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AND

AGRICULTURAL GAZETTE

FOR

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THE GARDENERS' CHRONICLE

AND

AGRICULTURAL GAZETTE.

A Stamped Newspaper of Rural Economy and General News.—The Horticultural Part Edited by Professor Lindley.

No. 1.—1861.] SATURDAY, JANUARY 5. Price Fivepence. STAMPED EDITION, 6*d.*

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Nursery and Seed Establishment, Hammersmith, London, W.

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*** These assortments have been drawn up with the greatest care, both as regards the sorts and quantities, and will doubtless be found adapted to most gardens; should there, however, be any of the varieties not required, increased quantities of others can be substituted.

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ENDIVE, finest sorts	2 oz.	1 oz.	½ oz.	....	[illegible]
LEEK, large flag	1 oz.	1 oz.	½ oz.	....	[illegible]
LETTUCE, best sorts for succession	6 pkts.	4 pkts.	3 pkts.	2 pkts.	[illegible]
MUSTARD	1 qt.	1 qt.	1 pt.	4 oz.	[illegible]
MELON, Model of Perfection, Scarlet Gem, &c.	3 pkts.	2 pkts.	1 pkt.	....	[illegible]
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PARSLEY, Myatt's splendid curled	3 oz.	2 oz.	1 oz.	½ oz.	[illegible]
PARSNIPS, Hollow Crown, very fine	6 oz.	4 oz.	2 oz.	1 oz.	[illegible]
RADISH, best for succession, including Beck, Wood's, Olive-shaped, &c.	16 oz.	12 oz.	6 oz.	3 oz.	[illegible]
SPINACH, Summer and Winter sorts	1½ qt.	1 qt.	6 oz.	4 oz.	[illegible]
SALSAFY and SCORZONERA, each	1 oz.	½ oz.	¼ oz.	....	[illegible]
TOMATO	2 pkts.	1 pkt.	1 pkt.	....	[illegible]
RAMPION and CAPSICUM, each	1 pkt.	1 pkt.	....	....	[illegible]
SWEET HERBS	6 pkts.	4 pkts.	3 pkts.	....	[illegible]
TURNIP, best sorts for succession	16 oz.	10 oz.	4 oz.	1 oz.	[illegible]

For Surplus Collections of Bulbs see Advertisement of last week, and Advertisement on front page of this week.

BUTLER & McCULLOCH, Covent Garden Market, W.C.

WHOLESALE CATALOGUE.

GEORGE JACKMAN AND SON'S PRICED AND DESCRIPTIVE CATALOGUE FOR 1860 AND SPRING 1861, comprising Fruit Trees of all the leading kinds, new and selected Roses, fine varieties of American Plants, Choice and Rare Conifers, Evergreen and Deciduous Trees and Shrubs, and a fine Stock of Transplanted Forest Trees, &c., can be had free on application.—Woking Nursery, Surrey.

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FROM A PHOTOGRAPH.

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Price 2s. 6d. per packet, to be had of all the principal Seedsmen.

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It contains all the newest and best kinds of KITCHEN GARDEN AND FLOWER SEEDS yet introduced, many of them from the Continent, with the prices affixed to each article. This Catalogue is now ready, and will be sent gratis and post free.

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JOHN WATERER begs to announce that his New DESCRIPTIVE CATALOGUE of HARDY SCARLET and other choice RHODODENDRONS, as are annually displayed at the Royal Botanic Gardens, Regent's Park, is now published and will be forwarded on application. It likewise furnishes a List of all popular Hardy Plants, with a selection of the most desirable Conifers, with heights and prices.

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MESSRS. PARKER AND WILLIAMS beg to inform their friends and patrons that their new priced and descriptive CATALOGUE of the above, to which are added supplemental Lists of Fuchsias, Stove, Greenhouse, and Hardy Plants, Ferns, Ornamental Foliage and Variegated Plants, Fruit Trees, &c. (which include the best new plants of the season, is now published, and will be forwarded post free on application.—Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, London, N.

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The following are particularly recommended as very superior varieties in their respective classes, and should be included in the most select collections:—Beet, Compact topped; Broccolies, New White Sprouting, Winter White (true); Brussels Sprouts, Improved Dwarf; Cauliflowers, Early Dwarf Erfurt, New Early Mammoth or Frogmore Forcing; Celery, Imperial Dwarf Red, Nonsuch, Colewort Rosette; Leeks, Ayton Castle Giant, Hybrid Prize; Lettuces, Alma, Moor Park, Versailles; Peas, Early Prolific, General Wyndham, Perfection.

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Per packet—	s.	d.	Per packet—	s.	d.
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Carter's dwarf Mammoth Cauliflower	1	0	Handsworth Potatoes, per peck	5	0
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For further particulars see CARTER'S SELECT LIST OF GARDEN AND FARM SEEDS, forwarded gratis, and post free on application.

JAMES CARTER & Co., 237 and 238, High Holborn, W.C.

The Gardeners' Chronicle.

SATURDAY, JANUARY 5, 1861.

IN resuming and completing our observations at p. 1059, on the state of the weather in 1860, we imagine that we need offer but little apology for again occupying our columns with some remarks on the climatic characters of a season in many respects so remarkable, and happily so uncommon. From what has been already stated it will be seen that the weather generally throughout the respective months has been unparalleled in the present century as regards combinations of cold and wet; and it now appears that in the last month of the bygone year a greater degree of cold

has been experienced than we find recorded at the same period in any year as far back as 1789.

A portion of the following table was given on a former occasion; but as it will be useful for comparative reference, we now give it complete for the 12 months.

Table of the Monthly Mean Maximum, Mean Minimum, Mean, and Extremes of Temperature, and the amount of Rain in 1860, comparatively with the average.

1860. Months.	TEMPERATURE. Mean Maximum.	Above (+) or below (−) the Average.	Mean Minimum.	Above (+) or below (−) the Average.	Mean.	Above (+) or below (−) the Average.	Extreme Highest.	Extreme Lowest.	RAIN. Inches.	Above (+) or below (−) the Average. Inches.
January ..	46.87	+4.11	30.74	−0.47	38.80	+1.81	57	20	2.18	+0.55
February ..	44.17	−1.50	26.34	−5.46	35.25	−3.48	58	14	1.20	−0.27
March ..	49.97	−0.75	32.77	−0.61	41.37	−0.68	60	18	1.68	+0.36
April ..	53.40	−4.21	31.00	−5.47	42.20	−4.84	65	20	0.95	−0.65
May ..	66.06	+1.49	39.90	−2.26	52.98	−0.38	75	27	3.04	+1.14
June ..	64.96	−7.17	44.36	−4.44	54.66	−6.80	73	34	5.16	+3.30
July ..	71.06	−3.65	45.35	−6.19	58.20	−4.92	77	34	2.72	+0.25
August ..	67.26	−6.25	47.16	−3.51	57.21	−4.38	76	38	4.16	+1.73
September ..	64.07	−3.65	40.27	−5.93	52.17	−4.79	72	28	2.82	+0.35
October ..	59.48	+3.48	38.39	−2.74	48.93	−1.14	69	25	1.60	−1.17
November ..	46.96	−2.79	31.16	−4.37	39.06	−3.58	65	22	2.60	+0.41
December ..	42.16	−3.19	26.83	−6.73	34.49	−4.97	55	−1	2.03	+0.56
	56.37	−2.26	26.19	4.00	46.26	3.13	66.00 77*	23.25 −1*	30.08†	+10.73

Although January was comparatively mild for the season, yet, owing to the coldness of the summer months, the mean temperature of the year, 46.26, was lower than any since 1789, at least. In 1855, nearly as cold, there was a severe winter, but a warm summer compared with the last.

November.—The mean temperature of the preceding month had a tendency to reach the average; but in the present the mean again fell back, owing not so much to the coldness of the days as to a general low temperature at night, but without any great extreme. The lowest, 22°, occurred on the nights of the 2d and 3d. East and north-east winds prevailed for 21 days; it was only between the 14th and 22d that it blew from other quarters, and in two days of that period it came from N.W. It rained more or less on 14 days, and more than half an inch fell on the 14th; the total amount was 2.60 inches, being nearly half an inch above the average. The ground temperature at 1 foot deep was about 1° higher than usual; at 2 feet it was nearly as much below the average.

December.—Neither the general low temperature of this month, nor the extreme minimum has been equalled in any corresponding month in this century. The mean was only 2°.48 above the freezing point, or 34°.48, whilst the extreme lowest was 1° below zero, or at —1° Fahrenheit. In December 1853 and 1859 it was as low as 7°, in 1855, 9°, and in 1830, 10°; and these are the lowest temperatures we find recorded as having occurred in the neighbourhood of London in any December for the last 50 years. Previous to this unusual degree of cold, the wind was from the north for six consecutive days, and one day from N.E., notwithstanding which the barometer was very low; but soon after it suddenly rose fully an inch. The amount of rain and melted snow was above the average. The mean temperature of the ground at 1 foot deep was 44°, and at 2 feet 43°.38, the former being 1°.94 above the mean and the latter 0°.17 below; the instruments at both depths indicated 38° on the last day of the month. During the intense frost the ground was covered with about 4 inches of snow, which doubtless prevented the frost from penetrating much below the surface. The severe period commenced on the 17th. The following are the minima:—Dec. 17th, 20°; 18th, 15°; 19th, 19°; 20th, 23°; 21st, 28°; 22d, 13°; 23d, 12°; 24th, 4°; 25th, 19°; 26th, 17°; 27th, 24°; 28th, —1°; 29th, 26°.

The above are the lowest temperatures that occurred between sunrise of the day, and the same time next morning.

In the neighbourhood of London the annual depth of rain-fall on the average of 34 years is 23.578 inches. In the past year the total depth, 30.08 inches, is therefore 6½ inches more than the usual quantity. But it was wanted; for trees in the previous seasons were suffering from dryness at the root. A well in which the water maintains the same level as that of the subterranean bed of water in the gravel in which the well is sunk, was 8 feet 11 inches below the surface of the ground in the autumn of 1859. On the 31st of December 1860, the surface of the water in the same well was only 4 feet 4 inches from the top, being a rise of 4 feet 7 inches. The underground reservoirs are now amply replenished; but it is doubtful whether roots that went down in quest of moisture when this was low, will not become diseased where the water has risen to surround them constantly.

The past year has been remarkable for the frequency of strong gales and violent hurricanes. One of the latter, on the 27th and 28th of February, proved very destructive on the west coast. It then swept across the centre of England, tearing up trees containing from 100 to 400 feet of timber. In the finely wooded parts of Nottinghamshire, more than 20,000 trees were blown down. At Acton Park, Denbighshire, an Ash tree was torn up which measured 41 feet in circumference near the base. A Cedar of Lebanon, in Hertfordshire, 100 years old, with 60 feet of straight stem, was uprooted, carrying with it several tons of earth. Again, on the 3d of October, a tremendous hurricane commenced in the Hebrides, sweeping such crops as were above ground on St. Kilda, completely into the sea; traversing Scotland, tens of thousands of trees, even whole plantations, were laid uniformly prostrate, as ordinary winds, with wet, will lay a field of grain.

We have now presented our readers with the principal characteristics of the year just ended, in hope that the effects of a recurrence of such vicissitudes may be guarded against as far as possible. We previously remarked that had it not been for improved cultivation and drainage, the past must have proved a most disastrous season. There is still much room for farther improvement, producing, consequently, still more beneficial results, to the country and to individuals. In rainy and at the same time cold seasons, for, as in 1860, the two generally go together, the urgent necessity of thorough drainage, both surface and underground, is sufficiently apparent. The means of surface drainage should be at command when required; but by deepening the soil where it is too thin, and rendering it permeable to water with deep under-drainage to prevent stagnation, most of the summer rain that falls can find its way through the soil, rendering it comparatively warm. But where under-drainage is neglected, the accumulated moisture stagnates on the already saturated soil, cold in consequence of the winter rains or melted snow having never been drawn off; that moisture from its coldness is heavier than the warmer summer rains; the latter may run off by the surface, and thus their warming effect on the soil is lost, but they cannot displace the colder and heavier water, which consequently retains possession of the soil for the greater part of the growing season, and in that case the crops cannot thrive as they otherwise would, and are, besides, rendered late, so that in bad seasons they are in danger of being lost.

* Extremes of the year.
† Total depth of rain for the year.

A SHORT discussion having taken place in our columns respecting the proper termination of modern surnames when Latinized for the purpose of BOTANICAL NOMENCLATURE, we have thought the question worth a little investigation. A correspondent objects to Latinizing such names as Hooker, Douglas or Darwin by Hookerius, Douglasius, and Darwinius, and contends for Hookerus, *gen.* i, Douglasus—*gen.* i, and Darwinus —*gen.* i. To this another correspondent replies that the proper manner of Latinizing names is to add us—*gen.* i, when the name ends with a consonant, and ius—*gen.* ii, when the name ends with a vowel; as was recommended by the British Association for the Advancement of Science in 1842. A third rejoins that an adherence to this rule would end in intolerable words, such as Lobb, *Lobbi*, Potts, *Pottsi*, Decaisne, *Decaisneii*, and that euphony is the only safe guide. Our second correspondent, P. G. E., replies that as he understands the rule for Latinising proper names, the termination *ius*, gen. *ii*, should be substituted for, and not added to a terminal vowel; thus Decaisne would make Decaisnius, *gen.* Decaisnii, &c. Terminal *y* should be treated as a consonant and retained: *e.g.*, Lindley, Lindleyus, Lindleyi. In proper names ending with a consonant the termination *us*, gen. *i*, is added; thus Lobb would make Lobbus, *gen.* Lobbi; Hooker, Hookerus, *gen.* Hookeri; and to his ear these terminations sound quite as harmonious as Lobbii and Hookerii. If euphony is to be considered "the only safe guide," he thinks a glance at our scientific nomenclature will show how little individual taste is to be trusted. Take for instance Abildgaardia, Forbesoerinus, Agassizichthys, as examples. If therefore some rule could be generally adopted it would be most desirable, for we must remember that names once correctly given must be tolerated.

In the last remark we must all agree; but there is little probability of uniformity being secured unless by showing what the practice was of Latinizing barbarian names when Latin was a living tongue. Upon this point we have been favoured with the following remarks by a very learned Latin scholar:—

"As the Roman surnames or those which belonged to *all* the members of a family ended without exception in *ius*, I can have no hesitation in preferring this termination whenever we Latinize English *surnames*. Theoretically such Latin surnames were in the outset probably but patronymics, that is, signified the "son of ——," just as Johnson, Dixon, Williamson, with us, or what is more in harmony with the Latin surnames, Jones (= John's), Williams (William's), Prichard (=ap-Richard). I say more in harmony because the Latin surnames (nomina *gentilia*) were strictly only genitives (with *son* understood). Thus Sextius was probably at first only the genitive of Sextus, Quintius the gen. of Quintus, Tullius of Tullus, like the familiar genitives unius, illius, and still more like the poetical genitives unīus, illīus."

These observations seem hardly confirmed by reference to well-known Latin proper names; the great majority indeed end in ius, as Ostorius, Petilius, Petronius, Vitellius, Manlius, Tarquinius, &c. &c. But on the other hand we find such names as Sabinus, Petalus, Soranus, Mansuetus, Ismenus, Gamaxus, Gannascus, and the like. To say nothing of Gracchus. It seems to have been usual with Low Latin writers to reject the terminal *ius* and adopt *us*. Thus in the old Latin Charters we find Heanus for Hean, Brihtricus for Brihtric, Rethunus for Rethun, Kenulfus for Kenulf, Sueinus for Sweyne, Cnutus for Cnut, Turkillus for Turkil, and Haroldus for Harold.

Upon the whole then it would appear that either termination, *ius* or *us*, gen. *ii* or *i*, is allowable, but that *ius* is that which was used in the best period of living Latin. We should be glad, however, to hear more of the opinions of Scholars upon this point.

NOTE ON THE ACHENIA OF PUMILIO ARGYROLEPIS.

MR. JAMES DRUMMOND sent me a packet of seeds of this plant from Swan River, with the following memorandum:—"The achenia of several small composite plants, more especially of that above named, are blown about by the wind till a shower of rain falls, when they attach themselves by a gummy matter to the soil by their lower ends, at the same time setting themselves perfectly upright. They ornament many a barren spot in this country throughout the dry season, and they are not easily removed even when the ground is flooded by thunder storms."

The achenia of the Pumilio are singularly-shaped bodies; the calyx (pappus) consists generally of nine scales or sepals, expanded like a flower, with each sepal beautifully ornamented by branching lines; the lower part, including the seed, is bent towards one side (see Fig. 1) at nearly right angles, and somewhat resembles a human foot in shape. The upper side or instep of this foot is smooth, but the toe and the sole, which is about 1-25th of an inch in length, is covered (see Fig. 2) with from 30 to 40 imbricated little bladders. Each bladder is oval and 1-200th of an inch in length, and is formed of thin structureless membrane, enclosing a hard ball of dry mucus or matter which becomes adhesive when moistened. The sole of the achenium is pitted where the bladders are attached

but these do not open into its interior. When the achenia are placed in water or on a damp surface, the bladders in a few minutes all burst longitudinally and discharge their contents, rendering a large drop of water very viscid. This viscid drop does not diffuse itself throughout the water, like gum, but remains surrounding the achenium. When dried it becomes stringy, and will again rapidly absorb moisture and swell. Spirits of wine does not cause the bladders to burst, and it renders the mucus slightly opaque.

If a pinch of these achenia be dropped from a little height on damp paper, the greater number fall like shuttlecocks, upright and rest on the sole; the bladders then quickly burst, and as the paper dries the seeds become firmly attached to it. Many achenia, however, drop so as to rest on one edge of the sole, and in this case the drying of the mucus pulls the upper edge of the sole down, and so places the flower-like calyx nearly upright. Any one looking at a piece of paper over which when damp a number of achenia had been scattered by chance would conclude that each one

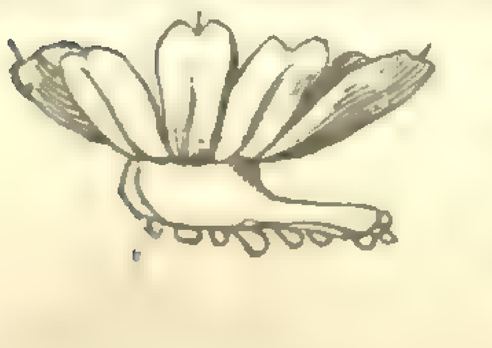

FIG. 1. Side view.

FIG. 2. View of under side, seen a little obliquely.

had been placed upright and carefully gummed. If an achenium falls upside down, so as to rest on the tips of the calyx, the sole does not touch the damp surface, yet moisture is so rapidly absorbed by the sepals, that in seven minutes I have seen the bladders burst: in this case as the paper dries the exuded mucus dries on the surface of the sole and the seed is not fixed; but if subsequently it be blown the right way up on a damp surface, the mucus will soften and act and attach it firmly. In so dry a climate as Australia the existence of these little bladders of dried mucus, having a strong affinity for water and becoming highly viscid on that side alone of the achenium which alights on the ground, seems a pretty adaptation to ensure the attachment of the seed to the first damp spot on which it may be blown. Whether the tendency of the achenia to place themselves upright be of any service to the plant would be hard to determine; but it seems possible that the salver-shaped calyx, which, as we have seen, so rapidly absorbs moisture and carries it down to the lower surface of the achenia, might aid in utilising dew or showers of fine rain. *Charles Darwin.*

MYCOLOGY.—No. XL.

AGARICUS RIMOSUS, *Bull.*—This is one of the most common Agarics on the borders of woods and in thickets, making its first appearance about the end of June, and then occasionally while the weather is open. Its general aspect is familiar to most observers of such objects, from the numerous radiating fissures which appear in the pileus. It has no especial qualities either good or bad to demand attention, and is introduced here merely as an object which must often come under notice, and with whose name therefore many would be glad to be familiar.

A. rimosus belongs to that division of Fungi which contains species with dingy and occasionally bright-coloured spores, to which no positive general character can be given, though they are termed by Fries generally, ferruginous. In some species, however, not the slightest ferruginous tint can be traced. Negatively they are neither white, nor rose-coloured, nor blackish-purple nor black, and therefore species are included not only with ferruginous but with tawny or brown spores. A few approach the peroxide of iron tint which is characteristic of *Cortinarii*, and which Fries terms ochraceous.

The pileus of *A. rimosus* is brownish yellow, thin, fleshy, and bell-shaped, and is clothed with fine adpressed silky fibres which as it expands separate and leave broad chinks exposing the paler flesh beneath; the stem is firm, solid, slightly bulbous at the base, white and nearly smooth, except above where it is minutely mealy; the gills are slightly ventricose, nearly free, and of a pallid brown tint. It has no peculiar scent or taste, by which circumstance it is known at once from *A. pyriodorus*, which has a peculiar scent like that of over-ripe Pears.

Such is the plant we have chosen for our present illustration, and we might have closed our notice here, did not the opportunity of a little permissible space enable us to answer a question which has often been submitted to our notice.

In all books which profess to give the derivations of botanical terms, it is said that Agaricus derives its name from Agaria, a region in Sarmatia, or from Agarus, a town and river in the same country. This derivation at first sight seems equally absurd with the parallel drawn by Fluellen between Macedon and Monmouth. What has Sarmatia to do with toadstools more than any other country, as they are found everywhere? The fact however is that the original name *Agaricum*, for so it stands in Pliny, had nothing whatever to do with them, but was applied by Dioscorides to a peculiar drug, supplied by the *Polyporus* of the Larch, which was obtained principally if not solely from Agaria, but which, though formerly of considerable repute, appears now to have gone almost entirely out of use in regular practice. It is, however, still to be had of the herbalists, who import it from Germany, a form on *Larix sibirica* being obtained occasionally from Archangel. As the true species occurs only on the Larch, and indeed upon very old trees, it is confined almost entirely to places where that genus of Conifers is indigenous.

Other Polypori have often been substituted for that of the Larch, and therefore the name *Agaricum*, or *Agaricus* as it was afterwards written, became to a certain extent generic for Polyporus, and it is so used by Micheli, Ray, and others, the word *Fungus* being generally applied to what after Linnæus we now call Agaricus. It is to be regretted that when that great author reformed the system of Botany, he too often took any names which offered themselves in the older authors without giving himself the trouble to inquire whether they belonged really to the plants to which they were attributed, and thus the familiar name of Agaric is now applied to plants which should never have borne it. Our earlier herbalists rightly applied it to corky arboreous Fungi, as Agaric of the Oak, &c. In like manner the Greek *Hydnum* instead of being a conspicuous pileate Fungus such as we now recognize under the name, was originally a kind of Truffle, and many other instances of similar misnomers might be adduced. It is however now too late to mend such matters, and we may be glad to substitute

AGARICUS RIMOSUS, *Bull.*
(Copied by permission from Greville's Cryptogamic Flora.)

such a word as Agaric for Toadstool, which is not only disgusting in its real etymology, but helps to keep up the feeling of contempt with which a most interesting class of plants is too frequently regarded. *M. J. B.*

COTTAGE GARDEN SOCIETIES.

AMONG the societies which are successfully managed, I suppose that at Hitcham, originated and conducted by the Rev. Professor Henslow, holds the first place, though I am given to understand those at Sudbury under Mr. Sydney, at Tortworth under the special direction of Earl Ducie, and at Broomborough Pool, connected with Messrs. Price's Candle Manufactory, are very excellently managed. These may be considered independent societies, supported (in a measure) it is true by the pecuniary aids of the good and benevolent, but dependent for their main attraction and usefulness upon the exertions and good cultivation of their respective members. This is as it ought to be, for I hold it to be more than questionable whether, when the prizes for cottagers' produce are tacked to the end of a large town or county exhibition, it is not positively injurious to the interest of the cottagers, inasmuch as their productions being brought in contact with more attractive things, they do not receive the attention they would do if collected in an exhibition to themselves; neither do the cottagers take so much interest as they would do in an exhibition which they might emphatically call "our own." For this reason I would in all cases detach the cottagers' show from the Horticultural Societies of the neighbourhood, for, however much these may tend to improve cultivation among the monied classes, I feel convinced they exert no such influence upon the working man. On the contrary, he feels, if he exhibits at all, that he is eclipsed by my lord's or the squire's gardener, though it must be confessed that, confining the comparison to the useful vegetables only, the cottager rarely loses much; indeed, in early Potatoes and Cabbage I have frequently seen better and finer specimens from the cottage garden than could be found elsewhere in the same neighbourhood, and I do know instances where gardeners have purchased or borrowed from the cottager to make up a basket for exhibition.

One of the largest and most successful cottagers' exhibition I ever saw was held in South Wales, not far from Llandilo. The quantity of produce brought forward there was really surprising, and generally the quality was first-rate. Connected with this society I have seen a room 90 feet long by 27 feet wide, with three rows of tables, insufficient to hold the produce. True a few plants and fruits for decoration were sent by the neighbouring gentry, but in no case was a farthing of the funds applied to any but its legitimate use, for though farmers and village tradesmen were invited to compete, it was perfectly understood that if any prize was awarded to their productions the value reverted to the funds of the Society. Here the competitors were of two classes—adults, paying in one sum one shilling per annum, and children, paying 1*d.* per year. Prizes were given for collections and also for each kind of vegetable or fruit separately, for window plants in collections of three, and single specimens for cut flowers, preference being given to a few things neatly and artistically arranged rather than to huge bunches of flowers, which serve no purpose except that of stripping a garden of flowers, and for collections of wild flowers, Ferns, and British fruits. Some of the collections of wild flowers were really very beautiful, and I recollect a bouquet of these (in an old china vase, composed of Ferns, Foxgloves, Grasses, Orchids, Honeysuckles, Eglantine, &c., managed so artistically and elegantly that the Queen herself would have been proud of it. Now, though some may sneer at the tawdry finery of the poor man's house, I go with poor Douglas Jerrold, who said, "I never see an Italian image-merchant with his Graces, Venuses and Apollos at 6*d.* a head that I do not spiritually touch my hat to him. It is he who has carried refinement into the poor man's house; it is he who has accustomed the eyes of the multitude to the harmonious forms of beauty." It is a great step in education to get a child to understand the difference between a bouquet and a bunch of flowers; it is one thing to stick a bunch of flowers into a jug of water, and there let them remain until they are withered and dead, but another and very different thing to take the same flowers, place them artistically in a vase, and tend them with the care of real affection so long as they can be kept fresh. Teach a child to do this and to feel a pleasure in doing it, and you confer a real and life-long benefit upon it, a benefit such as can only originate and live in pure affection. Such is the influence of gardening, and of flowers especially, upon the working classes; and those who encourage their growth either by precept, example, or pecuniary aid, may very justly be classed among the benefactors of their country.

Cut flowers as a general rule should not be encouraged at exhibitions. It is wrong to strip a garden of its beauty for a mere temporary purpose, and however great the morning view may have been, I never look upon long ranges of boxes of withered Roses without feeling a strong desire to apply a horse-whip to the backs of those who have thus destroyed the most beautiful of God's works. Cut flowers should not be encouraged to any great extent from the cottage garden, and it is for that reason that I would urge artistic arrangement rather than a mass of flowers, however good or choice they may be.

Perhaps, however, rewards for the best managed garden do more good in fostering neat and provident habits than prizes for specimens of the best growth, inasmuch as a prize for good management must extend not only to the whole garden but to the garden for the entire season, for I hold it to be a rule more to be acted upon than it is, that a prize for the cultivation of a garden should not be given for its appearance on any particular day but should extend to quarterly examina-

tions at the least; then you see the winter digging, the spring cropping, summer management, and autumn harvest, a much more satisfactory examination than one which may merely show a fine crop as the result of extra manuring rather than of superior management with only common appliances. Again, all prizes should be given in money, rather than in "wheel-barrows, garden tools, &c.," for it not unfrequently happens that tools are given which are not wanted, while at the same time their value in money would be much more serviceable. If a poor man could calculate upon getting a few shillings every autumn in prizes for his garden produce, it is not improbable that he might be induced to speculate in the spring upon a few of the finer kinds of vegetables, but when he knows his prize may only be a spade, a fork, or a tea-kettle, he is afraid to expend money which he knows he cannot spare. While on this head I may say gentlemen's gardeners may, if they are so inclined, do a great deal to introduce a better kind of vegetables among the labouring classes. It rarely happens that they have not many more plants of all kinds than they require for their own planting, and if they would only distribute those, in due season, among the cottagers of their neighbourhood, much good would accrue from their kindness. For many years I have given to the farmers and cottagers of my neighbourhood thousands of plants for their vegetable and flower gardens, as well as grafts of choice fruit trees when they required them, and the result has been most encouraging. Go thou, reader, and do likewise. *P.*

RETURNS OF THE LOWEST TEMPERATURES IN DECEMBER, 1860.

[We hope to close this in our next Number, and then to draw a few inferences to which the returns appear to lead.]

ENGLAND.

County.	Place.	December.	Thermometer.	Authority.
			Degs.	
Berks ..	Newbury ..	25	−6	Mr. Fordham
	Ditto ..	25	−2	Mr. C. Ross, Wilford Park
		28	−4	
	Wallingford	25	0	Times
	Moulsford ..	25	−2	Mr. Spearing
		28	−6.4	Ditto
	Englefield ..	25	−2	E. R.
Bucks ..	Westbury ..	25	7	W. Craw, Esq.
	Taplow ..	25	2	Mr. Rogers, Berry Hill
	Maidenhead	25	27	Old Sub.
Cambridgeshire	Chatteris ..	25	0	Times
	Cambridge	25	−5	Rev. E. Thompson
	Ditto ..	25	−4	Mr. Babington
Cheshire ..	Tarporley ..	25	−8	Sir P. Egerton
Derbyshire ..	Radbourne	25	−3	Mr. McPherson
	Chatsworth	25	0	Sir J. Paxton, M.P.
	Willersley ..	25	−6	Mr. Gadd
Devon ..	Torquay ..	25	33	Times
		29	36	Ditto
	Dawlish ..	25	8½	J. H.
	Castle Hill	25	2	Mr. Saul
Dorset ..	Little Bridy	25	16.2	
	Ditto ..	25	13.7*	Mr. H. S. Eaton
	Upwey ..	25	11.5	Mr. Miller
Durham ..		25	2	J. S.
Essex ..	Colchester ..	25	−4	Mr. Davis, Bures
	Apington Hall	25	−3	Ditto
	Sudbury ..	25	−4	Ditto
	Epping ..	25	−5	Mr. Rivers
	Ditto ..	25	4	Mr. Doubleday
	Ditto ..	29	5	Ditto
	Bardfield ..	25	−2	Ditto
	Saffron Walden	25	−12	Mr. Barrett
	Ditto ..	26	−12	Mr. Coldwells
	Knott's Green	25	1.3	Mr. H. S. Eaton
	Ditto ..	25	−3 9*	Ditto
	Chelmsford	25	−2	Mr. Cheveley
Gloucester ..	Dymock ..	25	−5	Times
	Stroud ..	25	3	Mr. Foster
	Ditto ..	25	6	Ditto
	Witcombe Court ..	25	−2	Old Sub
Hants ..	Heckfield ..	25	5	Mr. Dwerrihouse
	Ditto ..	29	2	Ditto
	Alton ..	25	10 ?	Mr. Williams, Bentworth Hall
	Southampton	25	11	A. S. Bourne
Herts ..	Tyttenhanger	25	−6	H. Kent, Esq. }
	Ditto ..	25	0	}
	Hertford ..	25	−10	Mr. Morgam, Balls Park
	Sawbridgworth	25	−2	T. Rivers
	Ware ..	25	−4	Times
	Harpenden	25	31	Mr. Wilson
	Hatfield ..	25	4	Mr. Plumbly
Herefordshire	Ross ..	25	−2	Mr. Lingwood
Hunts ..	St. Neotts ..	25	12.5	Rev. W. L. H. Elwyn
	Ditto ..	29	0	
Kent ..	Dartford ..	25	1	Mr. Austin
	Sandhurst ..	25	8	Const Reader
Lancaster	Wigan ..	25	−2	Times
Leicestershire	Belvoir Castle	25	−1	Mr. Ingram
Lincolnshire ..	Brigg ..	25	−12.9*	Times
	Grantham ..	25	5	Anon
Middlesex ..	Chiswick ..	25	4	Mr. Thompson
	Ditto ..	28	−1	Ditto
Norfolk ..	Fakenham	25	−10	Times
	Long Stratton	25	−10	Rev. H Long
Northampton.	Overstone Park	25	8	Mr. Thomas
	Apethorpe	25	4	Rev. M. J. Berkeley
Northumberland	Alnwick ..	25	−10	R. B.
	Sunderland	25	8	Times
Notts ..	Beeston ..	25	−8.3	Mr. Lowe
	Highfield ..	25	−8	Mr. Lowe
	Ditto ..	25	−13 8*	Ditto
	Kingston Hall	25	−5	Mr. Westland
Notts ..	Worksop ..	25	−6	Mr. Bennett
Oxon ..	Oxford ..	25	1	J. Slatter, Esq., Rose Hill
	Henley-on-Thames	25	−2	E. Jones, Esq.
	Ditto ..	25	33	Mr. Keith
Somerset ..	Bath ..	25	8.50	Mr. Davis, Crowhall
	Ditto ..	28	9	Ditto
	Langport ..	25	4	Mr. Helway
Stafford ..	Lichfield ..	25	−6	Dr. Holland
	Rolleston ..	25	−10	Sir Osw. Mosley
	Cheadle ..	22	−15	Times
	Tamworth ..	25	−7	Mr. Dowell
Suffolk ..	Bungay ..	25	−3	Mr. Elphinstone
	Stowmarket ..	25	−4	Mr. Barnes
Surrey ..	Dorking ..	25	20	Mr. Drewitt
	Weybridge ..	25	5.5	W. F. Harrison, Esq.
	Ditto ..	29	4.5	Ditto
Sussex ..	Uckfield ..	25	8.2	C. L. Prince, Esq.
	Ditto ..	29	6.6	Ditto
Warwick ..	Birmingham ..	25	−3	Times
Wilts ..	Trowbridge ..	25	2	Mr. Dawson
Worcestersh ..	Eardiston ..	25	27	Mr. Miller
	Ditto	28	0.1	Ditto
Yorkshire ..	Grimsby ..	25	−6	Times
	Grimston ..	25	−0	Times
	Whitby ..	25	10	Mr. J. McLean Mulgrave Castle
	Thorp Perrow ..	25	−12	Mr. Culverwell
	Scarborough ..	25	16	Times
	Doncaster ..	25	−8	Doncaster Gazette
	Wakefield ..	25	−6	Mr. Bell
	Bedale ..	25	−11	Mr. Cox
	Bradford ..	25	−3	
	Ditto ..		−4*	Mr. Abbey

WALES.

County.	Place.	December.	Thermometer.	Authority.
Monmouth ..	Chepstow ..	24	14 }	S. M. O., Sedbury Park
	Ditto ..	25	23¼ }	
	Ditto ..	28	18 }	
Brecknock ..	Crickhowell ..	25	−3	Times
Radnor ..	New Radnor ..	25	−3	Times

SCOTLAND.

County.	Place.	December.	Thermometer.	Authority.
Edinburgh ..	Dalkeith ..	25	4	Mr. Anderson, Oxenford Castle
	Ditto ..	27	6	
Fifeshire ..	Balcarras ..	24	3	Mr. Adamson
Renfrew ..	Greenock ..	24	15	Jas. Miller, Esq.
	Ditto ..	24	11 (64 feet above sea)	Ditto.

IRELAND.

County.	Place.	December.	Thermometer.	Authority.
Down ..	.. ..	25	18	Mr. Waring
Limerick ..	.. ..	23	0	Mr. Hackney, Milford House
Ditto ..		25	15	
Ditto ..		23	6	Mr. McIntyre, Mount Shannon
Waterford ..	Dungarron ..	23	16	Rev. H. G. C. Browne

* On Grasses.

Home Correspondence.

Education of Gardeners.—It is asserted in reference to the present generation of young gardeners that only one in fifty is fit for a situation; this at least is S. T.'s opinion. Allow me to inform him however that I do not think young gardeners in general expect that head gardeners have a right to make competent men of all who may chance to serve them. Does S. T. think the present generation of young gardeners inferior in point of education or industry to those now occupying first class situations?—I think it would be easy to prove that they are not. In my opinion they are in all respects worthy successors of their forefathers; still I must admit that they are far behind in many acquirements indispensable to a first class gardener. I have no hesitation in asserting that S. T. will soon be convinced by the success of Linager's proposals, that we at least inherit the indomitable perseverance of our predecessors; on the other hand I would say to my young brethren that it is not to head gardeners they must look for education, but rely on self-denial and persevering study. The savings of our scanty earnings must be laid aside for books; by such means in a short time we shall have acquired such knowledge as may at least place us in Linager's second class, and such as would aspire to the first rank must seek the aid to be found at evening classes, which would be better than trusting to head gardeners for assistance which it is not in their power to give. I am of opinion that Linager's final test would compel a few of the so-called first class men to make room for some of S. T.'s two per cent. aspirants. That there are more good places in this country now than there are good gardeners filling them, I will not deny; still I think there will not be any great difficulty in procuring efficient men for such places when vacant. I quite agree with S. T. as respects the difficulty nurserymen have in filling situations, but allow me to inform him that there are nurserymen who are competent judges of men, who are themselves thoroughly practical; therefore let those who want and are willing to pay for a good man apply to such tradesmen, and they will not often be disappointed. As regards young Scotchmen, I may inform S. T. that so long as gardeners are allowed by their employers to keep so many apprentices, and to receive as part of their salary the emoluments arising from apprentice fees, so long will the evil complained of exist; and further, no one need be astonished at their ignorance professionally, as their chief employment in many instances is attending Vines, nailing, mowing, digging, sweeping, &c.; when able to do all these things they are considered good journeymen in Scotland—a sad picture, but a true one. *A Young Gardener.*

Rain in 1860 *at Itchen Abbas, Hants.*

	Amount of Rain.		Wet days.	
	1860.	Average of 10 preceding years.	1860.	Average of 10 preceding years.
	In.	In.		
January	3.84	2.78	22	16
February	1.25	1.27	10	12
March	2.45	1.40	21	14
April	.48	2.37	15	13
May	3.54	2.24	18	15
June	6.43	2.39	30	14
July	3.56	2.32	15	16
August	4.85	2.73	23	11
September	3.67	2.27	16	13
October	2.35	4.18	16	16
November	3.78	2.25	13	12
December	3.10	2.45	15	14
Total	39.30	28.65	214	170
Monthly average ..	3.27	2.39	18	14

W. W. Spicer.

The Weather.—On Wednesday, the 19th, a steady and continuous fall of snow covered the earth 7 or 8 inches in depth. It was succeeded by frost, gradually increasing in intensity till Monday, the 24th. At 8 P.M., the thermometer had fallen to 7°; it continued to fall during the night, and at 8 A.M. on Christmas Day it stood at 6° below zero at 4 feet from the ground. At 8 A.M. on Wednesday (26th) it stood at 14°; and this morning, 27th, it was at 25°. It is now, 8 P.M. at 30°, with a cloudy sky and symptoms of change. I hope that the snow has protected our culinary vegetables, and that we shall only suffer from having the unripened wood of the autumn shoots of our shrubs cut off by this unusually intense frost. *Lichfield, Dec. 27.*——I herewith send you a report of perhaps the most extraordinary cold ever known in England,—certainly exceeding every record but one, and that record being looked upon as an error, and, indeed, thought to be an impossible temperature in England. This morning the temperature at 4 feet above the ground was 8° below zero, and on the Grass 13°.8 below zero, or 45°.8 of frost. As the above extraordinary temperature may seem impossible, I herewith append the readings of a number of thermometers placed in different situations:—

Thermometers.	Deg.
1 Negretti and Zambra's patent mercurial minimum, 4 feet from ground	= − 8.3
2. Rutherford minimum, 4 feet	= − 8.2
3. Spirit thermometer on Grass	= −10.8
4. Ditto ditto	= −10.7
5. Ditto ditto	= −10.8
6. Sensitive mercurial thermometer on Grass ..	= −11.7
7. Ditto on snow	= −13.8
8. Spirit thermometer on snow	= −12.8
9. Id. id. id.	= −11.7

The above are all readings made at the Beeston Observatory. At Highfield House they were:—

At 4 feet .. .. 6° below zero.
On Grass .. .. 8° below zero.

The maximum heat yesterday was only 20°, and from 7 P.M. till 11 A.M. the temperature never rose as high as zero of Fahrenheit's thermometer. At the present time (12.30 P.M.) the thermometer is 7° above zero at 4 feet, and 2°.5 above zero on the Grass. To night, in all probability, will be even colder, as the sky is cloudless, with a fog in the distance. Wind stationary since 1 P.M. yesterday in west, and calm. The Trent is full of ice, and in a few hours will be quite frozen over. I have just seen a horse pass with icicles at his nose 3 inches in length, and as thick as three fingers. The ground is about 3 inches covered with snow.

			Deg.		Deg.
Dec. 24, 1 P.M.	temperature at 4 feet,		20.0	on Grass	18.0
,, 6 P.M.	,,	,,	6.0	,,	+ 0.3
,, 10 P.M.	,,	,,	1.5	,,	− 2.6
Dec. 25, 2½ A.M.	,,	,,	0.0	,,	− 5.6
,, 4 A.M.	,,	,,	−6.1	,,	−11.0
,, 5 A.M.	,,	,,	−7.0	,,	− 8.3
,, 7 A.M.	,,	,,	−7.8	,,	−13.3
,, 8 A.M.	,,	,,	−8.0	,,	−11.7
,, 9 A.M.	,,	,,	−8.3	,,	−12.8
,, 10 A.M.	,,	,,	−2.0	,,	+ 4.0
,, 12½ P.M.	,,	,,	+7.0	,,	− 2.5

E. J. Lowe, Observatory, Beeston, near Nottingham, in the Times.

Boilers.—I have a boiler at work in my hothouse which I had made here, composed of a 2-inch copper pipe twisted spirally. There are six coils only (there ought to be nine for the size of the house), 15 inches diameter at base, and 8 inches at top. The fire is fed from the top, but there is also a furnace door. The base of the spiral receives the descending stream, the apex the ascending. It heats 200 feet of 5-inch copper pipe, and maintains easily a temperature of 60° at the present season. The feed pipe with its reservoir is fixed close to the ascending pipe, but the reservoir is set in an outer one filled with cold water, which

acting as a sort of condenser, keeps the water in the feed pipe always cool, so that though there are ample facilities for the water in the pipes to swell with the heat it never boils over, as is I believe a very common occurrence with some contrivances of the kind. The price of this boiler is naturally the mere weight of the metal employed, and may be made by any coppersmith. *H. Bertin, St. Omer, France.*

Wheelbarrows.—Allow me to suggest a fair trial of a wheelbarrow produced at the Great Exhibition in 1851, in Class 9, No. 29, under the following title:—"Ellis, 3 and 6, Tottenham Court Road; wheelbarrow on an improved principle." The body was similar to a navvies' barrow, but instead of the wheel being in front, it was directly under the centre of the body, by which the weight was removed from the workman's arm and thrown on the wheel. It appeared to me to be a very useful article. *South Hants, Dec.* 28. [We do not think the form of a navvie's barrow the best for gardening purposes, which are in general very different from mere wheeling earth.]

Societies.

BOTANICAL OF EDINBURGH: *December* 13.—Dr. W. H. Lowe in the chair. The following communications were read:—I. "The Theory of Terminal Fructification in the simple plant, of Ovules and Pollen, and of Spores." By Dr. Macvicar. II. "Tea Culture in Southern India." By Dr. Cleghorn, Madras. The author remarked—"I have collected from my journal a few notes made during my tours upon the Tea plants seen in different districts of the Presidency of Madras. The following are the localities:—1. Shevaroy Hills (4000 feet). There are several well grown trees at Yercand, introduced by G. Fischer, Esq.; these have not been picked or pruned, and have been left to nature, but are growing vigorously. 2. Coorg (4500 feet, rain-fall 120 inches, mean temperature, 68°). A case of plants was brought from China by Colonel (Lieutenant-General) Dyce in 1843; those at Mercara appear to me over luxuriant, producing a rapid growth of leaves, and not bearing seed with regularity. 3. Nundidroog (4800 feet). A number of plants have lately been sent to this Hill Sanatarium; they were beginning to droop in the Lál Bágh Garden, Bangalore, but there is hope of their thriving in their new location. The mean temperature of Bangalore is 75°, and the average rain-fall 35 inches. The climate being too dry and too hot, the plants necessarily become dwarfed. 4. Bababooden Hills (5600 feet, rain-fall and mean temperature not known). Four plants from General Dyce's stock were received from Mercara in 1847; these grew well without care. A packet of fresh China seeds was sent last year. Colonel Porter, superintendent of Nuggur, raised 23 plants above Ghât, near the Sircar bungalow, and a number of seedlings have been planted out about 1000 feet lower by Mr. Denton, coffee planter. 5. Nilgiri Hills—a. Coonoor (6000 feet, rain-fall 55 inches). A full report of Captain Mann's plantation is recorded in Proceedings of Government, 21st September, 1859. (A sample of the tea was exhibited.) Besides this there are a few plants at the under-mentioned places; b. Ootacamund (7300 feet, rain-fall 60 inches, mean temperature 58°), introduced or raised by Mr. M'Ivor, Government Gardens, from Saharunpore seed, and by General F. C. Cotton, at Woodcote; c. Kaity—Introduced or raised by Sir S. Lushington and Lord Elphinstone; d. Kulhutty—Introduced or raised by Mr. Rae. 6. Pulni Hills (7100 feet). Major Hamilton reported that a considerable number of tea plants at Kudaikarnal, were several inches above ground, and appeared fresh and healthy. 7. Curtallam (1200 feet). I have received flowering specimens from the old Spice gardens, which correspond with the standard figures of Thea Chinensis. The shrubs are 20 years old, 12 to 15 feet high; where the seed came from is not known. 8. Travancore—Tea trees grow luxuriantly in Messrs. Binny & Co.'s plantations (formerly Mr. Huxham's) 40 miles east of Quilon, on the road to Curtallam, and from whence some plants were procured 10 or 12 years ago, which were planted at Vellymallay, near Udagiri (1800 feet, rain-fall 80 inches), and at Atkaboo, near Tinnevelly frontier (3200 feet, rain-fall 40 inches). At both places they are growing luxuriantly. These facts are taken from General Cullen's letter, and I may state that seeds received from him were planted, and throve on the Nilgiris, at an elevation of 5500 feet. In Tea, as in all cultivated plants, there are variations, the discrimination of which is of the utmost importance commercially, and also in an economical point of view, but I have not materials for attempting a precise definition of these differences. This, however, is known, that the seed having been obtained from different parts of China, the introduced plant varies in stature exceedingly, from a bushy shrub of 3½ feet to a ramous tree 25 feet high. There is also a vast difference between the narrow-leaved forms and broad-leaved specimens in some of the localities mentioned. At present the leaves are taken indifferently from several sorts, which should not be done when preparing Tea for commercial purposes; and the means of manufacture are of the rudest description. The Tea shrub of commerce, though long confined to Eastern Asia, is now cultivated far beyond the limits of China and Japan—in Java (under the equator), in Assam, the North-West Provinces of Hindostan, on the banks of the Rio Janeiro, and recently in North America. From the published reports of Mr. Fortune and Dr. Jameson it appears to prefer a climate probably of 67° to 73° mean temperature. Such is nearly the mean temperature of the hill slopes near Kúnúr, Kotagiri, and of many of the valleys in the eastern and northern slopes of the Pulni and Nilgiri Hills, and also of the Bababooden range in Mysore, and of Kudra Muka in South Canera. It ought also to be observed, as illustrative of the hardiness of the Tea shrub, that the cultivation extends over a great breadth of latitude (from the banks of the Rio Janeiro, 22½° south latitude, to the province of Shanting in China, 36½° north latitude), and that as we recede from the equator the lower latitude compensates for the difference of altitude. The Chinese cultivate on the lower slopes of the hills, whilst in the North-West Provinces the culture is carried on between 2000 and 6000 feet. This valuable plant has been found wild in Upper Assam and Cachar, whilst its congeners abound on the Nilgiri and other mountain ranges of Southern India. Its cultivation, therefore, might be attempted with good prospect of success in some of the localities above-mentioned. In the plantation near Kúnúr we have the opinion of four competent judges that the experiment had entirely succeeded as regards the growth of the plants. It now only remains to prove the merchantable character of the leaf, and this, I hope, will soon be tested. So far as I can judge, the aid of a few practised manipulators is all that is required to conduct the manufacturing processes. This has been lately sanctioned by Government, I believe, and there will thus be opened up a new sphere for British energy and capital. The field is a wide one, and when occupied by private enterprise, it is not necessary that Government should give assistance further. A grant of land for tea cultivation has lately been made to Mr. Rae, near Ootacamund. One remarkable advantage of Tea cultivation is, that it may be carried on, in a fine climate, above the range of jungle fever, which proves so injurious to many settlers in India. III. "On the Introduction of Cinchona Trees (Peruvian Bark) into Southern India." By Dr. Cleghorn, Madras. IV. "Causes of the Movements in Diatoms, with illustrative models." By S. J. Meintjes, jun., Esq. In this paper the author endeavoured to show that the movements were due to the entrance and exit of fluid, and he illustrated the motion by glass models to which india-rubber tubes and balls were attached. The models resembled a Pleurosigma in form, and were held suspended in water, while, by pressure on the balls, water was made to pass through the models in various ways.

Reviews.

British Timber Trees: their Rearing and Subsequent Management, &c. &c. By John Blenkarne. 8vo. Pp. 276. Routledge.

The author of this volume announces that his intention in publishing it is to give the world a practical treatise conveying most useful and reliable information. He particularly objects to the introduction into such works of matter chiefly addressed to the scientific Botanist. We have looked through his pages with some care and cannot compliment him on the success of his attempt. His remarks on the growth of timber are certainly sufficiently brief, but we regret to say that brevity is not the companion of accuracy. He talks in another place of animal substances rendered soluble; of road scrapings being a good addition to the soil of a nursery; of bone *dust* being prepared by dissolving [what ?] in dilute sulphuric acid; of the designation of the Ash tree being *Polygamia Diœcia;* of the Elm being *Ulmus sativa* (!), as if we had but one species; of the Oak being *Quercus robur*, as if we had but one Oak; of the Acacia being Gleditschia triacanthos (!!!); of the Laburnum being *Cytisus sessilifolius*, which is a little bush; of one of the Evergreen Oaks being *Quercus coccifera;* of the Spanish Chesnut having wood little inferior in durability to Oak; and assures his readers that it is "difficult to distinguish this wood from the timber of the Oak," whereas the difficulty is to find their resemblance. We are sorry to say it, but really this trashy book deserves no further notice. The author would certainly be plucked if subjected to Linager's 2d class examination.

Personal History of Lord Bacon, from unpublished Papers. By William Hepworth Dixon. London: Murray. 8vo, pp. 388.

The author of this interesting and well written volume comes forward as the champion of Lord Bacon, asserting and endeavouring to prove that Bacon does not deserve the bad moral character which he unfortunately bears. In substance this work is an appeal by Mr. Dixon to the public from the judgment passed on Lord Bacon by Lord Macaulay and Lord Campbell in their lives of that great man. If Mr. Dixon's appeal proves unsuccessful that result will certainly not be due to any want of zeal or skill on his part, but to the stubbornness of the facts with which he has had to deal. In our opinion the appeal will not prove so successful as could be desired. In saying this we do not mean that the cloud which obscures the brightness of Lord Bacon's name is as dark as ever; that certainly is not so, but we think that notwithstanding the flood of light thrown by the present volume on his character and personal history the blackest spots upon his memory still remain, though they are not perhaps so dark as before.

It is plain from the author's pages that Lord Campbell is the chief offender against Bacon, and Mr. Dixon has succeeded in showing that the noble and learned writer of the Lives of the Chancellors has fallen into mistakes from which Bacon's reputation has suffered. Still, when we turn to the really grave charges against him, and to Mr. Dixon's refutation of these charges, we are compelled to admit that they are by no means disproved. The charges to which we refer are these:—

1. The charge of ingratitude towards the Earl of Essex.
2. The charge of procuring Peacham to be tried for an offence which he had not committed, of tampering with his judges, of ordering him to be tortured, and of witnessing his torture.
3. The charge of taking bribes when Chancellor from the suitors to his court.

In answer to the first of these charges, Mr. Dixon proves that Bacon had reason to be grateful to Queen Elizabeth, as well as to Lord Essex; that Lord Essex had in fact been guilty of treasonable conspiracies; that in prosecuting him Lord Bacon did no more than he was obliged to do as a Queen's Counsel, and that he performed a painful duty as leniently and humanely as he could. But admitting all this to be true, what is to be said in defence of Lord Bacon's conduct after Essex's execution? What Lord Campbell most strongly condemns is the publication by Lord Bacon of "a declaration of the Practices and Treasons of Robert late Earl of Essex," and "the apology of Sir Francis Bacon in certain imputations concerning the late Earl of Essex." The propriety of these publications is not attempted to be defended by Mr. Dixon.

In answer to the charges relating to Peacham and his trial, Mr. Dixon is more, though still not quite, successful. He proves that Peacham had committed many offences against his ecclesiastical superiors, and was an unscrupulous libeller; that both his trial and his torture were ordered by the Privy Council, of which Bacon was not a member; that Bacon was with others directed to examine Peacham, and that in examining him in the torture chamber Bacon did no more than was customary in the times in which he lived. Bacon is accused of having tampered with the judges, but Mr. Dixon shows that the Crown was in the habit of consulting the judges with reference to political offenders. This goes far to exculpate Bacon from the blame which has been imputed to him; but it must not be forgotten that the practice of consulting the judges was denied to be proper or usual by Lord Coke, that the use of torture was never legal in this country, and that in Bacon's time it was unpopular and fast going out of fashion. Bacon must have known that the law was not being carried out but was being infringed by the proceedings which he witnessed. This circumstance destroys the analogy between the position of Bacon and that of a modern judge who condemns men to be hanged; and even if the public heart goes on softening as fast as it has done, it will ever be more unfair to condemn Lord Campbell for judicial murders than to condemn Lord Bacon for his conduct in the affair of Peacham.

We come now to the question of bribes. Mr. Dixon alleges that at the time when Bacon was Chancellor judges were paid by fees, that these were paid by suitors as a matter of course, that their amount was not fixed but varied according to the wealth and feelings of the suitors, that Bacon never took anything but fees in the usual way, that no case of bribery or of corruption was ever established against him, and that he was the innocent victim of a scandalous conspiracy and of party spite. Mr. Dixon has we think clearly made out that had it not been for the unscrupulous measures of his enemies Bacon would probably never have been even accused of bribery or corruption. But it does not therefore follow that the charges made against him were unfounded. Bacon himself began the confession which he made to Parliament with an admission of guilt which cannot be got over. His words are—"Upon advised consideration of the charge, descending into my own conscience and calling my memory to account, so far as I am able, *I do plainly and ingenuously confess that I am guilty of corruption,* and do renounce all defence and put myself upon the grace and mercy of your lordships." This, as Lord Campbell has pointed out, puts Bacon and his defenders into a dilemma from which there is no escape. Either the confession is true or it is false; if true, Bacon's character is past redemption; if false, it was degrading for a man like Bacon to make the confession at all. Mr. Dixon does not however furnish us with adequate grounds for disbelieving Lord Bacon's own admission of the charges made against him. Mr. Dixon, indeed, says that the King urged Bacon to trust in him and make no defence; but making every allowance for the power and malignity of Bacon's enemies, it is incredible that Bacon should have made the full and particular confession he did if he had been as innocent of corrupt practices as Mr. Dixon endeavours to show.

Although, for the reasons we have given, we cannot admit that Bacon was morally as well as intellectually the greatest man of his age, we think that no one can

peruse Mr. Dixon's book without coming to the conclusion that Bacon has been painted blacker than he was. It is unfair to judge him by the comparatively high standard of morality and honour of the present day; we must look to the standard of his own times; but when tried by this standard Bacon cannot for one moment be compared with his illustrious predecessor Sir Thomas More. The truth seems to lie between Lord Campbell's condemnation and Mr. Dixon's admiration; but whatever may be thought of Bacon's character, there can be but one opinion as to the value of Mr. Dixon's work. Few books exhibit so much research, ability, or good feeling, and we heartily recommend it to all who take an interest in England's most illustrious philosopher, or in the times of which he was so great an ornament.

The Encyclopædia Britannica, or Dictionary of Arts, Sciences, and General Literature. Eighth Edition, Vol. xxi., 4to., pp. 1012. A. & C. Black.

At length this very important work has reached its termination, and now forms one of the most valuable books of reference in any language. Among literary matter we have in the present volume articles on Tacitus, Talleyrand, Troy, Turkey, Tyre, the United States, Universities, Varnhagen, Voltaire, Washington and Wellington. In Science are dissertations on Telegraphs (Electric), Tides, Voltaic Electricity, War, and Zoophytes. In Arts are treated of Tea, Tobacco, Veterinary practice, Weaving, Wool and the Wool Trade; and among miscellaneous matter a great number of subjects of not less interest. Nor must we omit mention of the numerous plates, especially the Maps, which are excellently engraved by Sydney Hall, and now form a very complete atlas. Let us add that as one of the most complete articles is that on War, so we should think it would be in these days a popular subject for a cheap separate publication.

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c.—The present frosty weather may cause extra protecting materials to be employed; therefore some should be in readiness when required. If not already done, lose no time in getting under cover a supply of the various loams, peat, &c., required for spring potting. The principal work in plant houses will consist in keeping them and their inmates scrupulously clean. Fires and frequent washing of stove plants, will be necesssry. The conservatory and show-house should now be gay with forced plants. Keep up a regular succession through the spring, by bringing forward stock as wanted. Roses, both dwarf and standard, Honeysuckles, Scarlet Thorns, Hybrid Rhododendrons, and Azaleas, with a host of other things, will enable cultivators in addition to the usual occupants of the houses to make a brilliant show. Hyacinths, Narcissus, Tulips, Lily of the Valley, and other plants of the above class must be duly forwarded as wanted. Hard-wooded plants will require a rather dry atmosphere to guard against mildew and damp.

FORCING DEPARTMENT.

The value of fruit trees in pots has now become a settled matter with cultivators, and where separate houses do not exist for each kind a valuable addition to the dessert in spring may be secured by growing a collection of Peaches, Nectarines, Apricots, Figs, Plums, Cherries, and Raspberries in the same house. All these (with the exception of Raspberries) should have been grown in pots two years at least, and be well furnished with fruit-buds. Raspberries are best obtained by taking up the strongest suckers early in September and potting them either singly or three together in rich soil, shading them for a few days to make fresh roots, and then placing them against a south wall to ripen. Where a stock of the above fruits is prepared for forcing the advantages of a deep pit with a bed of leaves will be apparent; the slight bottom heat thus afforded will be found beneficial in setting the roots in action. Cherries and Raspberries are the most impatient of heat and should be brought forward in a very low temperature, and unless they are required very early they will succeed better when started next month. The remainder should be started with a top heat ranging between 40° and 60°, with a gentle syringing daily, and air according to the state of the weather. Here they may remain till they are nearly in bloom, when a drier atmosphere being necessary, they may be removed to vacant shelves or stages in any house at work where a moderate heat is kept up. Peaches and Nectarines may even be placed on the back shelves of the Pine-houses after they have set their fruit, though a more moderate temperature would suit them better. In carrying out the subsequent treatment we may add that Figs, Peaches, &c., should occupy the warmest part of the house in which they are to fruit, and Apricots, Plums, and Cherries the coolest end. If required, Raspberries will succeed well in pits or in the partial shade of other plants. If circumstances permit of the whole being kept plunged in a gentle heat it will assist the swelling of the fruit, but with proper attention in supplying them with manure water they will do well without that assistance. Prepared plants of the most suitable kinds of the above fruits may be obtained at most of the principal nurseries, or maiden plants of each may now be potted in rich turfy loam for future operations, getting them into a bearing state by judicious stopping rather than by the use of the knife. Pursue former directions as regards the early Vinery and Peach house. Be careful not to use too much fire heat at first.

VINERIES.—The early house will now require careful attention, and as the Vines in some places will probably be in bloom, the night temperature must not be allowed to fall below 60°. Maintain a healthy growing atmosphere by sprinkling the floors, &c., as may be necessary, and admit fresh air whenever this can be safely done. Also attend carefully to the border, and if fermenting material is used do not allow the heat to decline, and where this is not used see that whatever covering is employed is efficient.

STRAWBERRIES.—Where ripe fruit is wanted early a portion of the most promising plants should now be selected and placed in a pit where they can be afforded a gentle bottom-heat; or if this cannot be commanded, a Peach-house or Vinery which has just been closed for forcing will do. They must, however, be kept close to the glass, for they require all the light that can possibly be afforded them at this season, and a free admission of air on mild days, with a low temperature until the fruit is fairly set, and if these conditions can be combined with bottom-heat, success will be more certain than under any other circumstances, and this will be more easily done in a small pit than in a house, the temperature of which must be regulated to suit other things.

FLOWER GARDEN AND SHRUBBERIES.

Where any of the beds or borders require a dressing of fresh soil this should be provided, in order to have it in readiness to wheel on while this favourable weather lasts. Fresh soil is in most cases preferable as a dressing for flower beds to manure, which is apt to cause too luxuriant a growth for a first-rate display of flowers. On soils that are naturally poor however, and where neither fresh mould nor decayed leaves can be had, a moderate dressing of well rotted farm-yard manure will be useful, but this should be well mixed with the mould the full depth of the bed, and not carelessly turned in and left in lumps near the surface, for in this case a gross habit of growth would be promoted early in the season, and as the principal part of the roots would be near the surface in the manure, the plants would soon feel the effects of dry weather, whereas if the manure is well incorporated with the soil to the depth of about 18 inches, no ordinary amount of dry weather will injure the plants after they once get fairly established. Shrubberies may be thinned where this involves only the cutting out of overgrown plants or lopping deciduous trees or the hardier kinds of evergreens, but where evergreens generally require pruning, the work had better be deferred until March, except in favourable localities, for although when the winter proves mild such work may be successfully performed at any time, it is never safe to depend upon this. When workmen cannot be profitably employed out-of-doors, get a good stock of Dahlia stakes, brooms, and things of that kind prepared for use when wanted.

HARDY FRUIT AND KITCHEN GARDEN.

If any transplanting of fruit trees has yet to be done this season, it should be seen to as soon as the weather is favourable for such work; also see to getting ground intended to be planted with young trees prepared, and spare no pains or expense to have this properly done. Make sure of thorough drainage, and where the subsoil is unkind this should be removed, replacing it with some good fresh loam. When a large breadth has to be planted in one season this expensive kind of preparation cannot be always afforded, but it is better to do such work only in such quantities as will allow of every precaution being used with the view of securing success. Attend to keeping up a supply of Rhubarb, Seakale, and Asparagus by introducing quantities of the roots into heat at intervals of about a fortnight. Where there is room in the Mushroom house the two former will be found to do exceedingly well there, and a supply will be obtained with little trouble. For land that has long been cropped with vegetables a good dressing of fresh loam would in many cases be preferable to manure, and where this is wanted and can be obtained, it should be got to hand in order that advantage may be taken of frosty days for wheeling it upon the ground. Where fresh soil cannot be obtained, charred vegetable refuse, such as prunings of shrubberies, edgings of walks, and many things which turn up in course of the season may be cheaply made to form an excellent substitute.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON
For the Week ending Jan. 3, 1860, as observed at the Horticultural Gardens

Dec. and Jan.		Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind	Rain.
Friday	28	○	30.192	29.784	36	—1	17.5	38½	39	N.E.	.00
Satur.	29	17	30.316	29.952	36	26	31.0	38	38½	S.E.	.62
Sunday	30	18	29.504	29.346	44	32	38.0	38	38½	S.	.18
Mon.	31	19	29.623	29.369	48	34	41.0	38	38	S.E.	.26
Tues.	1	20	29.691	29.122	44	24	31.0	38½	38	N.W.	.00
Wed.	2	21	30.122	29.918	33	18	25.5	38	38	N.E.	.00
Thurs.	3	22	30.254	30.177	31	12	21.5	38½	38	N.E.	.00
Average..			29.957	29.662	38.8	20.7	29.8	38.3	3.83		1.06

Dec. 28—Slightly clouded; sunshine occasionally; very clear; intense frost at night.
— 29—Severe frost with dense fog; slightly overcast; rain and sleet.
— 30—Rain throughout; foggy at night.
— 31—Foggy; drizzly; temperature higher at night than during the day.
Jan. 1—Hazy; drizzly; cold wind with snow.
— 2—Clear and frosty, with cold north-east wind.
— 3—Sharp frost; foggy; overcast; sharp frost at night.

Mean temperature of the week, 8 deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Jan. 12, 1861.

January.		Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday	6..	41.2	29.9	35.5	13	0.33 in.	3	7	4	4	4	10	3	—
Mon.	7..	41.4	29.6	35.0	13	0.34	3	5	4	3	4	7	6	3
Tues.	8..	40.4	31.0	35.7	11	0.26	4	4	8	4	—	13	1	[illegible]
Wed.	9..	40.6	31.1	35.8	14	0.71	1	7	4	3	4	9	6	[illegible]
Thurs.	10..	42.0	30.6	36.3	16	0.40	3	8	3	4	5	6	4	[illegible]
Friday	11..	41.4	31.2	36.3	18	0.83	4	6	4	1	5	8	5	[illegible]
Satur.	12..	42.2	30.7	36.4	15	0.76	2	7	3	3	5	10	4	[illegible]

The highest temperature during the above period occurred on the 12th, 1852—therm. 53 deg.; and the lowest on the 2d, and 9th, 1841—therm. 6 deg.

MONTHLY DEPTH OF RAIN, in inches and hundredth parts of an inch, which fell at Chiswick in the years 1841 to 1860 inclusive.

	1841.	1842.	1843.	1844.	1845.	1846.	1847.	1848.	1849.	1850.	1851.	1852.	1853.	1854.	1855.	1856.	1857.	1858.	1859.	1860.
	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.
January	2.60	1.06	1.33	2.25	2.97	2.85	1.31	1.16	1.73	1.43	3.07	2.72	2.14	1.92	0.10	1.76	2.09	0.41	0.61	2.18
February ..	0.76	1.32	2.35	2.27	0.93	1.47	1.34	3.12	2.52	0.95	0.90	1.06	0.59	0.78	1.35	0.62	0.31	1.48	1.31	1.20
March	1.32	1.81	0.47	2.44	1.25	1.09	0.41	3.05	0.85	0.13	3.57	0.25	1.48	0.42	1.75	0.97	0.73	0.88	0.77	1.63
April	1.58	0.15	1.62	0.33	0.95	3.93	0.92	3.06	2.21	1.79	1.65	0.52	2.58	0.30	0.26	1.97	1.77	2.13	2.01	0.95
May	2.16	1.73	5.26	0.25	2.89	1.35	1.59	0.28	3.53	1.84	0.74	1.74	1.60	4.03	1.94	4.38	0.87	2.05	1.80	3.04
June	2.45	1.58	1.62	0.97	1.36	0.80	1.31	3.20	0.31	1.40	1.33	4.69	2.54	1.53	1.48	0.88	1.91	0.78	3.10	5.15
July........	3.56	1.52	1.67	2.10	2.31	1.78	0.79	2.21	2.82	2.68	3.90	2.28	4.17	2.40	6.30	1.43	1.22	2.55	2.18	2.72
August	2.69	2.81	3.28	1.84	2.79	4.50	1.50	4.70	1.60	0.97	2.03	3.71	1.87	1.77	1.45	3.50	2.80	1.46	2.49	4.16
September..	3.71	8.39	0.98	1.31	1.77	1.76	1.66	2.20	2.49	2.36	0.42	3.54	2.41	0.58	1.15	1.99	3.52	1.05	4.05	2.82
October	4.61	1.71	4.19	4.13	1.39	5.54	1.75	2.93	2.18	1.55	2.01	3.87	3.78	2.61	6.15	2.40	4.01	1.36	2.55	1.60
November ...	3.41	4.43	2.13	3.06	2.11	1.48	2.26	0.90	1.32	2.03	0.55	6.20	0.91	1.31	1.34	0.04	1.53	0.10	2.72	2.60
December ..	2.12	0.76	0.58	0.39	2.61	1.21	1.81	2.03	1.28	1.15	0.62	1.97	0.30	1.27	1.11	1.88	0.30	1.53	1.95	2.03
Annual amount	30.97	22.27	25.48	21.34	23.83	27.71	16.65	28.34	22.84	18.28	20.79	32.55	24.37	18.92	24.38	22.72	21.06	15.78	25.54	30.08

The amount of rain which fell in 1860 was 30.08 inches, or 6½ inches above the average of the preceding 34 years.

Notices to Correspondents.

BOOKS: *Subscriber.* Kemp's How to Lay-out a Garden.

DRIED VEGETABLES: *R C G.* The method of drying Vegetables to which you refer is doubtless that patented by Masson & Chollet. Their agents are Fortnum & Mason. The plan consists in exposing vegetables, sliced when large, to currents of warm dry air until the greater part of their moisture is removed. Consult the *Gardeners' Chronicle* of 1856, pp. 75 and 762.

CYANOPHYLLUM: *Hereford.* It is a native of tropical America and was introduced before 1853 by Mr. Linden.

EDUCATION OF GARDENERS.—We have several letters on this subject, the consideration of which we must defer till next week.

NAMES OF FRUITS: Correspondents should not be unreasonable. We cannot undertake to name baskets full of different sorts. In future we must make it a rule never to examine more than six sorts, whatever may be the number forwarded.—*J Bryan.* 1, Wyken Pippin; 2 appears to be the Princess Noble ‖

NAMES OF PLANTS: *J B Y.* We have no means of knowing what is meant at Philadelphia by name "Madeira vine," also Mexican or Brazilian Vine."—*W C E.* Dendrobium Devonianum.—*A C.* It seems to be Dendrobium chlorops, becomes extremely fragrant while drying.—*D.* 1, Scolopendrium Krebsii; 2, Onychium lucidum; 3, apparently a sterile fragment of Lastrea cristata; 4, Lastrea Filix-mas paleacea.

SEEDS: *T J.* Your fast growing Bean was probably that Mimosa scandens, and the others in long pods we presume were Catjanga, a sort of Dolichos much used in tropical Asia, as we use Kidney Beans. But this is conjecture only. If you have any effectual method of making old seeds germinate the public would be very glad to know of it.

THE BLACK DAMASCUS GRAPE: *J. Gadd.* It is sometimes called the Worksop Manor. For early forcing it is not to be recommended; for that nothing equals the Black Hamburgh. Any good hardy strong-growing Vine will do for a Fig... Such tender sorts as Frontignans are to be rejected.

ARTIFICIAL MANURES, &c. — Manufacturers and others engaged in making ARTIFICIAL MANURES may obtain every necessary instruction for their economical and efficient preparation, by applying to J. C. NESBIT, F.G.S., &c., Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, Coprolites, &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch. Gentlemen desirous of receiving instruction in Chemical Analyses and Assaying, will find ample facility and accommodation at the College.

THE LONDON MANURE COMPANY
(ESTABLISHED 1840,)
Are now prepared to send out the following MANUFACTURED MANURES:—
SUPERPHOSPHATE OF LIME, of best quality.
DISSOLVED BONES, AND BONE MANURE FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN AND ROOTS.
CORN MANURE FOR AUTUMN SOWING.
They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate, to be obtained entirely from Bones.
The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE OF SODA, SULPHATE OF AMMONIA, and every Manure of value.
116, Fenchurch Street, E.C. EDW. PURSER, Secretary

LAWES'S MANURES.
LAWES'S TURNIP MANURE £6 6
,, BONE SUPERPHOSPHATE OF LIME 6 6
,, MINERAL SUPERPHOSPHATE OF LIME .. 5 5
,, BARLEY, GRASS, AND MANGEL MANURES 8 0
Wheat Manure: Peruvian Guano is proved to be the best and cheapest artificial manure that can be used for Wheat at autumn sowing.
Peruvian Guano direct from Messrs. Gibbs; Sulphate of Ammonia, Nitrate of Soda, and all Chemical Manures. Linseed, Rape, and Decorticated Cotton Seed Cakes supplied at the market prices, by Mr. J. B. LAWES, 1, Adelaide Place, London Bridge, E.C., and Liffey Buildings, Eden Quay, Dublin.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.
CONCENTRATED TURNIP MANURE, equal in value to the preceding.
Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

LOOK TO YOUR GRASS LANDS AND DOUBLE YOUR CROPS by dressing them with PULVERIZED BONES, to be had only of JARED TERRETT HUNT, Lambeth Wharf, Lambeth, S., and Downham Market, Norfolk. 5 cwt. sufficient for an acre, and the present the time for dressing. Prepared bones for Vine borders and fruit trees. Half-inch bones, bone dust, superphosphate of lime, gypsum, guano, and all other artificials of guaranteed quality.

THORLEY'S FOOD FOR CATTLE. Retail Depot, 77, Newgate Street, City, E.C. Offices and Steam Mills, Caledonian Road, King's Cross, N.
N.B.—A pamphlet post free. This Condiment has now become a great fact throughout the world.

GOOD PEAT, 16s. per ton; REIGATE SILVER SAND, 11s. per ton; second quality, 6s. per ton; delivered within four miles for 4s. per ton extra.—B. MALLER, Seedsman, Granville Terrace, Lewisham, S.E.

REIGATE SILVER SAND, best quality, 16s. per ton, less quantities, 1s. 6d. per bushel; delivered five miles or to any London wharf or Railway. Sacks for sand, 1s. 6d. each, or on hire, 6d. each, (5 hold a ton). Kentish, Hampshire, and other Peats, Yellow Loam and Leaf Mould in large or small quantities. Sphagnum Moss for Orchids.—JOHN KENNARD, Purveyor to her Majesty, Swan Place, Old Kent Road, S.E.

PATENT GUTTA PERCHA SOLES.— IMPORTANT TO GARDENERS.—The Gutta Percha Company have the pleasure to acknowledge the receipt of the following letter from G. GLENNY, Esq., the celebrated Florist:—
"420, Strand, London.
"Gentlemen.—I have worn Gutta Percha Soles and Heels these two years, and being so much in a garden as I necessarily am in all weathers, and with the ground in all states, I would on no account be without them. As a matter of economy I would recommend Gardeners to use them, for they may repair the worn part at all times by warming the material at the fire, and pressing it from the thick parts to the worn parts, as easily as if it were so much dough, I think it the duty of all persons who must occasionally wet their feet to adopt a material that completely defies damp. Many a gardener would escape colds and rheumatism by the use of Gutta Percha Soles
"Your obedient servant, G. GLENNY."
Every variety of Gutta Percha articles, such as Mill Bands, Tubing, Soles, Sheet, Pump Buckets, Fire Buckets, Bosses, Union Joints, Flasks, Bottles, Bowls, Chamber Vessels, Toilet Trays, Sponge Bags, Curtain Rings, Galvanic Batteries, Calbotype Trays, &c. manufactured by the Gutta Percha Company, and sold by their wholesale dealers in town or country.—The Gutta Percha Company, Patentees, 18, Wharf Road, City Road, London, E.C.

"FRIGI DOMO."—Patronised by her Majesty, the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.
PROTECTION FROM THE COLD WINDS & MORNING FROSTS
"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.
Two yards wide .. .. 1s. 6d. per yard run.
Four yards wide .. .. 3s. per yard.
An improved make, 3 yards wide, 2s. 6d. per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard run.
ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom. "It is much cheaper than mats as a covering."

JOHN FOWLER, JUN., 28, Cornhill, London, E.C.— Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address. CATALOGUES containing Prices and Testimonials sent post free.

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2, Basinghall Buildings, Leeds.
GALVANISED IRON WATER CISTERNS
for Cottage Houses, &c., to contain 50 gallons, 26s.; 80 gallons, 31s. each; and 140 gallons, 37s., and fitted with tap, keeping the water perfectly sweet and clean: will not rust or corrode. Cisterns of all sizes.
GALVANISED IRON PUMPS
for Liquid Manure or Domestic Use, 3 inches diameter, 30s. and 32s. 6d. each; Tail Pipe for same at from 10d. per foot.
GALVANISED IRON SWING WATER BARROWS
for Garden or Farm use, containing about 20 gallons, entirely formed of iron, 35s. 0d. each.

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BURGESS AND KEY, 95, Newgate Street, E.C. PRIZE HOLDERS for the best Agricultural Machinery Manufactured.
ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price 42l. 10s.
M'CORMICK'S REAPER for Manual Delivery. Price 25l.
ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30l.
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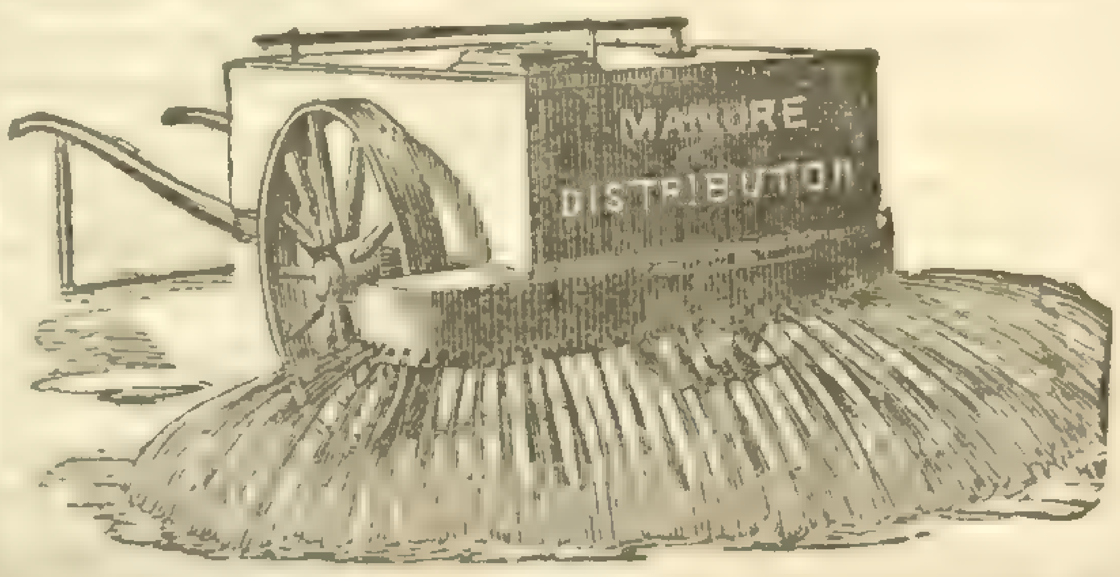
COMBINED REAPER AND MOWER—Two-Horse Machine. Price 35l.
COMBINED REAPER AND MOWER—One Horse Machine, Price 24l.
These Prices include Packing and Delivering at any Railway Station.
TESTIMONIALS.
A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following from
MR. JAMES ARNOT, of Woodcote, Carshalton.
"Having used your Machine for four years, I would not be without one on any consideration; and I can safely say that I have saved over 50 per cent. in the expense every year I have used it. In fact I have never yet seen an implement which pays itself in so short a time."

PRIZE LIQUID MANURE DISTRIBUTOR.



JAMES'S PATENT LIQUID MANURE DISTRIBUTOR OR WATER-CART, warranted not to choke up or otherwise get out of order. It is thoroughly adapted for Drill Crops, or Pasture Land, or for Watering Streets; has been awarded NINE FIRST PRIZES.
Full Particulars and Testimonials may be obtained of the Patentee, ISAAC JAMES, Tivoli Waggon Works, Cheltenham.
N.B.—Improved LIQUID MANURE PUMPS, either fixed or portable.

WARNERS' PATENT CAST-IRON PUMPS for raising Water from Wells not exceeding 25ft. in depth.

No. 35.

Diameter of Barrel.	Height.		£. s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead,	1 1 0
2½ ,, long	3 ,, 3 ,,	gutta percha	1 10 0
3 ,, ditto	3 ,, 6 ,,	or cast iron	2 4 0
3½ ,, ditto	3 ,, 6 ,,	flanged pipe	2 9 0
4 ,, ditto	3 ,, 6 ,,	as required.	2 18 0

2½ ,, short, with 15 feet of Lead Pipe attached, ready for fixing 2 0 0
2½ ,, long ditto ditto ditto 2 14 0
This Pump is fitted with J. W. & Sons' Patent Vibrating Standard Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.
Every description of Machinery for raising Water, by means of Wheels, Rams, Deep Well Pumps, &c.; also, Fire and Garden Engines, &c.
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The above may be obtained of any Ironmonger or Plumber in town or country, or of the Patentees and Manufacturers,
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2, Old Palace Yard, Westminster, S.W.
TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c. IN ENGLAND AND WALES AND IN SCOTLAND.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.
Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.
For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

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Offices, 52, Parliament Street, S.W.
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HENRY KER SEYMER, Esq., M.P., Chairman.
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George Thomas Clark, Esq.	Edward John Hutchins, Esq.
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Henry Currie, Esq.	William Tite, Esq., M.P.
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I. All works of Drainage, Irrigation, and Embankment.
II. The erection of Farm Houses, Cottages for Agricultural Labourers, and all kinds of Farm buildings.
III. The construction of Roads.
IV. The Grubbing and clearing of old Woodlands, Enclosing, Fencing, and Reclaiming Land.
The Landowners by whom any of these Improvements may be executed, are—Tenants for Life, Trustees, Mortgagees in Possession, Guardians, Committees of Incompetent Persons, Married Women, Beneficial Lessees for Lives or for a term exceeding 14 years, Corporations, Ecclesiastical or Municipal, Incumbents, Sequestrators, Charitable Trustees, &c.
The owners of Estates, not entailed, who may be desirous to avoid the expense or inconvenience of a Legal Mortgage, may also charge their Estates with Improvements under the simple and inexpensive process of the Company's Act.
The term of years for the Rent Charge is fixed by the Landowner, so as to adapt the amount of annual payment to the circumstances of the Tenants, the term for Building Works being limited to 31 years, but for all other Improvements being capable of extension to 50 years.
No investigation of Title being required, and the charge not being affected by Incumbrances, no legal expenses are incurred.
The arrangements for effecting Improvements are threefold—
No. I. The Works may be designed and executed entirely by the Landowner's Agent, and the Company employed only to supply the Loan and conduct the matter through all the forms for charging the outlay on the Estate.
No. II. The Company will supply Plans, Specifications, and Estimates for any Improvement to be executed by the Landowner's Agent, as under No. I.
In each of these cases the Landowner will be solely under the control of the Inclosure Commissioners.
No. III. The Company will undertake the entire responsibility of the Improvement, prepare the Plans, execute the Works, and finally charge on the Estate the actual amount expended with their Commission thereon approved by the Inclosure Commissioners.
Landowners may thus obtain what assistance they require from the Company, and no more, in effecting the objects in view.
Works of Drainage and other Improvements are also executed on Commission for Landowners who merely require the skill and experience of the Company's Officers and a Staff in constant practice.
Applications to be addressed to WILLIAM CLIFFORD, the Secretary, 52, Parliament Street, London, S.W.

COLLEGE OF AGRICULTURE AND CHEMISTRY, AND OF PRACTICAL and GENERAL SCIENCE, 37 and 38, Lower Kennington Lane, Kennington, London, S.
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Analyses and Assays of every description are promptly and accurately executed at the College. The terms and other particulars may be had on application to the Principal.

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TURNIP AND MANGEL WURZEL SEEDS.— The undersigned have on offer in quantity Seeds of the above, crop 1860, of best selected stocks, raised from transplanted bulbs, such as they can with confidence recommend. Terms on application.—JAMES FAIRHEAD & SON, Seed Growers and Merchants, 7, Borough Market, London, S.E.

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Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.
Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

The Agricultural Gazette.

SATURDAY, JANUARY 5, 1861.

MEETINGS FOR THE FOLLOWING WEEK.
TUESDAY, Jan. 8 { Hexham Farmers' Club—"On the Education of Farmers' Sons." Galashiels—"General Meeting."

THE Decade which has just expired has perhaps left nothing behind it more remarkable to the Agriculturist than its concluding year. The Seasons of 1860 stand unexampled in the memory of the most venerable seniors of our age. The predominance of rainy weather, following upon three years of comparative drought, has brought the subject of CLIMATE into a prominence that places it in its true rank amongst the most important questions of modern agriculture.

Drainage, Steam-Culture upon the Clays, and the profitable utilisation of Liquid Sewage,—three questions separate in themselves, and each of the highest moment, have all this feature in common, that they are directly connected with the special conditions of agriculture in these Islands, viz., a stiff soil and a moist atmosphere. Look Europe over, and you will not see these conditions elsewhere such as they are with us. Nowhere else do these three questions press with the same emphasis, under the same modifications upon the attention of the landowner and farmer. And they are more intimately connected together than their general treatment either by the agricultural or the non-agricultural world would, at first sight, lead any one to suppose. Travellers in France, Belgium, Tuscany, or China, who adme-

nish us of the value, and effective application of sewage in those countries, almost invariably omit to notice the *non sequitur* which a moist climate and a stiff soil place, like an extinguisher, upon most of their calculations and conclusions. Something of the same kind of prætermission seems to run through all the discussions, and most of the writing, up n Steam Culture. As it is upon the heavier soils that this great auxiliary of Spring and Autumn cultivation is pre-eminently needed, so it is upon the lighter and drier districts of the kingdom that profitable results are to be, if anywhere, looked for from profusely diluted manures. It is difficult to make a sanguine improver clearly understand that let a fertiliser be ever so precious in itself, it may, like the Pearl in Cleopatra's cup, be lost to all practical and commercial use, by mere solution, having become in fact more costly to restore, and apply, than its intrinsic value will repay. There still are rivers in whose sands like those of the once-famed Pactolus, gold-dust runs which will not pay the labour of separation. Ammonia, and the Sulphates and Phosphates are very precious; but they are not more precious than gold; nor, in like case, able to repay the costly labour of extraction, by chemical or mechanical reagents. This, at least, is the true point to be objectively kept in view, not the intrinsic but the relative, or resulting value; not the market-price of the metal, but whether it will pay for smelting from the ore. Wherever there is, under a dry climate, a light thirsty soil, free enough to filter off the fluid part, yet close enough to absorb that essence—volatile as it is precious—the Ammonia, from sewage water,—there let enthusiasts glorify its value. But under our skies, and upon our retentive soils, one word about solids, how to deal with them, is worth five upon liquids, except how to get rid of them.

And just now this seems to be the question of the day, how to command the Outfalls of our drainage; a question in every sense of ultimate importance. Drainage is one of that eccentric class of things which *begin at the end:* in the language of logicians, it is an 'analytic,' not 'synthetic,' operation. "Look to the *End!*" said SOLON, when some one asked him if a rich man's life could be called a happy one. "Look to the end!" every engineering Solon of the present day will say when consulted how a drain may be made to run, a field laid dry, a farm made profitable, a district healthy, and the country as wealthy as it ought to be from the intrinsic resources of its own soil and labour.

It does seem rather hard, and rather foolish, that the *grinding* of Wheat should stop the *growing* of it, that Mill-dams should block up Outfalls: yet this is what takes place over a large portion of this kingdom. But still more unbearable is it that any other less useful and excusable dam should be allowed to prevent or interfere with the first and foremost of agricultural improvements. The most possessive owner of land must be reminded that he holds what he calls his own, in this kind, subject to the rights and claims of the community at large. No Act of Parliament can be too explicit in reminding him of this. There is a class of men who would hardly let the crows fly over their fields, if there was any way of shutting the gate against them. But it would be well if these tenacious owners of tenacious soils could be a little better indoctrinated in the true nature of 'ownership' in regard to land. There is not an article to which the term is applied in this country with more of polite exaggeration; or more erroneously: for there is none in which ownership is in truth so limited and conditional.

It is singular that this error should exist; considering that our land-laws remain to this day based on Feudalism, which in fact allowed no ownership at all, except in the Sovereign as the head and representative of THE STATE. All the rest were Tenants, holding under every conceivable form of modified and vicarial tenure. The difficulty however is not here. Parliament is supreme, and Acts of parliament are powerful enough, if they are but constructed so as to work. But whoever has watched the course of legislation in this country, it matters not how long back in the memory of those living, will have noticed an unaccountable infelicity in the Acts relating to Land, in its agricultural character. Is it upon the well-known principle that 'he who pleads in his own cause has a fool for his client?' Is it that the legislative atmosphere itself, in this country, embraced too much of the "truly rural" element to be able rightly to direct its breath, for hot or cold, upon the home-made porridge; while the rest of the House regarded all land questions with that indifference which men of the world feel for everything dilettante-like, and lying out of the ordinary rules of business?

However this may be, we are anxious for the fate of this intended 'Outfall' Bill. The subject is, in some districts, a pressing one; and the vested interests this measure will have to deal with, are strong enough to need something of a different pattern to most of the Bills that have ever had to do with Agriculture. The rate of increase of our population, internal trade, and capital, demands that every inch of land should be made available: the public feeling will be more strongly in favor of the measure the more it can be got to understand it. There is every inducement to the manufacture of an effective Bill: the weir and mill-dam nuisance is a serious and extensive one enough; if that were all: but let any man try to cut an outfall for his drainage through his neighbour's land "by act of Parliament" now existing, and he will learn, experimentally, the exact measure—by a sort of GLADSTONE-alcoholic test—of the Squire-compelling strength required in the proposed new Act.

It ought to be a simple matter enough: and so, in truth it would be in a Parliament of Cotton Spinners and Ironmasters, and Railroad Contractors. But in every society or assemblage of men—and the British Parliament is within the rule—that particular business is ill-done which (however little really understood) is as though it were Everybody's-business. Another Century must elapse before any man can bring an agricultural subject before the House of Commons with better hope of a serious hearing than an Eton or Harrow boy would have who offered to spout for his schoolfellows' amusement a page of Virgil or Euripides. PUSEY tried it: CAIRD tried it: and they found an audience, not indeed impracticable, or inattentive. It was not that the "clouds did sit on Hamlet;" he was "too much i' the Sun!" A legislative chamber which for a hundred and sixty years was little else than a Committee of landowners and their nominees debating for the good of the '*Country*,' and dealing with "Agricultural Distress" must pass some reasonable aliquot of the time in *pratique*, before any agricultural subject can come before it except upon that sort of 'imperium in imperio' footing, where familiarity breeds contempt, undreamt of by the copybooks.

It is a pity that it should be so: for, agriculture during its twelve years of freedom has grown pretty well out of parliamentary swaddling-clothes. Give it the one more emancipation that it asks for: make the Land itself as free to buy and sell as you have made the Produce: give the Farmer the *other* half of the bargain that was so roughly pressed upon him: let the Crop stand free at *both* ends, top and bottom: as you have torn off the clutch of the Custom-house officer from the grain, drag away the Lawyer's gripe from the root; try less sheepskin and asses' skin manure; and our agriculture will then show a stature that shall not need to come before the House, or the Public, with the prestige upon it of an aristocratic pet, the *peculium* of Dukes and Lords and Squires, but as a solid interest representing every stratum of society, and uniting instead of severing social ranks, by the common bond of a common intelligence derived from the common interest of an investment that should be common and open and available to all.

OUTFALL DRAINS for one or more proprietors, through intervening estates of other owners, should be obtainable by a less obnoxious and burdensome process than that prescribed by "Lord LINCOLN's Act" of 1847—our latest legislation on the matter. This is the FIRST point in the legal remedy demanded by the improving underdrainage of high lands and low lands, near to or remote from wandering brooks or lawless rivers, and in want of new outfall drains. The SECOND point is, that the amendment and enlargement, as well as the efficient maintenance of existing public drains and outlets used simply for the passage of drain water, and not under the jurisdiction of authorities already constituted for their conservancy, ought to be procurable by improving landowners without heavy expense or oppressive litigation.

The Bill prepared and brought in by Mr. KER SEYMER and Sir WILLIAM HEATHCOTE in 1854 might be amended and extended so as to meet both these classes of remedial action, which are most urgently required—which have been needed for years, and are now cried for more pressingly than ever. Let us look at the provisions of this Bill. The Inclosure Commissioners are very properly made "the Drainage and Inclosure Commissioners;" for but few open fields are left to be fenced off and apportioned, while an immense amount of drainage work is required to be done; and what possible board can be qualified for the central superintendence of all so well as this, which has had ample experience of all land and water questions among proprietors, agents, engineers, and solicitors? They may from time to time appoint an engineer as assistant commissioner. Any individual landowner may make application to the Commissioners, sending in a proposed plan of improved outfall for his drainage; the Commissioners may require security for expenses incident to the case, and are to make a due examination into the proposed plan and objections to it; their assistant commissioner is to report, and ample opportunity is to be afforded opponents and probable sufferers for making their objections and claims. Where the Commissioners think that such objection is valid, but can be obviated by a reasonable modification of the scheme, they may insist upon such alteration; where they think that such a modification will not suffice they may certify what in their judgment is the compensation proper to be made; and where they think that any injury cannot be properly compensated for, they are not to sanction the proposed scheme. They may prescribe by whom or under whose superintendence the work is to be executed, and on what terms and conditions the works are to be maintained. The prescribed drainers are empowered to "enter upon, take, use, or interfere with any canals, waterworks, lands, or waters not belonging to or under the power of any of the applicants," in accordance with the provisions of the Lands Clauses Consolidation Act of 1845. This would be famous, only that it is nullified, so far as navigations are concerned, by the following clause, which was added in committee,—"nothing in this Act contained shall defeat, alter, prejudice, or affect any of the rights, powers, privileges, jurisdiction, or authorities of the owners, proprietors, undertakers, trustees, or conservators of any canal, navigable river, or navigation, or give any power or authority to the drainers, or in any manner injuriously to interfere with any canal, navigable river, or navigation, or any waterworks, or the works belonging or appurtenant thereto, without the consent in writing of the owners, proprietors, undertakers, trustees, or conservators of such canal, navigable river, or navigation, or waterworks, under the hand of the clerk, secretary, or other chief officer of such owners, proprietors, undertakers, trustees, or conservators, first obtained."

What forms of property and rights are included under the terms "lands" and "waters," which are not exempted by that clause, but may be entered upon, taken, and interfered with by the drainers? Well, the interpretation clause defines "lands" as embracing "mills, dams, weirs, messuages, lands, tenements, and hereditaments of any tenure;" so that the Bill contemplated the dealing with mills, &c., by compensation. The word "waters" includes "springs, brooks, rivers, and other running waters, and ponds, pools, reservoirs, and other standing waters, and sewers, drains, ditches, streams, cuts, channels, and other water-courses." Thus the Bill is sufficiently comprehensive (with the exception of navigation and ornamental waters) to empower improvements in most cases of suffering from defective watercourses, mills, reservoirs, &c.; but a clause inserted in committee prevents any meddling with drains already within the jurisdiction of commissioners of sewers, trustees, or other bodies for executing local Drainage Acts, &c., though such commissioners, &c., may apply to the Inclosure Commissioners if they think proper and conduct new works or improve old ones under this Act. There is another clause which prevents any interference with "any ornamental waters or dwelling-houses, except with the consent of the persons to whom the ornamental waters belong." This requires modification, as in some instances ornamental waters may be altered without serious inconvenience, and facilitate the drainage of a large tract of land.

So far, with certain alterations, this Bill would give power to any landowners to make a new or improved outlet for drain-water, by paying compensation to the parties whose property they interfered with. It does not empower a district to unite for a new drainage, or enable the promoters, if a majority, to bind the non-consenting proprietors to contribute to the expenses in proportion

to benefits received; this is reserved for a larger and more comprehensive measure.

The expenses fall upon the promoters only, for whose relief this part of the Bill is intended; and the provisions of the Lands Clauses Consolidation Act of 1845 are to govern the purchase of lands, easements, &c., excepting in cases where the amount of compensation does not exceed 50*l.* As the operation of the above Act is very heavy upon promoters of small drainages, although found to work tolerably for such large schemes as railways, &c., an exception of this kind is essential in a good Drainage Act, but the sum of 50*l.* is too low. There may be considerable opposition raised in both Houses of Parliament to a much higher amount; but certainly nothing under 100*l.* ought to be burdened with the Lands Clauses Consolidation Act,—and in the matter of better outlets for one or two estates, 100*l.* will go a great way. We shall consider in another paper the further provisions of the Bill with respect to the improvement of existing drains. *I. A. C.*

ON STRIPPING MANGEL LEAVES.

BY PROFESSOR JAMES BUCKMAN, F.G.S.

In November, 1859, a report appeared in these columns containing the results of various experiments made to ascertain the effects of stripping a certain proportion of the leaves from Mangels during their growth. I now reproduce that report, reminding my readers that the stripped plot was denuded of its larger leaves three times in the growing season, and that the experimental plots were planted with Yellow Globe Mangel. On the 27th of October the topped and tailed roots were weighed and gave the following results:—

Table I.—Results of Stripped Mangels.

	Weight.	Weight of Single Root.	Circumference of Single Root.
	Lb. oz.	Lb. oz.	Inches.
6 largest roots ..	10 10½	1 8	12
6 smallest do. ..	3 9	0 8	....
9 remaining do. ..	10 1	....	....
21 roots ..	24 4½		

Table II.—Results of Mangels not stripped.

	Weight.	Weight of Single Root.	Circumference of Single Root.
	Lb. oz.	Lb. oz.	Inches.
6 largest roots ..	27 4½	5 8	19
2 smallest do. ..	11 10	1 4	....
3 remaining do. ..	22 7	....	....
20 roots ..	61 5½		

Now these results (which indeed were not the first that I had obtained by means of the like processes) were deemed of importance as showing the immense value of the leaves in aiding the general development of the root; and my experiments seemed to warrant the following assertion:—That so long as a Mangel leaf can be considered a wholesome food for cattle, so long is it important to the well-being of the root.

This conclusion, however, was disputed in an article in the "Dublin Weekly Agricultural Review" for January 20, 1860, which states that an experimenter in Ireland procured an increase of roots at the rate of 5¼ tons per acre, by removing from the plants leaf to the amount of 5 tons.

Now, as these facts were founded upon repeated experiments conducted with great care, the plots and the whole contents being kept separate and weighed apart, I am led to think that from some source or other error has crept into the results of the Irish experiments. Such an error might probably arise from the fact that one kind of Mangel may bear stripping better than another, or from other causes to which all experiments are open. This being the case, I determined to repeat the experiments with as many sorts as could be procured, and I have now before me the results not only with nine sorts of Mangels, but under different circumstances with these other plots of transplanted roots in addition. Before entering into the details of these experiments, it will be well to call attention to the following communication relating to the growth of Mangels on the farm of Colonel Kingscote, as it shows the result of weighing part of a crop, which though it tells a little in favour of the unstripped roots is not to be entirely trusted to. I take the liberty of inserting the letter which was sent in reply to an inquiry as to the gallant colonel's treatment of the Mangel crop:—

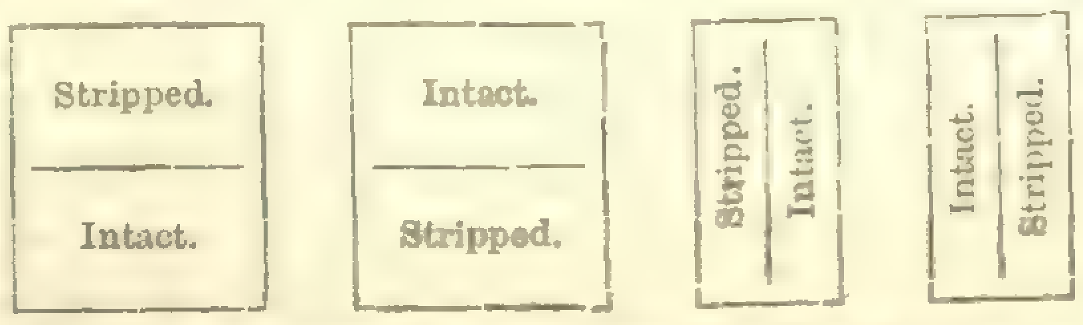
"Kingscote, Dec. 18, 1860.

"Sir,—Respecting the tops, it has been the practice of Colonel Kingscote in September to commence pulling the outer leaves to give the milch cows, and they never fail in producing an extra quantity of milk and butter. In 1854 the weight of 40 perches which had part of the leaves stripped off (not all) was 7½ cwt.; while 40 perches which had not been stripped weighed 7½ cwt. 20 lbs. Although there were 20 lbs. in favour of the latter, it was quite possible the difference might have been on the other side had a second lot been weighed. In 1857 we weighed two lots of 40 perches each, when a few pounds appeared in favour of the stripping, this was in the case of a crop of 34 tons per acre, and 310 Mangels per ton.

"Yours obediently, Francis Burkett."

The experiments then for 1860 were conducted on much the same plan as before, the plots being 2½ yards square, and the seeds drilled in rows. When of sufficient size the plants were thinned, leaving 24 roots in each plot. On the 4th of September stripped half of each plot, taking from three to four outer leaves from each plant varying the direction of the stripped plants as under, in order that no source of error should arise.

Plan of Stripping.



The stripping was repeated on the 21st September, and it should be observed that between the 4th and 21st very rapid leaf growth had been made; and between the latter date, and the period of harvest, viz., Nov. 12th, the leaf growth was also very vigorous, so that had there been a third stripping the difference in the results might probably have been even more striking.

The following is the resultant weight of the topped and tailed roots:—

Table III.—Weight of 12 Non-Transplanted Roots.

No. of sorts.	Sorts.	Leaves intact.	Leaves stripped
		lbs. oz.	lbs. oz.
1	Elvethan Mangel Wurzel	8 10	5 4
2	Yellow Globe Mangel Wurzel ..	9 0	5 2
3	Red Globe Mangel Wurzel	8 2	6 12
4	New Olive-shaped Red Globe Mangel Wurzel	11 13	7 6
5	New Olive-shaped Yellow Globe Mangel Wurzel	16 13	12 3
6	Sutton's New Orange Globe Mangel Wurzel	9 5	8 12
7	Improved Long Yellow Mangel Wurzel	19 0	9 11
8	New Long White Mangel Wurzel ..	15 0	7 8
9	Silver Beet	16 15	5 9
	Total	114 10	68 3

Now this gives a preponderance of 51 lb. 7 oz. for the nine half plots of intact roots, over the nine half plots of stripped roots, presenting in round numbers an average for 12 intact roots of 12 lbs. 11 oz.; 12 stripped roots, 7 lbs. In both cases it must be confessed the numbers are low, since the average does not give more than 1 lb. per root. It must be recollected however that the season was one uncommonly prejudicial to the growth of Mangel Wurzel, and more especially in the cold Cotswold district where these experiments were made. Besides, the plots in our experimental garden at the Royal Agricultural College were simply dug and the seed was planted without manure. As regards the seed I would remark that it was kindly supplied by the Messrs. Sutton. The experiment was further interesting as showing in plots side by side the different characters of so many derivate forms of the sea-side Beet, while the resulting weights indicate such as succeed best in our position.

While carrying on the experiments just detailed, it occurred to me that it would be a matter of not a little value in a practical point of view to ascertain whether Mangel would well bear transplantation, and what difference there might be in its effects upon so many varieties. Consequently, when our first set of plots were thinned out, I simply transplanted 24 plants of each kind into separate plots. Of these half were stripped, and the experiment was conducted in fact in the same way as it was with the untransplanted lot.

These transplanted specimens grew well from the first, a result most probably rendered the more certain by the wet cool season. The bulbs however were not seen above the ground as in the ordinary way of cultivation, and instead of a tap root to be cut away in the operation of tailing there was found a large bunch of delicate root fibres; the results of these experiments are as follows:—

Table IV.—Weight of 12 Transplanted Roots.

No. of sorts.	Sorts.	Leaves intact.	Leaves stripped
		lbs. oz.	lbs. oz.
1	Elvethan Mangel Wurzel	14 10	5 10
2	Yellow Globe Mangel Wurzel	13 0	6 14
3	Red Globe Mangel Wurzel	15 4	7 3
4	New Olive-shaped Red Globe Mangel Wurzel	12 4	5 6
5	New Olive-shaped Yellow Globe Mangel Wurzel	11 14	7 10
6	Sutton's New Orange Globe Mangel Wurzel	10 2	5 9
7	Improved Long Yellow Mangel Wurzel	15 10	11 1
8	New Long White Mangel Wurzel ..	12 11	7 6
9	Silver Beet	15 13	6 11
	Total	121 4	63 6

Here then is a positive increase from transplantation, and though I by no means think the process would always succeed, yet it is well to know that wherever a crop be thin, there can at least be no harm in filling up with transferred plants, and I am inclined to think that in most seasons at least a paying result would follow. In fact many of the large specimens of roots exhibited are derived from getting some early plants, perhaps by means of the greenhouse, and then transplanting them in good rich soil; they thus afford striking evidence of what may be done in this way.

It may be further remarked that as regards the difference in the intact and stripped roots, it appears to be even greater than is shown by the previous nine plots. The stripped exhibit very nearly the same results in the last as in the first series. The average in round numbers of the transplanted experiments will be for the 12 intact roots 13 lbs. 5 oz., for the 12 stripped roots 7 lbs., the latter being a trifle more than one half.

I conclude then that these experiments fully justify previous conclusions. Here are the records of some 25 plots of Mangels all telling the same tale. Besides this the like experiments have been tried with Kohl Rabi, both as regards untransplanted and transplanted plots, and I am enabled to state that the half of the plot stripped of leaves produced little more than half the weight of the intact ones, whilst the transplanted plots more than doubled in weight that of the untransplanted ones. I consider, then, that the matter of whether or not it be judicious to strip Mangels of their leaves, however partially, resolves itself into a question of value. If the leaves be worth more than the consequent lessening of the roots, which I deem inevitable, there is no mischief; but to suppose that the farmer can make use of green Mangel leaves and have as good, to say nothing of an increased crop of roots, I consider contrary to both science and practice.

Again, as regards transplantation I consider it a valuable process, and incline to the belief that it will be found of great advantage if carefully done, and done with judgment as to time.

Home Correspondence.

Cottages.—Whether, as a general rule, the working classes can have better dwelling accommodation than they can pay for, the inevitable laws of political economy will ultimately determine; but a few words seem desirable on the point which, in the discussion of cottage accommodation, is so frequently put forward, viz., that landlords should hold the cottages in their own hands, and not let them with their farms. Now, this is entirely a one-sided view of the question. It amounts to this, that the landlord, and not the farmer, is to choose the farmer's servants. A certain number of cottages are as much necessary offices of a farm as sleeping rooms for servants are necessary offices of a gentleman's, clergyman's, or tradesman's premises. What would be thought of a landlord stipulating to reserve in his own hands the servants' part of the house, that he might have a supervision over the servants employed, or rather over their employer? The proposal with regard to the cottages on a farm is equally insulting to a farmer. It has ceased to be the habit for farmers to live with their servants. Farm-houses therefore no longer provide accommodation for them, and some cottages require to be allotted to a farm for the accommodation of the farm staff, who are most of them married men. This is necessary to enable a farmer to carry on business with a fair control over his men, and as an independent man should be able to do. A landlord should satisfy himself that his tenant farmers are fit men to be trusted over labourers; but having acquitted himself of this responsibility, he should leave his tenant as free to deal with his men as the landlord is to deal with his own servants. *Alex. Hall Hall, Watergate.*

Farmers' Clubs.

Stirlingshire Central Union: *On Turnip Growing.*—A discussion on this subject took place at the late Annual Meeting of this Society, which we abridge from the columns of the *Stirling Observer.*

Mr. Nicholson, of Carnock, said: As regards the dryfield [The term "dryfield" applies to all the land, not alluvial, which surrounds the carse or alluvial land] farmers, there is no question that the Turnip crop is one of the most important they grow. On it depends the success of their live stock and on it their future white crops. It is very difficult to estimate the value of the Turnip crop in this country. The Highland Society's statistics on the subject, however, brought out some very curious facts. In Scotland, in round numbers there were 450,000 acres of Turnips grown in 1855. In Aberdeen there were 80,000 acres, or more than one-sixth of the whole Turnip husbandry in Scotland. Now I have the means of coming to a sort of guess as to the indirect value of this Turnip crop. I find that in 1859 from Aberdeen, by steamboat and by rail, there were 600,000*l.* of dead meat and stock sent southwards. Besides all that, there is the supplying of the large provision markets in that city. I think this shows at once the enormous value of the Turnip crop; because there is no doubt whatever that Turnips are the main staple food on which our beasts are fattened. Then, as to the cultivation of it. I think we are all agreed that the first necessity is that the ground should be thoroughly drained; and when I say thoroughly drained, I speak of draining from a depth of 3 to 4 feet. This, I think, we must all admit, is necessary, for thorough draining. But it is not many years ago since we had a very different theory. Mr. Smith of Deanston considered 30 inches very satisfactory draining; and at this present moment I am just now proceeding to drain a field which 40 years ago was drained with coupled drains upon what was considered an improved principle

in those days, and yet the field was not dry. Twenty years ago, this field being unsatisfactory, I drained it on Mr. Smith's principle, and supposed I had made a most practical job of it; but 20 years later, that is in 1860, I am beginning to re-drain it for the third time, and to the depth of 3½ feet. This shows how different the opinions are on the subject now, to what they were many years ago. Then there is a second point, which I believe, though very largely admitted, is certainly not very largely practised in the cultivation of the Turnip, that is deep ploughing and subsoiling. A good many around me, and in the district too, allow that it is well to do a good strong furrow, but I believe in practice they do no such thing. They may furrow near 7, 8, or even 9 inches, but not one in fifty subsoil for their Turnips. Now I believe that one half of the value of our draining is lost if we do not subsoil all around the stiff lands. I am quite satisfied that it is one of the great necessities for the success of the Turnip crop that the lands should be well stirred and thoroughly worked. Practice, they say, is better than precept, and therefore I am going to mention one or two things what I have done myself. I find that on one field this year, of 5 Scotch acres, which are partially drained and let in Grass for 4*l.* for the 5 acres, I expended 20*l.* in completing the draining and picking out the stones. I have put on the Scotch acre, 30 tons of farm-yard manure at 5*s.* per ton, 8 cwt. of bone manure at 7*s.* per cwt., and 1½ cwt. of Somart manure, making in all an outlay on manure of 11*l.* 1*s.* the Scotch acre. The Turnip grown was the Aberdeen Green-top Yellow, and on measuring I find that I have 43 tons the Scotch acre in that field. There is no doubt that this is heavy manuring, but I believe it will pay. I have no doubt tenant farmers may say that they cannot afford to expend so much on manures, but I will give you two specimens, which I think any tenant farmer with any enterprise may carry out. I have begun to farm upon about 140 Scotch acres on the Sherriffmuir, nearly 690 feet above the level of the sea. One of the fields was rouped [let by auction] by the outgoing tenant at 25*s.* per Scotch acre in 1859. I believe it did not pay him the seed and the labour. I have had no manure at all as incoming tenant, but I have applied 10 cwt. of bone manure at 7*s.*, 1½ cwt. of Somart manure at the cost of 10*s.* per acre, with dung besides, or at the cost of 4*l.* 5*s.* the Scotch acre. I should tell you that these Turnips were not sown till the 29th or 30th of June, far too late in the season; still although it was so late as that, with the amount of manure I mentioned, that land, which I could not ride my horse across—and I should tell you, drained at a cost of 8 guineas an acre, and subsoiled every inch of it 18 inches deep—on that ground I was offered 4*l.* the imperial acre for my Turnips to be used for the fattening of sheep. People at first were very shy of trying my Turnips at all on that height. Well I got the offer of 4*l.* the imperial acre. I did not take it. I have got my own sheep upon it—200 sheep—and I am glad to say, in spite of the weather, that I have not lost one single sheep, and a good many of my own neighbours can't say the same. I mention this last case more particularly because I assume that a landlord will be quite prepared to drain the land for a tenant with a lease before him; and if the landlord drains the ground I think that no tenant can consider that he is spending too extravagant a sum if he can raise Turnips on land of that quality, at a cost of 1*l.* per acre for manure. The kind of Turnip I have sold is Dale's Hybrid. I think it is one of the hardiest and most profitable Turnips, and does especially for this part of the country, where we are rather late. Of course I consider I should have had a much better crop had I been able to sow earlier in the season. I have also worked this field at great disadvantage, but I have no doubt I am working it for profit, and I have little doubt that if improvements were carried on in that way it would pay any tenant with a 19 years lease. Perhaps I should have mentioned one other thing. As far as my experience goes in Turnip growing, I have tried repeatedly bones and guano—bones separately, and guano separately, and both together; and I am quite satisfied that mixed together they gave a better crop. I have also found that where you have not manure to go over the entire field by itself, you are far better to divide the manure over the whole field, so as to give the whole Turnip crop a portion of it, than to give one half of the field the whole of your manure, and fill up the other half with artificial manures.

Mr. Murray of Polmaise said—The land on which I have grown my Turnip crop is a strong clay soil, thoroughly well drained and sub-soiled, and was very well worked by the steam plough in the spring, and grubbed to a most unusual depth; and I found this of very great service to the field in producing the crop. The crop was a very large one. I tried it at different parts of the field, and found that as nearly as possible there were 48 tons to the Scotch acre of Swedes—purple top and green top. The green top produced a smaller crop than the purple top, but it is considered to be the best keeping of all the Turnip tribe. We all know the value of a good keeping Turnip, because one week of feeding of the stock towards the end of May will tell more than months of feeding in the winter. If we can get Turnips to keep fresh and good till the end of May we are obtaining a very great object.

Mr. Smith described the cultivation of Mr. Murray's Turnip crop. We first plough our land from 10 to 12 inches deep in the winter, and furrow it with the two-horse plough:—this particular field being done in that way. It is a field of 13 acres, and it lies all winter with a strong heavy furrow, and this mollifies the sub-soil which is brought up. This season we had the use of the steam grubber to go over it. The first thing that was done was by this machine, which went over it and stirred up the soil from 10 to 12 inches—it made a very nice job of it, and broke it all finely down. After that we harrowed and grubbed it with the common four-horse grubber, ridged it up, and prepared it for sowing. Then we had farm-yard manure made up into dunghills lying during the winter season. There would be from 20 to 25 tons of farm-yard manure to every Scotch acre. We commenced on the 5th May and ridged it, and then about the 1st of June we commenced thinning. We thin the Turnips 14 inches apart, and the drills are 28 inches wide. The general rule in working the crop is to use farm-yard manure—we use no light manures.

Mr. M'Lachlan, Auchentroig, said—I have some little experience in the growing of Turnips in high grounds. For the last 10 years my time has been occupied with the improvement of waste lands. In regard to Turnips in high land, they are grown at far greater expense than can be done in Roxburghshire, East Lothian, or say Fife, or any regular Turnip growing county. A pair of horses in Roxburghshire will manage to work 25 imperial acres of Turnips, and their own share of work besides. Now among us if we manage half of that it is as much as we can do. I think 12 or 15 acres of Turnips is about as much as a pair of horses can manage with us. I think this arises from the large quantity of rain we have, and owing to our having a stiff, retentive soil that prevents the horses working after rain. In Roxburghshire, although it rains in the forenoon they can work the soil in the afternoon. With us we must allow our land to get into condition before we can work it. I find the green-top yellow to be the best specimen of Turnip. I find also that 28 inches wide for drills, is the distance that suits best for almost any ground. I generally thin my Turnips from 10 to 12 inches apart. I think Mr. Smith is very likely right in heavy ground. Regarding the storing of Turnips, I find the best way to store them is to keep them in small pits in the field. As to the consumption, I find we cannot consume them profitably on the ground by sheep eating them. My opinion as to the best way of consuming the Turnip is to drive them home to the farm and consume them on the steading by feeding cattle, or for dairy use—this answers best. I used the Loch Katrine Water Company's manure for a considerable time. I found that I could not do with less than from 40 to 50 tons per acre of horse dung. I also had very good Turnips from 3 cwt. of guano and 3 cwt. of superphosphate. I had also some very good manure from Lawson—it was rather late in the season, however, when I got this. We had not quite as liberal a crop from the 3 cwt. as from the 40 tons.

The Chairman said—With regard to the use of bone dust, I mix the whole of my bones with the urine of the byres. I believe that is far better than dissolving them with acid. It can easily be done merely by aid of a furrow at the end of your middenstead. Some of the bones I had, had been lying nearly a month steeped in urine.

Mr. Young of Keir Mains said—I will give you my experience on the farm of Keir Mains. After preparing the land, we applied about 30 yards of stable-yard manure, that being carried out into large heaps in the winter. After that we applied about 3 cwt. of guano. We have used ammoniac guano, and I am glad to say that it has been most satisfactory. During last year I think our average crop has been about 35 tons per Scotch acre. The land is worth about 3*l.* per acre. We make our drills about 30 inches apart, and thin our Turnips from 12 to 13 inches. We use the Aberdeen green-top yellow. I got it from Mr. Drummond, and I am glad to say it has given satisfaction. For many years we had been in the habit of growing Swedes, but we find that this green-top yellow is an improvement on the Swede. Last year—indeed every year since we grew this Turnip, we have them in the month of May in as good condition as we have in month of January. This year the crop is equally good, and we use the same storage as my friend Mr. M'Lachlan. We put them into heaps in the field—we find they keep best in that way. I may mention my experience in the west near Glasgow. Our farmers there have been busily engaged carrying their Turnips to Glasgow, where they are sold for food from 18*s.* to 22*s.* per ton, and deducting for the five miles they are distant from the city 3*s.* for carriage and tolls, this leaves about 19*s.* per ton they realise by the sale. I know of no crop so useful or so important as our Turnip, and it will be a woe-day for us when our Turnip crop fails us.

Mr. Alexander said—I have had a good long experience now in growing Turnips as a Carse farmer. I have not fallowed any these last 18 years. With regard to the growing of the Turnips, we apply all our farm-yard manure—and had a very successful crop last year from light manure. From what has been already said about the mixture of manures, I think this ought to be universally adopted. I think there is no fear of not growing a good crop of Turnips from the average Carse land. There may be land so very much impoverished, and very dirty, that may require naked fallow for the first Grass, but I think after that the green crop system will be found the most valuable, even on a Carse farm; I have laid down 35 tons of farm-yard manure per acre, and given 2 cwt. of guano, and then 4 chalders of shell lime—all the same year. I think that year it was the most profitable crop we ever had, and the pasture, even as it now is, beats Mr. Murray's in grazing. This year I applied light manures to a pretty heavy extent. Of the first using as much as 6 cwt. per acre, where there was no solid manure, and then after they were thinned I applied the lime.

Mr. M'Laren said—I should like to ask the general opinion as to using artificial manures and lime in one year.

Mr. Drummond said—I was at first under the impression that Mr. Alexander had used the lime and the guano in one operation; but he now tells us it was after the Turnips had been thinned that he applied the lime, so that the application of the lime was quite safe—coming in direct contact with the guano, it would undoubtedly neutralize its effect.

Mr. Gray, Bearside, said—I feel very little difficulty in growing a good crop of Turnips. I can grow very easily 35 or 40 tons per acre; but I am meeting with an enemy counteracting all these good effects—I am getting very much annoyed with "finger-and-toe." That appears to me a complete mystery, but I can see some little cause in certain cases. For instance, if you put rotten Turnips in your dunghill, you are just as sure to have "finger-and-toe" as if you had it. Mr. Gray described at some length a few experiments he tried, in order to find out the effects of the rotten Turnips on the crop, and every one of them invariably resulted in the fact that rotten Turnips mixed with the manure led to the appearance of this disease in the new crop.

The Chairman said—I think we must consider that this subject is nearly exhausted. We have got a great deal of interesting information from various gentlemen on the subject, and I think there are two or three things to be said as a sort of wind-up to the discussion. What Mr. Gray of Bearside mentioned about the rotten Turnips is certainly a point I never heard mooted before. It seems to me a strong fact; but a still stronger fact seems to me to be that he should have so much finger-and-toe upon new ground. We know that lime modifies this disease, but that it does not cure it; but it would be most desirable if farmers were to follow up these observations by investigations as to the primary cause of the disease.

ISLE OF THANET: *Labourers' Friend Society.*—At the late annual meeting of this society the distribution of awards to the successful competitors took place, the recipients [labourers] being admitted into the room for that purpose.

The Chairman, the Rev. G. W. Sicklemore, said:—My good friends, the gentlemen you see around this table are assembled this evening to do honour to you. The object of the Isle of Thanet Agricultural Association, which is supported by the farmers and others in a higher rank of life than yourselves, is to improve the condition of the labourers by giving awards to those who have conducted themselves well and gained the respect and esteem of their employers, their neighbours and their friends. It is not the mere money value of the rewards at which we or you ought to look. They have a moral weight which far exceeds any other value; and in this light, as testimonials to that conduct honesty, and skill, so much more precious than other possessions, they ought to be viewed by you. They will convince you that those who are placed over you desire that you should follow what is right; that your conduct is noticed by your masters, and known to your neighbours and friends. The reward-paper hanging up in your cottages, will be a perpetual incentive to honourable exertion, and your children will be reminded that if they tread in the same paths as you have done, it will not be in vain. I do not know that a more gratifying sight can be imagined than the one which this room now presents, when merit and worth are receiving the rewards which they so richly deserve. I will say no more, except to remind you of the good advice you so often have heard on these occasions from the lips of Mr. Warre [the lately deceased President of the Association]. Show by your general bearing that you come here merely to receive rewards of which you feel yourselves to be deserving, and that you desire, humble as you are, to work out your lives well and properly. Conduct yourselves well during the year to come as you have done during that which is now nearly ended, and we hope that at our next anniversary we shall see many of you again, and hear of all that you have shown yourselves worthy of the rewards which you are about to receive. I must now again ask you to join with me in drinking the health of her Royal Highness the Duchess of Kent, the venerable mother of our beloved Queen, and patroness of the Isle of Thanet Agricultural Association. The toast was drunk with three times three hearty cheers, and after the distribution of the prizes the labourers left the room. [Various toasts were then honoured and speeches made.]

Mr. Marsden, of Dumpton, near Ramsgate, in acknowledging a compliment paid to the strangers present,

spoke thus:—With the permission of the chairman, he would take the liberty of saying a few words on the Association and making a remark or two on topics which had been alluded to by previous speakers. They had existed as an Association for about a quarter of a century, with the same rules and regulations, and from year to year they had almost the same list of rewards as at its formation. He was of opinion that both the rules and the list of rewards required revision, and that some of them at least might be altered with advantage. They had been told that agriculturists must not stand still when all other classes and professions were going ahead. He was not sure that the alterations which he believed to be necessary were not better adapted for consideration by the committee than for a general meeting, and what he said was intended principally for the committee, by whom he hoped the subject would not be lost sight of. He believed there was some merit due to the labouring man who brought up a large family without parochial relief; but such a man only did his duty, and he did not think many of their labourers would have 10 children if they could help it. Nor could he see much merit in being a widow. He thought it much better, and certainly more within the scope of their Association to give prizes to skilled labourers, whose merits it was much more easy to define. The Association did right in giving rewards to their best ploughmen, stackers, thatchers, and shepherds, and in his opinion such prizes should be increased. He remembered the time when it was not safe for a farmer to use a machine, but now they had all machinery of some kind; very many of them possessed steam engines. Would it not be right therefore for them to give prizes to the men who proved themselves the best adapted by knowledge to be instructed with the management of such machinery and steam engines? The Rev. Mr. Robins had made some very judicious remarks on labourers' cottages, in reference to a letter by Mr. Tucker, recently published in the *Times*. He had read Mr. Tucker's letter, and he hoped things were not so bad as was there represented. But there was, even in the Isle of Thanet, a great want of cottages for their labourers. Some remarks had also been made by the chairman on the size of cottages and the number of rooms required. They all admitted that a good cottage was better than a bad one; but a bad one was far better than none at all. A landlord who takes down four cottages and erects only two, though the two may be on an improved scale, often forces the occupants of the other two to go and reside in worse houses in the worst part of some neighbouring town, from whence they have to travel two or three miles daily to and from their work, in all weathers, and are deprived of the chance of ever having a hot dinner or a meal with their families, except on a Sunday. Their children were left to run about the streets, getting early imbued with every species of vice and wickedness. Surely there must be some cause for such a state of things, and he believed the law of settlement had much to do with it. *Abridged from the Kentish Gazette.*

Calendar of Operations.

JANUARY.

Cheshire: *Jan.* 1.—The operations of the farm have of late been rather of a dull uninteresting character, being chiefly confined to the carting of Turnips and drawing out manure from the farmyard, with an occasional day's threshing to supply the cattle with straw. The weather for the last fortnight has been very severe, and with the deep covering of snow deprived the sheep and young cattle, such as were out, of what little herbage there is on the land, and they have for a fortnight been entirely depending upon what food has been given them by hand. The wet weather during the month of November and early part of December prevented the sowing of Wheat on many farms, so that a very great portion of land will have to remain unsown until more favourable weather in the spring, and we are inclined to think it will then have a better chance than if put into the ground in bad condition previous to the very severe weather, especially if it can be done not much later than the middle of February. A sudden change has taken place in the weather, and we hope soon to see the fields bare again, and the winter fallowing where not completed resumed. Wheat, as we anticipated, is threshing out very indifferently, and a great deal of it will have to be sold at a low price or used at home for feeding purposes. Mangel Wurzel and Turnips, with few exceptions, have proved very light crops, but where secured before the frost are generally of good quality and fetching a high price. Turnips are very much frosted even in the buildings when covered thickly with straw, and are so hard that it is with the greatest difficulty cattle can masticate them, but by the aid of a good Turnip machine, such as Moody's improved, worked by horse power, they are made palatable when mixed with cut chaff, &c., and are available for every kind of stock. The late season was most unfavourable for the growth of seed of both kinds, more especially the former, and much of it never ripened at all, consequently good seed will be very scarce and difficult to procure. The pleuropneumonia is still prevalent in some parts of the country, and we have seen and heard of a great deal of lameness amongst sheep. Bacon pigs and strong stores appear to maintain a good price. *W. P.*

Notices to Correspondents.

Potatoes and Peas: *N H.* There is no identifying Potatoes by their names, and the Lemon Kidney and Early Top are both unknown to us. Perhaps some readers may supply us with their experience of these, and also of "Bishop's last and best agricultural Pea." The Potatoes we should recommend would be the Soden's Early Oxford, so known in the neighbourhood of Reading, a good early sort—and the Axbridge Kidney, a late kidney of excellent quality till late in the season.

Temperature: *F. Walso.* It is found that the increase is 1° of Fahrenheit for every 45 feet of depth.

NOTICE.

SUTTON'S AMATEUR'S GUIDE and PRICED LIST of SEEDS has been unavoidably delayed, owing to the number of new kinds of Kitchen Garden and Flower Seeds. It will be ready on the 16th inst., and will be sent post free to any address on receipt of 12 stamps, and to customers gratis.—Royal Berkshire Seed Establishment, Reading

WHEELER'S "LITTLE BOOK" (Illustrated) for 1861 will be ready in a few days.

Free for three stamps. Gratis to customers.

This "Little Book," or select Seed List, contains prices and descriptions of some very choice varieties, exclusively in our possession. It also gives full particulars of our celebrated collections of Garden Seeds, which we deliver carriage free.

J. C. Wheeler & Son, Seed Growers, Gloucester.

PLYMOUTH SEED COMPANY.—The Directors have much pleasure in stating that the NEW EDITION of their GENERAL PRICE CURRENT is Now Ready, and may be had direct from the Company, or upon application to Messrs. Simpkin, Marshall, & Co., 4, Stationers Court, London, E.C. Price 6*d.* each.

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Address Plymouth Seed Company, Plymouth, Devon.

NOTICE.

South Eastern Nurseries and Seed Establishment, Ashford.

W. J. EPPS, Jun., begs respectfully to state that he has taken the above [illegible] of his father, and has a large stock of ORNAMENTAL SHRUBS and well-grown CONIFERÆ, consisting of Wellingtonias, Araucarias, Pinus Pinsapo, Smithiana, Deodars of all sizes; also a quantity of large deciduous Trees for belting Parks, Cemeteries, &c, which he will dispose of very cheap. An extensive collection of Trained and Standard FRUITS, ROSES, &c.

Every attention will be given to the commands of those who may favour him with their patronage, and it will be his constant care to merit them.

SEEDLING ASH, 5*l.* per 100,000.

WANTED, a quantity of FRUIT STOCKS, for cash. Sample and price required.

PINE APPLE PLACE NURSERY, EDGEWARE ROAD, W.

ARTHUR HENDERSON and CO. beg respectfully to announce that their CATALOGUE of Kitchen Garden and Flower Seeds for 1861, with a list of Garden Implements, &c., is now published, and will be forwarded postage free, on application.

They particularly desire to call the attention of the Public to their "CELEBRATED SHORT-TOPPED GARDEN BEET," the only variety that really will repay the grower; colour, flavour, and quality, are such as to render it worthy of extensive cultivation; also "SNOW'S TRUE WHITE WINTER BROCCOLI," MOOR PARK LETTUCE; those very superior sorts as yet but little known, namely, the PALATINE, and VERSAILLES CABBAGE LETTUCES; neither of these are disposed to run to seed during the hot summer months; also the PINE APPLE PLACE WINTER BROWN COS LETTUCE superior to Alma; the WHITE and BLACK SPINED IMPERIAL CUCUMBERS, HENDERSON'S CHAMPION of the WORLD CUCUMBER, LESLIE'S LONG RIDGE OUT-DOOR CUCUMBER; the new SPROUTING or FEATHER-STEMMED SAVOY, a scarce but most delicious Green; the "CHAMPION CABBAGE," "MITCHELL'S HARDY CAULIFLOWER," "LESLIE'S LATE WHITE BROCCOLI," "ROSETTE COLEWORT," "REED'S CELERY," "HENRY'S AYTON CASTLE GIANT LEEK," and other striking and first-rate Vegetables, which may be thoroughly depended upon as heretofore.

PINE GOLDEN PIPPIN APPLE.

R. GLENDINNING begs to offer the above new Apple, which for excellence is unrivalled. The following description is given by Dr. Hogg in his Year Book just published:—

"Of all the dessert Apples which bear the name of Pine and Pine Apple, there is none which possesses the flavour of that fruit so markedly as this. It is small, about the size of the old Golden Pippin, and of the same shape. The skin is entirely covered with a smooth coat of fawn-coloured russet, the flesh is very tender and juicy, sweet, sprightly and vinous, and with a distinct Pine Apple flavour. Ripe during October and November. The tree is of a small habit of growth, and will do well on the paradise stock, either grown as a dwarf bush, or for an espalier, and it is an excellent bearer."

Strong Maiden plants, 7*s.* 6*d.* each.

GENERAL TODLEBEN PEAR.—The above new Belgian Pear is one of the largest and finest in cultivation, very melting and juicy, with a rich sugary and perfumed juice. In use from December to February.

Strong Maiden plants, 3*s.* 6*d.* each.

R. Glendinning, Nursery, Turnham Green, W.

THE BEST HOUSE AND FRAME CUCUMBER, "WILLIAM BROWN,"—This excellent house and frame variety is offered not as an exhibition kind, but as one of the best for general purposes, being a profuse bearer, of very fine quality, and medium length, such as every Gardener would wish to possess who has the daily wants of a household to meet, or a good marketable fruit to supply. It is held in the highest estimation by all the Gardeners in the neighbourhood where it was originally raised. Stock limited. Price 1*s.* per packet, free by post.

To be had only from James Tynan, Seed Warehouse, 68, Great George Street, Liverpool.

YORKSHIRE HERO FRAME CUCUMBER.—An excellent variety, from 24 to 30 inches, fine flavour, white spined, most abundant bearer, will give satisfaction to every grower who wants quality and quantity. Price 2*s.* 6*d.* per packet

BRITISH QUEEN FRAME CUCUMBER.—A most prolific dark green white spine variety, 20 to 30 inches in length, carries its bloom well, a shy seeder, very good and distinct. Price 2*s.* 6*d.* per packet.

CHAMPION of ENGLAND BROCCOLI.—This universally esteemed variety will grow to an enormous size, sometimes weighing 27 lbs.; a small quantity of seed has been saved from large heads, which may be had in sealed packets, 2*s.* 6*d.* each.

KEMP'S EARLY INCOMPARABLE CABBAGE.—The best variety in cultivation. Packets 1*s.* each.

HUNT'S SUPERB SWEET WILLIAM, per packet, 6*d.*

May be had post free of E. P. Dixon, Yorkshire Seed Establishment, 57, Queen Street, Hull.

NEW CUCUMBERS AND MELONS.

W. J. EPPS has much pleasure in stating that he has the stock of the following which has been so successfully exhibited and grown by Mr. Frost, the gardener to E. L. Betts, Esq., Preston Hall.

CUCUMBERS.—"PERFECTION," Black Spine; small handle, fills up well and carries a fine bloom, a good cropper and superior flavour, pronounced by competent judges to be the best Cucumber out. 2*s.* 6*d.* per packet.

"WINTER PROLIFIC," one of the best Cucumbers grown for forcing and early supply. 2*s.* 6*d.* per packet.

"GARIBALDI," Black Spine; an extraordinary Cucumber for exhibition or table, averaging 30 inches and upwards; very handsome. 2*s.* 6*d.* per packet.

MELONS.—PRESTON HALL HYBRID, first prize Regent's Park, Chiswick, and Crystal Palace. 2*s.* 6*d.* per packet.

Turner's Gem, King's Green flesh, Beechwood, Terry's Green flesh, General Havelock, and all the leading kinds, 1*s.* per packet.—Maidstone.

CEDRUS DEODARA.

MAULE and SONS still hold large supplies of this favourite Tree, from seed, which they are offering at the following low prices:—Magnificent specimens, for immediate effect, from 10 to 15 & 20 feet high, at 2*s.* per foot in height; other smaller sizes, from 1, 2, 3, 4, 5, 6, 7, 8, & 9 feet, at 1*s.* per foot. Their Lists of AMERICAN CONIFER and FOREST TREES for the season can be had on application.

☞ Strong 2-year Gorse or Furze Plants for Fox Covert, &c., at 10*s.* per 1000.

Bristol: Nurseries, Stapleton Road and Stoke Gifford.

JNO. STANDISH has much pleasure in informing his friends and the Gardening world, that he has received all the plants collected by Mr. Fortune during his last voyage in China, and also all the Plants and Seeds lately collected by Mr. Watson, in New Zealand. A part of both the above Collections are now ready to be sent out:—

CAMELLIA RETICULATA fl. pl.—This very fine variety is a better grower than reticulata, the flowers being equally large and perfectly double; as soon as it has attained any size, it is the most gorgeous flowering plant that can possibly be imagined. Plants, 63*s.* each.

ARECA SAPIDA.—J. S. has received a large importation of this rare Palm, which is adapted for a conservatory, or any place from which frost is excluded. When it becomes large it is admirably suited for placing out of doors to ornament the flower garden in summer. Price 21*s.* to 31*s.* 6*d.* each

CORDYLINE AUSTRALIS, 7*s.* 6*d.* each; per dozen, 60*s.*; per 100, 20*l.*

" BANKSII, price 21*s.* each; per doz., 10*l.* 10*s.*; per 100, 60*l.*

" ERYTHRORACHIS, 31*s.* 6*d.* each, per doz. 12*l.* 12*s.*

The above Cordylines are well adapted for Conservatories in winter and for putting out to ornament Terrace Walks and Dutch Gardens during the summer. They are all nearly hardy, therefore they need only a slight protection in winter; in fact in the Isle of Wight and many parts of Devonshire and Cornwall they would stand the winter out of doors without injury.

CYATHEA CUNNINGHAMI.—As this beautiful Tree Fern is of comparatively small growth, it is well suited for a small Greenhouse or Conservatory. Nice plants from 3*l.* 3*s.* to 7*l.* 7*s.*

CYATHEA SMITHII.—This is undoubtedly the finest of all the New Zealand Tree Ferns. Its beautiful pale green short stalked fronds clothe it with foliage to its centre, and make it highly effective. Fine young plants, 5*l.* 5*s.* each; plants with nearly 3 feet stems, 21 guineas.

MYOSOTIDIUM NOBILE, or ANTARCTIC FORGET-ME-NOT, 10*s.* 6*d.* to 31*s.* each.

TODEA PELLUCIDA.—Those who have only seen the small plants which have been heretofore introduced, can have no conception of the magnificence of this fine Fern; some of the stems are more than a foot in diameter, and are the largest specimens Mr. Watson saw in New Zealand. Plants 7*s.* 6*d.*, to 15*l.* 15*s.* each.

WOODWARDIA JAPONICA, fine plants, 21*s.* each.

WOODWARDIA ORIENTALIS, collected by Mr. Fortune, has leaves from 3 to 4 feet long, with more substance than Osmunda regalis. This magnificent Fern is no doubt hardy as W. japonica. Plants 31*s.* 6*d.* each.

ROSE, NOISETTE—CELINE FORESTIER, bright yellow, fine form; is the hardiest of all the yellow Roses. Its foliage is so ample and beautiful that it forms a fine object even before it blooms, when it produces its flowers more profusely than any known variety. It continues blooming late in the season, until hard frosts destroy its buds, and is admirably adapted for covering walls, trellises, or banks. As a pillar Rose it cannot be surpassed, and is decidedly the most useful of all yellow Roses. Price 5*s.* each.

ROSE, HYBRID PERPETUAL—EUGENE APPERT.—Scarlet crimson, very vivid. The petals are so firm and the substance so good that they stand the sun's rays for a long time without discolouring. Each blossom is stiff and erect, showing itself with great advantage above the magnificent foliage. A free grower, well adapted for a climber or pole Rose. Fine standards, 5*s.* each; per dozen, 48*s.*

TORREA GRANDIS.—Mr. Fortune says this is one of the handsomest trees in China, being a stiff erect plant, of a pale green colour, in growth similar to Araucaria imbricata, attaining a height of upwards of 100 feet, and is particularly adapted for Avenues. Plants, 21*s.* each; 10*l.* 10*s.* per dozen; 63*l.* per 100.

Besides the above-named plants J. S. has one of the finest collections of RHODODENDRONS in Europe, which he cultivates in large quantities; the finest collection of GLADIOLI, as well as a choice selection of ROSES, VINES, &c.

CATALOGUES forwarded free on application to The Royal Nursery, Bagshot.

NEW METHOD, COMBINING ECONOMY AND EXCELLENCE.

JAMES TYNAN begs to invite the attention of Florists and Gardeners to his method of supplying SEEDS. In order to meet the wants of a large class of Amateurs and Gardeners, he has adopted the plan of making up seeds of the very best quality in small quantities, so that with the most economical outlay the small garden may be embellished with flowers of the greatest perfection and merit. This method has received very substantial approval from Florists and Gardeners in all parts of Great Britain, in the numerous orders annually received, and the flattering testimonials voluntarily tendered. GERMAN ASTERS and STOCKS of unequalled merit, BALSAMS, ZINNIAS, CALCEOLARIAS, CINERARIAS, PHLOXES and all the new annuals, both English and foreign (such as are usually sold in large expensive packets only), with every variety of Garden Seed worthy of cultivation.

The new French DOUBLE ZINNIA ELEGANS (see *Gardeners' Chronicle*, Sept. 22, 1860), and the splendid new HYBRID and other DIANTHUS, at 6d., 1s., and 2s. per packet. Priced Lists on application.

Seed Warehouse, 68, Great George Street, Liverpool.

FOR SMOKING GREENHOUSES.

NEAL'S PATENT APHIS PASTILS, which light with a Candle, save all trouble, destroy all Insects, and are already used by some of the leading Gardeners, may be obtained of the principal Seedsmen and Nurserymen, 2s. per packet.—Manufacturer and Patentee, J. NEAL, Edward Street, Birmingham. Trial packets, 1s. each.

GENUINE TOBACCO PAPER FOR FUMIGATING.

H. APPLEBY (Foreman to Messrs. IVERY & SON, Nurserymen, Dorking), takes this opportunity of thanking his patrons and the public for their support for the last five years, and begs to inform them that he continues to supply the above in 4 lb packets 1s. 3d. per lb. A liberal discount allowed to the Trade. Price on application. The undermentioned Testimonials among many others will guarantee its quality:—

"*Packington Hall Gardens, Coventry, October* 10, 1860.

"Sir,—I have used your Tobacco Paper during the last three seasons, and have always found it answer admirably.

"W. POOLE, Gardener to the Earl of Aylesford."

"*Moulsham Nurseries, Chelmsford, October* 12, 1860.

"Sir,—We have used your Tobacco Paper for the destruction of green fly for some time, and seldom find a second dose necessary. Those of our customers who have given it a trial continue to use it when necessary, which is the best testimony of its efficiency.—SALTMARSH & SON, Nurserymen, Chelmsford."

"*Camden Nursery, Camberwell, Surrey, October* 29, 1860.

"Sir,—I feel much pleasure in stating that the Tobacco Paper I have purchased from you on many occasions has given the greatest satisfaction to myself and customers, it has effectually destroyed the insects and not in any way injured the plants. W. BARNES, Nurseryman, Camberwell."

"*Millaton House, Bridestowe, Devon, November* 27, 1860.

"Sir,—Nothing can be more satisfactory than the Tobacco Paper you sent me; my Gardener considers it very effectual in killing the green fly, and the unpleasant smell soon passes off. I speak well of it on every occasion.

"J. G. NEWTON, Esq., Bridestowe."

Sheet Iron Pots for Fumigating .. 3s. 0d. each.

N.B. All orders to be accompanied with a Post Office Order payable to HENRY APPLEBY, Dorking, Surrey.

WINTER DRESSING FOR ORCHARD HOUSE AND OTHER FRUIT TREES.

Extract from the Eighth Edition of the Orchard House. By Mr. Rivers.

"January paint the trees (every shoot and bud) with Gishurst Compound, half a pound to the gallon of water. This will destroy the eggs of Aphides."

Vines and outside wall trees should first be washed, stem and shoots, with 8 oz. solution of Gishurst, then smeared with clay and Gishurst, (see *Gardeners' Chronicle* Oct. 13), or with lime, sulphur, and Gishurst, made into a paste. If the smell be disliked, make the solution 48 hours before use.

Full directions as to the use of weaker solutions against mildew and insect pests in spring and summer, with particulars of the experience of many great gardening authorities, are enclosed with the boxes of Gishurst. These are supplied retail through any nurseryman and seedsman at 1s., 3s., and 10s. 6d. each, wholesale by PRICE'S Patent Candle Co., Limited.

FUMIGATING AND SYRINGING.

GRIFFITHS AND AVISS, TOBACCONISTS, Coventry, call attention to their TOBACCO PAPER. It is simple in use, safe in application, altogether effective in the destruction of Green Fly, Black Thrips, &c., nominal in price, 12s. 6d. per dozen pounds, sent to any part of the kingdom on receipt of Post Office Order. To those in the Trade a liberal discount on 28 lbs. and upwards. The following practical gentlemen have submitted it to every kind of ordeal, and bear testimony it is all we represent:—

Mr. Charles E. West, the Earl of Denbigh, Newnham Paddox
Mr. Wm. Oliver, the Earl of Craven, Combe Abbey
Mr. A. Henderson, His Grace the Duke of Sutherland, Trentham
Mr. Wm. Pool, the Earl of Aylesford, Packington Hall
Mr. John Jennings, the Earl of Derby, Knowsley Park
Mr. Thomas Pond, the Viscount Hood, Whitley Abbey
Mr. Geo. Tranter, the Hon. Granville D. Ryder, Westbrook, Hemel Hempstead
Mr. Geo. Bennett, J. Beech, Esq., Brandon
Mr. Jas. Kinaston, J. R. West, Esq., Alcot Park
Mr. W. H. Mountford, H. R. Hughes, Esq., Kinmel Park, St. Asaph, North Wales
Mr. Peter Conlon, C. Webb, Esq., The Gardens, High Grounds, Hoddesden
Mr. Francis R. Kinghorne, Nurseryman, Seedsman, and Florist, Richmond, Surrey
Mr. John Reeves, Ladbroke Nursery, Notting Hill, W.
Mr. John Jennings, Nurseries, Shipston-on-Stour
Mr. Edward Perkins, Nurseryman, Seedsman, and Florist, Leamington Nursery
Mr. John Ogden, Nurseryman, Seedsman, and Florist, Coventry
Messrs. S. Perkins & Sons, Nurserymen, Seedsmen, and Florists, Coventry

. Agents Wanted. Nurserymen and Florists preferred.

N.B. Cast Fumigating Pots, Tobacco Water for Syringing, and Tobacco Juice for Sheep Dressing.

GLASS FOR GREENHOUSES, &c.

Sheet Glass, in Crates.

	16 oz.	21 oz.	26 oz.	32 oz.	36 oz.
Best	5¼d.	7¼d.	9¼d.	1s. 0d.	1s. 0½d.
Seconds	3¾	5	6¼	0 9¼	1 0
Thirds	2½	3½	5¼	0 7½	0 10¼
Fourths	2¼	3¼			

Glass cut to any given sizes not on the List.

16 oz.—4ths, 1¾d., 2d., and 2¼d. per foot
,, 3rds, 2¼d., 2½d., and 3d. per foot
21 oz.—4ths, 2¾d., 3d., and 3½d. per foot
,, 3rds, 3½d., 4d., and 4½d. per foot

Glass for Orchard Houses,

As supplied by us to Mr. Rivers.

Sizes		16 oz.	21 oz.
20 in. by 12 in. / 20 in. by 13 in. / 20 in. by 14 in. / 20 in. by 15 in.	Common	13s. 6d.	£1 1s.
	Superior do.	16 0	1 3
	English Glass	18 0	1 9

The above prices include the Boxes, with but few exceptions. When Packages are charged, full price is allowed when returned.

Sheet Glass, Stock Sizes, 16 oz.

				3rds.	4ths.
11 by 9,	12 by 9,	13 by 9	14 by 9	14s. 0d.	12s. 6d.
12 ,, 10,	13 ,, 10,	14 ,, 10,	15 ,, 10		
13 ,, 11,	14 ,, 11,	15 ,, 11,	16 ,, 11	16s. 0d. per 100 feet. Boxes included	13s. 6d.
14 ,, 12,	15 ,, 12,	16 ,, 12,	17 ,, 12		
18 ,, 12,	19 ,, 12,	20 ,, 12			
16 ,, 13,	17 ,, 13,	18 ,, 13			
19 ,, 13,	20 ,, 13,	21 ,, 13			
16 ,, 14,	17 ,, 14,	18 ,, 14			
19 ,, 14,	20 ,, 14,	21 ,, 14			

ENGLISH GLASS of the above sizes 18s. per 100 feet.

Small Sheet Squares, in 100 feet Boxes.

6 by 4	6½ by 4½	7 by 5	7½ by 5½	11s. 6d.
8 ,, 6	8½ ,, 6¾	9 ,, 7	9½ ,, 7½	
		10 ,, 8	10½ ,, 8½	12 6

Boxes 2s. each, returnable at full price.

Patent Plate and Polished Plate Glass.
Ornamental and Coloured Glass.
Perforated Glass for Ventilation.

LONDON AGENTS FOR HARTLEY'S IMPROVED PATENT ROUGH PLATE.

Linseed Oil, Genuine White Lead, Carson's Paints, Paints of various colours ground ready for use.

MILK PANS, PROPAGATING GLASSES, and every description of GLASS for Horticultural purposes.

JAMES PHILLIPS & CO., 180, Bishopsgate Street Without, London, E.C.

GLASS WAREHOUSE.—ESTABLISHED 1750.

THOMAS MILLINGTON,

87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.

Reduced Tariff for Horticulture, Pictures, and Dwellings.

ORCHARD-HOUSE SIZES. **SMALL SQUARES.**

Supplied to Mr. Rivers and many Others.

In. by In.		16 oz.	21 oz.
20 .. 12 / 20 .. 13 / 20 .. 14 / 20 .. 15	Common, per 100 feet,	13s. 6d.	18s.
	Super ,,	16s.	23s.

In. by In.	In. by In.	Per 100 feet.	Per foot.
6 .. 4	8 .. 6	Common	1½d.
6½ .. 4½	8½ .. 6½	11s. 6d.	
7 .. 5	9 .. 7	Super.	1¾d.
7½ .. 5½	9½ .. 7½	12s. 6d.	

Squares in 100 and 200 Feet Boxes.

Inches by Inches.	Inches by Inches.	Inches by Inches.	Inches by inches.	Inches by inches.		P. 100 feet.	P. foot.
10 .. 8	12½ .. 9½	13 .. 10	15 .. 10	13½ .. 11½	4ths.	12s. 6d.	1½d.
10½ .. 8½	13 .. 9	13½ .. 10½	12 .. 11		3ds.	14s. 3d.	1¾
11 .. 9	12 .. 10	14 .. 10	12½ .. 11½	14 .. 11	2ds.	18s.	2¼
12 .. 9	12½ .. 10½	14½ .. 10½	13 .. 11		1sts.	21s. 6d.	2¾
15 .. 11	15 .. 12	16 .. 13	24 .. 14	24 .. 16	4ths.	13s. 6d.	1¾d.
16 .. 11	16 .. 12	17 .. 13	20 .. 15	20 .. 17	3ds.	16s.	2
17 .. 11	17 .. 12	20 .. 12	22 .. 15	20 .. 18	2ds.	19s. 8d.	2½
18 .. 11	18 .. 12	23 .. 13	24 .. 15	.. ..	1sts.	24s.	3
13 .. 12	20 .. 12	20 .. 14	20 .. 16	.. ..			
14 .. 12	22 .. 12	22 .. 14	22 .. 16	.. ..			

If less quantity than 100 feet is taken, a moderate charge made for package.

GLASS CUT TO ANY GIVEN SIZES NOT ON LIST.

16 oz.—4ths, 1¾d., 2d., and 2½d. per foot.
,, 3ds, 2¼d., 2½d., and 3d. per foot.

21 oz.—4ths, 2¾d., 3d., and 3½d. per foot.
,, 3ds, 3½d., 4d., and 4½d. per foot.

HARTLEY'S IMPROVED PATENT ROUGH PLATE.

Not accountable for breakage.

GENUINE WHITE LEAD	32s. 0d. per cwt.	LINSEED OIL	2s. 7d. per gall.
ANTI-CORROSION PAINT	34 0 ,,	BOILED ,,	3 0
LINSEED-OIL PUTTY	8 0 ,,	TURPENTINE	2 10

BLACK, GREEN, and all other kinds of PAINTS, VARNISHES, BRUSHES, &c.

ST. PANCRAS IRON WORKS,

OLD ST. PANCRAS ROAD, N.W.

IRON HURDLES, FENCING, AND GATES.

THE PROPRIETORS OF THE ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, WERE AWARDED THE **SILVER MEDAL of the Royal Agricultural Society for their IRON HURDLES & GATES** which, by their peculiar construction, are more than twice as strong and durable as those in ordinary use.

Lists per post on application. Gates from 30s. to 50l.

The Hurdles can be seen in process of Manufacture at the Works.

GAME WIRE NETTING.

Professor Varnell's Enamelled and Wrought-iron Stable Fittings.

These Patent Mangers and Stable Fittings obtained the Commendation and the Silver Medal of the Royal Agricultural Society of England and the Royal Agricultural Society of Ireland, are adopted by the Royal Veterinary College, and Professor Spooner of that Institution states that they should be used by all who value the health and comfort of their horses. They can be had plain, galvanised, or enamelled.

A Show Room is devoted entirely to every description of Stable Furniture, and full-sized stalls and loose boxes are erected for inspection at St. Pancras Iron Works.

ADDRESS—THE MANAGERS

ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, N.W.

OPPOSITE OLD ST. PANCRAS CHURCH.

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SAMUEL N. McGERROW,
General Horticultural Builder,
Knotty Ash, near Liverpool.
Reference permitted to the Nobility and Gentry throughout Great Britain and Ireland.

HOTHOUSES FOR THE MILLION
Made by Steam Power at

J. LEWIS'S Horticultural Works, Stamford Hill, Middlesex, N. These Hothouses are made on a much better and stronger principle than those manufactured on Sir J. Paxton's plan, and are more durable and cheaper.

					£
A span-roof measuring 30 ft. by 16 ft., with two glass ends and doors complete					30
Do.	do.	40 ft. by 20 ft.	do.	do.	56
Do.	do.	60 ft. by 24 ft.	do.	do.	90

The price of any other size forwarded on application to J. Lewis.

HORTICULTURAL WORKS AND HOT-WATER APPARATUS MANUFACTORY.
Kensal Green, Harrow Road, London, W.

JOHN TAYLOR and SON beg to call the attention of the nobility and gentry to the very superior manner in which they Erect all kinds of Conservatories, Vineries, Greenhouses, &c., combining every improvement with elegance of design and durability of materials and workmanship.

Their VENTILATING APPARATUS for the Fronts and Roofs of Houses has given the highest satisfaction. Churches, Chapels, Schools, Entrance Halls, Public Buildings, &c., heated with Hot-Water Apparatus in a most economical and efficient manner.

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EDWARD BECK Manufactures in Slate a variety of articles for Horticultural purposes, all of which may be seen in use at Worton Cottage, on application to the Gardener, Sundays excepted. PRICED LISTS of PLANT TUBS and BOXES forwarded on application.

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JOSEPH HAYWOOD AND CO.,
Manufacturers of
PRUNING and BUDDING KNIVES,
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Dealers in Gambia Garden Shears, Scissors, Syringes, &c.

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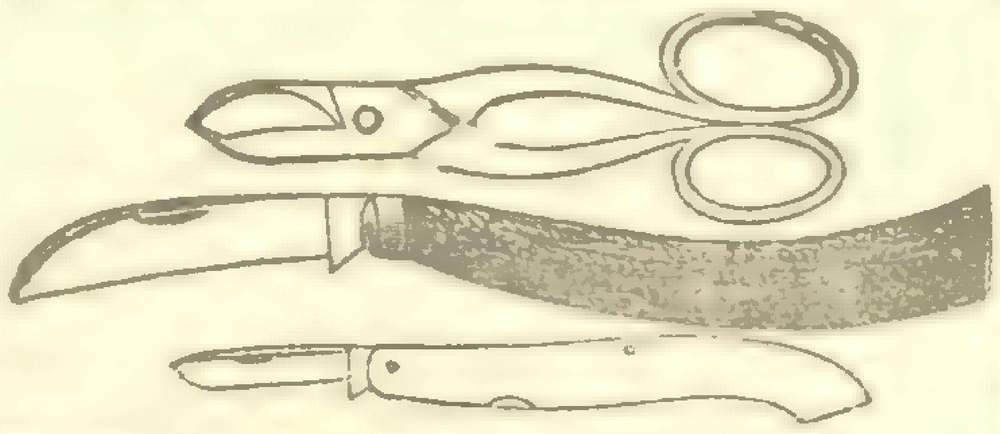
PAXTON WORKS, SHEFFIELD, ESTABLISHED 173..



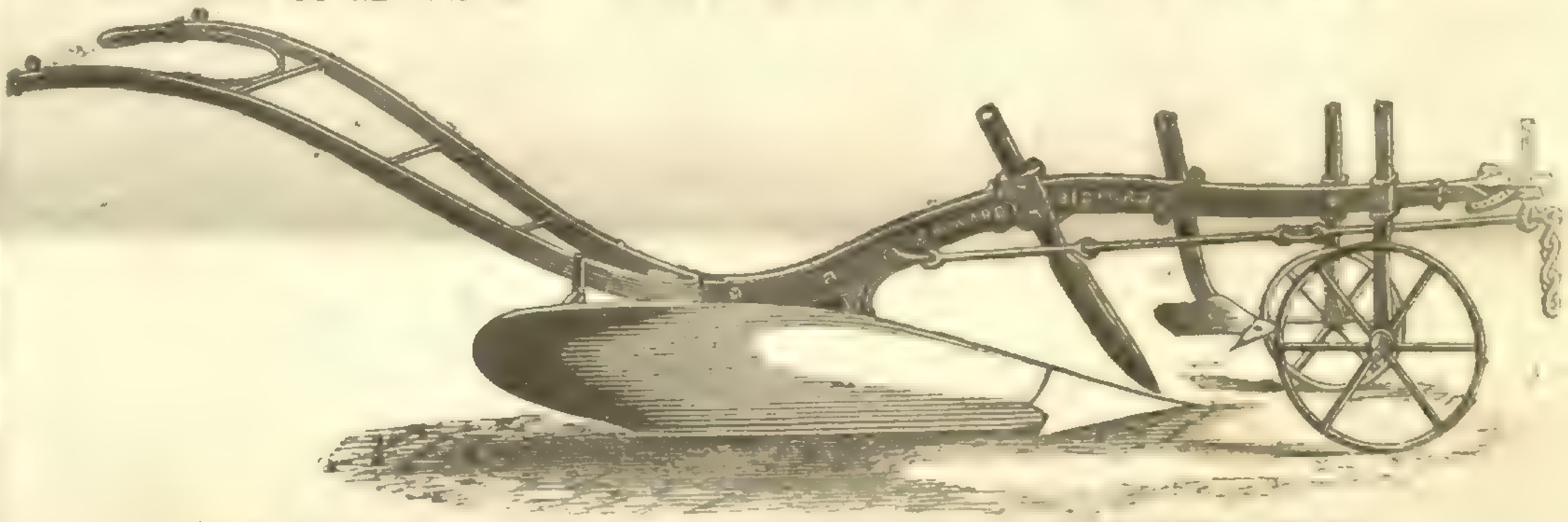
SAYNOR and COOKE'S warranted PRIZE PRUNING and BUDDING KNIVES, SCISSORS, &c.—Sold by all respectable Nurserymen and Seed Merchants in the three Kingdoms.

WEST OF ENGLAND, IRELAND, AND WALES.

VINCENT SKINNER (late Partner with J. Weeks & Co.), erects Conservatories, Hothouses, and Hot-water Apparatus to warm Churches, Hothouses, &c., and has foremen from London to superintend their construction. Upright Pipe Boilers, Plans, and Estimates.—V. Skinner, Bridewell Street, Bristol.

STRAW MATTING or THATCH is the best covering from frost for Hot-beds, Wall Fruit, Seedings, &c. MACHINES to weave the Matting are Manufactured by Maggs & Hindley, Bourton, Dorset.

HOWARDS' CHAMPION PLOUGHS.



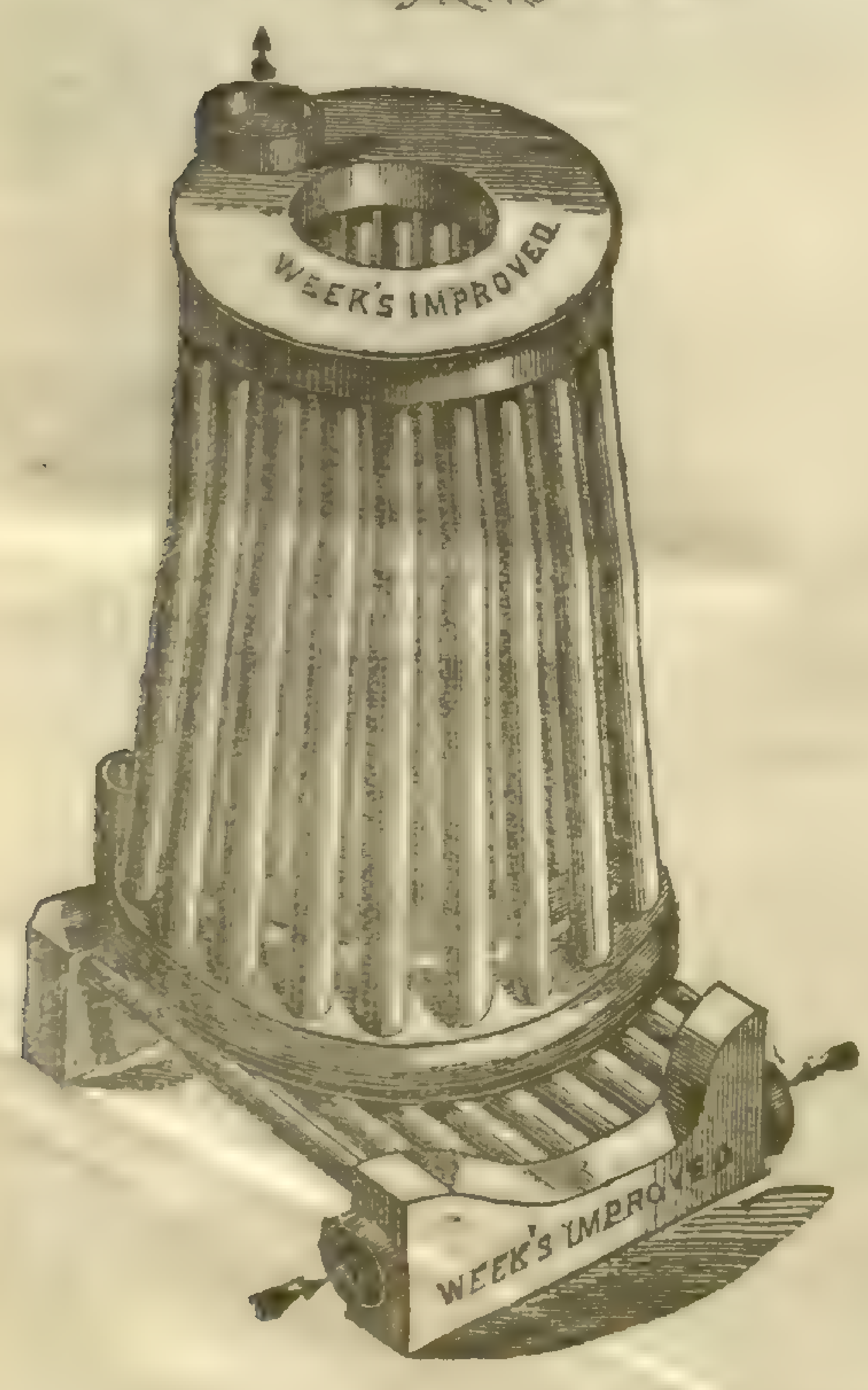
JAMES AND FREDK. HOWARD,
BRITANNIA IRON WORKS, BEDFORD,

DIRECT attention to some of the ADVANTAGES which their CHAMPION PLOUGHS possess:—

1. The BEAMS are *ribbed* or flanged at the hinder part, which gives great strength where most required, and effectually prevents springing or bending.
2. The FRAME or body, to which the lever neck is fitted, is formed so as to stand the roughest usage.
3. The BODY can be removed from the beam, and a Subsoil or Ridging body attached.
4. The BREASTS are so formed that choking in the *throat* is avoided.
5. The LEVER NECK is so boxed in as not to be liable to either wear or breakage.
6. The LEVER NECK is tightened at the end, so that the objection to a lever neck becoming loose through wear is entirely avoided.
7. The WHEEL FASTENINGS are made to tighten in the direction of the strain, and are not therefore liable to get loose through wear.

CATALOGUES with full particulars of J. & F. HOWARDS' CHAMPION PLOUGHS, HARROWS, HORSE RAKES, and other Implements, sent free on application. Also Reports of Smith's Steam Cultivators, from Purchasers in Twenty Counties of England, Scotland, and Ireland.

VALUABLE PROOFS
AND A
CHALLENGE TO THE WHOLE WORLD.
WEEKS' ONE-BOILER SYSTEM,
PATRONISED BY H.R.H. THE PRINCE CONSORT.



The Season has arrived for calling into urgent requisition and testing the unparalleled capacity of

"WEEKS' ONE-BOILER SYSTEM" OF HEATING BY HOT WATER.

Its world-wide popularity and universal satisfaction gained justifies Messrs. Weeks in challenging the world to show or refer to apparatus equal in extent and efficiency to the many hundreds erected by them in various parts of the kingdom and continent; and they refer with more than ordinary pleasure to those at the following establishments, being of gigantic proportions, and which the Nobility, Gentry, and Horticulturists are specially invited to inspect during the present season.

Messrs. E. G. HENDERSON and SON, Wellington Nursery.
Messrs. ARTHUR HENDERSON and CO., Pine-Apple Place, W.
Messrs. WOODROFFE and CO., Harrow Road, W.
Messrs. SMITH, The Nurseries, Dulwich, S.
Messrs. WOOD and INGRAM, The Nurseries, Huntingdon.
Messrs. WOOD and SON, The Nurseries, Maresfield.
Messrs. LOWE and SON, The Nurseries, Clapton, N.E.
Messrs. ROLLISSON, Tooting.
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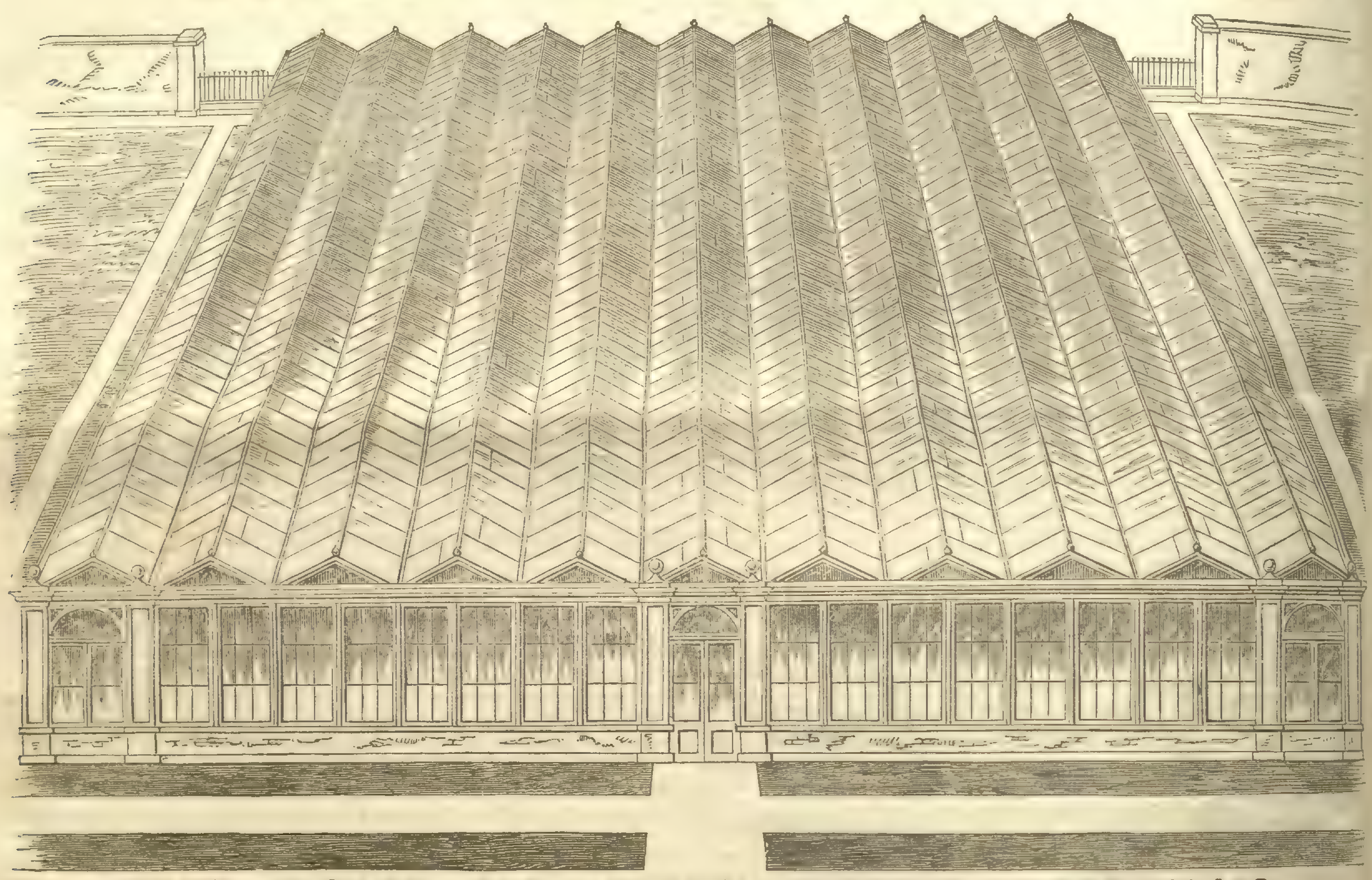
The Apparatus heated by One Boiler at several of these Establishments exceeds 10,000 feet of piping.

JOHN WEEKS & COMPANY,
Horticultural Builders, Hot-Water Apparatus Manufacturers, Engineers and Ironfounders,
KING'S ROAD, CHELSEA, S.W.

PLANS, ESTIMATES, AND PAMPHLETS FREE ON APPLICATION.

HOTHOUSES BY THE ACRE.



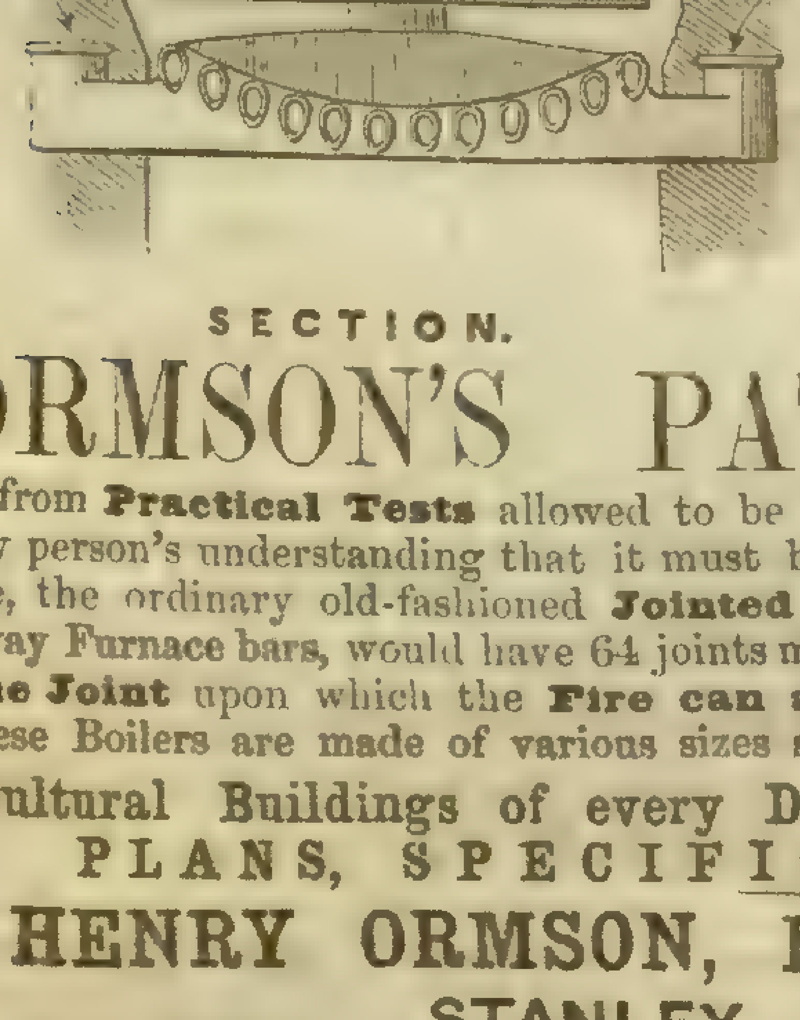
FRUIT, FLOWER, AND KITCHEN GARDENS UNDER GLASS.

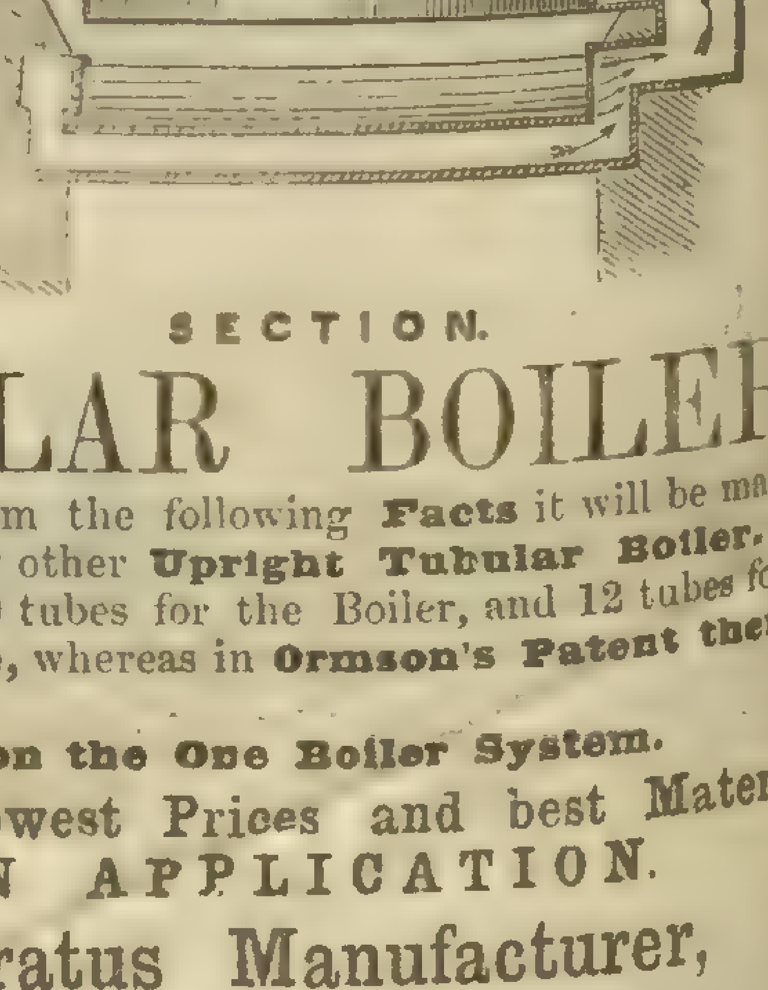
THE extremely variable and uncertain nature of the climate of Great Britain—so well exemplified in the experience of the present season—renders the supply of garden productions so very precarious, that it is high time the energies of the Horticultural Architect were directed to the arrangement of a cheap, simple, and effective structure which would obviate the defects of climate and insure in all seasons an abundant supply of common culinary vegetables; and also of those garden luxuries which our present state of civilisation has rendered indispensable to the comfort of every gentleman's home.

HENRY ORMSON, assisted by an able Horticulturist, has devoted much time to the consideration of this subject, and flatters himself that his designs for covering large spaces will entirely supply the desideratum, and that they will be found not only thoroughly efficient for the purpose contemplated, but that the prices at which he can erect them—manufactured by steam power machinery—will be so reasonable as to defy competition, while the workmanship and materials will be of the most superior description. **PLANS and ESTIMATES** given on application for covering ¼ of an acre, ½ an acre, ¾ of an acre, an acre, or any greater or less extent of ground which may be considered desirable.

HENRY ORMSON, Horticultural Builder, Stanley Bridge, King's Road, Chelsea, London, S.W.

BY HER MAJESTY'S ROYAL LETTERS PATENT.





SECTION.

SECTION.

ORMSON'S PATENT JOINTLESS TUBULAR BOILER

Is now from **Practical Tests** allowed to be the best ever invented for **Efficiency, Power, and Economy**, and from the following **Facts** it will be manifest to every person's understanding that it must be infinitely more safe for carrying out the **One Boiler** system than any other **Upright Tubular Boiler.** For instance, the ordinary old-fashioned **Jointed Upright Tubular Boilers** made by **all** other manufacturers, having 20 tubes for the Boiler, and 12 tubes for the Waterway Furnace bars, would have 64 joints made of cement and rope yarn **all** exposed to the direct **Action of the Fire,** whereas in **Ormson's Patent there is not One Joint** upon which the **Fire can act**, hence the great advantage and security of this **Patent.**

These Boilers are made of various sizes so as to suit the amateur or for heating the **Largest Establishments on the One Boiler System.**

Horticultural Buildings of every Description Manufactured by Steam Power Machinery. Lowest Prices and best Materials.

PLANS, SPECIFICATIONS, AND ESTIMATES FREE ON APPLICATION.

HENRY ORMSON, Horticultural Builder and Hot-Water Apparatus Manufacturer,

STANLEY BRIDGE, KING'S ROAD, CHELSEA, LONDON, S.W.

Printed by WILLIAM BRADBURY, of 13, Upper Woburn Place, and FREDERICK MULLETT EVANS, of No. 20, Queen's Road West, both in the Parish of St. Pancras, in the Co. of Middlesex, Printers, at their Office, Lombard St., Precinct of Whitefriars, City of London, and published by them at the Office, No. 41, Wellington St., Parish of St. Paul's, Covent Garden, in the said Co.—SATURDAY, January 5, 1861.

PINE APPLES, GRAPES, ETC.

PINE PLANTS, FRUITING AND SUCCESSION.
GRAPE VINES, FROM EYES FOR FRUITING IN POTS, OR PLANTING.

JOHN WEEKS AND CO. can supply any quantity of very fine healthy Pine Plants, either Fruiting or Succession.

GRAPE VINES remarkably strong and fine, 50 varieties, all the best sorts.

JOHN WEEKS AND CO.'S HORTICULTURAL SHOW ESTABLISHMENT is entirely devoted to the growth and Forcing of GRAPES, PINES, PEACHES, FIGS, CUCUMBERS, and other choice Fruits. The whole open for inspection, thereby showing the most improved plans of HORTICULTURAL BUILDINGS with the VENTILATING and HOT-WATER APPARATUS in full operation.

JOHN WEEKS AND CO., Horticultural Builders and Hot-Water Apparatus Manufacturers, King's Road, Chelsea, London. Plans, Estimates, and Illustrated Catalogues free on application.

SEED CATALOGUE, 1861.

STEPHEN BROWN'S LIST of the finest VEGETABLE SEEDS is now ready. Sent free on application.

The COMPLETE SEED CATALOGUE (30th Annual Edition) will shortly be ready, and contain many choice novelties from the Continent and elsewhere.

The late summer having proved unfavourable for many Seeds, S. B. is receiving a more than usual portion of his supply from the milder parts of the Continent, both of Vegetable and Flower Seeds.

Prices for first quality as moderate as the scarcity of the present season will admit.

Seed and Nursery Establishment, Sudbury, Suffolk.

NEW CINERARIAS OF 1860.

F. AND A. SMITH are now sending out their splendid Varieties of the above, which for colour, dwarf habit, and large compact heads of bloom, are unsurpassed; many of them are finely formed, and others have the largest flowers known. A DESCRIPTIVE CATALOGUE may be had on application—Dulwich, Surrey, S.

SUPERB BALSAMS.

F. AND A. SMITH are now sending out SEED of their well-known superior BALSAMS, which have maintained their character as the brightest colours. The doublest and largest flowers known for many years. In collections of 9 distinct colours, 2*s.* 6*d.* each; the same mixed 2*s.*; half the quantity, 1*s.*—Dulwich, Surrey, S.

WINTER AND SPRING FLOWERING PLANTS.

F. AND A. SMITH are now sending out at reasonable prices finely grown plants of Acacia, Azalea, Aphelexis, Boronias, Burchellia, Chorozema, Cineraria, Cactus, Cytisus, Carnation (Tree), Daphne, Epacris, Ericas, Eutaxia, Gardenias, Geraniums, Hydrangea, Primula, Prostranthera, Poinsettia, Polygala, Roella, Roses, Indica minor, Col. Fabvier, Mrs. Bosarquet, Géant des Batailles, Yellow Noisette, Gloire de Dijon, Cramoisie supérieur, &c. Tremandra, Greenhouse Climbers in variety. Prices with Lists on application.

Dulwich, Surrey, S.

RHODODENDRON PONTICUM.

WILLIAM YOUNG has a fine lot of the above suitable for Cover or planting in masses in pleasure grounds, or by carriage drives, &c. Fine strong bushy plants, from 40*s.*, 50*s.*, 75*s.* per 100.

Named varieties of good kinds from 7*l.* 10*s.* to 15*l.* per 100, or 24*s.* to 42*s.* per dozen.

Milford Nurseries, near Godalming.

GLADIOLI.

JOHN STANDISH is the largest grower and has the best collection. He has raised an immense quantity of Hybrid Seedlings, which flowered during the past Autumn for the first time, and exceeded anything that has been seen in Gladioli before; it being a remarkable fact that amongst these Seedling Gladioli there is scarcely ever a bad one. Strong flowering Bulbs, 75*s.* per 100; small ditto, 50*s.* per 100.

Besides the above, J. S. has all the best named kinds, CATALOGUES of which, and of his other rare and choice plants, may be had free, on application to the Royal Nursery, Bagshot.

TREE AND SHRUB CATALOGUE.

JOHN CRANSTON begs to announce to his Patrons and the Public generally, that his DESCRIPTIVE CATALOGUE of Conifers, Ornamental Trees, Evergreen and Deciduous Shrubs, &c., is now ready for distribution, and will be forwarded on receipt of one postage stamp.

The above contains important and interesting notes with regard to the height the Trees enumerated attain, Native Country, date of introduction, and in the case of Flowering Shrubs, the colour and time of flowering.

Nurseries, King's Acre, near Hereford.

LARGE TREES, ETC.

WM. PAUL (Son and Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, N., has a quantity of large handsome TREES, Evergreen and Deciduous, which must be cleared off 10 acres of the old Nurseries very shortly, and will be sold cheap. Cedrus deodara, Cedar of Lebanon, Yews, Box, Laurels, Arbor-vitæ, Privet, Red Cedar, fine specimens of choice Coniferæ, Alders, Planes, Poplars, Elms, Limes, Fruit Trees, &c. All have been frequently removed and rise with plenty of fibrous roots. Carefully taken up and delivered free to any railway station in London. Further particulars on application.—Please address WILLIAM PAUL, Cheshunt Nurseries, Waltham Cross, N.

THREE MILLIONS OF TRANSPLANTED QUICKS.

GEORGE CHIVAS offers the above, varying from Good to exceedingly Strong, clean and well rooted. A Sample Bundle containing 100 of each, 5 sizes, forwarded on receipt of 15*s.* Truck loads delivered Free at any Railway Station. Also, a Million of Transplanted LARCH; half a Million of Transplanted SPRUCE; Ten Thousand Superior Standard APPLES and PEARS; and a large General NURSERY STOCK.—Chester, Jan. 12.

CEDRUS DEODARA.

MAULE AND SONS still hold large supplies of this favourite Tree, from seed, which they are offering at the following low prices:—Magnificent specimens, for immediate effect, from 10 to 15 & 20 feet high, at 2*s.* per foot in height; other smaller sizes from 1, 2, 3, 4, 5, 6, 7, 8, & 9 feet, at 1*s.* per foot. Their Lists of AMERICAN CONIFER and FOREST TREES for the season can be had on application.

☞ Strong 2-year Gorse or Furze Plants for Fox Covert, &c., at 10*s.* per 1000.

Bristol: Nurseries, Stapleton Road and Stoke Gifford.

ROBERT NEAL, NURSERYMAN, Wandsworth Common, S.W., begs to call the attention of buyers to his large and well selected stock of EVERGREENS and FLOWERING SHRUBS, ORNAMENTAL TREES, AMERICAN PLANTS, FRUIT AND FOREST TREES, STANDARD AND DWARF ROSES of every description. A large stock of BOX-LEAF EVERGREEN PRIVET, from 1 to 6 feet for hedges; GREEN HOLLY, 1 to 6 ft.; RICH BOG and LOAM for American Beds; LEAF MOULD. The Nursery is 10 minutes' walk from Clapham Common, and New Wandsworth Station, Crystal Palace Line.

NEW GARDEN SEEDS, GROWTH OF 1860.

ROYAL BERKSHIRE SEED ESTABLISHMENT.

SUTTON AND SONS are now prepared to execute orders for all kinds of GARDEN SEEDS, and can warrant them genuine.

The PRICED LIST is now ready, and will be sent post free.

Royal Berkshire Seed Establishment, Reading.

ROYAL EXOTIC NURSERY, CHELSEA, S.W.

JAMES VEITCH, JUN., respectfully announces that his CATALOGUE OF KITCHEN GARDEN AND FLOWER SEEDS for 1860, with a List of Implements and other Garden requisites, is now published, and will be forwarded post free on application.

J. V., Jun., devoting his personal attention to this department of his business, can warrant his SEEDS TRUE TO NAME, and of the MOST GENUINE description.—Jan. 12.

SEEDS CARRIAGE FREE.

PIKE'S COLLECTIONS OF VEGETABLE SEEDS. —Collection A, 80*s.*; Collection B. 50*s.*; Collection C, 25*s.*; Collection D. 12*s.*; select CATALOGUE of GARDEN FLOWERS and FARM SEEDS post free on application, containing the quantities in each collection. Every kind of seed is proved before it is sent out.—JAMES S. PIKE, Winchmore Hill Nursery, and Seed Establishment, London.

CARTER'S LIST OF NEW AND CHOICE VEGETABLES.

Per packet—	s.	d.	Per packet—	s.	d.
Lee's White Sprouting Broccoli	2	6	Carter's Giant White Cos Lettuce	1	0
Nutting's selected dwarf Red Beet	1	0	Carter's Champion Cucumber	1	0
Tomato de Laye	0	6	New Feather-stem Savoy	1	0
Dalmeney Broccoli ..	1	0	Carter's Excelsior Melon	1	0
Conning's Perfection do.	1	0	Turner's Gem	1	0
Melville's variegated garnishing Kail	1	0	Strathmore Hero Peas, p. qt.	2	6
Carter's dwarf Mammoth Cauliflower	1	0	Handsworth Potatoes, per peck	5	0
Hood's dwarf Imperial Celery	1	0	Pheasant Eye do. ,,	3	0
Lynch's Star of the West	1	0	Dalmahoy do. .. ,,	3	0
			Baldry's Scarlet Defiance Rhubarb, per root ..	2	0

For further particulars see CARTER'S SELECT LIST OF GARDEN AND FARM SEEDS, forwarded gratis, and post free on application.

JAMES CARTER & Co., 237 and 238, High Holborn, W.C.

The Gardeners' Chronicle.

SATURDAY, JANUARY 12, 1861.

IN another column will be found returns with which we have been favoured by our correspondents, of the lowest temperatures of December, 1860. These we have arranged in the order of greatest intensity, so that it may be seen at a glance where the greatest cold has prevailed. In the majority of seasons, instances of the thermometer indicating less than zero are rare; but on this occasion they are so numerous that many inquiries are being made as to whether the intensity of the frost in the last week of the bygone year has been equalled, or exceeded by that which occurred in the memorable winter of 1838, and which proved so destructive to vegetation. For the sake of comparison, we have subjoined a statement of the temperatures at various places as they are recorded in the Transactions of the Horticultural Society, Second Series, Vol. 2, p. 225; and we may here remark that at the above reference the "*Observations upon the Effects produced on Plants by the Frost which occurred in England in the winter of* 1837-8," may be read with interest at the present time.

TEMPERATURES IN JANUARY, 1838;
AS RECORDED BY DR. LINDLEY IN THE TRANSACTIONS OF THE HORTICULTURAL SOCIETY, 2D SERIES, VOL. II.

COUNTIES.	PLACE.	DEG.
Surrey	Walton near Claremont	—14
Kent	Beckenham	—13½
Surrey	Claremont	—12
Middlesex	Hort. Society Garden, Chiswick	— 4½
Kent	Sevenoaks	— 3
Norfolk	Norwich	— 3
Glasgow	Botanical Garden	— 1
Kent	Redleaf	— 1
Hants	North Stoneham	0
Cambridge	Cambridge	3
Staffordshire ..	Rolleston Hall	5
Bucks	Dropmore	6
Yorkshire	Owston	6
Sussex	Arundel	9
Lancashire	Liverpool	9
Yorkshire	Wetherby	10
Northumberland ..	Belsay Castle	10
Cornwall	Carclew	12
Worcestershire ..	Pitmaston	12
Glamorganshire ..	Sketty Hall	15
"	Singleton	15
Dublin	Glasnevin Botanical Garden ..	15
Isle of Wight ..	Binstead	15
Devonshire	Bicton	18
Dublin	College Botanic Garden	20

It appears that in January, 1838, the instances in which the temperature was observed below zero, occurred only in the counties of Surrey, Kent, Middlesex, Norfolk, and at Glasgow. In December, 1860, we find that the thermometer has indicated at or below zero in Berks, Bucks, Cambridge, Cheshire, Derbyshire, Essex, Gloucester, Herts, Herefordshire, Lancashire, Leicestershire, Norfolk, Northumberland, Notts, Stafford, Suffolk, Warwickshire, Yorkshire, Brecknockshire, and even at Dublin. It therefore appears that intensity of frost has prevailed over a much greater extent of the kingdom in 1860 than in 1838.

It may, however, be said that the instances of extremely low temperature appear more numerous on the present occasion because the returns are so; but on the other hand, on comparing the two Tables, we find at Rolleston Hall, Staffordshire —10° on the present occasion against 5° in 1838 at the same place. In Lancashire —2°, in Yorkshire, at various places, —12°, —11°, —8°, against 9°, 6°, 13°, so that on the average these places have been 19° colder in 1860 than in 1838. From these facts, and from an inspection of the tabulated returns, we think it will appear very evident that the frost of last December has been much more extensively severe than that of January, 1838.

Such being the case the question naturally arises as to the effects on vegetation. Judging from those resulting from the lesser degree of cold in 1838, the consequences of the present greater intensity must doubtless prove most disastrous. On the former occasion a vast number of fine trees and shrubs were destroyed. In the 22 years which have since elapsed, doubtless many of these have been replaced, to be again cut off. Of this the possessors may rest assured. The following are examples of those that were killed in 1838:—Abies Webbiana; Pinus longifolia, insignis, palustris, halepensis; Quercus virens, Arbutus Unedo, Aucuba japonica, Berberis fascicularis, Bignonia grandiflora, Buddlea globosa, Caprifolium flexuosum, Cupressus lusitanica, Cydonia sinensis, Edwardsia grandiflora, Eriobotrya japonica, Escallonia montevidensis, Jasminum officinale, and revolutum, Ligustrum lucidum, Laurus nobilis, Laurustinus, Photinia arbutifolia, Rosa Banksiæ, Rosemary. Ulex europæus and nanus, the common and dwarf Furze, were killed to the ground, but sprang up again, as was also the case with many evergreen shrubs, such as Laurustinuses and Sweet Bays, yet those that did so never made such handsome growth as those that were planted afresh.

It is to be observed that previous to the severe frost in January 1838, the mean temperature of the last fortnight of December was 46°, corresponding with that usually experienced in the end of March. The thermometer was seldom below 40° at night and never at freezing during the above period. Under these circumstances, many species had pushed young shoots, and doubtless this excited condition of the sap rendered plants much more susceptible of the severe cold to which they were afterwards subjected. On the present occasion the weather, on the contrary, was colder than usual previous to the intense frost, and this may be considered a favourable circumstance. It must however be recollected that, owing to the cold wet summer, plants have imperfectly matured their wood, and of course are not well prepared for withstanding the continuous low temperature to which they are being subjected. On the former occasion plants were killed from the effects of a certain temperature in some places, whilst in others the same kinds were not killed by a still greater degree of cold. Many facts of this kind will doubtless be observed in the present year, which if *carefully* noted will prove useful additions to our knowledge of the nature of plants. But from the returns which we have received, although well and distinctly given by many gardeners, it does appear there are others who do not properly understand registering thermometers, nor the way in which their indication should be marked, so as to be intelligible. When the thermometer indicates 10° of Fahrenheit's scale, one calls that 10° of frost; another sets it down as 22° of frost, and a third as 10° below zero. It would render reports much more valuable if the statements of our correspondents were given merely in terms of the scale; all numbers being considered above zero, except those having the minus sign (—) *prefixed*, as it should be, to distinguish degrees below zero, where such occur. If this is done, the sign (+) is unnecessary.

Two years ago (*Gardeners' Chronicle*, 1859, p. 36) we drew attention to the important discoveries that had been made by the officers of the Canadian government in examining the country lying on the western part of the great colony up to the Rocky Mountains. We showed how in that distant part of the world a field of inexhaustible wealth lies before the enterprising emigrant, whether Gar-

dener or Farmer; and in what is called the Red River settlement a region may be found at least equal to our own country in climate, and far beyond it in fertility. One of the gentlemen on whose official reports the statement was made, was Prof. HIND, who acted as geologist to the exploring expedition. We have now before us from his able pen a circumstantial account of the people, the productions, the soil, the climate, and the penetrability of this region,* which will be read with eager attention by all who desire to see the flood of emigration directed to countries of great political as well as agricultural importance.

To what we formerly stated we can now add the great fact that the limits of this fertile land and happy climate have been exactly ascertained, and are actually laid down in one of Mr. HIND's maps. It appears that the part of the British boundary to the South and of the *United States country to the North is, with few exceptions, a vast desert,* extending over 16 degrees of longitude from a place named Pembina, a little to the west of a watery and swampy district called the Lake of the Woods, up to within a few miles of the foot of the great Rocky Mountain ridge which separates the American Continent into its vast Western and Eastern portions. But beyond this desert far away in British Territory is a belt or irregular crescent-shaped region, the eastern point of which rests on the above-mentioned Lake of the Woods and the western point on the land that rises upwards into the dividing mountain ridge. Of this Captain PALLISER, who surveyed the country, speaks in the following terms:—

"The extent of surface drained by the Saskatchewan, and other tributaries to Lake Winnipeg, which we had an opportunity of examining, amounts in round numbers to 150,000 square miles. This region is bounded to the north by what is known as the 'strong woods,' or the southern limit of the great circum-arctic zone of forest, which occupies these latitudes in the northern hemisphere. This line, which is indicated in the map, sweeps to the north-west from the shore of Lake Winnipeg, and reaches its most northerly limit about 54°30′ N., and longitude 119° W., from where it again passes to south-west, meeting the Rocky Mountains in latitude 51° N., longitude 115° W. Between this line of the 'strong woods' and the northern limit of the true prairie country there is a belt of land varying in width, which at one period must have been covered by an extension of the northern forests, but which has been gradually cleared by successive fires.

"It is now a partially wooded country, abounding in lakes and rich natural pasturage, in some parts rivalling the finest park scenery of our own country. Throughout this region of country the climate seems to preserve the same character, although it passes through very different latitudes, its form being doubtless determined by the curves of the isothermal line. Its superficial extent embraces about 65,000 square miles, of which more than one-third may be considered as at once available for the purposes of the agriculturist. Its elevation increases from 700 to 4000 feet as we approach the Rocky Mountains, consequently it is not equally adapted throughout to the cultivation of any one crop, nevertheless at Fort Edmonton, which has an altitude of 3000 feet, even Wheat is sometimes cultivated with success.

"The least valuable portion of the prairie country has an extent of about 80,000 square miles, and is that lying along the southern branch of the Saskatchewan, and southward from thence to the boundary line, while its northern limit is known in the Indian languages as 'the edge of the woods,' the original line of the woods before invaded by fire."

But it is not merely on account of its agricultural value that so vast a district demands attention. It is also readily accessible from Lake Superior, which, as will be seen by reference to any map, forms the natural western limit of Canada proper; so that emigrants can readily reach it by the ordinary Canadian routes. Moreover it presents this immense advantage to Colonists, that it must ere long form an easy overland line of communication between England and not only the vast Gold countries of British Columbia, but with Japan, China, the Sandwich Islands, and possibly Australia itself.

The importance of this line to Great Britain is sufficiently shown by the great fact that at present we have no means of access from this country to *our only station* on the long coast of Western America, except by either Panama or a two and twenty thousand mile voyage round Cape Horn. Political considerations on which it is superfluous to dwell render it an urgent necessity of Government to find means of throwing support into British Columbia in case of war with the United States or Russia. At present this can only be done by drawing on our naval resources in India or the Pacific. A way from Canada to the extreme west removes all difficulty. But can it be made? Can the dividing ridge be traversed by roads? Upon this point no doubt remains. The recent examination of the country by British surveying officers has led to the discovery of several passes more or less practicable. Captain PALLISER recommends a pass called the Kananaskis; Dr. HECTOR advocates the Vermilion Pass; Dr. PALMER mentions another; and Governor DOUGLAS in a most important report to Government writes thus:—

"We hope to complete the last section of a pack-road leading by the left bank of the Fraser, from Derby (Fort Langley) to Lytton, a distance of 170 miles, on or before the 1st day of February next. From Lytton a natural road now exists leading to Red River settlement, by the Coutannais Pass, through the Rocky Mountains, and from thence following the valley of the Saskatchewan, chiefly over an open prairie country of great beauty, and replete with objects of interest to the tourist and the sportsman; a settler may then take his departure from Red River in spring with his cattle and stock, and reach British Columbia by that road in course of the autumn following. This is no mere theory, the experiment having been repeatedly made by parties of Red River people travelling to Colville, from whence there is a good road to Lytton; so much so, indeed, that one of those persons assured me that the whole distance from Lytton to Red River, with the exception of the Coutannais Pass, which is thickly wooded, may be safely travelled with carts. If the Canadian Government would undertake to open a road from Red River to the borders of Lake Superior, which really presents no very formidable difficulties, the connection between British Columbia and Canada would be complete, and the whole distance might, I think, be travelled on British soil."

Mr. HIND sums up the case in these emphatic terms:—

"It is impossible to examine a correct map of the North American continent without being impressed with the remarkable influence which the Great American Desert must exercise upon the future of the United States and British North America. The general character of this desert south of the 49th parallel is described elsewhere, and the important fact has been noticed, that any railroad constructed within the limits of the United States must pass, for a distance of 1200 miles west of the Mississippi, through uncultivable land, or, in other words, a comparative desert. Along the 32d parallel the breadth of this desert is least, and the detached areas of fertile soil greatest in quantity, but the aggregate number of square miles of cultivable land amounts only to 2300 in a distance of 1210 miles. The northern limit of the Great American Desert is an imaginary line drawn from the Touchwood Hills to the Moose Woods on the South Branch, then south of Battle River as far as long. 112°, when turning south it sweeps along the flanks of the Rocky Mountains in long. 115°. North of this limit of the Great American Desert there is a broad strip of fertile country, rich in water, woods, and pasturage, drained by the North Saskatchewan and some of its affluents, and being a continuation of the fertile prairies of Red River, the eastern water shed of the Assinniboine and Red Deer River, with the outlying patches called the Touchwood Hills, File Hill, &c.

"IT IS A PHYSICAL REALITY OF THE HIGHEST IMPORTANCE TO THE INTERESTS OF BRITISH NORTH AMERICA THAT THIS CONTINUOUS BELT CAN BE SETTLED AND CULTIVATED FROM A FEW MILES WEST OF THE LAKE OF THE WOODS TO THE PASSES OF THE ROCKY MOUNTAINS, AND ANY LINE OF COMMUNICATION, WHETHER BY WAGGON ROAD OR RAILROAD, PASSING THROUGH IT, WILL EVENTUALLY ENJOY THE GREAT ADVANTAGE OF BEING FED BY AN AGRICULTURAL POPULATION FROM ONE EXTREMITY TO THE OTHER.

"No other part of the American Continent possesses an approach even to this singularly favourable disposition of soil and climate, which last feature, notwithstanding its rigour during the winter season, confers, on account of its humidity, inestimable value on British America south of the 54th parallel.

"The natural resources lying within the limits of the Fertile Belt, or on its eastern borders, are themselves of great value as local elements of future wealth and prosperity; but in view of a communication across the continent they acquire paramount importance.

"Timber available for fuel and building purposes; lignite coal, though not equal to true coal, nevertheless suitable for many of the different objects to which true coal is applied; iron ore widely distributed, of great purity and in considerable abundance; salt in quantity sufficient for a dense population. All these crude elements of wealth lie within the limits or on the borders of a region of great fertility, and drained by a river of the first class, navigable by steamer during several months of the year for 500 miles of its course, and by batteaux for nearly double that distance.

"The position which the colony occupying the basin of Lake Winnipeg may assume at the close of the next decade, few will be prepared to define. Bounded on the west by British Columbia, whose gold-wealth will ensure her a marvellously rapid progress, and on the east by the powerful, energetic, and loyal colony of Canada, which now, in conjunction with the sister provinces, contains a population exceeding by ONE MILLION that of the 13 United States during the revolutionary war, is it likely that British enterprise and patriotism will permit the intervening country to remain a wilderness, or pass into the hands of a foreign government?

"It is to be earnestly hoped that the attention of far-seeing, thoughtful, and loyal men will be directed to the present relations of the new colony, its possible future, and the opportunity it presents to plant British institutions and civilization across the North American Continent; thus linking the Atlantic and Pacific oceans together with a chain of British dependencies, distinguished alike by a 'SPIRIT OF LOYALTY, OF ORDER, AND OF OBEDIENCE TO THE LAW.'"

The length to which these remarks have extended forbid our doing more than referring the reader to Mr. HIND's two volumes—which are full of anecdote concerning the people and animals of Western Canada, as well as of the more serious matters for investigating which he was specially appointed; and which are moreover illustrated by excellent representations executed in chromo-lithography or on wood of scenery, natives, and miscellaneous objects.

SOME of our readers have probably seen in the police reports of the daily papers, that a porter in the service of the Horticultural Society has been sent to prison for robbing his employers of postage stamps to a considerable extent. This explains the history of letters and Journals from the Society not having been delivered or having been charged with double postage. It would be as well if those who have been victimized by this man were to communicate with ANDREW MURRAY, Esq., who has lately been appointed Assistant Secretary to the Society, *vice* Mr. BOOTH, resigned.

New Plants.

Messrs. Veitch & Son having placed in our hands the Coniferous specimens collected in Japan by Mr. J. G. Veitch, we are able to furnish the following list of them. It is satisfactory to see that the very first collection includes not only *Sciadopitys*, the most precious species in Japan, and *Thujopsis dolabrata*, a tree hardly less important, but two kinds of *Abies* not previously introduced, and no fewer than three entirely new and very fine species of the same hardy genus.

1. SCIADOPITYS VERTICILLATA, *Zuccarini*.

"Kanagawa. Tree, 120 to 140 feet. Habit pyramidal, distinct and fine." *J. G. V.*

This is perhaps the most remarkable Coniferous plant yet discovered. It is erroneously described by Siebold as a mere bush 12—15 feet high. It has stout *whorled* yellowish green leaves, resembling *those* of some Podocarpus, 4 inches and more in length, and thus has an aspect quite different from that of an ordinary Conifer related to Wellingtonia, as this is. Its name is derived from σκιὰς a parasol, and πίτυς a Fir tree, its spreading whorled leaves looking like the ribs of a tiny parasol. Judging from Mr. Veitch's specimens it must be a plant of extraordinary beauty.

2. ABIES MICROSPERMA, *Lindl.*

A. foliis secundis linearibus angustis planis apiculatis subtus glaucis 6-7-lineatis, phyllulis rhombeis, pulvinis apice longe protractis arcuatis ascendentibus, strobilis cylindricis

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* Narrative of the Canadian Red River Exploring Expedition of 1857, and of the Assinniboine and Saskatchewan Exploring Expedition of 1858. By HENRY YOULE HIND, M.A., F.R.G.S., Professor of Chemistry and Geology in the University of Trinity College, Toronto; in charge of the Assinniboine and Saskatchewan Expedition. Two Vols., 8vo., Longmans, with maps, chromolithographs of the people and country, and numerous woodcuts.

squamis chartaceis laxis rectangulis apice dentatis, bracteis minimis ovatis mucronatis, seminum alis ovatis acutis subdentatis.

(Leaves 10 lines long, ½ line wide. Cones 2¼ inches long, pale cinnamon colour, 2½ inches round. Seeds pale cinnamon, one line, wing 2 lines long nearly ovate and occasionally notched.)

"Hakodadi. Tree, 40 to 50 ft. Under side of the foliage very glaucous. Its foliage resembles Spruce in point of colour, but the *leaves are as long as A. amabilis*, and perfectly silvered underneath. I saw numbers of trees, but found only two solitary ones bearing cones. The quantity of seed you will receive will therefore be very small." *J. G. V.*

A beautiful thing, quite unlike any other Spruce, with slender delicately toothed cones as broad at one end as the other, and the smallest seeds of the genus.

3. ABIES LEPTOLEPIS? *Zuccarini.*

"Mount Fusi-Yama. Tree, 40 feet. The tree which grows at the highest elevation on the mountain, 8500 feet." *J. G. V.*

The Japanese Larch, *A. leptolepis* of Zuccarini, is represented with cones four times larger than those sent home by Mr. Veitch; so that there is some doubt whether his plant is not distinct. I do not possess the materials required to determine the point.

4. ABIES TSUGA, *Zuccarini.*

"Mount Fusi-Yama. Tree, 100 feet. Timber much used by the Japanese. 6000 feet." *J. G. V.*

A kind of Hemlock Spruce, much like that plant, and growing 25 feet high. Its wood is described as excellent, yellowish brown, and employed for the manufacture of various small-ware articles.

5. ABIES VEITCHI, *Lindley.*

A. foliis obtusis secundis emarginatis carinatis subtus glaucis concavis 00 lineatis, phyllulis circularibus, pulvinis rhombeis decurrentibus, ramulis hirtis, strobilis subcylindricis rectiusculis, squamis arctè adpressis corneis lunatis pedicellatis, bracteis æquilongis cuneatis apiculatis, seminibus angulatis cristâ angustâ lineari et alâ brevi acinaciformè transversâ nigricante.

(Leaves varying in length from 6 to 12 lines, ⅛ line broad. Cones 2¼ to 2½ inches long, 2¾ inches in circumference. Seeds testaceous, 2 lines, wing blackish, 2 lines long, with a very narrow curved crest at the base of the wing.)

"Mt. Fusi-Yama. Tree, 120 to 140 feet high, between A. nobilis and A. Nordmanniana." *J. G. V.*

This most remarkable species looks like a small-coned Silver Fir, and is wholly different from anything previously described. I have named it after Mr. J. G. Veitch, whose great merit as a very energetic explorer of the Vegetation of Japan it gracefully records. As to the Pine called by the same name by Mr. Roezl, whether or not it is the same as *P. Bonapartea*, as the writer of the Pinetum surmises, is unimportant, since names so published can have no place in systematical Botany.

6. ABIES ALCOQUIANA, *J. G. Veitch in litt.*

A. foliis secundis linearibus angustis planis obtusis emarginatisq. subtus concavis 5-6-lineatis glaucis basi tortis, phyllulis rhombeis, pulvinis apice longè protractis arcuatis ascendentibus, strobilis oblongis: squamis cartilagineis laxis obtusè rhombeis denticulatis, bracteis obsoletis linearibus, seminum alis obovatis.

(Leaves 6 lines long, ½ a line wide. Cones rather more than 2 inches long, 4 inches in circumference. Seeds cinnamon coloured, 2 lines, wing 4 lines long.)

"Mount Fusi-Yama. Tree, 100 to 120 feet. Wood used for light house work, 6000 to 7000 feet."

A noble Spruce Fir, in some respects resembling the *Abies polita* of Zuccarini, from which it differs in having much smaller cones, with scales of a different form, very small leaves glaucous on the under side, blunt or emarginate, not mucronate, and flat not 4 sided. Named in compliment to Rutherford Alcock, Esq., H.M. Minister at the Court of Jeddo, to whose kind protection and assistance Mr. Veitch has been greatly indebted.

7. THUJOPSIS DOLABRATA, *Zuccarini.*

"Hakodadi. Tree, 40 to 50 feet. Habit drooping prefers shady places." *J. G. V.*

A very few plants of this glorious evergreen tree have already been raised in Europe from cuttings taken from one or two imported specimens; and now we shall have seedlings, Mr. Veitch having been so fortunate as to meet with the tree just when the cones were ripened. The tree looks like a huge Arbor-vitæ with magnified leaves of a black green colour, glaucous beneath. The wood is excellent, the aspect of the plant superb.

8. TORREYA NUCIFERA, *Zuccarini.*

"Kanagawa. Tree, 20 feet. Foliage pointed, sharp." *J. G. V.*

The specimens sent home are identical with those in our herbarium from Zuccarini himself.

9. CEPHALOTAXUS DRUPACEA, *Siebold.*

"Kanagawa. Tree, 20 to 30 feet." *J. G. V.*

Mr. Veitch's specimens are however very much more glaucous on the under side of the leaves than the plants now in cultivation.

10. JUNIPERUS RIGIDA, *Siebold.*

"Atame. Tree, 12 to 15 feet." *J. G. V.*

The specimens sent home have the leaves very narrow, exactly like the figure in the Flora Japonica.

RETURNS OF THE LOWEST TEMPERATURES IN DECEMBER, 1860;

RE-ARRANGED FROM LAST WEEK ACCORDING TO THE DEGREE OF INTENSITY, WITH NUMEROUS ADDITIONS AND SOME CORRECTIONS.

County.	Place.	December.	Thermometer.	Authority.
			Degs.	
Cambridge ..	Chatteris	25	−15	Mr. A Fryer
Lancashire ..	Cheadle	22	−15	Times
Lincolnshire ..	Brigg	25	−12.9*	Times
Hunts ..	St. Neots	25	−12.5	Rev. W. L. H. Elwyn
	Ditto	28	0	
Derbyshire ..	Chatsworth ..	25	−12	Sir J. Paxton, M.P.
Notts	Carlton-on-Trent ..	25	−12	Mr. Fowle
Scotland ..	Dumfries	25	−12	J. Little, Esq., Carlesgill
Essex	Saffron Walden ..	25	−12	Mr. Barrett
	Ditto ..	25	−12	Mr. Coldwells
Yorkshire .	Thorp Perrow .	25	−12	Mr. Culverwell
	Bedale	25	−11	Mr. Cox
Herts	Hertford	25	−10	Mr Morgam, Balls Park
Northumberland	Alnwick	25	−10	R. B.
Norfolk ..	Fakenham ..	25	−10	Times
	Long Stratton ..	25	−10	Rev. H. Long
Stafford ..	Rolleston	25	−10	Sir Osw. Mosley
Lancashire ..	Old Hall, Sale ..	25	− 9.8	Mr. Curtis
	Ditto	25	−10.2*	Ditto
Yorkshire ..	Doncaster	25	− 8	Doncaster Gazette
Notts	Highfield	25	− 8	Mr. Lowe
	Ditto	25	−13 8*	Ditto
	Beeston	25	− 8.3	Ditto
Cheshire ..	Tarporley	25	− 8	Sir P. Egerton
Stafford ..	Tamworth ..	25	− 7	Mr. Dowell
	Ditto	29	0	Ditto
Lancashire ..	Thelwall near Warrington ..	25	− 6	G. J. Symons, Esq.
Notts	Beesthorpe		− 6	Mr. Fowle
Herts	Tyttenhanger ..	25	−6	H. Kent, Esq.
	Ditto	29	0	
Berks	Newbury	25	−6	Mr. Fordham
	Ditto	25	−2	Mr. C. Ross, Wilford Park
	Ditto	28	−4	
	Moulsford	25	−6	Mr. Spearing
	Ditto	28	−6.4	Ditto
Notts	Worksop ..	25	−6	Mr. Bennett
Stafford .	Lichfield	25	−6	Dr. Holland
Derbyshire ..	Willersley	25	−6	Mr. Gadd
Yorkshire ..	Grimsby	25	−6	Times
	Wakefield	25	−6	Mr. Bell
Gloucester ..	Dymock	25	−5	Times
Herts	Cheshunt	25	−5	Mr. Woolley
Northumb. ..	Hesleyside ..	25	−5	W. H. Charlton, Esq.
Essex	Epping	25	−5	Mr. Rivers
	Ditto	25	4	Mr. Doubleday
	Ditto	29	5	Ditto
Notts	Kingston Hall ..	25	−5	Mr. Westland
Cambridgeshire	Cambridge ..	25	− 5	Rev. E. Thompson
	Ditto	25	−4	Mr. Babington
	Ely	25	−5	Mr. Marshall
Gloucestershire	Highnam	25	−4.5	Mr. Wells
Mid-Lothian ..	Royal Botanic Garden, Edinburgh (Adie's Therm.) ..	24	−5	Mr. McNab
	Ditto	26	−2	Ditto
Herts	Ware	25	−4	Times
Essex	Colchester	25	−4	Mr. Davis, Bures
Suffolk ..	Stowmarket ..	25	−4	Mr. Barnes
	Sudbury	25	−4	Ditto
	Bungay	25	−3	Mr. Elphinstone
Essex ..	Apington Hall ..	25	−3	Ditto
Warwick ..	Birmingham ..	25	−3	Times
Derbyshire ..	Radbourne ..	25	−3	Mr. McPherson
Yorkshire ..	Bradford ..	25	−3	Mr. Abbey
	Ditto ..	25	−4*	
	Kirkham Abbey ..	25	−2	G. Legard, Esq.
Lancashire ..	Wilmslow, Manchester ..	25	−3	G. J. Symons, Esq.
	Victoria Park, Manchester ..	24	−3	Ditto
	Ditto	25	−1.3	Ditto
	Old Trafford, Manchester ..	25	−3	J. V. Vernon, Esq.
	Ditto	25	−7*	Ditto
	Latchford	25	−3	G. J. Symons, Esq.
	Eccles	25	−3	Ditto.
	Old Trafford ..	25	−3	G. V. Vernon, Esq.
	Ditto ..	25	−7*	Ditto
Herefordshire	Ross	25	−2	Mr. Lingwood
	Ditto	29	−3	Ditto
Brecknock ..	Crickhowell ..	25	−3	Times
Radnor ..	New Radnor ..	25	−3	Times
Berks	Englefield	25	−2	E. R.
Essex	Bardfield	25	−2	Ditto
	Chelmsford ..	25	−2	Mr. Cheveley
Herts	Sawbridgworth ..	25	−2	Mr. Rivers
Lancaster ..	Wigan	25	−2	Times
Oxon	Henley-on-Thames	25	−2	E. Jones, Esq.
Hants	Selbourne	28	−1.5	T. Bell, Esq.
Oxon	Henley-on-Thames	25	−1	Mr. Keith
Middlesex ..	Chiswick	28	−1	Mr. Thompson
	Ditto	25	4	Ditto
	Enfield	25	−1	Mr. McLellan
Lincoln ..	Belvoir Castle ..	25	−1	Mr. Ingram
	Ditto .. .	25	−5*	Ditto
Warwickshire	Gopsall Hall, Atherstone	25	−1	Mr. Sage
Worcestershire	Eardiston	28	−1	Mr. Miller
	Ditto	25	5	Ditto
Lincoln ..	Boston	25	0.75	Rev. G. Jeans
Berks	Wallingford ..	25	0	Times
Cambridgeshire	Chatteris	25	0	Times
Yorkshire ..	Coneysthorp ..	25	0	G. Legard, Esq.
Yorkshire ..	Grimston	25	0	Times
Limerick ..	Milford House ..	23	0	Mr. Hackney
Ditto .	Ditto	25	15	Ditto
Ditto ..	Mount Shannon ..	23	6	Mr. McIntyre
Herts	Harpenden .	25	1	Mr Wilson
Oxon	Oxford	25	1	J. Slatter, Esq., Rose Hill
Kent .. .	Dartford	25	1	Mr. Austin
Essex	Knott's Green ..	25	1.5	Mr. Hes Eaton
	Ditto	2[illegible]	−3.9*	Ditto
Hants	Heckfield	25	5	Mr. Dwerrihouse
	Ditto ..	29	2	Ditto
Devon .	Castle Hill ..	25	2	Mr Saul
Gloucestersh.	Witcombe Court ..	25	2	Old Sub
Wilts .. .	Trowbridge ..	25	2	Mr. Dawson
	Ditto	28	4	Ditto
	Castlefield, Calne	25	2	Mr. Ward
	Ditto	29	4	Ditto
Bucks	Taplow	25	2	Mr Rogers, Berry Hill
Durham ..	.. ..	25	2	J. S.
Northumb. ..	Near Hexham ..	29	2	W. H. Charlton, Esq.
Lincoln ..	Alford	25	3	Rev G. Jeans
Gloucester .	Stroud . ..	25	3	Mr. Foster
	Ditto	25	6*	Ditto
Bucks	Stowe ..	25	3	Mr. Ferguson
Leicestershire	Cole-Orton Hall .	25	3	Mr. Henderson
Fifeshire	Balcarras	24	3	Mr. Adamson
Somerset ..	Langport	25	4	Mr. Helway
	Ditto	28	4	Ditto
Herts	Hatfield ..	25	4	Mr. Plumbly
Northampton	Apethorpe ..	25	4	Rev. M. J. Berkeley
Derby	Osmaston Manor ..	25	4	Mr. Lamb
Yorkshire ..	Castle Howard ..	25	4	G. Legard, Esq.
	Oundle	25	4.9	G. J. Symons, Esq
	Ditto	26	7.9	Ditto
Edinburgh ..	Dalkeith	25	4	Mr. Anderson,
	Ditto ..	27	6	Oxenford Castle
Surrey ..	Weybridge ..	25	5.5	W. F. Harrison, Esq.
	Ditto	29	4.5	Ditto
Forfarshire ..	Barry	24	4.5	Mr. Mitchell
	Ditto	26	4.5	Ditto
Berks ..	Maidenhead ..	25	5	Old Sub.
	Ditto	29	6	Ditto
Hants ..	Alton, at 7 P.M. ..	24	6	Mr. Williams
	Ditto	28	8	Ditto
Forfarshire ..	Panmure Gardens	26	6	Mr. Mitchell
	Ditto	24	9	Ditto
Northampton	Rockingham Castle	25	6	Mr. Brown
Middlesex ..	Camden Town ..	25	6.7	G. J. Symons, Esq.
	Ditto	25	1.8*	Ditto
Bucks	Westbury	25	7	W. Craw, Esq.
Kent	Sandhurst	25	8	Constant Reader
	Ditto	29	7	Ditto
Down ..	Waringstown ..	24	7	Mr. Waring
	Ditto	25	14	Ditto
Northampton.	Overstone Park ..	25	8	Mr. Thomas
Northumberland	Sunderland ..	25	8	Times
Yorkshire ..	Easthorpe, Malton	25	8	G. Legard, Esq.
Sussex ..	Uckfield	25	8.2	C. L. Prince, Esq.
	Ditto	29	6.6	Ditto
Devon ..	Dawlish	25	8½	J. H
Somerset ..	Bath	25	8.5	Mr Davis, Crowhall
	Ditto	28	9	Ditto
Argyle ..	Lochgilphead ..	24	9	J Russell
Cumberland ..	Whitehaven ..	25	9	Mr. Williamson
Ireland ..	Armagh	23	9	Mr. Allan, Drumbanagher
Yorkshire ..	Whitby	25	10	Mr J. McLean, Mulgrave Castle
Wales	Merthyrmaur, Glamorgan	25	10	E. P. N.
Lancashire ..	Holkar	25	11	Mr. Wilson
Hants	Southampton ..	25	11	Mr. Bourne
	Ditto	29	11	Ditto
Dorset ..	Upwey	25	11.5	Mr. Miller
Buteshire ..	Cumbrae	24	15	Jas. Miller, Esq.
Renfrew ..	Greenock	24	11 (64 feet above sea)	Ditto.
Surrey .	Dorking	25	12	Mr. Drewett
Gloucestershire	Sedbury Park ..	24	14	S. M. O.
	Ditto ..	25	23¼	
	Ditto ..	28	18	
Kent	River Hill, Seven Oaks	24	15	John Rogers, Esq.
Yorkshire ..	Scarborough ..	25	16	Times
Ayrshire ..	Culzean Castle ..	25	16	Mr. Greenshields
Waterford ..	Dungarron .	23	16	Rev. H. G. O. Browne
Dorset ..	Little Bridy ..	25	16.2	Mr. H. S. Eaton
	Ditto	25	13.7*	
Wales	Pendyffryn, Conway ..	25	18	Mr. Ayres
Devon ..	Torquay	25	33	Times
	Ditto	29	36	Ditto

* On Grass.

BOTTOM HEAT FOR VINES.

THIS is a subject which seems to be attracting considerable attention at the present time, if one may judge from the pages of the horticultural press, though not more than it deserves. The wonder is that it should have been so long neglected, or, at least, but so imperfectly provided for, and that only when early forcing was contemplated, by the placing of fermenting material on the surface of the border, the heat from which could scarcely be expected to penetrate more than a few inches from the top; its benefit therefore chiefly consists in its preventing radiation of heat communicated by the autumn sun, but this would be equally effectually done by a few inches in depth of dry leaves with a slight thatching of Fern or straw, to keep them from being blown away, as by any given depth of fermenting material. As far as known to me, the merit of first applying bottom heat to Vines grown in common borders by means of hot water pipes, is due

* On Grass.

to Mr. Shearer, gardener to the Marquis of Tweeddale, at Yester, who published drawings making his system perfectly intelligible, a copy of which I received from him some eight years ago; but it may be objected to his system that as the border was all constructed on arches, and the pipes in chambers underneath, it was necessarily very expensive, and that this would always be a drawback to its general adoption. Such, however, is no argument against the great importance of providing some such temperature for the roots as is supplied to the branches of the Vine; and this leads me to describe two methods I have applied here for this purpose.

The first case is that of a Vinery 35 feet long and 13 feet wide. In the year 1855 the Vines in this house broke very weakly in April, and showed but little fruit in May; and on the 8th of June, when in full foliage, I shaded the house with a tarpaulin, poured a great quantity of water into a pit in the house, and took up the roots of the Vines, which were all in an outside border, and placed them in fresh soil. The leaves all flagged, but I kept the house warm and moist. The thick shading obviated the necessity for giving any air. At the end of a week the leaves began to turn heads instead of "heels up." I withdrew the tarpaulin, and substituted a thinner shading, and at the end of three weeks they were making lots of fine young rootlets from the old roots. They set what bunches were on them, and swelled them off in perfection.

In 1856 the Vines were started in February, and produced over 200lb. of Grapes that were ripe in July; in 1857 they were started in January, and were ripe in June. They were then started in October of the same year, and the first dish of Grapes was cut from them on the 15th of April, 1858. They were again started as usual in October of this season, but the spring being very cold and backward in 1859, I was not able to cut Grapes from them till the 11th of May, and this determined me to apply heat by some means to their roots. The house is one of a range of three Vineries all intended for early forcing, and in which were pits for Pines. The roots all being in an outside border, to effect my object I removed the Pine-pits, and laid a double row of 4-inch pipes along the bottom of the space previously occupied by the Pine-pits, and four feet below the general surface level the whole length of the three houses. To these pipes, 200 feet in length, I attached a small boiler, which required to be placed below the level of the boiler that gives surface heat in the houses. Over the pipes I placed about 9 inches of old brickbats, laid as loosely as possible. Over the bricks I placed a layer of turf with the grassy side downwards, and on this 3 feet of soil in the case of two of the Vineries, the Vines in which were planted in 1855, pulling from the outside border any roots that could conveniently be got hold of, and laying them in the new soil inside the house. I may here remark that the front of the houses is on arches, and that the stems of the Vines were inside, although their roots were all outside at the date now referred to; the wall of the Pine pit being close to the arches). I also made an incision with the knife in the stem of each Vine, about two inches under the point I brought the new soil up to, and from the upper side of this incision, which extended about one-third the circumference of the stem, I found by Midsummer that a complete tuft of fine roots had started into the new soil. In the two houses I am now referring to, I can maintain in the inside border a temperature ranging from 60° to 80°, by keeping a slow fire at the boiler for two days in the fortnight. But to return to the house referred to in the beginning of these remarks, I was anxious to have the benefit of bottom heat at once; to effect this, instead of filling up the border with soil, as in the case of the others, I filled it with leaves and stable dung to act as a lining for the outside border, and started the house on the same day of the month of October 1859 as in 1858; but mark the difference, I was able in 1860 to cut Grapes which were exhibited at the Edinburgh show on the 18th of March, a clear gain in time of two months, and at half the cost of fuel, for independent of the shorter time a fire had to be applied, the fermenting material made less fire heat at any given time necessary. I remarked that this year not a single air root was emitted from the stems, while previous to the application of the bottom heat they were in thousands. [Mark this!]

In July last I pruned the Vines in the usual way, and on examining what I may term "the old lining," I found that a great many roots from the stems had run into it in all directions, and instead of removing it, as it had subsided very much, I added largely of a mixture of dung and leaves to its surface on the 16th of August, and shut up the house; in three weeks the Vines burst into leaf, and showed 120 bunches, all of which were left on them, and on the 1st of this month I cut the first dish from them for my employer's table, and in order that you may judge of their quality I send you a bunch of them, with foliage attached. I also send you a bunch of Lady Downe's seedling, and one of Muscat, which shows that where proper means are allowed, Grapes may be had the whole year round. *Mr. Thomson, Dalkeith Park, Jan. 3.*

[The new Grapes sent us were of fine character. The Lady Downe's Seedling was of good quality, large, and well flavoured. The Muscats were exceedingly rich. Mr. Thomson has certainly shown that even in January old and new Grapes may be placed together on the same table. Another case of the kind is recorded in our Home Correspondence of to-day.]

FRESH-WATER FISH.

(From the Times.)

IN common with many who take an interest in the fresh-water fish of this country, I feel gratified by your article calling attention to this important subject. Your notice of it will probably stimulate many to attempt fish-breeding, and it may be of service to them to know beforehand which sorts are the best for that purpose. Although an inveterate angler, I shall here only regard the subject in a commercial light.

The fish adapted for breeding stock should be prolific, cheap to rear, rapid in growth, and good to eat. By "good to eat" I do not here mean as the first course of a superior dinner, but as pleasant to the palate and satisfying to the appetite with such cheap condiments only as salt, cayenne, and butter. To begin with the worst—barbel are scarcely eatable, often unwholesome. Chub, dace, roach, and bream, when broiled within two hours of leaving the water, are tolerable, but within 12 hours the flesh becomes soft and tasteless. They are, therefore, not fit for the market. Perch make good water-souchy, but this is not a poor man's dish; moreover, they are slow of growth. Eels are brought from Holland cheaper than we can catch them here, except in the autumn; besides which they are great destroyers of spawn. Carp require costly cookery. Dr. Kitchiner—not an extravagant man—says, "Lay it in a stew-pan with half a pint of claret or port wine, and a quart of good gravy." This at once puts the carp out of court as a trade fish. Mr. Boccius speaks highly of a German species, but it is not yet known here. Tench are good, but in this country not prolific, though De Huc describes them as easily and profitably cultivated in China. Probably our climate is too cold. They might succeed, like the Chinese carp or gold fish, in ponds heated by the waste steam of our factories. The burbot, referred to by your correspondents, is also good, but not prolific. Although not an angler's fish and seldom taken by the net, it is never plentiful. Some years ago, when living near the Trent, an experienced angler asked me as a favour to procure one for him to put in a museum. I need scarcely say that it cannot be deemed profitable. The char is excellent, but, alas! even in its most favourite haunt—Buttermere Lake—is by no means plentiful. Moreover, it seldom exceeds 6 or 7 ounces in weight. The potted fish sold under this title are often small trout—a very good substitute. Pikes are prolific and tolerable eating, but so voracious that they will only pay to keep where the better sorts will not thrive. In canals and meres they may be cultivated with profit.

We have now narrowed the list to salmon, trout, and grayling—all excellent eating, prolific, and from the size of their ova, easily bred artificially, by which process, I may here remark, about 90 per cent. of the ova become useful fish, whereas by leaving this to the care of their natural parents about 90 per cent. are instantly devoured. The difficulties with salmon are that they must go annually to the sea to feed, and annually towards the river's head to spawn. Few persons possess the whole length of a salmon river; the interests of the upper and lower proprietors become antagonistic, and so breeding ceases to pay. A commission is now inquiring into this subject, and I sincerely hope they will devise some means reconciling the conflicting interests.

In the meantime there is ample scope for all in trout and grayling, two of the best of British fishes, and possessing also this valuable quality, that the former is in season from March to August, and the latter from August to March, thus furnishing the table all the year round. To these, I think, the breeder should at present confine his attention. They require no feeding, and will grow in three years to between 15 and 16 inches in length, and 20 to 22 ounces in weight. This seems to be the most profitable age, as after that trout live less upon flies and more upon fish, their own families not excepted, while grayling after this grow very slowly. The so-called Thames trout weigh much heavier for their length; one of 13½ inches weighed 17 ounces, while a brook trout of the same length only weighs 13 ounces, and this difference increases as they grow older. These fish, however, seem to be merely emigrant brook trout under exceptional circumstances, and do not affect the general question. Occupiers of land through which clear streams run may breed large quantities of trout and grayling by merely separating rills, natural or artificial, from the main stream by fine gratings, digging a few holes in these watercourses for protection to the fish, and, after clearing out any resident fish, depositing vivified ova in the shallows. Nature will do the rest. By such means I believe the public may be constantly and abundantly supplied out of the present "waste of waters." *S. E.*

I have read with interest "S. E.'s" letter relative to the propagation of fresh-water fish, and quite agree with him in his remarks. I find, by experience, that it is difficult for an individual to do much in this line, and I do not think much will ever be done in England until there is a society formed for the purpose.

The Kennet is supposed to be, generally speaking, a capital trouting steam, but in that part of the river which runs through my property very few trout exist, and although for 10 years I have done all I can to encourage their increase, still I find my exertions have failed. The chief cause, I imagine, is the prevalence of barbel, which I suspect are far more destructive to the spawn than a few pike may be to the brood subsequently. The pike I can destroy, but how to get rid of the barbel I know not.

I have attempted artificial hatching of trout, and on one occasion, when I had some capital spawn brought me in 1854, by Glover, who was then conservator somewhere on the Wandle, I turned 800 fish out of one box; but since that date I have never been able to procure any good spawn; hereabouts I have no opportunity of getting fish in spawn. A neighbour has twice attempted to supply me, but I presume the spawn he sent had not been properly impregnated, for not one of the ova hatched. About two years ago I advertised in the *Field* and in two Hampshire papers for *grayling* spawn (provided it was supplied from legitimate sources, *i.e.*, by no poachers), but I did not receive a single answer to my applications.

I feel anxious to give publicity to the attempts I have made on this most interesting subject, to show how difficult it is for any single person to carry out the propagation of fish where they do not naturally exist. I have a little rill in my park in which I hatched the trout above-mentioned; this never ceases running in the driest summer, and no amount of rain discolours it, but its virtues are lost to me at present, for I can obtain no spawn. I could hatch millions of fish here annually could I but get the ova properly impregnated, and am quite at a loss how to procure it; no doubt there are many gentlemen besides myself who labour under the same disadvantsges; nor do I well see how these difficulties are to be overcome until an establishment is formed similar to that reported to exist in France, from which persons can be supplied with ova or young fish of all species to almost any amount. *Higford Burr.*

EXTRACTS FROM MR. J. G. VEITCH'S LETTERS ON JAPAN.

(Continued from p. 1126, 1860.)

No. VIII.—*Youkuhama near Kanagawa, Oct. 12, 1860.*—In my last dated September 22nd, I informed you of my being about to start for Hakodadi, the most northernly open port in Japan. This I did on the 24th, and much regret the short stay of the vessel there (8 days), being obliged to return here by her to keep my appointment to visit Mr. Alcock at Yeddo.

I found here trees and shrubs in great variety, but only three or four species of Coniferæ were met with, namely, Cryptomeria japonica, Pinus Cembra, Thujopsis dolabrata, Taxus species similar to Baccata, and an Abies—probably new. I collected seeds of the Thujopsis and Abies and some 40 species of shrubs. The Thujopsis appears to prefer shady situations, the foliage being much more luxuriant than when exposed to the full sun. It may however be guaranteed as being perfectly hardy. It grows where snow covers the ground for five months together, and where the thermometer if often below zero. The Abies will probably be quite new; it is neither described or mentioned by Siebold or Thunberg that I can find. Its foliage resembles Spruce in point of colour, but the leaves are as large as Abies amabilis and perfectly silver underneath; I saw numbers of trees, but found only two solitary ones bearing cones, the quantity of seed you will receive will therefore be small.

Amongst the shrubs are two species of Viburnum, three species of Aralia, a Rhododendron, a Chesnut, a Berberry, several climbers and other shrubs, with some four or five ferns. Sciadopitys verticillata and Cryptomeria japonica are certainly the finest Conifers I have met with. The former (Sciadopitys) is apparently very scarce, I have as yet found but 10 or 12 trees in this neighbourhood. It assumes a pyramidal habit when in a young state, and retains the same form when a tree of 100 to 130 feet, clothed to the bottom with branches. This tree is certain to be appreciated at home and will doubtless prove hardy. The latter (Cryptomeria) is a splendid tree here, as you will imagine on reading an account of those seen during our trip to Fusi-Yama. All situations and soils appear to suit it; it is found in deep wet valleys and on mountain summits. Our summers are probably scarcely hot enough to ripen the wood, and I would suggest that it should be planted in open situations, where the sun has power on it, and where it is not crowded with other trees; more than once I have gone a long way to reach a clump of young trees which in the distance have resembled young Wellingtonias.

Camellias and Azaleas grow luxuriantly everywhere, even at Hakodadi; five or six varieties of the latter with very distinct foliage are found there. A. indica alba, and a variety like crispiflora in foliage, are the commonest here.

On my first arrival at Kanagawa Mr. Alcock informed me that he had received the vegetable seeds you had sent him. Mr. A. has been exceedingly kind to me, and I am going to stay with him at Yeddo in about a week from this time. Two glass cases are to be filled, one for her Majesty and the other for Kew; also a kitchen garden is to be formed, in which the seeds from Exeter will be the first crop.

I continue to find the lower classes of the people exceedingly polite and kind, and willing to give you every

assistance in their power where not biassed by the officials; they are, however, under such control as is not known and scarcely to be imagined in Europe. A shopkeeper dare not sell or buy an article or even take a sample of his goods to your house when forbidden by the officials. At an auction a man dare not bid if an official is present and wants to buy, and commonly government officers buy up the goods and resell them at a profit on the spot. It is these government officials that cause all the disturbance and hindrance to trade in this country.

I have by this mail sent you, *viâ* Southampton, a parcel containing my diary of our trip to Fusi-Yama, and I hope you will find it interesting. [It will appear next week.]

No. IX. *Youkuhama, Oct.* 20, 1860.—I have the pleasure to acknowledge the receipt of your letter No. 8, dated August 10th. Since my last to you on the 12th inst. little of importance has occurred worthy of telling you. This will consequently be a short letter, and my principal object is to inform you that I have shipped by the same vessel which takes this to Hong Kong, two boxes of seeds, which I sincerely trust they will come to hand safely and in good order. The inclosed list will give you all particulars.

Mr. Hodgson, late British Consul at Hakodadi, is now here, *en route* for England. He takes home with him three cases of plants for Kew, which I have filled for him.

I have also filled a case for the French Minister, to go to Paris, and one of Tea plants for the captain of H.M.S. "Berenice," for Bombay. These little matters take up much time; but having received many kindnesses, I am anxious and glad to show my gratitude as far as I possibly can.

I go to Yeddo on the 22d, and stop a month. This is a great favour, as no one can get there except through the Minister. I am in hopes of finding some fine plants there.

No. X. *Yeddo, Nov.* 6, 1860.—An opportunity of sending letters free to England but so seldom offers, I am anxious to take advantage of the present one, and write a few lines.

The British Legation's mail leaves to-day, and this letter will be posted from the Foreign Office in London.

This is a most beautiful city, some of the buildings in it are as fine as any in Europe, and all the streets and places perfectly clean. I never saw so clean a place before. The walks and rides in the immediate vicinity of and in the very town itself are beautiful, such as you would appreciate in the neighbourhood of London. The great drawback is the hostile feeling of the officials, which sooner or later will, I fear, bring us into trouble with Japan.

The people like foreigners very much, and if allowed would make them very comfortable. We are obliged to pay often three or four times as much for things, and always at least double what the Japanese themselves pay, and if you want any novelty made which they do not understand the use of, they will not make it, imagining that it is something which will injure them. At this place no man can bring articles for sale without first having them examined by the officials at the gate, when he is told what price to ask. As for going to shop yourself, it is quite impossible, for the people are told directly you enter not to sell you anything. I sent for some paper a day or two since. One of the servants (a Japanese) here bought some for himself—60 sheets for 1*d.*; of course I wanted the same, but I was told foreigners must pay 2*d.*, and I could not get it for less. You need not suppose we are in any danger from all this; I merely tell it to you to show the feelings of the officials, who all the time pretend to be our friends.

My stay in Japan (at all events for the present) will soon be drawing to a close, as I shall before long have to pack the plants collected here in glass cases, run down to Nagasaki and pack up what I left there, and take the whole to Hong Kong to ship for England. Altogether it has been a most interesting and pleasant visit, and things have happened more favourably for me than I could have expected; but I am satisfied in my own mind it will be some time before Europeans can travel far inland in Japan.

All my friends have been very kind to me, particularly Mr. Alcock, whom I have to thank for my trip to Fusi-Yama, and my present residence in Yeddo.

(*To be continued.*)

Home Correspondence.

The Weather in December, 1860.—The following are some of the more explanatory letters that have reached us concerning this serious subject. The whole of the results as to Dec. 25 are embodied in the extensive Table of temperature to be found in another column:—

Although my neighbour Mr. Chater only got pooh poohed and laughed at when he sent you an account of the intense cold experienced here last winter, yet as, unfortunately for us, it was undoubtedly correct, I venture to address you now and brave the sneers of the weather oracles. This year the intense cold was more severe and longer continued than last; at 3 o'clock, P.M. on the 24th the thermometer was at 16°; at 4 P.M., 7°; at 5 P.M., 2°; at 7 P.M., 0=32 degrees, and continued there till midnight when a hazy fog slightly obscured the moon, and the mercury rose 2°. At 1 A.M., on the 25th, the fog cleared off and the glass fell to zero: between 1 and 2 I gave up my vigil to the under gardener and returned about 6. I then found the mercury at 12° below zero, and the man said that at 5 o'clock it was at 14° below, but I only vouch for what I saw. We may put it therefore thus:—

Dec. 24th,	3 P.M., thermometer	.. ..	16°=16 degrees.
,,	4 ,, ,,	.. ..	7°=25 ,,
,,	5 ,, ,,	.. ..	2 =30 ,,
,,	7 ,, ,,	.. ..	0 =32 ,,
,,	12 ,, ,,	.. ..	2 =30 ,,
Dec. 25th,	1 A.M., thermometer	.. ..	0=32 degrees
,,	6 ,, ,,	.. .. ..	—12=44 ,,
,,	7 ,, ,,	.. .. ..	—10=42 ,,
,,	8 ,, ,,	.. .. ..	— 8=40 ,,
,,	9.30 ,,	.. .. ..	— 5=37 ,,

At this time another good glass was brought out from the hall and registered exactly the same; it continued intensely cold, fluctuating near zero till noon, when there began a steady rise and was not again so severe, though on the 29th from 3 to 5.30 A.M., the glass was down to 3°=29°. I had two glasses out, one a perpendicular quicksilver, the other a horizontal spirit; they both hung on an open iron fence about a foot from the snow level, which was 8 or 9 inches thick. The horizontal one has hung out of doors for many years; I have compared it with four others I have in the houses, and it never goes so cold as the rest by 3°, so that last year when two others registered —8, that only went —5. This year it did not get lower than —9=41°. I shall not remove them for two or three weeks in case any "savans" pass this way, who can test them as much as they think proper. The effect of last year's frost on the shrubs, &c., here was most deplorable, and I will mention a few that my gardening friends, who have had it below zero, may form some idea of what they may expect. Aucuba japonica, large and small, killed to the ground; Evergreen Oaks, planted 30 years, stems 6 inches diameter, killed to the ground; nearly all the Ivy killed to the ground; Laurels and Laurustinus killed to the ground; Green and Variegated Hollies, injured and some killed; Cupressus Lambertianum and funebris, with Araucaria imbricata and Phillyreas, quite killed; Cedrus Deodara, some killed, all entirely ruined as specimens. Of course all acknowledged tender things were killed. *Frank M. Coldwells, gr. to Mrs. A. Gibson, Saffron Walden, Essex.*

The effects of the severe frost in this part will be long felt. On the morning of the 25th the mercury fell to 12° below zero, and on the morning of the 29th to 7° below zero. The destruction among the shrubs in the garden here is very great; large bushes of Aucuba japonica, Garrya elliptica, Arbutuses, Phillyreas, Laurustinuses, and others, are completely destroyed. I fear the destruction in the Pinetum is equally great; the weather is not favourable for making a close examination at present; but I am glad to find that the Wellingtonias appear to have stood the frost without injury, also the beautiful Berberis japonica and Beali. In connection with the severity of the weather, and showing the instinct of birds, I may state that the common wood pigeon has been very abundant in this neighbourhood, and I have not seen any diminution in their numbers either winter or summer. However, on the commencement of the storm they all disappeared. Can any of your southern correspondents inform us if they have had an influx of those birds. *William Culverwell, Thorp Perrow, Yorkshire.*

As you expressed a wish to know the effect of the intensity of the frost in various parts of the country, I beg to send you a few facts relating to it, that occurred at Chatsworth. On Dec. 24, at 6 o'clock in the morning the thermometer stood at 32°. Before 11 o'clock the glass had sunk down to 5° above zero, namely, 27° of frost, an intensity of cold I have never heard recorded in so short a period of time. This sudden intensity had a remarkable effect upon the river Derwent which flows through the park. About 9 o'clock A.M. the river began to throw off vapour very much in appearance like a steam boiler, which ascended about 40 or 50 yards into the atmosphere, when it became condensed into the finest particles of snow, the extreme lightness of it holding it in suspension, and after a large accumulation it moved off in a dense body in the range of the woods, and the sides of the valley of the Derwent, and had at a little distance the appearance of a dense fog. On coming within its range it almost darkened the air, so much so that no object could be distinguished beyond a few yards. This singular phenomenon continued for three or four hours and moved about in an otherwise clear atmosphere, in such singular forms as to give the whole district the appearance of floating mountains of snow. At 11 o'clock on Christmas Eve the thermometer descended 12° below zero, and it continued at about this point until after daybreak on Christmas Day. It ranged all Christmas Day at a little below zero. A great number of young Limes and Ash trees, of 30 and 40 years growth, were split up. One, a Lime of 40 years' growth, was split up 20 feet, with a crack in it three quarters of an inch wide, which went to the centre of the tree. I hear there are many trees split in the woods, some of them bursting with a report equal to that of a gun. What effect the frost has had upon vegetation it is now impossible to say, as the country is covered with snow. *Joseph Paxton, Chatsworth.*

As you invite an account of temperatures in different localities, I beg to send the following, viz.:—At Easthorpe Hall, 350 feet above sea level, and on limestone substratum, on night of Dec. 24, thermometer 8°+ (minimum).

At Castle Howard,	250 feet do.,	and on sandstone,	4°+	on 24th
At Coneysthorp,	200 feet do.,	do.	zero	,,
At Kirkham Abbey,	150 feet do.,	do.	2°—	,,

These places are within a circle of four or five miles; their temperatures, therefore, seem to depend on their elevation, and on their vicinity to water. Within the last four or five days the minimum temperature here is as follows, viz.;—On 4th Jan., 19°+; 5th, 23°+; 6th, 12°+; 7th, 20°+; 8th, 10°+. *George Legard, Easthorpe Hall, Malton, Yorkshire.*

The first real approach of winter here was on the afternoon of the 20th, when from 3 till 8 o'clock P.M. nearly 6 inches of snow fell. Night mild. On the night of the 21st the thermometer registered 17° of frost; 22d, 15°; and night of 23d. 26°; the latter the lowest it has been. It is 5° lower than minimum of 1859. This is unusually low for this part of the country, and many plants usually hardy here will I fear suffer. Magnolia grandiflora, Myrtles, Escallonia macrantha, on south wall severely browned; Laurustinus, severely browned; Bays and Aucubas slightly; Pinus tribe quite safe. Tenderer kinds of Rhododendrons (hybrids of arboreum) will I fear be severely cut up. A very genial thaw since 28th. All snow now gone, with not much rain.—*A. M'Intyre, Gardener to the Earl of Clare, Mount Shannon, near Limerick.*

On Dec. 25th the thermometer registered 2° above zero at 8 A.M., continuing so till 8. 30, when it began slowly to ascend. The preceding evening showed no indications of such a severe frost, a thick fog completly enveloping the low valley of the Thames, the thermometer indicating 20°, or 12° of frost. At 10 P.M. when the sun broke forth on the morning of the 25th, the trees in the park and the ornamental deciduous shubs presented a picture never to be erased from the memory, reminding one of those gorgeous pantomimic spectacles of the season, every twig forming a feather of shining crystal, the landscape assuming a midsummer denseness of shade with a brilliancy indescribable. For the next three days we had nothing remarkable. On Dec. 28th at 10 P.M. a clear night thermometer, 10°; on the morning of the 29th the index indicating 4°; by 7 P.M. it got up to 10°, and continued rising steadily till evening, when a fall of snow changing to rain in the morning of the 30th seems to have put a stop to the severest frost I have ever experienced. What its ravages may be time alone can tell. The narrow and broad-leaved Phillyreas are quite black in every instance; next to them comes the broad-leaved Holly and Magnolias, Berberis Fortunii and Darwinii, while, strange to say, standard Camellias, and all the Conifers down to Arthrotaxus selaginoides, seem unscathed—but the spring time too often reveals the sufferings of the Coniferæ. The registerings are from two of Negretti and Zambra's self-registering thermometers, 5 feet from the ground, placed opposite each other, on a wire trellis arching a walk. *A. Roger, Gardener to J. Noble, Esq., Berry Hill, Taplow, Bucks.*

The lowest my thermometer showed was 15° on the morning of the 24th. My house is about 200 yards from the shore, and about 15 to 16 feet above the level of the sea; but there are houses between mine and the shore. At another house on the shore it was 15°; the river or rather Firth of Clyde is here about three to four miles wide. At another place in town, about five minutes' walk from my house, and 64 feet above the level of the sea, the thermometer was 11°. I venture to send this difference of temperature, as it is interesting to notice the influence of the sea on the temperature. At the Island of Cumbrae, 18 miles down the firth the lowest was 15°. These thermometers are all Negretti and Zambra's, and are tested at Kew. This is the most extreme cold that has ever been experienced here. *James Miller, jun., Greenock, Dec.* 31.

In rather a sheltered situation, and nearly 2 feet from the ground, the thermometer showed 23½° of frost on the night of the 24th inst. On Friday, 28th, it again registered 28° of frost. The situation is high, and the thermometer is in a stout wooden frame, standing within the garden walls; the aspect is N.E. The snow during the week measured in an open situation rather more than 8 inches; it has now nearly all disappeared, and I regret to say that the Broccoli is to a very serious amount affected, many of the plants drooping their heads already, and the Bays are also very much browned at the points. I fear we have indications of a return of the frost, the glass standing at midday only 3° above freezing. *D. Davis, Crowhall Gardens, Bath, Dec.* 31.

To give an idea of the severity of the frost, we give the following extract from the registers of Adie's and Bryson's thermometers in the Botanic Garden, Inverleith Row, which, from their situation, may be taken as the medium temperature between town and country. The two thermometers are placed side by side, about 4 feet above the surface of the ground:—

		Adie's.	Bryson's.
Monday morn.,	Dec. 24	5° below zero	8° below zero.
Tuesday morn.,	,, 25	2½° above zero	½° below zero.
Wed. morn.,	,, 26	2° below zero	5° below zero.
Thurs. morn.,	,, 27	8° above zero	5° above zero.
Friday morn.,	,, 28	7° above zero	5° above zero.

Royal Botanic Garden, Edinburgh, Jan. 2.

I find on examination that the Laurel, Bay, Aucuba, Tree Pæony, Lavender, Rosemary, and some Hollies, are killed from the severity of the frost on the 25th. Peach trees are also nearly if not quite so, and what the result will be on a thaw taking place it is very difficult to say. There were 17° of frost last night, the 3d, and to-day the thermometer is standing at 21°; barometer, 30.1, with the wind north. We may therefore expect a continuance of this weather. Were it not for railways coal would be a scarce article, for the canals are frozen over and navigation stopped in this locality. *J. Gadd, The Gardens, Willersley, Derbyshire.*

The lowest temperatures registered at this place on the night of the 23d and 24th of this month were as follows:—16° by a horizontal spirit thermometer of Newman's, which has been in use some years, but which has been compared with and verified by a Royal Society Kew standard in my possession.

14° Negretti and Zambra .. .. No. 1.
14° ,, ,, ... No. 2.

These two last are self-registering thermometers, mounted on wood, but which have not been verified by the Kew standard. The first thermometer, Newman's, is exposed in a thermometer stand made of louvre board, open on the top and to the north, but which protects the thermometer from all sun in summer. Of the other two, one was suspended on a north wall, the other was laid upon a board covered with snow sloping to the north at an angle of about 20°, exposed in fact to the utmost radiation possible. All were as nearly as possible 4 feet from the ground. The garden in which they are exposed is about 520 feet above the level of the sea, facing south. I may add that the position of the third thermometer was as nearly as possible similar to that in which one of my thermometers fell to —3° in the frost of January 20, 1838. I consider Newman's my most reliable thermometer, but I am inclined to think that the thermometer stand, which I adopted only a few months ago, intercepts radiation, and that it would have been a degree lower if exposed as the others were. *John Rogers, River Hill, Sevenoaks, Dec* 29.

The cold of the night of the 7th and morning of the 8th exceeded that of Christmas Day by 1°, being 4° below zero. *R. Elphinstone, Flixton, Bungay, Suffolk, Jan.* 8, 1861.

On the Subject of the late Severe Weather.—Few people besides those accustomed to meteorological observations are aware of the variations of temperature which exist in midland districts, and in areas comparatively circumscribed. But the causes which produce a divergence from the ordinary range are terrestrial, rather than climatic, and thus capable of being modified if not removed, there can be little doubt; the knowledge of the existence of an evil is often the first step to its removal. By a fair comparison of observations of temperature from different parts of the country, we may be made acquainted with the discrepancies of temperature which exist, and by pursuing an inquiry into the causes which operate to unduly depress the temperature of a place, we may arrive at facts of great and general importance; suggestive of remedial measures. I am acquainted with a garden in Nottinghamshire in which Peas cannot be cultivated to produce pods of seeds, and another spot has often been pointed out in Notts as the coldest on the north road, and so well was it known that on approaching it the mail coach guards used to take refuge in the boot. Mr. Lowe's reports of the low temperature experienced at Beeston go to prove the inclemency of that particular spot, but many places in Notts are earlier and warmer than we are in this locality, and our lowest temperature during the late frost was — 1 The whole subject is full of interest and importance, and is one that should especially engage the attention of gardeners. I hope at some future time to recur to it, but at present I wish merely to comply with your suggestion, and to give the particulars of temperature as recorded at Belvoir Castle during the late frost ending Dec. 30, 1860. I may mention that the instruments from which the observations were taken are on a stand such as is used by

members of the Meteorological Society, which exposes them fully to the influence of the weather. They are placed 4 feet from the ground. The thermometers are by Negretti and Zambra, and have been examined, and their accuracy tested, by Mr. Glaisher of the Royal Observatory. Our station is 237 feet above the sea. The natural soil of the locality is clay; we are near large woods, and a lake is within half a mile. It is important that your correspondents should assure you of the accuracy of the instruments they have employed, and the propriety of the position they occupy. The readings of instruments placed against walls are very unreliable, the radiation of heat from buildings is more than is commonly supposed. This was curiously illustrated this season by a bed of Heliotropes planted near my house, the near half of which remained untouched by the early frost, while that part beyond the radiation of the house was destroyed.

Register of the Weather at Belvoir Castle, Lincolnshire, from the 17th to the 30th December, 1860. Taken each morning at 9 A.M. :—

Day of Month.	Wet Bulb.	Dry Bulb.	Maximum.	Minimum.	Thermometer on Grass.	Snow.
	Deg.	Deg.	Deg.	Deg.	Deg.	
17	32.5	35.5	38.5	31.5	34.5	.005
18	29.7	30.7	35	26.3	24.7	.003
19	26	26	34.5	25	19	.005
20	27.7	28	34.3	24	18	..
21	29	29	32.3	24.3	22	.010
22	30.3	30.3	31.5	28.7	28	.001
23	26	26	32	25	22	..
24	23	23	27	21.7	18	.011
25	2	2	19	0—1*	0—5*	..
26	19.5	20	33	7	4	..
27	30	30.3	33	25	24	..
28	25	26	35	20	15	..
29	22	22	32	12	7	..
30	31	32.5	35	24	21	.050

* Below Zero.

W. Ingram, Belvoir Gardens.

Roses for the Million.—I think I have hit on a way to strike Roses so as to place them within the reach of every one. Those who can obtain cuttings now can have a blaze of bloom next summer, and none can fail provided they observe the following instructions. As soon as the cuttings are prepared, place them in layers in boxes or pans, and bury with moist sand; place them so as to get a bottom-heat of about 70°, no matter whether on pipes, flue, or dung. The only thing to guard against on a flue is getting the sand too dry, so as to shrivel them, for the secret of striking cuttings in this way is to prevent loss of sap by evaporation. Mine are placed on top of an underground flue in a bin with Seakale, and covered with leaf soil to prevent the sand drying. After being so placed for a week I examined them, and to my surprise and delight I found all callused. I believe many hard-wooded things that are now considered difficult to propagate may be struck in the same way. I am now trying experiments with other things, on which I hope to report hereafter. *J. Sheppard, Woolverstone Park.*

Growth of Pinuses at Esher Place, Surrey.—

	1859.		1860.	
	Ft.	in.	Ft.	in.
Abies canadensis	7	6	7	11
,, cephalonica	9	2	11	0
,, Douglasii	11	10	13	3
,, Menziesii	20	8	21	9
,, morinda	11	9	13	4
,, orientalis	11	0	12	4
,, Pinsapo	11	2	14	8
,, Webbiana	8	6	9	6
Araucaria imbricata	13	0	14	0
Cedrus atlantica	4	6	6	0
,, Deodara	20	0	21	2
Chamæcyparis sphæroidea	6	11	7	6
Cryptomeria japonica	24	0	26	6
Cupressus Goveniana	9	0	10	0
,, torulosa	13	9	14	0
Juniperus chinensis (male)	11	0	11	6
,, ,, (female)	6	6	7	6
Pinus Coulteri	34	3	36	11
,, Devoniana	13	6	14	11
,, excelsa	15	8	17	6
,, Lambertiana	12	3	14	6
,, ponderosa	5	8	6	11
,, pyrenaica	18	6	20	2
,, Sabiniana	11	0	11	10
Taxodium sempervirens	23	10	26	3
Thuja plicata	3	9	8	9

W. W. Spicer.

Early Grapes.—At a time when the importance of bottom-heat, especially for early Grapes, is occupying attention, I take the liberty of sending you along with this a few bunches from a Vinery in which for several years I have (8 crops) had Grapes ripe at an early season. The Vines are planted out, but have their roots mostly in the inside border, which is well supplied with bottom-heat, to which I attribute to a considerable extent the success which, as an amateur grower, has attended my efforts. The Vines broke and progressed with the greatest possible freedom and uniformity all over the house. When the earliest bunch was barely ready to thin, every bunch in the house was in bloom. And throughout their various stages they have maintained the same uniformity, and almost every bunch has been ripe for the last fortnight. *D. S. Meiklam, North Berwick, Jan. 7.* [With this note we received specimens of Black Frontignan, Chasselas Musqué, and Black Hamburgh Grapes. They were well grown, but of course, in the absence of light and air at this season of midwinter, they had not the sweetness and flavour of sun-ripened fruit. The Black Frontignan seems too tender a Grape to ripen satisfactorily in January. We would recommend Mr. Meiklam to discard it.]

Heating Small Houses.—I have a small greenhouse, about 10 feet square, with three sides glass, in which, during the late severe frosts, I have used a pan of charcoal for want of any regular heating apparatus. Is it likely that the plants will be injured by the fumes of the charcoal? If so, would my house be sufficiently secured against frost by burning in it a pair of candles or lamps, or merely covering the roof with Tiffany or canvas? It contains nothing more tender than Geraniums, Cytisuses, Ferns, Diosmas, &c., and is new and free from apertures. *Paxtonia, Jan. 7.* [The charcoal will do no harm in such a place, provided it burns slowly.]

How to Destroy Rabbits Effectually.—In the autumn of 1859 I was much annoyed at the rapid increase of rabbits in the hedgerows of my neighbours owing partly to the warm dry season. Ferrets and traps were employed incessantly, but although numbers were destroyed, enough were left to do much damage to my young trees. I became desperate, and tried to poison them with the young shoots of Apple trees saturated with strychnine, but the cunning creatures would not touch a twig, although they are their favourite food. They would not even touch the twigs of Apple trees not poisoned which were stuck in the ground near the others, although they were carefully managed, not being touched with the fingers but with pincers. All at once a new idea struck me (and yet I dare say some old gardener has practised it). I directed my man to cut up with his bill a quantity of White Thorn shoots into pieces a foot or so long; he then took a two-pronged stable fork and crammed them firmly into the mouths of all the burrows he could find. When this was done he took a kettle of coal tar cold and poured it over the bushes so as to completely saturate them, then with his spade he banked up every burrow with earth, treading it firmly down. I watched the burrows with much interest, but could not find that a single rabbit made its way out. After some 10 or 12 days I found that two or three had made their way into the old burrows by making a fresh one on one side; ferrets were put in, and as they would not come out the burrows were laid open some distance from their mouths; in them were found dead rabbits with their noses covered with coal tar, and in one burrow 10 hedgehogs all dead, apparently suffocated. Since then, whenever I have found a burrow open and used by rabbits I have adopted the same method, and have nearly or quite extirpated them. *T. R.*

Young Gardeners and their Employers.—As the subject of young gardeners is again introduced into your pages, I, as one of that class, take advantage of the opportunity of expressing not only my own opinion but the opinion of others on the subject, considering it but justice, after reading "S. T.'s" opinion of such young men. As regards education, I think that there is no gardener, young or old, who will deny that a good education is highly necessary, in order to attain a thorough knowledge of the business, and that Mr. Linager's plan is decidedly a good one; indeed of the greatest utility in analysing the present and future generations of gardeners. But under the present circumstances, how is a young man to attain the qualifications which he is expected to possess, though he be well educated, so long as his master is so far behind in his abilities and in doing his duty? for I am convinced that if some of those who style themselves head gardeners and hold situations as such were put to the test, they would be found unfit for the third class in Linager's plan; and almost as far short of a gardener's qualifications as the man who styled a Privet a Myrtle. And yet they say young men are ignorant and careless. Now, suppose a young man to be tolerably well schooled. He enters into an engagement with some supposed first-class gardener to serve him a term of three years, and pays him a premium of no small amount; the weekly wages he receives are 9s. or 10s. (this I know from experience), and the heaviest and dirtiest work is his share. Of course the young man expects to be at the end of the three years qualified to take an under gardener's situation; but what chance has he to gain such qualifications? Does his master grant him the privilege of an hour's instruction in his own house or other place, for but a night or two in a week? Does he try to impress upon the young man's mind the necessity of his reading? or does he himself read and explain to his young gardener what he finds useful in the *Chronicle* or other papers or books? or does he lend him such books (if the rooms the young gardeners live in do not contain a library consisting of such works, provided by the proprietor of the establishment), that will prove edifying to him in his profession? I am sorry to say that there are many who do not, and the young gardener goes muddling on among his fellows, and acquires a deal more knowledge from the foreman than from the man who receives the premium. The end of the third year has arrived, and if he has not done his utmost to gain knowledge for himself, all he knows is the names of plants (quite as often wrong as right), a Muscat of Alexandria from a Black Hamburgh Grape, &c., to say nothing of kitchen gardening. Yet he has not altogether neglected himself, though his master has not done his duty towards him; he has paid some 20*l.* as a premium, and that teaches him pretty sharply that he must do something for himself, and so he watches the various processes of the kitchen, fruit, and flower gardens, if he is not permitted to take an active part therein; so that he is not so bad after all. Well, the end of the third year is come, as I said before, and through some gardening friend, or the nurseryman dealing with the establishment, a situation is procured for the young man, as foreman probably. His new employer has represented to him that he has comfortable rooms, and every necessary according to his situation provided him. The young gardener proceeds to his new abode, and what does he find?—perhaps what I found, an old granary or lumber room converted into two small apartments, without ceiling (and fancy the heat of summer), a concrete floor, and underneath an old boar, sow and pigs, poultry, &c., the smell from which is almost sufficient to ruin his young men's constitution. I found I had to provide myself with pots, kettles, dinner, &c., and when I objected (though the other young men were willing to put up with it), I was furnished with a pair of old sheets cut up to make towels, &c., and a tale into the bargain that "his lordship would not allow such things," which I do not believe. And yet "S. T.," and others like him, are afraid that young men should consider themselves illused. I rather expect there are some in "S. T.'s" service who fare little better than I did, and if such be the case is it not enough to make young men neglect their master's interests? Or, it may be, he makes gardeners, as the master I have mentioned before did, by taking labourers and placing them under glass, to fill the vacancies that occur, instead of looking out for experienced young men. Perchance there is some mishap, the foreman is blamed, and risking his character he gives notice, leaves and takes refuge in a nursery or market garden. And then says "S. T."—they are poor tools, careless, &c. But if he would only engage young men who could produce a certificate of qualification, he would not meet with so many difficulties, provided he treated men better. If those who hold high situations would adopt the system of Linager, or some other such plan, they would greatly protect the profession, the country would not be overstocked with blockheads, and young gardeners would be always looked upon as a class of respectable young men. *A. P., Young Gardener.* [We have been obliged to curtail this letter; as it now stands it expresses the feelings of a considerable number of correspondents, and has a right to admission as an answer to "S. T.'s" sharp charges. We must, however, inform young gardeners that "S. T." is a most respectable person, and by no means the kind of man some imagine him to be.]

Foreign Correspondence.

Weather at Nice.—The cause of the general atmospheric depression which took place on the 18th inst. might form an interesting topic of inquiry. It seems to have been universal throughout Europe, and almost simultaneous, as appears by the daily returns now published in the newspapers. The temperature in London and at Nice, though nearly 1000 miles apart, at that date underwent a similar change; of course being so much more south it did not become so severe in this locality, but from the 18th to the 25th, as will be seen by the subjoined table, it was unusually cold. Snow laid on the ground in the shade for three days, and on the 22d there was ice about a quarter of an inch thick. Some of the more tender shrubs, &c. in exposed situations, have partially suffered, such as Sparrmannia africana, Cineraria platanifolia (a very handsome large growing species with leaves resembling those of Gesnera zebrina), Phytolacca dioica, &c. The last from its fine appearance and very quick growth, would I think be worthy of attention by English growers in warm situations. It was introduced here from Africa about 10 years ago, and has attained a great height and size. In proof of its extraordinary growth I may say, that when I was at Nice six years ago the plants were hardly visible in the Jardin public, and now there are large trees forming some of its chief ornaments, and measuring about 2 feet in girth. The tissue of the wood is of a spongy nature, so that it may easily be pierced with a knife; in fact though of so great a size they seem so soft and fragile that some require support. They are now bearing bunches of what seem to be unexpanded flowers, resembling young Grapes. The leaves are of a glossy dark green, something between a Laurel and a Poplar, whitish underneath. They fall off in March, but are renewed again in April, so that for 11 months out of the 12 it retains its fine foliage. Another handsome tree here is the Carob (Ceratonia Siliqua), which in this district is quite hardy and a splendid Evergreen, resembling our common Acacia when in full leaf. It produces an abundance of pods, in appearance at first like small French Beans, but afterwards becoming larger than a full sized Red Runner, of a dark brown. They are sold as food for horses, and are also imported into England from Egypt for that purpose. If it could be acclimatised it would be very desirable, and be not only useful but highly ornamental. It is easily raised from seed. The Judas tree (Cercis siliquastrum) is of the same family, but not evergreen.

Notwithstanding the low external temperature,

there have been several days when, from the heat of the sun, fires were unnecessary. On the 15th I observed the yellow Narcissus in bloom in the open air, and on the 24th I purchased a bunch of the large blue (wild) Anemone coronaria.

TEMPERATURE IN THE SHADE AT NICE.

	7 A.M.	Mid-day	11 P.M.
December 13	37°	55°	39°
" 14	37	53	43
" 15	41	55	42
" 16	40	54	42
" 17	42	48	40
" 18	34	48	33
" 19	40	40	36
" 20	37	46	33
" 21	36	43	37
" 22	28	36	31
" 23	31	42	36
" 24	37	44	41
" 25	43	48	48
" 26	40	55	41
" 27	48	53	45
" 28	48	53	42
" 29	37	50	42
" 30	43	51	44
Mean	39	48	40

E. Copland.

Societies.

LINNEAN, *Dec.* 20, 1860.—G. Bentham, Esq., V.P. in the chair. Thomas Walker, Esq., B.A., was elected a Fellow. Mr. Bentham exhibited specimens of a presumed species of Cavanillesia, with a portion of its inner bark and wood. The latter was of so light and spongy a nature that it resembled the thin slabs cut from the flowering stems of some Agaves, and used by entomologists in South America for fastening their insects upon instead of cork. The delicate layer of bark bore considerable resemblance to what is known as Cuba Bast, the produce of some uncertain species of Hibiscus, and is probably put to the same uses. The tree was stated to grow 80 feet high. The following papers were read :—1. "A letter from C. C. Babington, Esq., announcing the discovery in June last, of Isoëtes Hystrix, Durieu." This interesting species of Isoëtes had been found in rather damp spots on L'Ancresse Common, in the island of Guernsey, by Mr. G. Wolsey, the botanist who first noticed Ophioglossum lusitanicum in that island. It was originally observed near Algiers by Durieu in 1844, and has since been found in Corsica, near Cadiz, at Cannes in Provence, and on Isle Houet and Belle Isle, off the coast of Morbihan in North-West France. It seems to prefer granite soil, and may be expected to be found in Cornwall. Lloyd has described the same species under the name of I. Delalandei, in his "Flore de l'Ouest de la France." 2. "Extract of a letter from Mr. H. Mouhot to S. Stevens, Esq., dated Bankok, Siam, April 7, 1860, and giving an account of the Cambodian mode of ingrafting." "They choose from a large tree a vigorous and healthy branch as thick as the arm and even thicker. They take off the bark from the bottom of this branch for 3 or 4 inches, and (important observation) they scrape with a knife the part whence the bark has been taken off, so that a new bark may not grow. Then they envelope this part with a lump of earth and one or several pieces of matting or cloth, so as entirely to cover it. The earth is kept constantly damp, either by watering it every day or by hanging over it a vessel from which water will drop constantly. At the end of two months, or earlier, the roots begin to pierce through the clod of earth. They then cut the branch a little underneath, but not entirely through, that the new roots which draw their nourishment from the earth may grow quicker, adding a new layer of earth round the former, and continuing to water it from time to time. The following year, and sometimes the same year, this branch having grown into a tree bears fruit." "The sap being stronger in Europe than in this country (?) it is probable that the operation, being made in spring, would succeed quite as well. In Cambodia there is not a tree on which this process does not succeed." [We cannot say we understand this statement. ED.]. 3. "Extract of a letter from Dr. W. F. Daniell, Staff Surgeon, to Mr. Kippist, dated Tien-tsin, N. China, October 10, 1860." "The neighbourhood of this town," Dr. Daniell observes, "is highly cultivated, but I have not hitherto met with the Tea plant. I have, however, collected a considerable number of the cereals used as food. The principal plants cultivated in this district are the Pak-shai, or white Cabbage of Pekin, a species of Sinapis, Celery, Garlic, Onions, a great variety of Radishes, Solanum Melongena, a small species of Yam, Holcus Sorghum, other kinds of Millet, Maize, Sweet Potatoes, Panicum, with a great variety of Beans. The bearded Wheat, Barley, Indian Millet, and other seeds, are also abundantly met with. The Chinese people are very friendly, and we have large markets in which we can procure all kinds of vegetables, with mutton, beef, pigs, poultry, and game in abundance. Grapes of fine quality, Peaches, Apples, Pears, Walnuts, Chesnuts, ground nuts, Pomegranates, and a great variety of fruits can be purchased at easy rates. We have no botanist or naturalist attached to the expedition; there would be a fine field for them." 4. "Further Observations on Entozoa, with experiments;" by T. S. Cobbold, Esq., M.D.—5. "On Sclerostoma Syngamus, and the Disease which it occasions in Birds;" also by Dr. Cobbold. 6. "Notice of the Discovery of a Second Species of Gyrodactylus, parasitical upon certain Fish;" by C. L. Bradley, Esq.

Notices of Books.

Notes on the Site of the Holy Sepulchre at Jerusalem. **By Jas. Fergusson (a Pamphlet—Murray).** In his learned and interesting essay on the ancient Topography of Jerusalem, Mr. Fergusson showed that the situation of the Holy Places of Jerusalem, and among others of the Holy Sepulchre, was perfectly ascertainable, and that their once doubtful topography could be brought into the strictest accordance with the indications of the Holy Scriptures, so that the source of many sneers had been removed. One would have thought that so important an achievement would have been hailed with gratitude. On the contrary what was the author's astonishment to find that his well-meant and successful efforts stirred up the blackest bile of the professors of *odium theologicum.* The pamphlet before us is a crushing answer to all their cavils, as our clerical readers will find upon its perusal. His main point has been to show that the present "Church of the Holy Sepulchre" is misnamed, and that the true site of the Holy Sepulchre is the present "Dome of the Rock."

Enumeratio Plantarum Zeylanicæ. Part III. (Pamplin).

The matter in this part extends from the early part of Compositæ to Labiates, and therefore includes the important tropical orders of Myrsinaceæ, Ebenaceæ, Apocynaceæ, and the very difficult family of Acanthads. The latter, reformed by Nees v. Esenbeck into an inconceivable chaos, has been reworked up by Dr. T. Anderson with great skill; and Botanists will see with satisfaction that this acute observer is occupied with the preparation of a *Novum Systema Acanthacearum* for the Linnean Society. Among the matters of most interest in a scientific point of view is placing the curious Moss-like Podostemads between Broomrapes and Acanthads, with his reason for which we trust our learned friend Mr. Thwaites will soon favour the world. In the arrangement of the genera and species we perceive the same careful extinction of imaginary species which has always characterised this Enumeration. Of new genera we find Dasyaulus separated from Bassia, and Dichopsis, both Sapotads, Dædalacanthus an Acanthad separated by Dr. Anderson from Eranthemum, and Psylliglottis formerly included in Rhytiglossa.

A Guide to the Food Collection in South Kensington Museum (3d edition). The popularity of that part of the Museum of Science and Art which relates to articles of food calls for quick reissues of its Catalogues; and if these guides are carefully edited by adding correctly whatever is revealed by Science in its onward progress, the public is a gainer; but if not not. We make this remark because we perceive here and there some blemishes which ought not to have occurred. The very first page of the Catalogue contains a list of 11 errors which have been detected since the pages passed through the press, and these errata themselves require correction, as is the case with the name of the Bread-fruit tree, misprinted *Actocarpa,* corrected to *Artocarpa,* which is itself wrong, the word being *Artocarpus.* Of other faults which catch our eye on turning over the pages we note the following. There is no satisfactory evidence that the common Lettuce, Lactuca sativa, is a cultivated variety of the wild Lactuca virosa; it is suspected to be so, that is all; and the statement should have been more cautious (p. 15). We never heard that Carde Beet (p. 16) was eaten in the same way as Lettuce; it is uneatable until cooked, except by cattle. Corn Salad is no doubt set down in books as *Valerianella olitoria* (p. 16), but other and better species are generally cultivated in good gardens. We doubt whether our wild Sorrel, *Rumex acetosa,* is ever "used as a Salad in France." The French employ *Rumex scutatus* and other delicate species. With regard to *Maranta indica* stated (p. 21) to be *another species* producing East Indian Arrowroot, it is well known that what has been called by that name, is the same as *M. arundinacea.* Then with regard to Tapioca, surely it should have been said that it is a prepared starch; as the sentence stands it seems as if both Cassava and Tapioca were natural products of the same plant. At p. 24 the word *Helminthochorton* is printed *Helminthocorton*; p. 30, *Spinacea* should be *Spinacia*; p. 97, *Coffee* should be *Coffea*; and so on. Let us hope that mistakes of this sort will not occur again.

London Medical Practice; its Sins and Short-comings (Simpkin, 2*s*. 6*d*., a pamphlet) is a fierce attack upon the College of Physicians and other medical men, for robbing of his fame Dr. Dickson, the author of Fallacies of the Faculty. It is not for us *tantas componere lites.*

Routledge's Natural History, Part XXIII., is occupied by the Warblers, here concluded, Titmice, Wagtails, and Thrushes. We select two passages. The first relates to the *Redbreast.* "Bread and butter is a very favourite dainty with the robin, who has often been known to come uninvited, and to peck from the table. 'Butter,' according to Mr. Thompson, 'is so great a dainty to these birds, that in a friend's house, frequented during the winter by one or two of them, the servant was obliged to be very careful in keeping what was in her charge covered, to save it from destruction; if unprotected, it was certain to be eaten. I have known them to visit labourers at breakfast-time to eat butter from their hands, and enter a lantern to feast on the candle. One, as I have been assured, is in the constant habit of entering a house in a tanyard in Belfast, by the window, that it might feed upon tallow, when the men were using this substance in the preparation of hides. But even further than this, I have seen the redbreast exhibit its partiality for scraps of fat, &c. Being present one day in December, 1837, when a golden eagle was fed, a robin, to my surprise, took the eagle's place on the perch the moment that he descended to the ground to eat some food given him, and when there, picked off some little fragments of fat or scraps of flesh; this done, it quite unconcernedly alighted on the chain by which the 'rapacious' bird was fastened. I at the same time learned that this robin regularly visited the eagle's abode at feeding-time, though as yet there was no severity of weather. Although the robin escaped the golden eagle unscathed, as much cannot be said for one which occasionally entered the kitchen at the Falls, and sang there; having one day alighted on a cage in which a toucan was kept, this bird with its huge bill seized and devoured it.' Another robin, mentioned by the same author, was in the habit of attending on a carpenter, stealing the shavings as materials for his nest, and making very free with his grease-pot, pecking from it while in his hand. The robin is also remarkably fond of bread and butter on which honey or sugar has been spread, and will eat of this dainty until it is hardly able to fly. One of these birds who had been treated to such a repast, was so pleased with it that he returned, bringing with him three companions, who gorged themselves to such a degree that they were taken up by hand, and put away for the night into a comfortable recess. After a while, between 20 and 30 robins came to the house in hopes of obtaining the sweet food. Perhaps they may be instinctively led to sugar and fatty substances, as a means of preserving themselves against the effects of cold. Cream is in great favour with the birds during the winter months, and they have been seen to enter an outhouse which was employed for washing purposes, and to eat the soap. The redbreast is a most combative bird, fighting its own species with singular energy, and often killing its opponent. One of these birds killed upwards of 20 of its own kind, merely because they came into a greenhouse which he chose to arrogate to himself. It is very jealous, too, of its human friends, and not only prohibits other individuals from sharing in the friendship, but will often drive away its own young if they approach too closely."

The second is a lady's account of the behaviour of an *American Catbird* (a kind of thrush) bearing the pet name of General Bem. "Well, General Bem went home with us at once, and was immediately given his liberty, which he made use of by peering into every closet, examining and dragging everything from its proper place which he could manage, pecking and squalling, dashing hither and thither, until at night he quietly went into his cage as if he was nearly or quite positive that he must commence a new career on the morrow; it was evident that he had to begin the world over again, yet, as he was not superannuated, and was, withal, ambitious, his case was still not a desperate one, although we had assured him most positively that we would not fall in love with him—we had only invited him there to help us pass the time. Bem looked wise at the assertion, but said nothing. The next morning we gave him water for a bath, which he immediately used, and then sprang upon my head, very much to my surprise; then he darted to the window, then back to my head, screaming all the time most vociferously, until finally I went to the window, for peace' sake, and stood in the sunshine, while Bem composedly dressed his feathers, standing on my head first on one foot, then on the other, evidently using my scalp as a sort of footstone, and my head as a movable pedestal for his impudent generalship to perch on when he felt disposed to be comfortably elevated; and had clearly come to the conclusion—as I was so fond of transporting him from his native land, that I should serve as a convenient craft to bear him where his moods commanded. In a word, he had determined to turn tyrant; if I had had the deliberate purpose of using him as a mere toy, he had at least the coolness to make me available, and from that time I became the victim of the most unequalled tyranny. Did I neglect his morning bath beyond the instant, my ears were assailed with screams and cries, till I was forced to my duty; I must bear him into the sunshine, or my hair was pulled; I must bring him his breakfast or he pecked my cheek and lips; in fine, I was compelled to become his constant attendant, while in the meantime he most diligently assailed my heart by endearing confidences. He would sit upon my arm and sleep, he would get into my work-box, and while I watched that he did not pilfer a little, he would quietly seat himself upon its edge, and in a low sweet voice lull my suspicions by such tender melodies, that finally I could no longer say, 'I will not love you, Bem!' but gave him the satisfactory assurance that he was not quite so much of a tease as I had tried to think him; and he now received my daily offering of

small spiders and worms with gestures of evident pleasure. These were always presented to him enveloped in white paper, which he carefully opened and secured his prey, before it could escape, even though it was sometimes a difficult task to keep his vigilant eye upon so many—apparently escapading—when I was called to the field, and appointing me a station, I was expected to give the alarm when one attempted to get away on my side, which he immediately killed and dropped, and then darted after those on the outskirts of the field of action. At last, one day, Mr. Webber brought for my sister a wood-thrush, which was very wild and savage, and was, besides, extremely ugly, but had the reputation of being a good singer, which made us forgive his sullen temper, and hope to win him back to more gentle ways, when he should see that we would be his friends, and that he should be almost free; besides, General Bem was much inclined to make his acquaintance, and took the first occasion to pay him a visit in his cage-house. This the stranger did not fancy, and drove him out. Bem resented this, by turning on the threshold and pouring forth a torrent of screams and mewings, which came near distracting the poor thrush, who darted at him and chased him to the bed, under which Bem darted, and was secure for the present. But from that time there were no more overtures of friendship, they were sworn enemies; the thrush from detestation of the impudent fellow who invaded his residence and finally appropriated it to the entire desertion of his own, which, by-the-bye, was much larger, and with which the thrush eventually consoled himself, and Bem continued to occupy, because it amused him to pester the ill-natured fellow, which he had set down the thrush to be."

Moore's Floral Magazine has a charming figure of the beautiful new double Zinnias; Frazer's Bee Larkspur, a very fine variety of Delphinium mesoleucum; the black spotted Nemophila, a variety of N. atomaria with a deep brown eye; and a set of Ghent Azaleas.

Lawson's Gardeners' Calendar for 1861. This useful broadside is this year enriched by copious memoranda respecting the weather and its signs. It is also disfigured by a most hideous design for a building called "a Conservatory for a first-class residence."

Trade Lists Received.—Peter Lawson & Son's List, Jan. 1861 (No. 2, Garden Seeds).——Louis v. Houtte (Ghent), Prix-courant de Graines (Price Current of Seeds for 1861); a very fine assortment.

Miscellaneous.

Wolves.—In the north and east of Europe, the danger incurred by travellers in sledges of being hunted by packs of hungry wolves is very great; and many dreadful incidents bear witness to their success. A very horrible one is narrated by Mr. Lloyd. A woman accompanied by three of her children was one day travelling in this mode, when she discovered that she was pursued by these gaunt foes in full pack. She immediately put the horse into a gallop, and drove towards her home, from which she was not far distant, with all possible speed. All, however, would not avail, for the ferocious animals gained upon her, and at last were on the point of rushing on the sledge. For the preservation of her own life and that of the remaining children, the poor frantic creature now took one of the babes and cast it a prey to her bloodthirsty pursuers. This stopped their career for a moment, but, after devouring the little innocent, they renewed their pursuit, and a second time came up with the vehicle. The mother, driven to desperation, resorted to the same horrible expedient, and threw her ferocious assailants another of her offspring. To cut short this melancholy story, her third child was sacrificed in a similar manner. Soon after this the wretched being, whose feelings may more easily be conceived than described, reached her home in safety. Mr. Atkinson has sketched, with his usual graphic vigour, the situation of himself and his party of Kalmucks, when surrounded by wolves in Mongolia. They were encamped for the night on the open steppe on the banks of a little lake, when suddenly the howling of the terrible wolves was heard at a distance. The men quickly collected the horses, and prepared to receive the assailants. The fire was nearly out, but it was thought best to allow them to approach, and then by a little fresh fuel obtain light enough for a fair shot. It was not long before the padding of their many feet was heard as they galloped towards the party, and presently a savage howl arose. The men threw some dry bushes on the embers, and blew up a bright flame, which sent its red glare far around, disclosing the pack with ears and tails erect, and flashing eyes. At a signal, five rifles and a double-barrel poured in a volley with deadly effect, as the horrible howling revealed. Snarling and shrieking, the pack drew off, but the Kalmucks declared they would return. Soon the terror of the horses announced the re-approach of the marauders, and they could be heard stealing round between the encampment and the lake, dividing into two packs, so as to approach on opposite sides. Presently the glare of their eyeballs was seen, and their grizzly forms pushing one another on. Again the bullets sped, and the shrieking packs again retreated, but only to keep watch at a little distance. The night now grew very dark, and all the fuel was exhausted. Presently, a distant howling announced the approach of a new pack, on whose arrival the old ones which had been silently biding their time, began to manifest their presence by jealous growls, which soon gave way to a general fight among themselves. Some of the men now, well armed, crept along the margin of the lake to collect more fuel, which was then placed on the fire. The flame was blown up, and a group of eight or 10 wolves was seen within 15 paces, with others beyond. The rifles once more cracked, and the packs with a frightful howl scampered off. In the morning eight wolves were lying dead, and the bloody tracks showed that many others had carried away mortal wounds, the reminiscences of this fearful night. *Gosse's Romance of Natural History.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Forcing-pits should now be in full activity to furnish plants in bloom, which at this season are more or less in demand in most places. Care should be taken before they are removed to sitting rooms to gradually harden them for a day or two, either by placing them in the conservatory or intermediate house. In addition to keeping the conservatory gay with blooming plants, let the arrangement of the house be occasionally changed, by grouping the plants somewhat differently, and adding a few striking ones for effect. Pay attention to plants intended for successive blooming. Hyacinths should be protected by a frame; as they begin to grow remove the plunging material down to the surface of the pots to prevent them rooting upwards. Mignonette will require attention to keep it from damping. As with the exception of forced plants most other things are now in an inactive state, the temperature of plant houses should fall to its minimum point consistent with the safety of their various inmates; as has often been insisted on, nothing can well be worse for the development of a healthy vigorous habit in plants than subjecting them to a high temperature at the present severe dull season. Where Achimenes are required to bloom early a few pots may now be started for that purpose.

FORCING DEPARTMENT.

Early Vinery.—In some places new Grapes are now ripe and will therefore require extra attention during the present frosty weather to keep them in good condition. In later houses such shoots as have more than one bunch should have them reduced to that number, selecting the one likeliest to form the handsomest cluster. Tying in the young wood should be managed carefully, bringing the shoots to their proper position by degrees, to avoid the danger of their breaking. After the buds are started a few inches the syringe may be gradually withheld; as too much humidity at this season will sometimes retard both the foliage and bunches, and a sufficient degree of moisture can easily be kept by sprinkling the floors and heating apparatus. Gradually advance the night temperature to 60° and then to 65° by the time the flowers are ready to open, keeping the thermometer from 10° to 15° higher by day according to the amount of light you can command. Where outside borders are not properly warmed by hot water, keep up the heat by additions of fermenting material, bearing in mind the injurious effects any sudden check to the roots now in action will produce on the coming crop. Bring succession Vineries into work as wanted. Late Vineries in which Grapes are still hanging will require fires daily to keep the house and fruit dry; remove decayed berries and dead leaves, and well protect the roots from frost.

Peach Houses.—Peaches and Nectarines which have been forced for several years oftentimes produce a large excess of fruit-buds, and this more especially on weakly trees; a natural consequence of allowing these to remain are weak flowers and inferior fruit and wood. When, therefore, such is the case the trees will be greatly benefited by well thining the bloom-buds, leaving the largest and those most favourably placed; of course a considerable number will be still left to allow for casualties. Syringe twice or oftener daily till the bloom is ready to expand, when it must be discontinued. The night temperature may advance to 45°, with an increase by day accompanied with a proportionate admission of air.

Pinery.—Pines are often deficient in flavour at this season; this is improved by exposing the ripening fruit to all the light you can command, and giving but little water. A good supply of air is likewise essential at all times for high flavoured fruit, but it must be given with caution during the present severe weather. Continue an increase of heat to Pines now wanted to start, employing it principally by day. Attend to linings for plants grown in dung pits and keep the atmosphere in which they grow dry.

Strawberries in bottom heat for forcing will require air daily to prevent drawing in those earliest started; when they show the truss of flower they should be removed to shelves in the Vineries and Peach houses to bloom.

FLOWER GARDEN AND SHRUBBERIES.

Except in the most favoured localities little can be done in this department at present. The bedding plants, however, must have attention, for in all likelihood many things are suffering, and such plants as appear most affected should be removed to other quarters where a higher temperature is kept. Keep the stock in pits and frames well protected and the surface soil of the pots frequently stirred. Dust with sulphur Verbenas and similar plants attacked with mildew. Be particular in keeping the interior of pits containing plants of the above description as dry as circumstances will permit.

HARDY FRUIT AND KITCHEN GARDEN.

Pruning of orchard trees will now require attention; it is a matter which is too frequently neglected, and the result is that the heads of the trees get so crowded with wood as to render a crop of fruit, except upon the extremities of the outer branches, not to be expected, and the thicket of worse than useless spray which the trees have to support is injurious both to the size and quality of the fruit, and also to the general health of the tree. When this state of things has been allowed to prevail, advantage should be taken of the first opportunity to give the trees a careful pruning, thinning out the inner branches severely. In the case of large branches being cut off, the surface of the wound should be neatly trimmed off with a sharp chisel and covered with a coat of paint. See to the protection of Lettuces, Cauliflowers, &c., under glass, so as to guard them from frost; but take every favourable opportunity of exposing such things to light and air. Introduce roots of Asparagus, Seakale, and Rhubarb into heat at regular intervals, so as to make sure of a constant supply.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON
For the Week ending Jan. 10, 1860, as observed at the Horticultural Gardens

January.	Moon's Age.	Barometer.		Temperature. Of the Air.			Of the Earth		Wind	Rain.
		Max.	Min.	Max.	Min.	Mean	1 foot deep.	2 feet deep.		
Friday 4	☾	30.138	30.009	37	26	31.5	38	37½	E.	.00
Satur. 5	24	30.037	29.994	34	13	23.5	37½	37½	E.	.00
Sunday 6	25	30.069	30.013	32	14	23.0	37	37½	N.	.00
Mon. 7	26	30.146	30.031	32	10	21.0	37½	37½	N.W.	.00
Tues. 8	27	30.263	30.221	37	6	21.5	37	37	S.W.	.00
Wed. 9	28	30.297	30.217	38	8	23.0	37	37	S.W.	.00
Thurs. 10	29	30.380	30.270	23	9	16.0	36½	36½	N.E.	.00
Average..		30.190	30.108	2.33	12.3	22.8	37.2	37.2		.00

Jan. 4—Clear and frosty; slight fog; overcast; warmer at night than during the day.
— 5—Foggy; dark hazy; very clear at night, with sharp frost.
— 6—Clear and frosty; very clear; sharp frost.
— 7—Frosty; cloudy; overcast; severe frost.
— 8—Foggy; clear, quite cloudless; bright sunshine; intense frost at night.
— 9—Intense frost; clear; bright sun; rather foggy; severe frost.
— 10—Severe frost; foggy; dense dark fog; severe frost.

Mean temperature of the week, 13 deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Jan. 19, 1861.

January.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 13..	42.6	32.2	37.4	16	0.29 in.	5	5	5	3	6	6	3	2
Mon. 14..	42.2	29.6	35.9	16	0.80	6	6	5	3	3	6	3	3
Tues. 15..	41.7	29.1	35.4	12	0.54	3	4	3	3	4	8	1	3
Wed. 16..	42.1	31.1	36.6	19	0.34	1	7	5	1	5	9	4	3
Thurs. 17..	42.8	31.1	36.9	12	0.48	3	6	2	3	3	10	4	4
Friday 18..	42.8	31.6	37.2	15	0.55	1	4	1	3	5	10	7	4
Satur. 19..	43.1	30.3	36.7	15	0.88	4	2	4	2	5	10	6	2

The highest temperature during the above period occurred on the 19th, 1828—therm. 60 deg.; and the lowest on the 19th, 1838—therm. 4½ deg. below zero.

Notices to Correspondents.

Books: *Alpha.* We are unacquainted with the book. You should inquire of the booksellers themselves.

Cinchonas: *Spectator.* We do not as yet know what Mr. Markham has done; but we hold to our opinion that the whole affair will prove a miserable failure. The last Ceylon newspapers *but one* were full of expectation of his arrival; but the last is silent, although the mail from Bombay was in.

Insects: *H R.* The minute insects found on the feathers of your recently dead canary bird are the Dermanyssus Avium of Milne-Edwards and Audouin (Gallen and De Geer, and Koch, Suppl. Panzer, 137, 14). They are generally found about the wood of the cage. The Dermaleschus Fringillarum is another kind of bird mite, but belonging to a different genus.—*A Y.* The material sent from the two bee-hives was so smashed as not to be recognisable. You should state in what part of the hive it was found.

Frost: *J W.* It is impossible to tell without actual trial; because the temperature is affected by springs which if deep seated raise the temperature to that of their own source.

Frost Returns: We regret to see that several communications have come in so late that they cannot possibly be introduced into this week's column.

Glazing: *W P.* We have ordered the plan to be engraved.

Ice House: *A New Beginner.* The ice is lost because the house admits air. It requires to be fitted with an ∽ drain from the lowest part; you will then save your ice and get rid of foul air. The house seems to be otherwise as good as possible.

Meteorological Observations: *T S P.* The thermometers at Chiswick are set at 10 A.M. Both maximum and minimum are set at the same time. If such a case occurs as a sudden thaw accompanied by a great sudden rise of temperature, the instrument is again set before sunrise.

Moss: *J E G.* Moss or Lichen grows on fruit trees because the soil is waterlogged and the trees stunted. Drain, Drain, Drain, and give your bushes some manure. Thermometers are made on purpose for registering ground temperature; so that the scale is above ground and the bulb at the proper distance underground. Maximum temperature is registered in shade over Grass.

Names of Plants: *T E C.* Hæmanthus albiflos.—*Torquay,* Skimmia japonica.—*Truro,* A mere variety of Veronica decussata, with leaves narrower than usual.

The Education of Gardeners.—We are still obliged by pressure of other matter to defer the further consideration of this subject. In the meanwhile we think it right to warn some "young gardeners" that we can have nothing to do with the quarrels between them and their employers. As to premiums, we may possibly notice them hereafter; but why are they paid since they are so useless and even fraudulent as they are represented to be.

Wheelbarrows: *J P.* We do not know. Why can you not write to them? If alive they will answer; if dead your letter will be returned through the Post Office.—If *A L J* will address C. A. Williams, Post Office, Windsor, he may get the information he requires as to wheelbarrows.

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MR. BUCKMAN, Professor of Geology and Botany in the Royal Agricultural College, begs to acquaint Landed Proprietors and those connected with Agriculture, that he may be professionally consulted in all matters relating to the Geology and Botany of Estates, such as the Mineral Products, Economic Materials, Water-bearing Strata and Water Rights of Estates and Farms, Improvements in Pasture, Analyses of Seeds, &c.—Communications to be addressed to Professor BUCKMAN, Dollar Ward, Cirencester.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.
LEEDS MEETING, 1861.
STOCK AND IMPLEMENT PRIZE SHEETS are now ready, and will be forwarded on application to H. HALL DARE, Secretary.
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The Agricultural Gazette.

SATURDAY, JANUARY 12, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

TUESDAY, Jan. 22 { Kingscote Farmers' Club (Wheat Culture).
THURSDAY, — 24—Staindrop Farmers' Club.

THE "Royal Agricultural Society of England" was becoming a real agricultural grievance; but there are happy indications that the new year will see it safely over manifold troubles and inaugurate the better management which can secure the confidence of a somewhat disappointed constituency. We hail the straight-forward publication of the names of individuals forming the standing committees for the year; so that if complaints should arise, the public will now know whom to blame. And while we have thus obtained responsible committees of management in every department of the Society's business, there are hopeful signs that the implement committee itself (the horror of the nervous manufacturers who fled from participation in the Canterbury Show) is reconsidering its course and preparing to amend its ways, for it has agreed (in one important class of machines) to the very sensible and long-urged plan of trying implements at a fitting season, and laying out the wonted prize money in the more valuable object of an adequately long test of performance. As a revision of the bye-laws and regulations has also been decided upon, perhaps we may soon have to thank the Council for a full publicity of proceedings which alone can give the periodical meetings that useful and standard character which they ought to hold in the eyes of all British and foreign agriculturists. And other changes with respect to the press at the Country Meetings may also prove a boon to the public.

The question of maintaining and still more of extending the prestige of our Society is certainly of the last importance. We English farmers add to the national wealth a yearly sum equal to that raised by all the factories, mines, fisheries, and colonial and shipping interests; and while the multiplication of field and farm-yard machinery, with the increasing trade in manures and cattle food prove our progressive spirit, the development of perfection in breeds and products, and a steady advance in all our rural economy, show that we are able to expand our art and the science which explains it. But we require an organisation capable of directing our common labours, and of educing and embodying the principles we bring to light. Now the Royal Agricultural Society, ever since its foundation in 1838 for these very objects, has been the instrument of great good; and were it expansive and spirited enough, the spirited tenantry as well as the landowners of England would exalt and uphold it as the nucleus and fountain-head of all our agricultural improvement, and leader of the husbandry of the world. And nothing can be more damaging to its career as director and leader of an otherwise unorganised body of industrial cultivators, breeders, and mechanists than a refusal to expand with the growing necessities of the age, or the pursuance of any course not approved by the practical members on whose subscriptions it so largely relies both for existence and the means of being useful.

The Royal Charter of incorporation is sufficiently comprehensive in defining the objects of the Society—embracing a wider field than the present implement exhibitions, shows of live stock, Journal contributions, prize essays, members' privileges of chemical and veterinary assistance, and the employment of professors in lecturing and scientific investigations. The charter provides for correspondence with home and foreign societies, the embodiment of published agricultural literature, the engagement of practical men in experiments, the encouragement of inventors of tillage machinery, the collection of information on rural improvement, the institution of measures for extending agricultural education. Hence the Society might draw up a mass of statistics on cultivation and cropping, as a substitute for the returns which Government has not yet obtained; it might report the condition and requirements of our river systems and drainage, as a basis for satisfactory legislation; it might bear the charges which have fallen so ruinously upon the inventors of our national steam ploughs; it might test new methods of culture and manuring, thus benefiting an incredulous and also gullible public. These are but a few of the works the Society might legitimately engage in, with all the power conferred by its high position; and from the valuable discussions of the Farmers' Club (that second luminary above the husbandman's horizon), we see what could be made also of the Society's more authoritative meetings for instruction, were its members really appealed to by the offer of publicity for their communications and speeches, and the press allowed to interest the public in these occasions.

But unfortunately, the Society has not given satisfaction even in those labours to which it confines itself. The great body of agriculturists, uncharmed by its exclusive attitude and routine behaviour, have held aloof from membership; though from the growth and prospects of our numerous provincial associations, it is clear that the farmers are prepared to flock to its aid did it sufficiently possess their esteem and confidence. The greatest number of members was in the year 1843, five years from the Society's birth, when 7000 names were on the list; thenceforward the numbers declined until 1855, when there were only 4882 members; and a fluctuating rate of increase since then has given only 4942 members at the present time, less than three-fourths of the number which the Society had 17 years ago! And the names and addresses of the members have not been published for 11 years; which looks more like disgrace than progress. True the Society has funded 12,000l. in the New 3 per Cents.; nevertheless its country meeting receipts have of late formed a decreasing series—namely, 6187l. at Chester, 5429l. at Warwick, and only 2659l. at Canterbury. And if this order of things runs on for a few more years the funds of the Society will be evidently "in the wrong box." Success depends on the financial prosperity of the Annual Show. Let us hope then that with symptoms of better management at head-quarters, the confidence of implement makers will return, and that a grand gathering at the populous centre of Leeds will set our great agricultural institution on its legs again.

No proverb is truer than that which accords to pride a frequent fall. The history of human progress tells of many such falls; especially in late advances upon the untrodden domains of social science. Where all is of course experimental the march forward has not unfrequently been succeeded by retreat. Considering the untried regions to be explored, and the desperate state of confusion out of which we strive to raise ourselves, some mistakes must be expected; indeed it may be the case that we learn more from our failures than

from our successes. There has been one signal mistake, however, for which it is hard to find either an excuse or a reason.

We allude to that false sentiment which builds churches, erects schoolhouses, and provides a national system of education at vast expense, and yet leaves the dwellings of the labourers as they were. No exception is taken to church building or chapel building, in so far as it represents healthy and genuine efforts to evangelise. If there be one trait amongst our Australian colonists more hopeful than another it is seen in the fact that the provision of a site for a church precedes, in the settlement of a new town, the building of any private residence. But church extension in England seems to have been accompanied with by far too slight a regard for the domestic comfort of the working classes. It is good to teach religion and morality, but no good Christians recognise religion or morality as a matter of sentiment, or a mere bundle of abstract truths. Their value consists in their *practical adaptability* to our everyday concerns, and they receive their seal of confirmation from the manner in which they are illustrated in our homes. True, but what sort of illustration can they receive in a mud-built tenement, where there are but two chambers for a family of four children, boys and girls, and two parents? The preacher may urge "contentment with the lot wherein it hath pleased God to place them"—(Should he not change the term and say resignation?)—but with what hope can he enforce those virtues which compose a good and pure life, when he sees that they could not possibly grow in the atmosphere of not only that hovel, but the 101 other cottages the village consists of. It sounds like a mockery of their misfortune to cry from the pulpit to the inmates of these squalid dwellings, "Train up thy child in the way he should go, and when he is old he will not depart from it." Crowded together in unseemly closeness, what training can there be for the boy or girl during the other days of the week but one of vice, from which ten to one all the pulpit exhortations, Sunday school teaching or secular education in the world shall be unable to make him depart.

Useless would prove all efforts to untwist the tortuous branches of a stunted Elm. It has grown thus permanently in accommodation to evil influences from without. Physically and mentally the labourer also will grow stunted and deformed where from birth the influences which surround him are unkindly, and Society takes no notice of the fact until the sight becomes repulsive or inconvenient; when a place on the treadmill, a solitary cell, or a bed in perpetuity at some reformatory, will be provided; where under the chaplain and the schoolmaster it is fruitlessly hoped that the crooked tree may be made straight. The country has been lately thrilled by publications about cottage accommodation in the Union of Faringdon. That district is not, we lament to say, unique. Well-built decent cottages, with three bedrooms, are everywhere the exception, and ill-built hovels, with drafty casements, pervious roofs, rheumatic floors, and want of rooms, allowing neither for decency nor comfort, are assuredly the rule. And this state of things exists, of all countries, in England, where we pride ourselves on the home influences, on the beauty of the family system, upon the rustic romance of cottage life! Good would it be if all cottage proprietors could see the matter as it really is, in all its intrinsic ugliness and deformity.

It has been found that liberty is better than education; and were our eyes only open they might possibly discover that there is one step which should even precede the building of schools, namely the building of cottages. Members of the higher and middle classes are accustomed to revere the sanctity of the home circle; they are used to speak with pride of the virtue of the daughters, and the manly worth of the sons. If they wish to reveal to a stranger the secret of England's strength, they take him home, and show to him the bond of love which knits brother to sister, and unites them all under the common parental head, fit type of that municipal institution which keeps bright our citizen honour, and preserves abroad our national reputation unsullied. If then we are quick to perceive the source of the strength and hope of the upper and middle classes, shall we be blind to the rot which is sapping the foundations of our splendid edifice? If it be true that the cultivation of the domestic virtues exalts a nation, the converse must be also true; and what but the converse is to be seen by those who enter five out of 10 of our working men's homes, and become acquainted with their miserable arrangements, which, as we have said before, place decency, cleanliness, and comfort, at defiance.

This is not a matter that will yield to the influence of soup tickets, or of charitable relief in the shape of coals and blankets. Neither can it be done by means of legislative interference. Like all our English reforms, if done at all it must be done by those who are concerned to do it. As a rural question it lies exclusively between the landlord and the tenant, and so far as they are concerned it assuredly need not go a begging upon its benevolent merits.

So far as the landlord is concerned all buildings adapted to the extent and character of the farm upon which they are erected, yield a good return and permanently improve property. Tenants are ready enough to pay 5 per cent. upon such outlay—nay, we have known some to whom a lease of 21 years has been granted who, impressed with the importance of suitable accommodation for man and beast, have expended their own money in bricks and mortar to a very large extent, in cases where the landlords were either unwilling or unable to accede to their wishes. It has been said that it is quite as important to have the staff of labourers upon the farm, as to have the stock of horses; and if it be found profitable to erect stables and cowhouses and bullock sheds, with every possible attention to the health of the animals which shall tenant them, how much more profitable must it be to erect cottages wherein the children can grow up without necessity of moral taint, where the mother can teach the precepts of order and cleanliness to her young ones by practising them herself, and where the father may experience the bright reception at the evening hour, and all enjoy the sentiment—"There's no place like home!"

Considerable hindrance has been thrown in the way of this question by the extravagant manner in which many cottage builders have set about their work of improvement. There has been too much yielding to simple matters of fancy. Thatched roofs, quaint gables, Tudor chimneys, and tasteful porches, may be well in their way; but a too exclusive seeking for pretty effects has often resulted in a picturesque exterior, an interior ill adapted to secure the comforts of a family, and a sum total which often obliges the owner to debit himself with half the rent. The idea has hence arisen that cottage building must always involve a loss. Where our rural architects follow the guidance of those who are responsible for our great public buildings, internal convenience will generally be sacrificed to exterior effect; but if our land owners or our tenant-farmers really take the matter into their own hands and set before them for solution this question—What is the utmost convenience that can be provided for a family of eight persons within the space of four walls, for the expense of whose erection the rent of 1*s*. 6*d*. or 2*s*. per week shall prove a fair return?—the exterior will be subservient to the wants of the family and the difficulties of prime cost will be overcome.

WE direct attention to a disgraceful illustration, reported in another column, of the way in which formal law and substantial injustice are sometimes dealt out together at Petty Sessions during a game law prosecution. The magistrates were no doubt bound to convict the prisoner of a proved offence. But it was not necessary that they should inflict on him a punishment so excessive for an offence to which he had been urged and tempted for the very purpose of his prosecution. Nor was it to have been expected that the presiding magistrate—a clergyman—while dealing out the law with such severity to the victim of a conspiracy, should have seemed to sanction by his silence the infamous conduct of his accusers.

The servants of the great landowner of the neighbourhood had been guilty of an offence of infinitely deeper dye than any which they could prove against their prisoner, and one would have supposed that no gentleman—certainly no clergyman—upon the bench, however he may have felt constrained to a strict administration of the law, could have restrained his indignant condemnation of the men who now demanded its penalties upon their victim.

It was, however, left to Mr. WILLIAM BOODLE, a byestander in the Court, to give expression to the outraged feelings of an Englishman. "He had hoped that the system pursued by JONATHAN WILD of first making men thieves and then taking blood-money for their apprehension had been extinct in this country since that worthy was executed. But he was sorry to find it was not so, but that the iniquitous system still found favour on the estates of Lord BATHURST, and with the magistrates of Cirencester."

Lord BATHURST will undoubtedly be the first to denounce and punish the misconduct of his gamekeepers: the prisoner will, we hope, be released by the Secretary of State so soon as the affair is fully reported to him: the Commissioners of Inland Revenue will certainly enforce the penalties of the broken Game Law upon the informer who, on his own confession, has gone out shooting hares and pheasants without a licence. And justice being thus done in these material points, will be completely satisfied by the public condemnation which will be everywhere pronounced upon the conduct of this affair by the Rev. HENRY CRIPPS and the Cirencester magistrates.

MR. HENRY RANSFORD, of Brompton, calls attention in the *Journal of the Society of Arts* to an expedient for hindering the incrustation of steam boilers—a subject of increasing agricultural importance. Frequent fatal accidents—one reported in Yorkshire during the past week—force everybody, for every one uses steam power now and then in agriculture, to seek immunity from the risks attending foul and ill managed boilers—and Mr. RANSFORD'S experience will therefore be read with interest. He says:—

"All the world knows that the incrustation in steam boilers is deposited from the water, and that, in tubular boilers, it is very difficult to get rid of; but few are aware that 'blowing out' a boiler, to get rid of the sediment on the bottom, hardens the sediment that adheres to the tubes, converting it into a calcareous shell, requiring a smart blow of a hammer to dislodge it. Will you oblige me by giving to the world, through your columns, a very simple and efficacious remedy?

"I tried the experiment on a 30-horse tubular boiler. In addition to the blow-off cock at the bottom another was fitted over the fire pan, at the usual level of the water, and to the end of it, inside the boiler, was screwed on a funnel of sheet-iron, partly flattened, so that on the cock being opened, anything floating within 8 or 10 inches on each side was drawn through.

"The engine-driver had directions to open the lower cock once a day, and the upper one when he saw the water in the glass gauge was thick, and keep them open until the water ran clear, but never to blow out the boiler, as formerly. Three or four gallons from the lower, and half that quantity from the upper cock was sufficient to carry off all thick and dirty water.

"At the end of three months, first allowing the water to get nearly cold, the boiler was emptied; a stream of water was then introduced by the man-hole, and the tubes thoroughly washed. On examination the under half of the tubes was as clean as the day they were made, the upper half discoloured but no scale, and the sides of the boiler in a similar state; on the bottom was about half a bushel of thin scale, broken up into small pieces, that apparently had fallen or been washed from the tubes; thus, after three months' work, there was nothing to do but to get up steam again.

"The secret consists in never blowing out the boiler when hot, the usual custom, as the result is—the heat of the tubes and sides instantaneously converts the soft deposit into a hard calcareous substance, and every time the boiler is blown out an additional stratum is added. If the man-hole is taken off on the Saturday afternoon, and the flues opened, the water is cold enough to run off by Monday morning, so that no time is lost, and I have no doubt the hot water might be allowed to run off on the Saturday provided an equally large stream of cold water was allowed to run in at the same time, until the boiler and tubes were cold."

THE AGRICULTURAL LABOURER.

No. I. SOUTH NORTHUMBERLAND.—The attention of the public has of late been more than usually directed to the condition of the agricultural labourer. In Scotland the discussion has been almost exclusively directed to the "bothy system," while in the south of England the "village system," as it may be called, and its over crowded cottages has occupied public attention; but to the method of providing farm labourers pursued in the north of England and south east of Scotland, and which we would call the "family system," little attention has been directed, chiefly, let us hope, because the agricultural labourers under this system are in a more prosperous condition than under the other two.

The manner of accommodating the agricultural labourer in this kingdom may be classed under three general heads, viz., 1st, the bothy system, under which the farm is chiefly wrought by unmarried men, who are lodged in a room attached to the steading, receiving a half yearly wage in money, and an allowance of oatmeal and milk; and a modification and improvement of this where the farm is wrought by unmarried men, but instead of being lodged in the bothy are boarded and lodged in the farm house. 2nd. What we have called the "village system," where the labourers are crowded into villages, and have to walk one, two, and three miles or more to their work. Neither of these systems

do we mean at present to discuss; but simply to describe as briefly as we can the 3rd, which we have called the "family system," and in doing so we shall take it as found in South Northumberland.

The carrying out in its integrity of this method of supplying labourers for the farm, implies that on each farm there are as many cottages as will accommodate the workmen required to work it through the year, harvest time excepted, when extra hands are of course required, and are supplied from the nearest village, or by Irish, who are for the time generally accommodated in some part of the steading. Some 20 or 25 years ago the cottages in Northumberland were perhaps as wretched as any in the kingdom, but much has been done since that date in repairing, enlarging, and renewing the farm cottages; though much, we regret to say, yet remains to be done, and on several farms there may yet be seen the accommodation which was at one time almost universally thought sufficient for a farm labourer, being little more than a shed some 20 feet long by 15 feet wide, with an open fire-place at one end, an ill-fitting door, and small window in the side. This state of matters is now, we are glad to say, the exception, not the rule; and for the change the county is largely indebted to the late Dr. Gilly, of Norham, who some 20 years ago, both by voice and pen denounced the then state of matters. In most of the new cottages sufficient accommodation is given to admit of the separation of sexes.

The building of cottages has not quite kept pace with the increased demand for labour which improved farming has made, and to meet this want farmers who have not sufficient cottage accommodation are obliged to hire an unmarried man, or it may be two, as the case may be. These young men are lodged and boarded in the farmer's kitchen, and generally receive a large wage; from 24*l.* to 28*l.* per annum, with board and lodging, being no uncommon wage for a young active man, thoroughly up to his work.

The cottages are occupied by the married ploughmen and their families, all of whom are in general employed upon the farm. They are hired for a year at a weekly money wage, and a small addition in kind in the south of the county, while in the north they are paid almost wholly in kind. In the south, with which we have at present to do, the wage of a ploughman or hedger varies from 13*s.* to 16*s.* per week in money with from 4 to 8 bushels of Wheat (sometimes a portion of Barley is substituted for Wheat), and from 60 to 100 stones of Potatoes, their cottage and garden free, and their coals carted. The wages of a foreman or steward being from 4*s.* to 5*s.* per week more, and of shepherds from 3*s.* to 4*s.*; the latter generally having a few sheep kept with the farmer's as part of his wage. This is an "upstanding" wage, which they receive wet weather and dry, and whether sick or well. They are generally (except the foreman) obliged to find a woman worker, or a stout lad instead, at a wage of 1*s.* per day from Mayday to Martinmas, and 10*d.* per day from Martinmas to Mayday, with 6*d.* per day additional while at harvest work. This provision may at first sight appear a hardship, but practically it is in 9 cases in 10 members of the ploughman's own family who do the work, their wage going to increase the family earnings, and in the case of those who have no family, they generally find some of their neighbours who are quite ready, for a small gratuity, to supply them with a worker. The general arrangement is, that the ploughman engaging the services of a neighbour's son or daughter pays them 2*d.* per day for each day they are working, amounting for the year to from 40*s.* to 45*s.* To this extent, and to this only, the binding the ploughman to supply a worker is a disadvantage to the man without one in his own family. There is no advantage in the matter of wage to the farmer, who can, when near a town or village, hire workers at the same wage as he pays those on the farm; but when not so situated he will, for the convenience of having workers on the farm, give a higher wage, other things being equal, to the man who provides him with a worker. Were the custom, which is not universal, but very general, abolished, the practical result would be that the farmer would look out for men with families to the neglect of those who have none.

We have called this method of supplying labourers to the farm the "family system," because under it the family ties are neither broken up by the young men being sent to the bothy, without any or at best with very insufficient supervision, nor are they invaded, as in the "village system," by the crowding of two or more families into one cottage—often into one room. Under this system the ploughman is master and head in his own house as fully as the farmer is in his. He has his children under his own training, finding plenty of work for them on the farm, until the sons grow up to take a pair of horses along with him, forming what is locally known as a "double hinding," or till they marry and set up house for themselves. The girls in like manner continue under their mother's training till old enough to go out to service, or till they marry.

We do not uphold this system as perfect, but as a great advance on the other two. Judged by its fruits it is greatly in advance. In the counties where this system prevails we find workmen as intelligent, industrious, and independent, as the skilled workmen of our towns. Apply the test of pauperism, and we have the same satisfactory result. In some of the towns of Northumberland the poor-rates are very heavy, while in the landward part of the county they are very light. Take the test of long service, and here, too, it has the advantage. Where the family system prevails there is no need of offering prizes for long service. When a man is set down with a comfortable house and garden, the inducement is for him to remain, not to move. No doubt there are in Northumberland, as elsewhere, masters who seem to like to have new faces about them every term day, and servants who are unable to settle more than a year in one place; but these are the exceptions. Try them by the test of intelligence, industry, and care of the animals committed to their charge, and here, too, the Northumbrian will compare favourably with his compeers under either of the other systems. In the matter of education there is room for improvement in all. The Northumbrian has the means of sending his children to school, but the demand for workers induces him to bring them from it at the very time they would receive most benefit by being there, while the south country ploughman is not able out of his small wage to educate his children as he ought.

There is, however, much yet to be done even in Northumberland, ere the agricultural labourers are in the position they ought to have. Much is to be done by landlords in building good cottages, and by farmers in not grudging the extra rent good cottages imply, and by both in taking a more lively interest in the welfare of the labourers; and by the labourers themselves in striving to increase their own knowledge and intelligence, and in showing by the interest they take in their employer's work that they have the advancement of his welfare at heart. Let them also labour hard to give their children a thoroughly good education, for they may rest assured that intelligence and education are becoming more and more valuable in the labour market. The more that machinery is introduced into our fields, the greater will be the demand for steady well-educated workmen. *A. G.*

GAME LAW PROSECUTION.

Cirencester Petty Sessions, on Monday last. The magistrates present were the Rev. Henry Cripps (Chairman), and Messrs. Cripps, Morris, and Hartland.

Thomas Hall, who appeared bordering on starvation, and whose clothes hung about him in rags, was brought up in custody, charged with being out in pursuit of game in the preserves of Earl Bathurst.

The information was laid by King, head gamekeeper to Lord Bathurst, and he called a witness, who deposed that he met the prisoner at 12 o'clock at night, and went with him through the woods in search of pheasants; saw him shoot at a bird which was roosting in a tree; he struck it, but did not kill it; he had several shots at it, but with the same result.

Prisoner said he was in bed in his own cottage on the night in question; that the last witness came and knocked him up and asked him to go with him and shoot a pheasant, adding that he was very "hard up," and that he had shot a hare the evening before, and sold it for 2*s.* 6*d.* in Cirencester, and if prisoner would come and shoot him a pheasant he should be very glad. Witness was a stranger to him, and he had never seen him before. He (prisoner) had no gun, but the witness produced a gun and loaded it, and as they were going along the witness pointed to a pheasant in one of the trees and asked him to shoot it. He shot, but did not hit it, and the witness loaded the gun three or four times for him, but he killed nothing. He should not have thought of going out if the witness had not called him up and brought the gun and loaded it for him.

The Chairman said the Bench considered the case proved against the prisoner, and the sentence was that he be committed to prison for three months, and at the expiration of that time find sureties for his good behaviour for a further period of six months.

The prisoner was again charged with a similar offence in shooting a rabbit in Lord Bathurst's preserves.

King, the gamekeeper, deposed that on Sunday afternoon he saw the prisoner and another man going along one of the drives; they appeared as though they were looking for game, but they were too far off for him to see whether they had a gun with them.

Mr. Morris inquired how it was the other man was not included in the charge.

King replied that the other man was his witness.

The same witness was again called in corroboration.

The magistrates were consulting on the case, when Mr. William Boodle, who happened to be in court on another case, asked to be allowed to say a few words. He did not speak as an attorney, but as an Englishman, and he thought any man with English feeling must feel indignant at the manner in which this poor starving wretch had been trapped into crime. This witness had been brought from a distant part of the country to tempt this poor man; he had basely lent himself to the purpose; he had called the poor fellow out of bed, begged as a favour that he would go with him, had himself produced the gun and ammunition, and was in fact the prime instigator of the offence with which the prisoner was charged. He had hoped that the system pursued by Jonathan Wild, of first making men thieves and then taking blood money for their apprehension, had been extinct in this country since that worthy was executed. But he was sorry to find it was not so, but that the iniquitous system still found favour on the estates of Lord Bathurst, and with the magistrates of Cirencester.

Mr. Boodle then asked the witness if he had a licence, and he said "No." The witness admitted having shot a hare, and being present when the prisoner shot the pheasant and the rabbit, and for each of these acts, not having a licence, he was liable to a penalty of 20*l.* He would himself turn common informer to enforce these penalties if nobody else would.

Mr. Boodle then formally applied for an information against the witness.

The witness refused to give his address, but admitted that he had been brought up from a distant part of the country for the express purpose of catching men as he had caught the prisoner.

An officer of Inland Revenue who happened to be present backed Mr. Boodle's application, and said he should certainly bring the matter under the notice of the commissioners.

After what had passed the magistrates refused to convict in the second case, and so great was the excitement against the witness by the parties in court, that he had to be taken under the protection of the police, and let out through a side door.

Mr. Boodle said he had never witnessed such disgraceful proceedings in his whole life; and he pledged himself to bring the case under the notice of the Secretary of State, with a view to obtain the prisoner's liberation. *Abridged from the Cheltenham Guardian.*

FERTILITY AND FARM-YARD DUNG.

CLEARLY the natural fertility of soils may be enhanced in three ways—1st, by tillage; 2d, by the contribution, through the medium of a certain class of manures, of substances identical in chemical composition with the indigenous nutriments of the soil; and 3dly, by means of the stimulation produced by another set of manures whose substantive office is not in themselves to yield nutriment, but to excite an abnormal development of aliment from the component parts of the staple itself. Whether in these three cases the increased productiveness is of a permanent and legitimate, or of a temporary and surreptitious kind, will afterwards be treated of. Meanwhile we would further define that to the contributive class of fertilisers belongs what will form the subject of this paper, namely the home-made manure of rotation husbandry. The stimulative class consists of the special manures, and to these a subsequent article will be devoted.

Now, a very moderate amount of reflection bestowed on the history of each year's product of dung on a tillage farm is sufficient to show, 1st, That in so far as it consists of terrestrial elements of nutrition, these, assuming as we shall no extraneous feeding stuffs to have been used, must have been obtained from the soil of the farm, because the manure is itself a portion of the products of the land grown in the previous season. 2dly, That in point of restitution, its reincorporation with the soil is only of a residual nature because not only had the corn been removed from the grain crops and sent to market, but in the process of converting the roots and straw into manure a large proportion of the chemical elements had been assimulated by the digestive organs of the live stock employed in the operation, and converted into the flesh, bones, and other parts of the fatted animals sold to the butcher.

In further premising our argument, let us next examine what the amount is qualitatively and quantitatively of the chemical elements of plant nutrition transferred yearly from the fields to the homestead in the ordinary produce of a 400 acre farm managed on a four-course rotation; and in order to do this we have framed the following table from data given in Chap. XIII. of the late Professor Johnston's lectures on Agricultural Chemistry and Geology, where he raises the question "At what rate and in what proportions quantitatively and qualitatively do the crops usually cultivated withdraw the inorganic nutriments of the soil?"

TABLE I.—Showing the inorganic, organic, and aqueous constituents withdrawn yearly by the crops of a farm of 400 acres, cultivated on a four-course rotation of—1, Turnips; 2, Barley; 3, Hay; 4, Wheat; the rates of produce being those stated by Johnston.

	Inorganic Matter.	Organic Matter.	Water.	Total.
	Tons.	Tons.	Tons.	Tons.
Corn of 100 acres of Wheat, at 25 bush. per acre of 63 lbs. per bushel .. Corn of 100 acres of Barley, at 40 bush. per acre of 52 lbs. per bushel ..	4	131	27	162
Straw of these crops, at 1½ ton per acre	15	232	53	300
Bulbs of 100 acres of Turnips, at 20 tons per acre	15	139	1846	2000
Tops of 100 acres of Turnips, at 6¼ tons per acre	14	98	581	693
Hay of 100 acres of Clover and Rye-grass, at 1½ ton per acre	11	115	24	150
	59	715	2531	3305

Here, then, it is seen, that in the gross amount of the yearly crops obtained from a 400 acre farm, under ordinary management, there is contained of inorganic

or mineral constituents 59 tons: organic of atmospheric origin, 715 tons.

Let us now suppose for an instant the extreme case that the tenant of a 400 acre farm sends to market the entire bulk of his produce without acquiring and applying any manure in return; and it is clear that thereby he would be lessening the stock of mineral sustenance in his fields at the rate of 59 tons yearly; and again let us assume, but to be speedily thrown aside, the extravagant postulate, that on arriving at maturity the entire produce of a similar farm was ploughed down and buried in the soil; and here no less clearly is it apparent, that as respects the inorganic matters the same 59 tons of mineral constituency absorbed by the 3305 tons of corn, roots, and hay (Table I.), would be restored to the fields; and along with them 715 tons of organic elements, which, obtained from the atmosphere and now deposited in the soil, thus is virtually an addition to the ingredients of the land.

Now, the relevancy of these suppositions is in this, that manurial practice consists of a modified combination of both the procedures above stated; since, in fact, the rotation farmer yearly alienates from his soil not all, but still a large portion (59 tons) of mineral element withdrawn by his crops, and yearly adds a large proportion, though not the whole, of the 715 tons of organic constituents palpably demonstrated that contemporaneously with a progressive decrease of the mineral constituents going on, a no less secularly accumulating increase of obtained from the atmosphere. At what rate this change in the relations of the inorganic and organic substances goes on, is indicated in the following table:—

TABLE II.—Showing 1st, the proportion, approximately of inorganic matter annually alienated from a farm of 400 acres under a four-course rotation. 2dly, conjecturally the proportion of organic matter added yearly to the fields.

	Inorganic Matter.	Organic Matter.	Water.	Total.
	Tons.	Tons.	Tons.	Tons.
Total inorganic or organic constituents in 3305 tons of crop yearly produced (See Table I.)	59	715	2531	3305
Yearly sent to market in 162 tons of corn	4	131	27	162
Yearly sent to market in produce converted into butcher's meat	3¾ ?	4¼ ?	7 ?	15 ?
Respiratory elements thrown off by the live stock from the lungs and skin. Waste	1¼ ?	79¾ ?	1047 ?	1128 ?
	9	215	1081	1305
Returned to the soil in manure	50	500	1450	2000
	59	715	2531	3305

By this table it is indicated that of the 59 tons of mineral constituency withdrawn in the yearly crops, only 50 tons are returned in the refuse of the farm applied as manure; while on the other hand this decrease of inorganic matter is accompanied by a yearly deposition of 500 tons of organic components.

But in pursuing this inquiry a little farther another progressive disturbance of the natural condition of the soil, as respects its mineral constituency, presents itself in the rotation system of manuring; and this we shall now point out by means of the following table, based on data also furnished by Johnston's valuable work:—

TABLE III., showing 1st the proportions of the various kinds of mineral elements contained in the 59 tons of inorganic matter withdrawn by the yearly crops; 2d, the quantities in which the mineral constituents ought to exist in the 50 tons returned in the manure, in order to preserve the normal mineral proportions of the soil; 3d, the abnormal proportions actually existing amongst the constituents of the returned minerals.

	NORMAL PROPORTIONS.						ACTUAL PROPORTIONS.							
	Proportions of the 59 tons of Minerals withdrawn in the crops.		Proportions according to which the 50 tons returned should exist.		Normal Loss.		Proportions in which the Minerals of the 50 tons returned actually exist.		Actual Loss.		Actual Loss less than normal Loss.		Actual Loss more than normal Loss.	
1. Substances returned in abnormal excess.	Tons.	Cwt.	Tons.	Cwt.	Tons.	Cwt.	Tons.	Cwt.	Tons.	Cwt.	Tons.	Cwt.	Tons.	Cwt.
1. Silica	15	18	13	12	2	6	14	14	1	4	1	2		
2. Potash	14	16	12	14	2	2	13	14	1	2	1	0		
3. Sulphur	5	6	4	4	1	2	5	8	0	8	0	19		
4. Chlorine	3	13	2	14	0	9	3	2	0	1	0	8		
5. Oxide of iron	0	13	0	11	0	2	0	12	0	1	0	1		
2. Substances returned in abnormal deficiency.														
6. Phosphoric acid ..	5	8	4	10	0	18	2	0	3	0			2	2
7. Magnesia	2	10	2	3	0	7	1	3	1	7			1	0
8. Soda	2	9	2	2	0	7	2	2	0	15			0	8
3. Substance in normal proportion.														
9. Lime	8	17	7	10	1	7	7	10	1	7			0	0
Total	59	0	50	0	9	0	50	0	9	0	3	10	3	10

From this table the practical conclusions are these: that inasmuch as the relative proportions of the various mineral constituents restored to the soil in the farm yard manure of rotation husbandry are not in the same ratio as the inorganic constituents withdrawn by the yearly crops, there necessarily must arise in process of time a greater or less degree of change in the proportions and quantities of the minerals themselves, thus removed in one series of proportions and replaced in another. Thus, taking silica as an individual instance, the proportion of this substance in the 50 tons restored should, were the normal ratio preserved, be 13 tons 12 cwt., but the quantity actually returned is 14 tons 14 cwt., thereby giving rise to an excess in that item at the rate of 1 ton 2 cwt. yearly. So in like manner of potash, sulphur, chlorine, and iron, all returned in relative excess. In phosphoric acid, magnesia, and soda, the proportional disturbance is one of diminution. In phosphoric acid the quantity ought to be 4 tons 10 cwt., but actually it is only 2 tons 4 cwt.; and hence it follows that under the system of manuring now under comment, a procedure is going on in this substance productive of a disturbed ratio in which a decrease of phosphatic constituency is caused at the rate of 2 tons 6 cwt. annually. Now this depletion of phosphoric acid requires only to be stated to raise up in every well educated agriculturist's mind very earnest reflections, knowing as he does how relatively minute is the proportion of this substance in average soils, whilst on the other hand, notwithstanding this relative scarcity in the soil, it is one of those mineral elements most largely required by all plants in the ripening of their seeds, and more especially in those of the corn tribes. In the grain of Wheat it exists in the high proportion of 50 per cent. of the crop, and in Barley and Oats in the less proportions of 28 and 26 per cent. Hence it may often occur that the corn crops come vigorously into ear, but are nevertheless deficient in grain, owing to a deficiency of this element to satisfy the requirements of an abundant yield.

(To be continued.)

Home Correspondence.

Steam Cultivation.—As an old correspondent of the *Agricultural Gazette*, and "professor" of steam-culture, allow me to inaugurate the new year with a letter on my favourite subject. Although begun with writing, who can foretell—the year may end in acting! However, continue to allow me to speak on the subject, until the subject unanswerably speaks for itself. Up till the present time we all know the history of the steam-culture problem; its high order of interest, and its low order of success; its frequent approbation, yet limited application. Mr. Fowler and Mr. Smith are almost the only gentlemen who hold a position, and they hold it as steam ploughmen, not as steam cultivators. What they do for the farmer is both bare and scanty. Ploughing; What is it? It may be a substitute for something which may not be needed in steam cultivation; or as an aid to plant production it may be found abnormal and unnatural. At all events, as they introduce no "system" of agriculture differing from the ancient, and as we infer from all past experience, that steam power when rightly applied, will introduce a system peculiarly its own, (as witness railways, &c.), we can predict beforehand that their machines and modes are liable to be superseded at any moment by the right system. That the philosophy involved in the process called ploughing is not understood, is practically evidenced by these very gentlemen, and, I may here add, was long ago commented on by me. In 1849, in my pamphlet entitled "A New Era in British Agriculture," I said "The plough is abolished," "Why turn over the soil?" "Where in Nature do you observe her laboriously turn over the soil previous to growing her plants therein?" &c. All this passed unnoticed. In 1857, Mr. Fowler appeared and affirmed by his engine that "inversion" was necessary; in this he was backed by R.A.S. and I.A.C. &c., but Mr. Smith, who had formed his plans before Mr. F., stoutly affirmed, as I had done, that inversion was not needed. This he proved on more than 100 acres of land, by growing good crops without inversion. This may be taken as the first step towards proving what I asserted even in 1846, namely, "that certain conditions being complied with during the growth of crops, ploughing is not needed, and is now only a necessary evil, arising from neglect, and want of command over material, during the growth of crops.". Now that I have spoken of my own affirmation and discoveries, allow me to speak on, as although I may have to allude to others, it may lead to a useful effect. In 1846, when I began to investigate the steam-culture problem, I speedily discovered that "steam" demanded, for its successful application, the highest order of mechanical movement, viz., the circular. On this I founded my circular system of tilling land, which has been described to many persons, and to the readers of the *Agricultural Gazette* (but to which I regret to add none seem inclined to give trial until they shall have become exhausted in the futility of their own plans). Shortly after my discovery in 1846, appeared an independent thinker, in Mr. Wren Hoskyns; he also affirmed, in his own beautiful diction, that the operation of mechanic power was circular—that steam was a mechanic power, therefore its mode of operation should be circular, &c. But having advanced thus far in a circle of true reasoning, he afterwards flies off at a tangent, and applies the law elicited solely to the mechanism in the machine employed, not to the control or direction of the movement of the machine containing the mechanism. Having thus turned aside from the circle of correct reasoning, his course of writing on the subject, although brilliant, becomes cometary, erratic, and not to be relied on, ending in the inventions (besides his own) of the vertically circular cultivators of Usher, Ricketts, and Romaine. I for one feel grieved with Mr. Hoskyns. Considering his great reasoning powers and ideality, and that he possesses the means of carrying his ideas into practical effect, it is surprising he has not solved this problem of steam cultivation. However, he has only tried one circular method, to wit, his own; suppose he now tries my circular method of steam agriculture. Another principle I affirmed was this, that machinery, to work successfully on the land, must work from a fixed point, or guide (point d'appui). This passed unconfirmed until Mr. Halkett appeared with his Guideway Steam Cultivator, and demonstrated the absolute necessity of precision in operating on the soil. But Mr. Halkett's guide-rail was so expensive (as compared with my post temporarily fixed in the centre of one of my circles), that his system failed to be adopted. An engineer has just appeared, who says he can obtain all the advantage of the fixed guide, without the expense. To comment on his plan was the chief reason why I took up my pen to address the readers of the *Agricultural Gazette*. Without doubt the visitors to the late Smithfield Show were much interested by the model steam cultivator of Mr. Grafton. In his cultivator he has sought to remove the great drawback, or I may say fatal impediment to the guideway system; namely, the expensive permanent railway. He causes his cultivator to travel on a portable railway (this endless rail being well shown in the model.) But in doing away with the permanent rail, fixed to the ground, he seems to me to lose that which I consider absolutely necessary to precision in working in the field, namely, a guide-line, from which no cultivator can or ought to deviate. If I understand Mr. G. rightly, he says that the wheels of his cultivator having a "bite" of 25 feet on each side, when the machine is adjusted to go in a given direction, trifling obstacles such as are met with on arable land will not cause it to deviate from the intended line. This question of the "fixed point" is the "pivot" on which I always turn. In my circular system of steam-culture, my cultivator revolves around a fixed axis. Mr. Halkett sought to avoid this fixed axis by means of permanent rails, at an expense of 30l. per acre. Mr. Grafton now steps forward, and declares neither my fixed post, nor Mr. Halkett's fixed rail, are needed, but that a platform steam cultivator, worked on a 25 feet line of portable rail, will, given the line of direction, guide itself to its destination. It is for Mr. Grafton to establish this, but I still doubt whether we can dispense with a fixed point, or guide for a steam tilling cultivator. *C. Burcham, 6, Lisle Street, W.C.*

Remedy for the Potato Disease.—In the home correspondence of the *Agricultural Gazette* of December last (22d), there is a very important communication from those eminent cultivators the Messrs. Hardy, of Maldon, on "removing the infested stalks from the Potato" as a preventative of the disease, every syllable of which I beg to endorse. In 1845, the same year that the Messrs. Hardy had, as it were, by accident discovered this only remedy, I had at the request of the late Lord Hetesburg [then Lord-Lieutenant of Ireland, and whose endeavours to find out a preventative are well known] tried all sorts of experiments on the roots or tubers infested, and found nothing to equal lime in its caustic state, sprinkled over them as they were spread out on a dry barn floor. In the following year, 1846, it occurred to me that the malady would best be stopped when the plant was in foliage. I therefore applied such substances as sulphate of magnesia, lime, salt, soot, sulphur, &c, without any beneficial result. It then occurred to me to cut off the stalks within 2 inches of the surface, and to re-mould the drill afresh, and I can say with the Messrs. Hardy that I had not a single diseased tuber. The quantity and quality presented a fair average, whereas on that of the same field not cut over, I had scarcely sound roots enough for seed. I may remark that, contrary to my own judgment, I was induced to pull up the stalks

of a ridge; but this, as I had anticipated, was too violent a process, and spoiled the crop. I beg also to remark, that for the last 12 or 14 years I have always cut over all my early sorts the moment I observed the blight, and invariably with the same success; only let us plant early and sever the connection between the tubers and the atmosphere, and we need not fear this formidable but not unconquerable enemy. *J. Walker, Steward and Gardener, Dublin, Jan. 4.*

On the Stripping of Leaves from Mangel Wurzel and the Transplanting of Mangel plants.—Professor Buckman, I presume, will excuse me if I make some remarks on his article, published in your valuable journal of this week; and perhaps what I am about to write on the above subjects, which the learned professor has treated of, may not be unacceptable to some of your numerous readers. Mr. Buckman treats the transplanting of Mangel plants as a novelty, which first suggested itself to him whilst making the experiments on the value or injury of stripping off the leaves from Mangel whilst the plants were in full growth. With reference to the transplanting of young Mangel plants the process has been known and known to answer from the time nearly or quite when this valuable root was first introduced into this country; very many years since I myself saw many acres transplanted, and about 30 years since, I had a large plot transplanted, and with complete success, and since then from time to time I have continued the operation to a smaller extent. But the year before last, that is, in 1859, I transplanted about half an acre where the dibbled seeds had failed, I having taken up the plants for transplanting when thinning the plants which did not fail. The whole crop was a very good one, both from the transplanted and non-transplanted plants; but as in my former experience, as is always the case, the non-transplanted were the better roots, that is, the larger; but I should think I had some among the transplanted weighing from 10 or 12 lbs., and some among the non-transplanted ones weighing nearly 20 lbs., but they grew in a better part of the field, and it will be remembered that 1859 was the finest year for Mangel, I believe, that had ever been known. I add, also, that if my crop may be considered fine, several of my parishioners roots were still finer, and I add, also, that the sort I grew in 1859 were the Yellow Globe. Hence it is quite certain that young Mangel plants may successfully be transplanted; but care should be taken that the operation be done after a shower, or when the ground is damp or wet; and my opinion is, that, if the ground were well dug or ploughed first, the crop from transplanting would be nearly or quite as good as others from non-transplanting; indeed, one year I had in my garden enormous roots from transplanting, but then the ground was rich and good, a necessary point in all root growing. With reference to the leaf stripping process, some years since this was discussed in your Journal, and it had several advocates, of two or three of whom I should have thought better things. I myself entered my protest against it, but not until I had made some experiments, which were much ridiculed, but why so treated I had not the sagacity to understand, but I will here repeat what I did and the result. In a field where Mangel and Swedes were growing side by side, I took a brass ring and slipped it over say 30 or 40 of each kind of roots, so as to have them all of exactly the same size, and at the same time I stripped off the whole of the leaves, and after that as fresh leaves grew, I stripped them off also, so as to keep the roots completely denuded until Mangel and Turnips ceased growing that year. I also took my ring and slipped it over other roots which were not stripped, by each of these I stuck down a stick; this I did to ascertain the difference of growth between the leafless and the other roots, because, as I have said, there were gentlemen who maintained that both Turnips and Mangel might profitably have their leaves pulled off for fodder for cattle, and without injury to the growth of the roots, and one gentleman, of whom until then I had a rather high opinion, wrote me a letter eulogising the new process, and advocating seriously, that hereafter Mangel and Turnips would be grown for the sake of the leaves, chiefly or wholly, with little or no regard to the roots. But now to the results of my experiments. The denuded Turnips ceased growing altogether, and in the spring, my ring showed that they had even become less, for I allowed them to remain all the winter in the ground. The Mangel was taken up in the autumn, and they had grown a little, but very little; and hence, from my experiments, I proved to myself and I trust to some others also, that denudation will no more answer for root crops than it will for Vines, or Cucumbers, or Melons, or any other kind of plants. But it appears that leaf stripping has answered in Ireland, but it should be observed that it was only very partially done, and that the lower leaves only were taken off, a very different thing from the complete denudation advocated. In conclusion, let me just add now, that I have a bit of Wheat now under the snow, some drilled with three and some with two pecks an acre, and a very little bit for experiment drilled twice over. The land is a cold wet clay, and the season, as all know, has been very unpropitious but I am nevertheless in good hope that I shall have a crop, and better than if I had overburdened my land with seed; but several of my neighbours inform me that they shall have to seed much of their Wheat lands over again, and I may be in the same plight, but I hope my strong plants will better stand the severity of the season than the weak and dwindling ones occasioned by over seeding. *Geo. Wilkins, Parsonage, Wix, January 8.*

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

The following are the Standing Committees for 1861:—

Finance.

Hood, Hon. Colonel Nelson	Hobbs, William Fisher
Vernon, Hon. A.	Howard, James
Barnett, Charles	Torr, William
Bramston, T. W., M.P.	

House.

The President	Shelley, Sir J. V., Bt., M.P.
Chairman of Finance Committee	Brandreth, Humphrey
	Challoner, Colonel
Cavendish, Hon. W. G., M.P.	Gibbs, B. T. Brandreth
Hood, Hon. Colonel Nelson	Hobbs, William Fisher

Journal.

Portman, Lord	Johnstone, Sir J. V. B., Bt., M.P.
Speaker, The Rt. Hon. The	Milward, Richard
Shelley, Sir J. V., Bt., M.P.	Thompson, H. S., M.P.
Northcote, Sir Stafford, Bt., M.P.	Hoskyns, C. Wren
Acland, T. Dyke	

Chemical.

Speaker, The Rt. Hon. The	Hoskyns, C. Wren
Vernon, Hon. A.	Hudson, John
Johnstone, Sir J. V. B., Bt., M.P.	Huxtable, Rev. A.
	Lawes, J. B.
Miles, Sir Wm., Bt., M.P.	Sheridan, R. B., M.P.
Acland, T. Dyke	Thompson, H. S., M.P.
Daubeny, Dr.	

Veterinary.

Speaker, The Rt. Hon. The	Challoner, Colonel
Shelley, Sir J. V. Bt., M.P.	Gibbs, B. T. Brandreth
Johnstone, Sir J. V. B., Bt., M.P.	Hamond, Anthony
	Hobbs, William Fisher
Miles, Sir Wm., Bt., M.P.	Simonds, Professor
Barker, Thomas Raymond	Spooner, Professor
Brandreth, Humphrey	Thompson, H. S., M.P.

Stock Prizes.

Portman, Lord	Jonas, Samuel
Walsingham, Lord	Milward, Richard
Shelley, Sir J. V., Bt., M.P.	Pain, Thomas
Hood, Hon. Colonel Nelson	Pope, Edward
Barnett, Charles	Smith, Robert
Barthropp, Nathaniel G.	Simonds, Professor
Druce, Joseph	Torr, William
Gibbs, B. T. Brandreth	Towneley, Lieut.-Colonel
Hobbs, William Fisher	Turner, George
Hudson, John	Webb, Jonas

Implement.

Portman, Lord	Exall, William
Speaker, The Rt. Hon. The	Gibbs, B. T. Brandreth
Cavendish, Hon. W. G., M.P.	Hamond, Anthony
Hood, Hon. Col. Nelson	Howard, James
Vernon, Hon A.	Hobbs, William Fisher
Shelley, Sir J. V., Bt., M.P.	Hoskyns, C. Wren
Miles, Sir Wm., Bt., M.P.	Shuttleworth, Joseph
Amos, C. E.	Thompson, H. S., M.P.
Barnett, Charles	Torr, William
Brandreth, Humphrey	Towneley, Lieut.-Colonel
Caldwell, H. B.	Wallis, Owen
Challoner, Colonel	Wilson, Professor

Metropolitan Sites.

Portman, Lord	Brandreth, Humphrey
Feversham, Lord	Challoner, Colonel
Walsingham, Lord	Gibbs, B. T. Brandreth
Speaker, the Rt. Hon. The	Hobbs, William Fisher
Johnstone, Sir J. V. B., Bart., M.P.	Hoskyns, C. Wren
	Jonas, Samuel
Shelley, Sir J. V., Bt., M.P.	Milward, Richard
Hood, Hon. Colonel Nelson	Thompson, H. S., M.P.
Barnett, Charles	Torr, William

General Leeds.

Walsingham, Lord, Chairman	Beckett, W., M.P.
Marlborough, Duke of	Beecroft, G. T., M.P.
Macclesfield, Earl of	Challoner, Colonel
Powis, Earl of	Dent, J. Dent, M.P.
Leigh, Lord	Eddison, Edward
Portman, Lord	Gibbs, B. T. Brandreth
Tredegar, Lord	Hobbs, William Fisher
Cavendish, Hon. W. G., M.P.	Hoskyns, C. Wren
Hood, Hon. Colonel Nelson	Humberston, P. S., M.P.
Johnstone, Sir J. V. B., Bt., M.P.	Leeds, Mayor of
	Milward, Richard
Miles, Sir William, Bt., M.P.	Pain, Thomas
Acland, T. Dyke	Salt, Titus, M.P.
Baines, Edward, M.P.	Thompson, H. S., M.P.
Barker, Thomas Raymond	Torr, William
Barnett, Charles	

The President, Trustees, and Vice-Presidents are members *ex-officio* of all Committees.

HIGHLAND AND AGRICULTURAL.—Recently a meeting was held in the Corn Exchange, of Agriculturists and others interested in the Highland Society's Show to be held at Kelso in 1862, and specially for the purpose of adjusting the list of premiums to be competed for on that occasion. Mr. Hall Maxwell, C.B., attended on behalf of the Highland Society; and among those present were Lord Binning; Sir William Scott, of Ancrum, M.P.; Sir George Douglas, of Springwood Park; Mr. Ord, of Muirhouselaw, and a great number of the agriculturists of the district.

On the motion of Mr. Dudgeon, Spylaw, Mr. Ord, of Muirhouselaw, was unanimously called to the chair.

The Chairman, after thanking the meeting for the honour they had done him in placing him in the chair, called on Mr. Maxwell to make a statement to the meeting, of the purposes for which they had been called together.

Mr. Hall Maxwell said, they were to-day called on to consider in the first place, whether the 1st of January, as at present, should be the date from which the stock should take their ages, or whether it should be changed to the 1st of October. About two years ago the whole system of the Society's shows had been overhauled by a committee composed of gentlemen from all the different districts in Scotland, and they had framed certain general rules in relation to the shows which had since then always been acted upon, and were to be so acted upon at the approaching show at Perth. In reference to the question of age, that committee recommended that the 1st of January should be given up as the starting point, and that the 1st of October should be taken in its place. When he (Mr. Maxwell) went to Perth last year, he reported this change, and the doubts which the directors of the Highland Society had as to its propriety. At the meeting in Perth a memorial to the directors was agreed to, asking the 1st of January to be again substituted as the starting point for age. The directors agreed to the recommendation, and fixed the 1st of January as the time from which the age of stock was to be calculated—agreeing at the same time to leave the question open till the meeting at Kelso, there to take the sense of the agriculturists of the south of Scotland on the point; and if they should recommend the 1st of January, that it should be a rule of the Society. Since then a large committee have again had the matter under consideration in Edinburgh, and they have come to the conclusion that the 1st of January is the proper period from which to calculate the age. Much discussion arose at that meeting as to the propriety of having the 1st of January as the period in the case of all the breeds save Short-horns, and it was suggested that for them the time should be the 1st of October. He had taken the trouble to see whether there were many Short-horns calved in the three months before January, as some exhibitors had complained that the stock which was calved in October or November was not put in with that calved after 1st January. Well, it was found that of 233 head of cattle, only eight had been calved between 1st October and 1st January, and out of 86 Short-horns at the Edinburgh Show, the numbers calved in the three preceding months had only been five. At the Dumfries Show, of 75 Short-horns the births had been five in the three months preceding, and out of 223 of all other breeds not one had been calved in these months. The Committee of the Society were of opinion that any alteration now would increase the number of such complaints as he had alluded to, and would otherwise be very inconvenient, and they recommended that the 1st January be retained as the period for calculating ages from. He (Mr. Maxwell) had been desired to bring this subject under the notice of the meeting with a view of arriving at a final decision, and he now left the matter in their hands.

Sir William Scott said the Royal Agricultural Society adopted the 1st of January as the date, and they had a good precedent in the case of the breeding of race horses. In former days it used to be counted from the 1st of May, but afterwards this date was altered to the 1st of January. This had continued now for many years, and everything had gone on very smoothly and harmoniously. He could not help thinking that the breeders of race horses—who were generally a sharp-witted class of people—had not adhered to this date without good reason. The case of prize cattle was quite analogous to race horses, and he thought that the same rule in this respect should be held to apply in both cases.

Mr. Curry, solicitor, said that the period for calculating ages of stock in connection with the Union Agricultural Society was always the 1st of January, and it had been found to work well on all occasions.

Mr. Dudgeon, Spylaw, said he only spoke what he believed to be the unanimous feeling of the meeting when he moved that in the opinion of the present meeting the present rule, fixing the date at the 1st of January should be adhered to. Mr. Fairbairn seconded the motion, which was carried unanimously.

Extra Stock.—The next item in the programme of the Perth show, from which the Kelso show is to be adjusted, was that of extra stock; and on Mr. Maxwell asking if there were any suggestions on this head, Mr. Dudgeon said he thought that in place of premiums being given for Highland oxen, as was proposed, a prize or prizes should be awarded to Short-horns of a young age, say calved after 1st January, 1860 and 1861, in order to see how soon they could be got into condition for the market. Mr. Maxwell though there was little chance of this part of the premium list being altered, as this description of stock might be shown in the pure breeds (No. 1 of the list). Besides, Highland oxen were a very great ornament to the show-yard, and he thought they had better be retained on the list.

Sheep.—Mr. Maxwell said, that in reference to sheep he had been desired to bring a point of some importance under the notice of the meeting. At the meeting of the committee, to which he had already referred, a letter was read from Mr. Harvey, Whittingham Mains, in which that gentleman suggested that the Leicesters should be divided into two classes, the large and the small-boned animals. Several obstacles in the way of carrying out this change had occurred to the Committee, independently of the financial considerations. Still, if it could be done, the directors thought it might be very desirable.

Mr. Usher, Stodrig, had often been employed as judge in connection with the exhibition of sheep, and he thought it was quite possible to draw the line of demarcation suggested by Mr. Harvey. It would, in his opinion, be of great importance to have two classes

of Leicester sheep, but it depends very much on the judges to which of the classes the prizes at present were awarded, as it was in many cases a pure matter of taste—one man liked the Scotch, and another the English breed.

Mr. Hall Maxwell said there was no doubt that experienced breeders could tell the difference between the two classes, but it came to be a very different thing when dealing with 50 or 100 exhibitors. Whether they would all know the difference was a different matter. He was of opinion that they would get into mere confusion. Mr. Hardie and other experienced breeders living on the Border could tell the difference, but would the exhibitors over the country do this too?

Mr. Dudgeon moved that the meeting recommend to the directors that the prize list stand as at present.

Mr. Fairbairn seconded the motion.

Mr. Usher moved, as an amendment, that the meeting express it as their opinion that it would be a great improvement if the Leicester sheep were divided into two classes, and two sets of premiums awarded for them.

Mr. Hardie, Harrietfield, seconded the amendment; and on a vote being taken, the motion was lost by 14 to 17.

Several discussions of minor importance took place on various points of the programme for the Perth show. Mr. Laing, Addinstone, suggested that premiums should be given for half-bred sheep stock, possessing as they did the tendency of the Leicester to fatten and the hardiness of the Cheviot. It was also of importance that this stock should be represented, inasmuch as a large proportion of the land in Berwickshire and Roxburghshire was stocked with this species.

Mr. Maxwell said the Highland Society had always objected to the introduction of crosses into the list; and as the meeting had already put on a large sum in additional premiums, the financial view of the matter must not altogether be forgot. Some conversational discussion took place, but ultimately Mr. Laing agreed to modify his suggestion to the effect that prizes should be given for fat sheep in the same way as for fat cattle. A suggestion by Mr. Dudgeon, that prizes should be given for Herefords and Dinmonts, was negatived by a considerable majority. The classes for poultry were next brought under discussion, and it was agreed, on the motion of Lord Binning, to continue them the same as at the Perth show. On the motion of Mr. Swan, it was agreed that there be no show of dairy produce, but that the premiums be given in another district of the country where dairy produce was more cultivated than in the south of Scotland. The site for the show being mentioned, Sir George Douglas stated that he would be very happy to do all in his power to forward the objects of the Society in reference to holding the show in the Bridge End Park.

Votes of thanks were passed to the Chairman and to Mr. Hall Maxwell by acclamation, and the meeting then adjourned.—*Mail.*

Reviews.

Elements of Agricultural Chemistry. By Thomas Anderson, M.D., F.R.S.E., F.C.S., Professor of Chemistry in the University of Glasgow, and Chemist to the Highland and Agricultural Society of Scotland. Adam and Charles Black. Edinburgh, 1860.

Industry is never so efficacious as when assisted by science. Long centuries did the husbandman painfully toil to extract from the stubborn soil—the intractable clays and the siliceous wastes of Britain—his scanty livelihood. He knew not how to ameliorate the one or to fertilise the other. All his operations were performed under the feeble light of a few traditionary proverbs, which being mainly the result of accumulated facts were good enough in their way. Poor fellow, to us he presents a miserable spectacle labouring hard in the cold twilight of knowledge for a pitiful living on rye bread and hard salted meat. There he goes — turning with infinite effort and immense expense of horse power, a soapy, shallow furrow slice, the savage integrity of which no harrow-tooth shall overcome, no subtle gaseous spirit shall enter to enrich. He knows not that the mission of the air is one of mercy to him and his, and although the summer rain beseeches entrance to the thirsty soil, he sees it glide from the indurated surface to the furrow, and from the furrow to the river, without once suspecting that with that little stream departs the element, which admitted to his soil and allowed there to work and combine with kindred spirits, would lighten his labour, double his crops, erase the wrinkles in his brow, and produce more magical results in nature's laboratory than ever Alchemy dreamed of in its best days. How long he was thus left to struggle with dreary frosts, continued droughts, and obdurate soils, is revealed by the fact that it was only so late as the year 1813, that Sir Humphry Davy, with that characteristic modesty which distinguishes all truly great men, said before the Board of Agriculture: "Agricultural Chemistry has not yet received a regular and systematic form. It has been pursued by competent experimenters for a short time only; the doctrines have not as yet been collected into any elementary treatise, and on an occasion when I am obliged to trust so much to my own arrangements and to my own limited information, I cannot but feel diffident as to the interest that may be excited, and doubtful of the success of the undertaking. I know, however, that your candour will induce you not to expect anything like a finished work upon a science as yet in its infancy, and I am sure you will receive with indulgence the first attempt made to illustrate it in a distinct course of public lectures." Good, wise old Tull, with his resolute efforts to afford his plants by mechanical means a palpable earth-food, died, and was buried, he and his theory—the latter to be exhumed in our day. The philosophic Lavoisier, the versatile Dundonald, both displayed the intimate connection between Chemistry and Agriculture, while the patient De Saussure laid the foundation by a prolonged series of experiments, of almost all our reliable knowledge of the chemistry of vegetation. Gathering up the results of these previous researches and supplementing them with original and confirmatory experiments, Davy's work appeared like a sudden meteor, upon which the learned looked as a happy omen, and the ignorant with the prejudice common to their class. The discovery in 1785 of Mr. Cavendish, that water was composed of inflammable hydrogen and vital oxygen, declared not to those most concerned the secret of its influence; nor did the explanation of the agency of ammonia arouse aught but resentment and aversion in the mind of the stout yeoman of that day. Industry would not be aided by science; consequently her hand was but tardy and feeble. Although Davy expounded the new doctrine in language admirable for its clearness and force, his words were soon lost amid the din of battles, the rancour of party strife, and the exhilarative realisation of famine prices. Liebig, who had been unwearied in his observations upon vegetation abroad, in the fields of Germany, and within his laboratory had been analysing plant tissues, dissolving and constructing plant food, turned his bright lamp upon the agricultural visage in one of those sudden fits of enthusiasm which only are experienced by our patient pioneers when the end of a long course of labour is in view. The brilliant light was hailed by some few whose minds were alert for signs and wonders; but the eyes of the great public upon which it fell were confused and dazzled by the glare. So clear, so distinct was the voice which accompanied the light, however, that a large portion of those who had staggered back with averted faces felt reassured, bent forward and looked, and whilst their eyes believed, the clear logic of the voice carried conviction to the heart and inspired a faith good natured enough to take for granted all it failed to comprehend. These scientific truths, like seed-down blown hither and thither, alighted here and there to germinate in Market Ordinaries and Farmers' Clubs. The furor concerning *orchides* and *silikates* was sudden and complete, and all moved with the same precipitancy to become acquainted with principles that promised such speedy riches, as they would have done to learn the terms of a new national lottery. Disappointment, however, fell as a thick curtain before these bright visions.

When Professor Oersted, in 1836, explained his discovery of the electric current, Sir John Herschel spoke of him as follows:—"To look at his calm manner, who would think that he wielded such an intense power, capable of altering the whole state of science, and almost convulsing the knowledge of the world. He had at the meeting developed to them some of those recondite and remarkable powers which he had been himself the first to discover, and which went almost to the extent of obliging them to alter their views on the most ordinary laws of force and of motion. He elaborated his ideas with slowness and certainty, bringing them forward only after a long lapse of time. How often did he (Sir John,) wish to heaven that he could trample down and strike for ever to the earth, the hasty generalization which marked the present age, and bring up another and a more safe system of investigation such as that which marked the inquiries of his friend." It is not to be wondered that the solitary student cannot forbear to rush from his cell before the crucible is quite cooled, crying to the astonished world, "Eureka! Eureka!" Patience is a virtue hard indeed to exemplify under such circumstances, and though it would have been better for the Professor to have worked a little longer in seclusion at Giessen before he raised hopes in England that were doomed to disappointment, our gratitude must not be presented in solution with blame. To those who are now working let us say: take warning, and preserve a clear line between fact and hypothetical inference. The reaction was terrible. The Sons of Science were quite a bye word in the mouths of the Sons of the Soil. Although there was a partial return to the state of darkness from which the agricultural world had emerged, the several candles which had been lit at the great light, burned in the laboratories of the scientific, shedding though a quiet, yet a pleasant and more certain illumination. Boussingault, as much at home in the field as amongst the paraphernalia of the chemist's workshop, sent forth his *Economie Rurale*, followed by Way, and Johnson, and Voelcker and the fraternal experimentalists of Rothamsted, who, according to their various bents, have each made important contributions to Scientific Agriculture, and together, aided by our Chemistry Associations, Agricultural Societies, and teeming periodicals, have generated an amount of intelligence in presence of whose searching agency the rocks of prejudice and ignorance are fast crumbling down.

Fifty — forty — no, we may say twenty years—will comprehend the record of the change thus wrought, a change the value of which as it respects the connection between Chemistry and Agriculture, remains now to be proved when we have well nigh entered upon our last acre of improveable waste land, and must prepare to feed our increasing millions from that already in cultivation. It required not that the farmer of that earlier date should trouble himself about chemistry; he grew as much corn as there seemed a market for, and when he wanted more he resorted to the Inclosure system, and not to Science. It was reserved for us of this generation to form a close alliance with Science—to throw our hand upon the mane of Steam, and bid him comminute our most intractable of soils; it was reserved for us to ascertain the true value of water in the process of drainage, and in this and many ways to supply the necessities of a growing population. It must be remembered, however, that up to the present time improved mechanical appliances have done more for us than chemical investigation; implement manufactories have won more confidence than chemical laboratories. But now although much remains to be done by agricultural mechanics, the chief onus of rendering available the hidden riches of our soils, and of reviving the fertility of such as are said to be exhausted, rests with the chemist. Now while these gentlemen are engaged putting theory through the crucible of practice, the public should be reading. The disappointment which followed upon the announcements of Liebig would not have occurred had his auditors been prepared by any previous knowledge. And if the farmers would now save themselves from much and frequent loss, in consequence of occasional will-o'-the-wisp leadership, they must prepare themselves. ANALYSIS, at work here by himself, discovers a half truth; SYNTHESIS, in solitude yonder, discovers another half truth; these half truths, in the enthusiasm of the moment, are announced with all good faith by the proud parents as whole truths. The ignorant public receives them as such, and bewails the consequences. The intelligent observer meantime, on the vantage ground, recognises the natural relationship of the half truths, unites them, and enjoys the result.

There are questions now which demand our most enlightened consideration. England's agricultural supremacy dates, according to general opinion, from the inauguration of the four course system; but experiments are now being made which shake our confidence by tending to show that root crops, which were considered the source of fertility, the key-stone of good farming, may be regarded as the occasion of exhaustion. There are many other questions of great weight to be solved before long, but this is one pressing, as you will perceive by the report of the Rothamsted experiments, for immediate consideration, and requires for our own sake that we should be in some measure prepared to judge between truth and error. The first thing to be done is to become acquainted with the objects of chemical science, with the elements with which it deals, with the laws which regulate the combinations of those elements, and with the results of investigation carried out under the guidance of those laws. There are several books which afford good conduct to the student through such a course as this; but we know of none which carries the attentive reader so pleasantly forward, helping him over difficult technicalities, and through elaborate calculations, giving him possession of a clear and brief summary of all that has been accomplished to the year 1860, as the one before us. Dr. Anderson, as Professor of Chemistry in the University of Glasgow, is eminently fitted, therefore, to undertake such a work, and the more so since his knowledge of husbandry is pretty full. The work consists of 294 well printed pages, and is conveniently divided into 14 chapters; the first five of which, treating of the organic and proximate constituents of plants, the changes which take place in the food of plants during their growth, the inorganic constituents of plants, the soil, its chemical and physical characters are specially excellent, presenting matters difficult of explanation in an exceedingly clear and popular style. Seated in his armchair after the day's work, with an unmistakeable tendency to nod, the farmer would find a decided stimulus in them, more effectual than his wife's smelling bottle or his daughter's vinaigrette. Some writers overlay a clear subject with a cloud of words, he renders intelligible and interesting one naturally complex. At the same time there is nothing with regard to the agency of ammonia or of nitrogen in the vegetable economy which is new; we are not yet informed of the manner in which the spongioles gather their nourishment, whether solely through the medium of water, or by a species of licking action from the soil itself. All that is attempted is to present a clear view of the present position of agricultural chemistry before the reader, combined with a sensible digest of the ways by which it was attained. The information afforded in the seventh chapter, on Special and General Manures, will be new to most readers and interesting to all. The difficulty involved will be best expressed in the author's own words.

"It is admitted on both sides," he says, "that all

the elements of plant food are equally essential, and the controversy really lies in determining what practically limits the crops producible on any soil. The point at issue may be put in a clear aspect by considering the course of events on a soil altogether devoid of the elements of plants. If a small quantity of mineral matters be added to such a soil it immediately becomes capable of supporting a certain amount of vegetation, deriving from the air the organic elements necessary for this purpose, and with every increase of the former the air will be laid under a larger contribution of the latter, to support the increased growth, and this must proceed until the limit of supply from the atmosphere is reached. At this point a further supply of mineral matters alone must obviously be incapable of again increasing the crops, and it would thus be absolutely necessary to supply them with a proportionate quantity of organic substance. Liebig maintains that this limit is never attained in practice, but that the air affords ammonia and the other organic elements in excess of the requirements of the largest crop, while mineral matters are generally, though not invariably, present in the soil in insufficient quantity. Messrs. Lawes and Gilbert, on the other hand, believe that the soil generally contains an excess of mineral matter, and that a manure which is to bring out their full effect must contain ammonia or some other nitrogenous substance, fitted to supplement the deficient supply afforded by the atmosphere. In short, the question at issue is, whether there is or is not a sufficiency of atmospheric food to meet the demands of the largest crop which can practically be produced."

The chapter on the composition of animal manures, especially that part which treats of guano, possesses special interest at this time, and should be generally read. Dr. Anderson in furnishing a table which shows the analysis of samples of the highest and lowest quality of the genuine guanos, remarks concerning two specimens of Peruvian :—"It appears that the highest exceeds the lowest in value by nearly 3*l.* per ton. Of course this is an extreme case, but it is no uncommon occurrence to find a difference of 1*l.* or even 2*l.* per ton between the values of cargoes of Peruvian guano which are sold at the same price."

The chapter which explains the principle on which the value of manures is ascertained is very useful. How to arrive at the actual value of ammonia, insoluble phosphates, biphosphate of lime, sulphate of lime, nitre, potash, soda, and organic matter, whether separate or combined, he points out and affords much information which will facilitate the detection of adulteration, the fear of which now prevents many a man from using artificial manures.

In the concluding chapters are to be found the results of the latest experiments in Cattle Feeding. Not having more space for extracts, however, we bring our notice of Dr. Anderson's work to a close, with a cordial and particular recommendation of its merits to young men.

Revue Contemporaine :— On the Impoverishment of the Soil. Paris.

Macaulay's representation of the future by the picture of a savage sitting on a ruined pier of London Bridge gazing on the ruins of St. Paul's, has obtained a hold of men's minds which the historian probably little dreamed of. All kinds of parallel speculations have arisen out of it; and now it seems the contagious idiosyncrasy has crossed the Channel, and is busy turning heads crazy there.

We have before us one of the late numbers of a celebrated French periodical, the "Revue Contemporaine," in which some such extraordinary proposition is seriously discussed. Baron Ernouf, the author of the article referred to, having read two or three treatises about the action of phosphates upon vegetable life, seems to have conceived the notion that the most serious waste of that precious substance is its assimilation by the human race in the structure of their bones, which after death being carefully packed away in coffins are consigned to the grave far from the reach of vegetable life. This certainly is a new idea, which we commend to Mr. Mechi. Hitherto the worthy alderman has sounded the alarm in respect of the town drainage waters, which he so rightly recommends should be made available for agriculture instead of running waste and deleterious into the river and the sea. Baron Ernouf goes further, and deplores the loss of phosphates caused by the burial of the dead. Not, indeed, that he would recommend the use of human bones in the manufacturing of superphosphates, on the contrary he deprecates in the strongest language such an outrage, which he wantonly accuses the English of having committed on the battle fields of Europe, and especially on those of the Crimea.

It is scarcely possible to deal seriously with such preposterous nonsense as Baron Ernouf has served to the readers of the "Revue Contemporaine." To talk of the progressive exhaustion of the soil is much more absurd than to raise fears about our coal mines being soon exhausted of their contents, for the supply of phosphates naturally from the soil itself, and artificially from manures the sources of which are ever abundant and available, is too vast and too unlimited for any apprehension ever being entertained of its failure. Let therefore the fears of Baron Ernouf, which he expresses with much unnecessary pathos, about the respect due to the bones of our fellow creatures be set at ease, and let him moreover be assured that whatever may be the necessities of English agriculturists as regards the raw material of the superphosphates they so liberally apply to their crops, the instinctive decency which protects the bones of the human body shall never be outraged.

Baron Ernouf fully expatiates upon the providential discovery of the mineral phosphates of the upper green sand formation, and seems to look upon it as a panacea for the barrenness of the soil when that has been brought about by exhaustion. It is evident our author has not the least conception of the advantages of the deep cultivation of all but very light soils, nor of the inexhaustible supplies of the mineral constituents of the food of plants, stored in the deep layers of clay land. He is also evidently unacquainted with the use of superphosphates as applied to our root crops, and does not know how small is the quantity of phosphate and other inorganic bodies abstracted from the land by our crops as compared with their organic constituents. If he did he would not attach to this subject the undue importance which he would lead his readers to believe it possesses. Let us tell him that there is infinitely more phosphate wasted by the loss of the excrements of a single generation of the human race than is contained in their bones, and therefore it is much more rational to bewail with Mr. Mechi and his friends the waste of the town sewage, than with would-be philosophers to sound a false alarm that the world is to come to an end by a universal barrenness caused by the amount of phosphate buried in our cemeteries.

We shall not inflict upon our readers any lengthened examination of this ridiculously pretentious paper, we merely notice it to record another instance of that folly into which even men of ability and intelligence are sometimes betrayed. But what will our readers think of the following precious extract, in which the Baron gives us so remarkable a proof of the power of his imagination, and so high an idea of the nobleness of his feelings.

"Our observations have no personal sting, but we think we should fail in the discharge of a sacred duty, if we did not here dispense blame as well as praise, and, if we did not energetically upbraid modern science for its complicity in odious profanations. It must be however acknowledged, that practice had anticipated theory by several years. Since the commencement of this century pulverised bones had already been employed in English agriculture on a large scale; already the purveyors of the grinding mills had ransacked most of the great battle fields of the empire, indifferently exporting the bones of men as well as horses. Already the dust of the conquerors and conquered of Jena, and of Austerlitz, were fertilising the soil of the county of York, where agricultural chemistry, still in its infancy, was hesitating in its explanations of the power of these substances. The first who treated of this question (1830-32) went on a wrong tack when they denied or doubted the action of phosphate of lime on vegetation. It was only in 1843 when a series of experiments skilfully directed by one of the most illustrious agriculturists of England, the late Duke of Richmond, restored to phosphoric acid its importance, hitherto ignored, by demonstrating that the action of boiled or calcined bones, deprived of all or part of their fatty matter and their gelatine, to which at first had been exclusively ascribed their fertilising properties, was but little inferior to that of raw bones. In the meanwhile the industry of bone grinding assumed gigantic proportions, using without any scruple all kinds of raw material, and crushing full well beneath its indifferent and remorseless mill-stones the bones of Mecklenburg Oxen with those of Alexander or Napoleon the Great. If we may credit certain indiscreet revelations, these profanations even apply now to localities rendered illustrious by more recent battles, to mortal spoils scarcely cold in their graves. The immense graveyards of the Crimea have already been the prey of sacrilegious explorations; Magenta, Solferino await in their turn the visit of these vultures of industry!"

Such an extract needs no comment, its mere quotation suffices to give the measure of the Baron's knowledge of the subject upon which he has undertaken to write; and when towards the close of his laboured essay he gravely announces the discovery of beds of apatites in Estremadura as being only just now made, as news which bid us not despair of the ultimate extinction of the human race, we can easily appreciate the weight of his authority upon this and other subjects.

Of course the Baron claims the merit of the discovery of the fertilising properties of bones for his own country. "The idea of using crushed bones," he says, "belongs, in the first place, to France, if it be true, as it is asserted, that the first bony débris which were thus used came from a manufactory of articles made of bones which had for many years been established at Thiers in Auvergne. However, just as it has happened more than once with other important discoveries, the merit of this one remained at first without any result for us. It was only at the beginning of this century that the use of crushed bones began to spread in Germany, and thence passed into England, where it soon reached considerable proportions. A mill for crushing bones was established at Hull in the county of York; its profits were such that other establishments were erected in competition. It was about that time (1822—1825) when the profanations above alluded to commenced; the English purveyors did not even respect the battle field of Corunna!"

With this last extract we will take leave of the Baron. Any serious attempt to refute such baseless assertion would give his ludicrous paper an importance which it by no means deserves. We must, however, express our regret that a Review, which although it does not rank very high on the continent, frequently contains articles of undoubted merit, should allow its pages as a vehicle for the dissemination of such erroneous assertions and unfounded calumnies.

Miscellaneous.

Penny Readings at Colchester.—At the twelfth reading, on Friday evening, Mr. J. Pattison in the chair, the following pieces were read :—

Subject.	*Author.*	*Reader.*
Battle of Flodden Field ..	Sir Walter Scott ..	Mr. Geo. Wittey
The Raven	E. A. Poe	,, Sulley
Battle Hymn of the League	Macaulay	,, J. Barritt, jun
Ancient Mariner	Coleridge	,, A. S. Harvey
A Curious Law Case ..	G. A. Stevens ..	,, Sulley
A Burial Scene in Australia	Hemans	,, Warner
Goody Blake and Harry Gill	Wordsworth ..	,, J. Hurnard
Rural Felicity	Hood	,, Sulley

At *Sudbury*, the Rev. T. L. Green in the chair :—

Subject.	*Author.*	*Reader.*
The Death of the Old Year	Tennyson	Mr. G. Mumford
Richard and Kate	Bloomfield ..	,, Spooner
Mark Antony's Oration ..	Shakspeare ..	,, J. C. Lynch
Mountain of Miseries ..	Addison	Rev. W. Bentley
Wolsey's Lament	Shakspeare ..	Mr. G. Bridgman
Misadventures at Margate	Ingoldsby Legends	,, G. Mumford

Fertilising Compound for Agricultural Purposes.—M. A. F. Mennous, of Paris, patents a method of working up urine into manure. He takes advantage of Dr. Stenhouse's observations regarding charcoal. The absorbent power of gypsum is also made use of. The patentee places the urine to putrify in reservoirs closed by wire-gauze trays, containing a mixture of 2 to 5 quarts of pulverised vegetable charcoal, and 5 to 10 lbs. each of mould and gypsum. As soon as the mixture has become saturated with the gases, &c., it is taken from the tray and mixed with 25 gallons more urine, also 2¼ lbs. of each of the following ingredients,—phosphate of ammonia, phosphate of lime, ammonio-magnesian-phosphate, nitre, nitrate of soda, sulphate or nitrate of magnesia, common salt, and about 4½ lbs. weight of sulphate of iron or of crude sulphate of zinc and magnesia mixed in equal parts; he then adds 14 lbs. of gypsum, and, to bring the whole to a pasty consistence, 2 cwt. of burnt-clay is added. The mass is then dried and powdered. The process appears to be complicated, troublesome, and by no means satisfactory. Any method is more or less defective which requires us to add large quantities of such substances as gypsum and burnt-clay. Moreover, the valuable ingredients of urine may be separated by far more convenient processes. The patent is dated 4th January, 1860.

Drainage Outfalls.—Messrs. Bidwell & Brodie thus write to the *Times* :—The right of outfall through the lands of adjoining proprietors having been advocated at a recent public meeting of landed proprietors, and subsequently by correspondents, and in a leading article in the *Times*, from which it may be assumed that no such power exists, we beg that you will admit into your columns this letter, stating the fact that such right is granted and exercised under the powers of "The Landowners West of England and South Wales Land Draining and Enclosure Company's Act, 1848." *Exeter, and* 30, *Parliament Street, Jan.* 3.

The Act for Preventing the Adulteration of Articles of Food and Drink.—The various Boards of Works are busily considering the best means of securing to the public the advantages of this important measure. Public Analysts will be appointed forthwith in every locality; and no doubt properly qualified persons will be sought out with care for this highly responsible duty. We are glad to see already, that the selection will be made in many cases in strict accordance with the rule of appointing not the local self-seeker, but the most approved candidate.

Phosphates from Paris.—2000 tons of phosphate of fossil lime, pulverised, were sold in Paris last week for Ireland. This phosphate may be used as a manure, either in its natural state or in powder, or mixed with stable dung, according to the nature of the land to which it is to be applied. *Times.*

A Village Hospital.—The management of cases of accident and severe illness amongst the poor in rural districts constantly offers the most serious difficulties to the surgeon. If there should happen to be a large hospital near at hand, or within a convenient distance, the difficulty is quickly solved by transporting the patient to that establishment, where all his wants are anticipated, and the necessities of his case supplied. In remote villages, in isolated districts, and in localities where the hospital is far distant or its accommodation insufficient, the patient must suffer greatly from the absence of all the appliances and the kind of nursing and attendance which only such an institution can afford. A well-devised effort, made at the village of Crawley, successfully meets these short-coming in that district, and may serve as a model to be usefully copied elsewhere. The Crawley Village Hospital consists of a cottage, which the rector lends rent free. It is designed for the accommodation of the poor when suffering from sickness or from accident. The establishment is composed of a nurse and a servant; a lady has also promised the benefit of her assistance in special cases. The institution has now been working a year, during

which period 22 cases of accident and disease have been successfully treated at an expenditure apparently not exceeding 60*l*. The number of beds is now fixed at six. Placed in the midst of a healthy atmosphere, and each of them the object of anxious and special care, the patients are favourably situated for cure. Crawley Village Hospital is a sensible and useful development of local philanthropy, for which we desire permanence and a rich fruition of useful works. *The Lancet.*

Crops in Scotland.—By the middle of September no Wheat was ready for the sickle but what was sown after fallow or Potatoes, in the earliest districts; while in the middle and higher districts of the country, the most of the Wheat crop was quite unfit for the sickle. Generally speaking, we may say that there may be an average number of bolls of Wheat in Scotland, but the quality will be very deficient; that is, supposing that none of it shall be destroyed in the harvesting. The Barley came much sooner to maturity than any of the other cereals, so that, after it was cut down, there was a cessation of reaping for some time on most farms, till the other crops were ready. The most of the Barley crop was cut down in the agricultural districts properly by the beginning of September. It is, both in point of bulk and quality, above an average. The Oats did not ripen so rapidly as the Barley, but much more so than the Wheat. Little of them was cut before September. On dry soils, or those in high condition, and where there was a liberal application of light manure, the crop is a full average; but on wet soils, or those in low condition, it is deficient. If it be well harvested, the pickles are so well filled and plump that the quality will be above an average. Beans are bulky and well podded, but, from the lateness of the season, may yet be much injured. There never was a finer crop of Turnips throughout Scotland than there is this year. From the moment they brairded till now, there has been no cessation to their growth, and there is at present a much larger crop of them, though far from maturity, on the ground, than there was last year when the crop was at the fullest. What is most to be dreaded is the Swedes running to seed, of which some fields already show unmistakable signs. The Potatoes are also a very fine crop, and comparatively sound. They are being sold freely by the acre, at prices ranging from 16*l*. to 26*l*. per imperial acre. *Quarterly Journal of Agriculture.*

Calendar of Operations.

JANUARY.

BORDER OF THE FENS.—The late harvest has driven autumnal work into a corner, so that while scarcely able to complete essential routine, we have been obliged to pass by much that ought to have been done, but confess that what with wet w ather, short days, and pressing business, we have not got on so forward with our work as we could wish, we just managed to finish getting and securing all our Mangels before the frost set in. We thought we had been very wise for not pulling and cleaning them so soon as some of our neighbours. This opinion held good up to the latter part of November, when they should have been all finished; after that time they were difficult to clean, and the weather being wet and cold they ceased to grow. Like many other farmers we could not sow all the Wheat we desired to put in, though pushing forward under more difficulties than we ever before experienced, we have about 30 acres up, and most of it looking well. Above 30 acres more are sown, the fate of which we anxiously await, but imagine that the snow has made it safe; other 20 acres may be done in Feb., or give place to spring corn. Of the matters *not* done the chief is ploughing forward enough, for if frost and snow will do land good, it will do ploughed land 10 times the good it will to any other sort; and so we have drifted into winter with much work to do and unable to move, excepting the carting manure, cleaning out dikes, claying and hedging; these with threshing will scarcely serve a full complement of labourers during a protracted frost; therefore we may, if this severe weather continues a few weeks longer, expect much floating distress, as the middling hands are thrown upon their own resources. Stock has not done well this year. Lambs appear to be weak. It is considered that winter food such as Coleseed Turnips, &c., is more plentiful than last year; but hay and Clover are not generally of so good quality as usual. Wages are generally reduced to 11*s* per week. This we regret to say is in some cases owing to the depression of circumstances of farmers, for scanty yield and bad quality of corn will lighten the pockets of many of them this year. *J. W., Peterborough.*

SOUTH NORTHAMPTONSHIRE.—Field work has been greatly retarded, and on all but the driest soils is in a very backward state; on the strong soils a great part both of the fallows and Bean stubble could not be planted with Wheat, and it is now doubtful if much of it can come under that crop in 1861, consequently a greater breadth of Barley and Oats will be the result. The unfavourable season has prevented the fallows from receiving the requisite dressings necessary to prepare them for the favourable development of the Wheat plant, and where sown early, they generally present an unfavourable appearance; on many of the dry soils the young Wheats have come up thin, and weak possibly from the inferior quality of a great part of the seed used this season. Sheep on Turnips have made but little progress owing to the dirty state of the land Should the present weather continue long keeping will in general be scarce, as the Turnip crop is considerably under an average. The breeding stock which were able till last week to fight their way on the Grass lands, will now require some assistance in the shape of Turnips, cake, or corn, with a liberal allowance of chaff; the young cattle in the straw yards with half a bushel each of cut Swedes per acre and plenty of cut chaff, three fourths straw to one fourth hay, are doing well. The Wheats on the best farmed lands turn out well in quantity though of inferior quality, and weigh less per bushel than we have known them for many years. We have a good demand for dry samples at steadily advancing prices, the condition is considerably improved of late; still there are many parcels which have to be kiln dried before they are fit to be ground; the prices vary from 41*s* to 62*s*. per qr. of 62 lbs. per bushel. Barley generally yields well, but like the Wheat the quality varies very widely, as shown by the prices, which reach from 28*s*. to 45*s*. per qr.; good malting qualities are in active demand at an advance on previous rates. As the season advances they will either command much higher prices, or the maltsters must be content with a lower class of Barley. *G M., Overstone.*

WEST SUSSEX: *January* 7.—We are now in the midst of a very sharp frost, and without any covering of snow to protect the Turnips and young Wheat plant, and both need protection. The Turnips are very small, presenting little besides tops, which are now going. This does not improve our supply of food, and good hay, which is scarce and rapidly diminishing, is likely to be dear. Wheat having been sown for the most part late looks very weak. Much of it is hardly up, and it is but little able to stand the sharp black frosts that we now have. On the 19th of last month about 9 inches of snow fell in 4 or 5 hours, followed by very severe frosts, during which the temperature fell from 4° to 5° below zero, but the snow was an effectual protection to everything in the ground. On the night of the 29th we had a very rapid thaw, with a hurricane of wind and rain, and all the lower lying fields and buildings were flooded, in some places 2 or 3 feet deep. The thaw subsided, and was succeeded by frost after one or two mild days. Lambing of Down ewes has now begun, and so far, I believe, has been attended with good luck; but, as may be expected there are a good many lame sheep, and in lambing lame ewes are not likely to do well. Good beef and mutton appears to be getting scarce, and in our last market realised high prices; prime beef from 5*s*. 2*d*. to 5*s* 4*d*., and prime mutton as high as 6*s*. to 6*s*. 2*d*. per stone, of which there was but little. Our market is more than usually full of corn, but most of the new is in very bad condition, and the prices for new varies from 44*s*. to 68*s*., while old was sold as high as 76*s*. per qr., but this weather will improve the new and make it worth more money. Good Barley is in more demand, and is scarce; even grinding samples are dear. Oats are about the usual price, from 22*s*. to 26*s*, but the quality is better than usual. Not much can be done in the fields at present except dung carting. All work is backward, there being very little stubble ploughed, and some farmers have been unable to get in their intended complement of Wheat. And in looking back upon the past year we can hardly conclude that patience was a virtue. We are often guilty of doing things before they are due, but had we not pushed a point, we should not stand so well as we do. Beginning with Wheat sowing in 1859, what was not got in by the middle of October had to wait till late in November, which on heavy land went in but indifferently, and did badly all the season. For sowing spring corn we had rather more time, but for Mangel we were tied to 7 or 8 days, and on heavy land we hardly had a time for Turnip sowing. For hay making we had one bare fortnight, and many who let that slip, have had cause to regret it. For harvest we had only 10 days, and as a matter of course much corn, even in the dry weather, was carted too quick, and much had to be taken in afterwards in worse order. And now in Wheat sowing again we have had only our usual 10 or 12 days of seasonable working weather, and with the Wheat yielding badly and little good food for cattle, our prospects are certainly not promising. We shall look anxiously for an early spring. In case we get that blessing we shall have to be careful, for as there is no Trifolium in this part of the country that I know of, we shall have to fall upon the young Clovers, as we did last year, and thus draw upon our next Hay crop. As may be expected, lean stock is low, and has a dull sale. These markets are likely to continue down for some time. *G. S.*

Notices to Correspondents.

BRETON COWS: *R.* The only means of obtaining these animals at a sum proportionate to their value is to make arrangements with some reliable French agent to send them over. Should several be required, it might be more economical to make a personal visit to the market. Before any expense is incurred in this direction, however, would it not be well to ascertain how far this fancy for Breton cows is allied to the popular fancy for Tom Thumbs, Exmore Ponies, and specimens of dwarfed vegetation, which proclaim a sort of reaction from the efforts to obtain great size, or nearly maturity, in our animals. To produce a certain amount of milk and butter, a certain amount of food must be consumed, whether the cow is great or small, and unless for the purpose of supplying the children of a family with a miniature dairy as a fit auxiliary to their doll's establishment, scarcely any useful results can be expected from the employment of Breton cows. Indeed, it is a question worthy of R.'s consideration, whether the Goat would not prove a more profitable investment.

CESSPOOLS: *Cymro* should read Mr. Moule's pamphlet published by Messrs. Bradbury and Evans. Any ordinary earth or mould will deodorise the contents of cesspools if they are mingled with it.

CHICORY FOR GRAZING: *H H.* The soil should be prepared by thorough cleaning early in spring, and a good coat of rotten dung applied. Drill 4 lbs. of seed per acre in March in rows 9 inches apart. Single them out when 5 inches high to 6 inches apart. The crop will continue luxuriant under good management for six or eight years. After full growth is obtained cut it down before flowering and carry it to stock in the house. It may also be depastured with sheep, but the other is the more productive use of it.

DRAINAGE: *W.* By all means carry your drains in the direction of the inclination, otherwise, because water will not run up hill, one side only of your drains will work. In your clay by no means allow the distance from drain to drain to exceed 25 feet. You must scarcely expect to do your work, 4 feet deep, at less than 4*l*. 10*s*. per acre, considering the price of your pipes, and the stony subsoil. If you employ 1½ inch pipes for the first length of each drain, using 2 inch pipes when the accumulation of water shows it to be necessary, the outlay will be somewhat reduced. The article Drainage in "Morton's Encyclopædia of Agriculture" will afford much valuable information.

EMIGRATION: *Jackson.* We are unable to answer your question. You had better acquire experience on the spot before investing your capital; and we should recommend avoiding any partnership except one made there after experience both of the work and of one another under it.

FELT COVERING FOR HOT PIPES: *C L.* is in want of some felt, or other suitable material for covering a galvanised iron steaming pan and some iron pipes for the conveyance of steam. Can any of our readers give their experience of such things? [Croggon's felt is obtainable at 2, Dowgate Hill, London, E.C.]

FOOD FOR PIGS: *A R P.* The brine we consider would have an injurious effect on the pigs, the extent of which depends on the quantity of saltpetre and salt consumed.

PROGRESS: *X.* As near as we can ascertain, during the last half century the corn produce of this country has increased 70 per cent., and the meat produce about 100 per cent.

SMALL FARM: *J G S.* If you are near a good market for milk you cannot do better than keep cows, and as the arable land is probably more than you will want for that purpose you might in part carry out your scheme of a market garden.

WOOL: *C.* We have known one fleece of long wool, weighing 14 lbs., to be manufactured into 12 pieces of the stuff called Alpaca, each piece measuring 42 yards, the breadth being 37½ inches. Here we have from the back of a single sheep, with a subordinate admixture of cotton, the astonishing result of 504 yards of fabric, or sufficient to afford dresses for some 36 ladies.

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Greenhouse and Flower-pot Sticks Varnished:—1 foot, 3*d*.; 1½, 4*d*.; 2, 5*d*.; 2½, 7*d*.; 3, 10*d*; 4, 1*s*. 6*d*. per dozen. Dahlia Sticks Varnished, per dozen:—3 feet, 1*s*. 6*d*.; 4, 2*s*. 3*d*.; 5, 3*s*.; 6, 3*s*. 6*d*. An allowance to Nurserymen.

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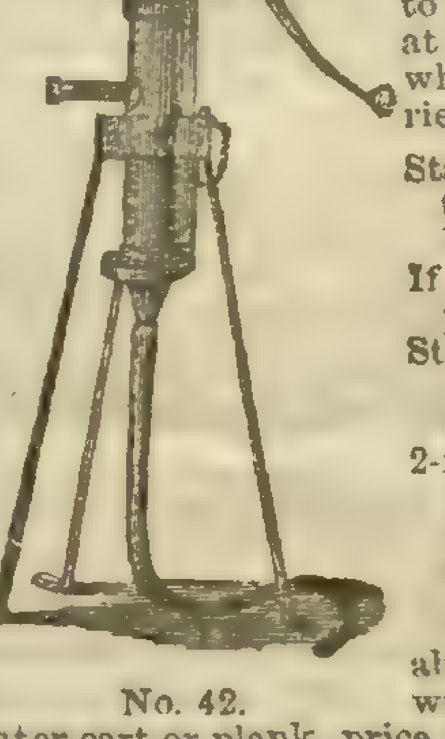

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The Gardeners' Chronicle.

SATURDAY, JANUARY 19, 1861.

THERE are those who are apprehensive that in advocating some fixed and rational system of EDUCATION FOR YOUNG GARDENERS we are drifting towards Competitive examination. They may dismiss their fears. We have no intention of the kind; nor indeed would the case admit of it. What we wish to see, what all intelligent master gardeners wish to see, and every employer of gardeners wishes to see, is that the rising generation should be purged of the ignorant pretenders who must soon infest the market if something is not done to prevent their ingress. This can only be effected by establishing some recognized method of determining qualification. The method is easy; in the recognition lies the difficulty. In the first instance those who apply themselves to a prescribed course of study will be sneered at by the ignorant and lazy; such as distinguish themselves must make up their minds to the jealousy of unsuccessful comrades; and all who obtain good situations as the reward of meritorious exertion are certain to be reviled by those whose sloth or incapacity keeps them on the outside of the pale of recognized merit. We speak thus plainly because it is well that young men should know what to expect as a part of their success. But on the other hand the best places in the land will open to them; they are certain to secure the respect of their employers, provided their attainments do not turn them into coxcombs; and as for envy, hatred, and malice, if they cannot hope to escape them they must remember that such evil passions are the constant attendants upon distinguished proficiency in all the walks of life. They will also have the proud consciousness of having contributed to drive out of the field a class of men who have no claim to the name of gardeners; the inevitable effect of which would be, by reducing the supply, demand remaining as it is, to raise the wages of the well qualified.

That formidable difficulties have to be encountered we should see clearly enough from our unpublished correspondence, even if we had no personal acquaintance with the subject. Two more especially deserve to be noticed. First and foremost is self-sufficiency, which leads young men to fancy they are well informed when they are in reality extremely ignorant; and next comes the ill-will of some head gardeners who dread the consequence of their men being better informed than themselves. Nor is this all. It cannot be denied that the desire to gratify the wishes of others, and the easiness of temper which leads men to give recommendations that are wholly undeserved, are in no small degree the causes of so many young men obtaining places as gardeners, without possessing in even a moderate degree the requisite qualifications. Were the value of a strict but reasonable examination once recognised these evils would ultimately disappear, for no rational employer would engage an untried man without a certificate of his fitness. In a letter lying before us the writer complains that he "cannot get young men to attend to their duties, or cannot keep them in the garden at night; they are continually running off to the town or village, or servants' hall, or the stables; this night gossip is preferred to study. Dark as the picture is it is but too common, as a large proportion of the head gardeners in England will affirm as their experience. But where," adds the writer, "does this evil originate? I answer, in the present system of manufacturing young gardeners. A boy, one of a large family, is taken into a garden. Mrs. So and So, or Lady So and So

wishes Rogers or Jones would do it; it would be such a charity, his mother is such a nice woman, or they are such honest people. Well, the boy is taken to weed, sweep walks, run errands, &c., he grows up a strong youth, a hard worker, keeps a favourite with my lady, who wishes Jones in due time to apply to the nurseryman to get him another situation, and away he goes—a complete gardener. Another and a numerous class is found where there is a head gardener and a labourer kept, or two, with a strong boy for wheeling coals, clearing fires, mowing Grass with machine, &c. The lad gets handy, and aspires to be a gardener. Through his master's interest with the nurseryman or the boy's own exertions he obtains another situation where they want an active hard working young man, and he goes to swell the crowd of incompetence. Another class is formed by village boys who go to weed in a garden, clean knives and shoes, assist in stables, attend cows and pigs, &c. Such a youth likes gardening—is recommended by his master to a friend who has a larger establishment as an obliging hard working youth. Again how many have nearly arrived at manhood before fortune has destined them to labour in a garden, who remain picking up a bit here and a bit there, and are presently pushed into first-class situations in England, a long list of whom I could name. Now what is the result of fostering this system,—not that we have no bright exceptions, not that amongst the above classes there have not been a good proportion of clever young men who have devoted their leisure to self improvement, and become good practical gardeners—but what about the large remnant? Here is the drag—youths with little or no education, kept at home till 18 or 19, working in the gentleman's or vicar's garden, their evenings spent in street or village gossip; when those hard working youths enter on a situation, their minds have never been cultivated—few ever give their minds to study."

Nothing whatever can put an end to such a system except a conviction in the public mind that no *untried* man ought to be employed unless he produces a certificate of proficiency up to a certain point, such as, or similar to what, LINAGER proposes. That it will eventually be insisted on we do not doubt. Nothing indeed can be more satisfactory than to see how unanimously, with a few exceptions, our correspondents agree in the indispensable necessity of instituting some positive test by which a man's fitness to be put in charge of a garden can be ascertained. Old and young are of the same opinion. That the dissenters should dissent in no way surprises us when we look at their language, writing, and orthography.

Among the methods adopted for preparing young men to become gardeners, the most usual, at present, is for a head gardener to require a sort of apprentice fee, in consideration of which he undertakes to teach "the art and mystery" of the business. There are great differences of opinion as to the effect of this plan. Some complain that after paying the fee they learn nothing; others think it ought not to be required under any circumstances whatever. Some, on the contrary, maintain that it is the only plan available generally, and that no one ought to have a gardener's place who has not served his apprenticeship, in proof of which they send us letters which are in every respect most discreditable both to the writers and those under whom they have served their time. Whether or not the apprentice system is allowable or advisable depends upon two principal considerations. In the first place, is the system permitted by the employer of a head gardener? and secondly, is the head gardener willing and able to teach that for which the fee is paid? If these questions are answered in the affirmative no reasonable objection can be offered to the system, though it ought to be merely ancillary to a formal examination *by unprejudiced persons* as to the proficiency of a candidate. There can be no reason why a head gardener should not be paid for the information he gives provided his employer permits it: and it is, we think, bad policy to refuse permission if the head gardener is known to be a competent man. His direct pay is too often so small, in comparison with that of others, that the increase of income arising out of fees is of serious importance to him. Moreover, it ought to have the effect of securing the very best class of young workmen, and of identifying their interests with those of the head gardener. We must however repeat that some check upon the system is demanded in the public interest, and that check is a formal examination. For it cannot be denied that there are many in search of employment who have been apprentices, or what are so called, who have derived no kind of advantage from their master's instruction, if he has ever given them any assistance beyond a lodging and their weekly wages.

For ourselves we for the present dismiss the subject. We have pointed out what appears to be the interest of both gardeners and their employers, and it is for others to organise some system of testing proficiency if they think fit.

A SHORT time since mention was made in the *Gardeners' Chronicle* of a method of forcing purple Lilacs to bear white flowers in winter by growing them in the dark (see p. 1060, 1860). We have now before us two reports upon this curious subject by M. DUCHARTRE, from which we condense what follows. It appears that the inventor of this method is M. LAURENT Sen., a Paris gardener living at No. 88, Rue de Lourcine, who has been astonishing the world of fashion by his magnificent winter bouquets or rather sheaves of Roses and white Lilacs, which had all the freshness and fragrance of spring, and which he continued to produce from December 22 to March 22.

The establishment in which this work is carried on is of considerable extent. There are 20 glass-houses, each of which, if a lean-to as is usually the case, is 5 or 6 yards wide, and slopes to the south. Sixteen of these houses are heated with hot water; four are not heated at all. Altogether they are more than 2000 yards long. The interior consists of two unequal beds with planked sides, sloped to correspond with the slope of the roof, and about a yard off it, with three very narrow paths. Twelve thousand Roses are planted in the beds; 20,000 more are kept in pots for the convenience of sale; and there is still a reserve of 20,000, besides which he forces 15,000 Lilacs.

He begins forcing Roses on the 15th September; has them in flower by the 4th November, and continues to take a crop of flowers till May. From 50 to 60 bouquets of 12 Roses each are sent daily to the Flower market; the pot Roses are used in the decoration of balls and grand entertainments. For cutting his long experience has taught him that no sorts are equal to Souvenir de la Malmaison, Gloire de Dijon, Saffrano, Lamarque, Canari, Mrs. Bosanquet, Cramoisi supérieur, Baronne Prévost, Louise Peyronnet, Auguste Mie and La Reine, according to the reporter to the Imperial Horticultural Society; and for pot cultivation Rose du Roi, Quatre saisons, Mousseux la Reine, Baronne Prévost, Aimé Vibert, Madame Hardy, and Céline Dubos. It is important to add that many Roses are totally unfit for forcing, among which is General Jacqueminot. M. DUCHARTRE adds Jules Margottin, Laffay, Jacques Lafitte, Triomphe de l'Exposition, Berceau imperial, and a few others as good sorts, and states that the Souvenir de la Reine d'Angleterre, with the three Teas, Lamarque, Canari, and Saffrano, are most especially valuable.

As to Lilacs, it has been found by experience that while that called de Marly is blanched without difficulty as well as Charles X., the Persian sorts will not blanch at all. Of the first we are assured that bunches are produced more than 8 inches long, broad in proportion, and perfect in form; and so strongly are they grown that such bunches with their ends in water will keep in a warm sitting-room for several days without undergoing any appreciable change.

Concerning the manner in which the blanching operation is managed, M. DUCHARTRE gives a very clear account. It seems that the great point to attend to is not to interfere with the usual method of forcing until the flowers are preparing to open. It is well known that their corolla, however deeply it may be coloured eventually, remains colourless so long as it is enclosed in the calyx, or even longer; but that as soon as it begins to expand, its colours are rapidly developed, *if exposed to sunlight*. This must therefore be prevented by transferring the Lilacs to a dark place before there is any sign of their opening. But in doing this there is the risk of rendering the leaves and green parts yellow, weak, and flaccid. Here a well known fact in vegetable physiology is turned to account. The green colour of leaves and other parts is caused by the presence in their tissue of a resinous grumous substance called Chlorophyl, which rapidly acquires its colour even in very weak light; on the other hand the matter which gives the blue, red and violet tints to flowers is a fluid which will not easily lose its primitive whiteness. Here lies M. LAURENT's secret. He sinks his Lilacs a yard deep in the open border of a house facing the north, and therefore cut off from every ray of sunshine. For as long as is necessary to open the leaf-buds and to bring on the production of bunches of flowers he keeps his plants in the diffused light of such a situation, at the same time forcing them as hard as he can. Weak as the light must necessarily be, it is sufficient for the formation of Chlorophyl in the green parts, and consequently to give them the necessary solidity. They are then of the pale green of leaves unfolding naturally in the spring. This is the first stage of growth.

When the Lilacs are ready to spread open their bunches of flowers, they are placed in almost constant darkness by means of wooden shutters painted with tar; the forcing temperature still being kept up. But a shutter is taken off here and there for a few hours each day, and the feeble light thus admitted is found to preserve the greenness of the leaves without causing the flowers to colour. And we are assured that nothing can exceed the pure white of the flowers or the rich green of the leaves thus produced. It would therefore seem that the absence of light was the sole cause of blanching the Lilac flowers; but M. DUCHARTRE suggests with much reason that the great heat of Mr. LAURENT's forcing houses has something to do with it, by preventing the formation of the colouring matter of the Lilac. In fact he found in the middle of March in the establishment of M. BERTHELOT, nurseryman, 4, Rue des Fossés St. Marcel, small plants of the purple Charles X. Lilac producing bunches of white flowers in a perfectly bright house where the heat was kept very high. In this case the cultivation was the reverse of M. LAURENT's, and yet the result was the same. He also suggests that another very powerful agent in the blanching process is in both cases the exclusion of air. It seems that these French forcing houses are not ventilated. And M. BERTHELOT states that when a square of glass in his house is broken or cracked the flowers next the aperture immediately become coloured.

One circumstance attending the blanched Lilacs of M. LAURENT is not a little remarkable; when they are once cut they are insensible to the action of either light or air, and never gain colour.

Of course the length of time required to force them depends upon the time of year. The nearer they are to the natural time of opening the more quickly they expand. Thus in November they require some days more than in January, and in January more than in February and March. Fourteen days seem to be the average.

AMONG the numerous signs of progress in Canada is the establishment of a BOTANICAL SOCIETY. At a large and influential meeting held at Queen's College, Kingston, on the 7th December, at which we observe the names of Professors LAWSON and LEIFCHILD, it was unanimously resolved to organise a Society for the advancement of Botanical Science in all its departments—Structural, Physiological, Systematic and Geographical; and the applications of Botany to the useful and ornamental arts. Periodical meetings of the members to be held in Kingston during winter for the reading of papers, and field meetings during the summer for personal investigation of such localities in Canada and other American Provinces of Great Britain as may be arranged from time to time. In addition to these means the Society will seek to promote its objects by correspondence; the mutual interchange of specimens among the members; experiments on the indigenous and domestic plants of Canada; the introduction and distribution of new plants and seeds adapted to the wants of the country; the encouragement of Arboriculture, Forest-Conservation, and the culture of Fibre, Dye, Oil, Food and Medicinal Plants; together with the publication of Transactions, embodying the results arrived at and the information brought together by these means. The ultimate establishment of a Botanic and Experimental Garden is to be held in view as an important means of carrying out the Society's objects. In the meantime, such seeds and plants sent to the Society as are likely to become useful to the country, are to be experimented with and reported upon by special committees of members.

THE sudden death of Mr. BECK of Isleworth is an event to be deplored by all who knew him. He was among the most enthusiastic and successful of Florists, and one of the creators of the modern race of Pelargoniums; as a cultivator he was remarkable for his skill, as has been shown by the high position his plants occupied at the Metropolitan shows; as an employer of labour he set an example to all in his neighbourhood; and

manufacturer of slate for garden purposes he was unrivalled. As an occasional contributor on practical subjects to Horticultural periodicals he did good service; and his *Packet of Seeds saved by an old Gardener* is one of the best jeux d'esprit in Garden literature. Mr. BECK died Jan. 15, aged 57 years, the day after the death of his youngest daughter.

NOTES ON THERMOMETERS.

IN extreme conditions of the weather, as regards heat and cold, more than usual attention is paid to the indications of the thermometer. It is of course desirable for the sake of comparison that these should in all cases be correctly noted. In order to do this it is necessary that the principle of the instrument should be clearly understood; but we have reason to apprehend that it is not so by many who ought to be well acquainted with it. Errors may consequently arise, either in placing the instrument, noting its indications, or from not being able to perceive its getting out of order, for this will sometimes happen, although it may have been obtained from one of the best makers. When so much is laid out on heating apparatus every gardener ought to study well the nature of heat, and of course the *thermometer*, the *measure of heat*, as its name implies.

In general, all homogeneous bodies expand by heat, and contract to their original bulk when the heat is withdrawn. To this law, water near its freezing point is perhaps the only exception. The substances commonly used for thermometers are mercury and spirits of wine; the expansion and contraction of the former is the most uniform under different degrees of heat, but the latter affords the most convenient means of registering the lowest temperature at night.

So long ago as 1600 a kind of thermometer was invented by Santorio, a physician at Venice; and about the same time a somewhat similar one by Drebbel in Holland. During the seventeenth century there was still no perfect instrument of useful application produced, philosophers not being agreed as to a fixed point for the scale. Hooke proposed for this the freezing of water; Halley the temperature which is found to be uniform summer and winter at a certain depth in the caves under the observatory at Paris. Newton recommended two fixed points, namely the freezing and boiling of water, and it is a proof of the soundness of his ideas on the subject that these are the points adopted at the present day. The space on the scale between them is, however, variously divided, the number of degrees according to Reaumur's scale being 80, Celsius or the Centigrade 100, Fahrenheit's 180.

According to M. Haeghens, *Annuaire Météorologique de la France*, Roëmer substituted mercury for spirits of wine, and invented the scale since generally known as Fahrenheit's. We may here observe that Roëmer must not be confused with Reaumur, as is apt to be the case, for both were concerned in improving the thermometer. It appears from their biographies that Olaus Römer (or Roëmer), a Danish astronomer, was born at Arhusen, in Jutland, in 1644. He was 10 years in France, where he was appointed by Louis XIV. one of the tutors of the Dauphin. On returning to Copenhagen he became Professor of Astronomy at the University, and was at the same time employed in reforming the coinage, regulating the weights and measures, and in making or repairing the public roads—doubtless a very fit person for planning them, for he had been for some time employed on a survey of the kingdom of France. Useful also in mechanics, he invented and proposed the epicycloid curve as the proper form for the teeth of wheels, in order to destroy friction.

René Antoine Ferchault de Reaumur was born at Rochelle in 1683. He contributed many papers to the Academy of Sciences on various subjects. Among other experiments he tried artificial incubation; but in this was not very successful, probably from not having at command in those days a hot-water apparatus adopted for the purpose. He was the inventor of *Reaumur's* thermometric scale.

To return to Fahrenheit's thermometer. Boerhaave ascribes its invention to Roëmer. "Thermometers of this construction began to be made by Daniel Gabriel Fahrenheit, a native of Dantzic, who afterwards lived at Amsterdam, in so admirable a manner that he has generally been considered the original inventor; they were speedily spread over the north of Europe under his name, and still maintain their ground in several countries, especially in Britain."—*Library of Useful Knowledge.*

On taking up one of Fahrenheit's thermometers it will be observed that the zero of the scale is 32° below the freezing point, that is to say, there are 32 divisions from 0 to freezing; and from the latter to the boiling point of distilled water, there are 180 similar divisions, making in all 212°. The zero of this scale is arbitrary, and corresponds with no fixed point. In the Philosophical Transactions, vol. xliv., it is stated to have been fixed from "the lowest cold observed in Iceland." Roëmer must have visited that island in summer, otherwise he would have found a zero point low enough to render minus degree unnecessary, which as our columns can testify, has not been the case in our own climate this winter.

Perhaps his scale might have been advantageously divided thus: 50° to the freezing point; and thence to the boiling point 200°. By this arrangement the zero would be 45° of the present scale below freezing; and an approach would be made to the Centigrade scale, inasmuch as 1° degree of the latter would be exactly 2° of the proposed scale. Had this been done originally, we think it would have been well; but now so many observations have been made according to the present scale that any alteration of it can scarcely be attempted.

The Centigrade scale has its zero at the freezing point, and thence 100° is the boiling point. When the instrument indicates below freezing, the degree must be marked minus (—); and consequently the columns of temperature in registers consist in many cases of + and — quantities, which have to be picked out from each other and added separately, the difference of the sums being the sum of the column.

The same inconvenience attends the adoption of Reaumur's scale; moreover its degrees are too large, each of them being equal to 2¼° of Fahrenheit.

Registering Thermometers.—Of these there are several kinds; but the best, as now improved are those constructed on Rutherford's principle, which is this:—They are placed nearly horizontally. The one for registering the maximum degree of heat is a mercurial one. Whilst the mercury expands by heat it pushes an index before it so long as the heat increases, that is until the hottest period of the day; then the mercury begins to recede towards the bulb, but the index remains; and its end *next the mercury* marks the point of highest temperature reached.

The minimum thermometer, or that which indicates the lowest temperature, is a spirit one. Its index is a very small enamel cylinder, with a minute knob at each end; it always, or should always remain in the spirit, so that when the latter recedes towards the bulb as the temperature becomes lowered, the index is drawn back along with it. When the temperature rises the column of spirit proceeds along the tube; but it leaves the index behind, and, let it be observed, the end of the index *farthest from the bulb* marks the lowest point to which the temperature had fallen.

The action of these maximum and minimum, or day and night thermometers, as they are sometimes called, is extremely simple; and with ordinary care they are, as now constructed, not liable to get out of order. Formerly it was not so. The index of the maximum one was a bit of steel wire which it was intended the mercury should push before it. But sometimes it got coated with the mercury and would not move. A small bit of ivory or of enamel was introduced between it and the mercury; neither answered the purpose. The new metal *aluminum* was tried with tolerable success; but that of *Graphite*, adopted by Mr. Newman, is perfection. It does not require the magnet to draw it back—in fact it will not obey it. By merely turning the extremity of the tube upwards the graphite index easily and readily slides down till it comes in contact with the mercury, when it is then ready for a fresh observation.

The minimum thermometer is liable to get out of order, as is well explained in the following communication which appeared in the *Times*, from Messrs. Negretti & Zambra. The remarks apply not only to their instrument but also to others on the same principle.

"Some of the readings published have certainly been astounding. We hear of 10°, 15° and even 20° below zero,—52 of frost. That the cold this season has scarcely been equalled is certainly true, but there are sources of errors that minimum thermometers are liable to, and it is to such errors we wish to call the attention of persons keeping meteorological registers, for in some instances it may be to a deranged instrument that we should attribute some of the extreme readings that have been noted. A minimum thermometer consists of a glass tube, the bulb and part of the bore of which is filled with strong or pure alcohol. During very hot weather evaporation takes place on the surface of the alcohol, but, the tube being hermetically sealed, the vapour does not escape, but it is (on a decrease of temperature) condensed and invariably deposited at the extreme end of the tube farthest from the bulb; we have known instances of 10, 15, and even 20 degrees of alcohol being thus left at the upper end of the tube. It follows as a matter of course that the readings taken by such an instrument will be too low by the amount so evaporated and detached from the indicating column. The alcohol in the thermometer may be very visible, it may even be highly coloured, but the portion left behind by evaporation, and deposited as described, will be so transparent and colourless that it requires a practised eye to detect it. The following simple rule should be observed in suspending minimum thermometers:—The thermometer should be suspended in such a position that the bulb shall be at least 1 inch lower than the upper end of the instrument. It is generally believed that the thermometer is to be hung perfectly horizontal; this is wrong. If the thermometer is placed in the position we have described, the vapour, when condensing, will drain back to the main or indicating column; and the thermometer, if a correct one, will always give correct indications."

Six's thermometer registers the extremes of both heat and cold, and has been, and is still, much in use; but it is expensive, complicated, and not easily righted when it gets out of order, which it is apt to do. To it however we owe the first records of registered maximum and minimum temperatures, as appears from the following extract from *Howard's Climate of London*:—"The thermometer of *Six* may be called his exclusive property, and it is the best adapted to his purpose. This most useful instrument was invented about the year 1780, by James Six, of Canterbury; the following year was probably the first in which the temperatures of both day and night were accurately noted." Those on the principle we have described are, however, much more consistent, and on the whole more trustworthy. *R.T.*

WINE-CELLAR FUNGI.

WE have lately had occasion to advert to the mischief which is done to wine in cellars by Fungi. A very curious case is now before us, which is already serious enough, and might have been most disastrous had it not been observed in time. Two months ago a Fungus made its appearance in some bins which are four feet deep, at one end of a large cellar. It was removed perseveringly so far as it could be done without lifting the bottles, but it has nevertheless crept on and has already extended along each bin some 8 yards or more from the point where it first made its appearance or rather where it was first noticed. If left undisturbed for a short time it completely covers the brickwork, filling up the spaces between the bottles, and giving to the whole place and its contents the appearance of being covered with cotton wadding, except that the Fungus is tinged with yellow. The sudden appearance of the parasite and its apparently irresistible progress caused some apprehension lest it should attack the corks, and if so spoil the wine, as in other cases which are on record. Nor was the apprehension groundless, for many of the corks have been infected in a neighbouring bin, which it was hoped the Fungus had not reached, though on closer examination it was found that the bottles were covered with white threads closely resembling Mushroom spawn in a spent bed. A sample of the corks before us exhibits a thick Fungous mass between the top of the cork and the rim of the bottle, penetrating deeply downwards into the cork and slightly upwards, and gradually converting its tissues into a friable white substance. A few raised detached spots show that the evil is spreading between the cork and the neck of the bottle, and there are even indications of mischief at the very base. The Fungous spawn appears to have had more difficulty in spreading upwards, though the whole of the top of the cork is more or less affected, but in a far less degree than the parts below. It seems therefore, as far as we can judge, that the wax with which the cork has been sealed has proved to some extent a preservative, and we believe that had the neck of the bottle been dipped in melted sealing wax so as to cover completely the parts of the cork which are exposed, no mischief would have ensued, for it is quite clear that the exposed part is that which has first become a prey to the Fungus.

The prospect of danger in so valuable a stock of wine as the one in question seems to be is doubtless urgent, and requires immediate remedy. Every particle of spawn should be removed, the walls of the cellar should be washed at once with a saturated solution of corrosive sublimate or blue vitriol; the wine, wherever the corks are in the slightest degree affected, should be re-corked and the necks of the bottles sealed as recommended above; and if, previous to the sealing, the outside of the cork were carefully moistened with the solution of the metallic salt and suffered to dry, a practice which could not be attended with mischief if conducted cautiously, we have little doubt that the evil would be completely remedied. It is one of very frequent occurrence, and which, if attacked at all, must be arrested at an early stage; for if the corks once get impregnated with spawn, the wine is sure to suffer eventually.

As the Fungus is merely in the state of spawn without a trace of fruit, it is impossible to give any positive opinion as to its place in the mycological system. The yellow tint however seems to indicate either the common dry rot, *Merulius lacrymans*, or *Paxillus panuoides*, which is sometimes abundant on the sawdust of Conifers. Whatever it may be, it is mixed with *Antennaria cellaris*, which at present is far from having an evil reputation with wine merchants. *M. J. B.*

LOWEST TEMPERATURES IN DECEMBER, 1860.

THE following returns reached us after those of last week were in type:—

COUNTY.	PLACE.	DECEMBER.	THERMOMETER.	AUTHORITY.
Yorkshire	Bedale	25	—13	Mr. Turner, Newton House
	Leeds	25	—12	Mr. Groom, Swillington House
Derbyshire	Ashborne	25	— 9	Mr. Godwin
Notts	Elton Manor	25	— 9	Mr. Bradley
Lancashire	Cheadle	25	— 8	Mr. Smith, Abney Hall
Stirlingshire	Plean	24	— 7	Mr P. Mackenzie
Derbyshire	Sudbury Hall	25	— 6	Mr. Dick
Lincolnshire	Horncastle	25	— 6	Mr Nelson, Stourton Hall
Essex	Wantage	25	— 3	Rev. R. W. Baines
Suffolk	Shrubland	25	— 2	Mr. Taylor
Denbighshire	Wynnstay	25	— 1	Mr. Cope
Surrey	Bagshot	25	0	Mr. Noble
	Ditto	29	1	Ditto
Northampton.	Peterborough	25	1	Mr. Worroke, Milton
	Ditto	29	5	
Inverness	Culloden	24	11.2	D. Forbes, Esq.
	Ditto	24	6.2*	
Island of Raasay	W. Coast of Scotland	25	10	Mr. Rennie
Dorsetshire	Melbury	25	11	Earl of Ilchester

N.B. We have been obliged to pass by some returns, they being unintelligible.

* On Grass.

THE KITCHEN GARDEN REMEMBRANCER FOR 1861.

AN old adage says, "In the multitude of counsel there is wisdom," and without attempting to deny the truth of the axiom, I may be permitted to remark, that in the multitude of directions of our Calendar writers (especially the weekly ones), there is much that leads to confusion. Hence to the amateur gardener, the directions are frequently a pest rather than a guide, for as he wishes to sow no more crops than are necessary in his limited space for the supply of his table, not to omit one that might give him a supply at a particular time, it follows that an arrangement for cropping the kitchen garden that will indicate the particular crops indispensible to this end is a desideratum much to be prized. For some years past I have been in the habit of making my foreman work to the annexed tabular arrangement, and the result has been so uniform and satisfactory, that I doubt not many of the readers of the *Gardeners' Chronicle* will be glad to avail themselves of it. The plan is exceedingly simple, and you will perceive I have eschewed the old practice of sowing on certain dates be the weather or the state of the ground whatever it may, for all experience shows that it is much more important to have the ground in a good state at the time of sowing, than to get in to a particular day or even a particular week. After a severe winter, when the ground has been ice-bound for weeks or perhaps months, many rush to sow their early crops directly it is thawed, but if they would try it with a thermometer, and then again after a week or 10 days sunshine, they would find it many degrees warmer, and in a much better state to start the young plants with the vigour so essential to their well doing. In kitchen gardening there is no point so important as to have the ground in a good state at the time of committing the seed to its care, and in untoward seasons and upon stiff land, it will be found excellent practice to cover the seed with light dry soil liberally intermixed with soot, or the dust of charcoal or burnt earth; indeed the amateur will find it a good plan to collect the prunings and other refuse of his garden to some convenient place where it may be charred or smother-burned for the above purpose, and then be stowed away in a dry place ready for use. Refuse of this kind for covering seeds is a great check to insects, and snails and worms do not like to travel over it.

Now, in the management of an establishment it is essential so to arrange that certain work may occur on certain days: thus I have long made it a rule that Monday should be devoted specially to cropping (seed sowing, or planting) the kitchen garden, and with the annexed tabular calendar it is only necessary for the foreman to run his eye down the column under the respective months and the figures will show him the crops to be put in each week, and when the seed sowing is done there is the pricking out into nursery beds or final planting to be attended to. Sow everything in drills, whether in seed beds or as permanent crops. If there was no other advantage it looks orderly, but the plants will grow more vigorously than when crowded together. Small seeds such as Onions, Carrots, &c., in addition to being sown in drills, should be dibbled in the drills, for it is not only wasting seed, but needlessly impoverishing the ground, to raise 20 or 30 plants in every lineal foot of a drill, when only two or three are required for a crop. By this system of sowing it will be found that half the usual quantity of seed will be sufficient, while the trouble of singling the plants for a crop will be comparatively trifling. It also admits of the small hoe being used among the plants from the first with the greatest facility, a matter of the greatest importance for the success of the crop. Avoid broadcast sowing altogether, for though it may facilitate the work a little at seed time, the subsequent trouble in cleaning the crop will more than counterbalance the gain.

To insure complete success in vegetable cultivation the old rules of deep digging, plentiful manuring, and timely hoeing and cleaning of the crop, must not be forgotten. It is not necessary to manure for every crop; in fact some crops, Carrots and Parsnips for instance, are better without it, as it makes them "forky;" but all gross feeding crops, Broccoli, Cauliflower, and all the Brassicas, should be plentifully supplied with it both in a solid and liquid form. The importance of pricking the plants out into nursery beds before the final planting can scarcely be overrated; they gain so much in strength, and the chance of selecting the plants from the nursery bed true to its soil is also much facilitated. Liquid manure is of great use, especially for the more gross feeding crops; but give it in quantity when it is given, and not in mere dribblings. For a summer crop, say any of the Brassicas, or Spinach, or for crops in drills, as Peas, Beans, or Celery, it is a good plan to first dig the ground as deeply as possible, then soak it with manure-water to the depth of a foot. Let the ground lay for a few hours or a night to dry the surface a little, and then put in your crop, leaving the surface soil as light and friable as possible. In this way it will retain the moisture much longer than if the surface was made firm and smooth. Liquid manure is best applied in dripping weather, and it may then be used much stronger than it would be safe to use it when the ground is dry. Still, err on the safe side—a good soaking of weak manure is much better than a small quantity frequently repeated of strong manure-water, and this remark applies more to recently planted crops than to those which are more established.

Now with reference to the annexed remembrancer it may be explained that the first and last crops, especially of the more tender varieties of vegetables, as Peas, Cauliflowers, French Beans, Lettuces, Radishes, should be sown in sheltered situations; indeed if the warmth of a little fermenting material, as leaves and dung, and a covering of glass, calico, or Tiffany, can be had for such things as Cauliflowers, Lettuces, Radishes, Celery, &c., so much the better. To render the succession of nice fresh vegetables more certain I always sow two or three varieties at the same time, and in this way a regular supply is not only secured but variety also. Thus of Peas I should each month sow Harrison's Perfection, Mammoth, and Raglan; of Lettuce, Alma, White Paris Cos, and Tom Thumb, or Versailles; of French Beans, Newington Wonder, Syon House, Negro; and so on throughout the entire list. And the later and last crops this is more especially necessary, as some of the varieties may come in, though others may not succeed. If a regular supply is desired, one of the crops indicated must be omitted, and those to which an * is added must be particularly attended to as yielding a supply at a particular season and which cannot be got by sowing at any other time.

KITCHEN GARDEN REMEMBRANCER, 1861.	January.	February.	March	April.	May.	June.	July.	August.	September	October.	November.	December.
Asparagus			2									
Beans, Early Broad	2	2				2*	2					
„ Windsor, &c.		2	2	2	2	2						
„ French Dwarf				3	2	2	1*					
„ Scarlet Runner				3	2							
„ New Zealand				3	2							
Beet					1							
Borecole and Kale			1	2								
Broccoli, Early (Snow's)			1 & 4	2	1							
„ Late			2	2								
Brussels Sprouts			2	2								
Cabbage, Early			1	2			2*					
„ for Coleworts				1*	3	2						
Cauliflower, Early		2	2					3*	2			
„ Late			2	2	2	2						
Carrot, Early		3	2	2	2			2*				
„ Late				1								
Cardoon				1								
Celery		2	3									
Chervil, Curled			3				2*					
Corn Salad			2				1					
Cress and Mustard		2	2	2	2	2	2	2	2			
Cucumber				4	2							
Chicory				2								
Endive					3	1	2*	1				
Gourd				3	2							
Kohl Rabi				3	2							
Leek			2	2								
Lettuce, Cos } „ Cabbage			2	2	1 & 3	1 & 3	1 & 3*	2	1			
Love Apple (Tomato)			2									
Mallow				1								
Mustard (see Cress)												
Onion			2					3*	2			
Parsnips			1									
Parsley			1	1	2*							
Peas, Early	2	2					2*				2	
„ Late			2	2	2	2	2					
Potatoes, Early		3	2									
„ Late			2									
Radish, Early Turnip	2	2	2	2	2	2	2	2	2		2	
Rampion					2	2						
Rhubarb				1								
Savoy			2	2								
Salsify and Scorzonera				1								
Seakale				1								
Sorrel				1		2						
Spinach		2	2	2	2	2	2	1*				
Turnips		2	2	2	2	2	2	2				
Vegetable Marrow				2	1							
Pot Herbs			2	2	2							

NOTE.—The figures refer to the weeks in each month; in early situations sow the early, and in late the latter part of each respective week.

SELECT VEGETABLES.

BEANS (Early Broad): Mazagan, Dwarf Cluster, Longpod. Late: Windsor, Taylor's Thick, Mackay's Monarch.—For my own eating I consider the Dwarf Cluster the best Bean in cultivation. I have had it in use until November, and always found it good. *It is* an excellent kind for small gardens, requiring but little room; it may be grown as edgings, and in situations where other varieties would not find room.

BEANS (French): Newington Wonder, Syon House, Long Negro, Scarlet Runner, New Zealand do.—Of these Newington Wonder is the most useful for private use, as it is very fine and tender. Cooked whole it makes a handsome dish. The New Zealand Runner is found to be of little value in its green state, but as a haricot or even soaked and parboiled in the ripe state, it is equal to Peas. Hence a quantity should be grown for the sake of the ripe produce. Runner Beans require plenty of manure and liberal watering in dry seasons.

BEET: Pine Apple Short-top, Nutting's Crimson, Seakale or Silver.—Beet is best sown in moderately rich ground. The root grown is liable to get large and stringy. The Silver Beet is not much grown, and only very rarely used as a substitute for Seakale.

BORECOLE: Dwarf Curled, Cottagers' Kale, Hearting, Buda, Asparagus, Couve Tronchuda.—these are excellent greens; Cottagers' when well grown is generally esteemed. The Buda Asparagus is an excellent spring vegetable, and very hardy. The Tronchuda when it can be had (not a common occurrence), is a capital autumn and early winter vegetable.

BROCCOLI (Early): Snow's Winter White, Hammond's White Cape. (Late): Lee's White Sprouting, Winter Imperial, Knight's Protecting, Dilcock's Bride.—The Walcheren Broccoli I class as a Cauliflower, and it has been remarked that it and Snow's Winter White with good management should give a supply throughout the entire season. Hammond's White Cape is of excellent quality, almost superior to Cauliflower; Lee's Sprouting I have not yet tested, I hope it will prove equal to its character. A good way of protecting autumn Broccoli is to tie them up the same as Lettuce directly the flower begins to form. In this way I have had Snow's of excellent quality after 17 degrees of frost.

BRUSSELS SPROUTS: Home saved is generally the best if carefully managed. This is still our most hardy vegetables, having stood last winter when all others were killed.

CABBAGE: Wheeler's Imperial, Cattell's Reliance, Enfield Market, Chappell's Rosette Colewort.—I am not an advocate for large Cabbage, and therefore recommend small kinds only. The Rosette Colewort, so much grown for the London market, is a delicious vegetable, and in autumn should be crammed at 1 foot apart into every spare bit of ground.

CAULIFLOWER: Frogmore Early Forcing, Walcheren.—The Frogmore is a nice kind for growing in pots under the protection of glass, and it is not a bad plan for amateurs to bring a score or two forward in pots for their early crop. Protect the autumn plants in the autumn the same as directed for Broccoli.

CARROT: Scarlet Horn, Dutch Horn, James' Scarlet.—For table the Horn Carrots are certainly the best, and may be had almost throughout the entire year, but where a quantity is required the larger sorts may be grown.

CELERY: Incomparable Dwarf White, Ivery's Nonsuch, Laing's Mammoth.—For my own part I

nothing but the Incomparable, as I find I can have it eight months in the twelve. Nonsuch is of excellent flavour, and Mammoth though coarse is good for a very late supply.

ENDIVE: Moss, Imperial Batavian, Large Scarrolle.—I am a great admirer of the Scarrolle, it is larger, sweeter, and more like Lettuce than the other Endives. It is also very hardy.

LEEK: Ayton Castle Giant.—I wonder Leeks are not more grown as an independent vegetable. Well grown and blanched and served as Seakale I think they are quite equal to it. This is a large and excellent kind. Don't spare the manure if you want them of fine quality.

LETTUCE—Cos: Griffin's Alma, Moor Park, White Paris. Cabbage: Tom Thumb, Versailles, Hammersmith.—The Moor Park is an excellent Summer Lettuce, but requires good growth and to be well blanched. Tom Thumb is the Laitue Gotte à graine noir of Vilmorin's list, but still a most excellent kind, either for salad or stewing. The Versailles is large, and a good summer variety.

ONION: Brown Globe, White Spanish, James's Keeping, Tripoli.—Onions delight in deeply trenched ground, with plenty of soot during the growing season as manure. If you want them to keep do not give much solid manure to the ground at the time of sowing.

PEAS—Early: Sangster's No. 1, Dickson's Favourite. Late: Harrison's Perfection, Mammoth, Lord Raglan.—I am no advocate for early Peas, preferring to wait a few days longer and have something fit to eat. I therefore grow the three last named varieties only, and they give me a supply from June to November. Peas for summer and autumn crops should always be sown in trenches prepared the same as for Celery, and with plenty of manure; in this way you need not fear to have a good crop, and but little mildew.

POTATOES: Early Handsworth, Ashleaf Kidney, Alstone Kidney, Gloucestershire Kidney, Early Axford, Regents, Fluke.—The Early Handsworth is an early and excellent variety, quite equal to Ashleaf Kidney. The Alstone and Gloucestershire Kidneys were sent to me last season by Messrs. Wheeler of Gloucester, and I found them excellent croppers, and nearly as early as the Ashleaf. They are much to be recommended. In the last untoward season the Fluke appears to have resisted the disease better than almost any other kind.

RADISH: Wood's Early Frame, Beck's Short-top, Red Turnip, White do.—These four kinds sown together give a capital succession; for summer crops a north aspect is the best.

SAVOY: Dwarf Ulm, Mitchell's Green Globe.—In a severe winter like the present a lot of Savoys planted late, and not for Cabbage, come in very acceptable in the spring.

SPINACH: Flanders, Prickly, Round.—The first is the best for all seasons; I prefer the Round for summer use. The Mountain Spinach or Orach I do not think much of; Water-cress, or the leaves of Vegetable Marrow, make a good substitute for Spinach when it is scarce.

TURNIP: Red American Stone, Clink Castle Black Stone, Orange Jelly, Yellow Finland.—I still regard the Red American Stone as the most useful Turnip in cultivation, and the Yellow Finland is a worthy rival to the Orange Jelly.

VEGETABLE MARROW; Custard, Prince Albert.—The Custard Marrow degenerates very much, but Prince Albert is an excellent variety, and a prodigious bearer. *P. A. W.*

DIARY KEPT BY J. G. VEITCH

DURING HIS TRIP TO MOUNT FUSI YAMA, SEPTEMBER, 1860.

Introduction.—The celebrated mountain Fusi Yama is situated in the province of Surunja, on the Island of Nippon, in 35° 21′ North latitude, and 138° 42′ East longitude. It is undoubtedly of volcanic origin; according to the most reliable Japanese records it has not emitted fire or lava for a period of 250 years. This is fully borne out by the general appearance of the foot of the mountain. Dense forests cover its sides to an elevation of from 8000 to 9000 feet, at which height trees become mere bushes; at this elevation Abies leptolepis is never met with over 2 feet high. From 9000 feet to its summit (14,000 feet), no vegetation is seen with the exception of one or two dwarf rock plants. Not a particle of soil is visible sufficient to support vegetation, loose lava alone appears in every direction.

The summit is entirely covered with snow for a period of eight months of the year, and during the remaining four, patches are met with in sheltered spots. It is asserted by Japanese writers that Mount Fusi Yama was thrown up from the bowels of the earth in a single night, and their books contain numerous representations of the event, with the surrounding population on the following morning, staring amazed at what had happened.

The Mount is remarkable as being the highest in Japan, and from its rising out of a level plain, and forming the most perfect cone conceivable, and also for the reverence in which the Japanese people hold it, and their extraordinary traditions respecting it. The highest ambition of hundreds of thousands is to form a pilgrimage to its summit. It forms the topic of their conversation for years before and after the journey. Thousands ascend yearly. It is considered a proof of their having done nothing wrong, when they ascend and descend without accident.

It is also recorded that millions of untameable horses inhabit the forests; birds are said to swarm which pick out the eyes of bad people. These and many similar tales are believed by the people generally.

Observations taken on Mount Fusi Yama by Captain Robinson, of H.M.S. Berenice, and myself. Latitude 32° 21′ north, longitude 138° 42′ east.

Height of the edge of the crater where the resting house and temple are situated	13,977 feet
Height of the highest peak	14,177 ,,
Thermometer at noon, exposed to the sun on the summit	54°
Ditto ditto in the snow	32°

Temperature at 9000 feet elevation.

6 A.M., out of doors	44°
6 P.M., ditto	45°
6 A.M., in our sleeping shed	48°

THE CRATER.

Its shape, an irregular oval	
Its mean length	1114 yards
Its mean width	666 ,,
Its depth about	500 feet

The angle of the mountain was calculated at 35° to 40°.

DIARY.

Sept. 4th, Kanagawa.—At 6 A.M. Mr. Alcock, Her Britannic Majesty's Minister, &c. &c., at Yeddo, his attachés and the gentlemen who had been fortunate enough to receive invitations, in all eight in number, assembled at the British Consulate, Kanagawa, prepared as far as stout horses and good spirits could make them, to be the first Europeans admitted into the interior of Japan, and permitted to ascend the sacred mount.

At 7 A.M. 12 pack horses loaded with provisions and clothes were despatched, and at 9 we mounted and rode off. Our party and their respective appointments were as follows.

Mr. Alcock, Commander-in-Chief.
Mr. Gower, Junr., Commissariat. } Mr. A.'s Attachés.
Mr. Ensden, Paymaster. } Mr. A.'s Attachés.
Mr. McDonald, Baggage Master. } Mr. A.'s Attachés.
Major de Fonblanque, Military Secretary.
Mr. Gower, Senr., Artist.
Captain Robinson, Naval Secretary, to take observations.
Mr. Veitch, Botanist.

The town of Totska was reached at 11 A.M., where we halted and breakfasted, started again at 5 o'clock and arrived at Fusisawa at 7 P.M. The scenery was exceedingly beautiful, the high road lined by one continued avenue of Pines (Pinus Massoniana), with an occasional break, through which a glimpse might be caught of the surrounding country and the mountains we were approaching. One of these views, named by Mr. Alcock "Our first view of Fusi Yama," was truly magnificent.

The population were everywhere exceedingly quiet and polite. We found our arrival anticipated, and thousands of men, women, and children assembled to behold the "foreigners."

The perfect submission of the people surprises a European accustomed to see a concourse kept in order by police and soldiers. A single wave of the fan by the officer preceding Mr. Alcock was sufficient to make every human being fall on his knees.

	Ri.	Street.
Route from Kanagawa to Hodogaya ..	1	9
Hodogaya to Totska	2	9
Totska to Fusisawa	1	30

36 Street = to 1 Ri.; 1 Ri = 2⅔ miles English.
Mean Temperature, 75°.

Sept. 5, *Fusisawa.*—Rose at 5, having had considerable practice in musquito hunting during the night. Started pack horses at 6, and rode off ourselves at 7 A.M. Crowds similar to those met with yesterday filled the streets, but no sign of disrespect. The country was very similar to that seen yesterday, beautiful avenues, and immense plains of Rice to the edge of the road on either side. Crossed the river "Banugawa" in ferry boats, and arrived at 10 A.M. at Oiso, a seaport town of considerable importance.

At the entrance of the town upwards of 20 officials received and conducted us to a resting house, where both ourselves and horses were refreshed. According to Japanese custom a present of eggs was presented to our chief. These presents are frequently made, and generally consist of something edible. We obtained a beautiful view of Fusi Yama and the active volcano of Osima in the Japan sea from this place. From Oiso we skirted the sea coast and proceeded to Odawara, arriving at the last named place at 6.30 P.M. The scenery met with this afternoon surpassed anything yet seen. Over and over again we stopped and silently admired the picture. To our left lay the sea as smooth as glass, with trading junks scattered over its surface. To our right magnificent undulating ground clothed with dense masses of vegetation, which often reminded one of an English park. Several small rivers were crossed before arriving at Odawara. The most remarkable was Sackagawa. Its current is so strong as entirely to prevent people riding over with safety. We were accordingly carried across on litters, each litter being supported by 6 or 8 coolies; our horses were led after us. The whole scene formed a most exciting and novel one, and caused the Japanese as well as ourselves much amusement.

Route—Fusisawa to Oiso, crossing river Banugawa.

	Ri.	Str.
Oiso to Odawara	4	8
Sackagawa ..	4	0

Temperature 78°.

Sept. 6, *Odawara.*—Having again loaded and started our pack horses, we bid adieu to Odawara. Hakone mountains lay in our immediate front, and their ascent was appointed as our day's trip. The road was exceedingly steep and rough and compelled us to dismount and walk. Arrived at the small village of Yamoti, at 9 A.M. A few houses form the village, which is however much frequented by Dimus (Princes) on account of the sulphur baths. The springs rise in the immediate vicinity. Pushed on to Hatoojiku through torrents of rain. Halted here and partook of a Japanese breakfast, consisting of Rice, vegetables, fish, and soup, eaten with chop sticks, and served by Japanese musmes (girls). To this we all did ample justice.

Hatoojiku is situated at 4000 feet elevation, commanding a magnificent view of mountain forests, and the sea in the far distance. It is famous as producing some of the finest lacquer ware in the Empire. The garden attached to our resting house here is the most perfect specimen of Japanese horticultural skill I have yet met with. Handsome trees, cut shrubs, ponds of water, and waterfalls, all blended together with exquisite taste, and without that formal appearance generally met with. The rain showing no signs of ceasing we again set out on foot for the town and lake of Hakone. Previous to starting our horses were supplied with straw shoes to enable them to keep their footing. The approach to Hakone was lined by one of the most magnificent avenues I ever beheld, and it fully repaid us for our exertions. It consisted entirely of Cryptomeria japonica, the trunk of every tree as straight as an arrow, averaging 130 to 150 feet in height, by 13 to 15 feet in circumference at the base.

Hakone, situated on the borders of a lake of the same name, is 6250 feet high. It is the chief town of one of the numerous Japanese Princes' territories, and is guarded by formidable barriers. To avoid inconvenience and annoyance special permission was obtained to cross these barriers before leaving Yeddo. Good accommodation was provided for us on the shores of the lake. The scenery to-day consisted of bold mountains covered entirely with dense Pine forests; constant rain, however, greatly obstructed our views.

	Ri.	Str.
Route—Odawara to Yamoti	1	10
Yamoti to Hatajiku	1	8
Hatajiku to Hakone	1	10

Temperature, 78° Barometer, 27° 90′

Sept. 7, *Hakone.*—Rain ceased during the night. Started at 8 A.M. to accomplish the ascent, our horses following in the rear, and with great difficulty kept on their legs. The southern side of Mount Hakone presents an aspect totally different from that met with yesterday. Coarse Grass, Bamboo, and Fern take the place of forests. No trees are met with above 1000 feet elevation. At this height I observed Thujopsis dolabrata. The trees averaged 30 to 40 feet in height by 1 to 2 feet in diameter at the base. On approaching Missima at the foot of the mountain 12 officers met Mr. A. and conducted us to a Dimu's resting house. Rain again fell in torrents during the afternoon, and compelled us to defer our next stage till the following day. Missima is only a few hundred feet above the level of the sea. It contains 12,000 to 15,000 inhabitants.

	Ri.	Str
Route—Hakone to Missima	3	28

Barometer, 30° Thermometer, 80°

Sept. 8, *Missima.*—Rain continued to fall in torrents. A council of war was held, and it was resolved to push on without further delay. Passed through a country to-day comparatively level, but remarkable for the extent and luxuriance of the agricultural crops. An immense acreage of Rice. Reached Numado at 9 A.M., and Hara at 11, riding through both towns without halting, to the immense amazement of the natives assembled in thousands in spite of wind and weather to behold the "foreigners." Arrived at Yosiwara at 1 P.M., wet and dirty, and looking as miserable as any men need do; a good wash and breakfast considerably altered our feelings, both inwardly and outwardly. A splendid view of Mount Fusi Yama is here to be obtained. It is considered by the Japanese as the finest. Yosiwara is some 12 miles distant from what is considered as the foot of the mountain, although the ascent gradually commences at this place. The weather still continued very uninviting, and we accordingly lay to for the night. At 9 P.M. the wind blew a gale, and at midnight an eastern typhoon was sweeping over us with all its fury; it blew without a moment's cessation from all quarters until 10 A.M. on the 9th, and threatened to carry all before it.

	Ri.	Str.
Route—Missima to Numado	1	18
Numado to Hara	1	18
Hara to Yosiwara	3	6

Temperature 76; Barometer, at 6 P.M., 29.90.

Sept. 9, *Yosiwara.*—At noon, the weather being favourable, started for Omio, halting at a Buddhist Temple in its vicinity for refreshment. The soil in this neighbourhood is exceedingly rich and productive. Rice, Tobacco, and Millet form the principal crops, and

grow most luxuriantly. The only Tea plantations (Thea Bohea) met with during our trip were seen in this locality. Moist shady valleys are the spots chosen for its culture; bushes 2 to 4 feet high, by as much through, are planted in rows 3 to 4 feet apart, and generally speaking an annual crop, such as Millet, is sown between the rows—apparently for the sake of additional shade. The plants appeared in perfect health, and would, doubtless, yield a good crop. Frequent plantations of Paulownia imperialis occurred during to-day's trip. The Temple Gardens at Omio contain an immense variety of rare trees and shrubs, amongst others Sciadopitys verticillata, Thujopsis dolabrata variegata, Aucuba species nova, four or five varieties of Maple, a species of Magnolia, splendid Azaleas, &c. Proceeded from this place to Muriyama, arriving there at 6 P.M. Quarters were in readiness for us at a Temple, and the priests dressed in their official yellow gowns to receive the minister. Muriyama is 4000 feet above the level of the sea. A view from this place of the plain beneath, through which we had lately passed—the sea in the far distance and the setting sun tinting the horizon, presented a picture scarcely to be described.

	Ri.	Str.
Route—Yosiwara to Omio	2	0
Omio to Muriyama	2	0

Thermometer, 7 A.M., 73°; 7 P.M., 69°.
Barometer, 7 A.M., 29.50; 7 P.M., 24.44

Sept. 10, *Muriyama.*—Our pack horses and heavy baggage remained here. Men hired for the purpose were despatched with provisions and a change of clothes. The road admitted of being ridden over as far as Hatchimando, 8 miles distant from Muriyama. Grooms were sent forward to this place to receive our horses, and we finally reached there at 12 noon. Each man furnished himself with a staff and started. At 6 P.M. we found ourselves to our great satisfaction at a house which was appointed as our quarters for the night. Our walk had been a circuitous one, very rough under foot, but well shaded. During the early part of the day we passed through forests of Beech, Alder, Lime, Oak, and Maple, and latterly through Pine forests, Abies bifida, A. Tsuga, A. firma, A. leptolepis, Podocarpus sp., &c. Resting houses are met with at stages varying from 1½ to 2 miles, where tea is provided for the refreshment of travellers. Never I believe did even Japanese drink more tea in the same space of time than we did to-day. Numerous pilgrims were passed returning from the summit, who congratulated us on our attempt. Our resting house was at an elevation of 8500 feet. A few Dwarf Larch were the only specimens of vegetation to be seen. The sea was plainly visible in the distance; the sun set beautifully, tinting the horizon for miles. Our sleeping apartment, 25 by 11 feet, was destined to contain eight Englishmen, their servants, and the host and hostess and family. A door served the double purpose of window and chimney.

	Ri.	Str.
Route—Muriyama to Hatchimando	3	0
Hatchimando to 8500 feet elevation	4	0

Thermometer 6 A.M., 62°; 6 P.M., 54.

Sept. 11*th*, *Mount Fusi Yama*, 8500 *feet elevation.*—In vain did we turn and twist during the night endeavouring to fall asleep. Heartily wishing for daylight hours before it appeared, swarms of fleas and our own imaginations totally prevented our finding rest, and the order to rise and start was hailed as joyful news. A steep zigzag walk barely to be made out brought us at 10 A.M. to the summit. The latter part of the ascent was very fatiguing. Each stage became steeper, the loose lava continually slipping under our feet. The glorious scene from the top fully repaid us for all our exertions. The day was beautifully clear. A vast expanse of sea, five lakes, including that of Hakone, Yeddo the capital, and numberless smaller towns lay to the east; and a vast extent of unexplored mountainous country to the westward. Plains of Rice appeared like small patches, and trees 150 feet in height but as mere bushes. The outer edge of the summit has been calculated about 3 miles in circumference and the inner circle (*i.e.* the crater) 2 miles. The crater is formed of huge masses of lava; it is perfectly dry, and no aperture can be observed in it. A small resting house and a temple are kept open on the summit during the summer months for the accommodation of pilgrims. A breakfast was prepared for us in the former, having done justice to which we assembled on one of the highest peaks to perform the honours of our country, &c.

The health of Her Most Gracious Majesty the Queen, of Mr. Rutherford Alcock, of our absent friends in England, were drunk in Champagne. A salute of 21 guns (revolvers) was fired, and the British flag hoisted. Three cheers were given, such only as Englishmen can give, and finally "God save the Queen" was sung. The descent was commenced at 2 P.M., and our sleeping house reached at 4. Much against our inclination we were compelled to remain here another night, and made ourselves as comfortable as circumstances would permit.

	Ri.	Str.
Route from 8500 feet elevation to the summit ..	4	0
Return to the same place	4	0

Temperature, 6 A.M. .. 44° } out of doors.
" 6 P.M. .. 45 }
" 6 A.M. .. 48 in our sleeping shed.
" 12 noon, on the summit, exposed, 54°
" of the snow, 32°.

Sept. 12.—8,500 feet elevation. Rain fell heavily this morning, and a thick fog covered the mountain. I started at daybreak to collect seeds, &c., and met our party at the foot. Our horses awaited us at Hatchimando. At 10 A.M. we started off for Muriyama amidst deluges of rain. Halted at the temple and breakfasted. Once more started our pack horses. Reached Omio at 6, drenched to the skin, but looking forward to a good night's rest in comparison to those passed on the mount.

Route from 8500 feet to Hatchimando.
Hatchimando to Muriyama,
Muriyama to Omio.
Temperature, 6 A.M., 44°; 6 P.M., 69°.

Sept. 13*th*, *Omio.*—The return trip presented little novelty, our journey to-day being over the same ground as that passed on the 8th and 9th. Started for Hara at 8 A.M. My horse being done up I was compelled to walk. Fortunately the weather was fine. Halted two or three hours at Hara. Started at 5 for Missima, passing through Numado. The river Sinagawa, swollen by the late rains, had overflowed its banks; we were compelled to dismount and wade through it, anything but a pleasant operation, but one which caused much amusement. Reached Missima at 7 P.M.; remained here for the night.

	Ri.	Str.
Route—Omio to Hara	5	6
Hara through Numado, and crossing the river Sinagawa to Missima	3	0

Temperature, 74°

Sept. 14, *Missima.*—Started at 8 A.M., for Atame, crossing one of the lower peaks of the Hakone ridge. All the fine views seen during our trip were apparently represented to-day; the scenery, cultivation, and vegetation generally if possible surpassed all we had previously met with. Splendid specimens of Cryptomeria, some of which attained a circumference of 16½ feet at the base, and woods of Thujopsis dolabrata were amongst the finest trees. From the higher elevations we looked down upon plains, thousands of acres in extent, cultivated entirely with Rice. At noon entered the quiet seaport town of Atame, situated on the east coast of the Island of Nippon.

This place is celebrated throughout the Empire for its sulphur-springs, and for the cures effected by their waters. A large establishment is kept up for Dimus, who yearly take the baths here. Excellent accommodation was provided for us at this house; the springs rise in the yard attached to the place and a suite of rooms have water always flowing into them. The power of these springs is wonderful. The temperature is above boiling point (212°). Such is the force with which the water bursts forth that a wall at a distance of 40 feet is continually wet with the spray. The steam produced from the water rises in an immense volume, and is plainly visible many miles at sea.

Route—Missima to Atame .. .. 5 Ri.
Temperature, 75°

Atame, Sept. 15.—The steamer "Berenice" hove in sight at 6 A.M. The Bay of Atame offers no anchorage for shipping, and she accordingly rounded the point and anchored in the next bay. Mr. Alcock and his attachés remain here to take the baths. The three other gentlemen with myself embarked at noon and steamed into Kanagawa harbour at 9 P.M.

The towns, their inhabitants, manners, and customs, were entirely similar throughout the entire journey. A Japanese town consists of one long continuous street, and once having seen a town in Japan a stranger is not repaid for visiting a second (except a few of the large places, such as Yeddo, Miaco, &c.) The same one-storied houses with their clean matting floors and paper windows, all built and fitted up alike; the features of the people, their modes of dressing, manners, &c. &c., all essentially resemble each other. A Japanese from the most southern point might pass for an inhabitant of the most northern regions, and *vice versâ.*

TRADE MEMORANDA.

A PERSON calling himself a Gardener, and pretending that he lost an arm in the service of * * * is passing through the country soliciting assistance. We have the authority of * * * to say that no one ever lost either leg or arm in his service.

Home Correspondence.

Low Temperature at Chatteris.—It would appear by your returns of temperature (see p. 23) that the lowest point to which the glass fell on Dec. 24-5, 1860, was —15°; and this at two places in England far distant from each other, viz., Chatteris, Cambridgeshire, and Cheadle, Lancashire. Now it is highly desirable that we should have reliable data to depend upon in such an extraordinary season, and no one knows better than yourself how many sources of error there are in defective instruments, and careless or imperfect readings; indeed you have pointed out instances of the kind in your leading article in p. 21 of the same Number. As a resident in the Cambridgeshire Fens I would suggest, therefore, that the Chatteris observation should be tested, and if incorrect put aside so as not to mislead those who come after us. For my part, I altogether doubt the accuracy of the observation—(although I have the greatest respect for the observer)—seeing that another observer at the same place and the same time has reported the temperature at 0° only. (My impression, however, of the latter observation is that it should be —5°, and I think it was so stated in the *Times* from which you quote.) [You are right; it now appears by Mr. Ruston's letter, which we print, that it should have been —5°.] Mr. A. Fryer will in all probability take an opportunity of stating the particulars of his observation as to aspect, kind of instrument, &c. It would be well if the instrument itself were now compared with the other one at Chatteris which registered —5°. *William Marshall, Ely.*—In your tabulated lists of returns of temperature I find one from Chatteris, taken from the *Times*, in which the thermometer is stated to have indicated 0° on the 25th. I presume this must apply to my return as reported in the *Times*, as I saw no others in that Paper from Chatteris; and if so, you have mistaken the return; it should stand 5° below zero. Subjoined is an extract from my letter which appeared in the *Times*:—"On Monday night the thermometer fell to 5° below zero, and at 10 o'clock on Christmas morning it stood exactly at zero; at 1 P.M. on the same day it was 7° above zero, and at 7 P.M. it had risen to 15°, and at 10 P.M. to 26°. The following are the lowest temperatures since the 25th, as shown by my self-registering thermometer (one of Casella's):—Dec. 28-29, 7°; Jan. 7-8, 11°; 8-9, 14°; 9-10, 11°. *Alfred S. Ruston, Aylesby House, Chatteris, Cambridgeshire.*

Registration of Lowest Temperature.—Now that the very cold season which we have just experienced has directed people's attention to the thermometer, it may be useful to mention the great care which is requisite in fixing upon a proper place for the instrument, so that the real temperature of the air may be determined, and not that caused by radiation either to or from the instrument. What I am about to state will be confirmed by all scientific observers of meteorology, and I shall chiefly use the words of the Rev. L. Jenyns, the accomplished author of "Observations in Meteorology." To give a correct indication of the temperature of the air the thermometer should not merely be placed in the shade, facing the north, but should have no wall or other large object near, from which the sun's rays may be reflected upon it. Further, it should not be fixed to a wall, the temperature of which it would take, and which is very slow in following the changes of the atmosphere. The best method is to fix it to a post, having a north wall at a few feet behind, the instrument being about 5 feet from the ground, exposed to a free current of air, but screened by a hood from the rain and radiation to the sky. Two thermometers placed within a few feet of each other will often show very different temperatures if the above precautions are neglected; if one is covered by a slight wooden roof it will give the true temperature of the air, and the other if exposed upwards towards the sky will mark a much lower degree of heat through radiation from itself. We do not want to know the amount of cold caused by radiation, but that of the air; or if we do want such information it should be carefully distinguished from the true temperature of the air as obtained from the hooded instrument. It is my belief that many of the very low temperatures recorded in the newspapers, and even in the *Gardeners' Chronicle*, result from ignorance of the care requisite to obtain a true result from the very best instrument. There is another fallacy pointed out by Messrs. Negretti & Zambra in another column. When the spirit thermometer is placed horizontally the exhalation which takes place from the surface of the spirit is condensed at the other end of the tube and remains there. It is so colourless as to be nearly invisible (quite so to the inexperienced), and sometimes accumulates to such an extent as to cause the instrument to show a temperature of several degrees below the true one. This is a very probable cause of some of the apparently very low temperatures recently recorded. Taking both the causes into consideration, viz., the radiation upwards from unroofed instruments, and the false depression of others become incorrect by exhalation, we may be allowed to doubt if some of the very low temperatures recorded recently are not also very great mistakes. Allow me to repeat: shade your instrument with a roof or hood of its own; place it away from a building, a few feet from the ground; and let the bulb end of the registering thermometer be from half an inch to an inch lower than the other end of the tube. *C. C. B., Cambridge.*

Effects of the Frost.—At this place I fear that Peach trees on open walls are all but killed—at least the wood, imperfectly ripened shoots of last summer are so much injured that all hopes of any fruit this season may be given up; and I much doubt if our Apricot trees are in a much better condition, as on examining some on a south wall this morning I find the bark of what would have otherwise been fruit-bearing spurs to be quite brown, and to all appearance dead. What surprised me most, however, even after such weather as we have experienced, was, that on my attention being called a few days ago by one of the workmen to the condition of some standard Pear trees which he was pruning, and which he reported as being all dead, I found on looking at them that many of their young shoots were in a similar state to those of the Peach trees; and even on some of the branches, as thick as a walking stick, the bark is quite discoloured, and possibly when the time of growth arrives will prove to be dead, though I am happy to say that this condition among Pears does not appear to be general. I may here state also that Quince trees have suffered in a great degree, appearing to be all killed, except perhaps the centre stem, where some vitality remains; and evergreen Oaks are killed to the ground. At present it is impossible to speak

on the extent of the losses the country has sustained in the shape of ornamental trees, though on some future day it will doubtless be an interesting subject of inquiry to ascertain upon what parts of the globe we can most rely for plants capable of withstanding our most severe winters. So far as I have had an opportunity of judging, the trees we are in possession of from California are quite safe, but I very much doubt if the same can be said of the majority of the so-called hardy plants from Mexico, Japan, and even some from China and the Himalayas, though doubtless the disastrous accounts of losses which will reach you during the next three months will very much enlighten us on these points. The winter here began to set in in earnest about the 20th of December last, and continued increasing in severity till the 24th, on the morning of which the thermometer, 3 feet from the ground, indicated 15°, and during the day never rose higher than 19°; in the evening the temperature became lower and lower till the thermometer read zero, and at daylight on the 25th it stood at —6°, and did not get higher that day than 13°. These two days, and perhaps the 29th, when the temperature was 7°, and the very ungenial previous summer, are quite sufficient to account for the many disasters which will doubtless hereafter be recorded. *Andrew Dick, Sudbury Hall, Derby.*——On examining my Peach trees on walls, I find that the young wood is completely killed, and that even the thick wood is injured. The young shoots and spurs on Apricots are quite destroyed. Plums have suffered severely. I have tried them carefully and cannot find one bud alive. Evergreen Oaks, Phillyreas, Laurustinuses, Common and Portugal Laurels, are killed to the ground. Hollies are dead to the thick wood; and budded Roses of all kinds are completely destroyed. The thermometer on the morning of Christmas-day indicated —9°, which was only 2° lower than on Jan. 3, 1854, but at that time I did not observe the least injury to fruit trees, although Laurels and Evergreen Oaks were killed to the ground. *Samuel Bradley, Elton Manor, near Nottingham.*

Position of Thermometers.—It is greatly to be regretted that in so valuable a paper as the one in your last Number, purporting to show the varying degrees of temperature, registered in various localities during the late severe frost, an omission exists which virtually robs it of its main value as a meteorological record. I refer to the absence of the needful information respecting the height of the thermometers from the ground. In some localities there is a record of 10°, 12°, and even 15° below zero. Now these, as isolated facts, are doubtless both interesting and valuable. But as relative or comparative facts they are almost valueless. It must surely be unknown to some of your correspondents that the variation of temperature between the surface of the snow, or even 6 to 12 inches above it, and 5 feet above the ground, is often as much as from 3° to 6° and even 8°. Now, where the proper standard of 4 to 5 feet from the ground is observed, there may be a register of 5° and 6° below zero; whereas, at 1 foot from the ground, or on the surface of the snow, the same thermometer would perhaps have indicated 10° or 12° below zero. Therefore as a comparative record of cold, all observations should be made at 5 feet (or never lower than 4 feet from the ground). Where the register is given at this elevation, and also on or near the surface of the snow, so much the better. I was myself told of an instance of a thermometer registering "14° below zero," in a gentleman's garden, which led me at once to ask where the thermometer was placed? The answer was given "On the snow," as innocently as possible. As an illustration of the varying intensity of frost at different elevations, I may state that, last year, many specimens of Cedrus Deodara which for the first 2 feet above the snow were killed, or nearly so (and wholly stripped of their leaves) were at 4 feet comparatively little injured. At 7 feet they were almost as fresh as the portion under the snow, which was, of course, uninjured. In some states of atmosphere (dense fog, for instance), there will perhaps be scarcely a trace of difference between the temperature on the ground and at 5 feet elevation; but it is far otherwise on a clear still night when the radiation is uninterrupted. Since the severe frost on the 25th, I have ascertained that in the part of our grounds which lies about 18 feet below the level of my house, the thermometer at 5 feet from the ground registers 4° lower than at my door! This would therefore (judging by subsequent observations) have given —9° as our lowest at 8.20 on the 25th. On the surface of the snow, or at 1 foot from the ground, probably the register would have been —13° or even lower. I trust that in future a caution will be extended to all parties forwarding registers of cold to indicate without fail the level at which the thermometer is placed, otherwise our comparisons, in a scientific point of view, will be of little value. *Jas. Backhouse, jun., York.* [The omission is our own. We cannot crowd everything into a tabular record. The stations where the observations are made are we presume well known, for the most part, to our readers.]

Education of Gardeners.—The discussion on the education of gardeners has drawn forth some very good articles in your late Numbers. The propositions of "Linager" present nothing very insuperable, neither is anything required more than is attainable by young men actuated by a proper spirit. During the time this matter has been occupying your pages, the question has been often pressed on my mind, whether, notwithstanding all the facilities enjoyed by young gardeners for the last quarter of a century, the present race of young men is more intelligent than its predecessors were that quarter of a century ago. This question I have put to not a few men of standing, some of them large employers of young men; the general answer is that they are not; the great complaint, the crying evil, is the want of application. In the present day there are so many frivolous excitements which call off the attention from less attractive studies, that it is not every young gardener who has the force of character which would enable him to pursue the self-denying course that can alone lead to success. Next to moral worth every gardener ought to feel bound to be a good workman, but how often is it otherwise; I have met with many, and I am sorry to say, continue to meet with them still, who can neither mow nor dig with an ordinary labourer. I often find the greatest difficulty in endeavouring to get them to try a little botany, or anything requiring application. There are, there always were, and always will be exceptions, and these exceptions must of necessity—other things being equal—attain to the highest positions. I would not for a moment object to such a course as Linager proposes, but it would never be of very general application; men would contrive to get on without it, just as they have done before. Our ranks must always be recruited from the working classes; a gardener, to deserve the name, is pre-eminently a working man; few men of intelligence and general attainments would follow gardening because of its emoluments, they must follow it from sheer love of it, for it has its charms, and they are neither few nor small to minds who can appreciate them. But to return to my question—are young gardeners more intelligent than they were 25 years ago? I take it as granted that they were always in the first rank of operatives; the general public has grown in intelligence. My question is—have young gardeners maintained their position ahead as before? Garden literature has flourished and practice improved, our facilities increased, and our numbers are greatly augmented. Still the question remains — has intelligence increased in proportion amongst our young men? *A. Dawson, Rood Ashton, Jan. 8.*——Permit me to state that I do not think the system of "Linager" in the least too high in its requirements, there being nothing in it that is not attainable by men of common intellectual development. "First Honours" even need but a little assiduity, persistency, and a proper direction of labour, and except a man is willing to give these he ought to stand at the bottom of the list. Every sensible person must admit that the present system of obtaining situations is a rotten one, having mere interest as its basis, and that men who with but a little "rubbing up" might take "first honours" are too often put aside to make way for others, who could not pass even as "third class." I speak feelingly, for I speak from experience. I give "Linager's" system my mite of support, as I think that it is a system which is likely to benefit gardeners, and raise their profession in the estimation of all thinking men. Noblemen and gentlemen would then know to whom to apply to find a man fitted for any situation they might require him for; and those who prefer the old system of getting men from a nursery will be at liberty to suit themselves all the same. Now, as "Linager" is the father of what I consider to be a good system, could he not furnish a few remarks that might be of service to his more ignorant brethren—remarks such as are offered by the "Civil Service," for instance, to candidates seeking examination, showing not only what they must know as a branch of study, but how much they must know of it; in mathematics he has already done so, why not follow the same course in relation to botany, vegetable physiology, &c.? thus showing what it is really necessary for us to acquire, in order that a man trying to pass for "honours" might not be left in doubt as to what was required of him. There must in my estimation be a stopping point in botany, vegetable physiology, &c.; a point where a man may be said to have a decent knowledge for all useful purposes in connection with gardening. Will "Linager" therefore indicate to us rising gardeners the stopping point; having attained which in their various studies, they may rest till the examination is passed and "first honours" gained, leaving the minutiæ and the depths of each science, together with its various branches and ramifications, for future study. *Yorkshireman.*

Do Hares or Rabbits Climb?—I do not know much about natural history, but is it not an unusual thing for hares or rabbits (which is it) to climb trees? During the late severe weather trees covered with Ivy have had it eaten off 10 feet above the ground; and an old castle in this neighbourhood (Whitby), covered with Ivy, has had it eaten off 15 feet from the ground, where the projecting stones assisted the animals in the ascent. *Scotch Terrier.*

Cephalotaxus drupacea.—In your last Number you mention that Mr. Veitch's specimens of Cephalotaxus drupacea (Siebold) are "very much more glaucous on the under side of the leaves than the plants now in cultivation." This is exactly the description of Siebold's C. drupacea, as compared with Fortune's short-leaved species, C. Fortuni fœmina of the nurseries, which Gordon in "The Pinetum" has in error stated to be C. drupacea of Siebold. Enclosed is a sprig from a plant which I procured last autumn in Von Siebold & Co.'s Japan Nursery at Leyden, where there is a large stock of plants from 1 to 3 feet in height, some of which were lately sent home by Dr. Siebold, who, I was informed, is now collecting in Japan, having gone out for that purpose in the autumn of 1859. In addition to the glaucous peculiarity alluded to, Siebold's plants exhibited a more robust and vigorous habit of growth than the short-leaved plant of Fortune; and I may add, a plant of it in the nurseries of Messrs. Lawson & Son here has stood the last three years without injury, it having been only slightly protected by snow from the late severe storm, when on one night a thermometer in its vicinity registered —5°. Both Fortune's long and short-leaved sorts produce small oval-shaped Plum-like fruit, undistinguishable from one another, at least to a casual observer, so that the old designations of mas. and fœm. as applied to them are incorrect; and if they are really distinct species a new name will have to be got for the latter, as it is certainly not the C. drupacea of Siebold. *William Gorrie, Bangholm, Edinburgh.*

Notices of Books.

Personal Narrative of Two Years' Imprisonment in Burmah. By Henry Gouger. 8vo. Murray, pp. 327.

The circumstances related in this curious volume occurred 35 years ago, and are described by the author from memory only. This is always to be recollected in its perusal. It appears that he proceeded to Burmah as an English merchant, that he was well received at Amerapoorah the capital, and sold his merchandize with "astonishing" profit. Having revisited Calcutta he returned to Ava, got on pretty well at first, but hostilities with the English having broken out he was regarded as a spy, thrown into prison, deprived of his property, and eventually, after many perils, delivered up to Sir Alexander Campbell upon the advance of that general to the capital. Those who love excitement or wish to study the manners of a barbarian nation at the time of the narrative, will find in the pages of the volume a plentiful supply of anecdotes. We can only quote a few.

Alligators.—"Bathing in the rivers of India is at all times a hazardous and foolish practice, especially in the Irrawuddi, which is teeming with alligators of huge size and terrible voracity. They are often known to take a man from the stern of his light canoe, depressed as it is almost to the water's edge by his own weight, offering a tempting bait to these ravenous creatures. I have seen them at times basking on the rushy bank, apparently asleep, with their horrid jaws wide open, and distended almost to a right angle. The natives say that while they are indulging in this way, their pestiferous breath attracts the swarms of flies and insects abounding on such sedgy banks, and that when their mouths are well lined with them a single snap secures the prey. This is not at all improbable, and must form rather a pleasant mode of taking a delicate dessert after a glutting meal of putrid carrion. A few years after, when my boat was once gliding noiselessly down the Saluen river, the men resting on their oars, I came unexpectedly upon one of these hateful reptiles as he lay extended in the cooling attitude just described. He was either asleep, or too intent upon his interesting amusement of fly-catching to notice my approach, until a charge of a very different description went down his nasty throat. A loud plash in the water followed, almost as quick as the report from my gun, and I saw him no more. There is no doubt he died, for the alligator rarely recovers from a severe wound."

Prison Precautions.—"But the most ridiculous instance of superstition, was that of a man brought into prison because he said he could fly. Why they should interfere to prevent his doing so, if he really possessed the power, no one could tell. The case was a difficult one. 'Father' Moung-lah was responsible for his safe custody, and was in terror lest the bird should take wing in the course of the night. The sagacious old man thought it was possible he might be able to fly out of one sort of fastening, but not out of another; so he wisely determined to take every kind of security his wits could invent. The man was first put in three pairs of irons,—the jaws of the central alligator then snapped upon his ankles, holding them tight,—his wrists were bound together with a long rope tied to one of the rafters of the roof of the building,—his long hair was twisted into braids, and each braid fastened separately to the floor,—another rope was tied round his waist and confined it to the floor also. As he lay thus prostrate, Moung-lah stood over him in contemplation, apparently deliberating in his own mind what further means he could adopt to clip the wings of this subtle captive. At last he bethought himself of the holes pierced in the man's ears, which usually are large enough to save the trouble of carrying a cigar-case, and through these holes the ingenious Moung lah contrived to pass strings, confining his ears also to the floor. One would have thought he had read Gulliver. Still the cautious 'father' had his misgivings, and before leaving the prison, very strict injunctions were delivered to the Savage with the club, to watch the creature, and if it attempted to fly, he was to brain it as it rose. While all this was going on, the sufferer ceased not to ridicule all their precautions, and to assert his own ability to elude them, as he fully intended to do in due time

The confidence of his manner raised the credulity of Mr. Rodgers. 'These people know more than you think they do,' said he to me. I suggested our tying ourselves to him,—perhaps he might take us under his wing, and so we should escape when he took his flight. 'Wait till you see, sir.' We did wait, and to the joy of our Chief, next morning, the bird had not flown. The gaolors soon began to doubt his powers; day by day the lashings were relaxed, and when it clearly appeared that he was an inhabitant of this earth only, and that he had no power to soar above it, no further means were taken to confine him to it. The poor lunatic was permitted to participate in the usual privileges of the prison."

Prison Punishment.—"One night, as I was vainly endeavouring to coax myself asleep, the screams of an unfortunate wretch in the inner prison fell upon my ear, and, the door of my cell being at the time unfastened and the prison wall not more than 3 feet off, curiosity prompted me to peep through a crack to see what fresh mischief was on foot. Never shall I forget the foul assassination I witnessed. The inmates were breathlessly silent, evidently expecting some evil. The cries proceeded from a young man, who lay stretched on the floor, with his feet in the stocks. The lamp was burning dimly, giving just enough light to show the form of a grim pahquet striding towards his victim. Without a word he stamped several times on the mouth of the youth with his heavy wooden shoes, with a force which must have broken his teeth and jaws into fragments. From my hiding-place, where I stood trembling with terror, I heard the bones crack and crash. Still, the cries were not altogether silenced, when the monster seized the club of the Savage, and with repeated blows on the body and head, pounded the poor sufferer to death. The corpse was then taken from the stocks and buried in the prison-yard. Chilled to the heart by what I had seen, I crept back into my cell unperceived, with a resolution never again to give way to unnecessary curiosity. 'My soul, enter not thou into their secrets.' What a gang of fiends was I living amongst!"

Mr. Gouger's Prudence.—"The passage to Rangoon, however agreeable, did not abound in adventures. One alone happened worth relating. The general's boat, as I have before remarked, headed the fleet; but sometimes, as it was powerfully manned, we dropped astern just to see that all was right, then shot ahead again to resume our proper position. I think it was the day we left Prome, as the evening was setting in, we were seated at our table on the deck making vigorous attacks on a noble cold round of beef, when we were surprised by a volley of musket-shots flying over our heads. None of them hit us; they appeared to be aimed some inches too high. We were at that time four or five miles ahead of the fleet. The right bank of the river, from which the shots proceeded, and which were pretty steadily kept up for two or three minutes, was about 150 yards distant, and was lined with high Grass, flags, and jungle. As the river was nearly a mile wide, it would have been an easy matter to put the boat out of harm's way in a few minutes by rowing her into the stream, and as Sir A. Campbell did not speak the Hindostanee language, I took the liberty to ask his permission to give the required order for the purpose. But the smell of powder had put the old soldier's blood up. 'No, sir! just tell the steersman to put the nose of the boat right in among them.' Now, this may be called bravery—with due submission, I call it downright folly. Here were three men seated at table on the deck of an open boat, offering an inviting butt for concealed marksmen on shore,—one of the three (I beg his pardon), who ought to have known better, absolutely donning his cocked hat in order to present a fairer target, and showing by the flag at the mast-head that it was the boat of the Chief risking his life—for what? For the chance of punishing a gang of marauders, who, if they are good shots, are pretty sure to make him pay dearly for his temerity."

The author was eventually appointed to examine the country for Teak trees, concerning which we should have been glad of details, even although 35 years old.

A Glossary of Scientific Terms for General Use. By Alexander Henry, M.D. (12mo, Walton & Maberly, pp. 202.)

A useful book, but very meagre and in great need of amplification. In Botanical terminology it is especially poor. Nor is it always correct. Thus *Acotyledonous*, although literally signifying having no cotyledons, nevertheless in common parlance really means not producing "seeds."

In *Modern Statesmen* or *Sketches from the Strangers' Gallery of the House of Commons* (Tweedie), Mr. Ritchie has given a lively description of the notables now or lately forming part of the House of Commons. He writes with knowledge and tact, and has produced something more than an agreeable volume.

A new vein is opened in the *Flore des Serres*. In the new number just out, in addition to figures of plants, we find articles on Marine Aquaria with coloured plates of their curious inhabitants.

Life Story, a Prize Autobiography, by Jas. Hillocks (18mo, Tweedie). A tale of the struggles upwards of a very poor man of the working class, a weaver's son born in Dundee. It contains plenty of good sense, and good feeling. We recommend the following to young gardeners. "On 25th November, 1844, I opened a school at Smithfield, a small plot of houses at the top of Hilltown, Dundee. I did not begin 'under distinguished patronage.' The small bill announcing my opening, simply held out that I was to teach reading, writing, and arithmetic. Latin and mathematics were not mentioned, because they were not needed, and because I knew but little of either—at least, I could not profess to teach them. I have ever detested quackery, and of all kinds palmed on the public, there is none more contemptible than that which too often springs from the vanity of young men when becoming teachers. With few exceptions they try to make the credulous believe they possess great learning, whereas, in not a few cases, they should attend to the advice—

"'Let all the foreign tongues alone,
Till you can read and spell your own.'"

We believe the author's story to be perfectly trustworthy.

Sutton's Spring Catalogue for 1861 is much more than a Trade list. It is a good instructor in the quality and cultivation of garden crops, and has some useful lithographic plates after the manner of Vilmorin's Album, but uncoloured.

Journal of the Linnean Society. Supplement to Vol. V., Botany, is entirely occupied by a valuable paper by Dr. Thomas Anderson on the Vegetation of Aden, the burnt up coaling station of Red Sea steamers, which nevertheless boasts of 94 species of plants belonging to 79 genera and 41 natural orders.

The Underground Railroad from Slavery to Freedom, by the Rev. W. M. Mitchell (Tweedie) is an account by a coloured clergyman, once a slave and slave driver, of what has befallen him in the course of his life. The name Underground Railroad signifies an imaginary railroad by which abolitionists carry off niggers, invented by the slave owners in consequence of their inability to discover by what means their runaway slaves were conveyed away. It is a curious narrative, and will find readers in plenty. Price 1*s*. 6*d*.

Calendar of Operations.
(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c.—Where proper means are allowed this structure should now be getting gay; Chinese Primulas, Daphnes, early flowering Heaths and plants of that description which should be in flower, make a good display. Large plants of Rhododendrons or Camellias that have been some time in their pots or tubs will require more attention than people commonly imagine; weak tepid liquid manure may be given them occasionally with advantage. In stoves heat must be indulged in, more particularly while the present severe weather lasts. To obtain this keep rather a lively fire from 7 in the morning until 11 o'clock, from which time it may be allowed to decline until evening. Begin soon to repot Orchids, taking them exactly in the order in which they push; be sure that your material is scalded or half charred to destroy insects. Keep the plants well elevated, and use plenty of charcoal in lumps of considerable size, fastening the whole at last so that the plant cannot be loosened by agitation. Sphagnum or other Moss pegged on the top makes a good finish, and is to be recommended in houses which are unavoidably deficient of atmospheric moisture. Syringe plants on blocks occasionally, but not too much during the present frosty weather. Let the temperature be 55° by night and 65° by day.

FORCING DEPARTMENT.

PINERY.—Have soil in readiness for shifting when required; keep up a moist heat in the fruiting house, syringing occasionally if much fire heat is employed. Plants intended for fruiting may soon be planted out into beds of good porous loam mixed with well rotted manure.

VINERIES.—Discontinue syringing Vines that are showing fruit; but secure moisture in the atmosphere by frequently sprinkling passages, &c. Be satisfied with as low a temperature as will be safe under the state of the Vines, at night, and on very frosty days, but take advantage of every ray of sunshine to raise it considerably, and be very cautious how cold air is admitted where the Vines are in leaf. As the Grapes are cleared from late houses, prune and wash the Vines with soft soap, and a little soot and lime; also thoroughly clean the woodwork, glass, &c., and have everything clean and ready for next campaign.

PEACH HOUSE.—Discontinue syringing where the blossoms are beginning to open, but secure a nice, moist, healthy state of the atmosphere by sprinkling the passages, &c., as may be necessary, but avoid anything like dampness while the trees are in bloom. Maintain a steady night temperature of 50° or 55° while the trees are in bloom. Take every favourable opportunity of admitting a little fresh air, especially if the external air can be made to pass over the heating apparatus, so as to get heated before coming in contact with the plants. Avoid the admission of currents of dry, cold air, however, which at present would be most injurious.

FIGS.—See that trees planted out are properly moist at the roots, and also keep those in pots and tubs carefully supplied with water, for any excess as respects the presence or absence of moisture at the root is dangerous after the appearance of fruit, and is the frequent cause of its dropping off. Maintain a moist atmosphere, and if necessary to water the border, use tepid water giving enough to nicely moisten the whole of the soil. Let the temperature range from 50° to 55° at night, giving air whenever it can be done with perfect safety.

FLOWER GARDEN AND SHRUBBERIES.

Continue to make the necessary preparations for clumps or masses by sweetening or renewing the soil. Planting out things of biennial character in masses where requisite in borders, and the rearrangement of perennials must stand over till more favourable weather has set in.

HARDY FRUIT AND KITCHEN GARDEN.

Push forward all kinds of wheeling while the ground is in a proper state for such work. Soils of a heavy tenacious character are improved by working and exposing them to the action of frost, and some persons dig such ground a second time, turning in the frozen surface, in order to expose a further portion to the action of the weather, but where it may be desirable to do this the frozen part should not be dug in deep. In short the system is not one to be recommended. Look well to the protection of Lettuce, Cauliflower, &c., under glass. Some of the strongest roots of early Rhubarb might be covered with pots or boxes, and sufficient leaves and stable litter to produce a gentle warmth; this would save injuring the roots by removing them for forcing, but where there is a good stock of roots this is of little importance, and is hardly worth the trouble and litter which it causes. Get ground prepared by heavy manuring and trenching for fresh plantations of Rhubarb, Seakale and Asparagus, and remember that the ground for these things can hardly be made too rich.

COTTAGERS' GARDEN.

All leisure hours should be occupied in collecting together ditchings, road-scrapings, and other refuse matters to improve the soil. Also take care that the dung-heap is secure at bottom by means of puddling or otherwise, and an escape drain should be provided at one end (the lowest) with a stopper, so that in the case of abundance of manure-water through rains or otherwise, the occupier could draw off the surplus into a sunken pit waterproof, and by means of a water-barrow supply it to his crops. Consult the Kitchen Garden Remembrancer in another column for information on other matters.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON, For the Week ending Jan. 17, 1860, as observed at the Horticultural Gardens.

January.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth. 1 foot deep.	Of the Earth. 2 feet deep.	Wind.
Friday 11	●	30.317	30.184	35	19	27.0	36½	36½	S.
Satur. 12	1	30.140	29.922	40	31	35.5	36½	36½	S.
Sunday 13	2	29.758	29.633	34	22	28.0	36	36	S.E.
Mon. 14	3	29.801	29.635	31	25	28.0	36½	36½	S.E.
Tues. 15	4	30.027	30.001	31	21	26.0	36	36	E.
Wed. 16	5	30.144	30.089	29	25	27.0	36	36	N.E.
Thurs. 17	6	30.291	30.201	37	30	33.5	36	36	N.E.
Average..		30.068	29.952	33.8	24.7	29.3	36.2	35.2	

Jan. 11—Severe frost, hazy, overcast; foggy at night.
— 12—Slight thaw, cloudy; overcast; drizzly.
— 13—Uniform haze; snowing, overcast; frosty.
— 14—Hazy throughout; cold wind; frosty at night.
— 15—Flying haze, with brisk cold wind; light clouds; clear and frosty.
— 16—Cold frosty wind; cloudy; snow showers; slight frost.
— 17—Overcast, slight thaw; drizzly at night.
Mean temperature of the week, 7 1-5th deg. below the average.

RECORD OF THE WEATHER AT CHISWICK During the last 35 years, for the ensuing Week, ending Jan. 26, 1861.

January.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	[illegible]
Sunday 20	42.5	30.9	36.7	14	0.65 in.	4	[illegible]	4	1	[illegible]
Mon. 21	43.6	32.6	38.1	15	0.48	1	5	4	1	[illegible]
Tues. 22	43.6	32.8	38.2	14	0.57	3	5	1	5	[illegible]
Wed. 23	44.6	32.9	38.7	15	0.27	2	3	2	3	[illegible]
Thurs. 24	43.7	32.2	37.9	16	0.51	3	4	2	1	[illegible]
Friday 25	44.1	32.4	38.3	18	0.90	1	4	3	1	[illegible]
Satur. 26	44.7	32.0	38.3	15	0.34	1	5	3	4	[illegible]

The highest temperature during the above period occurred on the 2[illegible], 1834—therm. 58 deg.; and the lowest on the 20th, 1838—therm. 7 deg.

Notices to Correspondents.

DISCOLOURED LEAVES: *W P.* Cold and damp with insufficient ventilation. There is no mildew. It is a very dirty practice to syringe with dirty water.

EDUCATION OF GARDENERS. We have a great quantity of letters before us upon this subject, for which we either find no room, or which are not to the purpose, or which are objectionable. To abuse head gardeners, to abuse nurserymen, to abuse employers, and everybody else is not to offer arguments. The worst of these is signed "A True Scotchman."

NAMES OF FRUITS: Correspondents should not be unreasonable. We cannot undertake to name baskets full of different sorts. In future we must make it a rule never to examine more than six sorts, whatever may be the number forwarded. *T J.* As far as can be judged from the specimens this year, No. 1 is Blenheim Pippin; 2, Cockle Pippin; 4, Rock Pippin; 6, Pearson's Plate. *L H W.* Your Apple is the Waltham Abbey Seedling, of which The Harvey, or Harvey, the name under which it is known by the gardener, is a synonym.‖

OLD SEEDS: *T J.* We do not recognise the seed, or rather shell, for that is all that we have received. Surely it is not Acacia.

RABBITS: *J B D.* It is stated at p. 13 of our volume for [illegible] that trees may be kept from being barked by rabbits by painting their stems over annually with thoroughly skimmed milk mixed with soot. Others (see p. 1038 of the same volume) recommend fresh cow-dung and soot plastered on the stems; and cow-dung, lime, and soot mixed with urine; gas tar is also sometimes added to give the mixture a strong smell; but if this is used the ring of paint must not exceed a hand's breadth.‡

MISC: *A Young Nurseryman.* You can use nothing cheaper or better for heating a propagating house and houses for forcing than a hot water apparatus. For makers and prices consult our advertising columns. The seeds of Conifers can only be had through the Trade, or at the auctions in London, which are always advertised when about to take place. *H W.* Double Zinnia Seed may be procured of the principal seedsmen. The Ailanthus Tree is a plant of the natural order of Terebinths.—Full price will be given for Nos. for Dec. 24th and Dec. 3rd, 1859.

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MR. BUCKMAN, Professor of Geology and Botany in the Royal Agricultural College, begs to acquaint Landed Proprietors and those connected with Agriculture, that he may be professionally consulted in all matters relating to the Geology and Botany of Estates, such as the Mineral Products, Economic Materials, Water-bearing Strata and Water Rights of Estates and Farms, Improvements in Pasture, Analyses of Seeds, &c.—Communications to be addressed to Professor BUCKMAN, Dollar Ward, Cirencester.

The Agricultural Gazette.

SATURDAY, JANUARY 19, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

MONDAY,	Jan 21—	Framlingham Farmers' Club.
TUESDAY,	— 22	Kingscote Farmers' Club (Wheat Culture).
WEDNESDAY,	— 23—	Blandford ditto ditto.
THURSDAY,	— 24	Staindrop Farmers' Club. Wirral ditto ditto.
THURSDAY,	— 31—	Agri. Society of Ireland.

IF you analyse an ordinary sample of cow's milk you may probably obtain nearly 4 per cent. of butter, quite 4 per cent. of casein, 4 or 5 per cent. of sugar, and 88 per cent. or thereabouts of water. If your cow yields, as it is probable she does, 6000 lbs. weight of milk per annum, then you obtain from her, according to this analysis, 240 lbs. butter and 240 lbs. of casein. But now, analyse and weigh the actual produce of your dairy. Let us suppose you are a Gloucestershire dairy farmer, and that you make 400 lbs. of cheese and 50 lbs. of butter from your cow per annum. This is not a large, but it may be considered an average return. That cheese, according to Prof. JOHNSTON, contains 38 per cent. of casein and 22 per cent. of butter, or in all 152 lbs. of casein and 88 lbs. of butter, besides other ingredients, water, salt, &c. That butter, again, according to Prof. WAY, contains 80 per cent. of pure fat of butter and 3 per cent. of casein, or in all 40 lbs. of butter and 1½ lb. of casein, besides other ingredients, water, salt, &c. Now add the ingredients thus ascertained together, and you find that you have had from your cow during the twelve months, as the produce of your dairy, 153½ lbs. of casein and 128 lbs. of butter, instead of 240 lbs. of butter and 240 lbs. of casein, which according to analysis your milk contained.

What has become of the remainder? It is a question of the very greatest importance to all dairy farmers. So great a loss is enough to startle them, and most people will be inclined to doubt it. It must be admitted in reply to these that the analyses here quoted are not as they would need to be if all question is to be silenced—analyses month by month of the milk whose actual produce for the year is here named. But they are the average of a number of examinations of ordinary samples by good chemists; and the composition of the cheese and butter quoted is also most probably not far from the truth. It must also be admitted that there is other besides dairy produce obtained from the milk of the cow. Pigs are fattened on the whey, but no farmer will admit that there is enough bacon thus made to correspond to anything like the loss thus indicated of the butter and the cheese of milk.

Such a loss, amounting to full one third both of the butter and of the cheese contained in the milk, is certainly not made up by the bacon fattened on the whey; and if as we must suppose the missing ingredients do escape in the whey, then the pigs fail nearly as egregiously as the dairymaids in saving all the valuable ingredients passing by them in the liquid which they deal with.

Let us add that the averages here spoken of are not quoted at random. They correspond very closely to the figures given as his experience by Mr. HARRISON, of Frocester Court, Gloucestershire, who has the credit of having first called attention to the loss which, according to analysis, thus takes place in the dairy. In a little Handbook of Dairy Husbandry,* published last year, his figures are communicated by him thus:—In 1857 55 cows were milked; they yielded 31,700 gallons, or 321,000 lbs. of milk, besides rearing 43 calves. From this quantity of milk 25,424 lbs. of cheese and 3466 lbs. of butter were made. Now the milk contained by analysis, according to Mr. HARRISON, 12,480 lbs. of casein and 11,556 lbs. of butter, whereas the cheese and butter contained by analysis only 9765 lbs. of casein and 8366 lbs. of butter, leaving 2715 lbs. of casein and 3190 lbs. of butter unaccounted for.

No wonder that great interest is taken in the dairy researches in which Dr. VOELCKER is engaged for the Royal Agricultural Society of England. We are glad to find from a lecture lately given by Mr. HARRISON before the members of the Vale of Berkeley Farmers' Club, that these researches are likely to result in some useful conclusions. Mr. HARRISON said: "There is undoubtedly very great room for improvement even in our very best dairies, and to prove that this is not mere assertion, but really the case, I am permitted by Dr. VOELCKER, who is now engaged in an investigation of cheesemaking for the Royal Agricultural Society, to mention a few general results at which he has arrived. The investigation, he says, in a great measure confirms the result I arrived at from a study of my own dairy produce, viz., that nearly 25 per cent. of the casein and butter which go to form cheese pass off in the whey; in fact, that could we completely extract therefrom the whey, where we make three cheeses now we should nearly make four: of course the pigs would suffer; but the cheese would be much more valuable could it be extracted as food for man, than, as now, in the whey for pigs. Dr. VOELCKER says further, he thinks it may be extracted. The results of Dr. VOELCKER's experiments will probably show, that as there are very many different methods of cheese-making, so are there amazing differences in the composition of the cheese made. At the end of September he had analysed 48 different cheeses, and he found the quantities of water in them vary as much as 16 per cent., being in the maximum quantity about 4-10ths of the whole. He has found as much difference as 16 to 20 per cent. in the quantity of water in the curd, when finally ready to place in the press, and there is little doubt that this great difference considerably affects the quality of the cheese when fit for market."

DAVEY *v.* GILLETT THE ELDER.—This was an action in which, so far as the dirty seed grievance is concerned, the question at issue is much the same as that commented upon in the *Agricultural Gazette* on the 17th November of last year. In this case Mr. DAVEY (the plaintiff in the former case, in which Mr. GILLETT, Jun., was the defendant) sued Mr. GILLETT, Sen. for damages upon the following grounds.

In 1858 the plaintiff ordered of the defendant a quantity of Sainfoin seed of the best quality, and it was complained that as the crop came to maturity it was found to be full of a plant (Burnet) which until then had been almost unknown to the growers of Sainfoin in the district. The evidence of some gentlemen engaged in farming was brought forward to show that the Sainfoin crop was much deteriorated by the presence of the Burnet, and further that the permanency of the Sainfoin was interfered with on account of the rampant growth of the Burnet, which from its mode of growth and poor qualities was only considered as a weed.

Professor BUCKMAN was called to prove that this Burnet was sown with the seed, inasmuch as the Sainfoin was drilled, and the drills on the 8th June last were occupied with about 50 per cent. of Burnet. The whole field, too, was full of different varieties of the Lop Grass, which our readers know is the Bromus mollis; now, as this form of Grass has many varieties, or according to some botanists many species, several of

* Handbook of Dairy Husbandry: Longmans.

which are undoubtedly of foreign importation—these foreign forms, united with the quantity of Burnet seed in the samples, offer good botanical evidence that the seed in question was a foreign seed: and the quantities of these weeds would lead to the inference that it was sold to the farmer without being properly cleaned from the filth complained of. This then we may remark is a matter of great importance to the farmer, for although it is not here complained that the weeds were purposely mixed, yet if they were not separated the transaction is unfair, as the market price of the dirty seed is from 3*s*. 6*d*. to 4*s*. a bushel, whilst that of the cleaned seed is 7*s*. In the case before us the plaintiff was charged at the rate of 52*s*. per quarter.

The case then, so far as the seed question is concerned, was simply that the plaintiff paid a good price for good Sainfoin seed, trusting to the seedsman for the quality, and that he got a crop of more than half rubbish. The defence to the seed case was that the Sainfoin was as free from weeds as it well could be, that the weeds were natural to the soil, and that the time since the transaction took place rendered it exceedingly hard upon the defendant to have it now brought into Court.

The obvious answer to this was the state of the drilled crop and the botanical evidence which was adduced. The latter, however, the counsel for the defendant entirely ignored—"a Professor of Botany forsooth, who is not a farmer, can know nothing about it." In fact the principal amusement at the trial seems to have been caused by the taunts levelled at the Professor of Botany for pretending to know anything about plants or agricultural weeds!

But to our case; the mere assertion of damage being done by a seedsman selling dirty Sainfoin seed cannot be doubted; and even if the "dirt" should not be such as cattle would reject as food, it yet seems to us that if a man pays for Sainfoin or any other seed he ought to get it. It is of no use to say, as in this case, Burnet seed sells for 9*d*. a pound, and is thus dearer than Sainfoin, for Burnet is seldom used, and there is little demand for its seed; whereas if it were a good crop-plant the seed might be supplied at an exceedingly cheap rate.

We have thus commented upon this trial on account of the unfortunate bearing it presents on the question of weeds in seeds, and because it bears out our oft-repeated assertion, that farmers sow nine-tenths of their weeds in their crop seeds, and thus are made to pay for what costs them pounds year after year to get rid of. And we further assert that at this moment there are throughout England many smaller seedsmen who buy up any samples of seeds, either British or foreign, which can be had at a cheap rate. They have not the apparatus to clean these even if such foul samples could be entirely cleaned; and thus it is we are to be taught that clean seeds are an impossibility.

It is true that the difficulties attending a conviction are very great, for as other matters (some of a private nature, as in the case before us) are presented to the jury by the advocate, the simple question of damage and liability for that damage has we think not yet been fairly tried, but that the law is sufficient for such cases we still believe; and as this action, upon which the jury could not agree, is likely to come before a superior court, we shall then have a chance of testing the legal merits of the case. Meanwhile let us add that we know that our strictures upon dirty seeds will fall perfectly harmless on respectable houses, not a few of whom it is but right to say have encouraged us in our course; but there is abundant proof nevertheless that the "dirty seed grievance" is a real one, and connected with much that is neither honest nor straightforward.

At Romsey on Monday last, a meeting convened by the vicar, and presided over by Lord Palmerston, was addressed by Mr. Cowper, M.P. and others, on the condition of the dwellings of the poor; and a Committee was appointed for the purpose of forming a Company for the purchase and improvement of cottage property. Such a Company exists in the Cottage Improvement Society at Hastings, whose successful career has more than once been referred to in these columns. It has been in operation for three years and a half. It has a capital of 12,000*l*. in shares of 100*l*. each, and has obtained possession of 100 houses. It has not built any, but has merely taken existing houses and improved them. The gross rents received have been about 11½ per cent. on the total outlay, and the net rental after paying rates, taxes, and insurance, has been about 8½ per cent. There has been paid every year a dividend of 6 per cent. and a reserve fund has been laid by amounting at the present moment to 200*l*. We extract these particulars from Mr. Cowper's speech, in which the establishment of such a society at Romsey was advocated; and we hope that the example which has been adopted there will be followed in many other localities. As Mr. Cowper said:—"If such a society were formed, their first business would be to hunt out with great keenness all the worst habitations. Having discovered the worst portions of a town, they should endeavour either to purchase the property or take possession of it upon long leases. Then, if there are houses which are discreditable to the neighbourhood and the town, and in such a bad state of repair that they cannot be improved, they should at once be pulled down. But if the foundations are good and the outer walls are sound, the *modus operandi* should be to convert the tenement from one of discomfort into one of comfort and health, by closing in the doors of the outer porches, by properly distributing the rooms inside, and by providing bedrooms for the decent accommodation of both sexes of the family. Then the floor must be changed from a brick floor into a boarded one, the walls must be whitewashed, and a good grate provided, capable of giving the greatest amount of warmth and cooking power at the smallest expenditure of fuel. By these means a cottage may be changed from a really bad, unfit, and improper place of residence into one which the most benevolent person might fairly wish to see provided for a decent respectable family."

Let us hope that the course here pointed out may be generally adopted.

THE ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

I was glad to see your comments last week on the recent management of this Society. What a good thing it is to amend one's faults when called upon to do so; and how fortunate it is when an appeal for better conduct is at once met amiably and obligingly by the repentant culprit. The genius of agricultural progress whose location is Hanover Square, must be heartily congratulated for earnestly endeavouring to set itself straight with those it has offended, and thus resuming its potent spell over the well-nigh lost affections of plain husbandmen and 'cute agricultural engineers. And it is quite time for some alteration; the indications of a lethargic or enfeebled state of health having become too painfully evident of late in a body strongly needing a revivification of new blood.

Critics had found in the Royal Agricultural Society shortcomings rather than offences; and these defects of a negative and passive character are the most difficult of all to remedy. There has been not so much blundering management and gross abuses as the long-continued rule of a quiet administration, innocent of the bold and popular measures calculated to inspire public enthusiasm and to attract an ever-growing army of supporters. Rules made stringent without cause and rigidly enforced without sufficient reason, seemed to have embodied the serene indifference or unaccommodating temper of genteel mediocrity during its little brief authority in council or committee: or why, for instance, was the Press carefully shut and sealed outside the show-yard boarding till the hour of public admission, and denied the convenience of a catalogue which every implement exhibitor was allowed to purchase? Surely the early descriptive notices of journals and periodicals are calculated to awaken public interest toward the show, and prepare visitors for what they are to see—thus serving the immediate interests of the Society, while furnishing information alike to absent members and to the world at large. Hence, the sensible stewards at the Canterbury meeting, with the clever indefatigable honorary director, wisely but timorously ventured to relax the red-tape barriers framed by the Medes and Persians of Hanover Square for the suppression of early publicity; and further facilities are promised to note-books and pencils on future occasions.

In the Council are men of liberal and independent mind who loathe the niggardly views, and unbusinesslike demeanour, hitherto too prevalent in the deliberations and decisions of that assembly. But these men of the right stamp are too few to counterbalance the influence of other members whose presence is ornamental rather than conducive to good management.

When the consulting chemist requires a paltry grant of some 100*l*. for investigating the cheese manufacture in our dairy districts—a sum barely sufficient to defray travelling expenses—is it prudent frugality or wretched meanness that demurs to the sum as "excessive!" Is that a sagacious economy which has suffered the implement trials to run on year after year in a hasty and ridiculously inadequate manner, because of the cost of half a score more judges! How careful over the expenditure! while simultaneously an additional 2000*l*. is laid by along with the previous 10,000*l*. already invested in the Funds, as a fall back in case there should be a loss at the metropolitan meeting of 1862, which everybody else expects will of course prove profitable and money-taking. This jealous watching over the money matter seems to have been always on the look out in the wrong direction; those investments being feared which are well calculated to augment the Society's influence, and to add to its resources, while there was a careless or inefficient oversight of the ordinary accounts. The late secretary, sad to relate, contrived to take nearly 2000*l*. of the Society's moneys; and the members of the Finance Committee, though not called upon to refund the amount, of course resigned their office, in order that another committee might take better charge of the cash, with a professional accountant to revise their book-keeping. Is it possible that the old financiers, unabashed by criticisms imputing gross neglect, still occupy the Council-room?

The Society's administration and executive have been rather unfortunate of late in the matter of appointments to vacant or new offices. The selection of a new secretary could hardly be expected to give universal satisfaction; seeing that the gentleman chosen was a stranger in agricultural circles, and, while competent to discharge his duties efficiently and courteously, he might not possess that large sympathy with the aims and capacities of the great organisation he had to command, by which another manager would have infused life and expansion. By the late appointment to the editorship of the Journal the amateur literary labours of some gifted gentlemen of high standing in the agricultural world were very properly to be superseded by those of a paid and responsible editor, and when several individuals of note in scientific and rural literature were among the applicants for the post, it was rather a strange vagary on the part of the sub-committee to select as candidate for election a worthy gentleman "whose name was never heard of" in agricultural authorship.

But the Society is reforming its behaviour, and in future let us hope that testimonials "strictly private," and the personal interference of leading M.P.'s and estimable bishops will not carry the day in favour of any obscure name against the sense and wishes of the whole constituency of the Society. *An English Farmer.*

FERTILITY AND FARM-YARD DUNG.

(*Continued from p. 32.*)

By a due reflection on those changes in the relative proportions of the constituents of soils (largely caused, as we have seen these changes to be, by the expedient of rotation manuring), it is that the agriculturist is enabled to account for the alterations for good or for evil, which every one must perceive to be going on in the productive powers of our fields. Many soils at first incompetent to grow Turnips ultimately have come, through the alterations produced by the joint agency of tillage and manure to bear them plentifully; while again, fields changed beyond the limits of healthful Turnip vegetation, seem only now beginning to be capable to produce Mangels in abundance. This may possibly be deemed a merely speculative illustration; and as the proposition in support of which it was cited, is both important in itself as well as too little considered in practical husbandry, we shall adduce other instances in support of it.

In the north-eastern counties of Scotland nothing is more usual than the parcelling out of heathy moors in the veriest state of nature into labourers' crofts; and in these arrangements the crofter's first step is to trench, inclose, and put in crop a certain portion of his allotment; his next is to build his cottage, and if a neat-handed spademan, a third consists in the forming of a little garden in which to grow his pot-herbs. As a son of Adam, he is of course subject to the curse of weeds; and what are those which in the wilderness he has settled in invade his Onion and Carrot beds? Outside the garden fence the soil is covered with Club Mosses, Carices, Crowberries, and Heaths of various species; and doubtless the soil of the garden itself contains myriads of their living seeds. Yet strange to say, of these not one springs up amongst the sown esculents; but instead Groundsel, Ground-Ivy, Chickweed, and all the other common garden pests; although of these no single specimen would reward the strictest search in the surrounding moor. In these circumstances of primitive cultivation, it is clearly seen that the same operations which qualified the garden plots to produce an esculent vegetation disqualified them from nurturing the indigenous herbage of the spot; nay, more, actually enticed the intrusion and fostered the growth of species which never before had been able to acquire a footing, even in the vicinity. So, in like manner, when we reason discriminately on the familiar fact that the ancient earthworks, whether sepulchral or military, which so frequently prevail in extensive wastes, are clothed with an herbage very different from that which covers the surrounding undisturbed soil, the conclusion arrived at is this, that the altered texture occurring in the process of construction originated new reactions between the atmosphere and the soil, resulting in food for plants unsuitable to the nourishment of the native herbage of the locality, but favourable to the colonization of other kinds wafted as seed from a distance, and which if falling on the unmoved soil

the waste could find no adequate food, and would not germinate, but falling on the *quasi* tilled soil of the tumulus or rampart found a congenial seed bed.

Again: how palpable is the difference between the kinds of Grasses which prevail in the footpath and those of the meadow through which it passes. Here the soil, though identically the same in both places, undergoes a modified vegetative power, due probably to nothing else than the greater consolidation imparted to the earth of the path by the footsteps of passers by. The end ridge of a Clover field, beaten hard by the turning of the horses and implements, and probably less manured, often bears a luxuriant crop when the rest of the inclosure has failed to rear a single plant; and numberless other analogous cases could be adduced. Enough, however, has already been cited to support the doctrine already advanced, that any change in the circumstances of a soil which occasions an altered ratio amongst its mineral elements of vegetation, whether the change be brought about by manurial or mechanical means, gives rise to new habitudes in such soil, unfavourable to the prosperity of plants aforetime successfully reared in it, and favourable to the cultivation of new species.

But not only is the manurial system of rotation husbandry amenable to the charge of introducing changed relations amongst the mineral constituents of soils; but it is open to this other grave objection, namely, that of surcharging the staple with an accumulating amount of organic constituents, thereby introducing not only chemical agencies in excessive proportion, but physical or mechanical alterations of texture of the greatest moment.* Thus, on a farm of the magnitude of that which we have assumed as the basis of our argument, there is incorporated with the soil in each yearly manuring a fresh accession of organic matter, exclusive of mineral and water, of 500 tons, and ever since the general adoption of alternate husbandry obtained in this country, now more than a century back, this procedure has been going on in all the old corn districts of England [?] On this ground, then, irrespective of any prejudicial effects arising from disturbed ratios in the mineral department, need any sound thinking husbandman be surprised that under such circumstances his fields, once fertile in Clover and Turnips, have at last become unfitted for the available cultivation of these plants. In the American forests accidental fires often lay bare extensive tracts, on which a fresh growth of trees springs up spontanteously with remarkable vigour; and teeming as the soil must be with seed shed by the destroyed kinds, we should expect the new succession to be identical in species with the prior occupants. But in reality it is otherwise, since almost always the renewed arboreal vegetation belongs to botanical orders and genera very different from those of their predecessors. Now, while obviously it is true that a tree which grows and sheds its leaves and fruit, and then ultimately bequeaths its dead trunk to the soil in which it stood—removes no mineral constituency from the spot, it is no less certain that in the many centuries during which the old American forests must have existed, a great change had necessarily occurred in the relative proportions of inorganic and organic matters of the soils in which they grew, not from any increase or decrease of the mineral constituents, but from an annual accession of atmospheric ingredients in the fallen leaves, and ultimately from the results of decomposition in the dead roots, stem, and branches. Hence then, when we seek for an explanation why after a conflagration in Trans-Atlantic woods, the Pine springs up and occupies the space where the Oak or Maple stood; and why, where the Oak and Maple were the original settlers, the Pine succeeds them; we must throw aside altogether the delusive light hitherto sought to be thrown on the subject by the theory of exhaustion (for here the fact is absolutely at variance with that hypothesis), and resort for an interpretation of the phenomenon to the proposition that change of relative proportion amongst the various nutrimental constituents of soils arising from an over accretion of one or more of the individuals, may destroy the fertility of the land on which such circumstances take place for a given class of plants which before throve in them abundantly, as fatally for them as if the disproportion had been caused by a decrease in one or other or several of the alimentary items.

But to stop here would be to express only one half of the truth, the other portion being that the same changes which disqualify a soil from the growth of a prior class of vegetables in an equal measure enables it to yield an abundant produce in other kinds. No farmer in his sound senses would deliberately tamper with the characteristic crispness of a prime Barley soil, by laying on it a heavy top dressing of vegetable matter, because intuitively he believes that the change of texture thereby occasioned would be detrimental. Nevertheless, how glaring becomes his inconsistency in accumulating through the medium of the cattle crops of modern husbandry, a vast mass of matter in his dung-court in which the organic element prevails in enormous proportion; and in then applying the compost at the rate of 10, 15, or 20 tons per acre, in the year immediately antecedent to that in which the Barley crop takes its turn in the rotation. If after a long-continued persistence in this practice the Barley crop is beginning to associate itself with Clover and Turnips, as a precarious member of alternate-husbandry, and if in place the Mangel and Kohl Rabi attain an enormous production, we have in the circumstance a very significant illustration of that law which we have been endeavouring to explain.

But further, besides this abiding source of disturbance in the condition of soils attributable to the manurial system of rotation husbandry, there is attached to the practice another prejudicial circumstance of the same kind, though more intermittent in its character and effects. On entering on this point we have to bring under consideration the all but universal custom of bestowing the whole yearly manurial produce of the entire farm, upon only that one-fourth part of it falling yearly to be on fallow crops, the consequence being that those fertilising benefits of the operation which are supposed to descend to the other three members of the quadrennial course, the Barley, the Hay, and the Wheat, are at best but residual both in qualitative and quantitative proportions. On this point the circumstances connected with the phosphatic element of the manure will afford the best illustration, although as regards the general principles involved in the question, the demonstrations about to be given apply with equal force to all the other elemental nutriments of the soil.

* Our correspondent does not give due credit to the influence of tillage in inducing the slow decay of organic matter in the soil by the admixture of air which it facilitates. *Ed.*

Table IV.—Showing 1st, the gross quantities of crop yearly yielded by a farm of 400 acres, circumstanced as already stated. 2dly, the proportion of phosphoric acid withdrawn by each species of the crops.

	Gross Weight of the crops.	Quantity of Phosphoric acid in each of these.	
	Tons.	Tons.	Cwt.
1. Turnips—Bulbs	2000	1	3
Tops	683	1	6
2. Barley—Grain	93		17
Straw	150		4
3. Hay	150		13
4. Wheat—Grain	70		10
Straw	150		7
		5	0

Now in the calculations which next follow, our prior demonstrations must specially be kept in view, in as far as they showed that the annual supply of alimentary matters furnished by a soil under rotation husbandry, consists first of its own natural yield, and secondly of the quantity returned in the manure. Next, let it be assumed that the naturally eliminated portion is 9 tons in weight, and consists of all the 9 elements stated in Table III. Now, of these 9 tons of natural mineral yield, the normal proportion of phosphoric acid is 3 tons; whilst of the 50 tons of mineral before supposed to be returned in the manure (see Table III.) 2 tons consist of that substance, the yearly available phosphatic element thus being—

	Tons.
Natural supply	3
Returned in manure	2
	5 tons.

With this preliminary explanation the following Table, in which a 100 acre farm under a four-course rotation is still assumed, will easily be understood.

Table V.

		Tons	cwt.
1st year of the Rotation.	Natural phosphatic element evolved in 100 acres under fallow crop in the first year of the rotation	0	15
	Returned in manure, as shown before ..	2	0
		2	15
	Withdrawn by the root crop, bulbs, tops (see Table)	2	9
	Balance of phosphoric acid remaining for the Barley crop	0	6
2d year of the Rotation.	Natural yield in the Barley year	0	15
		1	1
	Withdrawn in the Barley crop, corn, straw (see Table)	1	1
	Balance remaining for the Grass crop—none	0	0
3d year of the Rotation	Natural yield in the Grass year	0	15
		0	15
	Withdrawn in the hay crop (see Table) ..	0	13
	Balance remaining for the Wheat crop	0	2
4th year of the Rotation.	Natural yield in the Wheat year	0	15
		0	17
	Withdrawn by the Wheat crop	0	17

From these approximate calculations it is seen how the root crop may, and probably often does all but exhaust the phosphatic element (and so in like manner the other minerals) of the manurial supply as well as of that naturally yielded by the land, leaving perhaps only a small residue behind for the three succeeding crops of the rotation, and which thus are rendered dependent almost entirely on the natural supply alone.

But let it now be assumed that the manure, in place of being confined to the root division, were equally and yearly distributed amongst it and the other three portions of the farm, then there would in that case be 1 ton 5 cwt. of phosphoric acid annually available to each of the four members of rotation, a quantity sufficient to supply the phosphatic requirements of the quantities of crop set forth in the following Table:—

Table VI.

1. Turnips	1020	tons in place of	2000	tons
2. Barley	111	,,	,,	93	,,
3. Grass	288	,,	,,	150	,,
4. Wheat	103	,,	,,	70	,,
	1522	,,		2313	,,

Summary.—Summed up shortly the foregoing arguments resolve themselves into four heads, as follows:—1. That the manurial system of rotation husbandry necessarily and actually induces a constitutional change in the physical and physiological circumstances of soils. 2d. That as respects soils no constitutional change in their condition can ever occur without proportionally impairing their productive power as respects those species of plants which anterior to the change they were prolific of. 3d. That those morbid conditions which for many years have exhibited themselves in two members of rotation husbandry, and of late years in a third, are adequately accounted for by the constitutional changes induced in the fields by rotation manuring, without resorting for explanation to the untenable doctrine of the exhaustion of soils; because 4thly, it would seem, from a variety of instances possessing a very general acceptation and authority, that species long indigenous to a locality have ceased to be so, and have died out or failed to germinate, not by reason of exhausted, but enhanced nutrimental powers imparted to the staple by circumstances of change, naturally or culturally induced. *A. B.*

THE AGRICULTURAL LABOURER.

No. II. Isle of Ely, Cambridgeshire.—Nearly every locality has its peculiar mode of management, as it regards farm labour. And even in the same district we frequently find great dissimilarity in the methods adopted; so much so, that it ofttimes becomes exceedingly difficult to convey correct ideas upon the subject. Extensive parishes with a great diversity of soil, and consequently of culture, of necessity tend to render one uniform system of labour management very difficult, or impracticable: and perhaps there is no district where these remarks are more amply verified than in the wide-spread fens of the Isle of Ely. We there find large parishes of land frequently containing from 10,000 to 14,000 or 16,000 acres, and possessing nearly every variety of soil; there is the strong tenacious clay, the sharp burning gravel, and the light blowing black dust, which so frequently defies all the multiplied efforts which mechanical skill and genius have invented for its "safe-keeping," and despite iron rollers and pressers of every form and shape, flies away in clouds, disdaining cohesion even when compressed and consolidated to the utmost. We also find in addition to large parishes of land populous and overgrown villages, thinly scattered over this great wide flat of country, with their 4000, 5000, and 6000 people. Farms lying contiguous to these centres of labour possess great facilities for securing an adequate supply, but farms lying midway between these large villages are very differently circumstanced, and have to depend very considerably upon a restless class of "passers-by," and frequently upon Irish, many of whom reside for the whole year upon such farms, whilst others go elsewhere for employment during the winter months, and return to farm work in the spring or summer.

Another peculiar feature in this newly cultivated district is the smallness of the farms. Large farms in a ring fence are the exception. Hence every man who is a large occupier has his occupation in most instances made up of a number of small, detached holdings, lying a shorter or longer distance apart, and consequently attended with great inconvenience, and involving a great increase of personal toil and expense in their management, and tending to prevent all methodical and systematic management, and rendering proper oversight an impossibility. Let it, however, be understood that we make no reference in our further remarks to those many exceptional cases which necessarily result from any of those peculiar circumstances, but to those methods which more generally obtain, and are more extensively adopted.

Early History of the Fens.—When the low-lying lands were submerged, the population was driven to the higher ground, technically termed "high lands," where they resorted and erected their small homesteads, cultivating these lands, the produce of which, with the fish obtained from the inundated low lands, afforded them the means of subsistence. This will account for our villages being so thinly scattered: they could only be planted upon the higher and more elevated grounds, and in those days were literally islands in many cases, and constituted the isles around Ely, all now included in the "Isle of Ely." Successive schemes for removing these waters have been devised and executed, until these low lands have at length, in many instances, become effectually drained, and now yield an abundance of grain and other agricultural produce. These populous villages are both a benefit and an evil. They are a benefit so far as they enable the farmer at all times, except during the busiest week or two of harvest, to secure as large an amount of labour as he may require. And they are an evil in as much as they prevent the exercise of that proper oversight over the home of the labourer, and that care and

solicitude for his home-comforts, which a right-minded master would ever feel, and would gladly exercise, and which every good principled labourer would appreciate and approve.

Village Life.—In these fen districts, our labourers generally live in the towns and villages, finding their own homes, independently in every sense of their employers. These they rent at from 3*l.* to 5*l.* or 6*l.* per year, with a small plot of garden ground commonly attached. Cottages are plentiful, but vary very much in the comforts they possess. Some are well built and comfortable, others are utterly unfit for human habitations, worse indeed than many of the farmers' stables and piggeries.

Labourers living on the Farms.—We have already referred to the smallness of the farms in these fen districts. We have a great many freeholders, and lands are very much cut up and divided. But nearly every little farm and homestead has its one cottage, where lives either the foreman, the shepherd, or the horse-keeper as the case may be. If either of the two former, a single man generally lodges in the house, who waits upon the horses, and if the farm is far from the town as many more single men as are required to go with the teams also lodge there; but if near, married or single men living in the town frequently fill those places, walking to and fro every day. Men living upon the farm as foremen or shepherds, in some instances have a fixed weekly sum with certain privileges; in others they receive the same wages as other common labourers, with the addition of sundry privileges. In the former case 8*s.* per week, with the keep of a cow, found either by the master or servant as the bargain may be made, is often given. In other respects the privileges of both are the same. The house is rent free with small garden adjoining; 20 poles of extra ground for Potatoes in the field are also given free, with the option of having 10 or 20 poles more at 6*d* per pole. 5000 turves per year are also usually given for fuel; these in value are about equal to 2½ tons of coals. There are also poultry arrangements, which frequently amount to something considerable; 4*d.* or 6*d.* per head is generally paid for all the chickens raised. Men too, in these positions lose no time from adverse weather; when they cannot work abroad it is supposed they will find something to do about the homestead, and they always receive full wages. Besides these privileges, there are those of gleaning, which their families enjoy during the harvest. They are permitted to glean amongst the shocks as soon as the reapers have left the field. Married men living in cottages upon farms as horsekeepers have very similar privileges to the above, pehaps not quite so many or so great, but not requiring to be pointed out more minutely. Single men lodging upon the farm and serving in this capacity, or men (married or otherwise) living elsewhere than upon the farm, receive 1*s.* per week beyond the wages paid to ordinary labourers, and like foremen and others, suffer no deduction in wages for loss of time occasioned by foul weather. Men living in the cottages upon the farms are engaged by the year; all other farm labourers, whether men, women, or children, by the day. Wages are influenced very much by the price of corn, and in bad seasons, by the pecuniary circumstances of the employers. After harvest 12*s.* per week were paid for some time, but as prices of corn receded, wages fell to 11*s.*; and when our Fen Wheats became so reduced in value as to sell at only from 32*s.* to 40*s.* per quarter, they again fell to 10*s.*, with a scarcity of work, greatly resulting from the want of funds amongst smaller farmers especially, who have now experienced three decidedly bad years arising from deficient harvests and low prices. Doubtless as the days lengthen, and the spring work comes in, wages will again advance to 11*s.* or 12*s.*, or more, as the price of corn may decide. In justice to our farmers we must say there is no disposition or desire manifested to reduce the rate of wages further than circumstances require, the feeling is generally in the other direction. The length of the days for work is necessarily very much regulated by the amount of daylight we have. From March to October, men work from 6 to 6; during the few winter months from half-past 6 till dark. And here arises one of the difficulties and inconveniences connected with our small, detached farm system, and the consequent necessity for men to live in the town instead of upon the farm. So much time and energy is wasted in travelling to and fro upon the roads which would otherwise be profitably employed in work upon the farm, and this is sensibly felt, especially during the short days of winter. Women are largely employed in field work throughout the whole of the fens. They go to work one hour later than the men in the morning, except when required for threshing or other work where men's time would be wasted in their absence, and cease work at the same time as the men in the afternoon. They uniformly receive half men's wages, whatever they may be.

Employment of Children.—A great number of children find employment during the spring, summer, and autumn months. These are engaged principally in planting Potatoes, weeding corn, picking up twitch on the fallows, and after harvest in taking up Potatoes and Mangels. Their wages range from 6*d.* to 10*d.* per day, according to age and size. A system has grown up amongst us during the last few years in connection with the employment of children and young people, which is most pernicious in its tendency, and is fraught with moral evils of no trifling character—a system which cannot be too severely reprobated, and which, if unchecked, must ultimately result in the most disastrous consequence. The employment of children in these fens is essential to the right cultivation of the land; but the evil of which we complain is not a necessary consequence of the employment of them. It is an evil which might be obviated if only the whole body of farmers would determine it should be so; but it is difficult to secure united effort and action amongst a large body of independent men, however great and convincing the need of it. A man who is designated "a ganger" collects together a number of children and young people of both sexes, sometimes upwards of 100; these he puts in gangs of 15, 20, or even more, putting over each gang some man or woman who takes the superintendence of it during the hours of work. These gangs are employed by the farmers to perform the work already referred to, and the ganger pays the children and collects the money from the farmer for the same, doubtless leaving a margin between the amount paid and the amount received, for his own profit. The great evil of the system, morally speaking, is this. The children and young people of both sexes constituting these gangs are indiscriminately mixed, without any strict or sufficient oversight. The result is appalling, and we tremble to think what must be the consequences if the system is perpetuated. Girls lose modesty, the familiarity growing up between the sexes through this system is leading and preparing the way for the grossest acts of immorality. The remedy is simple. Separate the boys and girls, sending one in one direction, and the others in another. But simple as this may appear, it is exceedingly difficult. Many farmers care nothing about it, and those that do cannot effect their purpose in consequence of the great demand for children, and the consequent independence of the ganger. Some of the larger farmers keep gangs of their own, having sufficient work to employ one wholly, and these they seek to manage better.

Harvest Wages. — The harvest brings with it a different scale of wages. Large farmers who employ a good number of labourers during the whole of the year, generally let them all with their wives and families go to reaping during the early part of the harvest, and these constitute a strong party, and enable such farmers to get the bulk of their corn cut without being much dependent upon strangers for such work. After a week or 10 days of reaping, as many men as are required for carting are taken for that work, and their wives and families have the privilege of following the carts to glean as some sort of compensation for the loss sustained in being taken from the reaping. These men so taken off receive 21*s.* per week, with three pints of beer daily, and the pitcher, where working by the day and not by the acre, gets 4*d.* per day extra; and the stacker, if not a yearly servant, 6*d.* per day extra. From 10 to 12 acres of shorn corn can generally be cleared in a day, where the crop is good. This rate of wages is generally paid up to five weeks from the time of commencing to reap, so that if these hands reap one and a half weeks, they get paid these harvest wages for three and a half weeks, making together the five weeks. It frequently occurs that harvest is completed before the expiration of the five weeks; but this does not affect the wages of the harvest men, they receive the same to the end of the time. This is not a definite bargain made with the men, but is generally practised by the best masters, and is understood by the men, which encourages and stimulates them to make "good haste" whilst the "sun shines." The other men and their families not required for carting the corn, continue to reap until all the corn is cut, and then return to ordinary work at ordinary wages. Prices paid for reaping are generally high, especially upon farms where strange labour has to be employed. From 10*s.* to 14*s.* per acre are the current prices under favourable circumstances; but 18*s.* and 20*s.* have sometimes to be given under other circumstances, and it is not unfrequently the case that great excitement prevails, and the higher the wages the more drunkenness we see, and the less work we get done. We have however known farmers, and large farmers too, who amid all this excitement and high wages, have never been once asked during the whole harvest by a single reaper what price he was to have for his work. Of course, these reapers have been his regularly employed men, and have known that in seasons when hands have been abundant, and prices for reaping low, no advantage has been taken of them in consequence, but they have had as good a price as if such abundance and cheapness had not existed, and they now feel that when circumstances are otherwise, they can present no claim for exorbitant wages, but are content to leave themselves in the hands of their employers, knowing they will be fairly and justly dealt with. If we had more of this mutual confidence and good understanding between masters and servants it would be better for both.

It is not customary to pay different rates of wages to single and married men, or to skilled and unskilled labourers. We question the propriety of this arrangement in the latter case. It appears reasonable, and commends itself to one's judgment and common sense, that a man possessed of superior skill and ability should receive better wages than the man who can only use muscular or brute strength. Intellect and skill have everywhere else their worth, and should, we submit, have it here. The evil however is to some extent remedied by the selection of the best men for the most important duties, at additional wages during the time they are engaged in performing these duties; 9*d.* per day extra is given to the man who drives an engine; 6*d.* per day to the man who feeds a threshing machine; 4*d.* per day to the man who cuts and repairs hedges (if employed by the day); 6*d.* per day to the man who goes with a drill; 1*s.* per week to men who attend to stock in the yards during the winter. But all these men when employed at other work only receive ordinary wages.

During the winter more especially a great many labourers are employed at piece-work—claying principally. These earn from 6*d.* to 1*s.* per day above ordinary wages. Digging clay in what we term "pits," from 2½ to 3 feet wide, and 12 to 16 yards apart, taking out two draws or spits, and spreading the same upon the intervening ground, is very much practised, and is attended with the most beneficial results, and consequently finds employment for a great number of labourers during the winter months.

Notwithstanding the many disadvantages resulting from the labourers living in the towns and villages instead of upon the farms to which we have already adverted, and also those other great dangers and temptations to which town life necessarily exposes them, especially where in the neighbourhood of their own dwellings, nearly every other house is a beershop—we say, notwithstanding all these drawbacks, we have in the fens a tolerably large class of very respectable and steady labourers, who are honest and industrious, and who, if more favourably circumstanced, would vie with the labourers of any other district we know—men who, if they could be separated from the surrounding influences and placed under proper discipline and management, would be the pride of any master. We have also a class of labourers who have a new master nearly every week, and who appear bent upon never making "work scarce;" but who are idle and dishonest, and in a word a nuisance to every man who finds it necessary to employ them. Their chief object seems to be to do as little work as they can, and to exact as high wages as they can. To sum up in a single sentence—they are good for nothing. *Alfred S. Ruston, Aylesby House, Chatteris, Jan.* 2.

THE STRAW PLAIT TRADE.

A. J. TANSLEY, Esq., lately read a valuable paper before the Society of Arts on this subject, of which we give the following abridgment:—

Bedfordshire has long been celebrated for the production of beautiful Wheat straws, suitable for the purposes of plaiting. The first straws used for the making of plait in this country were grown in the neighbourhood of Luton. Straw-growing now extends throughout the southern part of the county, in the valleys and along the slopes of the Chiltern hills, and also in parts of Hertfordshire, Buckinghamshire, Oxfordshire, and Berkshire. The best soils are light but rich. The seed used is either that known as Red Lammas or White Chiddam. When harvest draws nigh great care is required by the grower, it being necessary to commence cutting before the flag of the straw falls. If very wet and stormy weather sets in, the straws become rusted or spotted; or, if opposite weather, dry and hot, and the crop remains uncut, the straws change to red and become harsh. The first favourable opportunity is taken, extra hands are set on, the crop is rapidly cut, laid out to dry before being tied into sheaves, carted and stacked with all despatch as soon as ready. The result of this attention is in general seen in obtaining bright and clear straws that will repay the farmer for all his trouble. An acre of Wheat will yield in a good season from 25 to 40 bushels, and from 15 cwt. to a ton of cut straws, of the value of 6*l.* to 8*l.* sterling the ton, clear of all expenses. At the present time the price is double, for owing to the past wet and stormy summer, good straws are very scarce, many of the best growers, with all their care, having lost their crops.

The farmer disposes of his straw to men known as straw factors, who draw and cut the straws in his barn. Each sheaf is taken between the knees, and the straws are drawn out a handful at a time; the ears are then cut off and carefully laid together on one side. After a sufficient number have been drawn and cut, large bundles are formed, weighing 20 to 25 lbs., and these are carted to the home of the factor, to undergo another "cutting" process, which is generally performed by boys, who earn from 2*s.* to 5*s.* per week. In the act of cutting each straw the sheath in which it is encased is taken off. Two joints of the straw are preserved for plaiting, the other, or root joint, being cast away.

Straws thus cut are next subjected to the fumes of sulphur in a close chest, and afterwards sorted by hand into proper sizes. Of late years sorting is performed by a hand-machine similar to a sieve; the straws, being held in an upright position, fall through holes of uniform size. A final sorting takes place, when discoloured or spotted straws are thrown out, which, however, are not altogether wasted, as they answer for dyeing in some cases. Marketable bunches are formed of the various sizes and qualities, the bundles so made up fetching one hal penny to 1*s.* per bunch; they are afterwards sold to the plaiters at the various markets

of the districts, or in the immediate neighbourhood, the factors always residing within the plaiting districts.

There are straw-growing districts in Essex, but as the soil is unfavourable for the growth of good straws, great quantities are sent there to be made into plait from Bedfordshire and the other districts.

The growth and preparation of straws are most important branches of the "straw trade," and to the attention given to them during the last 50 years, much of the excellence of English-made plait is to be attributed. The districts were originally limited, but the advantages of straw-growing have led to the present large extension of the districts in the counties enumerated, the possibility of obtaining a good crop of Wheat with a good crop of straw, having led on many a farmer to their successful cultivation.

The art of making plaits from Wheat straw was first introduced into England about two and a half centuries ago. In Agnes Strickland's "Lives of the Queens of Scotland," we read that Mary Queen of Scots, when travelling in Lorraine, in France, noticed that women and children were employed in the plaiting and making of straw hats, and in the districts where this light and pleasant handicraft was practised, the peasantry were much better off than in other parts where it was not. It is said that the thought struck her that the introduction of this useful art into Scotland would be attended with much benefit to her own subjects. She therefore prevailed upon some plaiters to return with her to Scotland; this was about the year 1562. The troubles in which she was afterwards involved prevented her fully accomplishing her object; but her son, James I., took a lively interest in his mother's plaiters, and transplanted them to Luton, in Bedfordshire. While, however, they remained in Scotland, they taught their art, and plaiting still survives to the present day in the Orkney Islands, though the quantity now made there is very limited.

These plaiters are supposed to have arrived in England about the year 1603, and must have taught the peasantry the art of making whole-straw plait. About a century after this, it is stated that plaiting had, in 1724, greatly extended, and that several thousand plaiters found profitable employment both in Bedfordshire and Hertfordshire. A taste having sprung up in the reign of Queen Anne, and in the succeeding reigns of the Georges for the milkmaid and gipsy hats, a considerable stimulus was received by the trade, and brought Dunstable into notoriety.

The invention of the straw splitter, supposed to have been made by the French prisoners at Yoxley Barracks, near Stilton, between the years 1803 and 1806, cheapened the prices and created a surprisingly enlarged demand for the plait. It was about 2 inches long, brought to a point, behind which a set of cutters was arranged in a circle; the point entered the straw pipe, the cutters separating it into so many equal-sized splints. Some were arranged to cut a straw into four parts, others five, and so on up to nine.

These machines, improved from time to time, so economised both labour and material that bonnets made of split straw succeeded rapidly in displacing the whole straw Dunstable hat, and continued a favourite article of fashionable wear until Leghorn hats interfered with them. Chips also had a considerable sale.

The great demand for hats from Leghorn about the year 1820, led to many attempts being made to produce an article resembling them in England. Every encouragement was offered by the Society of Arts to parties trying to grow straws like those in Italy, and then making a similar article to the Leghorn hat. A Mr. Parry received the Society's large silver medal in 1822, for his method of manufacturing Leghorn plait from straw imported from Italy. No person succeeded so well, however, as the late Mr. Thomas Waller, of Luton. This gentleman first imported seeds of the Italian Wheat, and endeavoured to raise straws from it in the neighbourhood of Luton, but being beaten by the uncertainty of our climate, and the want of sufficient heat in our atmosphere, he hit upon the expedient of using straws imported from Italy. He obtained a patent for a bonnet made by plaiting eleven Tuscan straws, called by him the "Tuscan Grass Bonnet," which was afterwards patronised by Queen Adelaide, and great numbers were sold all over the kingdom at prices from 30*s.* to 50*s.* each.

From the time of making the first single plait, called split, at the commencement of the present century, many fancy kinds of plait were invented in the split straw. Similar fancy plaits and trimmings followed, termed "Patent Dunstable."

Between the years 1844 and 1850, other and more important plaits were invented known as China pearl, Coburg, Vienna, and Brussels, each being distinguished by some particular form. The demand for the cheap plait composed of coloured and white straws was very great. But the most important of double plaits is that termed twist edge, also named whipcord edge, from the fact of the straw being whipped over as it were. It is also made in whole-pipe seven and 11 straws, and is a staple article of English wear, forming the true straw bonnet, by exhibiting English straw to the best advantage. The discovery of this valuable plait has been attended with happy results, as it is a description capable of being used in almost every kind of hat or bonnet.

These various descriptions of straw plaits have enabled the trade to produce so many novelties that Tuscan plaits for bonnets declined as articles of wear; and although the lowering and afterwards abolition of the duties on foreign Tuscan brought that article into competition with the English straw manufacture, no injury has been sustained by the straw trade.

From the date of the Great Exhibition in 1851, plaiting has continued to progress, not so much in the invention of a number of new plaits, as in the superior quality and extent of the manufacture, and such has been the determination of our manufacturers to meet the public taste and the necessities of the million, that although foreign straw plaits from Belgium, Germany, and Switzerland, have been brought to compete with them, they have nearly all failed in this respect.

Straw plait is a domestic manufacture, carried on in the cottages of the agricultural labourers of the three counties of Bedfordshire, Hertfordshire, and Buckinghamshire, and portions of Essex and Suffolk. The plaiters are generally the wives and children of the labourers; a few are men. No plait is made in factories.

Children are taught usually in schools, and are sent at the early age of four years; besides plaiting, they are taught spelling and reading. In most villages there is a plaiting school, which is generally conducted by an elderly dame, who receives from each scholar 2*d.* or 3*d.* per week. The children are some time before they can plait so as to earn anything, but after a year or two they contrive to obtain 6*d.* to 1*s.* 6*d.* per week, after their plait is disposed of by their parents. They remain at school the usual school hours; afterwards, during the time they do not play, they plait a little till sent to rest. They continue working at school till they can plait sufficiently well, and when they are above eight or nine years they earn 2*s.* to 3*s.* per week. On leaving school they earn 4*s.* to 5*s.* if expert plaiters, and after they become skilful they may obtain as much as 7*s.* Many learn to sew if near Luton or Dunstable, and then leave their cottage home for the greater attraction of hat and bonnet sewing, a sewer being considered a step above a plaiter; and one who may exhibit an amount of personal adornment to which a simple plaiter would not dare to aspire in her village home.

Plait is made all the year round, except during harvest time. In winter plait is made indoors, and as the splints have to be worked in a partially wet condition, it is cold work for the fingers. When plaiting near the fire the straws are liable to injury; winter-made plait is never so good as when it is done in spring and summer, away from the fire or in the open air, at the cottage door, or along the green lane.

The earnings of a good plaiter, after the straws are deducted, will be from 5*s.* to 7*s.* 6*d.* per week, in a good state of trade.

It is computed that the number of females engaged in plaiting, and boys up to eight years of age, would now be near to 50,000, and the number of yards annually made 200,000,000 or 10,000,000 scores of plait of every description.

Plait is sold by the score of 20 yards, at from 2*s.* to 3*s.* per score, and is done up in double links of 17 inches in length, 20 such forming the score.

The number of towns, villages, and hamlets embraced by the districts, is computed to be between 190 and 200. The chief plait markets are Luton, Dunstable, Hemel Hempstead, and Hitchin. There are nine lesser markets, and they all begin at a fixed hour in the morning, a bell being rung to announce the commencement. The plait is sold in the open market, beginning at 8 o'clock in the summer and 9 o'clock in the winter. At these markets straw dealers attend, and from them the plaiters obtain their straws when they do not purchase them nearer home.

Improvements in shape, superiority of colour and finish, continuing throughout a series of years, brought the Luton trade to its present perfection, and have been the causes of the present extensive English and foreign business. Luton was described by Boswell in 1781, after his visit to Lord Bute's, at Luton Hoo, as a "village," by after writers as "a small dirty town in Bedfordshire." In 1801, the census showed 3095 inhabitants; in 1841, 7740. In 1851 it had risen to 12,783; at the present time it is well drained and paved, and is supposed to contain about 18,000, and will in another year or two amount to 20,000, if its trade still keeps enlarging. As would be supposed, the females outnumber the males, but not quite to the extent some imagine. Of the whole population, 12,000 are supposed to be occupied directly in the trade, the remainder being chiefly dependent upon it indirectly.

Of the class of sewers employed by the manufacturers the most skilful are the room hands. Their earnings in the season vary from 8*s.* to 12*s.* for the medium hands; 12*s.* to 15*s.* is obtained by those employed upon the best plain goods; and best fancy hands can obtain from 16*s.* to 20*s.* per week; these earnings are subject to variation with the fluctuations of the trade.

The other and larger class of sewers are those engaged upon "sale work," and as this is the commonest description, their earnings are in proportion. The goods are in general sold by them to the warehouses at the end of the week. Almost every poor family is employed upon this kind of work, and their earnings vary considerably; but, on the whole, more is obtained than by the plaiting families of the surrounding districts. The earnings of those employed upon sale work vary much. Children can earn 2*s.* to 3*s.* per week; girls and women 5*s.* to 8*s.* per week. Boys in some cases also sew, and some men in the winter season, when other employment is scarce. The male part of the population engaged in the trade are boys and lads, employed in bleaching, dyeing, and brushing plait, earning 5*s.* to 8*s.* per week; men at the same earning 12*s.* to 15*s.*, and the large and important class of blockers or pressers earning 20*s.* to 30*s.* per week. Notwithstanding some few instances of youthful folly, the industry of the mass of the population is great, as may be seen when it is considered that the "sale work" amounts to nearly 5,000,000 bonnets and hats within a twelvemonth.

The Luton productions of the superior descriptions are manufactured in the work-rooms, and amount to from 2,000,000 to 3,000,000 of bonnets and hats annually.

The "straw trade," in all its numerous ramifications, is most extensive, and when the bonnets and hats now made in London from Bedfordshire and other straw plait are added, the annual returns will not fall short of a million and a quarter sterling.

From the foregoing statements the trade of Luton, and the straw trade generally in England, is exhibited as assuming greater importance every year. In addition to the straw trade of Bedfordshire, there is the Brazilian hat trade of St. Alban's, which employs about 1800 persons in the town and neighbourhood, and in other branches of hat-making, forming the staple trade of that town.

Home Correspondence.

Tithe Commutation.—As many of your readers may feel anxious to know the result of the Corn Averages for the seven years to Christmas, 1860, published by authority in the *London Gazette* of this evening, viz.:—

Wheat	7*s.* 4½*d.*	per imperial bushel,
Barley	4 7¼	"
Oats	3 2	"

I beg to state for their information that each 100*l.* of tithe rent-charge will for the year 1861 amount to 112*l.* 3*s.* 4¾*d.*, which is little more than 1¼ per cent. above the last year's value, which was itself the highest of the 24 preceding years. The value for 1855 was only 89*l.* 15*s.* 8¾*d.*, or 22½ per cent. below the value for the current year. The following statement from my Annual Tithe Commutation Tables will show the worth of 100*l.* of tithe rent-change for each year since the passing of the Tithe Commutation Act, viz.:—

For the year	£	s.	d.	For the year	£	s.	d.
1837 ..	98	13	9¾	1852 ..	93	16	11¼
1838 ..	97	7	11	1853 ..	91	13	5¾
1839 ..	95	7	9	1854 ..	90	19	5
1840 ..	98	15	9½	1855 ..	89	15	8¾
1841 ..	102	12	5¼	1856 ..	93	18	1¼
1842 ..	105	8	2¾	1857 ..	99	13	7¼
1843 ..	105	12	2¼	1858 ..	105	16	3½
1844 ..	104	3	5¼	1859 ..	108	19	6¼
1845 ..	103	17	11¼	1860 ..	110	17	8½
1846 ..	102	17	8¾	1861 ..	112	3	4¾
1847 ..	99	18	10½				
1848 ..	102	1	0		£2510	3	1¾
1849 ..	100	3	7¾				
1850 ..	98	16	10	General average			
1851 ..	96	11	4¾	for 25 years ..	£100	4	1½

Charles M. Willich, Actuary, University Life Assurance Society, 25, Suffolk Street, Pall Mall East.

Societies.

ANGUS.—*Turnip Culture.*—The judges of the Turnip crops in competition for the sweepstakes, under the auspices of the Angus Agricultural Association, have awarded the prizes as under. In the

Western District.—1. Mr. John Pattullo, Newton of Airlie. 2. Mr. D. Hood, Hatton of Eassie.

Eastern District.—1. Mr. William Goodlet, Beauchamp. 2. Mr. D. Black, Barrelwell. 3. Mr. Robert Lyall, Old Montrose.

In the western district there were five entries; in the eastern, nine; southern, one; and northern, none. We may be allowed to express regret that so few of our agriculturists join these sweepstakes, especially as a good Turnip crop is of the utmost importance to the farmer, not only on account of its value in producing a greater number of high-priced fat cattle, but also as forming the basis for the success of the subsequent crops of the rotation; and in proportion to the extra weight of Turnips raised, the quantity and quality of manure is increased.

As the successful competitors are required to report to the Association the particulars of the mode by which their crops are raised, the members and public have the benefit of these reports. We subjoin the reports of the successful competitors:—

REPORT BY MR. GOODLET, BEAUCHAMP.

The soil on which the Turnips were grown this season may be described generally as a friable loam, more or less inclining to clay, and resting on a clayey subsoil, interspersed with stones and occasional gravel, incumbent on rock, which in the two northmost fields, Nos. 4 and 5, protrudes at the summit of the brae through the subsoil and reaches the surface, although the soil in general in those fields is of good depth and quality. The fields where naturally wet had been all drained some years ago, and are in general dry. The number of acres in Turnips on the farm is [illegible] in all—of which about 50 got farm-yard manure, the remainder bone-dust and guano only. The plants were all hoed at good distances apart, and mostly in proper season, before being too far advanced in growth. The mode of culture and manures applied to each field will be stated below. I would here merely observe that the dung applied consisted for the most part of the ordinary dung made on the farm,

enriched by the consumption of about 40 tons of cake and other extra feeding stuffs by the stock during the winter, and not deteriorated by the abstraction of any of the richer portions of the manure produced on the farm, in the preparation of fancy composts—the whole of these richer portions being carefully collected and carted on to the respective middens, which were all turned and well mixed in the usual way a few weeks before being applied in spring, excepting only a small portion which was applied directly from the feeding courts.

No. 1, about 9 acres Swedes.—This field having been in Oats in 1859, after one-year-old Grass cut for hay and green feeding in 1858, was cross-ploughed in autumn with a good deep fur. It was again ploughed in spring, harrowed and rolled in the usual way into a fair mould, drilled up with the double-mould board plough, and manured in the drill with about 16 cartloads of dung per acre from the midden (excepting about 2 acres, which were dunged direct from the courts) and 3 cwts. Peruvian guano sown broadcast over the dung. The drills were closed with the common plough (which covers the dung better than the double-mould boarded plough), having a guano bag rolled up and tied to the stilt of the plough on the other side from, and opposite to, the mould board, which answers well in closing the drills a-top, which are generally left too open by the common plough wanting such an appliance. Purple-top Swedes were sown on the 3d May—one half with Skirving's, the other half with Roughead's; both were equally good, the latter, probably where the dung was taken direct from the court, and which showed most luxuriance of growth, being the best. The weight of the former was tested, and estimated at 32 tons per acre of roots, top and tails being removed.

No. 2, 16 acres Swedes.—This field having been in Wheat in 1859, after Beans and other green crops manured in 1858, was ploughed in autumn, with Sellar & Son's 4-horse plough, and grubbed in spring, the land having been allowed to lie a fortnight after being prepared for drilling up, was then drilled and manured with the same quantity and kinds of manure as No. 1—about two acres of this field being also dunged with fresh dung direct from the courts—and the whole finished off in the same way as No. 1. The seeds were sown on the 12th May, Skirving's & Roughead's Purple-tops in equal proportions. The 2 acres made with dung directly from the courts showed, throughout the season, the greatest luxuriance of growth; and even now continues stronger in the shaws than other parts of the field. Roughead's seed appears more growthy, but Skirving's are not behind in size of bulb. This field is, I think, the best on the farm; the weight of an acre from the worst of the field has been tested, and found to be 34 tons per acre of roots, tops and tails being removed.

No. 3, 26 acres Swedes.—This field was in Oats in 1859, after two-year-old Grass, pastured both years. It was dunged in autumn, on the stubble, with about 15 cartloads of dung per acre (part of it was not so well made as the dung applied in spring, and part of it was town's dung), and ploughed in with the common plough; again cross ploughed in spring, and partially grubbed where necessary, and finished off as the others. After lying a fortnight in this prepared state, it was drilled up with the double mould board plough, the drills were harrowed down, and 12 cwt. bone-dust applied to the acre. The bone-dust was put on with the Bean-barrow, which, by a simple contrivance, was made to answer the purpose, and distribute the bone-dust very equably and expeditiously in rows along the drills. The drills were then closed in the usual way, and sown with Skirving's improved purple-top Swede from Dickson & Turnbull, and with purple-top Swede seeds grown in the district, on the 20th May, and following days. A few acres on the north side got a light top dressing with guano after the Turnips were hoed a second time, and before furring up. This field did not show such luxuriance of growth at any time as No. 2, and is perhaps not so good a crop, although it has also bulbed well.

No. 4, 16 acres—half purple top Swedes, half Aberdeen yellows.—This field was in Oats in 1859, after two-year-old Grass, pastured both years. It was ploughed in autumn, and cross-ploughed in spring, and afterwards worked same as No. 3. It got no farm-yard dung, but was manured with 12 bushels bone dust and 5 cwt. Peruvian guano per acre. The Swedes were sown on the 24th, and yellows about the 28th May; both a heavy crop, all along luxuriant, and still growing.

No. 5, 12 acres, about 2½ acres of which were Stent's green-top Globe, the remainder of field Aberdeen yellows.—The field was Oats in 1859, after three-year-old Grass, pastured throughout. Was ploughed in autumn, and grubbed in spring, and otherwise worked as No. 4. It got no farm-yard dung. The part in Globe Turnips was manured same as No. 4; and the rest of the field got about 5 cwt. of a newly imported guano, analysed by Dr. Anderson, and said to contain upwards of 64 per cent. of phosphates, and favourably spoken of by him in his "Proceedings in the Laboratory," published in the "Agricultural Journal of Transactions of the Highland Society." About 3 acres on the east side of the field, of a more clayey texture and colder soil, got about 3 cwt. per acre Peruvian guano before the Turnips were furred up. The seeds were sown about the 8th June; Stent's Globe (which was recommended to me by my friend Mr. Bowie, and the seeds of which were got from Mr. Laird, Dundee) is a first-rate Turnip, and was a very fine crop; the rest of the field was no more than a fair average one, very little difference being observable in those parts which got the Peruvian guano from the rest of the field, which was manured only with the new guano. Wm. Goodlet.

Report by Mr. Black.

The fields, which I shall distinguish as Nos. 1 and 2, are a light black loam, on a retentive clay subsoil, with the exception of 5 acres in No. 2, which lie on gravel. No. 1 has been all drained at 9 yards apart, with drains 3 feet deep; has been also subsoiled, and is now dry.

The rotation followed has been sevens—two years in Grass (pastured), one crop of Oats, followed by Potatoes, Wheat, Turnips, and Barley, sown down with Grass-seeds. The whole land is in good heart, and the crops have been satisfactory. After the Oat crop, No. 1 was stirred deep, by ploughing with two horses, followed by a two-horse subsoil plough. This gave a loose soil of about 15 inches. No. 2 was ploughed as deep as two horses could draw. Both fields being free of weeds, I resolved to try the effects of grubbing, so highly recommended by our crack farmers. From the dry season that followed, I had no great reason to complain of the results, farther than where there were stray Thistles, they were not up rooted by it; and this I find from experience is an objection to trusting to grubbing alone. The Potato crop, following the Oats, was grown with 24 cubic yards of farm yard and town's dung, mixed in the proportion of three of the former to one of the latter; and, in addition to this, I applied to No. 1, 3 cwt. of Somerville's manure and 1½ cwt. of bone meal; and to No. 2, the same weight of Baillie's manure. No. 1 yielded about 12 tons per acre; and No. 2 about 9 tons. The former was planted with Orkney Reds; the latter with hen-nest (Regent's). After lifting the Potatoes, No. 2 and about 4 acres of No. 1, were dunged at the rate of 18 cubic yards to the acre; the balance of No. 1 had 3 cwt. of Rape dust, and 2 cwt. of Bell's Wheat manure, applied to each acre. Where the dung was applied, there was the best crop of Wheat, though both were good. After the Wheat crop was removed, the land was again ploughed deep, and being rather behind with the spring work, I resolved to risk grubbing, though I must say I have no confidence in it for cleaning land: this was followed with harrowing and rolling, thus reducing the whole to a fine mould. No. 1 being intended for Swedish Turnips, was first proceeded with; and after drilling with the double-mould board plough, I applied 24 cubic yards of well made dung to the acre, and, in addition to this, 1 cwt. Peruvian guano, 2 cwt. of Somerville's manure, and 2 cwt. of bone-meal. The spreading of the dung and sowing the manures were followed closely with the double mould plough and the sowing machine, thus getting the whole work finished quickly, and preventing waste; the field was finished by the middle of May. No. 2 was proceeded with immediately; the drills were formed and harrowed down, and the following mixture of manures sown broadcast on each acre, viz.:—10 bushels of bone-dust (Sim's, Arbroath), 1½ cwt. of Phospho Peruvian guano, 1½ cwt. Millar's Turnip manure, and 2 cwt. Somerville's manure, cost about 4*l.* 10*s.*; the re-forming of the drills and seeding were carried on quickly, and the whole work finished in excellent season. The varieties sown were Aberdeen yellow, Bullock, and Pomeranian Globe. Having fallen short of the above mixture, about half an acre was sown with Peruvian guano, at the rate of 6 cwt. to the acre; these came away best at the outset, but where the mixture of manures was applied, the crop is decidedly best, and the Turnips were harder and of better quality. In stating the quantities of manures applied, I refer to the Scotch acre.—*David Black, Montrose Standard.*

Farmers' Clubs.

London: *The Bothy System.*—At the late monthly meeting of this Society, the following notes upon the Bothy system were given by Mr. Burn:—

A description of the house accommodation for farm servants in Scotland would be incomplete were a notice of the "bothy" omitted. In place of giving a resumé of my own, of all that has been said on both sides of the question, I prefer to place before you extracts from correspondents who have favoured me with their opinions on the subject. A gentleman in Perthshire, in which county the bothy system is greatly developed, thus writes me:—"The 'bothy' is a house set apart for the men to sit in and cook their victuals, with a sleeping apartment or apartments adjoining. * * In many cases the bothy is badly kept, and the sleeping apartments dirty and untidy; but there is no necessity for this, and it is not inherent in the system. On the Home Farm at Windsor Castle there is a model bothy, and I know some in Perthshire kept in a similar manner, and when this is the case the men are extremely comfortable; and, where the men are unmarried, I should prefer the bothy system, under proper regulations, to that of giving the men their food in the kitchen (of the farm house). * * Where there is a bothy the men get their food, and keep by themselves; and when a woman arrived at the years of discretion is appointed to keep their bed rooms in proper order, and the bothy clean, they are far from uncomfortable, and prefer it to going into the house for their food. As regards married men, the system is radically wrong. A married man should live in his own house, preside at his own table, and be the head of his family." A Morayshire correspondent writes: "The bothy system, which is much abused in a moral point of view, consists in giving a room or rooms, fire and light, with a certain amount of meal, milk, and Potatoes, or an equivalent in money; besides the regular money wages. Where these bothies are well conducted there is nothing objectionable against them, at least nothing more so than being fed in the farmer's kitchen. In a well conducted bothy the master allows a female to keep the place clean, light the fires, bake the bread, and at the same time cleaning out the apartments and making the beds. You will therefore often find in these bothies every mark of cleanliness and tidiness, and at the same time furnished with books and periodicals. Such places as these the men like, and remain for years at the same place. On the other hand, there are other bothies where neither cleanliness nor order existed, and these places cannot be too much condemned. Farmers, however, are every day making arrangements with their landlords to build cottages for married couples; this is now the favourite system, and much to be commended." A Forfarshire correspondent thus writes: "Ploughmen are lodged in bothies, and furnished by the farmer with beds, bedding, &c. The accommodation has been deteriorating since the commencement of the last century, till it was reduced to a miserable pitch, the man being much worse lodged than the animals. Within the last five years a great change has taken place. Comfortable bothies are erected in many places, and new ones are constantly going up; and in a few years it is trusted that all ploughmen will be comfortably lodged." Where the bothy is used in Inverness-shire "it is a clean-floored and neat room of considerable size, with the beds in the side, or frequently in an adjoining room." But the testimony given on the subject is not generally so favourable to the bothy system; indeed, the weight of evidence is altogether against it, as productive of an immense amount of social evil. A correspondent in Caithness—a county in Scotland, in which the bothy system can be examined in all phases—sends me the following, part of a report which he drew up on the subject: "A common arrangement of some bothies is as follows: The male and the female servants sit and eat and pass their evenings in the place where the lads sleep, and the females' sleeping place is in some off-closet, entering from it or in a separate but adjacent apartment. Sometimes the sexes have separate apartments to dwell in, having different outer doors. These apartments may be placed on opposite sides of the farm court-yard. Not always, however, is there such accommodation. There are instance in which the males and the females sit, eat, and sleep in the same miserable place. Abundance of peats is allowed by the masters to the bothies, but neither lamp nor candle. I speak of the general practice: but I never heard of an exception. There is consequently no reading in our long winter evenings, and the darkness of the bothies encourages and facilitates deeds of darkness. This is the description of a bothy given by one of my reverend correspondents: 'A lad and a big boy and a single woman live in one room, which is badly furnished. There are two benches or forms, which supply the place of stools or chairs, but there is no table; the inmates make use of a chest lid as a substitute. There are two beds of coarse unplaned deals, and the interior is altogether uncomfortable.' The preceding description is, I have reason to believe, applicable, as to the fitting up, to numbers of our bothies. Their furnishing is for the most part wretched. All the sheets and blankets must be provided by the lads themselves, and all the bowls, plates, and spoons—all the dishes indeed, except the pot. Their food consists of milk, when it can be got, and oatmeal. Beef, mutton, pork, or fish, or flesh of any kind, they very rarely taste. The bothy may not be cleaned out or whitewashed for years, and their bedding is washed but seldom. In our bothies there is all but a universal sluttish and a slovenly disregard of cleanliness, order, and neatness." Calmly weighing all the statements pro and con. on the important subject of "bothies," I find that the evidence against them is very strong, while very nearly all that can be said in their favour is dictated, to a great extent, from notions of expediency. There can be no doubt, I should think, in the minds of every one calmly considering the subject, that any system of housing which does away with the family influences cannot be a good one. The beneficent God, "who maketh families like a flock," has ordained the family institution as one which exercises the strongest influence and the best in man; and all attempts to substitute a mode of living opposed to this cannot, from the nature of things, be good. We may modify the evils and get rid of some of the effects; but the primary cause still existing, these effects will every now and then crop out. I see, then, no method more likely to do away with the evils of the system, than that the unmarried labourers shall be lodged in the houses of the married labourers, and that the number of married labourers should be increased. The system of lodging is carried out in the manufacturing districts, and I see no valid reason why it cannot be adopted in rural ones. Failing this (and it must of necessity be a work of time to carry it out, involving as it does increased home accommodation), I see but one way of meliorating the evils—in addition to making the internal arrangements and construction in keeping with sanitary requirements—namely, for the farmer to exercise a steady and constant control and supervision over the arrangements and goings on in the bothy. By this, much of the benefits of the family system may be realised.

Miscellaneous.

Good Sense in Hungary.—At an agricultural meeting recently held in this country some peasants publicly addressed the nobles, and told them that it was a mistake on their part to keep the more humble tillers of the soil at such a great distance. "You, like ourselves," said one of the peasants, "wish to develop the resources of the province, but you do not go to work in a proper way. Engage our sons as farm servants, and when they have learned the rudiments of rational agriculture with you let them return to their homes and cultivate their own and their fathers' land." *Times.*

Diseased Meat.—It is well known that in the cattle districts beasts already diseased are constantly slaughtered, dressed, and forwarded to the butchers' shops in the densest and poorest metropolitan neighbourhoods. But when we read of more than 17 tons of meat and 500 rabbits in this or a worse state being seized within the precincts of the City alone in one quarter, and consider that the City is scarcely one twentieth part of the metropolis, we may judge of the extent to which this detestable practice must be carried. The strangest feature in the case is the difficulty of enforcing the destruction of the condemned meat after seizure. The officers, "with every desire to put a stop to the distribution of such meat among the public, find it impossible to prevent its use in some shape or another as an article of human food." "There are good reasons for believing that a large portion of it finds its way to the sausage maker, whose business flourishes in the neighbourhood of Smithfield;" and Dr. Letheby intimates a revolting suspicion that even if it finally reaches the boiler the fat is disposed of for the manufacture of butter. *Times.*

Mr. R. Girdwood's Edinburgh Wool Sale, Thursday, Jan. 9.—At this sale Southdown cross hogs reached 40*s.*; half-bred hogs, 43*s.* 6*d.*; ewes 38*s.* 6*d.*; wedders, 38*s.*; Cheviot hogs, 40*s.*; wedders, 38*s.* 6*d.*; cross hogs, 37*s.* 6*d.*; White Highland, 15*s.* to 19*s.* per stone unwashed; and for washed, 17*s.* to 20*s.* per stone; laid Cheviot, unwashed, 18*s.* to 24*s.*; washed, 20*s.* to 30*s.*; laid cross, 15*s.* to 19*s.*; laid Highlands, 13*s.* unwashed, and 14*s.* 6*d.* washed.

A Truism for 1861.—In agriculture it was once the practice to take ancient customs as an infallible guide; nothing was then doubted, nothing investigated, and little improved. Now it is the principle to do nothing without a reason. Everything is investigated and everything is improved.

STATE OF THE WEATHER NEAR WALLINGFORD, BERKSHIRE,

Since January 1, 1861, as observed by Mr. J. B. Spearing, Moulsford, Wallingford.

January.		Temperature. Of the Air. Max.	Min.	Mean.	Of the Earth 1 foot deep.	Rain.	Wind.	Barometer.	Max. temperature, South exposure.	Remarks.
Tuesday	1	41.	32.	37.3	32.0	In. 0.25	W.	29.62	42.4	Thermometers placed 4 feet from ground. Rain gauge 7 ft. from ground.
Wednesday	2	35.1	22.0	28.7	31.5	0.10	N.E.	29.99	35.6	
Thursday	3	27.6	15.4	21.5	32.0	...	E.	30.15	31.0	
Friday	4	25.4	17.0	20.7	32.0	...	N.E.	30.05	48.4	
Saturday	5	30.0	19.0	24.5	34.0	...	N.E.	29.99	54.6	
Sunday	6	31.0	18.1	25.0	36.0	...	N.E.	30.00	40.8	
Monday	7	27.0	12.0	19.5	36.0	...	N.W.	30.09	46.4	
Tuesday	8	28.6	10.4	19.5	36.0	...	N.	30.11	45.0	
Wednesday	9	28.4	14.0	21.2	36.0	...	S.W.	30.10	43.0	
Thursday	10	29.0	9.4	19.2	36.0	...	N.	30.20	40.4	
Friday	11	29.0	13.0	21.5	36.0	...	N.	30.18	40.0	
Saturday	12	36.0	27.0	31.5	36.0	...	N.W.	30.00	46.4	
Sunday	13	26.0	30.0	27.1	36.0	...	N.	29.63	52.0	
Monday	14	33.1	26.4	29.0	36.0	[illegible]	N.E.	29.56	34.2	
Tuesday	15	27.0	22.0	[illegible]	36.0	...	E.	29.90	31.0	
Wednesday	16	[illegible]	17.0	[illegible]	36.0	...	E.	30.15	40.2	
Thursday	17	30.0	22.4	31.7	36.0	...	N.E.	30.13	50.4	

All observations are taken at 9 A.M. on the days named, and the maxima, minima, and rain recorded are therefore those of the preceding 24 hours.

Notices to Correspondents.

Haymaking Machines: *Amateur.* The last trial of Haymakers was at Pontefract, and the prize was awarded to T. W. Ashby & Co., of Stamford, who has lately patented improvements of the machine shown here.

Liquid Manure Cart: *Old Sub.* Henry Attwood Thompson, Lewes.

Pea Straw: *J. Hales.* It varies exceedingly in quality. If cut before dead ripe and well dried it is capital fodder; according to analysis worth nearly as much as Clover hay, and in practice probably worth half as much as Clover hay.

Permanent Improvements, &c.: *J. Hales.* A tenant should make 10 per cent of farm capital, and any buildings which he erects ought to repay him that percentage, along with the original capital during the period of his lease. All movable implements are tenants' property, the fixtures and buildings belong to the landlord.—The house should be charged about 9*l.* per annum for the keep of a cow if it is well kept.—Maggs's straw weaving machine is a capital tool coming into general use. It is made by Messrs. Maggs and Hindley, of Bourton Foundry, Bourton, Dorsetshire.

Poultry: *M. T.* says, "I keep Spanish fowls, all of which are in excellent condition, except one—a hen pullet. Some days ago on going to feed them I found her on the ground unable to move. She seemed cramped with the cold. But this did not prevent her eating, as she continued to do so lying down. I took her up and she felt skin and bone, although the crop was quite full. She was brought into the house, kept in a warm room, given warm food, and the next morning was lively and brisk enough to join the other fowls. The next morning she was ill and in the same condition as before, evidently from the cold. She was again brought in, recovered, and is now brought in nightly to prevent recurrence of cold attacks. The chief point that puzzles me however is her condition. With plenty of food, crop always full, she is a bag of bones, emaciated, feathers dull, and weak on her legs. Can you suggest the cause and the remedy?" [We do not think the cold was the cause of your pullet's ailment, but her lack of condition made her feel it more than her fellows. Such a state as you describe would be caused by a blow or an injury on or in the back bone. We have seen the extremities of a hen paralysed by a slight blow on the back with a switch. We have known such appearances as you describe to precede the first egg, and we believe Spanish suffer more at such a time than any other fowls. It will not be your case, as she is not in a condition to lay. We shall not be surprised if she is in some measure crop-bound, and we believe that handle her when you will, the crop is full. If such be the case, pour warm water down the throat till the food is soft, then give a table spoonful of castor-oil. Watch the state of the crop, and persevere till it is empty. When it is empty, give oatmeal mixed very slackly; if she appears weak, give some bread and ale. Feed often and a little at a time whenever the crop is empty. If it is full when meal time comes round give physic instead of food. Keep her shut up for the present. Do not let her have food by her, but supply her with coarse gravel. Never allow her to eat to repletion. Keep her hungry, feed her sparingly and often, and we shall be surprised if you do not soon find her gaining flesh. She cannot thrive as long as her crop is full. As she may be of a feverish nature, we would advise you when she is near laying to introduce a feather soaked in castor-oil into the egg passage till two or three have been laid.

Sulphuric Acid: *C. T.* There are no means of knowing how much sulphuric acid is used in agriculture. Professor Anderson estimates that 71,000 tons of bones and 48,000 tons of coprolites and other mineral phosphates are annually converted into superphosphates by the use of one half their weights or about 60,000 tons of sulphuric acid.

Use of Oilcake: *E Little.* Get the decorticated Cotton seed cake. If you cut up good straw into chaff and break the cake up into a bucket of water for 24 hours, and then put it in the boiler along with some salt and throw the whole hot and salt over the chaff it will make a savoury mess, which cattle will eat readily. If pulped roots were also mixed with it the mixture would be first rate food.

N O T I C E.

SUTTON'S AMATEUR'S GUIDE AND PRICED LIST OF SEEDS has been unavoidably delayed, owing to the NUMBER OF NEW KINDS of Kitchen Garden and Flower Seeds. It will be ready in a few days, and will be sent post free to any address on receipt of 12 stamps, and to customers gratis.—Royal Berkshire Seed Establishment, Reading.

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"Of all the dessert Apples which bear the name of Pine and Pine Apple, there is none which possesses the flavour of that fruit so markedly as this. It is small, about the size of the old Golden Pippin, and of the same shape. The skin is entirely covered with a smooth coat of fawn-coloured russet, the flesh is very tender and juicy, sweet, sprightly and vinous, and with a distinct Pine Apple flavour. Ripe during October and November. The tree is of a small habit of growth, and will do well on the paradise stock, either grown as a dwarf bush, or for an espalier, and it is an excellent bearer."

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NEW CINERARIAS OF 1860.

F. AND A. SMITH are now sending out their splendid Varieties of the above, which for colour, dwarf habit, and large compact heads of bloom, are unsurpassed; many of them are finely formed, and others have the largest flowers known. A DESCRIPTIVE CATALOGUE may be had on application—Dulwich, Surrey, S.

S U P E R B B A L S A M S.

F. AND A. SMITH are now sending out SEED of their well-known superb BALSAMS, which have maintained their character as the brightest colours. The doublest and largest flowers known for many years. In collections of 9 distinct colours, 2*s.* 6*d.* each; the same mixed, 2*s.*; half the quantity, 1*s.*—Dulwich, Surrey, S.

SEED CATALOGUE, 1861

STEPHEN BROWN'S LIST of the finest VEGETABLE SEEDS is now ready. Sent free on application.

The COMPLETE SEED CATALOGUE (30th Annual Edition) will shortly be ready, and contain many choice novelties from the Continent and elsewhere.

The late summer having proved unfavourable for many Seeds, S. B. is receiving a more than usual portion of his supply from the milder parts of the Continent, both of Vegetable and Flower Seeds.

Prices for first quality as moderate as the scarcity of the present season will admit.

Seed and Nursery Establishment, Sudbury, Suffolk.

G L A D I O L I.

JOHN STANDISH is the largest grower and has the best collection. He has raised an immense quantity of Hybrid Seedlings, which flowered during the past Autumn for the first time, and exceeded anything that has been seen in Gladioli before; it being a remarkable fact that amongst these Seedling Gladioli there is scarcely ever a bad one. Strong flowering Bulbs, 75*s.* per 100; small ditto, 50*s.* per 100.

Besides the above, J. S. has all the best named kinds, CATALOGUES of which, and of his other rare and choice plants, may be had free, on application to the Royal Nursery, Bagshot.

HARDY SCARLET RHODODENDRONS.

JOHN WATERER begs to announce that his New DESCRIPTIVE CATALOGUE of HARDY SCARLET and other choice RHODODENDRONS, as are annually displayed at the Royal Botanic Gardens, Regent's Park, is now published and will be forwarded on application. It likewise furnishes a List of all popular Hardy Plants, with a selection of the most desirable Conifers, with heights and prices.

The American Nursery, Bagshot, Surrey, near Sunningdale Station, South-Western Railway.

The CATALOGUE can also be had of Mr. John Kernan, 4, Great Russell Street, Covent Garden, W.C.

TREE AND SHRUB CATALOGUE.

JOHN CRANSTON begs to announce to his Patrons and the Public generally, that his DESCRIPTIVE CATALOGUE of Conifers, Ornamental Trees, Evergreen and Deciduous Shrubs, &c., is now ready for distribution, and will be forwarded on receipt of one postage stamp.

The above contains important and interesting notes with regard to the height the Trees enumerated attain, Native Country, date of introduction, and in the case of Flowering Shrubs, the colour and time of flowering.

Nurseries, King's Acre, near Hereford.

VEGETABLE AND AGRICULTURAL SEEDS, &c.

MESSRS. PARKER and WILLIAMS beg to inform their friends and patrons that they are now prepared to execute with NEW and GENUINE SEEDS all orders they may be favoured with.

Their PRICED and DESCRIPTIVE CATALOGUE, containing all NEW VEGETABLES proved to be good, and all the best of the older varieties, will be forwarded post free on application. An inspection and comparison with prices of other firms is solicited.

The following are particularly recommended as very superior varieties in their respective classes, and should be included in the most select collections:—Beet, Compact topped; Broccolies, New White Sprouting, Winter White (true); Brussels Sprouts, Improved Dwarf; Cauliflowers, Early Dwarf Erfurt, New Early Mammoth or Frogmore Forcing; Celery, Imperial Dwarf Red, Nonsuch, Colewort Rosette; Leeks, Ayton Castle Giant, Hybrid Prize; Lettuces, Alma, Moor Park, Versailles; Peas, Early Prolific, General Wyndham.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, London, N.

SEEDS CARRIAGE FREE.

PIKE'S COLLECTIONS of VEGETABLE SEEDS.—Collection A, 80*s.*; Collection B, 50*s.*; Collection C, 25*s.*; Collection D, 12*s.*; select CATALOGUE of GARDEN FLOWERS and FARM SEEDS post free on application, containing the quantities in each collection. Every kind of seed is proved before it is sent out.—James S. Pike, Winchmore Hill Nursery, and Seed Establishment, London.

NOTICE.—Free to any Railway Station in England

EPPS' COLLECTIONS of NEW and GENUINE GARDEN SEEDS.

	£	s.	d.
No. 1.—Consists of 30 quarts of the best kind of Peas and Beans, and every other kind of Seed necessary in like proportions, sufficient for a year's supply of a large garden	3	15	0
No. 2.—20 quarts of Peas and Beans, and other seed in like proportion	2	10	0
No. 3.—Do., smaller supply	1	5	0
No. 4.—Do., for a small garden	0	12	6

All Orders (except from known Correspondents) to be accompanied with a remittance.

Mr. Epps trusts it is not necessary to blazon forth the names of his patrons, and their reports of the high character of his Seeds, but simply to state that every care in growing and selecting has been taken to insure the confidence of his friends.

Maidstone Seed Establishment.

JOHN CATTELL'S COLLECTIONS of KITCHEN GARDEN SEEDS carriage free to any railway station in the Kingdom.

COMPLETE COLLECTIONS for the WHOLE YEAR, suitable for large and small gardens.

Collection No. 1	4*l.* 0*s.*	Collection No. 3	1*l.* 10*s.*
Collection No. 2	2 10	Collection No. 4	0 15

The above are selected from an unrivalled stock of Vegetables, and nearly all are saved under J. C.'s own superintendence. Lists of quantities supplied in each collection may be had on application.

COLLECTIONS OF FLOWER SEEDS.

100 packets of the best and most showy hardy and half hardy varieties .. .. 20*s.*

50 do. do. do. .. 10*s.* | 25 do. do. do. .. 6

Any kinds not required should be named in the order that they may be omitted from the collection. Cash or references respectfully requested from those who have not previously favoured J. C. with their orders.

Seed Establishment, Westerham, Kent.

NEW CUCUMBERS AND MELONS.

W. J. EPPS has much pleasure in stating that he has the stock of the following which has been so successfully exhibited and grown by Mr. Frost, the gardener to E. L. Betts, Esq , Preston Hall.

CUCUMBERS. — "PERFECTION," Black Spine; small handle, fills up well and carries a fine bloom, a good cropper and superior flavour, pronounced by competent judges to be the best Cucumber out. 2s. 6d. per packet.

"WINTER PROLIFIC," one of the best Cucumbers grown for forcing and early supply. 2s. 6d. per packet.

"GARIBALDI," Black Spine; an extraordinary Cucumber for exhibition or table, averaging 30 inches and upwards; very handsome. 2s. 6d. per packet.

MELONS.—PRESTON HALL HYBRID, first prize Regent's Park, Chiswick, and Crystal Palace. 2s. 6d. per packet.

Turner's Gem, King's Green flesh, Beechwood, Terry's Green flesh, General Havelock, and all the leading kinds, 1s. per packet.—Maidstone.

CUCUMBER.—KIRKLEES HALL DEFIANCE; a handsome white spine variety, from 21 to 24 inches long, smooth, very thin skin, and of exquisite flavour, an extremely free bearing kind with a very short heel, one of the best varieties for summer or winter use.

JOHN CATTELL has the pleasure of offering seed of the above of his own saving, price 2s. 6d. per packet.

Seed Establishment, Westerham, Kent.

YORKSHIRE HERO FRAME CUCUMBER.—An excellent variety, from 24 to 30 inches, fine flavour, white spined, most abundant bearer, will give satisfaction to every grower who wants quality and quantity. Price 2s. 6d. per packet.

BRITISH QUEEN FRAME CUCUMBER.—A most prolific dark green white spine variety, 20 to 30 inches in length, carries its bloom well, a shy seeder, very good and distinct, price 2s. 6d per packet.

CHAMPION OF ENGLAND BROCCOLI.—This universally wteemed variety will grow to an enormous size, sometimes laeighing 27 lbs.; a small quantity of seed has been saved from esrge heads, which may be had in sealed packets, 2s. 6d. each.

KEMP'S EARLY INCOMPARABLE CABBAGE.—The best variety in cultivation. Packets 1s. each.

HUNT'S SUPERB SWEET WILLIAM, per packet, 6d.

May be had post free of E. P. DIXON, Yorkshire Seed Establishment, 57, Queen Street, Hull; also of Messrs. HURST & McMULLEN, 6, Leadenhall Street, London, E.C.

LEE'S NEW WHITE SPROUTING BROCCOLI.

MESSRS. JOHN AND CHARLES LEE have the pleasure to offer new seed of their WHITE SPROUTING BROCCOLI FOR 1860-61. This valuable Vegetable has established its character for hardiness by withstanding the late severe winter, when nearly every other kind of Broccoli was destroyed. It also produced an abundance of secondary heads as shown in the Photograph (published January 5), and was in every way equal to the description given of it last year. Price 2s. 6d. per packet, to be had of all the principal Seedsmen.

Nursery and Seed Establishment, Hammersmith, London, W.

W. THOMPSON, FLOWER SEEDSMAN, Tavern Street, Ipswich, respectfully announces that his PRICED DESCRIPTIVE CATALOGUE OF FLOWER SEEDS for the present Season, arranged on the Natural System, is now ready, and will be sent post free to *bonâ fide* purchasers, on application. The Catalogue comprises all the best novelties of the season, with a few which are exclusively in W. T.'s possession, and all are offered at the most moderate prices.

NEW SCARLET FLESH MELON GARIBALDI.

E. TILEY feels great pleasure in offering to the lovers of the above delicious fruit this new and superb variety, which he can with confidence recommend as being the most perfect in all points of any variety in cultivation. It is very hardy, an abundant bearer, thin skinned, weight from 4 to 5 lbs., beautifully netted, oval-shaped, bright scarlet flesh and luscious flavour. Price 2s. 6d. per packet.

E. T. has also Seeds of the following superb MELONS, which he can with confidence recommend:—

Per packet.—s. d.		Per packet.—s. d.	
General Havelock	1 0	Queen's Melon	1 0
M'Ewen's Arundel Hybrid Green Flesh	1 0	Blackall's Green Flesh	1 0
Do. do. Scarlet Flesh	1 0	Bailey's ,,	1 0
Monro's Green Gage	1 0	Bowood ,,	1 0
,, Crystal Palace Hero	1 0	Beechwood ,,	1 0
Golden Drop Green Flesh	1 0	Windsor Prize ,,	1 0
Golden Perfection ,,	1 0	Emperor ,,	1 0
Scarlet, King Scarlet ,,	1 0	Fleming's Trentham Hybrid	1 0
Green Gage	1 0	Duncan's Green-flesh Improved	1 0
Incomparable	1 0	Hampton Court Green Flesh	1 0
Golden Ball	1 0	Egyptian Green Flesh	1 0
Bromham Hall Green Flesh	1 0	Cuthill's Camberwell Beauty	1 0
Pine Apple	1 0	Gordon Castle Green Flesh	1 0
Rowse's Incomparable	1 0		
Austin's Incomparable	1 0		

CUCUMBER RIFLEMAN.—This is undoubtedly one of the finest varieties in cultivation ever yet sent out for exhibition purposes, possessing the following fine qualities:—A beautiful black spine, always growing even from stem to point, scarcely any handle, carries its bloom well, always keeps a fresh colour, and not liable to turn yellow as many other varieties. Length 24 to 28 inches, and a most abundant bearer. It will be found to be the most useful Cucumber in cultivation; 60 brace of this Cucumber were hanging at one time in a span-roof house 16 feet by 10 feet, and not one of which was less than 20 inches in length. They were seen by Cucumber growers from all parts of the country, who pronounced it to be the finest show of fruit they had ever seen. It is quite as hardy as any of the old ridge varieties, and not at all liable to rust or canker. Price 2s. 6d. per packet.

To Cucumber growers generally the following superb Cucumbers will be found to give every satisfaction:—

Per packet.—s. d.		Per packet.—s. d.	
General Outram	2 0	Stockwood Ridge	1 0
Sir Colin Campbell	1 6	Ayres' Prolific	1 0
General Canrobert	1 6	Manchester Prize	1 0
Victory of Bath	1 0	Sutton's Champion	1 0
Gordon's White Spine	1 0	Burgess' Conqueror	1 0
Lord Kenyon's Favourite	1 0	Henderson's A 1	1 0
Phenomenon	1 6	Sion House	1 0
Captivation	1 6	Allen's Victory	1 0
Mills' Jewess	1 0	Trollope's King	1 0
Manchester Prize	1 0	Ipswich Standard	1 0
Conqueror of the West	1 0	Tiley's Improved	1 0
Hunter's Prolific	1 0	Hamilton's Black Spine	1 0
Incomparable	1 0	Dickson's Newton Hero	1 0
Cuthill's Black Spine	1 0	Kelway's Victory	1 0
Champion of England	1 0	&c. &c. &c.	

TILEY'S EMPEROR RED CELERY, the finest grown, 1s. per packet.

TILEY'S SOLID WHITE CELERY. 1s. per packet.

GRIFFIN'S ALMA LETTUCE, 1s. per packet.

The TRUE OLD BATH COS LETTUCE, 1s. per packet.

A remittance must accompany all orders by cash or penny postage stamps.

EDWARD TILEY, NURSERYMAN, SEEDSMAN and FLORIST, 14, Abbey Church Yard, Bath.

GERANIUMS, HERBACEOUS AND ALPINE PLANTS, ORCHIDS, CHRYSANTHEMUMS, HARDY VARIEGATED PLANTS, &c.

MESSRS. PARKER AND WILLIAMS beg to inform their friends and patrons that their new priced and descriptive CATALOGUE of the above, to which are added supplemental Lists of Fuchsias, Stove, Greenhouse, and Hardy Plants, Ferns, Ornamental Foliage and Variegated Plants, Fruit Trees, &c. (which include the best new plants of the season, is now published, and will be forwarded post free on application.—Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, London, N.

FRUIT TREES.

WILLIAM J. EPPS, JUN., begs to offer the following at very low prices, as the ground on which they stand must be cleared:—

		£ s. d.
DWARF-TRAINED PEACHES AND NECTARINES	per doz.	£1 10 0
STANDARD CHERRIES	per 100	5 0 0
ASPARAGUS, 4 years	per 1000	1 0 0

South Eastern Nurseries and Seed Establishment, Ashford.

RHODODENDRONS, HARDY AZALEAS, ETC.

GEORGE WHEELER, NURSERYMAN, &c., Warminster, Wilts, respectfully announces he has a fine Stock of the above which he offers at very moderate prices, viz., good strong plants at 30s., 40s., 50s., 60s. 70s., and 80s. per 100, according to the strength of the plants.

RHODODENDRONS and AZALEAS, by name, 75s., 100s. to 200s. per 100.

SEDUMS, ANDROMEDAS, VACCINIUMS, &c., 60s. to 100s. per 100.

STIRLING, SCOTLAND.

OUR CATALOGUE OF SELECT VEGETABLE AND FLOWER SEEDS, POTATOES, GARDEN TOOLS, &c., for 1861, is now ready, and may be had on application.

The distinctive features of this Catalogue are such as have commended themselves alike to the Gardener and Amateur. Being simple in arrangement, and sufficiently descriptive, a selection from its columns is rendered easy and satisfactory. Moreover, we still adhere to the system introduced by us several years since, of discarding, in the various sections, all comparatively inferior varieties, as well as omitting what are mere repetitions of the same sorts under different names.

, SEEDS CARRIAGE PAID, as formerly.

W. DRUMMOND AND SONS.

Seed and Implement Warehouse, Stirling and Dublin, Jan. 19.

NOTICE.

WM. PAUL (Son and Successor to the late A. Paul, and for the last 13 years only and equal partner in the late firm of A. Paul & Son) respectfully announces that the old Cheshunt Nurseries have been divided, one part and half the stock remain in his possession; to these he has added 30 acres of Nursery Ground, Seed Warehouse, Plant Houses, &c., with entrance from the platform, Waltham Station, Eastern Counties Railway.—Address WM. PAUL, Cheshunt Nurseries, Waltham Cross, N.

FOR SMOKING GREENHOUSES.

NEAL'S PATENT APHIS PASTILS, which light with a Candle, save all trouble, destroy all Insects, and are already used by some of the leading Gardeners, may be obtained of the principal Seedsmen and Nurserymen, 2s. per packet.—Manufacturer and Patentee, J. NEAL, Edward Street, Birmingham. Trial packets, 1s. each.

WINTER DRESSING FOR ORCHARD HOUSE AND OTHER FRUIT TREES.

Extract from the Eighth Edition of the Orchard House. By Mr. Rivers.

"January paint the trees (every shoot and bud) with Gishurst Compound, half a pound to the gallon of water. This will destroy the eggs of Aphides."

Vines and outside wall trees should first be washed, stem and shoots, with 8 oz. solution of Gishurst, then smeared with clay and Gishurst, (see *Gardeners' Chronicle* Oct. 13), or with lime, sulphur, and Gishurst, made into a paste. If the smell be disliked, make the solution 48 hours before use.

Full directions as to the use of weaker solutions against mildew and insect pests in spring and summer, with particulars of the experience of many great gardening authorities, are enclosed with the boxes of Gishurst. These are supplied retail through any nurseryman and seedsman at 1s., 3s., and 10s. 6d each. wholesale by PRICE'S Patent Candle Co., Limited.

FUMIGATING AND SYRINGING.

GRIFFITHS AND AVISS, TOBACCONISTS, Coventry, call attention to their TOBACCO PAPER. It is simple in use, safe in application, altogether effective in the destruction of Green Fly, Black Thrips, &c., nominal in price, 12s. 6d. per dozen pounds, sent to any part of the kingdom on receipt of Post Office Order. To those in the Trade a liberal discount on 28 lbs. and upwards. The following practical gentlemen have submitted it to every kind of ordeal, and bear testimony it is all we represent:—

Mr. Charles E. West, the Earl of Denbigh, Newnham Paddox
Mr. Wm Oliver, the Earl of Craven, Combe Abbey
Mr. A. Henderson, His Grace the Duke of Sutherland, Trentham
Mr. Wm. Pool, the Earl of Aylesford, Packington Hall
Mr. John Jennings, the Earl of Derby, Knowsley Park
Mr. Thomas Pond, the Viscount Hood, Whitley Abbey
Mr. Geo. Tranter, the Hon. Granville D. Ryder, Westbrook, Hemel Hempstead
Mr. Geo. Bennett, J. Beech, Esq., Brandon
Mr. Jas. Knackston, J. R. West, Esq., Alcot Park
Mr. W. H. Mountford, H. R Hughes, Esq., Kinmel Park, St. Asaph, North Wales
Mr. Peter Conlon, C. Webb, Esq., The Gardens, High Grounds, Hoddesden
Mr. Francis R. Kinghorne, Nurseryman, Seedsman, and Florist, Richmond, Surrey
Mr. John Reeves, Ladbroke Nursery, Notting Hill, W.
Mr. John Jennings, Nurseries, Shipston-on-Stour
Mr. Edward Perkins, Nurseryman, Seedsman, and Florist, Leamington Nursery
Mr. John Ogden, Nurseryman, Seedsman, and Florist, Coventry
Messrs. S Perkins & Sons, Nurserymen, Seedsmen, and Florists, Coventry

, Agents Wanted. Nurserymen and Florists preferred.

N.B. Cast Fumigating Pots, Tobacco Water for Syringing, and Tobacco Juice for Sheep Dressing.

GENUINE TOBACCO PAPER FOR FUMIGATING.

H. APPLEBY (Foreman to Messrs. Ivery & Son, Nurserymen, Dorking), has now a good supply of the above on hand in 4 lb. packets, 1s. 3d. per pound. For testimonials see *Gardeners' Chronicle*, January 5, 1861, page 14.

CARD.

SAMUEL N. McGERROW, GENERAL HORTICULTURAL BUILDER, Knotty Ash, near Liverpool.

Reference permitted to the Nobility and Gentry throughout Great Britain and Ireland.

HOT-WATER APPARATUS FITTED in every description of Hothouses, Mansions, Churches, Chapels, &c., on the most approved principle by J. MEREDITH, Vine Cottage, Garston, near Liverpool.

N.B. First-class references may be had on application.

GREENHOUSES, ORCHARD HOUSES AND CONSERVATORIES.

H. FREEMAN'S Horticultural Works, Triangle, Hackney, N.E. Established 20 years. Substantially made Greenhouses, glazed, ready for fixing, 42 feet by 13 feet, 50l.; 21 feet by 13 feet, 28l.; 12½ feet by 10 feet, 15l. Orchard Houses 10 per cent. cheaper. A large assortment kept. Estimate given for Heating, or any branch in iron or wood.

WEST OF ENGLAND, IRELAND, AND WALES.

VINCENT SKINNER (*late Partner with* J. Weeks & Co.), erects CONSERVATORIES, HOT-HOUSES, and HOT-WATER APPARATUS to warm Churches, Hothouses, &c., and has foremen from London to superintend their construction. Upright Pipe Boilers, Plans, and Estimates.—V. SKINNER, Bridewell Street, Bristol.

HOTHOUSES FOR THE MILLION

MADE BY STEAM POWER AT

J. LEWIS'S HORTICULTURAL WORKS, Stamford Hill, Middlesex, N. These Hothouses are made on a much better and stronger principle than those manufactured on Sir J. Paxton's plan, and are more durable and cheaper.

A span-roof measuring 30 ft. by 16 ft., with two glass ends and doors complete

Do.	do.	40 ft. by 20 ft.	do.	do.
Do.	do.	60 ft. by 24 ft.	do.	do.

The price of any other size forwarded on application to J. Lewis.

HORTICULTURAL WORKS AND HOT-WATER APPARATUS MANUFACTORY.

KENSAL GREEN, HARROW ROAD, LONDON, W.

JOHN TAYLOR AND SON beg to call the attention of the nobility and gentry to the very superior manner in which they Erect all kinds of Conservatories, Vineries, Greenhouses, &c., combining every improvement with elegance of design and durability of materials and workmanship.

Their VENTILATING APPARATUS for the Fronts and Roofs of Houses has given the highest satisfaction. Churches, Chapels, Schools, Entrance Halls, Public Buildings, &c., heated with Hot-Water Apparatus in a most economical and efficient manner.

J. T. & SON have great pleasure in referring to numbers of the nobility and gentry by whom they are extensively engaged.

200 CUCUMBER AND MELON BOXES, AND LIGHTS, AND FROM 400 to 500 LIGHTS FOR PITS OF ALL SIZES KEPT IN STOCK

Glazed and Painted complete, ready for immediate use. Packed and sent to all parts of the kingdom.

JAMES WATTS AND CO., Hothouse Builders and Hotwater Apparatus Manufacturers, near the Green Man, Old Kent Road, London, S.E.

BLOSSOM OF WALL FRUIT TREES.—Worsted Net to protect Blossom, much approved, will last years. Samples and plan of fixing it sent. Twine Garden Nets, 1 inch –1½ inch, 2½d. per yard. Tanned Nets properly mended, ¾d. per yard. Thick Tarpauling for Covers, 10d. per square yard. Sheep Nets, very thick cord, 20s. per 50 yards. Rabbit Nets, Nets for covering Pheasantries, &c.—R. RICHARDSON, White Horse Factory, Bedborough Street, Judd Street. Office, 99, Euston Road, London, N.W.

TANNED GARDEN NETTING for preserving Seed Beds, Fruits, Strawberries, from Frost, Blight, Birds, &c., and as a Fence for Fowls, &c. 1 yard wide, 1½d.; 2 yards, 3d.; 3 yards, 4½d.; and 4 yards 6d. per yard, in any quantity, may be had at CHAS. WRIGHT'S, 376, Strand, W.C.

Greenhouse and Flower-pot Sticks Varnished:—1 foot, 3d.; 1½, 4d.; 2, 5d.; 2½, 7d.; 3, 10d.; 4, 1s. 6d. per dozen. Dahlia Sticks Varnished, per dozen:—3 feet, 1s. 6d.; 4, 2s. 3d.; 5, 3s.; 6, 3s. 6d. An allowance to Nurserymen.

GALVANISED GAME AND POULTRY NETTING.—By improved machinery at reduced prices. 2-inch Hexagon Mesh, 24-inch wide, light, 5d.; Medium, 6d.; Strong, 7d.; Extra strong, 9½d. per yard. Any other width, strength or mesh, from ½ to 6 inches, at proportionate rates. Every description of Wire-work by THOS. P. HAWKINS, Manufacturer, 27, Dale End, Birmingham.

HENRY J. MORTON AND CO., 2, Basinghall Buildings, Leeds.

GALVANISED IRON WATER CISTERNS for Cottage Houses, &c., to contain 50 gallons, 26s.; 80 gallons, 31s. each; and 140 gallons, 37s., and fitted with tap, keeps the water perfectly sweet and clean; will not rust or corrode. Cisterns of all sizes.

GALVANISED IRON PUMPS for Liquid Manure or Domestic Use, 3 inches diameter, and 32s. 6d. each; Tail Pipe for same at from 10d. per foot.

GALVANISED IRON SWING WATER BARROWS for Garden or Farm use, containing about 20 gallons, entirely formed of iron, 35s. 0d. each.

WIRE CABLE FENCES

FOR PARKS, AVENUES, PLEASURE GROUNDS, AND FARM LANDS.

FRANCIS MORTON'S PATENT WINDING STRAINING PILLARS, CABLE STRANDS, and FENCING STANDARDS, afford the only means of constructing permanently efficient and durable fence. They have been awarded special silver medals by the principal Agricultural Societies for having obviated the defects in the old and imperfect system of putting up wire fences, while greatly reducing the cost. Prices, from 9d. to 2s. 2d. per yard of fence. Drawings and full particulars on application to FRANCIS MORTON & Co., Sole Manufacturers and Patentees. Head Offices and Manufactory, Liverpool: London Branch, Parliament Street, Westminster.

, All kinds of Galvanised Iron Roofs for Buildings, Sheds, Farm and other purposes, Wire Netting, Lightning Conductors, Weighing Machines, &c.

PINE APPLES, GRAPES, ETC.

PINE PLANTS, FRUITING AND SUCCESSION.
GRAPE VINES, FROM EYES FOR FRUITING IN POTS, OR PLANTING.

JOHN WEEKS AND CO. can supply any quantity of very fine healthy Pine Plants, either Fruiting or Succession.

GRAPE VINES remarkably strong and fine, 50 varieties, all the best sorts.

JOHN WEEKS AND CO.'s HORTICULTURAL SHOW ESTABLISHMENT is entirely devoted to the growth and Forcing of GRAPES, PINES, PEACHES, FIGS, CUCUMBERS, and other choice Fruits. The whole open for inspection, thereby showing the most improved plans of HORTICULTURAL BUILDINGS with the VENTILATING and HOT WATER APPARATUS in full operation.

JOHN WEEKS AND CO., Horticultural Builders and Hot-Water Apparatus Manufacturers, King's Road, Chelsea, London. Plans, Estimates, and Illustrated Catalogues free on application.

FRUIT TREES.

WILLIAM J. EPPS, JUN., begs to offer the following at very low prices, as the ground on which they stand must be cleared:—

DWARF TRAINED PEACHES AND NECTARINES	per doz.	£1 10 0	
STANDARD CHERRIES	per 100	5 0 0	
ASPARAGUS, 4 years	per 1000	1 0 0	

South Eastern Nurseries and Seed Establishment, Ashford.

TREE AND SHRUB CATALOGUE.

JOHN CRANSTON begs to announce to his Patrons and the Public generally, that his DESCRIPTIVE CATALOGUE of Conifers, Ornamental Trees, Evergreen and Deciduous Shrubs, &c., is now ready for distribution, and will be forwarded on receipt of one postage stamp.

The above contains important and interesting notes with regard to the height the Trees enumerated attain, Native Country, date of introduction, and in the case of Flowering Shrubs, the colour and time of flowering.

Nurseries, King's Acre, near Hereford.

FINE TRANSPLANTED FIRS, &c.

WOOD AND INGRAM have to offer a fine lot of SCOTCH, 4 to 5 feet, very strong, at 35s. per 1000; a few hundreds of LARCH, 5 to 7 feet, at 8s. per 100; also fine specimen SYCAMORES, 10 to 12 feet, at 60s., and 15 to 18 feet, at 120s. per 100.—Huntingdon Nurseries.

THREE MILLIONS OF TRANSPLANTED QUICKS.

GEORGE CHIVAS offers the above, varying from Good to exceedingly Strong, clean and well rooted. A Sample Bundle containing 100 of each, 5 sizes, forwarded on receipt of 15s. Truck loads delivered Free at any Railway Station. Also, a Million of Transplanted LARCH; half a Million of Transplanted SPRUCE; Ten Thousand Superior Standard APPLES and PEARS; and a large General NURSERY STOCK.—Chester, Jan. 26.

ROBERT NEAL, NURSERYMAN, Wandsworth Common, S.W., begs to call the attention of buyers to his large and well selected stock of EVERGREENS and FLOWERING SHRUBS, ORNAMENTAL TREES, AMERICAN PLANTS, FRUIT AND FOREST TREES, STANDARD AND DWARF ROSES of every description. A large stock of BOX-LEAF EVERGREEN PRIVET, from 1 to 6 feet for hedges; GREEN HOLLY, 1 to 6 ft.; RICH BOG and LOAM for American Beds; LEAF MOULD. The Nursery is 10 minutes' walk from Clapham Common, and New Wandsworth Station, Crystal Palace Line.

LARGE TREES, ETC.

WM. PAUL (Son and Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, N., has a quantity of large handsome TREES, Evergreen and Deciduous, which must be cleared off 10 acres of the old Nurseries very shortly, and will be sold cheap. Cedrus deodara, Cedar of Lebanon, Yews, Box, Laurels, Arbor-vitæ, Privet, Red Cedar, fine specimens of choice Coniferæ, Alders, Planes, Poplars, Elms, Limes, Fruit Trees, &c. All have been frequently removed and rise with plenty of fibrous roots. Carefully taken up and delivered free to any railway station in London. Further particulars on application.—Please address WILLIAM PAUL, Cheshunt Nurseries, Waltham Cross, N.

GLADIOLI.

JOHN STANDISH is the largest grower and has the best collection. He has raised an immense quantity of Hybrid Seedlings, which flowered during the past Autumn for the first time, and exceeded anything that has been seen in Gladioli before, it being a remarkable fact that amongst these Seedling Gladioli there is scarcely ever a bad one. Strong flowering Bulbs, 75s. per 100; small ditto, 50s. per 100.

Besides the above, J. S. has all the best named kinds, CATALOGUES of which, and of his other rare and choice plants, may be had free, on application to the Royal Nursery, Bagshot.

GENERAL SPRING CATALOGUE OF PLANTS.

CHARLES TURNER'S NEW LIST is now Ready; it comprises new and general Collections of PELARGONIUMS, FANCY do., CINERARIAS, DAHLIAS, AZALEAS, FUCHSIAS, VERBENAS, VARIEGATED GERANIUMS, SCARLET do., ACHIMENES, GLOXINIAS, CALCEOLARIAS, PETUNIAS, CHRYSANTHEMUMS, PHLOX, CARNATIONS, PICOTEES, PINKS, AURICULAS.

The Royal Nurseries, Slough.—Jan. 1861.

WM. IVERY begs to inform his friends and patrons that he is now prepared to supply his superb NONSUCH CELERY at 1s. per packet, acknowledged by the Horticultural Society and all who have tasted it to be the best flavoured in cultivation. Price to the Trade on application. Seeds of all descriptions selected from the best growers at moderate prices, a very choice Collection of Standard and Dwarf Trained PEACHES, NECTARINES, APRICOTS, PLUMS, CHERRIES, &c., also NURSERY STOCK of every description.—Hanover Nursery, Peckham.—Jan. 26.

NEW CINERARIAS OF 1860.

F. AND A. SMITH are now sending out their splendid Varieties of the above, which for colour, dwarf habit, and large compact heads of bloom, are unsurpassed; many of them are finely formed, and others have the largest flowers known. A DESCRIPTIVE CATALOGUE may be had on application.—Dulwich, Surrey, S.

SUPERB BALSAMS.

F. AND A. SMITH are now sending out SEED of their well-known superior BALSAMS, which have maintained their character as the brightest colours. The doublest and largest flowers known for many years. In collections of 9 distinct colours, 2s. 6d. each; the same mixed, 2s.; half the quantity, 1s.—Dulwich, Surrey, S.

WINTER AND SPRING FLOWERING PLANTS.

F. AND A. SMITH are now sending out at reasonable prices finely grown plants of Acacia, Azalea, Aphelexis, Boronias, Burchellia, Chorozema, Cineraria, Cactus, Cytisus, Carnation (Tree), Daphne, Epacris, Ericas, Eutaxia, Gardenias, Geraniums, Hydrangea, Primula, Prostranthera, Poinsettia, Polygala, Roella, Roses, Indica minor, Col. Fabvier, Mrs Bosanquet, Géant des Batailles, Yellow Noisette, Gloire de Dijon, Cramoisie supérieur, &c. Tremandra, Greenhouse Climbers in variety. Prices with Lists on application.

Dulwich, Surrey, S.

NOTICE.—FREE TO ANY RAILWAY STATION IN ENGLAND.

EPPS' COLLECTIONS OF NEW AND GENUINE GARDEN SEEDS.

	£	s.	d.
No. 1.—Consists of 30 quarts of the best kind of Peas and Beans, and every other kind of Seed necessary in like proportions, sufficient for a year's supply of a large garden	3	15	0
No. 2.—20 quarts of Peas and Beans, and other seed in like proportion	2	10	0
No. 3.—Do., smaller supply	1	5	0
No. 4.—Do., for a small garden	0	12	6

All Orders (except from known Correspondents) to be accompanied with a remittance.

Mr. EPPS trusts it is not necessary to blazon forth the names of his patrons, and their reports of the high character of his Seeds, but simply to state that every care in growing and selecting has been taken to insure the confidence of his friends.

Maidstone Seed Establishment.

JOHN CATTELL'S COLLECTIONS OF KITCHEN GARDEN SEEDS carriage free to any railway station in the Kingdom.

COMPLETE COLLECTIONS FOR THE WHOLE YEAR, suitable for large and small gardens.

Collection No. 1	.. 4l. 0s.	Collection No. 3	.. 1l. 10s.
Collection No. 2	.. 2 10	Collection No. 4	.. 0 15

The above are selected from an unrivalled stock of Vegetables, and nearly all are saved under J. C.'s own superintendence. Lists of quantities supplied in each collection may be had on application.

COLLECTIONS OF FLOWER SEEDS.

100 packets of the best and most showy hardy and half hardy varieties .. .. 20s.
50 do. do. do. .. 10s. | 25 do. do. do. .. 6

Any kinds not required should be named in the order that they may be omitted from the collection. Cash or references respectfully requested from those who have not previously favoured J. C. with their orders.

Seed Establishment, Westerham, Kent.

CARTER'S LIST OF NEW AND CHOICE VEGETABLES.

Per packet—	s.	d.	Per packet—	s.	d.
Lee's White Sprouting Broccoli	2	6	Carter's Giant White Cos Lettuce	1	0
Nutting's selected dwarf Red Beet	1	0	Carter's Champion Cucumber	1	0
Tomato de Laye	0	6	New Feather-stem Savoy	1	0
Dalmeney Broccoli ..	1	0	Carter's Excelsior Melon	1	0
Conning's Perfection do.	1	0	Turner's Gem	1	0
Melville's variegated garnishing Kail	1	0	StrathmoreHeroPeas, p.qt.	2	6
Carter's dwarf Mammoth Cauliflower	1	0	Handsworth Potatoes, per peck	5	0
Hood's dwarf Imperial Celery	1	0	Pheasant Eye do. „	8	0
Lynch's Star of the West	1	0	Dalmahoy do. .. „	9	0
			Baldry's Scarlet Defiance Rhubarb, per root ..	2	0

For further particulars see CARTER'S SELECT LIST OF GARDEN AND FARM SEEDS, forwarded gratis, and post free on application.

JAMES CARTER & CO., 237 and 238, High Holborn, W.C.

The Gardeners' Chronicle.

SATURDAY, JANUARY 26, 1861.

So closely connected is the TEMPERATURE OF THE GROUND with the healthfulness of our crops, and so important a part does latent heat bear in the economy of vegetation, that a few words on the temperature of our earth, below the surface of the soil, can scarcely be deemed out of place in the *Gardeners' Chronicle*, and we think will prove very interesting to our non-scientific readers.

Instinct does not err when it teaches the inhabitants of the ice-bound tracts in the frigid zone to retire when their brief summer is over, to homes deep sunk below the frozen earth; in such a habitation only could they exist, and thus, having during the less severe weather provided a sufficiently abundant supply of necessaries for themselves and families, they pass the winter. It was not a theoretical science, or a long and laborious system of experiments, which taught these rude children of nature that the bosom of our earth was the best refuge against a cruel winter, and, in fact, the only place where they could find sufficient warmth to support that life the source of which it was. The poet has said that "reason may, but instinct never errs," and in no instance could we find a more apt illustration of the poet's words, than in this fact of the natives of cold climates wintering under ground, an alternative which reason alone would certainly never have suggested. We shall in the course of this note upon the temperature of our earth show how wise is that instinct; and that scientific investigation would point out this method as the most simple and effectual mode of enjoying the little sun heat which falls on their ground during the summer, a large portion of which is preserved in the bosom of the ground for the supply of vegetable as well as their own life. It is not our present intention to speak of the heat emanating from the *interior* of the globe, or of the many theories respecting it, a question which must always be more or less buried in obscurity and conjecture, but shall confine ourselves to the consideration of the influence of solar heat nearer its surface. Of the amount of heat which the earth annually receives from the sun, some portion is lost by radiation, whilst some is absorbed by the earth and gradually descends to some depth below the surface of the soil; this absorbed heat is slowly given off again, or radiated in the winter months, but is renewed by the sun during the hot months. If the bulb of a thermometer suspended in air be coated with a spherical crust, and the index of such a thermometer observed, we shall find that it is much less affected as to its diurnal range than one freely exposed; this range will become less as the coating increases in thickness, especially if it should be a bad conductor. Scientific men have treated our globe in the same manner, and by plunging long-stemmed thermometers into it have determined very accurately the amount of solar influence on the temperature of the earth at different seasons and in various kinds of soils. Professor FORBES has done very much in this field of physical inquiry; we shall have occasion to refer in the course of our notice to some of the results obtained by this gentleman. A brief description of the kind of instruments used, and of their mode of construction, burying, &c., may not be uninteresting.

To obtain instruments fit for the purpose, and to get them safely buried, was a work of no little trouble and anxiety, and was performed at the various stations in Scotland and on the Continent with generally good success, and observations were taken through many years with unvarying regularity. Those taken under the superintendence of Professor FORBES in Scotland, and reduced by that gentleman, are very valuable. We shall refer to their results in a further portion of our paper. The stems of the thermometers were made of very thick glass tube blown with great care, the bore of these stems, from the bulb up to the portion to be above the ground, was nearly capillary, but above this thinner part the stem expanded into such a size that the degrees should be of such a length as to admit of their being read to the hundredth of a degree with great accuracy; as the amount of change in temperature to be measured was so small this amount of sensitiveness was of course highly necessary; the liquid used was alcohol slightly coloured. After these instruments had been carefully compared and their graduation marked, a very delicate and difficult matter, the next thing was to put them into the ground: this was done by boring holes of the required depths, usually at depths of 3, 6, 12, and 24 French feet, and having inserted the thermometers, filling up the apertures with dry sand. Instruments of this kind are now placed at nearly all of the principal English and continental observatories, as well as in America and several of the British colonies; they are read at the Royal Observatory at Greenwich every day at noon.

The temperature at the surface of the globe, as we all know from experience, is liable to great and sudden fluctuations; this is not the case as we get a little below the surface of the earth, and as we descend lower we get a still less perceptible change of temperature. Although there is scarcely any perceptible variation in the temperature of one *day* and *another*, as shown by the deep-sunk thermometers, there is an *annual* variation, which is very constant. This we might expect, as the great heat falling upon the earth during the warm summer months, being absorbed, when it has had time to penetrate to some depth exerts a considerable influence in raising the thermometers; and on the other hand, the radiation during the months when the earth is receiving but little or no solar heat, will exhaust the accumulated heat of the summer, until again replenished, and then will occur the minimum, and this will happen about the middle of the hot weather.

The following table, showing the mean monthly results at the Greenwich Observatory, of the thermometer whose bulb is 24 French feet below the soil, for the year 1857, will serve to exhibit the annual variation.

1857. Months.	Mean Monthly Readings.
January	51.05
February	50.26
March	49.37
April	48.65
May	48.24
June	48.28
July	48.72
August	49.64
September	50.68
October	51.69
November	52.29
December	52.34

Here we see that the sun's heat has not penetrated to that depth until December, when the highest readings occur; and the minimum occurs in June, by which time the absorbed heat has been radiated and the earth receives a fresh supply from the sun. We should like to give many more tables of different depths and soils, but the limits of this paper will not admit of them: we must

therefore be content with observing that as we get nearer the surface the times of *maxima* and *minima* readings occur more and more near the times at which the highest and lowest occurs with us; and the range in the year, which by the above table we see is only 4°.11 at the depth of 24 French feet, whilst at the surface the difference between the mean of the highest and lowest monthly readings in the same year was 28°.8, gets larger as we ascend.

In addition to the other causes, the geological peculiarities of the soil in which the thermometers are sunk will also influence them in their readings, some strata having a much greater power of conducting heat than others. The following table, deduced from Professor FORBES' observations, will show the difference in the conducting power of three different kinds of strata:—

TABLE SHOWING THE RATE OF INCREASE OF TEMPERATURE WITH DEPTH.

	Porphyritic Trap.	Sand.	Sandstone.
	Deg.	Deg.	Deg.
From 3 to 6 feet ..	+0.37	+0.29	+0.04
„ 3 to 12 „ ..	+0.87	+0.63	+0.04
„ 3 to 24 „ ..	+1.38	+0.96	+0.19

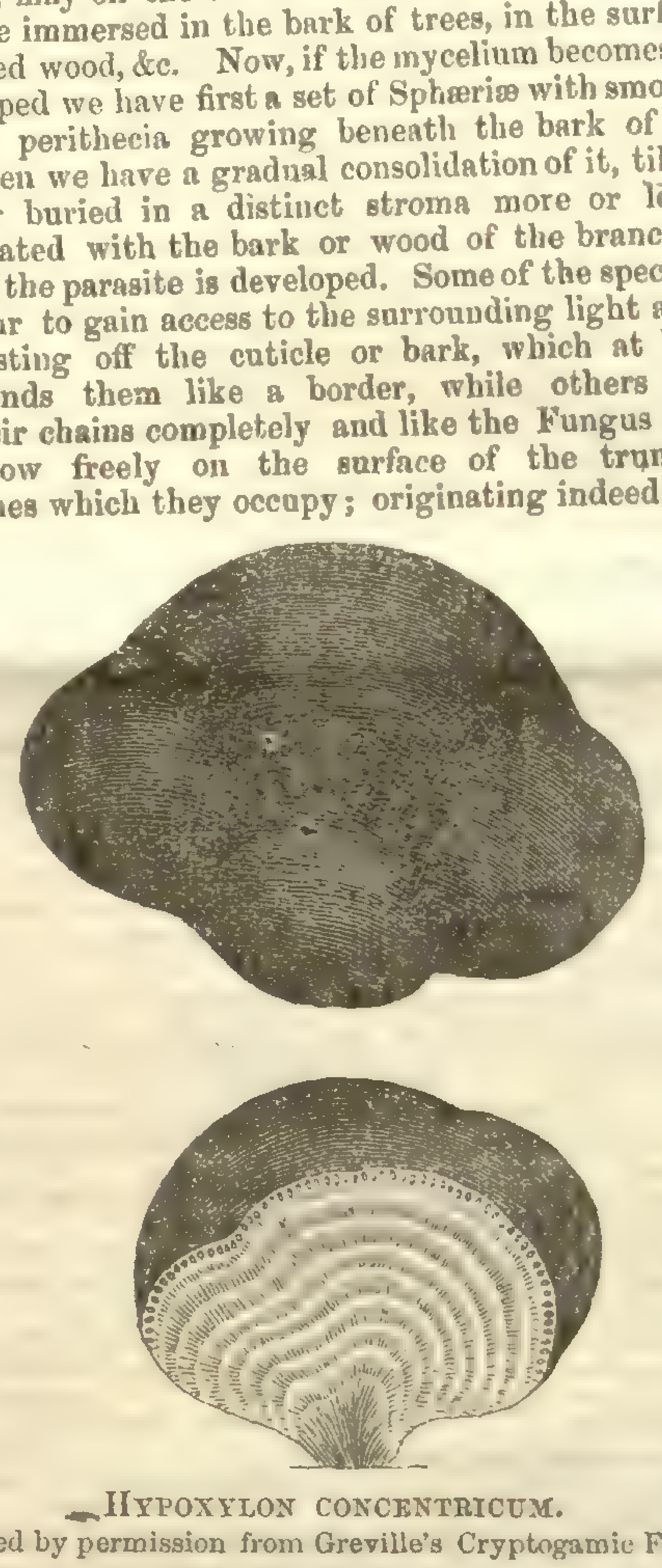
We will now glance at the general results which are deduced from the observations of the deep-sunk thermometers, and trace the general effect of the absorbed solar heat during the several months of the year. Commencing with the 3 feet thermometer, we observe an annual range of from 15° to 20°, the periods of maxima and minima not differing greatly in time from the highest and lowest readings at the earth's surface; 6 feet, here occurs a range of 10° to 15°, and the times of maxima and minima are retarded; as we descend lower the range diminishes, till at 24 feet below the surface of the soil, the range in the year is not more than about 3½°, and the times of maxima and minima are retarded by nearly five months. It has been observed that the impression of heat takes about five or six days to penetrate through a foot of soil; of course this time changes with a difference in the geological peculiarities of the soil, as we have shown above. A thermometer placed in the caves under the Observatory of Paris, a depth of about 85 feet, has during half a century scarcely varied a quarter of a degree from the reading 53°.2. We see then that by getting below the surface of the soil we escape the waves of atmospheric temperature, much in the same way as the diver does who penetrates many feet below the surface of the ocean, and the lower we descend the less perceptible do the changes become, until we reach the stratum of invariable temperature, which varies in different soils from 50 to 100 feet below the surface; and the temperature at this depth is probably very nearly that of the mean air temperature for the place. The mean temperature of the air, as obtained from the Greenwich volume of meteorology, for the three months of October, November, and December of the year 1857, was 47°.9, and the mean for those months, as shown by the deep-sunk thermometer, given in the table above, is 52°.11, showing a difference of nearly 5° *higher* than the air temperature; this difference would be considerably more in places where the winters are much colder than they are in our latitude.

MYCOLOGY.—No. XLI.

HYPOXYLON CONCENTRICUM, *Grev.*—We have already under *Cordiceps ophioglossoides* given an example of the curious set of Fungi to which the present subject belongs. They are characterised by having the essential parts of fructification, under the form of distinct cysts, composed of more or less closely compacted cells, of which those which line the inner surface give off in a radiating direction elongated sacs (*asci*) mixed with delicate threads of nearly the same length (*paraphyses*), and containing generally a definite number of sporidia, multiples of four, which escape at maturity by means of a central orifice. This is sometimes a mere point, with scarcely anything to distinguish it from the rest of the cyst, but more frequently it is seated at the tip of a distinct process, which may be either a mere nipple or tubercle, or a long linear neck-shaped body. The walls of these cysts are sometimes even and smooth externally; but frequently they are rough and granulated, or variously villous, bristly, &c.

The cysts are often quite naked or scattered, with scarcely any trace of spawn or mycelium. Sometimes, however, the spawn is highly developed, so as to form a thin stratum on which the cysts or perithecia rest, or even to embrace them so firmly and intimately that they are with difficulty removed, and little appears above the stratum except their orifices. Occasionally the threads are more closely woven together, and their articulations assume the character of cells; and thus we have freely expanded strata of greater or less density, such as we find in the fleshy *Hypocreæ*.

The perithecia, though unaccompanied by any palpable spawn, may on the other hand lose their free habit and become immersed in the bark of trees, in the surface of denuded wood, &c. Now, if the mycelium becomes more developed we have first a set of Sphæriæ with smooth or woolly perithecia growing beneath the bark of trees, and then we have a gradual consolidation of it, till they appear buried in a distinct stroma more or less incorporated with the bark or wood of the branches on which the parasite is developed. Some of the species endeavour to gain access to the surrounding light and air by casting off the cuticle or bark, which at length surrounds them like a border, while others throw off their chains completely and like the Fungus before us grow freely on the surface of the trunks or branches which they occupy; originating indeed in the



HYPOXYLON CONCENTRICUM.
Copied by permission from Greville's Cryptogamic Flora.

first instance within the branch, but at an early period of growth making their way through, and thus enjoying perfect freedom when they have arrived at maturity. But a step further, and the substance or stroma in which the perithecia are immersed acquires a distinct barren base, this is elongated into a stem, and thus we have the more perfect forms of *Xylaria*. The species with coloured perithecia have in the less complex forms more freedom of growth, and in the higher, as in *Cordiceps*, the stem arises at once from the nearly free mycelium. In either series the spawn occasionally exhibits threads which bear conidia or reproductive bodies of a second order distinct from the normal fruit.

Hypoxylon concentricum is one of those Fungi which are found in all countries, being widely diffused in tropical as well as temperate regions, undergoing here and there slight modifications, but seldom such as to make the identity doubtful. With us it is common on the trunks of old Ash trees, looking like lumps of cobbler's wax which have been moulded in the hand and thrown against the tree. When divided it exhibits a set of concentric strata with a radiating structure of a whitish or greyish tint in young specimens, though at length becoming brown and black. The whole is covered with a thin skin, pierced with the orifices of the superficial perithecia, which contain linear asci, each of which gives birth to eight brown elliptic sporidia. Exotic specimens differ slightly in colour, in the prominence of the perithecia and in the degree in which the outer surface is varnished. Like other Fungi it affords food to insects, but is too harsh and dry to be of any service to man. A closely allied species, however, *H. vernicosum*, whose stroma is of a looser texture, and is made of large concentrically arranged hollow cells, like those which exist in the large esculent Chilian or Antarctic Seaweed, *Durvillæa utilis*, is eaten by the inhabitants of Bhotan, though we can scarcely conceive a less promising kind of nutriment. *M. J. B.*

GOOD ROSES FOR BOUQUETS AND EXHIBITION,

AND THE BEST FOR THE PUBLIC GENERALLY.

THE Catalogues are now out, and so abundant are the sorts that a person who does not know them from experience may possibly select some that will disappoint. I have, therefore, selected and beg to recommend the following, which, with rare exceptions, are fit for exhibition, or for the above purposes.

First, Summer Roses.—These are all fit for exhibition. Many of them are indispensable for show, and they are all beautiful, hardy, and abundant bloomers. They are all on 1 or 2 feet briars. I have from 3 to 9 each of them. I must refer the reader to the catalogues for the colours. As they are all well-known Roses, I shall leave out a portion of their long names:—Zoutman, Jacqueminot, Ricaut, Kean, Boule de Nanteuil, Napoleon, Triomphe de Jaussens, Ohl, Coupe d'Hebe, D'Aguesseau, Letitia, La Ville de Bruxelles, Mousseuse, Duval, Comtesse Segur, Adèle Prevost, Lanei, Paul Perras, La Séduisante, Audot, Parmentier, Queen of Denmark, Blanchefleur, Schrismaker, nearly sky blue and very curious; Tricolor de Flandres, Madeleine, Œillet parfait. For poles, Chenèdolé, Brennus.

Secondly, Autumnal Roses.—1, Roses that are good and do well on the briar, but which I do not grow on other stocks: Ory, Salet, Marie Portemer, Monsieur Ravel, Raglan, Maxime, Triomphe de La Duchere, Lecocq, Prince Noir, Patrizzi, Paxton, Lansezeur, Reine de Danemarck, Lafitte, Mrs. Bosanquet, Aimé Vibert, M. Massot. The two last and Duchere are not show kinds but excellent garden varieties.

2. Roses that grow and bloom well on Manetti.—Apolline, Malmaison, Norfolk, Hallez, Le Lion des Combats, Mrs. Elliott, Diesbach, Chabrillan, Alexieff, Armide, Montigny, Laffay, Roygbem, Octavie Fontaine, Celine Forestier, Gloire de Vitry, Comte de Nanteuil, Duchesse d'Orleans, Leveson Gower, M. Schmidt, Eugène Appert, La Fontaine, Dr. Berthet, Oriflamme de St. Louis, Paul and Virginia, Edith de Murat.

3. Roses that do extra well on their *own roots.*—Paul Joseph, Proserpine, Laffay, Jacqueminot, Batailles, Malmaison, Devoniensis, Solfaterre—she is in height 14 feet, and in breadth 40 feet. Her first produce this year was 1570 blooms. I took 175 clusters to Dorchester on the 4th of June. She has buds on her now, and must be bone-dusted and constantly supplied with weak liquid manure, and also well mulched if the weather is very hot. Bone-dust is excellent for all Roses, and also for Strawberry plants; I used five sacks last year.

4. Roses that do well here on the Briar and also on Manetti.—Prevost, La Reine, Cambacérès, Knorr, Auguste Mie, Mont Carmel, Acidalie, Sutherland, Angleterre, La Ville de St. Denis, M. Regnier, W. Griffiths, L. Odier, Batailles, Jacqueminot, Franklin, J. Margottin, Bachmeteff, W. Jesse, Gloire de Dijon, L'Exposition, Caroline de Sansal. The soil here is friable loam.

A person beginning a Rosery cannot go wrong if he selects from this list. I have left out all bad constitutioned Roses. I have not less than three of any of these varieties. Of some I have great numbers. For instance, I have 54 Géant des Batailles, 15 Triomphe de Rennes, 24 Gloire de Dijon, 40 Jules Margottin, La Ville de St. Denis, 20 Comte de Nanteuil, 21 Leveson Gower, 26 Baronne Prevost, 20 Duc d'Orleans, 14 Knorr, 17 Regnier, 32 Norfolk, 16 Jacqueminot, Le Lion des Combats, 30 Angleterre. I do not therefore speak without ample grounds. The way to get a good Rosery is to find out good Roses and stocks suitable to them and the soil and situation, and then to multiply the sorts as above. I have left out some of the gems of England, because they are Roses for "special" soils, situations, and culture. Even in the soils suited to them they are not great bloomers.

One word on Manetti. I advise those for whom this is written to read my article on the cultivation of Manetti Roses, in the July Number of Turner and Spencer's Florist of last year. Manetti Roses require "special" cultivation. They also require "five times the manure that a Briar requires, but they will amply repay; the chief causes of their failure are, they are planted to death, cut to death, and starved to death. They are budded "too high." This is the fundamental error. One word to older Rosarians. Arago is the best new dark Rose of size and good constitution. Victor Verdier is good at all points. Triomphe de Lyon and Louis the 14th appear to be good dark kinds. Madame Crapelet is thick petaled, fine coloured, and bids well. George Peabody on its own roots (4 plants) is a rich beautiful crimson purple, free and perpetual bloomer, and good grower. I have four on Manetti also, but have not had time to prove them on that stock. It looks like a good bedding Rose on that stock. The following remarks from my friend Mr. Gloede, of Moret-sur-Loing, France, respecting new kinds of 1861, may be interesting:—

"As regards Roses I can tell you that there are some extra novelties this year, which you should have as soon as they come to England, viz. Madame Furtado, Triomphe d'Amiens (dark purple and striped), Reine des Violettes (very dark novel violet colour), and Boule d'Or (Golden Ball), the last a Tea Rose, and the best yellow known. The first was raised by Verdier father, the next two by M. Mallet of Amiens, and the last by Margottin."

Of Roses on the new Belgian standard stock I shall be able to inform the readers of the *Gardeners' Chronicle* next year. They are budded into the main stem, and the heads are quite excellent. I have two plants each on 4 feet standards (too high), of Baronne Prevost, Gloire de Dijon, and Duchesse de Nemours. They were raised by Verschaffelt of Ghent. *W. F. Radclyffe, Rushton Rectory, Blandford, Dorset.*

Home Correspondence.

Fertilisation of British Orchids by Insect Agency.—Referring to your Number for June 9, 1860, p. —, Mr. Darwin asks for information on this point from persons residing in an Orchis district. It is not as a person answering that description that I venture to reply to his inquiries, because with the exception of O. morio, rarely O. mascula, and most rarely O. —, and Listera ovata, we have none of the British Orchids growing near Ely. In the spring of 1860 I met by accident a poor fellow in a street near Hungerford Market, who for the important sum of 6*d.* sold me 15 roots of the Fly Orchis (Ophrys muscifera), which

had collected near Guildford, Surrey. I planted them in my garden, where they all flowered vigorously, bearing from seven to 12 flowers each. Not one of the seed vessels swelled, and long after the flowers had withered I narrowly inspected every one of them, and found the pollen masses still in their pouches, waxy and moist, where one would have expected to find them shrivelled like the flowers. I bought at the same time several roots of the Butterfly Orchis, and one of O. maculata. The seed vessels of the Butterfly Orchis in most instances swelled off, and I think every one upon the O. maculata was fertilised. I examined the latter frequently and found the pollen masses had been dislodged. If it had not been for the O. maculata growing with the rest, I might have referred the condition of the Fly Orchids to the absence of insects on account of the rainy weather, but as they all grew together and flowered at the same time (or nearly so), insects could as well get at the Flies as at the others. *Wm. Marshall, Ely.*

Gas Heating.—I have had gas stoves fitted up in my Vinery and in two green-houses; they heat water pipes leading through the houses the entire length. There is no smell arising from the gas: one jet is only kept burning, except the weather is frosty, when four or five Bunsen burners are lighted, keeping up a temperature of about 56°. The stoves require a small supply of water every morning or evening. They were fitted up only last October, so it cannot be proved till summer whether or not there will be any prejudicial effects from the use of gas—none are, however, perceptible at present. Messrs. Thomson & Co., Gas-Fitters, Dalkeith, who are the patentees, fitted my apparatus up. *A. Burridge, National Bank of Scotland, Kirkcaldy.*

Destruction of White Scale on Pines.—Allow me to bear testimony to the value of that excellent receipt for killing scale on Pines published some time ago in your columns by Mr. Robertson, of Stoke Edith Park, and originally invented, I believe, by Mr. Cairns, gardener to E. Griffith, Esq., of New Court, near Hereford. It consists in adding 8 lbs. soft soap and 4 lbs. of sulphur to 16 gallons of boiling water; when the heat is reduced to 90° I immersed my plants in the mixture for 10 minutes. I then placed them in the sun to dry and potted them next day. This I did on the 22d of October last, and no Pine plants could be much worse than mine were with white scale. I had the walls all white-washed and the wood-work painted both in my fruiting-house and succession-pit, and I am happy to say that my plants are now perfectly clean and looking remarkably well. Previously to my receiving the above receipt I tried Gishurst's Compound, and many other remedies, all of which proved a failure. *Simeon Phippen, Gardener to the Rev. C. T. Farley, Moor Hall, Stourport, Worcestershire, Jan.* 15.

Dianthus Veitchi.—Observing that some of the Seed Catalogues for the present season offer an article under this designation, I beg permission to state that having purchased a packet of the said seed in 1858, I obtained for my trouble a batch of plants which, on flowering last summer, proved to be nothing but the ordinary Sweet William! *Orwell.*

The late Frost and Roses.—How it may have fared with Rose amateurs who reside near London, and in places more north, I know not, but here at Clifton and its neighbourhood, the effect of the late frost on Roses of all kinds far surpasses anything ever before experienced in this part of the world. During the last five years I have been forming a collection of Roses, and especially of Teas and Noisettes (worked mostly on the Céline), and to which I have given up every foot of wall I could spare; but although on walls, and protected more carefully than in any previous year, so much have they suffered, that I have almost to commence my work anew, and the fine collection of a friend of mine on the other side of the Avon, in Somersetshire, near the Bristol Channel, has been cut up almost as badly as my own. Last winter I protected with Fern branches and netting, and did not lose a plant; this year I used green branches of Box, Yew, and Cypress, and fancied myself quite safe, but out of something like 180 plants of Teas and Noisettes on my walls, I do not believe that 30 are alive, most being killed down to the junction of the bud with the stock, and in many cases the stocks are killed also. One exception I ought however to make, and that is in the case of the Tea "Gloire de Dijon," of which I have 10 large plants on walls, and 3 or 4 standards, none of which are injured. The Noisette "Triomphe de Rennes" too on the walls is safe, although the standards are dead. Of the Hybrid Perpetuals more than one-third are dead, the sorts of which I have lost most being, amongst light Roses, "Louis Peyronnet," "Queen Victoria," "Adelaide Fontaine," "Duchesse d'Orleans," &c.; and amongst the dark, "Victor Trouillard," "Rebecca," "Emperor Napoleon," and Roses of that class—all are dead, and so for the most part are my plants of "Lord Raglan." "Comtesse de Chabrillard" has proved itself a good hardy Rose; and amongst the new ones of 1860, "Victor Verdier," "Eugene Appert," and "Senateur Vaisse" do not appear to be injured. With the Bourbons it has been "root and branch" work; in a bed of dwarfs on their own roots protected with a few branches stuck into the ground, some are alive, but the worked plants have with few exceptions perished. I did not protect any of the Hybrid Perpetuals, nor did I attempt to protect the roots of any of my Teas and Noisettes; perhaps a good thick mulching might have saved some of the latter, and on this point and generally as to the best mode of protecting, any information would be most valuable to Rose amateurs who have suffered like myself, and in this respect I fear I have but too many companions in misfortune. *R. C., Clifton, Gloucestershire, Jan.* 15.

Rainfall in December, 1860 :—

Stations.	Height of Rain Gauge. Above the Ground.	Height of Rain Gauge. Above Sea Level.	Depth of Rain and Snow. Total for the Month.	Total for the Year.	Greatest fall in 24 Hours. Depth.	Greatest fall in 24 Hours. Date.	Rainy or Snowy Days.
	Ft. in.	Feet.	Inches.	Inches.	Inches.		
Little Bridy, Dorset	0 4	348	6.88	49.03	1.49	30	17
Barnstaple, Devon	1 0	31	4.44	50.25	.99	29	18
Castlefield, Calne, Wilts ..	0 11	330	4.68	....	.95	30	17
Camden Town, London ..	0 4	100	2.51	32.30	.84	30	19
Finchley Road, London ..	0 4	270	2.35	....	....	..	..
Do. do. ..	36 4	306	1.86	....	....	..	..
Oundle, Northamptonshire ..	20 0	....	1.78	....	.31	4	14
Norwich	0 0	30	2.74	34.43	.25	30	15
Derby	3 0	179	2.52	32.78	.54	4	16
Manchester	3 0	106	2.93	36.13	1.03	6	18
North Shields	1 0	124	4.98	32.18	.56	9	28
Dumfries	....	....	4.30	41.21	1.10	1	12
Nookton, Leven, Fifeshire ..	0 6	80	4.86	30.65	1.00	19	19
Sandwick, Stromness, Orkney	2 0	78	4.66	37.60	.71	10	24

At Little Bridy, snow began to fall at 4.30 P.M. 26th, and continued till 10 A.M. 27th; the average depth was about 7 inches, and the measurement when dissolved was 0.831 inch; 1.486 inch of rain fell between 8 P.M. 29th, and 9 A.M. 30th. As regards Barnstaple, the yearly total is given as 50.14; an explanation of the discrepancy has been requested. At Derby, the fall of rain during the year has been nearly 6 inches above the average of 17 years, rain has fallen on 212 days, being 37 above the average. At Dumfries, heavy snow began at 6.30 P.M. 29th, wind being S., fresh. At Nookton 10 inches of snow fell on the night of the 18-19th. *G. J. Symons, Camden Road Villas, N.W.*

Great Exhibition of the Royal Horticultural Society.—Can you throw a little light upon the special prizes for "baskets of fruit and flowers for the decoration of the dinner table," offered by the Royal Horticultural Society in June next? Are the baskets with the fruit and flowers to be part of the decoration, and if so, what are they to be made of? In metal, or pottery, or wood, or straw, &c.? If not, are the fruit and flowers supposed to be taken out of their provisional baskets and put in something else to decorate the dinner table? The words are, "best group of three baskets," &c. What is the meaning of a group of baskets? "Beautiful arrangement is to be the test of merit, valuable flowers or fruits are not demanded." As but few fruits which are not valuable can be obtained in June, will you please instance the fruits which may be used? The finest fruits are the most decorative. Again, what kind of dinner-table is supposed to be adorned by these baskets of fruits? a duchess's, or a cottager's, or a well-to-do citizen's? I have not seen dinner-tables decorated with fruit and flowers where baskets have been used, but rather costly epergnes. If I go to Messrs. Garrard's and borrow a sparkling set of utensils and fill them with Peaches, &c., of the finest quality, will this piece of decoration be eligible to compete? Or if I get three twig baskets and arrange them with Canterbury Bells, and Apples and Oranges, shall I then be within the competition? If so, will you please to tell me upon what principles these two different sets of very differently decorated groups are to be judged? A little light thrown upon these points will oblige *A Lady.* [There can be no objection to persons using China vases, glass dishes, or silver epergnes; the object in saying baskets was to indicate that the cheapest material might be used. The present custom of decorating the dinner table ordinarily requires, say for a party of 16 or 18, three decorations, one for the centre and one for each end; that is what is meant by a group. The fact of the show being in June no doubt limits the fruit that can be obtained in small gardens, but it also adds to the number of flowers that can be used without cost and there is no necessity that either fruit or flowers should be the produce of the exhibitor. Anything particularly wanted to add to effect may be purchased. If twig baskets, with Canterbury Bells and Oranges, Apples, and Strawberries are so agreeably blended as to produce a better effect than Grapes, Peaches, and Orchids, the former will be entitled to the prize. The advertisement has at our request been made more explicit.]

Œnothera grandiflora (*Lamarck*).—Your advertising columns have recently contained a notice of a plant to which this name has been given, as I believe incorrectly. Will you permit me to ask the firm by whom the seed in question is offered whether it be not identical with that offered for two years past under the name of Œnothera Jamesii, both by Continental and English seedsmen. A species under the latter name is or was cultivated at Kew, and is inserted in the last catalogue with Lindheimer's name as an authority. *Jacques.*

Gardeners' Education.—I reply thus to the request of a Yorkshireman (see p. 51). 1. All candidates for examination in Botany ought to be able to name correctly 40 out of any 50 common garden or hardy plants laid before them, and 10 out of any 25 common greenhouse or hothouse plants. If they cannot do that they should not pass; if they exceed the minimum number that should tell to their advantage. They should also be able to give the scientific names of the different parts of a plant, and explain the meaning of terms of common occurrence, such as palmate, linear, digitate, and the like. That would be enough. 2. In Vegetable Physiology they should be called upon to answer any questions that arise out of "Lindley's Theory and Practice of Horticulture;" if they show that they understand that book, there they would stop in this branch. But they should show by their answers that they understand as well as remember the subject—two very different things. I hope I may now say that a commencement will be made in my little plan of testing fitness for taking a gardener's place. Of this men may be assured, that it is more to their own interest than to that of any one else. *Linager.*

The Late Frost.—In your remarks and those of your correspondents, on the late intense frost, I see no reference to one of its characteristics (when it was at its strongest), which struck me greatly. I mean that on the night of Christmas Eve the air was so elastic, so dry and pure, altogether so wholesome as it were, that the cold was not half so bitter and piercing as it often is when the mercury is not nearly so low as it was then. At 12.30 that night I heard the Waites and went into the pleasure ground to listen to them. I wore no topcoat, no hat or out door protection of any kind; yet I staid in the open air some minutes without the slightest inconvenience. The mercury must have been at or below zero. On Christmas Day, as I was going to church, the case was far different. There was then a slight mist; and, owing to this seemingly, the cold penetrated to the very bones. *H. J. Moule.* [We believe it is a recognised fact that cold is not much felt in Canada if attended by dryness and unaccompanied by wind.]

Raisins and Olive Oil in Australia.—A friend of mine, a lady who lives in South Australia, writes that she has this year planted 100 Zante Currant Vines, thinking that as all kinds of Grapes come to such perfection in that locality, people might easily dry there all the Raisins and Currants for their own consumption at least. But she says no one knows anything in her neighbourhood of the art of drying them. Olives also grow there in the greatest profusion, but all the oil is imported from England, because it is said presses and machinery with labour would be too expensive. Now I believe the Italian peasants often obtain their chief support from their Olive trees, and I think they must have some easy and inexpensive way of obtaining the oil. If you or any of your correspondents can point out a way of drying Grapes and Currants or making Olives into oil in a simple manner you will greatly oblige *A Constant Subscriber.* [Raisins are ripe Grapes dried in the sun by placing them on sloping banks of red clay at the foot of a wall, and perfectly protected by wooden covering boards, so as to keep off *all* rain and dew, either of which is fatal to good quality. The bunches are turned once only, with the greatest care; and in two or three weeks Grapes become Raisins. Currants should be dried upon the same principle—that is to say, in such a way as to be secured from dew or rain. The expression of Olive oil requires some machinery; there is a stone roller to mash the Olives in water. The bruised fruit is put into Rush or other bags, and pressed by a powerful screw. A full account of these processes is to be found in the first number of the Transactions of the Botanical Society of Sydney, published in the year 1849, from information furnished by the late Sir Thomas Mitchell.]

Botanical Names.—While the spelling of the genitive of Latinised proper nouns is being settled, it seems a fair opportunity for asking information, for the sake of those who are in doubt as to the pronunciation generally of Latinised foreign names. For instance, the spelling of such words as Weigela, Desfontainea, being retained, should the characters preserve their original powers, or should the words be pronounced according to what may be supposed would have been the Roman custom, or according to the prevailing

English fashion? If there be a recognised rule regarding this amongst men of science, it would be well that we of the laity were informed of it, that those who wished might follow the best method. *S.* [They must be pronounced according to the prevailing English method.]

Sudden Heat in Nottinghamshire.—On Monday evening about 20 minutes before 6 o'clock, there was felt in the neighbourhood of Worksop a singular hot south-west or nearly west wind. It seemed just as if one had suddenly come close to a large bon-fire. The wind was very soft, and the heat was felt at three distinct times at very short intervals. One person just entering Worksop was so struck with the warmth that he asked his companion (a man better acquainted with the place than himself), if there was an oven near them. Another man actually turned round to see where the heat came from; this same high temperature was also felt 3 miles from Worksop. Has this been felt in any other part of the country or can it in any way be accounted for? *E. B.*

Weather Observations at Edinburgh.—I have tested the two minimum thermometers at the Botanic Garden, one by Adie and the other by Bryson. I find on comparing them with a standard Kew thermometer that there is an error in each for temperature below 20°. Adie's was 1° above the Kew standard at temperatures between 6° and zero; Bryson's 2° below the standard. I find therefore that the correct temperature at the Edinburgh Botanic Gardens was (—6°). This temperature occurred on the morning of the 24th December. The height of these thermometers was carefully recorded every two hours during the nights of the 23d, 24th, and 25th December. *J. H. Balfour.*

Sowing Cabbages.—In the "Kitchen Garden Remembrancer" by "P. A. W.," which appeared in last week's *Chronicle*, I observe that Cabbages are marked to be sown in the 1st week of March, 2d week of April, and *2d week in July*, the latter period having an asterisk affixed, denoting that the time must be particularly attended to for a supply that cannot be obtained by sowing at any other time. Now, it would appear according to most other calendars that the 2d week of July, or between the 8th and 15th, is too early in general for sowing the main crop of Cabbages. Cathill mentions the 1st week in August; and the market gardeners near London sow on the 25th of July, or as near to that day as circumstances will permit. Which of the various discrepant periods is to be preferred for the operation? Your able correspondent "P. A. W." will probably supply some useful information on the subject. *A. B.*

Tom Thumb Lettuce.—In the list of select vegetables given at p. 48, this Lettuce is mentioned as being synonymous with the "Laitue Gotte à Graine Noir" of Vilmorin's list. As the introducers into this country of this delicious variety, we beg to say that until we saw it in your columns we were under the impression that it was entirely distinct from any other sort in cultivation. It is now three years since we first brought it out, and during that time we have received orders for it from nearly all parts of the kingdom, and also from the continent. Amongst others we have sent it to Messrs. Vilmorin, and though thus widely distributed we have never before heard of its being known by any other name than "Tom Thumb." *H. Wheeler & Son.* [No mention of this is made in the Bon Jardinier of 1860, the materials of which are understood to be furnished by Messrs. Vilmorin. The edition of 1861 has not yet reached us.]

Foreign Correspondence.

Civil Hospital, Port Louis, Mauritius.—I see by an extract from a review of the last part of the Transactions of the Royal Society of Mauritius, in the *Gardeners' Chronicle*, that some very valuable remarks are made on the Flora of this island, and it is said that the English Government desire and will have such an one. It will I am sure be gratifying to you to be informed that one of your old pupils has already completed about one third of the Phænogamous plants enumerated in Bojer's Hortus Mauritianus, besides adding a number of other species, and that he has in like manner collected and described a considerable number of the Cryptogamous species. These have all been described from fresh and living plants, and my herbarium contains duplicates of almost all of them. I have adopted the extended form of description of Smith, Withering, and Hooker, and as I have done almost the whole within the last 18 months, I may calculate that I shall be able to complete my work in from three to five years. I must tell you that this has been accomplished in the small leisure permitted by perhaps the most onerous and laborious medical appointment in the island—while in charge of an hospital containing at the present time nearly 300 patients. You will, I am sure, be pleased that one of your pupils should have succeeded, in less than four years' residence in the island, in being placed in the second medical appointment, and in being so fortunately situated for the extension of your favourite science. I know not what you will have thought of the paper or two of mine in the Transactions, but it was very interesting to find on these volcanic islands the remains of a fossil forest, and evidences of great and repeated changes of level of the land. Within the last few weeks I have found the tibia of the Solitaire, an extinct bird hitherto only found in Rodriguez, about 400 miles to the east of Mauritius, tending strongly to the confirmation of my opinion that a vast tract of land extended to the eastward in former geological days, of which Mauritius, Bourbon, Rodriguez, and other islands, were the mountain tops. The very peculiar Flora of Mauritius and Bourbon tends to the confirmation of this opinion. Each of the civil servants is entitled to six weeks' holiday each year, and those of two years may be conjoined. It is my intention on the first favourable opportunity to take the three months and go either to Rodriguez or Seychelles, to exhaust as much as possible the Fauna and Flora of these dependencies of Mauritius, and if the Government is willing to pay the expense, to form a collection for our local museum and herbarium; if not, it will be a private affair. I will take the liberty of asking you, as you have adverted to the subject, to inform the public that a Flora of Mauritius is in progress, and that it will be completed with as much speed as is consistent with correctness, and as my public duties will permit. I am quite certain that none but a resident botanist can give good descriptions, for I find every now and then considerable errors in De Candolle, Sprengel, and other books, arising from the descriptions having been drawn up from dried specimens. The Cryptogamous Flora below the Ferns is almost uninvaded by former botanists, and will afford to me a very rich harvest in my favourite division of the vegetable kingdom, of which I knew most of the British species. The Fungi are interesting from their similarity to those of England. I have found numbers of my old friends. The climate is delicious; the winter about the temperature of June, and in the summer the thermometer in the shade rarely rises above 87° Fahr., so that an Englishman with an Englishman's energy can readily go about throughout the entire year, and as malaria is absolutely unknown, without danger. The fears I have seen expressed that the native Flora of Mauritius will be extirpated by the progress of cultivation is absurd. A few localities may be lost, but from the mountainous character of a considerable part of the island, it is incapable of cultivation, and the majority of the species will always be preserved. Neither do I fear that the island will become barren by destruction of the forests; as it is the mountain tops that break the clouds, and the rainfall remains the same; but should the forests be destroyed to a large extent, it will then be necessary to have recourse to the storage of water in tanks, which would be readily made by damming the ravines, the sides of the ravines forming three sides of each reservoir, and these sides are often 150 to 200 feet high, and of solid basaltic rock. *Ph. B. Ayres.*

Societies.

Linnean: *Jan. 17.*—Prof. Bell, President, in the chair. Christopher Dresser, Esq., Ph. D.; R. C. Hurst, Esq., and John Millar, Esq., were elected Fellows. A new part of the Society's Transactions was laid on the table, and announced as being ready for distribution in a few days. The following papers were read:—1. "On Prolification in Flowers, and especially on that form called Median Prolification," by Maxwell T. Masters, Esq. The author defined median prolification as being that form in which the adventitious bud springs from the centre of the flower, the usual arrest of growth which occurs at this spot no longer holding good, but a new growth taking place, and generally manifesting itself in the formation of a new flower bud, of a new leaf bud, of a branch, or even of an inflorescence. This new growth may occur whether the carpels be present or not; if present then it may emerge from among or between them, or it may originate within the cavity of the carpels. Of the European families of plants the following were stated to be most frequently affected by prolification, viz., Ranunculaceæ, Caryophyllaceæ, and Rosaceæ, it being also commonly met with in Scrophulariaceæ, Primulaceæ, and Umbelliferæ. The author was of opinion that there is to be traced a real relation between prolification, and the normal extension of the floral internodes. According to this explanation, those instances wherein the parts of the flower become separated one from the other by the elongation of the internodes, would constitute a lesser degree of the same change which operates most completely in the formation of a new bud at the extremity of the prolonged axis. Some specimens in his possession of Geum rivale, a plant very liable to become prolified, showed this very clearly. On the wild plant the thalamus was elevated on a short stalk; in the abnormal ones the thalamus was simply upon a longer stalk than usual, or in a more advanced stage of the deviation the lengthened thalamus takes the form of a branch provided with leaves and terminated by a flower. Mr. Masters described a singular instance of prolification in the central flower of one of the verticillasters of Phlomis fruticosa, which had come under his notice. The calyx was torn on one side, and one of its lobes was petaloid; between the calyx and corolla were three or four spathulate hairy and bract-like organs; the corolla and stamens were unchanged, but in place of the usual 4-lobed ovary, there was a single carpel with a basilar style terminated by a forked stigma, and occupying the place of the other lobes of the pistil was an oblong w... flower-bud consisting of calyx, corolla, and stamens, b... with no trace of pistil. He had been unable to fi... any recorded instance of malformation among Labiatæ or Borages at all similar to this. It differed from mo... other examples of prolification in that the axis was n... prolonged, the adventitious bud occupying precisely ... position of the three lobes of the ovary that we... absent. The calyx of a prolified flower, it was observ... may be either unchanged or modified in harmony wi... the changes in the central part of the flower. Proli... ferous Roses have a special interest, inasmuch as the... show very conclusively that the so-called calyx t... of these plants is merely a concave and invert... thalamus, which in prolified specimens becomes elo... gated. The example was cited of a Rose wherein fro... the middle of the outer surface of the urn-shape... thalamus proceeded a perfect leaf, which could hard... be produced, it was argued, from the united sepals an... calyx tube. As to the corolla, it had long since been noticed, that prolification was especially liable to occ... in double flowers. Occasionally in prolified flowers th... parts of the corolla, like those of the calyx, becam... foliaceous, and in the case of proliferous Pears, fleshy and succulent. There was stated to be in cultivation a kind of Cheiranthus, in which may be seen a consta... repetition of the calyx and corolla conjoined with ... entire absence of the stamens and pistils, a short inte... node separating each flower from the one above it, a... thus frequently 10 or 12 of these imperfect flowe... may be seen on the end of a stalk. A similar instan... in a less degree, had been seen in Helianthemum. T... stamens are subject to various changes in proli... flowers, such as assuming a leaf-like or petal-like co... dition. Of more interest was the change occurri... in the position of these organs, which someti... necessarily accrues from the elongation of the axis a... the disjunction of the calyx; thus in proliferous Ro... the stamens become strictly hypogynous instead ... remaining perigynous, and in some Umbelliferæ t... epigynous condition is changed for the perigyn... &c. The condition of the pistillary organs in a p... lified flower was always worthy of notice. The freq... absence of the carpels had given rise to the opi... that the pistil or pistils were converted into a s... bearing leaves or flowers. Setting aside the morph... gical difficulties in the way of accepting such an opi... an examination of any number of cases would al... be sufficient to refute this notion, for as Moquin ... well remarked, the carpels may frequently be also fou... either in an unaltered condition or more or less m... fied. The ovules of a prolified flower, if present at ... were stated to be usually unaffected. After giving ... explanation, in several examples accompanied by figur... of various instances of malformation he had exami... Mr. Masters concluded with a list of the gen... in which median prolificacy had been observ... distinguishing those in which the disturbance was of ... leafy or a floral character. 2. "Extract from a let... addressed to Sir W. J. Hooker, by Dr. F. Welw... on the Botany of West Africa, dated S. Paul ... Loando, August 16, 1860." In the latitude of B... guela the character of the coast Flora of Loand... almost quite lost; other species with other genera ... deed new families, occur, and the vegetation bec... much more varied and manifold than we find it ... the long littoral tract between the mouths of the Za... and the Guanza. The large number of specie... Loranthus which, glorying in the brightest col... grew upon nearly all shrubs, indeed on under shrubs ... which were then in full flower, were partic... striking to him. The numerous species of sp... Mimoseæ are more or less clothed with Roccella ... formis, and afford orchil and gum arabic in abund... and of the best quality. In the gardens of Beng... especially by the side of the River Columb... European vegetables (Oleracea) thrive admir... and growing with and amongst them are ... the fruits of tropical and subtropical regions, as ... Olea europæa, Cashew Nuts, Pine Apples, Ficus C... Vitis vinifera, Elaïs, Musa paradisiaca, P... Granatum, various species of Anona, &c. The ... bears twice annually Grapes of very good fla... The cultivated plants of Mossamedes offer a medl... the species of different zones. Bananas and Pota... Mandiocca and Wheat fields, Saccharum officin... and Linum usitatissimum, fields some of Hord... distichum, others of Batatas paniculata and the ... are all mingled together. Ananassa, Anacardium, ... Elaïs, however, will no longer thrive, and Mossam... would seem to indicate the southern limit of these a... many other tropical cultures on the western co... Africa. The almost complete absence of marine ... along nearly the whole 30 geographical miles of ... between Mossamedes and C. Negro is remarkable, ... two Ulvaceæ and three Rhodophyceæ having ... found. Several miles before reaching Cape Negro ... coast rises to a height of 3—400 feet, form... a continuous plateau, clothed with a ve... tion which, though scanty, is of the hig... interest. The most remarkable production w... dwarf tree, with a densely ligneous trunk, and ex... resinous matter like that of a Conifer. The trun... stated to be often 4 feet in diameter, but never ... more than 1 foot above the surface; while throu... its entire duration, which not unfrequently ... exceed a century, it always retained the two ... leaves it threw up at the time of germination ...

besides these never put forth any others. The entire plant was compared to a round table a foot high, having the two opposite leaves, often a fathom long by 2—2½ feet broad, extended on the soil to its margin; these leaves are each split up into numerous ribbon-like segments. A short dichotomously-branched peduncle grows from the axil (ad marginem disci axillaris), and bears on the ends of its branches a strobiliform catkin, ½—1 inch long while in the flowering stage, and when maturescent (for they were not seen perfectly mature) 1—3 inches long, as thick as the finger, obtusely tetragonal, and of a pleasing rubescent colour. These catkins consist of densely crowded apparently polygamous hexandrous monostylous flowers, the anthers apparently 3-celled, and the stigmas peltate. Dr. Welwitsch proposed to call this curious dwarf tree Tumboa (its native name being tumbo), and remarks that it "probably represents the type of a quite peculiar family of the South African tropics, of which a close examination of the tract to the eastward, and of the coasts extending southward, may lead to the discovery of more species."

Notices of Books.

The Forester: a Practical Treatise on the Planting, Rearing, and General Management of Forest Trees. By James Brown, Wood Manager to the Earl of Seafield. Third Edition, enlarged, large 8vo. Blackwood. Pp. 700.

What we have often stated in these columns we now repeat, that the book before us is the most useful guide to good Arboriculture in the English language. The author is a man of great experience in Scotch forestry, and moreover is well grounded in the science of tree cultivation; so that he does not fall into the mistakes which mere theorists or mere practicals have each committed on so large a scale in too many great places. We will even add that it has been to the advice and instruction given in the two former editions of the 'Forester' now exhausted, that the general improvement in timber management may be fairly ascribed. That great improvement has taken place nobody can fairly deny; that is to say the mode of growing timber to profit, which is all that Mr. Brown professes to teach, is certainly better understood by the public than it was 20 years ago. We observe, however, that he considers that there is still great room for improvement; for he expresses a very unfavourable opinion of many who hold the situation of Forester. Such men, says Mr. Brown, "generally speaking, are not possessed of sufficient education to give them capacity for carrying out improvements in arboriculture; and until we have a better educated class of men reared to the profession, our woods must remain a comparatively unprofitable part of the resources of landed property. Proprietors have not taken the right way to insure their plantations being so highly profitable to them as they are capable of being made, as they have generally appointed unqualified men to their management, from a mistaken notion that a few pounds saved on the forester's salary was economy, and a saving of expenditure; while the fact is, that from the want of skill he was yearly losing 10 times more in the deterioration of the woods under his charge. Were proprietors to look to their own interest, they would upon no account employ men to take charge of their woods who would do so at a low salary, as such men invariably want ability and skill to manage profitably; and, besides, they should never employ men who have not undergone proper training, and received an education fitting them for their charge."

Leaving the author to settle this matter with those whom it concerns, we will now state in what respects the new edition differs from the last. In the first place for 526 pages we have 700, and considering that the pages are also enlarged the augmentation may be equal to 750 pages. Then there are some woodcuts of Conifers without their cones, and therefore of less use than might be supposed; and of the whole volume there is a copious and excellent Index. Other matters are so intermixed with the old text that we are unable to separate them for extract. We observe however that the matter relating to Timber trees and their sorts is revised and much extended, and some typographical errors corrected; in another edition this last process may be advantageously reconsidered; for we find the old error preserved of calling the Dutch Elm Ulmus tuberosa instead of suberosa; otherwise the article on Elms is particularly well done; although it is rather remarkable that after declaring that he never could get more than 1*s.* 6*d.* per foot for English Elm (Ulmus campestris) while the Wych (U. montana) is worth 2*s.* 3*d.*, he expresses his surprise that the former should be so little grown in Scotland. We are rather surprised that our acute friends in the north should cultivate it at all. Among novelties now for the first time introduced is the Araucaria, which Mr. Brown finds "perfectly hardy in even the climate of Strathspey." And yet that climate is too severe for the Douglas Firs, on which the author gives the following report.

"Apart from the specimens I have seen growing at various places in England, where it is quite hardy enough for the climate, it thrives well in the midland and southern counties of Scotland; but in the northern and high-lying parts of the country, as in Strathspey, it does not succeed, from the want of heat to mature its shoots in the autumn, and from the great degree of cold which follows in winter. In all the low-lying parts of the country, however, even in the north of Scotland, it seems hardy enough, and grows freely; nearly as rapidly as the Spruce Fir. Generally speaking, I think that this tree is not adapted to grow profitably as a timber tree in plantations on high-lying parts of the country, but is very suitable both for plantations and for ornamental culture in low-lying and sheltered sites; and I have no doubt that on such parts it will ere long become a valuable tree, even in point of its timber, while its very ornamental habit will make it gradually more sought after and cultivated."

This is a very unexpected statement considering that the Douglas Fir lives on the Rocky Mountains as far North as the Punchbowl Pass out of British Columbia, where it struggles up the mountains till it appears as a mere bush. Surely Mr. Brown's experience must have been with plants raised from Californian or Mexican seed.

In looking over the pages of this edition nothing has surprised us so much as to find the author adhering *more Scotico* to his once expressed opinion of the inferiority of the timber of the sessile-fruited Oak. We should have liked to know how he accounts for the excellence of the old timber of Q. sessiliflora disclosed in a late conflagration at Stirling Castle; and how he meets the experiments and practical conclusions of such men as Bennett and Cumberbatch, who have we think experimentally proved that one kind of Oak is at least as good as another. Be it remembered that these are the opinions of men who cannot, as Mr. Brown rather uncivilly intimates, "have no knowledge of the truth of the matter." "The quality of Oak timber," says Mr. Brown, "like that of all other trees, depends very much upon the soil and situation in which it is grown." Has it never occurred to him that this dictum, which is true, may explain the bad quality of such sessiliflora timber as he has had any experience of?

We are glad to see that the opinion we have always expressed as to the cause of disease in Larch, and upon which we venture to say we were the first to insist, as upon many another matter which writers find it convenient to forget, is entirely adopted by our experienced author. "In all cases of healthy Larch plantations in this country, where the timber has attained large size, and is sound in quality, we find them growing upon a soil through which the water that may fall upon it can pass away freely, as, for instance, upon the slopes of hills, and even in hollows, upon a strong clay soil, but where there is a proper drainage for the ready and free passage of the superfluous water; and I have even cut down Larch timber, of large size and sound in quality, growing upon a light sandy moss, two feet deep, which rested upon a stiff clay. In this case the moss was drained, and the water passed freely through the light soil; and the situation being upon a slope, there was a continual circulation of moisture passing along upon the top of the subsoil or clay. In short, I have found good Larch timber growing upon almost all varieties of soil; but I never found it upon one which had not its particles constantly cleansed by the continual circulation of water passing through it, either by natural circumstances or artificial drainage. On the other hand, in all cases of diseased Larch plantations, where the trees have become stunted and rotten in the hearts prematurely, we shall find that the soil has either been badly drained or not drained at all. There must be ingredients lodging in the soil which act against the health of Larch trees growing upon it, and which can be carried off only by an effective system of drainage, in order to make it fit for the healthy rearing of this tree."

The above are a few of the more prominent circumstances that have caught our eye in looking over Mr. Brown's pages; and we trust that he will not regard it as an unfriendly remark if we add that his book would be smaller, better, and cheaper, if it were placed in the hands of some literary man who would thin it and prune it of its redundancies.

TRADE LISTS RECEIVED.—Charles Turner's (of Slough) General Spring Catalogue 1861; also List of Seeds for the Kitchen and Flower Garden and Farm, Culinary Roots and Implements.

Garden Memoranda.

MESSRS. E. G. HENDERSON'S NURSERY, WELLINGTON ROAD, ST. JOHN'S WOOD.—Notwithstanding the severe weather we have just experienced, the glass houses here are well worth inspection at the present season; for although few things are in bloom, yet a degree of order and tasteful arrangement is observed which might be worthy of imitation in all private establishments. Flowering plants are chiefly confined to Hyacinths, Early Tulips, Azaleas, Chinese Primulas, Cyclamens (of which there is here a fine collection) and Tree Carnations. The last being numerous and finely in flower have kept up a good display for several weeks past. Places in which there is little blossom have been decorated with plants remarkable for the beauty of their foliage, and in cool houses even Hunnea elegans and things of that description have been introduced with excellent effect. Cultivators who are fond of Double Primulas, and have but few plants of them in their possession, may readily have more by dividing them into as many pieces as they have crowns, and potting them separately. This is a surer way of multiplying them than by cuttings, as each portion thus detached has roots to it, and is enabled to begin growing without much check. Daphnes are also useful early plants and their fragrance renders them favourites with everybody. The different varieties of Epiphyllum truncatum may likewise be had in flower about this season, and in less trying winters Mignonette; that sown in July will however not yet be in flower for some time, and successional sowings will be proportionately late. Monochætum ensiferum and tenellum are likewise both useful plants.

In stoves were some fine specimens of Cyanophyllum magnificum, whose great leaves are the admiration of everybody; many beautiful Caladiums, among which was the charming Bellemei, with foliage handsomely mottled with white; the red Gesnera cinnabarina, and the singular-looking Alocasia metallica, introduced from Borneo by Messrs. Low: this last is one of the most valuable of recent introductions to the class of ornamental foliaged plants, having polished bronzy leaves of great size. Associated with it was also another Bornean plant called Sphærostemma marmorata, a stove climber, with ovate acuminate green leaves, covered over with irregular-sized blotches of white, which sparkle and shine in a good light like frosted silver. Numbers of the variegated Fern Pteris argyræa have been raised from seed and of Rhopalas and other plants cultivated for the beauty of their leaves this nursery possesses a grand assortment.

In what is called the winter garden (i.e. a large house, the occupants of which are grouped on the floor instead of on stages), we noticed some fine plants intermixed with Camellias and Azaleas. Among these were handsome pyramidal Bays, Palm trees and variegated Yuccas as well as beautiful plants of the finer kinds of Conifers. Of Bhotan Rhododendrons there were some fine specimens, and the back wall was skilfully covered with Camellias and plants of that kind which when in flower will make a beautiful display. The blooming of Camellias will, however be late this year; their buds are very backward, and many kinds have set badly. The effect produced may therefore be expected to be unsatisfactory.

In a long span roofed house, one end of which was gay with Cyclamens, the charming Lapageria roses was in flower. It is growing in a bed of peat, leaf mould, and sand, and trained along the roof, and thus treated it keeps in bloom nearly the whole year round; what it chiefly requires is good drainage and plenty of water while it is in a growing state. The singularly handsome Clianthus Dampieri, which grew in this house and about which so much was said last year, has flowered itself to death; a young plant has however been put out in its place, and at present bids fair to bloom equally profusely this year; a specimen in a pot has also flower-buds on it. Of the general appearance of the brilliant scarlet blossoms of this plant, each ornamented as it is with a large black boss, no idea can be formed from the woodcut representation of them, which will be found in our advertising columns of last week.

Among the immense quantities of bedding plants which are raised here every year, we noticed a new Golden Chain Geranium, which is stated to possess greater merits than the old kinds, and to be better able to withstand the ill effects of cold and wet in autumn. Golden Fleece is also a charming dwarf flat growing kind whose colour is bright and showy; for small beds this will prove an acquisition. Of other variegated Geraniums, there is also here a fine collection; for pot culture Culford Beauty, Fontainebleau, and Golden Admiration, are well adapted. Of these a few specimens are invaluable for autumn display; and under glass their rich markings become beautifully developed. Of Dwarf Dahlias Messrs. Henderson also possess many useful sorts for bedding purposes. Among these may be named Titian, yellow; alba floribunda nana, white; Captain Ingram, crimson; Crystal Palace Scarlet; and Trentham White. These all bloomed finely in this nursery during the past autumn and were considered to be among the best of their class.

Neale's Pastiles for fumigating have been tried here on a small scale, and as far as can be judged the result has proved satisfactory. They are considered to be cheaper than good Tobacco paper and equally efficacious.

It may also perhaps be useful to mention that Weeks's "one boiler system" has been kept in operation here with excellent success. One boiler does the work of several under the old arrangement, and thus a great saving in the shape of fuel and labour is effected. Even this trying winter it has done its work to Messrs. Henderson's entire satisfaction.

Miscellaneous.

Joke of a Cree Indian.—A ridiculous incident occurred in the tent belonging to the Cree chief, Mis-tick-oos, in which I played a more prominent part than I should have selected had any choice been offered me. I heard of this incident again hundreds of miles from the spot where it occurred, as we journeyed homewards from the Grand Forks. It happened during a visit I paid to Mis-tick-oos after a long and tedious talk, which lasted nearly seven hours, relating to the object we had in view in visiting the country. Three of Mis-tick-oos' wives were visible, and with their children formed

altogether a party of 18 or 20. I rose from a buffalo robe where I was seated by the side of Mis-tick-oos to examine some arrows which one of his sons was making, and when my curiosity was satisfied, I sat down on what I thought to be a bundle of buffalo robes, close to the young Indian. I was not a little astonished to feel the robes slowly move and undulate beneath me, and before I could rise and look into the cause, I found myself projected into the middle of the tent among the embers, by means of some violent spasmodic action from beneath the supposed piles of robes. Mis-tick-oos and his three wives with the other inmates, shrieked with laughter, vociferating some words in Cree. Meanwhile, the buffalo robes were slowly thrown on one side, and, to my astonishment, were revealed the huge proportions of the chief's fourth, youngest and best wife. She shook a mass of hair from her head, and joined in the laughter at my discomfiture. Other Indians hearing the noise came in, and Mis-tick-oos, with tears in his eyes, told his friends how "the white stranger had sat upon his best wife, thinking she was a pile of robes, and how she tossed him into the middle of the tent like a buffalo bull pitching a colt. *Hind's Narrative of the Canadian Red River Exploring Expedition.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c.—Watering should now be conducted with great care, more especially in the case of recently potted plants, which must not on any account be overdosed. Keep them close, and when the weather is favourable syringe a little, so as to maintain a healthy condition; until the growth of the plants, however, shall have indicated that they have taken to the fresh soil apply water very sparingly at the root. Luculias in pots should be encouraged to make free growth, in order to get the wood well ripened and the plants in flower before those planted in the conservatory border, for it is desirable to prolong the blooming season. In stoves an increase of night temperature may now be allowed, more especially if the weather should remain favourable. Maintain a moist atmosphere, and give no quarter to insects of any kind. Auriculas in pits or frames must now be looked over; give them air during the day. Pot Tuberoses, and when fine give air to Mignonette and Stocks; Neapolitan Violets in frames may be forwarded by being closed early in the afternoon and in pots by keeping them in a temperature of 55°. Examine buds of forced Roses for caterpillars, and fumigate occasionally for green-fly.

FORCING DEPARTMENT.

PINERIES.—Young plants growing in open beds that have been some time planted will be benefited by having the soil loosened up as deeply as can be done without injuring the roots, giving it a liberal soaking of tepid water if it be found to be too dry. The water should be applied by means of a rosed pot, and not so fast as to flood the surface, for if this is done the soil will be rendered almost as close as before forking up; indeed, careless watering is the great cause of the surface of the soil becoming close and hard, and should be carefully avoided. Endeavour to afford a nice regular bottom-heat, with a thoroughly moist atmosphere, and keep the plants growing as freely as may be consistent with preserving them dwarf and stocky. Have a constant eye to maintaining a succession of fruit, or securing a supply at the season when it may be most wanted, and let the treatment of the plants be regulated according to your circumstances; this is a matter which demands considerable forethought, and which can be successfully managed only by careful observation and attention.

VINERIES.—Take advantage of all favourable opportunities to admit fresh air as freely as can be done with safety, and be satisfied with as low a temperature from fire-heat as may be considered safe under the state of the Vines, but shut up early, allowing the thermometer to rise considerably. This will to some extent economise fuel, and will be much more congenial than much fire-heat. Except where the Vines are in flower keep the atmosphere moist, but the foliage should always be allowed to become perfectly dry in the course of the day.

PEACHES.—Where the trees are in bloom admit air freely whenever the weather is mild, and keep the atmosphere rather dry, maintaining a steady night temperature of about 50°. Trees on which the fruit is fairly set should be afforded a moist temperature, syringing liberally in the afternoon to prevent red spider, and keeping the border in a healthy state as to moisture, to secure a vigorous root action.

CUCUMBERS.—These may now be kept at from 50° to 55° by night, and 65° to 70° by day, with a steady bottom-heat of about 80°, which, combined with a thoroughly moist atmosphere, will induce free growth. Keep the shoots thin, near the glass, and attend to stopping, &c., as may be necessary.

MELONS.—Attend carefully to the early plants, and regulate the temperature according to the state which they are in, taking care not to get the Vines weak and long-jointed through a high close temperature, for a fair crop of fruit need hardly be expected unless the Vines are kept strong and short-jointed. Do not omit putting in seeds of the favourite summer kinds.

FLOWER GARDEN AND SHRUBBERIES.

Now that the frost is over, look over beds planted with bulbs, and where necessary stir the surface, so as to keep the soil open and friable, and also to give it a fresh appearance. See to the propagation of Dahlias and Hollyhocks; the latter when planted skilfully produce an excellent effect, and therefore especial attention should be paid to having a good supply of them. Cuttings slipped off the old plants with a heel, planted in very sandy soil, and afforded a *very* gentle bottom-heat, keeping the leaves as cool as possible, will be found to root perhaps more freely at this than at any other season.

HARDY FRUIT AND KITCHEN GARDEN.

Push forward all alterations requiring attention here with the least possible delay. Manure and dress Asparagus beds. Get Cauliflower plants raised under glass hardened off, and pay every attention to those under hand-glasses in order to forward them as much as possible. As regards cropping consult the "Kitchen Garden Remembrancer," published last week at p. 48. Preparation of the ground after so much frost as we have had will however be the first consideration.

COTTAGERS' GARDEN.

Bush fruit, such as Gooseberries and Currants, should now be pruned; also get the ground amongst them manured and lightly dug, but in doing that take care not to injure the roots. See that early Peas are not injured by mice or birds. Where they are above ground draw the soil to their stems, raising it on the windy side sufficiently to make a kind of shelter for the plants. Fairbeard's Champion of England will make a good succession, and if a few of Fairbeard's Surprise are sown at the same time, they will come in about a week earlier than the Champion.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON

For the Week ending Jan. 24, 1861, as observed at the Horticultural Gardens

January.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind	Rain.
Friday 18	7	30.244	30.170	37	29	33.0	36	36	N.E.	00
Satur. 19	8	30.194	30.137	41	30	35.5	36	36	S.	.66*
Sunday 20	9	30.378	30.220	46	34	40.0	36	36	S	00
Mon. 21	10	30.423	30.376	44	28	36.0	36½	36	S.W.	00
Tues. 22	11	30.361	30.250	41	32	36.5	36½	36	W.	.01
Wed. 23	12	30.215	30.126	37	27	32.0	37	36	S.W.	.02
Thurs. 24	13	30.021	29.988	48	39	43.5	37	36	S.W.	.01
Average..		30.262	30.181	42.0	31.3	36.6	36.4	36.0		.70

* Melted snow.

Jan. 18—Slight sprinkling of snow; overcast.
— 19—Thawing; uniformly overcast.
— 20—Foggy; thaw continuing; overcast; foggy.
— 21—Hazy; very clear at night; slight frost.
— 22—Clear; hazy; foggy at night.
— 23—Hazy; uniformly overcast; drizzly,
— 24—Clear; very fine; slight drizzle at night.

Mean temperature of the week, 1 deg. below the average.

RECORD OF THE WEATHER AT CHISWICK

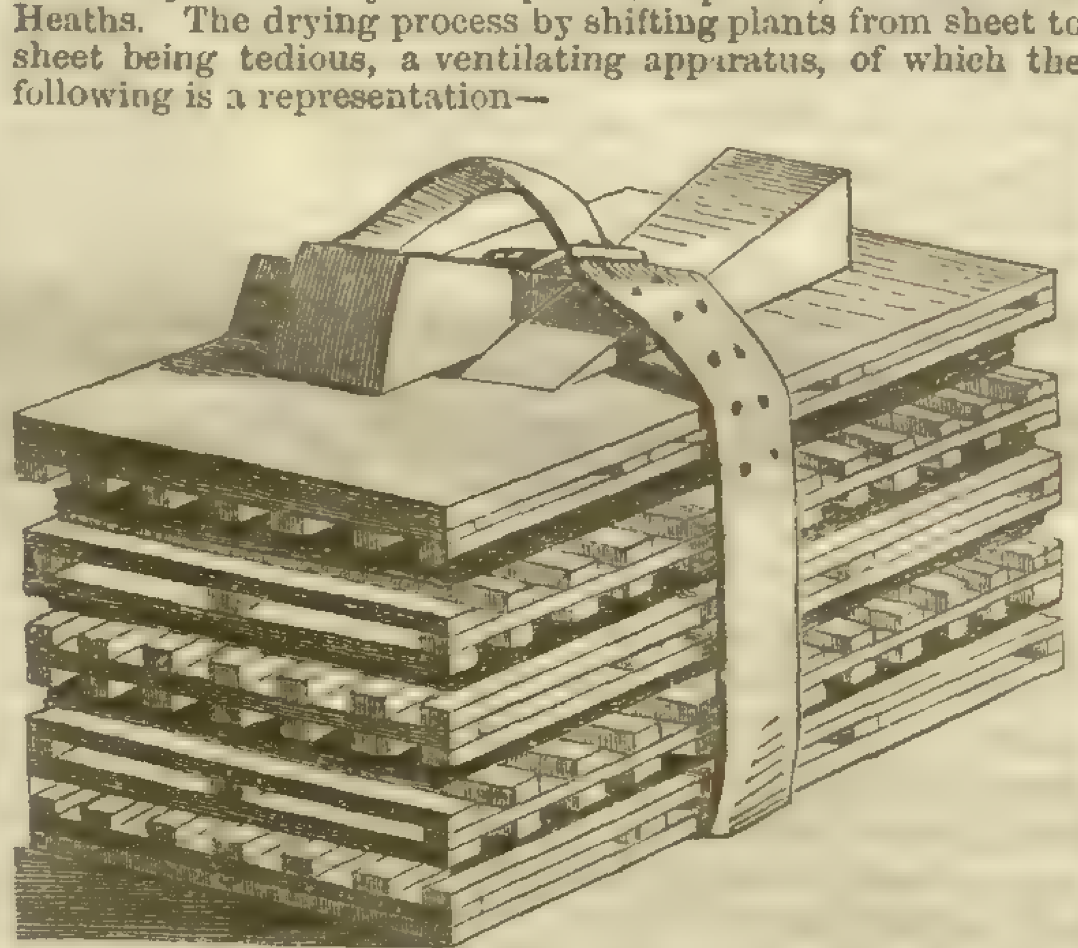
During the last 35 years, for the ensuing Week, ending Feb. 2, 1861.

January and Feb.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 27..	43.9	30.9	37.4	16	0.43 in.	2	5	4	1	4	13	5	1
Mon. 28	44.8	30.6	37.7	18	0.17	2	5	4	0	1	14	6	3
Tues. 29..	45.0	31.4	38.2	15	0.32	5	4	0	1	2	12	5	6
Wed. 30..	43.9	31.6	37.7	16	0.39	2	3	3	4	3	9	8	3
Thurs. 31..	43.7	30.0	36.8	15	0.38	5	5	1	2	9	8	3	2
Friday 1..	42.5	30.6	36.5	12	0.52	5	6	1	2	3	8	4	6
Satur. 2	43.0	30.4	36.7	12	0.75	3	6	5	3	2	8	6	2

The highest temperature during the above period occurred on the 1st, 1852—therm. 57 deg.; and the lowest on the 31st, 1857—therm. 8 deg.

Notices to Correspondents.

AN HERBARIUM: *J Bryan.* You cannot do better than occupy your leisure in forming a small collection of dried plants; the method of doing which is described in Dr. Lindley's Elements of Botany. The specimens are first placed between sheets of paper (any will do, but Bentall's is best), until all their moisture is expelled. In this process they lose their colour, but retain their structure, and often the form of even delicate parts. When they are thin they dry quickly in a room; but when fleshy they are more difficult. This difficulty is much diminished by steeping them for an hour in a strong solution of corrosive sublimate before they are first pressed. The same process may be advantageously adopted with all plants in damp weather, when it is difficult to prevent specimens from rotting; it will also destroy the disposition to throw off their leaves which is uniformly shown by some plants, especially Conifers and Heaths. The drying process by shifting plants from sheet to sheet being tedious, a ventilating apparatus, of which the following is a representation—



is now very commonly used. You may make it yourself with a couple of boards and a bundle of laths; and you can use a piece of rope instead of a strap. At the time of drying, a plant should be accompanied by a written label, stating its name, when and where it was gathered, and any other particulars which are not discoverable by an examination of it. A collection of dried plants, if carefully formed, perfectly kept, and correctly named, is invaluable to a student. The mode of keeping a Herbarium is this. Having formed a collection of species thoroughly dried, let them be washed with a large camel-hair pencil, dipped in spirit of wine half saturated with corrosive sublimate, unless they had been dipped in a solution of it previous to drying. When parts are fleshy, or flowers are collected in heads, such parts should be soaked with the tincture, or they will be attacked and destroyed by the Anobium castaneum. This insect commits great ravages in herbaria, but he cannot prey upon parts that are poisoned. Then provide—1. A glue pot, with hot carpenter's glue of the best quality, not so stiff as it is used by carpenters; 2. A number of half-sheets of paper of the foolscap form, but rather stouter and neatly cut *all round;* 3. Some tough thin paper, smeared on one side with a solution of equal parts of gum arabic, powdered tragacanth, and soft sugar, dried and cut into slips varying in width from one-eighth to three-eighths of an inch: 4. A quantity of soft waste paper, somewhat larger than the half-sheets which are to form the herbarium. In gluing down the specimens, it is convenient to proceed in the following manner:—Place on the table a few sheets of waste paper; on this lay one of the half sheets; then carefully glue over one side of a specimen, apply it immediately to the paper, put over it a few more sheets of waste paper, and then gently press it down with a napkin; next take another half-sheet, glue down another specimen, again cover it with waste paper, and so proceed until a good heap is before you. Place that heap under gentle pressure, and then commence a fresh heap. In gluing down, observe the following additional rules: 1. Never put more than one species on the same half sheet—take as many specimens of it as you please; 2. Always glue single specimens near one side of the half-sheet, and not in the middle, changing the side each time. By this means, one being on the right, the next on the left, a third near the top, and a fourth near the bottom, the whole will be flat when the waste paper is removed. But if this precaution is neglected, the middle will be much higher than the sides, which is very inconvenient. Having glued down as many specimens as may be convenient, take them carefully out of the waste paper, and look them over to see that none of the parts are loose; if they are, fasten them down with the slips above mentioned, which are so adhesive that it is merely necessary to moisten and apply them. In all cases, too, strap down the main stem, unless it is covered with hairs, in which case straps are superfluous. The next operation is to write near the lower right hand corner of the half sheet the name of the plant, and in some convenient spot near the specimen itself the place in which it was gathered, or any other particulars connected with it. In small local herbaria printed forms of tickets are sometimes used, in which the name and all other particulars are included; such tickets should be pasted (not glued) upon the lower right-hand corner. The next point is to arrange the half-sheets in genera. Sheets of stout brown paper, cut a little larger than the half-sheets, must be provided as covers. At the lower left-hand corner of each paste a slip of white paper, and write upon it the name of the genus, to which some add that of the natural order. Then put into each generic cover all the half-sheets belonging to it, and the operation is complete. The right-hand tickets or names on the half-sheets give the species, and the left-hand names on the whole sheets give the genera; and either can be rapidly referred to without the one interfering with the other. To receive the covers of genera wooden cabinets are constructed, with shelves, on which the covers can be placed according to their natural orders.

BOOKS: *Effingham.* The book is trash; the writer a dunce; we cannot call him an author, for he has stolen his matter from others without understanding it.

CLIMATE: *J H W.* Go to Torquay, by all means.

DELPHINIUM CARDINALE: *W W H G.* This is a beautiful Californian plant with scarlet flowers. We suppose it may be procured in the Trade. It flowered at Kew in 1855, and is figured at plate 4887 of the Botanical Magazine.

DISEASES: *A Westley.* Pear trees ruined by Savin? The Æcidium laceratum of the first caused by the jelly fungus of the last (Gymnosporangium)? How can you believe such folly, which by the way has come over from France, where the men of science are disgusted at such newspaper nonsense. Do you think a mouse can be born of a slug? One is as possible as the other.

FALSE CHARACTERS: *T. I.* We should say, 1, that the character you have received is no character at all, since it has neither date, nor place, nor signature; 2, that it was never written by a "squire;" 3, that it has all the appearance of being an attempt at fraud. Persons giving false characters, or obtaining places by means of them, are liable to severe punishment upon the offence being proved. If you are rightly informed that there are gardeners who give false characters at 5s. each, all we can say is, by all means bring them to justice. Here, in London, no prudent man takes a character from an unknown person, without also ascertaining the character of that person.—*Cave.*

GARDENERS: *W B.* If your master has treated you in the manner you describe, you should place the affair in the hands of a solicitor, who will speedily obtain redress, provided the occurrences are as you represent them.—J.W. All depends on the custom of the country, and the kind of man. In one place men find their tools, in others the master finds them. Near London the request of your gardener would be complied with, unless he is of a very superior class, in which case he would not make the request.

NAMES OF FRUITS: *W B.* 1, Sam Young; 2, 3, King of the Pippins; 4, Said to have been raised in your neighbourhood and called Pool's Keeper, is very like the Grey Leadington.

NAMES OF PLANTS: *G G——i.* Your letter dated Milan, November 21, 1860, has only just arrived. The plant is Alternanthera echinata of Smith, a mere variety of Alt. Achyrantha of Robert Brown. It is taken up under the latter name in De Candolle's Prodromus, xiii. 358. Linnæus called it Achyranthes repens. Martius has made out of it his genus Pityranthus. We do not find it mentioned as an astringent, though others are so of the same natural order.—*E A M.* It is quite impossible to form any opinion, from so loose an account. Pray do not call it a description.—*H M.* Cattleya pallida.

PITS: *A G.* Let your pit be 4½ feet high at back and 3½ feet in height in front, and it should be placed so as to face the south. Heat sufficient for your purpose might, we should think, be obtained from fermenting material; if not, run a hot-water pipes round it.‡

PONDS: *F W.* Your question is answered at p. 28 of our current year's volume. The answer to which you refer does not relate to your case.‡

RIFLES: *Exon.* We are informed upon the best authority that it is almost impossible to obtain pure animal oil, the demand so much exceeding the supply. Government is now using for all small arms Rangoon petroleum, a capital material, which may be had for a shilling a bottle of all who deal in articles prepared at the works of Price's Patent Candle Company.¶

THE LATE FROST: *Chester.* It is much too early to judge of its effects. We shall be much indebted to you and other correspondents for all possible information after March 1.

UNION OF GARDENERS: *C A.* Your plan is a laudable one: but we cannot possibly mix ourselves up with it. We have very great doubts whether any permanent good could be accomplished by such an association.

WELLINGTONIA: *Hannah.* The death of some of the small shoots of your Wellingtonia is constitutional, and of no kind of consequence.

MISC: *C P.* Messrs. Veitch's address is Royal Exotic Nursery, King's Road, Chelsea.

ERRATA.—At p. 47, instead of—each of them (degrees of Reaumur's Scale) being equal to 2¼° of Fahrenheit, read [illegible]; and for *aluminum* read *aluminium.*

ARTIFICIAL MANURES, &c. — Manufacturers and others engaged in making ARTIFICIAL MANURES may obtain every necessary instruction for their economical and efficient preparation, by applying to J. C. NESBIT, F.G.S., &c., Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, Coprolites, &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch. Gentlemen desirous of receiving instruction in Chemical Analyses and Assaying, will find ample facility and accommodation at the College.

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Are now prepared to send out the following MANUFACTURED MANURES:—
SUPERPHOSPHATE OF LIME, of best quality.
DISSOLVED BONES, AND BONE MANURE FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN AND ROOTS.
CORN MANURE FOR AUTUMN SOWING.
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LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME £6 6
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These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
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CONCENTRATED TURNIP MANURE, equal in value to the preceding.
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WORKS OF DRAINAGE of any extent are EXECUTED by the GENERAL LAND DRAINAGE AND IMPROVEMENT COMPANY on all descriptions of property, whether freehold, entailed, mortgaged, trust, ecclesiastical, corporate, or collegiate.
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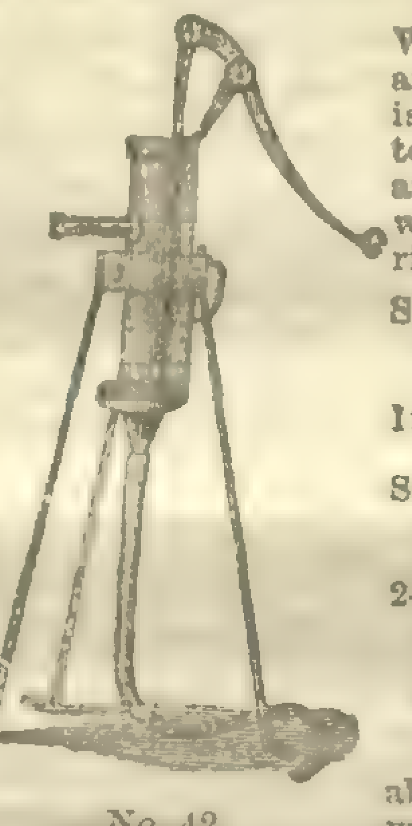
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This Pump is fitted with WARNER'S Patent Bucket and Valve, and cannot clog in action. The barrel is made of galvanised iron, not likely to corrode, and can be raised or lowered at pleasure on the stand, the legs of which fold together, and it may be carried with ease by one man.

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Stand and Pump, with screwed tail piece, fitted with strong brass union for suction pipe	2	15	0
If fitted with barrel of planished copper	3	4	0
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2-inch India rubber and canvas flexible suction pipe, on wires, either in 10, 12, or 15 feet lengths .. .. per foot	0	2	5

No. 43 is a similar Pump to the above, without stand, but with strong wrought-iron straps, for fixing to water cart or plank, price 2*l.* 5*s.*
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No. 11 Mill (recommended also for bruising corn for fowls)				3	15	0
No. 6 Mill for hand,	£4 15,	or with Bean Mill	(No. 6 B)	5	15	6
No. 7 ,, ,,	6 10	,,	(No. 7 B)	8	8	0
No. 2 ,, ,, or power	8 0	,,	(No. 2 B)	10	10	0
No. 1 ,, for power ..	12 0	,,	(No. 1 B)	15	0	0
No. 8 ,, for steam pow.	18 18	,,	(No. 8 B)	24	0	0

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The Agricultural Gazette.

SATURDAY, JANUARY 26, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.
THURSDAY, Jan. 31—Agri. Society of Ireland.
MONDAY, Feb. 4—London Farmers' Club, 6 P.M.

THE BOTLEY FARMERS' CLUB, one of our most active local agricultural Societies, resolved at their meeting last week that "on account of the monopoly they enjoy, and the large quantity of land they have severed and destroyed, the directors of the London and South Western and other railways are under a moral obligation to render every possible assistance towards the improvement of the land in the neighbourhood of their lines, by transporting, at the lowest remunerating rate, chalk and other minerals needed by the soil, and laying down or assisting others to lay down the necessary sidings for the purpose, in situations most convenient to the owners and occupiers of the land." The immediate occasion of this discussion was the refusal by the South Western Railway Company to undertake the delivery of 20,000 tons of chalk at a point upon their line to which no engineering objections existed, and at "any fair rate" of payment for the carriage of the same.

The following letter from Mr. CHARLES PINK, of Wood End, near Fareham, gives the full history of the proceeding:—

"The circumstances relating to chalk are these:—When I undertook Mr. CHAMBERLAYNE'S agency, and went over that portion of his estate at Baddesley, I found a large tract of enclosed land of a good description but requiring chalk—the tenants, alive to the advantages of chalking, had, when opportunities presented, brought back now and then a few loads, and where put, the land is worth at least 50 per cent. more money. In Baddesley there are about 700 acres of common land, much of which would be capital land if broken up and chalked.

"You are acquainted with the operations of the land improvement societies to enable landowners to borrow capital for draining, erecting buildings, &c. None of these societies could advance money for chalking; but last session Messrs MORRISON the millionnaires, applied for an Act to embrace all that former Acts included, and in addition obtained like powers to borrow for chalking. I was employed to write a report on the benefits of chalking, and although there was considerable opposition at first, the Inclosure Commissioners were convinced and gentlemen on the committee of the House of Lords gave way.

This Act enables landowners to borrow, therefore, for chalking, paying I think, 6*l*. per cent., which pays off principal and interest in about 21 years. Our tenants would pay the whole 6*l*. per cent. rather than not have it done.

"I was offered a few weeks ago 6*s*. per acre, or 30 per cent. increased rent of a farm, if I would chalk. The Salisbury and Bishopstoke Railway passing through Baddesley, and also through the chalk stratum of West Dean, and seeing a notice at Chandler's Ford Station that applications for chalk should be addressed, I believe, to Mr. Scott, the traffic manager, I at once made application.

"I ought to inform you that prior to making application I arranged a meeting with the company's engineer, to ascertain if there was any difficulty as to a siding at the spot where the chalk would be required. Having obtained his opinion in favour of my scheme, I applied to Mr. Scott for 20,000 tons of chalk, to be delivered in two years, at such times most convenient to the company, offering to pay any fair rate for delivering the chalk, the whole of the expense of the siding; and I will pay the pointsman, if necessary, and erect a temporary dwelling for him if required. I did not offer the two last items, because I received a reply from Mr. Scott that the company declined the matter.

"I then applied (by Mr. Chamberlayne) to the Hon. Mr. Dutton, who caused the subject to be brought again before the board, and I only received a similar reply. The point selected for the siding is almost midway between Romsey and Chandler's Ford, and equally convenient for Sir William Heathcote's estate as Mr. Chamberlayne's.

"I had seen Sir William's agent, who was pleased at the project, and no doubt would take another 20,000 tons; besides these gentlemen there are other landowners who would, no doubt, avail themselves of the privilege.

"Here we are, in the middle of the nineteenth century, in the days of progressive improvements, without parallel in the history of the world, with our network of railways developing the resources of the country, and an influential railway company for the first time (and I hope for the last) refusing to do its mission, firstly, by declining to be profitably employed, and, secondly, by refusing manure to thousands of acres of land. The railways of Great Britain and Ireland have destroyed enough acres of good land (generally the best) to make 200 farms of 300 acres each; the London and South Western Railway alone having destroyed 10 such farms. Baddesley Commons would replace two of them, and the increased produce of the remainder of the parish, by chalking, nearly another. A public company, however, in the face of such facts says, 'No, we will neither earn money ourselves, nor help those who are willing to expend their capital and labour to improve the country by growing more corn to feed the millions, and to provide labour for the poor.'"

This vigorously written communication has roused the agriculturists of the district, as it well might, and last week Mr. W. C. SPOONER brought the conduct of the railway company under the notice of the local farmers' club.

Admitting the benefit which railways have conferred on agriculture, he contended that the benefit was mutual, while on the part of the former it was due in return for injuries inflicted by their severance of estates and their actual destruction of many thousands of acres of cultivable surface. But agriculturists are among the best customers of the railway, and their interests ought to be attended to. There are 24,000,000 acres under tillage in the United Kingdom, besides 10,000,000 under Grass, producing 46,000,000 quarters of grain; whilst on it and the Grass land there were kept 30,000,000 of sheep and 8,000,000 of bullocks, consuming 2,000,000*l*. worth of oil-cake and other feeding stuffs. It needs no argument to show that the 300,000 farmers who own this property are considerable customers to railways. They are no longer the stay-at-home race they formerly were, but travel about freely in search of business and knowledge; besides which a very large portion of this immense produce is also moved about on railways.

MR. SPOONER's arguments and statements were followed by those of many other speakers on the same side. Mr. W. WARNER, who presided, said he considered Mr. PINK had very properly brought his case before the club. The South-Western Railway, and in fact all railway companies, state that they will carry agricultural manures and all goods on the line where and when required. They assume to themselves the privilege of accommodating a certain district of country, and if an independent line were brought forward they would oppose it in Parliament by all means in their power; the argument they use being that they can and do supply all the requirements of the district. The South-Western Railway putting themselves forward as public carriers, were morally and justly bound to deliver chalk or any other manure to any point of the line in sufficient quantity to pay them, without reference to whether it was a station or not. He hoped there would be a general expression from all farmers' clubs in the kingdom, stating the desirability of railway companies giving every facility to agriculture by the conveyance of all manures and other goods that were for the improvement of the land. The greater the production of the soil, the greater must be the increase of traffic on the railway, thereby improving the value of railway property.

We give prominence to this important discussion before the Botley Farmers' Club, hoping that Mr. WARNER's remarks will induce farmers' clubs generally throughout the country to consider the way in which the interests of their several localities are served by the railways passing through them. And we shall be happy to state the results of such discussions in our columns.

A GLOUCESTERSHIRE LANDOWNER revives in our columns the old question of depth and frequency of drains in clay lands. He has been draining his land, which lies upon the Lias, and the "New red" and "Old red" clays, 4 feet deep and 10 yards apart, using $1\frac{1}{4}$-inch pipes with collars. This has cost 5*l*. an acre, and his tenants would prefer the sum to be laid out in draining 3 feet deep and 7 yards apart. The question asked puts this alternative—whether drains 4 feet deep, 10 yards apart, with $1\frac{1}{4}$-inch pipes and with collars, or drains 3 feet deep and 7 yards apart, with 2-inch pipes without collars, will be the more efficient in his strong clays. Our opinion is that the 7 yard interval at the smaller depth will prove the better drainage of the two; but it is a pity that the choice of methods should be confined to two. We do not believe that the larger pipes will be in the least a help. If the drains be more frequent there is the less need of extra size—and provided the exit channel be of sufficient capacity to hold and carry off the water which exudes into it, there is no advantage whatever in giving it a size beyond what is needed for the due performance of this its only office. The depth and frequency of it below the surface are what the drainage of the land depends on—the depth of it, because upon this depends the depth of active soil between the surface and that level above the drains at which water stands in spite of them (owing to the action of capillary attraction)—the frequency of it, because on this depends the quickness with which the downfall of rain passes through the land.

The proper drainage of clay land requires the drains to be at least one in every 7 yards, and that is why we choose the latter term of the alternative proposed to us: if there were one in every perch wide land it would be better still; the cost would not be excessive even then, because increased fertility would repay it, and that is the only proper measure of expenditure. A perfect drainage of clay lands, as of every other, is to be obtained only by drains of sufficient depth, and therefore we prefer 4 feet to any shallower depth.

It may be conceded that a thinner layer of active soil above the level at which water will stand in drained land does, when that layer is clay, contain much more food for plants than a greatly thicker layer of sand contains; and it might therefore be supposed that a shallower drainage of clay land is all that is required. But this is not correct, because in clays the level at which water stands above the drains is much higher than in sands, owing to the greater capillary attraction which exists in the smaller passages between the finer particles of the former. It needs a greater depth of drains in a clay soil than in sands in order to the provision of a given thickness of dry and permeable soil—it needs probably an equal depth of drains in clays and lighter soils in order to the provision of a given nutritive value (so to speak) of dry and permeable soil in both.

If the land in question, with which we are perfectly acquainted, were ours, we would drain it 4 feet deep and not more than 7 yards apart.

OVER a great portion of the surface of the country the land is now a perfect illustration of the evils of no drainage. There is a hardened "pan" about 6 inches down, through which there is no exit for the melted snows. Even yet the thaw has scarcely overcome the frost, and till then the soil, so far as it is melted, must continue water-logged. When once the frozen layer has been fairly penetrated, then on all drained land we shall in the course of 48 hours, see the full advantage which such a condition gives it. Now little better than a puddle, it will then tread firm, and permit the use of implements of husbandry which would at present only poach it into mortar.

Those are wise who wait until the land is perfectly fit to work. Any attempt to regain lost time by too hurried a recommencement of either seed or tillage operations will be mischievous. Let the soil become firm and dry again before the plough is set to work; and it will turn over land already "tilled" by frost, without spoiling the good effect of the "tillage" it has thus received. But squeeze or knead or stir the soil thus loosened while it still is full of water, and you will effectually spoil it for the season.

It has been satisfactory to know that the still frozen layer lying now perhaps 6 inches deep has been thinning rapidly on both its surfaces. Stop the loss of heat above which air below the freezing point had been abstracting, and not only will the deepening of the frost be stopped, but the store of heat below will begin to react. The subsoil which retains last summer's temperature, of 40° and more, will exert a thawing influence upwards, gradually meeting the thaw from above.

Mr. SPEARING, of Moulsford, who is kind enough to supply us weekly with his meteorological register, points out the effect of the high maximum temperature of the early days of January upon his buried thermometer, which in this way rose two degrees in a couple of days. It could not have been in any other way than this, for it is impossible to suppose that any temperature however high could penetrate a frozen surface without melting it. All that it could do would be to check the loss of heat on one side of the frozen layer, leaving the other side to waste by contact with the warmer subsoil. This warm subsoil has a very material agricultural importance, and it is quite possible that we may have to attribute the safety of much of the young Wheat plant to the store thus lying dormant as we might imagine, but able nevertheless to check the destructive penetration of an unprecedented frost.

TALES OF A LANDLORD.

LAW, LAND, AND LABOUR.

ARRIVED at the middle period of Life—(a Thicket which grows thornier as you get deeper into it)—a student, by profession, a landowner by accident, I begin to want advice. This is easy to ask for; easier still, I have heard, to give. But as every one must state his case, before he can have the doctor's judgment on it, I shall tell you mine as candidly and fully as I can. Call it, if you like, the 'tale of a landlord,' for such in fact it will be, to the end. If the Land delight you not, its improvements, its incidents, its cost and after-gain, its troubles and after-joys—if all these afford you no interest, even in the reading, shut me up! pass me on to some one else more terrestrial in taste. But if you love the land, and all that happens on it, under it, and about it; if you value it not only for the loaves and—shall I say fishes! it produces, but absolutely, heartily, reverently, for its own sake; then, come with me, and I will tell you a story of the soil, and what things it has brought forth to me, besides those included in the four-course shift, or the six-course, or any other course or shift that modern farming wots of. But you must let me tell the tale my own way, for, the Earth hath bubbles, as the water has; and bubbles are unprofitable-looking things—airy nothings that only sputter a bit, and rise, reflect the sky and landscape, adding a colour or two on their own account, then burst; and a puff of carburetted hydrogen is not a valuable residuum!

At the threshold of practical life—at that bold spring-time when each of us thinks himself invincible in good, impregnable to ill,—fresh from the Oxford Class-Schools, and just beginning to consume Coke-on-Lyttleton like a steam-engine, and to breakfast and dine, as well as sup on the horrors of Real-property law, I was startled one day at finding myself an 'owner' of the article I was reading of. There might have been less to wonder at in this; but that in our land of England there is, you know, between those who *own* land by purchase or inheritance, and those who *read* about it, a considerable gulf, which it takes a man some years of his life to cross. I must tell you therefore how it happened that, in this particular case, things which man had put asunder, were joined together,—prematurely at any rate. For I too came of an acre owning race; and it was fully probable that, some future day, the usual Camel-burthen of a family-estate in land might be laid upon the back I was hoping to make strong enough and *hard* enough, to bear it. With this prospect in view, I had resolved to

"make assurance double sure
and seal the bond of Fate."

In fact, I had determined to be a Lawyer—to be myself a skilled weaver of those delicate fibrics that had seemed to my boyish, and then youthful observation, to catch 'Squires,' exactly as, on a smaller scale, I had noticed a spider entrap—envelope with hopeless convolutions—and finally *desiccate*—a stupid buzzing fly of about ten times its own specific weight and magnitude. It was impossible not to admire in a sort of way the pluck, the ingenuity, the manœuvres: and when I resolved—indeed *it was* rather the grown up purpose which had been always growing, than a resolution,—to become a Master: a Master in this art,—to take Arachne in her own web—nothing could be further from my thoughts than the destiny that Fate the most potent spinner of all was arch-weaving over all my plans. Scarcely had I read my Blackstone and Coke from cover to cover, when something happened which for the moment—for more than that, as it afterwards appeared—dislocated the joints of all my plans and purposes.

The thing occurred to me in this way. One night, as I sat in my chambers in the Temple, looking into the fire, having shut my books and taken to tea, a rough

heavy knock sounded at my door. I remember feeling a perfect certainty that there was *country* news in that knock; no Londoner would have bulged against a man's oak, in that Giant-Blunderbore fashion, at that time of night too. In three strides I was face to face with a bluff honest wintry but rather scared-looking visage I well knew, even in the dark passage; which on recognising me, broke out without preface —"If yer plaze sur the poor Squire is djed (!) and the ladies hopes you'll please to come down to 'em immediately, for they don't know what to do."

It was long before Railroads. There was just time to get to Charing Cross and catch the Mail: and oh! those long musty-straw-smelling rattling nights inside the Mail, and that everlasting yard of tin outside, over your head, with its two notes tenor and treble, requesting, desiring, urging, *screeching at*, the turnpike keepers to open the gates, all down the road, at unimaginable hours after midnight, up to the slow grey winter's dawn; and the persevering wheels whose revolutions were performing through your brains as you tried to rest your skull against the hard upright padding. Oh! those nights! Who shall describe them to the younger generation and other generations yet to come!

By breakfast-time I was with the mourning party. Happily it was not a case of very near relationship—for any of us. Death, always solemn, is not always supremely sad. In sending for me, the comfort of a relative's face to those who had but few in the world, was not the only motive—something was to be put down to compliment to the 'young barrister' with a vague idea that the occasion was one for a sort of paulo-ante futurum exhibition of his acquirements and utilities; especially when the day came for reading the will.

It soon did come. And you could hardly think worse of me than I should of myself were I to dive down into the bottomless plagiarism of re-presenting a Scene which is pictured in every mind by pens and pencils that have charmed human life, for evermore, by their exquisite humour and pathos. Besides, I am sorry to whisper (but this only in confidence—that 'confidence' which embarrassed men's affairs are so fruitful of,—so admirably successful *in*!) that my good old cousin just removed though a considerable 'squire' in his way, had the reputation of getting not exactly the sort of bows from his Banker (admire the conciseness, not to say delicacy of so describing the moral effect of his *balanced* Rental!) which territorialists of his magnitude might be supposed to command.

Well; the day came, and the Will, and the man to read it. This was young Mr. Debbitt, of the firm of Penn & Debbitt from a neighbouring town, a mild bleached-looking gentleman of soft voice (a little too much reminding me of that muttering night-owl of an Undertaker I had just had to deal with); and as he sat at the middle of the dining room table, it sent me back, in an internal spasm of keen sad contrast, to the merry days, oh! the merry days, and Noctes Ambrosianæ, in that room, at that table, under that Lamp, that I had seen! and never, thank Heaven! one hour for memory to regret or be ashamed of.

"In the name of God. Amen!" Don't be alarmed: I am only recalling the first words; deeply impressive in themselves, but which a year in a Conveyancer's Chambers had deadened the first sense of to my ear: for on hearing this beginning I felt myself draw up professionally in my arm-chair into a state of rigid criticism: for where is there so great a critic of legal language as your Student just *about to be* "learned in the Law." I pictured to myself the Devises about to follow as having all the value and solidity of so many slices cut out of an air balloon. The attention I paid was corresponding.

Suddenly I became aware that every eye in the room was upon me. I did not hear the words that had been read; for my mind had jibbed some years back, just then, as it has a recalcitrative habit of doing, inconveniently. But I 'woke up, and put on a look of as much *presence* and legal acuteness as I could, at short notice and then I heard words—bitterly, scornfully rejected on the instant—but which have turned the destiny of my life (Good heaven! that words should have such potency!) from what it was to be to what it has been!

My dear good stupid old friend, and most remote relative had constituted ME the heir to all his Mortgages! for, so I, and I believe every one who knew him, would have described his landed property. And here was I, in the dining room aforesaid, the accepted and congratulated 'owner' of acres which indeed I knew well enough by 'gun-proof,' but which by any other test, if all I ever heard could be believed, were literally on the wrong side of nothing:—unless the owner "could, like a cameleon, live on air, promise-crammed." You cannot feed bipeds so.

I fear I behaved very badly under the circumstances. I jumped up in my chair as if something had stung me: and holding it by one hand—so I was told afterwards—I glared a look of angry surprise at the whole party as if I was going to throw it at them, and so be off without taking other leave. But this fit fell away —and then came a deep gush of nervous feeling which throbbed in my throat, bumped under my waistcoat, and tingled to every joint and extremity. Never I do believe in the world was a more sincerely confounded and ungracious devisee! If there was a curse I had prayed against from the first moment of intelligent childhood it was an encumbered landed estate. This had been my bête noir (and not without reason good) almost before I had a clear idea about anything else.

And here I was, in the very budding of my first sensation of 'legal' importance, suddenly tripped up by the very thing I had most delighted in despising. Here I was, against my own consent transformed into a "Man of Pauperty" as I had in contemptuous travesty often called it. Here I was, the very thing that I had above all things deprecated—a Mortgage owning squire! Never did vaulting ambition more devoutly covet 'dirty acres' than I had prayed against them. To have a fair field and no favor—to battle man against man, and mind against mind for the fair and honest wages and prizes of life.

Hoc erat in votis!—Modus agri NON—ita!

This had been my 'stipulated condition of existence': let come what else might, for this I at least had bargained: and now—?

At the moment when a vexation befalls us, we are sometimes strong and resolute. A strong fish offended by the first entangling touches of the net darts out with masterful indignation, even tears a hole or two perhaps in his first vigorous leaps. How soon the encircling knots and meshes creeping gradually fold after fold seem to stupify and tame his dwindling efforts. Before two days had passed, instead of being back in Crown Office Row, with Saunders on Uses, and Fearne on Remainders, I had yielded to a dozen interviews with that old face I introduced to you just now at the door of my Chambers; and answered to the best of my power, in a dreamy bothered kind of way question after question, which might have been coined for the express object of wheedling one across the bridge that led from 'Lawyer' to 'Landowner.' It seemed uncivil to my good old relatives to decline to answer them; yet I soon found that it was in fact not for them, but for *myself* that I was answering! Everything was out of repair, all of a sudden: Cottages, Barns, Pigsties, Carthovels, Roads, "Rails, Pales, Drains, Ditches, Watercourses and Pumps!"

"Oh cursed spite
That I was ever born to set it right!"

Now, in most of the paths of practical English Life, men learn something from the footsteps of those who have preceded them. In the day-book surely if not in the ledger of the Past, the rising generation of Commerce, Trade, or Manufactures gather something of the doings and even of the thoughts of those who built up the fortunes they inherit or the Firms they represent. Even where there may be little to instruct or even encourage there is something to warn: as the leaves are turned over, of Journals reaching back into remote years, it is something to be able thus to travel the road that others have beaten, though it offer little to the imagination or the memory but the milestones!

But there is one business that drops from father to son,' from uncle to nephew, from the old generation to the new, without Ledger, Cash-book or even Journal. It is a fashionable business too, reputed as a thriving, and certainly a respected one. I have tried to find its books: for to such a business thus early in life,—unassisted, and almost alone, had I succeeded. Hitherto, I had been learning how *to learn*,—so far at least as books can teach the faculty, or employ it. So when this business fell to my hands, experienced more in poring over pages and fighting through folios than any other form that trouble could take as yet, my first question (little thinking I of it's 'commercial' propriety!) was "Where are the books?"

What Books? (still harping on his Reading-desk!) happy fellow! what do you want any more with books? You may change your books for something else now—you are a Landowner, a Squire, a—can't you *understand?*—the Estate is *yours.*—I *do* understand. Better than you think perhaps. Then there are no books, really? No: there were 'no books'! and what is worse still, and more now to the purpose, there *are* no books; except indeed what I have kept myself: and they are so scratched, and defaced, and torn, with early blunders: and in some places so blotted with—well, call it *Ink*: call them Ink-blots: they are black enough, now. The diamond-drop, you know, generically regarded is but a piece of coal: and coal is black, as black as ink is.

In short then, here I was in a sort of land-shipwreck cast like Crusoe, Prospero, and others upon a desert estate which nobody could tell me anything about, without log-book, chart, or compass. I hardly know on earth a more hopeless thing at first look, and in after reality, than the writing-table, and papers, of a careless man who has shuffled through the world, not "driving his business," not even letting it drive him—but in fact refusing his neck to the collar. This was the sight before me—in the room where my poor old would-be-benefactor used to sit. It was a Chaos: It was the real original *Tohu Bohu*. The dust flew up as I threw myself for the first time on an arm chair with my first *groan*: and as it rose up over my head it seemed like the ambitious hopes that were flying away, and the worthless empty prospect that was beginning to supersede them. *T.*

Home Correspondence.

Turnip Cultivation.—After reading over the speeches of the gentlemen of the Stirlingshire Central Union, on Turnip growing, at page 11; knowing that I had what I thought a pretty good crop of Swedes, my curiosity was raised by the extraordinary weights reported. I had a portion of mine weighed: the following is the result with the system of cultivation, taking a fair average part of the field. I measured off 8 yards square, locally called the Worcestershire perch. After having them topped and butted closely, they weighed exactly 8 cwt., which is scarcely 30 tons per imperial acre, superior as the crop is to any in this immediate neighbourhood, many of the farmers having but few, and some none at all; even with their Scotch acre it came far short of their weight. The variety is Francis and Arthur Dickson & Son's, of Chester, Brown Top Swede, which has always given such great satisfaction. Being situated on the banks of the river Teme (?), and on the brown loam formation, our soil is from 5 to 12 feet deep; it may be deeper for anything I can tell in some situations. The land was drained about 10 years ago with pipes 5 feet deep and 18 feet between the drains, which has hitherto kept dry. The land was G. O. ploughed and subsoiled in October 16 inches deep; it lay all winter to get pulverised until the month of April, and then it was cross-ploughed. When it got sufficiently dry to carry the horses the 4 horse scuffle was drawn through it to nearly the depth of the subsoiling; then with a pair of heavy harrows we got as many of the clods to the surface as possible, and bruised them with Crosskill's clod-crusher, then followed with the Norwegian harrow, which did its work well by cracking those clods that did not appear on the surface. Following in succession with a light roll and harrows we were ready for rowing out or boating out as some will have it, which was at once done, the manure, composed of straw, horse droppings, and sawdust, having been brought into the field during winter. The stables are kept well covered over with sawdust fresh from the saw mill, which serves two purposes; gathering up the urine and keeping the stables perfectly sweet, and of encouraging the growth of quantities of Mushrooms all over the field where it happens to be put in the shade of the Swede leaves. With our light one-horse Scotch carts, we put on about 25 loads to the acre, with $3\frac{1}{2}$ cwt. of Webb & Co.'s (Worcester) Turnip Manure. After being quickly spread and as quickly covered, we allow none of the manure to remain uncovered during meal time, nor at night, and having an odd horse in the field, the sowing of the seed is kept close up to the plough. I deem it necessary that the utmost expedition ought to be used in getting the small seed deposited into the cool soil, especially in this locality. Our soil will neither work wet nor dry, so that we have some difficulty in getting it reduced to a fine mould fit to receive Turnip seed. It is a great error often committed in having too much land ready for rowing up; a thunder storm, or two or three days' rain, has put us in a worse state than when we begun after the four-horse scuffling. If the barometer and the appearance of the weather indicate rain, when we have more ground ready than we can well make sure, instead of keeping on with the regular rotation, we leave off and get all the ground rowed up, that is ready. If they don't come too closely two or three dry days put us all right again, or otherwise we have been thrown out for three weeks or a month, with all the work to do over again. The past season has taught a good many practical lessons in that respect. We had scarcely finished when the wet weather set in, and we dare not set a foot upon the land. When the plants got about 8 inches high, and seeing no appearance of fine weather, I had them hand-thinned from 9 to 12 inches, with the weeds pulled along the tops of the rows, for about 8*s.* per acre. The rows ran about 26 inches apart. On no account did I allow a hoe to stir the soil while wet; the plants received no change in thinning, and owing to thorough drainage they have grown beyond my most sanguine expectations. *J. Miller, Eardiston, Worcestershire.*

House Sewage.—My ministerial duties leave me little time for any other employment; but the increasing importance of the social questions involved in the discovery and proposals set forth in my pamphlet "National Health and Wealth,"* constrain me to request space in your columns for a few further remarks on that discovery and those proposals. Inquiries and examinations have been made on the spot as to the correctness of my statement that the same earth may be used and dried repeatedly, and all doubt on the subject has been by such examination entirely removed. At the same time the luxuriant growth of everything in the garden in which the drying shed stands, and which is manured solely with house sewage, convinces inquirers of the value of that sewage as manure. But as a good deal of liquid manure is used in this garden, its produce does not serve as a sufficient test of the efficacy of that which is obtained by the daily removal of night soil mixed with common earth. I therefore got one of our farmers late in the spring to try some of that which had been used five times in the daily removal of the privy soil of a family averaging 15 persons, and which had remained dried and sifted in the

* Messrs. Bradbury & Evans, Bouverie Street, Fleet Street.

shed from October till May. He used 1 cwt. to a quarter of an acre, and applied superphosphate at the same rate to the rest of the field. It is a thin soil on a hill of chalk. The crop, though injured by the vast growth of weeds in the late rainy season, was one of the best in the neighbourhood, and all that I looked for was that the piece manured by the house manure should be as good as that which had received superphosphate at 8*l.* a ton. But through the whole growth there was no mistaking the superior healthiness and strength of the former, and on pulling them the roots of these generally weighed full one-third heavier than the others. Now such a valuable manure as this can be obtained not only in private dwellings but in our towns, and especially in public establishments, such as hospitals, gaols, barracks, union houses, and with great advantage to health, great increase of comfort, without the slightest offence, and not unfrequently with considerable saving of money to the public. Take as an instance of public saving a county gaol with an average of 150 prisoners and officials. The water closets in that gaol may be 60, and the expense of keeping them in order not less than 50*l.* a year. An apparatus for which I have obtained a patent (1316) is so simple in its machinery that 60 of them would not cost 2*l.* a year in repairs; and if you put the value of the manure saved and sold at 1*l.* a head, 200*l.* a year might thus be saved to the county. A company formed for the purpose could afford to give 2*s.* 6*d.* a head to every cottage in a large village or in our smaller towns. Yes, and even the larger ones might sell such manure with a large profit at 3*l.*, or even 2*l.* a ton. But this advantage is insignificant compared with the vast social evil prevented, and the increase of physical comfort and health secured by the adoption of this mode of removing manure. *Henry Moule, Fordington Vicarage, Jan.* 9.

Steam Cultivation.—I think Mr. Burcham has passed a very hard opinion on Mr. Fowler and Mr. Smith's individual work of ploughing and cutting up the soil by steam. They cannot help the farmers not availing themselves of other cultivating appliances. These two have been the successful pioneers who have shown that

A VIEW OF THE LOCOMOTIVE CULTIVATOR AND HEADLAND RAIL.

steam ploughing alone has great collateral advantage. The same rule holds good with it as with the cotton manufacturer, be sure you have material enough to work upon and that constantly; if there be any failure of profit it is the extreme smallness of the lands which prevents an advantage of steam over horse-power. I must admit that there are great disadvantages in attempting complete steam culture. We demand of landowners and farmers to change their modes and opinions to suit ours. Let this be tried upon any citizen of London, and see if he will even alter his mode of book-keeping alone, much less his present method of trading or manufacturing. In answer to Mr. Burcham, I do not contend that either a fixed point or a rail is necessary. There are other methods of laying a rail without driving posts into the ground. I simply use a rail which does not sink into the earth under the wheels, and depend upon the weight of my locomotive cultivator to keep it in position, thus transferring its weight to the portable rail, which has all the mechanical arrangements for keeping the flange of wheels in a straight line, I preferring to have the cost of the wear of the rail alone without adding the cost and waste of 160 lineal miles of rail to every 1000 acres, as under the guideway system, besides saving the interests thereon. In an engineering point of view there could not be a better plan devised than a permanent fixed rail, but commercially it is a loss alone over the present horse-system, unless we take its proposed advantages in superior culture. The question which we are trying to solve is—shall we be able to use all our available force for cultivation alone instead of expending one-third in our locomotion, or friction by rope, and other appliances? Mr. Burcham has been the first to promulgate the principle of not pressing on the soil for culture, and he has devised one of the most simple and cheap contrivances that has yet been devised, and were there no advantages or value in the lost spaces of the land which he cannot cultivate by circular tillage, then his would have taken the precedence of all others as far as my opinion goes. I think that those who have attempted circular tillage or cultivation in their mechanical arrangements have been led into error by adopting that motion, which is best for manufacturing appliances in connection with fibrous materials in commerce; but the land being a friable material, and subject to chemical and other changes, does not demand such a motion. The most economical action is an onward one, so long as it can be obtained to save the loss of turning the plough, which appears to be the most economical tool devised to effect the purpose required. Of course I speak of it only mechanically. I will therefore confine myself to a paper published by the Society of Arts of 28th December last on my system, and a locomotive cultivator, wherein I propose giving all the advantage of the guideway system without its cost, having added many improvements and economies, among which is the entire abolition of the waggon or cart for field purposes, the introduction of a permanent headland rail, worth 500*l.* per mile, at the small cost of 1*l.* per acre, and combining in one all the implements which a farmer requires to thoroughly cultivate his lands and reap his crops without any outlay beyond that of the present system. *H. Grafton, C.E.*, 80, *Chancery Lane.*

Drainage Outfalls.—It is strictly true that this Company's Act enables owners not only to go through adjoining proprietors' lands with outfalls, and to improve and deepen ditches, &c.; but also, at any subsequent time, to repair and maintain the same; therefore the "failure" and refusal to "allow his neighbour to remove the impediment" referred to in Mr. Denton's letters could certainly have been remedied and enforced under this Company's Act. As regards the expense, we can say that in no one case has it amounted to 5*l.* for carrying into effect. *Bidwell & Brodie, Secretaries, Exeter, and* 30, *Parliament Street, London.*

Breton Cows.—Your correspondent is unfair on the Breton cows. Many persons who wish for pure milk, not milk and water (see Dr. Letheby's report), and who have a small piece of land, could keep one. If four or even three can be kept for the cost in food of one Alderney [!], a small family might prefer them as ensuring a constant supply, and not a period of five or six weeks when the one cow is dry. Then they are very gentle, and will bear to be tethered. A goat's milk is drinkable and good, but the butter intolerable, and a goat is the most mischievous and troublesome of animals. *A. R. C.* [Three Breton cows may be kept on the food of two ordinary cows. That is the experience in our neighbourhood. ED.]—— I thought the goat had been tried in this country a good many years and found wanting. I have kept Breton cows nearly three years, and should I say anything in their favour you might think I am more interested than in keeping them—one thing, if we could only rely on a French agent, no doubt they would come much cheaper, and I am sure they would be more generally kept; the principal parties who have been shipping them to this country must have made a rich harvest, I am thinking. *R. B.* [Will you kindly tell us what your Breton cows consume, and what they produce?]

Depth of Drains.—I am anxious to obtain decisive information on the following point. My land is the stiffest blue and yellow clay that can be imagined, I have hitherto in draining adopted the rule of all drains being 4 feet deep, and 10 yards apart this does not dry some of the flat fields in the very wet season. The fields on hill sides answer well thus drained, but my tenants urge me to drain only 3 feet deep and 7 yards apart. The expense of draining 4 feet deep and 5 to 7 yards apart would be too great. The cost of what I now do 4 feet deep and 10 yards apart is about [illegible] per acre, with $1\frac{1}{4}$ inch pipes with collars. Four feet deep and 5 yards apart, would of course be best; but with a view to reasonable expense, on this very stiff and impervious clay, through which the water can't run down, my question is—what is the best depth, and width apart, and pipes to use? Whether 4 feet deep and 10 yards apart and $1\frac{1}{4}$ inch pipes with collars (my present mode), or as urged, 3 feet deep, 7 yards apart, and 2 inch pipes without collars. I shall be obliged to your scientific friends Mr. Bailey Denton, and Mr. Mechi and others to treat this subject fully, for it is one on which much may be said both ways. If what my tenants urge is reasonable and right, I shall be glad to do as they wish, but if their views are erroneous I shall be glad for some one more capable than myself to show them their mistake by arguments and proofs such as will convince them. *A Gloucestershire Landlord.*

Societies.

SOCIETY OF ARTS: *Straw Plait.*—During the discussion which followed Mr. Tansley's paper on the subject, Mr. P. L. Simmonds said:—The details and information connected with the straw plait trade, hitherto of the most meagre character, were of great importance to numbers in Europe and America, as well as in Asia and our colonies. Some of their manufactures came occasionally into trade here, and several were of a most expensive character, realising exceedingly high prices. At the Paris Exhibition of 1855, where there was an excellent display of straw plait manufactures of Tuscany, Switzerland, Belgium, Saxony, and France, Great Britain in this class was quite unrepresented, although, as the Jury Report observed, "She occupies a distinguished rank" in this particular manufacture. A very creditable competitive display of our skill and industry was made at Hyde Park in 1851, and judging from the specimens on the table, and the details given of progress, there was reason to believe that a better display still would be made in the Exhibition of 1862. Mr. Tansley had given the value and particulars of our home trade in this matter, and by way of comparison, and in order to fill up the details he (Mr. Simmonds) would hand in for publication and reference the statistics of the import and export of straw plait, &c., for the five years ending with 1858, the latest returns published. From these it would be seen that our import from France and Tuscany had declined nearly one-half, while our export averaged more than 43,000*l.* in value, evidencing the activity of the trade, which even supplied foreign markets, besides the increasing consumption at home. Mr. Tansley's paper would, he felt sure, be read and studied with interest by large classes both at home and abroad, and it was a striking evidence of the great importance of very many seemingly small manufactures in the country which only required to be properly described to become much more appreciated.

QUANTITIES AND VALUES OF STRAW PLAITING AND HATS IMPORTED FROM FRANCE AND TUSCANY.

	France.		Tuscany.	
	Quantity.	Value.	Quantity.	Value.
	Lbs.	£	Lbs.	£
1854—Hats ..	37,399	112,197	5,920	17,[illegible]
,, Plait ..	176,926	171,766	20,856	20,3[illegible]
1855—Hats ..	14,699	44,098	7,078	21,2[illegible]
,, Plait ..	125,425	120,757	3,007	3,0[illegible]
1856—Hats ..	19,354	58,062	4,519	13,5[illegible]
,, Plait ..	148 220	137,830	4,745	4,7[illegible]
1857—Hats ..	24,953	74,8·0	2,983	8,9[illegible]
,, Plait ..	144,398	136,418	4,853	4,5[illegible]
1858—Hats ..	12,147	34,616	2,991	8,4[illegible]
,, Plait ..	110,994	105,785	12,569	12,5[illegible]

EXPORTS OF PLAITING OF STRAW.

	Weight.	Value of British.	Value of Foreign.	Total.
	£	£	£	£
1854	138,713	40,515	17,472	57,9[illegible]
1855	101,831	41,145	10,280	51,4[illegible]
1856	112,285	58,972	7,306	66,[illegible]
1857	126,968	46,804	25,455	72,2[illegible]
1858	82,114	29,810	20,507	50,3[illegible]
Total	561,911	217,246	81,020	298,5[illegible]
Average ..	112,382	43,449	16,204	59,6[illegible]

Straw hats were not particularly specified in the exports.

Mr. Tansley, in reply to a vote of thanks from the chair, said he hoped the ladies present would bear in mind the fact that from 70,000 to 80,000 of their own sex were employed in this branch of manufacture, and therefore, by their patronage of it, they would contribute to the moral and social well-being of a very large class of society. When ladies wore straw bonnets they patronised a strictly national article, as they were entirely of home produce, both as to the material and the manufacture; and, happily, it was a portion of female attire which became the ladies of this country better than anything else they could wear. Some remarks had been offered as to the wearing of straw hats by the male sex. He was certain, if the gentlemen of London had the boldness to wear them, they would experience great comfort from them in the hot season, both as to convenience and the preservation

the hair, which suffered considerably from the want of proper ventilation in the hats now generally worn.

EDINBURGH: *Condition of Labourers.*—At a recent meeting of landowners and agriculturists in Edinburgh the following resolutions were adopted :—

1. That, taking into consideration the general improvement in agriculture in Scotland, it is most desirable that increased attention should be directed to improving the condition of the rural labourers.

2. That as comfortable and commodious dwellings greatly tend to promote morality, delicacy of feeling, and sound bodily health, this meeting while cordially admitting what has been already done in this direction would earnestly call the attention of landed proprietors and farmers to the necessity of increased efforts to provide these in greater numbers than exist at present, and to the facilities afforded for this purpose by recent Acts of Parliament enabling proprietors of entailed and unentailed estates to build and to improve cottages.

3. That as improved cultivation necessarily implies an increase in the amount and quality of the labour employed, it is the duty and interest of both landlords and tenants, that a sufficiency of cottage accommodation be provided on every farm, thus removing at the same time an impediment to the formation of those domestic and family ties so essential to the happiness and welfare of the human race.

4. That this meeting recognises the necessity of greater attention on the part of proprietors and farmers to the importance of education, both juvenile and adult, and especially to the disadvantages connected with the practice of taking away children from school during a pressure of field labour.

In the course of the proceedings the following description was given by Mr. Simpson, of Teawig, Inverness-shire, of the Scottish labourer. It had been his lot to spend many of the years of his youth and early manhood in different distant countries; to view man in many different aspects—savage and civilised. He had returned to his native country, and for 16 years had been engaged in the cultivation of land as his only occupation, and he might add, his sole source of living. During these years he had of course had much acquaintance and intercourse with the rural population of Inverness and Ross-shires, in both of which he occupied land. He had formed a high opinion of the character and capabilities of that class. From his acquaintance, as he had already said, with man in his various types, for he had had intercourse more or less with the inhabitants of the four quarters of the globe, he had some right to speak of the *physique* of a man; and he placed the Scottish peasant, when in his prime—before being broken down, as he too often was, by his own neglect fully as much as by the neglect of his employers—very high in that scale. He had good bone, plenty of muscle, and certainly not too much fat. On the mental scale he would also place him high. He had intellect, intelligence, and generally more or less education, but he was not to be driven capriciously or mechanically—if that was attempted he was apt to become one of "the greatest plagues of life"—if he was led well and judiciously, he became in truth what our American cousins called "a help." Having said this much for the agricultural labourer, he perhaps had a right to say something to him, and this would be his counsel to him. Do not suppose that your lot is altogether a hard and bitter one. It has many great alleviations, nay, great privileges. You live in a land where wars and rumours of wars sound only from a distance. When they seemed lately to come nigh your dwellings, a great body of your fellow subjects came forward, and by their voluntary association have put that danger for ever away—no military levy or conscription can touch you, you are absolately free from all direct taxation, and of indirect taxation the share you pay is nominal; in fact taxation is confined to luxuries, one at any rate of which, and not the least expensive—he meant tobacco—you would better be without. You live in a land where one day in the week is one of sacred rest—where you have religious instructors, and education for your children at a moderate cost. Your labour is, when rightly regulated (and to induce right regulation of it is one of the objects of our meeting to-day), is not excessive; and it is carried on in the pure open air in a climate which, on the whole, is that where outdoor labour can be most constantly carried on without chance of injury of any in the world. Much would your countrymen in the arid plains of Australia, in the agueish, sickly, backwoods of America, give for a breath of the pure healthy air which you breathe. He had dwelt a little longer than he intended on this head, because he desired that our Scottish ploughmen should retain what our national poet, one of themselves, described as one of the blessings he wished them, "Sweet Content." He is no friend but an enemy of theirs who would paint them their condition generally in dark colours—it may be there are dark spots in the picture—but he believed these were local; the great body was healthy and well conditioned. There were some slight local ulcers, to these it would be as well to apply some caustic, and he hoped it would be judiciously applied to-day, and that in time it would do its work.

In the counties with which he (Mr. S.) was connected, the staple of the farm servants were married men, having each his cottage, which, small and humble, and to southern eyes often apparently incommodious as they were, were their own, and in their case was fully examplified the truth of the saying "a wee bush better than na beild." The men were generally quiet, moral—he might add religious. The returns of illegitimate births showed most favourably in comparison with the counties where men did not marry, because they could not. Four parishes, of large extent, had their junction near him, and as he paid poor-rates in two, and had the other two every day in his eye, he associated them together. They were, as he had said, of large extent; and they had several and very different classes occupants; there were a good many large farms of arable land; there were a considerable number of small class farmers paying from 20*l.* to 100*l.* rental; there were a good number of sheep farms in mountainou districts; and there were upwards of 300 crofters paying less than 20*l.* rental—perhaps as great a diversity as could be found in any district in Scotland. The population of the four parishes in 1851 was 10,323—the illegitimate births during the year 1859 was 11, being, allowing for some increase in population since 1851, just one instance of bastardy in each 1000 of the population—a pretty clean bill of morality.

The system that prevailed in the northern counties, excluding Caithness, which was allied to the north-eastern counties—was yearly engagements—the men, in a large proportion, married or in the way of getting married—and the general tone was good, though he could not say it was improving, for half-yearly engagements and bothies for single men were creeping in. The men had their yearly money wages, and an allowance of meal, potatoes, &c., which was quite sufficient, when well husbanded, for the support of an average family. In the family relationship consisted the safety and prosperity of the class. A ploughman, without a wife at home to take care of his clothes and cooking, was a very helpless man. His oatmeal, which, when well made into porridge, was a nutritious and palatable food, fit to set before a Queen—for it was known since her excursion to Strathsprey that her Majesty breakfasted on that dish; but when made by a single man into brose or "stir-about" it is a dish to extract the necessary nourishment from which taxed, and in time exhausted the human stomach. The house accommodation certainly was not over abundant in the best case, and was gradually falling behind the requirements of the time there as elsewhere in Scotland; and to remedy this growing evil was one of the subjects which would to-day occupy much of their attention. He thought that each man should have a separate house in a detached piece of land, say one-eighth acre of ground. This would give room for a gravelled plot for the children, for a little wash green for clothes, and for garden ground for the simpler vegetables. It was well known that suburban semi-detached residences were on many grounds disliked, and he thought that cottages being built even two in a block involved bringing families into too near contact; hence quarrels and wranglings. The houses should be built to contain two rooms, say 12 by 14 feet, with a porch outside—one chimney stalk would heat both rooms. The roof to be a pavilion one, thatched with straw—the warmest cottage roof in winter, the coolest in summer. A room in this roof would be used for storing articles, and for sleeping place if the size of the family required it. This would be a very inexpensive, and he believed perfectly suitable and acceptable house for married ploughmen, and without entering into close calculations, he believed it might be built—the cartage of materials not charged for, and the timber from the proprietor's woods at wholesale price—at a cost of 40*l.* The greive or foreman would require a house of rather better accommodation, say costing some 50*l.*, and thus an acre of ground appropriated in a position not too far nor yet too near to the steading, with 300*l.* expended in building cottages, would afford every accommodation for the working staff of a 400 acre farm. He thought that cottages on even a more humble scale provided for female outworkers would also be very valuable. There were many women from the country who had married townsmen, become widows, and were pining away their lives in the garrets of the towns, dependent on parochial rates, or on the wretched wages of needlework, who would gladly return to the country could they find a roof to cover them, and cheerfully engage in the labours of the Turnip sowing and harvest work, and thus relieve the pressure for female labour that was felt more severely every year in the high farmed districts of Scotland. This brought him to consider the case of small agricultural holdings, on which he was aware that different or rather conflicting opinions were held. There were a large number of such holdings, as he had already stated, in the district in which he resided. In order not to speak at random, he had looked into the parochial valuation rolls, and he found that in the district lying within a few miles of his house there were 289 tenancies of less than 20*l.* per annum. It gave him pleasure to give testimony to the worth of this class morally, and to their value to the neighbourhood. They paid rents for their little holdings generally in excess of their agricultural value. They supported themselves partly on the produce of their holdings, and partly by working at the trenching, draining, dyking, and other operations connected with agricultural improvement. Their sons became ploughmen, their daughters domestic servants; altogether they were a creditable and valuable class. A good deal might certainly be done for their further advancement. Instead of allowing them, unaided, to improve and then cultivate the waste places on which they settle down—and many such waste places, he believed, would be found in every district in Scotland—were they, under the provision of the Drainage Act, advanced money for that purpose, they would make a fair start in the race, and would not afterwards be apt to fall behind. He would earnestly counsel proprietors, particularly those bordering on the highland districts of Scotland (high land he did not confine to the Celtic districts) to turn their attention to the building up of such a class as this. He had already indicated that their sons were good recruits for the working rural population. What recruits they made for the Queen's service let the character of the Highland regiments bear witness.

The third resolution was moved by Mr. Hope, of Fenton Barns, who gave the following account of an East-Lothian labourer:—I will endeavour to state as shortly as I can the position of the rural labourers in East-Lothian, with which I am best acquainted. Almost all the ploughmen there are married men, hired from Whit Sunday to Whit Sunday. Their wages are generally 9 qrs. of Oats, 2¼ qrs. Barley, 1 qr. Beans, the keep of a cow, cottage (with garden and pigstye), land for Potatoes, a small sum of money, food in harvest, coals driven, &c., worth altogether something like 12*s.* 6*d.* or 13*s.* per week. I have never yet seen a more respectable class of labourers than those men who are paid in produce in any part of Scotland, or England either. I attach very great importance to every man having a cow of his own. It is of great advantage to him in bringing up his family, by the abundance of wholesome food it supplies, and, from his wife's skilful management, he is, besides, enabled to sell produce often to double the value of the cow's keep. Before a man sets up as a hind, he requires to have saved something like 30*l.*, to pay for his cow and furniture, and few of them marry until they have done so. We all know the feeling of self-respect which property invariably gives. A man with a good cow in the byre rarely takes to petty larcency or poaching. Nothing pleases me more than the intense interest displayed by every man, woman, and child in the welfare of their cow. I have heard it alleged by farmers where it was not the custom for labourers to have cows and pigs, that it tempted them to pilfer. After a pretty long experience, I can affirm that this is not the case: I hold the cow and the pig to be pledges for their honesty; neither would I have about me men I suspected of dishonesty. I believe every way it makes them better and more thoughtful servants, and I have 15 men in my employment who have cows of their own. I should not like a man without a cow to be in any charge, or to drive horses belonging to me. At one time it was customary for each servant who was a householder to furnish a boy or a woman as an outworker during the summer months. This was occasionally a great hardship, when the houses were only perhaps hovels 18 feet square, and work was not given constantly, and particularly when the outworker was not a member of the family. It is true the poorer classes can do far more for themselves than can be done for them. But this building of comfortable houses is a thing they cannot do; it depends on the will of the wealthy. I think I have clearly shown that it is the interest of both proprietors and tenants that it should be done; I have no doubt it is also their duty.

Reviews.

Hints for Farmers, &c. By Robert Scott Burn, Editor of "The Year-book of Agricultural Facts." Routledge.

A marvellous shilling's worth for the mass of facts compacted together in it! Gathered from all quarters and arranged according to the subject, furnished with an index, it is a store house of all manner of agricultural information. The only criticism we can make upon it applies to all such collections, viz., that the statements of facts contained in it depend for their trustworthiness upon all sorts of authorities.

When a writer states anything on his own responsibility, his assertions soon acquire a certain positive and proportional value by which the reader can guide the confidence to be placed in them; but when contributions have been levied from every store house of hints and facts for farmers, editorship consisting merely in condensation and classification, the various assertions have extremely various values as guides to practice, and the reader has no guide to their relative trustworthiness.

Thus we happened to open the book at its 58th page where Poa annua, Hordeum pratense, and Cynosurus cristatus are named among Grasses of superior quality; while Lolium perenne is named as a Grass of medium quality, and Poa pratensis and Poa trivialis are classed together as of similar quality, and Festuca duriuscula is placed in the same class with Bromus erectus and Holcus lanatus, and Festuca pratensis is not named at all. Of course the authority for this classification is given, but unless the reader refers to the paper from which it is extracted, and sees within what limits, or under what circumstances the writer arrived at these conclusions, he will certainly be misled, for there is not one of these statements to which the practical man will not object.

This however is a long account of but half a page in a book containing 168 of them filled, as closely as small type and clever packing have enabled, with an immense store of useful agricultural information. It is one of the cheapest shilling's worths we have seen.

The Agriculture of Berkshire. Pp. 44. By the Rev. J. C. Clutterbuck. Bell & Daldy, Fleet Street.

Our readers have already seen the contents of this pamphlet, as they were last year published in weekly

sections in our columns. We strongly recommend them to procure it in its completed form as one of the best geo-agricultural essays we have seen. Besides being descriptive of the geology and of the agriculture of a central and important English county, it teaches and illustrates truths which are everywhere of the highest practical importance.

Miscellaneous.

Californian Bur Clover.—Its name is derived from spherical burs, from an eighth to a quarter of an inch in diameter, which it bears in clusters of three. This bur Clover is found in nearly all parts of the State, and is extremely valuable as food for stock. Cattle do not like it much when green; but after it dries, the burs fall upon the ground, and are picked up by the cattle, while the stranger is astonished at seeing cattle pasturing and keeping fat on what appears to him to be the bare yellow ground. The bloom consists of three very small yellow flowers. It is said that the stalks of this Clover take root whenever the joints touch the ground. *Hutching's California Magazine.* [Specimens for which we are indebted to Mr. Andrew Murray show this to be the common Medicago denticulata.]

Calendar of Operations.

JANUARY.

BERWICKSHIRE MERSE FARM; *Jan.* 21—Notwithstanding predictions to the contrary, it has blown fresh these three days, and all that remains of the deep snow is to be found behind fences and plantations. Partial thaws having occurred twice or thrice since the new year, we have got quit of it very quietly, and it is to-day for the first time that the streams are nearly brimful. Snow commenced falling on 16th December, and during three or four days it accumulated to the depth of a foot, the air being quiet and comparatively mild. On Christmas Eve, however we were suddenly seized with one of the severest frosts ever known; a protected thermometer, 4 feet above the ground, indicating a minimum of 4° below zero, and not rising higher during the day than 10°. Three days it persisted with similar intensity, but mitigated as to its effects by the absence of rime; moreover it is noteworthy that the barometer was low. As a contrast, on the 16th and 17th Feb. 1855, with a high barometer, the hoar frost floated palpably in the air, and covered the trees with spikes a couple of inches in length, killing most of the Evergreens. Owing to the previous continuance of wet, few had any store of Turnips; and a large portion of those in store being hard frozen at Christmas, they had to be supplemented by an extra allowance of cake and meal. On many farms it was necessary to send all hands afield, in all weathers; and many a hand and foot got severely frost-bitten in consequence—some of the cases very serious. For sheep it was a decided change for the better; for now they got their meat clean, with a warming feed of hay and straw. Hay-ricks are pretty well exhausted, and we should fear to face another month of such weather; but, as far as yet gone, we believe live stock in general have come through much better than last year, Turnips having been so well protected. Work is wofully far behind—much worse than last year. Some fields of Wheat and Oats, and a large moiety of the Bean crop, still stand exposed. Some are carting the sheaves in to their wintering cattle—the only use they are fit for. The breadth of Wheat sown is a mere trifle, and there is a prevailing impression that Barley pays better than spring Wheat; but of course further operations may be influenced by the character of next month. Much stubble is yet to plough, besides almost all lea and Turnip land; and it will be hard work to get ready for seed time. Swedes, on the other hand, demand immediate attention, lest black frost should follow. Barley is a good crop, and Oats limited; but of fine quality. Bad as were our anticipations of the Wheat crop, the reality surpasses them. From want of frost winds the condition has not improved, and 59 lbs. per bushel is considered a good weight. We threshed some the other day, yielding under 30 bushels per acre, and weighing 52½ lbs., price 34s. per quarter. Last year we had the same variety weighing 65½ lbs. *J. T.*

ISLE OF ELY: *Written during the frost.*—An agricultural report just now seems almost needless, as nearly all work is suspended. Manure carting, which found employment for the horses during the early part of the frost, is now completed, and nearly all the horses are idle; we have between 20 and 30 ourselves doing nothing every day, and this occasions great difficulty in finding work for the men. Thrashing is being vigorously carried on, and a few weeks longer continuance of this weather will make sad havoc amongst the corn stacks. The increased supplies and the general stoppage of navigation have tended to check operations, and but few buyers of Wheat are to be found, and those few select the best samples offering, and secure them at lower prices. The tendency of a long frost is to make Wheat cheaper during the period of its continuance, but it prepares the way for a better trade afterwards, as millers working at their old stocks all the time are prepared to make large purchases to replenish those wasted stocks as soon as deliveries become possible. A good many labourers are out of work, and there must be great suffering amongst them, and the longer the frost continues the more serious will it become. Some who had the pits drawn out before the frost can keep on claying, but those who were not so fortunate are driven to wait until we get a thaw before they can proceed with this most invaluable operation. Claying finds employment for nearly all our surplus labour during a portion of the winter months, and no money expended upon the farm yields so large or so quick a return. Sheep keeping is getting scarce; the Cole seeds are fast hastening to an end, and the Mangel crop was deficient. The price of meat remains good, but must be still higher as spring advances we conceive. Growing Wheats have been covered most of the frost with snow, but are now bare and look much cut. The winds have been high and severe during the last two or three days, and have made vegetation look very withered. We fear the long-continued and intensely severe frosts of the last four weeks will seriously affect our light Fen Wheats, but no definite information can be arrived at until we get a decided change in the temperature, which seems at present very unlikely. The thermometer ranges very low, having fallen to 5° below zero on the night of the 24th December, and on no night since has it exceeded 32°, but has frequently registered 7°, 11°, 14°, 15°, 17°, 20°, 25°, 28°, and 30°. The lowest temperature we remember for so long a continuance. *Your Fen Reporter.*

WESTER ROSS: *Jan.* 21.—A thorough and very agreeable thaw has at length set in. For several days the frost has been greatly less severe; on Saturday evening the rain began to fall, and now the wind blows softly from the west. Should the weather continue for a few days, mild as it now is, the frost would be entirely gone, and the plough would be again at work. For this there is unusual necessity. Many fields of stubble have yet to receive their winter furrow, and only a small breadth of Wheat has as yet been sown. We do not recollect a year in which, in the middle of January, we could say, as we now can, that we do not know of one well-brairded field of Wheat in the whole county. The harvest was so late, and the frost came so soon, that the earliest sown Wheat is so little above ground that we cannot yet decide what effect the intense and protracted frost has had upon it. Of the Wheat, however, we are less afraid than we are of the Turnips. Strange to tell, notwithstanding the heavy falls of snow in other quarters, we have not yet had a depth of 2 inches, hence our fears in regard to the Turnip crop. As long as the frost continued the sheep made no distinction—eating fully as readily an unsound as a sound one, apparently glad to meet with a Turnip on which their teeth would make an easy impression. Now, however, they will be more particular, and speedily the thaw will unfold the full amount of damage; what remains of the softer kinds, which should have been all eaten before now, must be nearly entirely destroyed; whilst the Swede and the Green-top Yellow will not escape unhurt. In the autumn many let their Turnips at a low figure, supposing, from the abundance of the crop, and the loss of sheep last spring, that there would be difficulty in getting them consumed at any price. Now, however, the demand has increased, the price is advancing, and before Grass come, Turnips will be a costly commodity. Considerable loss will be sustained, especially by the poor people, from the Potatoes being frosted. This might be easily prevented by covering the pits with horses' manure. The return of fresh weather has cheered the hearts of our working class, into many of whose dwellings destitution had entered.

STATE OF THE WEATHER—BERKSHIRE.
For the week ending January 24: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain.	Wind	Barometer.
		Max. in Sun.	Max. in shade.	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	18 ..	34.2	33.0	29.0	31.2	36.0	..	S.E.	30.14
Saturday	19 ..	34.4	33.0	26.0	30.0	36.0	..	S.W.	30.6
Sunday	20 ..	38.2	38.0	32.0	34.8	36.0	0.05	W.	30.10
Monday	21 ..	42.2	42.0	35.0	38.2	36.0	0.01	W.	30.30
Tuesday	22 ..	58.4	42.6	27.0	38.7	36.0	..	S.W.	30.25
Wednesday	23 ..	61.0	38.4	31.6	40.5	36.5	0.04	S.W.	30.10
Thursday	24 ..	37.2	36.6	31.0	33.9	36.5	..	S.W.	29.90

The readings are taken at 9 A.M on the days named; and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

BONEDUST: *T J.* For clay land you had better apply it dissolved in acid. Mangel Wurzels grown on clay soil, autumn cultivated, and manured with farm yard dung, will repay an additional dressing of 3 cwt. per acre of super-phosphate of lime. It is not however at all likely that on clay land well tilled, dependence on farm yard dung is likely to result in any appreciable diminution in fertility—the way which A. B. has pointed out.

COTTAGE ACCOMMODATION: *Merevale.* Landowners can borrow money of the Land Improvement Companies who advertise in our columns for cottage buildings, giving a rent charge on their estates for a period long enough for the repayment of principal and interest.

CLOVER: *J B. Handon House.* Mr. Lawes' "mixed mineral manure," used in his experiments on Meadow land, was found greatly to increase the growth of Clover. It consisted of 3 cwt. of superphosphate of lime, 300 lbs. of sulphate of potash, 200 lbs. of sulphate of soda, 100 lbs. of sulphate of magnesia. If you apply these they should be mixed and sown broadcast early in spring. Probably two thirds of these quantities would be a sufficient dressing.

MANURES, LINSEED CAKE, &c.—The London Manure Company report that the arrivals of Peruvian guano have been this week confined to one cargo of 556 tons. Nitrate of soda is very firm and will probably be dearer when the frost breaks up; sulphate of ammonia as last report. Cakes of all kinds exceedingly firm owing chiefly to the small stock and the scarcity of feeding stuff. Linseed, both in bag and barrel, fully maintain the prices quoted. Rape and Cotton much asked for, and supply limited.

		£	s.	d.		£	s.	d.
Peruvian Guano, direct from Importers' Stores or ex Ship	per ton.	12	5	0	to	12	12	0
Bones	,,	4	15	0	to	5	5	0
Ditto, crushed..	,,	6	0	0				
Ditto, half-inch	per qr.	0	17	6	to	0	19	6
Ditto, dust	,,	0	17	6	to	0	19	6
Animal charcoal (70 per cent. Phosphate)	per ton.	4	10	0	to	5	0	0
Coprolite, Cambridge, whole	,,	2	2	0				
Ditto ditto, ground ..	,,	2	13	0				
Ditto Suffolk, whole ..	,,	1	15	0				
Ditto ditto, ground ..	,,	2	6	0				
Nitrate of Soda	,,	13	10	0	to	14	10	0
Sulphate of Ammonia ..	,,	14	10	0	to	15	0	0
Gypsum	,,	1	10	0				
Salt in (London)	,,			..		..		
Sulphuric acid, concentrated 1 845	per lb.	0	0	1				
Ditto, brown, 1.712	,,	0	0	¾				
Superphosphate of Lime ..	per ton.	5	10	0	to	6	6	0
Blood Manures	,,	6	5	0	to	7	10	0
Dissolved Bones	,,	6	10	0				
Linseed Cakes, best American (barrel)	,,	11	17	6	to	12	5	0
Ditto ditto (bag)	,,	10	15	0	to	11	15	0
Ditto English	,,	11	0	0	to	12	0	0
Rape Cake	,,	6	10	0	to	7	0	0
Cotton-seed Cake	,,	7	0	0	to	7	10	0

PAMPHLET ON CHEESE MAKING: *Harleston.* The address of its author, Mr. Robert McAdam, is Gorsty Hill, near Cewde. This will help you. We do not at present know where it is published.

THE STOCKING OF PASTURE: *A C S.* wishes to know how many cows, all three years old, or all two years old, or all one year old, 100 statute acres of pasture, in fair average condition, will keep from 12th May to 10th October, in ordinary seasons? No cattle to be upon the land from January to May. [No answer can be given to this question that will be true out of the locality to which it relates. We know of land that will graze and fatten a large bullock per acre and of land that will barely keep a rabbit. Perhaps 100 acres of ordinary Grass land worth 30s. to 38s. an acre may be able to keep 70 ordinary cows, 100 two year olds, or 200 yearlings from 12th of May to 10th October. Such land may yield 8 tons of Grass per acre during its summer growth, about 800 tons of Grass between May 12 and Oct. 10, or 5 tons a day, equal to the keep of the stock named.]

NOTICE.

MESSRS. MILNE AND CO., NURSERYMEN, SEEDSMEN, and FLORISTS, Camellia Nursery, Wandsworth Road, London, S., respectfully tender their most sincere and cordial thanks to their numerous friends and patrons, for the kind and liberal support which they have bestowed upon them since their succession to the old established business of Messrs. CHANDLER & SONS, and beg to inform them, that in consequence of the decease of their senior Partner, they have admitted to a share in the Business, and as Managing Partner Mr. JOSEPH F. MESTON, whose thorough practical knowledge of Horticulture and excellent business habits, combined with several years experience in the formation of Gardens, Pleasure Grounds, Parks, &c., under W. A. NESFIELD, Esq., warrant them in assuring their customers that every requirement of the Garden will have due consideration, and that orders with which they may be honoured shall be executed, as heretofore, with care and punctuality.

GENUINE TOBACCO PAPER FOR FUMIGATING.

H. APPLEBY (Foreman to Messrs. Ivery & Son, Nurserymen, Dorking), has now a good supply of the above on hand in 4 lb. packets, 1s. 3d. per pound. For testimonials see *Gardeners' Chronicle*, January 5, 1861, page 14.

FOR SMOKING GREENHOUSES.

NEAL'S PATENT APHIS PASTILS, which light with a Candle, save all trouble, destroy all Insects, and are already used by some of the leading Gardeners, may be obtained of the principal Seedsmen and Nurserymen, 2s. per packet.—Manufacturer and Patentee, J. NEAL, Edward Street, Birmingham. Trial packets, 1s. each.

FUMIGATING AND SYRINGING.

GRIFFITHS AND AVISS, TOBACCONISTS, Coventry, call attention to their TOBACCO PAPER. It is simple in use, safe in application, altogether effective in the destruction of Green Fly, Black Thrips, &c., nominal in price, 12s. for per dozen pounds, sent to any part of the kingdom on receipt of Post Office Order. To those in the Trade a liberal discount on 28 lbs. and upwards. The following practical gentlemen have submitted it to every kind of ordeal, and bear testimony it is all we represent:—

Mr. Charles E. West, the Earl of Denbigh, Newnham Paddox
Mr. Wm. Oliver, the Earl of Craven, Combe Abbey
Mr. A. Henderson, His Grace the Duke of Sutherland, Trentham
Mr. Wm. Pool, the Earl of Aylesford, Packington Hall
Mr. John Jennings, the Earl of Derby, Knowsley Park
Mr. Thomas Pond, the Viscount Hood, Whitley Abbey
Mr. Geo. Tranter, the Hon. Granville D. Ryder, Westbrook, Hemel Hempstead
Mr. Geo. Bennett, J. Beech, Esq., Brandon
Mr. Jas. Knackston, J. R. West, Esq., Alcot Park
Mr. W. H. Mountford, H. R. Hughes, Esq., Kinmel Park, St. Asaph, North Wales
Mr. Peter Coulon, C. Webb, Esq., The Gardens, High Grounds, Hoddesden
Mr. Francis R. Kinghorne, Nurseryman, Seedsman, and Florist, Richmond, Surrey
Mr. John Reeves, Ladbroke Nursery, Notting Hill, W.
Mr. John Jennings, Nurseries, Shipston-on-Stour
Mr. Edward Perkins, Nurseryman, Seedsman, and Florist, Leamington Nursery
Mr. John Ogden, Nurseryman, Seedsman, and Florist, Coventry
Messrs. S. Perkins & Sons, Nurserymen, Seedsmen, and Florists, Coventry

*** Agents Wanted. Nurserymen and Florists preferred.

N.B. Cast Fumigating Pots, Tobacco Water for Syringing and Tobacco Juice for Sheep Dressing.

WINTER DRESSING FOR ORCHARD HOUSE AND OTHER FRUIT TREES.

Extract from the Eighth Edition of the Orchard House by Mr. Rivers.

"January paint the trees (every shoot and bud) with Gishurst Compound, half a pound to the gallon of water. This will destroy the eggs of Aphides."

Vines and outside wall trees should first be washed, or and shoots, with 8 oz. solution of Gishurst, then smeared with clay and Gishurst, (see Gardeners' Chronicle Oct. or with lime, sulphur, and Gishurst, made into a paste; if the smell be disliked, make solution 48 hours before use.

Full directions as to the use of weaker solutions against mildew and insect pests in spring and summer, with particulars of the experience of many great gardening authorities are enclosed with the boxes of Gishurst. These are supplied retail through any nurseryman and seedsman at 1s., 3s., and 10s. 6d. each, wholesale by PRICE's Patent Candle Co., Limited.

TANNED GARDEN NETTING for preserving Seed Beds, Fruits, Strawberries, from Frost, Blight, Birds, &c., and as a Fence for Fowls, &c. 1 yard wide, 1½d.; 2 yards, 3d.; 3 yards, 4½d.; and 4 yards 6d. per yard, in any quantity, may be had at CHAS. WRIGHT's, 376, Strand, W.C.

Greenhouse and Flower-pot Sticks Varnished:—1 foot, 9d.; 1½, 4d.; 2, 5d.; 2½, 7d.; 3, 10d.; 4, 1s. 6d. per dozen. Dahlia Sticks Varnished, per dozen:—3 feet, 1s. 6d.; 4, 2s. 3d.; 5, 3s.; 6, 3s. 6d. An allowance to Nurseryman.

PATENT GUTTA PERCHA SOLES.

IMPORTANT TO GARDENERS.—The Gutta Percha Company have the pleasure to acknowledge the receipt of the following letter from G. GLENNY, Esq., the celebrated Florist:—

"420, Strand, London.

"Gentlemen.—I have worn Gutta Percha Soles and Heels these two years, and being so much in a garden as I necessarily am in all weathers, and with the ground in all states, would on no account be without them. As a matter of economy I would recommend Gardeners to use them, for they can repair the worn part at all times by warming the material at the fire, and pressing it from the thick parts to the worn parts as easily as if it were so much dough. I think it the duty of all persons who must occasionally wet their feet to adopt a material that completely defies damp. Many a gardener would escape colds and rheumatism by the use of Gutta Percha Soles.

"Your obedient servant,
G. GLENNY."

Every variety of Gutta Percha articles, such as Mill Bands, Tubing, Soles, Sheet, Pump Buckets, Fire Buckets, Bosses, Union Joints, Flasks, Bottles, Bowls, Chamber Vessels, Tea Trays, Sponge Bags, Curtain Rings, Galvanic Batteries, Calbotype Trays, &c. manufactured by the Gutta Percha Company, and sold by their wholesale dealers in town and country.—The Gutta Percha Company, Patentees, 18, Wharf Road, City Road, London, E.C.

J. C. WHEELER & SON,

SEED GROWERS, GLOUCESTER,

OFFER THE FOLLOWING

SELECT VEGETABLE SEEDS (True),

Carriage Free by Rail (if ordered to the amount of 20s. and upwards)

Many of the sorts are scarce, and early Orders will be necessary.

Item	Unit	s.	d.
BEANS—Mazagan ..	per qt.	0s.	9d.
Mackie's Monarch	,,	0	10
Newington Wonder	,,	2	6
BEET—Wheeler's ex. fine,	per pkt.	1	0
BORECOLE—Cottager's Kale	,,	1	0
Asparagus Kale ..	per oz.	1	0
Couve Tronchuda	,,	1	6
BROCCOLI—Snow's Winter White,	per packet	1	0
Knight's Protecting	per oz.	1	6
Dilcock's Bride	,,	1	6
BRUSSELS SPROUTS ..	,,	1	0
CABBAGE—Wheeler's Imperial	,,	0	10
CAULIFLOWER—Walcheren,	p. pt	1	0
Stadtholder	,,	1	6

Item	Unit	s.	d.
CARROT—Scarlet Horn	per oz.	0s.	6d.
James's Scarlet ..	,,	0	4
CELERY—Incomparable,	per pkt.	1	0
Laing's Mammoth	,,	0	6
ENDIVE—Imperial Batavian,	per oz.	1	0
LEEK—Ayton Castle Giant	,,	1	0
LETTUCE—Tom Thumb,	per pkt.	1	6
Wheeler's Imperial ..	,,	1	0
Griffin's Alma	,,	1	0
ONION—White Spanish	per oz.	0	10
James's Keeping ..	,,	1	0
Tripoli	,,	1	0
PEAS—Wheeler's First Early,	per quart	1	4

Item	Unit	s.	d.
PEAS—Sangster's No. 1	per qt.	1s.	3d.
Dickson's Favourite ..	,,	1	4
Harrison's Perfection	,,	1	6
Mammoth	,,	2	6
POTATOES—Handsworth,	p. peck	5	0
Alstone Kidney ..	,,	4	0
Gloucestershire Kidney	,,	5	0
Regents	,,	2	6
Fluke	,,	2	6
RADISH—Olive-shaped,	per pint	2	[illegible]
,,	per oz.	0	4
SAVOY—Dwarf Ulm ..	,,	1	0
TURNIP—American Red Stone,	per oz.	0	3
VEGETABLE CREAM,	per pkt.	1	0

For description of the above and other extremely CHOICE VEGETABLE SEEDS, see

"WHEELER'S LITTLE BOOK,"

which will be sent post free for three stamps.

J. C. WHEELER & SON, SEED GROWERS, GLOUCESTER.

WHEELER'S

COLLECTIONS OF GARDEN SEEDS.

IN order to save trouble in ordering Seeds, we have made up Four Collections. This will be found by far the cheapest and easiest method of purchasing Garden Seeds. The Collections as we have arranged them give great satisfaction, as they include the best sorts in cultivation, and are extremely cheap.

The "Collection No. 1" comprises all the sorts requisite and necessary for the year's consumption of a large Garden, all arranged in proper quantities and correctly named. Price (carriage free) **£4.**

The "Collection No. 2" contains equally choice sorts, suitable for a middle-sized Garden. Price (carriage free) **£2 10s.**

The Collections "No. 3" and "No. 4" are just the right quantities for smaller Gardens. Prices **£1 5s.** and **12s. 6d. Both these Collections as well as the larger ones contain Tom Thumb Lettuce, Wheeler's Imperial Lettuce, Wheeler's Imperial Cabbage, Wheeler's First Early Peas, and other choice sorts.**

COLLECTION No. 3, £1 5s., CARRIAGE FREE.

1 qt. Wheeler's First Early Peas	½ oz. Early Malta ditto	pkt. Cole's red ditto	2 oz. Parsnip
2 qts. Champion of England	½ oz. Brussels Sprouts	4 oz. Cress	2 oz. Early salmon Radish
1 qt. Bedman's Imperial	½ oz. Nonpareil Cabbage	pkt. Cucumber	2 oz. Mixed Turnip
2 qts. Long-pod Beans	1 oz. Wheeler's Imperial [Cabbage	½ oz. Leek	¼ oz. Drumhead Savoy
1 pt. Windsor	½ oz. Borecole	2 pkts. Lettuce, Tom Thumb and Wheeler's [Imperial	2 oz. Prickly Spinach
1 pt. Scarlet Runner	2 oz. Long Orange Carrot	pkt. Melon	2 oz. Round ditto
½ pt. Newington Wonder	1 oz. Early Horn Carrot	4 oz. Mustard	2 oz. Early Snowball Turnip
½ oz. Red Beet	pkt. Early Cauliflower	2 oz. White Spanish Onion	pkt. Vegetable Marrow
½ oz. Southampton Broccoli	do. Cole's white Celery		do. Tomato

COLLECTION No. 4, 12s. 6d.

1 qt. Long Pod Beans	1 qt. Prizetaker	2 oz. Carrot	2 oz. White Spanish Onion
1 pt. Windsors	2 pkts. Broccoli	2 oz. Cress	2 oz. Parsnip
1 qt. Wheeler's First Early Peas	1 pkt. Cucumber	2 oz. Mustard	2 oz. Radish
2 qts. Champion of England	½ oz. Wheeler's Imperial [Cabbage	2 pkts. Lettuce, Tom Thumb and Wheeler's Imperial	1 pkt. Savoy
	1 pkt. Scotch Kail		1 oz. Turnip, red Stone

FOR DETAILS OF COLLECTIONS No. 1 & 2 SEE WHEELER'S LITTLE BOOK.

From the Rev. W. NICKISSON, *Ashley Rectory, Market Drayton.*

"It occurs to me just to mention one or two things while they are fresh upon my mind; with regard to your Seeds (both Vegetable and Flower Seeds) they are as excellent as usual, which to those who know your Seeds is, perhaps, the best testimony I can give. Your Glo'ster Kidney, on a second trial, confirms me in my opinion of its excellency which I expressed last year. As an early Kidney it surpasses in crop, soundness, and flavour, anything I know. I was anxious to see how it would stand this late wet spring, as I thought it might be affected by the long-continued wet, but this has not been at all the case. The Tom Thumb Lettuce has also given me great satisfaction, especially for continuing so long without running to seed. I have a few at the time I write which have been fit for table upwards of three weeks, and still show no signs of 'bolting.'"

From SAMUEL HITCH, Esq., M.D., *Sandywell Park.*

"I have great pleasure in telling you that all the Seeds I purchased of you in the spring of this year, in each case fully answered my expectation."

From Mr. MAXTON, *Gardener to* W. MONEY KYRLE, Esq., *of Homme House.*

"The Seeds supplied by your Firm continue to give the utmost satisfaction; where all is good it is difficult to particularise, however I have found your Beet a decided acquisition, from its medium size and fine colour. Wheeler's Imperial Cabbage I have found to be early, tender, and good. The Stadtholder Cauliflower is first rate, having very large and firm heads; all the varieties of Broccoli we had turned out well."

From Mr. BEVAN SMITH, *Manager of the Glamorganshire Reformatory.*

"Your Seeds of last year were of first-rate quality. We had a most prolific crop of Peas and Beans. The Cabbage and Roots in every way answered my expectations; indeed I may say your Seeds of every kind far surpass any I can obtain elsewhere."

From G. SHAKESPEARE, Esq., *of Stratford Villa, Llanstephan.*

"I have found your Seeds, both Garden and Agricultural, of a very superior quality, *always clean, true, and good*; this is a consideration of vital importance, and which will be readily appreciated by all who cultivate land, as when mixed and old seed is purchased a great vexation and disappointment follows, and a season lost. I shall certainly continue to deal with your House, whose business seems conducted on such sound principles as to ensure permanent custom."

From Mr. DOMMETT, *Crofty-Bwla Gardens, Monmouth.*

"Your First Early Peas I approve of very much, it is the earliest Pea I ever had. Sangster's No. 1 is a good Pea, but not so early by a week. Your Walcheren Broccoli is very good indeed."

From Mr. EDWARDES, *Gardener, Middleton Hall, Carmarthen.*

"I sowed Wheeler's First Early Peas a week or two after Sangster's No. 1, and yet they were in earlier, although Sangster's No. 1 were sown on a warm border, and the 'First Early' in the open quarter."

Wheeler's First Early Peas are included in our celebrated Collections of Garden Seeds.

J. C. WHEELER & SON, SEED GROWERS, GLOUCESTER.

NOTICE.

PURCHASERS OF LARGE QUANTITIES OF FARM OR GARDEN SEEDS will be supplied liberally by SUTTON AND SONS.

For prices apply (*stating quantity required*) to

SUTTON AND SONS,
Royal Berkshire Seed Establishment,
Reading.

NEW SORTS OF VEGETABLES.

GENUINE UNADULTERATED SEEDS of all the best kinds of VEGETABLES and all the most Showy FLOWERS are supplied at moderate prices, Carriage Free, by

SUTTON AND SONS,
Seed Growers, Reading.

PRICED LISTS gratis and post free.

Royal Berkshire Seed Establishment,
Reading.

GOOD SEEDS, CARRIAGE FREE.

SUTTON'S COLLECTIONS OF SEEDS, THE BEST YET OFFERED.

KITCHEN GARDEN SEEDS.

	£	s.	d.
No. 1.—A complete Collection, for One Year's Supply	4	0	0
No. 2.—A complete Collection, in reduced quantities, of the same sorts ..	2	10	0
No. 3.—Ditto ditto ditto	1	5	0
No. 4.—Ditto ditto ditto	0	12	6

A List of the quantities contained in these Collections may be had post free for one penny stamp.

HARDY AND SHOWY FLOWER SEEDS (POST FREE).

	£	s.	d.
A Collection of the best 100 sorts known	£1	1	0
A Collection of the best 50 sorts known	0	10	6
A Collection of the best 36 sorts known	0	7	6
A Collection of the best 24 sorts known	0	5	0

JOHN SUTTON & SONS, Seed Growers, Reading, Berks.

SUTTON'S SHORT SELECT SEED LIST.

This is the most convenient and useful Seed List for those who wish for only the most useful Vegetables and the most showy Flowers.

It will be sent gratis and post free on application addressed to

SUTTON AND SONS,
Royal Berkshire Seed Establishment,
Reading.

VEGETABLE & FLOWER SEEDS of the best description.

PRICED LISTS Post Free upon application.

JAMES DICKSON AND SONS,
SEED MERCHANTS, &c.,
102, Eastgate Street, and
"Newton" Nurseries, Chester.

GARDEN SEEDS.

PRIZE MEDAL FOR SEEDS ROOTS & PLANTS. BY THE HIGHLAND AND AGRICULTURAL SOCIETY OF SCOTLAND. 1845.

THOMAS KENNEDY AND CO. are now prepared to execute orders for VEGETABLE AND FLOWER SEEDS, and will be glad to forward their NEW DESCRIPTIVE PRICED CATALOGUE free by Post to any address.

FREE DELIVERY.

All Parcels of Seeds above 30s. value will be delivered Carriage Free to the chief Railway Stations in England and Scotland and to the principal steam ports in Ireland.

Nursery and Seed Establishment, Dumfries.

SURPLUS STOCK.

JAMES GARAWAY AND CO., Durdham Down Nurseries, Bristol, offer

		s.	d.
Cedrus Deodara, 8 to 10 feet	each	7s.	6d.
Cedrus Lebani, 8 to 10 feet	,,	7	6
Taxodium sempervirens, 8 to 10 feet	,,	8	6
Pinus excelsa, 6 to 8 feet	per dozen	30	0
American Arbor vitæ, 6 to 8 feet ..	,,	30	0
Irish Yew, 4 to 6 feet	,,	30	0
Walnuts, 8 to 10 feet	,,	18	0
Sycamore, 10 to 12 feet	,,	12	0
Horse Chesnuts 10 to 12 feet	,,	12	0
Black Italian Poplars, 8 to 10 feet ..	per 100	30	0
Ditto ditto 10 to 12 feet ..	,,	50	0
Chichester Elm, 10 to 12 feet	per dozen	18	0
Scotch Fir, fine transplanted, 1½ to 2 feet,	per 1000	20	0
Ditto ditto 2 to 3 feet	,,	25	0

PRICED CATALOGUE of best SEEDS on application.
JAS. GARAWAY & Co., Durdham Down Nurseries, Bristol.

CLAPHAM DEFIANCE CUCUMBER.

CHARLES SOUTHBY, Clapham, London, S., having received many Testimonials in favour of the above, again offers it as an extra fine variety; its hardy habit rendering it a good forcer, besides being a great cropper, very fine fruit and excellent in flavour. In packets, post free, for 1s. 6d.

LYNCH'S STAR OF THE WEST CUCUMBER.—The above having stood the test of six years' trial, and still keeping a favourite with all who have grown it, induces C. SOUTHBY (by whom it was first sent out) once more to bring it forward as being the best White Spine Cucumber grown. In Packets, post free, 1s.—Clapham, S.

CUCUMBER.—KIRKLEES HALL DEFIANCE, a handsome white spine variety, from 21 to 24 inches long, smooth, very thin skin, and of exquisite flavour, an extremely free bearing kind with a very short heel, one of the best varieties for summer or winter use.

JOHN CATTELL has the pleasure of offering seed of the above of his own saving, price 2s. 6d. per packet.

Seed Establishment, Westerham, Kent.

NEW CUCUMBERS AND MELONS.

W. J. EPPS has much pleasure in stating that he has the stock of the following which has been so successfully exhibited and grown by Mr. Frost, the gardener to E. L. Betts, Esq., Preston Hall.

CUCUMBERS.—"PERFECTION," Black Spine; small *handle, fills up well and carries a fine bloom, a good cropper* and superior flavour, pronounced by competent judges to be the best Cucumber out. 2s. 6d. per packet.

"WINTER PROLIFIC," one of the best Cucumbers grown for forcing and early supply. 2s. 6d. per packet.

"GARIBALDI," Black Spine; an extraordinary Cucumber for exhibition or table, averaging 30 inches and upwards; very handsome. 2s. 6d. per packet.

MELONS.—PRESTON HALL HYBRID, first prize Regent's Park, Chiswick, and Crystal Palace. 2s. 6d. per packet.

Turner's Gem, King's Green flesh, Beechwood, Terry's Green flesh, General Havelock, and all the leading kinds, 1s. per packet.—Maidstone.

TO THE TRADE.

GIANT AYTON, OR HYBRID PRIZE LEEK, the largest growing variety in cultivation.—The Subscribers have at present for sale a few lbs. of the above, also a large quantity of very fine dwarf CURLED GREENS or BORECOLE. Prices may be had on application.—STUART & MEIN, Nurserymen and Seedsmen, Kelso, Roxburghshire.

SPLENDID PRIZE SCOTCH LEEK.

CHAS. ALEXANDER, 30, W. Register Street, Edinburgh, offers seeds of HENRY'S HYBRID SCOTCH LEEK, at 1s. per packet: Crop 1859.

AYTON CASTLE GIANT SCOTCH LEEK, 1s. per packet, 2s. 6d. per ounce.

The above are genuine, being direct from the raisers.

LEE'S NEW WHITE SPROUTING BROCCOLI.

MESSRS. JOHN AND CHARLES LEE have the pleasure to offer new seed of their WHITE SPROUTING BROCCOLI FOR 1860–61. This valuable Vegetable has established its character for hardiness by withstanding the late severe winter, when nearly every other kind of Broccoli was destroyed. It also produced an abundance of secondary heads as shown in the Photograph (published January 5), and was in every way equal to the description given of it last year. Price 2s. 6d. per packet, to be had of all the principal Seedsmen.

Nursery and Seed Establishment, Hammersmith, London, W.

WM. IVERY begs to inform his friends and patrons that he is now prepared to supply his superb NONSUCH CELERY at 1s. per packet, acknowledged by the Horticultural Society and all who have tasted it to be the best flavoured in cultivation. Price to the Trade on application, Seeds of all description selected from the best growers at moderate prices, a very choice Collection of Standard and Dwarf Trained PEACHES, NECTARINES, APRICOTS, PLUMS, CHERRIES, &c., also NURSERY STOCK of every description.—Hanover Nursery, Peckham.—Feb. 2.

HENRY'S PRIZE LEEK.

DOWNIE, LAIRD, AND LAING are now sending out SEED of the above unrivalled LEEK, direct from Mr. Henry, in packets at 1s. This variety has gained upwards of 30 First Prizes within the last three years, and obtained the First and Second Prizes at the Edinburgh Horticultural Society's Winter Show, on the 11th Dec., 1860, the specimens then shown being solidly blanched 11 inches, and measuring 7 inches in circumference.

17, South Frederick Street, Edinburgh, and Stanstead Park, Forest Hill, London, S.E.

TOM THUMB LETTUCE.

J. C. WHEELER AND SON have but a few packets of this very dwarf, compact, and excellent flavoured LETTUCE to offer this season, price 1s. 6d. each.

From Miss HUMPHREYS, *Pembroke.*

"Your Tom Thumb Lettuce is most delicious."

From Mr. ATKINS, *Gardener to S. Allaway, Esq., Courtfield, near Ross.*

"You Tom Thumb Lettuce is extremely good; the flavour is exquisite."

From Mr. GEO. BOND, *Walcot Gardens, Shropshire.*

"Your invaluable Tom Thumb Lettuce is certainly the best I ever saw."

THIS LETTUCE IS INCLUDED IN OUR CELEBRATED COLLECTIONS OF GARDEN SEEDS.

J. C. WHEELER & SON, Seed Growers, Gloucester.

WHEELER'S IMPERIAL LETTUCE.—We can highly recommend this as being the best Cos Lettuce grown. 1s. per packet.

From General DRUMMOND, *of The Boyce Court.*

"I have been well satisfied with the Plants and Seeds with which you have supplied me for the last 20 years. I am especially pleased with the Wheeler's Imperial Cos Lettuce."

From Mr. W. MOFFATT, *Gardener to* JOHN MIREHOUSE, Esq., *of Brownslade, Pembroke.*

"Let me have the same quantity as usual of your Wheeler's Imperial Lettuce. I have found it this season to do better than any other sort; it is most assuredly a first-rate Lettuce."

From Mr. SHARPE, *Gardener to* The Right Hon Lord SUDELY.

"Wheeler's Imperial Cos is an excellent Lettuce."

From Mr. EDWARDS, *Gardener to* E. HOLLAND, Esq., M.P.

"I have grown your Imperial Cos Lettuce for three years, and it has proved itself to be the best of its class."

From Mr. B. GOLD, *Gardener to* Capt. VAUGHAN, *of Brynog.*

"Your Lettuce is the best of its kind; I took the First Prize with it this year."

From Rev. JOHN RAWES, *Alveston, Bristol.*

"I have been much pleased with Wheeler's Imperial Cos Lettuce."

THIS LETTUCE IS INCLUDED IN OUR CELEBRATED COLLECTIONS OF GARDEN SEEDS.

See Testimonials in another column respecting Messrs. Wheeler and Son's collections of Garden Seeds.

J. C. WHEELER & SON, Seed Growers, Gloucester.

TO THE TRADE.

H. AND F. SHARPE'S CATALOGUE OF GARDEN AND AGRICULTURAL SEEDS, including their selected List of the most improved varieties of Early and Late Potatoes, can be had on application.

Reasonable offers can be made of the under-named:

Early Emperor Peas	Beck's Prizetaker
Early Double Blossomed Frame	Fairbairn's Blue Surprise
	Dwarf White Marrow
Bellamy's Improved	Adelaide Dwarf
Green Marrow	Blue Prussian
Bedman's Imperial	Burbridge's Eclipse
Flack's New Imperial	Shilling's Grotto

Seed Growing Establishment, Wisbech, Cambridgeshire.

JOHN CATTELL'S COLLECTIONS OF KITCHEN GARDEN SEEDS carriage free to any railway station in the Kingdom.

COMPLETE COLLECTIONS FOR THE WHOLE YEAR, suitable for large and small gardens.

Collection No. 1	.. 4l. 0s.	Collection No. 3	.. 1l. 10s.
Collection No. 2	.. 2 10	Collection No. 4	.. 0 15

The above are selected from an unrivalled stock of Vegetables, and nearly all are saved under J. C.'s own superintendence. Lists of quantities supplied in each collection may be had on application.

COLLECTIONS OF FLOWER SEEDS.

100 packets of the best and most showy hardy and half hardy varieties .. .. 20s.

50 do. do. do. .. 10s. | 25 do. do. do. .. 6

Any kinds not required should be named in the order that they may be omitted from the collection. Cash or references respectfully requested from those who have not previously favoured J. C. with their orders.

Seed Establishment, Westerham, Kent.

NOTICE.—FREE TO ANY RAILWAY STATION IN ENGLAND.

EPPS' COLLECTIONS OF NEW AND GENUINE GARDEN SEEDS.

	£ s. d.
No. 1.—Consists of 30 quarts of the best kind of Peas and Beans, and every other kind of Seed necessary in like proportions, sufficient for a year's supply of a large garden	3 15 0
No. 2.—20 quarts of Peas and Beans, and other seed in like proportion	2 10 0
No. 3.—Do., smaller supply	1 5 0
No. 4.—Do., for a small garden	0 12 6

All Orders (except from known Correspondents) to be accompanied with a remittance.

Mr. EPPS trusts it is not necessary to blazon forth the names of his patrons, and their reports of the high character of his Seeds, but simply to state that every care in growing and selecting has been taken to insure the confidence of his friends.

Maidstone Seed Establishment

Fig. two-thirds of the natural size.

ZINNIA ELEGANS FLORE PLENO (double-flowered varieties, various colours mixed).—These are, without exception, the most remarkable and unexpected novelties of the present season. Per packet, 1s. and 2s. 6d., Continental saved seed.

CLIANTHUS DAMPIERI, English seed, 2s. 6d. each, or three for 5s. Foreign seed, 12 for 2s. 6d.

GYNERIUM ARGENTEUM (Pampas Grass), seed packets, 1s. and 2s. 6d.

SENECIO ELEGANS NANA CŒRULEA FLORE PLENO, new bedding plant; 1s. and 2s. 6d.

ATROPLEX HORTENSIS RUBRA, red-leaved bedding plant, 6d. and 1s.

LOBELIA BICOLOR MARMORATA, beautiful bedding plant, 1s.

DIANTHUS CHINENSIS NANUS ATROSANGUINEUS, beautiful bedding plant, 1s. and 2s. 6d.

PTERIS TRICOLOR, the beautiful new variegated Fern, 2s. 6d.

The above with other novelties are fully described in

MESSRS. E. G. HENDERSON & SON'S ILLUSTRATED SEED CATALOGUE AND AMATEURS' GUIDE. Post free on application Seeds carriage free to destination.

The WELLINGTON CAULIFLOWER, the finest kind in cultivation; pure white, size of head over 2 feet; in growth very dwarf, the stem not more than 2 or 3 inches from the soil. It is one of the hardiest varieties known, standing the extreme variation of climate even at New York. In these as well as all other points it is superior to all old kinds, being reliable for crop in such seasons when others have failed; and, moreover, a splendid variety for forcing. Per packet, 2s. 6d.

VEGETABLES are in this Catalogue also brought out prominently before the reader, so that an uninstructed person may light on the best of each section and its especial usefulness; for instance, among Peas, the best early, the best general crop, the best late, the best dwarf, the finest flavoured, the most prolific, &c., may be selected as required.

The following should be sown immediately for Bedding and Ornamental Garden decoration:—

Lobelia speciosa, 1s.	Maurandya, blue
Anagallis, large blue, 6d.	,, white
,, large red, 6d.	,, red
Perilla nankinensis, 6d.	Lophospermum Hendersoni, 6d
Bedding Calceolaria, mixed, 2s. 6d.	Thunbergia, of sorts, 6d. each; mixed, 1s.
Dianthus Heddewigii, 6d. & 1s.	Tropæolum elegans and Atrococcineum, 1s. each
,, laciniatus, 6d. & 1s.	Petunia coccinea, 1s.
Isotoma, of sorts, 6d. each	,, choice mixed, 1s.
Cobœa scandens, 6d., 1s., & 1s. 6d.	

BEDDING PLANTS for Propagation may now be supplied in strong plants of Petunias, Fuchsias, Salvias, Bedding Dahlias, pot roots; Verbena, Calceolaria, Tropæolum elegans and Stainfordiana.

COTTAGERS' KALE.

CHARLES TURNER can supply seed from selected plants of this delicious Winter Green. It is the only plant of its class unharmed by the late severe weather.

Price to the Trade on application.

POTATOES.

CHARLES TURNER has a fine stock of the DALMAHOY, round, early, a great cropper, producing double the quantity of most kinds: of a good uniform size, of excellent flavour and floury; the best Potato grown for a general crop, being also a good keeper.

GLORY OF ENGLAND (Kidney) one of the earliest, most prolific, and in all respects one of the best Potatoes ever introduced.

Also fine healthy sets of all the leading kinds. See Catalogue.

SEED CATALOGUE.

CHARLES TURNER'S DESCRIPTIVE LIST, containing several Novelties, and a Selection of the best established varieties, is now ready.

PELARGONIUMS.

CHARLES TURNER'S plants of the above are remarkably fine of all the classes, and in great variety. If purchased by the dozen are at very moderate prices.

CINERARIAS.

CHARLES TURNER'S select named varieties of the above can be supplied at 12s., 21s., and 30s. per dozen. These are of the finest quality.

GENERAL SPRING CATALOGUE OF PLANTS.

CHARLES TURNER'S NEW LIST is now Ready; it comprises new and general Collections of PELARGONIUMS, FANCY do., CINERARIAS, DAHLIAS, AZALEAS, FUCHSIAS, VERBENAS, VARIEGATED GERANIUMS, SCARLET do., ACHIMENES, GLOXINIAS, CALCEOLARIAS, PETUNIAS, CHRYSANTHEMUMS, PHLOX, CARNATIONS, PICOTEES, PINKS, AURICULAS, &c. &c.

WELLINGTONIA GIGANTEA, AND CUPRESSUS LAWSONIANA.

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All the Catalogues enumerated will be forwarded gratis and post free.

THE ROYAL NURSERIES, SLOUGH.

PINE APPLE PLACE NURSERY, EDGEWARE ROAD, W.

ARTHUR HENDERSON AND CO. beg respectfully to announce that their CATALOGUE of Kitchen Garden and Flower Seeds for 1861, with a list of Garden Implements, &c., is now published, and will be forwarded postage free, on application.—For details and particulars of New Vegetables, see *Gardeners' Chronicle* of 5th and 12th January.

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200 fine sorts of the above, properly named		£3 12 0
100 ,,	,,	2 0 0
100 showy and good kinds,	,,	1 5 0

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CAREY TYSO, FLORIST AND SEEDSMAN, Wallingford, begs to offer choice assortments as under, at reduced prices:—

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IMPORTED GERMAN SEEDS.—Asters, Stocks, Balsams, Larkspurs, Immortelles, Wallflowers, Phloxes, Zinnias, &c., in assortments, 1s. and 2s. 6d. each.

SELECT ANNUALS.—50 packets, 10s.; 25 do., 5s. per post to any part of the kingdom.

VEGETABLE SEEDS of all the approved sorts.

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ROBERT NEAL, NURSERYMAN, Wandsworth Common, S.W., begs to call the attention of buyers to his large and well selected stock of EVERGREENS and FLOWERING SHRUBS, ORNAMENTAL TREES, AMERICAN PLANTS, FRUIT AND FOREST TREES, STANDARD AND DWARF ROSES of every description. A large stock of BOX-LEAF EVERGREEN PRIVET, from 1 to 6 feet for hedges; GREEN HOLLY, 1 to 6 ft.; RICH BOG and LOAM for American Beds; LEAF MOULD. The Nursery is 10 minutes' walk from Clapham Common, and New Wandsworth Station, Crystal Palace Line.

LARGE TREES, ETC.

WM. PAUL (Son and Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, N., has a quantity of large handsome TREES, Evergreen and Deciduous, which must be cleared off 10 acres of the old Nurseries very shortly, and will be sold cheap. Cedrus deodara, Cedar of Lebanon, Yews, Box, Laurels, Arbor-vitæ, Privet, Red Cedar, fine specimens of choice Coniferæ, Alders, Planes, Poplars, Elms, Limes, Fruit Trees, &c. All have been frequently removed and rise with plenty of fibrous roots. Carefully taken up and delivered free to any railway station in London. Further particulars on application.—Please address WILLIAM PAUL, Cheshunt Nurseries, Waltham Cross, N.

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PINE PLANTS, Fruiting and Succession.
GRAPE VINES, from Eyes for Fruiting in Pots, or Planting.

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GRAPE VINES remarkably strong and fine, 50 varieties, all the best sorts

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JOHN WEEKS and CO., Horticultural Builders and Hot-Water Apparatus Manufacturers, King's Road, Chelsea, London. Plans, Estimates, and Illustrated Catalogues free on application.

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STANDARD CHERRIES	per 100	5	0	0
ASPARAGUS, 4 years	per 1000	1	0	0

South Eastern Nurseries and Seed Establishment, Ashford.

TREE AND SHRUB CATALOGUE.

JOHN CRANSTON begs to announce to his Patrons and the Public generally, that his DESCRIPTIVE CATALOGUE of Conifers, Ornamental Trees, Evergreen and Deciduous Shrubs, &c., is now ready for distribution, and will be forwarded on receipt of one postage stamp.

The above contains important and interesting notes with regard to the height the Trees enumerated attain, Native Country, date of introduction, and in the case of Flowering Shrubs, the colour and time of flowering.

Nurseries, King's Acre, near Hereford.

NEW ROCHELLE BLACKBERRY.

HENRY MAY has received a second importation of the above new Fruit Tree from the United States. The plants are very fine and strong. Price 12*s.* per dozen.

PYRAMIDAL PEARS on Quince, 15*s.* per dozen.

DESCRIPTIVE CATALOGUES of the above free on application to

Henry May, The Hope Nurseries, near Bedale, Yorkshire.

RASPBERRIES, Red, 10*s.* to 15*s.*; Yellow Antwerp, 8*s.* per 100. CURRANTS, Red and Black. STRAWBERRIES, Elton Pine and Keens' Seedling, 10*s.* to 15*s.*, British Queen, Eleanor, and Alice Maud, 15*s.* to 20*s.* per 1000; Eliza, Admiral Dundas, and Black Prince, 2*s.* 6*d.*, Wizard of the North, 7*s.* per 100; LAURELS, 3 to 6 feet; Bushy DUTCH HONEYSUCKLES, &c.

Geo. Cornwell, Seedsman, &c., Barnet, N.

NEW SEEDS FOR THE SPRING OF 1861.

J. H. ROBINSON'S SELECT VEGETABLE and FLOWER SEED LIST is now ready, and will be forwarded postage free to any address on application.

Warehouse: Cross Cheaping, Coventry; Seed Grounds: Abbey Farm, near Hinckley.

WHOLESALE CATALOGUE.

GEORGE JACKMAN and SON'S PRICED and DESCRIPTIVE CATALOGUE for 1860 and SPRING 1861, comprising Fruit Trees of all the leading kinds, new and selected Roses, fine varieties of American Plants, Choice and Rare Conifers, Evergreen and Deciduous Trees and Shrubs, and a fine Stock of Transplanted Forest Trees, &c., can be had free on application.—Woking Nursery, Surrey.

THE PRIMULARY, expressly for the cultivation of Latter's Superb Semi-double Fimbriated CHINESE PRIMROSES, of world-wide celebrity, with all the latest improvements, in size, shape, substance, and colours. Sealed Packets, post free to all parts of the world, on receipt of 2*s.* 6*d.* in Stamps.

Thomas Wild, The Primulary, Handford Road, Ipswich.

NEW AZALEA INDICA.—Alba unica, Adelaide von Nassau, Adolphe von Nassau, Alexander II., Aurelie, Bernard André, Bouquet de Flore, Comte de Hainault, Director Augustin, Distinction, Flower of the Day, Model, Nathalie, Queen of the Whites, Roi Leopold, Rosy Circle, Schone Mainzerin, Teutonia, Thusnelde, and William Luddick. Good clean plants; purchaser's selection of 12, 40*s.*; the set of 20, 3*l.*, hamper and packing included.

Thomas Jackson & Son, Nurserymen, &c., Kingston, S.W.

HARDY SCARLET RHODODENDRONS.

JOHN WATERER begs to announce that his New DESCRIPTIVE CATALOGUE of HARDY SCARLET and other choice RHODODENDRONS, as are annually displayed at the Royal Botanic Gardens, Regent's Park, is now published and will be forwarded on application. It likewise furnishes a List of all popular Hardy Plants, with a selection of the most desirable Conifers, with heights and prices.

The American Nursery, Bagshot, Surrey, near Sunningdale Station, South-Western Railway.

The CATALOGUE can also be had of Mr. John Kernan, 4, Great Russell Street, Covent Garden, W.C.

RHODODENDRONS, HARDY AZALEAS, ETC.

GEORGE WHEELER, Nurseryman, &c., Warminster, Wilts, respectfully announces he has a fine Stock of the above which he offers at very moderate prices, viz., good strong plants at 30*s.*, 40*s.*, 50*s.*, 60*s.* 70*s.*, and 80*s.* per 100, according to the strength of the plants.

RHODODENDRONS and AZALEAS, by name, 75*s.*, 100*s* to 200*s.* per 100.

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GERANIUMS, HERBACEOUS AND ALPINE PLANTS, ORCHIDS, CHRYSANTHEMUMS, HARDY VARIEGATED PLANTS, &c.

MESSRS. PARKER and WILLIAMS beg to inform their friends and patrons that their new priced and descriptive CATALOGUE of the above, to which are added supplemental Lists of Fuchsias, Stove, Greenhouse, and Hardy Plants, Ferns, Ornamental Foliage and Variegated Plants, Fruit Trees, &c. (which include the best new plants of the season, is now published, and will be forwarded post free on application.—Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, London, N.

R. M. STARK is happy to announce that his NURSERY STOCK has sustained comparatively little damage from the late severe frost, and he invites the inspection of intending purchasers. A Catalogue of FLORISTS' FLOWERS, BEDDING PLANTS, &c., will shortly be published.

He has also secured a supply of all the approved varieties of GARDEN, FARM, and FLOWER SEEDS (the latter including some interesting novelties), of which Lists may be had and for which orders may be left at the Nursery or his house, 7, South Charlotte Street.—Edgehill Nursery, Edinburgh, Feb. 2.

CHRYSANTHEMUMS FOR THE MILLION.

J. H. BIRD, F.H.S., Nurseryman, Stoke Newington, begs to inform his friends and the public, that he will be able to supply them with strong plants of the above Flower, in quantities from a dozen to a thousand, from his well-known stock, which is the largest in Europe, at the proper season, viz., FEBRUARY and MARCH next, at very low prices.—N.B. A new CATALOGUE will be published in January, and may be had for One Stamp.

NEW CINERARIAS OF 1860.

F. and A. SMITH are now sending out their splendid Varieties of the above, which for colour, dwarf habit, and large compact heads of bloom, are unsurpassed; many of them are finely formed, and others have the largest flowers known. A DESCRIPTIVE CATALOGUE may be had on application—Dulwich, Surrey, S.

SUPERB BALSAMS.

F. and A. SMITH are now sending out SEED of their well-known superior BALSAMS, which have maintained their character as the brightest colours. The doublest and largest flowers known for many years. In collections of 9 distinct colours, 2*s.* 6*d.* each; the same mixed, 2*s.*; half the quantity, 1*s.*—Dulwich, Surrey, S.

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Per packet—	s.	d.	Per packet—	s.	d.
Lee's White Sprouting Broccoli	2	6	Carter's Giant White Cos Lettuce	1	0
Nutting's selected dwarf Red Beet	1	0	Carter's Champion Cucumber	1	0
Tomato de Laye	0	6	New Feather-stem Savoy	1	0
Dalmeney Broccoli ..	1	0	Carter's Excelsior Melon	1	0
Conning's Perfection do.	1	0	Turner's Gem	1	0
Melville's variegated garnishing Kail	1	0	StrathmoreHeroPeas,p.qt.	2	6
Carter's dwarf Mammoth Cauliflower	1	0	Handsworth Potatoes, per peck	5	0
Hood's dwarf Imperial Celery	1	0	Pheasant Eye do. „	2	0
Lynch's Star of the West	1	0	Dalmahoy do. .. „	3	0
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For further particulars see CARTER'S SELECT LIST of GARDEN and FARM SEEDS, forwarded gratis, and post free on application.

James Carter & Co., 237 and 238, High Holborn, W.C.

ZINNIA ELEGANS FL. PL.

JAMES CARTER and CO. received a First-Class Certificate from the Horticultural Society of London, who described the above splendid novelties as follows:—"These were varieties of the well-known Zinnia elegans, in which the yellow centre or disc was transformed into florets, like those of the ray, so as to form rosettes of from 2 to 3 inches in diameter, and of various shades of colour, embracing *purple, deep rose, light rose, mottled rose, red, orange, and buff.* They were for the most part full double, and perfectly regular in form, a good deal resembling in their outline a fine double French Marigold, but larger in size." The seed offered is just imported direct from the East Indies, whence it was introduced by us last year. This seed will be found to germinate better than that saved on the continent during the past autumn. Price 1*s.* and 2*s.* 6*d.* per packet. Continental Seed 1*s.* per packet.

James Carter & Co., Seed Merchants and Nurserymen, 237 and 238, High Holborn, London, W.C.

The Gardeners' Chronicle.

SATURDAY, FEBRUARY 2, 1861.

In a paper read the other day before the Society of Arts its author, Mr. Leonard Wray, startled his hearers in the midst of a discourse about Tea by the following astounding statement:—

"From time immemorial the Chinese have been in the habit, more or less, of adulterating their Teas, but, until a very recent period, those Teas were consumed at home, and seldom if ever sold to Europeans. They however observed that the European dealers residing in Chinese ports practised this little 'art and mystery' themselves upon almost all the Teas they bought previous to shipping them. Now, 'John Chinaman,' who is an observing and highly imitative animal, seeing this interesting and lucrative business transacted so extensively under his very nose, and that, too, from month to month, and year to year, began to take counsel with himself, and speedily arrived at the conclusion that he was a great fool for surrendering this very pretty 'pigeon' to such bungling 'foreign devils.'

"We shall be in a position to appreciate the zeal with which our celestial friends set about remedying this poaching upon their own domain, when we find that, in 1859, of the Tea purchased by dealers in China seven-eighths were adulterated. The fact is, 'John Chinaman' had 'improved the occasion,' and entirely taken this little 'pigeon' out of the European trader's hands, by selling him Teas, largely adulterated it is true, but certainly most artistically got up. It mattered not whether the Teas were purchased in Canton or in the northern ports, the beautiful ingenuity of the Chinaman was as apparent in the one as in the other; and our circumvented traders groaned aloud. What was to be done? No one could tell; so they called a 'meeting' to consider the subject, and, on the 18th of April last, they met and compared notes. The immense quantity of 'lie' Tea, prepared for admixture by the Chinese, was mentioned; the cargoes of unsound leaf, brought from Japan to be 'doctored' and mixed with other Tea, were enumerated; and an interesting account was given of three plants, the leaves of which are largely employed in adulterating Teas. These are, *Gynura auriculata*, a drug which is stimulant and slightly acid, *Ardisia crispa*, and a common Mint. The meeting came to the doleful and indignant conclusion, that seven-eighths of the Tea they purchased were grievously adulterated, and that 'John Chinaman' was a great rogue.

"But in good truth this is no joke, especially when we consider that these 76 millions of lbs. ($\frac{7}{8}$ths of which are adulterated) have yet to pass through the hands of our own manipulating dealers. What it undergoes during this perilous ordeal we can only guess at, although the reports of the excise officers, and the cases in the several magistrates' courts, give us a faint idea of the nefarious practices resorted to. It was but a week or two ago that upwards of 2,000 lb. weight of pure English 'lie' Tea was seized by the officers, who admiringly pronounced it to be 'splendidly got up, and calculated to deceive the eye of any one.' When this 'manufactory' was entered by the officers, its enterprising proprietors were doing extensive business in supplying their home-made 'article' *to the trade.* Now, what with the 'lie' Tea of China and the 'lie' Tea of England, many begin to regard the Tea of our shops as being a huge 'lie' altogether. For myself, I cling to the comforting assurance that the Chinese do sell us one-eighth (of the whole quantity), or $9\frac{1}{2}$ million lbs. unadulterated, and I try to believe that this is not tampered with in any way, but comes to us pure and wholesome. Those who deal with Tea merchants of high character will have no difficulty in joining me in this belief. Who is it, then, that suffers from these double frauds? It is the million. And the lower the class, the greater are the impositions we see practised upon them; until we cannot but repeat that exclamation, which, in very bitterness of spirit, a good and tender-hearted man gave vent to, 'God help the poor!'"

As was to be expected, Mr. Wray's announcement brought on an animated discussion. Mr. Malone remarked that if the author of the paper was right, consumers "would be driven back to Sir John Barleycorn, and would prefer the malt tax to drinking such a compound as it was alleged they now got under the designation of Tea. He had himself had put into his hand a substance which he was told was extensively used in the adulteration of Tea. It was a substance called *Valonia*, said to be the cup of the acorn of a foreign Oak. It contained a large quantity of tannin or astringent matter. People generally preferred full-flavoured Tea, and it was said that much of the adulteration was due to that circumstance."

On the other hand Mr. White "believed the statement that seven-eighths of the Tea brought into England were adulterated to be a great exaggeration. Large quantities of Tea passed through his hands annually, and he could state, as the result of an extensive practical experience, that adulterated Tea was the exception, and not the rule.—Mr. Wray had commiserated the poor, who he said drank the worst descriptions of Tea, but he (Mr. White) must be permitted to say that the poor were the best judges of Tea; and in the poorest neighbourhoods good Tea could be obtained *if a proper price were paid for it*, and with *very little*, if any, adulteration. There was a great tendency in the present day to exaggerate these matters, and to find out cases of adulteration, to which a high colouring was given; but he repeated that his own experience had been that spurious Tea was the exception, and when met with it was cast aside as being almost worthless."

Mr. Reynolds also, "as a practical judge of the qualities of Tea," was in the habit of having between 200 and 300 samples in his hands daily, and emphatically denied that the great bulk of the Tea imported into this country during the last 10 years was adulterated. Adulteration had been tried; spurious Tea had been sent in, so well got-up that at a little distance it would look like gunpowder, but when water was put upon it it was found to be "lie" Tea, made of dust sweepings with starch. That description of adulteration had, however, long ceased, because there was no market for such an article. He fully concurred with the opinion expressed by Mr. White, that there were no better judges of good Tea than the poorer classes. Mr. Simmonds was also of opinion that adulteration was the exception not the rule.

Mr. Wray in reply observed that in stating that seven-eighths of the Tea sent to this country were adulterated before leaving China, or previously to its being sold to European dealers, he had the authority of a meeting held in Canton in April last. It was then decidedly shown, to the satisfaction of that meeting—composed entirely of Tea merchants—that adulteration to that extent was practised upon the Tea. He should never have presumed to make such a statement on his own unsupported authority.

Here then, upon a point of the utmost social importance, we have the most conflicting assertions. On the one hand Tea-dealers in China are represented as showing to their own satisfaction that only one pound in eight of what is exported is really Tea. On the other hand Tea-dealers and brokers here maintain that the adulteration is nothing worth notice: and as for the notion that the poor are cheated by the trade that *must* be

untrue, *because* there are no better judges of Tea than the poor! This argument seems to us to be as absurd as it is notoriously contrary to fact. Have these gentlemen who pay such easy compliments to the poor any idea what the stuff is that they are compelled to buy? If not we presume to inform them that we ourselves purchased the very day on which they discussed Mr. WRAY's paper a sample at 2*s.* 8*d.* per lb., and that, exclusive of the dust, it did not contain more than one third part of Tea; the rest consisted of leaves having no resemblance to Tea. We will add that the spurious sample then examined was possibly rather better than some which had been before us on former occasions. Do they not also know that the excise are unable to prosecute the authors of such frauds because of the rubbish on which the Custom-house officers permit duty to be paid? Oh! but, insist the Tea-dealers, people would not buy Tea *much* adulterated "if they paid a proper price for it;" that is to say 4*s.* 6*d.* or more per lb. And that is probably true *if the dust is left out of account.* But how are the poor, even supposing their taste to be so delicate as one speaker absurdly supposed,—how are the poor, we say, to pay 4*s.* 6*d.* a pound for what after all may be adulterated?

The truth of the matter appears to be this; that all low priced Teas are adulterated more or less; and that high priced Teas, as imported, are genuine. What frauds are committed in the latter are traceable to English sources, and if practised amount to little. We are therefore quite unable to accept Mr. WRAY's statement that seven eighths of the imported Tea are mixed—if he means that such is the fact with Tea consumed in England. It may be true in China: but we utterly discredit the estimate, if it is intended to apply it to Tea exported for use in the United Kingdom.

These remarks are intended to apply to the adulteration of Tea with spurious leaves, which is what we understand by the word "mixed." To what extent Tea is "drugged" for market is quite another question. In the first place all green Tea is thus treated, and we cannot blame the Chinese for the practice because the wise consumers here will have it so. They like the look of Tea painted with prussian blue although unwholesome, or with salts of chromium, arsenic, copper or lead, which are dangerous poisons. It is not very long ago since we received from a friend a sample of green Tea which had produced distressing symptoms resembling cholera. The leaves composing this Tea were perfectly genuine. The effect of using it belonged to the paint employed to make it look "nice and green." In cases of this kind buyers have no one to blame except themselves. The eyes of the most ignorant will tell him whether Tea is painted or not, and if he knowingly drinks such dangerous stuff on his own head rest the consequences. We fear that it is not known even yet that unpainted green Tea is of much the same colour as black Tea.

With Tea dust the case is different. All sorts of rubbish are rubbed down till form and colour are destroyed, and nothing less than microscopical examination or chemical analysis can detect fraud. Logwood, bark, terra japonica, and Valonia are undoubtedly employed, partly to give flavour to bad Tea, and partly to increase weight. It was quite amusing to hear an innocent gentleman expressing, at Mr. WRAY's lecture, his belief that the acorn-cups called Valonia if present among Tea must have got there accidentally. It does not seem to have occurred to him that they would first be ground to powder.

Among the questions introduced by Mr. WRAY were that of Tea cultivation, in which we find nothing new to report, and the antiquity of the practice of drinking Tea. Mr. WRAY quoted some Chinese authority to show that the virtues of Tea were first made known during the reign of an Emperor who reigned 3254 years B.C., a tradition in which Dr. FORBES WATSON expressed his disbelief. The learned KÆMPFER gives quite another account of the matter. He traces its discovery to DARWA, the third son of KOSJUWO, King of the Indies, and a famous Saint and Bishop, who took refuge in China in the year 519 A.D. There he passed a life of holiness, his whole time being devoted to teaching a knowledge of God and the true religion, and in practising austerities in the hope of securing the Divine Grace and setting a good example to the people. Moreover he fed upon leaves, and spent his nights watchful and sleepless in constant contemplation of the Supreme Being. Now once upon a time it happened, that after watching for many years, exposure to the sun and long fasting caused the holy man to fall asleep. Shocked at his violated vow and resolved that no such fault should be again committed, DARWA cut off both his eyelids, the offending parts, and angrily cast them on the ground. Returning next day to the place of his punishment the saint beheld a wonderful transformation. Each eyelid had grown into a little bush which had never before been seen on earth, and these were the first Tea Plants. Upon eating its leaves (whether raw or boiled is unknown), DARWA perceived a wondrous joyfulness of mind and renewed power of applying himself to heavenly contemplation. When he had made known to the multitude of his followers what virtues were hidden in the leaves of Tea, their employment rapidly increased, and the use of this, the "noblest of plants," spread everywhere abroad. In the meanwhile, as it had no name of its own, it became the custom to call it DARWA's eyelids. Dr. WATSON had probably forgotten this legend, the truth of which is however guaranteed by KÆMPFER, who gives a picture of the saint himself, standing on the very Reed that had the power of carrying him across seas and rivers.

IN a pamphlet called *Serres et Orangeries de plein air*, M. NAUDIN, of the Museum of Natural History, Paris, has published his ideas respecting the effect of Geothermal, that is to say, "earth heating" cultivation. In this he proposes to heat the soil and use coverings of textile materials instead of glass for the preservation of greenhouse plants during winter. This curious subject has so much importance that before offering any remarks of our own we give the following extracts, believing that M. NAUDIN's suggestions may be successfully acted upon, as regards many plants with which our greenhouses are at present overcrowded; and this with the severity of the weather in last December still fresh in our memory.

"It is known," M. NAUDIN remarks, "that vegetation proceeds in spring in proportion to the general advance of temperature, and numerous observations have shown that for each species of plants there is a certain degree of heat, without which its vegetation remains inactive. One plant begins to push at 40°, another at 50° or 55° or more. The same law regulates the flowering and fruiting as well as the ripening, and the germination of seeds; but all these changes have been almost exclusively referred to the temperature of the atmosphere, the only one on which observations are generally made, and it is here that the error lies, as we shall now endeavour to show.

"A plant of whatever kind, a tree for instance, is composed of two systems in close connection, the one above ground, the other beneath it. The aerial portion elaborates the juices which are required for the growth of the whole, but the subterranean portion is that which furnishes the materials to do this and which draws them from the soil. Now, to perform this function it is absolutely necessary that the underground portion, or root, be stimulated by a certain degree of heat; and if this degree is not attained, whatever may be the warmth of the surrounding air, the aerial portion can either make no progress, or only do so in proportion to the amount of partially elaborated sap which is contained in its tissues."

In confirmation of the latter statement, M. NAUDIN instances a Vine planted in an outside border, but having its branches trained under glass, and shows that till the soil in which the roots are situated is warmed by the sun, or other means, the Vine merely lives upon its own substance; and although the practice is attended with success in such climates as ours, yet in more northern countries, where the soil does not receive the necessary degree of heat, the Vine must be planted inside.

"There is wanting, then, for the growth in our climate of plants from warmer countries in the open ground, and without protection, not merely a sufficient atmospheric temperature, but bottom-heat as well; for it is that stimulant which causes the roots to act, and which forces to some extent the aerial parts, the stem, branches, and buds, to vegetate in concert with their roots. But how is this deficiency of heat in the soil to be remedied? The answer is evident. By artificially heating the soil, so long as its natural temperature is insufficient, by means of flues or hot-water pipes.

"But the artificial heating of the soil only fulfils one of the conditions above pointed out, and could only take effect whilst vegetation is going on; it still remains to put the stem and branches beyond the reach of frost in winter, for it is very evident that to whatever degree the soil be heated, that would not have the effect of preserving them from frost. They must therefore be protected, but in a temporary way, and so that they may enjoy in summer the advantages of a free access of air, and the direct rays of the sun. Geothermal culture will therefore consist of three essentials, which are: *planting out*, so as the roots may have full freedom as in the open ground at all times, *heating the soil at certain periods*, and *protection in winter*."

M. NAUDIN next proceeds to describe what situation should be chosen for the plantation of exotics intended to be cultivated according to his system. "As in geothermal culture it is necessary to make the most of the natural climate, it will be readily understood that we should choose the most southern aspect, or that best exposed to the sun's rays and best protected from north, north-east, or north-west winds, according to their predominance and the more or less baneful influence which they may exert in the locality. The southern side of a slope or mountain, where the country is mountainous, high buildings or walls, with a south aspect, if it is level, are circumstances that should be taken advantage of whenever they present themselves. The best condition would be a rather high wall built on purpose, and so as to afford the greatest amount of shelter from the most unfavourable wind; and at the same time it would have the effect of reflecting the sun's rays to the distance of several yards from its base.

"The soil in which the trees are planted should be isolated from the adjoining ground, and heated by flues or hot-water pipes. In the geothermal system we do not absolutely exclude the protection of glass, but we only admit it on condition that the sashes may be removed and replaced at will; but we greatly prefer to glass for protecting plants from cold the common fabrics of wool, hair, cotton, or hemp, which are less expensive, more readily moved, subject to fewer accidents, and in short equally efficacious for the purpose of protection. A frame-work of wood, simple, light, and strong, a sort of cage which would pull to pieces and be easily put together again, would serve to support the protecting materials; in short it would be merely a tent to secure the plants from cold.

"According to the climate and the locality the thickness of the walls of the tent ought to vary. At Paris, and wherever the winter is severe, it would be necessary to employ thick coverings of coarse woollen material. Nevertheless, Rush mats would suffice for the sides, and the more pliable materials should be reserved for the top. It would be necessary to cover the whole with a tarpauling reaching to the ground, which by thickening the covering would render it more effectual, and at the same time protect it from the effects of moisture. A rope netting, with large meshes interposed between the woollen covering and the tarpauling, would leave spaces filled with air which would add considerably to the protecting effect of the tent.

"An objection that would naturally arise, is this: These tents, which would of course be completely closed in frosty weather, would have a serious defect, that of keeping the plants in total darkness and causing them to be drawn up. We boldly reply that such would not be the result. In geothermal culture as in all others when properly conducted, the plants should have a season of rest, and this season is the winter. Now, plants do not become drawn up except when, stimulated by heat and moisture, they are making growth in a dark or imperfectly lighted situation. In the geothermal system the plants would be dry in winter, and no more heat would be given than would just be necessary to prevent them from suffering from cold. They would be, in fact, in such a condition that they would not push a leaf nor even a bud, and consequently would not be liable to be drawn up nor to suffer from damp. It should also be recollected that plants which have been six or eight months in the open air, which have become hardened by the direct rays of the sun, and which have not been deluged by syringings, will withstand several days of darkness infinitely better than most stove and greenhouse plants, which only receive the solar light transmitted through glass, and that frequently weakened by shading. But if a few days of obscurity can have no ill effect on evergreen plants, it would be otherwise if this darkness were to prevail for whole months, and we are far from wishing this to be the case. The tent should be constructed in such a way that it may be easily opened on the sunny side in order to give air and light readily to the interior. At intervals, or even along the whole length of the south side, the protecting materials might roll up, or pull aside like bed curtains. However severe the weather may be in

our latitudes, there are occasionally sunny days when light can be thus admitted.

"The periods at which it would be proper to put on and take off the covering depend on the season and the general climate of the locality. At Paris protecting for the winter in ordinary seasons may be commenced in the middle of October; at first it should be partial, and afterwards completed by degrees, as the frost increases. The tents should be made as close as possible during severe frost, and if the temperature of the interior descend to near the freezing point the soil should be moderately heated so as to maintain the air of the tent above 32°."

Such are the views of M. Naudin. Our own remarks we reserve till another week.

BRAZILIAN FRUITS.

In that most interesting work "Travels in Brazil," by the late Dr. Gardner, mention is made of several kinds of fruit which it seems have not been introduced to this country. As far as we can judge they would give increased interest to tropical fruit-culture, which, in spite of some of our English gardeners saying that no tropical fruits are to be compared to a good Pear or a good Peach or Nectarine, will one day form a prominent feature in our best gardens. I am half inclined to think that with you, Mr. Editor, they are not in high favour, but I trust you will one day be converted by a fine dish of Mangabas on your table.

At page 87 he mentions the Mangaba, Hancornia speciosa, as growing near Pernambuco, and bearing a fruit about the size of a large Plum, of a yellow colour streaked with red, and the flavour most delicious. It is a small tree, with small leaves and drooping branches somewhat resembling the Weeping Birch.

Page 193. The Marangaba, a nearly allied species to the Mangaba, is described. It is the "Psidium pigmeum" of Arrudo, a shrub from 1 to 2 feet high, the fruit of which is about the size of the Gooseberry, and is greatly sought after on account of its delicious flavour, which resembles that of the Strawberry.

Page 231. The Nubuzeiro (Spondias tuberosa), a fruit about twice the size of a large Gooseberry, of a yellowish colour when ripe; beneath its coriaceous skin there is a juicy pulp of a pleasant sweetish acid taste. Like the Mangaba it is only fit to eat when it is so ripe as to fall to the ground.

Page 335. On our journey from Ouso to Natividado we met with great abundance of a delicious wild fruit, a kind of Mangaba (Hancornia pubescens), different from the one that grows so abundantly in the provinces of Ceara and Pernambuco; the fruit is nearly twice its size and even more delicious.

Page 449. The Jabuticaba, a species of Eugenia (Eugenia cauliflora, Mart.) grows wild in the woods of the south of Brazil, and is also cultivated in most of the gardens of the Diamond and Gold districts. It is of a black colour, about the size of the Greengage Plum, of a pulpy consistence, and very refreshing.

In Kidder's "Sketches of Brazil" (London, 1845), mention is made of the "Jaboticabeira," a Myrtaceous plant bearing a fruit like a large purple Grape, the fruit growing from the trunk and large limbs, and "highly delicious." This was found near San Paulo.

Dr. Gardner left Brazil with much regret, for he says "the country is beautiful, and richer than any other in the world in those objects to the study of which I have devoted my life." It does indeed seem the most perfect country in the known world, taking its enormous extent, variety of climate, of surface, of soil, and productions into consideration. *T. R.*

MYCOLOGY.—No. XLII.

Agaricus vaginatus, *Bull.* The distinctive mark of the great section of Fungi known under the name of *Hymenomycetes* consists in the predominance of the hymenium over the other component parts, and its complete exposure to the action of outward agents. While however in many of the higher Agarics there is a veil in infancy which completely defends the delicate hymenium, in others there is not only a veil, but the whole plant is covered by a distinct wrapper or volva, which in the more perfectly organised species splits as the pileus expands into a number of lobes which call to mind a precisely similar appearance in many of the parasitic Phænogams of the curious natural order *Balanophoreæ*. In some species, as *Agaricus Phalloides*, both ring and volva may exist together, but in the plant before us, though the volva is most perfectly developed, there is not the slightest trace of a veil. Upon the presence of a universal volva, more or less perfectly organised, depends the subgenus *Amanita*, which by some has been esteemed of sufficient importance to be raised to the rank of a genus. To this view, however, we cannot subscribe, and enormous as the genus *Agaricus* is, even when the species are taken with considerable latitude, we greatly prefer it being retained in one large mass, subdivided into as many subgenera as may be convenient.

Agaricus vaginatus appears under two distinct forms, of each of which there are several varieties differing principally in stature and colour. In all alike the margin of the pileus is distinctly and regularly grooved, in all there is the same want of a veil, and in all the stem is stuffed with a delicate web of cottony filaments. In the one form, however, the volva forms a close fitting sheath at the base of the stem, and this is pre-eminently the form originally termed by Bulliard *A. vaginatus*; in the other the volva is broad and expanded above, and most distinctly lobed, and to this belongs the small white mountain variety appended to this notice, and called by authors *Amanita nivalis*. Occasionally the volva does not split or separate so perfectly, but leaves broad patches on the pileus. The colour is very variable, and passes through white, grey, blue, yellow, buff and brown, to a deep tawny and orange, in which state it may at first be mistaken for *A. cæsareus*, a fine species which, like *Clathrus cancellatus* may some day reward the researches of some botanist in the south of England or Ireland, or if not there at least in the Channel Isles.

This species is known in Italy by the name of Bubbolina and Bilzetto, and in France of Couconmèle grise, jaune, orangée, &c., or simply of Irandja, and Decandolle writes of it as one of the most delicate of Fungi, and the most wholesome, while Paulet, though speaking more negatively, does not attribute to it any evil qualities. Italian authors, however, are not all agreed upon the point, and some, from confounding it probably with *A. vernus*, or some other dangerous species, consider it as positively poisonous. Vittadini says that when eaten raw it has a sweet grateful taste like that of Chesnuts, without leaving behind any acrid sensation, as Persoon affirms, and that its flesh is delicate, without odour, and when dressed is easy of digestion and well flavoured. It is, however, not much used, and scarcely enters into the list of Fungi which are allowed to make

Agaricus vaginatus, *Bull*, var.
(Copied by permission from Greville's Cryptogamic Flora.)

their public appearance in the markets. In this country it is we believe very rarely cooked, but Dr. Badham speaks favourably of it, as does also Mrs. Hussey. Its flesh, being very delicate and tender, must not be over-dressed. When properly fried in butter or oil, and as soon after gathering as possible, *Ag. vaginatus* will be found inferior to but few Agarics in its flavour.

No species is more generally diffused. It makes its first appearance about the end of June, in woods and on their borders, and may be found till the end of October. It is often abundant, and as it forms in good hands an acceptable article for the table when Mushrooms are scarce, we subjoin a complete description, cautioning those who wish to make experiments of its qualities to observe particularly the grooved margin and cottony web within the stem, in the absence of which extreme caution is necessary.

Pileus 4 inches or more broad, plane, slightly depressed in the centre, scarcely umbonate, fleshy, but not at the extreme margin, which is in consequence elegantly grooved; viscid when moist, beautifully glossy when dry; cuticle easily detached, often studded with patches, the remains of the volva; stem 6 inches or more high, except in dwarf varieties, from half to an inch thick, attenuated upwards, obtuse at the base, furnished with a volva which is adnate for an inch, and then closely sheathing the stem, but with the margin sometimes expanded, brittle, sericeo-squamulose, scarcely fibrillose, but splitting with ease longitudinally, stuffed with delicate cottony threads; gills free ventricose, broadest in front, often imbricated, white. *M. J. B.*

EXTRACTS FROM MR. J. G. VEITCH'S LETTERS ON JAPAN.

(*Continued from p. 25.*)

No. XI. *British Legation, Yeddo, Nov.* 14, 1860. —My last letter, dated Nov. 6th, was written very hastily, that I might get it sent in the Legation bag. I now proceed to give you some further information about this really wonderful city. Mr. Alcock, with whom you will see I am now staying, has been exceedingly kind, and assists me as far as he can in the attainment of the objects I have in view; in return for which I am endeavouring to be of use to him, by arranging his garden, and forming for him a kitchen garden on English principles, to receive the seeds sent from Exeter, &c.

The residence of the British Legation is in one of the largest temples in Yeddo, surrounded by a very extensive and beautiful garden and shrubbery. Some of the specimen trees are very fine, such as Maples, Pines, evergreen Oaks, Salisburia adiantifolia, Camellias, &c. Aralia Sieboldi grows here in the greatest luxuriance, with several varieties of Azalea indica, and altogether it is one of the prettiest spots I have seen. On arriving I found a splendid room prepared for me, putting me in mind of England and English comforts. You can scarcely imagine how one enjoys a comfortable room after travelling and knocking about both by sea and land for so many months. Mr. A. has lent me a horse, and we ride out every day attended by Japanese officers to guard us.

This city (Yeddo) is a wonderful place, supposed to be at least 20 to 25 miles in circumference, and surrounded on all sides by extensive suburbs; it is well worthy of all that has been said of it. The walks and rides in and about it are beautiful; magnificent clumps of trees, and valleys cultivated with Rice, &c., continue into the very city itself, and often when in the centre of the town not a house can be seen—nothing but splendid banks of shrubbery and trees. The restrictions, however, placed upon the movements of foreigners are too great to allow of my walking about freely. Indeed, it is not safe to do so; I employ men, therefore, to bring me seeds and plants, and I am about to visit the nursery gardens of Yeddo, I hope, with Mr. Alcock in a few days. There I expect to find many good things; it is very annoying, however, to ride past trees and shrubs covered with seeds and not be able to gather them.

A Prussian expedition is now here endeavouring to make a treaty with the Tycoon. Mr. Alcock gives a state luncheon to them to-morrow, which will be rather a grand affair. I now find my knowledge of the French and German languages of great use to me. You will remember a Mr. Schottman, a Prussian gentleman, calling on us last spring and saying he was about to make a voyage round the world. Curious enough he is attached as botanist, &c., to the Prussian expedition now at Yeddo. He was glad, I think, to meet me; indeed, I may say the feeling was mutual. His collections go to the Berlin Botanic Garden.

You would be amused to see me talking and bargaining with the Japanese. First a few words, then sundry signs, and generally a sketch, before I can complete a transaction. We manage, however, to get on tolerably well on the whole. The climate is beautiful, with a total absence of those horrid cutting easterly winds which we often suffer so much from at this season of the year.

Since our return from Mount Fusi Yama an illustrated comic newspaper has been written, having for its title "The Illustrated Fusi Yama Gazette." Every one of us, from Mr. Alcock down to myself, is more or less caricatured, I and two or three others getting the lion's share. I am represented with a specimen case on my shoulders, with trees, &c., growing from all parts of it.

No. XII. *British Legation, Yeddo, Nov.* 20, 1860 —As I named in my last I have visited the Yeddo nurseries, and enclose a short account of them. [This will appear next week.]

Since my letter of the 6th, my time has been principally taken up in getting in plants, and having Wardian cases made, and packing them. My work at this place is now completed, and I go down to Kanagawa to-day. I have got together here a collection of various plants sufficient to fill 9 or 10 cases, to which I have more to add at Kanagawa. From Kanagawa I proceed to Nagasaki, take up the plants I collected there, and then proceed to Hong Kong to ship them off to England. I wish I could land my collections as they now are in London. I found in one of the nurseries a Tree Fern, which will probably be new, and certainly one that will do well in a hardy fernery, if not out of doors. I have secured two specimens of this, one with a 4 feet and the other with a 2 feet stem.

I enjoyed my stay in Yeddo very much, and saw a good deal of the town and surrounding country. The Japanese are certainly a very curious race of people but depend upon it, sooner or later we shall have to give up all intercourse or have a quarrel with them. It is impossible to travel inland in any direction, and the

difficulties become greater every day. Mr. Fortune arrived here on the 12th inst. He is quite well.

TENDERS

For the Heating Apparatus of the Conservatory in the New Garden of the Royal Horticultural Society, South Kensington, W. January 28, 1861.

John Weeks & Co., Horticultural Builders, King's Road, Chelsea, S.W.	£975	0	0
William Hood, 12, Upper Thames Street, E.C.	1216	0	0
A. Shanks & Son, Dens Iron Works, Arbroath, Scotland	1250	0	0
J. Tylor & Sons, Warwick Lane, Newgate Street, E.C	1300	0	0
Cottam & Co., 2, Winsley Street, Oxford Street, W.	1307	0	0
Barwell & Co., Eagle Foundry, Northampton	1321	0	0
J. Wontner Smith, 20 and 21, Tenta Street, Finsbury, E.C.	1350	0	0
W. Jeakes, 51, Great Russell Street, Bloomsbury, W.C.	1357	18	0
Alfred May, 259, High Holborn, W.C. ..	1480	0	0
Henry Ormson, Stanley Bridge, King's Road, Chelsea, S.W.	1490	0	0
Thomas Potter, 44, South Molton Street, W.	1497	14	6
John Taylor & Sons, Harrow Road, W. ..	1551	14	2
T. H. P. Dennis, Chelmsford..	1745	0	0
[N.B. This estimate includes Gratings, which are not in the other Tenders.]			
Frederick Bacon, 16, Ebury Street, Pimlico, S.W.	1839	17	0

The following also sent in Tenders, but they were imperfect:—

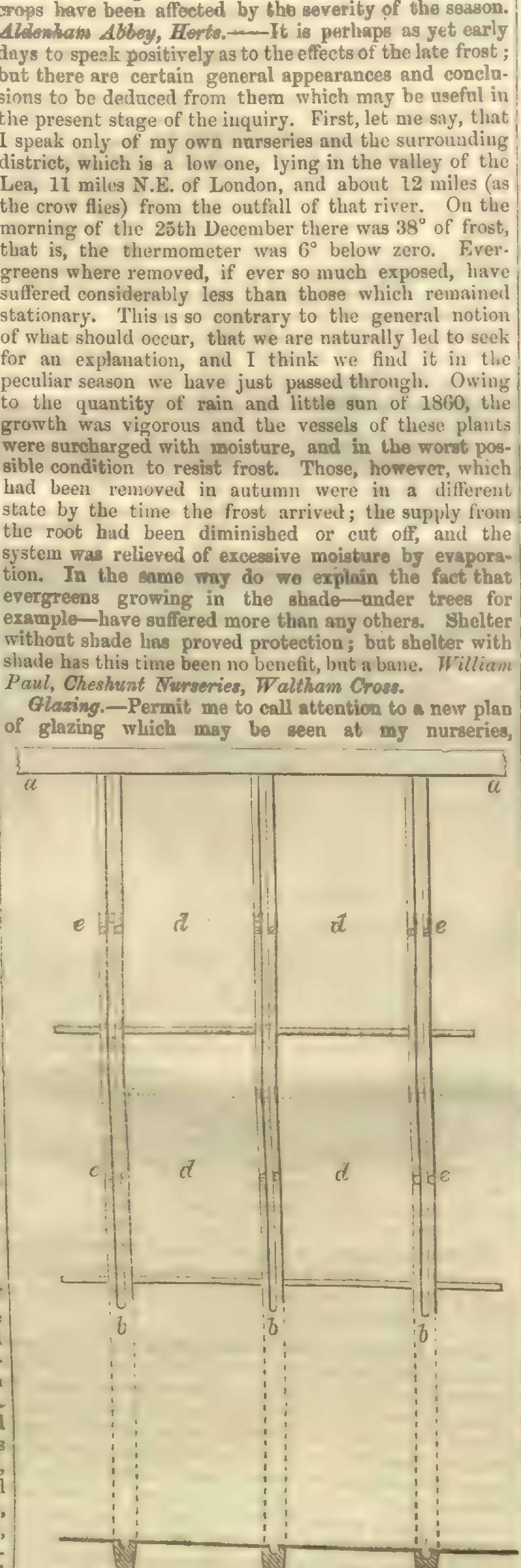
A. M. Perkins, 6, Francis Street, Regent Square, W.C.
John Meiklejohn, Westfield Iron Works, Dalkeith.
Feltham & Truss, 53, Gracechurch Street, E.C.

Home Correspondence.

Effects of the Late Frost.—The thaw of the last few days has revealed to a lamentable extent the injury done to our gardens by the late severe frost. Its ravages have certainly exceeded the former observations of most men, and following so late and wet a summer have perhaps surpassed all our recorded experience. Around us the atmosphere of the planted grounds is laden with a peculiar sickly smell, arising from the dead and decomposing leaves of those evergreens which have suffered; amongst which in this respect the Laurustinus is perhaps the chief offender. The amount of cold registered here agrees very generally with that recorded in your columns as occurring in our district. A mercurial thermometer, 3 to 4 feet from the ground, on a post in the open air, registered on Christmas morning —5½° or 37½° of frost; on the 29th ult. —1° or 33° of frost. These readings were corroborated by a second thermometer at 5 feet from the ground, outside the window of an inhabited room, with a northern aspect; which last registered uniformly throughout the frost some 4° higher; the difference being entirely due to situation. Prominently among such shrubs as are killed are the Sweet Bays, Laurustinus, Fuchsias, Phillyreas, Gum Cistus, Quercus Ilex, and Suber, some of these last being of large growth. Among the extensively injured are the common Laurel, Aucuba japonica, Garrya elliptica, Arbutus unedo, Viburnums. In a less degree the Portugal Laurels, Spurge Laurels, Boxes, and Mahonias. Of the Roses and wall fruit trees it is as yet somewhat difficult to form an accurate opinion; these have alike very generally retained their leaves through the winter, attributable to the lateness of their growth, and the immaturity of the young wood. It is probable that very much of the new wood has been destroyed, whatever much they may have suffered beyond this. Various ornamental flowering shrubs usually requiring the protection of a wall have also been unable to sustain the cold. Among them Magnolia grandiflora, old and well established, had been killed down upon an eastern wall; upon the western others are so much cut, and the loss of foliage so considerable, as to render their recovery almost hopeless. Will they spring again from the root? Foremost among the comparatively uninjured shrubs stands the queen of British evergreens, the Holly; all its varieties planted here, including ciliatum, Itea, atrovirens, serratifolium, with Maderensis, appear to be untouched; but Ilex latifolia and Perado are killed to the ground. Rhododendrons and other American shrubs of the hardy kinds are generally safe, as also the Yuccas. The greater amount of cold of this frost would appear to have tested the powers of endurance of the Coniferæ still more than the sudden and severe trial they underwent in the autumn of 1859. We have to regret the loss of some fine Montezumæ, muricata and Ayacahuite, 11 years planted, all of which kinds were somewhat injured in 1859. To these must now be added Llaveana, Roylii, and it is feared Cembroides. In several species the last year's unripened wood has perished, including that of Pyrenaica and Benthamiana, where they have stood exposed. Insignis proves very sensitive here; its growth is rapid and it likes the soil; but while some fine specimens have at times suffered and were much browned in 1859, one or more which then escaped has now been killed outright. Some fine macrocarpa, excelsa, Lambertiana, Sabiniana, and others generally recognised as hardy, are unscathed. Abies Morinda is safe in sheltered situations, but will lose many leaves where it has stood exposed. Abies Douglasii is safe. The genus Picea has scarcely suffered at all; Pinsapo, Cephalonica, nobilis, grandis, Webbiana, Nordmanniana, and amabilis, have proved their title to hardihood, albeit their progress in growth is in most instances very slow here. The younger Araucarias seem to be impatient of intense cold. With most the last year's shoot has perished; happily the finest specimen here with 20 years' vigorous growth is an exception. A few small Deodars are killed; others of various growths are killed back to the strong wood, a few young Cedars of Lebanon being affected similarly. So partial has been the effect of the cold in this case that of individuals standing in proximity some are altogether changed in colour while others are untouched. The Wellingtonias are safe. Saxe-Gothea conspicua in a well sheltered spot and upon dry soil is completely killed; Fitz-Roya patagonica nearly so. This last has never been robust, but with its companion stood the frost of 1859 unharmed. Cryptomeria japonica, where sheltered, is unhurt. Of the Cypresses, Goveniana is killed; torulosa, Uhdeana, and macrocarpa all more or less injured; several good specimens being so withered in appearance as to render their standing a summer's sun very doubtful. The Thujas, Thujopsis borealis, and Sequoia sempervirens are also sufferers in a greater or less degree. This discursive run through the pleasure-grounds may enable some of your readers to make a useful comparison of notes. Had it been continued through the kitchen department, another field of desolation would have been described. The soil of the garden is dry and upon the chalk; it rises well above the valley of the Colne. Being upon the southern bank of the river, its lies somewhat open to the north. Your readers will probably learn through other correspondents, how far the important interests of our forests and field crops have been affected by the severity of the season. *Aldenham Abbey, Herts.*

——It is perhaps as yet early days to speak positively as to the effects of the late frost; but there are certain general appearances and conclusions to be deduced from them which may be useful in the present stage of the inquiry. First, let me say, that I speak only of my own nurseries and the surrounding district, which is a low one, lying in the valley of the Lea, 11 miles N.E. of London, and about 12 miles (as the crow flies) from the outfall of that river. On the morning of the 25th December there was 38° of frost, that is, the thermometer was 6° below zero. Evergreens where removed, if ever so much exposed, have suffered considerably less than those which remained stationary. This is so contrary to the general notion of what should occur, that we are naturally led to seek for an explanation, and I think we find it in the peculiar season we have just passed through. Owing to the quantity of rain and little sun of 1860, the growth was vigorous and the vessels of these plants were surcharged with moisture, and in the worst possible condition to resist frost. Those, however, which had been removed in autumn were in a different state by the time the frost arrived; the supply from the root had been diminished or cut off, and the system was relieved of excessive moisture by evaporation. In the same way do we explain the fact that evergreens growing in the shade—under trees for example—have suffered more than any others. Shelter without shade has proved protection; but shelter with shade has this time been no benefit, but a bane. *William Paul, Cheshunt Nurseries, Waltham Cross.*

Glazing.—Permit me to call attention to a new plan of glazing which may be seen at my nurseries,



Waltham Cross. I am indebted to Mr. Monro the inventor of the Cannon Boiler for the original idea, which I have modified in working out. The plan surpasses everything I have seen for cheapness, reduction of cost in repairs, freedom from drip, increase of light, and elegance of appearance. I furnish a sketch, but I fear that it will only inadequately convey the value of the improvement. Several have seen it however, and I believe that it will soon be adopted in many places. *a*, ridge; *b*, rafters; *c*, section of rafters; *d*, glass; *e*, screws. In the usual mode of glazing a part of the rafter stands above the glass; in this case the centre of the rafter is hollowed out, *c c*, and forms a groove into which the water falls and passes rapidly away. The glass is fastened on with a small screw, and has stood the test of the recent changes of weather. *William Paul.*

The Frost and Laurustinus.—We have many fine specimens of Laurustinus; some I planted 20 years ago, but the frost has turned them all brown and killed them down to the root; they smell very offensively. My employer wishes me to cut them down directly, but I am of opinion that if I delay the operation till April, I shall see whether or not the roots are killed. If not, they will have a chance of starting afresh. Will you oblige me by stating when best to cut down, and if the bad smell is common. [It is universal.] Our Coniferæ look pretty well. Deodars and Araucarias are not hurt, nor are Hollies, nor Cedars of any kind. *Y.Z.* [On no account prune any such evergreens before the end of March or beginning of April.]

Weather Wisdom.—During the last year it was remarked by many persons that "there was no trusting to the barometer." It certainly does seem that very little weather wisdom has, as yet, been attained, particularly if we suppose that Fitzroy's Guide, published by the Board of Trade, comprises all that is known on the subject. If we refer only to the week described in your Paper of the 19th January last, we shall see that the indications of the barometer did not correspond with the rules usually laid down. "A high glass with a south wind is of rare occurrence, and shows firm dry weather." For the inaccuracy of this rule, observe that on the 11th and 12th the weather was foggy, frosty, thawing and drizzling. "A falling glass indicates either strong wind, or else that the wind will shift to S.W." The glass fell from 11th to 13th. The wind veered to the eastward; and as on the 13th there was "uniform haze," I presume there was very little wind at all. "A north-east wind with a rising glass foretells snow." This combination took place on the 17th with a thaw. "When the wind backs, *i. e.* moves against the sun, bad weather ensues." The wind backed continually through the week, but the weather did not become worse. *G. S.*

Columbines.—I see a new Aquilegia extensively advertised by the title caryophylloides. I should be glad to know whether any of your readers have grown it together with A. Durandi, and whether they have found any difference between them. I have seen a plate (coloured) only in Mr. Moore's work, but from that and the peculiar colour of the seed I am inclined to think they are identical. So many old things are brought out with new names that one likes to be certain, as far as possible, of the genuineness of the article, before paying a high price only to be disappointed in the end. *M. A.*

Botanical Nomenclature.—In connection with the remarks and inquiries which have appeared lately in your columns, I beg leave to ask—1. Whether in place of the coined word "Argemone," with its far-fetched derivation, we ought not rather to use "ἀργύρωνη," described in Hederic as "herba similis papaveri agresti?" 2. How does it happen that we have "erpetion" and "herpestis" from the same root, viz., ἕρπω? Is this on the heterographic principle? 3. Is there any good authority for pronouncing the name of the well-known Rose Chenedole as of four syllables? A gentleman staying hereabouts some time since, who had lived much in France, stated that it is the name of a well-known French poet, and a dissyllable. *O. P.* [As to Argomone you are right in quoting Hederic; but he gives no authority, and the word is written Argemone in all editions of Pliny that we have access to. Why some of the makers of generic names omit the aspirate, as in erpetion for herpetion we do not know; there are many such cases, all we believe of foreign origin. About Chenedole we can give no reply; there being no rule or authority for proper modern names. A poet of that name may be "well known" in France; but surely not here. Will you be kind enough to refer to the poet's title page and tell us how he accents his name?]

Œnothera grandiflora.—In your last issue appeared a paragraph on "Œnothera grandiflora (Lamarck)," questioning the correctness of the name, and assuming O. Jamesii to be identical with it. We can only say that Dr. Lindley kindly named the plant for us from specimens sent; "Jacques" will therefore doubtless consider this a satisfactory reply. *James Carter & Co., 237 and 238, High Holborn.* [The plant seen by Dr. Lindley had nothing to do with Œ. Jamesii, and though without its proper leaves was *probably* Œ. grandiflora, which is all he said.]

Radishes.—In your correspondent's "Kitchen Garden Remembrancer" (see p. 48), I observe a slight inaccuracy. Early Turnip Radish is put down for every month in the year to the exclusion of other and more useful varieties. *B.*

The Sirocco in Nottinghamshire.—I think that I can throw some light on the sudden hot blast experienced

by your correspondent "E. B." in the neighbourhood of Worksop. The large gasometer in that town lately turned completely over, and a large quantity of gas escaped, which on being liberated may have floated in the atmosphere until ignited by some natural agency, and caused the high temperature complained of. *D. C.*

A curious Fact in Natural History.—On the 12th of last month (January) there was found near Chepstow a sparrow's nest in a road-side hedge with the hen bird frozen to death on her eggs, five in number. The cock bird was seen at the same time apparently watching near, as was noticed by those who made the discovery. *A. A.*

Henderson's Short-topped Beet.—I was pleased to see that your correspondent "P. A. W." (see p. 48) has included, and in its class given foremost rank, to this excellent variety of Beet. Among the many good things introduced of late to the kitchen garden, none is of more value than this. After three years' experience I have always found it to possess deeper colour, dwarfer habit, and to be more constant than any other variety. *J. R. T., Crowhurst Park, Sussex.*

Hot-Water Apparatus.—As one or more of your correspondents previously to the late severe weather have asked for information respecting boilers, it is with great satisfaction that we record our willing testimony to the perfect efficiency of the very powerful upright tubular boiler erected for us by Messrs. Weeks, and which for some years up to the present period has effectively heated nearly two miles in extent of piping, without any intervening accident or replacement; some portion of the piping is laid at a considerable distance from the propelling power, yet the most remote extent is as efficiently heated as the nearest, and in the aggregate amount of service hot water is made to circulate through nearly 32 houses and structures, and, with the exception of a very limited period, the apparatus is at work nearly the whole year round. By the old system, the same extent of heating would have required about 20 separate fires. Previously to the working of our present apparatus we adopted six or seven other different boilers, but relinquished the whole of them in favour of our present one, which being self-feeding in its construction is vastly more economical and convenient in respect to labour, &c., than any other previously tried by us. Except in the severest weather it may be left in the evening self-fed for the full complement of time required for circulation until morning, without risk of the burning fuel being extinct overnight. The allotted distribution of heat through this most powerful invention to the different departments requiring various degrees of temperature, is admirably regulated by means of brass valves, a contrivance which, if not originated by Messrs. Weeks, is at least more efficiently adapted to hot-water apparatus by them than to any others previously known to us. *E. G. Henderson & Son, Wellington Nursery, St. John's Wood.*

Tom Thumb Lettuce.—This Lettuce first came into my hands some 10 years back through a friend at that time residing in the Azores, but my stock being exhausted, and thinking the Laitue Gotte à graine noir of Vilmorin's trade list six years back might be the same, I sent for some seed and found it identical. I have not the "Bon Jardinier" with me to refer to, but I am much mistaken if you will not find this Lettuce alluded to in the volume for 1850 or '51. It is an excellent variety, especially for stewing, and cooks who have once tried it will not use any other kind; that at least is my experience respecting it. *P. A. W.*

Cabbage Sowing.—I have always found plants from the middle of August sowing to be most useful, as some of them come in all through the winter, unless it is unusually severe, and a dish of what the cooks call "Spring Cabbage" is not in a gentleman's family objectionable at any time, even though it be Christmas. The great risk of early sowing is premature seeding in spring, but if the varieties I have named are procured true to name, a difficult thing to accomplish, and saved with care, but little fear need be entertained of their starting to seed. A friend of mine, one of the best kitchen gardeners in England, used to reckon to cut Atkin's Matchless Cabbage every week in the year, but the Matchless was a very different thing from what you get under that name at the present time. Now Cattell's Reliance is the nearest approach to Matchless in its pure state. I always put in these small varieties of Cabbage at 1 foot apart. When the first plants are ready by the end of September or first week in October, I put them out in rows at 2 feet apart and 1 foot in the row; and as soon as the secondary plants are large enough, I follow with the intermediate rows. I plant all crops of Brassicas in drills, and with an occasional flat hoeing afterwards to destroy weeds they get all the earthing that is needful for them. In this way a solid mass of nice compact Cabbage may be had, and in showery weather their growth may be much promoted by an occasional dusting of soot. The best time to sow them will just depend upon what is wanted, and your querist can elect for himself. *P. A. W.*

Foreign Correspondence.

NICE, *January* 14, 1861.—The nature of the winter here has enabled us in some degree to realise what it may have been, perhaps still is with you. I just escaped from England in time. The second day after getting to Paris it snowed. As I travelled south the worse the cold became, until at Nice I found the ground white with snow and hard with frost, which even a southern sun had little influence on. Happily this state of things did not long continue. In a week's time all wintry appearances and influences had disappeared, and we have had ever since mild, sometimes quite warm spring weather. What I have described as the period of our severe cold was during the Christmas week. Now Geraniums are in flower in the gardens. The Anemones which grow so luxuriantly wild here are beginning to show themselves, as well as the green budding of the new leaves of the Willows, and even the Orange blossoms in some situations may be discerned as forming. Nice is full to overflowing. Many travellers have been glad to find temporary shelter and pass on. Persons who had intended to proceed further halted here, deterred partly by the reports of the cold which awaited them in the northern parts of Italy, and partly by the unsettled state of the southern districts of the Romagna and Naples. *From an occasional Correspondent.*

Societies.

ENTOMOLOGICAL: *Jan.* 7.—J. W. Douglas, Esq., President, in the chair. The changes in the Council and officers to be proposed at the ensuing anniversary were announced. Mr. Stevens exhibited various beautiful Lepidoptera recently captured in Ceram by Mr. Wallace. Mr. Edwin Sheppard exhibited a remarkably dark specimen of Hemerophila abruptaria, and Mr. Bond various rare Microlepidoptera, including Gracillaria stigmatella. Mr. Gorham pointed out the distinction between two British species of Micropeplus. A note by Mr. Grove was read on the diurnal period of development of Acherontia Atropos; and Mr. Mac Lacland read a revision of Kolenati's second memoir on the Trichoptera, and exhibited several new British species of that order. Mr. Pickard exhibited a fine variety of Gonepteryx Rhamni, considered as a distinct species by most authors under the name of Gonepteryx Cleopatra, taken by his uncle in Yorkshire. A larva of a Noctua taken on the surface of the snow was exhibited, and Dr. Wallace alluded to Dr. Staudinger's statement of the repeated freezing of caterpillars, some of which, however, died during each experiment, whereby their numbers became gradually diminished. Mr. Grove exhibited some specimens of the cast skins of various Sphingidæ, showing the thin pellicle or covering of the limbs. Dr. Knaggs exhibited some insect eggs which had been destroyed by a small parasitic Teleas, of which specimens were exhibited. Mr. Waterhouse read a memoir containing a revision of the British species of Euplectus and Scydmænus. Mr. Scott described a new species of Coleophora, and Dr. Wallace exhibited some experiments for extracting the grease from insects by boiling their bodies in Benzine.

SYDENHAM HORTICULTURAL: A Lecture on the best mode of heating Horticultural Buildings by hot water, was delivered on Thursday evening the 11th inst., before the members of this Society, by Mr. Joseph Carter, Engineer, Peak Hill, Sydenham. Mr. Carter, by means of well executed plans and drawings, described the various forms and actions of some of the boilers now in general use. The Cannon Boiler he said had of late been much spoken of, but despite the many alterations and improvements it had undergone it was still far from being a good boiler, inasmuch as there was no means of removing the sediment from the lowest part which was in immediate contact with the fire, incrustation very soon took place, and a greater amount of fire heat was necessary to heat the water there by entailing more expense for fuel and attention. The saddle-back boiler he considered a very cheap, efficient, and economical form of boiler; it had a large area exposed to the action of the fire, and the objection to the Cannon Boiler was obviated in this by reason of the square bottoms or soles, in which a pipe or plug could be inserted and the foul water removed at any time, thereby preventing incrustation taking place so rapidly; for general purposes he thought this boiler was one of the very best if properly set. The cylindrical boiler he thought stood next to the saddle, it had also a very large surface exposed to the action of the fire, so much so that in comparing one of these with the tubular boiler, size for size, the heating surface of the former was as 165 to 113 of the latter, an advantage which must be apparent to all, and for very large or extensive work he thought the cylindrical quite as good as the tubular. The conical and the worm or corkscrew boilers were next explained by the lecturer. Of the latter of these he said, for warming small houses, such as are chiefly erected by amateurs, this kind of boiler was very suitable, as it was very cheap, efficient, and required little attention. He instanced several places in the neighbourhood where these were at work and giving satisfaction. For very large ranges of hothouses heated from a single boiler, the best in his opinion was the Cornish boiler; this was in general use where steam for manufactories, &c., was largely generated, and as it had a larger surface than any boiler he knew exposed to the action of the fire, it was both a powerful and economical boiler. Mr. Carter then proceeded to describe an invention of his own, a portable apparatus for warming small greenhouses, and judging from its effects on the lecture-room on a cold frosty night it appeared to act admirably. At the close of the lecture it was removed from there to an orchard-house belonging to S. Hodgkinson, Esq., where it was put in operation, and so convinced is that gentleman of its practical utility that he has decided on adapting it to two of his houses. The cost is trifling, and the ease with which it can be removed when not actually wanted is a great advantage over the usual fixed apparatuses. The next point to which the lecturer alluded was the piping. He strongly urged the use in all cases of large over small pipes, as the larger the heated surface, the greater the diffusion of heated air; 4-inch pipes were a very good size for nearly all kinds of houses, except very small ones. Having directed attention to the manner of firing, and the various kinds of fuel, the lecturer concluded his remarks, and a cordial vote of thanks to Mr. Carter terminated the proceedings. [We should like to know something more about this small apparatus.]

Notices of Books.

Moore's Index Filicum, Part 10 (Pamplin), just published, goes as far as Carpanthus, with seven plates of genera.

The parts of the *Flore des Serres*, for Oct. and Nov. 1858, have appeared in the present month. The Editor states that he will publish three numbers monthly till all arrears are cleared off, which will have been effected next December. The parts before us contain a continuation of the illustrations of marine aquaria, and take up the subject of the fossil plants of the coal measures, &c. Of living plants there are original figures of Pteris tricolor, and the new Arads called Caladium Belleymii (very pretty), Baraquinii, and picturatum (beautiful), a group of the double Dianthus Heddewigii, Hedysarum coronarium, the common French Honeysuckle, Æschynanthus tricolor, and a double Pomegranate called Legrellei. There is also the commencement of an article on Garden Architecture with woodcuts apparently borrowed from Downing, and a paper by M. Naudin upon Testudo culture; that is to say the management of the common European tortoise, which is said to be quite a delicacy when cooked, and to be bred for the table in Spanish convents, where it multiplies in vast numbers (*à l'infini*) in gardens planted with Lettuces and enclosed by bricks. It seems that this tortoise is fast disappearing from the South of France, where it was formerly so common that on the borders of the Durance river it supplied the peasantry with food for three months in a season of scarcity. M. Naudin advocates the revival of this sort of food, which we suppose is to be classed with that of snails and frogs and "such small deer."

Henderson's Illustrated Bouquet, Part X, contains figures and descriptions of Alocasia metallica, one of the noblest of Arads, sent from Borneo by Mr. Hugh Low, jun.; two varieties of Lilium speciosum, with a detailed and very good account of all the Lilia known in Gardens; and a plan and isometrical view of the Plant houses, &c., in Messrs. E. G. Henderson & Son's Nursery in the Wellington Road, the letter-press explaining which is to be given in the next number. The part concludes with a long horticultural account of ornamental bulbous and tuberous plants.

On the Origin of Species by means of Organic Affinity. By H. Freke, A.B. 8vo. Longmans.

We cannot pretend to give the reader a notion of the meaning of this author. He claims to be a rival of Mr. Darwin, who he informs us has "attained by analogy" to what he has "attempted to establish by induction." We are rather surprised that Mr. Freke should have introduced the word attempted; for he is evidently of opinion that his arguments, whatever they may mean, are conclusive. As a specimen of absurdity, let us quote the following passage, the italics of which are the author's:—"When we see a seed cast into the unorganised earth converting that earth's *inorganic* components into an *organised* tree, the propriety of calling that seed an organis*ing* agent, can, I conceive, scarcely be questioned. Whatever other functions or property (if any) that seed may be supposed to possess, to me it would appear obvious that it unquestionably possesses this, namely, the property of *conferring or imparting organisation* to certain constituents of the earth, which had hitherto existed in the *inorganic* or *unorganised* state. I consequently, cannot conceive the possibility of any one questioning the propriety of my designating that seed an organising agent. If instead of the seed just referred to we were to cast into the same unorganised earth a portion, say of the *woody fibre* of the tree that has been developed by that seed, we do *not* see a similar result to take place. We do not see that woody fibre (like the seed) converting the inorganic components of the earth into an organised tree. In a word, we do not see that woody fibre conferring or imparting organisation. Consequently, be the properties or functions of that woody fibre what they may, we unhesitatingly state that it is *not*, like the seed, an organising agent." Do we not indeed, good philosopher? Do you know what a bud is, or a cutting of a plant? Is not that what you call an "organising agent." Do not the roots it puts forth into the "unorganised earth" and the tree that is ultimately formed proceed

from the very woody fibre which you say does not "confer or impart organisation." Pshaw!

Parts 5 and 6 of Mr. Howard's superb *Quinologia* or illustrations of the Peruvian barks of Commerce are before us, and we are informed that the remaining 4 parts are to appear shortly. Those now issued comprehend Cinchona lutea, microphylla, conglomerata, heterophylla, Palton, and parabolica.

Bateman's Life of Dr. Wilson, the celebrated Bishop of Calcutta, has just been published by Murray in a single 8vo volume, and forms a most acceptable alteration of the first edition, the cost of which was beyond the means of many an eager purchaser. Some small and unimportant omissions have been made by the editor, in order to compress his matter, but nothing is left out which in any way affects the value of the work or diminishes the interest of Mr. Bateman's sketch of this truly great and good man. The price of the volume is 9*s*.; we mention this because it is a book to be bought and studied, not hired, read and forgotten.

The Prince of Wales in Canada and the United States. In an 8vo volume of 138 pages (Bradbury & Evans) Mr. Woods has arranged, extended and corrected those spirited sketches which so long gave new interest to the columns of the *Times*. It was fitting that they should have a more permanent existence than can be found in the Daily Newspaper press; and they now may grace the library shelf, where they will form an imperishable record of what, with great respect to French commercial treaty makers, and Garibaldian conquerors, we presume to consider the most interesting event of the year 1860. The volume is dedicated with much good taste to the Duke of Newcastle, the Prince's mentor on this great occasion, and has a useful map.

Miscellaneous.

Chair Making.—Chepping Wycombe, known as High Wycombe, is in the very heart of the Buckinghamshire woods. Beech, the sacred tree of the Romans, out of which the sacrificial cup was made, had come to be called "the Buckinghamshire weed." In old Fuller's time, Beech was held to be of value for timber, when no Oak was to be had. As long as the Oak lasted the Beech was safe from the woodman's axe for all purposes of house-building. It was still safe when the Pine, "hewn on Norwegian hills," came to us in ship-loads; and still more safe when our North American colonies sent us their deals by millions of feet. In a happy hour the people dwelling amidst the Beech woods of the Chilterns took to chair-making, and so vigorously pursued the occupation that the Buckinghamshire weed is becoming scarce, as the Oak was becoming scarce in the 17th century. It is remarkable how suddenly manufactures are localised under favourable circumstances. Chairs were, no doubt, always made in these districts. The Windsor chair has a fame of some antiquity; but the Wycombe chair-making trade was scarcely known as something remarkable 20 or 30 years ago. The demand for these chairs has grown with the enormous increase of general population; the facilities of communication with the metropolis; the rapidly extending demand of our colonies. "When I began the trade," said a large manufacturer to me, "I loaded a cart and travelled to Luton. All there was prosperous. There was a scramble for my chairs; and when I came home I laid my receipts on my table, and said to my wife, 'You never saw so much money before.'" This manufacturer now sends his chairs to London, Liverpool, and Manchester; to Australia, New Zealand, and Constantinople. He made 8000 chairs for the Crystal Palace; and, being a person of true English humour, rejoices to tell how he took his family to a Crystal Palace musical festival, and asked the attendants where they got so many chairs of one pattern, which seemed to him one of the greatest wonders of the place. Another manufacturer provided 2500 chairs, of unusual strength, for the evening service at St. Paul's; and he is providing similar chairs for the service of Ely, Exeter, and other cathedrals. He is also executing a contract for 6000 chairs for barracks—a contract not very profitable, for the Government officers insist upon having the seats of unusual thickness, which is of no real utility, but adds to the expense and the difficulty of execution, because seasoned Beech cannot be obtained in planks a quarter of an inch wider than those in general use. When official persons are wiser than the teaching of practical experience, the public must pay for their wisdom. But it is not the large contract which makes the great chair-trade of Wycombe and the neighbourhood. Let us bear in mind the immense improvement in the social habits of the British people, marking the universal progress of refinement, and consider the consequent number of houses with rentals varying from 10*l*. to 50*l*., whose tenants require useful furniture at once cheap, lasting, and ornamental. We need not then be surprised that Wycombe boasts of making a chair a minute all the year round—chairs which would not be unsightly in the handsomest sitting-room, and which can be sold at 5*s*. each. More costly chairs are here produced, as well as the commonest rush-bottom chair of the old cottage pattern. But the light caned chair, stained to imitate Rosewood, or of the bright natural colour of the Birch, and highly polished, finds a demand throughout the kingdom—a demand which might appear fabulous to those who have not reflected upon the extent to which a thriving industrious people create a national wealth which gives an impulse to every occupation, and fills every dwelling with comforts and elegances of which our forefathers never dreamt. The wondrous cheapness of the Wycombe chair is produced by the division of labour in every manufactory; and by the competition amongst the manufacturers, in a trade where a small capital and careful organization will soon reward the humblest enterprise. "I can turn out 30 dozen chairs a day," said the worthy man who occasionally carried a few dozen in a cart to Luton market when he started in business. *Knight's British Almanac for* 1861.

What Defies the Ocean.—But although, at Brighton, the burglarious Pholas is kept out of the wood of the pier by means of the iron nails, yet other parasites have established themselves on the iron armour thereof; for I observed large masses of the common mussel-shell hanging on to them, like huge bunches of Black Hamburgh Grapes. While I was looking at them from above, a colossal wave came thundering in, gave the poor mussels a tremendous blow, making them rattle again. Why did not that wave, I thought, knock off the shells? An opportunity soon came, for, on examination, I found that they are strung on together, like a rope of Onions. There is a centre rope, upon which, or rather to which, each shell is attached by an independent string; nay, more than this, each shell has tied himself on to his neighbour for common safety's sake, like the travellers do when going up Mont Blanc, as we see in Albert Smith's picture. The shell's rope looks like a very coarse bit of unravelled tow which has been soaked in water; it is, in fact, a sort of natural string. I have seen a ladies' glove made from the tow, or rather silk, secreted by the pinna-shell, and the pinna uses his silk for the same purpose as the mussel his tow, namely, to anchor himself firmly to a rock. This fact of their binding powers has been observed and even acted on by the French engineers in Cherbourg; for, to make the breakwater, they have planted, as it were, several tons of mussels, throwing them upon some loose masses of stone. In course of time, these little workmen will spin their string-like webs for self-security's sake, and will bind the loose stones firmly together, thus unconsciously making a living cement, more durable than any material ever invented by man. Thus we see that these two apparently unimportant shells—the Pholas the destroyer, and the Mussel the preserver—silently and unobserved in the depths of the ocean, may bring about important changes in the affairs of men, and even turn the scale in the destiny of nations. *Buckland's Curiosities of Natural History, 2d series.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Forcing pits will soon have to be kept in full activity to supply the various calls for plants in bloom, which during the spring months are more or less in demand in most establishments. Care should be taken before plants are moved to sitting rooms to gradually harden them for a day or two either by placing them in the conservatory or an intermediate house. In addition to keeping the conservatory gay with blooming plants, let the arrangement of the interior be occasionally changed by grouping the plants somewhat differently and adding a few striking ones, as some of the hardiest Palms, &c., for effect. Pay attention to the plants intended for successive blooming. Insects should be kept down and every means enforced to keep the foliage clean and healthy. The number of plants brought forward will depend on the demand and must be regulated accordingly. Narcissi, Hyacinths, &c., should be carefully attended to as they now begin to show flower; as regards those in a less forward state remove the plunging material down to the surface of the pots to prevent them rooting upwards. Mignonette and Neapolitan Violets will require abundance of light and air to keep them from damping. Cover pits, frames, &c. well at night. As, with the exception of forced plants, most other things are still in an inactive state, the temperature of plant houses should not be kept too warm.

FORCING DEPARTMENT.

Pinery.—Pines are often deficient in flavour at this season, which is improved by exposing the ripening fruit to all the light you can command, and giving but little water. A good supply of air is likewise essential at all times for high-flavoured fruit, and more than ever necessary at this time. Continue an increase of heat to Pines now wanted to start, employing it principally by day. Attend to linings for Pines grown in dung pits and keep the atmosphere in which they grow dry.

Early Vinery.—Remove all extra buds except such as may be required for producing bearing wood next season. In leaving these latter select such as are formed nearest the main stem to avoid the awkward appearance of long spurs at a stage further in their growth. Such shoots as have more than one bunch should have them reduced to that number, selecting the one likeliest to form the handsomest cluster. Tying in the young wood should be managed carefully, bringing the shoots to their proper position by degrees, to avoid the danger of their breaking. After the buds are started a few inches the syringe may be gradually withheld, as too much humidity at this season will sometimes retard both foliage and bunches, and a sufficient degree of moisture can easily be kept up by sprinkling the floors and heating apparatus several times daily. Regulate the admission of air so as to have a gentle current at all times through the house, increased, of course, by day agreeably with the state of the weather. Gradually advance the night temperature to 60° and then to 65° by the time the flowers are ready to open, keeping the thermometer from 10° to 15° higher by day according to the amount of light you can command. Keep up the heat in the outside border by additions when necessary, bearing in mind the injurious effects any sudden check to the roots now in action will produce on the coming crop. Bring succession Vineries into work as wanted. Late Vineries in which Grapes are still hanging will require fires daily and air sufficient to keep the house and fruit dry; remove decayed berries and dead leaves, and well protect the roots from frost.

Peach Houses.—Peaches and Nectarines which have been forced for several years oftentimes produce a large excess of fruit-buds, and this more especially on weakly trees. When therefore such is the case the latter will be greatly benefited by well thinning the bloom buds, leaving the largest and those most favourably placed; of course a considerable number will be still left to allow for casualties.

Fig House.—Damp the trees over frequently, and if wanted early increase the heat a degree or two weekly.

FLOWER GARDEN AND SHRUBBERIES.

Except in particular cases little more can be done in this department at present than paying attention to order and neatness. Bedding plants, however, must have attention, for in all likelihood many things are suffering, and such plants as appear to be injured most should be removed to other quarters where a more favourable temperature is kept. Keep stock in pits and frames well ventilated, whenever the weather will permit, and the surface soil of the pots frequently stirred. Dust with sulphur Verbenas and similar plants attacked with meldew. Be particular in keeping the interior of pits containing plants of the description just mentioned as dry as possible.

HARDY FRUIT AND KITCHEN GARDEN.

Trees attacked by scale, should now be well washed with a mixture of soft soap, tobacco water, and lime; a half pint of spirits of turpentine may be added to each 4 gallons of the mixture when the trees are much infested. The lime is added to give body to the mixture, and to show that no parts of the trees are missed in dressing. Let this be applied during dry weather, if possible, that it may remain on for some time and before the trees are nailed; washing the infected parts with water of the temperature of 160° is also a good remedy. Gishurst Compound applied in the shape of a strong lather, has likewise been proved to be a cure for scale on fruit trees.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON
For the Week ending Jan. 31, 1861, as observed at the Horticultural Gardens.

January.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind	Rain.
Friday 25	14	29.899	29.851	53	40	46.5	37	36	S.W.	[illegible]
Satur. 26	○	30.288	30.137	55	41	48.0	40	37	S.W.	[illegible]
Sunday 27	16	30.199	30.169	56	37	46.5	42	37½	S.W.	[illegible]
Mon. 28	17	30.200	30.090	56	25	40.5	42	38½	S.W.	[illegible]
Tues. 29	18	30.158	30.053	52	26	39.0	41½	39	S.W.	[illegible]
Wed. 30	19	30.104	29.989	46	38	42.0	41	39	S.W.	[illegible]
Thurs. 31	20	30.129	30.089	56	30	43.0	41½	39	S.W.	[illegible]
Average..		30.139	30.041	53.4	33.8	43.6	40.7	38.0		[illegible]

Jan 25—Densely clouded; rather boisterous; slight rain at night.
— 26—Fine; very fine; mild and overcast; rain.
— 27—Overcast; very fine; slight drizzle at night.
— 28—Uniformly overcast; very fine; foggy and frosty.
— 29—Very dense fog; clearing at noon; clear; slight frost.
— 30—Foggy; overcast; drizzly.
— 31—Fine; exceedingly fine throughout

Mean temperature of the week, 5½ deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Feb. 9, 1861.

February.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 3..	43.8	30.6	37.2	16	0.42 in.	4	4	4	3	2	13	3	[illegible]
Mon. 4..	44.3	32.4	38.4	17	0.31	3	4	4	1	7	10	4	[illegible]
Tues. 5..	45.3	33.2	39.2	16	0.39	2	3	2	2	3	13	5	5
Wed. 6..	46.0	32.7	39.3	18	0.25	2	3	4	3	4	8	[illegible]	4
Thurs. 7..	46.5	33.1	39.8	18	0.29	2	2	4	—	5	12	7	3
Friday 8..	45.6	33.2	39.4	19	0.67	1	3	4	1	5	14	4	[illegible]
Satur. 9..	45.3	31.6	38.5	14	0.71	1	5	3	2	[illegible]	14	[illegible]	[illegible]

The highest temperature during the above period occurred on the 9th, 1831—therm. 62 deg.; and the lowest on the 9th, 1847—therm. 4 deg.

Notices to Correspondents.

Books: *I C.* There is no book on the subject you mention except at a very high price—say from 5 to 20 guineas.

Frost Returns: *Alpha.* We shall deal with this subject in good time; but it is much too soon at present. We believe that Euonymus japonicus *is* killed everywhere.

Names of Plants: *M G D.* 1, Lycopodium cernuum; 2, An indeterminable Selaginella.—*Eastbourne.* Eranthis hiemalis.—*G J.* 1, Myrica cerifera; 2, Rhamnus Alaternus; 3, Cerasus lusitanica.—*J. Sheppard.* Cineraria Cyma. The boiler is under consideration.

The Kitchen Garden Remembrancer: *B.* We are not inclined to print this separately. You can cut it out and paste it on a board if you wish to do so.

Thermometers: *J M.* Your extract from Daniel's book relates to the freezing point alone, and has nothing to do with zero.

Wine Cellar Fungus: *G H B.* Fungi are so capricious in their actions that it is possible your wine corks may not be injured; but it is far more probable that they may. It would be well, therefore, to clear the spawn away, for it is undoubtedly of the same nature as that which has been so injurious in other quarters. *M. J. B.*

Misc.: *Constant Reader.* An advertisement in our columns may possibly effect the object you have in view.—*F C D.* The cost will be 4*s*. 6*d*. Remit by Post-office Order.

ARTIFICIAL MANURES, &c. — Manufacturers and others engaged in making ARTIFICIAL MANURES [illegible] every necessary instruction for their [illegible] and efficient preparation, by applying to J. C. Nesbit, F.G.S., &c., Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, [illegible], &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch. Gentlemen desirous of receiving instruction in Chemical Analysis and Assaying, will find ample facility and accommodation at the College.

THE LONDON MANURE COMPANY
(ESTABLISHED 1840,)
Are now prepared to send out the following MANUFACTURED MANURES:—
SUPERPHOSPHATE OF LIME, of best quality.
DISSOLVED BONES AND BONE MANURE FOR PASTURE.
CONCENTRATED URATE.
[illegible] MANURE FOR CORN AND ROOTS.
[illegible] MANURE FOR AUTUMN SOWING.
[illegible] the article DISSOLVED [illegible] which they guarantee every portion both of the [illegible] and insoluble phosphate, to be obtained entirely from Bone.
The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE OF SODA, SULPHATE OF AMMONIA, and every [illegible]
116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

LAWES'S MANURES.
The Manures manufactured by J. B. Lawes for the present season of 1861, are now ready for delivery at his Factories, at the following prices:—
LAWES'S PATENT TURNIP MANURE AND BONE SUPERPHOSPHATE OF LIME ... £[illegible] 6
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES ... 7 5
LAWES'S BARLEY, GRASS, AND MANGEL MANURES 8 0
These Manures can be obtained of Mr. Lawes or through his appointed Agents in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures. American and other Cakes at market prices.
Address John Bennet Lawes, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 43 per cent. of Tribasic Phosphate of Lime.
CONCENTRATED TURNIP MANURE, equal in value to [illegible]
Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

LOOK TO YOUR GRASS LANDS AND DOUBLE YOUR CROPS by dressing them with PULVERIZED BONES, to be had only of JARED TERRETT HUNT, Lambeth Wharf, Lambeth, S., and Downham Market, Norfolk. 5 cwt. [illegible] and the present the time for dressing [illegible] for Vine borders and fruit trees. Has [illegible] superphosphate of lime, gypsum, guano, and all other articles of guaranteed purity.

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BURGESS AND KEY, 95, Newgate Street, E.C. PRIZEHOLDERS for the best Agricultural Machinery Manufactures:
ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with Burgess & Key's Screw Delivery Platform. Price 42l. 10s.
[illegible] REAPER for Manual Delivery. Price 25l.
ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price [illegible]
ALLEN'S GRASS MOWER, for one Horse. Price 2[illegible] 10s.
COMBINED REAPER AND MOWER—Two Horse Machine. Price [illegible]
COMBINED REAPER AND MOWER—One Horse Machine. Price [illegible]
These Prices include Packing and Delivering at any Railway Station.
TESTIMONIALS.
A great number of highly flattering Testimonials in favour of these Machines have been received, amongst them the following from
Mr. JAMES ARNOT, of Woodcote, Carshalton.
"Having used your Machine for four years I would not be without one on any consideration; and I can safely say that I have saved over 50 per cent. in the expense every year I have used it. In fact I have never yet seen an implement which [illegible]"

JOHN FOWLER, Jun., 28, Cornhill, London, E.C.—Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address. CATALOGUES containing Prices and Testimonials sent post free.

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PROTECTION FROM THE COLD WINDS & MORNING FROSTS.
"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.
Two yards wide .. .. 1s. 6d. per yard run.
Four yards wide .. .. 3s. per yard.
An improved make, 2 yards wide, 2s. 6d. per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1s 4d. per yard run.
ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom. "It is much cheaper than mats as a covering."

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Principal—J. C. NESBIT, F.G.S., F.C.S., &c.
The system of studies pursued in the College comprises every branch requisite to prepare youth for the pursuits of Agriculture, Engineering, Mining, Manufactures, and the Arts; for the Naval and Military Services, and for the Universities.
Analyses and Assays of every description are promptly and accurately executed at the College. The terms and other particulars may be had on application to the Principal.

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Offices, 52, Parliament Street, S.W.
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Under this Company's Act Landowners may effect the following Improvements on their Estates, and charge the Outlay and expenses thereon, by way of Rent charge, to be paid by Half yearly Instalments, viz.:—
I. All works of Drainage, Irrigation, and Embankment.
II. The erection of Farm Houses, Cottages for Agricultural Labourers, and all kinds of Farm buildings.
III. The construction of Roads.
IV. The Grubbing and clearing of old Woodlands, Enclosing, Fencing, and Reclaiming Land.
The Landowners by whom any of these Improvements may be executed, are—Tenants for Life, Trustees, Mortgagees in Possession, Guardians, Committees of Incompetent Persons, Married Women, Beneficial Lessees for Lives or for a term exceeding 14 years, Corporations, Ecclesiastical or Municipal, Incumbents, Sequestrators, Charitable Trustees, &c.
The owners of Estates, not entailed, who may be desirous to avoid the expense or inconvenience of a Legal Mortgage, may also charge their Estates with Improvements under the simple and inexpensive process of the Company's Act.
The term of years for the Rent Charge is fixed by the Landowner, so as to adapt the amount of annual payment to the circumstances of the Tenants, the term for Building Works being limited to 31 years, but for all other Improvements being capable of extension to 50 years.
No investigation of Title being required, and the charge not being affected by Incumbrances, no legal expenses are incurred.
The arrangements for effecting Improvements are threefold—
No. I. The Works may be designed and executed entirely by the Landowner's Agent, and the Company employed only to supply the Loan and conduct the matter through all the forms for charging the outlay on the Estate.
No. II. The Company will supply Plans, Specifications, and Estimates for any Improvement to be executed by the Landowner's Agent, as under No. I.
In each of these cases the Landowner will be solely under the control of the Inclosure Commissioners.
No. III. The Company will undertake the entire responsibility of the Improvements, prepare the Plans, execute the Works, and finally charge on the Estate the actual amount expended, with their Commission thereon approved by the Inclosure Commissioners.
Landowners may thus obtain what assistance they require from the Company, and no more, in effecting the objects in view.
Works of Drainage and other Improvements are also executed on Commission for Landowners who merely require the skill and experience of the Company's Officers and a Staff in constant practice.
Applications to be addressed to WILLIAM CLIFFORD, the Secretary, 52, Parliament Street, London, S.W.

THE LANDS IMPROVEMENT COMPANY.—Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c. IN ENGLAND AND WALES AND IN SCOTLAND.
The Directors beg leave to announce that the Company's Amendment Bill, 18[illegible], has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.
Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.
For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

ROYAL AGRICULTURAL COLLEGE, CIRENCESTER.—Dr. VOELCKER, Consulting Chemist to the Royal Agricultural Society of England, has a VACANCY for a HOUSE PUPIL.

ROYAL AGRICULTURAL COLLEGE, CIRENCESTER.—The Veterinary Professor has a VACANCY for a HOUSE PUPIL.

AGRICULTURAL BENEVOLENT INSTITUTION.—INSTITUTED 1860.
FOR THE RELIEF OF DECAYED FARMERS, THEIR WIDOWS, AND ORPHANS.
President—HIS GRACE THE DUKE OF RICHMOND.
Treasurer—COL. THE HON. A. N. HOOD.
FIRST ELECTION OF PENSIONERS.
A GENERAL COURT will be held on THURSDAY, May 2, for the purpose of ELECTING TWENTY OUT-DOOR PENSIONERS.
BENEFITS TO OUT-DOOR PENSIONERS AS FOLLOWS:—
Male Pensioners .. .. £2[illegible] per annum.
Married Pensioners .. .. £40 ,,
Widow Pensioners .. .. £20 ,,
Subscriptions and Donations will be thankfully received by the Secretary, Mr. CHARLES SHAW, at the Office of the Institution, 55, Charing Cross, S.W.; and at the Bankers, Messrs. DRUMMONDS, 49, Charing Cross, S.W.

TENANT FARMERS' MANURE COMPANY.
ODAMS'S BLOOD MANURE FOR CORN.
ODAMS'S BLOOD MANURE FOR ROOTS.
ODAMS'S SUPERPHOSPHATE OF LIME,
MANUFACTURED BY THE PATENT
NITRO-PHOSPHATE OR BLOOD MANURE COMPANY
(LIMITED),
Consisting of TENANT FARMERS, occupying upwards of 30,000 Acres of Land.
Chairman.—JONAS WEBB, Esq., Babraham, Cambridgeshire.
All particulars may be had on application at the Offices. C. T. MACADAM, Secretary.
Offices: 109, FENCHURCH STREET. Manufactory: PLAISTOW MARSHES, ESSEX.

The Agricultural Gazette.

SATURDAY, FEBRUARY 2, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

MONDAY, Feb. 4	London (Mr. Mechi on Agricultural Prospects)	6 P.M.
TUESDAY, — 5	Wirral (on Lincolnshire Agriculture).	
WEDNESDAY, — 6	Agr. Society of England ... Noon	
	Royal Bucks, Aylesbury	
MONDAY, — 11	Botley (Mr. Haslam on Agricultural Mechanics)	
WEDNESDAY, — 13	Oxford.	

WE have before us a list of "SHORT-HORN" SALES in 1860. They do not indicate any degeneracy in the breed, its market value, or repute. Is it not a remarkable thing to know that 1000 animals of all ages were sold last year by one auctioneer for more than 40 guineas each: that no fewer than 340 reached prices between 40 and 400 guineas each, 84 of the number averaging 131*l.* 5*s.*

The following figures will be interesting in placing on record all the animals fetching prices above 80 guineas:—

Sale.	Number fetching more than 80 guineas each.	Amount. £ s. d.	Average. £ s. d.
J. S. Crawley	6	539 14 0	89 16 8
J. C. Adkins	11	1137 2 6	103 7 6
J. F. Philips	2	309 15 0	
J. Logan	1	91 7 0	..
S. E. Bolden	14	1692 12 0	120 18 0
R. Chaloner	14	2427 12 0	173 8 0
Mr. S. Stewart	3	526 1 0	—
R. Dudding	9	1103 11 0	122 12 4
Hon. H. N. Hill	10	1425 16 0	109 10 6
J. Wilkinson	1	102 18 0	
Captain Spencer	9	1171 16 0	130 4 0
G. Townshend	1	110 5 0	..
J. Price	3	388 10 0	..
	84	11,025 0 0	131 5 0

The following table again gives the classification of all the animals according to price:—

	No.	Value received. £ s. d.
Cattle sold above 100 guineas	47	7638 15 0
,, between 90 gs. and 100 gs.	17	1653 15 0
,, ,, 80 gs. and 90 gs.	20	1732 10 0
,, ,, 70 gs. and 80 gs.	37	2867 14 0
,, ,, 60 gs. and 70 gs.	49	2628 3 0
,, ,, 50 gs. and 60 gs.	68	3765 6 0
,, ,, 40 gs. and 50 gs.	112	5074 18 0
,, ,, 30 gs. and 40 gs.	207	7221 18 0
,, ,, 20 gs. and 30 gs.	306	7583 2 0
Under 20 gs.	297	4234 2 6

We add a full list of sales—the numbers sold—

the gross sum realised—and the average per head —excluding all but Short-horns with pedigrees.

Date.	Sale.	No. Sold	Amount Realised. £	s.	d.	Average. £	s.	d.
March 1	J. S. Crawley	59	2671	4	0	45	5	0
,, 15	J. Hall	62	1282	11	6	20	14	0
,, 21	C. W. Packe	18	328	2	6	18	4	0
,, 28	J. C. Adkins	51	3157	7	0	61	18	0
April 11	J. F. Phillips	32	1502	11	0	46	19	0
,, 18	Colonel Duncombe ..	62	1854	6	0	29	18	0
,, 26	G. Wentworth	38	891	19	6	23	9	0
May 3	W. W. Slye	51	1067	6	6	20	18	0
,, 10	J. Logan	72	1583	18	6	22	0	0
,, 17	Marg. Exeter	24	663	12	0	27	13	0
June 7	J. Whitehead	22	313	8	6	14	5	0
July 5	S. E. Bolden	29	2548	7	0	87	17	0
,, 18	R. Chaloner	48	4133	17	0	86	2	0
,, 19	T. Lee Norman.. ..	32	1076	5	0	33	13	0
,, 31	M. S. Stewart	88	3001	19	0	34	2	0
Sept. 7	R. Dudding	104	5154	9	0	49	11	0
,, 8	J. G. Dixon	53	1597	1	0	30	3	0
,, 26	Hon. H. N. Hill ..	50	2924	5	0	58	10	0
Oct. 3	J. Wilkinson	50	1606	10	0	32	3	0
,, 5	Captain Spencer ..	30	2004	9	0	66	16	0
,, 6	R. W. Ashburner ..	30	558	12	0	18	12	0
,, 9	W. Moore	46	1300	8	6	28	5	0
,, ,,	W. Woodward	5	98	3	6	19	13	0
,, 18	G. Townshend	31	936	12	0	33	4	0
,, 23	T. Proctor	50	1290	9	0	25	16	0
,, 30	J. Price	13	792	4	6	60	18	0
	Totals	1150	44,339	18	6	38	11	2

Even these large figures do not nearly express the sums realised by the breeders of first class stock. It is not always the successful breeder who disposes of his stock by auction. Larger prices are given by private contract than are paid in competition before Mr. STRAFFORD. Enormous sums too are given for animals sent across the seas, and probably four or five times the amounts here specified change hands annually between buyers and sellers of pure bred Short-horns in this country.

THE question of providing food for a densely populated country is both interesting and serious. Of late years we have perhaps seen and heard more of famine than there should be in a country where every science and knowledge is coaxed, urged and even tortured into progress towards perfection. We are a flesh-eating people, and to satisfy our appetites we import the cattle of other countries. We enjoy the comforts and even luxuries of life till we hold them to be things of course, and we hardly trouble ourselves with a question as to their origin, or the instrumentality by which they are provided and brought to us.

What if the theory recently broached by an ingenious Frenchman should be true! Suppose that every man takes more from the earth than he can by any process replace, so that at the death of each there is a balance due to the earth which remains unpaid. Suppose that the earth already produces as much as it can, and that undue and unnatural forcing may be productive of more harm than good, and rather induce blight and disease than increase production! And even if these speculations are unfounded, yet the growth of the population, which increases daily, makes every source of food of serious importance.

In feeding a country everything must come to use, and although poultry may not be an article of general consumption, yet it is a valuable auxiliary, and in some cases it is a positive necessity. Let us begin with eggs. Every vessel or almost every vessel of the P. and O. Steam Company, when it touches at Lisbon, takes on board, as part of the cargo, boxes of eggs. Holland, Belgium, France, parts of Switzerland and Italy are ransacked to supply this part of our eating. Our brethren across the Tweed now send immense numbers to London. In our own country there is little progress in this branch. There is still reluctance felt to embark in it, yet the consumption of poultry in London during the Christmas week reaches nearly to 200,000 birds. In the same way that people take every thing for granted, they remark without thinking that poultry is very much improved both in size and quality. We have to do chiefly with the first. If we could ascertain the number of fowls eaten, and taking the increase in the size of each at half a pound; the number of geese, and increase of each from 2 to 3 lbs.; the number of turkeys, and increase of each, 2 to 3 lbs.—we should be astonished at the increased quantity of delicate food that a little attention had provided. But the improvement in quality tells its own tale also. It is better because it is younger, and it is killed younger because it is of proper size, and in proper condition. If then we have succeeded in producing in 16 weeks, that which formerly took seven months to make, we have accomplished something in the increase of food. But we have not only done it in less time, we have made it larger. Early maturity has been attained, and this is valuable not only because it yields more food, but because it is a larger return for the quantity consumed.

We can further illustrate our argument by comparing the poultry of counties that formerly sent but very indifferent goods with what they send now, and with that sent from Ireland. Let us take Lincolnshire. We had thence years ago small shabby stunted fowls; now we have them more than doubled in size and of good quality. The consequence is, they find a ready market at good prices. The Irish importations remain what they always were—small dark chickens, with legs of every possible colour, blue, black, and yellow. They are sold at very low prices—little more than half what the Lincoln fowls make. Yet the adoption of the better breed would make the returns nearly double, and it would involve neither increase of labour nor greater consumption of food. It is undeniable that some counties are better suited to poultry than others, but there is no reason why Kent, Surrey, and Sussex should have the monopoly of the large prices that are given. Aylesbury takes 30,000*l.* annually for ducks. Cambridgeshire produces all the largest turkeys, and by exertion has taken the position formerly held by Norfolk in this particular. Soil has unquestionably much to do with success, but it is not everything. Many years ago all the geese were fatted in Essex; now one man in Norfolk fatted 6000 for the Christmas market of 1860.

Two points strike us as worthy of note, and as being proved true; they are, that there is a profitable market for any quantity of good poultry, and that there is neither soil nor weather in our climate that need deter any from keeping it. Breeding poultry may be compared to market gardening; the earliest produce realizes the best price, and poultry cared for and cultivated as gardens are, will pay as well. There is a continuous demand for it, especially for fowls, and yet these are in least favour. Geese are kept everywhere, and turkeys at most places; these are for home consumption, but that which will pay to eat will pay better to sell, and those who have no opportunities of rearing and feeding are always customers for the goods of those who have. We think the poultry question does not receive all the attention it deserves at the hands of the agriculturist. Where mowing, threshing, and all the operations of a yard and homestead are being carried on, fowls should be there what geese and turkeys are to the Barley-stubbles. They will make a good return for the food they pick up, and that which is given to them. In many parts of Sussex the chickens sold on a moderate farm in the course of a year amount to 200*l.* or 300*l.* in the balance sheet. The same is done on a smaller scale in parts of Surrey, Kent, and Hampshire. One farm in Cambridgeshire will take hundreds of pounds for turkeys from the Christmas market.

DEPTH AND FREQUENCY OF DRAINS IN STRONG CLAY SOILS.

IN reply to the inquiries of a "Gloucestershire Landlord" on these important points, I should say that no one can give a satisfactory opinion without examining both the soil and subsoil, and ascertaining by holes dug 5 or 6 feet deep in the wettest parts of the field to be drained, the depth at which the bottom water is to be reached, the height to which the water rises in the holes, and the distance a drain will lay the hole dry. About a foot below the point where the water flows most freely into the holes the tiles should be placed; a small piece of clay should be put upon the joints to prevent any silt washing in, and none of the strongest clay, especially the "pan," should be put in the drain, but be spread upon the land. The longer the drains remain open after the tiles are so placed the better. In the same field drains being so placed as to cut across the clay banks which are impervious, and to unite the porous places, will drain 20 to 50 yards, while others not so placed will not drain 3.

In page 96 of the 14th vol. of Journal of Royal Agricultural Society, will be found a valuable report on this subject by the late Mr. Jos. Trimmer. Should the "Gloucestershire Landlord" wish further information I should be happy to supply it privately or explain the process on the spot, as the space afforded in a newspaper is far too limited to give full practical details. *Berners, Keythorpe Hall, Leicester, January* 29.

THE ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

THE implement makers who withdrew from the competitive lists and the show yard mart at Canterbury were stigmatised as "conspirators;" but there never yet was a conspiracy without a previous grievance. In the case of these mechanical gentlemen there are many causes of complaint; but without detailing them, a reference to generalities will suffice to show that the Society is in the wrong as well as the exhibitors, who have dealt it such heavy damage by their non-attendance. In country towns it is all very well for hereditary gentility and professional rank to hold itself above contamination with mercantile and industrial society; but in the management of a great national institution, embracing all classes and conditions of men, aristocratic hauteur ought not to oppress machine manufacturers as if of lower caste; and there ought to be no complaints that the trade representatives in the Council have ever been slighted. When the head of a firm employing many hundreds of hands with first-rate machinery applies for an elucidation of ambiguous unbusiness-like terms in a prize sheet, the implement committee ought at least to be civil. When a deputation of the makers wait on the committee to make explanations and offer suggestions, they deserve somewhat better than an off-hand reception; the members of that committee ought not to be too haughty to explain or amend their own published terms of competition, and should be fully aware of the weight of responsibility which rests upon the office of bringing into distinction or consigning to demerit the productions of our agricultural ironworks.

The 13 manufacturers who, more determined than others equally averse to the style of procedure hitherto prevalent, withheld their productions from the show yard last year, exhibited at Warwick no less than 20,000*l.* worth of machinery and implements—the recognised models of their kind, and constituting about one third in value of the whole show. Their conduct cannot be founded upon any mere frivolous objection or fancied wrong, because rival firms, even houses on unfriendly terms with each other, combined in the movement; and that a loss to the interest of the manufacturers as well as to the Society must arise from a continuance of such a secession is probable from the fact that the importance of being present with fine stands in the showyard has led the greatest makers to expend annually some 500*l.* in the display. I do not enter now into the grounds of quarrel,—such as the violation of the understood arrangement in respect to the quadrennial arrangement of prizes, the unbusiness-like ambiguity in the terms of competition, the alleged employment of judges and officers who are either agents or rivals in trade of the firms they adjudicate upon, the want of power to object to interested umpires, and so on. It is high time that the dispute were arranged by inquiry and mutual concession, before further damage is sustained by either party. But the manufacturers certainly will not implore forgiveness on their knees because members of council may have declared that the implement-men shall be brought down.

The cure for all these evils, and the means for expanding the Society in accordance with its charter, is in administrative reform. The council is a representative body it is true; but the system of rule at present is very much like constitutional government without a free suffrage and parliamentary reports. The constituency consists of "members" annually subscribing one sovereign, and of "governors" annually subscribing 5*l.*; the president, 12 vice-presidents, and 12 trustees being elected from the latter class, and these with 50 members, or governors, elected by a general meeting of members, form the Council or ruling body. Twenty-five of the 50 general members of Council retire by rotation every year, being eligible for re-election; so that the Society, it would appear, might always place a considerable force of earnest practical men in its legislative and executive body. The fact, however, is that the vacancies are commonly filled up with noblemen, sons or sons-in-law of peers, and squires and gentry, who though generally possessing business ability and hearty sympathy with the aims and labours of the Society, do not really represent the great business portion of the constituency. At the anniversary last May two peers and a squire were chosen in preference to three first-class tenant farmers; and one earl having resigned since then, and made way for a tenant farmer, the Council now comprises four dukes, two marquises, six earls, two viscounts, eight lords, five honourables, and eight baronets, one-half the body being thus men of title, while only one-sixth consists of practical farmers cultivating the soil for profit. We know that some of the great men have done well in the Council-room and at the country meetings: but the affairs of our national Society ought to be administered by at least a fair proportion of the humbler classes constituting the vast majority of the membership.

The history of the Society reveals the secret of its oligarchic tendencies. The bye-laws and regulations promulgated with the Charter of Incorporation in 1840, ordain that the 25 annual vacancies in the Council shall be filled up by popular election at the General May Meeting, at which "all elections shall be determined by show of hands." Four years afterwards, however, the Council remodelled the code of bye-laws, "rendering the whole, as they said in their report, more exactly in accordance with the provisions of the charter," which object they conceived to be attained by quashing the "show of hands" altogether, and introducing a new method of voting that has practically disfranchised the general body of members, leaving the Council magnates at liberty to re-elect one another

at pleasure, or make their own choice of successors. By the existing regulation, the Council prepares a list of its candidates, a copy of which can be obtained by any member actually applying during certain hours of but three fixed days; and the voting takes place by each member present at the meeting giving in to the president, before the commencement of any other business, one of these lists signed by himself, having such names struck out or added as he thinks fit,—no member being allowed to vote "who does not personally deliver his list to the president." Of course only the smallest fraction of such a scattered constituency as that of the Agricultural Society is likely to be gathered together at a meeting in London; fewer still are forward to make the prescribed prior application for the house-list, and a still smaller number will choose to perform the ceremony imposed upon all voters. I look for nothing better than piecemeal improvements, unless the Council, in revising the bye-laws, make the suffrage a reality instead of a sham, and consult the convenience as well as conciliate the good-will and secure the lively interest of the whole body of members by circulating voting-papers—as practised by our benevolent institutions. Let this be done, and we shall soon send up a strong force of active spirits to invigorate the administration. The press, I am happy to say, are at last permitted to publish the names upon the standing-committees entrusted with the control of special departments; let the newspapers also give full details of the now secret proceedings, so that the constituency may not only know who is responsible, but may be able to watch the course of the legislators and managers, and tender advice or complaint at fitting opportunities, instead of remaining completely ignorant of the way in which the business of the whole body of members is conducted. Publicity of proceedings and *bonâ fide* representation would also deliver the Council from ineffective quid-nuncs, as well as, it must be added, from those old gentlemen who, having fostered and dandled the Society in its infantile days, think they must lavish the same nurse's attentions and meddling solicitude upon its mature age.

Disaffection is contagious; and the implement-makers' revolt may lead to other disasters for a Society which might, indeed, run a brilliant and beneficent career. We have mentioned in a previous paper some hopeful indications that the Council is becoming wise in time; let it meet the emergency in a liberal spirit, and so court the reliance of the stout *British farmer*.

AN ANTI-DEEP DRAINER CAUGHT AT LAST.

The following little incident may probably be deemed *apropos* of the renewed inquiry as to the depth of drains by the "Gloucestershire Landowner." On the occasion of my visiting, in the middle of last week, a very stiff clay farm which I was in the course of under-draining, I was accompanied by the tenant of an adjoining farm about which there was some talk of draining. My companion was as determined an opponent to deep draining as any Essex man, and it was evident to me that his object in walking over the work in progress was rather to justify his prejudices than to acquire information from what he saw. The frost was not out of the ground, though the men had recommenced digging, and the surface was extremely wet from the thaw being upheld by the frozen soil beneath;—no very good condition of things to make a convert of a disbeliever. As the clay was turned out of the trenches by the diggers, my companion exclaimed from time to time, "Do you think water can pass through clay like that? You may talk as long as you please about gravitation and water being 800 times heavier than air, and of steam cultivation destroying the symmetry of the Essex 'corduroys,' but you can't make me believe that water can pass through clay like that."

While we were thus talking we had moved to that part of the field which had been drained before the frost set in, and my friend in his eagerness to "cap" his declarations by a triumphant illustration turned to a test-hole midway between the finished drains, and pointed to the ice in the hole, which was level with the surface of the ground, as a conclusive indication of the little effect the drains had had in reducing the water which had stood level with the surface before the drains were dug. Lucky incident! I asked my friend to approach close to the frozen hole and I broke the ice. It fell to the bottom. The water had vanished to within a few inches of the bottom of the hole (which was 4 feet deep). No conjuror's trick was more astounding to my friend. "Come to the very edge," I exclaimed, "and tell me what has become of the water." It was my turn now, and I could not refrain from repeating "Who or what has stolen the water? You have just declared that the 4 feet drains could have no effect upon a clay like this, and as this hole stood full of water before the drains were dug and the frost covered it with ice so as to prevent evaporation—what, I again repeat, has become of the water?" My companion stared and cried, "Ah! but—ah! but—" He got no further, and I left him to reflect on this simple and conclusive answer to the question he had raised.

Having told my tale I will take the opportunity of thanking your correspondent for ranking me among your scientific friends. I do not aspire to that title. I claim simply the position of a practical observer who believes from his experience that "principles" in draining (as in most other things) should not give way to "expediency," if we would have the acts of to-day judged by the results of to-morrow. On this ground I fully concur in the decision you express in your editorial remarks, though I regret that the question of deep *v.* shallow drains should be reopened. To my mind, and I had hoped with thinking men, the question had been long ago determined. To reopen it now is to flatter expediency at the cost of principle, and to slam the door in the face of steam cultivation, for it should never be forgotten that whatever the depth you drain there are always slacks, hollows, and furrows, which, besides the thickness of the pipes themselves, practically reduce the depth in such places a foot at least, so that 3 feet drains give a minimum of 2 feet. Now, it is a common proverb in mechanical science that the strength of any substance or structure must be measured by its minimum power or dimensions, and drainage must therefore be tried by its minimum depth, as a single rupture destroys a drain, and perhaps the drainage of a whole field;—and why a steam subsoiler (now close at hand) should not raise a 2-foot pipe in the same way as a common plough is every day raising the pipes placed in the ground 18 inches deep a few years back is more than I can understand. The Gloucestershire Landowner will not give me credit for much science in taking this view of things, but when I assure him that I can only find time to write after the labours of the day are over, he will pardon my declining to enter into the discussion he desires to incite. At the same time I may repeat what I have often before ventured to state—that it is hardly possible to put too many drains in stiff clays, while to gridiron free and irregular soils, with uneven surfaces, is throwing away money which should be saved for the clays, in order to do both well without raising the average cost. *J. Bailey Denton.*

TRUNK OR ARTERIAL DRAINAGE.

A TREE IS A CORRECT TYPE OF THE ARTERIAL DRAINAGE SYSTEM.

Explanation.

1. Roots representing the Levels, Districts, and Fen Marshes intersected by natural or artificial channels, under the influence of the tide, and which are dependent upon artificial means of Drainage.
2. Trunk and Arms representing the River and Valley Tributaries, subject to Mill Rights, above the influence of the tide, and capable of natural discharge by gravitation.
3. Minor Branches and Twigs representing the upland Rivulets, Watercourses, and Ditches (public, party, and private), not subject to Mill Rights, which receive and convey to the Tributary Rivers the waters of Underdrainage of $\frac{8}{10}$ths of the Corn Lands of Great Britain.
4. Leaves representing the underdrained Fields which are connected with the Watercourses by outlets (the stalks of the leaves). *J. Bailey Denton.*

THE ALLOTMENT SYSTEM.

On this subject let me send you (1) an extract from a letter received from a friend in answer to some inquiries on the subject; (2) a form of agreement for the allotment lease—also (3) a communication received from a friend a few years ago.

——(1). The allotment system has worked admirably on Mr. ——'s Suffolk and Northamptonshire estates. It has had a decided tendency to diminish crime and drunkenness, thereby improving the morals and condition generally of the labouring classes.

When the allotments were first laid out the farmers had a great objection to them; now they acknowledge the poor man is as good a labourer as heretofore, and thus a better feeling exists between the employer and employed. In my short experience in this county I have known men formerly addicted to drunkenness become respectable members of society on entering a comfortable cottage with an allotment attached.

On letting an allotment I invariably protest against drunkenness, and tell them on my hearing of it, they must be prepared to give up their piece of land. It is right that I should state that I have seen more drunkenness in one week in ——, than I have seen here in four and a half years. Of course I do not attribute the whole difference to the allotment system, but I believe it bears materially upon the question. The allotment system is not confined to Mr. ——'s estate, but is general in Suffolk.

"When a poor man hires an allotment he undertakes to pay 17*s.*, 18*s.*, or 19*s.* per annum, according to the land for the half acre—the landlord paying the tithes and all parish rates. This arrangement is found to answer better than the poor man paying less rent and being subject to poor and church rates. They pay it in the form of rent most willingly, whereas it would in the form of rates be obnoxious to that class of persons and very troublesome to the parish officers. They also undertake to give up the land if committed of a misdemeanour—to give up possession in 14 days upon entering the union house or unnecessarily throwing themselves on the parish—to attend some place of public worship once every sabbath day when in health.

Whilst it is most praise-worthy in large landed proprietors to feel so deeply interested in the condition of their poorer neighbours, it is equally creditable to the labourer that I can say, out of 282 tenants there is not 50*s.* arrear, and but two half-acres that are really badly managed. Many people would suppose they must make much work for and be troublesome to the agent, but I assure you by being firm, and particular, they are very little trouble. You will remember that, for the most part, the allotments are detached from the cottages. Fields near a cluster of houses are appropriated to allotments. They farm on the two-course shift, one half being Wheat every year, and the other half Beans, Peas, Clover, or Beetroot (very seldom clover). They consume their Beans, Peas, and Beetroot with pigs, which give them good manure and pork (the latter the Suffolk people are very fond of).

You see there is no chance for them to keep a cow; not one keeps a cow from the produce of their allotment.

Although this plan of having Wheat every other year on the same land has been carried on for 13 years, the crops and yield are as good as at first. There is a great lesson to be learnt by the farmers, from the management of an allotment.

——(2). AN ALLOTMENT AGREEMENT made this day of , 185 , between A. B., of , in the county of Suffolk, Esquire, of the one part, and C. D., of , in the county of Suffolk, of the other part, whereby the said A. B. agrees to let, and the said C. D. to hire, a piece of Allotment Land, containing by admeasurement , or thereabouts, in the parish of , from the day of , for one quarter of a year, and so on from quarter to quarter, until the tenancy hereby created shall be determined by three months' notice by either party herein mentioned. Yielding and paying unto the said A. B., his heirs or assigns, the yearly rent of , by four quarterly payments in advance, if demanded, by or on behalf of the said A. B., his heirs or assigns, namely, the 11th of October, 6th of January, 6th of April, and the 6th of July next after the date hereof.

The said C. D. agrees as follows, that is to say:

1st. Not to plough any part of it, but to cultivate it with the spade, having one-half Wheat, and the other half Peas, Beans, Potatoes, or other vegetables, and not to have any Turnips or Beetroot growing for seed.

2nd. To give up possession of the said Allotments within fourteen days, shall he be convicted of any misdemeanour, or should he enter the union workhouse, or unnecessarily call upon the parish for relief (except in sickness), or should the rent remain unpaid for fourteen days after the same shall have been demanded by or on behalf of the said A. B., or his heirs; the said C. D. being allowed the value of all tillage, corn, vegetables, manure, and seeds, and for sowing the same, that may then be growing on the said Allotment. The value of such corn, vegetables, manure, seeds, &c., to be ascertained by a licensed valuer, to be named by the said A. B., and any rent or arrears of rent to be deducted from the amount due for valuation; and should there not be sufficient on the Allotment to discharge the amount due for rent and arrears, the remainder shall be recoverable by action or law.

3d. To attend some place of public worship once every Sabbath day.

As witness our hands,
day of , 185 .

——(3). The following is the communication to which I alluded in my first section:—"I know of nothing better calculated to benefit our peasantry than allotting to each labourer a certain portion of land for spade husbandry, at a reasonable price. Some laudable examples have been set by excellent individuals, in different parts of the kingdom, which are now beginning, I hope, to be pretty generally followed; but it has often been a matter of surprise to me, that a plan, so well calculated to ameliorate the condition of our poor fellow-creatures — so very satisfactory in its results, and those results being attainable without any pecuniary sacrifice, and I believe entirely free from any objection whatever—should not at once have received the most cordial and universal support of every well-wisher of the community. I have made upwards of a hundred of these allotments, varying from a quarter of a statute acre to an acre, but I generally confined them to quarter and half acres, according to the capability of the cottager and the size of his family, charging them the same rent as a farmer would be able to pay, and it is quite surprising to see the quantity of produce that is raised from this small quantity of land; and in order to show what may be done by spade husbandry, I will mention some facts which have come under my own observation. About three years ago I selected two pieces of land, together about 30 statute acres from a farm of Lord ——'s, which land had

been very hard tilled; and, lying more than a mile from the homestead, had not for many years received any support in the way of manure, besides which it was naturally a weak light soil, with a bad subsoil; and so little did the tenant prize it, that he said I was quite welcome to take it from the farm if I would release him from the rates and taxes paid in respect of it, and make any deduction from his rent I might think proper: this I did to his satisfaction, and set it out in proper allotments, averaging about half an acre each. I allowed the poor men draining tiles, which they put down themselves under my directions, and charged them as much rent as was just sufficient to cover the rent formerly paid by the farmer, together with all the taxes, tithe, rent charge, &c., and although the land has only undergone this superior method of cultivation for three years, and was in the lowest condition to commence with, and consequently will improve for years to come; yet notwithstanding these disadvantages the crops grown upon these 30 acres of poor land last summer, were as follows:—1497 measures of Potatoes, 298 measures of Wheat, 22 measures of Barley, 10 measures of Vetches, and 70 measures of Oats, which crops after paying the rent, poor-rates, tithe, and all other charges, amount to nearly 200*l.*, even calculating them at the present low prices of agricultural produce. [What is a measure?—we presume a bushel.] It is therefore impossible that this amount of produce could be distributed amongst these poor men without adding greatly to the comfort of themselves and families, besides which all these necessaries of life were procured by the application of those leisure hours which would most likely have been spent in the beer-house, and might have produced the bitter pains of domestic strife and wretchedness, instead of making the cottage a peaceful and happy home, and the allotment a healthy training school for the children.

"I am extensively concerned in the management of cottage property, and necessarily come in contact with some hundreds of cottage tenants (and I hope pay some attention to their habits, wants, and feelings), and I am decidedly of | opinion that no able-bodied labourer ought to have less than half an acre of land, which will enable him to raise Potatoes sufficient for his own consumption, and to fatten a couple of pigs, besides growing a little Bread-corn; and I think it would be for the general good of the agricultural community if every cottager with a family was enabled to keep his cow." *W. P.*

Home Correspondence.

Steam cultivation? The straight line.—Of all the impediments I know in the way of the application of steam for performing the labours of the field, the straight line is the greatest. That farmers in general, understanding only an ancient agriculture, should stick to the straight line, the line of horse power, and the only line in which they have been educated, I can readily comprehend; but how men calling themselves engineers and philosophers, and acquainted with mechanics as well as agriculture, should also adhere to the straight line in seeking to introduce a mechanic power to do the work of an animal power on the soil, is and has been to me an enigma of 14 years' standing. Some 14 years ago two persons, unknown to each other, might have been seen industriously studying how to apply the power of steam to tillage purposes. Both appear to have arrived at the conclusion that the most profitable use of mechanic power was circular, and consequently, as steam was a mechanic power, its mode of application or employment must be circular. Thus far both agreed in the truth of the law elicited. They now sought to apply the law. At this point occurred a divergence in judgment. One said the law elicited applied solely to the motion of the mechanism within a machine; the other person said "no" to this, and that the law, on account of certain inherent peculiarities in agriculture, applied to the motion of the machine itself, containing mechanism anyhow influenced. The first person's assertion has since been practically tested, and if it has not failed, has made no progress whatever. The second person's assertion has yet to be tried, and I need scarcely be modest in reiterating that that assertion is my own. The time has now arrived for abandoning the straight line in tillage. I know that to seek to put down the straight line, the pride of the British ploughman, will seem an invidious, almost desperate task, nevertheless it must be done if the British farmer ever desires to advance greatly beyond that point he has arrived at. I am well aware that prizes have long been given to the man who can draw the straightest line, and the man who accomplishes the difficulty prides himself on the feat, but there is nothing in it when done—it certainly does not combine beauty with utility; for centuries it has been demonstrated that the line of beauty is a curve (or curved line). In Nature's operation there is no such thing as a straight line, she invariably operates in curved lines, and generally in a curved line carried to its extreme limit, the circle. Wherever she employs one comparatively straight line, it is used for the purpose of hanging thereon thousands upon thousands of curved or circular areas. However, my main argument may be summed up in these words: the straight or vertical line now in vogue amongst the tillers of the soil is unmechanical, and steam has no sympathy with it; and hence the high result to be anticipated from the use of steam-power on arable land will never be attained until this straight line is abandoned, and the circular substituted. Under the straight line what marked progress have farmers of late years made? Some of our best men really do not seem to know what the word "progress" implies. To hear them congratulating each other, because they have polished their farms at a great expenditure, is enough to vex a person who knows what marked progress ought to be. Your readers may ask me what I call progress or sterling advance? I will give them an example. Some 22 years ago, the time when I first set foot in London, it cost me 60*s.* for conveyance outside a 10 mile-an-hour coach, from my home in Norfolk to my residence in London. Now when steam for conveyance was talked about, these carriers all said the old road (their "straight line,") was the route by which it could be applied. But others decided it should have a pathway peculiarly its own, and this being effected, what was the result to me? These very same carriers could and can convey me, at a profit, to and from London for 8*s.* in summer, and 16*s.* in winter. Now, this is what I call "progress," there being a wide and marked difference between 16*s.* and 60*s.* In agriculture, improvers will tell you they grow a few bushels more per acre after an enormous outlay. This is but doubtful progress; the result, compared with the outlay, is not sufficiently marked. We want a five-fold result from a less outlay, then we will call it plain, palpable, self-evident advance. *C. Burcham, 6, Lisle Street, W.C.*

The Cirencester Game Law case.—As you have given a prominent place in your paper recently to the now celebrated Cirencester Game Law Case I have taken the liberty of sending you a copy of the *Wilts and Gloucestershire Standard*, wherein you will find a somewhat different version of the affair, to which you will doubtless give equal publicity. I beg to state that I know nothing of the case but what I have gathered from the newspaper reports, and I certainly have no intention of putting myself forward as an apologist of the means employed to secure Hall's conviction. At the same time I think it likely that the version of the affair as given in the Cheltenham papers (probably supplied by Mr. Boodle), is an exaggerated one. I may remark that I have not the slightest personal acquaintance with either Mr. Boodle or Mr. Bevir. Hall I know by repute as a most determined and incorrigible poacher. *An Old Subscriber.*

The following is Mr. Bevir's letter quoted in the paper sent to us:—

Justices' Justice—The Jonathan Wild System at Cirencester.

Sir,—In your paper of last week, you give, under the above title, what purports to be an account of some proceedings before the Justices here, on Monday, 31st December. As you have inserted a communication calculated to prejudice the character of the Justices named, in their magisterial capacity, I shall feel obliged by your giving equal publicity to the real facts of the case. John Hall was brought before the Justices on an information laid by John Martin, Lord Bathurst's keeper, for night poaching, on the 29th December, in a plantation of Lord Bathurst's. Martin called Thomas Perry as his witness. On the hearing of the case, Hall voluntarily confessed he had shot at one pheasant, and that his gun, from the wet, missed fire at others; as his defence, he stated that the witness, Perry, asked him to go, which Perry, on cross-examination, denied, stating that he was a total stranger to this part of the country, and that he accompanied Hall to the plantation, at the latter's request. Hall is an able-bodied young man, belonging to a village near here, where he might have work, but his boast is that, from the age of 10 years, he had never done a day's work, but had lived entirely on poaching. That he was "bordering on starvation" is not the fact, as the whole of this winter he has been living in lodgings here with a common prostitute, and forming one of a gang of poachers, deriving large gains from an extensive and daring system of night poaching, he making the fourth of these confederates now undergoing imprisonment for offences against the Game laws. Not one of these men is ever known to do a day's work. The Justices knew nothing beyond the facts as given in evidence before them, and Hall's own admissions;—he had been previously convicted of offences against the Game laws, and on such facts and admissions, the Justices had no alternative but to convict. In the second case, James King, keeper to Miss Jane Master, laid information against Hall for shooting a rabbit on her land, on Sunday, the 30th December, and called the same witness, Perry. Hall admitted the facts, but, as before, he alleged that Perry had asked him to go, which, on cross-examination, Perry denied. As Perry was in the witness-box, it would have been irregular for any stranger in court to question a witness under examination, and I felt it my duty, as Clerk to the Justices, to caution the witness, that he was not bound to answer questions tending to criminate himself. The Justices did convict in the second case, but the punishment was to be concurrent with the sentence in the first case.—I am, Sir, yours obediently, W. L. Bevir, Clerk to the Justices.—Cirencester, Jan. 7, 1861.

Need of Agricultural Improvement.—Whoever turns his thoughts to the agriculture of this country, notwithstanding the reputation it has for excellence, and the many excellent and respectable gentlemen who are engaged in it, will find it is very far from that perfection, or that progress towards perfection, which he would expect to find in it. It is true that corn is grown by the aid of birds' dung fetched from nobody knows where, or compositions made to imitate birds' dung, manufactured in our own country; it is true, also, that mountains of flesh are laid upon oxen and sheep by the aid of foreign oilcake; but if England, notwithstanding all the boasting about it, were left to its own resources, dearth, famine, and diseases, their never failing companions, would in one single year half or more depopulate the land; but surely this ought not to be the case. But were the resources within the country properly made use of, England would not be dependent, as she now is, for a sufficiency of bread—the staff of life; but have enough for herself and some to spare for less favoured countries. I know, however, that I am writing treason to the minds of very many men, but [without speculating here as to what would follow the loss of our supremacy at sea, or a hostile combination of other nations against England, would it not be better to throw aside our long cherished dreams of perfection, and join the agricultural improvers, though they may cultivate no more land than did the Roman Cincinnatus, or than does our countryman of the present day, the Rev. Mr. Smith of Lois-Weedon; or the system might be adopted which I myself have adopted. We should then not only relieve our country from the necessity of ransacking all the world for a sufficiency of food, but we should have abundance for your own countryman, and some, and perhaps more to spare for less favoured lands. If any one wishes to know what the system I am willing to teach him is, though it has often been published in the *Agricultural Gazette*, I will endeavour to give it him in another letter; premising here that I drain my land, cultivate it thoroughly, put it into good heart, and sow rationally. For cereals of all kinds I have never exceeded except upon very rare occasions 2 pecks of seed per statute acre, and the results were that I had 44 bushels of Wheat on an average of four years, year after year, from a maximum of 2 pecks of seed an acre, or an increase of 88-fold. Of Barley one year I had 63 bushels an acre or 126-fold, and I have had crops equally as good. These were some of the results of my system; I admit my land was good, but it had never before produced the same quantity of produce, with from four and even five and six times the quantity of seed, and when the kind of crops returned only once in four years. *Geo. Wilkins, Parsonage, Wix.*

Agricultural Memoranda.—1. *Potatoes*: It would seem to be certain that these become tainted by the disease for a longer or a shorter time before it becomes visible on the skin of the roots. This appears to be proved by the fact that roots taken up very early before what is called being "ripe" keep sound—whilst others, taken up even whilst much of the stem was yet green and placed on a dry floor apparently quite sound, have after a short time proved to be diseased in various proportions, and undoubtedly contracted it before being taken up. If then general experience confirm these facts, the remedy would certainly appear to be the greater promptitude in lifting the crop. As we are taught that all the acts of Providence are intended for our ultimate good, may it not be that the Potato disease, for one thing, may be intended to cause in time the general adoption of an early harvesting of Potatoes, so that a second crop of some sort may always be secured thereafter?—thus increasing the quantity of food and labour to the benefit of the public as well as to the individual farmer. And here, if I may be permitted to make a digression, I would remark that he who increases the food of the country, increases that which lies at the very foundation of her strength; whilst if such person exercise self-denial to accomplish the necessary outlay, he is not less patriotic and more useful than the rifle volunteer for instance. In the event of a war with France and Russia, the value of home-grown food will put free-trade to the test. But to return to our farming.—2. *Seeding*: The observant farmer will have had abundant opportunity this season of noticing the effect of thick and thin seeding on different kinds of land. The result of his observations will I think be that it is easy to account for the wide difference in the views of the respective advocates of the two modes; and that the exact quantity of seed that should be used ought to vary with the time of year, the kind of soil, its condition, and whether wire-worm may be feared; a good judgment on these points is what is wanted, and not mere theories or unbending quantities. —3. *Draining*: The exact degree of wetness in land which makes draining desirable this season is also put to the test. No one will now deny that all soils would be benefited by it out of which in an ordinary winter any water can be obtained at 4 feet deep.—4. *Winter feeding of Stock*: Perhaps the most important point to which the past disastrous season must force the attention of farmers, is as to the best and most economical mode of winter feeding. On this head my own experience and all that I can learn from others point to the same system, viz., cutting hay and straw into chaff, pulping roots; these with a moderate mixture of Indian meal or boiled or steamed Rape cake are what must be resorted to. With regard to Rape cake, against which there exists considerable prejudice for feeding, I refer to the second part of the Royal Agricultural Society's Journal for 1859, in an article on pulping roots, where it is stated that by boiling the hurtful properties are removed from the cakes containing proportions of Mustard. *R. H., Cheshire.*

Societies.

Society of Arts: *Jan. 30.—On Food; its Adulterations, and the Methods of Detecting them.*—Mr. Scott read a paper on this subject. Extracts (much condensed) are taken from the Journal of the Society.

said:—Adulteration included—1st, the dilution of any article for sale as genuine with other substances of inferior commercial value or less marked properties, as spirits with water, or Coffee with Chicory. 2ndly. The heightening of their active principles, by admixture, as bread with alum, gin with Capsicums. 3dly. The employment of colours, essences, &c., to render the articles more attractive to the senses.

(1.) Bread is adulterated with a variety of substances—some harmless, some injurious, but none of an actively poisonous nature.* Of pure bread there are several specimens on the table, illustrating Dr. Dauglish's process, as carried out by Messrs. Peek & Frean, and the ordinary method, of which latter Mr. W. Salmon, of the King's Road, Chelsea, has furnished me with samples. The presence of Potatoes in bread imparts a peculiar crumbly texture; while Rice-flour causes a brittleness of structure not easy to mistake.

Chalk is present if the suspected bread effervesces on the addition of an acid. Gypsum is detected by the milkiness of the water in which the bread has been boiled when a solution of chloride of barium is added. Alum is the most frequent adulterant of bread. It may be detected by soaking the bread in water, and adding a salt of barium to the clear extract, when a cloudiness, more or less marked, will occur. Another way is to char the bread, and burn it nearly to an ash, and boil the latter with diluted hydrochloric acid to which a little nitric acid has been added; the addition of ammonia to the filtered liquid will precipitate various substances, including the alumina of the alum. This precipitate must then be boiled in potassa, when, after filtration, the liquid must be neutralised with hydrochloric acid, and the alumina may then be thrown down by ammonia.

Bone dust is now but seldom found in bread; it may be detected very readily with the microscope. My experience shows that on an average of 100 loaves of the bread in London about 13 are good and genuine bread, as the late bad harvest has thrown large quantities of damaged corn on the market, which of course is adulterated proportionately.

(2). Corn is subject to a varity of diseases, which often greatly impair its quality, and even render it dangerous as food; of these perhaps the Ergot Fungus and the pepper-brand (Uredo fœtida) are the most disgusting in their effects, the former acting sometimes like an irritant poison, and the latter is said to have occasioned skin diseases. Corn or meal affected with the smut or pepper-brand is at once distinguished by the disagreeable odour it emits and this may be bought up cheaply, which to my personal knowledge is often done for the purpose of making cheap, highly flavoured cakes and puddings with the flour, which is also used for adulterating mustard, pepper, ginger, and other articles having a powerful odour of their own, which conceals that emanating from the Uredo Fungus.

Another variety of Uredo (the Uredo segetum) is known to growers by the name of dust brand, black burn, or smut, but though injurious and destructive to growing crops, it does not appear to deteriorate the flour to any very great extent. I have, however, noticed a deficiency of nitrogen in Wheat affected by smut. Barley and oatmeal are frequently adulterated with inferior samples of either, and our poor horses frequently get some 25 per cent. of brewers or distillers "grains" served out to them in their reputed measure of oats.† Peas, Beans, Lentils, and other Leguminosæ, all come in for a share of adulteration; albeit they are used largely as adulterants themselves.

(3). The meat disposed of at the London markets is nearly 10 per cent. more or less unfit for human consumption. Washes of vinegar and water are used to heighten the colour of some meats; weak alkaline leys to improve the appearance of others; and, when decomposition or disease render more potent agents necessary, even arsenical solutions are employed without hesitation. With game and poultry this latter practice is indeed quite common.

(4). Can fruit ever be adulterated? I have seen English Apples coloured superficially in imitation of the American Newtown Pippins, and sold as such at the rate of 2s. and 3s. per dozen! Old and inferior Oranges, well boiled, with a little saffron added to assist Nature when her short comings in the matter of external colouring are a little too obvious, may be purchased at many shops, as we all know. Melons and Cucumbers, too, when looking pale and dejected from waiting so long to be eaten, have their rusty coats furbished up with a little acetate of copper, so that a "green old age" at least is accorded to them.

Mr. Scott's paper refers further to pickles, mustard, turmeric, spices, bottled fruits, sugar, &c. &c. We regret our inability to find room for further extracts this week.

* Sulphate of copper (bluestone) is used by Belgian and Austrian bakers, but not in this country.

† The Rape cake given to horses and cows often contains a quantity of refuse Mustard seed, which always proves dangerous, and some times fatal, to the former animal.

Farmers' Clubs.

Central.—The following subjects have been selected for discussion:—

February 4.—The Past, Present, and Future of British Agriculture. To be introduced by Mr. J. J. Mechi, Tiptree Hall, Kelvedon.

March 4.—The several Merits of Day and Piece Work. ——

April 1.—Sheep v. Bullocks as manufacturers of Manure—on Farms where the Produce is not fattening, and no roots but Mangels can be grown.—Mr. A. Ruston, Aylesby House, Chatteris.

May 6.—By what means can the Feeding of Stock on Pasture Land in Spring, Summer, and Autumn be so increased as to supply the demand of an increasing population?—Mr. Owen Wallis, Overstone Grange, Northampton.

June 3.—The Vegetable and Animal Kingdoms in their mutual relations, as bearing on the science of Practical Agriculture. Mr. J. G Hobson, Long Sutton, Lincoln.

November 4.—How Under-drainage affects, and by its extension will further affect the Arterial Channels and Outfalls of the Kingdom. Mr. J. Bailey Denton, Stevenage.

December 9.—Would it be advisable to abolish Parish and to substitute Union Settlements in the Agricultural Districts? Mr. H. Trethewy, Silsoe.

Wenlock: *Hiring Fairs.*—At the last meeting of this Club a paper was read by the Rev. E. Jackson, Diocesan Inspector of Schools, Herefordshire. The rev. gentleman divided the subject into three heads, viz. (1). How these hiring fairs originated. (2). What their character and value is now-a-days. (3). Reasons for making an alteration, on the score of morality; on the score of economy. All evidence combined to prove that the fairs were productive of every possible kind of vice, that after the hiring was over, drinking, swearing, fighting, and licentiousness were carried on to a shocking extent. These being the undoubted evils consequent on hiring fairs, he called upon the gentlemen present to do all they could to stop them. His next argument against hiring fairs was with reference to economy; great harm and waste occurred to employers by taking servants without a character. Other difficulties, and oftentimes trouble and loss, arose from a dispute about time, for if they did not hire until after the fairs they would stipulate that their year's service should expire at the date of these fairs. Servants would invariably claim some time for recreation, and he thought it would be a good plan if a certain number of days were allowed them at a time convenient for family gatherings. The subject had been of late much discussed, and the consequence was, that in upwards of 20 important towns in the counties of Warwick, Worcester, Gloucester, Bucks, Wilts, Leicester, and Northampton, Registration Offices had been commenced, and farmers and landlords had pledged themselves to discontinue their attendance at the fairs, and to do all they could to discourage them. If all would do the same, success must result. He considered that Registration Offices properly managed, would be a sure process for achieving a victory. He suggested that there should be a central office in a central town, and minor offices in each village, where personal interviews might take place. The national school in each village would, he was sure, be gladly offered by the clergyman for the purpose, and the schoolmaster might be the Registrar without detriment to his own peculiar work. Let this be done, and in seven years a new generation of servants would have sprung up. He suggested the advantage of hiring by the month or quarter rather than the year, and also the propriety of paying by the same dates. He urged them to acknowledge the lawfulness of marriage for their servants, and to allow of courtships at proper times and under proper circumstances. Allow to agricultural servants at least three days' holiday in the year at convenient periods, so that they may feel they were not done out of their holiday though they miss the hiring fairs holidays.

Reviews.

Edinburgh Veterinary Review. January, 1861. Published monthly. No. IX. Thomas C. Jack, Edinburgh.

The publication of a Veterinary Review is a good sign. Recording, as it does, the annals of comparative pathology, it will meet with a favourable reception amongst the country practitioners of the better sort, who have long been wanting a medium by which they might be brought into active communication with their brethren. The service which the press has performed for the medical art in relation to the human subject it is now waiting to perform in its application to the inferior animals. Before the year 1792 we depended upon the smith, the worker in iron, for the exercise of the healing art amongst our cattle, pretty much in the same way as our forefathers of earlier date were accustomed to appeal to the garrulous barber for like attention. Both dealt with their patients by the light of traditionary lore, and it was surprising how many subjects, thanks to Nature, rallied in spite of treatment! Since the establishment of the Veterinary College of London great progress has been made in the right direction. A large number of men have studied and graduated there, have spread themselves far and near over the land, and have succeeded in wresting from the incompetent cowleech and farrier the cure of the flocks and herds of Britain. It is not supposed that all who have gone forth have been able men; but where an able man has located himself in a district, he has at once won public confidence. The cow-leech has tried lower prices and aspersion; but the better man has invariably within 12 months of his settlement had more cases on hand than he could properly attend to. It is most encouraging to know that a school of veterinary medicine has been established in the northern metropolis, and is working well. Prof. Cameron, of Dublin, is now endeavouring to establish one for Ireland, and will doubtless succeed. France has two colleges—one at Alfal, near Paris; another at Lyons, both founded before ours. There are also colleges in Berlin, Dresden, Vienna, Wurtemberg, Munich, Carlsruhe, besides professors of veterinary practice in the different universities. We see therefore the imperative necessity for establishing several channels of communication through which the men thus sent out may correspond with and help one another. Welcome is the appearance of this Review; if conducted with spirit it will doubtless secure a wide circulation, not only amongst members of the veterinary profession, but amongst farmers who are anxious to make themselves acquainted with the new facts and features of disease as they appear, together with the principles upon which the science is built. There are, no doubt, men paying special attention to certain complaints who will be glad enough to give publicity to their discoveries, and we shall thus be furnished with a mass of materials resulting from the *particular* experience of different persons in the treatment of *particular* diseases which will go far to solve the difficulties that now surround several of those disorders which appear incurable, and construct a body of evidence that shall prove a firm stand ground for further ameliorative operations.

The first 20 pages of the number of the "Review" under notice are devoted to original communications and cases. The six following pages are occupied by reviews of books. Two are works treating of the Pathology of the Urine by Drs. Thudichum and Parkes; Hessling and Kollman's "Atlas of the General Anatomy of Animal Tissues," and the inquiry of Messrs. Lawes and Gilbert into "the composition of some of the Animals Fed and Slaughtered as Human Food." Six pages are then given to miscellaneous matter, and 25 to the Transactions of Medical Societies, &c., Correspondence, &c., filling up the remainder.

The abstract of a paper read by Dr. Thudichum "On Chemical Questions in connection with the Liver," and of another by Dr. Richardson "On the Physiological and Therapeutical Properties of the Peroxide of Hydrogen," are calculated to show how useful this branch of the Review may prove. The paper given *in extenso* from the *British Medical Journal*, by Erasmus Wilson, F.R.S., "On the Heat Cure," is exceedingly interesting, but at the same time so little likely to be of value to veterinary practitioners that we are sorry to find 12 pages handed over to it. There seems plenty of space for foreign correspondence, and surely with so much doing abroad, such a heading would attract communications from France and the German States, and in matters scientific it is usual to cultivate Catholicity.

We will now close with a few remarks upon Professor Gamgee's Inaugural Address delivered at the New Veterinary College, Edinburgh, in the autumn of the past year, upon the Relations of Veterinary to Social Science. His aim is to fire the ambition of the school. He shows that they occupy a rank in the social status below that in which their real merit and utility should place them; that their failing to take a proper stand arises partly from their own want of perception of the higher ends of their profession, and partly from the want of such civil posts of honour and emolument as are placed before the students in kindred schools to arouse emulation and induce excellence. He points, then, cheeringly to Dr. Richardson's opinion of the veterinary science, which we will here quote:—"I fully recognise the importance to medicine of every addition to veterinary science and art, and the fact that medicine human and medicine veterinarian is as distinctly *one* as the animal creation is one." And on this liberal and far-seeing view of the natural relation between what are called the higher and lower branches of pathology the Professor urges the students to regard no more their calling as a mere trade; but to see in it a science capable of rendering the highest services to humanity. Following therefore in this track he is not at a loss to show the nature of these services; nor does he omit to remind the students that the initiative must come from them, that they must discover an aptitude to fulfil the duties pertaining to certain offices before such offices will be thrown open to them, or where there are none, created for them.

In bringing this subject before their attention, he has of course to show that there are many sources of disease in man which are only to be discovered by studying the diseases of animals; that many of them are quite unsuspected, and the facts concerning them difficult to find out. Of these, which appear to lie without the province of human medicine, but perfectly within the scope of veterinary practice, it may be well to mention a few.

There are the cutaneous diseases common to cattle; in what measure are they communicable to ourselves. The cow is frequently attacked with "the vesicular murrain attended with the development of a virus, which is often squeezed into the milk-can as the cow is milked. Such milk drunk warm will kill calves and pigs, and induce fever and cutaneous eruptions in men. But what does it "to the infantile portion of the popu-

lation, which consumes so large a quantity of the dairy produce?" "In a piece of pork a few yellow specks or transparent vesicles which do not appear of the slightest importance, may in reality be tapeworms in one stage of development, for the destruction of which we have to hope for prolonged boiling or efficient roasting. If the meat be eaten underdone, a parasite at once developes in 'the human intestine.'" "I have known," says a medical authority, "in the market here the extravasation of blood and acute phlegmous occurring in the malignant 'black quarter' of cattle, looked upon as simple bruises, and the carcases passed as wholesome, the animals being young and fat; and the tubercles characteristic of phthisis passed over as unimportant, because of common occurrence, and, provided the meat was marketable, *i.e.*, fat enough—the diseased parts were cut away, and the carcases sold."

What new forms of disease are thus conveyed to the human patient? "I wandered about the London dairies," says Professor Gamgee, "and saw the disgusting practices incidental to the sale and consumption of diseased cows: how the most filthy products of diseases were hashed up with other meat equally unsightly and unpalateable, to make sausages; how a lot of the carcases of cows were polished and dressed up with the fat of two or three young fat bullocks killed with them, and how the flesh of deseased animals not only found its way to the poor man's home, but to the table of the middle and upper classes." Our medical staff may well be numerous to supply an antidote to all this poison, and our hospitals may well be extending their area to receive the thousands of men and women who thus daily swallow the seeds of death. It is evidently our interest to preserve the animals amongst which we live, and upon which we feed, in the highest possible state of health. "The evil results, therefore, of over work, over crowding, absence of light in stables, of artificial diet, of the nature of food as changed by modern cultivation, and the influences of such food on animals, together with the mysterious nature and operation of enzootic as of endemic influences, and epizootic as of epidemic, of miasmata and contagion, are objects that should constantly occupy the members of our profession;" and we quite agree with Professor Gamgee when he says, that upon the medical staff connected with the Board of Health, the veterinarian should find a place. The Professor's great aim, however, is to secure for veterinary surgeons the inspection of slaughter-houses for the furtherance of science, the checking of dishonest trade in diseased animals, and for the good of the public, directly, by ensuring a supply of wholesome food, and indirectly, by aiding, through their enlarged observation, the practitioners of human medicine in their efforts to ameliorate many forms of human suffering, and to overcome others which are at present without remedy.

The present inspectors are generally incompetent to judge of meat, and usually have too much thrown upon them. He mentions the duties which attached in 1857 to the inspector at Edinburgh: "to be in attendance daily in the dead meat market, to visit butchers' shops, to be on the look out at railway stations for carcases coming in from the country, to call twice daily at the police office, to draw up a report, giving the number and state of the byres and their inmates, to visit thereafter these byres, to see if any sick animals are in them, and should he find any, to watch them narrowly, to ascertain how their carcases are disposed of." The Town Council evidently knows what should be done, but shrinks from the expense of employing the proper number of men to do it. The inspectors in Edinburgh have generally been chosen from amongst the fleshers—retaining of course the prejudices of their order, and a considerable liability to bias not favourable to the public interest. Now for London the inspectorship is most insufficient: there is comparatively little check.

The city authorities are strict, and we read during the past year of some thousands of pounds of rejected meat and 500 rabbits. But if traced most of this putrid stuff would doubtless be found to have passed through the labouring sausage machines in the neighbourhood of Smithfield. This is far from right, but elsewhere we apprehend there is even less supervision. This question is one of vital importance, which should be again and again returned to until settled on the side of public health. No instance of the wrong man in the wrong place could be more glaring than the appointment as inspector of meat of any man who is unable to detect the difference between a bruise and the extravasation of blood which indicates malignant "black quarter." Prof. Gamgee speaks of the bright prospect such a change would afford to the veterinarian, but we are disposed to consider what an inconceivable advantage the public would gain were our supply of meat subject to the searching and discriminating glance of a qualified staff of men engaged not merely to detect fraud, but to prosecute scientific research, and add by an enlarged range of observation throughout the slaughter-houses of the land a mass of information that shall enable not only the veterinarian but the professor of human medicine to master the golden principles of *presentative treatment*, and practise the healing art with greater certainty of success.

Milk Fever of Cows: its homœopathic treatment and cure, with directions. By James Moore, R.M.C.V.S., &c. Second Edition. Turner & Co., 77, Fleet Street, London.

We presume it will generally be admitted that to hardly any other disease than this does the adage—Prevention better than cure—so perfectly apply. For none are more easy of prevention—hardly any more difficult of cure. Mr. Moore does, however, describe a number of cases of cows in "high condition," in which the disease ensued after calving, and in which it was successfully treated by him on the homœopathic plan.

We know the case of a dairy farm of 500 acres of the best Grass land—where upwards of 100 cows were kept—the tenant of which never knew milk fever among his cows except in instances of cows calving out of season, or in summer after being a month or two at Grass. Attacks of this kind do indeed almost wholly depend on the too high condition of the animal before calving. Moderate feeding and plenty of exercise will prevent it.

The Agriculture of Massachusetts. By C. L. Flint. [Some of our readers may remember a description which we gave a few months back of the Polled Angus Herd of Mr. Bowie, Mains of Kelly, Forfarshire. That gentleman, we believe, is the writer of a review of this work which appeared a week or two back in an excellent provincial paper; and from which we take the following extracts:—]

The volume before us is in two parts—first the "Seventh Annual Report of the Section of Massachusetts Board of Agriculture," and the second "Abstract of Returns of the Agricultural Societies of Massachusetts in 1859." The first section consists of reports of Committees of the Board on such subjects as the following:—"Application of Manures" (proper depth of applying them), "Exhausted Pastures," "Cattle Husbandry," "Diseases of Vegetation," "General Fruit Culture;" then "Root Crops"—Mangels, Carrots, Swedes: then "Market Days," "Farmers' Clubs," "Agricultural Education," "Museum;" then comes a section on "Pleuro-Pneumonia," recommending the destruction of all infected herds. We shall shortly notice the first of these, viz.—"Application of Manures" (proper depth of applying them). 1500 printed circulars were sent out by the Board requesting information as to the effects on crops with—1st, no manure; 2d, manure left on the surface; 3d, manure harrowed in; 4th, manure ploughed in from 3½ to 5 inches; and 5th, manure ploughed in from 7 to 10 inches deep. The Section says:—"On the returns of the circulars, we took pains to count them. Of the 1500 distributed there came back, one, two, three, four, five, six, seven communications, one of which, however, proved to be, not the returns of the experiment, but only an opinion!" It is painful to read this, showing such an unmitigated amount of apathy on the part of farmers in Massachusetts on a subject certainly important to them. The result, reducing the whole to decimals, and placing the product of the unmanured lot at 100., is as follows (the average of each of the six trials being here presented):—

Unmanured	100.
Manure left on the surface	142.4
Do. harrowed in	162.
Do. ploughed in from 3½ to 5 in. ..	167.3
Do. do. 7 to 10 in. ..	191.

We make no remarks on the above, as the value of experiments depends upon the aggregate results of numbers, or, what we consider better, the following of them out for a consecutive number of years by the same individual.

Part 2d contains eight addresses before as many Societies, on the following most important subjects:—"Observation and Experiment;" "Agriculture in the Public Schools;" "The Duty of the Farmer to his Calling;" "Agricultural Education;" "Use of Mind in Farming;" "The Farmer as he was, is, and is to be;" "Progress of Farming;" and "Dignity of Labour." On the "Use of Mind in Farming," Mr. T. T. Waterman's address is so sprightly, vigorous, and comic, that we cannot resist the following extract:—"The farmer must, by practical study, become a living thermometer, barometer, electrometer, patent wind and weather gauge—electrical, magnetic, galvanic, terrestrial, universal calculator! Such an instrument can be made of mind—strong mind. Such men are walking folios: they are exhaustless cyclopædias of available information in plough-ology, hoe-ology, corn-ology, barn-ology, fowl-ology, husk-ology, stock-ology, haw-ology, and gee-ology; they are practically, and thus really, the graduates of, and the professors in, the great university of natural science, and have the honorary degree of LL.D., Lords of Land and Digging! The college they enter and honour is one in which problems are solved, not by pen and blackboard, logarithms and signs, but a personal use of the axe, the hoe, the yoke, the plough, the scythe, and the flail!"

The Reports on Ploughing are interesting throughout. In the "History of the Plough" it is stated that "James Small, a Scotch mechanic, invented the iron mould-board, and attached it to his swing-plough, giving it such weight and power as to make it a general favourite from 1764 nearly down to our times." Mr. Choate thinks—"If my suspicion be true, that it is experiment, and not arithmetic, observation, rather than algebra, that is to work out the grand problem of a perfect plough, then, as before intimated, the field of competition is still open." We demur to the following, however—"American ingenuity might seem to be entitled to repose for a while, until other nations come up. Foreign countries are behind us in the matter of the plough, as well as the reaper!" Up to this date we cannot swallow these remarks.

The articles on Manures and Composts are short, and experiments therewith unsatisfactory. On this subject there seems no need for "repose!" One part is good. "Cato says, 'Study to have a large dunghill!'" "Indian Corn, Wheat, Barley, Oats"—the statements on the three last are short, in respect of yield per acre. Here, also, there seems no need for "repose," or "waiting until other nations come up!"

On "Working Oxen, Training, Fat Cattle, Draught Horses, Sheep, Swine, Poultry, Dairy Produce, Fruits." In Worcester North County, premiums are given for the best draught horses, the test being pulling certain weights up hill! We apprehend this method is quite as practical as simply looking to the shape of the animal in awarding premiums on this side the Atlantic; it may be termed, "coming to the scratch."

Miscellaneous.

Davies (appellant) and Lord Berwick (respondent).—This was a case which raised the question whether the appellant had been properly convicted by the magistrates of an offence under the Masters and Servants Act, for not fulfilling his agreement as a servant in husbandry. It appeared that the appellant had entered the service of Lord Berwick at the weekly wages of 25*s*. His duties were to keep the general accounts of the farm at Croakhill, in Salop, to weigh out the food for the cattle, to set the men to work, to lend a hand to anything, and especially to carry out the orders of his employer. On the day in question his employer, Lord Berwick, directed him to go over all the cattle stock of the farm, in order to enable another man to mark the cattle, and to ascertain what cattle had died; but he disobeyed this order, and, on being summoned before the magistrates, they treated him as a "servant in husbandry," and convicted him. Two questions were now raised for the opinion of the Court—first, whether the appellant was a "servant in husbandry" within the Act, and, secondly, whether the misconduct imputed was a refusal to fulfil his agreement? Mr. Justice Crompton said the Act referred to persons who gave their manual labour; but he thought the appellant was more like a steward. His principal duty was to keep the accounts, &c., and, though he was also to lend a helping hand, that would not make him a servant. His lordship thought the conviction ought to be quashed. Mr. Justice Hill was of the same opinion. Conviction quashed.

The Alpacas in Australia.—The flock of alpacas and llamas introduced 18 months ago by Mr. Ledger are still under his charge, depasturing at Arthursleigh, a sheep station a few miles off the Southern Road. Since they have been there they have thriven surprisingly, and have by successful lambings repaired the losses that were sustained a year ago, at Liverpool, principally through want of fodder. On their landing, in December, 1858, the flock numbered 256; when sold to the Government in the following April, it had increased to 291. The deaths last winter reduced the flock so that on arriving at Arthursleigh they only numbered 2[illegible]; they now amount to about 300. Although very late in the season the lambing is not yet finished; some have been dropped within the last few days, and are doing well. Excepting three, all the lambs born at Arthursleigh have been preserved. The animals are found to attain maturity here earlier than in South America, several instances having occurred of ewes under two years breeding lambs. The course of breeding has already arrived at the fourth cross, and the appearance of the animals, as the breeding progresses, encourages Mr. Ledger to expect ultimately to produce a finer animal than the alpaca of Peru. The experiment of the naturalisation of the alpaca in Australia has been so fully and successfully carried out, that the alpaca may now be looked upon as an Australian animal. An interesting calculation has been made of the probable increase of the flock of alpacas in 50 years, commencing in 18[illegible] with 350 animals, out of which there will be 200 breeding females and 50 males. The calculation proceeds on the fact of the alpaca living for 16 years, and the female breeding from her second to her 15th year, and it shows that at the end of 10 years the flock of 350 will multiply by eight, and will increase to 3250. Making every allowance for unforeseen disasters or for epidemics, a deduction of 20 per cent., this number is reduced to 2500; and at this rate of increase the flock will, at the end of the second 10 years, number 20,500; at the end of the third, 132,200; at the end of the fourth, 844,000; at the end of the fifth, 5,606,720. Reckoning that each animal will yield only 7 lbs. of wool, which will fetch 2*s*. 6*d*. per pound, the clip of the Australian alpaca flocks will in 50 years be no less than 39,247,040 lbs. in weight, and 4,905,[illegible] in value. There is every reason to believe that this computation is considerably less than what the productive capabilities of the alpacas would warrant us to expect. Considering their long and wearisome journey across the bleak mountains and arid deserts of South America, together with the frequent changes of climate they had to undergo, with a scanty supply of food, and frequently without water, and the knocking about on the voyage to Sydney, the preservation of so large a number and their healthy increase prove the alpaca to be a strong and hardy animal. Should the experience of the next few years show the increase of the flock to proceed at the rate above indicated, the extent of its produce and its growing importance, both as a colonial resource and as a raw material for British industry, will be contemplated with allowable pride by Mr. Ledger, and with a just appreciation of his services by his countrymen. We believe that at length some satisfactory arrangements are being made between the Government and Mr. Ledger, by which his claim on the colony will be suitably acknowledged, and the country will at the same time reap the benefit of his long experience in the management of the alpacas. Although Mr. Ledger's undertaking must be admitted to have been to a great extent a mercantile venture, and entered upon in direct anticipation of profit, the enterprise was of such importance to the future productive wealth of the country that for the Government to have taken advantage of Mr. Ledger's necessities, on finding his hopes of remuneration disappointed, would have amounted morally to an act of repudiation, and would also have effectually restrained the exertions of others who should hereafter contemplate the performance of a similar service to the country. It has been found desirable to retain Mr. Ledger's services for the Government not only on account of his knowledge of the habits and proper treatment of the animals, but because of his enthusiastic interest in the propagation of the sp[illegible]

in Australia, which alone could have prompted his self-imposed labours, affords the best guarantee for his bestowing that care and attention upon the flock which they especially require in the critical transition stages of breeding. By disposing of the animals to Mr. Ledger, and thereby giving him a permanent interest in their successful propagation, the Government will take the surest means of rendering the furtherance of Mr. Ledger's own interest coincident with the development of a great source of productive wealth. It will, we understand, be stipulated in any agreement made with Mr. Ledger that none of the animals will leave the colony, or be sold, without the consent of the Government; and it is well known that Mr. Ledger is desirous of keeping the flock intact until complete purity of breed is obtained. We hope to be able to report the sale of the animals to Mr. Ledger, on terms that will be at the same time advantageous to himself and creditable to this colony.—*Sydney Herald.*

Californian Alfilerilla.—This is often called erroneously "alfarea." Its name means little pin, and is derived from *alfiler*, Spanish for pin. It bears clusters of green pins or spikes about 1½ inch long, and is sometimes called Pin Grass, and sometimes Wild Geranium. The botanical name is *Erodium Cicutarium*. The Alfilerilla has attracted some attention as a succulent, sweet, nutritive, hardy, and large herb, well adapted for our climate and soil. It has a large root, which it sends deep into the ground, thus enabling it to resist the drought, while above the surface it puts forth a dense mass of stalks and leaves, spreading out sometimes several feet in every direction. Cattle prefer it to every other indigenous plant of the State. The seeds seem to abound throughout the soil, for whenever the sod is broken up for the first time, there the Alfilerilla appears, though it may never have been seen there before. It is frequent in gardens, in cultivated fields, and in lands lying fallow. *Hutching's California Magazine.*

STATE OF THE WEATHER—BERKSHIRE.
For the week ending January 31, observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air				Temperature of Soil 1 foot below the surface.	Rain	Wind	Barometer.
		Max. in Sun.	Max. in shade.	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	25 ..	46.0	45.4	34.6	40.2	36.5	..	S.W.	29.75
Saturday	26 ..	49.0	48.4	37.0	43.0	36.5	0.23	N.W.	30.10
Sunday	27 ..	58.0	48.0	40.0	46.5	36.5	..	S.W.	30.10
Monday	28 ..	62.0	48.0	38.0	[illegible]	37.0	..	S.W.	30.07
Tuesday	29 ..	46.2	[illegible]	[illegible]	[illegible]	37.0	..	S.	30.03
Wednesday	30 ..	60.0	41.2	[illegible]	41.2	37.5	..	S.	30.02
Thursday	31 ..	49.0	42.4	37.0	41.3	38.5	..	S.W.	30.01

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

ALGERIAN NETTLE: *A Q.* We do not know what it is. Mr. Scott Burn's Year Book, 1859, speaks of it thus:—"Nettles cut and cropped in from July or August are a dainty for horned cattle, provided they have been cropped in time. It may be mixed instead of hay, or infused during the night and given to the cattle the next day. The cultivation of the Nettle on a large scale allows stony and sterile land to be made use of: its produce as a fodder plant is very considerable. Lupines are often used as a green manuring on sandy soils."—Nettles will not do for such a purpose, nor would any other perennial plant.

BOOKS: *B.* There is no book on the surface geology of Great Britain. Morton on Soils aimed at doing just what you propose—and a new edition of that work, corrected up to the present time, would meet your wishes. Mr. Ridgway, Piccadilly, is the publisher of it.

CENTRAL FARMERS' CLUB: *L M.* should apply to the Secretary, H. Corbet, Esq., Farmers' Club, Bridge Street, Blackfriars. The Club Journal for December has been distributed to members. We do not know if it is procurable in any number by those who are not members.

CHEESE FAIRS: *Cor.* Chester, Derby, Leicester, and Reading.

COTTAGE RANGE: *X.* Taylor & Sons, High East Street, Dorchester, have applied Moule's Patent Vapour Feeding Drawer with great success in the manufacture of a cottage range. The smallest size is 2 feet by 1 foot. It has an oven, and the top is a hot plate. In its ordinary use in a family the consumption of fuel is not above 1 lb. an hour, while the baking which has been done during the day has been worth 1*l.*, and all the day the kettle has been kept boiling and flat irons heated, and the heat thrown into the room much greater than from any open grate. In the building a new cottage the expense of chimney would be saved by the use of this range, as it stands well in the room, and a 6 inch flue is sufficient for the smoke.—Chalk and tar for fuel.—In chalk districts where gas tar can be obtained cheaply a great saving in fuel may be effected by mixing as much tar as it will absorb with dried and powdered chalk, and making it up into small balls. In the range above mentioned two such balls will boil the kettle and cook a dinner in the oven. The proportion of tar to chalk is about 1½ gallon to a cwt.

FOOD FOR HORSES: *A G.* You will find the whole subject discussed in a paper in the 19th volume of the English Agricultural Society's Journal, and again in a Handbook of Farm Labour just published by Longmans. Perhaps the following may do:—Mr. Binnie, of Seton (Lothian), gives his cart horses 10 lbs. of Oats and 4 lbs. of Beans daily, together with a mash of about 56 lbs. of steamed Turnips and 6 lbs. of Barley every evening, and straw *ad lib.*

LIQUID MANURE: *F L W.* There can be no loss of fertilising matter by having the tank at a distance from the yard—if the drainings are safely conveyed by pipe. We imagine that the brickwork of a tank 4 yards in diameter need not be more than 1½ bricks thick, provided it be well puddled behind.

SHEEP HURDLES: *Admiral.* They are made in abundance in the copse woods of Hampshire. No doubt there are commission agents in the island who have correspondents in that county.

TO LAY DOWN GRASS: *P P P.* March is the best time to sow Grass seeds. Sow 40 to 50 lbs. of mixed seeds per acre without a corn crop. Any of the great seedsmen will sell mixtures suited for the soil and circumstances of your field.

SEED CORN FROM THE CHALK.

RAYNBIRD, CALDECOTT, AND BAWTREE supply carefully selected and screened samples of all the most approved varieties of Wheat, Barley, Oats, &c.

Address, Basingstoke, Andover; or 89, Seed Market, Mark Lane, E.C. Samples and prices Post-free on application.

RAYNBIRD, CALDECOTT, AND BAWTREE, SEED MERCHANTS and GROWERS, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E.C.

Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.

Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

THE BEST WHEAT FOR SPRING SOWING.—Good Samples of RED NURSERY and TALAVERA WHEAT supplied by RAYNBIRD, CALDECOTT, & BAWTREE.

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SEED ESTABLISHMENT, SUDBURY, SUFFOLK.

THE SEED CATALOGUE FOR 1861 (30TH ANNUAL EDITION) is now ready. It contains much that is choice and novel, both of ENGLISH and CONTINENTAL SEEDS, with much valuable information.

A FEW EXTRA CHOICE VEGETABLES.

ATKINS'S MELFORD HALL BEET, very handsome, bright light rich crimson, 1*s.* per ounce.

The PINE APPLE SHORT TOP do., deep crimson, 1*s.* p. oz.

LEE'S NEW WHITE SPROUTING BROCCOLI, 1*s.* 6*d.* and 2*s.* 6*d.* per packet.

TEN FINEST SORTS do., for succession, including LEE'S, 6*s.*, or 6 for 3*s.* 6*d.*

BELGIUM IMPORTED BRUSSELS SPROUTS, extra, 1*s.* per ounce.

FURRELL'S EARLY EDWARDSTONE CABBAGE, very large, close, and fine, 1*s.* per ounce.

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SUDBURY EARLY IMPROVED CAULIFLOWERS, large, beautifully white and fine, the best grown, 6*d.* per packet.

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IMPROVED LARGE WHITE COS LETTUCE, extra quality, 6*d.* per packet.

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MELONS, a rich collection of sorts, 6*d.* and 1*s.* per packet.

EXTRA EARLY SILVER SKIN ONION, 1*s.* per ounce.

GIANT MADEIRA ONION, the largest, 8*d.* per ounce.

DILLISTONE PROLIFIC EARLY PEA, 1*s.* 9*d.* per quart.

CHAMPION OF SCOTLAND, early wrinkled do., extra fine, 2*s.* 6*d.* per quart.

NE PLUS ULTRA, the finest and most productive of the wrinkled Peas, 2*s.* 6*d.* per quart.

Seeds all of first quality. CATALOGUES free on application.

STEPHEN BROWN, Seed Grower and Importer of Choice Foreign Seeds and Roots, Sudbury, Suffolk.

GEORGE SMITH has much pleasure in drawing the attention of the readers of the *Gardeners' Chronicle* to the woodcut of his extraordinary FUCHSIA, MAMMOTH, showin

the natural size and form. For further particulars see Catalogue, which is now ready, and forwarded in exchange for one postage stamp. Illustrations of four distinct and beautiful Seedling Fuchsias now ready in exchange for 12 postage stamps, and the elegant Petunia Eclipse for 8 stamps. The Catalogue also contains full particulars of the superb bedding variegated Geranium Argus, and fine White flowering Horseshoe leaved Called Snowflake. also a set of extra fine Verbenas, and Calceolaria Canariensis, superior to aurea floribunda, and distinct in colour, with Priced Lists of all the leading kinds of Show, Fancy, Spotted and Bedding Geraniums, Verbenas, Fuchsias, Dahlias, Petunias, Chrysanthemums, &c.

Tollington Nursery, Hornsey Road, Islington, London, N.

NEW SEEDS, CARRIAGE FREE.—Genuine and unadulterated Garden and Flower Seeds, &c., Carriage Free to any Railway Station in the United Kingdom. For particulars see the NEW PRICED DESCRIPTIVE CATALOGUE, which may be had post free on application to HENRY BROWN, Seedsman and Florist, 4, Commutation Row, Liverpool.

N.B. FLUKE POTATOES off the Moss or Sand, free from disease, 6*s.* per 80 lb. Price per ton on application

TO THE SEED TRADE.

THOMAS AYRES, WHOLESALE and RETAIL SEEDSMAN and GROWER, Biggleswade, Beds, has to offer to the Trade a few cwt. of WHITE SPANISH ONION SEED, the growth of 1859; 40 bushels of SCARLET RUNNER BEANS, English growth; a fine sample of LONG-POD and WINDSOR; also a few varieties of GARDEN PEAS; also a few cwt. of PARSNIP SEED, the growth of 1860.

N.B. T. A. has also to dispose of SWEDE TURNIP SEED and WHITE TURNIP SEED, in large or small quantities.

WILLIAM BARRON, GARDEN ARCHITECT, LANDSCAPE GARDENER, &c., Sketty, Swansea.

N.B. Gentlemen should be aware before they are led into an endless expense. First have PLANS and ESTIMATES, with proper SPECIFICATIONS. Everything executed by Contract or otherwise in the best style. Terms on application.

Alpha and Sketty Nurseries, Swansea.

MESSRS. J. AND H. BROWN offer the following selection of Choice PLANTS, which they will forward to any part:—

	s.	d.
25 Azaleas, new hardy Belgian varieties, one of a sort, on their own roots, by name, well set for bloom, fine for beds or pot culture for forcing	20	0
25 Azaleas, hardy American varieties, do. do. ..	15	0
12 hardy Rhododendrons, including scarlet, white, and rose colour	12	0
Fine hardy Scarlet Rhododendrons, 2 feet, for beds, per dozen	10	6
New Yellow Rhododendrons, each, .. 3*s.* 6*d.* to	5	6
Roses, best sorts, Standards and Half-standards, per dozen, ... 12*s.* to	15	0
Climbing Roses of best sorts, rapid growers, per doz.	6	0
6 fine hardy Magnolias, one of a sort	10	0
Greenhouse Azaleas, fine varieties, per doz. 10*s.* to	12	0
Camellias, best double varieties, per dozen	28	0
24 Epacris and Ericas, one of a sort, in small pots ..	16	0
50 choice hard wooded Greenhouse Plants, one of a sort	42	0
12 New Double Italian Pæonies	8	0

FRUIT TREES.

Fine Standard and Dwarf-trained Peaches, Nectarines, Apricots, Cherries, Plums, and Pears, 2*s.* 6*d.* each, or 24*s.* per doz.
Dwarf Plants of all the above kinds, grown especially for pot culture in orchard houses, &c., per dozen, 18*s.*
Best sorts Gooseberries, Currants, and Raspberries, per doz., 3*s.*
Mulberries, Medlars, Quince, and Walnuts, each, 2*s.*
Filberts, red and thin shell, per dozen, 3*s.*
Choice Grape Vines from eyes and layers.
Evergreen Shrubs and Ornamental Trees of all kinds cheap.

Albion Nursery, Stoke Newington, London, N.—Feb. 2.

JNO. STANDISH has much pleasure in informing his friends and the Gardening world, that he has received all the plants collected by Mr. Fortune during his last voyage in China, and also all the Plants and Seeds lately collected by Mr. Watson, in New Zealand. A part of both the above Collections are now ready to be sent out, viz.:—

CAMELLIA RETICULATA fl. pl.—This very fine variety is a better grower than reticulata, the flowers being equally large and perfectly double; as soon as it has attained any size, it is the most gorgeous flowering plant that can possibly be imagined. Plants, 63*s.* each

ARECA SAPIDA.—J. S. has received a large importation of this rare Palm, which is adapted for a conservatory, or any place from which frost is excluded. When it becomes large it is admirably suited for placing out of doors to ornament the flower garden in summer. Price 21*s.* to 31*s.* 6*d.* each

CORDYLINE AUSTRALIS, 7*s.* 6*d.* each; per dozen, 60*s.*; per 100, 20*l.*

,, BANKSII, price 21*s.* each; per doz., 10*l.* 10*s.*; per 100, 60*l.*

,, ERYTHRORACHIS, 31*s.* 6*d.* each, per doz. 12*l.* 12*s.*

The above Cordylines are well adapted for Conservatories in winter and for putting out to ornament Terrace Walks and Dutch Gardens during the summer. They are all nearly hardy, therefore they need only a slight protection in winter; in fact in the Isle of Wight and many parts of Devonshire and Cornwall they would stand the winter out of doors without injury.

CYATHEA CUNNINGHAMI.—As this beautiful Tree Fern is of comparatively small growth, it is well suited for a small Greenhouse or Conservatory. Nice plants from 3*l.* 3*s.* to 7*l.* 7*s.*

CYATHEA SMITHII.—This is undoubtedly the finest of all the New Zealand Tree Ferns. Its beautiful pale green short stalked fronds clothe it with foliage to its centre, and make it highly effective. Fine young plants, 5*l.* 5*s.* each; plants with nearly 3 feet stems, 21 guineas.

MYOSOTIDIUM NOBILE, OR ANTARCTIC FORGET-ME-NOT, 10*s.* 6*d.* to 31*s.* each.

TODEA PELLUCIDA.—Those who have only seen the small plants which have been heretofore introduced, can have no conception of the magnificence of this fine Fern; some of the stems are more than a foot in diameter, and are the largest specimens Mr. Watson saw in New Zealand. Plants 7*s.* 6*d.*, to 15*l.* 15*s.* each.

WOODWARDIA JAPONICA, fine plants, 21*s.* each.

WOODWARDIA ORIENTALIS, collected by Mr. Fortune, has leaves from 3 to 4 feet long, with more substance than Osmunda regalis. This magnificent Fern is no doubt hardy as W. japonica. Plants 31*s.* 6*d.* each.

ROSE, NOISETTE—CELINE FORESTIER, bright yellow, fine form; is the hardiest of all the yellow Roses. Its foliage is so ample and beautiful that it forms a fine object even before it blooms, when it produces its flowers more profusely than any known variety. It continues blooming late in the season, until hard frosts destroy its buds, and is admirably adapted for covering walls, trellises, or banks. As a pillar Rose it cannot be surpassed, and is decidedly the most useful of all yellow Roses. Price 5*s.* each.

ROSE, HYBRID PERPETUAL—EUGENE APPERT.—Scarlet crimson, very vivid. The petals are so firm and the substance so good that they stand the sun's rays for a long time without discolouring. Each blossom is stiff and erect, showing itself with great advantage above the magnificent foliage. A free grower, well adapted for a climber or pole Rose. Fine standards, 5*s.* each; per dozen, 48*s.*

TORREA GRANDIS.—Mr. Fortune says this is one of the handsomest trees in China, being a stiff erect plant, of a pale green colour, in growth similar to Araucaria imbricata, attaining a height of upwards of 100 feet, and is particularly adapted for Avenues. Plants, 21*s.* each; 10*l.* 10*s.* per dozen; 63*l.* per 100

Besides the above-named plants J. S. has one of the finest collections of RHODODENDRONS in Europe, which he cultivates in large quantities; the finest collection of GLADIOLI, as well as a choice selection of ROSES, VINES, &c.

CATALOGUES forwarded free on application to

The Royal Nursery, Bagshot.

THE FARM AND THE GARDEN.

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WEST OF ENGLAND SEED ESTABLISHMENT AT PLYMOUTH, CONDUCTED BY MESSRS. LAMOUREUX, CLARK, AND CO.

The RETAIL PRICED CATALOGUE, containing every particular in connection with the Business, forwarded gratis and post free on application.

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GLADIOLUS BRENCHLEYENSIS.—In the *Gardners' Chronicle* of September 8, 1860, p. 816, the following Report will be found:—

"GLADIOLUS BRENCHLEYENSIS.—We have received from Messrs. YOUELL & Co., of Great Yarmouth, some specimens of this plant, the gorgeous appearance of which cannot be spoken of in terms of exaggeration. The tall robust habit and intensely bright scarlet flowers, place it at the head of all the hardy flowers of the autumn."

Flowering roots, 30s. per 100; or 4s. per dozen. Trade price on application.—Royal Nursery, Great Yarmouth.

SURPLUS STOCK.—

TRANSPLANTED SCOTCH FIRS,
1½ to 2½ feet, strong healthy stuff, 10s. to 15s. per 1000.
TWICE TRANSPLANTED LARCH FIRS,
1½ to 3 feet, from 15s. to 20s. per 1000.
TWO-YEAR SEEDLING SCOTCH FIRS,
1s. 6d., 2s., and 2s. 6d. per 1000, or 125s., 175s., and 225s. per 100,000.

TERMS CASH.—Samples on application to
J. E. NELSON, The Nurseries, Rinefield, Lymington, Hants.

NEW METHOD, COMBINING ECONOMY AND EXCELLENCE.

JAMES TYNAN begs to invite the attention of Florists and Gardeners to his method of supplying SEEDS. In order to meet the wants of a large class of Amateurs and Gardeners, he has adopted the plan of making up seeds of the very best quality in small quantities, so that with the most economical outlay the small garden may be embellished with flowers of the greatest perfection and merit. This method has received very substantial approval from Florists and Gardeners in all parts of Great Britain, in the numerous orders annually received, and the flattering testimonials voluntarily tendered.

GERMAN ASTERS and STOCKS of unequalled merit, BALSAMS, ZINNIAS, CALCEOLARIAS, CINERARIAS, PHLOXES and all the new annuals, both English and foreign (such as are usually sold in large expensive packets only), with every variety of Garden Seed worthy of cultivation.

The new French DOUBLE ZINNIA ELEGANS (see *Gardeners' Chronicle*, Sept. 22, 1860), and the splendid new HYBRID and other DIANTHUS.

	Per packet.
ASTERS—Giant Emperor, azure blue	3d. and 6d.
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,, ,, pure white, new	1s.
,, ,, reddish purple, new	1s.
,, La superb, rose	3d. and 6d.
,, New Hedgehog, five colours, extra fine,	6d. and 1s.
,, Chrysanthemum flowered, very fine	3d. and 6d.
,, Truffaut's Pæony flowered, most splendid,	3d. and 6d.
STOCKS, large flowering Ten Week, extra fine ..	3d. and 6d.
,, dwarf ,, ,, ..	3d. and 6d.
DIANTHUS HEDDEWIGII	3d. and 6d.
,, laciniatus, extra fine	6d. and 1s.
,, new hybrid ,, ...	6d. and 1s.
ZINNIA ELEGANS, new double flowered ..	6d., 1s., and 2s.

Free by post. Priced Lists on application.
Seed Warehouse, 68, Great George Street, Liverpool.

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E. TILEY feels great pleasure in offering to the lovers of the above delicious fruit this new and superb variety, which he can with confidence recommend as being the most perfect in all points of any variety in cultivation. It is very hardy, an abundant bearer, thin skinned, weight from 4 to 5 lbs., beautifully netted, oval-shaped, bright scarlet flesh and luscious flavour. Price 2s. 6d. per packet.

E. T. has also Seeds of the following superb MELONS, which he can with confidence recommend:—

Per packet.	s. d.	Per packet.	s. d.
General Havelock ..	1 0	Queen's Melon	1 0
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Golden Drop Green Flesh	1 0	Windsor Prize ,, ..	1 0
Golden Perfection ,, ,,	1 0	Emperor	1 0
Scarlet, King Scarlet ,,	1 0	Fleming's Trentham Hybrid	1 0
Green Gage	1 0	Duncan's Green-flesh Improved	1 0
Incomparable	1 0	Hampton Court Green Flesh	1 0
Golden Ball	1 0	Egyptian Green Flesh ..	1 0
Bromham Hall Green Flesh	1 0	Cuthill's Camberwell Beauty	1 0
Pine Apple	1 0	Gordon Castle Green Flesh	1 0
Rowse's Incomparable ..	1 0		
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CUCUMBER RIFLEMAN.—This is undoubtedly one of the finest varieties in cultivation ever yet sent out for exhibition purposes, possessing the following fine qualities:—A beautiful black spine, always growing even from stem to point, scarcely any handle, carries its bloom well, always keeps a fresh colour, and not liable to turn yellow as many other varieties. Length 24 to 28 inches, and a most abundant bearer. It will be found to be the most useful Cucumber in cultivation; 60 brace of this Cucumber were hanging at one time in a span-roof house 16 feet by 10 feet, and not one of which was less than 20 inches in length. They were seen by Cucumber growers from all parts of the country, who pronounced it to be the finest show of fruit they had ever seen. It is quite as hardy as any of the old ridge varieties, and not at all liable to rust or canker. Price 2s. 6d. per packet.

To Cucumber growers generally the following superb Cucumbers will be found to give every satisfaction:—

Per packet.	s. d.	Per packet.	s. d.
General Outram	2 0	Stockwood Ridge	1 0
Sir Colin Campbell ..	1 6	Ayres' Prolific	1 0
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Victory of Bath	1 0	Sutton's Champion ..	1 0
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Lord Kenyon's Favourite	1 0	Henderson's A 1	1 0
Phenomenon	1 6	Sion House	1 0
Captivation	1 6	Allen's Victory	1 0
Mills' Jewess	1 0	Trollope's King	1 0
Manchester Prize	1 0	Ipswich Standard	1 0
Conqueror of the West ..	1 0	Tiley's Improved	1 0
Hunter's Prolific	1 0	Hamilton's Black Spine ..	1 0
Incomparable	1 0	Dickson's Newton Hero ..	1 0
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Champion of England ..	1 0	&c. &c. &c.	

TILEY'S EMPEROR RED CELERY, the finest grown, 1s per packet.
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GRIFFIN'S ALMA LETTUCE, 1s. per packet.
The TRUE OLD BATH COS LETTUCE, 1s. per packet.
A remittance must accompany all orders by cash or penny postage stamps.

EDWARD TILEY, NURSERYMAN, SEEDSMAN and FLORIST, 14, Abbey Church Yard, Bath.

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MARSH AND PERKINS beg to offer the undermentioned, being fine and well-rooted:—

		s.	d.
ACACIA, 4 to 5 feet ..	per 100	4	0
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,, 3 to 4 feet ..	,,	18	0
,, 4 to 5 feet ..	,,	20	0
BEECH, 2 to 3 feet ..	,,	20	0
ELMS, fine Standards ..	per 100 50s. to	80	0
,, WYCH, 3 to 4 feet ..	per 1000	20	0
,, ,, 4 to 5 feet ..	,,	25	0
,, ,, 5 to 6 feet ..	,,	30	0
FIR AUSTRIACA, 15 to 18 inches ..	,,	40	0
,, ,, 1½ to 2 feet ..	,,	60	0
,, SCOTCH, 1 to 1½ feet ..	,,	10	0
,, ,, 1½ to 2 feet ..	,,	15	0
,, ,, fine, 2½ to 3½ feet ..	,,	20	0
,, SPRUCE, 10 to 15 inches ..	,,	10	0
,, ,, 15 to 18 inches ..	,,	15	0
,, ,, 18 to 24 inches ..	,,	30	0
LIMES (Standards) ..	per 100	50	0
,, extra fine do. ..	,,	80	0
OAKS, 2 to 3 feet ..	per 1000	25	0
POPLARS, LOMBARDY, 4 to 6 feet ..	,,	30	0
,, ,, 6 to 8 feet ..	,,	60	0
,, fine Standards, 8 to 10 feet ..	per 100	40	0
SYCAMORE, 2 to 3 feet, ..	per 1000	15	0
BERBERIS AQUIFOLIA, 12 to 18 inches ..	,,	25	0
,, DULCIS, 2 to 3 feet ..	,,	50	0
EVERGREEN PRIVET ..	per 1000 14s. to	20	0
ARBOR-VITÆ, CHINESE, 18 to 24 inches ..	per 100	20	0
,, ,, 24 to 30 inches ..	,,	30	0
,, SIBERIAN, 18 to 24 inches ..	,,	50	0
RED CEDAR, 18 to 24 inches ..	,,	20	0
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Address, 42, Drapery, Northampton.

WINTER DRESSING FOR ORCHARD HOUSE AND OTHER FRUIT TREES.

Extract from the Eighth Edition of the Orchard House. By Mr. Rivers.

"January paint the trees (every shoot and bud) with Gishurst Compound, half a pound to the gallon of water. This will destroy the eggs of Aphides."

Vines and outside wall trees should first be washed, stem and shoots, with 8 oz. solution of Gishurst, then smeared with clay and Gishurst, (see *Gardeners' Chronicle* Oct. 13), or with lime, sulphur, and Gishurst, made into a paste. If the smell be disliked, make the solution 48 hours before use.

Full directions as to the use of weaker solutions against mildew and insect pests in spring and summer, with particulars of the experience of many great gardening authorities, are enclosed with the boxes of Gishurst. These are supplied retail through any nurseryman and seedsman at 1s., 3s., and 10s. 6d. each, wholesale by PRICE'S Patent Candle Co., Limited.

FUMIGATING AND SYRINGING.

GRIFFITHS AND AVISS, TOBACCONISTS, Coventry, call attention to their TOBACCO PAPER. It is simple in use, safe in application, altogether effective in the destruction of Green Fly, Black Thrips, &c., nominal in price, 12s. 6d. per dozen pounds, sent to any part of the kingdom on receipt of Post Office Order. To those in the Trade a liberal discount on 28 lbs. and upwards. The following practical gentlemen have submitted it to every kind of ordeal, and bear testimony it is all we represent:—

Mr. Charles E. West, the Earl of Denbigh, Newnham Paddox
Mr. Wm. Oliver, the Earl of Craven, Combe Abbey
Mr. A. Henderson, His Grace the Duke of Sutherland, Trentham
Mr. Wm. Pool, the Earl of Aylesford, Packington Hall
Mr. John Jennings, the Earl of Derby, Knowsley Park
Mr. Thomas Pond, the Viscount Hood, Whitley Abbey
Mr. Geo. Tranter, the Hon. Granville D. Ryder, Westbrook, Hemel Hempstead
Mr. Geo. Bennett, J. Beech, Esq., Brandon
Mr. Jas. Knackston, J. R. West, Esq., Alcot Park
Mr. W. H. Mountford, H. R Hughes, Esq., Kinmel Park, St. Asaph, North Wales
Mr. Peter Conlon, C. Webb, Esq., The Gardens, High Grounds, Hoddesden
Mr. Francis R. Kinghorne, Nurseryman, Seedsman, and Florist, Richmond, Surrey
Mr. John Reeves, Ladbroke Nursery, Notting Hill, W.
Mr. John Jennings, Nurseries, Shipston-on-Stour
Mr. Edward Perkins, Nurseryman, Seedsman, and Florist, Leamington Nursery
Mr. John Ogden, Nurseryman, Seedsman, and Florist, Coventry
Messrs. S. Perkins & Sons, Nurserymen, Seedsmen, and Florists, Coventry

*** Agents Wanted. Nurserymen and Florists preferred.

N.B. Cast Fumigating Pots, Tobacco Water for Syringing, and Tobacco Juice for Sheep Dressing.

GENUINE TOBACCO PAPER FOR FUMIGATING.

H. APPLEBY (Foreman to Messrs. Ivery & Son, Nurserymen, Dorking), has now a good supply of the above on hand in 4 lb. packets, 1s. 3d. per pound. For testimonials see *Gardeners' Chronicle*, January 5, 1861, page 14.

GENUINE ROLL TOBACCO CLOTH.

WARRANTED EQUAL IN STRENGTH TO TOBACCO.

JOSEPH BAKER, 10, Gough Square, Fleet St., E.C., having dealt upwards of 20 years in the above, can recommend it as the best article for destroying the Fly. 1s. 4d. per lb.; over 10 lbs., 1s. Post-office Orders payable Fleet Street.

FOR SMOKING GREENHOUSES.

NEAL'S PATENT APHIS PASTILS, which lit with a Candle, save all trouble, destroy all Insects, and are already used by some of the leading Gardeners, may be obtained of the principal Seedsmen and Nurserymen, 1s. per packet.—Manufacturer and Patentee, J. NEAL, Edward Street, Birmingham. Trial packets, 1s. each.

TREES COMING INTO BLOOM will be protected from Frosts, Hail, &c., by using HAYTHORN'S HEXAGON AND CHISWICK GARDEN NETS, used and recommended by all the Principal Gardeners; the Nets will also protect the Fruit from Wasps, Flies, Birds, &c.—For Patterns, Prices, and Testimonials, direct to Mr. HAYTHORN, Nottingham.

CARD.

SAMUEL N. McGERRO[...]
GENERAL HORTICULTURAL BUILDER,
Knotty Ash, near Liverpool.

Reference permitted to the Nobility and Gentry throughout Great Britain and Ireland.

HOT-WATER APPARATUS FITTED in every description of Hothouses, Mansions, Churches, Chapels, &c., on the most approved principle by J. MEREDITH, [...] Cottage, Garston, near Liverpool.

N.B. First-class references may be had on application.

GREENHOUSES, ORCHARD HOUSES, &c.

H. FREEMAN'S Horticultural Works, [...] Hackney, N.E. Established 20 years. Substantially made Greenhouses, glazed, ready for fixing, 42 feet by [...] 50l.; 21 feet by 13 feet, 28l.; 12½ feet by 10 feet, 15l. [...] Houses 10 per cent. cheaper. A large assortment [...] Estimate given for Heating, or any branch in iron or wood.

HOTHOUSES FOR THE MILLION

MADE BY STEAM POWER AT

J. LEWIS'S HORTICULTURAL WORKS, Stamford Hill, Middlesex, N. These Hothouses are made on a much better and stronger principle than those manufactured on Sir J. Paxton's plan, and are more durable and cheaper. A span-roof measuring 30 ft. by 16 ft., with two glass ends and doors complete [...]

Do.	do.	40 ft. by 20 ft.	do.	do.
Do.	do.	60 ft. by 24 ft.	do.	do.

The price of any other size forwarded on application to J. L[...]

JOSEPH SMITH, HORTICULTURAL BUILDER, [...] Road, Hammersmith, W., begs attention to his GREEN HOUSES, substantially made to order, at 1s. per foot. LIGHTS, 2-in. thick, 8d. per foot; if unglazed, 4½d.

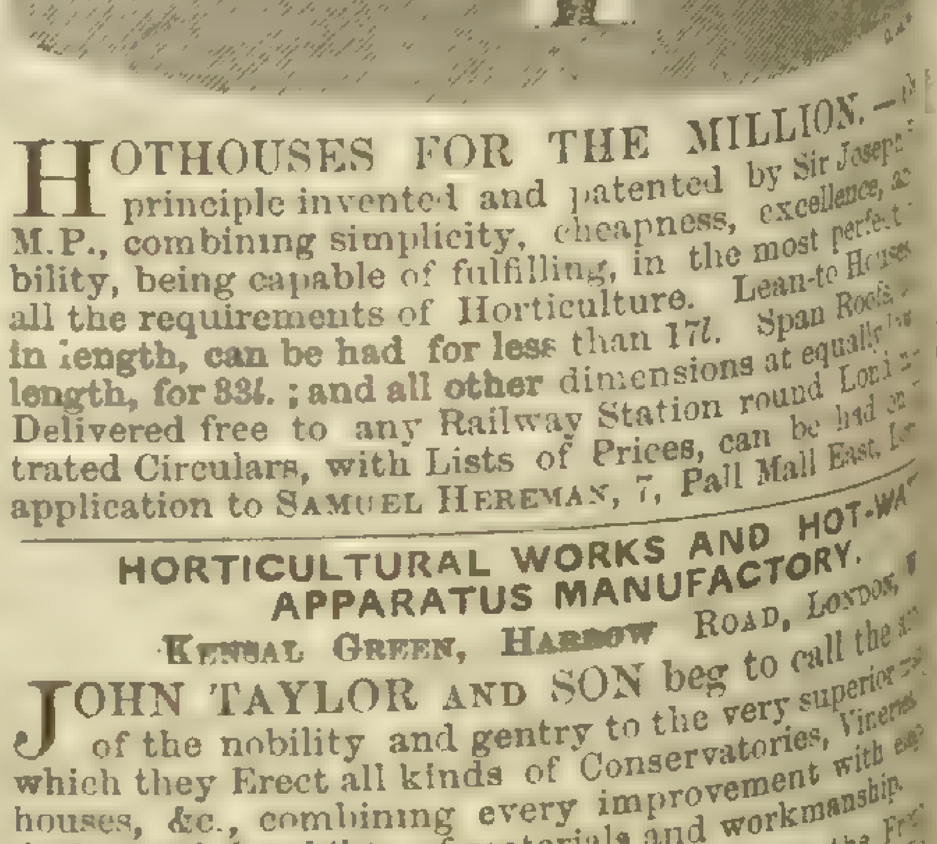
Ready-made: four HOUSES, viz.:—

Span, 24 × 15 feet £38	Lean-to, 24 × 12 ft. [...]	
Do. 23 × 12 feet 6 inches 32	Do. 21 × 11 feet	

Eighty 6 × 4 feet LIGHTS, 15s. each, or the lot for [...] a quantity of other sizes at 7½d. per foot.

WEST OF ENGLAND, IRELAND, AND WA[LES].

VINCENT SKINNER (*late Partner with* J. Weeks & Co.), erects CONSERVATORIES, HOT-HOUSES, and HOT-WATER APPARATUS to warm Churches, Hothouses, &c., and has foremen from London to superintend their construction. Upright Pipe Boilers, Plans, Estimates.—V. SKINNER, Bridewell Street, Bristol.



HOTHOUSES FOR THE MILLION.—[...] principle invented and patented by Sir Joseph [...] M.P., combining simplicity, cheapness, excellence, and [dura]bility, being capable of fulfilling, in the most perfect [manner,] all the requirements of Horticulture. Lean-to Houses [...] in length, can be had for less than 17l. Span Roofs [...] length, for 33l.; and all other dimensions at equally low [...] Delivered free to any Railway Station round London. [Illus]trated Circulars, with Lists of Prices, can be had on application to SAMUEL HEREMAN, 7, Pall Mall East, Lo[ndon].

HORTICULTURAL WORKS AND HOT-WA[TER] APPARATUS MANUFACTORY.

KENSAL GREEN, HARROW ROAD, LONDON, W.

JOHN TAYLOR AND SON beg to call the attention of the nobility and gentry to the very superior [...] which they Erect all kinds of Conservatories, Vineries, [...] houses, &c., combining every improvement with elegance of design and durability of materials and workmanship.

Their VENTILATING APPARATUS for the Fr[...] Roofs of Houses has given the highest satisfaction. [...] Chapels, Schools, Entrance Halls, Public Buildings, &c., [...] with Hot-Water Apparatus in a most economical and [...] manner.

J. T. & SON have great pleasure in referring to [...] the nobility and gentry by whom they are extensively [...]

COTTAGERS' KALE.

CHARLES TURNER can supply seed from selected plants of this delicious Winter Green. It is the only plant of its class unharmed by the late severe weather.

Price to the Trade on application.

POTATOES.

CHARLES TURNER has a fine stock of the DALMAHOY, round, early, a great cropper, producing double the quantity of most kinds: of a good uniform size, of excellent flavour and floury; the best Potato grown for a general crop, being also a good keeper.

GLORY OF ENGLAND (Kidney) one of the earliest, most prolific, and in all respects one of the best Potatoes ever introduced.

Also fine healthy sets of all the leading kinds. See Catalogue.

SEED CATALOGUE.

CHARLES TURNER'S DESCRIPTIVE LIST, containing several Novelties, and a Selection of the best established varieties, is now ready.

PELARGONIUMS.

CHARLES TURNER'S plants of the above are remarkably fine of all the classes, and in great variety. If purchased by the dozen are at very moderate prices.

CINERARIAS.

CHARLES TURNER'S select named varieties of the above can be supplied at 12s., 21s., and 30s. per dozen. These are of the finest quality.

GENERAL SPRING CATALOGUE OF PLANTS.

CHARLES TURNER'S NEW LIST is now Ready; it comprises new and general Collections of PELARGONIUMS, FANCY do., CINERARIAS, DAHLIAS, AZALEAS, FUCHSIAS, VERBENAS, VARIEGATED GERANIUMS, SCARLET do., ACHIMENES, GLOXINIAS, CALCEOLARIAS, PETUNIAS, CHRYSANTHEMUMS, PHLOX, CARNATIONS, PICOTEES, PINKS, AURICULAS, &c. &c.

WELLINGTONIA GIGANTEA, AND CUPRESSUS LAWSONIANA.

CHARLES TURNER has a large stock of various sizes of these very Ornamental Trees, which have also proved themselves to be the most hardy of our Conifers.

Prices on application.

FRUIT TREES.

CHARLES TURNER has very fine Trained and Standard Trees of all the sterling varieties. COX'S ORANGE PIPPIN APPLE and the SALWEY PEACH are highly recommended.

GENERAL NURSERY CATALOGUE.

CHARLES TURNER'S LIST comprises the extensive Collections of Fruit Trees, Roses, the Coniferæ, hardy Ornamental Trees, Evergreens and Deciduous Shrubs, as well as Strawberries and Rhubarb, all the best kinds of which are carefully cultivated.

All the Catalogues enumerated will be forwarded gratis and post free.

THE ROYAL NURSERIES, SLOUGH.

PINE APPLE PLACE NURSERY, EDGEWARE ROAD, W

ARTHUR HENDERSON AND CO. beg respectfully to announce that their CATALOGUE of Kitchen Garden and Flower Seeds for 1861, with a list of Garden Implements, &c., is now published, and will be forwarded postage free, on application.—For details and particulars of New Vegetables, see *Gardeners' Chronicle* of 5th and 12th January.

WHOLESALE CATALOGUE.

GEORGE JACKMAN AND SON'S PRICED AND DESCRIPTIVE CATALOGUE FOR 1860 AND SPRING 1861, comprising Fruit Trees of all the leading kinds, new and selected Roses, fine varieties of American Plants, Choice and Rare Conifers, Evergreen and Deciduous Trees and Shrubs, and a fine Stock of Transplanted Forest Trees, &c., can be had free on application.—Woking Nursery, Surrey.

NEW AZALEA INDICA.—Alba unica, Adelaide von Nassau, Adolphe von Nassau, Alexander II., Aurelie, Bernard André, Bouquet de Flore, Comte de Hainault, Director Augustin, Distinction, Flower of the Day, Model, Nathalie, Queen of the Whites, Roi Leopold, Rosy Circle, Schone Mainzerin, Teutonia, Thusnelde, and William Luddick. Good clean plants; purchaser's selection of 12, 40s.; the set of 20, 3l., hamper and packing included.

THOMAS JACKSON & SON, Nurserymen, &c., Kingston, S.W.

HARDY SCARLET RHODODENDRONS.

JOHN WATERER begs to announce that his New DESCRIPTIVE CATALOGUE of HARDY SCARLET and other choice RHODODENDRONS, as are annually displayed at the Royal Botanic Gardens, Regent's Park, is now published and will be forwarded on application. It likewise furnishes a List of all popular Hardy Plants, with a selection of the most desirable Conifers, with heights and prices.

The American Nursery, Bagshot, Surrey, near Sunningdale Station, South-Western Railway.

The CATALOGUE can also be had of Mr. JOHN KERNAN, 4, Great Russell Street, Covent Garden, W.C.

RHODODENDRONS, HARDY AZALEAS, ETC.

GEORGE WHEELER, NURSERYMAN, &c., Warminster, Wilts, respectfully announces he has a fine Stock of the above which he offers at very moderate prices, viz., good strong plants at 30s., 40s., 50s., 60s. 70s., and 80s. per 100, according to the strength of the plants.

RHODODENDRONS and AZALEAS, by name, 75s., 100s. to 200s. per 100.

SEDUMS, ANDROMEDAS, VACCINIUMS, &c., 60s. to 100s. per 100.

GERANIUMS, HERBACEOUS AND ALPINE PLANTS, ORCHIDS, CHRYSANTHEMUMS, HARDY VARIEGATED PLANTS, &c.

MESSRS. PARKER AND WILLIAMS beg to inform their friends and patrons that their new priced and descriptive CATALOGUE of the above, to which are added supplemental Lists of Fuchsias, Stove, Greenhouse, and Hardy Plants, Ferns, Ornamental Foliage and Variegated Plants, Fruit Trees, &c. (which include the best new plants of the season, is now published, and will be forwarded post free on application.—Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, London, N.

GLADIOLI.

JOHN STANDISH is the largest grower and has the best collection. He has raised an immense quantity of Hybrid Seedlings, which flowered during the past Autumn for the first time, and exceeded anything that has been seen in Gladioli before: it being a remarkable fact that amongst these Seedling Gladioli there is scarcely ever a bad one. Strong flowering Bulbs, 75s. per 100; small ditto, 50s. per 100.

Besides the above, J. S. has all the best named kinds, CATALOGUES of which, and of his other rare and choice plants, may be had free, on application to the Royal Nursery, Bagshot.

PINE APPLES, GRAPES, ETC.

PINE PLANTS, FRUITING AND SUCCESSION.
GRAPE VINES, FROM EYES FOR FRUITING IN POTS, OR PLANTING.

JOHN WEEKS AND CO. can supply any quantity of very fine healthy Pine Plants, either Fruiting or Succession.

GRAPE VINES remarkably strong and fine, 50 varieties, all the best sorts.

JOHN WEEKS AND CO.'S HORTICULTURAL SHOW ESTABLISHMENT is entirely devoted to the growth and Forcing of GRAPES, PINES, PEACHES, FIGS, CUCUMBERS, and other choice Fruits. The whole open for inspection, thereby showing the most improved plans of HORTICULTURAL BUILDINGS with the VENTILATING and HOT-WATER APPARATUS in full operation.

JOHN WEEKS AND CO., Horticultural Builders and Hot-Water Apparatus Manufacturers, King's Road, Chelsea, London. Plans, Estimates, and Illustrated Catalogues free on application.

EXTRA FINE DWARF-TRAINED PEACHES, NECTARINES, CHERRIES, AND PEARS.

WOODLANDS NURSERY, MARESFIELD, NEAR UCKFIELD, SUSSEX.

WM. WOOD AND SON refer with pleasure to their splendid Stock of the above; but more particularly to their DWARF-TRAINED MORELLO and MAYDUKE CHERRIES, which are as handsome trees as can possibly be desired.

NEW ROCHELLE BLACKBERRY.

HENRY MAY has received a second importation of the above new Fruit Tree from the United States. The plants are very fine and strong. Price 12s. per dozen.

PYRAMIDAL PEARS on Quince, 15s. per dozen.

DESCRIPTIVE CATALOGUES of the above free on application to

HENRY MAY, The Hope Nurseries, near Bedale, Yorkshire.

RASPBERRIES, Red, 10s. to 15s.; Yellow Antwerp, 8s. per 100. CURRANTS, Red and Black. STRAWBERRIES, Elton Pine and Keens' Seedling, 10s. to 15s., British Queen, Eleanor, and Alice Maud, 15s. to 20s. per 1000; Eliza, Admiral Dundas, and Black Prince, 2s. 6d., Wizard of the North, 7s. per 100; LAURELS, 3 to 6 feet; Bushy DUTCH HONEYSUCKLES, &c.

GEO. CORNWELL, Seedsman, &c., Barnet, N.

FRUIT TREES.

WILLIAM J. EPPS, JUN., begs to offer the following at very low prices, as the ground on which they stand must be cleared:—

DWARF-TRAINED PEACHES AND NECTARINES	per doz.	£1	10	0
STANDARD CHERRIES	per 100	5	0	0
ASPARAGUS, 4 years	per 1000	1	0	0

South Eastern Nurseries and Seed Establishment, Ashford.

TO THE TRADE.—

Strong	transplanted	SPRUCE FIR, 1 to 1½ feet.
Ditto	ditto	SCOTCH FIR, 1 to 1½ feet.
Ditto	ditto	BEECH, 1½ to 2 feet.
Ditto	ditto	ditto 2 to 2½ feet.
Ditto	ditto	OAK, 2 feet.
2 year	ditto	THORN QUICKSETS, fine.
3 year	ditto	ditto extra ditto.
1 year old Seedling		ditto

Will be Sold cheap. Prices on application to SAMUEL FINNEY & Co., Gateshead Nursery, Newcastle-on-Tyne.

IRISH YEWS.—Amongst the very few Plants which seem to be uninjured by the late severe storm, none appear hardier than the IRISH YEW, which still retains the same healthy hue it had before the storm. Fine healthy well-rooted plants from 1½ to 6 feet high, prices of which can be had on application to CUNNINGHAM, FRASER, & Co., Comely Bank Nursery, Edinburgh.

TREE AND SHRUB CATALOGUE.

JOHN CRANSTON begs to announce to his Patrons and the Public generally, that his DESCRIPTIVE CATALOGUE of Conifers, Ornamental Trees, Evergreen and Deciduous Shrubs, &c., is now ready for distribution, and will be forwarded on receipt of one postage stamp.

The above contains important and interesting notes with regard to the height the Trees enumerated attain, Native Country, date of introduction, and in the case of Flowering Shrubs, the colour and time of flowering.

Nurseries, King's Acre, near Hereford.

THREE MILLIONS OF TRANSPLANTED QUICKS.

GEORGE CHIVAS offers the above, varying from Good to exceedingly Strong, clean and well rooted. A Sample Bundle containing 100 of each, 5 sizes, forwarded on receipt of 15s. Truck loads delivered Free at any Railway Station. Also, a Million of Transplanted LARCH; half a Million of Transplanted SPRUCE; Ten Thousand Superior Standard APPLES and PEARS; and a large General NURSERY STOCK.—Chester, Feb 9.

ROBERT NEAL, NURSERYMAN, Wandsworth Common, S.W., begs to call the attention of buyers to his large and well selected stock of EVERGREENS and FLOWERING SHRUBS, ORNAMENTAL TREES, AMERICAN PLANTS, FRUIT AND FOREST TREES, STANDARD AND DWARF ROSES of every description. A large stock of BOX-LEAF EVERGREEN PRIVET, from 1 to 6 feet for hedges; GREEN HOLLY, 1 to 6 ft.; RICH BOG and LOAM for American Beds; LEAF MOULD. The Nursery is 10 minutes' walk from Clapham Common, and New Wandsworth Station, Crystal Palace Line.

LARGE TREES, ETC.

WM. PAUL (Son and Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, N., has a quantity of large handsome TREES, Evergreen and Deciduous, which must be cleared off 10 acres of the old Nurseries very shortly, and will be sold cheap. Cedrus deodara, Cedar of Lebanon, Yews, Box, Laurels, Arbor-vitæ, Privet, Red Cedar, fine specimens of choice Coniferæ, Alders, Planes, Poplars, Elms, Limes, Fruit Trees, &c. All have been frequently removed and rise with plenty of fibrous roots. Carefully taken up and delivered free to any railway station in London. Further particulars on application.—Please address WILLIAM PAUL, Cheshunt Nurseries, Waltham Cross, N.

GENUINE GARDEN SEEDS.

WM. CUTBUSH AND SON beg to intimate that their PRICED CATALOGUE OF KITCHEN GARDEN AND FLOWER SEEDS FOR 1861 is now ready and will be sent gratis on application.

Every article offered can be guaranteed of the VERY BEST description and TRUE.—Highgate Nurseries, London, N., ONLY.

MILLTRACK MUSHROOM SPAWN.
NOTICE.

WM. CUTBUSH AND SON beg to announce, in reply to numerous applications, that they cannot supply any more of the above for the present. As soon as they have some ready, advertisements will be inserted in this paper.

Highgate Nurseries, London, N.

PLYMOUTH SEED COMPANY, PLYMOUTH.

FOREIGN SEED ORDERS.—Plymouth is admirably situated for the execution and transmission of Foreign Orders. Seeds have during the past seasons been forwarded to Australia, New Zealand, United States, Canada, India, Malta, France, Austria, Portugal, Ionian Islands, Madeira, Gambia, China, Jamaica, Cape of Good Hope, Prince Edward's Island, and have arrived in the finest condition.

IRELAND.

PLYMOUTH is admirably situated for supplying Noblemen, Clergymen, and Gentlemen with all kinds of GARDEN and FARM SEEDS. All Orders of [illegible] and above delivered free to any of the following ports, viz., Cork, Dublin, Waterford, Limerick, and Belfast.

Address, Plymouth Seed Company, Plymouth, Devon.

THE FARM AND THE GARDEN.

NEW SEEDS, CARRIAGE FREE, from the

WEST OF ENGLAND SEED ESTABLISHMENT AT PLYMOUTH,

CONDUCTED BY MESSRS.

LAMOUREUX, CLARK, AND CO.,

The RETAIL PRICED CATALOGUE, containing every particular in connection with the Business, forwarded gratis and post free on application.

Address: LAMOUREUX, CLARK, & Co., Plymouth.

J. C. WHEELER AND SON acknowledge the receipt of every order by return of post; and each day's orders are carefully executed in exact rotation as received.

SEED POTATOES.—Choice sorts are very scarce, our celebrated Gloucestershire Kidneys are in great demand. All our Seeds (if ordered to the value of 40s.) are delivered Carriage Free by Rail.

J. C. WHEELER & SON, Seed Growers, Gloucester.

GRAPE VINES FROM EYES IN POTS.

LUCOMBE, PINCE, AND CO. have now a remarkably fine healthy stock of strong VINES, from 6 to 10 feet high, of all the choicest sorts, fit for immediate planting, propagated from eyes, taken from their own experimental Vinery, which enables them to warrant each kind true to name.

LISTS of sorts and prices may be had on application to them Exeter Nursery, Exeter.

CARTER'S LIST OF NEW AND CHOICE VEGETABLES.

Per packet—	s.	d.	Per packet—	s.	d.
Lee's White Sprouting Broccoli	2	6	Carter's Giant White Cos Lettuce	1	0
Nutting's selected dwarf Red Beet	1	0	Carter's Champion Cucumber	1	0
Tomato de Laye	0	6	New Feather-stem Savoy	1	0
Dalmeney Broccoli ..	1	0	Carter's Excelsior Melon	1	0
Conning's Perfection do.	1	0	Turner's Gem	1	0
Melville's variegated garnishing Kail	1	0	StrathmoreHeroPeas, p. qt.	2	6
Carter's dwarf Mammoth Cauliflower	1	0	Handsworth Potatoes, per peck	5	0
Hood's dwarf Imperial Celery	1	0	Pheasant Eye do. „	3	0
Lynch's Star of the West	1	0	Dalmahoy do. .. „	3	0
			Baldry's Scarlet Defiance Rhubarb, per root ..	2	0

For further particulars see CARTER'S SELECT LIST OF GARDEN AND FARM SEEDS, forwarded gratis, and post free on application.

JAMES CARTER & Co., 237 and 238, High Holborn, W.C.

The Gardeners' Chronicle.

SATURDAY, FEBRUARY 9, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

TUESDAY	Feb. 12	Royal Horticultural (Floral Committee) at Kensington Gore .... Noon.
		Royal Horticultural (Fruit Committee) at Kensington Gore .... Noon.

Mr. LEONARD WRAY'S estimate that of every 8 lbs. of TEA sold, 7 lbs. are ADULTERATED has produced quite an explosion in the Society of Arts. And no wonder, considering the injurious effect upon Tea-dealers of such a wholesale denunciation. At the last meeting of the Society the question was revived on the occasion of reading a paper on adulteration in general; and this induces us to return to the subject, which is certainly one the importance of which to the public cannot be overstated. What we want to know is not whether some Teas are fraudulently adulterated, but whether the practice is so general as to justify Mr. WRAY'S assertion. At the meeting alluded to this gentleman entered into an explanation the essential parts of which were—1, that his statement applied to the last crop of Tea imported; 2, that his authority was Mr. GREEN, who "had had very great practical experience; he was in one of the largest wholesale Tea warehouses in London, and for the last 20 years of his life had had daily experience in the article of Tea." Think of this, gentle reader! here is a Tea-dealer, a *practical* man! who one would have thought would have been silent as to such a fraud, substantiating Mr. WRAY'S astounding assertion. But Mr. GREEN appeared at the meeting in person and maintained his ground in the following original manner:—

The subject of the adulteration of Tea had occupied a large share of his attention during the last five years. His experience in one of the largest houses in the kingdom for 20 years had been, that Teas were very largely adulterated; and he was, prepared to stake his reputation upon the statement he made, that of the Tea which had been imported into this country during the last three years seven-eighths were adulterated. Startling as that statement was, he might, perhaps, add an explanation, which would, in some measure, qualify it. Out of the whole quantity one-eighth might be regarded as a spurious material altogether; that left three-fourths of the stock to be more or less adulterated or sophisticated. Those three-fourths might be taken to be

adulterated to an extent varying from 1 to 50 per cent. He felt it was impossible, whatever a man's knowledge of Tea might be, to detect adulteration in it when carried to a comparatively small extent. He would say that of the entire crop of Foo-choo-foo Tea which had just arrived, he believed there were but few lots that were absolutely pure. He had obtained some lots of that Tea, and he found that although it was only three months old, it had already deteriorated in commercial value to the amount of 6*d*. per lb. Then with regard to the Black Tea of Congou, the Orange Pekoe, and other varieties, he believed the assertion that seven-eighths were adulterated was borne out by the facts. He believed the quantity of Tea exported from this country amounted to about 10,000,000 lbs. annually, shipped principally to northern ports, and it was some consolation to know that the Tea so exported consisted chiefly of the most inferior qualities."

This, it must be confessed, is an explanation of a very singular description. Mr. GREEN has discovered that if you subtract 1 lb. from 8 lbs. there remains 6 lbs. *Such arithmetic does not inspire confidence*; but let it pass. He then says that out of the remaining 6 lbs. the greatest amount of adulteration is 3 lbs., and that the fraud even descends to 1 lb. in 100 lbs. Now, taking this gentleman's own version of the matter, the very worst Tea contains only 3 lbs. of adulteration in 8 lbs., and a great deal contains so inappreciable a quantity as to amount to not more than 1 ounce in 6¼ lbs. And that is what he calls a general adulteration to the extent of seven-eighths.

Does any one believe that a Tea dealer, or we will say a Tea merchant, would falsify the article for the sake of one per cent.? The story is absurd. Mr. GREEN, indeed, himself declares in the same breath, that when Tea is adulterated to "a comparatively small extent" it is impossible, whatever a man's knowledge may be, to tell whether it is adulterated or not. So that after all he admits that he does not know what he professes to know so thoroughly! In addition, by way we suppose of comforting the drinkers of Tea, Mr. GREEN adds that of this falsified Tea as many as ten million pounds are exported, so that no great deal can find its way into general consumption. We have long since learned to distrust the assertions of *practical men*: and our confidence in them is not increased by this discussion at the Society of Arts.

We entertain no doubt that the statement we made last week is as near truth as the circumstances of the case will permit; that is to say, that adulterated Tea is very generally supplied to the poor at low prices, and that the article as sold at higher prices is essentially genuine. Oh! but cries a speaker at the meeting, I have seen with my own eyes how Tea is treated in this country: and I'll tell you the process. And then he makes the following revelation:—

"Gentlemen were aware that the Tea came to this country in cubical boxes, enclosed in a thin sheet of lead, which was soldered in a manner so exquisitely beautiful, that no European plumber could imitate it. In the event, therefore, of that metallic sheet being ruptured, it could not be re-soldered without immediate detection. The practice, therefore, was to cut a hole in the metallic sheet sufficiently large to admit the introduction of the hand to take from the chest a sample from which the dealer decided as to his purchase. The Tea having been delivered in the chests to the purchaser, then came his own process of sophistication. If the seam in the metallic sheet could be imitated or reproduced, the task would be an easy one, but as that could not be done, the chests were emptied of their contents through the hole to which he had alluded, and the Tea was poured out in a room appropriated to the purpose, the floor of which was kept very smooth and clean. A mixture of various descriptions of Tea was then made in a heap, turned over with wooden shovels, and the chests were refilled through the same hole; the compression of the Tea in the chest being effected by the hand in the first instance, and afterwards by the foot. In that manner the chests were repacked with a different article from that which they originally contained, and they were then ready for sale by the dealer."

And this is called adulteration! We wonder how the intelligent men who compose the meetings of the Society of Arts can listen to such stuff. Mixing one genuine article with another genuine article, in order to improve the quality of both, is adulteration! The wine merchant who blends different qualities of sherry in order to suit the taste of his customers, adulterates it! The miller who mixes steely Wheat from Spain with soft English wheat in order to make the latter grind adulterates his flour! The apothecary who conceals the taste of nauseous drugs by aromatic or other ingredients adulterates his physic! That is what such a senseless statement as that we have just quoted really goes to. Why people would not drink Tea unless it was mixed to suit their palate.

We are no friends to fraudulent mixtures; few indeed have had more to do than ourselves with exposing them and assisting in the legal prosecution of offenders. But there is reason in all things; and we cannot but regard it as a very serious social offence to hold up honest men to public scorn because they have rogues among them. Let us ask whether scientific witnesses approve of the character they themselves bear among certain members of the bar because some men of science are scoundrels and bear false witness? For this reason we regret to see the Society of Arts lending itself to the propagation of enormously exaggerated statements such as that which we have endeavoured to expose. They do infinite mischief, for they lead to the inference either that fraud is universal, and must be borne with, which is not true; or that there is no fraud at all. Those who were present in the Adelphi on the 30th ult. will know what we mean. On that occasion a scientific gentleman expatiated on the adulteration of food, excluding Tea. Taking the chemist ACCUM's book called *Death in the Pot* as his guide, he assured his hearers that all things eatable or drinkable are adulterated; at the same time leading them to believe that no remedy is to be found for such a state of things except in a chemist's laboratory or a Botanist's microscope; by which we take it was meant the professional employment of chemists and microscopists. Let us beg our unlearned friends to believe that whatever may be the powers of chemistry, the microscope great as is its value can give no such magical results as is sometimes pretended. Then what are the grounds on which this outrageous denunciation is uttered. Here is a sample: Bread is mixed with bone-dust which is now "but seldom found;" can the learned lecturer say that he has ever met with such a case. Cakes are adulterated with Saffron; he might as well say that they are adulterated with sugar; does he not know that Saffron bread was once a favourite diet in this country? Corn is adulterated by grinding with it the poisonous Ergot. Does anybody now eat Rye-bread in this country? Has any one seen Ergotised Wheat? Smutted Wheat is ground into flour, which however does not appear to be so deteriorated to any very great extent; if this be adulteration it is effected by the hand of Nature herself. Perhaps the accomplished lecturer will tell us how smut is to be separated, or what is to be done with it when, as is not uncommonly the case, the Wheat crop is attacked. Then farmers put a foot deep of good corn in the mouth of a sack otherwise filled with rubbish!! Barley and Oats too are frequently adulterated with *themselves*; just as Tea is adulterated with Tea and wine with wine. Milk is mixed with brains; a disgusting story, and we believe wholly untrue. Surely to overstate a case in this manner is not the part of a man of science; and we trust that no more such exhibitions will take place in the Adelphi. We should like to have in a witness box the people who talk thus extravagantly.

We are glad to see that one voice was raised against them. Mr. WILLIAM HAWES could not characterise the paper now referred to, as it was generally in his power to do, as an able and useful one. He believed the results arrived at were exaggerated, and the remedies suggested of the most futile kind. Let us hope that the rebuke of so eminent a man will not have been lost upon the author.

THE WEATHER OF JANUARY, 1861, now calls for some remarks. Up to the 16th of December, 1860, there were only slight frosts; but from that time may be dated the commencement of the late severe period; it reached its intensity between the 24th and 28th of that month; and it may be said to have fairly ended on the 19th of January, when the wind changed from north-east to south and south-west. The day temperature then rose considerably, and the weather in the last week was perhaps the finest ever experienced in the first month of the year.

Notwithstanding the occasionally brilliant sunny days experienced after the 24th, with nights comparatively mild for January, the mean temperature of the month, 32°.49, was 4°.55 below the average of the last 35 years. The years since 1797 in which the mean of January was lower than the above, were 1815, 20°.87; 1820, 24°; 1838, 27°.29; 1830, 31°.75.

The mean maximum was 40°.19, or 2°.69 below the average. The mean minimum was 24°.80 or 6°.84 below the average, which was lower than in any corresponding month since 1826, with the exception of January 1838, in which it was 22°.72. The extreme highest was 56° on the 27th, 28th, and 31st; the extreme lowest was 6° on the 8th; and the thermometer indicated as low as 8° and 9° on the two following nights.

The barometer averaged higher than usual, about 2-10ths of an inch. It is generally low during the prevalence of south-west winds; but last month it was quite the contrary. And although the wind after the 23d was constantly from south-west, yet very little rain fell compared with what generally takes place with wind so long from that quarter; the total amount was nearly ¾ of an inch less than the usual quantity.

A TRIP TO THE NURSERIES AND BOTANIC GARDENS OF YEDDO.

BY J. G. VEITCH.

FOUR of us, Mr. Alcock, H.B.M. Envoy Extraordinary, having kindly consented to give us the advantage of his presence, started on a fine morning at 9 A.M. on horseback.

Our way after leaving the British Legation (Tosenge) lay for the first few miles through what in England we should call lanes, shaded on either side with the most luxuriant trees and shrubs, consisting principally of *Cryptomeria japonica*, *Chamærops excelsa*, evergreen Oaks, Camellias, Azaleas, &c. Occasional villages are dotted here and there, resembling far more many of our country rides in England than the immediate vicinity of one of the largest cities in the world. Half an hour's ride brought us to the banks of the outer moat, which entirely encircles the "official quarter" of the city. This portion is that exclusively occupied by the Tycoon (Emperor), and the chief officers of State, and is calculated to be from 10 to 12 miles in circumference. The outer moat is 100 feet in width, and two others of lesser dimensions have to be passed as you advance towards the centre of the quarter. The banks of the moats are kept under short Grass, and are in perfect order; occasionally portions of the moats are covered with Nelumbium speciosum, which in the spring and summer months must produce a beautiful effect.

During our ride round the outskirts of this part of the city, we passed in succession the palaces of the Princes Kishou, Mito, and Kanga; the two former are two out of the three Royal families of the Empire (Gosanhe families) from which the Emperors are chosen, the present one being selected from the family of Kishou. The latter is the most powerful noble in Japan, and is able at any moment to call out 40,000 armed retainers. His policy from the first has been hostile to foreigners and their trade, and he is considered as the great enemy to a liberal and friendly Government. Amongst other places of interest and note seen was the University of Yeddo, corresponding with our seats of learning, Oxford and Cambridge; all young men of position and rank are educated at this establishment.

At 11 A.M. we arrived at the gardens of Sumaye, consisting of a series of nurseries and botanic gardens very similar to each other in point of arrangement, but differing greatly as to the stock they contain. Each nursery has its "*specialité*," being devoted to the culture of some particular tribe of plants. In one, for instance, Sedges, Ferns, and marsh plants of all descriptions; in another dwarfed trees of all kinds and shapes, principally Pines, fruit trees, Maples, Oranges, Bamboos, &c.; in a third, plants with variegated foliage receive special attention; and in a fourth all the known species and varieties of Coniferæ, evergreen trees and shrubs. The whole of the plants are neatly arranged in clumps on the ground or on stages; the hardiest placed out of doors, and the more tender ones protected by rough shading of Bamboo or straw matting.

Chrysanthemums are especial favourites with the Japanese, and at this season of the year are everywhere in full bloom; scarcely a window in the town but has a plant or two, and each establishment devotes a piece of ground to their culture. They are grown to great perfection, and many varieties, exclusive of the ordinary large flowering ones, and Pompones, are met with. The fan-shape is the favourite mode of training them, the finest specimens averaging 3½ to 4 feet in height, and often having from 25 to 30 expanded trusses of flowers on them. The great characteristic mark of a Japanese nursery is its peculiar neatness, everything clean and in order, not a weed or a pot out of place to be seen. The Botanic Gardens, or more properly speaking the Royal Nurseries, are establishments devoted to the cultivation of plants for supplying the State parks and gardens. They contain large quantities of seedlings of all kinds, principally Pines, Arbor-vitæs, Junipers, *Cryptomeria japonica*, several species of evergreen Oak, two or three species of Maple, Hollies, *Sciadopitys verticillata*, *Salisburia adiantifolia*, *Cephalotaxus*, *Podocarpus*, &c. &c. Borders containing specimens of all descriptions are kept in constant readiness for removal to furnish a new pleasure ground at any moment, and at the same time supply stock plants for propagation. Acres upon acres of ground in the neighbourhood of Sumaye are devoted to horticulture.

Three miles distant from the last named place is the village of Ogee, famous as being one of the emperor's

hawking and hunting seats, and also a place much frequented by Japanese nobility on their gala days. In its immediate neighbourhood are some of the principal nurseries similar in point of detail to those of Sumaye, but on a much larger scale; each establishment contains a general selection of plants, arranged in the same manner as those at Sumaye. The principal stock seemed to consist of Camellias and Azaleas in great variety, Ardisias, several species; Hibiscus, do.; Chrysanthemums; Gardenias, of the various kinds; Orontium japonicum, several varieties; Chamærops excelsa; Rhaphis species; Rhododendrons; Kalmias; Pernettya sp.; China Roses; Bamboos three species, besides numerous varieties; Tree Box; Ilex, several species; Sedges, Ferns, and Lycopodiums, in great variety; Berberis japonica; Maples, several species; Oaks, evergreen and deciduous; Ivies, in variety; Salisburia adiantifolia; a general collection of Conifers, the most remarkable being *Thujopsis dolabrata*, *Sciadopitys verticillata*, two species of *Dammara*, a variegated Pinus, &c.

The river of Yeddo flows past the foot of the village; the view obtained from the elevated ground of the surrounding country, and the river winding its course towards Yeddo, is very beautiful, and probably rendered still more so at this season by the crimson tinge on the decaying foliage of the Maple groves, and the plains of standing Rice visible in all directions.

From Ogee we rode through one of the city suburbs to Osakusa, situated on the banks of the river. The temple of Osakusa is one of the largest in Yeddo; it is surrounded by a large bazaar similar to our Lowther Arcade, a menagerie, and a large garden. The latter is a mere repetition of those already described, the one plant worthy of special notice being a Tree Fern. This is the only species I have as yet met with in Japan. It will in all probability prove to be a kind of Alsophila, and from its thriving well in the open ground here all the year round I have no doubt it will prove to be hardy, at any rate in the southern and western counties of England. After spending an hour or two in visiting the Temple and the principal objects of interest about it, time not allowing of our continuing our researches further, we returned through the heart of the city, passing over the Nippon Bass or Bridge of Japan, from which all the distances in Japan are measured, a place being so many miles either N., S., E., or W. of "Nippon Bass."

The Japanese undoubtedly far excel the Chinese in horticultural skill, and in many points almost rival ourselves; the striking neatness of their establishments contrasts greatly with the dirty places met with in China. Many of their specimens would do credit to a European gardener, their Chysanthemums especially would not disgrace even a London exhibition. Their mode of pot culture seems to consist:—1st, In confining the roots of their plants in as small pots as possible; 2d, In using a light open soil, generally the same for all classes of plants; 3d, supplying them with unlimited quantities of manure water.

Their success in dwarfing trees is mainly to be attributed to the last named cause. The soil acts merely as a means of protecting the roots from the sun and air. It is the manure water which nourishes the plant and keeps it in a growing state.

The quantity and splendour of the timber trees in the neighbourhood of Yeddo far exceeds anything that can be described. I annex the dimensions of a very few which I have had an opportunity of measuring, taking the measure at 3 feet from the ground.

Pinus Massoniana, 10 feet in circumference.

Cryptomeria japonica, tens of thousands of trees, from 12 to 15 feet in circumference.

Salisburia adiantifolia, 15 to 20 feet in circumference, a single specimen measured 28 feet circumference.

Sciadopitys verticillata, 10 to 12 feet.

Evergreen Oak, 2 species, 15 to 20 to 25 feet.

Beech, 15 to 20 feet.

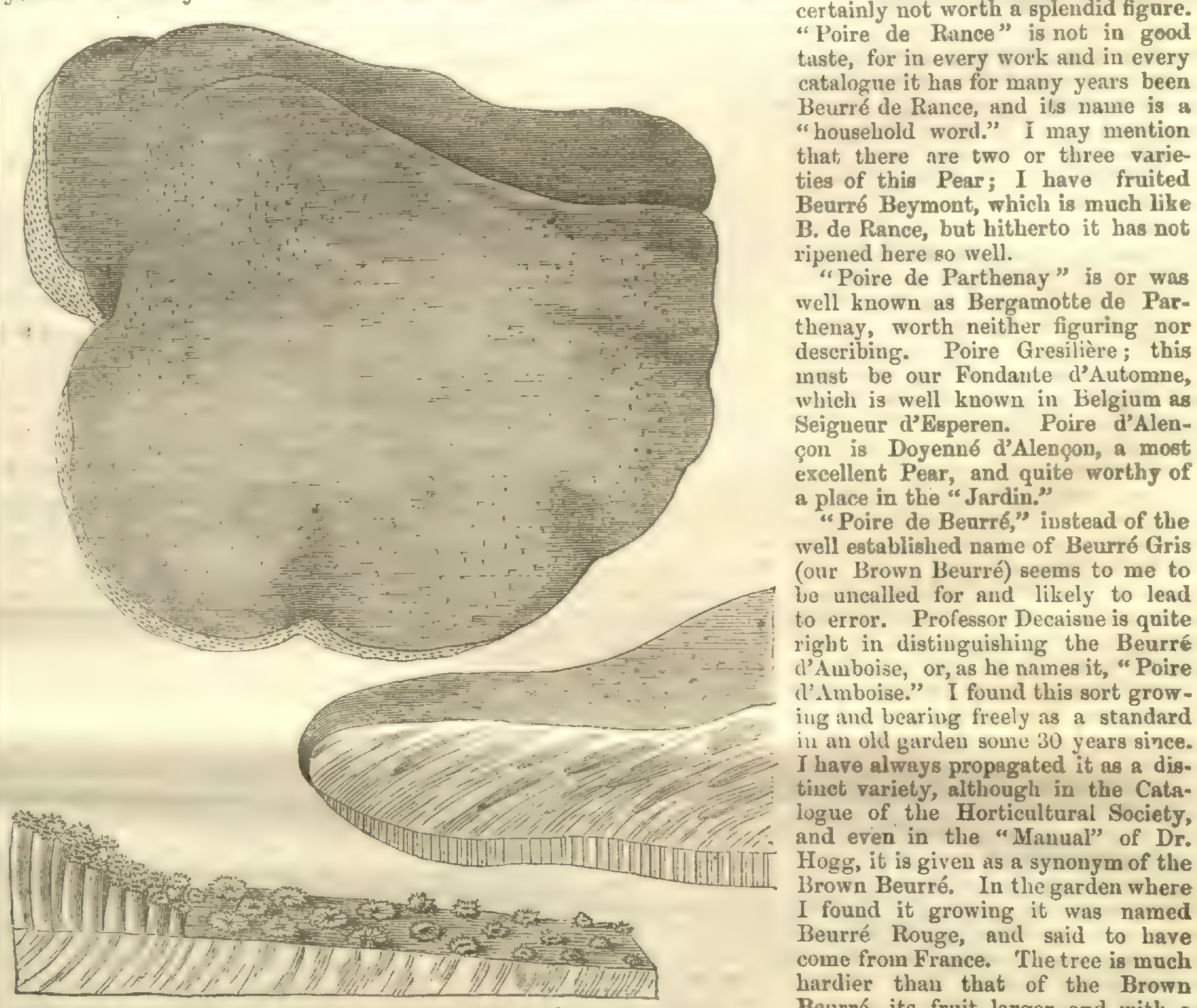
Abies sp., very common, 10 to 12 feet.

MYCOLOGY.—No. XLIII.

Fistulina hepatica, *Fr.*—The curious Fungus of which we here give a reduced figure is on many accounts worthy of especial notice. In point of colour, structure and useful qualities, though without the elegance of some, or the delicate aroma of others, it has merit enough to command attention, unable as it is to put out its tongue, as Paulet writes, and say "Come eat me." Schæffer calls it the Poor Man's Fungus, on account of its abundance, large size, and wholesome though coarse quality, but Dr. Badham thinks that when properly prepared it deserves a place at richer tables. It is however too slimy to please every palate, and to our taste not a desirable dish unless mixed with minced veal or chicken, and seasoned with lemon juice and Cayenne pepper. For this purpose it may be either cut in slices and broiled or nicely stewed. Mrs. Hussey, whose authority in such matters is undeniable, thinks that the most useful purpose to which it can be put is to make a rich brown gravy, which is excellent with beefsteaks or other broiled meat. In Vienna and some other parts of Germany it is served raw in slices with chicory and corn salad, in which way we may observe that our English Truffles are excellent. Though, like many other Fungi, indigestible when consumed in too great quantities or taken upon an empty stomach, it has no deleterious properties, and it has the great advantage of being incapable of confusion with any other Fungus. When eaten *en masse*, young and firm specimens in which the tubes are not yet formed must be chosen, though older individuals, provided no decomposition have taken place, may be used for making gravy. It is not however fit for ketchup, as its juice is quite different in point of flavour from that condiment.

Wherever old Oak Pollards are common, this Fungus may be met with. It is however far more abundant in Southern than in Northern latitudes. In Italy it is found principally on the Chesnut, and it also occurs sometimes on Beech, Walnut, and Ash. On the latter Mr. Graves once found a specimen that weighed nearly 30 lbs.

Its first appearance is that of a small red knob bursting through the bark. This gradually swells and elongates, becoming velvety above and covered with little granular warts beneath, so as to bear a strong resemblance to an ox tongue. As the pileus increases it is rather granulated than velvety and assumes a rich red brown tint shaded with vermillion and often more or less streaked. The under side meanwhile loses gradually its red or rosy tinge, and becomes white, yellow or tawny. The little warts which were



Fistulina hepatica, *Fr.* Copied by permission from Greville's Cryptogamic Flora.

star-shaped become more pronounced, burst at the apex, and are at once recognised as distinct tubes, the tips of which are free and whose inner walls bear the spores. The flesh when divided is red and mottled like Beet root, its fibres radiating from the base to the hymenium, though perfectly distinct in substance. The whole distils a red limpid juice, which in the older parts is very deep in colour, and stains the fingers. When past maturity it loses all its beauty and looks like a mass of bullock's liver, whence it derives its specific name. The Fungus belongs clearly to the same group as *Polyporus* and *Boletus*, and has only a remote relation to *Hydnum*, near which it is wrongly placed in our opinion by Fries. Its spores should be borne on the outer side of the tubes to entitle it to a place in *Hydnei*. A soft *Polyporus* (*P. querneus*) sometimes accompanies it, but though somewhat similar occasionally in form, its characters are such as to leave no room for doubt. There is no other European species, but Schweinitz has described one under the name of *Fistulina radicata*, which grows in America at the base of Chesnuts, with a grey hymenium and sending down deep roots into the rotten wood, and a third occurs in the extensive collections made by Mr. Curtis in North and South Carolina. We have no information however as to their esculent qualities. *M. J. B.*

LE JARDIN FRUITIER DU MUSEUM.

When the first numbers of this beautiful work were published my attention was called to them, and I anticipated that we should have a most complete pomological book, too dear for general circulation, but still a work of great interest, and an authority. I soon found, however, that the errors of the "Album de Pomologie" of Bivort, and the "Annales de Pomologie" of the Belgian government were perpetuated, and the work not adapted for any one with practical views. The errors I allude to are, the figuring of old and obsolete kinds of fruits not worthy of cultivation, and a capricious change in nomenclature leading to much confusion.

For these two or three seasons past a "pomological congress" has been held at Lyons to decide on the names to be given to different kinds of fruits, more particularly Pears. For the most part the decisions of this congress have been sensible, and likely to put at rest the names of many kinds of Pears; the principal nurserymen in France having adopted them. In the "Muséum," however, this congressional nomenclature seems entirely ignored, and M. Decaisne in the most capricious way gives new names to old Pears after his own fancy, and so we have "Poire Bon Chrétien" for our old correct name of Bon Chrétien d'Hiver (Winter Bon Chrétien), a name sanctioned by Duhamel; "Poire Crottée" for Doyenné Crottée; "Poire d'Arenberg" for that very coarse and inferior Pear, Colmar d'Aremberg. By the way, the present mode of spelling this word with the n instead of the m, although correct, is recent and not very general, for Bivort and other Belgian pomologists have always used the m, and it is universal in France as it is in England and America. Poire des Vétérans, for Besi des Vétérans, seems uncalled for, and the fruit is most certainly not worth a splendid figure. "Poire de Rance" is not in good taste, for in every work and in every catalogue it has for many years been Beurré de Rance, and its name is a "household word." I may mention that there are two or three varieties of this Pear; I have fruited Beurré Beymont, which is much like B. de Rance, but hitherto it has not ripened here so well.

"Poire de Parthenay" is or was well known as Bergamotte de Parthenay, worth neither figuring nor describing. Poire Gresilière; this must be our Fondante d'Automne, which is well known in Belgium as Seigneur d'Esperen. Poire d'Alençon is Doyenné d'Alençon, a most excellent Pear, and quite worthy of a place in the "Jardin."

"Poire de Beurré," instead of the well established name of Beurré Gris (our Brown Beurré) seems to me to be uncalled for and likely to lead to error. Professor Decaisne is quite right in distinguishing the Beurré d'Amboise, or, as he names it, "Poire d'Amboise." I found this sort growing and bearing freely as a standard in an old garden some 30 years since. I have always propagated it as a distinct variety, although in the Catalogue of the Horticultural Society, and even in the "Manual" of Dr. Hogg, it is given as a synonym of the Brown Beurré. In the garden where I found it growing it was named Beurré Rouge, and said to have come from France. The tree is much hardier than that of the Brown Beurré, its fruit larger, and with a fine rosy cheek; it bears freely as a pyramid on the Quince, and is a most delicious Pear. The Beurre de Caen is also a hardy variety of the Brown Beurré: hitherto it has not had so much colour as the Beurré d'Amboise, but it is of equal excellence.

Surely it is not prudent to rename our well-known Beurré Diel and make it "Poire Diel;" inexperienced cultivators would think it a new Pear. I penned these few remarks on reading those portions of the "Jardin Frutier" which you gave in your columns a short time since, not in a carping spirit, for in common with every one interested in fruit culture I entertain a high respect for the accomplished author of "Le Jardin Fruitier," but to caution pomologists against adopting such capricious changes in fruit nomenclature. The time has now arrived when as I take it we ought to have our own fruit school, translating or making far-fetched foreign names* into English names with some meaning attached to them, making the Catalogue of the Horticultural Society our foundation stone. Above all, if, as I hope, we are to have a fruit periodical illustrated, let the conductors of it avoid the errors of all Continental works of that kind, and give figures of varieties of fruit of first-rate quality only. How disappointing it is after admiring the splendid figure of some kind of Pear to find that it is merely some old variety fit for baking or stewing only, or that it is a kind very handsome but seldom or never good. *T. R.*

Home Correspondence.

Gishurst Compound.—The paragraph in your Paper of the 26th ult., headed "Destruction of White Scale on Pines," after stating that Pines immersed for 10 minutes in a mixture consisting of 8 lbs. of soft soap, 4 lbs. of sulphur, and 16 gallons of water, were effectually cleaned, continues—"I had tried Gishurst Compound and many other remedies, all of which proved a failure."

* Such as "25me Anniversaire de Leopold 1er;" "Bergamotte Schmidtberger;" "Poire du Congrès Pomologique," the names of some new Pears.

I have no doubt that the trials were carefully and fairly conducted by Mr. Phippen, but as "Gishurst Compound" contains soap and sulphur in its most active form, it ought not, other things equal, to have "proved a failure." Might I be allowed to ask whether a strong solution of Gishurst was used, and whether the Pines were in this case "immersed?" Very much depends on this last; I speak feelingly, as only last Saturday, on the occasion of giving some 60 of my dwarf fruit trees their yearly winter wash of Gishurst, 8 ounces to the gallon, I found two Peach trees which had been attacked by the brown aphis, and, as I thought, these had an especially effectual wash—stem, branch, spur, and bud. The solution in a wooden pail was applied by means of one of the sort of brushes sold for dusting picture frames. This, with its long bristles, appeared to pay the solution softly but effectually over every part of the tree (the stem and roughnesses of the bark were afterwards worked into by means of a painter's brush. Next day on looking over the trees ⅞ths of the aphides showed that they had been killed on the spot, but in more than one place was a small group on the under side of a twig which had escaped being touched by the solution, though looking far from well, still alive. With immersion this could not have been. My trees were at rest, otherwise the 8 ounce solution would, I need hardly say, have been fully fourfold too strong for Peach trees. While on this subject may I be allowed to state that for some time past the Gishurst combination has been made at a higher heat than formerly; this is in consequence of some of its users having reported a want of certainty in its application, which could only be accounted for by the supposition that some of the alkali used in its preparation had been left in a free state, in which case it would blacken tender shoots. As latterly made no alkali can be left free, and I believe that any solution which has been ascertained to be the right strength for any description of plants may be relied on to act always the same, on plants in the same state of growth. *George Wilson.*

Fertilisation of British Orchids by Insect Agency.—I am much obliged to Mr. Marshall, of Ely, for his statement that the 15 plants of Fly Orchis (Ophrys muscifera) which does not grow in his neighbourhood, but which flourished in his garden, had not one of their pollen masses removed. The Orchis maculata, on the other hand, which likewise does not grow in the neighbourhood, had all its pollen masses removed. Mr. Marshall is not perhaps aware that different insects haunt different Orchids, and are necessary for their fertilisation. From the wide difference in shape of the flower of Orchis and Ophrys, I should have anticipated that they would be visited and fertilized by different insects. In Listera, for instance, it is chiefly Ichneumonidæ, and sometimes flies, which by day perform the marriage ceremony. In the case of most Orchids it is nocturnal moths. Orchis pyramidalis, however, is visited by Zygæna, and I have examined one of these day-sphinxes with three pair of pollen-masses firmly attached to its proboscis. There can hardly be a doubt that the Butterfly Orchis is visited by different moths from most of the smaller Orchids; and I have recognised its peculiar pollen-masses attached to the sides of the face of certain moths. It is probable that the same kind of moths would visit all the species of true Orchis, which closely resemble each other in structure. Thus the Orchis conopsea, planted in a garden some miles from where any native plant grew, had its pollen masses removed; so this is a parallel case with that of O. maculata given by Mr. Marshall. I have also transplanted the rare Malaxis to a place about two miles from its native bog, and it was immediately visited by some insect, and its pollen-masses were removed. On the other hand, the Epipactis latifolia, growing in my garden and flowering well, had not its pollen-masses removed; though in its own home, several miles distant, the flowers are regularly visited and thus fertilised. We thus see that the seeds of an Orchid might be carried by the wind to some distant place, and there germinate, but that the species would not be perpetuated unless the proper insects inhabited the site. I have now Goodyera repens growing in my garden, and I shall be curious to see next summer whether our southern insects discover or appreciate the nectar of this Highland Orchid. *C. Darwin.*

Effects of the Frost.—The following is a list of the plants at Ossington, near Newark, which appear to be quite killed by the late frost, viz.:—Aucuba; Magnolia grandiflora, on a wall in a sheltered place; Araucarias of all sizes, some 20 and 25 feet high; Pinus insignis, some very large; Phillyrea; Ilex, some 60 and 70 years old; Taxodium, Cryptomeria, Cupressus macrocarpa, Laurustinus, Bay; Arbutus, some 50 years old; Catalpa, large trees; Latifolia Holly; Roses of all kinds; some sorts of Pears; some Apricots on S. wall; Common Laurel and Portugal, killed to the ground. Some of the common Hollies are injured. The Golden Holly will lose all its leaves at least. Pinus nobilis seems injured. Indeed it is almost a clean sweep of all Evergreens, except the varieties of Yew. Hemlock Spruce, Box, Cupressus sinensis, and Wellingtonia, hardy. The thermometer here was 8 degrees below zero; and at Carlton-on-Trent, 3 miles from this place, 15° below zero. *D.*

Œnothera grandiflora (Lamarck).—In their reply in your last issue to my inquiry relative to the plant thus named, Messrs. Carter have overlooked the main point at issue, which is not so much the correctness of the name grandiflora as that of identity with the plant hitherto sold for Œ. Jamesii. Messrs. Carter refer to my assumption of the identity of the two, but as your readers can judge, have given no denial to it. *Jacques.*

Kidd's New System of Heating.—Let me warn your readers that this *new* system is merely Polmaise, with all its bad points and none of its good ones. *Expertus.*

The Manetti Rose Stock.—I observe in Mr. Radclyffe's remarks (see p. 72), that with him this Stock requires "five times the manure that a Briar requires." There must be something very peculiar in his soil, for with me it seems to want no manure. I have Manetti Roses that have been growing for these seven years past in a rather tenacious chalky clay, without ever having had a particle of manure, and yet they are most vigorous, making annually shoots from 6 to 8 feet in length. The vigour of this stock is so notorious here that it is generally planted in pieces of ground more or less exhausted. A word from Mr. Radclyffe as to the nature of his soil would be a boon to Rose cultivators. *Thomas Rivers.*

The year 1860 *at Weybridge Heath, Surrey*:—

Wind.		Weather.	Departure from average of last five years. + *above.* — *below.*
Prevailing Winds.	On Days.	Mean height of barometer inches 29.7809	inches .0697—
		Mean height of thermometer:	
N	29	Highest in the sun, 63°.8028	2°.1309—
N E	69	Highest in the shade, 56°.8060	2°.8545—
E	5	Lowest .. .. 38°.7000	1°.7522—
S E	13	Mean temperature .. 47°.7530	2°.809—
S	33	Rainfall inches 30.3250	inches 5.2943+
S W	102	Number of wet days, 57	days 19.8+
W	14	Number of days on which rain, &c., fell, 234	days 46.6+
N W	33	Driest month, February	
Highest Winds.		Wettest ditto, June	
January 22, 23.		Range of barometer, inches 1.84	inches .018—
February 19, 27, 28.		Range of thermometer, 74°.5	6°.6—
March 20, 21, 24, 31.		Feb. 13. Barometer highest inches 30.48	inches .114—
April 18, 19, 20.		Jan. 24. Barometer lowest	
May 1, 2, 28.		inches 28.64	inches .096—
June 2.		July 17. Thermometer highest	
August 24, 30.		In the sun .. .. 91°	10°.8—
Sept. 24, 25.		In the shade .. .. 78°	14°.8—
October 5, 9.		Dec. 28. Thermometer lowest	
December 30.		(in the night of) 4°.5	7°.4—

W. F. Harrison, Bartropps, Weybridge Heath, Jan. 1.

Education of Gardeners.—Being a teacher by profession, and an amateur gardener during all my spare hours when weather is inviting and competitors for prizes are all on the alert, I have perused with much interest the various communications that have appeared in your columns on this subject for the last six months; but I must confess that I cannot give my cordial assent to any plan that has yet been proposed. As Mr. Linager is the first who has laid down a plan, which in your editorial remarks on the 29th ult. you seem to regard with considerable favour, he too has my approbation most, inasmuch as by means of the three examinations proposed, he is bringing the subject into a tangible shape. It is only in detail, then, that I would offer a few suggestions, and more particularly in regard to the 1st or preliminary examination, the subjects of which I consider exceedingly indefinite and meagre, and the time of passing all the three. The first, then, I would propose should be passed at or before 17 years of age, or during the first year of the tyro's apprenticeship; the second at or before 21, and the third at or before 25. This would allow the student three or four years between each examination to prepare himself for his next ordeal. To the subjects of examination I would add, that the candidates be examined in writing to dictation; this will prove both their spelling and their grammatical knowledge so far as relates to proper punctuation, the division of a word at the end of a line at the right letter, and the proper use of the capitals. Also that each, shut in a room alone for an hour, be requested to write a letter on any simple subject with which he may be familiar, such as a description of the weather, the progress of the crops, and the employment of the gardener for the last month. How often does it happen that my lord and lady are in London or on the Continent, and the gardener is requested to let them know how things are getting on at home; and how satisfactory to his noble employers, and pleasurable to himself, that he is able to give a succinct account in plain writing, correct spelling, and well arranged grammatical sentences—an accomplishment little inferior to his ability to use his pruning knife and rake. Likewise that the examination be very searching on the derivation and meaning of words. *E. g.* How can a young man who knows nothing either of the derivation or meaning of such terms as are used in the very text be expected in one year to pass an examination on practical botany. What do Physiology, Pomology and hundreds of other botanical terms mean: Heliotrope, Helianthus, Polyanthus, longifolia, latifolia, serratifolia, Trefoil, &c. These names or nomenclatures form such an insuperable barrier at the very commencement to most young men, that they get perfectly bewildered and give up the subject altogether in despair, and as soon as the merry bell tolls the joyful hour of release from labour, hurry off to the village green in quest of sport, as one of your correspondents affirmed, more congenial to their tempers; and no wonder. Young men have never had a fair opportunity of getting initiated into the subject; they may prosecute their studies for a time, but still no more light dawning, and wandering on in the mazes of uncertainty, they at last lose all relish for their profession and abandon it altogether in disgust; hence the number that become policemen and railway porters. How then, are these obstacles to be vanquished? I answer by early tuition, and not by learning the Latin and Greek languages, against which many of your contributors protest, on account of the time and expense of classical education, but by the following method. In our Scottish school books we have Latin and Greek roots with English derivatives. These I make my two highest classes commit as accurately to heart as the Multiplication Table, beginning only with four words once a day, till we get through them, return to the beginning and get double the number; and now follows the explanation of these terms Physiology, Pomology. Physis (Greek)=nature, and Logos (Greek)=a word, a discourse, hence Physiology=the science which treats of the nature of animals and plants. Pomum (Latin) = an Apple, hence Pomology=a discourse about Apples. Again, folium=a leaf, longus=long, latus=broad, serra=a saw, tres, tria=three; hence, longifolia=long leaved; latifolia=broad leaved; serratifolia=having leaves toothed like a saw; Trefoil=a plant with three leaves, the Clover. How useful such an exercise to every man who has not the time or means of acquiring a classical education must be apparent, but to no man more so than to the gardener; indeed to him I consider it altogether indispensable. I would also include in the preliminary examination, geography, so far as the candidates could point out on a map of the world every country, mountain, river, &c., and tell for what the more remarkable are famous; as China, for the Tea plant; Mocha, for Coffee. In land surveying, too, to be able to lay down a plan of the ground measured on two or three different scales. All this, with perhaps the exception of the letter writing, which may be postponed till the examination for honours, I am of opinion clearly belongs to scholastic education, and may be acquired by any boy of moderate abilities with diligent application at the age of 14 or 15 years. The deficiency in the case referred to in your Paper of the "well educated young man, who, when requested to write fifty, put down 05," is attributable most assuredly, not to the two head gardeners under whom he served, but to his schoolmaster, if ever he had one. The expense here for reading=2*s.*, or 2*s.* 6*d.*; reading and writing=3*s.*; preceding and arithmetic=3*s.* 6*d.*; all the preceding with grammar, geography, land surveying, practical mathematics=6*s.*, or 7*s.* 6*d.* per quarter. When the boys have to be boarded, however, the cost is very much increased. *D. Dods, Makerston, Kelso, Jan.* 12.

Wine Cellar Fungi.—In your leading article, Dec. 24, 1860, you intimate the propriety of using metallic salts to prevent Fungi in wine cellars. I will relate a case bearing on this subject. Eight years ago I had stacked away in my cellar some wine, using sawdust from Elm and Fir timber; within two years I found the corks eaten by weevils, the wine having escaped from several of the bottles; after recorking and removing perhaps half of the sawdust, some fresh was used made from Elm and Beech that had been injected with sulphate of copper to preserve it, and I have carefully examined this bin of wine and others that I have continued to use it in, and cannot find the slightest trace of weevil, fungus or decay. Another domestic use of sawdust charged with sulphate of copper is for keeping salted meats; bacon or hams may be kept for years free from flies, hoppers, and other insects. I have found it useful for keeping Potatoes, Parsnips, Carrots, and roots in. *Anon.*

Radishes.—I am obliged to "B." for his hint. If "B." will read "Early *and* Turnip Radishes" the error will disappear. For the sake of variety, and also to insure a good succession of fresh crisp radishes, I like to sow three or four varieties at the same time. While on the subject I may remark that summer crops should be sown on a north aspect, and the richer the ground the better. Birds are very partial to Radish seed, and some people suffer much from their ravages unless they protect the bed with nets; if instead of raking the seed in, which is the usual practice, they will, after it is sown, fork the ground over an inch or two deep, leaving it rough, they will find no inconvenience from birds. If asked for the philosophy of this operation I could not give it, but the fact, from many years' experience, I can vouch for. "B." asks for a separate publication of the "Remembrancer." It is not improbable that next autumn I may give it a more exact and detailed character, and publish it in a separate form, to which end I shall be glad of remarks on any vegetables that may have withstood the late intense frost, especially Broccoli and the Brassica tribe generally, which may be addressed to me at the office of the *Gardeners' Chronicle. P. A. W.*

Societies.

BOTANICAL OF CANADA.—This Society met on the 11th inst., the Rev. Principal Leitch, D.D., in the chair. Notwithstanding the coldness of the night (the temperature being 20° below zero) there was a large attendance of Fellows and subscribers. The committee

appointed to suggest a list of botanists suitable for election as honorary and corresponding members presented their report, in accordance with which the following honorary members were elected, viz. :—*Canadian (limited to four)*.—Dr. Dawson, LL.D., Principal of McGill College, Montreal; William Hincks, F.L.S., Professor of Natural History, Toronto University; Sir W. E. Logan, F.R.S., Director of the Geological Survey of Canada. *British (limited to six)*.—Dr. Balfour, M.D.; Dr. Greville; Sir Wm. J. Hooker, F.R.S., Director of the Royal Gardens, Kew; Dr. Lindley, M.D., F.R.S.; Mr. J. T. Syme; Dr. W. Lauder Lindsay. *Colonial (limited to four)*.—Dr. Müller, Government Botanist, Melbourne; Mr. Thwaites, Botanic Garden, Peradenia, Ceylon. *American, U.S. (limited to four)*.—Dr. Geo. Blackie, University of Nashville; Dr. Asa Gray, Harvard University; Dr. John Torrey, New York. *Foreign (limited to six)*.—Prof. N. Blytt, Christiania; Prof. Alph. DeCandolle, Geneva; Prof. Fred. Traugott Kutzing; M. N. Pringsheim, Berlin; Dr. Ludovic Tulasne, Paris. Corresponding Members were also elected. The following papers were read :—1. "On Cornus florida, L." By Professor Blackie. 2. "On the Botany of the Red River Settlement, and the Old Red River Trail." By John C. Schultz. 3. "Contributions to the Local Flora of Kingston." By A. T. Drummond, B.A.

The following is an abstract of Mr. Schultz's paper :—"The Red River Settlement has of late years attracted much attention in Canada on account of its isolated position and the many and vague reports that were in circulation regarding it, some describing it as a land of milk and honey, and others as a cold barren waste.

"It is situated on the Red River near its entrance into Lake Winnepeg, occupying both banks of the Red River and the Assiniboine, which empties into the Red River at the Hudson's Bay Company's post Fort Garry, the centre of the settlement. The settlement extends from the mouth of Red River up about 40 miles, and on the Assiniboine River about 20 miles. The distance of the settlement from St. Paul is said to be 600 miles, and from Lake Superior about 300. The population is estimated (rather high, I think) at 10,000, including the roving population, who live altogether by hunting. The climate resembles that of Montreal in the length and continued cold of the winters, and the rapid vegetation in the spring after the snow is off the ground. All the cereals are raised in abundance, the average produce to the acre exceeding that of Canada. Garden vegetables are also grown in abundance. Indian corn, however, is not so successful, being nipped by the early frosts.

"Here, as in other prairie land, the richest family is Compositæ, many species of which are found. At the Fort we have not only the ordinary Prairie Composites, but a great abundance of such plants as Artemisia Absinthium, especially on the drier and higher parts. Next in frequency come Cruciferæ, which generally follow man; these are abundant in the immediate vicinity of the Fort. There are many species of Rosaceæ and Leguminosæ, truly indigenous; Umbelliferæ are not unfrequent, and we have interesting representatives of Ranunculaceæ, Xanthoxylaceæ, Violaceæ, Balsaminaceæ, Caprifoliaceæ, Rubiaceæ, Ranunculaceæ, &c. The timber trees near the Fort are small groves of Aspen and Balsam Poplar, and on the banks of the rivers Oak, Ash, Elm, Maple, Aspen, and Balsam Poplar.

"From the Red River Settlement to Canada there are three routes more or less in use. The oldest, and the one now least used, is known as the Old Red River Trail. The second route is our Canadian route, which is not so practicable as might be wished. This is a canoe route, passable about five or six months in the year, and always attended with a good deal of difficulty. The third, known as the new route, is the one now most travelled, and through which the Hudson Bay Company bring their furs. It was opened up for travel last year by parties in St. Paul, who took a small steamer over to the head waters of the Red River in pieces on sleighs the winter before and put her together there, then cutting a road through from St. Paul to the head of navigation on Red River, they connected the boat with St. Paul by stages. By this route you leave the settlement in the little steamer referred to, ascend the river about 300 miles to George Town, the head of navigation, and take the stages there for St. Paul. By this route it is possible to travel from the Red River settlement to Canada in 12 days, which is a great improvement on the ordinary time of 25 to 30 days by the other routes. In St. Paul Mr. Schultz noticed several barrels of Ginseng root which had been collected by Indians and others, and was intended for export from New York or elsewhere to China. This American Ginseng is the Aralia quinquefolia, a different species, it is believed, from the Chinese one, but nevertheless highly esteemed in that country. It is said to be used there as a medicine in cases of debility, but its medicinal properties are not so highly esteemed in this country. Its uses in China must be very extensive, as, independent of the Ginseng obtained in China, and the enormous quantities exported from America, imports are registered at Shanghai of the enormous quantity of 55,000 catties, from the 11th November, 1858, to 30th June, 1859. This root is found in abundance in the western part of Minnesota, principally in the woods on Oak ridges, and there are persons who make large sums by collecting it and selling at St. Paul for one dollar per lb.; by sending it to New York they get a much larger price."

Notices of Books.

Iceland: its Volcanoes, Geysers, and Glaciers. By Charles S. Forbes, Commander R.N. John Murray, 1860.

When we consider that Iceland is but five days' steam from Edinburgh, it seems strange that this most interesting island should be so little visited. It is true, the traveller must be prepared to rough it, but what is that to an Englishman; especially when Hekla and the Geysers are the goal? Nevertheless, but few tourists visit its shores, and in consequence we have so few records of Icelandic travels that Captain Forbes' account of his two months' tour is a welcome addition to our knowledge of this isolated country.

Except that, like all previous travellers, he was defeated in his attempt to reach the top of Snaefells Yökul, his expedition seems to have been entirely successful. He found the inhabitants hospitable, and willing to assist his excursions, the weather was sufficiently good, while he was fortunate in witnessing one of the finest eruptions of the Geyser (which he estimated at very near 100 feet), and successfully cooked his dinner in the waters of the Strokr. Of this proceeding he gives an amusing account, which we extract, premising that an eruption can at any time be produced by closing the mouth of this Geyser with turf.

"I collected a considerable pile of turf at the mouth of the Strokr, and then, taking my reserve flannel shirt, packed the breast of mutton securely in the body, and a ptarmigan in each sleeve. On the approach of my guests I administered what I supposed would be a 0-minute dose of turf to the Strokr, and pitched my shirt containing our dinner into it immediately afterwards. Directing the guide to keep the coffee warm in the Geyser basin, and seated 'al fresco,' I offered brandy and strips of dried cod by way of a relish—northern fashion. . . . The forty minutes passed, and I became nervous regarding the more substantial portion of the repast; and, fearing lest the Strokr had digested my mutton, ordered turf to be piled for another emetic. But seven minutes after time my anxiety was relieved by a tremendous eruption (the dinner-bell had sounded), and, surrounded with steam and turf clods, I beheld my shirt in mid air, arms extended, like a head and tailless trunk; it fell lifeless by the brink. But we were not to dine yet: so well corked had been the steam-pipe below, that it let out with more than usual viciousness, and forbade dishing up under pain of scalding. After about a quarter of an hour, in a temporary lull, I recovered my garment, and turned the dinner out on the grass before my grave guests, who immediately narrated a legend of a man in his cups who had fallen into the Strokr, being eventually thrown up piecemeal in the common course of events. The mutton was done to a turn; not so the ptarmigan, which I expected to be somewhat protected by their feathers; they were in threads. As for the shirt, it is none the worse save in colour, the dye being scalded out of it."

Those who wish to understand the action of the Geysers are referred to Captain Forbes's work, where they will find Bunsen's theory given in a clear and condensed form; truth compels us to add, without acknowledgment.

A sketch of Icelandic history is likewise introduced into the work, together with many of the ancient legends; but we prefer extracting a description of the aspect of the country, and its cultivation.

"Its interior, as a whole, is one vast tract of lava-desert and ice-mountain—yökuls as they are termed: these occupy one tenth part of the island, and never have been and never can be traversed. Two tracks across this desert serve for communication between north and south; but not a blade of Grass or shrub exists in that death-like solitude—lava, lava, lava, is the eternal vista. The habitable coasts consist for the most part of marshy districts: there the Icelander builds his house, and collects the rank Grass for his sheep and cattle; and on the banks of the numerous rivers which, from yökul and lake, pour into every fiord, more favoured patches are found, sometimes stretching a few miles into the interior, the whole affording a bare subsistence for the scanty population.

"Grain will not ripen in their transient and uncertain summer, and must all be brought from Europe; even their Grass crop is often destroyed by the Polar ice, which in some years embelts the island, especially its northern and western coasts, and occasions such incessant rain that it is impossible to dry the hay. When this happens famine follows, for on their cows and ewes they principally depend for their sustenance during the long arctic winter, dried cods' heads being their only reserve; the bodies of the fish they are obliged to barter in exchange for European commodities, bread amongst the number, of which the masses, and that only in the parts adjacent to the trading stations, are unable to afford more than one meal a week.

"Paradoxical as it may seem, there are plenty of forests but no trees; for the natives dignify the vast tracts of stunted Birch-bushes, which are found in some parts, with that title, though they seldom average above 6 feet in height—never more than 9—and are useless but for fuel. The western and southern coasts are, however, plentifully strewed with drift timber, swept up by that Gulf stream which, striking the south-west corner of the island, diverges right and left along its shores, and materially affects the climate, the usual winter in the southern districts not being more severe than in Denmark." The gardens are described as containing "Potatoes, Carrots, Turnips, and here and there the domestic Cabbage; in one I saw Currant-bushes, and the fruit almost at maturity." One more plant completes the list of vegetable productions noticed by Capt. Forbes:—"In the sandy districts I saw a good deal of Melur (Elymus arenarius) growing; its seeds are much appreciated, and besides being eaten raw, are made into porridge and thin cakes not unlike a bannock." Again he says—"Escaping from the valley, where red precipitous hills frowned on us from all sides, we commenced a very gradual ascent over an undulating white sandy track. Here the Melur grew even more luxuriantly than on the plain we passed yesterday, and certainly seemed like matter out of place, springing as it did from the white volcanic sand, on all sides surrounded by lavas and ashes, devoid of the faintest traces of vegetation. Curious to know how it got there, and having my doubts as to its being wild in consequence of observing that it always grew on the summit of little sand cones, I asked my friend the farmer; he said it was planted there on account of the warmth and shelter. This species of Grass has the appearance of Rye, for which some travellers have mistaken it. The peasants gather it in August, but being seldom ripe it requires to be dried before it can be used. In Myrdals, where it grows more abundantly, the inhabitants not only provide themselves with meal from this source but send it to other parts of the island. This in a measure explains away the rumours that are circulated relative to the climate having formerly been much milder than at present, an assertion mainly supported by the fact of this Grass, often called Rye, having been more extensively grown in former days, but no longer necessitated from the increased facilities of obtaining grain from Europe."

The high latitude and volcanic nature of the country would prepare us for the barrenness here described; nevertheless Iceland is not without riches, and these are found in its sulphur and salmon, both of which are exported to a considerable and still increasing extent; indeed the supply of the latter may be almost said "to be inexhaustible." This fishery is principally in the hands of the French, who are fully aware of its importance as a training school for their navy, as the following extract shows. "This year there are 269 French vessels engaged, varying from 40 to 80 tons burden, and manned with crews amounting in all to 7000 fishermen; not merely hardy and able-bodied seamen natives of the Channel and Biscayan ports, but men who for the most part have served their appointed time in men-of-war. The owners of these vessels receive a subsidy; and the crews, besides an annual bounty of 50 francs, cheap tobacco, clothes, &c., participate in the rewards held out for service in the French Navy—from further service in which they are exempt, save in the event of hostilities. Three men-of-war are constantly cruising with them, and in the ports they frequent, to afford them any assistance they may require, either in men, spars, provisions, or medical aid. It is needless to remark, that from the severity of their occupation, and the careful training they have received, no such formidable reserve of trained seamen exists, except those engaged in a similar occupation and under similar regulations on the banks of Newfoundland, where they amount to nearly 20,000 men."

The sulphur mines on the contrary are almost entirely worked by Englishmen, and may eventually prove of great value to this country. "Its sulphur must also of necessity become of considerable importance, as the exhaustion of the Sicilian supply is a mere matter of time; and were we cut off from that depôt by the chances of war, the position of Iceland would be especially favourable for our markets; and it is a subject of considerable congratulation that all the mines of the island are in the hands of an English capitalist."

While heartily commending Capt. Forbes's book to our readers, and acknowledging the thorough way in which he has evidently studied most branches of his subject, we cannot but express our regret at the flippancy and attempts at smart writing which occasionally disfigure this otherwise very interesting volume.

Moore's Floral Magazine for February has figures of those gems of autumn the Dwarf Chrysanthemum-flowered China Asters, three very handsome new Picotees, a huge red Chinese Azalea called Magnet, and a small Statice, bred between puberula and Halfordi, called *profusa*.

James Carter & Co.'s Gardener's and Farmer's Vade Mecum, although a trade list, is also a guide to cultivation of importance enough to demand special notice. Very full directions are given for management, as well as rather full descriptions of most of the plants offered for sale. There is also in addition to a good Gardeners' Calendar, one for farm operations, very complete, and prepared, we believe, by one of our most eminent agricultural writers. The whole forms a thin quarto of 108 pages and is sold for a shilling—dog cheap.

Trade Lists Received.—Johann Nicolaus Haage (Erfurt), Haupt Verzeichniss, &c. (Catalogue of Seeds

and Plants on sale in 1861), with what is called a Photograph of Gynerium argenteum having no resemblance to the plant. We are however glad to know where the loss of the plant sustained this year from frost can be repaired.——Catalogue of some of the principal Plants sold by John Standish, Royal Nursery, Bagshot.

Garden Memoranda.

Messrs. Sutton and Sons', Reading, Berks.—Since we last visited this important seed establishment various alterations as regards arrangement both for the sake of convenience and despatch have been effected. Increase of business has caused proportionate enlargement of premises; but as heretofore we observed that there is a place for every thing and every thing in its place; in short an order and neatness which is worthy of imitation. In addition to what may be called home trade, an exportation department has been constructed on a large scale, in which, during the busy season, some 20 young men are actively employed in packing and sending off "orders."

Of seed growers Messrs. Sutton employ a great many in different parts of the country—men on whom they can depend; last year some hundreds of acres were occupied in that manner, while several acres were also employed in the production of root crops grown for the purpose of saving seed next year. For housing these extensive warehouses are here provided, more especially for Turnip and Grass seeds, which, as is now well known, form an important feature of this establishment, and to which separate storehouses are devoted.

Behind the seed shop and offices is a compact plant nursery furnished with glass structures for purposes of propagation; here four new houses have recently been erected and heated by one boiler; another boiler on an opposite side of the quadrangle in which they are placed, heats a larger number of houses previously erected. These are filled with choice stove, greenhouse, and other plants, kept partly for decorating the shop and partly for sale in pots. Among them were Primulas, Genistas, Hyacinths, Cinerarias, and Cyclamens, which at this season of the year keep up a gay and cheerful appearance. Here also are plots of Spergula pilifera, and Pampas Grass is also cultivated extensively, a large stock being kept in small pots for convenience of transit.

The principal nursery and trial grounds, however, are outside the town. In one of these departments was an interesting collection of Grasses in separate plots, all labelled. In the same piece of land were likewise numbers of winter Greens of different kinds on which the severe frost lately experienced has had but little effect. Among what are called sprouting kinds, the following are still in excellent condition, viz.: Cottagers' Kale, Brussels Sprouts, Asparagus Kale, Curled Scotch Greens, Blue Giant, Jerusalem and Imperial Hearting Kales, Ragged Jack, and Variegated Greens.

Broccoli on the contrary is generally destroyed, except the undermentioned, which are all that remain uninjured out of upwards of 40 kinds planted out, namely, Early Purple Sprouting, Sulphur Coloured, Large Late White, Close-headed Purple, Wilcove White, Russian Dwarf, Chappell's Cream, Miller's Dwarf, and Basket's Late White.

Of Lee's New White Sprouting Broccoli, two quarters put out for seed had just showed their true sprouting character before the frost set in, and though slightly damaged this promising new sort has not like many others been destroyed.

On the same plot of ground now occupied with Broccoli, about 60 kinds of Peas were grown last summer for trial, the results of which are recorded in Messrs. Sutton's "Amateur's Guide" just published. Adjoining the residence of one of the firm we observed a plot of Alsike Clover and Italian Rye grass, which, although not horticultural, may be worth notice. The Rye grass was sown in the autumn of 1859, and the Clover added in the month of March following. During last summer four mowings were made, and at present there is a close sward, both Clover and Rye-grass springing up since the frost broke up with surprising rapidity. When seed of Alsike Clover becomes more plentiful, it will, we apprehend, be as commonly cultivated as Italian Rye-grass.

Adjoining this field was one especially devoted to the competitive growth of Beet, Mangel Wurzel, and Carrots. About 10 acres we found employed in the trial of Turnips, containing at least 40 different varieties all sown on one day under similar circumstances—not for exhibition, or under "high" cultivation, but simply for comparative observations. The whole have been exposed to the late severe frost, which has proved a valuable test as to their relative hardiness. Some of the early kinds of Swedish and others were somewhat damaged; but the following proved quite sound, viz.:—Champion Swede, Hardy Purple Top ditto, Green Top Yellow ditto, White ditto, Sutton's Purple and Green Top Hybrid Turnip, Green Top Yellow Aberdeen ditto, Lincolnshire Red Globe ditto, Imperial Green Globe ditto, Old Green Round ditto, and Grey Stone.

An interesting feature connected with Messrs. Sutton's establishment is a reading room, which they have lately built for the use of their men; it consists of a convenient and spacious apartment furnished with weekly and daily papers, periodicals, and standard works on gardening, history, travels, &c., and is open gratuitously at meal times and every evening after business hours. On application to the librarian books may also be had to read at home. A friendly *soirée* inaugurated the undertaking, when about 50 young men, clerks, shopmen, warehousemen, &c., spent a social evening together with the principals. Let us hope that such consideration for the improvement of those employed in this establishment may be everywhere imitated. A schoolroom has also been provided in one of the Trial Grounds for the education of the children of people employed on the land, as well as for those of others belonging to that locality.

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Let every attention be paid to providing a succession of bloom with which to keep this house gay, and avoid as far as possible the expense of much firing, which is moreover very injurious to most plants. Be careful not to let things in bloom suffer for the want of water, giving weak clear manure water to Salvias, Camellias, &c., and use every means to preserve the beauty of specimens in bloom as long as possible. Camellias in most places will be a failure as regards display this year, there being but few flower buds on them. In greenhouses damp and mildew are the great enemies to be guarded against, and these must be sharply looked after, especially in the case of plants that have not ripened their growth, and are in a rather soft state. If the former is troublesome it must be got rid of by means of free ventilation on mild days using a little fire-heat at the same time, and for the latter a dry airy atmosphere is the best preventive, but the plants should be frequently examined, applying sulphur on the first appearance of the enemy. Very little water will be required here at present, but the plants should be carefully looked over about twice a week, so as to make sure that nothing is allowed to feel the want of it. If not already done, get all plants tied with the least possible delay, for it is difficult to tie a plant so that it will not look somewhat stiff and unnatural, and the sooner all this description of work is done the better specimens will look when in bloom later in the season.

FORCING DEPARTMENT.

Pineries.—Plants in bloom will require very careful management to prevent their being injured by damp, and the atmosphere must be kept dry, with a rather brisk temperature, admitting a little fresh air on every favourable opportunity; and if there are means of admitting air over hotwater pipes, so that it may get warmed before coming in contact with the plants, a little should be admitted constantly when the weather is not frosty. Plants in bloom should also be near the glass, and where they will catch every ray of sunshine. It is nearly impossible to get fruit to swell anything like properly at this season, therefore unless a succession of ripe fruit is indispensable, and cannot be secured except by driving plants that bloomed late in autumn, these had better be kept rather quiet until the sun gains a little more power. Where an attempt must be made at present to get fruit to swell, a moist warm temperature of about 70° at night and 75° by day must be maintained, allowing it to rise to 80° with the assistance of sunshine, and the bottom-heat must be kept regular at about 85°, taking care to keep the soil in a healthy state as to moisture. But it is difficult to get the fruit to make much progress at present, and a little time lost now will be easily overtaken next month when the plants will enjoy a moist temperature, and the fruit will increase more in weight in one month, than in two at present.

Vineries.—As soon as houses are closed for forcing, be careful to secure a thoroughly moist state of the atmosphere by frequently sprinkling the floors and every available surface, but as observed previously, a regular moist state of the atmosphere is most effectually secured by means of a slight bed of fermenting materials in the house, which will also afford a little warmth, and the moisture from this is much more congenial to vegetation than anything that can be effected by the most careful use of either syringe or evaporating pans.

Peaches and Nectarines.—Let it be remembered that these will not admit of rapid forcing, especially in the early stages of the process; therefore fire-heat should be applied with caution; let not the night temperature exceed 50°, otherwise the blossoms will be weak and liable to drop; during the day the temperature may rise to 60°, admitting plenty of air on every favourable opportunity. Syringe the trees and close the house early after a bright day; continue this until the blossoms begin to expand.

Cherries.—If not already done, place trees in pots in the early house. Top dress with fresh loam and dung, and keep up a moist atmosphere with a night temperature of 45°. Admit air freely during the day-time.

Strawberries.—Early kinds may still be placed in forcing houses, where a moderate heat is maintained. Water, however, sparingly until we have more sunlight than we have at present.

Cucumbers.—Stop and train the plants as they progress, and do not allow the leaves to crowd one another; water occasionally with weak clear liquid manure.

Mushroom House.—Collect fresh droppings and put them together in a dry place to heat preparatory to their being wanted.

FLOWER GARDEN AND SHRUBBERIES.

The weather is comparatively favourable for executing alterations; and where these are in hand they should be prosecuted with the greatest possible despatch, taking advantage of frosty mornings, should they occur, for wheeling. See to even small plants being secured against wind; for these are often greatly injured by being blown about, especially if recently transplanted, and a small stake and a few minutes' work would prevent the mischief. If not already done get in a stock of Briars for budding. Let the roots be well trimmed, cutting back closely the strong ones; for these, if left, will be of little use except to furnish an endless supply of suckers.

HARDY FRUIT AND KITCHEN GARDEN.

If any root-pruning of fruit trees has yet to be done let this be attended to without further loss of time, and see that trees exposed to wind are securely staked. Take every opportunity of pushing forward pruning and nailing. Now that the weather is favourable give air freely to Lettuce and Cauliflower plants under glass; indeed the sashes should merely be used to exclude frost and throw off rains, for the plants will do all the better in spring for being kept hard and stocky over winter. If not already done make a sowing of Peas and Beans on well sheltered dry ground, and do not spare the seed of the former, for it will be sure to be exposed to the depredations of mice. Attend to keeping up a regular succession of Seakale, Asparagus, and Rhubarb, by introducing moderate quantities at short intervals into heat.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON

For the Week ending Feb. 7, 1861, as observed at the Horticultural Gardens

February.		Moon's Age.	Barometer.		Temperature.					Wind	Rain.
					Of the Air.			Of the Earth			
			Max.	Min.	Max.	Min.	Mean	1 foot deep.	2 feet deep.		
Friday	1	21	30.255	30.114	56	25	40.5	42½	39½	S.W.	.01
Satur.	2	0	30.618	30.578	50	27	38.5	42½	40	N.W.	.00
Sunday	3	23	30.456	30.209	48	33	40.5	42	40	S.W.	.00
Mon.	4	24	29.993	29.808	49	41	45.0	42	40	S.W.	.11
Tues.	5	25	29.694	29.433	48	42	45.0	43	40	S.W.	.01
Wed.	6	26	29.361	29.356	51	29	40.0	44	40½	S.W.	.01
Thurs.	7	27	29.508	29.492	53	36	44.5	44	41	S.W.	.04
Average..			29.983	29.855	50.6	33.3	42.0	42.8	40.1		[illegible]

Feb. 1—Densely overcast; very fine; slight frost at night.
— 2—Clear and very fine throughout; slight frost.
— 3—Overcast; fine throughout.
— 4—Overcast; fine; slight drizzle at night.
— 5—Densely and uniformly overcast; cloudy and cold; boisterous.
— 6—Flying clouds; cloudy; rather boisterous at night.
— 7—Fine; heavy clouds; fine in afternoon.
Mean temperature of the week, 3½ deg. above the average.

RECORD OF THE WEATHER AT CHISWICK

During the last 35 years, for the ensuing Week, ending Feb. 16, 1861.

February.		Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds.							
							N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday	10..	41.5	29.9	37.2	14	0.52 in.	6	6	3	2	5	9	3	1
Mon.	11..	44.2	30.0	37.1	15	0.34	8	5	2	—	5	9	2	4
Tues.	12..	44.6	30.0	37.3	15	0.28	3	7	1	—	4	11	[illegible]	[illegible]
Wed.	13..	44.1	29.8	36.9	13	0.37	2	4	5	1	5	10	6	2
Thurs.	14..	45.2	31.0	38.1	13	0.50	1	4	3	2	3	12	8	[illegible]
Friday	15..	46.4	31.2	38.8	12	0.30	4	4	3	—	4	10	[illegible]	3
Satur.	16..	46.3	30.8	38.5	6	0.23	6	6	2	3	1	8	6	3

The highest temperature during the above period occurred on the 10th, 1831—therm. 65 deg.; and the lowest on the 13th, 1855—therm. 0 deg.

Notices to Correspondents.

Boilers: *J. Sheppard.* Your model appears to us to be imperfect. We cannot see where it is intended the water should be, as all parts of the invention are open. Nor do we see how the several parts of the boiler are connected, or flow or return pipe. The price at which such boilers could be produced should also be stated.

Chair Makers: *A Constant Reader* will be obliged by any one informing him of the address of any chair manufacturer at High Wycombe, as he is anxious to get some chairs from that quarter.

Moss on Fruit Trees: *W F.* Scrape off the Moss with an iron hoop. Drain the land, or give it in some other way a little fertility, and you will see no more of Moss.

Names of Fruits: *M C.* Your Apple resembles the Cockle Pippin; but, owing perhaps to the season or other circumstances, it is not so firm-fleshed as that sort usually is.

Names of Plants. *J H.* Astragalus Tragacantha.—*Flora.* Yes; it is common Savin.

Tom Thumb Lettuce: *J W.* We have again looked through all the French catalogues in our possession, and cannot find mention made of a Lettuce with this name. If Messrs. Vilmorin know anything of it they will probably take an opportunity of mentioning it.

Vineries: *Young Man.* You will find the drain pipe inactive unless you slope it towards it. As to the flue put into a shed to heat the inside of the Vinery, it and all connected with it are as bad as possible. You could not have hit upon a plan more certain to fail. Put the flue inside the house next to the front wall, and make proper arrangements to prevent its drying the air. Leave the leaves out of your compost. Only use a little rotten dung just to give your Vines a start.

Vines: *J Taylor.* Vines, young and vigorous, struck from eyes are in general to be preferred to 2-year or 3-year old plants, which answer best for forcing in pots. If the latter are weak you should cut them down, and not leave them at full length.

Water Pipes: *W C M.* We should use iron, since your water is so pure. It will not be injurious—or inconvenient if the rain is always at work. Use however cast iron, not wrought iron.

Worms: *Leicester.* Lime water, that is to say, water that has been mixed with caustic lime and been allowed to stand till clear will rid you of worms; but it disagrees with Heaths and American plants. We are unable to answer the other question.

Misc: *Cheriton.* You will find a very complete list of Nurserymen and Seedsmen, both in Town and Country, in Hogg's "Gardeners' Year Book."—*Enquirer.* As matters stand you had better decline the order unless the money is paid before hand. There will probably be an awful smash.

ARTIFICIAL MANURES, &c. — Manufacturers and others engaged in making ARTIFICIAL MANURES may obtain every necessary instruction for their economical and efficient preparation, by applying to J. C. NESBIT, F.G.S., &c., Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, Coprolites, &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch. Gentlemen desirous of receiving instruction in Chemical Analyses and Assaying, will find ample facility and accommodation at the College.

THE LONDON MANURE COMPANY
(ESTABLISHED 1840,)
are now prepared to send out the following MANUFACTURED MANURES:—
SUPERPHOSPHATE OF LIME, of best quality.
DISSOLVED BONES, AND BONE MANURE FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN AND ROOTS.
CORN MANURE FOR AUTUMN SOWING.
They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate, to be obtained entirely from Bones.
The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE OF SODA, SULPHATE OF AMMONIA, and every Manure of value.
116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

ESTABLISHED 1812.
MANURES.
MESSRS. PROCTOR invite the attention of their Agricultural Friends to their SPECIAL MANURES for ... prepared for Grass, Corn, and Root Crops. These Manures, which are the best and cheapest offered to the Agriculturist, are now ready for delivery, and early orders are respectfully solicited. Price List, with particulars as to quantity and best mode of using the Manures, sent free on application to H. & T. PROCTOR, Cathay, Bristol; or PROCTOR & RYLAND, Birmingham and Chester, Agricultural Chemists, and Original Manufacturers of Special Manures.

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861, are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME	£6	6	
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES ..	5	5	
LAWES'S BARLEY, GRASS, AND MANGEL MANURES	8	0	

These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.
CONCENTRATED TURNIP MANURE, equal in value to the preceding.
Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

LOOK TO YOUR GRASS LANDS AND DOUBLE YOUR CROPS by dressing them with PULVERIZED BONES, to be had only of JARED TERRETT HUNT, Lambeth Wharf, Lambeth, S., and Downham Market, Norfolk. 5 cwt. sufficient for an acre, and the present the time for dressing. Prepared bones for Vine borders and fruit trees. Half-inch bones, bone dust, superphosphate of lime, gypsum, guano, and other artificials of guaranteed quality.

ECONOMY OF CORN FOR HORSE & CATTLE FEEDING.
E. R. AND F. TURNER, Ipswich, submit the prices of their celebrated CRUSHING MILLS for Oats, Linseed, Barley, Malt, &c. They save 25 per cent. of Oats in feeding Horses; crush Corn for Pigs and Cattle, rendering it as efficacious as if ground to meal; reduce Linseed to fine meal with less of its oil, and bruise Malt perfectly.

	£	s.	d.
... Mill (recommended also for bruising corn for fowls)	3	15	0
... Mill for hand, £4 15, or with Bean Mill (No. 6 B)	5	15	0
... ,, ,, 6 10 ,, (No. 7 B)	8	8	0
2 ,, ,, or power 8 0 ,, (No. 2 B)	10	10	0
1 ,, for power .. 12 0 ,, (No. 1 B)	15	0	0
8 ,, for steam pow. 18 18 ,, (No. 8 B)	24	0	0

Delivery free to all Railway Stations in England, and to the principal ports of Scotland and Ireland.
At the R.A.S.E. Canterbury Show, 1860, E. R. & F. T. were awarded the prize of 5*l.* for the best Crushing Mill for Power; and prize of 2*l.* for their Crushing Mill for Hand.
Illustrated PRICE CATALOGUES sent free on application.

REAPING AND MOWING MACHINES.
BURGESS AND KEY, 95, Newgate Street, E.C. PRIZEHOLDERS for the best Agricultural Machinery Manufactured.
ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price 42*l.* 10*s.*
M'CORMICK'S REAPER for Manual Delivery. Price 25*l.*
ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30*l.*
ALLEN'S GRASS MOWER, for one Horse. Price 22*l.* 10*s.*
COMBINED REAPER AND MOWER—Two-Horse Machine. Price 35*l.*
COMBINED REAPER AND MOWER—One-Horse Machine, Price 24*l.*
These Prices include Packing and Delivering at any Railway Station.
TESTIMONIALS.
A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following from
MR. JAMES ARNOT, *of Woodcote, Carshalton.*
"Having used your Machine for four years, I would not be without one on any consideration; and I can safely say that I have saved over 50 per cent. in the expense every year I have used it. In fact I have never yet seen an implement which pays itself in so short a time."

COLLEGE OF AGRICULTURE AND CHEMISTRY, AND OF PRACTICAL and GENERAL SCIENCE, 37 and 38, Lower Kennington Lane, Kennington, London, S.
Principal—J. C. NESBIT, F.G.S., F.C.S., &c.
The system of studies pursued in the College comprises every branch requisite to prepare youth for the pursuits of Agriculture, Engineering, Mining, Manufactures, and the Arts; for the Naval and Military Services, and for the Universities.
Analyses and Assays of every description are promptly and accurately executed at the College. The terms and other particulars may be had on application to the Principal.

ROYAL AGRICULTURAL COLLEGE, CIRENCESTER.—Dr. VOELCKER, Consulting Chemist to the Royal Agricultural Society of England, has a VACANCY for a HOUSE PUPIL.

LAND DRAINAGE.
WORKS OF DRAINAGE of any extent are EXECUTED by the GENERAL LAND DRAINAGE AND IMPROVEMENT COMPANY on all descriptions of property, whether freehold, entailed, mortgaged, trust, ecclesiastical, corporate, or collegiate.
Repayment may be made by the Landowner as successive portions of the works are completed; or the actual expenditure, with a commission thereon, may be charged on the property improved, by way of rentcharge on the estate created for various terms of years so as to adapt the rate per cent. of annual charge to the circumstances of the tenants.
No investigation of title being required, or notices given to Reversioners or Mortgagees, no legal expenses are incurred.
Works of Irrigation, Enclosing, Wood Grubbing, Road Making, and Farm Buildings are executed in a similar manner.
Landowners desirous to execute any of the Improvements by their own Agents, and charge the outlay and expenses on the Estate, may obtain Loans for the purpose.
Applications to be made to WILLIAM CLIFFORD, the Secretary, at the Offices of the Company, 52, Parliament Street, S.W.

THE LANDS IMPROVEMENT COMPANY.—Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c. IN ENGLAND AND WALES AND IN SCOTLAND.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.
Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.
For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

ESSEX AGRICULTURAL ASSOCIATION.—
President—SIR THOMAS BARRETT LENNARD, Bart.
The ANNUAL SHOW will be held at Romford, on TUESDAY, June 25.—Amount of Prizes offered, 600*l.*
The following Special Prizes are open to all England:—
HORSES.
For the best Entire Horse, for Agricultural purposes, open to all England, the Proprietor being a Member, or paying an entrance fee of One Guinea £25
For the best Thorough-bred Entire Horse, open to all England, the Proprietor being a Member, or paying an entrance fee of One Guinea 25
*** The Agricultural Horse obtaining the above Prize must either have travelled regularly in the county the preceding Season, or the Owner must sign an undertaking that such Horse shall do so the following Season; and the Prize will be withheld till the completion of the contract. But the Thorough-bred Horse obtaining the above Prize shall be stationed in the county, for the same purpose, without travelling, if desired.
BULL.
For the best Bull, of any age, of a pure breed, open to all England, the Proprietor being a Member, or paying an entrance fee of One Guinea £15
RAM.
For the best Ram, of any age, of a pure breed, open to all England, the Proprietor being a Member, or paying an entrance fee of One Guinea 10
N.B. All Sheep to be barely and fairly shorn, and any animal shorn previously to the 31st March to be disqualified from exhibition.
The POULTRY Exhibition is not confined to Members, or persons residing in the county.
The following Bye-Law was passed, January 20, 1860:—
"That no Animal having obtained the First Prize in the Class in which it is exhibited, shall be eligible to compete in the same Class at any future Exhibition of the Society; and this Bye-Law shall also apply to Animals that have obtained any Special Prizes offered by the Society."
Books of Rules and Regulations may be had, 6*d.* each to non-subscribers, on application to the Secretary,
Slough House Farm, Halsted. ROBERT EMSON.

AGRICULTURAL BENEVOLENT INSTITUTION.—INSTITUTED 1860.
FOR THE RELIEF OF DECAYED FARMERS, THEIR WIDOWS, AND ORPHANS.
President—HIS GRACE THE DUKE OF RICHMOND.
Treasurer—COL. THE HON. A. N. HOOD.
FIRST ELECTION OF PENSIONERS.
A GENERAL COURT will be held on THURSDAY, May 2, for the purpose of ELECTING TWENTY OUT-DOOR PENSIONERS, as follows:—
9 Male Pensioners .. .. at £26 per annum each
3 Married Pensioners .. .. £40 ,, ,,
5 Widow Pensioners .. .. £20 ,, ,,
Subscriptions and Donations will be thankfully received by the Secretary, Mr. CHARLES SHAW, at the Office of the Institution, 55, Charing Cross, S.W.; and at the Bankers, Messrs. DRUMMONDS, 49, Charing Cross, S.W.

AGRICULTURAL BENEVOLENT INSTITUTION.—ELECTION OF PENSIONERS.
CANDIDATES are hereby instructed to return their FORMS of APPLICATION, properly filled up, to the Secretary, Mr. CHARLES SHAW, 55, Charing Cross, S.W., on or before MONDAY, the 18th of February.—By Order of the Council.

TENANT FARMERS' MANURE COMPANY.
ODAMS'S BLOOD MANURE FOR CORN.
ODAMS'S BLOOD MANURE FOR ROOTS.
ODAMS'S SUPERPHOSPHATE OF LIME,
MANUFACTURED BY THE PATENT
NITRO-PHOSPHATE OR BLOOD MANURE COMPANY
(LIMITED),
Consisting of TENANT FARMERS, occupying upwards of 30,000 Acres of Land.
Chairman.—JONAS WEBB, Esq., Babraham, Cambridgeshire.
All particulars may be had on application at the Offices C. T. MACADAM, Secretary.
Offices: 109, FENCHURCH STREET. Manufactory: PLAISTOW MARSHES, ESSEX.

The Agricultural Gazette.

SATURDAY, FEBRUARY 9, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

MONDAY, Feb. 11	Botley (Mr. Haslam on Farm Implements).
TUESDAY, — 12	Wirksworth. Hexham (Mr. Trotter on High Farming).
WEDNESDAY, — 13	Agri. Society of England .. Noon. Berkeley and Thornbury (at Thornbury). Oxford.
TUESDAY, — 19	Kingscote (Mr. Price on Ox Labour).
WEDNESDAY, — 20	Agri. Society of England .. Noon. Hungerford, ... 4 P.M. (On Reaping Machines). Blandford.

THE list of Short-horn Sales published last week, astonishing as many of its items were, does not give any adequate idea of the enormous prices which are still given for animals of any fashionable family or strain in the breed. We have before us a copy of the Annual Catalogue of the Branches Park Herd, the property of Lady PIGOT, in which the pedigree and personal history of the several animals specified are detailed. Among them we find "Queen of Athelstane," now two years old, purchased of Mr. DOUGLAS, of Athelstaneford, for 525*l.*; and "Victoria," now five years old, purchased of Mr. BARNES, of Moynalty, also for 525*l.* In the notice of the 2d Duchess of Gloster, bred by Mr. JONAS WEBB, calved January, 1857, got by Cheltenham, 12588, it is related that Mr. JONAS WEBB has sold five yearling bulls by this bull, at 200 guineas each, for the colonies, and nine more at prices varying from 100 guineas to 180 guineas each, and eight heifers at over 100 guineas each. These prices we add to the list given last week in illustration of the high market value which a well-bred animal maintains. The publication from which we extract them is not the mere "Annual Catalogue" which it is entitled. It is most interesting as a record of what energy and perseverance will accomplish—of the failures which cannot check them, and of the successes which ultimately reward them. Let us also add that it is useful as a sort of annual appendix to the Herd Book. It would be of great service if of all our leading Short-horn herds similar annual catalogues were issued. They could never be a substitute for the Herd Book, which must periodically appear as the ultimate and authoritative book of reference; but they

would be useful as intermediate and supplementary to a work which they could never supplant.

In her preface Lady PIGOT writes thus of the history of her herd:—

"I began in the winter of 1856 by purchasing 'Happiness,' a heifer bred by Mr. JONAS WEBB, giving 250 guineas for her. She only brought a bull calf, and sank away out of condition soon after, and appeared in that plight at the Royal at Salisbury. Eventually she recovered her appearance, and went to Ireland to the Dublin Spring Show in 1858, where she took the 1st prize and silver medal; also the gold medal as best cow. She came home however to die, having been literally *bled* to death by the farrier, *for cold* caught on the passage across.

"This purchase I made not knowing *one* tribe from another, and having no purpose or aim in view. I lost in the first year above 600*l.* from deaths and inexperience, but I was determined to presevere, and at Mr. WETHERELL's sale in 1859, *I gave 300 guineas* for Stanley Rose. I then began to question whether buying in this desultory way was the right course to pursue, and would it pay me, and so I went to Warlaby, and made outrageous offers, for animals *not to be bought.* I wrote in the same strain to various people possessing pure bred cattle of Mr. BOOTH's blood. Everywhere I was refused; and at last I saw that those who were lucky enough to possess these cows were quite determined not to part with them.

"My energy and perseverance, however, have at length been rewarded, as I have never allowed any hindrance to come between me and the purchase of particular tribes, and I have now succeeded in establishing a herd, the pedigrees of which lie in these pages. And now I give it as my opinion that nothing pays the farmer half so well as stock, if properly kept."

The following are notices of some of the cows and heifers in the list:—

"The Queen of Athelstane, rich roan, calved February 1859 (bred by Mr. DOUGLAS, of Athelstaneford), got by Sir James the Rose, 15290, &c. She has just perhaps earned her reputation, being, as is believed, nearly the best heifer in England. Lady PIGOT gave 500 guineas for her to Mr. DOUGLAS. She combines rare quality and style with great length and constitution, and is supposed by judges not a little to resemble the beautiful but unfortunate 'Queen of the May.' The Queen of Athelstane took her first prize at Saltoun, East Lothian, in 1860, and the first prize, also as a yearling, at the Highland Show at Dumfries. She was first again at Alnwick, first at the Lancashire show at Keighley, beating Col. TOWNLEY's prize heifer, and was first at the Craven show at Skipton, 1860. In the Frederick cross is some of Col. TOWNLEY's best blood, while Ringlet is in a direct line from the celebrated Bracelet, none of which tribe remain either at Warlaby or Killerby. Sir James has two crosses away from the 'Royal Blood,' but is from the famous Paris prize cow 'Rose of Summer,' of the Mantalini tribe."

Again, Empress of Hindostan, roan, calved September 1857, got by Duke of Kent, 14440, &c. "She won second prize, as calf, at Bridlington, 1858, first prize as calf at Wetherby, 1858 (beating Duchess 77), and many others; first prize as pair of heifers (with Stanley Rose), at Barnstaple, 1859; first prize at Glasgow, 1859; first prize at Swaffham Norfolk show, 1859; first prize at Ipswich show, 1859; first prize at Great Grimsby, 1859; H. C. at Ulverston, 1859; first prize at Ashford, 1859; H. C. at Redcar, where she would have been *first* but for a wrong date by mistake; first prize at Wellingboro', 1859; making up to two years old nine prizes. In 1860 she commenced by winning the first prize and silver medal at Norwich; first prize at the Suffolk at Framlingham; third prize at the Royal Agricultural Show at Canterbury; H. C. at the Durham County; H. C. at Pomfret (Yorkshire show); H. C. at Ulverston, 1860; third prize at the Cleveland Middlesboro' show; first prize at Keighley, and second prize at Skipton (being second to Stanley Rose)—making it up to two years and 11 months old 15 prizes won by her—thus exceeding the prizes won by any other animal of that age that has yet been shown."

Other histories could be given of the honours achieved by members of the Branches Park herd: these must suffice for the present.

MR. HENRY RICHARDSON, of York, has issued a circular on THE VALUE OF PERUVIAN GUANO as compared with manufactured manures. This is a subject, interesting at all times, which is especially important to the agriculturist at the season when he is about to purchase those supplementary fertilisers by which the agriculture of 1861 is expected to be more productive than that of 10 or 20 years ago. Mr. RICHARDSON is a dealer in the manures on which he writes, and it is evident from his statements that he derives a larger profit from the sale of superphosphate than from that of guano; but though probably not an entirely disinterested witness he is, we believe, a trustworthy one, the concluding sentence of his address proving that it is not mere personal profit that has dictated to his pen. Thus he says, most truly:—"If we were really careful to preserve in towns the various valuable products which are now to so great an extent wasted, and which I am satisfied might easily be done, by the absorption of animal fæces, &c. by mixture with ashes or earth (covered in to exclude the rain), we need not expend so much money in importing manures; for by a little care we should be able, by returning to the land the phosphates and nitrogen contained in the vegetables and the animals which we consume, not only to make our fields more fertile, our houses and streets more healthy, and our streams much less polluted, but also, what is a primary consideration with Englishmen, save our pockets by availing ourselves of the use of what we are constantly producing, and now to so great an extent wasting."

The following are the statements of fact which we gather from Mr. RICHARDSON's letter:—In 1856 he sold considerably more than 1000 tons of Peruvian guano; in 1860 about 700 tons; while his sale of superphosphate in the same period increased tenfold. In the last two years guano has cost 12*l.* per ton net in London; there has been also a charge of 1*s.* 6*d.* a ton for taking it out of warehouse, though it gains in weight there 6 per cent. by absorption of moisture.—Mr. NESBIT by calculation of the market value of its separate ingredients, makes the value of an average sample of Peruvian guano 13*l.* 16*s.*, moisture being 15 per cent. and sand 2 per cent.; but warehoused parcels often contain as much as 18 per cent. of moisture; and 5 per cent. of sand sometimes exists in them. Mr. RICHARDSON says:—"Out of upwards of 700 tons which I sold this year, only one parcel came out of foreign vessel (Black Swan), and was comparatively dry. This parcel contained $10\frac{1}{4}$ per cent. of moisture, 25 per cent. of phosphate of lime, and ammonia equal to rather more than 50 per cent. of sulphate of ammonia. These, calculated by NESBIT's standard, come to 10*l.* 18*s.*, whereas the damper ones only came out at 10*l.* 4*s.*; consequently if sold to a farmer at 13*l.*, it cannot be a cheap manure; and I think I can prove, by this same scale, that at the price bones have been for the last two years, it is possible to make a cheaper manure than Peruvian guano."

Again, "I made and sold last year, at 7*l.* per ton, upwards of 500 tons of superphosphate, entirely manufactured from bones, which, according to the same scale, comes out at 10*l.* 14*s.* per ton; and I am prepared to sell at about the same price this coming year. [In this respect, we here interpolate, Mr. RICHARDSON cannot and we presume does not claim superiority over other dealers. All well-manufactured superphosphate is worth more per ton according to the existing scale of calculation than it is sold for.] Now if Peruvian guano which comes out at 10*l.* 18*s.* is sold at 13*l.*, and a bone superphosphate which comes out at 10*l.* 14*s.* can be sold at 7*l.*, it is evident which is the cheapest; and I feel satisfied those figures are correct, as I, for the last four years, have been at considerable expense in obtaining the analyses of manures, and I have made myself familiar with the analyses and the calculation of their value by NESBIT's standard, which I have constantly used; and I am thoroughly convinced that we are quite able to make these calculations correctly."

The great ground of complaint against Peruvian guano, strange to say, is now in fact that to which our artificial manures have alone been hitherto supposed obnoxious, viz., that we do not know exactly what it is we are buying. Carelessness and unskilfulness, ignorance and dishonesty, have made manufactured superphosphates, for instance, of exceedingly various value, while Peruvian guano, surrounded by all the guarantees of a scrupulous and most trustworthy agency, has been latterly believed of entirely uniform constitution, and always worth more than the uniform price charged for it. The history of the case investigated by the Ayrshire Agricultural Society last year proves that occasionally from natural causes damaged cargoes arrive upon our shores and may reach the [illegible] unchallenged; and now we have Mr. RICHARDSON declaring that sand varies in it from 2 to 5 per cent., and that $3\frac{1}{2}$ cwt. out of every 20 sometimes are water, which when the parcel is warehoused becomes naturally added by absorption to it, at the rate of 1 cwt. to every ton.

Let superphosphates be as various as they may, we purchase them with a guarantee of composition ensuring the presence of a certain minimum of valuable ingredients; while as to guano "we buy the article, not knowing whether it will contain 10 per cent. or 18 per cent. of moisture, whether it may contain 2 per cent. or 5 per cent. of sand; nor do we know the per centage of ammonia and other ingredients."

This we quote from Mr. RICHARDSON, feeling that his statements deserve that discussion which just before the season when we purchase the manures they are sure to receive.

TALES OF A LANDLORD.

'CHARTOLOGY.'

"Go, and stand upon *the Bridges*," wrote the [illegible] Dr. Arnold to one of his pupils visiting London for the first time, "stand upon the Bridges, if you want to have the best idea of our Metropolis that can be taken in at a glance." I don't think I have ever stood upon one of the bridges since, without recalling that advice, and feeling its truth. Not visually [illegible] nor did Arnold mean this. He was not the man to address the mere corporeal eye. An intense [illegible] habit-versed economist of mental labour himself, he alluded not to what the mere bodily eye could see, but what the mental eye can grasp and inwardly digest: the world of shipping, the amphitheatre of public buildings, and of Trade, the moving life, terrestrial, aquatic, amphibious; the great pulsation of the world's heart (if it have one) its very core and centre, revealed *at work.* To have all this before the eye at once—to be a part of all you witness, not by the mere accident of presence, but by that inner relationship, of thought, which actually and veritably unites the *Thinker* with the *Thing*, the Interpreter with the problem interpreted, and [illegible] too in nicely-measured *proportion*—for this, [illegible] that no one ever loved or appreciated [illegible] better than Arnold: not for the mere form and [illegible] that it gives you of a country—but for all the [illegible]tive knowledge, the inferential matter, the moral [illegible]clusions from physical features, it presents to the [illegible]structed eye. And this was why he named the bridges and not, (as your, and my, respected Gran[illegible] would have done,) the top of St. Paul's, and [illegible] eye view down the lord Mayor's chimneys, and [illegible] the pan-tiled back of the great tortoise at your [illegible] distant, silent, unintelligible, mysterious in its [illegible] as an ant-hill.

And that was why, when I found there were [illegible] 'books,' of the estate, the next thing I asked for, [illegible] despair, was a Map! *Is there a Map?* Yes: [illegible] believed there was a map. And a grand [illegible] of boxes and drawers there was to get at it: for [illegible] put away as *very* precious; a sort of companion [illegible] Title-deeds—if THEY *had but been there!* So [illegible] doubly precious in virtue of their absence, as [illegible] a sort of possessional and substitutive character [illegible] it—'*secondary* evidence' in fact, of Title. At [illegible] rumbling over-head, as if the house was haunted, [illegible] butler and housemaid appeared with it, at length [illegible] brought it in, like a household god, tenderly, [illegible] down across two chairs, a great time-blackened [illegible] case, about four feet long; and *how* that gouty [illegible] first-named looked *at me*, as he made the deposit [illegible] find no word in Johnson that will exactly convey [illegible] you, as I saw, and should like you to see, the [illegible]

"Take care, *Yong* Gentleman! Don't you [illegible] it all at once! Them fine folks up in London [illegible] 'ull soon make a hole in this *here*, if so be as you [illegible] come down an' *live at 'ome*, like him as 'ave gone [illegible] guv' it to *yeu*, so sudden-like, lord 'elp us [illegible] what yeu shud do. That's the line for yeu [illegible] mind!"

No: I don't think any word in Johnson would [illegible] convey all that; but if it could be photographed [illegible] glance, at this distance of time, that was what [illegible] orthography and all, in old Poulson's face, as he [illegible] in stately silence out of the room, looking back [illegible] last instant as he closed the door.

The sliding-lid stuck fast to the box, as if [illegible] fully partaken of Poulson's caution for any number of years back; and the decayed moulding broke [illegible] would draw out. Dust, wood-lice, dead flies, an[illegible] tin-tacs with bits of carpet adhering,—and [illegible] lay, in state, the old Map, now fairly exhumed [illegible] brought back to day. One almost longed to [illegible] blinds down, for fear the light should hurt it [illegible] how. Four feet long, and as heavy as if it was [illegible] on iron. As I untied the thick green worsted tie [illegible] let the roller fall to the ground, holding it [illegible] cornice-rail as high as my arm could reach, I [illegible] sort of *susurrus*, I beg pardon, a 'sensation' [illegible] two old ladies standing behind me. Yes [illegible] was, at full length and view, and in one corner [illegible] old large hand and Murillo-brown ink, an [illegible]

cation of its 'unquestionable accuracy,' signed, and dated——1724!

I had a familiar eye for a Map: and one sight of this, as I ran quickly over its faint scrambling outline, seemed to drift me back into the Dark-ages. How strange is the impulse of contrast, and alternation, on the mind. The kind of solemnity of the proceeding, however mocked by inward *knowledge* had had its moment of triumph; old Poulson's look had no small part in it: but when I turned round and caught the—perfectly idolatrous—countenances of my two friends standing there together, like the picture of

"Darkness,—and Silence:—solemn sisters!"

the map—the precious idol—escaped from my grasp with a clatter on the floor in an apotheosis of dust, and I—I am afraid I—burst out laughing.

It was very wrong, I know; unpolite to the present tenses, irreverent to the preterite, and pluperfect and all the other past ones. But honestly I could not help it. There is a solemnity about the most rotten ownership of Land, which (for special self-excusal I must repeat) had appeared worse than mockery to me from my very childhood upwards. Women are particularly impressionable to its influence—*omne ignotum pro magnifico*—the less they know of the canker, the more they admire the fruit—rather say the rind, the false and fibbing *epidermis*.

Still a map is a Map: and this for once is no tautology. It may be upwards of a hundred years old, yellow and rotten as gingerbread, laughably inaccurate, a fanciful outline of wold, waste, and gorse commons. Still it is a basis, a beginning, a patriarch of excellent and beauteous offspring: and often since has it afforded me moments of real pleasure to recal the first sight of that curious and quaint old relic, when referring to its ancient names and altered outlines, from the neatly-finished and mathematically accurate descendant and successor to whose parturition it assisted. And here what delightful contrast might one not indulge, of the relative qualities and merits of 'old' and 'new,' the ancient world and the modern;—how as they stand at either of the two points of view, men magnify, or depreciate, the other, as it suits their purposes or present interests: but I resist the strong temptation: my story presses.

"Four wax candles, Sir! on one table, in my best parlour, and up o' nights all the winter through till three and four i' the morning! and out i' th' wet and fog all day, a-measuring, and writing, and a squinting through the handle of his walking-stick, (*the* rummest looking 'un as *never* you sid!) and there was a thing as a' kept in is *waistcoat pocket*, as a' could look round a corner with! O! He was a *clever* man, he was!"

This was the account given me the following spring, of the surveyor's clerk, employed in mapping the estate,—a business-like hard-working silent fellow who had not the faintest glimmer of the divine honors paid to him and his theodolite, as he poked about daily through the wet fields taking angles, and sat devoutly at his wax-lit *figures* through the night. Nearly a quarter of a century of constant use has scarcely detected an appreciable error, or a false angle or quantity, in that winter's work of night and day. Dobson was right: he was a clever fellow.

Was this a bad investment? Can you tell me a single tool, of all you ever saw exhibited in an an agricultural show-yard, that equals a first-rate map, presenting in such exact epitome and miniature every outline, every boundary, every hedge, every *inclination*; that as Napoleon fought and won the battle of Marengo—over a ground plan—a bit of paper, in a tent,—so may you master every refractory acre of your land that wants improvement, even when unable, like my poor predecessor, for the last half-dozen gouty years of his life, to walk or ride to the spot. But can you doubt for a moment that it would have been personally *more agreeable* to the 'petit caporal' to have been in the heart and roar of the battle, (and thus eventually saved by the Austrian,) than to be tied down in racking strain of thought to that cold-blooded *chess-board*, moving his battalions with his *pencil*, instead of a Sword!

Three or four hunters, at 'a hundred and fifty' a-piece, eating their heads off all that winter through, would have cost a good deal less reflection and shaking of men's heads at '*some people's*' extravagance,' than the modest price of that map, which has carried me five and twenty winters, wet, or frozen, without a single fault, (except my own).

Now there flourished in that district a curious sensitive plant, a single specimen at least, of a class not quite uncommon, a worthy Pastor, excellent in parish-matters, but whom I may describe as 'epicene' in mental constitution: for, his ears and pen formed, together, a perfect *Gossip funnel*. His letters to me while "the Survey" was in progress, were master-pieces of the deprecative, I might almost say the denunciatory style. He even found what he called 'parallel passages' from Sacred history, inimical to arithmetic and mensuration, which he bid me lay to heart in a tremulous strain of monition. "I cannot tell you," he wrote, "what a sensation, I may say *consternation* Mr. Dumper" (this was Dobson's veneration!) "has created in the neighbourhood. Old Mrs. Harris on looking out of her bedroom window last Wednesday morning saw him *dragging a chain* right across her bed of broccoli, and as she watched through the blind, she saw him *kneel down*, and he muttered something, and then rose, leaving a *split wand* sticking up in the very place where he knelt, with a piece of parchment *in the fork* and some characters inscribed on it. It frightened the poor woman so that she has hardly dared stir out of doors since. She says she would not touch one of them *broccoli* again if it was *ever so*; and has asked me to request you to please to have it *removed immediately*. Indeed, I must tell you I am quite concerned to hear the remarks that are made amongst my parishioners about *the goings on*. I hope Mr. Dumper will not meet with any molestation; he seems a quiet young man enough, but I wish he would not carry that *red flag* about with him. I'm sure you'll excuse me if it seems absurd to you, but it is thought by some to have a sort of *popish look*; (with that new Catholic Chapel so near too;) and I am sure you would not like anything of that sort *on your estate*. The ladies up at the Hall, are much concerned about it all. He has actually been in *their garden too*! and left *another forked stick* standing up right in the middle of the large Rhododendron-bed! I *hope* you will *spare that*: as it would go to their hearts to *have it destroyed*, as the late squire was very partial to it. I told them I would inform you immediately in order that you might write to Mr. Dumper to *stop him in time*, or authorise me to do so."

You are not to suppose that to this electric current of anxiety my mind presented by any means a perfect negative. I was young, and without experience of the world, how it snarls and cackles at the first approach of things, yields and crouches to the steady advance, and rises up, anon, to magnify and exaggerate results;—and I sometimes wished that the industrious and unconscious surveyor's clerk were trigonometrising in the moon, perhaps to balance the votes of the 'local committee' that consigned him and his divining-rods to a lower sphere. But I soon repented my repentance.

It is a fault of early life, to be too sensitive to the blame, and opinions, of men. Its worst result is an almost sure eventual reaction that makes middle age too hard and unimpressible. To *listen to* remonstrance and objection is almost always useful: but it should be met as the hand of the expert cricketer does a hard-sent ball—with that gentle *reculement* of the flexor muscle, that *cradling* of the pliant palm, that stifles impetus, avoids *the sting*, and secures the angry missile to better use, instant or deferred, as the matter may require. And, as this will happen, somehow, I submit this feeble illustration to *those it may concern*. For, there are young hands and merry hearts that find hard bowling as the game advances, and that Field-life is not all *innings*; and have need of timely knowledge that "be they chaste as ice, pure as snow," "wise as serpents, and harmless as doves," they shall not escape—Cricket-balls! *T.*

Home Correspondence.

Agricultural Improvements and Railway Prosperity.—Is agriculture to improve as railway extension advances? So we thought in Ireland; and hence, in our dearth of such accommodation, we have envied our English friends their great abundance. But it would appear now we had no cause to complain, and that you had less cause to rejoice in our relative positions. I am led to make these remarks from having read in your paper of last Saturday some of the proceedings of the Botley Farmers' Club as there reported relative to the obstructions thrown by railway misdirection in the way of Mr. Pink in improving the property he is happily placed over. You call on farmers' clubs throughout the country to discuss the important matter suggested by Mr. Warner. Unfortunately for us in Ireland we have no farmers' clubs, and consequently from such no aid can be supplied. We have nevertheless some individuals who receive much valuable information by the proceedings of the English clubs published by you. As one of those I now beg to offer the farmers said to be aggrieved in England, as we may be by and by in Ireland, the following suggestion. Call on your representatives in Parliament to induce or coerce the Government to pass a short bill to make it compulsory on the railway directors to afford such facilities to farmers, especially in the carriage of manures, as will prove not only beneficial to the producers but the consumers of agricultural produce, and, as a consequence, highly beneficial to railway directors themselves. There can be no objection to the passing of such a bill having the precedent of compulsory cheap travelling once a day at least on all railways in Ireland, and I suppose also in England. And if such a bill be introduced, and if introduced it must pass, let its benefits extend to Ireland, if it be not the wish of our legislators to prove those two countries ought not to be united. But brother farmers of England, whatever the policy of Government may be, let us remember the old but trite motto—"United we stand, divided we fall." At present we have little need of such coercive measures in dealing with our railway directors, who seem disposed as well for their own sakes as for ours to afford us cheap conveyance in many things, but in manures more especially. And hence their great and our supposed improvements in railway and agricultural profits here. But as "new kings may arise who will know not Joseph," our united policy perhaps would be best to "put no trust in kings," however trustworthy our beloved Queen may be. Excuse these crude and hastily written remarks, which I would not presume to make did I not feel the importance of the matter under consideration imperatively called for them. They are now made, as a mere "word to the wise," which is sufficient for them. *Edward Carrell, P. L. G., Enniscorthy Union, Cranemore House, Newtownberry, January 31.*

Turnip Culture.—In the *Galway Express* of the 12th inst., also of the 26th, there are notices of an immense crop of Turnips grown upon the farm in connection with the Queen's College, Galway, held and managed by the professor of Agriculture. As this is a matter in which the public are concerned, it may be interesting and useful to give some explanations and details concerning the land and the management. As this very unusual and heavy crop has for some time attracted considerable attention, a number of the college students and others assembled in a field on the 26th inst., in order to measure the ground and weigh a certain quantity and ascertain correctly the acreable produce; 21 feet, or 7 yards square (an Irish perch), was scrupulously laid off; there is no difference in the field, the crop being singularly equal all over; the bulbs were taken up, cleaned, topped and tailed, put into the cart, and drawn directly, under escort, to the public crane in Galway and weighed; the produce of the perch was exactly 8 cwt., being at the rate of 64 tons to the acre (40 tons per imperial acre). It is almost superfluous to state that this cart-load attracted the attention of farmers and gentlemen in the market generally; the great size, beautiful shape, and colour of the Turnips, and the entire absence of disease, produced universal admiration. The crop was raised on a portion of reclaimed bog and mountain, which, until three years ago, had not been disturbed since the creation. The bog, a quagmire, producing Rushes; the upland portion light, thin, granite gravel, producing dwarf Furze; it was drained, deepened, and afterwards cultivated, manured, and the crop handled in Professor Skilling's peculiar manner. This gentleman published a treatise on the cultivation of the Turnip in 1857, in which he took occasion to say that he never experienced a failure, but had generally superior crops; that he had at no time or season been disappointed or troubled with the fly or other pest; he had always a strong and early vegetation, a steady growth and a heavy crop, and he was confident he would be equally successful in future. These were considered by many as mere assertions, empty boasts; but facts are stubborn; in 1858 his crop was a good one, in 1859 much better, and in 1860 was as above described, when an almost general failure has been experienced over the United Kingdom; and he is still confident that, if spared, in future years he will be equally successful. *A Student, Queen's College, Galway, January 29.*

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

Monthly Council.—Wednesday, February 6th, present, the Earl of Powis, President, in the Chair, Lord Berners, Lord Feversham, Lord Macclesfield, Lord Tredegar, Lord Walsingham, Sir John Johnstone, Bart., M.P., Sir Watkin W. Wynn, Bart., M.P., Hon. W. G. Cavendish, M.P., Hon. Col. Hood, Hon. A. Vernon, Mr. Raymond Barker, Mr. Barthropp, Mr. Bramston, M.P., Mr. H. Brandreth, Mr. Caldwell, Col. Challoner, Mr. Exall, Mr. Frere, Mr. Brandreth Gibbs, Mr. Hamond, Mr. Fisher Hobbs, Mr. Wren Hoskyns, Mr. Howard, Mr. John Hudson, Mr Jonas, Mr. Lawes, Mr. Lawrence, Mr. Shuttleworth, Professor Simonds, Mr. Thompson, M.P., Mr. Torr, Mr. Jonas Webb, Mr. Burch Western, Mr. Henry Wilson, Dr. Voelcker, and Mr. Owen Wallis.

The following new members were elected:—

Hall Dare, F. M., Ilford Lodge, Essex
Abraham, Rev. T. E., Barton Place, Milden Hall
Tennant, Joseph Mason, Headingley, Leeds
Tennant, Thomas, Blenheim Terrace, Leeds
Fiddes, Thomas F., Handbridge, Burnley
Galpin, Mr. George, Kingston Farm, near Dorchester
Greene, William, Ditcham Park, Petersfield
Gregory, George, Crowhurst, Battle
Palmer, Thomas, Stoke Chingland, Callington
Jay, Mr. John, of New York
Congreve, Thomas, Leamington Hastings, Rugby
Thomas, John, Bletsoe, Bedford
Cartwright, John, Shrewsbury
Witherington, Mr. C., Bradfield, near Reading
Lambert, Robert de, Common Head, Staveley, near Kendal
Hack, James Carter, Springfield, Chelmsford
Mac Rae, Dr. Archibald, Brinach, by Beauly, Inverness-shire
Coose, William C. E., 26, Spring Gardens, S.W.
Richardson, T. M., Hibaldstow Grange, Kirtone in-Lindsey

On the proposal of Mr. Jonas Webb, seconded by Lord Feversham, the Right Hon. Lord Walsingham was unanimously elected Vice-President in the room of the Earl of Hardwicke, resigned.

The Right Hon. the Earl of Romsey was unanimously elected a Member of Council on the nomination of Mr. Thompson, M.P., seconded by Mr. Fisher Hobbs.

Finances.—The Hon. Col. Hood, who had been elected Chairman of the Finance Committee, presented the report. The Secretary's receipts during the past two months had been examined by Messrs. Quilter and Ball, and were found correct. The Balance in the hands of the Bankers on January 31 was 3600*l.* 5*s.* 2*d.*,

including a contribution of 1500*l.* which had been received from the Leeds Local Committee.

Journal.—Mr. Thompson, M.P., Chairman of this Committee, explained that the illness of a contributor prevented his laying on the table the forthcoming number of the Journal, which will probably be issued during the ensuing week.

Chemical.—Mr. Wren Hoskyns, Chairman of the Committee, presented Professor Voelcker's Annual Report (to be read at the meeting on Wednesday, the 20th inst.), containing the result of analysis made for members,—of Soils, Manures, and different Feeding Materials, and detailing the results of other Laboratory investigations during the past year. These have formed the subjects of three papers contributed to the last No. of the Journal:—

1. On the Composition of two varieties of Kohl Rabi.
2. On the Chemical properties of Soils.
3. On the Composition and Nutritive Properties of Mangel Pulp.

Also of two papers, which will appear in the forthcoming Number:—

1. On the Composition of the Yellow Lupine, and the Soil adapted to its cultivation.
2. On the Apatite Beds of Norway, Spanish Phosphorite, Coprolites, Rock Guano, and other Phosphatic Materials now used for manuring purposes in this country.

The field experiments on Wheat, Barley, and Turnips have been proceeded with, and those on Turnips will form the subject of more than one paper in the future Numbers of the Journal.

The results of the investigations made by Professor Voelcker last summer in the manufacture of cheese and butter have been recommended by the Committee to form the subject of a lecture to be delivered in May next.

The Committee have, in consequence of a suggestion from the Professor, directed him to make the composition and comparative qualities of different kinds of straw one of the subjects of laboratory investigation, should this be compatible with the investigations in cheese and butter, and the field experiments.

Admission of Members to Show Yard. — Lord Feversham, Chairman of the Committee, presented the following report, which was adopted:—

"The Committee recommend that the Governors and Members of the Society be admitted to the Show Yard, free from payment, during the time it is open to the public.

"That the Governors and Members who have paid their subscriptions for the current year are to be admitted free by tickets issued by the Secretary, which ticket shall not be transferable; and any Governor or Member of the Society who shall be found to transfer or lend his ticket shall be reported to the Council, and shall in future forfeit the privileges of Membership.

"That each Member shall sign his name, and write his address, with a declaration of his Membership, on the back of the official ticket, and shall also sign in the Gate-Book at the Special Entrance, if required to do so.

"That application for the Member's ticket be made in London, either by post or personally, not later than Friday the 12th of July, and afterwards at the Secretary's office in the Show Yard."

Veterinary.—Mr. Raymond Barker, Chairman of the Committee, reported the following recommendations, which were adopted:—

"The Committee recommend that an office, with proper facilities of water, &c. be constructed in the Show Yard for the use of the Veterinary Inspectors.

"That in future it shall be considered part of the Veterinary Inspectors' duty to give their professional assistance in case of illness amongst the stock exhibited in the Show Yard, unless objected to by the owners.

"That each of the Veterinary Professors may be allowed to introduce into the Show-yard two of his pupils as his assistants.

"That no horse shall be exhibited without a certificate from a Member of the Royal College of Veterinary Surgeons as to the state of the animal with reference to hereditary diseases, particularly those of the respiratory organs, which certificate shall accompany the Certificate of Entry; but that the above shall not supersede the usual examination by the Society's Veterinary inspector."

It was recommended that a request be made to the Leeds local committee to take steps for ensuring a supply of good hay and green forage for use during the country meeting.

The annual Report from the Governors of the Royal Veterinary College was received and ordered to be read at the next Weekly Council.

Implements.—Col. Challoner, who had been elected Chairman of the Committee, presented the report, which recommended that for—

Drills.—The General Purpose Drills, both for large and small occupations, must be adapted for all kinds of Corn and Seeds, Manures dry and moist, in quantities varying from 3 to 40 bushels per acre, and to have either fore or hind steerage.

The Small Occupation Seed and Manure Drill will not compete with the Drill of a higher price, as its price to the purchaser will be a material consideration.

The Turnip Drills must be adapted for the ridge and flat, and for manures both dry and moist, in quantities varying from 3 to 40 bushels per acre.

Horse Hoes.—The Horse Hoes in Class 3 should be adapted to set out Turnips at various widths, and leave the plants in such a state that they can ultimately be singled by hand.

Horse Hoes should be adapted to ridge and flat work, and to work in widths from 8 to 27 inches.

The Manure Distributor will be preferred which is best adapted for distributing any kind of artificial manure when in a moist or dry state; and which is capable of adjustment for the delivery of any quantity from 3 to 40 bushels per acre.

The Leeds Local Committee, in a letter dated February 2, had stated their inability to provide the land required for the trial of steam cultivators in April except at an excessive cost.

General Leeds Committee. — Lord Walsingham presented the report, which recommended that steam cultivators should be on the ground on or before Monday, July 1, and that the trials should begin on Tuesday, July 2, and that the prizes should be adjudged at the Leeds meeting; and that that decision should not be made dependent upon a further autumnal trial, unless decided by the stewards and judges to be absolutely necessary. The Committee consider that great importance is attached at Leeds to these prizes being made known at the meeting; for which object large subscriptions have been raised.

Presents of Books to the Library were laid on the table, comprising: Magnetical and Meteorological Observations made at the Observatory at Bombay in the year 1858, forwarded by the Secretary of State for India; The United States Patent Office Reports for 1857, 1858, and 1859; The Transactions of the New York State Agricultural Society for 1859; The Transactions of the Agricultural Society of Bavaria, with a pictorial Almanac for 1861, published at Munich and forwarded by His Excellency the Bavarian Minister.

The Council then adjourned over Ash Wednesday to their weekly meeting on the 20th inst.

Farmers' Clubs.

London: *Feb.* 4.—*The Past, Present and Future of British Agriculture.*—Mr. Alderman Mechi read a paper on this subject, of which we regret our inability to give more than a few extracts to-day.—Of the earliest period in our history, he said: No doubt the agriculturists of that day had their Webbs, Bakewells, and Collings; but they had no oil-cake, Turnips, or Clover to carry them through the winter. Having no Manchester manufacturers as their customers or suppliers, the ancient Britons depended principally upon nature for their clothing in the shape of furs and skins obtained by their skill as hunters in the extensive forests and coppices, or from the skins of their sheep and goats. Agriculture fared badly for several centuries. Murrain and famine alternately diminished their live stock and population, much as it does now in ignorant and pagan nations; and one-fifth of their herds perished every winter from exposure and want of food. The wool of a sheep was valued at two-fifths of the price of the whole sheep. The lands belonging to the church were, generally, the best cultivated. The monks themselves engaged in the labours of the field as a means of support. Then, as now, the superior education, and consequent intelligence, of our clergy enabled them to improve agriculture.

—— In the eleventh century William the Norman conquered England, and the foreign knights and others who accompanied him, or who afterwards settled here, made many improvements in horticulture and agriculture. They were, however, great game preservers, and their forest laws for its preservation were severe in the extreme. The population was now estimated at about two millions.

—— The drainage of the Fens of Cambridgeshire and Lincolnshire were commenced at this period, A.D. 1220. Essex was one vast forest, and stood foremost in Domesday Book for its number of pigs, which there found their food under Oak and Beech trees—the number was 92,991—Hertfordshire having only 30,705. A great many goats were kept as stock; and even now, very old men tell me of the fierce she-goats which rushed out upon them some eighty years since, when Tiptree Heath was a wild and wooded waste.

—— Landowners were not without their troubles: for in the reign of Edward II., 1307, the estate of the Elder Spenser, in Suffolk, was ravaged by his enemies, who carried off 28,000 sheep, 1000 oxen and heifers, 1200 cows with their calves for two years, 500 cart-horses, and 3,000 hogs. The proportion of pasture land to arable gradually decreased, but was still as 20 to 1. The steward of the manor (Hawsted in Suffolk) kept the manorial and farm stock accounts in Latin. This would now puzzle some of our modern stewards.

—— During the 15th century our flock masters must have improved the quality of their wool, "the cheap and principal commodity of the realm," for it was highly esteemed abroad, and the demand exceeded the supply.

——At the Hawstead Manor Farm, Suffolk (Sir T. Cullum's) the produce of sixty-one acres of Wheat for three years was 210 quarters, about nine bushels per acre, and, as the price was low, this was no doubt a good crop, and certainly the farming would be quite equal to, or above the average. The quantity of seed sown was two and a half bushels, so that the return was hardly four for one. The produce of the different grains at that period, on that farm, was:—Wheat, 8 bushels; Barley, 12 do.; Peas, 12, do., Oats, 6 do. A very small return for the quantity of seed sown, and something like what is now grown in many foreign countries that supply our market. Much arable land was laid down to pasture, on account of the high price of wool, and also because of the scarcity of labour. Land appears to have been let still at cheap rates, say 4*d.* to 8*d.* an acre, and it must have been of a fair average quality, as it was on Sir Thomas Cullum's estate, in Suffolk; in fact, in 1490, the Abbot of Bury, Suffolk, let 18 acres of pasture, on a lease of 80 years, for 4½*d.* per acre. Landlords reserved to themselves the right of immediate re-entry if the rents were not punctually paid. As to wages at that time, a bailiff received 25*s.* a year besides meat and drink, and 5*s.* a year for clothing. A chief hind, carter, or shepherd, 20*s.*, and for clothing, 4*s.*; a woman servant, 10*s.*, with 4*s.* for clothing; a common labourer, 15*s.*, 3*s.* 4*d.* for clothing; and he seems to have left to provide his own diet. In harvest, wages higher—say 4*d.*—with meat and drink, or 6*d.* provided for himself; a reaper or a carter, 3*d.* and 5*d.* without, provision; a woman, 2½*d.* with, without. These wages were fixed by statute, but labourers became scarce.

—— From 1400 to 1600 a large advance was ma[de in] our agricultural condition; farmers passed from [wooden] trenchers and wooden spoons to pewter, and [in] some cases to silver; their straw pallet was exc[hanged] for a feather bed, and their rents were doubled; this took place concurrently with, and as a con[sequence] to, our progress in manufactures and commerce.

—— 1600 to 1660. Matters moved slowly during [this] period. In agriculture, gardening, and manuf[actures] England was surpassed by several other countries, [par]ticularly by Holland and the Netherlands. Our [Dutch] and Flemish neighbours improved us in fen d[rainage] and in reclaiming land from the sea; they al[so intro]duced new seeds and improved our agricultural [implements]. Bligh, in his "Improver Improved" (1652), point[ed out] the advantage of growing Clover for cattle; an[d Sir] Richard Weston soon after published an account o[f the] Cultivation of Turnips in Flanders, by which cattle [and] sheep might be fattened in winter. The woollen [trade was] still the most important branch of non-agricul[tural] industry.

—— 1660 to 1760. The historian says:—

"The state of things to which the Revolution of 1688 [put a] termination was favourable to the development of agric[ultural] industry during the present period. Other political c[ircum]stances also favoured the landed interest; and, for [some time] after the Revolution, England, as we have seen, was [an] exporting country—(from 1697 to 1773 the total ex[cess of] exports amounted to 30,968,360 quarters of corn, upon [which] bounties were paid of not less than 6,237,176*l.* From [1746] to 1752 the average quantity exported was 643,961 qr[s.] annually. The bounty paid in 1750 amounted to [...] —fresh land was brought into cultivation, and in [...] first Enclosure Act was passed. In 1697 a duty w[as laid] in England on malt, and the same duty was exten[ded to] Scotland in 1713. In 1710 the winnowing-machi[ne was] introduced from Holland; in Scotland its use was den[ounced] from the pulpit as impious. The threshing machine w[as] employed in the northern parts of the island about [this] time: no instrument for saving labour has made su[ch] progress, and in many extensive districts its use is ma[...] even in the present day. In 1732 Jethro Tull comme[nced] his experiments in drilling and horse-hoeing on his [farm in] Berkshire, but thirty years elapsed before they ex[cited] practical attention, and before the really valuable part [of his] system began to be adopted by intelligent agricu[lturists]. Towards the close of the period, the extension of the [...] husbandry was already effecting the most important re[volution] in the history of modern agriculture. Those improve[ments] were also commenced which have gone far towards era[dicating] the defects of the ancient breeds of domestic animals [in this] country: Bakewell, the great improver of live stock, [began] his experiments about the year 1760. The writings [...] published near the close of the last period, had [...] taste for horticulture and planting. Gardens ha[d become a] luxury on which large sums were expended; the co[ttage of] the labourer began to be considered incomplete withou[t a plot] of ground for the cultivation of vegetables; and a great [increase] took place in the quantity and variety of vegetables co[nsumed] by the labouring classes. The farmer who did not [provide] plenty of Greens, Peas, and Beans for his servants, to [eat with] their salt meat, was despised for his parsimony. [By the] middle of the century the cultivation of the Pota[to had] become almost general in every part of England; [the] prejudice against its use had been nearly removed; [but in] some quarters premiums were still resorted to, for the [purpose] of bringing this root into consumption amongst the pe[ople."]

Legislation affecting Agriculture.—Our [ancestors] appear to have been constantly attempting [to keep] Agriculture in order, according to their own [notions], by Acts of Parliament. They do not appear [to have] succeeded very well in their objects, for most [of these] Acts fell into desuetude, or were evaded; some [of them] would sound oddly at the present day, such as—

No tenant should rent two farms. No tenant farmer [should] have more than 2000 sheep. 1538, That the King was [to have] half the profit from all land converted from [tillage to] pasture until a suitable house was built upon it. [Every] cottage was to have four acres of land; and no more [than one] family in each cottage. There was an Act to res[train the] excessive use of malt, and justices were empowered [at] sessions to suppress the making of malt, and the [...] maltsters. Farm houses that had decayed were to b[e rebuilt] compulsorily, and 20 to 40 acres of land attached [...] Roast beef at Christmas appears to have been a [...] modern times, thanks to Turnips, Mangel, cake, Clo[ver and] other winter food; for, formerly, as soon as the dep[asturing] season ended, the fat animals were killed and salted, to [prevent] their becoming lean again—the hay being required [for cows] and young growing animals.

Agricultural Implements and Machinery.—It [is my] lot to welcome many foreign agriculturists, a[nd when I] catechise them, I often wish that I had by my s[ide our] agricultural alarmists. They would hear the[m say]: "We have no roads, or we cannot use them [in wet] weather. We have the old wooden plough; w[e do not] hoe our corn, our men do not understand th[e machi]nery; we do not drill our corn; we keep o[ur cattle] three or four years before they are fat. We [have no] cake—our animals live on straw in the winter[; we are] very far from a market or river—we have no [railways] or canals; we grow 3, 4, or 5 bushels for [one."] brother of a neighbour of mine emigrated to [America], and writing to his brother said, "I expect to [...] thing of the country, for So and so is going [to take a] load of corn to market (Chicago); he will be [away three] weeks, as it is 50 miles away." This I kn[ow to be a] fact. It is a variety of these difficulties wh[ich protect] the foreign cheap producer; and it is the reverse [of] this that comforts and profits the British farmer. [Mr.] Mechi then referred in succession to the establ[ishment] of Farmers' Clubs and the Smithfield Club

Liebig—the influence of manufactures—the effect of the towns upon country—the influence of a new goldfinding—the influence of steam, &c.

The Test of our still Backward Condition in Agriculture, and the Necessity for its Improvement.—According to our best calculators, the average gross available agricultural produce of Britain is barely 3*l.* 15*s.*, or **less than 4 rents per acre.** Our arable and pastoral available acres may be set down at 60 millions. Our population is 30 millions. We don't produce enough to feed them and their animals, and, therefore, they not only consume the produce of 2 acres per head, but are obliged to consume, at least, another acre per head of foreign produce. Let us test this calculation by an unerring proof:—

350 convicts in our City of London prison at Holloway consume weekly 2*s.* 3*d.* worth of food, or by the year	£5 17 0
Clothing per week, 4*d.*	0 17 4
Paupers in our East London Union consume weekly 3*s.* 8½*d.* worth of food, or by the year	9 11 9
Clothing, per week, 3½*d.*	

So putting the pauper and the convict together, each would consume 7*l.* 14*s.* 4½*d.*, or more than the produce of 2 acres. **How many acres would an alderman of the** City of London require? It really is a humiliating fact that we are **unable, or rather unwilling,** to feed our own people, **for my own return per acre,** on my own poor farm, is more than three times the average of the kingdom. Therefore, I know we could feed our people if we chose to invest enough capital and intelligence, both as landlords and tenants.

Spirited Instances of Large but Successful Investments.—A friend of mine in Norfolk, who had farmed 1200 acres of poor light land for some 25 years, told me the other day that he had expended 70,000*l.* in oil-cake, and 50,000*l.* in artificial manure during his occupation. This would be 100*l.* per acre over the whole farm—pretty well as a tenant's investment; and we can hardly be surprised that his once poor rabbit warren land has now become highly fertile, profitable to the tenant, and producing a largely increased rent to the landlord. But has the landlord done nothing in this matter? Oh, yes; he has given hope and security to his tenant by a long and by a renewed lease. He has retained a good farmer on his estate, and sees in the rising generation of that farm young men brought up to **high and intelligent culture as a system.** A foreigner was the other day much astonished to see a farm-house erected by the landlord at a cost of 4000*l.* for the son of this farmer, who also farms largely. If **the tenant has found and raised capital enough to increase the live stock and manure the soil, the landlord has been** wise enough to provide the necessary accommodation and shelter for them. I will give also a spirited instance of recent judicious improvement on the part of a landlord. A merchant who had realised a fortune **in our colonies, and understood sheep, purchased an estate of 4000 acres in a county north of London,** for which he paid some 130,000*l.* or 140,000*l.* It was a noble property, but, like many such, neglected, unimproved, and consequently low rented. **The land, a rich stiff clay,** on the bank of the Thames, but undrained, and consequently unprofitable. **Most of it was in pasture.** The owner is draining the whole of it 4 feet deep, 18 feet apart, and when I visited the property a heavy stream of water was flowing from the aggregated drains—all top, or rain water. The result may be easily anticipated; the fine Lincoln sheep, which now thrive **upon it, give evidence of its altered** condition, and will pay a doubled rental. The same gentleman has thrown down the crooked fences, doomed those that remained, improved the roads and buildings, and deepened the cultivation on the arable by steam power; in other words, the rental will be 8000*l.* per annum instead of 4000*l.* The whole drainage will be completed in three years, at an expense of 30,000*l.* or something over 7*l.* per acre; probably not less than 50,000*l.* will be the total investment in improvements. The **increase** of roots and winter food by this operation **is already surprising.**

We are unable to give at length the remainder of this paper. Its successive paragraphs allude to steam power, public improvement **companies, land drainage,** the labour question, labourers' **cottages, meat making,** farm houses and farmeries, clay burning, and it concludes as follows:—

In conclusion, it is a great mistake to suppose that farmers are naturally more prejudiced than other men. It must be remembered that it has been their misfortune, and not their fault, that the difficulty of intercourse prevented those examinations and comparisons which the railroads and literature of recent times have permitted them to make. That there exists a most creditable desire to avail of such opportunities has been abundantly proved by their overwhelming attendance at the great annual and other exhibitions of stock and machinery. My object in reading this paper has been, not to find fault but to stimulate. I know the difficulties of agriculture—I know that we cannot control the seasons, but we may, by improvements, so moderate their ill effects as to avoid those famines and sufferings which, in less favoured times, afflicted this happy country. For the future let agriculture assume more of the manufacturing character, and let the question be, not what it costs, but what it will pay, to effect agricultural improvement.

Then follows an interesting chronological list of agricultural events. Any report of the discussion which followed the reading of Mr. Alderman Mechi's paper must be postponed till next week.

Reviews.

The Management of Bees. By Dr. Mackenzie, of Eileanach. William Blackwood & Sons, Edinburgh and London.

This little manual embraces, according to the author, not only his own experience as a large bee keeper during 60 years, but also the distilled essence of all the books which have been written on the subject, within 23 demi octavo pages! It is a perfect marvel of condensation, reminding us however of the concentrated essence of a round of beef presented in the form of a rather stout pill, which may be very well to satisfy a chemist, but would never satisfy a hungry man.

The pamphlet will be a useful one to those who have read most of the books of which it is a summary, **and to these we recommend it, but we question its** value amongst that class for whose guidance it pro**fesses more especially to be written.** It is intended to benefit the cottagers, but **certainly so far as we know** their class, it will fail of adding much to their yearly honey store.

In the first place it requires a degree of intelligence not commonly possessed by your true rustic. In the second place to follow out its rules necessitates such a nice and discriminating care as these people either will not or cannot in a general way, give to anything. In the third place Dr. Mackenzie would find the cottager most unwilling to be at the expense of furnishing himself with the necessary apparatus. To render the validity of these objections apparent we will quote a case. Dr. Mackenzie wages a very proper war against what he terms the "murder" system, universally practised amongst the poorer classes of bee-keepers when they secure the honey. He recommends the use of chloroform, thus:—"Get a hive No. 1 of the same diameter as No. 2, whence you mean to remove the bees. Turn up No. 1, and arrange so that a small tea-cup may hang in its centre, and the edge of the cup be say 3 inches below the edge of the hive. Over the cup secure a cap of perforated paper, or tin, or zinc sheet, or wire cloth, so that while the vapour of the chloroform may ascend from the cup to the bees through the holes in the cap, the bees, when tipsy, may not fall into the cup, but may fall over its **cap into the bottom of No. 1, where they will lie quietly till wanted.** In the evening set No. 1, thus prepared and turned up, on the ground near to No. 2. Pour *two or three ounces* of chloroform (the italics are ours) into the cup, cover it with its cap, and instantly place No. 3 over the hive No. 1, seeing that their edges fit correctly all round, or **are made secure by a cloth; or pour the chloroform over a large towel so as to cover the size of the hive** opening, and instantly place the hive over it. The loud alarmed hum of the bees will very soon cease, and **be followed by a stream of drunken folks tumbling** over the capped cup into the **bottom of No. 1. The** hive No. 2 may then be removed, or covered with a bit of gauze or cap net, to secure any bees that may not have fallen out, when they become sober and revive, No. 2 being turned up near a window in a room. Next day these sobered bees will be found **anxious to escape. Take No. 2 outside the** house, drum it well, and then removing the net, the bees will gladly fly away to their friends in the hive No. 1, leaving their honey to a humane and wise master. When No. 2 is removed from above No. 1, take away the cup, &c., and fitting a stand to No. 1, remove it to a post near the hive to which the bees are to be united. Next day the bees will be found hanging in the top of No. 1, like a new swarm, and are to be united in the evening to their new comrades."

This is a pretty and perfect picture, but we fear in 99 cases out of 100 Hodge and Rebecca, the "humane" master and mistress, would be found lying on their backs before half the operation was completed, profoundly indifferent to the newly-acquired honey store, and not likely to be "brought to" even by the tremendous stimulation of infuriated bees. The inhalation of the vapour from only *one* drachm of chloroform we have known to be fatally effective in three minutes, and what may be expected from the careless exposure of "*two or three ounces!*" We fear the plan would require more care than simple cottagers are likely to exercise, and though the plan may be a good one for those to adopt who are accustomed to handle such matters, we cannot but think the recommendation is **likely to lead to deplorable consequences in other** quarters. To us it appears that if any agent of this kind is needed, it would be far safer to employ sulphuric ether.

The chapter on autumn management contains some very valuable remarks. Dr. Mackenzie insists upon every hive having in the month of October at least 15 lbs. of honey in it, that is, if the population is to be supported through the winter, and send out a strong colony in the spring. Should it fail of this weight and there is no intention of making up the deficiency artificially, the whole of the honey should be taken away, and the bees added to another hive. The discovery that various stocks may be so grafted is due to M. Gelieu, a Swiss clergyman, and a knowledge of its value should be more generally disseminated. The population of a hive is generally divided into two stalls—one for hatching, one for foraging. The business of hatching is of the first importance, the bees told off to attend to that will die at their posts rather than quit before their duty is thoroughly performed. In consequence their food must be supplied to them by the foragers, and should they be considerably less numerous than the hatchers, the hatching temperature of the hive will not be sustained, and when the hive is turned up the spectacle of a dead city will disappoint the owner. A very curious fact in connection with the discovery is this, that no matter how the population of a hive be thus augmented, the weight of the winter store for its support need not exceed 20 lbs., that in fact "*five* stocks will consume no more honey than one would have done if left alone!" Incredible as this may appear, Dr. Mackenzie says, that he has proved it again and again, and upon it grounds the following remarks:—"But whatever be the reason, the consequence is that if ever there was an excuse once for killing our bees, assuredly there can be none now; since even if no single hive has enough of honey, we can easily feed it to the proper weight, and then add to it the bees from hives that **would otherwise have perished from hunger."** We must not however give more **extracts from so small a book.** There are many who will derive great benefit from its perusal, but in order to facilitate its extensive circulation amongst the cottagers of Great Britain, we think Dr. Mackenzie will do well to give it a little more body, and add a few explanatory cuts here and there.

This is a subject that merits our attention; in consequence of a neglect of this branch of rural economy we pay a large sum yearly to other countries for honey and wax, whereas it is calculated that were a proper system of bee keeping encouraged, this industrious little insect from the pastures, cornfields, heaths and blooming gardens of the kingdom would elaborate an annual produce in wax and honey, the value of which might be estimated at 3,225,000*l.*! This is a business in which all cottagers should be urged to engage. It requires very little outlay for plant: there is little expense but that of time, and it is the time of the wife, not the husband, which is wanted. Five hives will often afford 5*l.* per year. Many poor people would thus be made comfortable, and the country would be enriched, through the medium of the bee, from supplies of wealth which now run to waste.

Miscellaneous.

Wheat Sowing in France.—It is now ascertained that nearly one-half of the land in France intended for winter Wheat has not yet been sown. The farmers are waiting for a perfect thaw in order to resume the sowing. So far the weather has been favourable for **agricultural labour. There has been neither rain nor snow since the severe frost, and if the farmers be enabled to complete their sowing the next harvest may be much more productive than was expected some time since.** *Times, Feb.* 6.

Fat Cattle Show at Poissy.—The annual competition for the fat oxen to parade the streets of Paris on the occasion of the Mardi Gras took place the same day at Poissy. After the various animals offered for competition had been carefully examined, the jury unanimously selected the following:—1st, "Shanghai," and 2d, "Pekin"—twins, brindled oxen, aged 5½ years; weight for the first, 2800 lbs.; length, 8 feet 6 inches; height, 5 feet 8 inches. The 2d, 2840 lbs.; length, 8 feet 2 inches; height, 5 feet 7 inches. 3d, "What Shall We Call Him"—5 years old, 2950 lbs; length, 8 feet 10 inches; height, 5 feet 7 inches. These fine animals were all bred by M. Gustave Adeline, the eminent grazier of Blay, in the Calvados. They were immediately purchased by a Paris butcher.

Selling Diseased Meat.—Mr. Frederick William Firmin, a respectable meat salesman of Newgate Market, or that part of it called Tyler's Market, was summoned Feb. 5, for unlawfully exposing for sale the carcases of five sheep, which were alleged to be in a diseased state, and totally unfit for human food.

Mr. Newman, one of the inspectors of meat for the city, said that on the 18th of last month he saw upon the premises of a Mr. Dixon, in Newgate Market, the carcases of five sheep. Three were hanging up and two were lying on the ground. They were the worst he ever saw. They were what were called rotten sheep and very much wasted by disease. He seized them and brought them before Alderman Mechi, at Guildhall, who ordered them to be destroyed. The weight of the sheep was from 18 lbs. to 25 lbs. each. They were very unwholesome and quite unfit for human food. Thomas Dixon said he bought the sheep in question on the 17th of Mr. Firmin for Mr. Lialter, of Whitechapel. They were slightly frozen then, and he knew they were rotten sheep, but he thought they were good for food. Sheep which had the rot were frequently heavy and fat sheep, and, although unsound, were not considered unfit for food; they looked very different after the thaw set in and when they were seized. He gave 1*s.* 8*d.* per stone for the five. Dr Letheby, the medical officer of the city of London, said he knew what was meant by rotten sheep, having examined the matter very carefully. From the description given of these sheep he had no doubt of their being unfit for human food. The great protection people had against the evil effects of eating diseased meat was in the cooking. If such meat got into the human body in a partially cooked state it produced one of two effects—either a low fever or violent vomiting and purging, and, in fact, all the symptoms of cholera. It was an irritant poison when taken in that way. The frozen state of the meat did not make it less unwholesome than when it was thawed; it only altered the appearance by making it stiff. Mr. Holmes, Mr. Brown, Mr. Potter, Mr. Matthews, Mr. Frost, and Mr Bowyer, salesmen in the same market, were examined,

and the evidence of all of them, given with extraordinary unanimity, tended to show that the most practised eye could not have detected disease in the animal when frozen, although palpable to the most casual observer when in an unfrozen state. They also stated that it was quite a common thing for sheep and lambs, particularly the latter, weighing only 18lb., and from that to 25lb., to be sent to the London market for sale, and that such meat was both good and wholesome, one salesman remarking that it was good enough for his own table, and another that lamb of that quality had been sold frequently in the market at 2½d. per lb.

Alderman Copeland said: He had had 50 years' experience in farming and producing live stock, and was, therefore, well acquainted with the whole subject before him. He did not doubt Mr. Firmin's respectability, but at the same time he did not place any reliance on the evidence of his two men. With regard to the state of the sheep it was quite clear that Mr. Lialter, for whom they were purchased, rejected the purchase because the meat was unfit for food. The practice of sending such meat to the London market was extremely dangerous, and the time had now arrived when it should be stopped, and with that view he had decided upon fining the defendant 40s. for each of the five sheep.

The Fine Weather of 1860.—1860, the year of five fine fortnights, is gone with its sunless and watery countenance, to an unwept grave, and we farmers fondly hope its youthful successor will bear a fairer character, and pursue a brighter course. It is a singular fact that interspersed at the right time for the operations of husbandry there have been five fine periods of about a fortnight each, which in the farmer's journal shine as bright spots above the general gloom. They did not come hap-hazard, but just at those seasons when farmers were most anxiously looking and longing for them. The following were the five fine fortnights of 1860:—

27th April to 11th May	Spring corn (this year) and Mangel seed time.
2d July „ 19th July	Hay time.
30th Aug. „ 14th Sept.	Cutting corn.
30th Sept. „ 9th Oct.	Carting ditto.
20th Oct. „ 9th Nov.	Wheat sowing.

I once heard an old farmer say, "There always has been a season yet, and I've no doubt there always will be," and indeed, even 1860, pitiless and unkind as it was to man, durst not violate the promise, "Seed-time and harvest shall not fail." You will imagine how closely the wet season has concerned me, when I subscribe myself, *East Essex Heavy Land. In Bell's Messenger.*

STATE OF THE WEATHER—BERKSHIRE.

For the week ending February 7: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain.	Wind	Barometer.
		Max. in Sun.	Max. in shade.	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	1 ..	71.4	48.4	35.0	47.6	39.0	..	S.W.	30.00
Saturday	2 ..	66.0	52.2	27.0	43.4	39.0	..	N.W.	30.50
Sunday	3 ..	69.2	42.6	30.0	43.2	38.5	..	W.	30.32
Monday	4 ..	44.0	41.4	33.0	37.6	38.0	..	W.	29.85
Tuesday	5 ..	57.2	45.0	37.0	44.2	39.0	..	S.W.	29.50
Wednesday	6 ..	46.8	44.0	41.0	43.0	39.5	0.07	S.	29.23
Thursday	7 ..	52.0	46.0	30.0	39.5	39.5	0.02	S.W.	29.35

The readings are taken at 9 A.M. on the days named; and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Artificial Manures: *Eilenach.* For Italian Rye-grass any ammoniacal manure—sulphate of ammonia, 1 cwt. per acre, washed in once or twice a-year. For Turnips superphosphate or phospho-Peruvian guano. The latter is worth its extra price. For Potatoes, as an addition to a dressing of farmyard dung, 2 cwt. of guano sown over the drills before covering up.

Bones and Guano for Potatoes: *S.* Guano alone contains quite enough of the phosphate of lime for the Potato crop: there is no necessity of giving bones in addition. And owing to its containing other necessary elements in greater quantity than bones, it is better than they are as a dressing for the Potato crop. There is ample evidence of its fitness for this purpose. Our correspondent, "S., Inverness," published a report on the subject some weeks ago, recommending from his experience the guano to be applied when the sets were planted.

Coarse Hay: *Cincinnatus.* If you had sown it thicker and mown it earlier the Grass would not have been so coarse, nor the hay so hard and strawy. Any of the drainage companies have trustworthy agents, and we cannot choose for you. We would however recommend you to obtain the services of a competent adviser and of practised workmen. Surface drains never yet got rid of Rushes.—As to books, perhaps the new edition of Arthur Young's Kalendar, which Routledge is about to publish, may help you—We do not recommend sowing Clover seed over Grass fields. Apply bonedust, and that will bring out the Clover plant.

Drainage of Clay: *J C C* advises our correspondent "A Gloucestershire Landowner" to pay a visit to the estates at Strathfieldsaye, where he may find a practical and satisfactory answer to his question as to stiff clay drainage, backed by the experience of nearly 30 years, which he will rarely find elsewhere. He will not be deemed an intruder by the Duke or his respected and intelligent agent, Mr. Easton.

Green Manuring: *Husbandman.* There is nothing of more rapid growth for the purpose than Mustard. It will be ready for that purpose—*i.e.*, just before it breaks into bloom—about seven weeks after sowing in good weather.

Land Drainage: *A Hertfordshire Farmer* says:—"In answer to the 'Gloucestershire Landlord's' inquiries, I beg to state that I have drained 3 feet 6 inches deep and 7 yards apart with 2-inch pipe for the last 12 years without a single failure, but a land agent told me that one of his employers drained deep and wide distance, and was obliged to put another drain between."

Palmer's Green-top Yellow Bullock Turnip: *Haydon Bridge.* We do not know it, but have made inquiries.

SEED CORN FROM THE CHALK.

RAYNBIRD, CALDECOTT, and BAWTREE supply carefully selected and screened samples of all the most approved varieties of Wheat, Barley, Oats, &c.

Address, Basingstoke, Andover; or 89, Seed Market, Mark Lane, E.C. Samples and prices Post-free on application.

RAYNBIRD, CALDECOTT, and BAWTREE, Seed Merchants and Growers, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E.C.

Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.

Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

THE BEST WHEAT for SPRING SOWING.—Good Samples of RED NURSERY and TALAVERA WHEAT supplied by Raynbird, Caldecott, & Bawtree.

Address, Basingstoke, Andover; or 89, Seed Market, Mark Lane, E.C.

YELLOW GLOBE & LONG RED MANGEL, CROP 1860.

DICKSONS and BROWN, Seed Merchants, Manchester, can offer to the Trade a few cwt. of each, saved with the greatest care from large selected bulbs. Prices on application.

TO THE TRADE.

PURPLE-TOP SCOTCH, WHITE GLOBE, SKIRVING'S PURPLE-TOP, and GREEN-TOP SWEDE TURNIPS, all warranted net.—Prices on application to Dicksons & Brown, Seed Merchants, Manchester.

SPERGULA PILIFERA and SPERGULA SAGINOIDES.—The following is an extract from a report by Mr. Shirley Hibberd, in the *Gardeners' Chronicle* of November 10:—"In the correspondence which has taken place in regard to Spergula Pilifera, all that has been said against it as a lawn or carpet plant comes to this—that, like all other plants, you can kill it if you are bent on doing so, but even then it is not an easy matter. Planted in a wet hollow, and covered with water for weeks together, it survived and grew, and proved its merit by its beauty. On trashy London mould it has made charming verge lines in one season. Three times transplanted; first, because it looked yellow when the frost caught it before it was established; next, because it made the adjoining grass look poor by comparison; and next, for mere whim; it started away at last and did what was wanted of it most obediently. Some, who pronounced against it, confessed to having got it up in heat, and then coddled it under glass, till its hardy, fresh-air-loving constitution was broken; and others wanted it to make a turf instanter on worn out, hot, sandy, or chalky soil, and it failed through lack of skill and lack of patience. After all, patience is the chief virtue for those who plant Spergula pilifera. It must have time; it will not come so quick as Grass, that is, to make so close a turf, simply because we cannot sow it broadcast by the bushel. Some day, when the Seed is dirt cheap, we may be able to do that, and then Spergula turf will be possible with less patience than at present. But one grave objection, and only one, has been urged against it, and that is, that when in bloom it has the appearance of a lawn awfully foul with Daisies. It is true that from the middle of July till the middle of August it produces myriads of lovely little white blossoms. But the appearance is very different to that of a Daisied-lawn; the blossoms are smaller, more numerous, and look more like a fall of sleet than a sprinkling of Daisies; and this fall of sleet may in some cases interfere with the colouring of flower-beds, and for a few weeks be objectionable on that ground. In any discussion it is best to admit as much as you can of the arguments urged by the other side, and in the defence of Spergula pilifera this is all I am disposed to admit: and I apprehend it does little to weaken the claims of the plant to general adoption for out-door carpets. My circle of Spergula is not in the best place for such an experiment; it is close to the house, it is under the shade of an immense Robinia, has walls on each side within a few yards of it, and yet it has thickened now into a close and elastic felt, and is as smooth as a billiard table. I do not trust wholly to my own opinion as to its excellence. It has been seen by Mr. Veitch, Mr. Chitty, Mr. Oubridge, Mr. Cole, Mr. Cutbush, Mr. Holland, Mr. West, and a vast number of gentlemen gardeners, whose judgment in such matters is as ripe as that of most professionals, and they all say it is a triumph. I have made up my mind to the same verdict. It is a triumph, and those who hold back in doubt only defer the enjoyment of a new pleasure. I suggested in a former note on the subject that possibly Sagina procumbens and Spergula saginoides might be turned to account for the same sort of work. I have planted a small patch of Sagina inside a little semi-circular rockery in a rather damp position, and it looks as if it would be not long in constituting itself a respectable feature. But Spergula saginoides has been well proved by Mr. Summers, and if he does not offer it as a companion plant to the original, he will be like one who has put his hand to the plough and then turned back. I saw Spergula saginoides when I called last at Forest Hill: its growth is somewhat different to pilifera, and for certain hungry soils it will probably supersede it. Spergula saginoides is a British plant, and therefore no difficulty can arise in its culture as to climate. It is almost as abundant in Scotland as the renowned Heather, and a companion plant of the Heather on mountain slopes and rocky hollows. During winter Spergula saginoides preserves its bright green hue, unhurt by frost or damp, and it is a shade darker in colour than pilifera, and like it, produces myriads of starry snow white flowers only half the size of those of pilifera. But its distinctness as regards adaption and culture arises out of the fact that it is as much at home on sand or gravel as pilifera is on heavy loams or clay. In all other respects what has been said of one holds good as to the other. Lawns are quickest produced by planting tufts, and the more the tufts are divided the greater is the economy, and a close turf may be produced just as quick by planting pieces an inch across, 4 inches apart, as by using tufts as big as one's hand, at the same or greater distance, because it is only on the circumference of each that it can make lateral growth. Saginoides is as fond of the rolled as pilifera, and the firmer the ground is kept after the first dressing the faster will it grow. As a proof of its vitality, I may mention that Mr. Summers sent me a scrap of the plant in a letter in June last. It lay on my table three days; I then cut it up, dibbled it in some sandy stuff in little bits, about the size of pins, in a 5-inch pot, put a bell-glass over, and every one rooted. There is now, therefore, a choice of two distinct plants for those who are disposed to venture on a new idea in the formation of lawns, bowling greens, and verdant ground-work for geometric gardens, and the chances of final success are by the proof of S. saginoides, as two to one upon what S. pilifera had previously brought us to. *Shirley Hibberd, Stoke Newington.*

SPERGULA PILIFERA will succeed well on all descriptions of heavy land. Seed, mixed with sand, sufficient to sow one acre, 5*l.* Ditto, for one rod, 3*s.* 6*d.* Plants to transplant 4 inches apart, for one acre 15*l.* Ditto, for one rod, 10*s.*

SPERGULA SAGINOIDES, of quicker growth than pilifera, smaller flowers, and succeeds on light sandy and gravelly soils where pilifera does not do well. Per packet 6*d.*, 1*s.*, 2*s.* 6*d.*, and 5*s.* Small Clumps, per doz. 3*s.* Large ditto, per doz. 6*s.*

JAMES CARTER & CO., Seedsmen and Nurserymen, 237 & 238, High Holborn, London, W.C.

PLYMOUTH SEED COMPANY.

ASPARAGUS, large Surplus Stock.—Two Thousand fine strong roots at 25s. per 1000, or 3s. per 100. Large roots for forcing, 4s. per 100.

ILEX, or EVERGREEN OAK, large Surplus Stock.—Thousand 3-year old Seedlings, 12 inches high, at 7s. per 100.

BEDDED SCOTCH FIR, large Surplus Stock. 100,000 5s. per 1000.

Fine Roots ROYAL ALBERT RHUBARB, at 6d. per dozen.

Address, Plymouth Seed Company, Plymouth, Devon.

PLYMOUTH SEED COMPANY. CARRIAGE ARRANGEMENTS.—All Orders for Seeds above 1*l.* will be delivered free of charge to any Railway Station between Plymouth and Paddington; and to all Stations on the Cornwall, Tavistock, and North Devon Railways.

All orders above 2*l.* free to any Station on the broad gauge railways, or to any Market Town in Devon and Cornwall, to Cork, Dublin, Waterford, Limerick, Belfast, and Liverpool by Steamers; and to Guernsey and Jersey by Traders.

All Orders above 5*l.* will be delivered free of carriage to any railway station in England and Wales; and to any Steam Port in England, Wales, Scotland, or Ireland.

All heavy articles, such as Grain, Tares, Clover, Potatoes, &c., are exceptions to the above Rates.

Agricultural Implements and Manures are delivered at the Railway Stations and Ship's side at Plymouth, under Special Agreements.

Catalogues and Price Currents can be obtained for each Department, and every information given on application at The Company's Offices, Union Road, Plymouth.

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THE PLYMOUTH SEED, AGRICULTURAL IMPLEMENT, and MANURE COMPANY.—The Establishment for conducting the above Business dates its origin as far back as the year 86 in the last century, and from that period has been successfully increasing and expanding itself, until it has reached its present eminent position.

In its infancy, its operations were chiefly confined to One of a local character; but, by energy and attention on the part of the then Proprietors, it soon found its way into a few of the surrounding counties.

The construction of Railways throughout the entire kingdom of Great Britain offered immense advantages for the opening up of a connection; and the Proprietors, profiting by the events then taking place, entered into arrangements by which means they might, with regularity, economy, and despatch, forward their Goods to the most remote parts of the Country.

Besides the great facilities offered to them by Railway Transit, they were also much indebted to the new arrangements brought into operation by the Post Office authorities in the year 1841.

There can be but little doubt that Plymouth is most eligibly situated for the development of such a Business as the one under notice, connected as it is with the various Railways, and having continually in its harbour Steamers and Vessels ready to sail to almost all parts of the world. Yet, with all these advantages in its favour, it would, most undoubtedly have lacked success, had not the former Proprietors adopted the wise policy, with full determination to carry the same into effect, viz., not to introduce any articles but such as were deemed to be first class, and truly genuine in themselves.

This mode of Business gave confidence to Customers, who in return, recommended their friends; and it is owing in no slight measure to these recommendations that the Establishment has attained its present high position.

From its formation, to the year 1857, the Business had so increased that it was deemed desirable and necessary to incorporate it under the Joint Stock Company's Act of the latter year; since which time it has been carried on with even greater liberality and energy, and has continued steadily and permanently to increase.

The present Company would show a great want of courtesy did they allow this opportunity to pass without pointedly expressing their acknowledgments to their Customers for the patronage and recommendations which have been from time to time accorded to them from all parts of the country; and in seeking for a renewal of confidence in their Establishment, they can only add, that it will continually be their endeavour to carry on their Business so as to retain its present high and acknowledged position.

Address Plymouth Seed Company, Plymouth.

PLYMOUTH SEED COMPANY.—The Directors have much pleasure in stating that the NEW EDITION of their GENERAL PRICE CURRENT is Now Ready, and may be had direct from the Company, or upon application to Messrs. Simpkin, Marshall, & Co., 4, Stationers' Court, London, E.C., for six postage stamps.

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MANGEL WURZEL and TURNIP SEEDS.—The undersigned can confidently recommend their Stocks of the above SEEDS, crop 1860, grown from selected and transplanted Bulbs. Terms on application.

James Fairhead & Son, Seed Growers and Merchants, Lewisham, Kent; London Establishment: 7, Borough Market, S.E.

WILLIAM BARRON, Garden Architect, Landscape Gardener, &c., Sketty, Swansea.

N.B. Gentlemen should be aware before they are led into endless expense. First have PLANS and ESTIMATES with proper SPECIFICATIONS. Everything executed by Contract or otherwise in the best style. Terms on application.

Alpha and Sketty Nurseries, Swansea.

PINE APPLE PLACE NURSERY, EDGEWARE ROAD, W

ARTHUR HENDERSON AND CO. beg respectfully to announce that their CATALOGUE of Kitchen Garden and Flower Seeds for 1861, with a list of Garden Implements, &c., is now published, and will be forwarded postage free, on application.—For details and particulars of New Vegetables, see *Gardeners' Chronicle* of 5th and 12th January.

SUPERB BALSAMS.

F. AND A. SMITH are now sending out SEED of their well-known superior BALSAMS, which have maintained their character as the brightest colours. The doublest and largest flowers known for many years. In collections of 6 distinct colours, 2*s.* 6*d.* each; the same mixed, 2*s.*; half the quantity, 1*s.*—Dulwich, Surrey, S.

NEW SEEDS FOR THE SPRING OF 1861.

J. H. ROBINSON'S SELECT VEGETABLE AND FLOWER SEED LIST is now ready, and will be forwarded postage free to any address on application.

Warehouse: Cross Cheaping, Coventry; Seed Grounds: Abbey Farm, near Hinckley.

THE PRIMULARY, expressly for the cultivation of LATTER's Superb Semi-double Fimbriated CHINESE PRIMROSES of world-wide celebrity, with all the latest improvements, in size, shape, substance, and colours. Sealed Packets, post free to all parts of the world, on receipt of 2*s.* 6*d.* in Stamps.

THOMAS WILD, The Primulary, Handford Road, Ipswich.

RUSSELL'S PYRAMID PRIMULAS.

GEO. CLARKE will be prepared on and after the 1st of March to send out SEED of the above unrivalled train of PRIMULAS. Growers, therefore, desirous of possessing this Flower with a degree of excellence never before attained, will do well to have it. It will be sent out in sealed packets, price 2*s.* 6*d.* and 5*s.*

Orders from unknown correspondents to be accompanied with Post Office Order or Postage stamps.

Streatham Place Nursery, Brixton Hill, near London, S.

LARGE TREES FOR AVENUES, CEMETERIES, AND ORNAMENTAL PLANTATIONS

WHERE IMMEDIATE EFFECT IS REQUIRED.

R. GLENDINNING begs to offer the following kinds, from 10 to 16 feet high:—

LIMES.	LOMBARDY POPLARS.
HORSE CHESNUTS.	ACACIA.
ONTARIO POPLARS.	LABURNUMS.

CHISWICK NURSERY, London, W.—Feb. 16.

IRISH YEWS.—Amongst the very few Plants which seem to be uninjured by the late severe storm, none appear hardier than the IRISH YEW, which still retains the same healthy hue it had before the storm. Fine healthy well-rooted plants from $1\frac{1}{2}$ to 6 feet high, prices of which can be had on application to CUNNINGHAM, FRASER, & Co., Comely Bank Nursery, Edinburgh.

TO THE TRADE.—

Strong transplanted	SPRUCE FIR, 1 to $1\frac{1}{2}$ feet.	
Ditto ditto	SCOTCH FIR, 1 to $1\frac{1}{2}$ feet.	
Ditto ditto	BEECH, $1\frac{1}{2}$ to 2 feet.	
Ditto ditto	ditto 2 to $2\frac{1}{2}$ feet.	
Ditto ditto	OAK, 2 feet.	
2 year ditto	THORN QUICKSETS, fine.	
3 year ditto	ditto	extra ditto.
1 year old Seedling	ditto	

will be Sold cheap. Prices on application to SAMUEL FINNEY & Co., Gateshead Nursery, Newcastle-on-Tyne.

CHARLES DALY AND SON can now offer 200,000 3 and 4 years transplanted SPRUCE FIR at 10*s.* per 1000; 1 year SEEDLING THORNS, 1*s.* 6*d.* per 1000; ditto picked, 1 foot, 4*s.* per 1000; 2 years transplanted ditto, 8*s.* per 1000; COMMON LAUREL, 2 years transplanted, 15*s.* per 1000; PORTUGAL LAUREL, 3*s.* per 100; IRISH YEWS, 1 to $1\frac{1}{2}$ ft., 9*s.* per 100; ditto, $1\frac{1}{2}$ to 2 feet, 12*s.* per 100; IRISH IVY, 8*s.* per 100; LIMES, 5 to 7 feet, 16*s.* per 100.

A few cwt. of DRUMHEAD and DUTCH CABBAGE SEED, carefully grown by ourselves, 2*s.* per lb. Carriage paid to Belfast or Londonderry. Terms cash or respectable reference.

Coleraine, Ireland.—Feb. 16.

TO THE TRADE.

JAMES SAUNDERS has to offer the following NURSERY STOCK, in consequence of the Lease expiring on a considerable portion of the land:—

Several thousands of CHICHESTER ELM, 10 to 12 feet: likewise ENGLISH and CHICHESTER, 3 to 5 feet; 10,000 BLACK ITALIAN POPLAR, 7 to 8 feet; ditto, 3 to 5 feet; LOMBARDY and ONTARIO POPLARS varying from 4 to 10 feet; HORSE CHESNUT, 4 to 6 feet, and 6 to 8 feet; TURKEY OAK, 7 to 10 feet; NORWAY MAPLE, 8 to 10 feet; 30,000 SPRUCE FIR, $1\frac{1}{2}$ to 2 feet; PINUS AUSTRIACA, 4 feet; Ditto LARICIO, 3 feet up to 8; Ditto MARITIMA, 4 to 5 feet in pots; Ditto CEMBRA, $1\frac{1}{2}$ to 3 feet; 40,000 LAUREL, varying from $1\frac{1}{2}$ to 3 feet; Common YEW, various sizes; BOX in several varieties; fine Specimen Plants of PINUS EXCELSA, CEDAR of LEBANON, ELM, CHESNUT, SYCAMORE, and other Ornamental Trees.

Nursery Grounds, Abergavenny.—Feb. 16.

TO THE TRADE.

MARSH AND PERKINS beg to offer the undermentioned, being fine and well-rooted:—

		s.	d.
ACACIA, 4 to 5 feet	per 100	4	0
ASH, 2 to 3 feet	per 1000	14	0
„ 3 to 4 feet	„	18	0
„ 4 to 5 feet	„	20	0
BEECH, 2 to 3 feet	„	20	0
ELMS, fine Standards	per 100 50s. to	80	0
„ WYCH, 3 to 4 feet	per 1000	20	0
„ „ 4 to 5 feet	„	25	0
„ „ 5 to 6 feet	„	30	0
FIR AUSTRIACA, 15 to 18 inches	„	40	0
„ „ $1\frac{1}{2}$ to 2 feet	„	60	0
„ SCOTCH, 1 to $1\frac{1}{2}$ feet	„	10	0
„ „ $1\frac{1}{2}$ to 2 feet	„	15	0
„ „ fine, $2\frac{1}{2}$ to $3\frac{1}{2}$ feet	„	20	0
„ SPRUCE, 10 to 15 inches	„	10	0
„ „ 15 to 18 inches	„	15	0
„ „ 18 to 24 inches	„	30	0
LIMES (Standards)	per 100	50	0
„ extra fine do.	„	80	0
OAKS, 2 to 3 feet	per 1000	25	0
POPLARS, LOMBARDY, 4 to 6 feet	„	30	0
„ „ 6 to 8 feet	„	60	0
„ fine Standards, 8 to 10 feet	per 100	40	0
SYCAMORE, 2 to 3 feet	per 1000	15	0
BERBERIS AQUIFOLIA, 12 to 18 inches	„	25	0
„ DULCIS, 2 to 3 feet	„	50	0
EVERGREEN PRIVET	per 1000 14s. to	20	0
ARBOR-VITÆ, CHINESE, 18 to 24 inches	per 100	20	0
„ „ 24 to 30 inches	„	30	0
„ SIBERIAN, 18 to 24 inches	„	50	0
RED CEDAR, 18 to 24 inches	„	20	0
LILACS, 2 to 3 feet	„	20	0

Address, 42, Drapery, Northampton.

SURPLUS STOCK, CHEAP.—

Norway Spruce Fir, 9 to 12 inches; 12 to 18 inches.
Beech, $1\frac{1}{2}$ to 2 feet. Oak, 1 to 2 feet.
Silver Fir, 6 to 9 inches. Weymouth Pine, 3 to 4 feet.
Laburnum, 2 to 3 feet. Plane, 2 to 3 feet; 3 to 5 feet.
Horse Chesnuts, 2-year Seedling, fine strong.
Silver Fir, 2-year Seedling, fine strong.
Oak, 2-year Seedling, fine strong.
Oak, Evergreen, 1-year Seedling, fine strong.
Apple and Pear Stocks, 1-year Seedling.
Delphinium Formosum.

Price and other particulars on application at the SEED AND IMPLEMENT WAREHOUSE, 59, Crossgate, Cupar, Fife.

SURPLUS STOCK.

JAMES GARAWAY AND CO., Durdham Down Nurseries, Bristol, offer

		s.	d.
Cedrus Deodara, 8 to 10 feet	each	7s.	6d.
Cedrus Lebani, 8 to 10 feet	„	7	6
Taxodium sempervirens, 8 to 10 feet	„	3	6
Pinus excelsa, 6 to 8 feet	per dozen	30	0
American Arbor-vitæ, 6 to 8 feet	„	30	0
Irish Yew, 4 to 6 feet	„	30	0
Walnuts, 8 to 10 feet	„	18	0
Sycamore, 10 to 12 feet	„	12	0
Horse Chesnuts, 10 to 12 feet	„	12	0
Black Italian Poplars, 8 to 10 feet	per 100	30	0
Ditto ditto 10 to 12 feet	„	50	0
Chichester Elm, 10 to 12 feet	per dozen	18	0
Scotch Fir, fine transplanted, $1\frac{1}{2}$ to 2 feet	per 1000	20	0
Ditto ditto 2 to 3 feet	„	25	0

PRICED CATALOGUE of best SEEDS on application.

JAS. GARAWAY & Co., Durdham Down Nurseries, Bristol.

TO THE TRADE, &c.

SEEDLINGS, FOREST TREES, AND ONE-YEAR QUICKS.

Per 1000	s.	d.
2,000,000 1-year Larch	1	0
2,000,000 1-year Scotch Fir	1	0
1,000,000 2-year Norway Spruce	1	6
200,000 3-year do. do.	2	0
200,000 2-year and 1-year bedded do.	2	6
200,000 1-year Alder	1	0
50,000 2-year Birch, small	5	0
100,000 2-year Silver Fir	5	0
100,000 1-year Balm of Gilead Fir	5	0
100,000 1-year Sycamore	2	0
100,000 2-year Beech	2	6
100,000 2-year English Oaks	7	0
20,000 1-year Evergreen do	30	0
20,000 3-year Turkey do.	15	0
200,000 1-year Ash	1	6
100,000 2-year do.	2	6
100,000 1-year Pinus maritima	3	0
100,000 1-year Pinus austriaca	4	0
50,000 1-year Pinus Laricio	10	0
100,000 1-year Pinus montana	2	0
1,000,000 1-year Quick	2	0
10,000 1-year Common Laurel	20	0

The Subscribed begs to call the attention of his friends and the public in general to the above Stock of Seedlings, and is happy to intimate to them that they are generally good and perfectly healthy, and trusts they may give satisfaction. Any order, large or small, will be promptly attended to, and delivered free of expense at Dublin, and bundles put in to compensate for carriage. None need apply who cannot give a satisfactory reference. Application to be made to

MICHAEL BURKE, DRUMLARGAN NURSERY, Summer Hill, Co. Meath, Ireland.

TO NOBLEMEN AND GENTLEMEN ENGAGED IN PLANTING, NURSERYMEN, AND OTHERS.

THE TRUSTEES under the Deed of Assignment executed by Mr. GEORGE MOORE, for the benefit of his Creditors, being desirous of realising, without delay, his valuable STOCK of SHRUBS, TREES, &c., are prepared to OFFER the following for cash on delivery:—

4000 RHODODENDRONS—	£	s.	d.
100 Plants, in 50 distinct varieties	10	0	0
50 „ 25 ditto	6	6	0
25 „ 25 ditto	4	0	0
12 „ 12 ditto	1	11	6

The above form a superb collection, and are most hardy, having stood without injury the late intense frost.

A few extra fine specimens, from 1*l.* to 5*l.* each.

		£	s.	d.
1000 AZALEA PONTICA, 2 feet high	per 100	3	15	0
1000 Ditto 1 foot high	„	1	10	0
1000 Ditto mixed varieties, named	„	5	0	0
300 ARBOR-VITÆ, 4 feet to 5 feet	per doz.	1	1	0
600 CEDARS (Red Virginia), 3 feet high	per 100	5	0	0
300 ALDERS, 10 feet to 12 feet high, straight and handsome	per 100	3	15	0
1200 ASH (Mountain), 10 feet and upwards, very straight and handsome	per 100	3	0	0
1000 BIRCH (Silver), 8 to 9 feet, very handsome and well grown	per 100	5	0	0
500 Ditto, 6 to 7 feet	„	2	0	0
1000 BEECH, 7 to 8 feet, handsome	„	5	0	0
60 Ditto, 10 to 12 feet, strong, bushy, and well rooted	each	0	3	6
2600 BERBERIS AQUIFOLIA, extra transplanted,	per 100	0	15	0
500 BOX (small-leaved Tree), very handsome round bushes, about 2 feet high, well transplanted,	per 100	3	15	0
1000 CURRANTS (Raby Castle and Red Grape) fine Plants	per 100	1	0	0
3000 ELMS (Wych), 8 to 10 feet	per dozen	0	12	0
Ditto, extra fine	„	1	5	0
500 ERICAS, various	„	0	6	0
5000 FIRS (Scotch), 2 to $3\frac{1}{2}$ feet, well transplanted,	per 1000	2	0	0
10,000 Ditto (Spruce), 2 feet, very bushy, ditto,	per 100	0	12	0
10,000 Dittto, for Forest Planting	per 1000	3	0	0
40,000 FIRS (Larch), 3 feet to 4 feet, very stout	„	1	15	0
Ditto 3 feet to $3\frac{1}{2}$ feet	„	1	5	0
Ditto 2 feet to $2\frac{1}{2}$ feet	„	0	18	0
1000 HORSE CHESNUTS, 7 feet to 8 feet, straight, and clear in the stem	per 100	5	0	0
5000 HOLLY, $1\frac{1}{2}$ feet to 2 feet, bushy	„	1	15	0
Ditto, 1 foot to $1\frac{1}{2}$ foot	„	1	5	0

The above are very superior, having received the most careful attention.

		£	s.	d.
2000 IVY (Broad-leaved Irish), very strong,	per 100	1	0	0
200 JASMINUM NUDIFLORUM, strong,	per dozen	0	8	0
500 LILACS (Purple), 4 feet to 5 feet, bushy	„	0	6	0
1000 LIMES, 8 feet to 9 feet, strong and handsome,	per 100	6	0	0
1000 LIMES, 7 to 8 feet	per 100	4	0	0
100 LIMES, Handsworth new Red Twigged, a very superior variety	per dozen	0	12	0
500 LABURNUMS—English and Scotch,	per 100	2	10	0
1000 POPLAR (Ontario), 8 to 10 feet	„	2	10	0
300 SPIRÆAS, in six choice varieties	per dozen	0	6	0
500 SYCAMORES, 8 to 10 feet, handsome	per 100	3	15	0
200 WILLOWS, 6 to 8 feet, clear stems	per 100	1	10	0

All Goods will be delivered free to any of the Railway Stations in Birmingham, and Packages charged cost prices.

Perry Barr Nursery, near Birmingham.

STANDARD AND DWARF-TRAINED PEACHES.

R. GLENDINNING begs to offer some very splendid trees. They have all been trained on walls. The wood is well ripened, and many of them in a bearing state. They are all of the very best sorts, and true to their names. PRICES and LIST on application.

Chiswick Nursery, London, W.

DWARF-TRAINED PEACHES AND NECTARINES.

W. J. EPPS has a large quantity of fine clean grown stuff of the above. Prices to the Trade and others sent on application. The True KENTISH COB NUT TREES, very handsome plants, 6*s.* per dozen and upwards.

A GENERAL LIST OF FRUITS, ROSES, SHRUBS, PLANTS, &c., sent on application.—High Street, Maidstone.

EXTRA FINE DWARF-TRAINED PEACHES, NECTARINES, CHERRIES, AND PEARS.

WOODLANDS NURSERY, MARESFIELD, NEAR UCKFIELD, SUSSEX.

WM. WOOD AND SON refer with pleasure to their splendid Stock of the above; but more particularly to their DWARF-TRAINED MORELLO and MAYDUKE CHERRIES, which are as handsome trees as can possibly be desired.

SPLENDID DWARF-TRAINED APPLES, PEACHES, NECTARINES, PLUMS, AND MORELLO CHERRIES.

WM. KNIGHT respectfully solicits attention to his well-grown stock of the above, but more particularly to his Dwarf Trained Peaches, Plums, and Morello Cherries, many of the latter having from 12 to 18 branches to each tree; would bear a good crop of fruit the coming season, having been recently transplanted. Price each or per dozen on application. CATALOGUES of General Nursery Stock free on application.—Floral Nursery, Hailsham, Hurst Green, Sussex.

BUCKLAND SWEETWATER GRAPE.—Special Prizes of 5*l.* and 3*l.* will be given by the Subscribers for the best Three Bunches of this fine early Grape, in September, 1862; likewise Special Prizes of 2*l.* and 1*l.* will also be given for the best Bunch of the same in July, 1862. Strong Plants, 10*s.* 6*d.* and 21*s.* each.—J. IVERY & SON, Dorking, Feb. 16.

NEW GAGE PLUMS.—

	Each—s.	d.
1. BRAHY'S GREEN GAGE, the largest known	5	0
2. BRYANSTONE GAGE, late and excellent	3	6
3. JODOIGNE GREEN GAGE, very large	3	6
4. JULY GREEN GAGE	5	0
5. OULIN'S GOLDEN GAGE, or OULEN'S GAGE	5	0
6. TRANSPARENT GAGE, very large	3	6

The above are all of first-rate quality—Nos. 4, 5, and 6 are fully described in Dr. Hogg's "Fruit Manual." Fine healthy trees, Dwarf and Pyramids, are now ready for delivery—paid to London.—THOMAS RIVERS, Nursery, Sawbridgeworth.

POLYANTHUS SEED.

JAMES WOODS is now sending out his Polyanthus Seed as in former years, saved from a forty years' selection of plants; all fine laced Flowers, not to be equalled in the kingdom. Price 1*s.* per packet, or sent free on receipt of 13 postage stamps by JAMES WOODS, Florist, Harwich, Essex. The usual discount to the Trade.

BENJAMIN MALLER, NURSERYMAN, SEEDSMAN, and FLORIST, begs most respectfully to inform his friends and purchasers of Seeds that his PRICED CATALOGUE OF AGRICULTURAL, VEGETABLE, AND FLOWER SEEDS is now ready, and can be had free on application. Good Fibrous Peat, 16*s.* per ton; best Reigate Silver Sand, 11*s.* per ton, delivered within four miles for 4*s.* per ton extra.

Granville Terrace, Lewisham, S.E.

GLADIOLI.

JOHN STANDISH is the largest grower and has the best collection. He has raised an immense quantity of Hybrid Seedlings, which flowered during the past Autumn for the first time, and exceeded anything that has been seen in Gladioli before; it being a remarkable fact that amongst these Seedling Gladioli there is scarcely ever a bad one. Strong flowering Bulbs, 75*s.* per 100; small ditto, 50*s.* per 100.

Besides the above, J. S. has all the best named kinds, CATALOGUES of which, and of his other rare and choice plants, may be had free, on application to the Royal Nursery, Bagshot.

BEAUTIFUL FLOWERS.—Twelve packets, containing 10,000 Seeds, weigh 2 ozs., 1*s.*, sent post free, 1*s.* 4*d.*; tender Annuals and Perennials, weigh 1 oz., or post free, 1*s.* 2*d.*; Dwarf German (Ten-weeks Stocks, as imported, 36 varieties, 9*s.*, or each variety 3*d.* per packet; Brompton Stocks and Wallflower, warranted double, each variety 4*d.* per packet; Calceolaria, Heliotropium, Salvia, Ageratum, Pentstemons, Pinks, Carnations, Picotees, Cuphea, choice, Dahlia, Petunias, Verbenas, Fuchsias, and Geraniums, at 6*d.* per packet. CATALOGUE on application.

10 quarts of PEAS, best sorts, 6*s.*
5 quarts of BEANS, LONGPOD, 2*s.*

WM. CULLINGFORD, 1, Edmund Terrace, Ball's Pond, Islington, N.

SEEDS CARRIAGE FREE.

AGRICULTURAL SEEDS of genuine stock and first-rate quality.

KITCHEN GARDEN SEEDS of every description.
GERMAN FLOWER SEEDS, imported direct.

JOHN BELL'S CATALOGUE of the above is now ready, and will be sent free to any address.

SEED WAREHOUSE, 10 and 11, Exchange Street, Norwich.

MANGEL WURZEL AND TURNIP SEEDS.—The undersigned can confidently recommend their Stocks of the above SEEDS, crop 1860, grown from selected and transplanted Bulbs. Terms on application.

JAMES FAIRHEAD & SON, Seed Growers and Merchants, Lewisham, Kent; London Establishment: 7, Borough Market, S.E.

SEED CORN FROM THE CHALK.

RAYNBIRD, CALDECOTT, AND BAWTREE supply carefully selected and screened samples of all the most approved varieties of Wheat, Barley, Oats, &c.

Address, Basingstoke, Andover; or 89, Seed Market, Mark Lane, E.C. Samples and prices Post-free on application.

RAYNBIRD, CALDECOTT, AND BAWTREE, SEED MERCHANTS and GROWERS, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E.C.

Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.

Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

REIGATE SILVER SAND, best quality for Florists, 16*s.* per ton. Less quantities 1*s.* 6*d.* per bushel. Delivered five miles or to any London Wharf or Railway. Sacks for Sand 1*s.* 6*d.* each, or on hire 6*d.* each (5 hold a ton). Kentish, Hampshire, and other Peats, Yellow Loam, Leaf Mould, and Tan, in large or small quantities. Sphagnum Moss for Orchids.—JOHN KENNARD, Purveyor to Her Majesty, Swan Place, Old Kent Road, London, S.E.

PETER LAWSON & SON,

THE QUEEN'S SEEDSMEN AND NURSERYMEN,

EDINBURGH, AND 27, GREAT GEORGE STREET, WESTMINSTER, S.W.,

BEG to intimate that their NEW SEEDS have been grown with their usual care from selected stocks, and they are prepared to supply with promptness and attention all orders entrusted to them.

PRICED LISTS OF GARDEN AND AGRICULTURAL SEEDS, AND SEEDS OF THE NATURAL GRASSES FOR LAYING DOWN PERMANENT PASTURES, &c.; also LISTS of FOREST TREES, SHRUBS, CONIFERÆ, &c., may be had free on application.

GARDEN IMPLEMENTS of all sorts and of the best quality.

Orders most carefully executed for Seeds suitable for exportation to Foreign Parts.

27, GREAT GEORGE STREET, WESTMINSTER, S.W.

NOW READY, AND MAY BE HAD FREE AND POST PAID ON APPLICATION,

BUTLER AND McCULLOCH'S

DESCRIPTIVE PRICED SEED CATALOGUE.

It contains upwards of 2500 species and varieties of the most important genera in cultivation, each species or variety being fully described, and Copious Notes added on the value or adaptation of each genus. B. & McC.'s aim has been to make it useful alike to the Amateur and professional Gardener.

For a few important particulars of the above Catalogue, see Advertisement in *Gardeners' Chronicle* of Feb. 2.

COLLECTIONS OF VEGETABLE SEEDS.

No. 1.—Complete Collection of 20 qts. of Peas, and all other Seeds in proportion, for One Year's supply . . . £4 0 0

No. 2.—Ditto ditto 12 qts. of Peas, ditto ditto 2 10 0

No. 3.—Complete Collection of 7 qts. of Peas, ditto ditto £1 5 0

No. 4.—Ditto ditto 4 qts. of Peas, ditto ditto 0 15 6

No. 5.—Ditto ditto 4 Pints of Peas, ditto ditto 0 10 6

For particulars of the above Collections, see our Advertisement in *Gardeners' Chronicle* of January 5 or 12, 1861, pp. 2 and 20.

For a few Novelties of Importance, see our Advertisement, January 26, 1861, p. 66.

Per Packet.—s. d.

ABUTILON (Malvaceæ). Plants remarkable for fine foliage, and handsome richly veined and striped flowers; valuable conservatory plants, which also succeed against a south wall in Summer .. ..
ABUTILON BEDFORDIANUM, pale yellow, with maroon pencilling 0 9
ABUTILON BERANGER, yellow and brown, very large 0 9
" COMTESSE MEDICIS SPADA, primrose, veined with carmine, very large, new and beautiful 1 0
ABUTILON DUC DE MALAKOFF, beautiful yellow, veined with maroon (new and rare) 1 0
ABUTILON ESCULENTUM, straw and brown, pencilled 0 6
" FLORIBUNDUM, fine yellow bellshaped flower 0 6
" HYBRIDUM, yellow veined with brown .. 0 9
" INSIGNE, lilac, claret veined 1 6

Per Packet.—s. d.

ABUTILON MARMORATUM, a charming plant, with large pure white flowers, veined and marbled with bright rose 1 0
ABUTILON STRIATUM VENOSUM, orange-striped with crimson 0 6
ABUTILON VITIFOLIUM SUPERBUM, light violet, large; stands the winter out of doors with very little protection 1 0
CUPHEA (Lythraceæ). A class of plants remarkable alike for their beauty, profusion of bloom, and ornamental appearance, whether grown in the conservatory or out of doors. If sown sufficiently early, will bloom the first year .. ..
CUPHEA DONKELAARI, superb plant, with large flowers, of a green and yellow colour 0 6

Per Packet.—s. d.

CUPHEA EMINENS, bright red and yellow, a splendid free-flowering variety, with long magnificent tubular flowers .. .. [illegible]
CUPHEA HYBRIDA, red and yellow, very handsome .. 1 0
" MINIATA, scarlet and lavender 0 6
" PLATYCENTRA, crimson and white, beautiful 0 4
" STRIGILLOSA, orange and red 0 4

The following are splendid for beds, masses, &c.; they require the ordinary treatment of half-hardy annuals.

CUPHEA OCYMOIDES (new), violet-purple, bushy and compact, beautiful bedding plant 0 6
CUPHEA PURPUREA, purple, exceedingly beautiful .. 0 3
" SILENOIDES, dark purple, beautiful 0 3
" VISCOSISSIMA, red and white, handsome .. 0 4

☞ WANTED TO PURCHASE SHALLOTS; ALSO HANDSWORTH POTATOES, *TRUE*.

BUTLER & McCULLOCH, Covent Garden Market, W.C.

PERMANENT GRASS SEEDS FOR ALL SOILS.

SEEDSMEN BY APPOINTMENT Sutton AND Sons

SUTTON & SONS,

SEED GROWERS, READING, BERKS,

HAVE a most extensive and complete stock of all the best kinds of GRASS SEEDS FOR PERMANENT PASTURE, which they are now sending out daily to all parts of the Kingdom, mixed expressly to suit the soil for which they are intended and the purposes for which the Pasture is required. It is believed that MESSRS. SUTTON'S Stock of GRASS SEEDS is the largest in the country, and certainly the quality cannot be surpassed. The sorts can be supplied separate or mixed to suit the soil, or the Light Large Seeds may be had in one mixture, and the Clovers and other Small Heavy Seeds in another; 2 bushels of the former and 12 lbs. of the latter per acre are supplied.

No. 1.—Mixtures for Permanent Meadow and Pasture, adapted to suit the soil ... ... per acre 26s. to 32s.
No. 2.—Mixtures for Permanent Field Lawns, Parks, and Cemeteries ... ... per bushel 16s.
No. 3.—Mixtures for Irrigation or Catch Meadows ... ... per acre 25s.
No. 4.—Mixtures for Reclaimed, Marsh, or Heath Land ... ... " 18s. to 20s.
No. 5.—Mixtures for Loose Blowing Sands, Heavy Clays, Chalky Soils, and Sharp Gravel.
No. 6.—Mixtures of Finest Short Grasses for Garden Lawn ... ... 1s. per lb., or, per bushel 18s.
No. 7.—Renovating Mixture of Clovers and Fine Grasses for Old Parks and Meadows, 9d. per lb., or, by the cwt., 80s.

N.B.—MESSRS. SUTTON *furnish complete instructions for sowing and management with the Seed.*

OTHER AGRICULTURAL SEEDS, ALL WARRANTED NEW AND UNADULTERATED:—

CLOVERS.	RYE-GRASS.	MANGEL WURZEL.	SWEDES.	CARROTS.	SUNDRIES.
English Red	Sutton's Improved Italian	Long Red	Sutton's Champion	White Belgian	Holcus Saccharatus
White or Dutch	Dickenson's do. do.	Elvetham do.	Ashcroft	Yellow Belgian	Lucerne
Trefoil	Fine Imported do.	Orange or Yellow Globe	Skirving's	Large Altringham	Drumhead Cabbage
Alsike Hybrid	Common	Red Globe	Hardy Purple	James' Intermediate	Large Cattle Parsnip
Cow Grass (true kind)	Pacey's Perennial	Long Yellow	Marshall's Purple-top	Long Orange	Kohl Rabi, of sorts
			Improved White		

Goods delivered Carriage Free. Priced Lists Post Free. Cash or reference requested with first orders.

Five per Cent. allowed for Payment on receipt of Goods.

SUTTON & SONS, ROYAL BERKSHIRE SEED ESTABLISHMENT, READING.

J. C. WHEELER & SON,

SEED GROWERS, GLOUCESTER,

OFFER THE FOLLOWING

SELECT VEGETABLE SEEDS (True),

Carriage Free by Rail (if ordered to the amount of 20s. and upwards)

Many of the sorts are scarce, and early Orders will be necessary.

		s.	d.
BEANS—Mazagan	per qt.	0s.	9d.
Mackie's Monarch	,,	0	10
Newington Wonder	,,	2	6
BEET—Wheeler's ex. fine,	per pkt.	1	0
BORECOLE—Cottager's Kale	,,	1	0
Asparagus Kale	per oz.	1	0
Couve Tronchuda	,,	1	6
BROCCOLI—Snow's Winter White,	per packet	1	0
Knight's Protecting	per oz.	1	[illegible]
[illegible]	,,	1	6
BRUSSELS SPROUTS	,,	1	0
CABBAGE—Wheeler's Imperial	,,	0	10
CAULIFLOWER—Walcheren,	p. pt.	1	0
Stadtholder	,,	1	6

		s.	d.
CARROT—Scarlet Horn	per oz.	0s.	6d.
James's Scarlet	,,	0	4
CELERY—Incomparable,	per pkt.	1	0
Laing's Mammoth	,,	0	6
ENDIVE—Imperial Batavian,	per oz.	1	0
LEEK—Ayton Castle Giant	,,	1	0
LETTUCE—Tom Thumb,	per pkt.	1	6
Wheeler's Imperial	,,	1	0
[illegible]	,,	1	[illegible]
ONION—White Spanish,	per [illegible]	0	10
James's Keeping	,,	1	0
Tripoli	,,	1	0
PEAS—Wheeler's First Early,	per quart	1	4

		s.	d.
PEAS—Sangster's No. 1	per qt.	1s.	3d.
Dickson's Favourite	,,	1	4
Harrison's Perfection	,,	1	6
Mammoth	,,	2	6
POTATOES—Handsworth,	p. peck	5	0
Alstone Kidney	,,	4	0
Gloucestershire Kidney	,,	5	0
Regents	,,	2	6
Fluke	,,	2	6
RADISH—Olive-shaped,	per [illegible]	[illegible]	[illegible]
,,	per [illegible]	0	4
SAVOY—Dwarf Ulm	,,	1	0
TURNIP—American Red Stone,	per oz.	0	[illegible]
VEGETABLE CREAM,	per pkt.	1	0

For description of the above and other extremely CHOICE VEGETABLE SEEDS, see

"WHEELER'S LITTLE BOOK,"

which will be sent post free for three stamps.

J. C. WHEELER & SON, SEED GROWERS, GLOUCESTER.

WHEELER'S

COLLECTIONS OF GARDEN SEEDS.

IN order to save trouble in ordering Seeds, we have made up Four Collections. This will be found by far the cheapest and easiest method of purchasing Garden Seeds. The Collections as we have arranged them give great satisfaction, as they include the best sorts in cultivation, and are extremely cheap.

The "Collection No. 1" comprises all the sorts requisite and necessary for the year's consumption of a large Garden, all arranged in proper quantities and correctly named. Price (carriage free) **£4.**

The "Collection No. 2" contains equally choice sorts, suitable for a middle-sized Garden. Price (carriage free) **£2 10s.**

The Collections "No. 3" and "No. 4" are just the right quantities for smaller Gardens. Prices **£1 5s.** and **12s. 6d.** **Both these Collections as well as the larger ones contain Tom Thumb Lettuce, Wheeler's Imperial Lettuce, Wheeler's Imperial Cabbage, Wheeler's First Early Peas, and other choice sorts.**

COLLECTION No. 3, £1 5s., CARRIAGE FREE.

1 qt. Wheeler's First Early Peas	½ oz. Early Malta ditto	pkt. Cole's red ditto	2 oz. Parsnip
2 qts. Champion of England	½ oz. Brussels Sprouts	4 oz. Cress	2 oz. Early salmon Radish
1 qt. Bedman's Imperial	½ oz. Nonpareil Cabbage	pkt. Cucumber	2 oz. Mixed Turnip
2 qts. Long-pod Beans	1 oz. Wheeler's Imperial [Cabbage	½ oz. Leek	½ oz. Drumhead Savoy
1 pt. Windsor	½ oz. Borecole	2 pkts. Lettuce, Tom Thumb and Wheeler's [Imperial	2 oz. Prickly Spinach
1 pt. Scarlet Runner	2 oz. Long Orange Carrot		2 oz. Round ditto
½ pt. Newington Wonder	1 oz. Early Horn Carrot	pkt. Melon	2 oz. Early Snowball Turnip
½ oz. Red Beet	pkt. Early Cauliflower	4 oz. Mustard	pkt. Vegetable Marrow
½ oz. Southampton Broccoli	do. Cole's white Celery	2 oz. White Spanish Onion	do. Tomato

COLLECTION No. 4, 12s. 6d.

1 qt. Long Pod Beans	1 qt. Prizetaker	2 oz. Carrot	2 oz. White Spanish Onion
1 pt. Windsors	2 pkts. Broccoli	2 oz. Cress	2 oz. Parsnip
1 qt. Wheeler's First Early Peas	1 pkt. Cucumber	2 oz. Mustard	2 oz. Radish
2 qts. Champion of England	½ oz. Wheeler's Imperial [Cabbage	2 pkts. Lettuce, Tom Thumb and Wheeler's Imperial	1 pkt. Savoy
	1 pkt. Scotch Kail		1 oz. Turnip, red Stone

FOR DETAILS OF COLLECTIONS No. 1 & 2 SEE WHEELER'S LITTLE BOOK.

From the Rev. W. NICKISSON, *Ashley Rectory, Market Drayton.*

"It occurs to me just to mention one or two things while they are fresh upon my mind; with regard to your Seeds (both Vegetable and Flower Seeds) they are as excellent as usual, which to those who know your Seeds is, perhaps, the best testimony I can give. Your Glo'ster Kidney, on a second trial, confirms me in my opinion of its excellency which I expressed last year. As an early Kidney it surpasses in crop, soundness, and flavour, anything I know. I was anxious to see how it would stand this late wet spring, as I thought it might be affected by the long continued wet, but this has not been at all the case. The Tom Thumb Lettuce has also given me great satisfaction, especially for continuing so long without running to seed. I have a few at the time I write which have been fit for table upwards of three weeks, and still show no signs of 'bolting.'"

From SAMUEL HITCH, Esq., M D., *Sandywell Park.*

"I have great pleasure in telling you that all the Seeds I purchased of you in the spring of this year, in each case fully answered my expectation."

From Mr. MAXTON, *Gardener to* W. MONEY KYRLE, Esq., *of Homme House.*

"The Seeds supplied by your Firm continue to give the utmost satisfaction; where all is good it is difficult to particularise, however I have found your Beet a decided acquisition, from its medium size and fine colour. Wheeler's Imperial Cabbage I have found to be early, tender, and good. The Stadtholder Cauliflower is first rate, having very large and firm heads; all the varieties of Broccoli we had turned out well."

From Mr. BEVAN SMITH, *Manager of the Glamorganshire Reformatory.*

"Your Seeds of last year were of first-rate quality. We had a most prolific crop of Peas and Beans. The Cabbage and Roots in every way answered my expectations; indeed I may say your Seeds of every kind far surpass any I can obtain elsewhere."

From G. SHAKESPEARE, Esq., *of Stratford Villa, Llanstephan.*

"I have found your Seeds, both Garden and Agricultural, of a very superior quality, *always clean, true, and good*; this is a consideration of vital importance, and which will be readily appreciated by all who cultivate land, as when mixed and old seed is purchased a great vexation and disappointment follows, and a season lost. I shall certainly continue to deal with your House, whose business seems conducted on such sound principles as to ensure permanent custom."

From Mr. DOMMETT, *Crofty-Bwla Gardens, Monmouth.*

"Your First Early Peas I approve of very much, it is the earliest Pea I ever had. Sangster's No. 1 is a good Pea, but not so early by a week. Your Walcheren Broccoli is very good indeed."

From Mr. EDWARDES, *Gardener, Middleton Hall, Carmarthen.*

"I sowed Wheeler's First Early Peas a week or two after Sangster's No. 1, and yet they were in earlier, although Sangster's No. 1 were sown on a warm border, and the 'First Early' in the open quarter."

Wheeler's First Early Peas are included in our celebrated Collections of Garden Seeds.

J. C. WHEELER & SON, SEED GROWERS, GLOUCESTER.

PINE APPLES, GRAPES, ETC.

PINE PLANTS, FRUITING AND SUCCESSION.
GRAPE VINES, FROM EYES, FOR FRUITING IN POTS, OR PLANTING.

JOHN WEEKS AND CO. can supply any quantity of very fine healthy Pine Plants, either Fruiting or Succession.

GRAPE VINES remarkably strong and fine, 50 varieties, all the best sorts.

JOHN WEEKS AND CO.'S HORTICULTURAL SHOW ESTABLISHMENT is entirely devoted to the growth and Forcing of GRAPES, PINES, PEACHES, FIGS, CUCUMBERS, and other choice Fruits. The whole open for inspection, thereby showing the most improved plans of HORTICULTURAL BUILDINGS with the VENTILATING and HOT-WATER APPARATUS in full operation.

JOHN WEEKS AND CO., Horticultural Builders and Hot-Water Apparatus Manufacturers, King's Road, Chelsea, London. Plans, Estimates, and Illustrated Catalogues free on application.

GLADIOLUS BRENCHLEYENSIS.—In the *Gardeners' Chronicle* of September 8, 1860, p. 816, the following Report will be found:—

"GLADIOLUS BRENCHLEYENSIS.—We have received from Messrs. YOUELL & Co., of Great Yarmouth, some specimens of this plant, the gorgeous appearance of which cannot be spoken of in terms of exaggeration. The tall robust habit and intensely bright scarlet flowers, place it at the head of all the hardy flowers of the autumn."

Flowering roots, 30s. per 100; or 4s. per dozen. Trade price on application.—Royal Nursery, Great Yarmouth.

PLYMOUTH SEED COMPANY, PLYMOUTH.

FOREIGN SEED ORDERS.—Plymouth is admirably situated for the execution and transmission of Foreign Orders. Seeds have during the past seasons been forwarded to Australia, New Zealand, United States, Canada, India, Malta, France, Austria, Portugal, Ionian Islands, Madeira, Gambia, China, Jamaica, Cape of Good Hope, Prince Edward's Island, and have arrived in the finest condition.

IRELAND.

PLYMOUTH is admirably situated for supplying Noblemen, Clergymen, and Gentlemen with all kinds of GARDEN and FARM SEEDS. All Orders of 2l. and above delivered free to any of the following ports, viz., Cork, Dublin, Waterford, Limerick, and Belfast.

Address, Plymouth Seed Company, Plymouth, Devon.

MAJOR'S HALF-SHRUBBY CALCEOLARIA SEED.

MR. H. MAJOR offers as usual his choice CALCEOLARIA SEED, in packets at 2s. 6d. each, or three for 5s., post free. For size, shape, and beautiful markings H. M.'s Calceolarias are unsurpassed.

H. M. has raised a quantity of seedlings, which will be ready the first week in March, at 6s. per parcel of 20, or three for 15s., post free. Postage stamps may be sent in payment.

Knosthorpe, near Leeds, Yorkshire.

NEW CHRYSANTHEMUMS, DAHLIAS, HARDY VARIEGATED PLANTS, &c.

JOHN SALTER, F.R.H.S., will send out this spring several fine New CHRYSANTHEMUMS, both Large Flowers and Pompones. Full particulars will be found in his DESCRIPTIVE CATALOGUE for 1861, which will be sent post free on receipt of two stamps.—Versailles Nursery, William Street, near Hammersmith Turnpike, W.

CHRYSANTHEMUMS FOR THE MILLION.

J. H. BIRD, F.R.H.S., NURSERYMAN, Stoke Newington, N., can now supply from his great Collection, 20 Pair of Best Large Varieties for 10s.; 25 Pair of Best POMPONES, 10s.; 20 Pair of Best Large Varieties, Cuttings, 5s.; and 25 Pair of Best POMPONE Cuttings, 5s. N.B. To save trouble all Orders to be Prepaid.—CATALOGUES for One Stamp.

HORNBEAM WANTED.

THE ROYAL HORTICULTURAL SOCIETY are in want of a large number of strong and well rooted HORNBEAM, suitable for making good hedges, from 6 to 8 feet in height.—Samples, with prices, to be sent carriage paid to Mr. GEO. EYLES, Superintendent, The Royal Horticultural Society's Gardens, Kensington Gore, W.

The Gardeners' Chronicle.

SATURDAY, FEBRUARY 16, 1861.

"GEOTHERMAL CULTURE.—When we take into consideration that the mean temperature of the earth at one or two feet below the surface is, in the latitude of London, between 49° and 50°; that the heat thus stored up, as it were, in the earth, is constantly being given off to the air whenever the temperature of the latter falls below that of the former; and that air enclosed and kept still within slow-conducting materials does not readily part with its heat, we must come to the conclusion that M. NAUDIN's suggestions deserve attention, and are worthy of trial.

"We know that glass radiates heat very quickly, compared with a covering of woollen or other warm materials. During the late severe frost, the soil in a close frame covered with sashes only, was frozen to the depth of 6 inches, whilst in the open dug ground it was 9½ inches, and under Grassy turf only from 2 to 3 inches. This shows that the glass did not afford half so much protection as the turf, although the Grass on the latter was only a late after-math, and consequently consisted of imperfect fibre, very inferior as regards warmth to that of textile fabrics.

"But, whilst the glass transmits heat from the warmer air of the interior to the external colder air, the effect is counteracted to a considerable extent by the radiation of heat from the portion of the earth over which the glass is placed. If the ground plan of a house were traced on dry level ground, and an excavation made accordingly of the included area to the depth of 6 or 8 feet, and the whole were covered with glass level with the surface of the ground, a thermometer suspended below the glass would not fall below freezing during the frosts of ordinary winters, and probably not even in one as intense as that we have lately

experienced. The heat which maintains a comparatively high temperature below the glass, can, in this case, only be derived from the natural warmth of the earth.

"There is a curious instance recorded in the *Journal of the Horticultural Society*, Vol. 3, p. 275, of a conservatory being kept warm by means of heat communicated from the earth to water, and from the latter to the air of the conservatory. From the account of the circumstance detailed at the above reference, a few extracts bearing on the present subject may be here given. The conservatory alluded to belonged to the late JOHN WILLIAMS, Esq., of Pitmaston, near Worcester. In it the 'Orange trees exhibited a very healthy appearance. Their foliage was of a darker green than is usually to be seen on large Orange trees in this country.' The conservatory was 33 feet in length, and 28 feet wide, with a dome in the centre, consequently a large surface of glass was exposed to radiation. But fire heat was only applied during three nights in the course of the winter (1847), which was by no means remarkably mild; for on 75 nights the thermometer was below freezing, frequently below 24°, and even as low as 17° Fahr. The floor of the conservatory was grated; and underneath the grating there was a chamber with which a large drain communicated. This drain was 70 yards in length from the conservatory to the place where its farther extremity became exposed to the open air. Pure spring water out of the sandstone flowed constantly along the drain, imparting its temperature to the air passing over it into the chamber below the conservatory; and if the former entered the drain in a cold dry state it became comparatively warm and moist in its passage over the surface of the running water, of which the temperature was reckoned to vary little from 48°.

"The writer of the article to which we are referring ascertained by experiment that water 2 inches deep and 30° warmer than the air to which it is exposed will lose as much as 1° of heat per minute. Count RUMFORD states that a cubic foot of water in cooling 1° would give out as much heat as would raise the temperature of a stratum of air over it, and 44 times as thick as the water, 10°. HOOD, in his Treatise on Heating, states that a much greater quantity of air would be heated by a cubic foot of water losing one degree. However, we may adopt the lower estimate, that of Count RUMFORD, and see what results can be obtained according to it, regretting that his experiments were not made with reference to earth instead of water, as they would have then been more directly applicable to this subject.

"Supposing the temperature of the water of a pond were 44°, and that of the air 32°; and supposing the water were covered over with a roof 22 feet high, and of such materials as would prevent the escape of heat by radiation—it is certain that the water would be continually cooled by the enclosed air at 32°, until such time as an equality of temperature became established between the air and water; for under the circumstances this must ultimately take place. But when the temperature of the air is raised 10° at the expense of that of the water, the latter, if it were no more than a foot deep, would only be cooled half a degree. If greenhouse plants were staged over the water they would be in a medium of the uniform temperature of between 43° and 44°, and of course, so far as regards sufficient amount of heat, they would take no harm. Practically, however, this would be an inconvenient mode of obtaining it, and we must therefore direct our attention to some more eligible source—the earth.

"It is known that the soil receives and gives out heat more quickly than water does; but the amounts are so variable according to the nature of the soils that no such certain data can be obtained as in the case of water. But if the earth should lose two degrees, whilst the water loses only one in heating a certain quantity of air; or if it should maintain a temperature of 40° or 42° instead of 43°, still that would be amply sufficient for the plants suitable for geothermal culture.

"All this is rather under than over estimated according to the conditions laid down; but it will be observed that the results greatly depend on the assumption that the heat given out by the earth is economised to a greater degree than could practically be effected by any ordinary protecting materials of which the walls and roof of a tent could be formed. There is no telling what form some coarse fibrous substances may take by the skill of the manufacturer with the aid of machinery; but at all events the loss of heat by such substances as M. NAUDIN has pointed out may be counteracted by not a very large amount of bottom-heat, artificially applied as he suggests. Therefore we see no reason why geothermal culture should not prove successful."

Such are the remarks of a practical Gardener upon what may be very well called GEOTHERMAL CULTURE, that is to say cultivation in earth artificially heated. The importance of the method has long ago been fully recognized in England, although it has remained without much application to practice in this country, except occasionally in vineries, and has as far as we know been wholly neglected by foreigners. Yet as long ago as 1840 the author of the Theory of Horticulture, in a chapter devoted to "Bottom Heat" wrote as follows:—

"That the warmth of the soil acts as a protection to plants may be easily understood. A plant is penetrated in all directions by innumerable air passages and chambers, so that there is a free communication between its extremities however far they may be apart. It may therefore be conceived that if, as necessarily happens, the air inside the plant is in motion, the effect of warming the air in the roots will be to raise the internal temperature of the whole individual; and the same is true of its fluids. Now, when the temperature of the *soil* is raised to 150° at noonday by the force of the solar rays, it will retain a considerable part of that warmth during the night: but the temperature of the *air* may fall to such a degree that the excitability of a plant would be too much and suddenly impaired, if it acquired the coldness of the medium surrounding it; this is prevented, we may suppose, by the warmth communicated to the general system, from the soil, through the roots; so that the lowering of the temperature of the air, by radiation during the night, is unable to affect plants injuriously, in consequence of the antagonist force exercised by the heated soil."

In the Theory and Practice of Horticulture published in 1855 the following was added to the foregoing passage:—"It is not improbable that this fact may be hereafter applied in gardening to the acclimatising of half-hardy plants. Were an open border heated artificially in the winter, it is possible that plants might endure an amount of cold upon their stems and leaves, which in the absence of such heat would be fatal to them. An experiment upon this subject was tried some years ago, and although it was conducted so negligently and unskilfully, as not to justify any inference being drawn from it, yet the result, such as it was, was full of promise." Our friend M. NAUDIN will therefore doubtless excuse us if we decline to acknowledge him as the first to suggest the possibility of Geothermal cultivation. The experiment alluded to in the passage above quoted was tried in the garden of the Horticultural Society, but having been placed in the hands of a very unintelligent and ignorant person, although a good cultivator, led to no result that was thought worth recording, and was never repeated. But although no practical application of the principle has yet been made the idea has not been forgotten, as may be seen by referring to a remarkable article on the subject signed *Steam* and published at p. 1104 of the last volume of the *Gardeners' Chronicle*. What really belongs to M. NAUDIN is a suggestion of the manner in which this sort of cultivation may be effected, a slight sketch of which we have already given. On another occasion we may resume the consideration of what will doubtless become at no distant period a common method of preserving half hardy plants in winter without the assistance of glass roofs or the expense of costly hotwater contrivances. An acre or two of ground thus treated, covered in winter, unroofed in summer, would be something really worth attempting.

THE plans which the ROYAL HORTICULTURAL SOCIETY has adopted for its proceedings during the season of 1861, have been already announced in our columns; and we have now to record that these operations have been fairly commenced during the past week by the meetings of its Floral and Fruit Committees, which took place on Tuesday, for the first time in the noble Hall which has been provided in the New Gardens at South Kensington for the future assemblies of the Fellows.

The details of these meetings, which at this early and unfavourable time of the year possess but little of the interest which attaches to them at a more advanced period, will be found elsewhere. We may in this place briefly advert to the improved accommodation which the new establishment will afford, not only for the purposes of these meetings, which have become important courts of appeal as to the merits of New Flowers and New Fruits, but also for the transaction of the general business of the Society.

In the first place the temporary and inconvenient offices recently occupied in St. Martin's Place have been closed, and the Society's business has been transferred to the New Garden. In consequence of this removal all official communications should hereafter be addressed to South Kensington, W. This change has been every way advantageous; for while not even sufficient for the proper transaction of ordinary routine matters, the vacated rooms of St. Martin's Place were totally inadequate for the meetings of the committees. The council and the Society's staff of officers have now obtained other accommodation far better adapted for the transaction of the affairs of the Society; the committees have acquired the conveniences afforded by a spacious hall in which the little gatherings of novelties which have hitherto constituted their meetings may be developed into Floral and Pomological displays such as may be gratifying to the Fellows to whom they will be made accessible; and the Society at large has acquired an assembly Hall adapted to meet its necessities, and worthy of one which bears a Royal name.

The new Hall itself, which is placed on that side of the Garden next the Exhibition Road, is a building of beautiful design. It is approached by a spacious carriage sweep on the east side, and on the west opens directly into a portion of the colonnade which surrounds the garden. The exterior is as yet in quite an unfinished state, but the interior is sufficiently completed to be available for the purposes for which it is intended. The Hall is 60 feet long by 40 feet wide, and 30 feet high, a portion of this space being however occupied by architectural details. Its sides are formed by columns and pilasters of Roman Doric surmounted by a handsome cornice, from which a series of semicircular arches takes its source. Three of these arches on the east and west sides respectively, form openings which are to be used as entrances when required, forming a passage into the garden through the colonnades, and are at other times closed up by means of CLARKE's patent revolving shutters. A fourth arch occupies the centre of the north end, and another the south, and in these are placed the entrances for ordinary use. The four angles are fitted with large mirrors, and above them, occupying the spaces between the arches, are several window-like openings to be fitted with ornamental castings, and intended to aid in ventilation. The ceiling consists of horizontal lights of ground glass, through which the gas pendents descend. The floor is paved with MINTON's encaustic tiles. The heating is effected by means of hot water, the pipes for which are carried beneath the floor in channels covered by ornamental gratings. So far as it is yet carried out the ornamentation of this room is exceedingly chaste and beautiful in design.

Outside, in the garden department, all is bustle and activity. The colonnades are rapidly acquiring form and proportion, and together with the Conservatory, now that favourable weather has set in, are being pushed forward, as indeed they must be with the 5th of June looming in the not very distant future. Great progress has been already made with the ground work and planting. On the south side of the garden a double avenue of Atlantic Cedars, alternating in one of the lines with Tulip Trees, and in the other with Limes, has been planted. Groups of Deodars, some of large size, have for some time occupied their allotted sites, and notwithstanding the rigorous weather which has intervened, they appear to have borne removal without injury. A variety of deciduous trees, such as Limes, Horse Chestnuts, Poplars, Turkey Oaks, &c., selected for their peculiar forms and habits, and some of them as much as 40 feet high, have been distributed over the surface in accordance with Mr. NESFIELD's design. The main walks have been for the most part formed, wanting only their upper coating of gravel; the surface of many of the terraces and slopes is ready for turfing; the large triangular compartments of box embroidery, and the smaller embroidery panels on the glacis of the canals, representing the Rose, the Thistle, the Shamrock, and the Leek, are planted and ready to receive the different coloured gravels which are to develope their as yet hidden qualities. The other works are being urged on with celerity; and in short every effort is being made to have all things in readiness for the formal opening.

NOTES ON THE BOTANY OF JAPAN.

[We have received from Mr. Fortune the following, which shows that more than one collector of plants is in the Japanese field—a circumstance of no small importance, considering that the winter from which we have just escaped has proved conclusively that Japan plants are just as hardy as those wild in Great Britain.]

I do not know exactly whether you consider me as being in the east or in the west; the earth I believe is round, and it is possible to get here either by sailing westward *viâ* America, or eastward *viâ* India. All I know is that somehow or other I find myself at "the end of the earth," in the "Islands of the Rising Sun," commonly called Japan. Here is an extract from my note book, which seems to prove that I am not in a dream, as I sometimes think I am:—"I am sitting in the verandah of a temple pleasantly situated on the hill side about 100 feet above the sea. This temple is at present partially occupied by my friend Mr. M'Kenzie, who acts as French Consul at this port. Below me I see a beautiful bay, looking like an inland lake, for the hills appear to surround it in all directions. These hills are richly wooded, some of them up to their summits, and are of various heights, the highest being about 1500 feet above the level of the sea. On the smooth surface of the bay are seen the ships of several nations — English, American, Russian, and Dutch—and a number of queer looking junks, each having a single mast. At the head of the bay, covering an extensive space of undulating land, and even reaching a little way up the hills, is a town of considerable size, containing about 70,000 inhabitants. In front of this town, and looking somewhat like a breast-work to protect it, are seen some long buildings of two stories with the Dutch flag flying near one end. Above my head the French flag is flying; in front, a little below me, I observe the English, while the American and Portuguese are seen on a hill-side to my right. Altogether the view is one of the most charming I have ever looked upon. The town before me is Nagasaki in Japan; the low island in its front is Decima, where the Dutch have been so long permitted to trade to the exclusion of all other western nations. The different flags indicate the residences of the Consuls of those nations who have now treaties with this extraordinary people."

There is nothing very remarkable in the appearance of the little island of Decima, although from its associations with the history of the Dutch in Japan I considered it worthy of a visit. The old bridge, which, thrown across a canal connects the island with the town of Nagasaki, is still there, and presents a venerable and rather ruinous appearance; the little guard house is now empty, the gate has been removed, and the wall has been thrown down, so that the Dutch are no longer the prisoners they once were. They, like other foreigners, can now visit the town when they choose, and roam about the surrounding country to any distance not exceeding 30 miles without any interference from the Japanese. In my wanderings in Decima I stumbled upon a large rough piece of rock on which were carved the words "Kæmpfer" and "Thunberg." No other eulogy was necessary, and no other was there. It is pleasing to see that the Dutch reverence the names of such men, although I believe one was a German and the other a Swede.

While upon the subject I may introduce another distinguished German now well known in Europe, namely, Dr. Siebold. This veteran botanist now lives in the country a short distance to the north of Nagasaki, entirely away from Europeans, and his society consists of his plants, his books, and the Japanese. He has an excellent library of works on natural history, which he showed me with some pride; and also led me over his garden, which is rich in Japanese plants, many of which are new to Europe. An account of this garden, with the others about Nagasaki, must form the substance of another article. On taking my leave of Dr. Siebold, he accompanied me a little way down the hill. He speaks the Japanese language like a native, and seems to be a great favourite with the people around him, amongst whom he has great influence. "Doctor," I said to him, "you appear to be quite a prince amongst the people in this part of the country." He smiled, and said he liked the Japanese, and that he believed the regard was mutual. And with a slight cast of sarcasm in his countenance continued—"It is not necessary for me to carry a revolver in my belt like the good people in Decima or Nagasaki." *R. F.*

MYCOLOGY.—No. XLIV.

LICEA FRAGIFORMIS, *Nees.*—We have already adverted under *Æthalium* to the peculiar questions which attach to the natural order of *Myxogastres*, characterised amongst Fungi by their semi-gelatinous condition when young, and their dry brittle peridia when mature, often containing in their apparently amorphous substance much carbonate of lime, and filled with a dusty mass of spores mixed generally with a few threads. Amongst these two or three species of *Licea* are most conspicuous from their comparatively large size, occasionally beautiful colours, and in one case troublesome properties as regards some objects of cultivation. In point of colour far the most beautiful is the subject of our present notice.

Licea fragiformis, when young, consists of a roundish patch of white slime, spreading in every direction, and here and there collected into thicker masses. These by degrees assume a pinkish tint, and the upper surface soon appears studded with little pimples which gradually become of a brighter red and more elongated, and ultimately form so many somewhat cylindrical peridia filled with umber-coloured spores free from any admixture of those flat-branched threads which are so conspicuous in the neighbouring genus *Reticularia*. Few Fungi are more beautiful than this just before it attains maturity; resembling as it does in its papillate surface and ruddy tint a Strawberry. It occurs in hollow Willow trees, at the base of Alder stumps, and in similar situations, occasionally on sticks and leaves in woods, losing much of its beauty as it dries up and becomes mature. To the gardener whose eyes are not confined to his flower-beds or fruit, it is a pleasing object and nothing more, for it has no properties either good or bad to aid or to annoy him. This is not so, however, with a neighbouring species, *Licea perreptans*, which is happily not common, but when it does appear is most profuse in its growth and smothers everything it comes near. It is a vile inmate of a Cucumber or Melon

LICEA FRAGIFORMIS, *Nees*.
(Copied by permission from Greville's Cryptogamic Flora.)

frame, and, when once established, extremely difficult of extirpation. We have seen it, however, in other situations, where its presence was far from pleasing. During the last wet autumn its wide creamy patches appeared on the cut surface of some stumps of trees which had been sawed down. Near these stumps were some young Conifers whose branches nearly touched the ground. The slimy spawn contrived somehow to take possession of the lower leaves, from which it spread over the branches, hanging in festoons and weighing them down with its disgusting, dripping masses, which ultimately smothered everything with their dark spores. In such a situation it will be observed that the whole of the nutriment must be derived from the falling rain or the moisture in the surrounding air without the slightest dependence on the matrix. Any other matter lying in the way would have been equally covered with it, and, as the growth of these plants is extremely rapid, we need not think that the report of Schweinitz is fabulous, that he found an allied production on a piece of iron which had been red hot a few hours before. We ourselves possess part of the original specimen, and have implicit confidence in his report, having far greater reliance on his veracity than on his power of correctly discriminating species. Of *Licea cylindrica*, another species, we can say nothing, as we have never had the good fortune to meet with it, but a fourth, *Licea applanata*, occurs not unfrequently upon old sticks in gardens, and is known at once by its thinner stratum and clay-coloured spores inclining to reddish. There are, indeed, other species, but with a totally different habit, and none of them have occurred in this country. *M. J. B.*

ROSES AND THE LATE FROST.

AFTER so many wet and sunless months (294 wet days between Sept. 1859 and Sept. 1860) it is not to be wondered at that unripe wood should suffer so much, and that Roses on all stocks should die or show symptoms of great injury. The thermometers on the 23d of December marked 15° below zero. This weather lasted for one month and five days at least, and had not the snow covered the ground plants much greater disaster would have ensued. The ground plants, owing to this, though severely cut above snow mark, are by no means dead. The great injury was done by the severe frost that followed the snow thaw before the trees were dry. Standard Autumnal Roses have suffered most; Half-standard and 1 foot Summer Roses, 155 are not injured at all. Fresh planted Manetti Roses are also intact. Pot plants (with the exception of two worked Tea Roses) covered over their roots with three tiles in August, when the ground was tolerably healthy, are, without other covering, all alive and well. If wood is ripe and the roots are kept dry, Roses, otherwise tender, will stand tremendous weather.

Among my Teas on their own roots are Vicomtesse Decazes, Eliza Sauvage, Adam, Devoniensis, Bougère, and Souvenir d'un Ami. These are all well and have had no covering but the tiles. They were protected in the same manner in the winter of 1859. It is wet that gives frost power. Of course a sheet over head as well, and straw wrapped round plants would be an additional help. The best thing "R. C." could now do would be to leave Roses alone that are fresh at their eyes, and take up and restrike the roots of the sicklier ones in a bed or frame filled with new stable-dung and covered with light mould. Manetti Roses will strike almost immediately. I tried some sick ones before the winter set in, and planted them out in a month, and they are doing well. This is one advantage of the easily excited Manetti stock. Of the three years old Manetti Roses (great and strong bushes) much cut with the weather, I see that in a bed containing 105 I have lost only one. Some of them, however, are totally dead to within 3 or 4 inches of the base or point of union. To prevent further mischief they are banded and stuffed in their centres with hay or straw. All the standards have also the same materials put into their centres, and especially upon the point of union. It may be accident, but the following are the only Briar autumnal Roses that have thoroughly defied the weather:—Dijon, Triomphe de la Duchère, Bouquet de Flore, Pius the 9th, Cambacérès, J. Margottin, B. Prevost, Angleterre, Trudeaux, Duchatel, Marie Portemer, Mt. Carmel, T. de Paris, Panaché d'Orléans, Marx, Reveil, Menoux, Gloire de Santhenay (2), and Belle de Bourg la Reine. Colonel de Rougemont has died more than any Rose. Cambridge, firm wood, too, is dead, and I tremble for the M. Massons and Evêque de Nîmes. Six of this last Rose came from Mr. Keynes last fall, and I must say I never saw such good and firm wood. Marie Portemer, its twin gem of the same year, is a more preferable Rose. The winter indeed has been Siberian, and many Roses that appear to be alive will yet die, and *vice versâ*. Till March is out no one can tell the amount of his losses. The best thing to do this favourable weather is to stir the ground lightly and promote speedy root action. We have yet to meet the usual six or eight weeks of hoar frost and piercing easterly winds. To fill up serried standard ranks, I am getting dog Briars. Unless I can see good 2 feet standard Roses with "my own eyes," I shall not like to buy. Those I bought last spring died almost to a totality. "R. C.," if he does not follow the above advice, will do well to take up Roses that do not show freshening at the eyes, shake them out, and plant them with dry friable mould (which I always keep in a house), and then put a little fresh stable litter over the roots, which will occasion something like bottom-heat, and promote fresh rooting. Roses have suffered in their roots and rind, as well as in their branches.

In every instance, on all stocks, where a Rose was not cut at all, and the flowers were suffered to drop off, the wood was ripe, and the Rose has suffered nothing whatever, even at the points, from the effect of winter. The falling off of the first flowers is the ripening of the wood. Even the White Bath, N.E. aspect without shelter (five trees on Manetti, about 3 feet 6 inches high), is not even stained at the points.

To a true Rosarian, I am sure it will be no solace to know, that every Rose correspondent I have speaks of his own and neighbours' disasters. Nurserymen cry out, "nine-tenths are dead. I have lost many sorts altogether, and I do not know whether the others are dead or alive." Amateurs cry, "All my Roses are dead," "Mine are mostly dead or done for."

Budded Roses have done well. At the fall I fancied 107 would stand the winter, but I find to my joy 111 are perfectly good, and 17 doubtful. They were budded the 3d and 10th of July, and many broke at once, and have wintered well. Some of them bloomed beautifully. I am happy to say that the Eugène Apperts, Aragos, Francis the 1st, Marocs, Peabodys, La Fontaines, Gloire de Lyons, Marie Portemers (a free blooming Reveil), Marie Thierrys, and Anna Diesbachs will bloom on good strong Briars this next year, and I hope they will do credit to Mr. Worthington and Mr. Helyar, who cut the Briars for me previously to budding. I cannot conclude without giving a caution to Manetti Rosarians. If your Roses die back, don't cut into the quick. The Rose will bleed unless you leave a portion of the dead on, which will act as a seal; a little dirt rubbed on to the cut will do good. Never cut Manetti close to the eye. When you remove the dead wood of such as have died back nearly to the base, put lightly over the whole Rose a little earth to prevent exhaustion of sap by the sun. This succeeded admirably in the spring of 1859, as respects the Duchess of Orleans and Comte de Nanteuil. They bloomed nobly till winter set in. I never knew a Manetti Rose succeed that was cut hard when first planted, or that was not tolerably covered with earth over the point of union. Manetti Roses should be treated much as if they were hybrid China or hybrid Bourbon bushes. *W. F. Radclyffe, Rushton, Jan.* 29.

Home Correspondence.

Horticultural Exhibitions.—Every person who takes an interest in gardening (and who does not?) must be delighted to see the spirit with which the Council of the Royal Horticultural Society is preparing for the inauguration of the new garden at Kensington Gore. Though I had not the pleasure of witnessing it, I have frequently heard it remarked by persons upon whose judgment in the matter I can rely, that the exhibition which the Society held upon the same ground a few years back was the most unique, most perfect of all the grand exhibitions which the Society has ever held. It is most fervently to be hoped that the same success may attend this larger attempt upon the same ground, and that gardeners in all parts of the country will do their utmost to render the exhibition in June next the finest the world has ever seen. The arrangements which have been made relative to prizes are liberal, and no doubt will be responded to in a similar spirit; but at the same time I should have been better pleased if more original ground had been taken, and the everlasting and now almost worn out ditto so far as the collections are concerned had been avoided. Sixteen years ago Azaleas, Pimeleas, Eriostemons, Boronias, Leschenaultias, Gompholobiums, with, in the stove way, Stephanotis, Dipladenia, Allamanda, Ixora, Clerodendron, and Heaths were the staple plants of the large collections, and in 1861 the same plants, or at any rate the same species or varieties, will do the same work. No doubt many of these plants will be marvels of superior cultivation, but still when we consider that at that time 40 to 50 plants used to be shown for the principal prize, it must, I think, be admitted there was more merit in producing such a collection, than in bringing together some 15 or 20 plants, be they never so fine, the cultivation of which is well known at least to the initiated in competitive plant management. One of the most meritorious collections I ever saw was exhibited from Bromley Common by Mr. W. Barnes, now of Camberwell. He staged 50 species or distinct varieties in splendid condition, but the post of honour was awarded to his rival, for what? although he staged duplicates of White Azalea, persoluta Heath, spectabilis Pimelea, and two other common things, the names of which I now forget. Such was censorship at that time, but even allowing the collections to have been equal in point of cultivation, which they were not, the very fact of the collection containing duplicates must have placed it second in the competition, had the judges understood their duty. The encouragement of these overgrown plants, except as single specimens or in collections of six, has gone far enough; and if we go back to collections of 40 or 50 species or distinct varieties, confining the growth to pots not exceeding "their ten inches," I doubt if it would be considered a retrogressive movement, and I am quite sure the collections would be much more attractive than they have been of late years. We have seen what can be done with plants in large pots, let us now ascertain the size and perfection to which they can be grown in comparatively small ones. And are we quite right in our exclusive dealing with these large collections, whereby Orchids, Pelargoniums, Calceolarias, and other softwooded plants are not admissible? The question is at any rate a debatable one, and for reasons which I will presently assign I am strongly in favour of the prohibition being removed. Were I an exhibitor growing hard-wooded plants only, I should have a decided objection to the change, having more than once been swamped by a fine Orchid or two thrown into a rival's collection; but looking at the matter upon its merits and without any reference to the interest of exhibitors, it certainly appears to me the change might be made with decided advantage to the collections in question. Some years back, at one of the early exhibitions of the Royal Botanic Society, one of the largest exhibitors through a death in the family of his employer was unable to send the usual supply of plants. This led to the space for a large collection being left unoccupied, which the late Mr. Catleugh, of Sloane Street, at the eleventh hour on the morning of exhibition undertook to fill. Getting together the large Azaleas and other plants used for furnishing balls, routs, &c., with some specimens of Cinerarias, Pelargoniums, Calceolarias, &c., and a few spare plants from other exhibitions, the space was filled in a style which gave great satisfaction to every one. At that time fancy Pelargoniums were in their infancy, and in my mind's eye I can see now the sparkling effect of such novelties as Anais, Ibrahim Pasha, Gipsy, Itolinsky, and Queen Victoria. Should the proposition to grow large specimens in small pots be ever entertained by the leading metropolitan Societies, and I have no doubt it will be, it will not only infuse new life into the old exhibitors, but will also bring a number of new ones into the field. Collections of this kind would show more of what a first class conservatory ought to be in point of decoration at that particular season, than arrangements by which many valuable and highly decorative plants are excluded. The propriety of holding their meetings on two consecutive days was suggested to the Council of the Horticultural Society some years back; and at the same time it was advised that the plants should be arranged for prizes the first day of the exhibition; but on the second day the whole should be arranged for artistic effect. The change it was thought would involve too much trouble, and it was also thought exhibitors would be jealous of any one but themselves arranging their plants. There might have been some truth in this, but I fancy the prejudice would not have been too deeply seated for a little gold or silver ointment to have removed it. To break up the monotony of the finest exhibition I ever saw has always been a desirable thing with me, for though I see the great exhibitions but rarely now, I must confess that after examining the specimens individually, I have little taste left for the collections "en masse." The most striking collection of exhibition plants I ever saw was at the Bath and West of England Agricultural meeting in June, 1860, at Dorchester. A large tent, some 80 to 100 feet long and proportionately wide, was fitted with a low flat table stage with a horse-shoe end, the company walking inside the horse-shoe, and of course the plants were arranged to fall from the back to the centre. This tent was filled with plants supplied exclusively I believe by Messrs. Veitch & Son, of Exeter and London; and as they had evidently brought the very cream of their collections together, it was a display such as for effect I have never seen equalled in any place. With huge plants of Rhododendrons and Azaleas, &c. from the open ground were associated magnificent plants of Azaleas, Heaths, Pimeleas, Aphelexis, Ixoras, Orchids, Ferns, and other stove and greenhouse plants, and these intermixed again with Pelargoniums of all kinds, Calceolarias, Cinerarias, Roses, and a whole host of florists' flowers; and the whole so skilfully blended together that at every two or three steps every person met with something to please his or her particular fancy. Here perhaps a stately specimen of some rare Heath or Azalea flanked by a plant of Eriostemon or Stephanotis, with the feathery fronds of a choice Fern, or the snowy and almost ethereal flowers of Phalænopsis amabilis or grandiflora waving over head. Pass a little further and you had a group of the last new Roses or some other florist's flower, while rare plants not then distributed, and such as Messrs. Veitch only could exhibit, were there in abundance. In fact this tent was what a well appointed conservatory ought to be, and just the place to enable a lady to judge what her own conservatory should be, always premising that proper means are allowed to enable the gardener to procure such plants. This arrangement at the time pleased me so much that I determined to make a note of it, and I now commend the subject to the consideration of those interested in catering for the public gratification, with the hint that if they intend to act upon it that the sooner exhibitors are made acquainted with their determination the better. The prizes offered for baskets of fruits and flowers for the decoration of the dinner table is a move in the right direction, and I fancy will lead to a grand display. Of course the object is to bring out a set of the most suitable baskets or vases, as well as to encourage taste in the management of fruit and flowers. Were it otherwise, each competitor to make the competition equal should use the same form of basket, but as there is room for great improvement in the floral ornamentation of our dinner tables, it is to be hoped that some suitable designs may be produced. To take the dishing up and management of fruit out of the hands of confectioners, housekeepers, and still-room maids is an act of common justice which every successful grower of choice fruit ought to claim for himself, for to see the slovenly manner in which Grapes, Strawberries, Peaches, &c. are handed and mauled about is enough to try the metal of the most bending. *W. P. A.*

Delphinium Cardinale, &c.—I saw mention made in your Number of Saturday, Jan. 26, in "Answers to Correspondents," of the beauty of Delphinium cardinale. I find in my note book a remark made to me by an eminent nurseryman who had grown it extensively on coming out. After telling me it was the colour of brickdust, he said, "I believe it to be one of the greatest pieces of rubbish ever palmed upon the public." Who is right? Will you invite your correspondents who have grown it to give their opinion? "Orwell" is quite right about Dianthus Veitchi: it is a common pretty Sweet William, sent out by one of the first firms in London as "a very beautiful and much admired plant." I wish you would publish my letter verbatim, and then we should have a chance of hearing something. *A. R.* [But surely brickdust is a very acceptable colour among Delphiniums. When we saw the flowers we thought them handsome. We suspect that your informant cannot "grow" it.]

Lamps and Light.—To those who like myself burn a good deal of "midnight oil," either for reading or writing, and who cannot get gas, or afford the expense of a moderator, a cheap and economical lamp is a matter of considerable importance. During the last three years I have purchased several of the Paraffin lamps, but with an occasional exception of a night or two I found them ill to manage, smoky, and the stench most intolerable at times. I was recommended to try an argand burner, but that was not a cure, and from breakages I found that description of lamp expensive. Stopping one night at Chester in the autumn I met with a lamp which gave a most beautiful light, was quite scentless though burning Paraffin, and not troublesome to manage. Procuring one of these lamps in Liverpool, which with a duplicate chimney and ornamental ground glass globe complete cost me 5*s.* 6*d.*, I found it had what is called the "American burner," a Yankee arrangement which answers the purpose most completely, and is known in the trade as the "Albion Photogen Oil Lamp." Photogen was recommended as being cheaper and better than Paraffin, and so I have found it, the light being stronger and the expense considerably less. Burning the lamp six hours every night, the oil costing 3*s.* per gallon, I find that the expense is just a penny and a 35th part per night, and this for a light equal to four composite candles, and quite sufficient for a family of eight or ten people to read or work in comfort by. So much is this light liked in the north, that some families are using it in preference to gas, finding it cheaper and more agreeable to read or write by. My four months' experience is most favourable, and I can recommend it with confidence to all requiring that great desideratum, a good and economical light. Inquiries respecting this lamp may be addressed to the "Albion Company, 7, Lower Castle Street, Liverpool." *W. P. A.*

Thieves in Gardens.—I beg to forward the following, hoping it may prove a warning to persons who visit private establishments and nurseries under the plea of looking round, but really with the intention of robbery. Yesterday at mid-day a very respectable young man, in appearance a native of Exeter, visited my establishment, and immediately commenced operations by pulling out of the store pans large quantities of Verbena, Lobelia, Gazania splendens, &c., secreting them in his hat and pockets. He was given into custody and tried at Hammersmith before Mr. Ingham, and sentenced to pay 20*l.* or three months' hard labour. *Charles Woodroffe, Westbourne Nursery, Feb.* 13.

Rainfall in January, 1861.—

Stations.	Height of Rain Gauge. Above the Ground. Ft.	in.	Above Sea Level. Feet.	Depth of Rain and Snow. Total for the Month.	Greatest fall in 24 Hours. Depth.	Date.	Rainy or Snowy Days.
Little Bridy, Dorset	0	4	348	.68	.16	25	13
Barnstaple, Devon	0	6	31	1.27	.59	25	10
Castlefold, Calne, Wilts ..	0	11	330	.75	.45		
Camden Town, London ..	0	4	100	.43	.17	25	7
Finchley Road, London ..	0	4	270	.45	..	..	..
Ditto ditto	36	4	306	.28	..	..	..
Oundle, Northampton	20	0	124	.44	.23	1	10
Norwich	0	0	30	1.28	.30	2	9
Derby	5	0	179	.66	.50	1	5
Manchester	3	0	106	.37	.14	20	10
North Shields	1	0	124	1.00	.21	6	18
Dumfries	...		...	3.90	.75	25	13
Nookton Leven, Fife ..	0	6	80	1.29	.40	25	15
Sandwick, Orkney	2	0	82	2.12	.24	20	18

Little Bridy.—The smallest monthly rainfall since April, 1856.

Barnstaple.—The fall in September, 1860, should have been 3·54 and in November, 2·64.

Manchester.—The driest January since 1838; the mean (of 64 years' observations) for the month is 2·49 inches.

Nookton.—Snow on the 1st, 5th, 6th, 8th, 9th, and 10th.

Sandwick.—Mean (of 20 years) rainfall for January, is 4·3 inches; the fall is, therefore, only half the average.

G. J. Symons, Camden Road Villas, N.W.

Societies.

ROYAL HORTICULTURAL: *Feb.* 12.—(*Floral Committee*).—Illustrations of the severity of the winter on shrubs of different kinds were furnished by Mr. Noble, of Bagshot, who sent young plants of Laurustinus, killed down to the ground; Buxus Balearica, apparently quite dead; Araucaria imbricata, browned and greatly disfigured; Phillyrea angustifolia, killed; Ilex latifolia, young shoots killed; I. cornuta, dead; I. dipyrena, partially injured; Japanese Privet, dead; Taxodium sempervirens, young shoots killed; Quercus sclerophylla, killed back to the old wood; Q. bambusæfolia, and Q. inversa, in a similar condition; and Symplocos japonica killed down to the roots. Associated with these, and forming a striking contrast with them in regard to appearance, were Berberis japonica and Skimmia japonica, both in robust health, without the disfigurement of even a single leaf, although both were reported to have occupied situations equally exposed with the plants just enumerated. The Skimmia indeed was covered with brilliant red fruit, with which it is ornamented during the whole winter through, rendering it one of the most valuable perfectly hardy evergreen shrubs which we possess. Other objects of exhibition consisted of a collection of Chinese Primulas from the garden of the Society, and a group of miscellaneous plants from

Messrs. E. G. Henderson, which arrived too late to receive the attention of the Committee.

Feb. 12.—(*Fruit Committee.*)—A collection of Apples received from Guernsey was entrusted to a sub-committee to be carefully inspected and reported on at a future meeting. From the Garden of the Society came various Apples, most of which on trial proved indifferent in flavour—a circumstance doubtless owing to want of sun while ripening: the best were White Colville, Court of Wick, Waltham Abbey Seedling, Ribston Pippin, and Dutch Mignonne. A Seedling Kitchen Apple from Mr. Weaver, of Bellins Park, Essex, was recommended to be cooked and reported on hereafter. Arley Seedling, a small sized rather pretty variety from Mr. Booth, Northwich, was not considered better than kinds already in cultivation; the flesh was dry and deficient in flavour, and to some the skin had a peculiarly unpleasant taste. Mr. W. Paul exhibited a seedling clear yellow, firm fleshed and tolerably good in flavour; it was not, however, considered worthy of especial recommendation. A collection of late Grapes was contributed from the Society's Garden; they consisted of Black Barbarossa, Burchardt's Prince, Catalanesia nera, Oldacre's St. Peter's, Prune de Herault, Morocco Prince, Bussard Noir, Œillade Précoce, Raisin de Calabre, Verdal, Muscat of Alexandria, and one or two Wine Grapes; of these the best were the Muscat of Alexandria, Oldacre's St. Peter's, Morocco Prince, and Burchardt's Prince. All were however more or less shrivelled with the exception of the Barbarossa, which looked as if it would keep good with care until the end of April. Some Muscats, considerably shrivelled and past their best, were also sent by Mr. Booth, of Arley Park. Mr. Mobbs, Newport Pagnel, showed examples of new Grapes cut from Vines growing in pots; they were small both in bunch and berry, but well coloured, and considering the season tolerably well flavoured. Specimens of Baldry's Defiance Rhubarb were again shown; also some hybrid Cabbages from Mr. Melville, Dalmeny Park, near Edinburgh. These were recommended to be cooked by different members of the Committee, and reported on at a future meeting.

Linnean: *Feb.* 7.—Prof. Bell, President, in the Chair. W. Carruthers, Esq., was elected a Fellow. A paper "On the occurrence of the Festuca ambigua of Le Gall, in the Isle of Wight," by A. G. More, Esq., was read. This Grass was stated to grow abundantly on the seaside sandhills or "dunes" at St. Helens in the Isle of Wight, and was believed to be the plant mentioned by Dr. Bromfield in his "Flora Vectensis" as a variety of F. uniglumis. Its aspect was described as somewhat intermediate between that of F. uniglumis and F. pseudo-myurus, with the former of which it grew intermixed, resembling it a little in its compact and upright panicles, a resemblance which however was only superficial, the true affinity of the plant being with F. pseudo-myurus, with which it agrees in having a single stamen, and by the constant presence of both glumes. It was remarked that the differences between this plant and the normal state of F. pseudo-myurus were just such as are relied upon for distinguishing the latter plant from F. sciuroides, the F. bromoides of Smith; and there seemed therefore no reason why F. ambigua should not equally rank as a species. "It is not expected indeed," observed the author, "that those botanists who conjoin pseudo-myurus with sciuroides will be any more inclined to admit the distinctness of ambigua, and it may be urged that M. Lloyd speaks of a maritime variety of pseudo-myurus in such terms as to lead to the conclusion that he intends ambigua: but on the other hand Le Gall considered his plant much more nearly related to ciliata to which he was disposed to refer ambigua as a non-ciliated variety, and it must be confessed that, excepting the cilia of the lower pale, ambigua has very nearly the characters of ciliata." These three closely allied species, which belong to the section Vulpia of the genus Festuca (distinguished by having an annual root, and awns longer than the pale), were thus contrasted:—
* *Lower pale ciliated.*—1. F. ciliata: panicle narrow upright, its rachis downy; glumes widely membranous, pointed, very unequal, as 3-5 to 1, the larger one reaching less than half-way up the included floret; awn of lower florets one and half times as long as the pale. ** *Lower pale not ciliated, scabrous.*—2. F. ambigua: panicle narrow, close, upright, its lowest branch reaching more than one-third up; glumes widely membranous, sub-acute or eroded, very unequal, as 3-6 to 1, the larger one reaching one-third up the included florets; awn twice as long as the pale. 3. F. pseudo-myurus: panicle elongated, very narrow, nodding, interrupted below, often partly sheathed; its lowest branch reaching one-fourth up the panicle; glumes membranous-edged, acuminate, unequal, as 3 to 1, the larger one reaching half-way up the included floret; awn nearly twice as long as the pale. In all these characters it was mentioned that F. ambigua was still more distinct from F. Broteri, to which Mr. More was once inclined to refer it. F. Broteri has a short upright oblong panicle, with its lowest branch reaching nearly half-way up; its glumes are less unequal and more pointed; the large glume reaches more than two-thirds up the included floret, and the awns are more than twice as long as the pale. In a series F. Broteri would rank between pseudo-myurus and sciuroides. This latter was still less likely to be confounded with any of the above, for it has much stouter spikelets, a short upright oblong panicle; its glumes as 2 to 1, acuminate, with the dorsal nerve reaching to the tip; the larger glume as long as the included florets, and the awn about equalling the pale. In computing the proportions of the two glumes towards each other and to the included floret, it was observed that those of the terminal spikelet are not to be trusted, being always less unequal than the others. The author also pointed out that Parnell and Sowerby have drawn three stamens in the flowers both of F. bromoides and F. pseudo-myurus, but this he believes to be erroneous, for of the British Vulpiæ only uniglumis has three stamens; in the others he has constantly found one stamen only.—Dr. Hooker exhibited specimens of the Araucaria Rulei of Dr. Müller, a species found on a volcanic islet off New Caledonia.

Notices of Books.

A new edition has appeared of *Hassall's Adulterations Detected* (Longmans). Those interested in the subject are aware that this volume consists of highly magnified figures representing the appearance under the microscope of a great variety of articles genuine and adulterated, together with explanatory letter-press. To the present edition is prefixed the Act of Parliament passed last session "for preventing the adulteration of articles of food or drink." Up to this time the Act seems to have been a dead letter. Dr. Hassall now hopes that "many" appointments of Analysts will shortly take place. We presume to hope the contrary. The power that would be entrusted to them is hardly fit to be exercised except by persons of the greatest experience; and we should be glad to know where "many" such men are to be found. What comes of employing Amateurs has been pretty well shown by the Wakefield case. The employment of incompetent men, as must happen in many places, can only lead to injustice and litigation, if not to something even worse. If Mr. Scholefield, who brought in the bill in question, is well advised by *disinterested* persons he will rest contented with having gained his point, and now allow the matter to drop. The new outcry about adulteration, coupled with the prospect of appointments under the bill, has a very suspicious appearance.

A Packet of Seeds saved by an old Gardener. Second edition, enlarged. Chapman & Hall. 1s. 6d.

We little thought the other day when mentioning this clever story in connection with the memory of its lamented author that a new edition was even then about to issue. Let us now add that we know of no book which Gardeners may read with more advantage: for it is full of wisdom in the form of familiar gossip. A few extracts will explain our meaning.

Gregory "the old gardener" gives the following account of a visit paid him by one who "gave himself a deal of airs amongst country folk:"—"One day I'd just got up from dinner, when the one I'm telling of came up, and asked if he might have a look round. I thought what kind of a man I'd got hold of; so I first took him into the old garden and into the old houses—the ones I found when I came to Birdwood, and which we used just to keep bedding-out things and the Orange trees in, and some late Vines over head. These old-fashioned houses, with steep roofs, heavy sashes, small glass, and brick flues, soon set his tongue loose, and he began to talk very large about *my* place and *my* plants, and *my* houses, and *my* everything. He used such fine words, too, that I could not tell what he meant; and he pulled first one thing and then another about, and, looking at the Orange trees, which wanted new tubs, said he, 'These are doing badly; let me recommend you to get a little more *karbonic hacid* gas into your soil, and you'll find it wonderfully *venerate* 'em.' 'Well,' said I, 'I have heard as much; but 'tisn't easy to get it in a country place like this; perhaps you'll be so good as to send me a little parcel down by the waggon from London that passes by;' and I pulled out half-a-crown. But he said he was sure it would not be more than 1s., and he would not forget it. He was going, till I said, 'This way,' and took him through a door into the new houses, a large range all heated with hot water: one for stove and greenhouse plants, one a fine Grape house, with divisions for succession crops, and another with Peaches and Figs; then, again, pits for Cucumbers and Melons, and one for Mushrooms. Though I say it myself, they were a credit to us, if nothing to boast of; and he thought so too, for his eye caught mine, and there was something in it that stopped his tongue; and when I began to ask him a few questions how he did this and did that, he was all over confused, and made an excuse to be off; and I was glad to get rid of him, though I didn't let him go without bidding him not to forget the *karbonic hacid* gas to *venerate* my plants with. How foolish we are to use words we don't know the meaning of."

On another occasion Gregory and his friend Macpherson being peckish, "went to a road-side inn, hard by the place of sale, to get something to eat; and who should we first see, amongst a lot more that were there only losing their time, but this shoemaker and tailor, out as usual, for it was a Monday. We called for bread and cheese, and whilst we were eating it they opened out their old budget about the shame it was things were so unequal: some so rich and some so poor; some with so much land, and so many with none; and some such great folks that they scorned the like of them, tho' the rich were beholden to 'em for shoes and clothes; and wishing things was the same as in America, where they was as they ought to be. What the one said the other swore to; above all, they agreed that there ought to be in England a fresh start, and that no man ought to have more of God's earth than another, and nothing would be right till all was shared out afresh. Mac and I had heard all this so often that we didn't care to answer, but went on with our bread and cheese, till they took off, and ordered a rump steak and onions; and very particular they seemed about having it cooked with a bit of butter and dust of pepper, for they were knowing fellows in such matters, and proud of it too. By and by it was ready, and put on the table close by us; but the tailor had gone to gossip with the people outside that had come to the sale, so the shoemaker went off to look after him, and in no good humour either. As soon as his back was turned Mac whips off the cover, takes half the steak, divides it between him and me, and began eating away, whilst I could not think what he was at. Presently in they came, and seeing what we were doing they began abusing us most unmercifully. I will say I felt very foolish, till Mac said to them, 'What's the matter? did ye no say we ought all to begin again, and share and share alike? We've only done what ye've been sae lang advising. Our bread and cheese was all gone, and we'd cum roun' to your way o' thinkin', and thought we'd make a beginning at once; so we've taken our share.' But nothing of that kind of argument would suit them now, not a bit of it. They tried to hide how foolish they felt, but could not do it, tho' Mac went and ordered more, and paid for it, and as we went away said to them, 'Dinna ding me ony mair wi' your clavers about starting afresh, and sharing and sharing all alike, ye gomeralls, ye. When it comes hame to yoursels, ye see clear enough what fools ye are; and now take my advice, and wark o' Mondays like other folks, and drink less and chatter less, and ye'll hae mair for the wife and bairns.'"

Among the new matter we find the following piece of advice:—"If the Thorns and Thistles will grow, yet we are well repaid for the sweat of our brow by keeping 'em down; just the same as 'tis in our hearts all kinds of evil things spring up there, everybody knows that; but our business is to keep hard at the weeds; we may down with 'em, but look out, for they're always ready to come up again, and it'll be so to the end of the chapter. If any of you think you are men enough to do this of yourselves, you're mightily mistaken. But you're promised help; and you'll find it in a book more worth reading than any other, though it may lay on your shelves and be never looked at, and, if your house is untidy, be covered with dust. Now, what I want us all to do is, to read this book just as we read the gardening ones, and, while we work away in our gardens, abide by its 'calendar of operations' for working at the heart. It's a shame such a book should be so neglected. Don't read it alone; first get a good wife, if you haven't one, and whilst she is at work read to her and your children, if you have any. Don't make a task book of it, and, take my word for it, there'll be something wrong in yourselves if you don't find in it comfort in sorrow, support in honest poverty, something to keep you humble if you are prosperous, and free from pride if you are successful; something to make you careful how you speak of the faults of others, because you'll know so much of your own. It will teach you to lend others a helping hand, and to take help gratefully, if you ever need it. It'll make you respectful to your employers, and will get you respect from them; and when you've roughed it through life,—and I've known what it is to rough it as well as any of you,—it will give you a hope that'll grow stronger and stronger the older you grow."

In *Routledge's Illustrated Natural History* for February, we find the history of Thrushes, Orioles, Chats, Fantails, Shrikes, and Jays, all represented by capital wood-engravings.

A third No. of *Mr. W. Longman's* delightful Lectures on the History of England is out. It comprehends the period between 1216 and 1272, and is illustrated not only by quaint drawings from ancient manuscripts, but also by an excellent map of the English possessions in France in the 12th and 13th centuries.

Of the *Flore des Serres* a new Part, completing the 13th vol., is before us. Among the figures is one of a huge purple Utricularia with a lip like a crinoline, not in cultivation and probably uncultivable, and a very striking hybrid Rhododendron with snow coloured flowers bordered with cherry red, whence its name, *Neige et cerise*. There are also representations of the new double purple Zinnias, taken from specimens far inferior to those sent us by Messrs. Vilmorin.

The Peerage, Baronetage, and Knightage of Great Britain and Ireland for 1861. By R. P. Dod. 12mo. pp. 748. Whitaker.

Under the familiar name of "Dod" this has become a household book as indispensible to the middle and upper classes as an Almanac. That it has flourished for 21 years is sign enough of its utility. Everybody in the

realm from knights upwards is briefly mentioned; his birth, history, services, and kindred being duly set forth. It is also a feature of the volume for 1861 that the rank of all persons in the Volunteer service who have a handle to their names is carefully noted. It, like all other books, has its errors, some of which are whimsical; such as making Sir Joseph Paxton the Editor of the Botanical Magazine, and Sir William Hooker the "Curator" of the Kew Garden; but these are very slight blemishes, easily corrected.

We are glad to announce that *Knight's Popular History of England* (Bradbury & Evans), the best middle class history in our language, has again appeared after a few months' delay to give its very able and conscientious author time to re-examine with renewed care the multifarious materials that relate to the period since the great French Revolution. No. 54 was published the other day, and the remainder of the work is announced for April.

Among minor publications heaped before us are *A Memoir of Abraham Lincoln*, the President elect of the United States (price 1*s*. Low & Co.); *On Food*, First Course, by Dr. Lankester (price 1*s*. Hardwicke), a good treatise spoiled by the absence of an Index; *The Life and Travels of St. Paul*, by W. McLeod (12mo, pp. 143. Longmans), with maps illustrating the travels of St. Paul, and other subjects, for the use of training colleges and the higher classes of primary schools.

Miscellaneous.

New Source of Truffles.—After the depression occasioned in the minds of the gourmands by the announcement of the failure of the Truffle crop in France, it is but just to raise their spirits by the account of the discovery of the luscious production in such large quantities in Africa that several of the great Truffle growers of Perigord—armed with their knowledge, which is power, and their experience, which is wealth—have set out to this promised land, and have sent back the most flaming reports, backed by the most splendid proof, of the existence of a magnificent species of Truffle, produced in great abundance beneath the Pine trees and Cedars in the brakes of some Algerian forests, more delicate in flavour and more powerful in perfume than those belonging to the Oak and Hazel bush of Perigord. *Simmonds's Technologist.*

Gladiolus.—To grow this very handsome tribe of plants to perfection the bulbs should be planted in a light sandy soil; if very poor, a little leaf-mould may be added, but no dung. Where the above cannot be had, and the soil is a stiff loam, one-half should be burnt and thoroughly broken to pieces, then mixed with the other; this will grow them well. The bulbs should not be planted earlier than the middle of April, nor later than the last week in May; and when ripe, which will be from the beginning to the end of October, they should be taken up and dried off rather quickly, else, like Onions, they are apt to turn mouldy at the roots; after which place them in thoroughly dried sand in a cool dry situation, away from frost, until planting time. *Standish's Catalogue.*

Transcendental Science.—The *à-priori* or transcendental method in anatomy has evidently strong charms for some of our transatlantic brethren. In the Transactions of the Academy of Science of St. Louis for 1858, vol. i., No. 3, p. 416, there is a paper by one of the curators, Dr. Theodore C. Hilgard, M.D., "on Organotaxis," in which the dreamy and imaginative Oken is out-Okened. One good effect of this curious production of our voluble contemporary will be to show what may be done by a good tall fellow in this line of business, especially when such a worker is unyoked from reason and judgment. We shall give a specimen of Dr. Hilgard's paper—not to instruct but to warn the student; whilst the mere quotation of the author will be tantamount to putting him in the pillory. Thus, in page 418, speaking of what he calls "the pterygo-maxillary extremity" (of the cranium) Dr, Hilgard says*: "the fin or hand to this extremity we find in perfect likeness to a bat's hands, in the lake muscalounge (masque-allongée, Esox sp., length 5 feet). The interior ones, agglutinated to the nasal vertebra, constitute the *nasal bones* of the face; the stout second forms the *true maxillaries*, with teeth, like the nasal bones inclusive of sesamoids; the third, a finger of five bones, forms the infra-orbital osselets, in likeness of a cartilaginous *nostril-wing* surrounding the jawless orbit; the fourth is a long arcuate beam, with a terminal phalanx agglutinated, a *labial* forming the outer mask-bone of the upper jaw; and the fifth or thumb, a labial *stump*, as the thumb of bats and birds. The numbers of digital phalanges, as of cyclar elements, may vary among the different cyclar numbers." And in page 427 we have this profound utterance:—"The eye is the representative of the seed or focal cycle forming the centre and climax of floral as well as visceral cyclosis." Under the heading "Somatic Strata, Visceral Cycles, and Cryptogamæ," at page 424, we have the *cytosporous*, *aërifero-membranous*, *scatent*, *incrustate-cancellate*, and *spiral* elements, types, characters, and functions. To the first the following lucid passage applies:—"The *cytosporous* or cell-shedding pulverulent cycles' function—the fervid and vital, fermentative and effervescent action—we find largely and emphatically represented in the diffuse, cytogenetic, and, *par excellence*, eremacaustic fungine thallus, mouldy, pervasive, katalytic, chafing and consuming, under the form of fermentation, the noctilucent decay of wood, and of putrid decomposition. Like the central caloric of earth, it inhabits the *bulk* of substances. In animate organisms, we find its functions repeated in the (fermentatively) specific action of cellular contents, of the glands, olfactorio-intestinal crypts. the brains and ganglia, the fat and marrow. The nerves supplying organs once severed, says Reclam, the specific action of the glands becomes tempestuously paramount, producing heat and excitement; a proof of the inherency of bio-chemical action in the glands, while to the nerves, brains, and the ganglionic masses belong the specifically *bio-dynamic* energies. The antheral process of fructification in Aroids is known to produce considerable heat. The sudatory mucorine spores, like a moist dew, fore-fashion perspiration; their fermentative exhalation of carbonic acid gas, respiration," &c. The art of finding silly similitudes and aptless analogies can neither be advanced much further than the author pushes it, nor more flauntingly arrayed in sounding words than in this classico-technico-American garment of wordy nonsense. *Taylor's Annals of Natural History.* [Has Mr. Freke been studying Dr. Hilgard?]

* The *italics* are the author's own.

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c.—Young plants of Allamandas, Clerodendrons, Torenias, &c., and many other things, if encouraged with a little bottom heat and other favourable circumstances, will form nice sized specimens in a few months, and large masses of Statices, than which few plants are more useful, will, under kind treatment, be obtained in a short time. The showy Impatiens Jerdoniæ should also be encouraged by every possible means to make wood, and let it be propagated as quickly and freely as possible, for it is just the plant that is wanted for autumn decoration. The pretty dwarf Heliotropium Voltaireanum will likewise be found useful for blooming under glass where sweet-scented flowers are in request. In fact, where the stock in hand is deficient, as it will be in many places after so severe a winter, not a day should now be lost in making every possible effort to provide considerably more than is likely to be wanted, so as to be prepared against any accident or extra demand, should such occur. Push on Camellias with gentle warmth and weak manure water. Also get a portion of Epacrises into gentle heat. By getting them to flower early, starting them into growth in good time, and getting their wood well ripened, they may be had in full blossom in November, at which season their flowers retain their beauty much longer than after the sun becomes powerful in spring. Proceed as diligently as possible with the repotting of such of the hard-wooded greenhouse plants as require it, so as to afford them every chance to make a vigorous start. Be careful, however, before potting to have the ball in a nice moist state, and avoid giving large shifts to weakly growers

FORCING DEPARTMENT.

PINERIES.—Attend carefully to the bottom heat, particularly where this is produced by fermenting materials, as tan, &c., and see that it is not allowed to rise too high, which it is exceedingly apt to do after fresh materials have been added, either during bright weather, or where there are pipes under the bed. Where much fire-heat is used it requires some practice and attention to be able to keep the soil in a proper state as regards moisture, but this must be effected at any expense of attention if success is to be insured. Maintain a thoroughly moist atmosphere, but do not push young stock too fast until we may be favoured with more sunshine, when if all is right at the roots there will be no danger of drawing the plants, as might be the case in the present state of the weather. Avoid allowing water to lodge in the hearts of plants showing fruit, and do not wet the flowers of those in bloom with the syringe. Pot off or plant out suckers as they can be obtained sufficiently strong, and attend to keeping up a regular succession, which is the surest way of providing the necessary amount of fruit.

VINERIES.—See that the houses in which the Vines have not yet started are properly cleaned, the Vines painted with the usual composition of soft soap, sulphur, &c., and everything put into proper working order; also get the rods bent in time to induce the buds to push regularly. Attend to disbudding and stopping, &c., as may be necessary in the succession houses, and see that the inside borders are kept properly moist, giving tepid manure-water as may be necessary to effect this, and do not be afraid of giving too much of this to Vines in pots, except such as already have ripe fruit on them.

FLOWER GARDEN AND SHRUBBERIES.

Look over all recently transplanted shrubs and trees for the purpose of ascertaining whether they are securely staked, for if allowed to roll about with the wind the tender roots are often broken off. Attend carefully to the stock of bedding plants, and get rooted cuttings potted off as soon as they are in a fit state for that purpose, and encourage them with a gentle bottom-heat and careful management to make quick growth, for after this season there is no time to be lost with young stock. Calceolarias, if well established, may be planted out next month, should the weather be favourable, in a turf pit on poor sandy soil where they can be protected from cold winds, but they must be prepared for this by previously inuring them to full exposure to sun and air, &c., whenever the weather will permit. Their place under glass can be profitably occupied with recently potted-off stuff, and with ordinary care they will do better planted out than stunted in small pots. Tender annuals must now receive attention. Heat is indispensable to the raising of these, though not necessary to flowering them; indeed, most of them would bloom more beautifully if planted out in June in a warm sheltered part of the garden, than if treated as greenhouse plants. Commence sowing this month, and continue till the end of April, in pans, placed close to the glass, in a temperature of from 60° to 65°, keeping the soil moist, and shading from bright sunshine. Great care must be exercised to prevent the plants from damping-off or getting "drawn" from want of air. As soon as they can be handled, prick off singly into small pots, or place three round the edge of a 4-inch pot, plunging them in a gentle heat till they can be safely trusted in the open borders, or they may be pricked out in rows in a spent hot-bed, shading carefully, and giving plenty of air when the weather will permit. To secure fine plants and a profusion of bloom it is of the greatest importance to sow early. Defer cutting in shrubs injured by the winter until it is clearly seen how far they have been killed back.

HARDY FRUIT AND KITCHEN GARDEN.

Orchard houses and glass cases should have air daily during sunshine, but close early if there is any appearance of frost. Finish pruning and nailing as soon as possible. Prepare stations for Cauliflowers and Lettuces that have been wintered under glass, selecting a sheltered deep rich piece of ground. It is a very good practice in planting out things that are at all tender at an uncertain season to throw up the ground in good strong ridges running east and west, planting on the south side of the ridge. The plants are thus sheltered from the north winds, and fully exposed to the sun. Take advantage of dry days to stir the surface of the ground among growing crops, and to prevent weeds from making their appearance.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON
For the Week ending Feb. 14, 1861, as observed at the Horticultural Gardens

February.		Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Mean	Of the Earth. 1 foot deep.	Of the Earth. 2 feet deep.	Wind	Rain.
Friday	8	28	[illegible]	[illegible]	48	37	42.5	44	41	S.E.	.02
Satur.	9	●	29.965	29.508	44	36	40.0	44	41	E.	.06
Sunday	10	1	30.207	30.151	45	22	33.5	44	41	N.E.	.00
Mon.	11	2	29.959	29.728	40	20	30.0	42	41	N.E.	.00
Tues.	12	3	29.643	29.530	39	24	31.5	41	40½	W.	.00
Wed.	13	4	29.938	29.556	41	20	30.5	40	39½	N.	.07
Thurs.	14	5	30.059	29.762	45	38	41.5	40	39¾	E.	.12
Average..			29.902	29.666	43.1	28.1	35.6	42.1	40.5		.29

Feb. 8—Rain, overcast, cloudy; showers.
— 9—Foggy; rain; boisterous, with rain at night.
— 10—Rain; overcast; cold and dry; frosty.
— 11—Slight fall of snow; heavy snow-shower at noon; clear and frosty.
— 12—Frosty; cloudy and cold; overcast; frosty at night; snow.
— 13—Hazy; foggy; clear and frosty at night.
— 14—Frosty; fine; overcast; heavy rain.
Mean temperature of the week, 2½ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Feb. 23, 1861.

February.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 17..	46.2	31.2	38.7	13	0.32 in.	3	5	3	3	3	7	6	[illegible]
Mon. 18..	44.4	30.8	37.6	13	0.30	5	3	4	1	4	8	4	[illegible]
Tues. 19..	44.6	30.9	37.7	12	0.64	6	2	5	4	1	9	[illegible]	[illegible]
Wed. 20..	45.1	30.5	37.8	18	0.51	2	4	3	5	1	9	[illegible]	[illegible]
Thurs. 21..	46.3	31.9	39.1	16	0.21	3	7	4	5	0	9	6	[illegible]
Friday 22..	45.9	32.0	38.9	15	0.29	4	4	8	—	3	9	5	[illegible]
Satur. 23	46.9	31.2	39.0	12	0.44	4	3	6	2	1	10	6	[illegible]

The highest temperature during the above period occurred on the 21st, 1846 and 1859, and 23d, 1846—therm. 58 deg.; and the lowest on the 17th, 1855—therm. 2 deg.

Notices to Correspondents.

BOOKS: *Amateur.* Sim's Catalogue, Williams on Orchids, Standish's Hints on Planting Ornamental Trees, Barron's British Winter Garden.

CHAIR MAKERS: *Constant Reader.* Mr. Appleby, of Dorking, says that Mr. Glenister is one of the largest chair manufacturers of High Wycombe; and "Woodcock" recommends the same maker, who, he believes, manufactures for the Crystal Palace.

CUCUMBER: *J C H.* Cooks and footmen, if particularly ignorant persons, sound this word Cowcumber; but nobody else, unless indeed kitchen maids and grooms may have learnt it of the servants above them.

HALF DEAD PLANTS: *Hortulan.* If you wish to kill them outright you will act as you propose. Let them alone till the season is further advanced, hard frosts are over, and buds begin to swell. Manure Deodars! Pray don't.

HOW BEST TO PRESERVE DRIED PLANTS FROM INSECTS: *M H B.* Wash them or rather paint them with a very weak solution of corrosive sublimate in spirits of wine, laid on with a large camel's hair pencil.

MONRO'S CANNON BOILER: We have received a letter from Mr. Jones, of Bankside, in which he disputes Mr. Carter's assertion that the Cannon Boiler has undergone many alterations and improvements, and that there are no means of removing the sediment from the underneath part of the boiler. We cannot open our columns to disputes of this kind, although in justice to Mr. Jones we insert his denial of Mr. Carter's statement.

NAMES OF PLANTS: *Rosary.* It seems to be a leaf of Senecio Mikaniæ. — *E A.* 1, Selaginella pubescens; 2, Asplenium Fabianum; 3, Pteris aquilina; 4, Asplenium flaccidum, variety.

ARTIFICIAL MANURES, &c. — Manufacturers and others engaged in making ARTIFICIAL MANURES may obtain every necessary instruction for their economical and efficient preparation, by applying to J. C. Nesbit, F.G.S., &c., Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, Coprolites, &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch. Gentlemen desirous of receiving instruction in Chemical Analyses and Assaying, will find ample facility and accommodation at the College.

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They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate, to be obtained entirely from Bones.

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LAWES'S MANURES.
The Manures manufactured by J. B. Lawes for the present season of 1861, are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, and BONE SUPERPHOSPHATE OF LIME	£6 6
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These Manures can be obtained of Mr. Lawes, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.

Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.

American and other Cakes at market prices.

Address John Bennet Lawes, 1, Adelaide Place, London Bridge, E. C.; and Liffey Buildings, Eden Quay, Dublin.

Established 1812.
MANURES.
MESSRS. PROCTOR invite the attention of their Agricultural Friends to their SPECIAL MANURES for 1861, prepared for Grass, Corn, and Root Crops. These Manures, which are the best and cheapest offered to the Agriculturist, are now ready for delivery, and early orders are respectfully solicited. Price List, with particulars as to quantity and best mode of using the Manures, sent free on application to H. & T. Proctor, Cathay, Bristol; or Proctor & Ryland, Birmingham and Chester, Agricultural Chemists, and Original Manufacturers of Special Manures.

BURNARD, LACK, and CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.

CONCENTRATED TURNIP MANURE, equal in value to the preceding.

Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."

Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to Burnard, Lack, & Co., Sutton Road, Plymouth.

LOOK to your GRASS LANDS and DOUBLE YOUR CROPS by dressing them with PULVERIZED BONES, to be had only of JARED TERRETT HUNT, Lambeth Wharf, Lambeth, S., and Downham Market, Norfolk. 5 cwt. sufficient for an acre, and the present the time for dressing. Prepared bones for Vine borders and fruit trees. Half-inch bones, bone dust, superphosphate of lime, gypsum, guano, and all other artificials of guaranteed quality.

ECONOMY OF CORN FOR HORSE & CATTLE FEEDING.
E. R. and F. Turner, Ipswich, submit the prices of their celebrated CRUSHING MILLS for Oats, Linseed, Barley, Malt, &c. They save 25 per cent. of Oats in feeding horses; crush Corn for Pigs and Cattle, rendering it as efficacious as if ground to meal; reduce Linseed to fine meal with no loss of its oil, and bruise Malt perfectly.

		£	s.	d.
No. 11 Mill (recommended also for bruising corn for fowls)		8	15	0
No. 6 Mill for hand, £4 15, or with Bean Mill	(No. 6 B)	5	15	6
No. 7 ,, ,, 6 10 ,,	(No. 7 B)	8	8	0
No. 2 ,, ,, or power 8 0 ,,	(No. 2 B)	10	10	0
No. 1 ,, for power .. 12 0 ,,	(No. 1 B)	15	0	0
No. 8 ,, for steam pow. 18 18 ,,	(No. 8 B)	24	0	0

Delivery free to all Railway Stations in England, and to the principal ports of Scotland and Ireland.

At the R.A.S.E. Canterbury Show, 1860, E. R. & F. T. were awarded the prize of 5*l.* for the best Crushing Mill for Power; the prize of 2*l.* for their Crushing Mill for Hand.

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BURGESS and KEY, 95, Newgate St., E.C., London, being the Wholesale and Retail Agents for these celebrated TOOLS have always a large Stock on hand from which their Customers may select what they may require.

ANTHONY'S PATENT AMERICAN CHURN.—The FIRST PRIZE was again awarded to this Churn in Competition with several others at the Chester Meeting of the Royal Agricultural Society; it has obtained the First Prize given by the Society at every Meeting since 1850. Messrs. Burgess & Key, 95, Newgate Street, E.C., strongly recommend it as the most perfect Churn now in use. Full particulars sent on application.

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BURGESS and KEY, 95, Newgate Street, E.C. PRIZEHOLDERS for the best Agricultural Machinery Manufactured.

ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with Burgess & Key's Screw Delivery Platform. Price 42*l.* 10*s.*

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COMBINED REAPER and MOWER—Two-Horse Machine. Price 35*l.*

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These Prices include Packing and Delivering at any Railway Station.

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A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following from

Mr. James Arnot, *of Woodcote, Carshalton.*

"Having used your Machine for four years, I would not be without one on any consideration; and I can safely say that I have saved over 50 per cent. in the expense every year I have used it. In fact I have never yet seen an implement which pays itself in so short a time."

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Under this Company's Act Landowners may effect the following Improvements on their Estates, and charge the Outlay and expenses thereon, by way of Rent charge, to be paid by Half-yearly Instalments, viz.:—

I. All works of Drainage, Irrigation, and Embankment.
II. The erection of Farm Houses, Cottages for Agricultural Labourers, and all kinds of Farm buildings.
III. The construction of Roads.
IV. The Grubbing and clearing of old Woodlands, Enclosing, Fencing, and Reclaiming Land.

The Landowners by whom any of these Improvements may be executed, are—Tenants for Life, Trustees, Mortgagees in Possession, Guardians, Committees of Incompetent Persons, Married Women, Beneficial Lessees for Lives or for a term exceeding 14 years, Corporations, Ecclesiastical or Municipal, Incumbents, Sequestrators, Charitable Trustees, &c.

The owners of Estates, not entailed, who may be desirous to avoid the expense or inconvenience of a Legal Mortgage, may also charge their Estates with Improvements under the simple and inexpensive process of the Company's Act.

The term of years for the Rent Charge is fixed by the Landowner, so as to adapt the amount of annual payment to the circumstances of the Tenants, the term for Building Works being limited to 31 years, but for all other Improvements being capable of extension to 50 years.

No investigation of Title being required, and the Company not being affected by Incumbrances, no legal expenses are incurred.

The arrangements for effecting Improvements are threefold—

No. I. The Works may be designed and executed entirely by the Landowner's Agent, and the Company employed only to supply the Loan and conduct the matter through all the forms for charging the outlay on the Estate.

No. II. The Company will supply Plans, Specifications, and Estimates for any Improvement to be executed by the Landowner's Agent, as under No. I.

In each of these cases the Landowner will be solely under the control of the Inclosure Commissioners.

No. III. The Company will undertake the entire responsibility of the Improvement, prepare the Plans, execute the Works, and finally charge on the Estate the actual amount expended with their Commission thereon approved by the Inclosure Commissioners.

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Works of Drainage and other Improvements are also executed on Commission for Landowners who merely require the skill and experience of the Company's Officers and a Staff in constant practice.

Applications to be addressed to William Clifford, the Secretary, 52, Parliament Street, London, S.W.

THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
To Landowners, the Clergy, Estate Agents, Surveyors, &c. in England and Wales and in Scotland.

The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.

For further information, and for forms of application, apply to the Honourable William Napier, Managing Director, 2, Old Palace Yard, Westminster, S.W.

COLLEGE of AGRICULTURE and CHEMISTRY, and of PRACTICAL and GENERAL SCIENCE, 37 and 38, Lower Kennington Lane, Kennington, London, S.
Principal—J. C. Nesbit, F.G.S., F.C.S., &c.

The system of studies pursued in the College comprises every branch requisite to prepare youth for the pursuits of Agriculture, Engineering, Mining, Manufactures, and the Arts; for the Naval and Military Services, and for the Universities.

Analyses and Assays of every description are promptly and accurately executed at the College. The terms and other particulars may be had on application to the Principal.

EDUCATION.—Lieutenant C. Freytag, residing on a Dairy Farm at Quickborn, Holstein, desires to take into his family a limited number of young English Gentlemen, for the study of the German Language, Agriculture (Practical and Theoretical), and Natural History in connection with Agriculture. Terms 60*l.* per annum.—Address Lieut. C. Freytag, Kaufmann A. Meyer, Yungbaus Market, Hamburg.

ROYAL AGRICULTURAL COLLEGE, CIRENCESTER.—Dr. Voelcker, Consulting Chemist to the Royal Agricultural Society of England, has a VACANCY for a HOUSE PUPIL.

AGRICULTURAL BENEVOLENT INSTITUTION.—Instituted 1860.
For the RELIEF of DECAYED FARMERS, their WIDOWS, and ORPHANS.
President—His Grace The Duke of Richmond.
Treasurer—Col. the Hon. A. N. Hood.
FIRST ELECTION OF PENSIONERS.

A GENERAL COURT will be held on THURSDAY, May 2, for the purpose of ELECTING TWENTY OUT-DOOR PENSIONERS, as follows:—

9 Male Pensioners	at £26 per annum each	
3 Married Pensioners	£40 ,,	,,
5 Widow Pensioners	£20 ,,	,,

Subscriptions and Donations will be thankfully received by the Secretary, Mr. Charles Shaw, at the Office of the Institution, 55, Charing Cross, S.W.; and at the Bankers, Messrs. Drummonds, 49, Charing Cross, S.W.

AGRICULTURAL BENEVOLENT INSTITUTION.—ELECTION OF PENSIONERS.
CANDIDATES are hereby instructed to return their FORMS of APPLICATION, properly filled up, to the Secretary, Mr. Charles Shaw, 55, Charing Cross, S.W., on or before MONDAY, the 18th of February.—By Order of the Council.

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Offices: 109, FENCHURCH STREET. Manufactory: PLAISTOW MARSHES, ESSEX.

The Agricultural Gazette.

SATURDAY, FEBRUARY 16, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

Tuesday,	Feb. 19	—Kingscote (Mr Price on Ox Labour).
Wednesday,	— 20	Agri. Society of England .. Noon Hungerford, ... 4 P.M. (On Reaping Machines). Blandford.
Friday,	— 22	Inverness. Caithness.
Monday,	— 25	Framlingham .. .. .. 6 P.M. (Mr. Doggett on Steam Culture).
Wednesday,	— 27	—Agri. Society of England .. Noon
Thursday,	— 28	—Agri Society of Ireland.
Saturday,	March 2	—Hexham (on Stable Management).

Three lines in last week's report of the Council Meeting of the English Agricultural Society appear to us of greater importance than all the rest of it together. "The Leeds local committee, in a letter dated Feb. 2, had stated their inability to provide the land required for steam cultivators in April except at an excessive cost." We hope that this does not intimate a final abandonment of the attempt, which we presume that they have made. It is of great importance that steam cultivation should receive a full and satisfactory test before efficient judges, over extent enough, and during time enough to insure a useful report upon the rival schemes.

Such a trial cannot be made in July, not only because land then cannot be had for the trial unless it be retained for it at great cost throughout the year, but also because generally at that time land is not in good condition for tillage operations, in which the trial consists. In April, however, these operations would not only be in proper sea-

son, and on soil in the right state for them, but they would, for the most part, be for the good of the current crop; and therefore, excepting the case of sward of any kind, which, if to be broken up, would have been turned over earlier in the year, land should then be had for nothing.

It appears however that the Leeds Committee cannot provide such land, and Mr. BRADY NICHOLSON, one of the committee, got into hot water the other day at Wakefield (see another page) by suggesting at the Farmers' Club meeting that the agriculturists of that neighbourhood might perhaps be able to help them out of their difficulty. This, still smarting under the rejection, by the Council of the Royal Agricultural Society, of their town, where it seems everything of this kind could have been easily procured, the agriculturists present indignantly refused to do. Nevertheless it appears to us that there is no reason in the fact of the annual meeting of the Society being held at Leeds, why the trial of steam ploughs should *not be held near Wakefield*, or indeed any where in the great county of York, wherever land and other suitable circumstances can be had. The trial will not attract a multitude of spectators; Judges, engineers, and good reporters are alone needed to enable the Agricultural Society to do its duty in the matter to its members and to agriculture generally; and the general body of spectators can be otherwise sufficiently instructed by an exhibition on a smaller scale near Leeds during the show week in July.

We hope that the difficulties in the way at Leeds, which may not exist elsewhere, will not hinder the local committee from proceeding with their task—which is also their duty—the work of providing for a sufficient trial of steam ploughs and cultivators somewhere in Yorkshire during April.

MANY years ago the Farmers' Clubs of this country were more numerous and more vigorous than they are at present. Besides their social and their strictly professional usefulness, the political services then expected from them by the more energetic section of their membership tended to preserve them. But, independently of this, they were then, and always have been, of use to agriculture as the organs of trustworthy publication in their several localities—so that through them the failures and successes of agricultural enterprise, discovery, and invention, at once became known where they would not otherwise have penetrated. When, however, the political interest which at one time attached to all associations or machinery of associations among agriculturists for whatever purpose organised died out, then Farmers' Clubs died out also in great numbers.

In 1845 we published a list of 150 subjects for discussion before Farmers' Clubs, and distributed them to all the secretaries of societies, then numbered by the 100, whose addresses, we could obtain. In a very few years afterwards, in a paper on the "Natural History of the Farmers' Club," we called attention to their extremely various periods of existence—the energy, activity, and longevity of some, the short-lived uselessness of others. Throughout the years which have since elapsed, all the more important discussions which have taken place before these clubs have been published in our columns, and from this section only of the contents of our volumes, easily accessible by their indices, a complete "Body of Agriculture" might be compiled. However various their career, upon the whole they have been of immense service to the progress and improvement of farm practice in this country.

And for such services we have still to thank them. We have before us now the reports of many of our most active Farmers' Clubs for the year just past, and their programmes for the year to come. Instead of offering for their acceptance a further list of agricultural subjects still needing discussion and elucidation, let us by the publication of them here enable them to assist each other by an enumeration of some of the subjects which they have severally thought deserving of attention at their respective monthly meetings for 1861.

The Central Farmers' Club has just had a paper on Farm Progress read by Mr. MECHI; their ensuing subjects are—(1) Day *v.* Piece-work, (2) Sheep *v.* Bullocks as manufacturers of manure, (3) How to increase the production of meat, (4) The relations of the animal and vegetable kingdoms, (5) Under drainage, and (6) Parochial settlements—a sufficiently various admixture of the practical and the scientific—the general and particular—to ensure the edification and gratification of all tastes.

At the Newcastle Farmers' Club (1) Agricultural statistics, (2) Stable management, (3) Reaping and mowing machines, (4) Fences, (5) Weights and measures, (6) Leases, (7) Farm buildings, and (8) Autumn culture—are to be severally discussed at the monthly meetings for 1861.

The Framlingham Farmers' Club, who have just published their 21st report, and were engaged in the monthly discussion of agricultural topics when Mr. PUSEY wrote the introductory paper on English agriculture in the first volume of the English Agricultural Society's Journal, have issued the following programme for the 10 meetings of the current year:—(1) Life assurance, (2) Cattle feeding, (3) Steam ploughing, (4) The future of agriculture, (5) The management of swine, (6) Atmospheric electricity, (7) Stable management, (8) Straw, its uses; (9), Labour, (10) The assurance of crops and stock.

The Hexham Farmers' Club have just discussed the education of farmers' sons, having heard a capital paper on the subject read by the Rev. C. BIRD, which we shall give in another page; and they are further to consider (2) The advantages of good farming, (3) The management of Grass land, and (4) Meteorology, when we hope that an exposure will be made of the arrant nonsense which is allowed to circulate amongst agricultural readers in connection with the speculations of so-called astro-meteorologists.

The Kingscote (Gloucestershire) Farmers' Club, a newly established society, have selected the following subjects for discussion at their several monthly meetings:—(1) High, moderate, and indifferent farming, (2) Grazing and dairying, of which the opening paper will be found elsewhere, (3) Wheat culture, also partly reported in another column, (4) Ox labour, (5) Uses of scientific knowledge, (6) Comparison of horse and steam power.

The Wirral Agricultural Improvement Society, a most useful and energetic farmers' club, discuss (1) Lincolnshire farming, (2) Spring work, (3) The farm implements of the locality, (4) The agriculture of the neighbourhood, (5) Grass land manuring, (6) Influence of prices, (7) Stock feeding. This association adopts the useful practice of discussing at its meetings the papers which appear in the Agricultural Society's Journal—an example which may be generally followed with advantage.

The Blandford Farmers' Club have selected the following list of subjects for discussion:—(1) Treatment of lambs, (2) Manufactured foods for stock, (3) Relation of landlord, tenant, and labourer, (4) Agricultural Chemistry, (5) Nutritive value of roots, (6) Agricultural tenures, (7) Accommodation for stock. No. 2 will, we presume, include the policy of employing expensive "condimental" compounds, to use a barbarism which advertisers are trying to force into general adoption. No. 3 is to be introduced by the Rev. Lord S. G. OSBORNE.

We could of course pursue this subject much further, and it would be possible to name local institutions of this kind dating from an earlier period than any of the well-known provincial or national societies—still pursuing their course of quiet, unobtrusive usefulness—many too, of more recent formation, whose activity promises an equally beneficial career. It must, however, suffice for the present to have illustrated the fact, as we believe it to be, that the Farmers' Clubs of this country are after all the most influential agricultural organisation we possess, and that whatever the splendour, and we might almost say the clamour of the annual show and utterance of our great national society, it does not exert the perpetual, uniform, and general influence for good which we owe to humbler local organization.

—— AT a meeting of the Redhill and Reigate Cottage Improvement Society the other day, the report of their directors declared their invested capital to be 6450*l.*, and the income to be 400*l.* a year. A dividend of 5*l.* per cent. was adopted, and there remained a sum of 34*l.* to be carried to the reserve fund, which now amounts to 100*l.* The loss from empty houses has been 17*s.*, and from bad debts 9*s.*, making the whole loss to the Society during the past year 1*l.* 6*s.* The Chairman, G. LYALL, Esq., M.P., offered his congratulations on the satisfactory state of the Society's affairs. Their objects are twofold; 1st, the local benefit of the neighbourhood, and 2nd, to act as example for the encouragement of similar efforts in other localities, and both of these objects are in process of attainment. We gather from the proceedings that the "cottages" it builds and improves are not the cheap tenements which alone an agricultural labourer can afford, but homes adopted for men in receipt of at least a guinea per week as wages. This makes the profitableness of their invest[ment] … valuable or instructive to us, though of … instance of successful effort in the … improving cottage accommodation is …

THE discussion which succeeded Mr. … MECHI's paper on the future of agricu[lture] last week before the Central Farmer[s' Club] turned mainly, as was to have been exp[ected, on] the prospects of steam cultivation— … influences were however also enum[erated] tending to agricultural improvement.

Lord BERNERS spoke of the present … parochial settlements as a great injury … man; intimating the opinion, forced upon … experience, that the practice of each par[ish] landowner (in the case of close parishes) … merely after its own people without reg[ard to the] public good, had been productive of ev[il] … running counter to it he had resolved … utmost to secure an extension of the … rating. His lordship also referred to the … of the four-field course of cropping to the ex… circumstances of English agriculture.

Mr. BAILEY DENTON, on the subject of … Drainage, referred to the lamentable fa[ct] … most recent legal decision was a discourag[ement to] land drainers, inasmuch as it declared … man could extract underground water … land if it could be fairly assumed to be … from a higher to a lower level through it.

Mr. SHACKEL, of Erleigh Court, Reading … of the increasing expenses of farm mana[gement]. Labour is more costly—purchased foods … tilisers are an increasing charge—county … becoming heavy.

"His cultivation was increasing, and he … must endeavour to make up for a deficiency … by having recourse to steam and to improved … It was useless for farmers to sit still and … provements: they must endeavour to bring … able improvement into practical operation. He … that steam ploughs would one day be almost … threshing machines were at present; and … highly desirable that landlords and wealthy … turn their attention to the introduction of steam … on their farms, as Mr. Benyon, the member for … done in that county. He was quite sure that … improved implements, steam machinery, and … manures that they must look, to enable th[em] … their future expenses, and obtain a fair …

Mr. NOCKOLD, of Stansted, said:—

"Mr. MECHI had reminded them that, if … have a greater command of machinery and … they must endeavour to promote education … gence among labourers, and there must be … ment in labourers' cottages. To this he … that homesteads must be better adapted … requirements, and there must be proper … sheltering machinery—there was great … provement in that respect. Even the … homesteads were no longer applicable to the … agriculture."

Mr. COLEMAN, of the Park Farm, … believed, now that the favourable exp[erience of] tenant farmers on the subject of steam … was being made known, that it … rapidly into operation.

"Tenant-farmers would pay more at[tention to the] words of one of their own class than to … landlords. In such matters they ought … and to communicate with each other. A … a system of drilling Turnips with liquid … placed before agriculturists. He procur[ed a] manure drill, and, rather unthinkingly, … with it; the result of which was that he … 40 acres of Turnips. A neighbour of his … told him that if he had consulted him, he … saved him from that loss, having spoilt … Turnips in the same way in the previous year … the greatest obstacles to the improvement … was, that men who lived close to each other … perhaps, to expose their own ignorance, kept … rience too much to themselves. It was a pec[uliar advan]tage of that Club that it tended to remove …

Mr. SANDERSON, of Westminster, spoke … drained, unlimed, ill-fenced condition of … of acres in Great Britain, as indicating … field still open for agricultural improve[ment] … the general absence of leases was a barrier … The system of yearly tenancy was … to the interests of the landowner, … energy of the tenant, and locked up the … of the soil; and the future of British … depended very much indeed upon the … of leases.

The Chairman, Mr. SKELTON, in reply … remark, said that Mr. PUSEY, and Mr. … the United States, came to the conclu[sion that] North Lincolnshire was better cultivated …

…tions. Now, in North Lincolnshire farmers had no leases, and had never asked for any.

Alderman MECHI in reply said, "Nothing that had fallen from any of the speakers that evening had shaken his opinion, that in view of the future they must use more steam, invest more capital, maintain covered yards, plough deep, and have greater security of tenure."

It is plain from the above short abstract of the discussion, that it followed the example of the paper which preceded it, and, embracing a multitude of unconnected topics, did little more than name them.

THE EASY TRANSFER OF LAND.

To the Editor of the Agricultural Gazette.

Sir,—This is said to be emphatically the age of detraction. I will never believe it; but let us guard at all events against one thing,—that it be not the age that withholds what is due. Let not genius go unacknowledged, but, for the general good, as a matter of mere policy, let us, in the great battle we have to wage with the hardships of the farm, give a knee to the man of energy and talent, who sees where to plant his blows, and back him up with kinds words at least.

What, at this moment, do we look for with the greatest hope to benefit landlord and tenant? We look for the easy and cheap transfer of land; which is coming at last; and to steam; which has come already. And, to whose far-seeing efforts, year after year, for years, do we greatly owe both, but to the talent which so long enriched and enlivened your pages; and which sometimes even yet sparkles at intervals alas too wide. Let us give honour where honour is due. It is a debt we owe Talpa, and it is right we should pay it. Your faithful servant,

Feb. 12, 1861. TULLIUS FABRICIUS.

THE AGRICULTURAL LABOURER.

No. III. WEXFORD, &c.—Forty years ago the late Sydney Smith wrote thus from Somersetshire:—"The wretchedness of the poor in this part of the country is very afflicting; the men are working for 1s. a day; and if a man have only three children he receives no relief from the parish, so that five human beings are supported for little more than 10*d.* a day. I should not be surprised if a plague in the shape of typhus fever broke out here." The wages of agricultural labourers in the part of England to which the letter referred are now nearly double the amount paid at that period; and a corresponding rise has been established throughout Great Britain. The general scale may be inferred from the tabulated returns to each arranged in the *Agricultural Gazette*, April 28, 1860, for exhibiting the value of agricultural labour in 36 English, 12 Scotch, and 21 Irish counties. Notwithstanding the undoubted progression of Ireland in husbandry, I fear that on the average of her 32 counties, and not estimating the remuneration of labour in harvest time, the rate of wages is under 6*s.* a week throughout the year, and that "there are often five human beings supported for little more than 10*d.* a day," frequently a larger family. It need hardly be observed here, that there never has been given in Ireland to the parents of more than "three children," the extra allowance which was given in England when Mr. Smith wrote.

I have selected six counties in each of the three divisions of the United Kingdom as fair illustrations of the relative means of subsistence, cottage accommodation, and extent of poor law relief given to labourers in sickness, old age, or destitution from any cause. But as the strongest analogies in social and physical circumstances exist between the Scotch and Irish agricultural communities, the following statements will principally refer to them, my desire being to present as faithful a detail as the tabular columns in the *Agricultural Gazette*, the official reports of Poor Law Commissioners, and my own experience may supply. I have endeavoured to arrange for comparisons those counties which present the closest affinities in size, population, intrinsic resources and geographical positions—as to inland and maritime boundaries. If I were labouring to exaggerate the features of poverty in the portraiture of the Irish labourer, placed in contrast to that of the British labourer, I should select only those British counties in which the highest wages are paid, and where work-people possess corresponding comforts. And I should also present the columns of the high wages and perquisites of British shepherds and ploughmen. I have not done so; nor have I estimated the earnings of women, as these do not affect the general subject in a considerable degree:—

Column A shows the area in Statute Acres; B, the population according to Census of 1851; C and D, the ordinary and harvest Weekly Wages of Common Male Labourers; E and F, the Yearly Rent of Cottages and Number of Rooms.

COUNTIES.	A.	B.	C.	D.	E.	F.	Amount assessed to the poor in 1859.	Number relieved in 1859.
SCOTLAND.			s. d.				£	
Aberdeenshire	1,260,625	222,052	12 0	15*s.*, with board	10*s.* to 30*s.*	2 to 3	43,351	12,205
Inverness	2,723,501	96,400	12 0	15*s.*	51*s.*	2 to 3	22,368	5,832
[illegible]	650,156	189,586	13 0	22*s.*	60*s.*	2 to 3	37,006	21,759
[illegible]	568,750	191,264	13 0	21*s.* 9*d.*	50*s.*	3	33,646	11,181
Roxburgh	460,938	51,642	12 0	17*s.* 6*d.*	45*s.*	2 to 3	12,919	5,884
[illegible]	340,000	38,959	....	14*s.* 3*d.*, with diet	60*s.*	2 to 3	10,049	2,456
	6,003,970	780,253					159,030	57,916
ENGLAND.								
Lan…n	1,776,738	407,222	12 0	24*s.*	60*s.* to 80*s.*	3 to 4	105,400	18,903
Cumberland	1,001,273	195,492	15 0	15*s.*, with dinner	52*s.*	6?	34,298	9,074
W…	865,092	254,221	8 6	13*s.* with beer	40*s.* to 60*s.*	3 to 4	90,824	17,968
Hereford	534,823	115,489	9 6	14*s.* 9*d.*, with cider	4*l.* to 5*l.*	5	30,773	6,797
[illegible]	563,946	475,031	11 0	18*s.* with beer	50*s.* to 60*s.*	3 to 4	85,645	18,708
[illegible]	466,932	163,728	11 0	23*s.* with beer	5*l.* to 6*l.*	....	52,859	10,682
	5,208,804	1,611,188					399,801	82,032
IRELAND.								
[illegible]	1,846,333	649,071	6 7	13*s.* 6*d.*	40*s.*	2	42,546	11,206
Galway	1,566,354	321,831	5 0	9*s.*	40*s.* to 52*s.*	3	15,719	3,350
[illegible]	611,919	320,817	6 2	13*s.*	40*s.* to 52*s.*	2 to 3	12,194	3,088
[illegible]	579,899	140,750	7 0	18*s.*	40*s.* to 52*s.*	2 to 3	18,961	5,918
Limerick	680,842	289,136	7 0	16*s.*	20*s.* to 30*s.*	1 to 3	11,561	3,059
Kildare	418,436	95,686	7 0	18*s.*	60*s.*	1 to 3	10,124	2,441
	5,703,783	1,829,091					£105,907	29,059

(England figures: For the year 1858.)

From the foregoing columns it appears that the usual weekly wages is 12*s.* 4*d.* in Scotland, and a fraction over 6*s.* in Ireland. The rent of a cottage in Scotland is however higher than in Ireland, but in the latter country the quasi cottages are frequently but unfloored, ill-thatched and almost windowless hovels. I had the privilege of submitting last spring to the Agricultural Committee of the Royal Dublin Society, in answer to a circular form of queries regarding Irish husbandry and the labourers' condition, a few remarks on the latter subject, with a simple statistic table, exhibiting the amount of labourers' wages in my own district, on an area of about 10,000 statute acres of arable land in the county of Wexford. The amount corresponds with the average rate deducible from the tabulated returns in the *Agricultural Gazette*, viz., 5*s.* 11*d.* per week. A man with a family of young children, even if he be rent free, can barely subsist on 6*s.* a week. The cost of his weekly supply of Indian and inferior Wheat or Barley-meal or equivalents is from 5*s.* to 5*s.* 6*d.* per week: 6*d.* or less the surplus for purchasing milk, candles, salt, soap, and fuel. In numerous counties there is no bog—or very little of it—and the rural poor possessing no means for purchasing coals have no other fuel than a few furze faggots, the sticks which they may gather from hedge rows, or dried cowdung surreptiously taken, it may be, from farmers' fields. From the want of fuel to dry their clothes, when they return home in the evening wet to the skin, the labourers' liability to various ailments in early spring and winter is much greater than it would be if he could afford the comfort of a good fire; and "the danger of a plague in the shape of typhus fever" is always probable when the bodily wants are so prevalent. Besides the respectable and disinterested authority of the *Agricultural Gazette* which I have adduced for ascertaining the average weekly earnings of the Irish labourer, I shall refer to official reports for corroboration of my statement as to the Irish labourer's income and expenditure. Mr. Hamilton, the Poor-law Inspector for the counties of Donegal, Cavan, Fermanagh, Londonderry, and Tyrone, reports (for last year) thus:—"The average cost for maintenance outside the house is about 1*s.* per week for each member of the family." Mr. Bourke's report concludes thus:—"A glance at these returns will suffice to show that with wages not exceeding 6*s.* per week a labourer has no easy task in providing food, lodging, fuel, and clothing for his family. Indeed, it is difficult to see how, without some additional resource, he can procure all the necessaries of life even of the commonest kind."

But there is a large proportion of labourers' families without more than 3*s.* per week. In the lists which I forwarded to the Royal Dublin Society of the families in two parishes comprising 4389 acres (as illustrations of the average condition of labourers over a much larger area), there are 85 heads of families, and of these 41 receive but 3*s.* a week; these men, being dieted by their employers, are individually better circumstanced than those who receive 6*s.* a week without diet; but excepting three of the former class who have each a son labouring with his father under the same employer, and three others who occupy 2 acres of moor land each, the wives and children, with only the pittance of 3*s.* a week, cannot afford to provide more than two meals in the day without some contingent advantages—such as occasional employment, and the sale of a few fowls and eggs. But the men who work for 6*d.* a day and diet must feed at home on Sundays and on eight holidays (which are rigidly kept by the Roman Catholics, who constitute a vast majority of the labourers in three of the provinces)—and whenever they may be unable to perform their day's work. It would be impossible for people under such circumstances, without extra pay in harvest, to provide clothing even of the most scanty measurement and poorest quality. Boys and girls as they grow up usually become servants in farmers' families, and with wages better in proportion than the earnings of their parents at home they can clothe themselves sufficiently—but they expend upon themselves, generally, whatever sums they receive.

These are facts—such is the poverty of the Irish labourer throughout extensive districts without resident proprietors or liberal employers, or any very generous donors of clothing, blankets, coals, meat, &c., at the blessed but cold season of Christmas. The bright spots are too few to illuminate the great expanse of gloom.

In the six Scotch compared in the table with the six Irish counties the sum of 159,339*l.* was assessed in the last year for the relief of the poor, of whom 57,316 received aid; whereas the sum assessed in the six Irish counties in the same year was 105,907*l.* for the relief of 29,059 paupers. [The average ratio of Scotch poor in receipt of daily relief throughout the kingdom is 4 per cent.; that of the Irish poor somewhat less than 1 per cent.] Looking at the relative rates of wages in the two countries, we may feel surprised at the much greater amount of recorded pauperism in Scotland; but a slight investigation will show that the real pauperism of Ireland is far greater than its apparent amount, which is estimated by tests and bases different from those adopted for the administration of the far more humane and liberal poor law system of Scotland.

Our political economists, instead of congratulating Ireland on the great decrease of pauperism and a diminution of 43,466*l.* in the expenditure, would in my judgment act more consistently with the facts of the case and the requirements of the poor by increasing the amount of expenditure and commiserating the condition of the now unaided portion of the labouring class whose necessities I am now endeavouring to demonstrate.

Hitherto the extent of pauperism in Ireland has been measured (with few exceptive cases) since the full organisation of her poor law system, by the number of paupers in the workhouses, who are 29-30ths of those relieved; in Scotland 19-20ths, and in England 6-7ths of the cases are relieved out of the workhouses. This is a striking fact, which no disparities in the respective countries can justify. In the county of Cork, 5 out of 11,203 paupers; in Limerick, 5 out of 3059; in Galway, 22 out of 3350 received out-door relief in the last year; but Meath, Kildare, and Down show more satisfactory returns in this respect. The following cases are special subjects for commiseration. The aged labourer and his wife, who have outlived their working powers and become decrepit from long-continued toil and the weight of years, and who would be thankful for a small weekly allowance less than what would be the cost of their maintenance in a workhouse, are compelled in Ireland alone to choose between the discipline of the house with separation from each other, and the danger of starvation in their own home, unless private benevolence, precarious, scanty, and soon exhausted, be exercised in their behalf. The Poor-law Act does not preclude guardians from relieving them by out-door relief. The widowed mother of young children in vain pleads her state of destitution, unless she will abandon her home, and exchange liberty of action for confinement in a workhouse, separated from her children too, and exposed to association with the mothers of illegitimate children and worse characters it may be; unless she will accept in-door support no relief will be granted to her. There are widows whom nothing short of force could compel to enter the workhouse under conditions so painful to their maternal feelings and their self-respect as women of unimpeached reputation. But is the law to blame in this case? The Poor-law Act, 1 & 2 Vict., c. 56, gives to guardians the power of relieving "destitute poor widows having two or more legitimate children dependent upon them—either in the workhouse or out of the workhouse, as to them shall seem expedient in

each individual case." Thus, the law takes this class of poor into humane consideration. Guardians, however, too generally think it inexpedient to act upon this permissive clause, and a morbid dread of excessive pressure on property by increased rates, if the rigid workhouse test were relaxed, nullifies the mild principle which breathes in the legal clause just quoted. Hoping that a more generous spirit will arise to influence the dispensers of relief funds, I shall not express any desire that the indulgences which appear to me legal, just, charitable, and expedient, should be made obligatory on guardians in whom there must be vested authority sufficient to resist unreasonable demands, and in all practicable yet humane ways to nduce self exertion and industry. *Martin Doyle.*

GRAZING VERSUS DAIRY FARMING.

THE chief end of all business is, of course, the acquisition of profit, and it matters not, whether we are farmers or tradesmen, if we wish to succeed in our undertaking, we must have a thorough knowledge of our business, sufficient capital to carry it on, and a willingness to expend it in a liberal yet prudent manner; to this must be added great industry and perseverance. I need hardly say how important it is, in purchasing stock, to select animals most suitable to soil and situation, providing shelter for them, and giving them careful attendance, and the best nourishment the land will produce. Whether our farms will pay us best as grazing or dairy farms, depends vastly upon its quality, but in the examples I am about to give, I take the average Grass lands of our own neighbourhood. Doubtless the very rich and fertile soils of some of the midland counties are best suited for grazing; whilst, on the other hand, much of the land of Gloucestershire, being of a lower quality, appears more adapted for dairy purposes. I will now proceed to give you my calculations of the cost and produce of three beasts, the first two being grazers of a higher and a lower quality, and the third an average dairy cow. I will begin with the better class grazer—

	£	s.	d.
Grazer bought the 1st February, at	14	17	0
Keep on hay, from 1st Feb. to 19th May, 14 weeks, at 4s.	2	16	0
At grass, from 9th May to 3d Oct., 21 weeks, at 4s.	4	4	0
Keep on hay, from 3d Oct. to 18th Dec., 11 weeks, at 2s.	1	2	0
Roots, &c., not produced on the land, but given during the last 11 weeks, at 8s.	4	8	0
Attendance	1	8	0
Risk from sickness or injury	1	5	0
Ten months' interest on first outlay	0	12	0
Making a total cost of	30	7	0
Sold the 18th December.			

We will now see what she will produce, which will be about as follows:

	£	s.	d.
We will call her 8½ cwt., at 70s. per cwt. ..	29	15	0
Allow for rough keep left on the land	1	0	0
And as she has been eating artificials, I reckon the manure made to be worth	1	0	0
	31	15	0
Deduct expenses	30	7	0
Leaving a net profit of	1	8	0

By these figures you see, I make a charge of 8s. per week for the last 11 weeks, for roots, meal, &c., not produced on the grazing lands; this I think only fair, in comparing her with a dairy cow, as by my system the latter does not consume artificials; on the other hand, I allow 1*l.* for the rough keep left on the land, as the animal is stall-fed from the 3d October. I also allow 1*l.* for the manure, as having been eating oil-cake, meal, &c., it must be of that value. Let us proceed to what I shall call a second class grazer:

	£	s.	d.
Grazer bought the 1st February for	9	0	0
Keep on hay, from 1st Feb. to 9th May, 14 weeks, at 4s.	2	16	0
At grass, from 9th May to 3d October, 21 weeks, at 3s.	3	3	0
Attendance	0	10	0
Risks from disease or death	0	10	0
Eight months' interest on first outlay, at 5 per cent.	0	6	0
	16	5	0
Sold the 3d Oct. call her 6 cwt., at 60s. ..	18	0	0
Allow for rough keep left on the land ..	0	10	0
	18	10	0
Deduct expenses	16	5	0
Leaving a net profit of	2	5	0

Or a balance of 17*s.* in favour of the animal entirely jed on Grass, and disposed of early. We now come to the dairy cow, costing 18*l.*, to calve the 1st March:

	£	s.	d.
One year's interest on 18*l.*, at 5 per cent. ..	0	18	0
Keep on hay, from 1st March to 10th May, 10 weeks, at 4	2	0	0
At grass, from 10th May to 1st November, 25 weeks, at 5s.	3	15	0
Keep on hay, from 1st to 29th November, 4 weeks, at 4s.	0	16	0
Ditto, from 29th November to 1st March, 13 weeks, at 2s.	1	6	0
Expense of attendance and dairy work ..	1	10	0
Wear and tear of dairy utensils	0	3	0
Loss on casualties and aged cows	1	10	0
Total expense	11	18	0

Let us now see what she produces:

	£	s.	d.
Calf sold at a fortnight old	1	5	0
3 cwt. of cheese at 60s. per cwt.	9	0	0
37 weeks' butter, at 2s. per week	3	14	0
Whey for pigs	1	0	0
	14	19	0
Deduct expenses	11	18	0
Leaving a net profit of	3	1	0

By these calculations the dairy cow appears the more profitable animal, and with this I perfectly agree, when the farm lies compactly, and the wife or daughters of the farmer are able and willing to manage the dairy; but when the fields are at a distance from the homestead, it may be prudent to try grazing, if the land be of sufficiently high quality for feeding purposes. On my own farm I have tried both systems, and am thoroughly convinced my dairy cows are per head a greater source of profit than my grazing beasts; and as I have before said, the acquisition of profit is the main object of all business, I decidedly think that object will be best obtained, on the majority of our vale farms, by keeping a useful pack of dairy cows, provided they are well cared for, and the dairy managed on the best principles. *Mr. Savage, at a late meeting of the Kingscote Farmers' Club.*

This paper was succeeded by a discussion which we abridge:—

Mr. Nicholls considered the quantity of cheese stated to be made per cow, and the value of the same, to be over the mark; he thought that in discussions of this kind statements should extend over a series of years, rather than be confined to any one particular season, and it must be well known to all present that prices this year are at the maximum, consequently not safe by which to make calculations.

Mr. J. Till said he thought Mr. Savage's statements, as regards the quantity and price of cheese, not at all extravagant; he was satisfied he had realised 3*l.* per cwt., taking the average of the last seven years. There were, however, one or two items with which he could not exactly agree In the first place, what Mr. S. termed a second-class grazer, realising 18*l.* the beginning of October, could not be bought in the preceding February for 9*l.* He thought 11*l.* nearer the mark. He was, however, decidedly of opinion the grazer might be maintained at less cost than the dairy cow; at the same time, he doubted if it would make so good a return. There was another item which he could not agree to, that of 2*s.* per week for maintaining a dairy cow at hay, when dry for 13 weeks, from November to March. He certainly could not keep his at that sum.

Mr. Harrison thought, from Mr. Savage's figures, the second-class grazer showed as good a return as the dairy cow, the grazer being on the farm only eight months instead of twelve, and if allowed the same extent of land, the Grass left must be worth more than 10*s.* Again, 40*s.* per ton was generally considered the consuming price of a ton of hay, and most people agreed that stock would not realise more than that sum for feeding it. If so, he believed it would be better to consume it in Grass, thus saving the expense (which was a heavy one) of haymaking. If three cwt. of cheese per cow per year was an average yield, he should say it was a small quantity, and went far to show what was often reiterated, that that progress in cheese-making and dairy-management had not taken place as in other branches of agriculture: he, however, thought the day not far distant when the art of chemistry would point out to us how to make a larger quantity and of better quality. He coincided with the opinion expressed by Mr. Till, that 2*s.* per week was not sufficient to maintain a dairy cow during the winter season, and believed it would add greatly to her profit to keep her better, and not allow her to be in idleness for so long a time as thirteen weeks. No doubt some of the land in what was termed the rich vale of Berkeley was of a poor description, consequently not calculated for grazing, and many of the farms were also small, whilst at the same time it was celebrated for its excellent cheese; under these circumstances he should rather advocate dairying, although in his opinion sufficient had not yet been advanced to show decidedly which of the two was the most profitable. He must admit he had rather increased his dairy stock, to the diminishing of his grazing. He however recommended the feeding of the turned off cows.

Mr. O. Long said he was of opinion that a greater number of grazing cattle than dairy cows could be maintained on a like quantity of land, and so far as his experience went, and the farm was at all adapted, he should recommend both systems to be followed, as it would in some measure relieve the tedious and expensive haymaking, as also the indoor drudgery attending a large dairy.

Mr. Thomas said he was aware it was generally considered that a dairy cow required three acres of land for her winter and summer keep. He could not himself think she wanted so much. He could name many instances where a cow was kept to every three acres, with two or three horses or colts, and a small flock of sheep on the farm into the bargain. This, he thought was often the case, without being at all taken into consideration; he doubted not, however, the dairy cow would consume more than either of the grazers Mr. Savage had mentioned, and had he allowed more than 1*l.* and 10*s.* in the respective cases he should not have found fault. The manure left by grazing cattle would be better than from dry cows. He was himself in favour of the dairy cow, as most suited to the locality and size of the farms, and for which by nature the soil seemed best adapted.

Mr. Savage, in reply, said with respect to the 2*s.* per week for hay, when the cow was not in milk, in his own case she was turned out by day into the rough pastures, for which perhaps he should have charged a little; but it must be borne in mind that 40*s.* per ton was considered a fair consuming price for hay, and that the cow at this time was kept on that of inferior quality. As to what he had stated a second class grazer could be bought in at, at the present time they could be purchased at a less sum, and he generally found one at about that price (9*l.*) pay better than those at a higher figure. Mr. S. then gave a statement of four which he purchased on the 1st of February last, and had just sold them for 29*l.* each, and on going into figures they showed a loss of nearly 4*l.* each. He did not mean to say this was always the case; but he certainly thought there was greater variation and more uncertainty as to the profit in grazing than in dairying, and was one reason why he was in favour of dairy farming.

Home Correspondence.

The Possibilities of Agriculture.—In a recent letter of Mr. Mechi's, it is stated that each of our population require 2 acres to supply all his wants. In the fourth number of the Royal Agricultural Society's Journal, published in 1840, there is an account of the mode of cultivating Stinchcombe Farm, consisting of 200 acres of arable land, showing the quantity of human food produced yearly on the farm and the number of families it will yearly maintain. A three-course system is adopted; first year 60 acres are in Turnips; 20 of these are first sown to Vetches, and after they are consumed by sheep on the land, it is sown to Swedes; 40 acres are planted to Potatoes after the Turnips, and 60 acres in Wheat after the Potatoes. It has been found that the 20 acres of Vetches are equal to the keep of five sheep per acre per annum, and that the 60 acres of Turnips are [illegible] the keep of eight sheep per acre for the same [illegible] these two crops therefore will be equal to ke[illegible] ewes, four lambs, and four tegs per acre; and [illegible] four fat sheep are sold and produce yearly 300 [illegible] mutton per acre, or 18,000 lbs. of mutton wh[illegible] Vetch and Turnip crop on this farm yearly produces. [illegible] Potato crop produced an average of 80 sacks of Po[illegible] per acre, of which 60 sacks were sold of excellent [illegible] quality, 12 sacks were given to the pigs, and [illegible] kept for seed. The 12 sacks per acre given to [illegible] 280 lbs. each are 3350 lbs. per acre, or 201,000 [illegible] Potatoes, and reckoning 30 lbs. of Potatoes to [illegible] 1 lb. of bacon, we shall have from the 60 acres [illegible] to Potatoes 6700 lbs. of bacon. The 60 sacks of [illegible] toes per acre sold as food for man make 3600 [illegible] 280 lbs. per sack, *i.e.* 1,008,000 lbs. of vegetable fo[illegible] the farm. The average produce from the 60 [illegible] Wheat is 27 bushels, which will produce 70 [illegible] bread per bushel, 1890 lbs. of bread per [illegible] 113,400 lbs. of bread from the 60 acres of Wh[illegible] yearly produce of Stinchcombe Farm of mutt[illegible] 18,000 lbs.; of bacon, 6700 lbs.; of anima[illegible] 24,700 lbs.; of bread, 113,400 lbs.; of Pot[illegible] 1,008,000 lbs.; or 123 lbs. of animal food per [illegible] 567 lbs. of bread, and 5040 lbs. of Potatoes per [illegible] The food produced from Stinchcombe Farm giv[illegible] supply of food per acre at the following rate per [illegible] 2¼ lbs. of animal food, 10 lbs. 4 oz. of bread, and [illegible] of Potatoes. Two such acres would provide food [illegible] for the members of one family of five persons, and th[illegible] acres of it will give food for 500 of our population [illegible] a quality and quantity as is at least equal to, if n[illegible] superior to, that of the labouring class of the co[illegible] If there were more farms cultivated after the p[illegible] Stinchcombe Farm it would be a great advantag[illegible] only to the farmer but also to the community. B[illegible] mode of farming 2 acres produce food for five [illegible] population per annum, instead of two acres be[illegible] quired to supply all the wants of one individual. *J.*[illegible]

Honour to whom Honour is Due.—We are some[illegible] told that the farmer is behind those of like positi[illegible] the commercial world, as respects taking a share [illegible] philanthropic or benevolent movements of the d[illegible] another time it is said that So-and-so is only a "[illegible] farmer," and that he stands no chance when comp[illegible] with a so-called "practical man." It is pleasant [illegible] meet with many instances completely disproving [illegible] assertions. I happened to come across a Peterboro[illegible] paper the other day, and on scanning its co[illegible] noticed in several places the name of one of your [illegible] correspondents—a man known as a practical [illegible] and a good writer as well. In one corner I ob[illegible] an important meeting of guardians—"*Mr. J. W*[illegible] occupied the chair." Again, at the meeting of the [illegible] provement Commissioners," we find Mr. Whit[illegible] chief advocate and spokesman in favour of the pu[illegible] of a "Recreation Ground" for the town. Some [illegible] weighty remarks fell from him:—"When they lo[illegible] (said he) to the numbers of the population, the [illegible] of the town, and the penal consequences of tresp[illegible] beyond the footpaths, they must see how desira[illegible] was to secure a piece of land for public recreation [illegible] was often compelled to ask persons what the[illegible] upon his land, and the answer he got was whe[illegible] we to go; you drive us out of the streets and [illegible] no field. A considerable space was required [illegible] the public wants, and with the addition propos[illegible] Stanley recreation ground would be none too la[illegible] could be obtained at a moderate rate, it was in [illegible] venient place, would improve the town, and add [illegible] health by allowing of the recreation of the inha[illegible] If the protesters were opposed to the measu[illegible] them appeal to the town, and if that was done a[illegible] truth stated, he believed the unfavourable imp[illegible] would be removed and the opposition withdrawn [illegible] another corner we find a letter to the editor upo[illegible] same subject, in which the financial aspects o[illegible] measure are very ably handled by "W." A[illegible] we have not yet done, the local intelligence [illegible] full account of a lecture on Italy, delivered [illegible] members and friends of the Peterborough Me[illegible] Institute, by Mr. J. Whitwell. "The lecturer [illegible] quently applauded during his address, and [illegible] ceedings closed with a vote of thanks to Mr. Wh[illegible] Here is some amount of work done, certainly. [illegible] the credit of the craft we believe that Man[illegible] Swedes will not grow the worse at Springfie[illegible] the less judiciously managed because the good [illegible] been thus busy putting a few "irons in the [illegible] the well being of his fellow men. *T. B.*

Farmers' Clubs.

CENTRAL.—Mr Charles Howard, of Bidde[illegible] ford, has kindly consented, at a very short n[illegible] introduce the next subject for discussion. This [illegible] "The several Merits of Day and Piece-work," [illegible] meeting for its consideration is on Monday, M[illegible]

KINGSCOTE: *Wheat Culture.*—At the last [illegible] meeting of this Society a paper on this subject [illegible] John Ritchie was read. Mr. E. Drew, the [illegible] to the Club, related the results of an experim[illegible] various widths of drilling performed in 1852. He [illegible]

"I divided a field of 8 acres of two years seeds into [illegible] tions of 2 acres each, two of which were drilled at [illegible] rather over 7½ inches with 14 gallons or 7 pecks of [illegible] acre; two at 8¼ inches with 12 gallons 1 quart; two a[illegible]

inches with 10 gallons 2 quarts, and the remaining two at inches with 8 gallons 3 quarts. The land was ploughed in August, rolled, well dragged, and planted the last week in October. The whole came up well, the thinner lots through the winter, in proportion to the width and quantity of seed, being the most barren. The plant, however, stood well through the winter, and as spring advanced the thinner portions began to assume a more healthy and vigorous appearance; in fact, it soon surpassed in luxuriance the whole of the Wheat on the farm. As harvest time drew on it become very evident that the straw of that at wider intervals was not so kind and healthy, being more flaggy and darker in appearance, and there was a decided difference as to the stages of ripeness. That drilled 7½ with 7 pecks of seed being quite a week earlier than the widest and least quantity of seed, the intermediate lots in corresponding ratio. Now, as to the results: with respect to the straw, the difference in weight to appearance (I did not weigh it) was about the same, that from the thickest portion being much the kindest. Lot 1st, from the 14 gallons of seed, gave 27 bushels 3 pecks of head Wheat, weighing 62¼ lbs. per bushel, with 67 lbs. of tail; Lot 2, from the 12 gallons, gave 28 bushels and half a peck, weighing 61 lbs., with 77 lbs. of tail; Lot 3, from 10 gallons 2 quarts, gave 26 bushels 1 peck, weighing a trifle over 60 lbs. per bushel, with 84 lbs. of tail; Lot 4, from 8 gallons 3 quarts, yielded 25 bushels 3½ pecks, not quite 60 lbs. per bushel, with 101 lbs. of tail. The whole was harvested well, but there was a decided difference in appearance in the value of the several lots. I was however much struck with the similarity of the yield. The conclusion I arrived at was that, as a rule, the narrowest interval with the 7 pecks of seed was the safest to follow."

We have not room for a report of either the introductory paper or the subsequent discussion. The following resolution was adopted:—

"That as a general practice, manure should be applied to the lands for the root crops, Clover, or Beans, instead of directly to the Wheat crop. That in case of a deficiency of plant, Mr. Drew's experiment is strongly in favour of the spring application of nitrate of soda. That after roots are carted off the land (supposing the land to be deeply ploughed for the roots) the less working the land has the better for the Wheat crop, that after roots fed on the land a ploughing of about 3 inches is the best. That on large light land arable farms, the five-course system is preferable to the four-course, as the land is much better consolidated and prepared for Wheat by feeding second year. That the two years ley should be ploughed up about August, and should be afterwards well pressed, and as soon as any Couch that is in the land shows itself, it should be forked out, or worked out by the cultivator. That in pastoral districts the four-course system is preferable, the Clover being mown twice. That the best time for reaping Wheat is as soon as the straw is turned yellow at the ground. That two bushels of seed which should be of the best quality should be sown on the hills, but that a smaller quantity is sufficient on richer soils."

Wakefield: *Annual Meeting.*—The following enthusiastic picture of English agriculture is extracted from the annual report of this flourishing society:—

"Much has been done—barren lands have been reclaimed—employment has been more than doubled, if we take into account extra farm labourers, mechanics, chemists and others, besides employing double the amount of capital. Manufacturers themselves have benefited by improved farming. Just glance at the improvements in agricultural implements and machinery, thereby saving a large amount of manual labour and expense. Witness the much larger breadth of ground that can be stirred by the introduction of cultivators and scarifiers—the introduction of seed drills, horse-hoes, and other implements. Who can attend our great shows of implements, without being struck with the facts that are stated above. Portable steam engines have superseded the old threshing machines, and saved above one-third the expense. There are also near 10,000 steam engines employed in this country on farms. Reaping machines have helped the farmer to execute his work with despatch and comfort. Steam ploughs will yet do much, and farmers will have to be helped by the far more extensive application of steam power, and the more so, if that strange and destructive mania of "strikes" amongst labourers spread, as it has done, this great evil will work its own cure, in a measure, by the adoption of cutting and crushing machines, bone-mills, and chemical laboratories, thus demonstrating that some of the greatest intellectual powers of the kingdom are aroused, and see their path clearly pointed out to invent improvements for facilitating work, and to meet the demands of improving agriculture. Compare present scales of cattle food and tillages with 12 or 15 years back; almost incredible amounts of imports now take place, besides home manufactured food and tillages, near 100,000 tons of oil-cake and about 80,000 tons of bones have been imported; nitrate of soda, 50,000 tons, half of which is used for tillage; and within 10 years the importation of guano has doubled. Who can calculate the increase of trade by draining tiles, and the consequent increase of produce. Had it not been for increased produce, how could the increased population of this country's wants have been met? We have, during this time, an increase of about 3 millions of people, and their wants have not been met by a large increase in the importation of human food, for during this same period there was but a comparatively small increase of imported corn.—In 1850, of Wheat 3,739,000 qrs; in 1859, about 3,800,000 qrs.; increase, 60,000 qrs. In 1850, of flour, 3,828,000 cwt.; in 1859, 3,328,000 cwt.; decrease, 500,000 cwt. And let it not be overlooked that manufacturers, during this time, have increased the consumption of flour for the purpose of stiffening fabrics, for gum labels, and for starch of which near 40,000 tons a year is used, made principally from Wheat. There is no country on earth that has made the rapid strides in increased quantity and quality of human food that Great Britain has. Belgium is paraded forth as the land of all others to be admired for its farming. Why, what is the fact? they are patterns of neatness and economy in their villages, in keeping every yard of land cropped up: but their crops are not heavy. Thousands of acres in England, Scotland, and Ireland, produce twice the quantity of grain acre for acre with the best Belgium farming. Their farm cottages are wretched hovels; their implements are a century behind ours; their labourers' squalid faces compare ill with our rosy cheeked and contented farm labourers, or with their chubby cheeked bairns playful as lambs. France will bear the same remarks, except their implements are worse, and their comforts less. It would be a happy day for that country if her spears were pruning-hooks, her swords ploughshares, and her Emperor heading and promoting Farmers' Clubs and farming. Any true Briton, after a visit to these countries, will say, "England, bright, bonny, blest, happy, free,—England, with all thy faults I love thee still!" Let England's croakers hide their heads. Let the slumbering portion of our countrymen awake to the high standing of Britain as a farming country, and to the vast improvements yet to be made. Let our young farmers use their hands, their heads, their money, their fathers' experience, and press forward. Let landlords do their duty in draining, improving farm buildings, giving security for tenants' capital laid out by equitable leases and valuations, and help their tenantry, and thus bless themselves, and it will be demonstrated to the world that England in farming is the glory of all lands—a land flowing with milk and honey.

In the course of the evening, after the reading of this animated report, which was received with enthusiasm, Mr. Taylor, of Darrington, proposed "Liberal landlords, enterprising tenants, and contented labourers." He hardly knew how to treat the toast, but look at it whatever way he would, it divided itself into three parts—1, landlords; 2, tenants; and 3, labourers. Now he had a little to do with all three. All were bound together. They could not get along except together; they could not do without the labourer; nor without the tenant; nor yet without the landlord. Without liberal landlords, enterprising tenants, and contented labourers, their comforts would be less.

Mr. Briggs responded. 1. He was the landlord of a few small cottages. He did try to be liberal, for he believed they were good cottages. He was a tenant, and he could say he had a liberal landlord. 2. As to tenants, if they were a little more enterprising it perhaps would be better for them. He would mention a little land—13 acres—which when he went to it produced about five or six loads to the acre. He drained it, and the first year afterwards it produced 10 loads to the acre. If farmers were more liberal in their expenditure, they would prosper better. He remembered a gentleman who occupied his own land. He was so bad a landlord, that eventually it had to be sold, and he in his turn became a tenant. He considered that he must then exert himself, or he could not live; and he became so enterprising that eventually he bought it back again. 3. Contented labourers. For his part, he hoped no labourer would become so contented that he would not try to better himself. Now the coal trade five years ago was so good that wages advanced 30 per cent. The trade became worse again, and the wages were reduced 15 per cent. They had now got the whole 30 per cent. back again, and had turned out for 12½ per cent. more. Now he did not call those contented labourers. Mr. Briggs then contrasted the state of the farm labourer of Berkshire, who considered himself in clover if he received 10*s.* per week, with the farm labourer in Yorkshire, who got his 15*s.* per week, and concluded by saying if labourers in Yorkshire would contrast their condition with those in the South, they would be better contented than they were.

A number of other toasts followed. At length the Chairman gave "Peace and plenty," and called upon Mr. Bayldon, the Father of the Club, to respond.

Mr. Bayldon said he was in the difficulty of having so many children so much better than himself. So much had been said that evening, that he did not think he could say more. Peace! what was better than peace? It produced prosperity, and prosperity produced plenty. He admired peace as the greatest blessing of mankind. Plenty produced good-will to all. They all belonged to a society whose objects were to produce plenty, and plenty generally produced good-will. He hoped the united efforts of farmers would not only produce plenty, but peace and good-will among them all.

A subject, however, was shortly afterwards mooted which did anything but tend to the promotion of peace and good will.

Mr. B. Nicholson said—

With respect to the Royal Agricultural Society's Show at Leeds, he trusted Wakefield would do all it could to assist in making it successful. He was one of a committee to look out for land for the great trial of implements, which he believed would take place on the 16th April, or the latter end of June. He would be glad if any of them knew of any district in the neighbourhood of Normanton or Wakefield, or along any line of railway within 20 miles of Leeds, where about 100 acres of land could be obtained for it. Land could not be found in the neighbourhood of Leeds for the purpose. It would, he anticipated, be a great trial of implements; they wanted land, and he should be obliged if any of them could assist him in getting it.

Mr. W. Barratt said it appeared that the great Royal Agricultural Society had got into a dilemma, as Leeds, which wanted to swallow up all before it, could not find them land for their trial of implements. That came of being gulled by their champagne lunches, and the unfair means resorted to to prevent the show coming to Wakefield. When the deputation came to Wakefield, they showed them land suitable for the trial of all kinds of implements, and in any quantity, but they had refused it: and now he for one was glad they were in a "fix," and he would not lift a finger to help them out of it. Wakefield was sold in Leeds, and it was sold in London, and he told them so at the time.

Mr. J. T. Rayner fully endorsed the sentiments uttered by Mr. Barratt respecting giving any assistance to Leeds to provide land for the trial of implements for the Royal Agricultural Society's show. It was humiliating to Leeds to come there begging for their assistance.

Mr. Brady Nicholson indignantly repudiated the idea that he had come there to ask their assistance as any delegate from Leeds. What he had said and done was in his individual capacity.

Mr. Rayner still contended that Mr. Nicholson had come in the most supplicating manner to ask the loan of some 100 or 200 acres of land for Leeds to test the implements and machines. When the Royal Agricultural Society's deputation was here, the town and district were shown them, as well as several sites which would have been amply sufficient for all their wants, and still they had selected Leeds. Under the circumstances, therefore, he should consider it an everlasting disgrace if any member of the Wakefield Farmers' Club offered them any land.

Mr. Barratt said Leeds had bribed the Royal Agricultural Society. Leeds considered itself the Great Mogul, and if they could they would swallow up everything appertaining to Wakefield. They were actuated by a mean, grasping, centralising spirit, and would even deprive them of their homes if they had the power.

Mr. Taylor, Darrington, hoped that they would all be actuated by the advice so admirably given by their worthy father, and endeavour to be at peace with all men. Notwithstanding what had been said, he hoped all of them would do all in their power to render the coming show at Leeds successful.

Reviews.

The Economy of Steam on Common Roads in Relation to Agriculturists, Railway Companies, &c. By C. F. T. Young, C.E. Illustrated by Engravings. Atchley & Co., 106, Great Russell Street, Bedford Square.

The cost of carriage upon farms is a very large item in their annual expenditure. In the article on Carriages in the *Cyclopedia of Agriculture*, the writer puts the case thus:—On a farm of 1000 acres of good land, cultivated on the four-course or Norfolk system, there may be 200 tons of hay, 2000 tons of roots, 1000 tons of Grain in straw carried three-quarters of a mile to rick, or pit, or yard—400 tons of grain, carried perhaps 10 miles to market—and 4000 tons of manure carried three-quarters of a mile to the field—in all 10,000 tons carried one mile, and the carriages taken full and brought back empty will be equal to as much more. His conclusion is that the labour of carriage alone necessitates the employment of quite one-half of all the horses of the farm. Now, we have steam power proposing to take the cultivation of our fields out of our hands; but there has been hardly yet any serious proposal to do farm carriage by its aid. Mr. Mechi, in one of the most original passages of his late paper to the Central Farmers' Club, calls attention to the fact that what he calls the topography of our farms inflicts a gigantic charge on our farm produce. Our irregular fields and ill-arranged farms, crooked roads, and ill-placed buildings, inflict this charge mainly by the increased carriage to which they give rise. But make every farm a square, and straighten every road, and place every farmery centrally in the square to which it belongs—the cost of carriage will still bear a large proportion to the whole annual expenditure on cultivation.

The volume before us deals with this question—gives us a full account of steam locomotion, and points out its relations to civilisation, commerce, agriculture. In a succession of well written vigorous chapters on transport, roads, canals, railroads, steam *v.* animal draught, steam on common roads, concentrated and distributed weight, Boydell's engine, &c., it gives the whole history of the subject, and explains why steam traction is not more general. The book is full of interesting matters. Historical notices, anecdotes, biography, relieve the tedium of argument, and it is not necessary that the reader should have any personal or professional interest in its subject to carry him a willing interested reader from one end of it to the other. For those who have such personal and professional relations to its subject, and all farmers are of the number, it is of course especially interesting, and we hope it will be widely read.

The use of steam for traction on common roads is the principal subject of this work. It is traced from 1769, when M. Morin, a native of Lorraine, constructed a carriage whose wheels were propelled by steam, and an immense number of additional inventions are described and illustrated; and the very great success that was achieved by several inventors between 1833 and 1836 is related in detail. Then follow two chapters on concentrated and distributed weight; and the use of Boydell's endless railway—its fitness to the branch traffic of railroads, and to the circumstances of English agriculture is especially insisted on.

"The great advantage of the 'endless railway' was recently tested on a farm of Mr. Wood's, at Hanger Hill, Acton, after very heavy rains, in carting home a large quantity of Mangel Wurzel from a field of a deep clay soil, the result as to draft being that two horses drew with ease 35 cwt. in a cart with the 'endless railway,' attached to the wheels of 4 feet 6 inches diameter, while the same horses with considerable difficulty could only draw 15 cwt. in a cart with common wheels of 5 feet diameter and 6 inches wide—the result on the land being that the common wheels with the lighter load made very deep ruts, while the track of the heavier load on the 'endless railway' was scarcely even perceptible."

A committee of a Lincolnshire Agricultural Society in 1857 reported of it as follows:—

"Your committee are led to the conclusion that the great features in the character and construction of Boydell's engine, are its capability of laying down its own railway in endless succession, of travelling upon it in any direction, under the complete control of its driver, and its immense power of traction. They see no reason why the cost of working it should much exceed the cost of working any other 10 horse power engine. In short, they recognise in this invention a great motive power at a comparatively small working cost, requiring what alone experience can give, a better knowledge of the proper mode of attaching and managing the implements to make it available for the farmer's purposes.

"These experiments were tried on the land of Mr. J. Robson, of Brackenborough, two and a-half miles from Louth.

"Now, a traction engine that will draw five or six ploughs at a time, and cultivate 10 or 15 acres of land a day, according to the nature and quality of the soil, that will draw on ordinary roads from 20 to 30 tons of produce to market, at the rate of three miles an hour

for any distance, and bring back an equal weight of manure, lime, coals, gravel or merchandise; and when the farmer himself does not use it, may be hired out to his neighbours with advantage, cannot fail to prove a most valuable and profitable machine."

It is in the cost of carriage that Mr. Young sees the especial use of Boydell's engine, and we conclude with his contrast of steam and horse power severally employed on such work.

"The cost of haulage by these engines on common roads has been found, after numerous experiments and continued working, with an average net load of 20 tons, not to exceed 3*d.* per ton per mile. The first trip in which an account of coal, &c., was kept so as to give some certain data for calculation, was that of Mr. M'Adam, from Thetford to London, a distance of 85 miles. In the account of this journey no particulars as to the nett weight, or 'load,' are given, but it will be assumed that it was 17 tons net, which the engine would easily have brought, including the weight of the vehicles, at a trifling addition to the present cost of the journey.

"We find that there were three men to the engine and one man to the train—their cost will be—driver, 4*s.* 6*d.*; steersman, 3*s.* 6*d.*; man for train, 3*s.*; odd man, 3*s.* per day; 14*s.* per day wages; this journey occupied three days; we have 2*l.* 2*s.* for wages. The coal burnt was 43 cwt., which, at 1*s.* per cwt., equals 2*l.* 3*s.*: wear and tear on 85 miles, at 1*s.* 6*d.* per mile, equal to 6*l.* 7*s.* 6*d.*; the consumption of oil and grease was stated to have been great. Mr. Lamerton, in his journey of eight days' actual working, used 2 gallons of oil and 25 lbs. grease; so, if his consumption be doubled, it will give a liberal allowance, and will stand thus—4 gallons oil at 5*s.* per gallon, equal 1*l.*; ½ cwt. grease at 10*s.* per cwt., equal 5*s.* The total cost of the journey will therefore be:—

	£	s.	d.
Wages for 3 days	2	2	0
Coal	2	3	0
Wear and tear	6	7	6
Oil and Grease	1	5	0
	£11	17	6

or say 12*l.*, as the cost of drawing 17 tons over 85 miles; equal to, say, 14*s.* 2*d.* per ton on 85 miles, or 2*d.* per ton per mile.

"By horses this would have cost, at the minimum rate of 6*d.* per ton per mile, 36*l.* 2*s.* 6*d.*; if at 9*d.* per ton per mile, 54*l.* 3*s.* 9*d.*; and, at 1*s.* per ton per mile, 72*l.* 5*s.*; taking it at the sum of 6*d.*, there is a net saving of 24*l.* 2*s.* 6*d.* by the use of steam."

Transactions of the Highland Society, January, 1861. Blackwood & Son.

The current Number of this quarterly periodical is more than usually interesting; and of some of the papers we must hereafter give a fuller account than in this short notice will be possible. There are essays and reports on Top-dressing Pastures—on the natural history of the Turnip-fly—on the Reclamation of Waste Land—on the comparative value of Pure and Cross-bred Sheep—on the Cultivation of Italian Rye-grass, and on a new method of planting hedges, together with a report from Dr. Anderson on proceedings in his laboratory. The other division of the book, constituting what is called the *Journal of Agriculture*, is as usual rather heavy reading; but there is unusual variety and excellence in the list just quoted of the contents of the Society's Transactions; and the maintenance of the standard reached in this the first Number of this year's issue will make the volume for 1861 equal in interest to any other agricultural journal of the day.

We quote a sentence or two from Mr. Fulton's interesting account of Italian Rye-grass, for which the Society's gold medal was awarded.

This plant has rather degenerated in the estimation of farmers owing to the wiry, spindling growth it exhibits except where ample manuring and liberal supplies of moisture are either naturally or artificially provided. Some prejudice has existed against it on account of its being short-lived, and gradually disappearing after the second year.

Its quality as forage is referred to in the following passage:—"George Gunn, an enterprising and extensive dairyman of Edinburgh, whose dairy produce was famed all over the city, grew it for many years on a field near Stockbridge, applying to it the liquid from his byres. One of the family, who took an active part in the management, told the reporter that, as compared to Italian Rye-grass, 'the Edinburgh meadow Grass was far inferior,' and 'that, when fed on Italian, the cows were maintained in milk and condition with less cake and meal than when fed on the meadow Grass, or on common Rye-grass and Clover.' This observation is borne out by analysis. According to the result of the investigation by Professor Way, Italian Rye-grass contains 2.48 per cent. more nutritive matter, and 2.09 less of indigestible woody fibre, than a mixture of common Rye-grass and Red Clover, rendering it not only more nutritive, but easier to digest and assimilate. In one recorded instance, where the Italian Rye-grass was manured with diluted stable urine, the produce of an imperial acre in one year was found to yield as much nitrogen as is contained in from 200 to 300 bushels of Wheat."

The following is Mr. Fulton's experience of the persistence and duration of the plant:—

"The land does not tire or turn sick of Italian Rye-grass. It has been grown consecutively on the same land for 20 years in this country, and has kept gradually improving instead of falling off."

Again, the following passage illustrates both the duration of the plant and its luxuriant growth under liberal management:—

"A plant of Italian Rye-grass, with only one stalk, was in July last transplanted from a pasture-field, where it had grown for seven years, into newly-tilled ground, and watered with diluted liquid from the byre, and at this date (31st October) it is sending up 43 shoots; and a plant of it was observed this year, in a crop of the same, bearing 36 seed stalks, which shows considerable tillering powers."

Mr. Fulton's essay describes in detail the cultivation of the crop, and we shall again direct attention to its statements.

Miscellaneous.

Great Flood in Yorkshire.—The thunderstorm of Wednesday last has been succeeded by immense falls of rain and snow. The high Yorkshire moors and wolds are deeply covered with snow. On Sunday the whole district below Helmsley, the vales of Ryedale, Derwent, Pickering, and York, were all inundated, the flood being the fourth this winter, and the highest for many years. For many miles the York and Scarborough Railway runs through an immense lake, and in some parts the rails are in the water. Much damage will be sustained by the low-land farmers. The Wheat sown in the autumn perished, and the fine weather of the past fortnight had enabled them to re-sow some of the Wheat lands, which are now again under water. The roads in the low country, more especially in Ryedale, are covered with water to a great depth, and in Norton and Malton the yards and buildings in the low parts of the towns and some of the mills are flooded. The streets in Old Malton are full of water. In the north, Teesdale and the neighbouring vales are reported to be deeply clad in snow.

Wool and Shoddy.—Messrs. Littledales, Liverpool, in their circular say:—"The position of the woollen and worsted trades throughout the manufacturing world is such as to bespeak grave reflections, and ought to command an active sympathy—they are not extending in the same ratio as other branches of industry, and are precluded from doing so for want of adequate supplies of the raw material. The cry of scarcity which has been sounded for the last eight or nine years has produced no practical effect, the small increase of growth having been absorbed without any relief. In England, economising expedients have been resorted to on an enlarged scale. The use of cotton in woollen and worsted fabrics has been vastly augmented; and the manufacture of rag-wool (which consists of old worn-out woollens, torn or ground up) has been developed into quite an important branch of business, under the name of "shoddy" or "mungo," being utilised to the extent of 38,880,000 lbs. annually (equal to about a fourth of our yearly importations of colonial and foreign wools), for the purpose of mixing with, or adulterating wool in its manufacture; and yet, with these enormous aids, the prices of wool when not checked by adverse extraneous influence, ever gravitate to an extreme range, such, in fact, as effectually to limit the consumption. We have latterly congratulated ourselves on the achievement of the French treaty, as likely to create a new outlet for our manufactures, woollens and worsteds among the rest; more recently we have felicitated ourselves on the opening of a market in China capable of swallowing such goods to an indefinite extent. Pray where are they to come from? Our present customers are evidently taking all that we have the raw materials to make; and as the high prices of 1853, 1857, 1859, and 1860 have palpably failed to influence anything like a proportionate increase of supply, the present scarcity must for all practical purposes be considered absolute; ergo, all business in woollen and worsted goods to new customers must necessarily be so much abstracted from all the old ones! This is a most unwelcome conclusion to arrive at. To men of the world, having the word progression eternally on their lips, it sounds incredible, but who can gainsay it? Better ask, Where can we look for help? What we want is more wool, for which we can give a good price—50 per cent above what was considered profitable to grow it ten years ago! We might point to Canada as especially capable of assisting our growth of English, to South Africa for an increase of fine colonial, and to India for a larger supply of low wools; but if the stimulus for excessive price has proved insufficient to effect the desired purpose, we are at a loss for a stronger inducement."

Milk, Butter, Cheese, and Lard.—The two first are rarely to be met with pure in this metropolis, for the simple reason that they are very easily adulterated. Water is the usual adulterant of milk, as the dairyman who has only 40 gallons of pure milk at his disposal, while he requires 50 or 60, finds the "cow with the iron tail" ever ready to aid him in making up the deficiency. I have myself found the quantity of extraneous water in London milk to vary from about 8 to 61 per cent., while out of 100 promiscuous samples, from all parts of this city, I believe the number, more or less adulterated in one way or another, would be about 74. Large additions of water not only impart a bluish tint to milk, but also decrease its specific gravity; some yellow colouring matter is therefore added, annatto, turmeric, or gamboge; and the liquid thickened with various starches, mucilage, with the brains of some animal. [We have met with any proof of this scandal. *Ed. Ag. Gaz.*] The latter is best detected by the microscope. Starch to be present if the milk after separating the blue colour with tincture of iodine. Improper and housing of the cows, too, are fruitful sources milk, which when derived from diseased certainly is injurious. Caution must always cised in determining the density of milk, will diminish this very powerfully. The lacto M. Donné is useful in determining the richness but a simpler, and perhaps a better instrument described some time since in the *Dublin Medical* consisting of a thin hollow wedge of glass, on one side, into which milk can be introduced opacity discovered by ascertaining at what of the wedge the graduations can no longer through. The instrument has also been d the *Chemical News.* Butter, too, is one articles which affords a striking proof of the which adulteration is carried in this country, "salt" and "fresh" varieties being sophisticated largely. According to Hassall, the amount of water the fresh butters, examined by the "Lancet Analytical Commission," varied from 4.18 to 15.42 per while the quantity of salt averaged from 0.30 per cent. In the salt butters, the extremes were 8.48 and 28.60 per cent., and those of salt, 8.24 per cent. My own more recent results wider difference, and I have found as much cent. of water in some samples of salt butter. little pamphlet on adulteration, by Mr. John of Birmingham, I learn that, in 1857, butter in Liverpool to the poor, which contained only cent. of that article, 24 pounds of a mucilage a kind of lichen), and 28 lbs. of water making remainder of this delightful compound. Butter adulterated with flour and other substances instance has come under my notice in which of soda, or soluble glass, was the adulterant Butter should be examined by melting quantity in a graduated tube or jar, when the proportions of fatty matter and water can be estimated. Lard is adulterated in much the manner as butter, and is itself sometimes used adulterant of butter. Cheese is not generally rated, although instances have come to my *Mr. Scott, Society of Arts, Jan.* 30.

Rise of Farm Rents in Scotland.—Within few years the rise of farm rents in the district terarder has been very considerable, consequent the great demand for farms. On the A estate, the property of Colonel Hunter, of several farms have been let at an increase from 33 to 60 per cent., principally to new farm realising an increase of as much as 13 estate of Aberuthven, belonging to the trustees late Major Græme, of Inchbrakie, the rise has about 33, 40, 65, and in one instance as high cent., and all to new tenants. The increase the rents has been 110*l.* and 127*l.* On the Coul, belonging to Mr. P. Burgh Smeaton, have been let to new tenants at 220*l.* and former of which was formerly let at 130*l.* and at 190*l.*, or about 42 and 70 per cent. On the Kincardine, the property of Mr. James Johnston, rise has been considerable, the farms being the old tenants at an increase of from 33 cent. On the Strathallan estates the rise been great, being about 30, 33, 35, 45, and 80, 90, and 100 per cent., the increase of the rents being 90*l.*, 100*l.*, 120*l.*, 130*l.*, and these chiefly to new tenants. On the estate, belonging to the Earl of Camperdown, on the rents has been 20 and 30 per cent. on two rents being 100*l.* and 110*l.* On the estate, belonging to Mrs. C. Home Drummond of Abercairney, the rise has been from 20 per cent. On the Duncuib estate, belonging Rollo, the rise has been from 15 to 50 per increase on some rents being 70*l.* to 120*l.* In Glendevon the rise has been from 12 to In Fossaway the rents have increased 20, 40, per cent. to new tenants, one farm realising of 250*l.* In Muckhart parish the increase 33, and 80 per cent. The increase in property since the beginning of the present something remarkable. The old valuation of Auchterarder was about 5400*l.* Scots. valuation, taken about the year 1820, was sterling, or 12 times the former. The valuation present year is 14,615*l.* sterling, or nearly the valuation of 1820. The old valuation parish was 7388*l.* Scots; the valuation of sterling; and the present valuation about 1 old valuation of Trinity Gask and Findo 6718*l.* Scots; the valuation of 1820, 6735 and the present valuation about 9800*l.* Correspondent refers to this rise as the proved estates—and not as the result of market value in the case of estates of the same worth:—Thus—If you melt a gold sovereign after adding to it five shillings' worth of the whole for twenty-five shillings, will you to say, that gold has risen twenty-five

...it will not, neither will a rise in rent entitle ... to say that land in the abstract has increased in ... In 1841 I took my farm for 19 years at 800*l.* ...ar. A complete new set of offices were built during ... first three years, and my performing the entire ... was considered a fair equivalent for these ... during my lease. The whole farm was drained 1842, 3, 4, and 5, with Government money, the ...st of which was 240*l.* a-year. During my lease, ... went over two-thirds of the farm with lime, and ...rwise improved it greatly; and now that my lease is ..., I am quite prepared to pay, in shape of rent, 1100*l.* ...ear, and yet you are not entitled to say that I am ...ing an advance of 37½ per cent., for in point of fact ...ave been paying 240*l.* a-year of drainage interest, ...ich now takes the shape of rent, and my interest in ... buildings and lime being exhausted with my lease, ...m content to pay 60*l.* a-year for them during a new ...se, and you are not entitled to call this an advance ...nt. In order to ascertain the real advance in the ...ue of land, you must find a farm that has neither ...en drained nor limed, and has had no new suit of ...ices during the last lease, and the per centage of rise ...ll not be so astounding.]

Calendar of Operations.

FEBRUARY.

...UTH NORTHAMPTONSHIRE.—The frost which continued from ...cember 18th to January 19th, was of unusual severity, but ... been succeeded by a very mild and gradual thaw, leaving ... land everywhere in a very light state. The benefit to the ...d is immense, we do not recollect seeing the land work so ...ll for many years, the land being so full of water at the com...mencement of the frost made the beneficial effect doubly great. ...oughing is everywhere progressing rapidly; in the light soils ...ere Turnips have been consumed, several pieces of Wheat ...ve already been put in under favourable circumstances. ...ny are sowing the Red Chaff White Russian, a stiff-strawed ...riety which has been found to succeed well on land in good ...ndition, not being subject to mildew or easily laid by rains. ...e Turnip crop where not secured has suffered very much, the ... White Turnips unconsumed are utterly worthless, while the ...edes are rapidly going. I am something within the mark ...en I say that one-third are already rotten, while ... others are greatly deteriorated in value; unless ... weather should continue mild with an early spring, ...re will be a great scarcity of keep in this locality. ... Mangles where stored have generally kept very ...ll; we have heard of some which lay in small heaps ... the field during the whole of the frost with only a light ...ering of leaves to protect them, consequently they will ... unfit for anything but manure. The young Wheats ...erally present a very favourable appearance; whether those ...ich have not yet made their appearance have suffered is at ...sent not known. During the frost the horses were employed ... carting manure, road materials, delivering corn, &c., while ... keep the labourers employed the threshing machine was ...pt steadily at work. While the frost continued the Wheats ...dled dry, since the thaw the condition of many samples is ...ry inferior; partly from this cause, and the great quantities ... offer the markets have been depressed at considerably ...er rates. As the whole available strength of the farm will ... required at home for the next two months there will there...re be a great falling off in the deliveries, which will no doubt ...e a favourable effect on the markets. *G. M., Feb.* 6.

...OUTH NORTHUMBERLAND, HEXHAM, *Feb.* 12.—Ploughing was ...one in the lower districts on the 18th January, the ...w having been nearly disappeared. Fortunately when the ...er was removed, the weather continued moderately fresh, ... that little or no damage has been done to the young Wheats, ... to those Swedes which remained in the fields during the ...rm, except of course in very exposed situations, or where ... surface had been blown bare. A large quantity of soft ...rnips, however, remained on the fields, and have since that ...e been going rapidly to decay. The last week of January ...s everything that could be desired for Wheat sowing (as ...ll as for securing the outstanding portion of crop 1860), and ...onsiderable breadth has been put in, under very favourable ...cumstances. Much of the autumn sown has a very thin ... poor appearance on cold soils. Work is everywhere in ...ear, and a great deal of steam will require to be applied to ...rtake it in time. The Hexham Farmers' Club are at ...sent bringing out Fisken's steam plough, and have had it ...work on several occasions during the past week. A suffi...ent sum has been subscribed, chiefly by members of the ...ub, to defray the cost of manufacturing and trying the ...chine, and in spite of delays and alterations required, there ... no cause for anticipating an unsuccessful result. *W. C. T.* [...ill our correspondent kindly give in detail an account of it ... its performance?]

...EST SUSSEX, *Feb.* 12.—Since our last report we have had ...treme changes of weather, and for three weeks it has been ...y good for the season, and work that was then behind has ... been got up, and we expect to be able to start fair with ... season. The severe frost and snow that we had disap...ared without rain, and we were able to get on the land as ...n as the frost was out, and were beginning to think that ...ing was come, but yesterday frost returned, and we had ... light fall of snow, and now a sharp frost that in some ...s stops the plough. On the 2d inst., we had the barometer ...high, or higher, than I believe we have for seven years, ... though it has gone done low since, yet we have had no ...n. The Wheat has mended very much lately where there ... been a plant; but there are some failures, and some will ...e to be sown again either with Wheat or Barley. That ...ich was put in immediately before the snow has hardly ...e up yet, and it is feared that it will come rather thinly, ... still a fine spring will make a great difference to it. ...nips and Swedes have kept well; though they were small ...y are sound, and keep will not be so short with us as it was ... year, when they rotted so generally. Mangel has kept ... where protected by an earth covering; but no ...ount of straw appears fit to keep out a hard frost, ...nch of earth appears to be as effective as a foot of straw. ...ugh our prospects of winter food were at one time bad, ... we have got so far through without any serious consump... that we consider ourselves safe, and hay, that threatened ...tain a very high price, has been in many cases dispensed ..., using cut straw instead; still what is really good is dear, ...at 4*l.* per ton; but none will be used in the fields ... that price. The lambing season is nearly over with ...e who keep only old ewes for early lambs, and the ... has been various, perhaps, on the whole, not so ... as usual; the ewes have been so lame, and this often is ...nded by accidents in the lambing. We have been obliged ...ess their feet very frequently, and I have found a solution ...nar caustic in the proportion of 1 drachm to 2 ounces of ... a very effective remedy, especially when we were able to ...ver the sore part entirely, then they very seldom require

a second dressing. We have still a very full supply of corn in our market, and much of it in very bad condition, for which sales are difficult to make, except at a very low figure. *G. S.*

STATE OF THE WEATHER—BERKSHIRE.

For the week ending February 14; observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air: Max. in Sun	Max. in Shade	Min.	Mean	Temperature of Soil 1 foot below the surface.	Rain.	Wind.	Barometer.
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	8 ..	60.0	45.0	37.0	44.7	39.5	0.21	S.E.	29.55
Saturday	9 ..	44.0	43.0	39.0	41.2	40.0	0.04	S.E.	29.42
Sunday	10 ..	40.2	40.0	34.0	37.0	38.0	0.16	N.E.	30.12
Monday	11 ..	60.2	38.0	22.4	35.9	38.0	..	N.E.	29.85
Tuesday	12 ..	56.4	35.0	12.6	29.6	36.0	0.09*	N.W.	29.54
Wednesday	13 ..	64.6	35.4	26.0	38.0	36.0	0.03*	S.E.	29.45
Thursday	14 ..	57.0	39.6	21.6	35.0	35.0	..	S.E.	29.92

*Melted Snow.

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain gauge is 7 feet from the ground.

Notices to Correspondents.

BRETON COWS: *G Davis.* We could give you the address of those who have personal experience, but cannot do so here without their permission. Please send your address.

DEEP PLOUGHING: *W F P.* We would plough sandy soil shallow if at all for Wheat: and the deeper the land is dug and stirred the better for Potatoes and every other root crop. Your question had been mislaid.

FULLER'S EARTH: *H C C.* has pasture land on this formation which has been "drained and dressed with decomposed turf mixed with lime without any apparent improvement." If this be so we can hardly recommend bonedust or anything else. But from our knowledge of the Fuller's earth we should doubt the land being "drained," for it is a very difficult process therre. On drained land manure acts with tenfold efficiency, and there is no reason to doubt the good effect of a quarter of fine bonedust rolled in a heap and after being mixed with turf-mould spread broadcast.

MANURES, LINSEED CAKE, &c.—The London Manure Company report this week some large importations; 5546 tons of Peruvian guano have been received by Messrs. Gibbs, and the demand is proportionately large. There are no alterations in the prices of nitrate of soda and sulphate of ammonia; both are in great request, the present unusually low price of the nitrate having caused it to be freely purchased. 3359 tons of cake have arrived during the week, and in consequence the market has exhibited a marked decline. A Marseilles cake has arrived in considerable quantities, and found a ready sale at the low prices quoted. The following are the latest quotations:—

		£	s.	d.		£	s.	d.
Peruvian Guano, direct from Importers' Stores	per ton.	12	5	0	to	12	12	0
Bones	"	4	15	0	to	5	5	0
Ditto, crushed	"	6	0	0				
Ditto, half-inch	per qr.	0	17	6	to	0	19	6
Ditto, dust	"	0	17	6	to	0	19	6
Animal charcoal (70 per cent. Phosphate)	per ton.	4	10	0	to	5	0	0
Coprolite, Cambridge, whole	"	2	2	0				
Ditto ditto, ground ..	"	2	18	0				
Ditto Suffolk, whole ..	"	1	15	0				
Ditto ditto, ground ..	"	2	6	0				
Nitrate of Soda	"	13	10	0	to	14	10	0
Sulphate of Ammonia ..	"	14	10	0	to	15	0	0
Gypsum	"	1	10	0				
Salt in (London), according to quality	"	1	3	0	to	1	7	0
Sulphuric acid, concentrated 1.845	per lb.	0	0	1				
Ditto, brown, 1.712	"	0	0	¾				
Superphosphate of Lime ..	per ton.	5	10	0	to	6	6	0
Blood Manures	"	6	5	0	to	7	10	0
Dissolved Bones	"	6	10	0				
Linseed Cakes, best American (barrel)	"	11	12	6	to	11	15	0
Ditto ditto (bag)	"	11	0	0	to	11	7	6
Ditto English	"	11	0	0	to	12	0	0
Rape Cake	"	6	5	0	to	6	12	6
Cotton-seed Cake (very scarce)	"	7	0	0	to	7	10	0
Marseilles cake*	..	10	5	0	to	10	10	0

ORNITHOPUS: *G. Davis.* We presume you refer to O. perpusillus, one of our wild plants, growing naturally "a small prostrate plant" in "dry sandy and gravelly places," not at all likely to supplant our other leguminous forage plants.

PALMER'S GREEN-TOP YELLOW BULLOCK TURNIP: *Haydon Bridge.* The sort you refer to is probably that which was sent out by Mr. Palmer, seedsman, at Annan, in Scotland, and is just a variety of the old Green-top Yellow Aberdeen Turnip, which is still unsurpassed both for feeding quality and weight per acre and hardiness.

SEA SLUGS AS MANURE: *A Ten-years' Subscriber* would feel greatly obliged by any correspondents informing him if they have had any experience of sea slugs (Holothuria) being used as a manure. He is anxious to find out how it would act, and whether it would require other fertilisers to be added to it, and if so which would be the best, and in what proportion to add to it to make a cheap fertiliser, to replace in foreign parts, where guano is dear, this article, and where the Holothuria is in countless numbers.

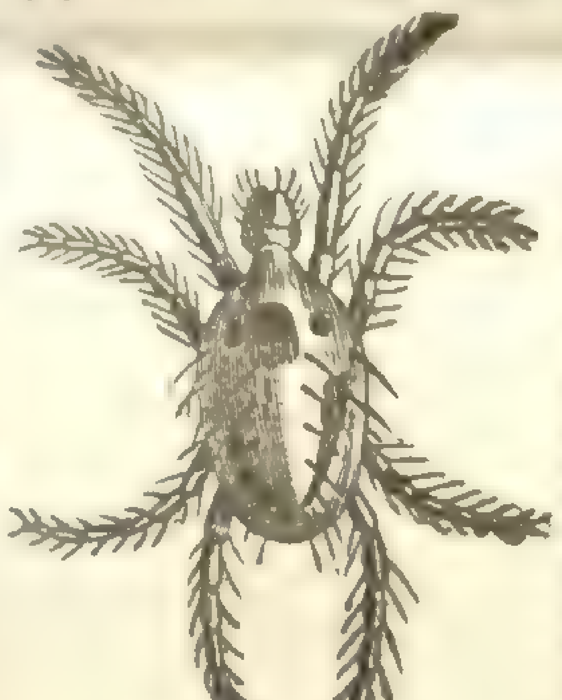
SWINE: *J W, Peterborough*, says, "Seeing an inquiry made in a contemporary (the 'Cottage Gardener') as to whether any remedy is known that would prevent a sow eating her young pigs, I beg to say that I have successfully applied a muzzle made by fastening a leathern slip over her nose and securing it by passing the thong or strap behind her ears and under the throat, just loose enough to allow of her sipping her food, but sufficiently tight to prevent her biting or hurting her pigs. This sow had a first litter of seven, which she brought up well, and they are all now sold. The second litter consisted of 11, and on the second day we missed one, in a day or two we missed another, and so she devoured nine before I heard of a remedy. On making it known among my friends I was told to use the muzzle by a gentleman who took prizes for pigs, and had received two well bred sows from Yorkshire of a similar sort to mine, black and white, not very large, the breed having a character for being shy and fierce: while having young ones, both showed a disposition to devour their young, and were muzzled; he brought up one litter, but the other sow would not let the pigs suck, and they all died. Of my litter the two remaining pigs are now six weeks old, and I have, therefore, every reason to suppose that they are safe. She was very sulky after the muzzle was first applied, and seemed more anxious to eat them than to let them live, and they went back for a week: after that they obtained more nourishment, and are now fine pigs."

GENUINE ROLL TOBACCO CLOTH.
WARRANTED EQUAL IN STRENGTH TO TOBACCO.
JOSEPH BAKER, 10, Gough Square, Fleet St., E.C., having dealt upwards of 20 years in the above, can recommend it as the best article for destroying the Fly. 1s. 4*d.* per lb.; over 10 lbs., 1*s.* Post-office Orders payable Fleet Street.

GENUINE TOBACCO PAPER FOR FUMIGATING.
H. APPLEBY (Foreman to Messrs. Ivery & Son, Nurserymen, Dorking), has now a good supply of the above on hand in 4 lb packets, 1s. 3*d.* per pound. For testimonials see *Gardeners' Chronicle*, January 5, 1861, page 14.

FOR SMOKING GREENHOUSES.
NEAL'S PATENT APHIS PASTILS, which light with a Candle, save all trouble, destroy all Insects, and are already used by some of the leading Gardeners, may be obtained of the principal Seedsmen and Nurserymen, 2*s.* per packet.—Manufacturer and Patentee, J. NEAL, Edward Street, Birmingham. Trial packets, 1*s.* each.

WINTER DRESSING FOR ORCHARD HOUSE AND OTHER FRUIT TREES.



Extract from the Eighth Edition of the Orchard House. By Mr. Rivers.
"January paint the trees (every shoot and bud) with Gishurst Compound, half a pound to the gallon of water. This will destroy the eggs of Aphides."
Vines and outside wall trees should first be washed, stem and shoots, with 8 oz. solution of Gishurst, then smeared with clay and Gishurst, (see *Gardeners' Chronicle* Oct. 13), or with lime, sulphur, and Gishurst, made into a paste. If the smell be disliked, make the solution 48 hours before use.
Full directions as to the use of weaker solutions against mildew and insect pests in spring and summer, with particulars of the experience of many great gardening authorities, are enclosed with the boxes of Gishurst. These are supplied retail through any nurseryman and seedsman at 1*s.*, 3*s.*, and 10*s.* 6*d.* each, wholesale by PRICE'S Patent Candle Co., Limited.

FUMIGATING AND SYRINGING.
GRIFFITHS AND AVISS, TOBACCONISTS, Coventry, call attention to their TOBACCO PAPER. It is simple in use, safe in application, altogether effective in the destruction of Green Fly, Black Thrips, &c., nominal in price, 12*s.* 6*d.* per dozen pounds, sent to any part of the kingdom on receipt of Post Office Order. To those in the Trade a liberal discount on 28 lbs. and upwards. The following practical gentlemen have submitted it to every kind of ordeal, and bear testimony it is all we represent:—
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Mr. Wm. Oliver, the Earl of Craven, Combe Abbey
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Mr. W. H. Mountford, H. R. Hughes, Esq., Kinmel Park, St. Asaph, North Wales
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Mr. Francis R. Kinghorne, Nurseryman, Seedsman, and Florist, Richmond, Surrey
Mr. John Reeves, Ladbroke Nursery, Notting Hill, W.
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N.B. Cast Fumigating Pots, Tobacco Water for Syringing, and Tobacco Juice for Sheep Dressing.

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No. 35.

Diameter of Barrel.	Height.		£	s.	d.
2½ in. short	1 ft. 7 in.	Fitted for lead, gutta percha or cast iron flanged pipe as required.	1	1	0
2½ " long	3 " 3 "		1	10	0
3 " ditto	3 " 6 "		2	4	0
3½ " ditto	3 " 6 "		2	9	0
4 " ditto	3 " 6 "		2	18	0

2½ " short, with 15 feet of Lead Pipe attached, ready for fixing 2 0 0
2½ " long ditto ditto ditto 2 14 0
This Pump is fitted with J. W. & Sons' Patent Vibrating Standard Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.
Every description of Machinery for raising Water, by means of Wheels, Rams, Deep Well Pumps, &c.; also, Fire and Garden Engines, &c.
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The above may be obtained of any Ironmonger or Plumber in town or country, or of the Patentees and Manufacturers,
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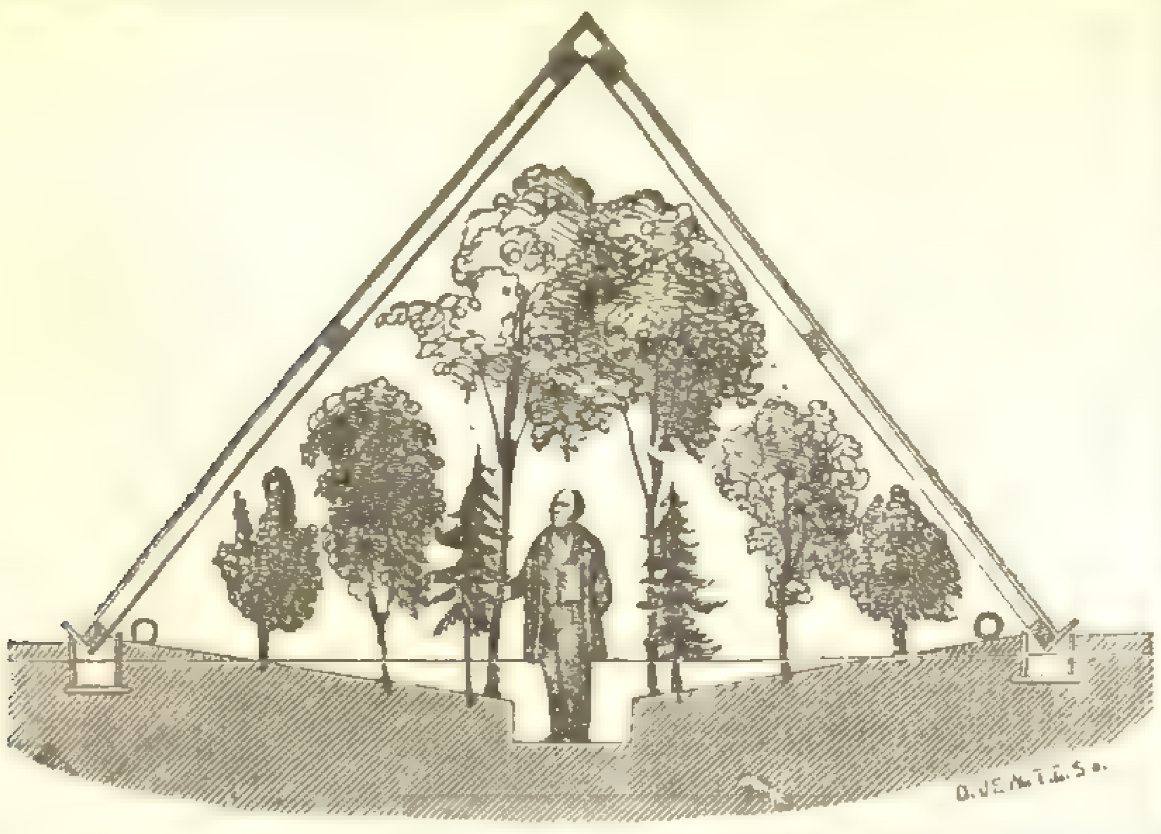

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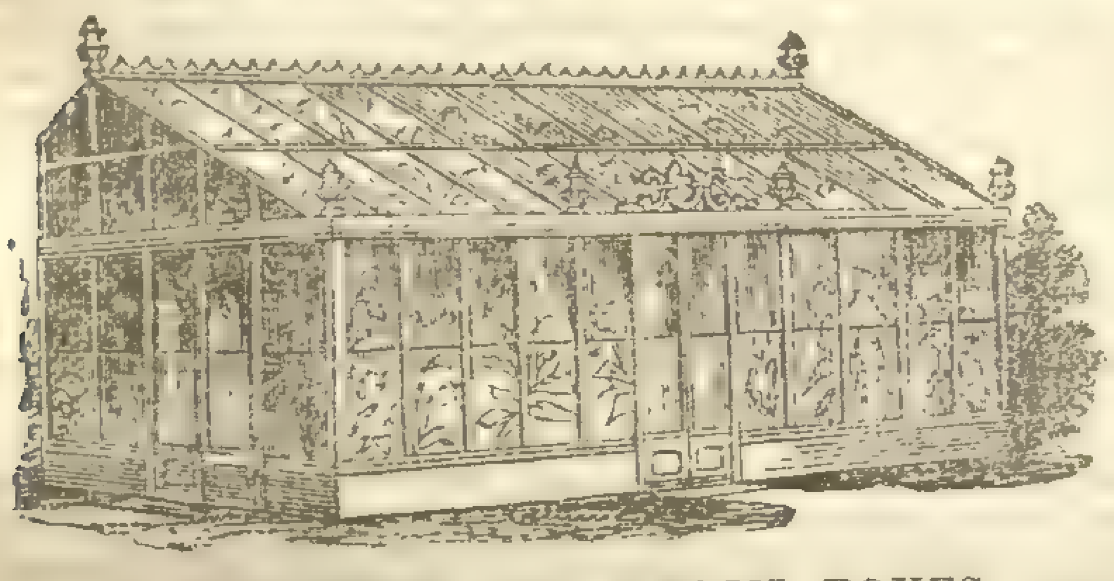

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Reference permitted to the Nobility and Gentry [illegible] Great Britain and Ireland.

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H. FREEMAN'S Horticultural Works, Hackney, N.E. Established 20 years. [illegible] made Greenhouses, glazed, ready for fixing, 42 feet [illegible] 50*l*.; 21 feet by 13 feet, 28*l*.; 12½ feet by 10 feet, [illegible] Houses 10 per cent. cheaper. A large assort[illegible] Estimate given for Heating, or any branch in iron [illegible]

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Squares in 100 and 200 Feet Boxes.

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Not accountable for breakage.

GENUINE WHITE LEAD	32s. 0d. per cwt.	LINSEED OIL	[illegible]
ANTI-CORROSION PAINT	34 0	BOILED	[illegible]
LINSEED-OIL PUTTY	8 0 ,,	TURPENTINE	[illegible]

BLACK, GREEN, and all other kinds of PAINTS, VARNISHES, BRUSHES, &c.

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EXTRA FINE DWARF-TRAINED PEACHES, NECTARINES, CHERRIES, AND PEARS.

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WM. WOOD AND SON refer with pleasure to their splendid Stock of the above; but more particularly to their DWARF-TRAINED MORELLO and MAYDUKE CHERRIES, which are as handsome trees as can possibly be desired.

STANDARD AND DWARF-TRAINED PEACHES.

R. GLENDINNING begs to offer some very splendid trees. They have all been trained on walls. The wood is well ripened, and many of them in a bearing state. They are all of the very best sorts, and true to their names. PRICES and LIST on application.

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WM. KNIGHT respectfully solicits attention to his well-grown stock of the above, but more particularly to his Dwarf-Trained Peaches, Plums, and Morello Cherries, many of the latter having from 12 to 18 branches to each tree; would bear a good crop of fruit the coming season, having been recently transplanted. Price each or per dozen on application. CATALOGUES of General Nursery Stock free on application.—Floral Nursery, Hailsham, Hurst Green, Sussex.

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JAMES DICKSON AND SONS, The Newton Nurseries, Chester, have now for disposal "10 MUSCAT OF ALEXANDRIA VINES," with rods 12 to 15 feet, strong and well ripened, fit to carry a full crop this season. Price on application.

BUCKLAND SWEETWATER GRAPE.—Special Prizes of 5*l.* and 3*l.* will be given by the Subscribers for the best Three Bunches of this fine early Grape, in September, 1862; likewise Special Prizes of 2*l.* and 1*l.* will also be given for the best Bunch of the same in July, 1862. Strong Plants, 10*s.* 6*d.* and 21*s.* each.—J. IVERY & SON, Dorking, Feb. 23.

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	Each—*s.*	*d.*
1. BRAHY'S GREEN GAGE, the largest known ..	5	0
2. BRYANSTONE GAGE, late and excellent	3	6
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6. TRANSPARENT GAGE, very large	3	6

The above are all of first-rate quality—Nos. 4, 5, and 6 are fully described in Dr. Hogg's "Fruit Manual." Fine healthy trees, Dwarf and Pyramids, are now ready for delivery—paid to London.—THOMAS RIVERS, Nursery, Sawbridgeworth.

CUTHILL'S STRAWBERRY PLANTS.—Black Prince, 5*s.* per 100; Princess Royal of England, 7*s.* 6*d.* per 100; Prince of Wales, 7*s.* 6*d.* per 100; Highland Mary and Improved Black Prince, 1*l.* per 100 each. All fine strong Plants.

BLACK SPINE and HIGHLAND MARY CUCUMBERS, seed, 1*s.* per packet; best MELONS, &c.

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STRAWBERRY PLANTS.—Spring being the best time for planting, strong healthy PLANTS can be supplied of nearly 200 varieties. A DESCRIPTIVE CATALOGUE of the above may now be had by applying to the Grower,

WM. JAS. NICHOLSON, Egglescliffe, Yarm, Yorkshire.

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W. J. EPPS begs to state that he has a large quantity of fine Trees of the above, which may be depended on. Maidstone and the neighbourhood is the only district where this valuable Nut is cultivated to any extent, 6*s.*, 9*s.*, and 12*s.* per dozen; 30*s.* to 40*s.* per 100.

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COTTAGERS' KALE.

CHARLES TURNER can supply Seed from selected plants of this delicious Winter Green. It is the only plant of its class unharmed by the late severe weather.

Price to the Trade on application.

POTATOES.

CHARLES TURNER has a fine stock of the DALMAHOY, round, early, a great cropper, producing double the quantity of most kinds: of a good uniform size, of excellent flavour and floury; the best Potato grown for a general crop, being also a good keeper.

GLORY OF ENGLAND (Kidney) one of the earliest, most prolific, and in all respects one of the best Potatoes ever introduced.

Also fine healthy sets of all the leading kinds. See Catalogue.

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CHARLES TURNER'S DESCRIPTIVE LIST, containing several Novelties, and a Selection of the best established varieties, is now ready.

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CHARLES TURNER'S plants of the above are remarkably fine of all the classes, and in great variety. If purchased by the dozen are at very moderate prices.

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CHARLES TURNER'S select named varieties of the above can be supplied at 12*s.*, 21*s.*, and 30*s.* per dozen. These are of the finest quality.

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CHARLES TURNER'S NEW LIST is now Ready; it comprises new and general Collections of PELARGONIUMS, FANCY do., CINERARIAS, DAHLIAS, AZALEAS, FUCHSIAS, VERBENAS, VARIEGATED GERANIUMS, SCARLET do., ACHIMENES, GLOXINIAS, CALCEOLARIAS, PETUNIAS, CHRYSANTHEMUMS, PHLOX, CARNATIONS, PICOTEES, PINKS, AURICULAS, &c. &c.

WELLINGTONIA GIGANTEA, AND CUPRESSUS LAWSONIANA.

CHARLES TURNER has a large stock of various sizes of these very Ornamental Trees, which have also proved themselves to be the most hardy of our Conifers.

Prices on application.

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CHARLES TURNER has very fine Trained and Standard Trees of all the sterling varieties. COX'S ORANGE PIPPIN APPLE and the SALWEY PEACH are highly recommended.

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All the Catalogues enumerated will be forwarded gratis and post free.

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POLYANTHUS SEED.

JAMES WOODS is now sending out his Polyanthus Seed, saved from a forty years' selection of plants; all first-rate Flowers, not to be excelled in the kingdom. Price 1*s.* per packet, or sent free on receipt of 14 postage stamps by JAMES WOODS, Florist, Harwich, Essex. The usual discount to the Trade.

SPLENDID SUMMER STOCKS.—

"DERBY" SCARLET 10-week, per packet .. 1*s.* 0*d.*
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A DESCRIPTIVE PRICED LIST of REALLY GOOD VEGETABLE AND FLOWER SEEDS free on application.

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THOMAS WILD'S PRIMULAS, in White, Crimson, Purple, Lilac, Pink, Scarlet, Striped and Spotted; 2*s.* 6*d.* per packet.

THOMAS WILD'S ORION MELON (true), the best in Cultivation for Beauty, Weight, and Flavour; 1*s.* per packet.

THOMAS WILD'S No. 1 and 2 CUCUMBERS,
On trial at Chiswick; 1*s.* per packet.
The Primulary, Ipswich.

GLADIOLUS BRENCHLEYENSIS.—In the *Gardeners' Chronicle* of September 8, 1860, p. 816, the following Report will be found:—

"GLADIOLUS BRENCHLEYENSIS.—We have received from Messrs. YOUELL & Co., of Great Yarmouth, some specimens of this plant, the gorgeous appearance of which cannot be spoken of in terms of exaggeration. The tall robust habit and intensely bright scarlet flowers, place it at the head of all the hardy flowers of the autumn."

Flowering roots, 30*s.* per 100; or 4*s.* per dozen. Trade price on application.—Royal Nursery, Great Yarmouth.

CARTER'S LIST OF NEW AND CHOICE VEGETABLES.

	Per packet—*s.*	*d.*		Per packet—*s.*	*d.*
Lee's White Sprouting Broccoli	2	6	Carter's Giant White Cos Lettuce	1	0
Nutting's selected dwarf Red Beet	1	0	Carter's Champion Cucumber	1	0
Tomato de Laye	0	6	New Feather-stem Savoy	1	0
Dalmeney Broccoli ..	1	0	Carter's Excelsior Melon	1	0
Conning's Perfection do.	1	0	Turner's Gem	1	0
Melville's variegated garnishing Kail	1	0	StrathmoreHeroPeas, p.qt.	2	6
Carter's dwarf Mammoth Cauliflower	1	0	Handsworth Potatoes, per peck	5	0
Hood's dwarf Imperial Celery	1	0	Pheasant Eye do. „	3	0
Lynch's Star of the West	1	0	Dalmahoy do. .. „	3	0
			Baldry's Scarlet Defiance Rhubarb, per root ..	2	0

For further particulars see CARTER'S SELECT LIST OF GARDEN AND FARM SEEDS, forwarded gratis, and post free on application.

JAMES CARTER & Co., 237 and 238, High Holborn, W.C.

The Gardeners' Chronicle.

SATURDAY, FEBRUARY 23, 1861.

PERHAPS there is no scientific discovery in the whole field of physical research which would be of greater importance to the agriculturist than some certain laws by which we might FORETELL FUTURE WEATHER. It is no wonder that such a subject should make itself of such wide-spread interest, and that it should always have had so much attention accorded to it. The importance of this department of meteorology, indeed, can hardly be overrated, either when considered in connection with climatology as bearing upon human health, or with a knowledge of atmospherical phenomena affecting the operations of the husbandman. In proportion to this general interest, has been the numbers of aspirants who have claimed for themselves the merit of having discovered the laws which regulate our atmosphere, by which they could predict its variations and phenomena with the precision that the astronomer antedates an eclipse. Such persons have at various times engaged public attention, but without, to any considerable extent, influencing opinion, or holding their position as weather prophets, a reputation gained sometimes by a lucky chance rather than anything else, and as easily lost by failure. Of the latter there was usually no inconsiderable number, as may be imagined, when it is known that at the time when "weather almanacs" were in their glory almost nothing was really known of the true causes of the very phenomena of which their authors pretended to fix the period of occurrence. For ourselves we incline to think that even yet Meteorology is too much in its infancy to afford sufficient data on which to ground predictions of future weather with such a degree of accuracy as to make them of any great practical use. Situated as we are in the midst of the ocean, at so comfortable a distance from the tropics, whence moisture is brought over in a moment, without any particular wind, or apparent cause, it seems to be peculiarly difficult, if not impracticable, to predict weather many hours before its occurrence.

Electricity and magnetism have been by some writers assigned as the agents or active forces at work producing all the changes and phenomena observed on our own or other planets; solar being in fact electric heat. Very elaborate papers have been written to prove the correctness of this theory, and show the necessarily correct inferences which must result from a theory so exact: unfortunately experience in no way bore the authors out, and plainly told them that they had failed. Others have attempted to class atmospheric changes with planetary and stellar motions, but their predictions have also failed to stand against the test of time, and have been found, by persons to whom an anticipation of rain or fine weather was of importance, to be totally insufficient for the purpose it was affirmed they would serve. We can scarcely think that we are to look to astronomical epochs taking place gradually, and according to constant laws, for an explanation of those sudden irregularities to which our atmosphere is always liable. Knowing the influence that is exerted by the sun, and our satellite the moon, upon particles of air and water, we do not think it improbable but that certain changes may be caused by the relative positions of these two bodies with respect to our globe, but what influence they do exert must be at stated periods and but of short duration; leaving no grounds whatever, we think, for connecting the general changes directly with the positions of either sun or moon.

Some of the many signs by which it is supposed may be learned the kind of weather to be expected are not without their uses, but usually they will be found only to be true as they indicate a very near approach of change, a change which by consulting the barometer and thermometer in conjunction could be seen much earlier. The crying of some birds, the flight of migratory birds, the habits of some insects, the closing or opening of certain flowers, and any peculiarity in the behaviour of the domestic animals, have all been set down as so many sure indications of atmospheric conditions and changes; were we to enumerate all the signs that have at different times been received and believed in, we might fill a volume, but we think our readers would ask *cui bono?* We shall enumerate here some of the more trustworthy appearances, founded upon physical facts, and which, in the place of more exact knowledge, may serve the turn of our professional readers, either to warn or assure. Sir Humphry Davy has left us some of the most sound observations and explanations on this matter. Thus—when the evening clouds in the west are observed to be of a red colour, tinged with purple, we may expect fair weather, because, the air being dry refracts more of the red and heat-making rays than when moist, and those rays are reflected in the horizon, the dry air not being perfectly transparent. On the other hand, a yellow coppery sunset may be taken as an indication of approaching wet. The best and surest sign of wet weather though, is in the halo sometimes seen round the moon, since it is formed by the precipitated water: the larger the diameter of the halo the nearer will the clouds be; consequently the more ready to descend in the shape of rain. The rainbow is another token by which weather may be foretold according to its position; when we see the bow in the west we may expect rain, since the rain in this country usually is brought by that wind, and the fact of seeing the bow in that quarter would seem to indicate that the clouds being then dissipated in rain were coming towards the observer: whereas if the bow were in the east the rain cloud would probably be moving away from him. The fact of swallows flying high is said to betoken fine weather, and is explained by stating that the insects on which these birds feed, preferring a warmer stratum of air, and seeking it higher up in the atmosphere, are followed by swallows, showing that the moister air is below, and therefore is not liable, as would be the case if the colder and heavier air were above, to the descent of colder strata and consequent condensation in the shape of water.

From the form, colour, and density of the clouds in connection with the direction of the wind something with respect to the weather may be drawn; if the high well-formed cirrus be the prevailing modification with a northerly wind it is a pretty sure indication of fine. If, on the contrary, the clouds take the form of heavy cirro-cumulus, and are seen to increase in density, we may expect present rain. The appearance of the air as regards its clearness or the contrary, the appearance of the moon and stars, &c. at night, may all be taken as indices of the weather; with due regard to any local peculiarities which from experience the observer might have found to have any influence on the weather in his neighbourhood. The vicinity of hills, lakes, or the sea will of course have an influence on the meteorological phenomena of the place; as we know the amount of rain falling in the Lake district in England is very considerably more than that experienced in other parts of the country, although the number of rainy days may be less, the difference being made by the very heavy falls which take place there. The approach of the thunder storm is well known, from the huge masses of cumulo-stratus appearing piled one on the other like gigantic mountains, having their bases very dark whilst their summits are sometimes white, giving the idea of a mountain tipped with snow. Such an appearance is too well known to pass unheeded, and warns us to fly from the fast approaching storm to the first place of

shelter at hand. But in addition to these observations, requiring no instrument, and therefore very valuable where such are out of reach, we cannot urge upon the agriculturist too strongly the great benefits he might derive from frequent and careful consultations of the dry and wet bulb thermometer, together with the barometer. The inestimable service of the barometer at sea cannot be overrated; it tells the sailor of storms coming and warns him to prepare himself for them, enabling him to ward off the effects which otherwise might have ended in wreck and death. It tells him of fine weather and sets his mind at rest, bidding him set all sail and hasten on his way. If these great and important objects are within the reach of the sailor, are they not equally so in that of the farmer? we believe much property might be saved, and crops improved, by knowing the favourable periods when sowing, cutting, &c., might be proceeded with without interruption from the weather, if these useful instruments were better understood and in more general use.

In some countries, as we know, atmospherical phenomena occur with the most constant precision, and may with certainty be predicted for weeks and even months before their advent; the trade winds and the periodic rains of the tropics being remarkable examples; but, as we mentioned before, this is very different in our latitude, and we see changes frequently occur for which we can apparently find no cause, and which at one blow seem to demolish all our laws and prognostics. By the physical observations, some of which we have enumerated, and by experience of any local effects we may learn a great many of the secrets of weather wisdom, and occasionally get a pretty fair clue to what Nature has in store for us. It is at this present period that everybody looks forward to the opening year with curiosity and anxiety as to what time shall unfold, and what weather shall follow the very remarkable period we have experienced during the past 18 months. Will the terrible and disastrous gales of 1859, extending over some four months with more or less violence, ever be forgotten, marked as they were by most severe losses by shipwreck, both of life and property. The gales continued up to the spring, and then, excepting May, which was a tolerably fine month, commenced such a season of wet and cold as has rarely been experienced, proving as disastrous in its effects to the agriculturists and gardeners as were the autumnal and winter storms to underwriters and sailors.

It will be seen upon an inspection of meteorological reports that nearly every month of 1860 was deficient in temperature as compared with the average, and that in the summer months this deficiency was very large, thus making it peculiarly felt in the fruit garden and in the cornfield. But not only was the low temperature a remarkable feature in the year's meteorology, there was another element which considerably differed from its average, viz. the rain. We see the total fall for the year, at Greenwich, amounted to the large sum of 32 ins., being nearly 6 ins. more than the fall of the previous 12 months. The sad effect of this unusual rain was too plainly seen all over England; in some places where the land was low, water to the depth of some feet constantly stood, and in the districts where the ground was below the sea level, no sign of dry land was visible for weeks together, the landscape assuming the appearance of a lake so entirely was it submerged. Not before another winter had commenced were we to see anything like seasonable weather. The earlier portion of the present winter, up to about the 15th of December, was not very different from the average, if anything a little milder; this was succeeded by severe and protracted cold, accompanied by heavy falls of snow in different parts of the country. Though this cold period occurred at a time of year when we usually experience our coldest weather, yet it was far below the average, and for a considerable time. Our winter has then been severe, though not unseasonable, up to the present time, and little or no inconvenience excepting of a temporary character may be anticipated from it; indeed for many purposes it must prove highly beneficial, and it is with confidence that we look forward to the opening year, when, should we be favoured by correspondingly seasonable weather, and the warmth of the summer should bear any proportion to the cold of the winter, we may reasonably anticipate a year abundant and fruitful.

—— At the meeting of the Imperial Horticultural Society of Paris on the 8th of last November a bunch of *black* Grapes was produced, which had been grown from seeds of the *White* Malaga. It was observed that a case exactly analogous had occurred in the production of the excellent early white Saumur Muscat by M. Courtillier, from seeds of the Black Grape of Ischia.

—— We see that the same Society has begun to *expel* its members who do not pay their annual subscription.

—— A M. Hubéda, a Paris Florist, advocates the introduction of *Cannas* into flower-garden cultivation. He says that such species as C. Annei, Warczewitzii, indica, discolor, gigantea, and Sellowi will pass the winter very well out of doors, provided they are protected from cold, and most especially wet in winter, by a bed of leaves. It is however necessary to take off the leaves now and then in dry weather. M. Hubéda further states that masses of Canna indica and gigantea, treated in this manner, have gone through the winter very well, in the Bois de Boulogne, and that in the second year their stems were from 3 to 3½ yards high. If so they must have had a grand tropical appearance. It seems that the plants are started in a hot-bed, that they then throw out suckers, which easily root, without damaging the mother plant; these suckers must, however, be handled gently, as they are very brittle. The right soil for them is three parts of leaf mould, and one part of peat. While young, after having been potted off, they will not bear wet; and in fact should only be syringed. But when their new roots begin to line the pot, then is the time for plentiful watering and repotting. The rest of their treatment presents nothing peculiar till the time arrives for turning them out. They should then be planted in good garden mould and rotten dung, in the hottest place that can be found. *Journal de la Société impériale.*

REPORT ON VARIEGATED BEGONIAS, GROWN AT CHISWICK, 1860.

By Mr. Moore, Secretary to the Floral Committee.

(From the Proceedings of the Royal Horticultural Society.)

The remarkably showy race of dwarf Begonias, having the leaves marked with elegant variegations, had become so much extended by the production of seminal varieties since the introduction of B. Rex, that attention was very early directed by the committee to the collecting of as many of these varieties as could be readily procured, in order that their respective merits in an ornamental point of view might be determined by direct comparison. For this purpose about 40 varieties were obtained in the spring of 1860, and of these 36 are described in the following memoranda, the remainder having either died or been too imperfectly developed to admit of their true character being seen.

This extensive collection was liberally contributed for the purposes of the committee by the following gentlemen, namely:—Messrs. Rollisson & Sons of Tooting, Mr. Veitch of Chelsea, Messrs. E. G. Henderson & Son of St. John's Wood, and Messrs. Low & Co. of Clapton.

The following classification of the varieties may assist in the identification of them:—

Ser. i. Argenteæ. *Upper surface of the leaves wholly silvered not zonate or vittate.*

1. B. argentea.

Ser. ii. Zonatæ. *Upper surface of the leaves marked with distinct colours, in a zonate manner.*

§ 1. *Leaves smallish, with bright silver zone.*

2. B. Griffithii	5. B. Regina
3. B. argentea guttata	6. B. amabilis
4. B. Madame Wagner	

§ 2. *Leaves large, with bright silver zone.*

7. B. Marshalli	10. B. Rex Leopardinus
8. B. Madame Allwardt	11. B. marginata
9. B. Rex	12. B. Cloth of Silver

§ 3. *Leaves large, flushed with red, silver or green-zoned; hairy beneath.*

13. B. Queen Victoria	18. B. nebulosa
14. B. grandis	19. B. rubra marginata
15. B. Urania	20. B. Queen of England
16. B. virginata	21. B. Isis.
17. B. Rollissoni	

§ 4. *Leaves wholly green and red.*

22. B. Royleana	24. B. Prince Troubetskoi
23. B. Roi Leopold	

Ser. iii. Vittatæ. *Upper surface of the leaves marked with silvery or other coloured bands or stripes, not zonate.*

§ 1. *Leaves obliquely ovate.*

25. B. picta	30. B. Victoria
26. B. miranda	31. B. splendida argentea
27. B. xanthina Reichenheimi	32. B. splendida imperialis
	33. B. splendida guttata
28. B. xanthina marmorata	34. B. vittata
29. B. xanthina argentea	35. B. Thwaitesii

§ 2. *Leaves palmately lobed.*

36. B. ricinifolia maculata.

The plants, which were under the care of Mr. Eyles, were grown to a moderate size under uniform conditions; and on the 2d of August, when in a well-developed state, were brought under the notice of the committee. The result of this, and of a subsequent examination was that the following varieties were selected as the best and most distinct in the several groups, the other kinds contained in the collection being thought unnecessary where these were grown; namely:—

In the first group.—B. argentea.

In the second or zonate group.—§ 1: B. Regina, Madame Wagner, Griffithii; § 2: B. Marshalli, Rex, Rex Leopardinus; § 3: B. Queen of England, nebulosa, Rollissoni; § 4: B. Roi Leopold, Royleana.

In the third or vittate group.—§ 1: B. xanthina Reichenheimi, splendida argentea, Thwaitesii; § 2: B. ricinifolia maculata.

The peculiar features of the several kinds are indicated in the following descriptive memoranda:—

1. *B. argentea.*—From Messrs. Rollisson & Sons, Mr. Veitch, and Messrs. Low & Co. Leaves large, greenish gray, of a satiny texture, looking as if silvered and polished; they are speckled over with fine pencilled zigzag markings of a deeper green, and veined with light red behind. The stalks are purplish, shaggy with white hairs. It is a very distinct sort, remarkably pallid in colour.

2. *B. Griffithii.*—From Messrs. Rollisson & Sons, Mr. Veitch, and Messrs. E. G. Henderson & Son. This is a plant of dwarf habit, with medium sized leaves, which are downy on the surface, and have a broad dark opaque green centre, exterior to which is a grayish or silvery zone and a dark green border of nearly equal width; the green becomes rather paler where it joins the gray. The under surface, opposite the green portions of the upper side, is red; and the stalks are pale, red-haired, and downy. This is a pretty, distinct, small-growing kind, of second-rate value.

3. *B. argentea guttata.*—From Mr. Veitch, Messrs. E. G. Henderson & Son, and Messrs. Rollisson & Sons. The leaves are of medium size, with a broad dark green centre, which dark green colour passes along the veins in a narrow broken line through the silvered zone, so that it almost comes into the vittate series. The zone is of a clear silvery gray, becoming narrower towards the base of the leaf, and is margined with a green border of about half its own width. The leaves, as is generally the case in these plants, are marked on the under surface with red at those parts which are opposite the green or darker parts of the upper surface. The stalks are red and hairy.

4. *B. Madame Wagner.*—From Messrs. E. G. Henderson & Son, Messrs. Rollisson & Sons, and Mr. Veitch. This is a very bright-looking variety, of moderate size. The leaves have a dark green centre, forming a tapering-rayed star, which is surrounded by a broad silvery zone, somewhat broken by the faintly tinted veins, and exterior to this by a narrow veiny or broken green edge marked with red behind. The stalks are red, hairy. It is a very pretty and effective sort, with the surface more silvered than B. Regina, and one of the most desirable varieties.

5. *B. Regina.*—From Messrs. Rollisson & Sons. This variety resembles B. amabilis in character, but is larger and was considered superior to it, and a desirable kind. The leaves are of medium size, glossy, with a dark olive-green centre, surrounded by a clear silvery-gray vandyked zone, exterior to which is a dark green border nearly equalling it in width. The leaves are marked with red behind, and have red hairy stalks. The colours of the surface are distinct and well marked, rendering this a desirable sort for cultivation.

6. *B. amabilis.*—From Mr. Veitch. This is a neat dwarf kind, with rather small leaves, of which the central part, extending half way to the margin, is bright green, and the rest of the surface is about equally occupied by a zone of silver-gray and a border of green. The under surface is bright red, and the stalks purplish and downy. It is a desirable small species.

7. *B. Marshalli.*—From Mr. Veitch and Messrs. Rollisson & Sons. This fine variety has large slightly bullate leaves, with the colours of B. Rex, but a broader silvered surface. The deep green of the central part radiates in tolerably even lines along the course of the veins, so as to form an irregular star; the zone of silver-gray is vandyked on both edges, and is nearly twice as broad as the green margin, which is blotched and spotted with gray. The leaves are stained with purple behind, and the stalks are purplish and shaggy. It is one of the very best sorts.

8. *B. Madame Allwardt.*—From Messrs. Low & Co. This handsome form bears so very close a resemblance to *B. Marshalli*, which was preferred before it, that both these kinds would not be required in the same collection; and it would not be very material which of the two was chosen.

9. *B. Rex.*—From Messrs. Rollisson & Sons, and Mr. Veitch. This fine species, the parent of most of the larger zonate varieties now in cultivation, was regarded as being still one of the most ornamental in the group. The leaves are large, somewhat bullate, deep green in the centre, tinged with red while young, the colour in this part scarcely radiate, and surrounded by a vandyked zone of silvery-gray, which in width is about equal to that of the green margin. The colours are definite and effective. The under surface is dark red, marked with red veins on the lighter parts opposite the gray zone, and the stalks are purplish, clothed with shaggy hairs.

10. *B. Rex Leopardinus.*—From Messrs. Rollisson & Sons. This variety also bears a very near resemblance to B. Marshalli, but has the silvered zone somewhat broader. It was considered one of the most select and desirable ornamental varieties.

11. *B. marginata.*—From Messrs. Rollisson & Sons. The leaves are rather above medium size, and marked in the way of B. Rex, but the zone is twice as broad as the border, and the parts are less effectively contrasted in colour. The under surface is veined with red.

12. *B. Cloth of Silver.*—From Messrs. Rollisson & Sons. The leaves of the variety are about the medium size, nearly covered with silvery-gray, having a very

small pale green central star formed by a green border to the base of the principal veins, and having also a few broken dark green markings at the edge. The leaves are scarcely bullate, and the under surface is veined with red. It approaches nearly to B. argentea, but the marking is obviously zonate.

13. *B. Queen Victoria.*—From Messrs. Low & Co., and Mr. Veitch. The leaves are large, deep red behind, a good deal like those of B. Queen of England, but more stained with red; and they are speckled on the dark ground colour of the upper surface. The centre of the leaf consists of a small dark red-green star, speckled with silver; and the border beyond the zone is narrowish, of the same dark red-green colour, dotted as in B. Queen of England, and speckled between the dots. The stalks are shaggy, with red hairs; and the veins are hairy above.

14. *B. grandis.*—From Messrs. Rollisson & Sons.—This was one of the large red-stained series, and bore so close a resemblance to the variety received as B. Queen of England as to have been regarded as the same for all practical purposes.

15. *B. Urania.*—From Messrs. Rollisson & Sons. This variety had leaves above the medium size. The centre which forms a star, and the border, are both of an opaque deep green, and the intermediate zone is of a glossy bronzy green, purplish while young, but when mature of nearly the same tint as that of the centre and margins. The upper surface is sprinkled with red hairs, the under surface purple, and the stalks purplish-red and shaggy. It is rather a dull-coloured plant.

(To be continued.)

CELOSIA AUREA.

Among recent introductions, or rather among plants which have recently become popular, that which heads this notice is not the least interesting, for whether considered in relation to its adaptability for a single specimen, the elegance of its habit, or the desirableness of its golden masses of colour for conservatory decoration, it is certainly one of the most useful tender annuals which has of late years been brought into notice. The brothers Thomson, to whom we are indebted for its general distribution, have grown it for some eight or ten years past, but whether they won it by cultivation from the Yellow Cockscomb (C. cristata flavescens), or obtained it by foreign introduction, I am not prepared to say; but however it was procured I for one should be delighted to see a crimson variety of the same habit, for I regard this pyramidal variety as a much more useful and elegant plant than those stiff formal waxwork looking things upon which gardeners of the olden time, and even some of modern date, have given themselves so much trouble. With the blue aprons of my younger days "my Cockscombs" were scarcely less important in point of cultivation than "my Cucumbers" or "my Melons," and even some at the present time consider it a grand achievement to grow a Cockscomb 18 inches to two feet over the comb. For my own part I see but little beauty in these stereotyped forms; it may be want of taste, but I would rather see one good specimen of this feathery variety than all the formal things that may be grown during the present year. I would also in this place wish to impress upon cultivators the importance of retaining the feathery form of Celosia in other colours. The "Florist" has figured a crimson variety which is no doubt very pretty, but we must not rest until we get a crimson variety equal to the orange one in point of habit. Those sticklers for "form" who can see no beauty except through a pair of geometrical spectacles will no doubt object very strongly to throwing the old form of Cockscomb out of cultivation; but that I do not want so long as they will assist me to obtain a variety which will be more useful in a decorative point of view and certainly not less worthy of cultivation.

Now in the cultivation of all soft-wooded and free growing plants the great desideratum is to have a suitable compost, a sort of general stock, which with the addition of a little sand, &c., to make it, as may be needed, light or heavy, will be ready at all times. This is best prepared by procuring two loads of fresh horse dung as much impregnated with urine as possible. Throw it together into a heap to ferment, and if not sufficiently moist sprinkle it with the drainings of the stable. It will require to be turned two or three times until it gets in a uniform state as to heat. Then procure four loads of nice turfy loam from an old sheep pasture and cut as thinly as possibly, chop this roughly over, and then having placed a layer about a foot thick upon the ground, proceed to build up a heap in alternate layers of the hot dung and loam, taking care to use the dung in sufficient quantity at the commencement to insure the mass heating in a regular manner. If there should be any doubt on this point cover the whole with hot dung to assist the fermentation, as the moisture should heat sufficiently to destroy every sign of insect or vegetable life in the mass. After sweating for a fortnight in this manner turn it over, throwing the sides of the heap into the middle, and then let it heat again, only covering with mats to throw off rain, and also in some measure to prevent the loss of ammonia. When the heat subsides turn the heap over frequently, mixing the loam and dung as intimately as possible, but still not breaking it too fine. This turning may be repeated frequently, so as to get the mass well aired; but at the same time great care must be taken to keep it dry. Some of the outside portions of the compost will be fit to use after it has been exposed to the action of the atmosphere for a few weeks: but use it with caution, for if properly prepared it will be almost as strong as guano, and much too strong for indiscriminate use. Compost of this kind sufficient for the use of a season should be prepared every autumn while the soil is dry, and if a sufficient stock is prepared to have six months' airing before any of it is used, it will be so much the better. Where hunters or other horses are kept in loose boxes it is a capital plan to bed them with leaves instead of straw, and a quantity of that taken when it has accumulated to the depth of 15 or 18 inches, and got quite hot and used instead of dung from litter, makes the finest compost in the world. Compost like this, or similarly prepared, is the secret of a large proportion of the splendid plants seen at the metropolitan exhibitions, and it also to some extent supplies the reason why of two plants growing in the same sized pot one in point of vigour may be cheap at 3*s.* 6*d.*, while the other would be dear at a third of the price.

Having prepared the soil we will next proceed with the cultivation of the Celosia. I generally make three sowings, one in February, another in March, and the third in April, and these give a good succession of bloom to Christmas or even into the new year. To start the seeds strongly and well a bottom-heat of 80° to 90° is necessary, sow the seed thinly, but directly the plants are up place them close to the glass and give air freely to keep them dwarf and stocky. As soon as the plants are sufficiently strong, pot them off into "thumbs," using equal parts of the preceding compost and mellow loam intermixed with sand and charcoal. Give the young plants the advantage of a bottom heat of 80° at the least, a moist atmosphere and as much air night and day as the heat of the frame, pit or house will admit of, always bearing in mind that the night temperature should not fall much below 60°, while in the day time a brisk moist heat rising to 80° or 90°, with sunheat and moisture will not be too much. As the pots fill with roots, shift into those of a larger size, using the same compost, but decreasing the proportion of sand and charcoal as they approach their final shifts. Fine plants may be grown in 11-inch pots, but if you wish to attain the fullest perfection, 13 or 15-inch pots will be necessary. A really well done specimen of this Celosia should not be less than 4 to 5 feet in height, proportionately bushy, branched to the foot, and with its plumes of rich orange flowers nodding in hundreds. After the plants get too large for pits or frames a vinery or plant stove is a suitable place for them; but when the flowers begin to change colour, more air and a comparatively dry atmosphere is necessary, always bearing in mind that the red spider likes to feed upon the Cockscomb, and therefore it will be necessary to keep a watch to arrest its ravages. The Celosia answers well for conservatory decoration in summer and autumn, but after the nights get cold the temperature of an intermediate house or cool stove is the most suitable for it. *P.*

Home Correspondence.

Geothermal Culture.—The leading article in the *Gardeners' Chronicle* of February 16, alludes to an article on the subject of Geothermal Culture, signed "Steam," which appeared at p. 1104 of the last Volume of the *Gardeners' Chronicle*. The subject seems to be of some interest, being considered not undeserving of consideration and discussion. Suppose the system suggested in the article signed "Steam," to be applied to the cultivation of Seakale and Asparagus, productions of great value at their respective and succeeding seasons. Might it not be expected that the moist heat which would be generated in the soil—at such times as experience might prove to be useful—would materially promote the earliness, abundance, and vigour of the crops. Steam might be used, so as never to admit the action of the frost on the subsoil and soil, and roots of the plants, and when the proper season came—a gentle forcing action would take place. If there is anything in the idea, more capable persons may think of it. *Steam.*

The Late Severe Frost.—The injury caused by the late frost to trees, shrubs, &c., has by no means been uniform; its effects having been modified by difference of situation, soil, and other circumstances which experienced cultivators can sufficiently account for. It will be remembered that while the severe weather lasted, although the actual temperature was at times lower than has been recorded for some years past, yet, with the exception of a few hours, there was an absence of piercing continuous wind, which at this season generally inflicts such injury on the young wood of trees and shrubs. The perusal of Mr. Paul's statement has, as he therein suggests to the reader, led me to compare notes and to inspect carefully the specimens I have planted in the grounds here, particularly those kinds he has mentioned. The situation of these grounds is apparently the reverse of Aldenham Abbey, being about a mile and a half south of the Surrey hills—hence too distant to be in any way sheltered by them—and five miles east from Reigate, on an eminence at the west end of the village of Blechingley, which slopes towards the north-east, and is fully exposed to the wind when it blows from that quarter. The soil is chiefly of light dry sand with very little clay and loam. All kinds of Coniferæ thrive well, and many of them in a warm season make astonishing growth. Now, it has invariably happened that a cold piercing wind from the N.E. has injured more or less the young shoots of most of the Coniferæ and evergreens, killing the tops of the branches, turning the foliage brown, or otherwise rendering them unsightly for a time; when, therefore, the late frost set in, I was apprehensive that I should be a severe sufferer, and lose the greater number of my pet plants. Such apprehensions I am happy to say are not fulfilled, and in trying to discover the reason I come to the conclusion that their safety is owing to the light and sandy nature of the soil, which prevented an accumulation of moisture at the roots, notwithstanding the great rains of the past year; and as I before mentioned, the absence of a continued piercing wind. I have by no means escaped altogether unscathed, but your readers may assure themselves that the oft-repeated caution to have ground on which it is intended to plant Coniferæ and evergreens well drained is a great fact, and not to be disregarded with impunity. To name particular instances—Cupressus macrocarpa, considerably injured by the severe autumn of 1859 and following spring, from which it recovered last summer, is totally uninjured, and at this moment presents a beautifully fresh and green appearance. C. Goveniana is similarly untouched by the last frost, although 18 inches of its leading stem was killed by the former season. C. sempervirens and C. torulosa have not suffered as in the previous winter, when they both lost their tops. C. Lawsoniana (a young plant) has likewise escaped, hence, proved to be perfectly hardy, it ought to be in every collection. Thujopsis borealis and Fitzroya patagonica have borne the ordeal without fault. Taxodium sempervirens, hitherto an invariable sufferer from cold winds, has not only completely escaped injury, but during the last few fine days began to show signs of growth. Of Evergreens, Laurus nobilis is slightly touched at top; Arbutus Unedo and the Laurels scarcely exhibit a dead leaf; a Laurustinus that is slightly sheltered looks as fresh as it did before Christmas; another fully exposed is injured all over, and when the thaw commenced exhaled the disagreeable smell complained of by some of your correspondents. Magnolia grandiflora, against a west wall, injured in the young shoots; M. exoniensis, south wall, similarly affected; Jasminum revolutum, against a west wall, has suffered more than any other plant in the place, its foliage and young wood being entirely destroyed. Many other examples might be adduced, but I will merely add, that it is my belief that it is not always the indication of low temperature that causes the great destruction of so many plants during severe winters, but other circumstances in connection with it, some of which may by care and foresight be remedied. It is a known fact in some tropical countries, perhaps all, that occasionally before sunrise the temperature of the air descends to within 2° or 3° of the freezing point, and yet the vegetation appears to suffer little or nothing by it—dryness being no doubt an accessary. Does it not follow that, using the appliances prudence can suggest against the rains and damp of our variable climate, much loss might be avoided? *Adolphus H. Kent, Grammar School, Blechingley, Surrey.*

Glazing.—Permit me to ask Mr. William Paul to give a further explanation of his mode of glazing. Firstly, how is the hole made in each side of the glass—is it merely a small triangular piece cut out at the edge? secondly, how are the panes prevented from shaking about during wind? as the screws being tightly screwed down would crack the glass. Again, if the panes are only held down in the middle at each side, it appears to me that the wind getting under the low edge would break them in two across by the screws, I have had a great number of panes broken in this way in an orchard house, though they are puttied all the way down; these were 20 inches wide, 16 oz. glass. Any further information he would give would greatly oblige "*W. G.*"

Prince of Wales Raspberry.—Allow me to direct attention to this, with us the finest of all red Raspberries. It is a vigorous grower, a great bearer, and produces fruit of excellent flavour, particularly last season, the worst in this part for hardy fruits of all kinds for many years. I intend to discard all other kinds, and grow nothing but Prince of Wales. On a long row of it in which the canes were left full length, the crop was very heavy. I never shorten the canes, as I find that by leaving them full length I get greater crops. *William Hill, Keele Hall, Staffordshire.*

Boilers.—Nobody who has hitherto written on this subject in your columns appears to me to have explained what I look upon as the important point in this matter. It is part of my business to understand boilers, as the firm of which I am a member requires 750 indicated horse power, and we raise the steam as economically as any member of the Manchester Boiler Association. Our boilers are common cylindrical ones, 7 feet in diameter, with two flues of 3 feet diameter each, running through them. There is a fire in each flue, say 5 feet long, and at the end of the boiler the two flues are united by means of a brick flue, which carries the heat round the outside of the boiler on its way to the chimney, the boiler being seated on a brick wall which

forms the division. Now you will say there is nothing here to explain the economy of working. That is just the reason why I have troubled you with this letter: I wish to advise all gardeners not to seek for economy in shape; we have plenty of boilers to keep up the required supply of steam at 47 lbs. pressure without pushing them, therefore the waste warmth passing to the chimney has only from 450° to 500° of heat, instead of from 1000° to 1200° as is usual and this is the true point where economy must be looked for. Mr. Carter, who lectured at Sydenham on this subject, is quite correct in saying that the old Cornish boiler is the most economical known, though he does not mention that part of the economy is due to its being used for pumping engines, which is a question of steam, and I need not go into that here. Messrs. Henderson praise Weeks's boiler, and I see that the tender of the last named firm to the Royal Horticultural Society is the lowest; these tenders, however, are sometimes used as advertisements, and therefore only prove who can afford to lose the most money. Weeks's boilers are built in a brick oven, and to this alone is due their power of keeping up heat, but that they are soon out of order is proved by two being required; let the Society write to our Boiler Association for the Prevention of Explosions, or the Boiler Insurance Society, and take the opinion of their inspecting engineers, and it will learn that in tubes consists no economy, but a great deal of trouble, and that they are only used for economy of space in steam boats or locomotives. The important point is to be able to keep up the heat with the damper nearly closed, and it is best to have the boiler made of one-eighth boiler plate with the fire inside. *Cotton, Manchester.* [We have only to remark that one of Weeks's tubular boilers has been at work in the Editor's house for many years without ever getting out of order.]

Plant Obituary.—Although I cannot speak with certainty as to many things, I regret to say there is no hope for the following plants. Coniferæ: Cupressus torulosa, Cashmeriana (small), Corneyana, McNabiana, funebris, Uhdeana; Libocedrus Chilensis, Fitzroya patagonica, Saxegothæa conspicua, Pinus Cretica, Abies Webbiana. Severely injured: Araucarias, Deodars (some), Pinus Pinea, insignis, Pindrow; Retinospora ericoides, Taxodium sempervirens, Juniperus macrocarpa, oblonga pendula, Cupressus macrocarpa (four plants 20 feet high, probably killed), sempervirens (probably killed). Shrubs: Escallonia macrantha, Laurustinus, Garrya elliptica, Phillyreas, Bays, Aucubas, Ligustrum japonicum, Assam Tea, half the Rhododendrons, and half the Roses. This list is small, as I fortunately never replaced the Arbutus, Magnolias, and other things I lost in the severe frost of January 19, 1838 (the greatest cold then was + 4°, on Christmas Day last it was − 8°), nor, indeed, those Coniferæ which have shown themselves to be tender since that time. The Laurels, Portugal Laurels, Cotoneasters, Privets, &c., are severely cut, especially in sheltered places. Wellingtonia proves perfectly hardy, and so does Thujopsis borealis, and Cupressus Lawsoniana. Cryptomerias much less injured than in an ordinary cold spring. *E., Oulton Park, Cheshire.* —— With us Cedrus Deodara, Cryptomeria japonica, and Araucaria imbricata are very much browned. Several noble specimens of Sweet Bay, Arbutus, and Laurustinus are entirely killed. What is rather singular some small Laurustinus from 18 to 24 inches in height, growing in pots for the decoration of the flower garden in winter, and plunged in some spare ground during summer, have for the most part withstood the severe frost plunged in beds without the slightest injury, and are now coming beautifully into bloom; while those growing in ground a few yards distant and those left in their summer quarters in pots are entirely killed. The stem of a large Arbutus, 9 inches in diameter, sustained several large cracks its whole length from ¼ to ½ inch wide, extending from the bark to the pith, but when the frost had broken up no trace whatever of the cracks could be perceived. Does frost affect in this way Oak and other timber trees which appear sound while growing, but when felled are often found to be shaken and useless for purposes for which sound timber is required? Roses too, particularly hybrid perpetuals, have suffered severely, a great many being entirely killed. Some plants of Magnolia grandiflora growing against a west wall have been very much injured, but not I hope fatally. Peach trees, I fear, will be found to have suffered greatly; some trees on a south wall here, where they had been unnailed and pruned and left in that state during the occurrence of the frost, many of the shoots being nicely set with blossom buds, now present the appearance of having been scalded. The shoots of some young Pear trees growing against wooden walls are also in the same plight. The mild weather of the last fortnight has caused many of those on the wooden walls just named to start; the walls in question consist of 1-inch board running north and south 4 yards apart, with the trees planted on both sides. On these the trees are nearly as forward as in our orchard house. Had the weather continued mild many of the Pears and Cherries would have been in bloom by the first or second week in March. The recurrence of frost has, however, put a stop to their progress. *J. Huldart, Gardener to R. A. Macfiel, Esq., Ashfield Hall, Cheshire. Feb. 14.* —— So bad are the effects experienced here from the late severe winter that it is only necessary to take a cursory glance around us to be convinced that never before within record has such an icy fatality swept over us. Our situation is, however, always some 2° or 3° colder than in the town, and being in a valley we suffer much more than our neighbours only a quarter or half a mile from us. Cedrus Deodara, from 7 to 12 feet in height, is killed; C. Libani, same height, nearly killed, leafless; large trees of the latter are very brown, and will lose many branches; common and Portugal Laurels, evergreen Oaks, Aucuba japonica, and Hollies both green and variegated, large bushes from 10 to 20 feet in height and more, are killed down to the ground. Common Yews in many instances are much injured; Irish ditto are killed, Arbutus, Buxus Balearica, Cupressus Goveniana, funebris, Corneyana, Knightiana, macrocarpa, fastigiata, and others; Cryptomerias, Magnolias, Phillyreas, Alaternus, double Furze, Broom, Ivy, Rhododendrons, Bays, Laurustinus, Taxodium, Pinus Cembra, insignis, and many others are totally annihilated. Pears, Apples, Cherries, and other fruits are cut back to the old wood. Peaches, Apricots, Nectarines, and Roses are killed; Berberis, Yews, Prairie Roses, Cedars, Box, and other young evergreens are cut down to the snow line. The following plants have proved hardy, viz.:—Wellingtonia, Pinus austriaca, American, Siberian, and Chinese Arbor-vitæ, Biota pendula, Juniperus sinensis, Picea pinsapo and Nordmannia, Abies Menziesii, Variegated and Green Box, Golden Striped Yew, and a few others. *Jabez J. Chater, Saffron Walden.* [We regret our inability to find room for Mr. Chater's carefully kept Meteorological Journal. It shows that his thermometer stood at −14° on the 25th Dec., and also on Jan. 8].

Pussley.—Mr. N. A. Woods in a very recent publication, his "Account of the Visit of the Prince of Wales to Canada &c.," mentions an esculent plant "Pussley," found in the Prairies, as likely to be very valuable. L. J. K. will be much obliged to the Editor of the *Gardeners' Chronicle* if he will inform him whether it has been brought to this country, and whether it is likely to possess the valuable qualities attributed to it. [As Mr. Woods' book has no index we cannot find the passage referred to. As to the name, it is unknown to us. Possibly it is Psoralea esculenta, a common Prairie plant; possibly it is Apios tuberosa; possibly neither one nor the other.]

Societies.

ENTOMOLOGICAL, *February 4th.*—J. W. Douglas, Esq., President, in the chair. The President nominated Messrs. Lubbock, Saunders, and Waterhouse as Vice-Presidents for the ensuing year. Mr. Stevens exhibited a number of beautiful Lepidoptera recently received from Port Natal, including Smerinthus Dumolinii one of the most beautiful species of Sphingidæ hitherto known, also some interesting species of Tineidæ from India. Mr. Bond exhibited specimens of a new British Moth, Cidaria reticularia, a very elegant species (allied to C. silacearia) taken in the Lake district in the preceding summer. Mr. Ianson exhibited a new Brachelytrous beetle taken near London by Mr. Edwin Shepherd, Philonthus punctiventris of Kraatz. Mr. Walker exhibited some very minute cases of Dipterous (?) pupæ (Phoræ ?) found in the inside of the covering of a hornet's nest also a Dipterous larva (Anthomyia canicularia ?) found in the refuse at the bottom of the nest. A memoir by Mr. Wollaston was read on the Weevils (Cossonides) of the Atlantic islands, including the description of a very anomalous form.

VICTORIAN GARDENERS' MUTUAL IMPROVEMENT. S. AUSTRALIA, *Thursday, Nov. 22.*—The holding of the first exhibition of the Victorian Gardeners' Mutual Improvement Society justifies us in giving a few particulars as to the origin of an association which has within so short a period of time achieved such important results. Practical gardeners, not only those scattered throughout the country, but those located in and about Melbourne, have for years past been at a loss for a means of communication with each other for effecting a friendly interchange of opinion. The formation of a society having the scope and objects above set forth was a desideratum which the present institution seems to have satisfied, inasmuch as it affords fitting opportunities of meeting freely to express opinions and elucidate facts bearing upon all subjects connected with the profession. Though it has been the design of the projectors to make the society especially practical, it has not been deemed advisable to exclude the co-operation of amateurs, who are therefore eligible for membership. The progress of the society has been one of almost unexampled success. The society was formed on the 17th December, 1859, on which day 15 members were enrolled. On the 29th of October, 1860, the society was 100 strong, ten candidates being also on the books, who will in all probability meet with unanimous election.

The first exhibition of the society is now being held in the most eastern shed of the eastern market, and encloses an area of 210 feet by 46 feet. Canvas walls have been carried all round, and a commodious stage erected for the exhibition of flowers, fruits, and culinary vegetables. The pillars which support the roof, and the cross timbers, have all been elegantly decorated with evergreens, intermingled with flowers, set off with numerous flags. The secretary's and ticket offices are situate at the northern end, and the division appropriated to refreshments, and the band, pitched to the southward. A spacious walk extends along either side of the central stage, which is so constructed as to display to the best effect the numerous floral and other contributions placed upon it; these, for number and variety, make the present exhibition surpass greatly any similar display held either in Melbourne or its vicinity; and it is not the least noticeable fact in connection with the present exhibition, that it is solely the produce of practical men, and of a society which can only boast of an existence of somewhat less than 12 months.

As may be imagined, the chief characteristic of the exhibition is the display of flowering plants in pots, and cut flowers, fruits and culinary vegetables being rather few in number, though of unexceptionably good quality. The magnificent collections of flowering plants from the nurseries of Mr. John J. Rule and Messrs Smith and Adamson strike the eye immediately upon entering the building, and the effect is not lessened upon minute inspection. Mr. Rule's collection includes the rarer Ferns, Conifers, and Taxads, which have carried off the leading prizes. Among these we notice fine specimens of the Platycerium grande, Neottopteris vulgaris, Glechium macrophyllum, Polypodium Billardieri, the Hare's foot Fern, and several other new species from New Zealand. We also notice the Dacrydium Franklini, and the Podocarpus totara; the latter supposed to be the most durable timber in the world for railway and telegraph purposes. Mr. Rule's collection also contains the Verticordia Browni from Western Australia, and numerous choice specimens of Calceolarias, both shrubby and herbaceous, as well as many other plants lately introduced into the colony.

The collection of plants supplied by Smith and Adamson, was likewise replete with novelties and varieties. In the collection belonging to this firm we especially noted the Thyrsacanthus rutilans, with its splendid red flowers, the Russelia juncea, standing nearly 6 feet in height and resplendent with vermillion blossom, and the Justicia splendens, with its Hyacinth-like flowers. The firm are also rich in Pelargoniums and fancy Geraniums. In the latter genus they are rich in spotted varieties, which have lately been introduced from England. They have themselves raised a seedling fancy Geranium, which they have most appropriately designated "Admiration." It has small finely formed flowers, blooming very freely, and is very shrubby in habit, the specimen before us having a diameter of upwards of 30 inches.

Dr. Howitt's collection of Ferns was exceedingly fine. The collection included the Bothryodendron latifolium, a fine foliaged plant. Dr. Mueller also sent several fine plants from the Botanical Gardens.

The cut flowers were on the whole of a choice description; but the show would have been much better had the weather been more favourable. The Roses were admirable, Mr. Ferguson, gardener to Mr. J. H. Brooke, of Heidelberg, had a magnificent collection of 24 varieties of Sweet William, as also several first-rate Antirrhinums. Nor must we forget to notice a design for a flower garden, by Joshua Gardner, of Prahran; or an elegant design in flowers prepared by Mr. Saugster.

The culinary vegetables were of first rate quality. The Carrots contributed by Mr. Dunstone, of Pentridge, and Mr. Charles Stone, of Brighton, the Cucumbers sent in by Mr. R. Cole, of Plenty Road, the Onions by Mr. Francis Thomas, of Thomastown, the Asparagus by Mr. Langmuir, of Prahran, and the Cabbages from the garden of Mr. Thomas Parkhurst, of Boroondara, alike procured admiration and approval. We must not forget to notice the excellent quality of the early Kidney Potatoes sent in by Mr. Charles Stone, of East Brighton. They were decidedly the best we have seen grown in the colony.

As to fruits, considering the season no better display has ever been offered. The red Cherries from the nurseries of Mr. John Cole, of Merri Creek, and the black Cherries from those of Mr. R. Cole, instantly attracted attention. We had also Gooseberries which rival those of English growth, supplied by Mr. William Hall, of Hobson's River Farm, Williamstown, and Mr. Johnston, of Boroondara. We also noticed some fine Pine-Apples grown in Queensland, and imported by Mr. Henry Wright, of Elizabeth Street.

Contributions of silkworms were sent in by Mr. B. H. Jackson, of the Crown Lands Office, and a white Mulberry tree in pot, contributed by Mr. Dyson, of the Eastern Market, is also covered with these interesting larvæ. Several newly invented beehives, and a Wardian case for the transmission of plants, with some other less noticeable objects, completed the exhibition, which, take it as a whole, has not been equalled in Melbourne. *From the Melbourne Leader of November 24th, 1860.*

Notices of Books.

The Rose Amateur's Guide. By Thos. Rivers. Seventh Edition, enlarged, corrected, and improved. 12mo. Pp. 223. Longmans.

This nice little volume continues to hold its own against all rivals; the fact being that no other guide is so well arranged, so well condensed, and so full of that sort of information which amateurs demand. Others

have their excellencies also: but this is both so good and convenient that nobody grudges paying 1s. for it. Mr. Rivers has profited by experience; he has pruned away redundancies; worked new ideas upon the good sound old stock; dismissed beauties that have faded or been eclipsed, and taken into favour the new aspirants to the glory of being Queens of Roses. Among his new notions we can only quote two. Firstly, *his way of "doing" Decorated Roses.*

"A few years since, a friend, living at Weycliffe, near Guildford, found the heavily built brick bridge leading over the railway to his house (this is, however, in his grounds, so as to be private), conspicuously ugly, and he wished it to be hidden by evergreen climbing plants. As the carriage-road ran over the bridge, the gravel, of which it was made, did not seem to offer very happy quarters for any plant but Ivy, which was objected to as being too heavy. I then proposed planting it with varieties of Rosa sempervirens, or, as we ought always to call them, Evergreen Roses. They were with some difficulty planted, the gravel being loosened with the pick, and some manure mixed with it. In my annual visits to my friend living in this charming district—for no part of England is more so—I watched with some interest my bridge-Roses. They grew with great rapidity, and soon covered every brick, but when they bloomed in large beautiful masses, some disappointment was expressed at the monotony of colour. I was prepared for this, and told my friend that they must be decorated. A good-natured incredulous smile met me with 'how?' I called the gardener, for this was in July, the budding season, went with him to the Rose-garden, and thence took buds of some of the most beautiful of the dark Hybrid Perpetual Roses, not forgetting some of the bright rose-coloured tints, such as Colonel de Rougemont, La Reine, General Simpson, and some others. Our great 'horse' was, I remember, General Jacqueminot. My budding hand had not forgotten its cunning, for did I not consider myself at 20 as the most dexterous and rapid budder of Roses that ever lived and was likely to live? So I and the gardener proceeded to place buds here and there in shoots favourable for the purpose. The day was warm, and the thorns much sharper than they used to be 40 years ago, so I have a misty idea that my friend Jackman the gardener put many more buds in than I did. To use the common phrase, nearly all the buds 'took,' *i. e.* lived, and many of them put forth fine clusters of bloom the following August and September. I paid my annual visit to my friend in June of the next year, just 11 months after my budding exploit. As I approached the bridge I felt full of interest about my buds. What a glorious sight met my eye! Amid the masses of flowers of the pale climbing Roses shone forth large clusters of the Géant, General Jacqueminot, Triomphe des Beaux Arts, Prince Noir, Comte Bobinsky, Louise Peyronny, Colonel de Rougemont, Jules Margottin, and others; the bridge was a fairy avenue, so charming was the effect.

"I have a full and fervent belief that ere long, banks and avenues of decorated Roses will be in every Rose-garden, and that their culture will be carried to an extent we at present scarcely dream of. I have one Rose friend who has formed his Rose-walk with net-work of iron wire, fastened to upright iron rods; the meshes formed by crossing the wire occasionally, are 12 to 15 inches in diameter, so as effectually to support the shoots of the Climbing Roses.

"This walk, in the course of a year or two, will be between two upright walls of 'Decorated Roses,' and I can scarcely imagine anything in Rose culture more beautiful. It must be borne in mind that no arches, unless some 15 feet apart, and no arched coverings must be placed over a Rose-walk or avenue of this description, for the finer kinds of Roses require all the light and air they can have.

"For pillars, banks, coverings for walks, and every fancy that can enter into the mind of a Rose lover, these budded Climbing Roses are adapted, and they will well reward the ingenuity of a clever Rose gardener; in many cases superseding the use of standards, which are for a great portion of the year so very ugly.

"The 'how to do' these Roses is very simple. If very rapid growth be required, the place in which they are to be planted should be well stirred to a depth of 2 feet, some manure mixed with the earth, and climbing Roses of such sorts as Félicité, Princesse Louise, Princesse Marie, and Spectabile (all varieties of Rosa sempervirens), should be planted in November; if they have strong shoots, they may be tied or fastened up to nearly their full length: if not with long and strong shoots they may be cut down to within 5 inches of their bases: they will in the following season make shoots from 10 to 12 or 15 feet in length. The first shoots that will be fit to bud will be the old shoots that were left at full length when they were planted; these may be budded in June, and the young shoots that are made during the whole of the summer may be budded weekly till the end of September: the position of each bud must be thought of so as to make a picture really artistic and beautiful. As soon as a bud is inserted, or if two or three buds are placed in the same shoot, the end of the shoot must be cut off to within two buds of the topmost inserted bud; the buds may be untied about three weeks after insertion, and all the young shoots that break out below the inserted buds must be rubbed off; this is all that need be done the first season. The next season the buds will bloom abundantly, and it will only be necessary to destroy all the young shoots that break out of the budded branch below the buds; those shoots that break out above the inserted buds may be pinched in frequently, the budded branch will not then become rigid and starved like the stem of a standard Rose.

"In decorating climbing Roses the buds should be dotted over the whole surface of the plant. Two or three buds in one branch will be found enough, and care must be taken not to bud every branch of the climbing Rose; some must be left to grow in their natural, graceful, vigorous manner, so that the decorated wall or walk has not a stumpy appearance like an avenue of standard Roses.

"Evergreen Roses, trained to tall pillars or suffered to hang in festoons, are capable of most fanciful decoration, as buds of very choice kinds may be inserted at different points of view so as to have a charming effect."

Secondly, Professor Owen's dodge for making fine Roses grow *in defiance of such neighbours as the thorns, Grass, and weeds of a Wilderness is noteworthy.*

"Large sewer tubes, rejected on account of flaws in the enamel-lining, were sunk vertically in the pure gravelly soil to within an inch or so of the surface, and filled in with loam and manure, and a Rose planted in the centre of each. The soil in the tube was kept free from weeds, and the running Grass and other weeds outside were prevented making their way into such good quarters. To give the Roses extra vigour some manure water was given to them occasionally in the summer. The effect of Roses growing in the highest state of luxuriance in a wilderness was most charming. The inside diameter of these tubes is 16 inches, their length 30 inches, so that they go below the roots of weeds, which would otherwise soon devour the rich compost in which the Roses delight."

Garden Memoranda.

Royal Gardens, Frogmore.—A visit to these great gardens is necessarily highly interesting at any time of the year, and scarcely less so at the present season than in summer; for now an opportunity is afforded of inspecting the various forcing houses in operation. Of Pine Apples alone the quantity grown here is enormous, and of the excellence of the fruit or the health of the plants it is impossible to speak in too high terms. The varieties are chiefly smooth-leaved Cayennes and Queens; those in the principal fruiting houses are planted out on beds of prepared soil, over hot-water pipes laid in shingle; but those in pits are grown in good loam placed over a thick bed of warm leaves. Even suckers are not put into pots, but are taken off the stools and planted out thickly at once in soil over beds of leaves. It may be remarked that the fruiting plants are truly admirable examples of skilful cultivation and careful management; not a broken or diseased leaf nor an insect is to be seen on one of them, and they promise to bear fruits worthy of the noble garden in which they are produced.

It is seldom that this establishment can be visited without finding ripe Grapes; but this year the late West's St. Peter's have just been cut and new fruit is not yet ripe; two early houses will, however, soon be ready, the bunches being more than half grown and swelling fast. In the earliest of these the Vines are not in pots but planted out; otherwise, however, they are treated nearly in the same way as pot plants. In both houses the Vines are extremely healthy and the crops wonderful considering the severe winter through which they have just passed. The roots of the plants in the first house are inside, and therefore protected; but even the Vines in the second house, the outside border of which is only covered with Fern, have broken and progressed satisfactorily, notwithstanding the severity of the winter. In the principal range of houses, all Vineries not yet started have been pruned and otherwise put in readiness for work when wanted; the rods, or rather stems, for they now in many instances measure at 3 feet from the ground 9 inches in circumference, are not here painted over with the usual mixture of soft soap, clay, and sulphur; they are, however, carefully scraped and well washed with warm water applied with a hard brush, with which all crevices are thoroughly cleaned. This treatment is found to answer equally well with the clay mixture, and the buds run less risk of injury than from the last named application.

Early Peaches have nearly reached the stoning stage, and Plums and Cherries are just coming into bloom. The last are in pots, and are liberally fed with manure water. Strawberries are also progressing satisfactorily. The variety now employed here for forcing is Prince Arthur, which bears an excellent character, both for flavour and productiveness. Cucumbers and French Beans are fit for use here the whole year round. The latter are grown along the kerbs of the Pine stoves, and in rows on the floors of the early Vineries, which receive plentiful supplies of manure. In some instances they are started in boxes or in little square bits of turf placed over warm surfaces before they are permanently planted out—a plan by which all failures are obviated, and the rows kept uniform and free from blanks. The Cucumbers are grown on raised beds over heated chambers, and the plants are trained over the roof of the house in which, by means of skilful management of the bottom heat, are kept up steady currents of warm air.

Asparagus has been "in cut" here for the last two months. The plants which are three years old are brought from the open ground and planted over a hollow chamber heated by means of hot water in 4-inch pipes. The main supply is, however, obtained from ranges of low pits also heated with hot water; this method had been practised here for years, and has furnished satisfactory proofs of its superiority over the modes usually employed. The roots are planted in brick pits, which are sunk to the depth of 4 feet; between each pit exists a space traversed by hot-water pipes which spring from a central boiler; the divisional spaces are securely covered in with York stone and the beds have a tight fitting somewhat flat wooden span roof. The soil employed is usually the rich loam peculiar to the garden, mixed with leaf mould and rotten manure. The beds are usually started early in December with a temperature ranging between 50° and 60°; but this year they are later. In about three weeks or so after starting the tops are fit for cutting, the size and flavour being excellent. It should be mentioned that the plants are liberally assisted with manure water.

Seakale is forced here in a narrow brick pit built along the back of the Cucumber-house, the heat from which, viz., what passes through the wall, being sufficient for the purpose. All that is required is merely to introduce the roots when wanted, and to cover them up with wooden shutters at top, protected with a layer of Fern. In this way excellent heads are produced, strong, crisp, and beautifully blanched, and with half the trouble usually bestowed on Seakale forcing.

Early Peas sown in a cool pit are now coming through the soil. The mould in which they are sown is placed over a bed of leaves in which there is just sufficient warmth to excite vegetation. Early Radishes and Potatoes in beds similarly constructed are also coming forward. The latter are started in warm houses, and then planted out in furrows in a bottom-heat of about 65°. Much warmer than that does not answer for those planted very early; for should severe weather set in and the pits have to be kept covered for weeks together, the plants get drawn, blanched, and ruined.

Neapolitan Violets were beautifully in bloom in a pit, and had been in that condition ever since December; their treatment consists in planting out the offsets in an open border in April, and allowing them to remain there until August, when they are removed to the pit in which they are to flower. If the summer is very dry care must be taken to keep them well watered while they are out of doors, and otherwise encouraged to make strong plants previously to transplanting them under glass.

In the Mushroom house beautiful crops were just becoming fit for use. The beds are made on slate shelves placed one above the other like the benches in a fruit room. Means of heating with hot water are at command, but warmth of this kind is seldom employed, the temperature being usually sufficiently high without it. The spawn, which appeared to be excellent, is all made in the gardens.

In the principal stove Bignonia venusta is still in bloom. Its long pendent branches, festooning from the roof, have been completely loaded for many weeks with blossoms of the richest orange, and allowed to hang loosely in this manner they have a much better effect than when trimly tied up. In the greenhouse at the other end of the range some choice Cinerarias, Epacrises, and Heaths are in flower, as are also the fragrant Luculia gratissima; the last is stated to have been in full beauty on Christmas Day, and to have been in bloom ever since. It forms a fine tree whose top occupies an area some 8 feet in height, and as much in width. Both this and the Bignonia are planted out in beds of peat and loam—the former in a warm greenhouse, the latter in a stove.

In the fruit room there is still a good supply of Apples and Pears, but in many instances the latter refuse to become soft or melting. Among Apples in good condition may be mentioned the following, viz., Late Golden Pippin, Braddick's and Downton Nonpareil, Dutch Mignonne, Rosemary Russet, Claygate Pearmain, Wellington, a most useful sort, and one or two new kinds which promise fair to rank some day as first-class varieties.

In the open ground there is little in the shape of vegetables to report on, the frost here as elsewhere having made a clean sweep as regards most of them, Broccolies in particular are all killed, and so are young Cabbage plants. The vegetables that have stood best are Brussels Sprouts and Cottagers' Kale, both of which have sustained little or no harm. Strawberries appear to be in better condition than they have often been after much less severe winters. Among Lettuces—the hardy Hammersmith—we noticed a good many blanks; still many have stood. Fruit trees, both on walls and in the form of Standards, have apparently suffered but little; it has been remarked, however, that fruit buds on Pears on west walls are thinner than those on east or north-east aspects, a circumstance attributable perhaps to the excessive amount of wet we had last year from that quarter. Roses on walls have suffered severely.

Crocuses and Snowdrops are in full bloom in open borders in front of the glass houses, and now that fine weather has fairly set in, and likely to continue, cropping and other spring work is being pushed forward with activity.

Miscellaneous.

Œconomy in Ceylon.—We find in the *Ceylon Overland* of December 29, the following remarks by Mr. Andrew Nicol on the Grant asked by the Superintendent of the Royal Botanical Garden at Peradenia. "With reference to the Grant asked by the Superintendent of the Botanical Gardens, I have to express my opinion, that this colony is not, financially, so placed as to permit ornamental gardening or scientific botanical researches to take the place and precedence of those means which are more intimately connected with the practical development of the agricultural and industrial resources of the island. It has been justly said, that the Botanical Gardens at Peradenia are but a branch of the Kew Gardens at home; and it is to be regretted, that with this idea before us, the branch here should have not drawn its financial vitality from the parent stem. I protest against this squandering of the Public Funds for enjoyments, personal, fanciful, or artistical. What we, as an industrial colony, require, is an opinion of the head of this branch of scientific expenditure, as to the best and most efficient method of cultivating our staple commodities, say Coffee, Cocoanuts, Cinnamon, &c.; also, as to vegetables, and to the Grasses which are the most nourishing to cattle, and under what conditions they are so;—these are generally useful public questions. A mere florally scientific Institution, being one of the adornments of a more advanced state, is only a ridicule on a colony still struggling with the primary obstacles of its agricultural industry. While we are exporting and exchanging "flora" with the world, we are importing from the adjoining countries the common necessaries of life,—Potatoes and Onions. The cultivation of vegetables is well adapted to the habits of the natives, and if instructed how to cultivate them in a climate more genial than Newera Ellia, a new industry would be introduced, by which the labour of their children could be turned to account, and a benefit would be conferred on Europeans, not the least substantial part of which would be that we should be less frequently called on to pay 1*s.* per pound for Potatoes, or enjoy the alternative of going without them." [It does not appear that any action had been taken on this subject by the Legislative Council.——Nor do we learn that the *fine collection* of Cinchona plants which Mr. Clements Markham was to have taken to Ceylon, and for which preparation had been made, has reached the island. Have they met with the fate which common sense foretold?]

Palo Santo Wood.—A letter from Buenos Ayres says:—"A few days since there arrived at Parana a small vessel built at Oran, which is within about 30 miles of the south central Bolivian frontier, upon the river Vermejo. According to the account of the captain his vessel (named the Esperanza) is of 50 tons capacity, built of Cedar of the best quality, and draws but 5½ feet water when loaded. Her cargo consisted of Cedar, 'palo santo,' hides, cheese, and grease—articles abundant in the province of Oran. The wood called "palo santo" is very rare, and similar in appearance to the 'caoba' of Central America, with which it might be confounded when once worked. It takes a magnificent polish, is of a green colour, very solid and elastic, and moreover has a fine odour, which it never loses. It may be used for furniture, wind instruments, and would make magnificent pianos. One log brought by the Esperanza measured 27 feet in length, with a section of 17 inches square. The voyage of the Esperanza may be said to open at least 40,000 square miles of new country. The first made, it will be, doubtless, the cause of opening a large trade with almost the centre of South America." *Simmonds's Technologist.*

Rattans—Palms.—Familiar to every one—from the schoolboy, over whom it hangs *in terrorem*, upward—as is the common Cane, with its slenderness, its flexibility, and its flinty, polished surface—how few are aware that it is only a small part of the stem of a Palm tree, which, in its native forest, reached a length of 500 feet! These Rattans form a tribe of plants growing in the dense jungles of continental and insular India, which, though they resemble Grasses or Reeds in their appearance, are true trees of the Palm kind. They are exceedingly slender, never increasing in thickness, though immensely in length; in the forest they trail along the ground, sending forth leaves at intervals, whose sheathing bases we may easily recognise at what we call joints, climb to the summits of trees, descend to the earth, climb and descend again, till some species attain the astonishing length of 1200 feet. *Gosse's Romance of Natural History.*

Calendar of Operations.

(*For the ensuing week.*)

PLANT DEPARTMENT.

Conservatory, &c.—Push on Azaleas with a warm moist atmosphere; for decorative purposes at this season of the year few plants are more useful. Epacrises are also valuable plants for winter work, and by starting them into growth early, as recommended last week, and getting their wood well ripened, they may be had in full blossom in November. Of Amaryllids and Dielytra spectabilis, there should likewise be a good supply; both may be had in bloom early in the season, and under good treatment they last long in beauty. Continue to repot such hard-wooded greenhouse plants as require it, so as to afford them every chance to make vigorous growth. Be careful, however, before potting to have the ball in a nice, moist state, and avoid giving large shifts to weakly growers; keep newly-potted specimens together as much as possible, and let the house be rather closer, and the atmosphere moister than usual. See that soft-wooded plants, as Pelargoniums, Cinerarias, &c., are allowed plenty of space, and that they are properly supplied with clear, weak manure-water, and kept perfectly clear of insects. Give air freely to these on every favourable opportunity, but do not allow cold winds to blow over them and disfigure their foliage. Many of the Cinerarias will now be in full blossom, and in warm greenhouses will keep up a brilliant display for some time to come; seed may be saved from some of the best kinds, which when out of flower may be set aside for that purpose.

FORCING DEPARTMENT.

Pineries.—Maintain a growing moist atmosphere, but do not push young plants too rapidly until the days get longer, when there will be no danger of inducing weakly growth. Avoid allowing water to lodge in the hearts of plants showing fruit; also spare the flowers of those in bloom with the syringe.

Vineries.—See that houses in which Vines are not yet started are properly cleaned. Most people paint the rods over with a composition of soft soap, sulphur, &c.; but some, after scraping off the old bark, merely wash well with clean water, brushing it thoroughly into all crevices with a hard plate brush; this is preferred to using the composition just named, which is apt to injure the buds. Attend to disbudding and stopping, &c., as may be necessary in succession houses, and see that inside borders are in a properly moist state, giving tepid manure water when necessary, and do not be afraid of giving too much of this to Vines fruiting in pots. Shut up early in the afternoon; for, depend upon it, there is no heat so congenial to vegetation as that derived from the sun's rays. Where plants are grown under Vines look sharply for black thrips, and use every means to keep them clear of this pest, which if once allowed to get upon the Vines, will spread with amazing rapidity, and soon ruin the foliage. This is not only the most destructive, but the most difficult of insects to extirpate, and should therefore be kept under by every possible means. Azaleas are exceedingly subject to it, and young plants of these can hardly be obtained from the nurseries clear of it, and should never be grown in Vineries, when it is possible to accommodate them in other houses.

Figs.—Attend to preserving a proper degree of moisture in borders or pots, and guard against red spider by maintaining a moist healthy atmosphere and by a liberal use of the syringe. It is not usual to thin this fruit, but, in cases where the crop is very heavy, timely thinning may prevent this being done by natural means at a later period, and to too great an extent, and will also be of much service to the general health of the trees, and towards securing a good second crop.

Cherries.—In some places these will now be coming into bloom. In their treatment aim at imitating nature during a very favourable spring as nearly as possible, until the fruit is stoned, when they may be pushed on by a warm moist atmosphere. Here, as elsewhere, insects will have to be contended with, and must be eradicated immediately they are perceived.

Strawberries.—Bring on succession plants very gradually, and afford those in bloom a rather dry atmosphere, with a free circulation of air, as they set their fruit badly in a moist close atmosphere. Plants swelling their fruit must be liberally supplied with clear, rather strong, manure-water, and if fine large fruit is expected thinning must be resorted to immediately the fruit is fairly set.

FLOWER GARDEN AND SHRUBBERIES.

Sweep and thoroughly clean lawns, and give them a double rolling with a heavy roller, to render the turf smooth and solid. If any alterations still remain unfinished every available hand should be concentrated on this work, so as to get it completed as soon as possible, while the weather is favourable for such work. Look over beds planted with bulbs, and where necessary stir the surface so as to keep it open and friable, and also to give it a clean, neat, fresh appearance. See to the propagation of Hollyhocks; they are now so greatly improved that they are almost superior to the Dahlia in the effect which they produce, and ought to be extensively planted in every garden. Cuttings slipped off the old plants with a heel, planted in very sandy soil, and afforded a gentle bottom-heat, keeping the leaves as cool as possible, will be found to root. Carnations and Picotees have suffered in some places from the effects of the frost; those that escaped should be potted forthwith. For growing them nothing is better than two parts sound virgin loam, one part of rotten horse manure, and one part sharp river sand; in this, with occasional doses of weak liquid manure during the growing season, we have seen them grown in first rate style. Seedling Pansies in beds should be gone over carefully, the surface soil stirred, and a dressing of manure put on. Ranunculuses must be watched when they make their appearance, as they are apt to displace the soil about the crown of the plant, which is prejudicial.

HARDY FRUIT AND KITCHEN GARDEN.

Cauliflowers must be planted out when the weather shall have become warmer. As recommended last week, where the ground will admit of it, it will be found good practice in transplanting to throw out shallow trenches, placing the soil removed on the north side, and putting the plants in the trenches, which will be thus sheltered from the north winds. Stir the soil among growing crops, as Lettuce, Spinach, &c. Clear off dead Broccoli, and get the ground dug and otherwise prepared for other crops. Forward Celery plants for a very early supply, by pricking out on a slight hotbed, and sow on the same for succession crops. Cabbage plants have been wholly killed in most places; therefore let a fresh supply be raised from seed as speedily as possible. Attend to providing for a regular succession of Peas, Beans, &c., by sowing quantities proportionate to the demand at short intervals. See that those in the ground are not injured. Get pruning and nailing of wall trees finished with all possible dispatch; and where vacancies occur let them be made good with fresh trees without delay.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON

For the Week ending Feb. 21, 1861, as observed at the Horticultural Gardens

February.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth. 1 foot deep.	Of the Earth. 2 feet deep.	Wind.	Rain.
Friday 15	5	29.645	29.497	54	40	47.0	41	39	S.	.01
Satur. 16	6	29.711	29.571	55	35	45.0	43	40	S.W.	.04
Sunday 17	7	29.788	29.546	57	35	46.0	44	40½	S.	.00
Mon. 18	8	29.604	29.532	57	32	44.5	44	42	S.	.01
Tues. 19	9	29.608	29.578	52	27	39.5	44	41½	S.W.	.00
Wed. 20	10	29.594	29.379	50	40	45.0	44	41½	S.	.10
Thurs. 21	11	29.462	29.296	46	40	43.0	45	42	S.W.	.17
Average..		29.630	29.485	53.0	35.5	44.3	43.5	40.9		.33

Feb. 15—Cloudy throughout; fine at night; slight showers.
— 16—Cloudy; overcast; rain at night.
— 17—Overcast; very fine throughout.
— 18—Fine; slight shower; very fine; overcast.
— 19—Fine; overcast; large lunar halo; slight frost at night.
— 20—Fine; cloudy; very boisterous at night.
— 21—Partially overcast; rain; tremendous hurricane in the evening; calm and fine at night.

Mean temperature of the week, 6 deg. above the average.

RECORD OF THE WEATHER AT CHISWICK

During the last 35 years, for the ensuing Week, ending March 2, 1861.

February and March.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 24..	47.0	32.7	39.9	16	0.60 in.	—	2	6	3	7	6	4	[illegible]
Mon. 25..	47.7	32.5	40.1	18	0.92	2	4	6	—	6	9	[illegible]	3
Tues. 26..	47.4	33.4	40.4	20	0.48	3	5	5	1	4	6	9	3
Wed. 27..	48.0	33.7	40.9	17	0.40	3	5	4	2	[illegible]	7	5	3
Thurs. 28..	49.0	33.4	41.2	18	0.84	1	7	5	—	2	8	4	3
Friday 1..	47.5	34.1	40.3	13	0.62	—	[illegible]	2	1	5	[illegible]	[illegible]	[illegible]
Satur. 2..	49.0	36.0	42.5	13	0.45	2	[illegible]	4	—	3	11	5	[illegible]

The highest temperature during the above period occurred on the 25th, 1846—therm. 64 deg.; and the lowest on the 24th, [illegible], and 1st, 2d, and 3d, 1854—therm. 18 deg.

Notices to Correspondents.

Books: *No.* 8. We do not know.

Dead Plants: *H F.* The twigs are dead: no doubt. But we should wait till it is seen whether the main stems, at least near the ground, will not break. We doubt the trees being wholly dead.

Drying Plants: *An Old Subscriber.* You shall have a reply next week.

Flower Gardens: *J M.* You cannot manage a flower garden by reading books, unless you are already acquainted with the general routine of the matter. The best thing for you to do is to study McKellar's *Gardener's Illustrated Book of Flower Plots*, profiting by what is good, and disregarding what is not; and also Carter's new Seed Catalogue.

Gishurst Compound: *S P.* You have not applied it often enough. It is absurd to suppose that it or anything else *once only* applied will destroy such insects as mealy bug or white scale on Pine Apple plants.

Glazing: *L. Cirencester.* We would recommend you to use Hartley's rough plate.

Heating: Cast-iron pipes are the best. We don't believe in any substitute except Copper, which is too dear, and no better.

Insects: *I M R.* The small scale on the Rose twigs is the Aspidiotus Rosæ. The plant should be carefully brushed with a soft brush and hot water, and then painted over with a glutinous mixture to fasten down the eggs and prevent the development of the young. This should be done before the spring commences. *W.*

Kiddean Heating: *Suffocatorium.* We have no doubt that you are right, but we do not mean to go into the question. Surely Mr. Kidd does not pretend to know anything of gardening.

Names of Fruits: *J C.* The Apple you sent appears to be the Gravenstein; it is however long past its season of perfection.

Names of Plants: *Redwood.* Correa alba.—*P J S.* Rhipsalis cassythoides. We know nothing of Abies Williamsoni; Abies Hookeriana is the same as A. Pattoni of Mr. Andrew Murray. Don't believe above half what you are told. Griselinia littoralis has little green inconspicuous flowers.—*W A.* Sericographis Ghiesbreghtiana: a stove plant.

Potatoes: *Thomas Holbrow.* We believe the sweetness of some of your samples to be owing to their having just begun to grow. It is true that there is no outward sign of it; but starch in Potatoes begins to be changed into sugar before there is any mark of growth having commenced. You can judge for yourself whether those which are sweet are so placed as to be likely to begin to move before the others. Frost has not touched them, nor are they sick of the soil in which they are growing.

Samples of Tea: *T S P.* The Congou and Orange Pekoe are genuine Tea; so is the young Hyson, except that it is painted green to suit the prejudices of English consumers, who will not believe that green Tea is black.——We must, however, beg to decline the examination of articles supposed to be adulterated. Such examinations demand so much time as to be incompatible with our editorial functions. We may now, however, just say that the Tea from P. T., of Manchester, is adulterated to the extent of about two-thirds.

Sap: *W D.* We are astonished at receiving such a question from an intelligent man. Sap rises through all the wood, but chiefly through the alburnum, and descends through the bark. Pray study the rudiments of Vegetable Physiology. You will find them in Lindley's School Botany.

Wine-Cellar Fungi: *J T.* The Fungus on your cork, which has penetrated its pores to a considerable extent, is the common Black Cellar Fungus (Tasmidium cellare). It will not, I think, injure your wine. Had the corks been sealed, they would undoubtedly have been in a better condition. *M. J. B.*

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A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following from

MR. JAMES ARNOT, *of Woodcote, Carshalton.*

"Having used your Machine for four years, I would not be without one on any consideration; and I can safely say that I have saved over 50 per cent. in the expense every year I have used it. In fact I have never yet seen an implement which pays itself in so short a time."

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	£	s.	d.
No. 11 Mill (recommended also for bruising corn for fowls)	3	15	0
No. 6 Mill for hand, £4 15, or with Bean Mill (No. 6 B)	5	15	6
No. 7 ,, ,, 6 10 ,, (No. 7 B)	8	8	0
No. 2 ,, ,, or power 8 0 ,, (No. 2 B)	10	10	0
No. 1 ,, for power .. 12 0 ,, (No. 1 B)	15	0	0
No. 8 ,, for steam pow. 18 18 ,, (No. 8 B)	24	0	0

Delivery free to all Railway Stations in England, and to the principal ports of Scotland and Ireland.

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Incorporated by Special Act of Parliament in 1853.
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WORKS OF DRAINAGE of any extent are EXECUTED by the GENERAL LAND DRAINAGE AND IMPROVEMENT COMPANY on all descriptions of property, whether freehold, entailed, mortgaged, trust, ecclesiastical, corporate, or collegiate.

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Principal—J. C. NESBIT, F.G.S., F.C.S., &c.

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Analyses and Assays of every description are promptly and accurately executed at the College. The terms and other particulars may be had on application to the Principal.

EDUCATION.—Lieutenant C. FREYTAG, residing on a Dairy Farm at Quickborn, Holstein, desires to take into his family a limited number of young English Gentlemen, for the study of the German Language, Agriculture (Practical and Theoretical), and Natural History in connection with Agriculture. Terms 60*l.* per annum.—Address Lieut. C. FREYTAG, Kaufmann A. MEYER, Yunghans Market, Hamburg.

ROYAL AGRICULTURAL COLLEGE, CIRENCESTER.—Dr. VOELCKER, Consulting Chemist to the Royal Agricultural Society of England, has a VACANCY for a HOUSE PUPIL.

TENANT FARMERS' MANURE COMPANY.

ODAMS'S BLOOD MANURE FOR CORN.
ODAMS'S BLOOD MANURE FOR ROOTS.
ODAMS'S SUPERPHOSPHATE OF LIME,

MANUFACTURED BY THE PATENT

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Consisting of TENANT FARMERS, occupying upwards of 30,000 Acres of Land.
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The Agricultural Gazette.

SATURDAY, FEBRUARY 23, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

MONDAY, Feb. 25	Framlingham .. .. .. (Mr. Doggett on Steam Culture).	6 P.M.
WEDNESDAY, — 27	Agri. Society of England	Noon
	Latheron.	
THURSDAY, — 28	Agri Society of Ireland.	
SATURDAY, March 2	Hexham (on Stable Management).	
	Cork.	
MONDAY, — 4	Central Farmers' Club .. .. (Mr. Howard on Piece work).	6 P.M.
	Uske (Quarterly Meeting).	
TUESDAY, — 5	Penrith.	
	Wirral (Mr. Jackson on Spring Work),	4 P.M.
	German Agricultural Society at Erfurt in Prussian Saxony.	
WEDNESDAY, — 6	Agri Society of England	Noon
	Berkeley .. .. (Mr. Bailey on Dairy Farming).	3 P.M.
	South Wexford.	

—— HAVING been connected with the Royal Agricultural Society of England since the year of its establishment, and having all that time been actively engaged, either in the field or at the desk, in matters agricultural, the proceedings of that Society have necessarily come constantly under our review. Now, it is worth while placing upon record here the fact, as we believe it to be—a very remarkable one, and well deserving the attention of those who regulate its proceedings—that during the whole of its long career it has done nothing whatever yet in furtherance of what was certainly one of the principal objects contemplated by its founders, one of the objects, indeed, specified in the charter of its incorporation—we refer to the subject of agricultural education.

Of course no one doubts the immense educational value of much that the Society has done and is still doing—of its annual Show for instance and its Journal. But we submit, as needing to be borne in mind, that while its Charter refers to the annual Show, and to the Journal, and to other ways of usefulness open to the Society, it also in addition to these—over and above all these—specifies the promotion of agricultural education as one of the purposes for which it was incorporated. And we believe it will be found upon inquiry that while the Society has carried out its annual Show and its Journal with greater success than was ever anticipated by its founders, yet that in addition to these, and over and above these, in the manner therefore contemplated by its Charter, it has hitherto done nothing whatever in furtherance of agricultural education. If this

be so, then we submit that inquiry should be directed by the Council as to the ways in which it may be possible or expedient to carry out this purpose for which the Charter of the Society was granted to it.

We believe that a career of great usefulness is open to the Society in connection with a subject which hitherto it has unaccountably neglected.

—— The publication in page 101 of a list of sales of Short-horns during the past year has been complained of as unfair to particular herds, in the absence of any accompanying explanation of the circumstances attending each. Mr. Woodward, of Northway House, near Tewkesbury, has for instance declared that the mention of his name in connection with a sale of five animals at so low an average price as 19*l*. 13*s*., is an injury to the reputation of his herd. These animals were late young bulls put in at the end of the sale of a deceased friend and parted with in October to avoid the expense of wintering them. If anything be inferred from the prices which they fetched as to the quality of the large herd from which they were draughted, great injustice will be done. Five young bulls, poor in condition, out of a herd of nearly 200 animals, cannot be any index to the general quality of the stock; and we publish this reference to the subject lest any mistake should have been made and therefore injustice done.

It is plain however that our publication of these figures has been made with no thought whatever of the personal interests of any of the breeders named, but merely as an interesting collection in one, of what had already been published in detail, on the occasion of the several sales in the columns of various agricultural papers. Such a report in illustration of the fortunes of Short-horns has already appeared from time to time in our columns, and will be given again as opportunity offers.

An exceedingly interesting report of the harvest of 1860, and the seed time of 1861, appeared last Monday in the columns of the *Mark Lane Express*, to which we here refer, both for the unquestionable value of the information which it conveys, and for the illustration given by it of the degree of accuracy possible in opinions formed at harvest time, as tested now by the threshing out of a large portion of the crop.

In our Number for August 18, 1860, we published the reports of about 200 correspondents on the probabilities of the harvest. Of these 66 per cent. declared the Wheat crop to be under average, and the remainder put it as an average crop. From only one locality was it declared to be over average. Of the Barley reports 70 per cent. were "average," about 18 "under average," and 12 "over average." Of Oats the proportions were nearly the same, viz., 70 per cent. average, 20 per cent. under average, 10 per cent. over average. Of Beans, about 60 per cent. were average, 15 under average, 25 over average; and of Peas 70 per cent. were average, 15 under average, and 15 over average.

Of the reports now published an enumeration under corresponding divisions, which however can be only approximately done, leads to the following results:—

Wheat: 308 reports.—1 over average, 77 average, 230 under average.

Barley: 292 reports.—17 over average, 153 average, 120 under average.

Oats: 281 reports.—33 over average, 166 average, 82 under average.

Beans: 237 reports—40 over average, 108 average, 85 under average.

Peas: 220 reports—12 over average, 64 average, 144 under average.

Reducing the numbers of the several classes of reports of all these crops to the percentages of their respective totals, we have the following tabular comparison between the returns of August and of February:—

Crop Reports.

		Wheat.	Barley.	Oats.	Beans.	Peas.
Over average	August	0	12	10	15	15
	February	0	7	12	19	6
Average	August	34	70	70	60	70
	February	26	52	59	45	29
Under average	August	66	18	20	15	15
	February	74	41	29	36	65

It will be observed that the February reports are uniformly the worst. They must be presumed the truest, as being drawn up after some months' trial by the threshing machine. The Wheat crop seems to have been fairly enough estimated at harvest time; and the other grain crops also may have been valued accurately then; but the extraordinary weather of August and September, with their four dozen wet days, damaged them in harvesting, and so the promised average of Barley, Oats, and Beans and Peas was spoiled, no fewer than 65 per cent. of the reports of the last named crop being now under average, while 70 per cent. of them in August promised an average crop.

Of the Turnip crop the report of our contemporary is more generally unfavourable than we had expected—the Mangel crop is now as everybody knows a failure—and at our end of the island the Potatoes have rarely been worse.

The reports of the progress made in sowing Wheat for the coming harvest are also very unfavourable. To the question—Is there a good breadth of Wheat sown?—300 answers are given, and of these 86 are virtually "yes"—and the remainder "no." As to the condition in which it has been sown, 90 of the answers declare it to have been fair, and the remainder describe it as bad.

FERMENTED MANGEL LEAVES.

About the end of last November, a notice appeared in the *Gardeners' Chronicle*, signed "A Norfolk Farmer," detailing a process of salting and preserving Mangel Wurzel and other leaves, and stating that having remained in pits for six weeks or two months, they became like dry dead leaves, and formed excellent food for all kinds of stock, especially dairy cows. This would, indeed, be a most valuable discovery, and above all would have been so for this year when all kinds of roots are so scarce. I immediately carried out his directions as closely as I could with the leaves of some 15 acres of Mangels and Swedes (separately), but on opening them at the end of 10 weeks, I found them to have subsided almost to nothing, and that which did remain to have become a moist mass of corruption, most offensive to the senses, and rejected with loathing by all kinds of stock. Even pigs turned away from it. If this should meet the eye of the "Norfolk Farmer," or that of any gentleman who has carried out the experiment with success, he would oblige me and perhaps many others very much by noticing this letter, and by giving ample details of the means adopted to secure that success. —Essex.—21, *Chesham Street, February* 17.

P.S. I tried the experiment also with several tons of Italian Rye-grass, cut the end of November, and mixed with chaff. On opening it last week I found it very moist and pudding like, but quite free from offensive smell. But it was also rejected by store bullocks.

[To this statement of experience from the Earl of Essex we have to add that a pit prepared as the "Norfolk Farmer" recommended in a Mangel field near us has become similarly offensive. There is, we presume, the greater probability of success according as the leaves are thoroughly dry at the time of collection, and the proportion of salt added to them large.]

THE AGRICULTURAL LABOURER.

No. IV. Cheshire.—The best means of improving the condition of the labourer in a way that shall be advantageous to the labourer and his employer appears to be by giving him a more direct interest in the soil, that is by allotting to him a certain portion of land at a moderate rent and under certain restrictions; the plan of allotting land to labourers has been practised for some years upon several estates in England, and when well managed, has been found to answer the most sanguine expectations of the promoters. On an estate with which I am acquainted in Cheshire, nearly every labourer has a portion of land attached to his cottage, for which he pays a very moderate rent, and the difference in the habits and appearance of those labourers is very striking as compared with those in the surrounding neighbourhoods where they have no such advantage. If a labourer after returning from his work in the summer time at 6 o'clock (which is the usual hour in many counties, excepting during harvest) has no occupation at home, he frequently strolls to the nearest hamlet or village, where he is sure to find many of his own class assembled to talk over the affairs of the day, or for amusement of some kind or other, and too often for the purpose of resorting to the beer-house. This of course leads to evil consequences, already too well known to require any description here; on the other hand the man who has a little land, generally employs his leisure hours in attending to it and spends his evenings with his family, instead of in the village or at the idle corner of his parish, or the beerhouse.

In a township in South Cheshire such a thing as a case of drunkenness is entirely unknown amongst the labourers, and no class of men in the kingdom are more comfortably off or give greater satisfaction to their employers, and their wages on the average never exceed 10*s*. per week for the winter, and 12*s*. for the summer months. But the secret lies here:—The men have constant employment on the adjoining farms, they have also very comfortable cottages that belong to the estate of which the whole township is composed, and in which there is no beerhouse. The rent of each cottage, some of them double, with from 10 to 15 roods of garden ground to each dwelling, seldom [illegible] and in addition to this they have on such [illegible] 2 acres of land at about 30*s*. per acre, [illegible] quality, on which is maintained a small Welsh [illegible] the use of the family, and a calf purchased [illegible] stock from some neighbouring farmer, which [illegible] sold at 12 months old for 5*l*. or 6*l*.: [illegible] pigs are likewise kept, one is sold when [illegible] paying the rent, and the other is killed at [illegible] the use of the family. A system of this kind [illegible] managed and carried out through the kingdom [illegible] place the agricultural labourer in a much better [illegible] than he is at present, and eventually it would [illegible] not only his employer but the estate also [illegible] the farm is situated, inasmuch as it would [illegible] the poor rate very materially, more especially [illegible] labourers are members of a benefit society [illegible] now so general, and which it is not only the [illegible] farmer, but the landowner also to patronise [illegible]

I will give a sketch of what I conceive [illegible] the purpose of improving the condition of [illegible] in a way that shall be mutually advantageous [illegible] labourer and his employer; in the first place [illegible] to carry out the scheme fully, a sufficient [illegible] well constructed cottages to afford accommodation [illegible] all the regular labourers required upon the [illegible] should be built contiguous to the farms [illegible] employers; to each of these cottages should [illegible] from 20 to 30 roods of land according to the [illegible] the soil or other circumstances, at a rent equal [illegible] is paid by their employers, and at a convenient [illegible] from the cottage; if adjoining all the better; [illegible] a quarter of a mile it could not receive that [illegible] it otherwise would do. In most cases it [illegible] well for the farmers themselves to become [illegible] and sublet to their own labourers at the same [illegible] this means the farmers would have a regular [illegible] labourers near at hand, whom they could [illegible] suited best their purpose; and they would [illegible] the land was properly cultivated. The cottages [illegible] have three separate lodging rooms for the accommodation of different branches of the family, viz. one for [illegible] and his wife, one for the boys, and one for the [illegible] if there should be no young family, the spare [illegible] might be occupied by single young men as lodgers.

On a model farm in Cheshire a plan has been [illegible] which I understand has been found to answer [illegible] four cottages neatly constructed have been erected [illegible] the homestead, and within view of the farm house [illegible] each there is sufficient accommodation for a man [illegible] his family, and a spare room for a single man [illegible] there are always eight able bodied labourers [illegible] for the work of the farm. To carry out the [illegible] farther I should recommend wherever practicable [illegible] a sufficient quantity of land should be added [illegible] cottage to enable the occupier to keep a [illegible] the use of his family, but he should be restrained [illegible] ploughing the pasture land or growing corn, [illegible] the object might be defeated, but in no case [illegible] quantity of land exceed 2 acres, as more might [illegible] with his regular daily labour, and would [illegible] be neglected. To many persons reviewing [illegible] perhaps insurmountable barriers may present [illegible] such as—where is the money to come from for [illegible] cows when the labourer has not a shilling [illegible] or where is the land to be found for the [illegible] them, when all the land in the neighbourhood [illegible] appropriated? My replies to these queries [illegible] that the condition of the labourer would [illegible] proved by degrees, and although he [illegible] possibly expect to enjoy the full benefit of [illegible] at once, he would have it in prospect, and [illegible] himself every luxury, and strain every nerve [illegible] his object. With the assistance of the first [illegible] of land he might save a little money [illegible] any of his children were in service they [illegible] assist their parents in a way likely [illegible] condition. With regard to land for the [illegible] cows, the occupiers of farms would find [illegible] interest to give up small portions of land [illegible] conditions of the labourers, as any loss [illegible] sustain by so doing would more than compensate [illegible] by a saving in poor-rates, besides the [illegible] seeing their labourers prosperous and happy.

By way of illustration I will briefly [illegible] cases out of many that have come under [illegible] observation. The first is that of a married [illegible] wages never exceeded 10*s*. in the winter [illegible] the summer, having brought up a family [illegible] children without the least parochial assistance [illegible] commenced with a very small allotment of [illegible] few years he saved money enough to buy [illegible] his stock soon increased to a cow, heifer, [illegible] his children have either married or have [illegible] situations with the exception of two, one [illegible] too young to leave home, and the other, [illegible] grown up, has been prevented getting a [illegible] an accident he met with when a boy; still [illegible] industry he is now in possession of a cow, and [illegible] cart horse with which he draws coals for his [illegible] The other is that of a man who had conducted [illegible] for some years with great credit to himself [illegible] faction to his employer. At the suggestion [illegible] master he claimed a prize of 5*l*. offered by [illegible] tural society for long servitude and good conduct [illegible] prize was awarded to him, and he told his [illegible] the height of his ambition was to have a [illegible] he was to raise the additional sum required [illegible]

[illegible] not know, as he had not been able to save much in consequence of having to bring up a family of children upon 10s. per week throughout the year. It is true his rent was low, being only 5*l*. per annum for a good cottage and small garden. He had also a small allotment of land at a moderate rent. He however hit upon a plan which was approved of by his master. It was to purchase a cow belonging to his master valued at 8*l*., to pay down the 5*l*. received from the Society, and the remainder by instalments as he could spare it from his wages. The money was soon paid up, and the man never was without a cow afterwards. He had frequently a good calf or heifer to sell, and lived in comfort to the end of his days. In both cases the men were members of a Benefit Society.

The following are the present wages and circumstances of farm labourers in Cheshire. Team men and boys generally hired by the year with board and lodging, and also female servants:

Head Team Man, average	£1[illegible]	per annum.
Under do.	8	,,
Boys	3 to 4	,,
Dairy Maid on large Farms	15 to 20	,,
Vessel Cleaner	7 to 9	,,
House Servants according to age and other [illegible] ..	[illegible]	,,

The labourers' wives seldom work upon the farm, not choosing to leave their own household duties. Cottages on many estates are much improved of late, and on some of the principal ones may be considered as models, having at least three comfortable lodging rooms, and every convenience required below; rents from 2*l*. 5*s*. to [illegible], according to circumstances. *W. P.*

STEAM CULTIVATION.

[The following letter, addressed by Mr. Pike of Stevington, near Bedford, to Messrs. Howard, was read by Mr. Alderman Mechi before the Central Farmers' Club last week.]

I VERY willingly send you my views and opinions upon the Steam Cultivator. Before I came into Bedfordshire, I farmed in Buckinghamshire, when I knew the land of Mr. Smith, of Woolston, and having witnessed the great improvements he subsequently made by his system of steam cultivation, I was induced to order a set of the apparatus from you, in the spring of 1858. I have now worked my apparatus for three seasons, and, having done upwards of 2000 acres of land with it, I am in a position to speak with some confidence as to its success. The effect on the crop has been very visible each season, but I think the greatest advantage was manifest last harvest. My wheat crop was particularly good, which, after so much wet, I had no right to expect on such heavy land; but I find, after steam cultivating, the water gets down to the drains so much quicker, indeed I have now dispensed with the furrows altogether; one field, which is rather steep, containing fifty acres, all is on the flat, and I never saw any water stand upon it, although the land is very stiff. My farm, belonging to the Duke of Bedford, contains about 370 acres of arable and 130 acres of grass land. I formerly worked fifteen or sixteen horses, but since I have got my steam cultivator I have managed with seven or eight, and have always been much more forward with my work than when dependent upon my horses; indeed I should be very sorry to farm this strong hilly land without steam power. I am also enabled to grow a much larger acreage of root crops with a heavier yield. The present season proving so excessively wet has prevented me doing as much work as I should have done, still I am very much forwarder with my work than I could have been with fifteen horses to keep, whether able to work or not. I have seventy-five acres of Wheat, looking remarkably well, some of which would certainly not have been sown had I not had the steam cultivator. I have also put in my Tares with the steam cultivator; on account of the wet I sowed them on the stubble before breaking it up: they promise better than those around me, put in in the ordinary way. I therefore entirely disagree with people who entertain the notion that a steam cultivator is of little use in such wet seasons. I have found it exactly the reverse. I have also broken up and crossed my Wheat stubbles, intended for roots and Mangels, and, notwithstanding the wet, I have made a good job of them. I usually put this land in [illegible]-inch ridges, as I think it lies drier and sweeter for the winter; but the backwardness of this season has prevented me. My Clover leys I broke up just before harvest, and as usual made a *bastard* fallow of them. From long experience on clay land, I am convinced that this system is a surer mode of securing a good Wheat crop than leaving your Clover ley down until Michaelmas; it also has this advantage, the work of the farm does not fall in so much at one particular time. My fallow land was broken up before I commenced the Clover leys. Upon my Bean stubbles, in an ordinary season, I use my steam cultivator only once, merely harrowing once before and once after the drill. Last year I cultivated sixty acres of Bean stubble in this way, upon which I had most excellent crops of Wheat. I kept an accurate account of the cost of preparing this land by steam, and found that for labour, fuel, &c., it was exactly 4*s*. 7*d*. per acre. I have no interest whatever in extending the use of the steam cultivator, but feeling obliged to Mr. Smith and yourself for enabling me to cultivate my own land cheaper and better, I have thrown open my farm to all comers, and, in addition to many from distant counties, it has afforded me pleasure to find some of my neighbours, good practical farmers, following my example; for when I commenced, very few thought I was acting wisely in making so great an outlay in what they termed 'an experiment.' In Mr. Drag's letter, I notice he says that he finds setting down to a large piece is a mistake. I think it is a mistake to set down to small pieces. I have one field of 36 acres, which I break up without going into the field at all. I put the engine and windlass in an adjoining field, and finish headlands and all, without shifting either engine or windlass. I have another field of 50 acres, in which I have dug a pond at one end, and I set the engine and windlass against the pond, and cultivate the whole without shifting or requiring a horse to fetch water. I sometimes dam up drain or ditch, and obtain water in that way, for in a wet season water carting is a great nuisance. I have increased the length of my ropes to enable me to do these large fields; I expected it would take more power, but I don't find it makes much difference to my engine, which is one of Clayton and Shuttleworth's 8 horse double cylinder. I was always told, 'Don't get too much rope out, you will want so much more power.' I am no engineer, and cannot go into the reasons, but I find from experience that the length of rope makes very little difference to my engine. As before stated, I have now done with the steam cultivator upwards of 2000 acres of land, and my rope, although the worse for wear, is still in working order: the other portion of the apparatus is very little the worse for wear. I am convinced that, if people will attend to the coiling of the rope, and exercise moderate care, the rope will last for years. I am sure the expense of keeping the whole in repair is not nearly so much as the repairs of a steam threshing-machine. I prefer the engine and windlass separate, as they are more easily moved from field to field, and along bad roads, than the combined engine and windlass I had on trial. I don't think much will be done in letting out steam cultivators, as the expense and trouble of haulage is so much greater than with threshing machines. I speak from experience, as I have let out both, but have given over letting out my steam cultivator; indeed, I have 90 days' work a year for it on my own farm. *William Pike, Stevington, near Bedford, Dec. 31, 1860.*

Home Correspondence.

Artificial Manures.—In your journal of February 9, you give statements from a circular of Mr. H. Richardson, of York, and add that you feel his statements deserve the discussion, which just before the season when we purchase our manures they are sure to receive. With your permission, therefore, I will state a little experience which I have had in the matter. I have for the two last years got manufactured manure from a celebrated party in the north of England, which have proved to be good, but I cannot say that, even taking the price into consideration, they are superior to Peruvian guano and simple dissolved bones; indeed, I question very much whether they are equal to these, and I have this season resolved to give a preference to the latter. This party gives a guaranteed analysis, but so different from Mr. Richardson's statement, that when calculated by the standard by which Peruvian guano comes out in value, 12*l*. 10*s*., the value of the manures is somewhat short of their price. I have remonstrated with the sellers about this apparent overcharge, and their reply has been that they do not consider it advisable to give a guarantee to the full amount of the component parts of their manures, and that in general they would be found to be of considerably higher value than that indicated by the guaranteed analysis. As this statement seemed honest and consistent, I have not tested these manures by getting them analysed. Last season I got from a firm of apparently high respectability a circular advertising a manure (compound) with a guaranteed analysis, of which, when calculated by the above standard, the value amounted to 11*l*. 8*s*., while the price was only 8*l*. per ton. Well, I thought that here was what we wanted, a manure considerably cheaper than Peruvian guano; so, although I had previously purchased manure for the season, I ordered 1¼ ton. The manure arrived in due course, and as its appearance was not so promising as I expected, I drew as fair a sample as I could from five different bags, and sent it to Dr. Voelcker to be analysed. When I got the analysis and calculated it by the same standard, the value came out to be only 6*l*. per ton. I applied the manure to Grass, Mangel Wurzel, and Turnips, and in all these cases its effects did not seem so good as I would expect from a superphosphate at 6*l*. per ton. Now, as Mr. Richardson's statement is very similar to that which induced me to purchase this manure, I shall endeavour to be on my guard in receiving such, and would advise others to be the same, and rather to favour the use of what may be called simple manures as being the safest. *James McKelvie, Yorkshire.*

Adulterated Meal.—According to your suggestion I at once sent for some muriatic acid and put some Barley meal, Indian Corn meal, and some flour (the two former I had purchased and suspected of being adulterated) in three separate tumbler glasses, and poured the muriatic acid over each. Both the Barley-meal and Indian Corn meal were in a commotion immediately, boiling up and effervescing furiously, while the flour (my own) in the third glass remained wholly undisturbed. I then poured in some rain water, and stirred up each, and after allowing to settle, decanting the clear liquid, I put into the same about a teaspoonful of oxalic acid in solution (which I had made by putting an ounce of oxalic acid into a bottle with some water and shaking up), then allowing this to settle, there was a slight white sediment at the bottom quite distinguishable in gradually pouring away the liquid. From the above test I consider my suspicions to be fully borne out, that a very large admixture of adulterating substance, such as chalk, exists in both the meals, quite sufficient to be injurious to cattle; indeed I have had an instance of this in a fine sow with 10 sucking young ones, which nearly lost her milk and began to look thin and refuse the food altogether, but upon changing her food to some fresh "pollard" obtained from another mill, her milk returned, and she is not like the same animal. *Puckle Church.* [The muriatic acid dissolved the lime present as chalk in the meal—detaching the carbonic acid of the chalk, and occasioning the effervescence. The oxalic acid on being added to the acid solution of lime united with the lime and formed the insoluble oxalate of lime which was precipitated. Both tests thus proved the presence of chalk in the meal.]

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

WEEKLY COUNCIL: *Wednesday, Feb.* 20.—Present Mr. Raymond Barker, Vice-President, in the chair Lord Berners, Hon. W. G. Cavendish, M.P.; Hon. Col Hood, Hon. A. Vernon, Sir E. C. Kerrison, Bart., M.P.; Mr. Dent Dent, M.P.; Mr. Frere, Mr. Goodwin, Mr. Slaney, M.P.; Professor Simonds, and Mr. Burch Western.

The names of candidates for election having been read,

The Annual Report from the Governors of the Royal Veterinary College was read as follows:—

The Governors of the Royal Veterinary College, in accordance with annual custom, have again the satisfaction of presenting their Report relative to the state of Veterinary Medicine and the means which are at their disposal to further its application to the wants of the agricultural community. During the past year the lectures on the diseases of cattle, sheep, and pigs have been uninterruptedly delivered, and the daily attendance of the pupils has been fully equal to that of any former year. Examinations to test the proficiency of the pupils have from time to time been instituted, and from the reports which have been furnished to the Governors by the Professors, they believe that the progress of the pupils, in the several departments of their studies, has been very satisfactory. To second the labours of the Professors, and to stimulate the pupils in the acquirement of knowledge, the Governors, early in the year, arranged for the application of certain funds, placed at their disposal by the late Professor Coleman, to the awarding of medals of silver and bronze, and a certificate of merit as honorary distinctions of the first, second and third class, to such pupils as should be the authors of the best essay on a selected subject of veterinary medicine. The subject chosen for the competition was "the Eye of the Horse, embracing its Anatomy and Physiology, the laws of light appertaining to vision, the chemical composition of the humours and the pathology, treatment and results of the disease known by the name of constitutional ophthalmia."

The conditions were—1st. That the essayists should write within the College, and that the time be limited to three hours a day, for six consecutive days. 2d. That their papers should be in the custody of the Demonstrator of Anatomy. 3d. That no reference to books would be allowed. 4th. That each paper should be superscribed with a motto, and be accompanied by a sealed envelope bearing the same motto, and containing also the name of the writer.

The successful essayists were:—

Mr. Francis Talbot Sharp, Nottingham, Silver Medal.

Mr. George A. Oliphant, Marshwood, Southampton, Bronze Medal.

Mr. William Barker Walters, Birmingham, Certificate of Merit.

Although an important malady affecting the horse was thus first chosen, such being in accordance with the wish of the donor, it is the intention of the Governors in future years to select in turn a subject in connection with the pathology of cattle, sheep, and other domesticated animals; as also upon Chemistry and Materia medica.

COMMUNICATIONS AND CASES.—It is a source of much gratification to find that an increased number of communications, seeking advice for the management and treatment of diseased animals, has been received from the members of the Society, and also that a great many morbid specimens have been forwarded from different parts of the country, thus affording increased facilities for the student to become practically acquainted with cattle pathology, at the same time that the principles of the science are being expounded to them in the lecture room. The benefit which must result from the continuous adoption of this plan cannot be too highly estimated, as it is an assurance to the agriculturist that those pupils who daily enter on the practice of their profession, as graduates of the College, are equally well informed on the nature and treatment of the diseases of cattle and sheep as they are on those of the horse. The Governors have long seen the advantages resulting from this co-operation on the part of the members of the Society, and which they view, as second only in importance to their obtaining the personal attendance of the professor of cattle pathology on cases of disease which may assume a more urgent type. Hence in former reports they have not failed to direct special attention to this subject, as well as to urge such a modification of the Society's rules which apply to the obtainment of the professor's services, as to lead to their being simplified, and they learn with great satisfaction that their recommendation has not only been entertained by the Council, but that in due course it will be carried into practice. A very limited number of cattle and sheep have been received into the infirmary for treatment, and the Governors cannot help reiterating their surprise at the apathy which prevails so generally among agriculturists to avail themselves of the privileges they possess in this respect as members of the Society.

ANNUAL MEETING.—At the meeting which took place at Canterbury both Professor Spooner and Professor Simonds were in attendance as Veterinary Inspectors, and the Governors have observed with very great pleasure that in this effort of theirs to render benefit they have succeeded to the satisfaction of the Society. The rigid examination to which all the animals are now subjected is gradually lessening the number of incorrect returns with reference to their age, and correcting also the abuse of sending for exhibition those which are the subject of hereditary disease. The examination of the horses has, however, often been less satisfactory to the inspector than he could desire, arising chiefly from the limited means at his disposal, and the Governors doubt not that at the approaching meeting at Leeds

any increased facilities he may require by a modified arrangement of the sheds, so as to set apart one exclusively for his use, and the supplying him with practical assistance in his investigations into the soundness of the animals, will be readily granted by the Council.

Prevalent Diseases.—Apart from ordinary diseases, the chief maladies of a serious nature which have prevailed among cattle have been pleuro-pneumonia and epizootic eczema, commonly known as the mouth and foot-disease; while among sheep, at the early part of the year, chronic diseases of the lungs, resulting from the existence of worms (filariæ) within the bronchial tubes during the preceding autumn, proved very destructive. No doubt but the fatality of this disease was greatly added to by the long-continued wet weather and low temperature which prevailed. It is, however, to be feared that these same causes have had even a far greater injurious effect on the health of sheep in producing that fatal malady which is commonly known by the name of "rot." At the present time this destructive disease is wider spread than has been the case for many years; and in several of the western counties it is to be feared from the recent investigations of the professor of cattle pathology, that whole flocks will be sacrificed to its ravages. Little can now be done to prevent these losses, the malady being one which has had its origin in the entrance of entozoa into the organism of the sheep, and during the preceeding summer months. In their more perfect form these entozoa are known by the names of flukes, and are found to be inhabiting the gall ducts of the liver, where they not only produce functional derangement of the organ, but early lay the foundation for irremediable structural changes. The study of the natural history of these creatures opens up the only chance of preventing their attacks, and thus to save the lives of our sheep; and it is gratifying to find that investigations of this kind have long since been undertaken by the Professor of Cattle Pathology, and which are satisfactorily progressing. With reference to pleuro-pneumonia, the Governors would observe that several circumstances have shown during the past year in a most remarkable manner that the main cause of the spread of this disease is contagion. Such is its introduction into the United States, and also into Australia; the outbreak depending in the former country on the importation of some cattle from Holland, and in the latter on a similar importation from England. Within the past week it has also come to the knowledge of the Governors that the malady has been carried into Norway by some Ayrshire cows sent from Scotland. Facts of this kind are of the first importance as indicating the means which should be adopted to limit its extension. Preventive measures are alone to be relied on, as the fatality attending the disease can be scarcely said to be diminished since it first made its appearance in this country, nor is it to be hoped that science can do more than she has already done in devising means of its cure. In conclusion, the Governors would again convey to the Council their fixed resolve to do every thing within their power to render the science of Veterinary Medicine of increasing value to the agricultural community. *J. W. Bosanquet, Treasurer of the Royal Veterinary College, Jan.* 12, 1861.

A report from the Veterinary Professor of his professional visit to Bridgerule, in Devonshire, was read as follows:—

Royal Veterinary College.—On the 14th of December, 1860, in accordance with instructions received from the Council, I visited the parish of Bridgerule, North Devon, for the purpose of investigating a fatal malady existing among the sheep in that and adjoining parishes. The application came from the Rev. S. Kingdon, the resident Minister, and an old member of the Society, who stated that "more than half of the sheep had died or been sent off to be slaughtered at Plymouth." It was suspected that the animals were suffering from "rot," but a doubt existed on this point with regard to many of them, in consequence of the statements made with reference to the condition of the body after death. An investigation of the symptoms satisfied me that the disease was rot in its most malignant form, and the doubt referred to I found to have had its origin in a want of knowledge of even the most simple facts of the animal frame. As I found indications of the disease in all the animals to a greater or less extent, without reference to their age, and as many were ewes in lamb, I deemed it prudent to select on the different farms some for slaughtering, with a view to determine if the individual proprietors would be justified in keeping them a sufficient time to produce and rear their lambs. In every case I regret to say that such was the advanced state of the malady that I could not advise any other course being taken besides that of disposing of the animals at a low price as quickly as possible. Inquiries since made show the propriety of this course, and it will appear from a report and details of particulars, furnished by Mr. Kingdon and attached hereto, that where the recommendation was not acted on the animals are being swept daily away by death. This parish forms no exception unfortunately to the existence of rot among the sheep. And it is a serious thing to contemplate the great amount of loss which the country as a whole will sustain from the disease. Few districts can be found perfectly free of the malady; but especially does it prevail on wet, cold, and undrained lands. Late investigations into the natural history of the entozoon—the liver fluke—on the presence of which in great numbers within the biliary ducts the disease depends, would cherish the hope that ere long preventive means may be adopted to limit their development, and thus save the lives of many of our sheep. *James B. Simonds, Veterinary Inspector.*

The total number of sheep lost or sold at a reduced price in this parish was 359, out of an original stock of 492.

An interesting conversation ensued, in which Lord Berners, Mr. Frere, Mr. Dent Dent, Mr. Slaney, Mr. Barker, Sir E. Kerrison, and Mr. Goodwin took part, in which information was sought as to the origin of and cure for this prevalent disease.

Professor Simonds stated that investigations into the natural history of Flukes are now being instituted. Experiments had some time since proved that the ova of tapeworms became developed into hydatids, but science until of late had done but little towards unveiling the mystery connected with the liver fluke. It was not to be supposed that flukes originated in the coarse Grasses of wet meadows, which Grasses might be got rid of by efficient drainage, but rather that the plants were indications of dangerous spots.

The liver fluke did not immediately produce its kind from its ova, for these gave birth to creatures much lower in the scale of organisation, and which had to pass, when out of the body of the sheep, through a series of transformations.

The organisms produced by the ova of Flukes appeared to be identical with infusorial *Cercariæ* met with in water, especially when stagnant. But it was still a matter of doubt as to whether the Cercariæ did not become parasitic to other creatures, such as small species of water snails, and in them undergo higher development before entering the stomach and intestines of sheep to undergo their last change, that of transforming into flukes, which would find their way into the biliary ducts of the liver and lay the foundation for rot. Perhaps salt may prevent this development of the entozoa in the stomachs of sheep, as it is well known they do not become rotten on salt marshes.

Turpentine is of value in leading to the expulsion of flukes, and is one of our most valuable anthelmintics.

The following report was also read from Professor Simonds:—

I have to report that in consequence of an application made to the Society by Mr H. Leeds of Slibbington, Northamptonshire, I visited his farm on the 22nd ult., for the purpose of investigating a disease existing among his cattle. I ascertained that since Michaelmas last he had lost eight animals out of a small herd, and that he had hoped the malady had disappeared until a few days before his application, when a fresh case occurred. An examination of the animal in question satisfied me that it was the subject of an attack of pleuro-pneumonia, to which disease I have no doubt the other cattle had succumbed. There being no chance of recovery in this case, I had the animal slaughtered, with a double view of pointing out the nature of the affection to Mr. Leeds, and removing a source of danger to his other cattle by a spreading of the contagion. The post-mortem examination fully justified this step, as one lung was found to be so extensively diseased that it was completely destroyed as an aerifying organ. The outbreak in this instance is clearly traceable to the bringing into the premises some newly purchased animals. At about Michaelmas last Mr. Leeds bought four young Short-horns, and very shortly afterwards one of them sickened and died. This was soon followed by the deaths of two more of the same lot, and then by the death of a ten months old calf which he had bred. Besides this calf four others have been carried off from the same disease, which with one killed for my examination make nine victims in the whole, being every one which as yet have been affected. I made a careful examination of all the other cattle which had been exposed to the contagion, and give special instructions with reference to their management, so as to avoid as much as possible the bringing of secondary causes of the disease into operation. With the same view I also directed that medical means should be at once taken to purge the system of the deleterious matter which had probably been received into the organism, and subsequently to lay the foundation for a supply of pure and healthy blood. Past experience, in numerous instances, would lead me to hope, that the rigid observance of the rules laid down for the treatment of these animals will be attended with marked success in arresting the spread of the malady. The result, however, be what it may, will in due time be reported to the Council.

The report of the Consulting Chemist to the Society is as follows:—

During the past year as usual a large number of analyses of soils, guanos, marls, artificial manures, waters, oilcakes, and other feeding stuffs, have been made in my laboratory for members of the Society. In many instances the analyses and reports supplied to members of the Royal Agricultural Society at a very moderate cost have afforded useful guides in the selection of the best articles of food and fertilising materials. At the same time they have acted beneficially in checking dishonesty on the part of dealers in manures and feeding substances. It is gratifying to one to be able to report that only a few adulterated Peruvian guanos were brought under my notice during the past season, and that on the whole inferior artificial manures do no longer find the ready sale with which such manures were disposed of a few years ago. Indeed, downright bad manures are now quite the exception. Still, occasionally, fertilisers are sold at prices which bear no relation to their intrinsic value. The following analysis of an inferior artificial manure, sold at an exorbitant price, may serve as an illustration of some six or eight other cases of a similar kind brought under my notice during the past season. The manure to which I refer was sent to me by Mr. John Ellis, land agent, Artington, Guildford, who bought it as Potter's guano.

Composition of sample of Potter's Guano sent by Mr. John Ellis, Guildford.

Water	30.73
*Organic matter	9 68
Phosphate of lime and oxide of iron and alumina	15.62
Chloride of sodium (common salt)	11.70
Sulphate of magnesia	1.99
Sulphate of lime (gypsum)	19.72
Carbonate of lime	5.38
Sand	5.18
	100.00
*Containing nitrogen	.18
Equal to ammonia	.21

It will be noticed that scarcely one-third part of this so called guano is water, that another third part is gypsum, chalk, sand, and other useless matter, and the remainder contains a large proportion of common salt. The intrinsic value of this British guano is scarcely 1*l.* 10*s.*, whilst it was sold at 7*l.* per ton. It is not surprising that such a manure should have had little or no effect upon the Turnip crop to which it was applied. Several kind of sewage manures have been sent for analysis; but though sold at a low price they were without exception dear manures, considering the small amount of valuable fertilising matter which they contained. Good superphosphates may now be obtained in almost every market at very reasonable prices. Inferior samples, however, are as abundant as good ones. I would remind the members of the Society that the appearance, smell, and other physical characters of a superphosphate offer little or no indication of its quality, and that the practical and commercial value of this and similar artificial manures can be accurately and expeditiously ascertained by analysis. I have also examined two excellent samples of Norwegian fish-guano, a manure which is likely to be very useful to British agriculturists, provided it can be imported at a price proportionate to its intrinsic value.

Whilst speaking of prepared manures I may that several complaints have been made manures into the composition of which largely enters. I have as yet not been able to ascertain the clay and other materials used for purifying contained, as is alleged, compounds injurious to vegetation subject is one of considerable practical importance and to be carefully investigated. In the meantime I indebted to any one who may have used gas-clay gas-refuse manures, favouring me with his experience.

With respect to feeding materials I have to report Linseed-cakes unfortunately are getting very least three-quarters of all the Linseed-cakes me during the past season were either grossly or were cakes of quite inferior quality. The recrushing oilcakes and mixing the powder with amount of bran before replacing it into the press to be gaining ground. Good decorticated Cotton become much dearer, and is bought up as arrives in this country, and is consequently cult to obtain of first-rate quality. One of useful oilcakes is green German Rape-cake excellent samples were sent for analysis and samples of common and of Indian Rape-cake. The of these cakes has strengthened my conviction green German Rape-cake may be used with is dangerous to give to cattle other kinds of Rape much as they frequently contain Mustard in jurious to animals. Recently attention has been the probable importations of Egyptian Dates in years I have therefore carefully ascertained the composition Egyptian Dates, and published the analysis in the *Agr. Gazette.* Another novel feeding material is compressed I have an analysis of this substance, which is now large quantities in England, and find in it a quantity of nitrogenized matters and of phosphates. yeast has been used for manuring purposes, but aware until lately that it may be employed purposes. Two gentlemen, who are in the habit compressed yeast mixed with chaff or hay to milch to fattening beasts, inform me that they think feeding properties of dried yeast. I shall endeavour further information on this subject, and hope at a future to communicate the results of my inquiries to the Five or six alleged poisoning cases have been referred but on examining the contents of the stomachs of the supposed to have been poisoned, I was unable poisonous substance. In one instance I found the a pig, which was believed to have died from the poison, greatly distended and completely filled with of broad Beans and some other vegetable refuse, and doubt that this mass of indigestible matter caused of the pig. It is a well-ascertained fact that food large excess of indigestible vegetable fibre, when given or pigs too abundantly, seriously interferes with being, and even may cause death. It is for this ordinary Cotton-cake made from seed from which husks have not been removed, should be administered caution. As the examination of stomachs for poison troublesome and time-consuming process, I may be suggest to members of the Royal Agricultural Society in the assistance of the Veterinary Inspector, Professor Simonds, and to request him to ascertain whether there cient evidence of poison having been administered the expense of a chemical investigation. Under the chemical investigations I may mention the titles of tributions to the last Number of the Journal:—

1. On the Composition of two varieties of Kohl Cattle Cabbage.
2. On the chemical properties of soils.
3. On the composition and nutritive properties pulp.

Also the heads of two papers, which will appear coming volume of the Journal:—

4. On the composition of the Yellow Lupine adapted to its cultivation.
5. On Norwegian Apatite, Spanish phosphorite, rock guano, and other phosphatic materials at present England for manuring purposes.

In addition to the investigations the results incorporated in these papers, I have carried out ments on Wheat, Barley, and Turnips. The will form the subject of future contributions to the

Dairy Investigation—A special grant having been carrying out certain dairy investigations, I have up the subject, and beg to lay before the Chemical brief summary of my investigation:—

1. I have completed a large number of analyses kinds of cheese. These analyses have brought to interesting particulars, on which I shall report in
2. Many analyses of milk and whey have been the past six months.
3. I have spent 14 days in visiting eight dairies Gloucestershire, and Staffordshire.
4. With the assistance of several intelligent have carried out dairy experiments on a large scale
   - *a.* One series of experiments was undertaken of ascertaining the exact amount of loss butter which is alleged to occur when into cheese.
   - *b.* Another series of experiments had for determine the advantages of different ing milk into marketable produce.
     - I. The whole milk of a large dairy was made
     - II. Morning and evening milk was skimmed made into skimmed-milk cheese, and the cream made into butter.
     - III. The evening milk was skimmed and added milk of next morning, and then made
     - IV. The cream of the evening milk was added milk of next morning, and made into cheese.

   These experiments were repeated, and eight cheeses made, which, when sufficiently ripened mitted to a cheesefactor to determine their respective
   - *c.* Experiments were made to ascertain the which cheese sustains on keeping.
   - *d.* Experiments also were instituted for tracing if possible the chemical changes undergoes in ripening.

The results already obtained are highly interesting couraging; but they cannot be well detailed in and will be incorporated in a paper which I hope to the August Number of the Journal. In conclusion suggest to the Chemical Committee to direct me attention more especially to the dairy investigation continue the field experiments of former years, mit to investigate the chemical composition and of the different kinds of straw. *Augustus Voelcker cultural College, Cirencester, Feb.* 1861.

Letters were read on the prevention of disease, of which the following is the most interesting:—

"As soon as I perceive the leaves of my tainted, I immediately cover them entirely with the roots high and dry, the ridges being not less apart. The consequence is that every tuber sound, without spot or blemish. I do not pretend

the cause of this, which probably may arise from the exclusion of atmospheric influence as well as moisture; all I beg to draw attention to is the effect. I am at present digging as fine and healthy Potatoes as I ever grew, whilst a considerable portion of some which were sown only a few feet distant, but not earthed up, I found to be decayed and useless. This mode of treatment is equally applicable to every variety of Potato and every description of soil. I have tried the experiment in fields as well as in gardens, and with the same invariable result. In 1859, having to plant 2 acres of Potatoes in a stiff clay soil in Devon, I had them ploughed in with a common plough carrying 10 inches to the furrow, leaving the rows 30 inches apart. This was done the third week in March. After the Potatoes were well up, they were hand-hoed, and kept clean until the beginning of June, when they were all earthed up with a double-breasted plough; and in the middle of July, "Howard's Patent Plough" was used to take a single furrow from between each row, laying the furrow slice on the top of the rows. In order to test the efficacy of the method, I left some of each variety of the Potatoes uncovered by the earth. On taking the crop up in October I found every tuber of those which had been covered in the way I have described quite healthy and sound, whilst the half of those which had not been earthed up were diseased and entirely useless, thus showing that the Potatoes only partially covered were affected by the disease, whilst those entirely covered, and as I said before lying high and dry, remained untouched.

"*Directions.*—The Potatoes, as I have said before, should be planted 30 inches apart from row to row, and 6 inches from set to set in the rows, and be earthed up in the usual way; nothing further is required until the first appearance of the disease in the haulm, when the tops of the Potatoes must be laid on one side of the ridge, and then with a spade take 6 inches in depth of soil from betwixt the ridges and place it on the plants laid down, and so go on ridge by ridge until the whole are completed, by which means there will be a trench between each row of Potatoes, 6 inches below the tubers, which will be left high, dry, and perfectly sound, all moisture being carried off. As to the expense, which some persons have stated would be greater than the gain, by this plan, I think it right to mention, that the extra labour would be about 2*d.* per perch, or Devonshire yard. It has been already stated that the plan is equally applicable to the farm as the garden, the only difference is that one is done by manual labour, and the other by horse labour, which any good ploughman can do with a little practice; the first earthing up with a double breasted plough, the second with a single breasted one; laying the furrow, which is taken from betwixt the ridges, on the top of the ridge of Potatoes; hereby there would be a saving of expense, as a man with a plough and pair of horses would be able to do 2 acres a day. I hope the plan I have found invariably to answer will be generally tried another season, as I am confident a great saving would thereby be effected in the food of millions! *Leonard Short, Gardener to John Mildford, Esq., Coaver, Exeter.*

A pamphlet and the first 10 of a series of original plans issued by the Cottage Improvement Society, were laid on the table, for which thanks were ordered.

The Council then adjourned to its Weekly Meeting on the 27th inst.

Farmers' Clubs.

Reading: *Jan.* 26.—At the annual meeting of this Farmers' Club, Mr. Benyon, M.P., presided.

Mr. G. Shackel, one of the judges of root crops, was sorry that the tenant farmers had shown so badly on the present occasion, but he would refer them to the months of June and July, when they put in their crops, and if they would also bear in mind the untoward season which they had, they would see that there was some excuse. When they commenced the inspection, they began at Mr. Benyon's and went over his Mangel, and he must confess it was exceedingly good—so excellent indeed, that he saw nothing in the county like it. They also viewed Mr. Benyon's general crop of roots, and he must say that these were also very good, although he had seen a great deal better in other seasons. Mr. Benyon's was dry land, and they also saw a similar trial on Mr. Boxall's land, which was of a different description of soil. On Mr. Benyon's land they discovered that the Grey Stone Turnip was decidedly the favourite, so much so that he and his colleague believed there would be one-third more per acre in the weight of the produce by this Turnip. With regard to the trial on Mr. Boxall's farm, that gentleman would no doubt give them better information respecting it than he would. It was all very fine to have a large crop of these Turnips in one portion of the season; but the question was, would they stand the winter when they wanted them for their sheep? Mr. Edmunds had a most beautiful piece of these Grey Stone Turnips after a Trifolium crop, and which did him great credit. The Carrots were a failure this year, and also the Swedes, and he might here remark that a great deal of credit was due to Mr. Boxall for the manner in which his land was cultivated. It was exceedingly clean from weeds, but such had been the effect of the wet weather on the Turnip crop on his farm, that they could not tell at first whether it was Rape or Turnip. There had been no time for rooting, and there were consequently no bulbs, but a great deal of top; but on Mr. Benyon's warm dry land, which was equally clean, there were some handsome bulbs. He hoped that next year the tenant farmers would be able to come out in greater force against the landlords. With reference to manuring for roots, he said that he knew the carter who had put 34 loads to the acre on Mr. Benyon's ground, while he who put none at all grew roots that gained the prize over Mr. Benyon's. He then referred to the advantages of steam-ploughing, to the superiority of Fowler's engine, and the late improvement which had been effected in doing away with two of the drum ropes, which caused less friction and less expense. He had lately been witness of a trial of the improved machine at a farm in Surrey, and the farmer stated that where the steam was used for the potato crop, he had 9*l.* an acre more off that portion than the other.

Mr. Boxall said, he believed that Mr. Shackel was right in saying that the Grey Stone Turnips were the best, but as he had also remarked it was not merely weight that they must consider, they must ascertain how they would stand the winter. Credit was due to Messrs. Sutton for affording these trials, and he received the seeds with a great deal of pleasure, and felt it his duty to give them a fair trial, and during their growth he made a memorandum every two or three weeks, but they all knew it was a very unfavourable season. Among the seeds which he received were eight sorts of Mangel, and of these the Red Globe turned out to be decidedly the heaviest, and in the trial of some Carrot seed, the White Belgian was the heaviest; of the Turnips the Grey Stone was the weightiest, but the severity of the winter had almost completely rotted them. He had previously thought that the White Globe was the heaviest cropper for an early Turnip, but he confessed that the trial this year had very much staggered him, and he was now inclined to think that the Grey Stone was weightier, but they were certainly not so hardy, because there was the White Globe put in side by side and there was scarcely a bad one amongst them, while the other was nearly valueless. The Purple-top Yellow Bullock was the best on his land for standing the winter, but they were very light croppers. There were next the Green-top, or Scotch, which were very quick growers and very hardy. He had grown this Turnip measuring 19 inches in girth, and the seed which he had sown was produced in the same year, and he would say if they wanted a Turnip to stand well through the winter the Green-top was the best.

The Chairman proposed the health of Mr. Spearing, of Moulsford, a gentleman who was not only known throughout the country as a Berkshire agriculturist, but to public fame as a writer of several essays of great ability, and those who had read the last number of the *Agricultural Journal* would agree with him that he had ample room for speaking favourably of the agriculturists of Berkshire.

Mr. Spearing returned thanks, and said whatever humble abilities he had as a writer he certainly had none as a speaker. He felt great interest in attending the meetings of the farmers' clubs, and he did not think the time had yet arrived when the full value of these clubs would be acknowledged and appreciated; they were calculated to do an immense amount of good to the farmer, and ought to be well supported. As to the root crop it very much depended upon the rapidity of the growth of the Turnips whether it stood the winter well. If it grew slowly it was more likely to be hardy and stand the winter.

Reviews.

A Word in Season, or How to Grow Wheat with Profit. Eighteenth Edition, with a practical Farmer's view of the plan. Ridgway.

The author tells us in his preface that "what is new in this edition is the visit of inspection by a practical farmer; and it is here noticed and reported because very likely the views he then expressed are not confined to himself."

We give the new portion entire, and leave it to speak for itself.

"*Lois Weedon Vicarage, January* 1861.

"Very early last spring a first-rate practical farmer went over my field of Wheat, and said, 'It is capital land, Sir; worth 45*s.* an acre;' and said nothing more.

"He was undeniably right that it is capital land, beyond his estimate by 15*s.* at least. For, a portion of the field which was double dug first has a staple of rich mellow loam from 18 to 20 inches deep; and the remainder a few inches less. So that beyond a doubt it is first-land land, of the highest value for the growth of every description of crop.

"But, as my visitor came to inspect and report, he should have gone below the surface and said something more. Resting where he did, the inevitable conclusion was, 'There is nothing in it: no wonder the crops are heavy, for the land is so good.' He should have gone to the ditch-side and looked. He should have taken a spade and dug. His office was a responsible one, and he should have rigidly searched out the truth. He would then have got an inkling of the gist of the scheme. He would have found that the staple of my field at the outset was, for the most part, only 5 inches deep, with a subsoil, generally, of stiff yellow clay. This 5-inch staple was deepened by degrees. At intervals, inch by inch, the clay was brought to the surface and mixed; and at the end of 17 years—for there were two crops before the first sowing of Wheat—the field has become what it is, a brown deep loam, worth 60*s.* an acre.

"His duty was not over then. He should have found out the actual rent of similar land under ordinary tillage. My own tenant has, in round numbers, a 400-acre farm, with a deeper staple and of similar quality, which he rents at 27*s.*; and for heavy, hard-working land like that, it is rent enough. That I believe, is the average of such land all over my parish of 2000 acres. A wide strip of the same heavy land, of the same geological formation, runs right through the country, north and south, and lets, I believe, at much the same rate. And yet the field I cultivate is picked out and arraigned as capital land—the best Wheat land in the country; and with laughing crops, never-ending, still-beginning, pleads guilty to the charge.

"But this was not all. When my visitor ended his survey and came back from the triple-rowed Wheat and the yard-wide fallows, he gravely demanded, 'Sir, why would not *this* do as well: set apart an acre alternately wholly for Wheat, and another acre alternately for fallow. Let the two acres be cropped and fallowed in succession. It would be easier: why not as well?' It was quite impossible to answer this question seriously and fully then; and so it is now, without speaking a pamphlet; and that would be a tiresome tale, twice-told. Why, it touches the main point of the very gist of the scheme. The scheme is, to get without manure a full crop of Wheat, and at the self-same time a bare fallow too. Suppose, then, 2 acres on the fallow interval and triple row system, and another 2 acres on the suggested plan. In a succession of years 35 bushels would be the possible average of the latter 2 acres together; while—judging from the past—the yield of the former two together would be 70 bushels—just double as much.

"The practical farmer objected still. 'The plan seems a sound one; and the practice is good. But the details are difficult: troublesome to learn, and hard to carry out; and where are the hands? It cannot be done on *a farm*. Besides, we don't depend upon Wheat. Things are altered now; and other produce is as paying as Wheat.'

"He was so far right, that things are much altered now. There is full employ for the labouring man. With many drawbacks still times are not bad; so that what drew attention in '50 and '60 was obsolete. I will never believe, notwithstanding, that the plan cannot work on *a farm*. For a change has arisen in my favour, too. Hand labour is scarce; but I need not trust mainly to that. For steam has come to supplant the fork, and trenching may be done as well by the plough.

"There is a great virtue in 'if.' If farming were my pursuit; if my tastes lay supremely that way; if, above all, other and higher aims were not my calling, I should take in hand my 400 acres of clay land at once, I should do so with confidence; for my 13th Wheat crop (for 1859) was 38 bushels. The 14th (for 1860), unthreshed as yet, was exceedingly fine. Having been early sown, it was cut early, without a drop of rain; and again the estimate of the yield is 40 bushels. The growing crop for 1861, notwithstanding the frost, looks strong and well, with scarcely a gap. Thus year after year gives growing confidence in the scheme; and I speak with the utmost sincerity when I declare that, according to the best of my belief, and judging from the past, the annual result of an actual farm would be highly successful.

"Trials have taught me on what plan I should farm. Twice I have grown Oats in triple rows and 3 feet intervals; and I make a heavy demand on the faith of the reader when I tell him that the produce of the first year was 8½ quarters of fine upstanding Poland Oats—upstanding from being earthed up—the weight of which was 46 lbs. to the bushel; and of the second year nearly the same.

"The general mode of cultivation, then, would be with manure for Oats, Barley, Beans, and roots. The intervals should be wide, seeing that, while the produce of the half is as much as the whole, the additional benefit of clean, deep, ready-prepared fallows for future crops is beyond all price.

"The light gravelly land, spoken of hitherto as the 4-acre piece, is now set apart for experiments of this nature, and will be seen this season in full operation.

"Supposing, then, for a moment that I had a farm of 400 acres in hand, 100 acres should be given wholly and solely to Wheat; the remaining 300 acres to crops in rotation, with Grass and stock. 'Other produce is as paying as Wheat.' I will not keep the objector too closely to this assertion, but in the following statement make it only half as paying.

"At pages 12 and 16 are the details of the Wheat account, showing, with Wheat at 40*s.* a net profit of more than 4*l.* an acre. The digging each half acre by hand is there put at 34*s.* Steam would reduce it to 10*s.* at most. The balance of 24*s.* would well meet contingencies, such as the want of phosphates in very inferior clays.

Net profit on 100 acres of Wheat, unmanured ..	£400
Net profit on 300 acres of rotation and Grass crops, manured	600
Total net profit on 400 acres	£1000

"It is quite clear that, if his balance-sheet equal this, my friend the practical farmer is not doing ill."

We had not ventured to make so long an extract, including, indeed, all the new part of this edition, but by the express permission of the author, who thus disinterestedly wishes "to prevent purchasers of the former editions being at the expense of this."

Our readers will, we are sure, agree with us in welcoming this new illustration both of the agricultural intelligence and the pure and lucid English of the writer.

Miscellaneous.

Diseased Meat.—At the last meeting of the City Court of Sewers, Dr. Letheby, the medical officer of health, reported that the officers had seized 4893 lb., or nearly 2 tons a and quarter, of diseased meat, which

consisted of 79 sheep, 3 pigs, 1 calf, and 20 quarters of beef, besides smaller joints. In two cases the meat had been taken before the justices, in order that further proceedings might be instituted. Nearly the whole of this meat was seized in Newgate Market by Mr. Fisher and Mr. Newman, and in every case but one the salesmen had given notice to the inspectors of the arrival of the meat.

STATE OF THE WEATHER—BERKSHIRE.

For the week ending February 21: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain.	Wind	Barometer.
		Max. in Sun.	Max. in shade	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	15 ..	41.6	40.0	30.0	35.1	35.5	0.20	S.	29.52
Saturday	16 ..	57.2	45.4	39.0	45.1	37.6	0.01	W.	29.53
Sunday	17 ..	55.4	50.0	38.0	45.5	39.5	..	S.	29.60
Monday	18 ..	68.2	52.2	34.4	47.3	40.0	0.01	S.	29.45
Tuesday	19 ..	66.2	51.0	34.6	46.9	40.0	..	S.	29.40
Wednesday	20 ..	56.2	46.0	32.0	43.9	40.0	..	S.	29.45
Thursday	21 ..	46.8	46.6	39.0	42.8	40.5	0.17	S.W.	29.34

The readings are taken at 9 A.M. on the days named; and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Calendar of Operations.

FEBRUARY.

BORDER OF THE FENS: *Feb.* 11.—We finished Wheat seeding last Friday; many of our neighbours still continue to sow Wheat, not only on fresh tilth, but a second time where excessive wet or other cause has prevented the first sown coming up thick enough. Oats, Barley, and Beans have also been put in during the last fortnight, the land beginning to work well. Turnips and Mangels do not keep so well as last year, and will not afford so much keep, consequently we may expect sheep to be brought to market early with a probable scarcity of mutton in the spring, unless the weather should turn out favourable for an early growth of Grass; that there is some expectation of this is shown by a recent upward movement in the price of store cattle, which have been cleared off briskly at market of late. There are great arrears of field work to make up, but unfortunately several persons have been severely visited by an epidemic among horses, accompanied by cough and great prostration of strength, and many horses have been lost; a similar complaint has been prevalent among the human family, though not of so fatal a character, but very general and severe in its effects. The severe frost not only destroyed Cole seed and White Turnips, but Kohl Rabi has shown that it cannot be depended on, and we fear that all the Cabbage tribe will suffer unless well sheltered and planted out early; and when we consider how large an amount of the fodder in the hands of farmers is of a most inferior quality, it behoves them to husband their resources with great care, as if an inclement spring should occur, we are not very well prepared to encounter it. *J. W., Peterborough.*

WESTEL ROSS: *Feb.* 18.—About a month ago the intense and long continued frost we had gave way, and was succeeded by weather so mild and genial, that in a few days the fields presented quite a revived and spring-like appearance. Plenty of time for carting manure and performing odds and ends of work having been afforded whilst the frost continued, so soon as the ground was workable the ploughs were started, and a large proportion of the arrears of autumn work was satisfactorily executed. Several fields of Wheat were laid down in good condition. Again, for some ten days has ploughing been suspended by frost of a greatly milder character, which yesterday gave place to weather fresh and pleasant as before. To-day the ploughs are at work preparing the ground off which Turnips were eaten by sheep for Wheat or Barley, breaking up leas for Oats, and, in some places, where the work was not previously overtaken, giving the winter furrow to the green crop lot. Should the weather now continue favourable, there will be no lack of employment until the Turnips be sown. It is somewhat strange that, notwithstanding the heavy falls of snow and rain in other quarters, the covering of snow we had was insufficient to protect our Turnips from frost, and the rain has afforded us only a stinted supply of water for our mills. Autumn sown Wheat is coming above ground close and vigorous, as if the frost had had no unusual intensity. A greatly smaller breadth than usual has as yet been sown, but should the weather continue favourable, as it now is, quite enough may soon be laid down. The season altogether has been so peculiarly suitable for sheep both on the hills and on Turnips, that those that survived have very much recovered the effects of the severity and dearth of last spring. Cattle have also been progressing satisfactorily. Our Barley fetched a good price, but yielded a small return. Wheat, which we expected to be uncommonly remunerative, has been hitherto unsaleable; and now, when getting into condition, its price is in danger of being lowered by the rapidly increasing value of money. Truly the man who would grow rich by farming would need to be in no particular haste.

Notices to Correspondents.

ABORTION: *Wirral.* Sympathy is, no doubt, the cause of cows aborting in many instances—perfect cleanliness, and the disuse for a little while of the affected stall, and well washing every part, is all we can suggest. *W. C. S.*

CESSPOOL: *J Hales.* We shall consider your case in detail next week. Meanwhile you had better procure a copy of a tract on "National Health and Wealth, &c.," by the Rev. Hy. Moule (Bradbury & Evans, 11, Bouverie Street).

ROOTS IN DRAIN PIPES: *J Malden.* We suppose them to be fibrous roots of the Mangel Wurzel.

SOOT: *Cambridge.* If it be compared with guano on the score of ammonia only—the guano is worth only about 12 to 16 times its weight of soot. If guano costs 13*s.* a cwt., then soot may be worth 1*s.* a cwt. It generally sells for more. Sometimes however in place of containing only 1½ per cent. of ammonia, it contains as much as 4 per cent.; and its greater price than guano in average samples would give it is then perfectly justifiable. Dr. Voelcker has said that an average sample of soot contains about 1000 lbs. of organic matter, 20 lbs. of sal-ammoniac, 80 lbs. of sulphate of ammonia, 247 lbs. of gypsum, besides other mineral matter, and 257 lbs. of moisture in every ton. Soot weighs as much as 40 lbs. a bushel.

SURFACE GEOLOGY: *J B.* No new edition is likely to appear this year. Such a book would be of great service.

TENANT RIGHT: *W K.* Unless your lease specifies otherwise, you should take as regards seeding and manuring the land exactly the same steps as if you were to remain in the occupation. Seeing however that you will be merely repaid the cost which you will thus have incurred, you had better do or abstain from doing (within these limits) according to the wish of the landlord or his incoming tenant. As to the legal interpretation of your lease we can give no opinion.

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FOREIGN SEED ORDERS.—Plymouth is admirably situated for the execution and transmission of Foreign Orders. Seeds have during the past seasons been forwarded to Australia, New Zealand, United States, Canada, India, Malta, France, Austria, Portugal, Ionian Islands, Madeira, Gambia, China, Jamaica, Cape of Good Hope, Prince Edward's Island, and have arrived in the finest condition.

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In its infancy, its operations were chiefly confined to those of a local character; but, by energy and attention on the part of the then Proprietors, it soon found its way into a few of the surrounding counties.

The construction of Railways throughout the entire kingdom of Great Britain offered immense advantages for the opening up of a connection; and the Proprietors, profiting by the events then taking place, entered into arrangements, by which means they might, with regularity, economy, and despatch, forward their Goods to the most remote parts of the Country.

Besides the great facilities offered to them by Railway Transit, they were also much indebted to the new arrangements brought into operation by the Post Office authorities in the year 1841.

There can be but little doubt that Plymouth is most eligibly situated for the development of such a Business as the one under notice, connected as it is with the various Railways, and having continually in its harbour Steamers and Vessels ready to sail to almost all parts of the world. Yet, with all these advantages in its favour, it would, most undoubtedly, have lacked success, had not the former Proprietors adopted the wise policy, with full determination to carry the same into effect, viz., not to introduce any articles but such as were deemed to be first class, and truly genuine in themselves.

This mode of Business gave confidence to Customers, who, in return, recommended their friends; and it is owing in no slight measure to these recommendations that the Establishment has attained its present high position.

From its formation, to the year 1857, the Business had so increased that it was deemed desirable and necessary to incorporate it under the Joint Stock Company's Act of the latter date; since which time it has been carried on with even greater liberality and energy, and has continued steadily and permanently to increase.

The present Company would show a great want of courtesy, did they allow this opportunity to pass without pointedly expressing their acknowledgments to their Customers for the patronage and recommendations which have been from time to time accorded to them from all parts of the country; and in seeking for a renewal of confidence in their Establishment, they can only add, that it will continually be their endeavour to carry on their Business so as to retain its present high and acknowledged position.

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RAYNBIRD, CALDECOTT, AND BAWTREE supply carefully selected and screened samples of all the most approved varieties of Wheat, Barley, Oats, &c.

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CARROT.—Early Horn, 1*s.* 6*d.* per bushel. Long Orange, 1*s.* 3*d.* per lb., 5[?]

CRIMSON BEET, 7*l.* per bushel.

DRUMHEAD CABBAGE, 1*s.* 3*d.* per lb., 6*l.* per

CHAMPION OF ENGLAND PEAS, 8*l.* 10*s.* p[er]

BRITISH QUEEN ditto, 28*s.* per bushel.

The above Prices are strictly Cash.

Apply to GEORGE SANDERS, Seedsman, Maids[tone]

STIRLINGSHIRE CENTRAL UNION FARMERS

GREEN-TOPPED YELLOW ABERDEE[N] —"Mr. Young, of Keir Mains, observed — years we had been in the habit of sowing we find the Aberdeen Green-topped Yellow an on the Swede.' Mr. McLachlan, Auchentroid, find the Green-topped Yellow to be the best Turnip.'"—*Agricultural Gazette*, Jan. 5, 1861. last year's growth for Sale. Price 30*s.* per bushel the BAILIFF, Chesterton Farm, near Cirencester.

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The following should be sown immediately for Ornamental Garden decoration:—

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Bedding Calceolaria, 2*s.* 6*d.* | Thunbergia, of sorts
Dianthus Heddewigii, 6*d.* & 1*s.* | Tropaeolum atrocc[ineum]
„ laciniatus, 6*d.* & 1*s.* | Petunia coccinea,
Isotoma, of sorts, 6*d.* each | „ choice mixed
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BEDDING PLANTS for Propagation may now of all kinds, and of the choicest varieties.

TRITOMA UVARIA, 6*d.* each. | TRITOMA SERO[TINA]
„ GRANDIFLORA, 1*s.* 6*d.* | „ GLAUCES[CENS]

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E. G. HENDERSON & SON, Wellington Road, St. John['s Wood]

OVER DARWEN, LANCASHIRE.—The BOARD for the District of Over Darwen are receive TENDERS for the supply of SHRUBS for the New Cemetery.

The Shrubs, &c., are to be planted by the person the same, who will be held responsible for them 12 months.

Plans of the Cemetery may be seen, and tracings may be taken on application to the Surveyor, the Board, No. 5, Church Street, Over Darwen.

Sealed Tenders, with list of proposed Shrubs must be delivered to me on or before the 28th inst.

CHAS. KENDALL, Clerk

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S. PONSFORD begs to announce th[at] standing the severity of the late season, stock of the above in excellent condition, and supply them at very moderate prices. Also of Evergreen and deciduous Shrubs, Fruit Tre[es] fine Standard Apples, Cherries, Pears, Plums, Standard and Dwarf trained Peaches, Nectarines, Forest Trees, amongst which a very fine stock Limes of all sizes, Standard and Dwarf Ros[es] hardy kinds, Azalea indica, of the leading va[rieties] with bloom buds, Kitchen Garden and Flower kinds. GENERAL NURSERY, DESCRIPTI[VE] SEED CATALOGUES on application. "Po[ssu]NUM BONUM" PEA is the best wrinkled Pe[a] Loughborough Park Nurseries, Brixton.

TO THE TRADE.

JAMES SAUNDERS has to offer NURSERY STOCK, in consequence of the on a considerable portion of the land:—

Several thousands of CHICHESTER ELM, likewise ENGLISH and CHICHESTER BLACK ITALIAN POPLAR, 7 to 8 feet; LOMBARDY and OMTARIO POPLARS 10 feet; HORSE CHESNUT, 4 to TURKEY OAK, 7 to 10 feet; NORWAY MAPLE 30,000 SPRUCE FIR, 1½ to 2 feet, PINUS 4 feet; Ditto LARICIO, 3 feet up 4 to 5 feet in pots; Ditto CEMBRA, LAUREL, varying from 1½ to 4 feet; sizes; BOX in several varieties; fine Specimen EXCELSA, CEDAR of LEBANON, ELM SYCAMORE, and other Ornamental Trees specimens of AZALEA INDICA, 3 to 5 feet, disposed of.

Nursery Grounds, Abergavenny.—Feb.

PINE APPLE PLACE NURSERY. EDGEWARE ROAD, W.

ARTHUR HENDERSON and CO. beg respectfully to announce that their CATALOGUE of Kitchen Garden and Flower Seeds for 1861, with a list of Garden Implements, &c., is now published, and will be forwarded postage free, on application.—For details and particulars of New Vegetables, see *Gardeners' Chronicle* of 5th and 12th January.

PELARGONIUMS.

JOHN DOBSON and SONS beg to invite the attention of intending purchasers of the above, who will be liberally dealt with. A choice selection sent at a moderate price. NEW CATALOGUES now ready, post free.
Woodlands Nursery, Isleworth, W.

STANDARD SCARLET RHODODENDRONS.

W. H. ROGERS can offer some magnificent specimens, with clean stems, and large symmetrical heads covered with blooming buds. Price from 2 to 3 guineas each.
Red Lodge Nursery, Southampton.

SPLENDID SUMMER STOCKS.—

"DERBY" SCARLET 10-week, per packet	..	1s. 0d.
"DERBY" PURPLE 10-week, per packet	..	1 0

A DESCRIPTIVE PRICED LIST of really good VEGETABLE and FLOWER SEEDS free on application.
Edwin Cooling, 18, Iron Gate, Derby.

KENTISH COB NUT TREES.

W. J. EPPS begs to state that he has a large quantity of fine Trees of the above, which may be depended on. Maidstone and the neighbourhood is the only district where this variety Nut is cultivated to any extent, 6s., 9s., and 12s per dozen. 30s. to 40s. per 100.
Maidstone Nurseries.

TO PLANTERS OF CONIFERS.

YOUELL and CO. can supply 50 species of RARE and HARDY CONIFERS in good plants for 5*l*., package included, and carriage paid to Liverpool, Manchester, Newcastle-on-Tyne, Hull, London, Peterborough, or to any Railway Station within 150 miles of the Nursery.

A LIST of the above can be had on application.
Royal Nursery, Great Yarmouth.

FINE TRANSPLANTED FIRS, &c.

WOOD and INGRAM have to offer a fine lot of SCOTCH, 4 to 5 feet, very strong, at 35s. per 1000; also fine specimen SYCAMORES, 10 to 12 feet, at 60s., and 15 to 18 feet, at 120s. per 100.—Huntingdon Nurseries.

ROY and BEECHER have to offer BEECH, SCOTCH FIR, and SPRUCE, fine strong transplanted stuff; also 2-year SEEDLING SPRUCE for Transplanting.

CATALOGUES of Prices may be had on application, or special offers for large quantities.
Ferry Hill Nurseries, Aberdeen.

MARSH and PERKINS have great pleasure in offering a quantity of very fine Transplanted LARCH FIR, from 3 to 4 feet; also fine Transplanted SCOTCH do., 2 to 3 feet. Prices given on application.
42, Drapery, Northampton.

TRANSPLANTED BEECH, stout and well rooted, 1 to 2 feet, 14s. per 1000; 2 to 3 feet, 18s. per 1000. For cash only.—G. Frost, Nurseryman and Seedsman, Brushford, Tiverton.

A large quantity of very fine 1 and 2-year SEEDLING ASH to be Sold cheap. A few Thousands of strong Transplanted ASH and ALDER.
Address W. Wood & Son, Maresfield, near Uckfield, Sussex.

THE SUBSCRIBERS have on Sale 2-year Transplanted SCOTS FIR, 9 to 15 inches; 3-year transplanted ditto, 1 to 1½ feet, from native seed; transplanted NORWAY SPRUCE, 9 to 15 inches; 2, 3, and 4-year Seedling ditto, all at very low prices.—Fowler & Son, Glasgow, March 2.

JOSEPH FRYER begs to offer a large quantity of very fine LIMES, POPLARS, LILACS, IVIES, CLEMATIS, VIRGINIAN CREEPERS, PRIVET, MULBERRIES, Dwarf trained PEACHES, NECTARINES, PLUMS and other general Nursery Stock.—[illegible] Nurseries, Camberwell, S.

RICHARD SMITH'S LIST of all the EVERGREEN FIR TRIBE suitable for Britain, giving size, price, popular and botanical names, derivations, description, form, colour, foliage, growth, timber, use in arts, native country and size there, situation, soil, and other information, with copious index of all their synonymes. Free by post for 12 postage stamps.—Richard Smith, Nurseryman, Worcester.

IRISH YEWS.—Amongst the very few Plants which seem to be uninjured by the late severe storm, none appear hardier than the IRISH YEW, which still retains the same healthy hue it had before the storm. Fine healthy well-rooted plants from 1½ to [illegible] feet high, prices of which can be had on application to Cunningham, Fraser, & Co., Comely Bank Nursery, Edinburgh.

LARGE TREES FOR AVENUES, CEMETERIES, AND ORNAMENTAL PLANTATIONS

Where Immediate Effect is Required.

R. GLENDINNING begs to offer the following kinds, from 10 to 16 feet high:—

LIMES.	LOMBARDY POPLARS.
HORSE CHESNUTS.	ACACIA.
ONTARIO POPLARS.	LABURNUMS.

Chiswick Nursery, London, W.—March 2.

THREE MILLIONS OF TRANSPLANTED QUICKS.

GEORGE CHIVAS offers the above, varying from Good to exceedingly Strong, clean and well rooted. A Sample Bundle containing 100 of each, 5 sizes, forwarded on receipt of 15s. Truck loads delivered Free at any Railway Station. Also, a Million of Transplanted LARCH; half a Million of Transplanted SPRUCE; Ten Thousand Superior Standard APPLES and PEARS; and a large General NURSERY STOCK.—Chester, March 2.

ROBERT NEAL, Nurseryman, Wandsworth Common, S.W., begs to call the attention of buyers to his large and well selected stock of EVERGREENS and FLOWERING SHRUBS, ORNAMENTAL TREES, AMERICAN PLANTS, FRUIT and FOREST TREES, STANDARD and DWARF ROSES of every description. A large stock of BOX-LEAF EVERGREEN PRIVET, from 1 to 6 feet for hedges; GREEN HOLLY, 1 to 4 ft.; RICH BOG and LOAM for American Beds; LEAF MOULD. The Nursery is 10 minutes' walk from Clapham Common, and New Wandsworth Station, Crystal Palace Line.

TREE AND SHRUB CATALOGUE.

JOHN CRANSTON begs to announce to his Patrons and the Public generally, that his DESCRIPTIVE CATALOGUE of Conifers, Ornamental Trees, Evergreen and Deciduous Shrubs, &c., is now ready for distribution, and will be forwarded on receipt of one postage stamp.

The above contains important and interesting notes with regard to the height the Trees enumerated attain, Native Country, date of introduction, and in the case of Flowering Shrubs, the colour and time of flowering.
Nurseries, King's Acre, near Hereford.

CUTHILL'S STRAWBERRY PLANTS.—Black Prince, 5s. per 100; Princess Royal of England, 7s. 6d. per 100; Prince of Wales, 7s. 6d. per 100; Highland Mary and Improved Black Prince, 1*l*. per 100 each. All fine strong Plants.

BLACK SPINE and HIGHLAND MARY CUCUMBERS, Seed, 1s. per packet; best MELONS, &c.
James Cuthill, F.R.H.S., Denmark Hill, Camberwell, S.

STRAWBERRY PLANTS.—Spring being the best time for planting, strong healthy PLANTS can be supplied of nearly 200 varieties. A DESCRIPTIVE CATALOGUE of the above may now be had by applying to the Grower,
Wm. Jas. Nicholson, Egglescliffe, Yarm, Yorkshire.

PRINCE OF WALES RASPBERRY (CUTBUSH).

WM. CUTBUSH and SON have some fine Canes of the above, "the BEST RED RASPBERRY in Cultivation,"—see *Gardeners' Chronicle* of February 23d, page 169—at the following prices:—100, 42s.; 50, 25s.; 25, 15s.; and 12, 8s. Highgate Nurseries, London, N.

GRAPE VINES FROM EYES IN POTS.

LUCOMBE, PINCE, and CO. have now a remarkably fine healthy stock of strong VINES, from 6 to 10 feet high, of all the choicest sorts, fit for immediate planting, propagated from eyes, taken from their own experimental Vinery, which enables them to warrant each kind true to name.

LISTS of sorts and prices may be had on application to them.
Exeter Nursery, Exeter.

GRAPE VINES.

J. IVERY and SON can still supply a few good Plants of the following kinds: Lady Downes' Seedling, Trebbiana, Buckland Sweetwater, Trentham Black, Barbarossa, Bidwill's Seedling, Black Hamburgh, Black Tripoli, Muscat Alexandria, Chaptal, and St. Peter's.—Dorking Nursery, March 2.

EXTRA FINE DWARF-TRAINED PEACHES, NECTARINES, CHERRIES, AND PEARS.

Woodlands Nursery, Maresfield, near Uckfield, Sussex.

WM. WOOD and SON refer with pleasure to their splendid Stock of the above; but more particularly to their DWARF-TRAINED MORELLO and MAYDUKE CHERRIES, which are as handsome trees as can possibly be desired

SPLENDID DWARF-TRAINED APPLES, PEACHES, NECTARINES, PLUMS, AND MORELLO CHERRIES.

WM. KNIGHT respectfully solicits attention to his well-grown stock of the above, but more particularly to his Dwarf-Trained Peaches, Plums, and Morello Cherries, many of the latter having from 12 to 18 branches to each tree; would bear a good crop of fruit the coming season, having been recently transplanted. Price each or per dozen on application. CATALOGUES of General Nursery Stock free on application.—Floral Nursery, Hailsham, Hurst Green, Sussex.

NEW GAGE PLUMS.—

	Each—s. d.
1. BRAHY'S GREEN GAGE, the largest known ..	5 0
2. BRYANSTONE GAGE, late and excellent	3 6
3. JODOIGNE GREEN GAGE, very large	3 6
4. JULY GREEN GAGE	5 0
5. OULIN'S GOLDEN GAGE, or OULEN'S GAGE ..	5 0
6. TRANSPARENT GAGE, very large	3 6

The above are all of first-rate quality—Nos. 4, 5, and 6 are fully described in Dr. Hogg's "Fruit Manual." Fine healthy trees, Dwarf and Pyramids, are now ready for delivery—paid to London.—Thomas Rivers, Nursery, Sawbridgeworth.

MELONS.—Scarlet Gem, Excelsior, Victoria, Trentham Hybrid, Incomparable, Green Gage, Bailey's Green Flesh, Frogmore, and Hornfleur. A packet of any one sort free per Post for 7 stamps, four for 24 stamps, or the nine for 48 stamps.

VINES, well ripened eyes, Golden Hamburgh, Muscat do., Champion do; Black do., &c., 7*d*. each and upwards, free per Post.

DESCRIPTIVE CATALOGUES for one stamp.

Address, Mr. John Bailey, Shooters Hill, near Longton, Staffordshire.

GIANT POLYANTHUS and GIANT COWSLIP.—These favourite Flowers to be obtained either in Roots or Seed.—Application to be made to Geo. Mace, at the Gardens, Calcot, near Reading.

JOHN CATTELL'S CATALOGUE of KITCHEN GARDEN SEEDS for 1861 is now ready, and may be had on application. Also his CATALOGUE of SELECT FLOWER SEEDS, containing the novelties of the season, and the approved old favourites.
Seed Establishment, Westerham, Kent.

NEW SPRING CATALOGUE.

WM. RUMLEY and SONS' New Spring CATALOGUE of new and choice Fuchsias, Verbenas, Geraniums, Cinerarias, Petunias, Dahlias, Hollyhocks, Pansies, Chrysanthemums, Phloxes, Calceolarias, Heliotropiums, Mimulus, Stove, Greenhouse, Bedding Plants, &c., at very reduced prices, is now ready, and may be had on application.
Gilling, near Richmond, Yorkshire.

GENUINE GARDEN SEEDS.

WM. CUTBUSH and SON beg to intimate that their PRICED CATALOGUE of KITCHEN GARDEN and FLOWER SEEDS for 1861 is now ready and will be sent gratis on application.

Every article offered can be guaranteed of the very best description and true.—Highgate Nurseries, London, N., only.

WHOLESALE CATALOGUE.

GEORGE JACKMAN and SON'S PRICED and DESCRIPTIVE CATALOGUE for 1860 and SPRING 1861, comprising Fruit Trees of all the leading kinds, new and selected Roses, fine varieties of American Plants, Choice and Rare Conifers, Evergreen and Deciduous Trees and Shrubs, and a fine Stock of Transplanted Forest Trees, &c., can be had free on application.—Woking Nursery, Surrey.

THOMAS WILD'S PRIMULAS, in White, Crimson, Purple, Lilac, Pink, Scarlet, Striped and Spotted; 2s. 6d. per packet.

THOMAS WILD'S ORION MELON (true), the best in Cultivation for Beauty, Weight, and Flavour; 1s. per packet.

THOMAS WILD'S No. 1 and 2 CUCUMBERS,
On trial at Chiswick; 1s. per packet.
The Primulary, Ipswich.

SUPERB HOLLYHOCKS.—The Plants are perfectly healthy, and well established.

12 first-class show varieties	18s. 0d.
12 superior show varieties	12 0
Good border varieties	6 0
Unbloomed Seedlings from the best show flowers, per 100	10 0

CATALOGUE forwarded on application.
R. B. Bircham, Hedenham Rosary, Bungay, Suffolk.

CHRYSANTHEMUMS FOR THE MILLION.

J. H. BIRD, F.R.H.S., Nurseryman, Stoke Newington, N., can now supply from his great Collection, 20 Pair of Best Large Varieties for 10s.; 25 Pair of Best POMPONES, 10s.; 20 Pair of Best Large Varieties, Cuttings, 5s.; and 25 Pair of Best POMPONE Cuttings, 5s. N.B. To save trouble all Orders to be Prepaid.—CATALOGUES for One Stamp.

NEW CHRYSANTHEMUMS, DAHLIAS, HARDY VARIEGATED PLANTS, &c.

JOHN SALTER, F.R.H.S., will send out this spring several fine New CHRYSANTHEMUMS, both Large Flowers and Pompones. Full particulars will be found in his DESCRIPTIVE CATALOGUE for 1861, which will be sent post free on receipt of two stamps.—Versailles Nursery, William Street, near Hammersmith Turnpike, W.

CHRYSANTHEMUMS.

W. HOLMES begs to offer strong and well-established Plants of all the best and newest varieties of the above as under:—

	Per doz. s. d.		Per doz. s. d
Chrysanthemums, Large Flower	5 0	Verbenas .	2s. 6d. to 4 0
Ditto, Pompones.. ..	5 0	Fuchsias	4s. to 6 0
Dahlias	6s. to 9 0	Petunias	3s. to 6 0
		Antirrhinums, &c., &c...	3 0

DESCRIPTIVE CATALOGUES of the above free for one stamp.—Frampton Park Nursery, Hackney, N.E.

ROYAL HORTICULTURAL SOCIETY.—Notice is hereby given, that the next Ordinary Meeting of the Society for the ELECTION of FELLOWS will be held in the Council Room in the Society's New Garden, South Kensington, W., on TUESDAY, March 19. The Chair will be taken at 1 o'clock. On this occasion a Ballot for the following Seeds will also take place:—

List of Seeds for Ballot.

1. Dwarf German Ten-week Stock (12 varieties).
2. Large Flowering Dwarf German Ten-week Stock (10 varieties).
3. Calliopsis Cardaminefolia (hybrid). [mixed).
4. Dianthus Heddewigi (fine—
5. Do. do. (double and semi-double, *new*).
6. Dianthus imperialis (*new*—hybrid).
7. Dianthus Chinensis nanus, variety atrosanguineus (double).
8. Phlox Drummondi, variety Radowitzii.
9. Lychnis Haageana.
10. Chrysanthemum Acaule.
11. Do. Burridgeanum.
12. Do. venustum.
13. Coreopsis nana, var. marmorata.
14. Zinnia elegans (double).
15. Lobelia Erinus, var. marmorata.
16. China Asters (7 varieties).
17. Do. (7 varieties, 4 of which dwarf).

Fellows of the Society desirous of obtaining any of these seeds, if Life Members of 40 guineas, or Annual Subscribers of 4 guineas, are requested to name *Six* sorts; if Life Members of 20 guineas, or Annual Subscribers of 2 guineas, to name *Three* sorts.

The arrangements for conducting the Ballot render it necessary that the names of the plants, or the number prefixed thereto in the above list, should be sent to the Offices of the Society, South Kensington, W., on or before Saturday, March 16, *after which date no applications can be attended to.*

In addition to this Ballot, the Annual Distribution of Seeds to Fellows is now being made, on application at the Offices.

Andrew Murray, Assistant Secretary.

The Gardeners' Chronicle.

SATURDAY, MARCH 2, 1861.

The horticultural calamities of the winter that is passing away have not been productive of unmixed evil. They have taught us prudence; at least we hope so. A long succession of mild winters had led us to fancy that the dangers of frost had quitted our shores, and that we were at liberty to neglect precautions which our fathers were careful to observe. If we have been roughly undeceived, at least we know the worst: and no man can now doubt that most of those half-hardy trees and shrubs from Mexico, California, and Northern India, which gentle winters have nursed into ephemeral beauty, are unfit for cultivation in northern latitudes without the old fashioned protections of pits, or mats, or baskets coated with straw. Even naked walls have deserted the unlucky amateur. On the other hand we have learned to know our fast friends; we can see on what we may securely depend; and to our joy we have found that those friends are as comely and stout as what we have lost.

At present we neither know the extent of loss nor the amount of gain. But as we are all busy in reckoning up both, it has occurred to us that a brief account of a walk round a small garden near London may even now serve as a guide to those who think of profiting by hard experience. The Garden in question is situated about 13 feet above high water mark at a quarter of a mile or so from the Thames. The soil is heavy clay as well drained as circumstances will permit, but not thoroughly for want of sufficient outfall. For the most part it faces the north, is fully exposed to the north-east, and not sheltered from the north-west. During the winter no register of the thermometer was kept; but in much warmer gardens close by it fell to 4° below zero, and must have been lower in the place reported on. It will thus be seen that the situation is as unfavourable as any place well can be in the valley of the Thames.

The deaths in this spot, already ascertained are as follows:—1. Myrica californica, the Californian Gale, an evergreen from the lower elevations of that country; 2. Fagus Cunninghami, the Tasmanian evergreen Beech tree; 3. Polygonum

vacciniifolium from the North of India, a very pretty creeping rock plant; and this is the more curious because Polygonum Brunonis, a similar plant, from the very same localities in India, and here growing intermixed with it, has taken no harm; 4. Two or three hybrid Rhododendrons bred from R. campanulatum, another puzzling circumstance, Rhod. campanulatum itself not having been touched in the very same bed; 5. a Cupressus Goveniana from California, standing on a dry bank. To this may be added Eugenia Ugni under a north wall; Fuchsia Riccartoni, which has survived at least 20 winters; and above all the Pampas Grass.

This last is a great misfortune, for the plant was one of the largest and oldest in the kingdom: but its death ought to have been expected, for how could we hope that a native of the banks of the lukewarm Paraña would bear the rigour of an English winter in ice cold land.

Next in order come cases in which plants are HALF DEAD; that is to say have lost all their leaves and unripe wood, but are safe in the main trunk or the roots. Here stands the Bay tree, of which there existed in the little garden a dozen or more plants from 15 to 20 feet high; death was at first believed to have overtaken them: but they seem alive near the ground where buds are swelling; and under the shelter of a dwelling house guarding them from the north they are not even half dead. The same may be said of the varieties of Laurustinus, only recently transplanted old plants being dead outright; most of them, especially the hairy being half dead, while bushes under the shelter enjoyed by the Bay trees are as green as those on our south coast. Euonymus japonicus, another bush supposed to be perfectly hardy, had when the frost departed, all the appearance of total death: but its roots are extending fast, and a summer's growth will re-establish it. Trained to the face of a high building looking southward, are the Cloth of Gold and Isabella Grey Roses; both will rapidly recover; and the same may be said of common China Roses in the open borders. FORTUNE's double Peaches, from China, look wofully; but may break again where the wood is ripe. Small as this list is it includes all that we could find except the unimportant Jasminum revolutum.

And now come the survivors, those hardy visitors on which we may depend. First among which we place Camellias; a double white and a double red, under a wall facing the north have enjoyed good health for many years; and now, February 28, look better by far than Laurels. It is true that their flowers have always been small, and usually bitten by March frosts; but as Evergreens they seem to rank with the hardiest. Pyrus japonica lost all its leaves and early flowers, but is pushing as healthily as ever. The same may be said of Spiræa Reevesiana; a very singular circumstance if it really be the S. China and Hong Kong S. cantoniensis as Mr. BENTHAM supposes; we must however remark that FORTUNE's plants, the origin of those in gardens, were gathered in Chusan in April, and at Foo-chow-foo in April and May, places far to the northward. It seems as if the whole genus Spiræa and its relatives were frost proof, for we find no casualties among the species; even the Himalayan Sp. canescens is breaking, and as for the handsome Spiræa (or rather Exochorda) grandiflora, a young plant supplied by Mr. STANDISH is alive to the very points. Among Cotoneasters C. microphylla has stood perfectly in one place and been rather punished in another close by; while the Mexican C. marginata on the face of a north wall has taken little harm. Of Indian Berberries in which the Garden is rich, it is too soon to speak; but it is quite certain that the beautiful B. Darwini can brave any English winter: and so can STANDISH's most ornamental forms of B. japonica, two of which growing under the slight shade of some trees are as green as last September, and are already pouring forth handfuls of flowers; such acquisitions as these may well reconcile us to heavy losses elsewhere; they tell us that if we cannot have the graceful B. nepalensis we can at least be sure of its Japanese relation which is handsomer. There are also other important Japanese plants on which frost is found to make no impression. One is the Metaké Bamboo, a most valuable ornament, first brought into notice by Mr. BATEMAN, of which the uppermost leaves alone have suffered; the other is the beautiful little evergreen Skimmia japonica, a plant of which from STANDISH still bears its scarlet Holly-like berries, which birds will not touch. A belt of this surrounding a mass of Pyracantha girding yellow and red Hollies would be superb in winter. Among Roses, the double Rosa Kamtchatica, the sweetest of the sweet, is alive to its points; nor, indeed, have any garden Roses flinched from the cold except those with Chinese blood in them. Among Rhododendrons, some of the hybrids from the brown leaved R. arboreum look very well; and none have suffered materially except where it was impossible to prevent their being water logged last summer. As to minor cases, we found that the Deutzias scabra and multiflora, Jasminum nudiflorum, Forsythia viridissima, Sedum Sieboldi, Yuccas, Chinese Box, are absolutely hardy. At first some fear was entertained lest large evergreen Oak trees, and Phillyreas should have perished; but they are casting their leaves freely, and we think may be pronounced safe.

Conifers demand a paragraph to themselves. Among them Pinus excelsa, and Gerardiana; Abies Pinsapo; Deodars; Cryptomeria japonica; Cupressus funebris, Lawsoniana, and Macnabiana are untouched. So is a species of Silver Fir from Vancouver's Island, of which there are specimens from VEITCH and STANDISH: we are unacquainted with its name, and suppose it to be unpublished; it is uncommonly handsome. Then there are all the Torreyas safe, though they do not seem to like the heavy land. Libocedrus decurrens is flourishing in a small plantation, near a tall Sequoia sempervirens which, like Wellingtonia, looks as if it had never felt a winter. The Cephalotaxi, a complete set of which had been received from the Bagshot Nursery some years since, appear emulous of the common Yew. Fitzroya patagonica is stunted, but green and healthy: Saxegothæa perished long since. A wee plant of the Japanese Thujopsis dolabrata, perhaps the most valuable of all Conifers, and which we may hope to see common, thanks to the energy of Mr. J. G. VEITCH, is as green as any greenhouse plant; but we cannot report the same of Thujopsis borealis, whatever that may prove to be, for its ends appear to be nipped; it had however been transplanted last September. Abies bracteata, the handsome tree obtained by Messrs. VEITCH from California, has lost the tips of some leaves; but its buds are all plump and swelling fast. Finally of Araucarias we found two specimens, one the spreading, the other the upright variety; the first has the leaves a little brown, the other is untouched. Among the specimens of this species there seem to be considerable constitutional differences, some resisting cold better than others. For instance, in Mr. GLENDINNING's nursery at Turnham Green, among some hundreds of seedlings, about one-third is killed, or rendered unsaleable by the loss of the terminal bud; the remainder appear unconscious of having been exposed to cold. And yet they are all mixed under equal circumstances.

Let us hope that many little gardens will be eventually found not to have suffered more than that here described.

WE read in a German periodical (the *Monatschrift für Pomologie*) the following method of DESTROYING GREEN FLY, and other Aphideous vermin. A Mr. OBERDIECK who had been in the habit of using for this purpose soap and water with indifferent success, the insects not dying unless the soap and water was very strong, and the young wood of his trees perishing if it was too strong, heard that if Quassia (the chips of Picrasma excelsa) is added to the soap and water, the remedy was effectual. As it may not be known to everybody that this Quassia is not merely a wood remarkable for its intense bitterness, we may add that it also furnishes a decoction employed as an effectual fly poison. So Mr. OBERDIECK took advantage of the hint, with the following happy result. Having boiled some Quassia chips and mixed the decoction with soap and water, he dipped into the mixture the shoots of young Cherry trees attacked by their peculiar black aphis, and also those of an Apple tree much infested. Each shoot was held in the mixture till its surface was thoroughly wet. He next syringed with the mixture a young Plum tree whose leaves and shoots were completely covered by green fly. In both cases the application took place in dry warm weather. In an hour's time great quantities of the insects were dead and had dropped off; but others were alive and held fast. This led him to doubt whether his experiment had not failed, especially with the Plum tree. Nevertheless to his surprise in 24 hours every insect was dead and dry, and the shoots of his tree were blackened by their remains. It was found, however, on another trial, when the "*solution* was twice as strong as before," the aphides were not wholly killed, whence Mr. OBERDIECK concluded that "*solution*" of a particular strength was necessary.

We do not know what is meant by the word solution; it may have been the soap and water to which alone the word properly applies; or it may have been the decoction of Quassia chips. Upon this point, however, gardeners can make trial for themselves. Of this they may be sure, that no decoction of Quassia, although it will poison the insects themselves, can do harm to their trees.

IT will be in the recollection of our readers that some time ago we drew attention to what we regarded as the monstrous absurdity of the India Board in sending to Peru, for the purpose of obtaining a supply of Cinchona plants, a gentleman who did not possess a single qualification for the task in the opinion of any person capable of forming one. The following announcement in the Ceylon *Overland Observer* of Jan. 16 induces us once more to return to the subject:—

"THE CINCHONAS.—We regret to learn that nearly all the plants and cuttings, respecting which Mr. MARKHAM was so sanguine, have died. Mr. THWAITES, of Peradenia, has obtained a small quantity of seed from Kew which will be sown immediately at Newera Ellia, and we trust the experiment there will be successful. Mr. W. NICOLL, the Gardener specially sent out from Kew to take charge of the Newera Ellia Plantation has arrived and proceeded to the Interior to act under Mr. THWAITES' instructions." And thus one bubble more has burst.

Surely this is a matter that deserves public inquiry. The absurd enterprise that has now arrived at its inevitable conclusion, must have cost a considerable sum of money, of which every body must pay his quota; and, what is worse, it manifested from the first deplorable ignorance on the part of all concerned in it, except the gardener, who performed his part admirably. It is really too bad that a clerk in the India House who had no notion of what he had to do, rash, incapable, and not possessing an element of success except, *according to his own account*, some knowledge of the Quichua language, which was useless, should have been selected for such an operation. As for Mr. MARKHAM's plants and cuttings "having nearly all died," we should like to know whether even one is alive at Ootacamund whither they were sent.

M. NAUDIN'S GEOTHERMAL SYSTEM.

[The interest excited by the remarks already made on the subject induces us to give a free translation of the more practical parts of M. Naudin's pamphlet. This seems to be due to the distinguished author, as well as necessary to the right understanding of his views.]

1. *Of the Open Ground.*

WHEN we propose to heat ground artificially for a plantation of exotic vegetation, it is understood we do not speak of ground selected at hazard and unprepared. The site must be chosen, and, if necessary, made where the locality is not suitable. The most essential point is to separate it from the surrounding soil, in order to avoid waste of heat, and thereby useless expense.

The site will vary according to the amount of exposure; the spot most exposed to the south—most open to the sun and best sheltered from the north, north-east and north-west winds, according to their prevalence and their baneful influence in different parts of the country, is to be preferred. The southern slope of a hill or mountain in those countries where such exist, high buildings, and walls with southern aspect, if the ground be open, are advantages all to be considered.

The best situation would be a high eastern wall expressly built at right angles to the most unfavourable wind, as it would then offer greater shelter, would concentrate in summer the sun's heat to within a few yards of its base, and offer besides, a secure support to the temporary covers of which we shall presently speak. Its height should be determined according to that of the trees we intend to cultivate; for instance, 7 to 8 metres for Orange trees and others of the same growth. It must be borne in mind whenever a wall is built, intended to protect the cultivation of trees, that the space sheltered by the wall is about eight times its own height, measuring on a level with the ground, since the moving current of air which passes over these walls, returns as down an inclined plane towards the surface of the earth. The higher the wall, the greater the protection it will afford. It would be complete, were it built with the two ends or extremities slightly advancing at an open angle like wings. In this style, it would shelter in three directions. Besides, its summit could be protected by a hood projecting about 15 to 18 centimetres, with rings and hooks fastened below in the stone work by which may be secured the principal pieces of the scaffolding which are intended to support a covering during winter.

The isolation of the ground is to be obtained

a very simple process. The portion of soil to be put under cultivation having been selected, and the form determined on, a trench of one metre to 1^{m}50 in depth must be dug around it: in this trench must be built (with inferior bricks) two parallel walls, with a space between them of 8 to 10 centimetres; this space is to be filled with pounded charcoal, which is a bad conductor of heat when dry; in lieu of which, straw, hay, moss, or any other non-conductor can be used. The two walls at the height of some centimetres above the level of the ground should be covered in by a double row of bricks or tiles, placed crossways and well cemented together to prevent all ingress of rain water into the middle of the enclosing wall, the exterior of which might be stiffened by ashlar work; but if the soil is firm its own pressure will make the wall sufficiently solid.

Air, being of itself a bad conductor of heat, suitable and sufficient isolation of the geothermal portion might be obtained by leaving empty the space in the brick walls, which should any way be closed above; but here occurs a difficulty; the ground contained in the enclosed space, from having been prepared for plants, would be sure to settle and push the interior against the exterior wall, consequently causing the space between to disappear. This inconvenience may be obviated by placing vertically in the space between the two walls, and at distances not exceeding 50 to 60 centimetres, rough pieces of wood or little blocks, such as are used (in France) for firing, equal in thickness to the space in the partition. This would be, in all probability, sufficient support to prevent the crushing of the partition. Wood being one of the worst conductors of caloric known, the use of it here will be preferable to that of stone, as the latter is a pretty good conductor of heat, and by coming in contact with the two partitions of the enclosure would occasion a certain loss of heat to the geothermal enclosure.

The enclosed ground, if it cannot have the shelter of a wall, might have a level surface, but it would be better were it slightly convex. In the first place, the plantation would appear more sightly, and in the next, a greater depth of earth obtained in the middle, which the tallest trees would naturally occupy. But, should the site be against a wall, it would be best if the earth sloped forwards, in the style of the shelving beds adopted by the kitchen gardeners in the environs of Paris, thus causing the sun to fall more perpendicularly on the earth, and infusing therein more heat than when its rays are horizontally directed; and far more than if it sloped the other way. The first row of trees, say Orange trees, could be trained against the wall; the next, at a distance from them, would grow unrestrained; but they should be arranged according to height, placing the tallest against the wall, the lowest at the opposite side, in order to afford each an equal share of the warmth of the sun and light.

The depth of the ground artificially warmed should vary according to the difference of cultivation intended, but as in general many kinds of plants differing in height, and whose roots are of unequal dimensions in depth, will most probably be assembled together, a medium of thickness may be adopted of 1^{m} 30 to 1^{m} 40. In no case should the depth be less than 0^{m} 80; and then it would in that case only suffice for herbaceous or stemless plants and weak shrubs. The depth should also be determined on, by the degree of power for heating. Should the cultivation of larger trees be contemplated, for instance, Date trees, of which we shall speak hereafter, a depth of two metres would not be out of the way.

We have supposed thus far, the earth to be homogeneous and of good quality, and we have disregarded the position of the heating pipes, but in actual construction the work would be found more complicated. It would be most desirable that the earth should be isolated or detached below as well as around, for it is evident that there would be a loss of heat otherwise, less great however than might be imagined, for this reason: the greater the mass of ground warmed, a longer period would it retain the heat.

In most cases the earth selected for geothermal cultivation should be formed of prepared mould. First the basin must be dug out, and then the enclosure constructed, the hot pipes laid on flag stones or flat stones, or even more simply covered with rubbish to a depth of some centimetres, before the earth is thrown in. Care must be taken not to throw too much at first against the surrounding wall but to fill in gradually, in order to avoid a pressure of mould, as too much might, as we said before, crush the enclosure, and do away with the open space left between the two walls.

The choice of ground, moreover, is not of slight consideration; the most dissimilar plants will adapt themselves to the same soil, provided it is healthy and of good quality, for the method employed by the gardeners of Paris must not be followed as a rule, in the composition of ground for Orange trees. Their scientifically mixed composts are not in the least necessary, and Orange trees grow very well in all soils, even on the almost sterile sands of the sea shore, provided they are stimulated by a sufficient degree of heat.

The best ground for forming geothermal plots would be in our opinion, the ordinary open ground, neither too calcareous nor too silicious; that which may have remained undisturbed for some years, as fields or unweeded. There would be no objection to mixing if necessary some leaf-mould, or a little decomposed matter, or mineral manure, if judged useful. On the contrary, all earth worn out by exhausting cultivation must be rejected, as well as any too full of the organic remains of animal matter; for it appears to us very probable that many of the maladies which assail cultivated plants arise from no other cause than an excess of manure, and manure of bad quality. In fact, there is perhaps no known instance where plants become really diseased in those soils which the hand of man has never touched.

(To be continued.)

MYCOLOGY.—No. XLV.

PORONIA PUNCTATA, *Fr.*—The genus *Poronia* is closely allied to *Hypoxylon* which we have lately illustrated, differing in the margined receptacle, and the perithecia being confined to the disc, and not studded all over the surface of the plant as in that genus. It consists of a very few species, of which the one here illustrated is among the most remarkable. *Poronia punctata* grows not uncommonly in this country on the dung of horses, or more rarely on that of cows. In tropical countries it is said to occur on that of elephants. In Tasmania specimens are found precisely similar to those figured here, apparently on the dung of horses as in England.

In an early stage of growth the conical stem is completely concealed by the dung, nothing appearing externally except the circular disc, which is white and mealy with conidia. In this state it suggests any thing rather than a Fungus closely allied to Sphæria, and may be mistaken for a *Stereum*. It is indeed so like the anomalous body figured by Tode under the name of *Epichysium*, which also grows on dung, as does a somewhat similar production found in the north of Europe by Weinmann, that we have more than once felt almost sure that their plant must be a mere condition of our present subject. However this may be, the white downy clothing of the disc gradually vanishes and the stem becomes more or less exposed, and is grey or black according as it is more or less tomentose or nearly smooth. It is then from half to three-quarters of an inch in height, the disc scarcely attaining equal dimensions. This meanwhile becomes darker in

PORONIA PUNCTATA, *Fr.*
Copied by permission from Greville's Cryptogamic Flora.

the centre, elegantly dotted and marked with a pale ring round each dot. On a vertical section the stroma is found to be white, with its tissue radiating towards the several parts of the disc, immediately beneath which the elliptic perithecia are seated, disposed in a single plane, and not at various depths as in some *Hypoxyla*, with a short nipple-like apex, perforated in the centre for the escape of the dark brown sporidia to which the dotted appearance of the disc is mainly due. The sporidia, which are oblongo-elliptic with one side nearly straight, are contained eight together in slender cylindrical cells or asci. The species is of a tough corky texture, and though amply repaying an attentive examination has no known economical qualities to recommend it. A distinct form or closely allied species, with a tall slender stem supporting a nearly hemispherical or subglobose receptacle with a concave disc, occurs in the south of Europe and in some tropical countries.

An allied genus which abounds in French Guiana, and is also found sparingly in other countries, to which the name of *Camillea* has been given by Fries, in honour of Dr. Camille Montagne, deserves notice here, not only on account of its affinity but because of its curious character. The species grow on the branches of trees, through the bark of which they make their exit. Like *Poronia* they have a disc to which the perithecia are confined, and which is downy before their appearance, but this is very small, and the outer wall of the receptacle, which gradually increases in length till in one of the species it looks like a piece of black pipe liquorice, being beautifully polished, is hard and unyielding, and brittle like the crustaceous cuticle of *Hypoxylon concentricum*, though far more rigid. The central substance moreover, which gives rise to the perithecia, becomes dark and carbonaceous as in that species. Occasionally the receptacle is conical instead of cylindrical, and as in that case the top is contracted, the disc is proportionally small. Should a taste ever arise for the cultivation of Fungi in the stove as objects of curiosity, which is not impossible, these are assuredly amongst those which would be most acceptable, and there is little doubt that they could be introduced in a Ward's case with other objects of interest. *M. J. B.*

REPORT ON VARIEGATED BEGONIAS, GROWN AT CHISWICK, 1860.

BY MR. MOORE, Secretary to the Floral Committee.

(From the Proceedings of the Royal Horticultural Society.)

(Concluded from p. 169.)

16. *B. virginata.*—From Messrs. Rollisson & Sons. This variety is in the way of B. Rollissoni, but of a lighter colour, intermediate between it and B. Queen Victoria. The leaves are large, hairy on the ribs above, their surface principally grayish green, a small dark reddish green star with a speckled surface occupying the centre, while the dark green purple-tinted margin is nearly covered with broken speckled markings. The young leaves are tinged with red. The veins are red behind, and the stalks are shaggy with reddish hairs. The colours of the surface are not so well marked and distinct as in some other varieties.

17. *B. Rollissoni.*—From Messrs. Rollisson & Sons, and Messrs. Low & Co.; also received as B. grandis from Messrs. E. G. Henderson & Son. One of the very deep dull purple-stained varieties. The leaves are large, hairy on the veins above, and having the stalks shaggy, purple. The upper surface is of a dark satiny green, with a small central star of deeper red-stained green, and a border of medium width, of the same red or purple-tinged deep green, marked with a few satiny green spots. The under surface is red. It is one of the deepest-coloured among the varieties brought together for comparison, and the best of the deep-coloured series, but is somewhat heavy looking. The red hairs on the stalk are conspicuous.

18. *B. nebulosa.*—From Mr. Veitch, Messrs. E. G. Henderson & Son, and Messrs. Low & Co. The leaves are large, grayish-green, hairy on the ribs above; their centre is of a dull reddish-green, forming a star with narrow-tapered radii, and the border is irregular, moderate in width, of the same dull green, dotted with grayish green; the under surface is red. The whole upper surface, as is the case in the rest of the varieties belonging to this section, is suffused with red. This variety is something in the way of that called B. Isis, but is less coarse, and more distinct in character from B. Queen of England, ranking therefore among the more desirable kinds of second-class merit.

19. *B. rubra marginata.*—From Messrs. Low & Co. Leaves large, dull grayish green, with a small star of dark green in the centre, the star speckled with the broken edge of the gray-green zone, and the margin also speckled with the same colour, and strongly tinged with red. The upper surface is hairy on the veins, and the under surface is red. The stalks are red, with shaggy red hairs. This is one of the dull-looking red-stained series, closely resembling that called B. virginata.

20. *B. Queen of England.*—From Messrs. Rollisson & Sons. This is the finest of the large red-stained varieties. The leaf-stalks are reddish and shaggy. The leaves are hairy on the veins above, and red beneath. The upper surface is of a reddish olive-green in the centre, the colour breaking out into broadish rays, which are more distinct than in B. Rex, and broader than in B. Marshalli. Beyond this is a broad silvery green intermediate zone, less pure in colour than in the varieties just named; and on the outside a distinct margin of about an inch in width, of the dark green, the marginal portion being dotted with silver in distinct spots, and having a red hair growing in each spot. It is a very ornamental variety, one of the very best of the large sorts for ornamental purposes.

21. *B. Isis.*—From Messrs. Rollisson & Sons, Messrs. E. G. Henderson & Son, Messrs. Low & Co., and Mr. Veitch. A large growing coarse variety of the dull red-stained series. The leaves are of a pale or grayish green, with a narrow red-tinged border, and a small central star of the same colour running out into narrow rays along the course of the veins, which are hairy on the upper surface, the marginal portion is slightly speckled. The under surface is red, and the stalks are reddish, shaggy with hairs.

22. *B. Royleana.*—From Messrs. Rollisson & Sons. A distinct and pretty plant, in which the back of the leaves is marked with red opposite those parts which are dark-coloured above. The leaves are below the medium size, glabrous and glossy above, downy beneath, angulately lobed, deep olive-green in the centre, with a zone of bright green, and on the outside a narrow broken border of olive green. The stalks are green and downy. It is a dwarf plant, corresponding with B. Griffithii in habit, and was adjudged to be one of the first-class sorts.

23. *B. Roi Leopold.*—From Messrs. Low & Co., and Mr. Veitch. This is a distinct and very handsome plant, with a tall erect red stem, and large leaves supported by

red stalks which are shaggy with red hairs. The young leaves are also so closely covered with similar hairs, as to appear like crimson velvet. The mature leaves are green, tinged with red along the base of the veins, so as to form a reddish central star, and having a narrow margin of red. The surface is clothed with red spreading hairs, and the leaves are also marked with red beneath. It is a very fine ornamental plant, and was considered to be one of the most desirable kinds in cultivation.

24. *B. Prince Troubetskoi.*—From Mr. Veitch and Messrs. Rollisson & Sons. Leaves large, deep satiny green, stained with purple at the centre and along a narrowish margin, and marked with red behind. The surface is hairy, and the stalks red, furnished with red spreading hairs. It is a coarser plant than the preceding.

25. *B. picta.*—From Messrs. Rollisson and Sons, and Mr. Veitch. The leaves of this variety are of medium size, very dark green, marked with obtuse oblong sinuous silvery blotches, not breaking up into dots. The under surface is barred with red, and the stalks are hairy, of a purplish colour.

26. *B. miranda.*—From Mr. Veitch and Messrs. E. G. Henderson & Son. This variety somewhat approaches the zonate series. The leaves are of medium size, bullate, with a broad surface of a dark satiny green at the base, this colour running out along the principal veins in tapering radii, so as to separate the silvery zone into broad radiate masses, which are broken up at the margin, and pass into dots; the edge being also marked with more distant silvery dots. The stalks are clothed with red hairs, and the leaves are marked with red behind.

27. *B. xanthina Reichenheimi.*—From Messrs. E. G. Henderson & Son, Messrs. Rollisson & Sons, and Mr. Veitch. This variety is one of the best of the vittate series. The leaves are of medium size, red beneath, and in the young state have a reddish tinge suffused over the upper surface. The principal veins are bordered with green, and the spaces between them form radiating bars of silvery green, breaking up into dots at the edges. The stalks are smooth, and of a dull purplish colour.

28. *B. xanthina marmorata.*—From Messrs. E. G. Henderson & Son. This plant is taller and more erect than B. Reichenheimi, and the leaves, which are medium-sized, have a broader margin of dark green to the veins; they are marked with purple beneath, and have somewhat hairy stalks.

29. *B. xanthina argentea.*—From Messrs. E. G. Henderson & Son. This is inferior to the other forms of B. xanthina, the markings being of a dull (greenish) colour. The leaves are medium-sized, dull green with yellowish gray-green bars above, and stained with purple beneath. The stalks are in all cases I have seen slightly hairy.

30. *B. Victoria.*—From Messrs. Low & Co. The leaves of this variety are above the medium size, red beneath, very dark purplish-green along the course of the veins, and having grayish-green satiny bars between them; the darker parts are speckled over with the lighter colour. The stalks are shaggy, purplish. It is rather dull in appearance.

31. *B. splendida argentea.*—From Messrs. Rollisson & Sons, and Mr. Veitch. Leaves large, grayish suffused with dull red, having bright green narrow lines radiating from the base along the course of the veins, and forking towards the edge. The under surface is red, and the stalks are clothed with red hairs. This is one of the most distinct and showy of the larger vittate forms, and was considered to be one of the most deserving of cultivation.

32. *B. splendida imperialis.*—From Messrs. E. G. Henderson & Son, of Wellington Nursery, St. John's Wood. This proved to be very similar in character to B. splendida argentea.

33. *B. splendida guttata.*—From Mr. Veitch. Leaves large, dark green, red beneath, with red hairy stalks. The surface between the veins is almost covered with dull silvery spots, from one-eighth to one-fourth of an inch in diameter. It is distinct, but too dull-looking to compare with some other kinds.

34. *B. vittata.*—From Messrs. E. G. Henderson & Son. This is rather an effective sort. The leaves are of a dark velvety green, and the spaces between the veins are marked with narrow elongated bars of silvery gray, the markings being broken at the edges. The under surface is red, and the stalks in all cases slightly hairy.

35. *B. Thwaitesii.*—From Mr. Veitch. A dwarf growing plant, with dark green purple-stained leaves, marked with blotches of greenish silvery gray, which radiate outwards between the veins. The leaves are purple behind. The upper surface is clothed with bright purple hairs which occur on both the light and dark-coloured parts.

36. *B. ricinifolia maculata.*—From Mr. Veitch. This is a very distinct sort, having palmatifid leaves, which are marked with bright green in irregular bars along the course of the principal veins, the margin being of a very dark bottle green: these colours are somewhat broken up where they meet. The parts corresponding to the dark portions of the upper surface, are red behind, and the stalks are purple, shaggy. It is a very effective plant, and was adjudged by all who saw it to belong to the first rank in respect of its valuable ornamental qualities.

Home Correspondence.

Earth-heat.—Your leader on "Geothermal Culture" in a late Number, has brought to my mind the use I have for many years made of earth-heat, perfectly well known to exist but seldom perhaps made use of by gardeners to the extent it might be. In December 1844, a severe frost came on early in the month in the midst of the "busy season," and to my dismay, before the many thousands of young half-hardy evergreens, which were then grown in pots, had been placed in their winter quarters, which were at that day brick pits with glazed lights. The fear was that the pots would be frozen to the ground, and thus become unremoveable. I was reduced to straits and began to fear that all my young stock must be left to the mercy of the frost, generally so fatal to plants in pots standing on the surface of the ground, for the soil of that portion of my nursery on which the pots stood was very tenacious and not fit to plunge them in. I just then recalled to mind that after the severe winter of 1838, which was as disastrous in its effect as the past winter has been, the branches of Laurels and Laurustinus resting on the ground were fresh and green, while every leaf above was killed, so I at once had all my potted evergreens laid down in beds and covered with mats placed double over them. They remained covered till the beginning of January, when as the weather was mild they were uncovered and found perfectly fresh and green. In February the frost returned and was very severe, the thermometer descending to 6°. At the commencement of this frost they were again covered, and some straw placed on the mats when the frost increased in severity. They remained covered all through February to the end of March, when they were again uncovered and placed upright, and every plant found uninjured. "On this hint I acted," and ever since I have protected my young evergreens in pots and store pans in the same manner. The saving of labour has been immense. I now come to a more complete exemplification of the power of earth-heat. On the 19th of last December the frost commenced to be severe—thermometer down to 20°. All hands were busy in laying down the young evergreens in pots and store pans, but a batch of young Lemon trees raised from seed the preceding spring were neglected, as it was thought they would not be wanted, the stock of them being very large. Towards the evening I saw them, and in a kind of wanton fit I said "Do not throw them away, cover them and let them take their chance." They were in seed pans and standing upright, were at once covered with the small dunnage mats (which are thick and closely woven) three thick, and then dry straw perhaps 1 foot thick was placed on the mats. On the 21st the snow came, and the Lemon stocks were forgotten till February the 14th (last Thursday), when they were uncovered. The leaves of a great portion of them were found discoloured owing to their having been so long in darkness and dampness, but not a stem or root was injured. Reasoning from this I have suggested in the ninth edition of my little book the "Orchard House," now at press, that Oranges, Lemons in pots, or even Camellias may be grown in any common orchard house without fire heat, by merely laying the pots in the earth borders at the advent of frost in November, and covering pots and trees thickly with mats on which should be placed dry leaves, or hay or straw a foot in thickness. This covering should be removed in continuous mild weather in winter and replaced on the approach of severe frost. There are some details of culture scarcely worth going into here, but I may perhaps be allowed to express my firm conviction that Orange and Lemon trees may be grown to an unlimited extent in common orchard houses by thus taking advantage of earth-heat under glass. Bedding plants, now wanted in such large numbers, and which are such a constant plague to gardeners both great and small in winter, owing to their requiring heat to preserve them in severe weather, may I have no doubt be kept safe and sound in any common "glass roofed shed," by covering them in winter during our winter frosts, which seldom last more than two or three weeks, and uncovering them in mild weather. I have mentioned the thick dunnage mats as being very efficient for covering, but as the object is to keep the earth-heat from escaping by placing the covering in close contact with the plants, thick painted canvas or some thickly woven woollen or shoddy fabric may be found more serviceable. As bedding plants grow during the mild weather in winter, they cannot be laid down like the hard-leaved evergreens. They should, I take it, be partially plunged in some light material, and to keep the thick covering from crushing their young tops, some small branches or spray should be first spread over them to support the covering, or some other contrivance effected so that the covering is raised very slightly above the tops of the plants. The sides and ends of the mats should be on the ground, thickly covered with the loose covering of hay, or, in short, the radiating earth-heat must be carefully kept in, which it will be by the cloth or mat covering nearly in contact with the plants, while the loose dry covering at top will prevent the heavy frosty air from penetrating. Millions of bedding plants may doubtless be grown in cheap houses by following this method, with much less trouble than they are at present in pits and houses heated. One recommendation to this mode of culture is that if the plants are forgotten for a week or so and not uncovered, but little harm will be done. *T. R.*

Delphinium cardinale.—I observe in your Paper of Feb. 16th, a notice of this Larkspur, and that one of your Correspondents invites the opinion of those who have grown it as to its character. I imagine the seedlings of it must have differed somewhat from each other in point of appearance. I had a plant of the first sent out, and can testify that it was neither a colour of brickdust nor a piece of rubbish; in 1859 the same plant attained the height of 6 feet 6 inches, and was a perfect pyramid in form, with 29 side shoots issuing from the main stem, the lower ones 1½ ft. long, and gradually diminishing to 6 inches near the top. The flowers, though somewhat small, were of a beautiful scarlet, and the plant was the admiration of all who saw it. I had the blossoms carefully crossed with Delphinium formosum, and I expected some hybrids, but a heavy gale of wind, accompanied by rain, broke the plants over near the ground, and ultimately the roots rotted during the winter, so I lost my crop of seed as well as the plant. I should, however, purchase the plant again if I could get it genuine. *William Deans, Anna Nursery, Jedburgh.*

Beetles.—A curious fact in Natural History, which you might perhaps think worth recording, has lately come under my notice. During the last week or two a great number of the large green and bronze coloured Rose-beetle (I forget its scientific name) have made their appearance in a Vinery where the temperature has ranged from 65° to 75°. Their existence is little more than ephemeral, for after buzzing about the front part of the house for a day or so, they settle on the front wall, or crawl between the wall plate and the rail of the sash, and there die, apparently from want of food. I have found several shoots of the growing Vines bitten off by them, but not to any extent. Beyond doubt these insects were introduced into the Vinery in the form of eggs or larvæ in some turfy loam with which the border was raised last autumn, and have been brought into life before their natural season by the warmth of the house. *J. B. Whiting, the Deepdene Garden.*

Neal's Patent Aphis Pastilles.—Permit me to call attention to the value of these pastilles. Half a packet, at the cost of 1*s.* effectually smokes a house 50 feet long and 10 feet wide, which requires the use of half a pound of Tobacco or a pound of Tobacco paper. On this scale the aphis is effectually destroyed, and plants with the tenderest foliage remain uninjured. The pastille may be set on a pot and lighted, and gradually smoulders away without further attention. Considering the severe ordeal through which many young gardeners have to pass under the old "bellows" system, this invention cannot be too widely or too quickly made known. *William Paul, Cheshunt Nurseries, Waltham Cross.*

Pussley.—Permit me to inform your Correspondent that the plant mentioned by N. A. Woods is undoubtedly a Portulaca, the most troublesome weed in North America, commonly called by the Americans Purslane, and used for Greens, particularly in spring when Greens are very scarce. I have eaten it myself during my residence in America, and it is the worst of all plants used for that purpose. In habit it very much resembles the common Portulaca of our gardens; when cooked it is very slimy, and in my opinion unfit for table. It would never be eaten in America if Scotch Kale could be had in anything like abundance. *W. Y. M., Gardens, Newnham Paddox.*

Glazing.—I have much pleasure in furnishing T. G. with the information he requires. Firstly, a small triangular piece is cut out at the edge of the pane of glass. After marking with the diamond it may be wrenched out with a key, pincers, or the putty knife; a slit is filed in the bottom of the latter.

Secondly, the screws are not screwed down tightly upon the glass; the screw is passed through a stout India rubber collar before inserted in the wood, and this collar comes between the screw and the glass. This reduces the liability to crack on expansion to almost nothing. Of course if the screws are too tightly screwed down the glass will crack on expansion, but no more than ordinary care and judgment are required to prevent this. The screws are better of brass than of iron, as the former will not rust. I also think if the screws were inverted at the bottom of each pane where the glass laps, and is consequently doubled, it would be an improvement. The wind does not get under the edge of the glass because the edges of the pane rest on putty the putty is flush with the edge of the glass. W. G.'s panes are too large or too slight. Panes 20 inches wide should be of 21 oz. glass, but not 16 oz. glass. My panes are of 16 oz. glass, but 14 inches wide, and in future I shall reduce them to 10 or 12 inches, or use stouter glass. I may remark in passing that I have often doubted, and still doubt, whether we should not save in repairs more than we save in first outlay by using 21 oz. glass for all horticultural buildings. *William Paul, Cheshunt Nurseries, Waltham Cross.*

Effects of the Winter on Transplanted Roses.—I have not yet seen any special notice of the damage inflicted by the severity of the past winter among Roses. In some instances it has been very great, so much so that Rose dealers have been compelled to raise the prices named in their autumn catalogues

replenish their stocks at a great cost from abroad. It may be interesting to your readers to know that the adoption of Mr. Rivers's recommendation to shift the plants in November and give them fresh food, has unexpectedly to me been the means of preserving most of my plants when those of my neighbours have perished. Between the 2d and 10th November I lifted most of my standards and all my Dwarf Roses, replanting them in the same places with a good mixture of leaf mould and manure, and then mulched the surface with stable manure. Unfortunately for themselves some of my best standards were still flowering at that date, viz.: Ophirie, General Jacqueminot, General Simpson, Lord Raglan, Auguste Mie, L'Etendard des Amateurs, and Duchess of Sutherland. They were plants that had been late pruned to make them flower late, and I could not find it in my heart to lift them with buds just coming into bloom, and so destroy my hope of Roses from my garden late in November. I had better have done so, for by not lifting them, though I had my flowers, I signed the death warrant of the plants. The frost caught them full, I expect, of sap and they are all dead, even the Dog Rose stocks on which they were budded perished with them. Of the shifted Roses I only lost one, Pierre de St. Cyr, which I had thought a very hardy Rose. Of climbing Roses the Boursault Amadis, Garland, Ruga, Thoresbyana, and Sir John Sebright, are unhurt. Myrianthes and the Banksian Fortuniana are cut down to the ground. Gloire de Dijon against an east wall and budded on Amadis is uninjured, though the frost found it in full leaf, and it is now showing buds up to the very end of last year's shoots. Of two young plants of Adam and Safranot, the former is killed, though well protected, the latter is looking well. Both these are against an east wall. I trust that this communication may elicit similar information from other Rose growers. I shall be glad to have my view of the preservation of my Roses confirmed by other experience. *Coventry.*

Impatiens Jerdoniæ.—A few words relating to the culture of this may perhaps not be uninteresting. If good blooming plants are required by the middle of October cuttings should be put in without delay in the following manner: first prepare some thumb or 60-sized pots, filling them half full of small clean crocks; over these put a layer of rough leaf-mould, and then finish with clean sand. The cuttings should then be laid in a horizontal position upon the sand, placing the bases close up to the side of the pot; then press the cuttings into the sand, leaving a small portion of the upper part uncovered. Roots will be emitted all along the stem, which will give vigour to the lateral shoots that will soon rise from the latent buds. Water with a fine rosed pot to settle the sand about the cuttings, and then place the pots in a propagating pit or frame where a temperature of from 60° to 70° is kept up. In six weeks' time the pots will be well filled with roots, and the plants may then be transferred to 4-inch pots, using the following compost: one part old turf, one part peat, two parts flaky leaf-mould, and one-third of the whole broken charcoal and lime rubbish that has passed through an half-inch sieve. Pot firmly, and place the plants in a pit or frame where a temperature of 60° by night and 70° by day is maintained, keep the atmosphere moist by frequent syringings with rain water, and let the plants have abundance of air, as they will not grow satisfactorily if kept in a close over warm atmosphere; never allow them to flag from the effects of sun or excess of heat, or growth will for the time be suspended and consequently a considerable amount of progress will be lost. About the beginning of July the plants will require another shift, when they may be put into 6-inch pots, adding a very little rotten cow-dung to the compost. Let them be watered with great care during the whole of the period of growth, as few plants suffer sooner from excess of moisture than this does. Flower stems should be picked out with a sharp pointed knife as soon as visible, until the beginning of September, when, if the plants are required to be in blossom by the middle of October, the practice must be discontinued. If these directions are carried out, instead of having diminutive miserable plants as we frequently see them, you will have specimens with from 3 to 10 shoots upon them, in the best of health; and when in full flower will be one mass of floral beauty, measuring from 18 to 22 inches in diameter. I ought to state that the drainage for each shift should never occupy less room than one-third of the pot. *T. E.*

The Late Frost.—The varied effects of the frost upon evergreens in this immediate neighbourhood are remarkable. Here in the valley of the Thames scarcely a shrub has escaped either destruction or injury; whereas on the chalk hills within two or three miles no trace of its severity is perceptible, except in the bronzed appearance of the Laurustinus, and the loss of some of the Roses. Similar, although in a modified form, were the effects of the winter of 1837. With me the Laurels, Laurustinus and Bay were then, as now, killed to the ground, but on the hills not a shrub was injured. The ground here is much undulated, and the same effect of situation, in a slight degree, is observable; the trees and shrubs that have suffered most are those on the low ground, and in the protected valley. Evergreen Oaks (many of them 30 to 40 years old), Cupressus macrocarpa, from 10 to 30 feet high, Deodars of large size, and Pinus insignis, are all apparently killed to the root, together with Cupressus toruloea and Goveniana, Libocedrus chilensis, Phillyreas, Double blossomed Furze, and Chinese Privet, whilst Araucarias, Juniperus excelsa, Abies Smithiana and pygmæa, Cupressus thurifera, Taxodium sempervirens, Magnolia grandiflora (20 feet high on a south wall), Yuccas, Hollies and Ivy are severely injured. Our soil is light, chiefly upon a substratum of sand, and much of the ground being artificially as well as naturally drained there is no accumulation of moisture at the roots, to the absence of which I observe one of your Correspondents attributes the safety of his shrubs. Your returns will probably show that a dry atmosphere is equally essential, and that the slow growth of plants on high ground is an important point in the discussion of the subject. In our Thames valley the general humidity of the atmosphere encourages rapid and continuous growth till late in the year, and frequently is the young wood, being insufficiently ripened, affected by frost and damp; but now seasoned wood 30 years old, and stems of Oak 4 feet in circumference, are brown and discoloured, and the roots alone appear to retain any vitality. I suspect the 28th of December was the fatal night, when the thermometer here stood at 7° below zero, and a dense penetrating rime overhung the valley, which my gardener described as quite paralysing, and such as he had never before witnessed during a lengthened experience. I append a list of shrubs, &c., that have escaped either entirely or with very slight injury:—Cryptomeria japonica, 20 feet high; Wellingtonia; Juniperus chinensis, phœnicea, ericoides, recurva, oxycedrus; Abies cephalonica, canadensis; Cupressus Lawsoniana; Cephalotaxus drupacea; Pinus Nordmanniana, Pinsapo, orientalis, excelsa, Cembra, Laricio, austriaca; Cedar of Lebanon, African do., and Portugal Laurels—slightly injured; Red Cedar; Thujas; the Taxus tribe, together with the Gold and Silver striped Tree Box. *J. K. H., the Castle, Wallingford.*

Plant Obituary.—The following is my gardener's report on the state of the Coniferæ and Shrubs here. It is really melancholy to look at the devastation which has taken place. I have lost nearly 50 Pinus insignis more than 20 feet high. The following is the report alluded to:—UNINJURED or slightly so: Abies Finedonensis, nigra, archangelica, pumilio, Morinda, browned; orientalis, Menziesii, laxa, alba glauca, tenuifolia, elegantissima, elegans, pygmæa, Clanbrasiliana, Khutrow; Biota orientalis, Cephalotaxus Fortuni, small leaved; Cupressus Lawsoni, pendula, Craigiana; Cedrus Libani, Mount Atlas variety, browned; Libani argentea, Cryptomeria japonica, browned; Juniperus communis, squamata, Bedfordiana, chinensis, virginica pendula oblonga, Oxycedrus, italica, excelsa, ericoides, spherica, canadensis, flaccida, cracovia; Pinus excelsa, Douglasii, maritima, persica, romana, Royleana, Cembra, Benthamiana, Hamiltonia, monticola; Picea Nordmanniana, taxifolia, grandis, austriaca, cephalonica, nobilis, browned; Pinsapo, spectabilis, Douglasi; Taxus pyramidalis, Dovastoni, adpressa, elegantissima, hibernica, foliis variegatis, yellow; Torreya myristica; Thuja gigantea, gigantea glauca, Lobbii; Thujopsis borealis, Wellingtonia gigantea; American Arborvitæ, do. var. Warreana; Portugal Laurel; Box, of sorts; Berberis aquifolium; Rhododendron ponticum. CONIFERÆ DEAD: Pinus Douglasii, halepensis, patula, Cembroides, Gerardiana; Picea Pindrow, Webbiana; Libocedrus chilensis; Cupressus torulosa, thurifera, Corneyana, Knightii, Macnabiana; Fitzroya patagonica; Saxegothæa conspicua. CONIFERÆ GREATLY INJURED: Pinus insignis, Sinclairii, Hartwegii, Montezumæ, tuberculata, Sabiniana; Picea nobilis, Cedrus Deodara, do. robusta, Libani africana; Cryptomeria japonica, do. nana, Taxodium sempervirens; Araucaria imbricata; Juniperus flagelliformis foliis variegatis, oblonga pendula. I fear the following are DEAD, or not likely to recover: Quercus Brownii, latifolia; Rhamnus Alaternus; do. foliis argenteis, Garrya elliptica; Berberis Darwini; Forsythia viridissima. There are many other shrubs more or less injured; their recovery it will not be possible to ascertain before the month of April. The following are DEAD: Laurustinus, Aucubas, Phillyreas, Honeysuckles, Jasmines, Ceanothus, and nearly all Roses. *R. Hanbury, The Poles, near Ware, Feb.* 16.—— The lowest the thermometer registered here was 4°, but the instrument hung in a rather sheltered place, on the wall of a house. It is remarkable that where some plants have survived the intense cold, others of the same kind have perished; the younger plants are those which have escaped. Differences of situation, of protection from neighbouring trees or walls, can alone account for the preservation of some plants and the destruction of others. There is reason to believe that the roots are uninjured in many instances, though the branches and stems are killed down to the ground. Many ordinary shrubs and plants are included in the list, as they are in their degree equally essential to the general effect of a shrubbery and grounds with others of a more rare description. KILLED to the ground: Arbutus, 9 feet high; Croomei, 4 feet, one plant only spared; Laurustinus, 9 feet high; Berberis Fortuni, Euonymus japonica, Scarlet Rhododendrons, many Roses, Gum Cistus, Tamarisk, some Spiræas, Ligustrum japonicum, Yellow Jasmine, Ilex cornuta; Cupressus viridis from India, elegantissima var; Pinus insignis, 6 feet. INJURED but not killed: Turkey and Lucombe Oaks, Arbutus Andrachne, Cupressus Cashmeriensis, torulosa, macrocarpa (from 1 feet to 10 feet), Corneyana; Juniperus Lambertiana, (10 feet), Spiræa Reevesii flo. pl., Taxus Dovastoni, Berberis dulcis; Pinus Gerardiana, slightly; radiata, foliage completely browned; canariensis, Hamiltoniana, Lambertiana, insignis, 3 to 4 feet; Paroliniana. Abies Finedonensis. Cedrus Deodara viridis, Double Ulex, White Broom, Aralia japonica. UNINJURED: Forsythia viridissima, Kalmias, Weigela rosea and amabilis, Deutzia gracilis, American Red Cedar. Juniperus tamariscifolia, prostrata, pendula, sinensis, Bedfordiana, recurva, Smithiana, thurifera, ericoides, fragrans, excelsa, Sabina fol. var., glauca, fastigiata; Pinus macrocarpa, ponderosa, Beardsleyii, maritima, pyrenaica, monticola, Benthamiana, Cembra, excelsa, Pallasiana, Laricio, austriaca, montana; Abies Douglasii, Menziesii, orientalis, canadensis, morinda; Picea cephalonica, Nordmanniana, Webbiana, Pinsapo; Cedrus atlantica, Deodara; Cephalotaxus Fortuni; Thuja tatarica, aurea, Craigeana; Thujopsis borealis, Taxodium sempervirens, Biota glauca, Taxus aurea, argentea, elegantissima; Saxegothæa conspicua, Wellingtonia gigantea, Cryptomeria japonica, Ilex latifolia, Salisburia adiantifolia, young Laurustinuses, Clematis azurea grandiflora, Wistaria sinensis, Leycesteria formosa, Jasminum nudiflorum, Pæonia atrovirens, Arbutus mucronata, young Ulex (double) plants. *C. R. Jacson, Barton, near Preston.*—— I am pleased to say that the injurious effects of the late severe frost have been scarcely felt in this nursery. The only plants affected are Laurustinus and Sweet Bays (in the low ground only), Euonymus, Ilex cornuta, and some sorts of Bourbon and Tea Roses. Very few Coniferæ have been injured, none killed. Cupressus macrocarpa, Goveniana, funebris, and sempervirens, a few small specimens are a little browned. Araucarias, Cedrus Deodara and robusta, Cupressus torulosa, Uhdeana, Macnabiana, Lawsoniana, thurifera, elegans, Irish Yews, Thujopsis borealis, Wellingtonias, Cunninghamia lanceolata, Thuja aurea, filiformis, and gigantea, Fitzroya patagonica, Libocedrus chilensis, Pinus insignis, excelsa, and Lemonii, are not in the least injured. Rhododendrons of all sorts have stood well, and so have all American plants, not even excepting the Andromeda formosa, many hundred plants of which, from the smallest to the largest, are looking quite as healthy and vigorous now as before the frost; one fine specimen, about 6 feet high, and bushy in proportion, is now commencing to expand its beautiful pearly blossoms. Garrya elliptica, Berberis japonica and Darwini, Desfontainia spinosa, Escallonia macrantha, Arbutus procera, Skimmia japonica, Eugenia Ugni, Ilex dipyrena and Tarajo, have not received the least injury, although planted out in exposed situations. *W. H. Rogers, F.R.H.S., Red Lodge Nursery, Southampton.*

Notices of Books.

Flora Hongkongensis: a Description of the Flowering Plants and Ferns of the Island of Hong Kong. By George Bentham, V.P.R.H.S. 8vo, pp. 482. Reeve.

Although the East India Company, while it lived, and the India Board which now rules in its stead, have been unable to perceive the value of what Botanists call Floras, the Colonial Office and Colonial Legislatures have a clearer view of their duties. Acting under a sense of the importance of making known to all nations the vegetable products of the vast regions whose destinies we govern, they have already taken means to enable working Botanists to publish an account of the plants wild in Ceylon, the Cape of Good Hope, and our West Indian possessions, to which has now to be added the important volume before us; besides which it is rumoured that the Australian colonies are about to be placed in the hands of some experienced Botanist. That such Floras should have an unequal value is only to be expected where different men of science are permitted to follow their own peculiar views. But this evil is as nothing when compared with the absence in any form of the information such works convey. We trust to have in time an accurate knowledge of the plants that grow in every region under British sway; not all thrown into one mass, but each colony dealt with by itself. We further trust to see at Kew a distinct herbarium for each colony; so that those who go there, or trade there, or have friends there, may be able to know with scientific accuracy the nature of the vegetation, the names of the species, and the œconomic value of every plant in a commercial sense. The cost of such an arrangement is too trifling to be thought of in a country like this, and its importance cannot be overstated. What, for example, would not be the value just now of being able to find at Kew all the forms and conditions of Cotton in our straggling African possessions. A Flora, edited by a competent authority, would be the guide to the Herbarium; and the latter, by means of cross references, would form the most admirable of practical indexes to the Museum of œconomic botany where illustrations of every kind might be grouped: as they now are with consummate skill. We do not indeed yet despair of the authorities at the India Board, who have too much intelligence not to appreciate the interest of a question like this when placed fairly before them. It was not the Right Honourable Gentleman that now fills the office of Secretary of State for India who put an end to the Flora Indica of Drs. Hooker and Thomson, undoubtedly the most valuable work of the kind that has appeared at any time in any country; and we cannot believe that our Indian

revenues are so reduced as to be unable to afford the few hundreds a year that are demanded for carrying out a publication which confers so much honour upon the science of England.

The volume now before us treats of the little island called Hong Kong, lying at the mouth of the Canton river, and described as a rugged mountain ridge, running from East to West, broken into three or four peaks attaining an elevation of 1700 to 1800 feet, intersected by deep ravines, its coast line cut into deep inlets, about 8 miles long by 4 broad, with an area of little more than 29 square miles. On this point has been collected in the course of time a singularly rich and varied vegetation, of Oaks and Fig trees, Camellias and Azaleas, trees that might have escaped from the Malay country, herbs that seem to have been transmitted from N. India, and exiles from Dahuria, Mantchooria, and Japan. It is of this singular Flora that Mr. Bentham has undertaken the description, preceding it with a brief but very useful Introduction to Botany for those who have no other elementary work to consult. The ordinal, generic, and specific characters are given with a degree of accuracy quite unusual in Floras; and this renders the work in reality a most convenient guide to those who wish to study the Flora of Southern Continental China; or who may be quartered on our new little acquisition of Kooloon. To each description of a species is added a statement of the place where it is to be found, the erroneous names by which it has been called elsewhere, and useful practical advice as to the manner in which it may be best distinguished from those which it resembles. The whole is beautifully printed, and is furnished with a capital Index.

Let us hope that all future Colonial floras may be published on the same plan, and prepared with the same conscientious accuracy; with the addition, however, in detail of the uses to which the plants are applied or applicable, for which, in the case of Hong Kong, we believe no sufficient materials exist.

Among other small matters before us are the following:—*Emigration to Canada* is a shilling pamphlet giving an account of that great Colony, published by authority of the Canadian Government, and to be had at the Canadian Government Emigration Office, Liverpool. It contains an authentic map of the country as far west as Lake Huron.—The *Midland Counties Almanac for* 1861 contains the usual amount of horticultural and agricultural matters, arranged according to the months. Had we received it sooner we should have noticed it sooner.—In a 12mo volume called *The Foot and its Covering* (Hardwicke) Mr. Dowie explains the anatomy and osteology of the human foot, and teaches how shoes and boots should and should not be made. His advice is sound: but those who act upon it must take care that their boots are *well made* as well as well formed. The volume is in part translated, as the author informs his readers, from the French edition of Camper "On the best Form of Shoe." —*The Enfield Rifle*, a lecture by Major Stewart (Hatchard) is a very small pamphlet of 22 pages. It contains nothing that volunteers are not familiar with, excepting a representation of a target made at Malta by the right wing of the 57th Regiment in 1857, which is an interesting illustration of what firing by skirmishers *may* be if men are steady. It is the dearest shilling's worth that we have seen for a long time. —In a volume called *The Gardeners' Illustrated Practical Book of Flower Plots*, by Duncan McKellar, published by John Carswell at Paisley, the young gardener will find excellent practical instructions for the art of marking out on land all sorts of geometrical figures, both simple and complicated. Now that geometrical gardening is about to revive, and the parterres, scrolls, box-work, and mazes of former days are reappearing, it is necessary to be perfectly familiar with the method of conducting the ground-work required in such designs. All this Mr. McKellar teaches well, both in its elements and their application. The formation of designs on paper, in perfectly good taste, is another matter, about which the volume does not contain information.

TRADE LISTS RECEIVED.—BUTLER & McCULLOCH'S (of Covent Garden) Spring Catalogue of Choice Flower, Shrub, Tree, and Vegetable Seeds.——HOOPER & Co.'s (of Covent Garden) Spring Catalogue of Flower, Shrub, Tree, and Vegetable Seeds, Bulbs, Ferns, &c.——PARKER & WILLIAMS' (of Holloway) Select Catalogue of Flower, Vegetable, and Agricultural Seeds, &c.——E. G. HENDERSON'S (of Wellington Nursery, St. John's Wood) Catalogue of Choice and Selected Flower Seeds; also a Selected List of Agricultural and Vegetable Seeds.

Miscellaneous.

Half-breed Buffalo.—In a description of domesticated herds of buffalo, and the results of crossing with the common cow, from the Patent Office Reports, it is stated that the mixed breeds are of various colours; striped with black on a grey ground, like the zebra; some others brindled red; some pure red, with white faces: and others red, without any markings of white. The mixed bloods have not only produced from the tame and buffalo bull, but it is known that the half-bloods reproduce, viz. those that were the product of the common cow and wild buffalo bull. At the first settlement of the country, cows that were considered the best for milking were the half-blood down to the quarter, and even eighth, of the buffalo blood. But the writer's experiments have not satisfied him that the half buffalo bull will produce again. That the half-breed heifer will be productive from either race, he has tested beyond the possibility of doubt. The domesticated buffalo retains the same haughty bearing that distinguishes him in his natural state. He will, however, feed or fatten on whatever suits the tame cow, and requires about the same amount of food. I have never milked either the full blood or mixed breed, but have no doubt they might be made good milkers, although their bags or udders are less than those of the common cow; yet, from the strength of the calf, the dam must yield as much, or even more milk, than the common cow. *Hind's Narrative of the Canadian Red River Exploring Expedition.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c.—The occasional sunshine and drying winds which we are now experiencing will soon, unless means are used to counteract their effects, impair the beauty of some of the finest specimens in this house, particularly if their blooming has been forwarded in a close moist atmosphere, and, although it is yet too early to bring shading into general use, it will be difficult without its occasional assistance to preserve blossoms in perfection during bright weather. Blinds must therefore soon be resorted to; but they should be arranged so as to be easily drawn up or let down. In admitting air avoid as far as possible allowing cold currents to blow over the plants. Many conservatories are very unfit places for Heaths, being generally too lofty and kept too warm for them; some of the winter flowering varieties are however very ornamental, and should be largely employed in their decoration during the spring months. As soon as they have done flowering let them be pruned back and give them a liberal shift when they start into growth, using good fibry peat for the purpose, and if they are well attended to during the growing season they will overcome any injury they may sustain through occupying an unsuitable posit on while in bloom. Azaleas, Camellias, Roses, early-flowering New Holland plants, and forced bulbs will keep show houses gay for some time to come.

FORCING DEPARTMENT.

PINERIES.—Look over young stock, occasionally examining and repotting such as is found to be in want of more pot room. The temperature may be slightly advanced as the amount of light increases, but this is a matter in which the state of the plants will be the best guide. Aim at securing strong dwarf plants, with a free habit of growth; and if this is obtained, it is immaterial whether the night temperature is 60° or 70°, and very much will depend upon circumstances as to which will be proper. Plants that may be unhealthy and in an unkind state, if kept near the glass, will be benefited by a considerably higher temperature than would be suitable for others in a free state of growth. These are circumstances, however, which can be properly judged of only by those in care of the plants, but they are easily understood by a little careful observation. Use every means to induce a vigorous root action, and if this is obtained free strong growth will result with otherwise ordinary care only.

VINERIES.—See that Vines starting into growth are tied up in their places before the shoots get so long as to be liable to be broken off in the operation. Syringe frequently until the leaves begin to unfold; but use the syringe sparingly after that is the case, and only on the afternoons of bright days. Where the buds do not promise to break regularly bend the Vines so as to place those that are backward in the most likely position to catch the sap, and this should be done directly any indications of their not breaking regularly are observed. If any of the bunches in houses where the berries are stoned look as if they would be improved by a few more berries being cut out, let this be done at once.

FIGS.—Keep the shoots thin so as to expose the foliage to light and air, and persevere in the use of the syringe to prevent red spider. Give air freely on bright days, shutting early in the afternoon after syringing the house.

PEACHES.—Proceed gradually with the disbudding of the early house, and where the fruit is very thick a portion should be removed as soon as fairly set; but the Peach is liable to drop until after stoning, and this must be borne in mind, and plenty left to allow for a few failing.

CUCUMBERS.—Maintain a steady heat for these of 65° or 70° at night, and allow it to rise 10° or 15° with sun heat. Give air on every favourable opportunity.

FLOWER GARDEN AND SHRUBBERIES.

The herbaceous ground should now be well cleaned and otherwise put in good order for the spring. Fill up vacancies either from the reserve garden or by sowing annuals in the intermediate spaces. Many plants, as for instance Phloxes, Asters, &c., throw up too many flowering shoots; where such is the case thin them out so as to obtain not only fine heads of bloom but increased strength in the remaining shoots, to enable them to need less assistance from stakes. Hollyhocks for late blooming may now be planted, as it is best where they are grown extensively to plant at two or three times to ensure a succession of bloom. These showy plants are very suitable for long lines, parallel with straight walks, walls, &c., where they produce a grand effect.

HARDY FRUIT AND KITCHEN GARDEN.

See that recently transplanted trees are not suffering for want of water, a circumstance which, however, will hardly happen except on very dry porous soils, and in such cases the ground should be mulched with decayed leaves to preserve it in a uniformly moist st te. Get materials in readiness for the preservation of blossoms of fruit trees. Where nothing better or more convenient can be obtained, Yew or Spruce branches will be of service provided they are so fixed as not to be liable to be blown against the blossoms. Remove the covering as frequently as may be convenient on fine days, so as to expose the trees to sun and air. Sow Broccoli in a bed of rich light soil in an open situation for the main crop, and Cabbages, Cauliflowers, &c., in succession. Attend also to sowing small breadths of Turnips about once a fortnight, so as to secure having a regular supply in a fit state for use. Plant French Beans in small pots to be raised in a cold frame and planted out as soon as all danger of frost is over. A row of some early dwarf Pea put in close to the front wall of a Pine stove or other warm house will come into use at least a fortnight before Peas can be obtained from the open ground. Seldom have vegetables of every description been scarcer than they are this season; therefore endeavour to get spring crops in early. Use the hoe freely to keep the surface soil loose and friable.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON
For the Week ending Feb. 28, 1861, as observed at the Horticultural Gardens.

February.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind.
Friday 22	12	29.614	29.566	54	38	46.0	45½	42	S.W.
Satur. 23	13	29.533	29.500	48	40	44.0	46	42¼	N.E.
Sunday 24	14	30.007	29.746	45	36	40.5	46½	42½	N.E.
Mon. 25	○	30.153	30.078	44	34	29.0	45	43	N.E.
Tues. 26	16	30.106	30.086	51	25	38.0	45	42¾	N.
Wed. 27	17	30.064	29.816	52	37	44.5	45	42¾	S.W.
Thurs. 28	18	29.785	29.745	51	36	43.5	45	42¾	W.
Average..		29.894	29.791	49.3	35.1	42.2	45.4	42.5	

Feb. 22—Fine; very fine; rain at night.
— 23—Constant rain with cold wind.
— 24—Rain; very boisterous; showery.
— 25—Cloudy; slight showers; overcast.
— 26—Fine throughout; very clear at night; frosty.
— 27—Frosty with fog; fine; overcast; brilliant aurora borealis.
— 28—Rain; low white clouds with clear intervals; slight shower.
Mean temperature of the week, 2½ deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending March 9, 1861.

March.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.
Sunday 3..	49.3	32.8	41.0	15	0.28 in.	3	7	5	1	3
Mon. 4..	49.2	31.9	40.6	11	0.48	3	9	2	3	3
Tues. 5..	48.4	31.4	39.9	9	0.40	2	7	3	3	4
Wed. 6..	48.3	32.0	40.1	12	0.26	4	6	4	2	4
Thurs. 7..	49.0	32.2	40.6	13	0.11	4	6	4	1	4
Friday 8..	49.1	31.8	40.4	13	0.17	3	7	2	1	5
Satur. 9..	49.8	31.3	40.5	9	0.47	3	4	3	2	5

The highest temperature during the above period occurred on the 5th, 1826—therm. 68 deg.; and the lowest on the 4th, 1852—therm. 15 deg.

Notices to Correspondents.

BOOKS: *G T Y.* We know nothing about the work you mention. You had better get Loudon's Self-instruction for Young Gardeners, or McKellar's Gardeners' Illustrated Practical Book of Flower Plots.

DELPHINIUM CARDINALE: *A burnt child* is referred to a statement respecting this plant, to be found in another column. It is the fault of the grower if it is not found to be a glorious thing Nature created.

DRYING PLANTS: *An Old Sub.* Float Sea-weeds when small in fresh water, having previously washed them well. Before floating place white paper in the dish so that they may expand over it. Then raise the paper carefully and horizontally, and drain off the water. The Sea-weed will often adhere by its own glutinous surface. If not they must be pressed. Large Sea-weeds require to be well soaked in boiling water, after which they may be dried with pressure like other plants. As for Lichens those which adhere to stones and rocks or the bark of trees must be placed in drawers without pressure; the thin leafy kinds must be pressed like other plants.

HEATING: *J S.* When we have made up our mind respecting the merit or demerit of your plan you will hear from us. Such matters require time for full consideration and inquiry. We cannot say whether the bud you have sent belongs to Tacsonia manicata or not; it is very young and a long way off expanding; but all the parts are healthy. If it never arrives at a more advanced stage then it probably wants bottom-heat. The Tacsonias are not all equally robust.

MULBERRY TREES: *C P.* If the common Mulberry grows in Ceylon it must be in gardens. The small sort is Morus indica, we suppose, the fruit of which is worthless.

NAMES OF PLANTS: *Jasper.* No doubt a flower of Delphinium cardinale. You must see that even when pressed and dried it affords abundant evidence of its beauty when alive.

SULPHUR FOR POTATOES: *J.* We have never had before us proof that the disease can be removed by sulphur; but we have had proofs that the substance produces no effect whatever either good or bad.

VINERIES: *A Constant Reader.* Your Figs and Vines are covered with mere mouldiness, caused no doubt by being shut up without any proper ventilation, in a cold damp house. They also seem to be dirty. Wash them clean, and drive warm dry air through the house as soon as you can, until the place is thoroughly aired. The mouldiness is certainly owing to either want of care or want of skill.

VINES: *M D.* You may plant in your cool vinery, Black Hamburgh, Golden Hamburgh, Royal Muscadine, Black Champion, Chasselas Vibert, Muscat St. Laurent, and Black Muscat.

WORMS: *Alpha.* Lime water, that is to say, water that has been mixed with caustic lime and been allowed to stand till clear will rid you of worms; but it disagrees with Heaths and American plants.

COLLEGE OF AGRICULTURE AND CHEMISTRY, AND OF PRACTICAL AND GENERAL SCIENCE, 37 and 38, Lower Kennington Lane, Kennington, London, S.

Principal—J. C. Nesbit, F.G.S., F.C.S., &c.

The system of studies pursued in the College comprises every branch requisite to prepare youth for the pursuits of Agriculture, Engineering, Mining, Manufactures, and the Arts; for the Naval and Military Services, and for the Universities.

Analyses and Assays of every description are promptly and accurately executed at the College. The terms and other particulars may be had on application to the Principal.

ARTIFICIAL MANURES, &c. — Manufacturers and others engaged in making ARTIFICIAL MANURES may obtain every necessary instruction for their economical and efficient preparation, by applying to J. C. Nesbit, F.G.S., &c., Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, Coprolites, &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch. Gentlemen desirous of receiving instruction in Chemical Analyses and Assaying, will find ample facility and accommodation at the College.

THE LONDON MANURE COMPANY (Established 1840,)

Are now prepared to send out the following MANUFACTURED MANURES:—

SUPERPHOSPHATE OF LIME, of best quality.
DISSOLVED BONES, AND BONE MANURE FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN AND ROOTS.
CORN MANURE FOR AUTUMN SOWING.

They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate, to be obtained entirely from Bones.

The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE OF SODA, SULPHATE OF AMMONIA, and every Manure of value.

116, Fenchurch Street, E.C. Edw. Purser, Secretary.

Established 1812.

MANURES.

MESSRS. PROCTOR invite the attention of their Agricultural Friends to their SPECIAL MANURES for 1861, prepared for Grass, Corn, and Root Crops. These Manures, which are the best and cheapest offered to the Agriculturist, are now ready for delivery, and early orders are respectfully solicited. Price List, with particulars as to quantity and best mode of using the Manures, sent free on application to H. & T. Proctor, Cathay, Bristol; or Proctor & Ryland, Birmingham and Chester, Agricultural Chemists, and Original Manufacturers of Special Manures.

LAWES'S MANURES. The Manures manufactured by J. B. Lawes for the present season of 1861, are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME £6 6
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES .. 5 5
LAWES'S BARLEY, GRASS, AND MANGEL MANURES 8 0

These Manures can be obtained of Mr Lawes, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.

Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.

American and other Cakes at market prices.

Address John Bennet Lawes, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.

CONCENTRATED TURNIP MANURE, equal in value to the preceding.

Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."

Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to Burnard, Lack, & Co., Sutton Road, Plymouth.

ESTABLISHED 1821.—Universal Success of

GRIFFIN, MORRIS, AND GRIFFIN'S MANURES. They have now been tried in 20 English counties, and invariable testimony borne to their value as Manures adapted for the TURNIP, MANGEL WURZEL, WHEAT, GRASS, AND POTATO CROPS.

Full particulars upon application to Griffin, Morris, & Griffin, Ceres Works, Wolverhampton.

LOOK TO YOUR GRASS LANDS AND DOUBLE YOUR CROPS by dressing them with PULVERIZED BONES, to be had only of JARED TERRETT HUNT, Lambeth Wharf, Lambeth, S., and Downham Market, Norfolk. 5 cwt. sufficient for an acre, and the present the time for dressing. Prepared bones for Vine borders and fruit trees. Half inch bones, bone dust, superphosphate of lime, gypsum, guano, and all other artificials of guaranteed quality.

A FEW respectable DISTRICT AGENTS wanted for a MANURE which is highly recommended and sold carriage free. Liberal terms given.—Address, with occupation and references, B. C., 10, Pall Mall East, London, S.W.

ECONOMY OF CORN FOR HORSE & CATTLE FEEDING

E. R. AND F. TURNER, Ipswich, submit the prices of their celebrated CRUSHING MILLS for Oats, Linseed, Barley, Malt, &c. They save 25 per cent. of Oats in feeding horses; crush Corn for Pigs and Cattle, rendering it as efficacious as if ground to meal; reduce Linseed to fine meal with no loss of its oil, and bruise Malt perfectly.

			£	s.	d.
No. 11 Mill (recommended also for bruising corn for fowls)			3	15	0
No. 6 Mill for hand, £4 15,	or with Bean Mill	(No. 6 B)	5	15	6
No. 7 ,, ,, 6 10	,,	(No. 7 B)	8	8	0
No. 2 ,, ,, or power 8 0	,,	(No. 2 B)	10	10	0
No. 1 ,, for power .. 12 0	,,	(No. 1 B)	15	0	0
No. 8 ,, for steam pow. 18 18	,,	(No. 8 B)	24	0	0

Delivery free to all Railway Stations in England, and to the principal ports of Scotland and Ireland.

At the R.A.S.E. Canterbury Show, 1860, E. R. & F. T. were awarded the prize of 5*l.* for the best Crushing Mill for Power; the prize of 2*l.* for their Crushing Mill for Hand.

Illustrated PRICE CATALOGUES sent free on application.

HENRY J. MORTON AND CO., 2, Basinghall Buildings, Leeds.

GALVANISED IRON WATER CISTERNS for Cottage Houses, &c., to contain 50 gallons, 26*s.*; 80 gallons, 31*s.* each; and 140 gallons, 37*s.*, and fitted with tap, keeping the water perfectly sweet and clean; will not rust or corrode Cisterns of all sizes.

GALVANISED IRON PUMPS for Liquid Manure or Domestic Use, 3 inches diameter, 30*s.* and 32*s.* 6*d.* each; Tail Pipe for same at from 10*d.* per foot.

GALVANISED IRON SWING WATER BARROWS for Garden or Farm use, containing about 20 gallons, entirely formed of iron, 35*s.* 0*d.* each.

PARKES' STEEL DIGGING FORKS.

BURGESS AND KEY, 95, Newgate St., E.C., London, being the Wholesale and Retail Agents for these celebrated TOOLS have always a large Stock on hand from which their Customers may select what they may require.

ANTHONY'S PATENT AMERICAN CHURN.—The FIRST PRIZE was again awarded to this Churn in Competition with several others at the Chester Meeting of the Royal Agricultural Society; it has obtained the First Prize given by the Society at every Meeting since 1850. Messrs. Burgess & Key, 95, Newgate Street, E.C., strongly recommend it as the most perfect Churn now in use. Full particulars sent on application.

REAPING AND MOWING MACHINES.

BURGESS AND KEY, 95, Newgate Street, E.C. PRIZEHOLDERS for the best Agricultural Machinery Manufactured.

ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with Burgess & Key's Screw Delivery Platform. Price 42*l.* 10*s.*

M'CORMICK'S REAPER for Manual Delivery. Price 25*l.*

ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30*l.*

ALLEN'S GRASS MOWER, for one Horse. Price 22*l.* 10*s.*

COMBINED REAPER AND MOWER—Two-Horse Machine. Price 35*l.*

COMBINED REAPER AND MOWER—One Horse Machine, Price 24*l.*

These Prices include Packing and Delivering at any Railway Station.

Testimonials.

A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following from

Mr. James Arnot, *of Woodcote, Carshalton.*

"Having used your Machine for four years, I would not be without one on any consideration; and I can safely say that I have saved over 50 per cent. in the expense every year I have used it. In fact I have never yet seen an implement which pays itself in so short a time."

LAWN MOWERS.

DRAY, TAYLOR AND CO. (late Wm. Dray & Co.) having secured a large stock of every make of the above machinery, solicit immediate orders to prevent disappointment. Green's, Boyd's, Whittaker's, and Shank's, all on show; together with the largest stock of first-class Horticultural Tools in London, at their New Central Depot, 4, Adelaide Place, London Bridge, E.C., (removed from Swan Lane). N.B. Every gardener, amateur or otherwise, should inspect Dray, Taylor & Co.'s New Patent Universal Garden Barrows.

DIPPENHALL FIRE BRICK FACTORY, near Farnham, Surrey.—Manufactory for Fire Bricks, White, Red, and Black Facing Bricks, Plinth Bricks of various shapes and colours, for string courses; ornamental Garden Edgings, Terra Cotta Chimney Pots, and Vases in great variety; superior Tesselated Blue, Black, Red, Buff, and White Paving Tiles, for churches, entrance halls, &c. All kinds of Ornamental Ridge Tiles, Sewage and other Pipes, Bends, and Junctions; Ornamental Garden Border Tiles to any pattern or colour.—Apply to Mr. E. Whalley, Manager of the Works. Agent for Guildford, Mr. Jno. Moon, Builder.

FARM BUILDINGS.

LOANS may be obtained under the General Land Drainage and Improvement Company's Act for the full amount required by the Owners of settled Estates, Incumbents, Trustees, Bodies Corporate, &c., for the erection of Farm Houses, Farm Buildings, and Labourers' Cottages designed by their own Agents and sanctioned by the Inclosure Commissioners.

The loans are repaid by a Rent Charge on the estate for any term the Landowner may fix, not exceeding 31 years.

No investigation of title being required or notices given to Reversioners or Mortgagees, no legal expenses are incurred.

The Company furnish designs of every description, and undertake the entire responsibility of the works wherever desired by Landowners.

No profit whatever is taken by the Company on any works they execute, the actual expenditure only approved by the Inclosure Commissioners, with a commission thereon, being charged in all cases.

Applications to be addressed to William Clifford, the Secretary, at the Offices of the Company, 52, Parliament Street, London, S.W.

THE LANDS IMPROVEMENT COMPANY.—Incorporated by Special Act of Parliament in 1853.

2, Old Palace Yard, Westminster, S.W.

To Landowners, the Clergy, Estate Agents, Surveyors, &c. in England and Wales and in Scotland.

The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.

For further information, and for forms of application, apply to the Honourable William Napier, Managing Director, 2, Old Palace Yard, Westminster, S.W.

ROYAL AGRICULTURAL COLLEGE, CIRENCESTER.—Dr. Voelcker, Consulting Chemist to the Royal Agricultural Society of England, has a VACANCY for a HOUSE PUPIL.

HIGHLAND AND AGRICULTURAL SOCIETY OF SCOTLAND.

AGRICULTURAL EDUCATION.—The Examination of Candidates for the SOCIETY'S AGRICULTURAL DIPLOMA will take place in the Museum Hall, George IV. Bridge, Edinburgh, on WEDNESDAY, the 27th March.

Candidates must lodge intimation with the Secretary on or before 20th March.

Edinburgh, March 1, 1861. Jn. Hall Maxwell, Sec.

TENANT FARMERS' MANURE COMPANY.

ODAMS'S BLOOD MANURE FOR CORN.
ODAMS'S BLOOD MANURE FOR ROOTS.
ODAMS'S SUPERPHOSPHATE OF LIME,

MANUFACTURED BY THE PATENT

NITRO-PHOSPHATE OR BLOOD MANURE COMPANY (LIMITED),

Consisting of TENANT FARMERS, occupying upwards of 30,000 Acres of Land.

Chairman.—JONAS WEBB, Esq., Babraham, Cambridgeshire.

All particulars may be had on application at the Offices. C. T. MACADAM, Secretary.

Offices: 109, FENCHURCH STREET. Manufactory: PLAISTOW MARSHES, ESSEX.

The Agricultural Gazette.

SATURDAY, MARCH 2, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

Monday,	Mar. 4	Central Farmers' Club .. .. 6 P.M. (Mr. Howard on Piece work). Uske (Quarterly Meeting).
Tuesday,	— 5	Penrith. Wirral (Mr. Jackson on Spring Work), 4 P.M. German Agricultural Society at Erfurt in Prussian Saxony.
Wednesday,	— 6	Agri. Society of England .. .. Noon. Berkeley .. .. 5 P.M. (Mr. Bailey on Dairy Farming). South Wexford. Hexham (Fisken's Steam Plough trial at Anick Grange) .. .. .. 10 A.M.
Monday,	— 11	Botley (Carts v. Waggons—Mr. E. King).
Tuesday,	— 12	Hexham (Mr. T. Dryden on Grass Land).
Wednesday,	— 13	Agri. Society of England .. .. Noon. Oxford.

A Correspondent has rented a cesspool into which flows the sewerage of a town of a couple of thousand inhabitants, distant about a mile and a half from his farm. The overflow from this cesspool has been used to irrigate a meadow of seven acres, which gives great crops of Grass cut three times. The rest of the fluid at other times has run into a river, and the deposit left in the cesspool has been annually cleaned out, yielding about 40 two-horse cart-loads. It is intended for the future to cart stuff into it, and when well saturated, to empty it several times a-year. The question — what substances to use—"sawdust, wood-ashes, soil, &c.," is one of interest in the ordinary circumstances of the farmer as well as in the extraordinary circumstances here related. Our Correspondent, guided by the ordinary method of turning excrementitious material to account, proposes among other things to chop up straw and throw it into the cesspool to dry up its contents: but then he says:—"I can sell Barley straw for 3*s.* a cwt. this season, and Oat and Wheat straw for considerably more."

It is plain that straw would thus be used most wastefully. It is so indeed in the farm-yard, where it is never worth 3*s.* a cwt., but in that case we look for repayment to the comfort and warmth of our cattle as well as to the mere purpose of the straw as dung. And it would be well if it could all be used as food, comfort and warmth being provided some other way, and the manure of

the farm being gathered up and applied cheaply without its aid.

It is this gathering up and application cheaply, without the aid of straw, that now puzzles our Correspondent. And sawdust, ashes, "peat charcoal at 2*l*. a ton," &c., suggest themselves. Sawdust, spent bark from the tan-yard, if it can be had some years old, gathered leaves, and things of that class, will certainly act well as sponges for the slush to be removed, and they possess some value of their own as well. Peat charcoal, though a disinfectant and absorbent, is wasteful of the ingredients which it absorbs, for they disappear from it by rapid decomposition, and though in harmless forms, so that they are no longer a nuisance, yet they are lost. As to sawdust and spent tar, it must be remembered that gardeners refuse to employ them till they are charred.

The best substance, as it appears to us, for the absorption and retention of the fertilising contents of the cesspool, is dry clay loam. A succession of heaps of this material for use during a corresponding succession of weeks would need to be provided under shelter—and the slush being cleaned out once a week and mixed with one will dry up and disappear so far as smell is concerned while the others in like manner are being used. And the heaps when dry may thus be repeatedly used, acquiring with every fresh use additional value as manure, without much losing their power to disinfect and hold repeated doses of the filth.

We recommend our Correspondent to read a pamphlet by the Rev. Henry Moule,* in which his experience in this way is described. It relates rather to the garden and the house than to the cesspool and the field; but the principle of his successful practice may be applied with advantage on the larger scale.

Agricultural Statistics, though refused at market tables and by many leading agriculturists, and therefore not to be had by Act of Parliament, are nevertheless looked for with anxiety by agricultural readers; and in many cases thankfully received even by those who will not sanction any scheme for their official collection. Information of the harvest yield or of the progress made in seed time, is sought for anxiously as soon as possible, and laboriously gathered up by journalists and published in the agricultural papers. We have for many years given an annual report at harvest time from hundreds of correspondents all over the kingdom.

The *Mark Lane Express* has of late years given a full report both of yield and prospects about seed time; its report this year was alluded to last week. *Bell's Weekly Messenger* has just collated the letters of correspondents on the condition of our sheep—a subject of serious importance this year, when disease is unusually prevalent in all wet districts. In Somersetshire and Devonshire enormous losses have taken place by the rot, as was last week reported (p. 176); but the inquiries of our contemporary appear to have been directed more generally to districts where it has not been prevalent, and the account upon the whole is favourable.

As a third and last instance of statistical information lately published of agricultural interest, we refer to the return to an order of the House of Commons, on the suggestion of Mr. Caird, M.P. (see p. 677—1860) for "a return of the average rate of weekly earnings of agricultural labourers in the Unions of England and Wales during the several quarters of the year. These returns, from more than 100 Unions, in 37 English and several Welsh counties, are now published for the two last quarters. They are exceedingly instructive as to the condition of the labourer, showing the great differences which exist in the agricultural wages in different parts of the Island.

Wages as a general rule are higher in the north than in the south. The report from Morpeth Union (Northumberland) during the past quarter is "14*s*. to 16*s*. a week" besides "house and garden, pig kept during summer, dinner during harvest, and an allowance of 6*d*. or 1*s*. when from home each journey delivering farm produce." For this the reporter says 2*s*. per week may be added. Certainly these extras must be valued at a much higher sum than 5*l*. a year. From Wigton and Bootle Unions in Cumberland, Kendal in Westmoreland, Settle in the West Riding of Yorkshire, and Sedgefield in Durham, we have the uniform report of 15*s*. a week as the wages of an agricultural labourer. On the other hand, from several other Unions in these same counties we have 13*s*. 6*d*., 13*s*., but none below 12*s*. returned.

Thus the lowest returns from the north are nearly the highest in the south. From Surrey, Kent, and Sussex, 13*s*. 6*d*., 13*s*., 12*s*., and 11*s*. are returned; from Berkshire, 11*s*., 10*s*., 9*s*.; and going further west, we have 9*s*. to 11*s*. in Wilts, 8*s*. generally in Devonshire, 10*s*. in Cornwall, 10*s*. in Somersetshire, 9*s*. to 10*s*. in Gloucestershire, 9*s*. in Herefordshire, 9*s*. to 11*s*. in Worcester, Warwick, and Shropshire.

On comparing however those districts with one another in which the practice of boarding the labourer prevails, there is not so much variety apparent in the money paid. And probably the better wages does in all cases more or less go in better food. Thus at Malton, in the North Riding of Yorkshire, 7*s*. to 8*s*. are given, along with six days' victuals, viz., "beef, bacon, pies, dumplings, and Wheat-flour bread," no very bad definition of "board." At Ormskirk, Lancashire, wages are 7*s*. with board, viz., "milk and Oatmeal porridge; bread and cheese; Potatoes and bacon; pies. At breakfast, dinner, and supper, the quantity is usually as much as can be eaten. Between breakfast and dinner, and between dinner and supper, bread and cheese or pies are supplied." In Westmoreland, eastward, "nearly the whole of the agricultural labour is performed by men who are hired by the half-year and whose wages are from 20*l*. to 26*l*. a year (7*s*. 6*d*. to 10*s*. 6*d*. a week). They live with their masters, and are found during the whole period with food."

At Garstang, where food is given it consists of "for breakfast—milk porridge and bread and butter; dinner—bacon, Potatoes, and Potato pies; supper—milk porridge and Potato pies. No drink allowed but butter milk or whey."

In the north of Staffordshire agricultural labourers receive 7*s*. per week and their maintenance during three-quarters of the year, and 10*s*. and their maintenance during the harvest quarter. In Caermarthen the wages are from 7*s*. 6*d*. to 10*s*. 6*d*. a week and food, which is thus described:—"No beer allowed except in haymaking time. For breakfast, skim milk or broth, with Barley or Oatmeal bread and skim cheese. For dinner, ditto, with an allowance of rough beef, bacon, and Potatoes. For supper, the same. When the labourer is on his own finding, coffee and tea, with Barley and common Wheat bread and butter, and skim milk for breakfast and dinner."

The returns are interesting as describing or asserting the generally comfortable circumstances of the settled agricultural labourer over the greater part of the island. From this however we must except large districts in some of the midland and western counties, together with a large floating population everywhere, who are not regularly hired and depend on casual day wages.

As showing how far the quotations describe the whole means at the command of the labourer we further quote the report from Atcham, Shropshire:—

"I find the whole subject of wages to be exceedingly difficult to ascertain, because of its contingencies. Thus, a farmer tells me, 'I am giving 12*s*. a week,' which on examination I find to be nominally true; while another, who gives only 10*s*. a week, really pays his labourer as much money during the year as the one who nominally pays 2*s*. a week more. Our wages now vary from 10*s*. to 12*s*., but I believe the man at 10*s*. receives in the aggregate the greater sum, inasmuch as he has less days of unemployed time. As to women, they receive from 8*d*. to 10*d*. per day, but the time occupied in beneficial labour is so fluctuating, that it is impossible to get at anything satisfactory as to the amount. Many years ago, I obtained from 12 large farmers, in different parts of the Union, a return of the total amount of labour rendered, and the total amount of money paid, together with the value of Potato ground and other advantages afforded to the labourers. From that inquiry I found the annual earnings of each family (on the average) was about 2*s*. 11*d*. per week more than the nominal wages of the man, which I think is very near the truth, taking the average of the year and the average of families."

TALES OF A LANDLORD.

THISTLE-DOWN.

There is probably not a thing existing in the physical world that has not its correlative, or 'double,' in the mental one. On this principle I suppose it is, that there seem to be thoughts which *hybernate*—matters of insensible observation which lie dormant in the minds of men, at least of the thinking tribe—till somebody, no wiser possibly than the rest, happens to utter them; when, lo! presto! they start into life on tongue, like a view-halloo. "That is just what always—said," you were going to add, but obliged to draw rein, and mildly substitute "th which you feel at once drops you down bel spoils the whole thing, tails you off into the have felt this often: and I felt it once, when I read the remark that 'Those arts are th backward in which everybody is a professor.' Smith was perhaps the true parent of the he said that there are some things which thinks he can do—Drive a gig—steer a b he adds—"*and Farm!*"

And if one may believe any advertising any newspaper on any day of any week, one least may be appended to this list of univers plishments—'Manage an estate!' Where is and heir who does not even in the mos affectionate corner of his soul still fancy matter or two—just a matter or two—in whi —*will* 'do the thing' a little better than his father's agent, or even that respected gov self? Alas! my young and ardent Phäeton, *crede!* or, if you won't, for indeed I fear you that; then, take the next best hint which exp can offer, keep the sentiment down in the lowest —heap Pelion, and Ossa, and Olympus on it; rein saw the bit, with both hands; serve it as you mare that *will* rush as she nears her fences; it *in*, I say, till you are yourself the Atlas of acres—of that little world whose management, management you think all Europe and part of critically watching. And then, when that sad cleared at last, and you are landed on the othe bereft of half your appellative—'Master' now, master' no longer—why then my friend find—as I found once—that there are 'Di Views' elsewhere than in the Polytechnic; curious but not so easy to get away from wh feel heart-weary; views where the rich green springtide and summer darken into the bro autumn, and before you are well aware, fade into the white garb of winter. Oh! that cheery smile on face—that open heart in every hand, that salutes gratis for nothing,' the magic epithet—the world his-wife-compelling prefix 'Young' infecting so vellously the sound and sense of that word 'Master,' making it seem such a charming word of promise: the day comes which brings it to the ear, and breaks to the sense; and you are left alone with it; to face!

Which means, in fact, face to face with that catholic struggle of the world, in which *all* the takes part, from the first hour of accomplished hood! but which all the world, or nearly all naturedly shield, and muffle, (as Pussy does those fishhooks she has got within the soft begging lets the children play with)—from scratching *shewing*, to the young. It seems like letting cruel secret, even to disclose it thus: but how describe thoughts without the things which make and will change them? and if thoughts described, how little can the mere facts of one experience, assist, or invigorate another? The of life is as different to each of us as fate or accide make it; the colours and shapes in the Kaleidosc not more varied: but in the action of the men all the world is kin, all mankind are brothers: imparted experience of *thought*, or feeling, may a link to the supple shirt-of-mail which the you are 'wise in time' may weave, before they wear, to wear, it.

So says one to whom this premonitory armour-rivetting was not accorded; the joints be forged and hammered as they were wa immediate action, which always seemed to be begin, by a *screw loose*. After this fashion

"If yer plaze Sur, Mr. Squitchall's a selling Straw! Another load went last *night*, just come i' the Coach!" The look and tone of voice mysteriously accompanied this communication to apprise me that my hair ought to stand on the intelligence. I answered with that inex safe interjection—

"Indeed!"

And as nothing came of this in the way of re I had to grope my way a little further in the and added, with equal safety, as I thought—

"Why?"

"*Why* Sir?—He've been a doin' it all along time 'll be up next month, come old Lady-day."

"How so? Is he going to leave the Farm?"

"Lor' blesh ye, yes Sir! He've been under sence Michaelmas. He's been a *sellin' off* ever

"But isn't it against his Covenants? his Lease

"There isn't *no* Layses!"

"Well, his Agreement—whatever it *was*—"

"He says he 'addn't no 'Greemunt: he never The squire and him 'ad allis a good understand till they fell out: about the Barn-doors; an' is fishin' i' the bruk. 'Is last year's rent ain't pa told: nor likely to be, they tell *me*. There's 'em in arrear: but I spose *you* know. The time bad, sur! There *is* no Greemunts!"

"No Agreements! What do you mean?"

"Well Sur," subjoined Dobson (in a tone snubbed at my emphatic 'do') "I'm sure I can I baint no scollard; but it was all right. The

* National Health and Wealth. Bradbury & Evans, 11, Bouverie Street, Fleet Street, London.

ud tell—and *a' told* ye all about it, if ye'd plaze to ax—if ye'd *'ar axed* him, however. They'd *all* a good 'understandin' wi' the squire—as *was*:—'xcept Squitcha'l however—him as fell out with 'im.—— There is no Greemunts!"

It was of no use to go on. I saw that. Whenever I pressed Dobson up to the point at which he disclaimed 'scholarship,' I knew I had got to the wall. I could see him roll up, inwardly, like a Hedge-hog, and you might roll it about as a Setter-bitch does under the hedges in September, stinging her nose by way of *condiment* as it were in the day's work; but there it was, a sort of spherical prickledom, that would roll for ever, but never *un*roll: a sensitive temper laid over an honest heart—sensitive *because* it was honest, and could not face the inward misgiving that 'all' was not *quite* 'right'—that there was, or might be, something somehow that was 'all wrong,' and that some day somehow I might find it so. It was no business, in fact, of his. He told me all he *knew*, he hoped the best in all things, and believed all he hoped:—not far short of a Grace too high to name in this light narrative!

But what was to be done? Inexperience itself—and that was my very name and addition—could not fail to see a background extending out behind this brief dialogue that made the crabbed lore and fossil eccentricities of Coke upon Littelton & Co. seem to shrink up into cobwebs, in comparison. "Selling off Straw—"—'in the night' too! 'Times so bad'—'No Agreements!'—and to put against all this, only a '*good understandin'*.' "Only one half p'orth of bread to all this sack!" And a good understanding, too, with *whom*! and about *what*? Ask the late squire! Knock *below*! tap (gently) at the door of the House 'where all things are forgotten'—'for *further* particulars enquire *within*'!

Where was the Agent, all this time? you ask. I sympathise entirely with that very natural question! I should have asked it too, a good many times: but alas, I knew the answer Echo would have given me. I had learnt it, gun in hand, from the Pasture, from the Arable, from the Woods, from the Hedgerows, and had known the answer too long, to ask the question now. Let me ask one in return. Did you ever know a man of strong will and weak capacity shew skill in the selection of an Agent? or *keep* a good one, if by perversity of accident, or inheritance, such an article happened to fall in his way? Is it not always "Thank you, I know how to manage my own affairs:—I don't want any one to *teach* ME!" Did you ever notice the seeming paradox ("till time hath given it proof") that the men of best judgment are exactly those who most effectively use, and develope, the capacity of *others*, and are least above employing it? and *vice versâ*!

"My 'Rent' is, surely, charged too high!" complained a noble Lord to his noble Agent, as they were casting up together the year's account of the 'Home Farm.' "If I lower your Lordship's, I must lower *all the Rest*!" quietly rejoined the impartial man of business. How many of that large class who 'know how to manage their own business, *Thank you!*' have such a "just balance" as that, at their elbow? *There was* a looking-glass indeed, in which "to see the form and *pressure* of the *time*." There was a *speculum*, a 'window to the ark' to look through from time to time, and judge of high-and-low-water mark *outside*, and all around you till the waters had subsided!

I do think young people believe, as I did once, that paternal landed incomes *grow*, like the fucoid, or the fungus-tribe, spontaneously, of their own self-will and accord, pushing their way into the gubernatorial pockets, or under his banker's counter, in an irresistible kind of manner, natural to mushrooms, and ready cooked, salted and peppered for immediate use.

During the conversation above narrated a sudden recollection had flashed across my mind. At a meeting of the tenants, after the late squire's funeral, an open but unsteady hand belonging to a face and figure that reminded me of the Beershop epigraph 'Licensed to be *drunk* on the premises' was just thrusting itself into mine, as the party broke up, when a voice cried "Don't you *be false* Mr. Squitchall!" which coupled with the gait and manner of my warm saluter cramped back my extended arm with a galvanic recoil, and double-locked my hand, as a live oyster, caught gaping, closes against the knife: and shortly after, some one as he passed me, said, in a sort of 'casual' tone, "You had better have Mr. Squitchall *looked after*, Sir!" I felt the truth of the friendly advice: but I missed the *point* of it!

Logicians tell us that 'Words are the signs of ideas.' This is no doubt useful information, as far as it goes. But, like much of the information of books, it leaves the *application* to be gathered, and the 'ideas' themselves to be picked up in a longer and wider schoolroom than that of the logicians. For instance, to the mind of 'Two-or-three-and-twenty' the 'idea' thus worded, of having Mr. Squitchall 'looked after' in his then condition, brought principally into suggestion the time-honoured formula for such cases made and provided, and touchingly versified for practical use—

"Slowly and sadly they took him to bed,
And told his wife and daughter,
To bring him next morning a couple of Red-
-herrings and Soda water!"

But as Life advances, and 'Two-or-three-and-twenty' gets multiplied (eheu! fugaces) by *two*, men's 'ideas' enlarge, and spread, as the Thistles do, in a recondite underground kind of way, out of sight; and woe to him who only keeps mowing and scratching year after year upon the surface and never penetrating to the root to learn the new Carduine lesson in *geometrical progression* which every occupier of land should know like his Multiplication-table, and every owner as pat as the tale of Hercules and the Hydra, if we are ever to be rid of that 'pest of the farm,' for our own sakes or our neighbour's. The insidious tiny plantling shews but a few inches of tender stem in its first year, and decaying seemingly in autumn (like the cunning insect that collapses to the eye, in feigned death, the moment it finds itself perceived) is boring underground as fast as any mole, the winter through; for its motto is 'Resurgam,' and many an ell it has taken for every inch it *had*, before its biennial phase has been reached, and its formidable reply *begun*, to those whom the agrestial deities have cursed with the belief that "Thistle-down doant graow"! It is to be hoped we may have an Act, before another session is out, for trepanning every skull that holds that doctrine, and inserting its correction beneath the *dura mater* for public protection.

Fugitive and volatile Thistle-down! Crafty parasite of Labour's hard toiled furrows—apt emblem of the small, despised, beginnings of the 'toil and trouble' of human life! White feathery innocent-looking *plague-seed*—*Curis acuens mortalia corda!*—how have you borne me away, like boy chasing butterfly, in the hope of giving one final pin-stab, one *quietus*, between your wicked wings, and *assuring* men the mischief-brewing witch-on-a-broomstick that you are as you fly so laughingly over the summer-fallows, and dance as if in *joke*, across the Turnip rows! A few hours after the short conversation, now so far back,—smothered in thistle-down—found me paying my first visit to the office of Messrs. Penn & Debbitt—some miles distant. The appointment was of some weeks standing, and the occasion was well suited to hasten its execution. What conversation there befel, in an interview between age and youth, between the grey-headed experience of the country practitioner and the young aspirant of a forensic path yet untrodden, but crossed by another that had commenced *in earnest*—may deserve a separate telling. *T.*

STEAM CULTIVATION IN NORTH LINCOLNSHIRE.

EVERY year gives new and increased interest to the cultivation of land by steam power. Every year too gives increased knowledge and information upon it, so far as it substitutes results for theories, and multiplies facts for our guidance and reflection. Two or three years ago we had only the few and scanty details of the successful application of the principle which were furnished by the few men of skill and enterprise who were far-sighted, and who early adopted the principle, and secured its proffered benefits. These pioneers of a new and mighty system, which has already wrought wonders, and excited almost universal attention, and which seems destined very soon to revolutionise and give a new phase to our national agriculture, gave us the only information we possessed as to the application of the principle of steam culture and its consequent results. But the case is widely altered now. The 100 sets of Smith's tackle sent out by Messrs. Howard, with we know not how many sets sent out by other inventors and manufacturers, and which are constantly working in different parts of the country, supply us with an amount of information we did not before possess, and afford the agricultural public facilities and opportunities not only for receiving from those working these sets such testimony as they can bear, but also of witnessing for itself the mode of application, and the benefits resulting; and we have great confidence in these personal inspections, and believe they do much more to carry conviction that any prepared statements, however accurate and truthful, which can be put upon paper. Men like to see and judge for themselves, and it is well they do: the more the principle of steam cultivation is observed and studied, the better; and every man possessing the opportunity of witnessing the operations themselves and of carefully noticing the subsequent effects, will do right to embrace it, and he will doubtless be well compensated for his pains. But to such as have not at present such facilities, and to others who may feel an interest in knowing the mode of operation, and the results obtained in other localities than their own, some observations upon the working of one of Smith's cultivators in North Lincolnshire may not be altogether unacceptable.

Last year, in a letter upon the subject of steam cultivation, we referred to the fact that Mr. Francis Sowerby had purchased a set of Smith's tackle from Messrs. Howard, Bedford, and was then working it upon his Aylesby farm. During a recent visit to Aylesby we had ample opportunities of witnessing for ourselves, as well as of hearing from Mr. Sowerby how far the experiments made last year had proved successful. Our first visit was to a field where we saw the cultivator No. 3 working to a depth of about 8 inches in the previous autumn, *i.e.* in 1859. This field is now Swede Turnips, and the sheep are just being folded upon them. A few days later we visited another field upon his Gunnerby farm, which was also Swedes, but which had not been cultivated by steam. The contrast in the crop was very great. In the former instance the crop was uniform and regular in plant, and the bulbs large in size and heavy in weight, whilst in the latter there was some irregularity of plant, and the bulbs were much smaller, apparently not more than half the size, and we could not estimate the difference in the two crops at less than 10 or 12 tons per acre in favour of the steam cultivated land: the latter crop being superior to anything we have seen this year. Another field on the Aylesby farm was partly cultivated by steam, and partly in the ordinary way, by horses. The whole was sown with Turnips, which were just finished when we arrived, but Mr. Sowerby told us his decided impression was, that the steam cultivated part of the field produced one fourth more weight of Turnips per acre than the part cultivated by horses, all other things being equal. So much for the first beneficial results of steam cultivation at Aylesby; we now anxiously await the results as it regards the corn crops, which another summer will show, and the next harvest will disclose.

The last autumn was not very favourable for working land, either by steam or otherwise. But Mr. Sowerby made the best of it, and set his apparatus to work in good earnest during the harvest, and cultivated 120 acres twice over and 10 acres three times over. These were all stubble and designed for root crops this spring, The first time over Smith's No. 3 implement was used and the second time the No. 4, except in the case of 10 acres, which were cultivated twice with No. 3, and once with No. 4. The average depth was about 8 inches, and the 270 acres were done in $35\frac{1}{2}$ days, averaging something over $7\frac{1}{2}$ acres per day. It being harvest, and the men receiving high wages, they made long days. The cost for manual labour was consequently about *3s. 2d.* per acre on the 270 acres. The cost per acre for engine, &c. we need not enter into, as that is a matter of easy calculation to any one. One 48 acre field was cultivated without the engine going into it, and it was an ill-shaped field too, with a long corner or two, and was as difficult to do as a well formed field of 60 acres would have been. The engine stood in an adjoining 20 acre field, and when the 48 acres were finished, was just turned round, and the 20 acre field where it stood was then cultivated, making a total of 68 acres cultivated with no other moving of the engine than just turning it once round. This land now lies as it was left by the cultivator, and is being fertilised by the manurial elements supplied by the air, which can now penetrate to the depth of 8 inches uninterruptedly, whilst the water as it falls upon it freely percolates through it. In the course of a few weeks Mr. Sowerby purposes putting the cultivator No. 4 again through it, and will then roll and harrow it with horses to prepare it for seed, which is the only horse labour expended upon it, until it is manured and ridged for sowing. These facts clearly show that Mr. Sowerby can easily reduce his number of horses, and not be required to work those he retains so hard or keep them so high as he did formerly. We believe such is the case already; he works one-fourth less horses than he did, and these three-fourths have much less to do, and consequently cost less keeping, and still his work is in a state of forwardness.

The wet summer prevented Mr. Sowerby breaking up some of his seed lands by steam power for Wheat as he had intended, but another year, should it be more favourable, some experiments in this respect will doubtless be made. In conclusion we may just say that the results of steam cultivation at Aylesby have been so thoroughly satisfactory, that several of Mr. Sowerby's neighbours have expressed their approval of his practice, and their desire very soon to imitate it. The adoption of the system of steam cultivation is expensive, at least it requires a good round sum to start with; and in wretchedly bad seasons like the present, farmers enter with caution into large outlays, however well satisfied they may be that such outlays will prove remunerative. This may perhaps to some extent account for the slow movements of many farmers in effecting large purchases just now. *Alfred S. Ruston, Chatteris, Feb.* 6, 1861.

Home Correspondence.

Roots in Drains.—I perceive that you allude to the probability of a Correspondent's drains having been injured by the roots of the Mangel Wurzel. Having suffered to some extent this year from a similar cause, I can corroborate your remarks by the fact that I have taken up and relaid at a depth of 5 feet a considerable extent of drains which had been put in a depth of $3\frac{1}{2}$ feet, but were completely blocked up by the fibres from the roots of the Mangel Wurzel. I have measured the tap roots of several plants of the Mangel Wurzel this year which have exceeded 6 feet in length. *William Machin, Papplewick, Nottingham.*

Short-horn Sales.—[The following is the letter referred to in a leading article last week]:—Having observed in the *Midland Counties Herald* (Birmingham) the week before last a tabular statement of "Short-horn Cattle Sales" in which my name appears, I have asked Mr. Wright, one of the proprietors, from whom the statement, with permission to publish it, was procured. He informed me from your *Agricultural Gazette*. My object in addressing you is to state that the manner in which my name appears, with a sale of only five late young bulls in a store state, put in (to avoid wintering of them), at the end of a deceased friend's (Mr. W. Moore's) sale, at a season of the year when bulls are but little wanted, and sold at so low an average, is not a fair representation of my herd, is likely

to be injurious to my interest, and ought not to have been published without my concurrence; the more so, as I had a sale of draught cows and young bulls in April of last year, which resulted in a widely different average to those five. And as no name appears to your statement, many may infer, and some have indeed asked, if I sold only five out of between 40 and 50 head, and if the sum shown in your statement was the average; so that I consider it behoves me not to allow the statement to go unnoticed, and to seek your aid in explaining or showing how improperly these five would represent the value of my herd. I have a large herd, and have had successful sales of young bulls (pure bred Short-horns) at Gloucester annually ever since 1843. *Wm. Woodward, Northway House, near Tewkesbury.*

Fisken's Steam Plough.—In the spring of 1860 a lecture was delivered to the Hexham Farmers' Club by the Rev. Mr. Fisken, on Steam Cultivation, illustrated by a working model of a machine invented by his brother and himself, and successfully worked by them many years since on a small farm in Perthshire by means of a water wheel. His plan of steam ploughing seemed so feasible that the Club unanimously resolved to open a subscription for the purpose of testing the invention, and Messrs Pattinson & Co., of the Hexham Iron Works, in the handsomest manner placed an engine at the disposal of the Club. The necessary funds were soon subscribed, and Messrs. Pattinson & Co., under the superintendence of the inventors, completed the construction of the machine in December last, when it was hauled to a convenient field for trial on the departure of the snow-storm of January. The engine is fixed at a convenient point within a moderate distance of the land to be ploughed, and does not require to be shifted as the work proceeds. The motive power is communicated from the engine by a hempen rope 1½ inch in circumference, running over capstans (which as well as the capstans for tightening the rope, are self-acting, and shift themselves so as to keep opposite their work) to a drum or cylinder 5 feet 4 inches in diameter, and 4 feet long, travelling on the unploughed surface, and sustaining the weight of the whole apparatus. This consists of gearing for reducing the speed (so that the cylinder makes only one revolution for 23 of the rope), a frame to which the ploughs are fixed in the same form as in Fowler's machine, and a steerage. The man in charge has the most complete control over the whole machine, and can reverse the motion, stop the plough or set it going without the necessity of any communication with the engineman. The number of ploughs attached at present is four, but it is proved that the drum has traction sufficient for a greater number; and the necessity for this drum or cylinder being the weak point of the apparatus, from its liability to clog on a damp surface, it is probable that the inventors may obviate this objection by substituting revolving discs with transverse connections of bar iron—the discs to act as coulters. The apparent advantages of the system are, the substitution of the light rope driven at a high speed for the heavy wire rope, thus reducing prime cost, tear and wear, and power required; the moderate cost of the apparatus, not exceeding 100*l*. exclusive of engine, and the simplicity of its adaptation to those farms already in possession of a fixed power, whether steam or water, at a central point, from the lightness and cheapness of the communicating medium. It would be premature to speak of the working of the machine, as it is yet only on private trial, but a further notice, detailing its proceedings, shall be forwarded, should you think this worthy of a place in your columns. *W. C. T.* [We shall be glad to have a further report].

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

At a Weekly Council on the 27th inst., Mr. Thomas Raymond Barker, V.P., in the chair, the names of candidates for election were read. Attention was called by a member to the following extract from the Chester Courant of Feb. 27, 1861;—

"*A Remedy for the Potato Disease.*—The following letter to the editor of a Bristol paper is worthy of notice:—I beg to draw the attention of the public to one of the most effectual remedies for preservation of the Potato from the annual visitation of the disease. In all affected Potatoes, even before the disease is visible to the naked eye, there is to be found a degree of moisture very far in excess of that to be met with in sound Potatoes; and this watery principle gradually increases until the disease itself makes its appearance, when the character of the Potato is changed, and the transition from comparative soundness to complete rottenness is sometimes the work of a day, but oftener the doings of an hour. Cultivators are indebted to Professor Bollman, of St. Petersburg, for the accidental discovery of a remedy, which has been found to answer so well in Russia, that on many estates drying houses have been built for the purpose of carrying out the experiment; and as it has been in operation in that country since 1853, it has consequently undergone seven years' trial. In the autumn of 1855 (1852?) Professor Bollman received from a friend—a colonel in the Russian army stationed in Siberia—a sample of a new Potato, with which he received two recommendations—namely, good in quality, and a perfect hundredfold in produce. These Potatoes were accidentally placed on the back of a stove used for heating the Professor's study, where, by some mischance, they were forgotten till the planting season arrived. When discovered they were shrivelled so much, that fears were entertained they would not grow at all. However, the Potatoes were planted, and flourished to such a degree, that the two recommendations before mentioned were pronounced to be verified; and what was more remarkable still, although all the Potatoes in the neighbourhood, and throughout the country, were more or less affected by disease, every Potato of the new kind was entirely free from the disorder. This induced the Professor to adopt the expedient of drying; and, in consequence, the entire produce was submitted (after being dug) to a high temperature, which had the effect of charring some of the Potatoes, and shrivelling the rest. It was surmised, at the time, that some of the charred Potatoes were killed. They were, nevertheless, planted at the proper season; and the charred potatoes grew, and did quite as well as those potatoes which were merely shrivelled. The year 1855 also proved that, although the disease was generally distributed throughout the country, not one of the Professor's new Potatoes was affected by it in the least. The experiment was again repeated in 1856; and the crop exhibited the same freedom from disease. The kinds mostly in cultivation were then operated on—sorts which were yearly more or less affected by the disease—still with the same result. The digging time of 1857 produced a splendid crop of Potatoes. Upwards of three acres were planted with kilndried Potatoes; and, although the produce exceeded 1600 bushels, not a diseased Potato was discovered. In 1858, Professor Bollman erected a drying house, with heated floors, on his estate; and within the past two years similar erections have taken place on the different estates of the principal landed proprietors. It is gratifying to find that the action of the shrivelling process on Potatoes already diseased arrests the progress of the infection, and kills the disease, thus leaving a portion of the Potatoes sound enough to be eligible for spring planting. It has been stated that by the constant raising new varieties from seed, for planting, the disease may be considerably diminished; and this proved to be the case with the Fluke Kidney; for the first two years after it was introduced, and even after its cultivation had become pretty general, this famous Kidney had not been attacked by disease; but last year the Fluke had been in some instances as badly diseased as the Fortyfold, Regents, &c.; so that the process of kiln-drying promises far greater advantages and more certain results than all the expedients put together, which have been from time to time offered for the consideration of the public.—I am, sir, your obedient servant,

"R. Miles."

The Council then adjourned to its Monthly Meeting on the 6th March.

Society of Arts: *Feb.* 20.—An interesting paper on the Natural History of the Alpaca was read by Mr. George Ledger, brother of the gentleman who has so laboriously, and at length successfully, exerted himself to introduce the Alpaca into Australia. We make a few extracts from the report in the Journal of the Society:—

The Alpaca.—The Alpaca stands about 4 feet in height and is of inferior size to the Llama, the size of a full grown deer, producing a much finer and longer fleece, superior to that of the sheep in length and softness, averaging 7 to 9 inches, and sometimes it is procured of an extraordinary length. The fleeces when annually shorn, range from 7 to 10, 11 and 12 lbs.

To Mr. Titus Salt, of Bradford, must undoubtedly, be awarded the high praise of finally overcoming the difficulties of preparing and spinning Alpaca wool. Dating from the year 1834, when the importation of Alpaca wool sprung up as a permanent branch of commerce, the demand has been a growing one, the quantity imported being, in 1834, 5700 lbs.; in 1840, 1,650,000 lbs.; 1850, 1,652,295 lbs.; 1859, 2,501,034 lbs. In 1836, the price was 8*d*. per lb. During the last 10 years, the prices have fluctuated considerably, from 1*s*. 8*d*. per lb. to 3*s*. 9*d*.

I will not here enter into a discussion of whether, under favourable circumstances, the Alpaca might not be acclimatised in some parts of this country. I am rather inclined to the opinion that when we know more about it, and its peculiar habits and wants, it perhaps may. I am afraid the main cause why it has not, and perhaps will not, thrive with us, is the humidity of our atmosphere, and dampness of our soil, as well as the unsuitableness of our Grasses for its sustenance. Its favourite food in its native country is the Ichu or Ycho, a rushy kind of Grass, of which it is immoderately fond, and which I believe is not found in this country.

Many animals had been exported, and in 1844 the British Consul at Arica was requested to send home 16 Alpacas for her Majesty Queen Victoria, eight of which were shipped on board a vessel-of-war, and eight were brought to Liverpool by the Octavia. The day after their embarkation, General Yguam (then prefect of the department of Tacna) was perfectly furious at their having been placed beyond his reach, and raked up an old decree of 1829, strictly prohibiting the exportation of Alpacas under very severe penalties, but which had remained a dead letter, seldom, if ever, put into operation, and the existence of which was almost unknown, and stopped the exportation of a further flock of 40 Alpacas intended for Germany, appealing to the government at Lima to support his act, which resulted in a decree of Congress, April 5, 1854, prohibiting the exportation of Alpacas in all the ports of Peru, imposing very severe penalties on those caught infringing the law, which has been strictly enforced up to this day.

This decree has not allayed, as it could not allay, the desire to possess them; opposition often becomes the parent of determination, and when a thing is denied to us we often attach a greater value to it than it deserves, and become more intent on its possession, even when it is not worthy of the efforts we make to obtain it.

Mr. Ledger's enterprise and perseverance were then illustrated by an account of the almost romantic adventures through which for years he went in carrying out the determination to export a flock to Sydney.

At length, in July, 1858, 322 animals were shipped at Copiapo on board the Salvadora, of 750 tons. Respecting the manner in which these animals were got away, my brother says, "In no way have I infringed a single law of either Peru or Bolivia—to break or infringe a law or decree of a Government is one thing, to evade the intention is another thing. The decrees promulgated state that it is illegal to drive Alpacas within a distance of 40 leagues of the seashore, and the penalty for so doing is the loss of the animals; and every person found with them, and the owners although not with them, are condemned to 10 years' labour in chains on the Chincha or Guano Islands. To smuggle Alpacas out of Peru, if successfully accomplished, could be done in 20 days. To avoid being amenable to such law, is why I took such a round-about-way as getting the animals first into the Argentine provinces, and then into Chili for embarkation, in neither of which countries do such restrictions exist."

On the 23d November, 1858, this flock, consisting of 276 animals, arrived at Sydney, and were immediately landed and temporarily located in the Government domain. I find, by an official report from my brother to the Secretary for Lands and Public Works, dated 16th April, 1859, that the flock then consisted of:—

46 Male Alpacas, pure breed
38 Female Alpacas, pure breed.
110 Female Llamas.
27 Females, cross-bred, between Alpaca and Llama, in first generation.
11 Females, cross-bred, between male Alpaca and female, from first cross.

232 Carried forward.

232 Brought forward.
5 Females, cross-bred, between male Alpaca and ... from second cross.
40 Lambs of first, second, and third cross.
4 Male Vicunas.
1 Female Vicuna.
1 Male cut Llama, carrier.

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All much improved in condition since landing.

After a short sojourn at the town domain, the ... was sent to Liverpool, about 20 miles from S... until a permanent locality could be fixed upon for ...

Before the animals were sent to the locality selec... them, about 200 were shorn, in November, 1859. ... produced was about 6 cwt. of three sorts, Alpaca, Lla... cross bred, and valued (by sample) by Messrs. Foster ... of Bradford, at from 15*d*. to 2*s*. 2*d*. per lb., the objectio... made to the shortness of the staple.

My brother writes to me:—"So far the animals are ... well and augmenting in number. The lambs are ... decided success, that is those born in the colony." [... present condition, see a paragraph in p. 106].

Results.—In endeavouring to estimate what ... results to our colonies of the introduction of the Alp... look at what has followed from the introduction of ... In January, 1788, the population of New South W... 1030, and its stock consisted of one bull, three cow... stallion, three mares, and three colts. (Fairfax.) ... Australia had no sheep of its own. Captain MacArthur ... persuaded that the introduction of the Merino sheep into ... Colony would be of the utmost consequence, and in ... succeeded, with the aid of Captain Waterhouse, of H.M. ... in procuring a small flock of three rams and five ewes from ... Cape of Good Hope, originally brought from Holland, ... had the satisfaction of seeing rapidly increase, their ... augment in weight, and the wool very visibly impr... quality. It is from the produce of this flock, and one ... others similarly acquired and improved, that we now ... from Australia the immense quantities of the very ... wool upon which our manufacturers so much rely. In 1... public and private stock of sheep in the Colony amoun... 1531; in 1801, to 6757, which is 633 over and be... calculation of Captain MacArthur on the basis that ... would double themselves in two and a half years.

The quantities of sheep's wool shipped from New S... Wales, in various years, are as follows:—

	lbs.		lbs.
1807	245	1830	[illegible]
1815	32,971	1835	[illegible]
1820	99 415	1851	[illegible]
1825	411,600	1859	[illegible]

I have already shown you how the exportation of Alpacas ... from South America has of late years increased; I now ... the following calculation, made on the probable growth of ... Alpaca flocks in 50 years—a long time in the life of a man, ... short period in the history of a people:—We commence in ... with 200 females, 50 males = 250. There will be, after deductio... made for wear and tear, accidents, &c., 3250, as per abov... calculation. I further deduct 25 per cent. of total every perio... of ten years, thus leaving in round numbers 2500; at ... rate, in

20 years, there would be		20,000
30 ,,	,,	160,000
40 ,,	,,	1,280,000
50 ,,	,,	9,760,000

At 7 lbs. wool each, 68,320,000 lb., at 2*s*. per lb., 6,83...

From this it will be seen that, making deductions ... liberal nature, according to the present ratio of increase ... will be in 50 years 9,760,000 head, the wool of which at ... lb. will amount to the sum of 6,832,000*l*. per annum.

Notwithstanding the enormous draught constantly ma... the flocks to supply the daily demands for food, notwiths... ing whole flocks were consigned to the boilers by their ... stricken owners, notwithstanding disease, caused and ... more destructive by desertion, swept away large num... they are not now diminished, but show a steady in... A fortunate climate and an intelligent devotion to the ... of sheep has prevented so great a calamity. Regions ... thought barren, are now showing abundant pasturage ... tion, hitherto unthought of, has supplied, and in the ... will supply, the only deficiency of which the country ... complain. The Alpaca, living to the age of 14 to 16 years ... not, like the sheep, having daily demands upon its ... for the purposes of food, is more likely to fulfil the calcu... I have given to you. By feeding on a coarser pasturage ... the sheep, it will benefit the owner of land, by bringing ... use portions hitherto unproductive.

Farmers' Clubs.

Hexham: *Agricultural Education.*—The Rev. C... topher Bird, of Chollerton, said—"My first obse... is, that the young agriculturist ought to have ... enlarged and liberal education than that whi... at our ordinary schools. It ought to be ... deeper and broader foundation, and built wi... materials—both grammatical and mathematical, ... be capable of carrying a higher and more finish... structure. Here you will be inclined to say, ... we not perform our duty very creditably with ... sent education? Yes; but I think you would ... better with a superior education—better for you ... individually, better for your own class, and bett... the community in general. I do not think you ... that relative social position, nor exercise that p... influence, nor give to agriculture that dignity ... you ought to, considering the capital you emplo... abilities you exercise, and the supreme importa... your occupation. For if it be the duty of the ... facturer to provide clothing and furniture, of the ... chant to distribute them—if it be the duty of ... physician to take care of your health, of the lawyer ... guard your property and person, of the architec... build your house, and of the clergyman, so far ... can, to guide your faith, it is your office to pro... plenty of wholesome food for the whole commu... And if you fail in your department all the others ... whole fabric of society—will fall to the ground ... perish. What reason, then, can be given why ... agriculturist should not feel himself upon a level ... any of these professions, except that his educatio... been left short? Then how comes it to pass that ... manufacturer and merchant should exercise so ... greater political influence than the agriculturist? ... capital embarked—the labour and care exerted—...

number of hands employed, directly and indirectly, by the plough are two-fold more than are put in motion by the loom; and yet the manufacturer and merchant exercise double the political influence, which you are often made to feel by the distribution of the taxes. I can see no other cause for this than that the sons of merchants and manufacturers and of professional men have a more enlarged education, and have more of that power which general knowledge gives. They feel themselves more equal to take a prominent part in political discussions, and are better qualified to gain a hearing from the public.

As to the advantage to be derived for your own occupation, I have to observe, that every one of the natural sciences might very materially subserve the purposes of agriculture. As to mechanics, it would seem that the knowledge of the first principles of this science were a *sine qua non* of the agriculturist—who has so much of his capital invested, and his power employed, in moving heavy bodies in every direction and angle to the horizon. As to chemistry, it is felt more and more to be a necessary for the agriculturist. It would enable him to judge of the qualities of food and manures he may have to purchase, and of the medicines he may have to administer to his cattle. It is scarcely necessary to point out to the cultivator, the usefulness and even necessity of knowing something of geology and its kindred science mineralogy. Generally the soil will partake of the qualities of the stratum which underlies it, or if some of those disturbances which from age to age have varied the external crust of our earth, have covered the rock with an adventitious soil, it will generally be found to have been washed down from the surrounding hills. Then, as to botany, it would seem that the study of that science would be almost forced upon the agriculturist by his daily occupation.

Well, you will begin to ask, do I intend to comprehend all those sciences within the scope of a schoolboy's education. No, not one of them. I know something of the kind is attempted at some schools—but that is mere delusion—throwing dust in the eyes of parents, and impediments to the progress of the children. The business of children of the age I am speaking of ought to be able to acquire that preliminary knowledge, which will enable them to pursue with ease any of those natural sciences they may have occasion or taste to cultivate, when entered upon the practical duties of their profession, be it agriculture or any other business. This brings me back to the observation I have already made that the education of the agriculturist ought to be laid deeper and broader, and of better material, and so capable of bearing a higher and more polished superstructure. The materials will consist mainly of two elements or ingredients—the one mathematical, the other grammatical, or, if you please, one literary, the other scientific. Now, let us see what is the course pursued at present in our second-class schools. Reading and writing English — common arithmetic, including weights and measures—Practice, the Rule of Three, and several other rules, such as Interest, Rebate and Discount, Tare and Tret, Allegation, &c., depending on the principle of proportion, to which we may add Fractions, vulgar and decimal, and Extraction of Roots. After which they proceed to mensuration, and other parts of practical mathematics. No very bad bill of fare you will say for the practical business of life—and I agree with you. But my objection to it is that the foundation is neither broad nor deep. It goes upon a narrow system of accepting blindly as true the results of other men's inductions, just as presented to them in arbitrary rules. It is not therefore, a scientific, but a mechanical education—servile, not liberal. Every piece of knowledge ought to be useful in itself, and also be the support of further knowledge. According to this after the pupil has mastered the first rules in arithmetic, I should advise his proceeding to the learning the management of Fractions, vulgar and decimal. Then turn back to the Rule of Three and Practice, which he will be able to work out as problems with some degree of understanding, and to their fractional detail. Then instead of spending two or three years over those rules, which depend upon the principle of proportion, such as Barter, Fellowship, Interest, Rebate and Discount, Exchange, &c., processes provided for specific trades, and instead of spending another couple of years upon Mensuration and other sorts of practical mathematics, I should introduce the student to the elements of theoretic and scientific Geometry, and the first rules of Algebra. He will here bring into full play the reasoning faculties, and be able to demonstrate those general truths upon which the practical rules are based. He will be able then to analyse any case that may occur, and he will not have in future to depend upon his memory for the accuracy of his calculations, but he will be able to work out the conclusion in his own mind, and almost intuitively see the conclusion at which he would wish to arrive. A couple of years of steady application, with moderate abilities, will bring him to a competent knowledge of plane geometry, including trigonometry and conic sections and algebra to the solution of a quadratic equation; and this he will accomplish in as little time as he would be working those other rules which have little to do with the reasoning faculty, and which he will now be able to work out without any regard to their specific rules. He will also be in a condition to understand those natural sciences to which we have before referred; and if his opportunity and taste conspire, he may go forward to the utmost height of mathematical science.

These are the observations I put before you on the mathematical part of education. I now venture to draw your attention and invite your remarks on the grammatical and literary side. If I have carried you with me in my remarks on the necessity of a more advanced education, I hope you will not be unwilling to hear me patiently in what I have to say on this part of our discussion, and I will at once announce to you that my purpose is to persuade you that in order to be perfect masters of your own language, and especially to consult with ease and satisfaction scientific authors, it is almost a necessity, at least it is a most important advantage, that you should be acquainted with some one language besides your own, and that language should be either that of the Roman, or some of what are called the Roman nations, from whom you have derived all your literature, science, and arts, and for all scientific purposes, your very language itself. Some advise the young student to adopt French for that purpose; and if you had any immediate purpose of conversing in that language, it might have the preference. But, otherwise, I have no hesitation of recommending Latin in preference to the agricultural student, on the principle of laying the foundation deep and broad, as it is the foundation of all the languages of South-Western Europe. You will say, what has a farmer to do with Latin? If you will have a little patience, I will hope to show you that he has something to do with Latin; in fact, that every second word he reads or speaks is Latin, only squared down at the point to an English shape. The foundation of our language is Saxon, the language which an uncivilised and barbarous people brought with them from the northern bank of the Rhine and the shores of the Baltic, in the fifth, sixth, and seventh centuries. They had expressions for all visible obvious objects—as head and foot, house and home, sun and moon; but the moment we begin to speak of nerves, arteries, veins in ourselves, or columns, arches, cornices, &c. in architecture, we begin to speak Latin. All the science and literature of the Saxon age was conveyed in the Latin language; and all the histories that have come down to us were written in Latin. Perhaps after this plain account of matters, you may not think it quite absurd, by way of laying the foundation deep and broad, that I should recommend the agricultural student to lay the foundation of his education on the knowledge of that language, in which all science is communicated. For all the terms of these sciences are Latin. Now, I have already ventured to say that no one will be able to perfectly understand the English language, at least to write it as it is written by our best authors. I will now venture to say more, that the agriculturists in general will never acquire even a moderate knowledge of those sciences which contribute so materially to the forming of an enlightened agriculturist, except Latin form a part of their school education. But if they have carried on their education to such a point as conic sections in mathematics, the understanding a Greek or Latin author, all the depths of science are opened to them, and all the elegancies of literature, according as they have taste, and talents, and opportunities, and leisure to cultivate their intellectual faculties.

In the course of the evening Mr. Grey of Dilston referred in the following terms to his connection with the Society and the county. He said:—

It was within a few months of 28 years since he came to live among them. That was a large portion of any man's active life; and during that period he believed his life had not been one of idleness. But it was now forced upon him to say that he felt he was coming to that time when he should feel called upon to withdraw from some of those duties not immediately connected with his position and appointment in this county. They would recollect that when he accepted the office he still held as manager of the extensive estates belonging to that important institution, the Greenwich Hospital, there were many reforms and amendments entered into as affecting the various institutions of this county. Such reforms, it was determined, should include the management of the funds of the Greenwich Hospital. It was determined, then — they would excuse him being, for this occasion, rather egotistical, thinking it needful as he did to call their recollection to some of the occupations in which he had hitherto been engaged—it was determined that the labours which had up to that time been divided between two receivers should in future be performed by one, and that the establishment should be reduced in the number of clerks and bailiffs, from three to four to one in each department. There happened to be at that time two men, both eminent in the government of this country—men with whom he had had the privilege of being intimately and confidentially acquainted. The late Earl Grey was then Prime Minister—a man who was the light of his own age as he would be looked up to as the light of future ages in this country. Earl Grey proposed that he (Mr. Grey) should undertake this labour under the changed circumstances. There was another eminent man—the then Chancellor of the Exchequer—Lord Althorpe, who, for his distinguished simplicity and goodness of heart was known as "honest Lord Althorpe." With Lord Althorpe, also, he was intimately acquainted; for he was a great promoter of the improvement of agriculture, and himself a great breeder of cattle. He (Mr. Grey) had spent many happy days with him in discussing those subjects with him at his own home and he had twice honoured him (Mr. Grey) by being his guest at Millfield Hill, when, making himself acquainted with the agriculture of the Border counties. He (Mr. Grey) hesitated greatly at the proposal then made to him, conceiving that he had not the capacity that would be required from him. Lord Grey said to his colleagues, on that memorable occasion, "I can answer for his integrity and industry, and we may leave his capacity to future proof." Lord Althorpe said, "Grey, you must take it, because you cannot do without a great deal of work; and if you go there you will not sleep on a bed of Roses. I hope it will be good for you—I am sure it will be good for the public." He felt some alarm, looking at the great extent of the property—beginning at the mouth of the Tweed, and ending on the Cross Fell in Cumberland, with all its mineral and agricultural productions. He did, however, undertake it, and the result they all knew. It did not for some time give him the opportunity almost of resting on a bed of any kind, much less a bed of Roses. But he worked through, and by the support of the public of this county, he had retained the office up to this period of his life. His friend on his right (Mr. Bird) had told them that he appeared before them at a certain age. All men were not gifted with the same vigour of mind and constitution. Mr. Bird's age was greater than his; but through the operation of domestic and other circumstances he felt himself less adequate than he had hitherto been to undertake many of those duties he had been in the habit of undertaking, or which were hastily imposed upon him. There were duties which were not merely those which men engaged to perform—duties which a man owed to society, as well as to his own appointment and the situation in which he was placed. These duties he had endeavoured in some measure to fulfil. He had been the cause of an agricultural society being formed on Tyneside; for when he came first to this county he saw that things were capable of being much improved and reformed. There was a slovenly system of harvesting, attended with great waste, both of corn and straw, and consequently, also of manure. His first plan was to give the hospital tenantry premiums for the best harvested crops; and he was happy to say that now, through the good sense of the people, who saw that their own interest lay in progress and the advancement of knowledge, there was not a district where the corn was better reaped or more economically harvested. He saw a languor and backwardness in the breeding of stock, and especially a great neglect of that most beneficial and productive department, the breeding and keeping of sheep stock. He then stimulated the tenantry by getting them to enter into sweepstakes, and that soon led to the forming of a society which up to this time had held a respectable place among the local societies of the land—a society which had for its secretary a young gentleman now present, who had done it and himself great credit by the production of that essay for which he had just had the pleasure of presenting him the premium. These things were not only connected with the tenantry of the Hospital, but were of influence on the country generally, and would bring benefit in the promotion of agriculture in other districts. He had also endeavoured to take his part in some other duties. He had acted as trustee for various turnpike roads, as a commissioner of taxes of all descriptions, and as a magistrate of this district. These were duties which occupied a great deal of time and attention, and if he felt called upon now to withdraw from some of these, and devote his energies more exclusively to that special institution for whose interest he had been placed in this county, he hoped to be held excused by those to whom he now addressed himself. Although he had not given in any formal resignation—although he did not wish to take the society unawares, yet before this time next year they would have exercised their power of electing another President, and he hoped to have the pleasure of being there and assisting, as he would be glad to continue to do as long as his health and strength would allow.

WIRKSWORTH.—As the General Quarterly Meeting on which the ploughing match connected with this Club is usually held, fell on Shrove Tuesday (Wirksworth Fair day), the Committee decided to postpone the meeting for a week, and well they did so, as a more glorious morning could not have been wished for than Tuesday, the 19th inst. In reply to the Secretary's circular, 11 good men and true entered the lists, all came to time, and having drawn for choice took up ground as under:—

	Owner.	Ploughman.	Maker of Plough.
1.	Mr. Thos. Wooliscroft	Thurstow Johnson	Ride, Cowers-lane, Belper.
2.	Mr. John Hole, Dethuk	James Hadfield	do. do.
3.	Mr. Joseph Bowmer	Reuben Conway	do. do.
4.	Mr. Richard Malin	George Malin	Stubbs, Derby
5.	F. Hurt, Esq.	R. W. Walton	Howard, PP.
6.	Messrs. Walker	George Ward	Lucas No. 7
7.	F. Hurt, Esq.	Samuel Morrele	Hornsby H
8.	Mr. Richard Malin	Joseph Malin	Ride, Cowers Lane.
9.	Mr. Thos. Wooliscroft	Samuel Kinder	do. do.
10.	Mr. J. Wall	George Peat	do. do.
11.	Mr. J. Wilmot	William Wilmot	Newham, Derby.

After a spirited competition, and all having been announced fair, the Judges, Messrs. Yeomans of Wakebridge, Cupit of Wingfield Park, and W. Spencer of Ashleyhay, carefully inspected the ploughing and awarded the prizes as follows, viz.:—

			£	s.	d.
1st Prize	to No. 11	Wm. Wilmot	2	0	0
2d ,,	to No. 2	Jas. Hadfield	1	10	0
3d ,,	to No. 5	R. W. Walton	1	0	0
4th ,,	to No. 4	George Malin	0	15	0
5th ,,	to No. 6	George Ward	0	10	0
6th ,,	to No. 7	S. Morrele	0	5	0

Refreshment was kindly provided for the ploughmen, judges, &c., by F. Hurt, Esq., and liberally distributed by Mr. Campion.

The members and their friends adjourned to the Red Lion Hotel, Wirksworth, and did duty to an excellent ordinary, the Vice-President of the Society, Mr. Cresswell, of Idridgehay, occupying the chair in the absence of the President, Mr. Hurt, who we regret to hear was too unwell to attend. Mr. Parkin, the Secretary, occupied the vice chair.

After dinner the ploughmen were called into the room and the prizes given by the Chairman with a few appropriate words of encouragement and advice to each. On the health of the judges having been proposed, Mr. Cupit complimented the members of the Society for having men in their service who could make such good work as they had seen that day; he observed the ground was somewhat stony in places, which went considerably against the ploughmen making the work appear to advantage, yet he must say out of 11 drafts six of them at least were amongst the best he had ever seen; he hoped the unsuccessful would take courage and try to win at the next match.

Mr. Yeomans, another of the judges, humorously congratulated the men in being in the service of masters who were members of the Club, and who allowed them the privilege of testing their abilities and having the opportunity of seeing good work. He encouraged the unsuccessful ones to be steady and practise at home in readiness for the next match; not to be discouraged by losing once, twice, or thrice, but reminded them of Bruce and the Spider, that if they lost 12 times they might win the 13th. He also said that it was his privilege to act as one of the Judges at one of the Society's first matches, and the improvement that he had seen that day was very encouraging. He could not imagine so marked an

improvement could have taken place. He wished the Society every success.

The health of the Chairman, "Success to the Club," and several other toasts having been drank, the meeting broke up.

Miscellaneous.

Locomotives on Common Roads.—In anticipation of the adoption and use of locomotives on turnpike and common roads, for which the general turnpike and highway and local Acts make no provision, the Bill intended to regulate the use of them provides for the levying of tolls by uniform general provisions, the weighing clauses in the general turnpike Acts not having been framed in anticipation of traffic by locomotives. Certain enactments of the Commercial Roads Continuation Acts are repealed, and the weight on each pair of wheels is not to exceed one ton and a half. The use of locomotives destructive to highways or dangerous to the public is to be prohibited by the Secretary of State, so as to prevent excessive wear and tear. The weight of locomotives over county, parish, or suspension bridges is not to exceed 15 tons, and any damage is to be made good. The locomotives are to consume their own smoke. Two persons are to drive and conduct every locomotive, and red lights are to be fixed conspicuously in front of locomotive and wagons one hour after sunset and one hour before sunrise. The speed of locomotives on high roads is not to exceed 10 miles an hour, and through towns, cities, or villages, five. No locomotive is to be used within the city of London more than 7 feet in width and with wheels 6 inches wide.

STATE OF THE WEATHER—BERKSHIRE.

For the week ending February 28: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain.	Wind	Barometer.
		Max in Sun.	Max. in shade.	Min.	Mean.				
		Degs	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	22 ..	52.6	49.8	36 0	43.6	40.5	0.16	S.W.	29.47
Saturday	23 ..	61.4	50.0	40 0	47 9	41 0	0.04	E	29.40
Sunday	24 ..	44.4	42.2	38.4	40 8	41.5	0.41	N	29.70
Monday	25 ..	44.2	42 0	32 4	37.5	41.0	0.02	N.	30 07
Tuesday	26 ..	48 0	40 0	29.6	37.0	40.0	..	W	29 98
Wednesday	27 ..	57.0	44.2	26 0	38.3	40.0	..	S.W.	29.90
Thursday	28 ..	61.2	44.4	34.6	43.5	40.0	0.09	N.W.	29.58

The readings are taken at 9 A.M. on the days named; and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Calendar of Operations.

FEBRUARY.

Isle of Ely: *Feb.* 19.—The variable character of the weather still continues. One week we have mild and genial weather, prompting the belief that spring is near, and another week we have a return to cold and snow, reminding us that it is still winter. The cold seems reluctant to leave us, and we fear it may linger long into the spring; we have hitherto had but little thoroughly drying weather, the mild and spring-like days have not been searching and bracing, but generally have been damp, with a moist heavy atmosphere. The high lands will scarcely work well yet; they are well pulverised by the frost, but require to be a little drier on the surface before the horses go upon them. The growing Wheats are only moderate in many instances. On Clover leys and on wet high lands generally the plant is very thin and sickly. The slugs have eaten the former, and the water has decayed the seed in the latter. On all these lands the prospect is anything but flattering. Upon the fen soils too, the plant is greatly injured and promises badly. These lands were very wet when the severe frost set in, which made them more susceptible of influence by the frost, the consequence was, the action of the frost was so great that it raised these lands so suddenly and so considerably that the stem of the Wheat was broken—completely snapped asunder, through the lifting up of the land, and the plant is very seriously thinned, and in some instances will probably require re-sowing. Our fen prospects are therefore anything but encouraging, and our fen farmers are beginning to despair. They have already had three decidedly bad harvests in succession, and are now threatened with a fourth; but we trust their fears in this instance may not be realised. It is premature to judge of a Wheat crop yet; but still, where the plant is largely lost, it requires strong faith to anticipate an abundant harvest. Horses now find full employment in preparing the land for the reception of the spring seed. Beans are already being planted, and many are being sown over the plough beam. With a few fine days, oat sowing will be commenced; most of the land designed for this crop is either already ploughed or will be in a very few days. Keeping is tolerably plentiful. Mangel holds out very well, and, with an average spring for Grass, will last through. Store Cattle are dearer, with a brisk trade. Sheep are scarcely as high as they were; they made a rapid advance a few weeks since, which they have hardly maintained. The Corn trade is as languid and depressed as it can be. It is a misnomer to call it a trade. Nobody cares to buy our low fen qualities, and, where sales are effected, prices are wretchedly bad. Better condition might improve the demand probably, but in this respect "hope long deferred makes the heart sick." —*Your Fen Reporter.*

Notices to Correspondents.

Hurdles: *A Country Subscriber* asks for the address of the firm which makes Oak hurdles by machinery.

Lois Weedon: *D A J.* The completest account of the system is in the book you refer to. The "latest" is the annual edition just published of the "Word in Season"—mentioned last week.

M. Wurzel: *Staines.* You must not depend wholly on any artificial manure. A half-dressing at least of farmyard dung must be applied, and with it some fertiliser containing some ammonia and a good deal of phosphate. Probably the so-called Phospho-Peruvian Guano, 4 or 5 cwt. per acre, will answer your purpose.

Sheep: *J B.* The disease is the rot or cothe, which has destroyed a vast number of sheep this year. It is fully treated in a late number of this Paper. The cause is the wet season.

Superphosphate: *A L.* You had better not mix the superphosphate with lime. The best plan of all is to distribute it by the water drill. To add lime would be to make an ordinary phosphate of it before its mixture with the soil, which is not desirable.

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PLYMOUTH SEED COMPANY.—CARRIAGE ARRANGEMENTS.—All Orders for Seeds above 1*l.* will be delivered FREE OF CHARGE to any Railway Station between Plymouth and Paddington; and to all Stations on the Cornwall, Tavistock, and North Devon Railways.

All orders above 2*l.* FREE to any Station on the BROAD GAUGE RAILWAYS, or to any Market Town in Devon and Cornwall; or to Cork, Dublin, Waterford, Limerick, Belfast, and Liverpool by Steamers; and to Guernsey and Jersey by Traders.

All Orders above 5*l.* will be delivered FREE OF CARRIAGE to any RAILWAY STATION IN ENGLAND AND WALES; and to any Steam Port in England, Wales, Scotland, or Ireland.

All heavy articles, such as Grain, Tares, Clover, Seed Potatoes, &c., are exceptions to the above Rates.

Agricultural Implements and Manures are delivered only at the Railway Stations and Ship's side at Plymouth, except under Special Agreements.

Catalogues and Price Currents can be obtained for each Department, and every information given on application at

The Company's Offices, Union Road, Plymouth.

Address: Plymouth Seed Company, Plymouth.

PRESENT PRICES OF FARM SEEDS.

MESSRS. SUTTON'S PRICES will remain UNALTERED until the 31st of March, after which time Mangel Wurzel Seed, and perhaps some other articles, must be raised. PRICED LISTS gratis and post free.

Royal Berkshire Seed Establishment, Reading.

THE FARM AND THE GARDEN.

NEW SEEDS, CARRIAGE FREE, from the

WEST OF ENGLAND SEED ESTABLISHMENT AT PLYMOUTH,

CONDUCTED BY MESSRS.

L AMOUREUX, CLARK, AND CO.,

The RETAIL PRICED CATALOGUE, containing every particular in connection with the Business, forwarded gratis and post free on application.

Address: Lamoureux, Clark, & Co., Plymouth.

AGRICULTURAL, VEGETABLE, & FLOWER SEEDS.

EDWIN HOLLAMBY begs to inform his Friends and Patrons that his DESCRIPTIVE PRICED CATALOGUE of the above for 1861, containing the novelties of the season, and the approved old varieties, is now ready, and may be had gratis and post paid on application.

Seed Establishment, Parade, Tunbridge Wells, Kent.

SEEDS CARRIAGE FREE.

AGRICULTURAL SEEDS of genuine stock and first-rate quality. KITCHEN GARDEN SEEDS of every description. GERMAN FLOWER SEEDS, imported direct. John Bell's CATALOGUE of the above is now ready, and will be sent free to any address.

Seed Warehouse, 10 and 11, Exchange Street, Norwich.

SEED CORN FROM THE CHALK.

RAYNBIRD, CALDECOTT, AND BAWTREE supply carefully selected and screened samples of all the most approved varieties of Wheat, Barley, Oats, &c.

Address, Basingstoke, Andover; or 89, Seed Market, Mark Lane, E.C. Samples and prices Post free on application.

RAYNBIRD, CALDECOTT, AND BAWTREE, Seed Merchants and Growers, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E C.

Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.

Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

MANGEL WURZEL AND TURNIP SEEDS.—The undersigned can confidently recommend their Stocks of the above SEEDS, crop 1860, grown from selected and transplanted Bulbs. Terms on application.

James Fairhead & Son, Seed Growers and Merchants, Lewisham, Kent; London Establishment: 7, Borough Market, S.E.

TO SEEDSMEN.

A BARGAIN OFFERED, viz., 35 quarters of ITALIAN RYE-GRASS SEED (weighing 17 lbs. a bushel), at 26*s.* per quarter, cash; also 30 quarters of Prime Ditto, at 28*s.* 6*d.* per quarter (16 lbs. a bushel).—Apply early to Thomas Jopson, Post Office, Kendal.

TO THE TRADE.

CARROT.—Early Horn, 1*s.* 6*d.* per lb., 7*l.* per cwt. Long Orange, 1*s.* 3*d.* per lb., 5*l.* 10*s.* per cwt.
CRIMSON BEET, 7*l.* per cwt.
DRUMHEAD CABBAGE, 1*s.* 3*d.* per lb., 6*l.* per cwt.
CHAMPION OF ENGLAND PEAS, 8*l.* 10*s.* per quarter;
BRITISH QUEEN ditto, 28*s.* per bushel.

The above Prices are strictly Cash.

Apply to George Sanders, Seedsman, Maidstone.

TO THE TRADE.

SWEDES.—Epps' selected; Marshall's Purple-top, Skirving's, and Matson's.
WURZEL.—Orange and Yellow Globe, Long Red.
CARROTS.—Long Orange, Early Horn and White Belgian.
BEET.—Dwarf Crimson, selected fine stock.
DRUMHEAD CABBAGE.
PEAS.—British Queen, Champion of England, Burridge Eclipse.

W. J. Epps respectfully offers the above at very moderate prices. The destruction of the forthcoming crop through the severe weather will tend to advance the prices considerably during the season.—Maidstone, March 2.

REIGATE SILVER SAND, best quality for Florists, 16*s.* per ton. Less quantities 1*s.* 6*d.* per bushel. Delivered five miles or to any London Wharf or Railway. Sacks for Sand 1*s.* 6*d.* each, or on hire 6*d.* each (5 hold a ton). Kentish, Hampshire, and other Peats, Yellow Loam, Leaf Mould, and Tan, in large or small quantities. Sphagnum Moss for Orchids.—John Kennard, Purveyor to Her Majesty, Swan Place, Old Kent Road, London, S.E.

GENUINE ROLL TOBACCO CLO
WARRANTED EQUAL IN STRENGTH TO TOBACCO

JOSEPH BAKER, 10, Gough Square, Fleet St. having dealt upwards of 20 years in the above, com- mend it as the best article for destroying the Fly. 1*s.* 4*d.* over 10 lbs., 1*s.* Post-office Orders payable Fleet Street

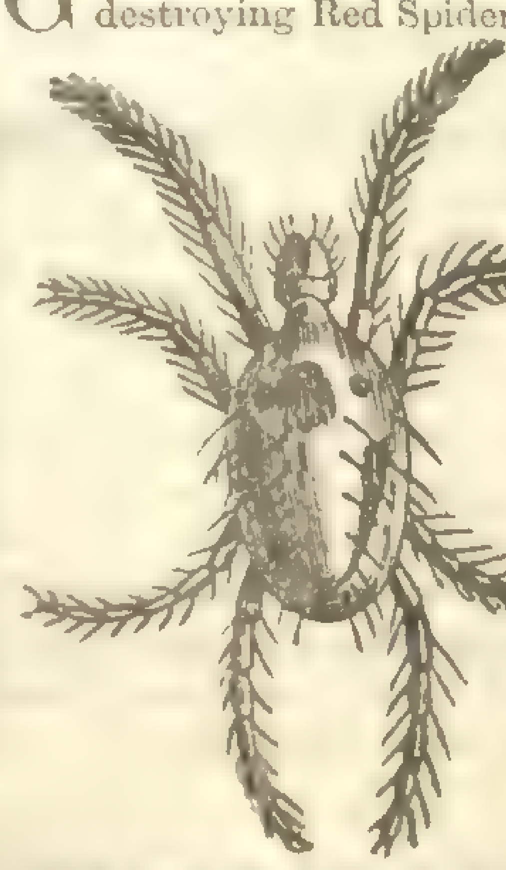
GENUINE TOBACCO PAPER FOR FUMIGA

H. APPLEBY (Foreman to Messrs. Ivery Nurserymen, Dorking), has now a good supp above on hand in 4 lb. packets, 1*s.* 3*d.* per pound. monials see *Gardeners' Chronicle*, January 5, 1861, page

FOR SMOKING GREENHOUSE

NEAL'S PATENT APHIS PASTILS, wh with a Candle, save all trouble, destroy all In are already used by some of the leading Gardene obtained of the principal Seedsmen and Nurserym packet.—Manufacturer and Patentee, J. Neal, Edg Birmingham. Trial packets, 1*s.* each.

GISHURST COMPOUND, for preven destroying Red Spider, Mealy Bug, Mildew, Th



Green and Brown F rican Blight, Ants, Bed Bugs, contains terious ingredient, is mended in Gar *Chronicle*, "Cottag dener," *Field*, Mr "Orchard House," tion, and Mr. Hogg's deners' Year Book for

Full directions for particulars of the ex of many great G authorities are enclo the boxes of Gishur are supplied retail any Nurseryman an man at 1*s*, 3*s.*, and each, wholesale, by PATENT CANDL LIMITED.

If the smell be disliked, make the solution 48 hours be

FUMIGATING AND SYRINGING.

GRIFFITHS AND AVISS, TOBACCONISTS, Co call attention to their TOBACCO PAPER. It is in use, safe in application, altogether effective in the de tion of Green Fly, Black Thrips, &c., nominal in price, per dozen pounds (not including carriage), sent to any p the kingdom on receipt of Post Office Order. To those Trade a liberal discount on 28 lbs. and upwards. The follo practical gentlemen have submitted it to every kind of ord and bear testimony it is all we represent:—

Mr. Charles E. West, the Earl of Denbigh, Newnham P
Mr. Wm. Oliver, the Earl of Craven, Combe Abbey
Mr. A. Henderson, His Grace the Duke of Sutherland, Tre
Mr. Wm. Pool, the Earl of Aylesford, Packington Hall
Mr. John Jennings, the Earl of Derby, Knowsley Park
Mr. Thomas Pond, the Viscount Hood, Whitley Abbe
Mr. Geo. Tranter, the Hon. *Granville D. Ryder*, W Hemel Hempstead
Mr. Geo. Bennett, J. Beech, Esq., Brandon
Mr. Jas. Knackston, J. R. West, Esq., Alcot Park
Mr. W. H. Mountford, H. R. Hughes, Esq., Kinm St. Asaph, North Wales
Mr. Peter Conlon, C. Webb, Esq., The Gardens, High Hoddesden
Mr. Francis R. Kinghorne, Nurseryman, Seedsman, an Richmond, Surrey
Mr. John Reeves, Ladbroke Nursery, Notting Hill, W.
Mr. John Jennings, Nurseries, Shipston-on-Stour
Mr. Edward Perkins, Nurseryman, Seedsman, and Leamington Nursery
Mr. John Ogden, Nurseryman, Seedsman, and Florist
Messrs. S. Perkins & Sons, Nurserymen, Seedsm Florists, Coventry

_ Agents Wanted. Nurserymen and Florists pre

N.B. Cast Fumigating Pots, Tobacco Water for and Tobacco Juice for Sheep Dressing.

IMPROPER FOOD, occasioned through im Manuring the Soil, is admitted to be the cause Sheep. Mr. Thorley will be happy to forward fu relative to the use of his invaluable Condiment as to this awful Malady, which is now scouring the c Members of the Royal Agricultural Society, as we farmer in the Kingdom, are invited to come Caledonian Road, King's Cross, N., and inspect the compounding of the several ingredients wh its composition.

HORTICULTURAL AGENT AND

MR. A. CHANDLER (of the late Firm & Sons, 28, Priory Road, Wandsworth Road offer his services as above. Sales of Plants and arranged, and Catalogues prepared.

PRIZE GARDEN AND CORN SCYTHE

JAMES PAYNE begs to direct the atte Farmers and Gardeners to his improved able Scythes, which have been awarded Six Prize acknowledged to be the best implements of the invented. The adjustment is neat, simple, and the workmanship first class.

Illustrated Circulars and Testimonials on applica Garden Scythes complete, 11*s.*; Corn ditto ditto. Parties wishing the above will please order Ironmonger or Seedsman, who will supply them prices, with carriage added.—Address, James Pa monger, Kirkcudbright.

GARDEN BORDER EDGING TILES

F. AND G. ROSHER beg to invite attentio varied Stock of ORNAMENTAL GARDEN EDGING TILES in Terra Cotta, Terro-Metallic ware. They present advantages over Box or Gras that they afford no harbour for slugs, &c., take up and are less expense and trouble to keep in order be had of various patterns at F. & G. R.'s premis Wharf, Upper Ground Street, Blackfriars, S., and Road Wharf, near the Canal Bridge, N.E.

N.B. Sketches of the patterns will be forwarded application. Ornamental Flower Boxes

ORNAMENTAL PAVING TILES FOR C VATORIES, HALLS, CORRIDORS, BALCON as cheap and durable as Stone, in blue, red, and and capable of forming a variety of designs. TILES, highly glazed, for Lining Walls of Kitchen-ranges, Larders, &c. To be obtained of F. & at their premises as above.

DWARF ROSES BY THE THOUSAND.

Westland Nursery, Maresfield, near Uckfield, Sussex.

WM. WOOD and SON respectfully solicit attention to their enormous Stock of many thousands of DWARF ROSES, either in pots or from open ground, at the following prices:—

	Per doz.—s. s.		Per doz.—s. s.
Dwarfs ..	10 to 15	Bourbon and China	10 to 15
Superb do.	12 to 18	Tea Scented	12 to 18
Hybrid Perpetuals	10 to 15	Do. do. in 6-inch pots	24 to 30

Extra plants presented for distant carriage. Catalogues Post-free on application.

ROSES.

JOHN CRANSTON respectfully begs to announce that he has now to offer a fine stock of Standard and other ROSES, containing most of the leading kinds, which have been principally selected during a recent journey on the Continent. The plants are strong, well grown, and such as he can confidently recommend. In consequence of the losses caused by the late severe frost, it has been found necessary to make a slight advance on the prices quoted in the general Catalogue. A list of sorts and prices forwarded on application.

Nurseries, King's Acre, near Hereford.

PINE APPLE PLACE NURSERY. EDGEWARE ROAD, W.

ARTHUR HENDERSON and CO. beg respectfully to announce that their CATALOGUE of Kitchen Garden and Flower Seeds for 1861, with a list of Garden Implements, &c., is now published, and will be forwarded post free, on application.—Also, details and particulars of New Vegetables, &c., see Gardeners' Chronicle of 5th and 12th January.

PELARGONIUMS.

JOHN DOBSON and SONS beg to invite the attention of intending purchasers of the above, who will be liberally dealt with. A choice selection sent at a moderate price. NEW CATALOGUES now ready, post free.

Woodlands Nursery, Isleworth, W.

GENUINE GARDEN SEEDS.

WM. CUTBUSH and SON beg to intimate that their PRICED CATALOGUE of KITCHEN GARDEN and FLOWER SEEDS for 1861 is now ready and will be sent gratis on application.

Every article offered can be guaranteed of the very best description and true.—Highgate Nurseries, London, N., only.

WHOLESALE CATALOGUE.

GEORGE JACKMAN and SON'S PRICED and DESCRIPTIVE CATALOGUE for 1860 and SPRING 1861, comprising Fruit Trees of all the leading kinds, new and selected Roses, fine varieties of American Plants, Choice and Rare Conifers, Evergreen and Deciduous Trees and Shrubs, and a fine Stock of Transplanted Forest Trees, &c., can be had free on application.—Woking Nursery, Surrey.

CHOICE PINKS.

YOUELL and CO. having an extensive quantity of the above, consisting of the very best show varieties by name, can supply strong and well-rooted plants at 6s. and 9s. per dozen pairs, or 40s. per 100 pairs.

PANSIES, finest first-class show varieties by name, well established in pots, 9s. per dozen.

Royal Nursery, Great Yarmouth.

CHRYSANTHEMUMS FOR THE MILLION.

J. H. BIRD, F.R.H.S., Nurseryman, Stoke Newington, N., can now supply from his great Collection, 50 Pair of Best Large Varieties for 14s.; 25 Pair of Best POMPONES, 10s.; 50 Pair of Best Large Varieties, Cuttings, 5s.; and 25 Pair of Best POMPONE Cuttings, 5s. N.B. To save trouble all Orders to be Prepaid.—CATALOGUES for One Stamp.

NEW CHRYSANTHEMUMS, DAHLIAS, HARDY VARIEGATED PLANTS, &c.

JOHN SALTER, F.R.H.S., will send out this spring several fine New CHRYSANTHEMUMS, both Large Flowers and Pompones. Full particulars will be found in his DESCRIPTIVE CATALOGUE for 1861, which will be sent post free on receipt of two stamps.—Versailles Nursery, William Street, near Hammersmith Turnpike, W.

CHRYSANTHEMUMS.

W. HOLMES begs to offer strong and well-established Plants of all the best and newest varieties of the above as under:—

	Per doz. s. d.		Per doz. s. d.
Chrysanthemums, Large Flower	5 0	Verbenas ..	2s. 6d. to 4 0
Ditto, Pompones.. ..	5 0	Fuchsias	4s. to 6 0
Dahlias	6s. to 9 0	Petunias	3s. to 6 0
		Antirrhinums, &c., &c...	3 0

DESCRIPTIVE CATALOGUES of the above free for one stamp.—Frampton Park Nursery, Hackney, N.E.

POLYANTHUS SEED.

JAMES WOODS is now sending out his Polyanthus Seed as in former years, saved from a forty years' selection of plants; all fine named Flowers, not to be equalled in the kingdom. Price 1s. per packet, or sent free on receipt of 13 postage stamps by James Woods, Florist, Harwich, Essex. The usual discount to the Trade.

PLANTS IN FLOWER.

F. and A. SMITH have now in bloom the following Plants, which are well grown and very suitable for decorative purposes. Prices on application:—Azaleas, Acacias, Æschynanthus, Aphelexis, Chironias, Chorozemas, Cinerarias, Cytisus, Cyclamen, Dillwynias, Dielytra, Echeveria, Epacris, Erica Cavendishii, E. gracilis, E. propendens tubiflora, E. regerminans, E. rubra calyx, E. Willmorea, E. Willmorea superba, Kennedyas, Polygala, Prostranthera, Tremandra.

Dulwich, Surrey, S.

ROBERT NEAL, Nurseryman, Wandsworth Common, S.W., begs to call the attention of buyers to his large and well selected stock of EVERGREENS and FLOWERING SHRUBS, ORNAMENTAL TREES, AMERICAN PLANTS, FRUIT and FOREST TREES, STANDARD and DWARF ROSES of every description. A large stock of BOX-LEAF EVERGREEN PRIVET, from 1 to 6 feet for hedges; GREEN HOLLY, 1 to 6 ft.; RICH BOG and LOAM for American Beds; LEAF MOULD. The Nursery is 10 minutes' walk from Clapham Common, and New Wandsworth Station, Crystal Palace Line.

NEW AZALEA INDICA.—Alba unica, Adelaide von Nassau, Adolphe von Nassau, Alexander II., Aurelie, Bernard André, Bouquet de Flore, Comte de Hainault, Director Augustin, Distinction, Flower of the Day, Model, Nathalie, Queen of the Whites, Roi Leopold, Rosy Circle, Schone Mainzerin, Teutonia, Thusnelde, and William Luddick. Good clean plants; purchaser's selection of 12, 40s.; the set of 20, 3l., hamper and packing included.

Thomas Jackson & Son, Nurserymen, &c., Kingston, S.W.

TULIP TREES WANTED.

THE ROYAL HORTICULTURAL SOCIETY are in want of about 24 Handsome Specimens of TULIP TREES, from 10 to 15 feet high.—Apply to Mr Geo. Eyles, Superintendent, the Royal Horticultural Society's Gardens, South Kensington, W.

BOX EDGING WANTED.

THE ROYAL HORTICULTURAL SOCIETY are in want of from 3000 to 4000 yards of good DWARF BOX EDGING. Samples of one yard, with price, to be sent (carriage paid) to Mr George Eyles, Superintendent of the Royal Horticultural Society's Gardens, South Kensington, W.

ROYAL HORTICULTURAL SOCIETY.—Notice is hereby given, that the next Ordinary Meeting of the Society for the ELECTION of FELLOWS will be held in the Council Room in the Society's New Garden, South Kensington, W., on TUESDAY, March 19. The Chair will be taken at 1 o'clock. On this occasion a Ballot for the following Seeds will also take place:—

List of Seeds for Ballot.

1. Dwarf German Ten-week Stock (12 varieties).
2. Large Flowering Dwarf German Ten-week Stock (10 varieties).
3. Calliopsis Cardaminefolia (hybrid).
4. Dianthus Heddewigi (fine—mixed).
5. Do. do. (double and semi-double, new).
6. Dianthus laciniatus (semi-hybrid).
7. Dianthus Chinensis nanus, variety atrosanguineus (double).
8. Phlox Drummondi, variety Radowitzii.
9. Lychnis Haageana.
10. Chrysanthemum acaule.
11. Do. Burridgeanum.
12. Do. venustum.
13. Coreopsis nana, var. marmorata.
14. Zinnia elegans (double).
15. Lobelia Erinus, var. marmorata.
16. China Asters (7 varieties).
17. Do. (7 varieties, 4 of which dwarf).

Fellows of the Society desirous of obtaining any of these Seeds, if Life Members of 40 guineas, or Annual Subscribers of 4 guineas, are requested to name *Six* sorts; if Life Members of 20 guineas, or Annual Subscribers of 2 guineas, to name *Three* sorts.

The arrangements for conducting the Ballot render it necessary that the names of the plants, or the number prefixed thereto in the above list, should be sent to the Offices of the Society, South Kensington, W., on or before Saturday, March 16, *after which date no applications can be attended to.*

In addition to this Ballot, the Annual Distribution of Seeds to Fellows is now being made, on application at the Offices.

Andrew Murray, Assistant Secretary.

ESTABLISHED UPWARDS OF HALF A CENTURY.

SEED ESTABLISHMENT, SUDBURY, SUFFOLK.

THE SEED CATALOGUE FOR 1861

(30th Annual Edition),

Sent Free to any address. It contains the finest sorts in cultivation, and not to be excelled by any house in the Trade. All orders supplied of new and best quality, charges moderate, and 5 per cent. allowed for ready-money purchases, or on receipt of goods. Remittances required from unknown correspondents.

VEGETABLE SEEDS—FIRST CLASS COLLECTIONS.

The following will be found very economical purchases. These Collections are decidedly the cheapest offered, embracing a number of new and very superior sorts.

☞ The names of those contained in the Collections are stated in the Catalogue. If any sorts are not wished for, enlarged quantities of others will be sent instead.

Collection No. 1 contains 20 qts. of Peas, of best sorts, 10 sorts of Broccoli for succession, and all other Vegetables in proportion, for One Year's Supply ...	£3 15 0
Collection No. 2.—12 qts. of Peas, 8 sorts of Broccoli, &c. ...	2 5 0
Collection No. 3.—7½ qts. of Peas, 5 sorts of Broccoli, &c. ...	1 5 0
Collection No. 4.—6 pints of Peas, 5 sorts of Broccoli, and most of the others contained in No. 3 ...	0 12 6

SECOND CLASS COLLECTIONS.

These are more particularly of the best older esteemed kinds, with fewer of those of more recent introduction, or of such as the late unfavourable season has rendered exceedingly scarce. They will embrace every thing required for successional supplies of each kind, and the same quantities will be given in the Four Collections in this class as in the preceding one. They are offered with the full confidence of their giving complete satisfaction to persons not desirous of purchasing the most expensive kinds.

Collection A, 20 qts. of Peas, &c.	£3 0 0	Collection C, 7½ qts. of Peas, &c.	£1 0 0
Collection B, 12 qts. of Peas, &c.	2 0 0	Collection D, 6 pints of Peas, &c.	0 10 6

FLOWER SEEDS—Free by Post.

The Collection comprises a large number of Choice Novelties, both of English and Continental, among which will be found the new double varieties of DIANTHUS HEDDEWIGII and LACINIATUS, also imported Collections of HEDDEWIGII and LACINIATUS in separate colours; the new double FRENCH ZINNIAS, also a new Mexican species; several new CALLIOPSIS, CLARKIAS, CONVOLVULUS, CUPHEAS, LINUMS, JACOBŒAS, EUCHARIDIUM, &c. See Catalogue.

Collections of superb German imported STOCKS, WALLFLOWERS, ASTERS, &c., exceedingly double and fine. See Catalogue.

Collections in separate names and colours of Choice Prize HOLLYHOCK SEEDS, CARNATIONS, PICOTEES, GERANIUMS, &c. See Catalogue.

☞ *Goods Carriage Free (if 20s. and upwards) to all Stations in London, and to all Stations on the two London and Norwich Lines.*

STEPHEN BROWN, Seed Grower and Importer, Sudbury, Suffolk.

The Gardeners' Chronicle.

SATURDAY, MARCH 9, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

Tuesday, March 12 { Royal Horticultural (Floral Committee) at Kensington Gore .... Noon. / Royal Horticultural (Fruit Committee) at Kensington Gore .... Noon.

A long and learned-looking article, entitled, "*The Theory of Terminal Fructification in the Simple Plant, of Ovules and Pollen, and of Spores*, by Dr. Macvicar, of Moffat," in the January Number of *Edin. New Phil. Journal*, strikes us as a fine specimen of a gratuitous ascent up nine pairs of transcendental stairs, for no purpose at all, except perhaps a tumble from the attic window. The article opens thus:—

"It is generally admitted, and indeed is obvious to every observer, that symmetry prevails to a great extent in the forms at once of the mineral, the vegetable, and the animal kingdom * * * and in a word symmetry makes its apparition*, more or less, everywhere. But to this, it must be confessed that there sometimes *seem* at least to be remarkable exceptions, and that, too, where one would naturally expect symmetry most to prevail.

"Of these one of the most striking is this, that in a simple plant, a plant with a single axis, the fructification is always terminal, so that, morphologically viewed, the fully developed plant presents its axis to us as terminated by the ugly root at one extremity or pole, and by the beautiful inflorescence at the other—an arrangement in which all symmetry seems to be set at defiance. Now, why is this? Why are the flower and fruit always produced at the upper extremity of the stem, a position which (besides its disregard of symmetry) can be reached only after the plant has survived all accidents till near the close of life, and when one would suppose its vital energy must be nearly exhausted?" &c.

Space would fail us for an abstract of Dr. Macvicar's answer. Suffice it to say that the answer developes itself in the form of a series of highly transcendental hypotheses, of which some of the simplest are, that the growing tips of roots are homologous, or philosophically comparable with ovules raised on their funiculi; that ovules tend to the ground or "seek downwards," and are "terrene organs;" that tap-roots answer to central, and multiple roots to parietal placentation; and it goes on to deduce the whole structure and economy of plants from assumed "final causes" and "the fitness of things," in a way that might distract the shade of Oken with envy and that of Bacon with dismay. We only ask, with the latter, for the necessity which impels the Scotch physiophilosophical naturalist to draw the dues of the now rather super-

* *Apparition!* In poetry Milton does use the word in this sense; but ever since, at least in prose, in England we are content with *appearance*.

annuated "sterile virgins" at such a rate upon the present occasion. Not that we object to the guarded use of final causes in scientific speculations in their proper way and place, nor fail to distinguish the difference between the Scotch and the German speculator as to spirit and the use they put the same philosophy to. We merely suggest that these speculations of Dr. MACVICAR, whether good or b d, are gratuitous, since his questions may easily be disposed of without them.

The Doctor's questions, it will be seen, are two, rather confusedly mixed, one of them morphological, the other physiological.

The first question is: why does "terminal fructification" (evidently meaning a terminal flower) set all symmetry seemingly at defiance? The simple answer is, that it does not, that there is no exception in the case, even seemingly, except what the Doctor conjures up in his imagination, it would appear, by supposing a flower to represent a *single* or *simple* organ, *i. e.* to be homologous with *a leaf*, whereas every botanist takes it to represent one or more cycles of leaves, no one of which terminates the axis. What becomes of the exception, and what is to hinder Dr. MACVICAR from tracing the symmetry of the leaves on the stem (either the particular or the general phyllotaxy) into and through the blossom?

The second question is, why, in a simple stemmed plant (or any other), the flower is produced "at the upper extremity of the stem," *i. e.* after the foliage? Answer, because "*ex nihilo nihil fit.*" There is not organised material enough in the seed or the young seedling to make the flower and fruit out of: organic material is produced by the organs of vegetation; and the plant flowers not "when one would suppose that its vital energy must be nearly exhausted" (who teaches such vegetable physiology as that?), but after it has accumulated energy and material enough to carry through an exhaustive process. Dr. MACVICAR must have the credit of doubting if "fructification is owing to the exhaustion of the vital energy of the plant." The wonder is that he should speak of such a doctrine, such a placing of the cart before the horse, as anywhere extant, and that he could not have satisfactorily answered both his questions upon the simplest and most elementary principles of vegetable morphology and physiology.

—— A VERY handsome NEW winter-flowering IMPATIENS in the way of *I. Jerdoniæ*, but with smaller flowers in flat-headed trusses, is figured in the last Number of the Botanical Magazine (t. 5237). The calyx is green, the corolla deep scarlet. It has been raised at Kew from seeds sent home by Mr. THWAITES, and is a great acquisition.

—— Mention is made in the *Revue Horticole* of a new *species* of Cucumber called Arada, the *Cucumis Anguria* of LINNÆUS. According to M. NAUDIN it is a prodigious bearer of little fruits and with about as big as a hen's egg when ripe. Half a dozen plants gave in 1859 18 or 20 lb. weight at a single gathering, and as many more were left on the Vines. It is described as a small growing species in the way of *Cucumis prophetarum*; the fruit when ripe is rather longer than broad, egg-shaped, pale green with a yellowish tinge. It is eaten cooked in various ways; when merely fried in butter the fruits are very nice. If to be dressed in perfection they must be gathered when half grown, at which time they are the size of a Walnut, very tender and extremely good, as at that time their seeds have not begun to form, so that there is no occasion to scoop out the middle. They are not so good when ripening. M. NAUDIN says that this Cucumber continues in bearing for a long time; a single plant will give fruit for six weeks and more; so that if a constant succession is sown the little Cucumbers may be had all the summer long.

—— The French have got up in some places, and with great success as it seems, SCHOOL HORTICULTURAL EXHIBITIONS, something in the way of Prof. HENSLOW's Cottagers' shows. At the College of Fontenay-le-Comte, in Vendée, the boys have long been taught how to garden. It occurred to the principal of this institution that upon the occasion of distributing prizes, more interest would attach to the ceremony if it were accompanied by a Horticultural Show. The experiment was first tried with the younger boys, who hastily set up their vegetables and other produce upon a table two yards square, covered neatly with a white linen cloth. Above the table was placed an image of the Virgin with green garlands, ribbons, and flowers. This was found to answer so well that the older boys (*Ecole supérieure*) had their horticultural lectures, and experimental garden, the funds having been found by the Municipality of the place. In the month of August, on the day of distributing prizes, a charming exhibition was produced of numerous and varied produce; a large collection of all sorts of Vegetables, of Kidney Beans, and Potatoes was set up by the boys, and their exhibition room was decorated with shrubs and flowering plants, magnificent fruits and new kinds of esculents, contributed by the boys' friends. The success of the second experiment induced the Municipality to furnish the funds required for getting up a third exhibition in 1860. It was originally fixed for the 9th of August; but the bad weather caused it to be deferred to the 11th and 12th October. Of what then took place the *Revue Horticole* gives a full account. It appears that gardeners were now allowed to compete for prizes, the place of honour in the centre of the room being assigned to the boys, who produced six or seven sorts of Cabbage, enormous Carrots, Turnips and Beetroots, six and twenty varieties of Haricots, a dozen sorts of green Peas, sixteen sorts of Potatoes, Gourds, Tomatos, Indian Corns, &c., &c., all which are described by the reporter as *magnifiques produits*.

It will interest many of our readers to hear in what way such an affair as this is got up in a French country town. We now translate literally: "Imagine a gallery (about 18 yards long by 6 yards wide) with pillars of wrought stone on one side and a dead wall on the other. Along this wall was placed a broad stand carrying a stage. On the side of the pillars was a border edged with turf, and filled with shrubs massed round the base of each pillar. At one end of the room was a fine group of Conifers and Evergreens, at the other a mass of rockwork surrounded by rare plants, and carrying a handsome specimen of a drawing-room greenhouse, elegantly furnished with Ferns, Begonias, and Lycopods, and inhabited by a little colony of frogs and salamanders, who hopped and crawled about on turf, or bathed at pleasure in the clear water of a small spring gushing from an overhanging rock." In the middle of the room seem to have been placed tables and stages for miscellaneous matters, which were also made to fill every spare corner. We should like to know something more of the drawing-room greenhouse described so graphically by M. F. BONCENNE.

——We are assured that if the strings used to tie up Vines in the Bordelais are steeped in sulphate of copper no slugs will come near them. The writer affirms that all such vermin have an incurable aversion for whatever has had this salt applied to it. Another writer in the *Revue Horticole* tells us that he can trap snails and slugs to any amount by another way. He left in his garden a jar containing starch saturated with iodine, with a tile loosely put over it; there it remained all the summer, fully exposed to the sun. What was his amazement at finding at the end of the first three weeks that dozens of snails had found their way into the jar from all parts of his garden. What was not less curious the snails continued to travel to this jar all the summer long. This is supposed to have been brought about by the snails liking the smell of iodine; and it is suggested that if iodine is dissolved in water which is poured upon sawdust, or even upon the earth itself, slugs and snails will enjoy themselves in it, and thus be trapped. Does iodine act then like Valerian and Dittany of Crete on cats?

VEGETABLE FORCING—FRENCH BEANS.

WHERE forcing is carried on at all with spirit, or where much company is kept in the winter season, French Beans may be classed among the requirements of the table which cannot be dispensed with, and to have them in quantity, fine handsome dishes in the depth of winter, argues a richness of garden resources which must be highly gratifying to a proprietor; but on the contrary when such things are dealt out in driblets, a mere spoonful of fifty or a hundred small Beans forming a dish (so called) for a large party, why then I think they lead to embarrassment, few venturing to take a taste from such a scanty supply. In my own estimation nothing short of 250 well grown Beans will form a dish for an ordinary party; and indeed I have frequently seen 500 used for the purpose. The forced produce of a garden should be presented in tolerable abundance; anything short of this savours too much of attempting the luxurious without the end being attained.

French Beans are generally grown in pots and sometimes in boxes, but the best of all plans is to grow them in open beds, nicely warmed and of sufficient extent to give a regular succession of produce. We will however first consider their cultivation in pots, and here as in almost every other thing gardeners differ in their practice, some obtaining fine crops in a very off-hand way, while others only attain the same object by comparatively a laborious and unnecessary process. These parties sow their Beans in 4-inch pots, five or six Beans in each pot, and when they have attained sufficient size (got the first rough leaf), shift them into the larger or fruiting pot. For this purpose 11-inch pots are generally used, but for a crop in the depth of winter, if good soil is used 8-inch pots will be found sufficiently large. The mode of procedure is this. Having drained the pots place in the bottom of each a layer of good rotten dung and then fill them two-thirds full with prepared compost. If the soil is warm and your plants in a fit state you may proceed to pot them at once, keeping the seed leaves or cotyledons level with the rim of the pot, but if not place the pots in the house until the soil is warmed, and then you may proceed with the potting. The soil should be pretty dry at the time of using; if it is not do not press it too firmly in the pots. French Beans like a free open soil, through which they can receive plenty of water and yet not have it stagnant in the pots. When the soil in the pots gets full of roots fill the remaining portion. This will be about the time the plants are in bloom, and will add very materially to the swelling of the produce. With Beans in boxes much the same treatment is pursued as to draining, soiling, &c. Some persons use boxes of large size, 9 to 10 inches square; but I have found boxes 6 to 7 inches wide and deep, and 3 to 5 feet long, the most convenient for general use, and with a judicious supply of liquid manure quite large enough for the purpose. Now a more expeditious plan is to take the full sized pots or boxes, drain and fill them two-thirds full with manure and soil, and sow the Beans at once where they are to stand, using plenty of seed, so that the strongest plants may be selected and the others destroyed. Another plan is to sow a quantity of Beans thickly in a pot or box, and transplant them when of sufficient size, and this is not a bad plan.

The treatment which the plants require is, first, that the temperature should not fall much below 55° during the night, neither is it desirable that it should much exceed 60°, therefore from 55° to 60° may be considered a suitable night temperature. Through the day in dull weather the heat may rise to 65° or 70°, and with sun heat to 80° or 90°, taking care to keep the atmosphere moist, and except in the two darkest months to syringe copiously both in the morning and evening. Some persons object to syringing while the plants are in bloom; but that is nonsense, as I never found daily syringing interfere with a good crop of Beans, but you frequently see the want of the syringe result in a troublesome crop of thrips or red spider. As the Beans progress in growth it sometimes happens that a part of the shoots will become spindly and long-jointed; should such be the case stop them at once to the lowermost joint; indeed an occasional regulating with the finger and thumb will add materially to the produce. Water, as we have remarked before, must be plentifully supplied and weak manure-water, especially while the crop is swelling. Ventilation cannot be too copious either night or day so long as cold draughts are avoided, but it must be recollected French Beans are scarcely more hardy than Cucumbers, and therefore the air given must be regulated with caution.

Should insects be likely to become troublesome add some sulphur to the water you syringe with, and for thrips or fly some tobacco-water, for after all I find these old-fashioned remedies both cheaper and more certain in their effect than the "Gishurst Compound," which is not to be trusted with tender-foliaged plants. From the preceding remarks it will be perceived the chief requisites in the successful cultivation of the French Bean as a forcing plant are a rich soil, moist heat, and a free circulation of air. With the healthy foliage is a necessity, and free-growing plants are rarely much troubled with insects. On the subject of soil it may be remarked it should be fresh maiden loam. Sometimes the soil of Cucumber or Melon beds is used, but that is not to be recommended, as in it the plants get full of insects, possibly from eggs deposited in the soil, neither do they grow so freely; in some cases we have seen them refuse to grow in such soil at all, and in one particular instance crop after crop was tried with the same result. A friend of the writer used to collect mole hills and mix the earth with Mushroom soil; indeed two parts fresh loam and one part the dung of an old Mushroom bed is as good a mixture as can be used for growing this esculent.

Now with reference to succession, if a regular supply is wanted throughout the year preparations for forcing must commence the middle of September, putting in a crop and growing it in the cool so long as the nights will admit of such a practice, the object being to get some strong hardy well matured plants to produce through November and December. This crop may be in good sized pots, but the next three crops will be better if grown in the 8 or 9 inch size, as that will admit of their being placed upon shelves nearer the glass than if a larger size was used. To insure a regular supply a few dozen pots should be started every fifth or sixth week from September to March.

retain the plants for a second crop; but this is not desirable practice, for though good crops are thus obtained there is a risk of encouraging insects, which should be avoided.

The best kinds for the use of a private family are the Syon House and Newington Wonder; but for market purposes the Negro is preferred, as it produces a larger pod and thus is more saleable. It is not however so fleshy as the Newington Wonder, and this Bean cooked whole makes a most beautiful dish. The Syon House is rather too large for cooking whole, but still an excellent kind. To keep a regular succession of young Beans gather the crop twice or thrice a week, and if not wanted for use, the best place to keep them in is either on the floor of a warm cellar, or put in a pot or box and buried in soil in a forcing or Mushroom house. The Covent Garden people keep their French Beans, Cucumbers, Seakale, &c., buried in soil, and it is the best way to keep them fresh or to restore them if drooping. The same plan is excellent for reviving cuttings that may have been sent from a distance. At any rate avoid putting the stems in water, which is a bad practice in every respect. *P.*

M. NAUDIN'S GEOTHERMAL SYSTEM.

(*Continued from p. 193.*)

§ 2. *The Mode of Heating the Soil.*

After speaking of the advantages of hot-water apparatus furnished with tubular boilers, such as Weeks's, M. Naudin proceeds thus:—An apparatus of that kind enables the stove to be placed at a distance from the spot requiring heat, which renders it useful when geothermal cultivation is purely ornamental. For instance, in a public garden or park of some extent, where one desires to mingle ordinary vegetation with groups of exotic shrubs, arranged for an agreeable *coup d'œil*, one single tubular boiler concealed by buildings or green thickets, could supply the necessary ground-heat for all. From one boiler would spring all the warm ramifications conveying life to some of these scattered groups. But to obtain the full benefit of this contrivance, the underground mains must be completely isolated as well as the geothermal branches, in order to retain all the heat, for were they to come in contact with the ground, they would in some degree, or even totally, lose it ere it arrived at its destination. The chance of this might be avoided by making them circulate through brick passages, securing round them a layer of air some inches in depth; but once introduced into the ground to be heated, they should be brought almost into contact with it either by means of a thick layer of cement or concrete, with which they should be coated, and which would serve both to protect them from the damp and to moderate the heat; or else by means of bricks placed between them or a tiled channel forming a continuous covering for them. The return pipes should pass, of course, through the same channel as the flow pipes, but on a lower level.

What must be here considered, and on which alone experience can pronounce, is at what distance from the surface of the soil the hotwater pipes ought to be laid in order to produce their full effect. Would it be best for them to lie at the depth of the geothermal border, that is to say of 1 metre to 1ᵐ 50; or that they should pass through the upper layer at a slight distance from the surface? Ought they to follow the wall enclosing the geothermal border, or should they act principally towards the centre of the ground? Or otherwise might it not be beneficial to divide the pipes into small ramifications distributed in the soil at different depths?" These are points to which we call the attention of horticulturists experienced in the use of hotwater apparatus. Any way, I am inclined to believe that the best plan would be to lay the pipes 15 to 20 centimetres below the surface of the ground, rather than at a greater depth, in order to follow out as much as possible what passes in nature, where the superficial layer of earth is most warmed by the sun's rays.

Heating by means of hot air is much more simple and less expensive than that effected by the aid of hot water; and though the more primitive system, is not on that account to be despised. Although a boiler, owing to its great range, is better suited to ornamental cultivation, the simple stove, warming at once by the air it puts in motion, appears to us more suitable to common geothermal culture. The stove should be placed behind the principal wall, rather above the level of the earth which requires to be heated. It could be also placed laterally at one of the extremities of the ground, but in this case it would act less regularly than in the first case, and a long piece of ground might require, perhaps, two stoves to keep up the heat, one at each end. However, this inconvenience would be counterbalanced by the simplicity of the apparatus, and the few accidents to which it would be liable. Common pipes of baked clay, like those used for chimney-pots, might be substituted for the metal pipes of a hot-water apparatus; or instead of pipes one might employ for the same purpose underground brick drains. These drains should be single or branched, the essential being to have a good draught at one end, by which the air when exhausted of heat could escape; and this might be obtained by the aid of a draught stove (*foyer d'appel*). An apparatus of this kind, constructed according to the true principles of flue construction, would be easy to manage, and it is probable its efficiency in heating the ground would not be inferior to that of the best hot-water apparatus.

(*To be continued.*)

EVERLASTING FLOWERS.

THE January number of the "Technologist" contains an article by Mr. T. D. Rock concerning everlasting flowers, from which the following is an extract:—

"It is surprising that, amidst this universal taste for flowers, and the enormous traffic in the artificial, so little attention has been hitherto bestowed upon these flowers commonly known as 'everlasting,' and which are so well adapted for purposes of decoration.

"The general idea seems to be that everlasting flowers are confined to that small yellow variety (Gnaphalium arenarium), known as 'Immortelles,' and occasionally dyed blue and red for the sake of contrast. But, as we shall presently prove, the choice of these flowers is confined within no such narrow limits.

"Everlasting flowers are chiefly, if not entirely, produced by plants belonging to the natural order 'Asteraceæ,' but although approximating in form, they vary considerably as to size, and in colour there is almost an unlimited choice, as the following enumeration of a few of them will illustrate:—

NAME.	LOCALITY.	COLOUR OF FLOWER.	TIME OF BLOOMING.
1. Acroclinium roseum ..	S. W. Australia	Rosy	August, September
2. Ammobium alatum ..	New Holland	White	August, September
3. Gnaphalium fœtidum ..	Cape of Good Hope	Light yellow	June—September
4. Helichrysum bracteatum ..	New Holland	Yellow and white	July—September
5. „ roseum ..	Ditto	Rose-coloured	June—August
6. „ aurantiacum ..	Ditto	Orange	July—September
7. „ brunneo-rubrum ..	Ditto	Brownish-red	August, September
8. „ coccineum ..	Ditto	Scarlet	June—August
9. „ flavum ..	Ditto	Yellow	July, August
10. „ purpureum ..	Ditto	Purple	June—August
11. „ macranthum ..	Swan River	Large flowered	July—September
12. „ speciosissimum ..	Cape of Good Hope	Most showy	July—September
13. Morna elegans ..	Swan River	Yellow	June—September
14. Stæbelina dubia ..	South Europe	Pink	June, July

"The property possessed by these flowers of resisting decay, may be attributed to the presence of large quantities of silica in the juices of the plants; and this appears the more certain from the fact, that at whatever stage of their development the flowers are gathered, they are still 'everlasting,' and resist all change after the little sap that remains in the stem attached is exhausted. Although these plants are many of them natives of warm climates, yet they are easily cultivated in this country, and most of them will thrive in the open air and flower profusely.

"A quiet trade in these imperishable flowers already exists. On the continent as well as in this country, wreaths are made of the small yellow variety (Gnaphalium arenarium) and are sold in large quantities for adorning the graves and monuments of the departed. The railings which surround the column of Napoleon, in the Place Vendôme, at Paris, are literally covered with these wreaths, producing a singular effect. In Germany, baskets and bouquets of everlasting flowers and wreaths are sold in the bazaars for decorative purposes; and within the last few weeks, a quantity of these elegant posies, &c., have been imported in this country, and readily realised from 1*s.* to 7*s.* 6*d.* each, according to size and quality, whilst they certainly surpass, both in form and colour, anything ever produced of an artificial kind. Mixed with the everlasting flowers in these German nosegays appear several of the beautiful Grasses recently in high favour with horticulturists, as well as a sprinkling of flowers not naturally everlasting, but which our ingenious friends profess to have preserved by a peculiar process.

"Wreaths of a yellow variety of everlasting flowers, about the size of a farthing and strung together transversely, are worn by the natives of the Sandwich Islands as a kind of head ornament.

"It only remains for us to suggest the extensive cultivation of all the varieties of everlasting flowers in this country, for the formation of winter decorations and the artistic grouping of them with Grasses, &c., would furnish another branch of employment to our large surplus of female population, who ought to be encouraged and educated in the manufacture of many little elegancies, for which we are now entirely dependent upon the foreigner."

The above interesting article by Mr. T. D. Rock, induced me to inspect a large stock of everlasting flowers, sent from Germany to Mr. B. York, 60, City Road, and I was truly astonished at the great variety of beautiful bouquets shown me, and their clever artistical arrangement. I found in these bouquets, besides most of the before-mentioned flowers of the Asteraceous order, also the following species:—Amaranth, Xeranthemum, Sea-lavender, Larkspur, Rose, Gypsophila and several species of Grasses.

The arranging of these flowers appeared to me to be a rather tedious process, each single flower being fastened to a separate wire; but as that part of the work could under proper guidance be very well carried on by children and young females, I suggested to Mr. York that he should endeavour to procure more information concerning the system of drying the flowers, and also obtain the assistance of some lady competent to superintend the preparing and arranging them; asking him at the same time, whether, in the event of any philanthropic institution taking the matter up, he would lend his assistance as an honorary director, to which he readily assented, at least so far as his other occupations would permit. I likewise pointed out the necessity of making arrangements in time with gardeners to sow the different plants, in order to ensure a plentiful stock of suitable flowers at the time they would be required.

I need only add that I have not the slightest personal interest in the matter, my only motive in addressing to you this communication being to draw the attention of some already existing philanthropic institution to what I believe may form a most suitable subject for the employment of a great number of young women and children.

Should any society find it within its province to take the matter up, or persons be found willing to establish one for that especial purpose, I shall think myself more than repaid for the little trouble I may have taken in the subject. *Francis Steinitz, London Parquetry Works, New Church Road, Camberwell.*

TRADE MEMORANDA.

MY experience in the trade is not very extensive, but during the short time I have carried on business I have suffered greatly through executing orders for plants without a satisfactory reference or remittance from parties by whom the goods were ordered, and have thus been a victim (of course partly through my own folly in sending the plants without security). Very recently I have received orders from three separate parties to the amount of 43*l.* 15*s.* The first from London amounts to 7*l.* 15*s.*; the next from Derby, to 21*l.*; and the third from Dublin, to 15*l.* 6*s.*; and had I executed these orders previous to sending invoices and requesting a remittance, I should have been grossly victimised. I received replies from each person by return, enclosing a cheque on blank paper for the amount invoiced, drawn on respectable London bankers (which read very well), and requesting that the plants should be sent off immediately upon receipt of the cheques, which course I did not feel myself justified in adopting until I had received the proceeds.

The cheques, after passing through the usual course, were returned to me dishonoured, the parties having no account at the bank, and not even known to the bankers.

I would therefore caution tradesmen (especially those who advertise) against such frauds as these, and I trust that the few words of advice I now give may have a salutary effect on those who have recourse to such unlawful proceedings. *A Sufferer.*

Home Correspondence.

The Manetti Rose Stock.—Mr. Rivers (see p. 122) says "A word from Mr. Radclyffe as to the nature of his soil would be a boon to Rose cultivators." I have two Rose gardens, one in the parish of Rushton near my house, and another in the parish of Rawston, of which I am also rector. A rivulet at the base of my home garden divides the two parishes; and were both gardens opposite to each other, the Roses in the two gardens would be about 50 yards apart, and yet the land would not be of the same nature or aspect. The Rushton garden is at the descent and base of an eastern hill, exposed to the fury of the west wind; and the Rawston garden is at the base of a western decline, protected by a high Thorn hedge south and west, but exposed fully to the north and east. The Rushton land is nice brown soil, better than the average of English gardens, but wanting alumina, and much intersected with espalier Apple trees, which have doubtless exhausted the wood-making matter. A little of Mr. Rivers's clay would greatly improve it. The Rawston soil is darker and richer (more cohesive and yet friable) but still minus alumina. In the Rushton land the British Queen Strawberry will not thrive, in the other she is now after this severe winter as green as verdigris, with bold crowns and fine broad and thick foliage; thus showing that soil and not aspect is the key to the Queen. Moreover, the Briar Roses grow much finer there, such as Masson, Dijon, Lawson, and Rougemont. This garden is the old rectorial garden, and has not been exhausted by any trees for 50 years at least. Such, then, is the soil of the two, and the treatment of Roses in both gardens is the same. The ground is well dunged and trenched deeply, and manures of one kind or other are continually applied to the Roses in the ranks and over the whole ground, to restore to the land what this miraculous stock takes out. Mr. Milne in the last "Florist"

has stated what he saw here; and I now refer your readers to Mr. Gill, of Blandford (well known to Mr. Rivers), who most kindly budded my Briars the 3d and 10th of July last year, for his opinion as to whether the treatment of Manetti Roses here succeeds or not. His words when here were, "I never saw such a floral sight in my life." I mention this to show that the high manuring does not drive blind wood nor impede efflorescence, which in Mr. Rivers's fine land it would probably do. Perhaps he often wants less wood, while I sometimes want more. Manetti Roses here are in all ages, from the full planted ones to an imported tree (five years old) now in its seventh season. This is the only 6 foot tree in my home garden. She was higher in November when I cut her for next year's bloom; and I may add that her wood being ripe she is completely untouched by winter even at her tips, and her eyes are ready to start. She is nailed against my north wall. In my Rawston garden I have only five high trees on Manetti. They are Acidalie. I stopped them in summer when they were about 8 feet high. They were planted on the 10th October, 1859, with 141 others at the same time. They bloomed abundantly after being stopped, dropped their flowers, and ripened their wood sufficiently to stand the winter with the greatest immunity from rind stain. They will be left as Pole Roses cut back to about 6 feet this year. They must be staked of course. In strong natural Rose soil such manuring as mine would be an injury and a great inconvenience, as the Roses would require stakes and binders, whether treated as Pole Roses or spread espalier fashion, which I have seen to succeed in a friend's garden. The strong growers are much more inclined to give their flowers, thus treated. My aim is, to get thick bushes from 3 to 4 feet high, and to keep them in repair to that height. All, however, cannot be got to that height, nor can all be kept to it. Of course every soil is a law to itself, and it is as impossible to lay down a manuring rule for all England, as it would be for a tailor to make a suit of clothes that would fit all the world. I agree in all points with what Mr. Rivers has said in his book about Manetti Roses, and the only difference between us seems to be this, that he has got inexhaustible land suited to Roses on either stock without manure, and I have soil suited to Manetti Roses, but requiring replenishment to keep up the miraculous flower-bearing properties of this wonderful stock. To show that Manetti Roses do succeed and can be brought early to the show, when Briar Roses could scarcely make their appearance, I may mention, that I took to Salisbury (22 miles) on the 28th of June last 182 Roses, mainly Manetti Roses or Roses on their own roots, winning the two 2d prizes for 24 singles and 24 trebles. The same society held its full meeting at Wilton House, the seat of Lord Herbert of Lea, on the 6th of September. Again I faced the amateurs and gardeners of Wiltshire (only 12 allowed to be exhibited), and won the 2d prize, and also a special prize for a collection of 92, showing 104 in all. From what stock did I get these Roses, early and later? almost only from Manetti. The last day was an adjourned day. The proper day was either the 22d or 24th of August. In the early morn (about 4 o'clock) on the day but one on which I was to exhibit, I cut 90 Roses to go to the exhibition, but at 8 o'clock I received a letter from Mr. John Keynes, saying "things were not ready." Those 90 Roses were taken as an act of good nature to Baron Hambro's cottage allotment exhibition, and great was the delight of the Baron and his people. I mention this to show, that with high manuring and proper pruning, Manetti Roses are never found wanting. For strong lands I fancy that the Briar Rose would be most convenient, for lighter soils with free drainage the Italian stock. I never knew the Briar Roses bloom here so well as last year; but they were, both summer and autumnal, very late. *W. F. Radclyffe, Rushton, Feb.* 10.

Tree Supports.—What is the best plan to adopt to preserve Spruce, Scotch Fir, and indeed numerous other trees from being blown down? I have several about 20 years old which are blown quite out of the perpendicular by the late heavy gales, and which are now cracking about the roots and getting worse each successive wind. Would undermining and letting them lower into the ground be of any use? *An Old Subscriber.* [We should employ either struts placed in an equilateral triangle, or galvanised rods of iron secured to picket stakes driven into the ground in a triangle. If these methods are employed care must be taken that an angle of the triangle is in the direction of the heaviest gales, which about London are from the south-west. But if the trees in question have lost their hold of the ground in consequence of the roots being corkscrewed, nothing can prevent their falling over at some time or other.]

Green Fly.—The "German method of killing green fly," &c., recorded last week, is not new with the exception of the soap. To Loudon's Gardener's Magazine I was a tolerably regular contributor, and in those days of high postage and comparative scarcity of writers, my humble efforts were acceptable. If, therefore, your readers who possess that work will turn to page 307 of the volume for 1842, they will find a communication from me bearing the signature of E. O., in which is detailed the plan just alluded to, and which I used to adopt with success. Also at page 430 of the same volume, in the article Retrospective Criticism, is a paper from an Oxford Correspondent, not only corroborating my statement, but adding that it will also destroy scale, &c. Why it has not come into more general use, may I think be attributed to the high price of Loudon's work, which I believe the majority of gardeners, even holding good situations, seldom if ever saw. *Jasper Standstill, Bourton.*

False Species (*Ulex strictus, Babington*).—I raised two plants from seed of the Irish Furze, of which I sent you a specimen some time back. I send you one of these plants, the two are just alike, and evidently common Gorse bushes; so that there is no longer any doubt that the plant is only a seminal form of Europæus. As small facts sometimes settle old questions, I thought well to mention this, and send you the living evidence. *R. T. C.* [And so it will be with all the rest of such things.]

Is Split Larch fit for Palings?—Can you or any of your Correspondents say whether or not split or cloven Larch can be used with advantage for park palings, as a substitute for Oak, which is so much more expensive? *E. T.* [We doubt, 1, whether Larch will split; and 2, whether it will last long. The first is, however, the first point.]

M. Naudin's Geothermal System not New!—This system seems to excite so much interest that it would certainly be well worth while to inquire what was the result of the same (or at least a similar) system for which I remember seeing the pipes laid more than ten years ago in the Duke of Sutherland's gardens at Trentham. *Suum Cuique.*

State of Trees near Kilkenny.—After reading accounts of the sad havoc by the late frost among trees and shrubs in England, it is a pleasing duty to be able to record that one of the finest collections of rare trees and shrubs in Ireland, or perhaps in Britain, remains unscathed. A few things of minor note have given way, such as Veronicas, some young exposed Standards of the variegated Euonymus, a few of the more tender of the Ceanothus tribe, and a nice young Cupressus from Cashmere, received from the Royal Hort. Society. Magnolias are browned a little. Photinia serrulata, Ilex latifolia, Benthamia fragifera, Escallonias, and plants of that class of hardiness are quite green. Among the Coniferæ the Moreton Bay Pine is the only one killed; this was a crippled plant, and I have hopes that this remarkable and beautiful tree will yet succeed here. A fine large Araucaria imbricata has not a brown speck on it. The avenue of Araucarias transplanted in the winter of 1859, and which was noticed in your columns in August last, has now recovered the sombre green hue so characteristic of a healthy Chili Pine. Notwithstanding the severe winter these trees have made young growths of from two to three inches. The lowest temperature indicated here was on the 24th December, when the thermometer stood a little above 9°. The pleasure grounds are about 300 feet above the level of the sea, and distant from it—as the crow flies—about 25 miles. When the wind is from about S. to S. W., the influence of the Gulf stream is directly felt, and whatever frost then exists at once gives way. *Charles M'Donald, Woodstock Park, near Inistiogue, Kilkenny, Feb.* 25.

Plant Obituary.—The following is a list of plants, principally Conifers or Evergreens, which have been killed or seriously damaged in my garden, Conyngham Hall, Knaresborough. I also add another list of those which, as far as I can yet see, are not materially hurt. The soil is a strongish marl with a substratum of limestone rock, and though exposed to west winds is well sheltered in other quarters. TREES AND SHRUBS NOT INJURED: Pinus Douglasii, ponderosa, nobilis, Benthamiana, excelsa, Menziesii, Morinda, Pinsapo; Thujopsis borealis, Biota glauca; Thuja gigantea, flagelliformis; Cryptomeria japonica; Wellingtonia; Cedrus Deodara, atlantica; Abies orientalis; Juniperus fragrans, glauca, Langoldiana (?), dealbata, recurva, chinensis, excelsa; Taxus adpressa, elegantissima, Gold-striped; Skimmia japonica, Garrya elliptica, Jasminum nudiflorum, and others of more common and well known descriptions. SHRUBS, &c., KILLED: Pinus insignis, palustris, Sabiniana; Cupressus Corneyana, majestica, Lambertiana, Macnabiana, Goveniana, macrocarpa, funebris; Libocedrus chilensis, Doniana; Forsythia viridissima, Escallonia macrantha, Ligustrum japonicum, Pyracantha crenulata. Shrubs and trees DAMAGED MATERIALLY; some killed down to the level of the snow: Araucaria imbricata, Taxodium sempervirens, Thuja aurea, dumosa; Juniperus Smithiana, Aucuba japonica, Cryptomeria Lobbii, Cupressus torulosa, Laurus nobilis, Laurustinus, Cistus, Quercus Ilex, Abies canadensis (perhaps hurt by wind). Many of these are small specimens, but they have been growing well for two or three years or more. I had some plants in pots in an orchard house, where the temperature was only 3° or 4° above the outward air, which are perfectly unhurt, nor in the least browned. Most Roses are killed. Standards almost all; others down to the snow. *Basil T. Woodd.*—— The following Conifers are not the least hurt, or so slightly so as not to be worth recording, viz.: Picea Cephalonica, Nordmanniana, Pinsapo, nobilis; Pinus mitis, pungens, Cembra, austriaca, excelsa, Hamiltoniana, Laricio, Lambertiana, monticola, ponderosa, Sabiniana, taurica, insignis; Abies Findonensis variegata, Smithiana, Menziesii, Khutrow, Douglasii, elegans. Some of the above are from 20 to 40 feet in height. The following are more or less injured, viz.: Pinus Montezumæ, Russelliana; Wellingtonia, Taxodium sempervirens, Taxus elegantissima, Juniperus Lycia. The following are killed or nearly so, viz.: Juniperus flaccida, Cupressus thurifera, Taxodium pendulum. I may add that Magnolias, China Roses, Laurustinuses and Bay are much injured. *Geo. Archer, Gardener, Fined Hall, Essex.*

Societies.

BOTANICAL OF EDINBURGH, *Jan.* 10.—Prof. Balfour, V.P., in the chair. The following communications were read:—1. On the Synonymy of Ectocarpus brachiatus. By Dr. Auguste le Jolis, Cherbourg. In this paper the author endeavoured to show that two distinct plants have been confounded under the name Ectocarpus brachiatus of English Botany. The one proposed to call E. Griffithsianus; it is found in water on Rhodymenia palmata, in England; while the other, which is the true Ect. brachiatus of Eng. Botany, is found in brackish water in Norfolk. 2. Notice of Baillon's Researches on the Organogeny of the Female Flowers of Coniferæ. By Dr. A. Dickie. 3. Remarks on the Theory of the Metamorphosis of Plants. By Mr. Maxwell T. Masters. 4. Notice of Algæ from the Faroe Islands. By R. Brown, Campster. 5. On the Timbers suited for Railway Sleepers in South India. By Dr. Cleghorn, Madras. The author alluded to the enormous requirements of the Indian railways in the matter of timber for different purposes, especially sleepers. This is a subject of great importance, but almost the only record now existing is a suggestive paper by Dr. Falconer in the Journal of the Agricultural and Horticultural Society of India, and the jury reports of the Madras Exhibitions of 1855-57. A portion of the immense supply required will be procured from Ceylon, Burmah, Andaman Islands, and Australia; there will also be a regular and heavy drain on the forests of South India. About 30 kinds of indigenous wood have been used experimentally for sleepers, but the trials have not been attended, in some instances, with satisfactory results: not always because the woods were inferior, but from the timber not having reached a sufficient age, and from its being employed when imperfectly seasoned. Experience has been gained, and better prospects are dawning upon the companies in this great essential of railway operations. The chief engineer, Madras Railway, lately issued a useful circular to the officers of districts regarding the branding of sleepers, of which the following is an extract:—"At the time of passing the sleepers they must be branded with a letter showing the kind of wood according to the table of specification. Zinc labels are being prepared which, being nailed to the sleeper will remain legible even after its decay. These will not supersede the branding, but be used in addition to it." The results of observations by the engineers of the different railways hereafter published will be valuable. At present the summary of what is known is as follows: Teak (Tectona grandis) is probably the best of woods for sleepers, but is yearly becoming more scarce and costly. Sal (Vatica robusta), the next best wood, is not indigenous in any quantity south of Orissa, but is largely used in Bengal. Erul, of Malabar (Inga xylocarpa) is a superior wood and suitable for railway purposes. Jarra or Yarra (Eucalyptus rostrata), specially noticed in a despatch from Lord Stanley, has been lately imported in considerable quantity from Swan River. A timber trade with Australia would benefit the colony, and supply the Indian market with a substitute for Teak. From the monthly returns of the engineers showing the number of sleepers delivered on the different districts on the Madras railway, and the trees furnishing them, the following results are obtained:—The largest number of sleepers are procured from the family Combretaceæ, and the genera Terminalia and Conocarpus, remarkabe for the height and size of their trunks, and the toughness of their wood. Their durability under ground has not been altogether satisfactory. Cadukai (Terminalia Chebula) appears liable both to the attack of Fungi and of the carpenter bee. The Leguminosæ are next in importance, the trees supplying the wood being Pterocarpus (Vengé), Inga (Erúl), Hardwickia (Acha), and various species of Acacia. Well grown timber of these kinds is deservedly prized by the engineers. As the native name frequently applies to a genus rather than to a species, it is doubtful whether those marked Sal and Pedowk are of the true species, although obtained from trees belonging to the genera Vatica and Pterocarpus. The railway engineers generally have confidence in Sal, Teak, (Bassia), Kar-Marda, Vengé, Chele-Wunjé. Teak being too expensive for general use as sleepers, it has recently been proposed to substitute sleepers of cast iron for those of wood, and the plan has already been carried out on a large scale; it is thought that iron will in the end be found the most economical material for sleepers. The Indian woods which as yet appear to be best adapted for trenails and wedges, are Kara-Marda (Pentaptera coriacea), and Sal (Vatica robusta); the former for trenails, the latter for wedges. They resist the attacks of white ants, which destroy the Beech and Elm imported from England.

T. C. Archer, Esq., exhibited a hunting-net, which had been sent to the Industrial Museum by Dr. ... from Sierra Leone stone from Africa, manufactured by the natives from the bark of the Baobab tree (Adansonia digitata).

Notices of Books.

A Free Examination of Darwin's Treatise on the Origin of Species, and of its American Reviewers. By Asa Gray, M.D., Fisher Professor of Natural History in Harvard University. 8vo. Pp. 55. Trübner.

In this pamphlet we have the deliberate opinion of one of the ablest Naturalists across the Atlantic, concerning the views of Mr. Darwin, about which there has been, and long will be, so much controversy. It is a remarkable fact that among those who have attempted to answer that learned author, there are few who have any *status* in science. One great zoologist indeed is thought to have prompted the reviewer in the Quarterly, and other gentlemen may have had a hand in criticisms elsewhere; but there has been little avowed opposition. The opposition writers have in reality treated Darwin's theory as a covert attack upon religious belief, which it is not, rather than an extremely curious philosophical problem, which it is. The doctrine of Morphology, which was also once looked at askance, has become a fundamental article of a Naturalist's faith. Is "Natural selection" passing through a similar trial? We cannot say; perhaps Asa Gray's examination may help to answer the question.

We cannot pretend to condense his remarkable work, which is itself a close condensation of facts and arguments. He who wishes to hear the lively counsel must study his words as carefully as those of Darwin himself. **A few extracts, however, without even a comment, will show in what manner the American philosopher treats his subject.**

After a few words of introduction he proceeds thus:—

"**Well, we found no cause of quarrel with the first chapter. Here the author takes us directly to the barn-yard and the kitchen-garden. Like an honourable rural member of our General Court, who sat silent until, near the close of a long session, a bill requiring all swine at large to wear pokes was introduced, when he claimed the privilege of addressing the house, on** the proper ground that he had been 'brought up among **the pigs, and knew all about** them.'—so we **were brought up among cows and** Cabbages; and the lowing of cattle, the cackling of hens, and the cooing of pigeons **were sounds native and pleasant to our ears. So Variation under Domestication' dealt with familiar, subjects in a natural way, and gently introduced 'Variation under Nature,' which seemed likely enough.** Then follows 'Struggle for Existence,'—a principle **which we experimentally know to be true and cogent,—bringing the comfortable assurance, that man, even upon Leviathan Hobbes's theory of society,** is no worse than the rest of creation, **since all Nature is at war, one species with another, and the nearer kindred the more internecine,—bringing in thousand-fold confirmation and extension of the Malthusian doctrine, that popula**tion tends far to outrun means of subsistence throughout the animal and vegetable world, and has to be kept down by sharp preventive checks; so that not more than one of a hundred or a thousand of the individuals whose existence is so wonderfully and so sedulously provided for ever comes to anything under ordinary circumstances; so the lucky and the strong must prevail, and the weaker and ill-favored must perish;—and **then follows, as** naturally as one sheep follows another, the chapter on '**Natural Selection**,' Darwin's *cheval de bataille,* **which is very** much the Napoleonic doctrine, **that Providence favors the** strongest battalions,—that, **since many more individuals** are born than can possibly **survive, those individuals** and those variations which possess any advantage, however slight, over the rest, are in the long run sure to survive, to propagate, and to occupy the limited field, to the exclusion or destruction of the weaker brethren. All this we pondered, and could not much object to. In fact, we began to conceive a liking for a system which at the outset illustrates **the advantages of good breeding, and which makes the most 'of every creature's best.'——"**

"The prospect of the future, accordingly, is on the whole pleasant and encouraging. It is only the backward glance, the gaze up the long vista of the past, that reveals anything alarming. Here the lines converge as they recede into the geological ages, and point to conclusions which, upon the theory, are inevitable, but hardly welcome. The very first step backward makes the negro and the Hottentot our blood-relations;—not that reason or Scripture objects to that, though pride may. The next suggests a closer association of our ancestors of the olden time with 'our poor relations' of the quadrumanous family than we like to acknowledge. Fortunately, however,—even if we must account for him scientifically,—man with his two feet stands upon a foundation of his own. Intermediate links between the *Bimana* and the *Quadrumana* are lacking altogether; so that, put the genealogy of the brutes upon what footing you will, the four-handed races will not serve for our forerunners;—at least, not until some monkey, live or fossil, is producible with great-toes, instead of thumbs, upon his nether extremities; or until some lucky geologist turns up the bones of his ancestor and prototype in France or England, who was so busy 'napping the chuckie-stanes' and chipping out flint-knives and arrow-heads in the time of the drift, very many ages ago,—before the British Channel existed, says Lyell,—and until these men of the olden time are **shown to have worn their great-toes in the divergent and thumb-like fashion. That would be evidence in**deed: but until some testimony **of the sort is produced** we must needs believe in the separate and special creation of man, however it may have been with the lower animals and with plants.—"

Referring to the modern belief in the prodigious antiquity of Creation, Dr. Gray goes on thus:—

"But this very extension of the current chronology, if we may rely upon the archæologists, relieves the difficulty by opening up a longer vista. So does the discovery in Europe of remains and implements of pre-historic races of men, to whom the use of metals was unknown,—men of the *stone age*, as the Scandinavian archæologists designate them. And now, 'axes and knives of flint, evidently wrought by human skill, are found in beds of the drift at Amiens, (also in other places, both in France and England,) associated with the bones of extinct species of animals.' These implements, indeed, were noticed twenty years ago; at a place in Suffolk they have been exhumed from time to time for more than a century; but the full confirmation, the recognition of the age of the deposit in which the implements occur, their abundance, and the appreciation of their bearings upon most interesting questions, belong to the present time. To complete the connection of these primitive people with the fossil ones, the French geologists, we are told, have now 'traced these axes in France associated with remains of *Elephas primigenius, Rhinoceros tichorhinus, Equus fossilis*, and an extinct species of *Bos*.' In plain language, these workers in flint lived in the time of the mammoth, of a rhinoceros now extinct, and along with horses and cattle unlike any now existing,—specifically different, as naturalists say, from those with which man is now associated. Their connection with existing human races may perhaps be traced through the intervening people of the stone age, who were succeeded by the people of the bronze age, and these by workers in iron. Now, various evidence carries back the existence of many of the present lower species of animals, and **probably of a larger number of plants, to the same drift period. All agree that this was very many thousand years ago. Agassiz tells us that the same species of polyps which are now building** coral walls around the present peninsula of Florida actually made that peninsula, and have been building there for many **thousand centuries.**

"5. **The overlapping of existing and extinct species, and the** seemingly gradual transition of the life of the drift period into that of the present, may be turned to the same account. Mammoths, mastodons, and Irish elks, now extinct, must have lived down to human, if not almost to historic times. Perhaps the last dodo did not long outlive his huge New Zealand kindred. The auroch, once the companion of mammoths, still **survives, but owes his present and precarious existence to man's care. Now, nothing that we know of forbids the hypothesis that some new species have been independently and supernaturally created within the period which other species have** survived. Some may even believe that man was created in the days of the mammoth, became extinct, and was recreated at a later **date. But why not say the same** of the **auroch, contemporary both of the old man and** of the new? **Still it is more natural, if not inevitable, to infer, that, if the** aurochs of that olden time were the ancestors of the aurochs of the Lithuanian forests, so likewise were the men of that age the ancestors of the present human races. Then, whoever con**cludes that these primitive makers of rude flint axes and knives were the ancestors of the better workmen of the suc**ceeding stone age, and these of the succeeding artificers **in brass and** iron, will also be likely to suppose that the *Equus* **and *Bos* of that time, different though they be, were the remote** progenitors of our own horses and cattle. In all candor we must at least concede that such considerations suggest a genetic connection from the drift period down to the present, and allow time enough—if time is of any account—for variation and natural selection to work out some appreciable results in the way of divergence into races, or even into so-called species. Whatever might have been thought, when geological time was supposed to be separated from the present era by a clear line, **it is now certain that a gradual replacement of old forms by new ones is strongly suggestive of some mode of origination which may still be operative. When species, like individuals,** were found to die out one by one, and apparently to come in one by one, a theory for what Owen sonorously calls 'the con**tinuous operation of the ordained becoming of living things'** could not **be far off.——"**

"So the Darwinian theory, once getting **a foothold,** marches boldly on, follows the supposed near ancestors **of our** present species farther and yet farther back into **the dim past,** and ends with an analogical inference which '**makes the** whole world kin.' As we said at the beginning, this upshot discomposes us. Several features of the theory have an uncanny look. They may prove to be innocent: **but their** first aspect is suspicious, and high authorities pronounce the whole thing to be positively mischievous. In this dilemma we are going to take advice. Following the bent of our prejudices, and hoping to fortify these by new and strong arguments, we are going now to read the principal reviews which undertake to demolish the theory,—with what result our readers shall be duly informed.——"

The "result," for a part of which alone we can find further room, may be understood from the following **passages**, with which we conclude:—

"To insist that the new hypothesis of the derivative origin of the actual species is incompatible with final causes and design, is to take a position which we must consider philosophically untenable. We must also regard it as highly unwise and dangerous, in the present state and present prospects of physical and physiological science. We should expect the philosophical atheist or sceptic to take this ground; also until better informed, the unlearned and unphilosophical believer; but we should think that the thoughtful theistic philosopher would take the other side. Not to do **so seems to concede that only** supernatural events can be shown to be designed, which no theist can admit,—seems also to misconceive the scope and meaning of all ordinary arguments for design in Nature. This misconception is shared both by the reviewers and the reviewed. At least, Mr. Darwin uses expressions which imply that **the natural forms which surround us,** because they have a **history or natural sequence,** could have been only **generally, but not particularly** designed,—a view at once **superficial and contradictory;** whereas his true line should be, **that his hypothesis** concerns the *order* and not **the *cause*, the *how*** and not the *why* of the phenomena, **and so leaves the question** of design just where it **was before.——"**

"It is very easy to assume, that, because events in Nature are in one sense accidental, and the operative forces which bring them to pass are themselves blind **and unintelligent, (physically considered, all forces are,) therefore they are undirected, or that he who describes these events as the results of such** forces thereby assumes that they are undirected. This is the assumption of the Boston reviewers, and of Mr. Agassiz, who insists that the only alternative to the doctrine, that all organized beings were supernaturally created just as they are, is, that they have arisen *spontaneously* through the *omnipotence of matter.*

"As to all this, nothing is easier than to bring out in the conclusion what you introduce in the premises. If you import atheism into your conception of variation and natural selection, you can readily exhibit it in the result. If you do not put it in, perhaps there need be none to come out. While the mechanician is considering a steamboat or locomotive engine as a material organism, and contemplating the fuel, water, and steam, the source of the mechanical forces, and how they operate, he may not have occasion **to mention the engineer. But the orderly and special results accomplished, the *why* the movements are in this** or that particular direction, etc., are inexplicable without him. If Mr. Darwin believes that the events which he supposes to have occurred, and the results we behold were undirected and undesigned, or if the physicist believes that the natural forces to which he refers phenomena are uncaused and undirected, no argument is needed to show that such belief is atheism. But the admission of the phenomena and of these natural processes and forces does not necessitate any such belief, **nor even render it one whit less improbable than before.——"**

"**Finally, we advise nobody to accept Darwin's,** or any other derivative theory as true. **The time has not come for that, and perhaps never will. We also advise against a similar credulity on the other side, in a blind** faith that species—that the manifold sorts and forms of existing animals and vegetables—'have no secondary cause.' The contrary is already not unlikely, and we suppose will hereafter become more and more probable. **But we are confident that if a derivative hypothesis ever is established, it will be so on a solid theistic ground.**

"Meanwhile an inevitable and legitimate hypothesis is on trial,—an hypothesis thus far not untenable,—a **trial just now very useful to science, and, we conclude,** not harmful to religion, unless injudicious assailants **temporarily make it so.**

"One good effect is already manifest: its enabling the advocates of the hypothesis of a multiplicity of **human species to perceive the double insecurity of their** ground. When the races of men are admitted to be of one *species*, the corollary, that they are of one *origin*, **may be expected to follow. Those who allow them to be of one species must admit an actual diversification** into **strongly marked and persistent varieties, and so** admit the basis of fact upon which the Darwinian hypothesis is built; while those, on the other hand who recognise several or numerous human species, will hardly be able to maintain that such species were **primordial** and supernatural in the ordinary sense of **the word.**

"The English mind is prone to positivism and kindred forms of materialistic philosophy, **and we must expect the derivative theory to be taken up in that interest. We have no predilection for that school, but the contrary. If we had, we might have looked complacently upon a line of criticism which would indirectly, but effectively, play** into the hands of positivists and materialistic atheists generally. The **wiser and stronger ground** to take is, that the derivative hypothesis leaves the argument for design, and therefore for a Designer, as valid as it ever was;—that to do any work by an instrument must require, and therefore presuppose, the exertion rather of more than of less power than to do it directly; that whoever would be a consistent theist should believe that Design in the natural world is coextensive with Providence, and hold as firmly to the one as he does to the other, in spite of the wholly similar and apparently insuperable difficulties which the mind encounters whenever it endeavours to develop the idea into a complete system, either in the material and organic, or in the moral world. It is enough, in the way of obviating objections, to show that the philosophical difficulties of the one are the same, and only the same, as of the other."

TRADE LISTS RECEIVED.—Vilmorin, Andrieux & Cie. (Paris), *Catalogue des Graines, &c.* List of Tree Seeds on sale at No. 30, Quai de la Megisserie. What is **Cotoneaster nepalensis, with "handsome flesh-coloured** flowers in long bunches, with very fine fruit as large as a small cherry, and coral-red"?——

Garden Memoranda.

J. S. RUCKERS, ESQ., WEST HILL, WANDSWORTH.—**Our readers will be glad to learn that the magnificent collection of Orchids for which this place has long been justly** celebrated **is at present in as fine condition as ever we remember to have seen it.** The different **houses in which these plants are kept** being efficiently warmed **and well glazed, the intense** cold for which last winter **will long be remembered** was effectually excluded, and a suitable temperature maintained even **when thermometers outside indicated several degrees below zero. In the Orchid house, properly so called, few of the**

plants are at present in blossom; we did observe, however, and with admiration, a vigorous specimen of the rare Dendrobium taurinum with a fine spike of flowers on it; of the latter the number on the spike was 13, and their colours were of the most delicate and beautiful description, being pure white, with the exception of the margin of the lip which was purplish violet, and the petals which were reddish brown, the whole producing a charming and agreeable contrast more easily conceived than described. The plant itself, which grows 4 or 5 feet in height, is one of the most stately among Orchids, and one which when better known cannot fail to be a favourite. The charming Odontoglossum Pescatorei was likewise in flower, as were also a Cattleya in the way of Wagneriana, Oncidium longifolium, and one or two others.

A water-house or aquarium possessed even at this season of the year a richness and variety in point of vegetation which is quite charming; immediately over the centre of the tank hung a huge basketful of Dendrobium nobile in full blossom; associated with it were also numberless smaller plants of different kinds suspended from the roof; and round the margin of the water were Caladiums and other things remarkable for fine foliage, and Pitcher plants—enlivened here and there by the fiery blossoms of Gesnera cinnabarina. On an end shelf was Dendrobium Paxtoni in full bloom—a fine kind with black blotched rich orange coloured flowers, and at the back was a border of Lycopods, containing nearly all the varieties of that very interesting tribe of plants, edged in front with a line of the bright green L. denticulatum. Platycerium grande and other Ferns have also been introduced here and there into this house with excellent effect.

A house has recently been put up exclusively for Ferns; it is upwards of 60 feet in length, and is well filled with very fine examples of that now fashionable tribe of plants. Among them were several fine specimens of Tree Ferns, and many splendid bushes of the better kinds of Gleichenia. Of Hymenophyllums and Trichomanes there is also a large collection.

Camellias have not bloomed well here this season, a fault which seems to be general, and one which doubtless arises from the wood not having been well ripened last year. They are now being encouraged to make growth in a moist temperature suitable for that purpose. On a front shelf were specimens of Tea Roses in the shape of Standards which will soon be in bloom, Skimmia japonica, one of the most hardy of evergreens, covered with round red Holly-like berries, Solanum Capsicastrum, also furnished with polished round orange-scarlet fruit, as large as ordinary-sized marbles, Epacrises in bloom, Tulips, Hyacinths, and numerous standard Azaleas, intermixed with Azalea sinensis and Rhododendrons, all having a showy and dressy appearance. In a warm end of this house, kept as a stove, the lilac-blossomed Conoclinium ianthinum was very effective, as were also Eucharis candida and various kinds of Amaryllids. The sweet smelling Rhododendron jasminiflorum was just coming into bloom, and when fully out will be one of the prettiest things in the whole collection. Its long tubular white flowers, some dozen or more in a bunch, are extremely handsome, and the foliage being rich dark green and not too large sets them off to great advantage. Vallota purpurea is largely cultivated here for decorative purposes, and when well flowered it is showy and striking. The way to bloom it satisfactorily is to start it early into growth and to well roast it in the sun under glass in the summer time, giving it no more water than is just sufficient to keep it in health.

In a large glass-covered promenade the borders were gay with flowering plants, among which was a very fine specimen of Rhododendron javanicum with beautiful heads of rich orange blossoms. To flower this Rhododendron well it must be started early into growth, so as to have its wood well ripened by means of sun heat in summer. In September it should be placed under glass; and thus treated it may be had in bloom by Christmas and all through the spring months. R. Maddeni is coming profusely into flower here, and in a conservatory attached to the dwelling house, R. Nuttalli is showing for flower. In indoor vases Farfugium grande had an excellent effect, the blotches on its leaves being well brought out and of good colour. Lapageria rosea also succeeds well here under glass; it has a light porous soil and plenty of water while growing; its only enemy is the slug, which eats the young shoots off close to the surface of the ground. To prevent this the stems are surrounded by narrow zinc troughs placed in the form of a square and kept constantly full of water. Over such a barrier as this, slugs find it impossible to pass.

A new Peach and Nectarine house has recently been erected, in which the trees are wholly grown in pots. They are at present loaded with fruit approaching the stoning process. Even the Stanwick Nectarine fruits well in pots; a small tree of it ripened 20 fruit last year, and this season it promises equally well.

Out of doors less injury has been done by frost than in most places. Rhododendrons are safe and promise to bloom well. Wellingtonia, a fine plant, is browned a little, but will outgrow it; Magnolias are also browned, and so are standard Bay trees in pots, even though protected. In the Kitchen Garden all is killed in the shape of vegetables, except Brussels Sprouts and Cottagers' Kale.

A new Rosery has been formed, and several important alterations effected in the way of improving the appearance of shrubbery borders; the whole place, in short, seems very much changed for the better.

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Climbers beginning to push should after this time be frequently examined to prevent confused growth. Kennedyas, if crowded, should have their shoots thinned. Ipomœas and Thunbergias being subject to red spider should be well syringed to prevent that pest gaining ground. Where a large quantity of hardy shrubs is annually forced, either to decorate the drawing-room or the conservatory, it is not desirable to pot a fresh stock each season, as a number of deciduous things, such as Roses, Lilacs, Thorns, Honeysuckles, &c., may, by proper treatment, be made to bloom for several successive seasons. Select therefore the most suitable plants when removed from the houses, and give them some kind of temporary shelter to gradually harden their foliage; those cramped for pot room shift into a size larger pot in rich turfy loam, and towards the middle of next month plunge them in an open situation in order that the wood may get ripe early.

FORCING DEPARTMENT.

Vineries.—Give air as freely as the state of the weather will permit, using a little extra fire-heat, and leaving a little air on at night so as to prevent the bloom being injured by damp settling on the berries, as is apt to be the case where the house is closely shut up.

Figs.—Where the early crop is approaching maturity the borders should be well watered, so as to avoid the necessity of having to water the soil after the fruit begins to ripen, which is injurious to the flavour, and is also apt to cause the fruit to burst prematurely, particularly if the trees have been rather dry at the root previously. So far as the present crop is concerned the trees can, perhaps, hardly be too dry at the root while the fruit is ripening, but where a second crop is expected care must be exercised to keep the trees in health, and to prevent the foliage becoming a prey to red spider, otherwise the second crop can hardly be expected to be good for much. Use the syringe vigorously and maintain a moist atmosphere as long as this can be done without risk of injuring the fruit. Also keep the young wood thin and regularly tied in, stopping before the fourth or fifth leaf, according to the strength of the shoots, &c.

Melons.—Encourage those newly planted out with a moist warm atmosphere, so as to get them into full growth as quickly as possible; but plants that are fairly established should be kept cooler, admitting air on every favourable opportunity, in order to secure short-jointed fruitful wood. Keep the shoots thin and regular, pinching out any not wanted, but avoid stopping the main shoots until they reach the sides of the pit, when by pinching out the points the laterals will start into growth and show fruit abundantly; and by this time the plants will have gained sufficient strength to set and carry a fair crop. Do not exceed 65° at night, and admit air when the glass rises to 75°, but do this very carefully on cold days. Endeavour to maintain a steady bottom-heat of about 80° or 85°, and keep the soil in a healthy state as to moisture. See to providing plenty of young plants for succession crops.

Cherry House.—Syringe the trees daily with water at the same temperature as that of the house. Loosen the surface soil in the pots or borders with a hand fork, and supply the plants liberally with water until the fruit begins to change colour, after which gradually decrease the quantity and cease syringing; give abundance of air on all favourable opportunities.

Strawberries.—Early plants ripening their fruit should be placed by themselves and kept moderately dry. Those in later stages of growth should however be well supplied with moisture both over head and at the root.

Frames.—All crops in these, such as Carrots, Potatoes, Radishes, and Peas, should have as much air as the state of the weather will permit, and be regularly supplied with water.

FLOWER GARDEN AND SHRUBBERIES.

Look well to recently transplanted trees and shrubs, especially such as may have got shaken or partially uprooted by the recent high winds. Do not allow anything to suffer for want of water at the root. The soil about newly moved things should be kept moist but not saturated or run together by over watering, as is sometimes done. In the case of large plants which require securing against wind use three strong tarred cords for each specimen; fix them to the plant by means of a collar made of strong metallic wire and thickly wrapped round with canvas to prevent its injuring the bark, and then tie them to strong pieces of Oak driven into the ground at proper distances from the stem of the tree. For specimens in prominent situations strong galvanised wires should be employed instead of cords, being neater in appearance; although somewhat expensive in the first instance they will last a lifetime. Take advantage of the present state of the ground to stir and rake the surface soil of shrubbery and herbaceous borders to prevent the growth of weeds and give a fresh neat appearance.

HARDY FRUIT AND KITCHEN GARDEN.

Seedling plants of Cauliflowers, Cabbages, &c., raised this spring should be pricked off when large enough to get stocky for final transplanting. As the future growth of the Cabbage tribe depends much on their being drawn when young, some attention should be paid to this point when they are in a seedling state, for the best after culture barely compensates for the first neglect. A crop of Globe Artichokes may soon be planted for producing a late supply of heads; the young side shoots taken from the old stools may be placed in lines 4 feet apart and 18 inches between the plants, or trenches may be dug 18 inches wide, and the same in depth, in which some well-rotted manure should be dug and the plants put out as above.

COTTAGERS' GARDENS.

Potato planting should now be finished as soon as possible. Potatoes and Onions should on no account be intermixed or shaded by other crops; there are however many things, such as Carrots, Parsnips, Turnips and all the Cabbage family, which will not only bear being slightly shaded, but in warm summers enjoy it. Mixed cropping therefore is a point to which the cottager should pay especial attention. The mixture must however be arranged so as not to interfere with earthing up or gathering.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON

For the Week ending March 7, 1861, as observed at the Horticultural Gardens.

March.		Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind
Friday	1	19	29.690	29.532	53	34	43.5	45	42½	S.W.
Satur.	2	20	29.927	29.619	52	40	46.0	45	43	S.W.
Sunday	3		29.850	29.540	53	35	44.0	46	43	N.W.
Mon.	4	22	30.184	29.0[illegible]0	49	28	38.5	46	43	N.W.
Tues.	5	23	30.225	30.003	51	[illegible]	45.5	45	43	S.W.
Wed.	6	24	29.901	29.606	55	37	46.0	45½	43½	S.W.
Thurs.	7	25	30.094	29.976	54	41	47.5	46	43	N.W.
Average..			29.981	29.739	52.4	36.4	44.4	45.5	43.0	

March 1—Rain; densely clouded; showery with cold wind.
— 2—Clear; cloudy, boisterous with rain at night.
— 3—Fine; very boisterous, slightly overcast.
— 4—Clear and cold; very clear at night; slight frost.
— 5—Overcast, densely overcast and windy.
— 6—Overcast, fine, sudden heavy squall with rain—5—6 P.M.
— 7—Clear; fine; cloudy, overcast; densely clouded.
Mean temperature of the week, 3½ deg. above the average.

RECORD OF THE WEATHER AT CHISWICK

During the last 35 years, for the ensuing Week, ending March 16, 1861.

March.		Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.
Sunday	10..	49.8	31.2	40.5	12	0.69 in.	4	3	1	4	5	8	[illegible]
Mon.	11	49.4	32.1	40.7	13	0.33	1	5	3	5	3	13	[illegible]
Tues.	12	50.6	32.4	41.5	16	0.24	4	4	5	3	4	11	[illegible]
Wed.	13..	50.6	34.8	42.7	13	0.36	—	2	6	3	3	10	[illegible]
Thurs.	14..	51.2	35.0	43.1	15	0.70	—	5	5	—	5	13	[illegible]
Friday	15..	51.0	34.6	42.8	17	0.37	3	7	4	1	3	7	[illegible]
Satur.	16 .	51.5	34.9	43.3	13	0.68	—	8	7	—	2	10	[illegible]

The highest temperature during the above period occurred on the 10th, 1826, 12th, 1841, and 15th, 1828—therm. 67 deg.; and the lowest on the 10th, 1847—therm. 7 deg.

Notices to Correspondents.

Books: *C A T.* It is impossible to advise you, your letter being far too vague. Nothing is said of your object in buying a book, or what you expect to find in it. We imagine you mean such a work as Moore's Floral Magazine, which comes out monthly, at 2s. 6d. a number.

Delphinium Cardinale: *A R.* It will not do for muling. If you cross purples with scarlet you obtain a muddy colour inferior to either. Dry brickdust is not handsome we own, but what of the colour of brickdust when wet? You doubtless read the letter from Mr. Deans of Jedburgh, p. 194 of last week.

Fruits: *Culloden.* Fruit that is to be kept should be gathered before it is ripe; once ripe the tendency to decay comes. Summer fruit is gathered ripe, because it does not need to be kept. If the fruit room is a good one Apples are best on shelves in a single layer, without any packing; but hard winter kitchen Apples may be heaped without injury. If decaying fruit is near sound fruit the latter immediately acquires a tendency to decay. All fruit that begins to spot should therefore be separated from the rest.

Glazing: *A.* If you will refer to Mr. Paul's admirable remarks in our Number for last week (p. 194), you will find the information you seek.

Hothouses: *W D.* You must consult a hothouse builder on such points. We cannot possibly do his work for him. Many more details than you give require consideration. To answer your questions properly would require a little treatise on heating and construction.

Moss Roses: *J C L.* These are usually increased by means of layers. They may, however, be propagated by cuttings, but that mode is preferred. Take young pieces off with a heel, insert them in sand, well watered, and pressed firm, in 8-inch pots, and place them on a slight bottom-heat under glass. When struck pot them off singly into small pots, and place them in a cold frame till strong enough to plant out.

Names of Plants: *A Z.* It seems to be some Aphelandra; we are unacquainted with the species.—*C B P.* It is a procumbens.—*E B P.* We are obliged to make it a rule not to name Mosses; however, we will not disappoint you; is Polytrichum juniperinum; B is Polytrichum aloides. You should obtain Wilson's Bryologia Britannica, an admirable book, published by Longmans.—*W G.* The true Leucojum vernum, a rare spring bulb.—*G D.* You are all wrong. 1 and 2 are species of Pittosporum: 1, undulatum. Colensoi. They have no sort of resemblance to Cyathodes (not Cyanthoues) acerosa, nor do they bear berries.

Wine Cellar Fungi: *J T.* Undoubtedly the white specks in your corks which penetrate the substance within the neck of the bottles, belong to a fungus likely to injure your wine. If you find that the spawn gets deeper into the corks, it would be prudent to recork the wine. *M. J. B.*

Misc: *C.* Both can be obtained through the great Nurserymen. You must observe, however, that it is the double Kamtchatica that is spoken of: the single one is a common Briar.—*Eliza.* Mr. Chater's address is Saffron Walden, Essex. Your other inquiry is merely antiquarian, and beyond our scope.—*A.* Much obliged for your letter. The subject contained in it has often been suggested, but is found too difficult to be carried out.

COLLEGE OF AGRICULTURE AND CHEMISTRY, AND OF PRACTICAL AND GENERAL SCIENCE, 37 and 38, Lower Kennington Lane, Kennington, London, S.

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The Agricultural Gazette.

SATURDAY, MARCH 9, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

MONDAY,	Mar. 11	Botley (Carts v. Waggons—Mr. E. King).
TUESDAY,	— 12	Hexham (Mr. T. Dryden on Grass Land).
WEDNESDAY,	— 13	Agri. Society of England .. .. Noon; Oxford.
MONDAY,	— 18	Norton (Paper by Mr. Nelson).
WEDNESDAY,	— 20	Agri Society of England .. .. Noon
FRIDAY,	— 22	Hadleigh .. .. 7 P.M. (Mr. Hawkins on Root Crops.)

THE second part of the Royal Agricultural Society's Journal for 1860 has just appeared. It contains long reports of Danish and French agriculture—the former by Mr. RAINALS, British Vice-Consul at Copenhagen—the latter a digest by Mons. TRÉHONNAIS, of Mons. LAVERGNE'S volume on the Rural Economy of France since 1789; both of these writers being men of European reputation in the agricultural world. These two reports occupy one-third part of the Number just published. There are also excellent contributions by Dr. VOELCKER and by Messrs. LAWES and GILBERT—the former on Phosphatic Materials, the latter on the Fattening Process in Oxen, Sheep, and Swine—together occupying about another third. And the remainder, descriptive more directly of Farm Practice, includes a prize essay by Professor TANNER on manuring; an account of a course of cropping in Kent, by Mr. HEATHORN; reports on the Canterbury Meeting by the judges, the stewards, and the editor; statistics of the Metropolitan Meat Supply, by Mr. HERBERT; and an elaborate account of Steam Culture by Mr. FRERE.

There seems no reason connected with any of the communications thus enumerated why the appearance of the Journal of the past year has been delayed so long. And as to the reports of the Canterbury meeting, many of them much inferior to those which appeared the same week, almost the same day, in the metropolitan journals, one does not understand why they should not have been published in the first part of the volume, more than six months ago.

The reports of the judges of implements are

given in the usual detail. Tabulated series of figures indicating force employed, and quantity of work accomplished, together with the awards, occupy many pages. They are however preceded by a short statement from the presiding steward, Mr. Caldwell, qualifying some of the conclusions arrived at, from which he appears to differ. Of reaping machines especially the Journal gives this year impartial testimony: the judges give the prize to Cuthbert, the steward declares for Burgess & Key, and a correspondent praises Wood's. They are no doubt all correct, and any of the machines may be safely chosen.

The reports of live-stock are extremely meagre; we greatly miss in the present volume the full and useful treatises, as they might well be called, of Mr. Robert Smith on the previous live-stock shows of the Society. Mr. Welby, one of the judges, does indeed give an interesting account of the riding horses and ponies shown at Canterbury, but to the cattle, sheep, and swine less than three pages are devoted—given, too, only that "the niche appropriated to 1860 may not be quite vacant in the annals of the Society." And thus after the lapse of seven months, during which the fullest record might have been prepared, we are told that the interest is lost and we must do without it. Accordingly there is nothing said which might not have been written down in half an hour on the evening of the first show day. And, written in the warmth and excitement of the time, the men of Kent might then perhaps have escaped the slur which has, seven months after date, at length been cast upon their agriculture in the *Agricultural Journal* of England. Assuredly Major Munn, who accused the absent implement makers of an intentional insult to his county, will have to do battle for its honour once more in behalf of the "sturdy but slow and tenacious race," who like the hare in the fable have "had a good lead and have not kept it."

One of the more important papers in the volume is on the present aspect of steam culture by Mr. Frere. There is in it a considerable collection of facts illustrative of the subject, and though many of the conclusions reached will not be generally accepted, and though when wider principles are touched upon, the writer goes, as we believe, altogether wrong, yet as a storehouse of actual experience it is very interesting. It is just one of those pictures of existing practice which it is the proper business of the Journal to exhibit, and which when the averages furnished by it are contrasted with the especial successes which ought also to be described, are useful contributions to agricultural progress.

The points successively taken up are—"An average day's work"—"Work done in a season"—"Cost of manual labour and water-cart"—"Cost of removals"—Cost of steam power"—Cost of horse power." These will furnish topics for comment hereafter. On the last named point there is a good deal of careless calculation and quotation, the less excusable as it occurs in passages where Mr. Frere is correcting the mistakes of others, and where one would think he would have taken care to be correct himself.

It is however when the interests of the labourer are discussed in connection with this subject that Mr. Frere goes most astray. He seems to belong to the school which teaches masters to watch over the interests of their men as if the relation between them were that of parent and child. The lamentation over the extension of the threshing machine and the advent of the reaper, of which circumstances have exposed the folly, takes now another form. But it is the same mind that once thus feared and grieved which finds now expression in such words as these:—

"One detail connected with steam-cultivation is really a misfortune, rather than, as it has been commonly regarded, a matter of congratulation. Most writers have stated correctly and with satisfaction that nearly as much manual labour is now required in connection with steam cultivation as that done by horses: but if we may rightly assume that this cultivation is to be effected in the six or seven busiest months in the year, I can hardly share their feeling."

"Indeed," says Mr. Frere, in another place, "we do not generally even attempt to do all we might do, and that for a sound economical reason—our primary object being to distribute the labour of both man and horse over the year with as little inequality as may be."

The Editor of the Journal, instead of hedging, and fearing, and warning, in the presence of inevitable activity and enterprise, ought to take the lead of it. He should recommend agriculturists, agricultural writers, and all who have the interests, whether of landlords, labourers, or farmers at heart, to further these interests by simply doing whatever in them lies to make farm practice profitable. Let them seek the interests of a class, whether they be farmers as part of the general community, or labourers as part of the agricultural community, rather in the extension of general prosperity than in direct effort for the exclusive good of the particular class concerned. A share in the general prosperity is a more lasting and a better thing than the possession of an exclusive monopoly of advantage. And labouring men will find their best interests served by whatever tends to increase the profits, nerve the energies, widen the intelligence, and quicken the enterprise of their masters. The amiable and charitable good will of Ladies Bountiful—beneficent by the sick bed, or in the school-room, or by helplessness wherever found—has done more harm than good whenever exercised among healthy men and women. And if it is to be fastened as a duty on the farmer, it will ensure the maintenance of that very condition which Mr. Frere treats as the natural one in a passage on the labourer which will be read happily with astonishment in many a district of this country.

He speaks thus:—"The man, feeling some of the drawbacks as well as advantages of not being a 'chattel,' has to trust to kindness and discernment, with the poor law in the back-ground, to save him from destitution." * He adds:—"And for his sake it is specially important that wisdom and humanity should combine to check a disposition to short-sighted saving, and, by a happy adjustment of farming operations, secure him steady employment."

However much of a truism this last paragraph may be, the whole statement bespeaks at once contentment with degrading circumstances, and want of confidence in the tendencies of those principles to which all progress is due. It is not with the energetic master or in the active well-farmed district that the labourer is badly off; that agriculture which employs the steam-engine and machinery is the one to be urged and hoped for in the interests of the working man.

There is an impartial report in another column of the state of the agricultural labourer in Dorsetshire.

In the *Times* of Wednesday last there appeared a letter from "A Looker-on," reciting the circumstances of a Petty Sessions case at Dorchester where William Little, George Cox, Ruth Cooke, and Anne Lake, were severally, and no doubt justly, fined for stealing Turnips. It is not for the purpose of casting odium on the county of Dorset, or of implying that wages are lower there than in other counties that he calls attention to this case, but for the purpose of denouncing that system described in another column by which various privileges, housekeeping perquisites, &c., are granted in part payment of wages, and accordingly the article is headed in large capitals "The Truck-system in Dorset."

The following is "A Looker-on's" description of this system. We simply reproduce it here that readers may compare it with the account given elsewhere by our Dorchester correspondent:—

"At Candlemas, or on the 14th of February, hundreds of working men meet at the county town, seeking employment, and ready, according to custom, to engage themselves for one year. This engagement is made sometimes in writing, but more frequently verbally. The terms and value are understood to be as follows:—

	s.	d.
A cottage, rent-free, equal to per week	1	0
Potato ground, 30 to 40 goad or perch	1	0
Money per week	8	0
A bushel of Wheat of inferior quality, called *gristing* or *tailing*, 1s. below the market price, equal to per week	1	0
For carters and shepherds alone, at harvest-time, 21s., which is equal to per week	0	5
Furze or fuel, equal to per week	0	6
Piece or task work during the year, considered to be equal to per week	1	0
	12	11

"It must not be supposed that these wages are offered to the single man, however strong or however skilled he may be; it is generally held to be the price of labour offered to and accepted by the labourer *with a family*; the single men obtain, according to circumstances, 7s., 8s., and 9s. per week.

"In the case of a man with a family, whose wages are made up partly by a money payment and partly by what are termed 'perquisites,' we will first examine the advantages. If the agreement is properly observed and carried out, as I admit it is by many fair and honourable masters, the Potato-ground is ploughed and thoroughly manured, and when the crop does not fail the produce may be considered worth more than 1s. per week. If the bushel of *tailing Wheat*, or *gristing*, supplied by the just employer at 1s. below the market price, is of a good quality, it is equal to more than 1s. per week in a year like the present, when bread is dear. The fair and considerate master frequently substitutes coal for the Furze or fuel, and in many instances gives ... expected; this may also be regarded as equal ... 6d. per week, and in this way a payment, partly ... partly in money, may be regarded in many instances ... advantageous to the agricultural labourer than ... payment, amounting to 12s. per week. But ... how the system is liable to abuse, and the labourer ... The cottage may be a wretched dwelling without ... accommodation, and disgracefully out of repair ... ground may not be manured; the soil may be ... quality, and the crop may fail, as it did this year. ... out of the 8s. given in money are taken weekly from ... to pay for the bushel of *tailing*, or *gristing*, and the ... the case I now bring under your notice, may be ... *miller could not grind it*, and the fuel or Furze ... wages, cut in a green state, either by the labourer ... *at his expense*, when brought to his cottage and ... produces a blaze without warmth, and, as it now ... be used simply for the purpose of drying the Wheat ... in part payment of wages, which the miller ... '*too damp to grind*.' Such may be, and frequently ... result of that most unjust and vicious *truck* ... prevails in the county of Dorset.

"If it had not been for this system, possibly ... women, Ruth Cooke and Anne Lake, might not ... the law, or have been able to plead as an excuse ... offences, '*It is very hard to starve*.' Five shillings ... eight retained weekly by their master for the pay... Wheat given *in lieu of wages* would have been at ... to buy good bread from the baker, or at least they ... purchasing Wheat '*which was so damp the miller* ... *grind it*.'"

* "If he has a garden allotment, he may very well do all the heavy work required to prepare the ground in the late autumn and winter."

THE AGRICULTURAL LABOURER

No. V. Dorsetshire.—Whatever may be ... other counties, it would seem impossible ... arrive at any correct view of the social, phy... moral condition of the agricultural labourer ... statements either of the average rate of his wa... the general character and condition of his ... from both taken together. The wages of ... bodied man, whether married or single (if no... in the latter case part of his father's family), ... in different localities, and according to the ... the farmer, and sometimes according to the nature ... employment, from 6s. to 14s. a week; the ... including a cottage and garden and an allow... fuel in wood, Furze or coals, and sometimes gri... per bushel. But unless the numbers receiving ... tively those several sums shall first be ascer... there surely can be no correct estimate formed ... the average rate of money payments. And unle... the case of those unprovided by the farmer ... cottage, it be also known what rent they ... for cottage or lodging, the effect of the mon... on their condition must be very doubtful. ... estates a very good cottage and garden may ... 1s. or even 9d. per week; a labourer on the ... the county town has out of 10s. to pay 2... week for a wretched cottage without any ... There is the same variation in the cottages. ... estates they are truly models; and in this ... there has been in various parts of the coun... the last 25 years very great improvement ... other estates the buildings are wretched, ... erected and allowed to stand without any rega... to the health, the comfort, the decency, or the ... of the labourer and his family. But here again ... a knowledge of the proportion which the ... classes of cottages bears to the other and to the ... gradations between them, no just view can ... taken from hence of the general condition ... labourer: and comparisons between this ... counties which have sometimes been drawn ... isolated cases have consequently been very ...

There are circumstances which greatly ... results both of low and of high wages paid ... of a family. If there happen to be four ... children, none of whom can work, what ... with 10s. or even 8s. a week, and perhaps ... paid? But if there are several of the fa... earn something, and if the father be ... sober and the wife thrifty, a very happy ... things through the aggregate earnings ... may consist with the lowest wages paid ... Not that this justifies in such case the ... which the farmer takes to keep down the ... either to the parent or sometimes to the chil... the other hand cases may be met with in ... united earnings of the family may be put ... or even 30s.; yet from the drinking habits ... them, and from want of management, there ... that family constant misery, want and deb... no imaginary nor unfrequent case. One ... the county well has seen not a few insta... And he traces much of this misery and ... debt, together with other evils to which ... is subject, to the wasteful and unjust sys... with a few exceptions exists in this county ... the farm labourer for his extra work ... harvest mainly by an allowance of beer ... Why should the truck system be prohibit... manufacturer in food and be allowed to ... rist even thus far in drink; especially when ... this latter system are so great? The thirst ... for drink are often originated in the harv... there fostered year by year. And thus ... labourer is often kept in a state of pov... man with low wages is led to poaching ... thieving. These practices re-act upon the ... lead him more and more to the beer-house ... legal or illegal; which last abound in ... districts. And few can know or imagine ... which in such districts by this petty thieving

bined result of drinking and low wages, often aggravated by the entire neglect on the part of the farmer of the social and moral welfare of the labourer and his family, that farmer is subject.

We could give startling instances. But it is needless to do so. If men will only think they cannot be surprised at the result, when to add something to the low sum paid to the father, the mother for 7*d.* or 8*d.* a day must leave her family at 8 or 9 A.M., and not return from her work on the farm until 6 or 7 P.M., when boys are sent to plough or to bird-keeping, or cattle keeping at 7 years of age, and exposed, without any regard to their welfare to the influence of the ploughman or carter, who may be a drunkard or of such habits at least as at a very early age accustom a boy to drink. Both the moral condition of the agricultural labourer and his wages are seriously affected by this too early employment of youthful labour. There may appear in it some advantage to the farmer in reducing the sum paid for labour; for from this early application to the work, a boy, though often at the cost of deformity, may hold the plough at 14 or even 13 years of age. Many and many an acre is ploughed in Dorset at the rate of an acre a day for 3*s.* 6*d.* a week. But an unprejudiced bystander who lives much amongst this class can plainly see that in a variety of ways the farmer loses far more than he gains by this; and that to train a boy only to work, to care only for the animal (as we have known some express it), and to be careless about his moral condition and his immortal soul, is bitterly cruel to the boy himself and most injurious to the best interests of society.

Another very fruitful source of evil to the Dorset labourer, arising either from the readiness of the farmer to take advantage of youthful labour, or partly also from the effect of the law of settlement, is the hiring of whole families, and their frequent removal from one place of service to another. For instance, if the use of a garden form part of the labourer's remuneration, what great profit can he make of it, or what great interest can he take in it, if on his sons leaving him, or on their refusing to work for very low wages, he is liable to be discharged at the end of a twelvemonth. The united earnings and privileges of the family may be 28*s.* or even 30*s.* a week, and the farmer considers that with this they ought to be very comfortable and contented. But if the father's share in either case be reckoned at 13*s.* or 14*s.*, the wages of two or three sons, perhaps above 17 years, must be very low. They have been as low as 4*s.* and 5*s.* for lads above 18 years; and on this family being discharged because the two earning those wages demanded an advance of 1*s.* a week, they earned, one on the next farm, as independent labourers 9*s.* each. Now, the effect of this on the mind and feelings of young men and lads is very injurious. They often say to those to whom they can speak freely, "If we can't get it in one way we can in another. If it isn't wrong in master to keep from us the full price of our work, it isn't wrong in us to take something to make it up." And thus a state of things is fostered which is ruinous to the moral and social interests of the community.

The Dorset labourer begins to know that his labour is an article of marketable value; and if only he would refuse the bribe of drink at harvest, and would renounce altogether his drinking habits, he would be able, without resort to means so evil and so injurious both to himself and to the farmer, to demand and to obtain a fair price for it. While the farmer, on his part, in the labour of a then sober, honest, and industrious peasantry would receive a far better article than he now gets.

On behalf of the farmer it ought to be observed that when from particular instances of low wages, philanthropists raise an outcry against him, it is too much forgotten by such persons, and by those who listen to them, that labour as a marketable article is a variable and not a constant quantity, and because of a man's family, 10*s.* or 12*s.* are expected to be paid for that which experience may have proved to be not worth 5*s.*, or sometimes worse than nothing.

There is great room for improvement on both sides. The farmer has to learn that it is his interest as well as his duty to care far more than he does both for the temporal, the moral, and spiritual condition of his workmen and their families. The labourer has to improve his habits and tastes, and the quality of his labour, and he must learn to take a greater interest in the stock and crops and property of his master. For these improvements we must look first, and above all, to the extended influence of love to God and our neighbour, and secondly to some alteration or to the repeal of the laws of settlement and rating.

MR. FRERE ON HORSE LABOUR.

Doubtless many of your readers are also readers of the *Journal of the Royal Agricultural Society of England*; and the clever account, in the "Part" just published, of the present aspect of steam culture in this country will not escape their notice. I shall be glad therefore, if you will let me in your columns direct their attention to certain criticisms in which the writer of that essay has indulged.

That is an important part of his subject which relates to the cost of existing methods of cultivation, because it is upon the greater cheapness as well as the greater efficiency of steam culture that its advocates depend. Both the ordinary, average, and unavoidable cost of horse power in agriculture, and that part of it, capable to some extent of reduction, which arises out of the inequality of its employment on our farms during the several months of the year, thus come properly within the scope of any essay on cultivation by steam power. Mr. Frere has accordingly referred to these and other aspects of steam culture in detail, adopting or correcting the conclusions of previous writers, and offering suggestions, arguments, and calculations, of his own.

It was right that an elaborate estimate, by the editor of the *Journal*, of what is now unquestionably the leading feature of English agriculture should include a correction of whatever previous statements bearing on this subject had appeared in the volumes of which he has the charge. When such statements have come to be quoted as authoritative it is especially necessary that they be subjected to whatever correction they require. We may reasonably suppose the latest writer on any subject to be the best informed; and, in the case of Mr. Frere, a high official position makes it not only his duty to provide for the right instruction of his readers, but his privilege to secure for his better information a currency and consideration certain of effecting whatever correction it may be capable of administering.

To this extent, therefore, I can have no doubt that Mr. Frere has been right in treating the subject of horse labour and steam culture controversially, though in the pages of what is not a controversial periodical. He was bound to correct previous misstatements in its pages. It may however be doubted whether it were equally needful or equally in good taste to pursue the victims of his criticism through other writings for which they are responsible, thus leaving the duty of correcting errors committed in the Journal for the mere pleasure of prolonging an attack, and that too from a position which protects the assailant from reply. Be that, however, as it may, I have personally no desire whatever to escape the responsibility of one who has "written a book;" and I am glad, therefore, that an error in my paper on horse-power (Vol. xix., p. 464, *Agricultural Journal*) which was detected I dare say by the first reader, and was corrected as publicly as possible soon afterwards (see p. 296* *Agricultural Gazette*, 1859), has at length received a correction in the Journal where it was made. This I would indeed at once have given in the next volume of the series had the error vitiated any important conclusion. But this it did not seem to me to do, and I treated it, therefore, as of little importance except as proving my unskilfulness as an arithmetician. And I would pass it by in silence now as formerly, were it not necessary to add that the correction offered by Mr. Frere itself needs to be corrected, as he will find if he again works out his problem. Doubtless he will think it quite as needful to correct his own mistakes as mine; and perhaps in another volume we may see this knotty point finally unravelled! And let us hope that in the promised article on the general economy of horse labour which Mr. Frere is to give us in a coming *Journal* we may at length have perfectly accurate arithmetic combined with trustworthy agricultural experience.

Assuredly in those pages of his present essay in which he sets himself to put me right his own blunders have been careless in the extreme.

He makes (p. 419) 9 horses capable of doing, "on Mr. Morton's hypothesis," 27,000 days work per annum!

He makes (p. 420) 300,000 lbs. 'lifted one foot high in 10 hours' time equal 5000 lbs. per minute!

He makes (p. 423) 10 per cent. on 10*l.* equal to 40*s.*!

Certainly I have no right to taunt any one with clerical errors; but at least it was to have been expected that, in personal criticism, and when so much importance had been attached to strict arithmetical accuracy by my assailant, he would have been correct in his corrections, accurate in his quotations, and careful to avoid that carelessness which he was condemning. In all of these particulars he is wofully at fault; not, surely, because of a hurried performance; his volume is two months after date, and there must have been ample time for careful revision. Alas! he is himself at length in the predicament of having "written a book;" and, he has doubtless long ago discovered to his astonishment and chagrin what blunders have escaped both editor and author.

There are however other errors for which he is responsible still more clearly indicative both of the carelessness with which he has read what he proposed to correct, and of the mistaken judgment as an agriculturist which he brings to bear upon his task.

Thus, to take but one additional instance of his references to my paper in the *Journal*, he attributes to me the absurdity of estimating a cart to weigh as much as its load. The point affects the whole calculation of annual horse labour on a farm, and therefore, trivial as it may seem, it ought to be correctly put and understood. What I had said was that the labour of carrying a load was equalled by the labour of conveying its carriage there *and back*. It appears that Mr. Frere's "own 2 horse Crosskill's" do not weigh "much more than half the load they commonly carry." I should have been very much surprised if they had. On both of the farms to which my calculations referred the common 1-horse Scottish cart was employed, weighing 8 to $8\frac{1}{2}$ cwt., and in estimating the labour of carriage on those farms, I had a right to double that of the mere conveyance of the load, because the effort of hauling an average cart-load (16 or 17 cwt.) to its destination is clearly equalled by that required to take to and *fro* a cart which weighs just one-half as much. Certainly I do not venture to say with Mr. Frere, that the aggregate I had given of the work done in the year "gives a total which it is not easy to mend:" and it is plain that he, too, will not venture to repeat it, seeing that he arrived at this conclusion through the careless blunder I have pointed out.

* Even, then, however, the correction was imperfect.

But I must ask your leave to add a few words about his references to my Paper on the Forces used in Agriculture, read in 1859 before the Society of Arts. That paper, hurriedly prepared, at a very short notice, and intended not as a contribution to an agricultural journal, but as a public address to others as well as agriculturists, could hardly be expected to withstand a criticism of its details. It contains several errors: one of considerable importance was corrected for me by Mr. Fowler in the Society's rooms just before it was read; and others are now exposed by Mr. Frere.

The irregularity of employment which horse labour meets with on a farm, now greater than ever when the advantage of autumn culture is at length generally realised, had to be illustrated, because on it depended the special advantage of a power which should take the excessive work at particular seasons, and be of no expense as horses are when unemployed. In illustration of this point I used a calculation, without first examining it, but the authorship of which I knew, of the monthly horse-labour on a farm of 240 acres of arable land. In doing so a clerical error—since, I am sorry to say, literally copied in more than one quotation—was committed, which Mr. Frere points out, but of which he offers a mistaken correction. The statement of the monthly horse-labour on this farm arrived at in this calculation, true enough qualitatively, and therefore proving that unevenness of its distribution throughout the year to which I was directing attention, is not true quantitatively. The figures named are I believe in every case below the truth.* They make in fact much too small a sum-total of days' employment on the farm per annum. Mr. Frere adds them together, though the unequal relation of the several monthly amounts to one another was the only truth they were intended to teach. He does this however to compare their sum on this 7-horse farm with the amount of time I had in my *Journal* essay suggested as the proper year's work of a farm horse; and thus he satisfactorily exposes the inconsistency of two statements for both of which I have been responsible.† I put the case as strongly as he could have put it himself, and can meet it only by the frank admission that the statement in the Paper read before the Society of Arts was hurriedly and carelessly employed, and is inaccurate *except for the purpose for which alone I used it*: and for which alone, as I think, its accuracy would have been tested by a candid critic. I may, however, add, that if, as is probable, the number of hours in the year, among which the annual cost of horse labour on a farm has to be divided be somewhat smaller than I have stated in the *Journal*, owing to insufficient employment of horses in certain months, and if therefore the cost per hour of agricultural horse-power should have to be put somewhat higher at present than I have estimated it; yet this is an error which will gradually cease as steam power becomes more generally employed during the excessive periods of farm labour, so that fuller and more even employment shall be found for a smaller number of draught animals throughout the year.

But, whatever the extent of my mistake, there is no reason (except it be a personal one) that I can see, why Mr. Frere should aggravate the appearance of it by multiplying my number of days per annum by his own number of horses. Why should he insist on 4 horses per hundred acres, and thus multiply by 9 when 7 were the number actually doing the work? Is it on the "black gritty siliceous heaths overlying chalk rubble and chalk which abound in Cambridgeshire around Newmarket" that he has found four horses needed for every hundred acres of arable cultivation—or, is it on that light land farm from which so many agricultural failures have been quoted and described in the volume of the Journal just completed—but which bids fair, nevertheless, from the frequent references which it there receives, to become the example farm of all England in the eyes of unprofessional agricultural readers?

If Mr. Frere had chosen he might have taken from my article on horse power the particulars of nearly 9000 arable acres and 2500 acres of pasture land on which 282 horses are employed, or not much more than three to every 100 acres of the arable. On the light land farms included here, there are instances where

* The case of this farm has been examined in detail in the Handbook of Farm Labour just published by Longmans.

† The following is Mr Frere's remark:—"I quote from the Bath and West of England Journal without knowing where the error of mentioning December twice originates. Assuming that the last mention of that month ought to be erased, we shall have a total of 560 days' work for a pair of horses in a year, or 1120 for one horse on a farm where 7 are kept; and according to the theory of 4 to 100 acres arable, 9 at least ought to have been kept; these 9 (on Mr. Morton's hypothesis) being capable of doing 300 days work a piece, or 27,000 days in all in the year.'

little more than two horses per 100 acres are employed, and out of 23 farms specified only three at all corroborate Mr. Frere's "theory." But it was necessary to assume a larger estimate than any here in order to the full exposure of a glaring error.

It may, however, have really been Mr. Frere's experience that nine horses are needed to work 240 acres of light land: if so, then let me use his own words and say—"If any man came to me saying 'I have thoroughly ascertained that such are my circumstances,' I should be disposed to answer, 'Surely you could revise your scheme of management a little so as to make it more economical.'"

Let me add that it will be a better use of his position if he shall in future urge the possibilities of Agriculture as illustrated by her conquests and achievements, instead of quietly describing average and listless experience, justifying "the old jog-trot pace," vindicating as acting on "sound economical reasons" those "who do not generally attempt to do all they might do," or going lower still for data on which to condemn his predecessors—all of which he has done in pages 418—421 just published of the twenty-first volume of the Journal. *John C. Morton.*

DEFICIENCY OF THE PAST HARVEST.

[The following remarks on this subject were made by Mr. Caird in Parliament on Thursday week.]

Mr. Caird said he was anxious to call the attention of the House to the serious deficiency of last harvest, by which interests of the greatest magnitude were affected. He was aware that in taking this course he was assuming considerable responsibility, but as the question had not been touched upon either in the Speech from the throne, or in the observations which fell from Ministers or the leaders of Opposition, he felt it a public duty to bring the matter under the notice of the House. It would be necessary for him to give a short history of the weather during the last season, and its effects upon the harvest. In October 1859, we were visited by a frost more severe, probably, than any within the memory of persons now living. This not only prevented a large breadth of Wheat from being sown, but its effects were felt in the almost total destruction of the green fodder crops. The severe winter caused great suffering to the stock farmers, and the cold wet spring which followed put them to enormous expense in buying fodder and carrying their stock forward to Grass. A cold wet summer followed the cold spring, and though there were heavy crops of Grass little progress could be made in getting them in and very few crops were saved. The same unpropitious weather continued during the harvest, and for 35 out of the 40 days preceding the end of August rain fell, and the temperature was 13° below what it had been in the previous season. The few intervals of sunshine did not admit of the crops being harvested to any extent, except in the finest and earliest parts of the country, and in some of the later counties—Derbyshire, Staffordshire, Northumberland, and elsewhere—the crops in some instances remained in the field as late as January. The scarcity produced by such unprecedented difficulty in recovering the corn crop was aggravated by a failure in the Potato crop, which, although not of as much importance in this country as in Ireland, nevertheless involved an increased demand for corn. He was sorry to say that the prospects of a future harvest were likewise seriously affected by the unpropitious weather which had lasted through the seed time, and had rendered it impossible that they could hope, even at the best, for more than an average crop this year. The House would not be surprised to hear that the result of so much bad weather had been highly disastrous. No reliable data existed, and all that they could hope to do was, therefore, to form an approximate idea. He had frequently pressed on the House the advantage of procuring returns of the acreage of the crops, and the advantage of such a system must now be evident. No objection would be offered by the great body of the tenant farmers, and the returns could be obtained at a very small expense. They had, however, no accurate data of that kind with regard to England. With regard to Ireland they had; and from them it appeared that the Wheat crop in that country had declined one-sixth as compared with what it was in 1857. He did not know that there was a diminution to the same extent in England; but though they had no accurate statistics to guide them in respect to the underground crop, they did possess some facts which enabled them to form an opinion as to the yield. During many years' experience he had found the Board of Trade returns to afford a good comparative data of the yield, past and present. He had examined those returns for a great number of the market towns; and, taking the five months from the 1st of September to the 1st February for the last five years, he found that the returns for the last year showed a deficiency of no less than 36 per cent. Besides the means taken by the Board of Trade to collect information on this important subject, very praiseworthy efforts were made by newspapers to supply the public with authentic data. The *Agricultural Gazette* had done much in this way, and as a result of its inquiries made an estimate which was subsequently confirmed by a return published in the *Mark Lane Express*. He found that out of 313 returns regarding the Wheat crop, more than three-fourths represented that in January last there was a deficiency of from 20 to 60 per cent. on the average crop. Those returns also dealt with Potatoes. He had made private inquiries of eminent agriculturists in various parts of the country, and had received full corroboration of the facts which he had laid before the House. Other evidence also corroborated these facts. The returns of railways running through corn producing counties did so. The Great Northern Company complained that for the last six months there had been a falling off in the traffic in consequence of the deficiency; the Eastern Counties repeated the same tale, and the North Western had suffered from the same cause. With these facts before him he should come to the conclusion that, estimating both quantity and quality—for there was a deficiency in quality also—the yield of corn at the last Wheat harvest would be at least one-third deficient. In Scotland, he was happy to say, things would be very different. The Wheat harvest there had been favourable; but hon. gentlemen would understand how little that told on the general consumption of the country, when he stated that the entire Wheat yield of Scotland would not supply more than 10 days' consumption for the whole country. From Ireland the accounts were conflicting. It appeared that in the earlier districts there was an average, but that in the later the results had been as disastrous as in England. He had obtained from the Custom House the comparative returns of imports during the last five years. From these he found that for the five years preceding last year the imports of Wheat and flour during the six months from August to February were on the average 2,438,000 quarters, while for the six months from August to January last they were 5,627,000 quarters, or more than double the average of the preceding five years, and more in those six months than in any one whole year, except the year 1853. Such had been the beneficial results of free trade. While there was famine in our fields there was none among our people. He believed that we had just reaped the worst crop since 1846-47, the time of the failure of the Potato crop. Mr. Porter calculated that during the first 50 years of the present century this country did not receive more than three weeks' consumption of foreign corn in each year. In the present year it would probably not receive less than six months' consumption for the whole population. The demand for meat and wool had naturally turned the attention of the farmers to that branch of the farming business. Accompanying that there had been a gradual rise in the rate of agricultural wages throughout the country. The consequence of all this had been that within the last six months we had imported more foreign grain than we had done in the 10 years between 1820 and 1830. We had the satisfaction of knowing that while there had been a shortcoming in this country there had been an abundant crop on the continent of Europe, and a superabundant crop in the United States of America; so that the people of this country had no reason to fear that bread would get either excessively dear or scarce. During the six months that elapsed between August and January, 1859, our imports of corn from America amounted to 148,000 quarters; for the corresponding six months of the last and present year our imports were 2,195,000 quarters, for which we paid 6,250,000*l.*, or nearly 20 times as much as we paid in the previous year. From Russia and France the imports of corn were also large, so that we had paid for our imports of corn this year an excess of 12,200,000*l.* over last year. In making these large imports of grain we had necessarily incurred a great expense, and the increase in the price of bread to the people of this country had been very considerable. It had been estimated that the Wheat consumed in this country amounted to 20,000,000 quarters annually, so that 1*s.* a quarter on that quantity, when the price rose or fell, amounted to 1,000,000*l.* We had, however, during the last six months to pay 14*s.* a quarter more than in the preceding year, so that the cost to the country was an increase of 14,000,000*l.* [Mr. Caird proceeded to argue for the need of reducing the expenditure of the country.]

Home Correspondence.

Pig Food.—For the last two years I have been in the habit of giving my pigs small coal to eat, perhaps 4 to 5 ounces twice per day, sometimes before meals; and my motive was got by accident, *i.e.*, seeing my half fat pigs one day out of the cot, they all went straight for a heap of small coal close by—known as ballast coal with my neighbours here. I was struck with the manner they seemed to enjoy the coal, grinding it up and eating the same. The idea came across my mind at the time, and knowing coal to be near related to carbon I thought it might possibly carbonise in the stomach of the animal, or on the other hand act as a good digester. I may very possibly be doing wrong at the present time by continuing to give my pigs coal, but I do so, and find they look for it and enjoy it too. I may add that the other week a friend of mine came to do some business, and among other things said a person had informed him they fed in part their pigs on coal. But my friend seemed to enjoy the thing so much that I was quite ashamed to confess I too had been such a foolish fellow as to feed with such gross food as coal; on the other hand I was better pleased with myself to find by his account there were other foolish people as well as myself. But are there not a many lessons we "animals" may learn from the instinct of the brute creation. I think swine keepers will agree with me, that it is very difficult to give a pig physic. But if they will turn the animal out of his cot into the green fields, ten to one he will act the part of his own physician, by simply finding some herb, that will perhaps in nine cases out of ten work wonders on his constitution. In fact I have found it so in two cases of pig sickness. I believe dogs cure themselves in the same way when ill, but not having dogs I cannot speak from experience of the fact. I simply do this to show the treatment I follow, that is, reason to assist instinct. Allow me to add another case for your kind consideration. I have got rather prejudiced against black pigs from the long cold winter's experience. I believe they require more food than the white pigs. I do also believe their black hides rob them of heat, and they will require more food to supply the extra loss of heat; on the other hand a friend of mine, a bailiff on a very large farm, tells me they are the very best a farmer can keep for profit. I can only tell you my white smock-frock was warmer for six days than my black coat for Sunday, and I found the same every Sunday this very cold winter. But I must add, in the summer my black coat is very objectionable, for when in the sun I feel as if on the spit roasting. If by feeding with small coal I should possibly convert a white pig into a black one, I should be exceeding sorry! Will any of your correspondents set me right on the combustion, if any, of my carbonaceous food, and convince me of the folly of one of my "wonderments," to use the words of one of my neighbouring farmers. *Thomas Gee, Bailiff, Hardwicke, near Gloucester.* [This letter will doubtless bring our Correspondent the information he desires. The quality of pigs depends on things of more influence than colour. The smock-frock is generally a warmer dress than black broad-cloth because you *work* in it.]

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

Monthly Council, *Wednesday, March 6th.* Present—The Earl of Powis, President, in the Chair; Lord Berners, Lord Feversham, Lord Tredegar, Lord Walsingham, The Hon. Col. Hood, Sir E. C. Kerrison, Bart., Mr. Amos, Mr. Raymond Barker, Mr. Barnett, Mr. Bramston, M.P., Mr. Caldwell, Colonel Challoner, Mr. Druce, Mr. Frere, Mr. Brandreth Gibbs, Mr. Hobbs, Mr. Wren Hoskyns, Mr. Howard, Mr. E. Mr. Jonas, Mr. Shuttleworth, Professor Simonds, Slaney, M.P., Mr. Banks Stanhope, M.P., Mr. Tho. M.P., Dr. Voelcker, and Mr. Owen Wallis.

The following new Members were elected:—

Harewood, Earl of, Harewood House, Leeds
Nevill, Viscount, Hope Hall, Tadcaster
Welch, Henry T., Leck Hall, Kirby Lonsdale
New, Richard, Hartpury, Gloucester
Badcock, Philip, 18, London Street, Cambridge Ter.
Crompton, George, Chesterfield
Crump, G. William, Woollas Hill, Eckington, Pers
Brown, Thos., Marham, Norfolk
Burtt, J. B., Kettering
Musgrave, Rev. Vernon, Mattersey, Bawtry
Haig, James R., Highfields Park, Wythiham, S
Hormgold, J. V., Blakemore Park, Upton-on-Se
Atkins, Alfred, Farnham, Slough, Bucks
Mayer, Smith, Newcastle, Staffordshire
Varnell, G. W., R. V. College, Camden Town, N.
Broughton, John Almington Hall, Market Dray
Linaker, Peter, Norton Hill, Preston Brook, Ch
Denson, Samuel, Picton Hall, Chester
Greenwood, J. M. P., Swarcliffe Hall, Ripley
Kitson, James, Leeds
Rider, Joseph, Leeds
Stead, Titus Bennett, Leeds
Blake, Wm. Bridge, South Petherton, Somerset

On the proposal of Mr. Fisher Hobbs, secon Lord Feversham, Mr. William Sanday of Holme point, Notts, was unanimously elected a Mem Council in the room of Mr. Kinder deceased.

Finances.—The Hon. Col. Hood presen report, from which it appeared that the Se receipts during the past month had been exam Messrs. Quilter and Ball and found corre balance in the bank on the 28th ult. was 350 It was recommended that in future on the pr any person to be a member of the Society, a letter shall be sent by the Secretary to the Ca requiring his signature and an acknowledgmen liability, which he must return to the Secretary his election can be proceeded with. The Co had consulted with the Solicitors to the Society expediency of summoning Members in arrears Subscriptions—two years and upwards—and were to issue a final letter to all defaulters, commencing the metropolitan counties, in the following form:—

"Sir,—The Council having had under consideration the ject of arrears of Subscription, consider they are boun justice to the Society to require these arrears to be forthw paid up. I am therefore instructed to draw your atten the applications that have already been made ... ment of the arrears for the past —— years, am £ ——, due from you. I would also direct your atten the opinion of eminent Counsel which has been comm to you, clearly pointing out your legal liability ... amount. Unless that sum be paid at this office, or re me by Banker's Check or Post-office Order on Vere the 30th inst., I am directed to hand over your na Solicitors of the Society with a view of taking legal pr to enforce payment.—"I am, Sir, your obedient Serv "H. Hall Dare, Sec

This Report was adopted.

Implement Committee.—Colonel Challon sented the following Report, which was adopte

That in order to give the public a better opportun specting the agricultural machinery exhibite County Meeting, the following regulations observed:—

I. That the stands for all Implements belonging lowing divisions, namely,
1st, The Tillage and Drainage of the Soil.
2nd, The Cultivation and Harvesting of Crops
3rd, The Preparation of Grain for Market an Cattle, as per the following list:—

1st,	2nd,	3r
Ploughs and Fittings, and parts thereof	Drills, and parts thereof	Steam En parts the
Harrows, and parts thereof	Manure Distributors, and parts thereof	Threshing and par
Cultivators, and parts thereof	Horse Hoes, and parts thereof	Dressing and par
Clod Crushers, and parts thereof	Hay Machines, and parts thereof	Barley and
Rollers, and parts thereof	Mowing Machines, and parts thereof	Chaff par
Whippletrees, and parts thereof	Reaping Machines, and parts thereof	Mills, there
Steam Ploughs, and parts thereof	Horse Rakes, and parts thereof	Cake parts
Potato Diggers, and parts thereof	Carts and Waggons, and parts thereof	Straw parts the
	Dibbling Machines, and parts thereof	Corn Scre Ruddles thereof
	Weed Extirpators, and parts thereof	Horse parts the
	Liquid Manure Carts, and parts thereof	Gorse parts the
	Farm Railways, and parts thereof	Root W parts the
		Turnip Pulpers thereof
		Steaming and par
		Sack Barrows thereof
		Weighing and par
		Thatch parts the
		Straw Tw parts the

be allotted in a part of the yard separate mis cellaneous articles.

II. That any Exhibitor wishing to show Imple longing to both these classes, and also mis articles, shall have two separate stands.

III. That the Certificate sent in by the 1st May sh to which division the articles intended to be belong, and if some to both the number of fee room required in each division.

IV. That the Specifications be classified according to the above division.

V. That Mr. Brandreth Gibbs be requested to adapt the Certificate Forms and Specification Sheets to suit the above arrangements.

General Leeds Committee.—The plan for a siding from the railway to the Show Yard proposed by the Mayor of Leeds was recommended, subject to approval by the Director of the Show; the gradient not exceeding 1 in 60. The great companies had agreed to use this siding.

The preliminary plan of the Show Yard on the same scale as at Warwick had been approved, and the Hon. Director had been requested to put up seats for the accommodation of visitors.

The Secretary was authorised to communicate with the railway authorities respecting the transport of live stock and implements to Leeds.

On the proposal of Mr. Brandreth Gibbs, seconded by Lord Feversham, it was unanimously resolved that the name of Mr. John Gott, of Armley House, near Leeds, be added to the list of this Committee.

A letter was received from the Secretary to the Commissioners for the International Exhibition of 1862, requesting the President of the Society to allow his name to be added to the list of those who had already signified their readiness to assist in the promotion of the object for which they were incorporated, which His Lordship, at the request of the Council, expressed his willingness to do.

The Consul-General of Denmark addressed a communication to the Society, informing them that the Agricultural Society of Denmark will hold their eighth meeting from the 2nd to the 6th of July next at Horsens in Jutland, and intend to arrange for the exhibition of machines and instruments used in agriculture, horticulture, fishing, forests, plantations, &c., as was done at Gothenburg last year, being desirous of showing the progress made in Denmark during the period which had elapsed. The mode of transport of machines, utensils, models, and designs will be communicated to intending exhibitors by the Danish Consul General on application at 6, Warnford Court, London, E. C.

On the motion of the President, it was resolved that the Monthly Council in April be held on Wednesday the 10th of April, in consequence of the first Wednesday in the month falling in Easter week.

Leave of absence was granted to the Secretary for a week at Easter.

The Council then adjourned to its weekly meeting on the 13th inst.

Farmers' Clubs.

Central: *March* 4.—At the monthly Meeting of this Club a very interesting paper was read by Mr. Charles Howard, of Biddenham, Bedford, "*On the several Merits of Day and Piece-work.*" He said: Labour has ever formed an important item in the cost of farm operations; but at the present day, when so much stock is reared, such large crops are produced, and so much machinery is employed, the balance-sheet shows that labour, upon the well cultivated farm, forms the largest item of expenditure; and the want of knowledge as to the best mode of directing labour, and of the value of the various operations in husbandry that manual labour has to perform, have been the cause of many a good man's downfall.

A farmer is far from being so advantageously placed as the manufacturer in letting his work by the piece, inasmuch as it is impossible for all the work of the farm to be performed on that system; a great deal, such as the feeding and tending of stock, carrying corn to market, and many of the field operations, cannot be done otherwise than by the day. Again, the farmer has to contend with the elements; and, if ever so disposed to keep his men at piece-work, the weather frequently prevents him. Again, some farmers are situated, like I am myself, with a good and well-conducted set of men, whom he is disposed to keep all the year through; and at certain seasons, when work is not very plentiful, there is no inducement to the farmer to set his men to piece-work, which would have the effect of raising his weekly expenditure. Still I think the system might be advantageously extended, for I find upon farms where piece-work is generally adopted the work of the farm is always in a more forward state than where the day system prevails, the men are better off, they are more active, and more skilful. It is a well-known fact in the commercial and manufacturing world that those trades have been the most successful, and have made the greatest progress, in which piece-work has been the rule; and I think this may be partly accounted for on the ground that the men feel an interest in facilitating the various operations upon which they are employed—the energies of their minds are also bent upon finding out easier and quicker methods of getting over their work. Put a set of men by the piece, at once a rivalry is felt as to who shall do the most work, or, to use their own words, be the "best man." If there is any rivalry amongst a company of day workmen, it is too frequently as to who shall do the least, and, in many cases, who shall best deceive his master. Piece-work, too, is the readiest way of making a difference between the good and indifferent labourer; and the plan adopted by many masters who wish it to be the rule, is to pay a comparatively low price by the day, in order to induce their men the more readily to take piece-work.

In treating this subject I have thought it desirable to adopt a course always favourably received by the Club, viz., that of collecting evidence from various counties of the systems pursued in each, with the prices paid for farm work. I find that most of my correspondents strongly recommend piece-work where practicable, and consider it would be benefical both to the employer and employed if it were considerably extended. In the northern part of England and in Scotland, I learn that there is not much work done by the piece, in consequence of the practice of having yearly or half-yearly servants. In most of the counties of England it is carried out to a considerable extent; and the operations by the piece are hoeing of corn and root crops; filling and spreading manure; mowing Grass and seeds; washing and shearing sheep; cutting, carting, stacking, and thatching of corn; laying and trimming hedges, ditching, draining; Mangel pulling; Turnip cleaning, heaping, and covering; cutting haulm, and threshing Lent corn. I have made particular inquiries on the important subject of harvesting; for, since the introduction of reaping machines great changes have been effected. My own opinion is, that to let the whole of the cutting, carting, and thatching to a company of men is the best. There is one gentleman in my own immediate neighbourhood whose name is now well known throughout the country in connection with steam cultivation, who adopts this mode of harvesting. He is a most practical man; and no one in our county gets more work done for his money. I will, if you will allow me, read you extracts from my correspondence, and begin with my own county, taking first the letter of Mr. Pike, of Stevington, the gentleman to whom I have alluded. He states:—

"I let my harvest as follows: I agreed with 17 of my own men to cut, cart, and stack the whole of my corn at 11*s*. per acre, with four pints of beer per day, to be cut close to the ground and all tied, viz., 100 acres of Wheat, 60 of Barley, 14 of Oats, and 60 of Beans. I agreed to find boys for carting and to horse-rake it: they tie and cart the draggings: the thatching is done at 1*s*. per acre. In former years I let them the thatching by the square; that did not answer, as they made too many stacks, by not carrying them high enough in the walls. With regard to using the reaping machine, they agreed to allow me 3*s*. per acre for the use of it and horses. By adopting the plan of letting the whole harvest, I had very little trouble with men or boys, for I find if they do not get on fast enough, they can get hands when I could not. One great advantage of cutting close is, that I get my land ready for breaking-up by steam for Tares, Mangels, Beans, &c. I have all hoeing done by the piece; dung-carting I generally let by the lump—that is to say, so much to fill and spread such a heap to go over so many acres, or so much for emptying a yard. One job I am anxious to have done by the piece—that is, the steam cultivating, which I think would be a great advantage, as it is so different from ploughing with horses: long days do not distress the engine. The only objection to piece-work in short days is, the desire of the men to make them shorter; if they are allowed to come late and leave early, the day men, whom we are obliged to have to look after the stock, become dissatisfied.

The next letter is from Mr. Howell, of Oakley, who occupies one of the principal farms of the Duke of Bedford. He states:—

"In this district, with the exception of draining, piece work is confined chiefly to the spring and summer months, such as hoeing Wheat, Beans, Peas, and Turnips, for which I pay as follows:—Beans and Peas per acre, 3*s*. 6*d*.; Wheat from 3*s*. to 3*s*. 6*d*.; Turnips, at 27 inches apart, setting out and once hoeing, exclusive of horse-hoeing, 6*s*.; mowing Grass from 2*s*. 6*d*. to 3*s*., with allowance of beer. When I commence my harvest operations, I agree with as many men as will be able to cut the corn as fast as I can with another set get it up after them. I consider I can gather in as much corn when tied with one set of men, as I can when otherwise with double the number. I pay the following prices:—Reaping Wheat, from 8*s*. to 11*s*.; mowing and tying Barley ready for carting, 6*s*.; mowing and tying Oats, 7*s*.; mowing Barley, 3*s*.; and bagging Beans, 10*s*. per acre." Mr. Howell also observes, "that if a farmer wishes to be forward with his work he must adopt the plan of having it done by the piece, and pay fair wages for the performance of the same, which stimulates the men to greater exertion."

The next letter I propose reading is from Mr. Battams, of Carlton—one of our most successful farmers, who has recently retired from business, leaving his sons in large farms. He says:—

"Although I have thrown the plough in the ditch, I will refer to my labour-book, and give you the prices paid upon my farms for piece and day work. I will commence with my first operation, grubbing up about 60 acres of woodland. This cost 8*l*. per acre. It was then drained 4 feet deep, at 2*s*. 6*d*. per chain. I next dug with spade 90 acres of old Grass covered with ant hills. This was done at 2*l*. to 2*l*. 2*s*. per acre. It was then drained 4 feet deep, at 2*s*. and 2*s*. 3*d*. per chain. The old ploughed land was drained the same depth, and at the same price, except where the pickaxe was used. This cost 3*s*. 6*d*. to 4*s*. per chain. The above was extraordinary farm work. I had more than 100 men employed at one time, my sons superintending the work; it was done well, and the men earned 12*s*. to 15*s*. per week, and some even more, in the winter months. I now come to ordinary farm work, done by the piece: trimming hedges, 2*d*. per chain; singling Turnips, and hoeing the side of the ridge after the horsehoe, 5*s*. to 6*s*. per acre; topping and pitting Turnips, 6*s*.; Mangel Wurzel, singled by the day, and for pulling, topping, and placing in rows for carting, 3*s*.; Bean dibbling, 2 feet apart, when the rows are marked out, 3*s*. 6*d*.; if unmarked, 4*s*. 6*d*. per acre; hoeing ditto twice after the horsehoe, 6*s*.; mowing Clover, 2*s*.; mowing Grass, 2*s* 6*d*. to 3*s*. per acre, with 3 pints of beer per day; mowing, sheafing, raking, and shocking Wheat, Barley, and Oats, 7*s* to 8*s*; Pea hooking, 4*s*. 6*d*. to 5*s*. 6*d*.: Bean hooking, 7*s*. 6*d*. per acre, with 4 pints of beer per day; thatching, 1*s*. per square of 100 feet, with beer: harvest carting, 3*s*. 6*d*. per day; ordinary day labour, 11*s*. per week; men attending the steam engine, 15*s*. per week, with beer; horsekeepers and shepherds, 12*s*. per week, with house and garden rent free. I think it desirable to have work done by the piece where practicable: but I find three-fourths of the ordinary work of the farm is performed by the day, and I cannot well see how it is to be avoided, with so many men attending stock, and the threshing, chaff cutting, grinding, and a great part of the cultivation of land done by the steam-engine; but even this day labour may be done very satisfactorily, where a good feeling exists between the master and the men, the former devoting sufficient time to the superintendence of the workmen." Mr. Battams adds, "I have not noticed the cost of paring and trimming old Grass land, as I think the necessity of doing it almost exceptional. I prefer double ploughing; what I have burnt cost 2*l*. an acre." Mr. Battams asks me how I purpose to make use of his name, and goes on to say: "Recollect I am an old fellow. Seeing the candle coming to an end, rather than flicker in the socket, I thought it better to light others, that I might see how they would burn before I was quite extinguished. I have had 38 years of farming, and I shall now be content to see my sons, who are all farmers, go a long way a-head of their father."

In our county, you all are aware the Duke of Bedford has a very large, and, I may add, exceedingly well managed estate, upon which draining has been carried out to a very large extent, and in the best possible manner.

The whole of the work, as far as possible, is done by the piece. The prices are regulated by the value of day labour in the district, and by the nature of the ground. The drains average 4 ft. to 4½ ft. In good free soils this work is done at from 6*d*. to 8*d*. per pole, and the men will earn 13*s*., 14*s*., and 15*s*. a week. The land belonging to the Duke, in the northern part of the county, is of a much stiffer nature—a blue clay, mixed with chalk stones and gravel. Here the draining costs from 9*d*. to 1*s*. per pole. The men expect to earn more money, as it costs them more for tools. They earn from 2*s*. 6*d*. to 2*s*. 8*d*. per day, and this in the winter months. The men are allowed to draw the usual day's pay of the neighbourhood, and are generally settled with once a month. The gentleman to whom I am indebted for this information, and whose opinion is worth having, thus closes his letter: "If a man works honestly and fairly, I think he is well entitled to the 6*d*. or 8*d*. a-day more than the ordinary day's wages; and if he has 2*s*. 6*d*. or 3*s*. per week clear after paying for his tools, it is a great help to the labourer and costs the employer no more, and perhaps less, than if done by the day." On the estate of the late Earl de Grey, now Lady Cowper's, under the very able management of our friend Mr. Trethewy, a great deal of draining has also been carried out. Mr. Trethewy has favoured us with the prices, and he states: "For draining I give from 5*d*. to 9*d*. per pole, for 4 ft. work, and provide a man to lay the pipes. I pay the latter by the day, and give him the control of the work, after it is set out. For 3 feet deep I give about 4*d*. per pole, with a foreman, as in the other case; main drains from 9*d*. to 1*s*. per pole, according to circumstances. For planting new Quick, forming table and ditch with single row of Quick, and fencing, 5*s*. per chain; with double row of fencing, 1*s*. more; for laying fences, 6*d*. to 8*d*. per pole, according to ditch, &c.; trimming or 'swabbing' Quick fences, when kept under the hook, 1*d*. per pole."

From Norfolk I have been favoured with letters from Mr. Hudson, of Castle Acre; Mr. Clare Sewell Read, of Plumstead; and one other gentleman, in another part of the county. Mr. Hudson says:

"There is not so much piece-work done on the farms in this district as in former times; but we prefer that system when the men will take the work. The drilling is done by the acre. The man who leads the horse, and the man who guides the drill, are paid each 3*d*. an acre, if the work is done well; they earn about 3*s*. a day each. Fencing is paid for by the rod of 7 yards, at from 9*d*. to 1*s*. a rod. The manure is filled by the load, at 1½*d*. per load; manure heaps turned over at 1*d*. per load. Turnips are hoed out at 2*s*. per acre, and singled by hand at 1*s*. 6*d*., and hoed round each plant at 3*s*. an acre, besides being horse-hoed three or four times between the ridges. Clover is mown at from 2*s*. to 3*s*. 6*d*. and 4*s*. an acre. The harvest work is taken by the men on the farm, who cut the Barley and Oats, and pitch, load, and stack the whole of the crop, including Wheat, at from 6*l*. to 6*l*. 10*s*. per man, the Wheat being cut by machines, and tied up by women, at from 2*s*. 6*d*. to 3*s*. an acre, according to crop. Rix's gathering rake is of great use in getting the Wheat into sheaves, ready to tie up. Barley is gathered and heaped at 6*d*. an acre. In the autumn the Swedes are placed in rows of from six to eight drills together, at 2*s*. 6*d*. an acre. If topped and tailed, and loaded on carts, or heaped ready to cover up, 4*s*. an acre. Stones are gathered from the Clover layers, and put at once on carts, instead of being laid on the ground in heaps, at 1*s*. per load of 24 bushels. Hay stacks are thatched at 4*d*. a yard run at the eaves; corn stacks, at 5*d*. per yard run. Threshing is done by steam power, the dressing by hand; the men earn from 11*s*. to 15*s*. a week." Mr. C. S. Read writes:—"Piece-work is not so common as formerly, because it cannot be done so cheaply as it could a few years ago. Not only do farmers pay more for mowing, hoeing, &c., but the rate of wages is quite 1*s*. a week higher than it was 10 years ago. Draining, ditching, and the like, are generally piece-work; also muck-filling and spreading in one way or another. Harvest is invariably managed as follows: a certain number of men and boys are hired, and they get in the harvest: the harder they work, the sooner it is done, and of course the more they earn. Wages have been 6*l*. for an able-bodied man lately, and the harvest averages under a month, being often ended in three weeks; but this year it was nearly five. Where reaping machines are extensively used, I think an alteration may take place in the mode of harvesting the corn. On some farms already the men are paid per acre for tying and carting the grain; and many farmers, to popularise the machines, have hired their usual staff for harvest, and given the men the use of the machine. The harvest costs from 10*s*. to 14*s*. an acre, including everything." In reply to my inquiry about the letting of ploughing in Norfolk, Mr. Read adds:—"Very little ploughing is done by the piece, certainly not with horses; but many farmers put out ploughing to their bullock men, the bullocks being changed four times a day, and four bullocks being allotted to a plough, the price varying from 1*s*. 2*d*. to 1*s*. 8*d*. per acre, the depth and stiffness of the land of course regulating the price. I am in favour of well-paid piece-work, and a comparatively low price for daily labour; if your day's pay is high, the men do not like to take piece-work, and having piece-work is the only way we can make the proper difference between the good and indifferent labourer."

The remainder of the paper, together with a short report of the discussion, will be given next week. Meanwhile we may add that there was a very general expression of thanks to Mr. Howard for his promptitude in undertaking the introduction of the subject though at very short notice.

Wantage.—At the late anniversary dinner of the Wantage Pitched Market, the Chairman, Mr. J. B. Empson, gave the health of Mr. Gillett of Swindon. He said:—Although the names of the buyers have been brought before you as a body, there is one name I am specially anxious of bringing before your notice, and feel much confidence that, under the existing circumstances, you will one and all most heartily respond to the toast. I have no wish to refer to the subject of the Burnet on the present occasion. Although I have once heard him called "Burnet" (laughter), I was sorry it could not have been more amicably settled; but for my part I have formed but one opinion, and have but one view on the matter. I know how great a difficulty there is in obtaining Sainfoin without Burnet, and I remember that so long ago as 1845 I purchased Sainfoin, and although purchased from a farmer—yes! from a farmer—I had a large quantity of Burnet, and since that time I have never seen Sainfoin without Burnet. You all know the honest, upright, straightforward, honourable manner in which Mr. Gillett conducted his own business as well as that of his father of

so many years, and I am convinced Mr. Gillett sold that seed to Mr. Davey in that same honourable way he was wont to do.

Mr. W. H. Gillett responded as follows:—I could almost have hoped that over so convivial a board, the subject of the Burnet would not have been mentioned, but inasmuch as it has been brought forward by the Chairman, I can only express myself most deeply grateful to him for the kind and flattering manner he has brought my name before you, as also to all for having so heartily responded to the toast. I have but little to say on the subject of the Burnet, having no desire to mention the name of Davey, or to sound my own trumpet, and the matter having come into the public papers, each has had an opportunity of forming his own opinion. The Chairman having mentioned that it would have been more satisfactory could it have been amicably arranged, I will briefly say that I declined to leave it to arbitration, as in such cases the amount in dispute is usually divided, as to please both parties, and this would give Davey an opportunity of saying I had not only sent him bad seed, but admitted it by allowing him 20*l.* to hush the matter up, and I would not compromise my character. I have a clear conscience, believing at that time I was selling Davey pure seed, and not only so, but I delivered him pure seed, as Mr. Bolton, of Wroughton, from whom I had the seed, has most fortunately a bushel of the same seed left, a portion of which has been sent to London, and was pronounced to be unusually clean, of which you may hear further hereafter, and this bushel of seed we had in court, though it was not produced, as we considered we proved the sale by sample, and then no matter if all was Burnet, as there was no complaint at the time of delivery. I have made it my chief study to conduct the business honourably, and if you do not feel that confidence in me which is necessary, I know you would not come to me, on behalf of my father, who has supplied you with pure seeds for so many years.

[We publish the above paragraph in fairness to Mr. Gillett, whose name has more than once appeared in these columns in connection with a seed case at Faringdon. The personal honesty which is here vouched for does not however affect our judgment of the possibility of separating Burnet and Sainfoin, or of the evils which foul seed whether honestly or dishonestly disposed of entail upon the purchaser.]

Reviews.

Handbook of Farm Labour. By John Chalmers Morton. Longmans. Pp. 138.

Of this number of Mr. Morton's series we give the following account, taken from the Messrs. Longmans' "Notes on Books," which are confined to an analysis of the contents of the works referred to, expressly excluding characteristic or laudatory notices:—

"The present Handbook consists of six chapters, with an appendix and index. In the first chapter the statistics of farm labour are discussed. The actual cost and amount of hand labour and of horse labour on three farms of light soil; on seven farms of medium soil; and on four farms of heavy soil, are detailed. The average expenditure of farmers under this head is gathered from figures describing the agricultural statistics of South Gloucestershire, as well as from such tables taken from the census of 1851 as bear upon the subject.

"In the second chapter the cost and use of steam, water, and wind power in agriculture are discussed. The actual employment of steam power on a number of farms is described—its cost per horse power is calculated; its economical management is referred to; the experience of two leading agriculturists in the use of water-power is communicated; and the occasional value of wind power is alluded to.

"In the third chapter the cost of horse-power is elaborately calculated from many different methods of stable management, and from an immense quantity of evidence on the other items of expenditure involved. Its cost per acre on a number of farms is stated, and its cost per cwt. of draught is estimated.

"The fourth chapter describes the condition of the agricultural labourer, states his wages in most of our counties, names the various methods of hiring and employing him, and discusses the relationship of master and servant.

"In chapter five the cost of all farm operations is ascertained. The data on which such calculations hinge are first determined; the cost of the several operations of the farm is then worked out; and lastly the labour cost of all our cultivated crops per acre is estimated; separate calculations being in several instances given according to the various plans of cultivation, and according to various rates of produce per acre.

"The sixth chapter contains a calendar of farm labour, and concludes with illustrations of the way in which the labour of the farm is distributed through the months.

"In an appendix Mr. Marshall's experience on boarding farm labourers, and Mr. Morton's experience of the way in which labourers' wages are usually expended, are added."

Miscellaneous.

Public Companies for Improving Agriculture.—Assuming and believing that great and comprehensive improvements in agriculture will originate with public companies, I prognosticate that a combined system of irrigation—town sewage irrigation—and railroad transit must form an important feature of any great district operation. The principles of drainage, steam cultivation, covered buildings, steam machinery, &c., so well understood by our agricultural engineers and surveyors, would naturally form a portion of every such improvement. "But," said a farming friend of mine, as we discussed this question of connecting farms and towns by rail, "how can you expect to do this? Mr. So-and-so would not listen to such a proposition, and his landlord would not like his farm altered and cut about." I reply there is no cure for prejudice like a public company and an Act of Parliament. At this very moment, regardless of affections and prejudices in favour of old residences and old customs, our new Railway Companies are, by Acts of Parliament, levelling whole streets and squares of houses, overlapping, undermining, destroying, and reconstructing, with a hard-heartedness yet unknown to British landholders and British tenants. I hope the time is fast approaching when great associated companies of city merchants and rich agriculturists will expend enormous sums in the purchase and reconstruction of estates, making them subservient to the one grand object of an economical use of steam power for almost every farming operation, including sewage irrigation. We shall then not have the mortification to know that it is possible to carry coals at ½*d.* a ton per mile, at 20 miles per hour, on a railway (formed at enormous cost, and still paying Consols interest to its shareholders), while our farm produce on the common road costs us 8*d.* per mile, and crawls along at a snail's pace. When estates and farmeries have been so improved by public companies, farmers will be found willing to pay a doubled or a tripled rental, provided they see that such increased rent only represents a fair interest on the necessary improvements, and such estates, or portions of them, would readily find purchasers. We all know that farmers like to hold under public bodies (such as charities, &c.), because their tenure is more secure, and they are more free from personal or political interference or caprice than when holding under a single individual. I have no doubt that Parliament will some day so facilitate the registration and transference or exchange of lands, that public companies may be found to deal with land improvements. It seems odd that, while hundreds of millions of capital flow into almost every other channel, British or foreign, agriculture has not been dealt with, except lately, on a limited but beneficial scale, by the "Land Drainage" and "Land Improvement" Companies. When I suggest public companies, I mean that they should do, on a large scale, and with immense resources, that which it would be impossible for individuals to accomplish, and, having made all necessary improvements, sell or let the various farms so improved. *Mr. Mechi's Paper on Agricultural Prospects.*

STATE OF THE WEATHER—BERKSHIRE.

For the week ending March 7: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain.	Wind	Barometer.
		Max in Sun.	Max. in shade.	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	1 ..	68.0	50.0	34.4	46.7	40.0	0.07	S.W.	29.52
Saturday	2 ..	60.0	49.4	33.4	43.8	40.0	0.05	W	29.78
Sunday	3 ..	52.4	48.6	40.0	45.0	42.0	0.17	W.	29.44
Monday	4 ..	62.0	49.0	33.4	44.4	41.5	0.01	N.W	29.80
Tuesday	5 ..	64.2	44.2	29.4	41.9	40.0	..	W.	30.05
Wednesday	6 ..	54.0	48.0	40.4	45.1	41.5	..	S.W.	29.70
Thursday	7 ..	56.6	51.0	35.4	44.5	41.5	0.05	N.W.	29.78

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Cider Mills: *R. H.* The old stone working in a circular trough is still believed to make the best work; but we ask for the experience of any of our readers who may have used other forms of cider mill.

Manures, Linseed Cake, &c.: *The London Manure Company* report the demand for Peruvian guano continues to increase considerably, and a very large business is being done in it. There has been one arrival this week—a cargo of 700 tons. Nitrate of soda, which has reached a very low price, has of late been decidedly firmer. Linseed cakes are still high, and dealers seem disposed to hold rather than give way further. Rape and Cotton cake are both lower than last report.

		£	s.	d.		£	s.	d.
Peruvian Guano, direct from Importers' Stores.. ..	per ton.	12	5	0	to	12	12	0
Bones	"	4	15	0	to	5	5	0
Ditto, crushed..	"	6	0	0				
Ditto, half inch	per qr.	0	17	6	to	0	19	0
Ditto, dust	"	0	17	6	to	0	19	6
Animal charcoal (70 per cent. Phosphate)	per ton.	4	10	0	to	5	0	0
Coprolite, Cambridge, whole..	"	2	2	0				
Ditto ditto, ground ..	"	2	13	0				
Ditto Suffolk, whole ..	"	1	15	0				
Ditto ditto, ground ..	"	2	6	0				
Nitrate of Soda	"	13	10	0	to	14	10	0
Sulphate of Ammonia ..	"	14	10	0	to	15	0	0
Gypsum	"	1	10	0				
Salt in (London), according to quality	"	1	3	0	to	1	7	0
Sulphuric acid, concentrated 1.845	per lb.	0	0	1				
Ditto, brown, 1.712	"	0	0	¾				
Superphosphate of Lime ..	per ton.	5	10	0	to	6	6	0
Blood Manures	"	6	5	0	to	7	10	0
Dissolved Bones	"	6	10	0				
Linseed Cakes, best American (barrel)	"	11	12	6	to	11	15	0
Ditto ditto (bag)	"	10	10	0	to	11	0	0
Rape Cake, English ..	"	6	0	0	to	6	5	0
Ditto Fine Green German ..	"	6	10	0	to	6	15	0
Cotton-seed Cake	"	6	10	0	to	6	15	0
Marseilles cake	"	9	12	6	to	10	0	0

Parsnips: *Subscriber.* Dr. Lankester's report shows that in Parsnips the nutritious matter forming flesh is only ½ what it is in Potato, 1-6th in Rice; 1-12th in Wheat; that it has only 1-5th the quantity of starch which Potato has, and not quite so much sugar! Parsnips are generally much more watery than Potatoes, and there may thus be twice as much dry matter in a cwt. of the latter as in a cwt. of the former, and this will account at once for Dr. Lankester's verdict. But in addition to this the dry matter of the Potato is richer in many valuable ingredients. The following is an analysis by Dr. Voelcker of the dry Parsnip. That of dry Potatoes with which it is compared is compiled from several analyses:—

	Parsnips.	Potatoes
Fibre	44.7	15.0
Starch	19.5	60.
Gum, &c.	4.1	[illegible]
Sugar	16.0	13.[illegible]
Fat	3.	1.[illegible]
Nitrogenised compounds ..	7.25	7.6

The above ingredients it must be remembered are mixed with nearly twice as much water in Parsnips as in Potatoes.

MESSRS. WHEELER AND SON beg to su[bmit a] valuable Testimonial respecting their GLOUC[ESTER]SHIRE KIDNEY POTATOES and TOM THUMB LET[TUCE].

From the Rev. W. Nickisson, *Ashley Rectory, Market* [...]

"It occurs to me just to mention one or two thing[s] they are fresh upon my mind; with regard to your See[ds] Vegetable and Flower Seeds) they are as excellent as which to those who know your Seeds is, perhaps, the testimony I can give. Your Glo'ster Kidney, on a trial, confirms me in my opinion of its excellency expressed last year. As an early Kidney it surpasses soundness, and flavour, anything I know. I was anx[ious to] see how it would stand this late wet spring, as I th[ought it] might be affected by the long-continued wet, but this been at all the case. The Tom Thumb Lettuce has al[so given] me great satisfaction, especially for continuing so long running to seed. I have a few at the time I write wh[ich have] been fit for table upwards of three weeks, and still [show no] signs of 'bolting.'"

J. C. Wheeler & Son, Seed Growers, Gloucester.

MESSRS. WHEELER AND SON beg to [call at]tention to the following Testimonial to the [...] their Seeds:—

From Mr. Bevan Smith, *Manager of the Gl[...] Reformatory.*

"Your Seeds of last year were of first rate quality a most prolific crop of Peas and Beans. The C[...] Roots in every way answered my expectations; ind[eed I may] say your Seeds of every kind far surpass any I c[an get] elsewhere."

Our LITTLE BOOK is this season Illustrated, an[d contains] prices and descriptions of some of the best seeds in c[ultivation,] post free for 3 stamps.

J. C. Wheeler & Son, Seed Growers, Gloucester.

From G. Shakespeare, Esq., *of Stratford Villa, Llan*[...]

MESSRS. J. C. WHEELER AND [SON,] Seed Growers, Gloucester.

"I have found your Seeds, both Garden and Agr[icultural,] of a very superior quality, *always clean, true, and g[ood,]* is a consideration of vital importance, and which readily appreciated by all who cultivate land, as wh[en bad] and old seed is purchased a great vexation and disapp[ointment] follows, and a season lost. I shall certainly continu[e to deal] with your House, whose business seems conducted [on such] sound principles as to ensure permanent custom."

A LIST of our FARM SEEDS, including GRASS [and] CLOVER SEEDS, MANGELS, SWEDES, &c. all [of the best] quality, will be forwarded gratis and post free.

J. C. Wheeler & Son, Seed Growers, Gloucester.

IMPROVEMENT OF GRASS LANDS,

BY SOWING GOOD SEEDS OF THE MOST SUITABLE KI[NDS.]

SUTTON'S RENOVATING GRASS SEED[S con]sist of the finest Grasses and Perennial Clovers, pro[ducing a] great improvement in the Pasture, and at a small ex[pense.] Quantity of Seed required, 8 to 12 lbs. per acre. Price [...] to 9*d.* per lb., or 80 per cent. Sow in February, Marc[h, or] April.

The great improvement effected by sowing Messrs. S[utton's] RENOVATING MIXTURE is most satisfactory, and t[o those] who have not studied the various properties and h[abits of] Grasses the results are quite surprising. The [following] extracts from letters are similar to many others rec[eived un]solicited:—

From Shaftesbury Walmsley, Esq., *Mottistone, I*[...]

"The Grass Seeds were extremely good, and [answered the] purpose uncommonly well; they gave me a fai[r crop of] hay last summer, 1½ tons per acre, where I never s[aw any]thing but bents and rubbish grow before. I strongly [recommend] your Renovating Seeds; they are clean, and I belie[ve may] be depended upon."

From Mr. J. Hallett, *Blackford Farm, High*[...]

"The plot of ground where the Grass Seeds we[re sown,] which before seemed almost past growing anythi[ng, is now] growing as beautiful a plant of herbage as any one [could wish] to see."

From Miss Andrews, *Norton Villa, near Sw*[...]

"Your Renovating Mixture we had last year a[...] answered our expectations."

From Alexander C. Forbes, Esq., *Stonestone House,* [...]

"You will be pleased to hear that the Renova[ting Seeds I] sowed, and which I thought had failed, are now co[ming up in] great abundance."

From Mr. G. Norrington, *Rectory Farm,* [...]

"Five years ago I wrote to you to send me a [...] Grass Seeds to sow upon 10 acres of old pasture. [When] I took the farm the 10 acres of meadow were almost [...] now have a most excellent pasture."

From the Rev. John Guthrie, *Vicarage, C*[...]

"I have no hesitation in expressing my great [satisfaction with] the manifest improvement both to lawn and pastur[e from the] Seeds which I received from you, though I was [...] in the sowing."

From Mr. W. Meakins, *Gardener to the Dowager La[dy ...] Bowes Manor, Southgate.*

"I am much pleased with the Renovating Seeds [I had last] season from you, as in every meadow where I sowe[d them there is a] great improvement both in quantity and quali[ty. The] Lawn was very much improved by the mixture [...] and my employer was much gratified with the re[sult both on] our Pasturage and on the Lawns, and wishes me [to pro]cure mixtures from you when the time arrives for [...]"

From C. F. Thurston, Esq., *Tulgarth*[...]

"Your Seeds have answered admirably. They [were sown last] spring, under rather unfavourable circumstances [...] Grass is remarkable; Clover and other Seeds [...] where nothing but the poorest pasture had bee[n,] and I find that a field of 9 acres sown with your [Renovating] Mixture is now one of the finest in our neighbourh[ood."]

From Sir David Cunynghame, *Wellshourne House*[...]

"The meadows that were renovated with you[r seeds are] looking very well. I cut nearly 2 tons of hay to the [acre, where] three years ago the same land hardly produced ha[lf a ton per] acre."

INSTRUCTIONS ON IMPROVING OLD PAS[TURES.]

Heavy harrows should be drawn over the old t[urf early in] the Spring, to loosen the soil for the admission of the [...] finest and most nutritive kinds of Perennial Na[tural Grasses] and Clovers, which, if sown freely, will occupy the small interstices between the Grasses already gr[owing, and] though, prevent the luxurious growth of coarse [grasses and] noxious weeds.

Parks, Meadows, and Upland Pastures may be [increased in] value 50 per cent. by sowing these Seeds.

Grass Seeds for laying down Permanent Pasture, [...] per acre.

Seeds carriage free to all parts, except small pa[rcels. Catal]ogues post free.

John Sutton & Sons, Royal Berkshire Seed Esta[blishment,] Reading.

KITCHEN GARDEN SEEDS,

FLOWER SEEDS.

In Collections including all the new and approved kinds, or separate to order.

PRICED LISTS free on application.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND
THOS. GIBBS & CO.
Corner of
HALF-MOON St.
PICCADILLY,
London.
APPOINTED APL. 3, 1844
THE SEEDSMEN

AGRICULTURAL SEEDS,

GRASS SEEDS.

DETAIL CATALOGUES post free.

CORNER OF
HALF-MOON St.
PICCADILLY, LONDON, W.

CUTHILL'S STRAWBERRY PLANTS.—Black Prince, 5s. per 100; Princess Royal of England, 7s. 6d. per 100; Prince of Wales, 7s. 6d. per 100; Highland Mary and Improved Black Prince, 1l. per 100 each. All fine strong Plants.
BLACK SPINE and HIGHLAND MARY CUCUMBERS, Seed, 1s per packet; best MELONS, &c.
JAMES CUTHILL, F.R.H.S., Denmark Hill, Camberwell, S.

STRAWBERRY PLANTS. Spring being the best time for planting, strong healthy PLANTS can be supplied of nearly 200 varieties. A DESCRIPTIVE CATALOGUE of the above may now be had by applying to the Grower,
WM. JAS. NICHOLSON, Egglescliffe, Yarm, Yorkshire.

PRINCE OF WALES RASPBERRY (CUTBUSH).
WM. CUTBUSH AND SON have some fine Canes of the above, "the BEST RED RASPBERRY in Cultivation,"—see *Gardeners' Chronicle* of February 23d, page 169—at the following prices:—100, 42s.; 50, 25s.; 25, 15s.; and 12, 8s. Highgate Nurseries, London, N.

THE NEW ROCHELLE BLACKBERRY.
HENRY MAY has received some fine stout healthy Plants of the above from the United States, and offers them at 12s. per dozen. Fine Plants of PYRAMIDAL PEARS on QUINCE, 15s. per dozen.—Catalogues of the above on application to the Hope Nurseries, near Bedale.

STANDARD MAIDEN PLUMS, in the leading kinds. List and prices on application.
Also strong flowering plants of PRUNUS TRILOBA; and strong maiden plants of PINE GOLDEN PIPPIN APPLE.
R. GLENDINNING, Chiswick Nursery, W.

GRAPE VINES FROM EYES, in pots, extra strong, all the leading kinds.
MARTIN & SONS, Hull and Cottingham.

GRAPE VINES.
J. IVERY AND SON can still supply a few good Plants of the following kinds: Lady Downes' Seedling, Trebbiana, Buckland Sweetwater, Trentham Black, Barbarossa, Bidwill's Seedling, Black Hamburgh, Black Tripoli, Muscat Alexandria, Chaptal, and St. Peter's.—Dorking Nursery, March 16.

TO BE DISPOSED OF, very Cheap, about 100 PINE SUCKERS, principally Ripley Queen, warranted free from scale.—Apply to Messrs. ARTHUR HENDERSON & Co., Pine-Apple Place Nursery, Edgware Road, London, W.

CHOICE PINKS.
YOUELL AND CO. having an extensive quantity of the above consisting of the very best show varieties by name, can supply strong and well-rooted plants at 6s. and 9s. per dozen pairs, or 40s. per 100 pairs.
PANSIES, finest first class show varieties by name, well established in pots, 9s. per dozen.
Royal Nursery, Great Yarmouth.

PELARGONIUMS.
JOHN DOBSON AND SONS beg to invite the attention of intending purchasers of the above, who will be liberally dealt with. A choice selection sent at a moderate price. NEW CATALOGUES now ready, post free.
Woodlands Nursery, Isleworth, W.

FERNS.—Collections in Town or Country arranged, enriched, and attended to, in either stove, greenhouse, Wardian case, open border, or rockery, upon moderate terms, by a Pteridologist who has been in practice from the beginning of the cultivation of Ferns becoming popular.—Letters, JOHN LLOYD, 9, Chatham Road, Five Houses, Wandsworth, Surrey.

GENUINE GARDEN SEEDS.
WM. CUTBUSH AND SON beg to intimate that their PRICED CATALOGUE OF KITCHEN GARDEN AND FLOWER SEEDS FOR 1861 is now ready and will be sent gratis on application.
Every article offered can be guaranteed of the VERY BEST description and TRUE.—Highgate Nurseries, London, N., ONLY.

WHOLESALE CATALOGUE.
GEORGE JACKMAN AND SON'S PRICED AND DESCRIPTIVE CATALOGUE FOR 1860 AND SPRING 1861, comprising Fruit Trees of all the leading kinds, new and selected Roses, fine varieties of American Plants, Choice and Rare Conifers, Evergreen and Deciduous Trees and Shrubs, and a fine Stock of Transplanted Forest Trees, &c., can be had free on application.—Woking Nursery, Surrey.

RUSSELL'S PYRAMID PRIMULAS
GEORGE CLARKE is now sending out Seed of the above unrivalled PRIMULAS, which cannot fail to give satisfaction if grown well. Early applications are respectfully invited. Sealed packets, price 2s 6d. and 5s. Unknown correspondents will please remit stamps or Post Office order with an order.—Streatham Place Nursery, Brixton Hill, S.

BEGONIAS.
F. AND A. SMITH have in fine Plants the following varieties:—Comte Alfred de Limminghe, Duchesse de Brabant, [illegible] grandis, Gabrielle, Isis, [illegible], [illegible], Queen Victoria, [illegible], Roi Leopold, [illegible], Saundersii, [illegible], President V. Houtte, Rex, [illegible] argentea, [illegible], &c. Prices on application.—Dulwich, Surrey, S.

GLADIOLI.
JOHN STANDISH is the largest grower and has the best collection. He has raised an immense quantity of Hybrid Seedlings, which flowered during the past Autumn for the first time, and excelled anything that has been seen in Gladioli before; it is a remarkable fact that amongst these Seedling Gladioli there is scarcely ever a bad one. Strong Flowering Bulbs, 75s. per 100; small ditto, 50s. per 100.
Besides the above, J. S. has all the best named kinds, CATALOGUES of which, and of his other rare and choice plants, may be had free, on application to the Royal Nursery, Bagshot.

GOOD SEEDS, CARRIAGE FREE.
SUTTON'S COLLECTIONS OF SEEDS,
THE BEST YET OFFERED.
KITCHEN GARDEN SEEDS.

No. 1.—A complete Collection, for One Year's Supply		£4	0	0
No. 2.—A complete Collection, in reduced quantities, of the same sorts	.. ..	2	10	0
No. 3.—Ditto ditto	ditto	1	5	0
No. 4.—Ditto ditto	ditto	0	12	6

A List of the quantities contained in these Collections may be had post free for one penny stamp.
HARDY AND SHOWY FLOWER SEEDS (POST FREE).

A Collection of the best 100 sorts known	.. ..	£1	1	0
A Collection of the best 50 sorts known..	.. ..	0	10	6
A Collection of the best 36 sorts known..	.. ..	0	7	6
A Collection of the best 24 sorts known..	.. ..	0	5	0

SUTTON & SONS, Seed Growers, Reading, Berks.

The Gardeners' Chronicle.

SATURDAY, MARCH 16, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

TUESDAY, March 19 { Royal Horticultural, South Kensington (Ordinary General Meeting and Special General Meeting) .. .. 1 P.M.
WEDNESDAY, — 20—Royal Botanic (Spring Meeting).

AMONG the lessons which, it is to be hoped, THE LATE FORMIDABLE WINTER will have taught us is that even in their power of resisting cold individuals of the same species of plant are remarkably different. That they vary greatly in other respects is notorious, but the fact of hardiness being also an increasable quality is scarcely thought of. And yet it is this which in skilful hands is perhaps the most valuable of all the attributes that a bountiful Providence has bestowed on the Vegetable Kingdom. It is that which permits us to cultivate in a northern latitude, without artificial aid, species that naturally prefer a southern climate. It is to this property, indeed, that the advocates of what is called ACCLIMATATION must look in their speculations about adapting one plant to the climate of another. If it is not that on which they rely, their aims will all miss; for there is not the smallest particle of evidence to show that when plants are propagated by mere subdivision, whether natural, as is the case with bulbs, or artificial, as with cuttings, buds, eyes, grafts, or layers, their constitution becomes in any degree affected.

It may have been observed that in speaking of the effect of the winter on a small garden near London (see page 191) mention was made of certain seedling Araucarias in the nursery of Mr. GLENDINNING of Turnham Green. The plants in question were all seedlings, all of the same age, all planted in the same border under the shelter of a wall facing the south, and in the same soil. There was no reason to believe that they were protected more in one case than in another; and yet, in the midst of the dying numerous individuals remained on which the frost had absolutely made no kind of impression. We do not know enough of the habits of the Araucaria when wild to say precisely under what varying circumstances the tree is found; but this much is certain, that it occurs at very different elevations above the sea, and extends over at least 10 degrees of south latitude. We believe that the seeds which have found their way to England are chiefly, if not wholly, from the forest of Antuco, the warmest locality in which the tree is known to thrive. "The Araucaria forest of Antuco," says Pöppig, in the Companion to the Botanical Magazine, "is the most northerly that is known in Chili, so that the boundary of this king of all the extra-tropical American trees may be estimated at 36° south latitude. The extreme southern limit is not so clearly ascertained, which is not surprising, when we consider how little, comparatively, is known of Western Patagonia; it seems probable, however, that it does not stretch far beyond lat. 46°. Between Antuco and Valdivia this tree only grows among the Andes, and as the Indians assert, solely on their western declivities, and nowhere lower than from 1500 to 2000 feet below the snow line, up to which it frequently reaches. Further to the South, the Araucaria appears at a lower elevation, and in the country of the Cuncos and about Osorno is said to occur on mountains of a very moderate altitude near the sea. The Corcovado, a mountain that rises opposite Chiloë, is said to be studded, from its foot to the snow-line, with large groups of these beautiful trees. Of all other vegetation the Araucaria forests are as bare as the Pine-woods, offering but few plants which can interest the Botanist. Steep rocky ridges, where there is no water, are its favourite habitat. We were obliged to seek this needful article at a considerable distance from our bivouac; but, our frugal supper not requiring much cooking, we soon stretched ourselves on the hard rock to sleep, under the lullaby of a storm, to which the lofty summits above us imparted the most singular tones. All of us who had been accustomed to such primitive beds might have rested well enough if a fog had not descended upon us about midnight, which was so dense as nearly to extinguish our fire. Matters became still worse when violent thunder and hail apprised us that not even a forest of Araucarias could shelter the traveller from the wrath of the Cordillera. We all trembled; my companions, however, chiefly from fear and superstition, though the temperature was sufficiently low to occasion a shudder in thinly-clad travellers." This shows that the Araucaria is naturally exposed to cold mists and storms of extreme violence, but grows on precipices *where water cannot lodge.*

From some of these localities the Indians bring the seeds to the markets of Chili; and although they probably come from the forest of Antuco, yet they are doubtless collected at different degrees of elevation above the sea, and therefore possess different degrees of hardiness. But with us they are all mingled, and no means exist of separating them. It is only when the seedlings have been exposed to a severe trial that it is possible to say which are more hardy and which more tender. A winter like the last tests them, and it will be a great benefit to the buyer to be able to secure hereafter with certainty the more hardy individuals, although he may have to pay thrice the usual price. In future it would be an object of much importance to procure seeds from the most southern limits of the tree, which we imagine might be effected by a skilful traveller who could hire a sloop in Chiloe; or otherwise, through Indians, get into communication with Western Patagonia. It is true that proof now exists of the ordinary seedlings possessing great diversities of constitution; yet a crop raised from forests towards latitude 46° S. would probably be not only wholly hardy, but more so than what we now have.

What has been said of the Araucaria may be equally applied to all species that will ripen seeds in Europe, or whose wild stations quit the hotter for colder latitudes. We know that there is an Olive tree far more hardy than the common Olive, that even Apple trees are unlike each other in the power to bear cold, that ridge Cucumbers will survive a frost that reduces other sorts to pulp, that Peach trees in like manner differ a good deal among each other, that in the Orange and Lemon race some are more tender than others, one, the Skimmia japonica, being as hardy as a Gooseberry, and that the hardy Kail of a Scotch homestead is descended from the same stock as the tender Cauliflower, the delicate constitution of which it refuses to acknowledge. All these differences have been produced either by artificial or natural selection; and we think it a most encouraging fact, that such a plant as the Araucaria already shows unmistakeable evidence of the existence of a universal law, of the utmost importance to the gardening world.

Were we importers of seeds we should endeavour to procure those of the Portugal Laurel from the highest mountains of the country whose name it bears, of the Bay tree from its greatest height on the Apennines, and of the Laurustinus and its varieties from the mountains of Spain. When we remember that the beautiful Pinsapo is in all probability the same in origin as the tender Cephalonian Fir, hardened by centuries of existence on the snow-clad mountains of Grenada, and tenaciously retaining its robust constitution, we have the strongest possible reason for believing that other trees will change in like manner.

ANOTHER of man's enemies is said to lie at his mercy. CUSCUTA is no longer to be dreaded; Chemistry has done for her. What the first DARWIN calls her "dangerous charms" have ceased to be dangerous; and the growers of Flax, Clover, and Lucerne may sleep in peace. A French chemist, Mons. PONSARD, having remarked

that Cuscutas contain "an enormous quantity of tannic acid," bethought him of iron-salts as a fatal enemy, and called them to his aid. He mounted on wheels a barrel filled with water, and introduced into it as much green vitriol (sulphate of iron) as would saturate it; the proportion is immaterial, as water will only take up a fixed quantity. To his barrel he adapted a tap and india-rubber hose, with a nozzle. In the field he cut away most of the Cuscuta and Lucerne attacked by it, so as to lay the soil completely bare. The part mowed off was put in heaps and burnt or else drenched with the sulphate of iron. The spaces whence the Cuscuta had been removed were also well watered to some distance all round, so as to be sure that every thread was reached. The effect was admirable; in an hour or two every morsel of Cuscuta was destroyed "or more correctly speaking mineralised," and nothing remained but a heap of black threads twisted and entangled in all manner of ways. A tannate of iron had been formed inside her. As for the Lucerne it is greedy of green vitriol, and pushed with the utmost vigour after the operation.

THERMOMETERS AND HYGROMETERS.

Much of late has been said about thermometers. Some have endeavoured to prove that many, if not all, of the frost returns furnished by your Correspondents, and published by you, were wholly or at least partly worthless. One writer says, "the thermometers must be incorrect, hence the low readings of a few localities;" another states "that science will lose by the returns, from the 'omission' of the height in feet from the ground at which the thermometers were severally fixed;" a third points out plainly enough, by referring to figures and facts, that they should not be placed against a wall or any radiating surface. Perhaps the following, therefore, taken from the table of meteorology kept here, may be interesting, being means for the year 1860—all the thermometers in the shade:—

Position of Thermometer.	Jan.	Feb.	March.	April.	May.	June.	July.	August.	Sept.	Oct.	Nov.	Dec.
	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.	Deg.
On Grass ..	34.16	27.06	34.02	39.45	47.46	51.61	54.36	51.29	45.32	43.16	35.22	29.45
1 foot from the ground	35.34	28.67	35.26	40.00	48.30	52.00	55.18	52.27	46.91	44.63	36.47	30.35
2 feet ditto	36.00	29.41	36.50	40.86	49.60	52.72	56.63	53.00	48.20	45.30	37.15	31.63
3 feet ditto	37.80	30.00	37.23	41.66	50.03	53.56	57.01	54.91	49.60	46.82	38.64	32.87
4 feet ditto	38.50	30.68	38.75	42.20	51.66	54.13	57.56	55.30	50.73	47.68	39.61	33.29
6 feet ditto	38.09	29.98	38.04	41.86	51.20	53.62	57.00	55.00	50.30	47.16	38.97	32.50
8 feet ditto	37.86	29.42	37.56	41.18	50.76	53.00	56.45	54.63	50.00	46.75	38.07	32.00
1 foot below surface ..	39.10	36.20	38.64	43.20	49.93	63.13	57.32	56.20	53.73	48.87	43.46	39.25
Mean maximum at 4 feet	41.00	34.68	44.29	49.90	61.19	61.60	66.48	61.19	58.36	53.25	42.80	37.48
Mean minimum ditto	36,00	26.68	33.12	34.26	42.13	46.66	48.64	49.51	43.10	42.12	36.23	29.09
Mean temperature at 4 feet above or below the average of the last 10 years ..	+1.92	—5.04	—1.30	—5.60	—1.26	—4.96	—3.63	—6.37	—5.05	—1.98	—2.67	—3.18
Rainfall in inches ..	2.68	.83	2.63	1.44	3.22	6.85	2.79	4.71	2.53	3.20	4.05	3.64
Rainfall above or below the average of the last 10 years ..	+ .74	—.96	+.54	+.47	+1.05	+4.01	+.08	+1.07	+ .15	+ .84	+1.96	+1.06
Mean reading of Barometer	29.523	29.624	29.320	29.745	29.738	29.377	29.716	29.434	29.703	29.800	29.906	29.564

Our situation is, latitude 53° 47′ 36″ north, longitude 1° 44′ 47″ west; height above sea, 49 feet. Permit me now to direct attention to an instrument called "hygrometer" (measurer of moisture). An hygrometer is two parallel thermometers, identical, the one marked dry, the other wet. The bulb of the wet thermometer is covered with thin muslin, and round the neck is twisted a conducting thread of lamp-wick, which passes into a cup of water, placed a little beneath, on one side, so that the water may not affect the reading of the dry bulb. The reading of the latter is the temperature of the air, and that of the wet the temperature of evaporation; from which may be calculated the dew point, degree of humidity, &c. It is chiefly used by meteorologists. Upon what does successful cultivation in our glass structures depend? On certain composts, and degrees of heat and moisture, &c.? The first is governed by practical experience, the second by the thermometer, and the last by the senses. Now, the senses cannot determine the degree of heat, or that of moisture (humidity), with any amount of accuracy. Take, for example, a Vinery under the following conditions—dry bulb, 70°; wet, 69°.5 = 97° of humidity, and no air given. Let the house be entered by our gardener and a friend; the latter finds the heat unbearable, and asks the former the temperature; he goes to the thermometer (but he cannot find it, for it is purposely taken away); his friend says, as there is no thermometer, he should like to know—the gardener here stops him by stating that the temperature is 85°; his friend pulls a thermometer out of his pocket, and the temperature is found to be 70°. "Oh!" exclaims the gardener; "the thermometer is good for nothing." He finds upon looking at it however that it is his own. His friend again inquires how moist the house is? and is answered thus—"Just right for Vines," which are in flower. His companion shows him by means of an hygrometer, that if it was 3° moister on the scale of humidity, it would be as moist as it possibly could be. Well, air must be given of course to dry up this superabundant moisture, but by giving air the temperature would be lowered, more fuel and then more heat and air is given, and what a relief when the air is put in motion! how cool and refreshing, and yet the thermometer remains at 70°! It will thus be seen how fallacious the senses are in this case. This instrument also shows the temperature at which we should water our plants, and also syringe them, that point being the temperature of evaporation.

The following table represents a little experience with Vines, &c.—all are means:—

Houses.		Started. Dry.	Started. Wet.	Buds Swelling. Dry.	Buds Swelling. Wet.	In Leaf. Dry.	In Leaf. Wet.	In Flower. Dry.	In Flower. Wet.	Swelling. Dry.	Swelling. Wet.	Changing Colour. Dry.	Changing Colour. Wet.	Ripening. Dry.	Ripening. Wet.	Ripe. Dry.	Ripe. Wet.	Description of Crops, &c.
Early Vinery	Maximum	55	49°	65°	58°	75°	72°	76°	71°	78°	71°	78°	73°	72°	67°	68°	60°	Crop good, well flavoured; planted inside; outside border heated by dung heat.
	Minimum	40	35	50	47	55	53	60	55	60	57	63	59	64	58	55	48	
	Earth, 1 ft. deep	46°		56°		61°		64°		61°		65°		68°		66°		
Succession Vinery	Maximum	50	47	66	59	74	70	78	72	75	72	76	71	78	72	70	64	Crop moderate, but well coloured; planted outside; border heated with dung, and covered in winter.
	Minimum	46	48	55	51	60	56	62	59	64	62	63	58	61	56	54	50	
	Earth, 1 ft. deep	45		60		65		72		74		75		73		70		
Late Vinery ..	Maximum	53	51	68	65	76	74	75	70	76	74	78	74	74	68	71	67	Crop excellent; planted inside; outside border heated with dung, and covered with boards in winter.
	Minimum	48	46	56	53	62	57	65	60	68	66	64	60	63	57	61	55	
	Earth, 1 ft. deep	54		66		71		75		78		76		73		71		
Vinery ..	Maximum	44	41	50	47	70	68	73	70	75	74	73	71	74	73	70	77	Crop indifferent (mildew, shanked); covered the border with litter in the autumn; roots deep.
	Minimum	41	40	46	45	65	63	68	65	63	63	67	65	62	59	61	59	
	Earth, 1 ft. deep	42		45		50		55		64		57		56		59		

Houses.		Spring. Dry.	Spring. Wet.	Spring. Humidity	Summer. Dry.	Summer. Wet.	Summer. Humidity	Autumn. Dry.	Autumn. Wet.	Autumn. Humidity	Winter. Dry.	Winter. Wet.	Winter. Humidity
Greenhouse ..	Maximum	55°	50°	= hu. 70°	67°	64°	= hu. 83°	64°	50°	= hu. 74°	47°	42°	= hu. 67°
	Minimum	45	43	= ,, 85	53	52	= ,, 93	50	45	= ,, 68	41	36	= ,, 64
Orchidhouse ..	Maximum	67	64	= ,, 83	88	89	= ,, 95	68	66	= ,, 88	64	60	= ,, 77
	Minimum	58	56	= ,, 87	61	60	= ,, 94	68	60	= ,, 92	53	48	= ,, 69
Fernery ..	Maximum	56	55	= ,, 93	67	66.5	= ,, 97	58	57	= ,, 93	45	43	= ,, 85
	Minimum	50	49	= ,, 93	60	59	= ,, 94	58	52	= ,, 93	42	40	= ,, 85
Stove ..	Maximum	69	66	= ,, 83	83	81	= ,, 91	68	65	= ,, 83	66	62	= ,, 78
	Minimum	61	59	= ,, 88	66	65	= ,, 94	63	61	= ,, 88	55	50	= ,, 70

Maximum at 1 o'clock afternoon.
Minimum at 6 morning or dusk (daybreak).

All that the instrument requires to make it really useful is "a keen eye and some experience." If all plant collectors would only take the trouble of keeping a correct meteorological table of the various countries they explore, they would furnish us gardeners with a great amount of valuable information.

We want to know the following points especially:— 1st, the temperature of the earth 1 foot deep; 2nd, the elevation at which certain plants are found, and whether they grow in the shade or in the full sun, with a description of the soil, if dry, moist, wet, or boggy; 3d, the mean maximum temperature of the air, and mean minimum at 4 feet; 4th, the hygrometrical conditions of the locality, so as to enable us to determine the degree of humidity; 5th, the amount of rainfall where practicable; 6th, the season of growth and time of rest, and how long each lasts, &c.

With the above information I think we ought to be able to grow, and bloom, or fruit successfully, the plants that have hitherto baffled our exertions, even our energy, and led others (frequently employers) call us ignorant of the plants we try to cultivate. More than half of the successful modes of culture now practised have been found out by guessing them, or by accident, or if the term be more agreeable, say experimentally. We had no work on theory that was correct practically, until Dr. Lindley showed his "Theory of Horticulture" that practice was then carried into effect. Again I say that an hygrometer would save the lives of many valuable plants, simply by showing when the air is too dry or too moist; keeping the air moister if dry, and giving more heat with more ventilation if wet, would check red spider, thrips, and mildew; and drawn, weak, succulent growths, producing few flowers, would give place to firm hard ripe wood. *George Abbey, Gardener to* ... *Hailstone, Esq., Horton Hall, Bradford, Yorkshire.*

THE POTATO DISEASE.

[The enclosed, which has been printed for private circulation, is presented by the person who made the experiment referred to. *London, March* 12, 1861.]

The Potato disease may be said to have perplexed the wisdom of philosophers, and to have baffled the skill of practical men. It has, however, been recently and satisfactorily demonstrated, by microscopical examination, that the malady which has so seriously affected a very important article of food, is due to the deposition by the atmosphere of a minute Fungus, which, taking up its habitation first upon the leaf and the haulm of the Potato plant, propagates with astonishing rapidity, and ultimately finds its way to the tubers and completely destroys them.

Having at first, without a knowledge of this theory, tried successfully an experiment which I have since found to entirely accord with it, I am anxious to place my experience before the public, satisfied that if others follow my example they will profit by the result.

Last season, I departed from the old system, so far as the greater part of my crop was concerned, and pursued the following plan:—I set the Potatoes in double rows instead of single; the two rows occupying about a foot, a foot of vacant space remaining on the outside of each row. They were planted upon the level ground, hoed up at the usual time.

When the haulm had reached its full growth, about the 1st of July, I turned it over, right and left, towards the vacant spaces, by adding earth between the rows and pressing down the haulms, so as to prevent their retaining an erect position, and to allow the rain to fall upon them, instead of descending to the roots, and upon the vacant space.

The kind of Potatoes upon which I experimented were "Regents" and "Flukes." Of the former I planted one portion upon the old system, and a like portion upon the new; the "Flukes" were all planted upon the new system. The land consists of a heavy clay—about as bad a description of soil as can be devoted to the growth of a Potato crop.

The result was, that the "Regents" planted upon the new system turned out to be a good crop, while those upon the old plan were a complete failure, although grown upon the same plot of ground, and planted at one time from the same seed. The "Flukes" produced an excellent crop, not two in a hundred being bad; while my neighbours, for miles round, without exception, lost their crops.

The efficacy of this system has been proved not alone by my own experience and that of several others who have tried it, but has been confirmed by the following curious circumstance:—A gentleman who had planted a lot of Potatoes, having a number of planks which he required room for, but not knowing how to dispose of, he allowed them to be thrown upon a part of the Potato bed. Upon removing them some time afterwards, and digging the Potatoes, he expecting to find that those which had been covered and pressed down were completely destroyed—he found, to his surprise, that those which the planks had lain upon were in excellent condition, while those that had been exposed in the ordinary manner were diseased. The laying down of the planks had, in this instance, effected the turning of the haulms, and sheltered the tubers from the wet; and the result was as good as if the system I have recommended had been carried out by design.

The success of my experiment is to be explained in this manner:—A microscopic Fungus is first deposited upon the leaves and the haulm, where it multiplies by millions; as soon as rain descends, these parasitic plants are washed downwards to the tubers, which

immediately attack, and the Potatoes are thereby completely destroyed. By turning down the haulms over the vacant spaces, the Fungi are washed by the rain from the plant on to the naked soil, where, wanting nutrition, they perish, and the tubers are protected from their destructive effects.

The result of my experiments being therefore entirely in accordance with the investigations of science, I feel anxious to make the new system of Potato-growing known, feeling assured that it will prove a great boon to the community at large.

MYCOLOGY.—No. XLVI.

LYCOPERDON PYRIFORME, *Schaff.*—The common species of Puffball occur in all parts of the world except those which are capable of nourishing little more than a few obscure Lichens or the lowest Algæ, and under varying conditions of temperature and atmosphere assume such a variety of forms that they are very difficult to recognise. The outer peridium varies in the manner in which it is clothed. Sometimes it bears papillæ so minute as at first sight to appear smooth, while at others it exhibits large well shaped warts or long prickles, or appears covered with dense bristly points. The spores and their threads differ so little as to afford no good characters, except in a few cases where they are either rough with little points or inequalities, shortly stalked as in *Borista*, or brightly coloured, instead of exhibiting the variable olivaceous tint verging more or less on yellow which is so common in these productions. Fries was the first to point out satisfactory characters for our common species, while Vittadini has accurately defined several which form sure resting points in this very perplexing genus. *L. pyriforme* is one of the best

LYCOPERDON PYRIFORME, *Schaff.*
(Copied by permission from Greville's Cryptogamic Flora.)

characterised, and at the same time one which occurs in most collections of Fungi, and while giving its characters we shall embrace the opportunity of enabling our readers to distinguish the other more common British species.

L. pyriforme, as the name implies, has a more or less pear shaped membranaceous persistent peridium, which has a closely attached outer coat clothed with a few very delicate fugacious scales, and opening by means of an umbonate aperture. The point, however, which most clearly distinguished it from *L. cælatum* and one or two allied species, and on which indeed the umbonate orifice depends, is that on a vertical section it is found that the flocci are so disposed as to present a stratum attached to the walls all round, with a distinct conical columella rising up in the centre from the base. The species grows in large dense tufts either on sandy ground or on rotten wood, and never, we believe, like our more common species, in Grassy pastures. It sends out from the base a mass of white creeping branched strings, like the spawn of some Agarics, from which spring up here and there new individuals. It is of a tough texture in its young state, and has yellower spores than the others. Fries, however, says that even this runs imperceptibly into the strongly echinate variety of *L. gemmatum*.

L. gemmatum, which is perhaps the commonest species of all, has, like *L. pyriforme*, a minute umbonate mouth, and a basal columella, but instead of having the bark clothed with minute deciduous scales, its mealy substance is studded with warts or variously shaped more or less decided and elongated spines distinct from itself, while the mass of spores verges on green rather than on yellow. Variable as these characters are they accompany equally variable forms, some of which are absolutely stemless, others distinctly stipitate; some are a foot or more across, while others scarcely exceed an inch, and this with almost every possible interchange, so that a distinct enumeration of the several forms is scarcely possible.

L. cælatum assumes an almost equal variety of forms, but it has two solid characters by which it is distinguished from the two last; first, that the internal peridium is distinct from the mass of fruit passing under it and separating it distinctly from the barren spongy base whether more or less approaching the nature of a stem, and then that the plant bursts at the apex by a large irregular aperture.

L. giganteum is at once distinguished by its smooth outer peridium splitting off, its opening by the splitting away of large angular patches, and its different internal structure, not to mention its vast size, while *L. saccatum* is easily recognised by its tall cylindrical stem and globose peridium strongly plicate beneath, while its fructifying mass is compact, not forming a columella and different from that of any other species. The only remaining species which it is necessary to compare, *L. pusillum*, which is not a common British fungus, is distinguished by the flaccid obtuse peridium bursting by a narrow orifice, by its smooth bark, which is at length cracked and slightly scaly, but above all by the obsolete sterile base continuous with the capillitium. *L. giganteum* is the only one which affords in our opinion an agreeable article of food, as we have noticed fully in a former Number. All are probably equally good substitutes for Chloroform. *L. atropurpureum*, which occurs in the neighbourhood of Bristol, cannot be confounded with any of the above, as it has brown purple spores, furnished with a short stalk, and rough with little points. *M. J. B.*

REMARKS ON THE WEATHER OF FEBRUARY, 1861.

THE mean temperature of the month was 41°.03, or nearly 2½° above the average. The temperature by day was generally high for the period of the season, but was characterised by no remarkable extremes of heat or cold; the highest point reached by the thermometer in the day was 57° on the 17th and 18th; the lowest 39°, on the 12th. The mean minimum temperature, 33°.03, was likewise above the average, though only so to the extent of 1°.39, and was also marked by no great extremes. The highest indication in the night was 42° on the 5th; the lowest, 20° on the nights of the 11th and 13th; on the 10th the thermometer fell to 22°, and on the 12th to 24°. With the exception of these four consecutive nights there was but little frost during the month; indeed only on five other occasions did the thermometer fall below the freezing point.

The mean temperature of the ground at 1 foot deep was 43°.50, or 3°.43 above the average of the preceding 16 years. This was as warm as the earth has been at this depth in any year and corresponding month, except in 1849, when it was equally warm, and in 1859, when it was 45°.21. At 2 feet deep, however, the effects of the severe winter were still apparent by the thermometer, for the mean at that depth was only 41°, or a quarter of a degree above the average. In the absence of frost and snow, with the above degree of heat in the soil, Grass lands may be expected soon to yield some fresh food for cattle, so much needed in consequence of the scarceness, and, in many instances, bad quality of the hay crop of last season.

Winds from the warm quarters prevailed during the month. It blew from North 2 days; E. 2; S. 4; W. 2; N.E. 5; S.E. 1; S.W. 11; N.W. 1. Strong south-west winds have the greatest effect in warming the soil. On the 19th it blew a hurricane, and again on the 24th. Great damaging effects from these have been recorded.

The barometer was high in the beginning of the month; on the 2d it stood at 30.618, a point seldom reached in this country. The mean pressure for the month was 29.776, or 0.120 inch below the average. On the 18th and 19th the mercury was almost stationary, as if there had been a lull before the boisterous weather which succeeded, and during which it was, as is usual in such cases, very fluctuating; but it never fell very low, not below 29.296, notwithstanding the great commotion which took place in the atmosphere.

The fall of rain was 1.41 inch, an amount but slightly below the average of the preceding 35 years, which is 1.46 inch. Nearly half an inch fell on the 23d.

On the whole the weather has been favourable for gardening operations, and quite warm enough for vegetation. In the third week this was being advanced almost too much, as appears by the buds of fruit trees, many of which are in as forward a state as is consistent with their safety. The buds of the Hawthorn are showing green; and the blossom buds of Peach trees on walls are almost exhibiting the tips of the petals, yet their development ought not to be accelerated by warm coverings, for by so doing the whole crop will be endangered. It is quite time enough to protect these trees when half the blossoms are fully expanded.

Home Correspondence.

Sulphuring Potato Sets.—In your "Notices to Correspondents" (see page 196) there occurs one addressed to "J." respecting the use of sulphur as an antidote to the Potato disease. Your reply to "J." is that "you have never had before you any proof that the disease can be removed by sulphur, but that you have had proofs that the substance produces no effect whatever, either good or bad." Now the fact I am going to relate may possibly (for I am too much of a tyro in gardening matters to make sure of anything) induce you to retract or at least modify that dictum. In the year 1858 I was led by some notice which appeared in your Paper to try the effect of sulphur, by applying it powdered to sets of Potatoes immediately after they were cut (in order to cicatrize the wounds rapidly); and by dusting it pretty plentifully upon the sets both whole and cut in the drills. I confined this experiment to the earliest kinds then known, the Walnut-leaved and Ash-leaved Kidneys, and to part of the successional crop, Midsummer Kidneys. The whole were planted at the same time on ground of the same nature and condition. The result was that not a single diseased Potato was discovered at digging time among the sulphurised ones; while in the very next row of the Midsummer Kidneys which were planted without sulphur, several roots were found affected. Moreover, the main crop, which consisted of Prince Regents (not the Yorkshire Regents), which were not treated with sulphur, was seriously damaged by disease. Now, the year 1858 was a peculiarly favourable year for Potatoes, and I was therefore loth to draw any decisive conclusion from the difference between the produce and condition of the sulphurised and unsulphurised sets, which inclines me also to think that the term "result" I have just before used may be inappropriate. Still the fact is as I have stated it, and you may form your own judgment on it. Of one thing, however, I am certain, that no slug, worm, or insect of any kind will touch the sets which have been pickled or planted with sulphur, which is no small advantage, unless equally strong haulm and tubers can be expected to be produced from a mere shell, to which my early sets were reduced last year by the devastation of the underground vermin. Salt may be an equally efficacious remedy against them, and I mean to try it with soot this year, equal quantities of each, and I will again test the sulphur as I did in 1858, and will inform you of the—if not "result," at least, condition of the crop thus treated, if I live till it is lifted. *Rusticus, Thornborough, Buckingham.*

Effects of the Winter on Transplanted Roses.—I can verify what your correspondent "Coventry" has said on this subject. About the latter end of last November I transplanted about 700 Standard Roses (including almost every variety that is usually worked), and some few days after the late frost set in I mulched with long manure. The result was that I saved every Rose, including Gloire de Dijon, which I lost entirely in October, 1859, from the effects of frost. Those which I have left in the nursery are pushing vigorously, but not so those which were not transplanted; they are nearly all dead. The spot where the former were moved to is the most exposed in my ground, and within 50 yards of the same place in which they were previously growing. I have, killed: Laurustinus, Cupressus torulosa (fine plants, 6 to 8 feet); and very much injured: Portugal Laurel (1 cut to the ground); Cedrus Deodara, foliage lost. The latter I see are breaking afresh; they were plants 6 and 7 feet in height, and well established—smaller ones are not so much injured. Araucaria imbricata has the ends of the shoots for about 9 inches yellow and drooping; they feel quite soft. I mention these matters to show how things close to the Roses have been affected. *Charles Southby, Clapham.*

Ulex strictus, Mack.—Your correspondent's experience is diametrically opposed to that of Mr. David Cameron, the well known Curator of the Birmingham Botanic Garden. He stated (Phytol. vol. 1, p. 76) that he had "saved seeds of the U. strictus in 1839, which were sown under glass. Of eight plants so obtained there is not the least deviation in the appearance from that of the parent." In the face of such good counter evidence, I shall retain my doubts about the plant being "only a seminal form of U. europæus," notwithstanding the remark that "so it will be with all the rest of such things;" the "such things" being, I presume, allied plants as well marked as U. europæus and U. strictus. Much care is requisite in experiments of this kind. Many of the best intended are known to be valueless from the want of it. Many mistakes also may be made in the plants. In proof of this, I have now before me a bit of U. europæus sent by an excellently skilled botanist as U. strictus. The discredit, if discredit it is, of giving a specific name to U. strictus does not belong to me: Mackay in 1824, and Lindley in 1835, preceded me [very true].—*C. C. Babington.* [Our Correspondent's plant was only common Furze—that is certain. The seed from which it was raised was as certainly that of the "Irish Furze," which we have always understood to be what is meant by Ulex strictus.]

Early Horse Chesnuts.—There is at the corner of the Lyndhurst Road, Peckham, a Horse Chesnut tree, which every year is in advance of other trees of its own species, as regards the expansion of its buds. This year, 1861, on the 1st of February, I noticed a few buds just commencing to open; four days after there were perhaps 50 buds on the south side of the tree, which were divested of their outermost scales; on the 5th of March, when I last observed the tree, the scales had fallen or were reflected from the majority of the buds, and the tender green of the young leaves was very conspicuous over the whole tree. One of the leaf lobes measured at this time fully 2 inches in length, not including the stalk. None of the other trees of the same species in the neighbourhood show any further sign of progress than a slight

ozing of the resinous matter of the bud scales. Last year, 1860, the tree was about a month later in its development than it is this year, although even then in advance of its fellows; thus on the 1st of March, 1860, it was in about the same stage as on the 5th of February, 1861; on the 26th of March it was about as it is now (March 5th), but would in all probability have been more advanced last year, had it not been for the inclement weather. The tree differs in habit from most of its fellows near it, in that its branches are less pendent, and the distance between their internodes is less, so that the top of the tree is more bushy and brush-like than usual. I have thought that these facts might interest you, as although similar instances of precocity are not rare, I have not been able to hear of any tree so much in advance of its fellows as this one. Mr. Paget, in a discourse on the Chronometry of Life, delivered at the Royal Institution in April, 1859, alludes to this subject in the following words:—"As there may be varieties in the size and number of organs and almost all the other properties of a species which together make up its specific character, so there may also be varieties in regard to that time-rate of the processes of organic life which, even by this variability, is indicated as essentially dependent on the properties of the organism itself." Mr. Paget cites among other illustrations the case of a Horse Chesnut near the main entrance to Kew Gardens, which is always three weeks earlier than its neighbours in all the processes of life. This tree I have also observed lately; thus on the 19th of February, when the Peckham tree was considerably advanced, there was no outward sign of development in the Kew tree. This latter, moreover, has the usual habit of the Horse Chesnut, as is also the case with a second tree in this neighbourhood, which is always a few days in advance of its fellows. *Maxwell T. Masters.*

Pinuses, &c., at Hawkstone Park, near Shrewsbury, the seat of Viscount Hill.—The large and fine collection of Pinuses, Araucarias, Deodars, &c. at this beautiful seat, have entirely escaped the effects of the late severe winter. Not a leaf of an Araucaria seems even browned, and the green colour of the foliage is deep and healthy. The Deodars look as fresh as possible, and the Pinuses which have elsewhere appeared in the obituary have all passed safely through the winter here. Nothing seems to have suffered except a few Laurustinuses and Bays, and in rather a large Rosery only 26 trees could be found that were frost-bitten. It is quite refreshing to see so many valuable plants in perfect health and untouched by the extreme cold which has been so destructive in other places, a fact that is worthy of notice at the present moment. *E. S.*

The Winter in the South of Ireland.—During the late severe winter we have been more fortunate than others in the north. I have about 250 feet of south wall planted with Tea and other Roses, and I have not lost one, although they received no kind of protection. The following are the names of a few of the varieties, all of which are budded on strong Dog Briars, from 1 foot to 1½ foot high, and all of them have plenty of good fibrous roots. The sorts are Abricoté, Auguste Vacher, Bougère, Eugène Desgaches, Goubault, Gloire de Dijon, Josephine Malton, La Pactole, Laurette, Madame Willermoz, Madame Bravy, Mirabile, Moiré, Madame Vitry, Narcisse, Niphetos, Princess Adelaide, Princess Marie, Safranot, Souvenir d'un Ami, and Souvenir d'Elise. Fortune's Rose, Isabella Grey, and Cloth of Gold also escaped unhurt. On the night of the 24th December we had in this neighbourhood 18° of frost, but we are greatly sheltered; 16° are the lowest I have heard of in this quarter. [What does 16° mean?] Our soil is on limestone and gravel. *Ballintemple, near Cork.*

A Method of Preparing Potato Sets.—I cut them in autumn as soon as the crop is raised; I keep them in a dry warm place until the ground is in a proper state for planting in spring. I have two reasons for the autumn cutting: first, if the Potatoes are left uncut until spring a few shoots at the crown are in a more forward state than the others. They appear to have abstracted the growing energy of the whole tuber. The result is that when cut in spring the sets containing the backward eyes are late in growing and produce a comparatively feeble plant, but if the sets are cut in autumn the inequality is prevented. This may be proved particularly by the kidney-shaped kinds; cut a walnut-leaf Potato, a Fluke, &c., not from crown to heel but across the middle, giving to the crown part a third or two-fifths of the whole, and in spring the lower portion which in an uncut tuber seldom exhibits any sign of a bud, will by this process have sufficient roots, and become as good a set as the crown end. Secondly, by this separation into parts, the sets become drier, which long experience has proved to me to be one of the most effectual methods of ensuring a plant, not only of vigorous growth, but also capable of resisting the rot. But in addition to cutting and drying, I have exposed the sets to the action of heat by placing them in warm rooms. This coincides with the statement of the Russian Professor, and which was suggested to me by an incident which occurred a year or two after the first appearance of the rot. To prove to my allotment tenants that late planting and a rich soil tended to aggravate the rot, I planted some in June in my garden; when raised however in autumn, to my surprise I could discover in about a dozen roots only one tuber exhibiting traces of rot. In the same garden the disease had been very destructive to the rest of the Potatoes. I was anxious to account for this strange exception, and guessed at the following solution:—The sets, merely to prevent the shoots growing to great lengths, were placed on the book shelves of my study; they had thus been dried and warmed. I therefore afterwards treated as many of the sets as I could in a similar way from the time of their being dug up in autumn; by confining the method with planting on a dry soil, pulverising it by trenching in autumn, applying well fermented dung or guano, &c., in moderation, and by early planting, I have long ceased to fear any loss worth consideration from the prevailing malady. I have generally a few sacks for sale beyond what is required for my own family, and the more prevalent the rot is the greater is my profit. I refer readers to the chapter "of resting" in Lindley's "Theory and Practice of Horticulture" for proof in abundance that the inspissation of the juices of plants by drying gives growing power, and that heat shortens the period of rest. Thus the Potato treated as I have described commences its annual course early and with vigour, and withstands the rot as a healthy man escapes many maladies which lay prostrate the youngest and the feeble. *Rev. Dr. Stephenson, Soulden Rectory.*

Ferns and their Adaptation.—Although much has been said in praise of this beautiful tribe of plants, I think their real merit is not yet fully appreciated, inasmuch as their peculiar adaptation for filling rock-work borders in greenhouses or stoves, or the beautiful effect they produce in a house specially set apart for them, is not sufficiently known. I am aware that Ferns have a place awarded them amongst other ornamental and flowering plants. But I think they deserve more extended cultivation after the manner in which they are naturally found, viz., amongst rocks, &c. They may be grown successfully in this way, and with beautiful effect. We constantly meet with mixed conservatories, Camellia and Heath houses; might not a Fernery, therefore, worthily occupy some place in an establishment? There is now such an endless number of varieties of Ferns introduced from temperate as well as from tropical latitudes that at a reasonable cost a well contrasted variety might be obtained suited to almost any degree of temperature. It is to be observed, however, that although the kinds grown be almost hardy, to secure a perennial verdure frost must be excluded from the house. I will now enumerate some varieties which have escaped uninjured, and are, in fact, looking none the worse for having withstood a temperature which ranged from as low as from 35° to 40° on many nights during the late severe weather. The list includes only small and medium growing sorts, as the room they occupy is somewhat limited:—

Adiantum, many varieties	Nothochlæna chrysophylla
Asplenium, ditto	,, distans
Blechnum gracile	,, nivea
,, triangulare	,, vestita
Cheilanthes spectabilis	Olfersia cervina
,, elegans	Onychium auratum
,, hirta	,, japonicum
,, lendigera	Platycerium alcicorne
,, pulveracea	,, grande
,, odora	Platyloma calomelanos
Davallia aculeata	,, flexuosum
,, Boryana	,, rotundifolium
,, bullata	,, ternifolium
,, canariensis	Polypodium plumulum
Doodia caudata	Polystichum capense
Doryopteris collina	Pteris argyræa
,, palmata	,, aspericaulis
,, sagittæfolia	,, tricolor
Gleichenia dicarpa	,, hastata
Hemionitis cordata	,, longifolia
Lastrea decomposita	,, semipinnata
Litobrokia leptophylla	,, serrulata
Neottopteris vulgaris	,, tremula
Nephrodium molle	Sagenia decurrens
Niphobolus lingua	

The Gymnogrammas, a very desirable class of Ferns, are mostly rather tender, and cannot endure a temperature below 50° without injury. G. gracile has however done well in the warmest corner of our house. Goniophlebium subauriculatum, a very desirable Fern for baskets, is also somewhat tender. Of other Ferns well deserving a place under glass are the beautiful British kinds Asplenium marinum and fontanum, Adiantum Capillus-veneris, and a few others. Amongst the many fine-foliaged plants which add to effect in the Fernery no one exceeds in beauty Dracæna terminalis; but it requires plenty of warmth. I have said nothing about Mosses, but they cannot be dispensed with in a Fernery. All the Lycopods are also objects of beauty. They may either be mixed with Ferns, or they may occupy a part of the house by themselves. Many of the dwarf trailing sorts are unequalled as edgings for reckeries or small borders. Subjoined are the names of a few which are about as hardy as the preceding Ferns:—

Selaginella apoda	Selaginella lepidophylla
,, denticulata	,, paradoxa
,, formosa	,, Schotti
,, Galeotti	,, stolonifera
,, helvetica	,, Wildenovi

In a future Number I may give a description of a small Fern-house. *G. E., Ford Abbey.*

Abies Douglasi.—About two years ago I sent you the dimensions of a Douglas Fir, which I considered of extraordinary growth. I am sorry to inform you that a violent wind in August last seriously injured the leading shoot of the previous year (1859), so as to cause it to bend at an angle of about 45°. It has stood the last two severe winters well, but the tremendous gale of the 6th snapped off the top of the tree where it was injured in August last. The growth for the last six or seven years has been very vigorous, proving how admirably adapted the tree is for this climate and soil, a magnesian lime rock being within 18 inches of the surface. The shoot of last year measures 3 feet [illegible] inches in length. The fine tree just described was planted by me in March 1839; it was then about 3 feet high. Even now, deprived as it is of its shoot, it is at least 40 feet high. *William Lawson, Brough Hall, Catterick, Yorkshire.*

Tree Supports.—Four years ago, when transplanting some trees here of 15 and 20 years' growth, as supports above ground were very much objected to I fastened them underground by driving four posts deeply and firmly into the earth on the outside of the large ball of earth got up along with the roots, notching strong cross bars into them over the roots. Although planted in a very windy place they have never flinched, and have grown well. *J. C., Haltwhistle.*

Heating by Hot-Water.—In a report of my lecture on this subject to the Sydenham Horticultural Society, you expressed a wish to have more information respecting the small portable apparatus which I then exhibited. The following therefore is a sketch and description of it for small or large houses; it is an adaptation for horticultural purposes of my patent steam boiler for agricultural work; it combines portability for small houses with cheapness, economy of fuel, and gives out in the house all the heat generated. The one shown was heated by a small pan of charcoal, but any kind of fuel can be used. A is the outer case, large at one end and connected with a pipe which can be short or long as required. B inner case, which contains the fire, and which is made smallest to allow a water space all round it; it is connected with the flue pipe, which continues through the outer pipe to the chimney pipe C, which can be conducted outside the house. D return hot-water pipe. It will be seen by the sketch that all the heat

FIG. 1

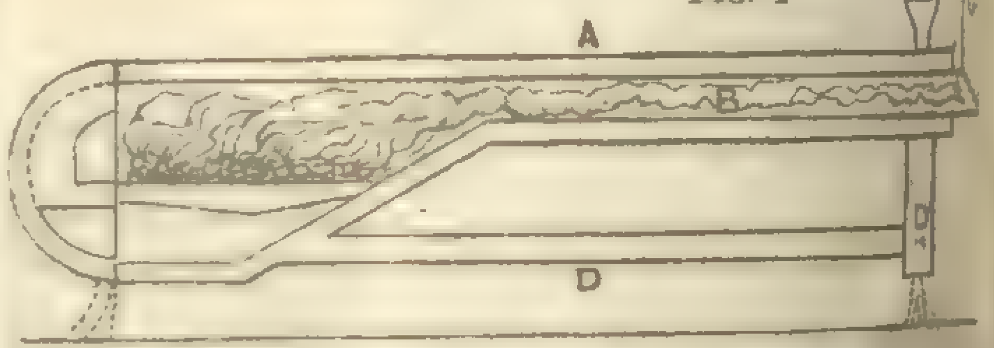
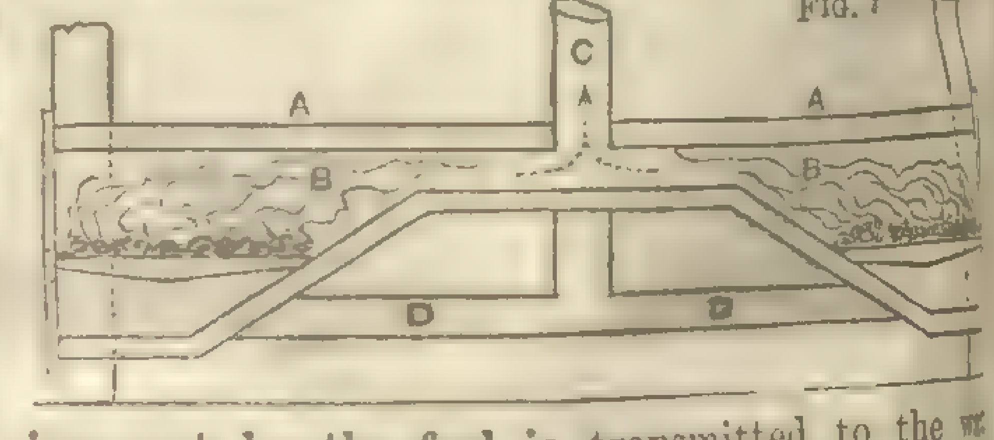


FIG. 2



given out by the fuel is transmitted to the water which is round it; the flue passing through in a longitudinal direction, allows all the heat to be taken up by the water, thereby economizing the fuel at the same time. The circulation of the water causes the heat to be equal all along the front of the house. For large houses with a great extent of piping, I should place a fire at each end of the building, and allow the flues to meet or run as far as might be found requisite, thereby causing a more general distribution of heat to take place throughout the house. Fig. 2 shows the arrangement for a large house, with the fire-place outside the building. *J. T. Carter, Peak Hill, Sydenham.*

Hibiscuses.—These, I think, are not cultivated to the extent they deserve. I mean the stove kinds. Two or three years ago my gardener bought a plant at [illegible] and all much out of condition, but with care flowered, and though an old variety, and the flower but of a few hours' duration, it took my fancy, and I turned to the catalogue and sent for two of the newer sorts—the H. sinensis rosea plena, and H. sinensis fol. variegatis; the former flowered last year, and the latter is now in bloom and should be in every stove, for taking it altogether I never saw a more lovely plant for colour, and form of flowers and beauty of foliage; and what is more, with me it is not the flower of a day, but lasts in perfection for three days. Allow me to introduce it as a lovely plant to those who do not know it as a desirable acquaintance. *Constant Reader, Dedham.*

Strawberry Mulching.—As straw is likely to be scarce this season, can any of your Correspondents suggest any thing that can be substituted for it for keeping Strawberries clean in the field. *Strawberry.*

Strangled Deodar.—Four or five years ago I observed that a fine Deodar Cedar of 20 years' growth was forming a second leader. Over the aspiring shoot I put a crook about 3 feet long, and tied its lower end to the main stem with tar cord. For some time all seemed to go well, but I now find that the ligature has strangled the upper part of the tree; above the ligature the stem is much larger, but discoloured and unhealthy, below all is healthy, and two branches have turned up and risen as high as the stunted top. Last year I made five or six longitudinal cuts with a sharp chisel, hoping to cut through the cord, which is quite overgrown and buried in the bark, but the top has not recovered and the two [illegible] I have of course made the swelling and the two leaders more conspicuous than they really are, as in Nature they are concealed by the foliage of the tree, which is about 20 feet high. Is there any hope of

top recovering itself? or ought I to cut the head away, leaving one or both of the false leaders, which are now about 5 feet long, healthy and covered with bluish foliage, whereas the top is a sickly yellowish green. Having been a subscriber to your valuable work for many years, I should feel much obliged by any hints as to the proper treatment. *F. W. N.* [All you can do is to cut out the strangled top, and trust to the two healthy side branches. No art or skill can cure the effect of such strangulation.]

Split Larch for Palings.—We have erected palings of small Larch trees from 2½ to 3 inches diameter, 5 feet in height, by sawing them with a circular saw into two halves and nailing them to horizontal Larch bars fastened to strong posts of the same kind of wood. We have found a fence of this description to stand for a long time. The posts will be the first to decay; but the spars and rails being kept dry above ground (putting in new posts when any single one gives way) will be found to survive two or three set of posts. On an average this kind of fence has cost us about 10s. 6*d*. per rood of 6 yards. *Robert E. Brown*, 17, *Minto Street, Edinburgh.*——Split Larch makes capital park palings; it is rustic looking, light, and lasting. Good Larch will endure as long as the Oak generally used for palings. When cut to the requisite lengths there is no difficulty in splitting it with wedges. Full grown Alder makes very good palings too, and will last a long time, but use neither for posts. *J. C., Haltwhistle.*

Education of Gardeners.—As this subject still occupies attention, allow me to offer a few practical remarks on what is often believed by young men to be the highest attainment of horticultural knowledge, viz., collecting and drying large quantities of British plants and naming them. This done, they consider that their studies are completed. Now, however much the practice is to be commended, yet horticultural knowledge will remain in its infancy if people possess no higher attainments than merely being able to name plants. There were in a large establishment a few years ago 15 young gardeners employed, three of them apprentices. One of the foremen laboured indefatigably to secure a good collection of wild flowers; his comrades being anxious to keep on a level with him all commenced in earnest, and in a short time were each in possession of a large number of dried specimens, and perhaps correctly named; but their studies ended here. There was no such thing as a book in the possession of these young men, except an Irishman and Scotchman, who were both very intelligent, and had plenty of good books by which their minds were fed. The *Gardeners' Chronicle* was supplied by the employer, but was only read by a few; we may guess how they would shine when they became head gardeners. I called upon a gardener some time ago who was in a good situation; all kinds of fruits were forced; the Pines had suffered severely when repairing the heating apparatus—they were all but dead. The gardener, who had much to say about plants and their names, remarked that the Pines had lost all their roots but would soon recover, as he was applying strong manure water liberally to them, and kept on plenty of air front and back to make them strong. I asked him—if his digestive organs were impaired, would it be wise for him to take rich food to regain his health? His reply was, "Not likely." Well, I advised him to treat his plants as he would treat himself; to get plenty of roots on them and then be liberal with manure water, keeping them close till they were in active growth. This grower apparently practised false economy, for he had a fine crop of Potatoes on his Vinery borders, but believed that he was a first-rate botanist. Another case which came under my notice is worthy of remark. A gardener, who also believed that he had a large share of botanical knowledge, had a number of stove plants which were suffering from loss of roots in wet, heavy soil. He ordered his foreman to surface them with good rich mould to give them a healthy colour—the result was of course a failure. Many similar instances might be recorded where gardeners have studied the names of plants, but remained totally ignorant of their nature. I would advise young gardeners to be able to name as many plants (both native and exotic) as possible, but above all things study the theory of horticulture, which is indispensable to a man who calls himself a gardener. *T. T. T.*

Foreign Correspondence.

Cinchonas in India.—From the interest you have taken in the attempt at introducing the Cinchona into India, you will be glad to have intelligence of the experiment, and I have therefore cut out of the *Madras Times* a slip containing the "Defence" of himself by Mr. Markham, which tells a very different tale from the flourishing report sent by him to the Secretary of State. The fact is the plants were rotten when they arrived; the writer was present when the cases were opened, they had been over watered. A few of them had their upper branches green, and a few young leaves had made their appearance since arrival in the heat of India, but the treatment they experienced here, cut into pieces 1 inch long, exposed to the heat of a house exceeding 100° in temperature, not shaded, or in any way protected, was quite sufficient to finish the work of destruction. Not a plant or cutting is now alive, and the nonsuccess of this costly attempt must be attributed to the carelessness or inexperience of the party to whom it was entrusted. *Ootacamund, Jan.* 6. [We may possibly return to this subject.]

Societies.

LINNEAN: *Feb.* 21.—Prof. Bell, President, in the Chair. Certain alterations of the bye laws proposed by the Council were put to the vote, and confirmed by the Fellows at large in the terms of the Charter. A. W. Crichton, Esq., H. T. Knowles Kempton, Esq., Capt. A. F. Lendy, D. Moore, Esq., and C. K. Ord, Esq., M.D., were elected Fellows, and Mr. W. Laughrin an Associate of the Society. The following papers were read:—1. Extracts from letters addressed to Sir W. J. Hooker, by Mr. Gustav Mann, describing his second ascent of Clarence Peak, Fernando Po. 2. "Glance at the Botany of the North Shore near Sydney," by William Wools, Esq., communicated by the Librarian. This was a popular sketch of the native vegetation of the neighbourhood of Sydney. Among other striking plants the author mentioned Boronia serrulata, or native Rose, as the most admired species of the family, and remarked that there were spots between the north shore and Manby Beach, which at certain seasons of the year were so enlivened by the profusion of these plants as to suggest the idea of a cultivated garden rather than a wild bush, while little inferior to this were the species B. pinnata, ledifolia and polygalæfolia, which by their pink and red flowers relieve the sombre appearance of the dark evergreens around them. On the creeks to the north of Paramatta Eriostemon salicifolium was stated to occur abundantly, and on the banks of the Nepean E. myoporoides to grow plentifully; this last having so powerful a scent as to be almost overpowering in a room. The species of Corræa found were alba, virens and speciosa, the two last, from some resemblance of aspect, being sometimes called Native Fuchsia. The Epacridaceæ were mentioned as being very numerous, and of peculiar interest as being members of an order almost exclusively Australasian or Polynesian. The crimson nodding flowers of Styphelia tubiflora, and the scarlet and white ones of Epacris grandiflora, are very attractive; nor must the Leucopogon Richei be forgotten, for its berries are said to have preserved the life of the French naturalist Riche, who was lost for three days on the south coast of New Holland. About 20 species of Acacia, a genus common in Australia, occur in this locality. The bark of these plants is astringent, and a great quantity of it is used in tanning; it is also sometimes employed medicinally as a remedy for dysentery, whilst the wood of A. melanoxylon is much esteemed by the cabinet maker, being hard, dark in colour, and finely veined. The most important order in the colony was said to be the Myrtaceæ; nearly all the trees of the forest belonging to it, and also many beautiful shrubs. Some of the Leptospermums have very much the appearance of the English Hawthorn. After thus sketching the various groups of phænogamous plants and Ferns, Mr. Wools referred to the unfavourable conditions of the climate for the growth of Mosses, "but even here," he observes, "under certain conditions they are sure to spring up. Whenever a tree in the bush has been burned, Funaria hygrometrica is sure to appear if there is sufficient moisture in the soil; and wherever in damp and shady places cow manure has begun to decay, Splachnum angustatum almost invariably appears. Again on the cindery path the minute Bryum argenteum delights to grow, whilst the same Moss in company with another of diminutive size, Gymnostomum ovatum, may be noticed on the bark or shingles of cottages in large patches. In the same manner, on the tops of walls or between the bricks of houses when the mortar is getting somewhat decomposed, Tortula muralis sends forth its hair tipped leaves. Dicranum flexuosum comes up in low wet ground, and as it dies away before the approaching summer, leaves dark and discoloured patches here and there between the Grasses; and D. bryoides, which cheered the celebrated African traveller in his despondency, comes on the moist dripping banks of our creeks." 3. "Catalogue of the Dipterous Insects collected by Mr. R. Wallace, at Gilolo, Ternate and Ceram," by F. Walker, Esq. 4. "Description of a (supposed) new Annelid," by Dr. Hart Vinen.

Notices of Books.

Flore des Serres (Jan. 1859, published Feb. 1, 1861) contains original figures of a very fine Tree Pæony called *Triomphe de Gand*, *Dendrobium densiflorum*, *Solanum texanum*, an annual from Texas, with large harmless handsome insipid scarlet fruits resembling Tomates, a pink double *Camellia* called *Bicolore de la Reine*, *Aristolochia trilobata*, and a white-flowered *Pyrus japonica*, whose petals are bordered with red. The miscellaneous matter consists principally of an account of a visit to the Wax Palms of New Grenada by the French Consul at Bogota, and a translation of the articles on Japan by Mr. J. G. Veitch which have appeared in our columns. We learn from the translation that a Mr. Schottman is now in Japan on account of the Prussian Government.

Under the respective names of *British Ferns*, and *Garden Ferns* (Lovell Reeve) Sir Wm. Hooker is bringing out two works, with coloured plates, after the plan of the Botanical Magazine. Three numbers of each are before us, admirably executed, as was to be expected from the most learned of pteridologists and the most skilful of draughtsmen. They are a very valuable addition to the works on garden botany, especially the last, which was much wanted.

Moore's Floral Magazine for March (Lovell Reeve). No. 11, contains figures and descriptions of *Incurved flowered Everlastings*; a mule Lobelia called *fulgens var.*, said to have been raised between L. fulgens and L. Erinus, which seems to us a doubtful parentage; New Chrysanthemums with huge balls of flowers, called Lady Hardinge and Little Harry; and a superb-looking double crimson Rose called Comte de Falloux—a hybrid perpetual which we are assured is of the first order of merit.

The *Fleet of the Future; Iron or Wood* (Longmans). We advise land owners and all who are interested in forests to read this pamphlet, in which Mr. Scott Russell, our great naval architect, maintains that the days of wooden ships are numbered, and that iron will inevitably replace wood in all our service afloat. If so, adieu to the work of timber merchants, and the labours of those who grow trees for profits to be realised by their distant successors. The statements are extremely interesting in many other points of view, especially with regard to naval expenditure.

Garden Memoranda.

MESSRS. CUTBUSH'S EXHIBITION OF HYACINTHS.—This has been thrown open to the public during the past week, and judging by the freshness and beauty of the bloom, it may doubtless yet be inspected for some time to come. Messrs. Cutbush's nursery, we need not remind our readers, has of late years become famous not only for the quantity of its Hyacinths, but also for the excellence of their culture; and this season, notwithstanding the severity of the past winter, they are in no way inferior to their predecessors. Indeed such a display of these charming spring flowers as is at present to be found here is well worth going to Highgate to see. Many hundreds of varieties of all shades of colour—reds, blues, whites, and yellows—are effectively arranged in a lean-to show house, which at present may be said to be literally a blaze of flower. On a flat table in front are placed all the finer varieties, whose pots are sunk in Moss, from among which the flower stalks issue with excellent effect. Among these, which are neatly edged with Crocuses and Primroses, we noticed some of the more striking new kinds, several of which appear to be real acquisitions to the colours to which they belong. Among the best of them may be named Lord Elgin, deep rosy salmon, large and fine; Noble par Merite, delicate pink, conspicuously striped with crimson; Solfaterre, orange scarlet, large and showy; Honneur d'Overeen, deep purplish mauve; Prince of Wales, nearly of the same colour, but darker; and of whites Miss Burdett Coutts and Snowball, both beautiful sorts, more especially the former, which has bells of great size and substance finely arranged on a spike at once large and showy. Other new kinds were Princess Alice and Victor Hugo; the first violet blue of a darker hue than Baron von Tuyll, and the last one of the best of yellows. Baskets full of Cinerarias, Cytisus, Tulips and Hyacinths, were suspended from the roof, and here and there were vases filled with the same charming mixtures, all of which served to vary and heighten the general appearance of the exhibition, which was well supported at the back by a stage full of early Tulips and other plants in flower.

In the following list will be found the names of such sorts as appeared most worthy of notice:—

Double Red.—Duke of Wellington, fine pale rose, bells large and beautifully arranged, large spike, excellent; Koh-i-noor, very fine deep crimson, spikes very large, with moderate-sized bells, new and very distinct; Princess Royal, fine red, very large bells and spikes; Susannah Maria, beautiful salmon rose, fine bells and good spike.

Double White.—Prince of Waterloo, pure white, bells very large, spike excellent; Tour d'Auvergne, pure white, moderate bells, and large spike.

Double Blue.—Laurens Koster, still one of the showiest, and of first-rate form, with an immense spike; Sir Colin Campbell, dark blue shaded, very fine bells and spike; new and excellent.

Single Red.—Amy, fine bright red, beautifully formed, large bells and spike; Belle Quirine, pale flesh, beautifully striped with carmine, very large bells, spike moderate; Circe, carmine, shaded with salmon, beautifully marbled with pink, large bells, and handsome spike; Florence Nightingale (Fabiola), deep pink, shaded with orange, large bells, and good spike, new and excellent; Lady Sale, very deep red, large bells, and immense spike, an excellent kind; Lina, the brightest red of all, moderate bells and spike, new and excellent; Madame Hodgson, very fine pale pink, good bells, and finely formed spike; Milton, dark crimson, beautifully shaped bells, and large spike, new and excellent; Monsieur Fesch, pale pink, striped crimson, changing to deep red, large bells, and fine spike, excellent; Mrs. Beecher Stowe, pink, striped red, large bells, and handsome spike; Norma, waxy pink, very large bells and spike; one of the most beautiful Hyacinths in cultivation; Queen Victoria, pale pink, with bright red stripes, large bells, and very handsome spike; Robert Steiger (Maria

Catherina), fine deep crimson, large bells, and fine spike; Von Schiller, very fine dark red, good bells and spike.

Single Lilac.—L'Unique, purplish lilac, small bells, moderate spike; Lord Clyde, bronzy lilac, large bells, with distinct white eye, fine spike, new and excellent; Prince Alfred, dark purplish lilac edged with black, large bells and spike, new and excellent.

Single White.—Elfrida, beautiful pale creamy blush, very large, well shaped bells, and good spike; gigantea, fine pale blush, large bells with peculiar narrow petals, very fine spike, new and excellent; Grandeur à Merveille, handsome pale blush, good bells, and large spike; La Balaine, very deep blush, good bells, and spike, excellent; Madame van der Hoop, pure white, large bells, and immense spike, excellent; Orondates, pure white, with very large bells and an immense spike.

Single Blue.—Argus, fine indigo blue, with very distinct white centre, large bells, with metallic-like tubes, and arranged on the spike somewhat thinly; nevertheless a handsome variety; Baron Van Tuyll, fine dark blue, large bells, extra fine spike, excellent; Charles Dickens, pale blue, large bells, very fine spike; Couronne de Celle, pale blue, large bells and handsome spike; Grand Lilas, beautiful delicate azure blue, large bells, spike large and beautiful; another Orondates, fine porcelain blue, large bells, and excellent spike.

Single Black. — General Havelock, dark purple changing to black, very large bells and spike; a remarkably vigorous grower. Of Black Prince and Prince Albert, we have seen no examples this season.

Single Yellow.—In this class the best are Anna Carolina, clear yellow, good bells and spike; and Heroine, pale yellow.

Messrs. Cutbush throw this beautiful exhibition open gratuitously to the public, and we recommend all lovers of Hyacinths to visit it speedily. It will well repay inspection.

We may add, that here, as elsewhere, things have suffered from the late severe winter; but not so much as in lower lying localities. A fine Wellingtonia, 7 feet in height, and beautiful in shape, is unhurt, with the exception of the browning of a few of the younger shoots. Magnolias and Bays, though a good deal cut up, show symptoms of recovery.

Miscellaneous.

Straw Hat Manufacture.—In the Jury Awards of the Great Exhibition of 1851, it is stated that the manufacture of straw-plait and bonnets may be considered of recent date, its origin being about 100 years ago. Without troubling ourselves with the apocryphal story, that Mary Stuart introduced Lorraine straw-plaiters into Scotland, and that King James transferred these workers to Luton, there is evidence that in Hertfordshire, especially at Hempstead, and in Bedfordshire, especially at Dunstable, hats made of plaited Wheat-straw were extensively sold in the weekly markets in the reign of George I. Flat gipsy-looking straw hats were worn by ladies in 1735, and broad-brimmed straw hats, surrounded by ribbons, were in vogue in 1783, as we are informed by Mr. Planché in his work on "British Costume." In the "Beauties of England and Wales," published at the beginning of the century, straw hats are spoken of as a curious novelty: "Such is the effect of fashion, that what was deemed by our forefathers only fit to be trampled on in the cowbarken, is now very commonly converted into ornaments for ladies' heads." The straw-plait manufacturers learned from the French prisoners of that period the art of splitting the straw by a little machine; previous to which knowledge no hat was made except of the whole straw, called Dunstable; and it is probably to be assigned to this improvement that the lady's straw hat became a straw bonnet, the split material being fitted for the more delicate work. The straw-plait market of Luton is held on every Monday throughout the year, at 8 o'clock from Lady-day to Michaelmas, at 9 from Michaelmas to Lady-day. It had been described to me as a scene combining many features of the picturesque, such as a painter would delight in if he beheld it on a bright summer morning, when the crowds from the country would hilariously display the golden plait on stalls set out from one end to the other of a long street, and cheerful matrons and smart lasses would stand quietly on the pavement, each with their scores of plait hooped on their arms. It was my misfortune to see this assemblage on a morning when the rain came down with a settled determination that destroyed all the gaiety of the scene. Nevertheless the street was crowded with sellers and buyers, and every gateway that could give shelter was filled with the poor women who brought their week's work to a certain market. All the curious organization of the trade could be here followed out. Let me attempt to describe Luton straw-plait market thus seen under unfavourable circumstances. At 9 o'clock the market-bell rings, and the traffic begins. My attention is first attracted by the dealers in straw prepared for plaiting. These come from the neighbouring hamlets, in which they are employed in the selection of straw from the farmers' barns; in sorting it into different degrees of fineness; in cutting it into a regulated length; in bleaching it by exposure to sulphur-fumes; and in making it up for sale in little bundles. The straw-plaiters come to the market to buy this straw; as they also come to sell their plait. Those women whose goods have not been collected by a middle-man stand in rank, their small dealings being principally confined to the private makers of bonnets at their own homes, who chaffer with the plaiters for a score or two of the plait. Carts have come in from distant places with loads of plait. The dealers are opening their bags upon the stalls. The commodity will sustain no material damage from the rain; and so the trade goes forward, as if all were sunshine. The buyers here are the agents of the great houses. They rapidly decide upon quality and price; enter the bargain in their note-books; the bags are carried to the warehouses; the loaded tressels are soon relieved of their burthens; and in an hour or two the street is empty. The scene reminds one of Defoe's description of the cloth-market of Leeds at the beginning of the last century, when the High Street was covered with a temporary counter, to which the clothiers from the country came each with his piece of cloth, rarely with more; and the business was settled between the producers and the cloth-factors after very few words. *From an excellent article in "Knight's British Almanac for 1861," where many further details are to be found.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Where hardy shrubs are annually forced, select the most suitable when removed from the houses, and give them some kind of temporary shelter to gradually harden their foliage; those cramped for pot room shift into a size larger pot in rich turfy loam; towards the middle of next month plunge them in an open situation in order that the wood may get ripe early. From having been previously forced these will bloom earlier than new stock, of which a portion should each year be potted to replace such as become useless for further work. Cut down and place in a close frame the most choice kinds of Cinerarias for suckers after they have done flowering, and put in a stock of Chrysanthemum cuttings for autumn display. As spring-flowering plants for the stove and for cutting we know of none more useful than Begonias. Now will be a good time to commence with a stock for next season's display; as they go out of bloom allow them a short rest in a rather dry house, when they may be partially disrooted and repotted, pruning in any straggling shoots. Keep them close, and syringe frequently, when they will soon commence growing. Abundance of light and a tolerable share of pot room are necessary to ensure fine plants. As the plants advance liquid manure may now and then be given. Keep specimens planted in beds and borders properly supplied with water at the root, and see that everything is clear of greenfly or other insects.

FORCING DEPARTMENT.

Vineries.—Continue to give air as freely as the state of the weather will permit, using a little extra fire heat, and leaving a little air on at night so as to prevent the bloom being injured by damp settling on the berries.

Figs.—Let us repeat that so far as the present crop is concerned the trees can, perhaps, hardly be too dry at the root while the fruit is ripening, but where a second crop is expected care must be exercised to keep the trees in health, and to prevent the foliage becoming a prey to red spider, otherwise the second crop can hardly be expected to be good for much. Use the syringe vigorously, and maintain a moist atmosphere as long as this can be done without risk of injuring the fruit. Also keep the young wood thin and regularly tied in, stopping before the fourth or fifth leaf, according to the strength of the shoots, &c.

Melons.—Keep the shoots thin and regular, pinching out any not wanted, but avoid stopping the main shoots until they reach the sides of the pit, when by pinching out the points the laterals will start into growth and show fruit abundantly; and by this time the plants will have gained sufficient strength to set and carry a fair crop. Do not exceed 65° at night, and admit air when the glass rises to 75°, but do this very carefully on cold days. Endeavour to maintain a steady bottom heat of about 80° or 85°, and keep the soil in a healthy state as to moisture. See to providing plenty of young plants for succession crops.

Cherry-house.—Continue to syringe the trees daily with water at the same temperature as that of the house. Also loosen the surface soil in the pots or borders with a hand fork, and supply the plants liberally with water until the fruit begins to change colour, after which gradually decrease the quantity and cease syringing; give abundance of air on all favourable opportunities.

Strawberries. — Keep plants ripening fruit moderately dry. Those in later stages of growth should however be well supplied with moisture both over head and at the root.

FLOWER GARDEN AND SHRUBBERIES.

Look well to recently transplanted trees and shrubs. The soil in which they are planted should be kept moist but not saturated or run together by over-watering, as is sometimes done. When the weather shall have become warmer a sprinkling over head with the engine on the evening of drying days will be of more service to large evergreens than over-watering them at the root. See that all recently planted things, whether large or small, are well secured against wind. A good way of effecting this in the case of large plants was described last week (see p. 220). Take advantage of the present state of the ground to stir and rake the surface soil of herbaceous borders to prevent the growth of weeds and give a fresh neat appearance. Also plant out young stock of herbaceous plants. Sow hardy annuals, not forgetting a liberal supply of Mignonette; also biennials and perennials where these are in demand. Prune Tea and other Roses not already done, and also attend to the pruning of shrubs that require that attention. See that gravel walks are put in perfect order for the season, and give turf a good rolling preparatory to mowing.

HARDY FRUIT AND KITCHEN GARDEN.

Cabbage plants raised this spring should be pricked off when large enough to get hard for final transplanting. As the time for sowing the principal crops of winter and spring Broccoli and Greens will soon be at hand, select if possible an open piece of ground rather poor than rich for the purpose; let the seed be sown thinly, and when large enough to handle prick them out on a similar soil. A crop of Globe Artichokes should now be planted for producing a late supply of heads. The young side shoots taken from the old stools may be planted in lines 4 feet apart and 18 inches between the plants; or trenches may be dug 18 inches wide and the same in depth, in which some well-rotted manure should be dug and the plants put out as above.

COTTAGERS' GARDENS.

Let Potato planting be finished. Carrots, Parsnips, and Turnips may be sown, and young Cabbages, if they can be got, planted out. Mixed cropping, let it be remembered, is a point to which especial attention should be paid. The mixture must however be arranged so as not to interfere with soiling or gathering.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON

For the Week ending March 14, 1861, as observed at the Horticultural Garden

March.		Moon's Age.	Barometer.		Temperature. Of the Air.			Of the Earth		Wind	Rain
			Max.	Min.	Max.	Min.	Mean	1 foot deep.	2 feet deep.		
Friday	8	26	30.069	29.978	59	29	44.0	46	43	W.	[illegible]
Satur.	9	27	30.372	30.252	50	32	41.0	46½	43	W.	[illegible]
Sunday	10	28	29.970	29.701	56	32	44.0	46½	43½	S.W.	[illegible]
Mon.	11	●	29.311	29.270	49	37	43.0	45	43½	W.	[illegible]
Tues.	12	1	29.391	29.314	49	33	41.0	46½	43¾	N.W.	[illegible]
Wed.	13	2	30.100	29.649	51	21	36.0	45	43½	N.	[illegible]
Thurs.	14	3	30.233	3 .114	55	40	47.5	44	43	W.	[illegible]
Average..			29.921	29.754	52.7	32.0	42.3	45.6	43.3		

March 8—Cloudy; densely clouded; fine.
— 9—Clear and fine; very fine; brilliant aurora borealis in the evening.
— 10—Fine; cloudy; very fine; showery.
— 11—Cloudy; low white clouds, with deep azure intervals; [illegible] and cold; rain.
— 12—Overcast; showery; very boisterous; heavy shower of [illegible] and hail
— 13—Cloudy and cold; dense low dusky clouds and cold [illegible] clear and frosty.
— 14—Frosty; very fine; rain at night.
Mean temperature of the week, 1 deg. above the average.

RECORD OF THE WEATHER AT CHISWICK

During the last 35 years, for the ensuing Week, ending March 23, 1861

March.		Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	[illegible]
Sunday	17..	50.2	33.6	41.9	15	0.36 in.	4	5	3	—	3	5	[illegible]
Mon.	18	50.5	33.7	42.1	10	0.24	3	8	2	2	2	[illegible]	[illegible]
Tues.	19..	51.3	31.0	42.6	10	0.33	4	4	2	1	2	[illegible]	[illegible]
Wed.	20..	52.0	34.3	43.1	14	0.36	3	3	—	2	—	[illegible]	[illegible]
Thurs.	21..	51.4	33.3	42.3	15	0.21	8	3	3	3	3	[illegible]	[illegible]
Friday	22..	50.5	34.7	42.6	17	0.44	6	3	4	2	4	[illegible]	[illegible]
Satur.	23..	50.4	31.0	42.2	15	0.60	6	6	1	1	1	[illegible]	[illegible]

The highest temperature during the above period occurred on the 19th and 20th, 1836—therm. 67 deg.; and the lowest on the 17th and 21st, 1845—therm. 17 deg.

Notices to Correspondents.

Books: *G E.* The latest Catalogue of plants is the last Supplement to Loudon's Hortus Britannicus, which is already [illegible]. It will not pay booksellers to keep pace with importations, and all plant catalogues must necessarily be in arrear. [illegible] not possible that your letters have missed for want of [illegible]. At this office all letters are refused which are either [illegible] or insufficiently paid.—*W J.* Brown's Forester.

Heating: *T. I.* The return and flow pipes should be of the same calibre. Both should rise a little in their course. Perhaps you have not a good air-pipe: in the absence of which no circulation will take place.

Rose Cuttings: *J C L.* You had better perhaps wait [illegible] autumn before you put in your cuttings. Take them about the end of September or beginning of October, [illegible] plant them at the foot of a wall with a south aspect, place a hand glass over them. Let them remain there all winter, and most of them will probably be found to have struck [illegible] the spring. The summer shoots are those which should [illegible] selected, but you must take care that they are well ripened; the want of sufficient ripeness is often a cause of failure.

Timber: *H W C.* The roof of Westminster Hall is constructed with the wood of Quercus sessiliflora. It is a strange popular error that it consists of Chesnut. The subject [illegible] been repeatedly discussed in these columns. We do [illegible] believe that a single cubic inch of Chesnut wood is to [illegible] found in all the old buildings of the kingdom. There is [illegible] doubt that the wood of Q. sessiliflora and pedunculata [illegible] equally good in situations equally favourable to the formation of good Oak timber. All timber ought to be felled when driest; that is to say in the beginning or middle of winter. The preference now given to spring felling arises out of the value of bark. If you must select the spring when trees [illegible] full of sap, then you should convert the timber immediately and let it season as plank or squared.

Vinery: *W D.* You may very safely do what you propose.

Vines: *Z W.* Your young Vines will be greatly injured [illegible] bleeding if the canes are now cut. You must bend the [illegible] so as to induce them to break where required near the [illegible] and when they have done so then you may disbud the upper part to a greater or less extent according to the vigour of the respective canes. As to keeping them close, on the contrary give plenty of ventilation.

ARTIFICIAL MANURES, &c. — Manufacturers and others engaged in making ARTIFICIAL MANURES may obtain every necessary instruction for their economical and efficient preparation, by applying to J. C. NESBIT, F.G.S., &c., Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, Coprolites, &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch. Gentlemen desirous of receiving instruction in Chemical Analyses and Assaying, will find ample facility and accommodation at the College.

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The Agricultural Gazette.

SATURDAY, MARCH 16, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

MONDAY, March 18	Norton (Paper by Mr. Nelson).	
WEDNESDAY, — 20	Agri Society of England	Noon
FRIDAY, — 22	Hadleigh .. .. (Mr. Hawkins on Root Crops.)	7 P.M.
MONDAY, — 25	Framlingham .. .. .. (Mr. Bond on the Agricultural Future).	6 P.M.
	Botley (Cattle Show).	
TUESDAY, — 26	Kingscote (Mr. Cox on a Knowledge of the Theory of Agriculture) ..	6 P.M.
WEDNESDAY, — 27	Hungerford (The Highway and Parochial Assessment Bills)	4 P.M.
THURSDAY, — 28	Royal Agri Society of Ireland.	

PROTEST is being made against the practice of feeding breeding stock for exhibition to the state of fatness which they generally exhibit at our fat cattle shows. Mr. FAWKES, of Farnley, twelve years ago addressed a memorial on the over fattening of Short-horns to the Yorkshire Agricultural Society, as the late Earl DUCIE did after him to the English Agricultural Society. His lordship's method of meeting the evil was by the exclusion of any animal declared on the authority of a referee accompanying the judges to be excessively fat. This however did not answer the intended purpose, chiefly because the judgment of the referee was in many cases overturned by the subsequent history of the rejected animals. Mr. FAWKES' method was levelled not directly at their fatness, but indirectly at this through its notorious consequences; and the following accordingly are the rules of which he suggests the adoption:—

"1. All the cattle duly qualified for competition to wear round their necks, in the show-yard, labels bearing certificates from their owners of the years and months they are old.

"2. No 2 years and 5, 6, 7, 8, 9, 10, or 11 months' old heifer to be qualified for competition, unless she bears on her label a certificate from her owner 'that she is six weeks past her bulling,' and her premium not to be paid till she has produced a live calf.

"3. No 3-year old heifer to be qualified for competition unless she bears on her label a certificate from her owner 'that she is five months gone in calf,' and her premium not to be paid till she has produced a live calf.

"4. No 3 years and 6 months' old heifer to be qualified for competition under any circumstances.

"5. No cow, not in milk or calf, to be qualified for competition. Each cow to have on her label a certificate from her owner 'of how many live-born calves she

is the dam,' and her premium not to be paid till, if in calf and not in milk, she has produced a live one.

"6. No yearling bull (if $1\frac{1}{2}$-year old) to be qualified for competition unless he bear on his label a certificate from his owner 'that cows are holding to him.'

"7. No 2 years old or aged bull to be qualified for competition unless he bear on his label a certificate from his owner 'that he is the sire of 12 live-born calves.'"

Nothing likely to impair the breeding powers of the animals exhibited would live long under the rigid application of such rules as these for a series of years. And we hope that they will soon be generally adopted.

In an excellent address on the uses of Agricultural Societies read last week by Mr. Dutton, of Stanthorpe Hall, Cheshire, before the Over Agricultural Society in that county, this subject is thus referred to:—

"Another abuse connected with agricultural societies is the practice of getting up animals for mere purposes of show. This has become such a monstrous abuse, that it is attracting unusual attention, and bids fair to receive an effectual check. The Royal Agricultural Society has done much mischief in this respect, inasmuch as it has not unfrequently awarded premiums to animals as breeding stock, when every man of common sense would say that that was the last thing the animal was fit for in the state it then was. Fat animals of any kind ought never to be allowed to compete for premiums offered for store cattle, and in exhibitions for fat stock. In my opinion no premiums ought to be given to animals so fed as to be unwholesome or wasteful as food for man. Not a few of the bulls exhibited in the various Cheshire shows are quite unfit for breeding purposes; many of them are kept for mere purposes of show, and it not unfrequently happens that the successful competitor in the show-yard passes at the close of the time for exhibition, at once to the butcher. If our object is to improve the 'breed of stock' in our neighbourhood, let our premiums be so worded if possible as to exclude all animals which by their condition are become at the time unsuited for the object contemplated. In Cheshire we have not fallen into the monstrous plan of givnig premiums for milking cows to animals concerning which a man would be laughed at as a spoony if ever he thought that they were guilty of such a thing, except perhaps to the extent of keeping their calves for the first few weeks of their lives."

The evil one would think must ultimately correct itself. If indeed the only effect of the prize system at our shows should be to give an unjust and excessive reputation to the herds which win the prizes, then it can be understood how the owners of these herds may find it to be their interest to sacrifice so many animals for the maintenance of a profitable status in the market for the rest. But a few such losses as Lady Pigott's herd for instance has lately suffered, will ultimately, we hope, beat even so strong a tendency as is thus created. Heifers worth 500*l.* a-piece, "preparing for show," and now and then dying under the process, will ultimately check even the powerful influence of the prize system, however mischievously administered.

An exceptional season, like that of last year, is sure to yield some curious modifications of existing species or varieties of plants. One of the most important which has fallen within our observation is now laid before our readers, and one which, should it prove permanent, may be of much consequence to the Barley grower.

The variety of Wheat called Fingered Egyptian, or Mummy Wheat, is undoubtedly one of the earliest which was cultivated. It is, however, but little esteemed at present, and is principally confined to cottage allotments where quantity rather than quality is the object, or it is cultivated merely as an object of curiosity in gardens. We are not, however, aware than an analogous form of Barley has ever been noticed. We can find at least no trace of any in books, and inquiry amongst Botanists and scientific Agriculturists has been equally unsuccessful. The first intimation we had of the existence of such a variety was from some gleaners in Northamptonshire, who found it in considerable quantities in a particular field which was a few years since taken in from the Forest, though unfortunately six ears only, and these rather imperfect, were preserved, from two of which the accompanying figure has been prepared. The origin of the seed from which it was produced cannot be traced beyond a single year. We have however a sample of it before us, the produce of 1859, which is sunburnt, and not exceeding in point of quality an average sample of the present year. The grain, as indeed is often the case with inferior growths, is inclined to part from the skin, some being quite skinless, like the Thibetan Barley. The sample, however, is too indifferent to say positively to what particular variety it may belong, though an experienced farmer at once indicated that to which we feel inclined to refer it, as will be seen below, after an examination of its produce.

Of the six ears of the fingered form before us, which originated from this seed, one has six spikes, a second five, a third three, while the remaining three have two only. In these however the main spike is very long, measuring in one instance five inches and a half, and in another four and three quarters. The tip however of the first are broken off, so that it probably measured when perfect at least 6 inches. The additional spikes all spring from the axils of the outer lateral glumes, occupying in fact the place of one of the fertile lateral spikelets which are the distinguishing feature of the common two-ranked Barley, the only one which is much cultivated in England. This indeed is not quite evident at first, as the spikes are sometimes turned to one side, probably from the Barley having been beaten down by rain.

The quality of the grain, as far as can be judged from a very bad Barley year, and from specimens which had been lying about exposed to daily wet for at least a month, is far from coarse, and we have no doubt that in a good year it would prove excellent. Indeed we are inclined to think, from its general appearance, combined with the very slight curvature of the barren spikelets, as well as from the plumpness of the grain and length of the spike in the best specimens, that it is to the variety known under the name of Chevalier Barley

that it owes its origin. Whether the Fingered Barley will be permanent is a question which can only be proved by cultivation. We have however fears about it, as it has arisen merely from peculiar conditions of climate, and not apparently from any cross with some other variety. We wait therefore with some impatience the result of next harvest, as the question is not only important to the farmer, but also of some physiological importance. In general increased produce is obtained at the expense of quality, but there is promise of something better in the present instance, should the variety remain true to the seed.

While on the subject of Barley, we beg leave to say a few words on a point which at the present moment is not without interest. One peculiar feature of last year's Barley harvest consisted in the fact that Barley though out in the fields for weeks in many cases was not inclined to sprout, and there was a general complaint amongst the maltsters that the new Barley could not be trusted. We made at the time trial of a sample of Barley which had been much exposed, and whether sown in pots, or malted in the usual way, only five per cent. germinated. After a few weeks Barley was found to work better on the Couch, and accordingly brighter hopes were entertained by farmers as to the prospect of the present year's seeding. The pots in which our Barley was sown, after due patience had been exercised, were set aside and kept perfectly dry all the winter. of them however a few days ago was moist some accident, and the grains are sprouting. We may hope therefore with some reason good result even from badly bleached spe provided they had not actually sprouted harvested. *M. J. B.*

AMATEUR COW KEEPING.

Miss Martineau's Paper in "Once a W "Our Farm of Two Acres" interested me ve although with some parts I could not qu I am not, however, so ungallant a gentlem criticise the lady's account of her experi I did seriously doubt the reality of the pleas of a cow yielding so fluent a supply of milk months in succession as "Bessie" is assum done, or if I had misgivings as to the accu supposition that milk, converted into butter milk, will give a larger amount of sterling when sold immediately on being taken fr it by no means follows that I should procee the lady's dream. It may, nevertheless, be and profitable to those who have read the pages of "Once a Week," to have placed be the results of the experience of an amateur co those results not consisting of fascinating built upon data either not accurately ascer recorded, or not continued for a period of s length to make them reliable, but results de by records carefully made, day by day, for th time specified in our paper.

Let me say, then, by way of introduction, th saw thelight in a large town, and that for m earlier years of my life I dwelt in towns an no small magnitude. There I was accus see milk so paly blue that I never cou the milk boys' cry to be other than a frankish compound. "Milk-et-eau!" designate so truthfully the lacteal liquid w were called upon to receive as the genuine p the cow, that I regarded the cry as a dai against the supposition that the agent wa to the deception; and the reader will unders better when I declare that I had seen "new milk from the cow;" the poor creature that slowly perm the metropolitan suburbs, but from inhabitants of the luxuriant pastures provinces. Yes, and tasted it too! how well do I remember the glorious Gooseberries, Currants, red and blac ries, Plums, which graced the suppe my uncle's at Dernville, where I summer holidays in the season of tarts sweetened and softened by th of rich new milk with which we were plent plied. What pleasant evening meals those w

With pleasing reminiscences of short perio enjoyed at intervals in my boyhood, amid rur the reader may well imagine that there were in the landscape when I contemplated, in late constant residence in the country. I was n acquainted with the habits and character of population as to dream of Arcadian innocence expect to find neighbours not unkind, and to supply my wants for a *quid pro quo*. I th as milk and butter, and divers other articles mortals need, were produced in and around I should always be able to procure the best sweetest butter, the choicest Cabbages, and Potatoes, at a price somewhat under that de inferior produce in our towns. But, dear rea live in a town be content when I say that quite a favour to obtain milk from Mr. Cow His good wife "would rather put it in the ch though she might charge what she pleased So with butter, of which "she thought th to spare;" and if the butter came, it had a so unlike the flavour once so dearly familiar to m were as difficult to get, and then th fabulous, when got! And as for Potatoes, sure, they were to be bought, but it was at t market price for the lowest quality!

No wonder then that I longed to possess I might get milk without putting myself implied obligation, and see good fresh butte any I ever tasted, and having the rich golden brightest Buttercups, on my breakfast tab I rented a field or two, because, anxious have these luxuries, I could not afford to pa 2*d.* a quart for my new milk, and 1*s.* a pou butter, and I must therefore do my amateur such a scale that the produce thereof wh remain after my own wants were supplied should repay my expenses in rent, labour, taxes.

I am not dissatisfied with the results of m ture, but I purpose confining myself in this p one matter of cow-keeping. In submitting ments with respect thereto, I must premise quantity of milk was determined by weig diately after milking, the milk-pail and were placed in the scale, every morning an and the weight recorded. The weight of th deducted subsequently, and the remainder quantity of milk stated in pounds and ounce

repeated experiments a pint of milk was found to weigh 20 ounces, so that the conversion of pounds and ounces into quarts became a simple arithmetical calculation.

It was considered very unlucky to measure milk, and I believe it is thought so still. I got over the difficulty by weighing it. I thus gained a more accurate record of the measurement, saved my precious fluid from being spilt in the operation, and from the injurious effects of pouring it frequently from one vessel into another.

My experience is not confined to one cow, but we begin with "Lady," who presented us with her fifth calf, a pretty heifer, on the 10th of March, 185—. We took no account of her milk until the evening of the following day, but in order that our days may include morning and evening, we begin our statement with the weight of milk given in the morning of the 12th:—

March 12,	A.M.	4.025	quarts
	P.M.	4.175	,,
,, 13,	A.M.	3.875	,,
	P.M.	4.275	,,
,, 14,	A.M.	5	,,
	P.M.	4.325	,,
,, 15,	A.M.	[illegible]	,,
	P.M.	[illegible]	,,
,, 16,	A.M.	[illegible]	,,
	P.M.	5.175	,,
,, 17,	A.M.	5.55	,,
	P.M.	4.4	,,
,, 18,	A.M.	4.2	,,
	P.M.	4.75	,,

Aggregate quantity 64.325 quarts in seven days.

Daily average, 64.325 quarts ÷ 7 = 9.1892 quarts, or 9¼ nearly.

"Lady" remained in the cow-house until the 12th of May, when she was sent out to grass. This was at the end of the ninth week after calving. During these nine weeks there were trifling variations in the weights successively recorded, corresponding with the variations observable in the preceding table, but it will suffice to show the aggregate quantity given each week, instead of each day, throughout these nine weeks. We have then from—

March 12 to 18	64.325 quarts.
,, 19 ,, 25	69.15 ,,
,, 26 ,, April 1	62.775 ,,
April 2 ,, 8	66.025 ,,
,, 9 ,, 15	68.[illegible] ,,
,, 16 ,, 22	68.45 ,,
,, 23 ,, 29	72.4 ,,
,, 30 ,, May 6	70.425 ,,
May 7 ,, 13	65.225 ,,

Aggregate quantity .. 599.1 quarts in nine weeks.

Weekly average 599.1 ÷ 9 = 66.56, or 66½ quarts.

Daily average 66.56 ÷ 7 = 9.[illegible], or a little more than 9½ quarts.

"Lady" was now allowed to roam at will in a good-sized pasture, and to sleep in the open air, which, as she is a half-bred Alderney, may account for a little falling off in the quantity during the first week after she was deprived of the warmth of the cowhouse at night. Our next statement takes in a period of 12 weeks, because the difference in the quantities given in the week ending May 20, and that ending August 5, is trifling. The quantity given was from—

May 14 to 20	62.8 quarts.
,, 21 ,, 27	71.6 ,,
,, 28 ,, June 3	70.3 ,,
June 4 ,, 10	68.9 ,,
,, 11 ,, 17	69.92 ,,
,, 18 ,, 24	66.27 ,,
,, 25 ,, July 1	68.65 ,,
July 2 ,, 8	69.3 ,,
,, 9 ,, 15	67.37 ,,
,, 16 ,, 22	65.37 ,,
,, 23 ,, 29	61.8 ,,
,, 30 ,, August 5	61.17 ,,

Aggregate quantity 801.45 quarts in 12 wks.

Weekly average, 801.45 ÷ 12 = 66.7975, or 66 4-5ths nearly.

Daily average 66.7975 ÷ 7 = 9.5425, or as during the nine weeks a little more than 9½ quarts.

Adding together the quantities above recorded, we have 599.1 + 801.45 = 1400.55, which divided by 21 gives the weekly average 66.69; or daily a little more than 9½ quarts.

Hence it is evident that notwithstanding many variations, the quantity given daily, was very uniform during the first 21 weeks after calving. The largest quantity at any one time was 6 quarts on the 28th of April, and the smallest was 3.6 quarts on the 14th of May, which show a daily average of 9.6 quarts, or 9⅗.

Comparing this decimal fraction .6 with that determined above, viz. .5425, the former shows a daily excess above the latter of .0575, which multiplied by 147 gives a total excess of 8.4525 quarts; a difference so small proves the accuracy of the record.

From this time the quantity given by "Lady" gradually diminished. The diminution is so gradual that we think it may be instructive to the reader if we state each weekly yield separately; and we are the more inclined to do this because we have noticed that however late in spring a cow calves, the quantity of milk given sensibly diminishes after the end of July. This may to some extent be prevented by the removal of the cow to a field of aftermath, but only partially, the cause being, we think, a changed physical condition of the Grasses, produced in all probability by the altered character of the atmosphere. The weekly yield was as follows:—

	Quarts.	Average	Daily. Average.
Aug 6 to 12 ..	55.62	215.62 ÷ 4 = 53.775	÷ 7 = 7.6792
,, 13 ,, 19 ..	52.45		
,, 20 ,, 26 ..	53.		
,, 27 Sept. 3 ..	53.95		
Sept 4 to 10 .	50.15	171.25 ÷ 4 = 42.8125	÷ 7 = 6.83035
,, 11 ,, 17 .	44.875		
,, 18 ,, 24 ..	42.05		
,, 25 Oct. 1 ..	31.175		
Oct. 2 to 8 ..	33.95	116.825 ÷ 4 = 29.20625	÷ 7 = 4.17232
,, 9 ,, 15 ..	31.675		
,, 16 ,, 22 ..	27.8		
,, 23 ,, 29 ..	23.4		
,, 30 Nov. 5 ..	20.35	71.225 ÷ 4 = 17.80625	÷ 7 = 2.54375
Nov. 6 to 12 ..	16.575		
,, 13 ,, 19 .	18.575		
,, 20 ,, 26 ..	15.725		
,, 27 Dec. 3 ..	13.225	44.025 ÷ 4 = 11.00625	÷ 7 = 1.57232
Dec 4 to 10 ..	9.5		
,, 11 ,, 17 ..	10.125		
,, 18 ,, 24 ..	11.175		
,, 25 ,, 29 ..	7.2	÷ 5 days	1.44
	625.545		

Thus in the second period of 21 weeks, after calving, we find a diminution of the weekly average of 13.0425 quarts in a month; in the second month a further diminution of 10.9245 quarts; and in the third, fourth, and fifth a further diminution of 13.60625, 11.4, and 6.8 quarts respectively. Adding together the quantities given in the 42 weeks we have 2026.095 quarts, being a weekly average of 50.621325 quarts; a daily average of 7.231617 quarts.

To the 2026.095 quarts we must add 4.025 quarts given in the evening of March 11, so that the whole quantity given from the time of calving until the cow became dry is 2030.12 quarts, which, at 2*d.* per quart, would be worth 16*l.* 18*s.* 3¼.844*d.*

But we cannot convert milk into money thus, in our locality, therefore we make butter and buttermilk. "Lady's" milk is rich, and 8.875 quarts yield 1 lb. of butter, so that

		£	s.	d.	£	s.	d.
2030.12 quarts give *228¾ lbs. butter, at 1s.					11	8	9
The butter milk, if sold, would realise					3	7	8
Heifer calf valued at					1	0	0
Manure made in nine weeks after calving					0	18	0
Do do. 16 weeks before calving					1	4	0
Entire produce in the year					£17	18	5
But what has she cost? says the reader. She ate weekly, for nine weeks after calving—							
1½ cwt. hay, at 3s 6d. = 5s.3d. / 315 lbs Mangels .. 2s 7d	7s. 10d. × 9 =	£3	10	6			
Summer pasture		4	0	0			
In 16 weeks before calving she ate—							
2 cwt. Oat straw .. 3s.4d. / 315 lbs. Turnips .. 1s.9d.	5s. 1d. × 16 =	4	1	4			
Interest and annual diminution of value of cow		1	1	1			
					12	12	11
					£5	5	6

But, says the reader, is this 5*l.* 5*s.* 6*d.* clear profit? This depends entirely upon circumstances. Here the hay, Mangels, and Turnips, are charged at the market price; the summer pasture at its actual cost in some localities. It is obvious that these charges are subject to endless variations, depending upon the locality in which the amateur resides.

Again, if a man be employed because land is held in occupation, then his wages must be charged against the returns, and the proportion chargeable against the 17*l.* 18*s.* 5*d.* as above, may exceed or be less than the balance of 5*l.* 5*s.* 6*d.* If, on the other hand, a man be kept whether his employer have a cow or not, then the 5*l.* 5*s.* 6*d.* will be clear gain, and so much in reduction of the unavoidable expense of a man's wages.

In estimating the advantages or disadvantages of cow-keeping, each must therefore form his own estimate, taking for his help, but not his guidance, such reliable accounts as this which we have now presumed to submit to the public. *T. K. C.*

* An account was kept of all the butter made. After estimating the quantity from the data taken, I added up the butter account, which only exceeded the estimated quantity by 1 2-5ths per cent.

SCOTTISH METEOROLOGICAL ASSOCIATION.

THE half-yearly meeting of this Association was held last month in the new hall of the Highland and Agricultural Society, Edinburgh, the Marquis of Tweeddale in the chair. Mr. D. Milne Home of Wedderburn gave in the report of the council. It stated among other things that the Marquis of Tweeddale has again liberally come forward to offer a prize on a subject of meteorological interest. The observations made on the temperature of the atmosphere at all the Society's stations, and at most other places, are with thermometers either in the shade or in the sun, and with blackened bulbs. In the former case the instruments indicate a much more equable, and probably a lower, temperature than if exposed to the full influence of the sun. In the latter case, owing to the powerful effect of black colour in both absorbing and radiating heat, extremes of heat and of cold are shown, which do not truly represent the temperature of the atmosphere. The object of the Marquis of Tweeddale's new prize is to afford the means of approximating more nearly to the temperature of the air, by exposing thermometers to the influence of the sun and weather; and thus to supply better data than exist at present for showing the meteorological conditions which determine the profitable cultivation of ordinary farm crops. The prize offered is 5*l.* for the best set of observations in each of the eight districts into which Scotland is divided by the Registrar-General.

The noble chairman hoped that attempts would soon be made to popularise the science of meteorology in its practical bearings upon every-day life, and particularly upon agricultural pursuits, in the same way as, to a large extent, the science of chemistry, in its bearings upon these subjects, had been popularised. He did not profess to be much of a theorist either in regard to chemistry or meteorology, but he might refer to a circumstance which happened to himself while in India, as showing, more by way of experiment than anything else, what might be effected by attending to simple elementary laws. It was usually understood that Potatoes could not be successfully grown at ordinary elevations in India on account of the intense heat of the climate. There was, however, a spot in lat. 13°, about 4000 feet above the level of the sea, where a gentleman had raised a crop of large size and excellent quality, and he (the Marquis) was twitted by that gentleman that he could not raise Potatoes at a lower level. He selected a piece of ground only about 10 feet above the level of the sea, and of the worst possible quality. He then pulverised a small portion of the soil, planted his Potatoes, and sunk two pits, one at each side, which he got filled with water every evening. The water evaporated before the next night, and the Potatoes felt themselves in something like their natural climate, and grew beautifully. When they were ready, the gentleman brought down his Potatoes, and at a dinner party of 36 people dishes of the two kinds were handed round, when the company to a man decided that those grown at the low level by him (the noble Marquis) were the best. It was also supposed that Wheat could not be grown in India, but by draining and pulverising the land, just as he did at Yester, he had grown as fine Wheat as could be produced in this country. All that he attended to was to sow the seed only about six weeks before the end of the monsoon season, so that it should not be sufficiently advanced to have the bloom washed off during the rainy season. He believed that he could not have done that if he had not paid some little attention to meteorology. His lordship next referred to the recent snow-storm in this country, and stated that having been in Edinburgh on the 17th, he heard of no depression of the barometer here, and went home without the slightest anticipation of the extraordinary fall of snow which took place on the night of the 18th. The barometer did fall, however, considerably on the 18th, but only about 12 hours before the snow-storm commenced—a period which was quite insufficient to enable the hill shepherds to collect their flocks and place them in safety. But it so happened that the shepherds in his neighbourhood had collected their flocks, and had them all safe when the storm came on; and he afterwards found out that on the 17th, while he had been in Edinburgh, a number of the shepherds had met upon the hill-sides; and while some of them were congratulating themselves and the others upon the good weather which they had had for the past few days, some of the older and more experienced gave it as their decided opinion that before 48 hours they would have a very heavy snow-storm. On this opinion they all acted, and commenced collecting their sheep long before the barometer gave the slightest indication of the approaching change. These men were thus enabled, without any scientific apparatus, but simply by watching the aspect of the sky and the atmosphere, to foretell the extraordinary snow-storm of the present winter in sufficient time to save themselves and their flocks from the disastrous consequences to which they would otherwise have been exposed. He thought these natural observations ought to attract a much greater amount of attention than they had yet received; and as Dr. Arthur Mitchell, as well as himself, were at present engaged in collecting such observations, for the purpose of being afterwards classified and systematised, he hoped that they would receive all possible assistance from their country friends in their inquiries.

Professor Balfour then proceeded, at the request of the Council, to read a paper on the relations of Meteorology and Botany. After stating that this was a subject which had as yet received far too little attention from gardeners and practical botanists, he said that one of the difficulties to be encountered arose from the great discrepancies in the markings of thermometers, as might be seen in the comparative details lately published in the newspapers. Professor Balfour proceeded with some observations on the amount of heat required by plants at different times, the varying temperature of the soil, and the loss of heat occasioned by radiation and evaporation, and afterwards read an interesting paper by Mr. M'Nab, of the Royal Botanic Garden, Edinburgh, showing the effects observed on shrubs and trees immediately after the unprecedented frost of the 23d, 24th, and 25th December last. The storm commenced late on the evening of the 18th December, with a very heavy shower of hail, lasting for some time, which was succeeded by a quiet fall of snow, which continued throughout the night. At daylight on the morning of the 19th December, the snow was 12 inches in depth all over the garden. On the morning of the 20th of December, about 5 inches of extra snow had fallen. For 10 days the snow lay more or less heavy on all the shrubs, many being weighed down

and broken by it. In some instances we may account for the damage done by the action of the frost on the overbent branches, particularly where a rupture was caused by the weight of snow. Irish Yews 10 and 12 feet high had their various tops touching the ground. When freed of their load they soon assumed their original upright form, which would not have been the case had they been long held in a bent position. On the morning of the 23d December, the thermometer indicated 25° Fahrenheit. The day subsequently was clear and cold, and there was every appearance of a sharp frost. The following tables show the minimum temperature indicated every two hours by Adie's and Bryson's thermometers during the three nights referred to. The thermometers were each placed about 4 feet from the ground, and were freely exposed to the atmosphere:—

MR. ADIE'S THERMOMETER.

	Dec. 23.	Dec. 24.	Dec. 25.
	Degs.	Degs.	Degs.
4 P.M.	13	9	7
6 ,, ...	10	4	3
8 ,, ...	8	3	0
10 ,, ...	6	3	—2
12 Midnight	8	8	8
2 A.M.	8	8	9
4 ,, ...	8	3	12
6 ,, ...	3	8	3
8 ,, ...	—2	3.5	—2
10 ,, ...	—5	2.5	—2

MR. BRYSON'S THERMOMETER.

	Dec. 23.	Dec. 24.	Dec. 25.
	Deg.	Deg.	Deg.
4 P.M.	10	6	4
6 ,, ...	7	4	0
8 ,, ...	5	0	—3
10 ,, ...	3	0	—5
12 Midnight	0	0	0
2 A.M.	0	0	6
4 ,, ...	0	0	9
6 ,, ...	0	0	0
8 ,, ...	—5	0.5	—5
10 ,, ...	—8	—5	—5

Professor Balfour explained that it had been found necessary to apply a correction to the indications of very low temperature on both thermometers, in order to bring them to the Kew standard. It was found that below zero Adie's thermometer indicated 1° too high, while Bryson's indicated 2° too low. After rectification, the lowest temperature indicated in the Botanic Gardens—namely, that which occurred at 10 A.M. on Monday the 24th December—was, according to the Kew standard, 6° below zero. After the intense frost gave way (continued Mr. M'Nab) we, fortunately for vegetation, experienced rather dull weather, with comparatively few glimpses of sunshine. The damage done to vegetation, however, is very great, and is daily becoming more observable; but months must elapse before we shall be able to detail the entire loss. The first plants on which the effects of the frost became visible were the Aucuba japonica, and the several varieties of Laurustinus. During the thaw the latter emitted a very strong and disagreeable odour—the smell not being perceptible so long as they remained in the frozen condition. The next shrubs which showed the effects of the frost were the Bay or Cherry Laurel, the Portugal Laurel, and the Laurus nobilis, or Sweet Bay. The last seems to be entirely destroyed, the centres of the young shoots being quite brown. The Bay Laurels in all situations and exposures have a uniform brown hue; the Portugal Laurels, in some situations, have all their leaves perfectly black, while in other situations portions only of large plants were in this condition. Another peculiarity observable during the late frosts was the splitting of the wood and bark of several shrubs and trees. Some of the Portuguese Laurels had rents fully half an inch wide, extending from 8 to 10 feet along their stems, but when the thaw took place, the fissures instantly closed. Similar splittings were observed in the stems of the American Lime, Sweet Chestnuts, Walnuts, and Sycamores. Professor Balfour entered into some interesting details regarding these frost-splittings, which, he said, had received special attention from Dr. Robert Caspary and others. After some remarks upon the effects of previous frosts upon the trees and plants in the Botanic Gardens, Mr. M'Nab's paper closed with the following Table, showing the minimum temperature indicated by Bryson's thermometer (rectified as formerly explained), during the nights from the 14th December, 1860, to the 14th January, 1861, both inclusive.

	Degs.		Degs.
December 14	29	December 30	25
,, 15	30	,, 31	32
,, 16	33	January 1	32
,, 17	31	,, 2	20
,, 18	30	,, 3	15
,, 19	27	,, 4	8
,, 20	28	,, 5	8
,, 21	24	,, 6	16
,, 22	18	,, 7	19
,, 23	25	,, 8	5½
,, 24	—6	,, 9	18
,, 25	14	,, 10	32
,, 26	—8	,, 11	30
,, 27	5	,, 12	36
,, 28	4	,, 13	28
,, 29	14	,, 14	25

Mr. Milne Home begged to announce that the Council had resolved that the Meteorological Secretary should proceed to investigate into the effects of the recent frost over Scotland. He hoped that persons who had observed anything peculiar in their various localities would communicate with the Secretary, Mr. Buchan. He had found that all parts of the country had been affected more or less by that cold, but not in anything like an equal degree. Low-lying parts of the country seemed to have experienced the cold in considerably greater intensity than the more elevated districts. For example, at Braemar and at Castle Newe, in the upper portion of Aberdeenshire, the lowest temperature experienced was 8° and 11°, while in the lowest stations the average minimum was *minus* 6. In East Lothian, their two lowest stations—Smeaton and East Linton—were also the lowest in respect to temperature; while at the most elevated—Yester and Thurston—the thermometer never fell below zero. The same principle was shown in an equally or even more remarkable way in Dumfriesshire. In the lowest parts of the country the thermometers went below zero; but at the Wanlockhead station, which was 1333 feet above the level of the sea, the lowest marking was *plus* 6. That seemed to corroborate what Professor Balfour had stated, that, within certain limits, the higher the observer went, at night, the higher would be the temperature. The greatest degree of cold observed throughout the whole kingdom had, as usual, been at Nottingham, which both lay low and was far from the sea. The lowest temperature observed there was 11° 4 feet above the ground, and 13° upon the Grass; and a correspondent of one of the local papers in that part of the country* wrote on one occasion, about the end of December, he had just seen a horse pass with icicles 3 inches in length, and as thick as a man's finger, hanging at his nose.

Home Correspondence.

The present Unsatisfactory State of the Roads.—The cause of the present rotten state of the roads must be traced to the great quantity of rain, which has completely saturated them with water, and it is well-known that frost affects roads in that state very differently from what it would roads in a dry sound state, therefore it is the water that is allowed to penetrate the roads that is chiefly the cause of the present evil. The most important point in reference to keeping roads in a sound state is then to prevent the water from penetrating the bed or resting on its surface, and this can easily be effected by making a drain 4 feet deep on each side of the roads, which would have the effect of preventing the water soaking from the adjoining land into the road. The road should be so constructed that the surface water will drain off into the water tables on each side. If these important points are acted upon we shall insure good roads at much less expense. It would be a public benefit if waste land by the side of roads was to be under-drained, but more especially greens and commons that are surrounded by the dwellings of the poor. *B. Ransley, Peressfield Farm, Oxted, Surrey.*

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

WEEKLY COUNCIL, Wednesday, March 13, Mr. Thos. Raymond Barker, V.P., in the chair.

The names of candidates for election were read.

The successful Essay in Class IX., for 1859, was announced to have been written by Professor Tanner, of Queen's College, Birmingham, on the Breeding of Farm Stock.

In Class VIII., for 1859, the Essays sent in were not considered by the Judges worthy of the prize.

A letter was read on the Culture of Mangel Wurzel from Messrs. Hardy, of Maldon.

The Council then adjourned to Wednesday, the 20th inst.

Farmers' Clubs.

CENTRAL: *March* 4.—We resume our extracts from Mr. Howard's paper on *Piece-work*:—Mr. Francis Twining, of Parbold Hall, Wigan, Lancashire, states:

Almost all work in this district is done by the day: wages are from 14s. to 16s. a week; mowing seeds (Clover and Rye-grass) from 4s. to 6s.; shearing Wheat 14s., cut close—say 5-inch stubble, set-up and hooded by a man found by the farmers; Barley mown, tied up, and raked, 11s.; Oats mown, tied, and raked, 12s.; and Beans, 12s per acre. Draining 4 feet deep, 10d. per eight yards: at this the men can earn about 18s. a week. Getting Potatoes grown on the drill, 32 inches apart, after being grubbed with the horse-hoe, 2½d. per 8 yards, running measure; pulling and cleaning Swedes, on 30-inch ridges, 1d. for 60 yards; Mangels, 1d. for 50 yards; Turnips, 1d. for 80 yards, running measure. This work is mostly performed by women, who earn 2s. 6d. to 3s. a day.

Mr. Henry Humphreys, of Beau Manor Park, Loughborough, states:

We are progressing slowly and gradually towards piece-work, and, whenever we can, prefer having the labour done in this way. I give you a list of prices paid upon this farm and neighbourhood, the labourer finding his own beer: Mowing Grass, 4s.; Clover, 2s. 6d. to 3s. per acre; mowing and tying Wheat, from 9s. to 12s. per acre; reaping Wheat, 14s. to 16s. per acre. Mowing Barley, 3s. to 3s. 6d.; reaping and tying Barley, 10s. to 12s.; mowing Oats, 2s. 6d. to 3s.; reaping and tying ditto, 8s. to 12s.; cutting and tying Beans, 9s. to 11s. per acre. Hoeing Wheat, 3s. 6d.; Barley, 3s.; Beans, 4s. 6d.; Peas, 3s. 6d. per acre. Hoeing and singling Turnips and Mangels twice over, 6s. per acre; raising and dressing Swedes, from 7s. 6d. to 9s.; ditto Mangels, 10s. to 12s. We do [illegible] allow the roots of Mangels to be cut with the knife. [illegible] and raising Potatoes, from 6d. to 8d.; double digging, [illegible] 2s. to 3s. per 100 square yards. Draining, varying from [illegible] 5 feet deep, 7d. to 1s. per rod of 5½ yards. Fencing: cutting down, taking out dead wood, and making strong fence, from 6d. to 8d. per rod of 5½ yards; trimming fences, 0½d. per rod.

Mr. G. Shackel, of Erleigh Court, Reading, in a very interesting letter, but which came too late for me to make full use of, considers the subject of vast importance to the farmers. He believes the labourers are not what they used to be, in not taking that interest in their master: hence, the greater necessity for piece-work, that it tends to make good labourers. A bad labourer he compares to a bad implement—next to nothing.

Mr. W. J. Brown, of Chippenham, states:—

His practice is to send to each of his labourers one 9-gallon cask every three weeks in summer, and in every six weeks in winter. If any short time is made, he deducts 2d. a day: he contends this is one of the means of keeping the labourer from where he states every evil is concocted—the beer shop; and he thinks nothing will improve the labouring class like this, and giving him a three-bed-room cottage to live in. Mr. Brown does his reaping with a Burgess & Key's machine. In 1859 he cut [illegible] in nine days; last year he cut 122 acres at about the same rate. His labourers now look upon the machine as a friend instead of an enemy. For tying up after it he gives 5s. an acre, without beer; winnowing and dressing after the machine, [illegible] per quarter—a custom he finds answers his purpose. He [illegible] thinks there are two things upon a farm you can do too much of in a day, viz., drilling and threshing, and condemns the finishing threshing machine.

Mr. J. T. Twynam of Winchester, has very kindly forwarded me the following list of prices paid for labour in Hampshire:—

Mowing and binding Wheat, 7s. to 8s. 6d., mowing and tying Barley and Oats, 3s. to 4s. 6d., mowing and binding ditto 5s. to 6s. 6d. per acre without beer; mowing [illegible] upland Grass 1s. 10d., Clover 2s. 6d., Sainfoin 2s. 6d., pasture and water meadows 3s. 6d. per acre; hoeing Turnips [illegible] Swedes once, 6s.; twice, 8s. to 10s. per acre; dung spreading, where about 12 tons per acre is put, 2s. per acre; cutting and laying Quickset hedges, 6d. per rod of 5½ yards; making faggots, 6d. per score; banking for the reception of Quicksets, when planted, 9d. per rod; making dead hedges with coppice wood, 2 feet high, 3d.; 3 feet high, 4d. per rod; moving earth, per cubic yard, 3d.; chalk or gravel, per cubic yard, 6d., with 1d. per rod in addition for every 15 yards length over which it may be wheeled. Chalking 30s. [illegible] per acre, according to the depth at which it is found; wheeling on in barrows from 1200 to 1500 bushels (55 to 68 [illegible]) per acre; this chalk is immediately spread, cost included in the price stated, and left to be acted on by the frost. Trussing hay 2s. 6d.; ditto straw, 3s. 6d. per ton; thatching corn [illegible] 8d. per square of 100 feet, including all work attached to it [illegible] not materials; grubbing up strong hedge-rows or coppice and thoroughly cleansing the ground, 1s. 3d. to 1s. 6d. [illegible] square rod; burning ashes round the borders of farm [illegible] 3s. 6d. per 100 bushels, including paring the turf; horse ploughing, 6s. to 8s. per acre, according to nature of [illegible] flooding water meadows and keeping the water-courses [illegible] throughout the year, 6s. per acre. Stacking hay and corn done by the day, the men being paid one third for the former and double in the latter case, over the usual wages, with [illegible] gallon of beer each per day; this mode is considered preferable to task-work, as the men are immediately under the control of the employer, which is of great importance while [illegible] is in progress. Threshing is nearly all done by machinery, chiefly steam power.

From Essex I have received letters from Mr. W. [illegible] of Great Bentley Hall, Colchester, and from Mr. W. Thompson, jun., of Thorpe, near Colchester. Mr. [illegible] states that he considers the system of piece-work [illegible] most equitable for both masters and men.

Wheat is hoed at 3s. 6d. to 4s. 6d. per acre; Peas and [illegible] about the same; Mangel and Turnip hoeing, including [illegible] ling, at 4s. to 5s.; mowing Rye-grass and Clover, [illegible] 4s. 6d., with three pints of ale and small beer. Harvest [illegible] is let to a company of men, at the rate of 6l. to 6l. 10s. per [illegible] each to do from 9 to 11 acres, half Wheat and half [illegible] where the occupations are small the second crop of Clover [illegible] included in the corn harvest, and sometimes a few acres of Turnips to hoe. This is done to enable a farmer to [illegible] his company to what is called a carting company. [illegible] unlimited potations of beer are allowed, of various degrees of strength. The harvesting of Mangel Wurzel has become [illegible] important feature in farm work, from 9s. to 12s. per acre [illegible] common price paid for this work.

From Scotland I have received several most interesting letters, full of valuable information, and which I only regret I cannot give you at length.

Mr. Hope, of Fenton Barns, Drem, writes that there is much less work done by the piece than there was some years ago: except filling manure and switching hedges, everything else is done at day's wages. Draining is now almost over: the mowing and reaping machines have put an end to [illegible] Clover and hay by the scythe, and diminished the quantity of grain that was formerly let by the acre. Last harvest Mr. Hope cut four-fifths of his grain by machinery. The men in charge of the machines are engaged and paid by the year, [illegible] he allowed each man a small sum for every acre cut. [illegible] gathered and tied up on day's wages; of course, the gatherers had to keep up with the machine. His workpeople are [illegible] hired by the year, and are either married, or young men [illegible] with their parents. He has no "bondagers." The men [illegible] paid in grain, with keep of cow, cottage, &c., and may [illegible] about 13s. per week.

Mr. J. Wilson, of Edington Mains, Berwickshire, states:

Our towns and villages are small and wide apart, so that there is a necessity for the labourers [illegible] for each farm to be resident upon it; and accordingly a row of cottages forms an invariable part of every homestead. The "hinds," as our farm labourers are called, are engaged by the year from Whitsunday to Whitsunday, the engagement taking place about the 1st March. A hind's wages at [illegible] consists of 4l. in money, 54 bushels of Oats, 21 bushels of Barley, 9 bushels of Peas, the keep of a cow (Grass in summer and 3 tons of Turnips and straw in winter), food during harvest, say for a month, and a small money allowance [illegible] delivering grain. This will amount to about 10s. per week, taking one year with another. Being a yearly servant, [illegible] wages are not liable to deduction from bad weather [illegible] casual sickness; but with the terms already enumerated there is associated a further arrangement, by which the hind engages to furnish throughout the year the services of a female or stout lad, popularly called a "bondager," for whose work the hind receives at the rate of 1s. per day from Candlemas to Martinmas, and 10d. from the latter to the former term.

* This was reported by Mr. E. J. Lowe in the *Times*.

with the current rates of harvest wages, say from 2s. 6d. to 3s., while reaping is in hand, and food all harvest. On consideration of keeping this field-worker or bondager, he further gets a cottage and small garden rent free, has what coal he requires carted by his employer, and gets one-third of an acre of land on which to plant potatoes, the farmer supplying manure and horse labour, the hind providing the sets and undertaking the hoeing and digging of the crop.

From the remarks in a most interesting letter I have received from Mr. Wilson, which I regret time will not allow me to read, there does not appear to be the same objection to the bondager system that many people have hitherto thought; indeed, the farm labourers of Berwickshire appear to be a most thrifty, intelligent, and well-conducted class of men. The harvest work is done by the day, the men working in sets of five for ten hours a day, any piece-work upon the farm being quite the exception.

M. Peter MacLagan, of Pumpherstone, Mid Calder, Mid Lothian, in a highly interesting letter, states he prefers piece-work to day-labour, considering it more profitable to the employer, and an encouragement to skill and industry to the workman.

In Mid Lothian very little of the work is done by the piece, except hay-cuttings, which costs 2s. 6d. to 3s. per acre, without beer. Potatoes are occasionally, after being dug or lifted, raised and sorted ready for market at 9d. per boll of 4 cwt. When harvest work is done by the day, the reaping is performed by a machine or by a band of reapers, overseen by a careful man, two reapers being put on a ridge of 18 feet, and one man binds to four reapers. Formerly, when tooth sickles were used, and the work was performed more slowly, one man bound to six reapers. At the present day there are certain men in every district who make a business of contracting for the cutting of the crop; they supply all the workers, and obtain lodging at the steading, with, perhaps, milk for their porridge. The price of cutting, gathering, binding, and shocking is from 8s. to 10s. per acre. One of the great advantages derived from the use of the reaping machine is the doing away with the evil of crowding so many people of both sexes promiscuously about the steading at harvest time. Draining is always done by the piece, at a cost of 1s. 8d. to 2s. per chain of 22 yards, three feet deep, and from 2s. 6d. to 2s. 8d. for four-feet drains. The practice in Mid Lothian of hiring the hinds is the same as in Berwickshire; but the annual payment is as follows:—65 stones of oatmeal, 12 to 16 cwt. of Potatoes, and 22l. in money; in East Lothian, 9 qrs. of oats, 18 bush. of barley, 24 to 32 cwt. of Potatoes, 2 qrs. of Beans, keep of a cow for one year or 6l., list money 1l.

From what I have gathered of the Scotch system, I am inclined to think that while we are before them in piece-work, they are before us in England in the management of their day-work; for it appears whenever a number of teams of horses or men are sent out, or a gang of women and boys, a trustworthy man accompanies them as overlooker, whose duty it is to keep them going, and to work himself. Perhaps after having read the plans and opinions of so many other farmers, I may now be expected to state my own practice; it is as follows:—

To let as much work as I possibly can, particularly to the best conducted and those of my men who have large families. The work done in this manner, commencing after harvest, is the filling of manure, for which I pay for the heap or for emptying the yard; I consider this plan preferable to paying by the load; there is no dispute then about the size of the load. The trimming of hedges, with the bushes raked, at 2½d. per chain. The whole of my land is what is styled Turnip land; but as I do not wish to grow that root so frequently, I grow a large breadth of Wurzels, two-thirds of which I leave on the land to be consumed by sheep in the spring, for the getting up and covering of which I give from 7s. 6d. to 8s. per acre; the other one third are thrown into small heaps, and covered with the tops, ready for the carts; for this I give from 5s. to 6s. per acre; the carting and clamping are done by the day. Turnips cleaned and covered, with one-fourth to go off, at from 7s. to 8s. per acre: this price includes the filling of those that are removed. Hand-hoeing Wheat from 3s. to 3s. 6d.: I last season used a newly invented horse-hoe for this purpose with great success: hoeing Peas after horse hoe, 2s. 6d.; Beans, 3s. 6d. to 4s.; Turnip and Mangel hoeing on the ridge, at 24 inches apart, setting out and flat hoeing, 5s. 6d. to 6s. 6d. per acre; washing and shearing sheep, 3s. per score; mowing Grass and Clover, 3s. 6d. per acre, with beer. My plan of harvesting has hitherto been to hire the whole of my men and boys, generally at double their ordinary day's pay, with a liberal allowance of beer for the month, thus securing their services. Besides this, however, I let to a company of these same hired men the cutting of the Wheat and Barley, thus giving them an opportunity of earning more than their day's pay. I have had two reaping machines, which in certain seasons have done good service, but during the last two seasons they have been of little use. I have found this plan to answer very well; but I must confess, from all I have heard and seen, that the most satisfactory plan is, as I before stated, to let the whole of the cutting, carting, and thatching, as adopted by Mr. Pike and other gentlemen. The principal thing that will require looking to, under this system, is to see that they do not carry the corn before it is ready.

And now, I think I am justified, by the correspondence I have read to you, in stating that a well-adjusted system of piece-work, particularly in busy times, appears to be approved by the practical men who have favoured me with their views; and I take this opportunity of publicly thanking those gentlemen for so kindly and promptly forwarding me such valuable information.

With the increasing demand for labour, with a decreasing supply in many parts of England, it behoves us as farmers to adopt a course by which to meet this state of things. The extension of piece-work, I hold, will have this tendency. Our position differs materially from the farmers of a former generation. At the present day we have far more expensive machinery, with well-fed teams, to be kept going, a greater number of much more valuable animals to be tended, larger crops to be gathered, and higher rents to pay: we cannot afford, therefore, to have fellows crawling through their day's work as in times gone by. We must, like the manufacturers, have more activity, if we pay more for it. Piece-work appears to be desirable for the following reasons:—1st: It enables the farmer to get his work done more expeditiously, and at the proper season, with less supervision on the part of the master. 2d: That, generally, it is less expensive than day-work, and the master pays for no more than is done. 3d: That, regulating wages by the quantity and quality of the work performed, is an incentive to industry, and affords greater scope for the exercise of skill, thereby giving the industrious and skilful man his legitimate advantage over the lazy and indifferent one. 4th: By placing higher wages within the reach of the labourer, the temptation to the best of our rural population to leave farming work for other spheres is lessened. I would here remark that I consider it essential to the system working properly for both master and man, that the price to be paid should be fixed either before the work is commenced, or, at most, after the men have had one day's trial. And here, gentlemen, although I may be travelling somewhat out of the record, I would observe, in conclusion, that I am not one to agree with those who speak harshly of the English agricultural labourer. I have found, in the main, that those who are treated with kindness and consideration appreciate it, and evince their gratitude by taking a greater interest in their master's concerns. Many little acts of kindness may be shown to themselves and families, that will cost their employers comparatively little, while at the same time it may afford them much comfort, and convince them that you are anxious to promote their social welfare. I have lately read with much pleasure one or two articles in the *Mark Lane Express*, relative to the Sunday work of the farm. There is, no doubt, much more done than need be; a little forecast on the Saturday, and extra help on the Sunday morning for an hour or two, would prevent this. I am aware some men like an excuse for not attending a place of worship; but it behoves us as masters as far as possible so to arrange our work that the blame may not rest with us. The employment of boys on the Sunday cannot for a moment be defended. Many a man has traced his downfall to his youthful occupation of field-keeping on the Sunday. It is much better, and is carried out by many farmers, to employ men for this work—one to take the morning, and the other the afternoon. By this method they each have part of the day for public worship. The articles to which I have alluded also recommend very highly the distribution amongst our labourers of that most useful and interesting periodical, the "British Workman." Having adopted for some years past this practice myself, I join the writers most cordially in their recommendation. But whilst I advocate and commend a kindly feeling towards the employed, we must not forget that neither charity, philanthropy, nor other good feelings of the same class, will enable farmers to pay labourers good wages; nothing but good profits will, in the long run, enable us to do this; and good profits can only be obtained by a close adherence to the well-known maxims and laws of business.

The following discussion then ensued:—

Mr. P. H. Frere said that every member of the Club was very much indebted to Mr. Charles Howard for having brought forward the subject. He had presented to the agricultural public a most valuable mass of evidence, showing the importance of the subject to agriculturists. He did not believe that in the 19th century they could get manual labour done better or cheaper than by gangs of English navvies on piece-work. He recollected, at the time of the famine in Ireland, when wages were at 8d. a day, and it was a question whether the wages should not be raised to 10d. or 1s. a day, to enable the labourers to obtain food, and still he thought that they could not have dearer labour than those men at 8d. a day. And again, in the days when drainage was first introduced, the work cost two or three times as much per acre than in England, where the men were receiving their 20d. or 24d. a day.

Mr. H. Trethewy (of Ampthill) said they must all feel that there were some little difficulties to contend with. Some objection had been made to piece-work on the ground that it required more supervision, but for his own part he thought the day-work required more trouble than piece-work. No doubt the men got higher wages by piece-work than by day-work, but still it did not follow that it cost the farmer more to get his work done; in many cases he believed the farmer got his work done cheaper and better by adopting the piece-work system.

Mr. Spearing was strongly in favour of paying by piece-work, but still there were many things which could not be done under that system. Of this fact he instanced his own case, where last year he paid 800l. for labour, and of that amount only 300l. was for piece-work. No farmer, he thought, objected to pay a fair day's wage for a fair day's work, but the amount of work got from the men when they were paid by the day was to his mind in accordance with the knowledge the farmers had of their business (laughter).

Mr. J. Coleman (of Woburn Park, Bedfordshire) said that while he agreed with the piece-work principle, there were two things which could not be done under it, and they were, the forking of twitch and the ploughing of land by horses and oxen. The threshing, he thought, could be done as well by the piece as by the day. In his opinion, however, the system would take up more time than the farmer could spare. He knew of several cases where men earned 2s. a-day on day-work, while by the other system they earned 3s. He thought the day man was the laziest man under the sun, but give him piece-work, and a better man he would not wish to be master of. He had had a great deal of experience, and he felt that the landlords might build cottages, or distribute tracts, but that did not do what was wanted. It rested with the farmer to show the labourer the way to help himself; let him find that the farmer took an interest in his welfare and that he was cared for, and no man would appreciate it more than the agricultural labourer.

Mr. Thomas held that piece-work was the best. When he first entered upon his present occupation he found the men were on day-work; they had an hour allowed for breakfast, and as they had to go some distance the one was very often much nearer two hours. He was then determined that they should work piece-work, and to this they objected at first on the ground that they were unaccustomed to it, but he was determined and the men shortly after were extremely satisfied with it; and instead of finding it more trouble to himself, he found that it was much easier than seeing that the men did a fair day's work. On one occasion he went to the barn where a machine was at work, and the man (on day-work) was quietly sitting down handing up the sheaves to the feeder. He sent that man to a field to "cut on" on piece-work, and in the course of the day a friend said to him, "Who is that man cutting on up in that field? I declare I never saw a man working harder in my life." He would give another instance. The first year that he had a reaping machine the men objected to bind up after it, and he sent some of them out to reap and gave them 4s. 6d. a-day, but they found that those who stayed behind on piece-work made more. These things showed him that on a large farm no good could be done without the system of piece-work.

Mr. J. Bradshaw (of Guildford) said: When he entered on his property 15 years ago, the wages were 9s. per week in his parish; they were now 11s., but he paid 12s. a week for able-bodied men, and some of them last year earned 13s. 6d. per man. He asked them what must be the benefit to those individuals who received that different amount of wages. They were a different class of men; instead of being poor sickly looking men they were fine athletic fellows. With regard to agricultural labourers in general he contended that if they were well considered and treated, the farmer had his reward in their conduct.

Mr. Thomas said he had had great difficulty in getting men to work piece-work, but to punish them now he sent them to day-work, where they would only get 9s. a week, instead of from 10s. to 15s. or 17s. a week by piece-work.

Mr. James Howard said: He had had great experience in manufactures as well as in farming, and knew that in day-work the amount done depended upon the knowledge of the farmer or the manufacturer in his own business. He thought that three times as much might be done by the piece than by day-work, and there was no doubt that some of the most important improvements which had been made of late had emanated from those men who worked by the piece. He could understand there might be some extra trouble, but that would soon be got rid of. A farmer would find some difficulty at first at every change of job about which he could not get the men to agree. He knew of no manufactory which had not had to pay at the commencement from 25 to 30 per cent. more than it was worth. But they had found a sliding scale, and that too sliding in a right direction. It had been asserted that they would not be able to get men to do the piece-work, but he knew of none more indolent than those who worked by the day. If a man shirked his work at the piece he could be docked for it, and in the presence of his fellow workmen his pride would make him try to finish his work. He lived in an agricultural district, and he could vouch for the fact that many agricultural labourers left their places to obtain more profitable employment, and therefore if they could devise some means of bettering their condition there would not be that encouragement for their best men to leave their regular avocations.

Mr. S. Sidney said: The prevalent impression appeared to be that instead of deteriorating, the agricultural labourer in his moral character was being raised, and with that his work must improve. He believed that if the sentiments which had been expressed that evening were carried out with a proper spirit, the condition of that class would be still further bettered. When oxen were employed the men went slowly; when horses were used, they went faster, and now that steam was called into requisition they went faster still; therefore it would benefit the farmers as well as the men if the system of piece-work were adopted.

Wirral.—At the annual meeting of this Society Mr. W. B. Burnham, the honorary Secretary, read the annual report, from which we take the following extracts:—

"Your committee again feel much pleasure in meeting the members of their Society on this social occasion, and in reporting progress for the past year, which has been the 11th of its existence, during which time it has held 112 monthly meetings.

"The subjects for discussion during the past year were principally drawn from prize essays in the Royal Agricultural Society's Journals; and the following were the leading topics—'The Cultivation of Kohl Rabi,' by Mr. Barber;' 'The Farming of Northumberland,' by Mr. Russell; 'Office of Straw on a Farm,' by Mr. Wm. Turner; 'The Farming of Shropshire,' by Mr. Hope Jones; and 'A Review of Mr. Verelst's Plans for Farm Buildings,' by Mr. Jackson. They proved to be interesting and instructive subjects, and were ably handled.

"They are to be followed this year by 'The Farming of Lincolnshire,' 'Spring Work of the Farm,' 'Implements suitable for the District,' 'When and on what Crops the Manure of the Farm should be Applied,' 'The Manuring of Grass Land,' 'Influence of Prices on Farm Management,' 'The Feeding of Cattle,' and 'The State of Farming in Wirral.' In the latter subject all are expected to take a part, in the hope that the information so collected may afterwards be tabulated and formed into an essay, showing the state of agriculture in the hundred generally.

"Your committee have great pleasure in noticing the progressive success of their elder sister, the Wirral Farmers' Club; and on behalf of your Society they venture to express the cordial wish that it may continue to increase in usefulness, by inciting those who till the soil of the district to bring it to the highest producing point of cultivation, likewise improving the breed of stock to the degree at which it will be most remunerating; and this with no selfish or class feeling, but that the emulation produced by its matches of skilled labour and shows of stock and produce may so improve the agriculture of the district, that landlords, farmers, and labourers may equally partake in the benefit, and your Society will heartily join in forwarding so good a work.

"Your committee observe that the difficulties attending the study of agriculture, arising not only from the rapid advances occurring in the art, but also from the changeable seasons and the novel circumstances which continually cause the routine of practice to be varied, are such as to render meetings of farmers for the mutual interchange of thought and good-will highly desirable; and they trust that in the ensuing year, by

the continued energy of [illegible] the members your [illegible] may be held deservedly entitled [illegible] [illegible] moment its excess viz., the W[illegible] A[illegible] [illegible] Improvement Society."

Reviews.

Sutton's Farmers' Manual and Seed List. Reading.—*J. Carter & Co.'s Gardeners' and Farmers' Vade Mecum.* 237, High Holborn, W.C.—*Plymouth Seed Company's General Price Current.* Plymouth.—*Wheeler & Sons' "Little Book."* Gloucester.—*Lawson's Seed List.* Edinburgh.—*Drummond's Seed List.* Stirling, &c.

Of these, we may mention, as a matter of fact, that the two first contain very detailed accounts of the cultivation of the crops whose seeds are sold—the instruction in "Sutton's Manual" being confined for the most part to the cultivation of Grass and fallow crops; Carter's "*Vade Mecum*" including almost all the operations on the farm, referring therefore to all kinds of crops in the order of the months. The Plymouth Seed Company's Price Current, and the Seed Lists of Messrs Drummond and Lawson, are characterised by short descriptive notices of the different plants enumerated, and Wheeler's "Little Book," besides its descriptive notices, includes a number of satisfactory testimonials to quality.

Of these the only instances in which an attempt has been made to exceed the bare relationship of salesman and customer are the two at the head of the list. In the others precision and conciseness of description are aimed at, and for the rest the publication is what it professes to be—a mere price list. In "Carter" and in "Sutton," on the other hand, is given a series of useful instructions to the reader on the cultivation of the seeds he purchases. We shall find room hereafter for an occasional extract from their pages.

STATE OF THE WEATHER—BERKSHIRE.

For the week ending March 14 observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface	Rain	Wind	Barometer
		Max in Sun	Max in shade	Min	Mean				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	8	68.0	51.0	41.4	50.2	42.0	..	W.	29.88
Saturday	9	66.6	53.6	34.0	46.4	42.5	..	W.	30.38
Sunday	10	70.0	48.0	33.6	46.4	42.5	..	S.W.	29.80
Monday	11	62.0	52.0	36.0	46.1	45.5	0.11	W.	29.00
Tuesday	12	54.8	43.0	32.4	4[illegible].4	41.5	0.09	W.	29.25
Wednesday	13	60.0	46.2	31.0	41.8	41.0	0.08	N.E.	29.68
Thursday	14	61.4	45.0	29.0	36.7	40.0	0.01	N.W.	30.05

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

AUTUMN PLOUGHING: *Alpha* says "I have always understood that the more autumn ploughing can be done the better condition the land will be in for spring crops. After last harvest I made an effort to plough up a piece of Wheat stubble on strong clay, but only succeeded in finishing part of it before the frost, having been delayed by draining it 4 feet deep and 9 yards apart. I am now surprised to find that portion of the field which has been ploughed since the frost, in fine mellow condition, whilst that ploughed in the autumn is as raw and rank as before the frost. Is autumn ploughing desirable in all cases?" [Only in those cases in which it is done in the dry, and then it is unquestionably beneficial.]

DAILY FOOD OF COW: *H B J.* Half a cwt. of Turnips, 16 lbs. of hay, and 24 lbs. of Wheat and Oat straw daily are very large rations for "a small cow—say 6 score a quarter." Cut the straw into chaff, mixing a very small quantity of hay, and pulp the roots, mixing them all together. You will thus save much hay. An acre of good land may produce, under proper cultivation, 50 cwt. a month of green food thoughout the year—equal to the keep of 10 or 12 such small sheep as you speak of.

IMPORTATIONS—1859 AND 1860: *R.*:—

Articles.		Importations. 1859	1860
Animals, living—Oxen, bulls, & cows.	No.	63,294	77,010
Calves	,,	22,38[illegible]	27,559
Sheep and lambs	,,	250,58[illegible]	320,219
Swine and hogs	,,	11,084	24,452
Bark, tanners' or dyers'	,,	400,820	418,059
Bones (whether burnt or not, or as animal charcoal	tons	81,820	62,321
Corn:—Wheat	qrs	4,000,922	5,880,958
Barley	,,	1,727,85[illegible]	[illegible],861
Oats	,,	1,677,885	2,090,951
Peas	,,	[illegible]	214,201
Beans	,,	341,47[illegible]	[illegible]
Indian Corn, or Maize	,,	[illegible]	[illegible]
Wheatmeal and Flour	cwt.	[illegible]	[illegible]
Indian Corn-meal	,,	2,446	7,625
Flax	,,	[illegible]	[illegible]
Guano	tons	[illegible]	[illegible]
Hemp	cwts.	[illegible]	[illegible]
Hops	,,	[illegible]	[illegible]
Oil seed cakes	tons	[illegible]	[illegible]
Potatoes	cwts	[illegible]	[illegible]
Provisions—Bacon and hams	,,	107,251	328,106
Beef, salt	,,	[illegible]	[illegible]
Pork, salt	,,	[illegible]	[illegible]
Butter	,,	[illegible]	[illegible]
Cheese	,,	[illegible]	[illegible]
Eggs	No.	[illegible]	[illegible]
Lard	cwts.	9[illegible],597	198,030
Saltpetre	,,	446,247	3[illegible]9,206
Cubic Nitre	,,	[illegible]	[illegible]
Seeds—Clover	,,	[illegible]	[illegible]
Flaxseed and Linseed	qrs	[illegible]	[illegible]
Rape	,,	[illegible]	[illegible]
Wool, sheep and lambs	lbs.	[illegible]	[illegible]
Wool, Alpaca	,,	[illegible]	2,891,926
Yeast, dried	cwts.	[illegible]	84,65[illegible]

SEED CORN FROM THE CHALK.

RAYNBIRD, CALDECOTT, AND BAWTREE supply carefully selected and screened samples of all the most approved varieties of Wheat, Barley, Oats, &c.

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Calliopsis Burridgii atropurpureum
Clarkia elegans, new double, 1*s.*
,, pulchella, Tom Thumb, 1*s.*
Convolvulus minor albus, new double, 1*s.*
,, tricolor subcæruleus
,, ,, monstrosus, 1*s.*
Eucharidium grandiflorum album, 1*s.*
,, grandiflorum roseum, 1*s.*
Gilia achilleæfolia alba, 1*s.*
Larkspur chamois, new colour
Linaria bipartita splendens, 1*s.*
Linum luteum (corymbiflorum)
Senecio elegans nana cærulea (new double dwarf Jacobæa, 1*s.*
,, cupreata, new bright copper coloured do.
Spraguea umbellata

HALF HARDY ANNUALS.
Aster, Chrysanthemum flowered, ex.
Callirrhoe pedata, new dwarf
Cuphea purpurea, dwarf vars.
,, ocymoides
,, Zimpanii, 1*s.*
Dianthus Heddewigii
,, ,, imperialis hybridus
,, ,, new double vars., 1*s.*
Fenzlia dianthoides
Dianthus laciniatus
,, ,, new double vars., 1*s.*
Linum grandiflorum purpureum, 1*s.*
,, ,, coccineum, 1*d.*
Lobelia erinus marmorata
,, gracilis rosea
Marygold, new double white
Nasturtium, Tom Thumb Beauty
,, ,, yellow
Perilla ocymoides
Phlox Drummondi oculata
,, ,, Radowitzii, 1*s.*
Podolepis affinis (from Melbourne) large golden flowers, 1*s.*
,, auriculata
Ricinus albus
,, macrocarpus, 1*s.*
Schizanthus grandiflorus oculatus
Stocks, mixed, from 30 fine German imported
Veronica syriaca alba
Zinnia elegans, choicest imported
,, ,, new French double, 1*s.*
,, new species from Mexico, 1*s.*

GREENHOUSE ANNUALS
Balsam, Camellia flowered, ex.
Celosia (Cockscomb), new feathered
Celosia macrocephala gigantea
Egg Plant, Giant purple
Ipomæa rubro-cærulea
,, ,, alba, 1*s.*
,, reniformis, yellow, white edge
Sabbatia campestris

HARDY PERENNIALS.
Antirrhinum, choicest, ex
Aquilegia caryophylloides flore pleno, 1*s.*
,, formosa tricolor pleno
Carnation, perpetual vars. 2*s.*
,, new dwarf, early dble. 1*s.*
Chelone barbata coccinea
Delphinium chinense album grandiflorum, 1*s.*
Gladiolus, new mixed early vars., 1*s.* 6*d.*
Hollyhock, first quality ex., 1*s.*
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,, longiflora magnifica
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Calceolaria, finest new ex. ex. pkts 1*s.* and 2*s.*
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,, Fintelmanni
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,, new dwarf continental, 1*s.*
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,, scarlet, finest mixed
Hibiscus liliflorus, 1*s.*
Kennedia, choice vars, each 6*d.*
Lobelia cardinalis nankeen
Lophospermum maculatum, 1*s.* 6*d.*
Maurandya Barclayana major
,, grandiflora crimson
Nierembergia gracilis
,, ,, albiflora, 1*s.*
Petunia, new and choice mixed, 1*s.*
,, choicest fertilized, with double vars., 1*s.*
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Primula fimbriata, ex., 1*s.*
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Sutherlandia, sp. from Holland, 1*s.*
Tropæolum Lillie Schmidt
Verbena, choicest ex. ex., 1*s.*

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The 1[illegible] varieties ditto ditto ditto ditto, for ..	46	0

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Messrs. Sutton's Grass Seeds being mixed expressly for the soil for which they are required are never known to fail.

SUTTON'S MIXTURES FOR LAYING DOWN LAND TO PERMANENT MEADOW OR PASTURE.

The sorts contained in these Mixtures are grown in [illegible] localities, and gathered separately by the hand [illegible] the purpose, by which means all noxious weeds [illegible] they consist of the most nutritive kinds of Fescue [illegible] Sweet Vernal, Perennial Clovers, Loliums, &c., [illegible] being kept separate, they are subsequently mixed [illegible] and proportions as are most suitable to the soil to be laid [illegible] The quantity we usually supply is two bushels of light [illegible] and 12 lb. heavy seeds per acre. Price 30*s.* per Acre.

MIXTURES FOR ONE, TWO, OR THREE YEARS PASTURE OR HAY.

These we can supply of best quality, at 20*s.* to 24*s.* per acre. In ordering these mixtures it is necessary to state whether they are required principally for pasture or for hay.

MIXTURES OF CLOVERS AND RYE-GRASS
To be sown with Corn, for a crop of Clover, &c., the following year.

These we can supply of very best quality at 18*s.* to [illegible] acre including Alsike.

SUTTON'S FINE LAWN GRASS SEEDS.
The finest Garden Lawns are formed from these [illegible] which are perfectly free from weeds and coarse Grasses. [illegible] of seeds 1*s.* per lb., or 16*s.* per bushel. Quantity required for making new lawns 3 bushels, or 60 lb. per acre.

SUTTON'S RENOVATING MIXTURE.
For improving Parks, Meadows, and Pastures 9*d.* per [illegible] 80*s.* per cwt. (8 lbs. to 12 lbs. per acre only required.)

*** For large quantities, special contracts may be made.

SUTTON'S PRICED LIST OF FARM SEEDS AND GARDEN SEEDS will be sent post free.

All kinds of Seed carriage free (except small parcels).

SUTTON and SONS, Royal Berkshire Seed Establishment, Reading.

THE FARM AND THE GARDEN.
NEW SEEDS, CARRIAGE FREE, from the
WEST OF ENGLAND SEED ESTABLISHMENT AT PLYMOUTH,
CONDUCTED BY MESSRS.
LAMOUREUX, CLARK, AND CO.,
The RETAIL PRICED CATALOGUE, containing [illegible] particular in connection with the Business, forwarded [illegible] and post free on application.
Address: LAMOUREUX, CLARK, & CO., Plymouth.

TO THE SEED TRADE.

THOMAS AYRES, WHOLESALE and RETAIL SEEDSMAN and GROWER, Biggleswade, Beds, has to offer a large quantity of TURNIP SEED, in large or small quantities. The stock includes Skirving's Liverpool Swede, Improved Liverpool Swede, Purple Top Swede, Marshall's Improved Purple Top Swede, Green Top Yellow Swede, [illegible] Green, Green Globe, White Globe, Red Globe, Red [illegible] Green Tankard, Dale's Hybrid, and a few other varieties. Price on application.
N.B. A few Cwt. of ONION and PARSNIP SEED to dispose [illegible]

100 FINE NAMED HARDY HERBACEOUS PLANTS, 2*l.*

100 fine named hardy Rock plants (for sorts see separate Catalogue) .. ..
100 strong autumn-rooted Scarlet Geraniums ..
100 do. do. do. Flower of the Day, do.
12 do. stock plants, Lobelia speciosa ..
12 finest new Verbenas of 1860 .. .. ..
12 fine exhibition kinds .. ..
100 fine for beds, fine habited sorts .. ..
12 finest named Hollyhocks .. .. ..
12 good exhibition do. .. ..
12 good sorts do. .. ..
Address HENRY MAY, the Hope Nurseries, near Bedale.

TO BE SOLD.—40 CAMELLIAS from 3 [illegible] high; some large specimens of Azalea indica, [illegible] phœnicea. Pyramidal and Standard; and a stock of [illegible] suited for a large Conservatory. 20 Geranium [illegible] Vases, 2 feet to 3 feet across; 14 Agapanthus umbellatus [illegible] quantity of bedding-out plants. Days for view, [illegible] Railway Stations, Alsager and Mow Cop.—Apply [illegible] BAILEY, Rode Hall Gardens, Lawton, Cheshire.

SURPLUS NURSERY STOCK.

H. AND R. STIRZAKER have to offer [illegible] fine well-rooted stuff.

Per 1000—*s. d.*
Chesnut, Spanish, 1½–2 ft. 20 0
,, Horse, 1–1½ ft. 12 6
,, ,, 3–4 ft. 40 0
,, ,, 4–6 ft. 75 0
Elm, grafted, 4–5 ft. per 100 .. .. .. 25 0
Per [illegible]
Spruce Fir, 1–1½ ft. [illegible]
,, ,, 1½–2 ft. [illegible]
Hazel, 2½–3 ft. [illegible]
Austrian Pine, 1½ ft. [illegible]
Sweet Briar, 2–[illegible] ft. [illegible]
Ashton Gooseberries [illegible]

Also an exceedingly large stock of Evergreen and Ornamental trees, not in any way injured by the [illegible] Common and Portugal Laurels, English and Irish Yew [illegible] plants, can be supplied by the 1000. Prices on application.
The Nurseries, Lancaster.

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JAMES GARAWAY AND CO., Durdham Down Nurseries, Bristol, offer [illegible]

Cedrus Deodara, 8 to 10 feet .. .. [illegible]
Cedrus Lebani, 8 to 10 feet .. .. [illegible]
Taxodium sempervirens, 8 to 10 feet .. per dozen [illegible]
Pinus excelsa, 6 to 8 feet .. .. [illegible]
American Arbor-vitæ, 6 to 8 feet .. .. [illegible]
Irish Yew, 4 to 6 feet .. .. .. [illegible]
Walnuts, 8 to 10 feet .. .. .. [illegible]
Sycamore, 10 to 12 feet .. .. .. [illegible]
Horse Chesnuts, 10 to 12 feet .. .. [illegible]
Chichester Elm, 10 to 12 feet .. .. [illegible]
Scotch Fir, fine transplanted, 1½ to 2 feet, per 1000 [illegible]
Ditto ditto 2 to 3 feet ,, [illegible]
PRICED CATALOGUE of best SEEDS on application.
JAS. GARAWAY & CO., Durdham Down Nurseries, Bristol.

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In Collections including all the new and approved kinds, or separate to order.

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GRASS SEEDS.

DETAIL CATALOGUES post free.

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THE BEST OF ITS KIND FOR GENERAL AND BEDDING PURPOSES.

Colour, a brilliant Scarlet. Remarkably free bloomer.

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Stirling is most [illegible] in point of Railway accommodation, there being direct and constant traffic to all the principal Stations in Scotland and England, and by Steamers (viâ Glasgow) almost daily to the chief Ports in Ireland, thereby [illegible] (with certain limitations) we forward carriage paid.

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ESTABLISHED UPWARDS OF HALF A CENTURY.

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THE SEED CATALOGUE FOR 1861

(30th Annual Edition),

Sent Free to any address. It contains the finest sorts in cultivation, and not to be excelled by any house in the Trade. All orders supplied of new and best quality, charges moderate, and 5 per cent. allowed for ready-money purchases, or on receipt of goods. Remittances required from unknown correspondents.

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[illegible] purchases. These Collections are decidedly the cheapest offered, embracing a [illegible].

☞ The [illegible] in the Collections are stated in the Catalogue. If any sorts are not wished for, enlarged [illegible].

Collection No. 1 contains 20 qts. of Peas, of best sorts, 10 sorts of Broccoli for succession, and all other Vegetables in proportion, for One Year's Supply	£3 15 0
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These are [illegible] of the best older esteemed kinds, with fewer of those of more recent introduction, or of such as [illegible] has rendered exceedingly scarce. They will embrace every thing required for successional supplies [illegible] will be given in the Four Collections in this class as in the preceding one. They are offered [illegible] satisfaction to persons not desirous of purchasing the most expensive kinds.

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The Collection comprises a large number of Choice Novelties, both of English and Continental, among [illegible] of DIANTHUS HEDDEWIGII and LACINIATUS, also imported [illegible] of HEDDEWIGII and LACINIATUS in separate colours; the new double FRENCH ZINNIAS, [illegible] Mexican species; several new CALLIOPSIS, CLARKIAS, CONVOLVULUS, CUPHEAS, LINUMS, JACOBÆAS, EUCHARIDIUM, &c. See Catalogue.

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NEW ROSES FOR 1861.

WM. WOOD AND SON beg to offer remarkably [illegible] the superb NEW ROSES [illegible].

N.B. The usual discount allowed to the Trade.

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Abd-el-Kader (Verdier et fils)	Madame Auguste Van Geert
*Agatolde (Lebreton)	Madame Furtado (Verdier et fils)
Alexandre Fontaine (Fontaine)	Madame [illegible] (Fontaine)
[illegible]	[illegible] (Ledéchaux)
[illegible]	[illegible] de Terre noir (Lacharme)
Darzans (Ducher)	Princesse Mathilde (Pernet)
*Duc de Cazes (Touvais)	*Reine des Violettes (Mallet)
Eugénie Lebrun (Fontaine)	*Robert de Brie (Granger)
General Washington (Ducher)	Rosine Parron (Fontaine)
Jean Bart (Margottin)	*Triomphe d'Amiens (Mallet)
Jean [illegible]	

Bourbon, Baronne de Noirmont.

Those marked thus * are particularly recommended.

Extra plants presented with each order.

Early orders solicited to secure the best plants.

DESCRIPTIVE CATALOGUES of the above furnished on application.

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ROSES IN POTS.

BY THE DOZEN, HUNDRED, OR THOUSAND.

WM. WOOD AND SON respectfully solicit attention to their enormous stock of DWARF ROSES in Pots, adapted either for Greenhouse culture or for Bedding, at the following prices:— Per Dozen.—s. s.

HYBRID PERPETUALS .. .. 12 to 15

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Extra plants presented with each Order to compensate for carriage.

CATALOGUES gratis on application.

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THE THREE VERY FINEST AND BEST NEW ROSES of the season as recommended especially by the Rev. W. F. Radclyffe, of Rushton Rectory, see *Gardeners' Chronicle* of January 26, page 72.

HYBRID PERPETUALS.
REINE DES VIOLETTES (Mallet)
TRIOMPHE D'AMIENS (Mallet)
MADAME FURTADO (Verdier)

Colours and description furnished on application.

WM. WOOD & SON are in a position to supply strong, vigorous, well grown dwarf plants of the above in pots at 5s. each. The usual discount to the Trade.

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THE FINEST DARK PERPETUAL ROSE OF THE SEASON.

HYBRID PERPETUAL—REINE DES VIOLETTES.

WM. WOOD AND SON have just flowered, in one of their Forcing Houses, the above splendid New ROSE; the colour is a very dark purplish violet, very double, large and finely shaped, habit remarkably vigorous, and will probably form a good Pillar Rose. They feel assured it will become a general favourite. Price 5s. each for good strong plants, with usual discount allowed to the Trade.

Address, Woodlands Nursery, Maresfield, near Uckfield, Sussex.

NEW ROSES.

THOMAS BARNES begs to offer the undernamed, in good plants:—

MADAME AUGUSTE VAN GEERT, pretty, well-formed, striped rose, 5s.

REINE DES VIOLETTES, deep violet, large, cup form, 7s. 6d.

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The Varieties of 1860, 30s. per doz. CATALOGUE, with descriptions, &c., on application.

Dane Croft Nursery, Stowmarket.

The Gardeners' Chronicle.

SATURDAY, MARCH 23, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

TUESDAY, March 26 { Royal Horticultural (Floral Committee, at Kensington Gore .... Noon.

IN a previous article in this Paper we glanced at some of the indications and signs by which it was possible to foretell future weather; signs founded upon physical facts, and to be observed without the aid of instruments. In that paper we mentioned the high value of the barometer, and dry and wet bulb thermometers, as indicators of weather, and urged upon all who could obtain them to do so, and consult them frequently and faithfully. We propose now to say a few words relative to the proper placing and the proper manner of using such instruments, for much depends upon their being placed in a proper situation, and in their use being perfectly understood. Of course we should not expect, nor indeed is it very necessary, seeing the necessarily irregular times of observation, that the instruments and observers should be up to that degree of accuracy and nicety demanded by the requirements of science; the differential results being the principal thing for the agriculturist to note.

We take the BAROMETER first. The instrument which has long been in common use is the one known by the name of the wheel barometer, and invented by HOOKE; this form of instrument is, in fact, little better than a mere toy, neither exhibiting the absolute height of mercury required to balance the atmospheric column, nor does it show accurately the variations even. As a philosophical instrument therefore it is perfectly useless; and as a weather indicator is, at best, but a poor guide. This form of barometer will not work long without getting some thing or other the matter with it, arising from the mechanical contrivances

necessary to cause the instrument to register by means of the index and dial. It will be apparent to all our readers that the most simple form is the best, and that the least complication possible of mechanism should be used in the construction of such instruments. The simple *cistern barometer* is the one always made use of for scientific purposes, and indeed is the only form of instrument which should be tolerated, except in certain cases where it is impracticable to use an instrument of such dimensions. A later invention, called the *aneroid barometer*, is used under such circumstances with advantage. We do not think it necessary to describe the *wheel barometer* at greater length, but shall proceed to explain the construction and use of the *cistern barometer*; in order that its theory being understood, the observer may better be enabled to appreciate the capabilities of the instrument he has to deal with.

It will be apparent to the most superficial observer that, amongst other properties, the air possesses that of weight; now this weight is not constant, and the barometer, as the name implies, is the balance (for it is nothing more) by which we measure this variation in the weight, or density, of the atmosphere.

A glass tube, open at one end, about 33 or 34 inches in length, and in which the air has been previously exhausted, is placed with its open extremity in a cistern or small reservoir filled with mercury; now the mercury will rise in the tube, by reason of the air pressing upon its surface in the cistern, and such a length as exactly counterpoises the superincumbent column of air will be supported. There is at the bottom of the cistern a screw for adjusting the surface of the mercury to the level of the scale, a correction necessary on account of the difference of bore between the cistern and the tube. At the upper end of the tube is placed a scale divided into inches and parts of an inch, furnished with a vernier, moveable by means of a pinion and rack work, for reading off the actual height of the column. The vernier is a moveable plate, 1.1 inch in length; the whole length is divided into 10 equal parts. After adjusting the pointer read off the inches and tenths on the scale and the smaller parts on the vernier at what point it shall coincide with a division of the scale, the number placed against that division being read off as so many hundredths; of course if the pointer coincides with some division of the scale it is read off at once on the scale. A much greater degree of accuracy is used in observations, but if the barometer be read correctly to hundredths of an inch, it will be found quite sufficient for all practical purposes; an attempt at a greater degree of refinement in observation might only lead the inexperienced into error. When it is necessary to transport the barometer from one place to another, in order to make it portable without danger of injury, the screw at the bottom of the cistern is turned up till the mercury in the tube is driven home to the top; the instrument is usually carried with the tube downwards. When the observer has fixed upon a position for placing his instrument, a spot should be selected where there is always plenty of light, and where the temperature is liable to the fewest changes. He should turn the screw down about three turns, having the instrument with its cistern downwards, and then sharply incline the tube; then if the mercury in striking the top of the tube elicits a sharp ringing percussion he may be assured of its freeness from air; if, on the contrary, no sound or but a dull faint one is heard it is an indication that air is there, which before fixing the instrument must be ejected. This is done by inverting the barometer and gently tapping the tube from its extremity up to the neck of the cistern, when the air will be seen to ascend and free itself from the mercury. In fixing the barometer great care must be observed to get it perfectly perpendicular; this is easily done by using the plumb-bob. A thermometer is always attached to the barometer to determine the temperature of the mercury in the cistern; and in reading the latter the thermometer should always be observed, and the observed height corrected for difference of temperature, and every reading reduced to one temperature, usually 32° of Fahrenheit. Tables of the corrections for temperature are to be obtained at most of the principal instrument makers and scientific booksellers.

When it is desired to take a reading, bring the eye, the convex part of the mercury, and the back and fore sights of the vernier, in the same straight line; move the vernier till the pointer forms a tangent to the apex of the mercury and read off in the manner described above; not forgetting the attached thermometer. The readings should be taken, ordinarily, at two or three stated times during the day; 9 A.M., 3 P.M., and 9 P.M. are perhaps the best times; but during stormy weather it should be consulted much oftener. As the air varies in density it will be evident that at some periods it will be able to support much more than at others; and that clouds which would be held in mid air one day would on another occasion be but very little above the earth.

Besides variations in weight there are also variations in some of the other components of the atmosphere; and these variations must be observed and measured by the observer who would arrive at a just estimate of approaching weather. There is always present in the atmosphere an element known as *aqueous vapour;* this is derived from the spontaneous evaporation of water from the surface of the earth. The amount of moisture in the air, at any time, is an important feature as regards the growth and health of plants; as the practical gardener well knows. An instrument therefore which shall tell him the amount of moisture in the air, in his green-houses and hot-houses, at any moment so that he may regulate it according to the requirements of his plants, is a great desideratum. Many instruments have been devised for this purpose, some incurring much expense, and very careful management in their use; others, such as simple substances susceptible to hygrometrical influences, sea-weed, bars of some kinds of wood, and the like, being only true for a time and afterwards losing in a great measure their sensibility. We shall only describe the HYGROMETER now in general use at all meteorological observatories, being very simple, and, for general purposes, the most correct instrument. It consists of two thermometers placed side by side; the bulb of one of them is covered with muslin, and kept constantly moist by tying, loosely, a piece of lamp wick round the stem of the thermometer, just above the bulb, the other end being immersed in a vessel of water placed near the instrument for that purpose. As the atmosphere is more or less moist, these thermometers will read more or less nearly alike; if the air be saturated with moisture then they will be precisely alike. From the difference of these two thermometers we can determine that degree of temperature to which the air must decrease in order that the atmosphere may be saturated by the vapour then existing in it; and this is called the temperature of the *dew-point*; it is obtained thus:—

Let the free thermometer read	.. .. ..	60°.5
Let the wet thermometer read	.. .. ..	50.4
Difference	.. .. =	10.1
Factor to multiply difference	=	1.9
		909
		101
Difference between dry and dew-point	.. =	19.2
Reading of dry thermometer	=	60°.5
		19.2
Dew-point reading	.. =	41.3

The factor, by which the difference is to be multiplied, will be found in tables calculated for the purpose; those by JAMES GLAISHER, F.R.S., are in common use by British meteorologists.

There are many other facts concerning the state of the atmosphere which may be deduced from the use of these two instruments, but generally these are of a character more interesting to the philosopher than of practical use to the agriculturist, and therefore we shall not speak of them here. Whilst we are upon the subject of instruments we might warn our readers against trusting to Providence and the makers for their reading accurately. All instruments before they are fixed up for use should go through some kind of examination, and should be tested by some standards whose errors are known, as nearly all will be found to want some correction or other for mechanical or other imperfections. We have endeavoured in this note on the barometer and hygrometer to point out, in a popular way, their general construction and principles, with a view to their practical use by those of our readers to whom they are likely to prove of benefit. We hope, in a future Number, to submit a collection of inferences that may be drawn from the phenomena of the barometer regarding future weather.

THE ROYAL HORTICULTURAL SOCIETY is at length beginning to show what is hereafter to be expected from it. Meetings of Committees commenced some weeks since. During three days last week, on one of which Her Majesty and the Prince Consort honoured the Society by their presence, the garden in its rough imperfect state was thrown open to the public who thronged to inspect it; and it will be again accessible by means of tickets to be had from Fellows only on Saturday the 31st inst. and Easter Monday and Tuesday, after which it will be closed till the grand inauguration in June. On Tuesday the first general meeting of the Fellows assembled in the beautiful hall erected from the design of Captain Fowke, R.E.

On that occasion the Lord Bishop of Winchester, who had come expressly from Farnham Castle, took the chair, and among those present were the Earl of ERNE, Lord JOHN MANNERS, Judge DE BARRES, Sir PETER VAN NOTTEN POLE, Bart., Sir JOHN A. BOILEAU, Bart., Lieut.-Gen. Fox, Col. HYDE, Mr. SAMUEL GURNEY, M.P., Mr. A. SPOTTISWOODE, Mr. J. C. WHITEMAN, &c. About 150 new Fellows were elected, and the first ballot for seeds took place, soon to be succeeded by others for plants. The meeting was also made special for the purpose of considering the following report from the Council:—

REPORT BY THE COUNCIL TO THE FELLOWS OF THE SOCIETY.

19th March, 1861.

THE Council of the Royal Horticultural Society have called the present Special Meeting for the purpose of removing an uncertainty, which some of their members have thought to exist, as to the extent of their powers to raise money for the works of the Garden.

By a resolution come to at a Special General Meeting, held on 20th July, 1859, the Society "empowered the Council to proceed to raise the sum required for the construction of a Garden at Kensington Gore, and if the money shall be obtained, to complete the arrangements."

The power here given seems sufficiently ample, but may possibly be held to be controlled by a previous Report made by the Council to the Society, in which they stated that they conceived 50,000*l.* would be sufficient to complete the substantial works in the Garden, and that not more than 40,000*l.* would be required to be raised by Debentures. They now find that a larger sum will be necessary. The probable cost will not be much less than 70,000*l.*; and, instead of borrowing 40,000 on Debentures, the Council think that they will probably require to borrow 50,000*l.*

They have arranged a Supplementary Agreement with Her Majesty's Commissioners for the Exhibition of 1851, by which the additional 10,000*l.* now proposed to be borrowed may be raised on the same footing as the previous 40,000*l.*

It is not a question about procuring the money which the Council now bring before the Society. They have no difficulty about that. It is authority from the Society to take it, if it should be required, which they now wish.

They have already received nearly 40,000*l.* on Debentures, and they now recommend to the Society to remove any doubt about their power to raise an additional 10,000*l.* by the same means, by expressly authorising them to do so.

Without such additional means they will be unable to complete the Gardens on the plans and in the manner which they consider advisable, and which have received the sanction of H.R.H. the President of the Society.

The report having been read, it was moved by Mr. C. WENTWORTH DILKE, V.P., seconded by HENRY THOMAS HOPE, Esq., and resolved unanimously, that the Council be authorised to raise a further sum of 10,000*l.* on debentures, should they consider it necessary.

The thanks of the meeting were then, on the motion of Lord JOHN MANNERS, voted by acclamation to the Right Rev. Chairman, the Bishop of WINCHESTER. His Lordship returned his grateful acknowledgments for the vote of thanks. He said that he considered it an honour to fulfil the duties of any office in connection with a Society which had been so productive of good, and which gave promise in its present condition of so much greater future usefulness. He congratulated the members on their assembling for the first time in that Hall, so admirably calculated in size and character for the accommodation of the increased numbers of the Association and the promotion of its objects. His connection with the Society was now of some standing, and he felt a deep interest in its success, because in his judgment its usefulness extended not only to the higher class of gardens, but was calculated equally to influence the productions and improve the culture of the gardens of the lower classes of society. In this point of view he thought it not inconsistent with his position to devote occasionally some of his time to the promotion of its objects.

We believe that the following explanation of the means possessed by the Council for executing the works and of the heads of expenditure co-

plated is not far from the truth. It is understood that Donations amount to about 1900*l.*, Life Subscriptions to 16,000*l.*, Debentures to 50,000*l.*, and other sources to 2000*l.*, making a total of about 70,000*l.* On the other hand the new offices will probably cost 7000*l.*; water supply, basins, cascades, &c., 12,000*l.*; the conservatory, 18,000*l.*; architectural arrangements within the arcades, 10,500*l.*; earthwork, walks, roads, planting, &c. &c., 8000*l.*; statuary, &c., 3500*l.*; sundries, including contingencies and professional services, 10,000*l.*; in all, 69,000*l.*

It is also reported that a collector of plants in South Brazil is about to be engaged, from whom ample supplies of new seeds and plants will be received for distribution among the Fellows of the Society.

New Plants.

[Among the last arrivals from Mr. J. G. Veitch are some most interesting plants hitherto wholly unknown in our gardens, and which, considering the climate that produces them, may be expected to be as perfectly hardy as Thujopsis dolabrata itself. We add a few notes concerning them.]

11. PINUS DENSIFLORA, *Siebold & Zucc.*, *Flora Japonica*, ii. p. 22, t. 112.

Of this Siebold gives the following account. It is found all over Japan, but more rarely in the Southern provinces, where it is generally cultivated; and in masses in the middle part of the empire, where it forms vast woods along with P. Massoniana. Near Nagasaki he only saw a few solitary specimens, 40 feet high or more. It is more especially found on the slopes of mountains to the height of 1000 to 2000 feet. It however occurs at the bottom of valleys, and on the road from Ohosaka to Jeddo are thickets of it and P. Massoniana, standing above the marshy rice-fields; the latter species is however more especially a valley plant, becoming a mere bush at the height of 3500 feet above the sea. The timber is of great excellence; its resin is largely in request for the plaisters and salves used by the Japanese in healing wounds and sores. In pulmonary complaints they hold it to be a specific. Indian, or China, ink is made from the soot of both P. densiflora and Massoniana. So far Siebold. The cones are smaller than those of a Scotch Fir, with flat lozenge shaped terminations to the scales, and very small seeds with a narrow curved wing. Mr. Gordon tells his readers that this plant is the same as the Stone Pine, an astounding assertion, enough to ruin the credit of any book. (See his *Pinetum*, p. 179.)

12. PINUS PARVIFLORA, *Siebold & Zuccarini*, *Flora Japonica*, ii. 27, t. 115.

This is one of the Cembra tribe of Pines with leaves 5 in a sheath, and great wingless seeds. According to Siebold, it, although found cultivated all over Japan, is a native exclusively of north of the empire, extending from about 35° N. Lat. to the Kurile islands. It forms a small tree not above 25 feet high in the Japanese promenades, but being taller on the North-eastern slope of the Fakone mountains. The wood is much used by cabinet makers and turners. There is a dwarf variety, and the species seems much inclined to vary in stature and in the length of the leaves. The cones are oblong with great blunt thin-edged concave rugged scales, when fully open.

13. ABIES FIRMA, *Siebold & Zuccarini*, *Flora Japonica*, ii. 15, t. 107.

Concerning this most beautiful species we collect the following from Siebold. It is a large tree, with the aspect of the European Silver Fir, growing from Kiusu to the Kurile islands. Its timber holds a fifth-rate place among the Japanese, and is principally used in fancy-work, or for making the cases in which they pack their lacquered goods. It is white, soft, and fine-grained.—The cones are about 4 inches long, pendulous, straight or little curved. Their scales are broad, dull, downy, a little notched at the edge, and beyond them projects somewhat the narrow sharp point of a stiff bracteal scale.

14. RETINISPORA OBTUSA, *Siebold & Zuccarini*, *Flora Japonica*, ii. 38, t. 121. (Hinoki *Jap.*)

"A Japanese author says that as a hero is the glory of men so is the Hinoki that of the forest." So writes Siebold; and certainly the account he gives of the tree would seem to justify the assertion. We have before us a branch of the plant with some cones. In its dried state it looks like a small leaved state of Thujopsis dolabrata without its glaucous underside and with a more brilliant green colour. It is an Evergreen Conifer, belonging to the Arbor Vitæ race, and Siebold assures us that it has a straight stiff bole from 60 to 80 feet high, and 5 to 6 feet through at the butt. Its branches spread like a fan, and its white fine-grained solid wood shines like silk when worked up. Because of these superior qualities the Japanese consecrate the tree to the Goddess of the Sun, whose chapels and little temples are built entirely of its timber. Moreover most of the wooden utensils employed at the Court of Micado are formed from it, and retain their natural colour without the aid of varnish. The fans of the prince and his women are also made of little slips of Hinoki wood held together by silken threads, and gleaming with the colours of the rainbow. The country of Hinoki is chiefly the mountainous part of Nippon, where it forms vast forests, and on account of the high price of its timber is an important article of trade. Huge piles of colossal balks and planks may be seen collected on the banks of Japanese rivers. The tree is planted for ornament and shade all over the empire.

15. RETINISPORA PISIFERA, *Siebold & Zuccarini*, *Flora Japonica*, ii, 39, t. 122. (Sawara *Jap.*)

A smaller and more slender tree than the last, with sharp pointed leaves glaucous and concave on the under side. According to Siebold the leaves are also of a darker green; he saw individuals 25—30 feet high near a temple at Nagasaki; and found it growing intermixed with R. obtusa. Its cones are much smaller, and the oil cysts on its seeds more numerous as well as larger.

16. VEITCHIA JAPONICA: *Lindley*, n. g.

Of this extraordinary plant only two mutilated cones, a few seeds, and a small branch have been received; but they suffice to show that it is a wholly new form in the Coniferous order, with the seeds of a Chamæcyparis, the leaves of an Abies, and cones which become when ripe more like spherical honeycombs than anything else to which we can compare them. One would fancy the plant to represent an Abies permanently assuming in the cone the monstrous form so often given to the common Spruce by the attack of insects, and then struggling onwards to become a Sciadopitys or a Cryptomeria. The branches are short and covered with spirally arranged projecting curved pulvines, resembling those of Abies Menziesii. At the base of each branchlet is a small cup formed of recurved scales from which the branchlet emerged when young. The leaves are ½ inch long, linear, blunt, and glaucous beneath. The cones are erect, downy, nearly spherical, about an inch in diameter, before ripening furnished with incurved horn-like projecting bracteal scales, which at maturity break and disclose as many 4-sided sockets or cavities, within which lodge a (to us uncertain) number of small 2-winged seeds terminated by a pair of short straight tooth-like processes. We cannot do otherwise than associate with this extraordinary genus the name of Mr. J. G. Veitch, its active and intelligent discoverer and the introducer of so many fine trees previously unknown in this country. For our scientific readers we subjoin a brief technical description.

VEITCHIA.—Genus Coniferarum Abietearum. *Strobili* alveolati: i.e. ovariis convolutis omninò connatis demùm apice quadratim dehiscentibus, bracteis cornutis elongatis incurvis maturitate fragilibus. *Semina* diptera, apice bicornia s. bidentata (numero indeterminata). *Folia* Abietis.

Sp. 1. V. *japonica*, foliis linearibus obtusis subtùs glaucis, phyllulis rhombeis, pulvinis elongatis rigidis incurvis, strobilis sphæricis erectis pubescentibus, bracteis triangularibus elongatis incurvis.

M. NAUDIN'S GEOTHERMAL SYSTEM.

(*Continued from page* 217).

§ 3. *Temporary Shelters.*

In any geothermal system, we do not entirely reject the use of glazed coverings, but merely require that they should be moveable at pleasure; but what we prefer, to protect plants against the cold, are common materials made of wool, hair, cotton, or hemp, which are less expensive, more easy to move, less liable to accident, and altogether afford as good protection. A building of common light but solid wood work, a kind of cage, of which the pieces would easily take asunder and would last for a long time, would form the support for the covering material. In short, we only want a sort of tent to shelter the plants from cold.

The thickness of the walls of such a tent should depend on the situation and climate. At Paris, and in all countries where the winter is severe, it would be necessary to use coarse woollen materials of the most common description; indeed common rope mats would do to form the sides, reserving softer textures for the roofing. The most indispensable part is to cover the whole down to the ground with tarpaulin, which whilst increasing the thickness of the sides and augmenting their effects would also protect them from humidity. A netting of coarse cord, very open, much like that used to cover air balloons, should be interposed between any woollen covering and cloth, so as to regulate the ingress of the air, and add to the protection of the tent.

In southern latitudes where the winter on an average reckons but 12 to 15 nights of frost, and these slight, the thickness of the walls of the tent could be lessened without injury, by substituting thinner mats or cloths than those I have named. The attention given to the construction of the tent must be regulated according to the power of resisting cold on the part of the plants which it covers. The slightest covering suffices for those which bear 1° or 2° of frost; such as Orange trees, Camellias, and the greater portion of Cape and South Australian plants. But for more tender plants, the tent must be made thicker. For prolonged and severe winters, there are still more effectual means to supply deficiency of covering, of which we will speak hereafter. One objection which suggests itself is this; that tents, which no doubt in time of frost will be hermetically closed, will have the disadvantage of keeping the plants in total darkness and cause them to run up blanched. We guarantee such will not be the result. In geothermal as in every other kind of cultivation, all plants must have a period of rest, and that season is winter. Now plants do not blanch except when over stimulated by heat they are made to grow in the midst of darkness or without a sufficiency of light. According to the geothermal system, plants will be left dry during winter, and only just the necessary heat given to prevent their suffering from cold; they will be in the state, in short, neither to throw out bud nor leaf, and therefore not liable either to be drawn up or to damp off. Besides, it must be borne in mind, that plants which have been from six to eight months in the open air, strengthened by the sun's rays, and not deluged by waterings and syringings, which are overdone by the present style of cultivation, will bear far better a few days of darkness than the majority of green-house plants, which only receive sunlight passing through panes of glass, and often lessened by linen shades. The necessity of having to weaken the solar light for tropical plants, is, we are compelled to say, against nature, and is a palpable proof of some absurdity in our plan of treating them.

But although a few days of darkness would not be injurious to evergreens, it would be different were darkness to be continued for months; therefore tents should be so constructed as to open on the sunny side, and to permit the interior to be aired or lighted instantaneously, or closed when necessary. At intervals, or even the whole length of the tent (the south side only), the pieces of cloth could be made to roll up to the top or to draw aside like curtains. However severe the winter in our latitudes, it rarely passes without some sunny days; sometimes even the mild weather will last a long time. It should, therefore, benefit the plants as much as possible. In the south, where there is so much sun in winter, and where it so rarely freezes during the day, the tents should be wide open as long as the sun is above the horizon. The free entrance of air (though even cold) and bright light are very favourable to plants, provided, as we have just remarked, they have been well hardened during the preceding summer and are well protected from damp.

The time when it becomes desirable to uncover or cover geothermal groups will, of course, depend on the general climate of the country and the meteorological rule of the year. At Paris winter protection would usually commence on the 15th of October, first partially, augmenting it gradually as the cold increases. The closing the tents should be perfect, even hermetical, during hard frosts; and should the temperature of the interior approach freezing, the ground should be moderately heated in order that the confined atmosphere of the tent might be sufficiently maintained above freezing point. This object would be best attained if, when the apparatus was put up, apertures allowing heat to escape were made in the underground heating pipes, to open and shut at pleasure. But it would be perhaps more simple and easy to employ small portable stoves especially adapted for this use. In the south such care would probably be only necessary with plants of quite a tropical nature.

Towards the close of winter the plants should be gradually uncovered, that is, the tents should be more and more opened during the daytime, according as the weather is genial, and the sun strong. It is needless to say that they should be closed at night should frost threaten.

At Paris it would be scarcely before the 15th to the 30th of April that the whole of the coverings could be removed; perhaps then it might be necessary to retain them during some days in May. In the south this may be effected three weeks or a month sooner, according to the situation and the weather. There plants would require but three or four months' shelter, and even less, were the geothermal cultivation employed on the sea coast; viz., at Nice, Marseilles, Toulon, Hyères, and other places particularly favoured by climate.

Of course it is barely necessary to observe that the cloths, carpets, mats, and other coverings, during the time they are not in use, should be preserved from damp, as well as the wood work which is used to support them.

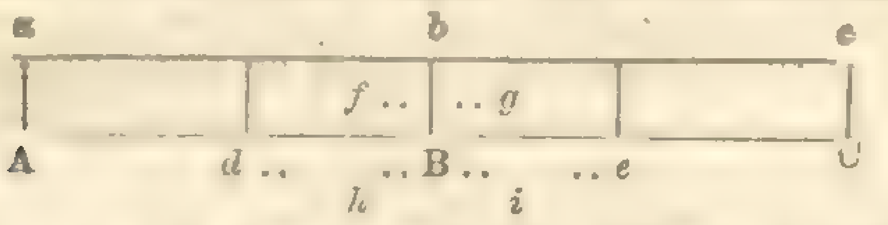
(*To be continued.*)

BONING RODS AND THEIR IMPROVEMENT.

SOME will naturally ask what Boning means, for the word is not to be found in many dictionaries, at least not in a sense applicable to the simple instruments now so designated. Formerly they were turned Borning rods. In James's Gardening, published in 1712, and which is a translation "Done from the French Original published at Paris, anno 1709," anonymous, but of which Le Brun is understood to have been the author, Bourning is employed. In Loudon's works they are termed Borning-pieces. In Crabbe's Technological Dictionary, the word borning is explained with reference to laying poles in a straight line; but in that same work, so full of crabbed terms, there is the word "*Bornoyer* (Hort.), a French term signifying

to look with one eye through three or more stakes or posts, in order to erect a wall or plant a row of trees." The latter part of the definition is not very apropos. However, on turning to Chambaud, it will be found that *borgne* signifies one-eyed; and *Bornoyer* [*regarder d'un seul œil une surface pour juger de son alignement*], to look over a surface with one eye. In this sense the word was employed in gardening directions by Le Brun, translated by James as follows:—"'Tis usual to put paper or card upon the head of the stakes or ranging-sticks, slitting the head of them a little, and putting the paper or card into the slit, which is a very great ease and relief to the sight, especially in lines of great length. When the paper is not seen plain enough, you cause a man to hold his hat behind the stake, the white paper appearing much plainer by the opposition of the black of the hat; and by this means the person that bourns may more easily distinguish all the heads of the stakes." From what has been stated, it evidently appears that from the French *Bornoyer* we have the terms Bourning, Borning, and Boning rods. That of Borning, employed by Mr. Loudon, appears the most correct; but Boning is the one now used by the greatest number in this country; yet as the other occurs in gardening works, and as many gardeners have doubts as to these names, we have thought it necessary to give the above explanations.

Boning rods are very simple instruments, but they are nevertheless most useful aids in the formation of walks, roads, in draining, levelling ground, or where lines have to be extended either in a straight or sloping direction for any purpose. Thus let A *a*, B *b*, and C *c*, represent rods of equal length. It is evident that if



their tops *a*, *b*, *c*, are in the same straight line, their lower ends A, B, C, will be in an equidistant or parallel straight line, and at a distance below the other equal to the length of the rods. If the position of the rods at A and C is determined, and if the ground at B is as high as *f g*, or as low as *h i*, it must be lowered in the one case and raised in the other, so that the top of the rod B *b* may appear exactly in the line of sight between *a* and *c*; in the same way other points in the same line may be ascertained, as at *d* and *e*, by shifting the intermediate rod B *b* to these places.

The rods are usually between 4 feet and 4½ feet long, with a cross-piece of board at top like a T square. Each of the three requires a person to hold it upright; but they might be made self-supporting by inserting their lower ends in metal cones, the bases of which should be perfectly flat. This would prove advantageous in many cases, as the man otherwise necessary to be stationed at the farthest rod might be dispensed with.

But a greater improvement might be effected as regards correct sighting. It is found that the rays of light in passing over the edge of any substance undergo diffraction, and in viewing over the edge of the cross piece of the boning rod a fringe of light is formed which renders it difficult to take the line of sight accurately over the tops of the three rods. Instead, therefore, of looking over the edge it is much better to sight through a small hole, which of course must be at the same height as the tops of the rods. Or it would be still better if a tube were fixed at that height, having the end next the eye closed with any black, but not glossy, piece of metal, all but a small sight hole. By these means the edges of walks, bottoms of drains, &c. can be carried out to a great nicety. The fringe or play of light above alluded to interferes likewise with the aim in rifles, and it varies more or less according to the state of the atmosphere.

Le Brun, *Theory and Practice of Gardening*, as translated by James, says "For levelling you should make use of a proper day, when it is still weather, not too hot nor too cold; when it neither blows nor rains, and when there is not much sun; all these are very injurious to the Sight, by the Refractions that make a great Diversity in lowering or raising the Visual Ray." These remarks on such simple, but very useful instruments as boning rods are made with a view to accuracy, which is highly necessary in many gardening operations. Take for instance a drain where perhaps only a few inches fall could be afforded; inaccuracy to that extent anywhere in its length would render it next to useless.

Home Correspondence.

Earth-heat.—Since I wrote you an account of my experience of the advantages I have derived from terrestrial radiation, or as I have, I think, in good English termed it earth-heat, and of the advantages to be derived from it in future by plant cultivators, I have looked more closely into the various methods employed here of protecting plants from severe frost, and the effect of the late winter on them under different modes of protection. Old trees of Laurustinus, Buxus balearica, Upright Cypress, and common Bays are killed not only down to the ground, but the roots even appear dead. Close to these are young plants in pots of the same kinds laid flat on the surface of the ground and covered with small dunnage mats two thick, without any straw or leaves—not a leaf of these young trees is injured. Young evergreen Oaks and Arbutus in pots, the pots plunged in cinder ashes, became frozen in on December the 19th, so that they could not be laid down; dry leaves were heaped on to them so as nearly to cover their tops, and some branches of Portugal Laurels laid over the leaves. They are all killed to their roots, while those lying on the surface close by, and covered with mats only, are fresh and green as ever. Ayrshire and all other Climbing Roses, even very enormous masses of the former, 20 years old, are killed down to the ground—as are all the Bourbon, Noisette, and China Roses. Some young trees in pots of the last mentioned, which were not wanted for propagation, were thrown down and covered with mats in the manner I have described. They have been recently uncovered, and not a bud or twig is injured. I need not enlarge on this subject; your readers will, I think, see the great store-house of heat always at hand, the work of the Creator, to be used by the gardener with so much advantage. I must not conclude without mentioning the remarkable freedom from fog or mould that is found in plants lying on the surface of the ground covered with mats for several weeks. In close pits and frames this is often a great evil. The only certain method of taking full advantage of earth-heat is to have a close covering—perhaps even an air-proof covering would be better than anything—next to the plants, and nearly in contact with them, so that there is but little space for the gentle and slowly accumulating heat to disperse itself. A loose covering of leaves or branches of evergreens does not seem to keep it in sufficiently to resist severe frost. The advantages to be derived from earth-heat are not confined to the nurseryman who may employ it to keep his young evergreens from injury; gardeners by placing their winter crops in a proper sloping position, if of a height to require it, near the surface of the soil, in beds say 6 feet wide, may cover them with some cheap water-proof covering and thus most efficiently protect them from severe frost with but little trouble and expense.—One little misprint has destroyed the meaning of a sentence at p. 194 of my last article. It should be, Oranges, &c., may be grown in any common orchard-house without fire-heat by merely laying the pots *on* the earth border, not "in." The word is a "little one," but of importance. *T. R.*

Potato Disease.—I see that a foreign professor has again brought forward the theory of kiln drying the sets of Potatoes as a preventive of disease. After the report of the Royal Commissioners was circulated respecting the evil in Ireland, my late noble employer wished me to try a series of experiments here, in accordance with some of the modes recommended in the report in question with a view to prevent the mildew. The kiln drying of the sets, and fumigating them with chlorine gas, was tried on a large scale, but failed in saving them from being attacked at the usual time. Some of the tubers were dried nearly to desiccation, and afterwards sulphured, but they proved just as liable to disease as the others. Seeds of the wild Potato were likewise procured from Peru, and sown in heat, and when the tubers were about the size of marbles, they were planted by themselves, but the plants were similarly affected as the old varieties in the following summer. A large quantity of a Kidney shaped Red Potato was imported from Portugal that was said never to have had the disease there, and a three acre field was planted with them. At lifting time they proved to be rather sounder than the crop generally that year, but the foliage and tubers were attacked by the disease at the same time as the others. Having tried autumn planting with no particularly good results, and the cutting and pulling up the haulm when the disease first appears, I have long since come to the conclusion that all the nostrums recommended for preventing the mildew are of little use, especially with late varieties of Potatoes. I am convinced that as many good sound Potatoes could be grown in this country as ever, were the early and second early varieties only selected and planted for the main crop. In trying some experiments with early Potatoes grown in frames in 1846—7 I found that the mildew could only progress in a damp high temperature, and in a letter which was inserted in the *Times* I recommended early planting and trying only the early and second early varieties for the main crop. The mildew seldom appears virulently before the beginning or middle of August, according to the moisture and heat prevailing at that period, and about the time the late planted Potatoes have advanced to a certain stage in their growth. Last year the temperature was so very low in August and September that the disease did not progress so fast as usual. Had the temperature been high with the great excess of rain that fell in these months, the whole crop would have been endangered. Such second early varieties as the Dalmahoy or Taylor's Fortyfold if planted early, will produce as large crops as the best of the late varieties, and be fit for lifting and storing in the beginning of August before any disease appears. All the early and second early varieties were good and sound last year at lifting time, and quantities I have stored have kept so until this time. I have no doubt that the mode promulgated by the Rev. Dr. Stephenson in last week's *Gardeners' Chronicle* is an excellent one, namely cutting the sets in autumn, and keeping them in a dry warm place till planting time. I always keep my seed Potatoes in shallow boxes or baskets, in charcoal dust, till they are quite hard and green, and sprouted an inch or two; and do not plant them out till there is some natural heat in the ground. For the last three years I have grown a late Potato from Ireland named "Millett's Manifold," which has a particularly long, hard, and woody stem, and seems to withstand the mildew longer than any other I know of. Last year the haulm was quite green in October, but this sort cannot be said to be quite free from the disease, for a few of the tubers were affected at lifting time. The Fluke variety has also a very strong woody stem, and withstands the disease longer than many others.—*William Tillery, Welbeck.*

Vines Killed by Frost?—I have a small greenhouse substantially built and glazed, and heated by hot water, planted with five Black Hamburgh Vines. They have done exceedingly well, and produced two fine crops of Grapes, but not heavy. The Vine nearest the entrance of the pipes is breaking very weakly and slowly; the second plant is breaking well, the third, fourth, and fifth are quite dead down to the border outside. The Vines are taken into the house close to the border, no legs being exposed to the weather. The house has been filled with mixed plants, such as Geraniums, Heliotropes, &c., and sustained no visible injury during the winter. My man says that the winter has killed the Vines; is it possible for frost to do so without killing the Heliotropes, Geraniums, &c.? The subsoil is gravel, the locality a light sandy, dry soil, the border is artificially made with the best turfy soil and very rotten light manure. Your opinion therefore respecting the cause of the disaster will greatly oblige. The Vines have been planted five years. *A Subscriber.* [When such things as Geraniums and Heliotropes were not injured, it is evident that your Vines could not have been killed by frost inside the house. Yet from all you state, to frost only can their death be attributed. They may have even been kept warm inside; but so much the worse, for in that case the sap may have still been kept in motion, and then if the ground had got frozen about the stems outside, so as to arrest the flow of sap, the plants would suffer as you describe. Some Vines of great vigour were killed in this way by the frost in October, 1859, which occurred when their vegetation was still going on, and before the usual winter covering of the stems was applied.]

Ulex strictus.—It is worthy of notice that whenever a question arises as to the validity of certain nearly allied species, and facts are brought forward purporting to show more or less conclusively that two or more so called species are merely varieties of a *single* one that exception is taken to such facts and experiments on the ground that errors may have been committed or sufficient care may not have been taken. The letter of Mr. Babington, in your impression of March 16, is a case in point, and this gentleman has expressed himself in like terms on previous occasions. Now, on Mr. Babington, and on those who hold the same opinion as he does, surely lies the *onus probandi.* May we not, therefore, look to some of these gentlemen, not only for valuable criticism on the experiments and observations of others, but also for some method whereby the requisite amount of care may be taken and trustworthy results obtained? *M. T. M.*

Irish Furze.—I can assure Mr. Babington that no pains were spared to eliminate error in raising the Gorse seed. I have for years applied myself to the close observation of phenomena connected with raising plants from seed. I have thrown away hundreds of both plants and seeds when it has happened that from the loss of a label or other such source of uncertainty a link had become lost in that chain of rigid evidence which is the only guide to truth. The seeds in question were taken from the ripe pod and caused to germinate at once on a surface of wet sand within a tin box; they were then each placed on the surface of a small pot and watched closely by myself, till they were seen to strike root into the soil and grow. The soil in the pots was carefully examined for accidental seeds. That a strongly marked variety will sometimes reproduce itself from seed is confirmed by general experience; moreover such plants have been found to do this more in some seasons than in others, the seed being taken from the same plant. My plant was what is commonly called the Irish Furze, a densely growing bush rarely seen in flower, and that from the seeds of this sort I raised two common Gorse bushes I stoutly aver. One of my garden men detected two pods on the bush last autumn when I was absent from home, and has raised two plants which no doubt he will swear to, though I can't, but will report on them when they are strong enough to prick my fingers, which the old lady couldn't. Moreover the frost hath killed her, and the first witness in the matter is now lost to science. *R. T. C.*

The Potato Disease.—In the notice at page 2[illegible] of your last Number, I see that this malady is imputed to the "presence in the atmosphere of a minute Fungus." I am of opinion, that the minute Fungus is the effect of Potato disease, not the cause of it: and that, if the Potato plant were in perfect health, no Fungus (be it ever so small) would be attached to it. I have paid great attention to Fungus in all its stages, on our forest trees, and I have long considered it as the offspring of disease, not the product of it. *C. Waterton, Walton Hall.*

The Renovation of Old Budded Fruit Trees.—The following experiment may not be novel; but, having proved successful, it may afford a useful hint to young gardeners. In my garden there grew (and owing to

the success there is growing still, although under different conditions), against a wall between 12 and 13 feet high with a south-east aspect, an old Green Gage tree, whose fruit is, I think, superior to any I ever tasted. The tree, budded about 6 feet from the ground, was planted about 80 years ago, more rather than less. Its stem, however, had decayed to such an extent as to become not merely hollow but only a riband of bark, slightly twisted, and certainly not broader than one third of the circumference of the tree in its healthy state. It would have been quite incapable of sustaining the weight of the branches, which were suspended in the air by being nailed against the wall and fed by the little sap that reached them through the narrow strip of bark, which grew less and less from the effects of decay. Notwithstanding, the tree had made young wood not long since, and the existing branches were healthy and clean. The slightest accident threatened its destruction; and, without accident, its doom appeared near at hand, unless something could be done for it. Being anxious to save it, early in the spring of 1859 I had an incision made in the bark, just above where it was budded, and then applied to the part a wooden box, of which the wall itself formed one of the sides, so as to completely cover the incision, the junction of the stock and the bud, and a few inches of the branches. The box was fastened to the wall with cramps or holdfasts and iron wire, and filled with good hazel loam, not too light, from a Wheat field. This earth was occasionally watered during the summer of 1859; during that of 1860 there was no need to do so. The incision in the bark was made at my gardener's request, my own idea being that at the union of the stock and the scion there was a sufficient callus for the emission of roots. About six weeks ago, after the box of earth had remained there two years, we examined it, and found it full of roots; the quantity of "peruke" was so considerable as to assure us that the intended operation might be safely performed. The roots emitted were much more abundant on the side next the wall, showing that the heat of the wall had something to do with their emission. The box being removed, the strip of stem was sawed through immediately beneath the roots; and, the old stump being grubbed up (which could hardly have lingered on a twelvemonth longer), the top was lowered, planted in the same spot in the border which it had occupied for 80 years, and is now swelling its buds with every prospect of an abundant crop, unless spring frosts come to disappoint us. I consider the life of this tree as prolonged indefinitely, for it is now on its own roots, and is so far exempt from the diseases and weaknesses to which budded and grafted trees are liable. Besides this, it may send up suckers, which will inherit its excellent qualities. Perhaps the same plan might be applied advantageously to other choice Plums, and to Apricots, without waiting for the stocks in which they grow to arrive at a dangerous state of decrepitude. *E. S. D.*

Potatoes in Double Rows.—In your last Number, you have (p. 240) an article on the Potato disease, which appears likely to be useful. But both my gardener and myself are at a loss to know what advantage is gained by setting the Potatoes in double rows instead of single. In Warwickshire (and elsewhere I presume) we set our Potatoes in single rows, with 24 inches between the rows; and it appears that this method would give more space for laying down the haulms (an important consideration) than the double row system with the space of one foot only on each side.—*Leek Wotton.*

Societies.

Royal Horticultural, *March* 12.—(*Floral Committee.*)—Mr. William Paul contributed various plants of Taxus baccata, accompanied by notes on their habits; for these a special certificate was awarded. From Mr. Bull, King's Road, Chelsea, came a prettily variegated variety of Agathæa cœlestis, for which a first-class certificate was awarded; and Rhododendron præcox, from Mr. Davis, of Wavertree, was commended. From Messrs. E. G. Henderson came a collection of Cyclamens, and other plants remarkable for the beauty of their foliage. Of Saxifraga oppositifolia, examples were contributed from Barleston Hall; of early spring flowering plants, this is one of the prettiest, and it is particularly suitable for the decoration of rockwork; taken up and potted it has also a fine appearance in window gardens.

March 12.—(*Fruit Committee.*)—It was announced that various contributions in the shape of kitchen garden seeds had been sent to Chiswick for trial. From Mr. Foster, of Edgeware, came two seedling Apples; but neither of them was considered worthy of a prize. A Seedling Apple was also contributed by Mr. Cant, of Colchester; but with the exception of one or two fruit it was not, even at this late season, sufficiently ripe to enable the committee to judge fairly of its merits. It was therefore ordered to be reproduced at a future meeting when in better condition. It however promises to be a valuable very late keeping Apple. Mr. Laxton furnished Stamford Pippin, and Mr. Cunningham, gr. to the Bishop of London, a nice collection of Apples in a state of excellent preservation, for which a label of commendation was awarded. Mr. Culverwell, of Thorpe Perrow, sent a small bunch of an oval black Grape, which had been grown in a pot; the specimen shown was in fine condition, the berries being quite plump, and the stalk and pedicels as fresh and green as those of early Grapes. It resembled the sort called Catalanesia nera, and was pronounced to be a delicious and valuable variety. Mr. Melville, Dalmeny Park, was awarded a first-class certificate for a Cabbage named Fearnought, a very hardy kind, and he also sent a sprouting variety, which was submitted to a sub-committee for examination. Mr. Spencer sent grafts of Bowood Muscat Grape for distribution among the committee; and Mr. Fraser, of Lea Bridge, exhibited scions of Pear trees which had become quite black in consequence of the severity of the winter.

Royal Botanic, Regent's Park, *March* 20 (Spring Meeting). A considerable number of early flowering plants was contributed on this occasion. From Messrs. E. G. Henderson came beautiful examples of Imatophyllum miniatum, with great heads of showy orange blossoms; Rhododendron jasminiflorum, retusum, and Princess Royal, all fine kinds, the second having small rich orange scarlet flowers, whose only drawback is their want of size, and the last rosy-eyed delicate pink blossoms of great beauty; the same collection also contained various varieties of Cyclamens, the charming little Iris reticulata, and Amaryllids of different kinds. Of Cinerarias Messrs. Dobson, of Isleworth, sent a well-managed group, consisting of Masterpiece, Mount Etna, Mrs. Hoyle, Hyperion, Rifleman, and Master F. Watson. A collection of Cinerarias was also furnished by Mr. Todman, gr., Clapham Park. Mr. James, gr. to W. F. Watson, Isleworth, sent finely bloomed potfuls of the following kinds of Pansies, viz. Lord J. Russell, Rev. Joshua Dix, Jeanie, Father Gavazzi, Miss Walker, and Alexander M'Nab. From Mr. Gaines, of Battersea, came well flowered plants of Amaryllis, and Mr. Young, West Hill House, Highgate, sent various Azaleas, among which the most striking were Criterion and Glory of Sunning Hill, the last one of the best double pink kinds at present in cultivation.

Plants remarkable for the beauty of their foliage came from Messrs. Cutbush (who also sent Primulas and Cyclamens), Messrs. Fraser and Mr. Young. Messrs. Fraser also contributed a pretty collection of stove and greenhouse plants, in which were Dendrobium nobile finely flowered, the handsome variety of Epacris miniata, called splendens; Boronia pinnata, an Eriostemon, and Azalea vittata, the last one mass of delicate white flowers, prettily flaked and striped with purple. Mr. Young sent Camellia Chandleri elegans, well bloomed; Cytisus racemosus, a Brassia, and one or two varieties of Azalea. Mr. Penny, gr. to H. H. Gibbs, Esq., Regent's Park, sent among other things, a well bloomed Acacia Drummondi, which is one of the handsomest of its class; and the pretty Azalea amœna literally loaded with little rosy purple flowers.

Of Hyacinths, the best came from Messrs. Cutbush; but a nearly equally good collection was also contributed by Mr. William Paul; Mr. Macintosh, of Hammersmith, likewise furnished some good kinds both in pots and glasses. As regards varieties full information will be found in our last week's Number. We may however add, that in most of the collections were beautiful plants of Argus, a blue kind with a striking white eye, and that one of the most conspicuous sorts in Mr. Paul's collection was Von Schiller, a rosy pink kind faintly striped with white, large and showy. General Havelock is a dark kind with noble spikes; the darkest however was Prince Albert, in Mr. Macintosh's collection, which is nearly black.

Of Early Tulips Messrs. Cutbush had a fine collection, in which the most showy were Cottage Maid, beautiful rosy pink, striped with white, Vermilion, Brilliant, Scarlet Duc Van Thol, Canary-bird, Bruid Von Haarlem, red and white striped; yellow and white Pottebakker, Standard Royal, crimson and white; and Prince de Ligne, bright yellow. These, together with the Hyacinths, made a fine display.

Of new Plants, Mr. Bull sent Areca Verschaffelti, and Calamus Verschaffelti, two graceful looking Madagascar Palms; Rhodea japonica macrophylla, a variegated leaved plant, the variegated variety of Pteris cretica, and the variegated Agathæa cœlestis mentioned above. Mr. Todman sent a new double white Azalea named Flag of Truce; from Messrs. Smith, Dulwich, came a Cineraria—white broadly edged with crimson—called Queen of Spring; and from Mr. James, of Isleworth, Cineraria Lord Elgin, a purple self of fine shape and good substance; Messrs. Parker & Williams sent a Cattleya with rich deep purple tipped lip and delicate pink sepals and petals, apparently new.

Among miscellaneous subjects was a box of Roses from Mr. Wm. Paul, among which were good blooms of Gloire de Dijon, Mrs. Bosanquet, Louise Odier, Madame Bonnaire, and Devoniensis.

Notices of Books.

The Gastric Regions and Victualling Department. By an Old Militia Surgeon. Small 8vo. Hardwicke. Pp. 119.

This is a book of jokes and serious advice—dry humour and grave admonition. Its general topic is health; its special warnings concern eating, drinking, and sleeping; their application is to everybody, but to Volunteers in particular. Buckskin consults the author:

"'I want some plan laid down for me, my dear doctor,' said a rosy-faced, jocund volunteer, burdened with more weight and rotundity than was agreeable or convenient to him,—'I want some plan to be invented for me that will make me, like Tom Sayers, able to bear knocking down 20 times without feeling it, and to get up at the end of the last round in better wind than at the beginning. Now surely, doctor, you must know how this is to be done; Tom submitted to all this, as you are well aware, and was as jolly at the end as he was at the first; and why should not I, or any other fellow, get into such trim, if we try? You have not spent all these years studying people's complaints, and how to cure them, without arriving by this time at something practicable; so if you know of a *multum in parvo* pill, or anything else that will accomplish this, and that a plucky man like myself can adopt without much trouble, do tell us how to proceed, and let us have your directions in print."

The volume itself forms the author's prescription, and as good a one it is as common sense and professional knowledge can draw up. What that prescription is the reader will learn upon perusing the book. We shall only state that it is not the production of a Vegetarian, or a Teetotaller, or a Homœopath, or a Water doctor; but of one who writes thus about diet and beverage.

"Food that rapidly ferments is decidedly unwholesome, and should be avoided; it yields no nutriment, and is only an incumbrance. Weak ale, no matter how bitter it is, rapidly changes in the stomach, and becomes acid; so also do all weak, poor wines, and every other thin beverage except pure water, and moderately-strong tea or coffee in small quantity. The prevailing evil in gastronomy in the present day is that there is too much cookery, that meat and drink are each prepared solely to please the palate, and to be comfortable for an hour or two; it has no care for the morrow; hence, as we have stated elsewhere, the nutritive and more valuable properties of wholesome aliment are frittered away for a paltry ephemeral gratification, and bones and muscles are left to die a lingering death of starvation. We should augur the worst results if we could suppose for a moment that British stomachs could persist for a month in drinking the poor thin wines recently introduced into this country—fortunately there is little chance of their becoming popular, though the invasion having commenced, there will be a great many people foolish enough to place themselves in jeopardy by drinking them, if only for fashion's sake. What are our cider and perry growers about? both of which beverages this country can produce of the ripest flavour, and of a quality not to be surpassed all the world over. What are they thinking about? Were a little more attention paid to the growth of the fruit and to the manufacture, and proper care taken to pack it in suitable bottles and cases, we cannot entertain a doubt that sound refreshing beverages of that stamp and character would soon be received with favour in England, and in due time drive all the unwholesome rubbish now sold as champagne, moselle, and hock out of the foreign markets as well. Let rational people look to this a little. But a word as we go on on something more substantial. Why have Englishmen turned a cold shoulder, as many have done, on the substantial bread and cheese, and the glass of good old ale that so cheered and refreshed their forefathers? Nothing in the form of food, though under so humble a name, contains anything like such an amount or such an extensive variety of the elements of nutrition as this simple fare. A man could live longer upon it than upon any other kind of food, and be strong and muscular and otherwise healthy throughout. And why has the good old ale formerly brewed at Burton, Farnham, and other well-known places, been superseded by the poor, thin, base stuff, that is in irony said to cheer but not intoxicate? Why, a wineglassful of good Burton, the glorious Cwrw da, or health-giving Stogumber, contains more muscle in it than a gallon of the meagre stuff now in vogue! The fact is, the gastric regions of the people of these realms have become so dainty and so enervated by the flashy, frothy, acescent dieting they have had of late, that unless the public *en masse* take the matter in hand, and enter at once upon a simpler and more nutritious method of cooking their food, our volunteers will never be anything but an army of martyrs, and we shall be all demolished together."

Our author's final advice to his volunteer friend Buckskin is as follows:—

"Our object in these observations on some of the consequences of our present system of dieting, has been, not to frighten but to laugh our readers into a little self-denial; to induce them, by the exercise of their own good sense, to cast away some of the dangerous ingredients that form a portion of their daily fare, and thus to spare themselves much future discomfort by the timely exercise of some little present self-command; and for the due and efficient encouragement of those cardinal virtues, we recommend them earnestly, as a preliminary step, to look at the clock, and measure out time correctly. Begin early, and determine as nearly as possible the number of hours that are to constitute the day, and when those hours are accomplished, seek and secure, if by any means possible, quiet rest and sleep for the remaining portion of the 24. These latter conditions are as essential to health as wholesome food, exercise, and intellectual occupation or enjoyment are. No one can neglect either the one or the other, and not

suffer for it. Allow a proper time for work, for relaxation and refreshment, and above all for repose and reflection, and the result will assuredly end in temperance and moderation in all things. The clear skin, beaming eyes, rosy cheeks, strength, muscularity, cheerfulness, will all return again, and with them, the grateful, heartfelt satisfaction that the bountiful gifts of Providence having been properly used, and not unsparingly abused, by the rich, have left a larger and more abundant portion to satisfy the wants and necessities of the poor."

Were this a speech in Parliament the reporters would add [Hear, hear].

Garden Memoranda.

Holland House, Kensington.— The conservatory is at present gay with Camellias, which are planted out in the borders, and many of them large plants. Two specimens of the Double Striped quite 10 feet in height are literally covered with blooms from top to bottom; a noble tree of old Double White has also blossomed most profusely, a rare circumstance this season, for owing to the unfavourable weather last year for ripening wood, Camellias in general have not flowered satisfactorily this spring. Most of the trees here have, however, bloomed as abundantly as usual.

Arranged along the centre of this conservatory are the noble Orange trees to which we have alluded in former volumes; many of them are of great size, and all of them are in excellent health; we did not observe even a discoloured leaf on any of them, notwithstanding the severity of the winter through which they have just passed. The larger specimens have not been retubbed for years; but they are annually top-dressed in spring with old hotbed manure, which keeps them in good condition, and at the same time some cowdung and clay mixed are put round the top of the tubs inside so as to prevent surface waterings from passing off between the tub and ball without moistening the centre of the latter. During summer this has been found to answer perfectly; but in winter it is removed for fear of its keeping the soil too wet. The tubs in which these trees are growing are set on feet, and made to take to pieces, so that the state of the roots can be examined at any time without any very great amount of trouble. The object kept in view has been, however, to preserve the trees in health in as small tubs as possible, and therefore when they have been found to require more root room, instead of placing them in larger tubs, the size of the ball has been reduced and fresh soil added, and thus the trees have been induced to thrive in tubs of manageable dimensions. Most if not all of the largest trees are to be re-tubbed we understand in May next, that being considered the best time for the operation; the new tubs to which they are to be transferred are made of good yellow Deal, held together at the corners with strong square Oak posts; tubs of this description are said to last in good condition for upwards of at least 10 years.

In the open ground tree transplanting is being carried on with activity; autumn is usually selected for this kind of work; but where screens have to be got up quickly, as is the case at present here, it could not be delayed till that time. A belt of Horse Chesnuts, Elms, Sycamores, Deodars, and Cedars of Lebanon has been planted across the front park to shut out from view the old Elms along the side of the Kensington road; the latter have become so aged as to be really dangerous to passers by; their rotten limbs must therefore necessarily be removed so as not to overhang the public road, from which the new belt is a considerable distance off. Other screens are also being formed, chiefly of Lombardy Poplars, some of which are upwards of 50 feet in height. Notwithstanding their size, however, they are being safely removed with good balls by means of a small transplanting machine, made somewhat on the principle of the ordinary timber carriage; but with low wheels so as to get it well under the balls—a real advantage, especially in lifting. By means of this and a few handy men trees of the dimensions just indicated are moved with ease.

On Apple trees near the conservatory we noticed some fine bunches of Misletoe, the bright green of which contrasted strikingly with the as yet leafless branches from which they were suspended. This favourite Christmas parasite took possession of these trees naturally; but it may be easily established artificially by merely making slits in the bark and inserting the seeds on the under sides of the boughs, where birds are not likely to pick them out and destroy them.

Various fruit trees in an orchard which was planted some years ago have borne excellent crops ever since and promise to do the same this year. The ground in the first instance was rich old pasture trenched two spits deep; it has however been retrenched since, which doubtless has had the effect of checking exuberant growth, owing to many of the roots being cut, and thus rendering the trees more fruitful than they probably otherwise would have been. On walls crops of stone fruit promise to be thin; the flower buds on Apricots are opening; it must however be mentioned that this is rather an early spot.

Mushrooms are grown here in triangular ridges in the open air. The horse-droppings are placed in the centre, and after being spawned are covered with soil in the usual way. Hay is then put over the ridge, and the whole is protected from the weather by means of wooden hurdles thatched with straw. In this way abundance of Mushrooms is secured. A bed put up in September last is at present full of them.

Bedding plants, of which great quantities are wanted every summer, are wintered in frames well protected with mats, and even during last winter few have perished. Verbenas and things of that kind succeed well in this way; the tops of such kinds as are found to be scarce are taken off about this time, struck and hardened off in turf pits, which, like the Mushroom beds, are covered with straw hurdles. These pits are also found to be useful for other things, such as early Potatoes and Radishes. Bedding plants are not grown in pots here; all are pricked out in frames.

The beds in the flower garden have all been dug, in order to prepare them for their summer occupants; in short the place generally is neat and clean, and has within the last few years been considerably improved.

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Shrubs planted out in beds will require occasional waterings. Larger specimens in tubs or pots must also have a liberal supply, provided the drainage is effective. This is the period for free use of liquid manure, but take care that it is clear and not over strong. Large Orange trees while growing are fond of it. Where these produce gross wood, disbud or remove it altogether, and let the lower shoots take its place; this will induce fruitfulness by moderating the growth. Pay due attention to the watering, shifting, and stopping of plants in general. Make cuttings as soon as they can be obtained, of Geisomerias, Plumbagos, Eranthemums, Justicias, Clerodendrons, Vincas, Euphorbias, Brugmansias, Begonias, and Thunbergias, &c., in order to keep up a succession of young stock. See that growing Orchids have abundance of atmospheric moisture with a liberal circulation of air early in the morning, shutting up close betimes, and take care to observe moderation in the use of fire heat in order that a pure atmosphere for the night may be ensured. Growing Dendrobiums will now require liberal supplies of water; and let plants on blocks be frequently syringed. Most stove plants will succeed in the mixed greenhouse, where a medium between the cold greenhouse and the stove is observed. See to securing cuttings of Heaths as soon as the wood is fit for the purpose. Fumigate the moment green fly appears; this is best done in a moderate way two evenings in succession.

FORCING DEPARTMENT.

Pineries.—Plants swelling their fruit should be carefully attended to with water at the root; for, if allowed to get too dry, there is great danger of checking the fruit and preventing its attaining the size which it would do under proper treatment. It is, however, easy to err in the opposite extreme, and considerable care and practice are necessary to enable one to properly water plants having their pots plunged; therefore this should not be intrusted to inexperienced hands, who would probably water every plant if the surface soil indicated dryness. Use weak milk-warm manure water for plants that are well rooted, whether fruiters or growing stock, and keep the atmosphere thoroughly moist, giving air very sparingly on cold, drying, gleamy days, except where proper means of ventilation have been provided. Black Jamaicas and Montserrats expected to supply ripe fruit next autumn should soon be ready for shifting into their fruiting pots, and care should be exercised to avoid checking their growth by any means, as this might lead to their fruiting prematurely. See to having the balls in a rather moist state at the time of repotting, and keep the bottom-heat regular and the atmosphere moist and rather close until the plants appear to have taken to the fresh soil. The same attention will be necessary in regard to watering and bottom-heat, &c., in the case of those growing in the open bed, for plants that are any size are apt to show fruit at this season if at all checked in their growth.

Vineries.—Directly the fruit in succession houses is sufficiently advanced for thinning get this done, the laterals stopped, and the shoots regulated without loss of time, for allowing the berries to get so thick that the scissors can hardly be got amongst them renders thinning tedious, and also robs the Vines. Give inside borders a liberal supply of manure water, using that from the stable-yard tank where it can be obtained, and mixing with it a sufficient quantity of warm water to render it about milk-warm. In all cases give every possible attention to the state of the roots, securing a little artificial warmth where circumstances allow of doing so, for the ground is cold and very unfavourable for the roots of Vines. Where fermenting materials have been used on the border of the early house, the heat should not be allowed to decline until the fruit is fairly ripe, for it is easier to secure a heavy crop of well-swelled fruit than to perfectly colour and ripen even a moderate crop, and a healthy root action is perhaps more important while the fruit is colouring than at any other period. Therefore let the fermenting materials be turned occasionally, adding fresh as may be requisite to keep the temperature of the border at about 70°. In cases where red spider threatens to be troublesome, in succession houses, rendering syringing necessary, rainwater should be provided for syringing with, as if water containing lime is used, the berries are apt to be disfigured by an incrustation of it.

Cherry House.—When the fruit begins to colour syringing overhead must be discontinued, and a less degree of moisture maintained in the house, decreasing this and the quantity of water given to the plants gradually. Give abundance of air on all favourable opportunities. Strawberries ripening fruit it would be well to remove here or to a similar situation.

FLOWER GARDEN AND SHRUBBERIES.

If the re-arrangement of herbaceous plants has not already been attended to, no time should be lost in effecting it. Some of the grosser kinds get into too large masses, and thereby destroy all proportion in the mixed beds. Sow annuals wherever required. Early struck Verbenas, Calceolarias, &c., may soon, if the weather becomes milder, be planted out under cover 2 or 3 inches apart in beds; with proper protection they will make nice plants by the middle of May, and may be removed either to masses or borders, where they will bloom at once, and soon produce a striking effect.

HARDY FRUIT AND KITCHEN GARDEN.

Prepare to protect choice fruit tree blossoms from spring frosts; if Shaw's tiffany or Haythorn's hexagon netting is employed it may remain on till the crop is safe; if however thicker coverings are used they must be removed during the day time. A full crop of Potatoes may now be planted. Kidneys with well protected sprouts or any other early kinds planted now will be little later than those planted in February. This however requires a little care; the sets should be placed in baskets a single layer thick on damp litter, and carefully handled; they should by no means be planted during either sunshine or wind. Those with sprouts 2 or 3 inches long, if managed thus and covered at night until the second week in May, will closely succeed those in frames. Let a sowing of winter and spring Broccoli be made forthwith. Cape Broccoli and Cauliflower for Michaelmas may, however, be sown a week or two later. See that plenty of Green Kale, Savoys, Brussels Sprouts, Leeks, Scorzonera, Salsify, Beet, &c., is got in without delay. Continue successions of Horn Carrots; indeed sow a bed every month from January to September.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON
For the Week ending March 21, 1861, as observed at the Horticultural Garden.

March.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind	Rain.
Friday 15	4	30.088	30.035	55	24	39.5	45	43	N.W.	[illegible]
Satur. 16	5	29.978	29.853	49	29	39.0	44	42½	S.W.	[illegible]
Sunday 17	6	29.890	29.338	47	30	38.5	43½	42½	S.W.	[illegible]
Mon. 18	7	29.906	29.249	49	35	42.0	44	42½	W.	[illegible]
Tues. 19	8	29.307	28.936	51	32	41.5	44½	44	W.	[illegible]
Wed. 20	9	29.576	29.346	48	33	40.5	44½	42½	S.W.	[illegible]
Thurs. 21	10	29.796	29.387	47	30	38.5	44½	42½	W.	[illegible]
Average..		29.791	29.592	49.4	30.4	39.9	44.3	42.8		[illegible]

March 15—Overcast; very fine; frosty at night.
— 16—Frosty; fine; rain; fine.
— 17—Uniformly overcast; boisterous with heavy rain; fine.
— 18—Quite cloudless; fine but cold; rain at night.
— 19—Boisterous with rain; slight showers, and occasionally boisterous.
— 21—Clear; fine but cold; snow shower; clear at night.
Mean temperature of the week, 2¾ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending March 30, 1861.

March.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 24..	50.0	31.9	40.9	11	0.11 in.	4	5	4	—	3	[illegible]	[illegible]	[illegible]
Mon. 25	50.3	32.3	41.3	12	0.50	3	10	4	—	[illegible]	[illegible]	[illegible]	[illegible]
Tues. 26..	51.6	32.1	41.9	12	0.17	—	6	4	2	[illegible]	[illegible]	[illegible]	[illegible]
Wed. 27..	53.7	34.1	43.9	11	0.37	2	6	3	[illegible]	3	[illegible]	[illegible]	[illegible]
Thurs. 28..	53.0	31.1	43.5	14	0.68	4	6	6	2	[illegible]	[illegible]	[illegible]	[illegible]
Friday 29..	53.8	33.5	43.6	11	0.33	1	4	8	3	[illegible]	[illegible]	[illegible]	[illegible]
Satur. 30..	53.4	34.4	43.9	14	0.50	3	5	5	1	6	[illegible]	[illegible]	[illegible]

The highest temperature during the above period occurred on the 27th, 1830—therm. 75 deg.; and the lowest on the 25th, 1850—therm. 14 deg.

Notices to Correspondents.

Books: *W S P.* We are not acquainted with any "garden produce book," and should think it far better for each person to make one according to his peculiar wants. There are no bad lawn mowing machines now in the market. Those of any of the great advertisers are excellent.

Dirty Plants: *B Y.* The leaves you have sent as a specimen of what you find in your new place are a disgrace to your predecessor. They are devoured by mealy bug and other insects. You must wash them, or rather scrub them, with soap and water over and over again, and when as clean as you can get them, keep down with Gishurst Compound what insects may have escaped. You might also try soap and water strengthened by a decoction of Quassia chips. Your letter, like many others, came too late for an answer last Saturday.

Horticultural Society: *Z A* has only to be proposed by a Fellow. If she will write to the Secretary at South Kensington she will obtain all particulars necessary.

Insects: *E R C.* The grubs you have sent are the larvæ of the common Daddy long legs (Tipula oleracea). Set traps of slices of Potatoes or Turnips for them in your Cucumber frame and water the soil well with gas tar water, before planting the ground. *W.*

Names of Plants: *A 15 Years' Subscriber.* A weed not in flower.—*D D.* Leptospermum scoparium.—*H G.* Your plant is not in flower. It looks like a smashed morsel of Senecio Mikaniæ.—*A Sub.* 1 and 2, not in flower; 3, Cyathodes acerosa.—*G G.* 1, Some Vitis not in flower; 2, not in flower: plants not in flower cannot be named.

Robinia Pseudacacia: *C M.* We imagine the midribs of the leaves to have been drawn into the ground by worms; if not, we are unable to suggest an explanation.

Vines in Pots for Exhibition: *D R.*—In order that these may travel safely, the Vines must have their branches firmly secured to rods; then the bunches must be tied by their stalks to rods thickly covered with cotton, and so as not to swing against any thing. The plants should be conveyed in a good spring van, the pots being placed on very clean straw or other soft substance, which will not cause dust to rise.

Misc.: Special Prizes:—Fruit and flowers are to be combined in three baskets or vases or epergnes, or whatever may be used. Only three baskets are to be shown by each party.

PERMANENT GRASS SEEDS FOR ALL SOILS.

SUTTON & SONS,

SEED GROWERS, READING, BERKS,

HAVE a most extensive and complete stock of all the best kinds of GRASS SEEDS for PERMANENT PASTURE, which they are now sending out daily to all parts of the Kingdom, mixed expressly to suit the soil for which they are intended and the purposes for which the Pasture is required. It is believed that Messrs. SUTTON'S Stock of GRASS SEEDS is the largest in the country, and certainly the quality cannot be surpassed. The sorts can be supplied separate or mixed to suit the soil, or the Light Large Seeds may be had in one mixture, and the Clovers and other Small Heavy Seeds in another; 2 bushels of the former and 12 lbs. of the latter per acre are supplied.

Mixtures for Permanent Meadow and Pasture, adapted to suit the soil ... ... per acre 26s. to 32s.
Mixtures for Permanent Field Lawns, Parks, and Cemeteries ... ... per bushel 16s.
Mixtures for Irrigation or Catch Meadows ... ... per acre 25s.
Mixtures for Reclaimed, Marsh, or Heath Land ... ... ,, 18s. to 20s.
Mixtures for Loose Blowing Sands, Heavy Clays, Chalky Soils, and Sharp Gravel.
Mixtures of Finest Short Grasses for Garden Lawn ... ... 1s. per lb., or, per bushel 18s.
Renovating Mixture of Clovers and Fine Grasses for Old Parks and Meadows, 9d. per lb., or, by the cwt., 80s.

MIXTURES OF CLOVER AND RYE GRASS SEEDS

To be Sown with Corn for a Crop of Clover, &c., in the following year, containing 16 lbs. Clovers per acre, including Alsike, 20s. p. acre.

N.B.—Messrs. SUTTON *furnish complete instructions for sowing and management with the Seed.*

OTHER AGRICULTURAL SEEDS, NEW AND UNADULTERATED:—

MANGEL WURZEL. Per lb.	s.	d.	SWEDES. Per lb.	s.	d.	TURNIPS. Per lb.	s.	d.
Long Red	1	6	Sutton's Champion ..	2	6	Yellow Tankard.. ..	1	9
Elvetham do.	1	9	Skirving's Improved ..	1	9	Lincolnshire Red Globe	1	6
Yellow Globe	2	0	Marshall's Purple-top ..	2	0	Sutton's Green Round..	1	6
Red Globe	2	0	Improved White ..	2	0	White Globe	1	6
Long Yellow	2	0	Hardy Purple-top ..	2	0	Mottled, or Grey Stone	2	6

RYE-GRASS. Per bushel.	s.	d.	CARROTS. Per lb.	s.	d.	SUNDRIES. Per lb.	s.	d.
Sutton's Italian	6	6	White Belgian Imported	1	6	Holcus saccharatus ..	1	0
Fine Imported do. ..	6	6	Yellow Belgian do. ..	2	0	Lucerne	1	0
Common .. 4s. 6d. to	5	6	Large Altringham ..	3	0	Drumhead Cabbage ..	4	0
Pacey's Perennial ..	6	0	James' Intermediate ..	3	0	Large Cattle Parsnip ..	1	6
Devon Evergreen ..	7	0	Long Orange	3	0	Kohl Rabi, of sorts ..	5	0

PRICES OF CLOVER SEEDS VARIABLE ACCORDING TO MARKET.

Goods delivered Carriage Free. Priced Lists Post Free. Cash or reference requested with first orders.

Five per Cent. allowed for Payment on receipt of Goods.

SUTTON & SONS, ROYAL BERKSHIRE SEED ESTABLISHMENT, READING.

J. C. WHEELER & SON,

SEED GROWERS, GLOUCESTER.

"WHAT wi' Swedes, Coal-rabby, and Mangel-Wuzzle," we devote a very considerable degree of attention to our Farm Seed Department, especially to laying down Land for Permanent Pasture, and to Rye-Grasses and Clover for one or two years' lay. The Seeds we have selected and sent out for these purposes have given the greatest possible satisfaction. **Seeds for Permanent Pasture, 30s. per acre.**

RENOVATING MIXTURE FOR OLD PASTURE.

For the improvement of Old Pastures we should recommend, when the land is being dressed in the Spring with manure, that about 8 or 10 lbs. of Grass Seed per acre be harrowed or bushed in with it, the quality and quantity of herbage will be thus greatly improved. Suitable Seed for this purpose we can supply at **9d. per lb.**, or **80s. per cwt.**

CLOVER, genuine and of excellent quality.

WHITE DUTCH, 11d. to 1s. per lb. .. 100s. to 112s. per cwt.			TREFOIL, fine .. .. 4½d. per lb. .. 38s. 6d. per cwt.	
RED or BROAD, fine	8d. ,, ..	72s. ,,	,, extra fine .. 5½ ,, .. 48 6 ,,	
,, ,, extra fine	9d. ,, ..	84s. ,,	COW GRASS, true .. 10 ,, .. 94 0 ,,	
			,, extra fine 11 ,, .. 103 0 ,,	

CLOVER AND GRASS SEEDS, for One or Two Years' Lay.

The quantity required per acre will be about 15 lbs. of mixed Clover Seed and 2 pecks of Rye-grass, to be sown about the end of March or beginning of April, with either Wheat, Oats, or Barley. "The land is then to be harrowed or *bush*-harrowed across the drills of corn, if these are up, and rolled." We can supply these Clover and Grass Seeds, of the very best quality, for **One Year at 17s. 6d.,** and **Two Years at 20s. per acre.**

From R. J. Phillips, Esq., *of Ashdale.*

"The Clovers you sent me are such a crop that I doubt if they can be beaten here or anywhere else. I hope you will provide for me next year as well as you have done this."

Seeds delivered Carriage Free by Rail, and 5 per cent. discount allowed for cash payments.

J. C. WHEELER & SON, SEED GROWERS, GLOUCESTER.

SEED CORN FROM THE CHALK.

RAYNBIRD, CALDECOTT, and BAWTREE supply carefully selected and screened samples of all the most approved varieties of Wheat, Barley, Oats, &c.

Address, Basingstoke, Andover; or 89, Seed Market, Mark Lane, E.C. Samples and prices Post-free on application.

RAYNBIRD, CALDECOTT, and BAWTREE, Seed Merchants and Growers, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E.C.

Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.

Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

MANGEL WURZEL and TURNIP SEEDS.—The undersigned can confidently recommend their Stocks of the above SEEDS, crop 1860, grown from selected and transplanted Bulbs. Terms on application.

James Fairhead & Son, Seed Growers and Merchants, Lewisham, Kent. London Establishment: 7, Borough Market, S.E.

The Agricultural Gazette.

SATURDAY, MARCH 23, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

Monday, Mar. 25 { Framlingham .. .. .. 6 p.m. (Mr. Bond on the Agricultural Future). Botley (Cattle Show).
Tuesday, — 26 { Kingscote (Mr. Cox on a Knowledge of the Theory of Agriculture) .. 6 p.m.
Wednesday, — 27 { Hungerford (The Highway and Parochial Assessment Bills) .. .. 4 p.m.
Thursday, — 28—Royal Agri Society of Ireland.
Monday, April 1—London Farmers' Club .. .. 6 p.m.
Wednesday, — 3—Agri. Society of England .. .. Noon
Saturday, — 6—Hexham.

A recent trial (Bannerman *v.* White and others, Maidstone, March 15) reopens, or at least restates the controversy between the dealers and the growers of Hops on the effect of sulphur applied to the growing plant. The whole subject will be found fully discussed in our volume for 1855. We are not interested in the verdict on the present occasion, for it turned on the question not whether the Hops had been injured by the application, but whether there had been any engagement that no such application should be made. The policy of such an engagement is however proper for discussion here; and the facts elicited five years ago unite with all the analogies of horticultural experience in showing any such engagement to be both mischievous and foolish.

The Hop is a plant which more than any other on the list of English cultivators is liable to injury by mildew. This, like all parasites, both robs the

growing plant of juices which should have gone to its own nourishment, and by the destruction of surface which it produces deprives the plant of organs which in a state of health had provided it with food. Both food and feeding powers are thus diminished, and to this is added direct local injury inflicted on the tissues of the plant. No wonder that a mildewed Hop plant soon betrays the disease it suffers from. But it is only in a state of health that the plant proceeds to the full development of those parts which are the object of its cultivation. Anything, therefore, which will check the mildew and restore the plant to health acts for the interests both of growers and dealers.

Sulphur is such an agent. Scattered in fine powder on the surfaces attacked it checks the mildew of the Vine, and the best Grapes are grown where otherwise they would have failed. Similarly used it checks the mildew of the Hop, and in like manner the best of Hops are grown where otherwise they would have failed. "Sulphur," says Dr. LINDLEY, "is one of the most powerful of known agents in destroying mildew. It is to gardeners what vaccine is to surgeons. In horticulture it has been used for many years without imparting a bad flavour to fruit or other vegetable products. The sudden discovery that Hops are an exception to the rule might well then have excited our consternation, had not long experience convinced us that the supposed discovery must be in reality a delusion caused by what we can only suppose to be hasty inferences drawn from insufficiently examined data."

Sulphur may injure hops, not however when it is employed against the mildew on the surface of the growing plant, but when in the form of sulphurous acid gas it is used in the oast houses upon the Hops themselves, to give the artificial appearance of a quality which they do not really possess. This is the use of sulphur against which dealers should protest, whether in the interests of honesty or health. It is possible that poisonous sulphurous compounds may find their way into the beer cask, through Hops with which they have been directly mingled in the oast house. But no such compounds can be found in Hops grown from plants which have only been sulphured during growth for the destruction of the mildew.

AMONG the phosphatic materials enumerated and described by Dr. VOELCKER in the current Number of the *Journal of the Agricultural Society* is the Maracaibo guano. It occurs on Monk's Island, off Venezuela, and is procured in large lumps which are reduced under a millstone with some difficulty into a brownish gray powder, containing organic matter which yields a small proportion of ammonia. It contains no less than 41.3 per cent. of phosphoric acid, 6 or 7 per cent. more than commercial bone ash usually contains; and it is therefore "a peculiarly valuable and excellent material for preparing artificial manures that are rich in soluble phosphate of lime." It contains, in fact, both less lime and more phosphoric acid than ordinary bone phosphate. Superphosphate, or rather soluble phosphate of lime, is made by taking away by means of sulphuric acid two-thirds of the lime with which the phosphoric acid is combined in bone phosphate; the remaining lime then forms, with the phosphoric acid, soluble phosphate, and at the same time a great deal of sulphate of lime is produced. The greater part of Monk's Island guano is composed of a phosphate which, containing less lime, requires less sulphuric acid for producing soluble phosphate, and the commercial product, which in reality is a superphosphate, contains less sulphate of lime than is the case when the ordinary phosphatic materials are employed.

It is the resultant superphosphate thus produced which is advertised and sold as "Phospho-Peruvian guano." Now, Maracaibo is on the north coast of South America, and however fairly the first and last terms of this designation may be taken to indicate the natural origin of the raw material and the process to which in the manufacture it is subjected, no justification of the middle term is possible.

But, however doubtful the origin of the name, it has long been used to designate in the market a manure of first-rate quality—which is now universally known by this designation, and there seems no such need for any condemnation of it on the score of honesty as there might have been when first it was adopted. Messrs. PETER LAWSON & SON, of Edinburgh and London, have undertaken the sale of this manure after a long and general agricultural experience of it has made both its quality and its name familiar, and they have not felt that honesty required them to change an old and familiar designation for the goods they sell any more than it requires a change from generation to generation in the title by which as a firm they conduct their sales. In neither case is literal truth observed, but truthfulness is maintained notwithstanding, for in both cases all the engagements which the title indicates in the market are observed.

Nevertheless it is now, when Messrs. LAWSON are successfully introducing a first-rate article into the manure market, that Messrs. A. GIBBS & SONS, if we read a trade circular aright, are forbidding their agents to deal in "Phospho-Peruvian Guano," or in any other manure under "usurped or fictitious designations." The rule is no doubt a salutary one, but like a blockade it is good for nothing unless constantly and strictly observed; and its particular application now indeed is mischievous. We stand on the same ground as Messrs. GIBBS in desiring the exclusion from the market of all fraudulent and worthless fertilisers—but we stand on altogether different ground from them in desiring the extended use of all good artificial manures by the competition of which the price of Peruvian Guano may be reduced. And the enforcement of a rule, however technically defensible and right it be, for the purpose of excluding such a superphosphate from the market as that which has been long sent out under the style and title of Phospho-Peruvian Guano, is not for the good of that large constituency of whose interests Messrs. GIBBS, as representatives of the Peruvian monopoly, may feel bound to take care, but who would be much better off if left and required to take care of themselves.

ANY encouragement to veterinary study is of agricultural interest, and we therefore note with satisfaction the Free Studentship which, as already announced in our advertising columns, has been established at the New Veterinary College, Edinburgh, under the following conditions:—

(1.) Any Gentleman intending to compete in August for the Free Studentship, must enter the New Veterinary College, not later than the 8th of May, paying the Fee of 8*l*. 8*s*. sterling.

(2.) He must attend regularly at the Lectures on Anatomy, and the Principles of Veterinary Medicine and Surgery.

(3.) There will be weekly Oral and monthly Written Examinations to test the progress made by the Students, at which the proposed Competitors are to indicate steady advance in their studies.

(4.) The first week in August the competitive examination will take place, at which six questions on the subjects taught during the Summer will be given, to be answered in writing.

(5.) The Student who replies best to the questions propounded, will be entitled to a Silver Medal, and receive back the Fee of Eight Guineas paid in May, in addition to a Perpetual Ticket of Admission to the classes of the New Veterinary College, with the exception of those marked as extra. As the Perpetual Ticket is worth Sixteen Guineas, the prize, with the Summer Fee, will amount to 24 guineas besides the Silver Medal.

(6.) No Person shall be admitted to such competition who has previously attended a Veterinary College or School of Medicine.

THE preservation of meat in cold ware-rooms is a project of greater interest to dealers in meat than to producers of meat. Nevertheless we direct attention to Admiral Sir C. ELLIOT's paper on this subject in another column.

Whatever is for the interest of the dealer does ultimately react upon the producer; and farmers as well as butchers suffer when hot weather increases the risk attending purchases from the former by the latter. Although therefore, as a general rule, the meat manufacturer can always get the full value of his fat stock when he is forced to sell, and their despatch to Smithfield is followed on return of post by a cheque for their market value, yet we can easily imagine that this market value in the summer months would be somewhat higher if easy means existed for preserving carcase meat in stores. Such means are suggested in the paper to which we refer.

It is in the summer season that they will be chiefly useful. It is not likely that ice-houses for preserving meat in winter time will be of much service to the farmer. The grazier, who has a lot of fat cattle in early winter, and must slaughter them for want of cattle food, is just as likely to get the full value of them next market day as he would be to receive it some months hence, if he could preserve their carcases till spring. But the case is different in the hot season, and if a cheap expedient can be devised for hindering the spoiling of meat in bad weather, no doubt the producer of that meat as well as the dealer in it and the consumer of it, will share in the benefit.

FARMING ECONOMICS.

No. 6.—TO MAKE CLAY FARMS "STOCK FARMS."

WHY are they not Stock Farms? Not because they cannot produce enough to keep stock, for if heavy land be drained, deeply cultivated, and heavily manured, it will produce ample crops of Mangel Wurzel and other roots, Clover, Tares, Rape, Beans, and other feeding stuffs, and certainly more straw than can be grown on lighter soils. The real reason is that you cannot keep stock in the open fields on such heavy lands during the cold wet months. But cannot [illegible] keep them under cover, dry, and comfortably sheltered, and will it not pay to provide such sufficient shelter?

I purpose in this paper to prove that it will pay, and that the absence of such covered yards on a heavy land farm is the cause of much loss and damage. I have recently been over many good farms of from 400 to 750 acres in Essex and Cambridgeshire, and found nothing but large open yards with a few narrow sheds. During this wet season the direct rainfall, added to the water from the untroughed buildings, has caused a flooding of the yards and a washing [illegible] of the most valuable and soluble portions of the manure, to the great injury of the farmer's pocket. This is a scarce year for straw, and farmers are now becoming converts to the cut straw and pulped root system; [illegible] yet, owing to the open yard system, they are compelled to waste a large quantity of that valuable feeding commodity in vain attempts to keep a dry bed for the animals. One farmer told me that the flood was so great in his yard that the men could only get access to their feeding bullocks by laying down planks, so, as a remedy, they had tied them up under the sheds, and thus saved both straw and manure. My animals and manure are all under cover, therefore although Mangel Wurzel this wretched season is but half a crop, and straw rather scarce, I manage by consuming the straw cut up, steamed, mixed with Rape-cake, malt combs, and bran, and adding to this a very few pulped roots and plenty of straw chaff, to keep a good head of stock, improving in condition and making good manure under cover. The strong stems of Bean straw are cut up, steamed, and consumed as food, [illegible] analysis showing that they are nearly equal to hay. [illegible] fact I use straw largely as food, instead of wasting it to mop up water. My short crop of [illegible] will therefore still last until June. The straw chaff is cut very fine by steam power, and absorbs the juice of the pulped roots. This is mixed with the hot steamed mess of Rape-cake, malt combs, bran, and chaff, and given warm to the animals. Simple covered yards, with space slating, may be provided at a cost of 9*s*. per square yard, or 1*s*. per superficial foot; and as I find that 12 superficial feet are ample room for one half-bred sheep, it follows that a charge of 1*s*. per year per sheep would amply pay the interest on such an investment. The question then arises whether 2 lbs. more of meat per head [illegible] be made during the six cold wet months by placing the animals in dry comfortable quarters, as compared with their exposure to the vicissitudes of weather on a [illegible] clay. I have long since solved this question to my [illegible] satisfaction; the avoidance of death and disease will alone pay for the shelter, but when we add to this the great saving in the quantity of food consumed, and especially the improved quality of the manure, [illegible] it being unwashed and unexposed to atmospheric influences, no further argument is required in favour of such a system. The same principle holds good with bullocks; 150 superficial feet of shelter, at a cost of 7*l*. 10*s*., would be ample for each bullock, at a charge of 10*s*. per annum for interest. When tied [illegible] when on sparred floors, 75 feet for a bullock, and 12 feet for a sheep would give ample space, [illegible] the spars permit a circulation of air under [illegible] around each animal, which would not be the case with straw. If judiciously managed as to ventilation, and especially as to a properly regulated supply of litter, your sheep will be free from foot rot and [illegible] fectly healthy, and your bullocks equally so. Breeding animals would require more space than I have specified.

The time will come when the value of straw as a feeding material will be better understood, and [illegible] farmers will resort to sparred floors or to burned [illegible] ashes as a bed for their animals. Mr. Randall has [illegible] adopted the latter practice with success and pro[illegible], barrow full of dry ashes or brickdust daily being sufficient to keep 20 sheep dry and comfortable. The saturated ashes form a capital Turnip manure, furnishing themselves a large supply of alkalies, &c. [illegible] unprofitable stiff clay farms, now difficult to let, [illegible] be cheaply converted into paying stock farms [illegible] annual summer burning of 1000 cubic yards of stiff [illegible] or brickdust ashes, to each 100 acres, at a [illegible] of 25*l*., for we can raise and burn at 6*d*. per cubic [illegible] of ashes. The straw would be then available [illegible] instead of being wasted in sopping up rain. [illegible] cost per 100 acres:—

	£
Burned ashes	[illegible]
Interest at 7 per cent. on covered yards sufficient for 20 bullocks and 100 sheep	[illegible]
Interest on drainage of land per acre ..	[illegible]

Such an arrangement on the part of landlords [illegible] tenants would convert our miserable and [illegible] plastic clays into holdings creditable and advantageous [illegible]

alike to tenant and landlord. But then the tenant must have capital enough to purchase stock and to buy cake for them, as well as to provide the necessary machinery for preparing the food. At present I know of several good buildings put up by landlords whose tenants have never availed themselves of them, having neither sufficient capital nor disposition to do so. Last year was a ruinous one to the holders of stiff birdlime-like undrained clays. I know many instances where the produce has ranged from 1 to 2 quarters per acre, and where there must have been a loss equal to one, and in many instances to more than one rent. The difference in value of produce between the drained and undrained clays was last year very great, in fact enough to pay several years' interest on good drainage. P.S. I was speaking to a farmer who entered upon an exhausted poor farm without any roots, and he said, "I have 240 ewes eating Cotton-seed Cake, Rape-cake, and grain. My shepherd tells me that they give more milk and of better quality than when on another farm they had plenty of Turnips alone. Our 200 lambs have been lambed down with a loss of only four, and are doing well." *J. J. Mechi, March*, 1861.

THE POPPY.

As a knowledge of agricultural weeds forms so important a part of the information which every farmer should possess, we purpose from time to time to give such drawings of plants, or parts of plants to which the term weed is more particularly applicable, as will enable our readers to recognise the plants referred to on the one hand, while their description on the other will give us an opportunity of detailing so much of their history as will enable the farmer to comprehend their method of growth; their agricultural indications; the best methods for their eradication; and any other interesting point connected with them. In doing this we shall, for the most part, take our examples in the order in which they are placed in Hooker and Arnott's "British Flora," in fact in the sequence of their natural orders, and shall commence with the Poppy.

All our native examples of red Poppies may be considered as weeds, because they are so completely agrarian that they track arable cultivation in almost every direction. There are, however, only three forms that we need describe, and as the flowers of all are more or less dark scarlet in colour, we have taken the seed-capsules as the best method of recognising their difference.

Papaver Rhœas (fig. 1), the commonly known Red Poppy of our corn fields, has a smooth, almost globose head or capsule, supported on a rounded stem which is covered by a profusion of rough spreading hairs. This is one of the most abundant weeds in agriculture, and is so decidedly a lover of sand that wherever we see its red flags displayed over a corn field, we have no hesitation in concluding as to the light nature of the soil. In Worcestershire, wherever the soil is but a disintegration of the sandstone of the new red sand deposit, the prevalence of this plant will indicate the difference between it and the Keuper marls of the same formation. In the green sand beds of Wilts this Poppy abounds; whilst in the tertiary sands of Sussex, Suffolk, and Norfolk, this weed is so abundant as to give a fiery hue to the landscape.

In the county of Bucks, especially between the border towns of Maidenhead and Slough, the chalk has been overspread by a drift of flint pebbles, and here the Poppy is the most general weed pest; and again, as showing the fondness of this plant for sand, we may instance the deep beds of marine sands upon which both Gloucester and Cheltenham are situate as most remarkable evidence. These sand-beds rest in flexures on the surface of the lias clay, and in each case the exact boundary line of the sand pots can be made out by the prevalence of this Poppy.

The Papaver dubium (fig. 2) at first sight much resembles the former, but it differs in having an oblong seed capsule, and the stem is armed with straight hairs placed close to it and pointing upwards (appressed hairs). The herbage exudes a yellow juice on being wounded. This is by no means so general as the former species, and where it does occur plentifully it is rather an indicator of strong than light land. Most soils having a clay substratum will yield it to a greater or less extent; hence then the different indications of these two species in particular is somewhat remarkable and decided, the P. Rhœas appearing as seldom on clays as the P. dubium does on sands.

The Papaver Argemone is distinguished by its rough capsules. It is a smaller plant than either of the others, and is usually found where there is an admixture of lime; as where the chalk has become mixed with the sand-drift with which it is so much covered along the course of the Thames, or on the mixed sand and oolite soils of some parts of the Cotteswolds, this will often be a general weed, but seldom in the quantity to be so troublesome as the two former species.

With respect to directions for the destruction of Poppies, it will be found that these may be shortly expressed as follows:—1. Never let a Poppy seed on the soil. 2, Never sow fresh Poppy seed.

1. As we have observed that a single capsule of the two first species we have herein named may contain as many as five hundred seeds, and that plants of both with as many as one hundred capsules are by no means uncommon, we may see from the following sum how important it is to attend to our first dictum:—

Capsules.		Seeds in Capsule.		Seeds to a plant.
100	×	500	=	50,000

Should this plant grow upon a dung-heap, and so its seeds become spread over the land, it will not be difficult to account for a crop of Poppies, or if a field should contain only a few seeded Poppies, as the wind shakes out the seeds, and that to some distance, this will well account for the vast masses of the plant we often observe, where in fact the field is quite red with their showy flowers. Now as all the capsules do not ripen at once, but a single one or two will come before the rest, these pests should scarcely be allowed to flower, to say nothing of seeding.

2. The farmer is surely not aware of how much he sows of Poppy seed, and yet we venture to say that he seldom sows Dutch Clover, which is much employed in soil favourable to Poppies, without having from hundreds

1. Papaver Rhœas. 2. P. dubium 3. P. Argemone.

to thousands of Poppy seeds in each peck of the crop seed. Well, Poppies do not grow very large in Dutch Clover, but they manage to perfect two or three capsules in this situation on their little stunted plants, and these are gathered with the crop for seed and threshed with it too, and as the seeds are not greatly different in size, they are not easily separated, and their dark colour, like much of the Clover seed itself, renders them difficult of detection.

Attention to our rules, and Poppies ought not to be a rule anywhere. We have had to do with fields and gardens on fire with the Papaver Rhœas, where we have seen pounds of the petals gathered in a day for the use of the druggist, where now even the peering botanist can scarcely find a specimen for his herbarium. *J. B.*

THE PRESERVATION OF FOOD.*

By Rear-Admiral Sir Charles Elliot.

Judging from the public notices on the harvest, there seems little doubt that all kinds of winter support for cattle and sheep have fallen short. If that should prove to be the case, or whenever it be so, it is clear that effective means of making those stocks go farther must be more advantageous in proportion to the intensity of the pressure.

My present object, however, is not to consider the accuracy, partial or complete, of these reports, but to claim attention to the fact that meat may be preserved in carcase in this country, between the middle of November and the early part of May, as it is in Russia and in Canada, and, indeed, as it is here (without any artificial appliances) in seasons of protracted frost, for periods of considerable duration. It has, no doubt, happened to many of us to partake of a saddle of mutton in the depth of a hard winter, which had been hung up in a friend's larder for upwards of a month, not only without the least taint to the meat, but, on the contrary, to its great improvement.

There is, in fact, no difficulty in subjecting meat in carcase to the exact condition of temperature, and necessarily of dryness requisite for its perfect preservation; and, it may be confidently added, that efficiently constructed and well fitted depots for the storage of meat between certain points of reduced temperature during the winter months would be far less chargeable, troublesome, and hazardous of management than conservatories of delicate tropical plants necessarily maintained at a high degree of heat and humidity through every hour of that season so formidably trying to such productions. I have eaten of a turbot at Barbadoes (taken on the coast of England more than three weeks before), with the thermometer at a tropical range for at least six previous days, in as fine condition as I ever tasted the fish in London. Mr. Alderman Mechi, to whom I mentioned this fact, remarked to me that it did not surprise him. He had eaten of salmon taken out of a river in Scotland on the same day, which he thought could not be compared, in point of excellence, with salmon taken out of an ice basket that had probably lain in London for several days or it might be weeks.

Professor Hofmann, with whom I have conferred on this subject, observed to me that the point for consideration is not whether meat can be perfectly preserved in carcase for indefinite periods under certain conditions of reduced temperature, for that is indisputable, but whether it would be cheaper, and otherwise more advantageous, to keep the meat in carcase from the moment the animal is in a fit condition to be slaughtered, at the least outlay for food. He thought that it was very probable that may prove to be the case, and strongly encouraged me to pursue the subject.

If we suppose that a grazier, in a situation to send to market, one season with another, 20 head of cattle and 100 head of sheep in prime condition for the butcher, should be henceforth furnished with the means of storing that quantity in carcase in all the month of December, with the assured knowledge that the meat could be kept and moved to market in that state of good condition throughout the ensuing four months, it is plain that his capabilities to rear stock would be well nigh doubled. But what is true of one farm in such circumstances is true of vast breadths of land appropriated to the growth of winter food for cattle under similar conditions of security of deposit and transport to market in prime condition. With our insignificant distances of navigation, and great and increasing facilities of rapid transport, by water and land, it is easy to secure any conditions of temperature requisite for the perfect preservation of the meat, in transit, not merely in winter, but in the hottest season of the year.

What the difference would be in years of average crops between the charge of maintaining the beasts alive and of storing their carcases under defective conditions of reduced temperature, for equal periods, would of course depend on the economic soundness and practical skill of these last arrangements. At all events, I hazard nothing in saying that, even in years of most abundant crops, there would be a large margin in favour of the storage system. It is manifest that it must in all cases cost much less to keep meat cold and fresh during the winter months, when the conditions of natural temperature are favourable to such objects, than to make and keep beasts fat in the same season, when cattle food must be most expensive, and it must need much more of it to nourish the animals than in the spring and summer months.

In point of principle, it is incontestable that cattle, sheep, and hogs should never be driven one foot farther than may be necessary to transport them to positions where they can be put into carcase, and conveyed more economically, by land or water, under proper securities for the preservation of the meat in prime condition.

Adverting to the great and increasing cattle trade between Ireland and Great Britain, it has occurred to me that the most eligible mode of accomplishing the purposes in view would be to establish great abattoirs, with properly-constructed and efficiently cooled depots attached to them, at the principal ports of export, as well as establishments of the same kind at the opposite termini of the lines, and at stations along them contiguous to the great grazing districts of the country. But it would be obviously impossible to make such arrangements at every point of the lines at which cattle are received for transport. The best thing to be done, therefore, as it seems to me, would be to establish branch depots at judiciously-selected positions on the lines, such, for example, as the sites of great cattle fairs and markets, concentrating at these points effective means for slaughter storage, and transmission of the carcases from time to time to the depots of exports, as well as for utilising all the other merchantable products of great abattoir establishments, and for restoring to the soil in the fittest condition, at the least loss of time, and least cost, all that portion of the results which serve as manure.

Reflecting on this subject as I passed through Ballinasloe a few weeks before the large annual fair, it struck me that it would be an excellent position for such an establishment as had suggested itself to my mind, of course in connection with proper storage and forwarding depots at the great ports of export. Assuming that the whole organisation had been carried out by the suitable equipment of air-tight tanks in the steamships for the safe conveyance of the meat, and in the waggons on the rail (to be maintained at a temperature rather below the freezing point), it would scarcely be too much to say that the economy effected of immense stocks of expensive cattle food and in reduced freight would probably not be less than the whole amount of money which the graziers had received for the beasts they had brought up to that fair.

The above remarks refer entirely to the cattle trade between Ireland and Great Britain, but if they are sound as respects that trade, it is clear that they are equally so of the storage and transport of meat by land or water in all countries possessing the necessary pervasive facilities of rapid land and water locomotion.

The time, I believe, is not distant when the great

* From the *Journal of the Society of Arts*.

abattoir establishments of centres of large consumption, with all their mischief sanitarily considered, temptation to intemperance and vice, and waste of valuable resource, will be replaced by great central and district depots for the storage of meat, fish, poultry, and all fruits, vegetables, and other alimentary products to which scientific and systematic modes of maintaining them at the necessary degree of reduced temperature can give prolonged subsistence without deterioration.

An important effect of the successful adoption of this system for the storage and transport of meat would be to extend to it the solidity of other great staples of consumption as a basis of commercial and financial security. Sugar, for example, in depot, is subject to much more of waste than would be the case with meat under the conditions here contemplated, but sugar finds its way to consumption under much steadier circumstances, both for buyer and seller, than meat under the present hand-to-mouth conditions of supplying and clearing the market according to all the variations of the temperature and fluctuations in the cost of cattle food. It frequently happens, I am told, and especially at the seasons of Christmas, Easter, Whitsuntide, and Michaelmas, that immense stocks of the finest descriptions of meat, poultry, game, &c., collected at the great centres of consumption, are suddenly thrown upon the market, and sacrificed at a heavy loss in consequence of a sudden change of temperature. But if effective depots existed for the safe keeping of these valuable supplies that would not happen. Capitalists engaged in those branches of trade would purchase for storage in all such cases of immediate over-supply, to the great relief of the holders (usually persons of small means) and of the public.

If we advert for a moment to the enormously high prices of cattle and sheep fodder in the winter and spring of the past year (and it may be added that the prospects of the present winter are not encouraging in these respects) we shall indeed be struck with the immense public advantage of an effective system for the storage and transport of meat such as I have endeavoured to explain above. In some parts of the North of England and Scotland, where I chanced to be residing at that time, the pressure on the cattle was most distressing. Many farmers, I was credibly informed, were compelled in the lambing season to kill the lambs to save the mothers, owing to the almost total failure of the Carrot crop; and a friend of my own, who farms with great success on a large scale in Westmoreland, at several miles distance from a railway, told me that, in the very tardy spring, it would literally be cheaper for him to feed his flock on wheaten bread than on hay at the price for which he could then purchase it. Some millions sterling would have been saved to the public wealth in the economy of cattle food, in the price of meat, and in the consequences on the general trade of the country of an unusually high price of provisions throughout the winter and spring, if large stocks of the cattle intended for slaughter in the ensuing four months could have been put into carcase in the month of December, 1859, under such conditions of safe storage and transport to market as I am convinced are susceptible of steady establishment.

Most economic writers have noticed the great difference observable in the genius of invention and improvement in commercial and manufacturing processes, and in all the labours and operations which have the nourishment of man for their object. It cannot be denied, at least, that our present situation in all that concerns the preservation and transport of our animal food, is forcibly corroborative of that remark. In these respects we are still in a very backward, not to say barbarous, state of civilisation. No man of observation can visit one of our great cattle markets in large cities, or attentively examine the condition of the beasts during the voyage from Ireland, or in closely packed cars on long journeys, without being struck by the humiliating juxtaposition between great and growing advancement in the decencies and conveniences of life and revolting proofs of unnecessary violence, too often of savage cruelty, and always of deterioration of the meat, and superfluous expense, which are the results of our present modes of fulfilling this great requirement of our existence.

I do not enter into any detailed explanation of my own ideas of constructing and organising the service of the depots, or on the fitting of the vehicles or tanks of transport, either by land or sea, so as to secure the necessary conditions of temperature and cleanliness, because I am, of course, sensible that my views must be very susceptible of improvement. There is great room for ingenious scientific adaptation in these respects, and it is plain that these means cannot reach their highest points of simplicity, effectiveness, and economy, at once.

Amongst the persons with whom I have communicated on this subject is Mr. Daniel Siebe, the talented and skilful constructor of the machine for making ice on an extended scale by the ingenious process conceived by Mr. James Harrison, of Australia. These two gentlemen have succeeded in producing a perfectly effective machine, driven by a 10-horse engine, capable of making 8000 lbs. of ice in 24 hours, at an expense (in London), including interest of money and every working charge, not exceeding 10*s*. per ton, which I believe I am correct in saying is at least 50 per cent. cheaper than the ice can be landed on the wharves of this river from abroad.

They have further placed us in possession of simple, efficacious, and inexpensive means of greatly reducing, as well as regulating, the temperature of apartments of considerable area, in tropical climates, as, for example, barrack-rooms, the wards of hospitals, courts of justice, prisons, &c.* It is much to be wished that Her Majesty's Government, and more especially the Indian branch of it, may direct their early attention to this subject. The invention is of high interest, and susceptible of adaptation to a variety of important uses in the public establishments of the country with great advantage and economy. My service has been principally within the tropics, and I may therefore take this opportunity of stating that this machine is well worthy of the careful examination of reflecting persons publicly or privately connected with our possessions in low latitudes. Mr. Siebe's manufactory is No. 17, Mason Street, Westminster Bridge Road.

This whole subject appears to me to recommend itself to the particular attention of the corporations of large cities, of the chambers of commerce of the chief ports of cattle export and import, and of the directors of the main lines of railway in Ireland and in England. It seems probable that the best mode of carrying out such projects would be by means of joint-stock companies, and I am strengthened in that impression by the opinions of persons of practical ability with whom I have conferred on the matter. But, at the same time, if this extended scheme should not immediately recommend itself to the public, there is good ground for the belief that the independent adoption of well devised plans of the kind by proprietors of large estates in grazing districts, conveniently situated in the close neighbourhood of large cattle fairs or markets, as well as of railway stations, would be attended with handsome profits to the parties themselves, and substantial advantages to the surrounding country.—31, *Kensington Park Gardens, W.*

* A large provision-merchant at Hamburg, in the course of last summer, experimentalising on this plan, merely by way of trial, and with incomplete arrangements, succeeded in reducing the temperature, in about two hours, from 80° to 40° Fahr. The apartment was 70 feet long, by 25 feet wide. The expense was trifling, consisting of some feet of pipe (4 in. in diameter) and a few pounds of ice and salt.

Home Correspondence.

Fingered Barley.—The curious alteration in the spikes of Barley figured and so well described by your valued Correspondent M. J. B., cannot be due to the exceptional character of the past season, inasmuch as in the harvest of 1858 I met with several ears of Barley (Chevalier) fully as much modified as those described, growing under the most favourable conditions as regards soil and climate. I collected my specimens from the drills nearest to the footpath that traversed the field, and am unable to say whether or not any others were to have been met with in other parts of the field, as circumstances interfered with my intention of returning to search for them when the Barley was cut. I gave directions for sowing their seed the following year, in order to see how far the variation would be permanent. On inquiry, however, I find that owing to a little misunderstanding, that was not done until a week or 10 days since, so that my evidence in respect to this important point will not be forthcoming until the next harvest time. *W., Edinburgh, March* 19.——You labour under a wrong impression regarding the Fingered Barley. I grew an acre some 8 or 10 years since, but my neighbours did not think much of it. I also forwarded some to my father, Mr. Fison, of Barningham, Suffolk. He, though an enthusiastic agriculturist, pronounced it a failure. Some of the ears produced more than three offsets. I procured the seed from a large farmer in West Norfolk, Mr. Hill, of Bristow, near Holt, Norfolk, who raised it there, and supplied also a neighbour, who disliked the product. The field was various in quality, that is in some parts the fingered character of the produce was plentiful; in others scarce any was seen. *James Fison.*

Feeding Pigs on Coals.—A Correspondent in your Paper has mentioned the subject of feeding pigs on coals. Now I am neither much of a farmer nor a chemist, but some little time ago I was staying with a friend who is rather eminent in both these lines, and he told me, laughing, that he had taken to feeding his pigs, of which he keeps a very large quantity, on coals. I took it for granted that he was in joke, till I went to his farm and saw a quantity thrown down in each stye, when the pigs left their other food and eat up the coal first. I asked him what was his principle?—whether he thought the carbon had any fattening properties? and he said that he only began it because his bailiff—a hard-headed practical Scotchman—had told him that he had tried it and found it answer, and he continued it, because he found that his pigs throve better with it than without it—a reason which you may consider unscientific, but practical. I asked the bailiff his opinion, and he said he had tried it for many years, and he supposed "it was the grit that did the good;" but he added, "I'd gladly give 'em cinders—and they'll eat cinders, but they'll do them no good." I must add that I asked one of the first agricultural chemists in England for his opinion on the matter, and he said that he believed that any grit would probably do as well as coal. So I give you merely the few pros and cons that I happen to know, and leave you to draw the conclusion; but if coals will make pigs thrive, and cinders will not, it appears to me, first, that it is worth while to give coals; and secondly, that it would be worth the while of scientific men to find out why coals do them good—whether it be carbon or anything else. One would suppose that peat Moss was as unlike anything nutritious or fatty—yet when one sees excellent candles extracted from it it is enough to puzzle such an ignoramus as *B.* P.S. The quantity given I made out to be about ¼ lb. per day to each pig.

Piece-work.—Having with much pleasure read in your Journal Mr. Howard's paper on piece-work, I cannot allow the opportunity to pass without bearing my testimony to the great benefit to be derived, both to the master and labourer, from adopting piece-work. Ten years ago I introduced this system, and when I commenced the men were earning from 10*s*. to 12*s*. per week; with me many of them after two or three years' initiation of piece-work, did their work infinitely better and earned from 16*s*. to 18*s*. a week all the year round. In confirmation of the great benefit of this system to man, master, and landlord, I am pleased to tell you that 6 out of 12 or 14 men, that I usually had on the farm, are now earning the following wages, all under different masters, namely, two are earning 25*s*. a week each, two 18*s*. a week each, one 21*s*. per week, and one 16*s*. per week; and neither of these men when I took them into my employ had more than 12*s*. a week, and some only 10*s*. If you think as I do, that this is a fair test of the advantage of piece-work, give it a space in your Paper. *Author of Hints to Landlords, Tenants, and Labourers, Guildford, March* 18.

Hedge-row Trees and their Effects, &c.—To say that trees in hedge-rows are a great evil is simply to utter a truism. The fact has become so patent that it has acquired universal acceptance. We nevertheless find the evil still existing, and in many instances without any apparent effort to seek its removal. Landlords are pleased with the effect produced by well-arranged hedge-row timber, and conceive that their estates are beautified if not benefited thereby. Tenants too frequently manifest apathy and indifference upon the subject, although conscious of the evils resulting therefrom. But these evils are frequently far greater than we are wont to imagine. It was only yesterday that a case which fully illustrates the truthfulness of this remark, was brought under my notice by a near neighbour, Mr. Alfred Fryer. To be brief, Mr. Fryer has a small plot of ground near to his house which has for many years been pasture, but from some inferiority in the herbage, and for other reasons he has dug it up, and appropriated it to garden purposes. There are several trees in the hedge row. These were not suspected of being particularly injurious to the land, except just under their immediate shade. But the fallacy of these suppositions was clearly revealed the other day. One little Wych Elm tree, probably from 20 to 25 years old, and whose value for timber certainly was not more than 5*s*., had a single root which measured 69½ feet in length. This root was taken up whole by the diggers, and I assisted in measuring its length yesterday. It ran directly across the little close about 6 inches below the surface, except at the farthest extremity, where it entered a little deeper into the soil. It also possessed many little rootlets which, with their multiplied fibres, extracted from the soil that nutriment which would otherwise have supplied food to the Grass. This is a very striking case, and goes very far to show how land is impoverished by the roots and rootlets of trees grown in the hedge rows. Comment is unnecessary. Every reader can make his own application, and draw his own inferences from this one startling fact.—As I have just named Mr. Alfred Fryer, I may probably be permitted to refer to a statement of his, and some correspondence respecting it, with reference to the temperature of the never-to-be-forgotten Christmas Eve of 1860, which appeared in one part of this Paper some few weeks since. My return for that severe night was —5°, Mr. Fryer's was —15°. Mr. Marshall, of Ely, devised some explanations respecting this discrepancy, and appeared to doubt the correctness of Mr. Fryer's return, and suggested that our thermometers should be tested side by side. This has now been done, and they were both found to register precisely the same. The cause of the difference appears to be this: mine was hung upon the wall of a building about 5 feet from the ground, Mr. Fryer's was placed near the ground and quite in the open. This probably will be quite sufficient to account for the apparent discrepancy. Mr. Fryer was up until 1 o'clock on Christmas morning making experiments and testing his thermometers. Some of the facts he acquired may not prove uninteresting to those of your readers who devote attention to the subject. Mr. Fryer found the same thermometer when placed 3 feet from the ground, in the open, registered 2° higher than when on the ground, and when suspended from a wall, 8° higher. He also found that the spirit and mercurial thermometers read precisely alike. He then plunged a bark-bed thermometer into the snow, and found that, when his ordinary thermometer stood at —10°, this was only 1° below freezing point, showing a difference of 41° between being upon and in the snow. Apologising for having trespassed so largely upon your space. *Alfred S. Ruston, Aylesby House, Chatteris, March* 19.

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

At a Weekly Council, the Rt. Hon. Lord Berners in the chair.

The names of candidates for election were read.

A letter from Mr. Williams, of Chester, inclosing the following extract from the *Chester Courant*, of the 19th March, was read, in which the writer stated as the result of his observations in Anglesey, that those parts of Potato fields where there are most weeds, such as Grass, Chickweed, and the like, suffer least from the disease; that the haulm decays many weeks earlier than it used to do before the disease came in, and the young tubers thus deprived of their natural shelter from the sun may profit by the protection given them by the weeds:—

Some weeks ago we published a letter on the Potato disease which had appeared in a Bristol paper. It set forth that a Professor Bollman, in Russia, had accidentally made the discovery, seven years ago, that the disease could be prevented and the produce greatly increased by drying—nay, almost roasting—the seed Potatoes before planting, and that the Professor had continued the practice with the greatest success up to the present time. We append to-day another letter from the same quarter, which has been published in a Bristol newspaper, to which we beg the attention of our agricultural readers. The philosophy of it may be right, or it may be wrong, and it scarcely matters which if the facts are borne out. It is very easy for anyone to ascertain for himself how much roasting a Potato will endure without destroying its vitality as a seed-set. Roast a dozen Potatoes, some more, some less, and if you plant them in a hotbed, you will learn in a very few days how far you may go with those that you mean to try in the open ground. The trial is so easily made, and the subject is of such incalculable importance, that we hope many of our friends will try it, so that the effect may be ascertained under different circumstances and in different soils. We have reason to believe that the Royal Agricultural Society will not be idle in this matter, but will try to obtain information from Russia in a more satisfactory form than what has as yet reached us.

The Remedy for the Potato Disease.—In answer to numerous letters desiring information as to the best time for kiln-drying potatoes, and as the planting season of this important esculent will soon be here, I beg to inform those who are desirous of giving the experiment a fair trial, that according to the practice of Professor Bollman, the operation was performed as soon after digging time as it happened to be convenient, and that the Potatoes were dried in single layers on a heated floor, the temperature of which was gradually increased to the maximum of 140° Fahrenheit. After being submitted altogether 24 hours to this process, the tubers will be dry enough to be replaced by a fresh supply, which of course will have to be repeated until the whole stock of seed Potatoes have been heated in a similar manner. The seed may afterwards be stored in sacks or bins, or disposed of in heaps on the floor of a dry loft. For the convenience of cottagers and others whose stock of seed Potatoes may happen to be small, the common oven will answer the same purpose. It is now a well-established fact in vegetable physiology that tuberous-rooted plants especially perform the functions of suction after the stalks have died away, and the roots to outward appearance are fully ripe. In the case of late Potatoes, therefore, the deposition of the organic matter cannot be reckoned to begin until the first week in November, and as this important process in most vegetable structures is not completed until the end of January, we may safely determine the latter period to be the best time for kiln-drying the Potatoes. Again, early Potatoes should be dried in the same way any time between the middle and end of October. Let the process be carried out according to the rules here laid down, and the manner of the operation will be found to be in harmony with the revelations of botanical science. Besides, the cultivator should never lose sight of the fact that the Potato loses nothing but moisture by drying, and seeds are not considered saleable until carefully dried. One of the causes of the disease is thus removed before planting. It often happens that seed Potatoes have to be spritted at least once before planting, an operation which afterwards greatly impoverishes the crop.

A collection of Agricultural Implements, manufactured in Montreal, many of which appear to be of excellent construction and remarkably cheap, was presented by His Grace the Duke of Newcastle, Secretary of State for the Colonies, by whom they had been brought home from Canada.

The Council then adjourned over Passion and Easter weeks to the Monthly Meeting on the 10th April.

Vale of Evesham: *March* 11.—The Committee of this Society met on the 11th inst. to arrange the operations of the Society for the current year. Lord Sudeley was elected President and the committee was formed.

It was determined to offer the same premiums as last year with first and second premiums, viz., 4 classes in cows, 12 classes in sheep, 4 in horses, and 5 in pigs. The Duke d'Aumale's Plate for the best six acres of Mangel Wurzel, as well as Mr. Cartwright's for the same quantity of Swede Turnips, will be again offered. It was also determined that the roots to be exhibited should be drawn from a regular crop of not less than an acre. First, second, third, and, in some cases, fourth premiums will be offered in 10 classes for Labourers and Domestic Servants, and sums be appropriated to extra stock, &c.

Farmers' Clubs.

Newcastle: *Agricultural Statistics.*—At the last meeting of this club Mr. Lawson proposed that they request the co-operation of the principal Farmers' Clubs and Agricultural Societies in the kingdom on this important subject, and that they submit to them the following basis of a measure, with a request that they would make such suggestions and amendments as to them appear necessary:—

Clause 1. To obtain the returns from the occupiers of land, through valuers elected on the representative principle, one valuer being elected for each parish, the office to be honorary, and the election annual.

2. The valuers in each county to elect from their body one superintendent, such officer to remain in office three years, and to receive a salary regulated by the area and the number of occupancies.

3. The whole to be under the direction of a Commissioner appointed by the Crown and responsible to Parliament.

4. The returns by the occupants to be voluntary, with power, in case of neglect, for the valuer to make such inspection as might be necessary to supply any deficiency.

5. The superintendents to direct the valuers as to the time of obtaining the returns; but so as the return of the live stock and acreage be not later than the 10th of July, and the estimate of the grain and root crops not later than the 10th of September in every year.

6. The returns to include all occupancies at and exceeding 20*l* of annual value.

7. The superintendent to receive from the valuers the aggregate return of each parish, and to make an aggregate return of the quantity of live stock and acreage of crops for their respective counties to the commissioner not later than the 20th of July, and of the estimated yield of the crops not later than the 20th of September in every year.

8. The Commissioners to cause to be published a statement of the quantity of live stock, and the acreage of crops in Great Britain, not later than the 1st of August; and of the estimated yield of the crops not later than the 1st of October in every year.

9. These statistics being for the national purpose, all costs incurred in their collection to be provided for by parliament.

Such statistics would enable the farmer to compare the stock on hand with the amount of food available for feeding purposes.

Mr. Glover moved that the matter be referred to a committee, consisting of Messrs. Lawson, Crisp, Weeks, Turnbull, Wilson, and the chairman, for the purpose of drawing up a communication to other farmers' clubs on the subject.

This was carried unanimously.

Morayshire.—The Morayshire Farmers' Club, finding that most of the fat cattle have, of late years, been sold out of the district before February, earlier than which seeds are not in season for showing, resolved this year to restrict their winter show to seeds and roots. We give the weights of the prize parcels of grain exhibited:—

	lbs.	oz.
White Wheat.		
1. Mr. Lawson, Oldmills	64	10
2. Mr. Smith, Middlefield, Forres	63	6
Red Wheat.		
Mr. Walker, Kintrae	63	3
Chevalier Barley.		
1. Mr. Smith, Middlefield	56	9
2. Mr. M'Bey, Woodside	56	3
Common Barley.		
1. Mr. Lawson, Oldmills	55	13
2. Mr. Geddes, Orbliston	55	15
Sandy Oats.		
1. Mr. Paterson, Mulben	41	12
2. Mr. Wilson, Westertown	43	4
Potato Oats.		
1. Mr. Stephen, Inchbroom	44	6
2. Mr. Wilson, Westertown	44	1
Any other Variety of Oats.		
1. Mr. Wilson, Westertown (Grey Angus)	44	6
2. Mr. Paterson, Mulben (Prince Albert)	41	13
Perennial Rye-grass.		
1. Mr. Smith, Middlefield	28	8
2. Mr. M'Pherson, Pitcroy	21	13

The great weight of the Barley and some of the Oats shown deserves notice.

The Morayshire Farmers' Club has been in existence for upwards of 60 years without a break. The first patron of the Club was the late Duke of Gordon, and the next the late Duke of Richmond. The present Duke has just accepted the office. In the two former patrons the Club was highly fortunate. They countenanced its proceedings in every way, by giving time, pains, and money, and to them perhaps a good deal of its success has been due.

They have the credit of having been among the earliest to publish experiments on the use of superphosphate of lime. Their report, introduced by a letter from the late Duke of Richmond, appeared in one of the earliest volumes of the English Agricultural Society's Journal. We quote from the proceedings of their late anniversary one useful and important official suggestion, a useful paper on fences, and excellent practical speeches from the secretary and one of the judges. The following deserves the attention of other local societies:—

Experiments in the Feeding of Cattle.—The Committee, considering the immense importance attached now-a-days to the feeding of cattle, recommend that 15*l*. should be given from the funds of the Society, to cover extra expenses in carrying out experiments in feeding upon different kinds of food, these being tested by weighings of the cattle and quantities of food consumed, at stated periods, commencing at the time when the animals are laid in, and concluding when it is supposed they are ready for sale. Your Committee consider that such experiments will be of essential service. The result of the experiments would, of course, be duly reported.

We now give a report of Mr. Cruickshank's paper on farms.

Decay in Paling Posts.—The Committee have much pleasure in introducing to the notice of members an excellent paper by one of themselves, viz, Mr. Cruickshank, Marcassie, as to a remedy for the rapid decay of posts used in connection with paling for fences. The following is Mr. Cruickshank's paper:—

To those who are accustomed to the use of paling for fences, it is well known that such fences are very expensive, not only in the first cost, but also in keeping up, from the rapid decay of the posts, particularly that part of the posts at or near the surface of the ground; and to know a remedy for such rapid decay of posts may be acceptable to those interested.

The following experiment, although only of four years' standing, is to all appearance very satisfactory. In the first place, I was careful to leave as little bark as possible on the paling-heads or posts. In the next place, when I dug the holes (22 inches deep) for said heads or posts I spread away the earth dug out, and filled up the pits round the posts, when put in, with stones, about the size of that used for causeways—packing them well with a mallet made for the purpose, and no earth from the sides allowed to come in contact with the posts.

I may mention that the ground on which this experiment is now going on, is of such a nature that old full-grown Scotch Firwood posts, put in in the ordinary way, would be rotted over at the surface of the ground in three, or, at most, four years. But on examining the same kind of posts, filled in with the stones four years ago, I found the part at and under the ground as sound as that above the ground, and to all appearance will last as long as any part of the paling.

In spring of 1859, I commenced a similar experiment with Larch posts for wire paling, and which I expect will prove equally satisfactory.

With regard to Larch posts for wire paling, an idea became very general, that to leave on the bark would to some extent preserve the posts from rotting. This idea has proved a mistake so far as I have experienced, as the following will show:—In the spring of 1843 there was a large quantity of young Larch trees barked at Altyre, and the bark sold, and in course of the summer the trees were sold in lots, of which I bought as many as made upwards of 60 dozen of posts for wire paling. In 1850 to 1853 I put in upwards of 100 dozen Larch posts with the bark left on, and on examination in 1860 I found the posts of 1843 in a better state than the average of those put in in 1850 to 1853. I find that the posts, with the bark on, rot much sooner at the ground and where the staples are driven, and consequently they lose their hold.

There is yet another experiment that circumstances forced me to adopt, and which proved very serviceable. Last year (1859) I had two Grass parks alongside each other, with a four barred paling between. In one of them there were three colts and in the other seven, and in the month of May scarcely a day passed that some of the bars were not broken or driven down and the colts together. To prevent this, I adopted the following plan:—At every hundred yards' distance, I put in a stretching-post beside the other paling, and put up and tighted a No. 5 wire at the height of the upper bar or rail and stapled it to the paling heads on the one side, and from the time I did that, during the season I had no more trouble, and the colts never got together again. I may mention that in course of the season a good many of the upper rails were taken out of this fence to repair other palings, and the wire served the purpose of a rail, and I have no doubt but said wire will keep up the paling when a good many of the posts or heads are decayed at the ground, and would otherwise require to be replaced with new.

This plan might be adopted to advantage with the paling along the different lines of railway as well as on farms. From the foregoing remarks it will appear—First, that when Larch or Firwood is to be exposed to the weather, or put into the ground, no bark should be left on. Second, when posts are to be put into the ground, no earth should be put round them, but stones. Third, when a wooden fence is to be put up, a No. 4 or 5 wire should be stretched in place of or alongside the upper rail. If a proper Larch fence were put up, or Larch posts for wire paling put in, as suggested, I have no doubt but they would stand a lease of 19 years, as the part above ground of my posts of 1843 are good yet, and the fences only partly substituted with new posts. *J. C.—Jan.* 1861.

Mr. Geddes (the Secretary), made the following remarks on the proposed experiment on fattening cattle. He said:—You all know that for a good many years past the rearing and fattening of sheep and cattle has been our sheet-anchor. We have had a very high rate indeed for beef and mutton; any man who takes the trouble of looking back upon his books for a series of years will find that there is an amount of money arising from the rearing and fattening of stock which did not exist at all some few years ago; and as we are told—that so long as the manufacturers of this country thrive there will be an increased demand for these articles, I think it is a most important matter to ascertain the cheapest rate at which we can manufacture that beef and mutton for them. Now, when we talk of the cheapest rate, I mean that we should take into consideration the extraneous substances required in the feeding of these cattle, and the part of these substances which goes for the enriching of our land again. There can be no doubt it is a most efficient mode of enriching our soil to feed our cattle upon oil-cake or any such feeding stuffs, for it all goes into the land again; and we all know that from the high feeding qualities of these commodities the manure must be of a very valuable kind. The object of the Club is to ascertain the cheapest rate at which we can manufacture our beef and mutton—the cheapest rate profitable to us, for if we do not find it profitable we cannot get on with it. But I think if we are enabled to carry on these experiments practically—to bring out the result not only in beef but in money—we shall confer a boon upon the agriculturists of this part of the country.

Finally, Mr. Allan, one of the judges of grain, on the other hand recommended especial attention to the growth of Barley. He said:—

I recollect that 20 years ago it was hardly possible to get a man south of the Tweed to try our Morayshire Barley. Now the case is totally different, and I am convinced that the Morayshire Barley will year after year come more and more into repute. In these circumstances I think it right that the utmost attention should be given to the growth of Barley, and particularly of Chevalier Barley. Don't cut your Barley too green. You know that colour is always a matter of chance, but the body of the Barley can be much improved by good management. You know the nice curl we like to see, and you know that if not well ripened it will not malt well—and it is of the utmost importance, for the credit of the Barley of the county, that these things should be attended to. If there is any bit of Barley laid down, farmers should try to keep that by itself and not mix it with the rest of the Barley. If you want a great price for your Barley, you must try and keep the good from the bad. It will not do to mix it all up higgeldy piggeldy.

We have taken the above extracts from a full report in the *Elgin Courant.*

Calendar of Operations.

MARCH.

North Northumberland: *March* 8.—The beginning of March seldom revealed the Clover seeds so good as we now have them. With a superabundance of Turnips at command, all breeding stock will be well fed, without resorting early to the intended meadows for succulent spring food, thus preventing any severe check endangering their growth from over eatage. The Turnip fields yet contain bulk enough to supply any demand thereon. Prices now are very low. Whites can be had for hogs at 2½*d*. per week; and cut Swedes may be taken readily at 5*d*. Having those so plentiful within ourselves, oil-

cake and other artificials have receded in price since the opening of the year. Young cattle are now extra fed, and will, without doubt, leave the folds for grazing, in May, in a very forward condition. Highland flocks, too, will undoubtedly partake largely of Turnips—a circumstance which will have its influence upon the coming public lets of Grass parks. Leicester breeders are now looking out for lambs. The ewes are in high condition, having, throughout winter, always been full fed. Not even 8s. per stone for beef, or 9d. per lb for mutton, has induced us to make an exodus from our feeding flocks. Our comparative short supplies, hitherto sent to market, are solely attributable to the fact that we are holding on our fat to assist to consume our Turnips. Bean seed time is now at hand, before we are altogether ready for it. Early ploughed fields are drilling up in fine tilth, but others recently ploughed lie bidding defiance to the ordinary appliance of the plough and harrow. Many of us, however anxious to sow early, have no other alternative but to wait, in the hope that Providence will yet save us from being compelled to resort to pulverisers to accomplish our labours. We have yet no symptoms of a seed time for Oats. A partial sowing has commenced in Glendale, but all the stronger soils are yet too wet. Late ploughed leys in places will require the action of frosts or rain to make them work easy. From the middle of March up to its close is the season generally looked upon as the best for sowing Oats; therefore, with open weather at that time, the land will soon be got sown. Our general practice of sowing broad cast with the hand in Northumberland is open to condemnation. That the corn drill is superior for the regular distribution of seed does not admit of a doubt. *Newcastle Daily Journal.*

STATE OF THE WEATHER—BERKSHIRE.

For the week ending March 21: observed by Mr J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air. Max. in Sun.	Max. in shade.	Min.	Mean.	Temperature of Soil 1 foot below the surface.	Rain.	Wind	Barometer.
	Degs.	Degs.	Degs	Degs.	Degs.	Ins.		
Friday 15 ..	68.6	50.6	38.0	48.7	41.0	0.01	N.W.	29.80
Saturday 16 ..	73.2	50.0	25.0	43.4	42.0	..	S.W.	29.84
Sunday 17 ..	47.0	43.2	29.4	37.1	40.5	0.05	S.W.	29.70
Monday 18 ..	40.0	40.0	31.4	35.3	40.0	0.43	W.	29.30
Tuesday 19 ..	53.4	43.0	36.0	41.8	41.0	0.06	N.W.	28.80
Wednesday 20 ..	64.0	49.0	33.0	44.5	41.5	0.02	W.	29.55
Thursday 21 ..	45.8	44.0	31.4	37.9	41.5	0.20	W.	29.25

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Error in printing last week, viz., the Temperature of Soil for Monday, 11th, should have been 42.5, instead of 45.5.

Notices to Correspondents.

ADDRESSES: *Young Farmer.* Tiptree Hall is 4 miles from the Kelvedon Station, Eastern Counties Railway. Lois Weedon is 10 or 12 miles from the Blisworth Station, London and North-Western Railway. In either case you ought to make a previous application by letter.

ARTIFICIAL MANURE: *Oxfordshire.* A pamphlet by Mr. Moule describes the manufacture of an inodorous fertiliser from clay and night soil (Bradbury & Evans). As to the other substances named—10 of bones, 5 of sulphuric acid mixed in a heap, and the result mingled with 15 of any waste flesh or night soil, and then thrown together and repeatedly mixed and turned over, with 70 or more of moist but friable clay soil, will make the very best of compost, to be used as a dressing at the rate of 10 to 20 cwt. per acre.

CYANIC MANURE: *S B.* The "Cyniac" manure to which your handbill refers is no doubt the "Cyanic" which has been before the public some years. What right it has to its title, which implies the presence of ingredients containing nitrogen combined otherwise than as in ammonia and nitric acid we do not know. The analysis is not very encouraging. Its 12.7 per cent. of organic matter *may* be worthless—its 25.508 of insoluble matter *must* be worthless. There are but 3.401 per cent. of phosphate of lime and magnesia, and nearly one-half is gypsum. On the other hand 11 293 per cent of ammonia are certified, and "0.834 of chloride of sodium," or, to speak more intelligibly, about a pinch of common salt to a handful of the stuff. The use of three places of decimals to indicate the composition of manures is a farce.

MANAGEMENT OF A DAIRY: *Inquirer.* Read the "Handbook of Dairy Management" (1s. 6d.) published by Longmans. Dairy produce is disposed of if on a small scale to neighbours, or on a large scale to Newgate Market or Leadenhall Market salesmen. It is hardly likely that taking as an entire novelty to dairy farming you will succeed, unless you have already had the management of labourers, and know how to choose and retain the services of competent hands. Pleuro-pneumonia and the distemper may well deter any one who has not capital to fall back upon from entering into dairy husbandry.

OATS: *O.* Black Oats are not the most remunerative on well cultivated land. They will not pay better than the Potato Oat. We should prefer Tartarian Oat, either black or white, to the Poland Oat. They will generally produce a greater weight of corn per acre than any other sort, but not so much meal.

PERMANENT GRASS: *Agricola.* Your light sandy soil after Turnips, if any portion of them have been fed on the land, does not want any manure before sowing Grass seeds. If the soil is at all too rich or the Barley likely to be laid, then the Grass seeds had better be sown by themselves without a light Barley crop.

POTATOES: *Subscriber.* Plant them far enough apart to give earth enough to cover them deeply—that is the only advice probably that would be given by a reader of the latest writings on the subject. But we have known failures under deep covering, and therefore will not do more than recommend you to plant in well tilled land, manured if possible in autumn: and on your dry land you ought not to suffer much.

WINTER VETCHES: *K.* Mr. Richard King, of Wilton Road Salisbury, writes as follows to *Bell's Weekly Messenger:* "From the exorbitant price of seed winter Vetches last autumn, the lateness of sowing, and the severity of the winter, doubtless many fields are now thin and weak in plant; therefore, allow me to state or suggest a system advantageously adopted by Wiltshire flockmasters—namely, in the latter end of next month, or the beginning of April, to sow about 12 lbs. of Mustard seed to the acre, and very slightly harrow in, and roll it; rolling is sufficient only if the land is loose and pulverised. The wholesome properties of the Mustard, when in full bloom, tend to prevent scouring in the flock from the succulent properties of the Vetches, if fed off early. Of course, the above recommendation or suggestion will be only applicable where the Vetches are intended to be fed off by sheep or lambs. My reason for being thus early with the above intimation is to prevent lands where thinly planted being reploughed, and sown with a spring crop." [Less seed than the above would suffice.]

PLYMOUTH SEED COMPANY, PLYMOUTH.—
SEEDS FOR THE FARM.

Mixed Grasses for Permanent Pasture, 28s. to 34s. per acre.
White Clover, Red Clover, and Cow Grass, 8d. to 1s. per lb.
Plymouth Swede Turnip, 2s. 6d. per lb.
Grant's Pine Apple Green Top, very hardy, 1s. 6d. per lb.
Globe Turnips, 1s. 6d. per lb.
Tankard, ditto, 1s. 6d. per lb.
And all other Agricultural Seeds at moderate prices.
For further information see advertisement of March 9.

The FARM SEED LIST can be had on application.

FREIGHT AND CARRIAGE.—All Orders for Seeds above 1l. will be delivered Free of Charge to any Railway Station between Plymouth and Paddington; and to all Stations on the Cornwall, Tavistock, and North Devon Railways.

All Orders above 2l. Free to any Station on the Broad Gauge Railways, or to any Market Town in Devon and Cornwall; or to Cork, Dublin, Waterford, Limerick, Belfast, and Liverpool by Steamers; and to Guernsey and Jersey by Traders.

All Orders above 5l. will be delivered Free of Carriage to any Railway Station in England and Wales; and to any Steam Port in England, Wales, Scotland, or Ireland.

All heavy articles, such as Grain, Tares, Clover, &c., are exceptions to the above Rates.

Address: Plymouth Seed Company, Plymouth, Devon.

FARM SEEDS.—Genuine Seeds of Select Orange Globe Mangel, from large roots and very choice, per lb. 1s. 4d.

Yellow Globe Mangel, select	,,	1	3
Elvetham Long Red Mangel, very large	,,	1	3
Other Varieties, all at	,,	1	3
Select Bronze Short-top Swede, very hardy ..	,,	1	6
Improved Skirving's Swede	,,	1	6
Sutton's Champion Swede	,,	1	8
White Belgium Carrot	,,	1	0
True Altringham Carrot	,,	1	8

Fluke Potatoes 5s. 6d. per 80 lb., off the Moss.

PRICED CATALOGUES of FARM and GARDEN SEEDS on application to HENRY BROWN, Seedsman, 4, Commutation Row, Liverpool.

MANGEL WURZEL AND CARROT SEED.

WM. ADAMS begs to offer the following SEEDS, true (for cash):—Elvetham Long Red Mangel Wurzel, 1s. 6d. per lb.; Red Globe do., 1s. 6d. do.; Long Yellow do., 1s. 6d.; Orange Globe do., 1s. 9d.: selected Altringham Carrot, 2s. do.—Dominie Cross Nursery, East Retford.

MANGEL WURZEL SEED FROM LARGE BULBS.

SUTTON'S MANGEL ROOTS AT THE SMITHFIELD CLUB CATTLE SHOW AND THE CRYSTAL PALACE ROOT SHOW (which were allowed to be the finest exhibited at these shows) were all grown by fair open field culture from Messrs. SUTTON's seed by upwards of 30 farmers and noblemen residing in different localities on different soils *The leading prizes at the Crystal Palace and Birmingham Shows* were awarded to some of these same growers. While great credit is due to the cultivators, the fine shape and quality of these Mangels is fairly attributable in a great desire to the superior stocks which Messrs. SUTTON have succeeded in raising from their annually selected roots.

Messrs. SUTTON & SONS have some fine new Seeds saved as usual from selected Roots, which they are now sending out at 1s. 6d. to 2s. per lb., or cheaper by the cwt. SUTTON'S LARGE YELLOW GLOBE is the best sort in cultivation for general purposes.

A PRICED LIST of new sorts of Mangel and other agricultural Seeds may be had post free on application, addressed SUTTON & SONS, Royal Berkshire Seed Establishment, Reading.

ARTIFICIAL MANURES, &c.—Manufacturers and others engaged in making ARTIFICIAL MANURES may obtain every necessary instruction for their economical and efficient preparation, by applying to J. C. NESBIT, F.G.S., &c., Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, Coprolites, &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch. Gentlemen desirous of receiving instruction in Chemical Analyses and Assaying, will find ample facility and accommodation at the College.

THE LONDON MANURE COMPANY
(ESTABLISHED 1840,)
Are now prepared to send out the following MANUFACTURED MANURES:—

SUPERPHOSPHATE OF LIME, of best quality.
DISSOLVED BONES, AND BONE MANURE FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN AND ROOTS.
CORN MANURE FOR AUTUMN SOWING.

They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate, to be obtained entirely from Bones.

The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE OF SODA, SULPHATE OF AMMONIA, and every Manure of value.

116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

LOOK TO YOUR GRASS LANDS AND DOUBLE YOUR CROPS by dressing them with PULVERIZED BONES, to be had only of JARED TERRETT HUNT, Lambeth Wharf, Lambeth, S., and Downham Market, Norfolk 5 cwt. sufficient for an acre, and the present the time for dressing. Prepared bones for Vine borders and fruit trees. Half inch bones, bone dust, superphosphate of lime, gypsum, guano, and all other artificials of guaranteed quality.

ESTABLISHED 1821.—UNIVERSAL SUCCESS OF
GRIFFIN, MORRIS, AND GRIFFIN'S MANURES. They have now been tried in 20 English counties, and invariable testimony borne to their value as Manures adapted for the TURNIP, MANGEL WURZEL, WHEAT, GRASS, AND POTATO CROPS.

Full particulars upon application to GRIFFIN, MORRIS, & GRIFFIN, Ceres Works, Wolverhampton.

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861, are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME .. .. £ .
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES .. 5 5
LAWES'S BARLEY, GRASS, AND MANGEL MANURES 8 9

These Manures can be obtained of MR LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.

Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.

American and other Cakes at market prices.

Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.

CONCENTRATED TURNIP MANURE, equal in value to the preceding.

Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."

Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

TAN Gratis, in the immediate neighbourhood of Covent Garden Market.—Apply to ESSEX & SONS, 8, Stanhope Street, Clare Market, W.C.

COLLEGE OF AGRICULTURE AND CHEMISTRY, AND OF PRACTICAL and GENERAL SCIENCE, 37 and 38, Lower Kennington Lane, Kennington, London, S.

Principal—J. C. NESBIT, F.G.S., F.C.S., &c.

The system of studies pursued in the College comprises every branch requisite to prepare youth for the pursuits of Agriculture, Engineering, Mining, Manufactures, and the Arts; for the Naval and Military Services, and for the Universities.

Analyses and Assays of every description are promptly and accurately executed at the College. The terms and other particulars may be had on application to the Principal.

THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.

TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c. IN ENGLAND AND WALES AND IN SCOTLAND.

The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.

For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

TENANT FARMERS' MANURE COMPANY.

ODAMS'S BLOOD MANURE FOR CORN.
ODAMS'S BLOOD MANURE FOR ROOTS.
ODAMS'S SUPERPHOSPHATE OF LIME,

MANUFACTURED BY THE PATENT,

NITRO-PHOSPHATE OR BLOOD MANURE COMPANY
(LIMITED),

Consisting of TENANT FARMERS, occupying upwards of 30,000 Acres of Land.

Chairman.—JONAS WEBB, Esq., Babraham, Cambridgeshire.

All particulars may be had on application at the Offices. C. T. MACADAM, Secretary.

Offices: 109, FENCHURCH STREET. Manufactory: PLAISTOW MARSHES, ESSEX.

SEED ESTABLISHMENT, STIRLING, SCOTLAND.

Gentlemen engaged in Agriculture are respectfully informed that our

PRICED CATALOGUE OF FARM SEEDS

IS NOW READY, AND MAY BE HAD POST FREE ON APPLICATION.

In recording our obligations to the many Noblemen and Gentlemen who have for a long series of years intrusted us with their orders for AGRICULTURAL SEEDS, we beg to assure them of our determination to adhere in all its integrity to the system hitherto acted upon, of keeping only the most perfect or improved varieties in the different classes, and guaranteeing the Seeds free from any of the numerous adulterations so frequently practised to increase profits or cheapen prices. By pursuing this legitimate system of fair dealing, we have been rewarded by a large and progressive increase of business, to meet which, our arrangements for augmenting the supplies have been greatly extended, and we are now prepared to execute orders from one of the most extensive stocks in the country.

Stirling is most favourably placed in point of Railway accommodation, there being direct and constant traffic to all the principal Stations in Scotland and England, and by Steamers (viâ Glasgow) almost daily to the chief Ports in Ireland, thereby insuring a speedy delivery of Goods, all of which (with certain limitations) we forward carriage paid.

W. Drummond & Sons

STIRLING, AND 58, DAWSON STREET, DUBLIN.

WELLINGTON ROAD, ST. JOHN'S WOOD.

MESSRS. E. G. HENDERSON AND SON'S

Illustrated Seed Catalogue and Amateur's Guide.

POST FREE ON APPLICATION. SEEDS CARRIAGE FREE TO DESTINATION.

CLIANTHUS DAMPIERI, English seed, 2s. 6d. each, or three for 5s. Foreign seed, 12 for 2s. 6d.

N. B. The Trade supplied for growing on at special prices on application.

ZINNIA ELEGANS FLORE PLENO (double flowered varieties, various colours mixed).—These are, without exception, the most remarkable and unexpected novelties of the present season. Per packet, 1s. and 2s. 6d., Continental or Indian saved seed.

GYNERIUM ARGENTEUM (Pampas Grass), seed packet, 1s. and 2s. 6d. Plants 6d., 9d. and 1s. each.

ATROPLEX HORTENSIS RUBRA, red-leaved bedding plant, 6d. and 1s., used largely at Trentham.

LOBELIA BICOLOR MARMORATA, beautiful, 1s.

PTERIS TRICOLOR, the beautiful new variegated Fern, 2s. 6d.

HENDERSON'S PERFECTION SWEET WILLIAM, per packet, 1s. and 2s. 6d., greatly improved on Hunt's varieties.

PHLOX DRUMMONDI RADOWITZI, true from seed, 1s.

WELLINGTON CAULIFLOWER.

The finest kind in cultivation; pure white, size of head over 2 feet; in growth very dwarf, the stem not more than 2 or 3 inches from the soil. Per packet, 2s. 6d.

The following should be sown immediately for Bedding and Ornamental Garden decoration:—

Lobelia speciosa, 1s.
Perilla nankinensis, 6d.
Dianthus Heddewigii, 6d. & 1s.
,, laciniatus, 6d. & 1s.
Isotoma, of sorts, 6d. each.
Cobæa scandens, 6d., 1s., and 1s. 6d.
Maurandya, blue, 6d.
Maurandya, white, 6d.
,, red, 6d.
Lophospermum Henderson, 6d.
Thunbergia, of sorts, 6d.
Tropæolum atrococcineum, 1s.
Petunia coccinea, 1s.
,, choice mixed, 1s.

Strong Plants to flower of the following:—

TRITOMA UVARIA .. .. 6d. each.
,, SEROTINA .. .. 6d.
TRITOMA GRANDIFLORA .. .. 1s. 6d.
,, GLAUCESCENS .. .. 1s. 6d.

The last kind is the Kew Garden variety, the most beautiful for beds and groups. T. UVARIA is uncertain from seed and variable in character.

E. G. HENDERSON & SON, Wellington Road, St. John's Wood, N.W.

ROYAL HORTICULTURAL SOCIETY.—FLORAL COMMITTEE.

LIST OF AWARDS, MARCH 26, 1861.

FIRST CLASS CERTIFICATE.

Hybrid Guatemalan Cattleya, from Mr. Veitch, Chelsea.

Pteris cretica albo-lineata, from Mr. Veitch; and from Mr. Bull, Chelsea.

Azalea Flag of Truce, from Mr. Todman, gardener to R. Hudson, Esq., Clapham.

COMMENDATION.

Primula sinensis (fimbriata) rubella plena, from Mr. W. Bull.

Primula sinensis (fimbriata) nivea plena, from Mr. W. Bull.

Primula sinensis filicifolia, from Messrs. E. G. Henderson & Son, St. John's Wood.

Cineraria Prairie Bird, from Mr. C. Turner, Slough.

Cineraria Maid of Astolat, from Mr. C. Turner.

SPECIAL CERTIFICATE.

To Messrs. Cutbush & Son, Highgate, for collections of Hyacinths and Tulips.

To Mr. Turner, Slough, for a collection of New Cut Roses.

The next Meeting of the Committee will take place on April 9.

THOMAS MOORE, Secretary to the Committee.

ROYAL HORTICULTURAL SOCIETY.—Notice is hereby Given, that the next GENERAL MEETING of the Society for the ELECTION OF FELLOWS, will be held in the Council Room in the Society's New Garden, South Kensington, W., on TUESDAY, April 9th. The Chair will be taken at 2 o'Clock. On this occasion a Ballot for the following Plants will also take place.

LIST OF PLANTS FOR BALLOT.

1. ARDISIA CRENULATA. An ornamental stove shrub, bearing red berries.
2. GARDENIA SP. From seeds sent to the Garden; said to be a large flowering species. Natal.
3. PELTANDRA VIRGINICA. A half-hardy herbaceous aquatic plant.
4. IMPATIENS JERDONIÆ. A fleshy-stemmed stove plant, with scarlet flowers.
5. HIBISCUS ROSA SINENSIS. Scarlet flowering stove shrub.
6. BOUGAINVILLEA SPECTABILIS. The finest of all stove or greenhouse Creepers, with deep violet hop-like flowers.
7. THYRSACANTHUS RUTILANS. A beautiful stove shrub.
8. CYANOTIS VITTATA. Very fine variety.
9. DRACÆNA RUMPHII. Stove shrub? East Indies.
10. BEGONIA PALLATANTRE. Stove shrub, Peru.
11. SPIRONEMA FRAGRANS. A fragrant stove herbaceous plant, Mexico.
12. CHIMONANTHUS GRANDIFLORUS. A hardy fragrant shrub, flowering at Christmas, China.
13. YUCCA PARMENTIERI. Ornamental greenhouse plant, Mexico.
14. ,, FILIFERA ,, ,, ,, ,,
15. BONAPARTEA GRACILIS. ,, ,, ,, ,,
16. AGAVE SP., No. 1. ,, ,, ,, ,,
17. ,, SP., No. 2. ,, ,, ,, ,,
18. LITTÆA XALAPENSIS. ,, ,, ,, ,,
19. DASYLIRION LONGIFOLIUM. ,, ,, ,, ,,
20. BONAPARTEA FLAVA. ,, ,, ,, ,,
21. AGAVE COCCINEA. ,, ,, ,, ,,
22. PINCENECTITIA GLAUCA. ,, ,, ,, ,,
23. AGAVE FILIFOLIA. ,, ,, ,, ,,
24. SEMPERVIVUM CALYCIFORME. Succulent greenhouse plant, Canary Islands.
25. ,, (GREENOVIA) FALLAX, do., Canary Islands.
26. ,, SUBTABULÆFORME. ,, ,,
27. ,, TABULÆFORME. ,,
28. WACHENDORFIA SP. Bulb, Cape.
29. DUVAUA DEPENDENS. Half-hardy evergreen shrub, Chili.
30. BILLARDIERA LONGIFOLIA. Greenhouse evergreen creeper.
31. ,, CYMOSA. ,, ,,
32. BANKSIA INTEGRIFOLIA. Greenhouse evergreen shrub, Australia
33. GOMPHOCARPUS ARBOREUS. ,, ,, ,, ,,
34. FRENELA VENTENATI. ,, ,, ,, ,,
35. SOLANUM GIGANTEUM. ,, ,, ,, ,,
36. LASIOPETALON BAUERI. ,, ,, ,, ,,
37. ACACIA DEALBATA. ,, ,, ,, ,,
38. ,, CELASTRIFOLIA. ,, ,, ,, ,,
39. ,, LATROBII. ,, ,, ,, ,,
40. ,, LONGIFOLIA. ,, ,, ,, ,,
41. ,, VERTICILLATA. ,, ,, ,, ,,
42. ,, MYRTIFOLIA. ,, ,, ,, ,,
43. ,, DODONEÆFOLIA. ,, ,, ,, ,,
44. ,, LEPROSA. ,, ,, ,, ,,
45. ,, RETINOIDES. ,, ,, ,, ,,
46. ,, SALIGNA. ,, ,, ,, ,,
47. ,, ARMATA. ,, ,, ,, ,,
48. ,, SP. ,, ,, ,, ,,
49. ,, SOPHORA. ,, ,, ,, ,,
50. GREVIA CLEISTOCALYX. ,, ,, ,, ,,

Fellows of the Society desirous of obtaining any of these plants, if Life Members of 40 guineas, or Annual Subscribers of 4 guineas, are requested to name 12 sorts; if Life Members of 20 guineas, or Annual Subscribers of 2 guineas, to name six sorts.

The arrangements for conducting the Ballot render it necessary that the names of the plants, or the number prefixed thereto in the above list, should be sent to the Offices of the Society, South Kensington, W., on or before SATURDAY, April 6th, after which date no applications can be attended to.

ANDREW MURRAY, Assistant Secretary.

The Gardeners' Chronicle.

SATURDAY, MARCH 30, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

WEDNESDAY April 3—Royal Botanic (Spring Meeting), 2 P.M.

NOTHING is much more important than that the stems of trees should be well grown, whether intended for timber, or standards supporting a fruit-bearing head. In either case a good stem should be straight, unless for special purposes there may be reasons for the contrary, as in the case of naval crooks; and it should be strong, in order to resist the force of winds, and maintain its erect position. In natural forests the majority of the stems have these properties, although the trees may have never been indulged by a taste of the pruning-knife or axe; whilst amongst those that we tutor from their youth with anxious care, really good stems are in most cases the exception. This would seem to lead to the conclusion that care and cultivation do harm in forming stems, and that it is, therefore, better to leave them to their natural mode of growth. This, however, cannot be admitted, for we know that in order to

obtain stems fit for our artificial purposes, interference with natural growth is absolutely necessary. Others may say that bad stems are the inevitable consequence of cultivation. Before acquiescing in this, it is as well to consider whether it is not possible for the head to have misdirected the hand in some of the processes connected with artificial management, and if bad results can be traced to unskilful operations, a little attention to the subject may give rise to a better system of treatment.

With this in view, we shall first offer some observations on the growth of stems in the natural way, making the calculations from actual measurement of a Plum shoot of one summer's growth from the graft. The tree had grown in deep alluvial soil, and would be termed by gardeners a vigorous maiden plant. Near the top its diameter was 2-10ths of an inch; at the base about an inch, the proportion being as 2 to 10. But the sectional areas, being to each other as the squares of the diameters, are as 4 to 100. The shoot is in fact an elongated cone. How it assumed this form is easily understood. We had not an opportunity of counting the leaves, but we know there must have been one for every bud that can now be seen, for buds on this kind of tree only form in the axils of leaves. On the main shoot and on several well matured laterals there are upwards of 200 buds, and therefore just as many leaves must have been developed, earlier or later in the course of last summer, all of them elaborating sap from their first exposure to light till age and autumn brought their labours to a close. And what, it may be asked, have they all been doing? They have elaborated the materials that formed the stem of which the dimensions are given above. The sap which rises through the stem to the leaves in a crude state is returned by them as organisable matter. Each leaf contributes a portion towards the general increase of the stem below it.

Now, the lower leaves, being first at work, lay the foundation; they form a nucleus over which the upper leaves deposit their contribution of elaborated sap in successive layers. The lower part of the shoot requires thickness, not only from the leaves situated *upon* it, but likewise from all those *above* it. Hence the origin of the conical form, or greater thickness at base than at top, the form which in this country the stems of trees naturally assume.

To return to the plant of which the dimensions have been given. These show that the area of the base section is $\frac{78}{100}$ of a square inch, whilst that of the top is only $\frac{3}{100}$. Supposing no leaves are allowed to grow on the lower part of the stem in the second and subsequent years, nor on laterals connected with it, but that, notwithstanding, annual layers of young wood are formed of uniform thickness averaging $\frac{1}{8}$ of an inch, at this rate in eight years the top part, now $\frac{2}{10}$ inch diameter, would have become $2\frac{2}{10}$ inches, and the base, now an inch, would be 3 inches in diameter, their respective sectional areas being $4\frac{8}{10}$ square inches at top, and 7 square inches at the base. As regards strength, supposing this to be estimated according to bulk of wood, if the top portion could support horizontally a weight of 480 lbs., the base would support one of 700 lbs.; and this superiority in strength is entirely owing to the conical formation of the first summer's shoot by the leaves which it bore; for in the subsequent eight years we have presumed that there were no leaves on the stem as far up as the dimensions were taken, and that consequently the successive layers of young wood were deposited of equal thickness, as is generally the case under such circumstances. If a stem is naked and cylindrical it will continue so, although its thickness may be annually increased by the action of leaves above it; but let a branch proceed from, say the middle of such a stem, and let that branch grow and bear foliage, well exposed to light for several years, then examine the tree immediately above and below this branch, and a great discrepancy will be found between the two dimensions; the girth below the branch will be much greater than that above it.

This shows that stems in the course of their first year's growth take the substantial form of an elongated cone, and that the tapering once commenced is afterwards continued, so that in general trees are able to support themselves erect without the aid of stakes. The necessity of employing stakes for years after transplanting a tree is much to be regretted, and chiefly arises from the stems being reared almost as thick at 6 feet high as they are at the base. We have seen that it is the nature of trees to take the tapering form, and it requires some trouble to grow them otherwise. Fortunately the art and mystery of producing stems cylindrical or nearly so is on the decline, much and long as it has been followed. With the view of obtaining clean stems, they were trimmed up, that is, when young, not a leaf nor rudiment of a branch was left upon them, except a very few situated some 6 feet or more from the ground. But it was impossible for these to perform the office of, perhaps, a hundred which would have been at work, each adding to the thickness of the stem, and to the base more especially, had they been permitted to remain. The result of the proceeding is of course a clean stem, according to the fancy of the operator; but, on the other hand, a degree of weakness which he never contemplated, although it might have been easily foreseen that by dispensing with nearly all its manufacturing agents the formation of wood must be proportionally limited; and that the stem would be comparatively slender, its form becoming cylindrical from loss of foliage below. The upshot of the matter is, that in order to counteract its tendency to become crooked the stem must be lashed to a stake of dead wood, from which, in struggling to get free, the living stem often receives galling wounds. Such is the sure consequence of unskilful interference with the natural mode of growth whilst the tree is making its first shoot from the graft.

Supposing, however, that the tree had not been mutilated during the first season, and that consequently the shoot was properly formed, tapering from a strong base. As winter approaches the leaves drop. But we find that in the axil of every leaf a bud has been formed; some indeed may be scarcely apparent, or they may even be completely overgrown near the base of the shoot. Further up the stem, where the layers are not so thick, their formation depending on the contributions of fewer leaves, the buds are more prominent; but near the top of the shoot, where the buds have been but recently formed, or are only in a rudimentary state, they are again less observable. Each bud, as is well known, if sufficiently stimulated is capable of producing a shoot, unless it has taken the form of a blossom bud; and although it rarely happens that every bud on a young stem does push a shoot, yet when a tree is healthy and vigorous it is certain that many buds do so, whilst some will remain dormant, and others may perhaps only produce a tuft of leaves.

All this being foreseen, what is to be done? If these side shoots are allowed to grow the stem will not be smooth and clean, but branchy; and no branches are desired till it reach what is termed standard height; but it has been imagined that where branches are not required in future, there can be no reason why their formation should not be at once prevented. The most effectual and expeditious way of doing this is to take hold of the shoot near the top, and, by drawing the hand downwards, rub off the buds. If this is not done the shoots can be trimmed away with the knife as they push. In either case the vegetation of the plant has to be carried on by the few buds left at top. Now, although the shoot may have been previously vigorous and well conditioned, the above proceeding must render it quite the reverse; for instead of its growth being carried on by the agency of 200 leaves there are left perhaps not more than 10 or 20; then instead of forming a layer of young wood one-eighth of an inch thick, as could be done by the 200 leaves, the 20 working at the same rate could only form one of the thickness of $\frac{1}{80}$th of an inch. In consequence of this the stem gains but slight increase in the second year of its growth. But this is not all the evil resulting from the great privation of foliage. Roots cannot be formed without leaves, or at all events their formation cannot be long continued without the co-operation of these organs. The increase of roots becomes limited in proportion to the scanty foliage. In short we have ourselves seen a tree that had undergone the treatment above described, the stem of which could not support itself for 10 years, and at the end of that period was still slender and liable to be brought over by wind.

By a different mode of proceeding trees may however be reared with substantial stems and in shorter time than is frequently required before they attain a certain thickness. This is chiefly to be accomplished by contriving to retain at work as many leaves as possible. During the first season's growth let all of them be preserved. In the second year shoots will push as above mentioned. It is not necessary that these should be allowed to grow to full length, but they should not be closely cut off so as to make the young stem like a naked rod; they should be spurred in, or they may have their ends pinched off when the shoots are 5 or 6 inches long. Some buds will probably only push a few leaves, and such will require no interference. In this way the young stem can be kept furnished with plenty of foliage, and it should be recollected that all leaves in connection with the stem, whether situated immediately upon it, or on the bases of shortened shoots, contribute to its strength, and also to the growth of roots. The latter will consequently be prepared to collect a good supply of nourishment for shoots to commence the head of the tree above standard height. As these shoots grow and have foliage enough to carry on the vegetation of the tree, the foliage-bearing spurs along the stem may be gradually dispensed with. In doing this, however, care should be taken that the plant has not in any season a less amount of foliage than it had in the previous one. On the contrary, let it have as much more as possible. Its growth will be rapid in proportion. As for the scars on the stem caused by the temporary retention of portions of shoots along it for the important purposes aforesaid, they will soon heal over when there is plenty of vigorous shoots and leaves above them. Thus, not only a clean but likewise a strong self-supporting stem can easily be formed long before those otherwise reared can be trusted without the stakes which have supported them for years.

IT is announced that the fine collection of Orchids formed by the late M. PESCATORE at Celle St. Cloud has been purchased by M. ROUGIER, of Paris, in whose Nursery buyers will now have an opportunity of acquiring the specimens in detail.

THE GORILLA APE.

A STRANGE account of this quadruped from Western Africa having appeared in the excellent "Field" newspaper, I shall notice certain parts of it, as they militate against what I have written on the Monkey family.

It states that the Gorilla is lord and master of the forest; and that every beast flies before it. How can this be? The Gorilla lives on trees, the beasts roam over the land. Again, the Gorilla being a real ape, is a timid and retiring animal, as all apes are. How then can we believe that every beast of the forest flies before it? The account states "that the Gorilla can never be tamed." Now the huge red ape from Borneo can easily be tamed, and as the Gorilla of Western Africa differs little or nothing from this ape except in colour, I argue analogically, that the Gorilla can be tamed. I reject altogether the encounter in which one of the traveller's party was killed by a Gorilla, and had his ribs and gun smashed, and the barrel bent, because nobody saw this most improbable feat. However, notwithstanding this, the traveller tells us that on the morrow "he shot this Gorilla." How did he know that it was the same Gorilla which had killed the man, or that he had been killed by a Gorilla at all? Negroes might have slain the man.

Again, how can we possibly give credence to the assertion that the Gorilla came on to the attack "beating his huge brawny breast with his hands." If so, then it must have been on its hind legs only; a most trying and unsteady position for an ape in the hour of battle! But supposing even that it were on all fours (its proper and natural position), why did it leave the trees? It certainly could not be to eat the traveller, because apes are not carnivorous. It could not be in revenge, because the traveller had not provoked it. There was no need whatever for a fight. Apes are mild and harmless. I entered the cage of the huge red ape from Borneo, without any fear of danger, and I put my hand into its mouth whilst I examined its teeth. We kissed each other affectionately.

Lastly, what are we to pronounce on a narrative which tells us that the "female Gorilla ascends a tree to sleep," and that "the male remains below?" What a disruption is this of connubial unity! Did the traveller himself actually see an unhappy pair of Gorillas thus cruelly separated from each other during the night? I should think not indeed. No.

However, there is one way of accounting for this hitherto unheard of monkey-separation *a mensâ et thoro*. Possibly, the Gorillas in Western Africa are blessed with a divorce court, which facilitates separation of male from female, or with a poor law which enforces it.

Such accounts as the one upon which I have so slightly commented, are no credit to the fascinating science of genuine zoology; on the contrary, they mar and pollute it. *Charles Waterton, Walton Hall.*

NOTES ON THE BOTANY OF JAPAN.—No. II.

(*See page* 145).

ON the side of a hill northward from the town of Nagasaki, and amongst the most beautiful scenery which I ever beheld, lives the veteran Dr. Von Siebold. He is some distance from all Europeans, and his delight seems to be in his garden, his library, and the Japanese country people, who are his friends. As I had deter-

mined to pay him a visit during my stay in Nagasaki, I chose a fine day, and set out in his direction after breakfast.

My road led me through the heart of the town. The streets were wide and clean, and contrasted most favourably with towns of equal size in China; but it struck me the people were less wealthy, and that these shops were not so extensive and fine as those of the Chinese. The common necessaries of life seemed to be most abundant everywhere. Amongst fruits I observed the Diospyrus Kaki, Pears, Oranges, Salisburia Nuts, Chesnuts, Water Melons, Acorns, &c. The vegetables consisted of Carrots, Onions, Nelumbium roots, Turnips, Lily roots, Ginger, Arum esculentum, Yams, Sweet Potatoes, and a root called "Gobbo," apparently a species of Arctium.

On my way I passed numerous Tea houses, hotels, and bathing houses, which are fully described in recent books on Japan. One feature of the people was rather striking, and an interesting one it is. Almost every house which has any pretension to respectability has a little flower garden in the rear, oftentimes, indeed, small, but neatly arranged, and adds greatly to the comfort and happiness of the family. As the lower parts of Japanese shops are open both before and behind, I had peeps of these pretty little gardens as I passed along the streets; and wherever I observed one better than the rest I did not fail to pay it a visit. Everywhere the inhabitants received me most politely, and permitted me to examine their pet flowers and dwarf trees. I have already said that many of these places are exceedingly small, some not much larger than a good-sized dining-room. But the surface of these little places is rendered varied and pleasing by means of little mounds of turf on which are planted dwarf trees kept clipped into fancy forms, and by miniature lakes in which gold and silver fish and tortoises amuse themselves. It is quite refreshing to the eye to look out from the shops upon these pretty little gardens. The plants generally met with in such places were the following:—Cycas revoluta, Azaleas, the pretty little dwarf variegated Bamboo introduced by me from China, Pines, Junipers, Taxus, Podocarpus, Rhapis flabelliformis, and some Ferns. These gardens may be called the gardens of the respectable working classes.

Japanese gentlemen in Nagasaki, whose wealth enables them to follow out their favourite pursuits more extensively, have another class of gardens. These, although small according to our ideas, are still considerably larger than those of the working classes; many of them are about a quarter of an acre in extent. They are generally turfed over, and like the smaller ones they are laid out with an undulating surface, some parts being formed into little mounds, while others are converted into lakes. In several of these places I met with Azaleas of extraordinary size—much larger than I have ever seen in China, or in any other part of the world, the London exhibitions not excepted. One I measured was no less than 40 feet in circumference! These plants are kept neatly nipped and clipped into a fine round form, perfectly flat upon the top, and look like dining-room tables. They must look gorgeous objects when in flower. Farfugium grande, and many other variegated plants still undescribed, were met with in these gardens, in addition to those I have named as being favourites with the lower orders.

One old gentleman whom I visited in company with Mr. Mackenzie—Mr. Matotski—has a nice collection of pot plants arranged on stages, much in the same way as we arrange them in our greenhouses in England. Amongst them I noted small plants of the beautiful Sciadopitys verticillata, several Retinosporas, some with variegated leaves; Thujopsis dolabrata, and variegated examples of Laurel, Bamboo, Orontium, and Hoya Matotskii, a name given by some Dutch botanist in honour of the old gentleman, and of which he was not a little proud. Mr. Matotski is a fine mild looking Japanese, rather beyond the middle age; he has a collection of birds such as gold and silver pheasants, and in his library are some illustrated botanical books, which he shows with great pride to his visitors. He presented me with a few rare plants from his collection, and offered to procure me some others of which he had no duplicates.

After getting through the town the road led me up a beautiful Rice valley, terraced in all directions and watered abundantly by the streams which flow from the mountains. On each side of the valley the hills are richly wooded, partially with trees and partially with brushwood. The trees I observed were Pinus Massoniana, Cryptomeria, Retinospora, Camphor, Oaks, Camellias, &c. The view from one side looking down upon and over the valley, and resting on the opposite hill, is rich indeed, and I almost envied Siebold his residence, which is situated on the left hand side going up the valley. I found him at home, and he received me most kindly. His house is a good one for Japan, and his workshop or library, to which he introduced me, contains works of all countries on his favourite pursuits connected with natural history. But it is to the garden to which I must draw particular attention.

On a level with the house and around it are small nurseries for the reception and propagation of new plants, and for preparing them for transportation to Europe. Here I noted examples of most of the plants figured and described in Siebold's great work, the Flora Japonica, so well known to all lovers of oriental plants, and several new things hitherto undescribed. A new Aucuba with white blotches on the leaves was striking; there was also the male variety of the old A. japonica, numerous fine Conifers, such as Thujopsis dolabrata, Sciadopitys verticillata, Retinospora pisifera and R. obtusa, and many other things of interest. Lychnis Senno was in full bloom, and a fine thing it is. Plants with variegated foliage were numerous, and many of them were very beautiful. Amongst the latter I may mention Thujas, Eleagnus, Junipers, Bamboos, Podocarpus, Camellias, Euryas, &c.*

On the hill side above the house Siebold is clearing away the brushwood in order to extend his collections and to obtain suitable situations for the different species to thrive in. For example he will have elevation for such plants as require that, shade and dampness for others, and so on. Long may he live to delight himself and others with his enlightened pursuits. *R. F., River Yang tze Kiang, China, Jan.* 2, 1861.

MYCOLOGY.—No. XLVII.

HYGROPHORUS PRATENSIS, *Fr.*—This is a very beautiful Fungus when well grown, and few will be found to be more general in autumn if the proper situations are examined. It delights in open exposed pastures where the Grass is short, and the soil not too rich, though not absolutely confined to such situations, varying from a light buff to a decided orange, with intermediate shades of tawny or rufous, and growing in tufts or occasionally in segments of circles. The cap is always obtuse and generally raised in the centre, though blunt, and for the most part perfectly smooth and even. The stem is nearly equal, except at the base, where it is generally attenuated and more or less stuffed with looser matter than that of the outer walls, white or slightly tinged like the cap, smooth and not viscid. The gills are few in number, thick, arched and decurrent, reddish buff, connected by veins, and easily separating from the flesh of the pileus which is nearly white, thick in the centre but thinner at the margin, firm and elastic. There is not the slightest trace of a ring, or of any viscid veil. As a species it is near to the common *H. virgineus*, which when perfect is of a pure ivory white, though sometimes acquiring a dingy tawny tint when old.

HYGROPHORUS PRATENSIS, *Fr.*
(Copied by permission from Greville's Cryptogamic Flora).

In the character of the separation of the gills from the pileus it agrees with the genus *Paxillus*, but its general character and affinities are otherwise wide apart. It is said to be confounded sometimes with the common Chantarelle, but if the agreeable Melon scent of that excellent Fungus is not decisive, the broad true gills instead of mere branched veins must at once obviate all mistakes. As, however, it is a wholesome species, though not to be classed with the Primates of the Fungus world, and there is no danger of its being confounded with any noxious species, as far as has been at present ascertained, we shall only have a more or less favourable exchange, "gold for brass, a hundred oxen-worth for nine," or the reverse. If cooked it should be gently stewed for some time, and when tender, if served with fine herbs and delicate sauce, it may supply the place of better species where a fricassee of Fungi is indispensable. We have little doubt indeed, if treated as was recommended under *Hydnum repandum*, that it would be equally good, and it would probably make an excellent purée.

There is one species of Hygrophorus, *H. leporinus*, which may easily be confused with it. That however has ruddy spores, whereas those of the present species are white, a point which may be worthy of notice, though at present *H. leporinus* has been little observed in England. We are not however prepared to say that it is rare. Species indeed with coloured spores are generally objects more worthy of suspicion than those with white. *A. euosmos* for example, with its lilac spores, is bad if not dangerous, while *A. ostreatus* is innocent enough to stomachs which can digest it. By parity of reasoning *H. leporinus* may be unwholesome, while *H. pratensis* is not to be despised. Caution therefore should be exercised, and indeed WITHOUT CAUTION NO SPECIES OF FUNGUS CAN BE USED SAFELY. *M. J. B.*

* Since writing the above I have visited the gardens about Yeddo, the capital of Japan, where I have been astonished at the number and beauty of these various plants. I may give you some account of them in a future letter, and I hope to be able to introduce many of them to our own gardens.

M. NAUDIN'S GEOTHERMAL SYSTEM.

(*Concluded from p.* 265.)

§ 4. *How to form Geothermal Clumps.*

ON account of plants demanding shelter during the winter season, geothermal plots can be only of limited extent, if made in a circular or elliptic form, as, in order that the tent intended to shelter them should be sufficiently firm, it ought not to be too wide, and in either direction only 8^m to 10^m can be allowed, should this form be particularly adhered to. However, this would not be the case, were the geothermal space formed in the shape of a border 6 or 7 metres wide; this in most instances would be ample, and an indefinite length might be given to it, without the tent being any way impaired in strength. For the same reason also, these tents should never be very high, 6^m to 7^m being the maximum, unless the scaffolding and supports intended to carry the canvas are strengthened. This, however, since it increases considerably the labour of mounting and dismounting the covering, renders it an inconvenience. In most cases they should be lower, not exceeding 4^m to 5^m, when the clumps are detached. It is however needless to say that when the geothermal space is placed against a high wall, it will support the latter and enable the roof to be carried higher.

The necessity of limiting the height in the way we have just mentioned, will consequently curtail the amount of vegetation cultivated, though much less than would be at first supposed. For instance, if one examines the trees and shrubs which occupy our present Greenhouse, it will be perceived that deducting the height of their tubs, there are very few which attain the height of 6 metres; the greater portion do not exceed 3 or at most 4 metres. Putting aside the plants whose excessive height would be an obstacle, there would still remain a considerable number for geothermal cultivation, without mentioning those thousand species of stemless or herbaceous plants which could, in an artificially heated soil, acquire their greatest possible development, without ever exceeding or even attaining 3 metres in height.

With a Parisian climate, all the shrubs from the Mediterranean may be geothermally cultivated. Orange, Citron, Lemon trees, with more vegetation of the same kind, the Camellia, Pomegranate, Myrtle, Lagerstrœmia, Oleander, Mastic tree, Filarias, and climbing Malvaceæ of the genera Lavatera, Sida, Abutilon, and Hibiscus; most kinds of Yucca and Agave; nearly all the Proteaceæ from New South Holland, from the Cape and from Chili; an immense number of shrubby Leguminous plants and Myrtaceæ from the same countries; quantities of Geraniaceæ from South Africa. To these may be added Pincenectitia, some Cycadeæ, and Palm trees of the genera Chamædorea, Geonoma, and Rhapis, but above all the Chamærops excelsa, Hystrix, and humilis, with Areca sapida, which by their height of 3 to 4 metres at most, and the fine spread of their heads, remind one of tropical vegetation. There might be tried (but probably without success) those dwarf Palm trees of Northern India, such as Wallichia and Phœnix farinifera and humilis, which although deprived of stems (or only with very short ones) are nevertheless suitable vegetation for the decoration of our gardens.

§ 5. *Geothermal Culture, without Protection.*

This style of geothermal cultivation consists merely in hastening the growth of certain exotic trees, which, although they resist the cold of winter under any given climate, yet do not find it sufficiently warm to fructify or blossom during the summer. The number of these trees is naturally very limited, but it might happen that their growth would be advantageously advanced by some days or even weeks, particularly in the case of fruit trees. In some instances this causes the

fruit to ripen when it would not do so without this assistance.

In the north of France there can be but little beyond the Fig tree, Pistachio tree, and Vine, and of the last, such only as produce dessert Grapes. Most years few Grapes ripen fit to eat to the north of the line which joins Nantes and Beauvais. Brittany, Normandy, Picardy, Artois, and Flanders, with other analogous climates, have scarcely any other Grapes than hothouse, which cost much to erect and maintain. The Fig tree will ripen pretty well on the coast of Brittany, yet not a few miles off, or even at Paris. Now it appears probable that by heating the ground in an artificial manner during the months of April, May, and June, the growth of these trees might be advanced to such a degree that the varieties would mature fruit before the middle of autumn.

It would be interesting to make the trial, but under any circumstances the experiments only must be tried in front of a wall with a south aspect, especially with Fig trees, which require a certain amount of shelter in winter, in order to be safe against hard frosts.

Home Correspondence.

Ulex strictus.—If any person tells me that by sowing the seeds of a plant (call it B.) he has obtained what by all botanists, except those of the school which has recently sprung up in England, is thought to be a distinct species (A.), I immediately desire to cross question him concerning the mode in which that result was obtained. For, when carefully examined, the evidence is very frequently found to be incomplete; either from a mistake concerning the plants themselves, or, as is more common, from want of sufficient care in guarding against error, or even by the result being brought about by the intentional falsification of a servant who proposes to please his master by producing the result supposed to be desired and expected by him. I therefore never accept the experiment as proof without good evidence of its being properly conducted. The simple statement of an anonymous writer is not sufficient, not from any doubt of his truthfulness, but because we have no means of estimating the dependence to be placed upon his judgment. "R. T. C." appears to have conducted his experiment in a very satisfactory manner, and I presume that he has proved his point. The tone also of his communication is such as to cause a kindly feeling towards him and full confidence in him. If he would favour me (privately) with his real name and address I should be greatly obliged. "M. T. M." seems to feel himself aggrieved by my not taking upon trust what is anonymously stated as a fact in such cases as these; but as no imputation is made upon the honesty or truthfulness of the experimenter, I cannot see that he has any cause for being so. I am led to suspect from his remarks that the conclusiveness of some experiment made by him has been formerly questioned. It is sad that he should feel hurt thereby. The search after truth is my object; and in that search I shall always endeavour to ascertain the particulars of each case before accepting the reported result. I am not given to taking these matters upon trust, even when stated by men of high reputation. I hold that it would be contrary to the search after truth to do so. He also seems to suppose that persons desirous of combining two plants are not required to produce conclusive evidence before expecting others to adopt their results; and that it is only from those who hold the opinions which he is pleased to impute to me that proof is expected. If he is a botanist, even of the new school, and if (before forming any opinion) he saw the two kinds of Furze growing side by side, I feel sure that he would not scruple to consider them as distinct species; and had they both been abundant in a wild state doubt of their distinctness would scarcely have arisen. As, however, I cannot learn that the wild U. strictus has been found in more than one place, I have long had some suspicion of its true character. *C. C. Babington, Cambridge.*

Potato Culture.—A plan of Potato growing somewhat similar to that mentioned in your Paper of March 16 has been used for some time in the neighbourhood of Nostell Priory, near Wakefield. It was begun by Mr. Winn's gardener, and from being found advantageous its use has gradually been extended. The Potato rows are a yard apart, and the sets a yard apart in the rows. The rows are earthed up as usual, but afterwards the earth between the plants in the rows is heaped on to the top of the plants, so that the stalks hang down into the trench all round each root. The produce is found to be as large and less diseased than when grown in the ordinary way. Tubers near the surface are, I believe, generally more diseased than those deeper in the ground. The heaping the earth over the root may therefore have a good effect as well as the hanging down of the stems. *C. W. Strickland, Hildenley.*——Your Correspondent in his article on the Potato Disease (p. 240), wisely proposes planting in double rows, as more convenient for covering and laying down the haulms, which he contends is a preventive, in a great measure, of disease. This of course (if extra space is given between the double rows) gives better opportunity for raising sufficient mould for this purpose. This, he affirms, prevents the Fungus, &c. from descending to the roots and tubers. Although I am sceptical of this being a specific remedy, allow me to add in confirmation of the utility of planting on ridges, that I have for several years succeeded well with early kinds by planting in double rows between my Celery trenches, after the trenches had been prepared. At the last operation of forming the trenches, when the Celery is planted, the haulms are pressed down with the spare mould on each row towards the trenches. The tops thus hang down on the side of the ridges, attracting the Fungus, &c. from the haulms, and draining excessive moisture from the roots into the Celery trenches where it is most needed. I strongly recommend the practice in garden compartments, as it interferes but little with the Celery crop, and secures an early and sound crop of Potatoes, where little else is commonly grown. *A. Hardy, Maldon, Essex.*

Potato Disease.—I am no believer in any of the quack doctrines hitherto promulgated with respect to this subject, and I think that a few common sense rules will in a great many instances either prevent disease or very much arrest its progress. I grow Potatoes for seed somewhat extensively, and have arrived at the following conclusions:—That a wet cold soil does not suit the Potato. That Potatoes for seed are best laid out on the floor of a loft, shed, or similar place early in March and sprouted, in readiness for planting when the sprouts are just formed, and have a sturdy and healthy appearance; to plant early and dig early, believing that as with the Orange, Melon, Apple, and other fruits, so it is with the Potato, that the tuber will ripen perfectly after it is dug. Potatoes are grown extensively in Yorkshire, and it is the common practice with us to let them remain in the ground until the haulm is quite dead. If in a porous soil they are often found not diseased. If in a stiff retentive soil they are generally much diseased, as has been the case in 1859 and 1860. It is a practice with me to dig all our Potatoes immediately the edge of the leaf shows the slightest indication of decay, long before the leaf itself is dead; and last year, when the Potato disease was very prevalent, we had scarcely a diseased tuber. I believe that up to a certain period the tubers through the roots can exhaust any amount of moisture that approaches them. That period, in my opinion, terminates when the tuber has ceased growing. After that an excess of moisture is dangerous. My reason for thinking so is this. Last year we planted a breadth of an early Potato, and during some fine weather dug all but three rows, and every tuber was sound. Wet weather came on and prevented us digging the other three rows, and after three or four rainy days we were enabled to get out the remaining three rows, and found more than half of the crop diseased. I believe that if the three rows of tubers and roots could have been protected from the rain they would all have been sound. In my opinion it does not signify whether the foliage gets wet or not, and I think with Mr. Waterton that the Fungus on the leaves is the result of the disease, not the cause of it, and I further believe that the disease is communicated through the roots. But I do think that it is necessary that the tubers and roots should be protected from rain, when the Potato has grown as large as it will grow, and that it can be done with the spade by digging out the soil between the rows and earthing them up as we do Celery. I leave it to scientific men who can readily do so, to explain whether the tuber becomes affected by the presence of a greater amount of ammonia from the manure than is requisite after the tuber has completed its rapid growth, or from its being influenced by the presence of too much moisture. *William Dean, Bradford, Shipley, Yorkshire.*

Strawberry Mulching.—Your Correspondent (see p. 242) will find an excellent substitute for straw in spent bark from the tan yard, which may be procured for 2s. 6d. per load. *J. M., Gardener, Wood Hill, Prestwich.* [And he will ruin his land. He should get the rough dressings of the coir rope manufacturers, if he can.]

Araucaria imbricata.—We have a fine Araucaria here, which has stood the late severe winter, and does not appear to be much if at all injured. It stands on an eminence in the centre of the Pinetum, and is planted on a mount 3 feet high, which is built round with a dry stone wall. We have 6 other fine trees 10 feet high, which, although sheltered by other trees and shrubs on all sides, but planted flat on the ground, are all nearly killed, a circumstance which shows the justice of your remarks (see p. 239), and teaches this lesson—that if we would have Araucaria imbricata do well and withstand such seasons as we have lately had, we must plant it on elevated mounds, well drained.—*T. Wills, The Gardens, Oulton Park, Tarporley, Cheshire.*

Effects of the Winter upon Roses.—The amount of evidence that has, up to the present time, been brought forward upon the capability of ornamental and flowering shrubs and trees to sustain the rigour of our uncertain climate has already been sufficient to enable the attentive reader of the *Gardeners' Chronicle* to deduce some important facts—facts particularly grateful to the amateur, and which may serve as an invaluable guide for the future. The just observation in the leading article of March 2, "that we have learned to know our fast friends," is fully borne out by the concurrent testimony of every Correspondent. There is no subject on which the amateur is more sensitive or more interested in than Roses. This subject was intentionally omitted in my communication of Feb. 23, because it did not then appear that the effects of the late frost could be distinctly ascertained, and because more evidence was necessary to be able to discover whether any definite rule could be laid down with a view of distinguishing what kinds and particular groups might be affirmed as safe. In common with other correspondents, I hope special notice will be given to the subject of Roses, being convinced that such will not be otherwise than duly appreciated by the amateur cultivators of that lovely flower. My own observation, which, for want of time, has been more limited than could be wished, has led me to suppose that all kinds have not been equally affected by the severe weather, and that although effects apparently capricious have resulted, it may be possible to discover a line of demarcation, and many beautiful and valuable species may be pronounced perfectly hardy. The injury inflicted by the frost has not been confined to Roses recently budded, but has extended its ravages to plants of all ages and sizes, though the younger plants appear to have been carried off in the greatest numbers. It is not a fair inference to show that when a particular plant has been found to be killed by the weather, the whole of the same kind may have probably suffered the same calamity. But it appears certain that in the same genus some species have shown themselves less hardy than others—the Hybrid Perpetuals, for example. Of the Roses that have been entirely unprotected in the garden here, the injury sustained corresponds very nearly with the accounts sent in by other Correspondents. Some kinds have been killed which at other places have probably escaped partially or wholly uninjured; a comparison of notes is therefore desirable, as such may furnish sufficient evidence to show what varieties have suffered in a greater or less degree. While granting that it is not a fair criterion to judge by a single plant, I beg to offer the following as illustrative of the effects of the last frost, it being understood that one plant of each variety only is alluded to, except when otherwise indicated. Adopting the classification according to the amount of injury done and escaped, the arrangement will stand thus:—First (uninjured): Gallica, Alba, and Hybrid China, Ohl, Madame Legras, Brennus, Blairii, Chenedolé, Coupe d'Hébé, Fulgens, Paul Ricaut, Madame Plantier, Paul Perras. Climbers: Elegans, Garland, Madame d'Arblay, Rivers' Queen, Ruga Amadis, Sempervirens (2 varieties), Austrian Yellow, Harrisoni. Hybrid Perpetuals: in this order the effects of the late winter appear to have been most capricious, in some instances completely destroying the plant, in others not affecting it in the slightest, while others again show injuries that almost amount to destruction, and some but trifling. Of the totally uninjured are Lord Raglan (4 plants), Jules Margottin (5), Louise Odier (2), Géant des Batailles (6), Souvenir de la Reine d'Angleterre (3), Souvenir de Leveson Gower, Madame Vidot, General Jacqueminot, William Griffiths, Duchess of Norfolk, Mrs. Elliott, Caroline de Sansal, Triomphe de Paris, Auguste Mie. Bourbons. Souvenir de la Malmaison, Sir J. Paxton, Le Grenadier, Acidalie, Madame Desprès. This completes the list of the best of those worthy of notice that have escaped unscathed, except one which deserves especial record by itself, viz., the invaluable, strong, healthy Gloire de Dijon; of six plants of this in different parts of the garden, not one has flinched from the severe ordeal it has had to pass under. Second, injured in a greater or less degree:—Hybrid Perpetuals: Arthur de Sansal, Le Lion des Combats, Madame Domage, Duchesse d'Orleans, Duchess of Sutherland, La Ville de St. Denis, Madame Laffay, Robin Hood, La Reine, Baronne Heckeren. Bourbons: Bourbon Queen, Du Petit Thouars, Armosa. Noisettes (unprotected): Ophirie, Jaune Desprès, Aimée Vibert. Tea (protected): Devoniensis, Saffrano, Auguste Vacher, Comte de Paris, Souvenir d'un Ami. Third, destroyed:—Hybrid Perpetuals. General Castellane, Madame Place, Baronne Hallez, Prince Leon, General Simpson, La Mère de St. Louis, Madame Masson, Louise Peyronny. Noisettes (protected): Lamarque, Solfaterre. Tea (protected). Goubault, Adam, Eugène Desgaches. Climbers. Banksian yellow, Banksian white. Comparing the above list with what has already appeared in your correspondence, it seems certain that the older Gallicas and Hybrid China are safe; that of the Hybrid Perpetuals and Bourbons, the most vigorous growers have the stoutest constitution, and among them are to be found many "fast friends" that will reward the care of the cultivator; that Gloire de Dijon is worthy of the highest consideration, and suggests the idea whether seedlings raised from it might not prove as hardy and valuable. It also appears that among the Hybrid Perpetuals and Bourbons there are many good varieties, fortunately not the best, that will not stand the test of our climate; that the Tea Scented and Noisettes are as a class not to be trusted to stand the winter without protection. It is only to be hoped that the valuable evidence collected in the columns of the *Gardeners' Chronicle* may be the means of determining which kinds the amateurs and others may at all times depend upon, without having to undergo the vexation of seeing them destroyed when it pleases Providence to allow the weather to be severer than ordinary. With regard to the preservation of Roses during the winter, various methods have been suggested, some of which have proved more or less efficient. I have always found the following plan answer till the late winter, when it failed in some instances, viz., I those above recorded, and was successful in others.

obtain a coarse kind of canvas cloth used by grocers and others as wrappers for heavy goods, which is useful for many garden purposes during summer and winter, but after exposure for months to sun and rain becomes unfit for its original purpose. I cut this cloth into pieces according to the size required, lay it over the Rose to be protected, if a standard, and drawing the ends together beneath the head tie the whole firmly but not too tight to the stock or stick to which the stock is supported. I have never lost a single head by this method till the late winter, when it failed in those cases where the Rose was not capable of enduring the unusually low temperature. I always use this method with recently budded stocks; there were three dozen in this garden at the end of last autumn in a healthy state, all of which were protected in the manner described above; about 16 have been saved, while a few yards off, of 180 stocks in a good condition at the same time, which had been budded by a gardener in the neighbourhood, and none of which were protected, more than 150 have perished. The plan of taking up Roses late in the autumn alluded to by a Correspondent appears to answer when they are taken up every season and slightly covered with dead Fern and other light material; but if the plants have not been annually removed, but have remained in their places several years, the probability of failure is greater than that of success. Of three old plants moved last autumn two have died, one Jules Margottin, one General Jacqueminot, while other plants of the same varieties which have not been moved are in a perfect state of health. I have also a very simple method of protecting Roses on their own roots which has always proved efficacious, and to a great extent during the late frost. Want of space compels a delay of the explanation; but should any of your readers desire it I promise it in a future paper. In addition to the plants mentioned in my communication of Feb. 23 as having passed the winter in safety, the following, having been very frequently alluded to in recent Numbers of the *Gardeners' Chronicle*, confirm what has been said respecting their powers of enduring cold:—Berberis japonica, B. Bealii, B. Darwini, B. dulcis, B. aquifolium hybridum, Weigela amabilis, W. rosea, Thuja aurea, Libocedrus chilensis, Spiræa prunifolia fl. pl., S. callosa, S. Douglasii. Obituary: Gum Cistus, Lonicera flexuosa, Pampas Grass. *Adolphus H. Kent, Grammar School, Blechingley, Surrey, March* 13.

Societies.

Royal Horticultural, *March* 26.—(*Floral Committee.*)—Among subjects of exhibition contributed on this occasion were beautiful collections of Hyacinths and Tulips from Messrs. Cutbush, of Highgate; of these lists of the best kinds will be found at pp. 243 and 267. From Mr. Turner, Royal Nursery, Slough, came specimens of Cinerarias, two of which — Prairie Bird, violet blue—and Maid of Astolat were commended. Messrs. Smith, of Dulwich, also sent Cinerarias, one of the most striking of which was Queen of Spring, mentioned by us in former reports. From Messrs. E. G. Henderson came a group of miscellaneous plants, among which were examples of an apparently hardy Coniferous plant, concerning which it is necessary that further information should be furnished. The same firm also showed Rhododendron nobile, a variety with large blush white flowers resembling those of campanulatum; R. ciliatum; the pink R. Princess Royal; two purple Azaleas; and a pink Camellia named Downing. A boxfull of Roses to which a special award was made was contributed by Mr. Turner; among them were Leonse Moice, deep velvety crimson; Louis the 14th, a very hardy kind with rich velvety scarlet blossoms, deeper in colour and more double than Gen. Jacqueminot; and John Waterer, a new rich rosy crimson Rose. The same collection also contained Eugene Appert in good condition; Dunant, beautiful crimson; Paul Ricaut, and Géant des Batailles. Mr. Bull furnished some young Palms from Madagascar, which were requested to be reproduced when in a better condition to judge of their merits; both Mr. Bull and Messrs. Veitch had awards for the variegated variety of Pteris cretica; and the first named exhibitor also sent a variety of Pteris aspericaulis called rubro-nervis, apparently a robust free growing Fern. Mr. Bull likewise showed imported specimens of semi-double white and pink Chinese Primulas, which were stated to come true from seed; to these a Label of Commendation was awarded. A similar award was also made to Messrs. E. G. Henderson for a plant of white Fern-leaved Primula, a distinct and showy kind, which cannot fail to be a favourite. A salmon-coloured Cattleya with dark cinnamon lip, was exhibited by Messrs. Veitch, and was awarded a first-class certificate; it was an imported plant introduced by Mr. Skinner, who is of opinion that it is a natural cross between C. Skinneri and Epidendrum aurantiacum, specimens of both of which were sent along with it. Be that as it may, it is certainly a distinct looking and rather pretty kind. From the garden of the Society came Palms, Dracænas, and other plants remarkable for the beauty of their leaves. Mr. Todman, gardener to R. Hudson, Esq., Clapham, received a first-class certificate for his Azalea Flag of Truce.

Notices of Books.

Address Delivered at the Anniversary Meeting of the Geological Society of London on the 15th February, 1861. By Leonard Horner, Esq., F.R.S., President. (Taylor and Francis.)

Never since the establishment of the Geological Society has a more deeply interesting Address been delivered than that which its learned and conscientious President submitted to the attention of its Fellows on the 15th of last February. We say "deeply" interesting because the subject mainly touched upon was nothing less than the evidence which geology now affords as to the true history of the human race, a history dim in the incalculable distance of the past, and rendered more difficult to trace by the hasty conclusions of geologists themselves, and the baseless speculations of dreaming chronologers. When and how did man first appear on the face of the globe? That is the problem to be solved. Can anything like certainty on this point be substituted for vague tradition! and is the earth, that huge mausoleum of extinguished races, still capable of yielding up to the contemplation of the philosopher the secrets of primeval life! It now looks as if the mist were drifting away.

In the authorised editions of the Bible we are told, *not by the sacred volume*, but by its annotators, that "*In the beginning* God created the heaven and the earth" [*four thousand and four years* before *the birth of Christ*]. "It is more than probable," observes Mr. Horner, "that of the many millions of persons who read the English Bible, a very large proportion look with the same reverence upon that marginal note as they do upon the verse with which it is connected.

"It will be useful to look into the history of this date of 4004 years, given, with so much precision, for the creation, not of this our earth only, but of the universe, and to inquire into the authority by which an addition of so much import is made to the sacred text.

"The author of the chronology given in the margin of our Bibles was Usher, Archbishop of Armagh. I make no allusion to any part of the learned prelate's system, except the date he assigns for the creation of the world: that date comes properly within the province of the geologist; for, as the almost religious belief in its accuracy is an obstacle to the acceptance of the conclusions to which he is led by a careful study of the facts which the structure of the earth exhibits, he is fairly entitled to deal with it."

Mr. Horner then proceeds to show that no specific authority, royal or ecclesiastical, can be found for the addition of the note in question. And if such were to be found it could not be regarded as of even the smallest importance, for Usher's Chronology has no more claim to credibility than any other of something like 300 chronological speculations with which the world has been favoured between King Alphonso X. of Castille (died in 1284), who fancied that the number of years that elapsed between Adam and our Saviour was 6984, and Lippoman a learned Venetian (died in 1554), who reduced them to 3616. Well has one of the most eloquent of the clergy and learned of geologists exclaimed, "Between the first creation of the earth and that day in which it pleased God to place man upon it, who shall dare to define the interval! *On this question Scripture is silent*; but that silence destroys not the meaning of those physical monuments of his power that God has put before our eyes, giving us, at the same time, faculties whereby we may interpret them and comprehend their meaning."

It is not then to Kings or Mitred prelates or learned schoolmen that we must look for true evidence concerning the earliest history of mankind. The buried witnesses of the earth are alone worthy of belief; and what do those witnesses declare? They say that man lived in Europe when the Elephant, the Rhinoceros, and the Hippopotamus were the lords of its swamps and forests, when horses and oxen of forms extinguished ages since may have been his slaves or his food; and that for anything we see to the contrary thousands of centuries may have passed away since the form of man was first placed by the Creator on the surface of the present globe.

The stalking horse of those who inconsiderately clung to the speculations of the Irish prelate has been that no human *bones* had been discovered amongst those of extinct races of animals.

"Still," Mr. Horner observes, "against such merely negative evidence we have undeniable proofs, in numerous places, of the existence of such an association with man's *works*, and even many instances of his having applied the bones of such animals to his wants." "Ever since the discovery by Dr. Falconer in 1858 of implements of human workmanship associated with the bones of extinct quadrupeds in the cave at Brixham in Devonshire, and the subsequent communication of Mr. Prestwich to the Royal Society in May 1859, of his examination of the ground where M. Boucher de Perthes had discovered, in a bed of gravel, flint hatchets associated with the bones of extinct quadrupeds, at St. Acheul near Amiens, and at Abbeville, this question has been a topic of intense geological interest. On the 7th of last May, M. Beaudoin announced to the Geological Society of France a discovery he had made of worked flints in undisturbed drift in the neighbourhood of Chatillon-sur-Seine; and on the 20th of the same month M. de Verneuil communicated a similar discovery at Precy, in the department of the Oise. . . . . Mr. Evans states that he was himself witness to the extraction of a worked flint from the gravel bed at St. Acheul, at a depth of 11 feet from the surface, and about 4½ feet from the bottom of the pit;—that, on another occasion, Mr. Flower, one of the party of geologists, uncovered and exhumed with his own hands a perfectly worked instrument at a depth of 20 feet from the surface:—that the implements occur most certainly in undisturbed gravel, for it is so hard and compact as to require the use of a pickaxe, and therefore precludes all idea of its being a reconstructed mass;—that there is every improbability of the bones of extinct species of quadrupeds associated with the implements having been washed into the gravel from an older deposit; for not only are they little if at all worn, but in the lower beds at Menchecourt, near Abbeville, the skeleton of a Rhinoceros was discovered nearly entire; and thus we have strong, almost conclusive, evidence of the coexistence of man with these extinct mammalia;—that it appears to be established beyond a doubt that, in a period of antiquity remote beyond any of which we have hitherto found traces, this portion of the globe was peopled by man;—that, at Amiens, land which is now 160 feet above the sea, and 90 feet above the Somme, has, since the existence of man, been submerged under fresh water, and an aqueous deposit from 20 feet to 30 feet in thickness, a portion of which at all events must have subsided from tranquil water, has been formed upon it; and that this too has taken place in a country the level of which is now stationary, and the face of which has been little altered since the days when the Gauls and the Romans constructed their sepulchres in the soil overlying the drift which contains these remains of a far earlier race of men."

But it is not merely to the discovery in their ancient beds of instruments fashioned by the hand of man that geologists now can turn. Better evidence has been found. Human bones *have* at last been discovered by M. Vibraye along with those of ancient Rhinoceroses, Bears, and Hyænas, in a cavern of Jurassic rock between Troyes and Chalons-sur-Marne, containing three distinct beds of drift, the lowest unquestionably undisturbed.

"On making excavations in this lowest bed, he met with a vast accumulation of the bones of the above animals; and among them, one of the labourers, while M. Vibraye was in the cavern, found *a human jaw*. M. Vibraye thus describes this remarkable event:—'Judge, gentlemen, of my surprise, when I saw a human jaw. I felt disposed to doubt the reality, and to believe that it was the jaw of an ape; but no, the doubt could not remain for an instant; for the jaw, all the alveoli of which are perfectly seen, still contained two well-characterised teeth, viz., the first right lower premolar and and the first large molar of the same side. I hastened to satisfy myself not only as to the situation, but as to the actual place this important remain had occupied, and I can affirm that the homogeneous bed, the lowest bed in the cavern, was perfectly intact, and had in no respect changed its nature. I found this jaw while devoid of all preconceived ideas, and was even obliged to do violence to my individual convictions to admit the evidence. To add to the value of this discovery, I ought to add that, while arranging the numerous remains collected in this cavern during the last two years, I found the tooth of another man, a first premolar of the lower jaw belonging to an individual of less size than he to whom the jaw belonged. This would tend to prove that the first discovery is not an isolated fact, and that it is more than probable that further confirmation would be found by continued researches."

Nor is this all: "Another and a very decisive proof of the coexistence of man with extinct species of quadrupeds has been brought forward by M. Lartet, a Foreign Member of our Society, in a paper read before us last May, as well as in a communication in the same month to the Geological Society of France. He there points out numerous instances of intentional incisions by a sharp but rude instrument in such bones. These incisions exist when the bones are disinterred; and if the bones unquestionably belong to extinct species, and if the deposit in which they are found is certainly undisturbed ground, the evidence is complete. All these conditions are fulfilled in the cases brought forward by M. Lartet. He exhibited the specimens to myself in the Museum of the Jardin des Plantes at Paris last spring."

Further discoveries hardly second in interest have been made by other observers; but for these we must beg the reader to refer to the Address itself.

Another edition (the ninth) of *Rivers' Orchard House* has appeared to greet the coming spring. These repeated reissues have considerable value, firstly, because they withdraw recommendations which experience shows to be faulty; and, secondly, because they admit of frequent additions and improvements as practice becomes more perfect. The chief addition on this occasion concerns the cultivation of Oranges and Lemons:—

"I have now, however (February 1860), the great satisfaction of stating that Orange and Lemon trees and Camellias may be grown in pots in any common orchard house without fire heat, by the very simple

method—and how simple are all good gardening practices—of taking advantage of earth-heat (terrestrial radiation), which is done by laying the pots on their sides on the earth-borders of the house in November or December, but not till the approach of severe frost, and covering pots and trees first with mats treble in thickness, and then with a coating, say 1 foot thick, of dry refuse hay, leaves, or straw, giving the plants some water before they are laid down. If the weather should be mild in the winter months, as it often is, the covering, which is easily removed, may be taken off and replaced as soon as frost approaches, and suffered to remain on even if the frost lasts some weeks. About the first week in March, if the weather be mild, the Camellias may be placed upright and have water, as their flower buds will be swelling, they will then bloom all through April; some of their flower buds may perhaps drop off, but not to any extent, for the plants will be in a better condition than they often are after being wintered in a greenhouse exposed to heat, necessary to keep out frost, and consequently to a dry atmosphere.

"Towards the end of the month of March, or earlier if the season be mild, the Orange and Lemon trees may be placed upright and have water, which should be given sparingly the first fortnight. They will then blossom and bear their fruit in the house all the summer and autumn. If any sudden severe frost should occur in March or early in April, all the trees must be promptly laid down and covered with mats till it has passed. The radiation of heat from the earth is so constant and powerful, that when thus intercepted by a thick dry covering, no fear of injury even from the most severe frost need be apprehended. I write with confidence on this subject, having for many years kept tender evergreens in pots from frost, by merely laying them down on the soil in the open air and covering them with mats. The application of the system to Orange trees in orchard houses is, however, an idea only a few days old, and was brought to my mind by the following incident.

"On the 19th of December, 1860, the frost became severe, and some young Lemon trees for stocks which it was thought would not be wanted and therefore not housed, yet too valuable to be thrown away, were covered with mats two or three thick, and then with a coating of straw. On the 21st there was a considerable fall of snow; they were forgotten and not uncovered till the middle of February. On taking off the mats and straw the leaves of the greater part were found to be discoloured, but their stems and roots all alive and fresh, although they had been in moisture and darkness for two months and lying on a cold clayey soil fully exposed to the north east. Reasoning from this I feel no doubt but that Lemons and Oranges may be grown in pots, not only in cold orchard houses where they will be cultivated by thousands, but also trained to walls with southern aspects, the pots being plunged and taken up annually early in November, then laid on the surface in a shallow trench at the foot of the wall, and parallel to it, and covered with mats and straw in frosty weather, uncovering them during the winter in continuous mild weather. About the first week in May, unless the season be unusually late and cold, the trees may be raised and trained to the wall, the pots being plunged, as in the preceding season, following the same practice annually. I have used the small 'Petersburgh mats' for covering, as they are more closely woven than the large mats, but some other material will doubtless be found, such as thick painted canvas, or perhaps some thick and cheap woollen fabric, so as to retain and thus take full advantage of earth-heat, hitherto so little thought of although well-known to exist."

Garden Memoranda.

MESSRS. HENDERSON'S NURSERY, PINE APPLE PLACE, EDGEWARE ROAD.—A span roofed house has this year been devoted almost wholly to Hyacinths, of which there is at present to be seen here a beautiful exhibition well worth inspection. The plants are tastefully arranged in rows round a flat table, whose centre is occupied by Norfolk Island Pines, and other choice Coniferous plants; the side shelves are also full of Hyacinths, Early Tulips, and Narcissi, and round the whole has been put a band or edging of Musk, whose green leaves just rising an inch or so above the Moss in which the pots are plunged and, no more, have a very pretty effect. The roof of the house is shaded with Tiffany, drawn tightly across inside. Among the Hyacinths were several yellows, which have bloomed well here this season, and form an agreeable contrast with blues, reds, and whites, the prevailing colours in this class of plants. Other kinds unusually striking were Kaiser Ferdinand, single blue, edged with lilac; Mimosa, violet; Couronne de Celle, bright pale blue, edged with white, large and showy; and L'Unique; the last, though not perhaps a first-class variety, is well worth growing on account of its peculiar colour, which is deep purplish lilac. Among Tulips, Queen Victoria is a fine kind—white delicately feathered with pink; and White Eagle is also good in its class; Brilliant and some of the other showier kinds were likewise very striking.

The show house is at present gay with Rhododendrons, Cinerarias, Pelargoniums, Cytisus, and plants of that description, the whole being neatly edged with Lycopodium denticulatum; and little plants in flower of the useful Rhododendron ciliatum. Of R. javanicum there were several specimens in bloom; even seedling plants of this, little more than 6 inches high, were furnished with fine heads of flower. Among Epacrises, by far the most attractive was one named Viscountess Hill, a rich bright scarlet, which seemed to be a general favourite. Some standard Myrtles with fine heads and clean straight stems formed a suitable and pleasing background to the more showy flowering plants in this house.

Out of doors were several thriving young Wellingtonias, which have stood the winter unhurt; they were in bushel baskets, out of which they are never intended to be moved. When planted permanently the baskets are put into the ground with them, and after a time they rot and allow the roots to spread. Managed in this way they can be planted out at any time without fear of injury. Some Pear and Cherry trees in pots which had stood out all the winter were just coming into bloom, and were about to be placed under glass to protect the blossoms from frost. They looked as if good crops might be expected from them.

In crevices and little basins in rock-work Crocuses were beautifully in flower, as was also the charming little Scilla amœna, which is one of the handsomest of all the Squills. A bed of Narcissus minor was also very pretty, the plants being little more than 4 inches high and finely in bloom; for the decoration of spring gardens this will be found a most useful plant. Of early Tulips those planted in January promise to be better than beds of them put in in October; the latter come in too early, and their blooms prove puny and poor.

Skimmia japonica, which is one of the most valuable evergreen hardy plants we possess, was covered with red fruit, and not a leaf of it has been injured during the late severe winter. Thujopsis borealis and Cupressus Lawsoniana have, even in the shape of small plants, also stood the winter unhurt.

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c.—The occasional bright sunshine which we are now experiencing will soon, unless means are used to counteract its effects, destroy the beauty of some of the finest specimens of plants in this house, particularly if their blooming has been forwarded in a close moist atmosphere, and, although it is yet too early to bring shading into general use, it will be difficult without its assistance to preserve blossoms in perfection during such weather as we have at present. Blinds must therefore be resorted to; but they should be arranged so as to be easily drawn up or let down. In admitting air avoid as far as possible allowing cold currents to blow over the plants. Many conservatories are very unfit places for Heaths, being generally too lofty and kept too warm for them; some of the free flowering varieties are however very ornamental, and should be largely employed in their decoration during the early months. As soon as they have done flowering let them be pruned back and give them a liberal shift when they start into growth, using good fibry peat for the purpose, and if they are well attended to during the growing season they will overcome any injury they may sustain through occupying an unsuitable position while in bloom. Azaleas, Camellias, Roses, early-flowering New Holland plants, and forced bulbs will keep show houses gay for some time yet.

FORCING DEPARTMENT.

PINERIES.—Look over young growing stock, occasionally examining and re-potting such as is found to be in want of more pot room. The temperature may be slightly advanced, as the amount of sunlight increases, but this is a matter in which the state of the plants will be the best guide. Aim at securing strong dwarf plants, with a free habit of growth; and if this is obtained, it is immaterial whether the night temperature is 60° or 70°, and very much will depend upon circumstances as to which will be proper. Plants that may be unhealthy and in an unkind state, if kept near the glass, will be benefited by a considerably higher temperature than would be suitable for others in a free state of growth. These are circumstances, however, which can be properly judged of only by those in care of the plants, but they are easily understood by a little careful observation. Use every means to induce a vigorous root action, and if this is obtained free strong growth will result with otherwise ordinary care only.

VINERIES.—See that Vines starting into growth are tied up in their places before the shoots get so long as to be liable to be broken off in the operation. Syringe frequently until the leaves begin to unfold; but use the syringe sparingly after that is the case, and only on the afternoons of bright days. Where the buds do not promise to break regularly bend the Vines so as to place those that are backward in the most likely position to catch the sap, and this should be done directly any indications of their not breaking regularly are observed. If any of the bunches in houses where the berries are stoned look as if they would be improved by a few more berries being cut out, let this be done at once.

FIGS.—Keep the shoots thin, so as to expose the foliage to light and air, and persevere in the use of the syringe to prevent red spider. Give air freely on bright days, shutting early in the afternoon after syringing the house.

PEACHES.—Proceed gradually with disbudding, and where the fruit is very thick a portion should be removed as soon as fairly set; but the Peach is liable to drop until after stoning, and this must be borne in mind, and plenty left to allow for a few failing.

CUCUMBERS.—Maintain a steady heat to these at night, and allow it to rise a little with sun heat during the day-time. Give air on every favourable opportunity.

FLOWER GARDEN AND SHRUBBERIES.

Let the herbaceous ground and borders now be well cleaned and neatly raked. Fill up vacancies either from the reserve garden or by sowing annuals in the intermediate spaces. Many plants, as for instance Phloxes, Asters, &c., throw up too many flowering shoots; where such is the case thin them out at once, so as to obtain not only fine heads of bloom but increased strength in the remaining shoots, to enable them to need less assistance from stakes. Hollyhocks for late blooming may still be planted, as it is best where they are grown extensively to plant at two or three times to ensure a succession of bloom. These showy plants are very suitable for long lines, parallel with straigh walks, walls, &c., where they produce a grand effect. Shrubberies should now be gone over, pruning in encroaching branches, and removing all dead and dying limbs, of which the late winter has in most places left a profusion. Shrubs wholly dead should be removed at once, and replaced by others from the nursery or reserve garden.

HARDY FRUIT AND KITCHEN GARDEN.

See that recently transplanted fruit-trees are not suffering for want of water, a circumstance which, however, will hardly happen except on dry porous soils, and in such cases the ground should be mulched with decayed leaves to preserve it in a uniformly moist state. Attend carefully to the preservation of blossoms of fruit trees. Where nothing better or more convenient can be obtained, Yew or Spruce branches will be of service, provided they are so fixed as not to be liable to be blown against the blossoms. Sow Broccoli in beds of rich light soil in an open situation for the main crop, and Cabbages, Cauliflowers, &c., in succession. Attend also to sowing small breadths of Turnips about once a fortnight, so as to secure having a regular supply in a fit state for use. Put in a small breadth of some early French Bean on a warm dry sheltered border, and plant a quantity in small pots to be raised in a cold frame and planted out as soon as all danger of frost is over. Seldom have vegetables of every description been scarcer than they have been this spring; therefore endeavour to get crops in early. Use the hoe freely to keep the surface soil loose and friable.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON
For the Week ending March 28, 1861, as observed at the Horticultural Garden

March.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind
Friday 22	11	29.723	29.595	55	32	43.5	44½	42½	N.W.
Satur. 23	12	29.837	29.774	61	28	44.5	45	42½	S.W.
Sunday 24	13	29.808	29.689	64	38	51.0	45½	42½	W.
Mon. 25	14	29.904	29.760	48	42	45.0	46½	43	E.
Tues. 26	○	29.675	29.518	57	39	48.0	46½	43½	S.W.
Wed. 27	16	29.457	29.384	59	43	51.0	47½	44	N.E.
Thurs. 28	17	29.522	29.416	60	30	45.0	48½	44½	S.W.
Average..		29.703	29.591	57.7	36.0	46.8	46.3	43.2	

March 22—Very clear; fine but cold; fine at night.
— 23—Overcast; fine; slight frost at night.
— 24—Fine; slight haze; very fine; overcast; rain.
— 25—Rain; hazy; overcast at night.
— 26—Uniformly overcast; fine; slight rain.
— 27—Overcast; very fine; rain at night.
— 28—Slight rain; very fine throughout.
Mean temperature of the week, 4½ deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending April 6, 1861.

March and April.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 31..	54.6	34.6	44.6	15	0.30 in.	3	7	2	3	7	5	5	5
Mon. 1..	54.8	34.5	44.6	19	0.76	3	7	3	3	5	9	1	4
Tues. 2..	55.3	36.2	45.8	18	1.19	4	4	4	3	4	10	11	3
Wed. 3..	56.5	35.3	45.9	12	0.30	5	3	3	1	3	11	5	4
Thurs. 4..	56.4	36.4	46.4	14	0.48	4	7	3	3	6	5	4	3
Friday 5..	57.1	36.3	46.7	16	0.65	1	6	4	2	3	5	12	[illegible]
Satur. 6..	57.3	36.1	46.7	12	0.30	3	9	3	2	4	11	2	1

The highest temperature during the above period occurred on the 3d, 1848—therm. 78 deg.; and the lowest on the 1st, 1838—therm. 16 deg.

Notices to Correspondents.

GREENHOUSE INSIDE A VINERY: *H R H.* The arrangement seems to be a bad one, unless you grow tropical Ferns. You might turn your attention to Begonias, but we cannot answer for their thriving in such a place.

HOTHOUSE: *Llanelly.* You will find it difficult to replace a wooden roof by iron unless you employ a curvilinear roof, or a series of ridge and furrow roofs, because if rafters are straight they must be very heavy to be secured against bending downwards, or else very short. We should advise you to have the roof *inspected* by some professional person who has no bias for one material more than another.

MELONS: *D M.* You have ruined your plants by the use of the varnish; and, what is worse, it is doubtful whether the poisonous effects will disappear until a long time has elapsed.

MOWING MACHINES: *R & A O.* We really cannot with any sort of propriety recommend one tradesman rather than another, and must beg to refer you to our advertising columns.

NAMES OF FRUITS: *Lawrence.* 1, Bezi de Caissoy Pear; 2, Coe's Golden Drop Apple.

NAMES OF PLANTS: *B F.* Cyrtoceras reflexum.—*G B.* What do you want to know? We find nothing except the Spergula and common Dog's-tooth Violet.

ORCHARD HOUSE: *A B.* We cannot say what is the matter with the leaves. The mischief is past remedy, whatever may have caused it.

VINES; *A B L.* Your Grapes are attacked by rust; that is to say the skin of the berries has been more or less completely killed. Whether by a current of cold air, or by handling or by somebody's greasy hair rubbing against them we have no means of knowing.

MISC.: *M T.* The seedsmen can no doubt obtain Cucumis Arada from Paris. Vilmorin's house is sure to have it. —One Shilling will be given for a copy of July 7, 1860.

PLYMOUTH SEED COMPANY, PLYMOUTH.—
SEEDS FOR THE FARM.

Mixed Grasses for Permanent Pasture, 28s. to 34s. per acre.
White Clover, Red Clover, and Cow Grass, 8d. to 1s. per lb.
Plymouth Swede Turnip, 2s. 6d. per lb.
Grant's Pine Apple Green Top, very hardy, 1s. 6d. per lb.
Globe Turnips, 1s. 6d. per lb.
Tankard, ditto, 1s. 6d. per lb.
And all other Agricultural Seeds at moderate prices.
For further information see advertisement of March 9.
The FARM SEED LIST can be had on application.

FREIGHT AND CARRIAGE.—All Orders for Seeds above 2l. will be delivered Free of Charge to any Railway Station between Plymouth and Paddington; and to all Stations on the Cornwall, Tavistock, and North Devon Railways.

All Orders above 2l. Free to any Station on the Broad Gauge Railways, or to any Market Town in Devon and Cornwall; or to Cork, Dublin, Waterford, Limerick, Belfast, and Liverpool by Steamers; and to Guernsey and Jersey by Traders.

All Orders above 5l. will be delivered Free of Carriage to any Railway Station in England and Wales; and to any Steam Port in England, Wales, Scotland, or Ireland.

All heavy articles, such as Grain, Tares, Clover, &c., are exceptions to the above Rates.

Address: Plymouth Seed Company, Plymouth, Devon.

FARM SEEDS.—Genuine Seeds of Select Orange Globe Mangel, from large roots and very choice, per lb. 1s. 4d.

Yellow Globe Mangel, select	,,	1	3
Elvetham Long Red Mangel, very large	,,	1	3
Other Varieties, all at	,,	1	3
Select Bronze Short-top Swede, very hardy	,,	1	6
Improved Skirving's Swede	,,	1	6
Sutton's Champion Swede	,,	1	8
White Belgium Carrot	,,	1	0
True Altringham Carrot	,,	1	8

Fluke Potatoes 5s. 6d. per 80 lb., off the Moss.

PRICED CATALOGUES of FARM and GARDEN SEEDS on application to HENRY BROWN, Seedsman, 4, Commutation Row, Liverpool.

TO THE TRADE.

SKIRVING'S, MARSHALL'S, AND PURPLE-TOP SWEDE, Early Horn, Long Surrey, and White Belgium Carrot, Drumhead Cabbage, selected Crimson Beet, British Queen, Surprise, Daniel O'Rourke, and Burridge's Eclipse at reduced prices.—Apply to M. HONEY, Bridge Terrace, Maidstone.

THE ALSIKE HYBRID CLOVER, PERENNIAL RED CLOVER, TRUE PERENNIAL WHITE CLOVER. —The above kinds of Clovers will take well on lands which have proved Clover-sick when sown with the common kinds of Clover. They are all included in Messrs. SUTTON'S Mixtures of Grass and Clover seeds, and they may be purchased separately. SUTTON & SONS, Royal Berkshire Seed Establishment, Reading.

IMPROVEMENT OF GRASS LANDS,
BY SOWING GOOD SEEDS OF THE MOST SUITABLE KINDS.

SUTTON'S RENOVATING GRASS SEEDS consist of the finest Grasses and Perennial Clovers, producing great improvement in the Pasture, and at a small expense. Quantity of Seed required, 8 to 12 lbs. per acre. Price reduced to 9d. per lb., or 80 per cent. Sow in February, March, and April.

The great improvement effected by sowing Messrs. SUTTON'S RENOVATING MIXTURE is most satisfactory, and to those who have not studied the various properties and habits of Grasses the results are quite surprising. The following extracts from letters are similar to many others received unsolicited:—

From SHAFTESBURY WALMSLEY, Esq., *Mottistone, Isle of Wight.*
"The Grass Seeds were extremely good, and answered my purpose uncommonly well; they gave me a famous crop of hay last summer, 2½ tons per acre, where I never saw anything but bents and rubbish grow before. I strongly recommend your Renovating Seeds; they are clean, and I believe safely to be depended upon."

From Mr. J. HALLETT, *Blackford Farm, Highclere.*
"The plot of ground where the Grass Seeds were sown, which before seemed almost past growing anything, is now growing as beautiful a plant of herbage as any one could wish to see."

From Miss ANDREWS, *Norton Villa, near Swansea.*
"Your Renovating Mixture we had last year more than answered our expectations."

From ALEXANDER C. FORBES, Esq., *Swanstone House, Whitchurch.*
"You will be pleased to hear that the Renovating Seeds I sowed, and which I thought had failed, are now coming up in great abundance."

From Mr. G. NORRINGTON, *Rectory Farm, Taplow.*
"Five years ago I wrote to you to send me a Mixture of Grass Seeds to sow upon 10 acres of old pasture. At the time I took the farm the 10 acres of meadow were almost useless. I now have a most excellent pasture."

From the Rev. JOHN GUTHRIE, *Vicarage, Calne.*
"I have no hesitation in expressing my great satisfaction at the manifest improvement both to lawn and pasture from the Seeds which I received from you, though I was somewhat late in the sowing."

From Mr. W. MEAKINS, *Gardener to the* Dowager Lady TRURO, *Bowes Manor, Southgate.*
"I am much pleased with the Renovating Seeds I got last season from you, as in every meadow where I sowed it I found great improvement both in quantity and quality; also the Lawn was very much improved by the mixture you sent me, and my employer was much gratified with the results both in our Pasturage and on the Lawns, and wishes me again to procure mixtures from you when the time arrives for sowing."

From C. F. THRUSTON, Esq., *Talgarth.*
"Your Seeds have answered admirably. They were sown in spring, under rather unfavourable circumstances. The after Grass is remarkable; Clover and other Seeds springing up where nothing but the poorest pasture had been previously, and I think that a field of 9 acres sown with your Renovating Mixture is now one of the finest in our neighbourhood."

From Sir DAVID CUNYNGHAME, *Wellesbourne House, Warwick.*
"The meadows that were renovated with your Seeds are looking very well. I cut nearly 2 tons of hay to the acre, and three years ago the same land hardly produced half a ton per acre."

INSTRUCTIONS ON IMPROVING OLD PASTURES.

Heavy harrows should be drawn over the old turf early in the Spring, to loosen the soil for the admission of Seeds of the finest and most nutritive kinds of Perennial Natural Grasses and Clovers, which, if sown freely, will occupy the numerous small interstices between the Grasses already growing, and thereby prevent the luxurious growth of coarse Grasses and noxious weeds.

Parks, Meadows, and Upland Pastures may be increased in value 50 per cent. by sowing these Seeds.

Grass Seeds for laying down Permanent Pasture, 26s. to 32s. per acre.

Seeds carriage free to all parts, except small parcels. Catalogues post free.

JOHN SUTTON & SONS, Royal Berkshire Seed Establishment, Reading.

SEED CORN FROM THE CHALK.

RAYNBIRD, CALDECOTT, AND BAWTREE supply carefully selected and screened samples of all the most approved varieties of Wheat, Barley, Oats, &c.

Address, Basingstoke, Andover; or 89, Seed Market, Mark Lane, E.C. Samples and prices Post-free on application.

RAYNBIRD, CALDECOTT, AND BAWTREE, SEED MERCHANTS and GROWERS, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E.C.

Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.

Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

LUPINE SEED FOR FIELD CULTURE.

SUTTON AND SONS, SEED GROWERS, Reading, can supply the proper kinds of LUPINE SEED for Field Culture, as recommended by Baron Herm Von Nathusius, and Mr. Thos. Crisp, in the "Journal of the Royal Agricultural Society," No. XLIII. Instructions on Cultivation sent with the Seed.

PRICED LISTS Post free.

Royal Berkshire Seed Establishment, Reading.

GOOD CLOVER SEED.

GENUINE NEW CLOVER SEED

may be obtained of the undersigned.

Prices (according to market and quantity required) will be forwarded on application.

JOHN SUTTON AND SONS,
Seed Growers, Reading, Berks.

The Agricultural Gazette.

SATURDAY, MARCH 30, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

MONDAY, April	1	London Farmers' Club .. .. 6 P.M. (Mr. Ruston on Sheep in yards.)
TUESDAY, &c., —	2, 3, 4, 5, 6	Royal Dublin.
TUESDAY, —	2	Wirral (Mr. Russell on Farm Implements.)
WEDNESDAY, —	3	Lochaber.
SATURDAY, —	6	Newcastle.
MONDAY, —	8	Botley (Mr. Blundell).
TUESDAY, —	9	Hexham (Rev. Mr. Shield on Meteorology). Galashiels.
WEDNESDAY, —	10	Agri. Society of England .. .. Noon. Oxford. Thornbury.

EVERYBODY knows that the rot has been prevalent among our sheep during the past season. We gave last autumn a series of papers on the diseases prevalent in a wet season—and Mr. SPOONER of Southampton, from whose pen they came, referred among others to the "rot." When it attacks a breeding flock it is hopeless ruination, but if care has been taken in purchasing a feeding flock, and they be hurried through the fatting process, the earlier stages of the disease are not apparently injurious. The following is an account of such a flock so managed during the past winter, and of the experience of its owner:—

"Wanting a hundred shearlings last October to run on Grass land and consume a few tons of Mangels and some rough hay thereon, I looked about me, and at last secured what I wanted. The wet summer caused me to be especially suspicious of rotten sheep, and reports were rife enough at that time of the revelations of the slaughter houses, and the losses that were being sustained by farmers in various parts of the country by the falling of great numbers of sheep, principally ewes, in no condition for the knife. Instead therefore of resorting to a neighbouring market, one of the largest in the kingdom, where it is next to impossible to pick out a lot of sheep for fatting sufficiently homogeneous in character, but where the lots are very much mixed up together, I made my way to a distant fair. There I bought a pen of fine sheep, of one flock, and very well bred. They were Downs with two crosses of Leicester, and, indeed, gave great prominence to the Leicester white face, frame, and wool. They had been reared upon a high, sandy, and somewhat exposed hill-side. The touch gave me the impression they were in a thriving state, and certainly, if the judgment can be guided by exterior signs, the 'blooming coat' denoted good health. I gave for them 46s., including expenses (sheep were dear then) and considered myself, if not very fortunate in securing a cheap bargain, yet very fortunate in securing a sound one. There are times, we all know, when sheep must be bought, whether the price is high or low, and in this case the sheep were wanted more perhaps to save the expense of the dung carting, and the comparative inefficiency of that process, than with any expectation of realising a further advantage from the outlay.

"But I have not stated my reasons for taking such special care to get sheep not infected with rot. The fact was, the Grass land on which I was going to place them lay water sodden. The previous tenant had supposed that drainage was the worst possible process for Grass land, and used to expatiate a good deal about the benefit of water meadows, and held, of course, in the most natural way, that unless the roots of the herbage were well nourished by a constant supply of water, the crop would be where the contumacious members of the English Parliament were when Charles went to look for them—wanting. Well, no draining tool had ever cut its way through that mass of London clay, with its gravel bed beneath, and the rain that fell during the summer, finding the soil as impervious as glazed earthenware, leisurely meandered amongst the dropsical Grass blades from the higher to the lower levels, and from thence to the brook, or quietly waited the invitation of the sun to ascend to cloud-land, failing which it waited on until joined by the water spouts of autumn. They were, in fact, what their former owner had represented them, veritable 'water meadows,' only they were so without any regard to my wishes in the matter, and I had always conceived that the value of such a contrivance lay not only in the power to flood a field, but to lay it dry again. This, however, is neither here nor there. There were the sheep, and the effort to get them through the first gate very much reminded me of the same species of woolly reluctance which has to be conquered above the wash-dyke in June, when the temperature is more in accordance with a plunge. In they went, however, the entire 100, and I remember saying to myself, 'What a likely place that is for the rot; if they have not got it now they soon will have, provided the rain continues to pour as it does now.' Pray, good reader, don't suppose that I shut the gate, left those sheep as a certain consignment to the inimical malady, and took a six weeks' holiday. The fact is that the gate was kept open pretty much. It opened to let in the cart with thousands of tiles, and it opened to let in a lot of burly fellows, with spades and stones, with picks and scoops; it opened to ponderous loads of manure, and it opened—you won't believe me if I say so—to let the same sheep out again. I mean to say that as fast as I could I drained field by field 4 feet deep, and laid them all dry, so that the poor animals during some part of their residence with me luxuriated on a dry layer, for which they were glad enough to relinquish their 'water bed.' Still I suppose the poison had been either implanted or developed before my drainers got through one-fourth of their work. A fortnight after navigating my fields, one of the worst of the sheep was killed because it displayed symptoms of giddiness, its brain probably being turned by too much reflection, and upon inspecting the viscera, the lungs were found grown to the side, and the liver was occupied by three tenants of the species *fluke*. In order to have come to a better decision this animal should of course have been killed before it commenced its amphibious career; but so it was, its death occurred a fortnight after.

"The carting of pipes and the cutting of drains were not, however, the only remedial measures I employed. The sheep were put upon dry nourishing food; half a pound of cotton-cake per day, and rough hay cut with straw, mixed with pulped Mangels and well heated together in a heap 24 hours before being used; besides this they had as much salt as they pleased to consume, and to the presence of this condiment I attribute a great measure of my success. I kept a wary eye on the flock, draughted off 10 or 15 at a time as they arrived at a certain point in condition; wherever I observed one falling back instead of progressing, he took his place in the next draught, and so on, until they are all gone, and my Grass lands are laid in for hay. Curiosity prompted me from time to time to slaughter one for my own family, and in each successively the number of flukes astonishingly increased, and I learn on inquiry amongst the butchers that the malady had spread throughout all the members of the flock. I gave you the original cost with expenses, namely 46s. per head; striking the average the return is 53s., and the last 10 I have had 16 weeks. So far this is one portion of my experience with rotten sheep, from which it seems to me that liberal management and a watchful eye has saved me from heavy loss. *F. R. S.*"

THE late trial of BANNERMAN *v.* WHITE and OTHERS, to which reference was made last week, and which has excited so much interest in the Hop districts, calls for further remarks here, not only on account of its intrinsic interest, but because we published a leading article in 1854 on the effect of applying sulphur to the growing plant, which formed the main feature of the evidence on the trial in question. It should be observed, however, that the case was not determined on the merits or demerits of dressing mouldy Hop bines with sulphur, but on the extent of the guarantee which was given by Mr. BANNERMAN when the Hops were sold. With this of course we have nothing to do, or with the judgment which was exercised respecting it. The point to which we wish to call attention is the extreme injustice of our great brewers towards the more intelligent and active Hop growers, in refusing to buy Hops where a particle of sulphur has been used in the Hop grounds.

In consequence of certain experiments which had been made two or three years before 1854 in

the neighbourhood of Maidstone, some of the Hop-growers in that district employed sulphur against the mould which was then so prevalent, and had in consequence large crops of Hops; while others, who neglected the suggested remedies which had proved so successful, had a complete failure. The late Dr. Plomley, for instance, at Maidstone, and Mr. Erskine at Leeds, who had been most active in the experiments, were well rewarded for their pains. The famous College ground which borders on Dr. Plomley's, and in which no precautions against mould were taken, was scarcely worth picking. The success of a few naturally excited the jealousy of the many, and in consequence the strangest reports were circulated, and the factors held a meeting at which it was resolved that they would buy no Hops from grounds in which sulphur had been used. It so happened that in the same year a quantity of beer was sent out to the Crimea and Australia, which for some reason turned out badly, and to whatever the failure might be really due, it was referred without the slightest proof to the sulphur-dressing of the Hops. The beer, however, was analysed at the time by Dr. Taylor and Professor Brande. The evidence of the former at the late trial, as given in the *South Eastern Gazette*, is as follows:—"Believed that the objection to the application of sulphur at the stages of the Hop's growth was a mere prejudice. Had examined the beer complained of in 1854, and found that there was nothing the matter with it, but conceived that it had been put into bottles tainted with gas tar or naphtha. Witness was associated at the time with Professor Brande, and they afterwards drank the beer submitted to them. It was good and pleasant to drink. The plant would not absorb sulphur if applied in a solid state, though it would do so if applied as a solution.* The Hop itself naturally contained a trace of sulphurous resin, and would not be a good Hop if it did not contain that." Prof. Brande's evidence is to the same effect. "Had tasted the beer in 1854 and found nothing the matter with it. Was of opinion that if sulphur were sprinkled on the bine or the ground in a Hop garden, it could have no injurious effect on the fruit, as it was an insoluble substance." Not a particle of evidence, as far as we know, has ever appeared in a contrary direction, and it seems to us as unreasonable, in the absence of anything like proof, for the great brewers to set their faces against the use of sulphur, which is the only effectual remedy in some shape or other against mould (the most effectual and easy mode being the use of sublimed sulphur with a sulphurator), as it would be for bakers to proscribe the use of arsenic or any other poisonous metallic salt in the dressing of Wheat, for the prevention of bunt. In other words it is quite as foolish to exact a guarantee that no sulphur has been used in the Hop ground, as it would be to exact one that no poison had been employed in the Wheat field. The effect on the produce would be as small in one case as in the other.

There is little doubt that the efficiency of sulphur against the mould is derived from the small quantity of sulphurous acid which adheres to the particles of the sulphur, as ground sulphur has not the same effect as the "sulphur vivum" of the Hop growers. Not a particle of the sulphur enters into the plant, and it is all washed or blown off long before the Hop is gathered, unless indeed it should be applied at a late stage of growth, and if in that case it still adheres to the Hops when dried it would at once be detected in the sample. It should however be recollected that as a general rule the fumes of sulphur (sulphurous acid) are applied to Hops in the Oast House, a practice which has never been complained of; and even supposing any particles of sulphur adhered to the Hops when placed on the kiln, they would we believe be entirely dissipated by the heat. If a few grains of sublimed sulphur are thinly sprinkled upon a piece of paper, and held cautiously for some minutes over a fire, the sulphur if unadulterated is gradually dispersed without leaving a trace upon the paper, and this though the paper is not scorched in the slightest degree. This notion is confirmed by an experiment which may be repeated by any of our readers. Professor Taylor states in his evidence that he found in the samples of 1860 sulphuric† acid from the process of drying, though nothing arising from the dressing, and this remark is of greater weight because there is no pretension that any sulphur was applied to more than 5 cwt. out of 1800, and the samples examined by the analysers were supplied by the defendants themselves, and it is on evidence that beer made with some of the Hops reserved out of the 5 cwt. proved excellent. A sample, indeed, was produced in court.

As we remarked before, we have nothing to do with the legal question. All we wish is to point attention to the injustice exercised towards our Hop growers. For their own sakes, as well as for the sake of justice, the great brewers ought to show by actual experiment whether beer is really injured by the use of Hops in the growth of which sulphur has been used. We suspect that it would turn out that the injury, if real, is due to mould which has been produced in spite of the sulphur or from insufficient application, and not from any chemical change in the Hop itself. It is very possible, indeed, that if sulphur adhered to the beer in any palpable quantity, it might exercise an evil effect either in preventing proper fermentation, or communicating a bad flavour, but then such Hops could never pass muster. The brewer at present seems to be a worse plague to the Hop-growers than the Chancellor of the Exchequer, and the modern reading of the legend must be—

First the flea, then the fly,
Then the bug, then they die,
And then the brewer.

We say nothing about tobacco and soft soap, a much worse evil, we suspect, if applied too late, than the sulphur, though when applied in good time free from all reproach. We may express too a parting wish, that nothing worse than sulphur-grown Hops were ever used in brewing. Unless sanatory Commissioners are very wrong in their reports, this is a consummation devoutly to be wished when we are in the hands of inferior manufacturers. *M. J. B.*

* By solution here is meant chemical solution, not mere mixture with water. Sulphur, it must be remembered, is not soluble in water. True solutions of sulphur are rarely if ever used in Hop grounds.

† Such is the word used in the report. Perhaps the word really used was sulphurous. The point is however of no consequence as regards the question before us.

FARMING ECONOMICS.

No. VII. THE GAME QUESTION.

Can it not be rendered agreeable to all parties? Being an old sportsman myself, fond of a little game preserving, and yet having the greatest aversion to injuring farm crops or irritating my neighbours' feelings, I enter upon a consideration of this question with [illegible]. I suppose we are all agreed that every man has a right to enjoy himself in his own way, provided he does not infringe on the feelings or interests of others. I am therefore [illegible] a [illegible] of game well fed need not be injurious to agriculture. I speak practically on this matter, for although two Wheat fields and a Clover field adjoin the wood in which I have many hares and rabbits, not a blade is [illegible], and scarcely ever does a rabbit make its appearance. Methinks I see a good many [illegible] of game farms gravely shaking their heads, but facts are stubborn things. The whole [illegible] lies in four words—"feed in the cover." Nothing goes away from its dinner. Where the food is supplied of the right kind and at the proper time, there [illegible] be found.

So it is with game; their shy and retiring habits naturally dispose them to cover. I know it is the custom with many game preservers to feed their pheasants, but do they feed their rabbits and hares? Very rarely. A farmer said to Lord C. recently, "Your lordship has, I fear, lost your game by poachers, for I have seen nothing of them lately." His lordship smiled and said, "The fact is, I have carted into and distributed over my covers sundry loads of Swedes and Mangel, and that accounts for your not seeing the game." This is [illegible], and you will find the Mangel, Swedes, or Carrots devoured to a nicety. I was shooting last season in some cover with some knowing game preservers, who were farmers. I saw the Mangel and Carrots lying about inside the wood. The consequence was in one wood we bagged 66 hares, but you might beat the surrounding fields without finding half a dozen. They were at home and had their meals provided for them there. During the late severe weather I could track the ground game all over my cover, but a sheep walk, but not a footmark was to be found in the surrounding fields. I assume of course that you keep down cats and other vermin that would disturb your game and drive it away. It is easy to comprehend that animals or fowls of any kind, if unfed at home, must go elsewhere for their sustenance. They must be fed somewhere and by somebody, or they would starve, which they will take good care not to do so long as something can be found somewhere. I wish to impress very strongly on all those who must feed game, whether as landlords or tenants, that they should use a ripened or full grown crop for such purposes, and thus prevent the frightful losses resulting from compelling game to feed on germinating or young growing crops. Let me illustrate my meaning:—a hare when ready for the spit will weigh 4½ lbs., and when alive would consume daily fully 1 lb. of Mangel or a trifle more of Swedes, on the same principle that a sheep or bullock when fed on Turnips alone will consume rather more than one-fourth of its net dead weight daily; of Mangel it would be rather less than one-fourth. A rabbit weighing 1½ lb. ready for the pot would consume six to seven ounces of Mangel daily, of course if they consumed other food they would require less roots, but as a general rule I find that hares and rabbits will not touch the young Wheat plants or Clover so long as they have access to roots, either Mangel, Turnips, or Carrots. Now let me draw my moral: a hare sits down quietly in the wood and enjoys its pound of Mangel, a ton of which at cost price, 6s. 8d., would last him 2240 days, or 6½ years, at 1s. per year. But supposing you do not provide this Mangel, how many tiny tops of budding Wheat or Clover plants must be destroyed to equal this 1 lb. of Mangel, and how much ground will be clear daily? Take for instance a nice crop of winter Tares or early Peas just pushing through the surface, and see how soon a score of hares will clear an acre and ruin the crop.

I happen to have in hand at this moment as arbitrator, a case involving a claim for damage by game, and the evidence submitted to me powerfully confirms the view I have taken, that it is ruinous policy to allow ground game to consume the early sprouting shoots of Tares, Clover, Peas, Carraway or other crops. Without entering into the question as to whose duty it is to feed the game, I would strongly recommend all farmers who hold game farms where the landlord will not [illegible] ground game, to have an ample supply of roots and feed them themselves, just inside the wood, and they may rely on them saving their growing crops. Every ton of roots so used will save them many times its value in growing crops—a pretty good profit. It will save much heart burning and perhaps a few law suits, [illegible] the other hand landlords may enjoy abundant [illegible] and yet let their land at its full value to [illegible] tenants, if they will take my advice and feed the ground game with full grown roots. It is necessary to continue the supply of Mangel until June or [illegible] events until Grass and Clovers are fully developed [illegible] the damage is [illegible]. Some [illegible] second Clover and early Turnips are desirable [illegible] autumn [illegible] growing [illegible] the cover, well secured, [illegible] cheap and [illegible] spring food. Pheasants, like barn-door fowls, are [illegible] fond of Mangel and roots. They are also very fond [illegible] sprouted grain and sprouted [illegible] the [illegible] they [illegible] sugar [illegible] up, feed them with germinated [illegible] save [illegible] the work of [illegible] your [illegible] from the soil. A full-grown pheasant [illegible] during winter consume at least [illegible] of corn [illegible]. I beg to express my conviction, contrary to [illegible] [illegible] that [illegible] economically fed as game than pheasants. [illegible] will have few competitors for their food, [illegible] fact, be nearly all consumed by them. [illegible] For every [illegible] and Beans consumed by them, probably [illegible] more will be eaten by small birds and wood [illegible] which are, by feeding, attracted in enormous [illegible] friend of mine who keeps 60 pheasants, on [illegible] acre of ground planted and netted over, [illegible] cost him about 15*l*. annually for food. [illegible] turned down a number in his wood and fed them, the expense was very greatly increased, and he [illegible] that they had many competitors for [illegible]. He therefore considers it cheaper to rear and [illegible] pheasants than to keep so many wild. Probably [illegible] economical way of feeding pheasants is with [illegible] acting iron troughs which open only when the [illegible] perch upon them. Beans and Indian [illegible] too large to be eaten by very small [illegible] therefore more economical than Barley. [illegible] are seasons of the year when winged [illegible] benefit the farmer by the destruction of an [illegible] number and variety of flies, grubs, and insects [illegible] farming is a good protection against game [illegible] The poor, miserable, unremunerative crops of [illegible] and ill farmed heavy lands suffered immensely [illegible] cold and wet season by game damage, the [illegible] harvest exposing the crops for many weeks to [illegible] them by game and other wild birds.

P.S. A friend shot a full sized wood pigeon [illegible] and [illegible] I counted [illegible] sized Beans. As 30 average Beans weigh an ounce, [illegible] as at 40s. per quarter every lb. of Beans would cost 1*d*., it follows that this pigeon would [illegible] annually (at 41 Beans per day) 14,965 Beans, [illegible] 498 oz. or 31 lbs., which at 1*d*. per lb. would [illegible] annually for one pigeon. Whether this pigeon [illegible] finished his dinner or not I cannot say, [illegible] I [illegible] and [illegible] it is [illegible] rate, it appeared to be [illegible] that [illegible] that a wood pigeon would consume [illegible] twice a day. I should recommend [illegible] weigh the corn consumed by their [illegible] they could compute [illegible] of feeding. [illegible] pheasant consumes 2 oz. of corn daily, it would amount to [illegible]. This expense may be much [illegible] them [illegible] pheasants annually [illegible]. If any farmer has to feed [illegible] pheasants [illegible] would be a [illegible] his growing and [illegible] crops [illegible] special care [illegible] Farmers should take [illegible] or they may lose [illegible] by hare [illegible] much of their plant by wood pigeons, rooks, and game. *J. J. Mechi, March*, 1861.

THE AGRICULTURAL LABOURER.

No. VI. DORSETSHIRE.—It is said of the Dorset labourer, his cottage is bad, and so they were, and some still are. They have not sufficient number on the greater part of farms, and many of those they have got are very deficient in accommodation. Till 14 or 15 years ago they were rather getting worse, the old were disappearing, and few new were being built. But about that time a great improvement began to take place, and perhaps it had attention drawn to it indirectly by the noble efforts that Lord Shaftesbury (then Lord Ashley) was making for ameliorating the condition of the miners and manufacturers in the north. While he in his noble efforts was showing the fearfully degraded state at which they had arrived, the defenders or apologists of this state of things, acting upon the principle that two blacks make a white, called attention to the condition of the Dorset labourers (which county he then represented), and painted it blacker perhaps than, compared with other places, it ought to have been. However, it brought about an improvement, and then the principle of three bedrooms began to be admitted. But still there were many mistaken ideas on the subject, and the greatest was the tendencies of those in authority to interfere too much in the domestic affairs of the cottager, dictating to him what lodgers, if any, he might keep, and sometimes going so far as to attempt to make him turn out some of his own family. And this tended to irritate the cottagers or degrade them to a cringing condition, which does not become any one, in whatever position of life he may be placed.

Where there were cottages upon the farm they were rented at 1*s.* a week, and perhaps I may be right in saying they contained on the average two bed-rooms and a sitting room and wash-house; some had more accommodation, but many had less. And as was often the case, if the labourer had to find a home in some distant village or town, he had to pay more for less accommodation, and this, with the extra distance that he had to go to work, placed him at a great disadvantage; and gave to him a listless, don't care sort of gait that has been said to be characteristic of the Dorset labourer. Till lately the condition of the unmarried men was not so good; their wages were very low, they were not paid the same wages as the married, though they were able, and expected to do the same work. And this had the effect of inducing early marriages and improvidence; but as they were placed they knew that with a wife and a home with the additional wages they would be better off. The old system of payment among the Dorset farmers was to pay the labourer according to his family, and this had naturally the effect of lowering care and efficiency among the younger ones, and as they were often out of work during the winter, they got into worse habits. But this bad system is nearly exploded, the young and strong that used to stay at home for 4*s.* or 5*s.* a week, and fear to leave their parish (what a drag upon energy this parish attachment has been!), now go further off in quest of work they have been benefited by railways going into their localities. Many left the farms to get the higher wages offered at the making of them, and thus were led farther from their parish, and thus supply and demand were brought to meet each other. But though this has tended to raise the wages of the younger, it has not yet done much for the married; and their condition may be said not to have much improved for many years, except in the improvement of their dwellings. But there is a kindly feeling existing between the higher and lower classes in Dorsetshire, that does not exist in Aberdeenshire. No doubt it often resolves itself into a rather officious meddling with the domestic affairs of the poor, but this from the want of education and intelligence among them may be a necessity, and will cure itself as the necessity for it disappears. The Dorset labourers' wages have been so often before the public that it hardly seems necessary to allude to them now. They are comparatively low: carters, with their various perquisites, about 12*s.*, including house, valued at 1*s.* a week; and as they get 8*d.* each journey from home and a little allowance when delivering corn, this adds perhaps 1*s.* a week, so that we are sufficiently near when we say 13*s.* a week for head carters; the other carters are 1*s.*, 2*s.*, or 3*s.* lower, and are generally unmarried men. Ordinary labourers have 9*s.* and 10*s.* a week without a cottage, but as they have piece-work for a considerable part of the year they earn perhaps about 11*s.* or more a week all the year round.

Their education has been far behind, but is now in a fair way of being remedied, as schools have within the last 16 years been very generally established, and before many years there will be a great difference in this respect. Their character perhaps does not stand favourably, as compared with that of the same class in other counties, and this I think is only the natural result of the system that has so long prevailed of not educating the young, and more especially underpaying them and turning them out of work so soon as a little slackness comes on the farm. This has had the effect of driving the young men, at the most susceptible age, to every kind of shift, and perhaps they get into the hands of the low, when a stigma is attached to their character, which deprives them of a chance among others, and then they become reckless.

Respecting their capabilities as workmen we can say nothing disparaging. They certainly make a great difference between piece and day-work, but I suppose all do where daily wages are so low. But at hay and harvest work, which tries the strength and activity of men, they will do as much as others if it is piece-work, but perhaps require to be looked after rather more at day-work. Their ordinary hours of labour are 10½ hours, from 6 to 6 with 1½ hour out for meals. Harvest and haymaking time from 5 or 6 A.M. to perhaps late, say on the average 8 o'clock at night; but then, though they have no more wages they get beer, perhaps about a gallon each a day—about the value of 8*d.* or 10*d.* And we have seen this commuted for 2*s.* a week during haymaking, and 4*s.* a week in harvest, and with the best results, and it would be well if such were the general rule, as the beer system excites on the part of both master and man, a feeling of "I'll do him if I can;" and much unpleasantness is the result. I feel sure that an alteration in this would benefit both master and man, and above all the man's family, and would not have the tendency to induce such a craving after beer in the younger hands. Women are extensively employed at out-door work, at weeding, haymaking, harvesting, threshing, and such like, from 8 A.M. to 5 P.M. in ordinary times, wages 8*d.* a day. But respecting the compulsory employment of them, I think we ought to protest. A married woman is bound to go out when called on to do so; indeed this in the Dorchester Agricultural Society's rules is a condition in giving a certificate to her husband to enable him to compete for its prizes! And she must not be judge in the matter, but must give a reasonable excuse for not going out. It is too much the practice to discharge young men, lads, boys, and women, at any time to save a few shillings, and to take it for granted that they must come on again when called on to do so. Now, in justice, if they are turned off when the employer pleases, they ought not to be taken on against their wish or convenience so long as they do not work for any other.

The system of hiring at one time was annual from Michaelmas, but it is giving way to continuous service, and this leaves all parties freer agents, and it would be well if all would fall into this more than they yet do. Upon the whole we cannot say that the Dorset labourers are nearly so badly off as they have been represented, and they will no doubt soon arrive at an equality with others. From the little knowledge that I have of Wiltshire I believe that the labourers from Dorset would not desire to change places with them. And their moral advantages are far before that of the same class in Aberdeenshire. But in point of intelligence and energy they are behind as well as in neatness of workmanship, though as ploughmen this does not hold good; but that is owing to the superior plough which they use, and which conceit will not let the Scotch ploughman use. *G. S.*

[Our Correspondent has, we understand, had experience as an employer of labour in many English and Scottish counties.]

THE SPRING WORK OF THE FARM.

THE following are a number of short unconnected statements on this subject, taken partly from my own experience in this locality, but more of them extracts from the Essay on this subject in the Royal Agricultural Society's Journal and other works that I have examined.

In preparing land for the reception of the seed for any crop, I think it safest to adopt the following rule—that is, to notice the character and natural condition of the soil that any plant flourishes best in, and try to produce the same in soils that by nature are not so well suited to the crops that we wish to grow on account of their advantage to us from our local position, or any other cause.

Wheat.—As a rule that admits of no exception, Wheat likes a solid bed. In stiff land we have it naturally, and our greatest care must be exercised to prevent it being reduced so fine that in wet weather it will run together like plaister. A good summer's fallow for that kind of land is the best preparation for Wheat, but it should be quite prepared during fine weather. I have always found it best not to cross-plough, but simply keep turning the furrows back. It has these advantages: if the weather sets in wet it is always in the right form, and you can plough much deeper in that way with the same strength. To produce the solid bed for Wheat on land naturally too tender, the first thing I find recommended is sowing Wheat on Clover ley, but at the discussion held here some time since on the system for this district, it was condemned on account of its proneness to make the land foul. The next plan proposed is to use the land presser, and to that I entirely assent. The next is to work the land as wet as it can be worked, but in this locality I have always found that any land sown wet, has invariably produced plenty of annual weeds. You will see, gentlemen, that the one object aimed at by all is a solid bed, and it will be for you to decide to-night which is most suited to our district, or if any improvement upon them can be suggested. I have always found it best to sow stiff land early, rough and dry, and as the soil becomes more porous in quality, to sow later and damper, but never wet.

Barley.—"The best qualities of Barley as well as the largest crops are produced from soils very free and open in their character, and this indicates the condition to which we should endeavour to bring any land upon which this crop is to be sown. On strong land winter ploughing should be practised, with spring cultivation when the land is dry." On more open soils defer the operation of preparing the land until near the time of sowing. On stiff land there is no fear of the manure put on in autumn being washed by the winter rains out of the reach of the plants sown, but in lighter and sandy soils that effect would be produced by early tillage, as asserted in the excellent Essay in the Royal Agricultural Society's Journal, and also proved by practice.

Oats.—"The natural energy of the roots of the Oat plant is much greater than that of Barley, and consequently enables it to flourish well with much less preparation of the soil; one ploughing is quite sufficient either on turf land or stubble." Like Wheat and Barley it is best to sow Oats dry, even at the expense of a little more labour, and they should never be sown so wet that the land will bake after. "The bed should be firm beneath, yet easy of penetration for the rooting of the plant, with a surface light and free for the germination of the seed." To effect this desirable state of the bed for Oats, the turf land should be broken up rather wet, but not worked until dry, for if both ploughed and worked wet it would become too adhesive for the germination of the seed.

Beans.—"This crop requires a soil of a strong adhesive character; a firm condition of it seems equally necessary for Bean as for the Wheat plant. Ploughing the land just immediately before sowing seems to meet with general disapprobation. In preparing stubble land for Beans, it should receive autumn cultivation to clean it, then ploughed up deep and left rough: in that state it is easily reduced to a good seed bed." In winter Beans, the want of firmness in the soil, and late sowing, have caused many of the prejudices against them.

Grass and Clover Seeds.—The able remarks in the essay before quoted on this subject are briefly contained in this short statement, that out of 33 kinds of Grass and Clover seeds experimented upon, an average depth of half an inch produced the greatest number of plants, while from 1 to 3 inches none grew. Those experiments, if reliable, and I have noticed others on the same subject, proving the same thing, need little comment, but at once point out the necessity of having land intended for Clover and Grass seeds very fine before sowing.

Turnips.—"These crops flourish on deep and free soils." This character of the plant at once points out the course of procedure. In stiff land early winter ploughing is indispensable with deep spring tillage, but I am not an advocate for crushing and rolling such land until it is very fine for Turnips. I have always found it run together too much after it. I prefer a little more seed, and a good rolling after it is sown. Like all the seeds alluded to before, the Turnip is best sown in dry weather, even if it does not germinate so soon. "Dryness at the time of sowing becomes of greater importance as the land gets lighter in its nature and more easily dried by the sun;" then it should not be rolled after sowing.

Mangels.—"This crop flourishes in stiff land and possesses great powers of growth through a retentive soil, the looseness of the soil necessary for the Turnip, not so essential for the Mangel. Some prefer autumn cultivation, but the principal benefit from it is the change effected in the mechanical condition of the soil, reducing the stiff land to a fine loose seed bed." It appears to him, Mr. Jackson, that the writer of the essay in the Royal Agricultural Journal contradicts himself slightly in regard to this crop.

Carrots.—"Carrots should be grown after a previous green crop as being the best preparation for them."

Vetches.—"The best preparation for Vetches is a clean stubble, well ploughed and early."

Trifolium Incarnatum.—"This plant is somewhat peculiar from the excessive firmness of soil required for its successful growth: a corn stubble twice harrowed being the best preparation for that crop."

With most of these quotations I entirely agree, but with some of the plans proposed by the writer of the Essay to obtain the ends desired. I think much labour and strength may be saved, especially in his autumn cultivation. In preparing land for Wheat I quite agree with him, but as I said before I can confidently recommend the absence of cross ploughing in summer fallows, or if under any circumstances it should be crossed, make the lands or "butts" up again at once to be safe. I am of opinion that if the influence exercised by climate on the operations of the farm were more distinctly recognised, the apparent differences in practice would be found at last to meet at the same point.

Wheat.—With respect to sowing Wheat after any other crop, I think the only requisites are, that the land should be clean, should be well ploughed (not too deep) for a seed bed, and after the winter rains to give the requisite firmness by rolling, &c., it seldom happens that Wheat loses root before the dry winds of March, unless from slug. In all tender land sown with Wheat, the rolling should be attended to when the weather admits, although other work might seem to demand attention at the same time.

Barley.—I think Barley as a crop repays any additional labour incurred in preparing land not naturally suited for its growth worse than any other crop, and I should not recommend much time, labour, or money

spent upon the preparation for it, where Oats would succeed with ordinary culture. Where land is suitable for Barley the course is simple, one ploughing being quite sufficient after either roots or a previous corn crop.

Beans.—The best preparation in autumn for Beans to be sown in ridges (the local term is drills), on stubble land is to leave the land in ridges all the winter, taking no notice of the weeds. In 1859 I was sowing 6 acres of Beans in a field, 3 acres I left in ridges all winter, the other 3 acres had the accustomed deep winter furrows. Through the whole of the winter the ridged or "drilled" portion looked disgraceful, every lump of soil had its living weeds attached to it. In the spring I put three horses to the drill cultivator, and stirred up between the rows as deeply as I could; with two horses I split the rows immediately, sowed the Beans with bones and guano, and covered up with double shelled plough, thus bringing every weed to the top again. I harrowed them down early, and never had cleaner Beans, though with double the expense and trouble. The weeds in this case seemed to free themselves from the soil so easily, and when once freed, died.

Oats.—In preparing land for Oats little else is wanted than good ploughing, to diminish in depth as the season gets late. One ploughing after Wheat I think quite sufficient, but I always run a broad share cultivator over the land after the previous crop is removed. I consider that that preparation for either Oats or Barley is far superior to any other I have either tried or read of.

Turnips.—If we could get autumn cultivation completed in preparing land for Turnips, get it level, cross-ploughed and ridged up, and so lay all through the winter, it would be the finest preparation for them. I have before remarked that I object to reducing stiff land too fine for the Turnip crop, and I repeat it, land gets far too solid for the healthy growth of Turnips when it is so very fine when sown. I have always found it best to ridge (or drill) the land early, even at the expense of drill cultivating, rolling, and opening again previous to sowing.

Mangels.—In Mangels, perhaps, a better quality of roots may be produced on stiff land, but I have ever found it safest to grow them on tender land, the usual course of winter-ploughing with spring cultivation being all that was required. I never sow them early, but always steep the seed. You will have noticed that amidst all the plans adopted and proposed for the most effectual preparing of seed beds for the different crops mentioned, the same state of land is sought for under different courses. For Wheat, all agree the bed must be firm and hard. For Oats, firm below but free and easy of penetration for the roots above. For Barley,—land free, fine, and not at all solid. For Beans,—firm and stiff. Turnips,—loose and clean. Clover and Grass, well harrowed for Corn crop, so that the seed may not be buried more than from ¼ to ½ of an inch. The idea that I would venture to suggest as created by the study of this subject, is that all our energies and all our intelligence should be brought to bear upon this point, in our annual routine of labour, for if we fail to sow our seed under circumstances favourable to its growth, much of the benefit of our manuring is thrown away. *Richard Jackson, at the* 114*th Meeting just held of the Wirral Agricultural Improvement Society.*

The discussion which followed turned chiefly on the state of the land for Wheat sowing, the depth of the furrow most suitable for Oats after ley, the cultivation of Beans and their place in the rotation, the best method of putting in Clover seed, and the preparation of the land for Turnips.

Wheat.—Mr. Hope Jones agreed with Mr. Jackson that very strong land should be prepared in the summer, and sown so that the seed bed should be tolerably dry and porous, but that light spongy land should be ploughed later, and when the land was wet, for the action of the plough in turning the furrow would press it and help to consolidate the land, and he thought it would be desirable to wait for wet weather for working such land. The Chairman, Mr. W. Turner, considered it very important that after the Wheat was sown the land should remain rough, the clods sheltered the plant during winter, and prevented it running together, which our land generally did if reduced fine. It was desirable to plough and sow Wheat on light land in moist weather.

Barley.—The Secretary, Mr. Burnham, considered that where Barley was sown on heavy land, and the foregoing crop admitted, it should be cleaned and left deeply ploughed in the autumn for the frost and winds of winter to mellow it, and only so much done to it in the spring as will make a shallow bed sufficient to bury the seed with the drill. He thought it a great mistake to plough such land in the spring for this crop, but on light dry land he was of opinion it might be ploughed and cultivated up to the time of sowing, but he agreed with Mr Jackson that we were not in a Barley country, and the cultivation of it was not generally profitable.

Oats.—Mr. Wm. Jackson recommended a shallow seed bed for Oats. The Secretary thought there was an omission in Mr. Jackson's Essay, and also in that in the R. A. Society's Journal, as to the proper depths to plough leys and other ground for Oats; he, the Secretary, was strongly in favour of a shallow furrow. This subject led to a general discussion among the members, and the effects of the ploughing matches in this locality for some years past were adverted to as examples, as they always took place in the early spring, on an old ley intended to be sown with Oats, the width of the furrow always being 8 inches, and the depth 5½ inches. Three cases were instanced, two on light land and one on heavy land, the staple in all the cases thin and some subsoil turned up in places, the Oats in each case a very bad crop; two other cases were cited in which the ploughing match took place on deep friable land, and the succeeding crops were good. By these facts it was considered proved that a thin ploughing would be the safer course, as very probably the crops on the deep land would have been equally good with a shallow furrow, while the deep furrow on the thin land had clearly been injurious to the following crop of Oats.

Beans.—Mr. Wm. Jackson recommended they should be sown on the flat, two rows six inches apart, the next row 18 or 20 inches apart, so that the ground would be well covered, and yet the horse and hand hoe could be freely worked among them. The Chairman always sowed his Beans on a ley manured, generally broadcast, and the headlands dibbled; he sowed from 3 to 4 bushels per acre a heavy roller once sometimes twice followed the seed, and then the harrows completed the work. His crops were generally good. The Secretary was not surprised to find the plan of growing Beans on a ley manured, was becoming general, followed of course by Wheat, which he considered a profitable rotation; he sometimes drilled them a foot apart in the rows, but generally dibbled them down each furrow, a single Bean in a hole. He tried both ways in the same field last year, the dibbled ones much the stronger crop but not the best, as they grew too much straw to yield well. He also tried them in the same field on a one year's and a two years' ley, the one year much the heavier crop. He found no advantage from very early sowing of Beans as a rule, but last year was perhaps an exception.

Clover and Grass Seeds.—Mr. Wheelhouse strongly recommended the use of Crosskill's Clod Crusher crossing the land on the corn crop before the seeds are sown; it left the land in a better state to receive them, and was not so liable to run together as after the flat roller; the seed follows the presser, and is covered by very light harrows or the bush harrows. He had never failed in his Clover root when following this plan. The members present also gave their full assent to it.

Turnips.—The Chairman said he had come to the conclusion, that in future on his land, which was heavy, he would not draw any farm yard manure on to the land in the spring for this crop, the cartage was so detrimental to it and the crop also; in fact he would use that kind of manure for this crop, for as he used it freely for Beans after a ley and there was only the Wheat crop between, he would apply a liberal allowance of dissolved bone ash and some guano to the Swedes, and he had no doubt he could secure a heavy crop of them by that means. The Secretary agreed with that part of Mr. Jackson's Essay recommending Turnips to be sown on heavy land in dry weather, and not till some days after the land is prepared for them: it made the land more friable, and also helped to starve out the fly, and render the crop more safe. The newly turned soil seemed to bring the fly into life, and then the want of something green to exist upon, either destroyed it or drove it away. All the members agreed that deep and early autumn cultivation was very essential to this crop, and quite necessary for the land, as it was the only opportunity for very deep ploughing in the rotation, and autumn was the proper season. Mr. Richard Jackson made some general remarks on the discussion. He was gratified to find his views met with their approval; the use of these debates was, that from them we might detect our own errors in practice. As it had been previously agreed that Wheat could not be satisfactorily grown in this locality after a ley, he thought the system spoken of and which he had adopted, of growing Beans after a ley manured, followed by Wheat, was a good one, for we could grow 40, 50, and even 60 bushels of Beans either broadcast, dibbled, or drilled, with good Wheat following. He thought about the 10th of March the right time to sow them.

Home Correspondence.

Pig Feeding.—That pigs do run to the coal heap when let out of their sty I have often noticed; at the same time a shovel full of cinders thrown into the sty is welcomed by them if not let out; what the benefit may be to them is a matter of speculation. I do not think it can do them any harm, for I have never seen damage arise from this cause. At the same time there can be no nutriment in either the coal or the cinder. My view of the case has always been this: that from the mode of feeding adopted, and the close confinement pigs are subject to in the sty, a certain craving for a corrective is induced, in the same way that a human being takes soda or ginger after a full meal. We cannot believe from the formation of the stomach that any such substance directly assists digestion, in the way stones do with the ostrich and turkey. As to the matter of colour, not being a Yorkshireman I do not hold by white pigs; as far as my experience goes that colour is by no means a hardy one in any race of animals or birds, or, I may add, plants. Gloucestershire boasts of some of the finest and most hardy races of pigs in England; let Mr. T. Gee endeavour to meet with some of the right sort of "black pig" before he discards them on this account. Black absorbs heat, white throws it off; let Mr. Gee convince himself of this fact, some day when the sun shines and the snow is on the ground, by putting a piece of black cloth, like his coat, on the snow, side by side with a piece the same size and weight of white, like his smock. If the black does not sink more than the white, by reason of its melting the snow sooner than the white, then will I allow the superiority of the white pig in this respect, and not till then.—*P. Devoniensis.*—— In answer to the queries of your Gloucestershire Correspondent about feeding pigs on coals, it puts me in mind of a story told of a great and very successful breeder of pigs, who on being asked how he kept his pigs in such good condition, said "You see what they get;" the inquirer said, "I see nothing but cobble-stones." Not exactly hearing the remark, he went on assuring the inquirer it was a fact. Ever after we always said Mr. ——'s pigs are fed on cobble stones; independent of that particularly nourishing food, wonderful feeders they were. Now to the point: I was struck many years ago with observing that my own and neighbours' pigs, when let out for the purpose of cleaning their styes (fatting pigs I speak of), went direct to the coal heap and eat the small coals as long as they could. I thought that there must be something wanting in their food, and I tried salt, from seeing some fatting pigs eat a lot that had been thrown out of a pickle tub. I ever after salted their food, and found they did not always run direct to the coals when let out. I never saw pigs that were loose eat them. The food of fatting pigs being more or less sour they take any cinders, mud, or gritty substance to take the astringency from their mouth; all other animals do the same—cows and horses when turned out into rank Grass, particularly aftergrass, will greedily eat soil in the evening. Horses thrive better with clay put into their trough if the water is very hard; pigs also eat Seaweed, I observed, which made me continue to give the salt, and found it made them eat more, ergo, feed faster, the salt being burnt out of the cinders, although eaten greedily, may not give that relish that coals do—ergo not feed them, but still take the astringency away. *J. S. H.*

Fingered Barley.—As I believe you are mistaken as to the origin of the proliferous variety of Barley figured in the *Agricultural Gazette* of the 16th inst., I wish to tell you that I remember a similar variety grown in this county at least ten years ago; but as it did not seem so valuable a kind as some others, its culture was relinquished. It is, I think, quite possible that your specimen is a fresh origination of a similar variety to the one I remember, but it is more likely to be an accidental mixture of seed by some means.—*J. G.* [illegible] *Aldborough Rectory, Hamworth, Norwich.*

Societies.

INVERNESS: *Harvest Operations.*—At the last annual meeting of this Society, a discussion on the subject took place:—Mr. Simpson, Teawig, said that he considered the term "Harvesting" as applying to the four different operations of—1st, Making hay; 2d, Cutting and securing the corn crop; 3d, Lifting and storing Potatoes; 4th, Securing the Turnip crop. 1. The perfection of haymaking was to cut while the Grasses were full of nutrition—to collect the Grass in [illegible] with its sap unhardened by the sun, and unwashed [illegible] by rains. Better have sweating in the stacks than blanching on the ground. 2. The corn harvest was the one to which their energies were most directed. [illegible] would agree, however, that it was necessary to do it as expeditiously as possible, and to have for this purpose a full complement of work-people. For in our uncertain climate the loss of even half-a-day in getting in corn when it was ready, might involve a sacrifice greater than the whole harvest wages. The cutting of the corn was performed in three ways—by the hook, by the scythe, by a reaping machine. The hook was a slow process at the best, and our rural population was so thinned out that in few cases was there sufficient labour at command for it. Cutting by the scythe was a rough and ready way of getting through the work, but it involved a considerable sacrifice of grain, for the corn was never so gathered together in sheaves that our ordinary Scotch mills could make clean thrashing of it, and besides there was the risk that, while employing the farm-servants in cutting the crop, the carting-in would be delayed. Cutting by machinery was not much known in the district yet, but having thus cut his harvest last season he would say that his opinion of it was favourable. With corn laid as it was last year a greater [illegible] cutting than eight acres per day could not be reckoned upon. This was effected by the work of a pair of horses and two men, the staff of gatherers being pretty nearly the same as were the work done by the scythe. [illegible] to put it at the lowest, there was a saving of the [illegible] of five men. With moderate attention and skill on the part of the servants in charge, the stubble [illegible] left as short as were the work done by the scythe, [illegible] gathering as clean, and the heads as uniform [illegible] as were the work done by the hook. He had cut between 140 and 150 acres last season, and he had harvested all without a sprouted stook or a heated stack. [illegible] stacking they all tried to get their corn together as soon as could safely be done; to get their [illegible] stacks thatched as quickly and trimmed as neatly as they could. He believed the day would come [illegible] covered rick-yards would make harvesting a [illegible] easier, and cheaper operation than it now was. [illegible] raising and storing of Potatoes followed close [illegible] corn-threshing. Their Potato crop this year had [illegible] rather deficient (a contrast in this respect [illegible] Lothians, where the crops were so great that [illegible] not larger than those of some present at the [illegible] 4000*l.* and even 5000*l.* worth of Potatoes had [illegible] sold), and their lifting and ingathering being [illegible] by the lateness of harvest into October and November became then tedious and expensive work. 4. The Turnip though a most expensive and troublesome crop [illegible] had hitherto been paid little attention to in regard to ingathering. It was allowed to take care of itself [illegible] be at the mercy of frost, and hares, and pigeons [illegible] took good tithe out of it, even when spared by [illegible] weather. This season the loss—particularly in [illegible] district he resided in—had been very great from excessive frost, and he believed that himself and [illegible] neighbours, who had suffered so severely, would [illegible] upon Turnip storing in future as not the least [illegible] portion of harvesting. Gathered together at the point of full nutrition, say early in November, [illegible] if secured from wet and frost would keep sound [illegible] March or April, whereas left in the open field [illegible] they might grow in bulk, but he believed not in [illegible] qualities, in November and December, they [illegible] became deteriorated and comparatively sapless, and the work of gathering them together was surely [illegible] cheaper when done by the combined strength of [illegible] at one time than when it was done piecemeal, cart [illegible] cart, "through daub and mire," as they were wanted for consumption. Even in devoting them to sheep feeding on the field they could be stored in heaps [illegible] these given as needed to the sheep in troughs—[illegible]

[illegible] some little labour, but surely it was better to apply that than to run the risk of losing a crop on which their stock depended, and which contributed much to the fertility of their land.

Mr [illegible], [illegible], did not approve of storing Turnips early, for he had seen them increase as much as a third between November and February, when left in the field.

Mr Paterson, [illegible], had been engaged about the [illegible] field from the time he was a boy able to lead a horse [illegible]. There were many ways of getting grain, but it was the securing of it that was the [illegible] to farmers. He had seen the [illegible] farmer in the country having the best [illegible], [illegible] getting their stock [illegible] almost on fire. He would very [illegible] be without a proper number of [illegible], whether the state of the weather [illegible] their being used or not.

Mr M[illegible], [illegible], with regard to Potatoes and Turnips, thought it a good plan to have a field planted with alternate [illegible] of them—say, five of the one and then five of the other. In October the Potatoes were lifted, and sheep could be placed upon the ground to eat off the Turnips. The whole ground was then manured and ready for Wheat. Following up this system, he grew on the same land [illegible] of Potatoes and two-thirds of Turnips. By that course by the end of November the Turnips were eaten off and the ground was well manured for the Wheat crop.

Mr Fraser, [illegible], said last year had warned them that it was not always good to be too active in [illegible]. A gentleman [illegible] at one of their meetings that he saved his crop by being the [illegible] in the country. [illegible] the hay harvest was pretty well secured—[illegible], he believed, as in England, but there were several reasons for this. Till this year and last year it was [illegible] their while paying much attention to it, for at 4*l.* or 5*l.*, [illegible] a stone, it did not pay in this country.

The Chairman said the hay crop should be put earlier than [illegible] the practice of the district, by at least a fortnight or three weeks. By so doing it would make the quality better, and there would be double the pasture. There was much [illegible] in the views of the meeting as to the Turnip crop. He could not believe that it was advisable to leave it out all winter. The crop should be secured from the frost, to which they were liable to be exposed in winter and spring, as well as from vermin, which abounded everywhere. For several years he left Turnips out, and they were mostly eaten up by rabbits and hares. Another advantage of storing was, that farmers could calculate how to use them, so that they would be sufficient for the cattle till the Grass came up. [Mr Sinclair, [illegible].—Yes, can see that in the field.] Yes, but there was nothing more [illegible] than [illegible] in the field; and really, while rabbits and hares abounded as they did in this part of the country, one never could say that the crop was his own while it remained in the field. The quality of the Turnip was [illegible] better, it was [illegible], and kept a good deal better when stored about the middle of November. They grew, it might be, in bulk, but they also grew soft in the heart; they got spongy. For his own part, he never looked upon the harvest as complete till he had his Turnips under cover. He set them in store with the tops above, and found that they kept very well.

Farmers' Clubs.

Dublin: *Value of Sea-weed.*—Dr. C. A. Cameron read a paper on this subject, from which the following are extracts:—

"One of the most important processes in agriculture is the application of manures to different crops; yet many problems of great practical interest in this department of husbandry still await solution; indeed, it may be said that no theory of manuring has met with general acceptance. It is a *questio vexata* whether or not large leaved plants, such as Cabbages and Turnips, are much benefited by the application of ammoniacal compounds. Many chemists believe that the salts of ammonia and Peruvian guano act chiefly by their solvent power on the soil, the constituents of which they present in an available form to the plant. Liebig and his disciples maintain that the food of plants is wholly inorganic; whilst the greater number of the French agricultural chemists, and many of other countries, though admitting that plants derive a large proportion of their nutriment from the air and from the mineral portion of the soil, contend that no inconsiderable amount is supplied by the organic matters which are present in every fertile soil.

"The farmers near the coast of Ireland use large quantities of Sea weed as a manure; and so favourable have been the results of the application of this substance to the Potato crop, that a price is frequently paid for it far beyond its real value—judging only by the standard offered by the chemical analysis of the substance, and the doctrine of the nutrition of plants generally entertained. Now, I have completely satisfied myself that a greater fertilising effect will be produced by a given quantity of Sea-weed upon soil bearing particular crops than by a quantity of any other substance yielding equal amounts of ammonia, phosphoric acid, and the various other substances supposed to be necessary for the perfect development of our cultivated plants.

"Here, then, is a subject for chemical inquiry, which promises the most interesting results. Can it be that Sea-weed contains some as yet recognised element, which, though necessary to the healthy vitality of plants, exists in most soils in quantities so minute as to have hitherto eluded detection? Can it be to the absence of such a substance or substances that Clover and Turnip sickness, and the fertility of soils which contain abundantly all the known constituents of plants, are attributable? May not even that most disastrous of vegetal diseases, the Potato blight, be the result of the exhaustion of the soil of some of the constituents essential to the production in a healthy state of our national esculent.

"I have been led to make these observations by the study of the remarkable experimental results lately obtained by the German chemists, Bunsen and Kirchoff, which have been published in the scientific journals. These experimenters have discovered the existence of Lithium (a metal hitherto supposed to occur but in a few rare minerals, such, for example, as Killinite, found at Killiney, county of Dublin) in the ashes of Sea-weed, of the Vine, and of Tobacco, of all the plants grown on the granitic soils of the district of Oldenwald, and in the milk of animals fed upon these plants. These experiments have been repeated and varied by Dr. Folwarcz, who succeeded in detecting lithium in the ashes of human blood and of muscular tissue. But these have not been the only results of Messrs. Bunsen and Kirchoff's experiments; these clever investigators have proved the existence of a new element—a fourth alkaline metal; which, as they found it to be very generally associated with potash and soda, we may presume that, like lithium, it will be found occurring in small quantities in the ashes of many kinds of plants. This new element has been named Cæsium by its discoverers.

"These experiments have opened up a wide field of inquiry, the exploration of which will, we have little doubt, reveal the most interesting and important facts, the knowledge of which will illuminate many obscure regions in the wide domain of vegetal physiology. The smallness of the quantities in which certain substances occur in the economy of nature detracts in no measure from their importance. In that most wondrous of organisms—the animal mechanism, we find the presence of a minute proportion of iron in the river of life which flows through it a condition essential to its very existence. Without iron blood could not be formed, although the metal does not form the one-thousandth part of the weight of the fluid. In vegetables, a certain proportion of mineral matter is found, the composition of which varies in different plants, and, but within certain limits, in the same kind of vegetables. Thus every plant cultivated as food for animals usually contains potash, soda, lime, and magnesia; but even in the same kind of plant the relative proportions of these varies exceedingly, and in some instances one of the ingredients is altogether absent. The variation in the composition of the inorganic portion of plants is frequently due to differences in the composition of the soil. Potatoes sometimes contain little more than an appreciable amount of soda; at other times the proportion is very considerable. In the pods of Peas, in Rape seed, in the grains of Hopetoun Oats, grown in certain localities, and in several other food substances, not the slightest trace of soda could be detected; whilst in Asparagus it constitutes one-third of the weight of its mineral constituents; in some specimens of Flax it has been found to constitute a fourth part of the ash, and in both the grain and the straw of the Oat it exists in proportions varying from 2 to 20 per cent. of the mineral matter. It would appear that plants possess the power of selecting certain substances in preference to others. Bouchardt doubts this, and contends from the results of his own experiments that plants absorb all the salts presented to them in solution in equal proportion. If this be the case, it is difficult to account for the large proportion of iodine and potash found in Sea-weeds; since the sea, which is the menstruum in which they exist, and from which they derive their food, contains iodine and potash in comparatively exceedingly minute proportions. That the Potato prefers potash to soda is more than a mere assertion; for I have assured myself, by experiments, that it is a fact. I have analysed Potatoes grown at Skerries, county of Dublin, within a few hundred feet of the sea, and in a soil containing a large amount of soda compounds, yet those tubers contained a large proportion of potash, but no soda. The crop of which those Potatoes formed a specimen had been heavily manured with Sea-weed, which, as is well known, is composed in great part of potash compounds.

"It would thus appear that potash is capable of replacing soda in our cultivated plants, but it remains to be proved whether such a replacement is beneficial, or the reverse, to the plant. Soda can also, to a great extent, take the place of potash; but when it does so the plant seems to suffer from the deficiency of the latter. Thus, Tobacco, in which soda predominates over potash, is very inferior in flavour compared with the plant in which the potash abounds.

"The consideration of the facts to which I have alluded in these brief notes cannot fail to suggest a host of interesting questions. Should we exclude soda from Potato manure? Are the remarkable virtues of Sea-weed, as a fertiliser, due to the large amount of potash salts which it contains, or to the iodides present in it play any important part in vegetal nutrition? Are the new metal cæsium and the long-known but seldom-sought-for element, lithium, essential or beneficial to certain plants? If they are, then Sea-weed contains one of them at least in notable quantity; and the remarkable fertilizing properties of these aquatic plants may, in the progress of enlightenment, be found in some way connected with this fact."

At the conclusion of Dr. Cameron's paper, an interesting discussion arose, in the course of which Captain Thornhill, Secretary to the Royal Agricultural Society, brought under the notice of the meeting the strange fact that a large tract of land near Dunshaughlin was of so poisonous a character, that animals fed upon the plants grown upon it lost their hair, hoofs, and horns, if possessed of the latter appendages. No satisfactory explanation had been given of this extraordinary natural phenomenon.

Reviews.

Scientific Farming Made Easy. By Thomas C. Fletcher, Agricultural and Analytical Chemist. Routledge, Warne, & Routledge.

Our chemists are learning that in order to obtain the confidence of the farmer they must be eminently practical. Most of our best writers on agricultural chemistry are as well acquainted with operations in the field as with operations in the laboratory: they are as good farmers as they are chemists, and consequently are fully aware as to the sort of information a farmer wants, and the best mode in which to administer it. The investigations of Messrs. Lawes and Gilbert, of Professors Way and Voelcker, &c., have not been made so much with a view to establish certain theories, independent of economic results, as they have been made with the definite intention of developing the resources of the land, and checking anything like waste arising from erroneous opinions. That farmers are quite alive to this fact is clear enough, if we do but consult the growing lists of the publishers. No class of men are more prompt to give a kindly meeting and encouragement to such as advance to their assistance, as the implement manufacturers can testify, when they sought to replace by machinery the labour which had deserted the fields of England for those of America and Australia. The author and printer are now about to experience the benefit of cooperation for the farmer's benefit. He is fast breaking away from the old prejudice concerning books, and in proportion as he becomes a reader will our scientific investigators be enabled with facility to convey to him the results of their discoveries. So far as publication is concerned these results have been very much confined to the Journals of the various agricultural societies, whose members they have enlightened, but beyond whose sacred circle, save in the form of rumour, they have not reached far. To arrange, condense, and submit in popular form a mass of most valuable information, which is thus increasing from month to month, and lies hidden in its present form from the general eye, is a work for the truthful execution of which the agricultural public may well be thankful. It is only a short time ago that we noticed Dr. Anderson's admirable compilation, and now we have to deal with one, less comprehensive and able, though exceedingly good, and abounding with information it befits every man to possess who has undertaken to farm land and manage stock. Mr. Fletcher is an analytical chemist and a farmer; we therefore are prepared to listen to him in both characters with considerable respect, and to believe him when he says that he admits no assertion which is not attested by his own experience, or the experience of some recognised authority. The first 116 pages are devoted to the discussion of the soil and its fertilisers, and the last 72 pages to cattle feeding. Dividing the first part into two chapters, he treats primarily of the properties of those elementary substances from which plants are built up, and the manner in which they contribute to vegetable life. This is done in such a way as to give the reader a pleasant notion of how easily these subjects are to be understood. As he proceeds we rather admire the way in which he induces the unscientific and perhaps yawnishly inclined reader to accompany him, by quickly inserting after a little dose of "principles," a tempting bit of practical advice that will help him to save here, or save there, in many little ways that never would have occurred to him. Thus insensibly he gains respect for the science that is shown to be so useful a matter of fact in its directions. For instance, while showing the value of ammonia, he alludes to the loss of this article in the stable. "Now see by what a simple and inexpensive contrivance this might all be saved; 1 cwt. of common green copperas, which can be bought for about 5s., is sufficient to mix with 100 gallons of water, and this when thoroughly dissolved is sufficient to moisten from three to four cartloads of sawdust. All that is required then, is to sprinkle the preparation ¼ of an inch thick upon the floors of the stable and cow-shed, and not only will the ammonia which would otherwise escape, be absorbed, but the whole of the buildings will be sweetened and the cattle be preserved from lung disease and blindness." His intention here and elsewhere is to show how such fertilisers are overlooked at home, and bought at a considerable expense from the manufacturers of artificial manure. In this special case ammonia being obtained by our grain crops from the soil, every bushel of Wheat, according to Mr. Lawes, requiring 5 lbs. of it, it becomes a matter of importance to return ammonia to the soil in sufficient quantity to produce such crops. One thousand pounds of urine, which is soon collected from the floor of the stables and cowsheds of a moderately large homestead, contain 16 lbs. of pure ammonia, and is worth from 15s. to 16s., so that the collection of it becomes an object of more consideration than farmers suppose.

Two very good tables are introduced, one showing the weight of fixed incombustible ingredients in pounds avoirdupois in every ton of the principal crops; another, showing the chemical constituents in pounds avoirdupois contained in one ton of certain manures, following which the author combats for a change of manures for the soil as well as a change of crops. Of course this brings him face to face with the subject of

manures, under which head he deals with the chemistry of the dunghill, and dishes up all the evidence in favour of making manure under cover, and then passes to the consideration of compost heaps. Here he gives Professor Voelcker's analysis of two very prevalent weeds, the Couch Grass and the Thistle, which are found to contain many of those ingredients in which cultivated soils are most deficient, and which the farmer finds it so necessary and so expensive to supply by means of artificial manure. The quotation which he makes from Dr. Bucknell's advice on this subject in the Journal of the Bath and West of England Agricultural Society, we give on account of its great value:—"The first thing is to secure a wide spreading roof, to prevent the wash of the rain, and the consequent solution and removal of the saline ingredient. Under this roof must be accumulated vegetable refuse, weeds, leaves, Turnip tops, stubble, ditch scourings, road scrapings, &c., the earthy and vegetable matter being in aboutequal proportions by bulk. They should be spread about 3 feet in depth, thoroughly mixed and well watered with liquid manure. In the course of three weeks, salt should be added in the proportion of 1 ton to 20 or 30 tons of compost, and lime ashes, watered, and spread about several days, may be added. After these materials have been well mixed in, the mass which will have shrunk considerably must be made into long parallel heaps, about 3 feet high and 4 feet wide, with a small space between each; and thus they must lie, watered from time to time with liquid manure, or with ammoniacal liquor from gas works, and moved occasionally with a fork, to keep up a supply of fresh air, and aid the process of decomposition, for 18 months or thereabouts, when the principal chemical changes will have been effected, and the heap will be ripe for use. The movement of these heaps will form useful occupation for farming men in bad weather. In watering it care should be taken not to make it too wet, as that condition is adverse to porosity. The prepared gas liquor may be used at two or three different times, and should be added in the proportion of 1 hogshead to 5 tons of compost. Managed in this manner, the texture of the material being kept in the condition of moistish brown sugar, it will be in a state to supply any crop with all, or almost all, the food required by its roots. To feed the cereal crops it may, however, want one thing, viz., phosphoric salts. Now there is no cheap source for these most important constituents; they must be supplied either by the addition of superphosphate of lime or other known substance containing phosphoric acid." By means of his own bran in a raw state, or in the form of dung after it has passed through pigs, the farmer might receive a good supply of this element without going to market for it. Such a system as this strikes at once at the root of the shiftless practice now so common of burning weeds, and obtaining for every 100 lbs. weight thereof about 3 lbs. of ash, which is left upon the spot to be scattered by the winds. Then follow several pages wherein the value of bones is set forth, accompanied with some very good instructions for making superphosphates at home, which certainly deserve attention. There are also tables for determining the money value of manure, similar to those in Morton's Cyclopaedia, and instructions for detecting adulteration in many of the artificial manures now vended. Finally, for those not acquainted with what has already been written upon cattle feeding, there is a very useful chapter wherein the author discusses Linseed and other descriptions of cake, their comparative value, and adulteration, the different theories concerning pulped food and cooked food, the comparative value of fodder crops, and all those considerations which generally fall under this head. We cordially recommend the book, not to those who are seeking for anything new, or to such as may be looking for a philosophical treatment of disputed points; but to those who wish to possess within a few pages the main principles of agricultural chemistry, presented with the definite view of making all farming operations better comprehended, and more remunerative.

Calendar of Operations.

MARCH.

ISLE OF ELY: *March* 18.—March has come in "like a lion;" whether it will go out "like a lamb" remains to be seen. It has been true thus far to its character, and has displayed its "many weathers." We have had frost, rain, hail, snow, with one or two mild days, thunder, lightning, and tempests of wind. The last week has been severely cold and vegetation has made but little progress. The high se[illegible] in some respects been beneficial. They have dried up the ground and made the spring seeding de[illegible]; and they have also penetrated into the corn stacks, and made the newly threshed corn come to hand in greatly improved condition. Our report of the growing Wheats, we regret to say, must upon the whole be decidedly unfavourable. Here and there [illegible] looks healthy and vigorous, and is assuming its beautiful spring verdure, but these are the exceptions. Much looks weak and sickly and unpromising, with, in many instances, a very thin plant. If such a crop as the present one can ever produce an average yield of grain, it must undergo a very speedy and marvellous change: but this can only be effected by continued genial, spring-like weather. So long [illegible] as these cold [illegible] winds and severe frosts continue [illegible] no [illegible] Spring seeding is [illegible] and satisfactory. Beans are sown, and [illegible] showing themselves above ground, especially [illegible] few mild days [illegible] largely sown [illegible] in February, and many were killed [illegible] month. The land is generally wet and cold [illegible] time before the spring sown corn will, to any [illegible] appear. It vegetates very slowly, but we hope [illegible] Sheep are selling well, but trade is not brisk, in consequence of the cold storms. Were Grass to grow quickly and keeping become plentiful, we should probably see prices advance considerably. Beef and mutton sell at high prices, the latter especially, 9*d*. to 10*d*. per lb. Pork makes 7*s*. 6*d*. per stone. We have at length a little more trade for our Fen Wheats, and prices have slightly improved; but low qualities are only a slow sale yet. The condition of all fresh-thrashed samples is good, and the intrinsic value of the Wheat is thereby increased. Beans are selling at about 1*s*. per stone, and in some instances are reported to yield badly, from 2 to 3 quarters per acre. Oats are about the same, and are still selling at 13*d*. to 14*d*. per stone for good qualities. *Your Fen Reporter.*

WEST SUSSEX: *March* 25.—We are still in the midst of very unsettled weather. March has from the first been a very wild, stormy month, and we are not likely to have much dust till it is out. It has been more than usually rough and cold, and a considerable quantity of rain has fallen; work is at a stand again, but still it is not behind, as most people have sown up close to the sheep, and few wish them to finish sooner than usual, for though the Turnips do last longer than might have been expected, yet few will find they have more than they want. When we have had it any thing like dry, the land has worked very freely, as might have been expected after such sharp frosts as we have had. The cold and wet have kept the young Wheat very much back, and perhaps for many years it has not looked so bad at this time as it does now. A little warmth and sunshine will put it quickly to rights, but if that does not come soon, we hardly can expect a fair crop. Clovers are also backward and in many spots have failed; and a few Mangels will come in very conveniently between Swedes and Grass for the sheep. There is no Trifolium to be found, and Vetches, winter Barley, &c., are almost a failure; the new hay crop will soon be drawn upon. Stock of all kinds are rather lower in price, and a very dull sale, but all fat stock is very dear. The supply of Wheat is not quite so plentiful, many waiting for dry weather before threshing to get the quality improved, as much of it is still very damp. We have a very full supply of inferior Barley and not much demand for it. Oats probably maintain their value more steadily than any other grain, and Beans and Peas keep well up. Grass land, where at all naturally damp, is looking very badly, all the better kinds of Grass have disappeared, and the rougher Grass and Rushes are showing themselves masters of the place. We have had one or two fine days with a little sun, but all is gloom again, and all our operations are sadly out of joint. *G. S.*

STATE OF THE WEATHER—BERKSHIRE.

For the week ending March 28: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain.	Wind	Barometer.
		Max in Sun.	Max. in shade.	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	22 ..	51.0	41.0	30.2	37.8	41.0	..	W.	29.55
Saturday	23 ..	65.4	49.6	34.0	45.7	41.5	..	S.W.	29.70
Sunday	24 ..	65.4	54.8	28.6	44.6	43.0	..	S.W.	29.59
Monday	25 ..	80.0	56.8	37.4	52.9	44.5	..	N.	30.08
Tuesday	26 ..	47.0	45.0	39.2	42.7	44.5	..	S.	29.50
Wednesday	27 ..	62.0	53.4	40.8	49.0	45.5	0.04	S.	29.30
Thursday	28 ..	62.8	52.0	39.6	48.3	47.0	0.34	N.W.	29.32

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

AGRICULTURAL BENEVOLENT INSTITUTION: *R.* The annual meeting and dinner takes place on the 1st of *May*, and the first election of pensioners on the following day, when 20 out-door pensioners are to be elected. We understand that the subscriptions hitherto announced include the following items:—

Annual subscriptions, about	..	£830	0	0
Endowment fund	..	260	0	0
Building fund	..	267	0	0
General purposes	..	2850	0	0

The office of the Institution is 55, Charing Cross, W.; the Secretary, Charles Shaw, Esq.

MANURES, LINSEED CAKE, &c.: *The London Manure Company* report that the Guano trade, which has this season been unusually brisk, has this week considerably declined. The stock is ample and the import large. 3600 tons Peruvian came in during the past week. Nitrate of soda and sulphate of ammonia are decidedly firmer. Bones and bone ash fully maintain previous rates, as do all phosphatic substances. A parcel of 650 tons of Sombrero was bought in at 4*l*. 15*s*. this week. Cakes are lower, the demand less, and imports large this week.

		£	s.	d.		£	s.	d.
Peruvian Guano, direct from Importers' Stores ..	per ton	12	5	0	to	12	12	0
Bones ..	,,	4	15	0	to	5	5	0
Ditto, crushed ..	,,	6	0	0				
Ditto, half-inch ..	per qr.	0	17	6	to	0	19	6
Ditto, dust ..	,,	0	17	6	to	0	19	6
Animal charcoal (70 per cent. Phosphate) ..	per ton.	4	10	0	to	5	0	0
Coprolite, Cambridge, whole ..	,,	2	2	0				
Ditto ditto, ground ..	,,	2	15	0				
Ditto Suffolk, whole ..	,,	1	15	0				
Ditto ditto, ground ..	,,	2	6	0				
Nitrate of Soda ..	,,	13	10	0	to	14	10	0
Sulphate of Ammonia ..	,,	14	10	0	to	15	0	0
Gypsum ..	,,	1	10	0				
Salt in (London), according to quality ..	,,	1	3	0	to	1	7	0
Sulphuric acid, concentrated 1.845 ..	per lb.	0	0	1				
Ditto, brown, 1.712 ..	,,	0	0	¾				
Superphosphate of Lime ..	per ton	5	10	0	to	6	6	0
Bone Manures ..	,,	6	5	0	to	7	10	0
Dissolved Bones ..	,,	6	10	0				
Linseed Cakes, best American (barrel) ..	,,	11	5	0	to	11	10	0
Ditto ditto (bag) ..	,,	10	5	0	to	10	10	0
Rape Cake ..	,,	5	10	0	to	5	15	0
Cotton-seed Cake ..	,,	6	5	0				
Marseilles ..	,,	9	10	0	to	9	12	6

POTATO CULTURE: *A B.* We would apply about 3 cwt. of guano per acre broadcast over the land just before you rib it for Potatoes; then plant the Potatoes and cover them in the usual way. You should not send the plough by the young plants when the young tubers are beginning to be formed, but it may be safely done as soon as the first shoots appear above the surface. The practice is [illegible] Parsnips and in both cases, a deep and thorough stirring of the soil when it is dry, as late as you can safely do it, is a good thing.

POTATO PLANT, &c.: *An Old Subscriber.* You will find in the "Farmer's Manual and Seed List" issued by Messrs. Sutton of Reading, an epitome of English crops, containing the information as to mineral composition which you ask for, besides much about the soil and manure adapted to each—the cultivation, management, and produce of each, &c.

MANGEL WURZEL AND TURNIP SEEDS, FROM LARGE ROOTS.

SUTTON'S PRICED LIST will be sent Gratis and Post Free. Royal Berkshire Seed Establishment, Reading.

SUTTON'S CHOICE STOCKS OF MANGEL WURZEL SEED AT SAME PRICES AS ORDINARY SEED.

SUTTON AND SONS, SEED GROWERS, Reading, are now sending out their MANGEL WURZEL SEED to all parts of the kingdom at the moderate prices quoted in their Catalogue, or cheaper by the cwt.
PRICED LISTS gratis, post free.

MANGEL WURZEL SEED.—A fine Stock of YELLOW GLOBE ready for delivery. All new Seed, and grows well. Price 1s. 3d. per lb., or less by the cwt. Early orders are requested.
Also LONG RED, 1s. per lb., OLIVE-SHAPED YELLOW, or RED (new variety), 1s. 6d. per lb. All of fine Stocks.
Address, Mr. ELLIOTT, Petworth, Sussex.

MANGEL WURZEL AND TURNIP SEEDS.—The undersigned can confidently recommend their Stocks of the above SEEDS, crop 1860, grown from selected and transplanted Bulbs. Terms on application.
JAMES FAIRHEAD & SON, Seed Growers and Merchants, Lewisham, Kent. London Establishment: 7, Borough Market, S.E.

TO THE SEED TRADE.

THOMAS AYRES, WHOLESALE and RETAIL SEEDSMAN and GROWER, Biggleswade, Beds, has to dispose of a large quantity of TURNIP SEED, in large or small quantities. The stock includes Skirving's Liverpool Swede, Ayres' Improved Liverpool Swede, Purple Top Swede, Marshall's Improved Purple Top Swede, Green Top Yellow Swede, Bronze Green, Green Globe, White Globe, Red Globe, Red Tankard, Green Tankard, Dale's Hybrid, and a few other varieties.
Price on application.
N.B. A few Cwt. of ONION and PARSNIP SEED to dispose of.

NEW SEEDS, CARRIAGE FREE.—All the best kinds of KITCHEN GARDEN SEEDS, including the good new kinds, at Grower's prices.
AGRICULTURAL SEEDS, of every description, and first quality. IMPORTED GERMAN FLOWER SEEDS, direct from the growers.
PRICED LISTS of the above, post free, on application to JOHN BELL, Seed Merchant, 10 & 11, Exchange Street, Norwich.

VEGETABLE AND AGRICULTURAL SEEDS, &c.

MESSRS. PARKER AND WILLIAMS beg to inform their friends and patrons that they are now prepared to execute with NEW AND GENUINE SEEDS all orders they may be favoured with.
Their PRICED AND DESCRIPTIVE CATALOGUE, containing all NEW VEGETABLES PROVED TO BE GOOD, and all the best of the older varieties, will be forwarded post free on application. An inspection and comparison with prices of other firms is solicited.
The following are particularly recommended as very superior varieties in their respective classes, and should be included in the most select collections:—Beet, Compact topped; Broccolies, New White Sprouting, Winter White (true); Brussels Sprouts, Improved Dwarf; Cauliflowers, Early Dwarf Erfurt, New Early Mammoth or Frogmore Forcing; Celery, Imperial Dwarf Red, Nonsuch, Colewort Rosette; Leeks, Ayton Castle Giant, Hybrid Prize; Lettuces, Alma, Moor Park, Versailles; Peas, Early Prolific, General Wyndham.
Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, London, N.

CARTER'S LIST OF NEW AND CHOICE VEGETABLES.

Per packet—	s.	d.	Per packet—	s.	d.
Lee's White Sprouting Broccoli ..	2	6	Carter's Giant White Cos Lettuce ..		
Nutting's selected dwarf Red Beet ..	1	0	Carter's Champion Cucumber ..		
Tomato de Laye ..	0	6	New Feather-stem Savoy		
Dalmeney Broccoli	1	0	Carter's Excelsior Melon		
Conning's Perfection do.	1	0	Turner's Gem ..		
Melville's variegated garnishing Kail ..	1	0	Strathmore Hero Peas, per qt.		
Carter's dwarf Mammoth Cauliflower ..	1	0	Handsworth Potatoes, per peck		
Hood's dwarf Imperial Celery ..	1	0	Pheasant Eye do. ,,		
Lynch's Star of the West	1	0	Dalmahoy do. .. ,,		
			Baldry's Scarlet Defiance Rhubarb, per root		

For further particulars see CARTER'S SELECT LIST OF GARDEN AND FARM SEEDS, forwarded gratis, and post free on application.
JAMES CARTER & Co., 237 and 238, High Holborn, W.C.

FLUKE POTATOES.—Genuine, off the Moss and Sand, free from disease, at 5s. 6d. per 80 lb., net. Price per ton for seed or table use of Fluke and other Potatoes on application. Farm and Garden Seeds very moderate and genuine quality.—DESCRIPTIVE PRICED CATALOGUE on application to HENRY BROWN, 4, Commutation Row, Liverpool.

EXTRAORDINARY PROLIFIC POTATOES.—A gentleman living in the country offers for SALE [illegible] Bushels of POTATOES of a most wonderful and valuable [illegible] For [illegible] they are unsurpassed, and their [illegible] astonishing [illegible] on indifferent soil; and, further, the [illegible] never [illegible] them. For price, &c., address Z. Z., Gardeners' Chronicle Office, W.C.

THE ONLY POTATO which has withstood the disease is the SKERRY BLUE, which R. ALLAN & SONS offer with [illegible] of their proving very productive, dry [illegible], good keepers, and entirely free from disease [illegible] testimonials to prove the above [illegible] which can be had on application. Price [illegible] 6d. [illegible] 2 cwt. sacks 2s. each.
Post Office Orders to accompany all orders from unknown parties.—Ballymena, Co. Antrim, Ireland.

SPLENDID PRIZE SCOTCH LEEK.

CHAS. ALEXANDER, 30, W. Register Street, Edinburgh, offers seeds of HENRY'S HYBRID SCOTCH LEEK, at 1s. per packet: Crop 1859.
AYTON CASTLE GIANT SCOTCH LEEK, 1s. per packet; 2s. 6d. per ounce.
The above are genuine, being direct from the raisers.

HENRY'S PRIZE LEEK.

DOWNIE, LAIRD, AND LAING are now sending out SEED of the above unrivalled LEEK, direct from Mr. Henry [illegible] at 1s. This variety has gained upwards of 20 First Prizes during the last three years, and obtained the First and Second Prizes at the Edinburgh Horticultural Society's Winter Show on the 11th Dec., 1860, the specimens then shown being solidly blanched 11 inches, and measuring 7 inches in circumference.
17, South Frederick Street, Edinburgh, and Stanstead Park, Forest Hill, London, S.E.

THE FINEST DARK PERPETUAL ROSE OF THE SEASON.
HYBRID PERPETUAL — REINE DES VIOLETTES.

WM. WOOD AND SON have just flowered, in one of their Forcing Houses, the above splendid New ROSE; the colour is a very dark purplish violet, very double, large and finely shaped, habit remarkably vigorous, and will probably form a good Pillar Rose. They feel assured it will become a general favourite. Price 5s. each for good strong plants, with usual discount allowed to the Trade.
Address, Woodlands Nursery, Maresfield, near Uckfield, Sussex.

ROSES FOR BEDDING.
Many Thousands of Dwarf Roses in pots, consisting of Hybrid Perpetuals, Chinas, Teas, Bourbons, and Noisettes.

WM. WOOD AND SON are now sending out daily thousands of ROSES in pots for grouping and bedding, **at 12s. to 18s. per dozen. Early orders respectfully solicited to secure the best plants.**
Address, Woodlands Nursery, Maresfield, near Uckfield, Sussex.

ROSES IN POTS.
BY THE DOZEN, HUNDRED, OR THOUSAND.

WM. WOOD AND SON respectfully solicit attention to their enormous stock of DWARF ROSES in Pots, adapted either for Greenhouse culture or for Bedding, at the following prices:— Per Dozen.—*s.* *s.*
HYBRID PERPETUALS .. .. 12 to 18
BOURBONS, CHINA, TEA SCENTED, and NOISETTE ROSES .. .. 12 „ 18
Extra plants presented with each Order to compensate for carriage.
CATALOGUES gratis on application.
Woodlands Nursery, Maresfield, near Uckfield, Sussex.

THE THREE VERY FINEST AND BEST NEW ROSES of the season as recommended especially by the Rev. W. F. Radclyffe, of Rushton Rectory, see *Gardeners' Chronicle* of January 26, page 72.
HYBRID PERPETUALS.
REINE DES VIOLETTES (Mallet)
TRIOMPHE D'AMIENS (Mallet)
MADAME FURTADO (Verdier)
Colours and description furnished on application.
WM. WOOD & SON are in a position to supply strong, vigorous, well grown dwarf plants of the above in pots at 5s. each. The usual discount to the Trade.
Woodlands Nursery, Maresfield, near Uckfield, Sussex.

ROSES FOR BEDDING.—The months of April and May are considered the most eligible for planting out DWARF ROSES in beds or clumps in the Parterre; the present weather is also most favourable for the work.
The Subscribers beg to offer a splendid stock of remarkably fine plants fit for immediate planting.—Address WM. WOOD & SON, Woodlands Nursery, Maresfield, near Uckfield, Sussex.

ROSES, NEW AND OLD.
WM. PAUL (Son and Successor to the late A. Paul) has now ready for delivery a fine lot of all the best ROSES, new and old.

HOLLYHOCKS.
WM. PAUL (Son and Successor to the late A. Paul) has now ready strong healthy Plants of all the best HOLLYHOCKS. Named sorts, 12s. to 42s. per dozen; Seedlings, 6s. to 9s. per dozen. All are on their own roots, the system of grafting so detrimental to the longevity of the plant is not practised at his establishment.

BEDDING PLANTS.—All the best kinds, stout hardy Plants, at the usual rates.
PRICED CATALOGUES free by post.
Address WM PAUL, Cheshunt Nurseries, Waltham Cross, N.

NEW ROSE.—MADAME STANDISH is the hardiest of all Roses. Those which stood out of doors during the whole of the late severe winter not having lost a bud, whilst most others were destroyed by thousands. The growth is very rapid; the foliage magnificent; colour, a clear pale pink; petals smooth, round, and finely imbricated; the form cannot be excelled, and it is a thorough Perpetual, being, in fact, one of the finest Roses ever offered. Plants on May 1st, 10s. 6d. each. Madame Standish must not be mistaken for Mrs. Standish, which was sent out by MIELLEZ, of Lille.
JOHN STANDISH, the Royal Nursery, Bagshot.

CHOICE FLOWER SEEDS—FREE BY POST.
STEPHEN BROWN (late BASS & BROWN), is supplying the following, carefully selected of the best varieties in cultivation.
☞ For List of novelties included, see *Gardeners' Chronicle*, March 16th, page 250:—

		s.	*d.*
	BEST HARDY ANNUALS.		
a.	100 varieties, including the novelties of the season	15	0
b.	50 varieties ditto ditto ditto ..	8	6
c.	30 varieties ditto ditto ditto ..	5	6
d.	20 varieties ditto ditto ditto ..	4	0
	BEST HALF-HARDY ANNUALS.		
e.	100 varieties, including the novelties of the season	20	0
f.	50 varieties ditto ditto ditto ..	12	6
g.	30 varieties ditto ditto ditto ..	8	0
h.	20 varieties ditto ditto ditto ..	6	0
	BEST GREENHOUSE ANNUALS.		
i.	20 varieties, including newest kinds	7	6
k.	12 varieties ditto ditto	5	0
	BEST HARDY PERENNIALS.		
l.	100 varieties, including the newest	20	0
m.	50 varieties ditto ditto	12	6
n.	25 varieties ditto ditto	7	6
	BEST GREENHOUSE PERENNIALS.		
o.	50 varieties, including the newest	18	0
p.	25 varieties, ditto ditto	10	0
q	12 varieties, ditto ditto	7	6
	The three large Collections, a, e, and i, comprising 220 varieties of Hardy, Half Hardy, and Greenhouse Annuals, together for	40	0
	The three second size Collections of the same, b, f, and k, comprising 122 varieties, together, for	25	0
	The 5 Collections, a, e, i, l, and o, comprising both Annuals and Perennials for open air and greenhouses, in 370 varieties, for	76	0
	The five second size collections of the same, b, f, k, m, and p, comprising 168 varieties	46	0

Cheaper or Second Class Collections.
See Catalogue.
Collections of Superb German Imported Seeds, as Stocks, Asters, Wallflowers, &c., exceedingly double and fine. See Catalogue.
Collections of choice prize Hollyhock Seeds, Ornamental Grasses, Greenhouse Climbers, Everlastings, Carnations, Picotee, Geraniums, &c. See Catalogue.
CATALOGUES on application.
STEPHEN BROWN, Seed Grower and Importer, Sudbury, Suffolk.

STRAWBERRIES.
R. S. YATES begs to inform the public generally, he can supply STRAWBERRY PLANTS of every kind worth growing, that he will warrant to produce a good crop of fruit this summer. They will be sent with a ball of earth to each plant any distance, and plants over for carriage. Purchasers will please be particular in the address, and state by what conveyance they wish them. Price 10s. per 100, except Oscar, which are 20s. Also small plants, healthy and well rooted, to any extent, as above, can be supplied in quantities of not less than 500 at 3s. per 100, and Oscars at 5s. Also, very strong plants in pots, just coming into bloom, at 18s. and 24s. per dozen.—3, St. Ann's Square, Manchester.

NOTICE OF PRIZES FOR
ROBERTSON'S SEEDLING STRAWBERRY, WIZARD OF THE NORTH, to be adjudicated by the Royal Horticultural Society, Kensington Gore, London, W.
In reference to the PRIZES offered by me at page 554 of the *Gardeners' Chronicle*, of date 16 June, 1860, to be competed for in 1861, I beg leave respectfully to inform intending competitors, that as the Fruit Committee of the Royal Horticultural Society has kindly agreed to receive at their meetings, and adjudicate upon my Seedling Strawberry, Wizard of the North, I shall be very happy, after adjudication, to pay to the several successful competitors the following Prizes, formerly announced by me, viz.:—
I. In March, 1861. For the best three Plants, in pots, first Prize, 2*l.*; second Prize, 1*l.*
II. In April, for ditto. First Prize, 2*l.*; second Prize, 1*l.*
III. In May. For ditto—First Prize, 2*l.*; second Prize, 1*l.*
IV. At a Summer Meeting. For the best Dish. First Prize, 2*l.*; second Prize, 1*l.* And
V. At a Summer Meeting. For the best three Plants grown in the open ground, and exhibited in pots or baskets. First Prize, 2*l.*; second Prize, 1*l.*
DANIEL ROBERTSON, Linside Nursery, Paisley.—April 6.

SNOW'S MUSCAT HAMBURGH GRAPES.
S. SNOW offers Three Guineas, Two-and-a-Half Guineas, and Two Guineas for the best Three Dishes of Three Bunches at the Crystal Palace Show, Sept. 4 and 5. Prizes will be paid on the Day of Exhibition.

ASPARAGUS.
YOUELL AND CO. having a large Stock of the above growing on the Sea Coast, of the finest quality, beg to offer it at the following prices:—
ASPARAGUS, GIANT, two years .. .. 2s. 6d. per 100.
„ „ three years .. .. 3s. 6d. „
Royal Nursery, Great Yarmouth.

CHOICE PINKS.
YOUELL AND CO. having an extensive quantity of the above, consisting of the very best show varieties by name, can supply strong and well-rooted plants at 6s. and 9s. per dozen pairs, or 40s. per 100 pairs.
PANSIES, finest first-class show varieties by name, well established in pots, 9s. per dozen.
Royal Nursery, Great Yarmouth.

TO PLANTERS OF CONIFERS.
YOUELL AND CO. can supply 50 species of RARE AND HARDY CONIFERS in good plants for 5*l.*, package included, and carriage paid to Liverpool, Manchester, Newcastle-on-Tyne, Hull, London, Peterborough, or to any Railway Station within 150 miles of the Nursery.
A LIST of the above can be had on application.
Royal Nursery, Great Yarmouth.

GENUINE GARDEN SEEDS.
WM. CUTBUSH AND SON beg to intimate that their PRICED CATALOGUE OF KITCHEN GARDEN AND FLOWER SEEDS FOR 1861 is now ready and will be sent gratis on application.
Every article offered can be guaranteed of the VERY BEST description and TRUE.—Highgate Nurseries, London, N., ONLY.

BEDDING PLANTS.
GODWIN AND PADMAN have a fine and extensive stock of all kinds of Bedding Plants. SPRING CATALOGUE will shortly be ready, enumerating Stove, Greenhouse and Bedding Plants, Dahlias and Hollyhocks, Conifers, &c.
Broadfield Nursery, Sheffield.

WANTED, large Plants of the following FUCHSIAS:—Galanthe flore pleno, Butterfly, Big Ben, Garibaldi (Banks), Garibaldi (Rollisson), Marvellous, Lord Macaulay, Schiller, Tricolor flore pleno, Solferino (Lemoine), and Madame Cornelisson. State size and price.
JOHN MORSE, Nurseryman, Dursley.

PLANTS IN FLOWER.
F. AND A. SMITH have now in bloom the following Plants, which are well grown and very suitable for decorative purposes. Prices on application:—Azaleas, Acacias, Æschynanthus, Aphelexis, Cheironias, Chorozemas, Cinerarias, Cytisus, Cyclamen, Dillwynias, Dielytra, Echeveria, Epacris, Erica Cavendishii, E. gracilis, E. propendens tubiflora, E. regerminans, E rubra calyx, E. Willmorea, E. Willmorea superba, Kennedyas, Polygala, Prostranthera, Tremandra, Geraniums, Fairy Roses.—Dulwich, Surrey, S.

SPLENDID NEW INDIAN AZALEAS.
FRANCIS R. KINGHORN is now prepared to send out his three SEEDLINGS, which for form, substance, and colour are unequalled.
PRESIDENT.—This noble variety was exhibited before the Horticultural Society's Floral Committee, May 10, 1860, and was awarded a First-class Certificate. It is figured in the August Number of the "Floral Magazine," and described thus:—"The habit of the plant is all that can be desired, and the flowers are of large size, excellent in form, stout in substance, firm in texture with a smooth surface, and of a very pleasing colour." This colour is a deep salmon red thickly and conspicuously spotted on the upper segments with deep crimson red. The plants offered are all grafted on free healthy stocks well established in 60-size pots, with several breaks to each, in fine health. Price 21s. each; a few larger, 31s. 6d. each.
KINGHORNII.—This is one of the finest varieties ever offered. The flowers of medium size, most perfect form, of unusual substance and smoothness of texture. Colour bright lively rose, thickly spotted on the upper segments with deep rosy purple. The habit of the plant is free, yet compact, and a most abundant bloomer, figured in the "Floral Magazine" for November, where Mr. Moore remarks that it is even a finer variety than President, as regards the smoothness and substance of the flowers. Price of stout grafted plants in 60-pots, 21s each; second size, 31s 6d; a fine half specimen plant well set for bloom, 50s. to 75s. each.
MARS.—This most attractive variety is the brightest of all existing kinds, the flowers large, smooth, firm well formed, bright orange red, almost scarlet, the upper segments spotted with purplish crimson; was exhibited before the Floral Committee, May 24, 1860, and received a Certificate of Commendation. Good grafted plants in 60 pots, 21s each.
F. R. K. can with the greatest confidence recommend the above Seedlings of his own raising, selected from an immense number and compared with named varieties, and notwithstanding the high place his previous Seedlings have maintained, yet he believes those now offered to be his best productions.— Sheen Nursery, Richmond, S.W.

NEW SEEDS, CARRIAGE FREE.— All the best kinds of KITCHEN GARDEN SEEDS, including the good new kinds, at Grower's prices.
AGRICULTURAL SEEDS of every description, and finest quality. IMPORTED GERMAN FLOWER SEEDS, direct from the growers.
PRICED LISTS of the above, post free, on application to JOHN BELL, Seed Merchant, 10 & 11, Exchange Street, Norwich.

ROCK PLANTS.
Fifty good showy hardy ROCK PLANTS, one of a sort to name, for 15s. 6d.
DELPHINIUM FORMOSUM, strong, 3s. per dozen; 16s. per 100, hamper, &c., included.
A remittance or reference from unknown correspondents.
W. FIELD, Florist, Flookensbrook, Chester.

DAHLIAS, &c.
C. E. ALLEN, having a very large stock of all the old and new varieties, will be able to supply strong plants the last week in April, at very low prices. DESCRIPTIVE CATALOGUES can be had on application.
Shacklewell, near London, N.E.

CARTER'S LIST OF NEW AND CHOICE VEGETABLES.

Per packet—	*s.*	*d.*	Per packet—	*s.*	*d.*
Lee's White Sprouting Broccoli	2	6	Carter's Giant White Cos Lettuce	1	0
Nutting's selected dwarf Red Beet	1	0	Carter's Champion Cucumber	1	0
Tomato de Laye	0	6	New Feather-stem Savoy	1	0
Dalmeney Broccoli ..	1	0	Carter's Excelsior Melon	1	0
Conning's Perfection do.	1	0	Turner's Gem	1	0
Melville's variegated garnishing Kail	1	0	StrathmoreHeroPeas, p qt.	2	[illegible]
Carter's dwarf Mammoth Cauliflower	1	0	Handsworth Potatoes, per peck	5	0
Hood's dwarf Imperial Celery	1	0	Pheasant Eye do. „	3	0
Lynch's Star of the West	1	0	Dalmahoy do. .. „	3	0
			Baldry's Scarlet Defiance Rhubarb, per root ..	2	0

For further particulars see CARTER'S SELECT LIST OF GARDEN AND FARM SEEDS, forwarded gratis, and post free on application.
JAMES CARTER & Co., 237 and 238, High Holborn, W.C.

The Gardeners' Chronicle.

SATURDAY, APRIL 6, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

TUESDAY, April 9 { Royal Horticultural (Floral Committee) at Kensington Gore .... Noon. / Royal Horticultural (Fruit Committee) at Kensington Gore .... Noon.

ON a recent occasion, while reporting on the effects of frost at that time visible, we ventured to point out the very important fact that of all our Asiatic plants those from Japan are the most uniformly hardy. Further enquiry has so confirmed the justice of this opinion, that we think it desirable to return to the subject. It is true that Japanese plants are not equally capable of resisting frost. It would be strange indeed if it were so; as must be evident to any one who considers attentively what is known of that country.

Geographers say that Japan is an empire in Asia, which consists of an unknown number of islands of different dimensions. These islands may be considered as constituting the western boundary of the Pacific, between 31° and 45° N. lat.; but the Japanese settlements on the island Tshoka, or Tarakai, better known by the name of Sakhalia, seem to extend as far north as 47° or 48° N. lat. Between these islands and the continent of Asia is a closed sea, called the Sea of Japan, which at its southern extremity is united to the Tong-Hai, or Eastern Sea of the Chinese, by the Strait of Corea, and at its northern with the Sea of Okhotzk, or Tarakai, by the still unexplored strait which divides the island of Tarakai from Manchuria Proper Japan consists of three large islands, Kioosioo, Sitkokf, and Nipon or Nifon, which are surrounded by a great number of smaller islands. Kioosioo, the most western, may be about 200 miles long, with an average breadth of 80 miles, which would give it a surface of 16,000 miles, nearly equal to that of the island of Sardinia. On its western coast are two deep bays, that of Simabara, in the middle, which is by far the largest, and that of Omoora, north of it: at its southern extremity is the Bay of Kangosima. Kioosioo is separated from Sitkokf by the Boongo Channel, and from Nipon by the Suwo Sound and the Strait of Simonoseki. Sitkokf may be 150 miles long, with an average breadth of 70 miles; it probably contains more than 10,000 square miles, and is much larger than the island of Corsica. The long strait which divides it from Nipon on the north is in some places hardly more than a mile wide: but about the middle a large bay enters deeply into the island of Sitkokf. The eastern extremity of this island is separated from Nipon by the Bay of Osacca, which contains the island of Avasi. Nipon, the largest and the principal of the Japanese islands, has the form of a curve, or, as Kæmpfer says, of a jawbone. Its length, measured along the middle of the island, exceeds 900 miles, and its average width may be estimated at more than 100 miles: its surface may therefore cover an area of about 100,000 square miles, or considerably more than that of Great Britain. The dependent

countries are the large island of Yeso, with some of the Kurile Islands and the southern districts of Tarakai.

All these islands are hilly or mountainous; Fusi Jama the great and holy mountain, compared by the Dutch to the Peak of Teneriffe, is, as Mr. Veitch has shown, 10,000 feet high, and the vegetation on its sides varies from the richest woodland on its lower ranges to a little Stellaria and nothing more on its summit. The north of Nipon is traversed by a continuous chain of mountains with several peaks. Many of the islands are so steep that they have no rivers; for which are substituted mountain torrents over which bridges cannot be built.

Of the Japanese climate we know little, the meteorological observations made by Thunberg at Nagasaki only extending over one year. The southern part seems to resemble in many points the climate of England. In winter it does not freeze and snow every year, though this is generally the case: the frost and snow, when there is any, last only a few days. In January, 1776, the thermometer descended at Nagasaki to 35° Fahr., but it was considered a very mild winter; in August it rose to 98°, and that was considered as the average heat of the season. The heat would consequently be very great but for the refreshing breeze which blows during the day from the south, and during the night from the east. The weather is extremely changeable, and rains are abundant all the year round; but they are more heavy and frequent during the *satkasi*, or rainy season, which occurs in June and July. Storms and hurricanes seem to occur frequently, and the descriptions of them in Kæmpfer and Langsdorf are truly terrific. Thunder-storms are also common, and earthquakes have successively destroyed a great part of the most populous towns. Only a few spots appear to be exempt from these terrible phenomena. It is observed by Kæmpfer that waterspouts are nowhere of such frequent occurrence as in the seas enclosing Japan.*

From this it would seem as if the climate of Japan should be similar to that of Southern Italy, if latitude alone were taken as a guide. But it has been shown by Humboldt and others that latitude here as in other instances, affords no evidence; and that in reality the average temperature of Japan for the whole year at the sea level is the same as that of France, N. Germany and Great Britain; the winter's mean being about 23° and that of summer about 79°. But this must change as we rise into the air; and therefore all the plants which come from mountain sides will bear more than the average cold, in proportion to the elevation above the sea from which they are obtained.

Experience wholly confirms this view. For what is the fact as to those perennial or ligneous Japanese plants already in gardens as high as the latitude of London? The following list will show:—

1. Chimonanthus, both species.—Perfectly hardy.
2. Thujopsis borealis.—Do.
3. Retinispora squarrosa.—Do.
4. Illicium religiosum.—Tender; only cultivated in Japan.
5. Forsythia.—Perfectly hardy.
6. Anemone japonica.—Do.
7. Deutzias.—Hardy, but not perfectly.
8. Pawlovnia.—Perfectly hardy.
9. Cryptomeria.—Do.
10. Broussonetia papyrifera.—Do.
11. Aucuba japonica.—Do.
12. Salisburia adiantifolia.—Do.
13. Hovenia dulcis.—Nearly hardy; probably not Japanese.
14. Pyrus japonica.—Perfectly hardy.
15. Eriobotrya japonica.—Half hardy.
16. Citrus japonica.—Half hardy; supposed to have come to Japan from China.
17. Lilium, various species.—Half hardy.
18. Prunus triloba.—Perfectly hardy.
19. Rosa rugosa.—Do.
20. Weigela rosea.—Do.
21. Bambusa Metake.—Do.
22. Skimmia japonica.—Do.
23. Rhus succedaneum.—Do.
24. Euonymus japonicus.—Half hardy.
25. Torreya nucifera.—Perfectly hardy.
26. Hydrangeas.—Half hardy.
27. Spiræa prunifolia.—Perfectly hardy.
28. Camellias.—Probably hardy.
29. Prunus japonica.—Perfectly hardy.
30. Kerria japonica.—Do.

We believe this to be a correct account of 30 of our best known Japanese plants. Rhododendrons from Japan we have none, unless Rh. Fortuni, which is quite hardy, should be one. Of Azaleas no mention is made, for they seem to be mere garden plants in Japan. Laurus Camphora is a southern lowlander; as are the two or three epiphytes known to grow among the southern islands. Taking the 30 above enumerated we find 21 perfectly hardy, and 2 probably but not certainly so, in all 23. Of the remaining 7 three although reputed Japanese are probably Chinese; of one, Hydrangeas, we have not, that we know of, a single specimen in gardens of Japanese origin; and the remaining three are more or less tender. Therefore, confining the calculation to what is certainly Japanese, by eliminating the three strangers we find about 90 per cent. capable of bearing our climate securely.

Of course the object of importers will be to secure the mountain plants, especially from the northward, and if this is done we entertain a confident belief that every perennial without exception will prove perfectly hardy. We say perennial because the summer crops in Japan would not succeed here from want of sufficient summer heat.

* See an excellent article in the "Penny Cyclopædia."

We have on more than one occasion drawn attention to the fact that the produce of the Mushroom bed is not always confined to a single species, nor indeed even where the soil yields nothing but *Agaricus campestris* is it always precisely the same variety of that most excellent of Fungi which rewards the pains of the cultivator. Three of the most remarkable of these varieties have lately been figured in this Journal.

A very curious case has just been brought under our notice by Mr. W. Young, in which a Mushroom bed after bearing an excellent crop for three months, has lately produced a totally different species in great abundance, remarkable for its beautiful cream-white tint, and the cap being crested with little downy processes, which give it an elegant appearance.

The Agaric is much tufted, from an inch to an inch and a half in diameter, convex when young, but depressed when old, with the margin waved and slightly incurved; its

surface minutely silky and opake; the stem is short and of a fibrous texture, stuffed within; the gills very narrow and acutely adnate with a slight sinus. The smell and taste are like those of *Polyporus squamosus*, without anything acrid or unpleasant, and we doubt not that the species might be eaten with safety, though such experiments should always be made with caution. The little downy tufts on the cap when examined by the microscope prove to be myriads of young caps, in which both the stem and gills are occasionally distinctly indicated. The species appears to be a form of *Agaricus dealbatus*, of Sowerby, whose figure t. 123 gives a tolerable representation of the plant before us, though of a more delicate variety. It is curious that young specimens, not exceeding a line in breadth, show traces of the abortive caps. Similar instances of new caps growing from the disc of Agarics are not uncommon, and have frequently been recorded in this Journal and elsewhere, and examples are not wanting in which the whole or a part of the upper surface of the cap bears gills like the under surface, though generally much distorted and branching into each other after the fashion of a Cantharellus or Merulius rather than of an Agaric.

We have no information as to the mode in which the bed in which the Fungi grew was prepared, whether from horse droppings, from bought spawn, or from spawn collected in the fields. The latter system is, we believe, always to be avoided, as likely to introduce inferior varieties unless great care is taken to dig for spawn in the exact spots where the true Mushroom has grown, and not some inferior species. Besides, as several kinds of Agaric often appear successively in the same spot, there is always danger of conveying to the bed a mixture of species, which may possibly interfere with each other's growth. *M. J. B.*

NOTES ON THE BOTANY OF JAPAN.—No. I[illegible]

(*See page* 289).

During my stay at Nagasaki I made an excursion to a place called Epunga, a kind of picnic station amongst the hills about 4 or 5 miles from the town. The summer agricultural productions of the country through which I passed were much like those in the province of Chekiang in China—that is, Rice and Arum esculentum on the low lands, and Sweet Potatoes, Buckwheat (Polygonum tataricum), Maize, &c. on the dry hilly soil. In winter, Wheat, Barley, and Rape are produced on the dry lands, and the Rice lands are generally allowed to lie fallow.

On the hill sides I observed the Japan Wax tree (Rhus succedaneum) cultivated extensively. It occupies the same position on these hills as the Chinese Tallow tree (Stillingia sebifera) does in Chekiang. It grows to about the same size, and, curiously enough, it produces the same effect upon the autumnal landscape by its leaves changing from green into a deep blood-red colour as they ripen before falling off. Some Camphor trees (Laurus Camphora) of enormous size were observed about the temples on the outskirts of Nagasaki, and Cryptomeria japonica was a very common tree on all the hill sides. The latter is often used as a fence round gardens, and a very pretty one it makes. When I first saw it used for this purpose it struck me that something of the same kind might be done with it at home, now that it is so common in every nursery. The Japanese manage it much in the same way as we do our Yew hedges, and when kept regularly clipped it is not only exceedingly pretty, but it also is so dense that nothing can get through it. The Tea plant is also common on these hill sides, but the great Tea country of Japan is 200 or 300 miles further to the northward, near the famous Miaco where the Spiritual Emperor resides.

Epunga, to which I was bound while making these observations, was reached in due course. I found the proprietor had a nice little private garden, and also a nursery in which he propagated and cultivated plants for sale. On the premises there was a building, apparently for the use of foreigners, which was only opened when any of them came out from Nagasaki for a day's pleasure. Like many other places of the kind its walls were defaced with the writing of the great men who had visited it, and who took this means of immortalising themselves. Doggrel lines, some of them scarcely fit to meet the eye, were observed in many places written in Dutch, German, and Russian. Our own countrymen had not been there long enough to visit the place and leave their marks; doubtless these will be found also in good time!

The nursery garden at Epunga was found to contain a large collection of Japanese plants, some of which were new to me, and others of great rarity and interest. But as I have already in a former letter mentioned the more interesting plants found about Nagasaki, I need not repeat that information. Several species were purchased for my collection, and duly brought in to the town next day.

Having finished my examination of the nursery I started, in company with some other gentlemen, on a journey to the top of a hill some 1500 feet above the level of the sea, and celebrated for the fine and extensive view obtainable from its summit. It was a glorious autumnal day, such a day as one rarely sees in our own changeable climate. The sky was cloudless, so that when we reached the top our view on all sides was bounded only by the horizon. Looking to the south-east and far below us we saw the town of Nagasaki, with the beautiful bay in its front. The bay had the appearance of an inland lake, being almost surrounded by hills, and on its smooth waters there were the ships of several nations at anchor, besides a number of boats and junks of native build, and rather picturesque in their way. Turning round and looking to the north-west the eye rested on many hundreds of little hills having a conical form, and which were covered to their summits with trees and brushwood. Behind them were mountains apparently two or three thousand feet in height, and a deep bay looking like an inland sea. Amongst the hills there were many beautiful and fertile valleys, yellow with the ripening Rice crops, and numerous villages and farm houses, which gave life to the scene, which was one of extraordinary beauty and interest.

On our way homewards we visited a little garden belonging to an interpeter to the Japanese Government. Here I noticed some Azaleas remarkable for their great size, and an extraordinary specimen of a dwarfed Pine. Its lower branches were trained horizontally some feet in length; all the leaves and branchlets were [illegible] down and clipped, so that the whole was as flat as a board. The upper branches were trained to form circles one above another like so many little tables, and the whole plant had a most curious appearance. A man was at work upon it at the time, and I believe it keeps him constantly employed from day to day throughout the year. *R. F.*

THE METEOROLOGY OF MARCH.

March, one of the most important months for the country, has gone. In many respects the past month had the usual characteristics of the period, but on the whole the weather has been of a more violent nature than is usually experienced.

The following is a summary of the leading meteorological features to be noted in the month. It commenced with the barometer standing at 29.50 in., and a mean temperature of 45°, being some 4° above the average for that date. The sky was generally cloudy, and heavy squalls of wind and rain were of frequent occurrence, the wind blowing chiefly from the N.E. and N.W., but at times very variable.

During the whole of the first week of the month the barometer was very disturbed, and rapid variations took place to considerable amounts. Between the 3rd at 9 a.m. and 5th 9 a.m., there was an increase of nearly 7-10ths of an inch. The temperature for the week, from the 3rd to the 9th, was high, each day being above the average, the mean temperature for the 8th day was as much as 10° above the average. Heavy winds prevailed, particularly on the 3rd and 6th, when it blew a perfect gale. The sky was very variable, and occasionally squalls of rain occurred on the 3rd, 4th, 5th, and 6th, but to small amounts only.

On the 10th the mean reading of the barometer was 29.71; the mean temperature being 47°; the barometer then fell suddenly, predicting the heavy storm of wind which occurred a few hours afterwards. The readings continued low till the 12th, when it turned to rise; the readings increased to 30.15 inches by the morning of the 14th. It then remained tolerably steady to the end of the week. Rain fell on every day in the week, small amounts were recorded every day, though the whole fall did not amount to more than half an inch. The amount of cloud during this week was very variable and, with the exception of the 14th day, the wind continued very strong throughout.

A flash of lightning was seen and thunder was heard at 3.30 on the 12th. In point of warmth this week also was above its average, the mean temperature being 42°.4, whilst the average is stated (in Mr. Glaisher's tables) as 41°.0. The direction of the wind was very variable, blowing from all points between N.E. and W. by S.

The third week was very similar in character to the preceding; the barometer fell from the beginning of the week to 28.82 in. by 9 A.M. on the 19th, and corresponding rough weather was experienced; from the 19th the mercury, with slight fluctuations, rose gradually to 29.74 in. by the end of the week. The mean temperature was nearly the same as the average for the week, viz. 41°.3. Till the 21st there was much rain and wind, and the weather was colder than it had been on any previous day in the month. From the 21st there was a great improvement; there was much less wind, and the sun shone a great part of each day. This improvement in the weather lasted, without intermission, to Friday the 29th. During this period the barometer remained very steady at about a reading of 29.5 in. On the 30th the sky was overcast throughout, and rain fell during a great part of the morning; the barometer however did not show any depression to cause alarm. The last day of the month was much the same as its predecessor, the 30th, inasmuch as the morning was cloudy and rainy, though the afternoon was fine, and the evening was cloudless; the air was soft and pleasant throughout the day. In point of rain the month did not differ very much from the average for March, the total fall being 2½ inches, whilst the average is about half an inch less. Then we see that March was warmer than usual by about 3°, the rain fall was not far from the average, and there was a fair share of sunshine during the month. The range in the barometer readings was rather large, and consequently we experienced some heavy squalls of wind, chiefly during the first half of the month, after which the mercurial column was much steadier. The highest reading in the month was 30.28 in., it occurred on the 9th; the lowest reading was 28.81 in. on the 19th, giving a range for the month of 1.47 in. *C.*

REPORT ON SCARLET AND OTHER BEDDING PELARGONIUMS,

Grown at Chiswick in 1860.

By Mr. Moore, *Secretary to the Floral Committee.*

[Extracted from "Proceedings of the Royal Horticultural Society"]

The season of 1860 having proved unfavourable to these plants, it has been determined to renew the trial of them in the present season, and, as far as it can be done, to prove them also under pot culture. The brief particulars noted concerning them, and which embody the opinion pronounced by the Committee, though influenced to some extent by an exceptional season, may nevertheless be worth recording. They are to be understood as applying to the varieties as grown in the open air, and in many cases are derived from single plants.

The following is a summary of the varieties which the Committee adjudged to be the most desirable for cultivation:—

Series I. *Plain-leaved Scarlet Pelargoniums.*—§ 1. *Flowers scarlet:*—Frogmore Improved, and Punch. Defiance and Wellington Hero, in addition, were commended for pot culture and for training up conservatory pillars. § 2. *Flowers cerise:*—Beauté de Meldoise, Lady Middleton, Le Titien. § 3. *Flowers rose-pink:*—Christina, Rose Queen. § 4. *Flowers white:*—The only variety of this colour was considered inferior.

Series II.—*Horse-shoe-leaved Scarlet Pelargoniums.*—§ 1. *Flowers scarlet:*—Baron Hugel, Captivation, Lilliput, Martin Gireau, Queen of England, Scarlet Perfection. Bishopstowe, Conway's Royalist, and New Globe were selected as good secondary sorts; while Amazon, British Flag, Compactum, and Richmond Gem were commended for pot culture or pillars. § 2. *Flowers cerise:*—François Chardine, Mons. Martin, Rubens, and Sheen Rival; and for pot culture, Paul Labbé. § 3. *Flowers salmon or flesh-colour:*—Prince Louis of Hesse; and for pot culture, Aurora and Blackheath Beauty. § 4. *Flowers rose pink:*—None of the varieties in this group were considered of first-rate character. §. 5. *Flowers blush with pink centre:* Henri de Beaudot. § 6. *Flowers white:* Madame Vaucher, and Nivea floribunda.

Series III. Nosegay Pelargoniums.—These all have zonate leaves. The best sorts were Crystal Palace, Imperial Crimson, Pink Nosegay, and Red Nosegay. Of good secondary sorts, of larger growth, there were:—Bishopstowe Nosegay, Purple Nosegay, and Salmon Nosegay.

Series IV. Ivy-leaved Pelargoniums.—These were all considered to be useful bedding plants for various purposes.

Series V. Variegated-leaved Pelargoniums.—§ 1. *Leaves golden-edged:* Golden Chain and Lady Cottenham were pronounced to be useful varieties. § 2. *Leaves silver or cream-edged:* Of the scarlet-flowered sorts: Annie, Alma, Bijou, Burning Bush, Countess of Warwick, Julia, Perfection, Scintillatum; and for pot culture, Picturatum. Of those with cerise-scarlet or rosy-tinted blossoms: Flower of the Day and Flower of Spring, both first-class sorts. Besides the foregoing, Lilac Variegated and St. Clair, both with pink flowers, were considered useful varieties of secondary rank. The varieties having the whitest-edged foliage were:—Alma, Bijou, Jane, Mrs. Lenox, Mountain of Light, Mountain of Snow, and Perfection.

Series VI. Hybrid Bedding Pelargoniums.—The varieties of this group did not succeed as bedding plants in 1860.

In the following brief descriptions of the varieties, habit and colour are the chief points to which attention has been directed:—

Series I. Plain-leaved Scarlet Pelargoniums.

§ 1. *Flowers scarlet.*

1. *Collinson's Scarlet.*—From Messrs. Fraser. Medium habit; flowers scarlet, in small trusses. Inferior.*

2. *Defiance.*—From Messrs. Fraser. Vigorous habit; flowers large, in fair-sized heads, elevated on long stalks, light scarlet. A good variety for training to the pillars of greenhouse conservatories, or for pots.

3. *Emperor.* From Messrs. Fraser. Vigorous; flowers large, bright scarlet.

4. *Frogmore Improved.*—From Messrs. Fraser. Medium and compact habit; flowers large and well formed, in fair-sized trusses, bright scarlet. One of the best sorts grown.

5. *Gen. Sir F. Williams.*—From Messrs. Low & Co. Rather vigorous in habit; flowers large, scarlet. Similar to Punch, but inferior to it.

6. *Goliath.*—From Messrs. Rollisson & Sons. Vigorous; flowers large, well formed, in good-sized trusses, reddish-scarlet. Inferior.

7. *Harkaway.*—From Mr. Taylor. Dwarf, slender habit; flowers narrow-petalled, in small trusses, scarlet. A useful bedding sort.

8. *Indispensable.*—From Mr. Turner. Dwarf; flowers scarlet, in small trusses. Inferior.

9. *Lamartine.*—From Mr. Scott. Medium spreading habit; flowers light scarlet, of good form. Inferior.

10. *Little David.*—From Messrs Low & Co. Dwarf; flowers scarlet. Inferior.

11. *Lord Raglan.*—From Mr. Turner. Medium habit; flowers large and showy, in small trusses, scarlet. Inferior.

12. *Magnum Bonum.*—From Mr. Scott. Vigorous; flowers small, in compact trusses, deep scarlet. Inferior.

13. *Mrs. Bloomer.*—From Mr. Taylor. Dwarf compact habit; flowers medium-sized, scarlet. Inferior.

14. *Punch.*—From Messrs. Fraser and Mr. Taylor. Rather vigorous in habit; flowers large, scarlet. A fine variety for large beds. It appears that there are several distinct seedling forms of this variety, and that the best of them has a small white eye.

15. *Rigby's Queen.*—From Messrs. Fraser. Vigorous; flowers large, loose, bright scarlet. Inferior.

16. *Royal Dwarf.*—From Mr. Turner. Medium habit; flowers medium-sized, in small trusses, scarlet. Inferior.

17. *Scarlatina.*—From Mr. Turner, Messrs. Fraser, and Messrs. Low & Co. Vigorous; flowers large, in medium-sized trusses, bright scarlet. Inferior.

18. *Tom Thumb.*—From Messrs. Fraser. Medium or dwarfish habit; flowers scarlet. Inferior.

19. *Wellington Hero.*—From Messrs. Fraser. Vigorous habit; flowers large and well formed, in fine trusses, scarlet with white eye. A fine variety for pot culture, and for conservatories.

§ 2. *Flowers cerise or rosy-scarlet.*

20. *Beauté de Meldoise.*—From Messrs. Fraser and Mr. Turner. Moderately vigorous; flowers large, well formed, in good sized trusses, rosy-scarlet, similar in colour to Lady Middleton. A very fine variety, superior to Le Titien.

21. *Judy.*—From Messrs. Fraser. Dwarf; flowers rosy-scarlet. Inferior.

22. *Lady Middleton.*—From Mr. Taylor and Messrs. Fraser. Moderately vigorous, compact habit; flowers large, well formed, abundant, in good-sized showy trusses, rosy-scarlet. An old variety, of good quality.

23. *Le Titien.* From Mr. Turner. Medium habit; flowers finely formed, and growing in compact trusses, better shaped than those of Lady Middleton, which they resemble in their rosy-scarlet colour. A useful variety, of excellent properties.

24. *Lord John Russell.*—From Messrs. Rollisson & Sons. Dwarf spreading habit; flowers medium-sized, reddish-scarlet, deeper than the rosy-scarlet of Lady Middleton. It was not, however, considered a desirable variety.

§ 3. *Flowers rose-pink.*

25. *Christina.*—From Mr. Kinghorn and Messrs. Low & Co. Moderately dwarf; flowers freely produced in fair-sized trusses, deep rose-pink uniformly coloured. It is deeper coloured and dwarfer than Rose Queen, and is further distinguished by the absence of white from its upper petals. It is one of the best sorts of its colour.

26. *Lucea roseum.*—From Messrs. Fraser. Vigorous; flowers pale rose-pink. Inferior.

27. *Princess Alice.*—From Mr. Ingram. Medium spreading habit; flowers deep rose-pink. Inferior.

28. *Rose Queen.*—From Mr. Kinghorn and Messrs. Rollisson & Sons. Medium habit; flowers medium-sized, in moderate trusses, deep rose-pink with white base to the upper petals. It is one of the best rose-coloured sorts.

29. *Roseum compactum.*—From Mr. Turner. Dwarf compact habit; flowers small, deep rose-pink. Inferior.

§ 4. *Flowers white.*

30. *Ingram's White.*—From Mr. Scott. Medium spreading habit; flowers white. Inferior.

(To be continued.)

* It may be explained that this term has been employed to express briefly the fact that superior sorts of similar character are known. It does not necessarily imply that the varieties to which it is attached are worthless.

Home Correspondence.

Potato Culture.—In addition to my confirmation and experience (see page 290) of the "utility of growing Potatoes on ridges between Celery, &c," allow me to remark that the mould where the Potatoes grow is not required for the Celery till the Potato crop is cleared off. The 1st and 2d earlies may both thus be advantageously cultivated. No. 1 such as Ashleaves and Frames growing between the first plantation of Celery, and No. 2 such as Flukes, Flour balls, &c., between the second or late plantations, where Celery is not required in quantity. I recommend that after the ground is well prepared in the common way on the flat, by deep digging and manuring, it should be formed into ridges 4 feet wide, and thereon double rows of Potatoes planted, to be treated in a similar way as I recommended for those between the Celery. In the centre of 3 feet intervals I would reserve 1½ feet spaces for double rows of late successional crops of Peas or Scarlet-running Beans to be sown in May and June. Where Broccoli, Cabbages, Savoys, Cottagers' Kale, Green Kale, Thousand-heads, &c., are required, let the ground be formed into complete 7 feet ridges, stetch fashioned, still adhering to double rows of Potatoes on the top or centre, with the furrows or lowest part reserved for double rows of the Brassicas, to be planted in June or July, right and left of the said furrows, and to be moulded up during autumn with the mould from the Potato plots, as a preventive or protection from excessive wet and frosts in winter. Thus 7 feet spaces will be allotted (and it will be found not too much), from one outside Potato row to the next, or 3 feet spaces from the Potatoes to the Peas, Brassicas, Beans, &c., changing the furrows in winter to where the Potatoes grew in summer. By reversing or alternating the crops next season no one kind of crop would be grown on the same ground as grew on it the year before. In field culture all the above practices of digging may be substituted with equal advantage by the plough, whether it is for Potatoes or other crops with the wide spaces, either planted or fallowed for similar crops the next season, at the will of the cultivator. *A Hardy, Maldon.*

Strawberry Mulching.—Tan is recommended for this purpose at p. 290, and you add an editorial note stating that "it will ruin the land." Is this really so? I have used it for some 10 years or more without the slightest inconvenience, and certainly without any appreciable injury to the land. The quantity necessary to be used is so small that in a few months it is scarcely perceptible on the ground, and certainly where they can get at it Strawberry runners root more vigorously in old tan than in any other substance. I have sometimes thrown old tan among the plants to get runners for forcing or planting, and most gardeners must have noticed how vigorously the runners of the forcing plants root if they only come in contact with the tan

bed. At the same time let it be understood that I do not recommend tan as dressing for Strawberry beds or as being of any manurial value, but to mulch the ground to keep the fruit free from grit and dirt, it may, or my experience goes for nothing, be used with safety and success. *W. P. A.* [Everything depends on the state of the tan. If old and rotten—well.]

Vine Rot.—I send you by rail to-day two Vines dead from some cause. The Hamburgh variety bore a good crop last season. The border is well drained, but unluckily it contains cotton waste at the bottom; would that cause the Fungoid appearances which the roots present? *J. H.*—[The roots are chokefull of dry rot, however produced. We should hardly suspect the cotton waste.]

Setting Grapes and Golden Cherry Plum.—Answers to the following questions will oblige:—1st, How am I to manage to make my splendid crop of Damascus Grapes set their fruit properly? 2d, Whether the Golden Cherry Plum, so highly recommended in Downing's work (American) can be procured in this country? *G. O. L.*

Effects of the Winter upon Standard Roses.—Anticipating winter I had each Rose (about 150 in all) banked at the roots with about 6 inches of stable manure, and despite the unprecedented severity of the late frosts not one has been injured, whereas all Roses in other gardens in the immediate vicinity not similarly protected sustained more or less injury. Might not this plan of protection be extensively adopted with advantage? *S. A., Spring Grove.*

Linum grandiflorum rubrum.—When successfully grown, this is one of the prettiest annuals that our gardens possess, either for large or small beds; its brilliant colours and cup-like flowers are very striking, and when the plants are kept pegged down they make one of the finest beds imaginable. It is however rarely grown, on account of the difficulty there is in getting the seeds to vegetate. It is well known that the seed of this is coated over with a glutinous substance, and if that is not removed previous to sowing, the result will be (as it has often been with me) that very few of the seeds will germinate, in comparison with the bulk sown. Now to make every good seed vegetate, I have adopted the following plan with perfect success: Previous to sowing procure about half-a-pint of tepid water, about as warm as you can comfortably bear your hand in; steep the seeds in this for 4 or 5 hours, pour the water away, and it will then be like jelly; have a little white silver sand in readiness, and mix the seed with it, to absorb the moisture; spread it out on a sheet of brown paper and lay it in the sun, or in some drying place, until quite dry and friable; then well rub between the fingers until every seed is separated, and sow in the usual way. If any of your readers who have had any difficulty in raising this pretty annual will try this plan, I will guarantee that the result will be satisfactory.—*G. A., Finedon Hall, Northamptonshire.*

Fungi.—In your Number of the 23d ult. are a few remarks on the Potato disease by Mr. Waterton, among which he states that he is of opinion that "the minute Fungus is the effect of the disease and not the cause of it, and that "he has long considered Fungus as the offspring of disease, and not the product of it." Though this may be true in many instances, yet it certainly is not so in others, as, for example, in that numerous group of Fungi whose habitat is on the living leaves (or stems) of plants, and which often show themselves almost as soon as the young leaves have expanded. These Fungi cannot be said to be the effect of disease, for there is no time for any disease to have attacked the plant, and must surely be held to be the cause of the disease and distortion, which are generally the product. The Fungi I allude to are those of the genera Puccinia, Uredo, Æcidium, Botrytis, &c., and which are popularly known by the names of mildew, rust, and moulds. A familiar example is also seen in the common Rhytisma acerinum, or the black spots which stud almost every Sycamore leaf, and which, I think, Mr. Waterton must acknowledge to be the cause of the premature decay of the same. *A. I., April 2.*

Marvellous Vegetation.—In a book called "Sketches of Nature in the Alps," translated from the German of Von Tschudi, there is the following passage which seems to me to "want confirmation:"—"The vast Dubenwald, at the entrance of the valley of Tourtemagne, in the Vallais, might be called a primæval forest, if any of the Swiss forests could be designated by such a title. . . . Thousands of majestic Firs and Larches stand there dead and withered; but their stems, like those of the real primæval forests of the tropics, are covered with Lianas, and the bright flowers of various Orchidaceous plants hang from their branches." To my ignorant mind this seems remarkably like a complete myth. However, as I have never enjoyed more than a distant view of the Dubenwald, it behoves me not to venture on a denial of the existence of its tropical vegetation, any more than I take on me to accuse Von Tschudi of fiction when he says that in the stillness of the forests you may hear the beating of the heart of the hunted hare. *H. J. Moule, Dorchester.* [This is the public "shaved" by the concocters of Travellers' tales. For further examples of this we may refer to the wondrous stories now current about Gorillas.]

Propagation of Begonias.—It will be seen from the specimens inclosed that Begonia Rex, and probably others of that habit of growth, may be induced to become viviparous; or in other words young plants may be produced on the leaves without the aid of a particle of soil, or removing them from the plant on which they grow. Specimen No. 1 shows how a stalk may be furnished when the leaf begins to decay. No. 2, with the swelling at the base, would in a few days have begun to push forth leaves. If the means by which this is brought about is not generally known, and any of your readers think it worth asking for, I shall be quite willing, with your permission, through the *Gardeners' Chronicle*, to communicate all I know of this simple process. *J. Moon, Canterbury.* [Doubtless many will wish to know. The young plants agree perfectly with the description.]

The Pengethly Pear.—Do any of your readers know this? Grafts were given me by the late President of the Horticultural Society, Mr. Andrew Knight, and the fruit is now very good. An excellent keeping Pear it has proved to be here in *Jersey*.

Rainfall in February, 1861:—

Stations.	Height of Rain Gauge.			Depth of Rain and Snow.			Rainy or Snowy days.
	Above the Ground.		Above Sea Level.	Total for the Month.	Greatest fall in 24 hours.		
					Depth	Date.	
	ft.	ins.	Feet.	Inches.	Ins.	Ins.	
Little Bridy, Dorset ..	0	4	348	4.81	1.93	23	21
Barnstaple, Devon ..	0	6	31	2.64	.33	7 & 20	15
Castlefield, Calne, Wilts	0	11	330	2.21	.87	23	15
Camden Town, London ..	0	4	100	1.93	.57	23	12
Finchley Road ..	0	4	270	1.87	..	..	..
Do do. ..	26	4	306	1.17	..	..	..
Oundle, Northamptonshire	20	0	124	2.03	.62	23	20
Norwich	0	0	30	2.75	1.04	23	13
Derby	5	0	179	2 17	.35	8	20
Manchester ..	3	0	106	2.56	.96	8	17
North Shields ..	1	0	124	1.97	.84	8	19
Dumfries ..	0	5	68	4 05	1.15	5	20
Nookton, Leven, Fife	0	6	80	1.81	.36	5	17
Sandwick, Orkney	2	0	78	1.43	.30	19	17

Notes: *Calne.*—Snow on the 12th, 1 inch deep.
Derby.—Mean (14 years) fall for the month 1.56.
Manchester.—Dr. Dalton's average for 47 years, 2 443 inches.
Dumfries.—Boisterous, with much rain to the 8th, then frosty till 15th, mild and wet to the end. Hepaticas in flower on the 17th, common Daisy on the 18th.
Nookton.—Snow on the 11th, 12th, 13th and 14th.
Sandwick.—Mean (20 years) fall for the month, 3.04 inches; the only years in which the fall was less than the present were 1843 and 1855, being 1.32 inch in each year.

G. J. Symons, Camden Road Villas.

Antiquity of Potato Planting in Scotland.—It has been a leading feature in the character of the *Gardeners' Chronicle* to do justice to gardeners dead or alive, however humble their position in society may be; therefore, perhaps, a short notice of two old characters connected with Potato planting in Scotland may be interesting to your readers. In the article "Horticulture" in the "Edinburgh Encyclopædia," written by the late Dr. Neill, we are told that the cultivation of Potatoes in Scotland was very little understood till about the year 1740, and it was not practised in fields till about 20 years after that period. It is stated in the "General Report" of Scotland as a well-ascertained fact that in the year 1725-6 the few Potato plants then existing in gardens about Edinburgh were left in the same spot of ground from year to year as recommended by Evelyn; a few tubers were perhaps removed for use in the autumn, and the parent plants were then well covered with litter to save them from the winter's frost. If the above statement is correct, old John Reid, gardener to Sir George Mackenzie, Rosehaugh, must have been far ahead in Potato cultivation and the mode of cooking them, for in his "Scots Gard'ner," published in 1683, he tells us to cut Potatoes in as many pieces as you please, provided there be an eye at each piece, and plant in March, five rows in the bed; plant not deep, neither in wet or stiff ground, and in housing spread only over a board floor. His method of cooking them might be relished by many of the present day. He tells us to boil and peel, chop and bruise them well, pour on butter, and set them on a coal, and if you please strew a little cinnamon upon them, or for want of butter take sweet milk. What may be called the fathers of horticultural writers in England appear to have been well learned men for the age they lived in, but it is some honour to the craft in Scotland, that it was a working gardener who wrote the first system of gardening for Scotland. Dr. Neill remarks that Scotland has been more distinguished for producing excellent practical gardeners than good publications on the art of gardening. There does not appear to have existed any Scottish system of gardening as a separate book till "The Scots Gard'ner" was published by John Reid. The work is divided into two parts, the first treating of contriving and planting of gardens, orchards, avenues, and groves; the second of the propagation and improvement of forest and fruit trees, kitchen herbs, roots, and fruits, with a gardener's calendar, the whole adapted to the climate of Scotland. The style is very inaccurate, but the matter evinces not only an acquaintance with previous horticultural works, but a practical knowl[edge] of the subject. The season recommended by Reid [for] planting the Potato, and his method of preserving [them] may be kept in mind by cultivators of the present da[y]. The parish of Kilsyth, Stirlingshire, claims the hon[our] of having Potatoes first planted in the open fields [in] Scotland. In the "New Statistical Account of Sco[t]land" it is stated that "It is the early and successf[ul] cultivation of the most useful Solanum tuberos[um] (Potato) on which the fame of this parish, in so far [as] botany is concerned, chiefly depends. It not [only] gave birth to the gentleman who first introdu[ced] the culture of Potatoes into this countr[y], but it was the scene of his earliest experiments. The gentleman referred to was Robert Graham, Esq., of Tamrather, in the East Barony. [It] was in the year 1739 that he commenced [this] work of utility. Before that period he and others [had] raised the Potato in gardens, but there was a prejudice against raising it in fields. He planted half an acre of ground on the croft of Neilstone to the north of the town of Kilsyth, where he at that time resided as factor on the estate of Kilsyth. This excited the attention of the neighbourhood, and the practice [spread] extensively. Some noblemen, as well as farmers and agriculturists, came from a distance, among others the unfortunate Earl of Perth, to observe the mode of culture and the success of the experiments. [Mr.] Graham rented lands in the vicinity of Perth, Dundee, Glasgow, and Edinburgh, and for many [years] obtained premiums for cultivating the Potato." [But] was Mr. Graham the first who cultivated the Potato [in] the open fields in the parish of Kilsyth? In [other] books we are informed that in 1728 Thomas Prentice, day labourer, first planted Potatoes in the open fields [of] Kilsyth, and the success of the experiment was [such] that every farmer and cottager followed his example. One remarks, "What honour does he not deserve?" He appears to have been 11 years in the field before Mr. Graham. *P. Mackenzie, Plean, Stirling.*

Effects of the Winter.—It may be interesting [to] know the effect of the two last exceptional seasons [on] classes of shrubs and plants which have usually [been] considered hardy or half hardy in this locality, i.e. [near] Helston, about a mile from the shore of the Mount's Bay on the South Western coast of Cornwall. [For] convenience of reference all but Pinuses are cl[assed] alphabetically. Killed: Aster argophyllus; Arau[caria] braziliensis; Acacia dealbata, and lophantha; Ar[undo] Donax; Buddlea Lindleyana, globosa; Berberis nep[al]ensis, and Fortuni; Cineraria arborea; Ceano[thus] rigidus; Daphne purpurea; Euonymus japonicus [...] all killed); Eucalyptus longifolia; Escallonia [...]nensis; Grevillea rosmarinifolia; Ligustrum japonicum; Myrtles; Mesembryanthemums (several); Olive; [...]thamnus thyrsoides (all but one plant); Pittosporum; Physianthus albiflora; Rhododendrons (seedlings [in] frame; Roses (various); Spartium (of sorts); Ver[onica] Lindleyana, Andersoni, picta, and speciosa; Viburnum suspensum; Yucca filamentosa; Vitex Agnus Castus (from the Troad); Pinus insignis (two and three years old in nursery). Killed back to stem; Benthamia fragifera (many of 20 years old, in all situations); Escallonia rubra, and Montevidensis; Laurus[tinus] (various); Phormium tenax; very old Macartney [...] (60 years at least). Points killed: Arbutus [...] common; Azalea indica purpurea; Abutilon vitif[olium]; Berberis japonica; Gum Cistus, various; Chinese [...] Camellia japonica (on eastern wall, but [...] where free from wall); Cupressus [...] Uhdeana, Goveniana; Escallonia macrantha, [Hy]drangea, common, with japonica, and involucrata; Quercus Ilex (very numerous; and where [ex]posed, stripped of leaves entirely), Juni[perus] recurva, flaccida; Knightii japonica; Liquidambar; Magnolia conspicua; Photinia dentata; Pomegranate (on N.E. wall, exposed site); Taxodium semper[virens]; Piptanthus. Uninjured: Azalea indica alba [...] various Americans; Araucaria imbricata (even [in] greatest exposure), Arundinaria falcata; Ber[beris] Darwinii (in splendid bloom, March 29), rotund[ifolia], intermedia; Camellia japonica (detached [...]; Cupressus Lambertiana, Lawsoniana, Corn[...], macrocarpa, tinctoria, funebris; Juniperus, of [sorts]; Ilex, of sorts (except common Holly, which, [...] exposed, is much stripped); Libocedrus chilensis; argentea; Pawlovnia imperialis; Cryptomeria japonica; Podocarpus coriacea; Taxus canadensis, [...] hibernica, gold and silver; Pyrus j[aponica]. Pinus and Abies: Norway Spruce, Morinda, [...] Douglasii, Scotch, halapensis, austriaca, excelsa, Deodara, all much browned, and points killed, [...] exposed to sea gales. Young insignis in nursery [...] or much injured at three or four years old, [...] year and under less injured. Old trees slightly [...] and checked where exposed, but in shelter [...] Very numerous, and of all ages up to 20 years: Pinus Hartwegii, Cephalonica, Menziesii, nobilis, N[ord]manniana, ponderosa, Webbiana, Pindrow, nigra, [...] pyramidalis, Lambertiana. The three most [...] nurses here are P. insignis, Pinaster, austriaca, [...] I place in their order of merit, as showing power [to] resist severe cold and severe sea winds. *J[...] Rogers, Penrose, near Helston, March 30.*—
The following is an account of the effects of the [...] near Tamworth during the late severe winter. Tr[ees] and Shrubs killed: Pinus insignis, P. pinea, [...] cembroides; Cupressus sempervirens, Quercus I[lex]

Liquidambar styraciflua, Ligustrum lucidum, Arbutus Unedo, Aucuba japonica, Berberis Darwinii, B. aristata, Leycesteria formosa, Escallonia macrantha, Pernettya mucronata, Jasminum revolutum, J. officinale, Cotoneaster microphylla, Erica mediterranea, E. multiflora. All the early flowering Rhododendrons, including Altaclerense, Nobleanum, and Tigrinum; Alaternus, Phillyrea, Laurustinus, Portugal Quince, White Broom, Double Furze, Gum Cistus, Sweet Bay, Evergreen Honeysuckle, Lavender, Rosemary, Rue, and Sage. Nearly all Standard Roses. All last year's shoots of Araucaria imbricata, and I may add Farfugium grande, Yucca filamentosa, and Pampas Grass. The following on south walls are KILLED: Magnolia grandiflora, Benthamia fragifera, Fabiana imbricata, Banksian, China, and Fortune's Yellow Roses; all the young wood of Peach and Nectarine trees. Figs, although protected, have suffered very much. Cedrus Deodara and Taxodium sempervirens lost all their leaves, but will probably recover. Of plants UNINJURED I may mention Cryptomeria japonica (although all the leaders of these were killed in the autumn of 1859), Pinus excelsa, and Nordmanniana; Polygonum vaccinifolium, and Zauschneria californica; also the following Standard Roses:—Baronne Prevost, Du Roi, Dr. Marx, Jules Margottin, Madame de Cambacérès, Madame Domage, Mrs. Elliott, Standard of Marengo, Sydonia, Gloire de Dijon, Coupe d'Hébé, and Paul Ricaut. We had frost more or less from Dec. 10, 1860, to Jan. 21, 1861—46 nights—of which the most destructive was Dec. 25—thermometer 7° below zero; 29th, zero; Jan. 4, after rain, 9°; and the biting frosty wind of Jan. 15 was very destructive. *Thomas Dowell, Arnington Hall, near Tamworth.*

Holland House.—Having read in your Number of the 23d ult. an article thus headed, I venture to send you the following remarks. I do not dispute the beauty of the conservatory "gay with Camellias," nor the noble appearance of the fine old Orange trees purchased by the late Lord Holland, and which belonged to Madame Adelaide, sister of King Louis Philippe. All these, together with the fruit trees and other garden operations, are doing well, no doubt, and it would be strange if they were not, since Mr. Scoby, the head gardener, is a man of great experience, as well as knowledge and judgment. What, however, induces me to address you is the paragraph respecting the planting of a belt across the large field in front of Holland House to the south, and which is commonly called the front park. Your Correspondent writes that "a belt of Horse Chesnuts, Elms, Sycamores, Deodars, &c., has been planted across the front park to shut out from view the old Elms along the side of the Kensington Road; the latter have become so aged as to be really dangerous to passers by; their rotten limbs must therefore necessarily be removed, so as not to overhang the public road, from which the new belt is a considerable distance off." Now, the new belt is most certainly a "considerable distance off," so considerable that it is evident what the real reason for planting this belt is. Namely, to screen off any row of houses that may be erected between it and the now calumniated "old Elms" close upon the road. It is but fair to give the real reason, and most certainly no one would plant a belt of trees at such a distance from the road, from 200 to 300 yards, unless it were intended to build something between, such as a row of houses. The back park has already two rows of houses commenced and a villa, so that it is probable that the same operations will take place on the south side. No one can find fault with these acts. The land is valuable and will bring in large rents, so that however "old people" may regret the doing away with "old recollections," and the erection of large rows of houses where air used to circulate freely, still every one has a right to do what "they like with their own." I must add one word as to our Elms so abused—they are not worse than their neighbours in the avenue, nor when in leaf do they look so decrepid, certainly not more so than those we ride and drive under daily in the "Parks." Moreover there is a row by them, and in the centre of the Row which were only planted 56 years ago, and which are therefore by no means old and decrepid. These were placed there when the iron open grille or palings were removed, and a wall built, in consequence of the erection of Earle's Terrace opposite, which the late Lord Kensington built in 1805 or 1806, and which it was proved would intercept the view from Holland House of the Surrey hills and intervening landscape. This, however, was not the case, for the house is so much higher that from the first floor the view is seen over the Row or Earle's Terrace. I may mention that the belt in question will entirely exclude the view of Holland House from the public: that fine old place, where Addison lived, and Charles James Fox was brought up; but, alas, "Auri sacra fames" prevails now-a-days! *A Very Old Neighbour.*

Societies.

ROYAL BOTANIC: *April* 3.—(Second Spring Meeting).—Groups of Stove and Greenhouse plants were contributed on this occasion by Messrs. Fraser, Cutbush, and Young, and the same exhibitors also furnished collections of Ferns and other plants remarkable for the beauty of their foliage.

Of Roses in pots Mr. Turner, Royal Nursery, Slough, exhibited the following in good condition considering the season, viz.:—William Jesse, Baronne Prevost, Jules Margottin, Lord Raglan, Lafontaine, and Souvenir de Malmaison. From Messrs. Fraser also came Roses in pots, among which were Victor Verdier, Mademoiselle Bonnaire, white with pink centre, and Vainqueur de Solferino, bright rose. Of cut Roses Messrs. Paul had boxfuls of beautiful blooms, among which was a very fine specimen of the bright yellow kind called Isabella Gray; this was shown by Mr. William Paul.

Cinerarias were again contributed by Messrs. Dobson, who sent Etna, Mrs. Hoyle, Brilliant, Perfection, Novelty, and Duchess of Sutherland. Messrs. Smith of Dulwich had some good seedlings, the best of which were Louise, white, with purple edge and dark centre; Queen of Spring, similar in character, but larger, and different in shade of colour; Rosy Morn, bright rosy-pink with pale centre; and Antagonist, a purple self. To each of these a Certificate was awarded. Mr. Turner had certificates for Prairie Bird, a lively violet blue, and for James Andrews, a handsome violet purple self. A similar award was also made to Duchess of Hamilton, a very large variety, white with a dark centre, and broadly edged with purple. This was shown by Mr. James, gr. to W. F. Watson, Esq., of Isleworth.

Mr. Todman received a Certificate for his new double White Azalea Flag of Truce, which was shown in excellent condition; a similar award was also made to the same exhibitor for Lord Elgin, a well-formed bright rosy crimson kind.

Auriculas were exhibited by Mr. Turner and others; the former sent Duke of Wellington, Eliza, Col. Taylor, Glory, Mary Gray, Waterloo, and Rifleman; to the last, a deep violet purple self, a Certificate was awarded.

Messrs. Parker and Williams furnished a basketful of Statice propinqua, a pretty dwarf kind, and the same exhibitors also contributed several finely flowered plants of Imatophyllum miniatum. Mr. Bull again showed plants of the double white and pink Primulas, mentioned by us at p. 267; also a striped-leaved Amaryllis, Dracæna spectabilis and Citharexylon niveum. Pansies in pots came from Mr. James; and Mr. Bragg, of Slough, sent a useful looking bedding kind called Cleifden Blue. From Mr. Davidson, Regent's Park, came Gloxinias, the most conspicuous among which was Princess of Prussia, an upright flowering kind, white, with a rich bright crimson throat.

Collections of Hyacinths came from Messrs. Cutbush, Paul, Turner, Jackson, and Young; and Messrs. Cutbush again sent a showy group of early Tulips.

ENTOMOLOGICAL: *March* 4.—The President in the chair. Mr. Stainton exhibited a new British moth belonging to the family Noctuidæ (Xylina conformis of Treitschke), taken on Ivy blossoms near Cardiff in October last; and Dr. Wallace specimens of a Lasiocampa, reared from a caterpillar taken in the Isle of Wight apparently identical with the supposed species, L. Callunæ, from the North of England; also some fine dark varieties of Hemerophila abruptaria and its pupa case taken near London. Mr. Mitford exhibited a hybrid moth reared between Biston pilosaria and hispidaria, a fine variety of B. prodromaria, and a series of six species of Fumea, taken at Hampstead, one of which appears to be undescribed. Mr. G. R. Waterhouse exhibited a fine specimen of Anobium denticolle, taken by Mr. Turner near London, and read descriptions of three species of Scymnus hitherto confounded together, with observations on the British species of the genus, Climbus, and descriptions of three species of the genus Bryaxis. Dr. Knaggs stated that having submitted specimens of his supposed new Nonagria Bondii to M. Guenée, the latter had pronounced it certainly a new species. Mr. Kirby read a note "On the Geographical Distribution of the Moths belonging to the Family Zygænidæ;" Mr. F. Smith, "Descriptions of New Species of Aculeate Hymenoptera taken by R. W. Stretch, Esq., at Panama;" Mr. Hewitson, "A Monograph of the Butterflies belonging Pronophila, a genus of the Hipparchiidæ."

Notices of Books.

Workmen's Earnings, Strikes, and Savings. By Samuel Smiles. 12mo. Murray.

This sensible treatise, which is a reprint from the "Quarterly Review," deserves especial attention at the present moment, when, in the midst of abundance a large body of hardworking men is plunging into poverty at the bidding of cunning and unscrupulous adventurers who prey upon their credulity, and abuse the best feelings of human nature. To stand by one another, to help each other in distress, and to support the weak against the strong, are the English qualities on which our social and political greatness may be said to be founded; but like all else that is good, these virtues are capable of being turned to the worst purposes. There is no merit in standing by cowards, or in helping those who will not help themselves, or in supporting weakness brought on by the wilful abuse of opportunity. On the contrary, aid in such cases acts as an encouragement to evil, and so far is it from commanding approbation, that it deserves the strongest reprobation.

Our modern strikes and lock-outs as they are called, are great examples of the abuse of good intentions, and of the unreflecting way in which intelligent men allow themselves to be misled by a few crafty leaders who live upon their credulity. Under the specious pretence of bettering the condition of working men, gigantic combinations are formed to compel the employers of labour to submit to terms which, if complied with, must extinguish the demand for labour itself. Earnest, industrious men, who are satisfied with that state of things to which it has pleased God to call them, are compelled by the lazy and the worthless to abandon employment; women and children are reduced to a state of starvation, and the small traders who supply the lower classes with food are ruined. And for what? To pull down the skilful workman to the level of the unskilful, the industrious to that of the idle, the honest to that of the dishonest. Those who move the springs of these confederacies fatten on their victims. While the deluded mechanic is enduring the severest trials for the sake of what he unwisely believes a good cause, the men who hoodwink him, and push him on to destruction, are living on delicacies and wear fine linen.

There is not even the poor argument of success on which to rest a justification of Strikes among workmen. They are all failures and must of necessity be so; or if they result in any apparent advantage it is temporary and delusive. The employers of labour may be coerced; but only for a time. The moment that intimidation rears its wolfish head capital and industry depart. The last great strike in London was in the building trade; it signally failed after a monstrous expenditure of money and an amount of suffering hardly credible. To borrow the words of Mr. Smiles:—"Many public works stood still. The masters sustained great losses. The men stood out as long as they could; their fellow-workmen sustained them at great sacrifices for many months. The union men thrown out of employment contrived to subsist somehow, supported by contributions from the funds of various lodges, some of which had been set apart for purposes of sickness and widows' and orphans' relief. But the great body of labourers connected with the building trade either starved, or sought other work, which, in the dead of winter, they failed in many cases to obtain. Some committed suicide. And after all this loss of wages, and frightful suffering, the strike ended as nearly all such strikes have done, in the Central Committee of Unionists withdrawing the strike at the Messrs. Trollope's, and permitting the men to resume work at the former terms." When workmen combine, their employers are constrained to do so likewise in self-defence; and when "masters are forced into union for self-defence, strikes have no longer a chance of success. They are as futile as the assault of an unarmed and unprovisioned multitude upon an impregnable and provisioned fortress."

The new strike in London is the most extravagant of all. The masters offer their men higher wages than ever and the men refuse them. In order to enable the industrious to be industrious, to give skill the advantage of skill, and the most able-bodied that return for their only capital (muscular power) to which they are entitled, it is proposed to pay by the hour. In this way the man who prefers six hours' daily labour to 10 can reduce his time according to his fancy; and he who would rather work hard in the hope of laying by money for his family can do so. This is what at the dictation of their destroyers the men refuse!

Mr. Smiles's book is full of most valuable facts concerning such events, and we wish it could be sold for a penny.

We have before us a Lecture *On the Variations of Plants*, by John Gibbs (Chelmsford, Fry), who enters the field against Mr. Darwin. It is worth reading though not of importance enough for more special notice.——*Market Gardening round London*, by Jas. Cuthill (Hamilton), a third edition of this useful little book.——*Report on the Formation, &c., of the Plantations on the Estate of Camperdown in Forfar* (Dundee, Shaw) is a very favourable description by Mr. Robertson of sundry plantations, great and small, formed by Mr. Thomas Taylor, the manager. The justice of Mr. Robertson's eulogium can only be ascertained by those who are on the spot, which however seems to be well worth the visit of foresters.

Garden Memoranda.

BANK GROVE, NEAR KINGSTON-ON-THAMES, THE RESIDENCE OF W. BYAM MARTIN, ESQ.—The magnificent tree of Camellia reticulata, for which this place has long been justly celebrated, is now in full bloom, and if the weather does not prove very bright or sunny it may be expected to remain in perfection for at least 10 days or a fortnight more. To this glorious specimen an entire compartment in one of the glass houses has been wholly devoted; the plant measures quite 16 feet in height and as much in diameter, and when we state that it has now on it no fewer than 2000 blossoms, each of which measures on an average 8 inches in diameter, some idea of the beauty of so remarkable a tree may be conceived. Although more than 2000 buds were removed from the plant in the winter time the branches are literally bent down under the load of rich rosy blossoms they are still required to support. Owing to the want of sunlight last year, wood did not get well ripened, and Camellias in consequence have not in general flowered satisfactorily this season; the tree in question must, however, be regarded as a noble exception, for we never remember to have seen it finer than it is at present. On the back wall too is a beautiful crop of blooms produced by the variety called Altheæflora, which is kept closely tied in to the trelliswork, covering it as thickly with green leaves as if it was clothed with Ivy. The back walls of other houses are also ornamented in the same way, but the plants which cover them have only bloomed well towards the top, where in consequence of receiving more air and light the wood got better ripened than that in lower positions. These trees are grown in slate tubs, and although the space allotted to their roots is necessarily limited, they generally bloom most satisfactorily. Other houses are

also at present gay with Camellias, all of which are well worth seeing. Conspicuous among them is a specimen of Duchess of Northumberland, which must be regarded as one of the handsomest of light kinds. Its finely formed white blossoms beautifully flaked and mottled with rose have a charming effect, more especially when associated, as they are here, with a profusion of others of different colours. These houses are also well stocked with flowering plants of other kinds, which, independent of the Camellias, render them both dressy and attractive.

In Vineries and other forcing houses there is every appearance of excellent crops. In one of the houses in which the Vines were not succeeding as well as could be wished, they were moved and replanted after the border had been renewed. This was done early in September last, soon after the fruit had been cut; the whole of the old soil was taken out, the drainage re-arranged, and eight inches added to its depth; at one end a trench was taken out right across the border; every root was carefully raised with as little mutilation as possible, and covered with mats, and thus the work proceeded until the other end was reached, when, as has already been stated, after the drainage had been put into efficient order, and covered with rough turf, the border was refilled with fresh fibrous loam, in which the Vines were planted, carefully spreading out their roots at a proper distance from the surface, which by means of the addition to the drainage has been raised 8 inches. The soil of the border is 18 inches in depth; no manure was used, except a few bushels of broken bones which were added to the loam. The house was shaded while the work proceeded, and it was kept in that state for a week or two afterwards. About the beginning of January the border was covered with fermenting material, which soon warmed it sufficiently to put the roots in action, and towards the end of the same month forcing was commenced—very gently at first, increasing the temperature gradually as the season advanced, and now wood is being made very much stronger and better than before the border was renewed, and there is every appearance of a good crop. Before these improvements took place stem roots were abundant inside the house; but now none make their appearance. [Mark this. Ed.]

On the lawn, which, like every other part of the garden, is kept in the neatest possible order, are some unique specimens of Coniferous plants, among which is a remarkably fine tree of Abies Pinsapo, at least 16 or 17 feet in height; we also observed Cephalotaxus Fortuni, a fine bush perfectly hardy, and a beautiful pyramidal specimen of Wellingtonia nearly 10 feet high. Among plants which have suffered from the winter are the Chinese Cypress, which is apparently dead; Pinus muricata, browned a good deal, and Ilex cornuta dead; Bay trees have also been a good deal cut up, but now that the dead portions are removed they have little appearance of having been injured. Rhododendrons are safe, even the brilliant R. Blandyanum, a little standard, is covered with flower buds which are perfectly sound.

In the fruit and kitchen garden, which is kept unusually trim and neat, there is every promise of good crops both of fruit and vegetables. Some Pear trees in borders which previously had borne little or no fruit were root-pruned by the gardener, Mr. Blair, last autumn, and now they are covered with blossom buds. Lifting and root-pruning fruit trees has been largely practised here for some few years back, and in every case with the best possible results.

Miscellaneous.

N. W. American Timber.—On the 7th of August, the ship Lawson, of Bath, Maine, 598 tons register, L. L. Watts, master, cleared for New York direct, with a cargo of yellow Fir spars, from the Puget Mill Company at Teekalet. She has on board some 140 beautiful sticks, varying in length from 60 to 118 feet, and from 20 to 32 inches diameter, dressed to the "partners," together with a sufficient quantity of deck-plank lumber and smaller spars to make convenient and safe stowage. This is an important shipment, being, we understand, the first cargo of spars shipped from Puget Sound direct to the Atlantic States; and we doubt not it is the inauguration of a commerce between Washington Territory and the East, which the ship-builders at its destination will find advantageous to encourage. It is now very generally conceded that the yellow Fir of this Sound is superior to the spar timber of almost every other part of the world, being stronger, much lighter, and possessing a peculiar tenacity of fibre, or toughness, the presence of which is ascribed to the dryness of our climate. The outer portion, or sap, which is usually discarded as worthless, is in the yellow Fir the best portion of the wood. Naval architects and other competent persons have pronounced it better for all marine purposes than a great proportion of the Oak and other wood now generally thus devoted. Amongst this cargo is one stick 110 feet long, and 30 inches diameter, without the least knot or blemish, as smooth, straight, and beautiful as a tree could grow. In this connection we might remark that a vessel is now loading at Seabeck, for London, with spars; and Capt. Stamp is daily expecting two more for similar cargoes—one for London and the other for Glasgow; the latter cargo to be used as masts for steamships.—*From the North-West, a paper published at Fort Townshend, Washington Territory.* [The yellow Fir spoken of is Abies Douglasii.]

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Heat and moisture may now be more liberally supplied to tropical plants. As the season advances these should be gradually increased, but in all cases avoid a high night temperature. That must be principally obtained by closing early, and so retaining heat derived from the sun; when fires are required they must not be so strong as to render it necessary to admit currents of cold air to keep the thermometer down. This, however, will be unnecessary where properly constructed ventilators have been provided. Attend to Achimenes, Gloxinias, and other summer and autumn flowering plants. The last succession of Achimenes, to flower late in the season, should now or very soon be placed in heat. Some of those formerly started may be potted for hanging vases, for which A. longiflora and cupreata are particularly well adapted. Employ pans or broad shallow pots for their general cultivation, and as they require an abundant supply of moisture when they are in flower, let the drainage be as efficient as possible, in order that they may be freely watered without stagnating the soil. Let Fuchsias for summer and autumn display have due attention, repotting them as may be required in rich compost, and occasionally watering them with liquid manure. Much however of their beauty depends on the shape of the plant. Nearly all the varieties have a natural tendency to form pyramidal bushes, and by a little attention they may be guided into that very appropriate form; only one shoot should be allowed to take the lead; this should be trained perfectly upright, and the side branches regulated by stopping any over-luxuriant ones which may be outstripping their neighbours.

FORCING DEPARTMENT.

Vineries.—Where it is desirable to retard breaking in the late house as long as possible, and the glass cannot be removed nor the Vines exposed to the open air, they should be let down as far from the glass as can be done, shading the roof, and giving all the air possible. Some however maintain that there is no decided advantage in retarding Vines by artificial means after this season. They prefer allowing the buds to start at the bidding of the weather after this time, merely giving all the air possible, and take chance as to the fruit keeping until next March. Weakly or overcropped Vines ought to be very carefully examined for red spider, which may be expected to make its appearance on these, particularly if the weather becomes bright, and means should be used to thoroughly eradicate it the moment it is perceived. Probably the best method is to well wash every affected leaf with a sponge, for it is useless trying to overcome it in such cases by syringing, which only serves to keep it in check, and when the fruit begins to colour, and syringing must be laid aside, it will increase with fearful rapidity. Keep the atmosphere moist, sprinkling the floors, &c., frequently on bright days, and take care that inside borders are well supplied with water.

Peach House.—The fruit in the earliest house will now be swelling fast; use water liberally until it begins to colour. In thinning later crops be guided by the vigour of the trees as to the quantity they may be allowed to bear. Syringe regularly and give air liberally on all favourable opportunities.

Cherry House.—Where the leaves are thickly clustered together and shading the fruit, a few may be removed to let in sunlight. Fumigate if necessary before the fruit gets so near ripe as to be affected by the necessary washing afterwards.

FLOWER GARDEN AND SHRUBBERIES.

Lose no time in potting off bedding plants or pricking them out into frames or boxes. As the potted plants become established they should be hardened off by gradually inuring them to the open air whenever the weather is favourable. The hardier kinds may soon be set upon a bed of coal ashes or plunged in old tan, ashes, or some other light material. Much of the labour of watering will thus be saved, many deaths avoided, and the plants will altogether be in a better state when planting out season arrives. Patches of showy hardy annuals should now be sown in vacant places which usually exist in herbaceous beds and in the hedges of clumps and borders in the shrubbery. Double Poppies, of various colours; Lupins, Sunflowers, African and French Marigolds, Erysimum, Clarkias, Gilias, Collinsias, Silene, and Nemophila are excellent for that purpose. A sufficient quantity of cuttings and seedlings of half hardy climbers should now be potted for planting out in May. With such plants as Cobæas, Maurandyas, Lophospermums, Calampelis, Loasa, Tropæolum canariense, &c., many bare places on walls and trellises may be covered and made ornamental which would otherwise be unsightly blemishes.

HARDY FRUIT AND KITCHEN GARDEN.

Growth is slow this spring; but the disbudding of Peaches and Nectarines will soon require attention. First remove a portion of the superfluous shoots, and in a week or 10 days go over them and regulate them finally. The superfluous shoots of Apricots must also soon be removed and the remaining ones carefully examined in search of a green caterpillar which not only injures them but also eats holes in the young fruit, thereby causing it to gum, grow deformed, or fall off before it is stoned. As regards vegetables continue to make periodical sowings of Spinach once a fortnight, and Peas, Beans, and Turnips once in three weeks. Successional sowings of all salads should be made with strict regularity, and proper attention should be paid to preserving them from the ravages of birds and insects. If the crops of Onions, Leeks, Parsnips, Beets, Salsify, Scorzonera, and Skirret are not yet sown no time should be lost, as the latest period for sowing the main crop of Carrots is near at hand. A sowing of tall Kidney Beans may now be made in early localities; the early sowing of this useful vegetable not unfrequently gets cut off by late spring frosts, but when this happens the ground should be left undisturbed, as shoots will be produced from beneath the surface.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON
For the Week ending April 4, 1861, as observed at the Horticultural Gardens.

March and April.		Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth. 1 foot deep.	Of the Earth. 2 feet deep.	Wind.
Friday	29	18	29.713	29.649	57	34	45.5	48½	44½	W.
Satur.	30	19	29.608	29.564	55	36	45.5	48	45	S.W.
Sunday	31	20	29.665	29.535	55	27	41.0	47	45	S.
Mon.	1	21	29.712	29.641	50	37	43 5	47	45	N.E.
Tues.	2	(	29.661	29.652	53	35	44.0	47	44½	S.W.
Wed.	3	23	29.709	29.662	55	35	45.0	48	45	W.
Thurs.	4	24	29.767	29.709	57	30	43.5	48	45	W.
Average..			29.691	29.673	54.5	33.4	44.0	47.6	44.8	

March 29—Fine; very fine throughout; slight rain at night.
— 30—Rain; cloudy; overcast.
— 31—Rain; cloudy; very clear at night; slight frost.
April 1—Foggy; cloudy; heavy rain in afternoon; foggy.
— 2—Foggy and drizzly; dark heavy clouds and showers; densely overcast; heavy rain.
— 3—Cloudy; fine; heavy clouds; drizzly; showery.
— 4—Partially overcast; fine throughout.
Mean temperature of the week, 1 deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending April 13, 1861.

April.		Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.
Sunday	7..	57.8	37.2	47.5	16	0.50 in.	2	7	3	2	2	12	5
Mon.	8	56.0	35.8	45.4	20	0.46	2	5	6	1	5	9	6
Tues.	9..	54.7	35.4	45.0	17	0.30	5	6	6	1	4	6	6
Wed.	10..	55 3	33.4	44.3	13	0.27	2	5	7	3	3	6	6
Thurs.	11..	55.2	35.7	45.5	18	0 51	2	9	3	1	4	9	[illegible]
Friday	12..	55.4	37.0	46.2	24	0.56	2	6	5	–	2	13	[illegible]
Satur.	13..	55.5	33.9	44.7	15	0.45	7	5	3	3	3	6	[illegible]

The highest temperature during the above period occurred on the 7th, 1859—therm. 79 deg.; and the lowest on the 10th, 1860—therm. 20 deg.

Notices to Correspondents.

Black Currants: *R S.* The buds seem to have been injured by cold. Have patience; the plants will recover.

Bleaching Linen: Will any of our readers give a young housekeeper a good receipt for bleaching linen from the manufacturer? Is there any process it should go through before being laid on the Grass for sun and water. She has heard of using the produce of the cowhouse, but don't know how to apply it. A Constant Reader and Subscriber will be obliged by any information on the subject. *T T B.*

Colours: *Rhododendron.* There is no book to instruct novices in the art of blending two different colours of flowers to obtain distinct or particular colours from hybridised seedling plants. Take water colours and blend them on a palette; that is the best guide.

Coniferous Seeds: *M A C S.* We cannot read your writing to make out what you mean. Sow the seeds in pans in a cool Cucumber frame, and pot the plants singly as soon as they have got their true leaves well formed.

Diseases: *H.* Such appearances are not uncommon on the entire-leaved Ash tree. We believe them to be of the nature of galls.

Fruit Room: *Bushey.* We doubt the wisdom of the experiment with so thin a partition wall; for heat must be obtained in some shape for the Mushrooms.

Glaze for Calico: *S W T.* Three pints of old pale linseed oil, 1 ounce of sugar of lead, and 4 ounces white resin. The sugar of lead must be ground with a small quantity of the oil, and, added to the remainder, incorporated with the resin by means of gentle heat. Lay it on the calico with a brush. One coat annually is sufficient.‡

Heating: *Inverness.* Possibly your plan would answer, but you must take care that the pipe in the fire rises more than usual and that a *long* air tube or good cistern is provided at the highest point; otherwise the water will hardly circulate and will boil over. But will not the cold iron so absorb heat so fast from the open fire place as to put the fire out?

Insects: *J K.* The leaves of your Peach trees under glass are gnawed by the Weevil, Otiorhynchus sulcatus. Examine the leaves after dark and lay a cloth under them, and shake the branches, when the insects will fall on the cloth. Keep a toad in your house.—*J S B.* The long-snouted fly is Rhingia... bylius major.—*M J B.* The Weevils from Wheat received from Bombay are not the English Calandra granaria. They are C. Oryzæ, Fabr. *W.*

Linnean Botany: *J F.* Observe the *meaning* of the words denoting classes and orders, not their numbers. Nobody now-a days thinks of studying the Linnean system, and you only waste your time in trying to understand it.

Names of Plants: *H G C.* Notylia incurva.—*E W.* Primula villosa.—*Redwood.* Primulas without leaves or any account of their native country cannot be named. The paler of the two looks like P. carniolica.—*Garibaldi.* 1. Some Prostanthera; 2. Ceratonia Siliqua. The "Potato" seems to be Cyperus longus. Treat it like a tender Annual, and take it up before the frosts of autumn.—*J G N.* Oxalis cernua.

Renovation of Fruit Trees: If "E S D." would kindly let your readers know the size of the incision and of the bark used for renovating his trees it will much oblige *T B* and many others.

Vinery: *Vitis.* It is not a disease. The spots are pimples caused by over feeding: that is to say the air has been too damp and warm. They do no harm. Your border must be a bad affair.

Vines: We think *An Old Subscriber* alarmed needlessly. The curled bunch is healthy and will surely straighten by degrees. The leaf is perfectly right.—*B B.* Your plants appear to be suffering from insufficient food. The leaves are without proper support at the roots. Do one of two things: either throw warm litter on the border, or increase the dampness and warmth of your house.

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The Agricultural Gazette.

SATURDAY, APRIL 6, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

Monday,	April 8	Botley (Mr. Blundell).
Tuesday,	— 9	Hexham (Rev. Mr. Shield on Meteorology). Galashiels.
Wednesday,	— 10	Agri. Society of England .. .. Noon; Oxford. Thornbury.

Within a radius of 18 or 20 miles around Overtown, near Swindon, there are no fewer than **14 or 15 sets of Fowler's steam cultivating apparatus working!** It is right that we should name Overtown as the centre of all this enterprise; for, whether it be strictly in the middle of the district thus signalised or not, it is from Overtown that the example has been taken which within the last two years has spread so rapidly. The first of these machines, purchased at the Chester Show, did good work on that farm during the autumn of 1858 and spring of 1859; and in the month of May that year, Mr. Redman could report that the set of steam plough tackle sent him at the end of the previous September had done good service. He then said:—"Under no use of animal strength could the land be left in the mild and healthy state it now presents. I have 60 acres under preparation for roots, in a very different condition from what it would have been had it been ploughed by cattle, and altogether different from what my land for roots has been at this time in former years. The quantity of land ploughed by me with steam last autumn was 210 acres, at a cost of 112*l.* 10*s.* 6*d.*, including incidental expenses and a first start: this was accomplished by the 4th January in 50 working days, being 4¼ acres per day, which completed our winter's work. In future I hope to finish all autumn cultivation by the end of November. I again brought out the tackle in March, and ploughed above 40 acres for a neighbour; since which I have ploughed 95 acres, and scarified 14, in 21 days, or about 5¼ acres per day. The cost of this I am not able to state accurately, as there are some bills not yet paid, but I think I am safe in saying that it will not exceed 7*s.* per acre. Since using the steam plough, I have dispensed with three teams of oxen, and one of horses, leaving my present power of 10 horses, on a farm of 410 acres of arable, and about 200 of pasture."

His experience thus described has since sold 14 sets of "steam-plough tackle" all around him—and a district which had long been rendered celebrated by such men as Stratton of Broad Hinton, and by the well-bred stock which is annually sent from it to take the prizes of our cattle shows all over the island, and to spread the fame of the Short-horned breed to the very ends of the earth, is now becoming still more celebrated by the energy with which its cultivators are taking the lead of English agriculturists in what is certainly now the leading feature of English agriculture.

Of course Mr. Stratton, whose resolution, intelligence, and enterprise had placed him so high on the list of English Short-horn breeders, was one of the first to follow the Overtown example, and already before last winter had set in he could say to Mr. Fowler:—"Before I purchased your 12-horse power Steam Plough, in October, 1859, I kept 27 horses and 20 oxen to work my farms, which embrace 1000 acres arable. I have now only the 27 horses, and shall probably do with 3 less in ordinary seasons. A fourth of the land is in fallow, a half of this under green crop; and, owing to the plentiful manuring obtained by means of my herd, the remaining three-fourths are well cropped with Wheat, Oats, Beans, and Peas, so that harvest-time provides plenty of carting for the teams. Of 800 acres of pasture land, about half is mown for hay, four horses being employed in working two mowing machines; but the cartage of all this hay and corn does not prove too heavy a task for the present reduced number of teams; and should it do so, I can hire horses for the purpose of the dairy-farmers in the neighbourhood. I have done more ploughing than scarifying; and more than 600 acres altogether. The machine is managed entirely by my own farm-servants, and yet, since we began to plough for Wheat-seeding, 200 acres have been ploughed without any breakage, or the delay even of half a day on account of either engine or tackle. Three horses or four oxen ploughed, 4 to 7 inches deep, not more than half an acre per day in winter, though pushed through more in Wheat-sowing time. With steam power we go 8 inches deep; in long summer days, or in free-cutting land, we have done 12 acres a day, and frequently at the rate of one acre per hour."

The district thus referred to is one of exceedingly various geology, including the Chalk and beds below it, but the steam cultivated farms are for the most part on the calcareous clays below the Chalk. It is a country of large farms, and, occupied by men of both intelligence and means, it is just adapted to the rapid spread of the steam plough.

We had the pleasure last week of walking over Mr. Redman's land. The Wheat put in after Clover and Vetches once or twice cultivated by steam power was looking in capital and most promising condition; and the land which is now being cross-ploughed by steam power after an autumn ploughing is being turned over thoroughly disintegrated and tilled. Eleven hours' work a day or thereabouts are got out of the engine at this season of the year, during which it consumes about 1 cwt. of coal per hour, and ploughs from 6 to 7 acres of land; two men and four boys, costing about **11*s.* or 12*s.* a day in wages,** do all the work. The work which it accomplishes during the year includes one or two ploughings before 150 acres of Wheat and 60 to 70 acres of other corn, and one, two, or three ploughings and cultivatings before Vetches, Mangels, and Swedes on the remainder of 410 acres of arable land, 40 acres of which are annually in Clover. And in addition to this, Mr. Redman occasionally does some work for his neighbours. On November 20th, 1860 (that wet year), Mr. Redman could say that he had thus cultivated 600 acres since February, and more than double that extent since he commenced steam cultivation.

And he added:—

"The force of teams to work my farm of 410 acres arable, and nearly 200 acres of pasture soil, so peculiarly stiff and sticking that ploughing a furrow 5 inches deep is very hard work for three horses or four oxen (at this season of the year), was 13 horses and 13 oxen. My present force is only 10 horses, besides the one in use to supply the engine with coal and water. This has been an unpropitious year for steam or any other tillage, and of course, except on farms that are very small, the opportunity of smashing up stubbles in

autumn, and accomplishing in one operation the labour of a whole succeeding spring, has been lost through the drenching weather; but still, as my work is forward and for the most part well done, and the working expenses 7s. per acre, I find a great benefit from steam cultivation in every respect."

On February 14 he wrote:—"Since the frost has given we have ploughed about 60 acres, 25 of which were for a neighbour; we shall have nothing more to do on my farm till the land is dry enough for stirring. This is very different from my neighbours who are not using steam. My friend next me, who farms about the same acreage I do, had 100 acres of fallowing to plough when the frost set in, and this is about the situation of most around me. Had the weather been favourable I should have finished very much earlier; of course this has been a most unpropitious season for all steam cultivation, but steam has the advantage over animal power in many ways. Expedition is possible, so that there is no compulsion to work when the land is not in a proper state; and the treading is avoided, which leaves the land in such a healthy state that the water percolates through the soil, and thus it is ready for planting in the spring earlier than it otherwise would be. I am quite of opinion that for heavy land farms steam is very preferable to the old method of cultivation."

To this short account of the most recent experience in steam cultivation, we add that it has thus proved successful in a district of low wages: where, indeed, there is an ample supply of labour at 9s. a week. Such labour is not necessarily however cheap labour, and we do not know that a profit from the substitution of steam power for that of horses is less likely where the attendant labourers receive low wages than where they are well paid. Meanwhile it is Mr. Redman's experience that steam cultivation, though it does not diminish the annual amount of wages paid upon a farm, results in a much more efficient tillage of the land than was previously possible. His labour bill—about 800*l*. per annum on a farm of 600 acres, nearly 200 of which are pasture, and 40 every year in Clover—is not below the average of well-cultivated heavy-land farms with so large a proportion of arable land.

A SAMPLE of American Wheat, of excellent quality so far as the Wheat is concerned, has just been submitted to us, which shows most forcibly the advantage of Farmers and Corn dealers having some larger degree of acquaintance with corn weeds than they generally possess at present. The corn was mixed conspicuously with little oval shining subglobose or slightly compressed pink bodies, which passed probably with both seller and buyer for the seed of some plant, which would grind down with the corn, and not materially affect the quality of the flour. When however it came into the miller's hands, he immediately detected something which he had never seen before, and on tasting the bodies in question, he found the flavour of Garlic so strong that he hesitated about grinding it, and wisely sought for better information than he possessed himself. He felt sure indeed that the flour must be tainted, and it was clear that in proportion to the quantity of the strange matter, the flour would be raw, as that at least had not parted with its moisture, however good the condition of the Wheat itself might be. On examination it was found that the corn was mixed to an injurious extent with little Garlic bulbs, which made it as unfit for sowing as it was for the mill.

But how could the bulbs have got into the Wheat? We shall be able to give an answer to this question presently. But we may remark first that the incident is not wholly without example, though no instance has fallen within our own observation, nor can we hear of any similar case in our own neighbourhood. It is very possible however that it may not be strange to every part of England, but at all events we find it recorded in an old German edition of Linnæus' System of Plants that both the crops of Wheat and Barley are occasionally tainted by a species of Garlic, *Allium vineale*.

It may not indeed be generally known that we have in England the very same species, known commonly under the name of Crow Garlic, which occasionally appears in our cornfields where the soil is thin and dry, especially if chalky or gravelly, though more common on waste ground, on the tops of walls, or in other situations where the bulbs are not likely to be disturbed. It is peculiar to this in common with some other species to have the flowers, which are produced sparingly, mixed with little bulbs, by means of which the plant is rapidly propagated. Sometimes the flowers are entirely suppressed, and instead a little head of bulbs, a hundred or more in number, is substituted, and these have such a tendency to vegetate that they often put out their first leaf before they fall. It may therefore be readily imagined that if the Garlic were very prevalent in the crop, the heads of bulbs would be harvested with the grain, and that the bulbs themselves would be threshed out, and as they are nearly of the same size with the corn, could not very easily be separated. Even our own improved dressing machines could probably not drive them out, and we know from the occasional occurrence of American flour strongly tainted with Melilot, that foreign machines do not always accomplish as much as our own, for a sample of British Wheat mixed with Melilot, though once so common, is now scarcely to be met with.

We have no information as to the particular part of America from which the Wheat originated. Presuming however that it came either from Canada or the Northern United States, there are but two species of Garlic, *Allium vineale* and *A. canadense*, to which the little bulbs could be referred. We have no opportunity of ascertaining the point at this moment, and in all probability the characters of the little bulbs alone may not be sufficiently characteristic to determine the point. We shall however try to raise the plant, as the matter is interesting in more than one point of view. The point of practical importance is to set purchasers on their guard against Wheat containing Garlic bulbs, which will certainly spoil their flour, and may be the means of spreading a new pest over the country, and one which may not be easily eradicated, should it be once established, as the plant is perennial, and has besides such powers of quick and certain increase.

Allium canadense at least is the pest of Canada, where it is abundant in almost every sandy field, whether pasture or under the plough. In situations which promote its growth it is useless to allow cattle to graze. The butter made from such pastures is absolutely uneatable, and the same may be said of their flesh when slaughtered. *Allium vineale* has a character almost as bad in most parts of Germany, except in the neighbourhood of Leipsic, where the inhabitants attribute the fine flavour of their larks to their feeding largely on its little bulbs. *M. J. B.*

TALES OF A LANDLORD.

COUNTER-TENANTS.

It is a strange reflection that in the country we call *old* England, there exist, almost in every shire, districts that are, or not long ago were, agriculturally speaking, only just born. Even in the most fertile and the most populous counties, you shall find parts so drear, so wild, so unkempt, and seemingly uncared for, that you feel as you pass through them, that chill and weird sensation which the absence of human vestiges creates in the human heart. I am not speaking of artificial Chase or Warren, of those exquisite out-o'-door Salvator Rosa pieces that presently betray their 'Reason-why' by your coming upon the huge *Frame*, in the shape of a park-paling evidently cleft by the giant axes of giant carpenters in the days of giant Landscape-makers. I speak of real and veritable desert-spots that appear to have been forgotten, or altogether overlooked and left behind in the advance of Civilization, where a kind of meanness and poverty of outline takes away even the poetry of wild nature, and makes one long inwardly for a colony of Spades, Square patches, and Cottages,——anything to break the dismal monotony of neglect extending out before the eye, and unaccounted for by any fault or frailty of the maiden soil except the old complaint of "nobody coming to woo." How singular is the mesmeric power of such a scene, to draw the mind into sympathy with its own features. Let any one as he dozes in his after-dinner chair go back in mental journey over the district he has ridden through, and say whether every mile of the road does not rise in picture after picture, with a character of its own so distinct and strongly impressed upon the feelings, through the eye, that it has become a part of himself, as it were, or rather a great many separate 'selves' reflecting in inward succession the characteristics of the scene without. The very turns and angles of the road fasten it down in geometrical precision point after point upon the memory, and a wild picture-gallery remains for years, sometimes for life, occupying the mind with a fantastic power little thought of, or anticipated as the rider rode along, the creature of the present, 'marking the landscape' he would say,——in truth the landscape marking *him*; photographically.

Such is the recollection I strive to convey of thirteen protracted miles stretching away their unmitigated length through the misty landscape of a cold grey February morning that threatened to turn to white before the day was much older.

Happy is the eye that cannot look too deep. To one more expert in agricultural evidences, that landscape would, in those days, have told a tale that was lost, like a masonic sign unrecognised, before the young gaze that simply took in what the hunter, or the artist could see. Each of these would have looked over, and thereby overlooked the *Soil*. The mere Farmer would perhaps have looked at nothing else, and pronounced it very 'changy,' and needing the best of management: the mere Geologist would no doubt have called it 'interesting.' But to an eye that looked deeper than Hunter, Landscape-painter, Geologist, or Farmer, there beckoned from the earth signs more chilling than a February fog, more discouraging than a changeful soil——signs that you shall sometimes see within the very smoke-reach of wealthy cities——the marks of utter agricultural apathy and ignorance among the labouring class, an apathy that penetrates and hardens the very soul, more than ever Labour did the Hand,——the undisturbed and unawakened ignorance that reigns supreme where the motives of agricultural emprise have never taken root. It is a weary sight: it wars against some 'moral fitness' in the heart of civilized educated man, that whispers there ought to be a reasonable equality in the race of progress, throughout a land where Trade and Commerce and the Springs of Industry have no special locality and whereabout, but exist for all, alike.

When did journey ever terminate exactly as one expected? What scene fore-pictured ever comes to pass as the mind had shaped it? Up a narrow creaking staircase, in a small low room but scantly furnished even with the usual insignia of legal practice, sat, and as I entered, rose a tall large manly figure whose first impression on me was that it was much too big for the room; (one cannot help those first-sight physical remarks that *make themselves* with such provoking independence of the will:) the second was that the business of nearly a whole county produces something else on a man's face besides spectacles ——an anxious overworked expression——a ring of redness round the eyes, and a suffusion of the organ itself, suggesting small print and candlelight, and long night hours extending into the 'short' ones. Such were the rapid first-glance impressions made upon my mind before a somewhat formal but kindly salutation from the head of the Firm of Penn and Debbitt, had time to take effect. It was said that no one ever came from an interview with Mr. Penn, Sen., without the feeling that her or his business (as the gender and case might be) was chief object of his thoughts and studies. Can it be wondered at that business fell thick upon him, and that I in my greenhood had pictured something different to a room like a pent-house, approached by a narrow flight of creaking stairs, no great show of Papers, still less of books, or Tin-boxes with large-lettered names upon them: no, there was little of all this, as little as well could be: you might have thought yourself the only client, but for that weighted eye, and cautious voice and manner: it was in truth at first sight a mean-looking cage for so large a bird: but you never thought of it a second time: and apparently *he* never thought of it at all. Like many another hard-working hand and brain, in this hard-working country, he might have written over his den "I magnify my *office*."

It does not take long to tell a story which the hearer knows better than the speaker. I soon found myself a listener in the dialogue I had opened with a rather troubled statement of the chaos that had fallen in my path like an avalanche, by the landed infliction which an unexpected Will had cast upon my shoulders.

"I should have seemed no friend of yours," he said, "to any one who could have overheard my urgent entreaties to the late Owner to spare you the prominent place you hold in the long Limitations of his Will. But he was always very sanguine himself, and sanguine people are more inaccessible to reasoning than any other class I know. I have found it so, especially in regard to Land: and I need not tell you I have seen a good deal of *that* experience."

"But how comes that?" I interposed, "one should think there is something so solid and unchangeable about Land——so different to mercantile and trading uncertainties and risks, that the Income and Accounts must be the easiest of all to see the bottom of."

"To *get to* the bottom of, without ever seeing, you might say with more truth!" he quickly responded, with the sudden smile with which men utter a strong and keen conviction: "'Nothing so deceitful as 'Riches' the proverb says: I think there is one thing more so, and that is landed poverty. Look at the conditions! An eldest son, brought up to no profession, least of all to one which deals in figures and accounts, finds himself, on coming into 'possession,' the nucleus of a wide acreage, the idol impromptu of a 'body of tenantry' great and small, part of whose very birthright it seems, to regard him as an inexhaustible storehouse of wealth, and favours, Improvements and 'Repairs,' and who bring him a moderate-sized tub-full of gold, silver and bank-notes twice a year; (your late cousin used to have a *wash-hand basin* at his side on Rent-days,—poor old gentleman! 'never joyed him since the cheques came in;)——and then drink his health three times three and one cheer more after Dinner, with a merry song and laugh"——

"*Shaking* after the *shearing!*"

"Exactly:—the sheep always do it. No wonder:

the Fleece is a heavy responsibility to carry about. The Shears never make so light a Summer-suit as for the *first* customer."

"*Cantabit vacuus!* I begin to think that motto was not meant in joke."

"It could hardly have a truer application. The load is shifted from many backs to one. That is all. But then comes the *per contra*. Enter the new *Dramatis personæ*——Jointuress, Dowager-ditto, Rentcharge-owners various. Settlement-owners of the last and present generation, 'with attendants,' followed by Bricklayers, Carpenters, Plumbers, Painters, and Repair-performers in general, followed by a Fire-brigade from the Insurance Offices; next enter the Drainers and Tile-manufacturers, with their 'little bills'"——

"But you have forgotten"——

"What the Great Drainer, with the largest Bill of all? No! I reserved him to bring up the rear: enter then, last not least, the Mortgagee! A goodly throng altogether. If the Tenants when they toast their Landlord could see him properly personified——like Briareus, with a hundred hands——it would spoil the good cheer with most admired disorder, like the ghost of Banquo."

"There should be a second table then——one for the Tenants, the other for the——*Counter*-tenants!"

"It would be a curious, and useful sight, sir, on many a large estate. For, here lies the deception and the danger: the one set of guests is visible,——actively and openly mordent and bibulous,——the other is invisible, yet not the less absorptive,——invisible not to the world only, but too often to the *one* of that party the most interested. This is the banquet of to-day, the other of the whole year round, of every day in it; and each claimant knocks in ignorance of all the others. I like, indeed, your proposal of a table for the 'Counter-tenants'! *They* should have an opportunity afforded them of seeing each other, for good fellowship's sake! If such *reunions* took place, semi-annually, all agricultural England over"——

"It would create mutual astonishment in unexpected quarters!"

"It would do more and better than that. It would tend indirectly, but surely, to a more widely diffused and equal system of agricultural improvement."

"I suppose 'indirectly' is English for the Irish medium of a 'Landed-Estates Court?'"

"I think not. I have heard that idea, but I don't believe in the necessity, nor indeed in the analogy implied."

"The difference is one of degree——?"

"And much more. The difference is absolute and specific. The one is the case of absentee proprietors who cannot pay the charges, or the interest on them, of estates they never see; the other that of a *Resident Proprietary* whom the incautious ambition,——often, if you like, imprudence, of predecessors has left *over*-landed. A simpler remedy has often, I confess, presented itself to me"——

"Had I three ears, I'd hear thee!"

"I might almost go on with your quotation, for the acknowledgment of it from one of my profession will seem 'bold and resolute' enough; for, I dare to doubt 'the power of man,' at least his moral power,——his right——to 'tie the dead to the living,' first; and secondly to dictate what individuals *unborn* shall do, or not do. We lawyers have an office-adage 'Men make their marriage-settlements as if they were going to die, and their wills as if they were going to live for ever.' To the first I have no objection: a man may certainly anticipate his own decease, in one sense, as soon and as much as he pleases: no one will grudge him that amusement. But I object to his making a Will by which he is to live for ever: lawyer though I be, I dispute *parchment immortality!* It strikes me each generation in turn has a right to its own life-tenure of the Earth. And now to explain:——" *T.*

STEAM CULTIVATION—LOST LAND.

The objectors to my circular system of steam agriculture have always advanced, as a prime argument against it, that I lose land. I might meet this objection by alleging that the farmer, by his wide spreading hedgerows and innumerable furrows, loses an amount equal to my own; and that the steam ploughman, in his very broad headland, loses as much. I shall not defend my system by quoting the defects of others. Although I must first show how farmers lose in profit, produce, and land by their present system, it shall be more especially my place to demonstrate in this letter, that I gain in all these points through my circular agriculture. I must again briefly explain, to the readers of the *Agricultural Gazette*, what my system would resemble. I propose to steam cultivate a farm in circular areas, each containing half an acre of land (more or less); these circular areas are distinct from but nearly touching each other—in fact it is the "Allotment" system carried out on a grand scale for the benefit of the farmer himself, aided by steam and mechanism, over which the poor allottee has now no command, yet every one knows the vast increase in meat and Wheat obtained under the allotment system. By cultivating the land in circles, where three circles conjoin I lose apparently a few rods of land, in fact the land untilled amounts to 1¼ acre in 20 acres. If a farmer places three coins upon the table, all touching he will see the comparative loss; if four circles touching, be the plan adopted, he will have fewer pieces of land, and yet the whole apparent loss in one lump (whether the three or four circle arrangement be the better), must in practice be proved.

The disadvantages of the present system of agriculture, on whose governing principles (those of the straight-line, and no untilled land) every plan of steam culture (except my own) is based, are the following: nothing effectual can be done in a field until it is cleared, nor any second crop sown or grown, because the first is not off the land. No system of transplanting crops for winter or sheep feed can be pursued, because the transplants are not ready at hand, or the prepared land is not in close proximity to the transplant seedbeds. Cartage of roots, corn, straw, fodder, manure or water, which entails an expense equal to at least half the rent of the farm, cannot be prevented, because there are no vacant or "lost" spaces whereon to pile, store, or deposit the various commodities. Cattle cannot be fattened in the field, although we have portable cattle boxes and sheds, portable root pulpers, Turnip cutters, straw and chaff cutters, without end, because there are no islands dotted over the vast ocean space of our fields, whereon these cattle boxes and sheds could stand, and have the food and bedding brought to them from the closely adjoining storehouses, until the cattle were fatted and ready for the market. Lands must be manured, all in the lump, at the three or six months' end, by an enormous expenditure of horse power on the instant, instead of receiving every morning, with a minimum expenditure of manual power, a dose of manure direct from the fatting or feeding cattle sheds, closely adjoining the land to be manured. Irrigation cannot be pursued in the summer, because by the present imitation river like method of land-drainage, the water has all run away in the winter. There are no wells in the fields to supply water for the steam-engine, or the fatting and feeding animals, neither can there be, because there are no blank or "lost" spaces, wherein to catch and hoard up the precious fluid against a hot summer's day. The farmer must plough up his land at one stroke, since he has no machine; neither has he the time or convenience for doing it by repeated strokes, as they fell great Oaks. He cannot grow exceptional, that is very paying or profitable crops, but must content himself with simple Wheat, and dear bought meat. I wish to call the English farmer's particular attention to this last fact, that he derives his hard got profits from the most bulky, lowest priced and most ordinary of this earth's produce. To him is denied the profit arising from any article that lies in an eggshell. His commodities must be laboriously carted to the market by the waggon load, for his system of tilled land arrangement does not enable him to grow anything which would give him more profit in less bulk. He illustrates the fable of the Boy and Filberts—by trying to grasp too much, and tilling every inch of land, he loses many benefits and prizes.

Let me now depict in the fairest manner I can the merits of my circular system of steam agriculture. In the first place I have as many blank or untilled spaces represented in rods of land, as I have of large growing plots represented in half acres of land. This is the principle of my system, and is the keystone to all the advantages I shall presently enumerate. Let it be understood these blank or small spaces are the feeders, and are destined to subserve the larger areas, to prevent labour by anticipating it, also to equalise and distribute the labours of tillage by extending them over longer periods of time. This last is considered a very profitable law in any mechanical system, and is employed wherever it can be introduced. Agriculture affords a fine field for its use.

In the next place I prevent the everlasting carting to and fro on a farm, which entails an expenditure equal to at least half the rental. Having blank spaces between my circles I can deposit corn thereon, until the portable combined threshing machine prepares it at once for the market. The threshed straw is then stacked on the untilled spaces as bedding for cattle. The corn being removed from the large circles on to the small blank spaces, a second crop for the winter food of sheep, &c. can be instantly sown or transplanted. Roots are all pulled and piled, or graved in the blank spaces. (It is desirable to mention here that the circles which grow roots alternate with corn or straw circles. Thus bedding and food for stock are ever within a distance of 100 yards of each other all over the farm.) Beans, Peas, and other crops which require the straw and pods to be ripened after being cut, are transferred to the blank spaces, and a second crop of some sort grown on the land from which they were transferred. The number of stock to be fattened are placed in boxes, and sheep or lean stock are shedded on the blank spaces, the root-pulper and straw-cutter are kept going, and the manure made over night is every morning transferred to the large half-acre circles immediately adjoining the animals. Thus cattle-feeding, manuring, and double-cropping can be unintermittingly carried on without cartage, hence the often suggested expensive rails, portable or fixed, may be avoided. The whole principle of my cattle-feeding is based on the fact that our farm animals must be viewed as self-portable root-pulpers and straw-cutters, and therefore it is wiser to take the beast to the bulk, rather than bring the bulk to the beast, bearing in mind that every farmer who carts 1000 tons of Turnips a mile carries 900 tons of valueless water. We have now disposed of some of my blank or "lost" spaces in economical meat manufacturing and corn and root storing. We have still a great many left, so let us see how they can be turned to account.

The farmer cannot now transplant, for he has no convenient seed beds; by using my small spaces this can be remedied, since the transplants can be grown in the closest proximity to the large circles, to which Cabbage, or Kohl Rabi, &c., can be transferred without feeling the change. (I ought here also to explain that the interior works or mechanism to my circular steam cultivator are men and boys, consequently I ensure the farmer a good staff of assistants, and as these are a convertible mechanism adapted to every job, they are just the mechanism the ever varying duties of a farm require.) I guarantee irrigation, and water for the engines or stock, by having a certain number of wells (clay-tamped) on some of the blank spaces in each field, thus providing an abundant supply of water all the year round.

I will now point out what nearly new and highly profitable crops the farmer might cultivate on the blank spaces left by my circular tilling machine, first observing that it is a stigma on the farmer that he now relies on little more than two crops for profit in his business. The gardener, a much smaller but more scientific man, never relies on less than 10 or 20 different crops. The Irish once relied on one crop, and were starved.

In the first place he may combine a species of market gardening with farming, by growing Carrots, Parsnips, Beet, Potatoes, and Winter Kale in abundance for the poor and working classes generally of great towns, since the railway has brought him just as near a large town, 100 miles off his farm, as were the market gardens 50 years ago, when they were 10 miles off London. He can grow chicory on the blank spaces; but the most important crop would be Flax, for having a large staff of assistants he could manipulate it as it ought to be, to fetch the best price. This is a crop which requires great attention, and it is most desirable that water to steep it in be close at hand; this would be the case with my wells of water on the blank spaces. The produce of this crop varies from 24*l.* to 31*l.*, the fibre (in the first estimate) bringing 17*l.*, and the Flax seed 7*l.* per acre. The next crop is the Sunflower, admirably adapted for the production of a fibre suitable for making paper for the cheap newspapers, also for an edible oil which cannot be surpassed for colour or blandness, as well as a cake for fattening stock. This crop will average from 35*l.* to 45*l.* per acre, affording a clear profit of 20*l.* to 24*l.* on its fibre, oil, and cake.

No doubt some great farmer would feel inclined to ridicule such suggestions as growing Sunflower with corn flour, but it is a friend's part to tell him he must not despise small things in his business. It is by numerous small things wrapped up with larger articles, the tradesman or manufacturer makes his great profits. It is not the house which pays the great profit, but the small things within it. The large house only returns 6*l.* per cent., the furniture or fittings 50*l.* per cent. Besides, is not the world itself made up of small things; we ourselves, perhaps the most important, being amongst the smallest. It is from want of small things that the profits of farming are so slow and even low. Some farmers abroad actually grow worms, and large cities, such as Lyons, owe their very existence to the industry of farmers, who in their untilled patches of ground, rear these lowly worms. But let no farmer suppose he can grow the Sunflower or the Flax, or other things I may suggest, by the acre. They must be produced in small plots and be incidental to the main crops; there is a law or reason why they cannot be produced en masse with advantage; the law which forbids it is too long for explanation in this letter. It may be sufficient to observe that I knew a man who took to egg-hatching and chicken rearing 'by the acre,' but it never answered en masse; a second took to Flax, Chicory, and Sunflower growing by the acre, but it never succeeded; a third took to pig fatting 'by the acre' on a small farm, but it never paid, nor ever will, unless it be carried out in conjunction with, and as auxiliary to certain main principles embodied in a systematic arable land arrangement, such as I indicate in my large farms with small plots.

To proceed, the next crops to be produced on the blank spaces are honey and wax; these are invaluable commodities, but the supply is so limited, that very few of the population ever taste honey during the whole year; it is now 1*s.* 4*d.* per pound. Wax is a most useful article in the arts, and would be more extensively employed, were it but cheaper. For the farmer to produce honey and wax in quantity, he would have to sow a certain number of the "lost" spaces with flowering, yet useful plants, and he would call these flower spaces "bee pastures;" success in bee keeping depends on pasturage, therefore seed Turnips, White Clover, Buckwheat, Heath, Lavender, &c. must be grown on some of the "lost" or blank spaces. I will not predict how many cwt. of honey and wax, say at 4*l.* per cwt., could be produced off a farm, without in the least diminishing that produce now derived from an acre of corn land on the present rectangular and all-tilled system. Poultry, rabbits, eggs, and butter (now 1*s.* and 8*d.* per lb.) all pay and are in immense demand,

all of which the farmer could produce in quantity, if he had but distinct patches of land dotted over his farm, whereon to grow their special food.

All further benefits and profits by his present mode of tillage are utterly denied; the farmer by my system would have a plot for everything, and everything growing, fattening, and flourishing on its own plot. As I said before, my system of steam farming is neither more nor less than the "allotment" system carried out in its entirety for the benefit of the farmer himself. The poor allottee has beat the farmer in production, without the aid of steam or mechanism: how superior in produce and profit would a like method of proceeding be to the farmer, when aided by steam and machinery as his powerful auxiliaries.

I fear I have trespassed on the time of your readers, and probably some may feel inclined to call me a "visionary enthusiast," so allow me at once to state that that can hardly be applied to one whose enthusiasm has had a cooling of some 14 years, and yet burns with the same steady self-reliance and conviction of the perfect practicability of his system of agriculture, as on the first week it was conceived and carefully noted down by pen and pencil for the benefit of the present British farmer or his immediate successors. *C. Burcham, 6, Lisle Street, W.C.*

WEEKLY AGRICULTURAL WAGES.

[Extracted from a recent return to the House of Commons, referred to lately.]

	Weekly Wages of Men during Quarters ending	
	Michaelmas, 1860.	Christmas, 1860.
Surrey—		
Epsom	12s. to 14s.	13s.
Godstone	13s.	12s.
Kent—		
Eastry	13s.	13s. 6d.
Romney Marsh	15s.	13s. 6d.
Sussex—		
Ticehurst	12s.	12s.
Westhampnett	12s.	12s.
Midhurst	11s.	11s.
Hants—		
Droxford	11s.	11s
Andover	15s. 6d.	10s. 6d.
Berks—		
Hungerford	12s. to 15s.	9s.
Faringdon	9s. to 12s.	10s.
Wantage	10s.	10s.
Herts—		
Royston	10s.	10s.
Hitchin	10s.	9s. 6d.
Northampton—		
Brixworth	11s.	11s.
Oundle	11s.	10s. to 11s.
Peterborough	12s.	11s.
Huntingdon—		
St. Neot's	10s. to 11s.	11s.
Bedfordshire—		
Bedford	10s. to 11s.	10s.
Woburn	10s. 6d.	10s.
Cambridgeshire—		
Chesterton	10s.	10s.
Essex—		
Billericay	10s. to 12s.	10s.
Tendring	11s. to 12s.	12s. to 14s.
Dunmow	11s.	10s. to 11s.
Suffolk—		
Stow	9s. to 11s. 6d.	11s. to 12s. 6d.
Samford	11s. to 13s.	11s. to 13s.
Blything	16s., 10s.	10s. 6d.
Norfolk—		
Aylsham	11s.	10s. 6d.
Depwade	10s.	10s.
Downham	11s.	11s.
Wilts—		
Devizes	9s.	9s. to 10s.
Alderbury	9s. to 10s.	9s. to 10s.
Dorset—		
Wimborne	9s.	9s.
Wareham	9s. 6d.	9s. to 12s.
Cerne	10s.	9s. to 10s.
Devon—		
Axminster	8s.	8s.
Okehampton	9s. to 10s.	9s.
Tiverton	9s. to 12s.	8s.
Barnstaple	10s. to 12s.	8s. to 11s.
Cornwall—		
Camelford	10s. to 12s.	10s.
Somerset—		
Shepton Mallet	10s.	10s.
Axbridge	9s. to 10s. 6d.	10s.
Gloucestershire—		
Newent	9s.	9s.
Strond	9s. to 10s.	9s.
Stow-on the-Wold	11s.	9s. 6d.
Cheltenham	10s.	10s.
Herefordshire—		
Ledbury	9s.	9s.
Hereford	9s.	9s. to 9s. 6d.
Bromyard	9s.	9s.
Salop—		
Shiffnal	10s. to 11s.	10s. to 11s.
Atcham	10s.	10s. 6d.
Staffordshire—		
Burton	13s.	12s.

WEEKLY AGRICULTURAL WAGES—*Continued.*

	Weekly Wages of Men during Quarters ending	
	Michaelmas, 1860.	Christmas, 1860.
Worcestershire—		
Stourbridge	11s.	11s.
Evesham	9s. to 10s.	9s. to 11s.
Pershore	9s. to 10s.	9s. to 10s.
Droitwich	10s.	9s. to 10s.
Warwickshire—		
Warwick	10s. 6d.	10s. 6d.
Stratford	10s. 6d.	10s. 6d.
Leicestershire—		
Market-Bosworth	12s. to 13s.	11s. to 17s.
Melton Mowbray	15s.	15s.
Rutlandshire—		
Oakham	12s.	11s.
Lincolnshire—		
Louth	13s. 6d.	12s. to 13s. 6d.
Notts—		
Newark	13s. 6d.	12s.
Derbyshire		
Ashbourne	12s.	6s., with food.
Cheshire—		
Runcorn	11s.	11s.
Nantwich	12s.	12s.
Hawarden	12s.	12s.
Lancashire—		
Ormskirk	14s.	12s.
Clitheroe	15s.	14s.
Garstang	13s. to 18s.	10s.
Yorkshire—		
Settle	15s.	15s.
Pateley Bridge	15s.	12s.
Doncaster	13s. 6d. to 14s.	13s.
Thorne	16s.	10s.
Malton	8s. and food.	7s. and food.
Leyburn	13s.	13s. 6d.
Richmond	14s.	13s.
Durham—		
Darlington	13s. 6d.	13s. 6d.
Sedgefield	15s.	15s.
Northumberland—		
Morpeth	15s.	14s. to 16s.
Berwick	15s.	12s.
Glendale	15s.	12s.
Cumberland—		
Brampton	15s.	9s.
Wigton	15s.	15s.
Bootle	15s.	15s.
Westmoreland—		
East Ward	12s.	12s.
Kendal	18s.	15s.
Monmouthshire—		
Monmouth	10s.	10s.
Bedwellty	12s. to 14s.	13s.
Newport	12s.	12s.
Wales—		
Merthyr Tydfil	11s.	15s.
Bridgend	12s. to 13s.	12s. to 13s.
Gower	12s.	12s.
Llanelly	12s.	11s.
Llandilo-fawr	10s. 6d.	10s. 6d. to 12s.
Carmarthen	9s. to 12s.	9s to 12s.
Haverfordwest	10s. 6d.	10s. 6d.
Cardigan	8s. to 9s.	8s. to 9s.
Crickhowell	12s.	12s.
Knighton	9s.	9s.
Conway	12s.	7s.

Home Correspondence.

Poultry.—Some time since there appeared an article in the *Gazette* about the importance of better poultry management in this country. I am not going into a dissertation on the causes that have led to the neglect of this point; we pay too dearly for our neglect to render words of any moment. My reason for addressing you is this: we most of us know what poultry sells for direct from the farmyard, and the price of eggs; but do we know what the cost of all this is to the producer? I must confess my notions on the subject are somewhat hazy, and I presume the best mode of trying the real cost of production would be to devote a small farm to poultry alone. Can your readers give me any information on this point? When I say a small farm, I mean such an establishment as would require the sole attention of a man and his wife to be devoted to the production for sale of this one article of consumption, not where only odd times are devoted to poultry, and therefore where the cost of attendance often falls into some other account, and leads to error. *Coop.*

Clover Dodder.—It is often asked if a remedy can be found for that formidable enemy the "Dodder," or Cuscuta, now so frequently seen in our Clover crops. Formerly in this district it was only seen here and there, until within these few seasons; alas! it is now of common occurrence always, and more or less in all our Clover fields. I have lately seen a statement of an experiment by a French chemist, M. Ponsard, which was attended with success. A small machine on wheels, similar to our water barrels, was brought into use, and as much "Green Vitriol" as would saturate the piratical plant was added to the water. This machine should have a tap and hose attached to it, and first cutting the attacked crop, and burning it and the seeds from whence the Dodder proceeds, it is used to well water all round to some distance, so as to wet every particle where the enemy grew; every "Cuscuta" will be "mineralised" and destroyed. We hope this plan will thus be brought into use wherever this enemy is seen this season. *Amicus, March* 26. [This was referred to in a late leading article in the *Gardeners' Chronicle*; and it is described at p. 125, Vol. II., of Professor Wilson's "Farm Crops."]

Societies.

Royal Dublin.—The April meeting of the Royal Dublin Society opened on Tuesday morning with every prospect of rivalling any previous one, and with premonitory tokens of exceeding many of them in interest and usefulness. The new Agricultural Hall, a spacious edifice, devoted principally to the agricultural exhibitions of this institution, has been much improved, and was elegantly decorated.

If we compare for a moment the relative value of live stock in England and Ireland—institute a comparison between a well conducted Royal English and a Royal Dublin Show, and finally, compare the prize lists of the Royal English and Royal Dublin, a piece of statistical information can be eliminated which is as curious as it is surprising. On the present occasion it is enough to remark that a money prize will soon be regarded in the Show-yard of the Dublin Society as an object of antiquarian and historic interest; and that the future exhibitor is likely to have to content himself with a large or small Silver Medal, which may aid in ornamenting a cabinet. This change may or may not be for the better. In the meantime, it simplifies very much the character of an agricultural Society.

Section 1. Short-horn Yearling Bulls.—The 1st prize was awarded to Lord Waterford, for "King of Hearts," got by "Foundation" (14,565), dam by "Velvet Jacket." This is an animal of great substance, and possesses many good points, including a nice touch. The colour is very disagreeable. The 2d prize to Mr. Barnes, Moynalty, for "Friar Tuck," got by Dr. McHale, and a roan brought out with three others in the same class in Mr. Barnes' usual style.

Section 2. Bulls calved in 1859.—Mr. Coppinger obtained 1st and 2d prizes; 1st with "Soubadar," which merited royal honours as a yearling, and which is loaded on this occasion with as many honours as gained for his present spirited owner as many Challenge Cups as Dr. McHale won last year; the second place was accorded to "Little Wonder," out of "Western Wonder," a prize-taker at the Royal Dublin, when exhibited by Mr. Ellison.

These two sections were respectably represented, the 1st containing 121, the 2nd 36 animals. No doubt there have been on this, as on all similar occasions, several animals, especially in the Yearling Class, that had been better kept at home.

Section 4. Short-horn Bulls, calved previous to 1858.—There were 12 entries, including veteran prize takers. The judges placed "Prince Tallyrand," the property of Mr. Ambler, first. The Prince is a remarkably good bull, got by "Prince Warlaby," and had previously distinguished himself. We understand that "Sir Colin," the property of Mr. Jaffray Barcroft, won 2d prize. We have so frequently had occasion to notice Sir Colin in these columns, that we shall not now repeat ourselves. At present he is in good working condition.

Section 5. Short-horn Heifers calved in 1860.—Mr. Crosbie, of Tralee, got 1st prize for "Florentine," got by Lamp of Lothian, a very promising animal. Mr. Crosbie's judgment and enterprise as a Short-horn breeder bid fair to meet a fair measure of success. Captain Thomas Ball followed at no great distance with the "Pride of Kildare," got by Sol, dam by Velvet Jacket. "Veronica," the property of Mr. Crosbie, ranked 3d in point of merit, among a lot of 26 heifers, many of which possessed much merit.

Section 6. Heifers calved in 1859.—1st, Captain Ball, with Nightingale, got by Monk. "Chaplet," bred by Mr. Welsted, of Cork, and a heifer which favourably impressed us as a yearling, gained 2d prize in this section for her present owner, the Marquis of Waterford. Out of 12 competitors the third rank was we believe accorded to Lady Pigot's "Victoria the 35th," bred by Mr. Glynn, Loughglynn, Ireland.

Section 7. Short-horn Heifers calved in 1858.—There were only three entries, of which only one appeared; "Wood Rose," belonging to Mr. Amber, appeared in the show; and to her the prize was deservedly awarded.

Section 8. Heifers of any age.—The prize was obtained by "Stanley Rose," bred by Mr. Wetherell, got by Earl of Derby.

In the several Sections devoted to "Miscellaneous Pure Breeds," we have once more to express our regret. In many cases these have no entries, and in several Sections there is a solitary entry without any competition.

We were particularly disappointed in the Ayrshire Classes, in which there has not been a single entry.

The Polled Angus, too, fell infinitely short of former Royal Irish Shows.

The Kerry race was better represented, though not equal to former exhibitions. In the Bull class Mr. Garnet, Kells, got the only prize (large Silver Medal;

—a small Silver might have been given as a second with "Young Rory," a very nice animal.

We consider it very absurd to be entering such miserable specimens of this breed as have been exhibited on this occasion; such a practice must tend very much to prejudice strangers against the breed.

SHEEP.

LEICESTERS.

One Shear Ram —1st prize, Mr. William Owen, Blessinton.

Two Shear Rams —1st, Mr Owen.

Three Hogget Rams, never clipped.—1st, Mr. Owen, Blessinton; 2d, Mr. Thunder, Navan.

Five Leicester Ewes.—1st, Mr. Warburton, Kill, Naas, county Kildare.

Five Leicester Ewe Hoggets.—1st, Mr. Owen, Blessinton.

Five Long-woolled Ewe Hoggets never clipped.—1st, Mr. Page, Eastgate, Lincoln.

One Shear Shropshire Ram.—Mr. Hamilton, Hamwood, Dunboyne, and Lieut.-Col. Tottenham, Woodstock, Newtown, Mount Kennedy, was highly commended.

Two Shear Shropshire Ram.—1st, Mr. Hamilton, Hamwood Dunboyne.

Three Shropshire Hogget Rams —1st, Mr. Broughton, Cherrymount, Kells. Mr Hamilton, highly recommended. Same highly recommended for another lot.

Five Shropshire Ewes.—1st, Mr. Hamilton, Hamwood, Dunboyne.

Five Shropshire Ewe Hoggets, never clipped.—1st, Mr. Hamilton, Hamwood, Dunboyne. Same, another lot, highly recommended.

Two shear Short-woolled Rams —Lord Clermont, Ravensdale Park, Flurrybridge. Commended.

Five Short-Woolled Ewes.—1st, Mr. Wheeler Chapman, Moygaddy Farm, Maynooth.

Five Long-Woolled Fat Wedders.—1st, Mr. Garnett, Arch Hall, Navan. Francis Donagh, Newtown, Drogheda. Commended.

Five Short-Woolled Fat Wedders —Mr. Broughton, Cherrymount, Kells.

Five Cheviot Fat Wedders.—Lord Clermont, Ravensdale Park, Flurrybridge.

Fine Fat Wedders, of any Age or Breed.—M. Broughton, Cherrymount, Kells Mr. Garnett, commended for another lot.

Mr. Naper, Loughcrew, obtained the Broughton Prize of Five Sovereigns for the best Pen of Five fat cross-bred Sheep: Scotch Ewe and Shropshire Ram.

COLOURED SWINE.

Boars, six months and not exceeding 12 months old.—1st prize, Mr. Backas, Waterford, for Lord Nelson, a Berkshire; 2d, Mr. Jameson, Montrose, Donnybrook; Lord Clermont, Ravensdale Park, commended.

Boars exceeding 12 and not exceeding 24 months old.—1st prize, Lord Clermont, Ravensdale Castle (Berkshire breed).

Boars exceeding 24 months old.—1st prize, Joseph Radcliff, LL.D., Z C., Cliff Lodge, Rathfarnum (Berkshire breed); 2d, Marquis of Waterford, Curraghmore (Berkshire breed).

BREEDING SOWS.

1st prize, Dr. Eustace, jun., Hampstead House, Glasnevin (Berkshire breed); 2d, H. S. Murray, Sandycove (Berkshire breed).

Three Breeding Pigs.—1st, Mr. Henderson, Elm Villa, Carlow (Yorkshire breed); 2d, Lord Clermont, Ravensdale Park (Berkshire breed). Commended: Mr. Jameson, Montrose, Donnybrook (Berkshire breed).

Litters of Pigs, not exceeding 5 months old.—1st, Mr. Jameson, Montrose, Donnybrook.

WHITE BREEDS.

Boars 6 months old and not exceeding 12 months.—1st prize Lord Lurgan, Brownlow House, Lurgan; 2d, same (Cumberland and Yorkshire breed).

Boars exceeding 12 and not exceeding 24 months old.—1st prize, Lord Clermont, Ravensdale Park (cross between a Cumberland and Yorkshire); 2d, Lord Lurgan, Brownlow House, Lurgan (Cumberland breed).

Boars exceeding 24 months old.—1st prize, Lord Clermont, Ravensdale Park (Cumberland breed); 2d, Mr. Henderson, Elm Villa, Carlow (Yorkshire breed).

BREEDING SOWS.

1st prize, Mr. L. W. Naper, Loughcrew, Oldcastle (small breed); 2d, same (small breed). Highly Commended: Mr. Henderson, Elm Villa, Carlow (for Large Yorkshire).

Three Breeding Pigs under 1[?] months old, same litter —1st prize, Lord Lurgan, Brownlow House (Cumberland and Yorkshire breed); 2d, Mr. Wheeler Chapman, Moygaddy Farm, Maynooth (Middlesex breed). Highly Commended; Mr. L. W. Naper, Loughcrew (small breed).

Litters of Pigs not exceeding 5 months old.—1st prize, Mr. Chapman, Moygaddy Farm, Maynooth (Middlesex breed).

As usual the implements were exhibited on Leinster Lawn, which is well enclosed, adequately spacious, and remarkably well adapted to the purpose. Tuesday, however, having been wet, the exhibitor and the visitor became alike too sensible that the interests and comforts of the one, and the comfort of the other had not received that attention which might have been expected. The ground was literally an intolerable puddle. We trust the deputation of exhibitors who waited on Dr. Steele, the active and zealous Secretary to the Society, will have the effect of preventing the recurrence of a similar nuisance.

We cannot attempt in the space and time at our disposal to give an outline of this department. It has been eminently creditable and as successful as circumstances permit. We had most of the leading English houses represented. Clayton and Shuttleworth exhibited a few articles, including the 4 H. P. Portable Steam-Engine, and 4 H. P. Threshing Machine. Ransome & Sims exhibited a large and well assorted collection of Implements and Machines: a well constructed Double Blast Steam Threshing and Finishing Machine, 5 H. P., fitted with Brinsmead Rotatory Shaker. We were glad to see their Patent Rotatory and Self-cleaning Corn Screen, which is favourably known in this country, and which we expect will soon become equally so in Ireland.

Mr. Norton, of the firm of Richmond and Norton, 32, South John Street, Liverpool, and who has had upwards of 20 years' experience in knowing and supplying the requirements of Irish farmers, has exhibited as usual a choice collection of Farm Implements and Machines. He has brought out the old 4*l.* 10*s.* Chaff Cutter in a much improved condition, having the same means for regulating the cut as in the larger machines. We were glad to see the rival Ploughs of Howard, Hormsby, and Ransome in proximity to each other. As might have been expected they excited much attention from practical men.

There are 65 exhibitors in this department.

HIGHLAND AND AGRICULTURAL: *March* 23.—*The Variety of Leicester Sheep most suitable for Scotland.*—Mr. Hall Maxwell, Secretary of the Society, said that some time ago it was suggested to the Board of directors that it would be desirable to divide Leicester sheep into the large-boned variety which were to be found in the Borders, and the smaller English variety, and at the annual shows to give separate premiums for each of these varieties. The directors entertained some doubts as to the expediency of the proposal, but he was desired by them, when at the meeting in Kelso making arrangements for the show in 1862, to take the sense of the meeting at Kelso upon the point. Unfortunately, the meeting was held during the heavy snow-storm, and it was not so well attended as it otherwise would have been. It was put to the vote whether the present system of merely having a set of premiums without subdivision should be adhered to, or whether there should be two sets of premiums for two distinct varieties of breeds of sheep. At first the vote was 16 for the present practice, and 15 for the division, but on retaking the vote the result was the reverse, 15 voting for adhering to the present practice, and 16 for a division. However, the division was so close, that as this subject had been fixed for discussion to-day, the directors thought the opportunity a good one of asking the opinion of the meeting upon this point as to the premiums.

MR. USHER, Stodrig, Roxburghshire, then read a paper on the comparative merits of the different breeds of sheep commonly distinguished as the large and small boned Leicesters, and their adaptation to our Scotch climate. He noticed the origin of the breed of Leicesters in England by Mr. Bakewell, giving it as his opinion that it was chiefly through the Messrs. Cully, who were associated with Mr. Bakewell in 1767, that the new Leicester breed found their way into Scotland. After quoting Mr. Cully's description of the proper form of a Leicester ram, Mr. Usher said he held that description to be a very faithful picture of the north country Leicester ram of the present day, where he had been kept pure from an admixture of the south country breed. He held that the south country breed was inferior in many points to the north country breed, and after quoting a number of testimonies from breeders, to show that in all cases where a trial had been made the north country breed had been injured when it was crossed with the south country breed, Mr. Usher concluded as follows:—In short, the testimony of all the Leicester breeders I have consulted confirms the same opinion—that the north country breed, from their greater hardihood of constitution, are infinitely better suited to our northern climate than the other, that they attain under proper management to greater weight of both mutton and wool, and have at least an equal aptitude to fatten. At a meeting of the Border Union Society, convened a few weeks ago for the purpose of consulting with Mr. Hall Maxwell about the list of premiums at the Highland Society's Show proposed to be held at Kelso in 1862, I made a motion, which received the support of a majority of those present—viz., that there should be two distinct premiums for the North and South Country Leicesters, with Scotch judges for the one and English for the other. I made the motion with a view to do away with the dissatisfaction which so much prevailed among exhibitors of Leicester stock for several years, the decision of the judges depending often on which side the majority of English or Scotch judges preponderated, and being matter of taste or prejudice rather than of judgment. Mr. Hall Maxwell argued that such an arrangement would give rise to much confusion in the classification of the stock, and that the crosses or intermediate breeds would be virtually excluded from the competition. I was under the impression that if the classification of the stock were left to exhibitors themselves, allowing them to enter in any class they considered their stock most resembled, the thing was practicable. The more I have thought on the subject, however, I have been the more impressed with its impracticability. Let exhibitors classify as they may, the breeds of Leicesters have become so intermixed that it would render the office of a judge more invidious than ever, and would probably increase the fermentation it was intended to allay. I now confess myself a convert to Mr. Hall Maxwell's opinion; yet I would not wish to allow matters to remain as they are. What I would propose is—let Leicesters be shown in one class as formerly, but instead of going across the Border for any of our judges, appoint Scotch judges only. We surely ought to know the stock that suits our country and climate better than they; besides, we have often done them the honour to invite them to act as judges at our shows, while, I believe, they have rarely if ever had the grace to return the compliment.

MR. THOMAS COCKBURN, Sisterpath, wrote:—I have now been a breeder of Leicesters for upwards of 40 years, and have had considerable experience in the breeding of that class of sheep. I have for the most part bred from the largest of the pure breed for various reasons. One reason for doing so is, that in breeding Leicesters in this high shelterless situation (being nearly 500 feet above the level of the sea), with a great portion of inferior land, I have always had considerable difficulty in raising my sheep to a good size, especially in adverse seasons, such as 1860. The principal reason, however, for my breeding from the largest of the pure breed is, that they almost invariably bring the highest price in the market. I have upon several occasions tried the small kind, but ultimately had always to resort to the larger breed, as I always found the very small breed would not take in the markets; and upon the whole I think that a good sized sheep, well clad with wool, is just as hardy and more profitable than the small blue-faced kind, and most suitable for Scotland.

MR. DUDGEON, Spylaw:—I hold there is only one species of pure Leicesters, "the New Leicester of Bakewell." I believe that with the view of increasing the size it has been crossed occasionally by others of the larger long woolled varieties of sheep, which it has been thought might be safely done without materially interfering with the tendency to early maturity and inclination to fatten, so remarkable in the pure Dishley. I however doubt that this can be safely tried, and still feel inclined to think that a greater weight of mutton will be produced on the same extent of land, or equal amount of food by adhering to the pure breed. It would be exceedingly unfortunate therefore, that, by giving a premium to a separate variety, as larger, we should in any case have the effect to diminish the flocks of pure new Leicesters, or at all events, interfere with due attention being continued to be given to the maintenance of this established valuable breed.

MR. SMITH, Whittingham, said that Mr. Usher's proposal to select only Scotch judges was tantamount to ignoring the small-boned sheep, as the judges would be selected on the principle that they were to give the prizes to the large-boned sheep. He did not see that they were interfering with the pure breed in asking a classification. Under any system there was always a distinct type of large and of small sheep and an intermediate stage between the two; and in any competition the judges would not take the intermediate sheep, but the large or the small type, according to their tastes or predilections. He did not think there would be any difficulty in classifying Leicester sheep any more than pigs, which were at present classified. He thought it was a pity to pass over this matter, and if they kept to one class he thought it was rather invidious that they should propose to select men who would ignore the Dishley sheep, which were the foundation of the pure breed.

MR. MELVIN, Bonnington, believed that Cully, who was the introducer of the Bakewell sheep into the Border, put south-country tups to a flock of sheep which he had on his farm in 1767, and from these he bred the Border sheep. Bakewell's sheep were blue-headed and not white-headed, as they should have been if the Border sheep were their true lineal descendants. He believed that Cully and the other Border breeders put Bakewell's sheep to the white-headed sheep on the Border; and it would never do for them to claim to be the only true descendants of Bakewell's breed. In regard to having two classes of prizes, he might say that there were comparatively few tup-breeding rams used. Of 2000 rams sold at Kelso, perhaps only 40 or 50 were sold for the purpose of breeding Leicesters from—the most of them went for crossing. The tendency at present was wool, and bone, and size. A ram for maintaining the breed of Leicesters in a state of purity must be very perfect in form. At the show in Kelso the shearling lamb that carried the prize was not a large but a medium-sized sheep; so that even the Border gentlemen, in deciding as to the best sheep, must, as it were, set aside size and take the handsomest and completest sheep, following the general practice of the Highland Society, which had hitherto been to disregard size unless it was combined with other properties. He thought they ought to maintain the present premium unaltered, but another premium might be offered for the best description of sheep, irrespective of the breed, for crossing with.

MR. SCOTT, Craiglockhart, said that, notwithstanding all they had heard, he had no faith whatever in there being two varieties of pure Leicester sheep. There was, it was true, a great variety between the south-country sheep and the Border sheep; but that might have arisen from the circumstances in which they had been reared, as they all knew that soil and climate had a very material influence over the style and form of any animal. No doubt it was true, as had been said, that they had two classes of pigs; but he knew one instance in which two pigs taken out of the same litter were exhibited, one as belonging to the small class and the other to the large one. That was a distinction without a difference, and so it might turn out in regard to Leicester sheep if they made two classes of them. They might have been exhibiting sheep from the same rams as small sheep and as large sheep. So far as he had an opportunity of judging, he would say distinctly that the Society should pause before they ventured upon creating two varieties of Leicester sheep.

The CHAIRMAN said he thought he was right in stating that it seemed to be the general opinion of the meeting that there should only be one class of Leicester sheep as hitherto.

Farmers' Clubs.

LONDON: *April* 1.—*On the Feeding of Sheep in Yards.*—Mr. A. S. Ruston, of Chatteris, read a paper on this subject, of which we hope to give a full report next week. Meanwhile we give the following extracts from it. He said:—

I have now tried sheep in yards for five years. During the three first years I had only a few. Last year the lung disease appearing in a lot of Scots I had, excited my fears lest it should spread and decimate another lot which I had just received from Scotland. I therefore determined at once to send the latter lot away, and sell them again, keeping only those in which the disease had appeared. This drove me to the necessity of purchasing nearly 400 lambs for the purpose of consuming my hay and Mangels, and of manufacturing my straw into manure. I made very close observations, kept a diary of all necessary particulars, valued them into the yards, and valued them out to grass with the dates of going in and out; I also calculated to a fraction their cost for artificial food, noticed very narrowly what quantity of straw they made into manure, and also the quality of the manure, as far as appearances enabled me to judge; noted every loss and its assigned cause, full particulars of which I will hereafter present to the meeting, with other facts which the experiments disclosed. But before I give these, I wish to make a few remarks upon the general management adopted, and the information it afforded. From close and careful observation last winter and again this—for I have now between 600 and 700 sheep in yards—I find six lambs will tread down as much straw, and make it into good manure, as a 12*l.* or 14*l.* bullock.

During the whole of last winter I don't suppose I had more than a dozen lame sheep whilst they were in the yards; this winter I have had more, as many of them came lame into the yards—arising, I suppose, from the wetness of the last summer. I may, however, say, there have been far less cases in the yards than there were previously to their coming in. I find it is very essential to keep a thin layer of dry straw over the yard. In wet days we litter them twice a-day, and on fine days once, but we only use a small quantity at a time; this just keeps the heat of the manure from rising to injure their feet, and prevents them also treading on wet straw during the day. When they first come into the yard, and indeed until the end of February, when the days begin to lengthen, we give them a larger quantity of dry food; they pick the bedding straw over, and where practicable have a stack or good heap in the yard to run to; we also cut them chaff, hay, and straw together, and feed them several times a-day with it. We give them a few Mangels twice or thrice a-day, but not in quantities sufficiently large to make them scour; but as the days lengthen we increase the quantity of Mangels, and reduce the supply of dry food. I find an acre of Mangels of an average crop will carry 25 sheep, *i.e.* 25 lambs, during the weeks they will require to be in the yard, say from the beginning of December to the beginning or middle of April; old sheep would consume more, and 20 per acre would be a fair calculation.

Mr. Ruston then went into details of the original cost, expense of artificial food and attendance, and the present value of the sheep thus treated, and deduced a profit on 377 lambs (wintered in the yards last year) of 245*l.*, equal to 3*s.* a head for hay, straw, and attendance; and no less than 12*l.* 11*s.* per acre on the 15 acres of Mangels consumed! He then compared bullocks and sheep thus fed, as follows:—

This year I have, as before stated, upwards of 600 sheep in the yards. These are consuming the food and making the manure that 100 bullocks would consume and make. Taking

1*l*. 10*s*. as the profit per head on 100 bullocks, and 3*l*. 18*s*. the profit on six sheep—and I think the latter is quite as likely to be realized this year as the former, and indeed more so—what is my position then? Why, instead of getting 150*l*. for the food consumed by 100 bullocks, for the very same food consumed by 600 sheep, I get 390*l*.; which simply puts 240*l*. into my pocket and emboldens me to stand here, and argue in favour of sheep as manure manufacturers. There is just one other argument I would adduce, which appears to strengthen the case in favour of sheep so far as the fens are concerned. A brief allusion to it will suffice. It is this—Our fen soils appear naturally more adapted for sheep than bullocks. Coleseed, which grows very freely upon them, is very fattening, and perhaps there is no vegetable food that sheep can consume that will give them so much firmness of hand, and so large an increase of weight in a given time, as good fen-land Coleseed. It is incredible how rapidly sheep will sometimes get fat upon it. Clover and Rye-grass, the common herbage on a fen farm, is far more suited to sheep than bullocks. Sheep, with an occasional change, will thrive well, and upon Clover eddishes will get good mutton, especially if a small quantity of cake is given to them. Bullocks do not generally thrive well on our fen lands, and unless they have frequent change to high lands, they will soon become diseased and unhealthy.

Mr. Ruston concluded by quoting the experience of several Lincolnshire correspondents on the policy of sheep-feeding in yards; which was clearly proved, so far as the circumstances of the fen districts are concerned. We shall next week give a fuller report.

Reviews.

Stables and Examples of Stable Fittings. By William Miles, Esq. Longman.

This is a detailed and elaborate account of what in the opinion of the author constitutes perfect accommodation for the horse. And Mr. Miles has directed his attention to such subjects for so long a time, as evidenced by other works from his pen, that he may be trusted. Besides which, the numerous illustrations and careful descriptions with which the present book abounds, commend themselves to the approving judgment of the reader.

Land Drainage, Arterial Channels, and Outfalls. By J. Bailey Denton, F.G.S., C.E. Second Edition.

A reprint of letters published last autumn in the *Agricultural Gazette;* with an appendix containing portions of a report "On the Drainage of the Valleys of the Rivers Test and Avon," and passages illustrative of the present state of the law connected with outfalls and land drainage.

On the Application of Different Manures to Different Crops, and on their Proper Distribution on the Farm. By J. B. Lawes.

This is a valuable epitome of the long and large experience of Mr. Lawes at Rothamsted, which is we presume being distributed by the author, as no publisher's name appears upon the title page. It contains in an accessible and condensed form more of the directly useful information on manures, which we owe to the combined labours of the farmer and the chemist, especially as both are combined in Mr. Lawes, than in any other pamphlet or publication we have seen. The following passages are extracted from it:—

1. *On the Adaptation of Different Manures to Different Crops.*—"The records of nearly 20 years of experiments at Rothamsted, have not afforded a single instance in which the application of ammoniacal salts to a *cereal* crop has failed to give a greater or less increase of produce. This is the case even where there has been a very unusual exhaustion of mineral constituents; and this effect of ammoniacal salts is quite consistent with that observed when such crops are cultivated and manured according to the ordinary course of practice. On the other hand, experiments continued for more than half that period with *Leguminous crops*, such as Clover and Beans, as well as practical experience with such crops, show no such result on the direct application of ammoniacal manures. Yet there is a much larger amount of that important element of ammonia—*nitrogen*, in a Leguminous than in a Graminaceous crop.

"It is, in fact, bad practice to apply Peruvian guano, or ammoniacal salts, to a Bean or a Clover crop; and where dung is applied both to the Wheat and Bean crops, true economy would suggest that the rich oil-cake dung be employed for the Wheat, and that which is poorer for the Beans and Clover."

2. *Manure for Wheat.*—"On the heavier descriptions of land, 2 to 3 cwt. per acre, of Peruvian guano is the best manure for this crop. It should be sown broadcast before the seed, and harrowed in. It is sometimes mixed with twice its weight of common salt, by which, as well as by ashes or other matters, a more equal distribution through the soil is attained."

3. *Manure for Barley and Oats.*—"When either of these crops follows a root-crop which has been partially or wholly removed from the land, a mixture of equal parts Peruvian guano, or nitrate of soda, or sulphate of ammonia, and superphosphate of lime, may be used with advantage. The selection of one or other of the three nitrogenous manures mentioned, should depend in some measure upon the comparative cost of each at the time. About 1 cwt. of the guano, nitrate, or sulphate, and 1 cwt. of superphosphate of lime, will generally be sufficient for an acre. The manure should be sown before the seed, as recommended for Wheat. When one corn-crop follows another, as Oats after Wheat, about twice as much of the Artificial mixture should be used as under ordinary circumstances. When corn-crops require to be top-dressed late in the spring, nitrate of soda is the best manure to employ; 1 to $1\frac{1}{2}$ cwt. per acre being used."

4. *Manure for Meadow Hay.*—"To Grass-land mown for hay, from 8 to 10 tons of rotten dung should be applied once in about every 4 or 5 years, in the month of November. The artificial manures most suitable for Grass-land, are, Peruvian guano, salts of ammonia, and nitrate of soda. When either of these manures is used alone, the following quantities may be applied:—

Peruvian guano	2 to $2\frac{1}{2}$ cwt. per acre,	
Salts of ammonia	1 ,, $1\frac{1}{2}$	,,
Nitrate of soda	1 ,, $1\frac{1}{2}$	,,

One cwt. of nitrate of soda, mixed with one cwt. of superphosphate of lime, is also a very good manure. Or, a mixture of equal parts of Peruvian guano, ammonia salts, nitrate of soda, and superphosphate of lime, applied at the rate of 2 cwt. per acre, is perhaps the most generally useful. In deciding upon the exact combination to be employed, some regard should be had to the relative cost of the several substances at the time, as it varies considerably from season to season.

"The best time to apply the artificial manures is from the end of January to the middle of February; if the application is delayed much later than this, nitrate of soda is the best manure to employ."

5. *Manure for Mangel Wurzel.*—"This crop requires to be liberally manured. The best dung at command should be employed; 10, 15, or even 20 tons per acre, being spread after the land is drawn in ridges, and previous to their being split; and 2 to 3 cwt. of Peruvian guano mixed with twice its weight of common salt, should be strained by hand on the top of the dung. Common salt appears to act more beneficially as a manure for Mangels than for any other crop of the farm; it also produces marked effects upon the growth of Asparagus in our gardens. Both plants are in fact indigenous to the sea coast."

6. *Manure for Potatoes.*—"It is the general practice to dung heavily for Potatoes. Although the crop might not be so large, it is probable that if Potatoes were taken after some other crop well dunged, instead of the dung being applied directly for their growth, they would be less liable to disease. Supposing this plan adopted, 3 to 4 cwt. per acre of an equal mixture of Peruvian guano and superphosphate of lime should be used for the Potatoes. Or, in case of dung being employed, the best mode of application would be to plough it into the land in the autumn, the Potatoes being set in the following spring."

7. *Manure for Turnips.*—"When Swedes, or common Turnips, follow a corn-crop which had been manured by farm-yard dung, the roots may be grown by artificial manures alone. From $2\frac{1}{2}$ to 3 cwt. of superphosphate of lime should be drilled with the seed; and in the case of Swedes (excepting when sown late, or the land be considered in good condition) from 2 to 3 cwt. of Peruvian guano may be used in addition. If the preceding crop has not been manured by dung, 7 to 10 tons per acre, should be applied; $2\frac{1}{2}$ cwt. of superphosphate of lime being drilled with the seed; and if the dung used be poor, 2 cwt. of Peruvian guano may be strained over it in the drills. Or, where no manure drill is employed, the superphosphate of lime may be sown broad-cast after the dung is spread, either alone, or mixed with guano, as the case may require. These manures do not react injuriously upon each other when mixed together; but the guano is liable to be injurious to the young Turnip plant if brought in close contact with it. Hence, when guano and superphosphate of lime are mixed together, and sown by the drill, 2 or 3 inches of soil should intervene between the manure and the seed."

STATE OF THE WEATHER—BERKSHIRE.

For the week ending April 4: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain.	Wind	Barometer.
		Max in sun.	Max. in shade.	Min.	Mean.				
		Degs	Degs.	Degs	Degs	Degs	Ins.		
Friday	29 ..	69.8	53.0	30.0	45.5	47.0	..	W	29.60
Saturday	30 ..	66.0	50.0	32.0	45.0	46.5	0.23	S.W.	29.15
Sunday	31 ..	67.9	54.4	33.0	45.8	46.4	0.04	S	29.44
Monday	1 ..	82.0	49.4	25.6	45.8	46.0	0.02	E	29.58
Tuesday	2 ..	62.6	50.0	30.8	43.5	45.6	0.18	S	29.50
Wednesday	3 ..	63.6	50.0	34.0	45.4	45.7	0.24	N.W.	29.53
Thursday	4 ..	70.0	53.0	33.0	47.1	66.5	0. 3	W.	29.63

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Compost: *Original Sub.* To a compost of two thirds peat moss and one-third dung of Neat cattle, we would advise as an addition 2 cwt. of superphosphate of lime and 1 cwt. of nitrate of soda per acre as a top dressing for "a light thin loam, on a dry gravelly subsoil, long depastured with cattle, and limed about 10 or 12 years ago."

Mangel Wurzel: *M.* Horses will generally take them readily enough. Pulp some and mix with good hay chaff.

Nitrate of Soda for Hay Crops: *C E B.* 1½ cwt. per acre of nitrate of soda is the best thing which you can now (so late) apply to the Grass lands. See Mr Lawes' pamphlet on the application of manures, reviewed in another column.

PLYMOUTH SEED COMPANY, Plymouth.—
SEEDS FOR THE FARM.
Mixed Grasses for Permanent Pasture, 28*s*. to 34*s*. per acre.
White Clover, Red Clover, and Cow Grass, 8*d*. to 1*s*. per lb.
Plymouth Swede Turnip, 2*s*. 6*d*. per lb.
Grant's Pine Apple Green Top, very hardy, 1*s*. 6*d*. per lb.
Globe Turnips, 1*s*. 6*d*. per lb.
Tankard, ditto, 1*s*. 6*d*. per lb.
And all other Agricultural Seeds at moderate prices.
For further information see advertisement of March 9.
The FARM SEED LIST can be had on application.
FREIGHT AND CARRIAGE.—All Orders for Seeds above 1*l*. will be delivered Free of Charge to any Railway Station between Plymouth and Paddington; and to all Stations on the Cornwall, Tavistock, and North Devon Railways.
All Orders above 2*l*. Free to any Station on the Broad Gauge Railways, or to any Market Town in Devon and Cornwall, or to Cork, Dublin, Waterford, Limerick, Belfast, and Liverpool by Steamers; and to Guernsey and Jersey by Traders.
All Orders above 5*l*. will be delivered Free of Carriage to any Railway Station in England and Wales; and to any Steam Port in England, Wales, Scotland, or Ireland.
All heavy articles, such as Grain, Tares, Clover, &c., are exceptions to the above Rates.
Address: Plymouth Seed Company, Plymouth, Devon.

FARM SEEDS.—Genuine Seeds of Select Orange Globe Mangel, from large roots and very choice, per lb. 1*s*. 4*d*.
Yellow Globe Mangel, select .. .. ,, 1 4
Elvetham Long Red Mangel, very large .. .. ,, 1 4
Other Varieties, all at .. .. ,, 1 4
Select Bronze Short-top Swede, very hardy .. ,, 1 4
Improved Skirving's Swede .. .. ,, 1 4
Sutton's Champion Swede .. .. ,, 1 4
White Belgium Carrot .. .. ,, 1 4
True Altringham Carrot .. .. ,, 1 4
Fluke Potatoes 5*s*. 6*d*. per 80 lb., off the Moss.
PRICED CATALOGUES of FARM and GARDEN SEEDS on application to Henry Brown, Seedsman, 4, Commutation Row, Liverpool.

JOHN KERNAN, Seedsman, 4, Russell Street, Covent Garden, W.C., can supply all the best GARDENING AND AGRICULTURAL SEEDS to Country Dealers and Farmers, at very low prices for cash, and he calls their attention to the following wholesale prices, as their best protection against the extortions of puffers:—

PEAS.
All the best varieties
BEANS. per bush. s. d.
Kernan's Hybrid Long-pod (surpassing all others in earliness and abundant crop) .. 8 0
Broad Windsor 10 0
Mazagan 6 0
DWARF FRENCH DO.
Early Cream or Light Dun 32 0
Fulmer's Forcing or Colchester Red 32 0
Robin's Egg Speckled 32 0
The above are all fine samples grown in 1860.
Newington Wonder, Early Six-weeks Duns, and Negros of 1859 .. 30 0
CARROTS.
Altringham per cwt. 168 0
Dutch Horn .. per lb. 2 0
White Belgian (for cattle) 0 9
Surrey 1 6
Parsnip 1 0
TURNIPS. per lb.
Skirving's Swede .. 1 0
Laing's 1 0
Ashcroft's 1 0
Matson's Purple-topped 1 0
Green-topped 1 0
Purple-topped Yellow Bullock 1 0
Green do. 1 0
Dale's Hybrid 1 0
Green Round 1 0
White do. 1 0
MANGEL WURZEL.
Long Red 1 0
,, Yellow 1 6
Red Globe 1 6
Yellow do. 1 6

GRASSES.
Rye Grass per bush.
Italian do. .. ,, ..
Pacey's Perennial ,, 5s. to 6
Stickney's .. ,, 5s. to 6
Cocksfoot .. .. ,, ..
Sweet Vernal per lb.
Sheep's Fescue per bush.
Meadow Fescue .. ,,
Meadow Foxtail .. ,,
Rough and smooth stalked Meadow Grass per lb.
SUNDRIES.
Split Lentils
Haricot Beans
Celery Seed for Soups
Cuba Bass
Garden Netting
Mushroom Spawn
Guano
Shallots and Garlic
Fine roots of Lilium speciosum rubrum and L. lancifolium album
Gladiolus Brenchleyensis
,, insignis
,, Gandavensis
,, floribundus
,, Seedlings
Persian Ranunculus and Double and Single Anemones
Tigridia Pavonia
,, Conchiflora
Dahlia Roots
Ladies' patent Syringes
Everything new and good in Flower Seeds, of which separate Lists may be had
True Talavera Wheat
Chevalier Barley
Black Tartarian and Potato Oats
Alsike Clover, Trefoil, Lucerne and Timothy, Sorghum saccharatum, Furze and Broom
Coarse Grasses for game covers.

It having been announced by provincial puffers that farmers must hasten to give their orders at 2*s*. 6*d*. per lb., J. K. has much pleasure in removing such fears, and to prevent farmers being mulcted, begs to inform them that he has an abundant stock of each of the above Turnips, which are quite equal, if not superior to those puffed at 2*s*. 6*d*. per lb., Carriage Free. The difference between 1*s*. and 2*s*. 6*d*. will convince the most sceptical that getting the carriage for nothing is paying rather too dear for the whistle.

Plain PARSLEY for Sheep-walks; where this was planted thousands of sheep were saved in the late cold wet season.

Ashleaf, 12*s*.; Fortyfold, 6*s*.; American Native, 6*s*.; Dwarf Regents, 6*s*.; Early Shaws, 6*s*.; Webb's Imperial Kidneys, 7*s*.; Flukes, 6*s*.; and Bread Fruit Kidneys, 7*s*. per bushel.

Every Agricultural Seed supplied to order on most reasonable terms.

Lean-to Lights against a south wall will give a better size, ripeness, and flavour to Peaches, Nectarines, Pears, and all other Wall Fruit, having been found far superior to the much puffed Orchard-houses.

Genuine PEAR TREES worked on Pear Stocks, which are strongly recommended in preference to Pears on Quince Stocks on account of natural affinity, as on trial of the two it will be found that the flavour has not been destroyed by the acrid sap of the Quince.

DWARF ROSES on their own roots, the late winter having demonstrated the futility of grafting on Manetti or other Stocks, as not one in a hundred of those grown on their own roots was destroyed by cold, whilst worked Roses failed almost entirely. J. K. will have an abundant supply of the most named kinds of Dwarf Roses on their own roots, for bedding out from April to end of May, at from 6*s*. to 12*s*. per dozen.

A collection of 30 HARDY SHOWY ANNUALS, 3*s*.
Trade supplied on moderate terms for Cash.

J. Kernan advises Farmers to sow Mustard Seed (about 1 peck to the acre), which is a great corrector against looseness of Lambs, when fed upon Tares, Clover, and other young Grass, or when the land has become sodden or sleepy from long-continued wet it will speedily rouse and stimulate it to perfect healthy condition if ploughed in.

Lettuce, Cauliflower, and Cabbage Plants. Rhubarb, all the best kinds of Early and Late, 6*s*. to 9*s*. per dozen. Asparagus and Sea-kale Roots. J. K. can supply a sample of his Mustard at 3*s*. per peck, which is sufficient for an acre; a better sample 5*s*. per peck.

THE ROYAL BERKSHIRE SEED ESTABLISHMENT, READING.

UNDER THE PATRONAGE OF

HER MOST GRACIOUS MAJESTY THE QUEEN,

AND

HIS ROYAL HIGHNESS THE PRINCE CONSORT.

MANGEL SEEDS FROM LARGE BULBS.

SUTTON'S MANGEL WURZEL SEED

IS SAVED EXCLUSIVELY FROM FULLY DEVELOPED ROOTS, THE ADVANTAGES OF WHICH HAVE BEEN PROVED FOR SEVERAL YEARS PAST.

(SEE THE FOLLOWING LETTERS.)

These are not mere Testimonials in the ordinary acceptation of that term, but show distinctly that the Seeds which Messrs. SUTTON have had grown FROM LARGE SELECTED BULBS, are altogether superior in germinating properties, and in the quality and trueness of their produce, to the Seed raised in the usual manner.

From Jas. Brebner, Esq., *Steward to* H.R.H. The PRINCE CONSORT.

"Norfolk Farm, April 4, 1861.

"Messrs, Sutton & Sons,—I have great pleasure in stating that the Seeds supplied by you for a number of years for H.R.H. The PRINCE CONSORT'S FARMS (the Norfolk and Flemish, Windsor Great Park), have always been good and given every satisfaction."

From John Graham, Esq., *Steward to* H.R.H. The PRINCE CONSORT.

"Bagshot Park Farm, April 9, 1861.

"The Seeds had from your Establishment for the last three years have always come up well and never once failed.

From the Right Hon. Lord Berwick, *Croakhill.*

"Let me have the same Globe Mangel as last year, which has given me the best crop I ever grew, good *both as to bulk of crop, and also in the fineness of roots and freedom from fangs and irregular growth; when pulled, the roots were nearly as clean and free from fibre as a Globe Turnip, and I had 50 loads per acre and more.*"

From George Beaumont, Esq., *Bridgeford Hill, near Nottingham.*

"We have had 4 acres of Mangel (Yellow Globe), 3 of which were sown with your seed, and 1 acre with seed grown in this neighbourhood. *I am quite sure your seed produced from 8 to 10 tons per acre more than the other.* I had nearly an acre weighed (from your seed), and found we had 55½ tons per acre."

Many PRIZES at Birmingham and other Shows throughout the Kingdom have been taken by Messrs. Sutton's customers both for Mangel and for Swedes. The price of SUTTON'S LARGE YELLOW GLOBE MANGEL WURZEL is **2s. per lb.; ELVETHAM, 1s. 9d.; other sorts 1s. 6d. to 2s., or cheaper by the Cwt.**

Priced Lists of other kinds of Mangel, Swedes, Turnips, Grasses, &c., will be sent gratis and post free. Carriage Free, to all parts except small parcels.

SUTTON & SONS, ROYAL BERKSHIRE SEED ESTABLISHMENT, READING.

MANGELS, TURNIPS, &c.,

FROM SELECTED ROOTS.

THE strongest evidence we can furnish of the quality of our FARM SEEDS is public opinion. We have one of the largest Trades in England with Farmers, from whom we could publish Testimonials enough to fill a volume; and although our Seeds are all of the best quality, we want but a *fair market price*. Practical men, who are continually on the markets with us (we personally attend the principal markets in this and the adjoining counties, which affords us great opportunities of selection) are never guilty of giving *fancy prices*, but their judgment is of the soundest.

At the BOTLEY CLUB, the Prize for the best Ten Acres SWEDES was awarded.

PAGE'S IMPROVED (grown by John Crosskey, Esq.)

Heaviest weight of Mangel, per Acre, 61 Tons, 2 cwt.
PAGE'S IMPROVED ORANGE GLOBE, (grown by Stewart Macnaghten, Esq.)

Mangel, sown 7th July, Weight and Shape,
PAGE'S IMPROVED RED GLOBE, (grown by W. Warner, Esq.)

Mangel, 50 tons per acre.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by W. Dickinson, Esq.

Carrots, 35 Tons per acre,
PAGE'S IMPORTED WHITE BELGIAN, (grown by R. Trench, Esq.)

Six Prize Swedes, for heaviest Weight,
PAGE'S IMPROVED, (grown by W. C. Humphries, Esq.)

VALES OF AVON AND STOUR FARMERS' CLUB.

PAGE and TOOGOOD could give numerous Testimonials, but prefer practical results.

Vales of Avon, Prize for best 5 acres Mangel.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. Salway).

Second best.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. H. Bone.)

Third ditto.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. Baker.)

Best 2 acres ditto.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. Jas. Salway.)

Second ditto.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. John Withers.)

Third ditto.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. Bone.)

Present prices for best quality, not to be surpassed by any House in the Trade:—

BROAD or RED CLOVER, 7*d.* to 8*d.* per lb.
DUTCH, 9½*d.* to 10½*d.* per lb.
TREFOIL or HOP CLOVER, 3½*d.* to 4*d.* per lb.
IMPORTED ITALIAN RYE-GRASS, 5*s.* 6*d.* to 6*s.* per bushel
HOME GROWN ITALIAN RYE-GRASS, 4*s.* 6*d.* to 5*s.* per bush.
COMMON RYE-GRASS, 25*s.* to 35*s.* per quarter.
TARES, 7*s.* to 8*s.* per bushel.

PAGE'S IMPERIAL ORANGE GLOBE MANGEL, 2*s.* lb.
" IMPROVED YELLOW " " 1*s.* 6*d.* lb.
" " RED " " 1*s.* 6*d.* lb.
LONG RED MANGEL, 1*s.* 6*d.* lb.
ELVETHAM LONG RED MANGEL, 1*s.* 6*d.* lb.
LONG YELLOW MANGEL, 2*s.* lb.
LONG WHITE MANGEL, 1*s.* 6*d.* lb.
PAGE'S IMPROVED HARDY SWEDE, 1*s.* 9*d.* lb.
" " SKIRVING'S SWEDE, 1*s.* 6*d.* lb.
CHAMPION SWEDE, 2*s.* lb.
ASHCROFT SWEDE, 1*s.* 6*d.* lb.
GREEN TOP SWEDE, 1*s.* 6*d.* lb.
TANKARD SWEDE, 1*s.* 6*d.* lb.
IMPORTED WHITE BELGIAN CARROT, 1*s.* 6*d.* lb.

SEEDS for EXPORTATION packed to arrive in good condition.

GENERAL PRICE CURRENT, containing practical information, free by post.

PAGE & TOOGOOD,

ROYAL SOUTH HANTS SEED ESTABLISHMENT, SOUTHAMPTON.

TO THE TRADE.

PURPLE-TOP SCOTCH, WHITE GLOBE, SKIRVING'S PURPLE-TOP or YELLOW BULLOCK, and GREEN-TOP SWEDE TURNIPS, all warranted net.—Prices on application to Dickson & Brown, Seed Merchants, Manchester.

TO THE TRADE.

SKIRVING'S, MARSHALL'S, and PURPLE-TOP SWEDE, Early Horn, Long Surrey, and White Belgium Carrot, Drumhead Cabbage, selected Crimson Beet, British Queen, Surprise, Daniel O'Rourke, and Burridge's Eclipse at reduced prices.—Apply to M. Honey, Bridge Terrace, Maidstone.

RAYNBIRD, CALDECOTT, and BAWTREE, Seed Merchants and Growers, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E.C.

Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.

Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

MANGEL WURZEL SEED.—A fine Stock of YELLOW GLOBE ready for delivery. All new Seed and grows well. Price 1*s.* 3*d.* per lb., or less by the cwt. Early orders are requested.

Also LONG RED, 1*s.* per lb., OLIVE-SHAPED YELLOW, or RED (new variety), 1*s.* 6*d.* per lb. All of fine Stocks.

Address, Mr Elliott, Petworth, Sussex

MANGEL WURZEL and TURNIP SEEDS.—The undersigned can confidently recommend their Stocks of the above SEEDS, crop 1860, grown from selected and transplanted Bulbs. Terms on application.

James Fairhead & Son, Seed Growers and Merchants, Lewisham, Kent. London Establishment: 7, Borough Market, S.E.

TROPÆOLUM GARIBALDI.—The best of its kind for general and Bedding purposes. Colour, a brilliant Scarlet. Remarkably free bloomer. Certificate awarded by Royal Horticultural Society. Price 3*s.* 6*d.* each, or 36*s.* per dozen. Usual Trade allowance.

New SPRING CATALOGUE post free on application.

Jas. Garaway & Co., Durdham Down Nurseries, Bristol.

SPLENDID NEW INDIAN AZALEAS.

FRANCIS R. KINGHORN is now prepared to send out his three SEEDLINGS, which for form, substance, and colour are unequalled.

PRESIDENT.—This noble variety was exhibited before the Horticultural Society's Floral Committee, May 10, 1860, and was awarded a First-class Certificate. It is figured in the August Number of the "Floral Magazine," and described thus:—"The habit of the plant is all that can be desired, and the flowers are of large size, excellent in form, stout in substance, firm in texture with a smooth surface, and of a very pleasing colour." This colour is a deep salmon-red thickly and conspicuously spotted on the upper segments with deep crimson red. The plants offered are all grafted on free healthy stocks well established in 60-size pots, with several breaks to each, in fine health. Price 21*s.* each; a few larger, 31*s.* 6*d.* each.

KINGHORNII.—This is one of the finest varieties ever offered. The flowers of medium size, most perfect form, of unusual substance and smoothness of texture. Colour bright lively rose, thickly spotted on the upper segments with deep rosy purple. The habit of the plant is free, yet compact, and a most abundant bloomer, figured in the "Floral Magazine" for November, where Mr. Moore remarks that it is even a finer variety than President, as regards the smoothness and substance of the flowers. Price of stout grafted plants in 60-pots, 21*s.* each; extra size, 31*s.* 6*d.*; a few half specimen plant well set for bloom, 50*s.* to 75*s.* each; was exhibited on Tuesday before the Floral Committee, and received a First Class Certificate, thereby confirming the above description.

MARS.—This most attractive variety is the brightest of all existing kinds, the flowers large, smooth, firm, well formed, bright orange red, almost scarlet, the upper segments spotted with purplish crimson; was exhibited before the Floral Committee, May 24, 1860, and received a Certificate of Commendation. Good grafted plants in 60-pots, 21*s.* each.

F. R. K. can with the greatest confidence recommend the above Seedlings of his own raising, selected from an immense number and compared with named varieties, and notwithstanding the high place his previous Seedlings have maintained, yet he believes those now offered to be his best productions.—Sheen Nursery, Richmond, S.W.—April 13.

NEW VERBENAS.—The following 12 New Verbenas, which I purpose sending out the first week in May, are selected from a batch of choice seedlings, 60 in number, which were chosen as the best and most distinct from five beds of seedlings. The whole of the 60 are first-rate, but the following are the very choicest of them, and I have great pleasure in recommending them to the notice of all lovers of this beautiful tribe.

They were raised by the Messrs. Elletson, of Thorngumbald (the raisers of the celebrated Mammoth and Emperor Broccolis).

In consequence of the lateness of the season at which I was offered the stock of the Verbenas, I was unable, on account of the unfavourable weather, to procure blooms sufficient to exhibit in London; but all who saw them have expressed a wish to have plants of them this season.

They were compared with all the new ones of last and previous seasons, and were unequalled. They were exhibited at one of the exhibitions in this neighbourhood, and obtained the FIRST PRIZE, the Judges remarking upon their extraordinary beauty and excellence.

Price 5*s.* each, or 42*s.* the set.

ALBONI.—A fine dark scarlet, very large, bold pip and flower, splendid
ALICE.—A real mauve, large white eye, very large truss and pip, extra
AMINA.—A flower after Leviathan, first rate shape, large pip and good truss, extra
CLAUDE DUVAL.—A fiery bright scarlet, with a clouded centre, fine large truss, good shape, extra
GARIBALDI.—A splendid dark maroon, with large yellow eye, very bold flower, truss large and fine, good shape. The darkest Verbena out
GERTRUDE.—A splendid flower, a pretty carmine, immense pip and truss, extra
PEARL, light rose, large white eye, fine bold pip, of good shape
PRINCE ALBERT.—Fine crimson, with yellow eye, good shape and truss, extra
QUEEN VICTORIA.—Magenta, yellow eye, surrounded with carmine, a first-rate flower in every way
ROBIN HOOD.—A bright scarlet, of excellent habit, fine shape, and good truss
ROSE OF CASTILLE.—Beautiful bright carmine, white eye, [extra
ROSETTA JOSEPHINE.—Splendid large pip and truss, colour delicate rose or blush, with large yellow eye, a fine flower, extra

E. P. DIXON, Exotic Nursery, Air Street, Sculcoates, Hull.
CATALOGUES on application.

CHRYSANTHEMUMS FOR THE MILLION.

J. H. BIRD, F.R.H.S., Nurseryman, Stoke Newington, N., can now supply from his great Collection, 20 Pair of Best Large Varieties for 10s. ; 25 Pair of Best POMPONES, 10s. ; 20 Pair of Best Large Varieties, Cuttings, 5s. ; and 25 Pair of Best POMPONE Cuttings, 5s. N.B. To save trouble all Orders to be Prepaid.—CATALOGUES for One Stamp.

NEW CHRYSANTHEMUMS, DAHLIAS, HARDY VARIEGATED PLANTS, &c.

JOHN SALTER, F.R.H.S., will send out this spring several fine New CHRYSANTHEMUMS, both Large Flowers and Pompones. Full particulars will be found in his *DESCRIPTIVE CATALOGUE* for 1861, which will be sent post free on receipt of two stamps.—Versailles Nursery, William Street, near Hammersmith Turnpike, W.

CHRYSANTHEMUMS.

W. HOLMES begs to offer strong and well-established Plants of all the best and newest varieties of the above as under:—

	Per doz. s. d.		Per doz. s. d.
Chrysanthemums, Large Flower	5 0	Verbenas ..	2s. 6d. to 4 0
Ditto, Pompones	5 0	Fuchsias	4s. to 6 0
Dahlias	6s. to 9 0	Petunias	3s. to 6 0
		Antirrhinums, &c., &c...	3 0

DESCRIPTIVE CATALOGUES of the above free for one stamp.—Frampton Park Nursery, Hackney, N.E.

DRACÆNA TERMINALIS.

MESSRS. MILNE and CO. have a large Stock of the above, which they are enabled to offer to the Trade; also CALADIUMS in variety, including all the newest; fine good plants of CYANOPHYLLUM MAGNIFICUM and ALOCASIA METALLICA still on hand. Prices on application.
Camellia Nursery, Wandsworth Road, London, S.

BEDDING PLANTS—BEDDING PLANTS.

J. H. BIRD, F.R.H.S., Nurseryman, Stoke Newington, can supply the following Plants for Bedding Out, good stuff, at 12s. per 100, or 5l. per 1000.—Tom Thumb and other Geraniums, Fuchsias, fine sorts, Verbenas, Lobelias, Heliotropes, Cupheas, Petunias, Salvias, Ageratums, Mimulus, Calceolaria aurea floribunda, &c. Tom Thumbs and Calceolaria aurea floribunda, by themselves, at 16s. per 100, or 7l. per 1000.
N.B. To save trouble all Orders to be prepaid, or no notice will be taken.

BEDDING PLANTS.

F. and A. SMITH will commence sending out on the 20th inst. their usual strong, healthy BEDDING PLANTS, at moderate prices. These plants are hardened and fitted for planting out in May, so as to produce an early decorative effect. Quality, is the test of cheapness. LISTS on application.—Dulwich, Surrey, S.

ORANGE TREES full of Bloom, and some with Fruit and Bloom, 2s. 6d. and 3s. 6d. each; AZALEAS, 21s., 24s., and 30s. per dozen. The largest Stock of British and Foreign FERNS in the Trade. SCARLET RUNNERS, new Seed, 2s. per quart; FRENCH BEANS, 1s. 6d. per quart, &c. —R. Green, 154, Kingsland Road, 55 doors from Shoreditch Church, E.C.

FINE ORANGE TREES, &c.

TO BE DISPOSED OF, on very reasonable Terms, 12 fine ORANGE TREES of various sizes, in the best possible health and condition; also three remarkably fine STANDARD BAY TREES, with some good Specimen *HEATHS* and *NEW HOLLAND PLANTS*, &c.—Applications for Terms, or for permission to inspect the same, to be made to Mr. Elworthy, The Gardens, Newton House, Bedale, Yorkshire.—N.B. Newton House is conveniently situated about one mile from the Leeming Lane Station, North-Eastern Railway.

NEW FUCHSIAS.

F. and A. SMITH beg to offer the undermentioned NEW FUCHSIAS as possessing distinctive and striking characteristics, being either improvements on existing sorts or entire novelties, having good habits of growth and flowering, ensuring to the grower an ornament for the conservatory or an efficient plant for exhibition.

ALARM.—Tube rich scarlet crimson, sepals well reflexed, corolla immensely expanded, of fine form and substance, colour rich violet plum; this variety is in advance of all others in the class of expanded corollas for size, form, and colour. 10s. 6d.

"First-rate."—Mr. Charles Turner, Royal Nursery, Slough, Oct. 19, 1860.

"Good form, large Corolla, spreading like a parasol."—Cottage Garden, Oct. 30.

"A large bold, showy variety, with stout scarlet tube and sepals, and large stout shaded violet corolla, of great substance, which closes well. Promises to be a fine exhibition variety."—Gossip of the Garden, No. 59, November, 1860.

CLARA.—Scarlet crimson tube and sepals, violet corolla, of a most beautiful tint, having more of the blue shade than seen in other varieties. Very effective and distinct. 7s. 6d.

CORONAL.—Vermillion tube and sepals, which are most elegantly curved, presenting a beautiful and graceful appearance, corolla rich violet purple of a pleasing shade. The flowers of this variety are of great substance, lasting in beauty a long time, and will prove most desirable for exhibition purposes. This is commended as pleasing in colour, graceful in form, enduring in substance, and of excellent habit. 10s. 6d.

MASTERPIECE.—Tube and sepals scarlet crimson of very thick substance, the sepals being well reflexed and of great width, corolla a beautiful and rich maroon. This variety, in accordance with its name, stands prominent among Fuchsias for its distinct properties of broad and thick sepals, a corolla new in colour and well formed; the habit of plant is excellent, being graceful and free in flowering. 10s. 6d.

RAPHAEL.—Light rose pink tube and sepals, the latter well reflexed, corolla violet purple. This variety presents a new feature in its contrast of sepals and corolla, exhibiting at once the charm of novelty and contrast, while its graceful and free habit renders it worthy of its name. 10s. 6d.

STRIATA.—Bright vermillion tube and sepals, which are finely reflexed, dark violet plum corolla, beautifully striped and shaded with rosy scarlet. This variety is superior to any extant in its class—the colours are rich and bright, a free bloomer, of neat growth and graceful habit, and will be found one of the most effective for decorative purposes or exhibition 10s. 6d.

GOLIATH.—Coral red, a very stout and large flower of good and free habit. The fruit of this variety is of monstrous size, being large as a Damson, of a light green colour, with a pleasant sub-acid flavour; it sets its fruit freely, as many as 12 on a small plant, in a 48-pot, in a season. A singular advance in Fuchsia fruit. 5s.

Strong plants will be sent out 20th April. Coloured plates of six of the above, by Andrews, may be had for 12 post stamps.

F. & A. Smith beg to announce, in reply to several enquiries, that the beautiful new AZALEAS—Prince of Orange, Princess Alice, and Clapham Beauty (Todman), will not be sent out before the autumn, full descriptions of which will be given in the forthcoming Spring Catalogue.—Dulwich, Surrey, S.

RICHARD SMITH'S LIST of all the EVERGREEN FIR TRIBE suitable for Britain, giving size, price, popular and botanical names, derivations, description, form, colour, foliage, growth, timber, use in arts, native country and size there, situation, soil, and other information, with copious index of all their synonymes. Free by post for 12 postage stamps.—Richard Smith, Nurseryman, Worcester.

EVERGREENS.

RHODODENDRONS, HOLLIES, COMMON and PORTUGAL LAURELS, a choice and immense Collection of CONIFERÆ and other EVERGREENS (perfectly uninjured by frost), from 1 to 12 feet high.
A surplus Stock of several thousands of AZALEAS to be Sold cheap.
Apply to G. Baker, American Nursery, Bagshot, Surrey.

70,000 VERBENAS.—Scarlet, Purple, and White Verbenas, autumn plants, 2s. 6d. per dozen, in small 60-pots for propagating from. Spring do. 6s. per 100 from cutting pots; cuttings of the same, 2s. 6d. per 100. Warranted true. A remittance from unknown correspondents. N.B. Not less than 10s. worth of plants sent. Post Office, Upper Holloway.
John Pyle, St. John's Nursery, Upper Holloway, N.

CHOICE CONIFERS for SPRING PLANTING.

		Per doz.—s. d.
Pinus cornea, 6 inches		6 0
,, Llaveana, 9 inches		6 0
,, Leroyii, 9 inches		9 0
,, patula, 1 foot		6 0
,, Don Pedri, fine, 1 foot		12 0
,, Veitchii, 9 inches	each	2 6
Abies religiosa or hirtella, 1 foot	per doz.	9 0
Picea grandis, 4 inches	each	2 6
,, nobilis, 1 year seedlings	,,	1 6
Pinus ponderosa, 1 year seedlings	per doz.	6 0
,, Lambertiana, 1 year seedlings		6 0
Cupressus Lawsoniana, 2 year seedlings		6 0
Thuja Lobbii, 4 inches		6 0

The above are all Seedling Plants, in single pots and in vigorous health.—J. Henchman, Edmonton, London, N.E.

CHOICE FLOWER SEEDS—Free by Post.

STEPHEN BROWN (late Bass & Brown), is supplying the following, carefully selected of the best varieties in cultivation.
☞ For List of novelties included, see *Gardeners' Chronicle*, March 16th, page 250:—

BEST HARDY ANNUALS.	s. d.
a. 100 varieties, including the novelties of the season	15 0
b. 50 varieties ditto ditto ditto ..	8 6
c. 30 varieties ditto ditto ditto ..	5 6
d. 20 varieties ditto ditto ditto ..	4 0
BEST HALF-HARDY ANNUALS.	
e. 100 varieties, including the novelties of the season	20 0
f. 50 varieties ditto ditto ditto ..	12 6
g. 30 varieties ditto ditto ditto ..	8 0
h. 20 varieties ditto ditto ditto ..	6 0
BEST GREENHOUSE ANNUALS.	
i. 20 varieties, including newest kinds	7 6
k. 12 varieties ditto ditto	5 0
BEST HARDY PERENNIALS.	
l. 100 varieties, including the newest	20 0
m. 50 varieties ditto ditto	12 6
n. 25 varieties ditto ditto	7 6
BEST GREENHOUSE PERENNIALS.	
o. 50 varieties, including the newest	18 0
p. 25 varieties, ditto ditto	10 0
q. 12 varieties, ditto ditto	7 6
The three large Collections, a, e, and i, comprising 220 varieties of Hardy, Half Hardy, and Greenhouse Annuals, together for	40 0
The three second size Collections of the same, b, f, and k, comprising 122 varieties, together, for	25 0
The 5 Collections, a, e, i, l, and o, comprising both Annuals and Perennials for open air and greenhouses, in 370 varieties, for	76 0
The five second size collections of the same, b, f, k, m, and p, comprising 168 varieties	46 0

Cheaper or Second Class Collections.
See Catalogue.

Collections of Superb German Imported Seeds, as Stocks, Asters, Wallflowers, &c., exceedingly double and fine. See Catalogue.

Collections of choice prize Hollyhock Seeds, Ornamental Grasses, Greenhouse Climbers, Everlastings, Carnations, Picotee, Geraniums, &c. See Catalogue.

CATALOGUES on application.
Stephen Brown, Seed Grower and Importer, Sudbury, Suffolk.

STRAWBERRIES.

R. S. YATES begs to inform the public generally, he can supply STRAWBERRY PLANTS of every kind worth growing, that he will warrant to produce a good crop of fruit this summer. They will be sent with a ball of earth to each plant any distance, and plants over for carriage. Purchasers will please be particular in the address, and state by what conveyance they wish them. Price 10s. per 100, except Oscar, which are 20s. Also small plants, healthy and well rooted, to any extent, as above, can be supplied in quantities of not less than 500 at 3s. per 100, and Oscars at 5s. Also, very strong plants in Fruiting Pots for Forcing just coming into bloom, at 18s. and 24s. per dozen.
3, St. Ann's Square, Manchester.

NEW GRAPE, INGRAM'S HARDY PROLIFIC MUSCAT.—This is the most fertile and the best setter of all Grapes. The bunches are from 12 inches to 14 inches in length, having black oval berries, with the peculiar vinous flavour of the Hamburgh, yet more piquant, and combined with a slight spice of Muscat, so as to tone down the acid without satiating the palate. The flavour is new, and has been pronounced by one of the first judges of this country, to be the finest flavoured of all Grapes. The fruit is such, that the more it is eaten the more it is liked. In this Grape we have the *gardener's friend* and the *gentleman's bonne bouche*. It is impossible to grow the Vine without producing fruit, and owing to its ripening in a much lower temperature than the Black Hamburgh, it is the very best sort for a greenhouse or Curate's Vinery, and in ordinary summers it, no doubt, will ripen against a wall in the open air. The footstalk of the berry is so stiff and strong that it cannot shank off. For those countries where the Vine is cultivated in large quantities in the open air and where they have now only coarse and tasteless kinds, this will be the greatest acquisition. It has been exhibited before the Royal Horticultural Society's Fruit Committee, and obtained a First Class Certificate. The fruit shown being cut from a Vine struck from a single eye that was only 14 months old from the time of putting in the eye till cutting the Grapes. The fruit this year will be ripe from the middle of May to the end of June, when intending purchasers are invited to call and judge for themselves. Plants will be ready to send out August 1, at 21s. and 42s. each: and a few extra strong at 63s. each.—Jno. Standish, Royal Nursery, Bagshot.

The Finest Dark Perpetual Rose of the Season.

HYBRID PERPETUAL — REINE DES VIOLETTES.

WM. WOOD and SON have just flowered, in one of their Forcing Houses, the above splendid New ROSE; the colour is a very dark purplish violet, very double, large and finely shaped, habit remarkably vigorous, and will probably form a good Pillar Rose. They feel assured it will become a general favourite. Price 5s. each for good strong plants, with usual discount allowed to the Trade.
Address, Woodlands Nursery, Maresfield, near Uckfield, Sussex.

ROSES for BEDDING.—The months of April and May are considered the most eligible for planting out DWARF ROSES in beds or clumps in the Parterre; the present weather is also most favourable for the work.
The Subscribers beg to offer a splendid stock of remarkably fine plants fit for immediate planting.—Address Wm. Wood & Son, Woodlands Nursery, Maresfield, near Uckfield, Sussex.

ROSES FOR BEDDING.

Many Thousands of Dwarf Roses in pots, consisting of Hybrid Perpetuals, Chinas, Teas, Bourbons, and Noisettes.

WM. WOOD and SON are now sending out daily thousands of ROSES in pots for grouping and bedding, at 12s. to 18s. per dozen. Early orders respectfully solicited to secure the best plants.
Address, Woodlands Nursery, Maresfield, near Uckfield, Sussex.

THE BEST NEW ROSES OF THE SEASON.

WM. WOOD and SON can supply fine strong Plants of the following at 5s. each, with usual discount allowed to the Trade.

HYBRID PERPETUAL ROSES.

Abd-el-Kader, velvety crimson shaded with scarlet	Reine des Violettes, purplish violet
Agatoïde, delicate pink	Rosine Parron, bright cherry red
Darzans, superb rose colour	Triomphe d'Amiens, deep lake, striped and shaded with velvety crimson
Duc de Cazes, velvety purple	Bourbon Baronne de Noirmont, very bright rose
Prairie de Terre noir, crimson shaded and tinted with violet	
Robert de Brie, rosy salmon	

Plants presented to compensate for carriage.
Woodlands Nursery, Maresfield, near Uckfield, Sussex.

ROSES IN POTS.

By the Dozen, Hundred, or Thousand.

WM. WOOD and SON respectfully solicit attention to their enormous stock of DWARF ROSES in Pots, adapted either for Greenhouse culture or for Bedding, at the following prices:—

	Per Dozen.—s. s.
HYBRID PERPETUALS	12 to 18
BOURBONS, CHINA, TEA SCENTED, and NOISETTE ROSES	12 ,, 18

Extra plants presented with each Order to compensate for carriage.
Woodlands Nursery, Maresfield, near Uckfield, Sussex.

ROSES! ROSES! ROSES!

THOMAS HANDASYDE, Glen Nurseries, Musselburgh, near Edinburgh, has a large and superior collection of ROSES in pots, true to name, consisting of Teas, Chinas, Bourbons, &c., and begs to offer to the Trade fine strong plants, 50s. per 100, selection left to T. H.
HEPATICAS, Double Red, Single White, Red, and Blue, 21s. per 100.
,, ,, Blue, 50s. per 100.

NEW ROSE.—MADAME STANDISH is the hardiest of all Roses. Those which stood out of doors during the whole of the late severe winter not having lost a bud, whilst most others were destroyed by thousands. The growth is very rapid; the foliage magnificent; colour, a clear pale pink; petals smooth, round, and finely imbricated; the form cannot be excelled, and it is a thorough Perpetual, being, in fact, one of the finest Roses ever offered. Plants on May 1st, 10s. 6d. each. Madame Standish must not be mistaken for Mrs. Standish, which was sent out by Miellez, of Lille.
John Standish, the Royal Nursery, Bagshot.

ROSES, NEW AND OLD.

WM. PAUL (Son and Successor to the late A. Paul) has now ready for delivery a fine lot of all the best ROSES, new and old.

HOLLYHOCKS.

WM. PAUL (Son and Successor to the late A. Paul) has now ready strong healthy Plants of all the best HOLLYHOCKS. Named sorts, 12s. to 42s. per dozen; Seedlings, 6s. to 9s. per dozen. All are on their own roots, the system of grafting so detrimental to the longevity of the plant is not practised at his establishment.

BEDDING PLANTS.—All the best kinds, stout hardy Plants, at the usual rates.
PRICED CATALOGUES free by post.
Address Wm. Paul, Cheshunt Nurseries, Waltham Cross, N.

CHOICE PINKS.

YOUELL and CO. having an extensive quantity of the above, consisting of the very best show varieties by name, can supply strong and well-rooted plants at 6s. and 9s. per dozen pairs, or 40s. per 100 pairs.
PANSIES, finest first-class show varieties by name, well established in pots, 9s. per dozen.
Royal Nursery, Great Yarmouth.

CUPRESSUS GOVENIANA.—50 Seeds of the above, gathered this Spring for 1s. (post-free). Parties wishing to identify the species may have an empty cone on forwarding a stamped envelope.
John Finch, Welland, Upton-on-Severn.

NOTICE.

ROBERT PARKER (late of the Paradise Nursery, Holloway), begs to inform his friends, patrons, and the public, that the DISSOLUTION of the PARTNERSHIP in Paradise Nursery is without restriction as to his recommencing business elsewhere as soon as his arrangements are made for the purpose. In the meantime, and during the winding-up of the late Partnership Business, he will be obliged by all communications for him being addressed as under until further notice.—Robert Parker, Paradise Nursery, Seven Sisters' Road, Holloway, London, N.

NOTICE is hereby given that the PARTNERSHIP between the undersigned ROBERT PARKER and BENJAMIN SAMUEL WILLIAMS, in the Trade or Business of Nurserymen and Seedsmen, at the Paradise Nursery, in the Hornsey and Seven Sisters Roads, Holloway, in the county of Middlesex, under the firm of PARKER and WILLIAMS, was this day DISSOLVED by mutual consent, and in future the Business will be carried on by the said BENJAMIN SAMUEL WILLIAMS on his separate account at the same premises, and he will pay and receive all debts owing from and to the said Partnership in the regular course of trade.
Witness our hands this 8th day of April, 1861.
Robert Parker.
Benjamin Samuel Williams.

BEDDING AND OTHER PLANTS.—The Spring Supplement to JAMES CARTER & CO.'s GARDENER'S AND FARMER'S VADE-MECUM will be found to contain all the requisite information for the arrangement and management of BEDDING PLANTS, besides copious Lists of STOVE and GREENHOUSE PLANTS, with descriptive observations. Will be published on MAY 1, and forwarded free of charge and post paid, on application to

JAMES CARTER & Co., 237 and 238, High Holborn, London, W.C.; and Crystal Palace Nursery, Forest Hill, Sydenham, S.

GERMAN ANISE SEED, 28s. 6d. to 34s. 6d. per cwt.

GERMAN CARRAWAY	..	15s. 1d.	to 32s. 6d.	per cwt.
,, CORIANDER	..	15 0	16 0	
,, FENNEL	..	23 6	25 0	
,, FOENUGREEK		12 6	14 0	

Always kept in stock. Samples on application to—

EMIL LEIBIUS, 132, Upper Thames Street (near London Bridge).

ANTIRRHINUM WONDER.

WOODLANDS NURSERY, MARESFIELD, NEAR UCKFIELD, SUSSEX.

WM. WOOD AND SON have much pleasure in offering strong plants of the above-named exceedingly beautiful, novel, and curious hybrid, having the foliage of an Antirrhinum, while the flowers resemble those of a Pentstemon. Colour bright rose, fine truss, and good habit. A distinct and striking plant. Price 1s. 6d. per plant, or 15s. per dozen, with the usual discount allowed to the Trade.

N.B. The above can be forwarded by post if desired.

100 PHLOXES for 40s. | 100 PENTSTEMONS for 40s.

SUPERB CONTINENTAL PHLOXES & PENTSTEMONS.

WM. WOOD AND SON have now ready for immediate delivery fine strong plants of the above at moderate prices, with extra plants presented for distant carriage.

The newest and best Continental PHLOXES, 12s. to 18s. p. doz.

Older but well proved kinds at 6s. and 9s. per dozen.

The newest and best varieties of PENTSTEMONS, 12s. to 18s. per dozen.

Older kinds, 6s. to 9s. per dozen.

Woodlands Nursery, Maresfield, near Uckfield, Sussex.

GLADIOLUS BRENCHLEYENSIS.—In the *Gardners' Chronicle* of September 8, 1860, p. 816, the following Report will be found:—

"GLADIOLUS BRENCHLEYENSIS.—We have received from Messrs. YOUELL & Co., of Great Yarmouth, some specimens of this plant, the gorgeous appearance of which cannot be spoken of in terms of exaggeration. The tall robust habit and intensely bright scarlet flowers, place it at the head of all the hardy flowers of the autumn."

Flowering roots, 30s. per 100; or 4s. per dozen. Trade price on application.—Royal Nursery, Great Yarmouth.

NEW HARDY BROCCOLI.—The Richmond Late White remains uninjured by the past winter, while other sorts have been killed by its side. It is therefore invaluable. Packets free by post for 1s. Eight fine sorts (including the above), which in ordinary seasons succeed each other from September to May, free by post for 5s.

R. JONES, Seedsman, &c., Henley-on-Thames.

LEE'S WHITE SPROUTING BROCCOLI.—Gardeners who have not yet tested this excellent new branching BROCCOLI may see it now in bearing at the grounds of Messrs. SUTTON, Reading, where a large piece has been planted for Seed. A few ounces and packets of seed may still be had for present sowing.

Royal Berkshire Seed Establishment.—April 13, 1861.

GENUINE GARDEN SEEDS.

WM. CUTBUSH AND SON beg to intimate that their PRICED CATALOGUE OF KITCHEN GARDEN AND FLOWER SEEDS FOR 1861 is now ready and will be sent gratis on application.

Every article offered can be guaranteed of the VERY BEST description and TRUE.—Highgate Nurseries, London, N., ONLY.

ROYAL HORTICULTURAL SOCIETY.—
FLORAL COMMITTEE.
LIST OF AWARDS, APRIL 9, 1861.

FIRST CLASS CERTIFICATE.

Campylobotrys refulgens, from Mr. W. Bull, Chelsea,

Azalea Kinghornii, from Mr. Kinghorn, Richmond.

COMMENDATION.

Epacris Vesta, from Messrs. Veitch & Son, Exeter and Chelsea.

Veronica Chamædrys, var. pulcherrima, from Mr. Salter, Hammersmith.

Symphytum tuberosum variegatum superbum, from Mr. Salter.

Pelargonium floribundum, as an early decorative plant, from Messrs. F & A. Smith, Dulwich.

Pelargonium Snowdrop, from Messrs F. & A. Smith.

Auricula Rev. G. Jeans, from Mr. C. Turner, Slough.

SPECIAL CERTIFICATE.

To Mr. Veitch, for a fine collection of Ornamental Plants.

To Mr. Turner, for a collection of 12 Auriculas.

The next Meeting of the Committee will take place on April 23. THOMAS MOORE, Secretary to the Committee.

The Gardeners' Chronicle.

SATURDAY, APRIL 13, 1861.

NEVER in our experience has there been such general alarm among VINE GROWERS as during the present season. One gardener finds his leaves refusing to assume their customary plumpness, another sees them turning yellow, a third has the stems of his Vines loaded with intrusive roots, a fourth has neither intrusive roots nor leaves of any sort. Then bunches of flowers shrivel and turn backwards, leaves rot in blotches, berries become brown and dry; and all this in the absence of mildew or red spider, the customary enemies of the Vine. We do not mean to say that there is novelty in such misfortunes; on the contrary they are always ready to visit the inexperienced and to baffle even the experienced; what we this year observe is the extraordinary frequency of such visitations. Of most of them the cause is known and susceptible of being removed by the application of greater skill-power; but some are extremely obscure diseases, the progress of which is hardly traceable.

Among the cases last brought under our notice is one that may be far more common than is supposed, although, like all things subterranean, it escapes observation. A Correspondent, "J. H." (see p. 314) last week forwarded two large Vine roots which had died during the winter; one, that of a Black Hamburgh, between 3 and 4 feet long and 1½ inch in diameter, the other, a Muscat, somewhat smaller. In both cases it was evident that the plants had lately been in vigorous health, for the annual rings were well defined and the lateral roots and fibres abundant, long, and wholly free from that brown rot which marks the influence of cold and wet. It was therefore clear that the death of the roots was owing to some other cause than that which usually effects their destruction. Upon the surface of many of the fibres, in their interior, and between their wood and bark, the white cottony matter which is the spawn (or mycele) of Fungi, and the cause of dry rot, was however plentiful. The main stem, however, appeared to be clear of it.

We have here then a new instance of healthy living plants perishing rapidly when attacked by Dry-rot Fungi. An instance was mentioned in our volume for 1857 (p. 611), when a Portugal Laurel thus died. A still more remarkable instance was that of Abies Kæmpferi mentioned at p. 820 of the same volume. Since that time other examples have come under our notice, among the most remarkable of which was that of a perfectly healthy Turkey Oak tree, girthing 23 inches, whose leaves suddenly became brown in mid-growth, and which rapidly perished. Upon being dug up one only of its main roots was found to be filled with mycele. Some two years ago, Beech trees at Shrubland, near Ipswich, were observed to be dying in the park of the late Sir WM. MIDDLETON: fine trees on good Beech land. One of them having been thrown for examination proved to have its lowest roots white with mycele and as brittle as a Carrot. The mere fact of trees dying under the attack of this invisible enemy has therefore been long known to the readers of the *Gardeners' Chronicle*; and we entertain no doubt that if unhealthy trees were examined by competent observers their sickly condition would be found to be attributable beyond all question to the same cause.

That the Larch-rot is so produced we ascertained in September, 1848, upon inspecting the late Dr. THACKERAY'S plantations at Nerquis, a place about 14 miles from Chester, not far from Moel Vamma, among the Welsh hills, and at some 800 or 900 feet above the sea. The following literal extracts from our note-book have some interest in connection with the subject now before us:—

"Plantations are in the most healthy state generally, with plenty of hard wood, especially OAKS, then Ash, Sycamore, Beech, a few Spanish Chesnuts. In springy places they have failed, the Larches and Oaks being yellow, and the Scotch Firs stunted. If they had cut the springs or led off the water these trees would have been as fine as others.——Shafts have been sunk by miners in search of lead. In one 20 or 30 feet deep the sides *were quite dry*; in another dripping with water from the very top.——LARCHES very fine, about 32 years old mostly, from 30 to 40 feet high; one has been felled 52 feet high; have grown sometimes ½ an inch in diameter per annum, as proved by the rings which I measured. Very clean when sawed up; few knots. Some contain 10 feet of timber. All, or nearly so, from 4 to 6 feet. It sells for 1s. a foot. The rot has attacked them in the low or wet places, where they are yellow and apparently dying at the points. One blown over because its roots were rotten—a case of dry rot; white spawn abundant; wood brittle; the hymenium was forming all over the butt. *Many of the felled trees* which had been lying about showed signs of this at the butt where they had been crosscut.——Evidently the rot is connected with wet. In the low parts especially (in Tir Coad or Woodland) the ends are yellow. The water must percolate thither from the springs above them. Near the dry parts no symptoms of ill health, in the wetter plenty. The land is very spongy.——The rot attacks the heartwood and thence spreads to the bark, and forms mycelium between the bark and alburnum. Some of the roots as thick as the base of the thumb, brittle and rotten, in the specimens which had been blown over. QU. So long as tissue is young and vitality strong, so long it resists the action of water; but as soon as it gets old and its vitality diminishes it ceases to be able to overcome decomposition, then Fungi attack the heart (the old debilitated part), and rot comes on. Perhaps if the wet were away the rot would never appear."

Since 1848 the same facts have been repeatedly observed by ourselves. That live and healthy trees are killed by dry rot is therefore certain.

There remains the important question "What is it that brings on dry rot in living trees?" So far as Larch is concerned, old notes just quoted show what opinion was formed in 1847. To that opinion we adhere, with some extension however. A root sickens and dies. It then becomes the nidus of Fungus-spawn. The Fungus establishes itself, pushes onwards, gradually saps the vitality of other roots, still advances, and eventually extinguishes the power of growth. This may happen in two ways. Rotten wood lying in the ground may in the first instance be the seat of the Fungus, and the point from which its arms extend till they reach an unhealthy living root, which it quietly encircles in its fatal embrace. Or, a tree may have a dead root, in which the Fungus establishes itself, and whence it passes into the living system. To the first of these the Abies Kæmpferi case and those at Nerquis belong; to the second, the Beech trees at Shrubland, the Portugal Laurel, and the Turkey Oak above mentioned may be probably referred.

But what of J. H.'s Vine roots? We have no means of knowing. He suspected the injury to have proceeded from the presence of some "Cotton waste" in the Vine border. What power such a substance may possess of generating Fungi we should be glad to know. Certainly it ought not to have found its way into a Vine Border. Woollen waste we know from experience will breed Fungi in plenty, and so destroy cuttings surrounded by it. But of Cotton waste there is we believe no record: it is generally understood to go to the Paper Mill.

Is it however quite impossible that bushes or faggots should have been buried for drainage in "J. H.'s" border? Perhaps he will ascertain and inform us. If they were the mystery is explained. Nothing can well be more certain than that dead pieces of stick, especially of young branches rich in nitrogen, are a prolific source of Fungus mischief.

—— ADVICES from St. Petersburgh bring intelligence of the death on the 9th of last December, at the age of 70, of Mr. V. HARTWISS, the Superintendent of the Botanical Garden of Nikita in the Crimea.

—— The old *Horticultural Society of Tournay* holds a three days exhibition on the 30th June and 1st and 2d of July; and another on Sunday, Monday, and Tuesday, the 8th, 9th, and 10th September.

—— By the Pharmaceutical Society a Silver Council Medal is offered for the best Herbarium, collected in any part of the United Kingdom, between the first day of May, 1861, and the first day of July, 1862; and should there be more than one collection possessing such an amount of merit as to entitle the collectors to reward, a second prize, consisting of a Bronze Medal, and also Certificates of Merit, will be given at the discretion of the Council. In the event of none of the collections possessing such an amount of merit as to warrant the Council in awarding Medals or Certificates, none will be given. The collections to consist of Phanerogamous plants and Ferns, arranged according to the Natural System of DE CANDOLLE, or any other natural method in common use, and to be accompanied by lists, arranged according to the same method, with the species numbered. The collector to follow some work on British Botany (such as that of BABINGTON, BENTHAM, or HOOKER and ARNOTT), and to state the work which he adopts. The name of each plant, its habitat, and the date of collection, to be stated on the paper on which it is preserved. Each collection to be accompanied by a note, containing a declaration, signed by the collector, and certified by his employer or a Pharmaceutical Chemist known to the collector, to the following effect:—The plants which accompany this note were collected by myself, between the first day of May, 1861, and the first day of July, 1862, and were named and arranged without any assistance but that derived from books. In estimating the merits of the collections, not only will the number of species be taken into account, but also their rarity or otherwise, and the manner in which they are preserved, and should a specimen be wrongly named, it will at once be erased from the list. The collections to be forwarded to the Secretary of the Society, 17, Bloomsbury Square, on or before the first day of August, 1862, endorsed "Herbarium for Competition for the Botanical prizes." If required, the collections will be returned after competition. No candidate will be allowed to compete unless he be an Associate, Registered Apprentice, or Student of the Society, or if his age exceed 21 years.

—— The subject of BORDER EDGING is one that interests more the inhabitants of large towns

where live edging will not grow than those in country places; but even in the latter it is difficult to give an air of smartness to little gardens without some sort of frame in which to set the flower borders. The rich have no difficulty in procuring what they want in this line; but with others it is different; and we are always glad to hear of any attempt to supply a cheap material suitable for the purpose. What is wanted is some hard good-looking material which will withstand frost. Unless it does that it is useless.

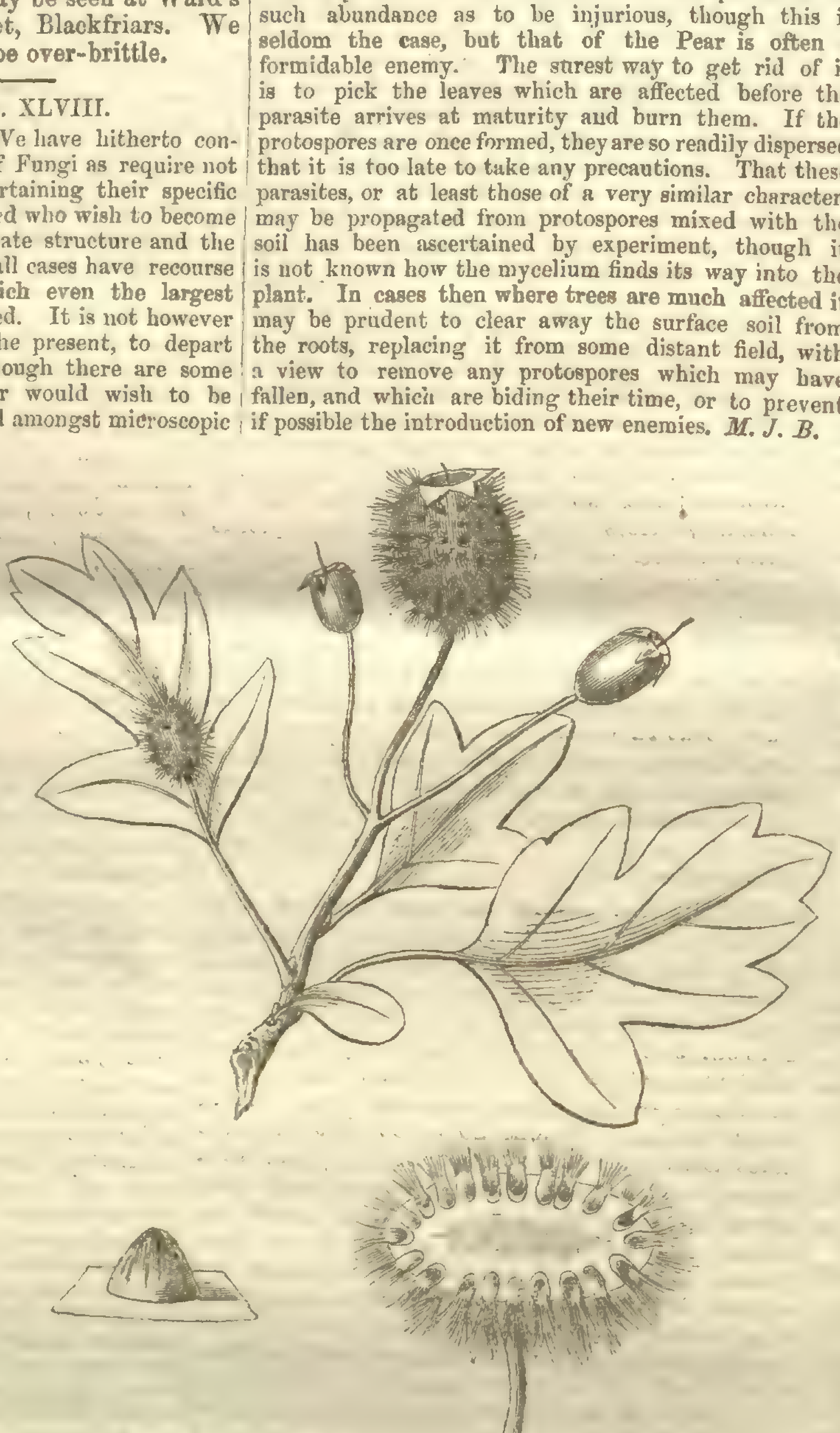
Some samples of terra-cotta tiles which have been submitted to us by Mr. Rosher of Ward's Wharf appear to fulfil those conditions; and although an architect may not admire them, we are of opinion that they are calculated to improve very much the appearance of small gardens. If they were magnificent they would only suit magnificent places; being neat and unpretending they are just what small folks want. Some are coloured like cast iron, some are red, some green, some white. The latter we like the least; but that is matter of opinion; the iron grey we prefer. We recommend those who do not like the slugs and snails that live edgings shelter, or who cannot persuade snail-nests to thrive, to inspect Mr. Rosher's patterns, which may be seen at Ward's Wharf, Upper Ground Street, Blackfriars. We only hope that they may not be over-brittle.

MYCOLOGY.— No. XLVIII.

Rœstelia lacerata, *Tul.*—We have hitherto confined ourselves to such species of Fungi as require not even the help of a lens for ascertaining their specific characters. Those persons indeed who wish to become acquainted with the more intimate structure and the characters of the fruit must in all cases have recourse to the microscope, without which even the largest Phænogam cannot be fully studied. It is not however our intention, at any rate for the present, to depart much from our former course, though there are some objects with which the gardener would wish to be acquainted, which must be ranked amongst microscopic species, and of these the Fungi which are parasitic on living parts of plants claim more than a superficial notice. One of these, which is not uncommonly produced upon the leaves and fruit of the common Hawthorn, has been chosen as the subject of our present memoir.

The group of Fungi to which it belongs has been the subject of much discussion. While some rightly considered them as true plants, others regarded them as mere pustules analogous to the cutaneous diseases to which the human race is subject, and to be mere modifications of the tissues of the plants on which they are produced. There was little excuse for this even when the botanist had nothing more than the old compound microscope or single lenses of greater or less power to work with; for with no more assistance than these could offer, a mere glance at the structure of an *Æcidium* or of the genus to which our present plant belongs, ought to have been sufficient to convince an unprejudiced person that these productions were real parasites and not merely diseased conditions of the tissues. A step further towards a knowledge of their structure, revealing the existence of a distinct mycelium, and the germination of the so-called spores, made it impossible any longer to deny them their proper place amongst organised beings, and the researches of De Bary, Tulasne, and others have shown that the bodies once considered as the spores are merely a preparatory structure (protospores as we are inclined to call them) for the development of the true fruit. The protospores in fact germinate, and the germinating threads protruded in different manners in the different genera, at length originate the true spores. Besides the pustules which produce the protospores, there are in several genera, and in none more conspicuously than in *Rœstelia*, other more minute pustules which yield a gelatinous mass often oozing out at the apex, as from the crater of a volcano, if we may compare small things with great, consisting of a multitude of minute regular bodies whose function is at present uncertain. While some are inclined to look upon them as a second form of fruit, of which there are so many examples amongst other Fungi and Lichens, and more especially amongst Seaweeds, others regard them as the male organs, of which there is no proof, and against which view there are several objections. It does not appear that the germination of *Rœstelia lacerata* has ever been observed, but in *R. cancellata*, which is such a plague to Pear trees where it abounds, M. Tulasne has at least observed the first germination, though he does not seem to have followed it out to the production of spores. In *R. cancellata* and *cornuta*, the protospores which as in *Æcidium* are disposed in chains, are connected with each other by little intermediate processes, but we cannot perceive anything of this sort in dried specimens, either of the more ordinary form of *R. lacerata*, which grows upon Whitethorn, or that which is found on *Pyrus Aria*, though they most probably exist in the young plant. The peridium of this curious Fungus, which is much elongated and repeatedly lacerated above, is composed of oblong cells which are easily detached from each other. The walls of these are extremely thick, and marked with waved raised lines, which in certain positions of the focus appear confined to the border, though they are in reality distributed all over the surface. The tissues of the mother plant where the parasite is inserted are much fruit when so that warts appear on the leaves, and the swollen, attacked is very gouty and distorted to a considerable extent, and this is especially the case in *R. cancellata.*

The parasite before us is sometimes produced in such abundance as to be injurious, though this is seldom the case, but that of the Pear is often a formidable enemy. The surest way to get rid of it is to pick the leaves which are affected before the parasite arrives at maturity and burn them. If the protospores are once formed, they are so readily dispersed that it is too late to take any precautions. That these parasites, or at least those of a very similar character, may be propagated from protospores mixed with the soil has been ascertained by experiment, though it is not known how the mycelium finds its way into the plant. In cases then where trees are much affected it may be prudent to clear away the surface soil from the roots, replacing it from some distant field, with a view to remove any protospores which may have fallen, and which are biding their time, or to prevent if possible the introduction of new enemies. *M. J. B.*



Rœstelia lacerata, *Tul.*
(Copied by permission from Greville's Cryptogamic Flora.)

REPORT ON SCARLET AND OTHER BEDDING PELARGONIUMS,

Grown at Chiswick in 1860.

(*Continued from p. 313.*)

Series II.—Horse-shoe-leaved Scarlets.

§ 1. *Flowers scarlet.*

31. *Agatha.*— From Messrs. Rollisson & Sons. Medium habit; leaves boldly zonate; flowers small, in compact trusses, scarlet. Inferior.

32. *Amazon.*—From Messrs. Fraser. Vigorous habit; leaves distinctly zonate; flowers large, well formed, in large compact trusses, on long hairy stalks, light scarlet. A good variety especially for pillars in conservatories.

33. *Baron Hugel.*—From Mr. Turner, Mr. Taylor, and Mr. Scott. Also known as Conway's Princess Royal and Dr. Duval. Dwarf and spreading in habit, with distinctly zonate leaves; flowers medium-sized, in small trusses, scarlet. It appears to be an early and profuse bloomer; and producing bright-coloured flowers, and decidedly horse-shoe-marked foliage, is to be recommended.

34. *Bishopstowe.* — From Mr. Turner. Medium habit; leaves boldly zonate; flowers medium-sized, in compact trusses, bright scarlet. A good old sort.

35. *British Flag.* — From Mr. Turner and Mr. Taylor. Medium spreading habit; leaves distinctly zonate and mottled with green; flower-stalks pale-coloured; flowers large, in medium-sized trusses, light scarlet. It was considered a good and useful variety for in-door culture, in greenhouses and conservatories.

36. *Captivation.*—From Mr. Turner and Mr. Scott. Vigorous habit, with boldly zonate leaves; flowers full size, in bold long-stalked trusses, scarlet. It is similar in character to Empress of the French, but the trusses are bolder, and it was pronounced a good variety of the large or vigorous habited series.

37. *Clarissa.* From Messrs. Rollisson & Sons. Medium habit; leaves distinctly zonate; flowers small, in compact trusses, scarlet.

38. *Compactum.*—From the Society's collection. Coarse habit; leaves distinctly zonate; flowers small, in large compact trusses, scarlet. Inferior as grown, but a good variety for in-door culture.

39. *Compactum coccineum.*—From Messrs. Fraser. Vigorous habit; leaves boldly zonate; flowers small, in compact trusses, scarlet. Similar to Royalist and Bishopstowe, but not so bright in colour.

40. *Conway's Royalist.*—From the Society's collection. Medium habit, rather spreading; leaves boldly zonate; flowers small, in compact trusses, bright scarlet. It is similar to Bishopstowe, but rather dwarfer, and is a useful variety.

41. *Cottage Maid.* — From Mr. Scott. Medium habit; leaves boldly zonate; flowers medium-sized, scarlet. Inferior.

42. *Empress of the French.*—From Mr. Turner and Messrs. Low & Co. Vigorous habit, with boldly zonate leaves; flowers large, in bold trusses, scarlet. The variety is rather coarse, and was considered inferior to British Flag.

43. *Fire Queen.*—From Mr. Scott. Medium habit; leaves indistinctly zonate; flowers scarlet, of medium size, loose. An inferior sort.

44. *General Pelissier.*—From Messrs. Fraser and Mr. Scott. Medium habit; leaves distinctly zonate; flower-stalks pale; flowers medium-sized, tolerably well formed, in moderate trusses, scarlet. Inferior.

45. *Glory of Somerset.*—From Mr. Scott. Medium habit; leaves zonate. This variety did not flower, but is said to be a dark scarlet with white eye.

46. *Ivery's Pet.*—From Mr. Scott. Medium habit; leaves boldly zonate; flowers medium-sized, scarlet. Inferior.

47. *Lilliput.*—From Mr. Turner. Very dwarf; leaves small, with distinct dark zone; flowers medium-sized, very bright scarlet. This variety proved to be a little gem.

48. *Martin Gireau.*—From Messrs. Rollisson & Sons. Vigorous; leaves distinctly zonate; flowers large, in bold long-stalked trusses, light scarlet. A good variety with fine bold inflorescence.

49. *New Globe.*—From Messrs. Fraser. Vigorous habit; leaves boldly zonate; flowers small, in compact trusses, bright scarlet. In the way of Bishopstowe. The foliage is fine, and the colour of the flowers good.

50. *Orion.*—From Messrs. Low & Co. Medium habit; leaves boldly zonate; flowers medium-sized, loose, scarlet. Inferior.

51. *Queen of England.*—From Mr. Scott. Vigorous, with boldly zonate leaves; flowers large, of good shape, produced in fair-sized trusses, bright scarlet. A variety of good properties. The same variety was received under the name of Excellence, apparently a misnomer.

52. *Reidii.*—From Messrs. Fraser. Medium habit; leaves boldly zonate; flowers scarlet. This variety was not well in flower, but was considered inferior.

53. *Richmond Gem.* From Messrs. Fraser and Mr. Scott. Vigorous habit; leaves slightly zonate, and with green; flowers light scarlet, rather loose. It is, however, a fine pot plant.

54. *Roi de Feu.*—From Messrs. Rollisson & Sons. Medium habit; leaves boldly zonate; flowers small, in compact trusses, very bright scarlet. In the way of Bishopstowe, but no improvement.

55. *Scarlet Globe.*—From Messrs. Rollisson & Sons and Messrs. Low & Co. Medium habit; leaves zonate; flowers large, in fair-sized trusses, bright scarlet. Inferior.

56. *Scarlet Perfection.*—From Mr. Turner. Also called Attraction and Boule de Feu. Medium habit; leaves faintly zonate; flowers in fair-sized trusses, bright scarlet. It is a very fine variety.

57. *Scarlet Unique.*—From Mr. Ingram. Medium habit; leaves distinctly zonate, and marbled with green; flower-stalks pale; flowers small, in small trusses, scarlet. Inferior.

58. *Shrubland Scarlet.* From Mr. Taylor. Vigorous habit; the leaves faintly zonate; flowers scarlet, in large showy heads. A variety called Eclipse, sent by Messrs. Fraser, appeared to be the same as this.

59. *Village Maid.*—From Messrs. Low & Co.

Vigorous, with boldly zonate leaves; flowers medium-sized, in moderate trusses, rather loose, scarlet. Inferior.

§ 2. *Flowers cerise or rosy-scarlet.*

60. *Beauty of the Parterre.*—From Messrs. Fraser. Medium habit, with indistinctly zonate leaves; flower-stalks pale; flowers small, in compact trusses, of a lively rosy scarlet. Inferior.

61. *Cerise Unique.*—From Messrs. Fraser. Medium habit; the leaves slightly zonate; flowers small, cerise-scarlet. Inferior.

62. *Comte de Morny.*—From Messrs. Low & Co. Dwarf; leaves indistinctly zonate; flowers well-formed, in fair-sized trusses, lively cerise or rosy-scarlet. Inferior.

63. *Emperor.* — From Mr. Turner. Dwarf and vigorous; with boldly zonate leaves; flowers in small trusses, rosy-scarlet. Inferior.

64. *François Chardine.*—From Messrs. Fraser and Messrs. Low & Co. Medium habit; with boldly zonate leaves; flowers large, well formed, in medium-sized trusses, deep rosy- or salmony-scarlet. A fine variety, near to Mons. Martin, but having better foliage.

65. *Lady Dorothy Nevill.*—From Messrs. Rollisson & Sons. Dwarf spreading habit; leaves distinctly zonate, and mottled with green; flower-stalks pale; flowers above medium size, rather quartered, rosy- or cerise-scarlet. Inferior.

66. *Leoni.*—From Messrs. Rollisson & Sons. Medium habit; leaves distinctly zonate; flowers large, in moderate-sized trusses, cerise- or rosy-scarlet. A promising variety, but not well flowered.

67. *Mons. August.*—From Messrs. Rollisson & Sons. Medium habit; leaves distinctly zonate; flowers large, well formed, rosy- or cerise-scarlet. A promising variety.

68. *Mons. Deschamps.*—From Messrs. Rollisson & Sons. Dwarf; leaves distinctly zonate; flowers well formed, cerise-scarlet. Inferior.

69. *Mons. Martin.*—From Messrs. Rollisson & Sons, Mr. Turner, and Messrs. Fraser. Medium habit; leaves distinctly zoned; flowers large, well formed, in compact trusses, of a lively rosy-scarlet, or bright cerise-scarlet, like Lady Middleton. This is a fine sort, in the way of Rubens and Lady Middleton, and one well deserving of cultivation.

70. *Paul Labbé.*—From Messrs. Fraser. Medium and somewhat erect habit; leaves distinctly zonate; flowers of good size and fine form, but produced in small trusses, rosy-salmon. A fine variety for pots.

71. *Picturatum.*—From Mr. Hally. Medium habit; leaves indistinctly zonate; flowers deep rose. This variety scarcely came into bloom.

72. *Rubens.*—From Mr. Taylor. Moderately vigorous; leaves zonate; flowers large, of fine form, produced in good-sized compact trusses, cerise-pink. A fine variety for all purposes.

73. *Sheen Rival.*—From Mr. Kinghorn. Medium and somewhat spreading habit, with distinctly zonate leaves; flower-stalks pale; flowers large, well formed, in bold compact trusses, cerise-scarlet. One of the best varieties in cultivation.

74. *Surprise.*—From Mr. Turner. Dwarf, with zonate leaves, distinctly marked with mottled green; flowers medium-sized, in compact trusses, rosy-scarlet. Inferior.

75. *Talma.* — From Messrs. Rollisson & Sons. Medium habit; leaves slightly zonate; flowers rosy-scarlet.

76. *The Bishop.*—From Mr. Scott. Medium habit; a very distinct variety, the leaves green, with a yellowish-green centre, and a dark zone; flowers large, in large trusses, rather loose, rosy-scarlet; they are produced on pale-coloured stalks. Though a distinct sort, it is of inferior properties.

(To be continued.)

Home Correspondence.

Boning Rods.—You have recently (p. 265) given us the history of these useful aids to new ground work, with some suggestions for improvements in the "sighting." No doubt it would be an improvement to "sight" through "a small hole or tube," if the observation was properly taken, and the rods were kept quite perpendicular, but if not the "tube" would be a source of error rather than of correct measurement. To secure this the "bob" or spirit level would be indispensable, and would lead to complications not necessary in the boning staff, inasmuch as we have already instruments better suited to the purpose. Le Brun recommends the placing of a hat behind the sight when the card is not seen distinctly. A better plan is to have two of the staffs painted quite white, and at the back of the one intended for the sight place a thin black board, some 2 or 3 inches high, and the same length as the horizontal top of the staff. The intermediate staff should also be painted black, and with this arrangement levels between two given points sufficiently accurate for ground work may be taken with great facility. The objection however to boning rods is that they are only suited to straight lines—in curved lines they lead to considerable trouble and are comparatively useless. For general purposes I have found Weir's Drainage Level exceedingly useful and easily managed. The beauty of it is that it not only gives you the rise or fall in any given distance in inches and quarter inches per yard, but when adjusted as a level, it will, acting on a centre, sweep a whole garden or building without the slightest necessity for removing. I have used it for some years, and in levelling terraces, foundations of houses, or farm buildings it is only necessary to adjust it at the time of commencing work in the morning, and any labourer of ordinary intelligence will work it throughout the day. For intricate foundations, where it is important that levels should be accurately carried out, it is most useful, scarcely less so than the Theodolite. In fact, a year or two back I took some levels against Mr. M'Adam, the eminent road surveyor, and the difference in the quantity of earth required to be removed, as indicated by the two surveys, was only 3 inches. With a graduated sight-staff Weir's Drainage Level is a most desirable and useful instrument, which is fast expelling the boning rods of former times. *W. P. A.*

Effects of the Winter in Ireland.—Our locality is about 80 miles north of Dublin, and we lie very low and damp on a limestone rock. The sharpest frost we had occurred on the 24th and 25th of December, but even then the thermometer registered only 16° of frost; and since that time frosts have been slight and of short duration. Of Plants Injured I am happy to say we have very few. They consist of Arbutuses, Benthamia fragifera, Ilex furcata ovata and cornuta, Olea fragrans, Cerasus ilicifolia, Cedrus Deodara and atlantica, Cupressus M'Nabiana and macrocarpa, Pinus pyrenaica, Thuja aurea and Juniperus Bermudiana. Not at all Injured: Wellingtonia gigantea, Cryptomeria Lobbi and japonica; Cupressus Lawsoniana, Knighti, Goveniana and Lambertiana; Thuja gigantea; Pinus Frazeri, Benthamiana, ponderosa, excelsa, Cembra, Pindrow, Pinsapo, macrocarpa, Montezumæ, insignis, and Lambertiana; Picea Webbiana and Cephalonica, Cephalotaxus Fortuni, Hemlock Spruce, Juniperus excelsa, Garrya elliptica, Quercus nigra and Fordi, Libocedrus Chilensis, Thujopsis borealis, Abies grandis and Nordmanniana, Taxodium distichum and sempervirens, Araucaria imbricata. I have taken some Calceolaria Kayi out of a box that stood fully exposed through the winter and replanted them, and they promise to be equally good plants by bedding out time as those which have been in frames; of course this is an exception, and I merely make the statement to show the great difference that exists between winter here and that in England. *E. W., The Gardens, Kilmore Palace, Cavan.*

Effects of the Winter upon Standard Roses.—Your Correspondent "S. A.'s" garden surely must be favourably situated. We had a collection here of all the best varieties of standard Roses, which previously to the frost setting in were all mulched 6 or 8 inches thick with stable manure, and the stems of some of the Noisettes and Teas we banded with hay, and covered their heads well over with Yew branches, yet without being able to save them. Before the frost set in, we could number nearly 400 varieties; we have now 24 alive, so I think that everything depends on situation; for in most of the gardens in this part of the country, Nottinghamshire, the frost has made a clean sweep of everything in the shape of evergreens. It is useless to particularise; all that is noticeable on pleasure grounds are Box trees, Yews, and Chinese Arbor-vitæ; everything else is being cleared away, and the gardens now present the appearance of a common where the Furze has been cut down. *W., South Notts, April 9.*

Pinus Sinclairii?—I have seen in your columns the names of various Conifers which have been killed, but Sinclairii has not appeared, owing I conclude to the name being changed. I had three; two I fear are killed, and the other very much injured; on examination a fine cone was found at the very top, where still there are signs of life. This cone weighs 1 lb. 10 ounces, and is of a beautiful form, and the seeds most firmly fixed. Have the kindness to tell me how best to get the seeds out of the cone. *C. E. B., The Hooke, Lewes.* [P. Sinclairii is said to be the same as P. Benthamiana. If so your leaves do not belong to it, and your tree is misnamed; from your account of the cone it would seem to be P. Sabiniana. In order to open the cone leave it for a few weeks in a warm dry place, it will then expand its scales and the seeds will fall out.]

Setting Grapes.—If your Correspondent will set his Damascus Grape with the pollen of free setting sorts (supposing his Vines to be in good health), he cannot fail to succeed. I have done so myself, and find it to answer very well (this season in particular), 20 bunches out of 40 on the Vine being quite perfect, and not a bunch that has not some berries on it; before I adopted this plan I could scarcely obtain a berry. *Devon.*

Strawberry Mulching.—I surfaced my Strawberries last season with the dung of spent Cucumber beds, leaves and stable dung mixed together, and I had not a dirty Strawberry for the season. *Devon.*

Golden Cherry Plum.—I have possessed this variety of the Cherry or Myrobolan Plum for some few years. It does not ripen its fruit in England earlier than the Cherry Plum, and is, I think, rather inferior in quality. The Yellow Myrobolan Plum, grown largely in Belgium for stocks, and called there "Mirabelle," gives fruit of the same pale yellow colour and quality. I have not thought the Golden Cherry Plum worthy of propagation, but I still possess my original imported tree. *T. R.*

False Mushrooms.—As you did me the honour (see p. 312) to notice prominently the Agaric I forwarded you for inspection, I beg to offer such information respecting the mode in which the bed, &c., was prepared as I then, as it seems, neglected to do. The bed which produced the curious variety in question (which we use largely for garnishing) was made with short dung from the stables about one month old, and which was worked up till fit to make the bed in an open shed. The depth of material was 16 inches; it was beaten firm, and when the heat had declined to 75° it was spawned with ½ a bushel of Cutbush's Milltrack Spawn. The size of the bed was about 12 feet by 7 feet, and it was covered 2 inches deep with soil which had been collecting for three years, such as parings of the sides of walks, soil knocked out of Cineraria, Geranium pots, &c. The bed has never had any covering upon it, and for three months it bore an excellent crop, free from, until recently, the variety alluded to, which showed itself in several places on the bed simultaneously. Other beds treated in every way similar to the one under notice have no signs of the spurious variety upon them, although one adjoining has been in bearing since the 7th Oct., 1860, and had on the 22d February, 1861, produced 160 lbs. weight of Mushrooms. I am therefore quite at a loss to account for the appearance of the variety of which I sent you specimens, more particularly since it is confined to this one bed, which like the others has brick walls for its sides. When fresh gathered it has a most beautiful white appearance, which exposure to the air discolours. *W. Young, Gr. to Capt. R. Barclay, West Hill House, Highgate.*

Black Damascus Grape.—Can any of your Correspondents inform me whether the old Black Damascus Grape is to be found in this country, except perhaps in some private collections. It is in the list of the Royal Horticultural Society, and, as a member, I have repeatedly applied for cuttings, but none have been sent. I have also had Vines under this denomination from two of the most eminent nurserymen, but they have each produced only the Black Hamburgh. It is a shy bearer and requires skilful management, and perhaps may have been discarded by gardeners on that account; but it is undoubtedly the finest black Grape which has yet come to our knowledge. *J. A.*

Ornamental Nettle.—I inclose for your inspection what I suppose may be termed a catkin of Böhmeria argentea. It has rather a singular and ornamental appearance, hanging as it does all round the stem of the plant. The inclosed is over 3 feet in length. It remains perfect for many weeks. The way in which it grows from the axil of the leaves, yet not out of the bud, as you will see from the bud attached to the catkin, may also be worth notice. *George Thomson, Stansted, Emsworth, Hants.* [The plant sent us is not what it is called. Böhmeria argentea, otherwise Pipturus propinquus, is quite different. As no leaves accompanied the flowers we are unable to say what Mr. Thomson's plant is.]

Lilacs Forced White in Darkness.—Having read the French account of forcing Lilacs in the dark, I thought that I would try the plan. I therefore lifted a plant with a good ball, put it into the Mushroom house, with some leaf mould round its roots, and well watered it, and last Saturday I counted 70 flowers on it, such as are enclosed, in full bloom. *J. Marthison, Barnton.* [You have succeeded in discharging colour, but your specimens require to be much improved by skilful management.]

Foreign Correspondence.

Quito, *January* 22, 1861.—I have intended for some time to write you in connection with Dr. Jameson especially in view of the interest you have shown in the introduction of Andine plants into Scotland, a country I intend to visit at some future time. I have enjoyed much satisfaction since I came to Quito in journeying with the Doctor in the country, and particularly upon the mountains, for nature is less likely than man to fatigue one in the Andes, and she repays one for all their labours and attention in discovering her secrets and unusual aspects.

But what I propose mentioning mainly—and I shall hope the topic will interest you—is the wealth of Amaryllidaceous plants, partly unknown, native to these mountains. I have now obtained 17 native species of bulbs, every one of which deserves a place in general collections, and most of which are decidedly elegant. And it has occurred to me that I may be able to forward you bulbs or offsets of all the species (if you should feel desirous of obtaining them), upon my return to the United States about June next. With this view I will briefly describe the plants in question. Some are probably in British collections.

1. Coburgia incarnata.—I find it at only one place, upon the bank of the Rio Machongra, near Quito, where it was discovered by Humboldt in 1802, classed by him under Pancratium. Perianth 4 inches, scarlet or deep flesh; scape 2½ feet.
2. Coburgia.—Orange flower. From Quito garden.
3. Coburgia.—Resembles No. 1, but perianth 5 to 6 inches. From Ibarra, in Northern Ecuador.
4. Stenomesson aurantiacum.—Common; small leaf, yellow flower.
5. Phædranassa obtusa.—Perianth red, green pointed; scape 2 feet. Common.
6. Stenomesson.—Resembles No. 4, but handsomer, fine leaf; flower bright yellow. Near Quito.
7. Elisena longipetala.—Native near Guayaquil, but

cultivated at Quito. White flower, limb of per. reflexed, stout habit.

8. Amaryllis?—From Napo River. Red flower.

9. An Amancaes.—From hill near Guayaquil. Resembles Ismene Amancaes of Lima, but fl. white and not yellow.

10. The Inca Lily.—This fine bulb is a Narcissus, or of that tribe in the Natural Order, and from Gualea far down on the western slope of the Andes, in the forest. Flower white, elegant and fragrant. Leaf very large, ovate. I cannot find that the plant has ever been described.

11. A bulb from the forest west of the mountain El Corazon. A large, fine plant, undescribed. Yellow flower.

12. Amaryllis?—Flower maroon colour. Alchipichi, north of Quito. Large flower and showy leaf.

13. Small leaved bulb from same place. Unknown.

14. Do. with yellow flower; neat leaf.

15. Callithauma viridiflora.—A fine plant; scape 3ft.

16. Bulb from Ventanas, west of Mountains. Unknown.

17. Bulb from forests of Nanegal. Unknown.

The foregoing all belong to Nat. Or. Amaryllidaceæ, and would make a fine collection.

Dr. Jameson sent you some time since seed of a plant resembling the Tiger flower, found at the base of Pichincha, which I hope you succeeded in growing. If not, as the bulbs are very small, they might be sent you in a letter. The flower is purple, and the plant allied to Tigridia.

You must have a number of plants produced from seed sent you by the Doctor not known elsewhere in Great Britain, and it would be well some time to have them classified, described, and published. There is so little intercourse between this region and the rest of the world—the mountains are so difficult and the forests so impenetrable—that a knowledge of the natural productions will get out but slowly into the world. And as to the propagation of plants, those taken from the upper regions of the mountains appear to be grown with difficulty in our northern countries. Seeds sent home by me have generally failed. It would be a pleasant thing to see the 16 or 18 species of Ecuador Gentians in a collection; but they are probably the most difficult of all to produce. *C. R. Buckalew.*

[We are indebted for the foregoing letter to Isaac Anderson Henry, Esq.* who has succeeded in raising several of these Ecuadorian Alpine plants, among which are, some of the Gentians mentioned by Mr. Buckalew. His experience, however, coincides with that of his enthusiastic correspondent as to the great difficulty of getting seeds from the lofty mountains of the Ecuador to vegetate.]

Societies.

Royal Horticultural, *April* 9 (*Floral Committee*).—Rev. J. Dix in the chair.—To Messrs. Veitch was awarded a certificate for a collection of plants consisting of Azaleas; Ardisia crenulata prettily ornamented with crimson fruit; white and pink-flowered Epacrises, the sweet-scented Rhododendron Edgeworthi with two blooms on it; and a noble specimen of Erica hiemalis. The same firm also showed an Epacris called Vesta—white tipped with pink—to which a Label of Commendation was awarded. A similar award was likewise made to Mr. Turner, Royal Nursery, Slough, for a grey edged Auricula named The Rev. Geo. Jeans, a promising variety well marked and possessing a well defined good white paste. The same exhibitor also received a special Certificate for finely bloomed plants of Maclean's Unique, Taylor's Glory, Conqueror of Europe (large and fine), and the green edged kind called Smith's Waterloo, all well known to be excellent Auriculas in their respective classes. From Mr. Turner likewise came Cineraria Miss Eyles, a dwarf free blooming variety, white with a dark centre broadly edged with purple, and other sorts, descriptions of which have appeared in former reports. To Mr. Bull, Nurseryman, King's Road, was awarded a first class certificate for Campylobotrys refulgens, a plant with leaves a foot or so in length, 3 or 4 inches in width, and beautifully ornamented with silvery looking veins. The same exhibitor likewise showed other fine foliaged plants which have been noticed in previous reports. A first class certificate was awarded to Mr. Kinghorn, Nurseryman, Richmond, for Azalea Kinghorni, a rosy pink variety of good form and substance. Mr. Salter of Hammersmith received a Label of Commendation for Veronica Chamædrys pulcherrima, a pretty hardy variety with yellow variegated leaves, and from the same establishment also came variegated varieties of Lunaria biennis, and Symphytum officinale and tuberosum; to the last, which had leaves broadly edged with yellow, was awarded a Label of Commendation. Messrs. Parker and Williams again showed Statice propinqua, a half shrubby greenhouse hybrid raised between S. Halfordi and S. puberula, and resembling S. profusa, a moderately vigorous free blooming blue and white flowered Hybrid of similar origin. From Messrs. Smith, of Dulwich, came Cinerarias and two varieties of Pelargonium suitable for forcing; one named Snowdrop was white and blotched and pencilled in the upper petals with purplish crimson; the other, named floribundum, was a rose coloured kind with dark spotted orange crimson top; to both were awarded Labels of Commendation. Messrs. E. G. Henderson showed Rudgea leucocephala, a stove shrub with ample deep green foliage and snow white blossoms, borne in compact terminal clusters.

April 9.—(*Fruit Committee*).—C. W. Dilke, Esq., in the chair. A paper on insect depredations on fruit and fruit trees was read by Mr. Graham of Cranford. From Mr. Spary, of Brighton, came examples of new Black Hamburgh Grapes, to which was awarded a Label of Commendation. They were well ripened and finely coloured. Pitmaston Orange and Elruge Nectarines, from trees in pots, small but well ripened, sweet and juicy, came from Mr. Gardiner, of Eatington Park, near Stratford-on-Avon; to these a Certificate was awarded. Of Apples, nine sorts all in good preservation came from Mr. Cole, St. John's Wood. Among them were Blenheim Orange, rather past their best, but still sound; Ashmead's Kernel, Spice Pippin, a long keeping firm-fleshed kind; and Waltham Abbey Seedling. From Mr. Rivers came an Italian Apple named Mela Carla, or Malcarle, a variety long since figured in the Transactions of the Horticultural Society; it appeared to be an excellent keeper, but requires a better summer than we have to ripen it in perfection.

April 9.—(*Ordinary Meeting*).—C. W. Dilke, Esq. in the chair. On this occasion 75 candidates were elected Fellows, and a ballot took place for plants, the names of which will be found in our advertising columns of last week. The result of the ballot will be given in next Number of the Society's Journal.

Botanical of Edinburgh, *February* 14*th*.—Dr W. H. Lowe, President, in the chair. 1. On the Effects of the late Frost on Trees and Shrubs, by Mr. James M'Nab; with some additional remarks by Professor Balfour.

After referring to the state of the weather between the 18th and 26th December, 1860, and the indications of the register thermometer at the Botanic Garden, Mr. M'Nab proceeded to describe the effects produced on the shrubs and trees in the Garden. The effects of the late frost are now being seen on the evergreens. Many species which did not at first seem injured are now seen to be destroyed. The evergreen Oaks (Quercus Ilex), especially in damp situations, will require to be cut down. One large specimen, 35 feet high, having a stem 6 feet in circumference, with a hemispherical top 135 feet round, has perished. The injury sustained by these Oaks was first seen in their stems, and in the points of their shoots, and subsequently the intermediate portions became brown like the rest of the tree. The Lucombe Oak (Quercus Cerris var.) is injured, and shows the effects in the same way as the evergreen Oak. In the case of the cork tree (Quercus Suber), although all the young shoots are gone, the branches and stems seem as yet untouched, evidently protected by the thick bark. The leaves of all the large plants of Arbutus Unedo have become black, and the bark on the lower parts of the stem has burst and is coming off in flakes; the wood has also become dry and discoloured. It is now evident that all the specimens of Arbutus in the Garden will require to be removed; many of them are 15 feet in height, with fine tops 36 feet in circumference. All the plants of the scarlet Arbutus Unedo are likewise destroyed. This variety was considered hardier than the common species; a larger proportion of the plants having withstood the severe winters of 1837-38 and 1844-45. The Arbutus Andrachne, although not looking so bad as the A. Unedo, is also much injured. One fine plant, 10 feet high, having a stem 2 feet 7 inches in circumference, with a globular head 45 feet round, seems in a precarious state; the leaves on the lower 6 feet are becoming discoloured. All the specimens of Rhamnus alaternus in the Garden, many of them 10 feet high and 30 feet in circumference, have been killed. The Laurus nobilis (Sweet Bay) is also killed; the largest specimen was 6 feet high, and 18 feet in circumference of branches The Aucuba japonica is killed to within 18 inches of the ground, the largest plants being 7 feet high and 20 feet round. All the varieties of Laurustinus are killed to the surface of the earth, the largest plants being 8 feet high and 18 feet in circumference. The Portugal Laurels (Prunus lusitanica), particularly those plants which had been freely pruned during previous years, are now parting with their dry leaves, while the free growing unpruned specimens are becoming soft and black in their foliage, and, where growing in damp situations, the stems are very much injured. In the case of the Bay or Cherry Laurel (Prunus Laurocerasus) many have their stems totally destroyed, and, where not killed, the leaves are of a dull brown colour. The points of many of the deciduous trees have suffered much, such as the Walnut (Juglans regia), Sumach (Rhus elegans), also the Oriental Plane (Platanus orientalis), Catalpa syringifolia, Pawlonia, &c.; but the full extent will not be thoroughly known till spring advances. The deciduous shrubs, particularly the early flowering sorts, have had their flower-buds much destroyed, such as Azalea pontica, Ribes sanguineum (in some situations), Cydonia japonica, Deutzia gracilis, &c. Roses have also suffered very much, all the climbing or wall Roses being destroyed; the tall Standard-budded sorts are also killed. The Mistleto (Viscum album) when growing on Apple stocks, and also on the branches of Mespilus Canadensis, has been very much injured; but it is quite green and healthy when growing on Oak and Thorn. The late frost, in situations where the thermometer fell below zero, has proved very injurious to the buds and young shoots of many fruit trees. The injuries in many cases will not be sufficiently known till the shoots containing the blossom buds expand. At the present time, the buds are swelling fast, and if cut longitudinally, the young flowers will be found quite brown. The injury is particularly observable on all wall trees, such as the Peach, Nectarine, Apricot, Pear, and Apple. The buds of the standard fruit trees, in certain situations are all much injured. The Fig trees are destroyed to within 18 inches of the ground. Since the publication of Mr. M'Nab's first report in the *Courant* on the effects of the frost, on 11th January, the injuries inflicted on the Coniferæ are becoming more and more visible. For a time it was thought that the specimens of Araucaria imbricata would get over the browning of their points, which was the first indication of the effects of the frost upon them. The weather for three or four weeks after the frost was very favourable for their recovery. In all low, damp situations, the plants are now found to be wholly destroyed, being soft and brown all over, and having the tops and the points of the branches bent down; while in dry situations the branches, though more or less brown, are greener and more rigid. About the 4th February the points of many of the branches were blown off; and, as the branches are hard and firm at the distance of a few inches below the broken points, hopes are entertained that they may yet push out buds. During the frost there oozed out from the stems of all the large Araucarias in the garden a quantity of thick resin. This was not observed on any of the smaller specimens. The largest plant in the garden, now 23½ feet high, with a stem 4 feet 3 inches round, the circumference of the branches being 54 feet, has suffered more than any of the other large specimens. During the last three weeks, many specimens of the Cedrus Deodara are showing evident signs of great injury—the leaves assuming a greyish brown hue, and being rapidly thrown off. The old wood is affected, but it is hoped the plants will recover. The Abies Morinda in all situations has also become very brown, while in damp places all the young shoots are dead, and, in some cases, the entire plant. The branches of all the plants of Cupressus macrocarpa seem destroyed. The largest plant is 18 feet high, and 26 feet in circumference of branches, with a stem 3 feet in circumference. By cutting its branches, and taking off 6 or 8 feet of its stem, hopes are entertained that it will yet sprout from below. Cupressus torulosa, 10 feet high, is also killed. Cupressus Lambertiana and C. sempervirens, also of large sizes, seem more or less injured. Large old plants of Pinus Pinea are totally destroyed, both on high and low parts of the Garden, the largest specimen being 25 feet high, having a fine woody stem 4 feet in circumference. Pinus insignis, P. radiata, and P. muricata are all alike brown. Mr. M'Nab contrasted the effects of the winter with those of the winters of 1837-38 and 1844-45, and concluded by giving reports on the injuries produced in other gardens:—1. From Mr. James Stratton, Botanic Garden, Cambridge; 2. From Mr. James C. Niven, Botanic Garden, Hull; 3. From Mr. John Bain, College Botanic Garden, Dublin; 4. From Mr. David Moore, Glasnevin Botanic Garden, Dublin; 5. From Mr. Daniel Ferguson, Botanic Garden, Belfast; 6. From Mr. A. Anderson, Oxenford Castle, near Edinburgh; 7. From Mr. William Baxter, Ricarton, near Edinburgh.

Professor Balfour made remarks on the splitting of trees which had taken place. He also read letters from Mr. W. Scott Elliot as to the state of the thermometer at Kilgraston, Strathearn, Perthshire; from Mr. Humphry Graham, as to the thermometer and vegetation at Bilstane, near Kirknewton, about 800 feet above the level of the sea; from Mr. James Stewart, Cairnsmuir, Wigtonshire; from Mr. William Stewart, Dalhousie; from Mr. Peter Liddell, Stornoway; and from Dr. J. C. Innes, Forres. In some of these situations the thermometer had not fallen below 28°. At Bilstane the lowest temperature was 4° Fahr. on the 24th December. On the last-mentioned property the Conifers are uninjured. Professor Balfour then referred to the reports given of the season of 1683-84, and detailed the observations of Bobart regarding that very severe winter. The effects on vegetation described by Bobart are very similar to those observed during the recent frost. There was extensive tree-splitting, destruction of many of the ordinary hardy evergreens, plants in low situations suffering much more than those in elevated positions. Bobart concludes—"It is hard to say what is winter-proof even among our native plants, except Box and Ivy, which stand in defiance of all." Evelyn states that in 1683-84 the following plants were destroyed:—Cork trees, Cedars, Alaternus, Rosemary, Halimus or Sea Purslaine, Cypress; and the following were much injured: Ilex, Scarlet Oak, Arbutus, Bays, Laurels, Laurustinus, and Hollies.

Professor Balfour exhibited a gall on Pinus sylvestris from Finzean, Aberdeenshire, which had been given to him by William Brown, Esq., F.R.S.E. The following is the description given of it by Mr. James Hardy, Penmanshiel, to whom it had been sent for examination:—"The oval mass of white resin on the young shoot of the Scotch Pine I found to be occasioned by the caterpillar of a moth which inhabits the interior of the wood beneath this hardened tubercle. On breaking it open it was hollow, excepting pieces of resin and the ferruginous excrements of the inmate, which, however, was invisible till I split up the shoot, and got it in the part occupied by the pith, with its head downwards, quite secure from the winter researches of hungry birds. Till it had thus withdrawn it had lived upon the wood beneath the tubercle, which was mostly frittered away; and but for this covering its proceedings would have been open to the day. The turpentine had collected round it from the irritated resin receptacles. Judging from an opening there, it had commenced operations near the base of a side shoot, underneath which was dug its gallery. The tubercle is 1 inch long by ¾ broad. The caterpillar is half an inch long and 1 line thick. It is of a testaceous or nankeen yellow colour; the head and the middle of the first segment above are shining black—the latter paler, with a white line in the centre; there is a row of wide-set black points on the fore part of each segment, and a pair behind; the spiracles are also black edged: the anal segment is nearly concolorous; there are also a few dots on the segments beneath and at the bases of the prolegs, and the legs have black patches; the parts about the mouth are mostly pale. It is thicker backwards than it is anteriorly. It is very sluggish, in this respect, as also in appearance, resembling a fat caterpillar that lives in the interior of Thistle stems. The only resin-moth that I have an account of is the Tortrix resinana of authors, Orthotænia resinella of Stephens. The actions of the two correspond, but the caterpillars are dissimilar. The caterpillar of O. resinella is ochre-yellow, with a brownish red head and throat, and is only four lines long. Its history is given in Kollar's "Treatise on Insects," p. 355-56. This one from the

* It is from C. R. Buckalew, Esq., the American Minister at the Republic of the Equator, an enthusiastic and an intelligent botanist, whose tastes incline him most to the bulbous tribes of plants, and to which his indefatigable efforts have been mainly confined in his collectings in those interesting but very impenetrable forest regions, on the slopes of the lofty Andes surrounding the ancient city of Quito.

Pine may, I apprehend, attack older wood than O. resinella does. Dr. Lowe sent a specimen of the larva to Mr. H. T. Stainton, who says—"The larva is a Tortrix, and I should expect it to be Retinia resinella,"—thus confirming Mr. Hardy's conjecture.

Mr. M'Nab gave the following report on the flowering of plants in the Botanic Garden: Eranthis hiemalis, Jan. 26, 1861; Crocus susianus, Jan. 28; Rhododendron atrovirens, Jan. 28; Galanthus nivalis, Jan. 31; Anemone hepatica, Jan. 31; Leucojum vernum, Feb. 1: Dondia Epipactis, Feb. 1; Sisyrinchium grandiflorum, Feb. 5; Omphalodes verna, Feb. 6; Pothos fœtidus, Feb. 9; Crocus vernus (yellow), Feb. 12.

Notices of Books.

A Residence in Jutland, the Danish Isles, and Copenhagen. By Horace Marryat. 2 vols. 8vo. (Murray).

In a couple of capital volumes Mr. Marryat tells his readers how he occupied himself for a year and a half in that Cimbrian region from which so many of us derive our origin. It is not a little curious that although within an easy sail of England, the land of the Jutes is as little known to the English as Muscovy; and yet, according to our lively author, it may be visited and travelled through and lived in with no discomfort from which a traveller need shrink. "My wanderings through the kingdom of Denmark," says Mr. Marryat, "have to me been of great interest. Still, recollect, I do not recommend this tour to every one. The boy in the Blues—a moustache naissante—the youth late escaped from college, with leave of absence, and a life of hard military duty, or the prospect of a country parish before his eyes—may far better employ his time. Let him stop his two days at Copenhagen, fish his way up Norway, shoot it down Sweden, quaff the champagne of the 'mère Cliquot' at St. Petersburg—he'll get it nowhere else—buy turquoises of the Tartars at Moscow (they'll all turn green a week after), on to Constantinople, poke his nose in a harem garden and get shot at, or say he did—ten to one if he's believed, if it's true—and then on, on, avoiding all the interstices of travel, seeing what is best worth visiting in the world, sowing his wild Oats, liberally, not wantonly—anything better than a later crop—and return to his own country and 'do his duty in that state of life to which it has pleased God to call him.' But for those more advanced in life—who have been everywhere and have done everything—who abominate being whirled for pleasure across the fair face of Europe by a locomotive—who detest German baths and their wickednesses—who, feeling they really know and are judges of what is grand and beautiful in this world, can afford, without losing their dignity, to be pleased with what is not perhaps first-rate—who like to drive through a country, to study its history, its customs, and its legends—who are content to take people as they find them—who prefer civil and kind treatment, with moderate prices, to fawning obsequiousness and robbery—to such people I can conscientiously promise much pleasure, much interest—especially if in spring time—in their travels through the ancient province of Jutland and the fertile sea-girt islands of the Danish Archipelago."

With such a companion any country would be interesting, for the author is "well up" in Jutland history, in antiquarian learning, and in that sort of gossiping anecdote with which a skilful writer knows how to make his pages sparkle. In a country house, on a hopelessly wet day, these very enjoyable volumes would be a treasure.

In his progress Mr. Marryat visited Hamburgh and Holstein, Sleswig and its islands, Copenhagen, Elsinore, and all the north of Zealand. Thence crossing into Jutland, he passed by Aalborg and Viborg into the islands of Funen, Falster, and Bornholm: and returning into Zealand witnessed the destruction by fire of the once beautiful palace of Frederiksborg, with a graphic description of which melancholy event the narrative concludes.

Of Bornholm, not long since recommended to English agriculturists who could not manage to live in England, we have an interesting account, from which we must borrow a few paragraphs:—

"We pass through a succession of cultivated fields. Stubble days gone by, all is ploughed; many portions resown with Rye. Farmers' carts, horses, and men, in full activity. In the background rises a ridge of purple rocks; while beyond these, towards the sea, among the thick protecting forests of Ash and Oaks, lie the farm-houses—small establishments when compared with those of Jutland. The farms here are seldom of more than 200 acres. Land has lately much increased in value. One farm, which some twenty-five years ago was valued at 2000 dollars, was lately sold for 12,000. The peasants are most careful cultivators. When the Rye is sown, not one pebble is allowed to remain on the surface of the field. Were it a Geranium bed, it could not be more delicately raked or the ground finer. for this there is but one explanation—the peasant is here no tenant: the land is his own property: four or six horses are the extent of his possessions, and a few farm boys his labourers. The farm buildings have a 'cocky' appearance about them, unlike to sober Denmark. Each gable, be there ten of them, is surmounted by a vane."

"The old customs of Bornholm differ little from those once prevalent in the rest of Denmark, though now gradually fading away. Christmas, as in other countries, is a season of universal rejoicing and merriment. 'Gud signe eders Juul: Juul til Paaske'—May God bless your Christmas; may it last till Easter. The salt-cellar remains on the table during the festival of Juul; Christmas cake and the Juul tonne, which dates from Pagan days, to which all strangers are welcomed with 'You shall not carry our Juul out of doors.' From the 24th of December until the New Year no one works, neither man nor woman. The farmer drinks during that period of repose a considerable quantity of honey mixed with brandy—a sort of hydromel, the favourite beverage—and devours huge Christmas cakes; and the young people love the dance almost to frenzy. The New Year, however, is not danced in, as with us; it is 'shot in' in Bornholm. Everybody who possesses or can shoulder a gun or discharge a pistol fires it off as the clock strikes 12 large parties of the peasants mount their steeds, and, visiting the farms of their neighbours, fire against the window-panes, startling those slumbering within—a somewhat uproarious manner of wishing them "a happy New Year." On the festival of the Three Kings in every house is consumed a tallow candle with three wicks; then, at six weeks' distance from Christmas Day, the Bornholmers indulge in one week of fun and jollity, relics of the old Papistic carnival, termed 'Fastelavn' (Shrovetide). They do their best to disguise and costume themselves, men as women, women as men, and with masks on their faces, go round and visit the different houses. Sometimes there are cavalcades on horseback, horses decked out as well as their riders; but for this one week they dance from morning till night and from night till morning; and Damm, the coachman, who, among other accomplishments, plays the fiddle, assured me that by the time the Bornholm week's carnival is spent his arms are well nigh played out of their sockets. 'Do everything by rule, as the tailor said when he killed his wife with a rule,' is a vulgar—very vulgar—Danish proverb, but one which the island peasants adhere to strongly, more especially as regards the traditions of the Church of Rome. On Good Friday 'they set their willows.' They have an especial day for the planting of everything, and as for signs and wonders, the life of a farmer must be a torment to him. If on Ascension Day the Rye be not in ear, woe betide them; or again, should it rain on any one of the Sundays when the Gospels are read from St. Luke, it is a bad look-out for the harvest. A great festival, too, is Hellig Bonder's Day, the week after St. Volborg's, the time for sowing the corn and the week when people clean out their houses."

"This morning we set off on an early walk, passing by an obelisk erected to commemorate the visit of his present Majesty, when a young man, to his loyal possession of Bornholm—a building open to the public on high days and holidays, and to-day all is motion and activity, for it is the annual cattle-show of the island, and prizes are awarded to bulls, bullocks, pigs, *et hoc genus omne*. Long tables are spread out under the trees with coffee, tea, and smeer brod, to say nothing of schnapps; and while the judges are busy awarding the prizes, the farmers and their families are occupied with their inward restoration. Very sturdy little bulls—small, like all island breeds—stand quiescent under inspection. A prize ticket is fastened on to a dun coloured animal with a white streak across his back; then we make our way on, up and down, down and up, till we come to the entrance of a huge encampment, surrounded by an earthen vallum, here termed Gamleborg. Nobody knows aught of its history; it is now studded over with trees, but it is worth while to climb on the opposite side merely to look down on the valley beneath."

As an example of Mr. Marryat's anecdotes, we select his account of a farming dame who lived on the island of Thorœ:—

"Later, Thorœ came into the possession of Ellen Marsviin, who here first appears in a new light—no longer Ellen Munk, but as a bride, wife of Knud Rud of Sandholt, one of the richest noblemen in all Denmark, who died in 1611. Here she carried on a great traffic in 'staldœxene' (cattle), furnished the king's troops, and well, too; for a French writer, in this very year, after praising the appearance of the Danish sailors and the army on board the fleet, adds, 'There is no luxury, but a wonderful abundance of good meat, as well as all the necessaries of life.' Old Ellen built here a stone house, called Marsviinsholm. She was, however, hard on the peasants, unlike her first husband, Ludwig Munk, who was the model landlord of his age; so her memory is not revered. The people tell how one day she staked the island of Thorœ against his majesty at cards, and lost it. At first Ellen declared it was only fun, that she never played in earnest, but Christian was not to be put off in that way; so she begged to keep it until after crop time; and, to spite the king, sowed Thistles; the land in consequence became so bad the king would not have it. She got into hot water with the Church, to which she had no idea of being a benefactor without ruling and regulating all appointments even down to the gravedigger."

Here is another, like to which are many more:—

"In the days of Christian IV. our garden was known by the appellation of 'Kronborg's Lundehave,' and here the king possessed a 'lyst' house, where he loved to pass his leisure hours and drink his wine in company with Mrs. Karen Andersdatter, whose son, Hans Ulrik, one of the Gyldenlœves—a distinguished man—became later Governor of the Castle. As for poor Karen, she grew blear-eyed, had to wear spectacles; so the king married her off to a parson. You will see her portrait at Rosenborg—not the lady with pearls in her hair: she's another, Kirsten Madsdatter, who died suddenly while sitting at her looking-glass, braiding those very ornaments among her golden tresses. An awful warning to bad Qvindfolk and others.

"Christian IV., in his journal of May 5th, 1629, notes down: 'I Christian IV. went from Frederiksberg to Kronborg. A little boy opened the door by the chimney of the kitchen, out in the garden-house (Kronborg Lundehave); and when I sent to see who was there, there was nobody.' Not very alarming, but he was always seeing visions. Here too he made his 'cure' and took his powder for 'epileptic fits.' Not that he suffered from them more than you or I. He got drunk, tumbled down like his neighbours, and on his recovery declared it was 'epilepsy.' No one contradicted his Majesty: it was not etiquette: so he believed it and betook himself to powders—powders composed of 'scrunched malefactors' skulls,' mingled with some bygone nostrum: the greater the villain, be he hanged or decapitated, the more efficacious the remedy.

"Capital punishment still exists in Denmark: none of your new-fangled philanthropic guillotines, but decapitation, as in days of yore, by sword and block; and now, even in the present century, when an execution takes place either in the island of Amak or Mœen, the epileptic stand around the scaffold in crowds, cup in hand, ready to quaff the red blood as it flows from the still quivering body of the malefactor."

As for the natural vegetation of the country near Elsinore at the end of April, it alone should tempt a stranger to turn his steps thitherward:—

"Along the coast extends for miles a beechen forest with walks cut out for the delectation of the visitors: no underwood—a shady canopy overhead, under which the exhilarating sea-air circulates. The Beech are now leafless, but the ground is carpeted with green Mosses, through which pierce the delicate flowers of the snowy Wood Sorrel with its trefoil leaf, and the Wood Anemone, its petals varying from rose to white; in the marshy parts below we find the golden Heste-hov (Horse's-hoot), Lamba Blom, Fruers Særk (Our Lady's Smock), and the Fladstierne; the pale green leaves of the Lily of the Valley and the Conval have already protruded themselves, but shiver and tremble in the blast as though they had acted unwisely; the Cowslips (Koe-driver, Cow-driver, as they here call them) and the Oxlips—shame on them for their effeminacy!—tuck their blossoms sturdily under their stalks within their coronal of leaves, determined to bide their time and not be caught committing any imprudence."

Two stories more and we break off. The first concerns the mysteries of Cuckoo:—

"As we strolled through the woods, the voice of the cuckoo rang shrilly through the air, entirely, too, devoid of Danish accent. Many naturalists declare that the notes of the singing-birds differ according to the climate in which they dwell. Perhaps I am hard of hearing, for I have never yet found it out. But if you wish to know why the cuckoo builds no nest of its own, that I can easily explain according to the belief in Denmark.

"When in early spring-time the voice of the cuckoo is first heard in the woods, every village girl kisses her hand and asks the question, 'Cuckoo! cuckoo! when shall I be married?' and the old folks, borne down with age and rheumatism, inquire, 'Cuckoo, when shall I be released from this world's cares?' The bird in answer continues singing, 'Cuckoo!' as many times as years will elapse before the object of their desires will come to pass. But as some old people live to an advanced age, and many girls die old maids, the poor bird has so much to do in answering the questions put to her, that the building season goes by; she has no time to make her nest, but lays her eggs in that of the hedge-sparrow."

The last relates to a practice we had not read of before. The author has been to the Veirhœi, one of the highest points in Zealand:—

"We returned to the castle to lunch; a charming residence, fitted up with all possible comforts, nothing too fine for use—family portraits and collection of stone antiquities found in the barony itself. Then we visited the gardens, rich in Roses; in the potager I observed a row of the Helleborus viridis. This plant is found indigenous in some parts of England, near the ancient hunting lodges of our Plantagenet sovereigns, and was used in the days of archery for poisoning the arrow-heads." Possibly Helleborus fœtidus is here meant.

Let us add that Mr. Marryat's volumes are set off by some of the most charming woodcuts that modern art has produced, among which is a view of the beautiful Castle of Frederiksborg, as it once was.

Trade Lists Received.—Vilmorin & Co., Paris: New List of Greenhouse and Hothouse Tree Seeds. Also Catalogue of Mexican Seeds received from Roezl & Co. Also Supplemental Catalogue of Tree Seeds.

Garden Memoranda.

J. Day's, Esq., High Cross, Tottenham.—Few gardens attached to suburban residences contain so rich a collection of Ferns and Orchids as this does. Among Ferns especially are specimens whose equals both in point of size and beauty it would be difficult to find; we allude more particularly to Gleichenias, of which Mr. Day possesses plants 5 and 6 feet and even more in height, and nearly as much in diameter! These are G. flabellata, dichotoma, dicarpa, and Speluncæ, the whole of which have wintered safely, and exhibit all the appearances of robust health. Of tree Ferns there are also some beautiful examples, more especially of Dicksonia medullaris, the great fronds of which reach the top of the house, and of Cyatheas; of Hemitelia horrida there is also a noble plant, and of scarcely less dimensions are Lastrea villosa, a kind with very handsome fronds, and two species of Angiopteris. In baskets suspended from the roof was Drynaria diversifolia, whose long graceful leaves falling in rich profusion over the sides of the basket had a wonderfully fine effect. Some of the Aspleniums, too, though not in baskets were also extremely handsome, one or two kinds having fronds five and six feet in length. Of Todea africana we noticed a fine plant, and the beautiful leaves of Thyrsopteris elegans are admired, and deservedly, by all who see them. Of such examples of Ferns as these, together with plants of smaller size, a house 50 feet in length is full, and in other compartments were beautiful examples of Hymenophyllums and Trichomanes.

Among Orchids are specimens not less remarkable; one in particular, Dendrobium densiflorum, has now on it no fewer than 90 bunches of rich yellow or rather orange blossoms, and many of the bunches measure quite a foot in length. Such a plant would indeed be grand in the extreme were it not that the majority of the bunches of flowers issue from situations too low on the stems to show to advantage, the leaves overtopping them and partially hiding them from view; as it is, however, it is a glorious specimen, nearly 5 feet in diameter, and well worth travelling miles to see. Of other Dendrobes of the same species there are also good plants coming into flower, and an example of the pale variety of it is just opening its blooms. Among other Orchids well worth inspection are Vanda suavis, with large spikes of blossoms just now in beautiful condition; the charming Odontoglossum Pescatorei, O. niveum, Arpophyllum giganteum, with seven spikes, the pretty little shell-like blossoms on which are just about to open; Dendrobium Farmeri, white, delicately shaded with pink and blotched in the centre with orange—a delightful contrast of colours; the rich orange Dendrobium aggregatum, Cattleya Skinneri; several plants of Lycaste Skinneri, Dendrobium Cambridgeanum, one of the best of the golden yellow kinds with rich deep brown blotched lip; and last, but not least, Phalænopsis grandiflora. Of the last, Mr. Day has never been without flowers at all seasons for years. Less important plants in point of size, either in bloom now or fast approaching that condition, are numerous.

The principal Orchid house is 30 feet long and 11 feet in width, and is warmed by means of hot water in iron pipes; it has slate shelves round it, and a flat slate-topped table or bench in the middle for placing the plants on; below the latter is a hollow chamber, but not heated, that being considered by Mr. Day's gardener to be detrimental to the growth of Orchids, inasmuch as it robs them of the amount of moisture required for their healthy development, and certainly nothing could look better than the plants treated on the comparatively cool moist bottom plan practised here do; not a discoloured leaf could be detected among them, and all seemed to possess unusual vigour and luxuriance.

Of variegated Orchids we also noticed an interesting collection; the plants of which it consists are placed on silver sand in a box with a glazed moveable lid, fixed inside the Orchid-house, over the hot-water pipes, which passing as they do through a little brick chamber built below the box, furnish the latter with bottom heat; a little door in front, which can be opened or shut as required, serves as a regulator of the temperature; thus treated the plants look uncommonly healthy, and the collection, containing as it does all the best and newest kinds, is by no means the least important feature of the place, which is altogether one of unusual interest to lovers of Orchidaceous plants and Ferns.

Tregullow, Cornwall, the Seat of W. Williams, Esq.—There is now in flower here a beautiful specimen of the Sikkim Rhododendron Aucklandi. The plant is about four feet and a half high, and has four bunches of flowers on it; the upper and central one contains eight flowers, some of which are five inches in diameter, of a delicate white colour, beautifully tinged towards the edges with pink; the whole presenting as handsome and striking an example of a Rhododendron as can well be conceived. There is also in the same Conservatory a splendid specimen of Rhododendron javanicum, 14 feet in circumference, with 20 bunches on it now in full bloom, and about 50 more buds yet to blossom. In order to flower this handsome Rhododendron satisfactorily it should have its wood well ripened in the summer time so as to be hard and firm before winter.

Miscellaneous.

A Microscopic Age.—If I were to point out what is the most striking characteristic of the present century, I do not think that I should dwell upon it as a scientific age, or as a commercial age, or as a mechanical age, or as an itinerary age, or as a missionary age—by all which epithets it has been described—but as a microscopic age. Nothing appears to be so wonderful as the change which has occurred in the common doctrine of magnitudes. Little things have become great, and great things have become small. As the modern science of chemistry could not spring into existence until an accurate balance was invented, so the modern science of physiology and the whole theory of mortal life, as we now comprehend it, has grown out of the microscope. This is a literal fact, and it is symbolic of a much wider one—that all modern research has become microscopic. Painting has become microscopic, and gives us details of Mosses and Lichens, which half a century ago would be laughed at as a useless waste of time. History has become microscopic, and enlivens the descriptions of courts and senates with a minute account of carpets and cakes, dresses, dinners, and other trivialities. Poetry has become microscopic, dwells even to morbidness on the blue fly singing i' th' pane, and tells us that the meanest flower which breathes can give to the bard thoughts that do lie too deep for tears. *St. James's Magazine.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—While cold drying winds and occasional bright sunshine prevail considerable attention will be necessary to maintain a moist healthy atmosphere in this house, and no effort necessary to secure this should be spared, for it is needless to expect flowers to last in a dry warm atmosphere. A thin shade should be used to break the force of the sun, and in giving air every care should be taken to avoid drying currents, opening the top ventilators only as long as these will suffice to prevent too high a temperature, and every available surface of bed or border should be kept constantly moist, in order to secure plenty of evaporation to counteract the drying effects of the external atmosphere. Give frequent attention to climbers in free growth, regulating the young wood before it gets entangled, and see that Hardenbergias, &c., are properly supplied with water at the root. At this busy season there is great danger of neglecting winter-blooming plants, such as Epacrises, Daphnes, &c., but if these are to be had in anything like perfection next season they must be properly cared for now. Show houses are generally kept too close and warm for Epacrises and Heaths, and in that case they should be removed to the greenhouse as soon as they are out of bloom, affording them a rather damp and shady situation for a few weeks. Attend to repotting such as have started after being cut back, and keep them moist and rather close until the roots get hold of the fresh soil. Shift and attend to tree Mignonette, for flowering the ensuing season, and see that tree Violets are not infested with red spider.

FORCING DEPARTMENT.

Pineries.—In cases where a regular supply of fruit is required at all seasons, it will be necessary to examine the stock of plants frequently, marking those considered the most likely for fruiting, so as to be able to keep them rather dry at the root for a month or so, which will in most instances have the desired effect of checking growth and throwing the plants into fruit. The only effectual method, however, of securing a supply of fruit at any particular time is foresight in the management of the stock, taking care to get the growth well ripened in sufficient time to allow of affording the plants a short period of comparative rest, which is the only certain means of inducing them to fruit at any desired season. With plenty of convenience this is easily enough managed, but where the accommodation is limited, it is by far the most difficult part of the culture of the Pine. Black Jamaicas and Cayennes are the best varieties for winter fruiting, and the stock of these should receive every attention at this season so as to induce them to make free growth, and a portion of them should be shifted into their fruiting pots as soon as possible. Use every means to afford growing stock a moist atmosphere.

Vineries.—In cases where Muscats are grown in the same house with Hamburghs and other free setting varieties the temperature must be kept sufficiently high during bloom, and until the berries are fairly set, to suit the Muscats; for a crop of these cannot be depended upon from the most healthy Vines, unless they can be afforded a brisk temperature while in bloom and setting their fruit. It will be better, however, to risk having the Muscat bunches somewhat thin than to injure other varieties by maintaining a night temperature of 75°, which is sometimes the practice; 68° or 70° will be found quite sufficient. Get the borders prepared for planting out young Vines, and if these are started into growth before planting do not keep them too warm, or it will be difficult to prevent their sustaining a check after planting out.

Melons.—Encourage those newly planted out with a moist warm atmosphere, so as to get them into full growth as quickly as possible; but plants that are fairly established should be kept cooler, admitting air on every favourable opportunity, in order to secure short-jointed fruitful wood.

Fig House.—Maintain steady treatment, as any check is apt to make the trees cast their fruit. Aim at preserving uniform growth.

Mushroom House.—Trap woodlice by means of flower-pots laid on their sides, placing in the bottoms of them a Mushroom, a cut Potato, or a little dry Moss. Watering occasionally round the sides of the bed with boiling water will also effectually thin their numbers.

Strawberries.—Water regularly and give abundance of air. Those which have ripened their fruit may be planted on a rich border to make runners; they may possibly also produce some late fruit if the autumn proves favourable.

FLOWER GARDEN AND SHRUBBERIES.

The cold winds which we have for some time past been and are still experiencing, renders the management of bedding plants somewhat difficult; it is yet dangerous without great caution to risk even the hardier kinds from under the protection of glass. All that can safely be done until the weather becomes warmer, in the way of hardening stock preparatory to its being planted out, is to give as much air as circumstances will admit without injuring the plants, and to place Calceolarias and the strongest Verbenas in turf pits, where they can be protected at night and sheltered from drying winds. Such things, when removed to cold pits, should be planted out in light soil, which will save trouble in watering and be much better for the plants than keeping them confined in small pots.

HARDY FRUIT AND KITCHEN GARDEN.

Be prepared with a supply of Tobacco water with which to attack Aphides the moment they are perceived upon Peach trees. Go over Strawberry plantations made late last autumn, and replant places (numerous we fear this season) where the plants have failed. Take advantage of the dry state of the ground to get manure wheeled upon quarters where it may soon be wanted, and see that there is a good supply being prepared for the Celery crop, for without plenty of old rich manure large crisp Celery can hardly be obtained. As soon as the weather shall have become warm, get spring-raised Cauliflowers and Lettuces planted out, selecting for them a sheltered situation and light rich soil. A few branches of evergreens stuck amongst such things after planting so as to screen them from the sun is a great protection, and prevents their being dried up until the roots get hold of the ground. Get Scarlet Runners planted, also French Beans, and give the former an open situation and good deep rich soil, of which they are well deserving. Attend to Vegetable Marrows, Tomatoes, &c., and endeavour to get strong plants, keeping them where they can be placed near the glass, and freely exposed to air on fine days; avoid getting them leggy and tender by too close treatment.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON

For the Week ending April 11, 1861, as observed at the Horticultural Gardens

April.		Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind
Friday	5	25	29.919	29.773	53	24	38.5	48	45	N.
Satur.	6	26	30.122	30.083	51	37	44.0	48	45	E.
Sunday	7	27	30.216	30.171	53	25	39.0	47	45	E.
Mon.	8	28	30.405	30.333	49	24	36.5	47	44½	E.
Tues.	9	29	30.490	30.475	50	23	36.5	46½	44½	E.
Wed.	10	●	30.500	30.391	55	22	38.5	46	44	E.
Thurs.	11	1	30.415	30.330	65	29	47.0	46	44	N.E.
Average..			30.295	30.229	53.7	26.3	40.0	46.9	44.5	

April 5—Very fine; cloudy; densely overcast; frosty at night.
— 6—Foggy; slight haze; cold wind; and densely overcast.
— 7—Overcast; slight haze; overcast; frosty.
— 8—Fine; slight haze; dry cold wind; clear; frosty.
— 9—Hoar frost; slight haze; fine but cold; hazy; frosty.
— 10—Slight dry haze; cold wind; clear and cold; frosty.
— 11—Sharp frost; fine; very fine; rather hazy at night.

Mean temperature of the week, 6 deg. below the average.

RECORD OF THE WEATHER AT CHISWICK

During the last 35 years, for the ensuing Week, ending April 20, 1861.

April.		Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.
Sunday	14..	57.4	36.9	47.1	14	0.36 in.	4	–	3	3	2	6
Mon.	15..	57.9	38.3	48.1	19	0.47	1	3	4	1	5	5
Tues.	16..	56.9	36.4	46.6	15	0.63	6	8	5	2	3	4
Wed.	17..	57.1	35.7	46.4	14	0.28	8	7	6	2	1	[illegible]
Thurs.	18..	58.2	35.8	47.0	14	0.49	5	6	6	1	4	5
Friday	19..	58.2	34.8	46.5	8	0.45	7	10	3	3	1	6
Satur.	20..	59.7	35.2	47.4	14	0.39	5	7	5	1	–	9

The highest temperature during the above period occurred on the 19th, 1854—therm. 77 deg.; and the lowest on the 16th, 1847, and 19th, 1852—therm. 20 deg.

Notices to Correspondents.

Beans: *W H G.* "Beans" from Khartoum? What are they? Kidney Beans? Broad Beans? Beans of Pythagoras? Carob-beans? We suppose, in our ignorance of your meaning, that they must be treated like tender annuals.

Books: *A W.* Kemp's "How to Lay Out a Garden" may possibly answer your purpose.

Mushrooms: *W Y.* The case you have sent of one Mushroom growing with its root on the cap of another, and so making a plant two stories high, is not uncommon, and is analogous to what is mentioned in a leading article last week (see p. 315).

Nets: *A R.* We know of no means of tanning nets except steeping them in a tanpit. Your ashes burn out too fast from one of two causes. Either they are too coarse or the draught is ill-regulated. We doubt your finding anything better; but it would be as well to try fireballs. If, however, the air in the Orchard House is warmed during the night, it ought not to matter at this time of year whether the fire goes out or not. Can't you throw netting over the house during the present frosty nights?

Vines: *A B.* Nothing is the matter with your leaves, which appear to be in excellent health. The spots or little green excrescences on their under sides are pimples caused by over feeding; that is to say the air has been too damp and warm. They do no harm.

ARTIFICIAL MANURES, &c.—Manufacturers and others engaged in making ARTIFICIAL MANURES may obtain every necessary instruction for their economical and efficient preparation, by applying to J. C. Nesbit, F.G.S., &c., Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, Coprolites, &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch. Gentlemen desirous of receiving instruction in Chemical Analyses and Assaying, will find ample facility and accommodation at the College.

ESTABLISHED 1821.—Universal Success of

GRIFFIN, MORRIS, and GRIFFIN'S MANURES. They have now been tried in 20 English counties, and invariable testimony borne to their value as Manures adapted for the TURNIP, MANGEL WURZEL, WHEAT, GRASS, and POTATO CROPS.

Full particulars upon application to Griffin, Morris, & Griffin, Ceres Works, Wolverhampton.

LAWES'S MANURES.

The Manures manufactured by J. B. Lawes for the present season of 1861, are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, and BONE SUPERPHOSPHATE OF LIME	£6 6
LAWES'S SUPERPHOSPHATE OF LIME from BURNT BONE or MINERAL PHOSPHATES ..	5 5
LAWES'S BARLEY, GRASS, and MANGEL MANURES	8 0

These Manures can be obtained of Mr. Lawes, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.

Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.

American and other Cakes at market prices.

Address John Bennet Lawes, 1, Adelaide Place, London Bridge, E.C.: and Liffey Buildings, Eden Quay, Dublin.

BURNARD, LACK, and CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.

CONCENTRATED TURNIP MANURE, equal in value to the preceding.

Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."

Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to Burnard, Lack, & Co., Sutton Road, Plymouth.

THE LONDON MANURE COMPANY

(Established 1840,)

Are now prepared to send out the following MANUFACTURED MANURES:—

SUPERPHOSPHATE of LIME, of best quality.
DISSOLVED BONES, and BONE MANURE for PASTURES.
CONCENTRATED URATE.
BLOOD MANURE for CORN and ROOTS.
CORN MANURE for TOP DRESSING.
MANGOLD MANURE.

They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate, to be obtained entirely from Bones.

The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE of SODA, SULPHATE of AMMONIA, and every Manure of value.

116, Fenchurch Street, E.C. Edw. Purser, Secretary.

Established 1812.

MANURES.

MESSRS. PROCTOR invite the attention of their Agricultural Friends to their SPECIAL MANURES for 1861, prepared for Grass, Corn, and Root Crops. These Manures, which are the best and cheapest offered to the Agriculturist, are now ready for delivery, and early orders are respectfully solicited. Price List, with particulars as to quantity and best mode of using the Manures, sent free on application to H. & T. Proctor, Cathay, Bristol; or Proctor & Ryland, Birmingham and Chester, Agricultural Chemists, and Original Manufacturers of Special Manures.

REIGATE SILVER SAND, best quality for Florists, 16s. per ton. Less quantities 1s. 6d. per bushel. Delivered five miles or to any London Wharf or Railway. Sacks for Sand 1s. 6d. each, or on hire 6d. each (5 hold a ton). Kentish, Hampshire, and other Peats, Yellow Loam, Leaf Mould, and Tan, in large or small quantities. Sphagnum Moss for Orchids.—John Kennard, Purveyor to Her Majesty, Swan Place, Old Kent Road, London, S.E.

PARKES' STEEL DIGGING FORKS.

BURGESS and KEY, 95, Newgate St., E.C., London, being the Wholesale and Retail Agents for these celebrated TOOLS have always a large Stock on hand from which their Customers may select what they may require.

ANTHONY'S PATENT AMERICAN CHURN.—The FIRST PRIZE was again awarded to this Churn in Competition with several others at the Chester Meeting of the Royal Agricultural Society; it has obtained the First Prize given by the Society at every Meeting since 1850. Messrs. Burgess & Key, 95, Newgate Street, E.C., strongly recommend it as the most perfect Churn now in use. Full particulars sent on application.

JOHN FOWLER, Jun., 28, Cornhill, London, E.C.—Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address. CATALOGUES containing Prices and Testimonials sent post free.

HENRY J. MORTON and CO.,
2, Basinghall Buildings, Leeds.

GALVANISED IRON WATER CISTERNS

for Cottage Houses, &c., to contain 50 gallons, 26s.; 80 gallons, 31s. each; and 140 gallons, 37s., and fitted with tap, keeping the water perfectly sweet and clean; will not rust or corrode. Cisterns of all sizes.

GALVANISED IRON PUMPS

for Liquid Manure or Domestic Use, 3 inches diameter, 30s. and 32s. 6d. each; Tail Pipe for same at from 10d. per foot.

GALVANISED IRON SWING WATER BARROWS

for Garden or Farm use, containing about 20 gallons, entirely formed of iron, 35s. 0d. each.

NEW WHITE CLOVER,	50s. to 55s. per cwt.	
NEW TREFOIL	22s. 6d. to 25s. 0d. per cwt.	
NEW WHITE SUGAR BEETS ..	21 0 ,, 24 6	,,
WHITE HARICOT BEANS ..	50 0 ,, 60 0	,,
LENTILS, small and large.. ..	60 0 ,, 95 0	,,
PEARL BARLEY	16 0 ,, 18 6	,,

Several new parcels just landing. Samples to be had of—

Emil Leibius, 132, Upper Thames Street (near London Bridge).

MANGEL WURZEL.

THE NEW OVAL-SHAPED YELLOW, introduced by us four years since, has been thoroughly tested, and proves to be a most superior sort. It is of a remarkably vigorous growth, with finely shaped roots, intermediate in length between the Long and the Globe, and producing from five to ten tons more per acre than any other variety.

The *seed* is very fine, *growing upwards of* 160 *per cent.*, price 2s. 6d. per lb. Fourteen pounds and upwards delivered carriage free to the principal Railway Stations.

W. Drummond & Sons, Seed Warehouse, Stirling.

*** PRICED CATALOGUES of every description of FARM SEEDS may be had, post free, on application.

AGRICULTURAL SEEDS

of warranted quality.

W. SKIRVING begs to call the attention of Practical Farmers to his short list of the leading Seeds required for the Farm, the growth of which has been carefully proved by himself.

		per lb.
Skirving's Improved Swede Turnip	1	8
(Largest, Hardiest, and Heaviest Cropper known.)		
Skirving's Improved Purple-top Yellow Bullock Do. ..	1	6
Skirving's Green Round (new hardy sort) Do. ..	1	3
Skirving's Long Red Mangel Wurzel..	1	3
Skirving's Orange Globe Ditto	1	9
Carrot, large Altrincham	1	9
,, large White Belgian	1	3

(Less by the Cwt.)

Rye-grass, Clovers, and all other kinds of Agricultural Seeds, at reasonable prices. Land laid down to permanent pasture with the most useful Perennial Grass Seeds, at a moderate expense, the sorts selected from personal observation of the growth and habits of the different Grasses. CATALOGUES on application.—Liverpool, April, 1861.

PLYMOUTH SEED COMPANY, Plymouth.—
SEEDS FOR THE FARM.

Mixed Grasses for Permanent Pasture, 28s. to 34s. per acre.
White Clover, Red Clover, and Cow Grass, 8d. to 1s. per lb.
Plymouth Swede Turnip, 2s. 6d. per lb.
Grant's Pine Apple Green Top, very hardy, 1s. 6d. per lb.
Globe Turnips, 1s. 6d. per lb.
Tankard, ditto, 1s. 6d. per lb.
And all other Agricultural Seeds at moderate prices.

For further information see advertisement of March 9.
The FARM SEED LIST can be had on application.

FREIGHT AND CARRIAGE.—All Orders for Seeds above 1l. will be delivered Free of Charge to any Railway Station between Plymouth and Paddington; and to all Stations on the Cornwall, Tavistock, and North Devon Railways.

All Orders above 2l. Free to any Station on the Broad Gauge Railways, or to any Market Town in Devon and Cornwall; or to Cork, Dublin, Waterford, Limerick, Belfast, and Liverpool by Steamers; and to Guernsey and Jersey by Traders.

All Orders above 5l. will be delivered Free of Carriage to any Railway Station in England and Wales; and to any Steam Port in England, Wales, Scotland, or Ireland.

All heavy articles, such as Grain, Tares, Clover, &c., are exceptions to the above Rates.

Address: Plymouth Seed Company, Plymouth, Devon.

SKIRVING'S SWEDE—SUTTON'S SELECTED STOCK.

SUTTON and SONS have a choice Stock of SKIRVING'S SWEDE SEED, growth of 1860, which they can strongly recommended; 1s. 9d. per lb., or cheaper in large quantities.

Also SUTTON'S CHAMPION; Hardy PURPLE-TOP; MARSHALL'S PURPLE-TOP and Hardy WHITE SWEDE; but the Stock of "CHAMPION" Swede, though saved from 45 acres of land, being so small compared with the demand, and so nearly sold out already, this sort cannot be supplied under 2s. 6d. per lb.

Sutton & Sons having had their CHAMPION SWEDE planted more extensively than ever for Seeding this summer, will be glad to take orders now for next season at 1s. per lb., or 50s. per bushel.

Royal Berkshire Seed Establishment, Reading.

NOTICE.—Purchasers of Large Quantities of FARM SEEDS will be supplied liberally by Sutton & Sons. For prices apply, stating quantity required, to Sutton & Sons, Royal Berkshire Seed Establishment, Reading.

SUTTON'S GRASS SEEDS AT THE
ROYAL FARMS, the ALDERSHOT CAMPS, the CRYSTAL PALACE, THE PEOPLE'S PARK, HALIFAX, &c.

SUTTON'S GRASS SEEDS for PERMANENT PASTURE, PARKS, and LAWNS are now sown at the Royal Farms; the Crystal Palace, Sydenham; the Horticultural Society's Gardens, Turnham Green; also at the Aldershot Camps, and in the formation of the New Park at Halifax, called "The People's Park," the munificent gift of Frank Crossley, Esq., M.P.; and on most of the large Estates in the kingdom.

Messrs. Sutton's Grass Seeds being mixed expressly to suit the soil for which they are required are never known to fail.

SUTTON'S MIXTURES for LAYING DOWN LAND to PERMANENT MEADOW or PASTURE.

The sorts contained in these Mixtures are grown in different localities, and gathered separately by the hand expressly for the purpose, by which means all noxious weeds are excluded; they consist of the most nutritive kinds of Fescues, Poas, Sweet Vernal, Perennial Clovers, Loliums, &c., and each sort being kept separate, they are subsequently mixed in such sorts and proportions as are most suitable to the soil to be laid down. The quantity we usually supply is two bushels of light seeds and 12 lb. heavy seeds per acre. Price 26s. to 32s. per acre.

MIXTURES for TWO or THREE YEARS' PASTURE or HAY

These we can supply of best quality, at 20s. to 24s. per acre. In ordering these mixtures it is necessary to state whether they are required principally for pasture or for hay.

MIXTURES of CLOVERS and RYE-GRASS.

To be sown with Corn, for a crop of Clover, &c., in the following year.

These we can supply of very best quality at 18s. to 20s. per acre including Alsike.

SUTTON'S FINE LAWN GRASS SEEDS.

The finest Garden Lawns are formed from these seeds, which are perfectly free from weeds and coarse Grasses. Price of seeds 1s. per lb., or 18s. per bushel. Quantity required for making new lawns 3 bushels, or 60 lb. per acre.

SUTTON'S RENOVATING MIXTURE.

For improving Parks, Meadows, and Pastures 9d. per lb., or 80s. per cwt. (8 lbs. to 12 lbs. per acre only required.)

*** For large quantities, special contracts may be made.

Sutton's PRICED LIST of FARM SEEDS and GARDEN SEEDS will be sent post free.

All kinds of Seed carriage free (except small parcels).

SUTTON and SONS, Royal Berkshire Seed Establishment, Reading.

TO THE SEED TRADE.

THOMAS AYRES, Wholesale and Retail Seedsman and Grower, Biggleswade, Beds, has to dispose of a large quantity of TURNIP SEED, in large or small quantities. The stock includes Skirving's Liverpool Swede, Ayres' Improved Liverpool Swede, Purple Top Swede, Marshall's Improved Purple Top Swede, Green Top Yellow Swede, Round Green, Green Globe, White Globe, Red Globe, Red Tankard, Green Tankard, Dale's Hybrid, and a few other varieties

Price on application.

N.B. A few Cwt. of ONION and PARSNIP SEED to dispose of.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

LEEDS MEETING, July 15th, 16th, 17th, 18th, and 19th.

ENTRIES of Implements, Wool, Flax, Cheese, and Butter close on the 1st of May, and Live Stock on the 1st of June.

Prize Sheets and Forms for Entries may be had on application to H. Hall Dare, Secretary.

12, Hanover Square, London, W.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

On WEDNESDAY next, the 17th inst., at 12 o'clock, Professor Simonds will deliver a LECTURE, in the Society's Rooms, on the Nature and Causes of the Disease known as the Rot of Sheep. H. Hall Dare, Secretary.

12, Hanover Square, London, W.

TENANT FARMERS' MANURE COMPANY.

ODAMS'S BLOOD MANURE FOR CORN.
ODAMS'S BLOOD MANURE FOR ROOTS.
ODAMS'S SUPERPHOSPHATE OF LIME,

MANUFACTURED BY THE PATENT

NITRO-PHOSPHATE OR BLOOD MANURE COMPANY
(LIMITED),

Consisting of TENANT FARMERS, occupying upwards of 30,000 Acres of Land.

Chairman.—JONAS WEBB, Esq., Babraham, Cambridgeshire.

All particulars may be had on application at the Offices. C. T. MACADAM, Secretary.

Offices: 109, FENCHURCH STREET. Manufactory: PLAISTOW MARSHES, ESSEX.

The Agricultural Gazette.

SATURDAY, APRIL 13, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

Wednesday,	April 17	Agri. Society of England .. .. Noon
Friday,	— 19	Hadleigh .. .. .. 7 p.m. (Mr. Postans on the Agri. Labourer.)
Monday,	— 22	Framlingham .. .. 6 p.m. (Messrs. Stearn and Walker on the Management of Swine.)
Tuesday,	— 23	Kingscote (Mr. Bennett on Steam Power.)
Wednesday,	— 24	Agri. Society of England .. .. Noon; Blandford.; Hungerford
Thursday,	— 25	Agri. Society of Ireland.

It is very rarely that a proposal in agriculture is backed by such well ascertained and definite experience as Mr. Ruston brought to bear last week before the Central Farmers' Club on the policy of winter-feeding sheep in yards. We give the paper in another page, and must refer here to a few only of the points which it brings forward.

On the quality of the manure thus made it seems plain, as manure is just food *minus* growth, that Mr. Lawes is right when he declares that the kind of animal has nothing to do with the question, which hinges entirely on the quality of food and the kind of growth that is being made out of it. Fatting sheep fed equally well will make as good manure as fatting beasts. On the other hand, the cattle are more liable to disease, and it seems that fen-grown food will not fatten them. Sheep again, if well littered, will not suffer from lameness, and are not liable to any other attack, and they appear to yield a valuable coat of wool over and above as much meat as is made by bullocks. At any rate, in the case of Mr. Ruston's farm, the difference is amazingly in favour of the sheep, and his experience will no doubt induce next year many copyists of his example.

And he does not stand alone in the opinion which he has thus expressed and defended. Though he is not unanimously supported, yet all of

his correspondents and many of the gentlemen who followed him in the discussion have experienced similar results. Thus Mr. DELF, of Great Bentley Hall, near Colchester, wrote as follows on this subject :—

"I have found the yarding of sheep a great advantage in enabling me to consume the food (and thereby converting it into manure) near to the spot where the roots may have been grown, whereby a very great saving is effected, both in carting the roots to the homestead, and the return of the manure to the field. In forming a yard in the open fields, that is simply done by using rather deep hurdles, say five feet high from the ground in order to admit of the accumulation of manure; by this plan you make your manure heap just where you want it, and turning it over onceor twice, it is ready for use. As a rule, I prefer lambs to older sheep for yarding purposes. Then, again, the breed has a great deal to do with the successful issue of the plan. The best description of lambs is half-bred Down (Oxford Down), Leicester and Cotswold; the whiter the face the better. I will suppose, then, that the lambs have been selected. They ought to be in the yard by the middle of October, but not confined to the yard all at once. A fortnight or three weeks should be set apart for getting them to the straw gradually. For that purpose let them run into the yards at night, and out again the first thing in the morning; by degrees increasing the duration of their confinement to the yard, until they are kept in entirely. A space of four square yards should be allowed for each sheep, as over-crowding is very injurious. It will be supposed that the foot disease is the great difficulty to contend with. To combat this enemy it will be necessary to pare every foot closely before placing the sheep in the yard; and again at intervals of time not greater than three weeks, for the accomplishing with the knife what under other circumstances would be effected by the wear of the horn on the land. . . . If a supplementary diet be given, it should consist of cut chaff, Pollard, or Oats, rather than Peas, Beans, &c., which we consider too heating for sheep in the yard, inasmuch as such food predisposes to the foot disease. Frequent littering of the yard must be attended to; Wheat straw being used if possible, in preference to Barley straw; in fact, a clean surface should be always kept; and that will be best accomplished by giving a slight covering every morning. From my own observations, I am inclined to believe that both mutton and wool may be grown quite as advantageously in the yard as in the open field; and as regards the consumption of the root crop upon heavy land, the yard system possesses much advantage."

Mr. DAVID MARTIN, of Wainfleet, describes his experience as bearing Mr. RUSTON out in the opinion that sheep are valuable auxiliaries in the manufacture of manure in districts where a great quantity of straw is grown.

Mr. FRYER, of Chatteris, says of the yard feeding of sheep :—

"I have gradually extended the system until this year I have had 400 ewes, shearlings, and lambs 'yarded' the greater part of the winter. The lambs being kept at a cost of 6d. per head per week on Mangel, Oats, and chaff; and the shearlings at 1s. per head per week, on the like food, with a small addition of cake: some of the latter have gone to market from the yard at 59s. each. I have remarked that 'yarded' sheep thrive remarkably fast if kept in quite late in the spring, and only turned out when the Grass is growing fast. The brief summary of my experience of the system is this: sheep in yards make more manure than beasts, with a less outlay of capital, and with more profit. I scarcely ever got a profit, often a heavy loss, on the wintering of store beasts. I never had a loss on the wintering of sheep in yards. My impression is, that five sheep (six undoubtedly) make as much manure as one beast. I find sheep manure more quickly and more thoroughly rots and becomes fit for the land. I have never tested their relative values side by side, but I have had no occasion to note any deficiency in the effects of sheep manure on any crop to which I have applied it."

During the subsequent discussion, Mr. R. SMITH, of Exmoor, referred to the advantages of warmth and shelter during the fattening process; Mr. COLEMAN, of Woburn, said that some of Mr. RUSTON's ill-luck in feeding cattle, as compared with feeding sheep, might be put down to the comparison in his case being made between inferior cattle and superior sheep, and that, therefore, we must not expect a universal experience of such profits as the yard feeding of sheep produced in Mr. RUSTON's hands. The discussion proceeded as follows. We give short extracts from some of the subsequent speakers :—

Mr. FISHER HOBBS thought there was one material point in the management of sheep in fold-yards which was not generally understood by farmers. It was most important that sheep should be littered thinly at least twice a-day; and when that was carried out, and the manure was not allowed to ferment, he had never found any difficulty in keeping sheep in yards.

Mr. JAMES THOMAS, of Dibden Manor, Southampton, had fed hundreds of sheep in yards, but in order to keep them in perfect health, and their feet free from the rot, those yards should be thoroughly underdrained, so that no moisture should be retained under them. On one farm in Hampshire the sheep were entirely fatted upon boards, upon which they did not experience the agony that oxen did. The boards were perforated with holes, which allowed all the moisture to escape, and he had found sheep enjoying themselves as much upon the boards as if they were lying in straw or in the fields. By this method sheep throve better than in any other way: but this would not convert the straw into dung. Would it not be better, therefore, to place the sheep under cover, and give them artificial food, whilst they made the straw into manure through the operations of the bullocks? He did not think it would be judicious to allow Mangel, straw, or oilcake to be consumed entirely by sheep.

Mr. SABERTON, Ely, said he had made inquiries in his own neighbourhood, and all went to confirm what Mr. RUSTON had said. He knew several persons farming from 800 to 1000 acres, who had been graziers and fatteners of bullocks for many years; but latterly they had tried a few sheep, and were doubling and trebling the number year by year.

Mr. COUSSMAKER (Westwood, Guildford) said, the summer before last it was his misfortune to lose about two-thirds of his cattle when he had plenty of food, and he did not know how to consume it. Fearing that his yards were infected he would not buy any more, but bought sheep instead, and wintered them in the yards. Now, the yards were well drained, and he had an abundance of straw, and he gave instructions for scattering it over them once or twice a day. Still his sheep had suffered very much from foot-rot. He had many tons of Mangel Wurzel and hay lying by him; and he had given orders to buy sheep, and intended consuming hay and Mangel on the land, not liking to do it in the yards after what he had suffered from foot-rot last year.

Mr. JOHN THOMAS (Bletsoe, Beds) had had experience in feeding bullocks and sheep, and he thought it was best to have a portion of each description of stock. Yards he looked upon as unnatural places for sheep; he considered it preferable to fit up hurdles on the land with straw and provide them with moderate shelter, thus consuming the roots without the trouble and expense of bringing them home. His experience with respect to bullocks, as of sheep and of everything else, showed that very much depended upon the judgment of the person who bought them in and sold them out. When he had gone to market and bought a good bullock, he never found that he did not make a profit. His experience was in favour of keeping a portion of each, to draw the roots to the yard for bullocks, and to leave them on the land for sheep.

WE are happy to hear that a gentleman in the neighbourhood of Maidstone, who is a Brewer as well as a Hop grower, and who constantly makes use of his own Hops, employs sulphur very largely in his grounds as a remedy against mould. We are assured that his beer is excellent—so good indeed, that it is sent to London to many who prefer it to what comes from other quarters. The Brewer in question asserts that it is impossible to tell the difference between beer which has been made with sulphur dressed Hops, and those which have been grown withoutsulphur, and he has offered to put the matter to a test for a wager of a thousand pounds, challenging brewers in general to distinguish between rival samples. We are glad to hear our notion confirmed by those with whom we have had communication as to the dissipation of any sulphur which might have adhered to the Burr, (not Beer as was misprinted in our last week's article). The whole matter indeed requires only a fair consideration to be completely set at rest. *M. J. B.* [Was not the mischief of which the Brewers complain produced in the Oast house by the use of low priced sulphur bought at Liverpool, and giving off sulphuretted hydrogen?]

THE statistic report of the last year, by the Registrar-General of Ireland, presented to his Excellency the LORD-LIEUTENANT, contains much by which to estimate the present condition of the sister country. Among many other important particulars it includes a special reference to Labourers' Dwellings, and to the Act 23 Vict. cap. 19, passed in the last session, by which Government loans may be obtained for providing house accommodation for the labouring classes, of whom, according to the census of 1851, 135,589 families (about 700,000 individuals) were huddled together in mud cabins with *only one room*, designated as fourth class houses. From the 1st of May, 1851, to Sept. 1860, 1,140,982 individuals have emigrated from Ireland, amongst whom rural labourers have formed a considerable proportion. It may therefore be assumed that a corresponding decrease in the number of this wretched class of habitations will be made apparent by the ensuing census. Yet we fear that the existing number of miserably lodged poor will still be great in proportion to the population. Zeal and active benevolence, therefore, should be sought for among the nobility, gentry, and occupiers of land generally, in order to render the new Act operative.

Accordant with the spirit of this Act, the "Royal Dublin Society" have passed a resolution to the effect that when 5*l*. are contributed from any county the Society will add 5*l*. A Gold Medal is then offered as a prize to the individual who has done most within the year to carry out this "primary object" in the county. Already several ladies have honoured the Society by becoming "associates for the special object above referred to." This stir among the ladies is a movement in a good and right direction—God speed them! Their undertaking such a work of love and usefulness is within their proper sphere of duty. Many ladies indeed have absolute control over properties, and many others enjoy the permitted privilege of superintending cottage homes. Their gentle influence wisely and beneficently exercised may sometimes induce an apathetic thoughtless owner to feel a due sense of his responsibilities towards the poor upon his estate, and to act upon his aroused impulses in favour of human beings not half so well housed as his horses, cattle, or dogs.

Ladies!—"a large proportion of your parish work will be to influence the men of your family to do their duty by their dependents. The greater proportion of them are in the hands of your men relatives. It is a mockery, for instance, in you to visit the fever-stricken cottage while your husband leaves it in a state which breeds that fever. Your business is to go to him and say, '*Here is a wrong!—right it.*' But the man must see that the woman is in earnest; that if he will not repair the wrong by justice, she will, if possible, by self sacrifice. Be sure this method will conquer. Do but say, 'If you will not [illegible] roof that cottage, if you will not make that [illegible] I will. I will not buy a new dress till it is [illegible] I will sell the horse you gave me, pawn [illegible] bracelet you gave me, but the thing shall [illegible] done.' Let him see that you are in earnest [illegible] he will feel that your message is a divine [illegible] which he must obey for very shame and [illegible] if for nothing else."*

It is astounding to think of the [illegible] gressive drain of the population by [illegible] tion; but good will result from it. Labour [illegible] commensurate with the almost famine [illegible] food must soon be given to induce [illegible] labourers, with families, to remain in the [illegible] Employers seeing that young men and girls [illegible] ticated in farmers' houses are saving [illegible] defray the expense of emigration to A[illegible] where they intend to marry and rear families [illegible] ample resources for living comfortably, and [illegible] almost all able and skilled labourers are de[illegible] of following relatives to America who are [illegible] remitting vast sums of money for this purp[illegible] must feed, clothe, and house the remaining [illegible] cultural labourers if they expect to retain in [illegible] country able and healthy ones.

The tables in the Registrar-General's rep[illegible] show that there were 1,622,610 milch cows, [illegible] 1,260,590 pigs last year in Ireland—this w[illegible] give an average of more than five milch cows, [illegible] a fraction less of pigs to each family in the [illegible] dom. Of milk a considerable proportion is [illegible] able to the sustenance of labourers, but of [illegible] and bacon the flavour is unknown to those [illegible] are not dieted in farmers' houses. [illegible]

THE GAME QUESTION.

A LETTER appeared in your *Agricultural Ga[illegible]* last week from Mr. Alderman Mechi, entitled [illegible] Economics, headed The Game Question.

In this paper appears the following senten[illegible] "Without entering into the question as to wh[illegible] it is to feed the game, I would strongly recomm[illegible] farmers who hold game farms, where the landlord [illegible] not feed his ground game, to have an ample sup[illegible] roots and feed them themselves just inside the [illegible] and they may rely on thus saving their growing cro[illegible]

I should like a photograph of the jolly and [illegible] Alderman when he was writing this "sop for landlords" in his Farming Economics! It would be as easy [illegible] "catch a weasel asleep and tickle his nose" as [illegible] tenant farmers adopting such advice. What? [illegible] Mangel at an expense of 10*l*. per acre for the purpose of feeding the landlord's game, which, when killed, [illegible] as commonly sold by him to the poulterer as [illegible] are sold in Smithfield Market. In the pre[illegible] scramble for land there are needy men who will [illegible] hire farms lying around game preserves; but [illegible] careful cultivator, the man who works for a fair [illegible] of his capital, is rarely found in such situations [illegible] will he accept covenants in his lease to be paid for [illegible] damage done by game. The risk of disputes with [illegible] landlord deters him, and when these disputes [illegible] they are usually settled by lawyers and arbitra[illegible] the great injury of both parties. The skilful [illegible] avoids game preserves and game liabilities.

The worthy Alderman will confer a great favour [illegible] the public, if he will publish the cost to the disp[illegible] on both sides in the arbitration in which he [illegible] now engaged. He may thus give an instructive [illegible] how to shun such difficult complications. If game [illegible] be preserved for sport and profit, the proprietor [illegible] occupy the land himself where it is kept, and [illegible] more he ought to pay for all prosecutions of po[illegible] which is now saddled upon the country, and which [illegible] no trifling figure in county expenses.

Another sentence in the Alderman's letter is as [illegible] "I am therefore going to show that an abund[illegible] game well fed need not be injurious to agricu[illegible] the whole question hinges on four words—feed [illegible] cover." Now this is simply fudge. The [illegible] hares and rabbits are opposed to all restraint, [illegible] rambling instincts are well known. The hare [illegible] will go miles in an evening in search of her [illegible] food, none of which can be found in covers filled [illegible] game; she will examine and taste many Turnips [illegible] she feeds upon a selected one; her taste in this [illegible] is quite aldermanic, and guided by her instinct she [illegible] when she has had enough, in which I am told alder[illegible] are sometimes faulty. The hare will not confine her [illegible] to roots, an essential part of her diet is the spr[illegible] and tender spring plants of Wheat, Barley, [illegible] Clover and Tares and choice herbage from the Gra[illegible] in fact her whole career is destructive to the far[illegible] where preserved in large numbers no cover [illegible] will keep her at home.

The rabbit is a pestilence, no farmer's stock will [illegible] with it or follow it, if they have the choice of [illegible] such company. Rabbits and rats are the farmer's great[illegible] foes. The pheasant may be kept at home dur[illegible] winter by feeding in cover, but so soon as the [illegible] sown in spring you find him rambling over the [illegible] picking up whatever he finds handy, for after [illegible]

* Lecture by the Rev. C. KINGSLEY.

ime he is no longer fed in the preserves, and as soon as the corn ripens he lives in it till harvest is ended, and afterwards while any corn is to be found on the land, when he is invited into cover to be fatted for the battue and poulterer. Five hundred pheasants require as much food as 500 barn-door fowls, and as many hares and rabbits consume what would keep a large flock of sheep.

No system of successful farming can compete with the present extravagant preservation of game. This must in time abate from its very excess; but in the mean time it will involve in ruin many industrious men who have unwarily consented to covenants to preserve game from which no compensation clauses will save them. If the worthy Alderman will sow a field of Beans adjoining his game preserve and invite me to shoot in them on the 1st of October, I shall not ask to go into the cover, feed it as he may. *Bang.*

ARTIFICIAL MANURES.

In the course of a somewhat careful retrospect of the agricultural literature of this country for the last 20 years, with reference more especially to the rapidly increasing practice of extraneous manuring, it occurred to us that probably a collection of instances properly arranged and tabulated, might present instruction both as respects the principles and results of the system. Transferring, therefore, to our note-book every instance which presented itself, we ultimately found the series to consist of 309 cases in whole, distributable into classes according to the kind of manure used, as follows:—

Manures.	Number of Instances.			
	Wheat.	Barley.	Oats.	Turnips.
I. Alkaline Salts.				
1 Chloride of sodium, common salt	3	3	2	..
2 Sulphate of Soda ..	2	..	1	..
II. Bone Manures.				
1 Bones alone	..	3	..	63
2 Bones and sulphuric acid	3	3	3	63
3 Bones and muriatic acid	1	1	1	6
4 Bones and nitric acid ..				
III. Acids alone.				
1 Sulphuric acid	..	..	..	1
2 Muriatic acid	..	..	..	1
IV. Nitrogen Salts.				
1 Sulphate of ammonia ..	1	..	2	..
2 Muriate of ammonia ..	1	..	..	..
V. Nitric Alkaline Salts.				
1 Nitrate of potash, saltpetre	2	..	1	..
2 Nitrate of soda, Chili saltpetre	31	5	4	1
3 Sulphate of ammonia and common salt ..	1	..	..	..
4 Nitrate of soda and common salt	41	1	2	..
5 Nitrate of soda and sulphate of soda ..	..	1	1	..
VI. Salts and Ashes.				
1 Sulphate of soda and ashes	..	..	1	..
2 Sulphate of soda and animal charcoal ..	1	..	..	..
3 Nitrate of soda and ashes	..	..	..	..
VII. General Manures.				
1 Artificial intermixtures (patent manures) ..	8	1	15	..
2 Soot	1	..	.	
3 Rape dust or cake ..	1	3	1	..
4 Rape dust and salt ..	..	1	..	..
5 Pigeons' dung	..	1	..	..
6 Guano	10	1	1	..
7 Guano and salt	1	..	..	..
8 " gypsum ..	1	..	..	..
9 " soot ..	1	..	..	..
10 " gypsum and soot	1	..	..	..
11 Guano and nitrate of soda and sulphate of ammonia	1	..	..	..
12 Guano and soot, nitrate of soda and sulphate of ammonia	1	..	..	..
13 Farm-yard manure ..	1	..	..	..
14 Farm-yard manure and guano	1	..	..	..
	115	24	35	135

Now before going into an examination of these numerous instances, some little explanation may advantageously be given of certain circumstances common to all the trials thus collected; and in the first place it may be remarked that they embrace in point of locality almost all the best agricultural districts of the island. In the second place it is important to state, that in 227 out of the whole number of 309, the invaluable expedient of leaving a measured portion of the ground experimented on, unmanured, was resorted to, and thus a simple but satisfactory test of the efficacy of the manure was obtained.

	Bushels.
Thus, for instance, a field of Barley, manured with 16 bushels of common salt, produced ..	51
While an unmanured portion of the same ground yielded	30
Difference due to the manure	21

Thus the efficacy of the dressing is represented by the difference of 21 bushels; and in all the other ganged cases the same method of determining the productive action of the manure was resorted to.

But although the considerable body of experimental testimony here collected will be found to suggest various important agricultural conclusions, there is in the sources from whence it was obtained, unequivocal internal evidence that the productive results belong to the list of experimental maxima. In other words, there is but too much reason for believing that the successful trials only were recorded, and the unsuccessful ones suppressed. Hence, then, although our tabulations will well afford unquestionable evidence that under certain conditions of the soil, the use of certain special manures is frequently, perhaps generally, attended with a greater or less increase of produce, there exist no true average data for determining the industrial value of special manuring as a branch of modern agricultural policy.

Unfortunately only one of the instances collected extends beyond one year's trial, and hence they embrace no evidence respecting the exhaustive effects of special manures; but as regards the comparative efficacy of non-nitrogenous and nitrogenous applications, and the comparative results due to greater or less proportions of nitrogen in substances containing that element, there is a considerable amount of testimony; and accordingly in arranging the following tables, care has been taken to bring out these points distinctly. As regards general plan, the tabulation begins with the simplest manures, and goes on taking up the others, *seriatim*, in the order of increasing complexity.

Table I.—Experiments with Chloride of Sodium (Common Salt).

	Number of Experiments.	Average unmanured produce per Acre.	Quantity of Manure used.	Average manured Produce per Acre.	Increase per Acre of manured Produce.
		Bush.		Bush.	Bush.
1. Results with Wheat ..	3	$27\frac{1}{2}$	..	34	$6\frac{1}{2}$
" Barley ..	3	$46\frac{1}{2}$	..	$60\frac{1}{4}$	$13\frac{3}{4}$
" Oats ..	2	$48\frac{1}{2}$	..	53	$4\frac{1}{4}$

Now, to explain the structure of the foregoing Table, as well as the other similar ones which will follow, we select from amongst the eight instances of which it forms an abstract, the following case from the Barley series, with this explanation, that in singling it out in preference to the others, we have done so simply because of the superior precision with which its particulars are reported, and that as respects general principles and conclusions there is no difference between it and all the other instances collected, to whatsoever kind of crop or manure belonging.

Hannam in Royal Agricultural Journal, Vol. 5, p. 267.

BARLEY.

Unmanured produce.	Quantity of manure.	Manured produce.	Increase.
$48\frac{3}{4}$	3	60	$11\frac{1}{4}$

Here the evidence is, that the effect of 3 cwt. of salt was to increase the produce $11\frac{1}{4}$ bush. per acre, and on referring to Mr. Hannam's admirable Report of the experimental series of which this instance forms a part, it will be found that, corn and straw together, the additional yield weighed $10\frac{1}{7}$ cwt., so that in fact the deposition of only 3 cwt. of salt in the soil gave rise to an extra yield of considerably more than thrice its own weight; and in that manner the idea of stimulative and non-nutrimental action in the applied substance, is made obvious.

An examination of the composition of the 7 cwt. of salt and of the 1136 lbs. of extra produce due to its application shows in connection with the other facts of this experiment—1st. That without manure the soil was capable of nourishing a crop of Barley amounting to $48\frac{3}{4}$ bush. 2d. That the intermixture of only 3 cwt. of salt with the soil per acre of another part of the same field increased the acreable yield by $11\frac{1}{4}$ bush., weighing in corn and straw 1136 lbs. 3d. That of the chemical elements of this increase, only 3 lbs. were of a kind identical with those in the manure, hence, showing 4thly, that the action of the manure could only have been stimulative and not nutritive; in other words that its agency was not to contribute an addition of alimentary ingredients to the staple, but to excite the elimination of those already existing dormant there. Whether in point of ultimate consequence, this species of productive action in the soil is or is not prejudicial to its permanent well being, is a question which will afterwards be more particularly inquired into.

Table III. Experiments with Sulphate of Soda (Glauber Salts.)

	Number of Experiments.	Average on manured produce per acre.	Quantity of manure used per acre.	Average unmanured produce per acre.	Increase per acre of manured produce.
		Bush.	Cwt.	Bush.	Bush.
1. Results with Wheat ..	1	$37\frac{1}{2}$	2	42	$4\frac{1}{2}$
2. Ditto ditto	1	29	$1\frac{1}{4}$	29	0
Average		33	$1\frac{1}{2}$	$35\frac{1}{2}$	$2\frac{1}{4}$
3. Oats	1	$42\frac{1}{2}$	2	$58\frac{3}{4}$	$16\frac{1}{4}$

Table IV.—Experiments with Bones.

	No. of Experiments.	Average unmanured Produce per Acre.	Quantity of Manure used per Acre.	Average manured Produce per Acre.	Increase per Acre of manured Produce.
		B. Bush.	Cwt.	B. Bush.	B. Bush.
Results of Barley manured with burned bones	1	$30\frac{1}{2}$	18	$43\frac{1}{2}$	13
Results of Barley manured with unburned bones	1	$30\frac{1}{2}$	27	40	$9\frac{1}{2}$
Average	..	$30\frac{1}{2}$	$22\frac{1}{2}$	$41\frac{1}{3}$	$11\frac{1}{4}$
Results of Wheat with varied quantities of bones and sulphuric acid	3	22	..	31	9
Results of Barley with do	3	$38\frac{1}{2}$	..	46	$7\frac{1}{2}$
Results of Oats with do.	3	$51\frac{1}{2}$	..	65	$13\frac{1}{2}$
Results of Wheat with bones and muriatic acid	1	44	..	47	3
Results of Oats with do.	1	48	..	44	4 decrease
Do. do. do.	1	43	..	60	17
Average	..	$45\frac{1}{2}$	..	52	$6\frac{1}{2}$

Hitherto we have been considering manures from which nitrogen is either wholly absent (as in the alkaline salts) or is very sparingly present (as in bones); and as a whole it must be acknowledged that the result in the growth of the cereals of these non-nitrogenous substances is far from feeble. *A. B.*

Home Correspondence.

Transplanting Wheat.—A few years ago an experiment was tried at the model farm at Glasnevin, near Dublin (suggested by the one recorded by the celebrated gardener, Miller), of transplanting Wheat in the spring, parting the roots so as to make each plant into 10 or more. The crop was as good as from a field sown in the usual way. It may be worth considering whether this plan might not be advantageously tried if we are to have another wet season; for the very weather which is utterly unfit for sowing, is the best for planting; according to the well-known proverbial maxim, "Set wet, and sow dry." Some persons, not well acquainted with country affairs, might suppose the process to be much more tedious and more costly than it is. They will perhaps be surprised to hear of the payment made by many nursery gardeners in England to the women and children employed in transplanting small forest trees (about a finger long) from the seed-bed. They pay 2*d.* a thousand; and many women and children are glad to earn in this way from 4*d.* to 6*d.* a day. It is even found to answer in some parts of England to sow Wheat in the way that is called "setting" or "dibbling," dropping the grains by hand into holes made for the purpose; as, indeed, is always done with Beans. It would not take much more time and labour to lay the little off-sets of the Wheat in a shallow furrow, and then slightly cover them over. And as some set-off against the expense of labour, is to be reckoned the saving of the seed Wheat. But, however, the alternative is not between sowing or planting a field of Wheat (the former being in such a season as this impossible), but between the planting and the leaving of the field absolutely waste for a whole season. *W.*

Pig Food.—Being a constant reader I have been much amused with your Gloucestershire Correspondent, about feeding his pigs with "small coal." A strange compound certainly. But according to your Correspondent "P. Devoniensis," there can be no nutriment in coal or cinder. I am very much of his opinion, but the former must have more carbon in it than the cinder that has undergone combustion. On the other hand, if the coal is a vegetable production, must it not be "organic" and not inorganic, as I have always been led to believe? But on that matter I confess my ignorance; perhaps "P. Devoniensis" will inform me when the change takes place from one element to the other. Not being a chemist I am quite at a loss for the information to settle the fact in my own mind. I was much pleased with his sensible remarks on Mr. Gee's letter in your last week's "Home Correspondence;" and he seems to settle the point—"There can be no nutriment in either the coal or the cinder." Now if it should turn out to be organic, the stomach may possibly have power to assimilate the coal. But I confess it seems very improbable from the formation of the stomach. Speaking to a friend of mine, a captain of a large merchant ship, he assured me on his honour he had three small pigs that lived three weeks on coal down in the ship's hold. He added they had plenty of water, but no other food could they possibly have got, as the cargo was coal. And, to his extreme surprise, at the end of that time when brought on deck they looked remarkably well, and certainly were much improved and grown too. "Loaded with coal for Africa, had fearful weather—that was the cause of the swine's neglect." I certainly agree with Mr. Gee, that a white coat for the winter must, according to "P. Devoniensis'" reasoning, be the

warmest, and for summer, the coolest, and as he justly remarks will throw off the heat, and "black" absorb heat. Query: will not the body of any person, or take "pig" in point at issue, be warmer than the external "air?" and if the wearer has a black coat on, I am of the same opinion as Mr. Gee, that the black coat will absorb heat from the body in the winter, by the same reasoning as its melting the snow sooner than the white coat. Again, "P. Devoniensis" remarks, "As far as my experience goes, white is by no means a hardy colour in any race of animals or plants." Now in the former, what is the reason nearly all animals in the Arctic regions are white? I believe the Laplander's fox changes his coat, *i. e.* for the summer months to a russet colour, and for the winter to a white. The reindeer are greyish colour, but most of them are greyish white; in fact, I believe most of the animals are white, or very near that colour: certainly more white than black. On the other hand, I believe a black man stands the heat better than a white man. We must take Nature in her laws, as our lawgiver, and our reasoning as liable to error. Secondly, the "plant," he says, is by no means "hardy," and yet we have that pretty flower the Snowdrop "white," and that beautiful flower the Christmas Rose, which blooms boldly and richly at Christmas. The large white Rose-like flower stands amid the evergreen leaves, vying with many summer beauties, although frosts and snows, and rains, alone greet its appearance. P. D. will say these are exceptions, and not the rule, and, not being a Yorkshireman, will not believe that in that county they can boast of the largest breed of pigs if not the hardiest in England. I have seen no black ones so large as Yorkshire white pigs, at our stock shows. But in regard to colour I am of the same opinion as a "farmer" friend, who exclaimed at a farmers' club, when Mr. Gee's letter on coal and colour came under notice: "It is the frame of the animal, and not the colour." But Mr. Gee having got a white hobby-horse, I feel wishful to assist him all I possibly can, and shall certainly give my pigs small coal if they will eat it, in preference to cinders; and if coal should get stale, as all food is liable, your Correspondent "J. S. H." recommends salt, "for I know that to be a capital cure for all stale things in the food line." I hope to see an answer to "Ignoramus B." (of the 23d inst.), and in the meantime I beg to subscribe myself *Ignoramus C.*

Larch Peeled v. *Unpeeled, for Fencing.*—Having read with much pleasure your extracts from the report of the Morayshire Farmers' Club, allow me to add for the benefit of those to whom Mr. Cruikshank's experiments (as to posts) may prove new and acceptable, that the same results will be found with reference to young Larch used for rails or paling, as those either peeled, or dressed to a more uniform thickness by the axe, will be found to last four times as long as those used with the bark entire. The adoption of charred posts or packing with stones, will be a matter of *£ s. d.*, and Grass certainly ought not to be allowed to grow round the latter. *Cambrian.* [It is proper to add that in the *Banffshire Journal*, shortly after the reading of Mr. Cruikshank's paper, the following letter in criticism of it appeared]:—

"The erection of wooden palings on the most permanent form, deserves the attention of all those interested, for truly great quantities of materials for palings are thrown away, being useless, on account of the want of care in putting them up. The posts of a paling are evidently the back bone of the erection; it is therefore desirable to have them made fast in the ground and protected from decay. It is quite clear to practical men that a post put into the ground at the depth stated (22 in.) and charged with causeway stones, is but temporarily fixed. The experiment has been often tried. Those best acquainted with fencing would very seldom think of fixing a post either for a gate or wire-strainer with stones, although from 3 to 4½ feet in the ground, far less the intermediate posts Four years would scarcely test the power of that kind of work to prevent decay. It would be difficult to prevent mould mixing with the stones in places where cattle and sheep assemble, and this is what is particularly desired. The pit for the post is 22 inches in depth, very likely about square; the opening of these will cost perhaps 3*s.* to 4*s.* a hundred, and now we have just an open stone drain with no outlet, very probably half filled with water during a great part of the season, the post drawing up the moisture, and when the summer heat operates, it hastens the decay. There is a liquid composed of vitriol and copperas mixed with water, which is sometimes used to prevent decay in wood; this can work satisfactorily only in large establishments. It would be very expensive on a small scale. I consider that the best thing to be done, and it can be performed on any scale, is to "char the posts." In order to do this, make two dwarf walls, leaving a space in the centre from 12 to 15 inches to hold the fire. The posts are then laid on, and the fire kept full of them; they are turned over occasionally to have their progress marked. They are taken up as they become ready; the best wood will be first ready. Have a pot of Archangel tar beside when the posts are taken out of the fire, and put a thin coating on the charred parts. When the bark is taken neatly from the place about to be charred, if the bark above adheres to the wood, it does no harm to the wearing of the post or paling. Sometimes there will be found in a moss half decayed trees which have been under the influence of fire, and thus part of the wood is charred; close to the back of that the wood will be very entire. It will be seen that, all along railways, with regard to the posts of the fences and the telegraphic poles, charring is generally adopted. The best ripened wood, either of Larch or Fir, should be selected for the posts of a paling. A clay subsoil is the best for packing posts with. Where the posts are pointed to drive into the ground, an iron pinch, pointed for the purpose of making a hole for the post before applying the mallet, is necessary. Where pits are opened for the post, beat and pack well round the post, as the subsoil goes in. In fixing wooden gate posts, a stretcher, neatly fitted between the posts, below the surface, is a good fixture."

Preservation of Food.—Few conveniences are more to be desired at centres of great consumption, economically or sanitarily considered, than effective arrangements for the storage of fresh meat and other easily perishable alimentary supplies,* under such steady conditions of reduced temperature as would put them beyond the risk of rapid decay in hot climates, or in the sudden changes of our own. There is no doubt that means of accomplishing these results have now been perfected, so far as the production of ice is concerned, at a great reduction of cost. If, therefore, the corporation of this metropolis, and of other large cities in the kingdom—especially at the great ports of cattle export and import—would offer a suitable reward for the most approved plan for carrying out the following objects, there is reason to believe that important public interests would be promoted.

1. Plan and estimate, accompanied by drawings and explanatory details of a construction, say 100 feet long by 50 feet wide, height not to exceed 40 feet (inside dimensions), to serve the purpose of a model plan of a depot for the storage of fresh meat in carcase, and other perishable alimentary supplies, the above space to be divided in two departments. A, to be described as the "department of prolonged storage" (to embrace one-half of the space), to be maintained at a temperature ranging between 28° and 32° of Fahr. B, to be described as the "department of issue," to be maintained at a temperature ranging between 38° and 40° of Fahr., *i.e.*, about the mean temperature of the coldest months of the year in this metropolis. 2. Detailed description of the proposed mode of maintaining the required temperature in the two departments, with estimate of the probable charge. 3. Detailed description of the proposed mode of storing the carcases in the department A, with estimated annual rent to be charged per section of 1,000 cubic feet 4. Detailed description of the proposed mode of exhibiting the meat and other supplies in the department B, with estimated annual rent to be charged per section of 1,000 cubic feet. 5. Detailed description of the proposed mode of lighting the two departments, with due regard to the constant maintenance of the required temperature. 6. Detailed description of the proposed mode of ventilating the department B, with due regard to the maintenance of the required temperature. 7. The outside walls, roof covering, and gates to be of incombustible materials; but the inside casing to be of any materials which the projectors may judge to be best suited to the combined objects of maintaining the required degree of temperature, economy of construction, and durability. There is an impression in this country that meat, which has been subject to frost, is injured; but that is by no means the case, as persons can testify who have lived in countries where the meat is put into carcase and kept in a frozen condition for four or five months without the least injury to it. The simple necessary precaution is, that the meat should be thawed gradually, and not suddenly, when it is to be consumed. In the Cunard line of steamers no live stock of any kind is embarked, with the exception of the cow. All the fresh meat, fish, poultry, vegetables, fruit, and butter, consumed on the voyage, out and home, at all seasons of the year, are kept in a well-fitted ice house. Persons who have travelled in that line (which may justly be described to be the best organised service in the world of the kind, performing the difficult duties entrusted to it with admirable regularity, despatch, and security) will admit that the comforts and excellence of the table leave nothing to be desired. There are, of course, no accurate means of estimating the saving which this company has effected by their mode of supplying the vast number of persons who have been transported in these ships, but officers in the sea service who have witnessed the dismal consequences of bad weather on large supplies of stock, will understand that the economy must have been very great. It is much to be wished that the other great steam companies would follow this wise example. The answer to the sole objection of greater difficulty founded on the much higher temperature of the regions through which they navigate, is, that there are easy means of establishing branch depots of supplies at some of the points where they touch, properly fitted for maintaining them at the necessary degree of reduced temperature. Indeed all the large steamers employed in the transport of passengers and troops should be supplied with one of Harrison's ice-making machines, to be driven by their donkey engines, capable of producing 7 or 8 tons per week. Officers of long service in tropical climates have no doubt witnessed the condemnation of vast amounts of wet and dry provisions, and of naval and military *matériel*, arising from the humidity and fermentation of storage under an elevated temperature. Heavy loss and grave public inconvenience, not easily detectable until the large issues of some sudden emergency disclose the mischief, may I believe be extensively prevented by the judicious employment of those means of reducing and regulating temperature which science has placed at our disposal. Neither do I doubt that the system is applicable to the wards of hospitals, barrack-rooms, and other confined and crowded spaces in hot climates, with beneficial results not to be over-estimated. Its importance for the preservation of fresh meat and other perishable supplies at large cantonments, and centres of extensive military consumption, need not be insisted upon. *Charles Elliott, Rear-Admiral, Kensington Park Gardens.* [Sir Charles Elliott thus continues in "The Engineer" his advocacy of cold food-depots, which he had recommended in the Journal of the Society of Arts.]

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

Monthly Council, *Wednesday, April 10th.* Present—The Earl of Powis, President, in the Chair; Earl of Macclesfield, Lord Berners, Lord Leigh, Lord Tredegar, Lord Walsingham, Hon. W. G. Cavendish, M.P.; Hon. Colonel Hood, Hon. A. Vernon, Sir J. V. B. Johnstone, Bart., M.P.; Sir E. C. Kerrison, Bart., M.P.; Sir J. V. Shelley, Bart., M.P.; Mr. Raymond Barker, Mr. Bramston, M.P.; Mr. Caldwell, Colonel Challoner, Mr. Druce, Mr. Exall, Mr. Brandreth Gibbs, Mr. Hamond, Mr. Fisher Hobbs, Mr. Wren Hoskyns, Mr. Howard, Mr. Lawrence, Mr. Milward, Mr. Paine, Mr. Pope, Mr. Sanday, Mr. Slaney, M.P.; Professor Simonds, Mr. Thompson, M.P.; Mr. Torr, Professor Voelcker, Mr. Jonas Webb, and Professor Wilson.

Six new Members were elected:—

Finances.—The Hon. Col. Hood presented the report, from which it appeared that the Secretary's receipts during the past month had been examined by Messrs. Quilter and Ball, and found correct. The balance in the hands of the bankers on the 31st ult. was 4075*l.* 3*s.* 1*d.*, of which sum the committee recommended that 2000*l.* be invested in the New Three per Cents. The Quarterly Balance-sheet and Quarterly statement of subscriptions and arrears and of property were laid before the Council.

On the motion of Lord Berners, seconded by Lord Walsingham, the Right Hon. Lord Feversham was unanimously elected a Trustee in the room of his Grace the Duke of Sutherland, deceased.

Ed. Holland, Esq., M.P., was unanimously elected a Member of Council, in the room of Lord Walsingham, elected a Vice-President.

The report of the Metropolitan Sites Committee was presented by the President, and after considerable discussion it was decided that its final consideration should be postponed to the Monthly Council in May.

Veterinary.—Mr. T. Raymond Barker, Chairman, presented the report, which recommended the purchase of 12 sheep for the purpose of trying a medicine which had been invented by a French Veterinary Surgeon at Gavely, in France, for the cure of "cachexie" or rot, of which medicine a supply had been sent for experiment. This portion of the report was adopted; the remainder respecting the Veterinary Privileges of Members was negatived.

General Leeds.—Lord Walsingham, Chairman, presented the report, which stated that land for the trial of Steam Cultivators had been secured about half a mile from the Garforth Station, on the Leeds and Selby branch of the North-Eastern Railway, about six miles from Leeds, and the same distance from Milford Junction. The trials will begin on Tuesday, July [illegible] and the prizes will be adjudged at the Leeds Meeting. Arrangements were being carried out for the exhibition of the entire horses, for which purpose a curved line would be given to one end of the Show-yard.

The Bye-Laws and Resolutions of Council had been printed and were taken into consideration, their final adoption being deferred till May.

On the motion of Mr. Brandreth Gibbs it was resolved that, in printing in the *Journal* and in the House List of Candidates for the Council, the list of the Trustees, Vice-Presidents, and Members of Council, their residences and counties in which they are situate be added.

On the motion of Lord Walingham, seconded by Mr. Torr, it was resolved that in order to keep a due check on the number of assistants' and servants' tickets issued to the Exhibitors in the Implement Yard, the number granted shall bear a definite proportion to the size of their respective Stands, and the Council decided that the proportion shall be two Assistants for the first 10 feet of shedding and one for every additional 10 feet.

It was announced that Professor Simonds would deliver a Lecture before the Members of the Society on Wednesday next, the 17th inst., at 12 o'clock, "On the Nature and Causes of the Disease known as the Rot in Sheep."

The Council then adjourned to their weekly meeting on the 17th inst.

Society of Arts: *April* 3: *American Inventions.*—The paper read was "Some Account of American Implements and Economic Contrivances," by C. T. Eddy, M.A., M.B., formerly Travelling Fellow of the University of Oxford. The author began by saying that he thought the observing traveller in America could not fail to be struck with astonishment at the vast amount of work that had been achieved, of forests cleared, of land reclaimed, of roads, railroads, and canals constructed, and of cities built by a sparse and scattered population, in the brief period of time which had elapsed since the first peopling of the country. In considering these wonderful results, he had been led to notice the ingenuity shown by the people in devising implements and machinery for economising labour, which was so dear in many parts of the country, and some of which he thought well worthy of attention, and even of adoption, in England. He would first touch upon agricultural implements. The first he noticed was the American felling axe, so well known in timber regions. Large quantities of these axes were made by convicts in the State prisons, and sold at a slightly remunerative price. Next in order to the felling axe came the stump extractor, a compound lever of wood, strengthened with iron, 30 feet long, with a handle at each end, worked generally by a chain of iron. The author then spoke of a method of applying steam power for felling and cutting up trees; of a peculiar method of fencing; of an earth auger for boring holes for posts; of the mode of making plank roads; and described in detail the different kinds of stone-crushing machines, which worked very efficiently. A peculiar kind of carriage spring, able to bear the jerking of the roughest roads, was next noticed, and some modifications in the general construction of the American carts and waggons were described; also the endless railway horse-power, and for most of the stationary work on a farm—thrashing, winnowing, chaff and Corn-stalk cutting, cutting up wood for fuel, &c. The subject of ploughs was discussed at some length, and the portable steam-plough

* Potatoes, for example (forming a large portion of the sustenance of the poorer classes, and appearing in some shape, every day, at most tables throughout the kingdom) cannot be stored in large quantities without generating constantly-increasing heat. Great risk of germination ensues; the vegetable then rapidly becomes unfit for use as food, or is at once cast upon the market at reduced prices, and consumed by the poor with danger to their health.—C. E.

described. Various other inventions and appliances were alluded to, such as machine-made watches, wood-working machinery, floating docks, unloading gear for shipping, railway engines and carriages, tramways and tramway cars, steam ferry-boats, canal sluices, canal boats built in sections, steam boats and pilot boats, &c.; and, finally, modes of house-warming adapted for very cold climates.

Farmers' Clubs.

LONDON: *April 8.—Sheep v. Bullocks, as Manufacturers of Manure.*—A paper on this subject was read by Mr. A. Ruston, of Aylesby House, Chatteris, from which we make the following extracts:—

Mr. Ruston said: My farming life has been spent in the great level of the Fens. Formerly, these lands were submerged during the winter months entirely, but they have at length become effectively drained, and present a large stretching flat of fertile and productive land. Heavy crops of corn are grown upon them, frequently more bulky in straw than richly laden with grain. Mangels grow well upon these soils, and heavy crops may be produced. Rye-grass appears better suited than Clover to Fen lands generally, and bulk rather than quality is afforded. But although the land produces plenty, yet the quality of all is inferior. Even the grain is commonly of a low quality, except in very peculiar and favourable seasons. The straw, as also the Rye-grass and Clover hay, are generally coarse, and contain no really feeding properties. Mangels too, which grow so freely, and afford such an abundance of keeping, possess but a small per-centage of nutriment. Straw, seed-land hay, and Mangels, then, are the three varieties of food which, on the farms to which we are referring, are produced, and have to be consumed in the fold-yard during the winter months. And none of these, either separately or combined, will fatten an animal. Artificial food must be very freely given, if an animal is to be made fat and fit for the butcher on a Fen farm of average quality. Stall-feeding is too expensive a practice to receive very general adoption. The more common custom is to buy lean cattle in the autumn, giving them the produce of the farm, with a small quantity of cake or corn, during the winter, and selling them in somewhat improved condition in the spring. From what I have seen of bullock-feeding in the yards in North Lincolnshire, I entertain the decided opinion that, in a given time, a bullock will acquire a given weight, with 4 to 6 lbs. less cake per day there, than he would on any of the farms I occupy; simply because the natural food is so much more fattening. As already observed, these Fen lands of ours grow a heavy crop of Mangels and a bulky crop of straw, although the quality is inferior. And I may here further remark, that a crop of Mangels does not appear to impoverish the land where properly cultivated; but the whole may be drawn from the field upon which it has been grown, to be consumed where circumstances may direct, without any apparent loss being sustained by the following cereal crop. As a rule, in average seasons we grow an abundance of straw after Mangels. This is important, as it makes the whole crop to be drawn near the foldyard, to be there consumed if deemed desirable. We are then brought to this point: We have the corn standing in the stackyard, ready to be thrashed, that the straw may be converted, during the winter months, into manure: we have the Mangels also carted into heaps in the neighbourhood of the fold-yard, ready to be consumed; and we have the hay stacked there too, for the same purpose—at least so much of it as is not required for the work-horses. The question then arises, how can this straw be manufactured into manure, and this accumulation of food consumed most profitably? Can it be best effected by bullocks or by sheep?

The more common method of converting our coarse straw into manure, and of consuming our Mangels and inferior hay, has been by purchasing for that purpose some growing bullocks in the autumn, giving them a few pounds of cake or corn per day, in addition to the natural food, and selling them again in the spring either at our home fairs or at Norwich, or in some other grazing district. If the bullocks have kept healthy and [illegible] well, they have occasionally left [illegible] per head for the natural food consumed, but it has been far more frequently the case that they have only just paid for their artificial food, and the Mangels and hay have had to be charged to the manure account. This mode of management was not very satisfactory. But the case has become even worse during the last few years, since the appearance of the lung disease, and our losses from this cause alone have been fearful. It is not then to be wondered at, that with heavy losses under these adverse circumstances, that we should anxiously inquire, cannot we make our manure and consume our winter food without being compelled to sustain these heavy losses? In other words, cannot we dispense with bullocks altogether for this purpose?

I have now tried sheep in yards for five years. During the three first years I had only a few. Last year the lung disease appearing in a lot of Scots I had, excited my fears lest it should spread and decimate another lot which I had just received from Scotland. I therefore determined at once to send the latter lot away, and sell them again, keeping only those in which the disease had appeared. This drove me to the necessity of purchasing nearly 400 lambs for the purpose of consuming my hay and Mangels, and of manufacturing my straw into manure. I made very close observations, kept a diary of all necessary particulars, valued them into the yards, and valued them out to Grass with the dates of going in and out; I also calculated to a fraction their cost for artificial food, noticed very narrowly what quantity of straw they made into manure, and also the quality of the manure, as far as appearances enabled me to judge; noted every loss and its assigned cause, full particulars of which I will hereafter present to the meeting, with other facts which the experiments disclosed. But before I give these, I wish to make a few remarks upon the general management adopted, and the information it afforded. From close and careful observation last winter and again this—for I have now between 600 and 700 sheep in yards—I find six lambs will tread down as much straw, and make it into good manure, as a 12*l.* or 14*l.* bullock. Some of my men say five will, but I hesitate to assert this, but speak confidently when I say six will. I put the sheep just into my ordinary fold yards, and always calculate six sheep to one bullock; so that where I should have ten bullocks I put sixty sheep. During the whole of last winter I don't suppose I had more than a dozen lame sheep whilst they were in the yards; this winter I have had more, as many of them came lame into the yards—arising, I suppose, from the wetness of the last summer. I may, however, say, there have been far less cases in the yards than there were previously to their coming in. I find it is very essential to keep a thin layer of dry straw over the yard. In wet days we litter them twice a-day, and on fine days once, but we only use a small quantity at a time; this just keeps the heat of the manure from rising to injure their feet, and prevents them also treading on wet straw during the day. When they first come into the yard, and indeed until the end of February, when the days begin to lengthen, we give them a larger quantity of dry food; they pick the bedding straw over, and where practicable have a stack or good heap in the yard to run to; we also cut them chaff, hay, and straw together, and feed them several times a-day with it. We give them a few Mangels twice or thrice a-day, but not in quantities sufficiently large to make them scour; but as the days lengthen we increase the quantity of Mangels, and reduce the supply of dry food. I find an acre of Mangels of an average crop will carry 25 sheep, *i.e.* 25 lambs, during the weeks they will require to be in the yard, say from the beginning of December to the beginning or middle of April; old sheep would consume more, and 20 per acre would be a fair calculation.

I will now present some details in connection with my last year's experiments. The 377 lambs wintered in the yards last year were bought during the months of August and September, and were kept entirely at Grass-keeping without artificial food, until December, when they were consigned to their winter quarters. Lot 1: 94 lambs were bought August 22, at an average cost of 30*s.* 2*d.* per head, and were valued into the yards on the 10th of December at 35*s.* per head. In addition to the natural food already so frequently alluded to, viz., Mangels, hay, and straw, they eat ½ pint of Oats and ¼ lb. of cotton cake per day, at a weekly cost of 1½*d.* per head. Six of these died or had to be killed at intervals during the winter, from different causes, particulars of which I have before me, but which I need not stay to enumerate. The remaining 88 were put to Grass on the 14th of April, valued at 50*s.* per head, having been in 15 weeks. Lot 2: 96 lambs were purchased on the 13th September, and cost 30*s.* 6*d.* per head. These were put into the yards on the 3d December valued at 34*s.* per head, and were kept precisely the same as Lot 1. Four of these died, or had to be killed before they left the yards; the remaining 92 were put to Grass on the 14th April, valued also at 50*s.* per head, having been in 16 weeks. Lot 3 and Lot 4 (84 and 103 respectively) were bought at different times during the month of August, at prices ranging from 25*s.* 6*d.* to 28*s.* Lot 3 (84) were put into the yards on the 3d of December, valued at 32*s.* 6*d.* per head, and lived the same as Lots 1 and 2. Only one of these died during the winter, and the remaining 83 were put to Grass on the 14th of April, valued at 48*s.* per head, having been in 16 weeks. Lot 4 (103) were put into yards on the 3d December, valued at 30*s.* each. These, too, were fed the same. Two had to be killed during the winter, and the remaining 101 were put to Grass on the 21st of April, valued at 48*s.* each, having been 17 weeks in the yards. The results when tabulated yield the following conclusions:—

	£	s.	d.	£	s.	d.
The whole 377 lambs were valued into the yards at	618	14	0			
and that they cost for artificial food ..	37	15	1½			
making a total cost of				656	9	1½
and, further, that the 364 put to grass were valued at	891	12	0			
and that the 13 casualties realised ..	9	16	3			
making a total of				901	8	3
which shows a profit on the whole of				244	19	1½
which I dispose of as follows, viz.:						
hay, straw, attendance, at 3*s.* per head, for 377				56	11	0
15 acres Mangel, allowing 25 sheep to the acre, at 12*l.* 11*s.* 2½*d.* per acre ..				188	8	1½

or, if you take two acres more Mangels, and call the total quantity 17 acres, it will then give you 11*l.* 1*s.* 8*d.* per acre for them, within a fraction: but I regard the former as the more correct calculation. As I previously stated, I suffered last year—as indeed I had done for three or four years—from lung disease with my bullocks, and sustained some rather serious losses. The lot of Scots, to which I have referred in an earlier part of this paper as having last year been afflicted with this terrible disorder, were bought on the 12th of March, 1859, and cost just 8*l.* 3*s.* 4*d.* per head when they reached my farm. They were put upon a very good (for our country) field of Grass, and made considerable progress, and on the 1st of July of the same year, when taking stock, with a view to closing and balancing my year's accounts, I valued them at 11*l.* per head. On the 29th of October they were put into yards, and I then valued them at 13*l.* 10*s.* per head. But before that time—during September I believe—two of them were seized with lung disease, and after some two or three weeks' doctoring and dosing, had to be killed. There were therefore only 24 left for the yards; and by the 3d of December these were reduced to 18. Some of the best bullocks fell, and I found the better plan was to dispose of them at once, before they sustained any serious harm. Two were therefore sold on the 11th of November for 14*l.* 17*s.*; two on the 18th for 17*l.* 17*s.*; one on the 29th, which realised 6*l.* 3*s.*, and one on the 3d of December, which realised 6*l.* 17*s.* After the 3d of December no more disease appeared, and I kept the 18 until the 2d of February, 1860, when they left me in good health, but went to a bad market, keep being very short last spring, and they brought home, clear of expenses, only 13*l.* 11*s.* 6*d.* per head, or just 1*s.* 6*d.* per head more than they were worth on the 29th of the previous October. During the time they were in the yards they consumed chaff—half hay and half straw—and 3 lbs. of the best decorticated Cotton-seed cake each per day. They had no Mangels, as they were at a farm where none were grown that year. The cost per head for cake was 1*l.* 1*s.* 6*d.* The six that fell with lung disease made 29*l.* 6*s.* less than they were valued at when they went into the yards, and the 18 that did not suffer lost 1*l.* per head on the cake account, besides all the hay, straw, and attendance—rather a costly yard of manure!

Let us look at the case a little further. Take a case where 30*s.* per head has been realised for the natural food consumed during the months that cattle have been in the yards, one bullock will return as much profit as two and a half sheep, or a trifle over, and will yet have cost as much keeping as six sheep. The figures will stand thus:—Profit on one bullock, 1*l.* 10*s.*; profit on six sheep, which have consumed the same amount of food, and made the same amount of manure, 3*l.* 18*s.* Excess of profit on account of sheep, all other things being equal, 2*l.* 8*s.* The sheep calculations are all based upon the figures contained in the tables to which I have just invited your attention, where it appears that 377 sheep paid 244*l.* 19*s.* 1½*d.* for the natural food consumed in the yards, including all losses. This year, I have, as before stated, upwards of 600 sheep in the yards. To simplify the matter, suppose I say I have 600 exactly; these are consuming the food and making the manure that 100 bullocks would consume and make. Taking 1*l.* 10*s.* as the profit per head on 100 bullocks, and 3*l.* 18*s.* the profit on six sheep—and I think the latter is quite as likely to be realised this year as the former, and indeed more so—what is my position then? Why, instead of getting 150*l.* for the food consumed by 100 bullocks, for the very same food consumed by 600 sheep, I get 390*l.*: which simply puts 240*l.* into my pocket, and emboldens me to stand here, and argue in favour of sheep as manure manufacturers.

There is just one other argument I would adduce: our Fen soils appear naturally more adapted for sheep than bullocks. Coleseed, which grows very freely upon them, is very fattening, and perhaps there is no vegetable food that sheep can consume that will give them so much firmness of hand, and so large an increase of weight in a given time, as good Fen land Coleseed. It is incredible how rapidly sheep will sometimes get fat upon it. Clover and Rye grass, the common herbage on a Fen farm, is far more suited to sheep than bullocks. Sheep, with an occasional change, will thrive well, and upon Clover eddishes will get good mutton, especially if a small quantity of cake is given to them. Bullocks do not generally thrive well on our Fen lands, and unless they have frequent change to high lands, they will soon become diseased and unhealthy. Linseed cake, although tending to mitigate, does not prevent the disease; and we have every year ample evidence to convince us that Fen land is not healthy for bullocks. We have plenty of land that will feed a sheep, that, if it will not starve, will do very little to mend a bullock. It seems only fair then to assume that as the herbage on these lands—*i.e.*, the Rye-grass and Clover—in its green and growing state, is so much better food for sheep than for bullocks, that the same herbage, when mown and made into hay, should retain the same superiority and fitness for sheep over bullocks. The cost for artificial food for my sheep last year was small, the whole 377 only consuming what cost 37*l.* 15*s.* 1½*d.* But, of course, this was quite optional. I wanted my sheep for a certain purpose, and I kept them accordingly. From the yards they went upon some old pasture land, and in July upon Clover and Timothy grass eddishes, and in August and September to Coleseed. They went to market from September to the end of the year, and made about 55*s.* to 56*s.* per head, leaving 15*s.* to 16*s.* per head for wool besides, being a total of 21*s.* or 22*s.* per head for summering. Where it is an object of great importance to make the manure of very superior quality, of course more artificial food must be given. This may be exactly regulated to meet the requirements of any and every case, without in any way interfering with the principle I am discussing. An objection has been raised against sheep as manure manufacturers, viz., that the manure made by these would be inferior in quality to that made by bullocks. This was evidently a question for chemistry to determine. Mr. Lawes tells me, I have no reason to suppose that the manure from sheep or bullocks eating equal quantities and quality of food would differ in value, and you will be quite justified in assuming that the quality of the manure depends upon the food consumed, irrespective of the animal.

Mr. Ruston then described the experience of others, to which reference is made elsewhere.

WINFRITH: *Barley and its Treatment.*—Mr. Randall said:—The subject for our consideration this evening is, the best sorts of Barley for the district, and treatment for it. From personal experience I have only formed the acquaintance of some three or four varieties.

The *Common or Early English* Barley is the first I shall bring to your notice, and as its name implies, is the one most commonly cultivated through the three kingdoms, and although from time to time many other varieties have been introduced, it still maintains its position, while the newer sorts have fallen out of favour. It is very suitable for sowing on light lands where the practice of sheep folding prevails, and also for a greater range of soils than many other varieties; it has the advantage of coming to maturity earlier, requiring only from 14 to 16 weeks to perfect its growth. For light lands of inferior descriptions this Barley appears better adapted than almost any other kind, and even on cold clay soils its early maturity and free manner of growing gives it a decided superiority over those varieties which, although of finer quality, are of much slower growth; it also, I believe, works very well in the malthouse. The *Chevalier* Barley is a great favourite with the maltsters, and on good Barley land answers the farmer's purpose very well, but in this district, I think, there is an opinion that we cannot grow so many bushels per acre of it as we can of the coarser varieties. Then comes the question, does the superior quality of the Chevalier Barley, and as a matter of course the extra price it will command in the market, counterbalance the loss by the deficiency in the amount of bushels per acre? It must, I believe, be sown rather earlier in the season, as it requires a longer time to ripen than some of the more common sorts. The *Leghorn* Barley is a very good sort for the farmer; it is a very fair cropper, and a good malting Barley, and is often worth several shillings per quarter more than the coarse Barleys, although the coarser ones may be the heaviest per bushel. The *Annat* Barley is one sown rather largely in this district, and has, I think, proved to be a very good sort, but has not attained the celebrity of the Chevalier for malting purposes. It is a very productive Barley if sown on a sandy loam. The *American* Barley is also sown to some extent in this neighbourhood; it is a fair sort, yielding variously per acre, but is rather coarse in the grain. The *Nottingham* Barley makes a fine sample, but it is also considered coarse; it is generally of a good colour, and works wells in the malthouse, and is, I believe, sown rather largely in the north of England. The *Pomeranian* or German Barley is a sort introduced from the Continent, and cultivated successfully in the northern districts of Scotland; it is hardy, early, and generally productive, the straw is tall and strong, the ear long and open, the grain of good colour, and weighs well, generally forming a good sample, and is considered a good sort for cold soils and late districts. There is a sort called the *Norfolk Shortneck*, which is spoken of as being very suitable for high and exposed situations. It has a long and tough straw, compact ear, with long and strong awns attached, and generally produces a sample good in quantity as well as in quality. *Potter's Chevalier* is a variety almost new to this district, it having been introduced but very recently; but from the character I have heard of it, I think it will soon supersede a good many of the coarse sorts, as it is found to answer very well on average soils. There is also a very useful Barley called the *Jela* Barley; it can be sown later than any other sorts; it is suitable for all Barley soils, yields well, and is a good sample for the maltster. But for a better description of these two last sorts, I shall refer to some of my friends here who grew them last year. There are also several varieties of Barley sown for feeding purposes; amongst them may be found the *Black Four-rowed*. It is sufficiently hardy to stand the winter, can be fed off in the spring by the sheep, and will grow a good crop of corn afterwards, if the land is not wanted for a crop of Turnips. The *Winter White*, a six-rowed Barley, is very suitable for sowing in late districts, as it comes to maturity a fortnight earlier than any sown in the spring.

I will now say a few words on the cultivation of Barley:—

One great object to be attained before sowing Barley is to

have the land perfectly clean and dry, and when Barley follows the Turnip crop I would recommend, immediately after the Turnips are fed off, either to put a scarifier across the field or to plough it very shallow, for by so doing we get the sheep droppings more intimately mixed with the soil, and also prevent its being washed away by the rain, especially in the hilly districts, thereby we have the advantage of destroying any Grass or weeds which may have escaped the hoes in cleaning the previous root crop. The four or five-course system is generally adopted in this district, and in both systems the Barley follows the Turnip crop, and is succeeded by Clover. If the Turnip crop, to which a liberal amount of artificial manures has been given, is all fed off on the land, and the manurial produce enriched by the addition of oil cake or corn, the land may be sometimes left in too high condition, and the Barley would grow too luxuriantly, and would to a certainty be laid; then the consequence is a very inferior sample of corn, and most likely the Clover plant killed. Now, to remedy this, a large or small portion, as the case may be, of the Turnips should be pulled up and carted away for the purpose of feeding elsewhere. Shallow or thin ploughing, for the Barley crop, is considered beneficial to the growth of Clovers, which, like Wheat, thrive and stand the winter better on a firm subsoil. I do not think that sufficient attention is always paid to seed Barleys,—the temptation of the higher price often takes all the best grain of the farm to the market, and the farmer then contents himself with sowing the best tailing. I believe the seed ought to be of the best quality, fully matured, quite free from injury, and true to its variety. Another point to be considered in reference to seed corn is the advantage of a frequent change of seed from a different district, different both as regards soil and climate from our own, as I believe that seed corn produced year after year on the same soil is apt to deteriorate in quality, and, as a natural consequence, in value, and to produce a smaller crop than if it be sometimes changed. The practice of changing seed is strictly adhered to by some farmers, for not only is a more healthy plant secured, but an opportunity is offered, by sowing seed from an earlier district, to accelerate the time of our own harvest, which to us is at all times a matter of great importance. In sowing Barley some use the Suffolk drill, others prefer the old-fashioned plan of sowing broadcast. I prefer the drill where practicable, as it not only deposits the seed at an uniform depth, but also puts it out of the way of the birds, and effects a considerable saving in the quantity of seed required. I think very early in the season that three bushels per acre is quite sufficient; but, as the season advances, a small addition to the quantity is required. I also consider that the early sown Barley, especially on our hills, is always the best. I think we ought, if possible, to get the greater part of it in in the month of March, the earlier in the month the better; even the last week in February, if our hill land will work free, I do not think too early to begin sowing. Now, gentlemen, having touched upon most of the principal parts of the subject, I must leave it in your hands, hoping I have said sufficient to provoke a good discussion, as I believe it is only by the interchange of opinion that we can arrive at a correct conclusion.

Mr. Budden said he had grown Potter's Chevalier for three years, and when sown early it was as good as any in the market; the July Barley, when sown in the latter end of April or beginning of May, was of a very good quality, it matured as early as some others sown considerably before; yet he believed that early sowing was very beneficial, and made the crop much more productive.

Mr. Reader thought that where the general practice was to use large quantities of artificial manures for the root crop, and those roots fed off on the land, it was desirable the Barley should be sown early—in February if the land would work well. He had always found early-sown produce a larger quantity of corn, and of a very superior quality, and the straw of late sown was generally weak, consequently was often laid down, and injured very much the Clover plant, which was a great consideration.

Mr. Meade stated, with regard to the time of sowing Barley, that the sooner it was done the better. He had once sown some in January, 2½ bushels per acre, and farther on in the season had sown the remainder of the field, 3 bushels per acre. At harvest he found the earliest sown much thicker on the ground, a larger quantity of corn, and a very much better quality. In fact, it was the best he ever grew. He had experience of late and early sowing, and recollected on one occasion putting in Barley as late as the end of April. This he found on threshing to be fit for nothing but pigs. He had sown Barley after Wheat, and the result was that the quality was greatly improved, but the quantity not so much, though he had sown guano with it.

The Chairman said he differed in some points from the gentlemen who had spoken about the several descriptions of Barley, and changing of the seed; having bought some at Norfolk and sowed it in the same field by the side of what he had sown for many previous years, at harvest he could not see any difference in quantity or quality, they were so much alike. He had adopted the system of saving his own best tailing Barley for seed for 14 or 15 years, and found it answered very well, the produce coming up to his expectation. He then tried a change of seed, and found no advantage resulting from it, it being the worst crop, by four sacks per acre, he had grown for many years. He always found that the tighter the ground was, the firmer would be the straw. He had never known late sowing of Barley to produce a good crop; the quantity of straw would be very great, but the produce of grain was never nearly so good as early sown corn.

KINGSCOTE: *March 27.—On the Desirability of the Farmer being well versed in the Theory as well as Practice of his Art.*—Mr. Cox, of Minchinhampton, read a paper from which we make the following extracts:—

I think what has tended more than anything else to bring theory into contempt is the wild and visionary ideas that sometimes seize on the brains of some of our greatest and most eloquent scribes; ideas that appear so capital on paper because written with so much enthusiasm, and which so captivate the minds of gentlemen with overflowing pockets that they will against all reason adopt the idea to the letter, without once asking themselves "Is this applicable to my case?" Well, in a very few years practice proves the fallacy of those high-flown proceedings, and the practical man has his triumph, and while rubbing his hands and shaking his sides exclaims "There go your theorists." We will take, for instance, *Draining*:—

I knew a gentleman who had a piece of very dry ground, and it produced a sort of black Grass or creeping Bent and Moss, and no Clover or any good herbage; it was a very side-land piece of ground, and free from calcareous matter, and he asked me what was best to do with it? I said, give it a good dressing of marl or some heavy loam, then sow some Perennial Clover and a few pounds of Cocksfoot and Perennial Rye, and Crested Dog's-tail, and Sweet Meadow Grass, &c.; then harrow as long as you like, no matter how much of its present sward you peel off: and I really thought I was giving sound advice; but he burst out laughing, and said, I see you are going back to old times; you are not half up with these times; I am going to drain it; that is all the go now. And he did drain it, and of course did no good, and then he set draining down as a humbug. Now, to call those men theorists is an injustice, an actual libel on true theory. They are phantom hunters, and had they understood theory they would have been enabled to steer clear of those absurdities, and to apply their hands to useful purposes. The true theory of draining is to draw gradually through the soil the showers of rain that fall upon it, and after having made them the medium of conveying the food contained in the soil, and that added to it, to the innumerable mouths of the plants growing on it, and of aerating and decomposing the mineral matter contained in it, to let the water pass off in the best manner we can, so that it shall not stagnate and starve the crops, as is the case in still too many instances.

Then, as regards deep culture, there is no doubt this is one of the best practices of good husbandry where practicable, as on deep alluvial loam.

Every good farmer knows it won't do on many parts of the Cotswolds or any of our brash land; but we sometimes get a wiseacre telling us we must plough deeper and find the gold because a Mr. Smith, or a Mr. Dixon, or a Mr. Hardy says so; and I have known a few who for want of knowing the true theory of the case have followed the direction and lost the gold, while another, for the very same reason, who might plough deep and find the gold, refuses to do it because his friend tried it and lost!

Look now at the Theory of manuring, and here it will be found the farmer is much in want of the aid of science to enable him to make the most of this, the staple article in his Turnip field, and in fact in his whole rotation.

What a storm of ridicule has been heaped upon our friend Liebig for asserting that there is no necessity for adding organic manure to the soil; but that if a sufficiency of mineral or inorganic substances is added the plant will be enabled to obtain all it requires from the atmosphere—while the theory of Tull, after being buried nearly a century, has been revived by Mr. Smith of Lois-Weedon, and others—that the soil requires nothing more than to be well turned about and exposed to the atmosphere, when it will acquire all it wants from the decomposition of its mineral matters, and the fertilising effects of the air. Now, although both those propositions read queerly to us on the thin soils of the Cotswold Hills, yet there are many thousands of acres in and out of cultivation in England, to which each of those theories would apply for many years in the production of cereal crops, if people only sufficiently understood them. The soils I allude to are those deep, rich districts of bog or Moss lands, sometimes termed "fen lands," where there is many feet deep of organic matter, without a sufficiency of mineral ingredients, and where the plant grows and flourishes with great luxuriance till the time of forming the ear, when down it goes, having nothing to give it strength, or as I may say, no bones for its support; I submit that Liebig's theory would be the best in such a case. The next is in such a soil as I once saw in Hertfordshire, where the occupier told me he could dig down 14 feet and find no difference from the top spit, except perhaps a slight difference in colour; there, as well as many other places where the subsoil is rich in mineral as well as organic substances, Mr. Smith's theory of bringing up a little of it every time of ploughing or digging, would, with the assistance of the food obtained from the atmosphere, grow good crops of corn. The Rothamstead theory, however, is the one that for us is the safest, that is, as farm yard manure contains nearly all the elements, both organic and inorganic, required by farm crops, it is after all the best manure if properly managed and applied. I said nearly all, because there is one ingredient (phosphoric acid) that farmyard manure is something deficient in; this is a substance largely required by many crops, and is likewise necessary in the economy of feeding; it goes towards the formation of bone in all animals, and a facetious French baron looks forward exultingly to the time when all this substance shall be buried in the graveyards of our country, in the bones of its inhabitants, and almost insinuates that our fall would have been ere this time, had we not ransacked the battle fields of Germany and the Crimea and ground up the bones of their victims to obtain it. Now science has discovered, and theory has demonstrated to us, that without grinding up the bones of our predecessors we have an almost inexhaustible supply of this useful mineral in the rich clays, the green sandstone, and in the fossil bone of our own country, as well as Spain and other countries, more than enough to compensate for that buried in our cemeteries. But what should we have known about this manure had not theory directed us? I can well recollect when 50 bushels of bones to the acre was thought a poor dressing, now it is made to do for 5 acres, and with better success; theory tells us, too, what soils are benefited by bones, and what by guano, and what crops require the most of one or the other.

I will pass on to the beautiful and useful theory of feeding.

Cobbett told us many years ago that the Potato was a nasty weed, a curse to England and the curse of Ireland, and Dr. Playfair and others have told us more recently why it was a lazy weed. It was not an inherent fault in the Potato fed labourer that he was lazy; but the fault lay in the fact that the Potato is incapable of affording a sufficient quantity of the flesh-forming principle to enable a man to do a day's work, even if he was to eat 14 lbs. per day. We find by the analysis of food, that 3½ lbs. of Peas give nearly as much muscle as 50 lbs. of Potatoes; hence, although Potatoes judiciously mixed with other food are a very useful article of diet, theory tells us that we may as well think of mending the worn out parts of a steam engine with coals as replacing the worn out parts of the animal frame with Potatoes; thus we have to thank theory and science for unfolding to us the different properties of the food we eat; for pointing out to us the different proportions of each such substance required to maintain us and our labourers, and our horses, in health and vigour. Theory tells us why we require Beans for our hard worked horses, and why we require aliments richer in carbonaceous substances for our fatting cattle. Theory tells us, too, why the manure of well fed animals is richer and better than that of ill fed ones; why those foods that are rich in phosphates are best for young animals, and what those foods are.

But I will tire your patience with only one other case, and that is included in the word Physiology.

Theory must assist the young practitioner in the choice of his animals whether they are for draught, for riding, for fatting, or for milking. Of course many have acquired a pretty good knowledge of this by long experience and close observation, and yet I doubt much if even those men who boast of "never having read a book on farming in all their lives," are not more indebted to theory than they like to confess. Have you never gone into a market, or a fair, to buy a cow, when the dealer will accost you something in this way—"Just look at her bag, how square it stands; did you ever see such milk veins; look at her breast, almost touching the ground; what an eye she has; why her horns are not much bigger than one's whip stick; you can see through her ears; she is as straight along the back as an arrow, and broad enough to play a game of bagatelle on. Her leg below the knee is like a buck: you can look in her face and see that she is a good 'un; and as for being a good milker, I never seed one as the hair grew the wrong way up the udder, that wasn't a good 'un, and you could hang your hat on her hock bones." Well, gentlemen, all this is theory; and a very great deal of your management, although you consider it purely practical, has been taught theoretically. Your fathers or friends have often told you what they found to succeed best, and what they found to fail, and by acting on their experience, as well as their fathers', for many generations, added to your own experience, you are working on theory (as well as practice) in its deepest sense. As regards vegetable physiology, I will take just one illustration. I was, not long ago, talking to a very intelligent farmer about saving Turnip seed: "Ah," said he, "we can't do that in this country." "Why not?" "Because I have tried it, but I will never try it again. I was as careful as any one could be. I pulled up the bulbs with my own hands, and had them planted in the garden, both Swedes and Turnips; and when I came to sow the seeds the plants came up something of all sorts, and 'twas a regular mess out." Of course it was; only fancy planting Turnips and Swedes to seed together in one garden; and, to mend the matter, let a few winter greens bloom at the same time. Now, if he had just known that plants possess sexual organs as perfect as those of animals, and that all those plants in his garden belonged to the same natural family, which a little theory would most assuredly have taught him, he might most likely have saved himself the mortification as well as the loss he sustained, and would have been gratified that he had succeeded so well, and been a gainer instead of a loser by the experiment.

I had intended to pass over the sister sciences of chemistry, botany, and geology, but they seem to be so completely intermixed with the theory of agriculture, that I must just take a slight passing glance:—

I consider it very essential that the young farmer should know something of each of these sciences. I do not think it necessary that he should trouble to know or attempt to pronounce all the hard names which they are at present encumbered with, but to be acquainted with a few of their general principles. For instance, we will consider a young farmer going into a strange locality to look at a farm. If he see a quantity of Rushes and Horse-tail, Reed Meadow-Grass, and such like Grasses and weeds, he may know at once that the soil requires draining, and by this means may be made productive; but if these plants are absent, and he see such plants as the Yellow Rattle, Water-bed Straw, Crested Rush, and such like, he may be sure that the land is not only wet but poor; while such plants as the Round-leaved Harebell, Hair-grass, Sandwort, Hawkweed, Purging Flax, and such like, indicate a very dry and a very poor soil; but if there should abound in large quantity Yarrow, Chickweed, Burdock, Nettles, and Couch, with strings like whipcord, close with it, you may be sure there is something about it somewhere. Again there are plants indicating certain chemical properties of the soil, as the Heath, the Lycopodium, Spike Rush, Cotton-grass, &c. By the presence of these you may know at a glance there is no lime in the soil, and consequently it must be added as a manure if you would make it useful. This, however, is but a mere glance at the uses of botany to the farmer; he should of course know the botany of cultivated plants to know how and where to grow them best; and the knowledge of the botany of weeds would enable him perhaps to destroy them with greater facility. The chemistry of agriculture would afford the farmer the means of judging the best kind of manure to add to certain soils; there may be soils rich in nearly all the ingredients required, yet lacking one; a knowledge of that one would be an inestimable boon to the cultivator who has been toiling on and on in disappointment, and would enable the young beginner to avoid that disappointment and loss. While by being acquainted with the geological character of the district, and applying his chemical and botanical knowledge, he would be at once enabled to proceed with his work, without waiting two or three years for experience, or peeping over the hedges into his neighbours' fields for information. Thus if he was located on the chalk formation he would not think of applying lime to his land; if he were placed on the green sand he might know that the phosphates abounded; if on the oolite, that calcareous matter would enable him to grow many of the best forage plants, such as Sainfoin, &c., which will not grow well except in calcareous soils; if on a deep alluvial soil, geology would enable one to tell pretty nearly its component parts, by marking the source from which it was deposited.

In the discussion that followed most members agreed in the main with Mr. Cox. Theory however of a mere speculative nature was condemned, and that only advocated or thought desirable, which was drawn from principles established on independent evidence. The following resolution was unanimously passed:—

"That it is most desirable the farmer should be well versed both in the theory and practice of his art, for without the aid of scientific knowledge he will be unable to keep pace with the rapid strides agriculture is taking, and if he is not thoroughly practical he is in danger of being occasionally carried away by unsound or ill-applied theory."

Miscellaneous.

Fallow Crops.—Fallow crops are restorative, and yet, taking the chemist's view of the subject, they extract more fertilising matter from the soil than any other which the farmer cultivates. Thus 20 tons of Swedish Turnips remove, generally speaking, in bulbs and tops nearly 6 cwt. of mineral substances per acre from the soil. 30 tons of Mangel Wurzels will in their roots remove 6 cwt. of ash, and in their tops probably 2 cwt. more per acre. On the other hand Wheat (30 bushels) removes only 178 lbs. of mineral substances both in straw and grain. Barley (40 bushels) takes about 200 lbs. from the land in the same way. Beans (28 bushels) will take about 180 lbs. in grain and straw. Oats (50 bushels) removes 2 cwt., and Beans (25 bushels) take about 2¼ cwt. from the land per acre. Look also at the various elements thus removed. Of the Turnip crop per acre 200 lbs. are potash, and of Mangel one quarter of the weight of its ash is potash. The Turnip takes 60 lbs. of phosphoric acid, and of the Mangel, one-20th of the entire weight of its ash is phosphoric acid. The grain crops which yield the smaller quantity of ash, and which actually use the smaller quantity of phosphorus and nitrogen too in building up their structures, are nevertheless in practice found to be the exhausting crops—while the Turnip and the Mangel, which take the larger quantity from the land of all these things, are in reality

the restorative crops. The explanation lies in this—that (1) the latter, notwithstanding the greater immediate tax upon the soil which they levy, and to supply them with which we apply heavy dressings of dung to obtain good crops of them, yet being consumed upon the land again, they give up those ingredients to the surface which they had taken from the subsoil as well as from the surface soil, so that the upper layer is in effect richer by their cultivation and consumption on the land. Much of the corn crop, on the other hand, all its grain part being sold from the land, takes from it that which it does not restore. The next reason for the restorative charater of the green crop is (2) that the Turnip and the Mangel Wurzel, which require a certain amount of nitrogen in the form of ammonia and other nitrogenous compounds in the manure and in the soil, do, in the act of growing, take it not only from these sources, but by their immense surface of leaf exposed to the air, they take it from the atmosphere as well. And so by their consumption after growth, a larger quantity of nitrogenous matter is returned to the land than was taken from it. And the last reason of the contrast between grain and green crops, as regards their influence on the soil, lies (3) in the manner of cultivation which they severally require. The soil is, during the growth of the Turnip and Mangel Wurzel, and by the manner of their cultivation, rendered so much more open to all the fertilising influences of air and rain than is permitted to it during the growth of corn crops, as they are generally cultivated. That this is a valid reason for the superiority of the Turnip, for instance to the Wheat, in its influence on the soil, seems plain from Mr. Smith's experience at Lois-Weedon, where it appears that by the thorough cultivation of the land during the growth of the Wheat crop, and between its widely separated rows, the period of exhaustion consequent upon the continued growth of that grain seems to be indefinitely postponed. *From Sutton's Farmers' Manual and Seed List.*

Calendar of Operations.

APRIL.

Cultivation of Mangel Wurzel.—[We take the following paragraph from Messrs Sutton's of Reading "Farmers' Manual and Seed List.] The cultivation of the Mangel Wurzel is precisely the same as that of the Swedish Turnip. There is a difference in the seed-time, but hardly any in the treatment of the soil either before it, or during the growth of the crop. Mangels like a stiffer soil than Turnips, but there is the same need of autumnal cultivation of the land. If the land be ploughed and cleaned and manured in rows during the autumn, then it only needs the same spring treatment of the drilled land which has been described in the case of Kohl Rabi [viz., a grubbing with the cultivator, ribbing with the plough, the ridgelets being about 27 inches wide—the manure is then carted and distributed in the drills, and covered by splitting the intervening ridgelets]. A heavy dressing of dung, and a liberal supply of superphosphate will be well repaid the future crop, and it is found in accordance with what is known both of the natural history and the chemistry of the plant, (viz., that it is a native of the sea-shore, and that its ash contains a large proportion of chloride of sodium, or common salt,) that the crop will also repay, by additional and more healthy growth, a considerable dressing of common salt, to the extent indeed of two or three cwt. per acre. The seed may be either drilled on the top of each drill or row, or dibbled therein at intervals of 15 to 18 inches—the rows themselves being 28 to 30 inches apart. The proper seed time is about the end of April. No advantage is obtained by sowing too early, as the seed will be longer in the land without germination, and the plants will also be more liable to run to seed. From 6 to 7 lbs. per acre should be used; and if it be damped for two or three days before sowing, it will sprout the sooner. The cheapest way to sow it is by the drill, depositing two rows or more at once, either on the flat, or what is better, on the top of the ridgelet over the row of manure; but it is not much more costly, and there are some advantages in depositing the seed by the hand dibble. The women or boys who plant the seed have a stick the length of the interval between the future bunches, and they measure out the place of the next plant by means of it. With the end of it they remove any clod which may lie there, making a little bed for the two or three seeds which they drop in that place, and then covering them up with a little fine earth, and half treading them in. Mangold seed is very easily buried, and not more than half an inch of earth should be used to cover it. The plants come up in bunches in these places.

STATE OF THE WEATHER—BERKSHIRE.

For the week ending April 11: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain.	Wind	Barometer.
		Max in Sun.	Max. in shade.	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	5 ..	64.2	50.8	32.2	44.5	47.0	..	N.W.	29.72
Saturday	6 ..	66.0	50.0	24.0	41.1	46.6	..	N.E.	29.95
Sunday	7 ..	75.0	51.0	37.0	49.7	47.2	..	E	30.10
Monday	8 ..	67.2	48.0	29.0	43.8	47.0	..	E.	30.22
Tuesday	9 ..	76.0	51.0	24.4	43.9	46.8	..	E.	30.37
Wednesday	10 ..	69.2	49.0	20.0	39.6	46.0	..	E	30.36
Thursday	11 ..	82.8	53.4	22.6	45.1	46.8	..	N.E.	30.28

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Error last Week, viz., the Temperature of the Soil on Thursday, 4th, should have been 46.5, instead of 66.5.—J. B. S.

Notices to Correspondents.

Grass Lands: *W T Hunter.* Feed bare in autumn, lay on compost, and spread during winter: well harrow in March, and roll down. If you sow any seeds over the Grass, you had better, instead of bush-harrowing, turn it well with light harrows, and rake all the moss and waste off. Then sow your supplementary seeds, and roll down. But it is to be remembered that however you sow seeds, if the land has no better treatment, it will soon relapse to its old state.

Mangel-Wurzel: *J M.* 16s. to 20s. a ton is a common price for Mangels, sold on the ground, but to be carried away.

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Principal—J. C. Nesbit, F.G.S., F.C.S., &c.

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No investigation of title being required or notices given to Reversioners or Mortgagees, no legal expenses are incurred.

The Company furnish designs of every description, and undertake the entire responsibility of the works wherever desired by Landowners.

No profit whatever is taken by the Company on any works they execute, the actual expenditure only approved by the Inclosure Commissioners, with a commission thereon, being charged in all cases.

Applications to be addressed to William Clifford, the Secretary, at the Offices of the Company, 52, Parliament Street, London, S.W.

THE LANDS IMPROVEMENT COMPANY.—Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.

To Landowners, the Clergy, Estate Agents, Surveyors, &c. in England and Wales and in Scotland.

The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.

For further information, and for forms of application, apply to the Honourable William Napier, Managing Director, 2, Old Palace Yard, Westminster, S.W.

GENUINE ROLL TOBACCO CLOTH.
Warranted equal in Strength to Tobacco.

JOSEPH BAKER, 10, Gough Square, Fleet St., E.C., having dealt upwards of 20 years in the above, can recommend it as the best article for destroying the Fly. 1s. 4d. per lb.; over 10 lbs., 1s. Post-office Orders payable Fleet Street.

PAGE'S BLIGHT COMPOSITION—Extra strong, 4s. per Gallon, sufficient to make Four. Ten Gallons and upwards, Carriage Free to London.

NINE YEARS' extensive manufacture has enabled Page & Toogood to effect great improvement in their Blight Composition. It is prepared upon Chemical principles, to destroy SCALE, THRIP, MEALY BUG, RED SPIDER, MILDEW, AMERICAN BLIGHT, &c., without injuring vegetation.

LONDON AGENTS:—
Henderson & Co., Pine-apple Place, N.W.
Veitch & Son, Chelsea, S.W.
Cutbush & Son, Highgate Nursery, N.
Mr. Barnes, Camden Nursery, N.W.
Mr. Hopgood, Shepherd's Bush, W.
Mr. Clark, Streatham Place, S.

The leading Provincial Houses, and of the Manufacturers and Inventors, Page & Toogood, Royal South Hants Seed Establishment, Southampton.

FUMIGATING AND SYRINGING.

GRIFFITHS and AVISS, Tobacconists, Coventry, call attention to their TOBACCO PAPER. It is simple in use, safe in application, altogether effective in the destruction of Green Fly, Black Thrips, &c., nominal in price, 12s. 6d. per dozen pounds (not including carriage), sent to any part of the kingdom on receipt of Post Office Order. To those in the Trade a liberal discount on 28 lbs. and upwards. The following practical gentlemen have submitted it to every kind of ordeal, and bear testimony it is all we represent:—

Mr. Charles E. West, the Earl of Denbigh, Newnham Paddox
Mr. Wm. Oliver, the Earl of Craven, Combe Abbey
Mr. A. Henderson, His Grace the Duke of Sutherland, Trentham
Mr. Wm. Pool, the Earl of Aylesford, Packington Hall
Mr. John Jennings, the Earl of Derby, Knowsley Park
Mr. Thomas Pond, the Viscount Hood, Whitley Abbey
Mr. Geo. Tranter, the Hon. Granville D. Ryder, Westbrook, Hemel Hempstead
Mr. Geo. Bennett, J. Beech, Esq., Brandon
Mr. Jas. Knackston, J. R. West, Esq., Alcot Park
Mr. W. H. Mountford, H. R. Hughes, Esq., Kinmel Park, St. Asaph, North Wales
Mr. Peter Conlon, C. Webb, Esq., The Gardens, High Grounds, Hoddesden
Mr. Francis R. Kinghorne, Nurseryman, Seedsman, and Florist, Richmond, Surrey
Mr. John Reeves, Ladbroke Nursery, Notting Hill, W.
Mr. John Jennings, Nurseries, Shipston-on-Stour
Mr. Edward Perkins, Nurseryman, Seedsman, and Florist, Leamington Nursery
Mr. John Ogden, Nurseryman, Seedsman, and Florist, Coventry
Messrs. S. Perkins & Sons, Nurserymen, Seedsmen, and Florists, Coventry

, Agents Wanted. Nurserymen and Florists preferred.

N.B. Cast Fumigating Pots, Tobacco Water for Syringing, and Tobacco Juice for Sheep Dressing.

FOR SMOKING GREENHOUSES.

NEAL'S PATENT APHIS PASTILS light with a Candle, save all trouble, destroy all Insects, are already used in the Royal and leading Nurseries in England, Ireland, and Scotland, and may be obtained of the principal Seedsmen and Nurserymen, 2s. per packet of six Pastils.—Manufacturer and Patentee, J. Neal, Edward Street, Birmingham.

CHURNS.—The Royal Agricultural Society's Prize CHURN is the best invented. Butter produced in 12 minutes. Price 30s. and upwards.—Full particulars forwarded on application to Burgess & Key, Agricultural and Gardening Machinery Stores, 95, Newgate Street, E.C.

REAPING AND MOWING MACHINES.

BURGESS and KEY, 95, Newgate Street, E.C. PRIZEHOLDERS for the best Agricultural Machinery Manufactured.

ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with Burgess & Key's Screw Delivery Platform. Price 42l. 10s.

Testimonials.

A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following from

Mr. James Arnot, *of Woodcote, Carshalton.*

"Having used your Machine for four years, I would not be without one on any consideration; and I can safely say that I have saved over 50 per cent. in the expense every year I have used it. In fact I have never yet seen an implement which pays itself in so short a time."

M'CORMICK'S REAPER for Manual Delivery. Price 25l.

ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30l.

ALLEN'S GRASS MOWER, for one Horse. Price 22l. 10s.

COMBINED REAPER and MOWER—Two-Horse Machine. Price 35l.

COMBINED REAPER and MOWER—One Horse Machine, Price 24l.

The last two Machines are fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.

These Prices include Packing and Delivering at any Railway Station.

PATENT GUTTA PERCHA SOLES.—Important to Gardeners.—The Gutta Percha Company have the pleasure to acknowledge the receipt of the following letter from G. Glenny, Esq., the celebrated Florist:—

"420, Strand, London.

"Gentlemen.—I have worn Gutta Percha Soles and Heels these two years, and being so much in a garden as I necessarily am in all weathers, and with the ground in all states, I would on no account be without them. As a matter of economy I would recommend Gardeners to use them, for they may repair the worn part at all times by warming the material at the fire, and pressing it from the thick parts to the worn parts, as easily as if it were so much dough. I think it the duty of all persons who must occasionally wet their feet to adopt a material that completely defies damp. Many a gardener would escape colds and rheumatism by the use of Gutta Percha Soles.

"Your obedient servant, G. Glenny."

Every variety of Gutta Percha articles, such as Mill Bands, Tubing, Soles, Sheet, Pump Buckets, Fire Buckets, Bosses, Union Joints, Flasks, Bottles, Bowls, Chamber Vessels, Toilet Trays, Sponge Bags, Curtain Rings, Galvanic Batteries, Calbotype Trays, &c. manufactured by the Gutta Percha Company, and sold by their wholesale dealers in town or country.—The Gutta Percha Company, Patentees, 18, Wharf Road, City Road, London, E.C.

"FRIGI DOMO."—Patronised by her Majesty, the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.

PROTECTION from the COLD WINDS & MORNING FROSTS

"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.

Two yards wide .. .. 1s. 6d. per yard run.
Four yards wide .. .. 3s. per yard.
An improved make, 3 yards wide, 2s. 6d. per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard run.

Elisha Thomas Archer, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom. "It is much cheaper than mats as a covering."

FOR GARDEN POTS, SEND YOUR ORDERS TO J. and W. ADAMS, Kilns, Belle Isle, York Road, N., and be promptly attended to. Town and Country supplied.

TERRA COTTA.—Warranted to stand the most severe frost. This material is especially fitted for Garden Decorations, and for all exposed work, such as Fountain Basins, Garden Vases and Statues, Balustrades, Tracery for Terraces and Parapets, Terminals, Crosses for Gables, Capitals of Columns, Brackets, Consols, Chimney Shafts and Pots, and all other work exposed to wet, heat, and frost. — John M. Blashfield, Stamford, Lincolnshire. Specimens may be seen at 16, Great Marlborough Street, London, W., and at the Works, Stamford, Lincolnshire.

GARDEN BORDER EDGING TILES.

F. and G. ROSHER, Cement, Brick, and Tile Merchants, beg to invite attention to their varied Stock of ORNAMENTAL GARDEN BORDER-EDGING TILES in Terra Cotta, Terro-Metallic ware, and Red ware. They present advantages over Box or Grass-edging in that they afford no harbour for slugs, &c., take up less room, and once laid, require no further attention. They may be had of various patterns at F. & G. R.'s premises; Ward's Wharf, Upper Ground Street, Blackfriars, S.; and Kingsland Road Wharf, near the Canal Bridge, London, N.E.

N.B. Sketches of patterns sent by post on application. Garden Vases and Ornamental Flower Boxes for Windows and Balconies in stock.

ORNAMENTAL PAVING TILES for CONSERVATORIES, HALLS, CORRIDORS, BALCONIES, &c., as cheap and durable as Stone, in blue, red, and buff colours, and capable of forming a variety of designs.

Also WHITE GLAZED TILES, for Lining Walls of Baths, Dairies, Larders, Kitchen-ranges, &c. Grooved Terro-metallic and other Stable Paving Bricks of great durability Clinkers Red and White Wall-Copings, Glazed Drain Pipes, &c. To be obtained of F. & G. Rosher, at their premises as above.

JOHN WARNER AND SONS,
Crescent, Cripplegate, E.C.

WARNERS' PATENT VIBRATING STANDARD PUMPS.

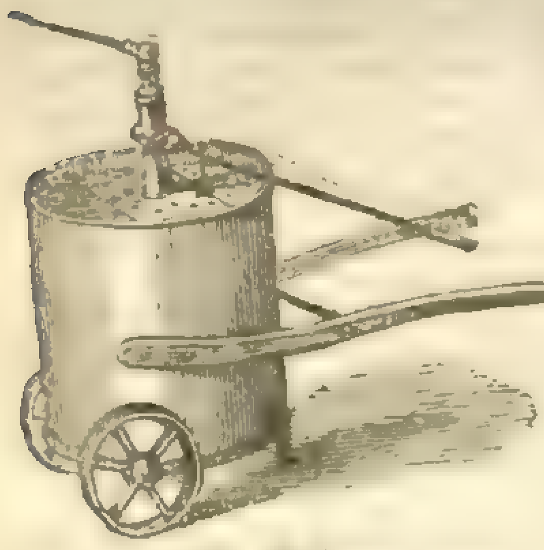
No. 35.

PATENT CAST-IRON PUMPS for Farms, Cottages, Stable Yards, &c., where the Well does not exceed 25 feet in depth; fitted with WARNER'S Patent Metal Bucket and Valve, which cannot clog in action. These Pumps can be made right-handed, left-handed, or with handle opposite the nose by removing four screws only.

Diameter.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead,	1 1 0
2½ ,, long	3 ,, 3 ,,	gutta percha	1 10 0
3 ,, ditto	3 ,, 6 ,,	or cast iron	2 4 0
3½ ,, ditto	3 ,, 6 ,,	flanged pipe	2 9 0
4 ,, ditto	3 ,, 6 ,,	as required.	2 18 0

2½ ,, short, with 15 feet of Lead Pipe attached, ready for fixing 2 0 0
2½ ,, long ditto ditto ditto 2 14 0

The short-barrel Pump is very convenient for fixing in situations of limited height and space for the supply of Coppers and Sinks in Wash-houses, with *soft* water from underground tanks, or in *Hot*, Forcing, and Plant Houses; they may be fixed, when desired, under the stage.



No. 554½.

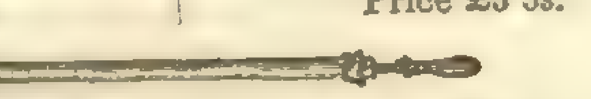
WARNERS' GALVANIZED IRON TUB GARDEN ENGINE, with Registered Spreader, is strongly recommended for durability and low price, viz.:—

10 gallons	.. ..	£2 15 0
16 ,,	.. ..	3 15 0
24 ,,	.. ..	5 0 0

Larger sizes may be had in either Wood or Iron.

No. 579.

WARNERS' SWING GARDEN BARROW (holding about 35 gallons) is intended for all large establishments where much watering is done by the Watering Pot. By its use the Gardener will save much time and labour, particularly where the Tank, Pond, or Pump is at a distance from the Garden.
Price £3 3s.



BRASS SYRINGES, from 9s. to 21s.

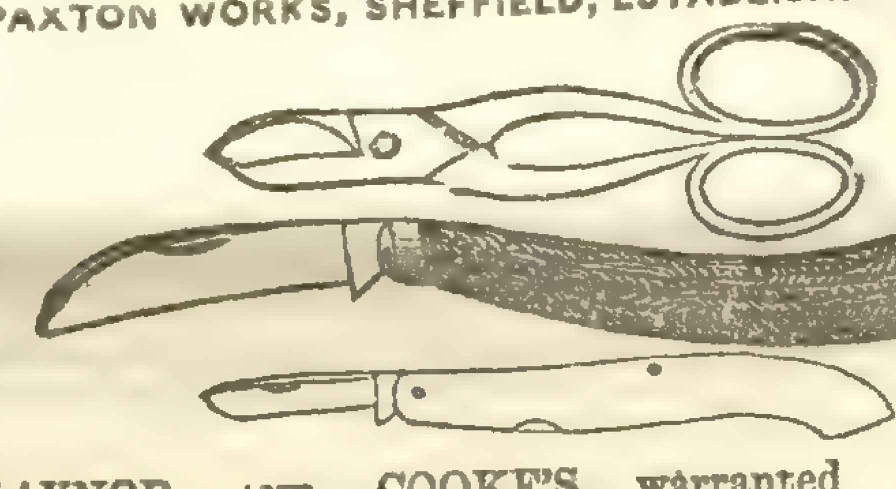
May be obtained of any Ironmonger or Plumber in Town or Country, at the above prices, or of the Patentees and Manufacturers,
JOHN WARNER AND SONS,
8, Crescent, Cripplegate, London, E.C.
☞ Engravings sent on application.

JOSEPH HAYWOOD AND CO.,
MANUFACTURERS OF
PRUNING AND BUDDING KNIVES,
SPORTSMAN'S, and all kinds of POCKET CUTLERY.

Dealers in Gambia Garden Shears, Scissors, Syringes, &c.

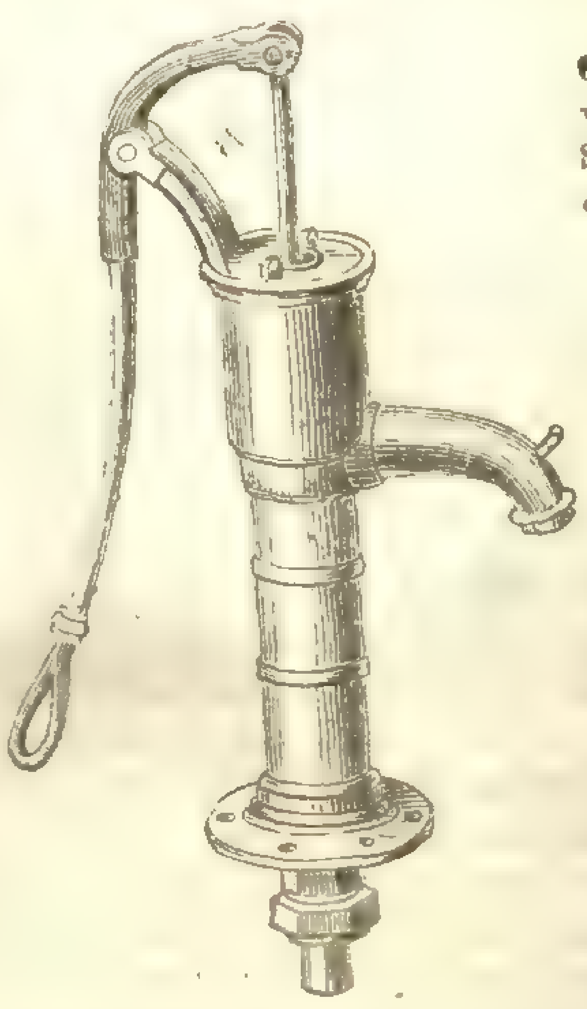
GLAMORGAN WORKS,
Sheffield.

PAXTON WORKS, SHEFFIELD, ESTABLISHED 1738



SAYNOR AND COOKE'S warranted PRIZE PRUNING and BUDDING KNIVES, SCISSORS, &c.—Sold by all respectable Nurserymen and Seed Merchants in the three Kingdoms.

LINGHAM, BROTHERS, 170, Hampton Street, Birmingham, Sole Manufacturers of the Improved ME-GRAPHS or WOOD LABELS, for Garden Borders, Flower Pots, &c., in boxes of 100 each. These Labels have now stood the test of public opinion for many years, and are acknowledged by all who have used them as superior to any offered to the public for neatness, utility, and economy in price.—Sole Agents: London, Messrs. DEANE & Co., Horticultural Implement Warehouse, 46, King William Street, London Bridge, E.C.



J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25s. 6d. each.

IRON YARD AND GARDEN PUMPS
3 feet 6 inches under spout.

2½	3	[illegible]
43s.	53s.	[illegible]

J. TYLOR AND SONS manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.

PUMPS of J. TYLOR & SONS' manufacture to be obtained of Plumbers in all parts of the United Kingdom.

J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London.

JAMES AND FREDK. HOWARD,

BRITANNIA IRON WORKS, BEDFORD,

MANUFACTURERS OF

CHAMPION PLOUGHS,

STEAM PLOUGHS or CULTIVATORS,

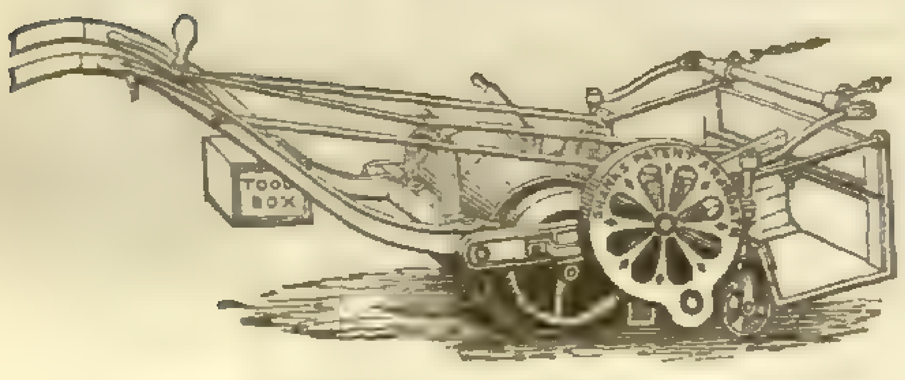
HARROWS, HORSE RAKES, HORSE HOES, SCARIFIERS,

AND OTHER IMPLEMENTS.

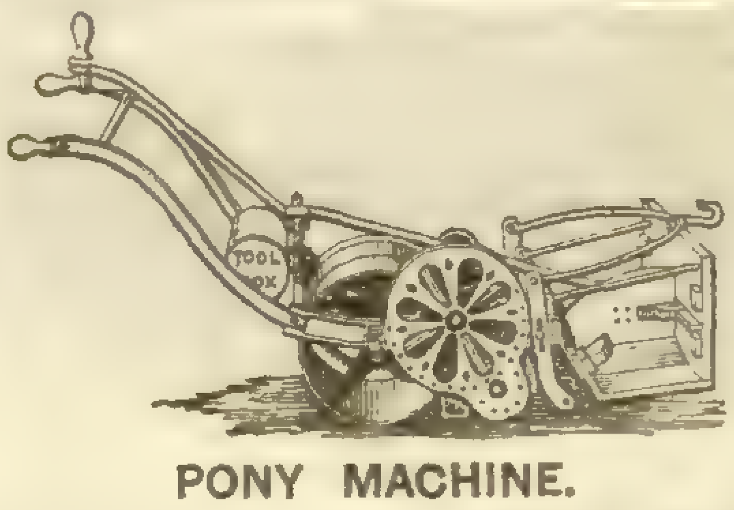
CATALOGUES WITH FULL PARTICULARS SENT FREE ON APPLICATION.

SHANKS' NEW PATENT LAWN MOWING, ROLLING, COLLECTING AND DELIVERING MACHINE FOR 1861.

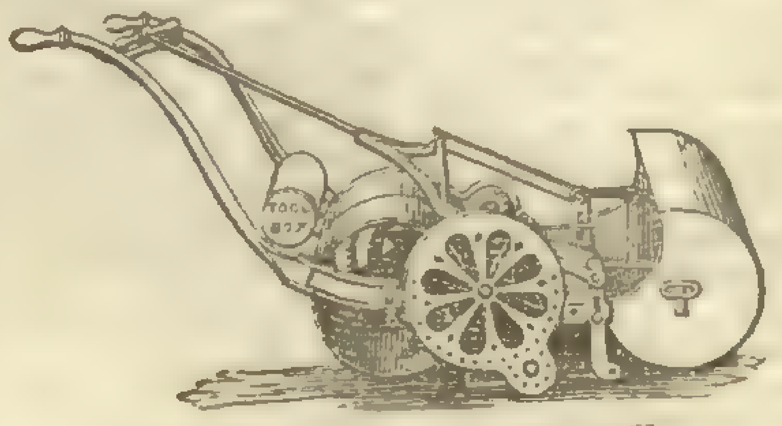
WITH SILENT MOTION IF SPECIALLY DESIRED.



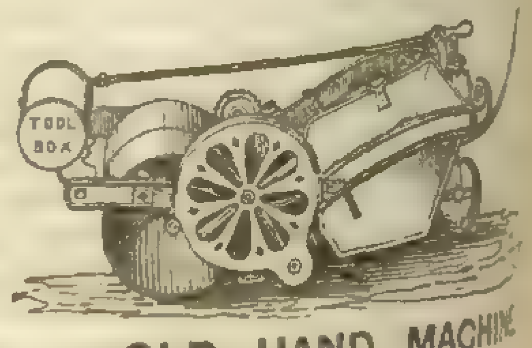
HORSE MACHINE.



PONY MACHINE.



NEW HAND MACHINE.



OLD HAND MACHINE.

PRICES.

SHANKS' NEW PATENT HORSE MACHINE.

Including Box of Tools for Sharpening, &c., and Directions.

Width of Cutter.			Width of Cutter.		
No. 1.—48-inch Machine	£28 0 0	*Drawn by a Horse.*	No. 3.—36-inch Machine ...	£22 0 0	*Drawn by a Horse.*
No. 2.—42-inch Machine	26 0 0	*Drawn by a Horse.*	No. 4.—30-inch Machine ...	19 0 0	*Drawn by a Horse or strong Pony.*

SHANKS' NEW PATENT PONY AND DONKEY MACHINE.

Including Box of Tools for Sharpening, &c., and Directions.

No. 5.—30-inch Machine . £15 15 *Drawn by a Pony* | No. 6.—28-inch Machine . £14 10 *Drawn by a Pony* | No. 7.—25-inch Machine, £12 10 *Drawn by a Donkey.*

Boots for Horses' Feet, 24s. per set. Pony, 21s; Donkey, 16s. per set.

SHANKS' NEW PATENT HAND MACHINES, FOR PUSHING OR DRAWING SEPARATELY OR TOGETHER.

Including Box of Tools for Sharpening, &c., and Directions.

No. 8.—24-inch Machine	£8 17 6	*Easily worked by Two Men*	No. 10.—19-inch Machine... ...	£7 12 6	*Easily worked by a Man and Boy.*
No. 9.—22-inch Machine	8 7 6	*Easily worked by Two Men*	No. 11.—16-inch Machine... ...	6 17 6	*Easily worked by a Man.*

No. 12.—13-inch Machine... ... ... £6 2 6 *Easily worked by a Boy*
No. 16.—12-inch Machine... ... ... £5 5 0 *Easily worked by a Boy*

The Patent Delivering Apparatus if attached to the Hand Machines, 20s. extra.

***** The Machines are warranted to give ample satisfaction, and if not approved of may be at once returned.**

The Prices include delivery at most of the Railway Stations throughout the Kingdom.

SOLE AGENTS FOR LONDON

J. B. BROWN & CO., 18, CANNON STREET, CITY, LONDON, E.C.

THE ROYAL BERKSHIRE SEED ESTABLISHMENT, READING.

UNDER THE PATRONAGE OF
HER MOST GRACIOUS MAJESTY THE QUEEN,
AND
HIS ROYAL HIGHNESS THE PRINCE CONSORT.

MANGEL SEEDS FROM LARGE BULBS.

SUTTON'S MANGEL WURZEL SEED

SAVED EXCLUSIVELY FROM FULLY DEVELOPED ROOTS, THE ADVANTAGES OF WHICH HAVE BEEN PROVED FOR SEVERAL YEARS PAST.

(SEE THE FOLLOWING LETTERS.)

These are not mere Testimonials in the ordinary acceptation of that term, but show distinctly that the Seeds which Messrs. SUTTON have had grown FROM LARGE SELECTED BULBS, are altogether superior in germinating properties, and in the quality and trueness of their produce, **to the Seed raised in the usual manner.**

From JAS. BREBNER, Esq., *Steward to* H.R.H. THE PRINCE CONSORT.

"Norfolk Farm, April 4, 1861.

"Messrs. SUTTON & SONS,—I have great pleasure in stating that the Seeds supplied by you for a number of years for H.R.H. THE PRINCE CONSORT'S FARMS (the Norfolk and Flemish, Windsor Great Park), **have always been good and given every satisfaction.**"

From JOHN GRAHAM, Esq., *Steward to* H.R.H. THE PRINCE CONSORT.

"Bagshot Park Farm, April 9, 1861.

"The Seeds had from your Establishment for the last three years have always come up well and never once failed.

From the Right Hon. Lord BERWICK, *Cronkhill.*

"Let me have the same Globe Mangel as last year, which has given me the best crop I ever grew, good *both as to bulk of crop, and also in the fineness of roots and freedom from fangs and irregular growth; when pulled, the roots were nearly as clean and free from fibre as a Globe Turnip, and I had* 50 *loads per acre and more.*"

From GEORGE BEAUMONT, Esq., *Bridgeford Hill, near Nottingham.*

"We have had 4 acres of Mangel (Yellow Globe), 3 of which were sown with your seed, and 1 acre with seed grown in this neighbourhood. *I am quite sure your seed produced from 8 to 10 tons per acre more than the other.* I had nearly an acre weighed (from your seed), and found we had 55½ tons per acre."

Many PRIZES at Birmingham and other Shows throughout the Kingdom have been taken by Messrs. SUTTON'S customers both for Mangel and for Swedes. The price of SUTTON'S LARGE YELLOW GLOBE MANGEL WURZEL is 2*s*. per lb.: ELVETHAM, 1*s*. 9*d*.; other sorts, 1*s*. 6*d*. to 2*s*., or cheaper by the Cwt.

☞ PRICED LISTS *of other kinds of Mangel, Swedes, Turnips, Grasses, &c., will be sent gratis and post free. Carriage Free to all parts, except small parcels.*

SUTTON & SONS, ROYAL BERKSHIRE SEED ESTABLISHMENT, READING.

MANGELS, TURNIPS, &c.,

FROM SELECTED ROOTS.

THE strongest evidence we can furnish of the quality of our FARM SEEDS is public opinion. We have one of the largest Trades in England with Farmers, from whom we could publish Testimonials enough to fill a volume; and although our Seeds are all of the best quality, we want but a *fair market price.* Practical men, who are continually on the markets with us (we personally attend the principal markets in this and the adjoining counties, which affords us great opportunities of selection) are never guilty of giving *fancy prices,* but their judgment is of the soundest.

At the BOTLEY CLUB, the PRIZE for the best TEN ACRES SWEDES was awarded

PAGE'S IMPROVED (grown by John Crosskey, Esq.)

Heaviest weight of Mangel, per Acre, 61 Tons, 2 cwt.
PAGE'S IMPROVED ORANGE GLOBE, (grown by STEWART MACNAGHTEN, Esq.)

Mangel, sown 7th July, Weight and Shape,
PAGE'S IMPROVED RED GLOBE, (grown by W. WARNER, Esq.)

Mangel, 50 tons per acre,
PAGE'S IMPERIAL ORANGE GLOBE, (grown by W. DICKINSON, Esq.

Carrots, 35 Tons per acre,
PAGE'S IMPORTED WHITE BELGIAN, (grown by R. TRENCH, Esq.)

Six Prize Swedes, for heaviest Weight,
PAGE'S IMPROVED (grown by W. C. HUMPHRIES, Esq.)

VALES OF AVON AND STOUR FARMERS' CLUB.

PAGE AND TOOGOOD could give numerous Testimonials, but prefer practical results.

Vales of Avon, Prize for best 5 acres Mangel.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. SALWAY).

Second best.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. H. BONE.)

Third ditto.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. BAKER.)

Best 2 acres ditto.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. JAS. SALWAY.)

Second ditto.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. JOHN WITHERS.)

Third ditto.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. BONE.)

Present prices for best quality, not to be surpassed by any House in the Trade:—

BROAD OR RED CLOVER, 7*d*. to 8*d*. per lb.
DUTCH, 9½*d*. to 10½*d*. per lb.
TREFOIL OR HOP CLOVER, 3½*d*. to 4*d*. per lb.

IMPORTED ITALIAN RYE-GRASS, 5*s*. 6*d*. to 6*s*. per bushel
HOME GROWN ITALIAN RYE-GRASS, 4*s*. 6*d*. to 5*s*. per bush.
COMMON RYE-GRASS, 25*s*. to 35*s*. per quarter.
TARES, 7*s*. to 8*s*. per bushel.

PAGE'S IMPERIAL ORANGE GLOBE MANGEL, 2*s*. lb.
" IMPROVED YELLOW " " 1*s*. 6*d*. lb.
" " RED " " 1*s*. 6*d*. lb.
LONG RED MANGEL, 1*s*. 6*d*. lb.
ELVETHAM LONG RED MANGEL, 1*s*. 6*d*. lb.
LONG YELLOW MANGEL, 2*s*. lb.
LONG WHITE MANGEL, 1*s*. 6*d*. lb.

PAGE'S IMPROVED HARDY SWEDE, 1*s*. 9*d*. lb.
" SKIRVING'S SWEDE, 1*s*. 6*d*. lb.
CHAMPION SWEDE, 2*s*. lb.
ASHCROFT SWEDE, 1*s*. 6*d*. lb.
GREEN TOP SWEDE, 1*s*. 6*d*. lb.
TANKARD SWEDE, 1*s*. 6*d*. lb.
IMPORTED WHITE BELGIAN CARROT, 1*s*. 6*d*. lb.

SEEDS FOR EXPORTATION packed to arrive in good condition.

GENERAL PRICE CURRENT, containing practical information, free by post.

PAGE & TOOGOOD,
ROYAL SOUTH HANTS SEED ESTABLISHMENT, SOUTHAMPTON.

MANGEL WURZEL AND CARROT SEED in sorts, 1859 and 1860. For price apply to the Grower, stating quantity.
J. B BROMLY, Little Bentley, Essex, E.

---

20 TONS OF GOOD MANGEL WURZEL FOR SALE.—To be delivered at any Wharf on the River Lea, or any Wharf within one mile of London Bridge, at 28*s*. per Ton.
Apply to Mr. WM. CLARKE, Seedsman, Bishopsgate Street, London, E.C.

MANGEL WURZEL AND TURNIP SEEDS.—The undersigned can confidently recommend their Stocks of the above SEEDS, crop 1860, grown from selected and transplanted Bulbs. Terms on application.
JAMES FAIRHEAD & SON, Seed Growers and Merchants, Lewisham, Kent. London Establishment: 7, Borough Market, S.E.

To the Trade.

WILLIAM ADAMS has a few cwt. of the following MANGEL WURZELS to offer to the Trade (for cash), more than he requires for retail:—

Elvetham Long Red, 90*s*. p.cwt.
Yellow Globe, 100*s*. do.
Orange Globe, 100*s*. do.
Ace-shaped Yellow. 100*s*. per cwt.
Long Yellow, 100*s* do.

The growing quality of the above Seeds is warranted.
Dominie Cross Nursery. East Retford.

Mangel Wurzel.

THE NEW OVAL-SHAPED YELLOW, introduced by us four years since, has been thoroughly tested, and proves to be a most superior sort. It is of a remarkably vigorous growth, with finely shaped roots, intermediate in length between the Long and the Globe, and producing from five to ten tons more per acre than any other variety.

The *seed* is very fine, *growing upwards of* 160 *per cent.*, price 2*s*. 6*d*. per lb. Fourteen pounds and upwards delivered carriage free to the principal Railway Stations.

W. DRUMMOND & SONS, Seed Warehouse, Stirling.

*** PRICED CATALOGUES of every description of FARM SEEDS may be had, post free, on application.

Agricultural Seeds
of warranted quality.

W. SKIRVING begs to call the attention of Practical Farmers to his short list of the leading Seeds required for the Farm, the growth of which has been carefully proved by himself.

	per lb.	
Skirving's Improved Swede Turnip	1	8
(Largest, Hardiest, and Heaviest Cropper known.)		
Skirving's Improved Purple-top Yellow Bullock Do. ..	1	6
Skirving's Green Round (new hardy sort) Do. ..	1	3
Skirving's Long Red Mangel Wurzel..	1	3
Skirving's Orange Globe Ditto	1	9
Carrot, large Altrincham	1	9
" large White Belgian	1	3

(Less by the Cwt.)

Rye-grass, Clovers, and all other kinds of Agricultural Seeds, at reasonable prices. Land laid down to permanent pasture with the most useful Perennial Grass Seeds, at a moderate expense, the sorts selected from personal observation of the growth and habits of the different Grasses. CATALOGUES on application.

Liverpool, April, 1861.

Skirving's Swede—Sutton's Selected Stock.

SUTTON AND SONS have a choice Stock of SKIRVING'S SWEDE SEED, growth of 1860, which they can strongly recommended; 1*s*. 9*d*. per lb., or cheaper in large quantities.

Also SUTTON'S CHAMPION; Hardy PURPLE-TOP; MARSHALL'S PURPLE-TOP and Hardy WHITE SWEDE; but the Stock of "CHAMPION" Swede, though saved from 45 acres of land, being so small compared with the demand, **and so nearly sold out already, this sort cannot be supplied under 2*s*. 6*d*. per lb.**

SUTTON & SONS having had their CHAMPION SWEDE planted more extensively than ever for Seeding this summer, will be glad to take orders now FOR NEXT SEASON at 1*s*. per lb., or 50*s*. per bushel.

Royal Berkshire Seed Establishment, Reading.

SUTTON'S PERMANENT GRASS SEEDS.—Gentlemen intending to lay down land to permanent pasture, or for one or two years' lay, are recommended to communicate with us, stating the nature of the soil and situation, that we may advise as to sorts of Grass seeds most suitable. The ALSIKE, the PERENNIAL WHITE, and PERENNIAL RED CLOVER are included in all our mixtures, together with such of the under-mentioned as are best adapted to the land to be laid down. Prices moderate according to quantities required.

Achillea millefolium (Yarrow).
Agrostis stolonifera (Creeping Bent).
Anthoxanthum odoratum (Sweet Vernal).
Alopecurus pratensis (Meadow Foxtail).
Avena flavescens (Yellow Oat Grass).
Agrostis vulgaris (Common Bent Grass)
Cynosurus cristatus (Crested Dogstail).
Dactylis glomerata (Round-headed Cocksfoot).
Festuca duriuscula (Hard Fescue).
Festuca loliacea (Darnel Fescue).
Festuca ovina (Sheep's Fescue).
Festuca rubra (Red Fescue).
Festuca pratensis (Meadow Fescue).
Festuca elatior (Tall Fescue).
Festuca heterophylla (Various-leaved).
Festuca tenuifolia (Fine-leaved Fescue).
Glyceria aquatica (Water Sweet Grass).
Holcus avenaceus (Tall Oat-like Grass).
Lolium perenne (Perennial Ryegrass).
Lolium perenne sempervirens.
Lolium perenne Paceyanum.
Lolium perenne Stickneyanum.
Lolium perenne tenue.
Lolium italicum (Italian Ryegrass).
Lotus corniculatus (Birdsfoot Trefoil).
Medicago lupulina (Black Medick Grass).
Phleum pratense (Timothy).
Poa nemoralis (Wood Meadow Grass).
Poa pratensis (Smooth Meadow Grass).
Poa trivialis (Rough Meadow Grass).
Poa fertilis (Fertile Meadow Grass).
Poa sempervirens (Evergreen).
Trifolium minus (Red Suckling).
Trifolium pratense perenne (Perennial Red Clover).
Trifolium repens (White Clover).
Trifolium hybridum (Alsike Clover).

The above may be purchased separately at moderate prices, as see List. The best of them are included in Messrs. SUTTON'S Mixtures.

N.B.—The Alsike Clover is included in all Messrs. SUTTON'S Mixtures.

Goods delivered Carriage Free to all parts.
SUTTON & SONS, Seed Growers, Reading, Berks.

WHEELER'S ORANGE GLOBE MANGEL,
WHEELER'S IMPERIAL SWEDE,
GRASS SEEDS FOR PERMANENT PASTURE,
GRASS SEEDS FOR LAWNS,

And all other Seeds of the same excellent quality which has rendered our Farm Seeds so celebrated.

We offer our Seeds at the lowest price consistent with their being good and pure, at the same time deliver them carriage-free by rail, and allow 5 per cent. discount for cash.

Our Book of FARM SEEDS sent free for 3 stamps.

J. C. Wheeler & Son, Seed Growers, Gloucestershire.

To the Trade.

SKIRVING'S, MARSHALL'S, AND PURPLE-TOP SWEDE, Early Horn, Long Surrey, and White Belgium Carrot, Drumhead Cabbage, selected Crimson Beet, British Queen, Surprise, Daniel O'Rourke, and Burridge's Eclipse at reduced prices.

Apply to M. Honey, Bridge Terrace, Maidstone.

To the Seed Trade.

FOR SALE, a quantity of superior SWEDE TURNIP SEED (Skirving's), all transplanted with great care.

Price on application to Step. H. Deacon, Church Brampton, Northampton.

GREEN-TOPPED YELLOW ABERDEEN TURNIP-SEED.

Stirlingshire Central Farmers' Club.

Mr. Young, of Keis Mains, observed:—"During last year, our average crop has been about 35 tons per Scotch acre. We use the Aberdeen Green-topped Yellow. For many years we had been in the habit of growing Swedes, but we find this Green-topped Yellow is an improvement on the Swede."

This Seed, of last year's growth, proved, can be had on application to the Bailiff, Chesterton Farm, near Cirencester, at 30s. per bushel on prepayment.

SWEDE TURNIP.—LOTHIAN PURPLE TOP SWEDE, a picked Stock, and raised on strong clay soil, may be had at 50s. per Bushel, in quantities of 1 Bushel and upwards. The Seed is crop 1860, a remarkably fine sample, and grows full 90 per cent.

W. Drummond & Sons, Seed Warehouse, Stirling, N.B.

*** Orders from unknown Correspondents must be accompanied with a reference or remittance.

Permanent Grass Seeds.

W. KER having had 21 years' practical experience with Mr. Skirving in the Selection and mixing of GRASS SEEDS, is prepared to Supply the most approved Mixtures for every description of Land. Orders, stating extent, nature of soil, &c., will meet with prompt and careful attention. Select Stocks of TURNIPS, MANGELS, CARROTS, &c.

10, Great Charlotte Street, Liverpool.—April 20.

RAYNBIRD, CALDECOTT, AND BAWTREE, Seed Merchants and Growers, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E C.

Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.

Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

New Farm Seeds, Carriage Free.

JOHN BELL'S PRICED LIST OF FARM SEEDS, including MANGELS, TURNIPS, CARROTS, CABBAGES, KOHL RABI, and GRASS SEEDS for permanent pasture, &c., is now Ready, and will be sent post free to any address on application at the

Seed Warehouse, 10 & 11, Exchange Street, Norwich.

To the Seed Trade.

THOMAS AYRES, Wholesale and Retail Seedsman and Grower, Biggleswade, Beds, has to dispose of a large quantity of TURNIP SEED, in large or small quantities. The stock includes Skirving's Liverpool Swede, Ayres' Improved Liverpool Swede, Purple Top Swede, Marshall's Improved Purple Top Swede, Green Top Yellow Swede, Round Green, Green Globe, White Globe, Red Globe, Red Tankard, Green Tankard, Dale's Hybrid, and a few other varieties.

Price on application.

N.B. A few Cwt. of ONION and PARSNIP SEED to dispose of.

Garden and Field Seeds.

H. AND F. SHARPE beg to offer to the Trade at very moderate prices, the undernamed varieties of SEEDS of their own selected stocks, and such as they can confidently recommend:—

Peas in variety	Turnips in sorts
Beans ,,	Mangel Wurzel do.
Curled Cress	Carrots do.
Turnip Radish	Drumhead Cabbage
Early Cabbage in sorts	Kohl Rabi
White and Red Celery	Thousand-head Cabbage
Blood Red Beet	Fine Rapeseed

Prices of the above may be had on application.

Seed Growing Establishment, Wisbech.

Verbena "Grand Eastern"

J. WOODS AND SON have great pleasure in offering their beautiful Seedling Verbena GRAND EASTERN, the largest and best of the season. Colour, bright rosy pink, with large clear white eye; of perfect form and fine substance, very sweet scented; an excellent bedding variety and splendid exhibition flower, quite distinct from anything else out; the individual flowers are very large, measuring an inch in diameter, whilst the trusses average more than 10 inches in circumference.

No exhibition stand will be complete without this truly "grand" Verbena, which has been awarded a Certificate of Commendation by the Floral Committee of the Royal Horticultural Society, also First Prizes and Certificates wherever shown in the country. See report of Floral Committee, July 12, also notices in *Hogg's Gardeners' Year Book*, *Gossip of the Garden*, Feb. 1861, and other gardening periodicals. Will be figured in *Floral Magazine* for May.

Good plants will be ready for delivery early in May at 5s. each, free by post, or six for 25s.; early orders for which are respectfully solicited. The usual discount to the Trade.

The following Nurserymen are amongst those who have already ordered it:—

Messrs. Osborn, Fulham	Mr. C. Turner, Slough
,, Lee, Hammersmith	,, Pontey, Plymouth
,, A. Henderson & Co., Pine-Apple Place	,, Shaw, Manchester
	,, Bunney, Stratford
,, Low, Clapton	,, Reeves, Notting Hill
,, Rollisson, Tooting	,, Cullingford, Ball's Pond
,, Fraser, Lea Bridge	,, Ewing, Norwich
,, Smith, Dulwich	,, Hussey, Norwich
,, Youell, Yarmouth	,, Gilbert, Ipswich
,, Backhouse, York	,, Moore, Lyme
,, Cunningham, Liverpool.	,, Young, Taunton
	,, May, Bedale

Post-office Orders or remittance from unknown correspondents.

Nurseries Woodbridge, Suffolk.

TROPÆOLUM GARIBALDI.—The best of its kind for general and Bedding purposes. Colour, a brilliant Scarlet. Remarkably free bloomer. Certificate awarded by Royal Horticultural Society. Price 3s. 6d. each, or 36s. per dozen. Usual Trade allowance.

New SPRING CATALOGUE post free on application.

Jas. Garaway & Co., Durdham Down Nurseries, Bristol.

Notice.—Now Sending Out.

G. SMITH begs to inform the readers of the *Gardeners' Chronicle* that he has now ready to send out his superb SEEDLING FUCHSIAS, Mammoth, Pioneer, King of Purples, and Figaro, 10s. 6d. each.

G. S. has also a first-class set of eight New VERBENAS, very distinct and fine; they have been exhibited before the Floral Committee of the Royal Horticultural Society, and were highly spoken of, and four awards made to them for their superior properties. The set, in good plants, for 30s.

CALCEOLARIA CARIENSIS, extra fine for all purposes, is commended by the Floral Committee, and has taken a First-class Certificate at the Royal Botanic Gardens. 10s. 6d.

PETUNIA ECLIPSE, the most beautiful Petunia now in cultivation, and recommended by the Floral Committee. 5s. per plant.

PELARGONIUM ARGUS, Variegated, the finest, taking all its qualities into consideration, that has yet been exhibited. 10s. 6d. each.

G. S. has also four first-class new tall CACTI to offer; they have been successfully exhibited at the Botanic Gardens, Crystal Palace, &c.

*** Coloured Illustrations of the Fuchsias, by Andrews, in exchange for 12 postage stamps, and Petunia Eclipse for 8 stamps. For description see CATALOGUE of the above new plants, with fine collections of the most popular florists' flowers, in exchange for one stamp.

Tollington Nursery, Hornsey Road, Islington, London, N.

JOHN KEYNES, in presenting his ANNUAL DESCRIPTION of NEW DAHLIAS, would tender his best thanks to his kind friends and patrons for their support, and begs to assure them his constant study shall always be to give satisfaction. He has a fine selection of SHOW FLOWERS to offer this season, and the severe test they have undergone will, he trusts, be a sufficient guarantee for their quality. None but First Class flowers have been chosen. Fine Plants in May as usual.

The FOLLOWING PRIZES were awarded to J. KEYNES, for DAHLIAS, in 1860:—First Prize, 50 blooms, National Dahlia Show at Leeds; Do., 24 blooms, Bath; Do., 36 blooms, Brighton; Do., 24 blooms, Swindon; Second Prize, 24 blooms, Reading; Do., 50 blooms, Crystal Palace: Do., 24 blooms, Crystal Palace.

FANCY DAHLIAS.—First Prize, 18 blooms, National; Do., 12 blooms, Reading; Do., 12, blooms, Bath; Do., 24 bloom, Brighton; Do., 12 blooms, Swindon; Second Prize, 12 blooms, Crystal Palace.

DAHLIAS.—NEW FLOWERS. s. d.

ANDREW DODDS (Keynes).—The darkest and most constant Dahlia grown; this flower has never been shown without obtaining a First Class Certificate. 3 ft. .. 10 6

Obtained the following First Class Certificates.—Horticultural Society's Floricultural Committee, National Meeting at Leeds and Reading, Bath, Brighton, Salisbury, Crystal Palace. Third for the Great Seedling Competition at Reading.

MASTERPIECE (Keynes).—A beautiful shaded crimson of the finest quality, perfect in form, grand in colour, constant, always to be depended on; small, and will require good cutting out early. 4 ft. 10 6

Obtained the following Prizes.

First Premier Prize at Reading for the Great Seedling Competition, beating every Flower of the year.

First Class Certificates.—Reading, Bath, Salisbury, Brighton, Crystal Palace.

MAUVE (Keynes).—Colour, quite new, good form and constant. Shaded Mauve, 3 ft. 10 6

Prize at Reading.

JUNO (Rawlings).—Colour, bright rosy lilac, very constant, large and very high centre, always good. 4 ft. 10 6

Commended at the Floricultural Committee, First Class Certificate, Brighton.

JOY (Rawlings).—Colour, light with deep crimson tip, the finest flower in its class and most desirable as first rate show flower. 3ft. It has been placed as follows:— 10 6

Second Prize at the Reading Competition. First Class Certificate at Bath, Crystal Palace, Salisbury, Brighton, Reading, Great National Meeting, Leeds. Commended at the Floricultural Committee.

PERI (Rawlings).—Light, tipped purple, very pleasing colour, not to be cut out. 4 ft. 10 6

First Class Certificates at Bath, Salisbury, Reading.

JOHN KEYNES (Rawlings).—Scarlet buff. A single flower of this shown at the Crystal Palace, surpassed every flower in the exhibition; it is a late flower and requires planting early; J. Keynes then expects it to beat anything yet offered. 2ft. 10 6

MRS. DODDS (Dodds).—Colour, light yellow, very pure, double, constant; possessing every quality to render it a First Class variety, it has been justly admired, and will prove a good companion to William Dodds, which has proved itself a First Class; deep coloured yellow. 3ft. 10 6

First Class Certificates.—Floricultural Committee, National Meeting at Leeds, Reading, Bath, Salisbury.

Fourth Prize at Reading for the Subscription Competition.

MRS. ECKFORD (Dodds).—Light purple ground, shaded lilac, and mottled, a colour difficult to describe, but quite new, and a very pretty flower. 3 ft. 10 6

Obtained First Class Certificates at Reading, Salisbury, Bath.

MARQUIS BOWMONT (Dodds).—Rose colour, shaded white, a most desirable flower, greatly admired for its symmetry and full high centre, was placed fifth at Reading for the sweepstakes. 4 ft. 10 6

J. Keynes has therefore the pleasure of sending out all the six flowers which obtained these prizes, which were subscribed for and exhibited by those marked * * Mr. Keynes, * Mr. Rawlings, * Mr. Turner, * Mr. Dodds, * Mr. Perry, Mr. Holmes, Mr. Sainsbury.

This flower also obtained First Class Certificates at Bath, Salisbury, Reading, Brighton, Crystal Palace, Floricultural Committee.

ROSA (Keynes).—Rose colour, fine. 4 ft. 10 6

Mrs. WYATT (Keynes).—Salmon, very first-rate; no stock of these two, consequently could not be exhibited. 4 ft. 10 6

The set of twelve will be charged 4l. 4s. No discount on Andrew Dodds, Masterpiece, Mrs. Dodds, or Marquis Bowmont, if taken separately. All the First Class Certificates, with one exception, which the Floricultural Committee have awarded this season, are in this lot.

J. Keynes therefore submits them to Dahlia growers as indispensable to every select collection. Descriptions of the above may be seen in *Gossip for the Garden*, the *Florist*, the *Gardeners' Chronicle*, the *Cottage Garden*, the *Transactions of the Horticultural Society, Chiswick*, &c.

VERBENA "LUCY TAIT" (Cunningham).—This elegant and picturesque variety was raised by Mr. Cunningham, Fulham, Middlesex, and by him exhibited at the Royal Floral Society's Exhibition, by whom it was awarded a certificate of merit for its adaptation to decorative effect in flower gardens, for small fancy beds, parterres, or belts. Its remarkably dwarf habit, scarcely rising beyond 6 inches, and profusion of bright rosy-pink bloom, retaining its full colour throughout the flowering months, will form one of the prettiest features in select designs, and be found one of the favourite flowers of the season, for its purpose.

Each, 2s. 6d.; Per Dozen, 18s.; Fifty Plants, 2l. 10s.

Messrs. E. G. Henderson & Son, Wellington Nursery, St. John's Wood, London, N.W.

VERBENAS FOR THE MILLION.—No better Plants in England.—Scarlet, Red, Crimson, Rose, Pink, White, Lavender, Blue, Purple, Plum, Striped Maroon, and Variegated, at 2s. per dozen. Packing Hamper and Carriage to every London Station Free, but not less than 10s. worth sent. All Orders to be prepaid, if satisfaction not given the money will be returned. Plants from Cutting Pots 6s. per 100.

John Pyle, Jun., St. John's Nursery, Upper Holloway, N.

Free by Post.

BROCCOLI. — Lee's New White Sprouting, per packet, 2s. 6d.; small packets, 1s. 6d.; 10 finest sorts for succession, including the above, also Mitchinson's Penzance, Snow's True Winter White, &c., 6s.; 6 finest sorts, do. do., 3s. 6d.

Stephen Brown, Seed Establishment, Sudbury, Suffolk.

NEW HARDY BROCCOLI.—The Richmond Late White remains uninjured by the past winter, while other sorts have been killed by its side. It is therefore invaluable. Packets free by post for 1s. Eight fine sorts (including the above), which in ordinary seasons succeed each other from September to May, free by post for 5s.

E. Jones, Seedsman, &c., Henley-on-Thames.

Dioscorea Batatas, or Chinese Yam.

GEO. WHEELER is ready to supply Whole Tubers, 2s. to 2s. 6d. per dozen; Cut Sets, 5s. per 100, or 40s. per 1000.

RHODODENDRONS, good and strong, from 30s. to 100s. p. 100.

AZALEAS, good and strong, from 60s. to 100s per 100.

ANDROMEDAS, SEDUMS, VACCINIUMS, &c., 60s. to 80s. per 100.

Nursery, Warminster, Wilts.

New Fuchsias.

F. AND A. SMITH beg to offer the undermentioned NEW FUCHSIAS as possessing distinctive and striking characteristics, being either improvements on existing sorts or entire novelties, having good habits of growth and flowering, ensuring to the grower an ornament for the conservatory or an efficient plant for exhibition.

ALARM.—Tube rich scarlet crimson, sepals well reflexed, corolla immensely expanded, of fine form and substance, colour rich violet plum; this variety is in advance of all others in the class of expanded corollas for size, form, and colour. 10s. 6d.

"First-rate."—Mr. Charles Turner, Royal Nursery, Slough, Oct. 19, 1860.

"Good form, large Corolla, spreading like a parasol."—Cottage Garden, Oct. 30.

"A large bold, showy variety, with stout scarlet tube and sepals, and large stout shaded violet corolla, of good substance, which closes well. Promises to be a fine exhibition variety."—Gossip of the Garden, No. 59, November, 1860.

CLARA.—Scarlet crimson tube and sepals, violet corolla, of a most beautiful tint, having more of the blue shade than seen in other varieties. Very effective and distinct. 7s. 6d.

CORONAL.—Vermillion tube and sepals, which are most elegantly curved, presenting a beautiful and graceful appearance, corolla rich violet purple of a pleasing shade. The flowers of this variety are of great substance, lasting in beauty a long time, and will prove most desirable for exhibition purposes. This is commended as pleasing in colour, graceful in form, enduring in substance, and of excellent habit. 10s. 6d.

MASTERPIECE.—Tube and sepals scarlet crimson of very thick substance, the sepals being well reflexed and of great width, corolla a beautiful and rich maroon. This variety, in accordance with its name, stands prominent among Fuchsias for its distinct properties of broad and thick sepals, a corolla new in colour and well formed; the habit of plant is excellent, being graceful and free in flowering. 10s. 6d.

RAPHAEL.—Light rose pink tube and sepals, the latter well reflexed, corolla violet purple. This variety presents a new feature in its contrast of sepals and corolla, exhibiting at once the charm of novelty and contrast, while its graceful and free habit renders it worthy of its name. 10s. 6d.

STRIATA.—Bright vermillion tube and sepals, which are finely reflexed, dark violet plum corolla, beautifully striped and shaded with rosy scarlet. This variety is superior to any extant in its class—the colours are rich and bright, a free bloomer, of neat growth and graceful habit, and will be found one of the most effective for decorative purposes or exhibition. 10s. 6d.

GOLIATH.—Coral red, a very stout and large flower of good and free habit. The fruit of this variety is of monstrous size, being large as a Damson, of a light green colour, with a pleasant sub-acid flavour; it sets its fruit freely, as many as 12 on a small plant, in a 48-pot, in a season. A singular advance in Fuchsia fruit. 5s.

Strong plants will be sent out 20th April. Coloured plates of six of the above, by Andrews, may be had for 12 post stamps.

F. & A. Smith beg to announce, in reply to several enquiries, that the beautiful new AZALEAS—Prince of Orange, Princess Alice, and Clapham Beauty (Todman), will not be sent out before the autumn, full descriptions of which will be given in the forthcoming Spring Catalogue.

Dulwich, Surrey, S

GOLD AND SILVER FISH, 100,000, 4s. to 9s. per dozen, 2l. per 100, or 18l. per 1000; Land and Water TORTOISE, 1s. each, 10s. per dozen. All kinds of Foreign BIRDS. A great quantity of CAMELLIAS, AZALEAS, and other Greenhouse and Stove Plants. The largest stock of BRITISH and FOREIGN FERNS in the Trade.

R. Green, 154, Kingsland Road, 55 doors from Shoreditch Church, N.E.

Notice.

ROBERT PARKER (late of the Paradise Nursery, Holloway) begs to inform his friends, patrons, and the public, that the DISSOLUTION of the PARTNERSHIP in Paradise Nursery is without restriction as to his recommencing business elsewhere as soon as his arrangements are made for the purpose. In the meantime, and during the winding-up of the late Partnership Business, he will be obliged by all communications for him being addressed as under until further notice.

Robert Parker, Paradise Nursery, Seven Sisters' Road, Holloway, London, N.

THE FINEST DARK PERPETUAL ROSE OF THE SEASON.

Hybrid Perpetual—Reine des Violettes.

WM. WOOD AND SON have just flowered, in one of their Forcing Houses, the above splendid New ROSE: the colour is a very dark purplish violet, very double, large and finely shaped, habit remarkably vigorous, and will probably form a good Pillar Rose. They feel assured it will become a general favourite. Price 5s. each for good strong plants, with usual discount allowed to the Trade.

Address, Woodlands Nursery, Maresfield, near Uckfield, Sussex.

Roses for Bedding.

Many Thousands of Dwarf Roses in pots, consisting of Hybrid Perpetuals, Chinas, Teas, Bourbons, and Noisettes.

WM. WOOD AND SON are now sending out daily thousands of ROSES in pots for grouping and bedding, at 12s. to 18s. per dozen. Early orders respectfully solicited to secure the best plants.

Address, Woodlands Nursery, Maresfield, near Uckfield, Sussex.

The Best New Roses of the Season.

WM. WOOD AND SON can supply fine strong Plants of the following at 5s. each, with usual discount allowed to the Trade.

HYBRID PERPETUAL ROSES.

Abd-el-Kader, velvety crimson shaded with scarlet	Reine des Violettes, purplish violet
Agatoide, delicate pink	Rosine Parron, bright cherry red
Darzans, superb rose colour	Triomphe d'Amiens, deep lake, striped and shaded with velvety crimson
Duc de Cazes, velvety purple	Bourbon Baronne de Noirmont, very bright rose
Prairie de Terre noir, crimson shaded and tinted with violet	
Robert de Brie, rosy salmon	

Plants presented to compensate for carriage.

Woodlands Nursery, Maresfield, near Uckfield, Sussex.

NEW ROSE.—MADAME STANDISH is the hardiest of all Roses: those which stood out of doors during the whole of the late severe winter not having lost a bud, whilst most others were destroyed by thousands. The growth is very rapid; the foliage magnificent; colour, a clear pale pink; petals smooth, round, and finely imbricated; the form cannot be excelled, and it is a thorough Perpetual, being, in fact, one of the finest Roses ever offered. Plants on May 1st, 10s. 6d. each. Madame Standish must not be mistaken for Mrs. Standish, which was sent out by MIELLEZ, of Lille.

JOHN STANDISH, the Royal Nursery, Bagshot.

Roses, New and Old.

WM. PAUL (Son and Successor to the late A. Paul) has now ready for delivery a fine lot of all the best ROSES, new and old.

Hollyhocks.

WM. PAUL (Son and Successor to the late A. Paul) has now ready strong healthy Plants of all the best HOLLYHOCKS. Named sorts, 12s. to 42s. per dozen; Seedlings, 6s. to 9s. per dozen. All are on their own roots, the system of grafting so detrimental to the longevity of the plant is not practised at his establishment.

BEDDING PLANTS.—All the best kinds, stout hardy Plants, at the usual rates.

PRICED CATALOGUES free by post.

Address WM. PAUL, Cheshunt Nurseries, Waltham Cross, N.

Yellow Picotees.

BRAGG'S Set of Twelve are now ready for delivery: extra strong Plants. They were shown and obtained First-Class Certificates at the Horticultural Rooms and were much admired for their quality and robust habit.

Hollyhocks! Hollyhocks! Hollyhocks!

W. BRAGG can now supply plants of Reine Blanche, Yellow Defiance, and Lord Taunton, which obtained First-Class Certificates last year at various places; likewise strong plants of all the choice and older varieties. Price on application.

Pansies! Pansies! Pansies!

W. BRAGG can supply by the 100 or 1000 all the best Show Varieties. Likewise the three early Bedding Varieties so extensively grown at the Duchess of Sutherland's, at Cliefden, viz.: Yellow, Purple, and Blue. Also strong plants of the four new varieties, Cloth of Gold, Master William, Volunteer, and Lord Carrington.

W. BRAGG begs to inform his friends and the public generally that his CATALOGUE is now ready of the above-named flowers; also Dahlias, Fuchsias, Carnations, Picotees, Pinks, and all sorts of Bedding Plants, &c., and can be had on application.

Star Nursery, Slough.

Evergreens.

RHODODENDRONS, HOLLIES, COMMON AND PORTUGAL LAURELS, a choice and immense Collection of CONIFERÆ and other EVERGREENS (perfectly uninjured by frost), from 1 to 12 feet high.

A surplus Stock of several thousands of AZALEAS to be Sold cheap.

Apply to G. BAKER, American Nursery, Bagshot, Surrey.

Rhododendrons.

W. JACKSON AND CO., NURSERY and SEED MERCHANTS, Bedale, Yorkshire, have a large Stock of the following fine hardy RHODODENDRONS, all large bushy plants.

Rhododendron campanulatum, 1½ to 2 ft.	..	£5	per 100.
,, Nobleanum, . . . do. do.	..	6	do.
,, Jacksonii, and varieties, do. do.	..	5	do.

The above, not being injured by the past winter, may be considered perfectly hardy.

Dahlias, Geraniums, Fuchsias, and Pansies.

CHARLES KIMBERLEY can supply the above in extra fine plants as under, all first-rate varieties:—

DAHLIAS, 4s. to 12s. per doz.	FUCHSIAS, 6s. to 12s. per doz.
GERANIUMS, 9s. to 18s. ,,	PANSIES, 4s. to 12s. ,,

A CATALOGUE OF DAHLIAS and other plants can be had on application.

Stoke Nursery, near Coventry.

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HENRY WALTON is now prepared to send out Plants of the above, which has been pronounced by the most eminent Calceolaria raisers in the county to be far superior to any of its class. The flowers are of the richest deep plum crimson, exceedingly large and round, and are produced in large erect clusters, standing well above the foliage; habit of growth very robust. As a variety for pot culture and bedding purposes it is unequalled. Plants, 5s. each. The usual discount to the Trade of one over when three are ordered.

Edge End, Marsden, near Burnley, Lancashire.

Geraniums, Herbaceous and Alpine Plants, Orchids, Chrysanthemums, Hardy Variegated Plants, &c.

MR. B. S. WILLIAMS begs to inform his Friends and Patrons that a PRICED and DESCRIPTIVE CATALOGUE of the above, to which are added supplemental Lists of Fuchsias, Stove, Greenhouse, and Hardy Plants, Ferns, Ornamental Foliage and Variegated Plants, Fruit Trees, &c. (which include the best new plants of the season,) is now published, and will be forwarded post free on application.

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MESSRS. MILNE AND CO. have a large Stock of the above, which they are enabled to offer to the Trade; also CALADIUMS in variety, including all the newest; fine good plants of CYANOPHYLLUM MAGNIFICUM and ALOCASIA METALLICA still on hand. Prices on application.

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W. J. EPPS begs to state that he has a large quantity of fine Trees of the above, which may be depended on. Maidstone and the neighbourhood is the only district where this valuable Nut is cultivated to any extent, 6s., 9s., and 12s. per dozen; 30s. to 40s. per 100.

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100 PHLOXES for 40s. | 100 PENTSTEMONS for 40s.

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WM. WOOD AND SON have now ready for immediate delivery fine strong plants of the above at moderate prices, with extra plants presented for distant carriage.

The newest and best Continental PHLOXES, 12s. to 18s. p. doz.

Older but well proved kinds at 6s. and 9s. per dozen.

The newest and best varieties of PENTSTEMONS, 12s. to 18s. per dozen.

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Woodlands Nursery, Maresfield, near Uckfield, Sussex.

BEDDING AND OTHER PLANTS.—The Spring Supplement to JAMES CARTER & Co.'s GARDENER'S AND FARMER'S VADE-MECUM will be found to contain all the requisite information for the arrangement and management of BEDDING PLANTS, besides copious Lists of STOVE and GREENHOUSE PLANTS, with descriptive observations. Will be published on MAY 1, and forwarded free of charge and post paid, on application to

JAMES CARTER & Co., 237 and 238, High Holborn, London, W.C.; and Crystal Palace Nursery, Forest Hill, Sydenham, S.

The Gardeners' Chronicle.

SATURDAY, APRIL 20, 1861.

MEETINGS FOR THE ENSUING WEEK.

TUESDAY, April 23	Royal Horticultural (Floral Committee) at Kensington Gore .... Noon.
WEDNESDAY, — 24	—Royal Botanic (Spring Meeting), 2 P.M.

BOUGAINVILLÆA is again in her glory, as we learn from the following letter:—

"About this time last year, attention was drawn in the *Gardeners' Chronicle* (see p. 431) to the magnificent Bougainvillæa in the gardens of the Rev. C. RUCK KEENE, at Swyncombe House, Oxon, and well deserved praise was accorded to Mr. DANIELS, the intelligent gardener there, for his successful treatment of a plant that had defied for years horticultural skill. It is now in full bloom, and presents I think a more brilliant appearance than it did last year. This unrivalled Brazilian creeper gracefully festoons at the end of a span-roofed stove, displaying its exquisitely blended colours in profuse masses, over a space of at least 300 feet square. A more gorgeous effect from one plant it is difficult to conceive. Mr. DANIELS adheres to the opinion he has already expressed in the *Gardeners' Chronicle* as to the mode of treatment by which such great success has been attained." *J. K. H., The Castle, Wallingford.*

It is now then ascertained beyond all doubt that the blooming the plant at Swyncombe was no accident, as some have fancied, but the pure and simple result of good management. Concerning that management too our readers have had ample information from various quarters, among which may be most especially noted Swyncombe House itself and Camden Park in New South Wales. To Sir WILLIAM M'ARTHUR's communication from the latter place (p. 955) we would again invite attention, for that gentleman tells us how he has attained success in a climate which really represents that of the best managed English greenhouse. And he tells us something more. He points to the existence in cultivation of two very different plants known under the name of Bougainvillæa spectabilis. And this is again adverted to in the following letter which has reached us lately.

"Camden Park, New South Wales, 21st Jan., 1861.—Six weeks ago I posted in Sydney a 'book packet' addressed to you containing dried specimens of the two species of Bougainvillæa respecting which I wrote last August. The species with flowers and bracts more clustered together upon short peduncles is the 'old' sort, which we suppose to be B. spectabilis. The other, with flowers more sparse upon long peduncles, is the one I obtained in Paris from Professor DECAISNE, and which, judging from the descriptions given by some of the Correspondents of the *Gardeners' Chronicle*, I presume to be B. splendens. Upon the whole the latter is decidedly of inferior beauty to the former. In colour it approaches closely to vermilion red, the ends of the bracts passing into and tipped with carmine; but as a whole it does not produce the rich glow of colour, especially from afar, which renders the former species so remarkable as an ornamental plant. Will you kindly cause to be inserted amongst the Notices to Correspondents in the *Gardeners' Chronicle*, under the head of 'Bougainvillæas,' the names of the two species, distinguishing them as I have done above. I believe them both to be as easy to manage and flower well in pots as any hard-wooded plants requiring strong light and heat to mature their shoots. In their native climates their season of rest is evidently a very dry season, and if this be imitated in their artificial treatment they will *flower* in the greatest perfection under the temperature which best suits the flowering of the Camellia and Indian Azalea."

The dried specimens alluded to have reached us, and will be exhibited at the next meeting of the Floral Committee of the Horticultural Society on the 23d inst. They show that Sir WM. M'ARTHUR's Paris plant is extremely different from the other, which is, we believe, the sort grown in England. Like many other cases in Botanical science it is not very easy to say what are the correct names of these two kinds, the distinctions to be found in books being insufficient for identification. Originally there was but one Bougainvillæa, a plant brought home by COMMERSON, described by the great JUSSIEU, and figured by LAMARCK under the name of B. spectabilis. In course of time the number of supposed species of the genus has increased till it stands at 6 in DE CANDOLLE's Prodromus published in 1849—one of which can hardly belong to the genus. In the Botanical Magazine (t. 4811) Sir WM. HOOKER suggested that the other five really represented only one variable species, to which he applied the old name spectabilis, at the same time figuring our usual English plant, from a specimen produced in a vinery near Christchurch, in Hampshire. For the present it is needless to discuss the goodness or badness of all the recent species admitted into DECANDOLLE's Prodromus, none being in cultivation. The question is, what is the proper name of our English species, and what of that obtained by Sir WM. M'ARTHUR in Paris? To this we believe a positive answer may be returned. 1. There can be no doubt that the Paris plant is the real original *B. spectabilis*, as M. DECAISNE stated. 2. It is equally certain that our English plant is not to be found among the four other species admitted into DECANDOLLE's work. But there is a *B. speciosa*, so called and figured by SCHNITZLEIN in his *Icones Familiarum Naturalium*, which, as we are informed by Prof. OLIVER, corresponds with our English plant, although in DECANDOLLE it is merged in *B. spectabilis*; and this name it must hereafter bear. We have therefore *B. speciosa*, cultivated in this country; and *B. spectabilis* grown in the Garden of Plants in Paris. Of the name *B. splendens*, mentioned by Sir WILLIAM M'ARTHUR, we find no trace. It has possibly been used in some continental garden, without having found a recorder.

—— Since the above was in type we have received from Mr. DANIELS further superb specimens of B. speciosa as it must now be called. His plant has been loaded with flowers for a month, and will retain its beauty for another. Mr. DANIELS retains his opinion that in successful cultivation all depends on root burning, as the plant now in blossom was never watered more than once from August to March, and that by mistake. He has this year treated a large plant "in the usual way of stove plants as regards heat and water, and kept it growing all the winter; it is two years old, and struck from the large one, but not the least symptom of bloom—although it bloomed last year with the hot dry treatment."

THERE can be no doubt that the two most remarkable Conifers introduced for many years, are, after Wellingtonia, those called SCIADOPITYS VERTICILLATA and Thujopsis dolabrata. Although we have already noticed them briefly (see p. 22), it seems desirable to give a further account of the former, especially as the statements made in GORDON's Pinetum are by no means correct. We therefore condense the account given by SIEBOLD, the first author who gave a satisfactory description of the Tree; omitting all such Botanical details as do not interest horticulturists.

Sciadopitys* forms a tree "for the most part 12 to

* This name will probably be pronounced Siadopĭtys in this country. But its proper pronunciation is Siadopĭtys.

15 feet high," with an erect trunk and a spreading head. The branches are straight and either in rings or alternate, marked between the rings of leaves with distant bud-scales (or primordial leaves) whose hardened bases remain visible for several years. The leaves are clustered at the end of every branch, and are in reality alternate, but are placed so close together as to look as if they stood in rings, 30 or 40 together spreading out horizontally like the ribs of a parasol (whence the name: see p. 22). They are linear, but a little sickle-shaped, long, undivided, blunt or slightly notched at the point, coriaceous, double-ribbed, with a shallow channel running through them; from two to four inches long and more, and two lines wide. The tree is evergreen for about three years, by which time each branch has from one to three parasols, according to its age; in the fourth year they fall off. The cones ripen in the second year, are oblong, about 3 inches long, by $1\frac{1}{2}$ in diameter, not unlike those of a Cembra but longer; each scale has from seven to nine seeds, which are pendulous, thin, and broad winged. The accompanying figure, the accuracy of which we guarantee, borrowed from Siebold and Zuccarini's book, of a branch

with male flowers, and a ripe cone, will suffice to complete this description. Siebold has however made a most important mistake as to the size of the tree. Instead of being only 12 to 15 feet high, it is in reality a pyramidal giant. Mr. Veitch saw it at Kanagawa 120 to 140 feet high. He measured some near Yeddo 10 to 12 feet in circumference at 3 feet above the ground. Mr. Fortune also points out the strange inaccuracy of Siebold, and adds that the leaves are deep green, not yellow green as Siebold reports. Doubtless the Dutch botanist saw none but garden specimens.

Two native names are given to the tree. The Japanese call it *Koja maki*, or the *Maki* of Mount Koja, and the Chinese *Kin Sjo* or the golden Pine, in allusion to the yellowish green of the leaves. Thunberg, with his usual botanical acuteness, took the tree for a Yew.

"The Parasol Fir," says Siebold, "is one of the finest but rarest Conifers in Japan. It is as yet met with oftenest in the eastern parts of Nippon on Mount Kojasan, in the province of Kii. It ought to be also found wild in other parts of the same island and in Sikok (a smaller island to the South). I only saw it cultivated in gardens and in the sacred groves that belong to Temples, where it forms a tree with wide spreading branches, which present an appearance as strange as elegant, in consequence of the innumerable ramifications always ending in a parasol. The Japanese have several varieties, which they propagate by cuttings struck in the shade."

Remains the important question how far the tree is likely to be hardy with us. Nippon is the southernmost of the great islands of Japan, and Sikok lies off its southern extremity. It therefore comes from the warmest part of Japan, and may not be so hardy as could be wished. But on the other hand it is a mountain plant, and Siebold expresses the opinion that it would find itself at home in the South of Europe, or even in the milder parts of Germany. Mr. Veitch found it growing along with the hardy Cryptomeria, and was of opinion that it would also prove hardy. Beyond this we have no certain information.

—— The Paris Journals mention that the Agricultural Society of France has just had the different rivers of the Basses Alpes stocked with 740,000 eggs of the Fera, one of the best kinds of fish in the Swiss lakes, and belonging to the same family as the salmon.

REPORT ON SCARLET AND OTHER BEDDING PELARGONIUMS,

Grown at Chiswick in 1860.

(*Continued from p. 337.*)

§ 3. *Flowers salmon or flesh-colour.*

77. *Aurora.*—From Mr. Hally. Dwarf; leaves distinctly zonate; flowers deep salmon-pink, not well developed. The variety is evidently not adapted for open air culture in such a season as the past, though a very beautiful object for pot culture.

78. *Blackheath Beauty.*—From Mr. Hally. Dwarf; leaves distinctly zonate; flowers pinkish-blush. This, like Aurora, is a beautiful little plant for pot culture, but in seasons like the past is not suited for bedding.

79. *Cherry Cheek.*—From Mr. Taylor. Vigorous; leaves large, zonate; flowers medium-sized, deep salmon-pink. Inferior.

80. *Chione.*—From Messrs. Rollisson & Sons. Medium habit; leaves distinctly zonate; flowers medium-sized, flesh-colour. Inferior.

81. *Criterion.*—From Mr. Taylor, Mr. Scott, and Mr. Turner. Moderately vigorous habit; leaves large, distinctly zonate; flowers well formed, in compact trusses, flesh-colour or blush. Ineffective, and evidently not suited for out-door culture in seasons like the past.

82. *Prince Louis of Hesse.*—From Mr. Ingram. Medium habit, with the erectish growth of Paul Labbé; leaves distinctly zonate; flowers large, well formed, salmon-red, paler towards the edges. This, which was grown as Seedling A, was pronounced a first-class variety of the salmon-coloured series. Mr. Ingram states that it is very pretty when grown in the shade.

83. *Kingsbury Pet.*—From Mr. Turner, Messrs. Fraser, and Mr. Scott. Medium habit; leaves distinctly zonate; flowers of good form, produced in fair-sized trusses, salmon or pinkish flesh-colour. A good variety for pot culture, but not equal to Aurora.

84. *Lady Emily Stanley.*—From Mr. Turner. Medium habit; leaves boldly zonate; flowers flesh-colour, in small trusses. Inferior.

85. *Madame Chardine.*—From Messrs. Low & Co. Medium habit; leaves distinctly zonate; flowers rosy-salmon. Inferior.

§ 4. *Flowers rose-pink.*

86. *Amy.*—From Messrs. Rollisson & Sons. Medium habit; leaves with distinct dark zone; flowers rose-pink, white on the upper petals. A very poor and inferior sort.

87. *Frogmore Seedling.*—From Mr. Taylor. Medium compact habit; leaves distinctly zonate; flowers narrow-petaled, deep rose-pink. Inferior.

88. *Ingram's Seedling.*—From Mr. Ingram. Medium habit; leaves faintly zonate; flowers small, rose-pink. Inferior.

89. *Minnie.*—From Messrs. Rollisson & Sons. Medium habit; leaves distinctly zonate; flowers medium-sized, in moderate trusses, deep rosy-pink, white on the upper petals. Inferior.

90. *Princess Royal.*—From Mr. Ingram. Dwarf compact habit; leaves faintly zonate; flowers small, deep rose-pink, with white on the upper petals. Inferior to others of this colour.

91. *Tom Thumb's Bride.*—From Mr. Turner. Dwarf, with slightly zonate leaves; flowers small, in small trusses, deep rose-pink, with white on the upper petals. Not equal to Rose Queen.

§ 5. *Flowers blush, with pink centre.*

92. *Anthony Lamotte.*—From Messrs. Low & Co. Medium habit; leaves boldly zonate; flowers medium-sized, of good form, in small close trusses, whitish with pink centre. Not equal to Henri de Beaudot, and paler in colour.

93. *Counte de Morny.*—From Messrs. Low & Co. Medium habit; leaves distinctly zonate; flowers small, in small close trusses, whitish, with salmon-pink centre. This was similar to Antony Lamotte, and quite distinct from another variety under a similar name, also contributed by Messrs. Low.

94. *Henri de Beaudot.*—From Messrs. Low & Co. Moderately vigorous in habit; leaves distinctly zonate; flowers medium-sized, in moderate-sized trusses, of good form, whitish, with a large distinct salmon-red centre. The best of the salmon-eyed light varieties.

95. *La Coquette.*—From Messrs. Rollisson & Sons. Dwarf; the leaves slightly zonate; flowers blush-white, of a deeper blush at the eye. Inferior.

96. *Skeltoni.*—From Mr. Turner, Messrs. Fraser, and Mr. Scott. Dwarf; the leaves distinctly zonate; flowers small, in small trusses, white, with blush centre. Inferior.

§ 6. *Flowers white.*

97. *Auber Henderson.*—From Mr. Scott. Dwarf; leaves slightly zonate; flowers white, of tolerably good form. It is now surpassed by other white varieties.

98. *Boule de Neige.*—From Mr. Turner. Moderately vigorous habit; leaves distinctly zonate; flowers small, of good form, white. A good variety, but inferior to Madame Vaucher.

99. *Lady Turner.*—From Mr. Scott. Moderately dwarf habit; leaves distinctly zonate, white. Not well developed.

100. *Madame Vaucher.*—From Messrs. Low & Co. Medium habit; leaves distinctly zonate; flowers of moderate size, well formed, produced in compact trusses, white. This was adjudged to be one of the best white sorts.

101. *Miss Emily Field.*—From Mr. Scott. Dwarf; leaves faintly zoned; flowers blush-white. Inferior.

102. *Nivea floribunda.*—From Messrs. Rollisson & Sons. Dwarf; leaves with distinct dark zone; flowers white, in medium-sized compact trusses, well formed, white. A good white variety, but not considered equal to Madame Vaucher.

The following sorts did not produce flowers:—

103. *Amy Robsart.*—From Messrs. Rollisson & Sons. Dwarf; leaves slightly zonate.

104. *Impératrice Eugénie.*—From Messrs. Low & Co. Medinm habit; leaves with a distinct narrow zone.

105. *Première.*—From Messrs. Rollisson & Sons. Vigorous and coarse habit; leaves distinctly zonate.

106. *Royalist.*—From Messrs. Fraser. Leaves distinctly zoned.

Series III.—Nosegay Pelargoniums.

107. *Bishopstowe Nosegay.*—From Mr. Taylor. Vigorous; leaves large, faintly zonate; flowers rosy crimson, in large bold trusses. It is a good large growing sort, but was considered rather coarse.

108. *Crystal Palace.*—From Mr. Taylor. Dwarf and compact; leaves prettily marked with a narrow

distinct dark zone; flowers small, pink. The flowers were not well developed, but its dwarf habit and very pretty foliage are sufficient to recommend it as a desirable variety in this section.

109. *Frewer's Nosegay.*—From Mr. Taylor. Medium compact habit; leaves zoned; flowers small, rose-coloured, in small trusses, which are not well filled.

110. *Imperial Crimson.*—From Mr. Turner. Medium habit; leaves faintly zoned; flowers loose, produced in moderate-sized heads, deep rosy-crimson. One of the best of the nosegay section.

111. *Model Nosegay.*—From Mr. Turner. Vigorous habit; leaves faintly zoned; flowers loose, in large heads, rose-colour. This was considered too coarse in habit.

112. *Pink Nosegay.*—From Mr. Taylor and Messrs. Fraser. Medium habit; leaves neatly zonate; flowers large, bright rose, in moderate-sized trusses. This is a fine variety, with flowers larger than in any other Nosegay variety grown in the collection.

113. *Purple Nosegay.*—From the Society's collection. This was also received under the name of Mrs. Vernon and Mrs. Colville. Vigorous; leaves large, zonate; flowers bright rose-colour, in good trusses, but they were not well developed. It is, however, a good large growing sort, though somewhat coarse.

114. *Red Nosegay.*—From Mr. Taylor. Medium habit; leaves bright green, with faint zone; flowers reddish-crimson, in good-sized trusses. A variety of good habit, and one of the best in this section.

115. *Salmon Nosegay.*—From Mr. Taylor. Vigorous; leaves large, zonate; flowers salmon-pink, in large trusses. It is a distinct large sort, somewhat coarse.

Series IV.—Ivy-Leaved Pelargoniums.

These are all of spreading habit, and have loose narrow-petaled flowers. They are useful bedding sorts.

116. *Golden Ivy-leaved.*—Leaves having a motley edging of yellowish-green and zonate.

117. *Scarlet, or Crimson Ivy-leaved.*—From Messrs. Fraser. Leaves green; flowers loose, rosy-crimson.

118. *Variegated Ivy-leaved.*—From Messrs. Fraser. Leaves cupped, silver-edged; flowers lilac.

119. *Variegated Crimson Ivy-leaved.*—From Messrs. Low & Co. Leaves cupped, silver-edged; flowers pink.

120. *White Ivy-leaved.* — From Messrs. Fraser. Leaves green, slightly blotched in the centre; flowers large, white.

(*To be continued.*)

MYCOLOGY.—No. XLIX.

Onygena equina, *P.*—The Fungus before us is not only interesting in point of structure, but because it is one of the very few which are confined to animal substances, the other species of the genus, with a single exception, having a similar habit. *Onygena equina* occurs not unfrequently on the continent, though more rarely with ourselves, on old hoofs of horses and asses, or occasionally on the horns of goats, sheep, cows, &c., while *O. corvina, piligena,* and *ossigena* are found respectively on decaying feathers, on wool or old damp woollen garments, or upon semi-decomposed bones. *Onygena faginea* alone occurs on old stumps of Beech, and may possibly belong to another genus. Three of the species have the appearance of small stipitate puffballs, while a fourth, which grows on bones, is perfectly sessile. It was once supposed that they resembled very closely in structure the Fungi to which they seem related by their outward aspect; but Tulasne some time since observed that when they are examined at a sufficiently early period of growth, there are distinct asci, containing the fructifying bodies, loosely dispersed through the cavity, and not collected into a regular hymenium as in *Peziza*. The asci are however soon absorbed, and then the sporidia form a dusty mass, tinged more or less decidedly with red. In *Onygena faginea* alone the asci have not at present been discovered, and we have not sufficient materials to decide what is its exact structure.

The occurrence of distinct species of Fungi on animal substances and confined to them is certainly a matter of surprise, especially since we know of no other group of which they can possibly be a modification from their peculiar place of growth. Some of the more common moulds indeed, as *Cladosporium herbarum, Penicillium glaucum,* &c., are not nice in their choice of a habitat, and may be found on animal substances as well as on vegetables, either in their ordinary form, or extremely disguised when they appear on living structures, from the constant supply of moisture, and the damp warm air in which they are produced and in such situations they either aggravate disease or cause it. If, for instance, they establish themselves on the mucous membrane of the lungs, a circumstance which is perhaps far more common than is generally imagined, they may help to clog up the air cells, and impede both the breathing and the circulation, by preventing the proper oxygenation of the blood. On the skin they are the fertile source of various cutaneous disorders, some of which may be induced by simply inserting a few spores of our common moulds beneath the skin. A list of the treatises on the occurrence of Fungi on living animals, amounting to a hundred or more, would show how prevalent the evil is, and tend to convince the unbelieving how necessary to health strict regard to cleanliness of person must be.

It is not however the common moulds only which attack animals. Nothing is more common than towards the end of autumn to see flies attach themselves to leaves or other substances by the tip of their proboscis, and to hang there till they are dead. On a close examination a mould of a peculiar structure is observed oozing out as it were between the rings of their abdomen. Silkworms are attacked by another Fungus both in their stage of caterpillar and chrysalis, to the great injury of the silk growers, while a host of other caterpillars are attacked by different Fungi, either when dead or living, and a species of wasp in Jamaica, carries about a peculiar club-shaped fungus exceeding its body in length till it becomes too heavy for it, and the poor insect falls to the ground and dies. Some attempt has been made to trace the caterpillar Fungi through their different stages of growth, but though such numerous treatises

Onygena equina, *P.*
(Copied by permission from Greville's Cryptogamic Flora).

have appeared respecting those species, which occur upon living vertebrate animals, and especially on man, we have but little information as to their true relations, though wherever means have existed for verifying their origin they have always been referrible to the most universally distributed moulds. The subject is one of great importance, and requires plenty of leisure, and an accurate knowledge of species, circumstances which are seldom combined, where opportunities occur of examining these productions, as they are generally found accidentally in the course of dissection, and their presence is very rarely indeed anticipated from the peculiar symptoms of disease. Those which produce cutaneous disorders are more open to inspection, and the results of a close examination might be of great utility both in a medical and physiological point of view. *M. J. B.*

Home Correspondence.

Vine Rot.—Seeing that you attribute the death of J. H.'s Vines to Fungi attacking their roots, I beg to inform you of similar instances which have come under my own observation. I have had Fungi kill Vines in fine health, also Peach trees and Cucumber plants. Sixteen years ago, when I went to Colney House as gardener, I found on the 4th of April a fair crop of Grapes in the early vineries, long loose straggling bunches, the Black Hamburghs beginning to colour, and quite one half of the berries shanked. I mentioned this to my employer, who informed me that they always shanked, and that he was not surprised at it, as it seemed to him quite unreasonable for Vines with tender foliage to experience as much as 70° of top heat and have their roots in a cold wet border, sometimes frozen hard, and at other times covered with snow. As the Vines, however, seemed nearly worn out, it was agreed that when what Grapes were worth cutting were removed, to clear out the Vines, make a fresh border and plant afresh. As I was aware that early fruits were most prized by my employer and his family, I felt anxious to do my utmost to supply them. I examined the old border and found it cold, stiff, and wet. My first object, therefore, was to secure a dry border, and next, if possible, a warm one. The old border, which was 14 feet wide, I had taken out 3 feet deep, and half the length of the Vinery. I made a good concrete bottom, and upon that I constructed a good border of turfy loam, brick rubbish, and bone-manure. In the other half, 4 feet from the wall and 3 feet from the walk, I had a pit like a saw pit, which was 7 feet wide, 22 feet long, and 5 feet deeper than the concrete bottom of the other half of the border; round this pit I had strong posts put in, and across the top strong pieces of wood with the bark on, such as Elm, Larch, and Spruce, on the top of which were laid some faggots to keep up soil used in the border, which was made of material exactly the same as the other half; so I had a chamber, 7 feet wide, 22 feet long, and 5 feet high, with a trap-door into it 3 feet square. My object was to fill this chamber full of fermenting material, which I may here state was not required, for by keeping a thermometer in the chamber I found that it hardly ever stood lower than 60°. Young Vines on both halves of the border were planted at the same time and in the same way, but the difference in growth between the two plantations was remarkable; those planted over the hollow chamber grew vigorously, ripened wood as hard as could be desired, and bore a crop of fruit the following year, while the others on the concrete bottom had to be cut back. Encouraged by the success of my chambered border, I cleared another Vinery upwards of 50 feet long, whose occupants used to shank as the others did, but instead of making a chamber in which I could walk under the roots, I laid on the bottom of the border, about 1 foot deep all over, branches of Elms, old roots, and then faggots to keep up the soil. The Vines in this house grew as finely as those in the one with the chambered border; the wood always ripening well, bore heavy crops which coloured beautifully, and not a shanked berry could be found; and although there were several other Vineries at Colney House, yet it was always for Grapes from the two houses in question I gained prizes at the London exhibitions. The sorts I found to succeed well on the chambered border were Cannon Hall Muscat and Grizzly Frontignan, both difficult Grapes to grow in perfection. Once Mr. Shearer from Yester and Mr. Gray, the horticultural builder, called on me and admired my Cannon Hall and Grizzly Frontignan Grapes, also my Black Hamburghs, all of which next day gained a silver gilt medal at the Royal Botanic Society's exhibition. I told them I would show them how they were grown, and took them down the trap door, where Vine roots were hanging 3 feet in length, as white as milk; and in the same chamber I grew Mushrooms, Sea Kale, and Rhubarb. My friends were delighted, and I am of opinion that from what was seen here originated the chambered borders at Yester, which however are heated by hot water pipes. Now for the Fungi: after several years some of the Vines began to show weakness in both Vineries; next year during hot days some began to flag; some I cut down and examined the roots, when I found that Fungi had got into them, and had actually gone right up the middle of the Vines like a wedge, splitting the stems inside of the house 1 foot high. I judged from where the Fungi proceeded, removed the sickly Vines, lifted the roots of the others within two feet of the front wall, removed every piece of wood or bark which was all white with Fungi, made a new border, and laid the roots on the top, and now finer Vines or finer Grapes I am told can hardly be seen. The Fungi also attacked a fine Noblesse Peach tree which I lifted from an over-crowded Peach house and planted in a house by itself; being previously a Pine pit, and the pit being very deep I put a lot of old roots at the bottom to fill up; the tree bore beautifully the first and second year after planting, then began to be sickly, and got worse every year till it died. When I cut it out, on examining its roots and stem I found that Fungi had split the latter like a wedge, and were working upwards between the wood and bark, so that it was quite impossible for sap to flow freely. This year I had above 100 fine young Cucumber plants plunged in bottom heat among sawdust from Larch trees; they began to look yellow, and some died. I examined the roots and found them full of Fungi, and the sawdust one solid mass, completely uniting the particles together. I removed the sawdust, re-potted the plants in new soil, and plunged them in leaf-mould. They started off at once, and grew most luxuriantly. *John Monro, Rabley Gardens, Barnet.*

Strawberry Growing.—Finding some of my Strawberry plants very strong in their growth, but bearing no fruit, I asked you the question whether I should try them longer or destroy them at once. The answer was, "Try them another year," and they are now under trial, but a circumstance has occurred which convinces me that they will do no good. A friend of mine, lately from America, has put into my hands a book on the cultivation of the Vine in vineyards and on wine making, &c., but there is appended to it, "Directions for the Cultivation of the Strawberry," by Mr. Longworth, containing reports from two of the Horticultural Societies of that country, in confirmation of a great secret in Strawberry culture, but now generally known and practised to an amazing extent by all transatlantic cultivators. It is acknowledged that this secret has been long known here, but it is believed that it is entirely neglected, and its importance overlooked. I have read Cuthill's little book upon the subject, but there is nothing in it whatever upon the point. I therefore infer that he is unacquainted with this (so-called) secret, for if he knew it his pages should have communicated the fact. What the Societies in question have stated I take to be true, and I think that it will be incumbent on all who propagate plants for the public to send the two distinct kinds in separate parcels, with directions as to the proper distribution of them in planting. I cannot but think that if you approve of the information published by Mr. Longworth, the widest circulation should be given to it through your pages. *Thos. Hancock, Green Lanes, Stoke Newington.* [There is no secret in the matter. Mr. Longworth's opinions and statements have long been known; but they seem to have no practical application to this country except in the case of the Hautbois Strawberry, which has always been known to produce sterile plants in abundance. If our esteemed

Correspondent has really found a Longworthian case, it will be the first we have heard of.]

Black Damascus Grape.—If your Correspondent "J. A." cannot procure the true Black Damascus from any of the Nurserymen or from private collections, I can let him have eyes or cuttings of it in the autumn. When the old garden existed here there was a large Vinery devoted to its culture, and it was the most esteemed of all the black Grapes in its season, in September and October. I have had the berries nearly 4 inches in circumference when well grown, and in my opinion no Grape has such a delicious vinous aroma when eaten. It requires a little extra management when setting, namely a rather high and dry atmosphere, he same as for Muscats, and rubbing the hand when dry over the capsules to disperse the pollen. I have likewise tried thinning the inside parts of the bunches before the flowers open, with the best effects. The Black Damascus is rather a shy bearing Grape with strong succulent shoots and leaves, and requires a well drained border. The best compost for the border I have found to be wood or coal ashes, or charred weeds and rubbish. I remember the original Vine growing at Worksop Manor, when the late Mr. John Wilson was gardener there; the roots had spread into a great heap of ashes at the stockhole end of the house, where it flourished and bore good crops. *William Tillery, Welbeck, April* 15.——My opinion respecting the fertilisation of this Grape entirely coincides with that of "Devon" (see p. 337). Having some in pots which were in bloom in February, and knowing them to be shy setters, I liberated each blossom that had not thrown off its sheath or covering, and carefully fertilised the bunches with pollen of the Chasselas Musqué, which was in bloom at the same time; the result was as I anticipated, scarcely a blossom failed to set. Your Correspondent "J. A." may well say that it is "the finest black Grape which has yet come to our knowledge," the high vinous flavour and large purplish-black berry make it a real acquisition; it is but little known among gardeners, as it has been discarded by many on account of its shyness, but by fertilising, as "Devon" observes, with the pollen of free setting varieties, that failing may be obviated. There is one peculiarity in it which may have been observed by others, and that is, it seldom has more than one stone in each berry, not even when artificially fertilised. Perhaps some of your readers may have observed the same, and been led to examine the blossoms microscopically, which I have no opportunity of doing this season, as I cut the old Vine down, hoping to get a good strong shoot from the bottom, and a fair prospect, if all goes on well, for some good Grapes in days to come. *J. Gadd, The Gardens, Willersley Castle.*

Growth of Ferns in a common Greenhouse.—For a considerable number of years the growing of Ferns has been steadily increasing in popularity, so that at the present time we cannot visit the garden of any one who has the least pretension to be considered a person of taste without meeting with some of them, either indigenous or exotic, according to the position of the proprietor. Attempts to cultivate them in a common greenhouse in close proximity with flowering plants has in the majority of cases where it has been tried proved a failure; the cause of which I shall endeavour to point out. Many who purchase them do not pay proper attention to the geographical distribution of the species which they buy, but order at random such plants as strike their attention without paying any regard as to whether they are natives of a temperate or a tropical climate; if they belong to the latter, nothing could be reasonably expected but a complete failure—for from experience I can assert that you may with as much reason expect any flowering stove plant to thrive in a greenhouse as you could a tropical Fern in a similar situation. Having pointed out what I consider to be the chief cause of failure, I shall proceed to describe the method which I have practised with very good success for these last seven years. At the time when I house the greenhouse plants I arrange the principal part of the Ferns upon a platform at the west end of the greenhouse, and during the prevalence of the damps of autumn I am very sparing with water, and very liberal with air, and I am careful in removing all dead fronds as soon as they make their appearance. When frost appears and fires are indispensible I water more freely, but admit plenty of air on every favourable opportunity. In early spring when they show signs of growth, I re-pot those which I think require it, and with respect to those which do not, I break the soil upon the surface and add a little fresh material. During the three following months they receive no special treatment except that care is taken that they should not receive the direct rays of the sun at any time. About the end of July, when the greenhouse is cleared from the flowering plants, I spread them over the whole of it, keep them close and well shaded in the day time, sprinkle them with the rose of a watering-pot in the afternoon, and leave them with plenty of air during the night. In the beginning of September I remove them into the open air, place them in a sheltered situation, and allow them to remain exposed, until frost compels me, though reluctantly, to remove them into the greenhouse. *John Lloyd, French Horn, Wandsworth.*

Hollies and Roses.—Do sheep bark Hollies during winter or spring? Some very fine ones have been barked this last winter and appear all dying. Will it be desirable to tar them, and should they be cut to see if they will break out? Are there not some Roses which it is desirable not to cut in so close as two eyes? and do they belong to Bourbons or Teas? Mine are pruned all alike. *J. W.*

The New Oak Galls.—It might interest many to know what effect the late season has had upon these pests; I therefore hope that some of your Correspondents may send you the results of their observations on the subject from different parts of the country. In the south of England I noticed, in the month of February last, that very few, if any, of the grubs had made their escape from the galls. Upon opening many of them I found the grubs full grown and fresh, but exhibiting no signs of life, even though placed under a glass in warmth. May we not therefore hope that the wet and cold of last autumn so retarded their growth that they did not pass into their chrysalis state before the severe frosts of last winter overtook and killed them? If so we may well compound with the loss of a few shrubs for the extinction of an enemy which threatens, if unchecked, to destroy young Oak plantations in many parts of England. *B.*

Leaf Secretions.—I shall be obliged if you will explain the cause of drops of water occasionally appearing on the points of leaves of plants in greenhouses. I have frequently noticed them on Arums, occasionally upon Fuchsias, and during the last two days upon a Hamburgh Vine, the only one, in a house containing several, which presents that appearance; in the mornings the points of every leaf had a drop attached to them. *H. T., Streatham Hill.* [Such appearances arise from two causes, viz., a natural secretion by the leaves themselves during darkness, when it cannot evaporate as it does in the day time; and a mere condensation on the leaves, which trickles down to their points. Arads have a special secreting apparatus, the nature of which we may explain if we find that our readers care to know about it.]

Pine Apples.—In a notice of Archerfield Gardens in your pages last year mention is made of a new Pine Apple grown there of very dwarf habit, called the Hurst House Seedling; and as I have never seen it mentioned before I should feel obliged if any of your Correspondents would give some account of its origin, by whom it was raised, if of good flavour and size, with its general habits, and where plants of it can be procured. *Ananassa.*

Plant Baskets.—Allow me to recommend the use of sponge baskets for the growth of plants. Take a cane or wire skeleton of a basket, and line it with this material; it will retain the moisture inside for the plants, and supply it to Moss, Lycopodiums, &c., outside; it is very durable, and perseveringly resists both drought and wet. *A Subscriber, Buckingham Gate, W., April* 16.

Cause of old age in Life continued by Grafting; and the means of prevention.—The disposition to canker and other infirmities in many kinds of our old Apple and Pear varieties which have long been continued by grafting some of them for many centuries, has been a vexed question amongst naturalist cultivators. It has by the one party been ascribed to old age, that all continuation by grafting or cuttings can only survive a limited time, and that, the time which the original seedling tree from which the first graft had been taken would have lived, (proceeding on the belief that in tree life there is old age and death), whilst the other party have ascribed the delicacy or infirmity of these old varieties to other causes than old age, unsuited soil or climate, infected disease, or that they had been delicate varieties from the beginning. My idea of the cause of this delicacy or infirmity differs from both. I ascribe it only to the aged character of the graft slip, which at some period of its progress had been taken from the branch of an old tree. Such slips are very porous light and infirm, defective in woody fibre, and the pores and vessels suited for or accustomed to be filled with air in place of juice or sap. Were a healthy slip taken from a healthy seedling in the prime of life, and grafted upon a young natural Crab root, and some 20 years after, while strong health pervaded the resulting tree, a slip taken from it and regrafted upon a young Crab root, and this process continued, I believe that no weakness or infirmity, especially if change of place was attended to, and circumstances were propitious, would ever ensue. It is where a grafted tree, or any tree, is allowed to become very old when the slip for the graft has taken an old-age character, weak and infirm, that the resulting tree from this slip, though supplied with a young root by grafting, continues weak and infirm. What else could be expected? grafting continues what you graft with. And the tree composed of this extension of the infirm graft is again brought under the action of time and old tree-top exhaustion to render its top slips more infirm still, and again and again this is continued. The plentiful supply of nourishment from the ground received from the young root may slightly restore the vigour, but to no great extent. The unnatural conjunction of old head and young root does not work well together. The quantity of nourishment sent up by the young root is more than the weak stomach-leaves can digest, the sap-proper, the chyle or blood of the tree, is thus unwholesome, and scrofulous canker is often the result. I have frequently had experience of the result of this conjunction of age with youth. At one time, if the wood sap vessels of the root correspond well in size with those of the graft, we have excess of nourishment, large annual shoots which die the following winter on the points, or in the second year are killed by large blotches of canker in the branch. At another time, when the sap vessels of the wood at the graft junction do not suit well together, or any cause prevents an excess of nourishment from rising, canker may not take place, but we have a stunted tree which comes immediately into blossom and fruit-bearing to an exhausting extent, soon acquires an aged look, remains small, is very liable to disease, and much preyed upon by insects of various kinds, often stripped naked by caterpillars. The porosity and fragility incident to the tops and branches of old trees is not limited to fruit trees. Every worker in wood knows that the timber of the top of an old tree, and in very old trees the whole of the timber, is frush, light, and worthless. It is comparatively worthless even as fire-wood to that of younger trees. This openness of texture and fragility of the wood constitutes or is a feature of old age in trees, as the closeness of texture and fragility of the bones is in animals. *Patrick Matthew, Gourdie Hill, Errol, Carse of Gowrie.*

Effects of the Winter in West Sussex.—I observe such a singular discrepancy between the report in your last Number from Kilmore, Cavan, Ireland, and my own observation here, that I send you this list for comparison. Many things are unhurt here which have suffered in Ireland, and *vice versâ*, though the degree of cold was precisely the same in both places at Christmas, viz., 17° Fahr., 15° below freezing point. The soil here however is dry and elevated, about 250 or 300 feet above the sea level. At Chichester, a few miles off, and much lower, there were 2° more frost on the 26th Dec., while strangely enough at Bognor, on the sea coast, the evergreens, such as Laurustinus, &c., are nearly all killed. My own list stands thus. Killed: Cupressus Knighti, Macnabiana; Pinus patula, Russelliana, apulcensis; Juniperus Bedfordiana, Quercus Fordi, Tea Roses. Much injured: Cupressus Goveniana, Uhdeana, Corneyana, funebris (slightly); Pinus Coulteri, Montezumæ, Ayacahuite; Arbutus procera, Andrachne; Erica Mediterranea, Ceanothus pallidus; Abies bracteata, Douglasii (this will not bear sea breezes), Quercus suber, and Lucombeana. Unhurt: Cedrus atlantica, Deodara; Cupressus torulosa, macrocarpa, Lawsoniana; Abies amabilis, grandis, cephalonica, Pinsapo, Menziesii, nobilis, Nordmanniana, Smithiana, Webbiana; Larix Griffithii, Cephalotaxus Fortuni, Cryptomeria japonica; Pinus Abchasica, excelsa, insignis, Jeffreyi, Parryana, &c.; Podocarpus andina, nubigena; Torreya taxifolia, nucifera; Thujopsis borealis, Wellingtonia gigantea, Araucaria imbricata, Thuja gigantea, Arbutus Unedo! Ceanothus thyrsiflorus, Ilex dipyrena, maderensis, Laurels, Bays, Laurustinus—or so slightly hurt as not to be worth mention. So our south coast, with chalky dry soil, is as favourable to plants as Ireland, or nearly so. *C. D., Ashdean, near Chichester.*

Foreign Correspondence.

Central Park, New York, *March* 18, 1861: *Effects of Severe Cold on Plants.*—We have been much interested in the varying and often conflicting observations recorded by your correspondents respecting the effect of severe cold during the last winter upon trees and shrubs of recent introduction. We have pretty well learned here that the question of hardihood is a complicated one. We have had for many years similar conflicting testimony, trees being killed to the ground in one garden, while in another, where they have been exposed to even severer cold, they escape uninjured. This is sometimes to be accounted for by the greater dryness of the soil of the favoured site; more frequently by its comparative sterility, whereby a slow growth and close habit has been secured. Many kinds of the recently introduced trees and shrubs—of evergreens especially—bear extreme cold, if protected from the sun's rays. It is the winter's sun, and particularly the early spring sun after a period of intense cold, that we have learned to fear. Consequently we plant nearly everything of doubtful hardihood on northerly slopes (if possible in the shade of old trees), but where the north-westerly wind, which is our coldest, will be somewhat broken. Yet this general rule is sometimes contradicted, and there are instances where the Deodar has lived for years in a southern exposure, though, generally, throughout this part of the Continent, it is sadly cut up every winter wherever it is not shaded and sheltered. I have had the Irish Ivy growing 30 feet high, on the north side of a stone house, killed to within 5 feet of the ground, while younger plants exposed to the sun, on the south side, have gone through unscathed. A damp rich soil favouring a rapid and late autumnal growth on the north side, and dry and poorer soil leading the autumnal sap to fill and ripen, instead of extending, the summer's growth on the south, is the explanation probably. We are frequently subject to much intenser cold than you have experienced this year, and in judging of what it is practicable to establish here we shall be much aided by your recent observations. We shall by no means reject, however, every thing that has been killed with you. For we have reason to believe that there are many plants which will bear dry cold which will not bear damp cold, and many, no doubt, which will bear severe cold in winter, and severe heat in summer, but not rapid alternation of severe cold and heat. *L.*

Societies.

Linnean: *March* 7.—Prof. Bell, President, in the chair. B. Carrington, Esq., M.D., was elected a Fellow. The following papers were read:—1, "Notes on Menispermaceæ;" 2, "Notes on Tiliaceæ;" and 3, "Notes on Bixaceæ and Samydaceæ:" all by G. Bentham, Esq. In the first of these papers, the author, after observing that in the case of Asiatic genera Drs. Hooker and Thomson had left little to be done until more satisfactory materials are obtained, passed on to the genera of Tropical South America, of which he admitted the following to be distinct:—Chondodendron, Anomospermum, Abuta, Cocculus, Hyperbæna, Botryopsis, and Sciadotænia. The species of these genera were then freely commented on. It was observed that in Australia only four Menispermaceæ are as yet known. The Tiliaceæ were stated to be universally admitted as a natural order connected with Malvaceæ and Sterculiaceæ by their valvate calyx, but differing in their indefinite free or nearly free stamens, and distinguished from Bixaceæ by their several-celled ovary with axile placentation. None of these characters, it was said, are absolutely constant, but the exceptional cases are readily classed by a combination of accessory characters, pointing out their affinity. No alteration was suggested in the general position and limitation of the order, which it has been usual to divide into two sub-orders, Tilieæ and Elæocarpeæ, the latter considered by some as a distinct order founded on the notched or divided petals, and the dehiscence of the anthers, whilst the Tilieæ have been subdivided into two tribes, the Sloanideæ without petals, and the Grewideæ with petals. Grisebach has proposed to take the anthers as the primary character for the division of the order, to which there are objections. If, however, observed the author, the nature of the petals is taken in the first instance, and that of the stamens and calyx next, and following out the principle that governs the demarcation of the order itself, if neither of these are considered as absolute characters, and exceptional genera are admitted, we have an apparently more natural distribution of the 35 genera he proposes to adopt, and which are grouped in 6 tribes under 2 sub-orders, called Holopetalæ and Heteropetalæ. The genera were each passed under review and comment, and of Sloanea and Echinocarpus a complete synopsis was given. Among genera enumerated as Tiliaceous in Lindley's Vegetable Kingdom and in other recent works, Vantanea, Aubl., was stated to belong to Humiriaceæ; Bancroftia, Macf., to be Tovaria, R. and P. in Capparidaceæ; Anstrutheria, Gardn., to belong to Rhizophoraceæ (Legnotideæ); and Antholoma, Labill., which Planchon thinks may be allied to Tiliaceæ, to be much nearer Sapotaceæ. In his remarks on Bixaceæ and Samydaceæ, Mr. Bentham called attention to the long series of polypetalous orders with parietal placentation which are so closely connected with each other, that systematists have in general endeavoured to keep them together, though the doing so has interfered much with any definite subdivision of the class. There is no doubt, he continued, that the hypogynous Cappparideæ, Cistaceæ, Violaceæ, and Bixaceæ can only be separated from the perigynous Samydeæ, Homalineæ, and Passifloreæ by an arbitrary line, and that this series, and that of the curvembryous orders, Caryophylleæ and its allies, furnish the strongest arguments against the Candollean arrangement. Yet even in these orders the chain which connects them is nearly as closely linked on to others which under any arrangement are kept wide apart. Thus Capparideæ are almost blended with Cruciferæ, Bixaceæ and Samydaceæ with Tiliaceæ, Violaceæ through Sauvagesieæ with Frankeniaceæ and Hypericineæ, Passifloreæ with Cucurbitaceæ, Loasaceæ, Turneraceæ, &c. Parietal placentation, moreover, cannot, he thinks, be taken as a character of so high an order as it might appear at first sight, for it occurs exceptionally in almost every large Calyciflorous order, as well as in a few Thalamifloræ which have normally axile placentation, and it is not constant in several of the above-mentioned orders where it prevails. De Candolle distributed the plants which formed the immediate subject of this paper into four orders—Bixaceæ and Flacourtiaceæ placed next each other in Thalamifloræ, and Samydeæ and Homalineæ rather widely separated under Calycifloræ. In their Genera Plantarum, Bentham and Hooker propose to unite De Candolle's four orders into two: Bixaceæ, with hypogynous stamens, and Samydaceæ with perigynous stamens; the Bixaceæ having for their chief prevailing characters indefinite hypogynous stamens, a compound unilocular ovary with parietal placentas, anatropous ovules, and a straight embryo immersed in a fleshy albumen; and the Samydaceæ, extended so as to include Homalineæ, having indefinite or more or less definite perigynous stamens, with the ovary and embryo of Bixaceæ. The more important characters distinguishing the most nearly allied orders were stated to be the exalbuminous curved embryo and usually dimerous flowers of Capparideæ, the orthotropous ovules of Cistineæ, the five erect introrse anthers connivent or connate in a ring round the ovary of Violaceæ, the axile placentation and valvate sepals of Tiliaceæ, and among Calycifloræ, the corona of the Passifloraceæ which include Malesherbia. The arrangement of the genera was then given, and the genera severally passed under review. 4. "On the Vegetation of Clarence Peak, Fernando Po, with descriptions of Mr. Gustavus Mann's plants from the higher parts of that mountain," by Dr. Hooker. A knowledge of the temperate Flora of any spot on the west coast of tropical Africa, Dr. Hooker remarked, had long been one of the greatest desiderata in botanical geography. The outlines of such a Flora had within the last year been supplied by the energy and resolution of M. Gustav Mann, of the Royal Garden, Kew, who was appointed by Lord John Russell to succeed the late lamented Barter as botanist to Dr. Baikie's Niger Expedition, and who has twice reached the lofty summit of Clarence Peak, 10,700 feet above the sea. The paper read on this occasion referred only to plants collected at and above 5000 feet elevation. These Dr. Hooker mentioned as amounting to only 75 species in 65 genera, a singularly small number for 5700 feet of vertical height almost under the equator. Of these fully 15 were tropical types that had ascended to 5000 feet or a little beyond, and must be excluded from the temperate flora. The remaining 60 belonged to no less than 48 genera, proving the flora to be an extremely fragmentary one. Of the total 75, 40 were stated to be Abyssinian species, and of the 60 temperate plants 33 were also natives of the mountains of Abyssinia, most of them being absolutely identical specifically, and others only slightly different. Of the Abyssinian mountain plants common to Clarence Peak no less than 15 were absolutely peculiar to these two localities, so far as is at present known. Others are peculiar to Abyssinia, the Mauritius, Madagascar, &c. Extending the comparison to genera, Dr. Hooker found that of the 65 gathered above 5000 feet elevation only seven were not Abyssinian, and of the 48 temperate genera 45 were found in Abyssinia. The next closest affinity was found to be with the floras of Mauritius and Madagascar. Of the whole 78 species, 11 are inhabitants of these islands. Compared with the Cape Flora the contrast was found to be very striking: not only was there a total want of any proper Cape types except such few as are common also to Abyssinia, or the Eastern African islands, but only 12 species of the 78 Fernando Po plants were South African, and of these all but Luzula have been found in Abyssinia also. With the Flora of the West African islands, there was no marked relationship whatever. Taking a still wider range, the temperate Flora of Fernando Po was seen to belong to the northern hemisphere. Of the 48 temperate genera, 12 alone were not European, whilst the following species are not only European but most of them British:—Oxalis corniculata, Sanicula europæa, Galium aparine, G. rotundifolium, Limosella aquatica, Luzula campestris, Deschampsia cæspitosa, Brachypodium sylvaticum, besides Ranunculus pinnatus, very near to R. philonotis; Calamintha simensis, near to C. vulgaris; and Parietaria mauritanica, a Mediterranean species. The species were severally passed under observation.

Notices of Books.

We find in the *Botanical Magazine* for April figures of the following plants. 5239. Gustavia pterocarpa, of which G. Leopoldi is a synonym, a noble stove shrub from tropical America, with great white flowers and superb foliage. Sir W. Hooker also remarks that Linden's Gustavia insignis is the same as G. urceolata, which yields the Bois puant of French Guiana. "Both have fragrant flowers, and both yield a fetid odour on cutting into the wood. G. urceolata is common in savannahs and in the forests of French Guiana, and is said to attain a height of 40 feet: its wood much used for hoops for casks. G. pterocarpa, M. Poiteau says, attains a still larger size."——5240 represents a pretty little Australian Sundew, called Drosera spathulata.——In 5241 is given the old Cistus vaginatus, one of those beautiful half hardy shrubs, which have been neglected and lost. The plant is "a native of Teneriffe, cultivated at Kew so long ago as 1779, when seeds were sent by Frederic Masson, and now scarcely to be found in collections at the present time, save in that of W. Wilson Saunders, Esq., at Reigate, a place rich in rare plants of Teneriffe. To that island it is quite peculiar, growing in Pine woods and Cistus-scrubs ('in Pinetis et Cisticetis') according to Mr. Webb, at elevations upon the mountains of from 1800 to 9000 feet. The flowers are particularly large and handsome, and there is a very distinct character in the union of the bases of the petioles into a very conspicuous elongated striated sheath, surrounding the branch, whence the specific name is derived."——5242. Zamia Skinneri, a new species from Panama.——5243. A little Convolvulus mauritanicus, from Algeria, much like Convolvulus minor.——5244. Beloperone violacea of Linden, now not uncommon in collections of Greenhouse plants.

The *Floral Magazine* for this month has fine figures of three new Pelargoniums, viz., Mulberry, Queen of England, and Mrs. Ponsonby Moore, the latter an uncommonly smart, lively looking sort, the delight of an amateur, the scorned of a regulation florist; four striking kinds of Clarkia, which seems inclined to sport to anything except duplicity (doubleness); the Golden Cockscomb, to the merits of which for decoration people are at last beginning to open their eyes, and two fine new Carnations—Rose of Castille, a rose flake; and Preeminent, a purple flake.

Journal of the Proceedings of the Linnean Society, Vol. V., No. 19, March, 1861. This number contains six good papers on Zoological subjects and two on Botanical. The latter consist of an enumeration of East Indian Liverworts by Mr. Mitten, in continuation of a former paper, and of an account by Drs. Hooker and Thomson of Indian Crucifers, of which Northern and Western India, Affghanistan, and Tibet, furnish a good many species. With this is given a new arrangement of the whole Cruciferous order, in which the method of De Candolle, founded on the peculiarities of cotyledons, is exchanged for one in which the condition of the Siliqua predominates. It is in fact a combination of the Linnean and Candollean methods, preserving the merits and avoiding the faults of each. The total number of genera admitted is 48.

Old Bones, or Notes for Young Naturalists, by the Rev. W. S. Symonds (12mo, Hardwick), is a concise account of the extinct vertebrate animals, out of whose remains the history of primæval life has been constructed. The purpose of the author is to furnish the inexperienced student with a safe guide to the intricate questions of what is called Palæontology, so that he may not, after long and persevering attempts to master its difficulties, find himself little wiser than when he began. He thinks that in science as in other subjects it is necessary to begin at the beginning, and that he who would run should in the first place learn how to walk. Most people are of the same opinion. The following is his own account of his plan:—

"In these pages I shall endeavour to explain how any person, wishing to become acquainted with the leading principles of Natural History, may, by pursuing the study with system and method, proceed from one subject to the other without falling into the maze of intricacy which generally besets those who commence such investigations without method, and who are altogether ignorant of the first elements that constitute a single branch of that far-spreading tree whose roots are planted in the depths of remotest time, and whose upper boughs are ever growing upwards and onwards to the remotest future. I have had personal experience of the necessity of beginning at the right end. Many years ago I commenced the study of fossil shells and plants, without the slightest knowledge of the history of the animals that inhabit recent shells, or of the physiology of living plants, and, as a natural consequence, I became confused with terms and definitions of which I knew nothing, and, like the youth who is crammed with Virgil before he has mastered the Latin grammar, had to endure the mortifying discovery, that after months of study I was still an utter ignoramus."

In the arrangement of his matter he follows a new arrangement of Prof. Owen. The orders, genera, and species of extinct animals are concisely described, in connection with the geological formations in which they occur; the descriptions are illustrated by neat pen and ink sketches, and the volume closes with a good Index. Students will find it a useful companion.

Turner & Spencer's *Florist, Fruitist, and Garden Miscellany* for this month has handsome coloured representations of two new kinds of Chrysanthemums, named Rifleman and Pandora, and accompanying them the following editorial remarks:—

"'Are those Dahlias?' was the question of one who shall be nameless, when I opened out the plate to view; with a half derisive laugh, I said, 'Oh, dear, no,' and yet bethought myself, after all it was not such an absurd question; for, as far as size goes, they might very well be regarded as such; and an unpractised eye would hardly mark the difference of petal, which makes an incurved Chrysanthemum so very unlike a Dahlia; and very marvellous it certainly is to see how every year seems to be increasing those properties which, in a florist's eye, stamp the value on a flower. As I have oftentimes said, and as Mr. Salter repeats again in his Catalogue this year, it is quite misleading to suppose that such blooms as those from which this drawing was taken are those that ordinarily are to be had in growing such kinds; they cannot be obtained but by very careful management—by disbudding the plant, and watching it in all stages of its progress; in fact, taking all that trouble with it which only a grower for exhibition will care to do; for its capability for that purpose does not make such a variety equally desirable for those who only wish to see large masses of bloom, and well filled up flowers, not caring whether they ever appear on an exhibition table or not, exhibition flowers rarely blooming well enough for specimen plants.

"The Channel Islands have long been famous as a region specially favoured by Flora and Pomona; Guernsey Lilies are well known. I have heard that they were originally wrecked on its shores, forming part of a cargo from distant Cathay or Japan; that they were thrown into a heap as rubbish, but in the following spring the heap was all covered with bloom, and then Nerine sarniensis was well taken care of, but that all the care will not make it flourish in even the neighbouring island of Jersey; while every year tens of thousands are imported to this country, only to bloom for once, and then be thrown away. In the more favoured island of Jersey the melting Chaumontel, Louise Bonne, and other Pears, acquire a flavour unknown here; and all Flora's productions flourish in proportion. To one of these islands (Jersey, I believe) the floral world is now indebted for the large proportion of the additions to new and excellent varieties of Chrysanthemum, Messrs. Smith and Clarke both living there; and a reference to Mr. Salter's Catalogue will show how largely they contribute to them. Their culti

vation there is materially aided by the nature of the climate; they mature their seed better than in our more chilly regions, and the experience of the last two seasons has shown us how disappointed we may be in the prospect of a bloom.

"Nothing has been added to our knowledge of the culture of this flower during the past year or two, and we are dependent more on climatic influences than on any difficulty in soil. A sunless summer and a cold dull autumn baffle even the most experienced cultivators; and we have to lament too often failures, even after all our care. The grower for exhibition still pursues his plans, and gets up most astonishing flowers, the parents of which would never know their own offspring. But may we, who are amongst the 'profanum vulgus,' not be wise to save ourselves some trouble in the method at present generally adopted of shifting two or three times. The Chinese, we are told, adopt an entirely different plan, and at once pot from the cutting pot into those they are to bloom in; and that by this means they acquire well-feathered plants, and not tall gawky things. We all know that if we plant a cutting in the open ground, how very soon it outstrips its companion whose energies have been cramped in a small pot, and the next best thing we can do is to imitate this, and give it plenty of room. By growing them on the one-shift system, potting them from the small forties or sixties into 11-inch pots at once, lateral shoots will at once start out, and without the care and fuss of tying out, will soon furnish the plant. To those whose time is limited, and who grow only for their own pleasure, this surely is preferable to that stunting and starving they too often have to endure at that early stage of their growth. It is a mistake, I fancy, to grow them in too rich stuff, that stimulus to their growth, which arises from gross feeding, being better supplied in the shape of liquid manure afterwards. Two-thirds loam and one-third rotted frame-dung is as good a mixture as we can give them. During the summer months they should be kept perfectly cool, and it is a good plan to place on the top of the pots something that will retain moisture well. Moss, rotted cocoa-nut fibre, or spent Hops, are used by various persons for this purpose. When the blooming buds appear, then liquid manure may be applied, but not profusely, the practice of the Chinese not being quite adapted for us, with our colder and damper climate.

"And now as to new sorts. I carefully went over Mr. Salter's collection, when in bloom, and noted those which seemed to me worthy of cultivation, and from those notes I now give the following list; some of the varieties (those figured were amongst them) had not then been named, but a reference to the numbers they bore, which Mr. S. has obligingly given me, has set that matter right. The cream of the collection has been transferred to paper, and the portraits of Little Harry and Lady Harding, in the "Floral Magazine," and of Rifleman and Pandora in our present Number, will express better than my words can do, what exquisite varieties they are. Of others I have also notes against, and give in order those that seemed to me most deserving of notice.

Ariadne, cream and buff.—There was an air of novelty about this, and it promised to be free in growth.

Caractacus, rosy carmine, blush tips; large and fine flower; will probably do better as an exhibition flower than as a specimen.

Golden Hermine.—Those who value the older one will gladly recognise in this a valuable sport; the flowers are orange, tipped, as its parent, with carmine.

Little Harry, a beautiful bright yellow, most perfectly incurved, never needing to be dressed, and one of the most profuse bloomers possible; the plant, too, is easily grown. Ex. ex.

Lady Harding, a pretty rosy pink, equally abundant in bloom to the last, though larger, and beautifully incurved. Ex. ex.

Lord Elgin, that indescribable colour, bronzy rose, finely incurved.

Pandora, deep nankeen, with yellow centre; fine show flower. Ex. ex.

Phœbus, bright orange, not very large, but very free in blooming; later in flower than some of the kinds previously named.

Queen of Whites, large white, and well incurved.

Rifleman, dark ruby red; a very noble looking flower, beautifully incurved and early flowering. This plate is taken from a very fine specimen. Ex. ex.

The Number in question also contains papers on acclimatisation; lists of new varieties of popular flowers; hot walls for fruit trees; cultivation of Gompholobium polymorphum grandiflorum in the form of a round bush; a good calendar of operations; hints on gardening, and other articles on practical horticulture—altogether a cheap shilling's worth.

BOOKS RECEIVED.—*Moore's Index Filicum*, Part 11 (price 1s., Pamplin), from Cassebeera to Cyathea. ——*Lindley's Descriptive Botany*, second edition (price 1s., Bradbury & Evans), little altered from the first edition. ——*Natural History Review*, No. 2 (4s., Williams & Norgate), a new periodical conducted by some of the most eminent naturalists of the day, but badly edited. We shall have occasion to refer to it hereafter. ——*The Cotton Supply*, by a Fellow of the R. Geographical Society (Hardwicke). This letter to the President of the Manchester Cotton Supply Association exhibits more zeal than knowledge. The writer does not seem to feel the difficulties in the way of obtaining Cotton from W. Africa, or of growing it in such colonies as Queensland. That any amount of Cotton may be grown in our colonial possessions is open to no question: but other difficulties, more formidable than those of growing the article, have to be met, not the least of which are freight and labour. If he turns to the columns of the daily press, even within the last few days, he will see what comes of attempts at Coolie emigration. ——*Wood's Class Book of Botany* (Lowe & Co.) is a thick 8vo. volume, giving a detailed account of the plants found wild in the United States and Canada. It is preceded by an Introduction to Botany, and seems intended as a companion to Asa Gray's Manual, and Chapman's Flora of the S. United States. It is illustrated by great numbers of somewhat rude but useful woodcuts, many of which are borrowed from English works. To anything more than a compilation it makes no pretension: viewed as such it is well done, and must be extremely useful in the United States. Nor indeed is it much less so to European Botanists who have hitherto had no Canadian Flora worth consulting; abounding as it does in careful analytical tables of genera and species. Its fault is its numerous misprints, which will doubtless be corrected in another edition.

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c.—Plants in pots that require fumigating should be removed to a close room, pit, or other place where smoke can be more conveniently and cheaply applied than in a lofty house; and the risk of injuring the blossoms of things which do not require fumigation will thus be avoided. Suspected plants should be frequently examined, and immediate steps taken to clean such as are found to be in the least infected. Should twiners or specimens planted out in beds get infested, these should be cleaned with Gishurst Compound, or they should be syringed with the following mixture, viz.:—½ lb. of soft soap, 1 gallon of tobacco water, and 6 gallons rain water, properly dissolving the soft soap in a portion of the water. But as there is some uncertainty about the strength of this mixture, and about its action on different plants, it should not be used without first making sure that it will not injure the foliage or young shoots, and also that it is sufficiently strong to destroy the insects. The beauty of early Azaleas and many other hard-wooded plants, which are now the principal ornaments here, will soon be fading, and every effort should be used to be prepared to supply their places with others in flower.

FORCING DEPARTMENT.

PINERIES.—In cases where a regular supply of fruit is required, we may repeat that it will be necessary to examine the stock of plants frequently, marking those considered the most likely for fruiting, so as to be able to keep them rather dry at the root for a month or so, which will, in most instances, have the desired effect of checking growth and throwing the plants into fruit. The only effectual method, however, of securing a supply of fruit at any particular time is, as we have formerly stated, foresight in the management of the stock, taking care to get the growth well ripened in sufficient time to allow of affording the plants a short period of comparative rest. In cases where a regular supply of fruit has to be furnished from limited accommodation, it is perhaps safest to grow the plants in pots, so as to secure perfect command over the roots, and also to be able to move them to a cooler pit or otherwise, as may be necessary. The planting out system is now, however, the one followed in most places. Continue to use every means to afford growing stock a moist atmosphere. Give air when favourable, but avoid cold draughts, and use shading to assist in keeping down the temperature without being under the necessity of admitting cold drying air too freely.

VINERIES.—Afford a sharp heat for Muscats while in bloom and setting their fruit. Get borders prepared for planting out young Vines, and if these are started into growth before planting (which will hardly be the case), do not keep them too warm, or it will be difficult to prevent their sustaining a check after planting out.

CUCUMBERS.—Encourage newly put out plants with a moist warm atmosphere, so as to get them into active growth quickly; but plants that are fairly established should be kept cooler, admitting air on every favourable opportunity, in order to secure short-jointed fruitful wood; all draughts must, however, be avoided, more especially while the wind is as cold as it is at present.

FIG-HOUSE.—Give air and water as before, but do not syringe trees over head whose first crop is ripening off, or use cold water.

STRAWBERRIES.—Give abundance of air on every favourable opportunity, and let late crops be carefully attended to with water.

FLOWER GARDEN AND SHRUBBERIES.

While the wind keeps so cold it will be well to defer planting even hardy things until we experience a decided change. Meanwhile take every favourable opportunity of exposing bedding plants to the open air, so as to get them well hardened off, and see that everything is perfectly free from insects, and also have the whole of the stock nicely arranged, so that when planting out has commenced everything may be in readiness. Push forward late propagated stock, and endeavour to keep the whole growing on slowly. It is a bad practice to allow bedding plants to stand in small pots exposed to bright sunshine and drying winds and but scantily supplied with water until they get almost dried up, and this with the view of preparing them for planting out. The plants should be exposed to the weather as freely as circumstances will admit; but this should be done by degrees, and never to the extent of browning the foliage and drying up the tissues, and they should never be allowed to suffer for want of water, for unless the plants are in good health when put out they require endless care afterwards if the beds are to be covered in any reasonable time, and despite every attention are long in getting into free growth. Remove, if not already done, dead parts from plants injured by the winter.

HARDY FRUIT AND KITCHEN GARDEN.

When Peach and Nectarine trees are sufficiently advanced proceed gradually with disbudding, but remove only a portion of the buds at once, selecting the strongest first and going over the trees two or three times at intervals of about a week. This will avoid checking the trees to the same extent as when disbudding is done all at once. Look carefully over Apricot trees, and destroy caterpillar wherever it is found. This is sometimes very destructive to the foliage, and also the fruit when neglected but for a few days. Do not yet by any means remove protecting materials. Take advantage of showery weather when it occurs to plant out Lettuce, Cauliflower, &c., and see to getting Tomatoes, Cucumbers, Vegetable Marrows, &c., prepared for planting out. Make a sowing of Sweet Basil, Marjoram, Savory, &c., on a light, rich, warm border; also get early Celery prepared for planting out. Attend to plants for succession crops, keeping them at all times well supplied with water.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON
For the Week ending April 18, 1861, as observed at the Horticultural Garden

April.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind	Rain.
Friday 12	2	30.316	30.235	63	40	51.5	47½	43½	N.E.	.00
Satur. 13	3	30.257	30.193	54	41	47.5	48	44	N.E.	.00
Sunday 14	4	30.267	30.184	51	40	45.5	48½	44½	N.E.	.00
Mon. 15	5	30.263	30.249	55	34	44.5	48	45	N.E.	.00
Tues. 16	6	30.327	30.301	62	33	47.5	48½	45	N.E.	.00
Wed. 17	7	30.313	30.218	60	40	50.0	49	45½	E.	.00
Thurs. 18	☽	30.199	30.110	59	38	48.5	50	46	E.	.00
Average..		30.277	30.213	57.7	38.0	47.8	48.5	44.8		.00

April 12—Cloudy; very fine; overcast.
— 13—Slight haze; fine; densely overcast at night.
— 14—Densely clouded, fine but cold; overcast.
— 15—Densely overcast; cloudy; overcast at night.
— 16—Slight haze; fine; very dry air; clear and cold.
— 17—Foggy; dry haze; fine; hazy at night.
— 18—Dry haze; very fine; drying air with hot sun and cold densely overcast.

Mean temperature of the week, 1 1-10th deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending April 27, 1861.

April.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 21..	58.5	37.4	48.0	14	0.28 in.	3	6	6	3	2	4	8	3
Mon. 22..	58.3	37.4	47.9	18	0.32	4	8	5	3	1	4	[illegible]	3
Tues. 23..	58.3	37.2	47.8	18	0.52	1	8	5	1	4	5	5	6
Wed. 24..	57.8	35.8	46.8	13	0.60	5	6	5	5	1	8	3	2
Thurs. 25..	58.4	37.6	48.0	16	1.40	6	7	5	3	6	5	2	[illegible]
Friday 26..	59.1	36.1	47.6	14	0.53	4	8	8	3	1	9	3	4
Satur. 27..	58.3	36.8	47.0	15	0.14	11	2	7	2	5	5	3	1

The highest temperature during the above period occurred on the 25th, 1840—therm. 80 deg.; and the lowest on the 24th, 1854—therm. 18 deg.

Notices to Correspondents.

ANTS: *C N H.* These creatures do not kill trees; they only infest them. Put in their runs guano or rags dipped in turpentine.

AZALEAS: *Ignoramus.* As you do not wish to increase the size of your pots, the only plan is to reduce the size of the balls and re-pot in fresh soil in the same sized pots. In reducing the balls, take care, however, to mutilate the roots as little as possible; by no means cut them with a knife; on the contrary, liberate them carefully, and pick the old soil from among them with your fingers till the ball is sufficiently lessened to enable you to add the fresh soil required.

BEANS: *W H G.* We lament to say that we do *not* possess the power of answering unintelligible questions. A Dogfish is not a Dog, nor a Carob-bean a Bean. If you, a gardener, do not know whether the "Beans" are Scarlet Runners or not, we are not likely to be much wiser than yourself. If they are we cannot think it a hardship that you should be expected to send the produce to table. Your suggestion is a good one, but difficult to carry out; we will take it into consideration.

CUCUMBERS: *T M M.* As far as we can judge you are over-feeding your plants, and thus producing sores and eruptions. The remedy, if we are right, is to give more air, more sun-light, and less water from the ditch. If this does not answer then you must discontinue the use of the sewage you speak of.

DEODAR: *A Constant Reader.* By all means defer moving it till next September.

FUNGI: *Old Sub.* Your Fungus is the true Morel. *M J B.*

HYACINTHS: *G S.* Solfaterre and Von Schiller, both single reds, may possibly answer your purpose.‡

LILIES: *Ignoramus.* We do not know what you call Lilium rubrum, and therefore are unable to answer your question. The name was once given to a kind of Pompone Lily: but has been long disused, and you cannot mean that.

NAMES OF PLANTS: *Llanelly.* The dried leaves Berberis japonica, the large piece B. aquifolium, the small bit B. Darwini.—*O P.* Lonicera alpigena.—*Armiger Oxoniensis.* You have been rightly informed. There is no better living authority than M. Decaisne.—*G. Thomson.* It is Myriocarpa longipes, not in the smallest degree resembling Böhmeria argentea, for which it was sold you.

OAKS: *C P.* They are tender, and so is Laurus regalis. We know nothing of Quercus Zan.

SEEDS: *Camden.* The Colonial Office has been obliging enough to take charge of seeds for you, and will continue to do so. There will therefore be no further difficulty.

VINE GROWING: *Belfast.* We have no other remarks to make than those to be found in a leading article last week.

MISC.: An adjutant said to a Rifle Volunteer who could not hit the target at a long range, "You ought, sir, to hit it every round," to which the Volunteer replied, touching his cap, that he could not see the target. So in reply to correspondents who occasionally complain that they do not get answers, we reply very respectfully that we cannot understand their questions.

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The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.

For further information, and for forms of application, apply to the Honourable William Napier, Managing Director, 2, Old Palace Yard, Westminster, S.W.

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WORKS of DRAINAGE of any extent are EXECUTED by the GENERAL LAND DRAINAGE and IMPROVEMENT COMPANY on all descriptions of property, whether freehold, entailed, mortgaged, trust, ecclesiastical, corporate, or collegiate.

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ROYAL AGRICULTURAL SOCIETY OF ENGLAND. SHOW-YARD REFRESHMENTS.

Persons desirous of having the privilege of supplying eithe First or Second-class REFRESHMENTS for the Visitors in the Society's Show Yard at Leeds, in July next, can obtain the particulars and Forms of Tender, on application at 12, Hanover Square, London, W.

Tenders may be delivered in, as above, on or before the 17th May. By order of the Council,

H. Hall Dare, Secretary.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

LEEDS MEETING, July 15th, 16th, 17th, 18th, and 19th.

ENTRIES of Implements, Wool, Flax, Cheese, and Butter close on the 1st of May, and Live Stock on the 1st of June.

Prize Sheets and Forms for Entries may be had on application to H. Hall Dare, Secretary.

12, Hanover Square, London, W.

Kohl Rabi (or Turnip Cabbage).

SUTTON and SONS, Seed Growers, Reading, have a good Stock at present of fine new SEED of KOHL RABI, the same kind as the specimens exhibited on their Stand at the Smithfield Club Cattle Show, and at the Crystal Palace Root Show. This is a valuable plant for Sheep Feed, and will thrive where Swedes and Turnips fail, not being liable to suffer from mildew or caterpillars.

Cultivation similar to Swedes. Drill 4 lbs. per acre in April or May.

Royal Berkshire Seed Establishment, Reading.

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ODAMS'S BLOOD MANURE FOR CORN, | ODAMS'S BLOOD MANURE FOR ROOTS,
ODAMS'S SUPERPHOSPHATE OF LIME,

MANUFACTURED BY THE PATENT

NITRO-PHOSPHATE OR BLOOD MANURE COMPANY

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Consisting of TENANT FARMERS, occupying upwards of 30,000 Acres of Land.

Chairman—Jonas Webb, Esq., Babraham, Cambridgeshire.

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OFFICES: 109, FENCHURCH STREET. MANUFACTORY: PLAISTOW MARSHES, ESSEX.

The Agricultural Gazette.

SATURDAY, APRIL 20, 1861.

MEETINGS FOR THE ENSUING WEEK.

Monday,	April 22	Framlingham .. .. 6 p.m. (Messrs. Stearn and Walker on the Management of Swine.)
Tuesday,	— 23	Kingscote (Mr. Bennett on Steam Power)
Wednesday,	— 24	Agri. Society of England .. .. Noon; Blandford.; Hungerford
Thursday,	— 25	Agri. Society of Ireland.

The quality, shape, and vigour of a calf depend as much on the sire it is begotten by as on the dam that bears it. In dairy counties, where calves are sold off in large proportions for weaning as soon as they fall, there are two important features working against a regular and general production of good stock. (1) Many dairy farmers are careless of what their calves may be so long as their cows come into profit through the pail at the right season; (2) Many owners of parks and Grass land, which for private reasons are not thought eligible for stocking on their own account, make what is termed a "ley" for accommodating their neighbours and making a profit for themselves. These ley-makers are only bound to provide a bull or bulls, that the heifers and cows they "book" may have a fair opportunity of proving in calf for "coming into profit" the following summer.

The result of these considerations is that whole herds produce a very inferior class of offspring for rearing, many of which grow up to be the vilest objects of hair, skin, and bones that persons acquainted with the shows at our large fairs can picture. The dairymen, whose practice it is not to rear for increasing their stock or replacing exhausted frames and "barreners," but to buy cows ready for profit, make the present outlay the greater consideration, and pick up bulls at the lowest figure they can find them at. This may be excusable where men are needy. Ley-makers, however, do the same, or they have it done for them, which is the same thing, and this even where they are not needy. This is not excusable in these days of agricultural intelligence and improvement. The term "ley bulls" is well understood where they are many. When an attempt is made to sell them, if their owners have any respect for their judgment, they are characterised as "ley bulls." If they be put into a "monthly sale," they figure under the same term in the hand-bills. In short, the bulls that appear in public in dairy counties, in the autumn of the

year, after their occupation has terminated, unfold a tale in regard to the miserable-looking calves and the wretched lots of store steers and beasts that are brought together at markets and fairs in rearing and grazing districts.

Many of the "Irish" brutes that find their way into midland and eastern counties, as yearlings and two-year-olds, were calved in the north-west of England in the districts where the cheese called Cheshire is produced. Cheshire, as the centre, with parts of Shropshire, Denbighshire, Flintshire, Lancashire, Staffordshire, and Worcestershire, produce thousands of calves annually, that are immediately sold and taken to Yorkshire, southward, eastward, and to Ireland. The worst go to Ireland, as an established commercial consequence, being bought up at from 5s. to 10s. per head, carted and trucked to Holyhead or Liverpool, where they are put on return cattle steamers to die or sojourn in the "Green Isle" till their bones and skin shall be more fully, if not more beautifully developed; when many of them reappear in this country to disgrace our periodical public collections of cattle, and die or linger in the hands of farmers who are driven to the necessity of having to tend such vermin. "The bad ones must go somewhere," it is said. This is true if they be studiously or carelessly bred. But there are many more of these than there ought to be, and the above is a fair outline of the origin of them, the manner of their subsequent disposal, and of their after distribution.

These careless and wilful methods of breeding from bad bulls ought not to happen. Especially ought not this to be the case where "leys" are made: but a bad average with a large proportion of ugly brutes may, and assuredly will, be the consequence if herds of heifers be "set" with bulls, the market price of which would be about 4*l.* with half-a-crown "again" or for "luck," or 4*l.* 10*s.* at the outside. Gentlemen who have a local standing, and dispose of their parks and other pasture lands in the way of "leys," ought to see to these things. Example is far better in such cases than argument or precept. If the customary price from May-day to Michaelmas will not afford bulls worth in the market 8*l.* or 10*l.* as year-olds, and 15*l.* to 20*l.* as two-year-olds, then let 1*s.*, 2*s.*, or 2*s.* 6*d.* a head extra be charged for each heifer, as the case may warrant.

Public opinion and criticism influence the isolated agriculturist and landed proprietor as well as more exposed personages, although it may not be so rapid and thorough on the former as it is on the latter. If these considerations be given a prominent place in the mind's eye of the localities they bear on, and a corresponding discussion of them ensue, men of judgment will shortly have their tastes less frequently and severely afflicted; and there will be a less proportion of "ugly scrubs" to be made away with at some price, and to eat that food which if bestowed on well-bred animals would greatly increase the growth of human food. Where agricultural societies can be brought to bear on these considerations, the classes and prizes for bulls of various ages ought to have that prominence which will especially encourage care in selecting and retaining animals that possess a good-shaped frame and a fine quality of touch. The season is at hand for beginning anew where necessary.

Farmers are at this moment recommended on all hands to give their orders for Turnip seed without delay, as from the unprecedented season of 1860 good seed is very scarce. We happen to have the results of some experiments and experience of importance upon the subject to lay before the agriculturist, and we venture at once to direct attention to the following interesting facts:—

In order to make what will follow more clear, we shall start with the two following propositions:—

1stly. That genuine new Turnip seed, both common and Swedish, should be capable of germinating to the extent of at least 90 per cent.

2ndly. That Turnip seed, both common and Swedish, as delivered to the farmer, is generally *incapable* of germinating to the extent of from 25 to 30 per cent.

We have long been fully satisfied of the truth of these propositions by an experience which we now proceed to describe.

Our readers are well aware that there is a ready market for home-grown Charlock seed, which indeed is in such great request that foreign stuff of this kind is largely imported under the head of "Indian Rape," and is avowedly sold to seedsmen "*for mixing with Turnip seed.*" Now seeing that this mixture is continually on sale as "genuine Turnip seed," it is a matter of moment to ascertain if there be any ready but unerring test for its detection.

In order if possible to solve this problem, we first had recourse to the microscope, but although we succeeded in detecting some differences between Charlock and Turnip seed, yet certainty is almost if not quite impossible, owing to the fact that Turnip, Wild Rape and Charlocks occur in endless varieties, and in all probability even hybridise each other.

If, however, Charlock seed be mixed in any quantity with Turnip seed it can in a little while be detected by powdering a little in a mortar and then mixing it into a thin paste with luke-warm water in it; for if the Charlock or any of the species of Mustard be present it is betrayed by the peculiar pungent odour which Mustard emits; but even this is by no means a positively satisfactory experiment.

We next tried to trace differences in the germination of the different varieties of Turnips and their congeners; to which end we procured a quantity of samples both of common and Swedish Turnips, and experimented with them as follows:—

A number of tin cases were made of the following proportions:—Length, 15 inches; width, 10 inches; depth, 4 inches. These, which were well perforated at the bottom, were divided across into 10 equal parts, each of which was filled to within an inch of the rim with a mixture of fine mould and silver sand. In these, seeds of different sorts of Turnips were sown, and the whole was put into a bed of sand in our forcing house. We could, however, see no difference in the results, nor could we trace any in the germinal or Cotyledon leaves of Swedes, Turnips, or Charlock. But of course samples of Turnip seed could not be tested as to freedom from Charlock by this experiment, because Charlock is killed before being mixed with the Turnip.

Now, seeing that we could get no trustworthy results by this kind of experiment, it struck us that our germination pans might be used to test the germinating power not only of the samples we had obtained for a different purpose but of others also. We first then counted a hundred of each of the following sorts of seeds and carefully dibbled them in a fresh mixture of soil; the results, which were carefully noted from day to day, are shortly given in the following Table:—

Table I.—Germination of Ten Sorts of Turnips.

No.	Name.—Copy of Label.	Came up.	No. of Days.
		Per cent.	
1	Mousetail, 1859	96	10
2	Pomeranian, or White Globe, 1859	86	11
3	Nimble Green Round, 1859	96	7
4	Lincolnshire New Red Globe, 1860	90	9
5	Yellow Tankard, 1859	92	9
6	Smart's Mousetail, 1860	98	7
7	Green Top Stone, 1860	84	8
8	Sutton's Imperial Grn. Globe, 1860	98	9
9	Green-topped Scotch, 1860	90	9
10	Early Six Weeks, 1860	90	10
	Came up =	92	
	Failed =	8	

Turnips from sample papers sent to us from Messrs. Sutton.

We would remark upon these results, that the temperature of the house was kept at between 60° and 70°, and the greater part of the seeds came up in four days; the numbers for the days then have reference to the time occupied before all that would germinate came up.

Now this Table is not a little instructive, as showing that samples of Turnip seed can be got in which only a very few of the seeds fail to germinate; but as experience had taught us that these samples by no means represented the usual market condition of Turnip seeds, in order to test this we begged to be allowed permission to take samples direct from the bags of a retail seedsman as they were exposed in his shop, and the following results will speak for themselves:—

Table II.—Germination of Ten Sorts of Turnip Seeds, from Market Samples.

No.	Name.—Copy of Label.	Came up.	No. of Days.
		Per cent.	
1	Norfolk Green Round	76	9
2	White Globe	78	15
3	Early Grey-topped Stone	80	10
4	Red Tankard or Pudding	62	11
5	Orange Jelly	52	15
6	Norfolk Round Red	80	10
7	Purple-topped Yellow Scotch	76	11
8	White Dutch	64	12
9	Early Green Top	64	13
10	Yellow Tankard Pudding	48	12
	Came up =	68	
	Failed =	32	

Taken from the bags by ourselves.

Eight samples of Swedes from the same source are in the next Table associated with a sample of Skirving's Swede grown in our own garden, (8) of the following Table, and another of Turnip grown on a neighbouring farm. We may remark upon the last-named sample, that we had observed the growth of this seed, which was from a very poor crop, half of which had decayed on the ground with the early frost of 1860, and the rest, without transplanting or selection of any kind was allowed to seed. Now, as this whole crop was so degenerated that it ought never to have been seeded at all, we were anxious to get some of the seed from the bulk in order to test from its growth this year whether it will not bring forth degenerate progeny. Its germinating qualities will be seen from the Table, and yet it is by no means the worst sample, which seems to show that the others are not naturally bad, but so by mixture:—

Table III.—Germination of Swedes, &c., from Market Samples.

No.	Name.—Copy of Label.	Came up.	No. of Days.
		Per cent.	
1	Ashcroft's Improved Purple-top	58	12
2	New Bangholm	96	10
3	Skirving's Liverpool	62	16
4	Green-top	78	10
5	Marshall's Improved Purple top	90	10
6	Hewer's Improved White	68	17
7	Green Major	86	10
*8	Skirving's Swede (own grown)	96	10
*9	Green-topped Turnip (neighbour's farm)	78	6
10	Fosterton Hybrid Turnip	64	10
	Came up =	77.6	
	Failed =	22.4	
	" of Seedsman's specimens =	24.8	

As regards the seedsman's samples in the Tables 2 and 3, we are quite unable to give exact details of their history, but we have reason to believe that the stock whence they were taken was purchased in the ordinary course of business from different "Wholesale Houses," as, though the tradesman whence the samples came combines the business of "Nurseryman" with that of Seedsman, we happen to know that he is not a grower of seeds, at least of Turnip seeds. The average then of 18 samples of Turnip and Swede from this source is that 28 *per cent.* are non-germinating seeds.

The next samples are from people in a large way of business, who are not mere retailers, but to whom we must accord all the immunities of the Trade as Seed-growers, Wholesale and Retail Seed Merchants, &c.

Before giving the Tables with the results as regards these samples, it is necessary to state that they were not sent to us direct, but were forwarded through a farmer to whom they were sent in the ordinary small packet samples.

We would further remark that as all that would germinate took so few days about it, being an average of six days, whilst those of Table 1 being seeds partly of 1859 and partly of 1860 occupied nine days, and those of Table 2, whose date we do not know, 11 days, in all probability the seed in question were tolerably new, most probably of the last seed season.

Table IV.—Germination of Ten Samples of Turnips

No.	Name.—Copy of Label.	Came up	No. of Days.
		Per cent.	
1	Green Globe	62	8
2	Dale's Hybrid	84	4
3	Red Globe	90	6
4	Orange Jelly	100	4
5	White Round or Norfolk	42	5
6	Green Tankard	50	6
7	Scarisbrick (sic)	88	11
8	White Globe	74	4
9	Golden Yellow	82	4
10	Green Round	30	6
	Came up =	70.2	
	Failed =	29.8	

Table V.—Germination of Samples of Common and Swede Turnips.

No.	Name—Copy of Label.	Came up.	No. of Days.
		Per cent.	
1	White Stone or Stubble	46	6
2	Red Tankard	60	5
3	White Tankard	60	4
4	Yellow Tankard	88	5
5	Green-top Yellow Scotch	84	6
6	Purple-top Yellow Scotch	62	8
7	Tankard-shaped Swede	74	7
8	White Fleshed	84	8
9	Skirving's Improved Purple-top	64	8
10	Lawhead Green-top	80	7
	Came up =	70.2	
	Failed =	29.8	

Of these samples we see that within a fraction of 30 per cent. is the average of non-germinating seeds, and this is only so low on account of two or three unusually good samples, the general range

being from 20 to 30 per cent. of non-germinating seeds for the last 20 samples.

If we compare No. 5, Table II., with No. 4, Table IV., we see a difference in the Orange Jelly Turnip; in the former little more than half came up, in the latter every seed. This is of importance as showing what genuine seed may be, the latter being doubtless as unmixed as the former was mixed.

Now, as regards this charge of mixing we are not going to make it without some evidence. In looking over the Tables we have now given, it will be seen that genuine seed has but a small percentage of non-germinating seeds, say from 5 to 10 per cent., but not only the examples herein referred to, but hosts of separate ones which have fallen under our notice, show a general amount of dead seeds of from 20 to 30 per cent. For these figures compare Table 1 with Tables 2, 3, 4, and 5. In those of the first lot the samples were sent direct to us from a seedsman, and their behaviour shows us clearly enough that good seeds are to be obtained, but the other Tables are as clear that from *some* seedsmen at any rate they are not good as actually sold.

That seeds are mixed we have then good internal evidence, but we are also in possession of facts more conclusive upon this important point, and we shall hereafter endeavour to enlighten our readers as to the art and mystery of Turnip seed adulteration.

Confining our remarks to Turnip seeds, we assert that if farmers will try the germinating powers from the *bulk* of the seeds which may this year be sent to them, they will find pretty nearly one-third to be rubbish. It is of no use to try from samples, except in comparison with bulk, and if all the farmers of Great Britain did this and would communicate the results, what an extraordinary tale would be unfolded, more especially if the evidence be completed by notes on the purity or otherwise of the crop grown from such seeds.

SULPHUR ON HOPS.

In your Journal of the 30th ult. there was an article on the cultivation of Hops, especially in reference to the practice of using sulphur, or "Sulphur vivum" to the Vine when in a growing state for the purpose of preventing mould. In that article it is stated that no evil consequences would be at all likely to attend the practice; that the opposition to it on the part of the brewers arises from ignorance and prejudice, and not from well grounded causes. It is further stated that if any sulphur did adhere to the Hops when gathered, that it would be dissipated by the heat of the drying kiln, and you quote from the evidence of Professors Taylor and Brande, as given at the trial, Bannerman *v.* White and Wigan, in support of such argument.

As this is an important question, involving the interests of both the brewers and Hop growers, and as it is very desirable that a right understanding should exist between them (a good crop of good Hops being essential to the prosperity of both), perhaps you will allow me to offer a few facts that have come under my own observations as a practical brewer, and also to state the result of some experiments that I made in 1855, in order to satisfy my own mind as to whether the "dressing" of the Hops with sulphur vivum, so extensively practised in 1854, was really the cause of so much beer being undrinkable in the season of 1854-5. In the winter of that season very little was discovered amiss in the brewings, but as the spring advanced, and the second fermentation of the beer set in, a most disagreeable smell was perceived in many of the different brewings and letters were received from several brewers stating the same of their beer; the customers too began to complain, and a great deal was returned as not fit to drink. It was soon found that the bad smell in the beer arose from the liberation of sulphuretted hydrogen, or what is sometimes called "rotten egg gas," whatever the cause might be that led to it. From inquiry we were informed that the Hop planters had been "dressing" their Hops in the field for the mould. I at once got a friend in Kent to procure for me some samples of the Hops so dressed, and any, if he could find them, that had not been so treated; he also sent me some of the so called "sulphur vivum," some in powder as "black brimstone," and some in solution. I tried the Hops in different ways, partly by putting a few of them dry into good beer that had no smell, and in every instance where the sulphured Hops were used, the same abominable smell presented itself after a short time. The Hops themselves could not be distinguished by the ordinary test of "rubbing down," but on putting a few of them into a beaker and pouring a little dilute hydrochloric acid upon them, the same smell at once became very perceptible, and lead paper was darkened by holding it at the top of the beaker.

I afterwards examined the "stuff" that had been applied to the Hops. The "solution" I found to be the common black brimstone held in solution by an alkali (if sulphur is fused with an alkali it becomes soluble in water); this had been fused with soda, but contained a large quantity of sulphuret of sodium, and on adding a little dilute acid abundance of sulphuretted hydrogen was set free. I next weighed a portion of the black brimstone, and submitted it gradually to a red heat; but instead of all flying away, as you show us it will,* from a sheet of paper without scorching it, after being at a red heat for some time a large black mass was left behind, which on weighing I found to be 30 per cent. of the whole. I examined this substance too and found it nearly all sulphide of iron, and by adding a little weak acid to it the same gas (sulphuretted hydrogen) was set at liberty. Here then was to me a convincing proof that this was the cause of the same smell in the beer. The sulphur is of the crudest kind, apparently made from common "iron pyrites," and it is very probable that when Hops are dressed with this substance so late as the month of September, as it came out at the late trial they frequently had been (though it was said by some that they did not think it a good plan to dress so late), the sulphide of iron in powder falls into the fruit or strobile of the Hop, that it is not changed by any heat upon the drying kiln, but that when put into the beer either as dry Hops for "hopping," or used for brewing the beer, after a time the iron becomes oxidised, setting the sulphuretted hydrogen at liberty, and thus causing loss and disappointment to the brewer. I must add that I also examined carefully the volatilisable portion of this black brimstone, and found in it unmistakeable evidence of arsenic.

This was not surprising, as it is well known that "iron pyrites" often contain a considerable quantity of that substance. Here then I think is quite sufficient reason why the brewers should object to buy Hops treated with such a compound. No doubt Professors Taylor and Brande, when they stated that sulphur could do no harm, meant pure sulphur and not such an impurity, but you state the pure sulphur does not answer the Hop planters' purpose,* neither does the impure answer the brewers' purpose, or the "public" either, who have to drink the beer. The German Government is no doubt right in prohibiting such practice, and the German Hop planters have this year found the advantage of it, as their Hops have been bought by the large brewers at as high as 28*l.* per cwt. free in England, while the English Hops have been totally neglected at half the money. *John Matthews.* [See memorandum in page 342. Mr. Matthews is mistaken in both of the assertions marked thus *.]

THE LESSONS OF 1860.

The following notes are herein set down in the order of a series of questions received from you, and it is to be understood, that wherever the word *this district* is referred to, it implies the "Braes and Carse of Gowrie," "District around Dundee," and Strathmore in general.

1st. The Use of the Reaping Machine in order to rapid Harvest Work.

The reaping machine was found of little value this season in this district, owing to the grain crops being so much laid, warped, and twisted in contrary ways, and consequently the sickle was the implement most generally employed last harvest, there being plenty of hands to be procured, in consequence of the grain being late in ripening. However, I understand from Mr. Bell, of Inchmichael (of Bell's Reaper), that he cut the whole of his grain crops this season with the reaping machine, inclusive of headrigs, corners, &c., and that at the rate of 5*s.* 6*d.* per acre, including binding and stooking. The cost for same operations on several farms, held by acquaintances of mine in same district of county, having ranged from 12*s.* 6*d.* to 13*s.* 3*d.* per acre.

Mr. Bell's harvest, however, was like most others, not a short one, having extended over a period of about five weeks, in consequence of the crops being so backward in coming forward.

2d. The ability of particular sorts of grain to cope with wet seasons.

Fenton Wheat, being a short strawed sort, is generally sown on ground where a rather heavy crop is expected, and where the land may be in fine order with a risk of the crop lodging. It has been in reputation for some years in the Carse of Gowrie, in consequence of its having been found to be freer from the ravages of the fly, as well as less apt to lodge.

In consequence of the wet autumn comparatively little Wheat was got sown in the Carse as well as in Strathmore and other districts, and I find that Matchless, a spring Wheat, also a White Wheat, is what is generally being sown this spring. Last year's crop of it having turned out well, was of good quality and turned out a good sample, and was found to be 8 or 10 days earlier than most other kinds. It is a free growing Wheat, and does with less manure than most other varieties, and accommodates itself to both heavy soils and those of a lighter description.

This spring, when so much Wheat has to be put in, it has been suggested by several experienced cultivators of Wheat, and is being carried out generally, that it is preferable to use for seed for spring sowing Wheat that has the season before been sown as a spring Wheat, from its being earlier and coming faster forward, and consequently getting earlier cut.

The Giant Wheat is a new variety which a great many farmers have sown a portion of this year by way of experiment. It is a Red Wheat and understood to be very prolific; the price being paid for seed is 100*s.* per quarter and upwards.

Of the varieties of Barley generally sown in the Carse of Gowrie and Strathmore districts, Chevalier is found to be less liable to lodge than many other kinds, and this is considered of immense importance for the young Grass, Barley being generally the crop with which the Grass seeds are sown.

"The Annat Barley" is also found to stand wet weather pretty well; but there appears to be less of this kind sown in this district than formerly.

The Sandy Oats is extensively grown in this district, and being stiff in the straw is not liable to be laid in wet seasons, which has been amply verified in the past harvest of 1860. It answers well for sowing in clay soils, but particularly on soft mossy soils where crops are apt to lodge. This Oat is also a free grower, and ripens early, which is a great advantage in a wet season.

The Potato Oats are also much sown, is short in the straw when grown on land in an ordinary condition, and possesses this advantage, that it can be early cut, and allowed to ripen in the stook, and being also an early kind is a most important object in cold wet seasons.

3d. The relative Productiveness of different sorts of Grain in ordinary seasons.

The Giant Wheat is stated to be the most prolific kind ever grown in this country; but as it is not yet generally known in this district, much cannot be said until it is fairly tested. It is being tried this year, as most Wheat growers have obtained a quantity of seed for the purpose of sowing a few acres as a trial.

In an experiment made two years ago by Mr. James Smith, tenant of Gray Farm, near Dundee, with six different kinds of Wheat, sown on land equal as regards quality of soil and the treatment it received, being all heavily manured, 2 acres were set apart for each variety, and they turned out as regards productiveness, as follows:—

1st. Hunter Wheat; turned out best.
2d. Fenton Wheat }
3d. Golden Drop } all three equal.
4th. Kessingland }
5th. Matchless; was third in the competition.
6th. Hopetoun; was the least productive.

Mr. Smith remarks that he considers that Matchless might have perhaps been first in the competition had the ground on which it was sown been less heavily manured, as it looked by far the most likely to turn out the best crop for a long period, but it was all lodged before ripe, while the others stood up. The portion sown with Matchless was quite observable all the winter from its greenness and vigorousness, and the crop he reaped of it the following year turned out a very superior one. Kessingland is not in much favour in this district, being a strong grower and a very coarse variety, and rather late.

4th. The Difficulties of the Hay Harvest of 1860.

It was found in this district that those who were enabled to cut early in the season suffered much less than those who were later in the season in commencing operations. The lateness of the hay harvest last season, and consequently its attending difficulties, were a good deal owing to the scarcity of fodder and root crops for winter and spring keep in winter of 1859, causing the necessity of turning out the stock early on the young Grass intended for hay, and thereby retarding its growth several weeks later than otherwise it would have been; it thence had to contend against the heavy rains which set in in July. The above practice in ordinary seasons of depasturing the young Grass intended for hay too long in the spring and beginning of summer has a tendency to render the hay harvest much later, and is often attended with injurious consequences as to the getting the hay crop secured in the best season.

Another circumstance this past year occurred, having the effect of less attention being bestowed in getting the hay crop cut and secured in proper time: viz., in consequence of the Turnip crop coming so very fast forward for thinning the farm hands could not be spared away to attend to the hay harvest.

5. *The Value of the different sorts of Root Crops.*

From the great deficiency of root crops in Scotland during the winter of 1859 and spring of 1860, a great quantity of Mangel Wurzel was obtained from the South of England, and seeing such splendid roots induced the most of our farmers to grow a few acres last season (1860), but the season proving so wet and having so little sunshine, it has in general turned out a very poor crop, if not a failure. The greater part were however taken up and stored before the frost set in; but on several farms where this was not done they may be said to be almost lost. A few took the precaution to have them furred up, which has been the means of protecting them somewhat. I examined a portion of a field a few days ago on one of the best farms in Perthshire, the rent 4*l.* per acre, where the crop has been allowed to stand without any protection, and found that only the very smallest of the roots, which are mostly all below the surface, are fresh, and all the others which have obtained any size are nearly quite useless for some inches at least, and comparatively few will be found fitted for cattle food. The Red variety, as they grow deeper into the soil, have certainly suffered less than other varieties which extend more above ground. But even those that were saved from the frost and grown under the most favourable circumstances are far below the Turnips as a remunerative crop; perhaps 20 tons per acre have been the weightiest crop grown in this district, but about 15 tons may be said to have been the general average per acre. Pigs seem to be very fond of frosted Mangel Wurzel, and thrive most remarkably upon them; the Long Red and Long Yellow have in general turned out a more bulky crop than the Round or Yellow Globe. On the other hand the Mangel raised in this district in 1859 may be said to have been attended with pretty good success, and where stored came in very well for spring food, the Swedes having been greatly destroyed that season by the frost.

The Turnip Crop of 1860 in general has been an excellent one, and a less expensive crop to raise than the Mangel, and may be held as having turned out twice the weight per acre of the latter.

Among the Swedes, Skirving's Purple Top may be held as having yielded the bulkiest crop this season. It is grown pretty extensively in this district, is a fine grower and comes early to maturity, but as it grows much out of the ground it is liable to be damaged by the frost, and is well suited for being stored. It has been found that the seed derived from England produces a finer Turnip than that raised in Scotland.

The Common Purple Top grows more into the ground, and is, therefore, less apt to be damaged, but is found not to yield so bulky a crop.

Waugh's Purple Top, a new variety introduced into this district last year from seed obtained from East Lothian, is a fine formed Globe Turnip, grows well down into the soil, therefore less liable to be injured by the frost, has given much satisfaction this year, and shown itself to be a free grower, and to yield a bulky crop.

Amongst the Yellows I find that the Aberdeen Green Top Bullock has given the most satisfaction this season, being the most hardy variety, it has proved itself to be able to withstand the frost much better than any variety of Swedes, but it is of the utmost importance to obtain seed grown from the true variety, there being several varieties in the trade sold as such the true original sort being of a very hardy nature and growing pretty deep into the land.

Fosterton Yellow is found to grow a weightier crop than the above, but does not stand the winter so well.

Purple Top Yellow also grows a heavy crop, but is not very hardy, at least such is found to be the case this season.

Of the White Turnip the Pomeranian Globe is held in high estimation, grows to a large size, and is a very suitable Turnip or autumn use.

The Greystone, a new variety, has been extensively grown in this district for the two last seasons, is considered to be a coarser Turnip than the White Globe, grows to a great size, and adapts itself to the poorest of soils, and is even said by some to be the best early Turnip we have.

But the whole of the Turnip crop has been more than an average crop this season, and grew very much during the autumnal season, which was so mild. The Mangel also m de

great progress during that period, indeed it may be said that our root crops increased fully one-half in bulk during that time

Potatoes.—The White Rock Potato was brought from Ireland to Cupar-in-Fife, and seven or eight years ago introduced into this district by Mr. Paterson, Fruiterer and Potato merchant, Dundee. It is the latest Potato we have, and yields the heaviest crop. It has, however, so much improved since grown in this district, that it can now be used at any time throughout the year. Mr. Paterson, who is the most extensive purchaser of Potatoes in this district, tells me that the greatest yield he has found this season has been 37 5-cwt. bolls per imperial acre, all marketable stuff, besides six bolls of seed or middlings.

The Orkney Red is a late Potato much grown in the district but more particularly in Fifeshire, and the yield is about equal to the White Rock in that county.

The Regents are now considered the most useful kinds of Potato we have in this district. There are several varieties of them. Walker's Early is the most extensively planted, yields a large crop, and is of fine quality, and is the best early Potato we have: it can be used down to the month of July. The yield may be held as from 24 to 32 5-cwt. bolls per imperial acre.

The Green Shaw Hen Nest is a late Regent, and has been the standard ever since its introduction, but is likely to be superseded this year 1861 by Walker's Early.

The best Regent Potatoes for early use are the Dalmahoy and Ash Leaf Early, both for their productiveness as well as for coming early forward.

The Fluke requires a finer climate than generally to be found in Scotland, but where it can be successfully grown in Scotland, it gives a great yield and brings a greater price in the London market than any other kind of Potato.

The price of Potatoes in Scotland has ranged this year from 3*l.* to 5*l.* per ton; they were sold from 16*l.* in the early part of the season to 30*l.* per acre later in the season, and there has been little or no disease, and they have in general kept well in the pits.

6th. *Modes of Cultivation adapted to the difficult circumstances of the past season.*

There were generally no great difficulties that presented themselves as to cultivation either in this district or throughout Scotland in general last season, with the exception of securing the grain crops where late, and in late districts, the ungenial weather for raising Mangels, and in some cases as to the hay harvest, as before explained. It perhaps may be said that the best modes of cultivation for wet ungenial seasons like the past, are good farming, and to have the land in the best possible condition, so that the crops may come as fast forward as possible, and in that case be sooner ready for harvesting, and thereby have more chances of getting them secured early in the season.

But it would appear that we had not nearly the same difficulties to encounter owing to wet weather as seems to have been the case in the southern counties of England, the rain fall being much less with us in this district. However a great deal of our crops were put into the stackyards in very bad order, and in not a few instances the stacks had to be turned over to prevent heating; also many tenants have had to resort to having their grain dried on kilns, it order to have it in a fit state for the market. Engine ashes are what is often employed for this process; it whitens the grain and makes a good looking sample. The cost is about 1*s.* 6*d.* per quarter, besides causing a very considerable inleak in the quantity thus dried. In some late districts instead of resorting to the usual method of round ricks several farmers have had large wooden tressels or frames erected, 12 to 15 feet high, having longitudinal bearers at every 3 or 4 feet apart supporting open "bosses," to allow of a good circulation of air through them. This plan has been found to answer admirably and prevent heating, even when the grain was carried in in very bad order, and would otherwise have been lost.

In reference to this query a practical farmer says that taking two farms, equal in soil, subsoil, climate, exposure, &c. &c., the one being in good order, and the other in inferior order, the latter will always be found the most wet, thence following the many drawbacks in rainy seasons; a reason assigned for this being that the farm that is in good order and rich in manure possessed most worms, and worms being the very best of drainers, as when the upper soil is dry they go down for moisture, thus making holes, which when rain falls act as so many draining tubes, carrying off the water; while on the farm in inferior condition, where the worms are few in number or awanting altogether, the water lodges on the surface or stagnates in the upper soil.

7. *Expedients used last year to economise the small store of Cattle Food.*

In the winter of 1859, there really was a scarcity of cattle-food generally throughout Scotland, from the deficiency of the root-crops, and in consequence of the Swedes being destroyed by the frost, as also the amount of fodder was deficient owing to the very dry season; but this past season, winter of 1860, there was no deficiency felt (at any rate before the effects of severe frost, which set in about the 15th December), the root-crops and fodder being very bulky throughout Scotland in general, excepting in some of the upland and late districts.

It may be said for winter 1859, that in this district great quantities of Mangel were obtained from the south of England, and boiling and steaming were a good deal resorted to to economise the roots, and stack-yards were seen to be empty that perhaps had not been seen so before for the last forty years. Great quantities of hay were imported to this port and Leith, &c., from the Continent, at a very high price. In that winter, 1859, I am aware of one person who kept 6 or 8 young cattle for some weeks on the cuttings of Ivy and a small supply of straw, and the cattle which I saw seemed to thrive very well upon their fare. He obtained the Ivy, which was the Irish or broad-leaved variety, by clipping it from walls and dykes, there being a good extent of these covered with Ivy about his premises.

But in reference to the past season, or winter of 1860:—

In this district the Mangels, which were comparatively a new crop, were mostly all taken up before the frost set in, and stored; but in some instances they were furred up and left in the fields, and thus considerably saved from the frost; in other instances, where left in the field exposed, they are much destroyed, and little or no use will be had of them. Pigs, however, have been found to thrive well upon them, and even to relish them in their frosted state.

It has now been found, since the snow storm has disappeared, that the Turnip crop has suffered much in some districts. In Strathmore, where there was less depth of snow than in the Carse of Gowrie district, they have suffered severely: the Swedes generally more so than the Aberdeen Green Top Yellow, which has in general been found to be the most hardy Turnip we possess this year. In the braes and carse of Gowrie, where there was a better covering of snow, the damage to the Swedes is less severe, and since the weather broke up the weather has been so mild that vegetation has commenced, when sound and unsound Turnips can be seen at once, and some farmers have set to work to pick out and use first those that are damaged.

The good effects of having the Turnips furred up is now also very visible, and I have seen several well marked instances of this lately on various farms in different districts occurring in one field, the portion that had been furred up being nearly all safe and the leaves quite fresh and green and growing, while he portion alongside not furred up are much damaged, and no vegetation to be seen amongst them. [This was written some weeks ago.]

This method of furring up is highly worthy of being more practised for those Turnips intended to come in for spring keep; those being thus treated and left in the ground are found much more fresh and better in every respect than if they had been stored. It is comparatively an inexpensive operation, as with a double boarded plough a pair of horses can accomplish seven or eight acres a day, and if this had been resorted to more this past season many hundred acres in Strathmore might have now been safe, where, in consequence of the damage many farmers are now obliged to sell off their cattle for want of Turnip.

Of course this cannot be resorted to where the Turnips are intended to be eaten on the ground with sheep, nor where intended to be early stored, and the ground cleared for Wheat sowing, &c., but such a quantity may be furred up as may be calculated will be required from the time we may expect fresh weather in spring until the cattle are turned out on the Grass. As the Turnips thus treated are not easily obtained during the time of frost, a portion at least may always be stored, and a portion rendered safe by the furring up method.

As to the economising of food I have to mention that I saw, a few days ago, on the farm of Gray, near Dundee, a farm of 300 acres possessed by Mr. James Smith, who has 75 head of cattle at present in his byres and courts, 40 of these being Dairy cows, a very neat steaming or rather boiling apparatus in operation for the purpose of economising of cattle food.

The apparatus consists of a large wooden box made of 1-inch deal for containing the cut Turnips and chaff, 9 feet long, and 3 feet 4 inches deep, and 4 feet in breadth, having a division across the centre, and false bottom pierced with holes raised about 4 inches above the true bottom, thus leaving an empty space. The steam-pipes, three in number, which are of copper, $1\frac{1}{2}$ inch in diameter, descend through each box through the false bottom, and there the steam escapes by four vertical slits in each, which allows of the steam to spread in all directions, and find its way up through the holes in the false bottom amongst the chaff and Turnips, the cover on top being quite tight; the contents are thus prepared in a few hours. He generally steams twice a week, doing two boxfulls at a time, or about 240 cubic feet, and that is served out generally to the cows which are yielding milk, and his young cattle; the mixture for the former being better, having along with the chaff cut Oats, Barley, light Wheat, and meal. The whole apparatus costs only about 20*l.*, and I hear of others who intend to adopt the same means for economising their cattle food.

—*Hugh Robertson, Dundee.*

Home Correspondence.

Consumption of Root Crops.—I take the liberty of forwarding my views upon what I consider the great error of the British farmer relative to the consumption of root-crops for oxen and pigs. Farmers, both ancient and modern, are all agreed when a field of roots has to be consumed by sheep that to use them on the land whenever practicable is the very best plan, but if the field of roots has to be consumed by oxen or pigs, it is always the practice to remove such roots to farm buildings at great expense, and often a mile or so distant. It often happens that the manure made from the roots is wanted where they have grown, or in an adjacent field; carting both ways, with an enormous loss of liquid, or applying such liquid at a cost equal to its value, renders such a practice to my mind anything but economical. I am not aware that the fold principle has ever been fairly tried for oxen and pigs. I tried it for the latter on a small scale, and found it answer well. For foul Wheat-stubble the practice of housing cattle upon the land must answer admirably; the roots being often grown in an adjacent field would be easily removed to the stubble, and the stubble would be trodden in together with all the noxious weeds and knot Grass, which would be killed by this severe treading. If the land is clean and the treading objected to, cut litter may be used from straw which has not been removed from the field, the threshing being often done in the field. *J. H.*

Farm Roads.—As improvements are made in the cultivation of the soil, we may reasonably calculate upon a great increase in corn, roots, hay and straw, and consequently much more stock will be kept; there will be also a proportionate increase in the quantity of manure manufactured on the farm, which will have the effect of increasing the horse labour, and that being a consideration of great importance, we shall do well to consider in what way we can best make our arrangements, so as to diminish as much as possible this expense. In the first place it is of great importance to have good sound roads constructed through the centre of the farm, so that the produce can be carted home at any time when most convenient to do so. But to diminish horse labour as much as possible, the corn should be stacked and threshed by the side of the farm road, and a portion of the hay and roots should also be placed there for consumption, that the manure may be near to where it is wanted for the future crops; therefore the stack yard should be formed by the side of the farm road, and it is there also that the dwellings for the labourers should be constructed, together with suitable buildings and yards for the accommodation for stock; water can be supplied by drainage or from the roofs of the buildings. *B. Ransley, Perrysfield Farm, Oxted, Surrey.*

Foreign Correspondence.

STUTTGART: *April 9th.—The German Agricultural Society* held its first meeting at Erfurt on the 5th of March. The German Agricultural Society (der deutschen Ackerbau-Gesellschaft) was at length instituted at the 21st meeting of German Agriculturists and Foresters at Heidelberg in September last. Though its foundation stones do not originally come from Germany, where they have lain quarried and chiselled for several years, they have now at last established themselves in German soil, to form there an edifice, which though still in embryo, may be expected to become by and by a mighty promoter of German Agriculture. The idea of a German Agricultural Society similar in principles to that of the Royal Agricultural Society of England had been conceived, as already mentioned, for a length of time: it has been confirmed and got new impulse by several spirited German agriculturists who, travelling and visiting foreign countries, especially Great Britain, have convinced themselves of the enormous good which such societies do by their exhibitions, meetings and discussions, &c. Those gentlemen, seeing the necessity of no longer lagging behind other countries, resolved, at first at some meetings in England, and afterwards at Heidelberg, to tarry no longer in calling into life such a society for the whole of Germany. The principal aim and object of the new Society is to promote the general improvement of German Agriculture by means of shows of agricultural produce and machinery, by occasional meetings and discussions of the members on the most interesting and useful points of the day, and by any other means which might serve that purpose. The leading gentlemen of the new Society are mostly from Saxony and Prussia, some few from Austria, Bavaria, Hanover and Würtemberg, &c. The most prominent of them is Baron von Nathusius of Hundisburg (Prussia), who is a large proprietor and distinguished farmer, well known by his breeding of Short-horns and Southdowns, not only in Germany, but perhaps also in some parts of your country. That gentleman with some others took charge of the working out of the rules and regulations of the Society. Those rules, or the fundamental law ("Grund-Gesetz" as we call it) of the German Agricultural Society contains 35 paragraphs. I give you only an extract of its most essential points:—

§ I. As a *German Agricultural Society* the association has its object to further and improve *German Agriculture.*

§ II. The means by which this object is to be attained are the following.

1. Exhibitions or shows of Agricultural produce and machinery (especially of cattle), which are to be held successively in the larger cities of the German confederation.
2. The offer of prizes for scientific or technical works relating to agriculture.
3. Discussions on special agricultural topics, at the [illegible] ordinary meetings of the Society.
4. The publication of a journal or periodical.

§ III. The necessary funds of the Society shall be raised, 1, by the contributions of the members; 2, by the receipts of the exhibitions; 3, by the receipts of the Journal; 4, by the interest of the funds of the Society; 5, by donations and other receipts.

§ XVI. The committee (council) consists of those ordinary members who have been elected to it for the duration of [illegible] years.

§ XXV. The presidency consists of 3 ordinary members of the Society, who are to be elected by the committee for the duration of five years. Their office is honorary.

§ XXVII. The presidency elects a chairman (one of the three) who presides at meetings.

Those are the principal points of the fundamental law of the German Agricultural Society. The first general meeting of the Society took place on March 5, in the hall of the Karthause at Erfurt, in the Prussian province of Saxony. The meeting at Erfurt was not a particularly numerous one; according to a German reporter there were only about 70 members present. The chairs were occupied by the provisional directors, Von Nathusius, Hundisburg (Prussia), Von [illegible] Stallburg (Austria), and Von Viethammer (Bavaria). Austria had sent only one besides the chairman. Prussia was represented satisfactorily only by Thuringians; the best represented were the kingdoms of Saxony, Hesse, and Weimar. Of prominent persons besides those mentioned already I may further mention Count Otto Solms, Laubach; Prince Nicolaus of Nassau; Minister Von Watzdorf from Weimar, Mr. [illegible] from Dresden, Count Schlieffen from Mecklenburg. Mr. Kirchner, from Hanover, acted as Secretary. Herr von Nathusius presided at the discussions with much spirit and ability. The fundamental law, with the exception of a few insignificant alterations, was accepted, and laid before the Society. One of its determinations, namely, to allow foreign competition at our German Exhibitions, met, as you may easily imagine, with some opposition, especially by those interested in the German implement trade. Those gentlemen who were against foreign (especially English) competition alleged that the Society, bearing the title "German Agricultural Society," should restrict itself also exclusively to German competition at its shows, and that by not doing so the Society would lose much of its nationality. One of the principal opponents particularly finds fault with the second paragraph mentioned above, which speaks of shows of agricultural produce and machinery in general, instead of shows of German produce, &c. exclusively), thinks that by this forbearance or "tame cosmopolitanism" as he calls it, the German Agricultural Society would run the risk of being laughed at by foreign societies, in so far as the latter would never allow free competition, nor adjudge prizes to German cattle and machinery. Now this last point is a point of much interest, and I would be much obliged to you if you would give me your opinion about this matter. [Any one is at liberty to compete for the prizes offered by the English Agricultural Society. By the increasing importation of English machines and cattle to Germany, by their rapid propagation, and the improved breeding of the latter, a mutual free competition of both countries can, I am sure, be of no harm; on the contrary, it will be advantageous and beneficial to both countries, especially to Germany.

which wants still so much improvement in the breeding of cattle. Not so much was said against the competition of British cattle, as against that of English machinery, which of course threatens to undermine a little the interest of the German implement makers. However, I am convinced that this competition of English machinery will by and by, if not in the beginning, be beneficial even to our own implement makers, in so far at least as the English exhibitors will give good and excellent patterns. Most, however, are for free competition, and at the end of the debate the majority not only voted for the competition of British exhibitors, but entirely agreed that the more Great Britain competes and takes part at our shows the better it will be for the whole of Germany's agriculture. Thus you see that the German Agricultural Society, whose founders and leaders are mostly well acquainted with English agriculture, far from suppressing British competition, desires to have it, and is anxious to transplant and propagate on German soil as much as possible those elements and principles of British husbandry which have brought the agriculture of your own country to such a high and flourishing pitch. The first Exhibition of the new Society will be held if possible some day this summer, probably in Frankfort-on-the-Maine. As Chairmen, Von Nathusius, Hundisburg; Von Riese, Stallburg; and Von Rabenau, Lollar, were elected. Much depends upon the wisdom, energy, and influence of those gentlemen to give to the young Society that leadership which it wants so much for a successful and prosperous existence. The Council was formed in the meantime by those members of the Society who were present at the time in Erfurt. The election of a permanent Secretary, the editor of a periodical, has been put off for the moment. The subscription to the new Society has not been very great yet; thus Austria counted only 8 members, and some of the smaller states none at all. However let us not despair, sometimes the weakest seed-corn gives us a powerful tree. The former has been sown; whether it has fallen upon a good and fertile ground we don't know yet, the future will tell us. But not all depends on the seed-corn. A careful and rational cultivation is also required for its free development and growing prosperity. That the latter may be bestowed on the young Society is my most earnest wish, and hoping that also in your own country it will find some true friends, I am, yours, *J. R.*

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

At a Weekly Council on the 17th April, Sir John V. B. Johnstone, Bart., M.P., in the chair, Professor Simonds delivered the following lecture on the Nature and Causes of the Disease known as the Rot of Sheep.

Sir John,—The subject to which I have to direct the attention of the meeting this morning is one which possesses a considerable amount of interest, in consequence of the great prevalence of the affection at this particular time, and the great ravages which it is producing among sheep. I allude to the disease which is commonly designated by the term rot, so called probably from the circumstance that we find in the progress of the affection that the system of the animal arrives at a condition which is unfavourable to the continuance of the integrity of its organs; it breaks up, if I may so express it, into a decomposed mass, and hence there can be no doubt that this term has been given to the affection, from the ultimate effects which are observed to attend its progress. The disease is also known by other names in different parts of the country, which more or less set forth its pathology. It is known, for example, by the name of "bane" in the western parts of England, probably from the baneful effects which attend the malady. It is also occasionally called "coathe," a term which seems in part to describe, if not the nature of the affection, certain symptoms which attend its progress. It is somewhat difficult to trace out many of these local terms given to affections; but I have been enabled, I think, satisfactorily to trace the origin of this term "coathe." It appears to come from the old Saxon word "cothe," which signifies to swoon or faint; and it is well known that animals affected with rot are exceedingly weak and debilitated, and sometimes so exhausted as to be liable to faint or swoon. I shall not intrude upon the meeting to any extent with regard to these names, but it will be necessary for me to refer for a moment to another term which is used, not in England, but on the Continent, to express this affection—namely, "cachexia," or, as it is called in French, "cachexie aqueuse," to signify a dropsical condition of the body; and this again sets forth somewhat the pathology of the malady, for we find that in its advanced stages there are dropsical effusions which take place into the different structures; hence, consequently, the origin of this term. With regard to the term cachexia by itself, it simply signifies in medical language a bad habit of body, and it is not, therefore, by any means an appropriate term to be used for this affection. None of the names I have mentioned in reality at all show the nature of the disease, they simply describe certain conditional states of the body and certain effects which follow upon these conditional states; and it would be very desirable, if we possibly could, to employ such a term as should express the pathology of the malady. I may observe that there are a great number of different diseases affecting sheep, which pass by the common term "rot," and this will explain why many different opinions are entertained with regard to the disease by different persons. These persons in reality describe two or more distinct affections, and hence they are not likely to agree as to their nature and symptoms. You occasionally hear such terms as "water-rot" and "fluke-rot," leading one to suppose that with one variety of rot you have a dropsical condition of the body, and that with another you have certain entozoa located in one part of the organism, and commonly designated flukes. I would rather, however, confine the term rot, if we are still to use it, to that affection in which we have flukes, as they are called, in the biliary ducts of the liver, setting aside entirely every other disease that has been classed under that name. I shall have to show you perhaps in the course of my remarks that dropsical affections, although agreeing in their latter stages with some of the symptoms of rot, are essentially and totally different.

The next remark that I would make with regard to these affections is that it is by no means new.

It is not new to us at all, nor in fact can it be said to be new to early investigators. We find the earliest writers upon the diseases of cattle and sheep making mention of the destruction which arises from time to time from rot, and they speak of a variety of causes in operation to produce this state of the animal organism. And not only is it not new in this country, but the same remark will apply to foreign countries, and I think it would not be going too far to say that there is no part of the globe where sheep have been domesticated in which we do not find this disease more or less prevailing. It belongs to no clime and to no country. This is a matter of some importance, because if the assertion be true we shall see that all those supposed local causes in this country to which the malady is by many persons attributed, cannot possibly have reference to other countries. For example, some persons speak of the deleterious effects of certain Grasses, such as the Carnation Grass. Now the Carnation Grass does not, so far as I know, belong to Egypt or to Australia, or to some other parts of the world where this disease is met with; and this shows us, were there no other proofs, that we are not right in looking for any one special cause of this affection, in regard, at any rate, to the kind of provender upon which the animals may be feeding. It will perhaps be unnecessary for me to allude to the great losses which in all countries from time to time have resulted from outbreaks of this affection. In Egypt the losses are very considerable, and they are always found to attend upon the too early passing of sheep upon those districts that are overflowed by the Nile: hence some individuals have supposed that there spring up upon soils of that kind plants which are injurious to sheep and produce this affection. But in this country also we have had serious outbreaks of the malady. Perhaps the greatest outbreak that ever occurred in England, or at any rate the one respecting which we have the most authentic information, is that which took place in 1830, in which it was supposed that we lost not fewer than two millions of sheep; and the result was that an inquiry then going on in the House of Commons with regard to the depressing causes of agriculture, branched out into an investigation of those losses as to which statements were made before a committee of the House. I believe the Government fully ascertained that in the following year the supply of sheep to our metropolitan markets was diminished by 5000—a circumstance that will help to show us to what an extent we have suffered in this country when these great outbreaks have taken place. From 1830 to the present time we have also had periodical outbreaks which have been more or less destructive, but none of them perhaps since that period have been so destructive as the present one. Speaking generally, I think I am right in saying that nearly all the southern parts of England, together with some of the eastern, and particularly the western parts, are at this time affected with this disease, and there have been some thousands of animals that have had to be disposed of at a very small cost, while others that have not been sold in the early stages of the affection have died by hundreds. I am acquainted with instances in my own neighbourhood, on the verge of London, where the losses have amounted to 600 and 700 sheep in a flock. I am now speaking more particularly of Welsh sheep, the ewes having been purchased and brought into the district for breeding purposes. Some persons indeed have scarcely a sheep left. One person in particular who buys 800 or 900 of these sheep has, I believe, not more than 40 or 50 now alive. In Sussex and in many parts of Surrey similar losses of sheep of far greater value have taken place. In the neighbourhood of Eastbourne some persons have lost as many as 500 and 600 breeding ewes of considerable value as Southdown sheep. These facts will show that the disease is not only very extensive, but that all kinds of sheep, from the most inferior to the superior, are equally affected with the malady.

Having made these preliminary observations, I must pass on to speak of the nature of the disease, and to show what have been supposed to be the causes in operation to produce it.

We have had a great number of theories as to the cause of the affection, but they have been more or less wide of the true cause, some however having approximated to it. For example, in Mr. Youatt's very excellent work—a work which I may say ought to be in the hands of every farmer—there is a very lengthened article upon rot, not only giving his own experience upon the matter, but culling from nearly all the writers who have written at all sensibly of this affection. He comes to the conclusion that the disease is due to the inhalation of miasm, and hence that it shows itself more particularly in the summer months, though the progress of the disease carries it over into the autumn through the winter, and even into the next year. He says that there are many deleterious emanations coming from the earth, where it is surcharged with moisture in damp and swampy districts; that the sheep inhale this miasmatic matter; that it induces a bad habit of body, and lies at the foundation of the malady. It is however not a little singular that Mr Youatt, in stating facts with reference to the disease, should state one which positively contradicts this theory with regard to miasm, and he appears to have done it without noticing it at the time. The fact to which I allude is this: that on a particular farm there was one field in which there was a swamp, hardly to be called a pond, and when the sheep were turned into the field during the summer months they became affected with rot. This became so obvious to the farmer that after a time he hedged in the pond, and prevented the sheep from having access to the swampy parts, and then the disease ceased upon the farm. Now this being a fact of which I have very little doubt, it at once negatives the idea propounded with regard to miasm. If the pond had been thoroughly drained, the water being entirely removed, and the character of the soil improved, I can understand the miasmatic vapours would not have arisen from it; but the pond remaining as a pond or swamp, we can of course see that the miasmatic matter would arise from it just as much when it was inclosed with an ordinary fence as when it was open; and this therefore strikes at the root, or negatives to a considerable extent, if not entirely, the view which Mr. Youatt has taken of this affection. Then we have had other individuals who have spoken of impure food as the cause. They say that where there is abundance of moisture, together with an elevated temperature, we have a great growth of Grass, especially in damp situations; that such Grass is deficient in nutriment to the sheep; that the blood produced from such food is impure; and that hence arises a cachectic condition of the body. But this can hardly be said to be the origin of the disease, since it would be perfectly impossible for impure food or water, or anything else, simply as impure material entering into the organism, to call into existence these entozoa, upon which the disease depends. Others, again, have looked to certain plants as the cause of the malady: and there is nothing new in this. I have here a work written by Mr. Mascall, who was I believe the chief farrier to King James. It bears the date of 1587, and is the original edition. It treats of the maladies of cattle, and it has this passage—

"It is good for al men to understand, specially shepheards which things do hurt or rotte sheepe, wherby, they maie avoide the danger the better, ye shal understand there is a Grasse or weed called Speare Wort, the leaves are long and narrow like a speare, hard and thick, the steales hollow, growing a foote or more high, with a yealow floure, which is comonly in wet places, and there wil it grow most, or where water have stood in the winter. There is also another weed called Peniwort or Penie-grass; it wil comonly grow in moist and marrish grounds, and it groweth low by the ground, and hath a leafe on both sides the stalke like unto a penie, thick and round, and without floure, yet some doe saie it beareth a yealow floure, which will (as they say) kil sheepe if they eat it. Alsoe all manner of Grasse that landfloods doe overrun before a raine is not good for sheepe."

Coming down to later times, we have had a theory which certainly ought not to be rejected without due consideration. It is founded entirely upon the existence of the fact that in this disease we have certain entozoa, to which I shall allude more fully, that are inhabiting the biliary ducts of the liver. These entozoa produce a number of eggs; these eggs pass out of the liver into the intestines, and are consequently expelled with the feculent matter of the sheep, in countless myriads it may be said. Some time ago a Mr. King (I do not know whether he had a medical education) wrote a series of papers in the Bath Society's Journal, in which he propounded the theory that the rot of sheep was due to this circumstance: that healthy sheep, if put upon pasture grounds where these eggs exist upon the soil, receive them into their organisms; that the egg produces the fluke, and that the fluke would consequently find its proper *habitat*—that it would seek out instinctively the biliary ducts of the liver, where it would locate itself and grow to perfection. This theory of the simple introduction of fluke eggs certainly did seem to have common sense for its foundation; but it was found, after a certain length of time, that there was little or no truth even in it; that the ova, for instance, of fluke eggs did not immediately produce flukes. Some 10 years ago I put this to the test of positive experiment. I collected a great number of the eggs of the fluke—far more than it would be possible for a sheep to receive into its stomach in the course even of a summer's grazing. I took not less than a tea-spoonful of them, and it would be scarcely possible for you to count the number in a single drop of the water in which they are placed under the field of the microscope; and these, to the number of millions, I conveyed into the system of a sheep which I kept six months, and then had it destroyed. On examining its liver and other organs I found that there were no entozoa at all in the biliary ducts. In reality there was not a single fluke produced from those millions of eggs so carried into the system of the sheep. This negative result was exceedingly valuable, and I may further remark that it fully confirms similar experiments carried out in Germany. Gerlach, who is connected with the Berlin school, I believe, has had recourse to experiments of the same kind, and invariably with the same result, showing that the ova of the flukes, if carried into the system of the sheep, will not generate or develop themselves into flukes. We find then, that all these theories have been more or less at fault, and it is only within, comparatively speaking, a very short space of time, that we have approximated to anything like one which will explain the pathology of the disease.

You will remember that I stated I was anxious to confine my remarks entirely to the malady in which we have certain entozoa within the biliary ducts. In the diagram before you you have a representation of one of these creatures. It is called the Distoma hepaticum, and is so designated in consequence of its having apparently two mouths or sucking discs—one placed at the anterior part of the body, which may be truly regarded as a mouth; and the other placed at a short distance below the neck, just where it terminates in the body. The animal, as I have said, inhabits the biliary ducts of the liver (which you have represented in the diagram); and if we slit up these ducts in any case of this kind we shall find that they are filled more or less to repletion with these distomæ. Before going into the natural history of these creatures I may say that after a certain length of time they lead to an anæmiated condition of the entire organism. They not only feed upon the bile which is produced, but they alter the structure of the liver by their presence, just as we find with entozoa in other parts, and when this is the case it is of course perfectly impossible for the liver to secrete healthy bile, any more than pure water can flow from an impure spring. The bile plays an important part in the manufacture of blood, and if it is not in a healthy condition pure blood cannot be produced from the food which the animal takes. The result is that the entire organism is supplied with impure blood, while the system is being drained by the presence of these creatures. After a certain length of time we find that dropsical effusions take place, and then we have the disease established in all its intensity and in all its destructiveness.

Having thus shown you that this is truly to be considered as an entozoic disease, it becomes a matter of great importance to see how these entozoa really do inhabit that part of the system of the sheep. When speaking of sheep, however, I may be allowed to remark, that although this affection is most destructive to that animal, it is not exclusively a sheep disease. These creatures have been found not only in cattle but in pigs; in the ass and also in the human subject. They are very widely dispersed, but it is in the sheep in particular that they accumulate in such numbers as absolutely to produce this special or specific malady.

We come now to inquire a little into the natural history of the distoma, that we may see what light it will throw on the nature and progress of the disease, and upon the means at our disposal for preventing or curing the affection.

It is self-evident that if a disease depends upon a special entozoon, if we are thoroughly acquainted with the natural history of the creature, and if by means of that knowledge we can destroy it or get rid of it, we shall thus be able to destroy its effects; for if we remove the cause the effects must cease. Now, without unnecessarily occupying time, let me say that the diagram shows dissections of the entozoon, more particularly with regard to its nutritive and generative system. You see that the sucking disc to which I before directed your attention, is in reality a true mouth with which the creature takes in the bile with which it is surrounded in the biliary ducts; and this bile passes down through a system of vessels which are in reality assimilative vessels, and consequently may be regarded as nutritive. You observe there is a peculiarity with regard to this nutritive system. We see an entrance for the material by which the life of the creature is maintained; but we see no excretory organ—we cannot perceive that any feculent matter is thrown out as such from the hinder part or the sides. Strictly speaking, then, this is really an organ by which the creature receives into its system that which it requires for its growth, and by which it also rejects from its system that which is not needed. And here let me say, that although there are many works upon the anatomy of the fluke, containing very nice drawings or engravings; though Professor Owen gives an engraving of the creature in his work on the Invertebrata, and Rymer Jones another in his work on the animal kingdom—in short though there are fifty or more representations by as many individuals, there is really none that can be depended upon as being perfectly correct. I say it advisedly because I have been engaged in investigations with regard to the natural history of this creature for eight or nine years, taking up the subject from time to time, and working at it occasionally for days together; and it is only very recently that I have been enabled to satisfy myself as to some intricate points of its anatomy. I have seen these animals, when taken fresh from a slain sheep, and placed in warm water, eject the biliary matter again and again from the oral opening, which thus, as I have said, performs the office of an excretory organ as well as an organ by which the creature receives its nourishment; and the nutritive system has really nothing whatever to do with the generative system.

The great point of interest, however, is the system of generation, which, when we come to examine it, we find to be exceedingly complicated, the two sexes being blended together in one individual, as we find in many other creatures. It is not to be considered as an hermaphrodite—that term is not strictly applicable to it—but it is bi-sexile, the two sexes being distinct, separate, and perfect. In whatever animal you meet with these entozoa, they are precisely alike in this respect. We have here a representation of the generative system, from which we find that the male organs are contained in the centre of the body, and that the female organs have their origin at the periphery, uniting in a kind of duct which meets in the middle, where the true uterus or womb is located, which is filled with a great number of eggs; and after these are perfected they escape from an opening which is very near indeed to the central sucking disc. With regard to an appendage near this, and which is sometimes protruded, and sometimes retracted into the body, it has been supposed to be an intromittent organ or penis, and its existence in all these creatures would rather seem to show that although they are bi-sexile it is not improbable that copulation takes place between them. We know of a similar instance with regard to snails, which are bi-sexile, and it is well known that they are furnished with an intromittent organ as well as a vagina, and that the intromittent organ of the one extends into the vagina of the other. And I say it is not improbable that this takes place with regard to the Fluke, but this point is not at present known. The sucking disc, as it is called, which is seen on the ventral part of the animal, is simply a disc which evidently performs the office of holding the creature on when it is traversing the biliary ducts, forming a kind of focal point whence it can travel and insinuate itself into the minute ramifications of the ducts. Nor is it improbable, if copulation does take place between two of them, that these two sucking discs approximate to each other for the purpose of contact during that period. If you take any fully developed fluke it would be perfectly impossible for any one to say what number of ova such a creature contains; but there is one circumstance especially which renders the ova so interesting to us, namely, that if we examine them never so carefully, and any number we please, those that have been naturally expelled from the creatures as well as those that are contained within them, we shall find that there never exists within the ovum anything of the outline of the young fluke; and this fact being established, it is evident that in order for the fluke egg to produce ultimately a fluke, the germs contained within it must pass through a series of transmutations—that either metamorphoses, as they have been called, or alternations of generations, must take place; and it is by studying these that we can get at something like valuable information with reference to the manner in which these creatures are propagated. It is now several years since I thoroughly convinced myself of that fact, and I believe nearly every person who is at all observing or familiar with the circumstance knows that if you slit up the gall ducts of sheep or any other animal affected with distoma, though you may see some of these creatures smaller than others, you never see what might be called a number of young flukes; nor will you be able to discover a young fluke by microscopically examining the bile in which they live. This then, together with the other circumstance to which I have referred, shows at once there is not a reproduction of these entozoa within the biliary ducts; so that (to put it in a practical way) supposing a sheep to receive six of these flukes into the biliary ducts, they would never multiply. They would deposit millions of eggs in the smallest ramifications of the ducts—instinctively deposited there, it would seem, for the purpose of preventing them from too readily flowing out by the functions of those organs—but you would never have more than six flukes. Now, what does this explain? It explains a fact of every day occurrence. A person will often tell you, "I sent a lot of sheep to the butcher; I never had more perfect and beautiful animals; they were as fat as sheep could be; yet the butcher found eight or nine, or 10 or 12 flukes in the liver." The fact is that here they did not exist in sufficient numbers to lay the foundation for disease. If it were otherwise we can see that if one fluke only passed into the biliary duct it would multiply almost *ad infinitum*, and the animal must fall a victim to the affection induced thereby. Here then we have a practical result at once, arising with many others from an investigation of the natural history of this creature.

(To be continued.)

The lecture was illustrated by diagrams of the organism of the ox and sheep, and the Distoma hepaticum magnified, and by specimens of the last-mentioned creature in various stages of development.

The Council was then adjourned to the 24th inst.

Farmers' Clubs.

Reading: *Relation of Geology to Agriculture.*—The first discussion meeting took place at the Reading Room, at Messrs. Sutton's establishment, on Saturday last. The Chairman, J. B. Spearing, Esq., of Moulsford, congratulated the Club on meeting in so large and suitable a room, for the use of which they were under obligation to the liberality of the Messrs. Sutton, who had evinced as much interest in the Farmers' Club, as they had for the welfare of the young men in their employ, by erecting that room. After a few other remarks, he introduced the lecturer, the Rev. J. Clutterbuck, of Long Wittenham, observing that the subject of geology is one with which it is important that farmers should be acquainted.

The Rev. J. Clutterbuck said: There is a very general feeling among agriculturists, that of all the sciences necessarily connected with the cultivation of the soil, there is none from which they have derived less practical benefit than geology. On the other hand, those who have devoted themselves to the study of this science, are inclined to complain that it has not received that attention and encouragement that it deserves. As an instance: Mr. C. S. Read, in his Essay on the "Farming of Oxfordshire," in closing his notice of the geology of the county, of which the geological condition in a very marked manner rules the very varied character of its agriculture, says:

This is a brief description of the geology of Oxfordshire, and with the assistance of the map and sections, may be tolerably plain to those conversant with the county. But it much want maps which show the superficial accumulations and alluvial deposits. It is the geology of surface that is most useful to agriculture. It can be of little benefit for the occupiers of the Thames meadows to look at a geological map, and see the land described as Oxford clay, or for the proprietor of the barren heights of Shotover to know that his land rests on Portland oolite. In one case 10 feet of gravel, and in the other 20 feet of sand, must exert such direct influence on the nature of the soil, that it matters little what deposit is buried below. Therefore, admitting that the rock formations define by their mineral character, the general agricultural features of a district, the superficial deposits produce those numerous variations of soils found in that district."

If the geologist would pay the same attention to the surface of the soil as he does to the substrata, his discoveries would be of much greater benefit to the farmer. These remarks of Mr. Read very much influenced the lecturer in looking into that branch of science, and led to his writing an Essay on Berkshire Farming*, now before the public. Chemistry and Geology could, between them, solve many existing anomalies on the use of mineral manures, and it may be safely affirmed that if they received due encouragement, they would not require half a century for the solution of such questions. The expenditure of a few hundreds of pounds on such investigations would be nothing compared with the saving which would be effected by preventing half a county using 100 loads of clay to the acre, if 20 loads is equally or more efficacious.

Commencing with the soil immediately under our feet, we find a slight coating of warp covering the gravel so widely spread through this district. This is the soil of which many of the farms in this district are composed. On the depth of the warp, as I have called it, their relative natural fertility depends. The situations in which it is found to the greatest depth, are usually what is termed dead flats. I am not sufficiently acquainted with this locality to fix on the best example. You will find it on the tract of land where there is much of the brick earth, about Cowley and Drayton, between this and London. If you should go to Bishopstoke, on the South Western Railway, you will see it in that remarkably level and fine, though limited track immediately round that station; in either case you will find a well-defined bottom, resting on the flint gravel, such as you have here, and go where you will you will generally find a trace of. Take the gravels of the vale of Berks, you will find it is of a different chemical character. It is beyond my province to inquire by what agency this warp is so widely spread. The rev. gentleman then described, geologically, Bagshot Heath, and said that in such unkindly soils geology might guide the agriculturist as to the position in which he would find the various beds, the amalgamation of which, in the proportion determined by the chemist, would promote fertility. It is well known what has been done in this matter in Norfolk—how the clays and the marls have brought fertility to barren sands. When we remember that the population of this country increases daily, and that the surface of the soil remains the same, and the only extension it can receive is increased fertility by improved cultivation, we do not know how soon even these barren districts may be called into requisition. The rev. gentleman then referred to the soils found in the valleys through which rivers run, showing the effects of the frequently occurring floods, and from those effects conjecturing how kindred causes of old, and on a large scale, have worked out the effects which appear almost identical. Even should they not materially affect the interests of agriculture, they may draw into exercise that power of thought, and that habit of observation, so essential to the calling into action the energies which are the best elements of success. As now brought forward, this was only the surface, so to speak, of the subject; "it is oftentimes the case that this subject is placed before us in a way which repels rather than interests. The farmer, whose business requires much thought, great personal attention, and unremitting industry, has not time to master hard words, and to enter into the solution of difficult problems and deep speculations; but point out to him that the physical features of the county in which he lives are but the guide to geological structure, give every step in the science as far as may be a practical bearing, and then I think the agriculturist will cease to complain with Mr. Read, that he has not received his fair share of assistance from the geologist, and the agriculturists of England will refute the complaint of Mr. Trimmer, that his science has not received due encouragement at the hands of those to whom I believe it may become, if simply set forth, practically useful." The next discussion meeting will be held on Saturday, June 1st, when Mr. Smith, of Woolstone, will deliver an address on "Steam Cultivation."

Norton: "*On the Horse's Foot and Pastern.*"—Mr. Nelson, V. S., pointed out some of the principal diseases, such as ring-bone, contraction, inflammation, pricks, bruises, corns, thrush, grease, &c., and showed how such serious afflictions might be guarded against. Nine times out of 10 the ringbone was inherited from the dam or sire, and it was strongly recommended to breed from no stock where chronic disease was known to exist. The locality of Sheffield, with its hard roads and steep hills, was more remarkable than other part of the country for developing unsoundness in the horse's foot, which showed that every care ought to be taken to detect any latent or concealed disease. At the present moment, it was doubtful whether one out of a dozen heavy draught horses in the Sheffield streets could be passed as sound. Bad management, particularly in shoeing, was alleged to be one of the chief sources of the mischief. The common practice of folding young horses on hot manure, and allowing horses to wear their shoes beyond a month without change were strongly denounced. Neglected feeding and housing of young stock were likewise condemned. It was often found when Grass time came, that even young animals, for want of room and exercise during winter, soon showed symptoms of disease. A breeder in this neighbourhood was mentioned whose fold-yard was constructed on a correct principle. One-half of the spacious yard was covered with litter, and the other part was bare ground, so that the horses were accustomed to the latter before they were put to street or road work. Sudden transitions from soft to hard roads were among the many causes of tender feet, side and ring-bones, &c. The greatest care should be taken of the feet till the horse was five or six years old. A number of specimens of diseased limbs were exhibited and explained, and Mr. Nelson concluded a very instructive paper by recommending the observance of the following rules:—

1. Never breed from horses, either male or female, unless they have good feet. 2 Good food and warmth during the winter months. 3. Exercise during the winter, both on hard and soft ground. 4. Attention to horses' feet before shoeing, to prevent shapeless hoofs; and after shoeing, make it a rule to have the shoes removed once a month, taking care that the shoes are left wide at the heels, and are higher at the latter than at the toes. 5. The feet to be [illegible] with the dung of the cow during dry weather, and all dirt be carefully pricked out from between the shoe and the [illegible] after a day's work.

Lavenham.—At a late meeting of this Society, after the election of new members, the chairman, Mr. Edward Green, of Preston, called upon Mr. Talbot, of Cockfield, to introduce the subject of the evening, viz. Corn averages. Mr. Talbot, on rising, remarked that he thought it advisable for the introducer of any [illegible] to be as brief as possible, thus giving the meeting assembled time to discuss fully and freely the subject introduced. After a most lucid exposition of the existing records of corn averages and the great defects in the present system of taking them, the members entered into a most interesting discussion upon the subject. The following resolution was then adopted—

"That in the opinion of this meeting the mode of taking the returns does not represent the true average value of the [illegible] grain grown in this country, inasmuch as a large portion of inferior corn is now consumed by cattle, and does not appear in the averages."

It was also proposed by Mr. Scott and seconded by Mr. Hustler—

"That it is further the opinion of this meeting that the farmer is the only person capable of making an accurate return, and that by a penalty imposed upon any person failing to comply with the demand requiring such return, a much more correct estimate of the average price of corn could be obtained than is now possible."

April 13. The New Highway Bill.—The meeting was numerously attended, and the Bill carefully investigated: a strong feeling prevailing against it, in consequence of its lessening the powers vested in the officers under the present Act, of its destroying the [illegible] step that now so frequently stands between pauperism and honest industry, and of the expensive machinery that would be required by the payment of district surveyors and other officials. The following resolution was unanimously carried:—

"That in the opinion of this meeting the Highway Bill now before Parliament is unnecessary and uncalled for, inasmuch as the powers conferred upon the surveyors by the present Act are amply sufficient for keeping the highways in an efficient state of repair at a much smaller cost to the ratepayers. It was also resolved that a copy of the above resolution (as also of the previous meeting of the Club upon corn averages) be forwarded by the Secretary to Major Parker, M.P."

Reviews.

Quarterly Journal of Agriculture. No. 72. [illegible] 1861. Blackwood & Son.

The current Number includes a paper on the condition of our labourers, from the useful text—"Give them good cottages and help them to educate their children;" Agricultural Notes taken in Holland and Belgium, by Mr. Scott Burn—Horses Ancient and Modern—Notes on Cattle Feeding—a paper on Dairy Agriculture—the Farmers' Note Book, on Dairy [illegible] ing, and on Rape as a Forage plant—and the Quarterly Agricultural Summary.

In the Transactions of the Highland Society, bound up into the same cover, are articles on the Drainage of Sheep Farms—on the Fattening of Stock—on [illegible] Water in Cattle—on the Loss of Sheep in 1860—on the supposed Exhaustion of the Soil by modern Agriculture, by Professor Anderson, the Chemist of the Society.

We give the following extract from Mr. Horn's paper on fattening sheep and cattle. His experiment in feeding sheep is thus described.—

"The experiments were commenced on the [illegible] December 1848, and concluded on the 10th of [illegible] 1859, with 7 lots of Cotswold hoggs, which were [illegible] divided into pens of 8 each. They were bred on the farm, and, previous to this time, all fed alike. Owing to circumstances they did not reach the weight that sheep generally attain. They were weighed on a stock weighing machine when put up, and every [illegible] during the progress of the experiment. For the first month they were fed on cut Swedes thrice a day under cover, in a well-ventilated shed; the second month on Mangel and Swedes mixed, in order to prevent the former scouring them; for the two last months on Mangels alone, with 1 lb. of meadow-hay each per day

* Our readers will remember a series of papers on this subject by the Rev. J. C. Clutterbuck, given in our columns last year. Those articles have now been collated and republished as a pamphlet, along with illustrations, by Weale of Holborn.

which they had throughout, with the following in addition: Oil-cake was taken as the standard money-value. The pen fed on it had three-quarters of a pound each; and each pen had value to the same amount of the other stuffs, which was procured of as good quality as could be found in the market. The following rates were paid: Oil-cake, 10*l.* 10*s.* per ton; Rape-cake, 6*l.* 10*s.*; cotton-cake, 6*l.* 10*s.*; Locust or Carob Beans, 6*l.* 10*s.*; Pease, 9*l.* 10*s.*; Linseed, 13*l.*; bruised Barley, 8*l.* For result, see Table. It was found that each lot consumed nearly 120 lb. of roots and 8 lb. of meadow-hay a-day.

No.	Artificial Food	No. in each Pen.	Live Weight, December 10.	Live Gain, January 10.	Live Gain, February 10.	Live Gain, March 10.	Live Gain, April 10.	Live Weight.	Total Gain.
1	Rape-cake ..	8	876	74	96	92	97	1235	359
2	Cotton cake ..	8	890	62	84	89	90	1215	325
3	Oil-cake ..	8	884	89	108	112	104	1297	413
4	Locusts	8	860	76	92	96	98	1222	362
5	Pease ..	8	8[illegible]	81	98	108	96	1173	[illegible]
6	Linseed ..	8	876	74	98	105	109	1263	387
7	Bruised Barley ..	8	8[illegible]	84	91	87	85	1131	347

REMARKS.

"No. 1. *Rape-cake.*—They did not take to it at first, and often left it uneaten amongst the cut roots. Throughout they did not eat it with relish. The wool seemed dry, which is a sure indication that all is not right.

"No. 2. *Cotton-cake.*—As will be observed, this lot made least weight of any. The cake was eaten with apparent relish, but the appearance of the sheep was not satisfactory.

"No. 3. *Oil-cake.*—This lot went on well all through. Wool soft, and every indication of doing well.

"No. 4. *Carob Beans.*—These were consumed with avidity. The sheep went more to bone than fat, and in my previous experience I have found these more profitable for store than fattening beasts. All kinds of stock relish them—horses, cows, or pigs. For brood sows, I have found them very good when soaked in water. It is worthy of remark that the pen fed on them consumed one-eighth less roots than the others: their more bulky nature accounts for this.

"No. 5. *Pease.*—Went on favourably all along. But the wool wanted the oily handle which those fed on oil-cake or Linseed had.

"No. 6. *Linseed, bruised.*—At first they did not relish it, nor until it was mixed with some chaff; latterly they went on favourably, with every indication of doing well.

"No. 7. *Bruised Barley.*—This lot went on slowly; the wool hard and dry. It seemed to be too hot for the constitution."

Miscellaneous.

Mr. Grundy's Sale of Short-horns, near Rochdale.—On Wednesday this herd was sold by Mr. Wetherell. It dated from 1853, when a previous herd was disposed of, the foundation of a new one having been shortly afterwards laid by purchases, chiefly of Col. Towneley's breeding. The present herd is sold because of the discovery of an extensive bed of fire-clay on the estate, from which a larger profit is derivable.

The following is the list of the sale, arranged according to relationship. Bulls are printed in capitals:—

Number in Catalogue.	Name.	Age.	Purchaser.	Price in Guineas.
		Years.		
1	Venilia	12	Mr. Topping	21
19	RED KNIGHT (son)	2½	Mr. Aylmer ..	28
21	ROYAL BUTTERFLY (g. g. son) ..	1½	Mr. Dugdale	80
2	Princess Royal	12	Mr. Leech ..	19
8	Patience (daughter)	3½	Mr. Ashton ..	22
14	Prudence (g. daughter) ..	½	Mr. Barclay ..	52
15	Princess Rachel (daughter) ..	¼	Mr. Holland	17
20	PRINCE REGENT (son)	1¼	Mr. Walker ..	27
23	P[illegible]CE (g. son)	1½	Mr. Whalley ..	28
3	Jenny Lind	11½	Mr. Baxter ..	21
5	Frederick's Victoria (g. daughter)	4½	Mr. Dugdale ..	34
17	Fruitful Vine (g. g. daughter) ..	2 mo.	Mr. Naylor ..	9
4	Victorine	6½	Mr. Ellison ..	46
7	Victoria Regina (daughter) ..	3½	Mr. Wetherell	66
22	HESPERUS (g. son)	1¾	Mr. Ellison ..	51
24	VANGOVEN (son)	¼	Mr. Higson ..	28
6	Cornelian	3¾	Mr. Dugdale ..	25
9	Faith	3½	Mr. Eastwood	75
10	Butterfly's Decorum	3	Withdrawn.	
16	Butterfly's Decoration (daughter)	½	—	36
11	Fr[illegible]nette	3	Mr. Naylor ..	39
12	B[illegible]ty	[illegible]	Mr. Knowles ..	30
13	[illegible] Lady	1½	Mr. Barclay ..	38
18	BUTTERFLY'S NEPHEW	¼	Mr. Walker ..	91

The total sum realised was thus 878 guineas, being an average of about 34 guineas for the cows and heifers and 47 guineas for the bulls—38 guineas a piece for the whole herd. Of the animals named above several have attained distinction, thus, (1) *Venilia* founded Colonel Towneley's Vestris tribe: she was grandam to Master Butterfly the Second, who brought 400 guineas at Mr. Marjoribank's sale. (5) *Frederick's Victoria* is the daughter of Victoria, who was a great prize taker. (9) *Faith* has been four times in the show-yard: At the Yorkshire Society, at Northallerton, when she was placed third in an extraordinary good class of 18 heifer calves; at Warwick, where the Royal Society gave her the first prize as the best yearling heifer; at the Canterbury Royal, where she was highly commended in the two years old class; and at the Yorkshire Society, at Pontefract, where she was highly commended as a two years old heifer. It will be gathered from the above account that the prices were lower than might have been expected.

A nice little Danish Dairy.—But the "Meiri" is the glory of the place—new constructed buildings in the national style of architecture, highly ornamental—water running, hot and cold, in all directions. Three hundred and forty cows form the establishment; to each milkmaid is allotted twenty cows; and the servants, farm dependants and all, sit down to dinner each day a hundred in number. One hundred and twenty pounds of butter are made every morning in summer: pats as big as cart-wheels, yellow as saffron, though none is added. Near the doorway stood, colossal, a tun of cream—not quite as large as the Heidelberg butt—fit to bathe a Roman empress, or to drown some milk-and-water Clarence.—*Marryat's Residence in Jutland.*

Calendar of Operations.

APRIL.

Wester Ross: *April* 8.—Right glad are we to see two days of dry weather, and great is the change they have already made. To-day all are busy sowing their seed, and the harrows are working delightfully. Last month we had an approach to continuous rain, and at its close the rain-gauge indicated a fall of some 5 inches. On the 15th of March we sowed 40 acres of new land with a mixture of Peas and Oats, and as it was the first crop, and the ground rough and open, it harrowed pretty satisfactorily. Never did farmer part with grain with greater goodwill than we did on that occasion. The Peas were late in ripening, and greatly later in being secured; but, in the stack, with the assistance of wood, they kept tolerably. In the end of February, the weather being fine, we threshed them out, intending to take the earliest opportunity of casting them into the ground; but wet weather setting in, we spread them thinly upon a loft, and turned them daily. But, ah! the oftener they were turned, the mouldier they grew: the hoar of age was fast settling upon them; and, thoroughly satisfied that, whatever might happen them in the field, their destruction in the granary was swift and certain, we committed them to the ground with the utmost cordiality. Since that time we have repeatedly examined them, and are glad to find them germinating. We have sown about 90 acres, a large proportion of which remained unfinished until now. From the sad condition of the soil we were all at a loss to know what to do. Some refrained from sowing entirely; others sowed pretty largely, and only partially harrowed it, thus allowing the seed to germinate, and afterwards, with better weather, completing the harrowing. Should this week continue dry, a very large breadth of Oats and Barley will be sown. Autumn-sown Wheat, on dry soils, is close and rapidly advancing; on wet soils it is thin and patchy. The winter Wheat is now coming above ground. The mild weather in February gave an early start to the Grass, and it appears more advanced than usual at this season. Early Grass would be a great boon, as our Turnips which at one time we thought we could scarcely consume have run speedily to their finish, greatly assisted therein by their exposure to a frost so intense. In this neighbourhood, and from this cause, very serious losses have been sustained. Sheep have returned to their hill pastures in excellent condition, and cattle have been thriving apace.

STATE OF THE WEATHER—BERKSHIRE.

For the week ending April 18: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain.	Wind.	Barometer.
	Max. in Sun.	Max. in shade.	Min.	Mean.				
	Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday 12 ..	90.0	59.0	31.6	53.1	48.0	..	N.	30.23
Saturday 13 ..	84.4	59.2	38.4	55.1	49.0	..	N. E.	30.14
Sunday 14 ..	52.2	48.4	39.4	44.5	48.3	..	W. E.	30.13
Monday 15 ..	45.2	43.4	38.4	41.1	47.2	..	N. E.	30.13
Tuesday 16 ..	60.0	53.0	35.6	45.7	47.2	..	N. E.	30.20
Wednesday 17 ..	80.6	59.0	32.6	51.4	48.8	..	S. E.	30.17
Thursday 18 ..	80.8	61.4	33.8	52.6	50.0	..	E.	30.05

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Poultry.—As we purpose giving now and then some quotations of the prices realised at market by good poultry, we deem it well to state at the outset we quote neither the very choicest, the almost fabulous London quality, nor the very worst, the almost refuse of the market. We need not explain to any one who is interested in the question, that the better poultry is, the better it sells; nor need we say the season has been unfavourable, and there is a dearth. High prices are the consequence. No size nor fattening can make a hard fowl valuable; nor is any a chicken but one of the present year.

	Each—s.	d.		s.	d.
Large fowls	6	6	to	0	0
Middling ditto	4	6	„	0	0
Chickens	3	0	„	3	6
Goslings	7	6	„	8	0
Ducklings	5	0	„	5	6
Guinea Fowls	4	0	„	4	6
Pigeons	0	8	„	0	9
Rabbits	1	3	„	1	4

—*G E O.* In the counties where most of the goslings are raised, it is common to keep three or more geese. As the eggs are not laid at the same time, one will want to sit before the others, and she takes all the stalest, or the first laid. When it is necessary to keep them, the best thing is a milk-pan filled with chaff in which they are laid, and moved or turned every second or third day. Were the eggs that failed broken, and was there no gall in them? We ask, because sometimes the geese have not access to the water, and sit quite dry. In that case many die in the shells, and only the best come out.

Genuine Roll Tobacco Cloth.

Warranted equal in Strength to Tobacco.

JOSEPH BAKER, 10, Gough Square, Fleet St., E.C., having dealt upwards of 20 years in the above, can recommend it as the best article for destroying the Fly. 1*s.* 4*d.* per lb.; over 10 lbs., 1*s.*

Post-office Orders payable Fleet Street.

No more Mildew.

JOHN BELL'S COMPOSITION for destroying Mildew on Vines, Peach and Nectarine Trees, &c., made and sold only by JOHN BELL, in bottles, 1*s.* 6*d.*, 2*s.* 6*d.*, and 5*s.* each, at his Seed Warehouse, 10 and 11, Exchange Street, Norwich. A 1*s.* 6*d.* bottle is sufficient to make 12 gallons.

For Smoking Greenhouses.

NEAL'S PATENT APHIS PASTILS light with a Candle, save all trouble, destroy all Insects, are already used in the Royal and leading Nurseries in England, Ireland, and Scotland, and may be obtained of the principal Seedsmen and Nurserymen, 2*s.* per packet of six Pastils.

Manufacturer and Patentee, J. NEAL, Edward Street, Birmingham.

PAGE'S BLIGHT COMPOSITION —Extra strong, 4*s.* per Gallon, sufficient to make Four. Ten Gallons and upwards, Carriage Free to London.

NINE YEARS' extensive manufacture has enabled PAGE & TOOGOOD to effect great improvement in their Blight Composition. It is prepared upon Chemical principles, to destroy SCALE, THRIP, MEALY BUG, RED SPIDER, MILDEW, AMERICAN BLIGHT, &c., without injuring vegetation.

LONDON AGENTS:—
HENDERSON & Co., Pine-apple Place, N.W.
VEITCH & SON, Chelsea, S.W.
CUTBUSH & SON, Highgate Nursery, N.
Mr. BARNES, Camden Nursery, N.W.
Mr. HOPGOOD, Shepherd's Bush, W.
Mr. CLARK, Streatham Place, S.

The leading Provincial Houses, and of the Manufacturers and Inventors, PAGE & TOOGOOD, Royal South Hants Seed Establishment, Southampton.

GISHURST COMPOUND, for preventing and destroying Red Spider, Mealy Bug, Mildew Thrips, Scale, Green and Brown Fly, American Blight, Ants, &c., and Bed Bugs, contains no deleterious ingredient, is recommended in *Gardeners' Chronicle*, *Cottage Gardener*, *Field*, Mr. Rivers' *Orchard House*, 9th edition, and Dr. Hogg's *Gardeners Year Book for 1861.*"

Red Spider Magnified.

Full directions for use and particulars of the experience of many great Gardening authorities are enclosed with the boxes of Gishurst. These are supplied retail through any Nurseryman and Seedsman at 1*s.*, 3*s.*, and 10*s.* 6*d.* each, wholesale, by PRICE'S PATENT CANDLE CO., LIMITED.

If the smell be disliked, make the solution 48 hours before use.

Fumigating and Syringing.

GRIFFITHS AND AVISS, TOBACCONISTS, Coventry, call attention to their TOBACCO PAPER. It is simple in use, safe in application, altogether effective in the destruction of Green Fly, Black Thrips, &c., nominal in price, 12*s.* 6*d.* per dozen pounds (not including carriage), sent to any part of the kingdom on receipt of Post Office Order. To those in the Trade a liberal discount on 28 lbs. and upwards. The following practical gentlemen have submitted it to every kind of ordeal, and bear testimony it is all we represent:—

Mr. Charles E. West, the Earl of Denbigh, Newnham Paddox
Mr. Wm. Oliver, the Earl of Craven, Combe Abbey
Mr. A. Henderson, His Grace the Duke of Sutherland, Trentham
Mr. Wm. Pool, the Earl of Aylesford, Packington Hall
Mr. John Jennings, the Earl of Derby, Knowsley Park
Mr. Thomas Pond, the Viscount Hood, Whitley Abbey
Mr. Geo. Tranter, the Hon. Granville D. Ryder, Westbrook, Hemel Hempstead
Mr. Geo. Bennett, J. Beech, Esq., Brandon
Mr. Jas. Knackston, J. R. West, Esq., Alcot Park
Mr. W. H. Mountford, H. R. Hughes, Esq., Kinmel Park, St. Asaph, North Wales
Mr. Peter Conlon, C. Webb, Esq., The Gardens, High Grounds, Hoddesden
Mr. Francis R. Kingborne, Nurseryman, Seedsman, and Florist, Richmond, Surrey
Mr. John Reeves, Ladbroke Nursery, Notting Hill, W.
Mr. John Jennings, Nurseries, Shipston-on-Stour
Mr. Edward Perkins, Nurseryman, Seedsman, and Florist, Leamington Nursery
Mr. John Ogden, Nurseryman, Seedsman, and Florist, Coventry
Messrs. S. Perkins & Sons, Nurserymen, Seedsmen, and Florists, Coventry

*** Agents Wanted. Nurserymen and Florists preferred.

N.B.—Cast Fumigating Pots, Tobacco Water for Syringing, and Tobacco Juice for Sheep Dressing.

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MR. A. CHANDLER (of the late Firm of CHANDLER & SONS), 28, Priory Road, Wandsworth Road, S., begs to offer his services as above. Sales of Plants and Nursery Stock arranged, and Catalogues prepared.

THE HANDY LAWN MOWER. — FERRABEE'S Patent. It can be worked by a boy, and is the most serviceable Machine yet produced. Price 4*l.* 10*s.*, carriage-paid to any Railway Station in England.

JAMES FERRABEE & Co., Phœnix Iron Works, Stroud Gloucestershire. London Warehouse: 75 & 76, High Holborn.

Prize Fencing for Agricultural Purposes.

ONLY MANUFACTORY—LIVERPOOL.

FRANCIS MORTON'S Patented Improvements in STRAINED WIRE FENCING, which have been awarded SILVER MEDALS by the principal Agricultural Societies, afford the only means of constructing a permanent and efficient fence at a greatly reduced cost.

Prices from 9*d.* to 2*s.* 2*d.* per yard of Fence.

Drawings and full particulars on application to FRANCIS MORTON AND CO., Sole Manufacturers and Patentees, Liverpool.

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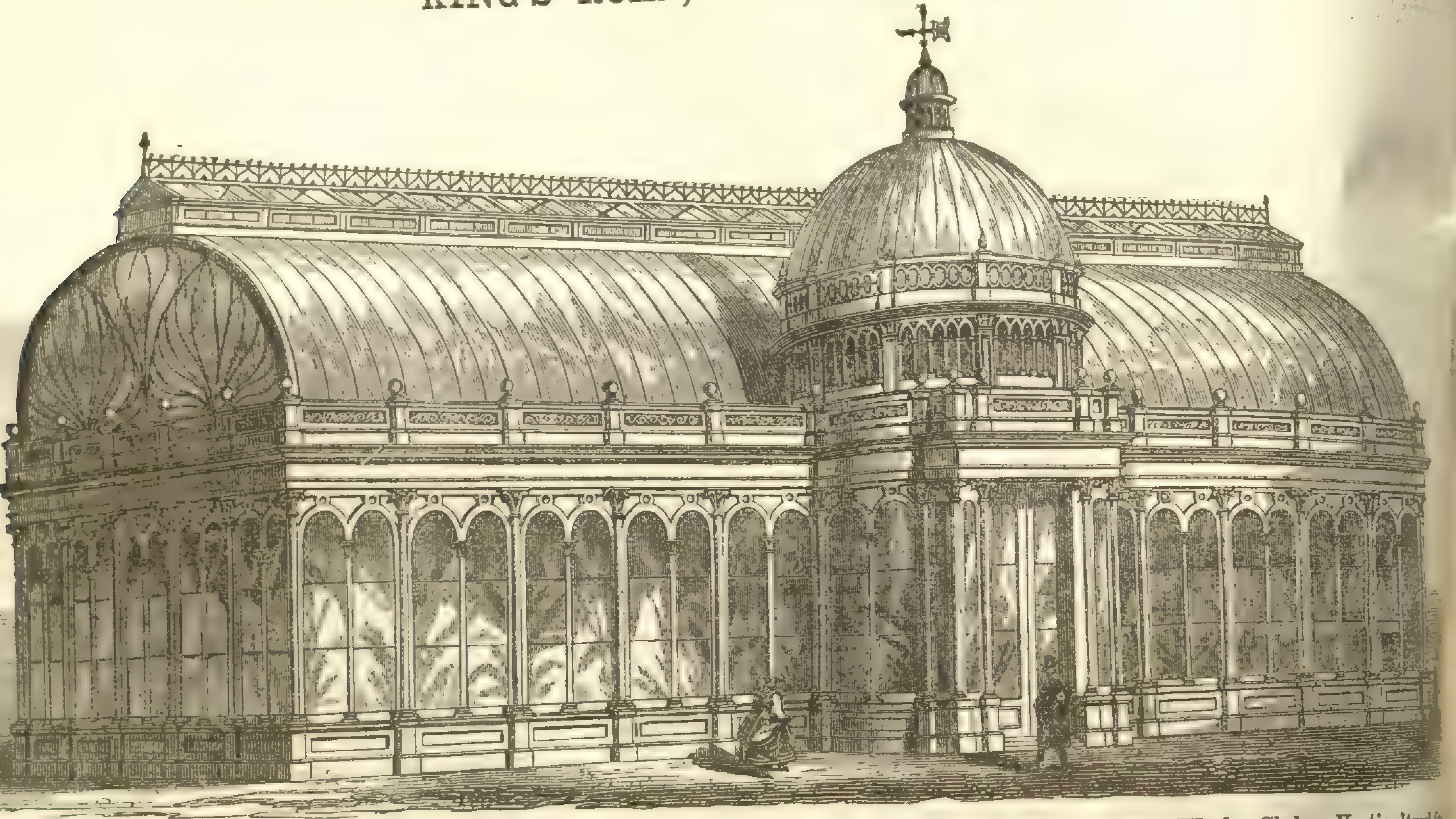
HORTICULTURAL BUILDERS AND HOT-WATER APPARATUS MANUFACTURERS

KING'S ROAD, CHELSEA, S.W.



MESSRS. WEEKS AND COMPANY have the pleasure to announce that they continue daily to send out from their Steam Works, Chelsea, Horticultural S of the first magnitude, choicest design, and most exquisite finish; and that they have received many unsolicited Testimonials of a very eulogistic account of the high satisfaction given. J. W. & Co. therefore respectfully invite an inspection of their vast Works by the Nobility and Gentry who purpose Ho additions or improvements, as all modern inventions relating to Building, Heating, and Ventilating are in operation at their Show Establishment.

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SAMUELSON'S SILENT, SELF-CLEANING, LAWN MOWERS,

WITH MANWARING'S AND BOYD'S PATENT IMPROVEMENTS.

THESE STANDARD MACHINES ARE NOW CONSTRUCTED WITH A SIMPLE AND DURABLE SILENT DRIVING GEAR.

PRICES: Including Packing Case, and Carriage paid to any Railway Station in the Kingdom.

		Boyd's & Manwaring's Patent.	Manwaring's silent gear only.
Manual Power.	12 inches wide	£5 0 0	£4 12 0
	16 ,,	6 15 0	6 7 0
	19 ,,	7 10 0	7 0 0
	22 ,,	8 0 0	7 10 0

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Pony Power.	22 inches wide	9 5 0
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From SHIRLEY HIBBERD, Esq., F.R.H.S., *Author of "Rustic Adornments," "The Town Garden," "Garden Favourites," &c., and the Editor of the "F*

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"The Samuelson's Lawn Mower, with Boyd's Improvements, paid its cost in one season, in the saving of labour alone. Instead of the old bother of scythe sharpening, and loitering, the Grass is mown now almost by looking at it, the turf improved by a regular and clean cut, and the operation one of enjoyment and healthy exercise. Instead toil of pleasure," one can now make a pleasure of toil, and gain time and strength that used to be wasted. I have a good collection of the best garden tools and implements, Lawn Mower above them all.

"SHIRLEY HIBBERD, F

ORDERS Direct, or through Dealers, will be executed according to priority of receipt. May be obtained at the WORKS, BANBURY; at Mr. Sa Warehouses in Newcastle; Stockton; York; Shrewsbury; and Bristol. Also of all Ironmongers and Seedsmen, and at

MR. SAMUELSON'S WAREHOUSE, 76, CANNON STREET WEST, LONDON.

ROYAL BOTANIC SOCIETY of LONDON,
Regent's Park, N.W.

The following are the Awards and the principal Subjects of Exhibition at the THIRD SPRING MEETING, which took on April 24.

NEW PLANTS, &c.—Small Silver Medal to Miss Clarkson, Avenue Road, St. John's Wood, for Athyrium Filix-fœmina, var. Frizelliæ, a remarkably elegant and curious form of Lady Fern, in which the pinnæ were reduced to small flabellate bodies resembling the pinnæ of Asplenium flabellifolium, thus forming a narrow linear frond. Bronze Medal to Mr. B. Williams, Paradise Nursery, Holloway, for Rhododendron Madame Wagner, a beautiful variety in which the flowers are white edged with bright rose-colour. Bronze Medal to Mr. W. Bull, Nurseryman, Chelsea, for Pteris rubro-nervia, an elegant free-growing Fern having a red midrib to the pedately pinnato-pinnatifid fronds. Certificate to Mr. Bull, for Erica "mediterranea alba," a very dwarf, white-flowered, hardy Heath, resembling E. carnea in habit. First-class Certificate to Mr. Turner, Slough, for Variegated Pelargonium Clara, a variety with well-marked foliage having an orange coloured zone and golden margin, the flowers of a deep bright scarlet, and well formed. First-class Certificate to Mr. Turner, for Pelargonium Herald of Spring, a horse-shoe-leaved variety with very large and finely-formed flowers of a lively orange-tinted cerise. First-class Certificate to Cineraria Miss Franklin, a variety with very large flower heads, which have heavily rosy-crimson tipped florets, and a clear ring of white around the dark disk; a variety of large size combined with good properties. First-class Certificate to Messrs. F. & A. Smith, Dulwich, for Cineraria Magnum Bonum, another large-flowered and very ornamental variety, having a dark disk, and white florets with a moderate tip of blue. Second-class Certificate to Messrs. F. & A. Smith, for Cineraria Enchantress, a bright-looking and effective kind, useful for decorative purposes, the florets white at the base heavily tipped with reddish purple, and the disk dark-coloured. Second-class Certificate to Mr. Turner, for Cineraria The Colleen Bawn, a variety of diffusely branched habit, the flowers having a dark disk, and white florets with slight and rather irregular tips of blue; a pretty decorative sort. Second-class Certificate to Mr. Turner, for Cineraria Great Western, a distinct and attractive self-coloured variety, of a purple-flushed rose colour, and having a dark disk. Second-class Certificate to Mr. Turner, for Pelargonium Prince of Hesse, a fine horse-shoe-leaved variety, having large finely-formed flowers, of a delicate salmon-pink, paler towards the edges. Second-class Certificate to Mr. Turner, for Auricula Rev. G. Jeans, a variety with large grey-edged flowers, having maroon markings, and an even paste; a useful second-rate flower.

Of this class of subjects there were also shown:—From Miss Clarkson, Goniopteris reptans, an elegant drooping slender pinnate West Indian Fern, not common in cultivation. From Mr. Todman, gr. to R. Hudson, Esq., Clapham: Azalea Great Eastern, a large flowered rose coloured variety moderately spotted. From Mr. Bull, Chelsea, Azalea President Claeys, a small-flowered salmon-coloured sort edged with white; also Dracæna fragrans latifolia, one of the broadish green drooping-leaved species. From Messrs. J. and J. Fraser, Lea Bridge Road: Azalea Duchesse de Brabant, a very large-flowered rose-coloured variety with petaloid stamens; also Azalea Leopold I., a salmony-rose with petaloid stamens; also Erica Victoria Regina, a fine light-coloured variety of the aristata breed, with salmony-pinkish tube, dark throat, and broad expanded whitish limb segments. From Messrs. F. and A. Smith, Dulwich: Cineraria Prima Donna, a variety with unevenly rosy-tipped florets; also Cineraria Louise, a variety with dark disk, the florets white with bright rosy-purple tips; and Cineraria Antagonist, a dark-coloured self, with broad deep pucy rose-coloured florets and dark disk: these both having received Certificates at a former meeting; also, from the same, Cineraria Sans-pareil, pucy purple with grey eye; Cineraria Rosy Circle, with deep rosy-crimson tipped florets white at the base, and with dark disk; Cineraria Favourite, with deep purplish rose tipped florets white below, the disk large and dark-coloured; Cineraria Lilacina, a lilacy rose with large dark eye; Cineraria Mammoth, a variety with very large flower heads, the disk dark purple, the florets white with slight tips of rosy-crimson extending irregularly down their margins; Cineraria Rubens, a pucy rose self with dark disk. From Mr. Turner, Slough: Cineraria Harbinger, rosy crimson with grey eye; Cineraria Lord of the Manor, with florets heavily tipped with rosy crimson white at the base, the disk dark coloured; Cineraria Reynold's Hole, a bright rosy crimson self; Auricula Negress, a mulberry maroon self, with rough notched segments, but a fine circular eye and even paste; Pelargonium Fairholmsland, a horse-shoe leaved sort, with blush white flowers; Pelargonium Queen of Scarlets, a dwarf, small-leaved, horse-shoe marked variety, of free-flowering habit, with bright scarlet flowers, likely to be a useful bedding variety.

6 MISCELLANEOUS PLANTS.—Small Silver Medal to Messrs. J. and J. Fraser, Lea Bridge Road; Bronze Medal to Mr. C. Penny, gr. to H. H. Gibbs, Esq., St. Dunstan's, Regent's Park; Certificate to Mr. J. Cross, gr. to Sir F. H. Goldsmid, Bart., Regent's Park.

6 AZALEAS.—Small Silver Medal to Mr. Todman, gr. to R. Hudson, Esq., Clapham; Bronze Medal to Mr. Turner Slough; Certificate to Mr. Cross, gr. to Sir F. H. Goldsmid' Bart. A fourth collection was shown by Messrs. J. and J. Fraser'

6 ORNAMENTAL-LEAVED PLANTS.—Small Silver Medal to Mr. W. Bull, Chelsea; Bronze Medal to Messrs. W. Cutbush & Son, Highgate; Certificate to Mr. Young, gr. to R. Barclay, Esq., West Hill House, Highgate.

12 HYACINTHS.—Small Silver Medal to Messrs. W. Cutbush & Son; Bronze Medal to Mr. Young, gr. to R. Barclay, Esq.

6 ROSES IN POTS.—Small Silver Medal to Mr. Turner, Slough.

6 AURICULAS.—Small Silver Medal to Mr. James, gr. to W. F. Watson, Esq., Isleworth; and to Mr. Turner; Bronze Medal to Rev. G. Jeans, Alford Vicarage, Lincolnshire.

MISCELLANEOUS SUBJECTS.—Silver Medal to Mr. Turner, for a very large collection of finely bloomed Auriculas, in great variety. Small Silver Medal to Messrs. W. Cutbush & Son, for a fine collection of well bloomed Hyacinths. Small Silver Medal to Mr. Young, gr. to R. Barclay, Esq., for a well-grown collection of Variegated Begonias. Small Silver Medal to Mr. W. Bull, Chelsea, for a collection of nine of the newer varieties of Variegated Begonias, the most distinct and beautiful of which was that called Comte Alfred de Limminghe. Bronze Medal to Mr. B. Williams, Holloway, for a handsome plant of Lycaste Skinneri, having 24 expanded blossoms. Bronze Medal to Messrs. Dobson & Sons, Isleworth, for a collection of 12 well grown Cinerarias. Bronze Medal to Mr. James for a stand of Cut Pansies. Certificate to Mr. James for 6 Pansies in pots. Certificate to Mr. Young for a collection of 36 Tulips. Certificates to Mr. Turner for 6 Cinerarias, and to the same for 6 Spotted Pelargoniums. Certificate to Mr. Bragg, nurseryman, Slough, for a stand of Cut Pansies. There were also exhibited:—From Mr. Bragg, 3 varieties of Bedding Pansies. From Mr. Young a collection of Stove and Greenhouse Plants, and a basket of Milltrack Mushrooms. From Messrs. Dobson and Sons a stand of Cut Pansies, and a collection of 12 Herbaceous Calceolarias.

ROYAL HORTICULTURAL SOCIETY.—
FLORAL COMMITTEE.

LIST OF AWARDS, APRIL 23, 1861.

FIRST CLASS CERTIFICATE.

Lomaria fluviatilis, from Messrs. J. & C. Lee, Hammersmith.
Lomaria "cycadifolia," from Messrs. J. & C. Lee.
Polystichum vestitum, var. venustum, from Messrs. J. & C. Lee.
Pelargonium Herald of Spring, from Mr. C. Turner, Slough.

COMMENDATION.

Erodium guttatum, from Mr. Weeks, Gardener to W. Wilson Saunders, Esq., Reigate.
Prenanthes arborea, from Mr. Weeks, Reigate
Adelaster albivenis, from Messrs. Veitch & Son, Exeter and Chelsea.
Variegated Pelargonium Clara, from Mr. C. Turner.
Horse-shoe Pelargonium Prince of Hesse, from Mr. Turner.

SPECIAL CERTIFICATE.

To Mr. C. Turner, for a large collection of Auriculas.
To Mr. C. Turner, for a collection of Indian Azaleas.
To Mr. C. Turner, for collections of Roses, Pelargoniums, and Cinerarias.
To Messrs. W. Cutbush & Son, for a collection of Hyacinths.

The next Meeting of the Committee will take place on May 14. THOMAS MOORE, Secretary to the Committee.

ROYAL HORTICULTURAL SOCIETY.—
Notice is hereby given, that the next General Meeting of this Society for the Election of Fellows, will be held in the Council Room in the New Garden at South Kensington, W., on TUESDAY, May 14. The Chair will be taken at 3 o'Clock. On this occasion a Ballot for the following Plants will also take place.

LIST OF PLANTS FOR BALLOT.

1. FABRICIA LÆVIGATA. Greenhouse evergreen shrub, Australia.
2. " CRASSIVALVIS. " " " "
3. MELALEUCA DECUSSATA. " " " "
4. HERMANNIA ANGULARIS. " " " "
5. GOODIA LATIFOLIA. " " " "
6. KENNEDYA RUBICUNDA. Fine greenhouse climber, Australia.
7. HARDENBERGIA OVATA. " " " "
8. " MONOPHYLLA. " " "
9. " " ALBA. " "
10. TECOMA LATROBEI. " " "
11. DRACÆNA AUSTRALIS. Ornamental greenhouse plant, Australia.
12. PHORMIUM TENAX. New Zealand Flax, New Zealand.
13. CASUARINA QUADRIVALVIS. Greenhouse weeping tree, Australia.
14. SOLANUM AURANTIACUM. Greenhouse shrub, Australia.
15. " HYSTRIX. " " "
16. EURYBIA ARGOPHYLLA. " " Tasmania.
17. SOLLYA HETEROPHYLLA. Greenhouse evergreen creeper, Australia.
18. EUCALYPTUS VIMINALIS. Evergreen tree, New Holland.
19. " POROSA. " " "
20. " GLOBULOSA. " " "
21. CALLISTEMON RUGULOSUS. Greenhouse evergreen shrub, New Holland.
22. PITTOSPORUM ACACIOIDES. " " "
23. LEPTOSPERMUM SCOPARIUM. " " "
24. PULTENÆA DAPHNOIDES. " " "
25. HAKEA SP. " " "
26. ANADENIA PULCHELLA. " " "
27. XANTHOXYLON SP. " " "
28. CALOTHAMNUS QUADRIFIDUS. " " "
29. HAKEA ACICULARIS. " " "
30. " BRACHYRHYNCHA. " " "
31. CLEMATIS ARISTATA. King George's Sound.
32. POLYGONUM COMPLEXUM. Hardy evergreen shrub, well adapted for rockwork.
33. CALCEOLARIA VIOLACEA. Violet-flowered Calceolaria.
34. VITIS ODORATISSIMA. Sweet-scented Vine, North America.
35. CUPRESSUS TORULOSA. Hardy Cypress, Bhotan.
36. " GOVENIANA. Gowen's Cypress, California. Hardy.
37. " CASHMERIANA. Cypress of Cashmere. Hardy.
38. CRYPTOMERIA LOBBII. Hardy coniferous tree, China.
39. ABIES MENZIESII. Hardy coniferous tree, North-west Coast of America.
40. THUJA LOBBIANA. California. Hardy.
41. BRIDGESIA SPICATA. Hardy trailing plant, pink flowers, Chili.
42. LONICERA FRAGRANTISSIMA. Fragrant hardy shrub, China.
43. SHANGHAE ROSE. Spring Rose of Shanghae. The earliest in flower.
44. NERGALI, OR HILL BAMBOO OF PUNJAUB. India. Hardy.
45. BAMBUSA GRACILIS. Hardy Bamboo, India.
46. BERBERIS NEPALENSIS. Evergreen shrub, Nepal.
47. PINUS LONGIFOLIA. Half-hardy coniferous tree, from India.
48. SPIRÆA CALLOSA. A beautiful hardy shrub, North China.
49. LIGUSTRUM OVALIFOLIUM. Hardy Shrub, North China.
50. SOLANUM CAPSICASTRUM. A beautiful greenhouse shrub, with scarlet berries in winter.

Fellows of the Society desirous of obtaining any of these Plants, if Life Members of 40 guineas, or Annual Subscribers of 4 guineas, are requested to name Twelve sorts; if Life Members of 20 guineas, or Annual Subscribers of 2 guineas, to name Six sorts.

The arrangements for conducting the Ballot render it necessary that the names of the plants, or the number prefixed thereto in the above list, should be sent to the Offices of the Society, South Kensington, W., on or before Friday, May 10, after which date no applications can be attended to.

ANDREW MURRAY, Assistant Secretary.

HORTICULTURAL SHOW AT ROMFORD,
in conjunction with the Exhibition of the Essex Agricultural Society, on JUNE 25, 1861.

President—Sir T. B. LENNARD, Bart.
Chairman—DAVID MCINTOSH, Esq.
Hon. Secretary—Mr. GEORGE GRIGGS.

A sum of 50*l*., and Two Silver Cups, of the value of Five Guineas each, will be given as PRIZES at this Show.

All necessary particulars required by the Exhibitors can be had on application to the Hon. Secretary.

All persons intending to Exhibit must give notice to the Hon. Secretary, on or before the 11th of June, 1861, after which date no entry will be taken.

GEORGE GRIGGS, Hon. Secretary, Romford.

TUNBRIDGE WELLS. — GRAND HORTICULTURAL FETE, JULY 5.

PATRONS:
The Most Noble The MARQUIS CAMDEN, K.G.
The Right Hon. The EARL OF ABERGAVENNY.
The Right Hon. The EARL DE LA WARR.
The Right Hon. LORD VISCOUNT HARDINGE.
The Right Hon. COLONEL LORD WEST.

The full Military Band of the Coldstream Guards, by permission of Colonel Newton, will be in attendance.

Tickets of Admission may be obtained at the Libraries; and of the Secretary, Mr. E. F. LOOF, 8, Parade.

The Schedules of Prizes are published.

Cineraria Seed saved from the Choicest Prize Sorts.

LUCOMBE, PINCE, AND CO. have now ready for sending out Seeds of their fine collection of the above, which for brilliancy of colour, form and size of flower, and dwarf compact habit, are unequalled.

The great satisfaction which for many successive years their Cineraria Seed has given, and the extensive orders which they have received for it, have induced them to pay the greatest attention to its quality. L. P. & Co. can therefore confidently recommend the Seed of this present season's saving as being very superior to any which they have previously sent out.

Packets, sealed and warranted, at 2*s*. 6*d*. each.

Their stock, owing to its select quality, is limited; early orders are therefore respectfully solicited.

Exeter Nursery, Exeter.—Established 1720.

Spring, 1861.

JOHN CRANSTON will be happy to forward on application his DESCRIPTIVE CATALOGUE of STOVE, GREENHOUSE, and BEDDING PLANTS, including selected varieties of Scarlet and Variegated Geraniums, Fuchsias, Verbenas, Calceolarias, Petunias, Bedding Dahlias, &c.

Nurseries, King's Acre, near Hereford.

BEDDING AND OTHER PLANTS.—The Spring Supplement to JAMES CARTER & Co.'s GARDENER'S AND FARMER'S VADE-MECUM will be found to contain all the requisite information for the arrangement and management of BEDDING PLANTS, besides copious Lists of STOVE and GREENHOUSE PLANTS, with descriptive observations. Will be published on May 1, and forwarded free of charge and post paid, on application to

JAMES CARTER & Co., 237 and 238, High Holborn, London, W.C.; and Crystal Palace Nursery, Forest Hill, Sydenham, S.

The Gardeners' Chronicle.

SATURDAY, APRIL 27, 1861.

MEETINGS FOR THE ENSUING WEEK.

WEDNESDAY, May 1 { Royal Horticultural (Anniversary) at Kensington Gore .... 1 P.M.

THE Gladiolus seems destined to occupy an important place amongst garden flowers, if we may judge from the rapid advance it has latterly made in public favour. A few years ago the genus was comparatively unknown, except indeed as a curious and ornamental family of bulb-tuberous plants adapted for pot culture in Fern-houses, the few species which had found their way into the flower gardens being turned to little account; while at the present time it has become one of the grandest and most varied of autumnal flowers.

The present races of Gladioli have been obtained by the intermixture of two or three species long since introduced, and of their progeny. The earlier steps, as is often the case, were less characterised by striking results than those of a more recent date, time having been required to break down the fixity of character which is more or less inherent in the so-called species of plants. This, however, accomplished, it is no longer mere variation of colour that is obtained, but the varied characteristics of one race, such as habit, season, &c., become blended with the forms and colours of another, and these are again varied *ad infinitum*. The parent species appear in this case to have been G. natalensis, sometimes called psittacinus, and cardinalis for the higher coloured sorts, and G. blandus and floribundus for those of lighter tint; whilst amongst the earlier hybrids which have in no small degree contributed to the present condition of the genus, are gandavensis, ramosus, pudibundus, and Colvillii. The intermixture of these plants has given origin to three distinct races, of which cardinalis, ramosus, and gandavensis are taken as the types. It is to the latter group that we now particularly refer, as forming a most valuable addition to the class of autumnal ornaments of the flower garden; but as the varieties of the cardinalis section bloom in June and July, and those of the ramosus section in July and August, the Gladiolus may be said to furnish a long continued succession of its beautiful flowers.

The seedlings of the gandavensis breed have not only become numerous, but amongst them two distinct types of flower may be discovered. Hence, as selection has become necessary, it becomes important to fix on some points of excellence, by the aid of which the superior varieties may be retained, and the inferior ones rejected. It is only in this way that we can hope ultimately to attain to something near the perfection of beauty which the Gladiolus is capable of yielding under the directing skill of the cultivator, and of which symmetry of development is an important feature. The points of excellence will be found to reside chiefly in the qualities of habit, form, and colour, and these stand in relative importance in something like the order in which we have named them.

In respect to habit the autumnal Gladioli are

naturally vigorous, and this sturdy property must certainly be maintained. Some varieties have a tendency to produce a succession of flowering stems, and this must be taken as an additional recommendation. The spike of flowers must be bold, and the blossoms themselves all somewhat inclined to one side, so as to produce a good face. There is a tendency in some plants to throw them into two lines pointing in opposite directions, which arrangement is far less effective.

The flower of a Gladiolus if examined will be seen to consist of six pieces or divisions technically called the segments of the perianth, the six pieces being arranged in two whorls one within the other, each whorl consisting of three pieces. In the Ixia and the Crocus, which belong to the same family, the six pieces are nearly or quite uniform, so that a regular flower is produced; but in the Gladiolus there is a certain amount of irregularity which has to be taken into account, and the object of the seedling raiser should be to modify this by imparting symmetry of development rather than to obliterate it, which would altogether alter the character of the flower. It will be seen that the contour of the Gladiolus flower is triangular, which general outline should be maintained; and although met with in two forms, yet in both it shows off to advantage the lower segments or lip portion of the flower. The outline then should be in the form of a triangle, but the angles should be rounded off, and the more smoothly and regularly this is done the better. But here we meet the diversity of character already alluded to. In one set of varieties the triangle formed by the three outer or sepaline segments is erect, that is, with its apex upwards; the dorsal segment, which is a sepal forming the apex, and the lateral sepals the base of the triangle, as indicated in the annexed diagram (Fig. 1), in which *s*

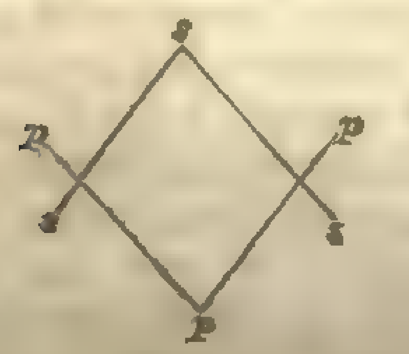

FIG. 1.

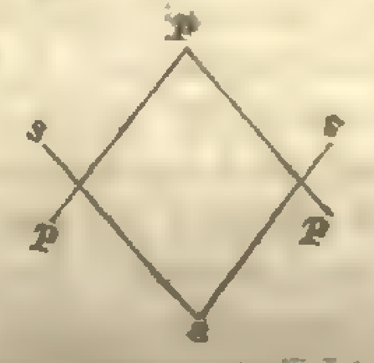

FIG. 2.

represents the sepaline and *p* the petaline divisions; the sepals being nearly equal in size, but the upper one rather the larger, and arched, while the petals which form a reversed triangle are more unequal in size, the two upper ones being larger, and the lower one smaller, forming a pointed central or one-leaved lip. In another group, equally handsome, perhaps even more so, this order is reversed (Fig. 2), and the dorsal segment is a petal instead of a sepal, thus: the two upper sepals being rather larger than the lower, and spreading out like wings, while the two lower petals are smaller than the upper, and distinctly-coloured, so as to form a two-leaved lip. These two groups may be very well maintained separately, the former distinguished by having its greater breadth in the lower parts, being erect-flowered; and the latter known by its greater breadth being in the upper part, being reversed-flowered; while all varieties with a confused arrangement of the parts should be rigorously discarded, at least for breeding purposes. Very good indications of the two groups may be seen in the new varieties called John Standish, which is erect-flowered, and Rev. Joshua Dix which is reversed-flowered, both being among the highest and richest coloured crimsons that are known, and the former one of the most perfect in respect to smoothness and substance, which are auxiliary qualities of no small importance.

In respect to colour and marking great latitude may be allowed according to individual fancy, but at least the colours should be pure and decided—rich, clear or delicate, as the case may be; and the lip markings should be distinct and well-contrasted, and moreover, they should be symmetrically disposed and confined to the centre petal of the erect-flowered group and to the two lateral petals of the reversed-flowered varieties, or if continued on the lower sepals they should be evenly balanced. The markings or stripings on other parts of the flower, if any, should also be clear and decided.

Thus it will appear that in order to carry on the improvements which have been so well commenced, the following rules in selected seedlings, at least those intended for breeding, should be rigidly observed. 1. The habit and constitution should be vigorous, the stems strong and sturdy, and if branching from the base so much the better. 2. The flower spike should be long and well-furnished, the flowers all inclining to one side so as to form a face. 3. The outline of the individual blossoms should be either an erect or a reversed triangle, the lip-marking being confined in the former case to the one and in the latter to the two lower petals, or, if continued on the sepals symmetrically disposed. 4. The colours should be clear and the markings distinct. 5. The surface and margins should be smooth, and the texture firm and stout or fleshy, so as to be enduring. The new varieties hereafter raised may be considered superior, in the degree in which they approach the standard thus set up. ——*

THE gentleman who favoured us with the account of how he succeeded in renovating a moribund Plum tree (p. 266), has been so obliging as to furnish in addition the following particulars as to the emission of roots aloft, at the place where it had been originally budded. The box then employed and now applied to a languishing Apricot tree is 17 inches high, 15 inches broad, and 10 inches deep from the front to the wall at its back. It must be remembered that the wall itself formed one of the sides of the box. The incisions were merely a slight ringing of the bark (which was removed) in two places, an inch apart, on each branch, as it started from the tree, and about a quarter of an inch in breadth; but he had so little faith in the necessity or use of that operation in this particular case, that he did not even look at it, but merely permitted it, as it could do no harm, to satisfy and quiet his routiner, the acting gardener, on the principle that he is not a wise workman who quarrels with his tools. In his own mind our amateur depended for the emission of roots entirely on the callus formed at the junction of the scion and the stock, where a good deal of organisable matter had been accumulated. In fact, the sap, after elaboration by the leaves, could not descend to the roots, so frail and thin was the strip of bark that served as the stem. It is known, too, that many plants that meet with a check at the roots have a tendency to throw out roots at a higher point, even from the branches, under favourable circumstances. The problem here was to supply those circumstances. He also reckoned on the sunheat that would be absorbed and retained by the wall; and the hot summer of 1859, followed by the showery one of 1860, tended greatly to success. It was bottom heat (applied a little above the usual level) employed for the striking of a cutting, succeeded by waterings and a moderate temperature, and a moist atmosphere after it had struck.

All these conditions are easily imitable. In fact our Correspondent would not have recorded the adventures of his Green Gage tree and its descent from the upper regions to the level of the ground, had he not believed that the experiment may be carried further and more widely applied with advantage. Of the hundreds of thousands of Camellias and other worked plants that are sent out by the Belgian plant manufactories and similar great propagating establishments, what proportion linger and die after they have reached the hands of their purchasers? A very large one indeed. The fault is mostly laid on bad gardening, or too much watering, or too little, unsuitable houses, &c. Even the Bon Jardinier (with whose ability all are conversant) tells us that we do not yet know what is the best soil for Camellias, and recommends further experiment. Nevertheless, old vigorous specimens, that have overgrown their feeble youth, do not seem to be very nice, or squeamish, or exclusive in respect to soil. But may not many cases of lingering consumption which are laid on the shoulders of unhappy gardeners (who have quite enough to answer for without that addition) be really owing to the imperfect union of the scion and stock, in some degree perhaps consequent on the hasty way in which the plants are got ready for market? Some scions never do take kindly to their stock, but only just keep alive for a while.

He has a small plant of that beautiful and hardy thing the Magnolia Yulan (worked upon he knows not what, for it came from Belgium, *viâ* a French nurseryman), which for the last two or three years has been growing, in homely phrase, like the cow's tail downwards, and must die shortly, unless he can get it to throw out roots above the graft. How slight is the attachment of the Medlar to the Hawthorn! A Medlar bush would be safer, and quite as pretty as a broom-headed standard.

The life of all worked plants must necessarily be more precarious than the life of plants on their own roots; for they are exposed to double injury; to injurious influences on the scion and injurious influences on the stock, with no possibility of self-renovation or propagation by suckers. For instance, he remarks, we lose tender Roses by perching them up in the air and exposing them to a degree of cold which they cannot support; and we lose hardy Roses, which no frost would kill, by budding them on a delicate or cankered Briar. Therefore, his octogenarian Green Gage tree (which is now, April 10th, full of blossom, and, what is better, is putting forth leaves) teaches him the lesson that many worked plants, such as Camellias, Magnolias, Roses, variegated-leaved shrubs and trees, &c., might gain in vigour, after they are turned out of the hands of the propagator, by being subjected to a second process, whose object would be to make them root at the graft.

Plants so re-rooted would be of considerably more value than before, and would be cheerfully purchased by many at a higher price. Horticultural skill is not wanting to determine what plants can be made in this way to grow upon their own roots, and the most efficient method of doing so. The heat, which is probably essential, might be conveyed along any series of pots or boxes by means of a pipe or flue. An objection to such a mode of rooting is that it is not certain to prove a rapid one; but there are many cases of valuable, or favourite, or interesting specimens, in which possibility is all that an amateur would require.

AMONG the parts of the new GARDEN OF THE ROYAL HORTICULTURAL SOCIETY at South Kensington that are most nearly completed is the Meeting room, in which visitors can assemble for business or pleasure. We have formerly described it in some detail (see p. 144), and we now produce a view of the interior, looking into the Garden, with which it communicates through the arcades, whence the level ground is reached by flights of steps. The architectural building seen in the distance is the Western Entrance, not yet commenced. The room has been built by Mr. KELK, from the graceful design of Captain FOWKE, R.E., and we venture to think affords a sufficient answer to those gentlemen who imagine that a military engineer is capable of no higher purposes than planning a fortification or forming a trench in the dark with a lantern and tracing-line.

THE accompanying Table, showing the TEMPERATURE OF THE EARTH near London, for the last 18 years, during the last 10 days of March and the first 20 days of April, will we trust prove acceptable to those who, like gardeners and farmers, are deeply interested in the progress of vegetation. We may have occasion to refer to it hereafter. For the present we have only to remark that although the ground in March at a foot below the surface was this year warmer than in any season except 1848 and 1859, yet the powerful radiation at night in the beginning of April reduced the temperature below that of many years; and notwithstanding the rapid accumulation of surface heat the ground at 2 feet deep was actually colder than in any year except 1845, 1852, and 1853. So long as this remains the case, vegetation must make very slow progress, as we see is happening in hard Asparagus, the growth of deep-rooted green crops, and the opening of Apple blossoms. The temperature was on the 20th April nearly 5° less than in 1856, a difference which may be called excessive at 2 feet underground. Whoever watches the unfolding of leaves and expansion of blossoms will, we think, find in differences underground the true explanation of differences above ground. Perhaps some of our correspondents who keep a "Calendar of Flora" will look to this.

A RETURN OF THE TEMPERATURE OF THE GROUND AT CHISWICK FOR THE END OF MARCH AND BEGINNING OF APRIL.

	Last 10 days. MARCH.		First 10 days. APRIL.		Second 10 days. APRIL.
	1 foot.	2 feet.	1 foot.	2 feet.	1 foot.
1844	43.6	43.6	45.6	47.3	50.3
1845	38.1	37.0	43.7	44.0	43.6
1846	43.4	45.0	47.0	46.6	50.9
1847	42.9	43.3	42.5	43.3	44.7
1848	45.2	45.0	48.5	48.5	47.7
1849	41.8	43.3	45.1	45.4	43.7
1850	39.0	40.3	46.0	40.2	48.4
1851	44.45	44.3	44.45	45.0	44.85
1852	41.0	40.9	42.2	42.2	44.5
1853	36.8	37.1	45.1	43.2	45.8
1854	42.4	44.6	46.9	48.1	48.5
1855	40.2	40.9	43.3	43.2	43.0
1856	43.1	43.2	47.6	44.4	49.5
1857	45.2	43.1	49.8	46.3	49.3
1858	47.1	44.7	46.7	45.5	48.0
1859	48.8	47.7	48.3	46.7	49.4
1860	45.3	44.0	47.6	45.3	47.1
1861	46.7	43.7	46.9	44.7	[illegible]

INTERIOR OF THE NEW MEETING-ROOM OF THE HORTICULTURAL SOCIETY AT SOUTH KENSINGTON. DESIGNED BY CAPT. FOWKE, R.E.

NOTES ON THE BOTANY OF JAPAN.—No. IV.

(See page 312).

LEAVING Nagasaki and its beautiful scenery behind us, I shall now endeavour to give some account of the land and its productions about Yeddo, the capital of Japan. The places or ports where foreign merchants are allowed to settle and trade in this part of the empire are named Kanagawa and Yokohama, both situated on the shores of the Bay of Yeddo, and distant from that place about 16 or 18 miles.

The geological formation of this part of the country differs entirely from that about Nagasaki. The latter bears a striking resemblance to the hilly part of China in the same latitude, that is, the upper sides of the hills are generally barren, with rocks of clay-slate and granite protruding in all directions. About Yeddo we meet with quite a different formation. The country consists of hill and valley, and with the exception of the celebrated mountain named Fusi-jama and some others in its vicinity, the hills are only a few hundred feet above the level of the sea. The soil in the valleys, in which Rice is the staple summer crop, is of a blackish-brown colour, nearly entirely composed of vegetable matter, and resembles what we meet with in a peat bog in England. Like that land it springs beneath the feet when one walks over it. The sloping sides of the hills are covered with trees and brushwood, the latter oftentimes being apparently of little value. One naturally asks why these lands, which are capable of cultivation, should be allowed to lie in an almost unproductive condition. But I could not get a satisfactory answer to the question, although doubtless there is some reason, and probably a good one, for this state of things. Passing upwards through the belt of trees and brushwood, we next reach the tops of the hills. These are all comparatively flat, and thus a kind of table land is the result. The soil of this table land is exactly similar to that found in the marshy valleys below, that is, it is a soil closely resembling what is found in peat bogs. Scarcely a stone or rock of any kind is met with, either in the valleys, on the hill sides, or on the table land on the summits. A casual observer on examining this black and apparently rich-looking soil would think it very fertile, and capable of producing large crops. But in reality it is not so fertile as it looks, and foreigners generally remark on the little flavour the vegetables have which are grown on it.

How this peculiar formation was originally produced I am unable to explain. Whether this part of Japan was at some early period a flat peat moss, and these hills formed by one of those fearful earthquakes for which the country is still famous, and which, according to tradition, forced up Fusi-jama in a single night to the height of more than 14,000 feet, I must leave geologists to determine, but it is such as I have endeavoured to describe.

Many of the trees of this district are identical with those found about Nagasaki, which I have already noticed. The largest and most useful seem to be such as Pinus Massoniana, Retinispora pisifera and Cryptomeria japonica; the latter attains a very great size, and seems peculiarly at home. There are, however, two most remarkable species which I did not meet with further south—the one is Thujopsis dolabrata, the other Sciadopitys verticillata—both charming trees, which it is to be hoped will prove hardy in England. I think we have already proved the former to be so, and there can be little doubt about the latter. Sciadopitys is different in appearance from any Conifer I have ever met with. It grows in the form of a cone, attaining a height of more than 100 feet; its leaves are long and narrow (or rather I should say broad, for a Pine); they are arranged in whorls, and are of a deep green colour. Altogether it is particularly striking in its general appearance, and very ornamental.

Amongst shrubs a species of Weigela was common, but whether it was W. rosea, or a new species, I was unable to determine at so late a period of the year. Osmanthus aquifolius, covered with sweet-scented white flowers, was also met with. It belongs to Oleaceæ, and is a very fine ornamental bush, particularly the variegated variety cultivated in the gardens of Yeddo. A new species of Aucuba with green leaves was common in the shady parts of woods and hedges, and is likely to prove an acquisition if introduced to Europe. As a fine evergreen it will be much prized, and in addition to this it becomes covered during the winter and spring months with a profusion of red berries, which give it a very ornamental appearance.

I found in the garden of Dr. Hall of Yokohama, who had a very interesting collection of Japanese plants, and to whom I am indebted for much valuable information and assistance, the male plant of Aucuba japonica which is now on the way home. I look forward with great interest to the introduction of this plant, not on account of its appearance, for it closely resembles the female plant which we have had so long in Europe, but the fruit, in all probability, will be highly ornamental. Only fancy all the Aucubas which decorate the windows and squares of our smoky towns covered during winter and spring with a profusion of red berries! Such a result—and it is not an improbable one—would be worth a journey all the way from England to Japan.

The Vine of this district, which you may as well name at once the "Yeddo Vine," produces a fruit of great excellence. The bunches are medium sized, the berries are of a brownish colour, thin skinned, and the flavour is all that can be desired. This Grape may be valued in England, where we have so many fine kinds, and most certainly will be highly prized in the United States of America. A few years ago I was travelling from Malta to Grand Cairo, in company with Mr. Bryant, the celebrated American poet, and a genuine lover of horticultural pursuits. This gentleman informed me that, owing to some cause, our European Vines did not succeed much on the other side of the Atlantic, and suggested the importance of introducing varieties from China, where the climate, as regards extremes of heat and cold, is much like that of the United States. I had never met with what I consider a really good variety of Grape in China, and therefore have not been able to act on Mr. Bryant's suggestion. At last, however, we have a subject for the experiment, and I urged its importance on Dr. Hall, who is an American citizen, and who has already introduced a number of plants to his country from China. He enters warmly into the matter, and no doubt will accomplish the object in view. I therefore conclude this article by giving notice to your readers on the other side of the water to look out for the arrival of the "Yeddo Vine." *R. F.*

REPORT ON SCARLET AND OTHER BEDDING PELARGONIUMS,

GROWN AT CHISWICK IN 1860.

(*Concluded from p. 361*).

Series V.—VARIEGATED-LEAVED PELARGONIUMS.

§ 1. *Leaves golden or yellowish edged.*

121. *Golden Chain.*—From Mr. Scott. Leaves flat, golden-edged; not in flower. Well known as one of the most useful bedding sorts for special purposes.

122. *Lady Cottenham.*—From Mr. Turner and Mr. Scott. Medium habit; leaves flat with yellowish green edge, and faintly zonate; flowers deep pink, or rose-colour. A useful sort.

§ 2. *Leaves silvery, or creamy-edged.* * *Flowers scarlet.*

123. *Alma.*—From Mr. Scott, Mr. Turner, Mr. Taylor, and Messrs. Fraser. Medium habit; leaves broad, flattish, white-edged; flowers medium-sized, in compact trusses, deep reddish scarlet. A first-class variety.

124. *Annie.*—From Mr. Kinghorn. Dwarf compact habit; leaves with a whitish edge; flowers large, light orange-scarlet, rather loose. It is one of the more desirable varieties, similar to that called Flower of the Day, but having better foliage.

125. *Bijou.*—From Messrs. Low & Co., Messrs. Fraser, and Mr. Turner. Medium habit; leaves rather convex, white-edged; flowers large, well-formed, bright scarlet. This is one of the finest varieties in cultivation, and was considered to be quite A 1.

126. *Brilliant.*—From Mr. Taylor. Medium habit; this, which is a variegated sport from Tom Thumb, has leaves slightly edged with white, the edge more or less abortive; flowers bright scarlet. It is a useful sort.

127. *Burning Bush.*—From Mr. Hally. Dwarf; leaves convex, edged with creamy-white, and zoned with dark red, pinkish on the younger parts; flowers of good form, in fair trusses, medium-sized, light scarlet. A very excellent variety.

128. *Countess of Warwick.*—From Mr. Kinghorn, Messrs. Low & Co., and Messrs. Fraser. Medium habit; leaves rather cupped, silver-edged, with distinct dark zone; flowers medium-sized, in compact trusses, bright scarlet. It is one of the best varieties, and is good either for beds or pot culture.

129. *Jane.*—From Mr. Turner. Vigorous, with spreading one-sided habit of growth; flowers large, well formed, light scarlet. It is, however, inferior to other sorts.

130. *Julia.*—From Mr. Turner. Medium habit; leaves having a creamy edge; flowers medium-sized, in good trusses scarlet. A distinct and good variety.

131. *Mountain of Light.*—From Messrs. Fraser. Medium habit; leaves convex, white-edged; flowers scarlet. Inferior.

132. *Mrs. Lenox.*—From Mr. Taylor. Medium habit; the growth rather one-sided; leaves with distinct white edge; flowers bright scarlet, in small trusses. It was considered to be inferior to Alma.

133. *Perfection.*—From Messrs. Low & Co. Medium habit; leaves flattish with broad white edge, and mottled green surface; flowers of tolerable form, in fine trusses, bright light scarlet. A variety of good properties.

134. *Picturatum.*—From Mr. Turner. Medium habit; leaves with a creamy edge and zoned with red; flowers of medium size, in compact trusses, scarlet. A pretty variety for pot culture, but apparently not suited for beds.

135. *Scarlet variegated.*—From Mr. Taylor. Medium habit; leaves cupped, with creamy or slightly silvered edge; flowers loose, crimson scarlet.

136. *Scintillatum.*—From Mr. Hally. Medium habit; leaves cupped, creamy silver-edged, and dark-zoned; flowers well formed, of medium size, and produced in good trusses, deep scarlet. It is a very beautiful variety.

** *Flowers cerise, or light rosy-scarlet.*

137. *Attraction.*—From Mr. Kinghorn. Leaves creamy-edged, and zonate; flowers cerise-scarlet; not in good condition.

138. *Bridal Wreath.*—From Mr. Turner and Mr. Scott. Medium habit; leaves white-edged; flowers rosy-scarlet, above medium size. Inferior.

139. *Fairy Nymph.*—From Mr. Turner. Medium habit; leaves rather cupped, white-edged; flowers cerise-scarlet, in small trusses. An inferior variety.

140. *Flower of the Day.*—From Messrs. Fraser. Medium habit; leaves rather cupped, creamy-edged; flowers light or cerise-scarlet, of medium size, and good form, in fair-sized trusses. A good old useful sort.

141. *Flower of Spring.*—From Mr. Turner. Moderately dwarf habit; leaves silver-edged, and mottled with green; flowers large, of extra fine form, rosy-tinted scarlet. This is a first-class variety, fine every way.

142. *Mountain of Snow.*—From Messrs. Fraser. Medium habit; leaves concave, white-edged; flowers large, well formed, light salmony scarlet. A useful variety.

143. *Shottesham Pet.*—From Mr. Turner. Moderately vigorous; leaves cupped, silver-edged; flowers medium sized, cerise-scarlet. Inferior.

144. *Variegated Tom Thumb.* From Mr. Scott. Dwarf; leaves white-edged; flowers small, cerise-scarlet. It is too small to be effective.

*** *Flowers reddish-crimson.*

145. *Lady Granville.*—From Mr. Taylor. Moderately vigorous; leaves cupped, slightly silver-edged; flowers loose, reddish-crimson. Inferior.

**** *Flowers pink.*

146. *Lilac variegated.*—From Mr. Taylor. Moderately vigorous; leaves cupped, slightly silver-edged; flowers pink, loose, in trusses of considerable size. A distinct and useful old-fashioned sort. It was received under the name of Peach Blossom from Messrs. Low & Co.

147. *St. Clair.*—From Mr. Turner, Mr. Taylor, and Mr. Scott. Moderately vigorous in growth; leaves cupped, white edged; flowers rose pink, in compact trusses, rather indifferent in form. It is however distinct, and useful as a rose-coloured variegated-leaved sort.

148. *Silver Queen.*—From Mr. Taylor, Messrs. Low & Co., and Mr. Turner. Medium habit; leaves flattish, white-edged; flowers loose, pink, distinct in colour, but inferior.

The following did not produce flowers:—

149. *Fairy Nymph.*—From Mr. Scott. Leaves silver-edged, indistinctly zonate.

150. *Koh-i-noor.*—From Mr. Scott. Dwarf, the plant being weakly in habit; leaves silver-edged. Described as a bright scarlet.

Series VI. HYBRID BEDDING PELARGONIUM.

This name is applied to a group having more or less resemblance in habit, foliage, and blossoms to the classes of show and fancy kinds. There are some interesting and useful varieties in this section, but during the last season they scarcely came into bloom, and they are evidently not adapted for bedding out in seasons like that of 1860. Some of them form fancy pot plants suitable for decoration.

VARIEGATION IN PELARGONIUMS.

THERE are few subjects more deserving of notice than this, and perhaps few are less thought of by the generality of gardeners. Various physiologists have, from time to time, done much towards solving the mystery; still the cause lies in comparative obscurity. That there are fixed laws, which govern the cause as well as the effect, no one can doubt, and a thorough acquaintance with these must be acquired before we can satisfactorily investigate the matter. It is poor logic to say that the effect is produced without a cause. There is no such thing in nature as chance; on the contrary, order and perfection are everywhere observable. Some may inquire when a change which results in variegation takes place. I say, at the moment the cellular tissue is generated, which afterwards furnishes a seed or bud. Although at this early stage no perceptible alteration is discernible, still a chemical change must have taken place. I can see no difference in the arrangement of the tissue in a full-grown leaf, whether the parts be white or green, and there may be none, except the presence or absence of green matter. If the tissue in the buds of Pelargonium Annie (variegated), and Compactum Superb (green Horseshoe), the former a sport from the latter, be examined, no difference will be observed between the two as regards colour, until light begins to play its important part; still this does not alter my opinion as to when the change takes place. It is probable that all the cells generated at that juncture were, to a certain degree, deprived of the power to become green, and that the green patch in the middle of a leaf is an effort of Nature to regain a lost position. As to the primary cause, I consider it to be water absorbed by the roots while in a state of decomposition. A plant such as a Pelargonium will live for a time without the aid of rootlets; indeed, when they perish, no callus is formed between the dead and living portions. The same result follows, in some cases, when dead or decaying

branches are allowed to remain on a plant; in the first case, the putrid matter may be carried upwards, and in the second downwards; be that as it may, matter in a state of decomposition assuredly does enter. If the power to form green material in a seed were partially destroyed, the future plant would doubtless become variegated, but if wholly destroyed no germination could take place; yet we often see white shoots start from a healthy-looking plant, growing as vigorously as any of the others, but deprive them of the aid of the green portion and they would soon die. I have never been able to get a variegated plant from seed, although I believe Flower of the Day was so obtained; nor do I see that any practical means can be employed whereby dependence may be placed in seeds to furnish variegated results; the case is, however, otherwise with buds.

Having found that in good soil variegated plants indicated a tendency to become green, and that in wet mould badly drained, green sorts had a tendency to throw up white shoots, I was led to try a few experiments. The first was in 1857. A plant of Cerise Unique, which had been very unmercifully cut for cuttings, was selected for the purpose. It was pretty well furnished with snags—in fact, a good specimen of bad cultivation. It was planted out in June, deep enough to hide all defects. As autumn drew on my doubts began to rise, for not a vestige of white could be seen about it. I therefore took it up, potted it, and cut the head off it. In a few weeks afterwards I was encouraged on seeing by five or six buds that had started, that some were green, some white, and one beautifully variegated: this I preserved and propagated. Next year two or three plants of the same (C. Unique), which had been bedded out, were taken up and potted after the frost had killed their tops. Keeping bad treatment still in view I would have nothing cut off them, and here again I got a sport similar to one which I obtained the previous year. I next took Tom Thumb in hand, and from it I was surprised to get Brilliant. I tried it again, and now I have got what I think is identical with Silver King! I believe, therefore, that all the so-called Scarlet Pelargoniums may be altered in appearance in this manner. Whether this alteration be a disease or not, there is one very remarkable fact connected with it worthy of Mr. Darwin's notice; that is, I have never got a green sport from a variegated plant like the green parent of the variegated variety. From Annie the sport is like old Compactum; from Brilliant it has an upright habit, and becomes red with cold; and from the variegated plant I raised myself, alluded to above, it resembles Cerise Unique in nothing but the flower. *An Old Showman.*

Home Correspondence.

Hautbois (see p. 361).—It may be a convenience to those who wish to grow Hautbois, to know that Belle Bordelaise, raised from the Old Hautbois and Alpine, is a free setter, and an abundant double cropper. It has for the last two years given four crops, and two sets of runners in the two years. It was sent to me by my valued friend Mr. Gloede, of Moret-sur-Loing, France, in the spring of 1859. It was partially disfruited in that year and cropped. The six plants then threw 90 runners, and cropped very heavily again in September, which Mr. Gloede saw when here. It did the same in the cold wet season of 1860. It is a rich, good Strawberry, and like in leaf and berry to the Old Hautbois. I have also here the Monstrous Hautbois and the Black Hautbois (the most musky of all); but they did not set their fruit last year. They are now in abundant bloom, and I hope they may do well. Belle Bordelaise may be had of Mr. Nicholson of Egglescliffe, Yorkshire, and of Mr. Rivers. With regard to the Old Hautbois, I never found it sterile, but a good cropper, though not so good and sure as Belle Bordelaise. I found that when I broke up a two-years old bed of it, though the ground had never been trenched, that the roots had penetrated downwards 27 inches, and perfectly filled the ground with its ramified roots. Probably deep trenching and dunging would secure a crop of it, but I think, with or without trenching, Belle Bordelaise would be sure to give satisfaction. The autumnal or second crop is too late to ripen without glass in this cold and fickle climate. It might be easily forced in August, September, and October. Mr. Rivers has kindly sent me two seedlings raised from it, the fruit of which, he says, is enormous. Of these I hope to be able to report favourably hereafter. The British Queen and the Hautbois race are the two representatives of Strawberry flavour. The last is the Pine Apple of Strawberries. From experience I find that Hautbois require mulching and plenty of water in hot weather. *W. F. Radclyffe, Rushton Rectory, Blandford, Dorset.*

Modern Gardening.—I have just received into my menagerie a most ferocious animal, of the excelsior genus, and it is considered to be, through the lights given by modern education, something very superior to the breed in olden times. The fact is I have to my unspeakable misery got a new gardener from a really good school, where he has been under a tight rein, and this is his first appearance on his own account. New boiler, new watering-pots; such things! new everything. Such "humbugging trumpery" as I had been used to were of no use to him. Ladies were treated rudely, the young gentleman was ordered out of the house, forbidden to touch the watering pots, and on remonstrating offered battle, and indeed struck by him, and I (an infirm old man) am compelled to go about looking in all directions lest I should encounter this ferocious animal, and now, after only a few weeks, I have, according to agreement, to keep him on at this important season, seeing many good things needing care for another month, without any control over anything, or must pay board, lodging, and high wages for that period; however this must meet with magisterial consideration. I do not however think myself repaid by that amount of practical knowledge which might make some amends, as I noticed the rootlets of all my Orchids are covered over and concealed from the light. I maintain that they should be exposed, though I dare not say so. Please to notice in your next who is right, master or man [master]. You need not fear, luckily for you, to speak out. He took charge as a single hand, but requires and has had a man and boy to do the real work, and wants more for a place not larger than your handkerchief. *Senex.*

Rhubarb Syrup.—The aperient qualities of green Rhubarb and its conduciveness to health being now so well known, its usefulness does not admit of a doubt; but allow me to remark that it is best used in the form of syrup eaten with "plain bread," as are all cooked fruits; and not with pastry, especially by invalid persons who have bilious constitutions. Pastry is like strong drinks, it only serves to indulge the appetite rather than to impart to it any real good, causing secretions in the stomach beyond their natural order. To make Rhubarb syrup is simply to cut it into small pieces, simmer it over a slow fire one hour with a very little water; or it may be baked in a jar, then strain it and add sugar to the palate. When it is young it is, like Apples, unnecessary to be peeled. If sweetened with the best of sugars (loaf is best), it will, if preserved air tight and set in a cool place, keep good for many months, and will be found to be pleasant and refreshing at all times and seasons. *A. Hardy, Maldon.*

Effects of the Winter.—As it has occurred to me that from the exceptional severity of last winter it is a matter of interest to horticulturists to record its effects on our half hardy plants and shrubs, I venture to trouble you with the following notice of the present condition of our shrubberies in lat. 56° 5′ N., and long. 5° 20′ W. You will no doubt have seen or at least have easy access to a paper recently printed by the Scottish Meteorological Association, which contains a report by Mr. M'Nab, of the Royal Botanic Gardens, Edinburgh, "on the effects observed on shrubs and trees immediately after the unprecedented frost of 23d, 24th, and 25th December, 1860." The notice I now send you from the same latitude will serve to show the great difference between the east and west coasts. Notes on the state of Shrubs and Plants of less hardy character in Sir John Orde's garden at Kilmory, lat. 56° 5′ N., long. 5° 20′ W., April 15, 1861:—Deodaras, untouched in all situations; Araucaria Cunninghami, in wood untouched, 11 feet high; Escallonia rubra, E. macrantha, untouched; Ceanothus azureus and Ilex latifolia, the same; Aristolochia sempervirens, killed to the ground against S.E. wall; Epigæa repens, untouched; Erica arborea, very much hurt; Photinia serrulata, suffered much, S.E. wall; Passiflora cœrulea, on S. wall, killed to the ground; Ligustrum lucidum, in border killed to ground, on S.E. wall green; Rhododendron arboreum cinnamomum, has been out nine years, and this year for the first time is covered with flowers; Lomaria alpina, perfectly hardy; Cryptomeria japonica, unhurt, 15 feet high, 12 feet through; Euonymus japonicus, dead; Phygelius capensis, sprouting; Gunnera scabra, Mitraria coccinea, and Rhododendron Falconeri, all unhurt; Aucubas, untouched in all situations; Laurustinus, made shabby in low places; on the hill (moor) well exposed in front of a dyke to sun and air, unhurt; Bay Laurels, both in shelter and against dyke in hill, untouched; Sweet Bay, uninjured; Veronica Lindleyana, self-sown in wall untouched, old plant dead to the ground; Azalea indica odorata, white, unharmed both in sun and shade; Araucaria imbricata, quite exposed on hill perfect, in low places a little damaged; Leptospermum Thea, killed to the ground, though of 20 years' standing, 12 feet high, 18 feet through, and sowing itself; Pampas Grass, in a degree sheltered dead, in full sun partly green; Olea ilicifolia, without any protection lost its leaves, but alive; Veronica decussata, dead; Phormium tenax, in a tub without protection alive, one in border dead; Clianthus puniceus, dead; Myrtle, very little hurt; Camellia, single, on S.E. wall not hurt in the least; Bamboo, not Metake. ? arundinacea, not hurt, Metake unhurt; Lycopodium denticulatum, perfectly hardy for last 10 years, now spreading amongst the Grass; Pistacia Lentiscus, dead; Ceanothus divaricatus, dead to the ground; Rhododendron lapponicum, in flower in open border; Bryanthus erectus, do.; Piptanthus trifoliatus, unhurt on S.E. wall; Jasminum nudiflorum, flowered first week in Jan. freely; Magnolia grandiflora, small plant against wall unhurt, sheltered by Spruce Fir branches; Magnolia conspicua does not flower this season, which it used profusely; Magnolia purpurea, unhurt; Woodwardia onocleoides, coming up well; Cyclamen Atkinsi europæum vernum (?), in flower since January; Erica vagans, australis, ciliaris, carnea, and herbacea, all untouched; Helleborus trifoliatus, olympicus, lividus, untouched; Gentiana verna, in flower; true Yellow Pæony, Fortune's, unhurt; Desfontainia spinosa, dead; Eugenia Ugni, alive, protected by Spruce branches; Garrya elliptica, untouched; Phlomis fruticosa, killed to the ground, springing again; Fuchsia discolor, against house shooting, several appear dead in borders; Gum Cistus, untouched; Buddlea globosa, unharmed; Rhododendron ciliatum, untouched; Azalea amœna, quite safe; Rhododendron Edgeworthi, dead; Weigela rosea and amabilis, unhurt; Erythronium lanceolatum, yellow, coming up; Sisyrinchium grandiflorum, in flower; Trillium grandiflorum, purpureum, and nutans (?), untouched. N.B. Snow never lay except 2 or 3 inches in sheltered places, so gave no protection in garden. Pyrus japonica never flowered so profusely before; Judas tree about to flower, south-west wall, unprotected; Rhododendron glaucum, about to flower, unprotected; Buddlea Lindleyana, dead; Leycesteria japonica, dead; Fuchsia Riccartoni, against wall, half dead; Veronica decussata, not killed, as far as I can see, but much injured: Clethra, quite alive, no protection.

Strawberry Growing.—My experience and that of my neighbours corresponds with that I read of in the American publication I formerly alluded to; and as the annoyance of constantly having a great number of barren plants of vigorous growth amongst the rest is great, it appears very desirable to obtain some certain knowledge of the cause of this evil, or if possible to lessen it. Will you allow me, therefore, to invite your readers during the coming season to put the matter to a trial by following the American system, which I will give in a very concise form presently. If it should be found that the difference of climate interferes, still we may hope that a careful investigation by a number of persons in different localities could hardly fail to throw some useful light upon this interesting subject. The practice is exceedingly simple, which will, I hope, be an additional inducement to a good number to give it a fair trial. During the flowering season mark the male, female, and hermaphrodite plants; reject the latter altogether; take 10 runners from female plants and one from a male, and plant them in this proportion, and next year mark the result. I should recommend the curious to plant in beds far distant from each other all three sorts by way of further test; the result, they say, will be that little or very poor fruit will be found on any of them. To be fruitful the proper plants must come together as in the manner I have just described. *T. H. N.*

Decorated Gardening and its Sorrows.—A few months ago an eminent landscape gardener made me a plan of beds (for bedding plants) with colours for a lawn, and the necessary bedding plants, according to such colours on the plan, were furnished by one of our first London nurseries, and it was then suggested by this nursery establishment, that during the early spring of this year I might have these colours more or less realised in bulbs, and a great deal of consideration was given by this establishment, and it was at last determined to have ribbon edgings of various coloured Crocuses, filling up the centres with different coloured Early Tulips—in fact, as near as could be, realising in bulbs the colours on the plan. A foreman of the nursery came down purposely to plant them, and he and my gardener were engaged two days entirely in planting, as there were many thousands of bulbs. They have come up regularly and healthy, but, alas! the coloured picture we were to have had, and the contrast of colours that took us so long to determine upon, have turned out simple impossibilities, for the Crocuses have all bloomed beautifully and faded, ere a Tulip flower had developed itself; so we had at first the frame without the picture, and now the picture without the frame. I have complained to this nursery establishment of the gross blunder committed by them (admitting now, of course, that every gardener, if not myself, ought to have known better), but they say merely that the fault lies with the man they sent down and my gardener and perhaps myself. Now, sir, what I want to ask you is this, whether, supposing they had simply acted on my orders, it was not clearly their duty to have explained to me the impossibility of carrying out my wishes, or being, as the fact is, their own suggestion, whether some compensation, and what, is not due to me for committing such a gross and expensive blunder. Their reply does not even contain an expression of regret or apology. *A Subscriber.* [This seems to be a legal question. Surely no gardener would arrange Crocuses and Tulips as the elements of contrast of colour.]

Bougainvillæa speciosa.—As this has so often been brought into notice of late, it may not be out of place to state that it flowered eight years ago at Alton Towers, under the management of Mr. Whitaker there. Whether this was the first time it flowered there or not I am not aware, but I should fancy not, as it was at the time of blooming a large plant. It was planted under a wooden trellis used for a foot-path, and trained on a rafter in a span-roofed stove, where it was fully exposed to a burning sun, and as close to the glass as possible. It received no check, as mentioned by Mr. Daniels, but I quite agree with that plan of treatment. I attribute its flowering to its constant exposure to a burning sun, as I well remember it did not blossom on shoots only a little less exposed. To those

quainted with this plant it cannot be too highly recommended, and few who have once seen it will be long without it; it is one of those rare gems which when once seen can never be forgot. *G. Ainsworth.*

Mr. Thomas Lobb.—Perhaps you are not aware that Mr. T. Lobb, the indefatigable collector, who has hazarded his life in traversing the wilds of Java, India, &c., in search of the beauties of nature, and introduced so many lovely things, has, since his return to this country, had the misfortune to lose one of his legs. He was seized with the typhus fever, which ultimately settled in his leg, and the doctors found it necessary to amputate it in order to save his life. Consequently he will never be able to undertake any more explorations. I therefore take the liberty to call the attention of all lovers of horticulture to the fact, in hopes that a subscription may be set on foot, in order that a fit testimonial may be presented to him for his past labours, and this I imagine could easily be effected, if every gardener and patron of horticulture in the kingdom would only subscribe 1s. each. There can be no doubt that the principal nurserymen and gardeners in or near large towns would willingly receive subscriptions from their neighbours for this laudable purpose, and convey the various sums to you or any other person you might think fit to appoint to receive them. If you will be so good as to bring the matter before the public, through your columns, you will oblige, *J. M., Truro, April* 22. P.S. I am very willing to subscribe 5s.

Heated Vine Borders.—Mr. Munro is mistaken in believing that from what was seen by me at Colney House "originated" the idea of heating the Vine borders here. It was my employer, the Marquess of Tweeddale, who first suggested the plan to me, and my mode of doing it was approved of by him, and carried out two years previously to my visit to Colney House. At the present moment I have not the slightest recollection of being shown any chambers where Vine roots were hanging 3 feet long. It must have been some other person. I cannot imagine that such an occurrence should so entirely escape my memory had it taken place. At all events the chambers at Colney House were not the originators of the chambers here. *Alex. Shearer, Yester.*

Aphides.—In your Number of March 2nd you recommended for the destruction of Aphides, a decoction of quassia wood and soft soap; you however did not give the proportions of the ingredients, but hinted that if the quantity of quassia was too large, the solution would be less efficient. My success has been so complete that I cannot resist the inclination to record in your columns the proportions I have found to be perfectly effectual; they are 1 oz. of quassia boiled for 10 minutes in one quart of water, then adding soft soap of the size of a small hen's egg; not the slightest injury resulted to the young leaves. *B. G., Sunning Hill, April* 24.

Foreign Correspondence.

Melbourne.—*New kind of Food.*—Two of the party of the Victorian expedition, who lost their horses, and were only rescued after a lapse of several weeks, saved their lives by learning from the aborigines how to pound up the seed vessels (sporangia) of the little Cryptogamic plant called *Marsilea hirsuta* by R. Brown, and bake them into bread; they also made a porridge of the same. Both kinds of food were considered by Dr. Beckler nutritious, by no means unwholesome, and free from any unpleasant taste. *Ferdinand Mueller.*

Societies.

Royal Horticultural, *April* 23 (*Floral Committee*). Rev. J. Dix in the chair.—From the Treasurer to the Society, W. Wilson Saunders, Esq., came some interesting plants, among which were Prenanthes pinnata and arborea from the Canary Islands, both graceful looking species, to the last of which a Label of Commendation was awarded; an ornamental kind of Asparagus from South Africa; and Erodium guttatum, a pretty little plant with cheerful dark-eyed mauve-coloured flowers. To the last a label of commendation was awarded. Mr. Bull, King's Road, Chelsea, again furnished a plant of the new Fern Pteris rubro-nervia, and along with it examples of P. tricolor and aspericaulis; from the same establishment also came Thrinax elegans, an ornamental small growing Palm from Central America; several variegated Begonias, the best of which was Comte Alfred de Limminghe, with leaves beautifully mottled and otherwise covered with silvery markings; a white variety of Erica mediterranea, found in Ireland by Mr. Moore, of Glasnevin, and a boxful of the variegated variety of Agathæa cœlestis, which, however, in this instance had nearly thrown off its variegated character and reassumed the original state. From Messrs. Lee, came some extremely pretty varieties of Ferns, to three of which, Lomaria cycadifolia, L. fluviatilis, and Polystichum vestitum venustum, were awarded first class certificates. From the same nursery also came Geraniums Imperial Prince and Scarlet Nosegay. Messrs. Veitch sent Adelaster Albivenius, a silvery-veined, ornamental leaved plant from South America; Erica Imperatrix, a pretty variety of the aristata breed; a Pultenæa called Gilesii, which was thought by some to be the same as Paxtoni, and a variegated-leaved Begonia; to the first of these (the Adelaster) was awarded a label of commendation. From Mr. Turner came beautiful collections of Azaleas, Pelargoniums, Cinerarias, and Auriculas, to which special certificates were awarded. The Azaleas consisted of Juliana, orange scarlet; Iveryana, white; Criterion, pink with pale edges; Murrayana, bright rosy pink; Perryana, glossy orange scarlet; delicata, white, occasionally striped with crimson; Petuniæflora, pink shaded with violet; and perfecta elegans, orange scarlet. Among the Pelargoniums, which were all prettily spotted varieties, the most conspicuous were Pescatore, Madame Pescatore, Impératrice Eugénie, and Parpaillot. Among the more striking of the Auriculas, of which there were some 80 sorts, all in the best possible condition, were Lightbody's Meteor Flag, violet purple self; Dickson's Duke of Cambridge, Chapman's Sophia, Hudson's Apollo, Fletcher's Mary Ann, Wild's Bright Phœbus, Fletcher's Ne Plus Ultra, Waterhouse's Conqueror of Europe, Campbell's Robert Burns, Hepworth's True Briton, Turner's Rev. Geo. Jeans, Smith's Waterloo, Maclean's Unique, and Barlow's Morning Star. The Cinerarias consisted of Brilliant, deep purplish crimson; Miss Marnock, Perfection, and Duchess of Sutherland, all white bordered with different shades of purple; Lady Seymour, white, broadly edged with violet; and Madame Parepa, crimson with small ring of white round a dark eye. From Mr. Turner also came some prettily bloomed Roses in pots, among which were Paul Ricaut, Aimée Vibert, Duchess of Norfolk, Gen. Jacqueminot, Baronne Prevost, and Jules Margottin. Mr. Turner likewise furnished some handsome seedling Cinerarias and Geraniums of the Scarlet class. Among the latter the best were Clara, a yellow and green variegated leaved kind of considerable promise; and Prince of Hesse, salmon pink with pale edges, to both of which were awarded labels of commendation; to Herald of Spring, cerise flushed with orange, a first class certificate was awarded: other kinds were Queen of Scarlets, a small, apparently very suitable kind for beds; Fairholmsland, white with horse-shoe foliage; and Garibaldi, a promising dwarf scarlet variety, with boldly marked reddish brown horse-shoed leaves. Messrs. Cutbush again contributed a handsome exhibition of Hyacinths, for which a special certificate was awarded, and a vote of thanks was given to Mr. Young, of Highgate, for a collection of Tulips. Last, but not least, was a glorious bunch of Bougainvillæa speciosa, fresh and beautiful, from Mr. Daniels, of Swyncombe House, near Henley-on-Thames; and along with it were shown Sir W. M'Arthur's dried specimens of this plant and of spectabilis (the Paris variety), described in our columns last week; to Mr. Daniels were voted, and deservedly, the thanks of the meeting for his magnificent example of speciosa, which as the dried specimens clearly showed to everybody present, is quite different from spectabilis.

Royal Botanic, *April* 24 (3d Spring Meeting).—Miscellaneous collections of plants were shown in good condition by Messrs. Fraser, Penny, Cross, and Young; and some finely flowered Azaleas by Mr. Todman of Clapham, Mr. Turner, Mr. Cross, and Messrs. Fraser. Plants remarkable for the beauty of their foliage were furnished by Mr. Bull, Messrs. Cutbush, and Mr. Young. Hyacinths were also shown by the two last named exhibitors, and Roses and Auriculas by Mr. Turner. Auriculas likewise came from Mr. James of Isleworth, and the Rev. Geo. Jeans, Alford, Lincolnshire. Mr. Young and Mr. Bull sent variegated Begonias; Mr. Williams, Lycaste Skinneri; and Messrs. Dobson, a collection of well grown Cinerarias. Cinerarias and Pelargoniums were also again shown by Mr. Turner; Pansies, both cut and in pots, by various exhibitors, and from Messrs. Dobson came a collection of herbaceous Calceolarias. Among new plants, the more remarkable were Goniopteris reptans, an elegant drooping West Indian Fern, and Athyrium Filix-fœmina, var. Frizelliæ, a singular and really handsome Fern, from Miss Clarkson; Rhododendron Madame Wagner, a pretty variety with white blossoms edged with rose, from Mr. Williams; Pteris rubro-nervia, an elegant and free growing Fern alluded to above, from Mr. Bull; also Erica mediterranea alba, from the same nurseryman. Pelargoniums Clara, Herald of Spring, and Prince of Hesse came from Mr. Turner; also Cineraria Miss Franklin, a free-flowering variety of large size and good properties. Cineraria Magnum Bonum, white with a dark centre, and tipped with blue, another large kind, came from Messrs. Smith; also Cineraria Enchantress, a cheerful looking kind, white, broadly margined with reddish purple. Cineraria Colleen Bawn was shown by Mr. Turner; though not perhaps first-rate in habit, it is a pretty variety, with lively looking blossoms, white with dark centre, and tipped with violet blue; also Cineraria Great Western, a showy deep purple self. Mr. Todman furnished Azalea Great Western, a large flowered rose coloured variety; Mr. Bull, Azalea President Claeys, a small flowered salmon-coloured sort with pale edges; and the green drooping-leaved variety of Dracæna fragrans, called latifolia. Messrs. Fraser sent Azalea Duchesse de Brabant, a very large rose-coloured semi-double variety; also Azalea Leopold I., salmon rose, and Erica regina, a light variety of the aristata class. Among other Cinerarias not mentioned above were Prima Donna, a rosy tipped sort, from Messrs. Smith; also C. Louise, white with rosy purple tips; C. Antagonist, a dark self; C. Sanspareil, purple with grey eye; C. Rosy Circle, with deep rosy crimson-tipped florets, white at the base, and with dark disk; C. Favourite, white, tipped with deep purplish rose; C. Lilacina, lilac-rose, with large dark eye; C. Mammoth, very large, white, tipped with rosy crimson; and C. Rubens, a rose coloured self—all from Messrs. Smith. Mr. Turner sent Cineraria Harbinger, rosy crimson, with grey eye; C. Lord of the Manor, with white petals heavily tipped with rosy crimson, and C. Reynold's Hole, a brilliant rosy crimson self.

From Mr. Turner also came Auricula Negress, a dark chocolate self, with some good properties, though rough; and Pelargonium Fairholmsland and Queen of Scarlets, both of which are mentioned in our report of the Royal Horticultural Society.

A list of prizes awarded on the occasion will be found in our advertising columns.

Garden Memoranda.

Preston Hall, near Maidstone, the seat of E. L. Betts, Esq.—At few places, even in Kent, are gardening operations carried on with greater success than they are here, under the skilful direction of Mr. Frost. That his Grapes are uniformly excellent is sufficiently proved by the number of first-class prizes which he takes for them at our London and other exhibitions of fruit, and, judging from present appearances, this season will be quite equal to its predecessors. Than the first and second early Vineries nothing could possibly be more satisfactory; the Vines in them have made excellent wood, and are bringing forward a crop which promises to be all that could be desired, and that too from spurs scarcely an inch in length, though the Vines themselves are fully 11 years of age; it will thus be seen that Mr. Frost follows strictly the close spur system of pruning. The borders in which these Vines are growing were well made in the first instance. The soil, which is good turfy loam, was well prepared by frequent turning and exposure to the air, and was stacked in a heap three or four months before it was used. It was then mixed with broken bones at the rate of a quarter of a cwt. to every load of sods; to these was added a fair proportion of oyster shells and old mortar rubbish, but no manure; the site of the border was excavated to the depth of 5 feet, but more than a foot of this was afterwards filled up with drainage material, on which was placed the compost. After the Vines had been struck and well established in pots they were shifted into baskets of open wicker work about a foot across. In these they were kept until they had filled the soil with roots, when they were transferred to the border in June, and planted—baskets and all—just as they had been growing. They were then treated exactly as if they had been intended to be forced for a crop till the end of September. In November they were cut well back. The first year they were permitted to carry a light crop, and they have been forced every season since. As regards temperature they are managed much in the usual way, and when the fruit is about half coloured, air is left on the house night and day. The borders receive a slight top-dressing of cow dung and other rich manure in autumn, and later in the season a covering of 2 feet in thickness of leaves is put on and is allowed to remain till the Grapes begin to colour, when it is removed a little at a time, so as not to too suddenly expose the surface to the action of the weather. Some additional covering was however applied last winter, which here as elsewhere was unusually severe.

The houses in which the Vines just mentioned grow form part of a long range of forcing houses constructed chiefly of galvanised iron; they have a light and neat appearance and are reported to answer perfectly every purpose for which they are intended. In addition to Vineries the range is divided into compartments devoted to Peaches, Figs, and Nectarines, in the growth of all of which Mr. Frost is equally successful as with Grapes. In the early and other Peach houses there is an excellent show of fruit; Figs are obtained from the back walls, and French Beans and Strawberries from shelves, beds, and borders. As regards Strawberries, we may mention that the pots, instead of being placed in saucers, are set on turves, into which the plants root through the bottoms of the pots, and thus derive an amount of nourishment which could not otherwise be obtained. That this is highly beneficial to them their luxuriant growth and the heavy crops they annually bear fully proves; the variety selected is Keens' Seedling, which Mr. Frost prefers to all others even for early work. In one house a stage has been erected for the special accommodation of plants in pots, among which were many fine specimens of Azaleas, and raised beds constructed in other houses in which there is warmth, supply early plants in flower for cutting from, and for the decoration of the conservatory, which being attached to the mansion has to be kept continually gay—in winter and early spring as well as in summer and autumn.

In addition to the houses already described there are two span-roofed plant houses—one a stove in which was a luxuriant Musa Cavendishi, which has recently produced a bunch of fruit 40 lbs. in weight; a Cucumber house and Pine pits, which annually yield some fine specimens of good cultivation. In the growth of Cucumbers for winter supply the following plan is

pursued. The seed is sown about the middle of August, and the young plants put out about four weeks afterwards, or about the middle of September. They are grown on trellises, to which they are carried up with a single stem about 3 feet in length, and are then trained over the whole roof of the pit. As they advance in growth great attention is paid to removing old leaves. The plants are certainly not stripped of foliage entirely; on the contrary, all young healthy leaves are retained, but such as are a fortnight or a month old are taken off; Mr. Frost always calculates upon having a fruit to each leaf when the plants are in full vigour, and he rarely fails in obtaining it. He stops at every joint when the plants begin to bear; but should a plant become weakly he allows it to run wild for a time and keeps the fruit removed until it is thought sufficient vigour has been infused into it to render it capable of bearing a crop. The compost used varies according to the season; in early and mid-winter one third peat (potting shed refuse in which Azaleas, &c., have been growing), is added to a similar quantity of leaf mould, and the rest consists of fibry loam, or perfectly rotten Couch Grass (which is better when it can be procured). Later in the season a soil consisting of three parts loam and one of dung from a spent Mushroom bed is employed. As Cucumbers are gross feeders guano water is given them freely and with the best results; and the better the drainage the more frequently they may be watered with it, especially in summer. During the dull months of winter the watering pot is used sparingly, its application being regulated according to the temperature, which in November, December, January, and February ranges from 60° to 65°. This, together with sufficient bottom heat, is considered by Mr. Frost quite high enough for the successful cultivation of Cucumbers in winter. During the dull months no water is kept in troughs, but a humid atmosphere is kept up when required by damping the paths and walls and occasionally the hot-water pipes. By following the mode of culture just indicated a good supply of Cucumbers is obtained the whole year round, and that at no great amount of trouble or expense.

The kitchen garden is entered from the lawn through handsome iron gates and palisading, and, to prevent a bare brick wall, which runs right and left on either side of the gates just adverted to, from presenting an unsightly front to the pleasure ground, it has been faced with a glass case in which are grown Peaches and Nectarines, Cherries, Plums, and other orchard house fruit. The width of this case is about 5 feet, and it is nearly 10 feet in height, but not heated. Another case of this description has likewise been put up elsewhere for Peaches and Nectarines, but this is warmed by means of hot-water pipes; its produce therefore comes in a little earlier than that of the cold case, which also furnishes ripe fruit before it can be obtained out of doors, and thus a good succession is kept up. These cases likewise prove excellent places in which to grow a few choice vegetables, so as to have them in use a little earlier than they could be had from the open ground.

In a fruit-room which has lately been built were some fine examples of Wellington Apple, still in an excellent state of preservation; also some Pears; but the latter have not been good this season. This fruit store, which is excellent in construction, is 36 feet in length, 14 feet in width, and some 8 feet in height to the ceiling; it is furnished in the centre with a set of shelves, four tiers high and 4 feet in width, and these are cut off from the side shelves by a concreted pathway. The walls are built hollow, and the windows and doors are double, and provided with shutters to keep the house dark. Under this arrangement an equable temperature can be maintained, and fruit is found to keep well. It is laid in layers on the bare shelves, which are made of open wooden lattice work.

Out of doors the severity of the winter has been felt here as elsewhere; but scarcely to the same extent as it has in some places; in short, few evidences of its ill-effects now remain. Within these last two years the appearance of the pleasure grounds generally has been greatly improved, and the green drives through the woods have been widened; the thickets of underwood by the sides of the latter have been removed, and ornamental Coniferous and other choice plants are to be substituted for them. In a few years, therefore, this already fine place may be expected to be still more attractive.

On the side of the garden furthest from the mansion is a Rose covered walk, forming a beautiful arcade some 200 feet in length, which, besides being very ornamental in summer, forms a cool retreat in bright weather. To the left of this is an orchard consisting of pyramidal Apple, Pear, and Plum trees, intermixed at convenient distance with bush fruits and Filbert and Cob Nut trees. The latter have clean stems a foot or so high, from the top of which the main branches radiate nearly horizontally. All suckers and strong wood are carefully removed every season, and especial attention is paid to keep the centres of the trees or rather bushes open. On this plan both Filberts and Cobs are grown extensively in Kent.

The lawn, we need scarcely say, is in excellent condition, and the flower garden in front of the house ready for planting; the latter overlooks a beautiful deer park in which are many fine specimens of timber trees, some of which are very old and of great size. The mansion stands on rising ground, and the view from it is varied and extensive.

Miscellaneous.

What influences our Climate.—I cannot omit directing the reader's attention to the influence which the far-distant barrier of Central America has upon the climate of Great Britain. Supposing yon narrow belt of land to be suddenly whelmed under the ocean, then instead of circuitously winding round the Gulf of Mexico, the heated waters of the equatorial current would naturally flow into the Pacific, and the Gulf-stream no longer exist. We should not only lose the benefit of its warm current, but cold polar streams, descending farther to the south, would take its place, and be ultimately driven by the westerly winds against our coasts. Our climate would then resemble that of Newfoundland, and our ports be blocked up during many months, by enormous masses of ice. Under these altered circumstances, England would no longer be the grand emporium of trade and industry, and would finally dwindle down from her imperial station to an insignificant dependency of some other country more favoured by Nature.—*Dr. Hartwig's "Sea and its Living Wonders."*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—All climbing or trained plants will now require attention in regard to thinning, training, stopping, &c. If the weather becomes very bright and warm, shading must be employed. Many New Holland plants will now be in bloom, and if fully exposed their beauty will be but of short duration. As regards stove plants thorough cleanliness, free ventilation, plenty of atmospheric moisture, and slight shading in very bright sunshine, are at present the chief requisites. No means should be neglected to encourage free growth at this period in Orchids, in order to get their pseudo-bulbs firm, well fed, and well ripened betimes. In mixed greenhouses fires may now be nearly or entirely dispensed with. If the weather is genial and accompanied with bright sunshine, heat sufficient for the night may be secured by shutting up early, not however soon enough to scorch. A general rule can scarcely be laid down in such cases to guide the inexperienced. On a sunny afternoon one-half of the air may be reduced at 3 o'clock, and the whole taken away at 4 o'clock. Continue the various points of cultivation previously recommended, remembering that now is the period for rapid growth and for applying all the encouragements accessary thereto.

FORCING DEPARTMENT.

Pineries.—Where the quality of the fruit is the first consideration, which it is or should be in every instance, care must be observed to have the soil about the roots in a rather dry state during the ripening period, and where it can be done without injuring the rest of the stock the atmosphere should be kept rather dry, admitting air more freely while the fruit is colouring; for there is no chance of fruit of first-class quality if the soil is very wet about the roots, and the atmosphere kept close and saturated with moisture during the ripening period. In the case of plants growing in pots the trouble of collecting and placing together those approaching ripeness, so as to be able to treat them properly, would be well repaid. Use fire-heat as sparingly as may consist with maintaining the proper degree of temperature. Be very careful to keep growing plants properly supplied with water at the root, and give plenty of manure water to those in vigorous growth.

Vineries.—Where Muscats are grown for a late crop the night temperature of the house must not be allowed to fall too low after the bunches begin to appear, and a temperature of from 65° to 70° must be maintained while the fruit is setting to ensure good sized, close bunches. Keep a sharp look out for red spider in houses where the fruit is colouring, and if this pest makes its appearance lose no time in coating the hot-water pipes with sulphur. It will soon be time to think of removing the litter from outside borders, but if it is found that the roots have crept up into it, which may probably be the case where the Vines were started early in the season, the decayed portion at the bottom should be left, and every caution used not to disturb the young roots. And if many roots are found at the surface it will be necessary, after removing the litter, to top-dress the border to prevent these getting dried up; a slight coat of turfy loam, leaf soil, and horse-droppings will answer very well for this purpose. See that the borders of houses where the fruit is swelling are not allowed to get too dry.

Melons.—Maintain a rather close, moist, warm temperature to plants recently planted out until they get into full growth, but avoid inducing a gross habit of growth by too much moisture and warmth after the roots fairly get hold of the soil, for it is generally somewhat difficult to secure a crop from wood of this sort. Give air as freely as the state of the weather will admit, in order to secure firm short-jointed wood, and where the crop is setting, as the young fruit is very apt to damp off unless the atmosphere is kept moderately dry. Endeavour to secure a steady bottom-heat of about 75° or 80° for plants in all stages, and keep the soil in a proper state as to moisture; having to water while the crop is setting, by soaking the soil before the principal blossoms begi expand.

FLOWER GARDEN AND SHRUBBERIES.

Endeavour to harden bedding plants as much as sible preparatory to their being planted out. may be done as to display by a judicious arrange or combination of both colour and form. As a principle, our best authorities seem to agree the various shades of orange and yellows will class w the various purples and blues; whites are suitable the blues, oranges, and reds; whites however de the effect of the yellows as also the violet shades, the various red or rose-coloured flowers are, as colour is concerned, capable of forming a bed by selves. Every individual bed of a flower garden should in our opinion, be complete in itself, both as to colour and outline. Sow the more useful and kinds of hardy annuals about shrubbery and borders, or wherever room can be found for

HARDY FRUIT AND KITCHEN GARDEN.

Let a sowing of Endive now be made; Dutch Turnips on a cool border. Let full crops of Beans be planted forthwith, and a row of Marrow Peas or the British Queen. The ro be prepared after the way of a Celery drill, manure completely saturated with moisture Radishes and small salad.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON

For the Week ending April 25, 1861, as observed at the Horticultural

April.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth. 1 foot deep.	Of the Earth. 2 feet deep.
Friday 19	9	30.170	30.146	55	29	42.0	50	46
Satur. 20	10	30.230	30.036	54	20	37.0	50	46
Sunday 21	11	29.909	29.822	56	24	40.0	48	46½
Mon. 22	12	29.887	29.772	56	39	47.5	46½	46
Tues. 23	13	29.854	29.815	55	25	40.0	46½	45
Wed. 24	○	29.919	29.982	64	40	52.0	48	46
Thurs. 25	15	30.001	29.981	66	30	48.0	48	46
Average..		29.995	29.936	58.0	29.5	43.8	48.1	45.3

April 19—Uniformly overcast; light clouds; fine but cold, slig
— 20—Fine; cold wind and hot sun; sharp frost at night.
— 21—Frosty; sunshine, with slight haze; cold air; frost
— 22—Low dusky-white clouds; cloudy; overcast; shower
— 23—Uniform haze; cloudy; very clear; frosty; rain.
— 24—Overcast; fine; clear at night.
— 29—Fine; cloudy and fine; clear; slight frost.

Mean temperature of the week, 3¾ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK

During the last 35 years, for the ensuing Week ending May 4, 18

April and May.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds
Sunday 28..	60.0	36.2	48.1	14	0.64 in.	[illegible]
Mon. 29..	61.0	38.3	49.6	12	0.75	[illegible]
Tues. 30..	61.3	40.2	50.2	14	0.31	[illegible]
Wed. 1..	61.0	39.9	50.4	12	0.51	[illegible]
Thurs. 2..	62.4	39.4	50.9	12	0.72	[illegible]
Friday 3..	61.6	40.1	50.8	16	0.58	[illegible]
Satur. 4	61.9	38.1	50.0	11	0.70	[illegible]

The highest temperature during the above period occurred on the 3rd, 1840, and 4th, 1833—therm. 81 deg.; and the lowest on the 2d, therm. 20 deg.

Notices to Correspondents.

Broccoli: *Inquirer.* It is impracticable to save two kinds of Cabbage, for example Broccoli and Savoy, within a yard of each other. One inevitably spoils the other, and no art can prevent it. **You must not allow more than one to** flower.

Cotton Waste: *J H* informs us that his Vine-borders contain Cotton-waste, but rotten wood; and that they were always healthy until their roots reached the which was put in for drainage. He adds that the wood has now been removed, and the border made on sound principles.

Cucumbers: *M S.* Persevere in the use of sulphur, mildew will ultimately disappear; it should be applied the plants are in a wet state, or it will not adhere su long to be effectual.‡

Diseased Vine: *E P.* Look to the roots. There is some the matter there.

Emigration: *J M F.* We know nothing of an opening gentleman's gardener in Vancouver. An industrious hardworking gardener, acting on his own account, on well no doubt. Labour is very high, especially and if he took out a wife she would find plenty of ployment as a help. The climate is that of Cornw island lies in latitude 49°-50° N., and in longitude Living is dear, lodging dearer, but wages extravagant As to cost of getting there and the way to do it you apply to the shipping agents at Liverpool. We undertake the duty of making such inquiries.

Grafting Wax: *Excelsior.* The following will possibly your purpose:—If several stocks are to be graft 27 oz. of common yellow rosin; melt it gradually to drive off the turpentine. When reduced to the ence of a syrup add 10 oz. of alcohol, shake them together, and pour the mixture at once into a we bottle. When the graft is inserted and tied with cover the surface of the latter well with this varnish painter's brush. Further information on this sub be found in our volume for 1860.‡

Laurels: *Sub.* These may be cut back now.

Names of Plants: *F S.* As you have sent only a flower without leaves your question cannot be answered looks like T. manicata.—*Orchid.* Cyrtochilum macul *A M B.* Oncidium longipes, and Cattleya Harr *Constant Reader.* Double Spiræa prunifolia.— Perilla nankinensis comes from Nankin. Nobody now the origin of Garden Pelargoniums. That which about has no doubt some of the blood of P. zonale proposed labels are quite sufficient; we agree with plant-labels should not resemble gravestones, and who wish to know about orders, suborders, &c. consult books.

Scythes: *Blue Apron.* Good scythes, that is to say quality, may be had of any respectable ironmonger a fair price. But for convenience of use and adjustment none are equal to Otway's, as sold by Key. They might be called mechanical scythes, so and perfect is the contrivance for fitting them to hand.

Taxodium sempervirens: *H W C.* This may be struck cuttings in a little bottom-heat.

ARTIFICIAL MANURES, &c. — Manufacturers and others engaged in making ARTIFICIAL MANURES may obtain every necessary instruction for their economical and efficient preparation, by applying to J. C. Nesbit, F.G.S., &c., Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, Coprolites, &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch.

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LAWES'S PATENT TURNIP MANURE, and BONE SUPERPHOSPHATE OF LIME	£6	6
LAWES'S SUPERPHOSPHATE OF LIME from BURNT BONE or MINERAL PHOSPHATES ..	5	5
LAWES'S BARLEY, GRASS, and MANGEL MANURES	8	0

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They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate to be obtained entirely from Bones.

The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE of SODA, SULPHATE of AMMONIA, and every Manure of value.
116, Fenchurch Street, E.C. Edw. Purser, Secretary.

TAN Gratis, in the immediate neighbourhood of Covent Garden Market.
Apply to Essex & Sons, Stanhope Street, Clare Market, W C

New Farm Seeds, Carriage Free.

JOHN BELL'S PRICED LIST of FARM SEEDS, including MANGELS, TURNIPS, CARROTS, CABBAGES, KOHL RABI, and GRASS SEEDS for permanent pasture, &c., is now Ready, and will be sent post free to any address on application at the
Seed Warehouse, 10 & 11, Exchange Street, Norwich.

Dioscorea Batatas (Chinese Yam).

MESSRS. CUTBUSH and SON can supply any quantity of Whole Tubers of this excellent esculent, at 2s. per dozen. Cut Sets for planting, 5s. per 100.
Highgate Nurseries, London, N.

Dioscorea Batatas.

J. IVERY and SON have a quantity of this useful esculent, which they are now offering in Cut Sets, at 1s. per dozen, or 8s per 100; also small Whole Tubers, at 2s. 6d. and 4s. per dozen.
Dorking Nursery, April 27.

Dioscorea Batatas, or Chinese Yam.

GEO. WHEELER is ready to supply Whole Tubers, 2s. to 2s. 6d. per dozen; Cut Sets, 5s. per 100, or 40s. per 1000.
RHODODENDRONS, good and strong, from 30s. to 100s. p. 100.
AZALEAS, good and strong, from 60s. to 100s. per 100.
ANDROMEDAS, SEDUMS, VACCINIUMS, &c., 60s. to 80s. per 100.
Nursery, Warminster, Wilts.

Spergula Pilifera Seed.
Wholesale and Retail.

SUTTON and SONS can supply Seed saved by Mr. Summers at the Crystal Palace Nursery, at moderate prices, wholesale or retail.
Royal Berkshire Seed Establishment, Reading.

Improvement of Grass Lands
By Sowing Good Seeds of the Most Suitable Kinds.

SUTTON'S RENOVATING GRASS SEEDS SHOULD NOW BE SOWN.
These Seeds consist of Perennial Clovers and Fine Grasses for improving the bottom. Price 9d. per lb., or 80s. per cwt. 8 or 12 lbs. per acre will be sufficient, and will produce a great increase in the produce.
Sutton & Sons, Royal Berkshire Seed Establishment, Reading.

Short Grasses for Lawns.

SUTTON'S FINE LAWN GRASS SEEDS, for MAKING NEW or IMPROVING OLD GARDEN LAWNS. Price 1s. per lb., 2s. 6d. per gallon, or 18s. p. bushel.

The following is an extract of a letter received from Prof. Lindley.

"Messrs. Sutton,—We have already made trial of your Lawn Grass Seeds, and it is but justice to say they have proved the best we have sown for many years.
(Signed) "John Lindley."
"Horticultural Society, 21, Regent St., London, Nov. 9, 1853."

Extracts from Letters recently received.

From Mrs. Edwards, *Rhyd y Gois, Caermarthen.*
"The Lawn Grass Seed you sent last year turned out beautifully."

From Wm. Symonds, Esq., 6, *Belfield Terrace, Weymouth.*
"The Lawn Grass Seed I received from you answered admirably."

From Sir Glynne Welby, *Denton Hall, Grantham.*
"The Lawn Seed with which you supplied me last year answered perfectly."

From the Rev. F. Kitson, *Hemyock Rectory, Wellington.*
"The fine Grass Seed for Lawns which Messrs. Sutton sent in the spring has given great satisfaction."

From Capt. Gape, *Portardulais, Llanelly.*
"Capt. G. will be obliged by Messrs. Sutton sending him more of the same Lawn Grass Seed as they sent him before, which was very good indeed."

Sutton & Sons also supply Grass Seeds for Permanent Pasture, mixed expressly to suit the Soil, which are never known to fail. Price 26s. to 32s. per acre.
Sutton & Sons, Royal Berkshire Seed Establishment, Reading.

Garden and Field Seeds.

H. and F. SHARPE beg to offer to the Trade at very moderate prices, the undernamed varieties of SEEDS of their own selected stocks, and such as they can confidently recommend:—

Peas in variety	Turnips in sorts
Beans "	Mangel Wurzel do.
Curled Cress	Carrots do.
Turnip Radish	Drumhead Cabbage
Early Cabbage in sorts	Kohl Rabi
White and Red Celery	Thousand-head Cabbage
Blood Red Beet	Fine Rapeseed

Prices of the above may be had on application.
Seed Growing Establishment, Wisbech.

SEA-KALE SETS, at 8s. per 1000.—A large quantity of fine, strong, healthy Sea-Kale sets for sale; the same kind which are always grown by market-gardeners round London, and far superior to seed for making fine large crowns for forcing the ensuing winter.
To be had of William Bagley, Munster Farm, Fulham.

COLLEGE of AGRICULTURE and CHEMISTRY, and of PRACTICAL and GENERAL SCIENCE, 37 and 38, Lower Kennington Lane, Kennington, London, S.
Principal—J. C. Nesbit, F.G.S., F.C.S., &c.

The system of studies pursued in the College comprises every branch requisite to prepare youth for the pursuits of Agriculture, Engineering, Mining, Manufactures, and the Arts; for the Naval and Military Services, and for the Universities.

Analyses and Assays of every description are promptly and accurately executed at the College. The terms and other particulars may be had on application to the Principal.

Farm Buildings.

LOANS may be obtained under the General Land Drainage and Improvement Company's Act for the full amount required by the Owners of settled Estates, Incumbents, Trustees, Bodies Corporate, &c., for the erection of Farm Houses, Farm Buildings, and Labourers' Cottages designed by their own Agents and sanctioned by the Inclosure Commissioners.

The loans are repaid by a Rent Charge on the estate for any term the Landowner may fix, not exceeding 31 years.

No investigation of title being required or notices given to Reversioners or Mortgagees, no legal expenses are incurred.

The Company furnish designs of every description, and undertake the entire responsibility of the works wherever desired by Landowners.

No profit whatever is taken by the Company on any works they execute, the actual expenditure only approved by the Inclosure Commissioners, with a commission thereon, being charged in all cases.

Applications to be addressed to William Clifford, the Secretary, at the Offices of the Company, 52, Parliament Street, London, S.W.

THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
To Landowners, the Clergy, Estate Agents, Surveyors, &c. in England and Wales and in Scotland.

The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.

For further information, and for forms of application, apply to the Honourable William Napier, Managing Director, 2, Old Palace Yard, Westminster, S.W.

ROYAL AGRICULTURAL SOCIETY of IRELAND. — The ANNUAL NATIONAL CATTLE SHOW of the Royal Agricultural Society of Ireland will be held at BELFAST on AUGUST 7, 8, and 9, when Money Prizes, Challenge Cups, and Medals will be competed for in the various classes of Horned Cattle, Sheep, Swine, Horses, Poultry, Flax, and Agricultural Implements.

Prize Lists and information can be obtained at the Secretary's Office, 42, Upper Sackville Street, Dublin, or from the Local Secretary, G. Gerald Bingham, Esq., Castle Chambers, Belfast.

Non-Subscribers to the Society can enter Stock on paying the usual fees. By Order,
42, Upper Sackville Street. J. B. Thornhill, Sec.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.
LEEDS MEETING, July 15th, 16th, 17th, 18th, and 19th.
ENTRIES of Implements, Wool, Flax, Cheese, and Butter close on the 1st of May, and Live Stock on the 1st of June.
Prize Sheets and Forms for Entries may be had on application to H. Hall Dare, Secretary.
12, Hanover Square, London, W.

TENANT FARMERS' MANURE COMPANY.

ODAMS'S BLOOD MANURE FOR CORN, | ODAMS'S BLOOD MANURE FOR ROOTS,
ODAMS'S SUPERPHOSPHATE OF LIME,

MANUFACTURED BY THE PATENT

NITRO-PHOSPHATE OR BLOOD MANURE COMPANY
(LIMITED),

Consisting of TENANT FARMERS, occupying upwards of 30,000 Acres of Land.

Chairman—Jonas Webb, Esq., Babraham, Cambridgeshire.

All particulars may be had on application at the Offices. C. T. MACADAM, Secretary.

OFFICES: 109, FENCHURCH STREET. MANUFACTORY: PLAISTOW MARSHES, ESSEX.

The Agricultural Gazette.

SATURDAY, APRIL 27, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

Wednesday, May	1	Agri. Society of England .. .. Noon
Saturday, —	4	Newcastle Farmers' Club.
Monday, —	6	Central Farmers' Club .. .. 6 p.m. (Mr. Owen Wallis on the Supply of Animal Food from Grazing Grounds.)
Tuesday, —	7	Wirral (Local Agriculture). Penrith.

Professor Simonds' lecture on the Rot of Sheep reported in another page is one of the most useful and interesting of the many that have been given in the rooms of the Agricultural Society. It would have been a valuable contribution to the pages of the Journal; but the Council have been well advised in directing its immediate publication. The Society does more good, and that is the purpose of its existence; and it gains more in public estimation by this immediate distribution of the valuable information thus laid before it. Those responsible for the contents of the Journal might wish that a treatise—for so the lecture may be called—so full of original research and characterised by such good sense, should be retained for its pages: this, however, though it might be an argument for the more frequent publication of the Journal and Transactions of the Society, could be no justification of the postponement of publication till August or September, when the next instalment of the Journal under existing arrangements may be expected.

Professor Simonds' recommendations in order to the prevention of the rot want to be known all through the summer: if delayed till September and October, the mischief to which they refer may have been completed and be without remedy. It is well that whatever is known of the causes and remedies for so fatal a disorder be published widely and at once. This accordingly has now been done, and to the report of last week and this we add the following *resumé* of the subsequent discussion:—

Mr. Askell, of Swindon, could confirm the statement of the lecturer with regard to the value of salt as a preventive or remedial agent, from his own experience. Last season, which was a wet one, he gave his sheep salt through the summer, and the result was a successful lambing, very few having been lost. He was desirous of knowing, and the lecturer had answered the question, whether stimulants would not be likely to save a flock in that condition. A veterinary surgeon, a neighbour of his, had recommended sulphate of iron in the food as likely to bring about a healthy state of the liver. Drenching of sheep of course, could not be carried on to any considerable extent; the medicine employed should be chiefly given in food; and last year he bought some advertised cattle food as a medium for the administration of physic. It would, he thought, be well if something authoritative in the way of a proper cattle food could be put forth for the benefit of the farmer. He gave

in the food which he purchased some sulphur and saltpetre, which the animals took, and after that period he lost but few of them.

M. De la Trehonnais said that in one of his articles on English agriculture published abroad he had stated that the last season was a very wet one, and that many sheep had been affected with rot. He afterwards received a letter from a person not known to him, stating that a veterinary surgeon in his neighbourhood had discovered an unfailing remedy for that awful disease, and would come to England, bring his medicine with him, go into the districts most affected, and undertake, at his own risk, to cure the sheep, claiming no remuneration if he did not meet with success. Thinking that in the presence of such an evil no suggestion ought to be despised, and knowing that the greatest discoveries of science had often sprung from very humble sources, he wrote to Professor Simonds, sending the whole correspondence, and undertaking to furnish him with a certain quantity of the medicine with which to make experiments. He believed that the Professor, under the authority of the Society, had purchased some sheep, with a view of instituting the experiments, which he hoped would prove the value or the worthlessness of the medicine.

Mr Fisher Hobbs had heard Professor Simonds many times since he had been the Veterinary Professor of the Society, but had never listened to a lecture of such value as the one just delivered. He had no doubt it would prove of the greatest importance to the farmers of England. He knew of no man to whom the farmers of England were more indebted.

In answer to Mr [illegible], Professor Simonds said that the [illegible] in sheep, and that there is no difference between them [illegible] as found in the goat, [illegible]. The reason why oxen do not suffer to the same extent as sheep is that they do not bite so close; they feed on taller Grasses, and are, therefore, not likely to take in so many of the entozoa. Besides that, it is to be remembered that they are animals of a stronger constitution. Suppose a hundred of these creatures in the biliary ducts of a sheep were sufficient to produce a broken-up state of the constitution, the same number put into the system of an ox, though not positively without injury, would not be sufficient to emaciate an animal of so strong a constitution. And it is to be remembered, that if oxen do fall, as they will in some few instances, perhaps in [illegible], as in the western parts of England at the present moment, they are generally young animals that are affected. A vote of thanks to Professor Simonds was unanimously adopted, together with a resolution that the Secretary be requested to take such steps as should insure the immediate publication of the lecture.

Turnip seeds are, as already stated, largely adulterated. What, then, is the general nature of the materials mixed with them?

1st. Old seeds are mixed with new.

2d. Charlock, Indian, and other Rape seeds are also mixed with them.

1st. The crops of seeds vary so much in produce per acre one season as compared with another, that most years there is a superabundance of some kinds and a scarcity of others.

Now as most seeds are of comparatively little use except for sowing, the surplus stock can only be disposed of at extremely low prices. Accordingly some wholesale seedsmen buy large quantities in the "glut season," as it is termed, and store them until the same articles fail in crop. For instance Swede, and Turnip seeds, 1857 crop, could be bought everywhere at from 15*s.* to 20*s.* per bushel, but owing to the destruction of the roots in the winter of 1859, seedsmen in 1860 had to pay the growers 50*s.* a bushel. Now in 1860 there were wholesale houses selling those seeds which they had by them for the same price. Such people can, it is true, warrant their seeds to be genuine, but as they well know how much Turnip seeds deteriorate by keeping, the mixing of this with good seed is still a species of adulteration, and if not mixed at all, we can then only say that the evil is only so much the greater.

2d. Even the above *genuine seeds* (?) are not unfrequently mixed, and we may now examine the nature of these mixtures. Charlock and Indian Rape are all prepared for this purpose, that is to say, they are rendered incapable of germinating before mixture—"Dead men tell no tales." Now rubbish so prepared is well known in the *Trade* as 000 seed. Under this denomination all seedsmen know it, and it can be procured at about 7*s.* per bushel.

With respect to this 000 seed, we direct attention to the copy of a letter in Sutton's Spring Catalogue for 1861.

"No —, ——— Street, Southampton, April 27, 1860.

"Messrs. Sutton & Sons.

"Gentlemen,—Being in possession of a new and improved method of killing seeds without the use of any chemicals, so that the seed when in an 000 state has not that unpleasant smell it has when killed by the old method and does not look perished [illegible]. A man by the new process may kill 10 or 12 quarters per day, and the apparatus is so constructed that it is impossible for a single seed to [illegible], and one great advantage is, that if you want [illegible] you may kill a sack of Rape or Turnip, or any seed, and have it fit for use in an hour. Seed in the process of killing increases in measure and weight, and when you send it out to be killed, of course the seed killers keep the extra weight and measure. If you think it worth your attention I will send you a small working model so that you may kill a few pounds of Kale for Cauliflower, or any small seeds, in a few minutes, and instructions for making a large one on receipt of a post office order for 2*l.*—Yours truly ———."

To this the Messrs. Sutton append the following remarks:—

"The writer of the above also being unknown to us, we had the curiosity to call at the address given, and ascertained that it was no 'hoax,' but was assured by the 'Inventor' that he had supplied several seedsmen with the apparatus, and that he was *formerly* in the seed trade himself. We may add that we have since heard from the same individual at another seaport town to which he has removed."

Having got possession of this circular, and being desirous of becoming acquainted with so notable an invention, we lost no time in setting on foot a negotiation for the possession of the secret, and having traced the inventor in his removal from Southampton to Gosport, we there had letters addressed to him upon the subject, and if promises had been of any avail we might possibly at this time have been in possession of a very improved and expeditious method of making 000 seeds, only that we have learned the undesirable nature of pay beforehand.

Our next inquiry was for a sample of "000" seed itself; but although it is well known in the trade, we have hitherto failed in procuring it. We hoped our seedsmen might be able to procure some through some of their friends. The result was that we made application to a most respectable London firm, receiving the following reply:—

"London, Feb. 27, 1861.

[illegible] We [illegible] however apply to some of our friends here to let us have a small quantity, but doubt if they will let us have it, as it is a matter they are rather shy respecting, and *although generally well known and understood in the trade, they do not care to have it* [illegible] 'What do we want it for?' We [illegible]."

The sentence we have placed in italics will be sufficient to show how well the matter of 000 seed is understood in the Trade, and how easy it is to get bushels of it, no questions being asked; while a small quantity required only for investigation may be refused.

It appears then that machinery exists by which any one in the seed trade may quietly and easily commit enormous frauds. And it is plain that the very notoriety of this machinery, together with the condition of many of the samples of seed which we have examined, proves that this machinery actually is employed by many seedsmen to the great injury of their customers. We cannot then be doing wrong in urging every one to make trial of the seeds he is about to buy before he sows them or even before he purchases them. Where the experience of a number of years already exists, the character of a seedsman is guarantee for his goods, and experience of this kind is indeed a more perfect carrying out of the system of preliminary trial or experiment which we recommend, especially to all new customers.

A foolish notion has been very prevalent in the country that there is a material difference in the growth of the Beans of last year from that of ordinary seasons, consisting in the supposed fact that the Beans hang down in the pod instead of being erect. A similar notion was prevalent in 1845, the year in which the Potato murrain was first observed in this country, and an inference is therefore made, that as this change ushered in the advent of the Potato murrain, it is now indicative of its final departure. It is difficult to conceive how such a notion should arise, though in the present state of imperfect education it is easy to imagine the possibility of its spreading like other equally ungrounded reports. Even supposing the fact to be as stated, its connection with the arrival or departure of the Potato disease is a mere piece of superstition, eagerly swallowed by those who are not accustomed to examine the necessary dependence of cause and effect. It is scarcely necessary to say that an examination of the Beans of 1859 and 1860 shows that the difference is quite imaginary. In every case the seeds hang down in the pods; and in every case the suture of the pods to which the seeds are attached is directed towards the axis, whether general or partial, though according to their position the suture is sometimes to the right of the observer, sometimes to the left.

As some of those who insisted upon the difference appealed to the position of the suture, we were the more inclined to examine the matter minutely, as we found several instances last year in which more than one pod was produced from a single flower in Kidney Beans. It was possible therefore, supposing three pods to have been produced, in one of which the suture would be directed away from the axis, that on the suppression of the other two, one might have remained with an abnormal direction of the suture. We have, however, in vain looked for such a case, and our informants, though confident in their ignorance, have not been able to point out the difference of which they talk. The subject would indeed be scarcely worth mentioning did it not extend from Scotland to the South of England, and were it not a good instance to warn cultivators, before they adopt general current notions, to examine the matter with their own eyes. In every age disputes have been prevalent about matters which are founded altogether upon false data. Before disputing about anything, it is always best to put the supposed fact to trial, and when proved to be true, it is quite time to consider the reasons which produce it, or the consequent results.

We may add, in conclusion, as something practical on the subject of Beans, that great benefit was derived during the late wet harvest from placing layers of faggots or of long Blackthorn drawers between the layers of Beans. We do not know whether this practice has been at all general, but there is no comparison between the condition of Beans so treated when threshed out, and of those from stacks or hovels in which no such precaution had been taken. *M. J. B.*

With reference to the observations made by Mr. John Matthews last week, on a leader which appeared a short time since respecting the late trial of Banneeman v. White and Others, it may be observed that it was assumed that Hop-growers used the best flowers of sulphur. We believe that on that assumption what we stated was true. If inferior sulphur is used the results may undoubtedly be injurious. Pure ground sulphur, not sublimed, is perfectly useless, but it was not pretended that pure sublimed sulphur did not answer the purposes of the Hop-grower, much less that it would eventually answer to use black sulphur, which might contain many impurities. Nothing but sublimed sulphur was used by Dr. Plomley and Mr. Prentice in the early experiments which proved so successful and remunerative, and it was these that we had especially in view. We are convinced that no sulphuretted hydrogen would have been given off by their Hops.

We never asserted that black brimstone would fly away when submitted to heat without scorching the paper. What we did assert was, that sublimed sulphur, commonly called flowers of sulphur, would do so, always supposing it to be pure, and we have still the paper by us free from strain on which we made our experiment before we ventured to hazard any assertion on the subject. *M. J. B.*

—— We learn with satisfaction that H. M. the Queen of Spain, in order to testify her sense of the value of the services rendered by Mons. F. R. De la Trehonnais in the improvement of agriculture on the Continent, by the publication of what has been done in England, by urging with a due regard to local circumstances the principles of British agriculture, and by the introduction of English breeds of cattle and modern agricultural implements wherever they are applicable, has conferred upon him the honour of the Knighthood of the Royal and distinguished Order of [illegible].

Mons. Trehonnais, long resident in England, has spared no effort [illegible] for many years past in making [illegible] the wants and the successes of French agriculture, and so encouraging profitable and [illegible] intercourse between the agriculturists of the two countries. In an eminently English [illegible], Mons. Trehonnais' services have been of great value to English agriculturists, as his speeches at our agricultural meetings and his papers in our agricultural journals testify, and we are therefore glad to hear of the distinction which he has just achieved.

THE AGRICULTURAL LABOURER.

No. VII. [illegible].—In giving a brief account of the agricultural labourer of this county we notice first that he is a householder, cottages being provided on every farm. The general rule is a cottage for every ploughman required, and on farms of considerable size an extra house or two for spademan and shepherd. In some cases the extra cottage is given to a cottar who is occasionally, if not regularly employed on the farm, and whose family furnish an additional supply of extra labourers—the widow and her family, as a cottar, of field labour, is a great consideration. Where there is a deficiency of houses, a young man or two are sometimes boarded in the kitchen of the farmhouse, and accommodated in a bed usually erected in the stable; or again a family is selected which can furnish two ploughmen, and this is termed a double-hinding. Bothies for the accommodation of the regular farm servant are unknown, though not unfrequently strangers, taken on for a month or two in summer, are thus lodged: the practice of this county [illegible] system, is certainly not a necessity even if the expense of the erection of cottages could be faced. We have no doubt that even in this county more cottages might with great advantage be added to many farms, though

in this respect it is amongst the best provided. More legitimate cause of complaint is however to be found in the character and class of accommodation that these cottages afford. We are glad to say that for years back decidedly more just and liberal ideas have been entertained and acted on in their erection; but though the tendency is certainly towards improvement, it cannot be denied that a large proportion of them do not afford the accommodation requisite for the comforts and common decencies of life. There may be said to be three classes of cottages in the county. First, the old thatched one apartment cottage; second, and an improvement on it, the cottage with its one apartment enlarged, and a garret above with a good boarded floor; and third, the more modern and exceptional cottage of two apartments, and frequently a good closet or pantry, with garret accommodation as well. The first and oldest style is gradually disappearing, the second may be stated to be in most general use, and the third we would fondly hope will prove the standard in time coming. The cottage of one apartment cannot be too strongly condemned, and though the addition of a good loft or garret is a vast improvement to it, even then the accommodation is so limited as to hinder the observances of propriety, especially where there is a grown up family of sons and daughters. Such housing and such sleeping accommodation is undeniably subversive of morality, and though on this subject we feel that we can do little but echo what has often been said, yet attention cannot be too earnestly called to this wrong done to the labouring classes, and which they are powerless themselves to remedy. Probably some of our modern cottages have been carried to an opposite extreme, supplying more rooms and apartments than the hind can furnish and his income keep up; but when houses of this class are built the difficulty is in part obviated by furnishing one or more of the rooms with fixed bedsteads, &c. This error, however, is on the right side, and so seldom committed that we need not dwell upon it. Our agricultural labourers are doubtless housed in a manner below their requirements; but though attention is at present specially and justly directed to them, we think the platform of the question is in reality much broader, extending to the whole of our country's labouring population. Are our town mechanics and factory workers any better off in this respect? We should think not. They certainly as a rule occupy no larger houses, and have all the inconveniences of a street dwelling over and above. There can be no comparison between the healthiness and comfort of a cottage in the country, and of a room or even two rooms in a flat of a house in the town.

We notice next the wages of the farm servant, which are mostly paid in produce. An average wage and valuation at current market prices may be stated as follows:—

In money	4*l.* 0*s.* 0*d.* or sometimes 5*l.*		
60 bushels of Oats, equal to at least 100 stones Oatmeal, at 2*s.* 2*d.* ..	10	16	8
18 bushels of Barley, at 4*s.* 6*d.* ..	4	1	0
6 bushels of Peas or Beans, at 5*s.* ..	1	10	0
One month's meat in harvest ..	1	0	0
Keep of a cow	6	0	0
1800 yards of Potato land (drill) ..	5	0	0
House rent free	2	0	0
	£34	7	8

The proportion of the different kinds of grain given may vary a little, some giving more Barley and Beans and fewer Oats. Prices are high at present and make the wage rather more than 13*s.* per week; subject however to an obligation of boarding a worker for the farm. Properly speaking the Potato land and house rent are put against this—so that this reduces the hind's wage by 2*s.* or 3*s.* per week.

The hind pays for what coals he requires, but gets them driven for him. This wage is a standing one, and runs on summer and winter, without deduction on account of weather or illness. The cow if well kept and her produce well managed, is generally worth much more to a family than 6*l.*, which is stated as the cost of the cow's keep. Her value to them may be often nearer double that sum. The same may be said of the right to grow Potatoes, the produce of which may be 30 bags; invaluable to a labouring man's family, and a portion going to feed his pig. Each cottage has its garden attached. The spade hind or day labourer is generally paid in money, about the rate of 12*s.* a week. Foremen or stewards receive considerably higher wage, with free house and a portion of Potato land. Shepherds' wages are also higher, being allowed the keep of so many sheep, or when paid in money they receive about 20*l.* in addition to farm produce. In the pastoral districts of the county the shepherds are allowed the keep of from 30 to 40 sheep, which pasture along with their masters', as also a proportion of farm produce. For some years back their income may have ranged from 40*l.* to 45*l.*, and even 50*l.*; varying of course with the value of the produce they have to sell. Though their income seems large in proportion to other classes of farm servants, it must be remembered that a shepherd requires a capital of not less than 50*l.* or 60*l.* to lay on his stock.

Till of late years, each householder was required to furnish a shearer in harvest, which stood for the rent of his house; but this is now given up and the houses are rent free. Each cottager is bound to keep a worker, summer and winter, for whom he is paid 1*s.* in summer and 10*d.* in winter, and in harvest he receives the current harvest wage for the worker. The wages paid by him to this worker are now very high, as much as 7*l.* in the half-year; so that it takes nearly all he receives for the worker's earnings to pay this high wage. This worker is termed a bondager, and it is but just to say that great complaints are made by those who are bound to keep them, of the hardship of the system. It has also been held up to public reprobation by writers and speakers on the subject, being sometimes classed in the same category of grievances as the Bothy system, and visited with like condemnation. In this case, as in many others, however, it is much easier to point out a grievance than to suggest or provide a remedy for it. No other feasible plan has been proposed whereby to provide field workers in rural districts. In the neighbourhood of towns and villages the case is quite different, as a large supply of labour can be drawn from them; but comparatively few of our farms have this advantage. Were the arrangement of bondagers (which, by the bye, is quite as ugly a name as it deserves) abolished, we must fall at once and largely into the Bothy system as a means of augmenting the supply of labourers obtainable from amongst the families on the farm.

It is easy to say that farmers should look out for and engage only those servants who can furnish workers from their own families; but what becomes of the newly married, or of those with a family of young children? It is impossible that all our farms can be supplied with families of the former class just always at the proper stage of furnishing workers. In those districts where the Bothy system prevails, no doubt many young men are debarred from marrying from the want of cottage accommodation, and so the command of home labour is proportionally diminished; but this does not apply to Berwickshire, where the household system obtains and the rural population marry early in life. No doubt it is a much more comfortable arrangement when the cottager can furnish a worker from his own family—the earnings going to help the general income. One point urged is the hardship of intruding a stranger into the labourer's family; but were this stranger hired to act strictly in the capacity of a domestic servant to them, we believe the intrusion would be more cheerfully borne, though as great in the one case as in the other: and though some of these hired workers may prove disagreeable inmates, yet many of them do make themselves useful in the labourer's house by assisting in household duties. We are satisfied that were cottages of several apartments the rule, it would go far to efface this sense of intrusion upon the family circle. In a one apartment cottage we confess that the system is a grievous invasion of the fireside—young women are most frequently engaged for this service.

Householders are engaged for the year from Whitsunday to Whitsunday. There are several hiring markets in the county, held in the beginning of March. Single servants are engaged half-yearly—in May and November, and the hiring markets for them are held a week or two previous to each term. Perhaps it is not a desirable thing that the time of engagement, as in the case of householders, should so long precede the term of removal. An attempt was made in a neighbouring county, in which the hiring market is held in February, to shift it nearer to the term; but it was not successful. The servants stood stoutly out against it and carried their point. We think that in such endeavours, originating with employers, to change or abolish existing hiring markets, that the servant is too little consulted in the matter. There are two parties to a bargain-making, and he is quite entitled to be heard. The very attempt to force a change upon the employed in an arbitrary manner, prejudices them against movements of the kind, however beneficial they might prove. It must not be overlooked that the hiring market day is regarded as a day exclusively their own, and any attempt to deprive them of this will be regarded with extreme jealousy. How far a system of registration might supersede our present hiring markets we do not venture to say, but we confess to a feeling that such a system, or at all events the abolition of hiring markets, would lead to much underhand and unhandsome conduct in the changing of servants, whereas the public market is fair and above board, and no feeling of delicacy prevents an employer hiring the best man he can find.

In regard to the education of the labouring classes, our parish and other schools place it within the reach of all, but in general the children are removed from school at too early an age, the cause of which is the great demand for field labour, and the strong temptation there exists for the parent to place his child in the way of earning something to help the family. As a rule they can read and write with tolerable freedom, though we fear that with many their education ceases when they are prematurely removed from school. Much might be done in the way of circulating instructive and useful periodicals, or even in organising reading rooms or circulating libraries. Each large farm might have a room comfortably fitted up for this purpose, and we believe it would be eagerly taken advantage of and well supported. The master would require to lend a helping hand and keep a proper oversight; but an hour or two of a winter evening might be worse spent. We believe the penny postage is rendering good service to the cause of education, for who now-a-days does not correspond?

Our labourer is a man of sober, steady, and industrious habits, who for long has been pretty well content with his position in life; though it is an unpleasant fact that of late years the tide of emigration has carried a large proportion of our best men from our shores. Australia, and latterly New Zealand, have drawn off many of the higher class of workmen, especially of such as may be termed the "well to do." This drain upon the population has of course told on the labour market, and has, we believe, by disturbing the balance, been the occasion of much of that changing and removing from farm to farm which has of late been so common amongst our servants. Upon the whole Berwickshire is well served by its labouring men, and we venture to say that were masters to study more the condition and comfort of their servants, show them more consideration in the social relation, and evince a more thorough and lively sympathy in their well-being, they would be amply repaid in the heartiness and cheerfulness of the service rendered to them. Not begrudging them a holiday now and then as a little relaxation in their year of toil, in which they may visit their friends on a week day, thereby removing the necessity which presses them too frequently to employ their Sabbaths in this way, though generally they are a church-going people amongst whom much sterling worth is to be found.

ARTIFICIAL MANURES.

(*Continued from p. 343.*)

The following Tables will all, until we come to speak of the behaviour of Turnips under the effects of special manuring, relate to nitrogenous fertilisers; and on comparing the effects of these with other non-nitrogenous manures, it will be seen what ground there is for the creed, that a special virtue belongs, particularly in corn growing, to nitregenised substances.

Table V. Experiments with Sulphate of Ammonia and with Muriate of Ammonia.

	Number of Experiments.	Average unmanured produce per Acre.	Quantity of Manure used per Acre.	Average manured Produce per Acre.	Increase per Acre of manured Produce.
		Bush.	Lbs.	Bush.	Bush.
Results of Wheat manured with sulph. of ammonia	1	39½	87	44	4½
Results of Oats manured with sulphate of ammonia ..	2	54	1 c. 58	70	16
Results of Wheat manured with muriate of ammonia	1	29	145	34	5
Table VI. Experiments with Nitrate of Potash.					
Results with Wheat	2	37	112	38¾	1¼
,, ,, Oats	1	37	112	41	4
Table VII. Experiments with Nitrate of Soda.					
Results with Wheat	31	31¼	129½	39	7½
,, ,, Barley	5	31¾	112	44¾	13
,, ,, Oats	4	49¼	126	62½	13¼

Now in passing, as we did with No. V. of these experimental tables, from a series of trials in which no nitrogen existed in the manures (see p. 343), to those largely impregnated with that element, we took occasion to remark what we here re-state, that if any special productive efficacy be justly attributable to nitrogen in manures, a greater increase of yield should exhibit itself in the nitrogenous class of instances. To determine whether this be so or not, we shall therefore adopt the following mode of comparison:—

Table VIII.—Abstract of the Non-Nitrogenous Experiments in Tables I. and III.

	Increase.		
	Wheat.	Barley.	Oats.
	Bush.	Bush.	Bush.
Average increased produce from common salt	6½	13¾	4½
Average increased produce from sulphate of soda	2½	..	16¼
Average of the two series ..	4½	13¾	10¼
Table IX.—Abstract of the Nitrogenous Experiments:—			
Average increased produce from sulphate of ammonia. Table V. .	4½	..	..
Average increased produce from muriate of ammonia. Table V. ..	5	..	..
Average increased produce from nitrate of potash. Table VI. ..	1¾	..	4
Average increased produce from nitrate of soda. Table VII. ..	7½	13	12¼
Average of the four nitrogenous series	4½	13	8¼
Average of the non-nitrogenous series	4½	13¾	10¼
Average of the bone-manure. Table IV.	6	9¼	10

Thus, then, the comparison, *quantum valeat*, presents the nitrogenous substances as actually the least productive, or perhaps we should say, the least stimulative of these three classes of manures, alkaline, phosphatic,

and nitrogenous. This very interesting and important point will afterwards be resumed; but in the first place it will be well to give another set of tables.*

Table X. Experiments with the foregoing non-nitrogenous and nitrogenous (but not phosphatic) substances in admixture.

		No. of Experiments.	Average unmanured Produce per Acre.	Quantity of Manure used per Acre.	Average manured Produce per Acre.	Increase per Acre of manured Produce.
			Bush.	Lbs.	Bush.	Bush.
1, Sulphate of ammonia and common salt—	Wheat	1	39½	S. A. 87 S. 112	44½	5
2, Nitrate of soda and common salt ..	Wheat	41	33	....	41	8
	Barley	1	37½	N.S. 6 st. S. 12	47¾	10¼
	Oats..	2	50	N. S. 98 S. 196	57	7
2. Nitrate of soda and sulphate of soda ..	Barley	1	30¾	N. S. 1 c. S. 1 c.	42½	11¾
	Oats..	1	43	N. S. 76 S. S. 168	61	18

Abstract.	Increase.		
	Wheat.	Barley.	Oats.
	Bush.	Bush.	Bush.
Average increased produce from No. 1.	5	..	..
" 2.	8	10¼	7
" 3.	..	11¾	18
Average of this series	6	11	12½

Let us now bring together the averages of all the manurial divisions as follows :—

Table XI.

	Increase.		
	Wheat.	Barley.	Oats.
	Bush.	Bush.	Bush.
Average of Division 1. Non-nitrogenous alkalies ..	4½	13¾	10
" " 2. Bone manures	6	9¼	10
" " 3. Nitrogenous salts	4½	13	8¼
" " 4. Non-nitrogenous and nitrogenous salts in admixture	6	11	12½

Here then, it is seen, that the most productive composition hitherto adduced is where a comparatively small proportion of nitrogenous salts is combined with a comparatively larger one of the non-nitrogenous kinds, the difference at the same time being substantially unimportant.

Home Correspondence.

Reaping Machine at Canterbury.—Having for six years made use of Burgess and Key's reaper, and having good practical reasons for considering it by far the best implement of the kind hitherto invented, I was greatly surprised on hearing of the award of the local Judges at Canterbury last September; I thought it better, however, to wait until they published the reasons which led them to decide in favour of Cuthbert's, before I ventured to impugn their judgment. Their report has at length been made public in the last number of the Journal of the Royal Agricultural Society, and I have perused it with great curiosity and attention, in the hope of having my doubts resolved, and of receiving some information that might be practically useful. I regret to say, however, that the report, instead of helping me to understand the result at which the judges arrived, has made it to my mind only more unaccountable. Not having been present myself at the trial, I have thought it my duty, before writing any strictures on the report, to make careful inquiries on the subject, for the purpose of ascertaining some essential facts on which the report unfortunately gives no information. I have been informed, then, that Burgess and Key's machine was worked by two horses, Cuthbert's by one. This fact taken alone gives the advantage, no doubt, to the latter; but, on the other hand, the respective draughts of the two machines as given in the report are nine for Cuthbert's and 14 for Burgess and Key's, so that the single horse working the former had to perform two-thirds as much labour as the two horses of the latter. Now, as I know by experience that two horses are not too much for my reaper, which in certain cases must even have three, it is manifest that the single horse must be greatly overworked. I need not tell any farmer that this is the very reverse of economical. Surely, the number of horses employed ought to have been distinctly stated in the report, as being of essential importance in any comparison of the competing machines, and, without it, no mere reader of the report can possibly have a correct understanding of the matter. I may add, that this being a main element in the cost of cutting, is another reason why it should have been plainly mentioned by the judges. Nothing more need be said to prove that if, in the "cost of cutting," those gentlemen charged only half as much horse-power to Cuthbert's as to Burgess and Key's, that is, one horse to the former and two to the latter, they committed an error that entirely vitiates their award, having apparently been misled by the maker's description of the Cuthbert as "a one-horse machine." Were the amount of work done the same by both machines, I should have nothing more to say on this point; but as the judges themselves report that Burgess & Key's reaper cut more than Cuthbert's, in the proportion of ten to seven, it is manifest that the unfortunate horse, which in the latter exerts two-thirds as much power as the two horses in the other, produced one-third less effect, so that in respect of power measured by results, the two machines were exactly equal. But even this is not all; for Burgess & Key's reaper performed by itself one more operation than Cuthbert's, namely, the delivery of the cut corn at the side, which in Cuthbert's was effected by the intervention of manual labour! Thus a careful analysis of the report shows clearly that Burgess & Key's machine effects an economy of power to the extent of nearly one-half as compared with Cuthbert's. Another statement in the report is, "that in simplicity of arrangement, in the strength and durability of the working parts of the machines, Cuthbert's appeared to have the advantage in the proportion of six to four." On this, I will only remark that I have used Burgess & Key's reaper for a whole harvest without incurring one farthing expense for repairs, and I observe that Mr. Laurence, in the present Number of the Royal Agricultural Society's Journal, makes a statement to a similar effect; whereas I have understood that during the trial at Canterbury the knife of Cuthbert's machine broke twice in cutting less than a single acre of Wheat, and from the acute angle of the knife I am not at all surprised at these accidents. There are several other points in the report that call for comment, but at present I will only direct attention to the following:—"The two reapers cut the corn remarkably well, except when badly laid; in this respect they were considered to be equal in merit." But subsequently the judges say:—"For light crops, or where the corn is laid or scrawled, Cuthbert's machine is preferable to Burgess & Key's." Perhaps these gentlemen will be good enough to explain how they reconcile these apparent contradictory statements, the first being a fact, the latter only an inference. In conclusion, I must say that I entirely concur in the opinion expressed in page 490 of the last Number of the Journal, by Mr. Caldwell, the senior judge of the Royal Agricultural Society, that reapers without self-acting side delivery are of very little use; and I have arrived at the conclusion after having examined and tried nearly every reaper that has hitherto been manufactured. *Collinson Hall, Prince's Gate Farm, Romford.*

* We are bound to add that however truthfully this conclusion is derived from the experiments here collated, general agricultural experience has not borne it out; neither is it corroborated by the Rothamsted experience. See p. 322.

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

At the Weekly Council on Wednesday, April 17th, Sir John V. B. Johnstone, Bart., M.P., in the chair, Professor Simonds delivered a lecture on the Nature and Causes of the Disease known as the Rot in Sheep, of which the first part was published in our last Number. It is here continued, somewhat abridged, from p. 370. Prof. Simonds said :—

I have said that the fluke must pass through a series of metamorphoses, or what have been designated alternations of generations; and perhaps I may be allowed to explain the difference made by scientific men between the two. In alternations of generations we have an animal which bears a young one as an ovum: and the young which come from the ova are dissimilar altogether from their parent, but are nevertheless capable of a new system of generation, and the young which they propagate as a second or a third step, pass back to the original form. Ordinary metamorphosis is a different thing. Take the case of a bed-flea for example, that being the first that occurs to me. The animal produces ova; these ova produce larvæ; the generative system becomes developed, but the larva does not propagate; it attains its full size, and then becomes a chrysalis or pupa; subsequently the perfect flea is formed out of the chrysalis, and it is in that state that the generative system reaches its highest order of development. There is no alternation of generation, in other words there is no generation from the larva or pupa. Now this is a part of the natural history of the fluke, which, although it has received the greatest amount of attention from investigators on the continent and in England for some time past, is still to a considerable extent shrouded in mystery. We have satisfied ourselves, as I have before explained to you, that we have from out of fluke eggs living creatures excedingly small, much smaller than the egg itself, and that these do not immediately pass into flukes, but go through a series of alternations of generations. Now what I am going to explain will only allow of an analogy with regard to these creatures. Before explaining it, however, let me say that we believe that each of these fluke eggs, which you see represented in the diagram, contains a number of moving ciliated cells, which are more or less round; that these creatures, passing into water for example, when the operculum comes off, are set at liberty; that they become parasitic to some of the creatures which are met with in water, and that when so parasitic they have the capability of propagating themselves; that they subsequently pass through a series of changes, and again become, as I shall show you by analogy, parasitic a second time to other creatures when they change into the fluke-like form. So that tracing the process all through we should say that the egg sent forth a circular germ which was ciliated, and which had a rotatory motion in water; that in this condition it becomes parasitic to molluscs, small snails, and things of that description; that when it gets into the body of these creatures, working its way in just below the skin by the cilia which it possesses, it undergoes a perfect change, becoming something like a chrysalis, in which condition it propagates itself; that the creatures immediately coming from it reach a certain order of development in the snail; that they then escape from it, swim about in water, and after a certain time, again become encased, and again become parasitic to the snail, in order, in reality, that they may reach a higher form of development. This is explained in one of my diagrams. Putting aside the eggs as representative of the distoma, we go back to a peculiar organism which is often met with in small water snails, slugs, and the like, imbedded underneath the common integument in different parts of the body. It has been called a secaria sac, so called from the creature which issues from it being a creature with a tail, which swims about in water. In this sac we have mere vital germs lying beside a kind of intestinal canal—very small granular matter, which is sent off as gemmæ or buds. We find this budding process goes on, and we have a considerable number of these germs set at liberty; they then within the sac develop into the true secaria, and when they have arrived at the full period of development they burst through the sac, and swim freely about in water. The diagram represents the different degrees of development. You have first the small germ, which as a gemma or bud, comes off, becomes elongated in one part of its body; that subsequently elongates into a tail-like appendage, other organs are then added, and in this condition the creature bursts through the sac, leaving others to come out of it produced in the same manner. It swims about in water with a long floating tail, and it has been viewed as one of the infusoria. Subsequently it curls itself up, and as a general rule gets in the first instance upon slugs, upon the slimy matter which covers them, and imbeds itself in that. It then becomes encased in a kind of shell again, and lies just underneath the skin of the snail, and from this state it goes on developing within the snail until it forms a distoma. So that there is no doubt, whatever may be the origin of these secaria, so far as they are parasitic to snails, we have traced the whole history of them. Therefore by analogy we imagine that, as we have germs of a similar nature which become parasitic from the ova of the true liver fluke, it there passes through a series of analogous changes, and that in this imbedded condition it remains in the water attached to plants, or to smaller creatures inhabiting water, especially slugs and snails; and when these things pass into the stomach of the sheep they find their proper habitat. We now get them developed into flukes, and it is important to bear in mind that the last transformation takes place, not in the liver, not in the biliary ducts, but in the stomach of the animal. You will see presently what importance there is attaching to that fact, which has only very recently come to light.

Now, if we accept this as an approximation to the truth with regard to the development of these things, we shall find that it unravels the whole mystery with regard to rot.

It explains at once why certain districts are dangerous. It explains to us the occurrence which has been recorded over and over again, that out of 100 sheep, for example, 99 have strayed over a common, and that one has been accidentally prevented from doing so; that subsequently the 99 have been attacked with rot, while the one that remained behind escaped. I now believe that it is perfectly possible for sheep to be free from the cause of rot at this minute, and to receive it at the next; that is, if they are placed under circumstances where they can obtain these creatures in one of their forms of development, and they must have reached a particular stage of development before they so receive them. Now let us suppose we have the Secaria rolled up into the form of a creature something like a chrysalis covered over by its shell; let us suppose that which is positively the fact, that hundreds of these creatures can be seen upon small molluscs, many of them also loose in water—that they are adhering likewise to plants and growing in damp situations; then a sheep has only to drink a mouthful of water to take in an infinite number of these little things, and, taking them into the stomach, they there become developed into flukes. We have therefore, very good ground for believing that rot can be very readily and rapidly received. Now there are certain difficulties which people put before us with regard to this theory. They want to know how it is that we get rot in certain seasons and not in others. Well, we show that whenever there is an excess of moisture—whenever, in fact, we have great rainfalls—certain pastures and places, which are perfectly free from the disease at other times, now become affected. This is easily enough explained. We have seen that the ova of these creatures come out in millions from one affected sheep: what, then, must be the number of them in hundreds of sheep so affected! Now, by direct experiment, I have proved this—that you may take the ova of these flukes, and keep them upwards of a year before there is any change taking place in them. We know not therefore what is the duration of the life of these ova. It is just possible that they may remain, not only one year, but two years, without undergoing change, until placed under favourable circumstances to undergo that change. If, then, we look at the vast numbers in which these ova exist, and at their power of maintaining their vitality for a great length of time, we get rid of a considerable amount of difficulty. Then we see that when you get an excess of moisture, and with that an elevated temperature, we have the living germs, if I may so call them, that are now separated by the bursting of the operculum of the egg, set at liberty, and become parasitic to other creatures, as I previously explained, passing through that series of transformations comparatively quickly, and being very easily received into the system of the sheep. I have referred to an elevated temperature combined with excessive moisture; and what is the practical observation which is made with reference, for instance, to watery meadows? It is notorious that sheep placed upon watery meadows receive the rot; but it is equally notorious that it is only at a certain period of the year that they will do so. You may, as every practical man knows, put sheep upon water-meadows during the winter months, or in the early part of the spring; but if you water your meadows in the month of May, and then get a luxuriant herbage springing up afterwards, and put the sheep on this, you are almost certain to rot them. As you approach Midsummer, the danger increases; and as you approach towards winter it decreases. That single circumstance shows that, when there is moisture and heat combined, the cause is brought into operation. I have spoken of the great losses amongst sheep affected with rot. When were the sheep affected with rot that we are now losing? I answer, last Midsummer. That is the time to which you have to look. The cause was received then; the development has been going on in these creatures since that time. They have now attained their full size, and they are producing mischief in anemiating the animals. When we talk about curing rot, we must talk about taking cognizance, if possible, of the early existence of the disease; then is the time to bring into operation certain causes which will prevent the infection.

Having explained, though not so much at length as I should wish to have done, what I believe to be the true cause of this disease, I must pass on to make some more commonplace observations with regard to the means which we have at our disposal, the first in ascertaining the existences of the malady, and then putting into requisition the means which will effect its cure or prevention.

With regard to the symptoms by which we recognise rot, it is universally admitted I believe, at least by all practical men, that in the earliest stage there is no great depreciation of the value of the sheep, that it does not apparently suffer any inconvenience, but that it rather accumulates flesh faster. The explanation of this is easy enough: The small flukes enter

into the liver, not perfected, but having of course to be perfected, and to have its generative system fully developed in the gall-ducts of the liver. When they first pass in, although, perhaps, in very considerable numbers, they simply act as a sort of stimulus to the action of the liver; they consequently call forth an increased secretion of bile, and as there is no alteration in the character of the bile, the sheep now being fairly supplied with an ordinary amount of food, will make relatively a larger quantity of blood out of that food. The liver being in a state of excitation scarcely bordering upon disease, the sheep will lay on a larger quantity of flesh. It is very difficult, therefore, for us to say what are really the early symptoms of rot, if we except this accumulation of flesh. There can be no doubt that in an advanced stage of the disease we take cognizance of the affection very readily; but unfortunately it happens that the symptoms which then show themselves are such as to prove to us that the system is breaking up, and that the time is past for curative measures. At first, I say, these symptoms are exceedingly insidious, but subsequently to this accumulation of fat they are well marked. For instance, after a certain length of time we find that such animals have an occasional cough, that their appetite is somewhat impaired and fastidious—to-day feeding pretty well, to-morrow scarcely at all. They will be easily acted upon by all external causes, and if exposed to wet and cold will suffer a great deal of inconvenience. Much of the progress of the disease will depend upon the treatment to which the animals are subjected. I am familiar with one case in which a gentleman in Norfolk, who has a sandy-heath farm, purchased some sheep in the latter part of August in one year, and he was not aware that they were affected with rot until the February of the following year. Being satisfied that the sheep had not received the disease while they were in his possession, he sought out the dealer from whom he bought them, and on tracing the matter out it was ascertained that other portions of the same flock were also affected; the dealer consequently took them back and paid the cost of them. The slow progress of the disease was entirely due to the circumstance that the sheep were placed upon a dry sandy soil, well supplied with highly nitrogenised food, and not exposed to great inclemency of weather. Had causes of the opposite kind been brought into operation, the disease would have much earlier declared itself in the most unmistakeable manner. I have stated that the animals have an impaired appetite; subsequently there is a gradual wasting of the body, and this is a matter of some importance to us, because we find it takes place even before other symptoms which are looked upon as unmistakeable symptoms of the existence of the disease show themselves, at any rate to any great extent. It is always a suspicious circumstance if you find that animals have been remarkably well, and then towards the latter period of the year, when they should be going on maintaining their condition, they begin to waste. If you put your hand upon them and find them "lean on the back" as it is called, that the vertebræ are sticking up, and are bare of flesh, if you find the animals "razor-backed," if I may use the expression, it is a pretty good indication that they are affected. This state of wasting being once established, it continues, and we then get a pale state of the skin, which becomes of a yellowish tint, and very frequently it may be said that jaundice to some extent becomes associated with dropsy. If you open a sheep which is in a somewhat advanced stage of the affection, what will you observe with regard to its fat? That it is particularly yellow; and if I were an inspector of metropolitan markets, and were to see a number of sheep which were deficient in flesh, and consequently deficient in fat, and that which existed was of a yellow colour, I should at once infer that they were affected with rot; and I know from experience that I should rightly come to such a conclusion. We afterwards find that the inner angle of the eye becomes exceedingly pale, so that when we evert and press forward the *membrana nictitans* of the eye, we find instead of its being in a healthy condition, that it is covered with a number of red lines, marking blood vessels through which the blood flows, but the blood being deprived of its red cells, the liquid is colourless. Now, it may be said this is nothing more nor less than shepherd's knowledge. Well, we admit that it is shepherd's knowledge, but it is nevertheless valuable to us as far as it goes, especially if we associate it with other symptoms. Then we have, generally speaking, a symptom which shows itself in conjunction with this wasting, this fastidious appetite, this yellow state of the skin, unhealthy condition of the wool, and blanched state of the vessels, namely, increased thirst. You generally find that these sheep, having the facility of getting down to the water, will very frequently be drinking to a much larger extent than healthy sheep will do. This evidently arises from the circumstance that there is a great drain going on upon the system, that the blood itself is being deprived of its watery matter, and that the watery matter must be taken up into the organism to make up for the drain. Then we find further, that as the disease advances we get a variable state of fæces: sometimes they will be scouring, and at other times nothing of the sort will be observed; and it is always a suspicious circumstance to find sheep in the autumnal months occasionally scouring. I would rather see a sheep with a regular laxed condition of the bowels, than one with a laxed state of the bowels to-day and an opposite state to-morrow, which may continue for three or four days, and then give place to a lax condition again. We can easily explain how this is. The bile will be poured out continually into the intestinal canal, and as it is changed in its character it will act as an irritant to the mucous membrane of the intestine, and as these things frequently form mechanical impediments to the free flow of the bile, when they have so comported themselves, or got out of the passage, there is a stoppage produced in the intestinal canal, but when the impediment is overcome, there is a great flow, and the contents of the canal are carried off in the form of fluid fæces. Of course such animals lose their strength very quickly. They are dull, dispirited, and often found lying down. As the disease advances, the breathing becomes somewhat difficult; the wool is easily removed; œdematous swellings, as they are called, begin to show themselves and to accumulate in different parts of the body, more particularly under the lower jaw. These are nothing more nor less than dropsical effusions; the animal is anæmiated; the blood is almost changed into water, and then you have these swellings finding their way into the areolar tissue in different parts of the body, passing freely through that, and accumulating particularly under the lower jaw. Why is this? Because the animal frequently has its head pendant, and in the act of feeding a gravitation of fluid takes place. This anasarcous condition marks a similar state of the internal organs; so you get effusions into the cavity of the abdomen, and hence many a rotting sheep will have an enlarged, pendulous belly. This emaciation continues until it leads to the death of the animal. It may die within a short time, a few weeks; but even under the most favourable circumstances, it is rarely that an animal will die in less than six weeks or two months; death, however, may be protracted for a much longer period.

I come now to speak of the treatment of the disease: The treatment, then, of rot, speaking of it as a curative treatment, must have for its end and object the removal of the cause, and if we have these entozoa which are the proximate cause of the affection, all our efforts must be made to the displacing of them from the biliary ducts. It is to be borne in mind that we have to combat, not only with the cause, which is a continuous one, but with the effects, which are also continuous for some considerable space of time. I make that remark for the purpose of saying that I believe if we are enabled at the present moment to take sheep in an advanced stage of this disease, as they would be at this period of the year, and give them any agent which should destroy or remove from the biliary ducts (which I do not believe possible) every fluke contained in them, we should not save the life of the sheep, because, as I have endeavoured to show, the presence of these creatures produces mischief in two ways; it leads to organic changes in the structure of the liver, and the breaking up of the entire organism of the animal. We cannot put a new liver into the animal, and the powers of life cannot be supported by us long enough to bring it into a new state. But, although I say that, it is equally true that we must look to the causes, for the purpose of getting rid of the effects. I repeat the remark, because it is important to remember it, that there is no multiplication of these creatures in the biliary ducts. If, therefore, we were to adopt the treatment early in the case when there are but few of these entozoa, it would necessarily be attended with success. We are to measure the danger of the animal by the number of flukes existing in the biliary ducts, and by the length of time that they have so existed. It is proved by daily experience that we can resist to some considerable extent the inroad of the disease, and we have therefore to look to the means which are at our disposal for the purpose of keeping the animal body together, if I may so express it, so that the ultimate loss shall not be very great. Now, how is this to be done? It is to be done in the first place, wherever it is practicable (but it is not always so), by protecting sheep from the inclemency of the weather; and in the next place, by abstaining as much as possible from all succulent vegetable food, all food which has an excessive moisture. We should give the animals as much nitrogenous food as we possibly can, so as to lay the foundation for pure healthy blood, and we want at the same time to throw tonics into the system, with a view of medicinally strengthening it. What should these consist of? It is rather a difficult thing when a man has 500 or 600 sheep to be giving them tonic agents, and therefore we are obliged to choose something which will of itself be unobjectionable to the animal. Sulphate of iron is an excellent tonic for purposes of this kind. Not only is it a good invigorator of the system, but an agent which sheep will take readily; but it is to be borne in mind, that it is in itself a very great anthelmintic, and may do much good in that way. So that if in December or January I had taken a number of sheep affected with this disease, and the subjects of structural change in the liver, and given them nitrogenous food, protecting them as much as possible from the weather, and giving them sulphate of iron; if I had husbanded the animals' powers to the greatest possible extent, and added also, from time to time, some salt to their food (which I shall have occasion to say a word upon presently), I have no doubt I should have kept them alive, and been able to sell them as fair food at a small cost in the market. If, however, I neglect all these things, then I have to deal with the ultimate consequences of the neglect. I may just say, that experiments have borne out what I have now stated. You will be aware that this Society has lately voted a certain sum of money for new experiments to be made with regard to the treatment or cure of rot. We are indebted to a gentleman present, M. Tréhonnais, for directing the attention of the agricultural community to the supposed means of curing this disease; and he has also kindly forwarded to the institution a quantity of medicine, with which experiments will be instituted immediately. Now, without any analysis of the medicine or anything else, I am well aware of the principles that have guided the individual who has sent it to us. He looks upon the disease as one producing perfect prostration of the vital powers, and he attempts to throw tonics into the system, especially giving instructions that the sheep should be kept as much as possible from wet and cold, and should have the most generous diet. Now, I was about to say, that very frequently where you have only a limited number of these entozoa, as they do not increase in the liver, if the simple plan of protection with nitrogenous food, and so forth, is persevered in for some time, you may often save your animals. I did that many years ago. I purchased a lot of rotten sheep; I gave them no physic of any kind, but merely kept them in sheds during the winter time, fed them with corn and cake, giving the most generous diet I could; and I not only prevented the further progress of the disease in several of these cases, but I even made the animals accumulate flesh, and they went into the market in the following spring, forming pretty fair meat for the people. This shows what can be done by generous diet and a protection of the animals. These remarks may cause a smile, but it is not to be presumed we are desirous as farmers of sending rotten sheep into the market, especially when we remember that a man has been sentenced to six months' imprisonment in Newgate for the offence. Nevertheless, we must keep as much food for the people as we possibly can. When we have animals in this condition, there will be a great advantage arising from the employment of diffusible stimulants, and such as, to some extent, are more powerful anthelmintics. For example, we may use turpentine (which the animals must of course be dosed with) in conjunction with sulphuric ether as an invigorating agent and at the same time an anthelmintic. If I were to take half-a-dozen sheep, and simply give them sulphuric ether with oil of turpentine day by day, attending to those other things that I have mentioned, not neglecting salt as a stimulant to the digestive organs, I think it very likely that two or three of them (according to the stage of the disease) would be benefited by treatment of that kind.

But that is really not the great question for us to consider. We are not to become advocates for the curing of rot in sheep; we are to become advocates for preventing the disease, and that is the reason why, as bearing upon that point, I detained the meeting so long with regard to the natural history of these creatures.

It is well known that sheep do not rot on salt marshes; no matter how wet they may be, no rot takes place on them. But if sheep are affected with rot upon marshes which are not salt, it is of very little use sending them to salt marshes, for you cannot in that way cure the disease. Now, what is the explanation of that fact? It is simply this. These infusoriæ that we have been speaking so much of are creatures belonging to fresh water and not to salt water. If, therefore, we were enabled to take a quantity of salt sufficient to render all these damp swampy places in our meadows or pools completely salt, we should destroy the whole of these creatures, and so get rid of the cause of this affection. But we cannot do that. Some persons being only partially informed on this subject, have been talking of strewing salt over the meadows and letting the sheep go upon them. That would be of no use, for you could not have a sufficient quantity necessary for the purpose without destroying the whole vegetation upon the meadows; anything short of that would be positively of no use whatever to the sheep. Now, bearing in mind these transformations—bearing in mind the fact which I have mentioned, that the change takes place in the stomach and not in the liver; and the other fact, that salt is destructive of these infusoriæ, as we may call them—you will see that if you convey salt in sufficient quantity into the stomach you may destroy them there before they undergo the last change. They undergo their last change, as I have said, in the stomach, and then as flukes find their way into the biliary ducts, but if you can prevent that last metamorphosis you get rid of the cause. I am therefore bold enough to say—not that I depend entirely upon salt, because I shall have a word to say in regard to something else; but that I do believe that rot may be prevented to a very considerable extent. And I further believe that we may save, even in our worst years of rot, a great number of animals. What would be the means by which I should prevent the disease? I must bear in mind all the facts of the case. I must bear in mind the influence of excess of moisture with an elevated temperature. When is the dangerous period to sheep? As you approach towards Midsummer. Then if that is the dangerous period to the sheep, it is for the reasons we have stated. We must prevent the disease then if we can; that is the time to strike at its root. Instead of grumbling about our losses in the winter months, we ought to have taken measures for preventing them during the summer. Now what have we had in the past season? We have had a very wet summer. I happen to have been an unfortunate farmer—unfortunate, I say, because, like many others, I have not had a very profitable return this year, but I had a number of sheep, and foresaw what was coming. I said to some of my neighbours, "We shall have a great deal of rot this year;" and I thought I would attempt, if I could, so far as my own sheep were concerned, to save them. What did I do? The sheep were on wet meadows up to the fetlock joints nearly every day, and nobody could avoid it. But at Midsummer I began to feed the lambs and sheep with corn and nitrogenized food, giving them with every meal a small quantity of salt. I continued that plan during the autumn, and I have the satisfaction of saying that I do not believe at the present time I have one of those lambs affected by rot. I kept killing them week by week to watch their progress. And here I may incidentally observe that long-continued wet weather is very prejudicial to the sheep in another way. I refer now to the water-rot. What was the state of the liver of these animals at Midsummer? There were no flukes or anything of that kind, but the liver was streaked with white here and there, and generally pallid. That was for the want of nitrogenized matter. The bile-cells were blanched; the liver had become structurally diseased, and it was a good nidus for these entozoa to inhabit. Not only, however, did the treatment prevent the entozoa, but it brought about a healthy state of liver, for in the course of a month or two I found that that organ resumed its natural colour and consistence. I again say, that if we commence at midsummer, and continue the treatment through the dangerous period of a wet season, we may do a great deal in the prevention of the disease. And I may go further, and say that even on farms where we have what are called rotten-pastures, on which sheep are placed, they might be preserved to a very considerable extent simply by giving nitrogenised food and salt, to destroy these creatures within the stomach, and prevent their final change, alternating with the salt a tonic, invigorating agent such as sulphate of iron. I do not depend on the salt alone; far from it, but it is a valuable agent, and its value depends more upon putting these things into salt-water, as it were, in the stomach, than anything else. This is the course I recommend. You have to look to the condition of the liver in a wet season; you have to look to the necessity of laying the foundation for a good quality of blood, by giving these animals nitrogenised food, and throwing sulphate of iron into the organism. Every practical pathologist, human or veterinary, knows very well that if you have an anæmiated or bloodless state of the system—if there is a deficiency of the red cells, upon which the invigorating properties of the blood depend, those cells will rapidly multiply, and the blood regain its proper colour by the use of iron. This is the reason why sulphate of iron should be employed. It should be given in fine powder, and in doses of about half-a-drachm a day; not, however, that a larger quantity would be prejudicial. The sheep should be divided into small lots; and if you have about a score feeding in one trough there should be 10 drachms of sulphate of iron mixed with the food for the day; and then, if one should get a little more, and another not quite so much, it will be of very little importance. These are matters of detail which of course every individual farmer must carry out for himself; but if he will adopt these leading principles that I have attempted to lay down this morning, in a very imperfect manner, he will save a considerable number of his sheep from falling a sacrifice to the affection which is commonly designated "rot."

A Weekly Council was held on Wednesday the 24th inst., Mr. Thomas Raymond Barker, V.P., in the chair.

The names of Candidates were proposed. It was announced that Professor Voelcker would deliver a lecture on Cheese-making before the Members of the Society on Wednesday, May 8, at half-past 12 o'clock. A letter was read from the President of the Agricultural Society of Simbirsk in Russia, announcing that experiments had been instituted during the month of February for the treatment of *pestis boum* by electro galvanism on eight head of stock, the detailed report of which and the particulars of the treatment would appear in the Journal of the Society of Simbirsk.

Two reports made to the National Association for the Advancement of Social Science on the subject of the Improvement of the Dwellings of the Labouring Classes, were presented by Mr. Henry Roberts, and the best thanks of the meeting were awarded to the donor.

Copies of pamphlets on Arterial Drainage were also presented by Mr. Bailey Denton. The Council then adjourned.

Farmers' Clubs.

MILBORNE ST. ANDREW.—*Forage Plants.* Mr. J. F. H. Scutt read a paper on this subject at the last meeting of this Club, from which we make the following extracts:—

1. *The Vetch or Tare.*—Tares being not allowed generally to mature their seeds, are not exhausting to the soil. I consider them as restorative crops, from the quantity of manure which the consumption of them affods when fed off with sheep. They are very nutritious, and supply as large (if not a larger) quantity of food for a limited period than most other forage plants. All the animals of the farm are fond of this crop, and thrive upon it in an eminent degree. It is suited to milch cows, and thought by some to cause them to give as much milk as any species of green food. The time of sowing winter Tares would be as soon as possible after harvest for early feeding in the spring, and in all cases it is advisable to sow at different periods—early, medium, and late—in order to secure a succession of feed at different seasons. After November I think sowing should be deferred until the middle of February, when winter Tares may be sown until the end of March with advantage, after which time I think spring Tares should be sown at intervals, if required, up to the end of May. The quantity of seed I should recommend would be liberal. The thicker in reason the better, as the tendrils get hold of each other, and grow faster and come earlier to perfection than when sown thin.

2. *Lucerne.*—The land best adapted to Lucerne is a rich,

light, deep loam, though any friable ground of a deep and open nature will answer, provided it be well drained and ploughed to a good depth; but it will not thrive upon clays, nor does it succeed well upon soils that are too dry and parching. The months of March and April are the customary periods of sowing. The seed is generally sown in drills, at the distance of from 12 to 18 inches, and the quantity of seed per acre is from 14 to 18 lbs. It requires constant hoeing and manuring. Portions of Lucerne cultivated on the small scale and with care have been found to maintain a great number of animals, and hence its advocates have formed an erroneous estimate of its fitness for extended cultivation. The limits then to which it seems beneficial to confine the culture of Lucerne, is to that of a small portion for the purpose of supplying the place of the common forage plants in early spring, and of using it, in addition to these, during summer.

3. *Sainfoin.*—The soils on which Sainfoin best succeeds are decidedly the calcareous. On a chalky rock, covered with only a few inches of soil, it will thrive and grow for many years with vigour, where neither corn nor cultivated herbage plants would cover the surface. Sainfoin may be used for herbage as well as for forage; it may be used as a substitute for Red Clover, mixed with other Grasses, in many of the sandy, dry, and rocky soils of this country, more especially if intended to remain for several years in herbage. The quantity of seed generally sown in its rough state is, I believe, about 4 or 5 bushels, the latter quantity when sown broadcast, the former when drilled. Of milled seed about 56 or 60 lbs., I think, have been found in most cases sufficient. It is always of importance to use fresh seed. The quality may readily be determined by opening the husk and cutting the seed across the middle. Good seed should be plump, of a light grey colour outside and of a greenish tint inside; if of a dark colour it has either been badly matured or else has been injured in the stack, and is so far of an inferior character. The number of seeds in a bushel of rough seed of the usual quality is about 871,200. An acre, if sown with 4 bushels, would therefore produce, viz., if they grew and all came to perfection, 3,484,800 plants, or 21,760 to the square pole or perch, and 80 to every square foot. Seventy two heads have been known to proceed from one root, and the crop, if evenly and thinly sown, will average 10 heads. I believe about 6 lbs. of Trefoil and 4 lbs. of White Clover per acre should be rolled in after the Sainfoin is sown, the Trefoil to secure a crop in the first season for mowing, and the White Clover for herbage the second and after years. The best time, I believe, for sowing is about the middle of March.

4. *Red Clover.*—As we have principally to rely upon other countries for our supply of seed, we meet with many different varieties in our crops; of these the Dutch and French varieties are the most esteemed. The former of these is of a light colour, and of a strong and coarse habit of growth, and succeeds better than most of the others on strong soils of an inferior description, particularly such as are of a dampish character. Its seeds are easily distinguished by their being large, but not so plump and well filled, and of a yellower colour than those of most of the others, arising probably from the humidity of the climate in which they are grown. The French Clover is remarkably smooth in all its parts, leaflets roundish, and altogether of a rich green, succulent appearance. The seeds, which are chiefly from the southern departments of France, are small, plump, and have a considerable portion of purple in their colour. This variety is best suited for superior soils in good districts. The Normandy Clover is from the northern part of France, and appears to be of a strong, luxuriant habit of growth. It is of a dark green colour, produces comparatively few flowers, and is some days later than the common sorts. The time of sowing the Red Clover depends both on the nature of the land, the state of the weather, and the kind of crop which it accompanies. Being, however, sown in the spring, generally among Oats or Barley, I think it best to sow about 4 lbs. per acre, if mixed with other Grasses when the Corn is sown before the last harrowing and being harrowed in, the remainder of the seed, 6 or 8 lbs., to be sown with the seed machine (when the corn is up) in an opposite direction from that sown before, so as to fill up any vacancies which may be occasioned by not wheeling the machine in a straight line at the first sowing, and then rolled down immediately. This last sowing is, I believe, to be depended on most, especially if the season be moist, as the seed would not be likely to go too deep, it being obvious that, even under the most favourable circumstances, much of the seed committed to the soil never attains maturity. When we think of the great disadvantages to which its seeds are exposed in field cultivation, the numberless chinks and crevices in a soil but moderately rough in which they may be cast, it is not to be wondered at that from this cause alone the expectation of the cultivator should sometimes be disappointed. Throughout the country generally the universal practice is to mix Rye-grass, either alone or combined with other Grasses, with the Clovers, and thus to a great extent to neutralise the benefit which Clovers sown by themselves would confer upon the rotation. The Rye-grass, which is the common companion of the Clovers, is identical in its botanical characters with the ordinary straw crops, which both precede and succeed the Clover crop; its food requirements are the same. Although this be the common practice that has been, and is still followed, there can be but little doubt that it is an erroneous one, and in the long run detrimental to the produce of the farm. We hear many complaints of the tendency of our fields to become what is termed "Clover sick," and we see far too often, and over far too large a range of country, the scanty proportion of Clover and the large proportion of Grass that form what are called our "Clover crop." The succeeding Wheat crop generally tells its tale of bad treatment, the preceding crop of Barley, and the Rye-grass of the Clover crop, having abstracted largely from the soil the same substances which the Wheat requires for its growth. I believe the principle upon which rotation should be based is, to avoid as much as possible the practice of cultivating three graminaceous crops in succession, as we find that plants degenerate in soils which do not supply them with a sufficiency of the elements of which they are composed, of what in animals would be called their food. The diseases to which our cultivated plants are liable are still very imperfectly understood. The effects, however, are well known, and are often discussed. Neither have we any lack of opinions and speculations as to their cause; but, with one or two exceptions, no systematic attempt has been made to arrive at the real causes. The plant now before us affords a marked instance of this great deficiency in our agricultural knowledge; although a moderately hardy plant and not generally susceptible of disease, the Clover plant is frequently greatly injured by a form of disease which, in our ignorance of its true character and mode of attack, we are accustomed to term "Clover sickness." An investigation into the composition of soils on which Red Clover succeeds and fails was made by Dr. Anderson, and given in the Highland Society's Agricultural Work, in 1857. The result of those investigations are very interesting; one of them was of the soil of a field at Thurston (East Lothian), on the old red stone formation, in which the contrast between a good crop of Clover on one part of the field, and its absolute and total failure on another part, was so striking as to merit careful examination. The analysis showed a very close similarity between both the soil and the subsoil of the two portions of the field on which such a difference in the produce was seen, with the exception that the soil on which the crop succeeded contained about six times as much sulphuric acid in its composition, as that on which the crop failed. Here then we have confirmatory evidence, as far as it goes, of the importance of sulphur in some shape to the healthy growth of the Clover plant; and, consequently, that the application of gypsum which has been recommended strongly as a remedy, is not likely to be followed by such beneficial results as when applied in the shape of "superphosphate," which always contains a large proportion of sulphuric acid in its composition. In each case of investigation by Dr. Anderson, he found that the plants throve best in soils containing the largest proportions of sulphate of lime. With this exception, which would tend to show us the importance of sulphuric acid and lime as constituents of our Clover soils, no chemical deductions could be drawn as to the cause of failure or success.

Calendar of Operations.

APRIL.

Isle of Ely, *April* 15.—The cold weather still lingers, and the periodical N.E. winds of April produce all their wonted influences both upon our persons and our fields. We never heard any one say they enjoyed these chilling piercing blasts, and they have never been famed for making Grass plentiful or corn fields luxuriant. But they are annual visitants, and we have to make the best of them whilst they stay, and ever and anon we bid them a sincere and hearty farewell when they leave. We are the best friends when farthest removed from each other. Last week we had three severe frosts and three warm sunny days; those combined exerted an unfavourable influence upon vegetation, and very much retarded its progress. Our report of the growing Wheats must still be unfavourable. In a few instances upon the warm gravelly fen soils the plant is promising, and presents a beautiful and healthy verdure, but upon the generality of lands it is far otherwise. The plant is thin and looks sickly, and the frosts of last week have given it a very unhealthy and unpromising aspect; unless we get a speedy change of weather, with more genial and spring like temperature, our worst fears as regards the Wheat crop must inevitably be realised. Oats have come up well, and look strong and healthy, and if they escape the ravages of their old foe, the wireworm, during the next few weeks, there is every prospect of their making a crop. Beans are not generally so good. We have heard to day of some having been ploughed up. The seed sown, in many instances was immature and in bad condition, and has rotted in the ground. Where good seed was used the plant is looking very well. In another week we shall begin to sow Mangels, and it will behove our farmers to be very cautious in the purchase of seed. Some is very good and other is comparatively worthless. We sowed 20 seeds we had from one party, and have 42 plants growing from them; and we sowed 36 seeds of another lot and have only two plants. Such is the difference this year. Grass was plentiful when April came in, but the frosts and cold weather have checked its growth. The corn trade is very bad again. For two or three weeks we had a fair sale for our fen Wheats, but the demand has again subsided.

South Essex.—The weather for the last fortnight has been as auspicious for the farmer and the gardener as need be desired. We have been blessed with the glorious sun, which has now warmed the earth considerably, and renovated the sickly crops which had suffered so severely from the wet, cold, and slugs for the last two years. True, we have had frosts; but these have served to ward off those depredators (not killed them, for no frosts will destroy slugs) and to keep them in their haunts by night, when, had the weather been warm and wet, those creatures would have continued to have devoured our crops most. By day it has fortunately been too dry for them to travel, or to feed at all. Frosty nights with sunny days in March and April I always consider are beneficial for general crops; it also serves to enure the constitution of plants to cold, even should such cold continue so long as it often has done before. In short there is but little cause to despair of the prospect of an early and productive forthcoming harvest on this account, but rather the contrary, for indeed very many crops are now in a prosperous condition which a month ago appeared not worth standing; but some are nevertheless nearly totally destroyed, and the breadths of Wheat are I fear too much limited. If however a corn season follows, many will no doubt have cause to repent for ploughing up their weak crops. *A. Hardy.*

STATE OF THE WEATHER—BERKSHIRE.

For the week ending April 25: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain.	Wind	Barometer.
		Max. in Sun.	Max. in shade.	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	19 ..	80.4	60.0	35.0	52.5	51.0	..	E.	30.03
Saturday	20 ..	77.4	53.0	27.0	45.8	50.8	..	E	30.10
Sunday	21 ..	66.2	50.6	19.8	38.9	49.4	..	N.W.	29.78
Monday	22 ..	63.4	51.0	24.6	40.6	48.0	..	N.E.	29.78
Tuesday	23 ..	74.2	53.6	38.6	50.9	48.5	..	N.E.	29.70
Wednesday	24 ..	75.6	56.4	25.6	45.5	48.7	0.04	N.W.	29.85
Thursday	25 ..	79.0	61.0	35.4	52.4	49.6	..	N.W.	29.90

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Agriculturist's Cattle Insurance Company: *Peel.* We do not know if it be in existence or not.

Grasses: *J. Dixon.* You will find the whole subject very fully discussed in Messrs. Sutton's new Farmer's Manual and Seed List.

Labourers' Friend Society: *W N, Jun.* It used to be heard of at Exeter Hall; where a letter addressed found its secretary.

Poultry: *E O.* We are very anxious to give every information in our power. We confess we cannot account for the failure of some of the eggs, but setting them on stone would perhaps help to an explanation. Nothing can be worse than a stone floor; it has no ventilation, and is always chilly damp. All nests for sitting hens should be on the ground. It is a golden rule, and we cannot help thinking deviation from it has in this instance caused failure. It is not expected that the eggs should be turned. In our country the hatches are unusually strong and numerous, the commons are covered with them. There a small square hut is made of turf or sods, large enough to hold the eggs and the goose, but no larger. It is placed in an old pig stye or shed in a quiet place, it is covered with sods laid on sticks, and if two or three geese are sitting at the same time they sit side by side, but divided by a partition of sods. The places made for three or four are exactly like the lower tier of pigeon holes in a writing table. As they need only sods for their construction and are by far the best places for the purpose, we advise their adoption in preference to any regular houses, and although we may not have discovered the cause of failure, we may have hit on a plan for preventing it.

The Sheep: *H W C.* Mr. W. C. Spooner "On the Sheep" is as good a book as you can have. His address is Ching, Southampton. We do not know the publisher.

WHEELER'S ORANGE GLOBE MANGEL,
WHEELER'S IMPERIAL SWEDE,
GRASS SEEDS FOR PERMANENT PASTURE,
GRASS SEEDS FOR LAWNS,
And all other Seeds of the same excellent quality which has rendered our Farm Seeds so celebrated.

We offer our Seeds at the lowest price consistent with their being good and pure, at the same time deliver them carriage free by rail, and allow 5 per cent. discount for cash.

Our Book of FARM SEEDS sent free for 3 stamps.

J. C. Wheeler & Son, Seed Growers, Gloucestershire.

MANGEL WURZEL AND TURNIP SEEDS.—The undersigned can confidently recommend their Stocks of the above Seeds, crop 1860, grown from selected and transplanted Bulbs. Terms on application.

James Fairhead & Son, Seed Growers and Merchants, Lewisham, Kent. London Establishment: 7, Borough Market, S.E.

To The Trade.

PURPLE-TOP SCOTCH, WHITE GLOBE, SKIRVING'S PURPLE-TOP OR YELLOW BULLOCK, AND GREEN-TOP SWEDE TURNIPS, all warranted net.

Prices on application to Dickson & Brown, Seed Merchants, Manchester.

To the Seed Trade.

FOR SALE, a quantity of superior SWEDE TURNIP SEED (Skirving's), all transplanted with great care.

Price on application to Step. H. Deacon, Church Brampton, Northampton.

To the Trade.

SKIRVING'S, MARSHALL'S, AND PURPLE-TOP SWEDE, Early Horn, Long Surrey, and White Belgian Carrot, Drumhead Cabbage, selected Crimson Beet, British Queen, Surprise, Daniel O'Rourke, and Burridge's Eclipse at reduced prices.

Apply to M. Honey, Bridge Terrace, Maidstone.

SWEDE TURNIP.—LOTHIAN PURPLE-TOP SWEDE, a picked Stock, and raised on strong clay soil, may be had at 50s. per Bushel, in quantities of 1 Bushel and upwards. The Seed is crop 1860, a remarkably fine sample, and grows full 90 per cent.

*** Orders from unknown Correspondents must be accompanied with a reference or remittance.

W. Drummond & Sons, Seed Warehouse, Stirling, N.B.

Kohl Rabi (or Turnip Cabbage).

SUTTON AND SONS, Seed Growers, Reading, have a good Stock at present of fine new Seed of Kohl Rabi, the same kind as the specimens exhibited on their Stand at the Smithfield Club Cattle Show, and at the Crystal Palace Root Show. This is a valuable plant for Sheep Food, and will thrive where Swedes and Turnips fail, not being liable to suffer from mildew or caterpillars.

Cultivation similar to Swedes. Drill 4 lbs. per acre in April or May.

Royal Berkshire Seed Establishment, Reading.

Skirving's Swede—Sutton's Selected Stock.

SUTTON AND SONS have a choice Stock of Skirving's Swede Seed, growth of 1860, which they can strongly recommend; 1s. 9d. per lb., or cheaper in large quantities.

Also SUTTON'S CHAMPION; Hardy PURPLE TOP; MARSHALL'S PURPLE-TOP and Hardy WHITE SWEDE; but the Stock of "CHAMPION" Swede, though saved from 45 acres of land, being so small compared with the demand, and so nearly sold out already, this sort cannot be supplied under 2s. 6d. per lb.

Sutton & Sons having had their CHAMPION SWEDE planted more extensively than ever for Seeding this summer, will be glad to take orders now FOR NEXT SEASON at 1s. per lb., or 50s. per bushel.

Royal Berkshire Seed Establishment, Reading.

RAYNBIRD, CALDECOTT, AND BAWTREE, Seed Merchants and Growers, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E.C.

Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.

Peruvian Guano, Lawes' Turnip Manures, Linseed Cake, Cotton Seed Cakes, &c., of best quality at Market Prices.

To the Seed Trade.

THOMAS AYRES, Wholesale and Retail Seedsman and Grower, Biggleswade, Beds, has to dispose of a large quantity of TURNIP SEED, in large or small quantities. The stock includes Skirving's Liverpool Swede, Ayres' improved Liverpool Swede, Purple Top Swede, Marshall's improved Purple Top Swede, Green Top Yellow Swede, Red Green, Green Globe, White Globe, Red Globe, Red Tankard, Green Tankard, Dale's Hybrid, and a few other varieties.

Price on application.

N.B. A few Cwt. of ONION and PARSNIP SEED to dispose of.

Select Agricultural Seeds.
(Saved by the most eminent Growers in England.)
Robert P. Ker, 4, Basnett Street, Liverpool.

ROBT. P. KER (late Manager for Mr. W. Skirving) begs to direct the attention of Farmers to his very superior stocks of TURNIP and MANGEL, all of which have been grown by the best Seed savers in this country:—

	s. d.
East Lothian Purple-top Swede Turnip ..	1 [illegible]
Liverpool or Skirving's Swede Turnip ..	1 [illegible]
Green-top Swede Turnip	2 [illegible]
Purple and Green-top Yellow Bullock Turnip ..	1 [illegible]
Elvetham Long Red Mangel Wurzel	1 [illegible]
Yellow and Orange Globe Mangel Wurzel ..	1 [illegible]

CATALOGUES on application.

Agricultural Seeds
of warranted quality.

W. SKIRVING begs to call the attention of Practical Farmers to his short list of the leading Seeds required for the Farm, the growth of which has been carefully proved by himself.

	per lb.
Skirving's Improved Swede Turnip	[illegible]
(Largest, Hardiest, and Heaviest Cropper known.)	
Skirving's Improved Purple-top Yellow Bullock Do. ..	[illegible]
Skirving's Green Round (new hardy sort) Do. ..	[illegible]
Skirving's Long Red Mangel Wurzel..	[illegible]
Skirving's Orange Globe Ditto	[illegible]
Carrot, large Altrincham	[illegible]
" large White Belgian	[illegible]

(Less by the Cwt.)

Rye-grass, Clovers, and all other kinds of Agricultural Seeds at reasonable prices. Land laid down to permanent pasture with the most useful Perennial Grass Seeds, at a moderate expense, the sorts selected from personal observation of the growth and habits of the different Grasses. CATALOGUES on application.

Liverpool, April, 1861.

THE ROYAL BERKSHIRE SEED ESTABLISHMENT, READING.

UNDER THE PATRONAGE OF

HER MOST GRACIOUS MAJESTY THE QUEEN.

AND

HIS ROYAL HIGHNESS THE PRINCE CONSORT.

MANGEL SEEDS FROM LARGE BULBS.

SUTTON'S MANGEL WURZEL SEED

SAVED EXCLUSIVELY FROM FULLY DEVELOPED ROOTS, THE ADVANTAGES OF WHICH HAVE BEEN PROVED FOR SEVERAL YEARS PAST.

(SEE THE FOLLOWING LETTERS.)

These are not mere Testimonials in the ordinary acceptation of that term, but show distinctly that the Seeds which Messrs. SUTTON have had grown FROM LARGE SELECTED BULBS, are altogether superior in germinating properties, and in the quality and trueness of their produce, to the Seed raised in the usual manner.

From JAS. BOWNES, Esq., *Steward to* H.R.H. THE PRINCE CONSORT.

"Norfolk Farm, April 4, 1861.

"MESSRS. SUTTON & SONS.—I have great pleasure in stating that the Seeds supplied by you for a number of years for H.R.H. THE PRINCE CONSORT'S FARMS (the Norfolk and Flemish, Windsor Great Park), have always been good and given every satisfaction."

From JOHN GRAHAM, Esq., *Steward to* H.R.H. THE PRINCE CONSORT.

"Bagshot Park Farm, April 2, 1861.

"The Seeds had from your Establishment for the last three years have always come up well and never once failed."

From the Right Hon. Lord Delamere, Cirencester.

"Let me have the same Globe Mangel as last year, which has given me the best crop I ever grew, good *both as to bulk of crop, and also in the fineness of roots and freedom from forks and irregular growth; when pulled, the roots were nearly as clean and free from fibre as a Globe Turnip, and I had 50 loads per acre and more.*"

From GEORGE BEAUMONT, Esq., *Bridgford Hill, near Nottingham.*

"We have had 4 acres of Mangel (Yellow Globe), 3 of which were sown with your seed, and 1 acre with seed grown in this neighbourhood. *I am quite sure your seed produced from 8 to 10 tons per acre more than the other.* I had nearly an acre weighed (from your seed), and found we had 32 tons per acre."

Many Prizes at Birmingham and other Shows throughout the Kingdom have been taken by Messrs. SUTTON'S customers both for Mangel and for Swedes. The price of SUTTON'S LARGE YELLOW GLOBE MANGEL WURZEL is 2s. per lb. ELVETHAM, 1s. 9d.; other sorts, 1s. 6d. to 2s., or cheaper by the Cwt.

☞ PRICED LISTS *of other kinds of Mangel, Swedes, Turnips, Grasses, &c., will be sent gratis and post free. Carriage Free to all parts, except small parcels.*

SUTTON & SONS, ROYAL BERKSHIRE SEED ESTABLISHMENT, READING.

MANGELS, TURNIPS, &c.,

FROM SELECTED ROOTS.

THE strongest evidence we can furnish of the quality of our FARM SEEDS is public opinion. We have one of the largest Trades in England with Farmers, from whom we could publish Testimonials enough to fill a volume; and although our Seeds are all of the best quality, we want but a *fair market price*. Practical men, who are continually on the markets with us (we personally attend the principal markets in this and the adjoining counties, which affords us great opportunities of selection) are never guilty of giving *fancy prices*, but their judgment is of the soundest.

At the BOTLEY CLUB, the PRIZE for the best TEN ACRES SWEDES was awarded

PAGE'S IMPROVED (grown by John Crosskey, Esq.)

Heaviest weight of Mangel per Acre, 61 Tons, 2 cwt.
PAGE'S IMPROVED ORANGE GLOBE (grown by STEWART MACNAGHTEN, Esq.)

Mangel, size, Quality, Weight and Shape.
PAGE'S IMPROVED RED GLOBE, (grown by W. WARNER, Esq.)

Mangel, 50 tons per acre.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by W. DRUMMOND, Esq.

Carrots, 25 Tons per acre.
PAGE'S IMPORTED WHITE BELGIAN, (grown by R. TRENCH, Esq.)

Six Prize Swedes, for heaviest Weight,
PAGE'S IMPROVED (grown by W. C. HUMPHRIES, Esq.)

VALES OF AVON AND STOUR FARMERS' CLUB.

PAGE AND TOOGOOD could give numerous Testimonials, but prefer practical results.

Vales of Avon, Prize for best 5 acres Mangel.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. SALWAY.)

Second best.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. H. BONE.)

Third best.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. BAKER.)

Best 2 acres ditto
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. JAS. SALWAY.)

Second ditto.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. JOHN WHITE.)

Third ditto.
PAGE'S IMPERIAL ORANGE GLOBE, (grown by Mr. BONE.)

Present prices for best quality, not to be surpassed by any House in the Trade :—

BROAD or RED CLOVER, 7d. to 8d. per lb.
DUTCH, 9½d. to 10½d. per lb.
TREFOIL or HOP CLOVER, 3½d. to 4d. per lb.
IMPORTED ITALIAN RYE-GRASS, 5s. 6d. to 6s. per bushel
HOME GROWN ITALIAN RYE-GRASS, 4s. 6d. to 5s. per bush.
COMMON RYE-GRASS, 25s. to 35s. per quarter.
TARES, 7s. to 8s. per bushel.

PAGE'S IMPERIAL ORANGE GLOBE MANGEL, 2s. lb.
" IMPROVED YELLOW " " 1s. 6d. lb.
" " RED " " 1s. 6d. lb.
LONG RED MANGEL, 1s. 6d. lb.
ELVETHAM LONG RED MANGEL, 1s. 6d. lb.
LONG YELLOW MANGEL, 2s. lb.
LONG WHITE MANGEL, 1s. 6d. lb.
PAGE'S IMPROVED HARDY SWEDE, 1s. 9d. lb.
" " SKIRVING'S SWEDE, 1s. 6d. lb.
CHAMPION SWEDE, 2s. lb.
ASHCROFT SWEDE, 1s. 6d. lb.
GREEN TOP SWEDE, 1s. 6d. lb.
TANKARD SWEDE, 1s. 6d. lb.
IMPORTED WHITE BELGIAN CARROT, 1s. 6d. lb.

SEEDS FOR EXPORTATION packed to arrive in good condition.

GENERAL PRICE CURRENT, containing practical information, free by post.

PAGE & TOOGOOD,
ROYAL SOUTH HANTS SEED ESTABLISHMENT, SOUTHAMPTON.

	£	s.
100 fine named Hardy HERBACEOUS PLANTS, one each	1	5
100 fine named Hardy Rock Plants	[illegible]	[illegible]
100 strong autumn-rooted Scarlet Geraniums	1	0
100 ditto Flower of the Day, ditto variegated	1	0
100 ditto Verbenas, new of 1860, in 40 sorts	1	0
100 ditto, for beds, good colours, older	0	16
12 finest exhibition sorts, new 1860	0	3
100 Lobelia speciosa, true fine blue, for beds	0	15
100 fine Dahlias for exhibition or flower garden	[illegible]	[illegible]
12 finest exhibition kinds	0	6
12 fine new Dahlias of 1860	0	9
12 finest named Hollyhocks	0	18
12 good exhibition ditto	0	12

All the above are fine, strong, well established plants in single pots, well hardened, and ready to plant out or grow on for competition, and all from cold frames.

CATALOGUES of all the above, with descriptions, will be sent free on request.

Address HENRY MAY, The Hope Nurseries, near Bedale, Yorkshire.

Free by Post.

BROCCOLI. — Lee's New White Sprouting, per packet, 2s. 6d.; small packets, 1s. 6d.; 10 finest sorts for succession, including the above, also Mitchinson's Penzance, Snow's True Winter White, &c., 6s.; 6 finest sorts, do do., 3s. 6d.

STEPHEN BROWN, Seed Establishment, Sudbury, Suffolk.

NEW HARDY BROCCOLI.—The Richmond Late White remains uninjured by the past winter, where other sorts have been killed by its side. It is therefore invaluable. Packets free by post for 1s. Eight fine sorts (including the above), which in ordinary seasons succeed each other from September to May, free by post for 5s.

E. JONES, Seedsman, &c., Henley-on-Thames.

JOHN KEYNES, in presenting his ANNUAL DESCRIPTION of NEW DAHLIAS, would tender his best thanks to his kind friends and patrons for their support, and begs to assure them his constant study shall always be to give satisfaction. He has a fine selection of SHOW FLOWERS to offer this season, and the severe test they have undergone will, he trusts, be a sufficient guarantee for their quality. None but First Class flowers have been chosen. Fine Plants in May as usual.

The FOLLOWING PRIZES were awarded to J. KEYNES, for DAHLIAS, in 1860:—First Prize, 50 blooms, National Dahlia Show at Leeds; Do., 24 blooms, Bath; Do., 36 blooms, Brighton; Do., 24 blooms, Swindon; Second Prize, 24 blooms, Reading; Do., 50 blooms, Crystal Palace; Do., 24 blooms, Crystal Palace.

FANCY DAHLIAS.—First Prize, 18 blooms, National; Do., 12 blooms, Reading; Do., 12, blooms, Bath; Do., 24 bloom, Brighton; Do., 12 blooms, Swindon; Second Prize, 12 blooms, Crystal Palace.

DAHLIAS.—NEW FLOWERS. s. d.

ANDREW DODDS (KEYNES).—The darkest and most constant Dahlia grown; this flower has never been shown without obtaining a First Class Certificate. 3 ft. .. 10 6

Obtained the following First Class Certificates.—Horticultural Society's Floricultural Committee, National Meeting at Leeds and Reading, Bath, Brighton, Salisbury, Crystal Palace. Third for the Great Seedling Competition at Reading.

MASTERPIECE (KEYNES).—A beautiful shaded crimson of the finest quality, perfect in form, grand in colour, constant, always to be depended on; small, and will require good cutting out early. 4 ft. 10 6

Obtained the following Prizes.

First Premier Prize at Reading for the Great Seedling Competition, beating every Flower of the year.

First Class Certificates.—Reading, Bath, Salisbury, Brighton, Crystal Palace.

MAUVE (KEYNES).—Colour, quite new, good form and constant. Shaded Mauve, 3 ft. 10 6

Prize at Reading.

JUNO (RAWLINGS).—Colour, bright rosy lilac, very constant, large and very high centre, always good. 4 ft. 10 6

Commended at the Floricultural Committee, First Class Certificate, Brighton.

JOY (RAWLINGS).—Colour, light with deep crimson tip, the finest flower in its class and most desirable as first rate show flower. 4 ft. It has been placed as follows:— 10 6

Second Prize at the Reading Competition. First Class Certificate at Bath, Crystal Palace, Salisbury, Brighton, Reading, Great National Meeting, Leeds. Commended at the Floricultural Committee.

PERI (RAWLINGS).—Light, tipped purple, very pleasing colour, not to be cut out. 4 ft. 10 6

First Class Certificates at Bath, Salisbury, Reading.

JOHN KEYNES (RAWLINGS).—Scarlet buff. A single flower of this shown at the Crystal Palace, surpassed every flower in the exhibition; it is a late flower and requires planting early; J. KEYNES then expects it to beat anything yet offered. 5ft. 10 6

MRS. DODDS (DODDS).—Colour, light yellow, very pure, double, constant; possessing every quality to render it a First Class variety, it has been justly admired, and will prove a good companion to William Dodds, which has proved itself a First Class deep coloured yellow. 3ft. 10 6

First Class Certificates.—Floricultural Committee, National Meeting at Leeds, Reading, Bath, Salisbury.

Fourth Prize at Reading for the Subscription Competition.

MRS. ECKFORD (DODDS).—Light purple ground, shaded lilac, and mottled, a colour difficult to describe, but quite new, and a very pretty flower. 3 ft. 10 6

Obtained First Class Certificates at Reading, Salisbury, Bath.

MARQUIS BOWMONT (DODDS).—Rose colour, shaded white, a most desirable flower, greatly admired for its symmetry and full high centre, was placed fifth at Reading for the sweepstakes. 4 ft. 10 6

J. KEYNES has therefore the pleasure of sending out all the six flowers which obtained these prizes, which were subscribed for and exhibited by those marked *

* Mr. Keynes, * Mr. Rawlings, * Mr. Turner, * Mr. Dodds, * Mr. Perry, Mr. Holmes, Mr. Sainsbury.

This flower also obtained First Class Certificates at Bath, Salisbury, Reading, Brighton, Crystal Palace, Floricultural Committee.

ROSA (KEYNES).—Rose colour, fine. 4 ft. 10 6

MRS. WYATT (KEYNES).—Salmon, very first rate; no stock of these two, consequently could not be exhibited. 4 ft. 10 6

The set of twelve will be charged 4l. 4s. No discount on Andrew Dodds, Masterpiece, Mrs. Dodds, or Marquis Bowmont, if taken separately. All the First Class Certificates, with one exception, which the Floricultural Committee have awarded this season, are in this list.

J. KEYNES therefore submits them to Dahlia growers as indispensable to every select collection. Descriptions of the above may be seen in *Gossip for the Garden*, the *Florist*, the *Gardeners' Chronicle*, the *Cottage Garden*, the *Transactions of the Horticultural Society, Chiswick, &c.*

INTERNATIONAL EXHIBITION OF 1862.

THE COUNCIL OF THE SOCIETY OF ARTS give notice that the GUARANTEE DEED lies for SIGNATURE at the Society's House, Adelphi, W.C. The Council have much pleasure in announcing that the Guarantee has been already signed for sums amounting to £385,600, and they desire that the number of Signatures should be further increased in order that the interest of the public in this great national undertaking may be still more extensively shown.

Gentlemen desirous of joining in the Guarantee are requested to communicate with the Secretary of the Society of Arts, who will arrange for the Deed being taken for Signature to those who cannot make it convenient to sign at the Society's house. The List will be closed on the 1st of May next.

LIST OF GUARANTORS WHO HAVE ALREADY SIGNED THE DEED:—

H.R.H. The Prince Consort	£10,000
Abel, Frederick Augustus, F.R.S.	100
Acland, Sir Thomas Dyke, Bart.	200
Adam, James Skipper	200
Adams, Wm. Salkeld (W.S. Adams & Son)	100
Agnew, Thomas	100
Agnew, Thomas, Jun.	100
Agnew, William	100
Ainsworth, Thos.	500
Akroyd, Edward (Jas. Akroyd & Son)	500
Aldam, William	100
Alexander, James	500
Aley, Frederick William	100
Alger, John	100
Allen, C. Bruce	100
Allen, Edward Ellis	100
Allhusen, Christian	1,000
Amies, Nathaniel Jones	100
Anderson, Sir James	100
Anderson, Thomas	100
Andrew, W. P.	500
Angell, Joseph	500
Ansted, David Thos.	100
Answorth, W. S. (Middleton & Answorth)	100
Antrobus, Sir Edmund, Bart.	2,000
Appold, John G., F.R.S.	1,000
Archer, T. C.	100
Armitage, Elkanah, & Sons	1,000
Armitage, Wm. (Armitage & Rigbys)	500
Armstrong, Sir William George, C.B.	500
Ashford, Wm. (W. & G. Ashford & Winder)	100
Ashton, Thomas	500
Asprey, Charles	1,000
Atkinson, William	100
Austin, George	100
Bagley, Thomas (Henderson & Co.)	300
Bake, Henry	200
Baker, Anthony Kington	100
Balderson, Henry	100
Balfour, George Edward	250
Ball, John	500
Balleras, Guillermo Esteban	500
Baring, Thos., M.P.	3,000
Barlow, Edward	100
Barlow, F. P. (John Dickinson & Co.)	1,000
Barrett, Henry (R. Barrett & Sons)	200
Bartlett, William Edward	100
Bateman, J. F.	200
Bateman, Joseph, LL.D.	100
Bates, Joshua	3,000
Bauer, Victor	100
Bax, Ed.	100
Bazley, Thomas, M.P.	1,000
Beale, Samuel, M.P.	1,000
Beaumont, John	500
Beaumont, Joseph, jun.	250
Begbie, Thos. S.	500
Behrens, Solomon Levy	300
Belcher, Sir Edwd.	100
Bell, John	100
Bendon, George	100
Benedict, Jules	300
Benham, Fred. (Benham & Sons)	500
Bennett, John	500
Bennett, Wm. Cox	100
Bentall, Edward Hammond	100
Bentley, Joseph	100
Benyon, Richard, M.P.	1,000
Besley, Frederick	200
Besley, Robt.	200
Bessborough, Earl of	300
Beveridge, Erskine	500
Bevington, Sam. B. (Bevingtons & Sons)	100
Bevington, James B.	100
Beyer, C. F. (Beyer, Peacock, & Co.)	1,000
Bicknell, Henry Sanforth	500
Biddle, Daniel	500
Billinge, James	100
Bingley, Alfred William	100
Bird, George	500
Bird, Stephen	250
Bird, William	100
Birkbeck, G. H. (Birkbeck & Tongue)	300
Blacklock, William Thomas	500
Blackwell, Samuel	200
Blackwell, Thomas (Crosse & Blackwell)	300
Blair, Harrison	200
Blandy, John Jackson	100
Blashfield, John Mariott	100
Blews, W. H. M. (William Blews & Son)	100
Bodkin, Wm. Henry (Assistant Judge)	500
Boileau, Sir John P., Bart.	500
Bowker, Charles Hardy	100
Bowring, Edgar Alfred	200
Bowley, Robert Kanzon	500
Braby, Frederick	100
Bradbury & Evans	1,000
Bragg, John (T. & J. Bragg)	100
Branston, Robt. E.	250
Brassey, Thos.	2,000
Breach, J. G	250
Breffit, E (Aire & Calder Company)	1,000
Brett, John W.	500
Brewster, Sir David K.H.	100
Bridson, H.	250
Brigg, John Fligg (J. Brigg & Co.)	150
Briggs, Geo.	100
Brodie, John Lamont	100
Brook, Charles, jun. (Jonas Brook & Brothers)	1,000
Brook, Charles	200

Brooke, Chas., F.R.S.	£100
Brooke, George (Starkey, Bros.)	1,000
Brooke, Thomas (John Brooke & Sons)	1,000
Brooks, Vincent	200
Brooman, Richd. Archibald	250
Brough, George (Stratton & Brough)	200
Brown, Mrs. H.	500
Brown, John (John Brown & Co.)	250
Brown, Michael Lewis	100
Browning, J. (Spencer, Browning & Co.)	250
Buck, Joseph	100
Buckley, Nathaniel	100
Buccleuch, Duke of, K.G.	5,000
Buckton, Joshua	100
Bunning, Jas. Bunstone	500
Burgess, James Reeve	100
Burrell, Charles	500
Burt, Henry Potter	500
Burzorjee, Dr.	100
Caley, Frederick C. (Caley, Brothers)	100
Caley, Nathaniel Henry	100
Callaghan, William	200
Callow, Thomas William (Callow & Son)	100
Calvert, Henry	100
Cama, Muncherjee Hormusjee	200
Campbell, C. Minton	2,000
Campbell, James	100
Candy, Charles	500
Cannan, Herbert Harris	100
Carstairs, Peter	200
Carver, John (Carver Brothers)	100
Cassell, Petter, & Galpin	250
Cave, Stephen, M.P.	500
Chadwick, David	100
Chadwick, Edwin, C.B.	100
Chadwick, John	200
Challoner, Col. T. C. B.	500
Chambers, Thomas, Common Serjeant	100
Chambers, Thos. King, M.D.	300
Chance, James T., (Chance, Bros.)	1,000
Chandos, Marquis of	1,000
Chantrell, George Frederick	100
Chapman, Edward (Chapman & Hall)	300
Chappell, Thos. (Chappell & Co.)	500
Charley, William	100
Charlton, Henry	100
Chater, Joseph	100
Chatfield, Charles	100
Chawner, Richard Croft	·100
Chester, Harry	300
Christie, Wm.	100
Christy, Henry	1,000
Christy, R. (Wm. M. Christy & Sons)	500
Churchward, Joseph George	500
Clanricarde, Marquis of	500
Clare, Charles Leigh	250
Clark, Chas., Mayor of Wolverhampton	100
Clark, Sir James, Bart.	200
Clarke, I. P.	100
Claudet, A., F.R.S.	100
Clegg, Thos.	500
Clouston, P. (Lord Provost of Glasgow)	100
Clennell, John Edwd.	100
Clowes, Geo. (Clowes & Son)	500
Clutton, John	500
Cobbett, Arthur	100
Cobbett, Richard	100
Cobden, George Long	300
Cock, John, jun.	100
Cockerill, William James	100
Cole, Henry, C.B.	300
Cole, Thomas	100
Coles, Richard (Mayor of Southampton)	100
Collard, C. L. (Collard & Collard)	1,000
Collins, Thomas Samuel, M.P.	200
Collyer, Robt., M.D.	500
Colman, Edwd. (J. & J. Colman)	1,000
Colnaghi, D. (Colnaghi, Scott, & Co.)	1,000
Colquhoun, John C.	100
Conolly, Thomas, M.P.	1,000
Conybeare, H.	1,500
Cook, Thos. W.	250
Cooke, Christopher	250
Cooke, Hindley & Law	1,000
Cooke, William	1,000
Coope, Octavius Edward	1,000
Corderoy, Edward	100
Cornforth, John	100
Copestake, Sampson (Copestake, Moore, Crampton & Co.)	1,000
Coulthurst, Wm. M.	1,000
Cousens, Frederick William	300
Coutts, Miss Burdett	3,000
Cowlishaw, Wm. (G. J. Houldsworth & Co.)	200
Cowie, Thos. S.	500
Cowper, The Right Hon. Wm., M.P.	100
Crace, John Gregory	200
Crampton, T. R.	1,000
Creed, Henry	100
Cremer, William Henry, jun.	200
Crisp, Thomas Dawson (Clabburn, Sons, & Crisp	100
Croll, Alexander Angus	1,000
Crossfield, Henry	500
Cubitt, Lewis	500
Cubitt, Wm. M.P., (Lord Mayor of London)	1,000
Cundall, Josh.	100
Cunningham, H. D. P., R.N.	100
Curt, Joseph	100
Cuthell, Andrew	1,000

Daniell, Richard (Perceval, Daniell & Co.)	£1,000
Darbishire, Samuel Dukinfield	1,000
Davies, John	100
Davis, Frederick	500
Davison, Frederic (Gray & Davison)	200
Davy, Charles	100
Day, P. A. (C. A. Day & Co.)	1,000
Day, Wm. (Day & Son)	1,000
Deacon, Henry	100
De la Rue, Warren (Thos. De la Rue & Co.)	1,000
Dent, William	200
Denton, John Bailey	100
Dewhurst, George Charnley	200
Dickinson, James (W. Dickinson & Sons)	500
Dickson, Peter	1,000
Dilke, C. Wentworth	1,000
Dillon, John, (Morrison, Dillon, & Co.)	1,000
Dixon, George	100
Dixon, Thomas	100
Dixon, Wm. Hepworth	100
Dobree, Bonamy, Governor Bank of England	500
Dobson, Benjamin	100
Docker, F. W.	100
Donald, William	100
Donkin, (Bryan, Donkin, & Co.)	500
Douglas, Francis Brown (Lord Provost of Edinburgh)	100
Doulton, Henry (Doulton & Co.)	200
Doveston, George (Doveston, Bird, & Hull)	300
Drax, J. S. W. Sawbridge Erle, M.P.	100
Ducie, Earl of	500
Dugdale, James	1,000
Dunlop, John Macmillan	100
Dunlop, Walter	200
Dunn, Thomas	150
Dunn, Thomas	250
Dyte, Henry	100
Eardley, Sir Culling Eardley, Bart.	1,000
Eastlake, Sir Charles L., President of the Royal Academy	200
Easton, James, Jun. (Easton, Amos, & Sons)	1,000
Easton, James, Sen. (Easton, Amos, & Sons	500
Eavestaff, William Glen	100
Ebury, Lord	500
Edgar, W. S. (Swan & Edgar)	1,000
Edgington, Benjamin	500
Edmeston, James	100
Edwards, Morton	100
Edwards, Richard (J. Edwards & Son)	500
Elkington & Co.	2,000
Elliott, Charles (Elliott Brothers)	300
Elliott, George Augustus	100
Elwell, Edward	200
Emanuel, Harry	1,000
England, George	1,000
Ernest, H. (Coleman, Ernest, & Rowe)	250
Evans, Edward	100
Evans, E. Bickerton	100
Evans, Jeremiah (J. Evans & Son)	500
Evill, Wm., jun.	300
Ewart, Wm., M.P.	500
Fairbairn, Andrew	500
Fairbairn, Thomas	1,500
Fairbairn, Wm., F.R.S.	1,000
Fairbairn, William Andrew	500
Falmouth, Viscount	500
Farrow, Charles (Farrow & Jackson)	100
Farlow, Charles	100
Farquhar, Thomas Newman	1,000
Fauntleroy, R. T. (R. Fauntleroy & Co.)	100
Fawell, Thomas	100
Fearon, John Peter	100
Fenton, Francis Henry	100
Feversham, Lord	100
Ferguson, John F.	200
Field, John	1,000
Field, William	200
Filmer, Thos. H.	100
Findlay, Charles B.	100
Finnis, T. Q., Alderman	1,000
Firmin, George Gordon	100
Fisher, Anthony Lax, M.D.	1000
Fisher, Richard	500
Fisher, Robert	250
Fisher, Samuel	100
Fladgate, W. M.	500
Fletcher, John Bowman	100
Forrest, James Alexander	100
Forster, John	250
Forster, Sampson Lloyd	100
Forster, Thos. (Elsmore & Forster)	250
Fortescue, The Hon. Dudley F., M.P.	100
Fortnum, Chas. Drury Edward	500
Foster, J. Porter (Foster, Porter & Co,)	1,000
Foster, Wm. Orme, M.P.	1,000
Fothergill, Benjamin	100
Fowke, Captain Francis, R.E.	300
Fowler, Charles	100
Fowler, John, C.E.	1 000
Fownes, E. (Fownes, Brothers, & Co.)	100
Francis, C. L. (Francis, Bros., & Pott)	1,000
Franklyn, G. Woodroffe, M.P.	500
Frith, J. G.	1,000
Froggor, William	100
Fussell, Rev. J. G. C.	200

Gardner, Robert	[illegible]
Gardner, Samuel (John Kenyon & Co.)	[illegible]
Garrett, Richard	[illegible]
Gaskell, John	[illegible]
Gassiot, J. P., F.R.S.	[illegible]
Gibbs, Henry Hucks	[illegible]
Gibson, The Rt. Hon. Th. Milner, M.P.	[illegible]
Gifford, W. J.	[illegible]
Gilbee, William Armond	[illegible]
Gilbey, Walter (W. & A. Gilbey)	[illegible]
Glaisher, James, F.R.S.	[illegible]
Glover, Thomas	[illegible]
Glyn, George Carr, M.P.	[illegible]
Glyn, Sir Richard Plumptre, Bart.	[illegible]
Glynn, Joseph, F.R.S.	[illegible]
Godwin, George, F.R.S.	[illegible]
Gooddy, Edw. (Barlow, Gooddy, & Jones)	[illegible]
Goode, Thos. (Goode & Co.)	[illegible]
Gooden, J. Chisholm	[illegible]
Goodman, John Dent	[illegible]
Goore, William Henry P.	[illegible]
Gordon, Lewis Dunbar Brodie	[illegible]
Gotto, Henry (Parkins & Gotto)	[illegible]
Gower, The Hon. E. F. Leveson, M.P.	[illegible]
Graham, Forster (Jackson & Graham)	[illegible]
Graham, Peter (Jackson & Graham)	[illegible]
Graham, Wm.	[illegible]
Graham, William	[illegible]
Grant, Alex.	[illegible]
Grant & Gask	[illegible]
Granville, The Earl, K.G.	[illegible]
Gray, Captain William, M.P.	[illegible]
Green, Daniel, Jun.	[illegible]
Green, James	[illegible]
Greenall, Gilbert	[illegible]
Gregory, Charles	[illegible]
Gregson, Samuel, M.P.	[illegible]
Griffiths, Robert	[illegible]
Grissell, Henry	[illegible]
Grove, George	[illegible]
Guedalla, Henry	[illegible]
Gundry, William (Gundry & Sons)	100
Gunter, Richard	300
Gurney, Samuel, M.P.	1,000
Gwynne, J. E. A. (Gwynne & Co.)	500
Hacking, Richard	1,000
Haden, Francis Seymour, F.R.C.S.	[illegible]
Hadfield, William	[illegible]
Hall, S. C.	[illegible]
Hale, Warren Stormes, Alderman	[illegible]
Halling, Pearce & Stone	[illegible]
Hancock, Charles Frederick	[illegible]
Hanhart, N. (M. & N. Hanhart)	[illegible]
Hankey, Thomson, M.P.	[illegible]
Hannington, Charles Smith	[illegible]
Hargreaves, W.	[illegible]
Harris, James	[illegible]
Harrison, T. E.	[illegible]
Harrison, W., F.G.S.	[illegible]
Hart, Charles (Joseph Hart & Son)	[illegible]
Hart, Ernest	[illegible]
Harter, James Collier	[illegible]
Hartley, James (J. Hartley & Co.)	[illegible]
Hawkins, George	[illegible]
Hawkshaw, John, F.R.S.	[illegible]
Haworth, J.	[illegible]
Hayes, Henry William (Hayes &) Co.	[illegible]
Headley, Richard	[illegible]
Heather, James	[illegible]
Heald, Nicholas	[illegible]
Hemming, Fred. H.	[illegible]
Henderson, John (Bank, Bros., Henderson & Co.)	[illegible]
Henderson, George William Mercer	[illegible]
Henty, Robert	[illegible]
Hepworth, William	[illegible]
Heron, Joseph	[illegible]
Heugh, John	[illegible]
Heymann, Lewis (Heymann and Alexander)	[illegible]
Hibbert, George	[illegible]
Hibbert, John Tomlinson	[illegible]
Hill, Charles	[illegible]
Hill, Thomas Rowley (Hill & Evans)	[illegible]
Hindley, Chas. Hugh (Chas. Hindley & Sons)	[illegible]
Hinstin, Ernest (Hinstin Bros)	[illegible]
Hirst, Joseph	[illegible]
Hirst, William Edwards	[illegible]
Hitchcock, George Charles	[illegible]
Hobbs, Ashley & Co.	[illegible]
Hodges, John Francis	[illegible]
Hodgkinson, Grosvenor, M.P.	[illegible]
Hodgson, Kirkman Daniel, M.P.	[illegible]
Holdsworth, William Bayley (W. B. Holdsworth & Co.)	[illegible]
Holland, James (Holland & Sons)	[illegible]
Holland, Sir Henry, Bart.	[illegible]
Hollins, M. Daintry	[illegible]
Holmes, James	[illegible]
Hoole, Henry E. (Mayor of Sheffield)	[illegible]
Hope, Henry Thomas	[illegible]
Hooper, Geo. N. (Hooper & Co.)	[illegible]
Hopkinson, James (J. & J. Hopkinson)	[illegible]
Hopkinson, Jonathan	[illegible]
Horsley, J. Callcott, A.R.A.	[illegible]
Horn, James	[illegible]
Hornblower, Jethro (Hornblower, Fenwick & Co.)	[illegible]
Horton, Isaac (Horton & Sons)	[illegible]
Hoskyn, Chandos Wren	[illegible]
Houghton, F. Burnett	[illegible]
Hovenden, Robert	[illegible]

BEDDING AND OTHER PLANTS.—The Spring Supplement to JAMES CARTER & Co.'s GARDENER'S AND FARMER'S VADE-MECUM will be found to contain all the requisite information for the arrangement and management of BEDDING PLANTS, besides copious Lists of STOVE and GREENHOUSE PLANTS, with descriptive observations. Will be published on May 1, and forwarded free of charge and post paid, on application to

JAMES CARTER & Co., 237 and 238, High Holborn, London, W.C.; and Crystal Palace Nursery, Forest Hill, Sydenham, S.

Bedding Plants.

WOOD AND INGRAM beg to announce that their Bedding Plants, consisting of Scarlet and Variegated Geraniums, Verbenas, Petunias, Heliotropes, Calceolarias, Alyssums, Lobelias, Fuchsias, Gazanias, &c., are very fine, thoroughly hardened and established in pots. Price from 2s. 6d. per dozen. Cinerarias in full bloom, 4s. to 6s. per dozen. Dahlias, a fine collection, 4s. to 6s. per dozen.

CATALOGUES may be had on application.

Nurseries, Huntingdon.

ESTABLISHED 1840.

Bedding Plants for the Million.

JOHN BOFF is sending out the undernamed Bedding Plants, strong established plants, in small pots, at 20s. per 100, package included:—Antirrhinums, in fine varieties, by name, Ageratums, Shrubby Calceolarias, Fuchsias, Scarlet Geraniums, Heliotropes, Lobelia speciosa, Pentstemons in variety, Salvias, and an extensive variety of Verbenas.

To those requiring quantity, J. B. begs to offer well rooted plants of the above from store pots, at 12s. per 100, packet included.

CATALOGUES with description, free for one stamp. A remittance from unknown correspondents is requested.

Northampton Park Nursery, Ball's Pond, Islington, N.

Bedding Plants.

MESSRS. MILNE AND CO. have a fine healthy Stock of all the leading varieties of Bedding Plants, which will be ready for sending out in May. Plants strong and well established.

M. & Co. beg to inform their friends and patrons that a reprint of their comprehensive GENERAL CATALOGUE will be shortly issued. The DESCRIPTIVE LIST OF CAMELLIAS, for which their Nursery has been famous for upwards of three quarters of a century, will be found complete to the present time. Copies forwarded free to any address on application.

Camellia Nursery, Wandsworth Road, London, S.

Richmond Nurseries, Surrey.

G. AND W. STEELL beg to call the attention of purchasers of BEDDING PLANTS to their Stock, which is exceedingly healthy and good this season, consisting of STANDARD, FLOWER OF THE DAY, SCARLET, and other GERANIUMS, CALCEOLARIAS, VERBENAS, HELIOTROPES, PETUNIAS, &c., also ROSES DEVONIENSIS, SAFRANOT, &c., which they can offer at very low prices where large quantities are required.

Bedding Plants, &c.

GODWIN AND PADMAN, Broadfield Nursery, Sheffield, offer the undermentioned in strong well established Plants:—

Per dozen—	s.	d.	Per dozen—	s.	d.
Ageratum cœlestinum	2	6	Gazania splendens 3s. to	4	0
,, variegatum ..	3	0	Geraniums Tom Thumb, 2s. 6d. to	4	0
Calceolaria aurea floribunda	3	0	,, Variegated, of sorts *		
,, other varieties 2s. 6d. to	6	0	Heliotropes, of sorts ..	3	0
Dahlias, of sorts	3	0	Lobelia speciosa . ..	3	0
,, of 1860	12	0	Petunias, crimson, purple, and white	3	0
,, Fancy	3	0	Senecio elegans fl. pl. ..	3	0
,, ,, of 1860 ..	12	0	Verbena, crimson scarlet, purple, and white ..	2	6
,, Bedding (15 varieties) from	3	0	,, of 1860 (50 varieties)	4	0
Fuchsias, of sorts .. 4s. to	6	0	Veronica maritima variegata	4	0
,, ,, 1860 (29 varieties)	9	0	Vinca elegantissima ..	6	0

* See other Advertisement.

Or 100 plants, viz., 1 dozen each Ageratum, Calceolaria aurea fl., Gazania splendens, Tom Thumb Geraniums, Lobelia speciosa, Petunia (any colour), and 2 dozen Verbenas (any colour), basket included, for 21s.

See also G. & P.'s DESCRIPTIVE CATALOGUE of GREENHOUSE and BEDDING PLANTS.

Remittance or reference expected from unknown correspondents.

Address GODWIN & PADMAN, Broadfield Nursery, Sheffield.
Also J. C. PADMAN, Bolton Spa, Tadcaster.

Bedding Plants.

F. AND A. SMITH are now sending out their usual strong healthy Bedding Plants, at moderate prices. These plants are hardened and fitted for planting out, so as to produce an early decorative effect. Quality is the test of cheapness.

Ageratum, blue
,, foliis variegatis
Anagallis
Antirrhinum, various
Bouvardias
Calceolaria, in variety
Cerastium tomentosum, for edging
Cuphea platycentra, scarlet
Campanula carpatica
Carnations, tree
Chrysanthemums, various
Deutzia gracilis
Dianthus giganteus, splendid crimson
,, Heddewiggi, large colours, various
,, imperialis, crimson
Dielytra spectabilis
Dahlias, many varieties
Eupatorium formosum
Fuchsias, various
Geranium, scarlet, various
Giliardia grandiflora
Gazania splendens
Heliotropium, various
Hollyhock
Hydrangea
Kaulfussia variegata
Lantana, various
Lobelia, blue, in variety
,, St. Clair, fine scarlet
Lilium, various
Mimulus, of sorts
Melissa variegata
Mesembryanthemum, various
Nasturtium Tom Thumb, &c.
Nierembergia gracilis
Pansies
Pentstemon, in variety
Petunias
Phlox, herbaceous
,, Drummondi
Pyrethrum, various
Perilla nankinensis
Portulaca, dwarf, for edging
Rhodanthe Manglesii
Roses, various
Statice armeria
Salvia patens, blue
,, ,, alba, and others
Stocks, in bloom
Senecio, double crimson
Thunbergia, various
Tropæolum Lobbianum elegans
,, attraction
,, Stamfordianum
,, several double varieties
Verbena, of every known shade of colour, a fine and large stock
Veronica
Variegated Geraniums (many varieties).
Zinnia elegans, &c.

CLIMBING PLANTS.

Cobæa scandens
Eccremocarpus scaber
Lophospermum Hendersoni
Maurandya Barclayana
Maurandya alba
,, grandiflora
,, rosea
Tropæolum canariense

Prices with GENERAL LIST on application.

Dulwich, Surrey, S.

Bedding Plants.—Mostly 2s. 6d. per dozen.

SCOTT'S 48-paged CATALOGUE, with copious descriptive Lists of all the best Bedding Plants out, to which is, this season, added suggestions for Planting Beds and Ribbons, with full lists of early Flowers for decorating the Garden in winter and early spring. Apply to

J. SCOTT, Merriott, Crewkerne, Somerset, inclosing 2 stamps.

Bedding Plants.

JAMES DICKSON AND SONS have Bedding Plants to offer in very large quantity, their Stock consisting, as it does, of about 100,000 fine strong Plants, calculated to give entire satisfaction, of the following:—

Antirrhinums
Ageratums
Fuchsias
Scarlet Geraniums
Heliotropes
Pentstemons
Pansies
Verbenas
Calceolarias
Dahlias (bedding varieties)
Gazania splendens
Variegated Geraniums
Lobelias
Petunias
Salvias
and others.

DESCRIPTIVE LISTS, with Prices, post free on application.

*** Terms to the Trade upon application.

The "Newton" Nurseries (near the Railway Station), Chester.

Wellington Road Nursery, St. John's Wood, London.

MESSRS. E. G. HENDERSON AND SON respectfully announce their SPRING CATALOGUE for 1861 containing extensive Descriptive Lists of the finest ORNAMENTAL FLOWER GARDEN AND BEDDING PLANTS, with other leading novelties of the season, which will be published the SECOND WEEK IN MAY, at which period all applications for copies will be sent as received, and all orders for New Plants will, from the same period, be immediately forwarded on receipt of such.

FUCHSIAS.—A collection of nine first-class competition varieties, the seedling productions of Edward Banks, Esq., whose reputation as a raiser is well known in both continental and home collections. 5s. each.

DIANTHUS HYBRIDUS MULTIFLORUS.—A perpetual-flowering mule pink, the most unique bedding plant of the season. 3s. 6d. each.

NEW VERBENAS.—The collection of 14 varieties are the seedling productions of Messrs. Breize, Elphinstone, Edmonds, and Cunningham, including beautiful competition and bedding kinds. 2s. 6d. each.

GERANIUM PRINCESS OF PRUSSIA.—A very beautiful variety of the Compactum section. The remarkably compact and rounded trusses of bloom stand erect above the foliage, the blossoms are of a bright orange-tinted scarlet. Each truss contains from 50 to 60 blossoms, which are retained upon the flower-stem until the whole are expanded, a feature of great value in all flowers intended for flower garden or vase culture. Its prolific bloom, brilliant colour, and globular outline of the flower heads, distinguish it from all existing varieties. Each 3s. 6d.

CLOTH OF GOLD AND GOLDEN FLEECE GERANIUMS.—Beautiful and effective, 3s. 6d. each.

HOLLYHOCKS.—Good named varieties, 6s. and 9s. per doz.

GERANIUM HENDERSONI NANA.—This fine variety is a decided improvement upon the well known G. Hendersoni, which for a considerable period was the most reliable self white flowered bedding Geranium known. The present one is of a much dwarfer and shorter jointed growth and more effective in character.

PETUNIAS.—These include six single flowered varieties and six double flowered ones. Amongst them P. Rosy Circle is a remarkably picturesque flower for beds and groups; and P. Leviathan is perhaps the largest double flower in the purple crimson section yet raised.

VARIEGATED-LEAVED GERANIUMS.—Including eight fine varieties, amongst which G. Mrs. Pollock is a splendid yellow belt with a broad and brilliantly picturesque crimson inner zone.

TROPÆOLUMS.—Six varieties, constituting a selection from the finest batch of seedlings in Europe, and are models of excellence in their various adaptations for decorative effect in beds, broad belts or pot culture. Individually they are distinguished by their brilliant colours, correct outline, and profusion of bloom.

GERANIUM MINIMUM.—A very small, neat, dwarf-habited bedding variety of the Nosegay section, with numerous trusses of crimson flowers.

ANTIRRHINUMS.—Three fine varieties of the remarkable new section with erect tubular flowers of violet-red and purple shades.

ROYAL HORTICULTURAL SOCIETY.—Notice is hereby given, that the next General Meeting of this Society for the Election of Fellows, will be held in the Council Room in the New Garden at South Kensington, W., on TUESDAY, May 14, when the Chair will be taken at 3 o'Clock.

General Meetings for the Election of Fellows will also be held on FRIDAY, May 24, and FRIDAY, May 31. On these days the Chair will be taken at 2 o'Clock.

On TUESDAY, May 14, a Ballot for the following Plants will take place:—

LIST OF PLANTS FOR BALLOT, MAY 14.

1. FABRICIA LÆVIGATA. Greenhouse evergreen shrub, Australia.
2. ,, CRASSIVALVIS. ,, ,, ,, ,,
3. MELALEUCA DECUSSATA. ,, ,, ,, ,,
4. HERMANNIA ANGULARIS. ,, ,, ,, ,,
5. GOODIA LOTIFOLIA. ,, ,, ,, ,,
6. KENNEDYA RUBICUNDA. Fine greenhouse climber, Australia.
7. HARDENBERGIA OVATA. ,, ,, ,, ,,
8. ,, MONOPHYLLA. ,, ,, ,,
9. ,, ,, ALBA. ,, ,,
10. TECOMA LATROBEI. ,, ,, ,,
11. DRACÆNA AUSTRALIS. Ornamental greenhouse plant, Australia.
12. PHORMIUM TENAX. New Zealand Flax, New Zealand.
13. CASUARINA QUADRIVALVIS. Greenhouse weeping tree, Australia.
14. SOLANUM AURANTIACUM. Greenhouse shrub, Australia.
15. ,, HYSTRIX. ,, ,, ,,
16. EURYBIA ARGOPHYLLA. ,, ,, Tasmania.
17. SOLLYA HETEROPHYLLA. Greenhouse evergreen creeper, Australia.
18. EUCALYPTUS VIMINALIS. Evergreen tree, New Holland.
19. ,, POROSA. ,, ,, ,,
20. ,, GLOBULOSA. ,, ,, ,,
21. CALLISTEMON RUGULOSUS. Greenhouse evergreen shrub, New Holland.
22. PITTOSPORUM ACACIOIDES. ,, ,, ,,
23. LEPTOSPERMUM SCOPARIUM. ,, ,, ,,
24. PULTENÆA DAPHNOIDES. ,, ,, ,,
25. HAKEA SP. ,, ,, ,,
26. ANADENIA PULCHELLA. ,, ,, ,,
27. XANTHOXYLON SP. ,, ,, ,,
28. CALOTHAMNUS QUADRIFIDUS. ,, ,, ,,
29. HAKEA ACICULARIS. ,, ,, ,,
30. ,, BRACHYRHYNCHA. ,, ,, ,,
31. CLEMATIS ARISTATA. King George's Sound.
32. POLYGONUM COMPLEXUM. Hardy evergreen shrub, well adapted for rock work.
33. CALCEOLARIA VIOLACEA. Violet-flowered Calceolaria.
34. VITIS ODORATISSIMA. Sweet scented Vine, North America.
35. CUPRESSUS TORULOSA. Hardy Cypress, Bhotan.
36. ,, GOVENIANA. Gowen's Cypress, California. Hardy.
37. ,, CASHMERIANA. Cypress of Cashmere. Hardy.
38. CRYPTOMERIA LOBBII. Hardy coniferous tree, China.
39. ABIES MENZIESII. Hardy coniferous tree, North-west Coast of America.
40. THUJA LOBBIANA. California. Hardy.
41. BRIDGESIA SPICATA. Hardy trailing plant, pink flowers, Chili.
42. LONICERA FRAGRANTISSIMA. Fragrant hardy shrub, China.
43. SHANGHAE ROSE. Spring Rose of Shanghae. The earliest in flower.
44. NERGALI, OR HILL BAMBOO OF PUNJAUB. India. Hardy.
45. BAMBUSA GRACILIS. Hardy Bamboo, India.
46. BERBERIS NEPALENSIS. Evergreen shrub, Nepal.
47. PINUS LONGIFOLIA. Half-hardy coniferous tree, from India.
48. SPIRÆA CALLOSA. A beautiful hardy shrub, North China.
49. LIGUSTRUM OVALIFOLIUM. Hardy Shrub, North China.
50. SOLANUM CAPSICASTRUM. A beautiful greenhouse shrub, with scarlet berries in winter.

Fellows of the Society desirous of obtaining any of these Plants, if Life Members of 40 guineas, or Annual Subscribers of 4 guineas, are requested to name Twelve sorts; if Life Members of 20 guineas, or Annual Subscribers of 2 guineas, to name Six sorts.

The arrangements for conducting the Ballot render it necessary that the names of the plants, or the number prefixed thereto in the above list, should be sent to the Offices of the Society, South Kensington, W., on or before Friday, May 10, after which date no applications can be attended to.

ANDREW MURRAY, Assistant Secretary.

The Gardeners' Chronicle.

SATURDAY, MAY 4, 1861.

THE effect of the spawn of Fungi on various plants, whether arboreous or herbaceous, has of late been so much ventilated, that cultivators are in general pretty well aware of what they have to contend against, and the precautions they must use. The subject however appears in a new light, from a communication just received from the well-known Algologist, Dr. HARVEY, who has transmitted specimens of a production, appearing at first sight to consist of a mass of branched roots about the thickness of a tobacco-pipe, but in reality of Fungous origin, which is devastating a collection of Rhododendrons in Ireland in a mixed shrubbery. They flourished well till a year or two ago, when some became very sickly. The gardener raised one of the invalids, and found the soil filled with a substance resembling Sarsaparilla in outward aspect, but more waved and corrugated, and twisted round the roots of the Rhododendron an inch or two beneath the surface. THE SUBSTANCE WAS REMOVED, AND THE PLANT RECOVERED. Other Rhododendrons are now similarly affected, and in every case which has been examined the surrounding soil is traversed with similar parasites.

A microscopical examination of the substance in question shows that it is a condition of some Fungus, and not the production of any Phænogamous plant. It is in fact one of those anomalous bodies, characterised by a firm white corky pith, consisting of delicate interlaced and often fasciculate threads, surrounded by a thin brown brittle bark, which cracks transversely here and there, exposing the white mass beneath. These

bodies are referred by authors to the genus *Rhizomorpha*, which, like *Himantia* and many other spurious genera consists of anomalous conditions of various species of *Polyporus*, *Hypoxylon*, &c. arising from peculiar places of growth, and in very rare cases only indicating their true origin. Some grow on the walls of mines, where they are often brilliantly luminous, rendering the dark caverns where they flourish as beautiful as an enchanted palace; others spread beneath the bark and wood of trees, while others run freely in the soil. It is very possible that if we had an opportunity of examining the spot in question, we might not be able to trace the exact origin of the parasite at this season of the year. We suspect however that it is not the produce of dead stumps or roots in the neighbourhood, but derived from some fleshy Fungus like *Agaricus grammocephalus*, which we have seen luxuriating amongst Moss and stick in plantations of Rhododendrons, sending out its thick branched root-like strings in every direction to a great distance. We have not indeed had an opportunity of examining the winter condition of these strings, but we recommend gardeners who suffer from similar attacks to be on the look out for such Fungi, and to facilitate their search we shall take an early opportunity of figuring the Agaric in question. Should our suggestion prove correct it would be easy probably to eradicate the Fungus. It is some satisfaction, however, that whatever be the especial cause, the diseased plants recover their proper healthy tone when the parasite is removed. This has been generally found to be the case with the white flocose spawn, which has hitherto been found productive of mischief, and as the substance before us is so much larger, and forms such large masses, it would be so much easier of removal. The gardener, it should seem, has not only before him the fear of old hidden stumps and decayed roots, or of compost consisting in a greater or less degree of half-decayed vegetable substances, but the very fallen leaves and twigs, though decaying on the surface and forming the source of fresh nutriment to supply the exhaustion of the soil, may prove the source of mischief, and the same principle may sometimes be applicable in farming operations. Few matters, indeed, are of more consequence to the cultivator than to have accurate views of the effect of Fungi upon the objects of his care, for it appears every day more and more certain that they are the fruitful cause of mischief.

Dr. HARVEY's communication was accompanied by a notice of the blocking up of drain tiles at the depth of three feet, after the interval of a year, with the roots of some Cruciferous plant, and probably of Watercresses. *M. J. B.*

THAT the smoky atmosphere of towns and cities is inimical to vegetation, especially to that of an arboreous character, is on all hands admitted. The plants become suffocated by it. Minute sooty particles are deposited over their surface, so that respiration is impeded, and debility follows as a thing of course, but only to give increased force to the debilitating agency, which is constantly doing battle with the vitality of the plant. If any proof is wanted, let only a tree or shrub thus circumstanced be handled, and in the mark of funereal hue which it leaves upon the hand, its lingering doom may be surely read. It is true that rains and storms sometimes wash away, in part at least, the accumulated pollution, and in the fall of the leaf deciduous plants gain some respite at a time when the evil is at the worst, but these at the best are mere palliatives, and on the whole vegetation in towns and cities has but a sorry existence.

But though smoke and soot are enemies of no mean power, they are by no means the only enemies to whose attacks plants located within the circuit of cities and large towns are exposed; nor are we sure that they are even their most powerful enemies. The excessive amount of drainage which is a necessity in regard to the health of the population, becomes a severe trial to plants having their roots, and consequently the source of their nourishment, deep in the earth. The giant Drainage clutches them, from his parching grasp they are powerless to escape, and while at this disadvantage the demon Soot falls upon them without mercy, bent on their destruction. The wonder is that under such circumstances trees survive at all.

Let one but for a moment recall to mind the conditions under which a tree has to exist in such a place as London, and the difficulties in the way of mere existence become obvious. The whole area is intersected by mighty sewers, at an average depth, in comparison of which the "deep draining" of the agriculturists is but a scratching of the surface, and by this net-work of drains all or most of the natural moisture of the soil is carried away from the roots. The quantity which can possibly be left in the presence of conduits 20 to 30 feet deep, crossing and recrossing at short intervals in all directions, is infinitesimally small. Then as to the rain-fall—the natural compensation for this excessive draining,—how small a portion can by any possibility be absorbed by the soil! What with buildings, paved streets, and macadamised roads, nearly the whole surface is skilfully fortified against the percolation of rain, and the water which falls from the clouds is conducted by the most ready way into the jaws of the all-absorbing sewer.

Now what is the immediate effect of this upon the health of a tree? If it be a deciduous one it will put forth its leaves at the natural season in spring, the energies of the plant being strengthened by its winter's rest, and thus it will be enabled to reach a moderate degree of development, which we may suppose to vary in amount with the conditions in which it happens to be placed. But that expended, the tree has nothing to fall back upon. Its roots cannot cater for its proper sustenance, and the consequence is that its growth is checked, and its energies flag. The hot parching weather of summer setting in sucks out the little moisture it contains; the leaves languish and are unable to perform their proper duty; a sickly grime seizes them, and the accumulating atmospheric impurities find a constitution already impaired upon which to work their still further paralysing influences. And so, in too many instances, piece by piece the tree dies away, the extremities being the first to suffer. The only difference, if it be an evergreen, is, that in this case the operation of these evil influences is more continuous.

This excessive drainage is, we have no doubt, one principal cause of the dying tops which are so nearly universal among London trees. Its effects may not unfrequently be directly traced. In one locality, for example, a fine avenue of aged Horse Chesnuts, though perhaps wanting the exuberant vigour of country trees, were, not many years since, to be seen in a fairly healthy state. A deep sewer was carried near them, not close enough to do them any material physical injury, but sufficiently so to draw away the moisture of the soil, and so that the wells of moderate depth in the neighbourhood were emptied. Since then the trees have been visibly decaying, here and there a limb, there a tree, has gone, and now the avenue has become a wreck. In another instance, where a sewer some 20 to 25 feet deep was constructed, the wells of about the same depth were at once drained, whilst within a year or two the tops of the larger trees in its vicinity, comparatively healthy before, began to die away. And such, there can be no doubt, is the general action of the sewage system upon the arboreous vegetation within its influence. Of course there will be differences apparent in different districts, some being more affected than others; those in which the soil is heavy will be less affected or even perhaps in some instances rather benefited if the depth of the drain is not too great, while those of a gravelly nature will be liable to suffer more or less severely.

In recurring to this subject, we shall endeavour to point out how the evils we have here referred to, may be in some degree mitigated. ——*

THE following suggestions for rendering WARD'S CASES better suited for the transport of plants during long voyages have been received from their author, Mr. CAMERON, the very intelligent head gardener at Peradenia, Ceylon. Since Mr. THWAITES, to whom they were originally communicated, considers them good, and the principle involved in them seems true, we hope that some trial of the method will take place.

"Since certain species of plants appear to be less able than others to sustain confinement for long periods in Wardian cases, it might be profitable when such species are very valuable to try if the common glazed case could not be improved. If it be granted that stagnation in the air and soil contained in the case is the main cause of failure in transporting these delicate species from one country to another, then the remedy lies in getting a perfect system of ventilation throughout. Experience proves that such a primitive mode of airing as the opening of a door, does not (for obvious reasons) produce the desired result; therefore a more manageable plan must be sought.

"It occurs to me that a WARD's case, where it has an attendant on a voyage or journey, might be made the home of the species indicated, instead of the sepulchre, by some such plan as the following.

"Fit a perforated false bottom into a WARD's case, letting it rest on spars of wood laid on the true one, so as to leave a space of ½ or ¾ of an inch between, and bore one or more holes communicating with the outside. Lay on the inner bottom a layer of small potsherds. Make two holes in the ends of the case near the top, and fit in one end a piece of gas pipe, long enough to reach nearly to the soil: fix it to the end, and tie a small cloth bag on it. Provide a pair of small bellows, the nozzle to fit into the pipe outside the case. At sea, or on land, blow down this pipe several times a day, opening the other end hole, or one or more of the holes below the soil, which ought to be pervious to air. All the stoppers ought to be screwed to the case, and the lower holes carefully stopped, particularly when at sea. Once a month or so one of the sashes might be removed for the purpose of cleaning out dead leaves; but it is hoped that this plan of ventilation will in some measure prevent this necessity.

"Should the plan succeed upon trial, there is still one more evil which would be difficult to remedy, and that is shaking; more to be dreaded on land than at sea."

PRUNING PEACHES AND NECTARINES.

Too much is done with the knife and too little with the thumb and finger, in managing these as well as many other fruit trees. It is considered a very clever thing by many fast gardeners to use the knife freely, and well thin out their wall trees. Now, having suffered many years by allowing my gardener too much licence with Saynor, I cannot do less than caution my fellow-sufferers in this way (and I know we are a numerous class) not to allow their gardeners a knife at all, except it be to prune Gooseberry bushes. In fact, I wish the Chancellor of the Exchequer would put a tax upon pruning knives; it would yield a good sum to the revenue, and save hundreds of Peach trees every year. The way I found out that the knife had caused all the evils my trees had been subject to in the last 14 years (during which time two series of trees had been "used up," and a third set were going in the same direction), was this:—My gardener left me two years ago, and wishing to bring a sharp young fellow who had worked with him for some time into his place, I took to the management of my wall trees *pro tem.*; and being a subscriber to the "Florist," took lessons from your back numbers, wherein thumb pruning is strongly insisted on; and strictly following the plan laid down, I shortly discarded the knife altogether. I began my work in April 1859. My principal Peach trees were then four years old, and were already getting naked in the centre and lower part of the tree, owing, as I soon found, to the buds not wanted for wood having been cut away with the knife, by which practice, in two or three years, the lower parts of the main branches were left without young wood on them, and what was still worse, without the power of forming even adventitious buds. My plan is to cut nothing away; every bud is allowed to grow a few joints in length, when I pinch out the point, leaving two or three leaves at the base, which includes as many joints. Those intended for filling up are selected and laid in when grown sufficiently long, but I am more sparing of this wood than more depending on my spurs. The shoots pinched back may again push during the summer, when they are again closely stopped and result in fruit spurs, which have also generally latent wood buds at their base, which prevents the wood ever becoming naked and unproductive, which it otherwise would. By this simple method, my trees are now covered with short spurs and small wood in place of the long coarse shoots which used to run up to the top of the wall in a season, and naked wood is now impossible. My trees have escaped this severe winter without suffering any bad effects that I can see, whereas my neighbours all tell me the wood of their trees is blackened or dead. The spurs ripen sooner than the wood on longer shoots, as they become brown and lose their leaves earlier. Hence the superiority of the plan in seasons like the last. My man is now getting into his work, and I shall in some measure place the trees in his care this season, allowing him no knife, except to shorten back some long shoots when they have fairly broken! Yes, gardeners must learn to dispense with the knife in tree management, just as we have done with the lancet in our medical practice. *A M.R.C.S., in Turner's and Spencer's Florist for April.*

SUGGESTIONS FOR ECONOMISING SOLAR HEAT IN PLANT HOUSES.

BY THOMAS MORRIS, 12, REGENT STREET.

(Read before the Floral Committee of the Royal Horticultural Society, February 12th, 1861.)

HEAT being a natural principle or influence of the highest importance in horticultural pursuits, its consideration becomes an object of commensurate interest; but it is only of that which is derived from the great

source of nature that it is here proposed to treat. The laws of optics by which light is governed, are applicable in many points, and especially with respect to reflection, they apply to heat also. The great defect in the construction of many buildings for horticultural purposes appears to me to have arisen from the neglect of such governing natural laws.

It is not my intention to dispute the vast, it may be, primary, importance of light in buildings of this nature, but to show that there is a practicable medium by which the greatest benefits of heat and light may be associated. Light, however, has been so largely insisted on by horticultural writers, that the employment of glass has been carried to the utmost possible limit, plant houses having been constructed as far as could be with all the sides and all the roof of that material.

It is my purpose to show that this maximum quantity, so far from being necessary, is positively injurious. Light, it must be recollected, is eminently diffusive, so that, as illustrated in the Pantheon at Rome, a single foot of glass is found to illuminate in an agreeable manner 3000 cubic feet of space; and the attention devoted in modern times to the subject of picture galleries, has enabled architects to remove, by a moderate employment of glass, shadow from every part of the internal surface of large rooms and galleries from which side light is altogether excluded.

The late Mr. Loudon, whose acquaintance with such subjects is well known, states that every superficial foot of glass is capable of cooling $1\frac{1}{4}$ cubic feet as many degrees per minute as the degree of the external atmosphere falls short of that within a building. To make a house, therefore, as I have said above, with all the sides and all the roof of glass, is virtually to construct a frigidarium of which the cooling powers throughout a large proportion of the year can only be overcome by an immense supply of artificial heat. It must be unnecessary therefore to insist on the value of any plan by which the admission of light and the retention of heat may be to the largest practicable extent secured.

The optical law of reflection is, that any incidental ray of light is thrown from a reflecting surface at a corresponding angle to its own, but in the opposite direction. It will not, therefore, be difficult to conceive the possibility of so placing opaque reflecting surfaces (I do not necessarily contemplate or imply polished planes or glass mirrors) in a building as to prevent the escape and throw back into the interior the more vivid southern rays, and thus to increase the positive amount of light within such building; and in so far as those reflecting surfaces may be formed on a cellular system, or with materials unfavourable to the conduction and loss of heat, the economisation of that valuable agent will be also effected.

The means by which this great object may be secured are fortunately of the most simple and inexpensive character. I will suppose, for example, that it is necessary to erect a house for the reception of plants in the form of a long parallelogram, whose chief dimensions shall run north and south. It will be a question in such a case dependent on the value accorded to a due east morning light, whether that aspect should be treated on the transparent light-admitting or the opaque heat-retaining principle, and this may be further subject to a consideration of other special objects; but it will never, I believe, be disputed that the northern aspect may be treated on the principle of preserving internal heat, rather than of straining to catch a few extra rays of dim diffusive light. According to this view the north side of a plant house should always be a wall, and, when circumstances permit, the eastern side may be a similar construction, either wholly or in part; but the south and the west would invariably have a large proportion of glazing.

It now remains to consider the roof. Taking the general average angle of the sun's rays throughout the year, together with the necessary conditions for throwing off rain, and general convenience, the ordinary pitch of 45 degrees appears very suitable; but instead of carrying the ridge of such a roof along the centre of the parallelogram from north to south, I propose to divide the length into a number of bays or compartments, such as proportion or other considerations may dictate. These divisions would then be covered each by its own ridge-roof running east and west, with gutters between in the same direction. With regard to the two sloping sides of each ridge-roof, I propose to make that to the south of glass, that to the north of a cellular construction, which may be lined on the interior with common boarding, plain or painted, or may be plastered or covered with porcelain tiles, or, should a higher effect be yet desired, it may be lined with silvered glass; while externally any of the ordinary covering materials of a mineral non-conducting character, such as slates and tiles, may be employed.

If a slight diagram be constructed it will be at once apparent that, when the rays of light come from the south and do not form with the horizon a greater angle than 45°, not one single particle of light is obstructed by a roof made upon this principle, while, on the other hand, a clear half of the radiating heat-wasting surface will be replaced by the non-conducting reflector.

The plan, it may be mentioned, is equally applicable to cases in which the longer line of the parallelogram may run east and west, but it would not then be necessary to divide the length into compartments, as the ordinary span roof, transparent on the south and opaque towards the north, would effect the same purpose.

Although the advocacy of a simple, natural, and economic principle is my chief object, the method of construction would not generally interfere with necessary decorative features, and in order to exemplify this in some moderate degree, I may deferentially refer to the illustration that accompanies this paper. But a purpose far higher than that of mere decoration will have been served if it has been shown that, before resorting to expensive artificial expedients in the endeavour to surround valuable subjects of the vegetable kingdom with climates assimilated to their native regions, much, very much, may be accomplished by a fuller appreciation and more extended employment of the simple means placed at our command by the beneficent Author of Nature.

MYCOLOGY.—No. L.

Reticularia umbrina, *Fr.*—The singular Fungus which forms the subject of our present illustration is like some others belonging to the same genus, so variable in form and appearance from age and situation that it is sometimes very puzzling to young mycologists. It commences its growth in the form of a limpid tear-like globule, which gradually increases in size and forms a sub-globose or shapeless mass, consisting of a thick cream-like fluid. This then acquires a thin cuticle which is either perfectly smooth and shining as if it were varnished, or dotted with little rough warts formed of a number of minute processes, collected in pencil-like tufts. In this state if the skin is ruptured a creamy fluid is discharged. In a short time, however, every trace of moisture is absorbed, and the skin, which has now acquired a more or less decided umber tint, is ruptured and exposes a mass of umber brown spores scattered amongst erect branched compressed threads. The spores in an early stage of growth are said to be attached to

Reticularia umbrina, *Fr.*
(Copied by permission from Greville's Cryptogamic Flora.)

the threads in clusters, but we have had no opportunity of observing this. *Reticularia umbrina* is fond of old Fir-stumps, on the horizontal surface of which it attains a large size. It is not, however, confined to Conifers, but is often seen attached to Oak posts, looking like a snake's egg adhering by a flattened disc. We have seen it frequently on the posts of foot-bridges, where it probably is nourished by the damp air beneath. Occasionally it is found in woods on fallen sticks and leaves. It is the only species of the genus which is at all common, at least in this country.

It is sometimes much altered by weather, becoming occasionally so firm and hard as scarcely to be recognised. It is hardly possible to preserve good specimens of the common form, the cuticle being so brittle and the spores so easily dispersed. We have never seen the threads so slender as represented in Greville's plate, but Fries informs us that they vary much in thickness, insomuch that he has at times been disposed to make two species. The usual size of the plant is about 2 inches across, but it occasionally in flat horizontal specimens acquires a diameter of several inches. *M. J. B.*

Home Correspondence.

Bougainvillæa speciosa.—On visiting the Flower Show at Oxford, on Thursday the 25th of last month, my attention was arrested by an assemblage of magnificent festoons of rich rose-tinted flowers, compared by many to the fashionable colour called mauve, which was suspended from a vase at one extremity of the exhibition room, and which I recognised as belonging to the same plant which I had once seen and admired near Palermo, growing in the open air on the wall of a country house belonging to an English merchant resident in that city. The specimen exhibited was in fact a branch detached from the plant of the Bougainvillæa which now covers a span-roofed stove belonging to the Rev. Mr. Keene, of Swyncombe House, in Oxfordshire, already noticed in the *Gardeners' Chronicle*, and was loaded with its gorgeous rose-coloured bracteæ, within which the true flowers are enclosed. The success which has attended the efforts of Mr. Keene's gardener, Mr. Daniels, in causing this very shy-blossoming climber to put forth such a profusion of flowers, seems attributable partly to that geothermal culture lately recommended in the *Chronicle*, as the roots are stated to be in immediate contiguity to the flue, and are thus stimulated into activity by the high temperature to which they are subjected, and partly to their being confined within a narrow space, and thus prevented from absorbing a redundancy of moisture, by which the foliage of the plant would be promoted at the expense of its inflorescence. *Charles Daubeny, Professor of Botany, Oxford.*—[Similar testimony has reached us from other quarters.]

Polyanthuses from Seed.—Being an admirer of the Polyanthus, it struck me that it might not be uninteresting to some of your amateur readers like myself to learn the mode others have successfully followed in raising seedlings, as I find not a few complain that they cannot get their seed to germinate. I procured a 1*s.* packet in the spring of 1859, from Mr. Woods, of Harwich, and having prepared a pan of good garden soil with plenty of drainage, I made the surface as fine and smooth as possible, and after having sown the seed evenly, I was careful to cover it very slightly—a mere crust over the surface. I then kept the pan uniformly moist and covered it with a hand-glass to keep it from baking. Nearly every seed vegetated and did well. But great care must be taken when the seedlings are up not to let them get dry, as thousands are lost in that way. I then pricked them out into pans and kept them over the winter in a cold frame, and found in the following spring that I had nearly 500 healthy plants to bed out; many of them bloomed last season, and all of them have done so this. And what is more, there are many good stage varieties among them whose substance and lacing are almost all that could be desired. I have shown them to several friends qualified to judge, who pronounced many of them to be superior kinds. *G. J., Aberdeen, April 29.*

Mr. Thomas Lobb (see p. 387).—If the suggestion of your correspondent J. M. is acted upon and a subscription opened, it will afford me great pleasure to give 5*s.* towards the same, and I hope a like spirit may influence many of J. M.'s neighbours, as well as lovers of Horticulture everywhere. *A Working Gardener, Torquay.*

Peach and Nectarine Trees on open Walls.—At this season, after such an unfavourable summer as the last, followed by such severe frosts as those we experienced last winter, it is not unlikely that you will be receiving complaints in reference to the injured Peach and Nectarine wood of last season's growth. I beg to send for your inspection two or three sets of last year's wood cut from our Peaches and Nectarines, which are all young trees on a wall 450 feet long, with a south aspect. I may in the first place remark that Peach and Nectarine trees have been grown on this wall for these last 40 years, and I can state on reliable information that heavy crops have been gathered from them. I merely mention the circumstance to show that trees did grow and bear fruit, planted in this Peach border years ago, and that in soil in which there is not a single drain. Drains are however not wanted, as the soil is loose and light, but of a dark colour, resting on a gravelly bottom. In the year 1857 I found the whole of the trees in a bad state; they were cankered and so badly furnished with wood that I considered it impossible to do anything with them except tear them out and burn them. This I did, and immediately afterwards I planted young ones. The border being deep I raised the bottom by means of stones, and added heavy soil to our existing loose dark mould, which is not so good as a yellow soil. I have seen Peach and Nectarine trees bear fine fruit and grow well in Worcestershire, in what would be termed here brick clay. It will be seen from the above that I have had three summers' growth from the young trees I planted. Most of them produced some good fruit last season, but many dropped their blossoms when they ought to have been setting; and although we were led to believe that the previous autumn's frost had had a very injurious effect on wall fruit trees, especially Peaches and Nectarines, I came to the conclusion that I would lift them, although young trees. But other work pressed me heavily, and I did not lift my trees until the beginning of last December. I was therefore in the midst of the work when the severe frost set in, and the whole, except one which was not taken up at all, were laid in by the heels on parts of the border, which was all "hills and holes." On broken stones, which were put in as bottoming, were laid yellow sods from 3 to 4 inches thick, upside down; and on that clay and marl, as much as I could procure, well mixed with the border soil. The trees that were lifted look well as far as I am able to judge from a minute inspection of the whole of them; but the one which was not lifted will be worse in my opinion before it is better. In January of last year I brought into our early Peach-house a young Royal George from off the open wall, and planted it against the trellis-work in the front of the house (leaving an open space large enough for it between two very large trees—a Peach and Nectarine). I commenced forcing the house shortly after planting the Royal George (rather trying for it), and I gathered four dozen fine fruit from this tree, as my employer can testify. Its roots were outside, and it never cast a leaf

or a fruit except those thinned off, and it was well furnished with wood. Many of its associates on the open walls had symptoms of ill health in spring; if their constitution was impaired by the frost of October, 1859, how was it that the tree planted in the Peach house has had no symptoms of disease, but on the contrary is in the best of health, and has, at the time I write, 10 dozen Peaches on it already stoned? There are localities in which the Peach and Nectarine do badly let one do what they will with them. I have seen Peaches do badly in parts of Worcestershire, and Apricot trees that would not produce fruit even after being planted on arched brick-work bottoms, and on all manner of contrivances; while when I lived in the north of Yorkshire, I could get good crops from Peach, Nectarine, and Apricot, by a more natural way of planting, and in heavy soil. With this in view, I have been led to the conclusion that every man must work according to his locality; mine is moist and cold in spring, and I am induced in consequence to think that if I am to succeed in getting out door wall fruit, I must lift almost annually, for here it is a common thing to find Polypodium vulgare living through the hot summers on the branches and stems of various sorts of trees, especially Oak in this forest. *J. Roberts, The Gardens, Charleville Castle, Tullamore.*

Rainfall in March, 1861.—

STATIONS.	Height of Gauge. Above the Ground. Ft. in.	Height of Gauge. Above the Sea Level. Feet.	Depth of Snow or Rain. Total for the Month. Inches.	Greatest fall in 24 Hours. Depth. Inches.	Greatest fall in 24 Hours. Date.	Rainy or Snowy Days.
Little Bridy, Dorset	0 4	348	4.41	1.00	27	25
Barnstaple, Devon	0 6	81	3.93	.46	26	20
Castlefield, Calne, Wilts	0 11	830	2.77	.60	27	20
Camden Town, London	0 4	100	2.42	.39	17	19
Finchley Road, London	0 4	270	2.83	..	..	..
Ditto ditto	36 4	306	1.48	..	..	..
Oundle, Northampton	20 0	124	1.56	.28	20	20
Norwich	0 0	30	2.60	.50	3	15
Derby	5 0	179	3.86	1.00	3	23
Manchester	3 0	106	4.43	.94	30	25
North Shields	1 0	124	2.23	.64	2	25
Dumfries	0 5	68	5.30	.55	20	29
Nookton, Leven, Fife	0 6	80	2.12	.36	21	23
Sandwich, Orkney	2 0	78	4.71	.51	28	29

Little Bridy.—0.8 inch of rain fell on the 26th; hail on the 11th, 12th, 17th, and 30th; snow on the 18th and 21st.

Camden Town.—Snow at 3 P.M. on 21st.

Oundle.—Hail on the 5th, 6th, 11th, 16th and 30th; snow on the 11th and 21st.

Derby.—Mean (14 years) fall for the month, 1.85 inch.

Manchester.—Dr. Dalton's average (47 years) 2.308 inches.

Dumfries.—Very wet month, there having been only three days without either rain or snow. Oat sowing commenced (on light gravelly soils) on the 25th.

Nookton.—Snow fell on the night between the 10th and 11th, and the 21st and 22d.

G. J. Symons, Camden Road Villas.

Heating Vine Borders.—When I mentioned in my article on Vine Rot, that it was my opinion that from what Mr. Shearer saw of the chambered Vine borders at Colney House the chambered borders at Yester originated, I did not for a moment intend to rob Mr. Shearer of credit due to him for bringing the subject of chambered borders before the public. But we must all live and learn, and certainly I did understand that Mr. Shearer came to England in order to visit some of the leading gardens, to see what he could learn before he began the great improvements which have been so successfully carried out at Yester. I also understood that directly afterwards, Mr. Gray went to Yester and erected the houses in question, with the chambered borders. Of one thing I am certain, and that is, that it was no other person than Mr. Shearer himself who was in the chamber among the Vine roots. *John Monro, Rabley Gardens, Barnet.*

Societies.

ROYAL HORTICULTURAL: *May* 1.—*Anniversary.*—This meeting, for the election of Council and Officers for the ensuing year, and receiving the Report of the Council, was held in the new Council Room in the Garden at South Kensington. The Earl of Ducie occupied the chair. Lord Llanover and the Right Hon. T. F. Kennedy, having been named Scrutineers of the approaching Ballot, the Assistant Secretary read the following Annual Report from the Council to the Fellows:—

In giving an account of their management during the past year, the Council are necessarily in a great measure restricted to reporting the progress of an unfinished design, and announcing the expenditure of much money and labour.

As the completion of the works connected with the new Garden was not contemplated at so early a date as that of the present anniversary, and as the progress actually made has kept pace with that anticipated at this time last year, the Council believe that the interests of the Society entrusted to them at the last anniversary have not suffered at their hands.

In the report of the Council then made they said that "they hoped and believed that in the absence of unforeseen obstacles, the garden will be for the most part completed by midsummer in next year;" and the present Council trust that they will be able to fulfil the anticipation so held out, notwithstanding that they have had to contend with formidable obstacles arising from circumstances wholly beyond either their control or anticipation. The first of these was the unprecedentedly wet season of last year. It threw the earthworks of the garden so far behind, that it was only by the most arduous exertions that the delay has been made up. This however has happily been done. The second great hindrance was the long-continued frost, and the brick-work and masonry were only beginning to recover the ground lost during that period of compulsory idleness, when they have been again thrown back by the strike of the building workmen.

Notwithstanding the imperfections caused by these obstacles, the Council feel bound to open the gardens on the 5th of June. Some portions of them will not be in such a state of completeness as they could wish, and it may be matter for the grave consideration of the New Council to be appointed this day, whether, after the formal and ceremonial opening and great Show on the 5th and 6th of June, the Gardens should not be again closed for a short period, for the finishing of the works.

One of the works to which the Council allude is the Memorial of the Exhibition of 1851, now executing by Mr. Joseph Durham; which, as Fellows are already aware, has been placed at the disposal of the Society by the committee entrusted with its supervision. This is a work dependent on the powers of labour of a single individual, and must bide its time; although every exertion has been promised to be made to have it ready as soon as possible, it cannot be in its position this year.

Another feature which will not be ready by the 5th of June, is the supply of water. After anxious consideration the Council decided on providing the water required for the various basins, &c., as well as for the general use of the garden, by sinking an artesian well. They found that the annual sums which would be charged by the water companies for supplying them was so large, that it was economy at once to take this step; and Messrs. Easton & Amos have contracted to do it, guaranteeing a supply of from 35,000 to 40,000 gallons per day.

There are other minor matters which, though it may be said that the works are incomplete without them, can hardly be ranked under the head of unexecuted works. These are statues, tazzas, vases, and other objects of ornament. As the Council trust that the garden is to be progressive, and that constant additions to its attractions will be made during successive years, they regard such works rather in the light of ornamentation which may be made, altered, or removed at any time, than in that of the permanent structures of the garden, which their exertions have been specially directed to have ready by midsummer.

If the progress of the works has been satisfactory, not less so has been the progress of the Society itself. Since 1859 a greater number of new Fellows have joined the Society than ever before did in any two years of its palmiest time;* and this notwithstanding that they have hitherto had scarcely any privileges to enjoy. Such numbers sufficiently indicate the appreciation by the public of the efforts made to restore the Society to its former eminence; their expectations of success, and confidence in the future attractions of the garden.

The funds of the Society have in this manner been largely recruited; many of those who have joined during the last two years have become life members, their subscriptions representing a sum of about 13,300*l.*

The expenses, however, have been, and to complete the works must be, great, and the Council, as the Society is already aware, found it necessary to apply for authority to raise, by debentures, a sum of 10,000*l.*, in addition to that of 40,000*l.*, which was already sanctioned by the Society. This authority was granted by the Fellows at a special meeting held on the 19th of April, and such was the feeling entertained of the prospects of the Society, that, in less than a fortnight, more than double the sum required was offered, although the loan was never advertised for, nor any publicity given to it other than the intimation to the Fellows themselves in the Notice calling the Special General Meeting. That meeting was held so recently that it is unnecessary to advert more particularly to the terms and arrangements relating to that loan.

An account of the money received and expended on the Kensington Gore account to the 31st of March will be found in the Appendix.

The General Account, representing the state of the liabilities and assets of the Society before the recent alterations, has worked its way into a satisfactory state.

On the 2nd of June, when the new lease of the Kensington Gore Gardens comes into operation, the two accounts hitherto kept separate will be amalgamated.

The Council, under the agreement with Her Majesty's Commissioners for the Exhibition of 1851, and the other arrangements of the Society, found it necessary to apply for a New Charter. This has been for some time in preparation, and it is expected to pass the Great Seal within a few days.

The ordinary working of the Society has been going on satisfactorily during the last 12 months. Several ballots for seeds and plants have taken place, and this mode of distribution has found favour with the Fellows. The confining the ordinary distribution of flower and vegetable seeds to those who apply for them is acknowledged (now that the rule is understood) to be a proper regulation. By devoting the large conservatory at Chiswick to the cultivation of Vines, an admirable collection of the best kinds has been secured, from which the inferior sorts are being, by degrees, eliminated, and a very large number of cuttings of the now recognised best sorts, and of other fruit trees, have been distributed. This has been felt by the Fellows, more than ever, to be a solid advantage.

The Flower and Fruit Committees have, under the superintendence of their respective Secretaries, Mr. Moore and Dr. Hogg, carried on their investigations in a most satisfactory manner, as is shown by their reports in the Society's "Proceedings." The Council have reason to know that these reports are regarded as valuable sources of reference by the gardening community. The Council, however, think that the time has now come when the publication of something of a more important character may be tried, and they are taking preliminary steps with this view.

They have arranged to send a collector to an interesting district in South Brazil, and have also made arrangements with a collector who is already in South Africa, to collect and transmit seeds and plants to this country.

The spacious Council Room in which the Fellows are now met not only furnishes them with a suitable place of meeting, as well as accommodation for their minor shows and competitions, but removes any difficulty as to a hall for the delivery of lectures, and for the reading of papers on scientific subjects should such be resolved on.

The Council have given much consideration to the question of the rules of admission, and the decision to which they have come will be found in the Printed Rules, copies of which are now laid upon the table. [It was announced that these Rules had been unavoidably delayed, but would be shortly sent to all the Fellows.]

The Council feel it their duty to express their gratitude to Her Majesty the Queen, and H.R.H. the Prince Consort, President of the Society. The interest shown by Her Majesty has not alone manifested itself in her gracious commands that the Society be designated "The Royal Horticultural Society." Your illustrious President takes a not less lively interest in its affairs and success. But it is only those who, like the Council, have had the privilege of seeing the time and thought bestowed by His Royal Highness upon the plans of the garden in all their details, who can appreciate the extent of that interest and the advantage the Society has derived from it.

The Council, on the occasion of the heavy affliction which recently fell upon the Royal House through the decease of H.R.H. the Duchess of Kent, thought it not unbecoming in them to present an address expressive of their sympathy and condolence to H.R.H. the Prince Consort, which he was pleased graciously to accept and kindly to acknowledge.

The Society has been indebted to the liberality of various individuals, who have offered or presented them with plants, seeds, and other donations. Some of these they have been unable to accept, others are not yet received or accepted; but a list of those who have so kindly testified their interest in the Society is appended.

The adoption of the Report having been moved by the Earl Grey and seconded by Sir John Boileau, Bart., was carried unanimously.

On proceeding to the ballot for officers and new members of Council, Mr. Henry Bohn rose and made some observations on the list proposed by the Council, advocating his own claim to a seat in that body, and inviting the Fellows present to substitute his name for that of one of the gentlemen the Council had recommended. Several other Fellows addressed the meeting. The ballot having been taken, the Scrutineers reported that, by an unanimous vote of 71 Fellows present, H.R.H. the Prince Consort had been re-elected President; W. Wilson Saunders, Esq. Treasurer, Professor Lindley, Secretary; and Mr. Jonathan Clark, Mr. Edward Rosher, and Mr. George Pim, Auditors for the ensuing year; and that to supply the vacancies in the Council caused by the retirement of Henry Pownall, Esq., Robert Wrench, Esq., and Dr. Charles Edmonds, there were for the Duke of Rutland, 60 votes; for Mr. John Fleming, Cleveden, Maidenhead, 61 votes; for Mr. Robert Cooper, 152, Fleet Street, 59 votes; for Mr. Henry Bohn, 10 votes. The Chairman thereupon declared the three former, who had been recommended by the Council for election, to be the new members of Council for the ensuing year.

LINNEAN, *March* 21.—The President in the chair. Mr. D. Moore exhibited from the Botanic Garden, Glasnevin, a flowering specimen of the curious and anomalous Cruciferous plant Megacarpæa polyandra. Mr. Moore stated that the seeds from which this plant was first raised in Europe, were sent to him by the late Major Madden, who collected them on the Himalayas about ten years ago; and that this was the second instance of its flowering. "Whether," he remarked, "very severe winters affect it so as to make it bloom, I am not prepared fully to confirm, but this much respecting it I now know, that the first time it flowered was after the severe winter of 1854, and not since, until the present year, after the winter which is now passing away. In both instances the flowering stems appeared above ground soon after the snow had melted, and thus continued to increase gradually in growth as the spring advanced until the blossoms opened—for the first time in April 1855, now in the end of March 1861. The flowers of 1855 were succeeded by perfectly formed silicles, which seemed to contain perfectly formed ovules, but when opened the ovules were found to be soft, and they did not germinate. The number of stamens is not equal in each flower, but varies from 10 to 14, and some of them are frequently abortive." The following papers were read:—1. "On the possibility of taking a Zoological Census," by Alfred Newton, Esq. 2. "On the true nature of certain structures appended to the feet of Insects and Arachnids, subservient to locomotion, by Tuffen West, Esq.

April 4.—Professor Bell, the President, in the chair. R. Heward, Esq., exhibited from the herbarium of the late Mr. Allan Cunningham, specimens of Cælebogyne ilicifolia, accompanied by some memoranda respecting them. The specimens were described as being the original ones of the male plant collected by A. Cunningham a short distance up the Brisbane River, New South Wales (now Queensland). The remarks Mr. Cunningham makes in his Journal are "Diœcia: a broad Holly-leaved shrub frequent in brushy forests. Flowers unexpanded. Anthers 6-8." Cunningham apparently never saw the female plant either in flower or in fruit. He took up however some young plants for transmission to Kew, three of which reached their destination safely, and they are the progenitors of all the existing plants in Europe. The following papers were read:—1. "On the Identification of the Grasses of the Linnean Herbarium," by Col. Munro, C.B. Hoping ere very long to be able to offer botanists a full account of all Grasses at present known in collections, Col. Munro has devoted "considerable time to the identification of the species of the early authors, with the view of clearing up some of the numerous mistakes in synonymy, which add so very much to the labour of a systematic botanist, who wishes to treat any natural order in a really scientific spirit." The author stated that he had carefully

* In 1820 and 1821, the two most prosperous years of the Society, 625 Fellows joined. During the last two years 937 Fellows have been elected.

examined every Grass in the herbarium of Linnæus, and in offering this list of names which he considers they should bear, he trusts the list would be of some use to those botanists who were unable to consult the herbarium itself. A list of the specimens accompanied by observations on many of them, formed the bulk of this very valuable paper. 2. "Note on an unusual Mode of Germination in the Mango, Mangifera indica," by M. T. Masters, Esq. The specimens referred to are in the Kew Museum. The seeds were sent from Western Africa by the late Mr. Barter, and were reared at Kew by Mr. Crocker. "From the appearance these young plants presented on cursory inspection, and perhaps from the knowledge that the seeds of the Mango are occasionally polyembryonous, the specimens were described in these words: "one Mango seed producing many plants." The closer examination Mr. Masters had been enabled to make led him to conclude that the specimen consists in reality of two seeds, presenting such peculiar appearances, especially when placed, as they were, in close apposition one to the other, as readily to give rise to the opinion before expressed. This would be understood at once, he observed, by the circumstance of there being only two cotyledons present, from between which a great number of shoots appeared to emerge. Both seeds had lost one cotyledon, but the scar left by the other was visible. In one the plumule, which was short, thick, fleshy, and conical, gave off not from its summit but from its side, some distance above the attachment of the cotyledons, three leafy shoots, one of which was small, and another divided into two branches. The peculiarities presented by the specimen were summed up thus:—1. The entire absence of one of the cotyledons in both instances; 2. The plumule in one case giving off no shoot at all, and in the other giving off three shoots from its side; and 3. The production of adventitious roots from the scooped out portion of the cotyledon. "I do not know," the author continued, "any instance of plumules presenting the peculiarities just mentioned, nor have I been able to find on record any case of adventitious roots springing from the cotyledons themselves. Irmisch indeed describes similar rootlets arising from the petiole of the cotyledon in Bunium creticum and Carum Bulbocastanum. The scooping out of the lower half of the outer surface of the cotyledon may not be an unusual occurrence in Mango seeds, though it is certainly not invariable. Braun, in his recently published memoir on polyembryonous plants, among which the Mango is mentioned, does not mention anything like the appearances I have attempted to describe." 3. "Descriptions of some new species of Ant from the Holy Land," by F. Smith, Esq. 4. "Catalogue of the Heterocerous Lepidoptera, collected by Mr. Wallace, at Sarawak, Borneo," by F. Walker, Esq.

Entomological: *April* 1, the President in the Chair.—Mr. F. Smith exhibited specimens of Myrmedonia funesta, a small species of cove beetle found in the nest of the sooty ant, Formica fuliginosa, near Erith; also some preserved fruit of the Litchi received from China, in jars infested with Silvanus frumentarius, a small beetle and its larva often found in sugar. Mr. Stainton exhibited specimens of the larvæ of an Adela found on Oak leaves, also that of a Nematois which feeds on the green leaves of Ballota nigra. Dr. Knaggs mentioned the case of a child 10 years old who had emitted the larva of a moth with 16 legs in a fit of sneezing. Mr. Mac Lachlan exhibited specimens of Stenophylax concentricus, a species of Trichoptera new to this country and Mr. Walker a large case of Hemiptera from North America. Mr. Waterhouse made some observations on several species of Monotoma, a small genus of British beetles.

Reviews.

The Great Sahara. By H. B. Tristram, M.A., F.L.S., 8vo. J. Murray.

The author of this volume, an accomplished and intelligent English clergyman and a zealous naturalist, being recommended to spend the winter in a more genial climate than that of England, twice visited Algeria, and on the last occasion made, in company with a friend, a four months' tour in the northern part of the Great Sahara. Under French auspices and protection the chiefs of the different tribes with which he came in contact received him with hospitality, and he had no difficulty in penetrating as far south as Waregla, a distance of about 250 miles, or about one-seventh of the entire distance to Timbuctoo. Insignificant as this portion of the great desert appears on the map, the natural features of the Sahara are so monotonous and unvarying that the traveller has only to imagine the oases and wells at greater distances from each other, to be able fully to realise what must be the character of an expedition across this most barren of countries. What its barrenness is may be judged of by the following description of its fertility.

"I said that the desert, as viewed from the heights of Laghouat, appeared interminable; but my rides to the Dayats soon showed that even this has its varieties. If any reader has formed his idea of the Sahara from Turner's well known picture, with its unbroken horizon line on all sides, a dying camel in the foreground, and a vulture soaring aloft, the only objects to break its monotony, let him at once dispel the misty illusion. The Dayat, which is very frequent to the south of Laghouat, may be looked upon as an unimprovable oasis, where there is no constant supply of water to be found by boring, but where, from the configuration of the substratum of limestone, it being in fact depressed into something like a saucer, moisture gathers after the rare and uncertain thunderstorms. This moisture affords just sufficient support for a few Terebinth trees and wild Jujubes, under whose shade a scanty herbage, intermingled with some desert plants, is browsed by troops of gazelles and a few antelopes. Here the golden eagle and the royal kite hold court and courtship, and carry on a perpetual but bloodless warfare with the raven, and the shrubs below are occupied by many warblers little known, and but rarely seen by European naturalists."

The following extract gives an idea of the difficulties to be encountered in traversing this inhospitable country:—

"From Guerrara our faces were set steadily southward, and we were well equipped for a forced march of three days. The plain, for some time after we mounted from the Wed Seder, was covered with rolling sand-drifts of fine and almost impalpable powder, driven and ripple-marked by the wind, in which our horses sank at each step to their knees. The only plant I could discover was a Garlic, new to me, with a leaf about 2 feet long, and scarcely the tenth of an inch in width, and a root with a flavour stronger than ever was breathed from the mouth of a Tuscan peasant. Soon we rose upon a stony plateau, of different geological character from the country of the M'Zab, composed of secondary limestone, but covered with rough masses of conglomerate, and innumerable sharp pebbles of silex, of every hue, apparently disintegrated from their matrix, which the winds that sweep this elevated tract had carried entirely away, and deposited in the lower ground through which we had just so painfully waded. Only here and there was the surface dotted by dwarfed and colourless desert shrubs, about 6 inches high. Not sorry were we just after nightfall to reach our appointed bivouac—the bed of the Wed N'ça, marked in the gloom by our gradual descent among clumps of a dwarf Tamarisk new to me (Tam. Buonapartii, Cosson), and other shrubs, which afforded us abundant fuel."

For about half the distance southward, Mr. Tristram was on French territory; this terminated at El Aghouat, or, as called by the French, Laghouat; a city of 2700 inhabitants, surrounded by mud walls, and embosomed in Palm trees. Being a rendezvous for the wandering tribes of the Sahara, who deposit their corn here when they move south for pasturage, it is a thriving place:—"The women carry on an active manufacture in 'Djellali,' or horse-housings, which have a great repute: in dyed 'djerbi,' or blankets, in haiks, and especially in 'filali,' or Morocco leather. The filali, which is always red, is considered equal to that of Morocco. The secret of its preparation consists simply in the tannin used, which is the inner rind of the Pomegranate, a most powerful astringent. So prized is the rind, that here, where the fruit is most abundant, and beneath price, the skin sells for more than its measure in Wheat, a very costly commodity. The best rind for the purpose is that of the wild or bitter Pomegranate, and it is a common practice to send the crier about the souk or market, exclaiming—'Who will let out his teeth to peel Pomegranates?' and the dyers actually hire masticators to provide them with tannin. But the principal source both of wealth and subsistence, here as in all the oases, are the gardens, of which there are 391, all watered by the Wed Djidi, whose stream is intercepted by a dam just below the groves. These gardens yield three simultaneous crops. First of all the closely planted surface supplies Carrots, Onions, Melons, Pumpkins, Cucumbers, Red Pepper, Tomatos, Beans, Maize, Cauliflowers, &c., which flourish luxuriantly under the thick shade. Over these rises a dense mass of fruit trees, Apricot, Peach, Almond, Quince, and many trellised Vines; and above all, a second dome of Date-Palms (djereed). The taxes are raised by a small payment for each fruit-bearing tree, and, besides 20,000 female and 500 male Palm trees, the last census gave 26,000 Apricots, 6600 Peach trees, 24,500 Figs, 1300 Quinces, 2400 Pomegranates, 800 Pears, and 1100 trellised Vines. A considerable quantity of 'hermez' or dried Apricots is exported, but the Date-Palm is the most carefully cultivated. The male trees blossom in the month of March, and about the same time the case containing the female buds begins to open. To impregnate these a bunch of male flowers is carefully inserted and fastened in the calyx. Towards the commencement of July, when the fruit begins to swell, the bunches are tied to the neighbouring branches."

After leaving Laghouat, Mr. Tristram pursued his journey through the country of the Beni M'Zab, a tribe in friendly relations with the French, and whom he considers as the most interesting people he encountered. He visited several of their towns, and was everywhere hospitably entertained at the expense of the state, every householder being in turn compelled to furnish provisions for the strangers.

They offer a strong contrast to the nomad tribes around them, being peaceable and industrious, availing themselves to the utmost of the resources within their reach; in fact, with such a soil and climate to contend against cultivation is impossible, unless unremitting attention be paid to it. "The cultivation in these groves or gardens was excellent, far superior to that of Laghouat. The soil was all artificial; every sort of manure carefully husbanded, then spread and watered well before being ploughed in, and after the surface had been raked, the seed was sown in drills. Round the root of each Palm was a hollow trench to hold water, and the land was laid in patches for cultivation, as in Egypt, with little miniature water courses in every direction, dividing it into rectilinear figures of about a yard square. These watercourses were fed by neat channels of about 4 inches in depth and diameter, beautifully formed of hard lime, and branching in all directions from the well, so that the precious fluid could be conveyed without the slightest waste through the grounds. Each garden is daily watered, and planted in every possible space. As at Laghouat, Vines are trellised from Palm to Palm, Fig trees, Quinces, and Pomegranates add their paler green to the dark wavy trees above them; while Capsicums, Pumpkins, Carrots, Turnips, and Barley, occupy the surface."

The M'Zab indeed seem to be far advanced in civilisation; they possess seven cities, each having "its own parliament for the settlement of its domestic affairs," while together they constitute a republic, "governed by a djemmâa, elected by the separate states." Their sewerage arrangements are represented as so good that we might with advantage take a hint from them; and long before Rifle Volunteers were thought of in England, they were enrolled in Africa, though we cannot but think there is some mistake in the extreme antiquity Mr. Tristram assigns to them. "Here are the butts of the Rifle Volunteers, at which every fortnight 100 of the citizens are summoned to practise ball-firing for three hours in virtue of their dignity as the militia of the confederacy. The target is the face of a rock, which, by the practice of centuries, has actually been hollowed into a cave of 12 feet deep. This presents the convenience of enabling them easily to re-collect the whole of the expended lead."

Ornithology is Mr. Tristram's favourite pursuit, and we believe that his name is by no means unknown to the followers of that branch of natural history. This being the case, he has been fortunate in the country he has selected for his expedition; for it abounds in rare and interesting birds, being indeed the winter resort of many European species. How must his eye have been gladdened by such a sight as is here described! "Not far from this is a small salt lake, which abounds in birds of every variety. Conspicuous among them is the Flamingo. On approaching the lake a long white line could be seen stretching right across it, looking somewhat, by its slightly undulatory motion, like the foam of a line of breakers on a reef. But the alarm is given, the white line becomes animated, rises, and expands—first of a snowy white, then, as the birds simultaneously turn, unfolding thousands of black wings, it appears a dark speckled confused mass; then as they wheel from the spectator, the soft pink colour of their backs and wing-coverts absorbs all other hues, and screaming, with outstretched necks, they fly off, an animated rosy cloud. It is the most gorgeous sight on which the naturalist's eyes can feast. The flamingos are most difficult of approach, and it is only by a chance flock crossing overhead that a shot can be obtained. But though the flamingos have gone on the first alarm, myriads of birds remain; ducks are swimming literally "en masse;" clouds of the pretty white-winged black tern are playing overhead, and making feints almost within reach, while the beautiful black-winged stilt, the tamest of waders, daintily lifts his long pink legs as he gracefully stalks through the shallows, or more hurriedly leaves the nests which are profusely scattered round us, unprotected and unconcealed, among the mud and grass. The opposite side of the lake is bordered by a mass of tall reeds, into the recesses of which the waterhens and purple gallinules are hurrying, and from whose thickets resounds the harsh note of the great sedge warbler or thrush nightingale, mingled with the gentler strains of many lesser aquatic warblers. On all sides of us the collared pratincole is exercising its arts, like the lapwing, to lure us from the eggs which lie scattered on the hard dried mud, dropped by threes into any chance camel's footmark; and groups of little Kentish plover are running rapidly by the water's edge."

Again, at Laghouat "the Palm groves are the resorts of thousands of migratory birds, which are busily employed in pecking at the Dates, and keep up a chirping at times almost deafening. Here are the winter quarters of many of our familiar English birds. The chiffchaff, willow-wren, and whitethroat hop on every twig in the gardens. The swallow and the window-martin thread the lanes and sport over the mouths of the wells in pursuit of the swarming mosquitos. The hoopoe solemnly stalks on every dunghill, a cherished and respected guest. The white shrike perches motionless on the extremity of the Palm-leaf; while a pair or more of the Egyptian turtle dove nestle in the centre of the tree, and a random shot will startle from under the Dates a dozing 'booma,' or little owl."

This interesting and instructive volume is completed by an Appendix, containing lists of the Fauna and Flora of the Sahara. The latter comprises 610 species; the most abundant families being Cruciferæ and Salsolaceæ, while "in the whole desert but one Orchideous plant, one single Fern (the Maidenhair), and only two

bulbs, a very small Allium and a small Crocus, are found."

TRADE LISTS RECEIVED. — Ambroise Verschaffelt (Rue du Chaume, Ghent). Supplement and Extract from his Catalogue for the Spring and Summer 1861.

Garden Memoranda.

SWYNCOMBE HOUSE, NEAR HENLEY-ON-THAMES.— We visited Swyncombe House on Monday last and had the pleasure of seeing Bougainvillæa in its glory. The plant stove in which it is growing is covered by a span roof about 18 feet wide and 50 feet long. The Bougainvillæa which fills the farther end of the house is four years old. In 1857 it was a mere sprig in a thumb pot; it grew rapidly as a pot plant, and in the following year it was placed in the cooler end of the house which it now occupies, and was supplied copiously with water. In October 1859, it was taken from a 12-inch pot, in which it had that year been thriving, and planted in a pit about a yard deep and as much in width, filled with rubble, loam, and leaf mould. This pit, as has been previously described, is close upon the brick-work of the boiler by which the house is heated. There is thus a cubic yard of well drained mould, and it is close to the greatest heat which the house can furnish; it is occasionally, *i.e.*, once every 8 or 10 days, soused with water during the blooming season, but receives hardly any between August and March. Thus treated, it threw out a few tufts of blossom in the spring of 1859, and in 1860, as our readers know, it was covered with a profusion of its pink or mauve-coloured translucent bracts. Now as one stands under it, it hides nearly 400 square feet of glass, and would cover even more but that every terminal spray hangs down loosely, many of them a yard or more in length. Certainly, it is now a glorious sight; the house, however, in which it is *confined* (for that is the impression one receives) is ill adapted for the exhibition of its wonderful beauty. One wants to look down upon it as it is looked upon by the sun to which its blossom is displayed. At a distance from it, and standing on a somewhat higher floor, you see imperfectly the upper surface of the mass of bloom lying nearly close to the glass; and in the slanting light of the evening sun the whole of the leafy canopy reflects on one side an almost glowing sheet of colour, while on the other, partly in the shade, and the semi-transparency of the coloured bracts thus coming into play, it has more of an amethystine hue.

Mr. Daniels has already cut, he told us, as much blossom from the tree as we saw remaining, and it would if unrestricted very soon cover the whole roof. It has already a stem as thick as one's wrist, and everywhere there is evidence of the most vigorous vitality. Last year about 1 lb. of guano was mixed with the water which was applied at weekly intervals about six or seven times during the blooming season. This year water alone has been used, about 60 gallons at a time once in every week or 10 days since it has been in its beauty. Young plants in all stages are being brought forward in pots, and under the management which Mr. Daniels has found so successful, the beauties of the plant will no doubt soon become generally known.

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c.—As soon as cold frames and pits become clear of bedding stuff they should be occupied with young stock of hard-wooded plants, for the summer growth of which they are better adapted than large houses. Such places will also be found suitable for dwarf Lobelias, Salvia splendens, S. gesneræflora, and many other things which are generally grown for flowering in the conservatory in summer and autumn; indeed most plants which require only a moderate temperature will be more manageable here and thrive better than in lofty houses with double the attention. As early flowering New Holland plants go out of bloom they should be treated in the way most favourable to secure compact growth, placing them in an airy part of a greenhouse. When the buds have fairly started will be the proper time for shifting such as require more pot room, as they can then be kept somewhat close for a fortnight to encourage a free root action without incurring the risk of the buds breaking scantily. Look well to the stock of plants for summer and autumn decoration, and do not allow them to sustain any check through want of pot room or carelessness in watering. Fuchsias for late blooming must not be kept too warm; they should be placed in a moist shady house, where they will grow much more freely than in a high temperature. Stove plants will now be pushing freely, and will require frequent attention as regards stopping and training. Look sharply after insects, and attend to cleanliness, washing the floors and pots as often as it may be necessary to do so. Go over creepers frequently, so as to regulate their growth and prevent confusion, which without attention soon happens. Syringe and shut up early on the afternoons of bright days, and be as sparing as possible in the use of artificial heat. Afford Orchids in growth a thoroughly moist atmosphere, giving them a good steaming every bright afternoon by syringing and shutting up early. Admit air in moderate quantities on mild days, but carefully avoid currents of drying wind. Examine the plants individually every other day, and water such as require it, but be careful not to give too much to those starting into growth; a cool atmosphere will greatly assist in prolonging the beauty of such as are in bloom.

FORCING DEPARTMENT.

PINERIES.—In the case of plants swelling their fruit the usual practice is to divest them of all suckers, except as many as may be wanted for stock, directly they make their appearance. This it is believed throws more of the energies of the plant into the fruit, and also secures stronger suckers than if too many are left. Some are, however, of a different opinion, and allow all suckers to remain, alleging that they get larger fruit by leaving them on than if they were removed. A case in favour of this plan was recorded in our columns last year (see p. 266). Our more valuable sorts of Pines are not, however, very apt to produce any great excess of suckers, and therefore such as are produced may in general be left untouched. Guard against any decline of bottom-heat, and where this is obtained from fermenting materials, a little fresh tan should be added before the heat gets too low; and it will be much safer to add a few inches occasionally as it may be wanted than to follow the old practice of renewing the bed only once or twice in the year. See to keeping the soil about the roots, where the plants are in pots or planted in the open bed, in a nice healthy state as to moisture, and give manure-water regularly to fruiters and stock in free growth.

VINERIES.—Go over the Vines in succession houses, frequently removing laterals, &c., before they shade or interfere with the principal foliage. Where plants must be grown under the Vines the latter should be kept sufficiently thin to allow a moderate share of light to reach the plants, and neither laterals nor any useless wood should be permitted to obstruct the light. See that none of the plants are infested with red spider or thrips, especially the latter, which if once allowed to get upon the Vines is very difficult to eradicate, and is most destructive to the foliage. Azaleas are very subject to this pest, and if these are grown under the Vines they must be closely watched, and kept clean at any expense. See that Vines in the late house are tied up in their places before the shoots get too far advanced, as there is considerable danger of breaking the latter off when they are allowed to get too long before the rods are tied up.

FIGS.—Attend to stopping and thinning the shoots, and aim at securing short-jointed strong growth, by exposing the young wood to all the light possible. This will of course necessitate keeping the trees rather thin, but it is useless hoping for a crop of good fruit from trees that are crowded with wood. Keep the atmosphere moist, and give the foliage a good washing with the syringe after shutting up the house in the afternoon.

CUCUMBERS.—Encourage newly put out plants with a moist warm atmosphere, so as to get them into active growth quickly; but plants that are fairly established should be kept cooler, admitting air on every favourable opportunity, in order to secure short-jointed fruitful wood; all draughts must, however, be avoided, more especially while the wind is as cold as it is at present.

STRAWBERRIES.—Give abundance of air on every favourable opportunity, and let late crops be carefully attended to with water.

FLOWER GARDEN AND SHRUBBERIES.

Attend to recently transplanted evergreens with water; let the soil about their roots be kept moist, but not to saturation, and the plants as soon as the weather gets warmer might be watered over head with the engine on the evenings of bright days, which will be of vastly more service in repairing the loss sustained by evaporation than if given in excess to the soil while there is a deficiency of active rootlets to absorb it. Where Roses are infested with grub it will be necessary to go over the plants frequently to destroy this pest. Green-fly is also sometimes troublesome; a good washing with the garden-engine on two or three successive evenings will greatly assist in getting rid of these destructive pests, but this must be done after all danger of frost is over. Planting of bedding stock must be deferred for a week or two yet. Begin with Calceolarias, Verbenas, Scarlet Geraniums, &c., leaving Heliotropes, Lantanas, Anagallis, and such things as are usually injured by frost until planting of the more hardy kinds is completed. Branches of evergreens are easily obtained about most places, and a sprinkling of these stuck into the beds after planting will be of great service in protecting the plants from the drying effects of bright sunshine, and will also help to ward off frost. In the meantime get all beds well prepared for the reception of their summer occupants, thoroughly pulverising the soil by occasional diggings; also get arrangements for planting, as recommended last week, decided on, so as to be able to add manure or leaf-mould for such things as will be benefited by such additions to the soil.

HARDY FRUIT AND KITCHEN GARDEN.

Disbudding Peaches and Nectarines may soon be commenced, removing a few of the strongest shoots at first from the most vigorous branches, leaving weaker ones to be operated on hereafter. Go over Apricot trees and remove all strong shoots not required to fill up vacancies on the wall. The fruit will soon require thinning, an operation which must be performed at different times, and always with care and judgment. Pay attention to the destruction of insects in order to afford the young shoots a fair chance to make healthy growth. Look after caterpillar on Gooseberry trees. One way of getting rid of this pest is to give the trees a heavy washing with a powerful engine, throwing the water against the under sides of the leaves, which will wash off the caterpillars; they may then be readily killed on the ground. Trenches must soon be got filled with fermenting materials in readiness for Cucumbers, &c., and expose the plants rather freely to light and air, to prepare them for planting under the protection of hand-glasses. If not already done see to sowing plenty of sweet Basil, Savory, &c., on a warm border of light rich soil.

COTTAGERS' GARDEN.

Every spare half hour may now be profitably employed in stirring the ground among growing crops. Vegetation, which has so long been checked by cold north-easterly winds, is now beginning to make some progress; and weeds, like other things, grow apace; they therefore require sharp looking after. Planting, if any, in the way of vegetables, should be done in drills. In that way the plants get more effectually watered, and the first hoeing, by filling in the drills, acts as a slight earthing up. Keep paths clean, straighten their edges, and endeavour to render them not only neat, but otherwise as comfortable as circumstances will admit for walking on.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending May 2, 1861, as observed at the Horticultural Garden.

April and May		Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind.	[illegible]
Friday	26	16	30.113	[illegible]	62	32	47	48½	45½	N.W.	[illegible]
Satur.	27	17	30.111	[illegible]	38	22	30	48	45	E.	[illegible]
Sunday	28	18	[illegible]	[illegible]	54	26	40	47	45	N.W.	[illegible]
Mon	29	19	[illegible]	30.128	54	23	38	48	45½	N.E.	[illegible]
Tues.	30	20	[illegible]	[illegible]	61	39	50	48	45	W.	[illegible]
Wed	1		[illegible]	[illegible]	62	30	46	48½	45½	N.W.	[illegible]
Thurs.	2	22	[illegible]	[illegible]	64	43	53.5	49	45	N.	[illegible]
Average..			30.173	[illegible]	56.1	[illegible]	43.5	48.1	45.2		[illegible]

April 26—Clear, fine; [illegible] densely overcast.
— 27—Cold rain till noon; then sleet; clear and frosty at night.
— 28—Sharp frost; fine; clear at night; slight frost.
— 29—Cloudy, with cool north-east wind; sharp frost at night.
— 30—Frosty; fine with sun; cloudy; overcast.
May 1—Overcast; fine throughout.
— 2—Fine; densely overcast; slight rain at night.
Mean temperature of the week, [illegible] deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last [illegible] years, for the ensuing Week, ending May 11, 1861.

May.		Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds.
Sunday	5	62.0	[illegible]	[illegible]	13	1.26 in.	[illegible]
Mon.	6	60.4	[illegible]	[illegible]	13	0.68	[illegible]
Tues	7	62.9	[illegible]	[illegible]	14	0.89	[illegible]
Wed.	8	61.6	[illegible]	[illegible]	14	0.62	[illegible]
Thurs.	9	61.8	[illegible]	[illegible]	14	0.61	[illegible]
Friday	10	62.1	40.0	[illegible]	14	0.11	[illegible]
Satur.	11	62.7	[illegible]	51.5	13	0.36	[illegible]

The highest temperature during the above period occurred on the 6th, 1859—therm. 81 deg., and the lowest on the 9th, 1859—therm. 21 deg.

Notices to Correspondents.

BOOKS: *R M.* Moore's Handbook of British Ferns is the best for your purpose.

CAPE BULBS: *G W L.* The treatment of all Cape bulbs is very similar, except that the large ones require more water in proportion to their size than the small ones. The chief point is to ripen them well in a high dry temperature after they go out of flower. You will find an excellent paper on their cultivation at p. [illegible] of our last year's volume.

[illegible]: *[illegible].* This plant being grown for its foliage, is not generally treated so as to favour the production of flowers, but it does blossom freely enough when permitted or encouraged to do so by a less stimulating mode of treatment, such as cramping the roots and growing in a dryish hot atmosphere.

HUMEA ELEGANS: *J.* This may be sown in a warm frame now, and the young plants pricked out and well established under glass, by and by, during the heat of summer, being placed out doors to keep them sturdy, and shifted moderately as required. Winter in an airy greenhouse. Finally pot for blooming about this time next year.

NAMES OF FRUITS: *[illegible].* King of the Pippins [illegible]

NAMES OF PLANTS: *T C.* As far as we can judge from your crushed flower, it appears to be one of the old-fashioned double kinds of Narcissus belonging to the group now sometimes called [illegible]. Indeed it is not unlike the form called "butter and eggs."—*[illegible].* 1. Parietaria serpyllifolia; [illegible] 4. Lastrea dilatata; [illegible] Adiantum [illegible]; [illegible] Pteris tremula; [illegible] Armeria maritima; 9. Saxifraga [illegible]—*J.* 1. Corydalis lutea; 2. Armeria [illegible] Saxifraga hypnoides [illegible] One of the forms of Saxifraga [illegible]—*B B.* [illegible]—*A Y.* [illegible] Arabis albida fol. variegatis [illegible] What is the [illegible] Does it differ from the common double [illegible]—*W. I.* [illegible] You should have sent leaves [illegible] Saxifraga tridactylites. 4. Alliaria officinalis [illegible]—*Wynn.* 1. Stellaria Holostea.—*Kerwood.* Narcissus [illegible]. 4. Ajuga reptans. 2. Lychnis [illegible]; [illegible] Plantago lanceolata. [illegible] Potamogeton crispus.—*E B P.* The plane-leaved form of Potamogeton [illegible] sometimes called P. serratus.—*T.* Lonicera alpigena and [illegible] Staphylea [illegible], wretched morsels. Wet and cold [illegible] roots, and [illegible] is no exception.—*W. C.* Habrothamnus elegans.

NIGHT TEMPERATURE: *T J.* The rule is this: when light is absent or deficient, artificial heat should be diminished; and when light is present and abundant, artificial heat may safely be increased. [illegible] is too much for Cucumbers at night; [illegible] 70° is nearer the mark, with 75°, 80°, or 90° by day, according to the clearness or otherwise of the atmosphere. For a general collection of stove plants, 60 to 65° at night is sufficient, with a higher temperature by day according to circumstances.

MISC.—*Alford. E B F. H T. A Subscriber. An Original Subscriber. [illegible].* [illegible], next week.—*A Constant Reader.* Send a copy of your advertisement to the office, and we will give you the price.

ERRATUM: In our leader on the Gladiolus, p. 391, line 7 from top, for Fernhouses read Greenhouses.

ARTIFICIAL MANURES, &c.—Manufacturers and others engaged in making Artificial Manures may obtain every necessary instruction for their economical and efficient preparation, by applying to J. C. NESBIT, F.G.S, &c., Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, Coprolites, &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch.

Gentlemen desirous of receiving instruction in Chemical Analyses and Assaying, will find ample facility and accommodation at the College.

Established 1821.—UNIVERSAL SUCCESS OF

GRIFFIN, MORRIS, AND GRIFFIN'S MANURES. They have now been tried in 20 English counties, and invariable testimony borne to their value as Manures adapted for the TURNIP, MANGEL WURZEL, WHEAT, GRASS, AND POTATO CROPS.

Full particulars upon application to GRIFFIN, MORRIS, & GRIFFIN, Ceres Works, Wolverhampton.

LAWES'S MANURES. The Manures manufactured by J. B. LAWES for the present season of 1861, are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME £6 6
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES .. 5 5
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These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.

Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.

American and other Cakes at market prices.

Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

THE LONDON MANURE COMPANY (ESTABLISHED 1840,) Are now prepared to send out the following MANUFACTURED MANURES:—

SUPERPHOSPHATE OF LIME, of best quality.
DISSOLVED BONES, AND BONE MANURE FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN AND ROOTS.
CORN MANURE FOR TOP DRESSING.
MANGOLD MANURE.

They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate to be obtained entirely from Bones.

The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE OF SODA, SULPHATE OF AMMONIA, and every Manure of value.
116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.

CONCENTRATED TURNIP MANURE, equal in value to the preceding.

Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."

Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

THE HANDY LAWN MOWER.—FERRABEE'S Patent. It can be worked by a boy, and is the most serviceable Machine yet produced. Price 4*l.* 10*s.*, carriage-paid to any Railway Station in England.

JAMES FERRABEE & Co., Phoenix Iron Works, Stroud, Gloucestershire. London Warehouse: 75 & 76, High Holborn.

"FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.

PROTECTION FROM THE COLD WINDS & MORNING FROST.

"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.

Two yards wide .. .. 1*s.* 6*d.* per yard run.
Four yards wide .. .. 3*s.* per yard.
An improved make, 3 yards wide, 2*s.* 6*d.* per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1*s.* 4*d.* per yard run.

ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.

"It is much cheaper than mats as a covering."

Reaping and Mowing Machines.

BURGESS AND KEY, 95, Newgate Street, E.C. Prizeholders for the best Agricultural Machinery Manufactured.

ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price 42*l.* 10*s.*

TESTIMONIALS.

A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following:—

From MR. JOHN RICHARDS, *Bailiff to* DR. N. CARNE, *Dimland Castle, Glamorgan.*

"I beg to certify that I have for five years worked Messrs. Burgess & Key's Reaper, in my master's Home Farm, and also accompanied it when lent to tenants on the estate. During the above mentioned period the Machine has not cut less than 1,000 acres of all kinds of crops, with the same two knives as first had with the Machine. Dr. N. Carne having given up farming, the machine is now in the hands of his tenant, Mr. D. Thomas, of Llanrwst, and is in excellent order."

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ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30*l.*

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COMBINED REAPER AND MOWER—Two-Horse Machine. Price 35*l.*

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The last two Machines are fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.

These Prices include Packing and Delivery at any Railway Station.

JOHN FOWLER JUN., 28, Cornhill, London, E.C.—Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.

Catalogues containing Prices and Testimonials sent post free.

CHURNS.—The Royal Agricultural Society's Prize Churn is the best invented. Butter produced in 12 minutes. Price 30*s.* and upwards.

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CHAMPION PLOUGHS	HORSE RAKES
STEAM PLOUGHS or CULTIVATORS	HORSE HOES
	SCARIFIERS
HARROWS	And other Implements.

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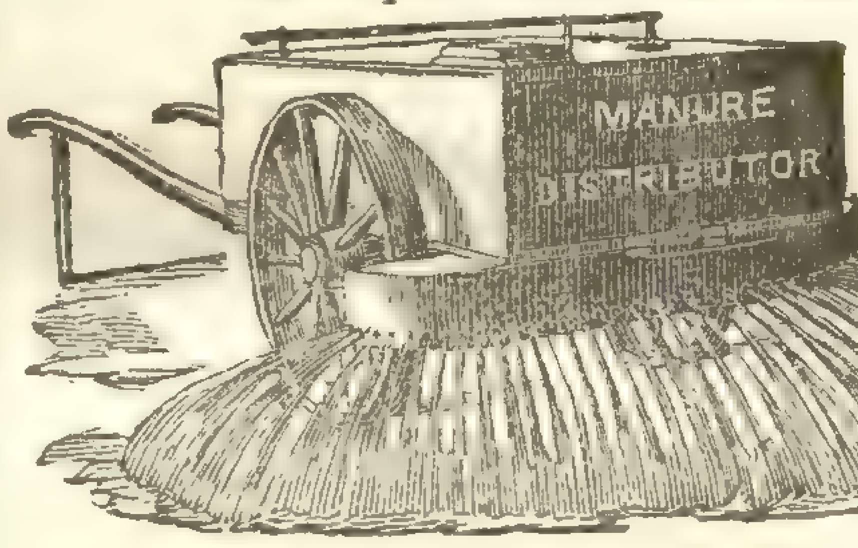

JAMES'S PATENT LIQUID MANURE DISTRIBUTOR OR WATER-CART, warranted not to choke up or otherwise get out of order. It is thoroughly adapted for Drill Crops, or Pasture Land, or for Watering Streets; has been awarded NINE FIRST PRIZES.

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J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25*s.* 6*d.* each.

IRON YARD AND GARDEN PUMPS

3 feet 6 inches under spout

2¼	3	3½ inch
43*s.*	53*s.*	60*s.* each.

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PUMPS of J. TYLOR & SONS' manufacture to be obtained of Plumbers in all parts of the United Kingdom.

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PATENT GUTTA PERCHA SOLES.—IMPORTANT TO GARDENERS.—The Gutta Percha Company have the pleasure to acknowledge the receipt of the following letter from G. GLENNY, Esq., the celebrated Florist:—

"420, Strand, London.

"Gentlemen.—I have worn Gutta Percha Soles and Heels these two years, and being so much in a garden as I necessarily am in all weathers, and with the ground in all states, I would on no account be without them. As a matter of economy I would recommend Gardeners to use them, for they may repair the worn part at all times by warming the material at the fire, and pressing it from the thick parts to the worn parts, as easily as if it were so much dough. I think it the duty of all persons who must occasionally wet their feet to adopt a material that completely defies damp. Many a gardener would escape colds and rheumatism by the use of Gutta Percha Soles

"Your obedient servant, G. GLENNY."

Every variety of Gutta Percha articles, such as Mill Bands, Tubing, Soles, Sheet, Pump Buckets, Fire Buckets, Bosses, Union Joints, Flasks, Bottles, Bowls, Chamber Vessels, Toilet Trays, Sponge Bags, Curtain Rings, Galvanic Batteries, Calbotype Trays, &c. manufactured by the Gutta Percha Company, and sold by their wholesale dealers in town or country.

The GUTTA PERCHA COMPANY, Patentees, 18, Wharf Road, City Road, London, E.C.

THE LANDS IMPROVEMENT COMPANY.—Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.

TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &C. IN ENGLAND AND WALES AND IN SCOTLAND.

The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.

For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

Land Drainage.

WORKS OF DRAINAGE of any extent are EXECUTED by the GENERAL LAND DRAINAGE AND IMPROVEMENT COMPANY on all descriptions of property, whether freehold, entailed, mortgaged, trust, ecclesiastical, corporate, or collegiate.

Repayment may be made by the Landowner as successive portions of the works are completed; or the actual expenditure, with a commission thereon, may be charged on the property improved, by way of rentcharge on the estate created for various terms of years so as to adapt the rate per cent. of annual charge to the circumstances of the tenants.

No investigation of title being required, or notices given to Reversioners or Mortgagees, no legal expenses are incurred.

Works of Irrigation, Enclosing, Wood Grubbing, Road Making, and Farm Buildings are executed in a similar manner.

Landowners desirous to execute any of the Improvements by their own Agents, and charge the outlay and expenses on the Estate, may obtain Loans for the purpose.

Applications to be made to WILLIAM CLIFFORD, the Secretary, at the Offices of the Company, 52, Parliament Street, S.W.

COLLEGE OF AGRICULTURE AND CHEMISTRY, AND OF PRACTICAL AND GENERAL SCIENCE, 37 and 38, Lower Kennington Lane, Kennington, London, S. Principal—J. C. NESBIT, F.G.S., F.C.S., &c.

The system of studies pursued in the College comprises every branch requisite to prepare youth for the pursuits of Agriculture, Engineering, Mining, Manufactures, and the Arts; for the Naval and Military Services, and for the Universities.

Analyses and Assays of every description are promptly and accurately executed at the College. The terms and other particulars may be had on application to the Principal.

FREE STUDENTSHIP IN THE EDINBURGH NEW VETERINARY COLLEGE, Authorised under Royal Sign Manual.

SUMMER SESSION, 1861.—Gentlemen desirous of commencing a Course of Study to qualify as Veterinary Surgeons are informed that the Summer Course will offer them considerable advantages. All who enter at May, and who have not attended a Veterinary College before, will be admitted to compete for a Free Studentship at the beginning of August.

The conditions of the competition and any farther particulars may be learned from Professor JOHN GAMGEE, New Veterinary College, Edinburgh.

ESSEX AGRICULTURAL SHOW AT ROMFORD, JUNE 25, 1861.

Prizes offered, 600*l.* Special prizes open to all England.

Prize sheets and forms for entries may be had on application to ROBERT EMSON, Secretary.
Slough House Farm, Halsted.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

Professor VOELCKER will deliver a LECTURE at the Society's Rooms on WEDNESDAY next, the 8th inst., at half-past 12 o'Clock, on the MANUFACTURE OF CHEESE.
12, Hanover Square, London, W. H. HALL DARE, Secretary.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

LEEDS MEETING, July 15, 16, 17, 18, and 19.

ENTRIES of Live Stock and Flax close on the 1st of June.

Prize Sheets and Forms for Entries may be had on application to H. HALL DARE, Secretary.
12, Hanover Square, London, W.

The Agricultural Gazette.

SATURDAY, MAY 4, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

MONDAY,	May 6	Central Farmers' Club .. .. 6 P.M. (Mr. Owen Wallis on Grazing.)
TUESDAY,	— 7	Wirral (Local Farming). Penrith.
WEDNESDAY,	— 8	—Agri. Society of England .. .. Noon
MONDAY,	— 13	Norton; Framlingham .. .. .. 6 P.M. (Mr. Jeaffreson on Atmospheric Electricity).
TUESDAY,	— 14	—Wirksworth.
WEDNESDAY,	— 15	Agri. Society of England .. .. Noon; Oxford.

WE have had many lectures lately on THE FUTURE OF BRITISH AGRICULTURE. Mr. Alderman MECHI, nearly three months ago, discoursed before the London Farmers' Club on its Past, Present, and Future. In a series of somewhat unconnected, often abrupt but generally suggestive paragraphs, he gave us our agricultural history, and pointed out many of the difficulties which stand in the way of our agricultural progress. "The future of agriculture," he declared, "must be based on a general use of steam-power."

At the Framlingham Farmers' Club, about a month ago, Mr. BOND gave a lecture on the "Future of Agriculture as deduced from the Past." The statistics of national wealth and population were quoted in illustration of social and general as well as of agricultural progress. Increased herds and flocks, better cultivation for their maintenance, improvement in the breeds of cattle and of sheep, and in the kinds of plants cultivated as farm crops, more efficient implements and better buildings—all these things had gradually lifted us out of barbarism and placed us where we are, in the midst of comfort and prosperity. If such were the progress in the past, could we believe that its utmost has been reached? He did not consider such a supposition reasonable, but presumed there must still be an upward growth—increased crops and increased annual produce of all kinds. He showed how progress depended on freedom of action being possessed by landlord, tenant, and labourer, and therefore on the removal of all sorts of disabilities which still exist in connection with each of these classes. Mr. BOND referred in succession to the discovery of new plants, the extension of land drainage, the improvement of machinery, the

use of artificial manures; but strange to say, he does not seem to have alluded to the place which steam-power is destined to hold in the agriculture of the future.

At Wakefield on the previous Friday Mr. HANNAM of Wetherby, the Secretary of the Yorkshire Agricultural Society, and well known to agricultural readers by his published works, had also given a lecture on "Agriculture, its progress and prospects." His history of it commenced with CAIN and ABEL. His description of it included the soil and everything upon it, the owner, the occupier, the labourer, animals and plants and implements. His reference to the probabilities of the future discussed details of practice, explanations of theory, the relations of classes, the landlord's equipment of the farm, the tenant's stock and management, the labourer's wage and cottage, the draining, manuring, and cultivation of the soil, varieties of grain and green crops, of cattle, sheep, and pigs. There never was a fuller discourse, and nowhere was it more energetic or explicit than in its announcement of the steam-engine as the agent on which the main differences between the future and the present of our agriculture are to hinge.

"Already in nearly every stack-yard in this country," he said, "this faithful servant has been relieving muscle and sinew of one of the severest taxes, and by the expenditure of a few pounds of the mineral which we have in so much abundance, has performed duties that would have required acres of Beans and Oats to restore to the animals the waste of muscle and fat which the severe labour of the threshing machine would have extracted from them. And while doing this, it has made the farmer a profit by the less cost of the process, by the saving in the preparation of the corn for market, by the saving of time, and indirectly by allowing the horse and human power of the farm to be made use of in productive labour. For it should be known that, however many horses and men are employed in a farm, such labour is unproductive, produces nothing, and makes no fresh wealth; whereas if hand and head are employed in cultivation, in deepening a ditch, or cleaning a fallow, in working a Turnip-cutter, and making the feeding animals still more lazy by our extra industry, we are not merely modifying agricultural products, but absolutely increasing their amount.

Mr. HANNAM went on to claim for the steam-engine the offices of cultivation not merely by displacing for them other powers now otherwise engaged, but directly by an actual yoking to implements of tillage which will thus do more efficient work at less cost.

There can be no doubt that he is right, and that in steam cultivation there is soon to be a revolution in the management of our clay lands. We have within the past fortnight walked over several thousands of steam-ploughed acres. There has certainly been almost as much difference in their condition as one would see in horse-ploughed land—for steam ploughing as well as horse ploughing may be done when the land is too wet for it. But even in the worst of such mistakes we have the knowledge that the worst is *seen*. The mischief is all upon the surface—the floor on which that clung layer of moved earth is lying is not trodden and impervious. And when as in the great majority of cases you have, as the result of steam ploughing, thoroughly broken up and falling to pieces in the drought, a bed of moved soil, 8 or 9 inches deep, lying on a subsoil which is not a trampled floor, but pervious and well-drained, there cannot be a doubt of the immense influence for good that is then brought to bear on the fertility of the soil.

We last week saw a field of hard clay land turned over in great blocks nine inches thick; and this we are persuaded could not have been done by the direct draught of horses except at great risk of injury to the draught animals. It is now drying in these easterly winds, and will moulder down with the first heavy rains. The land is thoroughly drained, and if fallowed as we presume it will be this year, it is now in a fair way for profitable cultivation. Close by it there are fields originally quite similar, paying formerly a rent of 5*s.* to 7*s.* an acre, which have been drained and worked by steam power and manured, and on which last year there grew the prize root-crops of the district! It is unquestionable that clay lands will have their value wonderfully increased by the use of the steam plough.

Conceive a well drained square of such land, 800 acres in extent: it is about 2000 yards long on each side—it needs 8000 yards of roadway made across it parallel with its four sides, and 500 yards from them respectively, enclosing thus an inner square of 1000 yards. Along these roadways a steam-engine travelling with an anchorage 500 yards from it will plough and cross plough the whole. Make the farm at least one-half larger, and we believe that under such favourable circumstances one of Mr. FOWLER's 12-horse engines will do all the heavy work of tillage for it. The immense saving of horse labour which will ensue is plain; but the superiority of the work which it will do is still more obvious.

It is in our opinion a great merit of FOWLER's method of steam culture, that being especially adapted to large and systematic agriculture it thus acts as a premium upon agricultural improvement. Both it and the Woolston system are, however, also well adapted to the more ordinary circumstances of most of our farms. The latter is probably especially fitted to a country of crooked many-cornered fields. And to some minds it is no doubt the advantage of any novelty, which has proved itself worthy of adoption, that it interferes as little as may be with existing usages and circumstances. Such is not our opinion. The existing condition of our clay land districts is not a thing to be preserved; and as for the other chief subject, of even greater moment, with which steam-power in cultivation is likely to interfere, neither, we are bound to add, is the existing condition of our rural labouring population a subject over which a benevolent conservatism has any reason to be jealous. There is many a village, let us gratefully admit, where a firm, consistent, and benevolent character in the master has been working for years on that of his subordinates and where one might lament any interference with the existing routine. Even here however the steam plough, it will be found, will destroy nothing that one would wish retained; besides which it will be more profitable in the midst of an intelligent and well conducted population than where ignorance or carelessness or spite is likely to do mischief. But these are the exceptions to the ordinary rule of country experience; and there are cases almost everywhere in which anything may be welcomed which shall break up the existing state of things—of which, in plain language, ignorance, drunkenness, and bastardy are the leading features.

We do not suppose the steam plough is to be a great moral agent or that it is directly to bring about the renovation of character which is needed. It will however help to waken out of that stolidity to which gross vice is due; and at the least it may be said that to lament any disturbance which it may produce of the condition in which the agricultural labourer often lives is the veriest cant that was ever thought or penned.

Meanwhile it is our duty to present our readers with frequent pictures of a change which, whatever may be its results, is surely proceeding. To-day accordingly we state the case of Peasemore, a well-known Berkshire farm, where the steam plough has been at work for upwards of a year; and on successive weeks we hope all through the summer to give similar reports of actual experience of steam cultivation wherever we can find it at least four seasons old.

TALES OF A LANDLORD.

DENDROLOGY. AN EPISODE.

THERE is a sort of fatality in discourse,——as in Action. The most matter-of-fact minds cannot resist the belief in it. Just as you appear to have reached that point, either in one or the other, where the knot is ripe to be untied, the chain of doubt, or hesitation, or mystery, to fall away, the rugged path of difficulty to become suddenly smooth——in steps the fiend Impediment, with ruthless hand, breaks you off from your hard-earned conclusion; and the red heat of expectation has to wait, and get cool, and the feeling of assurance is that that same red heat never can, or at any rate in the chance and nature of things, never *will* come again.

Thus it fell out that just as I had reached a point of attention to Mr. Penn's somewhat enigmatically-stated views which promised a down-hill run to the very outlet I had sought, in fact as well as argument, ——a bustling heavy step that shook his whole staircase, throughout all its vertebræ, and ended with a knock very like a kick, at his door, fell like a drop-scene between me and that promised conclusion which should bring the quietus to all landed troubles.

It is idle to say "Come in!" to a Thunderbolt. There is a class of men, and not at all the most unpopular either, who go through the world like an elephant through Jungle. I dare say the owner of the room said "Come in!" It mattered little. A pop-gun in a cannonade would obtain as good a hearing. What I *did* hear,——for the door yielded prompt compliance was, in a voice that seemed to shake my chair under me——"I say! Watchacallum! What am I to do with a fellow that lops my trees without my leave, eh?"

Now instead of Mr. Penn drawing himself up, or expanding like a turkey-cock to the extreme edge of every feather, with a r-r-r-r and a hmmm, as you would very reasonably expect, in reply to such an invocation, I saw a twinkling smile of infinite good-nature, and satisfaction steal, like a ray of shot-silk through every line and feature of his face, as I watched it after the first burst of the intrusion: and all he said was

"Sit down on that chair, sir, and I'll tell you: we were just coming to that: but first let me introduce you; to your neighbor: for you *are* neighbors!——Now what have you got to say? somebody been lopping your oaks? You've got too many. Your tenant Mr. Galldrip complains dreadfully, *dread*fully: 'ts too bad."

To which familiar reception of him and his complaints the gentleman addressed had already assented by seating himself, and giving me a sort of stare and nod of welcome, accompanied by some sound which fell from his lips like 'Serv'nsur!' That done he returned at once to the subject that vehemently occupied him.

"I say, what am I to do! They've been cutting Trees all along the road. You never *saw* such a thing. I wouldn't have had it done for a thousand pounds. They're all ruined——utterly ruined. I don't know what to do with 'em. I shall cut 'em all down"

"Don't know what to do; cut 'em all down," said Mr. Penn in the most provoking sotto voce, twirling a little penknife round like a wheel, between his thumb and fore-finger, his eyes and face running over with an inexpressible look of secret fun.

"Well! What *am* I to do then—you—you— *Lawyer* you! You're as hard as a millstone! you don't care a bit."

"You had the Surveyor's notices I suppose?" said the millstone.

"Rubbish! a pack of printed stuff!——I burn 'em always!"

—— Meantime, sitting by in a state of some amusement, I was doubly introduced by this curt colloquy, to my 'neighbor;' for, amongst the most depressing features of the road I had just ridden for the first time I had noticed the recent amputation by a very skilful hand, of some branches that overhung the road, in the only part of it that could even in summer have deserved the name sylvan. Some herodian decree had gone forth; axe and saw had been at work, mercilessly hewing off limbs too large for ordinary pruning, some close to the stem, some a foot or more from it. It is a sad sight always; it embodies one of the grossest stupidities, and one of the commonest, throughout the rural districts of this country. It seems nobody's business to understand it; and *the execution of the* mischief is entrusted to the most ignorant.

"Why didn't you prune your trees when they were *young*, sir?" said Mr. Penn, still provokingly.

"Young! They *never* were young! at least not in my time"——he added. "Trees should never be pruned. If they wanted pruning naturally, why Nature would prune 'em wouldn't she?"

"But she *does!*" said I, turning involuntarily towards him, before I could stop the words. The subject was hot within me. It had been a favourite study and two beautiful little works, then fresh to the world, which I had read almost accidentally, in the intervals of heavier study, had intensified the physiology of a tree into a sort of passion.

What an odd effect it has when a third person counted as absent, at least by one of the parties, ... natural assumption of his entire ignorance ... terest in the question——suddenly strikes in ... dialogue. I had no sooner uttered the words ... late-introduced 'neighbor' turned, not his face ... but his whole form and presence full upon me ... became sensibly aware of having let myself in ... sort of wrestling match——with a giant too, ... leagued top-boots, cords of extraordinary width ... dimensions——a blue coat and brass buttons, ... firmament of neckcloth and waistcoat, with a ... handsome bluff face over them, contemplating ... apparently from a new point of view. The ... naturally took some time, at the end of which—— ... of a clap of thunder which I expected, he ... wonderfully quiet tone that seemed half in mockery

"Nature prune trees? How so, sir?—— ... by the wind That's one sort of pruning indeed ..."

"My meaning was, that Nature plants not ... in masses, and trees so associated prune each other ..."

"Aye! to a regiment of bare poles like Mr. ... fir-plantations. I hate the sight of 'em. I like ... a tree with all its side branches, and natural ..."

"But what is *that?*" said Mr. Penn, to the ...

"Why, all that it ever produced," answered the other.

"But as that can only happen where a tree ... quite alone during the whole period of its growth ..." continued, "which in natural forest-scenery is ... condition, is not that rather like condemning ... practice of Nature herself, on the strength of an ... which she has made the most exceptional?"

"I don't think I understand you, sir."

"No! I wish he did," said Mr. Penn, (rubbing the palms of his hands together rather maliciously ... would save me some trouble with his tenants ... trees are like drum-head cabbages, all top; ... won't have 'em touched; nor his hedges, which

nearly as high. He 'leaves 'em all to Nature' he says; and so will the tenant's soon, for they can hardly get the plough round the fields. It's lucky his land is so good, for he makes it pay two rents, I tell him!"

"Pooh pooh! I leave 'em as Nature made 'em. She can't go wrong; she must be right."

"At any rate she is always consistent," said I; "as she does not undertake to keep hedges in order, she never plants any. We must not saddle the after-responsibility of our acts upon her. A hedge is from the first, an artificial affair altogether: to keep it down to the standard of usefulness, for the special purpose it was planted for, is surely as 'natural' as to plant it originally in a straight line. The hand of man is part of Nature."

"Well: p'r'aps so. I like to see 'em at their full growth myself. However, I suppose I must give up the hedges, then. Un' natural' from the first! ha! that's true enough. But if there's one thing I do hate to see more than another it is a tree lopped of its side branches. It's shocking; downright shocking: I call it cruel mutilation!"

"Because it is made so. They never ought to need it. But if you follow up the same principle, admitted in the case of hedgerows, I think you'll find that it still applies, more than appears at first sight. You plant a tree in a position where its nature is to defend itself by throwing out early side-branches from a low point of the stem. A solitary tree is obliged to do so whether it be planted in a hedge or a field. As long as it is young this is consistent with the perfect symmetry of the plant because these branches are not disproportioned to its height. But as no branch ever rises above that height from the ground at which it first made its appearance on the stem (for the stem does not *lengthen out*, as some imagine, but rises by mere projection of the leading shoots), as those early-formed branches keep increasing in magnitude, the tree loses its early symmetry, and becomes "all top," as Mr. Penn describes it. Now, as the real increase of the stem is downwards"——

"Lord help us! hold hard there, please! I shall be standing on my head in a moment.——Trees *grow downwards*, did I understand you, Sir! Crabs and Cows' tails! do say that again! Tell him to say that again, Mr. Penn!"

"I'll save him the trouble" bravely responded the man of law. "I think I know what he means——I think he's right! I had a branch cut off the large elm six years ago that grows over my garden wall. Before it was done, the stem of the tree *below* the branch was exactly double the girth of that above it. I measured it myself. And *now* there are only two inches difference in the circumference. To the eye it appears the same. I want to know the reason of that."

"I wish those merciless butchers who strip up trees to a mere pole with a brush at the top did but know the fact," I continued, warming up at this unexpected encouragement, and my 'neighbor's' look of confirmed surprise. "I wish they knew that the growth of trees is downwards,——that every branch they lop off, takes exactly so much from the growth of the whole stem below,——that, in other words, it is the *descending*, not the rising, sap that carries *growth* with it, and makes each new year's 'timber-deposit.' Simple as the fact is,——so familiar to every physiologist that I am almost ashamed to reiterate it, yet it is the key to the whole mystery of wood-craft, it lies at the foundation of the whole principle and practice of pruning —— in those cases where pruning *is* necessary——it is the one master-key that every forester and woodman ought to possess, as the first letter and the last, of his alphabet. Not one in a hundred knows it; or would believe it either, though Pan with all the Dryads at his back should offer bail to it. Yet that deity's own pipes, or the bugle of Robin Hood, or any other sylvan talisman that ever woke the echoes of the glades, never conferred a sovereignty more absolute over the forest than this one little simple fact of physiology, which any horticultural student, *at the desk*, would laugh to hear me enforcing, and which every axe-and-bill-hook-wielder in the woods who *does the practical work*, from year to year, would laugh at as much, for just the opposite reason.

"If every 'owner of Coverts' would but try to infuse the knowledge of this fact into the head of the—— axe, or the saw his woodman uses (for this might prove the shorter task) there would never be a tree mis-pruned again, or left neglected, to its neighbor's injury:——for the true object of pruning is the *social* relation of a tree rather than the individual.

"Are you utterly wearied? May I expand it yet a little?——Briefly stated then, the fact stands thus. It is not from *the Earth* but from *the Air* that the tree derives its food, and its increase. Were I to say that from the soil it gets its *drink*, and its *salt*, alone, I should not be far from the literal truth. The water that rises from the soil through the stem, and the branches into the leaf, does but enable that organ, by evaporation, under the Sun's influence, to absorb the carbon from the air (by decomposition of its carbonic acid). When this process is completed, in the Leaf, and only then, the *descending* sap deposits the new layer of wood upon the stem, under cover of the bark. Cut off a branch, or strip it of its leaves, and all the stem, below that branch, has *lost a tributary*: like some broad river one of whose inflowing streams has been diverted elsewhere. The stem is the main channel, deriving all its current from above —— the branches are its tributaries, every spray a rill, every leaf a little fountain:——the air around is the great reservoir supplying those little fountains——say by evaporation and condensation, as in a Still. There! now we have the true picture before us. Now go and try to tell it to your woodman, make *him* understand or *believe* it, if you can. Aye *there's* the rub." *T.*

(To be continued.)

STEAM CULTIVATION.

PEASEMORE, NEWBURY, BERKS.—Peasemore Farm, about eight miles from Newbury, lies on the chalk formation near its junction with the plastic clay. It forms part of an open country, well timbered here and there around the villages, but otherwise bare, and being high, somewhat cold and bleak. The fields are unfenced except against the roads, but there Thorn, growing well, and excellently managed, makes a first rate hedge. Except against the roads, therefore, the lines upon the map below which represents this farm are merely lines of difference in the cultivation—not of hedge or wall between separate fields. The surface of the land is undulating; the fields are easily accessible by excellent roads, and everywhere supplied in tanks and ponds with water. Mr. Tull, the late owner and occupier of the estate, spared no expense in anything tending to its thorough equipment.

The farm is upwards of 770 acres in extent, of which about 30 are in permanent pasture. The soil very rarely lies directly on the chalk, but is for the most part on a clayey drift, with which the chalk is here overspread. It is accordingly of a much stiffer character than any one seeing the chalk pits open here and there in the neighbourhood would expect to find it. So stiff indeed that, by a single ploughing in the wet, you may easily destroy your chance for the whole season of reducing it to tilth. Mr. Tull prided himself on the horse-power which he employed upon this farm. Twelve three-horse teams of well-conditioned handsome animals worked the land. Of course this was much beyond the requirements of the farm, unless a very considerable number were kept for breeding purposes—but the land is of that character and the distance of all carriage from and to market is so considerable that from 30 to 32 horses would be required for its proper cultivation.

Mr. Plummer, who succeeded the late Mr. Tull, and has been resident at Peasemore for rather more than a year, introduced Mr. Fowler's 12-horse power steam plough about 13 months ago. He has in consequence already reduced the horse-power of the farm to six 3-horse teams, and an odd horse for the water cart, and ultimately he expects to dispense with another team, reducing his number of draught animals to 15 or 16.

COST OF HORSE-POWER DISPLACED.

Let us see what he saves by this: In the first place, comparing 19 with 31, he avoids the purchase of 12 horses, at an expense probably (at 30*l.*, or thereabouts, apiece) of 360*l.* The annual expense of these animals as employed upon the farm is not easily ascertained; it is made up of food, maintenance at original value, smith work harness and farriery, maintenance of the implements worked by them, and wages. The *food*

PEASEMORE:—BERKSHIRE.

of these horses is stated to me to have been 2 bushels of Oats apiece weekly throughout the year, and half a bushel of Beans in addition during three months of seed time. They have hay *ad lib.* during the winter months, and cut green food—Trifolium, Clover, Vetches, &c., during summer. The Oats and Beans may be valued at 2*s.* 6*d.* and 4*s.* 6*d.* a bushel consumed at home—the hay at 3*s.* a cwt., and the green food cut and brought home at 6*d.* per cwt.

(*a*) The following, then, will be the annual cost of food:—

	£	s.	d.
Oats, 104 bushels, at 2*s.* 6*d.*	13	0	0
Beans, 6 bushels, at 4*s.* 6*d.*	1	7	0
Hay, 22 weeks, 1½ cwt. a week, at 3*s.* per cwt. ..	4	19	0
Green food, 30 weeks, 7 cwt. a week, at 6*d.* per cwt.	5	5	0
	24	1	0
(*b*) To this must be added the annual cost of smith's work, carpenter's work *, and saddlery, and farriery, probably	2	9	0
(*c*) And the annual depreciation of value, at least 10 per cent., on 30*l.*	3	0	0
	29	10	0
The annual cost under these heads amounts to 29*l.* 10*s.*, and this over 12 horses is a sum of ..	354	0	0
(*d*) To this must be added the wages paid, viz., head carter, at 13*s.*, and probably 3 younger men at 9*s.*, 40*s.*† weekly, or per annum	104	0	0
(*e*) The annual cost of the implements required for any number of horses may be put at 2*s.* per acre on the land which they would cultivate, supposing them to be the whole horse-power employed on a given extent of land. But as in this case they are displaced only so far as cultivation is concerned, and, indeed, only a certain department of that, this item is necessarily much smaller. The quantity of carriage, of harrowing, and rolling, and sowing for the whole farm remains as it was, and the same number of the implements for these purpose will be in use. On the other hand, the ploughs and scarifiers will be reduced in number more than in proportion to the teams displaced, and probably the implements displaced may cost as much as 150*l.* 10 per cent. on the whole for depreciation, will be	15	0	0
We thus arrive at a total annual saving of ..	473	0	0

* Implements of carriage will remain as many as ever on the farm. Implements of tillage will be diminished in larger number than in the proportion of the horses displaced. The carpenter's bill upon the latter will remain in full, but a more than average smith's bill, so far as the implements are concerned, will be saved.

† The whole expense is probably 20*s.* weekly more for four carter's boys—but this has not been taken into account; for the steam plough has not in effect displaced farm labour, and probably quite as much as 20*s.* weekly is paid, besides the wages of the steam ploughmen, in addition to the remaining hands formerly employed.

	£	s.	d.
Brought forward	473	0	0
(*f*) To this should be added 5 per cent. on the money invested in the horses ~~and their implements~~ (probably 410*l.*) or	20	10	0
Making a total of about	493	10	0

This is the annual cost which has been displaced by Mr. Plummer's steam plough. Let us now inquire his expenditure upon the substitute.

COST OF STEAM POWER SUBSTITUTED.

Mr. Plummer has spent on the engine and machinery 780*l.* His annual expenditure in repairs, fuel, oil, and depreciation of value is not easily ascertained, and it is proper to add here that some of the items have been incurred in working for a neighbour. I therefore make a proportionate deduction from their amount whenever justifiable, guided by the fact that of 878 acres actually worked within the year, only 700 acres have been done on the farm, so as to displace the 12 horses whose cost has just been calculated.

(*a*) Mr. Plummer has purchased this spring 400 yards of new wire rope, and it appears from as detailed an examination as I could give that this is likely to be an annual purchase, and that the old rope will require annual replacement to this extent in order to preserve its efficiency. It should be observed on the one hand, that Mr. Plummer's flinty soil is especially wearing to the rope, and on the other that unusual care is exercised in this particular—an otherwise expensive mode of laying out the land for steam culture being sometimes excused on the plea that it saves the rope.

	£	s.	d.
The annual cost under the head of rope will therefore be about 60*l.*, or, deducting 12*l.* for work done off the farm, and repaid in the charge made for such work	48	0	0

(*b*) Repairs of anchor and engine and plough. I examined Mr. Plummer's accounts from March to December, and the amount in the past year under this head seems to have been 50*l.* 16*s.* 3*d.* This includes everything needed connected with every part of the machinery. If for February and part of March, of which the accounts are not yet rendered, one fourth part or thereabouts be added, we shall have an annual expenditure under this head of 63*l.* That this will increase with the age of the machinery is unquestionable—that use may diminish

		£ s. d.
the account on the score of accident is also probable. On the whole it may be right to charge under the head of repairs the annual sum of 80*l.*, or, as chargeable to Peasemore alone during the year		64 0 0
(*c*) The consumption of coals is of course a costly item. The coal brought on to Peasemore during the year ending March, 1861, cost		91 11 10
The engine coals are 18*s.* a ton at Newbury, eight miles off: those used for the house cost 22*s.* per ton. Of this quantity 25 cottagers had half-a-ton apiece, or about	11 0 0	
The foreman 3 tons	3 0 0	
The house could not be estimated as consuming during the year less than 15 tons	16 10 0	
And there were on hand at the end of the year more than at the beginning, say 10 tons	10 0 0	
		40 10 0
Leaving as consumed by the engine at Peasemore, say		51 0 0
Carriage of 56 tons from Newbury, being in otherwise empty return waggons, say		9 0 0
Annual cost of coals, 1860—61		60 0 0

I find that during the year about 700 acres have been ploughed or scarified on Peasemore by this consumption of fuel, and this amounts to rather more than $1\frac{1}{2}$ cwt. of coal per acre, or including carriage about 2*s.* per acre. Mr. Plummer has however ploughed 180 acres for a neighbour, but the coal used in that case was supplied to him.

	£ s. d.
Of the oil consumed during the year I have no record, but it may probably be put as high as a gallon every four days, or on the whole 25 or 30 gallons for the work upon the farm	6 0 0
The coals and oil together cost then about ..	66 0 0
(*d*) The depreciation in the value of the engine, though nothing perhaps during the first year of its use, must of course amount to a considerable item in the long run, and probably it may be fair to charge 10 per cent. on the value of the whole apparatus, excluding the rope, which is supposed to be kept good by the purchase annually of 400 yards. This item therefore amounts to	68 0 0
(*e*) To this must be added the wages of the men employed who are farm-labourers engaged in other farm work when not at work with the steam plough. The daily wage when thus at work is as follows:—Driver, 3*s.*; ploughman, 3*s.*; anchor lad, 2*s.*; three boys, 11*d.*; water cart boy and horse, estimated 3*s.* 3*d.*; or in all, 14*s.* Now during the past year they ploughed and scarified 878 acres, of which about 180 acres were off the farm, and though I have no exact record of the days when they were at work, yet the 700 acres ploughed at Peasemore can hardly have been done in less time than 110 days, including stoppages, removals, &c.; 110 days at 14*s.*	77 0 0
(*f*) The removals, referred to, take less than four hours each, and may be taken to require the assistance upon the average of four horses with a man each time. Supposing one removal for every 25 acres, we have to charge against the steam plough 28 removals of half a day each of one man and four horses; 14 days at 15*s.*	10 10 0

To recapitulate then:—we have as the annual cost of work at Peasemore done by steam power:

	£ s. d.
Rope	48 0 0
Repairs	64 0 0
Coals	60 0 0
Oil	6 0 0
Depreciation of value	68 0 0
Wages, including supply of water	77 0 0
Removals	10 10 0
	333 10 0
Add 5 per cent. on the cost of the whole apparatus	39 0 0
Or a total annual cost of	£372 10 0

Horse and steam-power, then, may be thus contrasted so far as the cost incurred on Peasemore during the year 1860-61 is concerned:—

COST INCURRED BY

	12 Horses.	Share* of Engine.
5 per cent. on 1st cost	£20 10 0	£39 0 0
Food—fuel, &c.	288 12 0	66 0 0
Bills—repairs	44 8 0	112 0 0
Depreciation	36 0 0	68 0 0
Wages	104 0 0	87 10 0
	£493 10 0	£372 10 0

If the whole cost to Mr. Plummer of the engine for the year be added up, not deducting tear and wear upon a neighbour's farm, and adding for other costs and wages, then the amount is **423*l.***

But there has been received for 120 acres of ploughing at 10*s.*, and for 60 acres at 12*s.* for the work done upon that farm, or 96*l.* in all, so that the sum actually spent by Mr. Plummer during the year on his steam plough has been only 276*l.*, as against 493*l.* 10*s.* saved. And if it be urged that there will be in general work enough upon the farm for the engine and its machinery without going out for hire, then the cost of 423*l.* which would have been charged against it on Peasemore Farm alone—must be compared with a larger sum, which the horse labour displaced would have cost—for in that case Mr. Plummer expects to do with one team less—to save 5 teams instead of 4—*i.e.*, to save 616*l.* instead of 493*l.* per annum.

But in fact the year 1860-61 has been one of the worst years for the tillage of the land, whatever power may have been adopted, that has been known. And if the value of steam-power, which can be employed during the whole of daylight and pushed to its utmost without injury, is *comparatively* greater in such a season, the full use being thus made of the short periods when alone the land is in fit order—yet no doubt the *actual* performance per annum is less and the cost in proportion to work done during the year is greater than it will be in other years.

It results then upon the whole from Mr. Plummer's experience during this year—taking no account of his work except upon his own farm—that 700 acres ploughing and scarifying cost barely 2*s.* an acre for fuel and oil, 3*s.* 2*d.* an acre for repairs of all kinds, 2*s.* 8*d.* an acre for wages, including share of removals, and about 3*s.* 1*d.* an acre for interest and depreciation of value. These sums amount to 10*s.* 10*d.* per acre, or 379*l.* 3*s.* 4*d.* on the 700 acres cultivated by steam; the actual cost as already estimated being 379*l.* 10*s.*

This estimated cost per acre of steam ploughing on Peasemore is probably higher than will have been generally expected. In connection with it there is this, however, to be borne in mind—that Mr. Plummer's neighbours gladly hire his men and apparatus at 12*s.* an acre, paying for the coals (2*s.* an acre) themselves; and above all that the depth and quality of the work thus done are an immense enhancement of the mere immediate advantage on a money valuation which Mr. Plummer thus derives.

THE WORK ACCOMPLISHED.

But let us trace the progress of the steam plough as actually worked upon this farm. The following is the cropping of the land in 1860, as arranged for before being entered on by Mr. Plummer in the spring of that year. The reader must compare the figures with the map. Nos. 1, 2, 3, 4, 8, 23, 24, and 27—$30\frac{1}{2}$ acres in all, are permanent pasture, lying chiefly around the two sets of farm-buildings and around the house; Nos. 25, 27′, 38, 39, and 42—$34\frac{1}{2}$ acres in all, are woodland; Nos. 41, and part of 17 (56 acres), are Sainfoin; and the remainder was cropped as follows:—

No.	Wheat.	Swedes.	Rye or Vetches, followed by Turnips	Barley and Oats.	Clover and Grass.
	Acres.	Acres.	Acres.	Acres.	Acres.
5	..	..	..	..	10
6	..	..	..	..	4
7	..	..	..	..	4
9	..	..	..	..	22
10	..	..	..	17	..
11	..	..	..	23	..
12	..	..	9	..	..
13	6	..	14	14	..
14	..	..	..	..	..
15	44	..	..	.	..
16	..	..	..	..	39
17	22	..	..	..	..
18*	..	12	..	..	..
19	..	..	..	..	19
20	21	..	..	..	..
21	..	..	20	..	..
22 } 28 }	..	56	..	..	..
26	..	..	..	9	..
29	..	..	..	..	29
30	..	..	..	35	..
31	11	..	..	22	..
32	..	29	..	..	..
33	..	..	..	..	15
34	..	14	..	..	..
35	11	..	..	..	..
36	16	.	..	21	..
37	..	..	..	20	..
40	38	..	..	..	..
43	..	11	..	..	..
44	..	16	..	..	..
	169	138	43	161	142

Wheat, 169 acres; Swedes, and Rye or Vetches to be followed by Turnips, 181 acres; Barley and Oats, 161 acres; Clover and Grass, 142 acres; Sainfoin, 56 acres; or upwards of 709 acres of arable land, and $30\frac{1}{2}$ acres of pasture, and $34\frac{1}{2}$ acres of woodland; in all, upwards of 774 acres.

It is plain from this account of the cropping that the four-field course is for the most part adopted. Thus nearly all the Grass of last year is this year in Wheat. Almost all the Wheat of last year is to be in Swedes this year, or is in Rye or Vetches to be followed by Turnips. Almost all the Swedes and Turnips of last year is in Barley, and most of last year's Barley was sown down with Clover, or Sainfoin. The exceptions to this rule are where early Turnips are sown after a green crop of the previous year to be fed off early and sown with Wheat, when this Wheat is followed by Oats or Barley; two corn crops coming after two green crops. I refer to the course of cropping adopted, both in illustration of the quantity of cultivation required by a given extent of ground under it, and also in illustration of the quantity of carriage needed. The farmyard dung is for the most part carried on to the Clover before being ploughed up for Wheat—to the Wheat stubble before being ploughed for winter Vetches—and to any land (not much) that may be intended for Mangel Wurzel. The Turnips are grown on bone-dust and superphosphate, with a light dressing of farm-manure as far as it will go. The straw is carried to yards, where large numbers of pigs are kept, and it is made into dung in these yards under pigs and young cattle. The Turnips, &c., are consumed on the land by sheep.

The following is the list of work actually done by steam cultivation since the purchase of the engine and apparatus in March, 1860:—

It was taken first to No. 31, and ploughed 22 acres of land that had been folded by sheep for Oats and Barley. It then went to No. 14, and ploughed 14 acres for Vetches; then to No. 36, and worked the grubber there over 18 acres for [illegible] It then went to No. 34, and ploughed 14 acres for [illegible] In April it cross-ploughed No. 34 (14 acres); ploughed [illegible] 50 acres of Nos. 22 and 28, adjoining each other; and then [illegible] to a neighbouring farm and ploughed 120 acres. In May [illegible] brought back to Nos. 22 and 28, and grubbed [illegible] Swedes. It was next (June or July) taken to No. 14, [illegible] the land which had borne Vetches was ploughed for [illegible] Thence it was taken to 32, where 29 acres were ploughed [illegible] Rape for Turnips; then, in No. 16, 39 acres of Clover [illegible] ploughed up (early in August) for Wheat. Harvest operations, which that year were tedious enough, then intervened [illegible] was not till October that it recommenced work. In that [illegible] No. 35 (Wheat stubble) was ploughed ($10\frac{1}{2}$ acres) for Rye [illegible] (16 acres), Wheat stubble, was also ploughed for Rye; [illegible] (38 acres), Wheat stubble, was ploughed for Oats; [illegible] (21 acres), also Wheat stubble, was ploughed for winter Vetches. In November, No. 17 (22 acres), Wheat stubble; No. [illegible] acres) Wheat stubble; No. 11 (23 acres) Oat stubble (ploughed and subsoiled), and No. 31 (22 acres) of Oat and Barley stubble, were ploughed in succession; and the apparatus was then [illegible] out, and did 60 acres of ploughing for a neighbour. Since [illegible] winter, 22 acres (No. 17), which had been steam-ploughed [illegible] November, were grubbed across by steam in February before sowing Barley; 30 acres in Nos. 22 and 28, which had borne Swedes and Mangel Wurzel after steam cultivation of the previous spring, were also ploughed by steam for Barley; [illegible] acres, which had been ploughed the previous November [illegible] No. 15, were again cross-ploughed for Swedes; and in the [illegible] part of March 20 acres of the land in No. 11 which had [illegible] ploughed the previous November, were again ploughed [illegible] Swedes.

This is the list of its performances in the year during which Mr. Plummer has had it. But this list of [illegible] work done, preceded though it be by an estimate of [illegible] cost incurred, cannot give the reader any adequate impression of its value, unless he also learns what [illegible] description cannot teach him, and what even Mr. Plummer with his single year's experience cannot [illegible] of course have fully realised—the superiority of [illegible] work. The difference between the ploughing by horse-power and by steam, though obvious enough, is greater in reality than it appears. It is the disturbance [illegible] breaking up of the old floor beneath the shallow [illegible] on which the horses employed in its cultivation [illegible] been for centuries treading, that is the great advantage of the steam drawn plough; and this, though ultimately discovered in the greater luxuriance of the subsequent vegetable growth, is not immediately seen. [illegible] thorough ploughing by steam-power in good [illegible] generally visible enough in the better tilth which [illegible] almost immediately observable. I walked across [illegible] after it had been ploughed by steam this spring. [illegible] steam cultivation crossed the cultivation of the previous autumn, which had been partly done by steam [illegible] partly by horse-power, and the difference was [illegible] greatly in favour of the previous steam ploughing.

In No. 31, again (33 acres), which had been in [illegible] Barley, Oats, and Wheat (11 acres each), the [illegible] No. 28 is now in spring Vetches, looking as well [illegible] promising as possible—the middle piece after Oats [illegible] just been sown with Rape. They were horse-ploughing it as I walked over it, and the harrows were following almost close behind the plough. A particular line across the field divided the tilth from the clods; on one side it was breaking down before the harrows as [illegible] as possible; on the other side the land was close and rough, and intractable. That line separated the 22 acres which had been steam-ploughed in March, 1860, for Barley and Oats, and which had been again [illegible] ploughed in October, 1860, from the 11 acres of Wheat stubble which had been horse-ploughed for [illegible] But it is not in mere instances of this kind alone [illegible] the advantage of steam culture lies. The results appear at length not only in a more complete [illegible] of the natural fertility of the soil and in a consequent and constant annual increase of crops, but in a [illegible] and more energetic character impressed alike on both labourers and their employers.

Home Correspondence.

Subsoiling.—I beg to submit to you what [illegible] occurred to me as a very simple mode of subsoiling [illegible] deep ploughing, that can be effected by the [illegible] method possible. Let the plough be driven [illegible] same furrow two or three times, or as often as [illegible] sary, in order that you may be able to carry [illegible] ploughing to any depth you think desirable. [illegible] this an improved mould-board will be required [illegible] turning the first furrow. When the plough has [illegible] the first soil, and is driven again in the same [illegible] larger mould-board will be necessary, and one [illegible] peculiar construction to clear away the soil of [illegible] furrow, and facilitate the further passage of the [illegible] I am taking out a patent for a new mould-board [illegible] description to effect this purpose, which I consider [illegible] very simple means will produce a very desirable [illegible] A light two-horse plough will always be sufficient [illegible] this sort of work, and will enable you certainly [illegible] time to plough deeper than with the heavier [illegible] plough we are accustomed to, worked by four [illegible] This mode of ploughing, though very obvious, [illegible] be novel, and may be beneficial to the agricultural public, which is my excuse for intruding on your [illegible] *G. J. Crouch, Exeter.* [The *first* plough wants [illegible] a narrower one [illegible] mould-board; the second, if any, a [illegible]

The Game Question.—Your correspondent [illegible] has popped off without hitting his mark. I [illegible] this matter of things as they are, and not of [illegible] There are plenty of game farms, and, no doubt, [illegible] will be, and it is of these I speak. The farmer [illegible] "weazel," according to "Bang") is certainly [illegible] he permits the game to destroy his future crops [illegible] injuring them in their infancy, when, by [illegible]

*"Share" of engine—this assumes that every year as large a portion of the cost of the engine will be chargeable for work done off the farm on hire.

* This is a long outlying field, of which only the end is shown in the map.

matured food, he could prevent such a disaster. "Bang" evidently knows nothing practically of this question, or he would never have said that rabbits and hares prefer young Wheat and growing roots to matured Mangel or Swedes out of a clump. They will not touch the Wheat if they can get plenty of good Mangel, Carrots, &c., in the cover, especially when they have also the opportunity of a relish of dry Beans, Barley, &c., as supplied to the pheasants. I could show "Bang" two fields of Wheat adjoining a cover well stocked with rabbits, &c., where not a blade is eaten, and although the rabbits inhabit the banks they are seldom or ever seen on the Wheat. They know (better than "Bang" does) what they prefer. In fact the combining roots with corn will also keep pheasants very much in cover, especially if they have old lime, rubbish, or chalk, with which they form the shells of their eggs, and proper egging places in the open spaces or low cover under tree tops, bush faggots, &c. I know several farmers who grow large crops, and yet have plenty of game, preserving it for their own sport, but then they feed it well, and so save their crops from injury. In fact, in Norfolk, slips of land in the Turnip fields are regularly sown with Buck Wheat for the winged game, which abounds there, and the woods are duly provided with Carrots, Mangel, &c. This is cheaper than either a law suit or an arbitration, both for landlord and tenant, and I assume that both are or ought to be quite "wide awake" enough to make their own bargain. I have no doubt but that "Bang" relishes a hare, pheasant, and partridge, or even a rabbit (well smothered or curried) in due season, and that he would not wish to banish such luxuries from our markets or even from our aldermen's table. I will communicate to "Bang" a useful illustrative fact. While chatting at a recent civic feast with one of the very largest ship-owners of London, he said, "Mr. Mechi, I can beat you in pigs; I make a clear profit of 1000*l.* a year by mine." I said, "Indeed then you do beat me. How many do you keep," and so on. He replied only about 40 or 50. I was sorely puzzled. Well, he said, I'll tell you how it is. Before I kept pigs the rats used to damage my ships sails in store to the extent of 1000*l.* per annum; now they dine with the pigs, and the sails are uneaten. A military friend told me yesterday that he on a certain campaign fed the rats on bread and milk and so prevented their eating his regimentals. "Bang" can get a practical deduction from these facts, and apply it to the game question, thus rendering unnecessary the boiling over of his indignation. *J. Mechi, Tiptree, April* 30, 1861.

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

MONTHLY COUNCIL, *Wednesday, May* 1.—Present: The Earl of Powis, President, in the chair; the Duke of Marlborough, the Earl of Macclesfield, Lord Berners, Lord Feversham, Lord Tredegar, Lord Walsingham, Hon. W. G. Cavendish, M.P.; Hon. Col. Hood, Hon. A. Vernon, Sir J. V. B. Johnstone, Bart., M.P.; Sir J. V. Shelley, Bart., M.P.; Sir Watkin W. Wynn, Bart., M.P.; Mr. Raymond Barker, Mr. Barnett, Mr. Bramston, M.P.; Mr. Brandreth, Mr. Buller, M.P.; Colonel Challoner, Mr. Dent, M.P.; Mr. Druce M'Exall, Mr. Frere, Mr. Brandreth Gibbs, Mr. Fisher Hobbs, Mr. Holland, M.P.; Mr. Hoskyns, Mr. Howard, Mr. Hudson, Mr. Humberston, M.P.; Mr. Hutton, Mr. Jonas, Mr. Lawes, Mr. Lawrence, Mr. Milward, Mr. Pain, Mr. Pope, Professor Simonds, Mr. Robert Smith, Mr. Slaney, M.P.; Mr. Shuttleworth, Mr. H. S. Thompson, M.P.; Mr. G. Turner, Dr. Voelcker, Mr. Jonas Webb, Mr. Birch Western, and Professor Wilson.

Thirty-seven new members were elected.

FINANCES.—The Hon. Col. Hood presented the report, from which it appeared that the Secretary's receipts during the past month had been duly examined and found correct. The balance in the hands of the bankers on the 30th ult., was 3364*l.* 15*s.* 7*d.*

JOURNAL.—The report of this committee was presented by Mr. Thompson, M.P., the Chairman. The Judges of Essays had awarded the prize of 10*l.* to Messrs. W. and H. Raynbird, of Hackwood Park, Basingstoke for their paper on the Adulteration of Seeds. The Essays in Classes VI. and IX. for 1860 were not considered worthy of the prize.

CHEMICAL.—Mr. Wren Hoskyns, Chairman of the Committee, presented the report which stated that Professor Voelcker would deliver a lecture on the Manufacture of Cheese, on Wednesday, the 8th May, at 12 o'clock. This lecture would form the subject of a paper in the next Number of the Journal, for which the Professor is also preparing two papers, giving the results of the experiments which he has been making on the growth of Turnips. The Professor had lately received specimens of a new description of cattle food made from the refuse of the Palm nut, and stated to contain 29 per cent. of oil. It is now being made use of at the Royal Agricultural College at Winchester, and the Professor hopes to be able to make a detailed analysis of its qualities. This report was adopted. The names of the Earl of Macclesfield and Mr. Humberston, M.P., were added to the list of the Committee.

GENERAL, LEEDS.—The report of this Committee was presented by Lord Walsingham, the Chairman, recommending that the time for entries of Flax for the Leeds Meeting be extended to June 1. Arrangements have been made for procuring a supply of the best Hay and forage for the use of the horses in the show-yard.

METROPOLITAN MEETING OF 1862.—A deputation consisting of the Duke of Marlborough, the Earl of Powis, Lord Walsingham, Sir John Shelley, Bart., M.P., and Mr. Brandreth Gibbs, was appointed to wait on the First Commissioner of her Majesty's Works to confer on the proposed Metropolitan Meeting.

The President brought forward his motion that it will not be expedient for the Society to hold a dinner in London, in connection with the Show of 1862," which was agreed to.

On the motion of Mr. Thompson, M.P., seconded by the Hon. Colonel Hood, Earl Cathcart was unanimously elected a Member of Council in the room of Lord Faversham, elected a Trustee.

HOUSE LIST.—Agreeably with the bye-laws, the Council arranged by ballot an election list, to be recommended by them for adoption at the ensuing general meeting on the 22d inst.

A Committee was appointed on the motion of Mr. Fisher Hobbs, seconded by Mr. Thompson, M.P., to rearrange the districts of England and Wales, where the Society should hold their Country Meetings.

On the motion of Mr. Brandreth Gibbs, seconded by Mr. Milward, a Committee was appointed to consider and recommend what shall be the privileges of the Press at the Country Meetings of the Society—in reference to time of admittance to the Yard, and of being furnished with Catalogues, and with the awards of the Judges.

Mr. Holland, M.P., brought forward his motion, which was seconded by Mr. Fisher Hobbs, that the lecture lately delivered by Professor Simonds on the Nature and Causes of the Disease known as the Rot of Sheep, should be published by the Society in the form of a pamphlet, which was agreed to, the details being referred to the Journal Committee.

The Council then adjourned to Wednesday next at 11 o'clock.

Farmers' Clubs.

WAKEFIELD: *Prospects of Agriculture*.—The following is a portion of Mr. Hannam's lecture referred to elsewhere.

In scanning the present prospects of the farmer as a practical man, the most striking feature that I notice is the necessity for increasing the annual products of the farm. Grain, it is quite evident, cannot average a price that will make it for the future the most remunerative product of agriculture. Even in this the worst of growing seasons, with the deficient crops, a wet harvest, and damaged stacks, we have not been able to bring prices up to the mark, at which the consumer begins to pay his share of the loss which a providential visitation has caused. In ordinary seasons (and seasons of abundance) the wide field of production from which grain can be gathered, must ensure a low average of prices. In our animal productions the case is different. The new colonies, the fertile plains of Eastern Europe, the prairies of the Far West, can inundate us with grain; in return, however, they stimulate our manufacturing industry; but they cannot send beef and mutton to feed the increased mouths which an increasing trade brings into the market for animal food. In fact, while the price of corn has been nearly stationary for 60 or 70 years, the price of meat, cheese, and other animal products has doubled. Here then is our cue! Let us make more beef and mutton. This may be aimed at in many ways. By improving the character of the live stock. And to this the efforts of our societies and public spirited breeders are directed, as we have shown, with no inconsiderable measure of success, by taking better care of them, feeding judiciously, and properly housing. This we have shown is also understood and practised, and every practical man is anxious to obtain proper farm buildings, and to give warmth and shelter to his stock as far as possible. The progress in this must be gradual, has been gradual in fact, and it is going on. The tenant-farmer can only in this matter avail himself of all the resources within his reach, and this he generally does; but the really important mode of increasing our supply of beef and mutton is:—By producing more food for stock upon the farm. What bones and artificial manures have already accomplished has already been alluded to fully. The effect of draining adds every year to the acres available for the production of roots, and special attention seems to have been paid during the last 20 years to the economy of and application of manures, as the means of augmenting directly the bulk of our farm crops, and especially of the green crops. The success of these efforts have been dwelt on, but much is yet left to do. We find few farmers who do not know that a dressing of farm-yard manure, with an expenditure of 40*s.* to 50*s.* per acre in artificial manure can and does grow a fine crop of roots. We find many who are in the habit of using these means, but we also find that there are some who still do not put this knowledge in practice.

It is, however, very rarely indeed that we find any one who, even by these means, succeeds in obtaining a full crop of roots over the whole breadth of his lands sown. The peculiarities of season are such, that he seldom gets all his crops sown sufficiently early to secure them to the full growth they are capable of. After every effort is made some one or two fields are not so good as the rest, because, he says, "the weather became dry before the plant got well hold," or, "the weather changed and the wet prevented him getting the seed in as soon as he intended."

By autumn cultivation only can we remedy this state of things! Where lands are cleaned in the autumn, when the spring season comes the farmer can get the whole of his root crops in "in the nick of time." The fine tilth of winter is never lost, and the moisture, instead of being evaporated by turnings over, is retained to push on the seed to germination, and to furnish the plant with the means of growth during the drought of summer. The whole force of the farm is directed towards getting the seed put in at the proper season, instead of killing weeds by frequent turnings over of the soil, and by drying it so thoroughly, that it is as unfavourable a state for growing the Turnips as it is for the weed that is intended to be exterminated. We shall, however, only fully realise the full effects of this system, in increasing the green crops of a farm when steam cultivation becomes available. Then, when our stubbles are all broken up by steam and thoroughly cleansed by our horse power implements, immediately after harvest, we shall not see a field or two of fine roots up on a farm, but the whole crop a success! We shall be without the "field that was too late sown," and the plot that "could not get away for the drought," &c. How soon this may be who can tell? I will, however, venture to assert that the means are now in existence, as I trust will be fully seen at the Royal Agricultural Society's meeting at Leeds; it is for us to apply them, and the result will infallibly be an augmentation of the bulk of root crop grown beyond all anticipation, and a consequent increase of the amount of beef and mutton made on the farm—the object we aspire to. If we consider that an acre of good Turnips will fatten eight or ten sheep, a 200 acre arable farm with 50 acres of Turnips should make 400 or 500 fat sheep, or an equivalent of beef. Yet, how many do more than half this? Simply because the 50 acres of land sown with Turnips are generally a partial failure; and that not owing so much to imperfect manuring as by an attempt to grow the crops on summer made fallows or dried up lands. We must forget all our fathers taught us about killing weed, by the sun before we succeed in getting full crops of Turnips. It is however upon strong soils that the system of management will eventually give us the greatest augmentation of annual products. On immense breadths of lands of this character scarcely any animals are fed. The cost of pulverization of such soils deters the farmer from attempting to grow green crops upon them and casting them off or consuming them on the land so poached that the succeeding crop cannot be sown in a proper state. It is quite true that the process of grinding by machinery such soils into the state for a Turnip crop is an expense that is seldom repaid by the crop, and is most frequently a dead loss from the failure of the crop. After a thorough draining of these soils, give them a through autumn cultivation by steam power, so that the Turnip crop can be put in in good time, on the highly pulverized surface before the moisture is out of the soil, and there is no land which will produce a better green crop. The action of the weather on the particles of soil causes them to lose their power of cohesion, and they will not run together again, and the crop flourishes. If however we turn up the soil again, like a fresh wound its natural tendency is to heal or unite, and we get clods that can only be broken up by incessant harrowings and clodcrushings, and that only after every particle of moisture has escaped from the soil; and there is but a poor chance for any crop sown on such lands. The best crop of Turnips I ever grew was on strong land, cultivated in the autumn and sown upon the winter made mould. The crop was put into heaps in the autumn, and carted away in a frost,—an easy mode of preventing any poaching of the surface by carting. The gardener in autumn clears and digs up his ground, and he never finds a difficulty in getting a green crop on strong land.

Another mode of increasing our green crop is by paying attention to the kinds of roots that we grow. Now for years the great force of experiment has been directed to the fertilisation of the land, and but comparatively little to promoting the growth of improved varieties. Yet, in our gardens, how much has been done by this mode? To it we are indebted for our numerous varieties of fruits and vegetables of every size and character, and great improvement in the kind of roots grown may be safely anticipated, if we turn our attention to it.

In two separate years, I have experimented on a great variety of Swede Turnips and Mangels in one field, and under our management, and in each year there was a variation of 25 per cent. in the bulk of crop between one kind and another. The bulk of food for stock may again be augmented by improved modes of securing the crop after it is grown. Of late years, a considerable proportion of the Turnips grown have been destroyed by the frost. The loss in the Mangel crop has also been great, but this is easily prevented by securing them at the proper season, by being in time. With Turnips the case is different. A "Turnip harvest" has been recommended, but this year we scarcely had a grain harvest, and the time was too short for us to make all the Turnip fields safe. Moreover, "the hands" cannot be found to get up the whole Turnip "crop" of the farm at the proper season. Practice will corroborate this. We should endeavour, therefore, to grow that one portion of our green crop which is intended to remain ungathered during the winter, of a more hardy kind than we usually sow. In my experiments with Turnips, I found quite as great a difference in the keeping qualities of the several kinds as in their weight; of some kinds 25 per cent. were destroyed by the frost, while of others not more than 2 per cent. were damaged. A new white Swede, grown by Messrs. Raynbird, seems to me to be nearly indestructible by frost, and was brittle and juicy when the ordinary kinds were soft and pulpy.

The proper mode of consumption of the green and other farm crop is another mode of virtually increasing its amount.

By far too great a weight of roots are frequently given to our feeding animals on the one hand, and on the other the great bulk of the straw of the farm is generally trodden down and wasted, and its value as food altogether ignored; when, by a combination of the two, the roots and straw pulped and mingled, a valuable and nutritious cattle food is formed. Indeed, by the addition of meal, grain, crushed Rape cake, Linseed cake, Cotton cake, &c., to chopped straw, a more valuable cattle food may be made than by any other means, for straw is the very best basis on which to form a feeding compound. Though it is not very nutritious when eaten alone, that is no reason that it is not highly valuable in combination with other more highly concentrated feeding stuffs. In this form it acts chemically as a food, and its mechanical action on the stomachs of ruminating animals is highly useful to digestion. With this command of a raw material for cattle food, the amount at command for our cattle depends almost altogether on the expenditure we may elect to go to in the purchase of meal, &c., to combine with the pulp and chaff; and a great increase in the amount of stock kept in the yard may be attained.

Calendar of Operations.

MAY.

BERWICKSHIRE MERSE FARM: *April* 29.—Following on a protracted snow storm, an early spring contrasts favourably with the early months of last year. These two months have been remarkably mild, with occasional but very slight frost; and seldom has Grass been so green at the time of year. Ewes are in good condition and full of milk; but (perhaps in consequence of this) there has been a very considerable loss of lambs, through swelling of the joints. Hoggs and young cattle have plenty of Grass to look forward to; but the surplus of a large root-crop yet remains to be consumed—a pleasant thought, when we remember the scarcity of the previous season. One result of this plenty has been a great difficulty in procuring extra sheep stock, for which wild prices have been paid; and after every effort made, we believe Barley sowing will scarce be completed with the month. March was a windy month,

with a low barometer and occasional heavy rains; but being very drying between times, it presented a favourable seed-time for Oats, and for what Barley land was ready. A good deal of spring Wheat was put in; but the breadth sown before winter was trifling. The board, in general, looks well. Last week we had some days of very rapid drought; and some of our neighbours on the clay lands of the south-east district almost despair of finishing Barley seed until rain comes. A considerable breadth of Potatoes is to be planted, and not much done yet; and then there is Mangel seed waiting to be deposited, though, owing to the failure of last crop, the quantity will be limited. On the whole, we think work is a fortnight behind last year; and it will tax the energies of man and horse to get Swedes all finished by Whitsunday (old style). A good many stacks of Wheat may yet be seen; but, when threshed, the most of it is shrivelled stuff. The supplies of spring corn seem pretty well exhausted. We hear that Fowler's implement is to be in our country shortly, when we hope to make a more intimate acquaintance with the practice of ploughing by steam power. *J. S.*

STATE OF THE WEATHER—BERKSHIRE.

For the week ending May 2: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain.	Wind	Barometer.
		Max in Sun.	Max. in shade.	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	26 ..	80 2	63.4	39.0	55 0	50.0	..	N.W.	29.93
Saturday	27 ..	66.1	58.0	33.0	47 5	50.3	0.06	S.E.	29.92
Sunday	28 ..	48.0	44.0	27.0	36.1	48 0	0.24*	N.W.	29.93
Monday	29 ..	64.6	49.8	30.4	43.4	48.0	..	N.E.	30.00
Tuesday	30 ..	73 4	52.6	27.4	44.8	48.5	..	N.W.	30.12
Wednesday	1 ..	73.0	59.0	40.6	53.0	49.7	..	W	30.13
Thursday	2 ..	70.6	59.2	31.4	47.8	50.5	..	N W	30.10

* Melted Snow.

The readings are taken at 9 A.M on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Bones: *A Young Farmer.* They must be broken as well as you can with hammers, and thrown in a heap with as much thoroughly damp sand as will fill the interstices. The heap will heat and rot. Afterwards you may mix it in a basin shaped clay floor with one-third its weight of oil of vitriol.—*A L.* They may be smashed by hammer, and rotted in a heap with ashes as named elsewhere, and will then be good garden manure.

Grass Land: *A Grazier.* If there is ample pasturage for your herd we would rather have the whole together and shift from field to field, than divide them and let each field have its constant stock. We have forwarded your other question to Mr. Spooner.

Leeds: *W F H.* Your parcel arrived too late for examination this week.

Manures, Linseed Cake, &c.: *The London Manure Company* report that the imports of guano during the past week have been very small, but the stock is too large for the trade to be influenced by either small or large arrivals. It has sold very freely this spring, and is now in demand. Nitrate of soda has been low, but is firmer, and large quantities are being sold at subjoined quotations. Sulphate of ammonia is higher. Bones, bone-ash, coprolites, and in fact all substances yielding phosphates fully maintain previous rates. The cake trade is flatter, but fine kinds meet ready sale.

		£	s.	d.		£	s.	d.
Peruvian Guano, direct from Importers' Stores.. ..	per ton.	12	5	0	to	12	12	0
Bones	,,	4	15	0	to	5	5	0
Ditto, crushed..	,,	6	0	0				
Ditto, half-inch	per qr.	0	17	6	to	0	19	6
Ditto, dust	,,	0	17	6	to	0	19	6
Animal charcoal (70 per cent. Phosphate)	per ton.	4	10	0	to	5	0	0
Coprolite, Cambridge, whole	,,	2	2	0				
Ditto ditto, ground ..	,,	2	13	0				
Ditto Suffolk, whole ..	,,	1	15	0				
Ditto ditto, ground ..	,,	2	6	0				
Nitrate of Soda	,,	13	15	0	to	14	0	0
Sulphate of Ammonia ..	,,	14	10	0	to	15	0	0
Gypsum	,,	1	10	0				
Salt in (London), according to quality	,,	1	3	0	to	1	7	0
Sulphuric acid, concentrated 1.845	per lb.	0	0	1				
Ditto, brown, 1.712	,,	0	0	¾				
Superphosphate of Lime ..	per ton.	5	10	0	to	6	6	0
Blood Manures	,,	6	5	0	to	7	10	0
Dissolved Bones	,,	6	10	0				
Linseed Cakes, best American (barrel)	,,	11	5	0	to	11	10	0
Ditto ditto (bag)	,,	10	5	0	to	10	10	0
Rape Cake	,,	5	10	0	to	5	15	0
Cotton-seed Cake	,,	6	5	0				
Marseilles	,,	9	10	0	to	9	12	6

Sawdust: *A Subscriber.* We have known sawdust used as litter, and afterwards as manure without harm. It is a mere sponge by which the excrements are conveyed to the land. If injurious anywhere it would be so on any light land. Our instance was on the London clay.

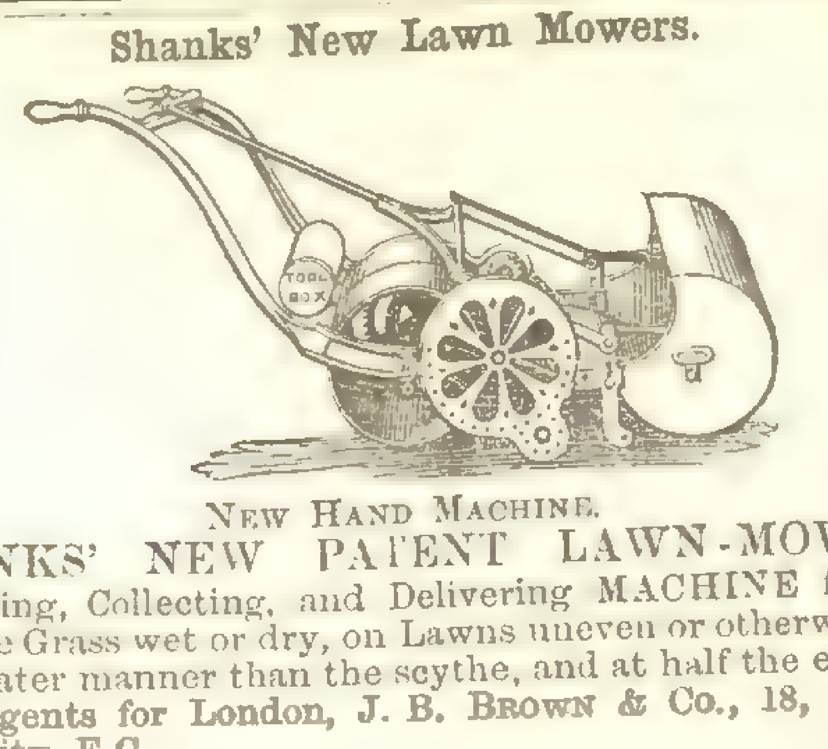
Soot: *Oxford.* If it be compared with guano on the score of ammonia only—the guano is worth only about 12 to 16 times its weight of soot. If guano costs 13s. a cwt., then soot may be worth 1s. a cwt. It generally sells for more. Sometimes however in place of containing only 1½ per cent. of ammonia, it contains as much as 4 per cent.; and its greater price than guano in average samples would give it is then perfectly justifiable. Dr. Voelcker has said that an average sample of soot contains about 10 0 lbs. of organic matter, 20 lbs. of sal-ammoniac, 80 lbs. of sulphate of ammonia, 247 lbs. of gypsum, besides other mineral matter, and 237 lbs. of moisture in every ton. Soot weighs as much as 40 lbs. a bushel.

Surface Geology: *G S.* No new edition is likely to appear this year. Such a book would be of great service.

The Supply of Poultry is still far below the demand. It is fair to suppose that the scarcity will last some time longer; indeed, as long as the frost that caused it. During five or six weeks of the winter the cold was so intense no eggs could be set or hatched, hence the present dearth. Much can be done by those well versed in it, to fill up a gap by extra care and forcing; but no poultry can thrive with cold easterly winds and hard frosts every night.

	Each—s.	d.		s.	d.
Large fowls	6	0	to	6	6
Middling ditto	4	6	,,	5	0
Chickens	3	6	,,	4	0
Guinea Fowls	4	0	,,	4	6
Pigeons	0	8	,,	0	9
Levretts	3	6	,,	4	6
Rabbits	1	3	,,	1	4
Wild ditto	0	8	,,	0	9

Shanks' New Lawn Mowers.



New Hand Machine.

SHANKS' NEW PATENT LAWN-MOWING, Rolling, Collecting, and Delivering MACHINE for 1861 mows the Grass wet or dry, on Lawns uneven or otherwise, in a much neater manner than the scythe, and at half the expense.
Sole Agents for London, J. B. Brown & Co., 18, Cannon Street, City, E.C.

Prize Fencing for Agricultural Purposes.
Only Manufactory—Liverpool.

FRANCIS MORTON'S Patented Improvements in STRAINED WIRE FENCING, which have been awarded SILVER MEDALS by the principal Agricultural Societies, afford the only means of constructing a permanent and efficient Fence at a greatly reduced cost.
Prices from 9d. to 2s. 2d. per yard of Fence.
Drawings and full particulars on application to
Francis Morton & Co., Sole Manufacturers and Patentees, Liverpool. London Office: 19, Parliament Street, Westminster, W.

CUCUMBER GLASSES

24 inches long ..	2s. 0d.	16 inches long ..	1s. [illegible]
22 ,, ,, ..	1 10	14 ,, ,, ..	1 [illegible]
20 ,, ,, ..	1 8	12 ,, ,, ..	1 [illegible]
18 ,, ,, ..	1 6	Made to any length.	

PROPAGATING GLASSES.

2 ins. diameter	0s. 3½d. each	12 ins. diameter	1s. 9d. ea.
3 ,, ,,	0 4½ ,,	13 ,, ,,	2 0 ,,
4 ,, ,,	0 5½ ,,	14 ,, ,,	2 6 ,,
5 ,, ,,	0 6½ ,,	15 ,, ,,	3 0 ,,
6 ,, ,,	0 8 ,,	16 ,, ,,	3 6 ,,
7 ,, ,,	0 10 ,,	17 ,, ,,	4 0 ,,
8 ,, ,,	1 0 ,,	18 ,, ,,	5 0 ,,
9 ,, ,,	1 2 ,,	19 ,, ,,	6 0 ,,
10 ,, ,,	1 4 ,,	20 ,, ,,	7 0 ,,
11 ,, ,,	1 6 ,,		

BEE GLASSES.

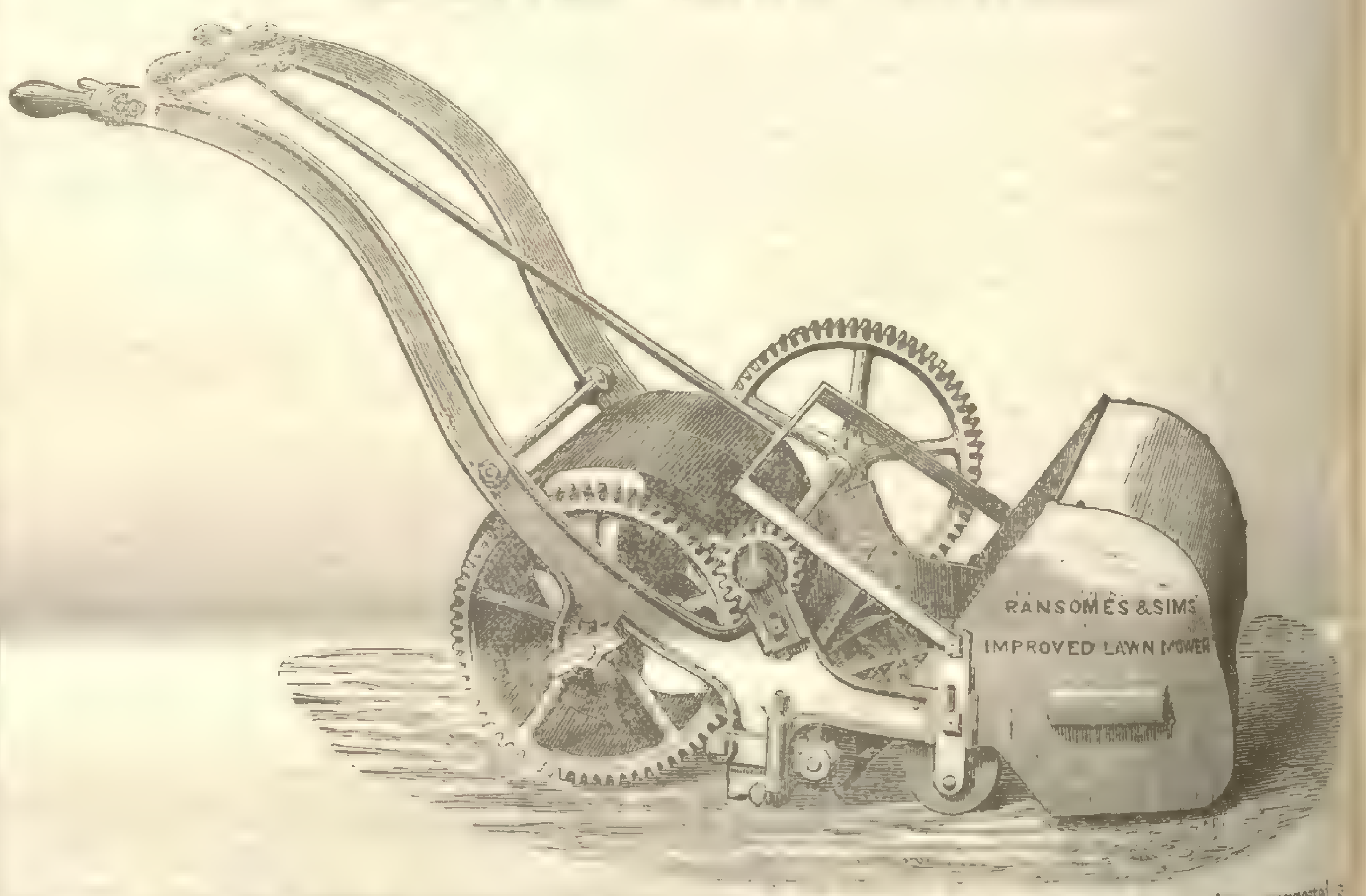
4 ins. diameter	0s. 6d. each	9 ins. diameter	1s. 9d. each
5 ,, ,,	0 8 ,,	10 ,, ,,	2 [illegible] ,,
6 ,, ,,	0 10 ,,	11 ,, ,,	2 [illegible] ,,
7 ,, ,,	1 1 ,,	12 ,, ,,	3 0 ,,
8 ,, ,,	1 4 ,,	Not made above 12 inches.	

LACTOMETERS, for Testing the Quality of MILK.
Four Tubes .. .. 4s. 6d. | Six Tubes .. .. [illegible]
With Stands complete.

London Agents for Hartley's Improved Patent Rough Plate, Linseed Oil, Genuine White Lead, Carson's Paints, Paints of various colours ground ready for use.
Milk Pans and every description of Glass for Horticultural purposes.
James Phillips & Co., 180, Bishopsgate St. Without, L[illegible]

RANSOMES & SIMS, Ipswich.

IMPROVED LAWN MOWERS.



THESE LAWN MOWERS contain all the improvements which long experience has suggested [illegible] RANSOMES and SIMS. They are made from entirely new patterns, are light and handy in use, and the gearing [illegible] made by Patent Machinery, they are nearly noiseless in work. The barrel spindles run in steel bearings, and the knives [illegible] other parts are of the very best quality, so that the machine is as durable as is possible.
RANSOMES and SIMS believe that these are the best Lawn Mowers yet offered to the public.
R. & S. are prepared this season to supply the two most useful sizes, viz., 16 and 18-inch, on the following terms:—

16-inch .. .. £7 0 0 | 18-inch £7 10 0

Packing Cases, 8s. 6d. each. Full Price allowed if returned paid and in good condition.
Carriage paid to any Station within 100 miles of London or Ipswich. A liberal discount allowed to the [illegible]

GLASS WAREHOUSE.—ESTABLISHED 1750.

THOMAS MILLINGTON,

87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.

REDUCED TARIFF FOR HORTICULTURE, PICTURES, AND DWELLINGS.

ORCHARD-HOUSE SIZES. Supplied to Mr. Rivers and many others.

In. by In.		16 oz.	21 oz.
20 .. 12			
20 .. 13	Common, per 100 feet,	13s. 6d.	18s.
20 .. 14	Super ,,	16s.	23s.
20 .. 15			

SMALL SQUARES.

In. by In.	In. by In.	Per 100 feet.
6 .. 4	8 .. 6	Common
6½ .. 4½	8½ .. 6½	11s. 6d.
7 .. 5	9 .. 7	Super.
7½ .. 5½	9½ .. 7½	12s. 6d.

SQUARES in 100 and 200 FEET BOXES.

Inches by Inches.	Inches by Inches.	Inches by Inches.	Inches by inches.	Inches by inches.		P. 100 feet.
10 .. 8	12½ .. 9½	13 .. 10	15 .. 10	13½ .. 11½	4ths.	12s. 6d.
10½ .. 8½	13 .. 9	13½ .. 10½	12 .. 11		3ds.	14s. 3d.
11 .. 9	12 .. 10	14 .. 10	12½ .. 11½	14 .. 11	2ds.	18s.
12 .. 9	12½ .. 10½	14½ .. 10½	13 .. 11		1sts.	21s. 6d.
15 .. 11	15 .. 12	16 .. 13	24 .. 14	24 .. 16	4ths.	13s. 6d.
16 .. 11	16 .. 12	17 .. 13	20 .. 15	20 .. 17	3ds.	16s.
17 .. 11	17 .. 12	20 .. 13	22 .. 15	20 .. 18	2ds.	19s. 8d.
18 .. 11	18 .. 12	23 .. 13	24 .. 15	.. ..	1sts.	24s.
13 .. 12	20 .. 12	20 .. 14	20 .. 16	.. ..		
14 .. 12	22 .. 12	22 .. 14	22 .. 16	.. ..		

If less quantity than 100 feet is taken, a moderate charge made for package.

GLASS CUT TO ANY GIVEN SIZES NOT ON LIST.

16 oz.—4ths, 1¾d., 2d., and 2½d. per foot. | 21 oz.—4ths, 2¾d., 3d., and 3½d. per foot.
,, 3ds, 2¼d., 2½d., and 3d. per foot. | ,, 3ds, 3½d., 4d., and 4½d. per foot.

HARTLEY'S IMPROVED PATENT ROUGH PLATE.

Not accountable for breakage.

GENUINE WHITE LEAD	32s. 0d. per cwt.	LINSEED OIL	2s. 7d. per gal.
ANTI-CORROSION PAINT	24 0 ,,	BOILED ,, ...	3 0
LINSEED-OIL PUTTY	8 0 ,,	TURPENTINE	2 10

BLACK, GREEN, and all other kinds of PAINTS, VARNISHES, BRUSHES, &c.

Parkes' Steel Digging Forks.

BURGESS AND KEY, 95, Newgate St., E.C., London, being the Wholesale and Retail Agents for these celebrated Tools, have always a large Stock on hand from which their Customers may select what they may require.

ANTHONY'S PATENT AMERICAN CHURN.—The FIRST PRIZE was again awarded to this Churn in Competition with several others at the Chester Meeting of the Royal Agricultural Society; it has obtained the First Prize given by the Society at every Meeting since 1850.

Messrs BURGESS & KEY, 95, Newgate Street, E.C., strongly recommend it as the most perfect Churn now in use. Full particulars sent on application.

CUCUMBER GLASSES.

24 inches long ..	2s. 0d.	16 inches long ..	1s. 4d.
22 " " ..	1 10	14 " " ..	1 2
20 " " ..	1 8	12 " " ..	1 0
18 " " ..	1 6	Made to any length.	

PROPAGATING GLASSES.

2 ins. diameter	0s. 3½d. each	12 ins. diameter	1s. 9d. each
3 " "	0 4½ "	13 " "	2 0 "
4 " "	0 5½ "	14 " "	2 6 "
5 " "	0 6½ "	15 " "	3 0 "
6 " "	0 8 "	16 " "	3 6 "
7 " "	0 10 "	17 " "	4 0 "
8 " "	1 0 "	18 " "	5 0 "
9 " "	1 2 "	19 " "	6 0 "
10 " "	1 4 "	20 " "	7 0 "
11 " "	1 6 "		

BEE GLASSES.

4 ins. diameter	0s. 6d. each	9 ins. diameter	1s. 8d. each
5 " "	0 8 "	10 " "	2 0 "
6 " "	0 10 "	11 " "	2 6 "
7 " "	1 1 "	12 " "	3 0 "
8 " "	1 4 "	Not made above 12 inches.	

LACTOMETERS, FOR TESTING THE QUALITY OF MILK.

Four Tubes .. .. 4s. 6d. | Six Tubes .. .. 6s. 6d.

With Stands complete.

London Agents for Hartley's Improved Patent Rough Plate.

Linseed Oil, Genuine White Lead, Carson's Paints, Paints of various colours ground ready for use.

Milk Pans and every description of Glass for Horticultural purposes.

JAMES PHILLIPS & Co., 180, Bishopsgate St. Without, E.C.

THE HANDY LAWN MOWER.—FERRABEE'S Patent. It can be worked by a boy, and is the most serviceable Machine yet produced. Price 4l. 10s., carriage-paid to any Railway Station in England.

JAMES FERRABEE & Co., Phœnix Iron Works, Stroud, Gloucestershire. London Warehouse: 75 & 76, High Holborn.

Important to Gardeners.

GARDENERS and Others are respectfully solicited to try PAYNE'S PATENT ADJUSTIBLE GARDEN SCYTHES, as they are sure to give the most entire satisfaction, being at once the handiest, best finished, and most easily adjusted implements in use. Price 11s. each.

Illustrated Circulars and Testimonials on application.

Address JAMES PAYNE, Ironmonger, Kirkcudbright.

TODD'S PROTOXIDE PAINT.—This article is largely used by the Clergy and Gentry, as well as by Builders, for Painting Stucco, Brickwork, Rough Wood, or Ironwork. It prevents the latter from corrosion, wood from decay, and masonry from damp.

Manufactured by FRANCIS BROTHERS & POTT, Nine Elms, London, S.W.

Oil Paint no longer Necessary.

HILL AND SMITH'S PATENT BLACK VARNISH for preserving Iron Work, Wood, or Stone. This Varnish is an excellent substitute for oil paint on all out-door work, and is fully two-thirds cheaper. It may be applied by an ordinary labourer, requires no mixing or thinning, and is used cold. It is used in the grounds at Windsor Castle, Kew Gardens, and at the seats of many hundreds of the nobility and gentry, from whom the most flattering testimonials have been received, which HILL & SMITH will forward on application.

Sold in casks of about 30 gallons each, at 1s. 6d. per gallon, at the Manufactory, or 1s. 8d. per gallon paid to any station i the kingdom.

Apply to HILL & SMITH, Brierley Hill Iron Works, near Dudley, from whom only it can be obtained.

WHY NOT PRESERVE YOUR HAY? BENJAMIN EDGINGTON, Rick Cloth, Marquee, and Tent Manufacturer, 2, Duke Street, London Bridge, S.E.

A quantity of SECOND-HAND MARQUEES, TENTS, and RICK CLOTHS, at greatly reduced prices.

West End Establishment, 32, Charing Cross, S.W.

An Illustrated Catalogue sent free by post.

Address BENJAMIN EDGINGTON, 2, Duke Street, Southwark, S E

TANNED NETTING for Fruit Trees, at reduced prices; 200 square yards, 10s.; 500 yards, 24s. Screen Canvas for Wall Fruits; Tulip Covers, Sun Shades, and Awnings; Rick Cloths, with Poles and Ropes complete; Marquees, Tents, and Flags, for sale or hire.

EDGINGTON & Co., 17, Smithfield Bars, London, E C.

TANNED NETTING AT REDUCED PRICES.—200 square yards, 10s.; 500 yards, 24s.; 1000 yards, 47s.

SCRIM CANVAS for WALL FRUIT, GREENHOUSE SHADES and TULIP COVERS.

ADDRESS IN FULL,

FREDERICK EDGINGTON, Marquee, Flag, and Banner Manufacturer, Thomas Street, Old Kent Road, London, S.E.

TANNED GARDEN NETTING for preserving Seed Beds, Fruits, Strawberries, from Frost, Blight, Birds, &c., and as a Fence for Fowls, &c. 1 yard wide, 1½d. 2 yards, 3d.; 3 yards, 4½d.; and 4 yards, 6d. per yard, in any quantity, may be had at CHAS. WRIGHT'S, 376, Strand, W.C.

Greenhouse and Flower-pot Sticks Varnished:—1 foot, 3d.; 1½, 4d.; 2, 5d.; 2½, 7d.; 3, 10d.; 4, 1s. 6d. per dozen. Dahlia Sticks Varnished, per dozen:—3 feet, 1s. 6d.; 4, 2s. 3d.; 5, 3s.; 6, 3s. 6d. An allowance to Nurserymen.

NETTING for Fruit Trees, Seed Beds, Ripe Strawberries, &c. TANNED NETTING for Protecting the above from Frost, Blight, Birds, &c., 2 yards wide, 3d. per yard, or 100 yards, 20s.; 4 yards wide, 6d. per yard, or 50 yards, 20s. New Tanned Netting, suited for any of the above purposes, or as a Fence for Fowls, 2 yards wide, 5d. per yard; 4 yards wide, 10d. per yard; 6 yards wide, 1s. 3d. per yard; ¾-inch mesh, 4 yards wide, 1s. 4d. per yard.

Can be had in any quantity of EATON & DELLER, 6 and 7, Crooked Lane, London Bridge, E.C.

GALVANISED GAME AND POULTRY NETTING.—By improved machinery at reduced prices. 2-inch Hexagon Mesh, 24-inch wide, light, 5d.; Medium, 6d.; Strong, 7d.; Extra strong, 9½d. per yard. Any other width, strength, or mesh, from ½ to 6 inches, at proportionate rates.

Every description of Wire-work by THOS. P. HAWKINS, Manufacturer, 27, Dale End, Birmingham.

BROWN'S FLORAL SHADING.—The cheapest and best material for protecting the Bloom of Fruit Trees from Spring Frost, preserving the Fruit from attacks of Wasps, Flies, &c.; also for Shading Plants under Glass.

Sold by all respectable Nurserymen and Seedsmen in pieces.

No. 1. 20 yards long, 38 inches wide, 4s. per piece

" 2. 20 " 38 " 4s. 3d. per piece.

" 3. 18 " 39 " (extra stout) 7s. per piece.

CHARLES BROWN, Greenheys, Manchester.

"FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.

PROTECTION FROM THE COLD WINDS & MORNING FROST.

"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.

Two yards wide .. .. 1s. 6d. per yard run.

Four yards wide .. .. 3s. per yard.

An improved make, 3 yards wide, 2s. 6d. per yard run.

Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard run.

ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.

"It is much cheaper than mats as a covering."

SYRINGES, ENGINES, GREENHOUSE PUMPS and SWING WATER BARROWS. Descriptions post free. READ, 35, Regent Circus, W.

PROTECTED BY THE CUTLERS COMPANY — CORPORATE MARK.

JOSEPH HAYWOOD [illegible] AND CO.,

MANUFACTURERS OF

PRUNING AND BUDDING KNIVES,

SPORTSMAN'S, and all kinds of POCKET CUTLERY.

Dealers in Gambia Garden Shears, Scissors, Syringes, &c.

Glamorgan Works, Sheffield.

HENRY J. MORTON AND CO., 2, Basinghall Buildings, Leeds.

Galvanised Iron Water Cistern

for Cottage Houses, &c., to contain 50 gallons, 26s.; 80 gallons, 31s. each; and 140 gallons, 37s., and fitted with tap, keeping the water perfectly sweet and clean; will not rust or corrode. Cisterns of all sizes.

Galvanised Iron Pumps

for Liquid Manure or Domestic Use, 3 inches diameter, 30s. and 32s. 6d. each; Tail Pipe for same at from 10d. per foot.

Galvanised Iron Swing Water Barrows

for Garden or Farm use, containing about 20 gallons, entirely formed of iron, 35s. 0d. each.

McNab's Transplanting Machine.

ALEXANDER HISLOP begs to acquaint the nobility and gentry that he has been intrusted by Mr. McNab to construct several Transplanting Machines, the same as those now in use in the Royal Botanic Garden, and on several gentlemen's Estates, which have given every satisfaction to the parties using them.

A. H., by the kind permission of Mr. McNab, begs to say that he has made arrangements for the manufacture of these unrivalled Tree and Shrub Transplanters, and can supply them as follows:—

No. 1. To lift a ball 48 inches by 40, complete, with all its gearings, 22l. 10s.

No. 2. To lift a ball 42 inches by 33, complete, with all its gearings, 19l. 15s.

N. B. Mr. Hislop will be happy to supply on application a prospectus of the method of using the machine, the same as inserted in the *Scottish Farmer and Horticulturist* by Mr. McNab on the 24th April last.

Agricultural and Horticultural Implement Works, Canonmills, Edinburgh.

GLASS WAREHOUSE.—ESTABLISHED 1750.

THOMAS MILLINGTON,

87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.

REDUCED TARIFF FOR HORTICULTURE, PICTURES, AND DWELLINGS.

ORCHARD-HOUSE SIZES. Supplied to Mr. Rivers and many others.

In. by In.		16 oz.	21 oz.
20 .. 12	Common, per 100 feet,	13s. 6d.	18s.
20 .. 13	Super "	16s.	23s.
20 .. 14			
20 .. 15			

SMALL SQUARES.

In. by In.	In. by In.	Per 100 feet.	Per foot.
6 .. 4	8 .. 6	Common	1½d.
6½ .. 4½	8½ .. 6½	11s. 6d.	
7 .. 5	9 .. 7	Super.	1¾d.
7½ .. 5½	9½ .. 7½	12s. 6d.	

SQUARES IN 100 AND 200 FEET BOXES.

Inches by Inches.	Inches by Inches	Inches by Inches.	Inches by inches.	Inches by inches.		P. 100 feet.	P. foot.
10 .. 8	12½ .. 9½	13 .. 10	15 .. 10	13½ .. 11½	4ths.	12s. 6d.	1½d.
10½ .. 8½	13 .. 9	13½ .. 10½	12 .. 11		3ds.	14s. 3d.	1¾
11 .. 9	12 .. 10	14 .. 10	12½ .. 11½	14 .. 11	2ds.	18s.	2¼
12 .. 9	12½ .. 10½	14½ .. 10½	13 .. 11		1sts.	21s. 6d.	2¾
15 .. 11	15 .. 12	16 .. 13	24 .. 14	24 .. 16	4ths.	13s. 6d	1¾d.
16 .. 11	16 .. 12	17 .. 13	20 .. 15	20 .. 17	3ds.	16s.	2
17 .. 11	17 .. 12	20 .. 13	22 .. 15	20 .. 18	2ds.	19s. 8d.	2½
18 .. 11	18 .. 12	23 .. 13	24 .. 15	.. ..	1sts.	24s.	3
13 .. 12	20 .. 12	20 .. 14	20 .. 16	.. ..			
14 .. 12	22 .. 12	22 .. 14	22 .. 16	.. ..			

If less quantity than 100 feet is taken, a moderate charge made for package.

GLASS CUT TO ANY GIVEN SIZES NOT ON LIST.

16 oz.—4ths, 1¾d., 2d., and 2¼d. per foot. | 21 oz.—4ths, 2¼d., 3d., and 3¼d. per foot.

" 3ds, 2¼d., 2½d., and 3d. per foot. | " 3ds, 3½d., 4d., and 4½d. per foot.

HARTLEY'S IMPROVED PATENT ROUGH PLATE.

Not accountable for breakage.

GENUINE WHITE LEAD	32s. 0d. per cwt.	LINSEED OIL	2s. 7d. per gall.
ANTI-CORROSION PAINT	34 0 "	BOILED "	3 0
LINSEED-OIL PUTTY	8 0 "	TURPENTINE	3 10

BLACK, GREEN, and all other kinds of PAINTS, VARNISHES, BRUSHES, &c.

ST. PANCRAS IRON WORKS,

OLD ST. PANCRAS ROAD, N.W.

IRON HURDLES, FENCING, AND GATES.

THE PROPRIETORS OF THE ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, WERE AWARDED THE SILVER MEDAL of the ROYAL AGRICULTURAL SOCIETY for their IRON HURDLES AND GATES which, by their peculiar construction, are more than twice as strong and durable as those in ordinary use. Lists per post on application. Gates from 30s. to 500l.

The Hurdles can be seen in process of Manufacture at the Works.

GAME WIRE NETTING.

PROFESSOR VARNELL'S ENAMELLED AND WROUGHT-IRON STABLE FITTINGS.

These Patent Mangers and Stable Fittings obtained the Commendation and the Silver Medal of the Royal Agricultural Society of England and the Royal Agricultural Society of Ireland, are adopted by the Royal Veterinary College, and Professor Spooner of that Institution states that they should be used by all who value the health and comfort of their horses. They can be had plain, galvanised, or enamelled.

A Show Room is devoted entirely to every description of Stable Furniture, and full-sized stalls and loose boxes are erected for inspection at St. Pancras Iron Works.

ADDRESS—THE MANAGERS,

ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, N.W.,

OPPOSITE OLD ST. PANCRAS CHURCH.

German and other Flower Seeds.

B. S. WILLIAMS begs to inform his friends and patrons that a PRICED and DESCRIPTIVE CATALOGUE of FLOWER SEEDS, in which is enumerated every novelty of proved merit, also all the best of the older kinds, is now published, and will be forwarded post-free on application. The sealed collections of ASTERS, BALSAMS, CARNATIONS, DIANTHUS, HOLLYHOCKS, PHLOX DRUMMONDI, PICOTEES, STOCKS, ZINNIAS, &c., &c., are purchased of, and received direct from the most celebrated cultivators, and may be relied upon as being the very finest qualities of their several kinds, and equal to the best samples supplied in previous years. The following Choice Seeds are specially recommended :—

Per Packet—	s.	d.	Per Packet—	s.	d.
Amaranthus tricolor splendidissimus	1	0	Dianthus chinensis Heddewigii imperialis hybridus	1	6
Aquilegia vulgaris caryophylloides	1	0	Gazania splendens ..	1	0
Aster Giant Emperor ..	1	0	Linum grandiflorum ..	0	6
Calceolaria herbaceous ..	2	6	Lobelia Erinus speciosa ..	1	0
Celosia aurea	1	6	Lychnis Haageana ..	1	0
Celosia cristata (coccinea)	1	0	Primula sinensis dentiflora	2	0
Celosia cristata nana kermesina	1	6	Primula sinensis dentiflora albiflora	2	0
Celosia spicata rosea ..	1	0	Solanum capsicastrum ..	0	6
Cineraria cruenta	2	6	Solano Pseudo capsicum ..	0	6
Cineraria maritima ..	0	6	Solanum species	1	0
Dianthus chinensis Heddewigii flore pleno ..	2	0	Solanum texanum	0	6
Dianthus chinensis nanus atrosanguineus	1	0	Verbena venosa	0	6
			Zinnia elegans flore pleno	1	6

Paradise Nursery, Seven Sisters and Hornsey Rds., Holloway, N.

JOHN KEYNES, in presenting his ANNUAL DESCRIPTION of NEW DAHLIAS, would tender his best thanks to his kind friends and patrons for their support, and begs to assure them his constant study shall always be to give satisfaction. He has a fine selection of SHOW FLOWERS to offer this season, and the severe test they have undergone will, he trusts, be a sufficient guarantee for their quality. None but First Class flowers have been chosen. Fine Plants in May as usual.

The FOLLOWING PRIZES were awarded to J. KEYNES, for DAHLIAS, in 1860 :—First Prize, 50 blooms, National Dahlia Show at Leeds ; Do., 24 blooms, Bath ; Do., 36 blooms, Brighton ; Do., 24 blooms, Swindon ; Second Prize, 24 blooms, Reading ; Do., 50 blooms, Crystal Palace ; Do., 24 blooms, Crystal Palace.

FANCY DAHLIAS.—First Prize, 18 blooms, National ; Do., 12 blooms, Reading ; Do., 12, blooms, Bath ; Do., 24 bloom, Brighton ; Do., 12 blooms, Swindon ; Second Prize, 12 blooms, Crystal Palace.

DAHLIAS.—NEW FLOWERS. s. d.

ANDREW DODDS (KEYNES).—The darkest and most constant Dahlia grown ; this flower has never been shown without obtaining a First Class Certificate. 3 ft. .. 10 6

Obtained the following First Class Certificates.—Horticultural Society's Floricultural Committee, National Meeting at Leeds and Reading. Bath, Brighton, Salisbury, Crystal Palace. Third for the Great Seedling Competition at Reading.

MASTERPIECE (KEYNES).—A beautiful shaded crimson of the finest quality, perfect in form, grand in colour, constant, always to be depended on ; small, and will require good cutting out early. 4 ft. 10 6

Obtained the following Prizes.

First Premier Prize at Reading for the Great Seedling Competition, beating every Flower of the year.

First Class Certificates.—Reading, Bath, Salisbury, Brighton, Crystal Palace.

MAUVE (KEYNES).—Colour, quite new, good form and constant. Shaded Mauve, 3 ft. 10 6

Prize at Reading.

JUNO (RAWLINGS).—Colour, bright rosy lilac, very constant, large and very high centre, always good. 4 ft. 10 6

Commended at the Floricultural Committee, First Class Certificate, Brighton.

JOY (RAWLINGS).—Colour light with deep crimson tip, the finest flower in its class and most desirable as first rate show flower. 3 ft. It has been placed as follows :— 10 6

Second Prize at the Reading Competition. First Class Certificate at Bath, Crystal Palace, Salisbury, Brighton, Reading, Great National Meeting, Leeds. Commended at the Floricultural Committee.

PERI (RAWLINGS).—Light, tipped purple, very pleasing colour, not to be cut out. 4 ft. 10 6

First Class Certificates at Bath, Salisbury, Reading.

JOHN KEYNES (RAWLINGS).—Scarlet buff. A single flower of this shown at the Crystal Palace, surpassed every flower in the exhibition ; it is a late flower and requires planting early ; J. KEYNES then expects it to beat anything yet offered. ft. 10 6

MRS. DODDS (DODDS).—Colour, light yellow, very pure, double, constant ; possessing every quality to render it a First Class variety, it has been justly admired, and will prove a good companion to William Dodds, which has proved itself a First Class, deep coloured yellow. 3 ft 10 6

First Class Certificates.—Floricultural Committee, National Meeting at Leeds, Reading, Bath, Salisbury.

Fourth Prize at Reading for the Subscription Competition.

MRS. ECKFORD (DODDS).—Light purple ground, shaded lilac, and mottled, a colour difficult to describe, but quite new, and a very pretty flower. 3 ft. 10 6

Obtained First Class Certificates at Reading, Salisbury, Bath.

MARQUIS BOWMONT (DODDS).—Rose colour, shaded white, a most desirable flower, greatly admired for its symmetry and full high centre, was placed fifth at Reading for the sweepstakes. 4 ft. 10 6

J. KEYNES has therefore the pleasure of sending out all the six flowers which obtained these prizes, which were subscribed for and exhibited by those marked *

* Mr. Keynes, * Mr. Rawlings, * Mr. Turner, * Mr. Dodds, * Mr. Perry, Mr. Holmes, Mr. Sainsbury.

This flower also obtained First Class Certificates at Bath, Salisbury, Reading, Brighton, Crystal Palace, Floricultural Committee.

ROSA (KEYNES).—Rose colour, fine. 4 ft. 10 6

MRS. WYATT (KEYNES).—Salmon, very first-rate ; no stock of these two, consequently could not be exhibited. 4 ft. 10 6

The set of twelve will be charged 4l. 4s. No discount on Andrew Dodds, Masterpiece, Mrs. Dodds, or Marquis Bowmont, if taken separately. All the First Class Certificates, with one exception, which the Floricultural Committee have awarded this season, are in this lot.

J. KEYNES therefore submits them to Dahlia growers as indispensable to every select collection. Descriptions of the above may be seen in *Gossip for the Garden*, the *Florist*, the *Gardeners' Chronicle*, the *Cottage Garden*, the *Transactions of the Horticultural Society, Chiswick*, &c.

Bedding Plants.—Mostly 2s. 6d. per dozen.

SCOTT'S 48-paged CATALOGUE, with copious descriptive Lists of all the best Bedding Plants out, to which is, this season, added suggestions for Planting Beds and Ribbons, with full lists of early Flowers for decorating the Garden in winter and early spring. Apply to

J. SCOTT, Merriott, Crewkerne, Somerset, inclosing 2 stamps.

ESTABLISHED 1840.

Bedding Plants for the Million.

JOHN BOFF is sending out the undernamed Bedding Plants, strong established plants, in small pots, at 20s. per 100, package included :—Antirrhinums, in fine varieties, by name ; Ageratums, Shrubby Calceolarias, Fuchsias, Scarlet Geraniums, Helictropes, Lobelia speciosa, Pentstemons in variety, Salvias, and an extensive variety of Verbenas.

To those requiring quantity, J. B. begs to offer well rooted plants of the above from store pots, at 12s. per 100, packet included.

CATALOGUES with description, free for one stamp. A remittance from unknown correspondents is requested.

Northampton Park Nursery, Ball's Pond, Islington, N.

Richmond Nurseries, Surrey.

G. AND W. STEELL beg to call the attention of purchasers of BEDDING PLANTS to their Stock, which is exceedingly healthy and good this season, consisting of STANDARD, FLOWER OF THE DAY, SCARLET, and other GERANIUMS, CALCEOLARIAS, VERBENAS, HELIOTROPES, PETUNIAS, &c., also ROSES DEVONIENSIS, SAFRANOT, &c., which they can offer at very low prices where large quantities are required.

Bedding Plants.

MARSH AND PERKINS have great pleasure in offering the undernamed, all of which are very fine and well established Plants, which cannot fail to give satisfaction :—

Per dozen—	s.	d.	Per dozen—	s.	d.
Ageratum mexicanum ..	2	0	Salvia patens (blue) ..	3	0
Œnothera macrocarpa ..	3	0	,, fulgens (scarlet) ..	2	0
Calceolaria Mackayii ..	2	0	Verbenas—		
,, aurea floribunda ..	4	0	Purple King		
,, sanguinea	2	0	Snowflake and Mrs. Holford	2	0
,, Gem	2	0			
,, Prince of Orange ..	2	0	Lord Raglan		
Cuphea platycentra ..	2	0	Musk	1	6
,, strigulosa	2	0	Geranium Flower of the		
Perilla nankinensis ..	1	0	Day	2	0
Heliotropes	2	6	Ditto (extra strong)	3	0

Dianthus Heddewigi and laciniatus, 6d. per pot—6 plants in each.

Cash or reference from unknown correspondents.

A DESCRIPTIVE CATALOGUE of all kinds of Bedding Plants may be had on application at

42, Drapery, Northampton.

Bedding Plants, &c.

GODWIN AND PADMAN, Broadfield Nursery, Sheffield, offer the undermentioned in strong well established Plants :—

Per dozen—	s.	d.	Per dozen—	s.	d.
Ageratum cœlestinum ..	2	6	Gazania splendens 3s. to	4	0
,, variegatum	4	0	Geraniums Tom Thumb, 2s 6d. to	4	0
Calceolaria aurea floribunda	3	0	,, Variegated, of sorts *		
,, other varieties 2s. 6d. to	6	0	Heliotropes, of sorts ..	3	0
Dahlias, of sorts	3	0	Lobelia speciosa . ..	3	0
,, of 1860	12	0	Petunias, crimson, purple, and white	3	0
,, Fancy	3	0	Senecio elegans fl. pl. ..	3	0
,, ,, of 1860 ..	12	0	Verbena, crimson scarlet, purple, and white ..	2	6
,, Bedding (15 varieties) from	3	0	,, of 1860 (50 varieties)	4	0
Fuchsias, of sorts .. 4s. to	6	0	Veronica maritima variegata	4	0
,, ,, 1860 (29 varieties)	9	0	Vinca elegantissima ..	6	0

* See other Advertisement.

Or 100 plants, viz., 1 dozen each Ageratum, Calceolaria aurea fl., Gazania splendens, Tom Thumb Geraniums, Lobelia speciosa, Petunia (any colour), and 2 dozen Verbenas (any colour), basket included, for 21s.

See also G. & P.'s DESCRIPTIVE CATALOGUE of GREENHOUSE and BEDDING PLANTS.

Remittance or reference expected from unknown correspondents.

Address GODWIN & PADMAN, Broadfield Nursery, Sheffield.

Also J. C. PADMAN, Boston Spa, Tadcaster.

Bedding Plants.

F. AND A. SMITH are now sending out their usual strong healthy Bedding Plants, at moderate prices. These plants are hardened and fitted for planting out, so as to produce an early decorative effect. Quality is the test of cheapness.

Ageratum, blue	Mimulus, of sorts
,, foliis variegatis	Melissa variegata
Anagallis	Mesembryanthemum, various
Antirrhinum, various	Nasturtium Tom Thumb, &c.
Bouvardias	Nierembergia gracilis
Calceolaria, in variety	Pansies
Cerastium tomentosum, for edging	Pentstemon, in variety
Cuphea platycentra, scarlet	Petunias
Campanula carpatica	Phlox, herbaceous
Carnations, tree	,, Drummondi
Chrysanthemums, various	Pyrethrum, various
Deutzia gracilis	Perilla nankinensis
Dianthus giganteus, splendid crimson	Portulaca, dwarf, for edging
,, Heddewigi, large colours, various	Rhodanthe Manglesii
,, imperialis, crimson	Roses, various
Dielytra spectabilis	Statice armeria
Dahlias, many varieties	Salvia patens, blue
Delphinium formosum	,, ,, alba, and others
Fuchsias, various	Stocks, in bloom
Geranium, scarlet, various	Senecio, double crimson
Gaillardia grandiflora	Thunbergia, various
Gazania splendens	Tropæolum Lobbianum elegans
Heliotropium, various	,, Attraction
Hollyhock	,, Stamfordianum
Hydrangea	,, several double varieties
Koniga variegata	Verbena, of every known shade of colour, a fine and large stock
Lantana, various	Veronica
Lobelia, blue, in variety	Variegated Geraniums (many varieties).
,, St. Clair, fine scarlet	Zinnia elegans, &c.
Lilium, various	

CLIMBING PLANTS.

Cobœa scandens	Maurandya alba
Eccremocarpus scaber	,, grandiflora
Lophospermum Hendersoni	,, rosea
Maurandya Barclayana	Tropæolum canariense

Prices with GENERAL LIST on application.

Dulwich, Surrey, S.

BEDDING AND OTHER PLANTS.—The Supplement to JAMES CARTER & Co.'s GARDENERS' AND FARMER'S VADE-MECUM will be found to contain the requisite information for the arrangement and management of BEDDING PLANTS, besides copious Lists of STOVE and GREENHOUSE PLANTS, with descriptive observations. Now ready, and will be forwarded free of charge and post paid on application to

JAMES CARTER & Co., 237 and 238, High Holborn, London, W.C. ; and Crystal Palace Nursery, Forest Hill, Sydenham.

Bedding Plants.

MESSRS. MILNE AND CO. have a fine healthy Stock of all the leading varieties of Bedding Plants now ready for sending out. Plants strong and well established.

M. & Co. beg to inform their friends and patrons that a reprint of their comprehensive GENERAL CATALOGUE will be shortly issued. The DESCRIPTIVE LIST OF CAMELLIAS, for which their Nursery has been famous for upwards of three quarters of a century, will be found complete to the present time. Copies forwarded free to any address on application.

Camellia Nursery, Wandsworth Road, London, S.

Bedding Plants.

WOOD AND INGRAM beg to announce that their Bedding Plants, consisting of Scarlet and Variegated Geraniums, Verbenas, Petunias, Heliotropes, Calceolarias, Alyssums, Lobelias, Fuchsias, Gazanias, &c., are very thoroughly hardened, and established in pots. Price from 2s. 6d. per dozen. Cinerarias in full bloom, 4s. to 6s. per dozen. Dahlias, a fine collection, 4s. to 9s. per dozen.

CATALOGUES may be had on application.

Nurseries, Huntingdon.

STRONG BEDDING-OUT PLANTS, very cheap, including all the Verbenas up to 1860, at 3s. per dozen; Scarlet Geraniums, 4s. ; Heliotropiums, 4s. ; Dahlias, and Calceolarias, 4s., all the best sorts out ; Lobelias, 4s., Salvias in sorts, from 2s. to 4s. ; Pentstemons, 4s. ; Fuchsias [illegible]

The above are all strong healthy Plants. CATALOGUES may be had on application to

BENJAMIN WHITHAM, Clough Nursery, Mottram, nr. Manchester.

Bedding Plants Wanted.

MR. WOODROFFE, of "The Westbourne Nursery," Harrow Road, London, W., requires immediately 3000 MANGLES'S VARIEGATED GERANIUM, 3000 VARIEGATED ALYSSUM, and 1000 VARIEGATED MINT, or other Variegated Foliage Plants suitable for edging. [illegible] be strong Plants established in Pots. Cuttings from [illegible] are useless for the purpose required. Sample and price, [illegible] the number that can be supplied, directed to the above [illegible] will be promptly acknowledged.

Cash on receipt of the Plants.

TAN Gratis, in the immediate neighbourhood of Covent Garden Market.

Apply to ESSEX & SONS, Stanhope Street, Clare Market.

WILLIAM BULL, F.R.H.S., F.R.B.S., NURSERYMAN and NEW PLANT MERCHANT, King's Road, Chelsea, London, S.W.

GERANIUM QUEEN OF QUEENS.—W. B. has the pleasure in announcing that he has purchased the entire stock from Mr. R. Weatherill of the most beautiful flowering variegated-foliaged Geranium ever yet raised; the trusses are of gigantic size, and flower measuring nearly 2 inches in diameter, or considerably larger than a five shilling piece; colour the most dazzling scarlet, the plant extremely floriferous ; in fact it is a perpetual bloomer, producing its rich scarlet flowers in the greatest profusion, winter and summer. This exquisite variety will be offered for sale as soon as it has been sufficiently multiplied ; meantime W. B. begs to announce that it can be seen at his Establishment for New and Rare Plants.

GERANIUM LADY ROKEBY.—WILLIAM BULL having purchased the entire stock from Mr. G. H. Bunney of this pretty and attractive Zonale Bedding Geranium, can now supply it in good plants. W. B. has no hesitation in saying that this variety will be an universal favourite, because the [illegible] everything that can be desired ; it flowers in the most abundant manner, and it is first rate for bedding or [illegible] the colour is a bright, pleasing, rosy scarlet, much brighter and altogether a great improvement on that popular [illegible] "Trentham Rose." Price 7s. 6d. each.

GERANIUM LOVELINESS.—A dwarf and compact, distinctly zonate foliaged variety, with soft pink [illegible] prettily and largely marked in the upper petals [illegible] white, of excellent form, substance, and outline; [illegible] kind for bedding or pot culture. Having acquired the stock, plants are now offered for the first time. 5s. each.

W. B. is now sending out Mr. Perry's six unequalled Verbenas, which have been exhibited at the principal shows in the kingdom 17 times during the past season, and have taken the first prize in every instance.

The best New Variegated Bedding Plant of the year, Agathæa cœlestis fol. variegatis, price 3s. 6d. each, [illegible] dozen ; and 11l. per 100.

WILLIAM BULL will be happy to make arrangements with Botanists or Naturalists going abroad for the transmission of Plants, Seeds, &c., and will also be glad to purchase or make arrangements for the sending out of any first-rate New Varieties of Plants that may be raised by amateurs or Gardeners in this country.

Establishment for New and Rare Plants, King's Road, Chelsea, London, S.W.

NEW GRAPE, INGRAM'S HARDY PROLIFIC MUSCAT.—This is the most fertile and the best of all Grapes. The bunches are from 12 inches to 14 in length, having black oval berries, with the peculiar flavour of the Hamburgh, yet more piquant, and [illegible] with a slight spice of Muscat, so as to tone down the [illegible] satiating the palate. The flavour is new, and has been pronounced by one of the first judges of this country [illegible] finest flavoured of all Grapes. The fruit is such, that the more it is eaten the more it is liked. In this Grape we [illegible] it is eaten the more it is liked *gentleman's bunch* [illegible] *gardener's friend* and the Vine without producing [illegible] possible to grow the Vine without temperature than [illegible] to its ripening in a much lower temperature; for a greenhouse [illegible] Hamburgh, it is the very best sort for a greenhouse [illegible] Vinery, and in ordinary summers it, no doubt, will ripen on a wall in the open air. The footstalk of the berry is so [illegible] and strong that it cannot shank off. For those [illegible] where the Vine is cultivated in large quantities in the [illegible] and where they have now only coarse and tasteless [illegible] will be the greatest acquisition. It has been exhibited to the Royal Horticultural Society's Fruit Committee, [illegible] obtained a First Class Certificate ; the fruit shown [illegible] from a Vine struck from a single eye that was only [illegible] old from the time of putting in the eye till cutting [illegible] The fruit this year will be ripe from the middle of [illegible] end of June, when intending purchasers are invited [illegible] judge for themselves. Plants will be ready to send out [illegible] at 21s. and 42s. each : and a few extra strong at 63s. [illegible]

JNO. STANDISH, Royal Nursery, Bagshot.

THE FINEST DARK PERPETUAL ROSE OF THE SEASON.

Hybrid Perpetual—Reine des Violettes.

WM. WOOD AND SON have just flowered, in one of their Forcing Houses, the above splendid New Rose; the colour is a very dark purplish violet, very double, large and finely shaped, most remarkably vigorous, and will probably form a good Pillar Rose. They feel assured it will become a general favourite. Price 5s. each for good strong plants, with usual discount allowed to the Trade.

Address, Woodlands Nursery, Maresfield, near Uckfield, Sussex.

Roses for Bedding.

Many Thousands of Dwarf Roses in pots, consisting of Hybrid Perpetuals, Chinas, Teas, Bourbons, and Noisettes.

WM. WOOD AND SON are now sending out daily thousands of Roses in pots for grouping and bedding, at 12s. to 18s. per dozen. Early orders respectfully solicited to secure the best plants.

Address, Woodlands Nursery, Maresfield, near Uckfield, Sussex.

NEW ROSE.—MADAME STANDISH is the hardiest of all Roses; those which stood out of doors during the whole of the late severe winter not having lost a bud, whilst most others were destroyed by thousands. The growth is very rapid; the foliage magnificent; colour, a clear pale pink; petals smooth, round, and finely imbricated; the form cannot be excelled, and it is a thorough Perpetual, being, in fact, one of the finest **Roses ever offered. Plants now ready, 10s. 6d. each. Madame Standish must not be mistaken for Mrs. Standish, which was sent out by MIELLEZ, of Lille.**

JOHN STANDISH, The Royal Nursery, Bagshot.

Roses, New and Old.

WM. PAUL (Son and Successor to the late A. Paul) has now ready for delivery a fine lot of all the best Roses, new and old.

BEDDING PLANTS.—All the best kinds, stout hardy Plants, at the usual rates.

PRICED CATALOGUES free by post.

Address WM. PAUL, Cheshunt Nurseries, Waltham Cross, N.

Early Sheep Feed.

SUTTON'S EARLY SIX-WEEK TURNIP.—The quickest sort known (sow 2 or 3lbs. per acre). Price 1s. 3d. per lb., or cheaper by the bushel.

MIXED MANGEL WURZEL SEED (Red and Yellow). This is found to be excellent for sheep, fed off in time for Wheat sowing. Price 1s. per lb., or cheaper by the cwt. (Sow 8 lbs per acre, and hoe out to 6 inches apart only in the drills.)

WHITE MUSTARD SEED. (Sow 24 lbs. per acre.) 6d. per lb., or cheaper by the bushel. Goods delivered carriage free

SUTTON & SONS, Royal Berkshire Seed Establishment, Reading.

YELLOW GLOBE MANGEL WURZEL SEED FROM THE CONTINENT, of superior growing quality to any saved in England last year.

PAGE & TOOGOOD having imported a large quantity, beg to offer it at 1s. per lb. for cash.

Royal South Hants Seed Establishment, Southampton.

GEORGE SMITH, FLORIST, &c., Lorrimore Road, Walworth, S., begs to draw attention to his choice collection of the following Plants, healthy and strong, warranted true to name:—

Verbenas, Edmonds' set of 1861, 15s. per set.

	Per dozen.—s. d.		Per dozen.—s. d.
Verbenas of 1860	6 0	Older varieties from	.. 2 6
Dahlias of 1860	8 0	" "	.. 3 6
Fuchsias of 1860	8 0	" "	.. 4 0
Chrysanthemums of 1860	6 0	" "	.. 4 0

CATALOGUES by enclosing postage stamp.

Chrysanthemums for the Million.

J. H. BIRD, F.R.H.S., NURSERYMAN, Stoke Newington, N., can now supply from his great Collection, 20 Pair of Best Large Varieties for 10s.; 25 Pair of Best Pompones, 10s.; 20 Pair of Best Large Varieties, Cuttings 5s.; and 25 Pair of Best Pompone Cuttings, 5s.

N.B. To save trouble all Orders to be Prepaid.

CATALOGUES for One Stamp.

New Chrysanthemums, Hardy Variegated Plants, &c.

JOHN SALTER, F.R.H.S., is now sending out strong Plants of several fine New Chrysanthemums, both Large Flowers and Pompones.

Full particulars will be found in his DESCRIPTIVE CATALOGUE for 1861, which will be sent post free on receipt of two stamps.

Versailles Nursery, William Street, near Hammersmith Turnpike, W.

Geraniums, Herbaceous and Alpine Plants, Orchids, Chrysanthemums, Hardy Variegated Plants, &c.

B. S. WILLIAMS begs to inform his friends and patrons that a PRICED and DESCRIPTIVE CATALOGUE of the above, to which are added supplemental Lists of Fuchsias, Stove, Greenhouse, and Hardy Plants, Ferns, Ornamental Foliage and Variegated Plants, Fruit Trees, &c. (which include the best new plants of the season,) is now published, and will be forwarded post free on application.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, London, N.

Plants in Flower.

F. AND A. SMITH have now in bloom the following Plants, which are well grown and very suitable for decorative purposes. Prices on application:—Azaleas, Aphelexis, Cheironias, Chorozemas, Cinerarias, Cactus, Dillwynias, E. Willmorea superba, E. ventricosa, E. perspicua nana, Leschenaultia formosa, Boronia Drummondi, B. serrulata, Eutaxia myrtifolia, Aotus gracillima, Fuchsias, Rose Mrs. Bosanquet, Kennedyas, Polygala, Heliotrope, Misembryanthemum, Tremandra, Geraniums, Fairy Roses, Mignonette, Intermediate Stocks.

Dulwich, Surrey, S.

MESSRS. E. G. HENDERSON AND SON

will commence sending out the New Plants of the season in the ensuing week, and the

NEW SPRING CATALOGUE

will be also distributed in accordance with their announcement in the *Gardeners' Chronicle* of May 4.

The New Plants will be sold at one half and a third of the usual prices, and they trust that the increased **demand will repay the reduction of cost thus made.**

NEW BEDDING AND OTHER ORNAMENTAL PLANTS FOR THE FLOWER GARDEN.

Agathæa cœlestis folia variegata, 2s. 6d. to 3s. 6d.
Bouvardia Humboldti.—New white, with long tube, and flower 2 inches in diameter.
Ditto longiflora carnea.—Beautiful coloured var. of B. longiflora.
Calceolaria angustifolia globosa, 1s. 6d.
Calystegia cornuta, 2s. 6d.
Carnations, Tree-habited, 6 beautiful varieties, including "Queen of Yellows," pure yellow self, and "Perfection," large, and equal to a show Bizarre.
Convolvulus mauritanicus, 2s. 6d. each.
Cuphea montana, 2s. 6d.
Dianthus hybridus floribundus.—A perpetual flowering Mule Pink, 1s. 6d.
Erythrina Marie Bellanger, and E. floribunda.—These are the finest in growth, bloom, and effect for flower-garden culture yet introduced.
Geranium Princess of Prussia, 3s. 6d.
Ditto Pink Tom Thumb, 1s. and 1s. 6d.
Ditto Hendersoni nana, 3s. 6d.
Ditto Minimum Nosegay, 2s. 6d.
Habrothamnus carminatus ruber, 3s. 6d.
Lobelia bicolor marmorata, 6d.
Pentstemon Lobbianum, yellow flowered, 3s. 6d.
Ditto Torreyi, 5s.
Senecio elegans nana cærulea flore plena, 9d. each.
Ditto ditto cuprea flore plena, 9d. each.
Sauromatum guttatum, 2s. 6d. to 7s. 6d. each.
Tropæolum "Perfection," Nigricans, Indispensable, and others, are the best varieties of this bedding plant. See Catalogue for proper management and planting of this brilliant tribe of summer and autumn-flowering section.
Zinnia elegans flore plena, 6d. each.
Antirrhinums "Pioneer," "Novelty," and "Curiosity," are three of the very remarkable erect flowered section, interesting and distinct, 2s. 6d. each.
New Bedding Dahlias, "Little Dwarf," "Minstrel," and "Novelty."—These are appropriately dwarf and effective, distinct from others of this section.
Heliotropium Madame Fricken, 2s. 6d. each.
Ditto M. Faucillon, 2s. 6d. each.
Petunia Fascination.—Beautiful, surpassing everything in the class of Shrubland Rose.
Petunia "Rosy Circle."—Superior to the beautiful one sent out last season as The Queen.
Ditto Leviathan.—The largest and most splendid double crimson ever sent out.
Ditto Marginata monstrosa plena.—The greatest novelty amongst double Petunias.
Ditto Inimitable grandiflora.—The finest and most picturesque white mottled flower yet produced. A charming variety.
Verbenas.—As a new collection the best sent out are those now offered by E. G. HENDERSON & SON, for all the requisite properties of exhibition blooms, and flower-garden effect. See the Catalogue for enumerated varieties.
Ditto Lucy Tait.—This pretty variety of Verbena was certified by the Horticultural Floral Committee for its perfect adaptation to small fancy beds, parterres, and belts, 2s. 6d. each; 15s. per doz.; 50s for 50 plants.
Ditto Madam Herman Strenger.—Beautiful rose, 2s. 6d.
Variegated Geraniums.—Gold and snow white margin with the tricolor zone leaved.

FIRST CLASS AND GOOD BEDDING PLANTS.

Geranium Madame Vaucher.—Beautiful, the best horse-shoe leaf, with white flowers, 2s. 6d.
Ditto Countess de Chambord.—Differing from the above, yet very pure, 2s. 6d.
Ditto Christina.—Exceedingly fine pink, profuse bloom, and fine habit, 6s. per dozen.
Ditto Henry de Beaudot.—Very novel, half salmon, and pure white, 2s. 6d.
Ditto Variegated Cloth of Gold } Splendid gold-leaved
Ditto ditto Golden Fleece } bedders.
Ditto Gold-leaved Ivy-leaved.—For Vases and Baskets.

FIRST CLASS AND GOOD BEDDING PLANTS.—*Continued.*

Calceolaria Lillio.—A splendid yellow habit, flower, and truss, 1s. 6d.
Dahlias, Lilliputian or Bouquet.—The most beautiful are Goldfinch, Dr. Webb, Crimson Beauty, Little Mistress, Little Beauty, Child of Faith, and Little Prince.
Petunia Inimitable flore plena, 1s. 6d.
Ditto Lady Emily Peel, 1s. 6d.
Ditto Annie Kien, 1s. 6d.
Tropæolum Distinction.—An improvement upon T. Triomphe de Hyeres.
Ditto Florence.—A new colour, Lilliputian.
Ditto Versicolor.—Splendid bedder.
Tropæolum speciosum.—A beautiful species; see Catalogue for management in planting, &c. this elegant plant.
Pentstemons.—See Catalogue for the best six distinct, and most prolific Gloxinia-like flowered bedding varieties, surpassing all others yet known, 1s. 6d. each.
Tritoma Uvaria glaucescens, 1s. 6d.
Ditto Uvaria, 6d. each.
Rose Celine Forestier, beautiful yellow, 3s. 6d.
Ditto Amicus, splendid flower, 2s. 6d. to 3s. 6d.
Ditto Cinderella, elegant plant, 2s. 6d. to 3s. 6d.
Ditto Fortune's, yellow climbing, 2s. 6d.
Ditto Green-flowered (Rosa viridiflora), 2s. 6d.
Banks' New Fuchsias, 5s. each.

F. PRINCE LEOPOLD.

WELLINGTON ROAD, ST. JOHN'S WOOD, LONDON, N.W.

The Gardeners' Chronicle.

SATURDAY, MAY 11, 1861.

MEETINGS FOR THE ENSUING WEEK.

TUESDAY, May 14	Royal Horticultural (Floral and Fruit Committees) at S. Kensington, Noon
	Royal Horticultural (General Meeting) at South Kensington ...... 3 P.M.
SATURDAY, — 18	—Crystal Palace .. .. .. Noon

WE propose in this notice to draw attention to some of the INDICATIONS OF WEATHER which may be gathered from the phenomena of the barometer and thermometer. It will be understood, generally, that very rapid and sudden falls in the mercurial column indicate a change, very near at hand, usually of a violent character, but of short duration only; a slow and gradual fall, on the other hand, usually predicts a continuance of bad weather. The lowest barometer readings, in this country, usually occur during a prevalence of south and south-east winds, and large amounts of rainfall, with occasional severe gales; the severe and disastrous gales of 1859-60, it will be remembered, were mostly from this quarter, whilst the barometer was low and changeable. If the barometer should fall during a prevalence of south winds, it is a very sure sign of rain. Sometimes the mercury will be observed to fall with the wind from the north, then very bad and rough weather may be expected: storms in the summer; in the winter and early spring snow and hard frosts. During a frost a depression of the mercury predicts a thaw; if with a south or south-east wind, the thaw will most likely continue; if the wind be south-west the frost may be expected to return, as in the late frosts, and the column will turn to rise again. A rapid rise after gales from the south or south-west in the winter is usually accompanied by clear sky and hard white frosts. After great depressions, in the summer months, cold unseasonable weather is experienced, preceded by violent storms of wind, rain, hail, and thunder. There are some occasions when a sudden rise in the barometer, with an increase in temperature, in the winter, indicates the advent of a southerly wind, accompanied by rain and thaw, the hygrometer showing a great degree of dampness. Whilst the barometer continues to rise steadily the observer may satisfy himself that no great storm will occur. The hygrometer, the dry and wet bulb thermometers, indicating the dryness or dampness of the atmosphere, should not be neglected; they should be observed at the same time as the barometric readings are made. The duration and probable amount of rain may often be learnt, for as long as the atmosphere remains saturated with moisture there is little chance of fine weather.

A steady rise, or a stationary column at a reading above the average, say 30.00 inches and above, with dryness, foretells very fine weather. Many persons are deceived, through a want of sufficient knowledge or experience, from the fact that the mercurial column may

sometimes *rise* and yet *wet* weather may be the result; this will occur when the wind changes from a southerly direction to north-easterly, the latter accompanied by wet, rain or snow; in these cases the change in the direction of the wind causes the rise in the barometer; winds coming from that quarter being colder and consequently more dense than those from an equatorial direction. Long-continued wet is usually preceded by rapid and continuous falls in the barometer, a rising thermometer, and increased dampness; the hygrometer often, for even days together, indicating saturation. Sometimes, generally in the summer months, indications of storms will be given by a falling barometer, and yet the observer *may* experience nothing of it, lightning sometimes being seen in the evening; in these cases the storm is too far off for him to feel its influence, although the disturbance created by the storm in the atmosphere has affected his instruments. For this reason allowance must always be made for the state of the instruments during some days previous. As thunder clouds rising from the *north* and *north-eastward* against the wind do not usually cause a fall, the approach of thunder and lightning is not always foretold by depression. Should the atmosphere be heated much above the average temperature of the season, squalls of wind and rain may be expected. It is a bad sign when the wind veers in a retrograde direction, that is, in a direction against the sun's motion, or *from* west *to* east; when this is the case, the weather is usually very unsettled. The observer must be warned against taking a rise or fall in the mercury when caused by *temperature* for a variation of atmospheric *pressure;* to guard against this error, he should always read the thermometer attached to his barometer, and, if necessary, correct the readings, reducing them to some degree of the thermometer at which he is accustomed to compare one day's observations with another; it is usual to reduce all readings to 32° of Fahrenheit's scale. The more north an observer is situated the higher will his barometer stand; in comparing his results therefore with other stations, he must make an allowance for difference of latitude. This difference will be of no practical importance, since the differential results will not be affected, but only the mean; thus, were a curve, representing the atmospheric wave, laid down for a more northern latitude than ours, it would occupy a place a little removed from our curve, but parallel to it, and following it through all its inflections. Height above the level of the sea must also be taken into account in comparing the observations of two different stations; the mercury, as will be readily understood, standing higher the lower the elevation; having of course a higher column of air pressing upon the mercury in the cistern. It will be sufficiently accurate for all general purposes to apply, as a correction for difference of elevation, 1-tenth of an inch for every 100 feet; if the nstrument be above the sea level, it must be *added*, if below *subtracted* from the observed reading.

The remarks which we have been induced to make for the guidance of our readers, are not given as absolute and infallible laws; they have exceptions like all other general rules. We give them as the best we have at present, believing they will be found very useful though perhaps not perfect. Let it not be supposed we despise *all* old weather saws, on the contrary, many of them are true, and it is with due attention to some of them, together with diligent use of instruments we have described in a former Number, that valuable information may be gleaned concerning approaching weather.

Now that public attention is directed to the want of timber and spars for naval purposes, the erection of a magnificent flagstaff of the DOUGLAS PINE in the Arboretum of Kew is a matter of no ordinary interest. This superb spar, unrivalled, we believe, in Europe for height, symmetry, and excellence of material, was presented to the Royal Gardens by EDWARD STAMP, Esq., a gentleman connected with the firm of Messrs. BILBE & Co., shipbuilders of Rotherhithe, and is assuredly as noble a gift as ever graced a Royal demesne; and as it towers there in an unbroken column, nearly twice the elevation of the loftiest trees which surround it, it cannot fail to command universal attention.

The Douglas Pine (Abies Douglasii) is a native of British Columbia, where it forms a considerable proportion of the forests of that timber-laden country. Owing to its height, straightness, elasticity, and presumed durability, it early attracted the notice of the colonists as being especially adapted for masts, spars, yards, &c.; and it is now upwards of two years since Mr. STAMP imported the first ship-load of its spars to Europe. Amongst these were three beautiful poles, all upwards of 100 feet, and one 118 feet long; this Mr. STAMP on his arrival at once offered to send to Kew, rounded, painted, and fitted as a flagstaff. As with many first attempts, however, misfortune dogged its course; its length was so great that the only way of transmitting it to Kew was by floating it up the river, and in its transit it was struck in the middle by a river steamer and cut in two. Nothing daunted, Mr. STAMP had the pieces floated back to Rotherhithe, spliced, with the loss of only 2 feet of length, and the repaired pole again sent up to Kew, where it was landed and brought to the foot of a commanding knoll in the Arboretum, on which it was intended to erect it. Here a well was dug for the reception of the butt end, 12 feet deep, bricked all round, and well ventilated; a derrick was rigged for hoisting the spar, under the direction of one of the most experienced men in such operations to be found in London; and the spar was gradually raised by a rope attached above the middle, but unfortunately too near the centre of gravity. The result showed how little idea the engineer had of the magnitude of the undertaking. The spar was hoisted to the top of the derrick, and had no sooner assumed its erect position than a puff of wind swung it round; after performing a majestic sweep in the air over the heads of the spectators, the derrick's supports gave way, and the spar came to the ground on the slope of the hill, with a tremendous crash, breaking into six pieces; providentally no one was hurt, and though it fell into a grove of young trees and shrubs, not one of these was injured either.

On being informed of this disaster, the liberal donor answered that he was going again to British Columbia, and would gladly send to Kew another and finer flagstaff. Well did he keep his promise, for in the course of this spring there arrived at Rotherhithe for Kew a second spar, fully 40 feet longer than the first, as straight, and of much greater bulk; this too was landed at Kew free of all cost, and immediately transported to the site of its ill-fated predecessor. This noble spar measured, before cleaning and rounding, 159 feet in length, the diameter of the butt end being 22 inches, and that of the top end 8 inches. It contained about 150 annual layers, which were close and well defined by broad brown resinous rings. Immediately on its arrival Sir WILLIAM HOOKER represented to the Chief Commissioner of Works the advisability of requesting the aid of the Admiralty in its erection, which was at once accorded by his Grace the Duke of SOMERSET. Ten mast makers and riggers were despatched from Woolwich Dockyard, under the superintendence of Mr. JOHN ISAAC, the able inspector of mast makers at that yard, under whose skilful directions the operation of cleaning and rounding the spar, fitting it with rigging, and coating it with a composition of wax and tar, proceeded with celerity, precision and order. Meanwhile Mr. ISAAC matured his plan for raising the spar, which was with him a labour of love, such a spar for size or beauty having never been seen at any of HER MAJESTY'S dockyards, and that intelligent officer's experience having taught him the wisdom of treating such enormous lengths of timber with due respect, he wisely devised a plan of letting it help itself into its place, instead of hoisting it up, to disport itself like a fishing rod in the air, as its predecessor had done. To this end he placed the spar at the foot of the hill, with its butt end pointing to its final resting place; he then had a cut made through the side of the hill to its centre, in the direction in which the spar lay; the latter was then dragged butt end foremost into the cutting, and the butt strongly propped in its final position. On Thursday, the 2d of May, by means of stout ropes attached about the middle, and passing through blocks on the adjoining trees, the flagstaff was slowly and steadily reared aloft from the horizontal to the upright position. A large concourse of people had assembled to witness this somewhat nervous operation of raising a spar of such length and weight that any untoward strain or sudden jerk might have caused it to snap across the middle. To guard against this the top was steadied with ropes, and other precautions were adopted as the strain was felt most at one or another point in the length of the spar; and though with such admirable precautions not the slightest accident or contretemps appeared possible, still all the spectators felt a sense of relief when, after now waving about in the wind during pauses in hoisting, trembling like a Willow wand as its taper top slowly approached the zenith, it finally to its rest as straight as an arrow, and so perfec erect that a plumb line dropped from the cut the centre of the butt.

The wire rigging for holding it in its place all been fixed before, together with crosstrees steadying the slender upper half, truck, and halyard; and on the extreme summit, a star looking-glass facets and points surmounts the staff, and reflects the sunbeams. The rigging fixed to strong supports deeply buried in the and there loaded with heavy blocks of stone. the spar was finally varnished with the same pedition and smartness as had characterised all proceedings of Mr. ISAAC and his men, who, witnessing the futile efforts of the heavy gale Friday evening to injure their work, left Woolwich the following morning.

The dimensions are as follow:—

	ft. in.
Total length of the spar	[illegible]
Under ground, in the bricked well	[illegible]
From surface of ground to crosstrees	[illegible]
From crosstrees to topmast rigging	[illegible]
From topmast rigging to truck ...	[illegible]
Length of iron crosstrees ...	[illegible]
Diameter of truck	[illegible]
Diameter of staff at heel	[illegible]
Diameter of staff at top	[illegible]
Cubical contents of staff	[illegible]

Total weight complete, 4 tons, 8 cwt. A cubic foot of the timber weighs 58 lbs. The probable age of the tree was not more than 200 years, and its total height 220 feet.

THE possession of good cutting tools is im tant to gardeners, and there is so much diffi in knowing where they can be certainly pro at a moderate price, that we do not hesi depart for once from our usual practice recommending tradesmen. During the 12 months several samples of knives and have come under our notice concerning nothing favourable could be said; blades break, edges turn, back springs won't spring points snap off, not from unskilful use but to badness of workmanship and the inferior qu of what is called steel. None of these faults to the garden cutlery manufactured by SAYNOR & COOKE of Sheffield, a number of whose knives of various patterns and sizes we have lately examined. They are of good forms, capitally tempered finished, reasonable in price, and really show is meant by the expression "true as steel." workmanship of this firm, which has always excellent, has now become everything the most fastidious gardener can require.

WE have just received an announcement on Thursday, the 16th inst., there AUCTION AT HAARLEM of what is called nifique collection d'Amaryllis" of the BOON. The Catalogue contains 170 lots names with which we are for the most acquainted. Messrs. SCHERTZER, the Haarlem, act as agents for the sale.

IT is announced that the Summer Co LECTURES on BOTANY, by Prof. OLIVER Foremen and Gardeners engaged in the Gardens at Kew, will commence on Tues 14th May, and will be continued on two weekly (at 7 o'clock, on Tuesdays and Fri until Friday, the 12th July. Examinations the subjects lectured upon will be held to time; also at the close of the Co Monday and Tuesday, the 15th and 16th The Prizes will be awarded on Tues 30th July. The first 10 or 12 Lectures devoted chiefly to the Structure of Pla Botanical Demonstrations. The latter p the Course to the principles of Classifica characteristic marks of the leading Natura and their general history. The Lectures abundantly illustrated by fresh specimens from the Gardens, Museums, and Herbari numerous Diagrams, Drawings, &c. The is open to all employed in the Royal Gard

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VARIEGATION IN PLANTS.

I HAVE read with no less pleasure than inte Correspondent "An Old Showman's" very se marks on "Variegation in Pelargoniums;" there are fixed laws by which such variegat place, few, I dare say, will seek to dispute misnomer therefore to call such results sports implying a departure from law. Your Corre enunciates this truth in saying, "There is thing in nature as chance." The whole

remarks seem to regard the results referred to as the effects of change in the tissues of existing plants by "absorbing (or imbibing) water by the roots while in a state of decomposition"—in other words, as produced by unhealthy action or disease. I was myself long a firm believer in the theory, and could never look on these departures from the beaten track of nature, from variegated Hollies down to Pelargoniums, with any of that admiration to which the general taste then and still so strongly inclines. Such a variegation took place in the Veronica raised by me, and which our Caledonian Horticultural Society complimented me by naming V. Andersonii, but I could never regard it in any other light than as diseased. Let any one possessed of them look over in his houses any general collection of plants, and he will find such variegation of frequent occurrence, especially among Camellias, Rhododendrons, often on R. ciliatum, Oranges, and sometimes, not often, in Fuchsias. And, so far as my observation goes, it oftenest happens in plants having leaves of thickish texture.

Generally I hold your Correspondent to be not far off the true causes, when he assigns them, as I understand he does, to improper drainage, by which the plants get saturated with water, and poor soil—in short, anything to induce diseased action.

All the instances of variegation he refers to are the results of change, at least on plants to which such variegation did not originally belong, having never, he says, been able to get a variegated plant from seed, although he believes "Flower of the Day" was so obtained. And he goes on to give his manipulations and experiences in producing variegation on various scarlet-flowered Pelargoniums—all excellent and instructive. He sums up by observing, that "whether this alteration be a disease or not, there is one very remarkable fact connected with it worthy of Mr. Darwin's notice,—that is, I have never got a green sport from a variegated plant like the green parent of the variegated variety"—a doctrine to which I cannot from my own experience wholly assent. But whether Mr. Darwin's tenets will gather strength or be shaken, or be at all affected by anything observed or to be discovered on this subject, is questionable. Certainly, the fact I have now to communicate upon it lies more in Mr. Darwin's way, though I do not see it can either aid or obstruct his views very much.

I was never so much in love with variegated foliage as to seek to promote or preserve it much in anything. I was both disgusted and disappointed to find a fine new Aucuba with a golden blotch, let out at a guinea a plant, soon lapsing back to the common variegated A. japonica (from which it had, so to speak, sported) a result which I attributed to its being placed in rich soil. And this falling back to its origin confirmed me more and more in the belief that it was all due to disease. Yet how was the original variegation of that same A. japonica, from which it never departed, secured? It did not then occur to me that it was too fixed for "a sport," and must have originated from the seed, a fact of which I have not now much doubt.

Some eight or ten years ago I happened to be on a visit to some relations in Perthshire, and calling at Altamont I was presented by Lady Ballingall with white flowered species of the common scarlet Pelargonium, a thing I had never before seen, and from which I hoped great things by crossing. I crossed it with Tom Thumb, then and still a very fine kind, and my highest expectations were from that cross, for I had inverted the cross, making the scarlet species the seed bearer. From the seeds sown of these respective crosses the product of the white-flowered kind was utterly worthless, tame, common looking things with pale washed scarlet flowers, all having common uniform green foliage. As I set little store by the inverted cross, the seeds I had saved and sown were few. But what was my surprise to find that most of the plants raised were less or more variegated in their leaves, some with uniform marking, others splashed with white colour, and as they got on some showing pure white foliage in some of the shoots, which, however, never advanced far.

At a loss how this change of colour could arise, I thereafter repeated the experiment by again crossing Tom Thumb with the same white flowered plant. The result was still more remarkable. I had from 20 to 30 plants, scarce one of which did not show the white variegation in a very striking degree. I lost the greater part of this brood by a servant incautiously throwing the pits (where they were) open to be aired one severe frosty morning. That this cross of the white flowered kind on Tom Thumb certainly produced plants with variegated foliage, I had ample proof in the two experiments made in successive years. I have long since lost Lady Ballingall's plant, and I have never repeated the experiment with any other white flowered sort. If any of your readers should wish to try, let them be sure to make the scarlet kind the seed bearer.

The experiment, as I have promised, can as little injure as it can support Mr. Darwin's theories. After 20 years' experience of hybridising, I might bring forward facts—an array of them—which might affect his views very differently. When I first started in this field I was so fully possessed of the same notions with Mr. Darwin, and which were suggested by no less an authority than Linnæus, that I set to work in the full persuasion that I would afford proof of his belief that all plants, now so diversified, were derived from a few original types, and years after years I laboured indefatigably at muling all sorts of allied things, till at last I had to open my eyes to the sickening truth that it was all labour in vain. Nature would go a certain length, but there were "set bounds" beyond which the art of man could not impel her. If Mr. Darwin would be advised by so very humble a person as myself—let him go and direct his great powers of observation, and his fine genius in tracing and learning from Nature, in her own haunts, and, as I have done, from his own manipulations endeavour to make out his case by well directed experiments. But let him, or any one with whom my suggestions may weigh, attempt no violence by trying to mix things of one tribe with things of another, even though it be an allied tribe. The alliance must be close and unmistakeable; and he will succeed to some extent—intermixing species with species readily—though in some families he will utterly fail even in this. But he may be rewarded in other families by getting plants of separated tribes to mingle. I say separated, not separate. For some things are put down in separate tribes, which should be in the same; *e. g.*, there is put down as Myrtus, a plant called Myrtus americana, which is a Eugenia; for I have with it crossed Eugenia Ugni, from which I have a brood of large plants. And I ripened seeds abundantly from the cross inverted, making the so-called Myrtus the seed bearer. *Isaac Anderson Henry, Hay Lodge, Trinity, Edinburgh.*

Peziza onotica, *Pers.* From a sketch by Mrs. Lloyd Wynne.

MYCOLOGY.—No. LI.

Peziza onotica, *Pers.*—Amongst the various beautiful Fungi which adorn our woods in autumn, scarcely one can be compared for loveliness of tint or delicacy of texture with the subject of our present notice, which is moreover one of the largest of the especial group to which it belongs. It delights especially in the borders of mixed woods or the entrance of groves, though it is not entirely wanting in their deeper recesses, while its closely allied but less elegant relation *Peziza leporina* affects more especially Fir-woods. *P. onotica* has a short or almost obsolete stem, clothed here and there with patches of white down and gradually widening above into an oblique ear-shaped elongated cup, which is mealy externally and pale, and within of a beautiful scarlet, passing here and there into rose or yellow. It is at first quite smooth within, but at length becomes slightly wrinkled at the base. A small variety occurs in woods densely crowded, and in consequence less regular in form, of a bright ochraceous tint, without any tendency to assume scarlet or orange. The only species, except *P. leporina*, with which it is likely to be confounded, is *P. aurantia*. That species, however, is very different in form, being shorter, nearly sessile and often depressed, and is besides of a fuller scarlet, but nearly white externally. It grows, moreover, principally about old stumps, and if these characters are not conclusive, a glance at the fruit under the microscope will be sufficient, the sporidia of *P. onotica* being regularly elliptic and perfectly even, while those of *P. aurantia* are more indefinite in outline and rough with irregular projections. A still larger species, distinguished by its tougher substance, and extremely elongated cup, which is of a chesnut rather than orange, occurs in great abundance in Sikkim, a country which exhibits most of the principal European types of Fungi, though the species are seldom identical.

As far as we know *P. onotica* has nothing to recommend it except its beauty, unless we advert to the peculiar pleasant odour which is so common to Fungi which resemble it in colour.

Peziza, like most genera abounding in species, presents many difficulties to the student. Fries has lately separated a few under distinct generic names; but with the exception of *Helotium*, which comprises numerous species whose disc is always open, and more or less convex, or at least plane, even in infancy, and which abound on old hard stumps or decaying chips in woods, though not confined to such localities, none of these genera contain many representatives. When these are separated, the true Pezizæ are easily resolved into three principal groups, distinguished by the appearance of the outside of the cups. In the first the surface is sprinkled with mealy particles; in the second it is variously hairy or tomentose, while in the third it is with few exceptions smooth. These groups again are divisible into others distinguished by comparative regularity of form, difference of substance, habit, and other particulars. Those of the third group are mostly minute and comparatively insignificant; the first containing the larger and more conspicuous, while the second comprises the smaller but more interesting species. One or two of the larger kinds are esculent, but in general the genus is unimportant in an economical point of view, though few genera contain more elegant objects for examination. *M. J. B.*

THE GORILLA.

Until very lately, I had imagined that articles in newspapers are common property. Under this delusion, I ventured to make a few remarks in the *Gardeners' Chronicle* for March 30, on a lecture which Mr. Du Chaillu had given before the Royal Geographical Society. Dr. Buckland, in defence of Mr. Du Chaillu, tells us, "on the best authority, that it is not fair or just to judge of Mr. Du Chaillu's observations from a brief report of a lecture which condensed into an hour the experiences of four years." However, notwithstanding this, we find Dr. Buckland himself judging most favourably of this one hour's lecture, which received the unqualified praise of Professor Owen and Sir Roderick Murchison. If the judgment of three such distinguished naturalists be sound, then, indeed, my own history of the monkey family (see my last little volume of Essays) is rotten to the core.

Let me revert to Mr. Du Chaillu's late lecture. In it he states that one of his men was killed by a gorilla. He says, "On arriving at the spot they found their comrade dead, his ribs smashed, the flesh torn off, the gun broken, the barrel bent." But, reader, it happened some how or other that the same dead man was alive on the following morning, and had such complete use of his faculties that he was enabled to swear positively to the identity of the very same gorilla, which Mr. Du Chaillu informed his audience had maimed and killed him on the preceding day. So says Dr. Buckland.

By the way, this gentleman taxes me, in the *Field* newspaper, with pronouncing "dogmatically," without having seen the skins and skeletons which are now in London; "and in being in entire forgetfulness of the anatomical descriptions of Professor Owen and of other scientific men." Here I plead guilty to both these grave charges; but in doing so, I beg humbly to remark, that having paid unceasing attention to the habits and economy of monkeys for more than 50 years, I will never believe that an ape did actually advance on two legs, or even on four, to attack a human being, and so unalterable is my opinion of an ape's powerlessness to bend a gun-barrel, that I do not hesitate to say what Sterne has said of poor Maria in his "Sentimental Journey," I would joyfully find "my way across the Apennines, travel over all Lombardy without money, and through the flinty roads of Savoy without shoes," to see a gorilla bend the barrel of a sportsman's gun.

Nature has certainly placed amazing powers of strength in the forelegs of apes; but these powers are mostly used to transport their bodies with wonderful precision and velocity from branch to branch, whilst their hind legs act as props.

So far for the present. I have written these few remarks to clear myself in the eyes of the public from Dr. Buckland's accusation of unfairness and injustice.

He will do well to recollect that patronage does not always succeed; *Causa patrocinio non bono pejor erit*; and that a man may do harm to his friend at the time when he wishes to give support. *Tantum ne noceas dum vis prodesse videto. Charles Waterton, Walton Hall, May* 6, 1861.

Home Correspondence.

Heating Vine Borders.—In answer to Mr. Munro's letter (see p. 410), I have to state that it was on the 8th of August, 1848, that I submitted plans for the chambered Vine borders here to my employer for his approval; and Mr. Gray had the work finished by the end of November of that year. The other erections, such as greenhouse, stoves, pits, &c., were finished in September, 1849. And on the 10th of June, 1850, I visited Mr. Munro at Colney House. He will thus see that all our improvements were carried out previously to my visiting the south, and that therefore the chambered borders here were no imitation or copy of those at Colney House. The subject of heating Vine borders had been discussed in the pages of the *Chronicle* long before 1848, and practically carried out at Trentham and other places, but I could not approve of any of the methods adopted or described. I have thus shown by dates, which cannot be controverted, that Mr. Munro is entirely wrong in all his conjectures about the origination of the chambered borders here, and their supposed connection with those at Colney House. Although I have no direct proof to place against his assertion that it was I who saw the Vine roots hanging in the chambers at Colney House, I have, together with a clear conviction in my own mind to the contrary, to state that I kept a copious journal of all the places I visited in 1851, what I saw, and what was new or deserving of attention, and Colney House among the rest is noticed, but I have no entry of Vine roots or chambers. I must therefore distinctly deny that I was shown any chambered borders at Colney. Mr. Munro says he did not mean to "rob me of any credit I had in bringing the subject of chambered Vine borders before the public." I may just state that I did not bring the subject before the public. And, if it was not to "rob" me of credit, his bringing forward the matter in the way he did must have been for the purpose of exalting himself. I hope, therefore, before he does anything of the kind again he will make himself better acquainted with facts than he has on this occasion. *Alex. Shearer, Yester.* [Here we think this discussion should terminate.]

Effects of the late Frosts, Wet, and Absence of Sun in 1860.—It now proves too true that my opinion previously expressed respecting the sad ill effects of the last adverse summer, autumn, and winter would be manifested this spring. It has already been generally exemplified, ascertained, and acknowledged, that very many seeds, plants, shrubs, Roses, &c., of various denominations are killed either by the frosts or wet. I believe it has been chiefly occasioned by the chilliness of the earth and atmosphere, the absence of sun in summer and autumn not enabling the lateral seeds, wood, or shoots to germinate or ripen sufficiently to endure the cold, for I can remember many winters and springs more severe than the present 1861, not proving near so fatal; but no such sunless summers and autumns as 1860. The chief cause of the bad plants of late autumn-sown unmatured corn and seeds may be safely attributed to the too coldness of the earth to admit of their germination. This circumstance, added to other contingencies, such as their being planted too deeply in drills at so precarious a season, instead of their being more cautiously surface-sown, has occasioned the chief mischief, and this is plain in thousands of instances. I am told that some fruit trees are seriously injured, and that there will be but little to boast of in the fruit department this season, especially Pears; but this occurrence, I may venture to write, is only partial, and I confess that I have not had ocular demonstration of Pears and Apples being abortive. One thing is, however, certain, that Walnut trees are injured to such an extent that there will be no Walnuts this year, if there is for years to come, as but few of the upper shoots remain alive to the length of a foot, including the new and last year's wood, and those few which had escaped the winter frosts are now scathed by the recent frosts of the past week. I enclose you specimens such as are general, at least in Essex and Suffolk. *A. Hardy, Maldon, April* 29.

Effect of Frost on Autumn Transplanted Roses.—I have been amused at the various accounts published in your columns with respect to Roses not dying, &c., if removed in the autumn. I made two large beds and placed in them not less than 118 Roses; all are dead except a few small ones carefully covered up with straw; some were removed from different parts of my gardens, the others were bought plants, very good ones, from the north and south-east of England. They were all hybrid perpetuals. The whole of my Roses against walls are dead, some 13 years old. I have at least 200 Roses killed; the few, a dozen perhaps, left, are the summer varieties, undoubtedly more hardy than the others. Probably "Coventry" &c., cannot give so good a report of his Roses now as he did some time ago in your columns, as many have died off since his report, for we all know plants are not safe from their winter trial till quite the end of April or beginning of May. Taking plants up and shifting them when the wood is not ripe, but full of sap, does not, in my opinion, mend the matter much for standing the attacks of winter. A Six's thermometer got out of order from the sudden cold on Christmas Eve, and the next morning two common quicksilver thermometers, hanging by the side of it, at eight o'clock stood at 2° and 4° below zero. I find that some Biotas, Cupressus Lawsoniana especially, Juniperus, Thuja gigantea, Thujopsis borealis, Wellingtonia, will stand any weather. Of plants NOT TOUCHED I may name Juniperus argentea, fragrans, hispanica, daurica, japonica, hibernica nana, sphærica, ovalis, glauca, chinensis; excelsa, old and large plant, slightly touched; Thuja japonica, aurea, aurea var., Lobbii; Biota glauca, excelsa; Thujopsis borealis, Cupressus ericoides, Pinus Sabiniana, &c. Portugal Laurels are much injured, and common Laurels, Laurustinus, &c., cut down. *Jack Frost.* [We are unacquainted with some of the Junipers named in this list.]

Vine Growing.—I have a Muscat house, with Vines planted inside, and on the spur system of Sanders, showing now bunches 15 inches in length before blooming. My gardener stops each shoot, leaving two joints above the fruit, but in consequence of a very eminent grower of Vines stating that he saw no reason for leaving even one joint, I have had all the shoots stopped to one, and some even without leaving one at all. Now, I do not observe any difference in the size or healthiness of the bunches, from this different mode of stopping. Will you therefore explain to me what botanical effect these different stoppings have upon the fruit? for although Sanders says one joint, and Roberts "one or not more than two," neither of these able and practical writers on the Vine give the botanical reason for their practice in this respect. *A Subscriber.* [The Grapes are fed by leaves; leaves prepare food; they also attract to themselves fluid matter which they afterwards pour into the Grapes. Remove all the leaves from a fruit tree, the fruit can neither swell nor ripen. Remove every leaf from above a Peach, and the Peach will shrivel; leave one healthy leaf, and it will swell, though not so well as if more leaves remained. This subject is fully explained at p. 73 of Lindley's *Theory and Practice of Horticulture*, published in 1855, by Longmans.]

Effects of the Winter.—The following are the effects of the winter of 1860 and 1861 on Conifers, and other tender trees and shrubs at Bishopstowe, Torquay, communicated by the Right Rev. the Lord Bishop of Exeter.

CONIFERÆ:—
Abies Pindrow, leaves mostly gone, partly frost, partly wind.
,, cephalonica .. .. } Not injured.
,, Douglasii .. .. }
,, grandis .. .. .. }
,, morinda & varieties }
,, Nordmanniana .. }
,, nobilis .. .. .. }
,, Pinsapo .. .. .. }
,, Montezumæ .. .. }
Pinus patula, killed, previously unhealthy.
,, insignis .. .. .. } Uninjured.
,, pinea .. .. .. }
,, Edgariana .. .. }
Cupressus funebris .. }
,, Goveniana .. }
,, macrocarpa .. }
,, thurifera .. }
Taxodium sempervirens, much browned, chiefly from wind
Taxodium distichum, points of shoots injured
Cedrus Deodara, injured by force of wind, but not by frost
Wellingtonia, browned by force of wind, but not by frost
Thujopsis borealis, not injured
Libocedrus chilensis, not injured

———

Arundo species, apparently dead
Agapanthus umbellatus, killed
Benthamia fragifera; lower branches killed, not upper
Coronilla glauca; some killed, some not
Ceanothus divaricatus; more or less injured, partly by wind—not killed
Daphne japonica, not injured
Edwardsia microphylla, killed
Escallonia macrantha, not injured
——— rubra; some cut to ground, some not
——— Montevidensis, cut to ground
Eucalyptus (?) robusta, killed
Eugenia Ugni, killed
Fuchsia Riccartoni, 7 feet high, killed to ground
Garrya elliptica, uninjured; this very much cut last year
——— macrophylla, much injured
Grevillea rosmarinifolia, not injured
——— sulphurea, not injured
Laurustinus, injured by the winds; but not by frost
Laurus nobilis (Bay), many much injured; previously unhealthy
Myrtles, rather cut
Melianthus major, killed to the ground; now shooting
Pawlovnias, large and small, uninjured
Pittosporum Tobira, large plant not hurt (small, dead, unhealthy)
Plagianthus Lampenii, partially killed
Roses trained to iron, much injured
Spiræa Lindleyana, &c., none injured
Quercus heterophylla, points of shoots killed
——— glabra, not injured

Last season being so very cold and wet, Pawlovnia imperialis will not flower this year.

An Auricula for the Dogs.—I send the accompanying truss of an Auricula, not as an interesting case of morphological change, but very much the contrary. I want your opinion to comfort me in my disappointment. I purchased the variety four years ago as "Bone's (Qu. Bohn's) Perfection," and have now three full grown plants of it, none of which have ever served me differently. Will the plant and all its progeny always serve me so? If so I think the name must be slightly altered to "Bones in perfection," and then perhaps some dog may pick them out of the dungheap. *George Jeans.* [In the specimen forwarded to us the flowers are resolved into their elements, or nearly so, every organ returning or trying to return to its primitive state of simplicity through the medium of acquired deformity. We fear that the case is hopeless, and that no beauty can be imparted to such a floral Caliban.]

Societies.

BOTANICAL OF EDINBURGH: *March* 14.—Prof. Balfour, V.P., in the chair. The following communications were read:—I. "Notes on Horticultural Experience at Russelconda, South India." By Dr. W. [illegible] Communicated by Dr. Cleghorn. The author describes the difficulties of forming a garden in the wilds of Orissa, the peculiarities of climate, and the results of his experience, which showed how much can be done by a zealous horticulturist in a rather wild country at a small cost. Many Cape and Australian Plants, chiefly Acacia and other Leguminosæ, appear to have grown well, and many British species, as Viola odorata, Bellis perennis, &c. With a little care many annuals ripened their seeds abundantly, nearly as well as in England, such as Mignonette, Larkspur, &c. A variety of English vegetables, as Beetroot, Knolkhol, Cabbages, and Onions were successfully cultivated. Bombay Onions from Bellary seeds attained the size of 10½ inches in circumference, and weighed [illegible]. He grew Tomatos of 7¼ oz. in weight. Cabbages formed solid hearts, and, stripped of the outer leaves, measured 3 feet 4 inches in circumference. The paper concluded with a tabular list of the annuals [illegible] trial of, showing the date of germinating and flowering. The seeds were obtained from the Nilgiris, and proved excellent. On the whole, the author believes Ganjam to be an admirable climate for horticulture, and it seems important that similar observations should be made and recorded at the different stations of our Indian empire.—II. "Description of a new species of Cladophora from the river Ouse in Sussex; with additions to the local distribution of British Marine Algæ." By Robert Brown of Campsie. As no specimen of the supposed new Cladophora was exhibited, it was impossible to give an opinion as to it. Some members expressed great doubts as to its claims to be considered a species.—III. "On the varieties of Mango Fruit (Mangifera indica) in Southern India." By Dr. Cleghorn. The author remarked—The Mango tree is one of the most common in India, and is generally cultivated throughout the warm parts of Hindostan, yet there is no full account of the varieties produced in gardens. Dr. Roxburgh (Flora Indica, p. 640) has given a good description of the tree, and Sir William Hooker published an excellent figure in the Botanical Magazine, Tab. 4510. There are many varieties of the fruit in cultivation, differing remarkably in size, shape, colour, smell, and flavour. Some are large, fleshy, and luscious, while others are so stringy and terebinthaceous that they have been compared to "a mouthful of tow soaked in turpentine." The fine sorts free of turpentine flavour should be the special objects of culture. A series of 40 varieties delineated by Walter Elliot, Esq., and Dr. C. in various parts of South India, was exhibited, including the best kinds obtained from carefully grafted stocks. The fruit assumes different shapes—some are kidney shaped, while others are roundish, compressed—with a point at the apex or at one side. The absence of the peak or point in a graft Mango usually indicates a fine variety. The weight of the Mangoes examined varied from 13¼ oz. to 34 oz. When the fruit attains a large size the flavour is generally inferior. Horticulturists propagate the fruit tree by layers and grafts. The natives generally are acquainted with the system of layering but not of grafting, which perpetuates the flavour of the parent stock. In the different Horticultural Gardens a large number of Mango grafts are taken from the choicest kinds, and are annually distributed over the Presidency. The Alphonso and Mazagon varieties are preferred from their honey flavour, and the absence of fibres; the former, which is distinguished by its green rind and deep orange mesocarp, is known at Madras as the Petre Pasund, from the circumstance of its having been introduced from Bombay by a former Governor, Mr. Petre. Other kinds are highly esteemed, as Ramani (after Rama), Dil Pasund (Delight of the Heart), Shah Pasund (Delight of the King), &c. Some are of a slight acid taste, and the mesocarp varies in colour from orange to nearly white. Mangoes of good quality are produced in the Chittoor, Salem, and Bangalore districts of the Madras Presidency.

The following report was read from Alex. Walker, Castle Newe, Strathdon, Aberdeenshire, 9th March 1861:—"Castle Newe is situated [illegible] feet above the level of the sea, and 35 miles [illegible] from the coast, N. lat. 57° 11′ 43″, N. long. [illegible]. Although in a high-lying Highland strath, surrounded N. and S. by hills—on the north, Ben Newe, [illegible] above sea level, the castle being on the southern slope of it, at the foot of the slope—and on the south [illegible] another hill 1300 feet above sea level—still the grounds where the thermometers are placed [illegible] said to be in a widened part of the valley of [illegible] from east to west three miles long, and three-quarters of a mile in width. The castle and grounds are on a fine slope to the south on the north bank of the [illegible] and are dry and sheltered. The thermometers [illegible] shade and protected, placed about four feet above the surface of the ground, indicated a minimum temperature on 25th December of minus 12° [illegible] zero); and on a deal on the surface of the ground (on snow which was 15 inches deep at the time) the minimum temperature was minus [illegible] below zero). This was in the centre of [illegible] away from trees, and about 12 feet above the [illegible] of the river Don, and 300 yards distant from [illegible] Peaches on a south wall are killed back three [illegible] wood, and few fresh buds are safe on the trees. [illegible] cots have one year's wood killed; buds more [illegible]

the old wood. Pears, on walls, espaliers, and standards have one year's wood killed, and the bark is split in many cases. As regards Apples, the sorts not well matured in the wood have, on standards, lost half lengths of last year's wood, and some even more. Most of the evergreens were protected by the snow which had fallen, and the very calm state of the atmosphere prevented in some degree bad consequences. Araucaria imbricata is considerably injured at top, and very brown in the foliage, although the stems seem to be safe. Cedrus Deodara, leaves all browned that were above snow, and the buds apparently injured on the older wood. Irish Yew, safe, although much browned. Wellingtonia gigantea, safe. Rhododendrons generally safe, being much covered with snow. Portugal Laurels killed down to 18 inches from the ground. Bays less touched. Common Holly killed back three years' wood, and most of the leaves fell off a few days after the severe frost. Ivy, that had reached some 50 feet high on the trunk of an old Ash tree, and had been growing on it for at least 40 years past, has shed all its foliage. Ayrshire and other climbing Roses entirely killed to the then surface of the snow; we had 200 of them on the walls of houses and on gate arches of seven years' standing, and whose height in some cases was 30 feet. All standard grafted Roses killed, and many other valuable dwarf sorts above the pleasure grounds killed entirely, or nearly so. Many wild birds were found dead about the shrubberies and woods.

P. J. Selby, Esq., of Twizell House, in a letter dated 12th March, 1861, writes as follows:—"The frost at Twizell never attained the severity it appears to have done in many parts of England and Scotland, as my thermometer upon two occasions only fell to 8° and 9° above zero, or to 23° and 24° of frost. I commence with the Laurustinus, which is killed to the ground; Portugal Laurels a little injured in the leaf where much exposed; Common Laurels, in consequence of being weighed down and covered with snow, very little injured, not more than I have seen in comparatively mild winters: Sweet Bay much injured, and not likely to recover. Rhododendrons uninjured; Leycesteria formosa killed to the ground; Arbutus Andrachne killed; China Roses killed to the ground. Coniferæ: two fine plants of Pinus insignis upon the lawn, much injured, one of them scarcely expected to recover; P. austriaca, P. Cembra, P. excelsa, P. Pallasiana, P. pyrenaica, P. Montezumæ, and P. Laricio, all uninjured; Cedrus Deodara, C. Libani, and C. atlantica uninjured; Araucaria imbricata uninjured; Abies Menziesii and A. Morinda uninjured; Picea nobilis, P. Cephalonica, P. Pinsapo, P. Webbiana, and P. Webbiana all safe; Cryptomeria japonica, upon the lawn, much browned, but uninjured in sheltered situations; Sequoia sempervirens much injured where exposed; Cupressus funebris killed; C. torulosa greatly injured, not likely to recover; C. Lusitanica killed; C. Lambertiana uninjured; C. Goveniana not expected to recover; Wellingtonia gigantea uninjured. My wall fruit trees have suffered greatly from the immature state of the last year's shoots, and I also find that many of my Pyramid Pears have lost their buds."—Dr. Christison, in a late visit to Castle Kennedy, near Stranraer (Lord Stair's), remarked that the frost of December had not done any injury to the plants. There are groves of evergreen Oak (Quercus Ilex) about 50 feet high, and not a brown leaf on one of them. There are multitudes of young Araucarias remarkably vigorous, with internodes 2 or even 2½ feet in length, and all without exception in their liveliest green, without a trace of the action of frost.

Mr. Gorrie stated that he had just returned from a visit to Roseneath, and that the evergreens there are uninjured. He saw specimens of Laurustinus 12 feet high, of Laurus nobilis 16 to 20 feet, and large plants of Arbutus Unedo, Bay and Portugal Laurels, untouched by frost. The thermometer did not fall below 9° F.

At Taymouth, Mr. Peter Murray says the vegetation has scarcely suffered any damage. The following are uninjured:—Common and Portugal Laurels, Rhododendrons, Araucarias, Cedrus Deodara, Cryptomeria, Pinus Hartwegii, Wellingtonia, Fitzroya, Saxegothæa; Picea nobilis, Cephalonica, Webbiana, Nordmanniana; Abies Douglasii, Morinda; Cupressus Lambertiana, Hollies, fruit trees, Cauliflower. Laurustinus a little browned, as also Arbutus and Sweet Bay. Leaves of Aucuba japonica injured, but not more than in ordinary winters. Loch Tay, he thinks, has a great effect in tempering the climate. The temperature of the water is never under 43°.

Mr. J. B. Hamilton, of Leny, near Callander, gives the following particulars:—The thermometer did not fall below 16° F. Wellingtonia gigantea and Cupressus Lawsoniana appear to be perfectly hardy here, while Pinus insignis, Cupressus Lambertiana, Cupressus funebris, Cryptomeria japonica, and Araucaria imbricata are all more or less touched at the tips of the branches; and Ilex cornuta, I. furcata, and Mahonia japonica are apparently killed. The Common Laurels, Bays, and Aucubas are all untouched.

Notices of Books.

The Wet and Dry Seasons of England, &c., &c. By Charles Fulbrook. 8vo, Renshaw. (A Pamphlet.)

Another weather prophet appears upon the stage. Mr. Fulbrook endeavours to show that the seasons from the year 1846 to 1860, inclusive, agree with a certain rule and system, which he has discovered, and he offers some remarks on the probable character of the following four years, 1861 to 1864, and on *the* expected extremely wet season, all founded on rules deduced from a long series of observations of the rainfall. It must be confessed that this is a startling announcement; it assures us that a way has at last been found of foretelling weather long, very long, before it occurs; and further that *the* extremely wet season is at hand. Appearing as the pamphlet does in the beginning of April, we imagined that *the* season in question was the present season. But upon turning to the author's pages we find ourselves mistaken. Whatever season may be meant we are comforted by finding it not to be this season, as will be seen by the following four predictions:—

1861. The rainfall of this year *is likely to be somewhat under the average*, taking the country generally. In such a year, *although dry weather will on the whole prevail*, some rainy periods of a few days each may be expected; and these, it is probable, will be more frequent in the last five months of the year. This, it will be seen, includes the harvest season; but I do not think there is reason to fear any serious consequences from excessive or long-continued rains. The driest weather may be expected to occur in the early part of summer, especially during the month of June and the first half of July.

1862. This year may also be looked forward to *as a little on the dry side*, generally speaking. The first three months will be, probably, comparatively wet; after which the weather becomes drier, and we may expect a fine and dry summer. September will be of a more unsettled and rainy character; and this sort of weather will, probably, be more frequent during the remaining months of the year.

1863. There will be a considerable quantity of rain during this year. In all probability, June, July, *and August will prove less rainy than most of the other months; and it may not be very unfavourable for the haymaking and the harvest*, provided the latter does not come late. September and the remaining months of the year will, undoubtedly, prove extremely wet, as there will then be a most remarkable combination of wet influences, which will produce extraordinary storms and extensive inundations.

1864. May also be expected to be wet, but, as will be seen by the diagram, *not so much so as the year* 1863.

The italics are our own. Which then is the year to which the alarming announcement of "the expected extremely wet season" is applicable? To us it seems that Mr. Fulbrook has studied to some purpose the sagacious almanac of the renowned Francis Moore, gentleman [illegible]

But he says that *certain rules* for predicting weather have been discovered, and he assures his readers that after having "largely investigated the subject," he is "in a position to state that there is the *most positive and satisfactory evidence* that a relation does subsist between those great fluctuations in the monthly and yearly amounts of rain, which have hitherto been regarded as uncertain, and the movements of the several bodies of the solar system." A very great discovery this if real. To show that it is a reality the author predicts of 1861 that the following is "likely to be of a rainy or unsettled character," viz., "The latter end of April or beginning of May." But unluckily for the reality of the great discovery the latter end of April was singularly dry, and now, on the 9th of May, which we suppose will be regarded as past the beginning of the month, we have scarcely felt a passing shower. Neither has the weather been more unsettled than it is in England in 10 out of 12 months in every year.

Such being the case it is needless to occupy our pages with a description of Mr. Fulbrook's "discovery." Those who desire to know what it is will doubtless provide themselves with his pamphlet.

History of the Siege of Delhi. By an Officer who served there. Small 8vo., pp. 331. (A. and C. Black.)

Though late in the field, yet, to those who are familiar with the great events that happened at Delhi, or are said to have happened there, the little volume before us can hardly be said to want interest. In some respects, indeed, its tardy publication is useful, for it has enabled the author to take a cooler and more dispassionate view of the operation, than was possible when men's blood was boiling with indignation at the hideous atrocities of the rebel Sepoys and their infamous leaders. On another account, too, we are glad to see it. The author does not paint everything European with a pencil dipped in rose-colour, nor everything Indian with one loaded with pitch. He endeavours to act fairly by both sides, and, in our judgment, has succeeded. We must add, however, that this feeling may go too far, as is shown by the manner in which the evasion by Government of dividing the Delhi prize-money is treated. "Three years," the Officer observes, "have now passed away, and half the men who fought at Delhi are in their graves, but no one has yet (1861) received a piece of the prize-money, nor any so much as a medal to point them out, among the soldiers of nations who two years later gained decorations on the plains of Lombardy, as men who had conquered at Delhi and Lucknow." It is even proposed to defer paying the prize money *for two years more!!* Such is the manner in which gentlemen who loll in their down-stuffed carriages, and dawdle over epicurean dinners, treat the gallant half-starved men who pour out their blood like water in defence of the power of their beloved Sovereign and the honour of England. Surely it is time to sweep out of our public offices those who cannot discover in less than five years how to divide 30 or 40 lacs of rupees. Or is it, as many believe, that the money has found its way into pockets from which it cannot be extracted? It has been the same with the prize money of Canton, taken in December 1857, in hard Sycee silver. Here there has been no room for trumpery excuses about jewels and silks requiring to be sold, and about nobody's knowing what men were present at the siege. The prize might have been divided in a week. The navy has long since received its share, thanks to good men at the Admiralty; but the troops ashore, what of them? To them not one penny has been paid; it seems that the value of Sycee silver cannot be ascertained in three years; and that the apportionment of shares is beyond the arithmetical power of Government officers. Yet Sir Hope Grant—all honour to him for daring to set a good example—was skilful enough to discover how to divide on the spot among his troops the prize taken in the Summer Palace at Pekin. It is a melancholy feature in the public men of the day that no one can be found to insist in Parliament upon the redress of intolerable grievances like these. No wonder that officers are disgusted with our service and men are mutinous when they compare the Government under which they serve with that of other nations.

The Illustrated Bouquet (Henderson & Son), Part XI. contains figures and descriptions of the following plants. *Rhododendron aureum magniflorum*, one of the yellow crosses between R. ponticum and Azalea sinensis; it is very like others of its race, and, what is remarkable, is not mentioned in a list of "the most commendable kinds" given in the letter press. A huge Horse-shoe *Pelargonium* called *Princess of Prussia. Dianthus hybridus multiflorus*, very like Captain Trevor Clarke's Mule Pink. A yellow leaved *Pelargonium* called Cloth of Gold. Some big *Fuchsias* called *Prince Leopold* and *Black Prince*, and a really pretty little white and rose sort named the *White Lady*.

Routledge's Illustrated Natural History for May contains charming woodcuts of the Ortolan, Buntings, Larks, the Bullfinch, Hornbills, and Toucans, and begins the history of the great race of Parrots. It is a capital Number.

Moore's Floral Magazine for May contains admirable figures of the following plants:—*Celosia coccinea*, one of those branching forms of the Cockscomb which, now that their cultivation begins to be understood, are found to make decorative plants of a high order; a group of elegantly striped, three-coloured *Branching Larkspurs*, single and double, excellent for bouquets; several new *Verbenas*, one of which, called Grand Eastern, must have a "grand" appearance; and some striped Pæony-flowered *China Asters*, bred by Mr. W. Paul, and rivalling the French Asters now so popular. Rumour says that the striking life-like *portraits* of Fitch which have hitherto graced this publication are shortly to be exchanged for the conventional pictures in which florists delight, and that the work itself, at the instigation of some gentlemen of that ilk, is to assume a purely florist character. Considering the ability and fidelity with which the artistic and literary departments of the work have been hitherto conducted, such a change can hardly be for the better. The public is not likely to appreciate more the technicalities in which florists delight, and we fear that those who are most interested in the work will hardly find the alteration said to be contemplated so advantageous as they anticipate.

Garden Memoranda.

DUTCH GARDENS.—*The Botanic Garden at Amsterdam* contains a number of good plants, and is especially rich in Cycadeæ. M. Groenewegan, the Inspector, kindly conducted me through the conservatories, and pointed out anything of special interest, among which were the following Cycads:—Cycas inermis (female plant in fruit); Cycas circinalis, fine; Cycas Rumphii (female plant); Cycas Altensteinii, large; Encephalartos caffra, with clean stem 12 feet high; Encephalartos Lehmanni, fine; and Encephalartos cycadifolia, new and fine. There were also some of the pretty variegated-leaved Orchids not often found in collections, particularly Pogonia discolor, and Goodyera colorata.

M. Willink's collection, near Amsterdam, is rich in tree Ferns, and many of them fine specimens. Dicksonia chrysotricha, Alsophila contaminans, Alsophila senilis, Alsophila subacaulis, Alsophila compta, Lophosora affinis, Cibotium Cummingi, Angiopteris hypoleuca, Marattia Willinki, and Hemionitis Blumei, were all in large-sized plants.

I visited the far-famed *Bulb Gardens, at Haarlem*, and spent a day among them. Previous to this, I had not formed a correct idea of the soil on which our beautiful Hyacinth roots, Tulips, Polyanthus Narcissus, Gladioli, &c., are so extensively produced. It is almost pure sand, with a slight mixture of the debris of alluvial clay. Our Dublin Hyacinth growers might form a very good notion of the position those

gardens occupy, by supposing the little town of Baldoyle, near Howth, to be Haarlem, with Portmarnock sand hills between it and the sea, preventing the farther encroachment of the waves, and the small farms inside the sand-hills the Bulb Gardens. Under this supposition the localities are similar; but here we want the greater heat in summer, besides another important desideratum which we cannot supply, namely, plenty of moisture at a short depth from the surface during the dry season, when the plants are growing vigorously, and forming their bulbs. At Haarlem the ground is intersected by canals and deep ditches at every 100 yards or so, from which the water percolates at its level, and supplies the plants with plenty of moisture at the period of their growth when it is specially required. With this soil large quantities of cow manure is mixed, on which the bulbs are planted; but I could not learn that any other particular manipulation was resorted to, further than to keep the ground clear of weeds. We can form very little idea respecting the extensive scale those plants are cultivated on, until we have actually seen it. Large squares of Polyanthus Narcissus, and Crocuses had already been planted in September, when immense quantities of hybrid Gladioli were in bloom. The Messrs. Rosenkrantz kindly conducted me through their drying and saving houses, where the remaining portion of their bulbs were spread out on airy shelves; but the greater part of them had been despatched before that time to the English and Russian markets, where the principal consumption takes place.

Leyden Botanic Garden is famous in early European botanical history, in connection with the names of Linnæus, Clusius, and other eminent botanists during the past and present centuries. On a tablet there is the following quaint epitaph to Clusius:—

"Non potuit plura quærere, Clusius, herbas ergo novas campis quærit in Elysiis."

A few of the old trees planted by Linnæus were pointed out by the present Inspector, M. Witté. The garden is well kept up, and contains a fair collection of botanical plants, both tender and hardy, some of which are rare species. In the Orchid-house I observed plants of Phalænopsis zebrina, Cypripedium caudatum and hirsutissimum, Lycopodium phlegmaria and furcatum. Among the hardy trees outside, there is the largest one of Salisburia adiantifolia I had previously seen, which must have been among the earliest planted of its kind in Europe. It is now almost 60 feet high, with a stem 6 feet in girth. There are also large specimens of Gleditschia horrida, and Catalpa Kæmpferi. The herbaceous plants are arranged according to Endlicher's system, and appeared to comprise a good collection.

At Antwerp, having made some acquaintance with M. Charles Van Geert, I went to see his nursery, which is well worthy of a visit from lovers of ornamental plants. Selections of most of the trees and shrubs which stand hardy in Europe are to be found in this nursery, as well as fair collections of hardy greenhouse and herbaceous plants. Among them, I noticed good plants of Acer palmatifidum and pseudo-platanus purpureum, Robinia inermis pyramidalis, Pavia californica, Quercus nigra and macrocarpa, Juglans lacerata, Castanea dissecta, Tilia Mississippensis, Ulmus Dampieri, Cornus mascula variegata, Populus pendula variegata, &c., &c. In the neighbourhood of this nursery is the residence of Madame Le Grele, who possesses an extensive private collection of good plants; but what I wished particularly to see there was the large specimen of Theophrasta imperialis, which is certainly a magnificent plant. Its dimensions are in height about 12 feet, in diameter about 6 feet, and well covered with healthy foliage, each leaf from 2 to 3 feet long. *Moore's Report to the Royal Dublin Society.*

Miscellaneous.

Anemone nemorosa purpurea.—In the *Annals* for May 1858 (3rd ser. vol. i. p. 397) I mentioned a purple variety of the Wood Anemone as found at Pinner. I observed it again the other day in the woods near Chislehurst. This variety or race is not dependent on any local or other external circumstance, as it is found in the same woods as the more common pale or white kind, and generally in patches intermixed with it. This probably arises from all the plants in each patch being flowering plants of the same root, or of fragments of the root, accidentally broken off. These patches are scattered in various parts of the woods. There is considerable difference between the two varieties, and I have not been able to discover any intermediate gradations between them. The more common pale states of the species have a large flower, usually consisting of six ovate, whitish petals, the three outer ones having a more or less deep-purple tinge on the outer surface. The purple-flowered variety or race has a rather smaller flower, generally of eight (rarely of six) narrow ovate petals, which are all of a uniform more or less deep-purple colour. The leaves of this variety are mostly of a darker hue. *Dr. J. E. Gray, in Annals and Magazine of Natural History for May.*

Calendar of Operations.

(*For the ensuing week.*)

PLANT DEPARTMENT.

Conservatory, &c.—Some of the earlier flowering half hardy plants will soon be getting past their best, and a judicious amount of foresight and care will be necessary to avoid being short of specimens in bloom with which to supply their places. Many things in the stove, as Achimenes, Gloxinias, &c., should now be in a forward state, but these must be carefully prepared for removal to the cooler and drier atmosphere of the conservatory, otherwise there will be great risk of injuring the foliage, &c. Where circumstances will admit, plants that have been grown in a warm moist atmosphere should be removed to an intermediate house about a fortnight previous to their being taken to the conservatory, and gradually inured to a free circulation of air, &c. By attention to this and placing the plants in the warmest corners in the conservatory, Clerodendrons, Allamandas, &c., will continue growing slowly and blooming for some three months at a time, whereas if this is neglected, their beauty may be very short-lived. Aim at maintaining an even temperature in the conservatory after removing plants thence that have been grown in the stove, and furnish a little shade on bright sunny days. Also see that every plant is perfectly clean before placing it in this house, and that climbers, &c., are not infested with insects. To the last-named class of plants should be added the charming Bougainvillæa speciosa, and the beautiful Lapageria rosea. For the former the warmest part of the house should be selected, and where if possible its roots can have a little artificial heat. Young stock in pits will now be making rapid growth, and must be carefully attended to as to watering, stopping, training, &c. Examine Heaths frequently for mildew, and apply sulphur the moment it is perceived, some of the soft-foliaged varieties being very liable to be attacked by that pest at this season.

FORCING DEPARTMENT.

Pinery.—Where quality is of importance, care must be observed to have the soil in a healthy rather dry state during the period of ripening, for as there is no reasonable hope of otherwise obtaining high-flavoured fruit, the trouble necessary to collect and place together those approaching ripeness, so as to be able to afford them a rather dry atmosphere, and avoid touching them with the syringe after they begin to colour, will be well repaid. Suckers that are not very strong will be benefited by being left on the stool for a month after the fruit is cut, but this will seldom be necessary in the case of healthy vigorous plants. Any neglect in the way of watering and maintaining a moist atmosphere in the case of succession stock may lead to their fruiting prematurely, therefore let there be no lack of attention at present. Plants showing fruit should be encouraged with a brisk growing temperature, shutting up early in the afternoon after syringing.

Vines.—If red spider makes its appearance on the foliage after fruit has commenced colouring, no time should be lost in coating the hot-water pipes with sulphur. The sulphur should be mixed in water with about equal quantities of lime and soot, and applied with a brush. The lime serves to prevent the sulphur from being washed or rubbed off, and the soot helps to prevent any disagreeable appearance. The temperature of late houses where the fruit is now showing must not be allowed to fall too low at night if good-sized bunches are expected, and where Muscats are grown for a late supply, there will be but little chance of securing a good crop of these unless a temperature of 70° is maintained. Attend carefully to young Vines recently planted, keeping the borders in a healthy moist state, maintaining a moist atmosphere, and shading if necessary until the Vines get a fair start. Proceed diligently with thinning the berries, &c., immediately they are ready, for they progress rapidly at this season; stop all the laterals in time, and allow no confusion.

Melons.—Where the fruit is swelling the soil should be kept in a properly moist state, and every means should be used to preserve the foliage in perfect health, as there is no possibility of obtaining good flavoured fruit unless the foliage is kept in health. Keep the Vines thin, and prevent their being encumbered with useless laterals, and remove any decaying leaves at once, as these when left only serve as a harbour for insects. There is yet plenty of time to secure a good crop in dung beds, and if any of the frames which have been used for getting up "bedding-out stuff" can be spared for this purpose the plants should be got out at once.

FLOWER GARDEN AND SHRUBBERIES.

Examine recently transplanted Evergreens and other shrubs and trees frequently to see that they are progressing favourably. Give a liberal soaking of water where necessary, and stir and mulch the surface afterwards. Half-hardy plants, when consigned to their summer places after many months' shelter under glass and much attention and care, must also be duly attended to with water until they lay hold of the soil, and with favourable weather and proper attention they will speedily cover the beds and will repay all the trouble that has been bestowed upon them, but every effort must be used to prevent their sustaining any check, for if allowed to get into an unhealthy state at present there will be much difficulty in getting them into free growth without much loss of time. Spare hand-glasses should now be used for the propagation of favourite spring blooming plants, as Pansies, Phloxes, &c. These do best on a shady border.

HARDY FRUIT AND KITCHEN GARDEN.

Peaches and Nectarines will now require particular attention; destroy green fly on its first appearance; for this purpose a good wash may be made by boiling [illegible] water 2 lbs. of Tobacco, 2 lbs. of soft soap, and 2 lbs. [illegible] sulphur; boil for one hour and strain through a [illegible] sieve, then add sufficient water to make in all 20 gallons, and sprinkle the trees with this in the evening after the sun is off them. Strawberries, should the weather again become dry, may soon require attention as to watering, &c. After thoroughly cleaning the beds a thorough soaking should be given, and if manure-water from the stable-tank can be given when the ground has been well saturated with clear water, it will assist in securing large fruit. The beds should be mulched as soon after watering as convenient, in order to prevent evaporation and the fruit from being soiled. Where clean straw cannot be afforded, fresh litter from the stable-yard will form a very good substitute.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON

For the Week ending May 9, 1861, as observed at the Horticultural Gardens.

May.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Temperature of the Air. Min.	Temperature of the Air. Mean	Of the Earth. 1 foot deep.
Friday 3	23	30.074	29.944	63	37	50.0	[illegible]
Satur. 4	24	30.115	30.047	55	33	44.0	[illegible]
Sunday 5	25	30.161	30.117	55	38	46.5	45½
Mon. 6	26	30.137	30.001	58	26	42.0	50
Tues. 7	27	29.955	29.919	51	35	43.0	50
Wed. 8	28	29.893	29.709	45	27	36.0	49
Thurs. 9	●	29.757	29.670	52	30	41.0	48½
Average..		29.870	29.915	54.1	32.3	43.2	49.6

May 3—Rain; dense dark clouds; overcast; rather boisterous [illegible]
— 4—Cloudy and cold; heavy shower of rain and some hail [illegible] cold wind and showers.
— 5—Brisk cold dry north wind; fine; overcast.
— 6—Cloudy; overcast; slight haze; frosty at night.
— 7—Dry haze; cloudy and cold; overcast; slight rain.
— 8—Slight rain; cold haze; drizzly; overcast; frosty at night.
— 9—Frosty; slight fog, uniform haze; foggy, slight frost at night.

Mean temperature of the week, 7½ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK

During the last 35 years, for the ensuing Week, ending May 18.

May.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.
Sunday 12..	63.6	41.1	52.3	16	1.14 in.	5	7	8
Mon. 13..	63.8	39.4	51.6	17	1.10	2	9	5
Tues. 14..	63.4	40.6	52.0	14	0.66	3	7	8
Wed. 15..	64.7	41.0	52.8	12	0.41	3	9	3
Thurs. 16..	65.8	43.2	54.5	13	0.34	6	6	6
Friday 17..	65.3	42.4	53.8	15	0.58	2	6	4
Satur. 18..	64.9	43.2	54.0	16	0.17	9	6	5

The highest temperature during the above period occurred on the [illegible] and 17th, 1833—therm. 86 deg.; and the lowest on the 15th, [illegible] therm. 25 deg.

Notices to Correspondents.

Books: *A Constant Reader* should consult Gosse's works [illegible] Lloyd's Guide to Aquaria, which exhaust the subject.—*X Y Z.* Van Houtte's Flore des Serres is undoubtedly [illegible] kind of work you want. It may be had through [illegible] Silberrad, 5, Harp Lane, Great Tower Street.—*Maria.* All we can say of the Botany in The Young Lady's book, written by Mr. Henry Bohn the bookseller, is that it is without exception the worst account of the science with which we are acquainted. The ignorance of the author would be incredible if it did not stare us in the face.

Bougainvillæas: *G. Jeaffreson.* For the present the subject [illegible] exhausted.

Couch Grass: *W S N.* There is only one way of extirpating Couch Grass from a lawn. Pare off the existing turf, [illegible] pick out of it with the hand every bit of the intruder. The fork over the pared surface of the ground and pick [illegible] Couch from that also. Roll well down to a level surface and relay the turf.

Cultivation: *F R C.* We cannot make any such arrangement as you suggest with correspondents concerning [illegible] knowledge and skill we are uninformed. The [illegible] communication depends upon the value of the [illegible]

Dendrobium: *O C.* The air is not damp enough. [illegible] care that in making the air more damp you do not [illegible] temperature. No harm has been done.

Deodar: *Original Sub.* It is clear that your plant is [illegible] excess of water at the roots. All you can do with [illegible] restoring its health is to lay the ground dry by [illegible] age. We fear however it will hardly recover.

Diseases: *A Reader's* seedlings are probably mildewed [illegible] sequence of exposure to our singularly cold nights. [illegible] nothing the matter with the seed of the Berberry, [illegible] very likely not to grow before next spring.

Grapes: *Vitis.* It is a bad case of mildew which has [illegible] stopped soon enough. We can suggest no other remedy [illegible] cutting out the diseased berries, taking them [illegible] resulphuring.

Insects: *Farnham.* Your box arrived smashed and [illegible] send another specimen, more securely packed.

Larch Insect: *E B P.* We doubt the possibility of [illegible] the "white blight" of this tree. Your best chance [illegible] syringe it with the decoction of Quassia and soft soap [illegible] at p. 387 of our current year's volume.

Leaf Secretions: *H T.* Why should not this fluid [illegible] the point of a leaf? the very place where, at least [illegible] the secretion is thrown off.

Names of Plants: *C L.* Andromeda polifolia.—*Boch* [illegible] gainvillæa speciosa—not spectabilis.—*A Devonian.* [illegible]—*H J.* It is [illegible] ovatum.—*F Y.* Pedicularis sylvatica.—[illegible] Mignonette ill grown. You are perhaps not aware [illegible] plant becomes a shrub if preserved from frost.—*S L.* [illegible] in fruit; looks like a Davallia, perhaps canariensis [illegible] Adiantum pubescens; 3, Doodia, too bad to name; [illegible] stichum Lonchitis.

Peach Leaves: *N H M.* Cold nights have wrought the [illegible] It will all disappear as soon as warm weather [illegible] Nothing can be done or need be.

Potatoes.—We have received from Mr. S. A. Daintree, [illegible] drayton, Cambridgeshire, four tubers of his "[illegible] Seedling," which we shall report upon next autumn [illegible] present we can only say that it is a good-looking sort.

River Banks: *W D.* Your inquiry should have been addressed to some engineer who knows the stream. Possibly you [illegible] prevent the mischief by "camp shedding," that is by [illegible] stout stakes deep into the mud and filling up the [illegible] with coarse wicker work or rough slabs of timber.

Misc.: *Douglas.* The tendrils of a Vine are given it by [illegible] as supports to Grapes, without which the bunches [illegible] down.—The advice about glazing is right.—The Green[illegible] proposed by Sir Joseph Paxton have been repeatedly [illegible] sented in our advertising columns, to which we [illegible] you to refer.—We know nothing about the hardiness [illegible] Broccoli you mention.

ARTIFICIAL MANURES, &c.—Manufacturers and others engaged in making Artificial Manures may obtain every necessary instruction for their economical and efficient preparation, by applying to J. C. Nesbit, F.G.S, &c., Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, Coprolites, &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch.

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LEEDS MEETING, July 15, 16, 17, 18, and 19.
ENTRIES of Live Stock and Flax close on the 1st of June.
Prize Sheets and Forms for Entries may be had on application to H. Hall Dare, Secretary.
12, Hanover Square, London, W.

The Agricultural Gazette.

SATURDAY, MAY 11, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

Monday, May 13	Norton; Framlingham .. .. .. (Mr. Jeaffreson on Atmospheric Electricity).	6 P.M.
Tuesday, — 14	Wirksworth.	
Wednesday, — 15	Agri. Society of England; Oxford.	Noon
Wednesday, — 22	Agri. Society of England (General Meeting)	Noon
Friday, — 24	Penwith, Penzance.	

Some months since reference was made in these columns to an experiment carried out at Glasnevin in the season of 1859, with the view of testing the several manures then in the Irish markets. Another experiment equally interesting was instituted on the same farm in the same season, to which we will now briefly allude.

The notion is pretty generally entertained that ground coprolites exercise little or no fertilising influence on the green crop to which they may be applied; the supposition being that their phosphates are so locked up as not to be available for nourishing the growing crop.

It has occurred to Mr. Baldwin, of Glasnevin, and others, "that it was by no means improbable that when coprolites are finely ground, and evenly distributed over the land, their phosphates might be dissolved by rain water or water charged with carbonic acid." * Mr. Baldwin was aware that experiments tried elsewhere were rather opposed to this supposition, but this "did not appear to preclude the possibility of coprolites, in an impalpable powder, possessing manurial value." To test this point an experiment appears to have been specially instituted, and carefully conducted.

The experiment seems to establish the fact that under certain circumstances the insoluble phosphates (as they are called) of coprolites can be assimilated by plants. Whether the result would prove as satisfactory in all soils as on the Glasnevin trial field, and in all seasons as well as in that of 1859, may, however, be well doubted. And of this the conductors of the Glasnevin experiment appear to be fully aware, as is evidenced by the cautious observations by which the result arrived at is introduced to public attention.

The manures used in competition with finely-ground coprolites in this experiment were—

1. Farm Yard.	4. Ground (½-inch) bones.
2. Peruvian Guano	5. Dissolved bones.
3. Dissolved coprolites.	6. Ground coprolites.

All these manures were analysed by Mr. Robert Galloway, of the Department of Science and Arts (Dublin). Judging by the detailed composition of the two "dissolved" manures, it would appear that some other points beside the relative efficacy of insoluble and soluble phosphates were sought to be tested. The following table gives the per centage of the more important constituents contained in the several manures:—

	Farm-yard manure.	Peruvian guano.	Dissolved coprolites.	Ground bones.	Dissolved bones.	Ground coprolites.
Water	78.14	14.00	11.15	12.58	12.56	6.39§
Phosphoric acid in soluble state	.12	2.64	5.70	37.13 Phosphate of lime.	2.63	33.84 Phosphoric acid.‡
Phosphoric acid in insoluble state ..	.13	3.80	7.39*		4.41†	
Ammonia in form of salts ..	.05	11.98	....	....	....	....
Ammonia capable of being derived from nitrogen in nitrogenised compounds ..	1.71	4.11	....	3.24	1.43	....

As the low per-centage of phosphoric acid in the prepared bones and prepared coprolites, particularly the former, may lead to mistake, it is necessary to explain that in order to be able the more evenly to distribute the manures in the drills, a very large quantity of finely divided vegetable mould was used in drying those two manures.

The soil on which the experiment was carried out appears to have been in no very high condition, which together with the great heat and dryness of the season, accounts for the small acreable yield. The crop experimented with was Swede Turnip, which was sown on the evening of the 26th May, the manure having been, on the same day, simultaneously applied and covered in. And in order that the plants in one lot should not derive any advantage from the manure in the adjoining lots, the plots were separated by uncropped drills.

The farm-yard manure was applied at the rate of 30 tons per statute acre, and the purchased manure at the uniform rate of 3*l*. per statute acre, no charge being made for the trouble of preparing the dissolved coprolites and dissolved bones.

The Peruvian guano cost	..	13*l*.-5*s*.	per ton.
The ground bones ..	..	8 0	,,
The finely ground coprolites	..	4 0	,,

The produce per statute acre stood thus:—

	Tns.	cwt.		Tns.	cwt.
1. Farm-yard manure	13	15	4. Ground bones ..	10	10
2. Peruvian guano ..	12	10	5. Dissolved bones ..	11	5
3. Dissolved coprolites	14	10	6. Ground coprolites ..	14	5

"The land was carefully measured, the manures carefully applied, the seed carefully sown, and the produce as carefully weighed." We must therefore accept the experiment as one faithfully conducted.

It has been suggested, we believe by Mr. Lawes, of Rothamsted, that the result may arise from the humidity of Ireland. In order to elicit an explanation on this point, we should be very glad to publish any experiments with ground coprolites tried elsewhere in the season of 1859 or any other season, and the value of such experiments would be enhanced by a note of the rainfall.

Meantime it may be observed that our rainfall in the Turnip season of 1859 exceeded that at Glasnevin, as will be seen from the following table:—

Rainfall in Inches.

1859.	Glasnevin. Dublin.‖	England.¶
May	0.56	2.4
June	1.29	1.4
July	1.51	3.3
August	1.41	1.1
September	2.76	3.8
October	1.25	3.6
November	2.03	2.8

The year 1859 was remarkably dry in England, a circumstance which is not easily reconcilable with the explanation suggested above.

We see from a report of the Proceedings of the Royal Agricultural Society that the Judges of Essays have awarded the prize of 10*l*. to Messrs. W. and H. Raynbird for their paper on the Adulteration of Seeds. Believing this subject

* Dr. Kirkpatrick's Report on Agricultural Schools for 1859, p. 292. See also Quarterly Journal of Agriculture.

* Besides 3.99 of phosphates of iron and alumina.
† And 4.25 phosphates of iron and alumina.
‡ And 5.25 phosphate of iron and alumina.
§ This includes some organic matter.
‖ From the observations taken on the Glasnevin Model Farm.
¶ From the report of Mr. Glaisher, F.R.S., in *Journal of the Royal Agricultural Society of England*, Vol. XX.

to be of the greatest importance to the agricultural community, we are glad to find that we are now to have the assistance of seedsmen themselves in unravelling the art and mystery of the seed trade, and this too with a combination of the knowledge of practical agriculture, which must render their evidence of great value upon this question. And we shall therefore be much interested in reading their essay upon the subject.

Our part in this discussion has been exceedingly simple. We have from time to time published the results of such inquiries as we could rely upon, and we have now made it notorious that the seeds upon which we depend for our annual crops have for some time been getting worse and more impure. We feel sure that both respectable seedsmen and their customers are interested in learning the truth from us; but indeed we learn it from them. Take the late case of Davey v. Gillett, in which it was clearly shown that a weed new to the district was introduced with Sainfoin seed, a weed too, that a few years since was scarcely known in England, as the Burnet of Sainfoin is not our native form known as *Poterium sanguisorba* (the lesser Burnet), but a much larger and coarser plant, probably a foreign variety, botanically named *P. muricatum*. This plant is *now* so common with Sainfoin, and makes such rapid progress in its growth in comparison with the latter, that in some instances a Sainfoin crop will contain scarcely a tithe of the true plant. Now seedsmen are not accused of mixing it, but they have not separated it; and it is possible that in many cases they have relied upon the similarity of colour of the two seeds, and the hitherto notorious fact that farmers really knew nothing about it. Under such circumstances it seems a plain duty to tell our readers of these matters.

We are glad to find that there is a remedy at law for the selling of Burnet seed for Sainfoin, and we must still contend that even if Burnet were a valuable plant, if we want Sainfoin we ought to have it and not Burnet. It is no answer to this request to say Burnet seed is worth 1s. per lb., and Sainfoin only 2d. No plant seeds more rapidly, and were there a market for it we could render it much cheaper than Sainfoin. But this reminds us that the other day we sent to a seedsman for a quantity of Burnet seed for sowing in an experimental plot, and on examination of it we computed that there were at the rate of 230,000 seeds to the bushel of it, consisting mostly of Sainfoin, Lop (*Bromus mollis* and varieties), Buckwheat and others; and this, as it was too impure for our purpose, was returned. Now, this was doubtless some siftings from a sample of dirty Sainfoin, and we contend that we have in this case as much right to complain of the Sainfoin in the Burnet, as Mr. Davey had of the Burnet in the Sainfoin.

However, we are happy to state that at the same seedsman's we saw bulk of Sainfoin seed so free from Burnet that we could not detect a single seed of it in a sack. We were however handed a sample which the seedsman had refused to buy because it contained much Burnet, and the reason for its rejection was that the farmers were getting too wide awake, and very properly insist on a genuine seed.

Mr. Gillett did no more than the custom of the trade allowed; he bought dirty Sainfoin, and he sold it at a moderate profit just as he bought it.

But it is plain that if by continued discussion on this subject, whether in agricultural periodicals or before juries, farmers are made "too wide awake" to permit a custom injurious to themselves, great good is accomplished.

STEAM CULTIVATION.

Sutton Courtney, near Abingdon.—On Mr. Pullen's farm, which lies between this long and straggling village and the Didcot Station on the Great Western Railway, Smith's steam cultivator has been employed since August 1858. Mr. Pullen was the first in Berkshire to seek the aid of steam-power in the cultivation of land. Mr. Benyon, M.P., of Englefield, was, I understand, the second. In both of these cases the Woolstone system has been adopted. Mr. Fowler's plough was also very soon at work in the neighbourhood of Sutton Courtney, but it was not until a year or two years later that it came so rapidly into operation in this county. Meanwhile we have on Mr. Pullen's farm a case of very nearly three years' experience of the Woolstone system, long enough of course to command great confidence in its results. The apparatus was purchased at the Chester Meeting of the Royal Agricultural Society, and was soon (August, 1858) at work on Peas and Bean stubble for Wheat sowing; and since that time 1480 acres have been cultivated by it.

The farm is 700 acres in extent, of which 600 acres are arable. It lies for the most part over gravel upon the Oxford clay. At least 500 acres are thus a tolerably open soil, the remainder is however upon the sheer clay, and some of it is thus "the stiffest land in England." The clay land is not all drained: it would be difficult to find an outfall; the land upon the gravel beds—an adhesive loam—has generally a good natural drainage, and is a very fine soil well worth the 40s. an acre which is commonly paid. The greater part of the estate is the property of Mr. Pullen. It is very flat, and lying low was last year flooded over a considerable part of its surface. It is in several ways particularly well adapted for steam cultivation. Thus it is open and unfenced except against the drift ways and roads — it is sufficiently heavy to make horse labour always costly and often mischievous — and in particular there is not a field or division of it which has not water close at hand in ditches through it or around it. Instead, therefore, of a horse and cart, a boy and bucket are all that is needed for the water supply of the engine, and even that is sometimes dispensed with—the engine pumping directly from the ditch by which it stands.

Mr. Pullen's farm is interesting in other ways than as being cultivated by steam-power. It is a great meat manufactory. Nothing is sold off it except to the butcher—no stock is sold in "store" condition, and no expense is spared in fattening. No wonder that the land is in good condition. As much as 5 quarters of grain—Barley, Beans, and Peas—are consumed daily during winter and on till past this time: a steam-driven chaffcutter and pair of stones keep the feeding-houses, yards, and folds supplied. Two or three hundred fat bacon hogs are sold every winter—30 or 40 heavy beasts are fatted—a breeding flock of 600 cross-bred ewes yields every spring at least an equal number of fat lambs—and 200 ewe lambs being purchased every summer, as many old ewes are fatted off and sold. The production of fat lamb is a great business in that part of the country. They are dropped at Christmas time —sheltered for a while in yards—but soon taken out to Turnips in the fields, and fed first there, and then on the earliest Trefoil and Vetches—both the ewes and their lambs, with whatever they will eat, Peas especially being given to them, as much as they will eat—and from the middle of March till the middle of June the lambs are sold from them as they are fit for market. It has this spring been a very profitable business, no less than 16*d*. a lb. having been lately occasionally reached.

The rotation adopted on this farm, while it is especially adapted to the stiffer class of soils, is of course framed with a particular view to the provision of food for so large a quantity of fatting stock. There is no bare fallow—and excepting here and there a field for Mangel Wurzel, as well as the case of Wheat stubble ploughed for spring corn, there is not even any winter fallow. The following is the ordinary cropping of the land. Of 600 acres, 200 are in Wheat; 150 in Barley; 100 acres are first Trefoil or Vetches, and then Swedish and common Turnips or Rape, a field or two lying fallow during winter for Mangel Wurzel; 100 acres are Beans and Peas, and 50 acres are in broad Clover.

Of the Wheat stubble half comes up for Barley and half for Vetches, &c., and roots. Of the Barley stubble 50 acres are in Clover, and 100 are for Beans and Peas. Half the root crop, all the Beans and Peas stubble, and the Clover, are followed by Wheat. Wheat thus comes once every three years, or alternately four and two years apart, the intervening crops being Barley and Beans—or roots, Barley and Clover as in the four-fold system—or roots only. The following rotation, for instance, would satisfy the actual cropping of the land:—1, Wheat; 2, Barley; 3, Beans; 4, Wheat; 5, Vetches and Turnips; 6, Barley; 7, Clover; 8, Wheat; 9, Barley; 10, Beans; 11, Wheat; 12, Trefoil and Swedes or Mangel Wurzel. Each of these pieces being 50 acres in extent, there would on the whole 600 be the acreage of the several crops which Mr. Pullen grows. Of course this is a very heavy cropping of the land. It is however naturally a fertile soil—a strongbox full of treasure which only needs skilful tillage to pick its lock —and Mr. Pullen's large fatting stock, fed abundantly on the richest food, and treading the enormous growth of straw into dung, which is applied to Beans, Clover stubble for Wheat, autumn fallow for Mangel Wurzel, and after Vetches and Trefoil for Swedes, provides an immense storage of manure for the maintenance of the fertility which is so drawn upon.

It is, however, in the laborious rather than the exhausting character of the rotation that we are especially interested. There are only 50 acres of broad Clover on the whole 600 acres; 550 then are every year in cultivation. Wheat stubbles need autumn and spring ploughing for Barley, and autumn ploughing for Vetches, &c., and again more than one ploughing for Turnips. Barley stubbles (excepting 50 acres sown with Clover) need autumn cultivation for Beans and Peas. Beans and Peas stubble need ploughing for Wheat. The fields in root crops carted off or fed upon the land need ploughing for Barley or for Wheat. The Clover needs also ploughing up for Wheat. It is not too much to say that every year upon 600 acres there are at least 900 acres of ploughing, besides other cultivation, needed. The number of horses kept upon the farm was accordingly unusually large.

THE HORSE-POWER AND ITS COST.

Ten three-horse teams were needed for its cultivation occasionally, on the lighter lands, worked in pairs. The steam grubber has displaced 12, so that the stock which Mr. Pullen now finds enough is 18. The 12 horses displaced would have done in their proportion 360 acres of the ploughing which we have estimated to be needed annually under the rotation, besides their share of all the other work. I find that the steam cultivator has given a grubbing (once) to 1480 acres since August 1858. There are still about 80 acres of Vetches and Trefoil to prepare for Turnips and Rape this season; if for these we put down 160 acres of grubbing yet to be done, then probably the three years' cultivation will reach 1640 acres, or about 550 annually, equal at the average rate of performance to 110 days' work each year. I may mention that the quantity of work accomplished was ascertained by going over each field in succession, and counting up the number of times it had been cultivated by steam; and it thus appears that about 40 acres had been cultivated once, 312 acres had been cultivated twice, 103 acres had been cultivated three times, 127 had been cultivated four times—leaving about 20 acres of the arable land on which the cultivator had yet not been worked.

The following is the estimated cost to Mr. Pullen of the displaced horses:—

Food. Two bushels of Oats weekly during half the year, and 1 bushel weekly during the other half:— £ s. d.
78 bushels, at 2*s*. 6*d*. .. .. [illegible]
Hay, 1½ cwt. weekly, 27 weeks at 3*s*. .. .. [illegible]
Cut forage for two months, 1 cwt. daily at 6*d*. .. [illegible]
Pasturage, 18 weeks at 4*s*. .. .. [illegible]

[illegible]
Extras, including farriery, harness, smith-work .. [illegible]
Maintenance of value, 10 per cent. .. .. .. [illegible]

The whole annual cost is thus .. .. [illegible]

And this over 12 horses amounts to .. .. .. [illegible]

The cost of *repairs and maintenance* of the implements worked by these and other horses which have been displaced by the steam cultivator may be 1*s*. 6*d*. an acre over 200 acres .. .. 15 [illegible]

The *wages* saved by displacing 12 horses may be: 1 carter 12*s*., 3 ploughmen at 9*s*., 4 boys at 3*s*. 6*d*. A portion of these is still retained, and I therefore suppose the amount actually saved to be 40*s*. weekly, or in all .. .. 104 [illegible]

Lastly there is interest of money, or 5 per cent. on 300*l*., the value of the horses, or in all .. .. 15 [illegible]

The sum thus annually saved is thus .. .. [illegible]

THE STEAM-POWER AND ITS COST.

We now come to consider the cost of the steam-power substituted, and let us take the actual history of the first two years of Mr. Pullen's experience.

His apparatus, including windlass, rope, anchorage, rope pulleys, and cultivators, cost 210*l*. He bought a second-hand 7-horse-power engine for 150*l*., and at the end of two years, after 5*l*. of repairs upon it, he sold it for 130*l*. He has since bought an 8-horse-power double-cylinder engine from Roby, of Lincoln, with Williams' self-driving apparatus—costing in all 300*l*. His good fortune with his first engine is no doubt an exceptional case, but what we have to do with as historians is that it is an actual one. His rope, costing 50*l*., was worn out at the end of two years, and another costing 5[illegible] was substituted. His windlass has cost nothing as yet for repairs since he had it, and it seems in good condition now. The repairs on other parts of the tackle and of the cultivator have not exceeded 10*l*. during the two years, and three dozen shares have been bought during the period, costing 3*l*.

The cost of *Repairs* per annum, including new rope, adding up the items specified, and dividing by 2, amounts to .. .. [illegible]
The *Fuel* has averaged 10 cwt. a day, costing on the ground 10*s*., and this on 110 days amounts to .. [illegible]
The oil used is half a gallon a week, or .. .. [illegible]
The *Wages* are as follows:—Engine-man, 2*s*. 6*d*.; two anchor-men, at 2*s*.; two men with grubber, at 2*s*.; a boy at windlass, 6*d*.; and boy to carry water, 1*s*.; 12*s*. a day, or .. .. £66 0*s*. 0*d*.
To this must be added the cost of removals—viz., 1½ hours each time of 8 horses (viz., 3 or 4 to engine, 2 or 3 to windlass, and 2 to waggon holding tools), and two extra men—probably 30 removals, equal 5 days of all this labour at 24*s*. 6 0 0

The whole thus amounts to .. .. .. £72 [illegible]
The Maintenance of the Apparatus I put down at 10 per cent. upon 210*l*. its cost .. .. .. 21 [illegible]
The maintenance of the engine is of course in this case not incurred, as it was sold, and the loss has been already specified under the head of repairs
The interest of money invested in the apparatus and engine, 360*l*., at 5 per cent. is .. .. 18 [illegible]

The whole annual cost amounts to .. .. £212 [illegible]

Supposing the cultivation to amount, as I have calculated it, to 550 acres annually—then it has during the first two years cost Mr. Pullen about 7*s*. 9*d*. an acre, being as nearly as possible 2*s*. an acre for coals and oil, as nearly as possible 3*s*. for repairs and maintenance of apparatus and interest of capital, and 2*s*. 9*d*. an acre for wages.

This is what I estimate the cost of the work during the first two years. The items in the future will be somewhat different.

Let us suppose the repairs to be the same, or excluding loss upon the engine .. .. £ [illegible]
Wages (with less laborious removals) .. .. .. 84 [illegible]
10 per cent. on 510*l*. .. .. 66 [illegible]
Fuel 6 cwt. a day, 110 days, and oil .. .. .. 51 0 [illegible]
Interest of money, 510*l*. .. .. 25 10 [illegible]
.. 25 10 [illegible]

In all .. .. £214 [illegible]

or nearly the same. Mr. Pullen nevertheless reaps an advantage by the purchase of his better engine—(1) because 10 per cent. for maintenance, though I have adopted it, is practically an excessive charge—(2) because no doubt the more powerful engine will raise the average performance beyond 5 acres a day—and (3) because of the less annoyance and labour of shifting from place to place.

On the subject of removals I am assured that the machine has repeatedly been left over night in a finished field, and that they have begun work by 8 o'clock next morning in a field half a mile off. In every case it is the business of the engineer to get up the steam by 6 A.M.

STEAM AND HORSE-POWER COMPARED.

Let us now recapitulate the case of steam and horse-power respectively per annum.

Cost per annum on Mr. Pullen's Farm.

	Of 12 Horses.	Of Steam Cultivator.
Wages	£104 9 6	£72 0 0
Food—Fuel	245 8 0	57 10 0
Repairs and maintenance	75 12 0	65 0 0
Interest of capital	15 0 0	25 0 0
	£4[illegible]	£[illegible]

It is worth noticing how nearly the capital account is the same in the two cases: the horse and the implements displaced cost probably 400*l.* (though Mr. Pullen, not having parted with the old implements, has not probably obtained from the sale of what has been displaced more than 300*l.* towards the buying of his steam cultivator), and the engine and apparatus, even with the present costly engine, costing 510*l.*

Of course this is a point of great importance to many a tenant farmer, who might be dissuaded from the idea of trying steam cultivation if it involved any increased investment of capital, and to whom it would be a very great merit that the money spent upon his engine and apparatus would be nearly replaced by the sale of horses and implements.

But it is not, as I have already said, on a mere £ *s. d.* estimate of *expenses* that the relative merits of the two systems are to be made apparent. It is in the **quality of the work done by the two respectively that they will stand or fall.**

Of this the produce of the farm is of course the proper test. **And I heard** many amusing accounts of contests with neighbouring horse cultivation on similar land backed by its (of course prejudiced) advocates, in which Mr. Pullen had come off victorious. He has carried off the prize for Mangel Wurzel too, offered by the neighbouring agricultural society, by a steam-cultivated field. **And I saw a field, of which the cultivation and seeding with Mangel Wurzel, for a similar contest the ensuing season,** had just been completed, and nothing could be more perfect than the entire disintegration and mixture of soil and dung together which the grubber had produced. The young Wheats were everywhere looking forward and well, the land remained unrolled.

Mr. Pullen had tried rolled and unrolled pieces often against one another, and had given up the ordinary spring rolling of young Wheat upon his land. Meanwhile cultivation by the grubber had left it with an extraordinarily rough surface, which it still retained. Of course a good deal of ploughing is still done upon the clay land, and any cultivation which the low lying undrained clay fields receive before winter is of this kind. Notwithstanding that much of it had been under water, I saw where the grubber had since crossed it that it was breaking up satisfactorily. But the magnificent weather of the past six weeks has been greatly in its favour.

Of the cleanliness of the land under steam cultivation I can speak satisfactorily. The only piece I saw that was foul was Vetches; but as this was after—1, Wheat; 2, Beans; 3, Wheat; 4, Barley, it was not to be wondered at.

The farmer and the landlord both appear from Mr. Pullen's experience to be interested in the extension of steam cultivation. That consumers are interested in such management is plain from the enormous produce of all kinds which his farm yields: and that the interests of the labourer do not suffer appears from Mr. Pullen's labour bill, which amounts to 125*l.* a year, or, deducting 50*l.* for the 100 acres of Grass land, to 40*s.* an acre.

THE BEST MIXTURE OF GRASS SEEDS.

[An interesting discussion, reported in the *Haddington Courier*, lately took place on this subject before the East Lothian Agricultural Club. **We give the following abridgment of it.**]

Mr. S. Shirriff, Saltcoats, said:—As far as his own experience went, he had found that all his mixtures had been generally unsuccessful, and not so good as he could have wished. Never having been able to grow good young Grass, he had proposed the subject, in the hope that those who were successful in raising good fields would give to the Club the benefit of their experience. Thinking that it would add to the interest of the discussion to have some statistics from different counties in regard to this matter, he had written to several gentlemen in Roxburghshire, Berwickshire, Dumfriesshire, and Galloway, with the view of getting them to collect all the information that they could, in the hope that when the members of the Club were made aware of the mixtures used in these districts they might be able to arrive at some improvement, because he thought it would be found that Grass was planted better elsewhere than in the fertile fields of East Lothian. Before sowing out a field, it must be as clean as possible, and in very high condition. If it is intended for cutting, then give a larger proportion of red Clover—say 14 lbs.—a little yellow and a mixture of Rye-grass, Italian being preferred. He thought **he had erred in giving too little Italian Rye-grass,** because the experience of some of those gentlemen to whom he had referred, showed that they had been very successful when they had used much larger quantities. It was well known that long ago, before guano was introduced, there was far better Grass grown than now, and that the hay crops had very much diminished compared to what they once were. The following were the **proportions in which he mixed his Grass seeds:—For** cutting.—14 lbs. red, 2 lbs. alsike, 2 lbs. yellow, 2 lbs. white, and 3 pecks Rye-grass. For pasture.—8 lbs. white, 4 lbs. red, 2 lbs. yellow, 2 lbs. alsike, and 4 pecks Rye-grass. He would not detain the Club further, but read to them the results of the communications which he had received; and he would first begin with the experience of Mr. Hope of Fentonbarns, because his young Grass was probably better than that of most of the other farmers in the county. For some years, Mr. Hope had been in the habit of sowing his young Grass after two green crops, and he did so for the purpose of cleaning the land, and putting it in good condition. He had found that the young Grass came away better after Potatoes than after Turnips, and in the neighbourhood of Edinburgh the farmers were in the habit of sowing it after Potatoes. The following was Mr. Hope's mixture, which was calculated by the Scotch acre:—

For pasture, one year or two: 14 lbs. red Clover, 4 lbs. white, 2 lbs. alsike, 2 lbs. yellow, 2 pecks Italian Rye grass, and 1 peck perennial. For cutting.—12 lbs. red Clover, 2 lbs. white, 2 lbs. alsike, 2 lbs. yellow, and 1 peck perennial, or 2 pecks Italian. The 2 lbs. white might be omitted; it does little good in cutting Grass.

He would next give the authority of an eminent agriculturist in Berwickshire—Mr. Wilson, Edington Mains:—

For cutting: Half bushel Italian and 14 lbs. red Clover. For grazing either one or more years: 1 bushel of Italian (or instead, a half bushel perennial and a half bushel Italian), 8 lbs. Trefoil, 4 lbs. white, 2 lbs. alsike, and 1 lb. Parsley. **Mr Wilson's experience goes much in favour of Italian, and he thinks less and less of common Rye-grass as a pastoral plant.** In the letter accompanying his list, Mr. Wilson said he had been successful in sowing Grass crops for a good many years, and gave some details as to the system he followed. His red Clover he **always obtained from the grower. He never sowed any of his Clover or Grass seeds until about the third week of April, by** which time the grass was [illegible] well braided. He was also very particular about the mode of covering in his Grass seeds. **When the surface was at all rough, he was in the habit of rolling it with a one-horse roller before sowing the seeds, and** he afterwards covers them in with a Cambridge roller, to which Thorn bushes are attached. Mr. Wilson prefers the Cambridge roller.

Mr. Usher, Stodrig, Kelso, used the following per imperial acre:—

For grazing: 12 lbs. yellow, 4 lbs. red, 4 lbs. white, and a half bushel Rye grass. He approves of yellow sown thick. It keeps in the other Clovers, and also feeds even better than white, if not allowed to become too luxuriant. **In grazing** for one year, he found the stock, **especially sheep, eat annual** Ryegrass much better than perennial. **For cutting, he used** nothing but red Clover and annual Rye-grass.

Mr. Stewart, Kirkchrist, Kirkcudbright, an excellent authority, used the following **mixtures per Scotch acre:—**

For cutting: 2 bushels **Rye-grass, 3 lbs. Timothy Grass, 6 lbs.** red Clover, and 3 lbs. yellow. **On light, dry land, to be grazed** two or more years: 2 **bushels perennial, 2 lbs. Rye-grass,** 2 lbs. Italian, 2 lbs. Timothy, 4 lbs. white, 2 lbs. yellow, 2 lbs. cow Grass, and 2 lbs. alsike. On drained land, to be grazed three years: 2 bushels perennial, 2 lbs. Italian, 3 lbs. Timothy, 4 lbs. white, 5 lbs. yellow, 3 lbs. cow Grass, and 1 or 2 lbs. alsike.

He would next quote the experience of **Mr. Gibson,** Woolmet, one of the best authorities in Mid-Lothian:—

For cutting: ½ bushel annual Rye grass, 1 bushel **Italian,** 10 lbs. red Clover, 2 lbs. white, and 2 lbs. alsike. For one year's pasture: ¼ bushel perennial, ¼ bushel annual, ¾ bushel **Italian, 9 lbs. red, 3 lbs. white, and 2 lbs. alsike. For pasturing** more than one year: ¾ bushel perennial, 1 bushel Italian, 4 lbs. red, 4 lbs. cow Grass, 3 lbs. white, and 3 lbs. alsike.

Mr. Wilkin, Tinwold Downs, Dumfriesshire, made use of the following mixtures:—

For pasture: 1 bushel perennial Rye grass, ½ bushel Italian, 4 lbs. red Clover, 4 lbs. white, 2 lbs. yellow, and 2 lbs. alsike. For cutting: Mixtures of 3 bushels of Italian Rye-grass, and 4 lbs. red Clover. The kind of Rye-grass varies according to the purpose for which it is sown.

The usual mixtures sown in this county, as he had obtained them from Mr. Dods, were as follows:—

For one year's pasture: 8 lbs. red Clover, 6 lbs. white **Clover, 2 lbs. yellow Clover, 2 pecks Rye-grass, and 2 pecks** Italian Grass. For two year's pasture: 8 lbs. red Clover, 4 lbs. cow Grass, 4 lbs. white Clover, 2 lbs. alsike Clover, 2 lbs. yellow Clover, 2 pecks Rye grass, and 2 pecks Italian Grass. For cutting or hay: 14 lbs. red Clover, 2 lbs. white Clover, 2 lbs. yellow Clover, 2 pecks Rye grass, and 2 or 3 pecks Italian Grass.

Mr. Durie, Standingstane, said he could not help feeling astonished at the great diversity of practice that existed among the gentlemen whose communications had been read to the Club.

Some of them had sown upwards of two bushels of Rye grass, and some of them merely two pecks. They could not all be right. Mr. Hope used a very small proportion of Rye-grass, and his (Mr. Durie's) experience was, that the quantity used had been diminishing of late years. His father used to sow about a bushel and a half, but he afterwards came down to one bushel, and now he never went the length of a bushel. In sowing Italian grass **his experience had been that where much of it was used it had** a tendency to keep the Clover from growing, and his practice was never to sow more than two pecks. He never sowed perennial Grass, for he regarded it as a weed. If animals could get anything else they would never eat it. The first thing that convinced him of this was when his men had, unknown to him, sowed five acres of a field with annual instead of perennial Grass. Next year, on the Grass coming to pasture, he was much surprised to find that one portion of the field was eaten quite bare; and on making inquiry, learned for the first time of the mistake that had been made. The cattle had eaten quite bare all that portion of the field sown with annual Grass, and allowed the rest to go to seed. From that time he had **never sowed perennial Rye-grass, either for pasture or cutting. His proportion was now very nearly coming to about the** following quantities per acre of every kind of Clover for grazing:—4 lbs. each of red, white, yellow, and alsike. He would use a larger proportion of alsike, but for two reasons. In the first place it was late, and in the next place it was very dear; but after it came away, it made excellent pasturing Grass. He did not know how it did in hay, because he had never tried it. It was a great pity to see that the red Clover was disappearing. He had almost given up growing it, for it never succeeded with him above once out of five times. If anybody tried the proportions of Clover which he had indicated, and added 2 pecks of Italian and 1 of annual Grass, they would, if the land was in fair condition, secure a first-rate pasture.

Mr. Douglas, Athelstaneford, said he never, for his own part, sowed above three pecks, or three and a half at most—one and a half of annual and two of Italian. He thought that two pecks of Italian was quite enough, whether it was for the purpose of protecting the slower growing plants, or securing an early bite in spring. When he attempted more Italian, he found, from its rapid growth—if the plant was not very healthy—that it was very apt to overcome the Clover, and destroy it, especially if it had been topdressed. With regard to perennial Grass, he never now sowed it—he did not believe in it. The annual was a better growing Grass, more succulent, and grew a heavier crop. It was not so wiry and hard as the perennial, and therefore he **never sowed the latter. As to Clover, there was a** great difference of practice, arising, he supposed, from differences in soils and in situations. He knew one gentleman, a very successful grower of Clover, who never sowed above 6 lbs. per Scotch acre; and yet he said that he had always his surface well planted. His (Mr. Douglas') mixture for all purposes was—10 lbs. red Clover, 4 do. white, 2 do. cow's Grass, and 2 do. alsike.

He thought that 2 lbs. of alsike was sufficient of itself to plant an acre, as it was a small seed; and he thought if any person **used more he was using too much.** Along with Mr. Bruce, late **of Waughton, he was one of the first to** introduce alsike into **the county; and when the Highland Society** (some 15 years **ago) offered a premium for a report** on its growth and **capabilities as a substitute for red Clover,** he instituted three experiments with it, in order to test its capabilities in relation to red Clover, viz., as pasture, cutting Grass, and hay, for which he received the medium gold medal. The result of his experiments went to show that the alsike was quite equal to the red Clover as pasture, while it was a very good substitute for green forage or hay. It was a free grower, and had the advantage of being new to the soil, and, when land was Clover sick, and threw out the plant in the winter and spring months, **it enabled the farmer to follow the regular rotation of cropping. He thought the six-break system was** a great advantage to the successful growth of Clover compared with the four, as by extending the period of growing the plant, and having a greater alternation of cropping, there was much greater chance of the crop succeeding. With regard to top-dressing, he might say that he top-dressed a considerable portion every year at a cost of something like 30*s.* per acre; and every year he had done so, he had been repaid. Every one knew of the great influence a full crop of Clover had upon the succeeding Oat crop, and top-dressing, when there were plenty of Clover plants, added very much to this desirable result. This was his own experience with regard to growing Grass, but as to sowing 2½ bushels of Rye-grass along with Clover, it was quite **too much, unless indeed it was to sow** down a field to per**manent pasture with a grain crop. He must say, however, that when he was a breeder of Leicester sheep,** he recollected, **on one occasion, telling his man to give an** acre a double allow**ance of seed; the result being that** a greater amount of **herbage was produced—so much so,** that it became with him **a serious question whether he would not** have been remunerated if he had **done the same to the whole** field.

THE AGRICULTURAL LABOURER.

No. VIII. West Sussex.—We know that in some parts of the kingdom wages are higher than here, but so far as I can learn after several years' residence in the county, I believe men are nowhere more comfortable, better cared for, or treated with more respect and kindness in any part of the kingdom, than they are in Sussex. Let us first examine their homes: perhaps the best locality is the neighbourhood of Chichester. We find many such "cottage homes" as cannot and need not be surpassed anywhere; most of the cottages have three bedrooms, two rooms and wash-house downstairs, the latter including oven and copper, and they are fitted up with good cottage ranges, the whole by the landlords, so that no grates or coppers have to be removed to hurt the building, and the tenant finds everything arranged comfortably for him at once. There are few things that can be provided in a cottage of more value to the tenant than a good range. It gives a superior appearance to the room, and so induces a love of cleanliness and good order which can hardly be credited. The man likes his home better than the beer shop, and the wife exerts herself to keep her house in good order, and thus fix him more and more to the spot where his affections ought to rest. Still there are estates where the cottages are not sufficiently numerous, nor of the description that I have stated above, and we trust the proprietors, with the proper pride of Englishmen and Christians, will set about putting their estate in order, and if they have not the means directly, charge them on the estate. It will be a good investment, for assuredly the time is coming when hands

without homes will not be easy to get. Only a few years ago, few young men would have ventured to seek work far from their home, but now they do, and are often absent when most wanted, and this, though desirable for national works, is not the system of things to improve the character. It induces the young men to remain single, and profligacy is more likely to follow. Public works are necessary and tend to general prosperity, but even this boon may be obtained at too great cost, and it is the duty of proprietors, and they will find it their interest too, to provide homes for all that may be generally required on the land; good cottages do not, and are never likely to pay directly of themselves. But there is no doubt that a farm well provided in this respect will let at an additional rent, sufficient to cover the cost, and even if not so, property has its duties as well as its rights, and this is the most important duty of all. Upon the estates near Chichester, especially the Goodwood and Oatwood estates, there are nearly as many cottages as are required, and all of the best description, with full accommodation for all the comforts and decencies of life, and none are allowed to take in lodgers without the proprietor's consent, which is never withheld without good reason, and until the occupants acquire a higher appreciation of proper domestic arrangements this restraint is necessary. For, here as elsewhere, they have so long been huddled up in small untidy cottages that it is some time before they feel the need of such extensive accommodation. The rent that they have to pay is generally 2s. a week, and carters and shepherds have as extra wages their houses rent free.

Respecting their education we cannot speak favourably; in this they are considerably behind Dorset, for what reason I cannot tell, but such is the case. Probably from one-half to three-fourths of those grown up can neither read nor write, and this gives them a dull, listless manner, but the defect is in a fair way of being remedied. We have schools in every village, not certainly of a high standard, but such as will set the rising generation far before their parents, and give them a pleasure that has been denied to the former.

Wages for the past few years have been from 11s. to 12s. a week for able-bodied men; piece-work is not paid higher (with the exception of harvest work) than in other places, so that when employed in it they do not earn much more, perhaps about 1s. In harvest for one month they earn from 25s. to 30s. a week when employed at piece-work, and carters and regular day hands get 5l. for the month. For Wheat fagging and putting in shock the price ranges from 14s. to as much as 20s. without drink per acre; and Barley and Oats if treated in the same way 1s. to 2s. less per acre; if mown the price is from 3s. to 5s. But though this latter is the customary price, they do not earn so much as at fagging. There is little other piece-work except thatching connected with harvesting. Turnip hoeing for the first time is from 4s. to 6s., and the second time 2s. to 3s. There is still a little threshing done by hand, and for Wheat the price is 6d. per bushel, Barley, 4d., Oats and Peas, 2½d., and they hardly do so well at this as their daily wages. But there is this special characteristic attending the Sussex labourer, that he works but very little more when at piece-work than he does at day-work, while the Dorset one will do nearly double, and the former are better by the day, so that I suppose the higher character must be given to the Sussex labourer. But still there is the reason to be taken into account that I have mentioned above—that daily wages are higher in Sussex, and piece-work hardly any, so that the Sussex labourer does not care to have it, and the Dorset labourer is very anxious to get it. And though it may not accord with the general belief, I think the Dorset labourer is stronger, and when paid for it more energetic than the Sussex one. And if he does not do such a good day's work he is not so well paid for it, so, as we have always heard, low wages do not imply cheap work.

Respecting their general character we must speak highly; they are steady, and more sober than in some other parts. And it is seldom that one hears a disagreeable expression passing between master and man; I do not think I have ever heard anything approaching to abuse used by a master towards his man in this county, while I am sorry to say such was not an uncommon case in Dorset. But such conduct practised here would disgrace an employer in the eyes of all his neighbours, and in every way prove an inconvenience. In short, we may say of Sussex, that good masters have made good men. There are a few that live and board in the master's house, such as odd men employed as grooms, but as these are exceptions both in Dorset and Sussex, we need take no further notice of them; such a place does not suit a married man, as the wages are low, perhaps from 3s. to 5s. per week. But the one evil that prevails in both counties, especially in Dorset, is that of giving beer as part of wages during hay and harvest time; in some cases in Sussex they have 6d. a day instead, and in Dorset 2s. a week in hay time and 4s. in harvest. The general hours of work here are from half past 6 A.M. to 12, then 1 hour for dinner and work to 5 P.M., so that our days are not so long as in some places. The system of doing all the day's work with horses at once is the common practice, from half past 6 to half past 2 with half an hour for luncheon at 12, an l if the labourers are employed with them, such as dung filling or any other carting, they stop only the half hour at dinner and leave off at half past 4. There is now and then an instance where the horses work nine hours with a rest in the middle, but they do not appear to get on much better, although one would suppose that horses ought to be better for it. Harvest work hours are from 5 to 7 or 8, or in carting later. Farm work are generally good hands at every kind of farm work that they have long practised, but as may be expected with people of their education or rather want of it, many of them can only do well that which they have been brought up to. To state briefly and contrast their condition in three counties which I know.

Cottage Accommodation.—Aberdeenshire may be put at little and that very bad, Dorset not good but improving rapidly, Sussex not extensive enough, many farms having too few, some not so good as they ought to be, but many very good, and altogether before the other two counties.

Education.—In Aberdeenshire easy to obtain, from unfavourable circumstances difficult to retain or turn to good account, not improving much. Dorset far behind, but advancing rapidly and bidding fair to make up for lost time during the present generation, and though not so good as that obtained in Aberdeenshire, yet in the homes of the labourer may be turned to a better account than is possible in the dens in which the Aberdonians are lodged.

Condition.—As regards comfort, Aberdeenshire has not much, though wages are good. Dorset, very little in some parts, and this often arises from too early and thoughtless marriages. Sussex, better in every respect, though men with large families have not so much as one thinks they ought to have.

Wages.—Aberdeenshire, from 15l. to 20l. a year, with board for men; women, from 5l. to 8l., with board, and hard worked for it. Dorset: men with every item added, about 12s. for leading men, 11s. for others a week; women, 8d. and 10d. a day of eight hours; boys and young men rather badly paid in proportion. Sussex: men from 12s. to 14s. per week, for a day of nine and a half hours; women, 10d. for seven hours; boys and young men fairly paid in proportion.

Character.—This requires a little explanation. But we may safely put the Aberdonians first, notwithstanding their sad statistics of illegitimacy, which ought to be put to the account of the necessity they are under to remain single, as there are no homes for them. No class would present a more favourable account if placed in such a wretched position, and for upright conduct towards their employers they stand high, and few of them are ever found before the courts of justice. In Dorset their character does not perhaps stand so high, but still there is a cause for this, and we think it is that the younger hands are badly paid, and turned off whenever a chance occurs of being able to do without them, and thus at a susceptible age are at liberty to roam about, and thus acquire bad habits that may cling to them more or less through life. And as education has so long been neglected among them, it is not to be wondered at that the magistrates have sometimes a little to do among them. But as their homes are rapidly improving and they are being better educated, we shall find them improve before many years. The character of the Sussex labourer stands high, and that because the causes of deterioration common in Dorset are to a great extent wanting. And we have no doubt that it will improve speedily.

And now, in conclusion, I may remark that all parties and sects are anxious to improve the comfort and character of the workman. The churchman wants more churches and more clergy, so that they may be able to visit them. But the former are not so much wanted, and the visitations are too often like a meddling with their private concerns, and are in reality taken as such by the labourer. Others want a better education, and this will do good; but without an opportunity of turning this to account, it may be of little or no use. Some advocate allotments, which are of use to a man who has his home near, and a family to help him, but I do not think that they are of such advantage as they are often put at, and some farmers object to them. A large garden close to the cottage is far better. But if it is really wished to raise the character and comfort of the labourer, give him a good cottage, and he will do then his utmost to make himself happy, home will then be pleasing to him; the beer shop that has now a more attractive aspect to him will then have less than his own house. And then the family training of the rising generation will be better attended to, and the British labourer will stand as high in the scale of civilisation as any other class now does. *G. S.*

Home Correspondence.

Labourers in East Sussex.—The cottages here are generally good, with large gardens, and rents vary from 1s. 6d. to 2s. per week. Education is improving, so that if there should be any to be found in the next generation who cannot read and write it will be their own fault. Wages by the day 2s., but at piece-work a good hand will frequently earn 2s. 6d. and upwards. Team-men get from 12s. to 15s. per week. The mode of living is various, and much depends upon the management of the wife. Some seem to get along well, while others, with as large an income, are always badly off and appear destitute; as a general rule the farm labourers are industrious. *J. B.*

Agricultural Labourers.—I am acquainted with their condition in the north of Scotland, south-west and south of England, Aberdeenshire, Dorset, and Sussex. (1) In the north 16 or 18 years ago their condition was bad in the extreme. The first requisite was that they be unmarried; if they were married there was no home for a wife and family perhaps within miles of the farm; and a man might think himself well off if he could get to see his family two or three times a month, and then could leave his work only after 8 o'clock P.M. to be back by 5 or 6 next morning, so that he could exercise no influence on his family for good. Now can any one say that he had a home? And such is the case at present. I lately paid a visit to the county, and I saw little if anything done to improve this state of things. I saw hills that I left covered with heath now growing corn, and comfortable looking slated barns, byers, &c. but saw no new "cottage homes." I saw some of the old ones, and they too looking older, as it seems to be the order of the day to do nothing for them so long as they will stand at all. Anything worse than the state of the lodgings for the unmarried labourer can hardly be conceived. Perhaps it is a loft over the stable: on one side a row of beds extends under the roof, and this, with the labourer's trunk, containing the whole of his wardrobe, &c., is the whole of the furniture, unless, as is often the case, hay or straw for the horses is stowed away beside them! This of course applies to servants (for so are agricultural labourers called there who are boarded in the farm-house, which probably five-sixths of them were 16 years ago.) But I must also speak of how they are fed; their food consists of various preparations of oatmeal, skim milk, and potatoes, meat probably not six times a year. A little small beer at harvest, sometimes a little cheese at harvest, seldom any butter. Need there be surprise expressed if they should be sometimes a little discontented? And then the wages in addition were (on a farm, say of 200 acres, where three carters and four or five other hands were kept), 7l. 10s. to 8l. for first horsemen, and 6l. to 7l. for other hands a half year; and for day labourers who had a cottage some miles off from 1s. to 1s. 6d. per day, with board, according to the season of the year. And now let me state what had to be given in return for all this, and I shall take the same farm, which is one that I was well acquainted with, and it and others in its neighbourhood are still carried on on the same system. In winter the hands had to turn out between 4 and 5 o'clock A.M., the carters fed and watered their horses, and all were ready to attend upon the threshing machine at 5, which was kept going an hour every morning (it was a water-power); then the odd hands cleared up for a half hour, while the carters cleaned their horses and stables, then all went to breakfast at half-past 6, half an hour being allowed for it. Then commenced the day's work of ploughing, &c., lasting till dark, or 6 P.M., with one hour out for dinner. But though this routine was common in some localities, and I believe is so still in the neighbourhood of Haddo House, the seat of the Earl of Aberdeen, still they were not pulled up quite so tight in every place, but perhaps might have the days an hour shorter in winter, while in summer ordinary days were from 6 to 6, or from 10 to 11 hours of work; carters two hours more attending to their horses, during Turnip sowing, which must be done during the end of May and first half of June. They then begin work at 5 A.M., working from 11 to 12 hours a day. Harvest from 5 to 7 were the regular hours, but often to 8, 10, or 12 at night, and sometimes all night they kept at work, and the difference in wages between summer and winter was about 20s. Respecting bothies it may be as well to add that the result of the system is that the great majority of men servants are unmarried, and must be so, and as this state contravenes one of the immutable laws of Nature, those terrible statistics of illegitimacy follow that make a Scotchman ashamed almost of his country. But I have omitted to notice the condition of the female servants, which is as bad as that of the other sex. For 2l., 3l., or 4l. a half-year they are employed spreading dung, weeding, hoeing Turnips, gathering and binding sheaves in harvest, pulling Turnips, assisting in threshing with the machines, &c., and for the same hours as the men, with sometimes the addition of having to help to milk the cows morning and night. Now respecting education the county is noted for the high place it takes, and perhaps it has proved its title to this character, but I fear not among the class under consideration. Female education has not been countenanced to any extent, and as the mother is the only parent left with the family, one great and the chief thing is wanting—a sound home infant education. Respecting their character as workmen it is well known and generally admitted to be good. The great cause that produces all the evils I have mentioned is the want of "Homes for the Labourers." *G. S.*

Agricultural Prosperity.—An observation made in Parliament that the agricultural interest is in a prosperous condition, and that its prosperity is in a great measure to be attributed to the financial measures of the present Chancellor of the Exchequer, has taken the country by surprise, and causes people naturally to look about for evidence of such an astounding statement, as for the last two years the quality if not the quantity of cereal productions in England has occasioned considerable loss to all corn growing farmers, and if previously there were indications of improvement in

their circumstances, this must be attributed more to the high prices resulting from the Russian war, than to any legislative enactments whatever. The fact of a large decrease in the number of inhabitants of many provincial towns depending in a great measure on agriculture, as shown by the present census, cannot be alleged as a proof of agricultural prosperity. On the contrary our inference would be quite the reverse, and we should argue that if even a small proportion of capitalists had cultivated land with such a return as to be classed as prosperous, yet so large a falling off as 700 at Stamford; as many at March; 800 at Whittlesea; Ramsay, 143; St. Ive's, 178; Chatteris, 409; Yaxley, 172; Newborough, 141; Huntingdon, Horncastle, Crowland, and numerous other towns in this neighbourhood, shows that many labourers must have transferred their exertions to more prosperous occupations, a considerable proportion of them to the manufacturing districts, some to other countries, and we may also assume that small farmers have had to look out for other callings or to emigrate. Some of these towns are on the line of railways, and ought therefore not to have retrograded. Peterborough, Cambridge, and Lincoln have increased, but a majority of the villages throughout the Fens show a diminution; as the income tax paid by farmers is calculated by the acreage, we have no trustworthy guide to show whether the available profits (?) of farmers have been more or less, or whether there has been any profit at all for two seasons. Most farmers entertain doubts of their class having realised even moderate profits. Hence it is most desirable to ascertain if possible on what grounds the honourable member made the assertion, as if it will not admit of demonstration it ought not to have been used, the Government being ready enough to take advantage of the assumed prosperity of agriculturists to charge them with income tax on profits never obtained, and to continue their wasteful expenditure under the plea of the wealth of the country not being impaired thereby. It is therefore obviously unjust to measure the ability of farmers in bearing taxation by haphazard statements of persons who ought by their position and antecedents to be more reserved in their speeches, and not by their unauthorised opinions sacrifice an important interest for the sake of a compliment. *J. W., Peterborough.*

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

At an adjourned meeting of the MONTHLY COUNCIL on Wednesday, May 8, the Right Hon. the Earl of Powis, President, in the chair, a letter was read from the Royal Commissioners for the International Exhibition of 1862, requesting the Council to nominate two gentlemen who would be willing to act on the Central Committee formed in connection with the Class of Agricultural Machines and Implements, to advise her Majesty's Commissioners on the measures to be taken for an adequate representation of the class, to examine the demands for space sent in by intending exhibitors, to encourage the production of suitable objects for exhibition, and to settle the final distribution of space among the exhibitors in the class.

Mr. Thompson, M.P., and Mr. Brandreth Gibbs, having consented to act, the Secretary was instructed to communicate their names to her Majesty's Commissioners.

The WEEKLY MEETING OF COUNCIL was held at 12 o'Clock, when the names of Candidates were proposed, and a lecture was delivered by Professor Voelcker, Consulting Chemist to the Society, on the Manufacture of Cheese.

The Council then adjourned to Wednesday, the 15th inst., at 12, when Mr. Chadwick would read a paper on the Annals of a Liquid Manure Farm.

Farmers' Clubs.

LONDON CENTRAL: *The Feeding of Stock.*—The usual Monthly Meeting of the Club took place on Monday evening last, at the Club House, Blackfriars, Mr. Skelton in the Chair. The subject for discussion, assigned for introduction to Mr. Owen Wallis, of Overstone Grange, Northampton, was the following: "By what means can the Feeding of Stock on Pasture Land in Spring, Summer, and Autumn be so increased as to supply the demand of an increasing population?"

After a few opening remarks from the chairman,

Mr. Owen Wallis said: The subject for discussion this evening is, I think, one of very great importance, not only to agriculturists, but to the community generally. It involves considerations which seriously affect the comfort and well-being of the labouring and all other classes, for the physical energies of the working man cannot be sustained in their full vigour without a proper allowance of animal food. With a population rapidly increasing in numbers, and happily also in material prosperity, the demand for meat has increased to a wonderful extent. That the supply has not kept pace with the demand is, I think, apparent, from the increased price which it has attained. That the supply is very much greater than it was some 20 or 30 years since, cannot be doubted; but still the consumptive powers of the people have increased in a much greater ratio. It is, in my opinion, much to be regretted that we have no means of ascertaining, even approximately, the extent of our increased supplies. We are at great pains and expense in finding out the rate at which the people increase in numbers, but take no thought as to the extent to which an article of food essentially necessary to their proper existence has also increased. It is here that we feel the want of a simple system of agricultural statistics. I do not attach any very great importance to them in other respects, but I think they are very desirable as a measure of our progress. With many branches of our great manufacturing interests greatly, but I trust only temporarily depressed, and the consumptive powers of the working classes consequently lessened, the price of meat is higher than at any period since the close of the French war. With a return of prosperity, full employment, and good wages, we may reasonably suppose that the demand will be much greater than it is at the present time; and unless there is an increased supply, prices must necessarily range even higher than they have yet done. It is necessary, therefore, to see in what way and to what extent, the quantity of meat can be increased. With few exceptions, all but the most worthless soils have been brought into cultivation. We cannot, therefore, very greatly extend the area of production. We must, then, endeavour to produce more upon those acres at present at our command. The chief exceptions are the Woodlands of England. That they are not now a productive property is pretty generally admitted. Large portions of them would, if cleared, thoroughly drained, and well cultivated, make excellent corn land. The use of timber of British growth has been greatly superseded by the use of iron and foreign timber; thus rendering the continued growth of the former less necessary. This may be thought irrelevant; but every addition to our arable soils is necessarily followed by an increased production of cattle, sheep, and pigs, and is, therefore, not an unimportant feature in the future supply of meat. It is, however, by the extension of our artificial pastures, the improvement of our permanent ones, and by calling to our aid the use of cake, meal, and other food, in conjunction with them, that we must look for the chief increase in the supply at those periods of the year to which our subject chiefly has reference. That the improvement in the productive powers of our pastures has not kept pace with that of our arable land, is only too apparent. Indeed, the latter has very commonly been manured at the expense of the former. It is true that the practice which formerly prevailed of folding sheep nightly on arable land, that had been grazed during the day on pasture land, is now much less common. That, however, is mainly owing to the fact that the pastures so used became so worthless that they would no longer support a sufficient number of sheep to make folding from them practicable, much less profitable. These exhausted pastures were therefore ploughed up, and converted into permanent arable soils. But where folding has not been practised, and a less exhausting system adopted, still most of the hay grown on old pastures, and consumed on farms of a mixed character, has found its way, when converted into manure, not to the land which produced it, and which was fully entitled to it, but to the arable portion of the farm. Much of the pasture land has been drained—some of it effectually, more of it only partially—and it has otherwise been improved, by the removal of ant-hills and hassocks. Those, however, who have ridden over the country during the past winter know full well that more requires draining than has already been drained. There is, I know, some degree of prejudice against the draining of pasture land, and it is not uncommon to hear that practice deprecated. To this circumstance we may possibly attribute the non-drainage of a portion of those lands. It is, in my opinion, a great error, and has its origin in the circumstance that pastures do, for a time, occasionally wear a worse appearance, and carry less stock, than before draining was effected. But this is very easily accounted for, and is in reality no valid reason against the ultimate benefits of good drainage. We all know that stagnant water produces and supports a coarse herbage, and is destructive to the finest and most valuable Grasses. Having taken out the water which is essential to the support of the course Grass, and sufficient time not having elapsed for the reproduction of the finer ones, it is no great wonder that temporary disappointment is the result. In the end however the drainage is highly beneficial, and the outlay profitable. In my experience, I can safely aver, that I have never yet seen an instance to the contrary. There are some soils naturally so tender, that no amount of draining will make them otherwise; and as they produce only the finest and most feeding herbage, it is folly to attempt it. It is only necessary to keep the cattle off them in wet seasons. But, supposing that some portion of the pasture land has been fairly dealt with, and that all the excrementitious matter which belonged to it has been returned to it, still waste and deterioration may be going on by the yearly abstraction from the soil of phosphates and other substances. Where land is used for dairy purposes, this is unquestionably the case. Hence the marked benefits which the use of bones has caused on the dairy lands of Cheshire and other districts. To the abovenamed causes, I think I am justified in assigning the great injury done to some portions of the Grass lands, and the partial deterioration of others. I am acquainted with a good deal of land that has the reputation of having been many years since much better than it is at the present time. Some fields are spoken of as having fed off two lots of beasts in a season, that now will scarcely make one lot fat. It is owing to this deterioration, and the consequent unprofitableness of many of the old pastures, that many of them were broken up. This has been one of the chief causes of the lessened supply of live stock. Another cause may be found in the substitution of the four-course rotation of husbandry, for the six-course. I recollect when the artificial grasses were very generally grazed two years, and some were three. There was, therefore, one-third of the light arable soils on farms so managed in pasture; and a much greater number of cattle and sheep were then kept upon them than there are at the present day. I have, on former occasions, when addressing the members of this Club, advocated a return to the six-course rotation; and the increased value of both store and fat stock is an additional reason for its adoption. I have long been of opinion that more stock may be produced, and more corn grown at a less cost, by that system than by any other. An increased supply of young cattle is now of the first importance. Until it is produced, of course it cannot be fed, and we must look to the arable soils for a portion of that increase. At present, by the great extension of winter feeding, they abstract very largely from the supplies of the summer grazier. No one can regret this, because stock feeding is the life and soul of good husbandry; but it causes the price of store cattle to rule so high, that even with the present price of meat, those purchased now can scarcely leave a profit to the feeder. Breeding has generally, for many years past, when combined with feeding, been the most profitable part of the business. More than twenty years since, when the late Lord Spencer (the uncle of the present Earl) endeavoured to persuade the farmers of Northamptonshire to turn their attention more to breeding their own cattle, he gave as a very cogent reason for their doing so, that his own home-bred steers paid him more per week from the time they were calved, to the time they were sold as fat ones, than the cattle he bought for grazing did for the last six months they were feeding. The inducement to breed is much greater now than it was then, and it should be extended wherever practicable. It is, moreover, highly important that the cattle which prevail in some districts should be greatly improved. This is especially the case with respect to North Wales. There is no more useful class of beast than a good Welsh runt; but many of them are so inferior, and require so much fattening, that they are much less profitable than they ought to be, or need to be. This is owing to the suicidal practice of the breeders, who sell all their best heifers to come to England to be fed, and keep only their worst ones to breed from. It seems useless to offer advice to men who can be capable of such folly; but they may be quite certain that much the largest portion of the cattle they breed would command much higher relative prices if they were to adopt the very contrary course, and breed only from the best males and females they can obtain. The cattle of South Wales are getting more in favour than the North, owing to their greater aptitude to fatten; but many of them are very light of flesh, and require great improvement in that respect. Another matter requiring great change, is the use of better bulls in the dairy districts. Too many of the owners of dairy herds care nothing about the bulls they use, so long as their cows are only in calf at the proper season, and many of their bulls are of the most ordinary character. The calves so bred are bought by dealers, and sold by them for rearing; and the result is very often a very mongrel kind of Short-horns. Numbers of these calves have been sent to Ireland to be reared, and kept there till they are two or three years old. They are then sent back for the benefit of the English grazier. While speaking of Irish cattle, I will mention, incidentally, the very objectionable treatment they receive on the passage to England. I was once at Holyhead when cattle were being unloaded from a steam vessel. They had been crowded one tier above another in the hold of the ship, and the stench from them was perfectly unbearable. After having been kept in this foul atmosphere during the voyage, and steaming with perspiration, a rope was looped round their bodies with a running noose, and hooked to the crane by which they were drawn on deck. The effect of the rope, drawn by their whole weight tightly round their flanks and chest, was not only to force their intestines into their lungs, but also to compress their ribs with great force upon the lungs. After this treatment on board, they were driven to a bleak hill side, till such time as they could be loaded in railway waggons, and forwarded to England. They were conveyed at great speed through the cold air; and with their skins still wet, we can easily imagine the chill they would get, and need not be surprised if, from these combined causes, diseased lungs were the result. From what I saw on that occasion, I have had no difficulty in accounting for the losses sustained amongst them. I have myself participated rather heavily in those losses, not only with respect to the Irish cattle, but also in others infected by them, and dare not now venture to purchase them. I need scarcely add that these losses recoil upon the producers of the cattle, as they are purchased at prices commensurate with the risks. This may be thought a digression from the subject, but anything that has a tendency to produce disease in cattle has also a tendency to raise the price. Another cause of the high price of cattle is the very imperfect manner in which too many of them are now fed. We give a very high price for what may be termed the raw material, and then waste a large portion of it. It is, in my opinion, a positive waste to send thousands of young beasts annually to be slaughtered that are barely in a half-fat state. This, however, is commonly done in the autumn of each year. These beasts are now grazed at so early an age that common pasturage alone does little more than support their growth; they are consequently unfit for the fat-stock markets, and ought to be sent, if sold they must be, to the markets for store cattle. Thousands of them having attained maturity, would make really fair good beasts if kept another year, and are worth much more to keep than to sell. In order to get an opinion on which reliance can be placed as to this point, I wrote to Mr. William Collins, who, as most of you are aware, is a cattle-salesman of great experience in the metropolitan markets, asking him what, according to his judgment, would be the increased weight of the cattle sent to market during the Grass season, provided those sent were really and fairly in a fit state for slaughtering. His reply is, that they would, with only a little additional feeding, weigh, on an average, 10 stones per head more than they do now. He estimates the average weight of those sent to market from the 1st of July to the end of November at 82 stones, of 8 lbs. to the stone. The increase, therefore, of only 10 stones each would give a large additional per centage to our present supplies. He states that other salesmen, whose opinions he asked, estimate the Grass-fed beasts for the above period at only 76 stones. From the above evidence it is quite clear that a very large portion of the cattle at present sent to market are very insufficiently fed; and we have now to consider in what way the defect can be remedied. I have already hinted that it is by the use of Cake, and other artificial food, in conjunction with summer grazing, that we must look for a greater supply of really well-fed beasts, and the gradual, but permanent enrichment of our pasture lands. I am rather diffident in recommending its extensive use, knowing that cautious men will be slow to adopt it. There are many who will use both artificial food and manure to any reasonable extent on arable land, when it is immediately available, and can soon be exhausted, who will be rather shy in using either on permanent pasture; which, when once enriched by the tenant, remains for the future benefit of the landlord. But if we can adopt this system with profit to ourselves, it will be a very foolish and selfish policy to abstain from its use because we are increasing the value of our landlord's freehold. That there are some wanting in means and principle, or deficient in both, who would be ready to take advantage of a tenant's capital so expended, is probably true; but such cases are happily the exceptions and not the rule. The great majority of landlords are sufficiently men of business to see how much it is to their interest to deal liberally by and encourage improving tenants, and are gentlemen of too high principle to take advantage of confidence reposed in them. But before cake or meal can be extensively used on pasture land, proper accommodation must be provided, and arrangements made for the purpose. Among other things, the large fields must be divided, for it would be impossible to give either to a great number of beasts in one field; for before the whole could be given out, the first portions would be eaten, and the master beasts would then disturb the weaker ones, and rob them of their fair share of the food. The consequences would necessarily be, that some would get too much, and others none. I consider there should not be more than 15 beasts together, but certainly 20 ought not to be exceeded. Indeed, the smaller the lots the better they will do. Moreover, on moderately small fields, irrespective of artificial food, a higher percentage of cattle can be grazed, and consequently more meat can be produced per acre. This is owing to the circumstance that in small fields the land is of a more uniform character, and grazes evenly; whereas, in large ones, some parts are eaten closely, while others get coarse. Cake can be given in small boxes set about the Grass, giving a box to each beast. Some persons think boxes unnecessary, and give it on the ground; but I cannot but think that some of it must be wasted, and prefer to use boxes. If given on the ground, it should not be broken too small, and the dust should be screened out of it, and given to sheep. Mr. Hudson, of Castle Acre, informs me that he gave it in this way, and that by throwing it on the roughest parts of the pastures, the cattle eat up the coarse Grass very barely, in consequence of the particles of cake which adhered to it. There is this great advantage in this plan, that it can be adopted at any time, and almost under any circumstances. But to carry out the system in the most efficient manner, there should be hovels in the fields, suitable for the accommodation of the number of beasts they will graze. I am quite of opinion that hovels are quite as much needed for shade in summer, as they are for shelter in winter. We all know how much cattle often sink in hot weather in consequence of racing about the fields when gadding. If they were tied up in sheds during that time, and fed with a portion of either cake or meal, and a small quantity of either

good hay or chaff given to them, this waste would not only be prevented, but they would be rapidly gaining flesh. I am of opinion that under no circumstances can cake, meal, or hay be given with greater benefit than those I have described. As to the most suitable sheds, I am of opinion that those with low-slated roofs are the most costly, and also the worst. They are intensely hot in summer, and cold in winter, two faults most desirable to avoid. I should greatly prefer to have them either well-coated with thatch, or covered with Thorn or Gorse faggots, and sufficiently thatched to keep the wood dry. Good wide mangers are necessary in order that they may be used for either cake or hay. With respect to the number of beasts that individuals should have at artificial food at one time, that of course will depend upon the extent of their occupation, and other circumstances. One of the main objects gained would be the equalization of the supplies. Now, at the close of the Norfolk season, there are but few Grass-fed beasts ready for market, and beef is very scarce; whereas in October and November many more beasts are sent for sale than there is a demand for; and many are sold very badly, and pay little or nothing for grazing. If, however, a portion were got into a forward state during the winter, and were kept improving, in the way I have described, they would be ready for market when wanted. As they are sent away, others that are in the most forward state should take their places; and these, when ready, should go, to make room for others. By this arrangement, no one lot of beasts would be at expensive food so long as to cause too great an outlay upon them. This part of the feeding process should not exceed six, or at most eight weeks; and that, with beasts sufficiently advanced, would be ample to finish them. I would by no means recommend its adoption with respect to lean cattle. That can only be productive of loss. As to whether cake or Barley, Bean, or other meal is most suitable, in conjunction with Grass, will depend upon their relative values, and also upon the state of the Grass. When that is in a very succulent state, straw or hay-chaff and meal would be the best corrective; whereas in hot weather, when the pastures are in a dry state, cake and hay might be given. These, however, are matters on which the feeder must necessarily exercise his own judgment. Mr. Oakley, of Lawrence End, Herts, informs me that he has used the meal of Egyptian Beans very successfully. He gives it with straw-chaff cut very fine. By pursuing this plan, and by the improvement to the pasture resulting from it, he now feeds upon the same land more than double the number of cattle that he did formerly, notwithstanding they are put into the yards at night, and thus take some of the manure from the pasture. It may be argued that land treated as I have recommended would soon become too much manured. When that occurs, other fields should be selected, and the over-manured ones mown for a time. Besides, the manure collected in the sheds, and that gathered in the fields where laid too thickly, might be applied to the fields usually mown, or to the store pastures. It will be long before any great difficulty arises on this point. I am not enough of a chemist to be able to say whether feeding of cattle in the way I have described will of itself be sufficient to renovate our old pastures. Should lime, superphosphate, or other applications be necessary, our agricultural chemists will enlighten us on the subject, and the manufacturers of manure supply the necessary stimulant. There is only one other point on which I need trouble you: that relates to the practice of soiling cattle. On arable farms with artificial Grasses, or with water-meadows that can be flooded at pleasure, and a regular supply of Grass depended upon, this practice may answer. On old upland pasture I doubt its being at all successful. It is generally so late in the season before it is fit to mow; and, when it is so, it would so soon outgrow the wants of the cattle; and with variable seasons also it would be next to impossible so to regulate the supply of cut Grass as to suit the demand. Moreover, this system on a large scale would require an amount of both cattle and labour much beyond the present supply of either, and would on that ground alone be impracticable. As to the quantity of cake it is desirable to give, I commence with 4 lbs. per day, and finish with 6 lbs. giving on an average 5 lbs. per day. If this is continued for six weeks it will amount to 15 stones per head, which, at about the average price of cake during the summer, will not exceed 20*s*. We know from our experience that between a ripe bullock and one that is not well up to the mark, there is commonly a difference of more than double that sum in their respective prices, supposing they are equal in size, If, therefore, by an outlay of 1*l*. we receive 2*l*., the investment is a profitable one. But supposing it to be rather less than this, we must not forget the extra number of beasts that can be so fed on the same quantity of land, and the rent, rates, and taxes being the same in both cases, a further additional profit is thus obtained, to say nothing of the rapid improvement of the soil. I have not thought it necessary to go into the question of sheep-feeding, that being too well understood to require discussion on the present occasion. In conclusion I have only to remark that I am quite sensible I have nothing new to offer for your adoption. I have ventured, however, to recommend to the graziers of England a much more extended use of a practice now only carried out in isolated cases, and on a very small scale; feeling assured that the time has arrived when we can no more depend upon Grass alone for our supplies of beef during the Grass season, than we do upon roots alone during the Norfolk season. In short, we must adapt the practice of winter feeding to our old pastures, with such modifications as the circumstances require.

Reviews.

The Respective Duties of Landlords, Tenants, and Labourers. An Address delivered to a Farmers' Club, by the Hon. and Rev. Lord Sidney G. Osborne. Ridgway, 169, Piccadilly.

This pamphlet, containing an address read at a late meeting before the Blandford Farmers' Club, contains a plain and straightforward discussion of most of the points affecting the relations of the three great parties in the agricultural world. It is done evidently with perfect honesty of purpose—but for the most part from the landlord's point of view—where the author indeed naturally takes his stand. He thus discusses the relative position of land and fund holders of equal wealth—the greater influence possessed by the former and the way in which he should exercise it; he condemns letting land by tender; he speaks without much energy of the policy of letting land for a term of years. He refers to the landlord's relation to the personal character of the tenant—his preservation of game—his provision of cottages for labourers. He describes the duties of the tenantry, the social and political relation to the landlord, and their duty towards those whom he employs.

The following concluding passage will indicate the spirit in which all this is done:—

"You may perhaps be inclined to say I have represented the landlord as one with the despotic power of a sovereign over his estate; the tenant as holding under much restriction only a delegated authority; the labourer as little better than a serf, bound for life to the locality of his settlement, with little choice as to the master he will serve, the terms of his hiring, or the nature of his dwelling. I did not meet you to draw upon my imagination for your amusement, but to speak of things as I see and know them. So far as regards mere legal right, the landowner does hold his acres with almost unlimited power as to the use he makes of them. If it is his pleasure to let them lie barren, I know no law to prevent him. If for profit, or for pleasure, he chooses to cultivate them, or to let them to others to do so, in either case it is a matter subject to his own sovereign will. He can make his own terms, although he can compel none to accept them. But it is so ordered in this country that the words and deeds of our lives are more or less subject to another law besides that of courts of justice. Public opinion is ever ready to pass verdicts upon us, whose weight we can hardly venture to defy. The prerogative of the monarch is not only wisely limited, but if it should attempt to interfere with what the good sense of the nation declares to be right, it must bow to the national opinion. The landowner's high position in England owes not a little of its honourable character to the fact, that the power his freehold of the land gives him, must ever be exercised, subject to a deference to what all classes acknowledge to be just. Let him be found using his power only to abuse it, he will quickly find himself unsupported by his own 'order,' and despised by others. The contempt of society will soon bring him down from any social height to which the greatest landed possessions may have raised him. If I have claimed for him the privileges which are clearly his own, I have used no hesitating language as to the responsibility under which he is entitled to enjoy them.

"I may have described your position as renting tenants in a light in which you appear subject to a good deal of restriction, and in much only exercising your calling in dependence on the goodwill of your landlord. I have made it no matter of degradation to you that it is so. If I have drawn a strongly-defined line between ownership and tenure by renting, I have tried to render to the latter all the influence, all the social importance it clearly ought to possess. I would far rather regard you in the honourable position of men who admit that, as renters, they must be more or less dependent, than as those who would assume on the ground of a hired occupation all the independence of an owner. As a body the tenant farmers are very powerful, and will, I believe, yet become more so; but the secret of your power will consist in the proper understanding and right use of your real station in life, not in any attempt to raise yourselves by encroaching on what justly belongs to the station of the landlord. On the whole I know no one profession in life which has more personal enjoyable freedom than your own. It calls forth a wholesome activity of mind and body; it gives you, without interfering with your business, a great deal of social enjoyment; it exempts you from the depressing nature and strict confinement attendant on almost every other kind of business. I am not one who ever says, in these days, you can make great money gain; but you must pardon me when I say that, in my opinion, a modern tenant farmer holds a position of freedom, of comfort, of authority in very many things, I know no other man to command from the same amount of capital.

"I cannot qualify my opinion of the utter dependence of the labourer's position. It is the result of a combination of circumstances, susceptible, I hope, in time, of much amendment. Still, in this our day God has raised up to him many able and active friends. His condition occupies the thoughts and enlists the abilities of many of the most distinguished of our public men. The amelioration of his condition, by improving his dwelling, affording him education, the means of healthy recreation—these and many other matters, bearing on the labourer's life, have taken a strong and abiding hold on the public mind. I look in time for good results. I hope the days of the law of settlement are numbered. I have every confidence that the dwelling question will not fall to the ground. After all that can be said of his lot there is still much blessing in it. Working in a narrow sphere, if honest and worthy, he seldom fails to find good friends in it. The law is as jealous in the matter of his property and his person as that of the richest. He can pass through a life of honest labour to a grave to which he passes not unhonoured. "Old George was a good man if ever there was one," says a master worthy of such a servant. "That he was!" is the echo from the lips of those who walk after him to his grave. The undertaker and the mason may have but little to do with him in his end; but, before God and every good man, that man dies a hero, who has lived honest a life of temptation, and given his years to industry, with no hope of rising beyond the power to earn a labourer's wages, and leave a good name in a cottage home."

Miscellaneous.

The Agricultural Benevolent Institution.—On Thursday, the 2d inst., this society held its first election, when twenty out-pensioners were placed upon its books as recipients of annuities amounting in the aggregate to 454*l*. It would not be easy, we believe, to find another instance of youthful vigour so striking as this. The institution of the Agricultural Benevolent Society dates from last year only. But we should have little difficulty in naming other charities of a like nature whose matured strength is infinitely less efficient than its *first* efforts. The following are the names of the successful candidates:—

Nine Male Pensioners, at 26*l*. per annum.

Name.	Age.	Farmed.	County.
Phypers, Prior	.. 86	469 acres	..Cambs. & Hunts
Ellaway, Richard	82	160 ,,	..Berks
Dester, Joseph	.. 80	852 ,,	..Warwick
Ffitch, Samuel	.. 75	160 ,,	..Essex
Atley, William	.. 74	75 ,,	..Middlesex
Jenner, Thomas	.. 74	2100 ,,	..Sussex & Hants
Smith, John	.. 71	800 ,,	..Hants
Drew, Chris. Pike	65	600 ,,	..Devon
Wigg, Herbert	.. 64	259 ,,	..Suffolk

Three Married Pensioners, at 40*l*. per Annum.

Name.	Age.	Farmed.	County.
Kirkby, Joseph	..80	658 acres	..Herts..
Kirkby, Frances	..72		
Bourton, Thomas	..77	130 ,,	..Gloucester
Bourton, Ann	..76		
Ivens, William	..70	365 ,,	..Northampton
Ivens, Sarah..	..69		

Five Widow Pensioners, at 20*l*. each per Annum.

Name.	Age.	Husband Farmed.	County.
Bolton, Mary Anne	78	100 acres	..Suffolk
Argent, Caroline	..73	300 ,,	..Essex..
Nesmyth, Mary	..78	140 ,,	..Surrey
Buttle, Eleanor	..70	140 ,,	..Essex..
Mills, Marianne	..62	250 ,,	..Wilts..

At the close of the election, Mr. Charles Shaw, the secretary, informed the successful candidates that on application to him, on Thursday, the 9th instant, at the Office of the Institution, 55, Charing Cross, they would be paid their pensions in advance.

The Leeds Show.—If in one sense the agricultural world is on its trial before Leeds, in another sense Leeds is on its trial before the agricultural world. And what is more, the agricultural world can far better judge how Leeds comes off, than Leeds can judge how the agricultural world comes off. We have some reason to be proud of ourselves as a town, but we can hardly expect to grasp in a moment all the merits of prize oxen and agricultural implements. But our agricultural friends, with or without training, will easily be able to tell whether Leeds offers good accommodation and at reasonable rates. Now, in this respect, Leeds has not a character to gain, but it has a character to keep. At the British Association time, it was noted for its moderation of charges and the reasonableness and excellence of its arrangements. A letter published in our columns on Thursday, and signed "An Observer," complained that in some quarters and for some kinds of accommodation, the charge demanded had been so excessive, that if similar charges were made elsewhere it would bring the town into infinite disgrace. We are happy to see from a letter which our readers will find in our columns to-day, that one of the classes which will have most to do in furnishing accommodation of different kinds is not likely to suffer the punishment, or to incur the disgrace, which such disgusting extortion must bring with it. We say to suffer the punishment, for disgrace will not be the principal part of it. Exorbitant charges will not pay. Half Yorkshire is open to our visitors, and with the low railway fares and the temptation always existing to go out of large towns, our Leeds friends will have quite enough to do to keep their guests at home. Moderate charges and good accommodation are necessary to ensure any large profit even for the time. There can be no worse economy than unjust and extortionate charges, and we trust that as the licensed victuallers have felt this, so lodging house keepers, livery-stable keepers, and others whose duties and chances of extortion will be similar, will learn off the same lesson. Probably the general satisfaction given by Leeds at the time of the British Association had much influence in bringing the Royal Agricultural Society to the town this year. And we may be sure that any dissatisfaction created by unreasonable conduct on the part of the public entertainers now, will have the effect of deterring other itinerant societies from coming at a future time. Thus even a great harvest can be reaped at the present moment, it will be at the cost of permanently impoverishing the soil. *Leeds Mercury.*

Sainfoin v. *Burnet*—*Davy* v. *Gillett.* [The following account of a long disputed question often referred to in our columns and finally decided last week is taken from the *Illustrated News.*] "Agricultural Berkshire has been agitated to its very centre during the present week with the great question of Sainfoin v. Burnet seed, or rather Davy v. Gillett. The question had been tried in the County Court, but the jury divided, three to two in favour of the plaintiff, and it was removed accordingly by certiorari to Westminster, where it occupied a great part of Monday and Tuesday. It was a complete Oxford Circuit tribunal—Mr. Justice Keating presiding, and Mr. Huddleston, Q.C., for the plaintiff, against Mr. Mr. Gilmore Evans for the plaintiff, against Mr. Serjeant Pigott, M.P., and Mr. Lawrence. Thither, as came quite a *posse comitatus* of witnesses, land-agents, farmers of all sizes and experience, from 40 years to four, one filling the witness-box so tightly that Mr. Huddleston was compelled to ask him—of course simply for the ends of justice—if he wasn't 'a very large farmer,' and others tall as Goliath, or 'bearded like the pard.' The seedsmen-ranks were also very

freed, on the defendant's side, from the metropolis; but for all practical purposes the learned recruits only proved to be thorns. This memorable investment of the Common Pleas by the men of Berks sprang out of the subtle introduction of 'a foreigneering article' called Burnet into the fair fields of Buckland. Twenty years ago not six men in a hundred had even heard its name; but during the last four or five years it has crept in from France, on whose head the agriculturists heap so many of their woes. In this instance it came not as an humble refugee, but with a most unblushing multitude of companions in 5½ quarters of Sainfoin sold to Mr Davy, without a sample or a warranty. Such a thing had never been heard of in the parish, and Mr. Davy did not know what it was till Sir R. Throckmorton's agent drew his attention to it on riding over his farm. Market gardeners have, it seems, extended it a slight protection, as that very pungency which disgusts the sheep makes it a valuable constituent of early Salad. Gradually it assumed the form of 'a long, lanky plant, like a Dock,' and, as a caustic witness observed, 'enjoyed itself very much.' It came to perfection the first year, and so completely did it thrust the modest Sainfoin into the background, rising—to judge from the elevation of Professor Buckman's hands above the ledge of the witness-box—to some 18 inches, that when that gentleman came specially from Cirencester Agricultural College he thought it was a crop of Burnet he had been judicially summoned to see. Whatever dignity seedsmen may award to it as a cultivated plant, it is despised and always ploughed up on the College Farm, and it is so scarce in the neighbourhood that the Professor and his class seem to have been in the habit of drawing the neighbouring fields and hedgerows blank for it till within the last two or three years, when they have seldom failed to find. It was allowed by the skilled witnesses on both sides that you would expect to meet with it in every Sainfoin sample, but Mr. Davy's percentage of it must have been something enormous. The seed was duly drilled in with Barley in the February of 1858, and fed with sheep that autumn, mowed in 1859, fed again in 1860, and then ploughed up as being perfectly useless, instead of running out its five or six years; and at the end of that time Mr. Davy applied to the defendant for compensation. There seems to have been some 'little difficulty' between them, as the latter in the witness box spoke of not wishing to deal with him, as he 'was so often dissatisfied,' and of having threatened to send a writ as well; but the plaintiff had preferred peace to war, and wished for an arbitration by a mutual friend, who certainly fixed the claim for compensation at a most moderate figure. The defendant, who 'put up his witnesses like sandwiches, farmers and seedsmen mixed,' in strict keeping with the character of the case, principally relied on the claim being a stale one, in consequence of the lapse of time, and on the fact that the plaintiff, instead of merely running his lambs over the Sainfoin after the Barley was cut, had folded sheep on it, who had eaten the very heart out of it, and laid the foundation for Lob and other weeds among the plants next spring. The general mass of their evidence went to show that no Sainfoin samples were now free from a very great admixture of Burnet, and that no purchaser could expect it. In shape the two seeds are very distinguishable, as the Sainfoin is oval and the Burnet has four angles; and, while the former cost 1*s*. a lb., the latter is only 2½*d*. The seedsmen's theories were terribly puzzling. One had seen more than one part in five Burnet; another thought a fourth or a fifth a fair sample, but had never seen less than a fourth, and did not expect, on an average, to get less than a sixth in it. Then we had doctrines to the effect that the best contained an eighth to a tenth. A great London dealer (who had one of his own samples cunningly handed to him, could only find a Lob and a kernel or two of Rye-grass in it) 'would not give a fourth Burnet, if he knew it. I should not have done you justice, if I did.' In fact, he went so far as to say he would not sell it if it was in that state, but would clean it. Mark Lane also spoke up for itself: it might send three or four per cent. out in its samples, but certainly not more than five; and one of its leading men has for 20 years past only recommended milled seed—*i.e.*, set loose from the shell. This gentleman seemed to pull the question best together when he said there 'has not been much more Burnet of late years, but there has been much more noise made about it. If I was asked for pure Sainfoin, I would not send it at all; if I was asked for the best, I'd send the best I had.' He, however, thus qualified the last sentiment on cross-examination:—'I should not do you justice if you paid me the best price, and I sent you one-fourth Burnet.' Now the plaintiff, as it happened, had paid the top price, 50*s*., in 1858, and hence this witness virtually settled the question against those who called him. The jury, after a very short consultation, found for the plaintiff for the 41*l*. 6*s*. 9*d* claimed. On the count charging fraud there was a verdict for the defendant, as there was not the smallest ground for attributing to him anything of the kind. The seed was proved to have come to him direct from Mr. Forshaw, a very aged and infirm farmer in the neighbourhood (whose health alone prevented him from travelling up to speak to the fact), and had been passed on at once to the plaintiff. Telegraph wires were set to work, and the 'great Sainfoin party,' looking rather less blooming for their sojourn in the metropolis, were restored to the bosom of their county, to fight the battle of Burnet over and over again at their firesides, and amid the inspiring glass and the social cloud of the market-table, for many a week to come."

Calendar of Operations.

MAY.

West Sussex, *May* 7.—Since our last report we have had a continuance of very dry and cold weather, and as the ground was so cold and wet before, it has got hard and difficult to work fine. Some of our clay is now only a mass of hard rubble, pastures are looking badly, and keep is with many very scarce; the hay crop will be light, some is being fed that should have been left, and there are extensive failures in the Clover. The Wheat plant has seldom looked worse at this season than it does now. It is rarely that we see a field nearly thick enough, and many must make their owners doubt whether to plough them up or let them remain; much has been ploughed up, more than 100 acres in this parish has been so, and such is the case, so far as I have seen, round this coast, and come what may we cannot look for or expect an average crop of Wheat this year. Barley has generally come up well, but some has been hurt by wire-worm since, and looks thin, but generally it presents a fair appearance. Oats have also a good healthy look, and so have Peas, but Beans are rather backward. Food being scarce has had the effect of sending a good deal of half-fat stock into the market, and the price for such is rather lower, but for the best it is still high. All stock is a dull sale, though prices are not much lower, and with a change to mild growing weather they will be very dear. Our market is well supplied with corn of all kinds, and a dull trade, and there has been but little life in it all the season, but now the condition improves, and the supply falls off a little, so that we may expect a little more life in it. Work is perhaps rather behind, and the heavy land requiring more than usual, will tend to keep it so. Putting in Mangels is now the principal work, and will be got in this week, which is considered to be in very good season; and though we should like sometimes to get it earlier, we seldom find the land in working order sooner. Manual work is scarce, and there are a good many hands out of work, which with the high price of provisions makes it a serious matter for them. *G. S.*

STATE OF THE WEATHER—BERKSHIRE.

For the week ending May 9: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain	Wind	Barometer.
		Max. in Sun.	Max. in shade	Min.	Mean				
		Degs	Degs	Degs	Degs	Degs	Ins		
Friday	3 ..	74.0	61.4	38.0	53.4	51.0	..	N W.	29.93
Saturday	4 ..	67.8	61.0	34.0	49.1	51.2	0.04	N. W.	29.95
Sunday	5 ..	65.0	48.0	28.6	42.1	50.0	0.02	N. E.	30.05
Monday	6 ..	66.4	58.4	34.0	46.0	50.0	..	N	30.02
Tuesday	7 ..	73.4	56.0	31.0	47.3	50.5	..	N.E.	29.84
Wednesday	8 ..	64.6	53.0	32.4	45.3	50.0	0.18	N. E.	29.76
Thursday	9 ..	60.0	46.0	24.0	37.8	49.5	0.06*	N.E.	29.60

* Rain and Melted Snow.

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Destruction of Weeds: *R.* The weeds specified are Thistles, Docks, and Rag-weeds, and it authorises the occupiers of land to serve a notice on the occupant of any adjoining field, or in any adjoining cemetery, or upon the sides of any adjoining railway or canal, requiring him to cause such weeds to be cut down and destroyed. And in case of neglect to cause such weeds to be cut down within 14 days, a penalty ensues not exceeding 5*l*.; and if not then cut down, a second notice may recover a second penalty of double the first.

Devon Herd Book: *A Young Farmer.* Captain Davy is we believe the editor of it, and we presume that any bookseller can procure it for you.

Poultry.—A weekly notice of the prices realized by poultry necessitates more than the mere printing of figures in columns. For such returns to be serviceable, there must be good ground to believe they are true, and that will necessitate explanation. For some time poultry has been unusually dear, and those who have had early chickens have done well; although the moment for large profits has gone past, yet there will for some time be a steady demand for good poultry. Up to the present time, youth has been almost all that has been required; now when that quality is become common, it is necessary to have a tolerable size as well, they should weigh 2½ lbs. each. All things that go to market, and that have seasons, are subject to the same rules; and those that can come before their time will realise a large price spite of shortcomings in size, or it may be in appearance. They are before their time, and consequently scarce; but when competition gets rife, not only must they be young, but they must be large and good looking. We notice this in order that none of our readers may imagine that chickens are now so scarce that very small ones will find a ready sale.

	Each.—s. d.			s. d.
Large Fowls	5 0	to	5 6
Middling ditto	4 6		
Chickens	3 0	,,	3 6
Goslings	7 0	,,	7 6
Ducklings	3 0	,,	3 6
Pigeons	0 7	,,	0 8
Guinea Fowls	4 0	,,	4 6
Rabbits	1 4	,,	1 5
Wild ditto	0 8	,,	0 9

Rot: *D P D.* It is not the same disease as the rot in sheep. Rub iodine ointment into the swelling and give the animal a few pounds of Linseed or Linseed cake daily. Iodide of mercury ointment may be rubbed in several times, about half an ounce each time.

Seeds: *W F H* sends two packets of seeds for opinion, and wishes to know if the Grasses, &c., are a proper mixture for laying down permanent pasture. This part of the query cannot be properly answered without some knowledge as to the nature of the soil. 1, the Grasses, judging from so small a quantity, we should say are not a bad mixture of species, and though not quite clean are up to the average of such mixtures, but for laying down permanent pasture in the southern counties we are much opposed to Italian Rye-grass, of which this sample contains a rather free sprinkling. 2, Clovers. With these is a sprinkling of Timothy Grass; they are tolerably free from weeds.

Seed Adulteration: *Sense.* We shall be happy to publish your letter with your name attached to it.

Card.

SAMUEL N. McGERROW,
General Horticultural Builder,
Knotty Ash, near Liverpool.
Reference permitted to the Nobility and Gentry throughout Great Britain and Ireland.

WILLIAM HURD, Horticultural Builder and Hot-water Apparatus Manufacturer, Radnor House, Radnor Street, King's Road, Chelsea.
TUBULAR BOILERS from 5*l*.

J. VOKINS, late Vokins & Hurd, 2, York Place, Queen's Elm, Chelsea, S.W., Horticultural Builder and Hot-water Apparatus Manufacturer.
Estimates forwarded.

HOT-WATER APPARATUS FITTED in every description of Hothouses, Mansions, Churches, Chapels, &c., on the most approved principle by J. Meredith, Vine Cottage, Garston, near Liverpool.
N.B. First-class references may be had on application.

HOTHOUSES for the MILLION.—On the principle invented and patented by Sir Joseph Paxton, M.P., combining simplicity, cheapness, excellence, and durability, being capable of fulfilling, in the most perfect manner, all the requirements of Horticulture. Lean-to Houses, 30 feet in length, can be had for less than 17*l*. Span Roofs, 30 feet in length, for 33*l*.; and all other dimensions at equally low prices. Delivered free to any Railway Station round London.
Illustrated Circulars, with Lists of Prices, can be had on prepaid application to Samuel Hereman, 7, Pall Mall East, London.

West of England, Ireland, and Wales.

V. SKINNER (late Partner with J. Weeks & Co.), Horticultural Builder and Hot-Water Apparatus Manufacturer. Establishments Heated on the ONE-BOILER SYSTEM. Plans and Estimates on application.
Bridewell Street, Bristol.

Horticultural Works and Hot-Water Apparatus Manufactory,
Kensal Green, Harrow Road, London, W.

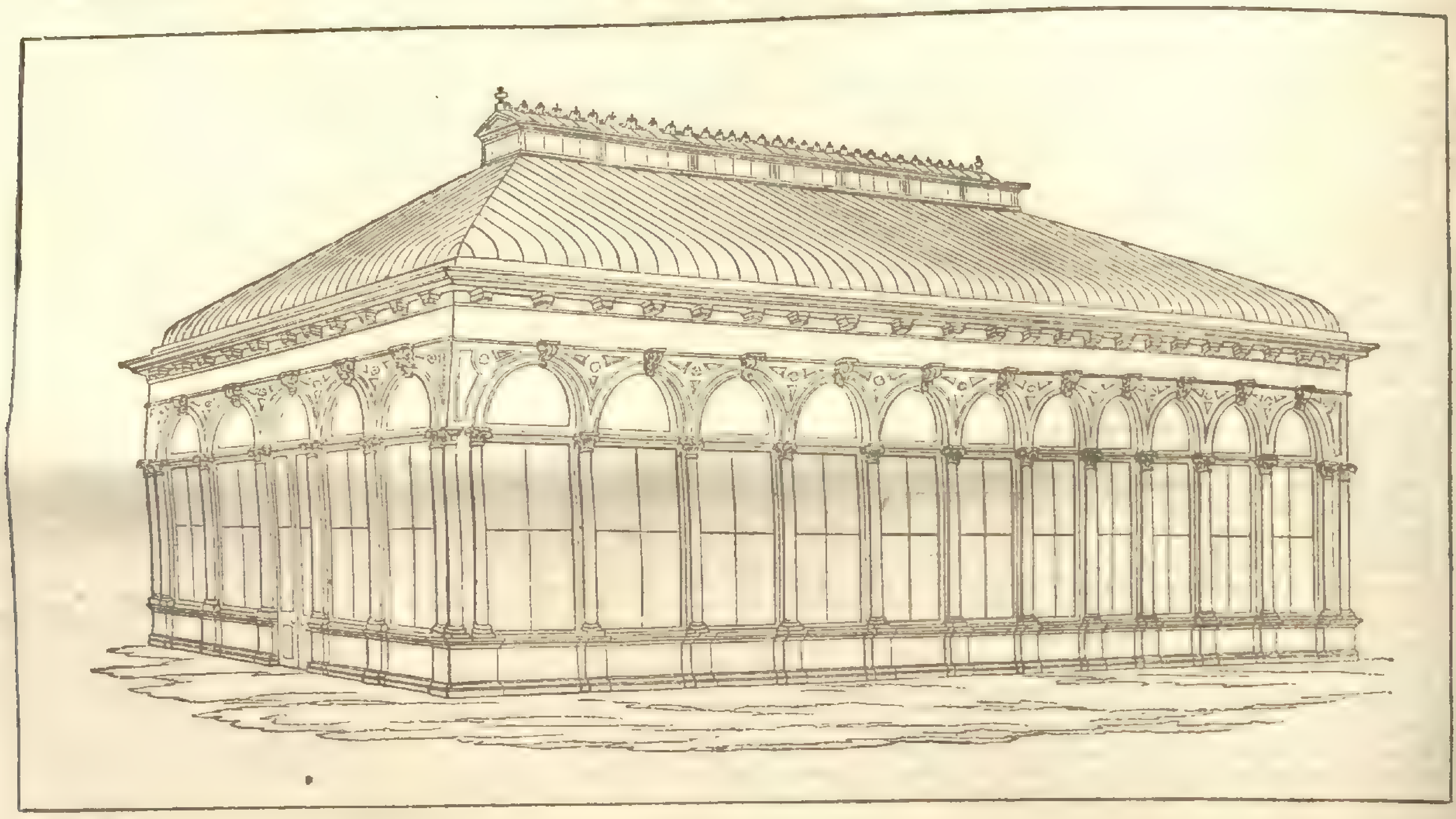
JOHN TAYLOR and SON beg to call the attention of the nobility and gentry to the very superior manner in which they Erect all kinds of Conservatories, Vineries, Greenhouses, &c., combining every improvement with elegance of design and durability of materials and workmanship.
Their VENTILATING APPARATUS for the Fronts and Roofs of Houses has given the highest satisfaction. Churches, Chapels, Schools, Entrance Halls, Public Buildings, &c., heated with Hot-Water Apparatus in a most economical and efficient manner.
J. T. & Son have great pleasure in referring to numbers of the nobility and gentry by whom they are extensively engaged.

JOHN TURNER, Horticultural Builder, begs respectfully to inform the nobility and gentry that he is now carrying on all the branches connected with Horticultural Works, viz., Conservatory, Greenhouse, Hothouse, Orchard House, Stoves and Pits on the most improved principles of heating and ventilation. Having had many years' experience in Horticultural Works, J. T. can assure those who may favour him with their work that the best materials only will be used.
Hot bed frames of all sizes, glazed and painted, always kep in stock at the Works, Cheetham Hill, Manchester.

Ironfounder and Smith — By Special Appointment to the Queen.

W. WALKER, Hot-Water Engineer, Victoria Foundry, York, directs special attention to his successful system of Heating Hothouses and Churches, &c., by Hot-Water Pipes. He has had considerable experience in that department for several years, both in Yorkshire and the adjacent counties, and received most satisfactory testimonials in his favour as to the efficiency, the economy of cost, and the simplicity and durability of construction. W. Walker has recently supplied apparatuses to the new Ranges of Hothouses for the following Nobility and Gentry:—
The Earl of Carlisle, Castle Howard.
The Right Hon. Lord Wenlock, Escrick Park.
The Right Hon. Lord Londesborough, Grimston Park.
Sir W. M. E. Milner, Bart., Nun Appleton.
G. J. Yarburgh, Esq., Heslington Hall.
T. H. Preston, Esq., Moreby Hall.
James Walker, Esq., Sand Hutton Hall.
P. Saltmarshe, Esq., Saltmarshe, &c., &c., &c.
Improved Ventilating Apparatus for Hot-house Lights.
Galvanized Wire Netting at the reduced prices, Strained Wire Fencing, improved Flat Bar Continuous Fencing, Iron Hurdles, Iron Field Gates, Iron Bedsteads, Iron Spouting, Kitchen Ranges, Patent Stable Racks and Mangers, Iron Pumps, &c.

HORTICULTURAL BUILDER TO HER MAJESTY,



AND

HOT-WATER APPARATUS MANUFACTURER

TO THE COMMISSIONERS OF

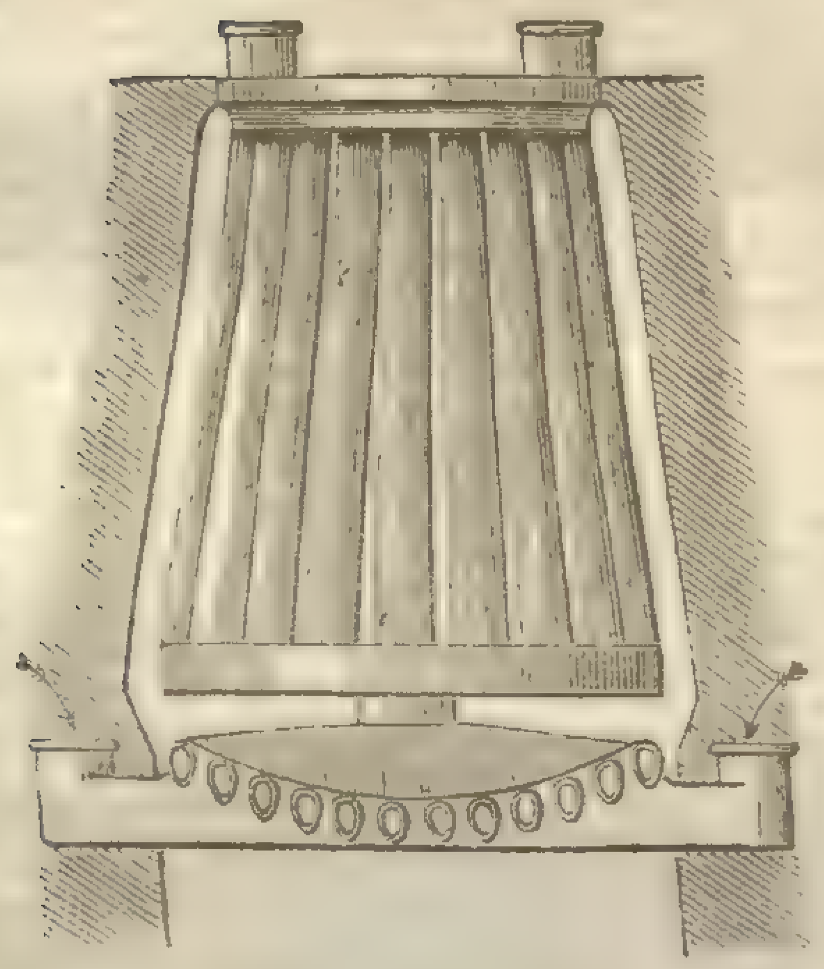
HER MAJESTY'S ROYAL PALACES AND PUBLIC BUILDINGS,

AND TO

THE ROYAL HORTICULTURAL SOCIETY OF LONDON.

HENRY ORMSON, Horticultural Builder and Hot-Water Apparatus Manufacturer,
STANLEY BRIDGE, KING'S ROAD, CHELSEA, LONDON, S.W.

BY HER MAJESTY'S ROYAL LETTERS PATENT.



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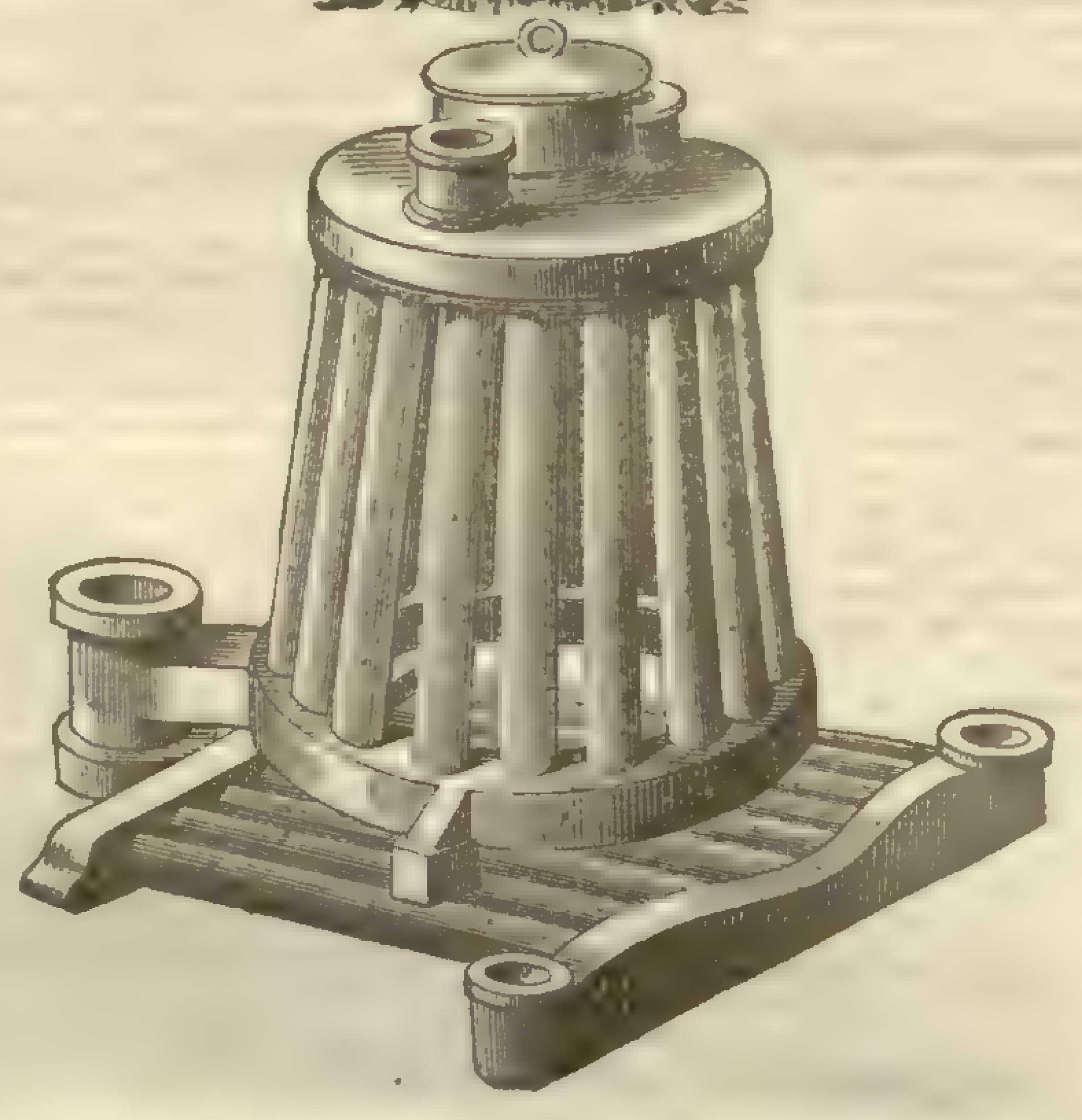

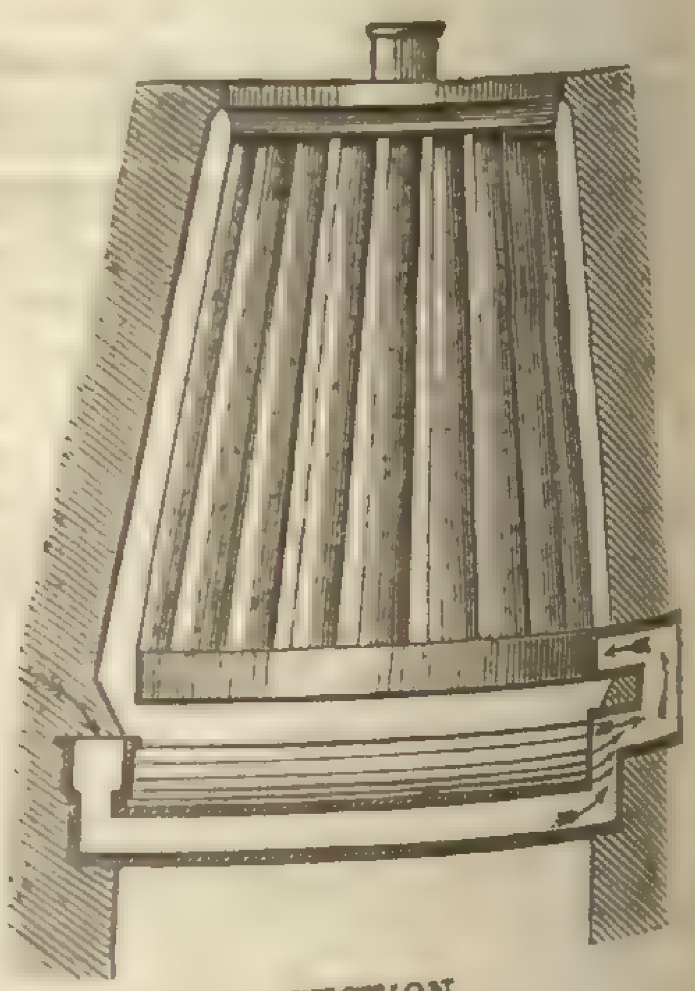

SECTION.

ORMSON'S PATENT JOINTLESS TUBULAR BOILER

Is now from Practical Tests allowed to be the best ever invented for Efficiency, Power, and Economy, and from the following facts it will be manifest to every person's understanding that it must be infinitely more safe for carrying out the One-Boiler System than any other Upright Tubular Boiler. For instance, ordinary old-fashioned Jointed Upright Tubular Boilers made by all other manufacturers, having 20 tubes for the Boiler, and 12 tubes for the Waterway Furnace bars, would have 64 joints made of cement and rope yarn all exposed to the direct Action of the Fire, whereas in Ormson's Patent there is not One Joint upon which the Fire can act, hence the great advantage and security of this Patent.

These Boilers are made of various sizes so as to suit the Amateur, or for heating the Largest Establishments on the One-Boiler System.

Horticultural Buildings of every Description Manufactured by Steam-Power Machinery. Lowest Prices and best Materials.

PLANS, SPECIFICATIONS, AND ESTIMATES FREE ON APPLICATION.

HENRY ORMSON, Horticultural Builder and Hot-Water Apparatus Manufacturer,
STANLEY BRIDGE, KING'S ROAD, CHELSEA, LONDON, S.W.

Chrysanthemums for the Million.

J. H. [illegible], F.R.H.S., Nurseryman, Stoke Newington, N., [illegible] from his great Collection, [illegible] Best Large Varieties [illegible] of Best Pompones, [illegible] of Best Large Varieties, Cuttings, [illegible] of Best Pompone Cuttings, 5s.

N.B. [illegible] all Orders to be Prepaid.

CATALOGUES for One Stamp.

New Chrysanthemums, Hardy Variegated Plants, &c.

JOHN SALTER, F.R.H.S., is now sending out strong Plants of several fine New Chrysanthemums, both Large Flowered and Pompones.

Full particulars will be found in his DESCRIPTIVE CATALOGUE for 1861, which will be sent post free on receipt of two stamps.

Versailles Nursery, William Street, near Hammersmith Turnpike, W.

Hardy Ornamental Plants with Variegated Foliage.

JOHN SALTER, F.R.H.S., solicits an inspection of his [illegible] collection of Hardy Herbaceous Plants with variegated foliage, which is now in perfection. Among them will be found several new varieties of surpassing beauty.

Versailles Nursery, William St., Hammersmith Turnpike, W.

Roses for Bedding.

Many Thousands of Dwarf Roses in pots, consisting of Hybrid Perpetuals, Chinas, Teas, Bourbons, and Noisettes.

WM. WOOD and SON are now sending out daily thousands of Roses in pots for grouping and bedding, at 12s. to 18s. per dozen. Early orders respectfully solicited to secure the best plants.

Address, Woodlands Nursery, Maresfield, near Uckfield, Sussex.

NEW ROSE.—MADAME STANDISH is the hardiest of all Roses; these which stood out of doors during the whole of the late severe winter not having lost a bud, whilst most others were destroyed by thousands. The growth is very rapid; the foliage magnificent; colour, a clear pale pink; petals smooth, round, and finely imbricated; the form cannot be excelled, and it is a thorough Perpetual, being, in fact, one of the finest Roses ever offered. Plants now ready, 10s. 6d. each. Madame Standish must not be mistaken for Mrs. Standish, which was sent out by Miellez, of Lille.

John Standish, The Royal Nursery, Bagshot.

Roses, New and Old.

WM. PAUL (Son and Successor to the late A. Paul) has now ready for delivery a fine lot of all the best Roses, new and old.

BEDDING PLANTS.—All the best kinds, stout hardy Plants, at the usual rates.

PRICED CATALOGUES free by post.

Address Wm. Paul, Cheshunt Nurseries, Waltham Cross, N.

Extra Choice Seed.

JOHN DOBSON and SONS beg to recommend the following as very superior, being Home saved:—

Calceolaria.

Dobson's Superb Hybridised Calceolaria, 1s. 6d., 2s. 6d., 3s. 6d., and 5s. per packet.

Cineraria.

Dobson's Superb Cineraria, 1s., 2s. 6d., and 5s.

Primula.

Dobson's Superb Primula, 1s., 2s. 6d., and 5s.

Woodlands Nursery, Isleworth, W.

Choice Seeds.

DOBSON'S SUPERB HYBRIDISED CALCEOLARIA, saved from our unrivalled collection. Three thousand packets sold in 1860, and sent all over the world; in sealed packets, 1s. 6d., 2s. 6d., 3s. 6d., and 5s. each, with directions for sowing.

*** We are just now harvesting our new stock, which is even superior to any we have ever yet offered to the public, owing to the immense variety we have; and we are sparing no trouble or expense in its popularity continuing, as it has been, second to none. The plants from which the seed is being saved are now in bloom, and are well worthy a visit from lovers of this beautiful class of plants.

John Dobson & Sons, Seedsmen, Isleworth, W.

Shrubby Calceolaria Garibaldi.

HENRY WALTON is now sending out strong Plants of the above; for description, see *Gardeners' Chronicle* last week. The following are amongst the Nurserymen who have already ordered plants of it. Plants, 5s. each; one over when three are ordered:—

Messrs. Youell & Co., Yarmouth	Messrs. J. Woods & Son, Woodbridge
,, Rollisson & Sons, Tooting	,, Robertson & Paul, Paisley
,, Henderson, Pine-apple Place	Mr. Smith, Hornsey Road
,, Low & Co., Clapton	,, Bull, Chelsea
,, Smith, Dalston	,, Berry, Blackburn
,, Godwin & Padman, Sheffield	,, Hudlart, Preston

[illegible], Marsden, Lancashire.

BEDDING AND OTHER PLANTS.—The Spring Supplement to James Carter & Co.'s GARDENER'S AND FARMER'S VADE-MECUM will be found to contain all the [illegible] for the arrangement and management of BEDDING PLANTS, besides copious Lists of STOVE and GREENHOUSE PLANTS, with descriptive observations. Now ready, and will be forwarded free of charge and post paid on application to

James Carter & Co., [illegible], High Holborn, London, W.C.; and Crystal Palace Nursery, Forest Hill, Sydenham, S.

CHOICE BEDDING PLANTS from 1s. to 3s. per dozen, including Tom Thumb, Baron Hugel and other Scarlet Geraniums, Golden Chain, Brilliant, Flower of the Day, and other variegated ditto; Tropæolums, Stamfordianum, Gazania splendens, Calceolarias, Fuchsias, Cupheas, Ageratums, Verbenas, Lobelia speciosa, &c.

Apply, [illegible], Winchmore Hill, Southgate, N.

Bedding Plants.

WOOD and INGRAM beg to announce that their Bedding Plants, consisting of Scarlet and Variegated Geraniums, Verbenas, Petunias, Heliotropes, Calceolarias, Alyssums, Lobelias, Fuchsias, Gazanias, &c., are very fine, thoroughly hardened, and established in pots. Price mostly at 2s. 6d. per dozen. Cinerarias in full bloom, 4s. to 6s. per dozen. Dahlias, a fine collection, 4s. to 6s. per dozen.

CATALOGUES may be had on application.

Nurseries, Huntingdon.

Bedding Plants—Very Fine.

MESSRS. CUTBUSH and SON have an unusually well grown healthy stock of Bedding Plants, which are well worth an inspection from purchasers. Prices, &c., on application.

Highgate Nurseries, London, N.

[illegible]

Bedding Plants for the Million.

JOHN BOFF is sending out the undernamed Bedding Plants, strong established plants, in small pots, at 20s. per 100, package included:—Antirrhinums, in fine varieties, by name; Ageratums, Salvias, Calceolarias, Fuchsias, Scarlet Geraniums, Heliotropes, Lobelia speciosa, Pentstemons in variety, Salvias, and an extensive variety of Verbenas.

To those requiring quantity, J. B. begs to offer well rooted plants of the above from store pots, at 12s. per 100, package included.

CATALOGUES with description, free for one stamp. A remittance from unknown correspondents is requested.

Northampton Park Nursery, Ball's Pond, Islington, N.

Bedding Plants.—Most[illegible] 2s. 6d. per dozen.

SCOTT'S 48-paged CATALOGUE, with Copious Descriptive Lists of all the best Bedding Plants out, to which is, this season, added suggestions for Planting Beds and Ribbons, with full lists of early Flowers for decorating the Garden in winter and early spring. Apply to

J. Scott, Merriott, Crewkerne, Somerset, inclosing 2 stamps.

STRONG BEDDING-OUT PLANTS, very cheap, [illegible] all the Verbenas [illegible] per dozen; Scarlet Geraniums, 4s.; Heliotropiums, 4s.; Dahlias, 4s.; Calceolarias, 4s., all the best sorts out; Lobelias, 4s.; Salvias, in sorts, from 2s. to 4s.; Pentstemons, 4s.; Fuchsias of 1860, 8s.

The above are all strong healthy Plants.

CATALOGUES may be had on application to

Benjamin Whitham, Clough Nursery, Mottram, nr. Manchester.

Bedding Plants.

MARSH and PERKINS have great pleasure in offering the undernamed, all of which are very fine and well established Plants, which cannot fail to give satisfaction:—

Per dozen—	s.	d.	Per dozen—	s.	d.
Ageratum mexicanum ..	2	0	Salvia patens (blue) ..	3	0
Œnothera macrocarpa ..	3	0	,, fulgens (scarlet) ..	2	0
Calceolaria Mackayii ..	2	0	Verbenas—		
,, aurea floribunda ..	4	0	Purple King		
,, sanguinea	2	0	Snowflake and Mrs. Holford	2	0
,, Gem	2	0	Lord Raglan		
,, Prince of Orange ..	2	0	Musk	1	6
Cuphea platycentra ..	2	0	Geranium Flower of the Day	2	0
,, strigulosa	2	0	Ditto (extra strong)	3	0
Perilla nankinensis	1	0			
Heliotropes	2	6			

Dianthus Heddewigii and laciniatus, 6d. per pot—6 plants in each.

Cash or reference from unknown correspondents.

A DESCRIPTIVE CATALOGUE of all kinds of Bedding Plants may be had on application at

12, Drapery, Northampton.

Bedding Plants.

YOUELL and CO. beg to offer the following well established Plants in Single Pots, at 25s. per 100:—

Geraniums, Scarlet and Variegated of sorts	Senecio, Double White and Purple
Verbenas	Koniga variegata
Calceolaria aurea floribunda	Pentstemons, fine
Lobelia speciosa	Phloxes, ditto
,, densa multiflora	Pansies
,, ,, alba	Dahlias, Dwarf Bedding and Show Varieties
Petunias	Pinks
Fuchsias	Campanula corallina
Geraniums, Sweet-scented	Cerastium tomentosum
Gazania splendens	Cobæa scandens
Ageratums	Cupheas
Antirrhinums	Heliotropes
Tropæolums, of sorts	Lantanas
Maurandyas, ditto	Linum flavum
Nierembergia filicaulis	Salvias
Chrysanthemum regalium	Vinca elegantissima
Pyrethrums, Double White	New Belgian Daisies.

*** All orders of 2*l.* and upwards are delivered Carriage Free to London, Manchester, Liverpool, Peterborough, and Newcastle, as well as to any Railway Station within 150 miles of the Nursery. Communications by Steamer and Railway to all parts of England, Ireland, and Scotland, as well as the Continent.

Royal Nursery, Great Yarmouth, Norfolk.

Bedding Plants.

F. and A. SMITH are now sending out their usual strong healthy Bedding Plants, at moderate prices. These plants are hardened and fitted for planting out, so as to produce an early decorative effect. Quality is the test of cheapness.

Ageratum, blue	Mimulus, of sorts
,, foliis variegatis	Melissa variegata
Anagallis	Mesembryanthemum, various
Antirrhinum, various	Nasturtium Tom Thumb, &c.
Bouvardias	Nierembergia gracilis
Calceolaria, in variety	Pansies
Cerastium tomentosum, for edging	Pentstemon, in variety
Cuphea platycentra, scarlet	Petunias
Campanula carpatica	Phlox, herbaceous
Carnations, tree	,, Drummondi
Chrysanthemums, various	Pyrethrum, various
Deutzia gracilis	Perilla nankinensis
Dianthus giganteus, splendid crimson	Portulaca, dwarf, for edging
,, Heddewigi, large colours, various	Rhodanthe Manglesii
,, imperialis, crimson	Roses, various
Dielytra spectabilis	Statice armeria
Dahlias, many varieties	Salvia patens, blue
Delphinium formosum	,, ,, alba, and others
Fuchsias, various	Stocks, in bloom
Geranium, scarlet, various	Senecio, double crimson
Gaillardia grandiflora	Thunbergia, various
Gazania splendens	Tropæolum Lobbianum elegans
Heliotropium, various	,, Attraction
Hollyhock	,, Stamfordianum
Hydrangea	,, several double varieties
Koniga variegata	Verbena, of every known shade of colour, a fine and large stock
Lantana, various	Veronica
Lobelia, blue, in variety	Variegated Geraniums (many varieties).
,, St. Clair, fine scarlet	Zinnia elegans, &c.
Lilium, various	

Climbing Plants.

Cobæa scandens	Maurandya alba
Eccremocarpus scaber	,, grandiflora
Lophospermum Hendersoni	,, rosea
Maurandya Barclayana	Tropæolum canariense

Prices with GENERAL LIST on application.

Dulwich, Surrey, S.

Seeds Direct from the Growers.

The Most Certain Means of Preventing Disappointment.

NOTWITHSTANDING the Wet Summer and Autumn of 1860, Messrs. Sutton & Sons have the satisfaction of [illegible] accounts of the growth of the Seeds they have supplied this adverse season. The following is similar to many others:—

From the Rev. W. H. [illegible]

"Messrs. Sutton & Sons, May 3, 1861.

"I am happy to tell you that all the Garden Seeds which I had from you this year have come up beautifully; better and more regular, if possible, than in any former year."

SUTTON & SONS can still supply all kinds of Farm and Garden Seeds for present sowing, of excellent quality, at moderate prices, according to quantity required.

Royal Berkshire Seed Establishment, Reading.

ROYAL OXFORDSHIRE HORTICULTURAL SOCIETY.

Patrons.—H.R.H. the Prince Consort.

H.R.H. the Prince of Wales.

The SUMMER EXHIBITION of the above Society will be holden in the Gardens of Trinity College, Oxford, on TUESDAY, June 11, when, in addition to the Prizes confined to Members, the following are offered, open to all England, entrance free:—

A.—Stove or Greenhouse Plants (not Orchids, Fuchsias, or Geraniums), nine varieties: First Prize, 10*l.*; second ditto, 8*l.*; third ditto, 7*l.*

B.—Cape Heaths, six varieties: First Prize, 5*l.*; second ditto, 4*l.*

C.—Geraniums (not fancies) in 8-inch pots, 12 varieties: First Prize, 6*l.*; second ditto, 4*l.*

D.—Geraniums (fancies) in 8-inch pots, 12 varieties: First prize, 5*l.*; second ditto, 4*l.*

No person will be allowed to take more than one Prize in each class.

Notice of intention to exhibit must be given, by post, on or before Saturday, June 1.

The Flowers must be labelled with their names, and staged ready for the Judges by 11 o'Clock on the morning of the day of Show, and will not be allowed to be removed till the close of the Exhibition (7 o'Clock p.m.)

Exhibitors will be required to sign a declaration that the Flowers are *bonâ fide* their property, or the property of their employers.

The Judges have the power of withholding the first or any other Prize if the Flowers exhibited are not worthy.

By permission of the Commanding Officer, the Bands of the Coldstream Guards and of the Second Oxon Rifle V.C. will play alternately during the afternoon.

W. R. Hobbs, Acting Secretary.

23, St. Giles' Street, Oxford, May 18.

ROYAL HORTICULTURAL SOCIETY.—FLORAL COMMITTEE.

LIST OF AWARDS, MAY 14, 1861.

First Class Certificate.

Pimelea elegans, from Mr. J. Veitch, Jun., Chelsea.

Petunia inimitabilis fl. pleno, from Mr. Veitch.

Commendation.

Cineraria rosea plena, from Mr. A. Kendall, Stoke Newington.

Pelargonium Mrs. Ponsonby Moore, from Mr. Veitch.

Special Certificate.

To Messrs. Downie, Laird, and Laing, for a collection of cut blooms of Pansies.

The next Meeting will be held on May 28.

Thomas Moore, Secretary to the Committee.

The Gardeners' Chronicle.

SATURDAY, MAY 18, 1861.

MEETINGS FOR THE ENSUING WEEK.

Wednesday, May 22—Royal Botanic .... 3 p.m.

The change which has taken place in our gardens within the last few years is doubtless more or less dependent upon a more highly cultivated sense of the really beautiful. The garden is no longer a mere collection of plants characterised only by variety or number, without the slightest attempt at any general effect, and we no longer see, except in rare instances, whole houses of Pelargoniums or other plants of luxury, individually beautiful, but unpleasing as a mass. Harmony of colouring is the great object in the flower garden, while in the conservatory graceful forms and elegance of foliage are more highly prized than gaudy flowers, whose effect is spoiled by coarse foliage or other matters which are not compensated by brilliancy of colouring. No fact indeed proves more assuredly, that so far as what the Germans call æsthetics, by which they mean something like an appreciation of beauty, our taste has been greatly improved, than the peculiar zeal with which Ferns are cultivated. It is not indeed every one who can grow the more delicate species, though with the help of houses made on the principle of Ward's case very much may be done. The delicate *Hymenophyllum alatum* for example, than which few Ferns are more truly beautiful, has in the very heart of London produced nearly a hundred fronds in a single mass, and multitudes of other equally delicate species might be reared where a conservatory, in the ordinary sense of the word, is out of the question.

Ferns, however, are not the only objects which are attractive from intrinsic elegance alone, though they produce no flowers. There are other flowerless plants which to the present moment have been much neglected, which would be as welcome were they once introduced. A few Clubmosses indeed appear in our collections; even the smallest of these have many admirers in consequence of their elegance, and occasionally a stray Moss or Fungus comes up from some foreign mould, though

they die off generally without notice, for no care is taken of them, if they are observed at all.

There are, however, many Cryptogamic plants besides Ferns and Clubmosses, which would amply repay introduction, and we are sure that when once known they would be highly prized. Some of our own Jungermanniæ, as *Pellia epiphylla* and *Petalophyllum Ralfsii*, bear fruit readily in a WARD's case, the elegant capsules of the former and the gill-like folds of the leaves of the latter at once ensuring admiration; but there are many other European species, neglecting the smaller, which would at once be welcomed. We can conceive few of the smaller Ferns which could be more acceptable than the fronds of *Lunularia* with their crescent-like receptacles of gems, and their four-valved capsules springing four together in the form of a cross from their delicate caps at the top of a graceful stem. Several forms too of *Marchantia* might be imported which would form nice subjects of cultivation, though possibly some of them if once established might be inclined to spread where their presence was not required, like the common *Marchantia* of our gravel walks, a most exquisite plant by the way, if carefully examined. If, however, more distant regions were searched for novel forms, there are *Marchantiæ* and allied genera of varied aspect, which require to be seen only to be admired. There are the Fern-like *Jungermanniæ* of New Zealand, belonging to the genus *Symphyogyna*, which are as delicate and beautiful as the species of *Hymenophyllum* which we admire so much as cabinet specimens of Ferns; and if cultivators wish to see what can be introduced in this way, we would only call attention to the plate of *Plagiochila Stephensoniana* in Dr. HOOKER's Flora of New Zealand, that they may ascertain what objects they might expect at the hands of an intelligent collector.

Neither is it less sure that many of the true Mosses might be cultivated, either from directly imported plants or from their spores collected just when they are ripe. The different tints of green, from the merest tinge arising from deep seated cells shining through the external strata devoid of green matter, to rich tints of purple, would be a great ornament amongst the smaller Ferns, as indeed may be witnessed occasionally where Mosses have accompanied imported specimens. Nor is it easy to conceive the excitement which would be produced, were it possible to raise fruiting individuals of such Mosses as *Splachnum luteum* and *rubrum* with the large yellow and red umbrellas which are spread out beneath their capsules. As these are annuals they might possibly be raised from seed. There could be no difficulty in introducing the former at least, as it is very common in Sweden. Even our own *S. ampullaceum*, the commonest of the British species, is a most attractive plant. If a taste for these smaller Cryptogams were once raised, there is no knowing to what extent their cultivation might be carried.

We will venture even to advance a step further, and suggest attempts at introducing some of the more elegant tropical species of Fungi, which though seldom seen in a recent state, are even when dried for the herbarium lovely objects. Cuba and Guiana abound with species displaying the most exquisite colouring, without any of that coarseness of form or tendency to speedy decomposition which make multitudes of our British species of Fungi objects of dislike to the many. We have ourselves seen in England *Marasmius hæmatocephalus*, the bright rich red of whose pileus is scarcely to be exceeded by that of any flower. There are many species however of equal beauty, and especially one broadly striped, which displays colouring as rich as that of the most gorgeous African Marigold. Still more easy however would it be to introduce the coral-like *Clathrus* and some allied genera, which are amongst the most beautiful objects in nature, though unfortunately they are attended by a disagreeable odour which would stand much in their way. Similar bad qualities however do not entirely prevent the cultivation of *Stapeliæ*.

British Seaweeds are already cultivated to a certain extent, and it is very possible that some of the more beautiful exotic forms might be successfully grown by the aid of artificial sea water; and if such lovely objects as *Claudea* could be introduced they must undoubtedly prove far more attractive than the Madagascar Lace Plant, which has been so justly admired. *M. J. B.*

IN making some remarks on a former occasion (p. 408) on the condition of London trees, we assumed, as we think may safely be done, that the system of deep sewers with which the soil is pierced in all directions, has a powerful and direct influence upon trees planted within its area, and that influence of a nature inimical to their well-being. If this is so, it is important to ascertain whether any and what means can be adopted to palliate an evil which cannot be removed.

We set out with the inference that the trees are in many instances perishing from lack of moisture, the natural moisture of the earth being drawn away by the deep channels made for the sewers, and the natural compensation for this afforded by the rainfall being carefully prevented from penetrating the earth, except, indeed, by the readiest way into the interior of the sewers themselves.

The evil to which we are referring being caused by the abstraction and loss of water, the remedy doubtless consists in the judicious artificial application of that element in such a way as to supply the deficiency, in part at least; and if this were done systematically there seems no reason why the trees of cities should not be made to regain something of their natural vigour, since it would be doing battle with their two principal enemies at the same time. We refer especially to those planted in the squares and thoroughfares and in other confined situations where they have to struggle against an accumulation of unfavourable conditions.

The first thing which appears desirable is to give the roots one or two thorough waterings in the early part of summer, before, in fact, there has been time for any impression to be made upon the system of the plant by the parching summer heats, and before the trees have entirely expended the strength they had accumulated during their winter's rest. To do this effectually the ground towards the circumference of the area occupied by the roots, should be pierced so as to facilitate the absorption of the water, which should be applied freely and abundantly, and if possible in an aërated form, so as not unnecessarily to lower the temperature of the earth. One good soaking in the month of May, if the atmosphere during the spring months has been dry, another in June, and another early in July, would go far to provide the roots with accessible moisture during their most active season. With a hose attached to a supply pipe from the mains these waterings would be readily effected.

Another point of equal importance with that just adverted to, is the cleansing of the foliage while yet in a healthy state by frequent washing, which while doing battle with the soot, would, by enabling the trees to absorb moisture by their surface instead of continually parting with it, to some extent help to supply the deficiency which has been alluded to. There would be no difficulty in accomplishing this in ordinary cases, by means of jets from the water-mains, the pressure in which is always considerable. Such washing would only be necessary in dry weather, and as a help to the cleansing and moistening influences of natural showers; and if done weekly or fortnightly during the earlier part of the summer would go far to preserve a healthy condition of the foliage, which again would react upon and invigorate the entire system of the plant.

The exact means to be employed for carrying out these irrigations and washings would vary with particular cases, but they need not be other than of the simplest character. A leather hose, or tube of gutta percha, is the chief apparatus that would be required, the high service main being generally resorted to for the washing powers, though perhaps in some cases an engine might be required. These cleansing operations, at least, should be carried on either in the morning or evening.

Such artificial waterings need not be continued to a late period of the summer, as they would interfere with the ripening of the wood, which is so necessary to its passing the winter safely. The object to be kept in view is rather to encourage and carry on into the summer months the natural spring growth, and to keep this in a fresh healthy state, until after the midsummer growth has been formed, and then to allow the plants to fall into a natural state of rest as autumn approaches. The whole process could easily be carried out in the early part of the day, so as not to interfere with the limited portion of time during which a City garden can be enjoyed.

The cost of these operations, which could not be very great, would under any circumstances bear no comparison with the results, if the health of the trees in our great cities could thereby be brought into an improved condition. ——*

MIGHT we suggest to the Association for the erection of Drinking Fountains, the proprie[ty] of putting up one or two in Exhibition Road, South Kensington, somewhere near the entrance to the New Horticultural Gardens? Such an accommodation would be a real boon, not only to attendants on carriages, but to the crowd generally which may be expected to daily throng the road in question, after the Royal Horticultural Gardens and Exhibition of 1862 shall have been thrown open to the public.

NOTES ON THE BOTANY &c. OF JAPAN.—No. [illegible]

(See page 385.)

H. M. Legation and Garden at Yeddo.—Owing to the kindness of H. M. Minister Mr. Alcock, I was enabled to visit Yeddo and make a most interesting collection of plants. The British Legation is housed in a large temple, or rather in buildings adjoining, such as are attached to nearly all the large temples in Japan, and which are probably intended to receive visitors, or as seminaries for the Buddhist priesthood. It is placed at the head of a little valley, backed behind and on each side by low richly-wooded hills, somewhat in the form of a horse-shoe, and open in front to the Bay of Yeddo. The situation is exceedingly picturesque and beautiful. A fine wide avenue, some 200 yards in length, leads up from the Bay to the residence of the English Minister. Ornamental gateways stretch over the avenue and give it a pretty appearance, and here and there I observed some large examples of Pinus Massoniana, Cryptomeria japonica, Salisburia adiantifolia, Podocarpus macrophyllus, Camellias, &c.

The garden is situated in the rear of the buildings, and although small in extent it is one of the most charming little spots I ever beheld. The circular [hill] just noticed rises up behind and forms a background to the picture, which hill is richly covered with trees of great size and beauty, particularly some fine evergreen Oaks, seeds of which Mr. Alcock has sent to Kew. On the lower part of the hill there is some pretty rockwork covered with Maples, Azaleas, Camellias, and other plants, with a species of Plum, whose branches hung down like a Weeping Willow. At the base there is a small lake of irregular and pleasing form, extending the whole width of the garden, and between this and the temple there is a little lawn which gives a quiet and pleasing finish to the whole.

To complete the picture as it appeared to me: it was a bright autumnal day; an old Maple tree with blood-red leaves was hanging over the lake at one end; an Azalea with leaves of a glowing crimson was seen in groups at the other; patches of red, purple, and colours of almost every hue met the eye in all directions and produced a striking effect, backed as they were by the deep green of the Camellia, Evergreen Oak, and Pine. As the large trees in the background threw a shade over some parts of the garden, while the sun's rays streamed through other parts or shone full upon the varied colours, the effect produced made one almost fancy himself in some fairy land. Little walks wind through amongst the bushes over the hill side, where the different plants can be minutely examined, and where shade can be had from the fierce rays of the sun. A fine avenue has been made on the top of the hill, a spur extending down towards the bay, from which a delightful view to seaward can be obtained, and where exercise and the cool morning and evening breezes can be enjoyed without the nuisance of being followed by the officials of the Japanese Government, which every one has to submit to if he moves out of the grounds of the temple.

On the west side of the temple there is a large cemetery covered with many thousands of stone tablets, some of them apparently of great age. One of these cemeteries is attached to almost every temple in Yeddo, but this is the largest that came under my observation. Curious enough they seem in all cases to be placed on the west side of the temples. The Japanese, like their neighbours in China, pay great attention to the graves of their dead. They frequently visit them, and place branches of Laurel and other evergreens in Bamboo tubes in front of the tombs. The trade of collecting and selling these branches must be one of considerable magnitude; they are to be seen always for sale in all Japanese cities, and seem always fresh upon the graves as if they are frequently replaced.

The garden I have been describing is purely Japanese, Mr. Alcock having found it much in the same state as I saw it. The French Consul-General and his Secretary the Abbé Gerard have each a garden, which they found attached to the temples given up to them as their places of residence. These gardens are remarkable for Azaleas of extraordinary size, which have been kept carefully clipped; and if they are covered with flowers in the spring, as I believe they are, they must be indeed charming objects to look upon. R.

TREE TRANSPLANTING.

IN the course of the last 20 or 30 years a good deal has been written about a Transplanting Machine invented by the late Mr. Wm. M'Nab of Edinburgh, which was celebrated for the success that attended

emoval of large trees. But in the absence of any representation of the apparatus it was difficult to understand its exact nature. We are now, however, enabled to reproduce from the *Scottish Farmer and Horticulturist*, with the permission of the present Mr. M'Nab, a view of the machine which fully explains its construction.

It appears that in a recent extension of the Edinburgh Botanic Garden it became necessary to transplant a very large number of shrubs and trees; this caused the working powers of the machine to be considerably altered and strengthened, facilitating the raising of a larger amount of soil with the plant, with the aid of fewer men than were formerly required. "The merit of the machine is, that a shrub or tree weighing from 18 to 30 cwt., after being prepared, can be raised, conveyed, and planted without being subjected to any undue stress or even the possibility of injury. If water be copiously used, shrubs may be safely removed during any of the spring, summer, or autumn months. Last year numerous shrubs were successfully removed with it during the months of May, June, and July."

We use the words of Mr. M'Nab himself, who describes the instrument in the following manner:—

"The machine (engraved from a photograph taken by Mr. Sight) weighs about 8½ cwt., and is constructed of a strong frame of wood and iron, supported on wheels, with two windlass rollers in front, and two at the back, the back rollers being so arranged that they may be taken off, to enable the machine completely to enclose the plant to be operated on. To show how this method of transplanting is performed, and to follow it throughout all the stages, we shall take, for example, a shrub 18 feet in height, and the branches 16 or 18 feet in circumference. The first operation is to tie in all the branches with a piece of soft rope or yarn, to keep them as close as possible, and thus prevent them interfering with the works while in progress. It is necessary, before tying up, to attach a mark on the best side of the shrub, or what is intended to be the front after planting; by so doing it will save a good deal of trouble after the plant has been lowered into the pit prepared for its reception. The machine is capable of taking in a ball of earth with roots 4 feet long, 3 feet 4 inches wide, and 3 or more feet deep. In every case it is necessary to be careful not to exceed this width, making allowance for the thickness of the canvas and staves to be employed round the roots. The opening up of the soil round the plant must now be commenced, beginning, of course, at such a distance as to secure all the roots which protrude beyond the line of the intended ball. The soil ought to be removed from the roots with a three or four-pronged fork, taking care to keep the ball of earth and roots all round, as perpendicular as possible, and where the ball will admit of being made circular it is better to be so. In the case of very large plants, an oval shaped ball is just as easily managed as a round one, the machine being sufficiently strong for the extra size. Supposing the ball to be at its proper depth, and properly rounded and upright, such roots as will not bend may be cut off close to the earth. Surround the ball with a piece of canvas 3 feet broad, bending the roots carefully beneath it, taking the precaution of having the doubled portion of the canvas anywhere but at the sides. After the canvas has been placed round the ball, take a doubled piece of soft rope or yarn and surround the canvas within 8 inches of the bottom, then bring the loose ends through the centre loop, bring the ends up the side, and surround the ball again about 8 or 10 inches from the top. Between the soft rope and canvas, introduce a number of barrel staves of uniform length and breadth, about half an inch in thickness, place them within 5 or 6 inches of each other, according to the firm or loose nature of the soil composing the ball, taking care not to put any on the extreme sides, that the canvas alone may touch the machine. The object of the soft rope or yarn is to keep the staves in their place till the rack rope is put on. With this rope surround the lower part of the staves, doubling the end several times round the main portion of itself, say about 2 feet or so in length; bring the main portion of the rope up the side of the ball, and surround the top again with it, doubling the end round itself as before. Both the upper and under portion of this rope must now be tightened firmly with a stout pin, placing them at opposite ends, and placed perpendicular, so as to come within the corners of the machine. It is necessary to attend strictly to these observations, they being essentially necessary in order to prevent them interfering with the frame of the machine while the lifting is going on. The next part of the process is undermining. The front of the plant being previously decided on, being the side where the machine can with the greatest ease be introduced with reference to the adjoining walks or roads. This concluded, fix a piece of wood between the ball and the edge of the hole, in order to prevent the plant getting off the perpendicular while working beneath it, which is usually done with a long trowel. After the undermining has been carried nearly half-way through, the lifting boards, four in number, made of strong Oak, and curved in the middle, with a grooved recess at each end, within 3 inches of the points for receiving and keeping the lifting ropes in their proper places. If the ball to be raised be compact and firm, two Oak lifting boards may be put in, but if the ball is inclined to be soft, it is necessary first to introduce a piece of Deal the same length as the ordinary lifting boards in case it has to be left under the plant, as the removal of it in some instances is apt to injure the ball; next place side by side one of the ordinary lifting Oak boards. The lifting-ropes, made expressly for the machine, are now put under the ends of the lifting boards, one on each side, the centre or middle of each rope being placed exactly in the centre of the ball, taking care that the rope is directly under the grooves of the lifting boards, particularly the outside one; this done, fix in some soil to keep the bottom boards and the ropes securely in their place. Before commencing the undermining of the back part of the ball, fix it also to the bank with a piece of wood, and then commence the undermining. When finished, place two bottom boards as before mentioned, taking care that they are exactly parallel with the two previously put under, and that the ends of each are alike straight. The opposite half of the lifting-ropes must next be put under the grooves of these boards, one at each end, and secured with earth all round. The supports between the ball and the sides of the hole may also be withdrawn, as the plant ought now to stand by itself. The next operation is to lay two strong planks, one on each side of the plant. They must be laid perfectly level, and parallel with each other, keeping them as low as the ground will admit of. The machine being at hand, remove the back binding bar and the two rollers, then run the machine on the planks, till the centre of the machine be exactly at the centre of the plant; replace the two back rollers, binding-bar, secure the wheels with stones or wedges, likewise place a piece of board across the planks in front for the feet of the machine to rest on; next bring up the ends of the lifting-ropes over the rollers. This part of the work requires a little nicety, as the ends of each rope must be done exactly in the same way. The rope is first brought up, and over the top of the inmost roller three times, winding it always towards the centre of the roller; then take it over the top of the outer roller and work it also towards the centre, where hooks are placed for fixing the ends of the ropes on, each rope being previously supplied with suitable strings for the purpose. All the ropes being similarly adjusted, the plant is now ready for lifting and removal. The foregoing operation is easily accomplished with two men, but the lifting and removal requires more; this, however, depends on the size and weight of the plant to be raised, a moderate sized ball, say 15 or 18 cwt., can easily be lifted with four men, but if larger six or eight men will be required. If the tree or shrub is very tall, it will be desirable to have two guy ropes to steady the top and keep it perpendicular during the lifting and transmission. Each roller is provided with a cross-wheeled handle, and the outer rollers have a series of iron-bound holes pierced through them. By means of two round iron levers and the wheeled handles, the plant is easily wound up, both back and front at the same time. The strong crank catches at each end of the inner rollers prevent the possibility of the plant running

down, and secure it firmly at every turn, when re-adjusting the levers. After the plant has been raised high enough to clear the bottom of the wheels, the levers can then be pushed through the holes so as to rest either on the inner roller or binding bar; this will doubly secure the plant and hold it tight in its position, till such time as it is conveyed to its destination. If the plant has to be taken over clean gravel walks, it is necessary to put a piece of canvas under the ball to prevent any loose earth from falling. If the distance for removal is not great, it can easily be taken along by the men employed in the lifting, but if the distance is considerable, the most convenient way will be to attach a horse and draw it backwards, taking with it, if necessary, the two planks, foot-board, and cog wedges. If many removals are going on, it is desirable to keep a double set of planks and foot-boards. The hole for its reception being prepared, in all cases taking care that it is not less than 2 feet of the diameter of the ball to be put in, place over it the two planks, adjusting them to the width of the wheels, then run the machine with the plant backwards upon it, till right over the centre of the hole, place the cog wedges to the wheels, and adjust the foot-board as before, and arrange the men as at the lifting. After taking off the strain, sufficient to remove the four crank catches, lower gently into the pit, by holding back the handles and levers. If the pit is found to be too deep, raise, and put in some soil, and then lower again. When properly placed, undo all the ropes, and take off the two back rollers and binding bar, and remove the machine. Immediately the machine is withdrawn from the plant, but before it is taken off the planks, put on the two rollers and binding bar, to prevent the possibility of twisting the machine by taking it upon uneven ground. The machine and planks being removed, withdraw the two lifting ropes, which will be easily done, owing to the curve on the bottom of the lifting boards. The bottom boards can also be withdrawn by a slight leaning either to the one side or the other, placing at the same time a little earth below to keep the plant in its upright position. If attention has been paid to mark the best side previous to the first tying up of the branches, the plant can be easily turned, so that the best part shall face any particular side; if this has not been done, it is necessary to loosen down the whole top, so as properly to adjust it—that, however, is very inconvenient till such time as the plant has been filled in and watered. After the plant has been properly secured in its upright position, take care to have the soil firmly fixed below the bottom of the ball all round, to prevent it sinking down on any one side after the water has been applied; next remove the rack pins and binding ropes, staves and canvas, loosen out all the roots and fill in with prepared soil, taking care to adjust the roots in a horizontal manner while filling in; afterwards prepare a basin round it. In all cases apply water freely, but more particularly with summer transplants. After the branches have been loosened down, syringe freely if the weather be dry, and cover the surface of the ground, under the branches, with fresh cut Grass to prevent the surface of the soil from drying up. In the case of many summer trantplanted trees and evergreens, it is a good plan to roll some Hypnum or Sphagnum Moss round the stems and chief branches, as it assists in keeping the bark moist."

REPORT OF THE CURATOR
OF THE
BOTANIC GARDEN, GLASNEVIN,
FOR THE YEAR 1860.
(Extracts.)

Arrangements of Hardy Plants.—The arranged departments o hardy plants have received many important additions during the past year, and are now nearly as well filled as it is possible to have so large a collection, where losses are constantly taking place by deaths, &c. Formerly, they were chiefly useful to the botanist, plant amateur, and for filling up their places in the general plan of a botanic garden; but ever since the system of competitive examinations took place, they are daily visited during the summer season by numbers of students from the medical schools, and other educational establishments in the city, thus rendering it necessary to have them as perfect as possible.

Hardy Trees and Shrubs.—In like manner, the taste for planting hardy ornamental trees and shrubs has greatly increased in Ireland within the last twenty years, and their supply has kept pretty fair pace with the demand; hence we begin to experience a want of space, in even this extensive Garden, for planting out new sorts as they are introduced. Had the adjoining portion of ground offered to the Society last year been taken, it would have enabled us to enlarge the Arboretum, so as to afford room for the many interesting plants such a public garden as this is surely ought to possess, and that at a very small additional expense.

Donations and Exchanges of Plants.—The total number of plants received during the year 1860 is 670 species; and of seeds, 686 kinds. The total number of plants given from the Garden is 420 species; and of seeds, seven packages.

Supplies of Plants for Lectures and School of Art.—Good supplies of flowers and plants, for assisting to illustrate the lectures on economic botany, delivered by Dr. Harvey at the Museum of Irish Industry, were duly sent according as they were required; and also for the lectures on structural botany delivered in the Theatre of the Royal Dublin Society. For the lectures on systematic botany, delivered at the Botanic Garden, the table was well furnished with large plants in pots at each lecture, as well as cut flowers. The Professors of Botany at the Royal College of Surgeons, and at some other Medical Schools, were supplied with specimens for their different courses of botanical lectures according as they were required. Regular supplies of plants and flowers were sent, on two days in each week, to the School of Art at the Royal Dublin Society, for the use of the pupils studying there, during the season they were wanted.

Visitors.—Notwithstanding the exceeding wetness of the last season, the decrease in number of persons who visited the Garden is not so great as might have been expected, though still considerable. At so great a distance from the city, and the Garden being situated in a locality to which no public conveyance has been yet established, it is rather difficult to reach in bad weather, when walking is rendered unpleasant; hence we generally find, under those circumstances, that visitors come more for the purpose of study than pleasure. The total number who have written their names and addresses in the Visitors' Book during the year 1860 is 39,000,443 Total number of persons who attended lectures at the Garden, 598; thus making an average of 50 at each lecture. *D. Moore, Curator.*

Home Correspondence.

Transplanting a large Yew Tree.—Having recently been engaged in removing a remarkably fine specimen of the common Yew, I have been induced to give you some account of its size, with a view of ascertaining whether or not it is the largest tree of the kind on record that has ever been transplanted. The dimensions are as follows:—Circumference of bole, at 3 feet from the ground, 6 feet 3 inches; at 6 feet from the ground, 6 feet 1 inch; and at 14 feet from ditto, 5 feet 9 inches. The trunk divides itself at the height of 15 feet into four branches, the circumferences of which are as follows: No. 1, 2 feet 8 inches; 2, 3 feet 1 inch; 3, 3 feet 10 inches; 4, 2 feet 9 inches. Height of tree, 40 feet. Circumference of branches at 10 feet from the ground, 130 feet; and at 28 feet from the ground, 116 feet. The ball contained 15 cubic yards of earth. The distance which it was removed is 22 yards. The operation commenced on the 8th of April, and was completed on the 20th of the same month. Unfortunately a clear sky with cold easterly winds prevailed the whole time without even a slight shower of rain. This evil I endeavoured to counteract by frequent syringing overhead and covering the roots with mats. Subjoined is a list of the apparatus by means of which the tree was lifted, viz., two powerful screw jacks, each capable of lifting 20 tons weight (these were worked in a chamber perpendicular under the bole of the tree); two smaller screw jacks capable of lifting 3 tons each; three common timber jacks (each worked by two men), 3 tons each; a powerful crab (worked by six men), capable of lifting 5 tons; five balks of timber, 10 inches square, and from 30 to 40 feet long, put at an angle of about 45°, provided with ropes and pulleys. To the above add six sets of powerful wedges and the assistance of 32 men. Doubtless many of your readers may be inclined to ask—But what of its future prospects of growing? To this I reply (judging from present appearance), that I have every reason to think that it is progressing favourably. It may also be of interest to know the cost of removal. I may just mention that there were only 16 men engaged constantly during the operation; the others, forming the number recorded above, were required only at times when most needed, so that the entire cost,

including nearly 3*l* for repairing machinery, is under 25*l*. *Jas. Harland, Gardener to Sir Culling E. Eardley, Bart., Bedwell Park, Herts, May* 14. [Will you favour us with a report on this tree at the end of next September?]

Hose-in-hose Polyanthuses.—If your Correspondent whose communication was in your columns of the 5th inst., would prick out in an open bed his seedlings (raised in pans, &c.) as soon as the first leaf is about 1½ inch long—judging from my own experience I think he would obtain earlier and stronger blooming plants than by any other treatment. Mr. Henry Wooler and myself have grown these plants from seedlings for a quarter of a century, with the view of producing Hose-in-hose self-coloured and double flowered Polyanthuses. In our first object we have made much greater progress than in the second, as the pips enclosed will show. In a deep orange Hose-in-hose seedling which flowered for the first time in 1859, it will be observed that the sepals of the calyx are so completely transformed into coloured petals that the plant presents twice as much bloom as the normal form. The great object, however, of raising self Hose-in-hose Polyanthus, is to vastly improve this flower for spring beds or ribbons; and as the converted sepals into petals retain much of the natural power of the calyx to endure a longer period than the corolla, another advantage is obtained. The inclosed pips exhibit the bottom "hose" fresh, whilst the upper or real corolla is decayed. The seedling was produced by fertilising a normal Yellow Polyanthus with the pollen of a cream-coloured Hose-in-hose, again working the pollen of the best Hose-in-hose into the Yellow, and also selecting the seeds of the best Hose-in-hose pips. It was not difficult to thus produce Hose-in-hose seedlings; but they were nearly all with the calyx only partly coloured, that is, the calyx mixed with corolla, and generally speaking about half the size of the corolla, or of the fully developed Hose-in-hose. It is interesting to find that pollen of a Hose-in-hose influences the seedlings in this way; besides I have had a few seedlings, but of a lighter colour than the one sent, producing the first season of flowering some of the anthers transformed into petalets—a great step in my opinion towards doubling—all experience teaching that a double flower is not only more massive and enduring than a single one, or perhaps than a Hose-in-hose, it is the greater inducement for raising this vernal favourite into an almost unrivalled spring bedder, to endeavour to produce double Polyanthus of clear bright self colours on Hose-in-hose; the attainment of which seems from our experience not so easy. Last year I had a Cowslip, which in the summer of 1859 I transferred from the field into a pot, as it had a pip with six lobes, and I supplied it with as little water as possible to sustain the plant—it was of course under glass in a frame. This naturally stunted the size of its leaves and retarded its time of flowering; however, before there was any sign of a flower, I placed it where it received abundance of rain, when it rapidly flowered, and not only had several pips with seven, eight, and nine lobes, but on two of these many lobed pips the tubes were split to the junction with the calyx, which thence had a stripe of yellow all up the sepal of the same structure and colour as the Cowslip's corolla. It has been said that the double Primrose will revert to a single if planted in poor soil or become wild; this I have failed in effecting, my object being to get thus a semi-double Primrose to fructify with the Polyanthus, in the hope of obtaining a strain disposed to double. I have two plants of a yellow Hose-in-hose Polyanthus, which I grafted last year upon the root of the lilac double Polyanthus, but I fancy from being too severe with them they have not shown any flowers this season. By "severe," I mean destroying all leaves from the stock and all roots from the graft. My object in this is to ascertain the influence of the double stock upon the seedlings, both in respect to disposition and colour. The graft was a Hose-in-hose, light yellow, which had pips with the anthers developed into petalets. *W. Wooler.*

Barren Jargonelle Pear Tree.—I planted, about seven years ago, a healthy Jargonelle Pear tree against the west side of a house in the outskirts of Leamington, in stiff clay soil. It has grown and flourished, and always looks healthy, and has very clean silvery bark, which has been gashed more than once to allow it to expand; and the tree itself does not make any inordinate amount of foliage, but it has never shown the slightest symptoms of flowering, and won't. It has at times had guano and other manures applied to it, and in the autumn of 1859 it was root-pruned, but nothing has the least effect on it—it resolutely refuses to bloom. There are three or four small standard Pear trees in the same garden that are annually loaded with blossom. What can be the cause of this? *Binswood, May* 1. [We presume that the roots are down in the clay, beyond the reach of root-pruning. The tree is evidently expending on leaves the power that should be directed towards producing flowers. Perhaps you can *undermine* it and introduce a bed of concrete beneath the main roots.]

Oaks.—Having heard frequent objections made to the planting of Oaks on account of the supposed slowness of their growth, I think it may interest some of your readers to know that I was told by a gentleman residing in Norfolk, that in the year 1818 he sowed several acres of land with Acorns in rows, and ploughed them in. He never neglected to thin out the young plants when they appeared to require more air and room. The trees are very healthy and growing rapidly, having gained such size and height that now and for the last two years the rooks have taken possession of them from a neighbouring rookery, and are rearing their young upon them at this moment. The planter has certainly attained more than the scriptural age of man, but has not yet reached the four-score years of which it is written, "Their strength is labour and sorrow." *One of your Readers.* [Where did this happen?]

Rookeries.—Two months ago I placed two rooks' nests in a tree which rooks frequented, and which they have taken to; they are now sitting on eggs. I am advised, if I wish to establish a rookery, that I must shoot three or four of the young ones, but no reason can be assigned by my knowing adviser for what appears to me an absurdity. Will any of your readers be kind enough to enlighten me, and say if there is anything in it? *Corrus.*

Lilium giganteum.—At the seat of Miss Player, Ryde House, Isle of Wight, a Lilium giganteum of the following dimensions is now in flower, viz:—height, 8 feet; girth of stem, 7½ inches; leaf, 31½ inches by 10 inches; number of leaves, 26. The plant is growing in a small tub in the conservatory. *A Subscriber.*

Foreign Correspondence.

Cinchonas in India.—In your columns of March 2, I observe you ask a question relative to Mr. Markham's Cinchona plants. With the exception of two cuttings they are all dead. In justice to Mr. Markham, however, I must inform you that we have obtained some supplies of seed from Mr. Markham, many of which are now germinating in the Ootacamund Government Gardens under the charge of Mr. McIvor, and there is every probability of some of the finest kinds of Quinine-yielding Cinchonas being naturalised on these fine hills. Mr. Cross is reported to be at Calicut with 15 Wardian cases of Cinchona, all in good order; it is to be hoped that they will reach this in a healthy state. *J. R. Morgan, Capt. Act. Conservator of Forests, Octacamund, April* 24.

Societies.

Royal Horticultural: *May* 14 (*Floral Committee*).—Young plants in a growing state of the new Japanese Conifers, Pinus densiflora, Retinispora pisifera, and R. obtusa, were exhibited on this occasion by Messrs. Veitch; and along with them dried specimens of these plants, all of which were, as they deserved to be, objects of great interest. The same establishment also exhibited an extremely pretty dwarf Pelargonium named Mrs. Ponsonby Moore; it had rich bright crimson flowers with jet black spots on all the petals, the two colours producing a striking yet agreeable contrast; for this a label of commendation was awarded. From Messrs. Veitch likewise came a sweet-scented violet and white double Petunia named inimitabilis fl. pleno, for which a first-class certificate was awarded, and a similar mark of distinction was also conferred on Pimelea elegans, a new white-flowered kind from the same collection. Mr. Kendall, of Stoke Newington, contributed a collection of dwarf "Tom Thumb" Cinerarias, to one of which, a rosy-flowered semi-double kind called Eclipse, a first-class certificate was awarded; it appeared to be a variety especially well suited for the ornamentation of small vases. From Messrs. Lee, of Hammersmith, came Sisyrinchium versicolor, Luculia Gardneri, a Phyllanthus like plant with little grey blotched leaves, and Arundo conspicua, a tall flowering Reed resembling Pampas Grass, but not so handsome. Mr. Torbron showed Pelargonium Alice, a lilac kind thought to be useful for forcing. Cut blooms of Pansies came from Messrs. Downie & Laird, and a few profusely flowered Azaleas from the Society's Garden at Chiswick. Some interesting subjects furnished by Captain Trevor Clarke arrived too late for examination.

May 14 (*Fruit Committee*).—From the Rt. Hon. the Earl of Ducie came a dish of Oranges remarkable for their size and fine appearance; on being cut they proved to be without seeds and to be full of juice, which was sweet and refreshing. They had been imported, we understood, from Buenos Ayres. Examples of Runner Beans from Piedmont were shown by Capt. Clarke, and a collection of Apples, still in an excellent state of preservation, by Mr. Gardiner, Eatington Park, Stratford-on-Avon. From the garden of the Society came various kinds of Strawberries in pots, to one of which, Eclipse, was awarded a first-class certificate. Under the same treatment the different sorts named below ripened as follows, viz.:—Highland Mary (Cuthill's), May 14; Black Prince, May 1; Richard II. (Cuthill's), May 14; Eclipse (Reeve's), May 7; Princess Alice Maude, May 7; Keens' Seedling, May 10; and May Queen (Turner's), April 28. It will thus be seen that as far as mere earliness is concerned, the last must be placed first; in point of flavour however it was deficient. A very dark coloured promising looking seedling was shown by Capt. Trevor Clarke, and some well fruited plants of other kinds by Mr. Cunningham, the Palace, Fulham.

May 14 (*General Meeting*).—The Right Rev. the Lord Bishop of Winchester in the Chair. On this occasion the following ladies and gentlemen were balloted for and duly elected Fellows, viz.:—

The Right Hon. Lord Chesham, Miss K. M. Edmonds, Miss Clara Ward Edmonds, J. Cole, Esq.; C. F. White, Esq.; Mrs. W. T. Fawcett, J. Jones, Esq.; Mrs. Stuart Lane, F. J. Ellis Jervoise, Esq.; Lord Rokeby, Lady Rokeby, W. Henry Domville, Esq.; G. T. Saul, Esq.; C. Ward, Esq.; Mrs. Jacks, Gilbert Heard, Esq.; Ralph W. Elliot Forster, Esq.; Mrs. Nathan, Mrs. G. H. Foster, G. Greenall, Esq.; Mrs. J. Pritchard, Lady Davis, Miss Davis, Miss F. Davis, S. Mottram, Esq.; J. Holland, Esq.; J. Henry Dart, Esq.; J. Cumming, Esq.; Rev. J. G. C. Fussell, J. Nicholson, Esq.; J. Boyd Kinnear, Esq.; C. Latouche, Esq.; Earl of Cawdor, T. R. Taylor, Esq.; The Lady Elizabeth Stucley, Mrs. Smith Barry, Lieut.-Colonel T. F. Blois, William Coulson, Esq.; Mrs. J. A. Mrs. Bray, J. P. Gassiot, Esq.; A. P. Pickering, Esq.; Mrs. Pickering, Sir C. Lindsay, Bart.; Major Straith, Rev. Sir Nicholas Chinnery, Bart.; J. Green, Esq.; Mrs. Green, Miss A. Green, Wm. Harrison, Esq.; Ardaseer Cursetjee, Esq.; Sir H. Rawlinson, R. M. Lynch, Esq.; W. J King, Esq.; Mrs. W. J. King, C. King, Esq.; Miss Edmonds, Lieut.-General Sir Richard Doherty, Mrs. Anna Murray, Mrs. Reid, Mrs. J. Alderson, J. Holt Beever, Esq.; A. Smith, Esq; Mrs. Coakley, Hon. Colonel P. Cust, C. E. Kingston Butler, Esq.; William N. Spicer, Esq; Mrs. M. Spicer, D. Wilson, Esq.; W. Laird, Esq.; C. W. S. Pinney, Esq.; Lady Albrida Vernon, Mrs. Dorington, P. Rose, Esq.; J. Dobie, Esq., R.N.; Mrs. S. Macnaghten, J. Reeve, Esq.; Earl of Lanesborough, W. P. Pickering, Esq.; C. P. Cooke, Esq.; F. Crossley, Esq., M.P.; Miss Coleman, Miss Firmin, A. Davis, Esq.; J. D. Padgett, Esq.; Miss Gore, A. Leith, Esq.; Mrs. Baldock, W. G. McMullen, Esq.; J. G. Brand, Esq.; J. W. Burmester, Esq.; Rev. E. R. Bayne, J. H. Durham, Esq; Mrs. C. Lloyd, T. F. Twemlow, Esq.; Mrs. T. Martin, Miss C. Sharpe, Miss L. Sharpe, E. Bates, Esq.; H. Hill, Esq.; J. J. Gosset, Esq.; Miss J. Morris, A. Smith, Esq.; J. R. Gardiner, Esq.; P. Badcock, Esq.; H. Pinney, Esq; A. Moss, Esq.; F. Wilmot, Esq.; Miss A. Macdonald, R. B. Oakely, Esq.; Mrs. Edmonds, J. H. Lermitte, Esq.; J. Durham, Esq; Mr. W. Clarke, J. B. Haig, Esq.; F. J. Graham, Esq.; Miss M. Sloane, Miss F. Paul, W. A. Smith, Esq.; W. Scarswell, Esq.; Mrs. G. M. Gifford.

A ballot then took place for plants to be distributed, the names of which have already been given in our advertising columns; of the names of winners of these it was announced that a list would be published in the next number of the Society's Proceedings.

Linnean: *April* 18.—The President in the Chair. Henry Duckworth, Esq., and David Walker, Esq., M.D., were elected Fellows. The following papers were read:—1. "On the circulation of the blood in Pegea, bearing on the question of a lining to the vascular system of the Tunicata;" and 2. "On the Physiology of the Pallial sinuses of the Brachiopoda," both by J. D. Macdonald, Surgeon R.N. 3. "Extracts from Letters addressed by Gideon Lincecum, Esq., to Charles Darwin, Esq., on the habit of the 'Agricultural Ant' of Texas." The first letter was dated Long Point, Texas, Dec. 29, 1860. The species of Formica, which Mr. Lincecum named Agricultural, was stated to be a large brownish red ant, dwelling in paved cities, a farmer thrifty and healthy, and diligent and thoughtful, making suitable and timely arrangements for the changing seasons. When he selects a situation upon which to locate a city, if on ordinarily dry land he bores a hole, and surrounds it with a low circular mound 3 or sometimes 6 inches high, its outer limits 3 to 4 feet from the entrance. But if the location is on low flat land liable to inundation, though the ground may be perfectly dry when he does the work, he elevates his mound in a sharp cone to the height of 15 or 20 inches, sometimes even more, and places the entrance near the apex. Around this, he clears the ground of all obstacles, and levels and smooths the surface to the distance of 3 or 4 feet from the gate of the city. On this space not a spire of any green thing is permitted to grow, except a single species of grain-bearing Grass, which having planted he nurses and cultivates with constant care, cutting away all other Grasses and weeds that may spring up. The cultivated Grass grows luxuriantly, producing a heavy crop of small white flinty seeds, which under the microscope very much resembles the Rice of commerce. When it gets ripe, it is carefully harvested, and carried by the workers, chaff and all, into the granary cells, where it is divested of the chaff and packed away, the chaff being taken out and thrown beyond the limits of the cleared space. In wet weather these stores are liable to become damp, and to sprout and spoil; and if this occurs they bring them out to dry on the first fine day, carrying back all the sound seeds, and leaving the sprouted ones to waste. Mr. Lincecum stated that in the sand beds overlying portions of rock in his Peach orchard there were five cities of these agricultural ants —evidently quite ancient cities—which he had observed for 12 years. The cities were invariably planted at the proper season with the ant Rice, and it was accordingly seen springing up in the farm circle every year about the 1st of November. He maintained that there can be no doubt of the fact, that the peculiar grain-bearing Grass was intentionally planted. In a subsequent letter, dated March 4, 1861, replying to this question from Mr. Darwin: Do you suppose the ants plant seed for the ensuing crop? Mr. Lincecum replies—I have not the slightest doubt of it. I have at all seasons watched the same ant cities during the last 12 years. I visited the same cities yesterday, and found the crop of "ant Rice" growing finely, exhibiting the signs of high cultivation. We have, he continued, not only agricultural ants in Texas, but a species that is a regular horticulturist. These plant with shade-trees the mounds of sand thrown out from their cells and extensive tunnels. They cannot stand our summer sun, nor travel over the unshaded plains to bring in provision, and hence the necessity of tunnels

or underground passages to the trees and patches of herbaceous plants that yield the leaves upon which they subsist. The excavations sometimes extend outwards 400 or 500 yards. To allow sufficient space for carrying a piece of leaf through it as wide as a dime, or sometimes larger, the tunnel is generally an inch in diameter, terminating most commonly under a shady tree, or in a garden or corn field. When they enter a garden in this way they seldom fail to ruin it, all kinds of fruit trees, flowering shrubs, and garden vegetables being trimmed of their leaves.

May 2.—The President in the chair. Andrew Murray, Esq., Robert Hogg, Esq., LL.D., and John Martin, Esq., were elected Fellows, and M. Isidore Geoffroy St. Hilaire, a Foreign Member. J. E. Howard, Esq., exhibited specimens of Cinchona Pahudiana from Java, and made some remarks upon the plant; he also read a portion of a letter dated Torquay, April 29, 1861, from C. R. Markham, Esq., on the cultivation of the various species of Cinchona in Southern India. Mr. Markham stated that he had arrived in England from India on the 26th, after examining and reporting upon all the hill districts south of Bombay as sites for Cinchona plantations. "I am sorry to say," he writes, "that nearly all the plants brought out by me died after I last wrote to you. Only eight retained life when I left India, and you may imagine the time of distress and anxiety I have passed. However, all is well that ends well, and I am rejoiced to say that nearly all the valuable species are by this time safely established either in India or Ceylon. Pritchett's seeds are at last coming up very well in the Neilgherries, as well as Spruce's; and I passed Cross's collection of red-bark plants at Aden in excellent condition, as well as six Calisayas. By this time they are safely established. Dr. Anderson has also landed three Calisaya plants in good condition at Ceylon." The following papers were read:—1. "A letter from Dr. John Kirk to Sir William Hooker, from the Zambesi Expedition." 2. "A letter from Dr. Thomson to Dr. Hooker on some plants collected at Aden." 3. "Note on Omphalocarpon procerum,' by G. Bentham, Esq. Mr. Bentham exhibited specimens gathered by Mr. Mann on the Cameron river, in West Tropical Africa, which from their similarity in general aspect, in foliage, and in the remarkable fruit-growing sessile on the main trunk, he had no hesitation in referring to the Omphalocarpon procerum of Pal. de Beauvois, although the details of the flowers proved to to be very different from what De Beauvois had figured. Mr. Bentham found the flowers, which were females only, to consist of five orbicular concave sepals about three lines in diameter, the two outer ones being very thick, five petals of similar size and shape, but thinner, and slightly connate at the base, where they were also united with the base of the barren filaments, which are numerous and short, the inner ones united in five laciniate scales. The ovary was stated to be conical with a thin sessile disc-like terminal stigma, very minutely toothed. The tree was referred by Mr. Bentham to the Ternstrœmiaceæ, instead of the Sapotaceæ, but its precise position in the order could not be fixed in consequence of the absence of male flowers. 4. "On Rope made of Tree-mallow Fibre," by John Hogg, Esq. The rope, which was made of the fibre of the bark of the Lavatera arborea, and of which a portion was produced, was strong though coarse in texture, and suited to many ordinary uses. The rope-maker who prepared it, did not think the fibre was capable of forming the finer cordage, or of receiving a bright polish like Hemp fibre, but he considered that as it became stronger and tougher by immersion in water, it would probably be of use for water or ship purposes. The bark gave out a great deal of mucilage in its preparation, and it was thought it might prove serviceable in the fabrication of paper. 5. "Note on an Egg within an Egg," also by Mr. Hogg. In a common hen's egg a second one of smaller size was found embedded, its external covering being white and soft. The enclosed egg measured 9-16ths of an inch in its longer diameter, and about 7-16ths in its shorter diameter, and contained a globular yolk. 6. "On the Floral Structure of Osyris peltata," by E. de Crespigny, Esq. After describing the structure of the flowers, which are diœcious, the author remarked that the plant must be removed from the Sandal-wood tribe, where some authors place it. At the same time he regarded it as having nothing in common with Euphorbiaceæ, where others refer it, except its diclinous flower, and imperfect perianth; and suggested that it might be referred to the Urticaceæ, to which it bears a strong resemblance in many respects, but differs in the oblique or heterotropal position of the embryo. The tree was described as being generally of small size and readily recognised by its peltate leaves on longish terete footstalks, furnished with varied leafy stipules.

Botanical of Canada, *March 8th*, 1861.—The Very Rev. Principal Leitch, D.D., President, in the Chair. About 200 members and visitors were present. Numerous donations were announced. Prof. Dickson, M.D., exhibited beautiful specimens of marine Algæ collected on the coast of Australia by Samuel McGowan, Esq., Government Superintendent of Telegraphs. An extensive collection of specimens illustrating the Flora of Belleville, C.W., was arranged for exhibition by Mr. McCoun. Mr. Grafton exhibited a singular variety of Indian Corn from China. The following papers were read:—

1. Note on the Genus Graphephorum, Desv. By Asa Gray, M.D. The author notices the discovery at Rivière du Loup, Lower Canada, of a Grass conspecific with one described in his "Manual" from a single panicle under the name of Dupontia Cooleyi. The discoverer, Dr. Pickering, suggested to Dr. Gray that it might be the obscure Aira melicoides of Michaux, a Grass known only from the specimen preserved in the Michauxian herbarium, upon which specimen Desvaux and Beauvois had characterised the genus Graphephorum. Dr. Gray proves the correctness of this suggestion. Thus a long lost species of the North American flora is rediscovered, and a genus which has rested for almost half a century in obscurity and doubt takes its appropriate position, in the author's view including not only its original species but also Dupontia, R. Br.; Arctophila, Rupr.; and even Scolochloa, Link. The genus Graphephorum, as now constituted by Gray, will embrace five species, which are arranged as follows into four sections, viz.:—§ I. (=Scolochloa, Link), 1. G. festucaceum. § II. (=Graphephorum, Desv.), 2. G. melicoides, Beauv., and var. major (Dupontia Cooleyi, Gray). § III. (=Dupontia, R. Br.), 3. G. Fischeri, and var. psilosanthum. § IV. (=Arctophila, Rupr.), 4. G. fulvum. 5. G. pendulinum. All except No. 5 (which may be expected) have already been detected either in British or Russian America. G. festucaceum abounds on the Saskatchewan, and is likely to occur farther south. The paper embraces full details of synonymy, &c., and will be printed at length in the Society's Annals.

2. On the Secretion of Saccharine Matter in the Floral Organs of Plants, and on the Economy of Bees; with the results of investigations on the Sexual Development of Bees. By the Very Rev. Principal Leitch, President. Part 1.

3. List of Plants collected in 1860, on the South and East Shores of Lake Superior, and on the North Shore of Lake Huron. By Robert Bell, attached to the Geological Survey of Canada, Corresponding Member of the Botanical Society of Canada. The species determined by B. Billings, F.B.S.C.

4. List of Plants collected on the Island of Anticosti, and on the coast of Labrador, in 1860. By John Richardson, while accompanying an Exploring Party of the Geological Survey of Canada. The species determined by B. Billings, F.B.S.C.

5. On the Economical Uses of Sticta pulmonaria, Hoffm. By T. A. Drummond, B.A., F.B.S.C. The author alluded to the great abundance of this Lichen in the Canadian woods, and proceeded to give a very full detail of the various uses to which it has been applied in different countries. Samples of the dye which it yields, prepared from specimens collected in the neighbourhood of Kingston, were exhibited.

6. Report on the Hubbard Squash. This was reported upon as remarkably rich in flavour, easily cooked, and much superior in every respect to all other varieties. It keeps well throughout the winter. The only objection is that the outer skin is remarkably hard, requiring the application of a saw or axe before cooking. *G. L.*

Notices of Books.

In *Suggestions for the Exploration of Iceland*, Mr. Wm. Longman urges upon the hardy and fearless members of our famous Alpine Club the fitness of Iceland as a new scene of enterprise. He has been induced to take this step, we will not say because Swiss glaciers are worn out, but because "he believes the members of the Club to be especially fitted to explore those parts of Iceland, which hitherto have seemed too terrible to all who have visited the island." "I have," adds Mr. Longman, "great faith in our Alpine Club. I believe that, if only we steer our course right nobly onward, having faith in ourselves, we shall, by degrees, attract to our body the best of the active, energetic, intelligent youth and manhood of our day: and also show, that we ourselves are useful contributors to that department of knowledge, for which we should feel we are especially qualified,—I mean Physical Geography in its widest sense." So have we; so have all who know the pluck and skill which lead them where the oldest Alpine hunters dislike to venture. By means of a map, reduced from Olsen's large four sheet one, routes are proposed, and the unexplored country represented; and by existing itineraries the way to get through the field are so clearly indicated, that with the aid of well calculated tables of expense, &c., which the author has been at the pains to collect, any one with a taste for adventure may be ready for a start in this very summer. Mr. Longman's "address" is also full of curious matter bearing upon this Icelandic question, and will doubtless command the serious attention of the scientific traveller.

Under the name of *British Birds' Eggs and Nests*, Mr. Routledge has issued a little shilling volume which is sure to become a favourite with the young. The letter-press is from the pen of the Rev. J. C. Atkinson. Of plates there are 12, containing figures of all the more important eggs laid by our native birds, with the exception of those which are wholly white, and even of these a few are given. Altogether, 323 birds are mentioned. We extract the following from the author's Preface.

"Perhaps an Egg-book might be so written as to help such thought and observation as is here supposed, and now and then besides to suggest explanations or lead to investigation or communicate a knowledge of facts such as to illustrate and make clear, and even entertaining or amusing, the every day incidents and facts which fall commonly enough beneath the notice of the moderately sharp eyed and observant nest-hunter.

"The difficulty of making such a book useful to the systematic collector of eggs, however young, is not nearly as great as that of making it interesting to the many, who, though not inspired with the ambition of owning a real grand cabinet, and of arranging its manifold drawers with neatly ordered and ticketed egg-cards, are yet sensible of a real pleasure and enjoyment in noticing the nests and eggs of their numerous 'feathered friends,' and identifying such as may chance to be less familiarly known than the majority of those met with under ordinary circumstances. Faithful description and accurate representation are clearly within our reach, and such description and representation are sufficient in 19 cases out of 20 for the purposes of identification in all instances of usual occurrence.

"The cases in which identification is difficult are of two or three kinds. Sometimes the difficulty arises from the near resemblance of the eggs laid by different allied species, sometimes from the wide discrepancies in the markings and especially in the shadings or tints of eggs laid by the same species; but much more frequently from the doubtful eggs being met with apart from the containing nests, or from want of proper or sufficiently accurate observation of the nests at the moment of discovery. The young egg-fancier should always recollect that the fashion and materials and site of the nest taken in connection with the eggs, will almost always, with the aid of a tolerably accurate and well illustrated book of eggs, enable him to decide without hesitation as to the real owner of the nests and eggs in question; while there are very many eggs, such as the common Wren's, those of one or more of the Tomtits, the lesser Willow-wren, &c., of which specimens may be found so nearly resembling one another in shade and size and spots, that it requires a very nice and experienced eye to allot the several eggs to their certain origin. In such a case as this, recourse must be had to some kind and experienced Oologist.

"A few words on another subject. The author has been gravely taken to task by some of his conscientious friends, for delineating in one or two of his former books, the pleasures and excitements of egg-hunting, or the satisfaction of trying to form a methodical collection. He has been more than once asked Do you really mean to encourage boys in robbing birds' nests? Can you defend such a practice from the charge of cruelty?

"If I thought there was any real or necessary connection between a love of egg-hunting—yes, and egg-collecting, too,—and cruelty, I would not say another word for it or about it. But I am sure that the real lover of birds and their nests and eggs is not the boy who is chargeable with those torn and ruined nests—'destroyed' as they may well be styled—which grieve one as he walks along the lanes and hedge sides. If the nest is taken, or rudely and roughly handled, or the eggs all plundered, there is cruelty: for in the one case, the poor parent birds are warned by their instinct, if not their intelligence, to forsake their treasured charge: in the other, they suffer from pitiless robbery of what they most love. But if the parent bird be not rudely and repeatedly driven from her nest,—if the nest be not pulled out of shape, or the containing bushes or environing shelter be not wilfully or carelessly disturbed—if two or three eggs are still left for her to incubate, there is, so far as human observation can reach, no pain, or concern, or uneasiness, to the little owners from the abstraction of one egg or more, and, therefore, of course, no cruelty in the abstraction. The legitimate pursuit of sport in the stubbles and Turnip fields, or on the open moor, does not differ more widely from the cruel proceedings of the cold blooded, hard-hearted slaughterer of his dozens of Rock birds) many of which are always left to die lingeringly and miserably), than the object or manner of action of the true lover of birds and their ways and nests and eggs, from the ruthless destruction of every nest and its contents which may happen to be met with by some young loutish country savage."

Van Houtte's Flore des Serres et des Jardins, &c., is steadily and quickly making up its leeway. We have now before us Nos. 39 and 40 of the new issue, both produced in the month of April. As usual the illustrations are such as do honour to Belgian art; the letter-press is copious and varied, and the short cultural directions, which are from the experienced pen of Mr. Van Houtte himself, give the work especial interest with plant growers. Among other subjects of interest in the Parts before us are some remarks upon the subject of ornamental Grasses. It appears that there has been raised on the Continent, as is thought from seeds collected in Central America by Warczewitz, a beautiful Grass to which has been given provisionally the name of *Andropogon formosum*; but as it does not appear to have flowered, the fitness of the name is quite uncertain. It is described as not only being ornamental in the highest degree, but absolutely magnificent. "It forms a fine tussock of straight stems as thick as the finger,

solid and pliable as steel, and from 2 to 5 yards (meters) long. The leaves are a fine bright green, striped and ribboned with white, a yard or yard and half long, and not quite an inch broad. These noble proportions are however only acquired when the plant is in the open ground in rich soil carefully prepared; it then becomes really admirable, especially if standing by itself on a lawn." Unfortunately the plant is not hardy, although it thrives out of doors in summer. In winter it must be taken up and housed. The writer of the remarks here quoted adds a few words about other new ornamental Grasses now in vogue on the Continent. In the first place there is the great *Metake Bamboo* from Japan, which is said to grow as high as a forest tree; then comes *Hordeum jubatum*, whose great red plumes form a charming contrast with the snow-white spikes of *Pennisetum longistylum*. *Elymus glaucus* is also praised as a decoration of rock-work and steep banks, and *Agrostis nebulosa*, whose cloudy panicles furnish in bad weather, when dried, a capital material for making up bouquets. We hope to see, even in this season, good examples of such Grasses in the Royal Horticultural Garden in South Kensington or Arcadia, as we hear that the district is to be called.

Garden Memoranda.

CONSUL SCHILLER'S GARDEN AT HAMBURGH.—One large house was wholly occupied with the best sorts of variegated-leaved Begonias, and a few other conspicuous plants interspersed among them, the whole forming quite a picture of beautiful foliage, as well as a perfect specimen of good cultivation. The following named sorts were rather remarkable among the mass:—Madame Schiller, Boissier, Prince Troubetskoy, and Bullata. Not a decaying or blotched leaf was visible on one of them, which is rarely the case in groups of this sort; and on considering the matter afterwards, it occurred to me the perfection they were in might be partly owing to the conservatory being roofed with double sashes, which would prevent the external moisture from entering so readily, as well as the internal vapour from condensing, so as to fall in drops from the roof. Among the Orchids were many rare kinds, and I have seldom seen so large a number in bloom in one establishment at the same time. Four, if not five, species of Phalænopsis were flowering, and among them the rare Phalænopsis Schilleriana, which I had not previously seen; another curious plant, named in honour of the same gentleman, viz., Selenipedium Schillerianum; also, Miltonia Regnelli, Masdevallia maculata, Epidendrum glumaceum, Pescatorea cornuta, Dendrochilum arachnoideum, Trichopilia suavis, Stanhopea ecornuta, &c. The species of Vanda, Aerides, and Saccolabium, were both numerous and fine. *Moore's Report to the Royal Dublin Society.*

WEST HILL HOUSE, HIGHGATE, THE RESIDENCE OF R. BARCLAY, ESQ.—We visited this place the other day for the purpose of inspecting its Mushroom beds, from which Mr. Young, the gardener, annually raises prodigious crops, examples of which have been shown at our different floral exhibitions this spring. Of the appearance of these beds some idea may be formed when we state that from one 12 feet long and 8 feet wide were gathered as many as 160 lbs. of Mushrooms between October 7, 1860, and February 22 this year. Other beds are also equally productive, though all of them are without the means of being warmed artificially. They merely occupy a dry dark cellar under the dwelling-house, where no hot-water pipes or other mode of heating is employed. Yet with the thermometer down as low as 40° they remained unharmed. The usual temperature, however, ranges from 48° to 55°. The beds are formed of short dung from the stables, 16 inches or so in depth. Previous to using it the dung is thrown into a heap to heat and get rid of its superfluous steam and moisture; it is then spread out for a day or two to dry and cool; after that it is thrown together again for a few days more, and then it is made up into a bed. In forming the latter, however, care is taken to have it made very firm by means of treading or beating, and as soon as the heat has risen and declined it is spawned with Cutbush's Milltrack spawn, of which half a bushel is sufficient for a bed 10 feet square. This, broken into pieces about the size of small Apples, will, placed just in the dung, and firmly covered 2 inches deep with any good garden soil, produce Mushrooms of first-rate quality in six weeks in a temperature of 50°. Beds thus treated never fail to bear satisfactorily, not only in regard to quantity, but size, many of the specimens weighing four ounces each, and excellent in flavour.

It will thus be seen that Mr. Young's plan of growing Mushrooms in cellars is worthy of imitation; especially in places—and there are many—where there is no proper Mushroom house, and even where there is, empty cellars might thus be turned to profitable account.

In glass houses were variegated Begonias, Ferns, and other plants remarkable for the beauty of their leaves; and one house, a span-roofed one, contained a remarkably fine collection of Fuchsias, many of the plants being 7 and 8 feet high, perfect pyramids of flower from top to bottom. These are pruned hard in in the autumn, and, after being repotted and started into growth, are kept constantly stopped until handsomely shaped specimens are produced, when stopping is discontinued, and the plants are permitted to push into bloom, which under kind treatment they soon do, and continue in beauty for many weeks together, forming useful subjects for cool greenhouse or conservatory decoration.

Among Cucumbers, a Seedling raised by Mr. Young seemed to be an excellent variety; where planted out along with and treated the same as Horwood's Favourite, it had fruit on it quite twice the size of that of the latter, and equally plentiful.

In the open ground the effects of winter may yet be seen in the form of a dead Pinus insignis, about 25 feet in height, in an open situation on the lawn, a dead Jaune Desprez Rose, which has stood unprotected and unhurt for the last 15 years; and a dead Magnolia grandiflora on the side of the house, where for years it has flowered every season most profusely. Bays are browned but not killed.

Some beds of Tulips in a sheltered corner of the lawn (which is kept in beautiful order by means of one of Shanks' mowing machines) are now extremely gay, especially Rex Rubrorum, whose glowing red blooms measure quite 5 inches in diameter, and are unusually double. Tournesol is also good. In other beds were Wallflowers, which have been gay for some weeks past, and will continue so till they are displaced by the usual summer bedding plants.

Fruit crops out of doors promise to be all that could be desired, with the exception of Peaches, which are thin, and appear to drop more than usual this season.

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c.—Now that the weather has decidedly changed for the better the conservatory should be relieved of all superfluous stock, for the reception of which cold pits and Tiffany houses will be found extremely useful. Nothing therefore will be required in show houses or structures of that kind but to carry out a cleanly system of cultivation and to introduce specimens in flower from other houses. Keep the atmosphere as moist as circumstances will admit. Ventilate thoroughly, and shade with thin canvas during bright sunshine. Attend to plants for autumn and early winter decoration, such as Japan Lilies, Chrysanthemums, Scarlet Salvias, Tree Carnations, and things of that sort. Give them plenty of pot room, good rich compost, a moist atmosphere, and plenty of space for the proper development of their branches and leaves. Selago distans is a useful plant which should not be forgotten; it flowers freely and requires nothing beyond a cold pit to grow in. Epacrises, winter blooming Heaths, and Cytisus should likewise be cultivated in quantity, for few plants surpass them for winter decoration. The atmosphere of plant houses can scarcely be kept too moist at this season; therefore sprinkle every available surface frequently, and syringe growing stock lightly twice a day during bright weather.

FORCING-DEPARTMENT.

PINERY.—Shift succession plants as they require it, and keep up a moist growing heat for them, varying from 70° at night to from 80° to 90° during bright days. By all means avoid too much bottom heat. Give air freely when the weather is fine; but avoid draughts, which have a tendency to brown and otherwise injure the plants. Water fruiting stock occasionally with liquid manure. All plants intended for winter fruiting must soon have their final shift, and be afforded a warmer drier atmosphere, in order to induce them to start. Syringe, however, occasionally, and shut up early in the afternoon.

VINERIES.—In the case of fruit intended to be kept as long as possible, the berries should be thinned, so that they will hardly touch each other when fully swelled, for it is scarcely possible to keep Grapes through the winter except they are severely thinned. Be particularly careful of the foliage of Vines intended to furnish a late supply of Grapes, and if plants must be grown in the house, see that they are not infested with black thrips or red spider, for if either of these pests is allowed to gain a footing on the Vines, the foliage will probably be greatly injured, and then there will be no chance of keeping the Grapes in good condition for any length of time after they are ripe. Muscats must be encouraged with a brisk temperature while setting.

PEACH HOUSE.—Use means to eradicate insects, if any, from the early house; the trees should be perfectly free from them before the lights are removed. Syringe copiously to destroy red spider, dust freely with sulphur for mildew, and smoke with tobacco for green-fly.

CHERRIES.—Reduce the moisture when the fruit begins to colour, and increase the heat a little to accelerate the process of ripening. Keep the roots well supplied with water. When the fruit is gathered remove the trees to a shady situation out of doors.

MELONS.—Still keep up a good heat in dung beds by means of linings. Give air freely. Sprinkle late varieties overhead early in the afternoon before closing up the frames; a little air may be left on during warm nights if the bottom heat is brisk. Keep the shoots thin and shade lightly if the weather should become very dry or hot.

CUCUMBERS.—Attend to watering and thinning out superfluous shoots. If in frames, and the atter are small, they may be raised by placing bricks under the corners so as to allow the shoots to run outside.

FLOWER GARDEN AND SHRUBBERIES.

Although the weather has now become warm, we would not advise tenderer kinds of bedding plants to be turned out for eight or ten days yet; in the meantime, however, see that they are kept in a healthy growing condition. When planted out, the benefit of forming little basins round each plant will be readily seen, more especially in the event of dry weather. Let the young shoots on all old Fuchsia stools be thinned out to five or six. Attend diligently to standard Roses; constant disbudding is necessary at this period; also keep down suckers. Let every attention be paid to propagating reserve stock to fill gaps, and let those already rooted have kindly cultivation forthwith, in order to be ready to fill blanks when wanted.

HARDY FRUIT AND KITCHEN GARDEN.

In order to have a good and constant supply of Endive a sowing should now be made. Endive is generally sown too thickly. Another good sowing should be made in the first week of July, and a third towards the middle, after which the plants will not attain full size. As soon as the plants are a few inches high some mow the tops of the leaves off with a scythe, cutting about one-third of the leaves away. This they do to stiffen the plants and cause more heart to develope itself; it also enables them to bear transplanting better. A good breadth of dwarf and compact Cabbages may soon be sown for early Coleworts; also a bed of Horn Carrots. This is a good time for a liberal sowing of Turnips; the Dutch or Stone are useful sorts for the kitchen garden. Prepare for Leeks by heavy dressings of manure, also for Celery.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending May 16, 1861, as observed at the Horticultural Garden.

May.	Moon's Age.	Barometer.		Temperature. Of the Air.			Of the Earth		Wind.
		Max.	Min.	Max.	Min.	Mean	1 foot deep.	2 feet deep.	
Friday 10	1	29.678	29.649	52	38	45.0	48½	46	E.
Satur. 11	2	29.573	29.539	50	44	47.0	49	46	E.
Sunday 12	3	29.896	29.615	60	41	50.5	49½	46	N.
Mon. 13	4	30.260	30.125	53	27	40.0	51	46½	N.E.
Tues. 14	5	30.366	30.287	71	40	55.5	50	46½	N.W.
Wed. 15	6	30.324	30.174	73	41	57.0	52	48	N.
Thurs. 16	7	30.184	30.044	78	45	61.5	54	48½	N.W.
Average..		30.040	29.919	62.4	39.4	50.9	50.4	44.8	

May 10—Cold, with uniform haze; overcast and cold, rain at night.
— 11—Heavy and constant rain; lightning at night.
— 12—Uniform haze; showery; overcast.
— 13—Overcast; clear and cold at night; frosty.
— 14—Fine; very fine; clear at night.
— 15—Very fine throughout.
— 16—Fine; exceedingly fine; thunder 5—6 P.M., followed by heavy rain.

Mean temperature of the week, 1½ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending May 25, 1861.

May.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds.
Sunday 19..	66.1	43.5	54.8	12	0.50 in.	[illegible]
Mon. 20	66.1	43.4	54.7	17	0.64	[illegible]
Tues. 21..	66.0	45.0	55.5	15	0.36	[illegible]
Wed. 22..	65.5	43.3	54.4	16	0.30	[illegible]
Thurs. 23..	67.6	45.5	56.5	11	0.53	[illegible]
Friday 24..	68.2	44.6	56.4	11	0.54	[illegible]
Satur. 25	66.5	44.5	55.5	15	0.64	[illegible]

The highest temperature during the above period occurred on the 2[illegible] 1847—therm. 89 deg.; and the lowest on the 25th, 1839—therm. 2[illegible] deg.

Notices to Correspondents.

APPLE AND PEAR TREES: *A G.* It is too soon to prune [illegible] the former are not even growing "at this time of [illegible] All you can now do is to pinch any Pear shoots [illegible] threaten to become exuberant and rob their neighbours. There must be some mischief at the roots of your Calceolarias.

BOOKS: *M G.* Glenny's Manual of Practical Gardening.—[illegible] Riley's Translation of Pliny's Natural History (published by Bohn); the best translation we have of a very [illegible] author.—*Q R S.* Lindley's Synopsis of the British [illegible] or Bentham's Handbook of the British Flora; we recommend the latter in preference.

COMMUNICATIONS: *F R C.* Not accepted.

CUPRESSUS LAMBERTIANA: *A Reader* asks whether or not [illegible] have been raised from English grown seed of this tree. [illegible] has a score or more from seed grown at Torquay. We [illegible] no knowledge of the tree having produced good [illegible] although empty cones have appeared now and then.

HYDRANGEAS: *A R.* Dissolve ½ lb. of sulphate of iron [illegible] 2 gallons of water. Apply the solution a little at a time frequently till the effect is produced.

IXIAS: *A R.* Give them a gentle bottom heat and a little [illegible] much, water till they have begun to form their leaves [illegible] then let them have plenty of air and sunlight.

NAMES OF PLANTS: *C B.* 1. Phlox setacea, 2. Genista [illegible] ensis. 3. Coronilla Emerus.—*E A.* 1. One of the forms [illegible] Scolopendrium vulgare. 2. Doodia (or Woodwardia) caud[illegible] 3. Asplenium Adiantum-nigrum. 4. Polypodium [illegible] var. cambricum.—*A Young Gardener.* 1. Anthriscus [illegible] 3. Lamium purpur[illegible] tris. 2. Galeobdolon luteum. You have [illegible] *Jacobson.* They are all named wrong. As you are within a drive [illegible] bad teacher.—*Surrey.* As you are within a drive [illegible] Standish's nursery you had better compare your plants [illegible] those in his possession, which are certainly correctly [illegible] That will be better than sending bits to us.—[illegible] We cannot undertake the office of naming any Cryptogamic plants except Ferns, or Fungi which are proving [illegible] to crops.—*A B C.* Fuchsia arborescens.—*X.* Doronicum [illegible] dalianches.—*C G.* Neither is in a state for naming. If you [illegible] larger seems to be some sort of Cephalotaxus. [illegible] better specimens be so good as to say of what country [illegible] plants are native.

PEAR LEAVES: *W W.* They seem to be preparing to [illegible] forth a brood of the Fungus called Æcidium cancellatum, for which there is no remedy except picking off the diseased leaves and burning them immediately.

SILKWORMS: *F Ll,* 8, *Sackville Street, St. James's, W.* will [illegible] much obliged by any of our Correspondents informing [illegible] "where eggs of the Ailanthus silkworm can be obtained."

STRAWBERRIES: *A B.* Use well established runners. [illegible] autumn; new ones cannot be had at present. Read the [illegible] on the Strawberry. It is impossible to say what ails [illegible] Grapes without seeing them.

ARTIFICIAL MANURES, &c.—Manufacturers and others engaged in making Artificial Manures may obtain every necessary instruction for their economical and efficient preparation, by applying to J. C. NESBIT, F.G.S, &c., Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, Coprolites, &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch.

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For List of Vice-Presidents and Stewards, see next advertisement.

Dinner Tickets, 21s.; Ladies' Tickets, 5s.

To be had of the Secretary, CHARLES SHAW, Esq., at the Office of the Institution, 55, Charing Cross, S.W.; and at the Bar of the Tavern, Great Queen Street, Lincoln's-inn-Fields.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

The ANNUAL MEETING of MEMBERS will be held in the Society's Rooms on WEDNESDAY, May 22, at 12 o'Clock.

H. HALL DARE, Secretary.

12, Hanover Square, London, W.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.

LEEDS MEETING, July 15, 16, 17, 18, and 19.
ENTRIES of Live Stock and Flax close on the 1st of June.
Prize Sheets and Forms for Entries may be had on application to H. HALL DARE, Secretary.
12, Hanover Square, London, W.

The Agricultural Gazette.

SATURDAY, MAY 18, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

WEDNESDAY, May 22	Agri. Society of England .. .. Noon (General Meeting at Hanover Square.)
	Smithfield Club .. 2 P.M. (General Meeting at Freemasons' Tavern.)
FRIDAY, — 24	Penwith, Penzance.

THE lectures at Hanover Square before the Council of the Royal Agricultural Society are a mistake unless they be allowed immediate publication. What good purpose is served by letting 20 people into the secret history just unravelled by the scientific man of any particular branch of agriculture? If they were 20 farmers in extensive business, some service would indeed be done, or 20 representative men from the districts interested in the subject might at once turn fresh knowledge to account, or subject it to those tests which it must in the first place stand before it can be utilised. But 20 noblemen and gentlemen, and these not tenant farmers, were no fit audience for Professor VOELCKER last week, and seeing that we are not allowed to publish his remarks, they might have safely been delayed without injury till their publication in the Journal. There they will probably form the leading feature of the current Number; and the information which has been acquired in great detail on the composition of different kinds of cheese, and of cheese under different modes of making, will then begin to act upon the manufacturer—whereas for the good of the country and for the reputation of the Society such knowledge ought to be set to work at once.

Professor VOELCKER's researches reassert the fact that cheese is made in the *Dairy*. Mr. HARDING, who went into Ayrshire on the invitation of the County Society, to teach the Cheddar cheese manufacture, made it equally well off all kinds of land. It is in the manipulation of the milk, and, provided it be sweet, on that alone, that the cheese depends; and Dr. VOELCKER detailed a number of experiments on the influence of the temperature at which the milk is set for curd, and on the influence of cleanliness in the vessels and the *air* of the dairy, for which we must refer our readers to the pages of the forthcoming Journal. One conclusion he had reached was that the cheese manufacture had deteriorated in this country. It is difficult to determine such a point with accuracy, and we should be inclined to doubt it. The memory is not to be trusted on such a point. This however does not affect the usefulness of researches which make known on what points it really is that the manufacture of the best cheese depends.

SWEDES have attracted considerable attention during the last few years on account of their bad quality both for feeding and keeping, while the weight per acre has also been light. The Royal Agricultural Society has had this question pressed on its attention, and that body has talked of having the subject placed in that line of its resources which would assure for it the very best scientific investigation at its command. Nothing authoritative, and at the same time comprehensive and cleverly pointed, has, however, yet appeared; therefore we are left to grope along with only indirect scientific evidence to appeal to, aided by that practical experience and observation which an agricultural occupation gives.

Among practical men, importance enough does not seem to have been given to the time of sowing, or, if so, the prevailing desire to produce an extraordinarily heavy weight seems to have outweighed original and past customs as regards months and times of months; and an early day in May has often had the seed drill at work in it, that the greatest possible length of time for the crop to grow in might be assured. Twenty years ago, when Swedes were not "diseased," we did not find them, in the first week in September, of that height and spread of leaves which made "good laying" for driving birds into. For these last few years however it has been usual then to find good "cover" in Swedes from their leaves frequently being knee-high. Is not the present doubtful character of this crop attributable in a great measure to the present practice of sowing it earlier than its nature will really allow? We once knew a keen practical observer, albeit he was illiterate, who was superstitiously prepossessed in favour of the 12th of June as the day for sowing Swedes on. This practical impression originated in North Essex, and the success that attended it was so favourable that it was cherished by its owner till the day of his death, which happened 12 years since. He would make every preparation, and muster every man and horse to sow every acre he could between early and late hours on the 12th of June. Our experience and observations (also in a southern county) are decidedly in favour of a few days before or after that time, according as to whether the land be heavy or light. The former first, as the plants do not grow so rapidly as on the soils their roots can run into more readily.

The direct scientific evidence we have on the changes which ripening or its checks produce in the juices of plants is of the most meagre kind. Dr. ANDERSON has just published a book on "Agricultural Chemistry," wherein he treats this subject so summarily that it would seem that it has not occupied much of the attention of the "Agricultural Society of Scotland," to which he is consulting chemist. He says of

Pectine and Pectic Acid.—These substances are met with in many fruits and roots, as, for instance, in the Apple, the Carrot, and the Turnip. They differ from the starch group in containing more oxygen than is required to form water along with their hydrogen; but their exact composition is still uncertain, and they undergo numerous changes during the ripening of fruit.

And that is all there is said under that heading! If they are "met with" and it is equally certain "they undergo numerous changes," *what are they?* The history latterly of our root crops, and especially of the Turnip, makes us more especially want to know just what these "numerous changes" in growing Swedes are, and how they are induced by time and circumstances.

The teachings of analogy from other plants will

help us in some measure. When the "flesh" of Swedes has been converted into woody fibre, or a substance nearly akin to it, its powers for healthy growth and increase have come to an end, and the time for its natural decay and decomposition has arrived. When the stems of Corn plants have been converted into woody fibre, from excessive heat and lacking water before the time for them to ripen, they do not renew their own growth when rain and a cooler temperature come, but the sap that has escaped this premature conversion bursts out in the form of new stems. When fruit, as Pears and Apples, is left hanging in the sun and light till it gets somewhat sweet, but not soft and juicy, it never will transform into the quality and flavour of good fruit. Its substance has been converted in part into woody fibre instead of sugar. Fruit so neglected—left till brown from the sun before gathering—often begins to rot on the tree, and will not keep when gathered. Its proportion of sugar is not enough to preserve it.

The self-evident woody character of "diseased" Swedes is no doubt caused by a premature transformation of their juices into that vegetable substance. The disease occurs generally on a light sandy spot of a field when the whole is sown at a proper season. Here the plants start off and grow rapidly till they require much support, both of food and water; neither of which are sufficiently abundant to supply them. Then their growth ceases, and the natural result, rapid transformation of internal substance, commences. If a fresh supply of water come in time, fresh shoots burst out, and a neck, or an imitation of running to seed, is the result. When Swedes are likely to "hang fire," or grow but slowly for a few weeks at starting, as they do sometimes in a hollow, if that place be cool though dry, there they will maintain a steady growth with a green verdure to the end of the season for their growing.

It is perfectly clear that improved implements have allowed land to be earlier prepared, and that sowing Swedes too early has been glided into without thinking of the consequence. Readily soluble and stimulating manures, as guano and superphosphate, have tended also to push Swedes before their proper season. These fertilizers make, at the least, a fortnight difference in the growth of Swedes, as compared with the use of plain farm-yard manure. If a farmer cannot reconcile himself to growing a moderate crop, or as much as will grow in the time when, in an ordinary season, they will maintain a healthy luxuriance and a corresponding quality, then he must resort to two crops in the year, and take Tares, or Rye, or Rape, or whatever may best suit him, or his stock and his land, before growing Swedes. It is the height of folly to aim at too much at once. Especially is this the case when it is attempted to grow an enormous crop of Swedes by sowing very early.

The provisional remedy against woody mat-rooted and long necked Swedes, when they ought to be full of growth, is not to sow them at a time when a hot fortnight in August or September will be sure to produce the result in question.

These remarks will probably induce practical men to review their experience and observations. And they may induce some enterprising chemist to give the subject his closest and cleverest investigation during the coming season. A well digested and intelligible paper on this subject would assure a large measure of popularity for its author.

WE are sure that our readers will be glad to know that the Agricultural Benevolent Institution is at length bearing good fruit, and that on the 1st of May nine male pensioners at 26*l.* a-year, three married couples at 40*l.*, and five widows at 20*l.* a-year, were elected on its roll. Let us not forget to whose energetic benevolence the movement is due to which this result is to be attributed. It is not only for his unwearied reiteration of useful though unpleasant truths, nor for his active discussion of all the agricultural questions of the day, on which, whatever side he took, his exuberant good nature and his genial temper, and his ready speech, made him a most effective agitator, that English agriculture owes its thanks to Mr. Alderman MECHI. We have now, owing to his initiation and laborious advocacy, an institution for the relief of agricultural distress possessed of 4000*l.* funded property and 1200*l.* annual income. How much immediate trouble such an institution can at once relieve, is plain enough from the tabular statement published last week. Let our readers then, especially in those counties which it has already benefited, lend it further help, and extend its power for good by their subscriptions.

ANNALS OF A LIQUID MANURE FARM.

[On Wednesday last Mr Chadwick read the following Paper before the Royal Agricultural Society in Hanover Square. We give the first portion of it this week.]

AT this time agriculturists appear to be speculating on the future of agriculture. In submitting to your examination the results of some practical experience on what was long ago pointed out by the eminent vegetable physiologist De Candolle as one element of the future of agriculture—the distribution of manure or food and water at the same time—allow me to notice the connection of that one element with other elements of its future progress viewed in other than in the common aspects. I wish at the same time to bring under notice some effects on the population as they have been brought under my own observation.

A primary conclusion which my investigations some years ago led me to adopt was, that the physical improvement of the population was more intimately connected with the improvement of agriculture than is commonly supposed by the public at large, or even by agriculturists themselves. The facts collected established three primary conclusions:—1st. In respect to towns,—that all offensive smells from the decomposition of animal and vegetable matter, whilst they indicate the waste of highly fertilising manure, indicate the generation and presence of potent causes of insalubrity and of preventible disease, at the same time that they display a low state of mechanical and engineering and of administrative art. 2dly. As to rural districts; that all offensive smells arising in the farm-yard or in the field from animal and vegetable decomposition denote the preventible loss of fertilising matter, loss of money, and bad husbandry. 3dly. That all excess of moisture on land which hinders the permeation of the air into the soil, and which prevents the chemical combinations of manure, and obstructs the free range of the roots of plants, and by evaporation lowers temperature, is injurious to animal and vegetable life, and is productive to men as well as animals of the diseases attendant on damp, and denotes a low state of agricultural art. I submit that the practical application of these conclusions,—the practical means of which are displayed in long official papers, involves the future profit of agriculture, as well as a great proportion of the sanitary improvements in which I have been concerned.

1. *Land Drainage.*—To proceed in an inverse order with the last category. In the papers to which I refer it was shown that although the first land drainage works were conducted rudely and empirically, yet that the productive results have repaid the expense within 10 years, and of the later and more improved operations in five and even in four. As these land drainage works have made progress, it has been displayed in evidence referred to in your Transactions, which it gave me great satisfaction to have made available by the late Mr. Pusey,—that the health of the population, as well as of animals, increased; that ague and rheumatism in men—the rot in sheep, have diminished. But after all the demonstrations made as to their profitable results, what has been the extent to which the conclusions from that experience have been practically applied? According to the best estimates of the land requiring drainage, not one-tenth has yet been drained, *i.e.*, of the extent of profit derivable from that source of investment, not one-tenth has yet been gained. From particular observations of the results of the drainage of particular districts, an increase of an average of six degrees of temperature and corresponding salubrity of the whole country may be anticipated from the complete attainment of the agricultural future of profit as well as of health on this third topic. But I have further to observe upon this subject that, as experience shows that water is the primary agent for an improved culture,—being the cheapest means of receiving manures, of arresting decomposition and saving waste, of conveying and distributing fertilizers, it will come to pass that all the surplus water (or 10 or 12 inches of the rainfall) which in the drained districts now floods the rivers, will be required to be retained or stored for use on the farm in such manner as will be displayed to you. The object of drainage is not to make land dry, but to regulate its moisture and prevent injury from its deficiency as well as from its excess.

2. *Farm Manures.*—On the second topic, Dr. Voelcker has demonstrated that at least two-thirds of the productive powers of the solid manures are lost or are to be gained by its immediate application, and by the avoidance of waste from decomposition. I think I had proved the waste or the gain available to be greater than that,—or three-fourths of the solid manures; whilst as respects the liquid manures, excepting a small proportion of advanced farms, the loss of the manure throughout the width and breadth of the country, or the gain for the future may be set down as total. And this pecuniary gain from the improved application of the existing farm-yard manures would be almost equivalent to another rental throughout the width and breadth of the country.

3. *Town Manures.*—And then there is presented for exertion the present general almost total loss,—for the future, the almost total gain of the town manures. In places where what I will call the waste of manure (such as is going on by the evaporation in nearly a thousand miles of sewers of deposit and cesspools in this great metropolis), where this waste has been prevented by the abolition of cesspools, there the sickness and death rates have been re[illegible] third. But what has happened? though the [illegible] of houses have been purified, and men, [illegible] children have been saved from premature [illegible] debility and mortality, rivers have been p[illegible] fish it is feared have perished. I have been [illegible] in Parliament as an instigator of such d[illegible] pollution of rivers; but as to the poll[illegible] Thames, I bore with equanimity these rep[illegible] the sufferings of hon. members (when sa[illegible] short time to stenches, which the poor in [illegible] districts have to bear always), for those su[illegible] be proved to have been from their own [illegible] not consulting the evidence laid before [illegible] in not regarding the conclusions from that [illegible] which it was shown how the evil and the incon[illegible] have been prevented. In my report of 1[illegible] sented it as an enormity that manure which [illegible] was equivalent to the annual feed of upwards [illegible] head of cattle, should be thrown into [illegible] To those whose concern is greater for the p[illegible] rivers than of towns, I will stay to offer this [illegible] they should direct their exertions to ge[illegible] sewerage discharged fresh by means of sel[illegible] pipe, house, and street drains and water-clo[illegible] it can be provided for agriculturally [illegible] as in the common method by the putrid [illegible] cesspools and sewers, and drains [illegible] that discharged from most old town[illegible] have to inform them, as also engineers, [illegible] and others who have undertaken to [illegible] sanitary improvement of towns, that there [illegible] difference, of which they have as yet taken [illegible] account, between sewerage which is fresh [illegible] has not entered into advanced stages of dec[illegible] and sewage which has been kept to advanc[illegible] of decomposition, and which is putrid; [illegible] appears that where, by means of sel[illegible] pipe drains, the sewerage is discharged [illegible] fish are increased in quantity and [illegible] quality. At Ely the anglers find their [illegible] the outfall of the new pipe sewers; and [illegible] places drained with self-cleansing pipes [illegible] The principle of the preventive measures [illegible] suggested gained examples of practical [illegible] amples which, though imperfect in themselves [illegible] as conclusive for the principle as was the exam[illegible] tramway opened in 1803 across Croydon Comm[illegible] its powers were tested, and when it was pro[illegible] one horse could draw some 35 tons at a rate of [illegible] an hour, when men of assumed science dec[illegible] the principle could never be worked pro[illegible] declaration which was repeated after the demons[illegible] of a yet quicker and cheaper propulsion by [illegible] Rugby and Watford afford the demonstration [illegible] the sewage of towns may be applied to fertilise land daily and in the cheapest manner, and be a less offensive than top-dressings, placed in [illegible] combination with the soil; that the abso[illegible] and retentive power of the soil, at fir[illegible] monstrated empirically, afterwards scientifi[illegible] Professor Way, is greater than agriculturi[illegible] imagined to be practicable, or than had been [illegible] by Baron Leibig, when he objected to liqu[illegible] that they must be washed out by every [illegible] rain, and Mr. Muspratt pressed upon [illegible] tion of the Baron his patent solid m[illegible] reliance on the varying extent of this [illegible] I have always advised to this effect, in re[illegible] sewerage of towns, as well as the manure [illegible] "Ascertain by trial works, by means of [illegible] and by applying the manure on a given spa[illegible] average land, how much it will absorb; or i[illegible] manure, put a quantity of it in a cask [illegible] with a given quantity of water, four, [illegible] times its bulk, or such as will exting[illegible] and apply it by hand by the water-pot. Le[illegible] cation be under a horticulturist's advice and [illegible] as to times and frequency of application. [illegible] that as a railway, which is only used once a [illegible] very dear instrument, so would be machine[illegible] distribution of liquid manure if you only give [illegible] a year. When you have made such trials [illegible] tested the absorbent power of the soil, and [illegible] be enabled to determine upon the extent of [illegible] you will need, and the frequency of the [illegible] you may profitably make." But I scarcely [illegible] instance of any one troubling himself with [illegible] tative process to save waste, and large c[illegible] have been made on simple hypotheses. Rud[illegible] as the principle has been commonly applied [illegible] the feeding of the plants—which is an art [illegible] known only to the horticulturist, yet the re[illegible] monly attained indicate what appears to [illegible] important element of the future of a[illegible] besides an augmentation of the bulk of produ[illegible] on given areas, the like changes and imp[illegible] in the quality and nutritive proportions of [illegible] that the horticulturist has achieved by car[illegible] altering the whole structure of plants to a[illegible] which was previously beyond conception. At the [illegible] of this question, when it was alleged in the [illegible] water or marsh irrigation, that because the liqu[illegible] fed vegetation was large it was rank and inferior [illegible] lity, against this conclusion I appealed to the [illegible] of a cow; and in Paris to a selected cow, with the [illegible] of a cow; and in Paris to a selected cow, with [illegible] bation, I believe, of M. Dumas, the eminent c[illegible] the question was referred; and was resolved [illegible]

superior quality of the milk yielded. In general the extra quantity of butter yielded is from one-fourth to one-third. The line of recent sewerage irrigation is seen by the cattle selecting the grass which has last been fed. On some liquid manure farms the choice of the best judges, the consumers has been decided in a manner which has been productive of extreme inconvenience. On one small farm the hares and rabbits have been brought upon it in such numbers, "from miles and miles and miles about," to eat the manure irrigated grass, that the farm being in a strictly preserved country, the method of cultivation had to be abandoned. On a manure irrigated model farm set up under the superintendance of Professor Moll, at about 15 miles from Paris, whole armies of rabbits, which it was not allowed to kill, issued from adjacent woods, and ate up the herbage of the liquid manure farm in preference to that of any other.

In France trial works were on my advice adopted by the Imperial Government for the application of sewerage; and whensoever other circumstances, such as the improvement of the water supply and the house drainage, allow of the application of the principle, data have there been gained for applying it profitably and correctly. Now if such a tentative course had anywhere been adopted in England, no doubt the gain, which has I believe everywhere nevertheless been obtained, might everywhere have come up to the sanguine anticipations of profit. Neither the Earl of Essex nor Mr. Walker of Rugby admit themselves to be dissatisfied with what they have already got; but what however have they and others who have extended their pipeage and capital two-thirds beyond what they consider requisite for manure irrigation—what have they proved but that the powers of the soil are at least two-thirds greater than they or any one else anticipated? In this result we have the development of another principle, highly important for the future of Agriculture; namely the saving of roads, of fences, the saving of space, or rent, the reduction of the space requisite for food manufacture, or the principle of intensive and high cultivation on small areas instead of diffused and low cultivation over wide areas. It may yet be doubted whether even they have laid down too much of pipage for an improved agriculture, which shall follow garden culture, and apply the machinery which enables them to distribute plain water equal to a thunder shower at a rate of from 6d. to 1s. per acre; which on the large scale enabled 100 tons to be put on in an hour at a working expense of 1s. 8d. per acre. I have been informed of a number of farms on which the principle is applied successfully; but unfortunately it is those who are known to be most successful who are the least disposed to give any account of their process or the particular means of their success. In one case an interruption occurred with the first occupier of a leading liquid manure farm; a merchant who set up an exemplary model farm, displaying unequalled rates of production in a small area became a bankrupt from other speculations, and loud was the shout upon these occurrences as failures of the principle. That is to say, according to the notions of the objectors he had failed because he saved instead of wasting his liquid manure—had failed because he applied the manure of his farm with an economy of money and time and a productive result beyond anything that had before been done, just as it might be shouted that the railway principle was failure in conveying goods at working expenses of pence instead of shillings—in hours instead of days! To avoid the mistakes which have been made in extending pipes at a rate of 5l. per acre over two thirds more area than is happily proved to be requisite, recourse is proposed by engineers to the old method of submersion, that is to say to a method in which in all but farmed slopes, the establishment charges are from 16l. to 40l. per acre; to higher working expenses, and to a four or five-fold expenditure of manure to obtain the same amount of production, besides creating for the time marsh surfaces which in England, with plain water irrigation, occasion agues in men and rot in sheep, and in some parts of Italy have made the use of that method within six miles of any city to be prohibited. With all the mistakes made, I know no instance of the commercial failure of the pipe irrigation or of fairly conducted liquid manure farms—which your Transactions report are spreading, and which I know are adopted abroad, whilst there are most decisive instances of remarkable success. One cause of obstruction to the progress of the principle, more particularly in its application to the distribution of the sewerage of towns, is the fact, that most of the engineers who have undertaken to apply it, have not fully mastered it, and are not agriculturists or qualified to command the confidence of agriculturists, whilst the agriculturists who see the principle of production, are not mechanists, or competent to avail themselves of the new mechanical appliances which are required. I am now however enabled to submit to the Society the example of the application of the principle of culture to a farm by a gentleman of mechanical attainments, as well as of sound practice as an agriculturist—Mr. James Blackburn, in relation to whom Sir John Forbes, the convener of the county of Aberdeen, gives me high testimony. Mr. Blackburn has given me the results of his experience during six years, and I beg to submit it as an example involving sound and important principle. He has been so obliging as to give me the information in answer to questions which I have put in an old way with me; in which I beg the Society will allow me to submit it to their consideration, point by point. I submit it as an example of what may be extensively done under the second category of our agricultural future, by the saving of the liquid manure alone of our farms by means of skilfully conducted and economical mechanical appliances. I have also corroborative information to submit from Dr. Kirkpatrick as to the experience of the model farm of the Agricultural Institute at Glasnevin, Dublin, and from other places.

MR. BLACKBURN'S LIQUID MANURE FARM.

Before taking a farm yourself, you studied agriculture, did you not?—Yes; under a large practical farmer in East Lothian, about 13 years ago, for about two years. I was previously acquainted with the practice of farming as carried out on my father's estate in the Isle of Thanet. After leaving the East Lothian farm I laid the foundation of the study of agricultural chemistry under Dr. Gregory at the University of Edinburgh, where I also studied physiology and natural philosophy. I had previously had opportunities of studying practical mechanics at a large steam-engine factory.

How long have you had experience of the working of a liquified manure farm?—In 1853 I took a farm and prepared for the application of the liquified manure principle, which I got into operation in the following year.

Will you describe the farm, its situation, soil, and extent?—It is situated on the east coast of Scotland, and within a mile of Stonehaven. It includes 135 imperial acres, some of which are braes and plantation not capable of being tilled by the plough, and leaving 128 acres for tillage, exclusive of the space occupied by buildings. A large portion of the soil, about 40 acres, is of clay too heavy to make bricks of, and requiring an enormous proportion of sand for that purpose. The remainder is partly of a good black loam, resting some on gravel and some on clay; and a moory soil resting on what is called a burning gravel.

Can you state what had been the produce of the farm previously to your taking it?—The gross valued produce of the crops, exclusive of straw, was 632l. 9s. 2d. the year I took it, the average of the Wheat being in that year, and in that county, 71s. 6d. per imperial quarter. There were 33 quarters of Beans then grown from 10 acres, or three quarters, two bushels and a fraction per acre; 32½ quarters of Barley from nine acres, or three and a-half quarters per acre; and 183 quarters of Oats from 52 acres, or three quarters and a-half per acre. The average of the Turnips was from eight to 10 tons per acre; of hay about a ton and a-half per acre. No Wheat was then grown upon the farm, and it was then in every way run out.

You took the farm with the view of applying the liquified manure principle?—Yes, and I took it simply because it presented conveniencies for the immediate application of the system.

Then you got the system into early application?—Yes, I began after the first year, when I laid down the apparatus over the 20 acres of the farm, or that portion contiguous to the farm steading.

The valuation of the farm having been 632l. at high prices, what has been the value of your subsequent average yield at low prices since you have got the farm in what you deem passably fair order?—About 1500l.: that is to say with Wheat at about 48s. per quarter.

To what is mainly due the extra value of the produce you now obtain?—Mainly the use of the liquid manure. The large quantities of cattle food raised by its use on so small a portion of land, and consumed in the stall, afforded me the means of heavily manuring the remainder of the farm.

What is the increased quantity of produce you have obtained upon the liquid manure system on that portion of the farm to which you applied it, as compared with the old system?—On the old system, in that part of the country, where the temperature is low and the climate dry, only one good cut is got and very seldom a second. I used 5 acres of Italian Rye-grass for summer feeding in the house. The following shows my cuttings on the liquid manure system for the first and second years, and for the year 1858:

		Actual results—Ft.	in.
1st cutting	11th June .. .. =	1	10
2d ,, ...	15th July .. .. =	2	0
3d ,, ...	15th August .. .. =	2	0
4th ,, ...	17th September .. =	1	10
		7	8
1st cutting	22d April .. .. =	1	10
2d ,, ...	28th May .. .. =	1	6
3d ,, ...	1st July .. .. =	1	10
4th ,, ...	29th July .. .. =	2	0
5th ,, ...	2d September .. =	1	9
6th ,, ...	20th October .. =	1	10
		10	9
	1858.		
1st cutting	22d May .. .. =	2	6
2d ,, ...	25th June .. .. =	[illegible]	[illegible]
3d ,, ...	10th August .. .. =	3	6
4th ,, ...	17th September .. =	2	[illegible]
5th ,, ...	13th November .. =	1	0
		12	0

Will you state the value of the produce from the whole of the manure irrigated portion?—The produce, as will have been seen, has been constantly improving each year. In 1858, on 9½ acres it was 231l. 3s., besides the valuable stock of manure derived from the consumption of the increased growth. The following is the account of it in detail—

1858.

Produce of 9½ acres of Manure Irrigated Italian Rye-grass.

Cr.	£	s.	d.
Keep of bull through summer	3	0	0
,, ,, 2 cart horses (partial)	4	0	0
,, ,, pony	4	0	0
Cows, butter and cheese	94	9	0
4 cattle feeding	16	0	0
8 calves, increase of value	14	0	0
	£135	9	0
Grass seed sold	109	8	0
,, ,, on hand	2	6	0
Hay	40	0	0
	£287	3	0

Dr.	£			
8 acres water meadow at 6l.	48			
2 ,, Rape	6			
1 ,, Cabbage leaves	2			
		£56	0	0
Total produce ..		£231	3	0

3½ acres yielded besides the manure 79l. 9s. = 24l. an acre.
6 acres of seed in 2 crops returned 151l. 14s. = 25l. 5s. an acre.

In 1860, under the most disadvantageous summer known, the 5 acres of the irrigated portion produced in hay and seed and feeding off the second crop, 148l. 17s. 9d., or in detail as follows:—

1860.

5 Acres of Italian Rye grass Irrigated.	£	s.	d.
Hay sold	18	6	6
Hay consumed	9	3	6
49 quarters 6 bushels, at 42s. per qr. (1st crop)	104	9	6
Light seed	0	8	0
From feeding off	9	10	3
From manure, 30 cubic yards, at 5s. ..	7	0	0
Total produce	£148	17	9

Which equals 29l. 15s. 6d. per acre.

Owing to the excess of rain, a large portion of the hay of the above crop was lost.

In fair seasons, and without any damage, what might you have anticipated from your crop?—In addition to the above I should have realised 50l. or 60l. by the second crop.

Do you find the Italian Rye-grass improveable in condition and habit to adapt it to our climate?—Yes: liquid manuring renders it more hardy.

(To be continued.)

Home Correspondence.

Irrigated Meadows near Edinburgh.—I am informed upon good authority these meadows have been let this year at enormous prices, one lot having realised 40l. per acre. Can any of your readers give further information and say whether they can imagine any person so circumstanced as to be able to derive any profit or advantage from paying such a price for four, or even five, crops of Grass or hay? The question that naturally occurs to me, as a landowner, is—Can I by any means raise a crop equal to that grown upon these fields or one approaching it? My informant, an Edinburgh man, says yes, by pursuing the same system. I reply, my land is situated 3′ south of Edinburgh, 20 feet above the sea, and has undoubtedly a better climate, yet the springs are so late cattle are never turned out before the 13th of May, before which day probably the first crop has been cut on the Scotch meadows. The answer to this is: the soil of these meadows is so enriched that whatever the weather may be the Grass must grow; thus, at this moment the leaves are browned by the frost, yet the plant continues to shoot upwards. My informant adds, however, the irrigation with liquid manure is carried to such an extreme as to have become a nuisance; the authorities of the city therefore propose putting a stop to it. My property is not situated close to a large town, but we have great facilities of procuring all kinds of tillage by water and railroad. I should be satisfied with as many shillings per acre (taking the arable with the pasture land), and should be thankful for any information that would enable me to realise—*Forty Shillings.*

Manures for Grain.—In the interesting remarks upon the results of various kinds of tillage for white crops that have lately appeared, it is stated that by an application of 76 lbs. of nitrate of soda and 168 lbs. of sulphate of soda per acre, an increase of 18 bushels of Oats was realised. Upon referring to the fifth volume of the Royal Agricultural Journal, the soil appears to be upon the limestone. I should esteem it a favour if any practical farmer would inform me whether a dressing of nitrate and sulphate of soda would be profitable upon a clay soil for Oats (the substratum being the new red sandstone), and if so, the proportions. I cannot find the price of sulphate of soda in any dealer's lists. The season is so backward nitrates may be used as a top dressing in the north as late as June, if not then too dry. We have been sowing nitrate of soda at the same time as the Barley was drilled, but a very cold shower falling we have deferred adding the salt. I find, however, upon mixing a strong solution of salt I could only reduce the temperature of rain-water taken from a tank at 45° to 41°, and by the strongest solution water at 60° could not be lowered more than from 4° to 5°. I am therefore inclined to think the maximum quantity of salt usually used upon even cold clay soils does not reduce the temperature of the ground upon which it falls to an injurious extent. Will the reader be good enough to say what is the best hand tillage to use in sowing "seeds" upon a clay soil overcropped

with Wheat and Oats, and deficient in lime, it being desirable to sow the Clover now when common lime cannot be used. *Peculius.* [Sulphate of soda is not likely to be of any service. Nitrate of soda sown 1 to 1½ cwt. per acre, even as late as the middle of May, is likely to be of use to you.]

Turnip Seeds.—Being a dealer in seeds I read with interest your article the other day on Turnip seeds. Wishing to procure my Turnip seeds as true and pure as possible, I often send to various growers to try their sorts. In February last I had three kinds from a grower in Lincolnshire, and some little time since on proving them before sending out I found their per centage in growing was very low, and on complaining of it to the grower he said he did send out his seeds as he grew them, and mine were of last year. I, however, fancy there must have been killed seeds mixed with it, as the White Globe grew only 30 per cent., Purple-top Swede, 70; Lincolnshire Globe, 60. On Saturday fortnight I observed an advertisement in your Paper of Green-top Yellow Aberdeen, proved seed, and on writing about some of it I was told it had been proved and would grow every seed of it. Accordingly, I ordered 2 bushels, and on receiving it found a complete lot of rubbish. I enclose samples of all the kinds for your inspection, and should be very glad of your opinion about them. Now, ought not such parties to be brought to justice, or at all events can I not refuse payment for such articles? I cannot attempt to sell them again, and it certainly is hard for me to pay for an article so very different from what it was represented and sold for. Would you kindly inform me in your Notices to Correspondents if there is not some redress to be obtained from the seller for such barefaced imposition. *A Dealer in Seeds, Brushford, Tiverton, May* 6. [Your sample of Green-top Yellow Aberdeen Turnip seed certainly does not look of first-rate quality, and it is besides much charged with bits of dirt. We shall, however, thoroughly test it, and will let you know the result. If not what it is represented and sold for, we have no doubt you will have a remedy at law.]

The Game Question.—I have a great respect for Mr. Mechi's opinion on many points of practical husbandry, but on the game question he appears to be sadly wide of the mark, which he charges "Bang" with not hitting; whilst, on the contrary, I and many besides are of opinion that the latter has hit the bull's-eye, whilst the Alderman has missed the target altogether! To abate one nuisance by creating another seems rather an Irish mode of proceeding; but what better can we call the plan he recommends of carting to the cover a portion, large or small, of a valuable crop to pamper a destructive and unprofitable race of animals? I protest on principle against any such system, even where the adjacent covers belong to the owner of the farm; but what if they are the property of a stranger, over which the farm tenant has no control nor right of entry, not even by a gap either in the fence or underwood through which to wheel so much as a barrow-load of the good things so liberally and sumptuously provided for "the wild denizens of the forest" by the worthy Alderman? Nor is this an imaginary case; I will vouch for the truth of the following facts:—A young man was once offered a farm in the county of Norfolk. He liked it on the whole, but had a strange misgiving on the game question; the more so as he was no sportsman himself, and his landlord was said to be rather too much so. Determined to have a clear understanding with the latter on a point of so much importance, he openly and unreservedly expressed his apprehensions, and the answer he got was this:—"Oh, if you have any doubt on that point, I will add a clause to your lease, indemnifying you from all damage by game above 10*l*. in any one year." This seemed fair enough, and the lease was signed. At the end of the first year, the injury having far exceeded the stipulated amount, he pointed to the clause as entitling him to the promised compensation. "Well, yes," was the reply; "if you can prove that my game has done the mischief; but how can you do that, when your farm is bounded by a large wood, not belonging to me, and over which I have no control whatever?" This was a poser! But anything rather than law; and so ended his game bargain. "Bang" is perfectly right in stating that hares and rabbits, but particularly hares, are not to be restrained from wandering by cover feeding, however sumptuous and aldermanic. Probably the love of liberty and the necessity of exercise may lead them to prefer a stroll over the fields to constantly skulking in the cover, even with an alderman to cater for them. What were those long hind legs given them for, but to add to their locomotive powers? and where would be the use of them if confined to the limits of a cover? It is "the nature of the beast," and who can control nature? Don't tell me of game doing no injury to growing crops. A very few hares will make sad havoc in a field of either Turnip or Mangels; not so much from what they eat and carry away, as from their nibbling, as if for the mere love of mischief. The aggregate amount of their plunder is, to be sure, hardly worth mentioning, but look at the crop after a pretty severe frost. Every bulb, however slightly marked by either hare or rabbit, is doomed to destruction. So of a growing crop of Wheat, especially on light land, and short strawed; when coming into ear, how frequently do we see patches of many square yards each with the stalks bitten off and scattered about as if in mere wantonness! On the whole therefore, I end as I began, with the assertion that so long as these are their natural habits, no system of cover feeding will effectually prevent the game nuisance. *Samuel Taylor, Gloucester, May* 11.

Foreign Correspondence.

U. S. WISCONSIN: *Margrette, April* 3.—Supposing original information from the West respecting last year's Wheat crop, quality, prospects of supply, &c., may be of some interest to your numerous readers, and residing as I do, and farming also in one of the most fertile parts of the Western Wheat region, I accordingly herewith offer you a few items upon the accuracy of which you can rest entire confidence, the more so as I have no connexion whatever with the corn trade, either here or elsewhere, being simply a producer. From information from threshers, growers, and from personal observation I am confident the Wheat crops of Wisconsin averaged 26 bushels or very nearly per acre, which would make the gross product of this State about 26,000,000 bushels. About one-third of this amount, or 1,000,000 quarters, remains in first hands to-day, part in store at R. Rd. Depots, part at home. The other two-thirds are either finally distributed or in transition eastward in some form. About one-third of the western crop, which was by far the heaviest in yield of any part of the States, as well as the largest we ever had or can for years expect, was injured by wet in the stack from hasty and unskilful stacking, resulting equally from the scarcity of hands, the great haste and wasteful way of stacking, and the unprecedented bulk in straw to be handled. This Wheat, the damaged part of the crop, was most of it necessarily sold very low, and early in the season, both because the producers had no means of drying it, and from the risk of its entirely spoiling by frost if kept till the warm days of February, which as to diurnal, as distinguished from nocturnal temperature, may be considered the opening of Spring in our usual seasons. The balance of the Wheat crop to come forward to your market is therefore of better quality in the main than what you have received from the Western States, and as the driest would of course keep best and be longest kept, you may expect an improvement in the quality of American Wheat from this time forward till harvest.

Though some doubts on the point have been expressed, I believe firmly that the result will show that we have as much Wheat yet to send forward as will preclude anything like famine prices, and abundantly supply your wants arising from the last most defective harvest. I have farmed in England, and in more than one county, and having resided in this country over 12 years I hope to speak understandingly and confidently as to the facts. You will have no famine prices, nor need you fear a defective supply either as to quality or quantity for the balance of this season. It is now the 3d of April, and no sowing of importance yet done here. The bulk of the Wheat grown in the north-west being spring Wheat, you will correctly therefore infer that the seed for next year's crop will not be got into the ground till two weeks, or it may be more, later than in either the two last seasons, or than usual. Still we may have an abundant crop, as we have had in former years when sowing was quite as late as it now appears likely to be in 1861. The dry seasons we have had (comparatively with several previous ones) the last two years, particularly in 1859, have left us a comparatively dry or unsaturated subsoil, which in fact was the prime cause of promoting the fertilisation and working of the ground to a much more than ordinary depth, for our unequalled product of the year 1860. I infer as highly probable that your next crop will be less than an average, for reasons the converse of these: for it takes much time to drain and dry soil saturated as yours were last season. You may have readers emigrating or desiring general information as to the resources, &c. of different parts of the West. I speak of no small or particular locality. But there is a district bordering here, of about 35 by 45 miles in extent, that is not excelled by any part of the United States. I have seen something of New York, Ohio, Illinois, Missouri, and Kansas; but this district of Wisconsin, embracing about three counties, is not excelled nor equalled when healthfulness, &c., is added to the account, by any extent of country in either state named. Our winters are, it is true, long; but we have abundant meadow hay and grain for wintering stock, and corn ripens well; and our Wheat is even superior to the formerly famed brands of Michigan. This district lies high, which secures it a salubrity for man and beast unknown in Illinois or Missouri. I speak advisedly when I say no part of England is more really healthful or naturally fertile to-day. Our cattle and sheep have very few diseases, and the invigorating nature of this climate, latitude 43¼° north, is so well appreciated that residents of Illinois frequently sell out, and come here to recruit health and strength.

I have seen much of England, and judge of both countries by experience, and comparatively I give you reference by which you can judge of the confidence due to my conclusions. I have no preference for any particular town or parish, but the district named, which has two railroads and a navigated river connecting with New York, is better adapted to English farmers, of whom there are many here already, than any I have seen in the West. I may again write to you, and meanwhile I will answer any prepaid letter of inquiry; but cannot of course receive any others. We apprehend secession will purify the elements and do us substantial ultimate good here. *J. W. C.*

Farmers' Clubs.

KINGSCOTE: *The Comparative Advantage and Expenses of Animal and Steam Power in the Cultivation of the Soil.*—Mr. Burnett read a paper on this subject, from which we take the following:—

Let us look at the advantages of steam cultivation. These advantages can only be obtained in conjunction with animal power, for as yet we are without any practical system whereby steam can be employed to perform all the operations required on a farm. I could mention many things not connected with steam ploughing which would be an advantage to the farmer, many things he would like to be in possession of; but he has to ask himself the question—Will it pay? his well-being entirely depending on whether his systems of operations are successful or not. In comparing the expenses of the two systems of power, we need to consider the various soils we have to cultivate; for in proportion to the variety of soils, there are necessarily a similar variety of systems of cultivation. Having arrived at this conclusion from practical experience, I believe the theory is false which says deep cultivation is, or would be, a means of improving all soils.

Allow me to give you the opinions of a few of the gentlemen who have had the kindness to reply to my inquiries. Mr. Cobban, steward to the Earl of Ducie, says:—

My experience in steam ploughing is limited to about 30 acres ploughed on Whitfield Farm last winter, and that can hardly be called a fair trial; the winter being so wet the land was hardly in a proper state for work. The land ploughed consists of stiff clay and heavy tenacious loam, with here and there patches of red sand and stone brash; the depth of furrow about 6 inches, and the average of a full day's work with three ploughs about 5 acres. As to the acts of cultivation to which steam is applicable, my experience only goes to ploughing, but I can see no reason why subsoiling, cultivating, and grubbing could not be done, and that far better than by horse power. All that is wanted is proper implements for this purpose, which I have no doubt will be forthcoming as soon as a demand arises for them. As to harrowing, rolling, drilling, &c., they can be better done by horses. Such operations would occupy too much time in moving anchors and so on. The advantage of ploughing by steam in the winter in a great measure consists in not treading the land, for while the horses tread our land into a puddle, the steam plough leaves it quite hollow, allowing the rain to sink freely, as deep as the furrow slice, and thereby allowing the land to get more thoroughly pulverized by the action of the weather, and in a far better and healthier state for work in the spring than would be the case where every horse stepping forms a pool to hold water, which remains there till dried out by the spring winds. The Company have not sent in their bill, therefore I cannot say the price, but should think it would be something like 12*s*. per acre, and if so, we could not plough our land for a less sum by horses, nor do it anything like so well as that done by steam.

Mr. R. Stratton, of Broad Hinton, says:—

I have had Fowler's steam tackle for the last 18 months, like it much, and think it superior to any other mode of steam cultivation, inasmuch as it ploughs and scarifies; we think its advantage over animal power very great. In the first place, the cost price is less than horses that would do the same work for it; a 12-horse engine will do more ploughing in a day than 25 horses, that is, in heavy land. Indeed we think that it cannot be worked to half the advantage in light soils as in heavy; we find great advantage from deep ploughing and horse-treading. Last summer when the land was in the best state for ploughing, and in a full working trim, we ploughed at the rate of an acre per hour for days.

Mr. Savidge, steward to Earl How, Gopshall, Leicestershire, says.—

With an 8-horse-power engine we cultivate from 6 to 10 inches deep. Our plan in this neighbourhood is to hire an engine and one of Smith's cultivators at a cost of 8*s*. per acre. We find three men and coals, &c. This added to the 8*s*. will make the expenses about 10*s*. to 11*s*. per acre; we can break up from 5 to 6 acres per day. Respecting the difference between the expenses of horses and steam-power I should say it is very little, but the advantage we have upon heavy land farms is that we can produce one-third more roots, and of course increase the number of cattle accordingly. Since we have used steam in the autumn upon land intended for Turnips, the saving of horse-labour has been very great. Still we have not been able to reduce them to the extent you might suppose. I consider the argument of steam-power is between growing good crops and bad ones, not between steam and reducing the horses. I cannot see that upon a farm of 300 or 400 acres the horses can be reduced to any great extent, as they are required for harvest work, drilling, harrowing, carting, &c.

I will only quote the opinion of another gentleman, J. T. Harrison, Esq., who has had great experience.

First, as to the economy of steam cultivation: I believe that in the case of heavy clay land this is quite a minor consideration, but there is at the same time no question that work can be done by steam-power which it is next to impossible to do with horses; such work is now being done in the Vale, and at undoubtedly less cost than it could be done with horses. On the light lands, and especially where no great depth can be obtained, the question of economy is an important one; in this case, I doubt not but steam would gain the day, the point being to get a considerable quantity of work done when you wish to do it, and to accomplish which many farmers are obliged to maintain an otherwise unnecessarily large number of horses or oxen. As to treading in the case just mentioned of light lands (brashy lands in particular), treading may not be of so much importance, but in the case of the heavy clay lands I have not any doubts as to the very decided advantage of steam cultivation in this respect, as it allows the water to pass away much more freely in the drains, the benefit of which you can easily imagine. I am sure there are many cases where it is desirable not merely to cultivate deeply, but to plough and bring up some of the subsoil to the surface to be exposed to the sun and weather, when it will prove a very beneficial mixture with the soil cultivated previously. For the extirpation of the weeds and ordinary cultivation, I should like the grubber. The quantity of work executed by steam-power depends so much upon the character of the

work that it is not possible to give you much information on this head. It varies between an acre a day and an acre an hour. One great advantage of the steam plough is the speed at which the plough travels over the furrow; the effect in many cases being equal to a combined ploughing, cultivating, and harrowing.

I will now confine my remarks on the comparative expenses chiefly to what I have seen, and will take for our consideration a heavy land farm of 300 acres, and one of Fowler's steam 12-horse engines with tackle complete, which is best known in this neighbourhood.

I will take for instance the work done at Churcham, near Gloucester, by the Gloucester Steam Company, under the management of our president; and if this is not a fair criterion I doubt not but he will give us better information. I think it proper to mention that the present tenant had just taken to this farm, and it was not in a very good state of cultivation. The number of acres ploughed from the 12th of March to the 5th of April was 60, the removals from field to field (a considerable distance apart) included; this is at the rate of 3 acres per day, but as the distance of removal was greater than in many cases I will add ½ an acre per day; the depth from 6 to 18 inches. When ploughing 6 inches deep they worked four ploughs, and above that three. Just as I was about to leave they were obliged to lessen that number to two, in consequence of the rope slipping on the drum, owing to very heavy pressure on the engine dragging the ploughs through a large quantity of full grown Couch. This work was very well done and left in a first-rate state for fallow, which it was intended for. At this rate per day there would be something like 86 days' ploughing or grubbing on a 300 acre farm in a year. Let us now consider the cost of the operation; and, without giving a detail of cost of the several parts of the engine and plough, we will put the sum total 800*l.*, and on that charge 20 per cent. per annum—8 per cent. for repairs, 7 per cent. for depreciation, and 5 for interest of capital; this will be 160*l.* :—

	£	s.	d.
The manual labour required :—2 men ..	0	6	0
" " " 3 boys ..	0	4	6
1 man and horse hauling water	0	5	0
12 cwt. coals	0	12	0
Oil	0	2	0
Extra horses required for removals ..	0	1	6
Expense for labour, coal, and oil	1	11	0
" for 86 days	133	6	0
Interest per annum	160	0	0
Total	£293	6	0
Working expense per day	3	8	2½
Or per acre	0	19	6

I will not remark on the several items, but leave them for discussion, and pass on for a peep into the expense of animal power; and as it is the ploughing and grubbing of heavy land we are taking into consideration, I will make my calculations on horse-power, although at a preceding meeting of this association we had proof that such operations could be performed at less expense by oxen. However, to proceed with horses, and let us have a full strength, that we may be ready and up to the mark to take every advantage of getting the work done in proper season, and leave the stubble ploughing till Christmas. Horse labour is very much increased within these few years—what used to be bare fallows is now green, and land that is not suitable for Swedes is now planted with Mangel; instead of hand-hoeing between the ridges, horses perform that operation in a much more efficient manner. In many cases the reaping-hook and the ell-rake have leave of absence, while the reaping machine and horse rake do duty. It may be there is a quantity of pasture land attached to this 300 acres of arable, which formerly was cut, tedded, and turned by manual labour, this is now added to the long catalogue of horse. Seeing the necessity of a full strength of horses at all seasons to perform the many operations required on a heavy land farm of 300 acres, I will venture to put a pair of horses to every 30 acres, or for more easy calculation, 4 to 60, as it will require on an average 4 to plough the depth mentioned in the calculations on steam power I do not mean that 4 horses are to be used at all times; 3 or even 2 would be quite enough. On half the ploughing throughout the year, and in other cases, similar to the one mentioned where the steam could only work two ploughs, it would require six; and according to this rule I could employ eight as often as I did two and have an average of four. Now as to the expense: the quantity got over by the four horses I will put at ¾ of an acre per day. Looking at the distance traversed with a 9-inch furrow, this is very slow work. Much more might be done, but we calculate them by the same rule as we did the steam. What is done? At this rate there will be something near 80 days ploughing or grubbing in the course of the year for every four horses; and for every calculation of cost I will apply that system (well known to all of you), we adopt in the valuation of work done by an outgoing tenant—3*s.* per day for each horse, 12*s.*; 2*s.* for a man; 1*s* for a boy=15*s.* per day, or 1*l.* per acre, showing 6*d.* in favour of steam. This is considered a sufficient charge for all expenses, interest, and depreciation.

A few words on light soils, and I have done. Here the advantages of deep cultivation, horse treading and breaking of the furrow, are lost; experience has proved the breaking of the pan formed between the subsoil and the plough not only useless but ruinous, the best crop being obtained where light ploughing well solidified with the roller or steam presser is practised; but the advantages of spring and autumn cultivation would be of the greatest importance, and I doubt not a means of increasing the produce of the soil in many seasons, therefore it may not be in the cheapness of the operation that the gain, if any, of the steam-plough may be felt.

Not having had an opportunity of witnessing the working of steam on light soils, I am not in the position to quote an instance as before, but knowing something of the amount of power required to turn over light soils from four to six inches deep, I will venture to put the quantity of work done at double that on heavy seven acres per day; this would be nearly 43 days in a year; the tear and wear of the rope would be greater on such soils; and probably the breakages a much more heavy item, in consequence of the speed the plough would come in contact with large stones, yet a less rate per cent. would in all probability be sufficient, say 15 per cent., 120

Expense of coal, oil, labour as before, per day ..	£1	11	0
For 43 days	£66	13	0
Interest per annum	120	0	0
Total	£186	13	0
Working expenses per day	£4	4	0
Or per acre	0	12	0

The comparative expenses of horses, if we put a pair of horses to work 60 acres, which I believe is something like an average, would be (calculation as before) 2 horses, 6*s.*; 1 man, 2*s.* = 8*s.* per day, or 10*s.* per acre; thus showing an advantage over the steam of 2*s.* per acre.

I feel sure few would be inclined to find fault with the average quantity of ploughing per day on light soils by steam-power, yet I believe no more power will be required in the latter case than the former. It may be considered by some that what I have seen, and the information I have received from others are very different, but I think you will find on comparing them that there is not so much difference as might appear. The work done at Whitfield is five acres in a full day, the engine and ploughs in the field ready to start, no breakage or stoppages of any account, and the depth is only 6 inches. The grubbing at Gopshall costs quite as much as any practical man could put it at, and information from such a source is of the greatest importance, as I doubt not the price charged for hire is that which the owner can afford to let it for. As regards Mr. Stratton, my knowledge of him in other respects warrants me in saying it is in the hands of no ordinary man; and it is only when everything is in first rate trim, not only engine and tackle, but the land in the very best condition, and nothing said about the depth, that he can turn over an acre per hour.

London: *On Grazing.*—After Mr. Wallis's paper (reported last week) had been read, Mr. Hudson, of Castle Acre, referred to several of the points on which Mr. Wallis had touched.

He had but a few observations to offer on the subject contained in the excellent paper just read by Mr. Wallis.—He had understood Mr. Wallis to recommend the dust of cake for sheep. He preferred the dust for cattle, with cut hay in boxes. Sheep would not touch the dust, but they would eat the cake in pieces the size of a hazel nut. Feeders of cattle in this country could not keep pace with the consumption unless something new was discovered for summer feeding, and he did not think of anything that would supply the market better than a little additional food in the shape of cake when the cattle were at Grass. He believed also that it had the effect of improving the pasture land, whilst the system of feeding on pasture and folding on arable land during the night robbed Peter to pay Paul. The breed of cattle best fitted for the purpose was the best of every breed. Why feed bad cattle? He had last week been through several herds of Short-horned cattle in a district in Wiltshire that he visited eight or ten years ago, and the improvement that had since taken place was perfectly marvellous. The Short-horned cattle were decidedly the cattle with which to feed the people of England. As to the relative value of sheep and cattle, there were certain districts that would feed sheep which were not calculated to feed cattle; and Norfolk men were under great obligations to Hampshire men for keeping up a very useful class of sheep—a sheep that suited their purposes, particularly by being used with the Cotswold ram. There they had the very sheep to make meat for the million. Indeed, he believed they were the most profitable sheep that we could have. They could not be bred to a very large extent in his county, but he was too happy to send his men into Hampshire and Wiltshire to buy the class of sheep which was now breeding there from the large Hampshire ewes crossed by the Cotswold ram. At 12 or 13 months old they would give as much as 20 or 25 lbs. of mutton per quarter, and 7½ lbs. or 8 lbs. of wool of the description which manufacturers most wanted to be grown, and which was the most useful to them.

Mr. Little (Landhill, Wilts), observed that Mr. Wallis declined to recommend the use of oilcake or meal by breeding stock. Now, he had reared young stock from time to time on inferior pasture lands, and had found that by the use of oilcake and other artificial food the land had been improved in quality and had enabled him to increase the quantity of stock by nearly one-half. He thought therefore it was as well to adopt an artificial mode of feeding, and thus increase the number of animals, which as they became older got into the hands of the grazier. This practice has been carried out not only upon his own farm but on others, and he thought that the inferior pastures of the country might be greatly improved by means of artificial manures in other counties as well as Cheshire. In that county pastures had been brought from very poor into very high condition by the application af bones. As Mr. Wallis had told them, enormous sums of money were expended in artificial manures on arable lands where a quick and immediate return could be made; but he agreed with him that the use of artificial manures on pasture land was quite as profitable as on arable, when time was given for their development. One instance which he might cite was that at Wall's Court in the neighbourhood of Bristol, which had been held by Mr. Procter. He was engaged to survey the property for that gentleman when he took it of the Duke of Beaufort, and observed that together with improved drainage a large quantity of artificial manure was used, and the result was surprising. Perhaps there was no pasture land in England upon which so great a change had been wrought as upon that particular farm, the means resorted to having been draining and the use of bones, especially in a prepared state.

Mr. W. Shaw (Northampton) having for years brought out his early-fed cattle on Grass with the assistance of cake, had gone fully into the use of cake on Grass lands, and he had found it to be absolutely necessary to have hovels and sheds, so as to completely develop the results of hay and cake.

Mr. Fisher Hobbs thought the main points for consideration that evening were, first, the improvement of the permanent pastures of the country; secondly, the improved breeding of animals; and, thirdly, the best and most expeditious means of preparing the animals for the consumption of the people. Now he thought it might be laid down as a fundamental rule, that upon Grass lands, as well as upon arable, drainage was a necessity. He could not agree with the gentleman who said that evening that they might drain their Grass lands too much. There might be some porous soils which, if the water were extracted, would not nourish those watery plants on which animals were fed. Hence the land might for a time appear to have been impoverished; but if Grass lands were thoroughly drained, broken up, and laid down for pasture, an improved quality of Grass would soon show itself, and land which had previously only kept stock in existence, would serve for the general purposes of stock feeding. As regarded the improvement of Grass lands, he concurred in the opinion that the use of oilcake was a very good means of carrying out that object He had, like many other gentlemen, seen land doubled, and more than doubled, in value in consequence of oilcake to a fair extent having been given to beasts during the summer months. He knew many pastures in this country which would at one time scarcely maintain a fair amount of store stock; oilcake however, having been used, it was found that animals fed with Grass fattened very well, and within five years at least 10 per cent. more animals were fattened upon those very pastures. He was persuaded that oilcake was a simple and comparatively inexpensive mode of improving the Grass lands of this country, and of making lands which were previously store pastures, with good management fattening pastures. With regard to the breeding of animals, they could not possibly do better than follow the advice of Mr. Hudson, by breeding the very best. Whether their animals were Short horns, or Herefords, or Devons, much depended on the soil and climate, and as practical men they must all feel that Short-horns, at all events, could not be reared and grazed to advantage in every district and county of England. He had been a considerable breed of cattle of different kinds, and he had always found that the best and cheapest plan was to feed them liberally, to keep them warm and clean during the winter months, and to give them proper shelter during the summer. As regarded inexpensiveness in sheds, an old friend of his recommended sheds that, to use his friend's sporting phraseology, were "got by wood-stack out of clay pit." Perhaps those inexpensive sheds which broke the wind and protected animals from storms were the most useful. He could not help expressing the opinion that the landlords of England could not do greater service to their tenantry, and through them to the country at large, than by keeping good male animals for the use of their tenants. That would conduce very much to the breeding of the best stock, to early maturity, and to the increase of the supply of food of the nation. Notwithstanding what had fallen respecting bone dust, he did not believe it was the best kind of manure for the Eastern Counties pastures, or that it would lead to such results as that gentleman appeared to anticipate. Mr. Wallis made some remarks about over-manuring of pastures, and the subsequent mowing of them, and the effect of this in checking their growth. He had heard it stated that some of the finest old grazing pastures in England, including some in the Vale of Aylesbury, were some years ago very much injured by being over-mown. He had always considered that the farmers of England never paid sufficient attention to the varieties of Grasses which they cultivated on their pastures. They paid great attention to varieties of root and varieties of Wheat, but little attention to the varieties of Grasses on their land. It had been said by some of the best authorities on the subject, that a square foot of turf should produce at least 28 varieties of Grasses. Many of the best Grasses, if sown at certain periods of the year, were thereby checked, and coarser Grasses were apt to take their place. He was therefore very much inclined to the opinion that pastures which were adapted for the production of beef should seldom if ever be mown; and that low lands, where coarse Grasses fructified the most, should alone be given to the scythe. Having had experience with regard to some 20 or 30 different manures, he had come to the conclusion that oilcake was the best for improving first-class grazing grounds.

Reviews.

Our Domestic Animals in Health and Disease. By John Gamgee. T. C. Jack, Edinburgh.

This promises to be a valuable work. The first chapter just issued, as No. I. of a series in 20 parts, treats of Digestion and Food. It is well illustrated, both by drawings and by described instances. The lips, tongue, teeth, suction—all concerned in the taking of food—the diseases of the several organs thus engaged, the nature of food, the indications of age furnished by dentition, and the rogueries practised in the market under this head, are severally discussed. The following is an amusing bit of speculation on the origin of certain terms.

"Fraud has been practised to destroy the marks of age. The angularity of form, sharpness of bones, and grey colour of the hair are not readily hidden, but teeth can be filed and marked, and horns scraped. Making false marks in the teeth is termed 'bishoping,'—a practice common amongst horse-copers. Why it should be called bishoping I cannot say, but it strikes me that the name was originally adopted as indicating cheating or cunning, for which prelates were long reputed famous. This opinion is strengthened by the following circumstance:—It is not usually known that when a horse is taken to a forge to be shod, that, instead of putting new shoes on, old ones are sometimes placed in the fire, heated and shaped to pass for new. Such shoes have always a red, rusty look, and in Italy are called 'cardinals.' There is evidently connection between the term 'bishop' and 'cardinal,' as both are used to designate a fraudulent practice, though, with regard to the last, as applied to old shoes, it is, perhaps, derived from the red colour, which is that of the cardinals' stockings."

Handy Book for Young Farmers. By C. Lawrence Second Edition. Longmans.

This pamphlet contains a series of consecutive memoranda proper for attention in the several months, and it is furnished with an Appendix containing much useful instruction on manure-making and cattle-feeding, and Implements. The following is a passage on hoeing and singling Mangel Wurzel:—

"As soon as the plants are two inches high, they should be horse-hoed preparatory to the setting out. We consider the plants should be set out 16 inches apart, but some cultivators recommend 18 inches in preference.

"We recommend the employment of women in preference to men for this work. They can do it quite as well, and as quickly, and earn considerably more than ordinary day wages, at a shilling per acre less than men require. There is a more useful plan still, where it may be feasible, which we observed some years ago on going over the admirably managed farm of Mr. Thomas of Lidlington, on the Duke of Bedford's estate. He had a set of boys and girls on either side of a careful man, hoeing his Swedes and Turnips. We never observed better hoeing than that done by these children. We understood him to say that a sum was given equivalent to the value per acre of the work well performed. This, instead of being equally distributed, was divided according to the tickets given by the overlooker, and produced on the pay night. This created a degree of emulation which made very effective hoers at an early age.

"The clergy of the present day very considerately and kindly devote much attention to the education of the children of the poor in their parishes. They generally disapprove of children under fourteen years of age being removed for the purposes of field labour. Far be it from us to discourage their zeal in this respect; but is it not feasible to combine, with a facility of reading

writing, and the four elementary rules of arithmetic, say after ten years of age, much of that field manipulation by which a large proportion of such children are to earn their livelihood? At this season, boys and girls, between the ages of ten and fourteen, may be made very useful in the field to the farmer, with advantage to themselves in various ways. One half the children between those ages might be occupied in the fields, and the other half in the schools, in one week, and their occupations be reversed in the following week. We believe this change would be alike beneficial to their minds and bodies."

Mr. Lawrence is a member of the Council of the Royal Agricultural Society, and has more than justified his position there by many useful publications on agricultural subjects, both in the *Journal* and elsewhere. The "Handy Book" has reached a second edition, and we are glad to find that there is so large a demand for it.

Miscellaneous.

Improvements in Spades and Shovels.—Messrs. Spear & Jackson, of Etna Works, Sheffield, have just patented an improved method of making these articles. They take a bar of solid cast steel, full temper, into which, by powerful machinery, they punch a hole just large enough for the foot of the handle to enter; afterwards they forge and hammer it down to the required thickness and finish. Thus the whole tool (minus the handle, of course) being of cast steel, is uniformly strong throughout, and there being no welding it cannot work loose.

Calendar of Operations.

MAY.

West Dorset: *May 11th.*—The long wished for rain has come, but not too soon, the meadows and pastures presenting a brown and bare appearance, the late sown Barley and Oats in many places not yet visible "above ground;" the chance of a Flax crop, although improved, still very precarious, but we may now entertain hopes for the Mangel crop, as well as for the freshly sown Clover and Grass seeds. The appearance of the growing Wheat varies considerably, in some fields ragged and weak, in others luxuriant and rich. Trifolium and Vetches have completely failed, consequently store sheep are cheap, but fat stock of all descriptions command good prices. *P.*

STATE OF THE WEATHER—BERKSHIRE.

For the week ending May 16: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air. Max. in Sun.	Max. in shade.	Min.	Mean.	Temperature of Soil 1 foot below the surface.	Rain.	Wind	Barometer.
		Degs.	Degs.	Degs.	Degs	Degs.	Ins.		
Friday	10 ..	77.0	59.0	30.2	48.8	50.5	..	N.E.	29.55
Saturday	11 ..	50.6	46.4	36.8	42.2	49.6	0.26	N.E.	29.46
Sunday	12 ..	44.8	44.0	39.9	41.2	48.5	0.20	N.	29.87
Monday	13 ..	46 6	45.6	38.4	41 9	48.6	0.07	N.	30.02
Tuesday	14	61 6	52 0	31 0	45 0	49 4	..	W	30 20
Wednesday	15 ..	73 0	66.4	35 0	51.1	52 0	..	N	30.18
Thursday	16 ..	88.6	66 0	40.0	58 4	54.2	..	N.W.	30.00

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Destruction of Weeds: *Staffordshire.* There is no Act, but there was a proposal in the form of a Bill referred to last week, which was, we believe, introduced a session or two ago, founded on Mr. Donnelly's annual remonstrance in his statistical report of Ireland.

Pond Sludge: *Richard* says, I am cleaning out a pond which contains a large accumulation of apparently rich soapy deposit of 50 years growth, and in some parts 8 or 10 feet in depth, containing a mixture of clay, fine sand, leaves, &c. Having my land ready prepared for Swede Turnips, I wish to be informed if such a kind of sludge is adapted to their growth, and if so, in what quantity it should be applied to the land to secure a good crop, and whether it should be mixed with ashes, or some other combination to impart to it more solidity. [To this we answer that such black mud is generally less valuable than it is supposed to be. Nevertheless if allowed to lie and drain and dry, it will be very good stuff to break up and mingle with ashes and other material as in a compost. Several cart-loads should be applied per acre if any benefit is to be derived from it.]

Poultry: *F R H S.* Dorking hens are not good for setting or rearing chickens. You should keep Cochin hens to supply eggs during winter, and to be ready to sit as soon as you have the first eggs from the Dorkings ready for them. The Cochins are excellent mothers. There is no cure for hens addicted to eating their eggs. Chalk eggs should be kept for nest eggs, and they should not have access if possible to eggs, but there seems no cure short of death.—*Y.Z.* Cramp in fowls is generally caused by improper flooring to the houses. Wood, stone, or bricks will cause it. If either of these exists, the remedy will be to remove them, or if that be very inconvenient, to cover it with loose dry gravel, six inches deep. If the flooring be what it should be, earth or gravel, and the fowls are yet crampy, it arises either from a blow on the back, or from improper or hurtful food. The former admits of no treatment, but the effect of the latter may be removed by copious doses of castor oil, say a brimming table spoonful every other day——There is an alteration in the market. The buyer will call it an improvement, the seller will perhaps differ from him; hot weather compels a speedy sale, and this is in favour of the purchaser. It also increases the demand. There is more poultry eaten in hot than cold weather, and therefore, putting all things together, buyers and sellers of poultry may rejoice with all others at the advent of fine and warm weather.

	Each.—s. d.		s. d.
Large Fowls	6 0	to	6 6
Middling ditto	3 6	„	4 0
Chickens	2 6	„	3 0
Goslings	6 0	„	6 6
Ducklings	3 0	„	3 6
Levretts	2 6	„	3 0
Pigeons	0 7	„	0 8
Rabbits	1 5	„	1 6
Wild ditto	0 8	„	0 9

Turnip Seeds: *Dealer in Seeds.* Will you be good enough to give your name and address, which have not reached us.

Horticultural Agent and Valuer.

MR. A. CHANDLER (of the late Firm of Chandler & Sons), 28, Priory Road, Wandsworth Road, S., begs to offer his services as above. Sales of Plants and Nursery Stock arranged, and Catalogues prepared.

Garden Border Edging Tiles.

F. and G. ROSHER, Cement, Brick, and Tile Merchants, beg to invite attention to their varied Stock of Ornamental Garden Border-edging Tiles in Terra Cotta, Terro-Metallic ware, and Red ware. They present advantages over Box or Grass-edging in that they afford no harbour for slugs, &c., take up less room, and once laid, require no further attention.

They may be had of various patterns at F. & G. R.'s premises; Ward's Wharf, Upper Ground Street, Blackfriars, S.; and Kingsland Road Wharf, near the Canal Bridge, London, N.E.

N.B. Sketches of patterns sent by post on application. Garden Vases and Ornamental Flower Boxes for Windows and Balconies in stock.

ORNAMENTAL PAVING TILES for Conservatories, Halls, Corridors, Balconies, &c., as cheap and durable as Stone, in blue, red, and buff colours, and capable of forming a variety of designs.

Also WHITE GLAZED TILES, for Lining Walls of Baths, Dairies, Larders, Kitchen-ranges, &c. Grooved Terro-metallic and other Stable Paving Bricks of great durability, Clinkers Red and White Wall-Copings, Glazed Drain Pipes, &c. To be obtained of F. & G. Rosher, at their premises as above.

PATENT GUTTA PERCHA SOLES.—Important to Gardeners.—The Gutta Percha Company have the pleasure to acknowledge the receipt of the following letter from G. Glenny, Esq., the celebrated Florist:—

"420, Strand, London.

"Gentlemen.—I have worn Gutta Percha Soles and Heels these two years, and being so much in a garden as I necessarily am in all weathers, and with the ground in all states, I would on no account be without them. As a matter of economy I would recommend Gardeners to use them, for they may repair the worn part at all times by warming the material at the fire, and pressing it from the thick parts to the worn parts, as easily as if it were so much dough. I think it the duty of all persons who must occasionally wet their feet to adopt a material that completely defies damp. Many a gardener would escape colds and rheumatism by the use of Gutta Percha Soles

"Your obedient servant, G. Glenny."

Every variety of Gutta Percha articles, such as Mill Bands, Tubing, Soles, Sheet, Pump Buckets, Fire Buckets, Bosses, Union Joints, Flasks, Bottles, Bowls, Chamber Vessels, Toilet Trays, Sponge Bags, Curtain Rings, Galvanic Batteries, Calbotype Trays, &c. manufactured by the Gutta Percha Company, and sold by their wholesale dealers in town or country.

The Gutta Percha Company, Patentees, 18, Wharf Road, City Road, London, E.C.

CUCUMBER GLASSES.

24 inches long ..	2s. 0d.	16 inches long ..	1s. 4d.
22 „ „ ..	1 10	14 „ „ ..	1 2
20 „ „ ..	1 8	12 „ „ ..	1 0
18 „ „ ..	1 6	Made to any length.	

PROPAGATING GLASSES.

2 ins. diameter	0s. 3½d. each	12 ins. diameter	1s. 9d. each
3 „ „	0 4½ „	13 „ „	2 0 „
4 „ „	0 5½ „	14 „ „	2 6 „
5 „ „	0 6½ „	15 „ „	3 0 „
6 „ „	0 8 „	16 „ „	3 6 „
7 „ „	0 10 „	17 „ „	4 0 „
8 „ „	1 0 „	18 „ „	5 0 „
9 „ „	1 2 „	19 „ „	6 0 „
10 „ „	1 4 „	20 „ „	7 0 „
11 „ „	1 6 „		

BEE GLASSES.

4 ins. diameter	0s. 6d. each	9 ins. diameter	1s. 8d. each
5 „ „	0 8 „	10 „ „	2 0 „
6 „ „	0 10 „	11 „ „	2 6 „
7 „ „	1 1 „	12 „ „	3 0 „
8 „ „	1 4 „	Not made above 12 inches.	

LACTOMETERS, for Testing the Quality of MILK.

Four Tubes .. .. 4s. 6d. | Six Tubes .. .. 6s. 6d.

With Stands complete.

London Agents for Hartley's Improved Patent Rough Plate.

Linseed Oil, Genuine White Lead, Carson's Paints, Paints of various colours ground ready for use.

Milk Pans and every description of Glass for Horticultural purposes.

James Phillips & Co., 180, Bishopsgate St. Without, E.C.

TODD'S PROTOXIDE PAINT.—This article is largely used by the Clergy and Gentry, as well as by Builders, for Painting Stucco, Brickwork, Rough Wood, and Ironwork. It prevents the latter from corrosion, wood from decay, and masonry from damp.

Manufactured by Francis Brothers & Pott, Nine Elms, London, S.W.

Oil Paint no longer Necessary.

HILL and SMITH'S PATENT BLACK VARNISH for preserving Iron Work, Wood, or Stone. This Varnish is an excellent substitute for oil paint on all out-door work, and is fully two-thirds cheaper. It may be applied by an ordinary labourer, requires no mixing or thinning, and is used cold. It is used in the grounds at Windsor Castle, Kew Gardens, and the seats of many hundreds of the nobility and gentry, from whom the most flattering testimonials have been received, which Hill & Smith will forward on application.

Sold in casks of about 30 gallons each, at 1s. 6d. per gallon, at the Manufactory, or 1s. 8d. per gallon paid to any station in the kingdom.

Apply to Hill & Smith, Brierley Hill Iron Works, near Dudley, from whom only it can be obtained.

For Garden Pots, Send your Orders to

J. and W. ADAMS, Kilns, Belle Isle, York Road, N., and be promptly attended to. Town and Country supplied.

TERRA COTTA.—Warranted to stand the most severe frost. This material is especially fitted for Garden Decorations, and for all exposed work, such as Fountain Basins, Garden Vases and Statues, Balustrades, Tracery for Terraces and Parapets, Terminals, Crosses for Gables, Capitals of Columns, Brackets, Consols, Chimney Shafts and Pots, and all other work exposed to wet, heat, and frost.

John M. Blashfield, Stamford, Lincolnshire. Specimens may be seen at 16, Great Marlborough Street, London, W. and at the Works, Stamford, Lincolnshire.

J. TYLOR and SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25s. 6d. each.

IRON YARD AND GARDEN PUMPS

3 feet 6 inches under spout.

2½	3	3½ inch
43s.	53s.	60s. each.

J. Tylor and Sons manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.

PUMPS of J. Tylor & Sons' manufacture to be obtained of Plumbers in all parts of the United Kingdom.

J. Tylor & Sons, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

"FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.

PROTECTION from the COLD WINDS & MORNING FROST.

"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.

Two yards wide .. .. 1s. 6d. per yard run.
Four yards wide .. .. 3s. per yard.

An improved make, 3 yards wide, 2s. 6d. per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard run.

Elisha Thomas Archer, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.

"It is much cheaper than mats as a covering."

GLASS WAREHOUSE.—ESTABLISHED 1750.

THOMAS MILLINGTON,

87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.

REDUCED TARIFF FOR HORTICULTURE, PICTURES, AND DWELLINGS.

ORCHARD-HOUSE SIZES. Supplied to Mr. Rivers and many others.

In. by In.		16 oz.	21 oz.
20 .. 12	Common, per 100 feet,	13s. 6d.	18s.
20 .. 13			
20 .. 14	Super „	16s.	23s.
20 .. 15			

SMALL SQUARES.

In. by In.	In. by In.	Per 100 feet.	Per foot.
6 .. 4	8 .. 6	Common	1½d.
6½ .. 4½	8½ .. 6½	11s. 6d.	
7 .. 5	9 .. 7	Super.	1¾d.
7½ .. 5½	9½ .. 7½	12s. 6d.	

SQUARES in 100 and 200 Feet Boxes.

Inches by Inches.	Inches by Inches.	Inches by Inches.	Inches by inches.	Inches by inches.		P. 100 feet.	P. foot.
10 .. 8	12½ .. 9½	13 .. 10	15 .. 10	13½ .. 11½	4ths.	12s. 6d.	[illegible]
10½ .. 8½	13 .. 9	13½ .. 10½	12 .. 11		3ds.	14s. 3d.	[illegible]
11 .. 9	12 .. 10	14 .. 10	12½ .. 11½	14 .. 11	2ds.	18s.	[illegible]
12 .. 9	12½ .. 10½	14½ .. 10½	13 .. 11		1sts.	21s. 6d.	[illegible]
15 .. 11	15 .. 12	16 .. 13	24 .. 14	24 .. 16	4ths.	13s. 6d.	[illegible]
16 .. 11	16 .. 12	17 .. 13	20 .. 15	20 .. 17	3ds.	16s.	[illegible]
17 .. 11	17 .. 12	20 .. 13	22 .. 15	20 .. 18	2ds.	19s. 8d.	[illegible]
18 .. 11	18 .. 12	23 .. 13	24 .. 15	.. ..	1sts.	24s.	
13 .. 12	20 .. 12	20 .. 14	20 .. 16	.. ..			
14 .. 12	22 .. 12	22 .. 14	22 .. 16	.. ..			

If less quantity than 100 feet is taken, a moderate charge made for package.

GLASS CUT TO ANY GIVEN SIZES NOT ON LIST.

16 oz.—4ths, 1¾d., 2d., and 2½d. per foot.
„ 3ds, 2¼d., 2½d., and 3d. per foot.

21 oz.—4ths, 2¾d., 3d., and 3½d. per foot.
„ 3ds, 3½d., 4d., and 4½d. per foot.

HARTLEY'S IMPROVED PATENT ROUGH PLATE.

Not accountable for breakage.

GENUINE WHITE LEAD	32s. 0d. per cwt.	LINSEED OIL	2s. 7d. per gall.
ANTI-CORROSION PAINT	34 0 „	BOILED „	3 0
LINSEED-OIL PUTTY	8 0 „	TURPENTINE	2 10

BLACK, GREEN, and all other kinds of PAINTS, VARNISHES, BRUSHES, &c.

Chrysanthemums for the Million.

J. H. BIRD, F.R.H.S., Nurseryman, Stoke Newington, N., can now supply from his great Collection, 20 Pair of Best Large Varieties for 10s.; 25 Pair of Best Pompones, 10s.; 20 Pair of Best Large Varieties, Cuttings, 5s.; and 25 Pair of Best Pompone Cuttings, 5s.

N.B. To save trouble all Orders to be Prepaid.

CATALOGUES for One Stamp.

New Chrysanthemums, Hardy Variegated Plants, &c.

JOHN SALTER, F.R.H.S., is now sending out strong Plants of several fine New Chrysanthemums, both Large Flowers and Pompones.

Full particulars will be found in his DESCRIPTIVE CATALOGUE for 1861, which will be sent post free on receipt of two stamps

Versailles Nursery, William Street, near Hammersmith Turnpike, W.

FRANCIS R. KINGHORN is now sending out his unequalled SEEDLINGS. For description and awards see *Gardeners' Chronicle*, May 18, page 454.

Azalea Indica President	21s. each.
Azalea Indica Kinghornii	21s. ,,
Azalea Indica Mars	21s. ,,
Lobelia Purple Standard	7s. 6d. ,,

Sheen Nursery, Richmond, S.W.

Spring 1861.

A CATALOGUE of PELARGONIUMS, FUCHSIAS, CHRYSANTHEMUMS, BEDDING PLANTS, &c., is just published, and may be had Post free on application to

John & Charles Lee, Nursery and Seed Establishment, Hammersmith, London, W.

Roses for Bedding.

Many Thousands of Dwarf Roses in pots, consisting of Hybrid Perpetuals, Chinas, Teas, Bourbons, and Noisettes.

WM. WOOD and SON are now sending out daily thousands of Roses in pots for grouping and bedding, at 12s. to 18s. per dozen. Early orders respectfully solicited to secure the best plants.

Address, Woodlands Nursery, Maresfield, near Uckfield, Sussex.

Roses, New and Old.

WM. PAUL (Son and Successor to the late A. Paul) has now ready for delivery a fine lot of all the best Roses, new and old.

BEDDING PLANTS.—All the best kinds, stout hardy Plants, at the usual rates.

PRICED CATALOGUES free by post.

Address Wm. Paul, Cheshunt Nurseries, Waltham Cross, N.

NEW ROSE.—MADAME STANDISH is the hardiest of all Roses; those which stood out of doors during the whole of the late severe winter not having lost a bud, whilst most others were destroyed by thousands. The growth is very rapid; the foliage magnificent; colour, a clear pale pink; petals smooth, round, and finely imbricated; the form cannot be excelled, and it is a thorough Perpetual, being, in fact, one of the finest Roses ever offered. Plants now ready, 10s. 6d. each. Madame Standish must not be mistaken for Mrs. Standish, which was sent out by Miellez, of Lille.

John Standish, The Royal Nursery, Bagshot.

Seeds Direct from the Growers,

The Most Certain Means of Preventing Disappointment.

NOTWITHSTANDING the Wet Summer and Autumn of 1860, Messrs. Sutton & Sons have the satisfaction of receiving almost daily very gratifying accounts of the growth of the Seeds they have supplied this adverse season. The following is similar to many others:—

From the Rev. W. H. Roach, *Whiteshill Parsonage.*

"Messrs. Sutton & Sons, *May* 3, 1861.

"I am happy to tell you that all the Garden Seeds which I had from you this year have come up beautifully; better and more regular, if possible, than in any former year."

Sutton & Sons can still supply all kinds of Farm and Garden Seeds for present sowing, of excellent quality, at moderate prices, according to quantity required.

Royal Berkshire Seed Establishment, Reading.

The Gardeners' Chronicle.

SATURDAY, MAY 25, 1861.

MEETINGS FOR THE ENSUING WEEK.

Tuesday, May 28 { Royal Horticultural (Floral Committee) at South Kensington ...... Noon

The arrangements for opening the New Royal Horticultural Garden, at South Kensington, on the 5th of June, are so far advanced, that we are now able to publish what will probably be the formal arrangements of the day.

Probable Programme for June 5.

The Royal Engineers attached to South Kensington Museum having volunteered to assist, they will occupy the ground round the spot where a tree is to be planted by His Royal Highness.

The South Middlesex Engineers having also volunteered their services, they will line the main walk from the Council Room to the East Terrace.

The main East entrance to be shut to the public at 4 o'clock, the side door being then opened.

The Board Room and southern side of colonnade attached to Board Room to be cleared at 4 o'clock.

His Royal Highness the President will reach the entrance at 4.30, arriving by Prince Albert's Road and Cromwell Road.

The Procession to assemble at 4 o'clock, and to consist of:—

Police.
Foremen of Gardeners.
Foremen of Works.
Clerks of the Works.
Contractors.
Auditors.
Assistant Secretary.
Floral Committee.
Fruit Committee.
Implement Committee.
Works Committee.
Fine Arts Committee.
Council of the Royal Horticultural Society.
Commissioners of the Exhibition of 1851.
Vice-Presidents of the Royal Horticultural Society.

H.R.H. the Prince Consort, President of the Society, accompanied by H.R.H. the Princess Alice, H.R.H. the Princess Helena, H.R.H. the Princess Louisa, H.R.H. the Prince Arthur, H.R.H. the Prince Leopold, H.R.H. the Duchess of Cambridge, H.R.H. the Princess Mary, H.R.H. the Duke of Cambridge, H.R.H. Prince Louis of Hesse, H.R.H. the Count de Flandres.

Suite.
Police.

The Procession having moved, the Band of the Volunteer Engineers Corps, on the appearance of His Royal Highness on the landing at the top of the steps leading to the Garden, will play one verse of God Save the Queen, the Royal party waiting on the landing during the time. The same Band will then play the Coburg March until the Royal party have passed into the second garden, when the Band in the West Terrace will take it up, and the Procession will move on up the centre avenue to the East Terrace, the first four groups stopping short just above the Memorial, the remainder entering within the space kept by the Royal Engineers. The Secretary will read an address from the Council, and His Royal Highness will read a reply.

His Royal Highness will plant a Wellingtonia gigantea, given by Mr. Veitch.

A Prayer will then be said by the Bishop of London.

His Royal Highness will declare the Gardens open, and the nearest Band will play God Save the Queen.

The Royal party, escorted by the Council of the Horticultural Society, will then pass into East Arcade, survey the flowers, pass out of the Arcade into the Conservatory by the main East door, visit the top of the Northern Arcade on the Western side, returning and continuing the examination of the plants in the remaining half of Conservatory, and will go out at main Western door into the Arcade. On arriving at Western Refreshment Buffet, the Royal party will be offered refreshments.

The Procession will return by the main avenue to the Board Room.

The Royal party will inscribe their names in the Fellows' Book, as they pass out to enter the carriages.

Every Apple grower complains more or less of a formidable disease which attacks his trees, deforming their stems and branches, impairing their fertility, and inducing premature decay, to which in common with his neighbours he gives the name of Canker. He is not, however, generally aware that there are at least five distinct diseases which he confounds under one name, as different from each other as abscess, cancer, and two or three other maladies amongst the farmer's stock. One of these forms at least is of insect origin, the others depend probably on a bad condition of the roots, or from unwholesome food due to an uncongenial soil, but certainly not from bad draining only, as all of them occur in light soil with a porous bottom and most perfectly drained.

The one which is of insect origin may be dismissed in a few words. It is produced by the woolly Aphis, which, while the bark is soft and green, insinuates itself into some point more easy of penetration than the rest, and at once sets up an abnormal growth which ends in the destruction of the contiguous tissues, producing a deep cavity with rugged edges, which deforms the tree though it does not absolutely prevent the formation of fruit. Common tar rubbed well in when the branches are first attacked will generally destroy the insect; but when once the young bark is injured and the growth distorted, it is not always easy for it to recover its original condition, though the original cause has ceased to operate, a fact which has its exact parallel in the effect of gunshot upon trees.

A second form of canker, and a very injurious one, is that in which bundles of short blunt roots are thrown out from dormant eyes, from the forks, or as they are called in forest language the gimble* of the branches, or from the lens-like points on the stem, so common on most trees, where the cuticle is ruptured, and the substance of the bark is exposed. These roots seldom acquire a length equal to that which they attain in Vines, Figs, or the common Laurel, and as they soon die they contaminate the surrounding tissues, and an effect is produced similar to that which we have just noticed as caused by the Aphis.

A third case is still more formidable, as it induces even more rapidly partial sterility, which after a short time ends in death. This commences in a totally different way from the others. A small dark brown patch occurs at the base of a little dead fruit spur, or round some ill-developed or dormant bud. On examination the discoloration is seen to arise from the death of the bark, induced sometimes by the previous death of the spur or bud, though sometimes originating at once in the tissue of the bark itself. In either case the real cause is the condition of the roots, which may indifferently either affect the shoot or bud first, extending the evil from thence to the bark, or attack the bark immediately. If the disease commences in a young branch, the bark is soon affected all round, the cuticle is detached, the circulation is stopped, and every part above the diseased ring perishes. If the patch occurs on the stem the progress may be slower, and a rugged wound may be produced as in the two former cases, but death is at length the inevitable result. The evil may be checked by removing the decayed bark and paring the edges perfectly even, but as the cause is not remedied it is almost sure to recur in some other part of the tree, exactly as is the case with cancer in the human frame. Some varieties of Apples are far more subject to this malady than others, and the graft may be affected when the stock is sound, which seems to indicate that in such cases the affection is in some degree constitutional, or at least that it arises rather from inappropriate food derived from the stock than from a diseased condition of the roots, or a soil which does not suit the particular variety.

The fourth kind of canker is of a very singular character, and is probably not uncommon, though we have not had many opportunities of observing it. We have no longer a discoloured patch on the same level with the rest of the bark, but the whole stem is pitted with little irregular roundish or oblong greyish cavities, as if it had been affected with the smallpox. These cavities are at first distinct, but as they increase in diameter they run into each other and form patches of various sizes. The pits bear no relation to the buds, but are indifferently dispersed over the surface. The bark is killed from the very first immediately beneath the shoots, but the decay is superficial, and does not extend to the wood till a later period. In the end, however, it forms cankerous spots as in the other cases, though at present we have not sufficient data to form any comparative estimate of its intensity.

The fifth differs widely from the others, and at present has been of more rare occurrence, so far as our own experience extends. It is indicated in the first instance by the chipping off of a portion of the bark in such a way as to expose completely the younger portion beneath, which is externally of a yellowish colour from the presence of a few cork cells, but left without any other protection to the mercy of external agents, the consequence of which sooner or later is destructive action on the wood.

There is another affection to which Apple trees are subject which may be mentioned here, as we are half inclined to think it a modification of the third form of canker, though its external signs are very dissimilar. Particular bunches of spurs gradually acquire an unhealthy appearance, though they do not cease to bear fruit, and in some cases are even more productive than others, though the fruit is small and scarcely arrives at perfection, and the foliage is pale. After a time these parts of the trees perish though neighbouring portions do not seem to be affected, and in the spring they are often covered with Fungi, the consequence we believe and not the cause of the affection.

These various diseases in a plant of such importance as the Apple demand very serious consideration, but unhappily at present little can be suggested in alleviation. Immediate excision of the parts affected is the first indication, but this is only palliation not cure. The affection if constitutional can be met in scarcely any other way than by abstaining from the cultivation of such varieties as are most affected by canker, of whatever kind it may be; but if local, the only plan is to trench the ground deeply before planting,

* The word gimble expresses especially that point in timber where the annual rings in a vertical section are bent at a more or less acute angle, a matter of some consequence as regards the strength of the timber.

paving the bottom to prevent the roots penetrating into injurious strata, and encouraging the production of roots in more genial soil. On a large scale, however, very little can be done, beyond accurate observation of such local peculiarities as induce these diseases, and avoiding sites for planting which are likely to bring them on. *M. J. B.*

DEATH OF THE REV. PROFESSOR HENSLOW.

In this week's Obituary is mentioned the decease of this distinguished Naturalist and excellent man. We had hoped to have to-day added a few words upon the character and career of one so dear to his friends; but by some accident the letter in which the record of his life was enclosed had not reached us at the time of going to press. We must therefore defer the subject till next week.

MYCOLOGY.—No. LII.

AGARICUS VERNUS, *Bull.*—The genus *Agaricus* at the lowest computation comprises a thousand species, of which more than three hundred and sixty have been recorded as British, and it is probable that Great Britain will reward future researches with many novelties. The difficulties attending their determination are so great, even after they have been disposed into natural groups, that some of our correspondents have suggested that it would be useful to give an illustration in succession of each of the sections into which Fries has so happily divided the enormous mass of species. We accordingly commence to-day with the subgenus *Amanita*, with the intention of similarly treating the remaining twenty-six subgenera.

We have already stated that the primary divisions depend upon the colour of the spores, the first comprising those with white spores under the general name of LEUCOSPORI. In a very few cases only, instead of pure white we have slight cinereous or rosy tints, but in none so decided as to cause much difficulty. The most striking exception perhaps is that of *Agaricus euosmus*, but the evident relation of that species to the common *Agaricus ostreatus* would at once obviate mistakes.

The subgenus *Amanita*, to which our present subject belongs, a name originally given by Galen to some esculent Fungus, is characterised amongst the white-spored Agarics by its universal volva or outer perfectly distinct veil or covering, investing in an early stage of growth the whole of the stem and pileus, and often, as in *Agaricus vernus*, retaining its distinctive character to the last. The volva sometimes scarcely adheres to the cuticle of the pileus, and as that expands splits up into two or three lobes suffering the pileus to pass freely through, or leaving a few fragments behind which remain fastened to the disc. Sometimes, however, it is so closely attached that it does not burst except at the line of division between the pileus and base of the stem, but breaks up into warts which are more or less permanent, and in many cases so firmly united that they cannot be rubbed off without violence. The Hymenophorum, or part which bears the gills, is moreover perfectly distinct from the stem.

The subgenus *Amanita* is divisible into two principal sections, in the first of which there is a distinct ring attached to the upper part of the stem, and at first covering the gills, as in the present instance, and in *A. muscarius*, No. VII., while in the other there is not a trace of a ring, as in *A. vaginatus* No. XLII.

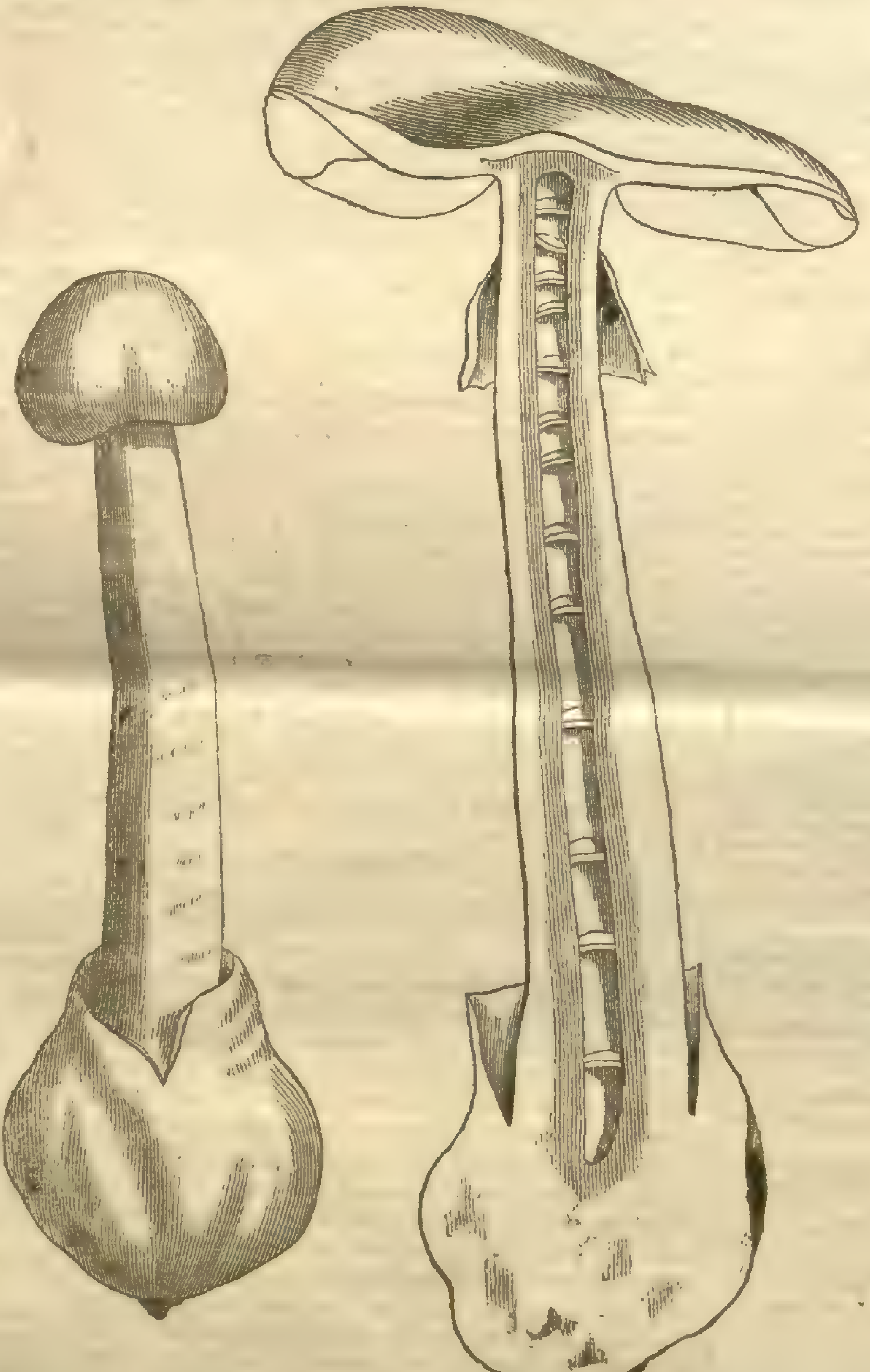
The first section again comprises four groups characterised by different conditions of the volva. In the first it bursts so as to form distinct lobes. The most remarkable species in this group is the famous *A. cæsareus*, said to be the prince of esculent Fungi, as it is one of the most beautiful, with its scarlet pileus, yellow gills and white volva. *A. vernus*, moreover, is a good example of this group.

The second has the volva divided horizontally, the lower part often forming a distinct margin at the base of the stem, while the upper splits into warts. The whole Fungus, indeed, is at first covered by the volva, but the pileus being perfectly distinct from the base, the volva necessarily splits at the margin of the pileus, and hence acquires its peculiar character. *A. muscarius*, No. VII., is an example.

In the third the whole of the volva breaks up into scales or warts without leaving any margin. *A. rubescens*, one of the commonest inhabitants of Fir woods, is an example, and is at once known by its acquiring a reddish tinge where bruised or broken.

The fourth is somewhat anomalous, the volva being very imperfect or obsolete, though the ring is still of the same character as in the other groups, and quite different from that of the subgenus *Armillaria*. Of this at present only a single species, *A. megalodactylus*, has been discovered in this country.

A. vernus grows occasionally in woods in early summer, and is distinguished from white forms of the common *A. Phalloides* by its closer sheathing volva, and more ovate pileus when young. It is considered by authors a subspecies of *A. virosus*, differing principally in its sheathing volva and more even margin. Like that species it is extremely poisonous. In either case the volva and white gills are so decisive that no mistake can be made in this country, which does not possess the esculent *A. ovoideus*, a species sufficiently characterised, not to mention other points, by its perfectly free gills Vittadini and Paulet consider *A. vernus* as the most dangerous of Fungi. Several cases of its pernicious effects both in France and Italy are recorded, but very few of recovery. It is probably confounded with the esculent *A. vaginatus*, which may however at once be distinguished by the absence of a ring. *M. J. B.*



AGARICUS VERNUS, *Bull.* Copied from Vittadini, "Funghi Mangerecci."

WEEDS.

A GREAT statesman some short time back at a public meeting defined dirt as "anything in a wrong place." By the same rule a weed may be described as a plant in a wrong position, and thus a Dock in a dung frame, or a Dahlia among the Mangel, is a weed and ought to be eradicated. Happy should we be if all weeds could be as easily got rid of as a Dahlia, for leave it to itself and the Ice King will give it its quietus. Many of our pests are more persistent, and to rid the farm or garden of them is in the language of many cultivators impossible. "They were here when I took the varm fivty dree years ago, and they 'll be here when I be gone," said Farmer Lonehouse to me one day, when pointing out to him some acres of Docks and Thistles just beginning to shed their ripe seed. But the farmer had made it a rule to cut the Thistles and other weeds after the harvest work was completed, and hence in the case of perennial plants, they had not only laid up a good store of organisable matter for another season, but they had also sown such a progeny of youngsters as to render their extermination an event to be accomplished in the very far distant future. But perhaps Farmer Lonehouse was not more ignorant of the philosophy of weed eradication than many who consider themselves more learned, for go where you will, even on model farms (models in some respects to be avoided), and around the homestead in the rick-yard and pasture fields, and you will see Nettles and other weeds so rampant that you would imagine the paper duty had been repealed years ago, and that the weeds were being specially prepared for the paper manufacturer. Such however is not the fact, as young Hopeful, so long as his corn land is clean does not care for a few weeds in the pastures, forgetting that the produce of the pasture will ultimately get to the dung heap, and through it not improbably to the Turnip field. Under a proper system of management weeds should be eradicated wherever they present themselves, and that too, not when they have matured their growth and possibly shed a crop of seeds, but in the early spring, directly they show a green leaf above ground. True the covenants of many agreements and leases only require that weeds should be mowed twice in the year, the precise time for doing so not being stipulated, but it is much cheaper to exterminate the weeds altogether if the method of doing so is properly carried out. All physiologists, most gardeners, many school children, and some farmers, know there is a reciprocity of action between the root and the foliage, and that the latter is quite as essential to the existence of the plants as the former. Deprive a plant of its roots, and it will certainly die; divest it systematically of its foliage as fast as it is produced, and it must perish, just because you will pump or draw out every vestige of life sustaining sap, but leave one branch unscathed, or neglect the disleafing sufficiently long to enable the foliage to elaborate and return some organisable matter to the parent stock, and your effort will be less certain and possibly fail altogether.

Few are there among the uninformed in vegetable physiology who can believe in the possibility of killing a plant by cutting off its leaves, and many times among farmers I have been set down as being in a pitiable state of ignorance for promulgating such a doctrine. But see that splendid root of Rhubarb, that plant from which you plucked the six sticks weighing 20 lbs., and which you have boasted about for years. How fine it looks; that last soaking of soap-suds and guano has put new life into it, and nothing short, you would think, of cutting the root to pieces would destroy it. But tear off those leaves, every one of them, leave not a vestige, and every week, or twice a week, if necessary, remove the new growth, and just as certain as you will empty that barrel of beer by boring a hole in the bottom, so surely will you dry up the last drop of life-blood in that Herculean plant by the constant removal of its foliage. The reason is that though the roots may provide moisture, and such other elements of vegetable nutrition as may be taken up with it, those elements are useless for building up the fabric of the plant unless exposed to the vivifying influence of light, heat and air in the foliage of the plant, and therefore if you remove the foliage as fast as it is produced, and before it can return anything to the fabric of the plant, you are as sure to destroy it as if you deprived it of roots.

We have thus seen that a root of Rhubarb may be destroyed by the constant removal of its foliage, and if such a plant will yield to that influence, why not the Docks and Thistles, and Nettles and Coltsfoot, and a thousand other plants which not only vex and perplex the cultivator, but in too many instances, by destroying his crops, deprive him of the means by which he ought to live. But with these pests of the farm we need not act so leniently as we have done with the Rhubarb, we will not trouble to pluck their leaves, but with the spud or mattock we will take off their heads at one fell swoop and not content with this we will give each plant salt sufficient to deprive it of the life remaining in it after the leaves are gone. The quantity of salt required would be less than a teaspoonful, or you may use, where it is readily obtained, a little gas-water or diluted sulphuric acid poured on the decapitated roots. Salt, however, is the most readily obtained, and a boy or girl of 10 years of age will follow two or three weeders and drop the salt as fast as they cut the weeds. In this way a considerable scope of ground will be got over in a short time, and more real work will be accomplished in one season than the usual system of "mowing twice a year" would accomplish in the life of the oldest inhabitant. In the disleafing process the work must be continuous, there must be no shirking; the enemy must not only be knocked down, but he must be kicked again the moment he attempts to rise. Continue this system vigilantly for a season,

and perhaps a part of a second, and those will be most obstinate weeds which do not succumb to your energy. Some years back (upwards of 20), when walking through the park at Woburn, I saw a gang of some 40 or 50 boys under a foreman beating the ground most lustily with long supple Ash sticks. Upon going up to them I found they were beating Nettles, and upon inquiry the foreman told me they should continue to beat them throughout the season, or so long as any came up to be beaten. At that time I could not see the *rationale* of their work; but disleafing was the process, and the growth of the plant was also much checked from the bruising the creeping stems got during the operation.

Therefore let no one despair about eradicating weeds, for so sure as an animal would perish from the want of food, equally certain is it that all plants must perish, be they the monarch Oak, or tiny Moss, so long as their foliage is removed before it can return anything to the parent stem. Here is the secret of success, and there can be no failure if the war is waged continuously and without "quarter." *W. P. A.*

MONKEYANA.

(*From Punch.*)

AM I satyr or man?
 Pray tell me who can,
And settle my place in the scale.
 A man in ape's shape,
 An anthropoid ape,
Or monkey deprived of his tail?

The "Vestiges" taught,
 That all came from naught
By "development," so called, "progressive;"
 That insects and worms
 Assume higher forms
By modification excessive.

Then Darwin set forth,
 In a book of much worth,
The importance of "Nature's selection;"
 How the struggle for life
 Is a laudable strife,
And results in "specific distinction."

Let pigeons and doves
 Select their own loves,
And grant them a million of ages,
 Then doubtless you'll find
 They've altered their kind,
And changed into prophets and sages.

Leonard Horner relates,
 That Biblical dates
The age of the world cannot trace:
 That Bible tradition,
 By Nile's deposition,
Is put to the right about face.

Then there's Pengelly
 Who next will tell ye
That he and his colleagues of late
 Find celts and shaped stones
 Mixed up with cave bones
Of contemporaneous date.

Then Prestwich, he pelts
 With hammers and celts
All who do not believe his relation,
 That the tools he exhumes
 From gravelly tombs
Date before the Mosaic creation.

Then Huxley and Owen,
 With rivalry glowing,
With pen and ink rush to the scratch;
 'Tis Brain *versus* Brain,
 Till one of them 's slain;
By Jove! it will be a good match!

Says Owen, you can see
 The brain of Chimpanzee
Is always exceedingly small,
 With the hindermost "horn"
 Of extremity shorn,
And no "Hippocampus" at all.

The Professor then tells 'em
 That man's "cerebellum,"
From a vertical point you can't see;
 That each "convolution"
 Contains a solution,
Of "Archencephalic" degree.

Then apes have no nose,
 And thumbs for great toes,
And a pelvis both narrow and slight;
 They can't stand upright,
 Unless to show fight
With "Du Chaillu," that chivalrous knight.

Next Huxley replies,
 That Owen he lies,
And garbles his Latin quotation;
 That his facts are not new,
 His mistakes not a few,
Detrimental to his reputation.

"To twice slay the slain,"
 By dint of the Brain,
(Thus Huxley concludes his review)
 Is but labour in vain,
 Unproductive of gain,
And so I shall bid you "Adieu!"

Gorilla, Zoological Gardens, May, 1861.

Home Correspondence.

Transplanting a Large Yew Tree.—Having had considerable experience in shifting large Yew trees, I have been much interested in the account given at p. 457 by Mr. Harland, of the shifting of one at Bedwell Park. I find on measuring the best of a great number shifted here, that none of them are quite so large as Mr. Harland's. One tree shifted is about 30 feet high, the circumference of the bole 5 feet 8 inches, and the circumference of the branches 102 feet at the ground. This tree was raised, and drawn to its place, and planted in two days, 12 men being employed in the process, with two horses to draw with block and tackle, the ball on rollers, which with the tree would weigh about 12 tons. The expense in shifting this tree was considerably under 5*l.*, but then we had jacks, planks, rollers, and packings all at hand, and the men constantly employed at such work for two or three months at a time. Mr. Harland would have to hire machinery, and find all for that particular tree, so that the expense is not to be wondered at. For lifting trees too large for machines, we use here two screw-jacks of Worsdell & Evans' double action patent, each capable of raising 12 tons, and Oaks and Limes considerably larger than Mr. Harland's Yew have been shifted by them. I find that large Yews require a good soaking of water at the roots every 10 days in dry weather, and if the bole is wrapped in Moss, and a good drenching given with an engine frequently over head in dull weather, the success of their growing well will be more certain. Mr. Harland must not expect his Yew to recover its vigour the first or even the second year, if ever so carefully planted and watered. I find that it takes three years for large Yews to quite get over their shift; but after that, owing to the fresh soil given them, they grow better than before. *William Tillery, Welbeck.*

Rainfall, April 1861:—

Stations.	Height of Gauge. Above the Ground. Ft.	In.	Above Sea Level. Feet.	Depth of Snow or Rain. Total for the Month. Inches.	Greatest fall in 24 Hours. Depth. Inches.	Date.	Rainy or Snowy Days.
Little Bridy, Dorset	0	4	348	.48	.30	28	8
Barnstaple, Devon	0	6	81	.66	.34	7	5
Castlefield, Calne, Wilts	0	11	330	.59	.27	27	6
Camden Town, London	0	4	100	1.31	.46	27	6
Finchley Road, London	0	4	270	1.26	...	...	...
Ditto ditto	36	4	806	.98	...	...	...
Oundle, Northampton	20	0	124	.89	.40	3	9
Norwich	0	0	80	.99	.48	1	8
Derby	5	0	179	1.20	.62	9	7
Manchester	3	0	106	2.14	.42	20	10
North Shields	1	0	124	1.25	.42	8	19
Dumfries	0	5	63	.65	.40	8	10
Nookton, Leven, Fife	0	6	80	.88	.26	25 & 26	9
Sandwick, Orkney	2	0	78	1.02	.19	20	15

REMARKS:—

Little Bridy.—Hail on the 1st; thunder on the 1st and 3d.
Barnstaple.—No rain fell after the 7th.
Camden Town.—No rain from the 4th to the 23d; heavy snow on 27th.
Oundle.—Hail at 4 P.M. on the 3d; heavy snow on the 27th.
Derby.—Average (14 years) fall for the month 1.90 inch.
Manchester.—Dr. Dalton's (47 years) average, 2.114 inches.
Dumfries.—Nearly 0.6 inch fell in the first four days; from that to the 21st the weather was dry and warm; during the last week slight showers. Snow on the 27th. Swallow first seen on the 18th.
Nookton.—The month has been dry, and cold nights with rime.
Sandwick.—Mean fall in April (20 years) 1.83 inch.
G. J. Symons, Camden Road Villas.

Effects of the Winter at Belstane, near Edinburgh.—Having lately seen in your Paper so many deplorable accounts of the ill effects of last winter, I am induced to send you some short memoranda, to show that on this side the Tweed we have not suffered so much as some of our southern friends imagine. Belstane, which is situated about 12 miles west from Edinburgh on the Lanark Road, is near the Pentland Hills, and stands at an elevation of from 700 to 900 feet above the sea. The soil is of a heavy nature, lying on a substratum of sandy clay. Belts of wood are planted round the fields; still we are exposed to blasts from nearly all quarters. The lowest temperature occurred on the night of the 24th December, when my thermometer indicated 29° of frost; yet notwithstanding this less injury has been done to trees and shrubs than has been experienced during winters less severe. For the last 16 years, the more recently introduced Coniferæ have been largely planted here, and among them are some good specimens; for instance, Abies Douglasii of 15 years' growth, is about 30 feet high. Of plants considered hardy, but which have suffered most, I may name Pinus insignis, Fortune's Yellow Rose, Souvenir de Malmaison, and Celina; these Roses were all nearly killed to the ground against a south wall. SHRUBS SLIGHTLY INJURED are Garrya elliptica, Berberis Darwinii, Leycesteria formosa, Cupressus Lambertiana, Desfontainia spinosa, the latter on a south wall; Roses, such as Bourbons and Hybrid Perpetuals, in the open borders, may also be placed under this head. Of PLANTS PARTIALLY INJURED, that is to say injured in one place and not in another, although in similar situations, I have to record Picea Webbiana, Araucaria imbricata, and Taxodium sempervirens. Of PLANTS NOT AT ALL INJURED my list includes Pinus Cembra, excelsa, Strobus, monticola, Lambertiana, rigida, pyrenaica, Pallasiana, Mughus, pungens, calabrica, inops, Hamiltoni, taurica, Jefferyi, Benthamiana, and Pattoniana; Abies Douglasii, A. Smithiana (A. Morinda), A. Menziesii and orientalis; Picea grandis, Pichta, Pinsapo, cephalonica, nobilis, Nordmanniana, and Pindrow; Cedrus Libani, Deodara, atlantica; Cupressus Lawsoniana, torulosa, Seemanni, Macnabiana, and Goveniana; Wellingtonia gigantea; Thuja Wareana, gigantea, aurea, Craigana, and pendula; Pyrus japonica; Chimonanthus fragrans; Clematis azurea grandiflora, bicolor, Flammula, and montana; Salisburia adiantifolia; Spiræa bella; Cratægus cordata; Deutzia scabra; Taxus adpressa? Weigela amabilis and rosea; Escallonia macrantha and E. pteroclada; Sambucus racemosus; Ailanthus glandulosa. Also Hollies, Bays, Portugal Laurels, and common Rhododendrons; these may be said to have escaped. *A. Donald, Belstane.*

Neal's Aphis Pastils.—Though these may perhaps merit in some degree the commendation they have received in your columns, your readers should be informed that there are plants whose foliage is sure to be more or less injured or even destroyed by the nitrous fumes resulting from their combustion. What plants will suffer experiment only can decide. In my own small collection a plant of Corydalis speciosa was severely affected, and in a cold frame where a trial of a pastil was thought expedient, an Epimedium, an Ononis, and Corydalis nobilis were much injured. From the rapid and perfect combustion of the pastils it is very evident that they are very strongly impregnated with nitre, and I would suggest to the manufacturer to try a weaker solution. They are so convenient that some modification which will render them safer than at present would be highly desirable. A smaller size than those hitherto sold would, I am of opinion, also be found serviceable in frames if it could be manufactured. *Jacques.*

Potato Disease.—I see that you always state that the Potato disease first showed itself in 1845. In 1842 I lost half of a crop of Potatoes in an 11 acre field, and we have never been free from the disease here since. *John Hamilton, Sundrum, Ayr.* [It is probable that the Potato disease has existed in some degree for many years. When it is said to have first shown itself in 1845, it is meant that it first appeared in that year in a formidable degree. It was known in St. Helena before 1842.]

Andropogon formosum.—The plant referred to under this name in your last issue (p. 459) I grew last summer in the open ground with a certain amount of success, but my specimen did not exceed 4 feet by the end of the season, though it threw up a large number of culms. The foliage, though marked by a central white stripe, was much browned by the low temperature, and, from the same cause probably, it yielded no blossoms. I judge it to be a semi-aquatic. It is remarkable for the number of roots emitted by the joints, even from those at some distance from the ground, though my plant was in moist soil, and certes had no lack of water last season. *W. Thompson, Ipswich.* [Doubtless the summer was too cold for it.]

Oaks.—In your Number of May 18 I observe a statement of a plantation of Oaks, sown from acorns in 1818, having become occupied as a rookery. I can easily credit this, as in this place an extensive Oak plantation for small nursery trees, planted in 1836, has been occupied by rooks from the adjoining rookery for two or three years as a roosting place, and for the last two seasons they make efforts to establish their nests in these Oaks. *Shannon, Castle Martyr, Cork.*——In reply to the question as to where did this (alluding to the quick growth of Oaks mentioned at p. 458) happen, the answer is in the pretty village of Brooke, near Norwich, Norfolk. Many of the trees have been transplanted to other localities, and have grown luxuriantly. *One of your Readers.*

Green Copperas.—I have a manure tub into which I pour dissolved green copperas, in order to destroy the smell. Will the water with the copperas in it injure the plants, Roses, &c., which I water with it? *H. H.* [We think not, unless the copperas has been used in excessive quantity.]

Wasps.—On May 4th, 1854, I paid to the children of a parish school in this neighbourhood 5*l.* 2*s.* 4*d.* for 1228 wasps that were brought to my gardener, and by him brought to me, on or before the 1st May in that year. On the 8th instant, I asked the gardener how many wasps he had got to bring me this year, and was answered that not one single wasp had then been killed by any of the children. A promise of a shilling for the first wasp brought to the schoolmistress has resulted in the destruction of *one* on Friday last, 17th instant. *F., Diss, May* 23.

Strawberries.—I enclose a few Strawberry blossoms to show you the state in which they are in this neighbourhood. In nearly all those which are open the anthers are abortive. In a few in which the female part or young Strawberry is destroyed by frost, the anthers remain in a perfect state. *Henry Doubleday, Epping.*

Foreign Correspondence.

BALLARAT, VICTORIA, AUSTRALIA.—*Double Seasons.*—I observe that in your Number of 17th November, 1860, there is a review of a pamphlet entitled, "The Six Months' Seasons of the Tropics," by James Lees; and it is stated in the review that it is the object of the author to prove the existence of two summers and two winters in all tropical countries.

I have resided in this semi-tropical climate for six years, and every year since my arrival here I have been more and more convinced that two such seasons exist, not only in this country, but to a greater or less extent in all countries, even in England; and indeed it was my intention to have written to you on this subject before I saw the review of Mr. Lees' book.

The usual Spring vegetation commences in the month of July, which corresponds with your February; seeds germinate and grow vigorously until checked by the dry weather in November; in July, August, and September, the various species of Acacia, Daviesia, Pimelea, Boronia, &c., exhibit their blossoms, and about November mature their seeds, when their active vegetation seems to terminate; during the dry and sometimes warm months of November, December, and January, a great many plants remain dormant, and this period of inactivity extends even into February and March; but in March showers begin to enliven the earth; a second vernal growth sets in; the browned pastures become quickly covered with a rich and abundant sward; the bare hill sides, which were recently the pictures of arid desolation, assume a lively verdant hue; crops of vegetables are sown and grow rapidly; the Epacris begins to show its blossom buds, which, however, do not expand till May or June; the vegetation of almost all native plants is renewed, and protracted far into the winter, which, being mild, permits the growth of many things to continue up to the month of June. June is the most torpid month of our winter; but it is not the rigid, iron-bound, frozen up torpidity of your cold climate; it gives a moderate check to vegetation, but by no means a complete stoppage. The Eucalyptus and other native trees accommodate themselves to this state of the climate, and retain their leaves, growing all the time, sending out young twigs and fresh foliage, but the latter is of a rather more yellowish green colour than in the warmer months.

An analogous process of vegetation seems to occur in Great Britain also, but the four seasons of spring, summer, autumn, and winter are so conspicuous and well-marked in your land that the occurrence of two minor springs and two minor autumns is not so observable. When I remind you, however, of the existence of two classes of fruit which ripen at different periods you may recognise the two minor autumns. The Strawberry, Gooseberry, and Cherry ripen their fruits in the first autumn, the Apple, Pear, and Plum ripen in the second autumn. The Fig tree on the other hand endeavours to mature two crops, thus indicating that its natural habits fit it for a cold climate.

I have no doubt that the decided double seasons spoken of by Mr. Lees exist distinctly in the tropics; that as you recede from the tropics into higher latitudes they gradually become less conspicuous, until in the northern regions they may not be observed at all. Perhaps the Indian summer of Canada may be a phase of the phenomenon.

I am further of opinion that these double periods of rest and activity exist also in every period of 24 hours —modified by the length of the day and night. The nocturnal rest of plants is of a different kind from the meridional rest—but both seem to exist—and even the animal creation displays more activity in the forenoon and afternoon, retiring to rest by night, and sheltering themselves during the mid-day heat under the foliage of the forests. Even man in the tropics find it to be the best arrangement to sleep at night, rise early, and be active till mid-day, then enjoy a ride, and resume work in the afternoon. *Thomas Lang, Nurseryman and Seedsman, March* 18. [We would refer the reader upon this subject to the Theory and Practice of Horticulture, in which it is fully discussed.]

Societies.

CRYSTAL PALACE HORTICULTURAL EXHIBITION: *May* 18.—This Company's great floral fête of the season took place on this occasion, and, the weather being favourable, it was well attended. The exhibition itself was scarcely so fine as some of its predecessors. To this remark, however, Roses in pots formed a glorious exception, and Mr. Turner's Pelargoniums and Azaleas were also all that could possibly be desired both as regards growth and bloom.

Collections of stove and greenhouse plants, however, were deficient as regards floral beauty and effectiveness; the best were furnished by Mr. Peed, gr. to T. Tredwell, Esq., of Norwood. They comprised huge bushes of Indian Azaleas, the beautiful Lilac-flowered Heath-leaved Tetratheca, various kinds of Everlastings, Epacrises, Polygalas, and Cape Heaths, the pretty Phlox-like Leptodactylon Californicum, Franciscea of different kinds, the useful Impatiens Jerdoniæ, the Willow-leaved Ixora, Dracophyllum gracile, Adenandra speciosa, Boronia Drummondi, a most useful plant for cool greenhouse decoration, being ornamented for many weeks together with multitudes of bright rosy star-like flowers; Eriostemon intermedium, and other half-hardy shrubs.

Of 12 Stove and Greenhouse plants, Messrs. Green, Baxendine, and Cutbush, sent collections, in which were well grown plants of various kinds of Azaleas, Erica depressa, Hederoma tulipiferum, covered with white, red streaked, drooping, bell-shaped blossoms; Pimelea Hendersoni, Allamanda grandiflora, beautifully in flower; Franciscea calycina, Boronia serrulata, Erica Victoria Regina, a handsome kind; Rhynchospermum jasminoides, and other plants of similar character.

Groups of 6 and 8 Stove and Greenhouse plants were contributed by Messrs. Chilman, Kaile, Page, and Smith. Among these were Boronia Drummondi, Aphelexis macrantha rosea and purpurea, Acrophyllum venosum, a large yellow Heath, Polygalas and Adenandras.

Collections of plants remarkable for the beauty of their leaves came from Messrs. Hutt and Young. In addition to variegated Begonias they contained small plants of Farfugium grande, Theophrasta macrophylla, Caladiums of different kinds, Aralias, Marantas, Cissus discolor, Palms, Ferns, Rhopalas, and Dieffenbachias, producing on the whole a display inferior to that which we have witnessed on previous occasions.

Exhibitions of Orchids were tolerably good; the best came from Mr. Stone, gr. to J. Day, Esq., of Tottenham, who contributed Dendrobium Devonianum and macrophyllum, both in baskets, and excellent specimens with long pendent shoots covered with blossoms; the rare Chysis Limminghi, the white Butterfly plant; the large yellow lipped Oncidium ampliatum, a charmingly flowered plant of the handsome Lælia purpurata, the Fielding Foxbrush Aerides, two finely bloomed species of Saccolabium, Cattleya Mossiæ, the rare and beautiful Odontoglossum Pescatorei, the singular O. niveum, and Epidendrum bicornutum. The next group came from Mr. Peed; it contained Phaius grandifolius, the purple Calanthe masuca, Phalænopsis grandiflora, Lycaste Harrisoniæ, Cypripedium, and Brassia.

Collections of 6 and 10 Orchids came from Messrs. Milford, Stone, Page, Penny, and Bunney. Among these were the Fielding Foxbrush Aerides, the white Butterfly plant, Cattleya lobata, Aclandiæ, Mossiæ, and amethystina; Lælia purpurata, with three fine spikes of large handsome blossoms; Vanda suavis, Oncidium ampliatum, the green-tailed Uropedium Lindeni, Cypripedium Lowei, with two large singularly formed blossoms; Aerides Warneri; an Odontoglossum in the way of niveum; O. citrosmum, Calanthe veratrifolia, and Vanda insignis. Mr. Woolley also showed a collection, in which were plants of Cypripedium hirsutissimum, Dendrobium nobile, cærulescens and Paxtoni, Aerides crispum, the bright yellow-lipped Cyrtochilum filipes, and one of the best varieties of Bearded Lady's Slipper.

Azaleas formed, as they usually do in May, a conspicuous feature of the exhibition; the larger collections of them occupied prominent positions, and were altogether very effective. The best, as we have already stated, came from Mr. Turner, of the Royal Nursery, Slough; these were beautifully grown and extremely well flowered; Mr. Green, gr. to Sir E. Antrobus, Bart., and Mr. Carson, Nonsuch Park, Cheam, also showed good collections, in both of which were large specimens of the yellow A. sinensis. Groups of smaller plants were abundant, and in these Mr. Turner again stood in the first rank. Messrs. Ivery, of Dorking, also showed some fine kinds, among which were Flower of the Day, white with an occasional stripe of rose in it; an improved variety of variegata; Gem, glowing crimson, and beautifully shaped; Admiration, pink striped white; Distinction, salmon; rosea alba, Lord Raglan, and Etoile de Gand.

Cape Heaths were produced in large quantities and in good condition. We did not, however, observe among them anything new or remarkable.

Tall Cacti were produced by Mr. Green, Mr. Young, and others; but they were not sufficiently advanced in flower to be very striking or effective. Among them were Cereus Mallesoni and flagelliformis; Epiphyllum Ackermanni, speciosum elegans and Jenkinsoni, and a salmon-coloured Seedling called Novelty; the last was shown by Mr. Young, of Highgate.

Roses in pots were truly magnificent. Notwithstanding the severe winter and long cold spring we have experienced we do not recollect ever seeing finer plants than were contributed on this occasion by Messrs. Lane and Paul. The former, to whom the first prize was awarded, sent Paul Perras, a noble bush 5 feet in height and quite as much in diameter, ornamented with no fewer than 90 blooms, large, fresh, and beautiful; such a plant one rarely has the good fortune to see; scarcely inferior were Chenédolé, with 60 blooms on it; Souvenir d'un Ami, with 50 delicate salmon blossoms all in the highest possible perfection; Baronne Prevost, equally well flowered; Comtesse Molé, with 40 rosy pink blossoms; Coupe d'Hébé, always one of the handsomest of Roses; Lion des Combats, fine dark crimson; Gloire de Dijon, Triomphe de Paris and Jules Margottin, the last with 40 flowers on it, large and beautiful. The groups from Messrs. Paul were also extremely fine considering the season. Among Cut Roses were glorious blooms of the new kind called President, a variety which cannot fail to take a first place in the class to which it belongs. Other new sorts we hope to report on hereafter when the season has got further advanced.

Among new and rare plants the most striking was a Lælia, allied to purpurata, from Mr. Williams, of Paradise Nursery, Hornsey; the lip resembled that of the species just named; but instead of the sepals and petals being pure white, as in purpurata, they were purplish lilac; to this a first prize was awarded. From Mr. Bull came the handsome silvery-veined Campylobotrys refulgens, Dracæna spectabilis, the variegated variety of Rohdea japonica macrophylla, the variegated Agathæa cælestis, this time in better condition than when we last saw it; and various Begonias, Palms, and Ferns, most of which have been described by us in reports of the Royal Horticultural Society's Meetings, at South Kensington. From Mr. John Porter, Brixton Hill, came a cheerful looking bright yellow Polyanthus, which appeared to be a most abundant flowerer; Mr. Bunney sent Alocasia metallica, and are also noticed a pinkish white flowered Ixora, which we, however, not in a condition to judge correctly of its merits.

Of Pelargoniums, both fancy and ordinary kinds, Mr. Turner sent excellent plants, large and finely bloomed; Celestial especially was a perfect model of skilful cultivation. Messrs. Dobson also showed some good plants.

Some well grown Cinerarias were shown by Mr. Turner and Messrs. Dobson, and we also noticed several promising new kinds from Messrs. Smith of Dulwich; of the best of the latter descriptions have been given by us in former reports.

Fruit, though not plentiful, was good. Pine Apples came from Chatsworth, Mr. Leaf's garden at Streatham, Goodwood, and the Deubies, near Dorking. The sorts were for the most part Queens and Cayennes; a variety, however, from Chatsworth, called Charlotte Rothschild, obtained a first prize. It appeared to be a promising kind belonging to the Cayenne class.

Among Grapes the best Black Hamburghs came from Mr. Hill, Keele Hall, Staffordshire; these were large both in bunch and berry, and beautifully coloured. Scarcely inferior were also exhibitions of the same kind of Grape from Mr. Henderson, of Trentham. Mr. Frost and Mr. Wortley likewise showed good dishes. Messrs. Hill, Baker, Henderson, Spary, Frost, and McKenzie showed good boxes of 10 lbs. each of Black Hamburgh. Of White Grapes the best came from Mr. Powell, gr. to Dr. Newington, Ticehurst; the variety appeared to be the Dutch Sweetwater. A dish of Muscats from Mr. Embry was not up to the mark; Mr. Durant sent from Waresley Park, St. Neots, fair examples of both White and Grizzly Frontignans. Bunches of White Tokay were shown by Mr. Baker, but they were not ripe.

Of Peaches the best came from Mr. Henderson, Trentham, and the second best from Mr. M. Henderson, Coleorton Hall, Ashby-de-la-Zouch; Mr. Dawson, gr. to Lord Palmerston, also showed a good dish; the sorts were Royal George, Violet Hâtive, and Barrington.

Nectarines were shown from Trentham in excellent condition, large and well coloured; the sort was Violet Hâtive, with which Mr. Henderson took both first and second prizes in this class of fruit.

Cherries, Black Circassian, beautifully ripened, came from Trentham, and some good May Dukes were shown by Messrs. Jackson of Kingston.

Strawberries were excellent, especially Sir Charles Napier and British Queen, from Mr. Smith, of Twickenham, the Queens being well coloured even to the very point. Mr. Bailey, Shardeloes, and Mr. Gilham also showed good dishes. From Mr. Turner came handsome fruit of Oscar, now admitted to be a first-class kind not only for out-doors but for forcing; also Gen. Havelock and Sir C. Napier. Three collections of Strawberries in pots were exhibited, the best of which came from Mr. Kaile, gr. to Lord Lovelace.

Melons, considering the season, were good; the best was a yellow, oblong, Trentham Hybrid, from Mr. Taplin, gr. to Lord Hatherton, and the second best King's Green-fleshed, from Mr. Frost. In the class of Scarlet-fleshed kinds, a first prize was awarded to Mr. Eustone, gr. to Sir J. Duckworth, Bart., for Gem, a most useful Melon, and generally high flavoured; the same variety from Mr. Frost was placed second.

ROYAL BOTANIC, REGENT'S PARK, *May* 22.—This was in most respects an excellent exhibition. Azaleas and Pelargoniums were numerous, and made a brilliant display. Roses were again produced in first-rate condition, and there was as usual a large assemblage of stove and greenhouse plants. The day, though cloudy, was favourable, and there was a fair attendance of visitors. Falling so soon as it did after the exhibition at the Crystal Palace, the great bulk of the plants was, as a matter of course, the same as was present on that occasion. In the following report we shall therefore only notice such as have not been previously described.

A large collection of Stove and Greenhouse plants, furnished by Mr. May, gr. to J. Spode Esq., Hawkesyard Park, near Rugely, were all that could possibly be desired, not only as regards growth, but flower, and formed in this respect a striking exception to London plants, which have not been good this year. In Mr.

May's group were Ixora javanica, a noble bush, each branch of which produced a glorious bouquet of rich orange flowers; Ixora coccinea, also in good condition; Pimelea Hendersoni, 5 feet through, though it was stated to be only 4 years old, and covered with bloom; huge specimens of Epacrises, Chorozemas, Coleonemas, and Azaleas; Pimelea spectabilis and Gompholobium polymorphum, the latter grown in the form of a bush, a state in which it is much prettier than when trained on a trellis; Aerophyllum venosum, Genetyllis macrostegia, loaded with drooping orange red bells; the Heath-leaved Tetratheca; Dipladenia crassinoda; an Everlasting or two, and a charming specimen of blue Leschenaultia. To these a first prize was awarded.

Of Orchids the same exhibitor also sent a small collection, which received a first prize; it consisted of Dendrobium nobile and Paxtoni, two examples of Phalænopsis, Cattleya Mossiæ, and Aerides affine.

Among large Azaleas, Mr. Turner's plants again stood first; than his specimens of Chelsoni, Criterion, and Iveryana, nothing in their way could possibly be handsomer; they were not only fine examples of skilful cultivation but they were loaded with flowers from bottom to top, especially the first, an orange scarlet kind of great brilliancy and beauty. Messrs. Green and Carson also showed large and fine specimens.

Roses in pots were again shown by nurserymen in beautiful condition; in Mr. Francis's group, which was not at the Crystal Palace, were Vicomtesse Decazes, covered with rich yellow flowers; Paul Perras, Souvenir d'un Ami, Coupe d'Hébé, Madame Willermoz, Jules Margottin, Auberon, Baronne Prévost, Niphetos, a white kind; and Madame Hector Jacquin. From Mr Wm. Paul came a collection in small pots which was greatly admired, and deservedly, for the plants of which it consisted were nicely grown and well flowered. Amateurs also showed tolerably well on this occasion; Mr. Terry, gr. to Lady Puller, had good plants of Paul Perras, Souvenir d'un Ami, Niphetos, Vicomtesse Decazes, Jules Margottin and Comte de Paris; and A. Rowland, Esq., of Lewisham, had a beautiful plant of Chenédolé, with large richly coloured blossoms; Gloire de Dijon, Queen, Baronne Prévost, and Paul Perras. Of cut Roses a beautiful collection was shown by Mr. Wm. Paul, containing among others blooms of the following new kinds viz., Victor Verdier, a large showy rose; Madame William, yellow; Baronne Gonella, rose; Comtesse Cecil de Chabrillant, rose; Virginal, white; Gloire de Santenay, crimson; and Madame Boll. Messrs. Paul and Son also showed cut blooms, among which was a remarkably fine truss of the fawn-coloured Tea Rose, Madame de St. Joseph.

Of Cape Heaths Mr. May had a small collection, consisting of ventricosa magnifica, florida, odore rosæ, vestita purpurea, ventricosa coccinea, and suaveolens.

New Plants were numerous. From Mr. Piko, Winchmore, came a fine specimen of the handsome sweet-scented purple and white double Petunia named Inimitabilis; Messrs. Veitch sent the variegated variety of Pteris cretica in beautiful condition; also the Petunia just alluded to, the handsome Lomaria blechnoides, a pretty Gloxinia named Princess Beatrice, the silvery-veined Adelaster albivenius, and Araucaria excelsa variegata. Mr. Williams again showed his new variety of Lælia, and a singular creeping Ficus-like plant from Manilla; from Messrs. Fraser came a new white flowered Heath which promises to be an acquisition to that tribe of plants. Messrs. Ivery sent two new Azaleas, and Mr. Bull a great variety of plants, consisting of Palms, Ferns, variegated Begonias, double and single-flowered Petunias, some of them very pretty; three kinds of Dracæna, the handsome Campylobotrys refulgens and pyrophylla, Aralia leptophylla, a pretty kind; the singular-looking Alocasia metallica, Sphærostema marmorata, with silvery blotched leaves; three kinds of Caladium. Statice propinqua and profusa, Cissus porphyrophyllus, Theophrasta imperialis, the long spiny-leaved Hippomane longifolia, a glaucous variety of Araucaria Cunninghami, Rhopala crenata, and a species of Cupania. Mr. Verschaffelt also showed some new plants, chiefly Begonias, and other things remarkable for the beauty of their leaves, among which the most conspicuous was Campylobotrys Ghiesbreghti. Captain Speke showed blooms of a handsome red and white-flowered Amaryllid from Central Africa; Messrs. Lee, a fine plant of Cordyline indivisa, and some pretty New Zealand Ferns. Messrs. A. Henderson & Co. furnished Rhododendron calophyllum, a large pink-tinged white-flowered kind, a dwarf yellow Wallflower, and the singular purplish blue-flowered Mantisia saltatoria.

Among miscellaneous subjects were some handsome stands of Pansies from Messrs. Downie and Laird; Tulips and Verbenas from Mr. Turner; a collection of variegated Begonias from Mr. Young, Highgate; and a large Phænocoma proliferum from Mr. May, Rugeley.

Pelargoniums, especially the two first collections, both from nurserymen and private growers, were excellent. Leviathan, Fairest of the Fair, Candidate, Etna, Picnic, Vestal, Admirable, and Rose Celestial, in Mr. Turner's group, which was placed first, were beautifully grown and well flowered. Messrs. Dobson had Governor General, Fairest of the Fair, Una, Viola, Rosalie, Rose Celestial, Symmetry, R. Benyon, Eugène Duval, Fair Helen, Sanspareil, and Admirable. In the amateur's class, Mr. Nye, gr. to E. Foster, Esq., sent among others, Rose Celestial, Fair Helen, Flora, Sanspareil, Sir Colin Campbell, Fairest of the Fair, Saracen, and Vesta. Mr. Bailey, Shardeloes, contributed extremely well grown plants, dwarf and well flowered, both of ordinary and fancy kinds; their only fault was that the blossoms were rather small. Of fancy varieties those from Mr. Turner, to which the first prize was awarded, were also all that could be desired. Messrs. Dobson and Fraser likewise showed good collections. In the different groups, Cloth of Silver, Acme, Madam Rougerie, Circle, Formosissimum, Princess Royal, Attraction, and Lady of the Lake were conspicuous. Several Seedlings, all of which we hope to see again, were also shown.

Notices of Books.

British Wild Flowers, Illustrated by J. E. Sowerby. 8vo, pp. 168, with 80 plates, containing figures of 1600 plants (3*l.* coloured, 30*s.* plain; or in 10 monthly numbers). Van Voorst.

That 1600 really good, characteristic, well coloured figures of wild plants should be collected in one volume and published for less than a halfpenny each, would be incredible if we had not the proof before us. Mr. Sowerby's talents as an artist require no eulogium; the name is imperishably associated with the history of pictorial Botany in Europe; and he could not have conferred a greater service upon our field naturalists than by placing within their reach for a trifling sum what in our own remembrance 30*l.* would not have purchased. The plan of the work is to give figures, reduced from those of "English Botany," of every flowering plant found wild in the United Kingdom. Twenty of these occupy each plate, so that 80 copper plates include the whole. The arrangement being on the Natural system all similar genera and species are brought at the same time under the eye, so as to offer the best possible means of comparison. The plates are accompanied by short descriptions, and a few pages of slight introductory matter.

Messrs. Longmans have added to their "*Graduated Series of Reading Lessons*" a fifth book and last, consisting of 480 pages. It contains good selections from the works of Carlyle, Sydney Smith, Coleridge, Mill, &c. on Miscellaneous subjects; of Willis, Dickens, Head, Humboldt, &c. on Descriptive Travel; of Buckle, Thierry, Hallam, Froude, &c. on History; and of Owen, Gosse, Hugh Miller, &c. on Natural Science.

Popular Education in England, by Herbert Skeats. Bradbury & Evans. 8vo., pp. 154 (2*s.* 6*d.*).

This is a carefully prepared abstract of the Report of the Royal Commission of 1858, upon the present state of Popular Education in England, and will be invaluable to those who interest themselves in this national subject. Mr. Skeats informs us that "the first inquiry into the state of education in England and Wales was made in the year 1803. It was then estimated that the number of day scholars of all classes was 524,241, or only one in 17½ of the population. In the year 1818 a second inquiry was made. The returns then collected, like the former, were avowedly defective, and they indicated that no very considerable progress had been made in the education of the people. The number of scholars was then stated to be 674,883, or one in 17¼ of the population. The 15 years intervening between these two periods were, however, years of great political convulsion. For 12 of these years the Government was engaged in the prosecution of hostilities on a scale such as the world had never before witnessed. During the whole of this period the burden of a frightful taxation rested heavily upon the people; attention was distracted from all domestic concerns; no social or political progress of any kind was made. It need not therefore excite surprise that the education of the masses should have remained almost if not quite stationary. The years of peace which followed were characterised by a rapid advancement of the nation in every art of which a people may be proud. Education shared largely in this improvement. From returns laid before a committee of the House of Commons in 1833, it was ascertained that the number of day scholars was 1,276,947, or one in 11¼ of the population. But these returns also were defective; their deficiency being estimated to be as much as 10 per cent. Soon after this the first Parliamentary grant for education was made, but for many years it was so comparatively insignificant in amount, and so limited in its application, that it was impossible that it should influence to any appreciable extent the progress of popular education. The next general inquiry into the state of education was made at the census of 1851; but previous to this an investigation of a limited nature was undertaken, by unofficial authority, but of an extremely valuable character. This was made in 1843 by Mr. Edward Baines, and related to the ecclesiastical and educational statistics of the manufacturing districts of Yorkshire, Lancashire, and Cheshire. It proved that the number of scholars in these districts was then in the proportion of more than one to ten of the population. The results of the census of 1851 indicated a still further advance. In that year there were 2,144,378 day scholars, or one in 8.36 of the population. This proportion was remarkable for attaining the standard fixed by the most eminent educational writers, as well as by a committee of the House of Commons, as the desirable and practicable standard of education in this country. The Commissioners have ascertained that at the time their statistical inquiry was made, viz., in 1858, the number of children receiving day-school education was not less than 2,535,462, or one in every 7.7 of the population. This number is estimated to indicate an average instruction of six years for every child between three and 15 years of age."

The conclusions at which the Commissioners have arrived occupy 10 pages of Mr. Skeat's abstract, and are far too long for extract; we must therefore be content with giving what they suppose to be the expense of the plan of public education which they propose for adoption in future:—

"FROM GENERAL TAXATION.

Grants for annual maintenance ..	£375,000	
Building grants	100,000	
Inspection	60,000	
Training colleges	75,000	
Office	17,000	
Miscellaneous, say	3,000	£
		630,000

"FROM LOCAL TAXATION.

Grants towards annual maintenance	375,000	
Expenses of management and examination	53,400	
		428,400
		£1,058,400

"To the above estimate is to be added the grants to night schools, the amount of which it is impossible to calculate. From it may be deducted any amounts which may be realised from an improved administration of the charities."

We have received from Messrs. Routledge one of their shilling volumes, called *Common Objects of the Microscope*, the figures by Tuffen West, the letter-press by the Rev. J. C. Wood. The representations of microscopic objects are very nicely drawn and engraved, and the letter-press is well suited to those learners who wish to become learned.

The Student's Manual of Ancient Geography, by Dr. Smith. (Murray.) 8vo, pp. 702 (9*s.*)

As a companion to the Student's Hume and Gibbon, and the Histories of Greece and Rome from the same publisher, this volume is invaluable. It illustrates pictorially and historically the subjects treated of in those important works. It places before the student's eye not only maps of the regions known to the ancients, as far as can now be ascertained, but also views of their cities, temples, coins, and public monuments, and plans of their towns. The whole is copiously and skilfully interspersed with quotations from classical authors, and the proper names have their "quantity" given, a great convenience to the unlearned or even learned reader. Among the illustrations are views of Ephesus and the Acropolis of Athens restored, the Harbour of Alexandria Troas, the ruins of Miletus, Damascus, the Nile during the inundation, Brundusium, a map and many antiquities of Rome, Gallia in Cæsar's time, a map of the route of the 10,000 Greeks, and very many others of great value to the reader. In all, the illustrations number above 250.

Garden Memoranda.

THE NURSERY OF MESSRS. BOOTH, OF HAMBURGH.—These nurseries are well known and famed throughout most parts of Europe, for extent of ground occupied, great collections of hardy and tender plants, as well as for the manner they are conducted. The collections of Ferns, Orchids, and Cacti were good, and comprised a number of rare kinds. There were also some of the best plants of Nepenthes sanguinea I have seen, along with such other sorts of Pitcher plants as are only found in a few nurseries. The assortment of hardy ornamental trees is extensive; and although many having distinct nursery names are only varieties of well-known species, they are different in their appearance, and interesting as such. I observed good plants of Quercus lyrata, pubescens, and coccinea, variety dissecta; Tilia europæa, variety asplenifolia, and variety spicata; Cerasus Mahaleb, variety monstrosa, Cerasus asplenifolia, Caragana jubata, Robinia revoluta, Salisburia adiantifolia variegata, Cercis Siliquastrum variegatum; Morus macrophylla, Morus urticifolia, Fraxinus discolor, Weeping Walnut, and Weeping Thorn, along with many others still rare in this country. A handsome specimen of the Weeping Deciduous Cypress, Taxodium distichum, variety pendulum, stood near Mr. Booth's residence. It was of a pyramidal form, and about 20 feet high, well clothed with branches. Another pretty tree, much used for ornamental purposes through the North of Germany, stood near the Cypress, the upright variety of Elm, known under the name of Ulmus oxoniensis. *Moore's Report to the Royal Dublin Society.*

Miscellaneous.

Dr. Butler's Orchids.—At the sale of these the other day at Stevens's Rooms, some of the principal lots fetched the following prices, viz., Saccolabium guttatum (Butler's variety), 52*l.*; four plants of S. guttatum, 32*l.*; fine plant of ditto, 36*l.*; Rucker's variety of S. guttatum, 46*l.*; S. curvifolium, five plants, 36*l.*; S. Blumei majus, four plants, 20*l.*; Saccolabium supposed to be retusum, two plants, 23*l.*; S. ampullaceum, 21*l.*; S. præmorsum, two plants, 13*l.* 10*s.*; Phalænopsis amabilis, 14*l.*; P. grandiflora, 14*l.*; Vanda insignis, 15*l.*; V. tricolor, 11*l.* 11*s.*; Aerides Fieldingi, 20*l.*; A. quinquevulnera, 16*l.* 10*s.*; A. Schröderi, 21*l.*

A. Lindleyanum, 15*l.*; A. crispum, 9*l.*; A. Lobbi, two plants, 19*l.*; one of the best varieties of Cattleya Mossiæ, 12*l.* 10*s.*; Butler's ditto, 18*l.*; Anguloa Clowesi, 13*l.*; Cypripedium Lowei, three plants, 9*l.*; Lælia purpurata, 9*l.* 10*s.*; Dendrobium formosum, 5*l.* 10*s.*; Oncidium Lanceanum, 5*l.* 5*s.*; Epidendrum bicornutum, 5*l.* 15*s.*; Miltonia spectabilis, 6*l.* Smaller lots fetched prices varying from 1*l.* to 4*l.*; the whole sale realised upwards of 1500*l.*

Sea Bears.—From the 5th of October, St. Paul is gradually deserted by the sea bears, who then migrate to the south, and reappear towards the end of April,—the males arriving first. Each seeks the same spot on the shore which he occupied during the preceding year, and lies down among the large stone blocks with which the flat beach is covered. About the middle of May the far more numerous females begin to make their appearance, and Otarian life takes full possession of the strand. The full-grown sea bear is from 8 to 9 feet long, measures 5 in girth, and acquires a weight of from 800 to 900 lbs. He owes his name to his shaggy blackish fur, and not to his disposition, which is far from being cruel or savage. He indulges in polygamy like a Turk or a Mormon, and has often as many as 50 wives. The young are generally lively, fond of play and fight. When one of them has thrown another down, the father approaches with a growl, caresses the victor, tries to overturn him, and shows increasing fondness the better he defends himself. Lazy and listless youngsters are objects of his dislike, and these hang generally about their mother. The male is very much attached to his wives, but treats them with all the severity of an oriental despot. When a mother neglects to carry away her young, and allows it to be taken, she is made to feel his anger. He seizes her with his teeth, and strikes her several times, not over gently, against a cliff. As soon as she recovers from the stunning effects of these blows, she approaches her lord in the most humble attitudes, crawls to his feet, caresses him, and even sheds tears, as Steller, the companion of Behring's second voyage, informs us. Meanwhile the male crawls about to and fro, gnashes his teeth, rolls his eyes, and throws his head from side to side. But when he sees that his young is irrevocably lost, he then, like the mother, begins to cry so bitterly, that the tears trickle down upon his breast. In his old age the ursine seal is abandoned by his wives, and spends the remainder of his life in solitude, fasting, and sleeping; an indolence from which he can only be roused by the intrusion of another animal, when a tremendous battle is the consequence. Though extremely irascible, the sea bears are lovers of fair play, so that when two are fighting the others form a ring, and remain spectators until the contest is decided. Then, however, they take the part of the weaker, which so enrages the victor that he immediately attacks the peace-makers. These in turn fall out, the dreadful roaring attracts new witnesses, and the whole ends, like an Irish wedding, with a general fight.—*Dr. Hartwig's "Sea and its Living Wonders."*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c.—Where circumstances admit of it plants that have been grown in a warm moist atmosphere should be removed to an intermediate house about a fortnight previous to their being taken to the conservatory, and gradually inured to a free circulation of air. By attention to this, and placing the plants in the warmest corners, Clerodendrons, Allamandas, Achimenes, &c., will continue growing slowly and bloom for some three months, whereas if this is neglected their beauty may be very short-lived. Aim at maintaining an even temperature in the conservatory after removing thence plants that have been grown in the stove, and avoid allowing the atmosphere to become very dry on bright warm days. Also see that every plant is perfectly clean before placing it in this house, and that the creepers, &c., are not infested with insects. Go over the house every morning, and remove decaying flowers and leaves as they make their appearance. Young stock in pits and frames will soon be making rapid growth, and must be carefully attended to as to watering, stopping, training, &c. Examine Heaths frequently for mildew, and apply sulphur the moment it is perceived, some of the soft-leaved varieties being very liable to be attacked by that pest at this season. If the permanent occupants of the beds and the twiners, however, are such as require a free circulation of air, the house must not be kept so close as to injure them; but where Passion Flowers, Ipomœas, Mandevillas, Tecomas, Bignonias, &c., are grown for covering the roof, and Orange trees and other things that enjoy a fair amount of warmth and moisture while making their wood occupy the beds, the hardier stove plants will form the most suitable decoration for the next three months. Go over twiners frequently and regulate their growth before the shoots get entangled, but avoid keeping them tied too closely, for they are never seen to advantage unless they are allowed to hang in a natural and graceful manner.

FORCING DEPARTMENT.

PINERY.—Where Pines happen to be grown on the Hamiltonian system, a close watch must be kept upon the most likely plants for immediate fruiting, so as to keep them dry at the root or otherwise as circumstances may dictate, and those showing fruit must not be syringed over head to the extent of causing water to lodge in the centres of the plants, for this would probably cause the fruit to be deformed. Young stock growing in dung pits must be allowed plenty of air to prevent weakly growth, and must not be over-watered, which through the greater amount of moisture in the atmosphere is more apt to be the case here than in houses heated by any other means. Encourage recently potted stock with plenty of warmth and a corresponding degree of humidity in the atmosphere, but water carefully until the roots get hold of the fresh soil. The most certain method of obtaining a regular supply of fruit is by securing and potting a limited number of suckers at short intervals throughout the growing season; therefore attend to this, which will save much trouble and disappointment as compared with the old practice of doing this but once, or at the most but twice in the year. Where the bottom-heat is obtained from tan it will often be found necessary to add a little fresh material at intervals, in order to recruit the heat, but at this season it will be safer to surface with a few inches of fresh tan in a rather dry state than to turn the bed, mixing the fresh materials, which often cause too strong a heat; and at this season there is much more danger of erring on the side of too much than too little bottom-heat. Give every attention to keeping up a succession of fruit. Take care to attend to keeping up a regular supply of young plants even if doing this should necessitate throwing away a few overgrown plants which have failed to fruit at the desired time. We have frequently seen cultivators allow the number of large plants to increase, so that there was little room left for the young stock, which suffered accordingly, and disappointment came in due course. Do not let the growing stock suffer for want of pot-room, or through dryness at the root, and afford a moist atmosphere, syringing and shutting up early in the afternoon, so as to give the house a good steaming. Recently potted plants, especially if they be much pot bound before being repotted, should be kept rather close and shady, with a thoroughly moist atmosphere, and very carefully attended to with water until they appear to have taken to the fresh soil.

VINERIES.—Attend to keeping cool and moist where early fruit has been cut in order to preserve the foliage in a healthy state as long as possible. The laterals need not be kept very closely stopped after the fruit is cut, but they must not be allowed to shade or injure the principal leaves. If there is any appearance of red spider give the foliage a good washing with the engine directly the fruit is cleared off, and repeat this as long as there is a vestige of the enemy is to be seen. Give prompt attention to the thinning of the fruit in succession houses, for like many other jobs this is most easily and expeditiously done when taken in time. Look well to the state of the borders where the fruit is swelling, and give a thorough soaking of tepid, good strong manure-water wherever the soil is found to be at all dry, and aim at having the borders in a healthy state as to moisture where the fruit is about colouring, for a healthy root action has more to do with the colouring of the fruit than many persons seem to suppose. Young Vines planted out this season should be encouraged to grow freely, and as the roots will be near the surface see that they are not allowed to suffer for want of water, and in the event of continued dry weather a slight mulching over the roots would be useful. Do not keep the laterals too closely stopped, as the more leaves, &c., the Vines are allowed to make the more freely the roots will run in the border, and this deserves attention the first season.

PEACHES.—Spare no means to maintain a moist state of the atmosphere where the fruit is swelling, syringing freely, and shut up early in the afternoon, but give air sufficiently early in the morning to prevent the least risk of scorching.

MELONS.—Give air freely. Sprinkle late varieties overhead early in the afternoon before closing up the frames; a little air may be left on during warm nights if the bottom heat is brisk. Keep the shoots thin and shade lightly if the weather should continue very dry or hot.

FLOWER GARDEN AND SHRUBBERIES.

All annuals should be thinned out as soon as they are well above ground, for if left to grow too thickly they spoil one another, and never make half the display plants do that are allowed plenty of space and which are grown strongly from the first. Attend to staking such of the herbaceous plants as require it before they get blown about and injured, and do not huddle the stems together, as is too frequently done. The early flowering bulbs, as Tulips, Hyacinths, Turban Ranunculuses, &c., should not be left in the ground after the decay of the foliage, as if wet weather occurs they will be making fresh roots, which weaken them for next season. Attend to the propagation of the better varieties of Pentstemons, which are exceedingly useful plants. Also see to having a good stock of border Picotees and Carnations, which are invaluable for cutting. Cuttings of these, if put in before the wood gets too hard, root as freely as Pinks.

HARDY FRUIT AND KITCHEN GARDEN.

Strawberry beds may soon require attention as to watering, should the weather continue dry. After thoroughly cleaning the beds, a thorough soaking should be given, and if a moderate watering from the stable tank can be supplied when the ground has been well saturated with clear water it will greatly assist in securing large fruit. The beds should be mulched as soon as after watering as convenient, in order to prevent evaporation and the fruit from being soiled. Next to slates or tiles clean straw is the best material for this purpose, and mowings of lawns the worst. The latter, besides forming an excellent harbour for slugs, soils the fruit, spoils its flavour, and in wet seasons hastens the decay of any over ripe fruit. Where clean straw cannot be afforded, fresh litter from the stable yard, as we have before stated, will form a very good substitute. Exposure to the air and a few showers will perfectly sweeten this, so that there need be no fears entertained of its injuring the flavour, but it should be applied immediately. Persevere in the destruction of insects on fruit trees as soon as they are perceived.

COTTAGERS' GARDEN.

Early Potatoes will be late this season; but as soon as they are fit for use and up let the ground be immediately cropped with Winter Greens. The Early Ulm Savoy, Brussels Sprouts, and above all Green and Cottagers' Kale, should be amongst the foremost to claim attention. A bit of the early Potato ground when cleared should be sown with Turnips. Leek ground may be got ready; when well grown and large they are most useful in a cottager's family. Blanks among Potatoes should be filled up with transplanted Cabbages.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending May 23, 1861, as observed at the Horticultural Garden.

May.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind	Rain.
Friday 17	☽	30.132	30.045	61	29	45.0	56	49½	N.E.	.00
Satur. 18	9	30.235	30.211	61	32	46.5	54	50	N.E.	.00
Sunday 19	10	30.340	30.297	68	34	51.0	54	50	N.E.	.00
Mon. 20	11	30.352	30.280	79	43	61.0	54	50	W.	.00
Tues. 21	12	30.371	30.207	80	50	65.0	56	51	W.	.00
Wed. 22	13	30.159	30.100	73	46	59.5	56½	52	N.W.	.00
Thurs. 23	14	30.114	29.877	81	43	62.0	57½	52	S.W.	.03
Average..		30.243	30.002	71.8	39.5	55.7	56.8	50.6		.03

May 17—Cloudy; densely clouded; clear; slight frost.
— 18—Overcast; fine with sun, but air cold and dry; very clear.
— 19—Partially overcast with low dusky clouds; fine; clear at night.
— 20—Overcast; fine; clear at night.
— 21—Very fine throughout; gathering of thunder-like clouds in the evening; clear.
— 22—Very fine; partially overcast; hot sun; cloudy; clear.
— 23—Very fine; hot and sultry; thunder storm with a little rain, 7—8 P.M.

Mean temperature of the week, ½ deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending June 1, 1861.

May and June.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 26..	66.9	43.3	55.1	16	0.48 in.	2	10	4	1	3	10	3	2
Mon. 27..	68.2	45.2	56.7	19	0.63	2	9	5	2	2	10	2	3
Tues. 28..	67.4	44.6	56.0	14	0.97	—	9	5	1	5	6	4	2
Wed. 29..	66.1	44.5	55.3	13	0.97	3	11	3	2	6	5	4	1
Thurs. 30..	67.4	44.8	56.1	14	0.34	3	7	6	—	3	8	4	4
Friday 31..	68.8	45.2	57.0	18	0.48	2	7	6	1	5	8	4	2
Satur. 1..	69.9	46.0	57.9	12	0.27	1	10	3	—	5	10	3	3

The highest temperature during the above period occurred on the 28th, 1847—therm. 91 deg.; and the lowest on the 31st, 1857—therm. 32 deg.

Notices to Correspondents.

ASPARAGUS: *C.* Never cut till it is strong enough to give good heads. When you do cut remove all the heads from each plant until it is time to cease altogether. If there are weak plants among the strong ones let them alone. If you have allowed heads to grow too long for use on any strong plants you had better cut them back at once. It will not do to leave any one head to grow long on the roots you are cutting, because what you leave starves the heads that follow it.

CUCUMBERS: *J M.* They are too wet and cold; raise the temperature, drive warm dry air through the frame, and the disease will probably disappear. Nothing ails the Vine leaf; the little green excrescences of which you complain will die off as the atmosphere of your house becomes drier.

GARDEN KNIVES: *Derby.* The cutlery made from Taranaki iron sand is beautiful and excellent; but we imagine too costly for ordinary garden purposes. It is said to owe its fine quality to the presence of the metal called titanium.

GUANO: *Veritas.* Use a handful in a pail of water; stir it well; let it stand for 24 hours, and use the clear solution. The mud at the bottom of the pail may afterwards be worked into the soil sparingly.

HEATING: *Eileanach.* We have no knowledge of the green-house stove made by Messrs. Musgrave, Belfast. One of our correspondents says it suits well to keep frost out of an ordinary lean-to house at small cost of fuel, and little trouble. But we have heard nothing more about it.

HOLLY TEA: *T S.* Mr. Forsyth prepared his own Holly leaves; and others must do the same, until such Tea gains favour enough to become an article of trade.

JAPANESE PLANTS: *C B L.* Sciadopitys is, we hear, growing, as are most of the other valuable seeds received by Messrs. Veitch.

NAMES OF FRUITS; *F D, Pershore.* The seedling from the Ribston Pippin was juicy and rich. It appears well deserving of further trial. The others were so much past their season that no fair opinion can be given respecting them. The Red Newtown Pippin is not known; it is not the true Newtown Pippin.‖

NAMES OF PLANTS: *C W W.* Variegated Ulmus campestris.—*A Y.* 1, Bromus mollis, not erectus; 2, Melica uniflora; 3, Carex remota.—*J C H.* Cerasus Padus; the common Bird-cherry.—*Anonymous.* 1, Scolopendrium vulgare; 5, Polypodium vulgare; 9, Lychnis dioica; 10, Convallaria Polygonatum. We never name more than four plants at a time, as has been repeatedly stated.—*R C K.* 3, Luzula campestris; 1, Alopecurus pratensis; 5, Anthoxanthum odoratum; 6, Poa annua.

OAK GALLS: *P Devoniensis.* Letter and specimens only received just before going to press.

PEACH TREES: *Yas.* Your tree is suffering from the effects of removal; nothing more that we observe.

PEAR LEAVES: *J M M.* They seem to be preparing to bring forth a brood of the Fungus called Æcidium cancellatum, for which there is no remedy except picking off the diseased leaves and burning them immediately.

POTATOES: *Mr. Daintree,* of Fendrayton, having submitted to our examination other specimens of the variety mentioned at p. 436, we are now able to report that, late as the season is, they possess as much excellence as the best Potatoes of mid-winter.

ARTIFICIAL MANURES, &c.—Manufacturers and others engaged in making Artificial Manures may obtain every necessary instruction for their economical and efficient preparation, by applying to J. C. Nesbit, F.G S, &c , Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, Coprolites, &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch.

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CONCENTRATED URATE.
BLOOD MANURE for CORN and ROOTS.
CORN MANURE for TOP DRESSING.
MANGOLD MANURE.

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Sold in casks of about 30 gallons each, at 1*s.* 6*d.* per gallon, at the Manufactory, or 1*s.* 8*d.* per gallon paid to any station in the kingdom.

Apply to Hill & Smith, Brierley Hill Iron Works, near Dudley, from whom only it can be obtained.

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President—His Grace the Duke of Richmond.

Founded 1860, for the Relief of Decayed Farmers, their Widows, and Orphans.

The SECOND ANNIVERSARY FESTIVAL, in aid of the Funds of the Institution, will take place at the Freemasons' Tavern on WEDNESDAY, June 12.

The Right Hon. Benjamin Disraeli, M.P., in the Chair.

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His Grace the Duke of Cleveland, K.G.	The Most Noble the Marquis of Abercorn, K.G.
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Dinner Tickets, 21*s.* Ladies' Tickets, 5*s.* To be had of the Secretary, Charles Shaw, Esq., at the Office of the Institution, 55, Charing Cross; and at the Bar of the Tavern, Great Queen Street, Lincoln's Inn Fields.

COLLEGE of AGRICULTURE and CHEMISTRY, and of PRACTICAL and GENERAL SCIENCE, 37 and 38, Lower Kennington Lane, Kennington, London, S.

Principal—J. C. Nesbit, F.G.S., F.C.S., &c.

The system of studies pursued in the College comprises every branch requisite to prepare youth for the pursuits of Agriculture, Engineering, Mining, Manufactures, and the Arts; for the Naval and Military Services, and for the Universities.

Analyses and Assays of every description are promptly and accurately executed at the College. The terms and other particulars may be had on application to the Principal.

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To Landowners, the Clergy, Estate Agents, Surveyors, &c. in England and Wales and in Scotland.

The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
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4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

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For further information, and for forms of application, apply to the Honourable William Napier, Managing Director, 2, Old Palace Yard, Westminster, S.W.

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LOANS may be obtained under the General Land Drainage and Improvement Company's Act for the full amount required by the Owners of settled Estates, Incumbents, Trustees, Bodies Corporate, &c., for the erection of Farm Houses, Farm Buildings, and Labourers' Cottages designed by their own Agents and sanctioned by the Inclosure Commissioners.

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The Company furnish designs of every description, and undertake the entire responsibility of the works wherever desired by Landowners.

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ROYAL AGRICULTURAL SOCIETY of ENGLAND.

LEEDS MEETING, July 15, 16, 17, 18, and 19.

ENTRIES of Live Stock and Flax close on the 1st of June.

Prize Sheets and Forms for Entries may be had on application to H. Hall Dare, Secretary.

12, Hanover Square, London, W.

NOTICE.—Purchasers of Large Quantities of FARM SEEDS will be supplied liberally by Sutton & Sons. For prices apply, stating quantity required, to Sutton & Sons, Royal Berkshire Seed Establishment, Reading.

GOOD MANGEL WURZEL SEED at Moderate Prices. Carriage Free, according to quantity required. Sutton & Sons, Seed Growers, Reading.

The Agricultural Gazette.

SATURDAY, MAY 25, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

Wednesday,	May 29	—Agri Society of England ..	.. Noon
Monday,	June 3	—London Farmers' Club ..	.. 6 P.M.
Wednesday,	— 5	} Meeting of Bath and West of England	
Thursday,	— 6	} Agricultural Society at Truro.	
Friday,	— 7	}	

It is announced that his Royal Highness the Prince Consort has accepted the Presidency of the Royal Agricultural Society of England during 1862; and the intimation will, we doubt not, be everywhere received with pride and satisfaction in the English Agricultural world. "We farmers of England," to use the Prince Consort's own words at the York meeting of the Royal Agricultural Society, gladly acknowledge as our chief one who has never claimed merely as of right belonging to his position that which he had not previously achieved and earned by earnest, well directed, and laborious effort. In reference to agriculture his Royal Highness the Prince Consort has long been known as patron and exemplar; and on the Home Farm near Windsor may be seen ample evidence both of his interest in our pursuits and of especial fitness for the Presidential office which he has consented to accept.

It is plain from what has been already published regarding Mr. Fowler's steam ploughing apparatus, that not only estimate but experience differs very much as to the annual cost incurred by its use. In our report giving the actual history of a first twelvemonth at Peasemore, the stated cost of repairs and waste of rope was enormous. On again examining the accounts we find that several of the items were owing to an accident on the first arrival of the engine, and many others arose from breakages of sundry parts, which in the improved apparatus are all swept away. And thus we have in that case an actual expenditure of upwards of 50*l.* in repairs alone in less than 10 months.

On Mr. Pocock's farms, on the other hand, reported in another column, where the machinery fell into experienced hands, not 20*l.* have been spent in 18 months, and it is plain that the sum will depend almost entirely on the care and supervision bestowed upon the machinery. And the importance of this item becomes obvious when we find that the cost of Steam Cultivation, which exceeds 10*s.* an acre at Peasemore, has not been much more than 8*s.* at Bourton, though the latter has the stiffer and more intractable soil.

Mr. Fowler has lately achieved another great step towards perfect mechanism, by an arrangement on the travelling plough which keeps the slack or dragged rope always at a given tightness, letting it out of itself when that tightness is exceeded, and rolling it up when it falls below the degree that is required.

Many advantages are thus obtained. No time is lost in stopping to take up or let out slack, which

used to be done by hand; no unnecessary dragging of rope behind the plough, which occasioned a great loss of power, can take place; and in the case of any sudden stoppage, as on an imbedded stone, the draught rope at once pulls upon the slack, and the pressure, instead of falling on the attachment to the plough alone, is distributed over every bearing taken by the rope throughout its length.

The apparatus as now sent out, with a single clip draught-pulley underneath the engine, and the slack-rope apparatus on the travelling plough frame, the self-moving engine, and the engine-driven anchorage—this last travelling it may be along a tortuous headland, and yet the draught rope lengthening or shortening of itself to suit the varying interval between it and the engine, is certainly at present in a very effective and satisfactory state. It is plain that the account given by Mr. Burnett last week in his paper read before the Kingscote Farmers' Club (p. 464), of the work of the machine near Gloster, and of its probable annual performance, calculated on the data which that case supplied, exaggerates the cost of steam cultivation, and depreciates the quantity and quality of the work accomplished. And it must be observed both of Fowler's and of the Woolston apparatus that in the instances of their work already given in these columns, one item of the charge which we have put on their performance is beyond doubt excessive. The 8s., 9s., or 10s. an acre at which we have calculated the cost of cultivation by steam-power includes a charge which shall replace the whole apparatus every 10 years. Ten per cent. has in every case been charged for maintenance. Now these engines are all of them longer lived than that, and such a charge being excessive, of course the estimated cost of the performance is beyond the truth.

After all that has been written about the Potato disease and the parasite to which it owes its origin, and the extremely small quantity of new matter which has been brought forward, amidst the multitude of repetitions which have overloaded the pages of scientific journals, it is quite refreshing to have something new to record upon the subject.

It has been long known that various Fungi have more than one mode of reproduction. Very many of them, and perhaps all, have two distinct kinds of reproductive bodies, while the Hop mildew has been ascertained to have five. In the Potato mould two only had been hitherto described, the one arising from the tips of the branchlets, and the other in the substance of the Potato leaf amongst the creeping rootlets. It appears however from the observations of De Bary, an imperfect account only of which has at present appeared without figures,* that a third mode of fructification takes place by zoospores, that is by reproductive cells, which move about freely by means of two or more long lash-like threads, or a multitude of short processes, like many of the more minute animals.

De Bary's observations were not, however, confined to the Potato mould, but he ascertained the same fact in the white rust of Cabbages (Cystopus candidus), or rather in that form of it which is so common on Salsafy, especially on our own wild species, Tragopogon pratense. On placing the spores of these two Fungi in a drop of water under a thin plate of glass, he found that they imbibed the fluid rapidly, swelling very much, and soon indicating changes in the character of the granular matter with which they are filled. This matter, which was at first tolerably uniform, became divided into distinct portions, which gradually assumed a definite form, and were ejected by means of a little aperture at one end of the spore, furnished with two long thread-like appendages, by means of which they moved about with great rapidity in every direction, exactly like the spores of many Algæ which are propagated by precisely similar bodies. The motion ceased after a few hours, and the cells germinated, and in the case of the Potato mould, De Bary saw the threads sent out from the spores penetrating the tissues of a small slice of a Potato tuber placed with them in the water. In the case of the Fungus on Goat's Beard, a plant which often retains water for a time in the axils of the leaves, he found the water teeming with the zoospores of the white rust, which moved about with immense rapidity. It is very probable that that especial form of reproduction in the Hop mildew which consists of germination in every direction from the granular contents of the terminal necklace-like spores, is a case in point, the zoospores being detained either normally or accidentally within the common coat of the original spore.

* The last Number of the *Annales des Sciences Naturelles*, which we received only a few days since, does not contain the promised figures.

De Bary's discovery has a very important bearing on the question of the true nature of such Fungi as the yellow, slimy, and at length dusty Fungus which is so common in hothouses, running over the tan, especially amongst Pine Apples, and soiling everything around with its sooty spores. No one will deny that moulds are vegetables, though, as De Bary has now shown, their spores in some cases so closely resemble animals; and by the same reasoning it will be plain enough that these slimy plants are true Fungi, though their spores occasionally, as also the gelatinous matter of which they are principally composed, resemble so closely what is found in undoubted animals.

The discovery moreover throws light on a set of curious plants, whose nature has been much contested, namely the mould-like productions which are so common on fish in ponds, and on various animals in the aquaria which are now so much in favour. It was supposed that as these are strictly aquatic, and as their spores are zoospores like those of many Algæ, that they belonged to that class of plants. We now however see that zoospores are found in Fungi, and in consequence these false puff balls may now be referred to Fungi without doing violence to preconceived notions. We ourselves have always entertained the view, believing that they were merely a peculiar form of mould induced by their aquatic mode of growth. It was long since shown that the body of the same salamander when divided, half being kept in the air gently moistened, and the other immersed in water, produced two distinct plants, the former half giving rise to a true mould, and the latter to a *Leptomitus*. This, like many other ill-understood matters, was brought forward as a proof of spontaneous generation, or the transmutation of species, with how little justice will appear from the present statement.

It is a curious fact that those salts of soda which are destructive to moulds in the human stomach relieved the sick fish when administered in small doses; and this fact, amongst others, tends to prove the real nature of the fish mould. The bearing of the subject on the Potato disease itself is not at present apparent; but it is quite clear that in order to understand diseases thoroughly, we must first understand the nature of the parasites by which they are caused. We do not, therefore, think these observations, though of a scientific rather than practical nature, are out of place in this Journal, especially as they are stated in language as little technical as the subject admits. *M. J. B.*

ANNALS OF A LIQUID MANURE FARM.

(*Continued from p. 463.*)

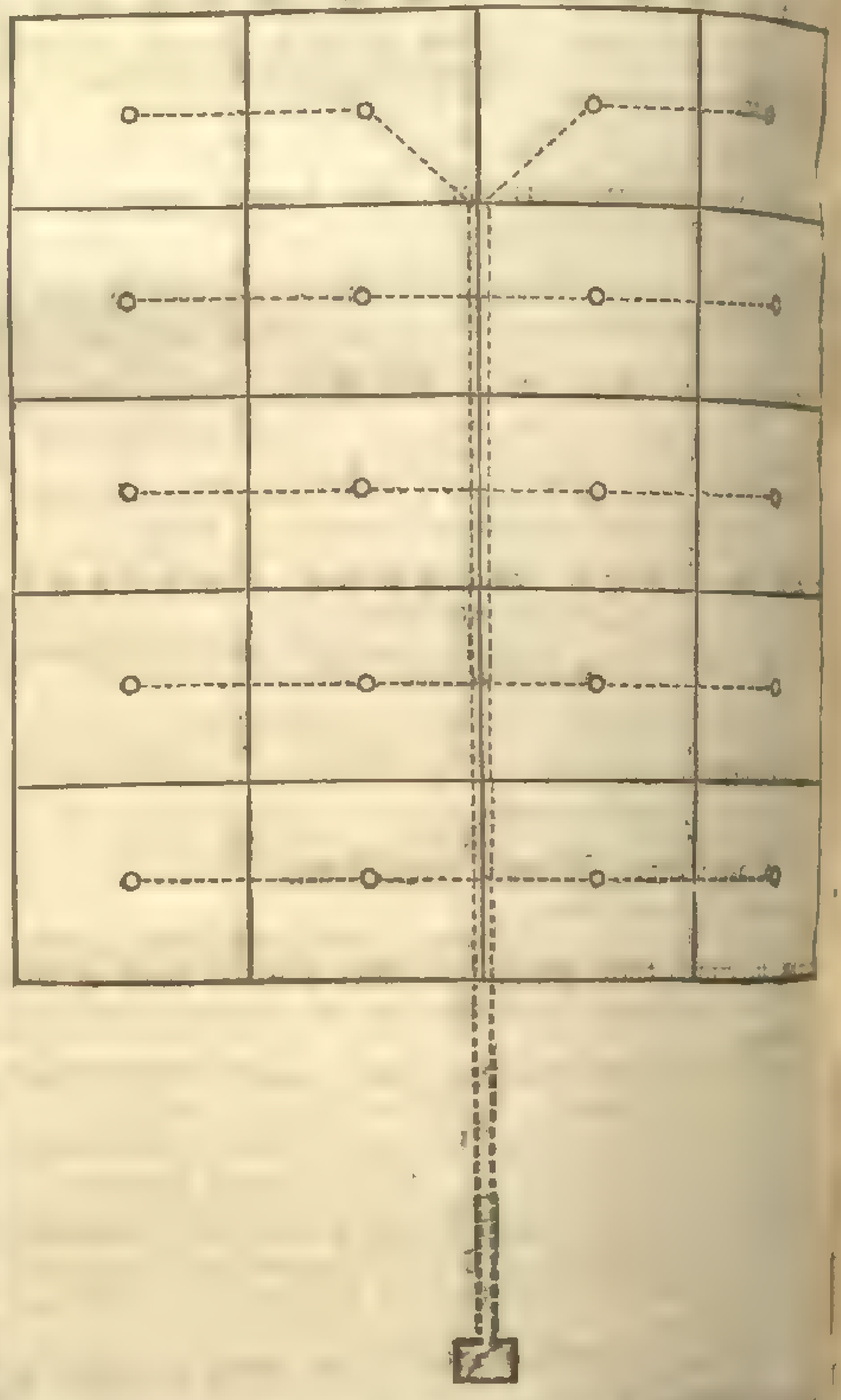
You have stated that your attention was first called to the principle of the liquified manure cultivation, by Mr. Chadwick's expositions, published in agricultural papers. Before however carrying the theory into practice, did you make any examinations of the practical means in use for its application?—Yes; I examined Mr. Kennedy's, of Myer Mill; Mr. Telfer's, at Ayr; and Mr. Ralston's, near Ayr.

What modifications did you upon that examination make in the practical means of applying the principle?—It struck me that on Mr. Kennedy's farm there was an excess of pipage, that is to say, an excess of capital over and above what could be profitably employed, or beyond the quantity of manure that he had to apply. I did not see that more than one-third of the pipage could be used yearly for liquid manure, and therefore upon that third must fall the interest of the capital laid out on the other two-thirds. Mr. Ralston's pipage was carried from his tanks situated high up the hill to the bottom, where the distribution took place from pressure; an arrangement which has been praised for its economy, but I believe that that economy is more than counterbalanced by the expense of raising to his cattle shed the heavy produce, from 50 to 60 tons per acre, nearly a mile up hill. Another practical objection to the methods in use at Mr. Kennedy's, Mr. Telfer's, and Mr. Ralston's, appeared to me to be the few hydrants they had, or only one to every ten acres, the same as at Mr. Mechi's. This necessitates an excessive length of flexible pipe, gutta percha or other, with an additional labour in working, and a compound wear and tear of the material.

Will you describe your own machinery and piping?—My tanks were 8 feet deep, and the manure tank held 22,239 gallons, and the mixing tank is 25,293 gallons. They were faced with wood—the rough slabs of the outside of trees, with a dry black mould rammed in at the back. They were covered with the cheapest whole trees with the bark on, and a bed of Heather on the top to prevent soil falling through the interstices, and soil or road stuff over the Heather. The cost of both tanks, well covered, was about 12*l*. or 13*l*. each and they last very well. The bottom was a strong holding clay. I used 4-inch iron pipes, except at the extremities, where there were 3-inch pipes. My buildings from their situation required a larger extent of pipes than would, I think, under ordinary circumstances be necessary. The pipes commonly in use on most of the liquid manure farms were about three inches in diameter. I should to save power have them much larger.

Would you not also avoid junctions at right angles?—Certainly: and have used gentle curves. Instead of a right-angled principle of distribution, the one first recommended by the engineers, as thus—

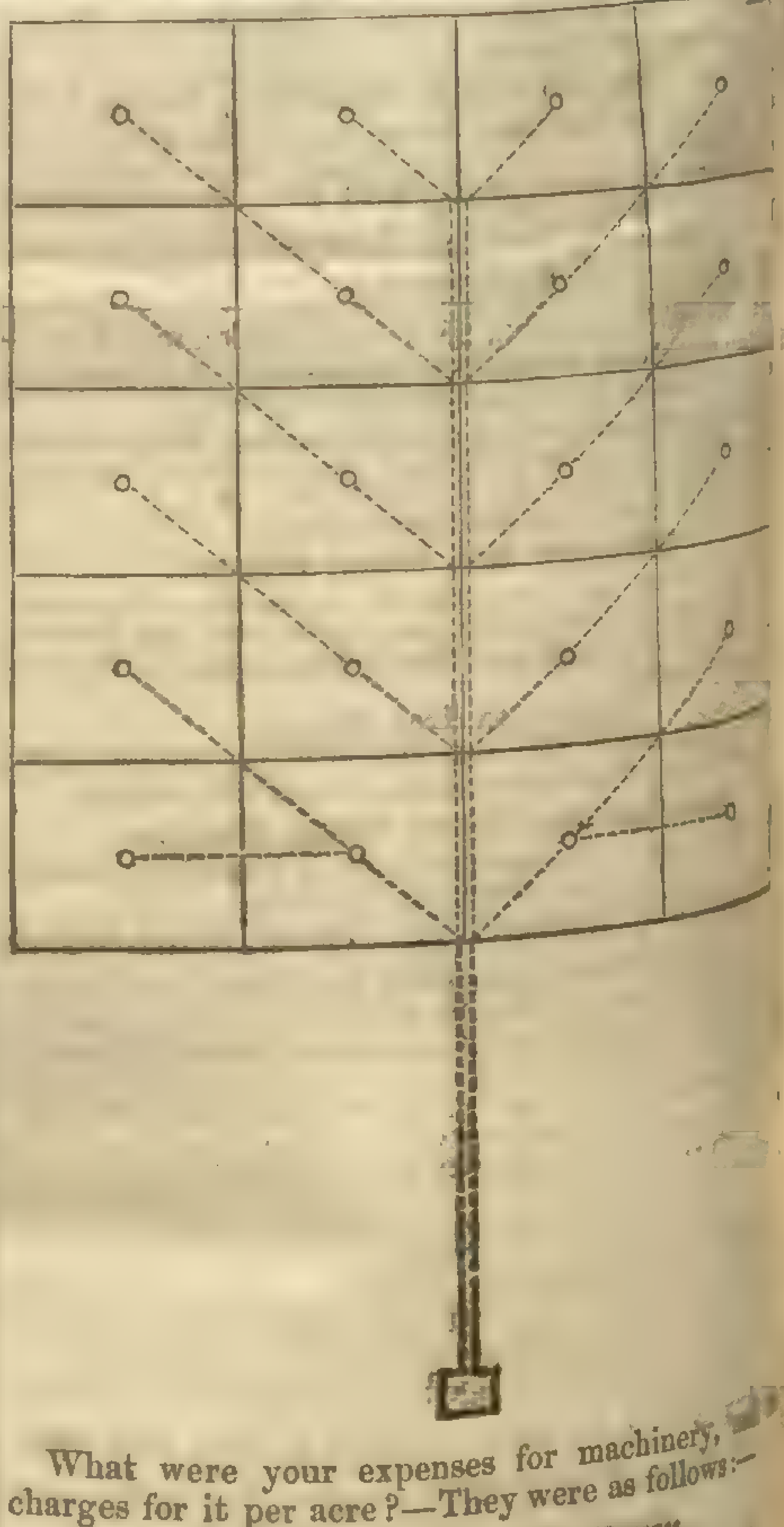
3700 Yards of Piping.



I should prefer the following principle of arrangement.

Plan for an Arrangement of Underground Pipes with a view to the avoidance of sharp angles.

3400 Yards of Piping, 1 Hydrant to every 5 Acres.



What were your expenses for machinery, and charges for it per acre?—They were as follows:—

Expenses of Pipe Irrigation 20 acres.

	£	s.	d.
Tanks	25	0	0
Metal pipes, lead, and laying ..	86	10	0
Cutting drains for do.	2	0	0
Hydrants and brass joints	6	8	0
Manure pumps and fitting	30	10	0
Water-pump and fitting	12	0	0
Shafting for do.	8	0	0
Gutta-percha pipe	19	10	0
For 20 acres	£189	18	0

or 9*l*. 10*s*. an acre. The interest on 189*l*. 18*s*. at per cent. = 14*l*. 6*s*. In some conditions I should

centrifugal pumps. If the machinery I have described be used on 10 acres yearly, it entails a charge per acre of 1*l*. 8*s*. 6*d*. for interest; if on 12 acres, a yearly charge of 1*l*. 4*s*.; if on 20 acres, a yearly charge of 14*s*. 3½*d*. per acre for interest and deterioration.

This 14*s*. 3*d*. being the rate of fixed charge per acre, say for such areas as the 20 acres, what are the variable charges per acre?—With the number of dressings I give, which are about twelve in the year, it is 16*s*. per acre for the expense of distribution.

By what power do you apply the liquid—horse, water, or steam?—By water-power: taking about four horse power.

What quantity of manure do you apply in a day?—About 180 tons per diem.

With what lift?—Between 20 and 25 feet from the bottom of the tank.

Have you compared the cost of distributing a given quantity of liquid manure by the cart, with that by pipes and jet?—Yes: my estimate is that the total expense of pumping out to a distance of from ¼ to ½ a mile and spreading, by the pipes and jet, is nearly three farthings per ton. By the water-cart—man, horse, and cart, at 6*s*. per diem, the cost under the most favourable circumstances is 3½*d*. per ton, allowing the cart to hold 1 ton; and 20 loads to be distributed per day. The difference increases with the distance in favour of the pipes, and this estimate includes nothing for the poaching of the land by the cart.

But in what time will you distribute 20 loads by the pipes?—In about one hour.

Over what area did you distribute by pipes the 180 tons per acre per diem?—It varied with the conditions of the soil as to moisture and with the temperature. If the soil was dry or the evaporation was great I gave more. The variation was from 2 to 4 acres per diem.

Then you gave heavier applications than is stated to be the practice in other instances of the liquified manure culture?—Yes, and more diluted.

To what extent did you dilute the urine you received in your tank?—The dilution varied with the state of moisture in the soil, and the weather if rainy or not, from three to one to six to one, and sometimes a great deal more than that.

Did you distribute the solid or stable dung diluted in the liquid?—Only partially; because I had not sufficient tank room for it, and the farm steading was so awkwardly situated as not to afford me the means conveniently. At first, indeed, I only thought of applying the dung in the common method, but the experience I have had leads me to the conclusion, that I ought to distribute the whole of it in a liquid state. But to effect this most economically we want some improvement in the pipage, in the shape of cheaper branches, to which branches flexible pipes might be attached.

Did you not find by experience that more of dilution and greater frequency of application than is customary in the common distribution of liquid manure is beneficial?—Yes; my results, which have increased yearly, have been brought about mainly by following that principle as a rule; and I should follow it still closer. For the earlier applications in the spring I used the manure in a very concentrated state, as one to three, and even one to two, relying, as experience enabled me to do, on the power of the soil to retain for future use that which the present crop did not appropriate. For I found that on this important principle of the power of the soil to retain the manure, I got the remaining surplus of the first application in the next crop, by the use of water only. I found this out from the necessity of making room in my tanks for a further supply of manure from the cattle shed.

Then your experience corroborates the early doctrine enunciated, that the soil is, when properly treated, the best store-house of food for plants, rendering large reservoirs for town manures not so necessary as previously supposed?—Exactly so. The farmers still object to the application of manure in the liquid form to the soil; that there is "no stay in it;" that it had no permanent effect, whereas my foreman would point to them, that the effect of a concentrated application was visible on the third crop with an application of plain water.

Your expenses for putting on liquid manure being at the rate of less than three farthings per ton, that being by water power, about what would it have been by steam?—Merely the difference of the coals, for my water and connecting machinery cost me nearly as much as a steam engine would have done.

So far as you have gone, what is the quantity of milk produced per acre on this system as compared with the common practice?—It is at least four-fold, which is chiefly brought about by the supply of the succulent food produced by this system through the summer and the autumn months. Whilst the common supply of milk falls off when the Grass dries up in the beginning of August, I keep on a steady supply until the end of October.

What was the quality of the milk produced?—It gave very great satisfaction to all the people that got it, though my cows were not Alderneys, but the Ayrshire and Short-horn breeds, which produced very large quantities. I got a prize in the county for cheese as well as butter.

What was the quantity of stock per acre which you were enabled to rear, as compared with the previous system on the same land?—My predecessor kept 10 oxen and six cows on 21 acres of Grass, and the aftermath of 17 acres, the first crop of which was taken for hay. On the irrigated Grass land, consisting of 3¼ acres of Italian Rye-grass, and 8 acres of water meadow newly brought in—and not very good at that time—there were kept 20 cows, four feeding cattle, and a bull; there was provided the partial keep of five cart-horses, and the total keep of one pony, and the Grass which eight calves required. This same land had two quarters and a half of Oats per acre the year I took the farm. My experience, however, enables me to state that the result I have obtained is not a maximum result, even in our cold climate, where it may be estimated that we have two months less of growing weather than in the south of England.

Did you try your liquid manure on any of the cereals?—No; because the green crops would absorb more profitably every particle of manure that I could produce.

Did you try it on your garden crops?—Yes; I had 5 acres of market garden, which, with the irrigation, became the most profitable part of my farm; chiefly in Onions and Carrots. This was only for the last year, when my crop was, for the weather, wonderfully good. In my own garden I tried it upon Rhubarb with astonishing results, as also upon the Celery and the Asparagus, with very great improvement in the quality as well as the quantity. I am satisfied myself that the principle is very important for market garden cultivation, inasmuch as there appears to be a larger development of the saccharine matter, and less of woody fibre produced than in plants grown under the ordinary system.

(To be concluded next week.)

STEAM CULTIVATION.

Bourton, near Shrivenham.—Mr. George Pocock, of Bourton, near Shrivenham, has had one of Fowler's 10-horse engines, with his 3-furrow balance plough, at work since October 1859. Both his farms and himself were especially fitted for the successful employment of steam-power in cultivation—for in the first place he has long been accustomed to the employment of the moveable steam-engine—having for many years had two or three in constant work on hire in his neighbourhood. And in the second place the horse cultivation of the land which he holds at Bourton, is extraordinarily expensive. Experience and skill on the part of the master, and great difficulty in the circumstances of his cultivation, are just what are wanted to bring out the merits of steam-power on the farm; and I have accordingly been surprised to learn at how little cost all the advantage of steam cultivation have been experienced in Mr. Pocock's hands.

The farms at Bourton and Upper Stratton include 250 acres of arable land and 400 acres of pasture. The former is a dairy farm, and besides the cows and young stock of the dairy several hundreds of heavy bacon hogs are fattened annually. The land is very stiff, probably on the bed known as the Kimmeridge clay. Of the arable land at Bourton, one quarter is in sheep-food—Clover, and Vetches, and Rape—the remainder being in Wheat, Beans, and Barley.

It is obvious that there is an immense extent of autumn cultivation, and comparatively little other work. A large extent of Bean stubble has to be ploughed for Wheat; Clover and Rape have to be ploughed for Wheat; Barley stubble has to be ploughed for Vetches; Wheat stubble has to be ploughed for Beans, and all this, except perhaps the last item, which may be done somewhat later, has to be accomplished after harvest and before November. Force enough has to be put on to accomplish the work in proper time, and when the land is in the right condition, which such excessively stiff land very rarely is. And not only this ploughing but a great work with the harrow has to be accomplished in a hurry to fit the land for the seed, and to cover it in. When once the Wheat and Vetches are sown in October, and the land for Beans is made ready for the seed, most of the work is done.

The fact then in this case is that a great number of horses are kept most of the year for the sake of their labour at a critical time. No fewer than 15 to 20 horses were kept on Bourton Farm; 18 was the common number, and several teams of oxen were taken up during the latter months for the accomplishment of the work. It is however difficult to estimate the exact cost of horse-labour on the farm, because after the busy season several horses were always put up to fit for sale. I have therefore estimated, with Mr. Pocock's consent, the horses saved by the introduction of steam-power into the field at 9 horses during six months, and 6 oxen during three months of the year.

Mr. Pocock purchased Mr. Fowler's apparatus in October, 1859, and the next week sold six draught oxen, and gradually parted with his horses until from 16 or 18 they were brought down to seven or eight. He thus saves the keep of at least 9 horses during the year, and of at least 6 oxen during say three months of the year, when their food goes to the production of force instead of flesh. He saves the full wages of team men in both cases during the time of full work—say six months for horses and three months for the oxen, and he saves the wages of horse keepers during the other six months. His expenditure would therefore be:

	£ s. d.	£ s. d.
Food. 9 horses at 10*s*. a week		234 0 0
6 oxen at 7*s*. a week (13 weeks)		27 6 0
		261 6 0
Extras. Blacksmith, farrier, harness. &c. 2*l*. 2*s*. 0*d*...		18 18 0
Maintenance of value, 10 per cent. on 270*l*. the value of 9 horses		27 0 0
		307 4 0
To this must be added repairs of such implements belonging to horse cultivation as have been displaced by steam-power, say 10 per cent. on 100*l*. ..		10 0 0
		£317 4 0
Add also *Wages*. A man and boy to each of 3 teams during 6 months, and a man and boy to 9 horses during 6 months, and a man and boy to every 3 oxen during 3 months, at 10*s*. a week for the man, and 3*s*. 6*d*. a week for the boys—		
4 men, 26 weeks, at 10*s*.	52 0 0	
4 boys, 26 weeks, at 3*s*. 6*d*.	18 4 0	
2 men, 13 weeks, at 10*s*.	13 0 0	
2 boys, 13 weeks, at 3*s*. 6*d*.	4 11 0	87 15 0
Add interest 5 per cent. on capital, say 270*l*.	13 0 0	
And for 3 months on 130*l*.	1 12 6	14 12 6
		£419 11 6

This then is the cost which Mr. Pocock saves by the use of his steam-engines and cultivating apparatus; now let us see what it costs him.

Mr. Pocock has had his rope at work for 18 months, and though once or twice jammed by accident it has never yet broken. He has had his engine and plough at work during the same time, and has had four sets of points for his plough, which cost him 36*s*. He has also had sundry additional expenses connected with new wheels and one or two other little matters, but including all that, his whole expenditure on repairs has not been 20*l*.

His belief as regards the rope—costing 40*l*.—is that one half of it in his management will last two years, and the other half will last three years.

	£ s. d.
It thus appears that 20*l*. will have to be laid out every other year	10 0 0
And 20*l*. once in 3 years	7 0 0
And thus	17 0 0
per annum covers the cost of rope; add for repairs 20*l*. for 1½ year, or	13 0 0
And	£30 0 0

will cover the whole annual cost of repairs and rope.

The average performance is perhaps barely 5 acres a day when ploughing—by a 3-furrow plough worked by a 10-horse engine. The coals cost 18*s*. a ton on the land, which is close to the station, and 8 cwt. a day is the ordinary consumption. The labour employed when at work is—

	£ s. d.
Engineer, per week..	1 1 0
Ploughman	0 18 0
Anchor boy	0 9 0
2 porter boys	0 14 0
Horse and water-cart and boy, say	1 4 0
	£4 6 0

Or, say 14*s*. 6*d*. a day.

The wages are high, and Mr. Pocock is perfectly sure that he is well repaid in paying such wages as shall secure the content and interest of those men who are employed. To this he attributes the fact that he has had no breakage or accident since he began.

The work of removal from field to field is very easily accomplished. When the field is finished, the anchor actuated by the engine works itself on to a frame on wheels which is turned and pulled up to the engine, the slack rope as it is paid out is wound on a drum placed on a pair of wheels, and it too is ready at once to move. The porters are coupled successively on to the anchor carriage on its way to the engine, and the engine itself, with tank, steams out of the field. The anchor carriage, with porters, and drum with rope on it, are drawn out by horses. Last Monday it came down half a mile in this way into a 16-acre field just fed off by sheep, took up its station; the anchor was drawn by horses to its place, the porters being uncoupled on its way, the rope was paid out from the drum and round the stationed anchor and fastened on to the plough—the other end of it was drawn down by horses, fitted around the pulley, and fastened on behind the plough; the slack was wound up and the work commenced—and the field was finished (grubbing) by Tuesday night. This was at Upper Stratton, near Swindon, where Mr. Pocock has another farm.

On another occasion the engine finished work at Bourton at half-past 11 A.M.—the men had their dinner—they then got all the apparatus together and steamed off 5 miles to Upper Stratton, planted their apparatus, and began work the same day.

These facts then illustrate the fairness of the estimate which puts the loss of time for removal at less than 2 hours in the case of mere going from one field to another on the same farm. Of course this depends exceedingly on the weather. In heavy weather everything works slowly, and the time would be more than this.

Mr. Pocock has made a cultivator, which the engine pulls to and fro across the field, turning it by a most ingenious guide apparatus for the pull rope and the slack rope, by which the process is most satisfactorily and easily accomplished. He, with this 9-tined culti-

vator, covering a width of 6 ft. 6 in., easily gives 8 acres a double tine in the day. It is a thoroughly efficient tool, not easy to choke, in however foul a piece of land; and the grubbing thus accomplished is certainly marvellously cheaply done.

The work the engine has done since Mr. Pocock has had it amounts to fully 900 acres, and it is a very moderate estimate of the work yet to be done which puts it at 300 acres to be accomplished before the date of purchase comes round again this year. The whole work will thus be say 1200 acres in two years, or 600 acres annually. The work done has been partly ploughing and partly grubbing, amounting therefore on the average to at least 6 acres daily, including removals, so that 100 days' work per annum must be charged against the engine, and the annual cost will stand thus:—

Repairs and rope		£30 0 0
Coals, 8 cwt. at 18*s*.	£0 7 6	
Oil, probably	0 1 0	
100 days, at	0 8 6	42 10 0
Wages 100 days, at 14*s*. 6*d*.		72 10 0
Maintenance of value, 10 per cent. on say 740*l*. ..		74 0 0
Interest of capital, 5 per cent.		37 0 0
The whole annual cost thus amounts to ..		£256 0 0

The annual cost of horse-labour was put at 419*l*. 11*s*. 6*d*. And even if that be reduced by one-half the charge for food for horses (234*l*. per annum) as they are at work during only about six months, and are then put up to prepare for sale—even then the cost of the horse-power (displaced by 256*l*. per annum spent upon the engine and apparatus) would exceed 300*l*.—so that there is a direct annual saving to Mr. Pocock by the employment of steam-power in cultivation, by which he has annually ploughed and grubbed at least 600 acres for 256*l*., or not much more than 8*s*. an acre. How much more than this the ploughing and grubbing of such heavy land cost when done by horses every farmer knows. It is customary on the extremely heavy land of that county to require 6 horses to every 100 acres of plough land —and the trampling of long teams in the furrow, altogether saved by steam-drawn tools, cannot but exert a most mischievous effect.

Mr. Pocock's farms are the property of H. Tucker, Esq., of Bourton, to whose letters in the *Times* last winter the attention then directed to the condition of cottages in rural districts was mainly due. Mr. Tucker has not confined himself to public discussion of a great evil; but by the erection of good cottages and schools he has set himself to correct it within his own district. Several sets of 5-roomed cottages containing three bed rooms and two living rooms have lately been erected, at a cost not much exceeding 125*l*. apiece.

Home Correspondence.

Agricultural Prosperity.—I am equally surprised and at a loss with your Correspondent "J. W., Peterborough," to know what foundation there exists for the term "Agricultural Prosperity" frequently made use of in the House of Commons, or to discover any trace of such prosperity arising from any financial measures of the Government. I have the highest respect for the wonderful talent and ability of the present Chancellor of the Exchequer, but I cannot see what he has done for agriculture. True, he has taken off some portion of the excise duties on Hops, but the foreign grower has a great deal the best part of it. However, as he admits that the Hop duties are unjust and oppressive, and alike condemned by growers and consumers, we trust the time is not far distant when free trade in Hops as well as corn will be proclaimed. But this does not much affect the prosperity of the agricultural interest, and to return, what evidence have we to prove the prosperity of farmers? By this term, I mean fair business profits for the capital employed in the cultivation of the soil, which ought at least to be 8 or 10 per cent. To judge of such by the returns of the income tax is no criterion at all, for the tax is based upon the rental not the profits of the farm, and I very much doubt if the farmers of the south of England can speak of anything but their losses during the past season. Instead of judging from the income tax, if some members were to move for a return of this balance sheet, some real conclusions might be arrived at. My balance would be very much like Mr. Mechi's when he produced it; a tolerable farm too, very clean, and farmed I trust pretty well. By the bye, a wonderful man is this Mr. Mechi; he has lately discovered a plan for growing corn on one side of a hedge, and breeding hares and rabbits without injury to it on the other. To take the farmers as a class I do not believe they make any more profit than their forefathers, with perhaps double the capital invested per acre; the competition for farms in England will always keep them to a high rent, and profits proportionately low. There are many classes of men always ready to take land; some understand their business and will probably do well, others will take at any price per acre, who have not that knowledge, find that they are losing money, abuse the times and the seasons, but especially their landlords, get out of it, and make way for better men. Others will farm as an amusement and delight, spare no expense, and the farm will look neat and pleasant as a garden. All this helps to put a pleasant face upon the country, the income tax is paid, the crops are good; immense quantities of meat are produced, but not enough for consumption, and hence all such remarks on agricultural prosperity, &c. What the men who do all these things have to thank the Government for or any Chancellor of the Exchequer I am at a loss to conceive. The increasing wants of the population, aided by skill and capital, improvements in machinery, &c., and a rising intelligence among farmers generally, have worked these changes. *W. S.*

Societies.

ROYAL AGRICULTURAL: *May* 22.—The half-yearly report of the Council, read at the General Meeting this day, stated that during the past half-year 87 members have been elected into the Society, 6 governors and 67 members have died, and the names of 236 members have been on various accounts omitted from the list of the Society, which accordingly now includes 4633 names on its list.

The question of the free admission of governors and members to the show-yard during the Society's country meetings has been under the consideration of the Council.

Governors and members who have paid their subscription for the current year, will be admitted free by tickets issued by the Secretary, which tickets will not be transferable; and any governor or member who shall be found to transfer or lend his ticket will be reported to the Council, and will in future forfeit the privileges of membership. Application for the member's ticket is to be made in London, either by post or personally, not later than Friday, the 12th July, and afterwards at the Secretary's Office, near the entrance to the show-yard.

The interest attaching to the country meeting will be this year largely increased by the competitive trials of steam-cultivators. The result of these trials will be made known at the Leeds Meeting.

The Society having offered this year a prize of 100*l*. for the best thorough-bred stallion, having served mares during the season 1861, which, in the opinion of the Judges, is best calculated to *improve and perpetuate* the breed of the sound and stout thorough-bred horse for general stud purposes, and an unusually large amount for horses in other classes, they contemplate that great interest will be evinced at this meeting by the breeders of horses and the public generally throughout the kingdom.

The entries of implements and machinery in motion, to be exhibited at Leeds, closed on the 1st of May, and the Council have the satisfaction of stating that the applications for space in this department of the show-yard exceed those of any previous meeting of the Society.

The entries for live stock and flax, which will close on the 1st of June, already gave indications that this portion of the exhibition will be equally satisfactory.

The arrangement for the Leeds Meeting, to be held in the week commencing Monday, July 15, are advancing rapidly. The show-yard will be open as under:—

Monday, for implements, and for stock (after the judges have made their award)	5*s*.	0*d*.
Tuesday	2	6
Wednesday	2	6
Thursday	1	0
Friday	1	0

Her Majesty has been graciously pleased to grant a site of 26 acres in the Regent's Park, for the purpose of holding an Exhibition of Stock and Implements in 1862.

Farmers' Clubs.

FRAMLINGHAM, *April* 22: *On the Management of Swine.*—Mr. Stearn said:—The management of swine includes breeding, rearing, and feeding. The inhabitants of Great Britain and Ireland are great consumers of meat, and more particularly of the flesh of the pig, in all its varied forms of conversion into meat. The consumption of pork, fresh or salted; of bacon, dried, or smoked; of hams, &c., is immensely great, and renders the progressive improvement in the breeding and general management of the pig of great importance to the public; and in my opinion the keeping of swine is fast becoming something more than a mere means of disposing of the refuse of the farm, which would otherwise be wasted. Mr. Bond stated at the last meeting, our population had doubled in the last 50 years. I am convinced that in swine alone, if the farmers generally would pay proper attention to the breeding, rearing, and feeding, there can be double the meat raised at little more than the present cost.

I have had experience in management of pigs a good many years. I exhibited a sow and pigs at the Framlingham show as long back as 1847, and gained the prize; they were then considered superior to everything that had been seen in this neighbourhood, and many said I should never produce another lot so good. But as Mr. Bond says, "we keep progressing," for at the Framlingham show last year I exceeded the former very much in weight at the same age. The same remark was then made again, but the two lots I showed at Birmingham and Smithfield were heavier still at the age; and now I suppose I may make up my mind I have got to my furthest in that point, as I have raised between 14 and 15 stone, 14 lbs. to the stone, at the age of between five and six months, dead weight; and between 8 and 9 stone, 14 lbs. to the stone, live weight, at between 12 and 13 weeks old; and I think I have now in the breeding of that animal arrived as nearly at perfection as I could reasonably hope. I find that the profit or loss of the pig rests on the quality of the stock, and it must be kept in mind for what purpose the animal is intended, whether for bacon or pork,—if for bacon flitches, you must choose a large kind, such as Berkshire, but if for pork, the small kind is most desirable, such as the Suffolk or Leicester, which are very similar animals, and every judicious breeder will have to take into consideration many circumstances in choosing a breed of pigs. The intent and purpose of breeding is profit. To ensure the greatest amount of profit, it would be well to consider the position in life of the population resident near one's own locality; the proximity to a good market, and the kind and quality of meat necessary for its supply. Formerly farmers had no means of conveying their swine to a favourable market, except the tedious one of driving them, or the expensive one of conveying them in carts. There is a pig called the improved black Suffolk, which many persons prefer to white, thinking they are more hardy, but I have fairly tested the thing of late (which I suppose most present have been eye witness to) and proved that the white will exceed the black as far as early maturity is concerned, and of course early maturity is where the profit is gained; and I find the better the quality of breed the more lucrative it becomes, much less food being required. Now for our white Suffolk breed. In choosing the sow and boar, the chief points are a smallish head, with short snout, wide chaps, the ears rather small and thin, ends sharp, pendulous, and pointing a little forward, broad and deep chest, round ribs, long in the body and short in the leg, the hams or thigh dropped almost to the hock, back broad, straight or slightly curved, shoulders and hams thick, and the neck to rise well behind the ears, small bones in proportion to the flesh, the hair to be long, thin, and silky, tail small and curled. Strict attention to these points in selection cannot fail of perpetuating good stock. Here I must add my surprise how careless breeders are in selecting the boar for their sows. If there happens to be a good animal within a short distance for the going to which half-a-crown is charged, they will often send double the distance to a thoroughly bad bred ugly brute for the sake of the gain of a shilling; whilst this apparently paltry gain is so much looked after improvement is out of the question. As to the time for breeding, the sow should be from 10 to 12 months old, and the boar from eight to 12 months. I however find that very few people will keep them so long, but breed them much earlier, which very often prevents their growing to the proper size, or acquiring sufficient strength for breeding. I think good sized sows are best for breeding, and more likely to have a good number of pigs. Great care should be taken not to save one with less than 12 paps, for it is observed each pig selects a tit for itself. I consider 12 good even pigs to be sufficient for any sow to bring up. The sow I exhibited at Framlingham and Canterbury last summer has brought up 51 pigs in four litters, without losing one. As far as my experience goes, the time of gestation averages about 113 days, or 16 weeks and one day. Two good litters in a year are all we ought to expect. When a sow is in pig she ought to have liberty and plenty of exercise. The boars kept for stock should be confined in a shed with a roomy yard; if allowed to roam about, you are likely to get wrong in your breed. In managing the sow at the time of farrowing my practice is as follows: To have a man with her to attend to her; for it is absurd to have all the trouble and expense of keeping a sow, then, at the most particular time to leave her alone to take her chance. In my idea there is not sufficient attention paid to the construction of piggeries; I have seldom seen one which I did not consider too small, except perhaps just for fat pigs, which, of course, do not so much signify, for the less a pig put up for fatting moves the better. But the farrowing pen ought to be large, to allow the sow plenty of room, and likewise to admit of rails being placed round the sides, so fixed as to prevent the sow lying on the young ones. These rails should be made to shift according to the size of the sow, I think in height from 8 to 12 inches, and extend out from the wall, about nine inches, having the supports carried up sloping from the side, instead of straight up from the floor, like a model I have brought with me, then when the sow lies down there will be no likelihood of her squeezing the pigs, as there is plenty of space left for them to pass between her and the wall, for nine times out of ten that is where the mischief is done, as sows invariably like to lean against something when they lie down. I have recently had a hundred pigs, without losing one from being crushed. Each place ought to be, at least, from 8 to 10 feet square, and the best floor, I consider, is asphalt. No damp or scent can rise from that; I tried boards, bricks, and almost everything in the way of floors; most persons would say boards are best, but I think I can convince you to the contrary. If you will consider for only one minute, they cannot be healthy; for if the boards are placed close, of course the moisture will stand, and the boards become saturated; and if a space is left, the refuse litter will go between, so it will become one mass of putrid matter underneath, quite level with the floor, whatever the depth may be; for what passes through will absorb the urine, and is likely to bring on many diseases. But I think it is well in the cold weather, to lay down a false lattice floor on the asphalt, so it can be taken up once a week, and everything swept from under, for two or three weeks, when the pigs are very young. I have the beds attended to and fresh littered every morning, for I find the cleaner the place is kept, the better the pigs thrive. The floor being washed once or twice a week, everything runs off, and the asphalt dries in a very short time. There is another great advantage: it does not take more than two-thirds the straw it requires for any other floor, for the moisture appears to run under the litter, without wetting it so much, as it is laid a little on the slope; what is taken from the inside, serves as litter for the outside, which ought to be paved in some way to prevent the pigs from rooting. By following this plan, the manure is made very regular and good. A tank should be made just outside to receive the drainage from the pounds, the building to be troughed to take off the rain water, to prevent the manure being washed. The pens ought to be so constructed as to be closed up in cold weather, and well ventilated in warm. At the time of farrowing I allow a very small quantity of litter cut short, and have a hamper placed in the pen, with a little straw at the bottom, and also an old blanket. I put a slight partition about $2\frac{1}{2}$ feet high across the pen, to prevent the sow getting to the hamper; as the pigs come forth put them into it and cover them up, until the sow has done farrowing, after which put them to her and let them suck. When done, put them back in the hamper, give the sow a little warm milk and bran; and whilst she is eating this, have the bed attended to by removing all the wet straw, &c. Add a little fresh litter cut short, then when the sow lies down let the pigs go to her again; by pursuing this plan there is very little danger of losing them, for I believe one-third are lost for the want of proper attention. I always give the man 6*d*. per head for all the pigs he can bring up to a fortnight old. I find this much the cheapest plan, for then there is no fear but he will see to them properly, and attend to them in the first instance as well in the night as the day. How often do we hear people complain of the sow eating her young? Therefore steps ought to be taken to prevent her doing so; for when once a sow does that she is of very little use for breeding purposes. If you will allow me, I will explain what I have found to be the cause. In some litters, the side teeth are much longer and sharper than in others; when this is the case, and the pigs begin to suck, they bite and scratch the paps, and punish and irritate the sow to such a degree, that it brings on inflammation, and the sow becomes mad with rage, she throws some one way and some another. At last she bites them, and if she once draws blood, she will begin to eat them. Now the way to prevent this: when the pigs are a few hours old, I have them taken away in the hamper, so the sow cannot hear them, and nip those teeth out with a pair of pincers. I should have lost a lot of 13 some time since, if I had not pursued this plan, for the sow was as near mad as possible, threw the pigs all over the

place, and I had great difficulty in taking them away, for she would not allow any one to approach her. As soon as I had drawn the teeth, and put the pigs back, she was as kind to them as possible, and perfectly docile. I think about eight weeks old is a good time for weaning the pigs, and I like to have them operated upon a short time previous.

As far as the feeding of my pigs is concerned, it appears the public know more about it than I do myself. Some say I give them sugared milk, some, when they think my back is turned, put their hand into the troughs and taste the food, and say they are sure it is physic; others have stolen some of the food to have it analysed. Now I will try and explain how I feed.

I begin to feed the young pigs at five or six days old, with warm milk mixed with a little very fine sharps, and a small quantity of whole Maize, out of troughs like some I will show you presently. For the first few weeks after being weaned, I have the boy feed them very often, but give them a very little food at a time, so they will clear the troughs out. In the winter I feed all with warm food, but not in the summer. I give them a great variety of meal, such as Wheat, Maize, Barley, Oats, and whatever is most convenient to mix together. I just wet it with cold water, and then scald it with boiling water, and sprinkle it with salt; between meals, I give them whole Maize and Mangel Wurzel or Swedes cut small; and once or twice a day a little coal, but not too much, as it will be likely to do them harm. I allow them plenty of clean water; and there is one thing I am very particular about, not to give them any more food than they will clear up at a time. When pigs are put up fatting, it will be found very beneficial to wash them, at least once a week; this is quickly done by experienced hands, and will amply repay any one for the trouble. I also like to have them very often brushed. If you will only try the experiment between this and the common mode of treatment, you will be surprised at the difference. Store pigs ought to have their liberty as far as convenient, such as to range in large yards in winter, and the run of a piece of pasture in the summer. They should also be fed two or three times a day. Good bred and well fed store pigs will always consume the refuse from the farm and dairy, when a bad bred one will refuse. I have never known mine refuse anything in the way of pig food yet that was offered them, not even the prize animals. In my opinion the generality of pig-troughs are very badly constructed, so as to waste a great deal of the food, and soil it, by allowing the pigs to get their fore feet in. I have tried a great many different sorts, and find those I have brought here to night to be the best kind I have seen, to prevent both spoiling and soiling; they are called the light iron Norfolk troughs. They cannot be too fleet according to the size of the pigs to prevent their getting deformed. Their shape is very often injured through not using a suitable trough. I have a great many different sizes, and use them to suit the animal.

The Secretary, at the request of Mr. Stearn, then read several letters from gentlemen to whom Mr. Stearn had sold pigs, in proof of the statements he had made.

Some extraordinary specimens of Mr. Stearn's success in the breeding and rearing of pigs were then brought into the room, and engaged the attention of the meeting for more than half an hour before the discussion proceeded.

The first animal produced was a breeding sow belonging to a neighbour of Mr. Stearn, which was produced as a contrast to his own. When this animal was placed side by side with one of Mr. Stearn's the contrast produced a great deal of merriment; but we were informed by those competent to speak on the subject that the unhappy pig which was produced as a foil on this occasion was not an unfair sample of the run of young breeding sows. Its age was about nine months, as was also that of one of Mr. Stearn's, placed beside it: the former weighed 4 stone; the latter about 16 or 17 stone. Mr. Stearn also showed three white Suffolk sows in pig. The last specimen shown was a young boar from the Framlingham and Canterbury prize sow. Mr. Stearn also showed one of the light Norfolk troughs he uses, along the top of which he had added a bar to prevent the pigs from attempting to leap over, in doing which he said they would often break their legs. He also produced a specimen of the wedge-shaped lattice he uses, which has the effect of fending the sow from the wall when she lies down, and so leaves room for the young to escape uncrushed. These contrivances were simple and excellent, and served, no less than the wonderful specimens of the pig tribe which he exhibited, to convey an ide so this great care, perseverance, and skill in the work in which he takes so much delight.

Mr. W. Jeaffreson acknowledged the obligations of the meeting to Mr. Stearn, and said he wished to ask one question, as he was a little bit of a pig man himself. One of Mr Stearn's observations was that coal was advantageous to a certain extent, but not too much. What was the quantity of coal that ought to be given to a pig?

Mr. Stearn said that not being acquainted with the properties of coal, he had had to be guided by experience, and in gaining that experience he had been very near losing many of his pigs. He used coal as an astringent, and it acted almost immediately; but in two or three cases he had given too much, and had been near losing the pigs. They must be guided by the age of the pig in using the coal; he never allowed anybody to give it but himself. To a pig from seven to nine months old he should give, if the animal required anything of the sort, about as much coal as would lie in the palm of his hand, twice a day.

Mr. J Mann offered some remarks from his experience of the breeding and rearing of pigs. He said he scrubbed his pigs, but not every day; he rubbed them very frequently with a dry horse brush. For lung disease he gave Linseed meal, and he found they recovered upon it. He believed cleanliness to be one of the greatest points in reference to the growth of pigs; his sties were always washed down clean, and the manure taken away every day. If he had the means he would carry out Mr. Stearn's plans; he was convinced it would pay. To put the growth of well managed pigs down in figures, the heaviest pig would average a growth of 1 lb. per day and 1 stone over, in seven months.

Mr. Stearn said that one of his stock, not of his own breeding, at 28 weeks old, weighed 16 stone 8 lbs. dead weight. In answer to questions, Mr. Stearn said the hide of any white pig would crack upon young Clover.

Mr. W. Jeaffreson asked Mr. Stearn whether it was his custom to endeavour to reduce the fattening qualities of the sow while breeding?

Mr Stearn: I assure you that these very pigs are fed as common as we can feed them to keep them alive. I am perfectly aware none of you will believe me, but these two animals have been kept as low as possible, for breeding purposes. His sows, notwithstanding their fatness, would bring up 12 or 14 pigs, and after the first litter they would average 10 at every time.

Mr. H. Bloomfield said he had been waiting to hear some practical farmer ask some questions which he should like to have answered.

It seemed to him to be quite impossible to imagine that any animal could be in that uncomfortable state of obesity in which these pigs were, unless they consumed a large quantity of food of some kind. It could not be done with those doses of coal. It appeared that from the very earliest moment, at the 6th day after they were born, they were taken from the care of the mother, and fed with a little milk and sharps, and, perhaps with a little sugar.—Was there any sugar?

Mr. Stearn: Certainly.

Mr. Bloomfield said he received that candid statement with a great deal of satisfaction. He hoped Mr. Stearn would be prepared to tell them the kind of feed the animals consumed, for instance, in the first six, seven, or eight months. When he had done that he (Mr. Bloomfield) should have no hesitation in pronouncing Mr. Stearn to be a very prince of pig breeders and fatteners.

Mr. Stearn: I will tell you what I will do, I will allow any one to take that pig, and the Club shall employ a competent person to feed and take care of him for a week or two months, or what period you like, and I will engage to say that that very pig will consume less food than any pig of half the weight in the country, and you shall feed him on anything you think proper.

Mr. George Ling, of Bedfield, near Wickham Market, said Mr. Bloomfield appeared to discredit what Mr. Stearn had stated. He was not going to tell the meeting what Mr. Stearn's pigs ate, he only knew that when Mr. Stearn decided to lay the floors of his piggeries with asphalt he employed him (Mr. Ling) to do the work. When the men came home he asked them how the pigs got on, and the men said the pigs got on they did not know how, for they did not seem to eat anything. The men were there all day long, and were surprised at how little the pigs ate. He was glad to find Mr. Stearn was satisfied with the asphalt. He hoped Mr. Stearn would advise everybody to let him lay their piggeries with asphalt. (Laughter.)

Mr. Stearn: I should very much like to have some competent person feed one of these young breeding sows for two or three weeks. I think he would feed her so that she could not rise at all, and think he was going to starve her too. We can't give her little enough. I have not kept her up to bring her here.

Mr. Sexton said he had not been in the black pig line long, but he was still of opinion that they were hardier than white. Mr. Stearn said his pigs could not stand young Clover; now the black ones would, and their coats did not crack. The blacks did not want so much scrubbing; not more than once in three months. He did not feed them with coals. They did not require it. He could not afford coals. He thought the blacks were hardier, quite as good breeders, and would fat quite as quick. They were certainly first-rate pigs Mr. Stearn had shown them, but he hoped he should meet Mr. Stearn in competition again some day, and he would endeavour to lick him.

Mr. Stearn: Mr. Sexton speaks of my scrubbing, and does not agree with using so much soap. I don't think it costs so much as rose oil, such as I saw him use. We don't wash them more than once a week.

The Chairman said—It was no little honour that they had in their club-room at that discussion the two most celebrated pig breeders in England. They might go into the discussion room of a hundred farmers' clubs, and they could not say what they could say this evening. These two gentlemen went to the Royal Agricultural Society's meetings anywhere in England, and stood at the head of the list. They returned their thanks to Mr. Sexton, and if ever they had another agricultural show in Framlingham, they would guarantee him the very best accommodation to show his pigs, and a well aired bed for himself. They also thanked Mr. Stearn for a sound practical lecture in a short compass.

The Chairman asked Mr. Sexton what he gave his pigs, and whether he gave the food warm or cold?

Mr. Sexton said as soon as the pigs would eat he gave them a little meal or Oats; the Oats whole. He never gave them any Peas till they got 12 or 14 weeks old, he found it cramped them.

Mr. Stearn said he never gave Peas at all.

Mr. Sexton said Lentils and Oats were the principal food; he ground the Lentils, and after a time he ground the Oats and gave them wet with a few sharps and middlings. When the pigs were over three months old, he gave them Barley, and a little before that time, but not much. He also gave a small proportion of Maize. He gave everything cold, in winter and summer. He found if he gave warm victuals, when the pigs got 8 or 10 weeks old their lungs were gone. He sold his pigs for London, at between 4 and 5 months old, at about 5 stone. He generally killed them at from 40lbs. to 70lbs. weight. He got the young pigs to eat as soon as they would. He could get them to eat a little at 6 or 7 days' old. He did not agree with keeping the sows over well.

The Chairman said the secret seemed to be: Oats instead of Barley, and making the pigs eat early.

Mr. G. Goodwyn proposed that by a show of hands the meeting should express their approbation of the show, and their sincere thanks to Mr. Stearn for the useful practical information he had given them.

The vote of thanks was given with much cheering.

(*Abridged from the East Suffolk Mercury.*)

Reviews.

Journal of the Bath and West of England Society. Vol. IX. Part 2.

The Editor of this Journal has already presented its readers with the complete volume for the current year, and a very excellent collection of agricultural papers is given in it.

We do not know the plan of the publication, but it seems to us that it would have been better had this latter section of the volume been delayed until the official report of the Truro meeting could have been prepared. Unnecessary earliness of publication is, however, a very venial fault compared with dilatory performance; and it is in this case altogether atoned for, and, indeed, justified and made especially acceptable, by the need of early publication for one very important paper which the work contains. We refer to the valuable report by Professor Brown, of the Royal Agricultural College, on the sheep rot, in which the skill and industry of the author himself are not more obvious than the fairness and the candour with which he treats the labours of his predecessors on this subject. Having already given Professor Simonds' account of the natural history of the creature whose ravages in the liver of the sheep produce or accompany the rot, we shall do no more than quote a foot-note of the Editor on the manner of its generation:—

"Although this theory of 'alternation of generations' has been worked out with wonderful care and ingenuity by Steenstrup and other helminthologists, too much stress cannot be laid on the fact that the whole series or succession of changes has not been observed in any one species, still less has it been traced in the D. hepaticum. Reasoning from analogy and observation it may be inferred, with almost entire certainty, that the D. hepaticum undergoes changes similar to those of other species of the order to which it belongs; but flock-masters will require something more positive and practical than the hypothesis, however plausible and ingenious, that because one species of Cercaria is developed into a Distoma in the body of a water-snail, therefore other individuals of the same or a cognate species are developed into a D. hepaticum in the liver of the sheep. Until the sheep-fluke has been actually traced through all its stages of development, from the ovum to the perfect trematode animal, we have no positive facts—only analogy and hypothesis—to guide us, and the investigation cannot be deemed complete."

The publicity which has now been given to existing knowledge on this subject by Professor Brown and by Professor Simonds cannot but have a most useful influence on the fortunes of the sheep farmer in all future seasons of such a kind as those of 1860. The other papers in this Part of the Journal, omitting the shorter pieces comprised in the Appendix, are an interesting account of small farms by Mr. Darby, of Lytchett—an elaborate discussion, by Mr. Burnett, of the comparative economy of Grazing and Corn Growing—a useful account by Mr. Tegetmeier of Poultry as Farm Stock—a report by Professor Buckman on the Difficulties of Turnip Cultivation—a collection of reports by Mr. J. C. Morton illustrative of recent agricultural experience, and a valuable report by Mr. Whitley on the agricultural resources of Cornwall.

There is thus sufficient matter of local interest (for Prof. Brown's paper on the rot is especially adapted to the west of England, where it most fatally prevailed), and sufficient matter of general interest, to make the volume at once proper for the Bath and West of England Society to give, and proper for any English or Scottish farmer to read.

From Mr. Morton's paper we quote a single paragraph, to which we hope attention will be given in sufficient time by some of our great seedsmen, who ought to undertake the labour needed fully to carry out the suggestion which it makes. "Of grain crops such reports as have reached me suffer materially from the want of uniformity in the names of sorts. Reports of Wheat, for instance, from different quarters of the country, describe crops of the same sort under different names, and sometimes, I believe, crops of different sorts under a common name. It is to be hoped that a full collection of sheaves of all the sorts grown in this country, may, during the coming harvest, be collected for exhibition in the great international show-rooms at Kensington next year. So good an opportunity for a complete classification of varieties, if used as it deserves to be, will prove of great agricultural service."

When once it is known what a particular name refers to, it will be possible to collate the experience of farmers in various parts of the country, and thus to convey to agricultural readers the special fitness of particular varieties of wheat and other grain crops to the varying conditions under which they are cultivated.

Miscellaneous.

The late Duke of Bedford.—Just as Agriculture is beginning to rejoice under the approving smile of Royalty itself, she turns aside for a moment to mourn the loss of a true friend. And right worthily may he who has just left us ask the tribute of a tear. He was a good man, who used his great means in doing great good to those around him. Descended of a noble race, that has long stood high in the annals of Agriculture, his own unchequered career of usefulness will eclipse even the fame of his ancestors. Seldom has a man worked so steadily onwards. Rarely has any one left so many lasting monuments to his memory. At every turn wheresover his path was followed, you saw what a blessing it was for the poor to own such a friend, the tenant to boast of such a landlord, and the gentry to feel the force of such an example. The blocks of clean comfortable cottages—the complete well finished homesteads—the thriving schools, and the spiring churches—either alike in town or country, there is that record of him that the sculptor's art or the poet's pen will seek in vain to vie with. The Duke of Bedford has done his duty in that state of life in which it pleased God to place him. The charge was, no doubt, a heavy one; but he ably fulfilled it. *Mark Lane Express, May 20.*

Extraordinary Wheat.—On the 14th inst. Wheat measured in the Dunbar Corn Exchange was found to weigh 66 lb. per imperial bushel, which is considerably heavier than any parcel of crop 1860 which has been pitched in the market-place. This fine Wheat was grown on the farm of Broomhouse, in the neighbourhood of Dunbar, a district celebrated for Wheat and Potatoes. It is white, but high coloured, and one of the bearded varieties, selected and propagated by Patrick Shirreff. Hitherto the beard has been regarded with dislike, and associated with coarseness of grain; but, from the beautiful and heavy samples of bearded Wheats which Mr. Shirreff has this season shown in the markets of the Lothians, they seem to be destined to occupy a prominent place in British agriculture.

Calendar of Operations.

MAY.

TYNESIDE, SOUTH NORTHUMBERLAND, *May* 17.—Since the heavy rains of the first week in April, dry sunny days and frosty nights continued to be the rule, almost without intermission, till the 12th inst., when we had a fine gentle rain with a change of wind to the west. In consequence of the long continued barren weather even the early sown grain crops are not now so far advanced as they were last year at this time, though in the beginning of April they were at least a fortnight in advance. The severe frosts of last week have injured the seeds and Barley to a serious extent, and cut down the early crop of Potatoes which had appeared above the surface. Keep of all kinds for stock has been plentiful, and a considerable quantity of Mangel is still on hand. Seeds were so promising in April that they were early stocked with sheep, and have now a poor appearance, while old swards make no progress, and consequently a considerable decline in the value of store stock has been experienced. Nearly all the fat cattle have been cleared out of this district, and Newcastle market is principally supplied from North Northumberland and Tweedside. Winter Wheat on early soils, where it made rapid progress last month, has now lost colour very much, and all the spring sown, which is the bulk of the land under Wheat, is in great want of rain and warm nights. Barley, early sown, looks well; later sown has come away partially, while many of those fields which were cleared of Turnips during April have been given up in despair, as it was found on trial that ploughs and harrows could make no impression on the stubborn soil. Oats in a few exceptional cases look well, but the great bulk has lost colour and has a dwarfed appearance; while seeds for hay, unless where liberally top-dressed, must now be a light crop. An enormous breadth of land has been planted with Potatoes, and we can still observe some pushing farmers getting in the fag-end of this crop. The season has been a famous one for preparing and cleaning the land for green crops, except on the stiffest soils; and Mangel and Swede sowing have occupied the attention of farmers for the last three weeks, though we have never seen any advantage from such early sowing of Swedes. Crop 1860 in this district has turned out in quality as miserable and in quantity as deficient as we expected, and the season has throughout been a disastrous one for all wet ill-conditioned soils. *W. C. T., Dilston.*

YORKSHIRE: *May* 18.—Our present position is by no means an encouraging one. Frosts at night and blighting winds by day have brought the growth of Grass to a stand still. The soil being supplied with a sufficient quantity of moisture, accompanied by dry weather in April, vegetation made considerable progress. So much so, that by the month of May there was every appearance of the farmer having the continued supply of a green bite for his stock. As yet the ungenial weather has not only increased the expense of the food in the straw yard, but has also reduced the amount of green food, by discolouring and in too many cases rendering unwholesome the quality of the Grass there is to turn out upon. Our yearling and two year old cattle cannot without great risk leave the straw yard for good in such weather. The same may be said of young cattle of all descriptions. Incipient diseases are matured and aggravated in all kinds of stock by an entire exposure to the withering influences of our climate, as we are now experiencing it. Lameness, an evil common to our young horses may be plainly traced to an imprudent exposure to cold; and quarter ill amongst our young cattle to the same cause, a cause which we attribute to our easterly winds, accompanied by frost at nights. Under these circumstances the fold yard must prove the safest place of lodging for night, for such stock especially as are dependent on shelter; namely, mares and foals, young horses that have been entirely kept in the straw yard during winter; yearling and two year old heifers and steers. Lambs have done well up to this time. Should the progress of the Grass be still impeded, hogs will require an additional feed of cake; an expensive commodity which farmers must not yet expect to dispense with, if they are preparing to realise the top price for mutton.

STATE OF THE WEATHER—BERKSHIRE.

For the week ending May 23: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain.	Wind.	Barometer.
		Max. in Sun.	Max. in shade.	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	17 ..	94.6	73.4	46.0	64.5	56.7	..	N.	29.86
Saturday	18 ..	69 2	64.4	26.2	46 2	55.0	..	N E.	30 08
Sunday	19 ..	81.0	57.2	28 0	48.1	54.7	..	N.E.	30.22
Monday	20 ..	82 0	60 6	32.0	51 4	55.2	..	N.W.	30.23
Tuesday	21 ..	86.6	73.0	41.4	60.2	57 0	..	W.	30.20
Wednesday	22 ..	84.2	74.4	46.4	62.5	58.0	..	W.	30.00
Thursday	23 ..	73.2	71.0	47.6	59.5	58.4	0.02	S.W.	29.88

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

DANISH AGRICULTURAL SOCIETY: *R.* The Consul General of Denmark has addressed a communication to the Royal Agricultural Society, informing them that the Agricultural Society of Denmark will hold their eighth meeting from the 2nd to 6th July next at Horsens, in Jutland, and intend to arrange for the exhibition of machinery and instruments used in horticulture, agriculture, fishing, forests, plantations, &c., as was done at Gothenburg last year; being desirous of showing the progress made in Denmark during the period which has elapsed. The mode of transport of machinery, utensils, models, and designs, will be communicated to intending exhibitors by the Danish Consul General on application at 6, Warnford Court, E.C.

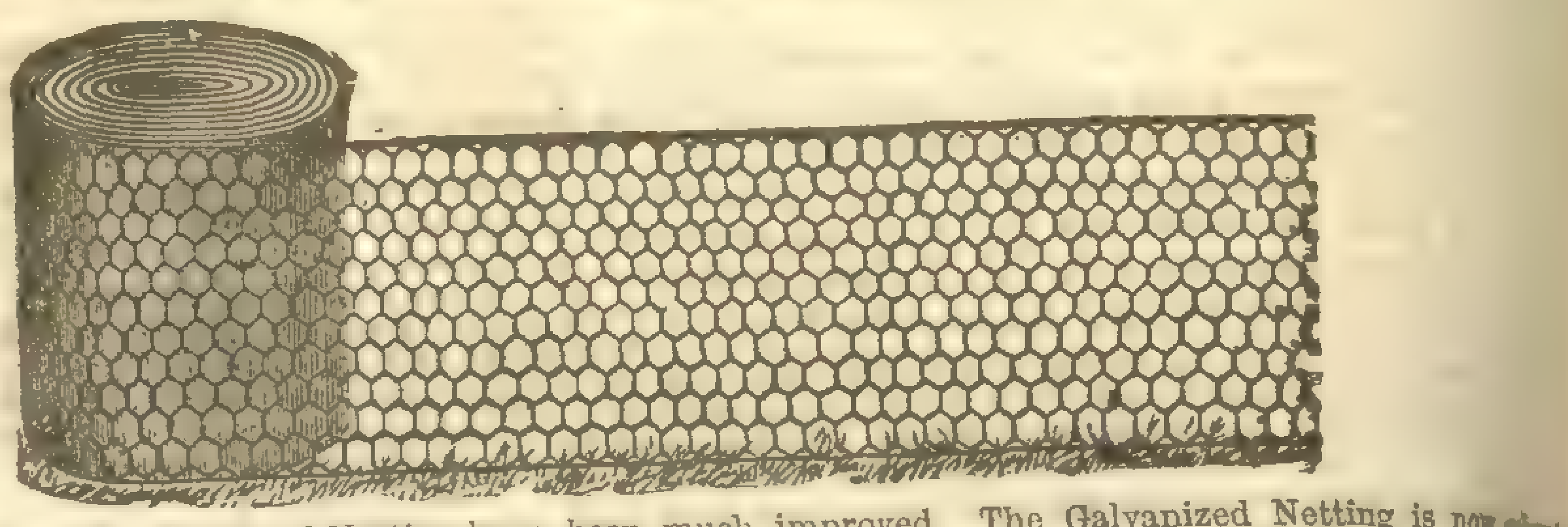
IRON ROOFING: *S B.* It should be painted *inside* and out at least once every three years. We hope to send you a full report by post.

POULTRY.—It is with poultry as with everything else that depends on atmosphere, and a certain temperature for good condition. Growth and well doing depend on warmth and sun, while cramp and discomfort are the inevitable results of easterly winds and inclement weather. Our market report must then of necessity be influenced by the same, and we congratulate our readers that the improvement we noticed last week is continued. The supply is better, and we may soon look for a regular trade at prices that will satisfy the sender, while the purchaser will find in the increased ease with which he will rear his goods, and in the sale for a larger number, the compensation for some diminution in price.

	Each.—s. d.		s. d.
Large Fowls	5 6	to	6 0
Middling ditto	3 0	„	3 6
Chickens	2 6	„	3 0
Goslings	5 6	„	6 0
Ducklings	2 6	„	3 0
Pigeons	0 7	„	0 8
Levretts	2 6	„	3 0
Rabbits	1 4	„	1 5
Wild ditto	0 8	„	0 9

NEW IMPROVED PREMIUM WIRE NETTING.

GREAT IMPROVEMENT WITH REDUCED PRICE.



Both the Galvanized and the Japanned Netting have been much improved. The Galvanized Netting is now galvanized after being made, and is thus much stronger and more durable, with an improved appearance. The Japanned Netting has a very durable and bright chocolate varnish coating and looks well. With these increased advantages the prices are much reduced, as under:—

PRICES PER LINEAL YARD, 24 INCHES HIGH:—

Size of mesh.	Mostly used for	Light.		Medium.		Strong.		Extra Strong.	
		Japanned.	Galvanized.	Japanned.	Galvanized.	Japanned.	Galvanized.	Japanned.	Galvanized.
2¼ inch	Hares, Dogs, Poultry	3d.	4d.	3¾d.	5d.	4½d.	6d.	5½d.	7d.
2 inch	Game or Poultry Netting	3½d.	4¼d.	4d.	5d.	5d.	6½d.	6½d.	8d.
1⅝ inch	Small Rabbits, Hares, &c.	4d.	4¾d.	4¾d.	6d.	5½d.	7d.	7d.	9d.
1½ inch	Smallest Rabbits..................	5d.	6d.	5¾d.	7d.	7d.	9d.	9d.	11d.

These prices being a reduction from ½d. to 1d. on the 2¼-inch mesh, and 1d. to 2d. per yard on the smaller meshes, will, it is believed, still further stimulate the more general use of Wire Netting, which is already so extensively used for various purposes.

Quantities of 100 yards or upwards delivered free at nearly all the principal Railway Stations and Shipping Ports in England; and 200 yards or upwards delivered free to most parts of Scotland and Ireland.

☞ *Every description of Netting warranted to give satisfaction, and if not approved will be exchanged or may be returned unconditionally.*

J. B. BROWN & CO., 18, CANNON STREET, CITY, LONDON, E.C.

GLASS WAREHOUSE.—ESTABLISHED 1750.

THOMAS MILLINGTON,

87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.

REDUCED TARIFF FOR HORTICULTURE, PICTURES, AND DWELLINGS.

ORCHARD-HOUSE SIZES. SMALL SQUARES.

Supplied to Mr. Rivers and many others.

In. by In.		16 oz.	21 oz.
20 .. 12	Common, per 100 feet,	13s. 6d.	18s.
20 .. 13	Super „	16s.	23s.
20 .. 14			
20 .. 15			

In. by In.	In. by In.	Per 100 feet.	Per foot.
6 .. 4	8 .. 6	Common 11s. 6d.	1½d.
6½ .. 4½	8½ .. 6½	Super 12s. 6d.	1¾d.
7 .. 5	9 .. 7		
7½ .. 5½	9½ .. 7½		

SQUARES IN 100 AND 200 FEET BOXES.

Inches by Inches.	Inches by Inches.	Inches by Inches.	Inches by inches.	Inches by inches.		P. 100 feet.	P. foot.
10 .. 8	12½ .. 9½	13 .. 10	15 .. 10	13½ .. 11½	4ths.	12s. 6d.	[illegible]
10½ .. 8½	13 .. 9	13½ .. 10½	12 .. 11		3ds.	14s. 3d.	[illegible]
11 .. 9	12 .. 10	14 .. 10	12½ .. 11½	14 .. 11	2ds.	18s.	[illegible]
12 .. 9	12½ .. 10½	14½ .. 10½	13 .. 11		1sts.	21s. 6d.	[illegible]
15 .. 11	15 .. 12	16 .. 13	24 .. 14	24 .. 16	4ths.	13s. 6d.	1½d.
16 .. 11	16 .. 12	17 .. 13	20 .. 15	20 .. 17	3ds.	16s.	[illegible]
17 .. 11	17 .. 12	20 .. 13	22 .. 15	20 .. 18	2ds.	19s. 8d.	[illegible]
18 .. 11	18 .. 12	23 .. 13	24 .. 15	.. ..	1sts.	24s.	[illegible]
13 .. 12	20 .. 12	20 .. 14	20 .. 16	.. ..			
14 .. 12	22 .. 12	22 .. 14	22 .. 16	.. ..			

If less quantity than 100 feet is taken, a moderate charge made for package.

GLASS CUT TO ANY GIVEN SIZES NOT ON LIST.

16 oz.—4ths, 1¾d., 2d., and 2½d. per foot.
„ 3ds, 2¼d., 2½d., and 3d. per foot.

21 oz.—4ths, 2¾d., 3d., and 3½d. per foot.
„ 3ds, 3½d., 4d., and 4½d. per foot.

HARTLEY'S IMPROVED PATENT ROUGH PLATE.

Not accountable for breakage.

GENUINE WHITE LEAD	32s. 0d. per cwt.	
ANTI-CORROSION PAINT	34 0 „	
LINSEED-OIL PUTTY	8 0 „	
LINSEED OIL	2s. 7d. per gal.	
BOILED „	3 0	
TURPENTINE	3 10	

BLACK, GREEN, and all other kinds of PAINTS, VARNISHES, BRUSHES, &c.

ST. PANCRAS IRON WORKS,

OLD ST. PANCRAS ROAD, N.W.

IRON HURDLES, FENCING, AND GATES.

THE PROPRIETORS OF THE ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON,

WERE AWARDED THE

SILVER MEDAL of the ROYAL AGRICULTURAL SOCIETY for their IRON HURDLES AND GATES, which, by their peculiar construction, are more than twice as strong and durable as those in ordinary use.

Lists per post on application. Gates from 30s. to 500l.

The Hurdles can be seen in process of Manufacture at the Works.

GAME WIRE NETTING.

PROFESSOR VARNELL'S ENAMELLED AND WROUGHT-IRON STABLE FITTINGS.

These Patent Mangers and Stable Fittings obtained the Commendation and the Silver Medal of the Royal Agricultural Society of England and the Royal Agricultural Society of Ireland, are adopted by the Royal Veterinary College, and Professor Spooner of that Institution states that they should be used by all who value the health and comfort of their horses. They can be had plain, galvanised, or enamelled.

A Show Room is devoted entirely to every description of Stable Furniture, and full-sized stalls and loose boxes are erected for inspection at St. Pancras Iron Works.

ADDRESS—THE MANAGERS,

ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, N.W.,

OPPOSITE OLD ST. PANCRAS CHURCH.

Roses, New and Old.

WM. PAUL (Son and Successor to the late A. PAUL) has now ready for delivery a fine lot of all the best Roses, new and old.

BEDDING PLANTS.—All the best kinds, stout hardy Plants, at the usual rates.
PRICED CATALOGUES free by post.
Address WM. PAUL, Cheshunt Nurseries, Waltham Cross, N.

NEW ROSE.—MADAME STANDISH is the hardiest of all Roses; those which stood out of doors during the whole of the late severe winter not having lost a bud, whilst most others were destroyed by thousands. The growth is very rapid; the foliage magnificent; colour, a clear pale pink; petals smooth, round, and finely imbricated; the form cannot be excelled, and it is a thorough Perpetual, being, in fact, one of the finest Roses ever offered. Plants now ready, 10s. 6d. each. Madame Standish must not be mistaken for Mrs. Standish, which was sent out by MIELLEZ, of Lille.
JOHN STANDISH, The Royal Nursery, Bagshot.

Dwarf Tea-scented Roses
IN POTS ON THEIR OWN ROOTS FOR BEDDING.

EDWIN HOLLAMBY is now sending out strong established Plants of all the best varieties. Priced CATALOGUES free by post.
Strawberry Hill Nurseries Seed Establishment, opposite the Post Office, Parade, Tunbridge Wells.

FRANCIS R. KINGHORN is now sending out his unequalled SEEDLINGS. For description and awards see *Gardeners' Chronicle*, May 18, page 454.

Azalea Indica President	21s. each.
Azalea Indica Kinghornii	21s. ,,
Azalea Indica Mars	21s. ,,
Lobelia Purple Standard	7s. 6d. ,,

Sheen Nursery, Richmond, S.W.

Select Plants.

HENRY WALTON begs to offer strong Plants of Gloxinias, erect and drooping flowered, 9s. to 18s. per dozen; Fuchsias of 1860, 9s. per dozen; Geraniums of 1859, 20s. per dozen; older varieties, 6s to 15s. and 18s. per dozen.
A choice collection of Bedding Plants, Dahlias, Verbenas, Petunias, Scarlet Geraniums, &c. &c., at low prices.
DESCRIPTIVE LISTS on application.
Edge End, Marsden, Lancashire.

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F. AND A. SMITH have now in bloom the following Plants, which are well grown and very suitable for decorative purposes. Prices on application:—Azaleas, Aphelexis, Cheironias, Chorozemas, Cinerarias, Cactus, Dillwynias, E. Willmorea superba, E. ventricosa, E. perspicua nana, Leschenaultia formosa, Boronia Drummondi, B. serrulata, Eutaxia myrtifolia, Aotus gracillima, Fuchsias, Rose Mrs. Bosanquet, Kennedyas, Polygala, Heliotrope, Mesembryanthemum, Tremandra, Geraniums, Fairy Roses, Mignonette, Intermediate Stocks.
Dulwich, Surrey, S.

EXCELLENCE AND ECONOMY COMBINED.

	per packet.
Very choice Fringed Primula sinensis, at	6d and 1s.
,, Calceolaria	6d. and 1s.
,, Cineraria	6d. and 1s.
Extra fine double German Wallflower mixed	3d.
,, ,, Brompton Stock mixed	3d.

Free by Post.
The Primula, Wallflower, and Stock may be had in separate colours. Price per ounce on application.
JAMES TYNAN, Seed Warehouse, 68, Great George St. Liverpool.

New Phloxes and Pentstemons.

DOWNIE, LAIRD, AND LAING beg to offer their new Sets of Twelve of each of the above. Having been selected from many thousand Seedlings, they offer them with every assurance that they will give the same satisfaction as those hitherto sent out by them. Price 30s. per set. The usual discount to the Trade. CATALOGUES may be had free on application.
D., L. & L. have also a large Stock of BEDDING PLANTS, which they offer at 20s. per 100.
Stanstead Park Nursery, Forest Hill, S.E.; and at 17, South Frederick Street, Edinburgh.

Unequalled Cineraria Seed.

JOHN DOBSON AND SONS are now sending out their superb Cineraria Seed, which is being saved exclusively from the finest new varieties of Dobson's, James's, Smith's, and Turner's. These cannot fail to produce a splendid strain. Three First Prizes have been already awarded to our collection this season. Sealed packets, 1s., 2s 6d., and 5s.
Woodlands Nursery, Isleworth.

Extra Choice Seed.

JOHN DOBSON AND SONS beg to recommend the following as very superior, being Home-saved:—
CALCEOLARIA.
DOBSON'S Superb Hybridised Calceolaria, 1s. 6d., 2s. 6d., 3s. 6d. and 5s. per packet.
CINERARIA.
DOBSON'S Superb Cineraria, 1s., 2s. 6d., and 5s.
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DOBSON'S Superb Primula, 1s., 2s. 6d., and 5s.
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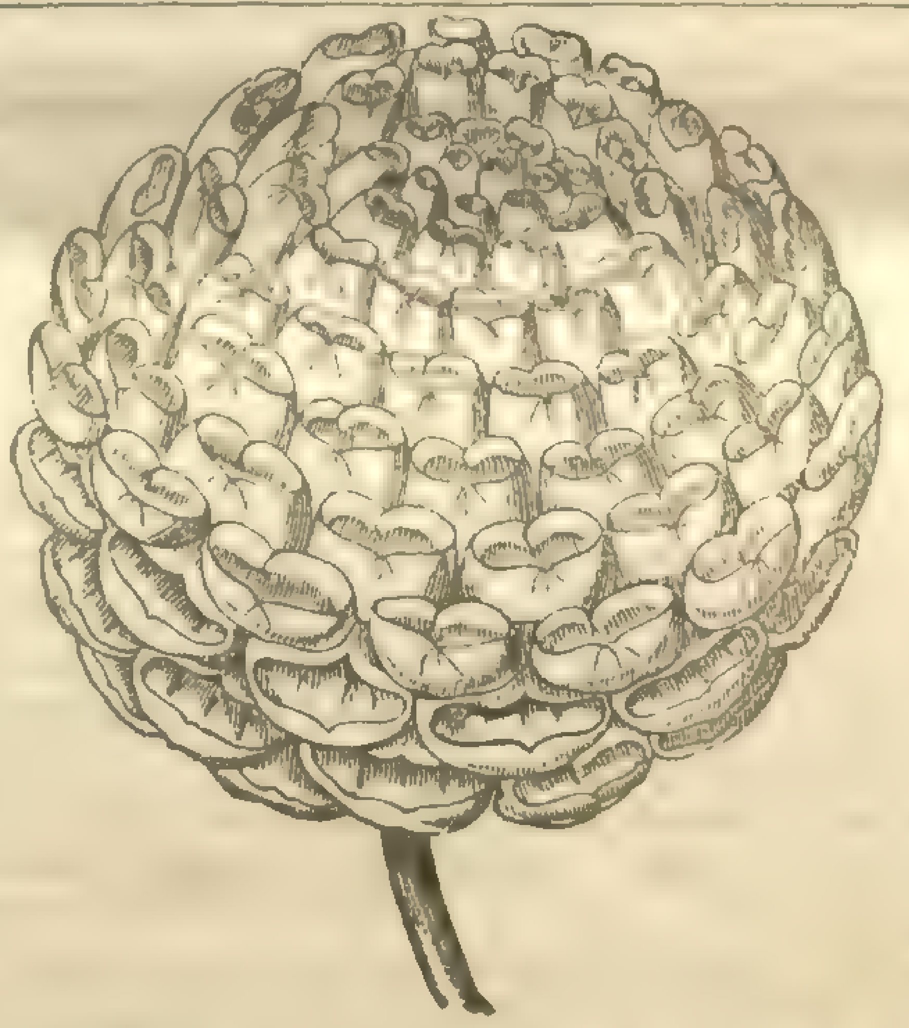

LILLIPUTIAN OR BOUQUET DAHLIAS.—The most beautiful are Goldfinch, Dr. Webb, Crimson Beauty, Little Mistress, Little Beauty, Child of Faith, and Little Prince.
See E. G. HENDERSON & SON'S Catalogue.

THE MOST UNIQUE BEDDING PLANT is Dianthus hybridus multiflorus, as free to propagate and grow as Verbenas.
See E. G. HENDERSON & SON'S Catalogue.

THE MOST NOVEL AND BEAUTIFUL GERANIUMS are G. Princess of Prussia, the most useful scarlet yet out; Ditto Pink Tom Thumb, the most prolific, and of Lilliput habit; Ditto Hendersoni nana, the best bedding white Zonale; Ditto Minimum Nosegay, large flowered, with small leaf, and Lilliput growth.
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NEW ERECT FLOWERED ANTIRRHINUMS, as A. "Pioneer," "Novelty," and "Curiosity," are three of the very remarkable erect-flowered section, interesting and distinct.
See E. G. HENDERSON & SON'S Catalogue.

THE GREATEST IMPROVEMENTS IN PETUNIAS will be seen on referring to
E. G. HENDERSON & SON'S Catalogue.

VERBENAS FOR 1861.—As a new collection the best sent out are those now offered and detailed in
E. G. HENDERSON & SON'S Catalogue.

VERBENA LUCY TAIT.—This pretty variety of Verbena was certified by the Horticultural Floral Committee for its perfect adaptation to small fancy beds, parterres, and belts.
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CONVOLVULUS MAURITANICUS.—This beautiful plant is admirably adapted for Vase, Basket, and Bed-culture, covering the surface with rich blue blossoms. See a fine illustration in the *Gardeners' Chronicle* of May 18, and
E. G. HENDERSON & SON'S Catalogue.

NEW BEDDING DAHLIAS.
See E. G. HENDERSON & SON'S Catalogue.
Wellington Road, St. John's Wood, London, N.W.

Seeds Direct from the Growers,
THE MOST CERTAIN MEANS OF PREVENTING DISAPPOINTMENT.

NOTWITHSTANDING the Wet Summer and Autumn of 1860, Messrs. SUTTON & SONS have the satisfaction of receiving almost daily very gratifying accounts of the growth of the Seeds they have supplied this adverse season. The following are similar to many others:—

From JAS. BREBNER, Esq., *Steward to* H.R.H. THE PRINCE CONSORT.
"Norfolk Farm, April 4, 1861.
"Messrs. SUTTON & SONS,—I have great pleasure in stating that the Seeds supplied by you for a number of years for H.R.H. THE PRINCE CONSORT'S FARMS (the Norfolk and Flemish, Windsor Great Park), have always been good and given every satisfaction."

From JOHN GRAHAM, Esq., *Steward to* H.R.H. THE PRINCE CONSORT.
"Bagshot Park Farm, April 9, 1861.
"The Seeds had from your Establishment for the last three years have always come up well and never once failed.

From FRED. F. HALLETT, Esq., *Manor House, Brighton, May* 23, 1861.
"On April 4, this year, I began to cut a field of your SUTTON'S Improved Italian Rye-grass 18 inches high, and on May 4 I began to cut it the second time, when it was again the same height. A continuous North-east wind blew throughout the whole of April. *I feel bound to say that from no other sort of Italian Rye-grass have I succeeded in obtaining such crops.*"

From the Rev. W. H. ROACH, *Whiteshill Parsonage.*
"Messrs. Sutton & Sons, May 3, 1861.
"I am happy to tell you that all the Garden Seeds which I had from you this year have come up beautifully; better and more regular, if possible, than in any former year."

SUTTON & SONS can still supply all kinds of Farm and Garden Seeds for present sowing, of excellent quality, at moderate prices, according to quantity required.
Royal Berkshire Seed Establishment, Reading.

Chrysanthemums for the Million.

J. H. BIRD, F.R.H.S., NURSERYMAN, Stoke Newington, N., can now supply from his great Collection, 20 Pair of Best Large Varieties for 10s.; 25 Pair of Best Pompones, 10s.; 20 Pair of Best Large Varieties, Cuttings, 5s.; and 25 Pair of Best Pompone Cuttings, 5s.
N.B. To save trouble all Orders to be Prepaid.
CATALOGUES for One Stamp.

TROPÆOLUM GARIBALDI.—The best of its kind for general and Bedding purposes. Colour, a brilliant Scarlet. Remarkably free bloomer. Certificate awarded by Royal Horticultural Society. Price 3s. 6d. each, or 36s. per dozen. Usual Trade allowance.
New SPRING CATALOGUE post free on application.
JAS. GARAWAY & Co. Durdham Down Nurseries, Bristol.

RHODODENDRON EDGWORTHII.—This magnificent plant has produced eight trusses of perfect flowers highly scented, though exposed to all the inclemency of the last winter. Have any of your subscribers met with the same success?
JAMES DEAN, Fairlawn Gardens.

Bedding Plants.—Mostly 2s. 6d. per dozen.

SCOTT'S 48-paged CATALOGUE, with Copious Descriptive Lists of all the best Bedding Plants out, to which is, this season, added suggestions for Planting Beds and Ribbons, with full lists of early Flowers for decorating the Garden in winter and early spring. Apply to
J. SCOTT, Merriott, Crewkerne, Somerset, inclosing 2 stamps.

Spring 1861.

A CATALOGUE OF PELARGONIUMS, FUCHSIAS, CHRYSANTHEMUMS, BEDDING PLANTS, &c., is just published, and may be had Post free on application to
JOHN & CHARLES LEE, Nursery and Seed Establishment, Hammersmith, London, W.

New Plant Catalogue.

JAMES VEITCH, JUN., begs to announce that his GENERAL PLANT CATALOGUE for the present season, including a Descriptive List of all his novelties of this year, is now ready, and will be forwarded post free upon application.
Royal Exotic Nursery, Chelsea, S.W.—June 1.

BEDDING PLANTS.

JAMES CARTER & CO.

HAVE much pleasure in offering fine strong Plants of the following, all of which have been properly hardened and may now be planted out with safety.

Geraniums.

	Per dozen.—s. d.	s. d.
Flower of the Day	4 0 to	6 0
Brilliant	4 0 ,,	6 0
Cloth of Gold, *the best variegated Geranium yet sent out* .. .. each		3 6
Crystal Palace, scarlet	4 0 ,,	6 0
Trentham, rosy scarlet	4 0 ,,	6 0

	Per dozen.—s. d.	s. d.
Cerise Unique	4 0 to	6 0
Cottage Maid		6 0
Punch	4 0 ,,	6 0
Tom Thumb	4 0 ,,	6 0
Beaton's Imperial Crimson Nosegay		6 0
Purple Nosegay or Fothergilli, *very extensively used at the Crystal Palace*		6 0

	Per dozen.—s. d.	s. d.
Calceolarias in variety		4 0
Crystal Palace Tropæolum elegans, *true*	4 0 to	6 0
Crystal Palace Tropæolum Triomphe de Hyères, scarlet and yellow, new		6 0
Petunias, a fine collection, double and single, from		4 0
Lobelia speciosa, *true*	3 0 &	4 0
Antirrhinums in great variety, from		4 0
Gazanea splendens	4 0 to	6 0
Koniga variegata	3 0 &	4 0
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	Per dozen.—s. d.	s. d.
Verbenas, *a fine collection, including the principal shades of colour, purple, scarlet, white, &c.*, from		4 0
Perilla Nankinensis		3 0
Ageratums	4 0 to	6 0
Salvias	4 0 ,,	6 0
Cannas *for centres of beds, a very choice collection*		12 0
New French Asters in pots, *raised from our unrivalled collections* .. .. per doz. pots	3 0 ,,	6 0
Pampas Grass .. .. each	1 0 ,,	1 6
Achimenes, very strong, in pots, collections of 12 choice kinds .. .. per dozen 9s., and	12 0 &	18 0

Hanging Fern Baskets

of new and elegant designs, for Greenhouse, Stove, or Conservatory decoration, filled with Ferns, complete, 2s. 6d., 3s. 6d., 5s., and 7s. 6d.

Hanging Flower Baskets

filled with Fuchsias, Gazanias, Lobelias, Tropæolums, &c.; are extremely graceful and effective ornaments; 3s. 6d., 5s., 7s. 6d., and 10s. 6d.

JAMES CARTER & CO., 237 & 238, HIGH HOLBORN, W.C.

The Gardeners' Chronicle.

SATURDAY, JUNE 1, 1861.

MEETINGS FOR THE ENSUING WEEK.

TUESDAY, June 4	Royal Horticultural (Special General Meeting)	3 P.M.
WEDNESDAY, — 5 THURSDAY, — 6	Royal Horticultural (Great Flower and Fruit Show) at South Kensington	1 P.M.

EARTH-HEAT and water-heat are at last seen to be among the necessaries of a garden. Even the most prejudiced blue apron has given way to the force of evidence; for "mighty is truth, and never doth it fail." More than 20 years ago the importance of earth-heat was insisted upon in the *Theory of Horticulture*; the French, German, Italian, and Russian translations of the work brought the author's views before the cultivators of every kingdom of Europe; and by degrees the gardening world has universally recognised the importance of the doctrine that "Bottom-heat," as it is called, is as essential to healthy vegetation as air-heat itself. The large sums expended in drainage are of themselves a great practical recognition of the truth; for one of the principal, if not the principal, effects of drainage is to raise the temperature of soil.

We have lately published the speculations on this subject of M. NAUDIN, an eminent French botanist, whose plans of geothermal cultivation may, we think, be assumed to have grown out of the theory and practice of England; and we would

now direct attention to a German illustration. In Mr. D. MOORE'S report to the Royal Dublin Society the following passage occurs:—

"The next garden I visited in the neighbourhood of the Prussian capital was that of Mr. BORSIG, at Moabit, where there is a fine private collection of plants, the grand feature being the amazing number of tropical aquatic plants cultivated in the open air. This is effected by supplying a winding stream, which passes through the garden, with a constant flow of hot water from the adjoining iron works. This stream is about 100 yards long by 20 wide, and is filled with them. The gardener, M. GOERDS, informed me that only three years ago a single plant of Nelumbium speciosum was planted, which has already spread itself over a great portion of the stream; and on the day I visited there could not have been fewer than 100 expanded blooms of this loveliest of flowers. At the same time there were many flowers of Victoria regia, Nymphæa Devoniana, Nymphæa cœrulea, Nymphæa dentata, &c., altogether producing such a charming floral picture as can hardly be imagined. Near the aquatics stood another interesting group of tender coniferous plants, among which were Araucaria excelsa, Araucaria Cunninghami, Dacrydium Cupressinum, some species of Dammara, &c. They were planted out in the open ground, and are covered in winter with a moveable conservatory. *Their appearance in that state was so unlike that they have when starved in small pots or tubs, as scarcely to be longer recognisable as the same kinds of plants.*"

Of course, in the winter of Prussia, the Araucarias and other trees that are spoken of must be preserved by the warmth which their soil derives from the neighbouring heated stream. We entertain no doubt indeed that if a creek proceeding from the stream were merely covered with a tent roof, even tropical Ferns and Orchids would flourish under it during summer more than in any hothouse; and that by some simple method of irrigation Pine Apples might be made to ripen as well as in their native South America.

The readers of the *Gardeners' Chronicle* may remember that this subject was repeatedly discussed in its columns during the year 1850, and was revived in 1851. It was then shown that all the objections taken to the method of heating employed by Mr. BORSIG were destitute of foundation, and that no practical difficulty whatever was to be anticipated, where the waste water of steam-engines could be had. Those who may not have the *Gardeners' Chronicle* to consult will find the evidence abstracted in the "Theory and Practice of Horticulture," to which we beg to refer them. There can be no kind of doubt that our English system of cultivation is on the eve of a great change, the necessity of which has been sufficiently shown by the winter that has passed. As the effects of that disastrous period become more evident it is every where seen that plants now utterly destroyed would have survived could the temperature of their roots have been maintained a few degrees higher. A very small rise of temperature in the earth will prevent the fatal action of our frosts, and when preservation, not forcing, is the object, some simple means will surely be discovered, even in places where fuel is costly. Where the roots of Vines have been screened buds break well and berries swell as usual. Where the soil was exposed naked to the intensity of the frost, buds break ill, and berries, *if any appear*, shrivel and shank; and we entertain no kind of doubt that Peach trees would have disregarded the cold of the atmosphere had their roots been saved from excessive congelation. Let any one who doubts this observe how many exotic trees began to swell their buds on the approach of spring, and then died—Standard Apricot trees for example. The branches had borne the cold, their buds had escaped destruction; but when, in their growth, they called on the roots for food, the roots had none to give, for the roots were killed or paralysed, and so the buds too died. A very inconsiderable amount of earth-heat would have saved them; even a thick coating of straw would have prevented much loss of heat by the ground, and that would have been sufficient.

We do not pretend to say how earth-heat can be best applied in winter. Some simple and inexpensive contrivance might surely be employed even where fuel, that is to say coal, is dear. The length of time during which it would have to be maintained would be short; and the earth once warmed would be slow in getting cold again—much slower than is supposed. Perhaps a horizontal subterranean flue or passage might be roughly put together and heated enough by burning weeds at its entrance, as we believe was once suggested by Mr. FORSYTH. The way, however, of obtaining warmth is not what we have here to do with; all that we contend for is its very great importance.

ELY has long been famous for its Asparagus. The soil is peculiarly suited to its growth, and the gardeners are skilled in its production. They have, however, a formidable enemy to contend against, which is at work this spring as it has been in former years, and is known locally under the name of the Copper Web, because it consists of copper-coloured simple or branched cottony strings made up of a multitude of delicate threads running in every direction over the roots, and soon destroying the plant. It is clearly of fungous origin, but it does not show the least trace of fructification, nor is there any thing to indicate to what especial plant it owes its origin, or of which it is an imperfect form. The only successful mode, as at present known, of contending against it is to dig up completely the part of the bed which has been attacked, taking care to carry on the process so far that no stray threads may convey the mischief to neighbouring plants.

Asparagus is not however the only plant which is affected by this or a similar plague. We have seen Potatoes covered with a web apparently identical, though we have in vain tried to coax the spawn into some further development. Lucerne also is notoriously subject to a like parasite, especially in France, and the deep tap roots of the infested plants present a very curious appearance

in consequence when carefully dug out of the soil. A great loss again is experienced by Saffron growers from a web which attacks the roots; and it is well known to many cultivators of those plants, though not so generally in the case of Lucerne as it should be, that the only sure remedy is trenching similar to that practised at Ely by the cultivators of Asparagus.

Besides these plants it has been observed on the common Red Clover, to which it is very destructive; on the roots of Orange trees, on the Starch Hyacinth, on the dwarf Elder, on *Coronilla varia*, on cultivated Madder, and, as we shall see presently, on Mint—plants, it may be observed, of such different affinities, that it is probable that injury may possibly arise from the Copper Web in some cases where its presence is not suspected.

The Tulasnes, eminent French Botanists, who have thrown so much light upon the underground Fungi, have not neglected these. Nothing, indeed, can exceed the beauty or faithfulness of their representations of the appearances they present on Lucerne and Saffron; appearances the more mortifying, because they seem to indicate the production of true fruit, though on close examination there is nothing of the kind.

In the Lucerne, besides the copper-coloured strings there is a delicate web of the same hue which covers the whole or the greater part of the root, which is studded with little warts that at first look much like fructification. These, however, merely consist of a mass of jointed very irregular threads, which partially fail within, so as to leave a cavity without any trace of fruit.

The Copper Web of the Saffron exhibits subglobose bodies which have a still closer resemblance to the fruit of a *Sphæria*, as they have their tip formed into a little nipple which is perforated as if for the discharge of the true fruit. None, however, has been found, and the perforation extends at times through the whole wart, so that threads come out of it which are in connexion with the spawn beneath.

This was all that was known about these curious productions till Mr. BROOME, some two years since, observed that the Mint in his garden was affected by some parasite, and on examination he not only found that the base of the plant just above the surface of the soil was covered with Copper Web, but that this was, as in the two instances just mentioned, studded with warts and little tawny tufts besides, of a looser texture, covered with globose or ovate spores. On further examination it was found that there were traces of the tawny threads on the surface of the copper-violet warts, which, like a *Sclerotium*, were distinctly cellular within. That the warts and tufts were mere forms of each other appeared quite evident. There appeared little doubt moreover that the plant had fructified from being produced freely in the air, and not sunk down beneath the surface.

The only question then which remains relates to the nature of the fruit; whether it is to be regarded as the true fruit of the plant, or whether it is only a secondary fruit such as occurs in so many other Fungi. We have no means of answering the question, but must content ourselves with recording what we have observed and figuring the appearances which presented themselves under the microscope. It may however be suggested in reference to the question, that it is very possible that our plant may be a true mould. Several so-called species of *Sclerotium*, as for example the *Sclerotia* of Onions, Pears, Apples, &c., are mere conditions of moulds, which remain filamentous in a dry air, but when moist nourishment is abundantly supplied form frequently a dense cellular mass, which has more resemblance to the higher Fungi than to the moulds to which it owes its origin. The masses before us have quite the air of a *Sclerotium*. The surface has traces upon it of the old threads, which are often broken off at the joints, though frequently perfect. These fragmentary or short filaments are of the usual violet; beyond these are several layers of irregular angular tawny cells, containing here and there a very few oil globules. Then follow rounder cells with dark walls, containing several granules; then angular cells again, or others much larger, succeed at once, also filled with granules. All this has little resemblance to a preparation for any higher form of fruit, and we are half inclined to think that the plant is really a mould, though we know of none which has spawn so strongly resembling that of the higher Fungi. We cannot therefore consider the true relations of the Copper Web to be decidedly ascertained, though we are rejoiced at being the means of giving some little help towards the solution of a very interesting problem.

Our figure represents at *a* a group of the tawny threads with their spores, but unfortunately not attached; *b*, a vertical section of one of the firm nearly globular bodies; *c*, a single cell to show the dark walls; *d*, a group of threads from the surface, where they are mostly entire; *e*, two separate spores; all more or less magnified. *M. J. B.*

THE fifth of June is at hand. On Wednesday next the NEW GARDEN OF THE ROYAL HORTICULTURAL SOCIETY will be formally opened by the PRINCE CONSORT; and if we are rightly informed there will then be such a display of flowers and fruit as even England, the mighty in Horticulture, has never seen. It is to be hoped that the weather will be propitious; but if not a huge conservatory and a covered promenade under the Arcades, three-quarters of a mile long, will afford abundant shelter. The annexed view of a portion of these Arcades as they will appear when finished, gives a good idea of the happy manner in which Mr. SIDNEY SMIRKE has managed the part of the garden that is executed at the cost of the Royal Commissioners.

Of course such impediments as a wet summer, an intensely cold winter, and a senseless strike among operatives, have rendered it impossible to bring the works so near completion as was desired; but they have advanced quite far enough to render the grounds sufficiently enjoyable, as has been shown by the numerous visitors who have already been attracted thither. We see indeed that the number of strangers thronging the garden has become a most serious obstacle to the progress of the workmen of all kinds now actively employed in preparing for the opening day; so that the Council have been obliged for the present to close the gates to all who are not required by business to be upon the ground.

THE ARCADES IN THE GARDEN OF THE ROYAL HORTICULTURAL SOCIETY, SOUTH KENSINGTON.

SOUTH END OF NORTHERN TERRACE ON THE EAST.

New Plants.

236. LIBOCEDRUS TETRAGONA.

IT has been known, ever since the south-western coast of South America was visited in the Beagle by Captain Fitzroy and Mr. Darwin, that an evergreen tree of extraordinary beauty and great economical value grows on the mountains there. The Spanish Americans call it Alerse or Alerze, a name given by European Spaniards to the Larch, and also to the *θυιον* of the Greeks, or the Callitris quadrivalvis of Morocco, yielding a most durable kind of timber, on which account it was largely used in Grenada by the Moors in constructing palaces and edifices of great importance. The tree now exists in this country, having been raised by Messrs. Veitch, with whom it has borne the last disastrous winter without the slightest injury; a circumstance that excites no surprise when we recollect that it was found by Lobb forming forests up to the snow line on the Cordillera, and that its neighbour Fitzroya has escaped in like manner. It proves to be a most useful ornamental plant in consequence of its perfectly erect close growing habit, the young plants being quite pyramidal: and it must certainly supplant in time such "fastigiate" monsters as Irish Yews and Swedish Junipers—to say nothing of the singularly beautiful green of its foliage.

But it is not merely as a handsome object that Libocedrus tetragona demands an extended notice. It is found to yield timber of the utmost value. Sir Wm. Hooker, who long ago directed public attention to the tree in his "London Journal of Botany," gave the following account of it, which will now be read with new interest:—

"Travellers who visit the various towns on the Pacific side of South America, speak of the quantity of timber imported from the south of Chili, especially in the form of shingles, under the name of Alerse or Alerze, a tree I believe hitherto unknown to botanists. The fullest account of it that has come in my way is that of Captain King in the 'Voyage of the Adventure and the Beagle,' vol. i. p. 282, where he says: 'The Alerse found near Chilöe, is of better quality than that which comes from Concepcion; it is brought in "tablones" or planks, 7 or 8 feet long, 2 inches thick, and 9 or 10 inches wide; and as it splits readily, it is also seen in boards of half that size, the latter being the principal articles of barter.

"'The Alerse grows in great quantities near Calbuco, but at such a distance from the beach that it cannot be conveyed thither for embarkation, except in the above form. The tree is felled and squared, and then hewn with the axe into as many logs of 7 or 8 feet long as it will afford, and these, with the assistance of iron wedges, are split into planks and boards; in which state, without being further trimmed, they are tied together in bundles and carried on men's backs, or dragged over the ground to the beach.

"'The extraordinary straightness of grain in this tree, enables the natives to split it, so as to make it appear as if it had been dressed with an adze, or even with a plane; but, as I have said, the axe is the only instrument used. So great is the difficulty of procuring a spar of this wood, that when I wished to obtain a new mast for the Adelaide, I offered four times the value of an Alerse spar to the natives, besides the assistance of 20 men and tackles, &c. to assist in conveying it to the shore. The temptation was almost too strong to be withstood; but the man to whom I applied, who had before been employed to get masts for a schooner in the Chilian service, and a flag-staff for the town, assured me that it would take his own party two months to bring one to the beach; with the assistance of our people, however, it might be done in a month. The trees were distant, and there were two or three ridges of hills to cross, that would cause much delay. The facility with which these people handle timber, was a sufficient proof to me that such a task, if refused by them, must be very difficult indeed, and I gave it up; as the Yntendente was so obliging as to give me the flag-staff which had taken the same party two months to procure.

"'The Hoxsley, a national schooner, built at Chilöe for the government, was masted with Alerse spars, which proved to be very strong.

"'Alerse is used principally for the floors, partitions, and weather-boards of houses, and also for shingling the roof, for which latter purpose it is peculiarly superior and durable; after exposure to weather it turns blue and looks like slate. It does not shrink or warp, and though brittle, is of close grain, and well adapted for furniture. From this wood the country people make staves for casks; and the bark of the tree serves to caulk the seams of vessels, for which it answers remarkably well, being exceedingly durable when constantly wet, though it quickly decays if exposed to the sun and air.

"'Spars of Alerse, 80 or 90 feet long, may be procured, and from 800 to 1000 boards are frequently obtained from a single tree; I was told even so many as 1500 out of one trunk. Alerse is found on the Island of Chilöe, but not of any size; it is also common in the Straits of Magelhaen, in all those parts west of Cape Froward; but from the poverty of the soil it is [there] of very stunted growth.'

"To the above information given by Captain King, a few notices are added by Captain Fitzroy, as to the mode in which the Alerse is obtained. 'The forests of Alerse are like mines to the Calbucano, or native, and nothing but old age or accident can check him from making boards after he has had one season of good luck. A man and his wife, if industrious, and if their fortune has led them to find plenty of fine-grained straight trees, at not more than the usual distance, three to five miles from the sea, can cut and bring down 500 boards in a month. The place where the trees are felled is called an Astillero. Here, on the flanks of the Cordillera, the pair will work for four or five weeks, then go home and clean their Potato-grounds and attend to domestic matters, till their feet heal and a paralytic motion of the legs, acquired in the Astillero, has ceased. When quite refreshed they return for another cargo, and work till their feet and limbs can stand it no longer. A third trip is afterwards made by the husband for a fortnight to a nearer Astillero, where he cuts pieces of timber and plank (tablones and cuartones) as large as he can carry, and then goes home to collect his harvest, make chicha, and sow corn for next year. As soon as the children can walk a few miles, their parents take them to the Astillero, and beginning with half-boards to carry, the load is increased as they grow stronger. At about 16 they borrow an axe, and make the boards they afterwards carry. The profitable parts of the forest are now, of course, much farther from the sea than they were, owing to constant thinning. To get a load of 20 boards twice as much labour is necessary as was required for the purpose 30 years ago. The largest Alerse tree that has been found by any Calbucano, during the last 40 years, measured 30 feet in girth at 5 feet from the ground, and more than 76 feet to the first branches. This famous trunk gave eight lengths of boards and half a length. The two largest individuals seen by Mr. Douglas in his excursion for me, measured, respectively, 24 and 22 feet round, at 5 feet from the ground; but they were dead trees, nor did he detect any above 10 feet in circumference that were quite sound. Report, however, says, that in the Cordillera, out of reach of the Calbuco woodsmen, there are enormous Alerses, from 30 to 40 feet round, and 80 to 90 feet in height to the first branches; above which the heads of these giants are said to rise some 40 or 50 feet more. The Alerse has short stout boughs, and leaves resembling those of a Pine in their bluish-green hue, but shorter, being only half an inch and the 20th of an inch wide; on each stem there are four rows of these small leaves at opposite sides. In carrying the load of boards from the Astillero to the nearest water conveyance, the native wears a sheep-skin on his shoulder under a woollen shirt, and taking a stick, with its lower end forked, to steady him across the frequent bridges of single trees thrown over the ravines, he trudges away with the load on one shoulder, and on the other the stick, which partly supports the weight of the burden till one shoulder is tired, when he shifts it to the other and goes on. This half-rest is called cantantun. After eight, ten, or a dozen of these transfers, according to his strength and the state of the road, he casts down his burthen and rests a few minutes; this is his descanso, and he indulges himself thus at about every two or three miles. The Astillero of Melipulla is 10 descansos, a whole day's journey, distant from the place of embarkation.

"'In examining the different forests of Alerse, Mr. Douglas noticed some immense landslips, quechi (earth*quakes*?), one of which was said to have brought down 1000 Alerses of great size. This landslip measured nearly half a mile long, and half a quarter of a mile in width.'"

There is a further statement by Gay, which we borrow concisely from his little known *Historia fisica y politica de Chile*, vol. v.

"This beautiful tree reaches 120, and often more, feet in height, is very luxuriant in its foliage, with thick branches, open, and ascendant, is found in great abundance in the provinces of the south, on the hills verging from Valdivia to Chiloe; grows very straight, of great height, and of such circumference that five, six, and even seven men are required to measure round it. It is of the most durable quality, having been worked for ages, and stands the greatest test of the atmosphere, trunks of this tree having been met with buried since the year of the great rising of the Indians in 1599, and these trunks have been worked up as easily as newly cut timber, only being much heavier. In the country the trunks consist of three parts; the 1st, the liber, a filamentous layer beneath the bark, makes an excellent oakum, imperishable in water, and used by the natives for caulking their 'Piraguas' (large species of canoe); the 2d, or bark, is not much valued, but the third is of great value for all building purposes and plankings, for floorings and decks of vessels, besides masts and pillars. Working this tree on the mountains is a most laborious business, and occupies during the summer about 6000 people. The export runs from 300,000 to 400,000 planks; it most abounds in Tenglu, Carinel, Mellipulli, Cohuin, la Boca, &c. In the department of Calbuco the planks are so common that they serve as money in the currency, and are received as such in all warehouses, and they have even given a name to the measurement of time. For example—'Descansada' means an hour, and 'Cantutun' means a quarter of an hour, arising from the Indians in their journeys carrying these plants, resting every hour, 'Descansada,' and changing shoulders every quarter of an hour, called 'Cantatun.' These words are commonly used in that province to describe any distance. Throughout all Indian countries distance is described by an Indian's run or march."

237. LIBOCEDRUS CHILENSIS.

We are also able to give some account of the timber of a nearly allied species, now well known in England. Of this plant Mr. Whyte, a gentleman who has been many years resident in Chili, writes as follows:—"If the Libocedrus chilensis or *Cipres* of Chilöe can be grown in England as a timber tree it will become of great value. The wood is beautiful, fine-grained, and easily worked, and as far as the observation of the most experienced persons in the country goes, is almost imperishable in moisture, as a proof of which the railway companies, after experience of some years, have determined to lay down *all their sleepers* of this wood, and have made a contract to a very large extent for procuring it."

THE REV. PROFESSOR HENSLOW.

THERE are few men whose loss will be more generally deplored, whether as a clergyman or as a man of science, than the subject of this notice: nor are these his only claims as a benefactor of his race, for there are few whose personal influence for good on the social, moral, and religious characters of those with whom he has associated or laboured, has been so deeply felt or so gratefully acknowledged. To give even a sketch of the varied attainments and personal qualifications that were so blended in Prof. Henslow as to render him at once the most popular and useful man of science of his day, is quite impossible here, for they depended on a combination of rare qualities of head and heart, each natural, but all well trained and conscientiously cultivated by their possessor during a long period of his life. Amongst them, however, should be mentioned some personal and other features, which, as being in a great measure due to temperament and mental endowment, were inherent and characteristic of all periods of his life: these were a sense of truth and fair play, so instinctive, that deception or even reticence when the cause of truth was at stake were things almost unintelligible to him; a geniality of disposition that rendered him an attractive companion from his childhood upwards; a temper of which he was never known to lose command, even by his most intimate friends; an organisation of brain that rendered all subjects of study equally easy of acquirement; a keen love of nature and of natural knowledge, and ardour in communicating it; a quick perception, excellent powers of generalisation, the largest charity, a total absence of vanity or pride, a winning countenance, and a robust frame. Few men indeed were more gifted by nature to take a commanding position in the many spheres of life, in one or other of which he was always busy; few had more need of that balance of powers of mind which his University tutors recognised as something unusual, and the phrenologists accounted for by the form of his head, which they considered faultless. That this is no exaggerated estimate of the subject of this sketch, the following brief notice of his career will prove.

John Stevens Henslow was born on the 6th February, 1796, at Rochester, where his father was in business as a solicitor; he was the eldest of eleven children, of whom four sisters only survive him. His scientific powers and love of natural history, which were very early displayed, were inherited both from his father, who was a great reader of natural history books, and devoted to the observation and keeping of birds and other animals, and from his grandfather, Sir John Henslow, surveyor of the navy, who united to a scientific knowledge of naval architecture, great ingenuity and skill in designing. He was educated first at a free school in Rochester, and afterwards at Dr. Jephson's, of Camberwell; during the former period he delighted in making excursions on the Medway, and especially in hunting for insects, and in rearing them and observing their habits. And it was during the latter period that he first learned how to arrange and systematize. And the delight in analysing, understanding, and illustrating gradually equalled that of collecting; and these were thenceforward the ruling passions of his life.

In 1814 he was entered at St. John's College, Cambridge, and graduated as 16th Wrangler in 1818, in which year also he joined the Linnean Society. During his college career he continued an active naturalist; declining to compete for the much higher academic position which, with his mathematical powers, he might easily have attained, he preferred substantial knowledge, studied chemistry under Prof. Cumming, mineralogy under Dr. Clarke, laboured hard at geology as an original inquirer with but little aid, and became a Fellow of the Geological Society in 1819.

In 1821, at the early age of 23, he became an author, communicating to the Geological Society his "Supplementary Observations on Dr. Berger's account of the Isle of Man," containing a map and sections, to the preparation of which he had devoted his spare time, whilst spending two long vacations on that island with pupils. At about the same period the same duties led him to the Isle of Anglesea, the geology of which he diligently explored, and embodied the results in a most elaborate paper, printed in the first volume of the Cambridge Philosophical Transactions. This paper not only at once raised its author to a very high position, and

caused such a demand for the volume in question that it was soon out of print, but it is to this day quoted by geologists as a model of truthful and sagacious scientific research. It possesses also rare merit, as combining with great power of co-ordinating physical features, skill and accuracy in the application of chemistry, mineralogy, mathematics, and drawing, to the illustration of a very complicated mountainous region.

At this period, too, his physical powers were equal to his mental, and during his geological excursion in Anglesea he once walked 40 miles in the day, with his hammer and specimens on his back, and danced all the following night at a ball!

About the same year Professor Henslow took up botany with the same zeal and method which he had devoted to other branches of science, being, it is believed, first attracted to morphology and physiology. He soon, however, found that no satisfactory knowledge of these branches could be acquired without a previous acquaintance with systematic botany; and this, joined to his ardour for collecting, led him to the formation of a herbarium, in which he displayed not only the specimens but the structure of their organs, their relations, variations, and aberrations. In 1822 the Professorship of Mineralogy becoming vacant he became the successful candidate; he held the appointment for three years, conscientiously devoting the whole of his time to the study, and especially to the chemical and crystallographical branches of it, for which his mathematical powers and previous training eminently qualified him. He prepared and published an admirable syllabus of his course of lectures, followed by a systematic list and analytical tables, drawn up with the same scientific precision and clearness that characterise all his labours.

In 1825 the Professorship of Botany became vacant by the death of Professor Martyn, and for this Professor Henslow resigned the mineralogical chair; applying all his energies and manifold acquirements to his new post (which had been wholly neglected for many years), and at once raising it from obscurity to renown. He immediately arranged a course of lectures at once scientific, practical and popular, gave chemistry and physiology their legitimate places in botanical teaching, and, by applying his mathematical powers to giving a prominent place to the geometrical problems involved in phyllotaxis, he awakened interest in a study to which some of the mathematicians of Cambridge had hitherto hardly accorded the dignity of a science. Nor did he neglect the more practical duties of a teacher; no one knew so well as he did that to make botanists of students they must quickly be brought to believe that in some directions at any rate they can and ought to walk unaided: he therefore took them on excursions, taught them early how to name plants by an artificial use of the natural method, gave each confidence in his earliest efforts, and led them on by example, teaching and encouragement. Nor did botanists and undergraduates alone profit; his lecture room was attended by senior members of the University, and his excursions by entomologists, conchologists, and geologists; each deriving knowledge in his own speciality from him, and he from them: thus exciting amongst his pupils an admiration for his manifold acquirements, that was only equalled by their love of his personal character.

For 14 years Professor Henslow resided at Cambridge as botanical professor, during which period the income attached to his chair was very small; this was, however, no obstacle to his instituting weekly evening meetings at his own house for the reception of every one interested in science, including under-graduates; to which all were invited to bring specimens of interest in all branches of science; and at which there was free intercourse between young men and "dons" of every degree. This practice, previously unknown in the University, and we regret to say as yet unfollowed, was a step of immense importance in diffusing a taste for science, no less than for inciting the young men to intellectual pursuits.

During this period he contributed two papers to the Cambridge Philosophical Society on a hybrid Digitalis, and the structure of the Mignonette, both of the highest merit as works of philosophical research, and which established his reputation amongst continental naturalists: he also wrote the volume on Botany for Lardner's Cabinet Cyclopædia, an admirable little work of which two editions have been sold, and a third was under revision at the time of his decease. It is a noticeable fact that since Professor Henslow's departure from Cambridge, not a single Botanical paper, and very few on other branches of Natural History, have been contributed to its Philosophical Transactions, of which he was one of the founders.

In 1823 Professor Henslow married a daughter of the Rev. George Jenyns, of Bottisham Hall, in Cambridgeshire; and in 1825 he took orders as Curate of Little St. Mary's, in Cambridge. In 1833 he was presented by Lord Brougham, then Chancellor, to the Vicarage of Cholsey cum Moulsford, in Berkshire, where he resided during the summer months of three years, passing the rest of his time at Cambridge as before. In 1837 he was transferred by the Crown to the valuable Rectory of Hitcham in Suffolk, and there from 1839 until his death he resided throughout the year, with the exception of six weeks of the Easter term, when he lectured during the week in Cambridge; for many years returning to Hitcham for the Sunday service.

To the duties of his new position Professor Henslow brought the same energy, and the same love of bettering his fellow creatures as had distinguished him in Cambridge, together with increased fervor for teaching, matured faculties, and a deep sense of his responsibility in ministering to the spiritual and temporal wants of a large and wofully neglected parish. His flock were notorious for witchcraft, drunkenness, poaching, sheepstealing, and immoral habits; they consisted of field labourers living in wretched hovels, and of farmers who, being intellectually little better than their servants, were doggedly opposed to any change in their moral or physical condition. Here was work requiring all Professor Henslow's indomitable energy, and multifarious resources; no one knew better than he what is the result of throwing good seed on stony ground, and he consequently laid his plans for tilling and fertilising with such sagacity and skill, and carried them out with such unflinching steadfastness of purpose, that within less than a quarter of a century he reaped his hundred-fold, and died with a harvest garnered. It is quite impossible to estimate the amount and kind of moral courage required for a clergyman to break down the sturdy opposition of the farmers of twenty years ago; but these had to do with one who never determined on a plan of action without carrying it into successful effect, and whose downright honesty, frank bearing, and imperturbable temper, were weapons proof against the outbursts of prejudice, avarice, and malice with which he was assailed.

(To be continued.)

THE GORILLA.

"Fabula de te narratur."

At a former period, when I placed the true habits of the sloth in their proper light before the readers of the "Wanderings in South America," I considered that it had been the most calumniated animal in the creation. And I held this opinion until a few weeks ago:—when upon reading an account of Mr. Du Chaillu's lecture at the Royal Geographical Society, I became fully convinced that the character of the Gorilla has suffered far more at his hands than ever the sloth did, amid the knowing ones of long gone by days. This eminent naturalist has so completely changed the habits of the poor unoffending Gorilla, and has so distorted its natural propensities, that I am nearly at a loss to recognise it as one of the monkey family.

Its wonderfully muscular forelegs (which, by the way, have been given to it by nature, not for self defence, but in reality to facilitate its rapid transition from branch to branch in its native haunts) are now forsooth to be considered, according to our traveller's statement, as tremendous weapons of destruction. With these, his Gorilla smashed the ribs of a nigger, and bent his gun-barrel, and broke the stock in pieces! How came the Gorilla on this occasion to use its forefeet at all? None but quadrupeds with retractile claws use them in the act of aggression. Thus, the lion, the tiger, and the leopard, and every individual of the cat tribe, strike down their prey by a blow of the paw. Whereas the dog, the hyena, and all with nails not retractile, secure it by open mouth, and well adapted fangs.

Again, what brought the Gorilla to the ground, and caused the timid ape to commence warrior movements? Examine the formation of its entire frame, and you will perceive how well it is adapted to pass a life amongst the trees; and, on the contrary, how ill to plod its way on the ground. The soles of all its four feet are so soft, that they may be compared to satin, or to the most delicate lady's hand. But, those quadrupeds which live on the ground have hard and warty soles to their feet. Again, Mr. Du Chaillu proclaims the Gorilla to be untameable; and in support of his assertion, he tells us, that he had some young ones; but he could not tame them. Why not? What a sorry schoolmaster he must be! He ought to know that all young animals, from the tiger to the tomtit, can very easily be tamed. But it is quite the reverse when they become adults in their wild state. Then, if you attempt domestication, the tomtit will peck furiously at your finger, and the tiger will lay you low with one stroke of its paw. Thus my young Gorilla, when unloosed, was as harmless as a lamb, and as playful as a kitten. But, had it been an old wild one in a tree, and unable to escape, it would have flown at me open mouthed, on my approaching it, and have lacerated me, not with its toe-nails, but with its powerful teeth.

'Tis education forms the tender mind;
Just as the twig is bent, the tree's inclined.

We don't require a Mr. Du Chaillu to teach old John Bull's grandmother to suck eggs. *Charles Waterton, Walton Hall, May 26th.*

Home Correspondence.

Roses and Rose Shows.—Roses have suffered much by winter and long continued rains. I have lost comparatively few; some, however, that are not actually dead will never do anything more. I have lost but one summer Rose, a nine years old tree, moved in the autumn. The other 146 summer show Roses are well, and many are in forward and abundant bud. They are chiefly on Briars. Lanei and 5 White Baths have wintered well on Manetti. I have lost about 60 Briar H. P.'s, and 6 of other sorts. Out of the 111 budded Roses on the Briar, 66 stand good. Of Manetti Roses I have lost about 30, and 30 are much deteriorated. The Roses on their own roots are all alive and well. Nineteen plants of the following, planted in August, and covered over their roots with three tiles, stood the winter perfectly well, and are in forward bud:—Triomphe de Lyons, Marie Thierry, Reine de la Cité, Victor Verdier, M. Boll, George Peabody, and Chabrillan. They are all on Manetti. Out of 55 yellow Roses I have lost but three. The 52 remaining are Gloire de Dijon, Aristide (Schulz); these two are the hardiest of all yellows; Persian Yellow, Harrisoni, Solfaterre, Cloth of Gold, Elize Sauvage, Decazes, Dr. Kane, Isabella Gray, Celine Forestier, and Triomphe de Rennes. This last Rose but one did not winter well, owing to its making gross wood late last summer. Aristide is hardy, and the strongest grower of all yellows. The four first are hardiest. I have 13 plants of the last. It is the most perfect of all, and is best against a wall. When well shaded it is a golden yellow, otherwise it is canary. *Roses of* 1860: Victor Verdier, M. Boll, Vaisse, Montecon, and Carique are all good growers; the buds of the last are formed well and abundant. It will not be the worst of last year's. Triomphe de Lyons and Louis XIV., the best dark Roses of last year, bud well. The foliage of the former is a little crumpled. This is the fault of Evêque (a rogue) and Rougemont. Clean stout leaves are essential to health, and also betoken a good constitution. *Roses of* 1861: I have only bloomed one H.P., Parmentier. It is perfect in form, rich rose and silver, with clean stout leaf. The bloom lasts well a long time. Prairie de Terre-Noire (Meadow of Black Earth!) Madame Melanie, Reine des Violettes have no buds yet, but they are good growers. La Boule d'Or has three buds; foliage like the Cloth of Gold. Buffon is the nicest of all as a plant; the foliage is like Ravels, and the sepal like Cambacérès. L'Elégante is very nice as a plant, and from the form of its buds, it must be good. Belfroy will not, I think, disappoint. Carique, Buffon, L'Elégante, and Belfroy, will all bloom in a few days. They were planted out March 1st, and have stood well severe weather. I will report in a few days of these and of some of the other novelties after blooming. I have omitted Washington; it is a nice plant. Probably this Rose, L'Elégante, John Waterer, Triomphe d'Amiens, and Duc Decazes, will have a race for the premiership of 1861. I have got Waterer, Duc Decazes, Barlow, and Abdel-Kader. The following older, but still new Roses, have wintered well out of doors on Manetti stocks:—Edith de Murat, Octavie Fontaine (two neat smallish white Bourbons), Diesbach, Alexieff, Chabrillan, Arago, Armide, Roygheim, Eugène Appert, and Stephanie Beauharnais. Diesbach, Alexieff, Chabrillan, Arago, and Eugène Appert are very nice Roses. The others also are nice. Arago is the best constitutioned new dark Rose. Eugène Appert is also very hardy, free growing, fine in foliage, deep rich colour and fixed in colour, but not so good in outline as the Géant, which is as yet the best crimson H. P. I have now 91 plants of it. Moreover the Géant is the hardiest of his race, and will, with all his race, do best on his own roots. The whole family prefer a hot south wall. The frosts between the 8th of April and the 12th of May have ruined many hundred fine buds. I do not think the bud rule can be applied this year severely. The grub has disbudded a good many Roses. If a man is to produce 25 trebles with not less than three Roses on a stalk, in different states of expansion, for the Botanic on the 12th of June, he must produce them from a conservatory; for he will not get them out of doors. A great many Rose trees this year will go blind at first, from injury to the roots. There is also one other thing to which I wish to call attention, viz., the desirability of the Metropolitan Rose Societies agreeing together upon the size and shape of show boxes, both for singles and trebles. The boxes are more convenient where they are 4 inches deep behind and before. I saw America, forced at Mr. May's, Blandford. It is a cream colour, with fine petal, but a hard opener. I gave him G. Peabody, which I saw also forced. It is a most striking colour, strong grower, abundant and constant bloomer; but, though grand as a whole, I do not like its petal and folding. Its colour is rich dark crimson purple. The foliage is large, broad, and clean. It is very like Proserpine, but darker and richer in colour. Louis XIV. and Triomphe de Lyons have produced nice Roses, splendid colours, very dark crimson. Louise Carique has also bloomed two beautiful Roses very rich rose colour bordering on crimson, but superior to M. Laffay. L'Elégante is a very superior Rose in every respect; she sees three blooms. The stalks are stiff and hold the blooms up well; and the foliage is set on in the right place, about an inch below the bloom. The leaves are very thick, broad, and glazed. Buffon is Ravel in red, instead of scarlet, very pretty, but small. Nelson is a nice flower, scarlety crimson. What we want is distinct Roses, so that we shall know them without tallies. Such is L'Elégante (not Elégante Nouvelle), the new H.P., flesh colour, like Therèse Appert, but better. It is a first-class Rose, taken at all points. It is fair to observe that I have never yet seen Arago and Anna Diesbach under powerful suns. Chabrillan is out and beautiful. My five plants of it have wintered admirably. The same may be said of all the Manetti and July budded Briar Eugène Apperts. *W. F. Radclyffe, Rushton Rectory.*

Transplanting Large Yews.—I regret that all our great transplanters of large trees have been silent touching Mr. Harland's inquiry of the 18th inst, except

my friend Mr. Tillery. You told us eight years ago of a "new system," which you said was a "first attempt at moving large trees upright;" this was an error, as some thousands of large trees have been removed on my machines during the last 30 years, all in an erect position; and you added, "this new system would supersede every other." This was rather unfortunate, as the author of this new system waited on me at Elvaston for my opinion of his new plan; this was about two months after he operated on the Poplar tree at Chiswick: I then showed him six modifications of large trees, all of which had been successfully transplanted by my machines, and not one of which he could have removed with the machines as shown at Chiswick. He then admitted that he "must invent a new machine before he could remove such specimens." Mr. Harland's is a new plan, and he deserves credit for pluck and perseverance: I sincerely hope he may succeed. I know Mr. Tillery will excuse my helping him a little, as I have managed transplanting machines and "patent screw jacks" rather longer than he has. Mr. Tillery has given us the dimensions of a tree considerably less than that removed by Mr. Harland, and speaks of it as a "tree too large for machines." This is an error. He then tells us of its being raised by screw jacks, and being moved on by pulley blocks. This latter plan I only adopt when I wish to remove a tree a few feet, or to raise it when the branches are strong and are too near the ground to apply a machine readily. None of the machines at Welbeck are of my largest size. To transplant large trees a few feet or yards has been managed by make-shift contrivances in many instances during my practice; but had either of the trees mentioned by Mr. Harland or Mr. Tillery been required to have been removed some miles, how then? I find a Yew tree here which was moved several years ago on my large machine over two miles. The time occupied was two days; eight men a part of the first day and 12 the second. This tree measures over 40 feet high; stem near the ground 7 feet 3 inches; and at 14 feet above ground the stem is 6 feet 4 inches round. Another, upwards of 800 years old, the same machine brought 30 miles; eight men and nine horses were three days over the moving of this tree. It had many of its limbs of the staghorn cast; some of its leafless branches were bleached white by the ruthless blasts of many years. Its stem, which is rotten and hollow, is nearly 10 feet round about 5 feet above the ground. This tree since its removal has grasped mother earth afresh, and will soon be young again, making shoots 9 inches and upwards in a season. Yew trees, if tolerably managed, are not difficult subjects to deal with, owing to their countless fibres. At Millichope Park, in Shropshire, during the last three years, many large trees have been removed most successfully by my second-sized machine, which is the same as the largest size used at Welbeck. Amongst the Yews, many are very old and large; one I know is about 12 feet round the stem—too large, certainly, for such sized machines. They were all brought from difficult situations in a very hilly country; all of them close to limestone rock (rather a puzzler for "McGlashan spades"). At present I shall only give two more examples; the first is much more difficult than a Yew tree to deal with. In two days, on my large machine, a Cedar of Lebanon was removed some distance; it was when transplanted 43 feet high, 6 feet round the stem, and upwards of 150 feet round the branches; the stem of this tree is now 9 feet round. An Oak of fastigiate habit was removed on July 4th, six years ago (with a cloudless sky). It was then upwards of 46 feet high; this tree was removed on my third sized machine, on a fête day, when about 10,000 people were present. It was planted about mid-day, six men having commenced upon it the previous afternoon. It was brought into an open situation from the centre of a plantation; it did not flag a leaf. Last year the top or leading shoot grew 2 feet 1 inch, and the lowest branch, which is 6 feet from the ground, grew last year 2 feet 5 inches horizontally. Should any one wish to see these trees, it may be as well to state that Elvaston can only be seen on Fridays by ticket at 3*s.*, which sums are appropriated to schools, &c. *William Barron, Elvaston Castle, May 27.*——Your Correspondent Mr. Tillery (see p. 481) says that the largest Yew removed by him is "not quite so large" as the one described by me at p. 457. Will Mr. Tillery oblige me by giving measurements, commencing with the bole at 3 feet from the ground, and giving the circumference of branches at 10 feet from do., in order that I may fully comprehend the meaning of the words "not quite so large?" I must confess that I cannot see any comparison between the two trees from the information Mr. T. has been kind enough to furnish. It will be perceived that the Yew here is 14 feet more in circumference at 28 feet from the ground than Mr. Tillery's is at the ground level. The bole also presents a greater circumference at 14 feet from the ground than the tree at Welbeck does at its base: Mr. Tillery likewise informs us that he has removed Oaks and Limes considerably larger than the Yew at Bedwell, with two jacks each capable of lifting 12 tons. Now it must be evident that there can be no comparison between the wood of Lime and that of Yew, or between a deciduous tree and an evergreen. But there is one thing about which I am quite convinced (as well as others who have travelled 20 miles to see large trees removed), and that is that Mr. Tillery with his two jacks, two horses, and 12 men, might as well undertake to lift unbroken the Crystal Palace at Sydenham, as try to move a tree like the Yew here with the appliances he mentions. The estimate given by one of our best landscape gardeners for removing our tree was 25*l.* *James Harland.*

Oak Insects.—I send by to-day's post a few specimens of the affection with which Oaks have been troubled of late, gathered in my neighbourhood this day, May 18. No. 1. Galls from which the grub seems to have escaped. No. 2. Galls in which I presume grub may be found now, as I examined a similar one, and found therein a small white, apparently inanimate, grub. No. 3. A specimen of each joined naturally. No. 4 I presume is an ordinary Oak Apple, and has not any relation to the galls above named. No. 5, I fancy may be the germs of new galls on the young leaves. I may mention that I send these in consequence of a communication in your columns of May 11th, and that they were gathered from Oak shoots which sprung from old stools in hedges, though they are exactly similar to those that affect Oaks of much larger growth. Some of the galls have had the grubs picked out by birds I presume, as I found some that were mined to the centre most cleverly, still on the shoots. *P. Devoniensis.* [The galls are as you describe them, with the exception of No. 5, which are very young leaves, each protuberance in which is occupied by the pupa of some Hymenopter, already about to change. It is to be presumed that the eggs must have been by some means deposited in the unexpanded leaf bud; for the leaves themselves can scarcely be more than 10 days old, and yet the insects have nearly gone through their transformations, and are already about to emerge from their pupæ, which are not larger than grains of Mustard seed.]

Peach Trees.—We have a Peach-house, the trees in which have been planted 3 years; they have done well, and last summer made very good bearing wood, and flowered satisfactorily this spring; but very little fruit has set, and what did set does not swell; most of it will drop. The trees are clean and thriving. We had a beautiful bloom on some young Cherry trees in the same house, but very little fruit will come to maturity. We used a very little fire heat in early spring to keep out frost. My employer is anxious to have your opinion on the subject; is there any book you can recommend on growing Peaches and Nectarines under glass—not in pots, but planted in the border and trained to a wall? *Ellesmere.* [Unless your soil is warm enough when Peaches, and Cherries, and Plums are stoning you will never have a crop of fruit. The ground ought not to be less than 50° Fahr.]

Societies.

ROYAL HORTICULTURAL: *May* 28 (*Floral Committee*).—On this occasion there was but a small display of plants, but some of considerable interest were produced. The most attractive was probably a lovely New Zealand Fern from Messrs. Veitch & Son, named Todea superba, sometimes called Leptopteris superba. This received, as it well merited, a first class certificate. The fronds, which are of the filmy character seen in the race of Hymenophyllums, are lance-shaped in outline, the pinnæ, which are very short below, being continued down to the base of the stalk. It is cut into narrow segments, which are crowded, and seem to bristle up over the whole surface. It is a very much more lovely plant than the beautiful Todea hymenophylloides, *alias* pellucida. Another fine New Zealand Fern, shown by Mr. Standish, of Bagshot, received a first class award. This is a dwarf, slender, tree-like, or arborescent plant, with a thin stem of 2 or 3 feet high, and firm pinnate-pinnatifid shining green fronds, the rachis of which is clothed with a wing of small angular segments decurrent from the bases of the pinnæ. It is quite unique among Lomarias. Mr. G. Smith, of the Tollington Nursery, Hornsey Road, obtained a first-class certificate for his Calceolaria canariensis, a shrubby sort, of remarkably dwarf bushy habit, bearing dense compact heads of bright-coloured yellow flowers. It is decidedly the best of this group for decorative purposes. [But why called Canariensis? No Calceolarias grow in the Canaries.] Awards were also made to Messrs. Veitch & Son for Aralia Sieboldi variegata, a blotched-leaved variety obtained from Japan; to Mr. W. Dean, of Bradford Nursery, Shipley, for a showy fancy Pansy called Princess Alice, a large creamy white, each petal marked with a broad radiating blotch of violet purple; and to Mr. W. Beck, of Worton Cottage, Isleworth, for Pelargonium Amazon, a very vigorous-growing stocky variety of free-blooming habit, attractive for decorative purposes, on which ground the award was made; the flowers were large, deep purple-rose, with a violet centre, and having dark-blotched upper petals. Mr. Beck had several other Pelargoniums, among which Butterfly, which was rather attractive, had something the character of the French sorts; the flowers neatly formed, with dark maroon upper petals, narrowly edged with rose, the lower ones with large distinct maroon spots passing into crimson, and margined with pale rose. Another, called Sylph, had blush-white flowers with three distinct rosy spots on the lower petals, and bolder and darker ones on the upper; this was thought a promising sort, but was hardly enough advanced in flower. A promising horse-shoe Pelargonium was sent along with some other sorts, and a double Petunia by Mr. Bull, of Chelsea. The leaves of this were very boldly and clearly marked, and the flowers of good form, a pleasing salmon-colour, pale at the centre. Tydæa insignis, a fine free-blooming crimson variety, came from Mr. Williams, of Paradise Nursery, Holloway. Mr. Standish sent two showy hardy hybrid Rhododendrons, named Countess de Morella, a fine truss of lovely soft rose-colour, and The Saxon, a compact rich carmine. From Messrs. Milne & Co., Vauxhall, came four good sorts of erect-flowered Gloxinias, General Garibaldi and Mestonii, white with violet throat, and Lady Willoughby and Countess of Derby, white with rosy carmine throat; the last-named of each colour was the better of the two. Mr. Veitch sent the red hairy-leaved Campylobotrys pyrophylla, one of Mr. Linden's new plants, which does not appear to be so effective as some other sorts already known. Finally, from the Rev. T. Staniforth, whose garden is in the moist climate of Windermere, came some remarkably finely grown Lily of the Valley, bearing in one instance as many as 23 large-sized bells on a single scape. They were produced by annually renewing a portion of the soil, and allowing the plants to grow into the fresh earth.

Notices of Books.

House Dogs and Sporting Dogs (Van Voorst, 12mo). In this little volume Mr. Meyrick treats of the varieties of dogs, their points, management, training, breeding, rearing, and diseases. His book is not a farrago of all manner of the stories true and apocryphal, called anecdotes, nor is it a natural history work, that is to say a scientific systematical treatise. It is something more practical on the one hand, and more reliable on the other. Every breed of dogs is briefly described, through nearly 80 pages, in the following groups, viz., Greyhounds, Hounds, Terriers, Pointers and Setters, Spaniels, Shepherds' dogs, Wild dogs, Watch dogs, House dogs, and Toy dogs, of all of which the "points" are explained. Then we have chapters on Dog-breaking, managing, breeding, stealing, coursing, and physicing, after which half a dozen are devoted to an account of their diseases. It is therefore evident that Mr. Meyrick deals with all that a country gentleman, a farmer, a dog-fancier, or a lady's maid who has to wash the pets, requires to know. Let us add to this dry introduction the fact that the work is capitally done, as was to be expected from a perfect master of dog-craft. In proof of the justice of this remark we make two quotations.

The Poodle.—"The Poodle has never been a great favourite in this country, in spite of his extraordinary intelligence and docility; the great objection to him being his fantastic appearance when his body is shaved, and his clumsy look when the hair is left on.

"The Poodle does not take readily to hunting, though he possesses a capital nose; but in France he is often taught to point, and I have frequently seen a Bourgeois sportsman accompanied by his Poodle, which potters along the hedges in front of his master, and manages to find a great deal of game.

"The temper of the Poodle is not particularly good, and I have not observed that he is either faithful or affectionate towards his master, in spite of statements to the contrary in all works upon the dog. The fact is, that these statements are chiefly founded upon French anecdotes of the fidelity and sagacity of dogs; and the inaccuracy of most popular French naturalists, from Buffon downwards, is well known. The Poodle is also the commonest dog in France, except the Cur, and all good stories are, of course, told of him alone.

"I once became the purchaser of a Poodle, which was offered for sale by a poor student in a café on the Boulevards. The man only asked a napoleon for a dog, which, though by no means prepossessing in appearance, would put his paw upon any one out of a row of dominoes, stop a certain card when a pack was rapidly dealt out, and go through a variety of other amusing performances. I had not an opportunity of learning from his former owner the different signals and orders for his tricks, consequently I never could persuade him to choose a card, or domino, which tricks were, of course, accomplished by a slight previously taught signal given by his master: but so great were his intelligence and docility, that I easily taught him many new tricks. I suspect that the person from whom I bought him was not his first instructor, or that he did not exhibit all his tricks when I first saw him, for one day on going upstairs, I happened to say "monte," holding up my hand, and Scapin immediately walked upstairs on his hind legs. He had evidently been taught to retrieve—an accomplishment which he turned to the worst purposes, for he had a magpie propensity for stealing any loose article that came in his way, particularly what lay on the tables, and making hoards under drawers and in other inaccessible places, to which he resorted to gnaw his stolen goods at his leisure. Though possessed of the highest talents, Scapin was of a very morose and sullen turn of mind. He seldom wagged his tail, or showed any signs of pleasure in his master's presence; he was also very ill-tempered, and this, combined with his reputation for sagacity, and the grave and dignified expression of his face, impressed everybody with a great respect for him; and my belief is, that the housemaid never ventured to interfere with his propensities for carrying off small articles of furniture.

"His death was very sudden, and was wrapped in

mystery till it was discovered that he had consumed nearly the whole of a large pincushion, including the bran, and probably several pins. I believe I was the only one of Scapin's numerous acquaintance who in the least regretted his death.

"The Poodle is too well known to require a minute description. His shape should be compact, and should possess the general symmetry which marks a combination of activity with strength, and of which it is impossible to convey an exact idea in words. The points most looked to are: his head, which should be large, with a high, broad forehead, and a square muzzle; straight legs; and hair very thick, and falling in long, sharply twisted curls or ringlets. The colour is either pure white, or pure black, but generally a mixture of the two colours. The height should be between 15 and 18 inches."

Dog stealing.—"Perhaps an account of the manœuvres generally practised by dog stealers may explain the mystery. These men practise their trade in pairs. When a sufficiently valuable dog is seen following his master, the least respectable of the two thieves walks about 50 yards ahead of him and drops at one place (generally a corner) a small quantity of boiled liver, called 'duff,' cut up in small pieces. The dog naturally lags behind his master to eat it, and the second thief, usually dressed as a respectable mechanic, with an apron, catches him quickly up, covers him with his apron, and coolly walks by the owner, who, when he misses the dog, never dreams of suspecting any one who is not running away.

"The stealer, who is usually a rascal of small substance, sells him for a few shillings down, to receive a larger sum when the dog is reclaimed, to one of a class of men called dog brokers. This person waits to see if the dog is what is termed 'chanted,' that is, advertised for as lost, or in any way inquired after by his owner. If so, he calls upon, or sends to the owner to say that he has heard of his dog by accident, and that he can undertake to return him for a certain sum—generally from 2*l.* to 6*l.* or 8*l.* Under these circumstances, the owner's best course is to express no anxiety about the dog, and to name a certain sum—about one-quarter of what the man asks—as what he will give for him. The broker, who generally measures the ransom by the anxiety of the owner, will, after some bargaining, come to terms. I do not think that more than 2*l.* should ever be offered for any but the most valuable animals. The dog may not be returned for a week, or even a fortnight, in hopes of a higher offer; but the owner is sure to have him at last if he is firm.

"A dog is not safe from dog stealers even if he has a chain and collar on, if he is entrusted to a careless person. I have heard of a valuable dog which had been twice stolen and brought back, and which his master determined never to trust out of the house again without a chain. He was one day, however, sent out for a walk with an Irish servant, who came back without him, declaring that the dog had slipped his head through the collar when he was not looking. The dog was in a few days brought back, and his master again ransomed him, making it a condition of his doing so that the thief should tell him how the dog had been stolen; which, it appears, was as follows: the servant had stopped to look at some of his countrymen mending the street, and, while so doing, one thief had held the dog's chain tight with one hand to imitate the pulling of the dog, while with the other he undid his collar, wrapped him in his coat, and then pointing to his companion, who ran away, he told the servant that the fellow had just stolen his dog. Of course the Irishman set off in pursuit."

We must not omit to say that to the honour of the author he has supplied a *good* Index.

Where Shall we Go? Under this title Messrs. Black of Edinburgh have brought out a new edition of their half crown guide to the watering places of England, Scotland, and Ireland. It contains neat railway maps, some sketches of scenery too few to be of any importance, and the usual information that travellers look for. It would be greatly improved by the addition of more Natural History memoranda as to the localities of rare plants and insects, geological formations, &c., than which nothing more interests modern tourists.

We have omitted to mention the appearance of the 7th part of Mr. Howard's superb work on Cinchonas, or *Illustrations of the Nueva Quinologia* of Pavon. It contains figures of Cinchona Uritusinga, nitida, and Pahudiana, a new species now cultivated in Java by the Dutch, but of inferior quality; it seems however to grow freely, and would be a good hothouse shrub, bearing panicles of pale vermilion flowers as large as Lilacs.

Calendar of Operations.

(*For the ensuing week.*)

PLANT DEPARTMENT.

CONSERVATORY, &c.—As soon as Azaleas and other plants of that kind shall have been placed in summer quarters out-of-doors, painting and other repairs required by any of the plant-houses should be commenced, as they can be more conveniently done then than at any other season. As recommended last week pay great attention to plants for autumn and early winter decoration. Let them have plenty of pot-room, good rich compost to grow in, a moist atmosphere, and plenty of space for perfect development, regulating the temperature according to the nature of the plant, and they will make rapid progress. Mealy bug and thrips will require to be looked after; the utmost diligence must be used to keep these in check. If among stove plants there are any sickly or badly rooted specimens they should be frequently examined for red spider; otherwise they will become a nursery for this pest, and from them it will soon spread to adjoining plants. See that young growing stock is not allowed to suffer for want of pot room; attend carefully to watering, giving manure-water to all plants in free growth that require it. Gardenias and other things that have been in the conservatory while in bloom should be replaced in heat as soon as their beauty is over, in order to allow time for getting their growth ripened before short days and dull weather have arrived. Orchids in a growing state will require encouragement. Shading must be promptly attended to during this bright weather. Allow, however, as much light as they will bear without injury, using a very light screen, and that only when absolutely necessary. Keep them clear of insects and dust by frequent syringings or spongings.

FORCING DEPARTMENT.

PINERIES.—Such varieties as are at all liable to spoil at the bottom before the upper pips are coloured should now be kept as dry as possible immediately they show the least signs of colouring, keeping the atmosphere also as dry as can be done without injury to the rest of the stock.

VINERIES.—As was stated last week, Grapes intended to hang through the winter should be thinned very freely, and, if necessary, they should be gone over a second time, leaving them so that the berries when fully swelled will scarcely touch each other. A moderate crop only should be left on the Vines; for, to ensure success in keeping Grapes fresh and in good condition till next March, the Vines must be in first-rate health; be satisfied, therefore, with a moderate or rather light crop in the late house. Keep the atmosphere of houses where the fruit is colouring in active circulation, using gentle fires by day with abundance of air, and leaving a little air on at night to prevent damp. If red spider appears inclined to be troublesome wash the pipes, &c., as before recommended, with a mixture of soot and lime, and if the colour is objectionable add more soot.

FIGS.—Trees that have been kept dry while ripening the first crop, and are now cleared of this, should be well watered at the root, and if there is any appearance of red spider, the leaves should be thoroughly washed with the engine. Give manure-water to trees showing a heavy second crop, and keep the atmosphere moist by frequently sprinkling the passages and borders, &c. Keep the shoots thin and regularly tied, so as to avoid confusion, and expose all parts of the tree equally to the light. Where the fruit is ripening attend to previous directions, and keep the atmosphere and borders as dry as can conveniently be done. Assist trees in pots by giving them a liberal supply of manure-water.

CUCUMBERS.—Encourage young plants with a moist growing atmosphere, so as to get them into active growth quickly; but plants that are fairly established should be kept cooler, admitting air on every favourable opportunity, in order to secure short jointed fruitful wood.

FLOWER GARDEN AND SHRUBBERIES.

Remove everything in the way of early bedding plants whose beauty may be over or that is at all ineffective, and introduce good things from pots in the reserve ground. A good reserve ground, if properly situated and systematically planned and conducted, would be one of the most useful plots about a garden. Such a valuable adjunct as this would, however, require the constant attendance of a man possessing some knowledge of flowers, and therefore could not be carried out where there is scarcity of labourers. Decayed patches of bulbs which are required to stand for early spring flowering may have Verbenas or other things introduced from pots between them, so as to give gaiety to the places they occupy. Cuttings of Pansies should be got out in succession before the shoots are too much exhausted. All boundary or other hedges should be clipped forthwith.

HARDY FRUIT AND KITCHEN GARDEN.

Pay daily attention to Peaches and Nectarines on walls; thin the fruit and remove all useless or badly placed branches. Look also over other trained fruit trees frequently for the purpose of stopping and shortening any gross shoots, and keeping the growth nicely regulated; also get young shoots laid in where not already done. Tomatos against walls must be regularly attended to, keeping the shoots thin and stopping them above a cluster of fruit, for if the plants are allowed to ramble and grow too freely there will be a poor chance in an unfavourable season of securing a crop. Where a sufficient breadth of Celery is not yet planted out, this must be attended to as speedily as possible, and must be well looked after in the way of water, &c., until established after planting, otherwise good sized heads need hardly be expected. Earth up former plantings, and encourage rapid growth by occasional waterings with manure water. Ply the hoe freely among growing crops, both for the destruction of weeds and for loosening the surface of the soil.

COTTAGERS' GARDEN.

If Carrots have failed, a small bed of Early Horn may yet be sown. All spare ground should now be filled with green food; not an inch should be left uncropped. A little York Cabbage seed may soon be sown, to furnish heads for autumn use; they will also do to plant in any small gaps that may exist among other crops. Stake up flowers, and render everything about the garden as neat as possible.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending May 30, 1861, as observed at the Horticultural Garden.

May.	Moon's Age.	Barometer.		Temperature. Of the Air.			Of the Earth.		Wind.	Rain.
		Max.	Min.	Max.	Min.	Mean	1 foot deep.	2 feet deep.		
Friday 24	○	29.984	29.878	73	37	55.0	58½	52½	N.	[illegible]
Satur. 25	16	29.803	29.693	67	45	56.0	58	53	S.W.	[illegible]
Sunday 26	17	29.860	29.795	66	43	54.5	57½	53	S.W.	[illegible]
Mon. 27	18	30.032	30.017	74	46	60 0	57	53	N.E.	[illegible]
Tues. 28	19	30.048	29.930	62	46	54.0	57½	53½	N.E.	[illegible]
Wed. 29	20	29.912	29.865	74	43	58.5	58	53	N.E.	[illegible]
Thurs. 30	21	29.911	29.843	81	46	63.5	58	53	N.E.	[illegible]
Average..		29.935	29.860	71.0	43 7	57.3	57.8	52.8		[illegible]

May 24—Fine; some low dusky white clouds; dry air; cool and very clear at night.
— 25—Fine; clouds in strata; clear at night.
— 26—Overcast; fine; very fine.
— 27—Very fine; much dryness in the air; slight rain at night.
— 28—Slight rain; uniformly overcast; densely overcast at night.
— 29—Fine; slight shower 11 A.M.; densely overcast.
— 30—Fine; exceedingly fine throughout.
Mean temperature of the week, 1 4-10 deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending June 8, 1861.

June.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 2..	69.6	46.4	58.0	15	0.87 in.	1	4	3	4	3	9	5	5
Mon. 3..	70.8	45.7	58.3	15	0.91	—	4	5	1	5	12	3	[illegible]
Tues. 4..	70.7	46.4	58.5	13	0.76	1	5	2	2	4	10	7	4
Wed. 5..	70.7	47.0	58.9	19	0.64	2	7	2	1	5	9	6	3
Thurs. 6..	69.6	47.8	58.7	18	0 28	5	6	2	2	4	9	4	3
Friday 7..	68.8	47.3	58.0	13	0.53	3	8	0	4	3	10	3	4
Satur. 8..	70.3	47.6	59.0	13	0.45	4	7	1	—	3	14	4	2

The highest temperature during the above period occurred on the 7th, 1846—therm. 90 deg.; and the lowest on the 1st and 5th, 1856—therm. 33 deg.

Notices to Correspondents.

ELECTRIFIED: *North Hampshire* had better not waste money and time in idle speculations. No advantageous method of influencing vegetation by electrical action has ever yet been applied to practical purposes.

FUNGI: *E B.* Your Fungus from the Mushroom bed appears to be the variety of Agaricus dealbatus which is figured at p. 312 of our Journal for the present year. The specimen, however, was so crushed that it is impossible to feel quite certain about it. *M. J. B.*

GARDENERS: *J Clews.* We do not think hard names should be given to small offences, especially if they are in some degree sanctioned by custom, although bad. At the same time we do not see how a man can be called strictly honest who, without permission, gives away another person's property.

GRAPES: *N Walton.* The berries are attacked by rust, a disease which prevents the growth of the skin and causes the berries to burst. This affection arises from many causes, *e. g.*, cold currents of air, handling, contact with the greased hair of the head. We also observe traces of the Vine Mildew, which should be immediately attacked by sulphur.

INSECTS: *H T.* It is too late to do any good in attempting to destroy the "grubs" or larvæ of the daddy longlegs, as they are now full grown and have done all the mischief they are capable of. When the perfect insects appear get children to catch them all, and so save your plants next year from their progeny. *W.*

MILDEW: *M F W.* Some sudden chills have probably caused your plants to be attacked. Perhaps too they are insufficiently ventilated. Give them plenty of air; keep them warm, and attack the mildew with flowers of sulphur.

NAMES OF PLANTS: *Twickenham.* Andromeda axillaris.—*W R.* 1, Ledum latifolium; 2, Leiophyllum buxifolium; 3, *A Y.* Iberis—probably sempervirens; 4, Arabis alpina.—*A Y.* 1, Right; 2, Agrostis alba—not setacea.—*Ignoramus.* Lycium barbarum.—*H R J.* Claytonia perfoliata, escaped from a garden.—*G M.* Bougainvillæa speciosa, we believe.—*B A.* 1, Gymnogramma, but too young for determination; 2, Pteris serrulata; 3, Selaginella Martensii; 4, Gymnogramma Calomelanos.—*Wm. Hatfield.* You ask for the names of four plants, viz., Nos. 1, 2, 3, 4. Your specimens have no numbers attached to them; and only *three* are in your letter, viz. Viburnum opulus, Weigela rosea, and Andromeda axillaris.—*S H.* Spiræa alpina and a variety of Asplenium flaccidum.—*A Subscriber.*—We have received a heap of plants from a correspondent using this signature, although we have over and over again begged that this may not be done. London life does not permit such extravagant inroads upon time. We cannot even look at specimens for name if they exceed the prescribed number of four.

NETTLES: *J Wilson* It is all fudge. Believe what you please, but don't think of applying a practical test to such idle notions.

PEAS: *J W F.* They are attacked by the spawn of some small Fungus, as you may tell by their peculiar dry-rot smell. But we have no means of knowing how the spawn was generated in such soil as you describe.

ROSES: *Teignmouth.* Bourbon Roses budded last autumn will most probably bloom this year if the season proves favourable, and the plants are well treated and in a thriving situation. If you wish your Rose trees to have good heads, you must pinch off the points of all the strongest shoots when about eight or 10 inches in length; they will, however, not then be so likely to bloom as if left alone, but next season the display will be much finer than if the shoots had been allowed to grow on untouched until winter pruning-time. In the latter case few or no laterals would be produced, but by means of judicious pinching good-sized and well proportioned heads may be secured, even by the end of the first season.‡

SILKWORMS: *F C.* An obliging Correspondent at St. Omer informs us that the eggs (graine) of the Ailanthus worm may be obtained of M. André Marchand, Rue des Petites Ecuries, 50, Paris, for 5 francs the gramme, paid in advance.

VINES: *Mrs. C.* We have no means of knowing what has caused your Welbeck Black Tripoli, leaves and berries to become jaundiced. The most *probable* cause is that the roots are wet and the leaves and branches cold. If so the colour will alter as the earth dries and becomes warm enough.

MISC.: Full price will be given for a clean copy of the *Gardeners' Chronicle* of December 1, 1860, by Messrs. Hatchard & Co., 187, Piccadilly.

ARTIFICIAL MANURES, &c.—Manufacturers and others engaged in making Artificial Manures may obtain every necessary instruction for their economical and efficient preparation, by applying to J. C. NESBIT, F.G.S, &c., Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, Coprolites, &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch.

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They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate to be obtained entirely from Bones.

The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE OF SODA, SULPHATE OF AMMONIA, and every Manure of value.

116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.

CONCENTRATED TURNIP MANURE, equal in value to the preceding.

Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."

Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

REIGATE SILVER SAND, best quality for Florists, 16s. per ton. Less quantities 1s. 6d. per bushel. Delivered five miles or to any London Wharf or Railway. Sacks for Sand 1s. 6d. each, or on hire 6d. each (5 hold a ton). Kentish, Hampshire, and other Peats, Yellow Loam, Leaf Mould, and Tan, in large or small quantities. Sphagnum Moss for Orchids.

JOHN KENNARD, Purveyor to Her Majesty, Swan Place, Old Kent Road, London, S.E.

RAYNBIRD, CALDECOTT, AND BAWTREE, SEED GROWERS and MERCHANTS, Basingstoke, Andover; and 89, Seed Market, Mark Lane, London, E.C.

WHITE SWEDE SEED.—The extremely severe frost of last winter has again proved the value of this most hardy Swede Turnip. From all parts we receive favourable reports of its abundant produce, hardiness, and suitability for late sowing. Fine crops of perfectly sound roots are now being folded off with sheep and lambs.

T. HANNAM, Esq., the Secretary to the Yorkshire Agricultural Society, in his recent lecture to the Wakefield Farmers' Club, on Agriculture, its Progress and Prospects, says:—"In my experiments with Turnips, I found quite as great a difference in the keeping qualities of the several kinds as in their weight; of some kinds 25 per cent. were destroyed by frost, while of others not more than 2 per cent. were damaged. A new White Swede grown by the Messrs. RAYNBIRD seems to me to be nearly indestructible by frost, and was brittle and juicy when the ordinary kinds were soft and pulpy."

Fine Seed, growing nearly 100 per cent., is offered for free delivery to any Railway Station, if taken in quantities of 20 lbs. and upwards. Address—

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*** Samples and quotations of all kinds of Farm Seeds sent on application.—June 1.

CHURNS.—The Royal Agricultural Society's Prize Churn is the best invented. Butter produced in 12 minutes. Price 30s. and upwards.

Full particulars forwarded on application to BURGESS & KEY, Agricultural and Gardening Machinery Stores, 95, Newgate Street, E.C.

Reaping and Mowing Machines.

BURGESS AND KEY, 95, Newgate Street, E.C. Prizeholders for the best Agricultural Machinery Manufactured.

ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price 42l. 10s.

TESTIMONIALS.

A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following:—

From Mr. JOHN RICHARDS, *Bailiff to* Dr. N. CARNE, *Dimland Castle, Glamorgan.*

"I beg to certify that I have for five years worked Messrs. Burgess & Key's Reaper, in my master's Home Farm, and also accompanied it when lent to tenants on the estate. During the above mentioned period the Machine has not cut less than 1,000 acres of all kinds of crops, with the same two knives as first had with the Machine. Dr. N. Carne having given up farming, the machine is now in the hands of his tenant, Mr. D. Thomas, of Llanrwst, and is in excellent order."

M'CORMICK'S REAPER for Manual Delivery. Price 25l.

ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30l.

ALLEN'S GRASS MOWER, for one Horse. Price 22l. 10s.

COMBINED REAPER AND MOWER—Two-Horse Machine. Price 35l.

COMBINED REAPER AND MOWER—One-Horse Machine. Price 24l.

The last two Machines are fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.

These Prices include Packing and Delivery at any Railway Station.

"FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.

PROTECTION FROM THE COLD WINDS & MORNING FROST.

"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.

Two yards wide .. .. 1s. 6d. per yard run.
Four yards wide .. .. 3s. per yard.

An improved make, 3 yards wide, 2s. 6d. per yard run. Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard run. ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.

"It is much cheaper than mats as a covering."

COLLEGE OF AGRICULTURE AND CHEMISTRY, AND OF PRACTICAL AND GENERAL SCIENCE, 37 and 38, Lower Kennington Lane, Kennington, London, S. Principal—J. C. NESBIT, F.G.S., F.C.S., &c.

The system of studies pursued in the College comprises every branch requisite to prepare youth for the pursuits of Agriculture, Engineering, Mining, Manufactures, and the Arts; for the Naval and Military Services, and for the Universities.

Analyses and Assays of every description are promptly and accurately executed at the College. The terms and other particulars may be had on application to the Principal.

THE LANDS IMPROVEMENT COMPANY.—Incorporated by Special Act of Parliament in 1853. 2, Old Palace Yard, Westminster, S.W.

To LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c. IN ENGLAND AND WALES AND IN SCOTLAND.

The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.

For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

AGRICULTURAL BENEVOLENT INSTITUTION

President—His Grace the Duke of RICHMOND.

Founded 1860, for the Relief of Decayed Farmers, their Widows, and Orphans.

The SECOND ANNIVERSARY FESTIVAL, in aid of the Funds of the Institution, will take place at the Freemasons' Tavern on WEDNESDAY, June 12.

The Right Hon. BENJAMIN DISRAELI, M.P., in the Chair.

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Dinner Tickets, 21s. Ladies' Tickets, 5s. To be had of the Secretary, Charles Shaw, Esq., at the Office of the Institution, 55, Charing Cross; and at the Bar of the Tavern, Great Queen Street, Lincoln's Inn Fields.

Land Drainage.

WORKS OF DRAINAGE of any extent are EXECUTED by the GENERAL LAND DRAINAGE AND IMPROVEMENT COMPANY on all descriptions of property, whether freehold, entailed, mortgaged, trust, ecclesiastical, corporate, or collegiate.

Repayment may be made by the Landowner as successive portions of the works are completed; or the actual expenditure, with a commission thereon, may be charged on the property improved, by way of rentcharge on the estate created for various terms of years so as to adapt the rate per cent. of annual charge to the circumstances of the tenants.

No investigation of title being required, or notices given to Reversioners or Mortgagees, no legal expenses are incurred.

Works of Irrigation, Enclosing, Wood Grubbing, Road Making, and Farm Buildings are executed in a similar manner.

Landowners desirous to execute any of the Improvements by their own Agents, and charge the outlay and expenses on the Estate, may obtain Loans for the purpose.

Applications to be made to WILLIAM CLIFFORD, the Secretary, at the Offices of the Company, 52, Parliament Street, S.W.

HIGHLAND AND AGRICULTURAL SOCIETY. PERTH SHOW.

29th, 30th, and 31st JULY, and 1st and 2d AUGUST.

All Entries must be made on or before FRIDAY, 14th JUNE.

Schedules of Entry, and Copies of the Premium List and Regulations to be had on application to the Secretary at 6, Albyn Place, Edinburgh.

SWEDES, TURNIPS, MANGELS, &c.

PAGE & TOOGOOD

HAVE still a supply of their first-class Stocks at low prices for a quantity, the excellent growing quality of which is proved by the full plant.

Mr. ROBERT SCOTT, Great Eastly Farm, in ordering 60 lbs. more of our Improved Skirving's Swede, says:—"I have a splendid plant from the first lot and also of the Mangel.—May 24, 1861."

F. WEST, Esq., West End, in ordering his Swedes, says:—"My Carrots are a magnificent crop, too thick by half, and so are the Mangels.—May 24, 1861."

Mr. BERTRAM, Corve Farm, I. W., in ordering his supply of Turnips, says:—"I have no doubt they will be as good as the Swedes, of which I have a capital plant; the drills are full from end to end.—May 25, 1861."

These reports could be multiplied indefinitely.

ROYAL SOUTH HANTS SEED ESTABLISHMENT, SOUTHAMPTON.

The Agricultural Gazette.

SATURDAY, JUNE 1, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

MONDAY,	June 3	Great Meeting of the Bath and West of England Agricultural Society at Truro.
TUESDAY,	— 4	
WEDNESDAY,	— 5	
THURSDAY,	— 6	
MONDAY,	— 3	London Farmers' Club .. .. 6 P.M. (Mr Hobson on the Agricultural Relations of the Vegetable and Animal Kingdoms)
WEDNESDAY	— 5	Agri. Society of England .. .. Noon

"CHEESE IS MADE IN THE DAIRY:"—Mr. HARDING of Compton Dando, Somersetshire, who has frequently visited Ayrshire for the introduction of the Cheddar system into that district, spoke thus at

a meeting of the Ayrshire Agricultural Society:—"I am satisfied that whether we make cheese at Dalgig among the mountains, at Cunning Park amongst forced Grass, or among heather at Corwan, where Mr. Wason is making the desert to blossom as the Rose, there is no difference whatever. My opinion is that good cheese can by good management be made anywhere, whether at the Land's End or at Caithness, if it be in the hands of a person who has something in the upper story."

Cheese-making then is just one of those subjects on which information is everywhere of use. Dairy management may be irrespective of soil, and to a great extent irrespective of climate. Whether you farm in Derbyshire, in Wiltshire, or in Ayrshire, you may make use of any dairy management you choose, certain of attaining its constant and unfailing result. It is for this reason that Dr. Voelcker, who spoke the other day in Hanover Square on this subject, ought to have been reported at once.

The discussion last Wednesday at the general meeting in Hanover Square has made it plain that the Society will not much longer consent to a delay of months in the publication of information which has reached head-quarters. Cries of "No, No" meeting the remark that the Council must retain for the exclusive information of members, that which it has at their cost acquired, sufficiently express the now general conviction that the Society ought to take its place as representing not merely a few thousands of English agriculturists, but the general interests of English agriculture. The number on its roll depends not on the exclusive advantages offered to its members, but on its reputation as an energetic public body; and, to return to the case of the lecture on cheese-making, an immediate publication of Dr. Voelcker's lecture, either through the weekly agricultural press, or by the issue of a pamphlet, would have done more to extend the influence of the Society in the dairy districts, than it can possibly acquire by the publication of a good article in its Journal some months hence.

The subject of cheese-making is one of which a thorough investigation ought to be published, not merely because information of this kind can at once be turned to good account wherever cow-food can be grown, but also because there cannot be a doubt that the various uses made of milk differ materially in the value per gallon which is thus made of it in different parts of the country. Cheese varies from 50*s.* to 84*s.* per cwt., and it might be all made worth the higher price. And though where the poorer cheese is made there is a manufacture of butter also which adds somewhat to the returns from the dairy, yet there cannot be a doubt that great differences in the money return, and especially great differences in the labour, of the dairy, take place under varying dairy management, whether reckoned by acre, per cow, or per gallon of milk.

To take an instance of large money return and of a small expenditure in labour, we describe the process of Cheddar cheese-making carried on upon the farm of H. Chandos Pole, Esq. of Barton Fields, near Derby. Mr. Pole is an enthusiastic dairyman, well acquainted with the dairy management of our principal dairy districts; and having been long convinced of the inferiority of that prevalent in Derbyshire, he commenced his endeavours to improve the manufacture of cheese soon after becoming the tenant of Barton Fields, and eventually decided on adopting the Cheddar system. He has a farm of 213 acres on the red marl of the New Red Sandstone, which is here covered by a layer of drift of varying thickness yielding a soil more or less adhesive, sometimes a stiff clay, and elsewhere light and gravelly. Of these 213 acres 86 are arable; the pastures are generally of a fair quality. The herd contains 40 cows, more or less of the Short-horned or Yorkshire breed. A breeding flock of 20 or 30 well bred Leicester sheep is also kept; about 10 calves are annually reared, and a large number of hogs are fattened every summer from the waste of the dairy.

Cheese is the sole produce of the dairy, and from 7 to 9 tons are annually made, and sold for from 75*s.* to 80*s.* a cwt.; and the annual produce per cow thus varies from 14*l.* to 18*l.* in cheese alone. The whole annual produce was one year as high as 19*l.* 10*s.* per cow. The cows had been all at Grass for a fortnight or longer before we saw them; up till then they had been receiving, as they severally calved and came to the pail, Beans boiled to a soup and poured over their chop of mixed hay and straw. This, together with a few roots and 100 bushels of brewers' grains weekly among 40 cows, was their feeding. They are brought in night and morning to the cow house to be milked. This is a long building with double mangers, &c. across it at intervals, and doorways to each separate double row of about five cows, which thus occupy the breadth of the place.

The milk as it is drawn each evening is poured through a sieve into a cheese tub of about 160 gallons, or if it be hot weather it stands over nightin large tin vessels placed in a tank of water. These tins are in that case emptied into the tub in the morning along with the morning's milk. In order to the saving of labour in the dairy, the boiler of a 2-horse engine is fitted up in an adjoining room, and steam is thus driven off under pressure either through the pipes which warm the cheese room, or into the dairy itself, through the end of a pipe furnished with a universal joint, by which it may be delivered anywhere within reach. The evening's milk stands in the tub over night. The milking commences at 5 A.M. next morning. The milk is brought in pails and poured through the sieve in among the evening's store, which has now become covered with cream. From two to four gallons of the sour yesterday's whey is added to every 100 gallons of the milk, either along with the morning's milk, if the night has been cold, or after it if it has been mild, or not at all if it has been hot, no whey being added if the temperature of the night's milk is over 64°; and the whole is then heated up to 80° by the introduction of the steam-pipe, and the sending a lot of steam into the midst of it. The violence of the ebullition ensures the thorough mixture of the whole, and the steam is stopped on the indication of the thermometer. Rennet, a pint of water in which 2 or 3 square inches of a 'vell' have been steeping for 24 hours, is then poured through a sieve at the rate of a pint and a half to 120 gallons of milk, and mixed well by stirring; half an ounce of Nicholl's liquid annatto to every 100 gallons is at the same time added, and well mixed, and the whole is covered over with a woollen cloth. The curd should have fully come in 50 minutes.

The process of cutting—done by thrusting up and down a framework of tin cutters, acting as a sieve with about a $\frac{5}{8}$ inch mesh—is done with extreme slowness. Nearly a minute is taken in pushing this sieve-cutter from the top to the bottom, through perhaps 2 feet of curd. The whole surface is thus covered with the cutter, and the whole substance accordingly cut through. A few gallons of the whey baled out of a floating sieve are then heated in a vessel by the steam nozzle up to 120° or thereabouts, and added to the mass, so as to raise the whole to the old temperature of 80°, the whole being stirred and broken with rather more rapidity with the so-called shovel breaker, which is in fact a shovel-like tool, the 'blade' being an open work harp or screen of wires. The whole then stands covered up again for three quarters of an hour. Twenty or 30 gallons of the whey are then drawn off, placed in a cistern above the tub, heated there by the addition of the hot steam to 150° or thereabouts, and then set running into the tub again, the whole being rapidly stirred and broken by the shovel breaker, so that no part of it shall be unduly scalded, the whole being raised to the heat of 100° of Fahrenheit. The curd thus acquires a certain firmness and consistency; it is left to settle in the middle of the tub, and covered up for half an hour, that the hot whey may exert whatever influence it possesses. The whey is then gradually drawn off and runs to the pig tank, a few gallons only being retained for use next morning. The curd is heaped up in the middle of the tub and left half an hour to drain; it is then cut once and again, and turned and left again for half an hour to drain, after which it is taken to a tin curd cooler, broken into flakes by hand and left for 20 minutes, being once turned over during that time. It is then put into the vat and under pressure for a quarter of an hour, taken out, weighed and passed through the curd mill, and thoroughly mixed with 2 lbs. of dry salt to every cwt. of the curd. The whole lies in a heap on the cooler till of the temperature of 60°, and it is then vatted and put under a lever-pressure of 15 cwt. At night a dry cloth is put on and it is turned. This is repeated at intervals of 12 hours until the evening of the second day, when it receives a calico cap and is again placed in the press. On the morning of the third day it is swathed in a linen binder and carried to the shelves of the cheese room, where it stands thoroughly protected for two or three months, being turned at first daily, and afterwards at longer intervals until ready for sale. The cheeses weigh from 80 lbs. to 1 cwt., and are ready for sale in three months or thereabouts after making, wasting during that time about 8 lbs. in every cwt. of the curd when weighed for salting.

Mr. Chandos Pole keeps an exact record of each day's process in a ruled book, in which are recorded the number of each day's cheese, the number of gallons of milk yielding it, the temperature of the evening's milk when the morning's is added to it, the temperature at which the whole is set to form curd, the time in forming, the state of the curd on breaking, its weight on salting, its temperature and condition when vatted, together with general remarks on the character of the curd. We gather from this record, that in April 1996 gallons of milk yielded 1792 lbs. of curd when vatted, which would yield 130 lbs. less of ripe cheese, and that from the 1st till the 17th of May 1660 gallons of milk had yielded 1553 lbs. of curd. The milk becomes richer in curd as the year advances, and more than 1 lb. of cheese is made per gallon towards the end of the year. Thus in October of last year we read on three successive days that 61, 60, and 58 gallons of milk made 70, 67, and 69 lbs of the vatted curd.

It is plain that details of this kind will ultimately be exceedingly instructive, and we cannot doubt that Mr. Pole's experience thus carefully recorded will be a most useful contribution to any future investigation by which it may be attempted to extract the lessons of our English dairies.

ANNALS OF A LIQUID MANURE FARM.

(Concluded from p. 487.)

From a statement made by Sir John Forbes at a meeting of the Highland Society, it appears that your cultivation has been interrupted by an interference with your supply of water, which obliges you to give up the farm under circumstances which have nothing to do with the economical results?—Exactly so; at the same time the case is one which, as stated by Sir John, requires the attention of the Legislature upon the general question of water rights.

From your experience and observation, what are the results you anticipate from the extended application of the principle of cultivation in question to farming?—My conviction is that the time will come when we shall put all our manures on to the land in a liquid form; as it is already the experience of myself and many others that straw is too valuable to be used merely as an absorbent for liquid manure, and to be trodden under foot, and that the manure itself is too valuable to be wasted as it now is by fermentation and evaporation. I believe with Professor Voelcker, as he expresses it, that two-thirds of the fertilising power of the farm-yard manure is lost under the existing management, and would be saved by laying it on to the soil as soon as it leaves the cattle. My belief is also that steam power will be completely occupied in performing the most requisite wants of the farm—in cultivating the soil, in driving out manure through pipes, and in threshing and preparing cattle food.

Will not the application of the principle lead to high cultivation in narrow areas instead of low cultivation on wide areas—to intensive cultivation giving heavy produce, instead of extensive cultivation, and light produce?—I get a fivefold produce on the irrigated portion of my own land, but the whole is made nearly equal to a farm of double the extent with a comparatively small outlay for the purchase of manures. [I should have mentioned that I use about 3000 gallons of ammoniacal liquor from the gas works in addition to the manure of the farm. I have too thrown dead animals, dead horses or cows, into the tanks. I have them cut up and thrown in; and the liquid disintegrates them effectually for distribution.] Undoubtedly the system will tend to the high cultivation of small areas of land. Some of my neighbouring farmers used to condole with me, that I had not some 300 acres, to which my reply was, that I should have done better it I had had half the quantity, or 60 acres instead of 120, and had I been rid of the hard clay land. The clays in England are, however, I think, more manageable owing to the climate. Large capital may, however, be more advantageously applied in the system in question than in the common methods. I have studied the question in this aspect, and I am prepared to show that 100 acres may be made to produce the same amount of dairy produce as a grazing farm of 450 acres. I estimate this as in the following account, in which it will be observed that the rent alone in the farm of 450 acres, set down at 30*s.* per acre, would be 675*l.*, whilst on the smaller liquid manure farm it would only be 332*l.*, inclusive of an extra rent of 6*s.* per acre for additional buildings, including also 65*l.* for the yearly interest and deterioration of the pipes, pumps, engines, and irrigating apparatus; including also 42*l.* for coals, and 45*l.* for the time occupied by the engine man. Viewing the system in relation to the conveyance to the land of the manure of such a quantity of stock, viz., 150 cows for a farm

of 450 acres, in water instead of in straw, I find the balance in favour of the liquid manure would be 469*l*.

Estimated Expenses of Pipe Irrigation for 100 acres of Grass Land, 1 hydrant to every 5 acres.

	£	s.	d.
4-horse engine with expenses, erecting, &c. ..	140	0	0
T-pipes, cocks, and branches	20	0	0
3400 yards of 3-inch and 4-inch pipe	380	0	0
20 hydrants, 25*l*.; lead and laying, 20*l*.	45	0	0
2 sets of brass joints and 2 unions	5	0	0
2 manure pumps, 6½ ins. diameter, 2 feet stroke ..	60	0	0
Shafting, connecting, and extras	10	0	0
Cutting drains for pipes	10	0	0
2 lengths, 90 yards each, gutta percha	40	0	0
Circular brick tanks, 100,000 gallons	100	0	0
Contingencies dependent on locality	50	0	0
	£860	0	0

860*l*., at 7½ per cent. = 65*l*. yearly charge.

Pumps will discharge 300 tons daily of 10 hours, and working for irrigation 150 days, at a daily expense of 18*s*., viz.:—

	s.	d.
Coals, 5 cwt.	3*s*.	9*d*.
Engine man	3	0
4 women or boys	4	0
Deterioration and interest on capital ..	7	3
	18	0

Which equals for cost of distribution ¾*d*. per ton, or per dressing of 1 inch deep = 100 tons per acre, costing 6*s*., manuring at the rate of 3 acres daily.

Estimate.

Comparison between Water and Straw as Vehicles for Manure.

	£	s.	d.	£	s.	d.
150 cows on the box-feeding principle (the system adopted when straw is used as the absorbent), would require, at 20 lbs. per day, 490 tons of straw yearly, and this would absorb, say 1800 tons of solid and liquid manure = 12 tons of solid and liquid per head (a low calculation). Cost of applying and preparing 2290 tons, at 1*s*. per ton	£114	0	0			
Cost of straw for manure, at 20*s*. per ton	490	0	0			
Cost of solid manure on the land				604	0	0
Cost of procuring water and distributing manure (43,200 tons of water mixed with 1800 tons of solid and liquid manure), at the rate of 450 tons an acre; 90 tons an acre at each dressing, taking 150 days, at 18*s*. for distribution				135	0	0
Balance in favour of water as compared with straw, besides the saving of loss by fermentation and other causes				£469	0	0

No gain is mentioned as likely to be derived from the advantages of using manure in the above diluted state, &c.

Estimate.

Comparison between Irrigation and Grazing.

	£	s.	d.	£	s.	d.
To maintain 150 cows as in the Dairy districts would require 450 acres, being at the rate of 3 acres per cow for her yearly keep. 450 acres, at 30*s*.				675	0	0
100 acres under irrigation may be fairly assumed to produce equal to the above, subject to the following expenses:—						
Rent, 100 acres, at 36*s*.	180	0	0			
Yearly charge on irrigation	65	0	0			
Coals	42	0	0			
Engine man	45	0	0			
				332	0	0
Balance in favour of irrigating on a farm of 100 acres over a grazing farm of 450 acres				£343	0	0

I may observe that from experience I have learnt that an ox will eat in the house 144 square yards of Grass per week, the crop being a fair average one. On this data an acre will keep 33 head for one week, or 5 acres will keep 150 head for one week, or 25 acres for five weeks, at the end of which time a second crop will be ready which will also last five weeks; a third crop will then be fit, which will last another five weeks; then a fourth crop which will last five weeks, but requiring perhaps, say 5 acres additional; a fifth crop over as many of the 50 acres as can be obtained, with the pasturage, will last another four weeks—in all 24 weeks at the very least, assuming that 50 acres yield two crops of hay, and the other 50 acres four or five crops of Grass, a large portion of this last 50 acres will be converted into hay, there being more Grass during the consumption of the first three crops than can be consumed by the above stock; this will form a considerable addition to the store for winter keep. An artificial drying house would be needed.

In what length of time on the ordinary system, and applying the manure in the solid form, will it produce its return?—Throughout Scotland it would be four or five years. Some farmers manure once in four years, others once in five years. They presume that the manure lasts for that time before its full effect is produced.

In what length of time do you find that the result is obtained by an application of liquid and liquified manure?—Under some circumstances the results will be realised in five or six weeks. Thus, as in the account I have given, I commenced cutting on the 22d of May. I irrigated immediately and obtained another cutting of three feet on the 28th of June; I irrigated immediately, and then got another cutting of three feet six inches on the 10th of August. If the manure for Turnips or green crops be applied to the land in a liquified form as soon as it is produced, I conceive from its existing in a minute state of subdivision in combination with the soil that it will be usually appropriated within the period of the growth of the plant, that is if the quantity be not in excess under the conditions which I have already explained.

In this account of the difference between the common method, and that on the principle of the liquid and liquified manure cultivation, the estimate appears to be based chiefly on the different rate of cost of applying the manure, and on the different degrees of efficiency when applied. But besides the different ratio of the increased production to the rents and rates, will there not be the difference of the rate of transport over the average of 100 acres, as against that over 450 acres; the reduced proportion of roads, hedges, fences, &c., to be taken into account?—Yes; I have only entered into the first economies produced on the item of rent. There are various other economies which enter into the question, and which are preponderant on the side of the liquid manure cultivation.

Will not the system be available for high culture on the small areas of such farms as those of France; might it not be applied by simple machinery such as the American horse-power which I have heretofore described, for the cultivation of glebes, and the small farms in the hands of improving farmers?—Yes, it offers peculiar facilities for small holders. A friend uses the American horse-power engine, by means of which he makes his pair of carriage horses thresh, bruise corn, cut hay, straw, and Turnips. Of course it might be economically used for pumping liquid manure, and prevent the farm being thrown far back, by competition with the larger farms with steam power. Small farmers might use it with great promise of success.

You have stated that you converted some of your farm into water meadow. Under what circumstances did you do that?—It was a portion of ground below the mill lead which I could conveniently and very economically water. I had no more liquid manure to apply, and my farm was not at that time in such a condition as to allow me to liquify much of the solid manure. But had the two portions of ground been under the same local conditions, I should never have thought of adopting the practice of distribution by submersion, or the method of shedding by the water meadow.

Why?—On account of the great waste of water or of manure incident to the method of submersion. Then there is the expense of cleansing the gutters, and of the land occupied by the gutters, which altogether makes the yearly charge nearly equal to that of pipes. Then the distribution of manure would by this method be very unequal, unless the ground be exceedingly well levelled, which makes the cost greatly exceed that of the pipe distribution.

Have you altered the method first commonly adopted of pipe distribution by jet?—Yes; I did not find it the best method to wet the surface by a spray over a wide space, but rather to give it in larger quantity by a fish-tail stream instead of the rain shower. By delivering it closer it is more under the eye of the labourer, and may be delivered more evenly. It is so much easier that I use the labour of women; one woman manages the coils of the pipe and the other the distribution.

What length of hose do you use?—90 yards.

How many tons do two women distribute in a day by this method?—From 180 to 200 tons. If my pumps were larger they might distribute more.

What do you pay them for their labour?—10*d*. a-day each.

How many water-carts and men and horses would be requisite to distribute the like quantity?—Ten carts and ten men, and two or three hand-pumps to be worked to fill them.

Some engineers have objected to the distribution of liquid and town manures by pipes and jet, on the score of expense; your practice it would seem leads you to prefer it on the score of economy?—Yes, undoubtedly. It might alter the question if such quantities as 66 inches of sewerage per acre, which are put on the Edinburgh water meadows by the method of submersion, were found necessary to produce the same result, but my experience leads me to believe that one fifth of that quantity applied by pipes and jet will produce equal fertilising results, and hence for the production of those results the distribution by pipes and jets is the more economical.

Have you examined the subject of the application of liquid manure on a large scale, namely, the sewerage of towns?—Yes, I have done so at Edinburgh. I have studied the subject, and I have repeatedly visited the meadows irrigated. I can have no doubt that the waste of the manure by that method is enormous.

If you were consulted in relation to the application of the sewerage of a town practically, would you think of having recourse to the Edinburgh method or the method of submersion?—Decidedly not, either as a question of agricultural production, or as a sanitary question. The evaporation from the surface, which is one of a swamp, is at times very offensive, and must be very noxious. The proper dilution of my own farm manure is about as six to one, which extinguishes smell: when I have applied it in a less dilute state, as about three to one, it is offensive in its application, but in a very short time it is absorbed and loses all smell; and altogether the smell is less than in the common applications of dry manures. But I would engage that town sewerage, even diluted as that at Edinburgh, may be applied inoffensively as well as more productively.

But do you not recognise as a principle that town sewerage should be applied to the land before it enters into advanced stages of decomposition?—Yes, certainly; and that to prevent the waste of the manure by fermentation. It should be got on to the land if possible before the volatile products are formed by decomposition. This is not so practicable on a farm where you have to store the manure for application during seasons of growth on certain portions of the land.

As applied to farms, the liquid manure system implies the adoption of the stall feeding of the cattle. In some instances cases have been stated of losses from *pleuro pneumonia*, which is to be expected from close crowding without ventilation, especially of close crowding without great cleanliness. Have you adopted any and what precautions against that danger?—I have succeeded in obtaining good ventilation with cleanliness, with the use of the jet, and I have had no disease amongst my cattle, whilst there has been considerable loss in the neighbourhood.

For what period have you had no disease?—For seven years.

Wherein does your cattle-shed differ from that of Mr. Telfer?—In having a wider feeding passage between the animals and the roof, and the side wall being carried up nearly at an angle of 45, and being ventilated on a principle similar to Watson's.

What do you use as bedding?—My cattle lie on sparred floors, with a very small quantity of straw.

STEAM CULTIVATION.

FAWLEY COURT FARM, HENLEY-ON-THAMES.—On this farm, partly in the occupation, and partly the property of Edward Marjoribanks, Esq., Mr. Fowler's steam plough has been at work since September, 1859. The main facts regarding its use here are that on two farms, the one exceeding 850 acres, of which nearly 600 are arable, and the other containing 120 acres arable, where 14 pairs of horses had been worked, only 15 have been employed since the 10-horse engine and 4-furrow balance plough have been at work, and ultimately it is expected that the work will be done by 12. The land is not the best adapted, according to the popular judgment, for steam cultivation. It is for the most part a light and flinty, often a very shallow soil upon the chalk. It occupies the northern side of the Thames valley above Henley, and lies in large fields, between the top of the hills which there approach the river and the low flat pasture land which forms its brink. Between the woodland above and the almost marsh land below, there is a sloping hill-side, varying in descent from 1 in 10 above to 1 in 5 midway, gradually becoming level at the foot of the slope. This hill-side varies from 400 to 800 yards in width. It is broken in upon by patches of woodland, and by an exceedingly various outline of the woodland on the hill, and there are occasional side-valleys stretching northwards from the river, still further interfering with any regularity of outline, on both sides of which the land is arable. The soil is, at top, and also where it is steep, extremely poor, flinty, chalky, and thin; while below it is good, deep, loamy, and calcareous, nowhere however stiff. Most of this sloping land is cultivable, and has been cultivated, both up and down and across, by steam-power; the engine generally working itself along the lower end or the lower side, and actuating the anchorage, which climbs the upper side, and travels along a line as nearly coincident with the varying outline of the field as it can go, the rope being lengthened or wound up to suit the varying interval between it and the engine. The upper edge of the field is very scant of soil, and the anchorage, not having sufficient hold, has sometimes to be lashed to a neighbouring tree, lest it should be dragged downwards. And when lately there, and trying the draught by dynamometer at a greater depth of work than usual, not only did the anchor drag, but it pulled down the tree (a young Beech) to which it was tied. I mention all this in illustration of the difficulties under which Mr. Burniston, who is Mr. Marjoribanks' most intelligent agent, has laboured in adapting his difficult circumstances to the work of steam ploughing.

When I visited the farm about four weeks ago 528 acres had been ploughed, and 100 acres had been scarified since Oct. 1859. This is but a small performance compared with what has been done on many farms, but it must be remembered both that the time included has been exceedingly untoward for arable culture, and that Fawley Court Farm is, as I have shown, very difficult to work, whether by steam or horses. I have before me, for instance, a record of the time taken to plough 291 acres in 11 fields, including, therefore, 11 removals from field to field. The time taken was 52 days, which was at the rate of only 5½ acres a-day, which, when a 4-furrow plough is employed, is a very low average. Although, however, the land is light enough to enable a 10-horse engine to work a 4-furrow plough, yet in practice it is found too laborious work when the engine is drawing the plough up hill, and when working up and down any of these steep slopes accordingly it is usual to use only three ploughs when going up and four when coming down. This of course diminishes the performance of the implement, and we may assume accordingly that the 628 acres which had been done (by May 1, 1861), were accomplished in at most 120 days, or probably 420 acres in 80 days per annum, since October 1859. So small a number of days during which the engine and machine had been at work is owing for the most part to be the character of the weather. The cost during the year in which these 420 acres have been ploughed and scarified is to be estimated as follows:—

	£	s.	d.
Wages—Engineer, 15*s*. a week; stoker, 9*s*.; anchor-man, 12*s*. 6*d*.; two porter lads, at 6*s*.; plough-man, 13*s*.; and assistant, 11*s*.; in all, 3*l*. 12*s*. 6*d*.; or 12*s*. 1*d*. daily over 80 days	48	6	8
Fuel and Oil.—The coals consumed amounted to 1 cwt. per acre at first starting, but latterly to 1½ cwt., which Mr.			
Carrried forward	£48	6	8

	£	s.	d.	£	s.	d.
Brought forward				£48	6	8
Burniston attributes to diminished work owing to the slipping of worn rope—say 30 tons at 18*s.* = ...	27	0	0			
Oil, a gallon for every 5 days' work, or ..	4	0	0			
				31	0	0
Repairs and Rope.—Connected with this I have the following account:—Oct. to Dec. 1859, "Shares, snatch blocks, &c...	20	2	6"			
Jan to June, 1860, "430 yards steel rope..	41	0	0			
Shares, wheels, and repairs	9	9	0			
Sept., 1860, Shares and steel breasts ..	17	4	0			
	87	15	6			
Of this so much belongs of right to the capital account. 200 yards of rope are in all (April 1861) nearly worn out, and 10*l.* would cover the wear and tear of the remainder. For rope, therefore, during 1½ year I put down 30*l.* or per annum ..	20	0	0			
And for repairs, and new parts during the year, including also sundry home-made work, I put down per annum	15	0	0			
Making in all under this head				35	0	0
The Maintenance of engine and apparatus is put down, as in former instances, at the extravagant estimate of 10 per cent. This on 700*l.* is				70	0	0
And interest of capital at 5 per cent. ..				35	0	0
Total annual cost				£219	6	8

Or about 10*s.* 5*d.* an acre over the work accomplished.

This is a very high cost, and it is so high simply because the machine was lying idle for so long. Half the annual sum is made up of interest and maintenance of value, and this divided over only 420 acres is a very heavy charge. The number of hands employed in working the apparatus is also unusually great—two men work the engine, and two men work the plough; the necessity in the latter case arising from the flinty, shallow nature of the soil, which is a continual interruption to any work deeper than usual.

The following is interesting as recording some of the work done during the past month, and the cost of wages, fuel, oil, and time at which it has been accomplished:—"Farther West Field" (14 acres) has been scarified in two days—using 1½ pint of oil, and 25 cwt. of coal, and 1*l.* 5*s.* 10*d.* in wages—at a cost in these items of 4*s.* an acre. "Middle Nuddings" (17 acres) was scarified in three days, including removal, at a cost in like manner of 4*s.* 4*d.* an acre, and "Middle West Field" (14½ acres) was ploughed in 2½ days at a cost in these items of 3*s.* 8½*d.* per acre. This shows how small a sum the cost in labour and material per acre may be, and to how small a sum the cost of steam-ploughing may by good management be reduced.

It is worth noting, notwithstanding the great expense of the steam-plough per acre in this instance, how much expenditure has been saved by its adoption. Twenty-eight horses were employed—15 are now used, and as there have always been some employed on estate work, 12 will by-and-by do all that is required. In the meantime 13 horses, costing with their implements at least 500*l.*, have been saved, and without going into the detail of their expenses, it is plain that in food, wages, implements, annual maintenance and interest of capital, more than twice as much expenditure has been annually saved as is now annually incurred. Thirteen horses worked as pair horse teams by men at 13*s.* a week, and fed better than is generally done, must have cost indeed more nearly three times the sum spent upon the engine during the year 1859-60, which has been the subject of our calculation.

I walked through the several hill-side fields in succession. No. 1. "Great Roger field" (60 acres, 56 of which are cultivable by steam)—had been in Swedes and Mangel Wurzel in 1860, was steam ploughed and cross ploughed in April of that year. It was in capital order for Barley, which was coming through. No. 2. "Little Roger field" (40 acres)—had been in Barley last year. The Clover had failed and had been ploughed by steam for Peas, which had been early sown, and were looking very well. No. 3. "Home Nuddings" (27 acres)—had been Barley in 1859, the Clover had failed in 1860, and it had been ploughed and sown with Turnips, which had been fed off and the land was in Barley again. It had been ploughed by steam in March last year. Turnips had been got in and failed; the land had then been scarified by steam and Turnips were again sown, which stood. It was steam-ploughed in March this year for Barley. No. 4. "Middle Nuddings" (17 acres)—had been Clover in 1859—Wheat in 1860, which had failed—the land was then scarified by horse-power, and Oats had been put in which yielded a good crop. The Oat stubble had been steam-ploughed, and it was about to be cross ploughed by steam for Swedes and Mangel Wurzel. No. 5. "Farther Nuddings" (18 acres)—had been Wheat last year, and is to be Swedes in 1861. It had been ploughed by steam, and was to be cross-ploughed again. I need not however go over the whole farm here in this way. The fields, for the most part cultivated on the four-course system, had a history sufficiently indicative by occasional Clover failures, &c. of the difficulties which that system at length involves. The land is in very good order, and the young corn everywhere promises well; and the condition of it indicates also satisfactorily both the skilfulness of Mr. Burniston's management and the powers of the steam plough as a fertiliser and a fallow implement.

Besides the adoption of the steam plough upon this farm, it is interesting for a very complete set of farm buildings supplied with a fixed steam-engine, which threshes, and grinds, and cuts chaff and roots. The arrangements for mixing chaff and cut roots and adding liquid soup of meal or steamed messes of various kinds to the mixed chop, and afterwards of delivering it in measured lots into waggons by which it is conveyed on rails along the gangways of the extensive feeding stalls and boxes, is worthy of imitation.

Any one wishing to see steam cultivation and energetic agriculture carried out in spite of great natural difficulties, cannot do better than seek an introduction to Fawley Court Farm.

I have since visited it for a day, and have to express my best acknowledgments both to Mr. Marjoribanks and his agent for their good nature in permitting me to occupy so much time of their men and engine in the determination of certain questions of draught, for which a steep hill-side offered unusual opportunities. Without any attempt at present to indicate the lessons taught by the dynamometer on this occasion, I will simply place on record some of the results obtained.

A four-furrow plough taking a furrow 5½ inches deep drawn from the engine towards the anchorage, and doing a furrow of about 250 yards in length, required 15 cwt. of draught when ascending 1 in 10, and 17 cwt.* when ascending 1 in 5. It required only 9½ cwt. when descending † 1 in 10, and 6¼ cwt. when descending 1 in 5. It took 7½ cwt. of draught going *empty* up 1 in 10, and 9 cwt. when ascending 1 in 5. The remaining experiments were done on a slope of 1 in 10. The draught, which was 15 cwt. when ploughing 5½ inches deep up that slope, was 17 cwt. when 6½ inches deep, 19 cwt. when 7½ inches deep, and 23 cwt. when 8½ inches deep. It had been 19 cwt. going up with a 7½-inch furrow, and it was 13 cwt. coming down with that furrow. The drag of the slack rope behind the plough coming down hill varied from 2¼ to 4¾ cwt., according as the rope was properly carried on porters or improperly dragged. But on this point subsequent experiments have thrown a much better light.

I may add that Howard's plough, drawn by a capital 2-horse team, took 3½ cwt. to draw it up 1 in 10, and 3 cwt. to draw it down—in each case turning a 5½-inch furrow. Going empty up 1 in 10 it took 1¾ cwt. draught, and ¾ cwt. coming down.

Experiments with the dynamometer elsewhere will be hereafter given.

* The steep part of the field is a lighter soil than the level part above it.

† Pulling also 300 yards of slack rope.

Home Correspondence.

The Game Question.—The letters of Messrs. Mechi and Taylor have reminded me of another plan which many people think will have to be the final one for preserving game in England, and if so it will have the effect of preserving the crops at the same time. This plan is to put a game-proof fence round the coverts and grounds within which the game is to be preserved, and to grow different crops of roots, &c., for their support on lands adjoining the coverts. It is said that one-fourth of the land now despoiled by game would suffice to support them if the crops were allowed to attain their full growth before being eaten by them, and this could be thus secured. The plan would also prevent a great deal of poaching. This plan, it is said, would lead to a limitation of space for game, but would probably increase the quantity of game at the same time. It is argued that deer parks are all fenced in, and that a gentleman has now fenced in a deer forest in Scotland, consequently that game preserves might be fenced in also. *J. P. T.*

Deep Cultivation upon Light Soils.—The paper read by Mr. Burnett at the Kingscote Farmers' Club contains one remark, the truth of which it is most important should be ascertained, to prevent the enormous loss that may ensue from the cultivation of light lands upon an erroneous principle. He observed: "On light soils the advantages of deep cultivation, horse-treading and breaking of the furrow are lost; experience has proved the breaking of the pan formed between the subsoil and the plough, not only useless but ruinous, the best crop being obtained where light ploughing well solidified with the roller or seam presser is practised but the advantages of spring and autumn cultivation would be of the greatest importance." I have not farmed light land for some years, but it was thought at that period advantageous to break up the hard pan, however closely the surface may afterwards have been pressed down. I conclude the reason given for not breaking through this sole, is that the roots of plants might be rendered too dry; the theory being that 100 lbs. of sand will only retain 25 lbs. of water. I hope however you will agree with me in considering the question of sufficient importance to be discussed by scientific and practical men. *Aluminium.*

Cultivation of Undrained Clays.—Does good or harm result from the deep cultivation of undrained strong land? I am aware water cannot be removed in a downward direction by any other means than underdraining, but it is not impossible it may in an upward one, by increased capillary attraction by deep cultivation; if so, the question is, will the first or any subsequent crop be injured? If water do not escape upwards by evaporation, the same quantity, but observe no more, remains in the subsoil after it has been stirred as before; we should therefore know whether by deep ploughing or subsoiling, the temperature of this water is increased. If it be, some good must ensue, as I believe the roots of plants, especially Wheat, travel deeper through land cultivated to a considerable depth. Gardeners will perhaps be able to answer this question, many gardens being undrained—Do they find a better crop upon a strong soil undrained by digging two spits deep or one? I fully appreciate the advantages possessed by cultivators driven by steam-power, but may not some injury be done, especially in wet weather, by the wheels of Fowler's plough, considerable weight appearing to rest upon them even when the ploughs are in the ground? Perhaps Mr. Fowler will say what the amount of pressure and diameter is of each wheel of the plough he is sending to Leeds. *Aluminium.*

Agriculture and Commerce: a Contrast.—The failure of a bank always occasions loss and suffering to individuals, and in an agricultural locality may be supposed to cause great inconvenience to those farmers who are suddenly deprived of access to such portion of their working capital as may be deposited to meet emergencies. The stoppage of Messrs. Yorke & Co.'s bank at Peterborough placed many persons in this calamitous position—that one day they were wealthy and ready to meet any demands that might accrue; the next, they had to sell stock or thresh corn to pay their labourers or meet their most ordinary requirements, consequently the prospect of a rent day occasioned in some quarters an appeal to their landlord for a short delay to enable them to make up their payments. We understand that some of the tenantry of a neighbouring estate—a rich tract of land called Borough Fen, near Peterborough, were so circumstanced, and six weeks' grace to pay their Lady Day rent has been at their joint request accorded, viz., from 17th June to 29th July. So far so good—"a little help," as the steward says, "being worth a deal of pity;" but not content with granting a moderate favour to a respectable body of old tenants, who perhaps at no former time sought for a similar indulgence, he seems to grasp at the opportunity to display the utter dependence of these farmers on their landlord; and notwithstanding the pretences of the mutual interest of landlord and tenant, the flimsy claptrap to stimulate a spirit of improvement, together with a certain humane and religious parade about the welfare of all classes and all peoples, the Steward of this liberal landlord avails himself of this season of calamity to inflict upon the too obsequious and highly flattered tillers of the soil the following unexampled, unfeeling, and inquisitorial passage of a circular sent last week to the sufferers:—"I am also desired to ask you what security you can show or give for future rents? What you propose as to the carrying on of your farm? And with what capital, if you have any, and what liabilities to other people? These you will think plain questions, but I am sure you will receive them in the light they are meant, and you will see the necessity for your landlord to know how you are prepared for future years." Here is a pretty specimen of the sympathy expressed at a time when a generous forbearance, or a kind considerate spirit would be invaluable, would cement the old ties, cheer on the fresh exertions demanded by the exigency, and inspire farmer and labourer with a sense of the reality of friendly relations that ought to subsist among the different orders of society. Turn we to a letter written on the same subject by the member of a commercial firm to a tradesman at Peterborough, and observe which displays more philanthropy, and which recommends itself more to our esteem for charity and real nobility of nature. "We have a letter from Mr. —— this morning, in which he informs us that you have sustained a heavy loss from the stoppage of Messrs. Yorke's bank; allow us to assure you of our sincere regret at the circumstance, and at the same time to beg that, as far as our account is concerned, you will not allow it to put you to any inconvenience." This was entirely unsolicited, but it came from an old and confidential connexion, and its tone of courtesy is worthy of imitation. *J. W., Peterborough.*

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

A Weekly Council was held on Wednesday, the 29th May, the Right Hon. Earl of Powis in the chair; when a communication was read on the successful treatment of Traumatic Tetanus in the Horse, which had been placed at the disposal of the Society by the author, a member of the Royal College of Veterinary Surgeons, who has been upwards of 20 years in practice. The writer states that after he had repeatedly tried in all ways, but with no good result, the system of bleeding, physicking, and blistering, which puts the animal to much useless pain and torture, but which all the professors, books and magazines of the day concurred in advocating, he determined at all risks to alter his treatment; which intention he has carried out with complete success in three cases, the only ones which have come under his management since this resolution was adopted.

He reports these cases with the names and addresses of the owners of the horses, that any one who is disposed to do so may satisfy himself of the authenticity of these cures. The statement is as follows:—

"The first horse belonged to Mr. John Inglis, who has extensive mills, called Brunston Mills, near Edinburgh: this animal when drawing a cart jumped up into a loaded cart before him, and as he came down again, the point of a bolt in the side of the cart tore

open his leg, the wound being about 1 foot in length; he was placed under my charge, and the wound soon healed satisfactorily, but about two weeks later tetanus came on, and I was again called in. I then decided on changing my mode of treatment, and after giving one dose of physic and taking some blood, I had him wrapped from head to tail in large woollen rugs wrung out in nearly boiling water, and placed him in a quiet box, where no person was allowed to go but the attendant, who was ordered quietly to pour a pail of very hot water over his coverings every four hours; he had water to drink if he would, but no opium, no blister, no Hyoscyamus, no aconite, no physic beyond the one dose. In eight days he was as well as ever, and continued so.

"In the second case the horse had belonged to Mr. A. Douglas, an extensive corn-merchant and farmer of Mayfield near Dalkeith. A large tumour grew on the olecranon of this animal, which was probably occasioned by pressure when lying down. (N.B. The streets of Edinburgh are steep, and high heels are used on the horses' shoes). The horse underwent medical treatment, but without effect, and was so unsightly that its owner disposed of it for little or nothing to a customer of his, Mr. Campbell, an extensive brewer in Edinburgh, and it thus came under my charge.

"Suspecting that the tumour was connected with the joint, I declined to use the knife and attempted unsuccessfully to destroy it with caustic; at last the deformity became so great that the horse could not be sent out to work, and I got orders to operate at all risks. I then directed a pair of iron glams to be made about 12 inches long with a screw in each end, for the purpose of closing by pressure the opening into the joint, if any such existed; these were applied and tightened daily; in five days the weight of the tumour was pressing the weight of the under screw into the muscles of the arm. I had then to remove the tumour, weighing nearly 9 lbs.; the glams were soon removed; and the healing of the wound was advancing favourably until about two weeks later, when I received word that the horse was not looking so well, and found that he had tetanus. I then put him under the treatment already described, when he soon got well, and has worked ever since, the part operated upon bearing scarcely any mark or scar.

"Thirdly, Mr. Sheils, of Miles, near Tranent, employed me to castrate a blood horse, four years old, nearly 12 months ago. The operation, at Mr. S.'s particular desire, was performed with glams. The horse was irritable, but the wounds healed well. When he was supposed to be perfectly safe I called one day in passing, and discovered, to my great mortification, that my patient had tetanus; the same treatment which I had before adopted was pursued for a week, when he recovered perfectly, and was taken in May last (1859) to a farm belonging to Mr. Sheils, in the neighbourhood of Newcastle, where he was quite well the last time I heard of him."

AGRICULTURAL: *Cork, April.*—At the last monthly meeting of this Society Professor Murphy said that he lately saw an advertisement to the effect that one thousand bags of blood phosphate manure were about to be sold by auction, and on calling at the place where the auction was held he received a specimen of the manure, together with a printed analysis by Edmund W. Davy, Professor of Agricultural Chemistry to the Royal Dublin Society, but it was not such as would enable him (Prof. Murphy) to arrive at any calculation as to the value of the manure. The analysis was to the effect that 100 parts by weight contained organic matter, together with a small quantity of ammoniacal salts, 32.00; alkaline chlorides, phosphates, and sulphates, 10.80; sulphate, phosphate, and carbonate of lime, together with a small proportion of carbonate and phosphate of magnesia, and a minute quantity of oxide of iron, 19.25; argillaceous and siliceous matter, 9.25; and water, 28.70—100.000. The manure in its present condition, the analysis stated to contain 1.32 per cent. of nitrogen, which was equivalent to about 1.60 per cent. ammonia, which it was capable of yielding to the soil by its gradual decomposition. Now, he having obtained a sample of the manure had it analysed, and he found that it contained little more than a trace of soluble phosphate, and only a very small quantity of bone phosphate; indeed it seemed to him to be a mixture of turf mould and soot. Thinking that Professor Davy had never made any analysis of it, he wrote to him, and received a reply stating that he had analysed a specimen of the manure, but that he did not make a separate determination of the amount of soluble and insoluble phosphates present in it. Owing to the peculiar character of the manure, he found that such determination would be attended with very considerable trouble and a large devotion of time, and that he could not for the small fee he received for its analysis give a more detailed statement of its composition. The price was 5*l.* a ton. There would be a profit on it of 3*l.* or 4*l.* "I therefore think that chemists ought not to issue such an analysis as that; they are calculated to do serious injury to the farming interest."

Farmers' Clubs.

NEWCASTLE: *The Maintenance of Horses.*—The Secretary, Mr. Glover, read letters from practical farmers of the cost of their horses:—Mr. T——, a Tweedside farmer, gave each horse per week 2½ bushels of bruised Oats, at 3*s.* a bushel, 7*s.* 6*d.*; 10 stones of hay, at 4*d.* per stone, 3*s.* 4*d.*; total, 10*s.* 10*d.* Mr. P——, an Allendale farmer, allowed his horses 2½ bushels of Oats, at 3*s.* per bushel, 7*s.* 6*d.*; half a bushel of boiled corn, at 3*s.* a bushel, 1*s.* 6*d.*; 10 stones of hay, at 3*d.* a stone, 3*s.* 4*d.*; total, 12*s.* 4*d.* Mr. C——, a well known Northumberland tenant farmer, found his horses were kept in good condition by the following feed:—2 bushels of Oats, at 3*s.* per bushel, 6*s.*; 7 stones of hay, at 4*d.* a stone, 2*s.* 4*d.*; 7 stones of straw, at 2*d.* a stone, 1*s.* 2*d.*; 2 stones of boiled Beans, at 1*s.* per stone, 2*s.*; total, 11*s.* 6*d.* Another tenant farmer, residing on the banks of the Tyne, gave each horse per week, 3 bushels of Oats, at 3*s.* per bushel, 9*s.*; 18 stones of hay (wasted and consumed), at 4*d.* per stone, 6*s.*; total, 15*s.* A north country farmer, who for the past few years had adopted Mr. Hunting's plan of cutting the hay and crushing the corn, had sent him a statement that his horses cost him now not more than 10*s.* 5*d.* per week, whereas before they cost 13*s.*, being a saving of 2*s.* 7*d.* Upon a calculation of such a saving, they would take a farm of five draughts, with an odd horse, making eleven, so that they had a saving of 28*s.* 5*d.* per week, or 73*l.* 16*s.* 5*d.* per annum; and as it was estimated there were about 2,215,198 horses in the United Kingdom and Ireland, so, if they assumed one-third (728,399) to be entirely employed for farm purposes, they had, at 2*s.* 7*d.* per horse per week, a total of 95,376*l.* 10*s.* 9*d.* per week, or 4,959,579*l.* 19*s.* per annum as the saving the farmers could make in keeping their horses. This was no theoretical notion, but a fact given to them by one of their own order, a tenant-farmer, who had adopted the system, and systematically followed it out at an actual saving of 2*s.* 7*d.* per week.

Mr. Weeks had read Mr. Hunting's paper which Mr. Glover sent them, but he would like that gentleman, and others who might follow him, to tell the farmers how they were to carry out all this. He had no doubt to a certain extent it was all very true, but he would like to learn how they were to get their farm people to do all these things, which were not only to benefit themselves, but also be a national good. He had been summoned to the court by his men for insisting on having these principles put in execution.

Mr. Crisp said he had read Mr. Hunting's published letter, in which he mentioned of not approving of cooking meat. He had known a great number who had commenced cooked food and given it up as being inappropriate and very expensive. Mr. Hunting, it appeared from the letter, insisted on having dry food, and he did that which he (Mr. Crisp) dared say every farmer must very highly approve. He should like, however, to ask him his reasons for these things. Mr. Hunting also placed a good deal of importance upon having the Beans and Tares ground, and mixed with their food. He should like to know whether that was given in the dry state, or as a wash.

Mr. Weeks gave a statement of his experience in the matter, observing that it was some 16 or 20 years ago since he began to take any great interest in farming. At that time he got a small straw-cutter. He cut with it himself. They carried it out for a winter or two, and it was afterwards discontinued. Some three or four years ago they got a more powerful hay-cutter and oat-bruiser; and they now cut and crushed by water twice a week. He saw a pamphlet recently in which it was recommended never to give horses dry food, but always to wet it, if not conveniently with warm, at least with cold water. He tried that, but the men did not like it.

Mr. Wilson was of opinion that the difficulty of carrying out the scheme could only be obviated by having one man to feed the horses. They could not do it by every man feeding his own. At the Royal Agricultural College they had eight or nine pair of horses, and there one man was employed to feed them all. He defied any man to have it done by manual labour; but where they had power, and in Northumberland, where they had steam, it did not cost much.

Mr. Hunting, who attended to give explanations, said the plan of feeding horses which he advocated was guided by certain great principles, the first and most important being that of a mixed diet. The second was governed by the amount of labour the animals had to go through. All other matters, about the advantage or disadvantage of giving dry food or cooked food, were only details. The reason why he gave dry food was because it was in strict accordance with all the great laws governing the physiology of digestion, and the assimilation of that food to the animal system. They tried cooked food at South Hetton and Merton collieries for a long time, and their horses became quite emaciated, because they got their food in a soft state. Moist food was however very proper as a corrective in the principle of feeding. If they fed upon dry food exclusively, their horses became too costive. Everybody knew that the ground mash given three times a week did an immense amount of good. Why? because if they got too much costiveness they interfered with the functions of the animal body itself. The great saving effected was in the mixing of a large quantity of food together, so that every constituent of the body could be supplied at one and the same time.

MONKS KIRBY: *Fences.*—At the last meeting of this thriving Club a good practical paper on the treatment of live fences was read by Mr. West, manager to Lord Denbigh. We give a portion of it:—

The management of Quick fences, so that they may continue to be a fence, as long as any fence is needed, is, in my opinion, all dependent upon the cutting and the dyking. As regards the cutting, presuming there is (as is generally the case) two rows of Quick, my idea is (I am speaking of a good young fence) that one row should be cut entirely off, with the exception of a tie every two yards, which is to be laid in with the layers of the back row, and the back row to be laid a little sloping, so as to allow the stools of the front row to grow. I would also lay as many layers in as possible. In short I would not cut one out, whether weak or strong, and by putting in a few dead stakes at intervals they would be of great service in keeping it steady, and would strengthen it, and would also fix the hedge on the proper slope. I have a great objection to the living stakes being cut half through, for if they are weak the wind often has great power upon them. The next time it is cut I would layer the front row, cut off the back one, and proceed in the same manner as before. By this means the fence would always be young and growing from the surface of the bank. The interval that should elapse between the cuttings depends entirely upon the situations of the fence. If it is between grazing fields, let it grow until the shoots are sufficiently strong to make a strong fence against cattle. If between arable fields, cut it so often that it will be strong enough to fence against sheep, which is a better guide than any given number of years, particularly as fences grow stronger in some localities than others; but in all cases, I prefer cutting and layering to switching with the Scotch hook. In short, I feel convinced that if a yearly cutting of hedges with the hook is persisted in, without the hedge being allowed to grow up to be cut and layered, it will ruin any fence, for the simple reason that the drip in the winter and spring, and shade in summer and autumn, from the thicket on the top of the hedge, destroys every shoot below, consequently the hedge gets bare at bottom, gaps are made, and the whole perishes, and if height is the objection they can be kept tolerably uniform by cutting and layering frequently. There is another point to which I draw your attention. That is, I cannot conceive why, when hedges are cut, the stakes are hacked and split, the layers chopped and nicks cut in them, and the bark pared off here and there. I have often asked the operator, and the reply has been—"It is to make them shoot out." Now, I don't want them to shoot out, but would much rather all their energies were reserved until wanted; it is the front row I want to shoot. The fact is, by this plan of putting both rows into one fence, they are obliged to nick them to get any shoots at all, and the consequence is there is such a thicket of weak useless shoots that they choke each other. Hence the bare fence at the bottom. Therefore, the next time it is cut it has to be laid in from anywhere that a shoot can be found, whether it is half way up the hedge or from a stray sucker half down the ditch, whereas had the hacking and nicking business been omitted, wherever possible, and one row cut entirely off, a row of strong healthy shoots growing in a straight line, and ready to make as good a hedge as it was the first time it was cut, would be the result. Do not suppose that I mean to imply that this theory can be practically applied to every fence we meet with. Old hedges that have been mismanaged are not to be renovated by the first or second cutting, neither is it possible in some cases to adopt this plan at all; but if a fence is not too far gone a steady perseverance in this plan will, I think, go a great way towards keeping it a close bottomed healthy hedge. As regards the dyking, I have but few words to say, but if the soil from the ditch is well put up to the stools that are cut off, and some Thorns hooked on the layers of the back row, it would nourish them and prevent hares and rabbits from biting the young shoots. I beg also to add, that I think this Society, which has done so much good in this locality by the competition it has fostered in draining, ploughing, shearing, and hedge-cutting, would, as regards the latter, confer a further benefit upon the neighbourhood if the prizes were given for the best hedge and dyke, cut upon some fixed rule, which might be decided upon by a majority of the committee of management, that rule having reference to the future as well as the present welfare of the fence. In that case, if all the competitors cut their allotted share upon the same principle, any one could—in after years by comparison of that fence with others in the neighbourhood that were not cut upon the plan adopted by the Club—form their own opinion whether the Monks Kirby Society had adopted the best or worst method.

Notices of Books.

A Paper on Turnip Culture, read before the Oxford Farmers' Club. By Mr. James Sanderson, Land-Agent, 13, Cannon Row, Westminster. Published by the Club; J. Plowman, Secretary and Publisher, 1, St. Aldate's, Oxford.

We call attention to this pamphlet, read as a lecture by a Scottish agriculturist before a body of Midland English Farmers, and received by them with uncommon satisfaction, as an able exposition of the difficulties in the way of Turnip culture, and the best means of overcoming them.

It is only to one branch of his subject that Mr. Sanderson refers in any detail—that in which during the ensuing month English farmers will be especially interested—viz., the preparation of the soil. Under the head of "General Preparation," Mr. Sanderson speaks of Drainage, Liming, Proper Tillage, and High Manurial Condition. Of the direct and special preparation of the soil for Turnips, he writes under the particular headings of Autumn culture, Spring culture, Retention of Moisture, and Artificial Manuring.

Details of farm practice and valuations of costs are given, and explanations of the former are also given whenever necessary. The whole is a capital instance of what an essay to be read by the practical farmer ought to be. We quote a passage on Spring culture:—

"It is well known, as already noticed, that, for the success of a Turnip crop, a finely comminuted surface soil is essential. Small seeds require for their vigorous germination to be embedded in a soil whose particles have undergone the most minute subdivision, besides a fine mould allows the roots of the plant unlimited freedom, and freely absorbs all available nourishment. This mechanical condition of the soil is therefore not only favourable for a vigorous braird, but generally ensures a luxuriant crop. To secure it, it is only necessary to dispense with the plough in spring and substitute the grubber and harrow. No stubborn clods unreduced by frosts, or unyielding furrows,

which impede labour and retard vegetation, are brought by the latter implements to the surface, but a sufficient depth of soil, already in a fine state of division from the action of frosts, is loosened and levelled to afford sufficient earth to form a ridge. Nor is the untouched subsoil a barrier to the success of the coming crop, for, as already shown, the subsoil as left by an autumnal ploughing is of looser texture than when reconsolidated by an over abundance of spring tillage. Nor is this method only practicable on light soils, for the more clayey and tenacious the soil, the greater the necessity of only using surface cultivators. I am cognisant of several extensive clay farms in Northumberland on which the cultivation of Turnips, with the exception of a few fields, was until recently not attempted; but by the recent adoption of the system I am commending, some of these farms are severally now annually producing 150 acres of excellent Turnips; in fact, I believe that in Great Britain there are no soils so plastic and stubborn but could, under proper tillage, raise Turnips.

"But in addition to a fine tilth there is another important advantage which accrues from surface culture, viz., the retaining of moisture. All crops require for their germination and growth a certain degree of moisture, which if withdrawn at any stage they wither and die. Turnips, especially, are invariably most luxuriant in a moist climate. Insufficiency of moisture is therefore as detrimental as excess of moisture, but happily the extremes of both may be prevented, for, as we have seen drainage prevents the one, so surface tillage prevents the other. There are few indeed, if any soils, so deficient of moisture in spring as to prevent vegetation; want of moisture in that season is generally caused by the frequent exposure to the atmosphere of all the surface soil. No means can more effectually dissipate moisture than the frequent inversion of the soil in dry weather; this applies to clayey as well as dry soils. The effects of droughts are indeed more sudden and severe on a rough, cloddy, clay soil than on any description, while, on the other hand, the finer the tilth of the surface soil, the better is it fitted to retain and attract moisture."

STATE OF THE WEATHER—BERKSHIRE.

For the week ending May 30: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain.	Wind	Barometer.
		Max. in sun.	Max. in shade.	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	24 ..	83.2	74.0	41.0	59.8	59.7	..	N.	29.84
Saturday	25 ..	84.0	64.0	38.5	56.2	59.5	..	S.W.	29.63
Sunday	26 ..	68.4	66.0	49.7	58.4	59.0	..	S.W.	29.67
Monday	27 ..	71.6	69.2	46.5	58.4	58.6	..	W.	29.90
Tuesday	28 ..	85.0	71.0	48.4	63.2	59.2	0.07	N.E.	29.92
Wednesday	29 ..	62.0	59.0	44.1	52.3	57.3	0.01	N.	29.82
Thursday	30 ..	87.4	72.0	37.1	58.4	58.0	..	N.	29.77

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Artificial Manure: *Peter Bunn.* A pamphlet by Mr. Moule describes the manufacture of an inodorous fertiliser from clay and night soil (Bradbury & Evans). As to the other substances named—10 of bones, 5 of sulphuric acid mixed in a heap, and the result mingled with 15 of any waste flesh or night soil, and then thrown together and repeatedly mixed and turned over, with 70 or more of moist but friable clay soil, will make the very best of compost, to be used as a dressing at the rate of 10 to 20 cwt. per acre.

Forage Plants: *H. Sney.* The plant you have sent is the *Medicago maculata*, Spotted Medick: it is admitted into the British Flora, but there is reason to believe that it mostly occurs in the arable land as an introduction in foreign seed.

Galvanised Corrugated Iron: *S B.* Will any of our readers give their experience of corrugated iron, unpainted, painted, and galvanised respectively, as roofing?

Grass: *Forester.* The specimen you send is Bromus secalinus, a common agrarian Grass, probably wild in the district, as it is generally diffused amidst corn and other crops, its spread having been accelerated by being so often mixed with seeds: hence Sainfoin, Vetches, and seeds, *i.e.*, mixed artificial pasture, will commonly be found to contain a small quantity, and as it is very prolific the great accession one sometimes meets with is accounted for.

Oilcake: *An Old Subscriber.* Young breeding stock may be profitably fed on some oilcake along with their green food, and, if the pasture be not good, even at Grass; 1 lb. a day towards autumn for a calf, and 2 lbs. a day for a yearling, and on till calving, is an ample allowance.

Poultry.—We have still an increasing supply of poultry at market, and seeing the natural season has now arrived for it to be more plentiful, we may look for lower quotations. It will however be long before it comes in sufficient quantities to make sale difficult, unless extreme heat should happen. In that case freshness often causes less important points to be overlooked:—

	Each.—s.	d.		s.	d.
Large Fowls	4	6	to	5	0
Middling ditto	3	6	,,	4	0
Chickens	2	3	,,	2	9
Goslings	5	0	,,	5	6
Ducklings	2	6	,,	3	0
Levretts	2	6	,,	3	6
Rabbits	1	4	,,	1	5
Wild ditto	0	8	,,	0	9
Pigeons	0	8	,,	0	9

Turnip Seeds: *A Dealer in Seeds.* The sample of which you complain is, we find, very low in germinating power, and is besides full of bits of dirt, derived no doubt from pulling up the plants, threshing all together, and not properly cleaning it, in which, indeed, there would be some difficulty, as the dirt is in little granules, the size of the Turnip seeds. The following is the analysis of counted seeds: Germinated, 68 per cent; the sample contained of the dirt, 12 per cent. of its weight. This is the same sample as was commented upon in Table 3, ex. 9, see article April 20, and it has deteriorated in germinating power—probably as the result of bad keeping.

For Smoking Greenhouses.

NEAL'S PATENT APHIS PASTILS light with a Candle, save all trouble, destroy all Insects, are already used in the Royal and leading Nurseries in England, Ireland, and Scotland, and may be obtained of the principal Seedsmen and Nurserymen, 2s. per packet of six Pastils.

Manufacturer and Patentee, J. Neal, Edward Street, Birmingham.

GISHURST COMPOUND, for preventing and destroying Red Spider, Mealy Bug, Mildew, Thrips, Scale, Green and Brown Fly, American Blight, Ants, &c., and Bed Bugs, contains no deleterious ingredient, is recommended in *Gardeners' Chronicle*, *Cottage Gardener*, *Field*, Mr. Rivers' *Orchard House*, 9th edition, and Dr. Hogg's *Gardeners' Year Book for 1861.*"

Red Spider Magnified.

Full directions for use and particulars of the experience of many great Gardening authorities are enclosed with the boxes of Gishurst. These are supplied retail through any Nurseryman and Seedsman at 1s., 3s., and 10s. 6d. each, wholesale, by Price's Patent Candle Co., Limited.

If the smell be disliked, make the solution 48 hours before use.

NEAL'S PASTILS for Destroying Insects in Greenhouses.—The Sole Agent in Birmingham (appointed by Mr. Neal) to supply the above Retail is Mr. Cottrell, Seed Merchant, 15, Bull Ring, Birmingham. 1s. and 2s. per packet. Stamps required.

No more Mildew.

JOHN BELL'S COMPOSITION for destroying Mildew on Vines, Peach and Nectarine Trees, &c., made and sold only by John Bell, in bottles, 1s. 6d., 2s. 6d., and 4s. each, at his Seed Warehouse, 10 and 11, Exchange Street, Norwich. A 1s. 6d. bottle is sufficient to make 12 gallons.

Genuine Roll Tobacco Cloth.

Warranted equal in Strength to Tobacco.

JOSEPH BAKER, 10, Gough Square, Fleet St., E.C., having dealt upwards of 20 years in the above, can recommend it as the best article for destroying the Fly. 1s. 4d. per lb.; over 10 lbs., 1s. Post-office Orders payable Fleet Street.

KEATING'S PERSIAN INSECT DESTROYING POWDER.—Poultry, Dogs, and Plants, are effectually freed from Fleas and all other Vermin with which they are infested, by the above Powder, which is quite harmless to animal life. The Farmer, the Gardener, or the Sportsman, will therefore find it invaluable. Bugs, Cockroaches, Beetles, Moths in Furs, and every other species of Insect are also instantly destroyed.

Sold in Packets, 1s., 2s. 6d., and 4s. 6d. each, or post free for 14, or treble size for 36 postage stamps, by Thomas Keating, Chemist, 79, St. Paul's Churchyard, London, E.C.

IRON HURDLES, FENCING, AND GATES, made of superior iron, in the best manner, at moderate prices. Illustrated Catalogues free of Cottam & Co., 2, Winsley Street (opposite the Pantheon), Oxford Street, W.

N.B. Cottam & Co.'s only address in London is 2, Winsley Street, W.

PAGE'S BLIGHT COMPOSITION.

Extra strong, 4s. per Gallon, sufficient to make Four fit for use. Ten Gallons and upwards, Carriage Paid to London.

NINE YEARS' extensive manufacture has enabled Page & Toogood to effect great improvements in their Blight Composition. It is prepared upon Chemical principles, to destroy SCALE, THRIP, MEALY BUG, RED SPIDER, MILDEW, AMERICAN BLIGHT, &c., without injuring vegetation.

From Andrew Toward, Esq., *Royal Gardens, Osborne Palace.*

"I have great pleasure to add my testimony to the efficacy of your Blight Composition, which has been used with great success upon Rose trees much affected with the green fly."

From Mr. W. Poole, *Gardener to the* Right Hon. the Earl of Aylesford, *Packington Hall Gardens.*

"I have given your Blight Composition a fair trial upon Peach and Nectarine trees, and gladly bear testimony to its efficacy in destroying all insects without the least injury to the foliage.

"Your Composition has again proved very satisfactory, so far as thrip, green fly, and spider are concerned. Bug we do not patronise here, or I should have tried it upon them long ago; still, I cannot conceive why it should not prove fatal to bug as well as the other pests mentioned."

From S. Snow, Esq., Earl de Grey, *Wrest Park.*

"Please forward me another 10-gallon cask of your Blight Composition. I have found it answer the purpose exceedingly well.

"As to the aphis and other insects which attack the trees, I consider your Composition cannot be too highly recommended for it. I have used it in my Peach houses this season with the greatest success. My trees were very much infested, and by two or three dressings they assumed quite a vigorous appearance."

From Frederick Malleson, Esq., *Royal Gardens, Claremont.*

"I find it answer the purpose in all respects for walls, also for green fly and brown scale in the houses. I have no occasion to try it any other way as yet."

From Mr. E. Butcher, *Gardener to the* Right Hon. Lord Jersey, *Middleton Park.*

"I am much pleased with the Composition; it far exceeded my expectations."

From Henry Bailey, Esq., *Nuneham Park, Oxford.*

"I have found it most effectual in destroying the black fly on Cherries, but it requires to be used in a less diluted state than you recommend. It is, however, a valuable boon."

From J. Forbes, Esq., His Grace the Duke of Bedford, *Woburn Abbey.*

"I have much pleasure in bearing testimony to the valuable qualities of Messrs. Page & Co.'s Composition, which I have found very efficacious in destroying the green fly (or aphides), on the young shoots of Peach trees, as well as those of the Rose, when liberally syringed with the mixture."

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REDUCED TARIFF FOR HORTICULTURE, PICTURES, AND DWELLINGS.

ORCHARD-HOUSE SIZES. Supplied to Mr. Rivers and many others.

In. by In.		16 oz.	21 oz.
20 .. 12			
20 .. 13	Common, per 100 feet,	13s. 6d.	18s.
20 .. 14	Super ,,	16s.	23s.
20 .. 15			

SMALL SQUARES.

In. by In.	In. by In.	Per 100 feet.	Per foot.
6 .. 4	8 .. 6	Common	1½d.
6½ .. 4½	8½ .. 6½	11s. 6d.	1¾d.
7 .. 5	9 .. 7	Super.	
7½ .. 5½	9½ .. 7½	12s. 6d.	

SQUARES IN 100 AND 200 FEET BOXES.

Inches by Inches.	Inches by Inches.	Inches by Inches.	Inches by inches.	Inches by inches.		P. 100 feet.	P. foot.
10 .. 8	12½ .. 9½	13 .. 10	15 .. 10	13½ .. 11½	4ths.	12s. 6d.	[illegible]
10½ .. 8½	13 .. 9	13½ .. 10½	12 .. 11		3ds.	14s. 3d.	[illegible]
11 .. 9	12 .. 10	14 .. 10	12½ .. 11½	14 .. 11	2ds.	18s.	[illegible]
12 .. 9	12½ .. 10½	14½ .. 10½	13 .. 11		1sts.	21s. 6d.	[illegible]
15 .. 11	15 .. 12	16 .. 13	24 .. 14	24 .. 16	4ths.	13s. 6d.	[illegible]
16 .. 11	16 .. 12	17 .. 13	20 .. 15	20 .. 17	3ds.	16s.	[illegible]
17 .. 11	17 .. 12	20 .. 13	22 .. 15	20 .. 18	2ds.	19s. 8d.	[illegible]
18 .. 11	18 .. 12	22 .. 13	24 .. 15	.. ..	1sts.	24s.	
13 .. 12	20 .. 12	20 .. 14	20 .. 16	.. ..			
14 .. 12	22 .. 12	22 .. 14	22 .. 16	.. ..			

If less quantity than 100 feet is taken, a moderate charge made for package.

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16 oz.—4ths, 1¾d., 2d., and 2¼d. per foot. ,, 3ds, 2¼d., 2½d., and 3d. per foot.

21 oz.—4ths, 2¾d., 3d., and 3½d. per foot. ,, 3ds, 3½d., 4d., and 4½d. per foot.

HARTLEY'S IMPROVED PATENT ROUGH PLATE.

Not accountable for breakage.

GENUINE WHITE LEAD	32s. 0d. per cwt.	
ANTI-CORROSION PAINT	34 0 ,,	
LINSEED-OIL PUTTY	8 0 ,,	
LINSEED OIL	2s. 7d. per gall.	
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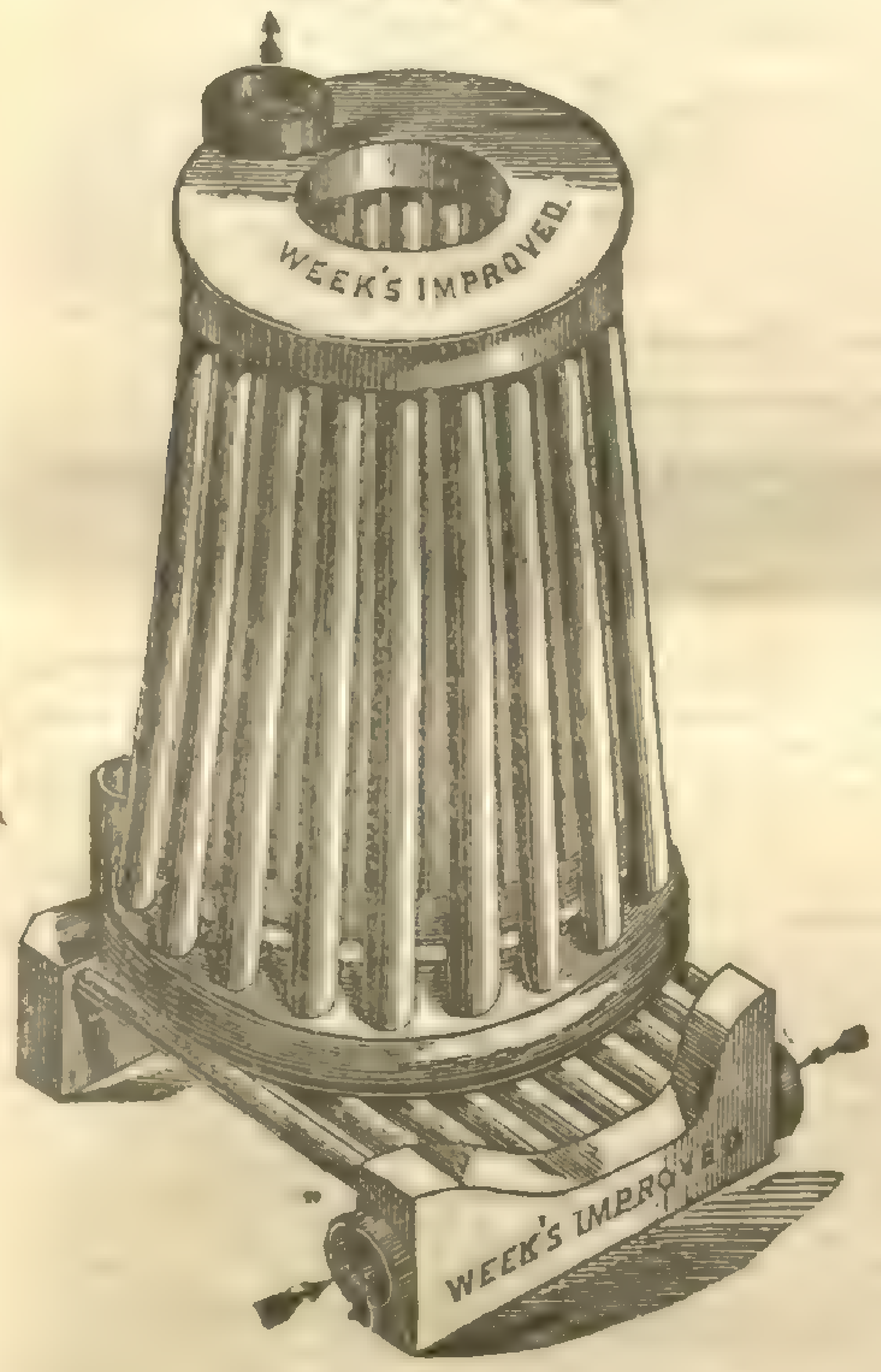

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TO

HER MAJESTY THE QUEEN,
H.R.H. PRINCE CONSORT,
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THE ROYAL HORTICULTURAL SOCIETY OF LONDON,
THE ROYAL BOTANIC SOCIETY, REGENT'S PARK,
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FIG. 5.

The prices of Lean-to Houses complete are as follows:—

	8 ft. Lights	10ft. Lights	12ft. Lights	14ft. Lights	16ft. Lights
20 7 in length	£12 0 0	£16 0 0	£21 0 0	£28 10 0	£34 5 0
31 3 in length	16 10 0	21 2 6	26 10 0	37 12 0	45 16 0
41 11 in length	20 18 0	26 18 6	33 7 6	46 14 0	57 7 0
52 7 in length	25 12 6	32 15 0	40 5 0	55 16 0	68 18 0
63 3 in length	30 6 0	38 10 0	47 2 6	64 18 0	80 10 0
73 11 in length	34 12 6	43 15 0	53 7 6	74 0 0	92 0 0
84 7 in length	39 6 0	49 11 6	60 5 0	83 2 0	103 11 0
95 3 in length	43 19 0	55 10 0	67 2 6	92 5 0	115 2 0
105 11 in length	48 17 6	60 12 6	73 10 0	101 10 0	126 13 0

The prices of the Span-roofed Houses, with Water-troughs, Doors, and Ends complete, are as follows:—

Ft. In.	8 ft. Lights	10ft. Lights	12ft. Lights	14ft. Lights	16ft. Lights
20 7 in length	£24 0 0	£32 0 0	£42 0 0	£57 0 0	£68 10 0
31 3 in length	33 0 0	42 5 0	53 0 0	75 4 0	91 12 0
41 11 in length	41 16 0	53 17 0	66 15 0	93 8 0	114 14 0
52 7 in length	51 5 0	65 10 0	80 10 0	111 12 0	137 16 0
63 3 in length	60 12 0	77 0 0	94 5 0	129 16 0	161 0 0
73 11 in length	69 5 0	87 10 0	106 15 0	148 0 0	184 0 0
84 7 in length	78 12 0	99 3 0	120 10 0	166 4 0	207 2 0
95 3 in length	87 18 0	111 0 0	134 5 0	184 10 0	230 4 0
105 11 in length	97 15 0	121 5 0	147 0 0	203 0 0	253 6 0

If only one end is required a corresponding deduction will be made. The 14 and 16 feet lights are made stronger than those of less dimensions.

The above prices do not include package, railway freight, heating apparatus, or erection.

ILLUSTRATED CIRCULARS WITH LISTS OF PRICES CAN BE HAD ON PREPAID APPLICATION TO

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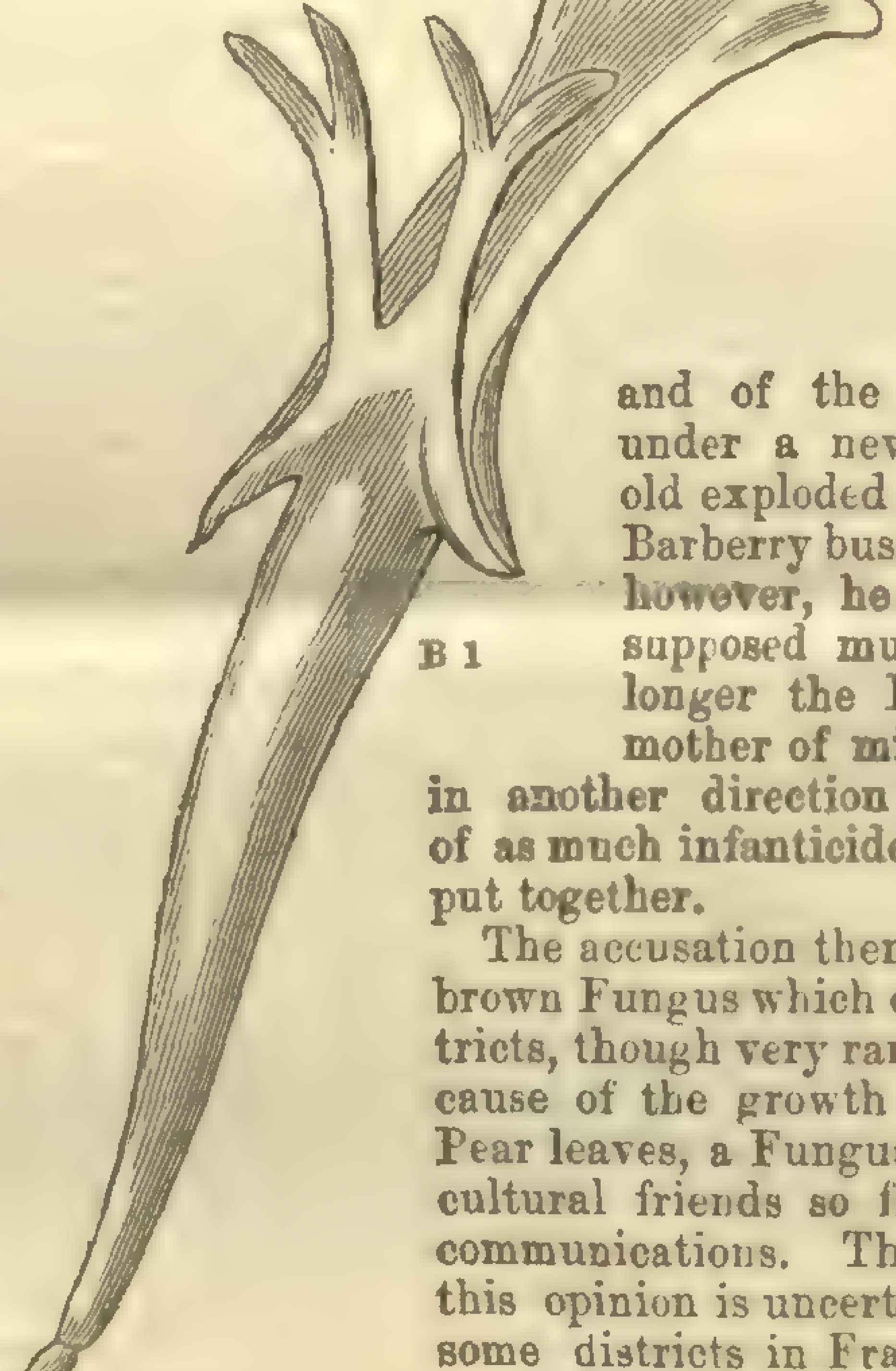
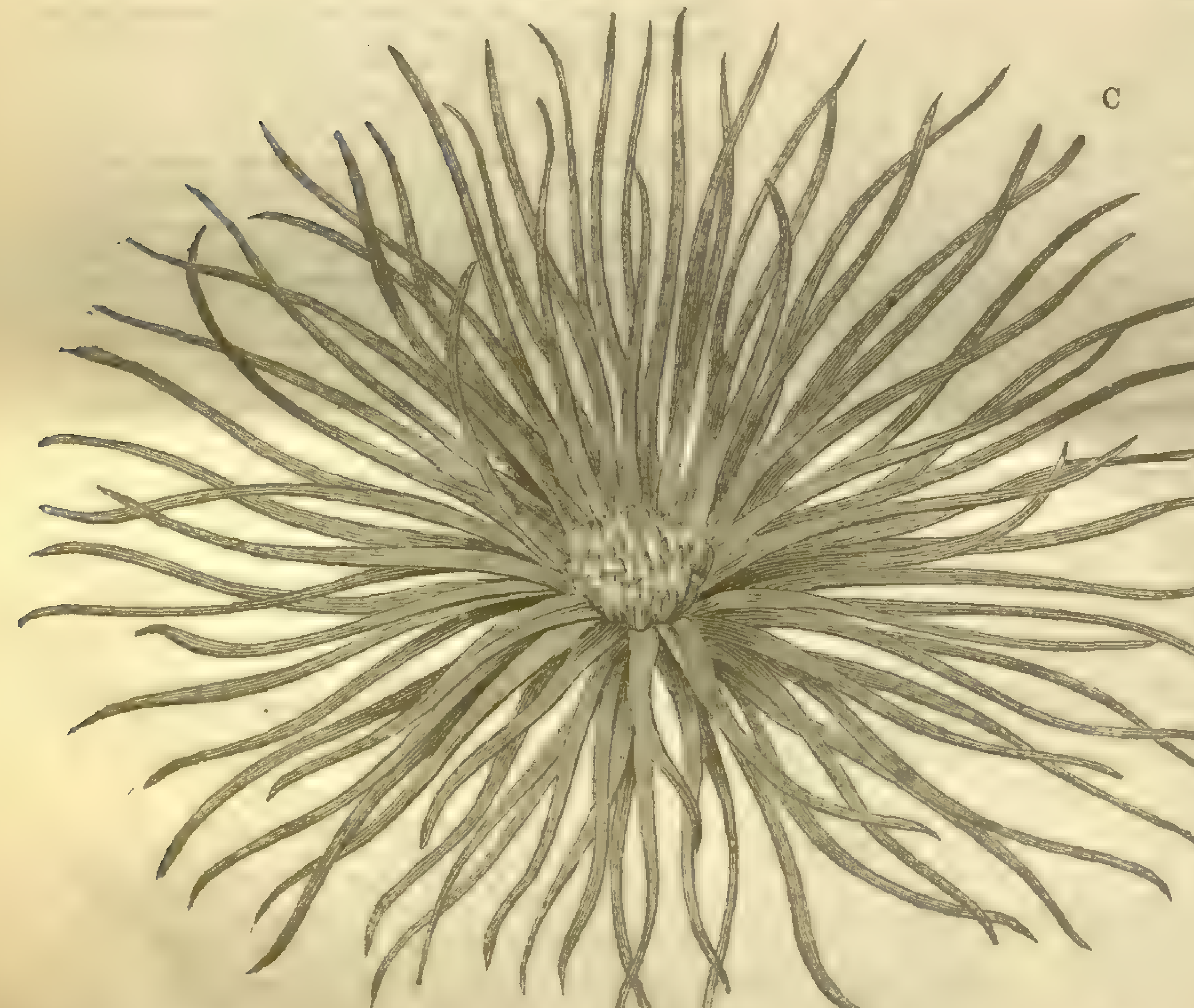
A

B



B 1



C

double, Daisy-flowered, Anemone-flowered, and Pompones, seemed to represent all that this class of plant was likely to afford. But it is not so. Mr. VEITCH has sent home two other very distinct forms, evidently the representatives of many a beautiful production yet unborn. The accompanying figures, A B C, of the natural size, drawn by Mr. FITCH from the dried flower-heads, will show Chrysanthemum growers that quite a new field is about to be opened to their skill.

A and B represent the same form, the two varieties differing only in colour and size. Their peculiarity consists in the ligulate corollas being all, or nearly all, drawn out into extremely narrow sharp terminations now and then inclining to fork. These may be called STAR CHRYSANTHEMUMS.

B is quite of another kind, close headed, incurved, with all the corollas divided into two irregular unequal lips as is shown by the magnified figure B 1. It represents what may be called DRAGON CHRYSANTHEMUMS, in allusion to their ugly yawning jaws.

We have no further information about them, but as live plants have reached Messrs. VEITCH & SON we may expect to see them at our next autumn shows.

A SHORT paper has just appeared in the Journal of the Imperial Society of Horticulture at Paris, by M. LECOQ, a correspondent of that Society and of the French Institute, reviving under a new form something like the old exploded notion of the influence of the Barberry bush on Wheat mildew. Though, however, he speaks incidentally of their supposed mutual dependence, it is no longer the Barberry bush which is the mother of mischief, but the Savin, which in another direction has been guilty probably of as much infanticide as the whole Pharmacopœia put together.

The accusation then is this, that the gelatinous brown Fungus which occurs frequently in some districts, though very rarely in others, on Savin, is the cause of the growth of *Rœstelia cancellata* upon Pear leaves, a Fungus respecting which our horticultural friends so frequently make inquiries or communications. The first person who broached this opinion is uncertain, as the accusation has in some districts in France been as popular as that against the Barberry; but of late the Abbé BLAIS and M. MASSÉ have formally asserted the fact, and have supported it by some supposed inoculation of the *Rœstelia* from the spores of the *Gymnosporangium*, the Fungus of the Savin. The obvious objection that Pear rust and Wheat mildew are equally abundant and virulent, where neither a Savin nor a Barberry bush are to be found, is met by the supposition that though the Fungi in question take their origin from the Savin and Barberry, yet when once established they are capable of propagation by their own spores. This notion is sustained by the supposed analogy of intestinal worms and flukes. M. LECOQ has however entirely mistaken the nature of the changes which take place in those animals. There is no transformation, or as it is sometimes called, transmutation of species, but as the butterfly is first a larva, then a pupa, so the intestinal worm or fluke pass through different stages in different positions, till the cycle is complete. And even supposing multiplication to take place in any case by the production of gems, analogous to the little bulbs which are formed on the stem of a *Begonia*, there is not a pretence that any especial condition of a species can be indefinitely prolonged by sexual propagation, without reverting to the original type. Metamorphosis in the physiological sense of the word, as generally used by botanists and zoologists, is a very different thing from transformation, however similar they may be as to their etymology. Petals for example are metamorphoses of leaves, but if the leaves became liverworts, we should have a case of transformation.

There is not however any ground in the present case, beyond mere conjecture, and the delusive experiment of inoculation has little weight except after frequent repetition, and the most perfect proof that there was no indication of the Fungus on the Pear tree before inoculation. There is, however, a matter which

greatly invalidates Monsieur Lecoq's confirmation of the theory adduced, namely, that he is clearly not well acquainted with the objects which he has taken in hand. The *Æcidium* of the Barberry is remarkable for its very elongated peridium, and in consequence he has clearly confounded it with *Rœstelia cornuta*, which agrees with it principally in this character, though had he compared the two he would have found that there are essential differences in more than one particular. Till therefore he can produce a specimen of *R. cornuta* actually growing on the leaf of the Barberry, about which we are more than sceptical, we must decline to accept his authority on the subject. It would be very unwise to deny the possibility of the one plant being a modification of the other, but the question of probability is quite different.

The matter, however, is rather of theoretical than practical importance in this country. The Savin is by no means so universally grown as to make it an object of fear, were its neighbourhood really as dangerous as is supposed, and we have the pest itself in such abundance where no Savin exists, that our efforts need not be directed to destruction of Savin bushes, like those of the remorseless farmers, who in their ignorance and fears for their Wheat crops have rooted up in some districts one of the greatest ornaments of our hedgerows. As we have stated under No. XLVIII. of our notices of Mycology, the proper remedy is to pick the leaves off carefully and burn them. If this will not do, we may feel secure that an onslaught against the poor Savin bushes will not avail us. *M. J. B.*

So much inconvenience has been experienced at the Berlin Gardens in consequence of bad packing that M. Bouché, the intelligent Superintendent, has published a set of rules for the direction of correspondents. They would certainly be not altogether superfluous in our own country, though nurserymen do not in general err in this direction; we have therefore thought it worth while to give a translation of them.

We take this opportunity, though the case is not precisely the same, of recommending persons who transmit to us specimens for examination, or to ascertain their name, to exercise a little more care in packing. The great object is to secure them so firmly in the box which contains them that they may not rub against the sides. Valuable specimens are often completely spoiled or rendered unfit for accurate examination from being put up loosely without anything to secure them. Firm but judicious stuffing with dry clean Moss will generally protect even the most delicate objects from injury.

Another point is to damp the packing as little as possible. The mere moisture of the object, where there is no exit for evaporation, will in most cases be sufficient to prevent injurious withering. Destructive mouldiness or direct decomposition is sure to spring from superfluous moisture. Nor must the evil of cotton wool be overlooked. This is one of the worst substances employed by packers for the post office, if placed in direct contact with the object sent. If the latter is first covered by tissue paper and *afterwards* set fast or guarded with cotton wool, then we have nothing to say against the use of wool.

To the collector or to the botanist in general a good system of packing is indispensable. The finest collections may be ruined from want of skill or from mere carelessness, as every working botanist knows too well. In this as in the former case the great principle is to secure everything from motion, and if this be done the injury after the most distant voyage will be almost infinitesimal.

Cautions respecting Packing, by M. C. Bouché, Inspector of the Botanical Garden at Berlin.

1. It is a bad practice, when a plant is packed, to take the wooden tally from the side of the pot and to put it with the plant, without first wrapping the plant in Moss, as both the roots and stem are liable to be injured by its pressure. If sticks are placed in the soil in addition to the main support, they should be quite smooth to prevent injury to the roots in thrusting them into the soil or removing them.

2. Tallies are often left against the edge of the pot without taking care to tie them. If they fall out during the journey, as is not unfrequently the case, they may injure the plant, or if there are several varieties in one package, confusion of names may easily occur.

3. When woody plants are transmitted, the hard tallies are often fixed at one end only, the other rubbing against the plant. Parchment tickets are therefore far preferable to wooden tallies, or if tallies are used they should be painted to show the names distinctly, and fixed with string to anything except the plant itself. If a stronger stick is necessary, it should be placed in the hole from whence the first was taken. If several small sticks are requisite to support a paper envelope, they should be secured in the Moss and not plunged into the soil. After the plant is packed no stick should ever be thrust into the Moss, as the packing may be forced inwards and injure the plant.

4. Gardeners are often stingy about packing. They not only use old Moss which is partially decomposed, but they substitute hay, leaves, or other matters. If moist they are liable to heat, and in consequence the plants cast their leaves soon after they are unpacked. Delicate plants are from the same practice sometimes destroyed by mould. If the journey is short, much is left to chance. Unexpected delays however frequently take place at railway stations, &c. Moss should be clean and fresh. The best is *Hypnum fluitans*, or different species of *Sphagnum*. Moss from trees is seldom advisable.

5. Moss should be neither too dry nor too moist. If the plants are well watered before being packed, the Moss requires only to be just moist enough to prevent its breaking under the hand. The Moss in contact with the stem or leaves should be dry. It is sure to become damp enough during the journey.

6. The soil should never be too moist or too dry. It should not be watered at the time of packing; or the roots may rot. The best way is to moisten it an hour before packing. Plants should never be watered after they are packed.

7. Plants should never be sent in summer simply in contact with each other; the pots or the masses of soil should be kept apart by cross sticks nailed at either end, and the interstices filled up with Moss. Without these precautions they are often displaced and injured.

8. In the case of novelties or rarities, plants are too often sent out before they are established, and disappointment thus ensues. The delay of a few weeks is preferable to the chance of injury from too hasty transmission.

9. In the case of fruit trees or shrubs, more pains ought to be taken in removing the plants from the soil. The roots are often so damaged, or so devoid of rootlets, that success is very uncertain.

Finally, packing ought not to be trusted to inexperienced hands.

THE REV. PROFESSOR HENSLOW.

(*Concluded from p. 528.*)

With the exception of Cambridge, no town owes so deep a debt of gratitude to Professor Henslow as Ipswich, whose unique museum was planned and arranged by him, and made the model of what a local museum should be in a scientific, educational, and popular point of view. He so grouped all natural objects that enough was exhibited to learn from, but not so much as to confuse; and the ingenuity, judgment, and science with which he has done this for all branches of knowledge, have never been even rivalled. To a certain extent the same services have been rendered to the Cambridge Botanical Museum, where however his efforts were frustrated for want of space: at the Royal Gardens, Kew, he has been more successful, and the museums there owe much of their admirable method of mounting, illustrating, and ticketing, together with many valuable objects, to his unequalled talents for such work. His practice throughout life was to give the best of everything to public museums, and to retain duplicates only for himself.

The Great Exhibition of 1851 deeply interested him, and there were few departments of it with the contents of which he was not perfectly familiar. To the succeeding Exhibition at Paris he communicated a most beautiful series of Carpological illustrations, which excited the enthusiasm of the Paris botanists, and of which a duplicate set is now in the South Kensington Museum; where also are sold his admirable botanical diagrams for schools, with a little guide to their use, and his method of teaching botany in schools.

For a considerable period of his life he worked with zeal at British antiquities, in which he became learned and expert, himself opening several tumuli, the contents of which he described in two tracts with illustrations. The fragments of glass, pottery, and Samian ware from these and other quarters, some of very large size, were all neatly and accurately restored by his own hands, and the best presented to the museum of Colchester.

Every room of his large rectory, from hall to attic, presented a marvellous assemblage of instructive objects of interest, beautifully mounted with descriptive labels, to attempt conveying any idea of which would be utterly hopeless; besides botanical and zoological specimens, economic, physiological and structural, without end, there were series illustrating many important arts and manufactures of savages and civilised beings, ancient and modern:—linen, cotton, shoes, hats, candles, glass, pottery, silk, &c., all beautifully packed in boxes, and ready for use when needed. Fossils, antiquities, models of ships and machines, orreries, microscopes, weapons, crystallographical series, and philosophical apparatus of all kinds; besides diagrams, drawings, and classified woodcuts, of which he had literally thousands, mounted and instructively arranged in classes; and all independent of his library and excellent British entomological, conchological, and tertiary fossil collections. Let it not be supposed that these were the miscellaneous hoardings of a mere collector; there was not one specimen that had not attached to it its history, nor that was not obtained and mounted for a purpose, and that was not in use at one or other of his frequent lectures, or placed at the service of his scientific friends.

Tertiary geology and the recent changes of the earth's surface before and since man's appearance, had perhaps a more absorbing interest for Prof. Henslow than any other subject. Few persons more deeply studied and more boldly preached the Bible, or more staunchly upheld the doctrines of the Church of England; but he ever maintained the necessity of appealing to the spirit rather than to the letter of the written Word, in all cases where the established facts of science appeared to contradict the text of Scripture. In spiritual matters he avowed the total insufficiency of human reason unaided by revelation; but having witnessed many changes of theological opinion brought about by progressive discoveries in history and science, he was very averse to speculative reasoning where these were not in apparent harmony with Revelation.

His charity was nowhere more conspicuous than in his intercourse with those who differed widely, and often publicly, from himself in religious opinion. He never sought to gloss over these differences, nor did he allow of any misconceptions with regard to their true nature, but he never permitted them to influence in the smallest degree his conduct, or to diminish his admiration for what was honest and good, wherever he found it. Hence he discussed such polemical questions as the age of the globe, the origin of species, &c., with such ingenuous forbearance, that inquirers of all denominations and professions turned to him for a calm and unprejudiced judgment.

As may be supposed the flint implements in the drift deeply occupied his attention: on first hearing of them (their human origin he never doubted), he was disposed to be wholly incredulous as to their antiquity, and published his opinion on the subject: this was no wonder, considering how many mare's nests of the kind he had seen exposed and himself aided in exposing. Nothing hampered by his avowed scepticism, he with characteristic devotion to truth earnestly took up the subject, twice visited Hoxne, where he had excavations made, which resulted in a modification of his first view; he then visited the pits at Amiens and Abbeville in the autumn of last year, studied the localities and country around, the museums and collections in the neighbourhood, and returned with his views still further modified, though not wholly altered. Up to the time of his last illness he was busy on this subject, comparing his observations with those of others, and studying the results, which he was preparing to lay before the Cambridge Philosophical Society. Of what his final conclusion was, no record has been published; but we believe that he had convinced himself that the flint implements belong to a period long antecedent to that usually attributed to man's existence on the earth, though by no means so distant as some geologists suppose.

But it would be difficult to point out any branch of science in which Professor Henslow did not take an active interest; he attended the first meeting of the British Association, and was ever afterwards a staunch supporter, and frequently an officer of this body; he was one of the first examiners in the University of London, and till his death a distinguished member of its council; he actively aided the Society for the Diffusion of Useful Knowledge, the Ray Club, and the Palæontographical Society, and was a most liberal contributor to the various charities and funds for the relief of the needy members of his own profession, and naturalists in general. To poor authors especially he was a most generous subscriber, nor was he ever appealed to in vain in any cause the justice and expediency of which were duly authenticated.

At several periods he took a most important part in public politics, being an active member of a party who pledged themselves to suppress that system of bribery for which the town of Cambridge was long so justly infamous; and though few of his University and scientific friends sympathised with him on these occasions, his conduct was so typical of his singleness of purpose, firmness of character, and abhorrence of foul play, that this portion of his career cannot be overlooked even in a brief review of his life.

On one occasion in particular, when no one else of sufficient position and character would come forward, he had the moral courage to brave not only the public odium (for which in a just cause he never cared much), but the disapprobation of many of his most intimate friends, and offer himself as the nominal prosecutor in a case of gross corruption. In doing this he was actuated by a feeling of duty to his country; and beyond it he did not interfere; neither attending the trials or committees, nor subscribing to any of the proceedings. The amount of abuse he received may be estimated by the fact that upwards of a quarter of a century afterwards he smilingly pointed out to a friend the words "Henslow, common informer," on the walls in Cambridge, where they are still legible. His services were, however, deeply appreciated at the time, for he received three handsome testimonials, one from the Town of Cambridge, another from the Town Committee for the suppression of corruption, and the third from a committee of noblemen and gentlemen; all alike testify to the perfect disinterestedness,

moral courage, and consummate ability with which Professor Henslow conducted the duties he volunteered for. It has been erroneously stated that he received the living of Hitcham as a reward for these services. Such however was far from the case; he was made aware, indeed, that he was considered entitled to Government patronage, but with conscientious disinterestedness he declined to avail himself of the offer. On the death of the previous rector of Hitcham he was recommended by the Bishop of Ely (formerly tutor to Lord Melbourne) as being the man who, in that prelate's opinion, was best calculated by his ability, activity, and common sense to reform that populous, remote and woefully neglected parish, where the duties of squire, magistrate and rector must all fall upon the latter.

Amongst the most remarkable instances of a direct benefit conferred upon agriculture through scientific knowledge was his discovery of the use of the phosphate nodules which abound in the tertiary formations of the Eastern counties. On the discovery of the nature and origin of those petrified animal remains, their value to the farmer was instantly apparent to Professor Henslow, who at once gave his discovery the widest circulation in the local papers, without reservation of any kind; claiming no credit, no reward, no consideration even as the discoverer. This was indeed heaping coals of fire on the farmers' heads, to whom this discovery continues to be a source of incalculable wealth, large areas of Norfolk, Suffolk, and other counties, being now honeycombed with phosphate pits; yet up to the day of Professor Henslow's death, no acknowledgment even was vouchsafed of his services. In the same liberal spirit he printed and circulated his volume of letters to the farmers of Suffolk, which pointed out and stimulated them to use methods which have largely increased the products of their holdings.

Though the professional career of Professor Henslow as the spiritual guide of his parishioners is a subject unsuited to our columns, yet it is right to state that his duties as pastor superseded all others in his estimation; and though they were eclipsed in public opinion by his more conspicuous labours, and though he had the greatest aversion to a parade of religion, he was ever assiduous in spiritual duties—so much so that for fifteen years he was not absent from Hitcham for a single Sunday.

But want of space forbids our going further into the philanthropic or scientific career of this most amiable, learned, and excellent man; a volume might be filled with the incidents of his ever busy and well spent life, during which he was incessantly occupied for others rather than for himself, and with anecdotes of his noble qualities of head and heart. We can only allude to his efforts, not completely successful until near the close of his life, to established in Cambridge the scientific tripos and degrees in science, and to develop the University Herbarium and Botanical Garden, with their Library and Museum, to which he for 30 years very largely contributed from his private means, and to which he gave all his own botanical collections. To the University his loss is as disastrous as it is irreparable; whether as a member conspicuous for his varied accomplishments and genial nature, or as a teacher, and most especially as not only the best, but the only man altogether qualified to direct the scientific, educational, and practical arrangement of its new museum.

During the last few years of Professor Henslow's life his health had become seriously impaired; incessant mental and manual labour, habitually protracted beyond midnight, and the want of proportionate daily exercise, gradually undermined his once robust constitution; though he was always abstemious and temperate in every respect. About five years ago he complained of considerable derangement of lungs or heart, which was attributed by his medical attendants to defective digestion. In March of the present year, though feeling far from well, he left home to pay some visits in the south of England, where he caught a violent cold, which was followed by bronchitis and congestion of the lungs and liver, which alarmingly aggravated his heart symptoms. He returned to Hitcham on the 24th, when he rapidly grew worse, and was soon confined to a bed of protracted suffering, which he never quitted till his death on the 16th of May.

Prof. Henslow desired to be interred in the churchyard at Hitcham, and that his funeral should be of the simplest description, and none but his parishioners employed; his wishes were strictly attended to, but a considerable concourse of strangers found their way to that remote village, and, together with a deputation from the town and corporation of Ipswich, paid their unobtrusive tribute to the memory of one whose rule of life was the motto of his family—"Quod videris esto."

THE GORILLA.

Our African explorer says of this ape, that "his short and slender legs are not able firmly to sustain the vast body. They totter beneath the weight, and the walk is a sort of waddle, in which the long arms are used in a clumsy way to balance the body and keep the ill-sustained equilibrium." Page 434.

Let us turn to page 350, where he informs us that "no animal is so fatal in its attacks on man as this, for the reason that it meets him face to face, and uses its arms as weapons of defence, just as a man or prize-fighter would."

Say, how would the Gorilla, so weak, so tottering, and so crippled, dare to meet a warrior-man face to face, when, according to our traveller's own statement, its legs are too weak to sustain the vast body without the assistance of the arms, which in that case would have other ample employment in sparring and fisticuffing? At page 58 he tells us that the "Gorilla is literally the king of the African forest." What a sorry sovereign! Moreover, he tells us that it performs other feats with its arms and hands, notwithstanding that without the aid of these arms and hands its short and slender legs cannot do their duty. Thus, this tottering cripple can break a gun-stock, bend the barrel, kill a man and tear out his bowels. In the meantime I ask, what becomes of the huge superimpending body, whilst the frail legs are giving way beneath the weight? Out upon such nursery fables.

Mr. Du Chaillu's admirers and supporters (so well known for their acquirements in orthodox zoology), ought to say to him, Good sir, place your Gorilla in a tree, and then you will see immediately that your crippled, and tottering, and waddling ape suddenly becomes a steady and an active animal amongst the branches, perfect at all points; and is no longer a "bungled composition of Nature," as the celebrated Buffon said of the sloth, when he viewed it on the ground, instead of looking at it whilst in a tree—its real and only place of abode, on account of its most extraordinary formation by the unerring hand of Nature. See my "Wanderings."

Satisfied in my own mind (after having paid attention to the monkey-family for upwards of half-a-century) that apes pass their lives in trees, I am astonished to learn that the veritable apes which Mr. Du Chaillu fell in with during his travels, should always have been roaming at large over the ground. I come to the conclusion that he must have been labouring under ocular delusion, and that he saw phantoms.

Be this as it may. I am borne out in my conjecture by the traveller himself; for at page 434 he says that the Gorilla which had been killed "was like a very devil."

If the book is to go into a second edition, I would advise the compilers of it to sweep away with unsparing hand nearly all those parts of natural history which have already appeared in the first. They are a disgrace to zoology.

Were I to hazard a conjecture, I would presume that by the descriptions and figures which Mr. Du Chaillu has given us of the Gorilla—he has never seen a live one. *Charles Waterton, Walton Hall, June 8.*

Home Correspondence.

Roasted Forest Trees.—Having cut down a considerable number of trees in the spring of 1860 on the sides of the drive to my house, for the purpose of making openings here and there, but leaving some in groups and many fine Beech, &c., I was very much provoked to find, upon looking at some of them, that the bark was full of cracks, and fell off when touched. The branches of those taken out were burned, but as the openings were sufficiently large no damage could have been done if the least care had been taken, but the forester, in order to save himself and others employed the trouble of removing the branches a few yards, set fire to them quite close to the growing trees, and hence the bark was scorched on one side and falls off by the slightest touch. What would you advise me to do in order if possible to hasten the growing on of the bark, or should the trees be taken out and replanted, as without bark they have a very unsightly appearance? Is not the forester deserving of punishment for such gross negligence? *A. C. B.* [If the liber or inner bark of these trees is really destroyed all round they cannot recover. If it is only the outer rind that has been roasted alive the trees will get over that. Wait and observe.]

Fertilisation of Vincas.—I do not know whether any exotic Vincas seed, or whether gardeners would wish them to seed, and so raise new varieties. Having never observed the large Periwinkle or Vinca major to produce seed, and having read that this never occurs in Germany, I was led to examine the flower. The pistil, as botanists know, is a curious object, consisting of a style, thickening upwards, with a horizontal wheel on the top; and this is surmounted by a beautiful brush of white filaments. The concave tire of the wheel is the stigmatic surface, as was very evident when pollen was placed on it, by the penetration of the pollen-tubes. The pollen is soon shed out of the anthers, and lies embedded in little alcoves in the white filamentous brush above the stigma. Hence it was clear that the pollen could not get on to the stigma without the aid of insects, which, as far as I have observed in England, never visit this flower. Accordingly, I took a fine bristle to represent the proboscis of a moth, and passed it down between the anthers, near the sides of the corolla; for I found that the pollen sticks to the bristle and is carried down to the viscid stigmatic surface. I took the additional precaution of passing it down first between the anthers of one flower and then of another, so as to give the flowers the advantage of a cross; and I passed it down between several of the anthers in each case. I thus acted on six flowers on two plants growing in pots; the germens of these swelled, and on four out of the six I have now got fine pods, above 1½ inch in length, with the seeds externally visible; whereas the flower stalks of the many other flowers all shanked off. I wish any one who wishes to obtain seed of any other species that does not habitually seed would try this simple little experiment and report the result. I shall sow the seeds of my Vinca for the chance of a sport: for a plant which seeds so rarely might be expected to give way to some freak on so unusual and happy an occasion. *Charles Darwin, Down, Bromley, Kent.*

Diseased Oaks.—On coming to this part of the country ten days ago, I have observed in the hedgerows and find in the plantations the same result—that the Oak trees are to a great extent blighted, and in many cases the under branches are dead. It is not general, as you will find in the same plantation two or three with the leaves not on, and those beside them in good health and the sap flowing freely. I observe the last year's wood in a great many cases dead, owing to the sap not having been formed into a woody substance before the severe winter set in. A great many of the trees I find are beginning to send out small shoots from the boles of the trees within these few days. I observed it all up the east coast—in hedgerow timber along the east coast up to York. From Newcastle I notice also several Spanish Chesnuts are likely not to recover, as well as a few Ashes; and most of the Hollies, Portugal and Common Laurels are all killed at this place. The country lies rather low, and little outfall for water; of a light soil along the Derwent side to York. About here light soil or rather sandy moss, resting on sand and gravel in some parts. Six miles from Scarborough. Would you oblige by giving your opinion in next Paper. *A Constant Reader, Wykeham, Sherborne, near York.* [We are unable to suggest an explanation.]

Disa grandiflora.—In your notice of the Horticultural Exhibition at South Kensington, I do not see any mention of one plant exhibited there, which is equally rare and beautiful, and so difficult of cultivation that few even of the most skilful gardeners have ever seen its flowers. I refer to Disa grandiflora, a plant which I do not recollect ever to have seen exhibited before anywhere in the course of some 34 years' experience of horticultural exhibitions. In the Sertum Orchidaceum it is figured from a foreign specimen, and is there recorded as having only flowered once in England, viz., in 1825 with Mr. Griffin, of South Lambeth. From a figure in the Bot. Mag. it appears to have flowered at Kew in 1843. But except these two instances I know no record of its successful cultivation. So rare a triumph of horticultural skill ought to have received its due tribute of praise, especially when the opening fête at South Kensington was graced by its appearance. It is allowed on all hands to be the most gorgeous of all terrestrial, if not of all Orchids. You will perhaps correct my mistake if it has ever been exhibited before; I am under a strong impression that it has not. Unfortunately I did not note the name of the exhibitor, who ought at least to have the credit of his singular skill. *J. R.* [It has also flowered formerly with Mr. C. Leach, who now exhibited it again.]

Black Hamburgh Grapes.—I have a Vinery in which the Grapes are now nearly ripe, but there is no bloom upon them owing to a number of bright spots which appeared on the berries soon after they began to swell; before colouring in fact the bunches appeared as though they had been syringed with greasy water, but my gardener assures me they had not been syringed at all. The Vines (Black Hamburgh) are planted inside the house, and are young and healthy, with a fair crop, but having been disappointed in this way two seasons I should be much obliged would you, or any of your readers, give me their opinion as to the cause. *An Old Subscriber.*

Mercury.—May I beg to call your attention to an answer to correspondents in your last week's impression which states that "Mercury is Chenopodium Bonus Henricus, a very indifferent kind of Spinach." This does not appear to be quite correct, the plants popularly known as Mercury being Mercurialis perennis and annua; the first would indeed prove to be a very indifferent Spinach, as any one who might partake of it in that character would find to their cost; but Chenopodium Bonus Henricus is very generally known as Good King Henry and Fat Hen, and is frequently used by country folks as a Spinach. Mercurialis perennis occurs so frequently, and in such abundance near London and elsewhere, and at a season, too, when green vegetables are not always plentiful, that I have thought it worth while to call your attention to the matter, lest your Correspondent, or some other reader, should be tempted to try a dish of it; it is already upon record that a man, his wife and three children experienced highly deleterious effects from partaking of Mercury fried with bacon. *J. Ray, Hammersmith.* [The commonest name of Chenopodium Bonus Henricus is "Mercury." As for the poisonous Mercurialis, the vulgar name of that is "Dog's Mercury."]

Tree Supports.—Four years ago, when transplanting some trees of 15 and 20 years' growth, as supports above ground were very much objected to I fastened them underground by driving four posts deeply and firmly into the earth on the outside of the large ball of earth got up along with the roots, notching strong cross bars into them over the roots. Although planted in a very windy place they have never flinched, and have grown well. *J. C.*

Effects of last Winter's Frost.—Not only have Hollies of large size suffered from the effects of the

severe frost of last Christmas, as mentioned by Mr. Strickland in your last Number, but also in the park at Castle Howard, and in parts adjacent to it, very many Oak trees, whose age it is not easy to estimate, but many of which are probably not less than 300 or 400 years old, are apparently dead. This hitherto unheard of calamity occurs chiefly by the sides of a small stream which winds its way through the park. In some cases the tops of these venerable trees have a few leaves apparent. Many of them, however, have not as yet exhibited a single leaf, leaving their fate only too certain. Have you heard of such cases in other parts of the kingdom? *George Legard, Easthorpe Hall, Malton.*

Early Strawberries in the North.—I have had May Queen ripe on a five-years' old row growing near a Privet hedge since the 4th of June, and it is covered with fruit. The very severe frosts of May, the 10th and 11th, killed all the first blooms, or I should have had it ripe about the middle or latter end of May. Out of more than 200 varieties, no other sort is near ripe. Crops of Strawberries will be splendid; almost every sort in my collection is and has been covered with bloom. *William Jas. Nicholson, Egglescliffe, near Yarm, Yorkshire.*

Societies.

ROYAL BOTANIC, *Regent's Park: June 12.*—This was in most respects another good exhibition. The weak points were Azaleas and Roses in pots, which were for the most part somewhat past their best. There was, however, as usual, a large assemblage of stove and greenhouse plants. H.R.H. Prince Albert, and other members of the Royal Family honoured the Society with their presence, and the day though cloudy being fine there was a large attendance of visitors. Falling so soon as it did after the Royal Horticultural Society's exhibition at South Kensington, the great bulk of the plants was, as a matter of course, the same as was present upon that occasion. In the following report we shall therefore only notice such as have not been previously described.

Among Stove and Greenhouse Plants, the main feature was again a collection furnished by Mr. May, gardener to J. Spode, Esq. This contained some fine specimens of Azaleas and a well bloomed Dracophyllum gracile. Other groups from Messrs. Fraser, Green, and Page were also reproduced in excellent condition.

Orchids were tolerably numerous; but among them by far the best came from Mr. Day of Tottenham, whose plants had a freshness, vigour, and beauty about them in which other groups were comparatively deficient. Of smaller collections the best came from Mr. Woolley, Mr. McMorland, and Mr. Gibbs. Among these were fine plants of Anguloa Clowesi, different kinds of Lady's Slippers, Vandas, Cattleyas, White Butterfly plants, Saccolabiums, especially the bright orange S. curvifolium, Lælias and Aerides.

Azaleas, as we have stated, were but indifferently in bloom; with the exception of a collection from Mr. Turner, which was all that could be desired. The sorts were Optima, Sir Charles Napier, Admiration, tricolor, and Gem—all large plants and well flowered.

Among Cape Heaths we noticed a new variety named nobilis, from Messrs. Jackson, of Kingston. It was orange red in colour, and looked as if it might be an acquisition to the class of plants to which it belonged. Infundibuliformis, an old but seldom seen kind, was shown in good condition by Mr. May.

Though Roses in pots were ineffective, cut blooms were good. The best came from Messrs. Lane, in whose boxes were remarkably fine examples of Charles Lawson, Adam, Coupe d'Hébé, and Triomphe en Beauté. In Mr. Mitchell's (of Piltdown) stands were also excellent blooms of General Jacqueminot, Pauline Lanzezeur, Col. Rougemont, and Harrisoni; and conspicuous among Messrs. Paul & Son's blooms were Madame Willermoz, Lælia, and Paul Ricaut. The last named exhibitor also sent a nice group of small Roses in pots, in which was President, a new sort in excellent condition. From Mr. Wm. Paul came a miscellaneous collection, in which the best blooms appeared to be Lælia, Victor Verdier, Gloire de Santenay, a fine dark crimson; and Madame Hortado.

Of plants remarkable for the beauty of their foliage there were nice collections, but greatly inferior in size of plant to those shown the other day at South Kensington. Among them perhaps the most remarkable plant was one of Alocasia metallica, from Messrs. Veitch. This had great bronzy leaves, which could not measure less than 18 inches in length and a foot in width. We also noticed a good plant of Calocasia edulis, with large green and white leaves, from the same exhibitor.

New Plants almost wholly consisted of those shown at South Kensington on the 5th and 6th. Mr. Standish reproduced his Japanese collection; and from Messrs. Veitch, Mr. Williams, and Mr. Bull, also came large groups. Some Caladiums and Begonias were also shown by Mr. Verschaffelt.

Among Miscellaneous subjects were six nice plants of Imatophyllum, with fine heads of orange flowers, from Messrs. E. G. Henderson; Cordylines, and other plants of that kind, from Messrs. Lee; the old Gnaphalium eximium from Mr. Arthur Henderson; and some good Gloxinias from Messrs. Smith and others. From Messrs. E. G. Henderson came Clianthus Dampieri, whose black blotched singular looking scarlet blossoms excited a good deal of attention.

As regards Pelargoniums, it is usual to expect to see them in their best dress in June, and admirers of this class of plants were not disappointed on this occasion. The first collection was in admirable condition, fresh, well flowered, and in the case of the best 12 more varied than usual. These came from Mr. Turner, of Slough; they consisted of fine plants of Etna, Rose Celestial, Desdemona, Nestor, Ariel, Guillaume Severyns, Madame Hortado, Evelyn, The Belle, Sir C. Campbell, Candidate, and Viola.

Messrs. Dobson sent a well flowered group, in which the best were Saracen, Carlos, Admirable, and Sanspareil.

Messrs. Fraser and Mr. Windsor also exhibited successfully in this class.

Fancy Pelargoniums, from Mr. Turner, consisted of Captivator, Princess Royal, Madame Rosier, Acme, Clemanthe, and Rosabella, all seedlings raised at Slough. Kinds dissimilar to the above in the second collection, from Messrs. Fraser, were Delicatum and Bridesmaid. Mr. Windsor and Messrs. Dobson also contributed to this class.

Of 10 Plants (Amateurs), Mr. Nye, gr. to E. Foster, Esq., Clewer Manor, sent Carlos, Ariel, Fairest of the Fair, Seraskier, Symmetry, Fair Ellen, Saracen, Conspicuum, Sanspareil, and Sir C. Campbell. Mr. Bailey, gr. to T. T. Drake, Esq., who had an excellent second collection, sent Glow-worm, Bianca and Spotted Gem. Mr. Shrimpton, gr. to A. J. Doxat, Esq., Putney, and Mr. Parmenter, gr. to J. W. Taylor, Esq., Highgate, also exhibited good plants, and Mr. Watson and Mr. Bailey sent fine specimens of Fancies. Seedling Pelargoniums were contributed by Mrs. Beck, Mr. Turner, G. W. Hoyle, Esq., Messrs. Dobson, Messrs. Rollisson, and others. From Isleworth came Peeress, salmon rose, with clear white eye, and maroon top petals; Alba Regina, Bessie, and Beautiful Star, three good white kinds; Rosy Bloomer, very free, in the way of Roseleaf; Amazon, a bold crimson; Diana, orange salmon; and Lilacina. Mr. Hoyle sent Timon and Zingari, fine dark sorts; Celeste, a new shade of orange rose, very good; Mrs. Hoyle, colour of old Rosamond, but large and fine; Violetta, black top, purple lower petals, white eye; Princella, a Topsy flower of fine form. Mr. Turner received Certificates for the best yearling, named Loveliness, a light spotted variety of fine quality; also for the best scarlet, named Flambeau, a very free blooming kind and unusually bright. The same exhibitor also sent Diophantus, a large bright scarlet spotted kind; Senior Wrangler and John Leech, both spotted varieties, of good quality; Patroness and Lily, whites; and Miss Garnett, an excellent light variety. In Seedling Fancies, Undine, a crimson, with white centre and edges, was very fine; Butterfly and Improved Modestum, Fleur de Marie, purple and white; Edith, rose and white, lilac shading; and Sweet William, small, but very pretty. These came from Mr. Turner, as well as Herald of Spring, a salmon-coloured bedding kind. Mr. Lennox sent a new and very pleasing variety, which for bedding may be valuable; it was named Venus. This has excellent foliage, and is of a pretty soft shade of rose. From Messrs. Veitch came Lady Churston, a lively orange red kind, with blacks spots on all the petals.

Verbenas were sent by several growers, the best being from Mr. Perry, Birmingham, and Mr. Turner. The most striking kinds were Garibaldi, Mrs. Moore, Lord Elgin, Rainbow, Brilliant, and Cornet.

Fuchsias were shown in excellent condition by Messrs. Young, Cross, Davidson, and Harpur. Among the sorts were good plants of Souvenir de Chiswick, Little-Bo-Peep, Rose of Castile, Guiding Star, British Sailor, Sir C. Campbell, Prince Imperial, Catherine Hayes, Venus de Medici, and Queen of Hanover. We also noticed a nice white corolla'd kind from Messrs. Veitch.

Some pretty Calceolarias were shown by Mr. Burley and others. Mr. Bull also exhibited a small brown and yellow kind called Sparkler, which looked as if it might be a good sort for beds.

From Mr. Tyso came a collection of 50 Ranunculuses, among which were Fidelia, Alexis, Gomer, Commodore Napier, Naxara, Festus, Olympia, Herald, Zemindar, Pertinax, Phrosine, Lady Dartmouth, Eva, Melancthon, Poliander, Paragon, Dr. Saunders and others.

Among fruit were some well-grown Pine Apples. A Providence, weighing 9¼ lbs. was furnished by Mr. Young, gr. to C. Bailey, Esq.; and a good Queen came from Mr. Constantine, gr. to C. Mills, Esq., of Hillingdon. Mr. Bailey, Shardeloes, also showed a good Providence, and we noticed a smooth-leaved Cayenne from Mr. Sage.

Of Black Hamburgh Grapes, the best came from Mr. M. Henderson, gr. to Sir G. Beaumont, Bart. These were not remarkable for size, but they were very perfect as regards colour. Messrs. Little, Hill, and Drewitt also showed fine fruit of this variety, but it was all more or less deficient in colour. Black Hamburghs were likewise shown by Messrs. Jackson, Dwerrihouse, Sage, Bartlet, Smith, Durrant, and Frost. Of Black Prince Mr. Hill again showed wonderfully fine bunches, and Mr. Allport had very fine specimens of West's St. Peter's. Mr. Standish sent Ingram's Prolific Muscat, both in pots and in a cut state. Of White Grapes by far the most remarkable were three bunches of Buckland Sweetwater, which were again produced on this occasion by Mr. Hill. Bailey's Muscadine is also a fine sort; and we noticed good bunches of White Frontignan from Mr. Standish. Of Grizzly Frontignan, admirable specimens were shown by Mr. Drewitt, The Denbies, near Dorking.

Peaches were good. The best came from Messrs. Sage, Sanders, Durrant, Enstone, Little, Manning, Taylor, and Chalmers. The sorts were Royal George, Grosse Mignonne, and Noblesse.

Of Nectarines, Messrs. Rockford & Dawson sent the best; but Mr. Little also showed good fruit of the Downton. The other sorts were Violet Hâtive and Hunt's Tawny.

Cherries consisted of May Duke from Mr. Wilson, of Warwick, and Mr. Bartlet. The last were, however, unripe.

Of Strawberries there were only two dishes—Sir C. Napier and British Queen, very fine fruit, from Mr. Smith, of Twickenham.

Melons were good. The best scarlet-fleshed sorts were Gem and Bailey's Surprise—the last a really good sort. Mr. Enstone and Mr. Frost also showed good fruit. Green-fleshed varieties were shown by Messrs. Bailey, Dwerrihouse, Tillyard, and Smith. Among the best of these were Orion, Strathfieldsaye, and Heckfield, green-fleshed kinds.

BOTANICAL OF EDINBURGH: *April* 11.—Dr. W. H. Lowe, President, in the chair. The following communications were read:—I. The Flora of Iceland, By W. Lauder Lindsay, M.D.

ABSTRACT.

Total number of Phanerogams—			
British	358		
Not British	68		
		426	
Total number of Cryptogams—			
British	415		
Not British	12		
		427	
Total numerical strength of Icelandic Flora as at 1860			853

The botanical traveller in Iceland is at once struck by the strong general resemblance between its flora and that of Britain, and especially of Scotland. The number of species in Iceland, however, especially of flowering plants, is greatly less than in Britain. In Iceland our rare Scottish Alpine plants, such as Silene acaulis, Lychnis alpina, Thalictrum alpinum, Cerastium alpinum, Alchemilla alpina, Dryas octopetala, Draba incana, Salix herbacea, Potentilla alpestris, Luzula spicata, occur at or slightly above the sea level. Dr. Lindsay also gave an account of the vegetation of the hot-springs, and concluded by an enumeration of all the plants recorded as natives of Iceland.—II. "On the Species of Dioscorea (Yams) occurring in South India." By Dr. Cleghorn. The author adverted to the great importance of these tropical esculents, in eastern countries, particularly in seasons of famine like the present, when the Rice crops have failed and the suffering population resort to the forests in quest of Yams and other indigenous roots. The Araceæ and Dioscoreaceæ yield starchy tubers, which are much more wholesome than the Cucurbitaceous fruits so extensively used by the natives. The former contain a large amount of nutriment, and when roasted or steeped in cold water are deprived of their acridity; but the latter are a fruitful source of diarrhœa and mischief. A good conspectus of the genus is still a desideratum. The best description of the Asiatic species was given 40 years ago by Roxburgh, who cultivated 17 species in the Botanic Garden, Calcutta, the roots having been transmitted to him from different districts of Bengal. Of these, 13 species are now recognised in the public gardens. The student will find representations of these in Wight's "Icones" and in Rheede's "Hortus Malabaricus." The growth of some of the Yam tribe is very remarkable. A tuber of D. alata, 1 lb. in weight, was planted at Madras in June and lifted at the end of nine months, when the weight was found to be 27½ lb. The best known and most esteemed kinds are D. aculeata, "Goa Potato;" D. Batatas, "Chinese Yam;" D. purpurea, "Pondicherry Potato." D. globosa and D. alata, with Arum campanulatum are also much cultivated; whilst D. bulbifera, pentaphylla, and oppositifolia are common species in the jungles.—III. Effects of the late Winter on the Coniferæ and other Trees and Shrubs at Belstane. By Mr. P. S. Robertson.

Belstane, the property of Humphrey Graham, Esq., is situated near Kirknewton, 12 miles south-west of Edinburgh. The lowest part, of the ground is 700 feet and the highest 900 feet above the sea level. The Pentland Hills extend along the south side, about a mile from the boundary. The soil is for the most part a stiff unctuous clay, naturally retentive of water, but advantage has been taken of the sloping character of the district in executing drains and water runs, by which the surface stratum is now pretty dry. For the last 12 or 14 years the proprietor has carried on extensive planting operations; all the woods are disposed in belts to afford shelter to the fields, and at the same time to produce timber. These are for the most part in a thriving condition. A large collection of trees and shrubs have been planted, comprising nearly every species and variety considered hardy in Britain. The rare trees and plants are interspersed with the common forest trees, in the most varied positions. Coniferous trees have been largely planted. There are hundreds of Pinus Pinsapo, from 2 to 11 feet in height, several making growths of 14 to 15 inches annually, none of which have suffered by the frost. Pinus Cephalonica has been planted largely, and promises to become a splendid timber tree, many of the specimens being from 8 to 12 feet in height, and all uninjured. Pinus Webbiana and P. Pindrow are in considerable quantity, the latter uninjured. The former, in several cases, have the foliage

browned and falling off, while the shoots are fresh and green. The largest specimen is 10 feet in height, a well-shaped fast-growing tree, situated in the northern side of a plantation of Larch, in poor damp soil. P. Fraseri, P. grandis, P. Pichta, P. Nordmanniana, and P. nobilis, are all uninjured. Of the Spruce Frs, Abies orientalis is uninjured; A. Morinda in some places much scorched, in others not touched; A. Douglasii, all healthy and green; some of the trees are about 30 feet high, the growth of 15 years. Two of the finest specimens are planted in a belt on poor soil; the one bears cones every year, and the other has never produced any. A. canadensis, A. Pattoniana, A. Mertensiana, and A. Menziesii, have all stood well; but specimens of A. Brunoniana are all either killed or much injured. Cedrus Deodara, C. Libani, and C. atlantica are for the most part green and healthy, and are of considerable size, but a plant or two of each were injured above the line where the snow lay, as has been frequently observed about Edinburgh this year. The plants of Araucaria imbricata are uninjured, except a few growing in a close damp belt, which are not likely to recover. Of the true Pines, all the long leaved or Mexican species had been previously tried, but failed, as was the case also with P. Pinea, P. halepensis, P. Brutia, P. australis, P. Llaveana. P. Laricio and its varieties are in the most flourishing condition, overtopping Larches and Spruces planted at the same time; and P. Cembra, generally considered a slow growing species, thrives remarkably, making growths of about 20 to 24 inches annually, and covered with abundant foliage. This species, with P. austriaca, P. Laricio, P. pyrenaica, and P. Menziesii, seems to grow well in such a situation as this: a fact worthy the attention of planters, especially in places where Larch is not found to thrive. P. Benthamiana is healthy, but not equal in luxuriance to specimens at Darnhall near Peebles, at a lower elevation. P. Coulteri and P. Lambertiana are not injured, but P. insignis and P. tuberculata in some cases are much hurt, in others not injured; Wellingtonia gigantea of all sizes has been slightly injured; Cryptomeria japonica and Sequoia sempervirens slightly injured in some places, in others not at all; Cupressus macrocarpa slightly; C. Macnabiana, several, from 3 to 6 feet in height, not injured; C. torulosa, a great many, 5 to 8 feet in height, green and healthy; C. Lawsoniana, C. nutkaensis, and C. borealis not injured; but C. funebris killed. No Junipers have sustained injury: Thuja gigantea, T. aurea, T. plicata, and a very fine plant of T. pendula, were uninjured. Portugal and Bay Laurels, Hollies, Yews, Box, Rhododendrons, and all the ordinary Evergreens are not in any degree hurt, but several plants of Lucombe Oak are killed, though they must have been covered with 2 feet of snow. Liriodendron tulipifera, 10 feet high; Planera Richardi, 10 feet; Arbutus Unedo, Salisburia adiantifolia, Ailantus, Clematis azurea, C. grandiflora, Berberis, Ribes, Philadelphus, Cotoneaster affinis and microphylla, Chimonanthus fragrans, Cratægus cordata are quite healthy; but Garrya elliptica, Leycesteria formosa, many Ayrshire and hybrid perpetual Roses, have suffered severely. With the exceptions stated, the whole collection has a healthy appearance, and the injuries sustained bring out important facts regarding the hardiness of plants at various altitudes and exposures. It is puzzling to determine why certain individuals of a species should be killed, and others apparently in the same circumstances not injured. Can the difference be caused by the greater inherent hardiness of some; or must it be attributed to the particular state of growth of the plants when the frost came on? Or can there be such a difference of temperature in some spots of any given place as to cause these varied results; One fact regarding the effect of the late winter is obvious—viz., that the frost in its greatest severity occurred at the season of the year when it was least likely to produce damage. Cold of half the intensity, occurring early in November, or during February and March, might have hurt a very different class of plants, and to a far greater degree. The injured plants in this collection presented a similar appearance to that observed about Edinburgh and other low districts. Such plants as Aucuba japonica had the foliage blackened, and the more tender shoots killed, while the other portions of the plant were green and healthy. In Evergreen Oaks, Minorca Box, and Sweet Bay, the injury extended to the roots, as was the case with the hybrid Rhododendrons of R. arboreum. Cedrus Deodara, Cupressus Lambertiana, and several other Conifers were injured only to the surface of the snow, the portions covered by it being perfectly sound. In the case of the Araucarias the injury in some was confined to the terminal shoot, in others the main stem and side shoots were the parts which suffered. On looking at the Pears, Apples, and Plums on the walls no external injury could be seen, but, on cutting the branches across, the pith and inner portions of the wood were found to be injured, but in no case was there observed any injury to growths more than two years old. There is in the Garden a fine collection of herbaceous plants, none of which suffered—a circumstance generally true in all districts, as the snow had effectually protected them. In connection with this it may be stated that in some gardens about Edinburgh, greenhouse Calceolarias, Verbenas, and Chinese Primroses, which had not been housed before the storm came on, were found after the snow had cleared away quite healthy, and even producing flowers.

IV. Notes by Mr. Wm. Gorrie as to the Effects of the late Frost on the Plants at Borthwick Hall, the seat of Charles Lawson, Esq.

1st. At Heriot Manse, altitude 800 feet above the sea-level; Portugal Laurels 6 to 8 feet high, and Rhododendron ponticum uninjured. 2d. Between Heriot Manse and Borthwick Hall, by the river side, altitude 800 to 820 feet; young Hollies have lost their leaves and young shoots, old ones uninjured. Rhododendron ponticum, R. Catawbiense, hybrid (plants 2 to 3 feet high), and Portugal Laurels uninjured; Bay Laurels and Araucaria imbricata slightly injured; Cupressus sempervirens a good deal injured, but not killed. 3d. In park and flower garden at Borthwick Hall; Rhododendrons generally, including hybrids of R. arboreum, all in full average health, only a few leaves being slightly browned; Araucaria imbricata, several specimens being from 3 to 6 feet high—only one injured, which stands in a wind draught; Wellingtonia gigantea, 4½ and 6 feet high (2 splendid specimens), uninjured; Cupressus Lawsoniana and C. Nutkaensis, uninjured; C. Lambertiana, a good deal browned, but not materially injured; Picea nobilis, P. Nordmanniana, and var., P. bracteata, P. Pinsapo, P. cephalonica, uninjured; P. Pindrow, and P. Webbiana, slightly hurt. 4th. On hill above Borthwick Hall, altitude 1300 to 1400 feet; Wellingtonia gigantea, Cupressus Lawsoniana, and C. Nutkaensis, are quite safe, and not even browned. 5th. On Dod Hill, altitude 1600 feet; Larch, four years planted, making little progress; and the same may be said of Scotch Fir, Norway Spruce, and Silver Fir; but Pinus pumilio and P. Cembra are growing with luxuriance, the latter having foliage almost as long and healthy as in the Edinburgh nurseries.

T. C. Archer, Esq., sent for exhibition sections of the stems of Bignonia and Heteropterys anomala. Mr. Gorrie exhibited a cone of Pinus Mantchurica, an edible-seeded Pine from the province of Mantchooria, on the Amoor River, Eastern Siberia.

LINNEAN: *May* 24 (*Anniversary*). — Prof. Bell, President, in the chair. The Secretary reported that since the last anniversary 14 Fellows and 3 Associates had died; that 4 Fellows had withdrawn; and that 23 Fellows, 1 Foreign Member, and 1 Associate had been elected. The financial report showed a balance in favour of the Society on the year's account of *134l. 9s. 9d.* At the ballot which ensued F. Boott, M.D.; Daniel Hanbury, Esq.; T. H. Huxley, Esq.; T. C. Janson, Esq., and R. Owen, Esq., were removed from the Council, and the following Fellows were elected in their room:—M. P. Edgeworth, Esq.; J. Miers, Esq.; Prof. Oliver, L. Reeve, Esq., and P. L. Sclater, Esq. The following gentlemen were then elected officers:—G. Bentham, Esq., President; W. Wilson Saunders, Esq., Treasurer; G. Busk, Esq., and F. Currey, Esq., Secretaries. The usual resolutions requesting that the Address of the President and the Obituary notices by the Secretary might be printed, were adopted. It was also unanimously resolved "That the best thanks of the Society be given to Prof. Bell, for his invaluable services to the Society during the eight years he has occupied the President's chair; that the Society gratefully acknowledges the unvarying courtesy and kindness with which he has discharged the duties of the office, and fully recognises the zealous interest he has taken in the welfare of the Society and in the promotion of its objects, willingly attributing to his efforts much of its present prosperity and increased usefulness, as displayed in the large number of new Fellows, the value and greater frequency of its publications, and the satisfactory state of its finances." The thanks of the Society were also voted to Dr. Boott, on his retirement from the office of Treasurer.

June 6.—G. Bentham, Esq., President, in the chair. The President nominated T. Bell, Esq.; J. J. Bennett, Esq., J. D. Hooker, M.D.; and W. Wilson Saunders, Esq., Vice-Presidents for the year ensuing. The following papers were read:—1. "Notes on Caryophylleæ, Portulaceæ, and some allied Orders," by the President. It was observed that the series of orders in which the natural affinities of plants are the most dissevered by the Candollean arrangement is "that of the Curvembryonous group, each one of which appears to be connected with the others by gradations so close that positive limits have very seldom been assigned to any of them, and yet they are necessarily dispersed in the three great classes of Thalamifloræ, Calycifloræ, and Monochlamydeæ." Thus the numerous genera constituting the group are distributed among 10 orders: Caryophylleæ, referred to Thalamifloræ; Paronychiaceæ, Portulaceæ, and Ficoideæ to Calycifloræ; and Phytolaccaceæ, Salsolaceæ (Chenopodieæ), Basellaceæ, Amarantaceæ, Polygonaceæ, and Nyctaginaceæ to Monochlamydeæ. To remedy these and similar incongruities, various transpositions have been suggested by those who adhere generally to the Candollean classes, but none of the groups or alliances so formed are limited by any character that does not undergo many exceptions among the genera placed under them. The author himself was not able to devise any others that could be strictly and absolutely defined; but he intimated, that in the new account of the genera of plants which is being prepared by himself and Dr. Hooker, an endeavour has been made to seek out such limitations as might bring together genera having the greatest resemblance, and united by tangible characters having the fewest exceptions. The Caryophylleæ were pointed out as forming the first great group, and to be distinguished by having opposite leaves, sepals, petals, and one or usually two series of stamens, all isomerous, a free one-celled ovary with several ovules in the centre formed by the combination of two or more carpels, and a dehiscent or several-seeded fruit; this order was made to include the Sileneæ, Alsineæ, and Polycarpeæ. The next order was that of the Portulaceæ, which, with the ovary of Caryophylleæ, was at once to be distinguished by the remarkable anisomery of the parts of the flower; this was unhesitatingly referred to the Thalamifloræ. The Tetragoneæ and Sesuveæ, united with the Portulaceæ by Fenzl, differ both from them and from the Caryophylleæ in their ovary being divided into cells, and in their very perigynous stamens, and these it was proposed to restore to Ficoideæ. The Mollugineæ sometimes referred to Paronychiaceæ or Caryophylleæ were next referred to as forming a small group which it was stated could not be referred to either of the allied larger orders without invalidating their characters, and it was suggested that it would be best placed amongst the Monochlamydeæ next Phytolaccaceæ, or even incorporated with the latter. The Paronychiaceæ forming the link which unites the Caryophylleæ with Amarantaceæ, were limited to the genera with a uniovulate, although compound ovary and utricular fruit; and were held to form a distinct group more nearly allied to Amarantaceæ than to Caryophylleæ, the genera being, except in Corrigiola, decidedly apetalous. "With regard to Phytolaccaceæ," contended Mr. Bentham, "characterised by the ovary consisting of one or usually several annular uniovulate carpels, and to Chenopodiaceæ and Amarantaceæ with their vague but universally recognised ordinal distinctions, we leave them for the present, as worked up in the Prodromus—entering only our provisional protest against the useless change in name from Chenopodiaceæ to Salsolaceæ, against the separation of Basellaceæ as an order, against the importance attached to the erect or horizontal seeds, and against much superfluous splitting both of genera and species upon inconstant characters." The author then made various detailed observations on the limits of the genera of the following four orders, which were either retained among the Thalamifloræ, or now first transferred to the Monochlamydeæ:—namely Caryophylleæ; Portulaceæ; Mollugineæ (limited to Macarthuria, Telephium, Orygia, Glinus, Mollugo, Pharnaceum, and Cœlanthum); and Paronychiaceæ. 2. "Further Remarks on Scansile appendages to the Feet of Insects," by Tuffen West, Esq. 3. "Catalogue of Hymenopterous Insects collected by Mr. A. R. Wallace in the Islands of Ceram, Celebes, Ternate, and Gilolo," by F. Smith, Esq.

ENTOMOLOGICAL: *May* 6.—The President in the chair. Mr. Stainton exhibited some Birch leaves mined by a small larva which had recently been ascertained to belong to the genus Micropteryx, a very interesting group of minute moths whose economy had hitherto remained unknown. The larva is small, destitute of feet, and tapering to the extremity of the body. He also exhibited the larva of the genus Antispila. Mr. Samuel Stevens exhibited specimens of the rare Saperda oculata from the Cambridgeshire Fens, and some rare Cetonidæ and Paussidæ from Africa and India. Dr. Power exhibited specimens of an Hemipterous insect new to this country, Micropus Sabuleti from Folkstone and Merton; Dr. Wallace a specimen of the India Deaths-head moth (A. Lethe) taken alive at East Cowes; and Mr. Hayward specimens of Euryporus picipes taken among dead leaves at Sanderstead. Mr. Machin exhibited some rare species of Gelechia and Coleophora. An interesting paper on the species of Coleopterous insects infesting the Euphorbiæ in Madeira and the Atlantic islands, by Mr. Wollaston, was read. Considering that the peculiar vegetation of any locality was the most likely to afford corresponding peculiarities in the insect tribes, the author had carefully investigated the Laurels as well as the Euphorbiæ in the Canaries and Madeira. He had found the foliage almost free from the attacks of insects, but on examining the stems, especially in a decaying state, he had succeeded in finding as many as 44 separate species of Coleoptera, including several new genera, often in great abundance in the Euphorbiæ of the Canaries. Of these 44, 32 were exclusively confined to the Euphorbiæ, but 12 were found to attack other plants. The Euphorbiæ had nearly been extirpated in Madeira, so that only eight of the species had been found there, showing that these beetles possessed no power of accommodating themselves to altered circumstances, but that when the trees upon which they had been formed to subsist, disappeared, they in like manner became extinct. A paper entitled "On the Distribution of Insects in the Channel Islands in 1860," by Mr. F. Walker, was read, but it consisted only of a series of typographical notes on the islands, with a list of the species of spiders found there. Dr. Knaggs exhibited a novel contrivance for a breeding cage for insects, formed of a wide glass tube open at top and bottom; the former to be closed with an unglazed plate, having a hole in the middle, through which the stems of the food plants of the insects were to be placed, and the top to be covered with gauze.

Notices of Books.

A Manual of Botany, by Robert Bentley (Churchill, 12mo, pp. 811), is one of those uncalled for compilations with which natural history libraries are overflowing. It does not appear to contain anything original, and we must decline endorsing its statements; it however forms a neatly printed volume, abundantly illustrated by woodcuts, for the most part well known, though "many are from original sources." Nevertheless students must take care how they trust to its guidance.

A fourth edition of Mr. Stewart's capital *Practical Angler* (A. & C. Black) shows how much such a work was wanted. Men were tired of the insipid sentimentalism of Izaac Walton and his imitators, and wanted a book that would tell them what to do in the stream, not to doze over in the parlour. Mr. Stewart gave it them, and they have accepted the gift with enthusiasm. There is nothing indeed in the whole art of fly-fishing which is missed in the author's practical instruction. On one point however we would make a suggestion. He recommends Bamboo rods to be varnished every three or four times that they are used, "as the varnish will not adhere to the skin of the cane but cracks off in casting." Would it not be worth while to try the effect of silicate of potash upon such rods, whose natural glaze consists of that substance, and to which an artificial silicate would surely adhere.

The *Floral Magazine* for June has good and reliable figures of four Pompon Chrysanthemums, Young's Evening Primrose of the Œnothera fruticosa race, three varieties of the Chinese Primrose, and Sedum Fabaria.

The *Last of the Old Squires* (Longmans) is a clever sketch of what the author (Dr. Warter) considers that the "fine old English gentleman" must have been. Walter Savage Landor says of it that he has read it "with great interest and delight," and that the style and sentiments remind him of Addison and Goldsmith, and of a greater man than either—his dear old friend Robert Southey. We quite agree with him.

In *The Massacres in Syria* (Bradbury & Evans), Mr. Lewis Farley, now residing at Constantinople, has collected into a volume some letters contributed by

him to the *Morning Post*, with other memoranda of a later date hitherto unpublished. Having lived in Syria during many years, and knowing well the real merits of the case, his statements respecting the late horrible events in that country are entitled to serious attention.

Sir Cusack Roney's Month in Ireland (Smith, Strand) is a guide to what the author thinks most sight worthy in that country, and no one is more competent to offer advice. It has a railway map, tables of railway and other fares, lists of public conveyances, and descriptions of scenery and places—all for a shilling. We advise tourists in Ireland to travel with a determination to follow so experienced a guide.

Routledge's Illustrated Natural History, Part 28 for June, contains a continuation of the History of the Parrot race, followed by the Woodpeckers; and commencing the Pigeons. We extract what is said of our highly valued friend the Woodpecker, who is represented "tapping the hollow Beech tree."

"As is well known, the name of Woodpecker is given to these birds from their habit of pecking among the decaying wood of trees in order to feed upon the insects that are found within. They also chip away the wood for the purpose of making the holes or tunnels wherein their eggs are deposited. In order to enable them to perform these duties, the structure of the woodpecker is very curiously modified. The feet are made extremely powerful, and the claws are strong and sharply hooked, so that the bird can retain a firm hold of the tree to which it is clinging, while it works away at the bark or wood with its bill. The tail, too, is furnished with very stiff and pointed feathers, which are pressed against the bark, and form a kind of support on which the bird can rest a large proportion of its weight. The breast-bone is not so prominent as in the generality of flying birds, in order to enable the woodpecker to press its breast closely to the tree, and the beak is long, strong, and sharp. These modifications aid the bird in cutting away the wood, but there is yet a provision needful to render the woodpecker capable of seizing the little insects on which it feeds, and which lurk in small holes and crannies into which the beak of the woodpecker could not penetrate. This structure is shown by the accompanying sketch of a woodpecker's head dissected. The tongue-bones or 'hyoid' bones are greatly lengthened, and pass over the top of the head, being fastened in the skull just above the right nostril. These long tendinous-looking bones are accompanied by a narrow strip of muscle by which they are moved. The tongue is furnished at the tip with a long horny appendage covered with barbs and sharply pointed at the extremity, so that the bird is enabled to project this instrument to a considerable distance from the bill, transfix an insect, and draw it into the mouth. Those insects that are too small to be thus treated are captured by means of a glutinous liquid poured upon the tongue from certain glands within the mouth, and which cause the little insects to adhere to the weapon suddenly projected among them. This whole arrangement is clearly analogous to the tongue of the ant-eater, described in the volume on Mammalia, page 771. Some authors deny the transfixion."

"The rapid series of strokes on the bark, something like the sound of a watchman's rattle, will indicate the direction in which the bird is working; and when the intruding observer has drawn near the tree on which he suspects the woodpecker to have settled, he should quietly sit or lie down, without moving. At first the bird will not be visible, for the woodpeckers, like the squirrels, have a natural tact for keeping the tree-trunk or branch between themselves and the supposed enemy, and will not show themselves until they think that the danger has passed away. Presently the woodpecker may be seen coming very cautiously round the tree, peering here and there, to assure itself that the coast is clear, and then, after a few preliminary taps, will set vigorously to work. So rapidly do the blows follow each other, that the head of the bird seems to be vibrating on a spring, and the sound can only be described by the comparison already made, namely, a watchman's rattle. Chips and bark fly in every direction, and should the tree be an old one, whole heaps of bark will be discovered at the foot. By the aid of a small telescope, the tongue can be seen darted out occasionally, but the movement is so quick, that unless the attention of the observer be especially directed towards it, he will fail to notice it."

"Although the woodpeckers were formerly much persecuted, under the idea that they killed the trees by pecking holes in them, they are most useful birds, cutting away the decaying wood, as a surgeon removes a gangrened spot, and eating the hosts of insects which encamp in dead or dying wood, and would soon bring the whole tree to the ground. They do not confine themselves to trees, but seek their food wherever they can find it, searching old posts and rails, and especially delighting in those trees that are much infested with the green fly, or aphis, as the wood-ants swarm in such trees for the purpose of obtaining the 'honey-dew,' as it distils from the aphides, and then the woodpeckers eat the ants. Those destructive creatures generally called wood-lice, and known to boys as 'monkey-peas,' are a favourite article of diet with the woodpeckers, to whom our best thanks are therefore due. But the woodpeckers, although living mostly on insects, do not confine themselves wholly to that diet, but are very fond of fruits, always choosing the ripest. In this country the forest-land forms so small a portion of the kingdom, that the woodpeckers are comparatively few, and can do little appreciable mischief to the gardens; but in some lands, such as many parts of America, they do very great damage, stripping the trees of their fruit, and the fields of their crops, to such an extent that they are annually shot by hundreds. As is the case with all its congeners, the great spotted woodpecker lays its eggs in the hollow of a tree."

In a thin 8vo. volume called the *Climate of Egypt* (Churchill), Dr. Dalrymple lays before the public his personal experience of that country in its relation to health. Himself an invalid, he went thither "in obedience to the orders of his physicians to obviate the effects of many years over work." The orders were judicious and the patient got well. What more would you have? Others in the same predicament as the author should read his work (only 80 pages), which will tell them how to proceed. In addition to medical advice, the volume contains trustworthy meteorological observations, well made, with good instruments. If Egyptian plants were worth cultivation we should even recommend our gardening friends to study Dr. Dalrymple's observations, the result of which he condenses into the following statement:—

"In the month of December—	
The mean reading of the Barometer was	29.724 inches.
The mean temperature was	58.5 degrees.
The highest reading	75 „
The lowest „	39 „
The average range	36 „
Mean amount of cloud—10 being the maximum	1.6
In January—	
Mean of Barometer	29.540 inches.
Mean temperature	59.2 degrees.
Highest reading	82 „
Lowest „	38 „
Average range	44 „
Mean amount of cloud	1.2
In February—	
Mean of Barometer	29.398 inches.
Mean temperature	60.4 degrees.
Highest reading	90 „
Lowest „	40 „
Average range	50 „
Mean amount of cloud	2.9
In March—	
Mean of Barometer	29.649 inches.
Mean temperature	58.1 degrees.
Highest reading	70 „
Lowest „	49 „
Average range	30 „
Mean amount of cloud	0.9

"The results of these observations are—

"1st. The very slight variation in the barometer—the greatest range being less than one-third of an inch.

"2nd. That the mean temperature of these months is nearly the same as our months of June, July, and August.

"3d. That the moisture of the atmosphere, as compared with that of our summer months of June, July, and August for the last five years, is as 56 to 81; and yet three of these years in England have been remarkable for their dryness.

"It will, of course, be observed how great the range of the thermometer is—in February, as much as 50 degrees between the highest and lowest; yet it must be remembered that the minimum never registered within 6 degrees of freezing point out of doors, while in the cabin the thermometer was 50 degrees; at home,

"'Dick, the shepherd, blows his nail,
And the milk comes frozen home in the pail.'"

We are not ourselves musical, and therefore when a copy of *Lady Jenkinson's "Valse brillante"* reached us we naturally referred to a fair critic, who makes the following report.

"This waltz may be recommended as a very good specimen of light music, displaying a great deal of elegant easy harmony, and altogether pleasingly arranged."

Garden Memoranda.

MR. JOHN WATERER'S EXHIBITION OF AMERICAN PLANTS.—This is held as usual in the grounds of the Royal Botanic Society, Regent's Park, and, notwithstanding the great severity of last winter, is nearly as effective and beautiful as heretofore. True, we miss a few of the more tender old kinds; but in their place we have equally showy varieties into which has been infused by repeated cross breeding a hardier constitution.

On entering this garden of flowers, for so it emphatically is at the present moment, one is struck with the variety which is presented, the entire surface under cover of a large tent being richly clothed with blossoms of the most brilliant colours, the whole being agreeably and tastefully broken up into clumps by gravel walks neatly edged with Grass. Here and there single specimens stand out in bold relief, and are extremely effective. Among the largest of these may be named nivale, album elegans, Attila, roseum elegans, and bicolor; but this season we miss the large and fine tree of Lady Eleanor Cathcart, which is one of the handsomest Rhododendrons in existence, its beautiful clear rosy Geranium-like flowers being set off to excellent advantage by a black blotch in the upper petals. Of this variety there are, however, several thriving young plants now beautifully in flower.

Among other kinds, the best were Æneas, fine rosy crimson; album virginale, clear white; Attraction, salmon crimson; Bassano, spotted rosy crimson; Bellini, crimson, with brown spots; Blatteum, large claret-coloured kind; Bronzino, spotted crimson; Butlerianum, white, spotted with yellow; Bylesianum, white, broadly and conspicuously margined with crimson, a fine variety; Caravaggio, spotted dark rose; Concessum, one of the best of the older kinds; Currieanum, large brilliant rosy purple; John Waterer's variety of Delicatissimum, clear white delicately tinged with pink; Duc de Brabant, large white flushed with salmon; Elfrida, spotted rosy crimson; Fleur de Marie, crimson and white, very showy; Garofalo, large clear rose; Genseric, shaded dark purple; Gretry, rosy purple; Guercino, vivid crimson scarlet; Iago, blotched rosy crimson; John Waterer, glowing carmine, a very late bloomer, most of the flowers being yet unexpanded; Mrs. John Waterer, also a fine kind and an abundant and late bloomer; Lady Dorothy Neville, spotted dark purple; Lefevreanum, purplish crimson; several fine varieties of maculatum; Parmegiano, spotted dark crimson; President Vandenhache, beautiful spotted light rose; Princess Amelia, bright rosy crimson; Raphael, richly spotted rosy crimson; several fine varieties of Roseum, the best of which is Picturatum; Salvator Rosa, purplish crimson with a white eye, an attractive and fine kind; Sir Colin Campbell, orange blotched purplish lilac; Tintoretto, beautiful yellow spotted rosy crimson; Vasari, spotted dark carmine; and Madame Van de Weyer, beautiful rosy crimson.

Of hardy Azaleas Mr. Waterer also possesses a rich collection; a long border of them is, we understand, now beautifully in bloom in his well-known grounds at Bagshot, which at present richly deserve inspection. As regards the cultivation of American plants it cannot be denied that light sandy peat is the most suitable soil for them to grow in; but where this cannot be procured other materials must be employed. Of these the best are leaf mould and turfy loam in equal parts with a small admixture of white or other sand, or the top spit of any plantation, wood, or Grass land, the more impregnated with vegetable particles the better; the thickness of the spit will depend upon the composition of the soil, the more turfy the better for the growth of plants. A small portion of sand with well rotted stable manure should be added; the proportions of the latter being one barrowful to six of the former. Numberless instances are however recorded of Rhododendrons thriving in almost every kind of soil, particularly in light fertile loams of which peat forms no part.

One point of considerable importance in connection with their successful cultivation is the immediate removal of all decayed blooms as soon as they cease to be ornamental; this facilitates the growth of the plants, and has a tendency to induce a greater profusion of blossom the following year.

THE BOTANICAL GARDEN AT HERRENHAUSEN.—The grand feature of this garden is the great collection of Palms, for which it has long been famous; it is also rich in species of Pandanus and Cycadeæ. The principal Palm-house is said to be 120 feet long, by 40 high, and 30 wide. The most remarkable plant in it is a magnificent specimen of Corypha australis, which has a clean stem for 14 feet, measuring 6 feet in circumference at the base, and had on it, at the time I saw it, 114 full-grown leaves. There were also good plants of Manicaria saccifera, Geonoma electropus, Areca aurea, Areca Verschaffelti, Iriartea gigantea, Morenia gigantea, Freycinetia insignis and rubra, Pandanus latissimus and sessilis, Macrozamia eriolepis and Skinneri, Lichtenbergia princeps, &c. &c. A rather extensive flower garden in front of the Royal Palace has lately been laid out in the French style, and my attention was arrested on seeing a large tree of Sophora japonica in full bloom, which does not flower in Ireland that I am aware of, though it grows so freely. The fine avenue leading from the town of Hanover to the Botanic Garden is straight from one end to the other, and between one and two English miles in length. On each side are several lines of old Lime trees, planted at equal distances, which extend the whole of the way, thus affording shade and shelter to the inhabitants, who so much frequent the avenue and park. *Moore's Report to the Royal Dublin Society.*

Miscellaneous.

The Vagabond Curs of the Ocean.—Most of the fishermen's houses in Folkestone harbour are adorned with festoons of fish hung out to dry; some of these look like gigantic whiting. There was no head, tail, or fins to them, and I could not make out their nature without close examination. The rough skin on their reverse side told me at once that they were a species of dog-fish. I asked what they were? "Folkestone beef," was the reply. What sort of fish is this? "That's a Rig;" and this? "that's a Huss;" and this other? "that! a 'Bull Huss;'" this bit of fin? "that's a 'Fiddler;'" and this bone? "that's the 'jaw of Uncle Owl,'" &c. Here, then, was a new nomenclature; but I determined to clear up the matter, so, day after day, when waiting in the harbour for the trawl-boats to arrive, I took down my two volumes of "Yarrell's British Fishes." A class was soon assembled, and turning over the pages one by one, I asked the name of the fish whose portraits formed headings to the

chapters. In this way I got a curious collection of local names. I give now only the dog-fish kind. A "rig" is the "common tope," Yarrell; a "bastard rig" is the "smooth hound," Yarrell; the "huss, or robin huss," is the small spotted dog-fish; the "bull huss," the large spotted dog-fish; the "fiddler," is the angel, or shark ray; "uncle owl's jaw," belonged to a species of skate. I must here bear testimony to the excessive civility, and really gentleman-like conduct of the Folkestone fishermen; at first they were shy of me, and tried to cram me with impossible stories, &c.; but we soon became the best of friends, and I really believe I have made some true friends among these rude but most honest and sterling men. Nearly all these various kinds of dog-fish above mentioned are caught by the men who "go out after rigs" to the "hungry ground," over the Warne sands; and they catch them with "long lines," laid down all night. Some of the large rigs are nothing more nor less than sharks of the English waters, and most formidable creatures they are. They have teeth of a triangular shape, exceedingly sharp, and so arranged that if one is broken off another comes up into its place. "You see, sir, they has jaws as tears ye like a bramble-bush." The skin is not covered with scales, but with an exceedingly tough armour, which sets the teeth on edge when felt, and is "a terrible thing to dull your knife." When the rigs, &c. are caught out at sea they are thrown down to the bottom of the boat, and as they jump about there, they can be heard "grating one against each other." A rig lives longer than any fish in warm weather, but dies soonest in cold. When the lines are hauled, and there are a lot of freshly-caught savage rigs at the bottom of the boat, the men are obliged to be careful not to get bitten. "They all goes mad, sir, and it's like being among a lot of wild beasts." They have been known to catch hold of the men's "barbel," or fishing petticoat, and shake it. I have seen a small boat nearly full of these various kinds of fish—rigs, husses, bull-husses, fiddlers, &c. They are vagabond curs of the ocean, that go prowling and snapping about anywhere and anyhow for food. The fishermen hate them because they do so much damage to the herring-nets, eating the fish actually out of the net, and often rolling themselves right up in it. At Dover, during the herring time, there are plenty of "rough dogs," and "smooth dogs," and the sea sometimes boils with them. There is a very peculiar smell about these dog-fish, and they are not good to eat boiled or fried. Ten minutes after the arrival of the boats the small fish-dealers may be seen cutting off their heads, tails, and fins, and splitting them into halves; they are then salted and hung out to dry, and taste, when broiled, "like veal chops." They are eaten by the poorer class, "as a relish for breakfast." The great heads, and the intestines, &c., are left in the harbour till picked up by the owners of crab-pots or stalkers for baits. The livers are colled and boiled for oil for the boats in winter. There is an immense deal of gelatine in these heads and fins, and I tried in vain to persuade the men to boil them up, quoting the example of the Chinese, who esteem shark's-fin soup as a great delicacy. An Englishman is naturally a bad cook, and soup-making of any kind is not his forte. The Rigs have a long projecting nose (one species of shark is called "old shovel-nose," by the sailors), and this nose is of the same service to the rig as the snout is to a pig, for with it he routs about among the sand for small fish. The plaice, sole, &c., are essentially hiders in the sand, and the dog-fish comes and routs them up with his nose, and then snaps them up as they attempt to escape. I found several of these small fish in their stomachs, and in one monster the skin and the dorsal spikes of his cousin, the "pike dog-fish," called by the men the "spur-fish." In Dorsetshire they call them "spur-dogs." In order to see how this nose acted, I pressed a rig's head into a heap of wet sand and shingle. It was quite marvellous to remark how beautifully the nose was fitted to its work; man, curiously enough, copies its shape exactly in the instrument used for paring turf. On making a section of the nose I was much struck at its internal anatomy; it is not solid, for that would be too heavy; the outer skin forms a frame work, and from side to side firm white strings are stretched across so as to make a series of chambers, which are filled with a beautiful white gelatinous fluid. The organ of smell is highly developed, and the delicate membrane on which the nerves are spread (answering to the Schneiderian membrane in our own bodies) is defended by a fold of skin to keep the sand out of it, answering to our nostril. The eye, when fresh, can be compared to nothing but a cup hollowed out of a large pearl, containing a diamond as its lens, and powerful muscles move it in all directions. On sinking the head in clear sea-water, the eye glares like a cat's eye in the dark. I can fancy nothing more horrible than the glare and terrible rolling of this merciless, ravenous sea-tiger, deep down under water, and can well understand the piercing cry of horror which a human being naturally utters when he sees the murderous glance of the pursuing and man-eating shark. I heard a story that, some five years ago, the rigs for some reason migrated into shallow water somewhere at the back of the Isle of Wight, and that people "was afraid to bathe for them." So at least says report. *Buckland's Curiosities of Natural History, 2d series.*

Calendar of Operations.

(*For the ensuing week.*)

PLANT DEPARTMENT.

CONSERVATORY, &c.—If there are sickly or badly rooted specimens here they must be frequently examined for red spider, or they may become a nursery for that pest, and it will soon spread to adjoining plants. See that young stock is not allowed to suffer from want of pot room, and attend carefully to watering, giving weak liquid manure, as recommended last week, to all plants in free growth that are likely to be benefited by it. Such stove plants as may have been removed to this house while in bloom should be placed in heat again as soon as their beauty is over, in order to permit the young wood to get ripened. Large specimens of the hardier kinds of greenhouse plants may now be placed in a sheltered situation out of doors, where they will be shaded from the midday sun; but care must be observed to protect them from heavy rains, either by having a waterproof cloth which can be stretched over them, or by laying the plants in pots on their sides Those that require repotting should be kept in the house after shifting until the roots get hold of the fresh soil. Attend well to young stock, which will now be growing freely; keep the shoots nicely regulated, and shaped as may be necessary, to secure well-formed specimens, and use every care to afford these a moist atmosphere, sprinkling them overhead early on the afternoons of bright days, and reducing the air; but, as has often been stated, young stock will be better in pits and frames for the summer than in greenhouses. Spare room, if any, may be occupied with Fuchsias and soft-wooded plants for the conservatory.

FORCING DEPARTMENT.

PINERIES.—Air should now be given liberally to young stock in dung pits, in order to secure strong stocky growth. The plants should not, however, be exposed to draughts, for these would not serve the end in view; a moderate circulation should however be secured at night, giving no more during the day than may be necessary to prevent the temperature getting too high. This, with careful attention to the state of the roots, keeping the bottom heat regular, the soil in a nice healthy state as to moisture, and giving a liberal supply of manure water to such as are well rooted, will be found much more conducive to growth than exposing the plants too freely, which would probably check and throw them into fruit prematurely. Use every means to afford plants swelling their fruit a thoroughly moist atmosphere, sprinkling passages, &c., frequently, and shutting up early, giving a gentle dewing with the syringe, and saturating the atmosphere by sprinkling every available surface; also give plenty of clear strong manure water at the root until the fruit begins to change colour, when the soil should be kept rather dry, which will improve the flavour.

VINERIES.—Attend to former directions as to thinning the fruit in houses intended to furnish a late supply, and see that the bunches are severely thinned, and also that the crop left is not too heavy in proportion to the strength of the Vines. Where the fruit is swelling, be careful to maintain a moist state of the atmosphere, and give every possible attention to the roots, keeping the border in a healthy state as to moisture, and if watering is found necessary, use good strong manure water. Give abundance of air where the fruit is colouring, and do not allow plants in pots to remain in the house to cause damp, which despite every care in ventilating, is apt to settle on the berries and spoil the bloom. Where the fruit is ripe and expected to hang for some time, the atmosphere of the house should be kept as cool as possible; but a little fire-heat will probably be necessary occasionally in order to keep the atmosphere dry during very damp weather.

CHERRIES.—As soon as the crop is gathered, remove the trees to a shady situation and keep them syringed and watered; the pots should be plunged, or the plants taken out and planted in a northern aspect. Those plants in pots intended for forcing next season should not suffer from drought or from the effect of Cherry-fly.

PEACHES AND NECTARINES.—Expose the ripening crop as much as possible to the sun and admit plenty of air, to give colour and flavour to the fruit. Late houses, where the fruit is swelling, should have an increased day temperature, with plenty of moisture. Thin and tie in the shoots in the last house.

FLOWER GARDEN AND SHRUBBERIES.

Trimming, staking, and pegging down must be well followed up at this period where neatness and order are essential. See that sufficiently strong stakes are applied to plants with heavy foliage and gross habits, such as Dahlias, Hollyhocks, Larkspurs, Phloxes, and tall-growing Asters. Keep Roses as much as possible free from insects, and if time can be spared dead blooms should be removed from Rhododendrons. Let Carnations and Picotees be layered as soon as the shoots are in a proper state for that purpose. They make exceedingly useful border flowers, and are much prized in a cut state. See therefore that plenty of them are secured for next season.

HARDY FRUIT AND KITCHEN GARDEN.

During the present month every attention should be given to trained fruit trees. All wall trees especially should be gone over in time, and the shoots thinned and stopped to admit air and light among the fruit and young shoots, which will greatly assist the formation of fruit buds for the following season. Old Pear trees in particular, that are unfruitful, should be subjected to this treatment. Keep Peach trees free from green fly by means previously advised, and dust sulphur on shoots affected with mildew. Use the garden engine occasionally in warm weather, to clean the trees and prevent red spider. Tomatoes must be regularly attended to, keeping the shoots thin and stopping them above a cluster of fruit. Herbs as they come into flower should be cut and dried for winter use. They can either be hung up in bags to keep them clean or rubbed out and bottled. Where a sufficient breadth of Celery is not yet planted out this must be attended to as speedily as possible. Earth up former plantings and encourage rapid growth by means of occasional waterings with liquid manure.

STATE OF THE WEATHER AT CHISWICK LONDON, NEAR

For the Week ending June 13, 1861, as observed at the Horticultural Garden.

June.	Moon's Age.	Barometer.		Temperature. Of the Air.			Of the Earth		Wind	Rain.
		Max.	Min.	Max.	Min.	Mean	1 foot deep.	2 feet deep.		
Friday 7	29	29.917	29.899	65	46	55.5	57	54	N.E.	.00
Satur. 8	●	29.881	29.860	61	40	50.5	57	53½	N.E.	.04
Sunday 9	1	29.727	29.662	60	49	54.5	57	53½	N.E.	.38
Mon. 10	2	29.938	29.757	68	46	57.0	56½	54	W.	.15
Tues. 11	3	30.062	30.026	70	47	58.5	58	54	S.W.	.00
Wed. 12	4	30.127	30.096	78	42	60.0	59	55	S.W.	.00
Thurs. 13	5	30.172	30.084	81	54	67.5	59½	55	E.	.00
Average..		29.975	29.912	69.0	46.2	57.6	57.7	54.1		[illegible]

June 7—Cloudy and cold; densely clouded; cold and overcast.
— 8—Cloudy; overcast; slight rain; cold at night.
— 9—Overcast; rain; densely overcast; heavy rain at night.
— 10—Cloudy and fine; showery; fine; overcast.
— 11—Fine; very fine; hot sun; cloudy.
— 12—Cloudy and rather windy; very fine; cool at night.
— 13—Very heavy dew; hot; very fine; slightly overcast.

Mean temperature of the week 2 deg. below the average.

RECORD OF THE WEATHER AT CHISWICK

During the last 35 years, for the ensuing Week, ending June 22, 1861.

June.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 16..	72.5	49.1	60.8	15	0.46 in.	3	3	7	1	9	7	3	2
Mon. 17 ..	72.6	48.4	60.5	20	0.80	2	4	3	—	7	9	5	5
Tues. 18..	72.5	50.0	61.3	17	0.30	3	2	4	2	6	5	10	3
Wed. 19..	70.5	49.2	59.9	19	0.62	2	3	3	1	3	14	6	3
Thurs. 20..	72.0	49.4	60.7	17	0.62	2	4	1	2	6	11	8	
Friday 21..	74.0	50.8	62.4	15	0.68	1	5	3	3	1	17	4	1
Satur. 22 ..	73.2	49.6	61.4	13	0.59	1	3	2	1	2	13	9	4

The highest temperature during the above period occurred on the 16th, 1858—therm. 97 deg.; and the lowest on the 20th, 1855—therm. 33 deg.

Notices to Correspondents.

EARTH HEAT: *W H.* Your plan for heating earth or a Vine border requires to be reconsidered, for there are many circumstances connected with it which you seem not to have taken into account. You propose to induce evaporation of the water in the soil by means of heated air, so that the latter may take the place of the water and thus heat the soil. But if your border is just moist enough, it is evident you will render it too dry for the roots of plants. All the space occupied by moisture in the form of water in a border would not admit of many cubic feet of air being introduced. Enclosed in a glass case, as you propose, evaporation would go on but slowly, and chiefly from the surface. Then you must understand that heated air ascends, and instead of going down amongst the particles of soil in the border, it would ascend by the ventilating tower which you have sketched. That seems well adapted for carrying off the heated air from the chamber round the boiler, so that the heat which you intended for the earth will be dissipated among the clouds. Is that what you mean?

ELECTRICITY: *North Hampshire.* It has been proved experimentally, and we think conclusively, that electrical agency cannot be brought to bear on growing crops. Why don't you syringe your Hops with lime water? Water, lime, and labour are the whole cost. Make the lime water by putting caustic lime into water, and then after 24 hours drawing off the liquid and syringing the bines with a common garden engine. Your "fly" will be rather astonished.

GOOSEBERRY CATERPILLAR: *T.* Powdered Hellebore, if fresh and good, dusted over the trees is reported to kill this pest; but the most effectual of all remedies is in January to carefully pare the surface soil clean off all round the bushes to the depth of 3 inches, and to collect it into a heap and burn it. For other modes of getting rid of this caterpillar, see former Volumes.

INSECTS: *Redwood.* The grubs are those of some Tenthredo. Turn some ducks among the Mangel Wurzel.

LILIUM GIGANTEUM: *A Sub.* We do not think this plant at all likely to withstand the winter out of doors even in the Isle of Wight.

NAMES OF PLANTS: *Enquirer.* In the Eastern Counties the common Lychnis dioica is called Bachelor's Buttons. In other places the name is given to double Ranunculus acris, and no doubt to other things. *J N.* The colour of the flowers of such plants cannot be preserved. And *cui bono* if it could? 1, Lotus corniculatus; 2, Centaurea Jacea; 3, Alchemilla vulgaris; 4, Veronica scutellata. You forget the rule about numbers. *Ignoramus.* 1, Spergula arvensis; 2, Agrostis setacea; 3, Rhynchospora fusca; 4, Arenaria rubra. *J P L.* 1, Festuca pratensis; 2, Festuca bromoides; 3, Bromus mollis; 4, Aira cæspitosa: as far as it is possible to name specimens so young and small. *G. Hayward.* 1, Pilea herniarioides; 2, some Oxalis, quite indeterminable; 3, Eucnide Bartonioides, a plant of which we should like to see a good specimen. *C R D.* Aerides odoratum. *M, Castle Cary.* Some Heracleum, only to be named from a *good* specimen, with the fruit nearly ripe, which will not be the case for some weeks.

TASMANIAN CONIFERS.—Messrs. Maule & Co., of Bristol, have sent specimens of two species of Arthrotaxis, from Tasmania, which they say have not been in the least injured by last winter's frost, although Evergreen Oaks were killed. The species sent were A. cupressoides, misnamed imbricata, and A. selaginoides misnamed Doniana.

TRANSPLANTING EVERGREENS: *A J.* There is no doubt that the end of August or beginning of September are the best months for transplanting most evergreens, and the spring the worst. The last may succeed, but is more likely to fail. Many gardeners think otherwise. The above is the opinion formed by us after very long experience.

VINES: *J E M.* 1, The edge of the tooths of the young leaves which on some of your Vines are blackened is in an unnatural condition, but how caused we have no means of knowing. Quick lime and sulphur, which have been used lately, as recommended by Mr. Rivers, are not likely to have caused it. 2, If the Pears of the Knight's Monarch fall in an apparently premature state early in October, it is owing to some local cause, the nature of which can only be determined by examination on the spot.

ERRATUM: p. 530, col. 3, for Mimulus cupressus, read cupress

LAWES'S MANURES.
The Manures manufactured by J. B. Lawes for the present season of 1861, are now ready for delivery at his Factories, at the following prices:—
LAWES'S PATENT TURNIP MANURE, and BONE SUPERPHOSPHATE OF LIME £6 6
LAWES'S SUPERPHOSPHATE OF LIME from BURNT BONE or MINERAL PHOSPHATES .. 5 5
LAWES'S BARLEY, GRASS, and MANGEL MANURES 8 0
These Manures can be obtained of Mr. Lawes, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
Address John Bennet Lawes, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

THE LONDON MANURE COMPANY (Established 1840,)
Are now prepared to send out the following MANUFACTURED MANURES:—
SUPERPHOSPHATE of LIME, of best quality.
DISSOLVED BONES, and BONE MANURE for PASTURES.
CONCENTRATED URATE.
BLOOD MANURE for CORN and ROOTS.
CORN MANURE for TOP DRESSING.
MANGOLD MANURE.
They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate to be obtained entirely from Bones.
The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE of SODA, SULPHATE of AMMONIA, and every Manure of value.
116, Fenchurch Street, E.C. Edw. Purser, Secretary.

BURNARD, LACK, and CO.'S CONCENTRATED SUPERPHOSPHATE of LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.
CONCENTRATED TURNIP MANURE, equal in value to the preceding.
Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to Burnard, Lack, & Co., Sutton Road, Plymouth.

JOHN FOWLER, Jun., 28, Cornhill, London, E.C.—Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free.

JAMES and FREDK. HOWARD, Britannia Iron Works, Bedford, Manufacturers of
CHAMPION PLOUGHS — HORSE RAKES
STEAM PLOUGHS or CULTIVATORS — HORSE HOES
HARROWS — SCARIFIERS
And other Implements.
Catalogues with full particulars sent free on application.

CHURNS.—The Royal Agricultural Society's Prize Churn is the best invented. Butter produced in 12 minutes. Price 30s. and upwards.
Full particulars forwarded on application to Burgess & Key, Agricultural and Gardening Machinery Stores, 95, Newgate Street, E.C.

Reaping and Mowing Machines.
BURGESS and KEY, 95, Newgate Street, E.C. Prizeholders for the best Agricultural Machinery Manufactured.
ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with Burgess & Key's Screw Delivery Platform. Price 42l. 10s.
Testimonials.
A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following:—
From Mr. John Richards, Bailiff to Dr. N. Carne, Dimland Castle, Glamorgan.
"I beg to certify that I have for five years worked Messrs. Burgess & Key's Reaper, in my master's Home Farm, and also accompanied it when lent to tenants on the estate. During the above mentioned period the Machine has not cut less than 1,000 acres of all kinds of crops, with the same two knives as first had with the Machine. Dr. N. Carne having given up farming, the machine is now in the hands of his tenant, Mr. D. Thomas, of Llanrwst, and is in excellent order."
M'CORMICK'S REAPER for Manual Delivery. Price 25l.
ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30l.
ALLEN'S GRASS MOWER, for one Horse. Price 22l. 10s.
COMBINED REAPER and MOWER—Two-Horse Machine. Price 35l.
COMBINED REAPER and MOWER—One-Horse Machine. Price 24l.
The last two Machines are fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.
These Prices include Packing and Delivery at any Railway Station.

Prize Fencing for Agricultural Purposes.
Only Manufactory—Liverpool.
FRANCIS MORTON'S Patented Improvements in STRAINED WIRE FENCING,
which have been awarded SILVER MEDALS by the principal Agricultural Societies, afford the only means of constructing a permanent and efficient Fence at a greatly reduced cost.
Prices from 9d. to 2s. 2d. per yard of Fence.
Drawings and full particulars on application to
Francis Morton & Co., Sole Manufacturers and Patentees, Liverpool. London Office: 19, Parliament Street, Westminster, W.

Gutta Percha Tubing for Watering Gardens.
THE GUTTA PERCHA COMPANY have the pleasure to acknowledge the receipt of the following
Testimonial from Mr. J. Farrah, Gr. to Boswell Middleton Jalland, Esq., of Holderness House, near Hull.
"I have had 400 feet of your Gutta Percha Tubing, in lengths of 100 feet each, with union joint, in use for the last 12 months for watering these gardens, and I find it to answer better than anything I have ever yet tried. The pressure of the water is very considerable, but this has not the slightest effect on the tubing. I consider this tubing to be a most valuable invention for Gardeners, inasmuch as it enables us to water our gardens in about one-half the time, and with one-half the labour required."
Manufactured by the Gutta Percha Company, Patentees, 18, Wharf Road, City Road, London, E.C., and sold by their Wholesale Dealers in town and country.

The Quickest Turnip Known.
SUTTON'S EARLY SIX WEEKS TURNIP.—Good new Seed, 1s. 3d. per lb. or Cheaper by the Bushel. This is a heavy cropper, and comes off in good time for Wheat sowing. Carriage free, except small parcels.
Sutton & Sons, Seed Growers, Reading.

THE ADVANTAGES of SOWING SUTTON'S GENUINE HOME GROWN SEEDS.
EXTRACTS FROM LETTERS RECENTLY RECEIVED.
From the Rev. J. G. Nelson, Aldborough Rectory, Hanworth, Norwich, June 11th, 1861.
"I have a full plant of Mangel, a very rare thing this year in this neighbourhood."
From J. C. Adkins, Esq., Milcote, Stratford-on-Avon, June 12, 1861.
"You will, I am sure, be glad to know that I have a perfect plant of Mangel, not a gap worth notice on the entire area (about 70 acres). Some of my neighbours, I am sorry to say, are not equally fortunate, for great complaints of thinness are heard. My prospect was never so good for a crop of roots as it is at present."
From Fred. F. Hallett, Esq., Manor House, Brighton, May 23, 1861.
"On April 4 this year, I began to cut a field of your Sutton's Improved Italian Rye-grass 18 inches high, and on May 4 I began to cut it the second time, when it was again the same height. A continuous North-east wind blew throughout the whole of April. I feel bound to say that from no other sort of Italian Rye-grass have I succeeded in obtaining such crops."
From the Rev. W. H. Roach, Whiteshill Parsonage.
"Messrs. Sutton & Sons. May 3, 1861.
"I am happy to tell you that all the Garden Seeds which I had from you this year have come up beautifully; better and more regular, if possible, than in any former year."
Sutton & Sons are almost daily receiving similar letters to the above. They have still on hand some excellent Turnip Seeds of all kinds (except the Champion Swede), and the growing crops of Seed for next year look very promising.
Royal Berkshire Seed Establishment, Reading.

DRUMHEADS for CATTLE, 3s. 4d. per 1000; Early Cabbage, 4s.; Broccolies, 5s.; Red Cabbage, 5s.; Celeries, 5s.; Savoys and Kales, 3s. 6d.; Cauliflowers, 2s. per 100. Crates included.
Thomas Welland, Surrey Gardens, Godalming, Surrey.

Large Drumhead Cattle Cabbage.
J. H. ROBINSON begs to announce that he has a fine strong and healthy stock of the above Autumn-sown Cabbage Plants, which he can supply at 5s per 1000.
Warehouse, 8, Cross Cheaping, Coventry.
Seed and Nursery Grounds, Abbey Farm, Hinckley.

Cabbage Seed
CATTELL'S DWARF BARNES and CATTELL'S DWARF RELIANCE may be had as usual, free by post for 12 penny stamps per packet, the former containing one ounce, and the latter half an ounce. May be sown as early as the middle of July, and will not run to seed the following Spring.
These two are the earliest and best Cabbages in cultivation. See remarks by P. A. W. in Gardeners' Chronicle of Feb. 2, 1861, page 99.
Nursery and Seed Establishment, Westerham, Kent.

Plants of Cabbage, Savoy, Kale, Broccoli, and Cauliflower.
JOHN CATTELL begs respectfully to inform the public that he has a plentiful supply of Plants of the above superior true sorts, which he will forward to order on receipt of postage stamps or Post Office order, made payable here, at the following prices, package included.
All the sorts of Early Cabbage, Savoy, and Kale, including Brussels Sprouts, 6d. per 100, 4s. 6d. per 1000. All the sorts of Autumn and Spring Broccoli, 8d. per 100, 5s. 6d per 1000. Early and Late Cauliflower and Red Pickling Cabbage, 10d. per 100. Drumhead or Cattle Cabbage, 3s. 6d. per 1000.
Packages containing plants to the value of 1l. and upwards, will be delivered Carriage Free to London, Croydon, and the Eden Bridge Station of the South Eastern Railway.
Seed of Cattell's Reliance Cabbage may be had free by post at 1s. per packet containing half an ounce.
Nursery and Seed Establishment, Westerham, Kent.

WHEELER'S ORANGE GLOBE MANGEL, WHEELER'S IMPERIAL SWEDE, GRASS SEEDS for PERMANENT PASTURE, GRASS SEEDS for LAWNS,
And all other Seeds of the same excellent quality which has rendered our Farm Seeds so celebrated.
We offer our Seeds at the lowest price consistent with their being good and pure, at the same time deliver them carriage-free by rail, and allow 5 per cent. discount for cash.
Our Book of FARM SEEDS sent free for 3 stamps.
J. C. Wheeler & Son, Seed Growers, Gloucestershire.

To the Seed Trade.
THOMAS AYRES, Wholesale and Retail Seedsman and Grower, Biggleswade, Beds, has to dispose of a large quantity of TURNIP SEED, in large or small quantities. The stock includes Skirving's Liverpool Swede, Ayres' Improved Liverpool Swede, Purple Top Swede, Marshall's Improved Purple Top Swede, Green Top Yellow Swede, Round Green, Green Globe, White Globe, Red Globe, Red Tankard, Green Tankard, Dale's Hybrid, and a few other varieties.
Price on application.
N.B. A few Cwt. of ONION and PARSNIP SEED to dispose of.

RAYNBIRD, CALDECOTT, and BAWTREE, Seed Merchants and Growers, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E.C.
Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.
Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

Turnip Seed, saved from selected Transplanted Bulbs.
Carriage Free.
WILLIAM MORTON, Agricultural Seedsman, and Turnip Seed Grower, Old Market Place, Ripon, Yorkshire, intimates that he is now offering his selected Stock of TURNIP SEED at the following reasonable prices, and which he can with confidence recommend. Several varieties of new selected Swedes, Green and Purple-topped, in sorts, 1s. 6d. per lb. New selected Yellows (Bullocks and Hybrids), in sorts, 1s. 3d. per lb. New selected Red, White, and Green Globes, 1s. 3d. per lb. New selected White and Red Norfolks (the former of these is well known by the name of Sweet Willow White). New selected Tankards, in sorts, 1s. 3d. per lb. New selected Stones, in sorts, 1s. 3d. per lb. Rape Seed (Broad-leaved and Long-stalked, a magnificent sample), 4d. per lb.
Mangel Wurzels, Clovers, Rye-grasses, &c.
Orders executed with prompt care and attention, and a reduction made where large quantities are required.
PRICE CURRENTS Free
Established for the Sale of first-class Agricultural Seeds, 1830.

Land Drainage.
WORKS of DRAINAGE of any extent are EXECUTED by the GENERAL LAND DRAINAGE and IMPROVEMENT COMPANY on all descriptions of property, whether freehold, entailed, mortgaged, trust, ecclesiastical, corporate, or collegiate.
Repayment may be made by the Landowner as successive portions of the works are completed; or the actual expenditure, with a commission thereon, may be charged on the property improved, by way of rentcharge on the estate created for various terms of years so as to adapt the rate per cent. of annual charge to the circumstances of the tenants.
No investigation of title being required, or notices given to Reversioners or Mortgagees, no legal expenses are incurred.
Works of Irrigation, Enclosing, Wood Grubbing, Road Making, and Farm Buildings are executed in a similar manner.
Landowners desirous to execute any of the Improvements by their own Agents, and charge the outlay and expenses on the Estate, may obtain Loans for the purpose.
Applications to be made to William Clifford, the Secretary, at the Offices of the Company, 52, Parliament Street, S.W.

THE LANDS IMPROVEMENT COMPANY.—Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
To Landowners, the Clergy, Estate Agents, Surveyors, &c. in England and Wales and in Scotland.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.
Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.
For further information, and for forms of application, apply to the Honourable William Napier, Managing Director, 2, Old Palace Yard, Westminster, S.W.

THE BIRMINGHAM CATTLE and POULTRY SHOW, 1861.
The THIRTEENTH GREAT ANNUAL EXHIBITION of CATTLE, SHEEP, PIGS, DOMESTIC POULTRY and ROOTS, will be held in Bingley Hall, on MONDAY, TUESDAY, WEDNESDAY, and THURSDAY, the 2d, 3d, 4th, and 5th of December next, when Prizes, Cups, or other articles of Silver Plate and Gold and Silver Medals to the amount of 1450l. will be awarded. Prize Lists may be obtained on application.
John B. Lythall, Secretary.
Offices, 14, Temple Street, Birmingham, June 15.

The Agricultural Gazette.

SATURDAY, JUNE 15, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

Wednesday, June 19 { Agri. Society of England .. .. Noon; Norfolk Agri. Society at Swaffham. }

—— Recent rains and the change at length of an obstinate north wind are fast clothing the country with luxuriant growth. Mowing has commenced in all our southern counties; and if a good haymaking season should ensue, a large produce of good quality will be saved. Most corn crops are now fully fed, Wheat especially needs no more rain, and a dry summer would now ensure a good harvest. Such weather, however, is not wanted in the interests of other crops; nevertheless, nothing can be better for every crop we grow than the present condition of the land. A wet year left the land unprecedentedly foul—a dry spring has enabled us to clean it. And rain enough has fallen now to feed the young corn and Grass, and to prepare a first-rate seed bed for our Turnips. Mangels are nearly everywhere more or less a failure—the seed has proved exceedingly defective. But we do not hear complaints of any other crop.

—— We direct attention to a paragraph elsewhere, in which the alterations in the Birmingham Prize List for December next are specified. In the Cattle Department several liberal special prizes are announced, making it possible for an ox or steer, if bred by the exhibitor, to win upwards of 100l., or a cow or heifer about 96l.

How are steam ploughs and the rival methods of steam culture to be "judged" at Leeds next month? Has any one devised a satisfactory test of merit which can be readily applied, or which will fairly indicate the relative standing of competitors? It is a subject on which judges upon previous occasions must have spent some thought; and they ought to make public the conclusions they have reached. It is a subject too on which the hundred, who have already had a year's experience of steam cultivation, would do good service by enlightening us; and they would certainly

receive the hearty thanks of the thousand who are about to follow in their steps.

What we want to know is the intrinsic worth of the cultivation done; and the expense incurred in its accomplishment. A year or two's experience of the several plans on various soils might ultimately teach us the former of these particulars, and it would need as long safely to determine the latter. But we have hitherto had only a day or two—this year we may have 10 days—devoted to the determination of both, and it is obvious therefore that every precaution must be taken to ensure a true reading and an exact record of every particular during the examination which can throw light upon the result. It is to be hoped that, as in the case of other implements, the committee of Council of the Agricultural Society have applied for suggestions to all likely quarters as to the instructions by which judges of steam cultivation should be guided. We have before us replies to such an inquiry addressed by the committee to Messrs. Garrett & Son on the subject of sowing machines, and a very full account is given in them of the conditions under which a satisfactory judgment of relative merit is in this case likely to be attained. Has any preliminary inquiry of this kind been made — any suggestions gathered and compared—any instructions founded on them issued, so that the attention of judges may be guided to the points on which the judgment ought to turn?

Hitherto we have had different engines employed through differing apparatus upon machines for different purposes. The comparison has been as complicated and uneven as possible. Smith's cultivated ground has been pitted against Fowler's ploughed ground—the cost of the operation has in either case been determined with tolerable accuracy, or at least error, if any, has been common to both cases alike. The labour of the operation has been very imperfectly determined; but here, too, both would be similarly liable to a common error. The real use, value, and agricultural effect of the operation has been left for decision to that mixture of speculation, prejudice, and sound judgment, to which all agricultural valuations more or less are due. And here conclusions wide as the poles asunder will be arrived at by different men.

In the case of horse-drawn implements you never try ploughs and cultivators in a common class—*each* competes with implements of its own class, and no determination for which a day's trial of ploughs and cultivators against each other should take place would be worth recording. The only decision possible of a question of this kind is that which it receives upon the great scale at the hands of agriculturists generally, whose practice gradually changes as experience of the advantages of any altered practice becomes more widely known. In this way, no doubt, the cultivator and grubber are coming rapidly into more general use. The advantage, perhaps the need, of cutting once at least in every year a definite layer of earth clean off from the subsoil which it covers, and so of obtaining a certain quantity of material to be cleaned and fertilised, will always be recognised; but the more rapid action of toothed implements of tillage by which this layer is to be combed and stirred and the subsoil itself torn up is rapidly commending itself to favourable judgment, and in place of repeated ploughings and endless harrowings every year, the general rule will be one ploughing before winter and repeated cultivatings and harrowings in the spring. In the meantime, however, it is plain that observations for a day or for a week cannot solve the question of the relative advantage of a ploughing and a grubbing; and it is therefore satisfactory to learn that Mr. Fowler is prepared at Leeds to show cultivators at work as well as ploughs, and that Mr. Howard is prepared to show ploughs at work as well as cultivators. Each implement will thus compete in its own class—and the rivalry will lie rather between two different modes of applying steam-power to the tillage of the soil than between two different methods of steam cultivation.

In our impression for the 30th of June of last year (1860), we find the following statement by a Correspondent in reference to the Grass in Hyde Park:—

"The most extraordinary piece of Grass that can be found is that in Hyde Park; there is not a Plantain, Dandelion, Nettle, or any other weed in it. If permission were given under certain restrictions for seeds of this Grass to be gathered, the country at large would ere long derive great advantage from it. The practice of sowing what are called 'hay seeds' is very objectionable." Now, it was with this latter part of our Correspondent's note in our mind, that wishing to see what really were the capabilities of the Grass of the Park for permanent pasture, we shortly afterwards took a list of its graminaceous productions; and we then found a pretty plentiful supply of the following species:—

Grasses forming the Turf of Hyde Park.

1. Poa annua.—Annual Meadow Grass.
2. ,, trivialis.—Rough stalked ditto.
3. ,, pratensis.—Smooth ditto ditto.
4. Hordeum pratense.—Meadow Barley.
5. Lolium perenne.—Perennial Rye-grass.
6. Dactylis glomerata.—Cocksfoot Grass.
7. Cynosurus cristatus.—Dogstail Grass.
8. Agrostis stolonifera, vars.—Fiorin. Other plants.
9. Plantago media.—Common Plantain.
10. Trifolium repens.—Dutch Clover.

We perfectly agree with our Correspondent as to the impolicy of sowing hay seeds, but differ from him in his estimate of their quality in this particular instance. If the contents of Hyde Park should be allowed to seed, we see no reason, so far as we then ascertained those contents, to recommend that seed for permanent pasture, in any position whatever. Only those Grasses to which the Nos. 3, 5, 6, and 10 are attached, are worth much either for pasturage purposes or for the rick, whilst Nos. 1, 7, 8, and 9 can hardly be considered better than weeds, to which category, if we were estimating for a first-rate pasture, we should also be inclined to refer No. 4. The fact is that although Hyde Park is comparatively free from absolute weeds, which is a matter due to the constant treading which it receives, yet its Grasses are not generally those of a rich, but on the contrary, of a poor meadow. Its condition is, however, an evidence of the great good of treading, in preventing the growth of extraneous plants on the one hand, and in producing that consolidation so necessary to the development of an even uniform turf on the other.

Its condition is moreover influenced by our climate; for a long period of drought and intense heat which usually characterises the summers of other countries bakes the turf, so that if not universally destroyed it is so in patches; but our climate is so fitful that, speaking generally, the brown caused by frost is displaced by green after the first showers of spring, and so is the brown of summer by the fitful rains of which we often so unreasonably complain.

It happens however that Hyde Park and the other open spaces of Grass of London and large cities are liable to injury, not only from occasional long drought, but from the more continuous traffic of large bodies of people. A case of this kind occurred on and after the first grand parade of the Rifle Volunteers. Its result was to destroy whole patches of the turf, which was here and there worn into holes. In such places, if left entirely to themselves, there will be sure to spring up a few sprigs of the Poa annua, and this if allowed to seed will cover the places preparatory to a gradual admission by wind or other means of a stray seed or two of perennial kinds of Grass. Such a method of restoration may indeed be imitated artificially. A mixture of Poa annua and Poa pratensis should be sown on such bald places in the early spring; the first species would mend the mischief for the London season, while the latter will prepare for a permanent restoration of the grassy herbage.

Such a plan is applicable in any circumstances of a similar nature; the Poa annua being specially adapted to any case where the early appearance of Grass is required for any special purpose.

A Correspondent, "Aluminium," has asked questions on a subject that every cultivator of soil ought to make himself familiar with. Deep cultivation, to which he refers, is now practicable to an extent which could not have been profitable before the adoption of steam culture.

If it has ever failed on ordinary corn-growing lands, it has been because it was done at the wrong season, or for the wrong crop, or, perhaps, because too much was expected from it alone. Nothing tends to retard the development of any system connected with agriculture so much as extravagant representations of results. But, on the other hand, there have been eccentric men opposed to any ploughing at all, and annually publishing balance sheets of crops to show the correctness of their system. The late Mr. Piper, whose thickset Wheat is generally known, was one of these.

The two or three acres of land he cultivated in Essex were at the back of a mill dam, and so situated in the nook of a valley as to have become covered with the richest alluvial deposit. This land was naturally a soil such as by the best implements and by the best manures skilful farmers study to produce. To have stirred it a few inches only would have ruined by over-luxuriance the next crop of corn. Mr. Piper simply hoed it, dressed it with some inorganic material, as road-sand, or wood ashes, and when the time came for sowing, dibbled it with Wheat again. There could be no objection to this mode of corn culture and cropping, nor to publishing the result; but to urge it as showing how labour in cultivation may be saved is mere folly.

Light land, whether sandy or gravelly, cannot have its naturally uncertain productive capacities fully developed without deep cultivation. If a hole be dug in search of gravel or sand, and the soil be simply put back again, that place will retain its luxuriance of growth much longer than the soil adjoining, where the field has merely been subjected to ordinary shallow ploughing.

To create 2 feet of well tilled soil, instead of 9 inches of it, is to give the soil a greatly increased power of retaining moisture. A piece of pumice stone will occupy far less space when smashed to powder. Its capacity to resist the escape of moisture will be proportionately increased. Light soil is of a somewhat corresponding structure; and by first stirring it as deeply as possible, and then compressing it into a compact, united mass of atoms, not only are fresh substances made available for roots to feed on, but its natural moisture is retained for use by the growing plant.

Heavy or clay land, even if undrained, would be greatly benefited by deep autumn cultivation, if well furrowed out subsequently. It might be of no benefit in a wet year like last. But in such a year common culture would be done at a loss. Drainage, in any case a fertiliser, is, in such a case, the first necessity, and deep cultivation is the second requisite, if profitable crops be the object.

If soil be deepened and pulverised, and just enough ammoniacal or other stimulating manure be applied to cause the first development of a green crop, and enable it to feed freely on the air, and if this crop be turned in to decompose, an addition of every element of food for plants will be made to the soil.

All that need be guarded against in practising deep cultivation is bringing up merely mineral earth from below more rapidly than it can be easily converted into soil by tillage and exposure.

Steam-cultivators for stirring subsoils, and steam-ploughs for rapidly turning and lightening surface soils, may be hailed with every feeling induced by anticipated success. The benefit in increase of crops that will accrue from them has only begun to be appreciated.

STEAM CULTIVATION.

Burderop, near Swindon.—It is proper to say with reference to these reports, that while every care is made to ensure their accuracy in every detail, yet the responsibility on this point must rest wholly with the reporter. While the facts on which he bases his opinions are obtained of course originally on the farm that is being described, yet those opinions and the calculations on which they are founded are his own, and often retained notwithstanding objections raised by the gentlemen immediately interested in them. The report as soon as printed is sent back for correction as to matter of fact; but in many cases passages are retained to which objections have been made involving not statements of fact but statements of opinion. Neither Mr. Brown of Burderop, Mr. Pocock of Bourton, Mr. Burniston of Henley, nor any other of the gentlemen whose farms are described, are therefore in any way compromised by the arguments, opinions, and calculations which have been published in this series. Whenever errors in statements as of fact are discovered they will be immediately corrected: and we take occasion now to correct a mistake which has been made in the report last week of Burderop. Mr. Brown informs us that not 11*s.* but 15*s.* a day must be charged for coals—which will raise the cost of his steam ploughing at least 6*d.* an acre. It is only fair to add that error, if any, on these accounts is certain to be on the safe side—that all expenses are dimiishing as the process becomes familiar, and that the work accomplished will be more in other years after the land has been once deeply worked by steam-power than it is at first.

Broad Hinton, near Swindon.—This farm is a upon the level tract of heavy calcareous soil at the foot of the chalk downs near Swindon. It is held along with another farm stretching into the lower vale, whose Messrs. Stratton. Mr. Richard Stratton, whose herd of pure bred Short-horns has made his name known over the kingdom, has been tenant of the Salthrop Farm for 18 years and of Broad Hinton for nine years. The two together include 1000 acres of arable land and

600 acres of pasture. He has since taken a farm under the Duke of Beaufort, at Wall's Court, near Bristol, where he now resides.

Mr. Stratton has had Fowler's 12-horse steam-engine and ploughing apparatus since the end of October, 1859. Immediately on its purchase he sold all his ox-teams, including 20 oxen, and he shortly afterwards sold one team of horses. If we suppose, as in the former case, that his oxen are sold for the same value as when they were put to labour, then their food has been spent wholly in the production of force—had it been given to a flock of 200 sheep it would have yielded an annual return of at least 200*l.* Their cost besides this includes the wages of 5 men and 5 boys at 10*s.* a week for the men and perhaps 3*s.* a week for the boys—3*l.* 5*s.* weekly, or 169*l.* The team of 3 horses may be put down at more than 100*l.*, so that the annual money saving may be fairly estimated as being at least 470*l.* And this does not include the annual cost of repairs of harness for the oxen, or of the implements they worked, to keep all which at their original value would be a considerable expense.

Commencing in October, 1859, and working through a most unseasonable year for tillage-work of all kinds, the following fields have been ploughed. I give the list as taken from Mr. Stratton, field by field. The question of work accomplished is one of such importance to a right judgment of its economy, that I always put it in detail and get as detailed an answer as possible:—

"In October, 1859, we first began steam-ploughing, and ploughed* Dyke Field, 16 acres; then Calne Court Field, 32; Snap Field, 22; Far do., 13; Horse Pound, 21; Hill Field, 67; The Lanes, 12; Rough Park, 45; Mead Park, 114; Millway, 8; West Field, 94; Weir Field, 26; Park Piece, 45; Forty Acres, &c., 55; Chilverlinch, &c., 65; Bell Field, 92; Sainfoin Pieces, &c., 120; Small Gains, 72; Harkpen Field, 30; Littleworth, 81; Harkpen Middle Field, 18. We also mole-drained 95 acres of Grass land with this steam tackle, which work I consider caused as much wear as 50 acres of ploughing."

Counting this mole-draining as equal to 50 acres, Mr. Stratton has thus accomplished 1128 acres. Some of this however was worked with the short plough breasts, which make the implement more a grubber than a plough—but it does only four furrows at a time, and takes therefore as long to scarify as to plough. A great deal of the land too is so stiff that it was done with only three furrows at a time when ploughing. The work accomplished is therefore none the more for its being partly scarifying, while it is less than it would otherwise have been owing to the stiffness of the soil. May and June, August, September, and great part of October, remained before two years will be completed, and these with their long summer days are fully one half the year: and putting 1128 acres therefore down as the work of 1½ year, they correspond to 752 acres per annum. The average performance hitherto may be put down at 7 acres daily, considering both the difficulty of a first deep tillage and the many hindrances of a wet season. More than this will be done in future. I saw the engine at work in a stiff calcareous loam. It had finished elsewhere at 7 P.M. the previous day; the engine had been cleaned, and it and the tackle had been moved, and it had done 5 acres the first day; and in many cases, perhaps hereafter on the average, 9 acres will be easily accomplished daily. The work done hitherto corresponds to 107 days per annum, and the cost is to be estimated as follows:—

Coals, 12 cwt.	£0 12 0	
Oil	0 0 9	
		0 12 9
Wages:—engineer, 3*s.* 6*d.*; ploughman, 3*s.* 6*d.*; anchor-man, 2*s.*; 2 boys, 1*s.* 5*d.* each; boy and horse at water cart, 4*s.* 2*d.*		0 16 0
		£1 8 9

or rather more than 4*s.* an acre, according to the performance hitherto.	
107 days at 1*l.* 8*s.* 9*d.*	153 16 3
Rope has been a costly item. Mr. Stratton purchased first 800 yards; at the end of 14 months he had purchased another 800 yards, and he is now about to order a third; and more than 800 yards must be charged per annum	90 0 0
Repairs, say per annum	20 0 0
Add 10 per cent. for maintenance of value	78 0 0
And 5 per cent. for interest of capital	39 0 0
And the whole charge per annum is	380 16 3
or, about 10*s.* an acre.	

It is plain that this cost is so high owing to an unusual expenditure on rope. The only object of these histories is of course to state actual experience, and this I believe is the cost which Mr. Stratton has hitherto incurred. I have no doubt it will be largely reduced hereafter, both by a more economical use of rope and by a larger performance in a day: that in the latter as well as the former particular there is scope for great improvement appears from what has been actually done on particular occasions. In one instance 13 acres have been ploughed in a day; and Mr. Stratton is no doubt right in saying that his 12-horse engine and its 11 cwt. of coal daily will do more work in a day than 30 horses on his land with their 40*s.* worth of food per diem.

The land is cropped as follows:—Wheat, 400 acres, put in after a single ploughing; bare fallow, 100 acres, equal to four ploughings; Swedes, Turnips, and Mangel Wurzel, about 90 acres (four ploughings); Beans, after Wheat, 80 or 90 acres (one ploughing); Peas, after Wheat, 70 or 80 acres (one ploughing); Vetches, 50 or 60 acres, followed by fallow (three or four ploughings); Oats, after Wheat, 70 acres (one ploughing); Barley, after Wheat, 20 or 30 acres (one ploughing); Clover, after Wheat, 50 to 80 acres.

There are thus at least 1600 acres of ploughing per annum to be done; and this with the large fields in which the land lies makes the steam-plough especially necessary. I saw some admirable work done: one large field of heavy land in particular had been well ploughed when dry, and the whole was lying thoroughly and deeply disintegrated, ready for the first rains to moulder down completely. It will be seen from the cropping that the land bears a very large quantity of corn. It maintains also a large herd of cattle, including 350 of all ages and a summer flock of at least 1000 sheep. A considerable quantity—4 or 5 tons—of nitrate of soda is also annually applied to the Wheat crop, 40 tons of oilcake are annually consumed, and this, with the large store of manure, suffices to maintain fertility.

* This is not the size of the fields, but the amount of work done in them; some were ploughed many times.

ANNALS OF A LIQUID MANURE FARM.

AFTER the reading of the account of Mr. James Blackburn's liquid manure farm, before a recent meeting of the Agricultural Society, Mr. Chadwick read the following account given to him by Dr. Kirkpatrick, the Principal of the Agricultural Training Institution at Glasnevin, of the experience obtained there, with the application of farm-yard liquid manure and, in part, of sewer manure:—

ALBERT NATIONAL AGRICULTURAL TRAINING INSTITUTION.
Glasnevin, Dublin, May 13, 1861.

Dear Sir—Agreeably to the wish expressed in your note of the 6th inst., I now submit the following particulars with reference to the application of liquid manure on a portion of the Albert Model Farm. I may in the first place remark that the Albert National Agricultural Institution, which is a branch of National education in this country, accommodates 75 agricultural pupils,* the superintendent and his family, the matron and servants, land steward, and literary teacher—in all upwards of 90 persons. The area of land attached to the Albert Institution consists of 180 statute acres, of which the Albert Model Farm contains 168 acres, and the remainder is under gardens, buildings, &c. The following is a list of the live stock at present on the farm:—

6 horses	3 bulls { 2 Short-horns and 1 Kerry.
1 colt	2 young ditto.
1 foal	30 milch cows.
1 pony	Short-horns, Ayrshire, Kerry, Alderney, and crosses.
40 pigs (young and old)	20 heifers.
40 sheep (young and old)	15 calves.

The contents of the water-closets, urinals, pupils' privies, and night vessels, as well as the urine of the cows, horses, and pigs, flow into two large well-constructed tanks which hold upwards of 40,000 gallons. The liquid in the tank is largely diluted by the water which has been used in the lavatories of the establishment, and also by a frequent and copious flow of water in the washing and cleaning of the cattle, cattle stands, &c. No solid manure is put into the tanks, except what may be carried in by the flow of water when washing the cattle houses. The solid manure is most carefully made up and preserved, and frequently saturated with the liquid from the tanks. From these sources, together with the rainfall in a limited space in the farmyards, it is estimated that there is a weekly average supply of 40,000 gallons. A steam-engine of 8-horse power is employed for threshing grain, cutting chaff, grinding and bruising Oats, washing and cutting roots, churning, grinding bones, pumping water, and distributing liquid manure; but it is to be borne in mind that but a small portion of the steam-power is required for the last mentioned purpose, as that work is carried on simultaneously with the threshing or some other operation. In the year 1854 iron-pipes were laid in about 50 statute acres of the farm, and liquid manure pumps, gutta percha hose, &c., provided as follows:—

980 yards 3 inch pipes at 3*s.* 6*d.* per yard ..	£163 6*s.* 8*d.*
112 „ 2 „ do., at 2*s.* 5*d.* do.	13 10 8
88 „ 3 „ do., at 3*s.* 6*d.* do.	15 15 8
11 „ 3 „ do. (branch) at 3*s.* 4*d.* per yard	2 17 9
3 „ 3 „ do. (bend) at 4*s.* „	0 12 0
2 „ 3 „ do. (branch) at 5*s.* 3*d.* „	0 10 6
2 clash seats with brass valves, at 2*l.* 5*s.* each ..	4 10 0
7 hydrants,† at 1*l.* 3*s.* each	6 18 0
1 swivel joint and key for same	1 12 0
1 set liquid manure pumps (plungers 4 inches diameter, 2 feet stroke, discharges per hour 4500 gallons) and belts	61 1 0
Gutta percha hose	55 13 0
	£324 8 3

The gutta percha hose, which was at first used, was very liable to be much injured, and difficult of being properly repaired. Through the kindness of J. Mechi, Esq., of Tiptree Hall, we have been enabled to procure hose of a different composition and construction, and which is known by the name of "India Rubber and Canvas." This hose for so far answers admirably well, and although its cost (2*s.* per foot) is from 10 to 15 per cent. above that of gutta percha hose of the same diameter, yet it will be found to be cheaper in the end.

Mr. Boyle, the Board's Agriculturist at the Albert Model Farm, says, "About 2 million gallons of largely diluted liquid manure are distributed yearly over an area of 16 statute acres of Italian Rye-grass at a calculated cost of 1*d.* per ton.‡ The increased weight of Grass on the 16 acres to which the liquid-manure is applied annually, is about 100 tons, which I calculate to be worth 16*s.* per ton. If the 100 tons of Grass were made into hay, there would be about 27 tons of the latter, which, on the average of seasons, would sell in the Dublin market for about 80*l.*, or 3*l.* per ton." It has been found from several trials made on the Albert Model Farm, that full grown cattle consumed on an average 1 cwt. of Grass each per day, when house-fed, so that this increase of 100 tons has enabled us to keep 20 head of cattle for 100 days over and above what the same land would have produced without the application of liquid manure, though otherwise in good condition. I may also remark that the very best quality of Italian Rye grass seed is obtained from the crops grown on the irrigated land, and a large quantity is sold annually at the highest market price. In the summer of 1859 I had an offer of 40*s.* a quarter for 30 quarters of seed by a gentleman from Wiltshire who saw the growing crop. I sold the seed of that year's produce, as that also of 1860, at 48*s.* per quarter, or 6*s.* per imperial bushel. The seed is always saved from the second cutting, and is thus quite free from the seeds of other Grasses or weeds, owing to the much more rapid growth of Italian Rye-grass. There is a drawback in having two-thirds of the land, in which pipes are laid, on which no liquid manure is applied each year, thus increasing the charge on the remaining third; but it does not follow that one-third of the pipes would be sufficient, as where systematic rotations of cropping are carried out, as on the Albert Model Farm, Grass will be in a different field or fields each year, or every second year at farthest, so that all the fields of the rotation must be piped, or the Grass renewed on the same land, which would be a hazardous practice. The following Table gives the particulars of five cuttings obtained in a season:—

* The pupils are boarded and educated at the public expense for two years; all the labour of the farm and gardens, including the feeding and management of the live stock, &c., is done by the pupils. All candidates for these free places are obliged (in accordance with a suggestion recently made by the Right Hon. E. Cardwell, M.P.) to submit to two strict competitive examinations.

† The number of hydrants might be increased with advantage.

‡ The distribution of the liquid manure by horse-labour could not be effected under 4*d.* per ton. Nor could the liquid be distributed over the Grass land with all the farm horses on the place, as there are so many days in the year in which the liquid could not be carted on the land without doing serious damage.

EXPERIMENTS AT ALBERT MODEL FARM.

1. *Irrigation of Italian Rye-grass.*—The greater number of the readers of the *Albert Journal* are aware that in order to economise the very large quantity of liquid manure which is carefully collected at the Albert Farm, from the cattle houses, piggeries, and also from the pupils' dormitories, water closets, lavatories, &c.; under ground, iron pipes, with hydrants, have been laid for its distribution, by means of steam power, in about 50 acres of the farm. Its application heretofore has been chiefly directed to the production of Italian Rye-grass, and, although the results have not equalled those which have been reported as having been realised in other places, yet they have been highly satisfactory, and have made a good return for the outlay on the necessary works. We now submit the following return of the several cuttings during the past season, and the weight of each per statute acre. Each cart load of the Grass as it was cut for soiling, was accurately weighed, so that the very objectionable and inaccurate mode which is usually adopted for ascertaining the amount of produce by measuring a small portion of ground where the crop is supposed to be a fair average of the whole, and weighing the crop raised upon it, and from this calculating the acreable return, was effectually obviated. Thus, and thus only, can a reliable return of the acreable produce of Grass or root-crops be obtained.

No. of Cuttings.	Dates of Cuttings.	Produce of each Cutting per Statute Acre.	Amount of Liquid to each Cutting.*
		Tons Cwt.	Gallons.
1st	April 14	6 15	9,561
2d	June 4	9 13	9,030
3d	July 19	7 14	11,221
4th	Sept. 1	7 10	14,276
5th	Nov. 22	6 15	6,308
	Total ..	38 7	50,396

The result of an experiment made to ascertain as accurately as possible the produce obtained from land in which liquid manure had been applied, and compared with the produce of a portion of the same field which had received none, is annexed. It will be observed, however, that this particular field had produced but a poor crop of Grass on the previous year, and as the second year's crop of Italian Rye-grass is always lighter than the first, the produce in this case is much below an average yield. Besides the quantity of liquid applied to a portion of the field being larger, the contrast in the results must be looked upon as extreme. It proves clearly, however, the very large quantity of additional feeding which could be produced by economising this valuable manure, which is but too frequently allowed to run to waste at farm buildings, and almost without an exception from our cities and towns.

No. of Plot.	Date of cutting.	Produce, per statute acre, in a green state.	Total weight, per statute acre, in a green state.
		tons cwt. qrs. lbs.	tons cwt. qrs. lbs.
1	1st cutting, 11th May, 1854	9 0 0 0	
	2d cutting, 12th June	12 10 0 0	
	3d cutting, 4th August	8 0 0 0	
	4th cutting, 27th September	3 19 1 24	33 9 1 24
2	1st cutting, 11th May, 1854	3 10 0 0	
	2d cutting, 12th June	2 0 0 0	5 10 0 0

The large return of Grass from that portion of the field to which liquid manure was applied speaks so strongly in favour of the use of this substance for manurial purposes, that comment by me on the practice seems almost unnecessary. In our case the distribution was effected by means of the steam-engine, a mode which, of course, the small farmer could not employ. He could carry out the practice, however, more extensively than is done at present, by means of the liquid manure cart. I know that this mode of distribution incurs a great deal of expense, but the valuable returns which it insures afford ample compensation for the outlay. So convinced am I of the valuable effects of liquid manure, when properly applied, that I look upon the recent mode of distribution by means of the steam-engine—were it possible that it could be brought into general use—as one of the most important agricultural practices of the day. By means of it green food could be readily procured for house-fed cattle throughout eight or nine months of the year; whilst the large amount of food obtained from a comparatively small area of land would enable an increased number of cattle to be kept, and of course an increased produce realised. By the application of liquid manure a cutting of Italian Rye-grass will be available for cattle feeding from six to eight weeks earlier than would otherwise be the case. A supply of this valuable food at the end of March or beginning of April, at which period the roots are exhausted—can only be duly estimated by those who have experienced the difficulty of providing feeding for a numerous stock of cattle at that season of the year. Again, a great advantage results from the use of liquid manure in being enabled in dry seasons, when perhaps for weeks there is little or no growth in the ordinary Grass crop, to keep it in a rapidly growing state, and thus have a supply for the live stock. "I am, respectfully yours,
"To Edwin Chadwick, Esq. "THOMAS KIRKPATRICK."

At the close of Mr. Chadwick's paper, Mr. William Dickenson, who has long been known as the most successful cultivator of Italian Rye-grass, gave an account to the meeting of the working of a liquid

* The liquid was very much diluted with water.

manure farm laid out for him by the Government on part of the New Forest land at New Park, near Lymington, Hants. In its more prominent features it was similar to that of Mr. Blackburn, whose chief principles of culture Mr. Wilkinson corroborated. He stated that he acted upon the doctrine that any running away or discharge of water charged with manure from the soil was waste; that no more manure should be applied at once than the soil would completely absorb, and that if there were a surplus for one dressing it was better to apply it completely in two. He had not applied liquid manures to the cereals, simply because he preferred applying it to a crop which made him a return in a month, to one from which he had to wait for a return a year.

The Earl of Essex gave an account of his application of the town sewerage of Watford to the successful cultivation of a field of Wheat, on which he obtained 53 bushels and 5 loads of straw, as against 40 bushels and 4 loads of straw under the previous common culture. His lordship had found that he had greatly exceeded the extent of pipage requisite for the successful application of the sewerage, which it was proved might be utilised on a far smaller area—less than one-third that previously supposed. He fully supported the principle of culture.

After the reading of the papers, in answer to questions as to the progress of experience in the use of earthenware or wooden pipes, Mr. Chadwick stated that earthenware had been used in France and Switzerland not for the distribution of manure but of water, under such pressures as 150 feet. In England, earthenware had been nowhere properly laid down or succeeded that he was aware under such pressures, or otherwise than for water collecting and leading at low pressures of from 30 to 40 feet, for which purposes the use of rude earthenware piping, with rude joints, was gaining ground for the supply of towns. The failures in England were evidently failures in skill. On some liquid manure farms underground pipes of wood had been used successfully for a time, but they were, in the instances he knew of, replaced by iron. In remote districts, where neither iron nor earthenware were to be had, he thought that distribution might be effected, from such simple tanks as Mr. Blackburn had described, by overground pipes or open wooden and shifting spouts supported on tressels, and leading to troughs, from which the manure might be distributed by scraps, by the method described as in successful use in Norway and Sweden for the distribution of water.

On the motion of Mr. Raymond Barker, the thanks of the meeting were voted to Mr. Chadwick for his papers; and the Chairman, Lord Berners, expressed a wish that they might be promulgated in the agricultural journals.

Home Correspondence.

The Game Question.—Although some of your Correspondents do not acquiesce in my views on this matter, I have reason to believe that a great many others do approve of them, and are, in fact, carrying them into practice, and have tendered to me their thanks. Nobody can suppose that game is no longer to form an element of our food; and on the narrow ground of profit, I am prepared to prove that game pays as much for its food, probably much more, than the animals or poultry with which our markets are supplied. A partridge weighs on an average 12 to 15 ounces, an average pheasant about 3 lbs., so that their selling price is over 1*s.* per lb. live weight. Hares on an average will weigh 6 lbs. to 7 lbs., and a rabbit about 3 lbs., the selling price being about 4½*d.* to 7*d.* per lb. live weight. The average live weight price of beef and mutton is about 4½*d.* and of poultry about 6*d.* to 7*d.*, so that in both cases the game pays better for its feed than either meat or poultry, and we know that all things eat in proportion to their weight. Winged game, provided they are properly fed during certain seasons, are of great benefit to the farmer, for they consume an immense number of the insect tribe, very much to his advantage. The same may be said of poultry. I have always 200 to 300 head of fowls and ducks. They have free access to my corn fields, which adjoin my farm-yard, and have not even a hedge to keep them out. After being fed in the yard with corn they disperse themselves over the fields in the early morn, and with that quick bird's eye perception which is natural to them, make a keen onslaught upon the farmer's enemies. My bailiff tells me that at this season they live almost entirely on insects and Grass—eating only one-fourth the usual quantity of corn. Now how much mischief do these 300 poultry perpetrate? I cannot possibly estimate it at 40*s.* a year. But how much benefit do they confer by the consumption of millions of grubs, wire worms, slugs, &c.? and yet how angry would 200 to 300 pheasants make certain people feel. Gardeners are generally tenacious of intruders, but I never heard mine complain of the ducks. It is amusing to see them advancing in line, waddling and anxiously intent on their prey. Examine their crops, and you will find them crammed with slugs, worms, &c. But when do fowls commit havoc? I confess that to see some scores of them scratching with all their might on the recently sown Wheats has ere now excited my ire and my anxiety, knowing that certain rigidly stern critics who might examine my farm would rejoice to find a misplant; but experience has taught me that if the corn is properly drilled when the land is in the right condition (and we should always wait for that), your plant will be safe in spite of the poultry; and we must consider that they are capital cultivators. Again, just at and before harvest they will pull down a few straws and clear out the kernels, but the damage looks more than it really is, and they will consume less corn in the yards. Game, like poultry, sheep, and cattle, must be fed somewhere and by somebody. If people will do what is consistent with right and common sense in this matter, there need be none of that heart burning which now exists. I know that there always will be a per centage of greedy landlords and cross-grained tenants, but the bulk of humanity is actuated by the better principles of equity and justice. To those I appeal to combine pleasure with profit. The rapid diminution of our hedges and trees reduces our supply of warblers, and unless the food provided for these is consumed by winged game, the farmer will be severely injured by the insect tribe. Oh, but then there is the poaching question. In every village there are, and always will be, irregular men who will spend more than they get, and where there are no game preservers or game keepers, I know of a great many poultry houses which, although locked at night, are found minus their contents in the morning. Your Correspondent ridicules the idea of rabbits feeding on one side of the fence and not on the other. Facts are, however, stubborn things. I have this moment returned from a close inspection of many acres of Wheat and Oats surrounding a wood stocked with game; not one pennyworth of damage was done, proving my first proposition, that if game is well fed in cover it will seldom show itself in the open. There are some woods unfavourable to the retention of game; I mean those where closely packed trees so shade the ground as to prevent the growth of Grass or underwood. We are told that the way to preserve small beer is to place some strong ale by the side of it. The young growing crops are the small beer of game, the ripened roots and dry grain their strong ale. They know which to choose in spite of an intervening fence, or of an agricultural disbeliever in such a theory. It is a remarkable but convincing fact in regard to the foregoing theory, that three cottage gardens abutting on and in fact forming a part of the wood, suffer no injury, although the fence is a very imperfect hedge; and the rabbits may be seen feeding on the other side of it in the wood. Another remarkable fact is, that although a fine crop of Red Clover runs some hundred yards beside the wood, the rabbits in the banks and hares do not come to feed on it; it is only occasionally and rarely that late in the evening you may see one, or two, or three. *J. Mechi, Tiptree, June 3.*—P.S. Looking to the comparative live weight value and market prices of game, and of our other animal and winged consumables, we may safely conclude that you can sell your root crops and grain at a higher price to the former than to the latter. The question of keepers is another consideration. ——It is both curious and amusing to notice the almost endless variety of opinions on this somewhat perplexing subject; for whilst on the one hand Mr. Alderman Mechi would protect the crops on a farm by feasting the depredators (at the farmer's expense), on the other a worthy Correspondent in your last sets to work after a fashion more military than civil, and would starve the garrison by cutting off the supplies. Having had some experience on this system of tactics, I have no objection whatever to submit it to your pages for the benefit of the uninitiated in such matters; but previous to this I should tell you that many years ago, whilst residing in Norfolk, the idea occurred to me of establishing a sort of home manufactory of wire netting of various sorts and sizes, chiefly for the sake of employing the children of the cottagers in my own immediate neighbourhood. It succeeded vastly beyond my expectations, and for more than 20 years was a source of profitable employment to both young and old. It was however, as I had long expected, ultimately superseded by machinery, as the Buckinghamshire hand-lace had been by the bobbin-net of Nottingham, Leicester, and Derby. A short time before I quitted Norfolk I was applied to by a friend of mine, a tenant farmer, to supply him with 1000 yards of net to fix against a field of Turnips which abutted upon one of his landlord's game covers. The next time I saw him, "That is a capital fence of yours," he observed, "I must have 500 yards more. Not a single hare has been near the Turnips. But I expect to lose my farm by it, for my landlord vows vengeance against me for interfering with his game." And lose it he did; though he soon met with another not burthened with so great a nuisance. I could mention many similar cases, but this was the most prominent, as coming more immediately under my own cognisance. Yet, effective as this system has been proved to be, and admitting the full right of every individual to do what he will with his own, I am by no means disposed to advise its general adoption. In the first place no game preserver would sanction what he would consider as little less than an act of hostility on the part of his tenant, and thus induce a feeling of distrust and estrangement between the two, which ought if possible to be avoided. Besides, if a man hires a farm under a covenant not to interfere with the game himself, nor to permit others to do so, I do not see how he can consistently act upon the defensive against what may be deemed the property of his landlord. He has made his bargain, and by that bargain he is bound to abide. I am not going to preach a homily on the relative duties of landlord and tenant; but without crouching to the former, or wishing for one moment to encroach on the rights of the latter, I would, as much as lieth in me, live peaceably with all men. *Samuel Taylor, Gloucester, June 5.*

Horse Hay-rake.—Some time ago I noticed in the *Agricultural Gazette*, or some other paper which I cannot now lay my hands on, an account of a horse-rake made to fold over, so as to enable it to pass through a common gateway. If you or any of your Correspondents who may have used it would give a statement of its merits, and the address of the maker, it might confer an obligation on others as well as *J. G.* [The horse-rake referred to is by Mr. Gerrans, of Tregony, Grampound. See p. 538.]

Should Light Land have deep or shallow Cultivation?—Like "Aluminium" I was struck with Mr. Burnett's remark—"On light soils the advantages of deep cultivation are lost," as being contrary to my experience, both on light sandy ground and on light black moorland, and should be glad to know the opinion of others who may have tried it. In the cases to which I allude I may state that in 1845 a portion of a sandy field was dug with the spade, and that almost every succeeding crop has been perceptibly better on the digged portion. Ten years ago a moor field previously worthless, growing nothing but a short Heath, with scarce a blade of Grass to be seen, was thoroughly drained, trenched, and levelled, paring off the top and burying it (not burning it) in the bottom of the trench, turning the soil or rather the black and grey sand on top of it, so that in turning it over one foot deep a great portion of subsoil or sand was brought to the surface. I cannot boast of some of the first crops, but the field has since produced some of the heaviest crops of Oats and Grass in the parish, and is at present one of the best pastures, and in the dry season of 1859 was almost the only really green pasture field in the neighbourhood. *Cambrensis.* P.S. A field adjoining, but broken up some years previous with the plough, although originally of better quality has never produced such good crops of grain or Grass.

Benefit Clubs.—There is no channel better calculated than the benefit friendly society to approach the working classes with a view to encourage them in habits of economy, sobriety, and good conduct. All should become subscribers, by adding to the funds, and by adding also to the stock of information calculated to promote the interests of the society, namely, to increase and strengthen the growth of such principles as are calculated to promote the best interests of all, as members one of another. The agricultural districts have been pretty well thinned of their labourers of late years, and consequently the rate of wages is higher, but experience proves that it is not high wages alone that has had the effect of producing good habits. We may conclude that by inducing the working classes to become members of the benefit club, we shall lead the way to their becoming subscribers to the savings bank. To obtain the greatest amount of benefit from these societies the meetings should take place every month, and let all meet as friends, and the result will be a benefit to all. *B. Ransley, Perrysfield Farm, Oxted, Surrey, June 5.*

Thin Crops of Corn.—Some time back I remonstrated with my brother farmers for their rashness in ploughing up so many of their weak crops of Wheat, or interlining second spring sowings amongst them, unless where the plant had been destroyed to a very great extent; believing that very many regular plants, though so thin, would in a kindly season recover, tiller, and become a full crop. My anticipations are now fully realised, and many people are exclaiming "What a wonderful change!" This opens a wide field for fresh discussion: which of the two, rational seeding or very thick seeding, are most correct and proper? Allow me to observe that such accidental thin plants of Wheat as are now prevalent are not patterns that should be imitated, and are not fair criterions to judge by, though they may this year prove more abundant and lucrative than ordinary thick crops; for they will be found to be attended with considerable amount of labour and expense in hoeing to keep them free from weeds, and may cause them to tiller too much in summer, and to produce late ears, and too uneven a sample for the miller. If those irregular thin plants should do well this season, it will be an exception and not the rule; such casual plants have often disappointed the farmer's hopes, and undeservedly injured the cause of rational seeding. Early-sown Wheat uniformly planted in separate grains in August or September are subject to no such dangers in winter and spring, and no intruding insects or animals will eat it, either its blades or roots, as they are not then tender and palatable; save to sheep, which will eat it, and will also benefit themselves and the crop by so doing, causing a solid surface of the earth which the Wheat plant requires. No frosts will then hurt it, and snow will protect it; neither will wet injure it, and it will have due time to tiller well, and at its proper season, so as to establish itself in the soil which should be provided for it, sending its main tap roots 3 feet into the subsoil before Christmas in search of winter food; and this is necessary for it to obtain sufficient moisture to perfect its growth in summer. The late crops, however, are subject to

those vicissitudes just enumerated, and to more which might be added, whether extravagantly sown thick or more rationally, and what I choose to call properly planted; such late planting should be avoided as much as possible, as circumstances will admit. Let us then sow early, rationally, uniformly, and separately, and with the best of seed, and moreover on clean land, and the best of results will follow; save the casualties attending it occasioned by adverse winds and tempests, which no one but God can control. *A. Hardy, Maldon, Essex.*

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

Monthly Council, Wednesday, *June 5th.*—Present, the Earl of Powis, President, in the Chair.

The President announced to the meeting that His Royal Highness the Prince Consort had consented to accept the office of President of the Society during the year ensuing the Leeds meeting.

Finances.—The Hon. Col. Hood presented the Report, which stated that the Secretary's receipts during the past month had been examined and found correct by the Committee and by the Society's accountants. The balance in the hands of the bankers on the 31st May was 2649*l.* 2*s.* 8*d.*

Journal.—The report of this committee was presented by Mr. Thompson, M.P., the Chairman, who announced that the prizes offered by the Society in the following classes of Essays had been awarded as follows:—

Class VI. On the rearing of Calves. The prize of 10*l.* to Mr. Thos. Bowick, bailiff to Lord Leigh, Stoneleigh Abbey, Kenilworth.

Class VII. On Harvesting Corn. The prize of 10*l.* to Mr. Peter Love, Agricultural Valuer, 13, Sheep Street, Northampton.

Implements.—Colonel Challoner, Chairman of the Committee, announced that the Ordinary Portable Engine alluded to in Class II. of the Prize Sheet was one which might be applied to the working of steam cultivators or ploughs, but the engine to be used must be worked in the state such engines are in when otherwise employed on the farm.

Veterinary.—The veterinary privileges of Governors and Members of the Society had been under the consideration of the Committee, and were altered as follows.

I.—Serious or Extensive Diseases.—No. 1. Any Member of the Society who may desire professional attendance and special advice in cases of serious or extensive disease among his cattle, sheep, or pigs, and will address a letter to the Secretary, will, by return of post, receive a reply stating whether it be considered necessary that Professor Simonds, the Society's Veterinary Inspector, should visit the place where the disease prevails. No. 2. The remuneration of the Inspector will be 2*l.* 2*s.* each day, as a professional fee, and 1*l.* 1*s.* each day for personal expenses; and he will also be allowed to charge the cost of travelling to and from the locality where his services may have been required. The fees will be paid by the Society, but the travelling expenses will be a charge against the applicant. This charge may, however, be reduced or remitted altogether at the discretion of the Council, on such step being recommended to them by the Veterinary Committee. No. 3. The Inspector, on his return from visiting the diseased stock, shall report to the Committee, in writing, the results of his observations and proceedings, which Report will be laid before the Council. No. 4. When contingencies arise to prevent a personal discharge of the duties confided to the Inspector, he may, subject to the approval of the Committee, name some competent professional person to act in his stead, who shall receive the same rates of remuneration.

II.—Other Cases of Disease.—Members may obtain the attendance of the Veterinary Inspector on all urgent cases of disease by paying the cost of his visit, which will be at the following rate, viz. 2*l.* 2*s.* per diem, and travelling expenses.

III.—Consultations without Visit.—Personal consultation with the Veterinary Inspector, 5*s.*; Consultation by letter, 5*s.*; Consultation necessitating the writing of three or more letters, 10*s.*; Post mortem examination, and report thereon, 10*s.*

IV.—Admission of Diseased Animals to the Veterinary College, Investigations, Lectures, and Reports.—No. 1. All Members of the Society have the privilege of sending cattle, sheep, and pigs to the Infirmary of the Royal Veterinary College, on the same terms as if they were Members of the College, viz., by paying for the keep and treatment of cattle 10*s.* 6*d.* per week, each animal; and for sheep and pigs "a small proportionate charge to be fixed by the Principal according to circumstances."

No. 2. The College have also undertaken to investigate such particular classes of disease, or special subjects connected with the application of the Veterinary art to cattle, sheep, and pigs, as may from time to time be directed by the Council.

No. 3. In addition to the increased number of lectures now given by Professor Simonds, the Lecturer on Cattle Pathology, to the pupils in the Royal Veterinary College, he will also deliver such lectures before the Members of the Society, at their house in Hanover Square, as the Council may decide.

No. 4. The Royal Veterinary College will from time to time furnish to the Council of the Society a detailed Report of the cases of cattle, sheep, and pigs treated in the infirmary; a return of the number of applications during each half year being required from the Veterinary Inspector.

General Leeds Committee.—Lord Leigh, the Chairman, announced that the Local Committee having reported the failure of the crop of Rye sown near Leeds for the trial of reapers, this Committee recommended that means be at once adopted to provide cereal crops for the trials at harvest time. The programme was presented and approved.

On the motion of Mr. Brandreth Gibbs, the Council resolved that "in printing the Award of the Live Stock, at the end of the Journal, the High Commendations and Commendations shall follow the Prizes in the respective Classes to which they belong, similar to the Printed Awards distributed in the show yard, and that the names of prize animals be inserted."

On the motion of the President a Committee was appointed to consider the making short-hand reports of Lectures and Papers read at the Weekly Councils.

A Committee was appointed to recommend Judges of Live Stock, Implements, Flax, Wool, Cheese, and Butter, to the Special Council on the 18th inst.

It was resolved that the following be the privileges of the Press at country meetings:—

That the representatives of the press be admitted into the Implement yard as well as the trial yard during the days of trial.

That catalogues of Implements be supplied to the press at the same time as to the Exhibitors, viz. the first morning of the trials in the week preceding the show, but that it be a condition that no reprint shall be made previous to the termination of the meeting. That in order to insure all the press getting information at the same time, all information, awards, &c. shall be given by the Secretary, but that previously to his arrival the press may apply to the Honorary Director.

That the Honorary Director be supplied with some press tickets for delivery to any representative who may apply at the yard previously to the arrival of the Secretary.

That the awards shall be handed to the Secretary as soon as practicable after the judges have delivered them to the Hon. Director, and that the press have access to the awards of Implements up to 10 o'clock on Saturday night and after 7 on Monday morning in the show week.

That the award of live stock be accessible to the press as heretofore on the Monday afternoon as soon as a copy shall have been completed.

That the printers employed to get up the awards shall not deliver proof of the same to the press except on the written order of the Secretary.

That the Council be requested to make order that the officers of the Society are not to be called upon to afford any particulars on the Sunday.

That the invariable rule of the Society in reference to the Live Stock Department be adhered to, viz.:—

That no Catalogue shall be furnished, nor any admission granted to the Cattle Yard under any pretext whatsoever, until the Judges shall have completed their awards.

That the Hon. Director be furnished with a few tickets with similar privilege to the press tickets, for such distinguished foreigners or delegates from foreign agricultural societies as may present proper introductions or credentials.

Weekly Council.—Mr. Thos. Raymond Barker, V.P., in the chair. The names of candidates for election were read. A report was received from the Chairman of the Journal Committee, announcing the successful competitor for the Prize Essay in Class II. (1861), on the Agriculture of Hampshire, to be the Rev. John Wilkinson, Rector of Broughton Gifford, Melksham, Wilts.

In Class VIII. (1859) the Essays are adjudged to be unworthy of the prize.

The Council then adjourned to Wednesday, the 19th inst., at 12 o'clock, when Mr. Caird, M.P., will exhibit samples of Wool grown in various districts of England, and invite discussion on the subject.

Agricultural Benevolent College.—On Wednesday the Second Anniversary Festival of this Institution was presided over by the Right Hon. B. Disraeli, and honoured by the attendance of a numerous and distinguished company. The Chairman referred to the destruction by railway, newspaper, and the penny post of that state of isolation in which farmers have lived, as at once tending to the increase of their intelligence, and to the production of a stronger bond of union between them and other classes. Intercourse produces knowledge—it produces something even more precious than knowledge—it produces sympathy; and how great a scope for the exercise of sympathy the agricultural calling furnishes was ably represented. "A breaking bank, a bad debt, a foolish friend, might be the fate of all; but it is not all who have to meet the barren harvest, the destructive storm, or to encounter the mildew, the murrain, and the rot." These were special reasons for an Agricultural Benevolent Institution.

The right hon. gentleman then paid a merited compliment to Mr. Alderman Mechi, who had first conceived the idea of the institution and called the attention of the late Duke of Richmond to it. This was really its first year; yet it had conferred 20 pensions varying from 40*l.* to 20*l.* each, and had invested 4000*l.* This was no inconsiderable beginning, but it was only by united efforts that they could accomplish their greater objects. They required no expensive advertising, no elaborate staff.

The amount of subscriptions collected during the evening was 1500*l.*

BATH AND WEST OF ENGLAND.

The report which we last week published of the proceedings of this Society at the Truro meeting, made the public aware of all that had taken place up to Wednesday evening. We now resume our report, adding certain particulars with reference to the show of stock, and fulfilling our promise with regard to the work done by implements in the trial field.

* Commencing with the Sheep classes, we append the following tabular statement of the girths and ages of the first prize animals:—

Class.	Age of 1st Prize Sheep.		Girth of 1st Prize Sheep.	
	Years.	Months	Feet.	Inches.
Leicesters.				
Shearling Rams	1	2½	5	0
Aged Rams	3	3	5	3
Two-teeth Ewes	1	3	4	3
Long-Woolled.				
Shearling	1	3	4	7
Aged Rams	3	3	4	9
Two-teeth Ewes	1	3	3	9
Cotswolds.				
Shearling Rams	1	3	4	9
Aged Rams	2	2½	5	3
Two-teeth Ewes	1	3	4	0
South Downs.				
Yearling Rams	1	3	4	0
Aged Rams	2	3	4	4
Two-teeth Ewes	1	3	3	10
Other Downs.				
Yearling Rams	1	3½	4	6
Aged Rams	2	3½	4	4
Two-teeth Ewes	1	3½	3	10
Somerset and Dorset Horns.				
Yearling Rams	1	5	3	11
Aged Rams	2	5	4	3
Two-teeth Ewes	1	5	3	9

As regards the show of Horses and the awards of the judges in that department, it is only fair to correct an error which has crept into several published reports, and which represented Mr. Booth, of Cotham, as one of the judges, whereas in fact he was not present at the meeting. Such is the prevalence now-a-days of hereditary taints in horses, that the Society's inspector acted well and advisedly in rejecting every animal which showed evidence of communicable disease: several of the animals shown were manifestly affected by ailments disqualifying them for breeding purposes; and no little merriment was occasioned by the discovery, that owing to a blunder of an exhibitor a colt had found his way to the filly class, from which he was at once removed by the stewards.

Owing to the peculiar contour of the district round Truro, and the prevalence of small inclosures, the trial of implements for cultivating and harvesting purposes had to take place on the St. Austell Road, at the distance of some two miles from the general show-yard. This was a necessity for which neither the local committee nor the Council could be held responsible, but it sadly interfered with the number of persons who would otherwise have felt particular interest in seeing the work which the more celebrated implements could do. As it was, the majority of the visitors to the Exhibition contented themselves with examining the steam-engines, threshing-machines, &c., in the yard, and comparatively few were attracted to a department which it was thought would have been very largely attended.

The new steam cultivator recently patented and introduced by Messrs. Howard, and already stamped with a verdict of approval by many farmers of great experience and observation, was to be seen at work on Wednesday, Thursday, and Friday, tearing up a tough and most unfavourable piece of land with a degree of speed quite unexpected on a strong stony brash, and after a single crossing leaving the land in a state of tilth which at the utmost would require nothing more to produce a good and clean seed bed than one working with the harrow. While at work in the field, Messrs. Howard's representative booked several orders from farmers not resident in the county of Cornwall, but we fear from the nature of the observations made by several of the local lookers-on that the merits of the apparatus were not duly appreciated by those who for the first time saw the operation of cultivating by steam-propelled machinery. The improvements effected by Messrs. Howard on the Woolston apparatus have reference to so many points and details that it would occupy too much space to describe or discuss them. The plan by which the patentees have got rid of the delay and danger attendant on the use of the turn-bow—an essential feature of the Woolston apparatus—is not only good in principle, but effects a great saving in the first cost of the machine and the subsequent charge for working it. The whole thing is now so simple that it can be easily managed by labourers of ordinary intelligence, and there is no fear of any derangement of the parts arising from a want of the dexterity so essential in the turn-bow system. The windlass, too, is very much lighter and more portable

than that employed by Mr. Smith, and for the interests of the farming community it will be a matter of great regret if some arrangements are not arrived at by which the Woolston apparatus can be merged in that of the Howards. At all events we trust that the progress of steam cultivation will not be arrested by the starting of doubts which owe their existence to the conflicting claims of rival houses; for however much the agricultural body may owe to Mr. Smith, and his original introduction of the system which goes by his name, it is scarcely credible that a firm conversant with steam cultivation as the Howards would stake their reputation on the bringing out of a new system without a thorough conviction of its excellence and superiority. It is to be regretted that although a set of Beard's tackle was entered for exhibition, it never found its way to the trial field. On land adjoining that on which the cultivator was at work the trial of ploughs took place: the exhibitors being the Howards, the Ransomes, the Hornsbys, Eddy, Page, Wright, Chamberlain, and Snowden. Howards' plough did good work on anything but a favourable plot, and went deeper than any of its rivals, but for real good ploughing there was nothing superior to that effected by Hornsby's Champion. The turnwrest plough was tried with moderate success by Ransomes and Eddy, but as a whole the work was accomplished under difficulties rarely encountered on show occasions. It is to be regretted that owing to a mischance on starting from Bedford, the extra strong plough, manufactured by the Howards, which has been so successfully introduced on the down land near Boconnock, was not exhibited at this meeting, more especially as frequent inquiries were made for it.

The trial of mowers and reapers resulted in a general verdict in favour of Wood's machine. As a mower it did its work most efficiently at the rate of $1\frac{1}{3}$ acre an hour, without making any great demands on a pair of light horses: when applied as a reaper it also maintained its reputation on a green crop of Rye, quite sufficient to test its capabilities. The various modifications of Hussey's reaper exhibited by Pickslev & Sims, Bowhay, and the Cuthberts, were less successful than Wood's combined machine, but they nevertheless did tolerably well, considering the circumstances of the trial to which they were subjected. Of the Hay-tedders, that which did the best work was a Nicholson's patent, shown by Ransomes; the other exhibitors were Smith Brothers, with a new machine, which hardly effected all that was previously claimed for it by the patentees; Boby, with a tedder which attracted a good deal of notice; and Huxtable, with a local machine which had no possible chance against the large makers. The tedder entered by Smith & Ashby was too much damaged by the railway accident on the eve of the show to permit of its exhibition. At the head of the horse-rakes was the very ingenious and convenient implement manufactured by the Howards; the other exhibitors were Gerrans, Ransomes, and Page, respecting whose claims to superiority very different opinions were entertained and expressed.

THE ANNUAL MEETING of members was held on Thursday at noon, when the chair was taken by Mr. Buller, M.P. (North Devon), supported by the Earl of Devon, Lord Portman, Mr. T. D. Acland, and other influential members of the Society.

The report read by the Secretary (Mr. Maule) stated that the Society has now 101 governors, 1078 members, and 47 life members, making a total of 1226 names on the list. The total head of stock now exhibited was 499 (one more than was stated last week in our analysis of the catalogue). The Council recommended the election of Mr. T. D. Acland as President for the ensuing year; the election as Vice-Presidents of Mr. T. Newman, Mainhead, Devon; Mr. R. Davie, M.P., West Cornwall; and Mr. P. P. Smith, Truro: and the election of Mr. Nicholas Whitley, of Truro, and Dr. Scott, of Exeter, as members of Council in place of Mr. Acland, the President elect, and Mr. Newman, Vice-President elect. The report further stated that during the past year the Society's library had been confided to the care of the Bath Literary and Scientific Institution, on terms which it is hoped may render it more generally useful to members and the public, and it contained the following paragraph with reference to the Society's Journal:—"The Journal Committee by the engagement of experienced writers on agricultural subjects have endeavoured to sustain the reputation and increase the usefulness of the Society's publication. To Mr. Nicholas Whitley, who has frequently enriched its pages by the communication of practical papers, the Council tender their thanks for his interesting and instructive article on 'The Development of the Agricultural Resources of Cornwall.' The Editor will at all times be glad to receive short practical articles suitable for publication in the note-book." It was further stated that the meeting for the year 1862 was appointed to be held in the City of Wells.

The various recommendations in the report were adopted unanimously; the election of Mr. Acland, as President, being moved by Mr. Sillifant, and seconded by Lord Portman, not only on the ground of the invaluable services he had rendered the Society by giving a new impetus to its career 10 years ago, but because Mr. Acland being a Devonshire man, though connected by family property with the county of Somerset, his election would be in accordance with the resolution of last year, which brought to the Truro meeting a president (Mr. Buller), who though a Devonshire man was also connected with Cornwall. Mr. Acland's election was carried by acclamation, and that gentleman in acknowledging the compliment conferred upon him, expressed his thanks to Lord Portman and those gentlemen of Somerset who had promised their aid at the Wells meeting in 1862, reminding them that as it was the year of the Great International Exhibition as well as of the meeting of the Royal Agricultural Society in London, it would require all their energies to sustain the reputation of the Bath and West of England Society when the attention of the public was absorbed by such a great national event.

Mr. G. S. Poole, who had given notice that he should move a resolution "that it be a rule of the Society that the president be elected from among the members not resident in the county in which the next annual meeting of the Society is to be held," on the ground, as stated by him at the Dorchester meeting, that "there was nothing the Society should more carefully avoid than mixing itself up with local interests, local divisions, and local difficulties," then rose and said that as the principle for which he contended had been acted upon by the Society both this year and last, he begged leave to withdraw his notice of motion, as there was no occasion to burden their rules unnecessarily.

After some further proceedings of a routine character, the chair was taken by Lord Portman, on the proposition of the Earl of Devon, and a vote of thanks was unanimously passed to Mr. Buller, the President of the past year.

THE BANQUET.—The usual banquet took place shortly after the annual meeting, and was attended by more than twice the number of those present at the similar entertainment at Dorchester. The tables were inconveniently crowded with guests, and though every allowance should be made for the unexpected position of the contractor, it is to be hoped that the almost universal complaints of scanty provision and bad waiting will have a due effect at any future meeting.

The Chair was taken by the President of the year, supported by the Mayor of Truro, the Earl of Devon, Mr. Acland (President elect), and the following Cornish members: Mr. Robartes, Mr. St. Aubyn, Mr. R. Davie, Mr. A. Smith, Mr. M. Smith, Q.C., and Mr. J. J. Rogers. The Mayors of Wells and Dorchester, and Mr. Bremridge, formerly Mayor of Barnstaple, were also present, in addition to the council and officers of the Society.

The speaking, from the opening remarks of the Chairman in proposing the toast of the Queen, to the concluding observations of Mr. Acland, the President elect, was so uniformly good in point of style and quality as to form the topic of general remark, and the genial tone of Mr. Acland's address brought a most successful meeting to a very gratifying close. A full report of it would occupy six or seven columns of the *Times* newspaper, but the agricultural pith and marrow may be thus summarised.

The Earl of Devon, in acknowledging the toast of the Society, remarked that since the infusion of new life into it by the adoption of the migratory system of meeting, it had devoted its energies not more to the encouragement of agriculture than of arts, manufactures, and in its way, commerce; in fact, striving to promote them conjointly. Any one who had lived long enough in the English world must be aware that the great object of all such societies was to promote union and consolidation. Years ago there might have been disunion and jealousy; but that had passed away, and all classes now feel that they have a common concern.

The President, in acknowledging the toast of his health, attributed his position mainly to the fact of his connection with the railways of the West of England, remarking that the directors with whom he was associated had always acted in an enlightened spirit towards the Society, believing that by so doing they were indirectly benefiting the shareholders whom they represented.

Mr. St. Aubyn, M.P., in proposing "the Royal Agricultural Society," expressed his great satisfaction as a Cornishman at the success which had attended the meeting. He looked with great pleasure on the progress made of late years in Cornish Agriculture, and though there was still ample room for improvement, he trusted that the periodical visits of the Bath and West of England Society would afford them all the stimulus necessary to exertion and success.

Lord Portman, in responding for the Royal Agricultural Society, said he could have wished that his friend who proposed the toast had accompanied it by an invitation to the Society to hold an early meeting among them, for although it had been his fate to occupy the chair of the Royal Agricultural Society on three different occasions, he must say that he should have liked to have lived long enough to preside over a meeting of it in Cornwall. He should not speak to them of farming, in the first place because he should shortly start by train, and in the next because, though in many places they could throw the light of theory upon the practice of agriculture, yet in Cornwall they saw practice beating theory and the world. He had no hesitation in saying that the Bath and West of England Society had received such a welcome as it had never had before, and of all the meetings of the Royal Agricultural Society of England they had had no such meeting as this of the Bath and West of England Society. In conclusion Lord Portman said that such was the good report of the Bath Society since the adoption of the peripatetic system, that it had been intimated to him by one of his friends that in the East of England there was a talk of combining several counties on the same plan, and with the same objects in view.

Mr. Beviss, in returning thanks for the judges, said that the competition in stock generally was as good as he had ever witnessed. He was very much surprised to see so many entries of animals from a distance, such as Short-horns and Herefords, for though he of course expected to see a good show of Devons from their own county, which adjoins Cornwall, he did not think the Devons prevailed over the other breeds.

It may not be generally known to the agricultural world that the land around Penzance stands unrivalled for the production of early vegetables. "The soil," to quote the words of Mr. Whitley,* "is derived mainly from the decomposition of the greenstone rocks mixed with the detritus of the granite and the clay slate: it is friable, deep, and abounds with all the elements of fertility. The south and east slope of the surface gives it all the benefit the sun can bestow; the range of hills behind affords shelter from the north and west winds, and the warm air from the sea keeps up a hot-bed temperature and wards off the frosts of spring. At the Scilly Isles this peculiarity of climate is more fully developed. From the concurrence of these causes immense quantities of early Potatoes, Broccoli, Cabbage, Peas, and Strawberries are grown and forwarded to the London market, and the facility of railway transit will still further extend this peculiar cultivation." In a word, the West of Cornwall is "the winter-garden of England." These remarks, though introduced by way of parenthesis, will impart additional importance and interest to the following speech delivered by Dr. Smith, chairman of the Cornwall Railway, in responding to the toast of the railway companies:—

"From the 4th of December last to the 23d of May, just four months, there passed over the West Cornwall Railway, and was transferred at the Truro Station of the Cornwall Railway for transit to the other parts of the country, 6098 crates of Broccoli, weighing in the aggregate no less than 898 tons, 11 cwt.; and I beg to say that the land conveyance of nearly 900 tons of Broccoli in some three or four months from the West of England to the millions of London and the North was an impossibility until the appearance of the locomotive. Again, from the 22d of April to the 7th of June—a period of six weeks only—there was conveyed and transferred in a similar way, 8566 baskets of Potatoes, weighing 439 tons. Four hundred and thirty-nine tons of early Potatoes transferred from the West of Cornwall in about six weeks to a good market in the large and populous districts of the kingdom, is no bad illustration of the aid railway extends to agriculture. Has this anything to do with the prosperity of Cornwall? Will land here eventually be worth 10 times as much as now? Will land within 20 miles of London continue as valuable as now? These are important questions the great equaliser, the railway, will aid you to solve, but it seems tolerably clear that the railway has had, and is destined to have, an important interest in agricultural prices and profits. And therefore, in acknowledging your kind compliment to the railway companies, it is impossible for those who have for the last 20 years laboured to bring about this state of things to avoid a little self-gratulation. Allow me, for a moment, to utter a few words which may counteract an impression my figures may have caused. The markets of the metropolis and the North still demand, and demand, infinitely more than you can possibly supply. Talk of 800 tons of Broccoli, what would 80,000 tons be to them? They would soon eat them all. If you send ten times as many Potatoes, all will be devoured. If you send ever so much more fish, all will be eaten up. You are not supplying London; you only help the market in a very limited way; not one Londoner out of 20 tastes your early Potatoes; you can go on with your work of producing heavier crops and reclaiming waste land, for you can find markets for ten times as much as you have hitherto raised."

The proceedings were brought to a close by a speech in excellent taste and feeling from Mr. Acland, and immediately afterwards the party broke up.

On Friday, a select party, consisting of members of Council and other friends of the Society, were conveyed by special train to Camborne, and thence to West Seaton copper mine, and Dolkoath tin mine, where the machinery and various processes of raising and treating the ore were fully described by the agents and engineers of the respective companies. Owing to the unfavourable state of the weather the out-door part of the day's proceedings was rendered less agreeable than would otherwise have been the case, but once assembled in the board-room of the Dolcoath company an entertainment in the true style of Cornish liberality more than compensated for any inclemencies of weather. The only cause for regret was the reflection that the 14,000 or 15,000 persons assembled in the show-yard at Truro were more or less drenched by relentless showers of rain.

Thus terminated one of the most successful meetings in the annals of the Society, and one which has surpassed all others in the amount of money taken at the gates, as attested by the following statement. Amount taken on Monday afternoon, 53*l.* 3*s.* 6*d.*; on Tuesday, 120*l.* 12*s.* 6*d.*; on Wednesday, 898*l.* 10*s.* 11*d.*; on Thursday, 1017*l.* 1*s.* 5*d.*; and on Friday, the popular day, 614*l.* 16*s.* 9*d.*; besides which upwards of 2500 school children and others were admitted free. The total attendance is estimated at 35,000 persons, being quite as many as there were under any circumstances at Barnstaple, respecting which a rather exaggerated statement has found its way into the blue-book relating to the South Kensington Museum.

Miscellaneous.

Mr. Robert Girdwood's Edinburgh Wool Sales, May 30th.—The prices realised were, for Half-bred Hogs, 38*s.* to 43*s.* 6*d.*; Ewes, 35*s.* to 38*s.*; Cheviot Hogs, 36*s.* to 39*s.*; Cheviot Ewes, 34*s.* to 36*s.*; Cross Hogs, 34*s.* to 36*s.* 6*d.*; White Highland, unwashed, 16*s.* to 18*s.*; do. washed, 18*s.* to 24*s.*; Laid Highland, 12*s.* to 13*s.*; Laid Cheviot Ewes reached 26*s.* 6*d.* per stone.

The Birmingham Cattle and Poultry Show.—The prize lists and regulations for the 30th annual exhibition, to be held on the 2nd, 3rd, 4th, and 5th of December next, are agreed upon, and will be issued immediately. The special prizes this year are more numerous than in any previous list, and cannot fail to ensure a spirited competition. First on the list is that of the President, the Right Hon. the Earl of Shrewsbury and Talbot, a silver cup or other article of plate of the value of 25*l.* for the best ox or steer bred and fed by the exhibitor; the Hon. Colonel Pennant, M.P., offering a 20 guinea cup for the best cow or heifer on the same conditions. The Hotel and Innkeepers of Birmingham liberally contribute this year a prize of 25 guineas (in plate) for the best animal in the Cattle Classes, and as the extra prizes of 20*l.* for the best Hereford, Short Horn, and Devon are continued by the Society, as well as the two Gold Medals, value 20*l.* each, it will be possible for the exhibitor of one animal to carry off premiums exceeding 100*l.* in value. A class has been opened for Scotch Cows or Heifers, one prize of 10*l.* being offered. The breeders and exhibitors of Sheep will also receive additional and well deserved encouragement this year. The Mayor of Birmingham (Arthur Ryland, Esq.) offers an extra prize of ten guineas for the best pen of South or other Downs; C. N. Newdegate, Esq., M.P., one for the best pen of Long-woolled Sheep; and Messrs. Mapplebeck and Lowe the same amount for the best pen of Shropshire Sheep, these three extra prizes being all in cups or other articles of plate. The extra prizes of the Society, 10*l.* each, for the best pen of Long and Short-woolled Sheep, are also given as usual, so that three exhibitors of sheep will receive 30*l.* 10*s.* each. Classes have been opened for Long and Short-woolled Ewes, to be shown

* Bath and West of England Journal, Vol. ix., Part 2.

singly, a prize of 5*l.* being offered in each case. The Pigs also come in for a share of the special prizes, the Society offering a silver cup, value five guineas, for the best pen in the two classes of three fat pigs; the same prize for the best pen of breeding pigs of a small breed; and two members of the Council contribute a like prize for the best pen of Berkshire breeding pigs. In the Root department, Sir John Ratcliff again offers his handsome premium of ten guineas for the best collection of four varieties, and Messrs. Proctor and Ryland contribute two special prizes, of five guineas each, one for the best six Swedes, to be selected from a crop of not less than five acres, and the other for the best six specimens of Yellow Globe Mangel Wurzel, to be selected from a crop of not less than two acres. The total amount offered in prizes from Poultry has been increased, while there are numerous changes in the mode of its distribution, and such as appear well calculated to increase the attractions of the Show. In future, also, the principal classes will comprise pens of a cock and two hens or pullets, instead of a cock and three hens or pullets, an alteration which will no doubt be satisfactory both to exhibitors and purchasers.

Calendar of Operations.

JUNE.

BERWICKSHIRE MERSE FARM, *June* 3.—In reviewing the past month we may say that the weather has been on the whole favourable to the special labour of the season. On the 1st of May we found work a fortnight behind on an average; the stubble furrow consolidated by the weight of Christmas snow and by the exclusion of mellowing frost. A continuance of strong drought made it of the first importance to retain the moisture, and where grubbers were exclusively used for this purpose great progress was made in Turnip drilling. The majority who stuck to the old plan of stirring with the plough, have had a tough time of it, but what has been done, has been done satisfactorily. It is found that Swedes do quite well if got in by the end of May, and the soft weather we now have will put the later sowings nearly on a par with those of the middle of the month. During the barren weather corn did look blue for two or three weeks, and at such times grub and wire-worm are specially active. It would seem, however, that more genial weather has come in time to prevent much destruction. An unusual breadth of Potatoes has been planted. The tops are just appearing above ground, and so escaped the sharp frosts which culminated in the night of the 10th ult. With many last year was their first trial of Mangels, and few have cared to try it again; but the crop is too valuable for spring keep to be thus lightly abandoned. The other day we saw a lot of prime cattle eating fine fresh roots. It is another trial to the supporters of Mangel, however, that much of last year's seed will not germinate, and must be replaced by Turnips. We entered on the grazing season with prospects of unusual promise. Italian Rye-grass has stood its cuts nobly, but Clovers were much cut up for a while by frosty nights and sunny days, and where perennial Rye-grass predominates things look very poor indeed. Seeds intended for hay are light, except on some deep rich soils. Ewes still carry their wool, for clipping is stayed by showery weather. Hog fleeces are rather light, or at best not above an average. *J. T.*

STATE OF THE WEATHER—BERKSHIRE.

For the week ending June 13: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain.	Wind	Barometer.
		Max. in Sun.	Max. in Shade.	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	7 ..	63.6	60.4	50.5	56.2	57.6	0.01	N.E.	29.80
Saturday	8 ..	62.6	61.0	48.5	55.1	56.6	..	N.E.	29.75
Sunday	9 ..	61.4	59.6	47.1	53.8	56.6	..	N.E.	29.61
Monday	10 ..	62.0	60.0	50.7	55.8	55.8	0.30	S.W.	29.63
Tuesday	11 ..	69.0	67.0	48.5	58.2	57.4	0.11	S.W.	29.90
Wednesday	12 ..	76.4	70.0	55.5	64.3	58.8	0.02	S.W.	29.95
Thursday	13 ..	77.0	70.6	50.0	61.9	59.0	..	S.E.	29.93

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

COMPOSITION OF SOIL: *J B.* 30 per cent. of sand and 65 per cent. of finely divided matter, of which seven are alumina, should be, so far as mechanical structure is concerned, an adhesive soil. It is impossible from a statement of the composition of 100 grains of the soil, to declare the proper tillage of the field out of which it was taken. Drainage, gradual burning, and deep cultivation will enable you to grow roots profitably on clay soils. The presence of phosphoric acid in considerable quantity, and of potash in abundance, is a good thing, but the land seems deficient in lime.

COPPICE WOOD: *Improver.* Your plan is no doubt the cheapest, and it will in all probability answer sufficiently well. Any of the old stools which retain unusual vigour can be grubbed up as necessary. We shall be happy to name Grass seeds adapted to such a situation, if the sward should prove defective.

COWS: *J A.* It is not well to interfere with Nature in such cases. It may be owing to too much confinement, and now that the cows are turned out to Grass, the disposition will probably return. If not, powdered Cantharides, 5 grains given in a mash three following days, may be tried. *W. C. S.*

POULTRY.—The supply of Poultry has much increased during the past week, and scarcity can only now be applied to large Fowls. It will be some time before this alters, because the prices realised by small fowls two months since were as great as they would have made if kept till now. It will always be profitable to sell early, because there is economy of food, and labour. It enables breeders to give more space to other foods and it avoids the risk, and to some extent, the certain loss of keeping young and forced animals two months longer. A shilling or two more per head now, than they would have made in April, or the beginning of May, would be a positive loss.

	Each.—s. d.		s. d.
Large Fowls	4 0	to	4 6
Middling ditto	3 0	„	3 6
Chickens	2 6	„	2 9
Goslings	5 6	„	6 0
Ducklings	2 9	„	3 0
Pigeons	0 8	„	0 9
Rabbits	1 4	„	1 5
Wild ditto	0 8	„	0 9

JEAN VERSCHAFFELT'S Nursery, Ghent, (Belgium)

CAMELLIA LEOPOLD 1er, a Ghent Seedling.—This very splendid novelty has been exhibited by J. V. at the last winter show of the Royal Botanical Society of Ghent (in March, 1861), where it was very much admired by all lovers of that beautiful tribe of plants, and was awarded the 1st prize for the finest seedling Camellia. It has since been sent to the exhibitions of Brussels (Société Royale de Flore), Tournay and Lacken, where it was also rewarded, and considered a first-rate novelty; and certainly no Camellia collection should be without it.

This Camellia is of a very fine ornamental habit; very large leaves, of a dark green; the flowers are of the largest size, exactly imbricated, of a bright scarlet uniform colour, turning to blue on the top of the petals; it is in fact perfection, and a very free flowering variety.

J. V. has much pleasure in announcing that he has decided upon sending out this superb novelty on and after the 1st of October next, at the following moderate terms:—

Fine plants (well grown), 1 to 1½ feet high, 21*s.* each.
Do. do. do. with flower-buds, 31*s.* 6*d.* each.
A very few larger plants at 42*s.* each.
One plant over for every three taken.

A carefully coloured plate will be sent to each subscriber. The subscription list is open now, and early orders are solicited, as it will be sent out in strict rotation.

J. V. has much pleasure in announcing that he will send out on and after the 1st September next, the following New Plants, viz.

AZALEA INDICA PROFESSEUR LEMAIRE.—This charming novelty is of a quite new description, of a very dwarf and compact habit; the flowers are of a beautiful rose colour, with the upper lobe and a third part of the two following lobes of a deep red turning to violet, and richly spotted with crimson; a very abundant flowering variety. Nice plants, 8*s.*; stronger plants, 12*s.*

RED FLOWERED ROSE SOUVENIR DE LA MALMAISON (à fleurs rouges).—This is a seedling from the well known Souvenir de la Malmaison, of which I purchased the entire stock; it has the same leaves and wood as the type, but produces very freely its splendid flowers of a deep rose, and of the same shape as the Malmaison. Dwarf summer grafts, in pots, 8*s.* each.

HETEROTOMA LOBELIOIDES (Zucc.)—A curious little thing sent from Mexico in 1858 by Messrs. Tonel, to their brother Mr. Aug. Tonel, in Ghent, from whom I purchased the stock; the flower represents a kind of bird, of a rich red and golden yellow colour. (It will be shortly figured in Van Houtte's Flore des Serres, &c.) Price 8*s.* each.
One plant over for every three taken.

All orders to be sent directly to JEAN VERSCHAFFELT, Nurseryman, 43, Rue de la Caverne, Ghent (Belgium).

☞ A reference required from unknown correspondents.

NOTICE is hereby given that the PARTNERSHIP heretofore carried on between us the undersigned, SAMUEL FINNEY and CHARLES I'ANSON, as Nursery and Seedsmen, at Gateshead, in the county of Durham, and at Newcastle-upon-Tyne, under the styles or firms of SAMUEL FINNEY and COMPANY, and I'ANSON & FINNEY, is this day DISSOLVED by mutual consent.
CHARLES I'ANSON,
SAMUEL FINNEY.
Dated this 1st day of May, 1861.

SAMUEL FINNEY begs to return his sincere thanks to the friends of the late firm, and to the public generally, and to inform them that he will continue to carry on the Nursery and Seed Business as heretofore, at the Nursery, Gateshead, and Groat Market, Newcastle upon-Tyne; and he hopes by strict personal attention to merit their continued support.
Gateshead Nursery, June, 1861.

For Smoking Greenhouses.

NEAL'S PATENT APHIS PASTILS light with a Candle, save all trouble, destroy all Insects, are already used in the Royal and leading Nurseries in England, Ireland, and Scotland, and may be obtained of the principal Seedsmen and Nurserymen, 2*s.* per packet of six Pastils.

Manufacturer and Patentee, J. NEAL, Edward Street, Birmingham.

NEAL'S PASTILS for Destroying Insects in Greenhouses.—The Sole Agent in Birmingham (appointed by Mr. NEAL) to supply the above Retail is Mr. COTTRELL, Seed Merchant, 15, Bull Ring, Birmingham. 1*s.* and 2*s.* per packet. Stamps required.

No more Mildew.

JOHN BELL'S COMPOSITION for destroying Mildew on Vines, Peach and Nectarine Trees, &c., made and sold only by JOHN BELL, in bottles, 1*s.* 6*d.*, 2*s.* 6*d.*, and 5*s.* each, at his Seed Warehouse, 10 and 11, Exchange Street, Norwich. A 1*s.* 6*d.* bottle is sufficient to make 12 gallons.

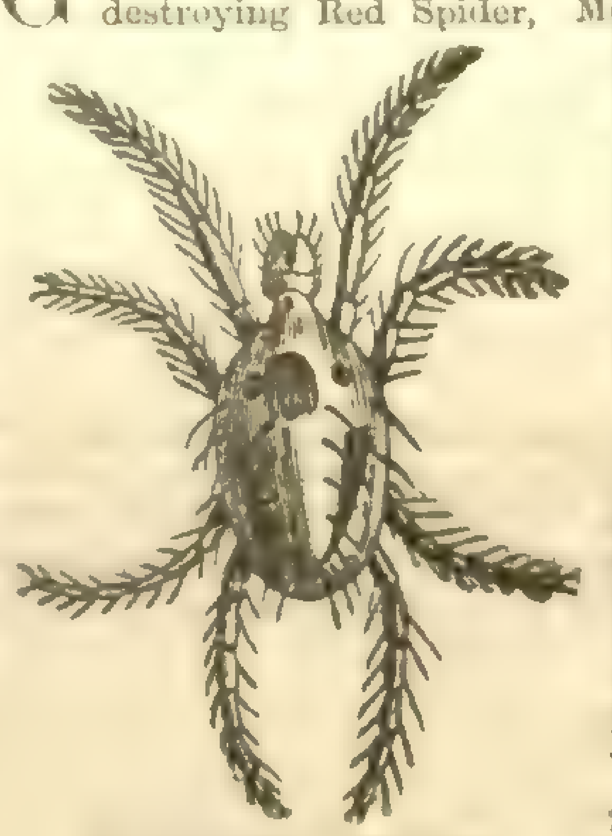
Important to Grape Growers.

SPARY'S FUMIGATOR AND MILDEW ANNIHILATOR (Invented and Patented by EDWARD SPARY, F.R.H.S., Queen's Graperies, Brighton), for destruction and prevention of Mildew in Grapes, Vines, and Plants, without injury to the Fruit or Foliage.—Vide *Gardeners' Chronicle*, April 13, page 351.

Sold wholesale by JOHN WARNER & SONS, 8, Crescent, Cripplegate, E.C.; Retail of any Ironmonger, or Nurseryman and Seedsman, 25*s.* each. The material is sold in packets (with full directions for use) at 1*s.* 3*d.* each, and wholesale by Mr. W. D. SAVAGE, Chemist, 65, Edward Street, Brighton; Messrs. BARCLAY & SONS, 95, Farringdon Street, London, E.C.

Prospectuses, with Testimonials, to be obtained of the Patentee, Brighton.

GISHURST COMPOUND, for preventing and destroying Red Spider, Mealy Bug, Mildew, Thrips, Scale, Green and Brown Fly, American Blight, Ants, &c., and Bed Bugs, contains no deleterious ingredient, is recommended in *Gardeners' Chronicle*, *Cottage Gardener*, *Field*, Mr. Rivers' *Orchard House*, 9th edition, and Dr. Hogg's *Gardeners' Year Book for* 1861."


RED SPIDER MAGNIFIED.

Full directions for use and particulars of the experience of many great Gardening authorities are enclosed with the boxes of Gishurst. These are supplied retail through any Nurseryman and Seedsman at 1*s.*, 3*s.*, and 10*s.* 6*d.* each, wholesale, by PRICE'S PATENT CANDLE CO., LIMITED.

If the smell be disliked, make the solution 48 hours before use.

KEATING'S PERSIAN INSECT DESTROYING POWDER.—Poultry, Dogs, and Plants, are effectually freed from Fleas and all other Vermin with which they are infested, by the above Powder, which is quite harmless to animal life. The Farmer, the Gardener, or the Sportsman, will therefore find it invaluable. Bugs, Cockroaches, Beetles, Moths in Furs, and every other species of Insect are also instantly destroyed.

Sold in Packets, 1*s.*, 2*s.* 6*d.*, and 4*s.* 6*d.* each, or post free for 14, or treble size for 36 postage stamps, by THOMAS KEATING, Chemist, 79, St. Paul's Churchyard, London, E.C.

CHASE'S BEETLE POISON.—The most effectual Destroyer of Black Beetles and Cockroaches, also Rats and Mice. Testimonials from the Rev. Edwin Sidney, Cornard Parva Rectory, near Sudbury, Suffolk; James Veitch, Jun., Esq., of the Royal Exotic Nursery, Chelsea; Lucombe, Pince, & Co., of Exeter; E. G. Henderson & Son, Wellington Nursery, St. John's Wood; C. Loddiges, Esq., of Hackney, and many others. Sold in boxes at 1*s.* each, or free by post for 20 stamps.

THOS CHASE, Chemist, 14, Holborn Bars, London, E.C., and through all respectable Chemists and Nurserymen.

PAGE'S BLIGHT COMPOSITION.

Extra strong, 4*s.* per Gallon, sufficient to make Four fit for use. Ten Gallons and upwards, Carriage Paid to London.

NINE YEARS' extensive manufacture has enabled PAGE & TOOGOOD to effect great improvements in their Blight Composition. It is prepared upon Chemical principles, to destroy SCALE, THRIP, MEALY BUG, RED SPIDER, MILDEW, AMERICAN BLIGHT, &c., without injuring vegetation.

From ANDREW TOWARD, Esq., *Royal Gardens, Osborne Palace.*
"I have great pleasure to add my testimony to the efficacy of your Blight Composition, which has been used with great success upon Rose trees much affected with the green fly."

From Mr. W. POOLE, *Gardener to the* Right Hon. the EARL OF AYLESFORD, *Packington Hall Gardens.*
"I have given your Blight Composition a fair trial upon Peach and Nectarine trees, and gladly bear testimony to its efficacy in destroying all insects without the least injury to the foliage.
"Your Composition has again proved very satisfactory, so far as thrip, green fly, and spider are concerned. Bug we do not patronise here, or I should have tried it upon them long ago; still, I cannot conceive why it should not prove fatal to bug as well as the other pests mentioned."

From S. SNOW, Esq., EARL DE GREY, *Wrest Park.*
"Please forward me another 10-gallon cask of your Blight Composition. I have found it answer the purpose exceedingly well.
"As to the aphis and other insects which attack the trees, I consider your Composition cannot be too highly recommended for it. I have used it in my Peach houses this season with the greatest success. My trees were very much infested, and by two or three dressings they assumed quite a vigorous appearance."

From FREDERICK MALLESON, Esq., *Royal Gardens, Claremont.*
"I find it answer the purpose in all respects for walls, also for green fly and brown scale in the houses. I have no occasion to try it any other way as yet."

From Mr. E. BUTCHER, *Gardener to the* Right Hon. Lord JERSEY, *Middleton Park.*
"I am much pleased with the Composition; it far exceeded my expectations."

From HENRY BAILEY, Esq., *Nuneham Park, Oxford.*
"I have found it most effectual in destroying the black fly on Cherries, but it requires to be used in a less diluted state than you recommend. It is, however, a valuable boon."

From J. FORBES, Esq., His Grace the DUKE OF BEDFORD, *Woburn Abbey.*
"I have much pleasure in bearing testimony to the valuable qualities of Messrs. Page & Co.'s Composition, which I have found very efficacious in destroying the green fly (or aphides), on the young shoots of Peach trees, as well as those of the Rose, when liberally syringed with the mixture."

LONDON AGENTS:—
HENDERSON & Co., Pine-apple Place, N.W.
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PAGE & TOOGOOD, ROYAL SOUTH HANTS SEED ESTABLISHMENT, SOUTHAMPTON.

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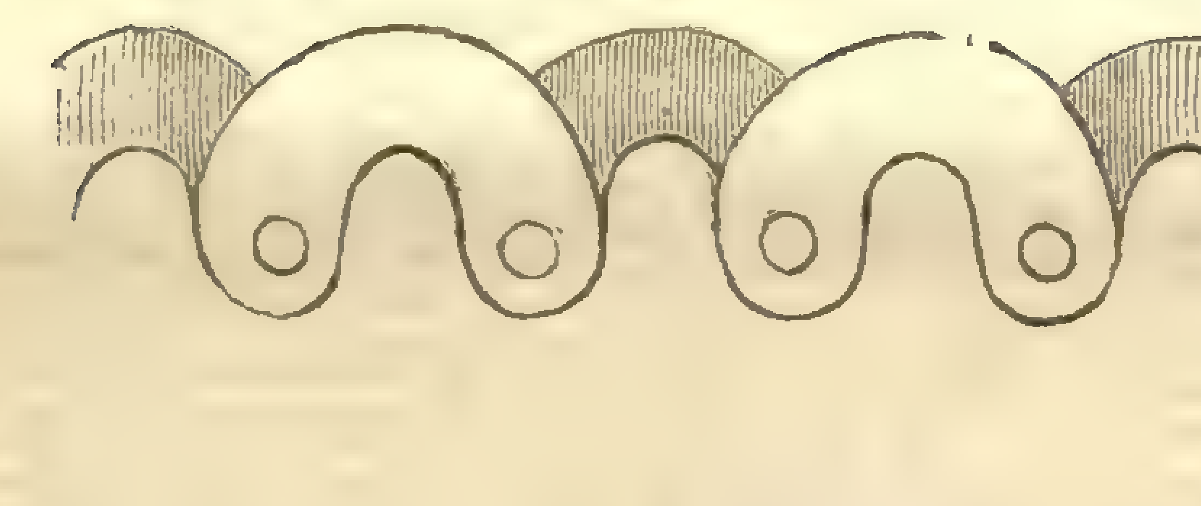
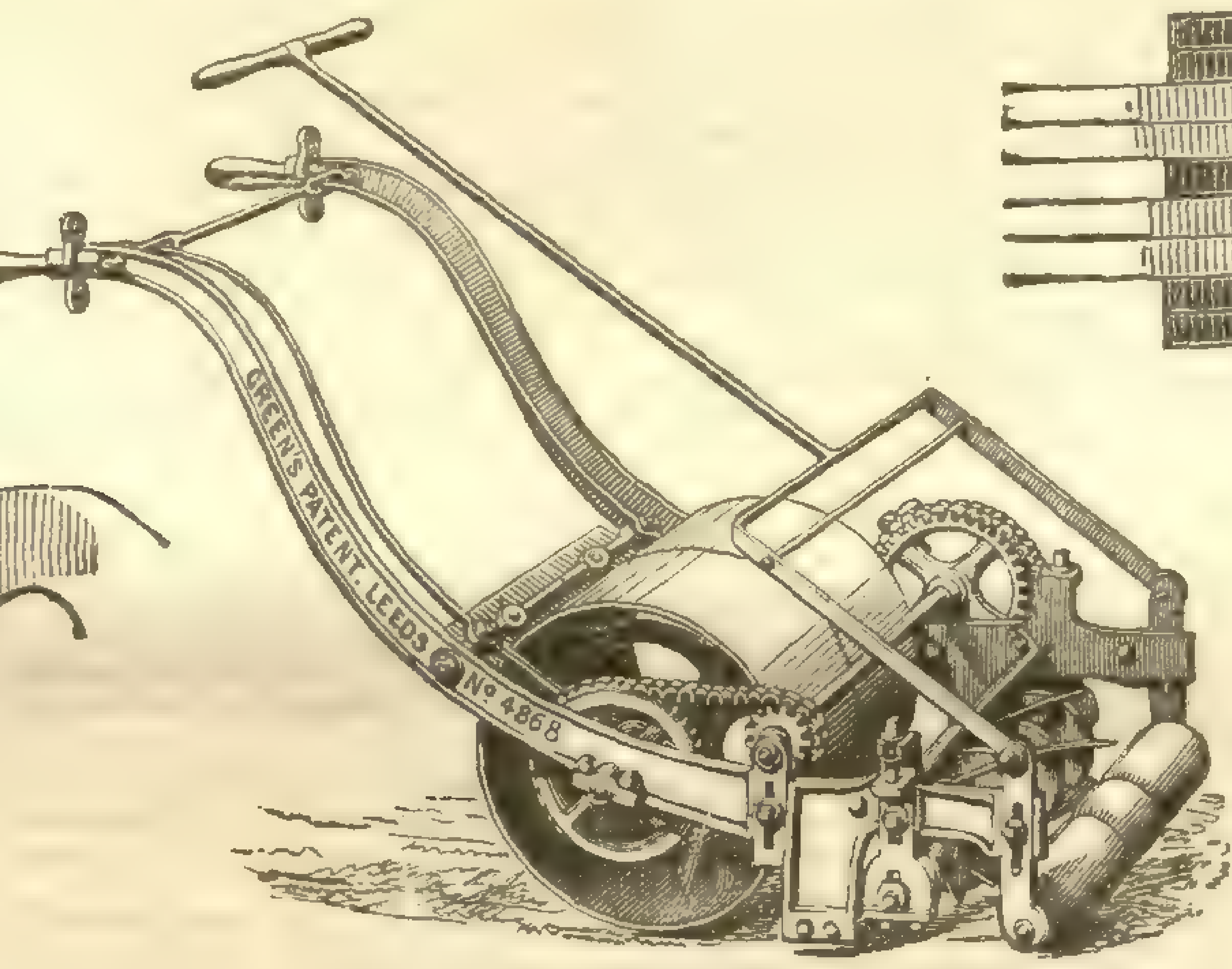
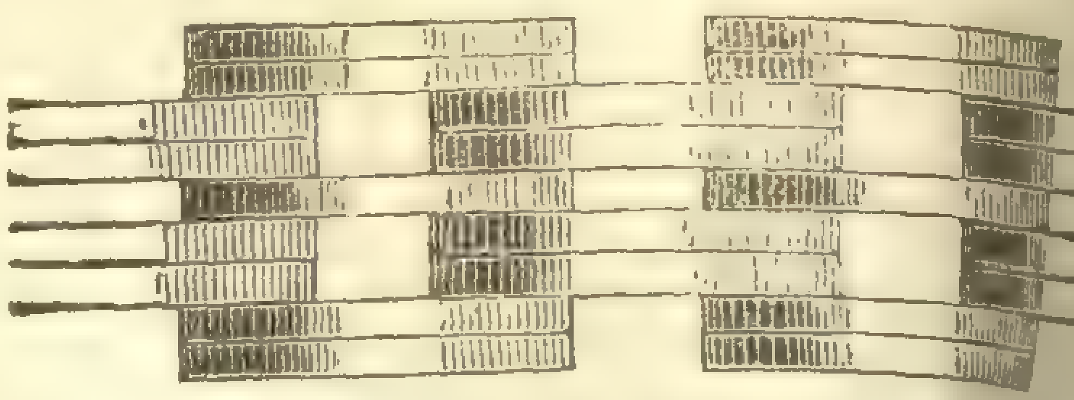
GREEN'S PATENT SILENS MESSOR.



CHAIN FULL SIZE.





CHAIN FULL SIZE.

THOMAS GREEN, in respectfully returning thanks to the Nobility, Gentry, and the Public generally for the very liberal support he has received for some years past, informs them that he has, at all the principal Agricultural and Horticultural Shows in the Kingdom, proved the superiority of his Machines over all others, carrying off in all cases of competition every Prize that has been given, and highly commended by the Judges.

The Patentee introduces the SILENS MESSOR for 1861 to the Public with confidence, having had it entirely remodelled, being worked with a Patent Double-Action Cast Steel Pinion Chain (as above). The Patentee has been at great expense in the perfecting of this machine, without extra charge. The Prices are as under :—

TO BE WORKED BY TWO PERSONS.

To Cut 14 inches	£6 10 0
To Cut 16 inches	7 0 0
Two extra Chains	0 11 0
One extra Chain for last year's Machine	0 7 0
To Cut 18 inches	£7 10 0
To Cut 20 inches	8 0 0
Two extra Chains	0 12 0
One extra Chain for last year's Machine	0 8 0
To Cut 22 inches	£8 1[illegible]
To Cut 24 inches	9 [illegible]
Two extra Chains	0 1[illegible]
One extra Chain for last year's Machine	0 9 [illegible]

HORSE, PONY, AND DONKEY MACHINES.

Prices of Horse Machines, including Box of Requisites and Traces.

	With Old Collecting Box.	With Patent Delivery Box.
To Cut 30 inches	£20 0	£21 10
To Cut 36 inches	23 0	24 16
To Cut 42 inches	26 0	28 2
To Cut 48 inches	29 0	31 8

Leather Boots for Horse, per set, 1l. 4s.

Donkey and Pony Machines, including Box of Requisites and Traces.

	With Old Collecting Box.	With Patent Delivery Box.
To Cut 24 inches	£11 10	£12 10
To Cut 26 inches	12 10	13 13
To Cut 30 inches	16 14	18 0

Leather Boots for Donkey, 16s ; for Pony, 20s.

GREEN'S IMPROVED PATENT PARVUM MIRACULUM,

Or SINGLE-HANDED LAWN MOWING MACHINE for 1861.

To Cut 12 inches ... £5. | To Cut 14 inches ... £5 10s. | To Cut 16 inches ... £6.

The above are the only Machines now in use at the Royal Horticultural Society's Gardens, South Kensington ; Crystal Palace, Sydenham ; Regent's Park Gardens, and hundreds of other places, where other Machines have been laid aside. The following are a few (selected from many) of the Nobility and Gentry who have patronised the Patentee :—

H.R.H. The Duchess of Cambridge, Cannon House, Kew, Surrey
Prince Yousouoff, St. Petersburgh, Russia
His Grace the Duke of Buccleuch, Drumlanrig Castle
His Grace the Duke of Leinster
His Grace the Duke of Devonshire
His Grace the Duke of Leeds, Gog and Magog Hills, Cambridge
His Grace the Duke of Northumberland, Syon Gardens, Brentford, Middlesex
Marquis of Westminster
Marquis of Exeter, Burghley House, Stamford
Earl of Harewood
Earl of Leicester
Earl of Scarborough
Earl of Stamford and Warrington
Earl of Scarborough
Earl of Stair, Oxenford Castle, Edinburgh
Earl of Brownlow, Ashridge Park
Earl Spencer, Althorpe Park, Northampton
Earl of Ellesmere, Cobham House
Earl of Howarth, Howarth Castle, Louth, in Dublin
Earl of Darnley, Cobham Hall, Gravesend
Earl of Airlie, Holly Lodge, Campden Hill, Kensington
Count Kennisdal, Château de Rignière
Count Donnemarsh, Neuderk, Silesia
Count Berastorff, Wedendorff
Countess of Harewood
Countess Dellormorella, 31, Eaton Square
Viscount Falmouth, Tregothnan, Probus, Cornwall
Viscount Campden
Viscount Eversley, Heckfield Place, Winchfield
Viscount Sydney, Frognall, Kent
Viscountess Downe, Balderby Park
Lord Sondes, Elmham Hall, Norfolk
Lord Scarsdale, Kiddleston, Derbyshire
Lord Ashburton, The Grange, Alredford
Lord Brideport
Lord Bolton, Bolton Hall, Bedale
Lord Ross, London
Lord Portman, Bryanston, Blandford
Lord Forester, Willey Park, Broseley, Salop
Lord Cremorne, Dundalk, Ireland
Lord Broughton, G.C.B.
Lord Cork, Marston House, Frome
Lord Overstone, Overstone Park, Northampton
Lord Belper, Kingston Hall, Derby
Lord Bagot, Blithfield House, Rugeley
Lord Leigh, L.L., Warwickshire
Lord Wenlock, Escrick Park, York
Lord Ashtown
Lord John Scott
Lord Suffield, Gunton Park, North Walsham
Lord Heytesbury, Warminster
Lord George Cavendish, Ashfield Hall
Lord Braybrooke, Audley End, Saffron Walden
Lord Braybrooke, Haden House, Royston
Lord A. Hervey, Bristol House, Wimbledon Common
Lord Ravensworth, Ravensworth House, Fulham Green
Lord Leconfield, Petworth Park
Lord Broughton, 4, Berkeley Square
Lord Chesham, Latimer, near Chenies
Lord Heytesbury, Heytesbury, Bath
Lady Milner, Aldwark Hall
Lady Fairbairn, Woodsley House
Lady Harland, Wherstead Park, near Ipswich
Lady Webster, Roehampton
Lady Fitz Gablin, Wandsworth Court, Collamore
The Ladies Wentworth Fitzwilliam, Harrowden House, Wellingborough
Bishop of Rochester, Danbury, Chelmsford
Hon. and Rev. Charles Hervey, Chesterford Vicarage, Chesterford
Hon. and Rev. Latimer Neville, Heydon Rectory, Audley End
Right Hon. J. T. Parker, Everton Hall, Preston
Right Hon. Henry Labouchere, Stoke Park, near Slough
The Commissioners of Her Majesty's Works, Kensington Palace
Hon. H. Bligh, The Hall, Rotherfield, Sussex
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Colonel Gossell, Mecktam near Dorking
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Lt.-Colonel Montresor, Denne Hill, near Canterbury
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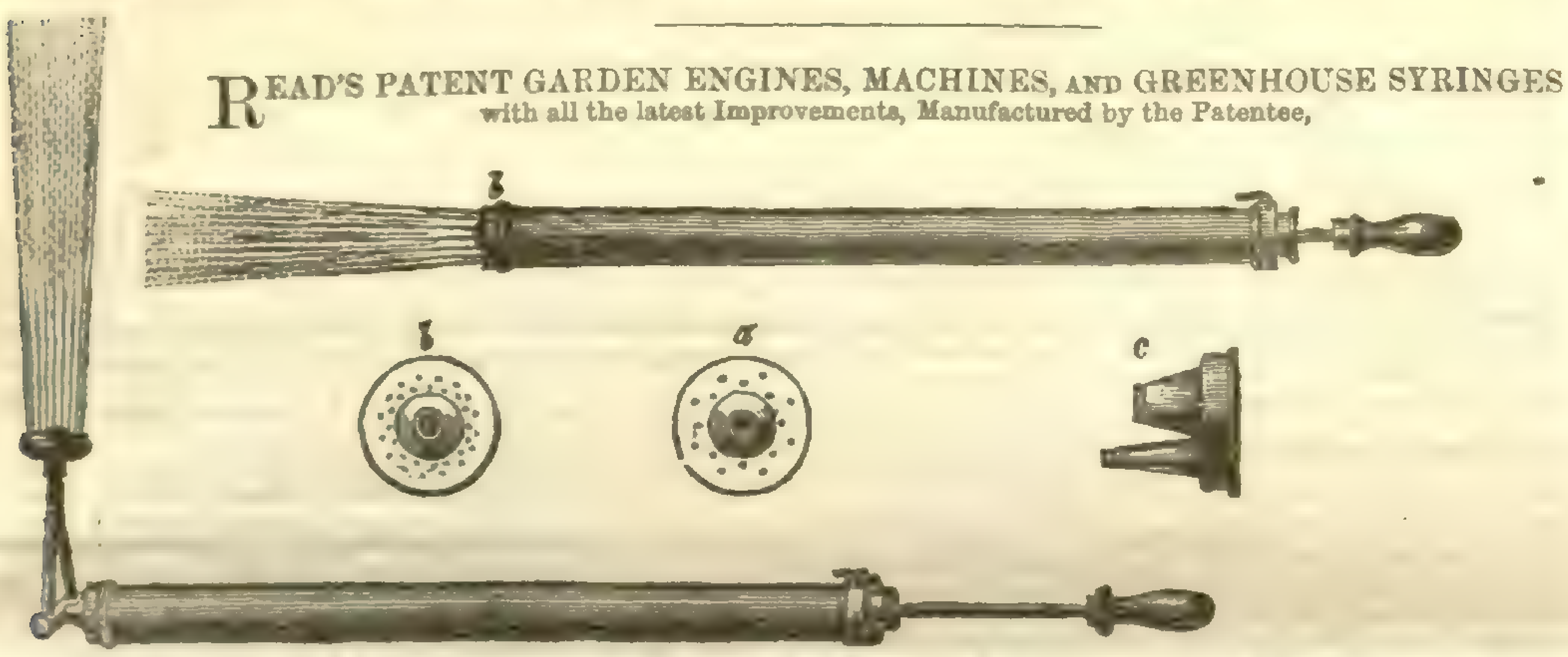
The above Machines are made from the best materials and of superior workmanship ; they are delivered (Carriage Free from the Works at Leeds) to all the principal Railway Sta[illegible] and Shipping Ports in England, are warranted to give satisfaction, and if not approved can be at once returned, if sent Carriage Free to Leeds.

THOMAS GREEN, SMITHFIELD IRON WORKS, LEEDS, and 2, VICTORIA STREET, HOLBORN HILL, LONDON, W.C.

GARDEN ENGINES, MACHINES, AND SYRINGES.

READ'S PATENT GARDEN ENGINES, MACHINES, AND GREENHOUSE SYRINGES with all the latest Improvements, Manufactured by the Patentee,



RICHARD READ, Instrument Maker (by Special Appointment) to Her Majesty,
35, REGENT CIRCUS, PICCADILLY, LONDON, W.

Caution.—R. READ begs respectfully to assure the Public that the Syringes advertised weekly in the *Gardeners' Chronicle* by a London Firm as "Read's" are *not his make*, but are mere imitations; and on trial many of them will be found defective and useless. All Syringes made by READ are marked with the Royal Arms, and Address,

"35, Regent Circus, London." ☞ *Descriptions, with Drawings, post free.*

GLASS WAREHOUSE.—ESTABLISHED 1750.

THOMAS MILLINGTON,

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REDUCED TARIFF FOR HORTICULTURE, PICTURES, AND DWELLINGS.

ORCHARD-HOUSE SIZES. SMALL SQUARES.

Supplied to Mr. Rivers and many others.

In. by In.		16 oz.	21 oz.
20 .. 12			
20 .. 13	Common, per 100 feet,	13s. 6d.	18s.
20 .. 14	Super ,,	16s.	23s.
20 .. 15			

In. by In.	In. by In.	Per 100 feet.	Per foot.
6 .. 4	8 .. 6	Common	1½d.
6½ .. 4½	8½ .. 6½	11s. 6d.	
7 .. 5	9 .. 7	Super.	1¾d.
7½ .. 5½	9½ .. 7½	12s. 6d.	

SQUARES IN 100 AND 200 FEET BOXES.

Inches by Inches.	Inches by Inches	Inches by Inches.	Inches by inches.	Inches by inches.		P. 100 feet.	P. foot.
10 .. 8	12¼ .. 9½	13 .. 10	15 .. 10	13½ .. 11½	4ths.	12s. 6d.	1½d.
10½ .. 8½	13 .. 9	13½ .. 10½	12 .. 11		3ds.	14s. 3d.	1¾
11 .. 9	12 .. 10	14 .. 10	12½ .. 11½	14 .. 11	2ds.	18s.	2¼
12 .. 9	12½ .. 10½	14½ .. 10½	13 .. 11		1sts.	21s. 6d.	2¾
15 .. 11	15 .. 12	16 .. 13	24 .. 14	24 .. 16	4ths.	13s. 6d	1¾d.
16 .. 11	16 .. 12	17 .. 13	20 .. 15	20 .. 17	3ds.	16s.	2
17 .. 11	17 .. 12	20 .. 13	22 .. 15	20 .. 18	2ds.	19s. 8d.	2½
18 .. 11	18 .. 12	23 .. 13	24 .. 15	.. ..	1sts.	24s.	3
13 .. 12	20 .. 12	20 .. 14	20 .. 16	.. ..			
14 .. 12	22 .. 12	22 .. 14	22 .. 16	.. ..			

If less quantity than 100 feet is taken, a moderate charge made for package.

GLASS CUT TO ANY GIVEN SIZES NOT ON LIST.

16 oz.—4ths, 1¾d., 2d., and 2½d. per foot.
,, 3ds, 2¼d., 2½d., and 3d. per foot.

21 oz.—4ths, 2¾d., 3d., and 3½d. per foot.
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HARTLEY'S IMPROVED PATENT ROUGH PLATE.

Not accountable for breakage.

GENUINE WHITE LEAD	32s. 0d. per cwt.
ANTI-CORROSION PAINT	34 0 ,,
LINSEED-OIL PUTTY	8 0 ,,
LINSEED OIL	2s. 7d. per gall.
BOILED ,, ...	3 0
TURPENTINE	—

BLACK, GREEN, and all other kinds of PAINTS, VARNISHES, BRUSHES, &c.

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OLD ST. PANCRAS ROAD, N.W.

IRON HURDLES, FENCING, AND GATES.

THE PROPRIETORS OF THE ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, WERE AWARDED THE SILVER MEDAL of the ROYAL AGRICULTURAL SOCIETY for their IRON HURDLES and GATES, which, by their peculiar construction, are more than twice as strong and durable as those in ordinary use. Lists per post on application. Gates from 30s. to 500l.

The Hurdles can be seen in process of Manufacture at the Works.

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PROFESSOR VARNELL'S ENAMELLED AND WROUGHT-IRON STABLE FITTINGS.

These Patent Mangers and Stable Fittings obtained the Commendation and the Silver Medal of the Royal Agricultural Society of England and the Royal Agricultural Society of Ireland, are adopted by the Royal Veterinary College, and Professor Spooner of that Institution states that they should be used by all who value the health and comfort of their horses. They can be had plain, galvanised, or enamelled.

A Show Room is devoted entirely to every description of Stable Furniture, and full-sized stalls and loose boxes are erected for inspection at St. Pancras Iron Works.

ADDRESS—THE MANAGERS,
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Opposite Old St. Pancras Church.

FRUIT AND FLOWER GATHERING INSTRUMENTS, newly invented, and most useful for ladies and gentlemen, are to be had of Mr. Hawes at the Floral Hall, at very moderate prices.

GLASS MILK PANS.

12 in. diameter	.. 1s. 3d.	20 in. diameter	.. 3s. 3d.
14 ,,	.. 1 9	22 ,,	.. 3 9
16 ,,	.. 2 3	24 ,,	.. 4 6
18 ,,	.. 2 9	26 ,,	.. 5 6

WASP TRAPS, 3s. 6d. per dozen.

GLASS CREAM POTS.

6 ins. diameter	1s. 0d. each	13 ins. diameter	4s. 0d. each
7 ,, ,,	1 4 ,,	14 ,, ,,	5 0 ,,
8 ,, ,,	1 8 ,,	15 ,, ,,	5 6 ,,
9 ,, ,,	2 0 ,,	16 ,, ,,	6 0 ,,
10 ,, ,,	2 6 ,,	17 ,, ,,	7 0 ,,
11 ,, ,,	3 0 ,,	18 ,, ,,	8 0 ,,
12 ,, ,,	3 6 ,,		

PROPAGATING GLASSES.

2 ins. diameter	0s. 3½d. each	12 ins. diameter	1s. 9d. each
3 ,, ,,	0 4½ ,,	13 ,, ,,	2 0 ,,
4 ,, ,,	0 5½ ,,	14 ,, ,,	2 6 ,,
5 ,, ,,	0 6½ ,,	15 ,, ,,	3 0 ,,
6 ,, ,,	0 8 ,,	16 ,, ,,	3 6 ,,
7 ,, ,,	0 10 ,,	17 ,, ,,	4 0 ,,
8 ,, ,,	1 0 ,,	18 ,, ,,	5 0 ,,
9 ,, ,,	1 2 ,,	19 ,, ,,	6 0 ,,
10 ,, ,,	1 4 ,,	20 ,, ,,	7 0 ,,
11 ,, ,,	1 6 ,,		

Jas. Phillips & Co., 180, Bishopsgate St. Without, E.C.

PROTECTED BY THE CUTLERS' COMPANY
CORPORATE
MARK.

JOSEPH HAYWOOD AND CO.,

Manufacturers of PRUNING and BUDDING KNIVES, SPORTSMAN'S, and all kinds of POCKET CUTLERY.

Dealers in Gambia Garden Shears, Scissors, Syringes, &c.

Glamorgan Works, Sheffield.

FOUNTAINS, PORTE-FLEURS, VASES, &c.

An immense Stock of GARDEN ORNAMENTS may now be inspected at Austin, Seeley & Co.'s Artificial Stone Works,

Or Pattern Sheets will be sent by post to any gentleman who may not have an opportunity to call.

369 to 375, Euston Road,
Regent's Park,
London, N.W.

CAST-IRON GARDEN ORNAMENTS

TAZZA.

Size.	Price.
22 inches diameter by 14 inches high	£1 5 each.
30 inches ,, by 22 inches ,, ...	2 5 ,,
42 inches ,, by 25 inches ,, ...	3 15 ,,

The above may also be had with Pedestal.

PRICES of TAZZA and PEDESTAL.

Size.	Price.
22 inches diameter by 28 inches high	£1 15 each.
30 inches ,, by 43 inches ,, ...	3 3 ,,
42 inches ,, by 46 inches ,, ...	4 15 ,,

J. Jones has much pleasure in stating that he has now an entirely new Stock of Cast-Iron Garden Ornaments, comprising Vases of various patterns, Garden Seats of all sizes, and of both Plain and Ornamental Designs, Flower Stands, Tables, &c.; he therefore requests that all parties in want of such Castings will favour him with a visit to his extensive Show Rooms, where the above may be seen fitted ready for use, and he has no doubt they will prove to their satisfaction.

Orders to the amount of 5l. and upwards Carriage Paid to any Railway Station in England. Post-office Orders to be made payable to John Jones, Borough, S.E.

ROYAL HORTICULTURAL SOCIETY.

SCHEDULE OF PRIZES.

GRAND ROSE SHOW, WEDNESDAY, JULY 10, 1861.

The Special Regulations can be had of Mr. Eyles.

The Council have great pleasure in announcing that the Rev. S. R. Hole, F.R.H.S., on the part of the promoters of the Grand National Rose Show, has intimated that the Exhibition of Roses contemplated by the Royal Horticultural Society will render a separate Exhibition on the part of the National Society unnecessary; and also that Mr. Hole, with the approbation of the aforesaid promoters, has consented to aid the Council in the endeavour to make the Exhibition a complete success.

The FOURTH GRAND NATIONAL ROSE SHOW will therefore be held in connection with this Exhibition.

The Rev. S. Reynolds Hole, F.R.H.S., Honorary Secretary.

Exhibitors of cut flowers to provide their own stands. Entries in each class to be exhibited on separate stands.

The stands are to be 1 foot 6 inches broad, 6 inches high at the back, and 4 inches in front. Any deviation from these dimensions will disqualify.

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
1. 96 Varieties. 3 trusses of each .. ..(Nurserymen)	7 0	5 0	3 0	2 0
2. 48 Varieties. 3 trusses of each .. ..(Nurserymen)	4 0	3 0	2 0	1 0
3. 24 Varieties. 3 trusses of each .. ..(Nurserymen)	2 10	2 0	1 10	1 0
4. 24 Varieties. Single blooms .. ..(Nurserymen)	2 0	1 0	0 10	
5. 48 Varieties. 1 truss of each .. .. (Amateurs)	6 0	4 0	3 0	2 0
6. 24 Varieties. 1 truss of each .. .. (Amateurs)	4 0	2 0	1 0	0 10
7. 12 Varieties. 1 truss of each .. .. (Amateurs)	2 0	1 10	1 0	

Note.—Exhibitors in Classes 5 and 6 cannot also show in Class 7.

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
8. 12 Varieties. Single blooms .. .. (Amateurs)	1 10	1 0	0 10	[illegible]
9. 12 Roses, 12 varieties, in pots not exceeding 13 inches in diameter .. ..(Open)	6 0	4 0	3 0	
10. 50 Roses, not less than 12 varieties, in pots not exceeding 8 inches in diameter .. ..(Open)	6 0	4 0	3 0	
11. 20 New Roses, not less than 10 kinds, in pots not exceeding 8 inches in diameter .. ..(Open)	6 0	4 0	3 0	
Note.—No variety which has been publicly sold for more than three years to be accounted new.				
12. 12 New Roses of 1860 and 1861, single trusses, distinct .. ..(Open)	2 0	1 10	1 0	
13. Moss Roses (single trusses), best collection of (Open)	3 0	2 0	1 0	
14. 18 Tea-scented Roses (single trusses), ...(Open)	3 0	2 0	1 0	
15. Best decorated basket or vase of Roses ..(Open)	3 0	2 0	1 0	

GRAND SHOW OF DAHLIAS AND OTHER CUT FLOWERS, WEDNESDAY, SEPTEMBER 11, 1861.

The Special Regulations can be had of Mr. Eyles.

Exhibitors of cut flowers to provide their own stands. Entries in each class to be exhibited in separate stands of the following dimensions:—

	Length.	Breadth.	
48 Dahlias, 2 stands	4 ft. each.	1 ft. 6 in.	Height of stands 6 inches behind, and 4 in front,
24 Dahlias, 1 stand	4 ,, each.	1 ,, 6 ,,	
12 Dahlias, 1 stand	2 ,, each.	1 ,, 6 ,,	
48 Roses, 2 stands	4 ,, each.	1 ,, 6 ,,	
24 Roses, 1 stand	4 ,, each.	1 ,, 6 ,,	
24 Hollyhocks, 1 stand	4 ,, each.	1 ,, 6 ,,	
24 Asters, 1 stand	2 ,, each.	1 ,, 6 ,,	

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
1. 48 Dahlia Blooms. Distinct. .. .. (Nurserymen)	8 0	6 0	4 0	
2. 24 Dahlia Blooms Distinct. .. .. (Nurserymen)	5 0	3 0	2 0	1 0
3. 18 Dahlia Blooms Fancies, distinct .. (Nurserymen)	4 0	3 0	2 0	1 0
4. 24 Dahlia Bloom Distinct .. .. (Amateurs)	6 0	4 0	3 0	2 0

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
5. 12 Dahlia Blooms. Distinct. .. .. (Amateurs)	4 0	3 0	2 0	[illegible]
6. 6 Dahlia Blooms. Distinct. .. .. (Amateurs)	2 0	1 10	1 0	[illegible]
7. 12 Dahlia Blooms. Fancies, distinct .. (Amateurs)	3 0	2 0	1 0	[illegible]
8. 48 Cut Roses. 3 trusses, distinct .. (Nurserymen)	4 0	3 0	2 0	
9. 24 Cut Roses. 3 trusses, distinct .. (Amateurs)	4 0	3 0	2 0	[illegible]
10. 24 Cut Roses. Distinct. Single blooms. (Open)	2 0	1 0	0 10	
11. 12 Roses, in pots, not more than two of one kind (Open)	5 0	4 0	3 0	
12. 12 Hollyhocks, in spikes. Distinct .. .. (Open)	3 0	2 0	1 0	
13. 12 Hollyhocks, single flowers. Distinct .. (Open)	2 0	1 0	0 15	
14. 24 German Asters. "Quilled," distinct .. (Open)	2 0	1 0	0 15	[illegible]
15. 24 French Asters. "Tasselled," distinct .. (Open)	2 0	1 0	0 15	[illegible]
16. 24 Gladiolus, cut spikes. Distinct .. .. (Open)	2 10	1 10	1 0	
17. 12 Gladiolus, cut spikes. Distinct .. (Amateurs)	1 10	1 0	0 10	
18. 12 Pots of Gladiolus. Distinct. Not more than 3 in each pot .. .. (Open)	3 0	2 0	1 0	
19. 24 Phloxes, single trusses. Distinct .. (Open)	2 0	1 0	0 15	
20. 12 Phloxes, in pots. Distinct .. .. (Open)	3 0	2 0	1 0	
21. 24 Verbenas, 5 trusses of each. Distinct .. (Open)	1 10	1 0	0 10	
22. Miscellaneous. For Flowers not specified .. (Open)	1 10	1 0	0 15	

GRAND FRUIT AND CHRYSANTHEMUM SHOW, WEDNESDAY and THURSDAY, NOVEMBER 6 and 7, 1861.

The Special Regulations can be had of Mr. Eyles.

FRUIT.

A dish of Grapes to consist of 3 bunches; of Apples, Pears, Oranges, Lemons, and such like, 6 fruits of each; and of Plums, 9 fruits.

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.
A. Collection of Fruit .. .. (Fruiterers only)	4 0	3 0	
B. Collection of Fruit .. .. (Private Growers)	6 0	4 0	3 0
C. Pine Apples, collection of. 3 distinct kinds	4 0	3 0	2 0
D. Pine Apple. Single fruit, any variety	2 10	2 0	1 0
E. Grapes White Muscat. Basket of, not less than 10 lbs. weight	4 0	3 0	2 0
F. Grapes, White Muscat. Single dish	2 10	2 0	1 0
G. Grapes, White. Any other variety, single dish..	2 10	2 0	1 0
H. Grapes, Black Hamburgh. Basket of, not less than 10 lbs. weight..	4 0	3 0	2 0
I. Grapes, Black Hamburgh Single dish	2 10	2 0	1 0
J. Grapes, Frankenthal or Dutch Hamburgh. Single dish ..	2 10	2 0	1 0
K. Grapes, Black. Any other variety, single dish	2 10	2 0	1 0
L. Pears, dessert, collection of, 1 dish of each	4 0	3 0	2 0
M. Pears, dessert, collection of 6 dishes, distinct kinds	3 0	2 0	1 0
N. Pears, dessert, collection of 3 dishes, distinct kinds ..	1 10	1 0	0 10
O. Pears, dessert. Single dish, any variety	1 0	0 15	0 10
P. Pears, kitchen. Uvedale's St. Germain. Single dish.. ..	1 0	0 15	0 10
Q. Pears, kitchen. Catillac. Single dish	1 0	0 15	0 10
R. Pears, kitchen. Single dish, any variety	1 0	0 15	0 10
S. Pears. Heaviest 5 fruits, dessert	1 0	0 15	0 10
T. Pears, Stewed, jar of	2 0	1 10	1 0
Note.—These are to be prepared without sugar, spice, or any colouring matter, and to be shown in white glass jars. Ladies are particularly invited to cause jars of fruit to be sent for examination.			
U. Apples, dessert, collection of, 1 dish of each	4 0	3 0	2 0
V. Apples, dessert, collection of 6 dishes, distinct kinds	3 0	2 0	1 0
W. Apples, dessert, collection of 3 dishes, distinct kinds	1 10	1 0	0 10
X. Apples, dessert. Single dish, any variety	1 0	0 15	0 10
Y. Apples, kitchen, collection of 1 dish of each	4 0	3 0	2 0
Z. Apples, kitchen, collection of 6 dishes, distinct kinds.. ..	3 0	2 0	1 0
AA. Apples, kitchen, collection of 3 dishes, distinct kinds.. ..	1 10	1 0	0 10
BB. Apples, kitchen. Single dish	1 0	0 15	0 10
CC. Apples, kitchen. Heaviest 5 fruits..	1 0	0 15	0 10
DD. Pommes Tapés; that is to say, Apples dried in the same way as Normandy Pippins; of which an account is given in the *Gardeners' Chronicle* for 1860, p. 932. Note.—It must be observed that this process is quite different from that employed in preparing Norfolk Beefings.	3 0	2 0	1 0
EE. Oranges, Lemons, &c., collection of 1 dish of each	3 0	2 0	1 0
FF. Oranges, 4 plants, in pots or boxes, bearing fruit	3 0	2 0	1 0
GG. Oranges, best specimen of Tangerines, in pot	1 10	1 0	0 10
HH. Melons. Single fruit, any variety	1 0	0 15	0 10

Class.	1st Prize. £ s.	2d Prize. £ s.
II. Plums. Single dish, any variety	2 0	1 10
JJ. Strawberries. Single dish	1 0	0 10
KK. Currants. Single dish	0 10	0 7
LL. Raspberries. Single dish	0 10	0 7

Note.—Fruit specified in the above Classes will be excluded from MM.

MM. Miscellaneous .. .. 60s., 50s., 40s., 30s., 3[illegible]

CHRYSANTHEMUMS.

Exhibitors of cut flowers to provide their own stands, of the following dimensions:—

For 24 Blooms, 1 stand 4 feet long, 1 foot 6 inches broad.
For 12 ,, ,, 2 ,, ,,
For 6 ,, ,, 1 ,, ,,
Height of stand, 6 inches behind, 4 inches in front.

☞ Preference will be given to plants trained in the bush-like or pyramidal form.

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.
1. 6 Plants. Distinct varieties, on single stems (Nurserymen)	4 0	2 0	1 0
2. 6 Plants. Distinct varieties, on single stems (Amateurs)	6 0	4 0	2 0
3. 3 Plants. Distinct varieties, on single stems (Amateurs)	2 10	2 0	1 0
Note.—Pots not to exceed 11 inches in diameter in Classes 1, 2, and 3.			
4. 6 Plants, Pompons. Distinct varieties, on single stems .. .. (Nurserymen)	4 0	2 0	1 0
5. 6 Plants, Pompons. Distinct varieties, on single stems .. .. (Amateurs)	6 0	4 0	2 0
6. 6 Standard Chrysanthemums or Pompons .. (Open)	4 0	2 0	1 0
Note.—Pots not to exceed 8 inches in diameter in Classes 4, 5, and 6.			
7. 6 New varieties of the current year	2 0	1 0	0 10
8. Single specimen, single stem, either Chrysanthemum or Pompon .. ..(Open)	1 0	0 15	0 10
9. 24 Cut blooms. Distinct .. .. (Nurserymen)	2 0	1 0	0 15
10. 24 Cut blooms. Distinct .. .. .. (Amateurs)	3 0	2 0	1 0
11. 12 Cut blooms. Distinct .. .. .. (Amateurs)	1 10	1 0	0 10
12. 6 Cut blooms. Distinct .. .. .. (Amateurs)	0 15	0 10	0 7
13. 6 Cut blooms. Distinct. Anemone flowered (Open)	0 15	0 10	0 7
14. Best group of cut blooms .. .. (Open)	2 0	1 0	0 10

TOWCESTER FLORAL AND HORTICULTURAL SOCIETY.—OPEN TO ALL ENGLAND.

Patrons.

His Grace The Duke of Grafton.
The Right Hon. The Earl of Euston.
The Right Hon. The Earl of Pomfret.
The Right Hon. The Lord Southampton.
Sir Charles Knightley, Bart.
Sir Thomas Hesketh, Bart.
Colonel Cartwright, M.P.
Rainald Knightley, Esq., M.P.

President—The Right Hon. The Earl of Pomfret.

The ANNUAL EXHIBITION will be held, by the kind permission of The Earl of Pomfret, in the Parterre, at Easton Neston, on THURSDAY, July 18, the day appointed for the Review of the Northamptonshire Volunteer Rifle Corps.

Liberal Prizes are offered for Stove, Greenhouse, and Ornamental Foliage Plants, Lycopodiums, Ferns, Gloxinias, Fuchsias, Roses in pots, Cut Roses, Verbenas, Collections of Fruits, Single Dishes of Fruit, Vegetables, &c.

Extra Prizes will be given where deemed worthy by the Judges.

All Entries must be made before July 9, and the space required. The entrance into the Show Ground for Exhibitors will be at the second Lodge on the Northampton Road.

The Gates will be open at 4 A.M., and close at half-past 8 on the morning of the Exhibition, after which time no articles will be admitted for competition except such as arrive by Rail at Bisworth (London and North-Western Railway), which will be conveyed to and from the ground free of charge if notice has been given at the time of entry.

See Rules, which will be strictly adhered to.

Schedules, &c., may be obtained from Mr. W. BOOTH, The Gardens, Easton Neston, or the Secretary, Mr. T. B. RODHOUSE, Towcester.

P.S. No Entrance Fee required for exhibiting in any of the Classes. Prizes paid the same and following days.

DOBSON'S SUPERB PRIZE CALCEOLARIA SEED is now grown by most of the nobility, clergy, and gentry in the three kingdoms; also by all the leading nurserymen and florists. The flowers are superior to named flowers or anything ever offered to the public before, and the numerous letters daily received fully testify to their superior excellence.

Sealed Packets, 1s. 6d., 2s. 6d., 3s. 6d., and 5s.
J. DOBSON & SON, Woodlands Nursery, Isleworth, W.

Extra Choice Seed.

JOHN DOBSON AND SONS beg to recommend the following as very superior, being Home-saved:—

CALCEOLARIA.
DOBSON'S Superb Hybridised Calceolaria, 1s. 6d., 2s. 6d., 3s. 6d. and 5s. per packet.
CINERARIA.
DOBSON'S Superb Cineraria, 1s., 2s. 6d., and 5s.
Woodlands Nursery, Isleworth, W.

The Gardeners' Chronicle.

SATURDAY, JUNE 22, 1861.

MEETING FOR THE ENSUING WEEK.

TUESDAY, June 25 { Royal Horticultural (Floral Committee), at South Kensington.... Noon

Now that the time approaches for preparing in earnest for the GREAT INTERNATIONAL EXHIBITION OF 1862, our readers will probably wish to know what is afoot in the British Colonies, as far as any intelligence has hitherto reached England. Fortunately we are able to satisfy their curiosity, which is the more natural considering what multitudes of persons at home, of every class in Society, are bound up with Colonial interests and anxious for Colonial prosperity.

With the exception of the West India Islands, from which no tidings have come unless from Jamaica, there seems to be everywhere a general recognition in all Colonies of the immense importance of bringing under the eyes of assembled Europe the nature of their respective resources. The International Exhibition affords an opportunity, incomparably advantageous beyond all others, of effecting this purpose; and it is clear that it will be seized wherever there is an intelligent government, and a population not in a state of paralysis. They have found how slow is the process of obtaining markets for their produce, through the agency of merchants and brokers alone, and that some more rapid way of attracting attention is indispensible.

There are those, indeed, whose interest it is to conceal Colonial wealth from all eyes except their own; for to display it is to annihilate the monopolies by which they profit at the cost of producers. To that kind of interest Colonial prosperity is opposed; and we can entertain no doubt from what is hitherto known that in 1862 many a source of unsuspected but invaluable trade will be disclosed. It is from our Colonies and other foreign possessions that we draw the larger part of all that is most valuable for manufactures, with the exception of what agriculture and mining can supply. Gums, oils, timber, spices, and textile materials, peltry, drugs, dyes, condiments, precious and other metals and minerals, and an endless variety of articles of luxury or necessity are, with a few exceptions, the produce of distant countries owing allegiance to the British Crown. Let European merchants know where to find them, and enterprise will do the rest.

How generally the Colonies are alive to these considerations is evident from what is already known. British Guiana, so well represented here in 1851, and at Paris in 1855, is endeavouring to make a still greater display; Jamaica is using all possible exertion; the Cape of Good Hope is astir, and will doubtless show what South African wines really are; active measures are taking in Sierra Leone and the whole western coast of Africa; application for space has been made on behalf of Hong Kong; the great Australian Colonies are voting their thousands for expenses, and some of their Commissioners are already in England; the Hawaian islands have placed themselves in communication with the Royal Commissioners charged with the direction of the Exhibition; Lord MULGRAVE is organising the producers of Nova Scotia; in New Brunswick 8000 dollars are voted; Canada, the pride of the old Exhibition of 1851, means to retain her proud position if she can; and the Governors of Malta and the Ionian islands report favourably of what is going on there.

In no Colonies, however, has more energy been displayed than in distant Vancouver and British Columbia; possessions that are already among the most important countries that we hold. Enjoying an excellent climate, furnished with harbours of unsurpassed magnitude and value, rendered by their natural position a great naval and military station, they form the two eyes of England in the West, whence our enemies in the Pacific can be watched and bridled if need should be, and which a chain of posts must before many years connect with the whole expanse of British North America. In this remote region action was taken as soon as even rumours arrived of the intended Exhibition, and long before official notice could be communicated from home. Governor DOUGLAS, a man of great tact and long experience, clear sighted, prompt to act and resolute to persevere, had called meetings of the inhabitants as early as the 12th of February to consider how they could best bring Europe acquainted with the rich stores of natural wealth so profusely accumulated in both Colonies. In Vancouver, which assumed the initiative, the Governor pointed out how little is known in Europe of the great extent and abundance of its material resources, and that only to a few; he placed the public buildings at the disposal of the Colonists as stores and offices, and declared his readiness to sanction such pecuniary assistance from the Government in aid of private subscriptions as circumstances might render necessary. A Commission under Seal was immediately appointed, Committees formed of the principal inhabitants for getting together various classes of produce, and we believe a thousand pounds in aid were afterwards voted by the House of Representatives. A few days later Governor DOUGLAS presided at a meeting at New Westminster, the capital of British Columbia, similar proceedings took place, and Colonel MOODY, the Lieut.-Governor of the Colony, undertook to act as Vice-President. That is the way to bring distant Colonies "face to face with Europe," to use the Governor's emphatic language, and "to create a bond of sympathy with all other nations that have the honour to belong to the Anglo-Saxon race," as another speaker well observed; and if persevered in will render British Columbia and Vancouver the emporia of the North Pacific as well as the Sanitaria of India and China, for which their healthy climate has already caused them to be selected.

WE have before us the first report of the *Society for the Acclimatization of Animals, Birds, Fishes, Insects, and Vegetables within the United Kingdom.* A report of a meeting held last year at the Society of Arts, published in our columns last December (p. 1079), has already brought the objects of this new association before the public; and we need not say that we heartily wish it success. But to achieve success, not alone are knowledge and experience indispensible; prudence is also an important ingredient. In the absence of the latter the funds of the Society will be wasted in unprofitable schemes, or applied to experiments the result of which has already been ascertained by others.

"The Society will begin with small and carefully conducted experiments." This is laid down in the prospectus as a fundamental proposition, and entirely meets our views. We confess however to doubts about the sense in which this wholesome rule is understood by the Council, when we see that one of its first operations is to order the "purchase of *a flock* of the very useful and curious Chinese sheep for propagation and distribution," upon the strength of an income of about ninety pounds a year (see Appendix B). Rather a dangerous adventure, we should say, for a body which is neither chartered nor otherwise protected against the personal liability of its members.

It would be a misfortune should unskilfulness or imprudence nip in the bud the hopes of the gentlemen who are endeavouring to set the Acclimatization Society in motion. Nothing is more likely to produce such a result than attempting too much. According to the prospectus it is intended with 90*l.* a year to grasp the whole organic world. We strongly advise the Council to be more moderate. Most especially would we impress upon them the wisdom of either omitting the Vegetable Kingdom or taking into their counsels some one acquainted with that part of Natural History. It is impossible to refrain from making the suggestion when we see it announced that they propose to commission some of their members to cultivate the "West Indian Sweet Potato," if not out of doors yet in a hothouse. To grow plants in a hothouse is an odd sort of acclimatization; to effect that feat with the Sweet Potato requires the aid of no great Society, for any intelligent gardener knows how to do it; how to grow it even without a hothouse has been shown without such potent assistance; as may be ascertained by inquiry at the Duc D'AUMALE's at Twickenham (see *Gard. Chron.* 1855, p. 839). But to "acclimatize" the plant is physically impossible, as every tyro in horticultural science knows. Then the Society has commissioned ladies and others to attempt the growth of "Beans" from Honduras! and the White Nile. Alas! poor ladies! Has the Council no idea of the relation borne by Vegetation to Climate?

The strangest part, however, of the report of the Society is the announcement that "specimens of the *Dioscorea Batatas*, or Chinese Yam, are already (!) in cultivation," and that an order has been given "to plant at the expense of the Society an acre of land" with this new esculent—another pull upon the income of 90*l.* a-year, especially now that "a large part of the funds in hand are already spent in anticipation." Is it possible that the gentlemen who are taking a lead in the acclimatization of everything, are ignorant of what every body knows about this Chinese Yam? and that it is perfectly absurd to plunge into the large cultivation of a root of which so many horticultural trials have been made, for some years past, in this country and in France. We greatly fear that the old and sagacious maxim, *Festina lentè*, has been forgotten.

THE University of Cambridge has appointed Mr. CHARLES C. BABINGTON, of St. John's, to the chair of Botany become vacant by the decease of the lamented Professor HENSLOW. It is almost needless to inform the readers of the *Gardeners' Chronicle* that Mr. BABINGTON is one of the most distinguished investigators of the European Flora.

THUJA PENDULA.

DURING a visit to the Botanic Garden at Turin last autumn, my attention was drawn to a fine specimen of this shrub, bearing abundance of fruit, in all respects like that of T. orientalis. This recalled to my mind the singular history of the specimen of the same plant at Kew, for which I had been indebted to our curator, Mr. Smith; and I therefore asked M. Lisa, the intelligent head-gardener at Turin, what he knew of the origin of his plant. He knew nothing of its parentage, but, to my surprise, told me that T. pendula was only a sport of the common T. orientalis, and proceeded to show me five fine healthy and unmistakeable young plants of the latter species, raised, as he assured me, from seeds of the T. pendula which I saw growing in the garden. Observing my hesitation, he obligingly called his assistant to verify the statement, which I hence accepted as substantiated. To make assurance doubly sure, however, I have addressed a query on the subject to Prof. Moris, of Turin, who informs me that this is quite correct. He writes: "M. Lisa assures me that the little plants of Thuja orientalis (var. accedens ad var. gracilem, seu Thujam Nepalensem Auct.) were really raised from seeds of T. pendula. Hence T. pendula and T. orientalis are only forms of one type, the T. orientalis, L. This has been already remarked, and you will find it in Carrière's 'Traité général des Conifères,' pp. 99, 100." As, however, the interest of the question turns very much on the historical origin of the T. pendula, which may not be known to many of your readers, I shall give this in Mr. Smith's words; his acumen and accurate memory in such matters being well known.

"*Thuja filiformis*, Lodd. Bot. Reg. t. 20, for 1842. Loudon, Arb. Brit. vol. 4, p. 2461; *Thuja pendula*, Lamb. Pinus, t. 67; and Seebold and Zuccarini, Fl. Jap. t. 117, are considered as the same. The old plant in the Royal Gardens, Kew, was purchased by Mr. Aiton from Loddiges & Sons, of the Hackney Nursery, and stands charged 1*l.* 1*s.* in a bill of 10*l.* 4*s.* for shrubs, dated April 3d, 1806. Twenty-five years ago, on inquiring into the history of this plant, William Lod-

diges told me that he picked it out with four others rom a bed of seedling Thuja orientalis; they having attracted his attention as being different from the rest in the bed. One of these was sold to Mr. Aiton, one Mr. Lambert had, and he also told me where the others went, but I forget now. Neither George nor William Loddiges could account for these five plants being different from their fellows in the bed; but they hinted at the probability of their being hybrids, founding this idea on the fact of the seed having been collected from a group consisting of Thuja orientalis, Juniperus virginiana, and I think J. chinensis, which were shown me growing thickly together at the back of their Palm-house. The greater number of the plants now in this country have been raised from the Kew plant."—J. SMITH.

Loudon in his "Arboretum" mentions the Kew plant, but says nothing of its history, except that Dr. Wallich is said to have recognised it in 1830 as a native of Nepal†; he, however, enters Thuja filiformis, Lodd. Cat. 1836, as a little known but different species. Lambert, who figures T. pendula from his own specimen, which was also received from Loddiges, says that he suspects it to be a native of the parts of Tartary near China, because that is the native country of the nearly related T. pensilis.

Let us now turn to the other pendulous species of Thuja; these are T. pensilis, Lamb., brought from China by Sir George Staunton, which has pyriform or obovate cones; and T. pendula, figured in the Flora Japonica.

Judging from the figures and dried specimens of the Japan plant, this and T. pensilis are apparently forms of the same species; and as we have no evidence of either having been found in a wild state, it becomes a question whether both may not be sports of T. orientalis, propagated by the Chinese, as the T. pendula undoubtedly is of the same species cultivated by Loddiges. In support of this view I add a translation* of an article in the "Revue Horticole," which apparently refers to the same plant; and which, though confused and open to much criticism, seems explicit as to the main facts stated.

The author, it will be remarked, calls the T. orientalis flagelliformis a hybrid between T. orientalis and T. filiformis, apparently on no better authority than Loddiges had for suspecting his T. pendula to be a hybrid between T. orientalis and a Juniper; nor does it seem to strike him that if, as he states, T. filiformis is only a sport from T. orientalis, so may flagelliformis be also. Again, he ascribes to Lambert's great work, published in 1832, a date subsequent to 1857, and adds that Lambert gives Japan as the native country of T. pendula, which is not the case. Lastly, he states that Loudon, "in 1842, in his Arboretum," says it has not been introduced into England, whereas that volume of the Arboretum which contains the description of T. pendula was published in 1838, and gives a full account of English plants at Kew, Boyton, Chelsea, and Dropmore; besides quoting T. filiformis, for which the original, and in 1836 the only, authority was Loddiges' Catalogue.

In conclusion I think there can be little doubt but that the Thuja pendula originated in Loddiges' nursery, whence all the plants known in Europe up to recent times were obtained, either directly or indirectly by cuttings. Whether it is a hybrid or a sport is not sufficiently proved, though from the statement of M. Lisa respecting the Turin plants, and the tenour of this in the Revue Horticole, I am inclined to suppose the latter. Whether also the Chinese T. pensilis, and the Japan T. filiformis, are indigenous species, or sports, or hybrids, also remains to be seen. *J. D. Hooker.*

* *Thuja orientalis flagelliformis* (*Translated from the Revue Horticole, Oct.* 16, 1860).—In an account of a horticultural journey, undertaken by our regretted colleague, M. Poiteau, inserted in the 19th Number of the "Annales de la Société Royale d'Horticulture" (October, 1843), page 214, it is stated: "A fact which concerns botany as well as horticulture has been lately observed with regard to Thuja filiformis, of which I have already spoken. M. A. Leroy possesses a strong plant of it in a bed of peat earth, and he has placed beside it a Chinese Thuja, for the sake of comparison.

"This filiform Thuja, which differs so remarkably from the Chinese, was at first considered a distinct species, but it is now sold by an amateur of Laval, who states that he has raised it from seeds of the Chinese Thuja, of which it is only a variety; and it is true that this variety (if such it be) bears fruit resembling that of the Chinese Thuja," &c.

This fact is ascertained; it is not an hypothesis: our colleague, M. Jacques, was the first who received a plant of this singular hybrid, and he named it Thuja orientalis flagelliformis; since when, other horticulturists have called it Thuja filiformis, and Biota pendula.

M. le Comte de Reumigny informed M. Jacques that his father-in-law had on his estate near Laval (Mayenne), a Thuja, which appeared to him uncommon, and which had been raised amongst some seedlings of the Chinese Thuja by his gardener. M. Jacques begged M. de Reumigny to request his father-in-law to take care of this Thuja, and to take a cutting from it for him. This was done, and the first plant was sent to him at Neuilly, in 1822. M. Jacques carefully tended it; he placed it in the open ground, and grafted it as soon as the branches were strong enough to bear the operation.

It is, therefore, partly to M. Jacques that we owe the introduction of this interesting hybrid, which is described as third of the genus Thuja, in the "Monographie des Conifères," published in 1857.

Lambert, in a similar work, has since described and figured this tree under the name of Thuja pendula, and gives Japan as its native country. This is the more curious, as the Chinese Thuja also grows wild in those countries; and it would not be surprising if its seeds should have produced the same variety as in France. But, which is very singular, English authors (even Loudon, in 1842, in his Arboretum) say that this interesting tree has not been introduced into England (twenty years after it was known in France); and Lambert himself pretends that it only exists in Japan, although it is certainly the same tree which he has figured in his "Monographie."

But the best proof of its being only a hybrid variety of the Chinese Thuja, is that though it produces fruit every year, no one has ever found a single fertile seed; they are always sterile. Finally, it is a very curious tree, on account of its long filiform branches. It takes readily when grafted in slits on herbaceous wood, or better still, by approach on the Thuja orientalis, *i. e.* the Chinese Thuja.

† It may very probably be introduced into Nepal from China (as is Cupressus funebris), but it is certainly not a native of the Himalaya.

MYCOLOGY.—No. LIII.

AGARICUS MUCIDUS, *Schrad.* The third subgenus of Agaricus, *Armillaria*, so called from *armilla*, a ring or armlet, is perhaps one of the least satisfactory, as it collects species which are not obviously of close alliance, though distinguished by the artificial character of the presence of a ring. From the two foregoing subgenera they are known by the hymenophorum and stem being continuous, by the veil being partial not universal, or if really present forming merely a few scattered flocci on the pileus, and by the gills being sinuated or decurrent behind. The subgenus in fact consists of three sections, which if the ring is put out of the question are referrible to the subgenera *Tricholoma*, *Clitocybe*, and *Collybia*.

The first accordingly has the gills sinuated behind, and though reaching the stem not really adnate. The stem moreover is fleshy and of the same substance throughout, without any distinct bark. We have two British species, one of which, as far as our experience goes, has a ringless variety, for the plant which we refer to *A. constrictus* is in peculiar habit and character and place of growth so exactly the plant of Fries that we cannot conceive it to be really different.

AGARICUS MUCIDUS, *Schrad.* Copied from "Flora Danica."

The species of the second section have adnato-decurrent gills, and an elastic stem spongy within, while externally it is firmer and fibrous. To this belongs *A. melleus*, No. I.

The third division, which includes the subject of our present illustration, has a stem which is externally cartilaginous, as in *Collybia*.

A. mucidus is a rare but very beautiful species, confined principally to the southern parts of Great Britain. We have found it in abundance about Dorking on fallen branches of Beech trees, and it has been gathered in a few other localities. The pileus, which is from $1\frac{1}{2}$ to 2 inches across, is either pure white or slightly tinged with ash or olive colour, glutinous, soft, convex, more or less wrinkled, with the margin furrowed. The stem, which varies in length and thickness, is rigid, stuffed, and slightly thickened at the base, with a distinct entire reflexed striated ring, whose margin again becomes erect; the gills are pure white, few and distant, rounded behind, and then running down the stem so as to leave lines upon it. We are not aware that it is esculent. Indeed it is too tough to make a very wholesome article of food. *M. J. B.*

NOTES ON THE BOTANY OF JAPAN.—No. V.

(*See page* 456).

THE capital of Japan is remarkable for the large number of gardens in its suburbs where plants are cultivated for sale. The finest of these are situated on the north-east side of the city, and consist of two groups; one at a place named Su-mae-yah, and the other at Dang-o-zaka. I was indebted to the kindness of Mr. Alcock, her Majesty's Minister, for frequent opportunities of visiting these collections. At Su-mae-yah the nurseries extend along one side of a road for about a mile, and each nursery covers about 2 or acres of land. Upon the whole they are nicely kept, and contain a large number of plants both in the ground and in pots, many of which are of great interest. As they are generally much alike in their features, a description of one will give a good idea of the whole.

On entering the gateway there is a pretty little winding path which leads up to the house of the proprietor, which is usually situated near the centre of the garden. On each side of this walk are planted specimens of the hardy ornamental trees and shrubs of the country, many of which are dwarfed or clipped into round table forms. The beautiful little Yew (Taxus cuspidata) which I formerly introduced to Europe occupies a prominent place amongst dwarf shrubs. Then there are the different species of Pines, Thujas, Retinosporas, and the beautiful Sciadopitys verticillata, all duly represented.

Plants cultivated in pots are usually kept near the house of the nurseryman or enclosed with a fence of Bamboo work. These are cultivated and arranged much in the same way as we do such things at home. The Japanese gardener has not yet brought glass-houses to his aid for the protection and cultivation of tender plants. Instead of this he uses sheds and rooms fitted with shelves, into which all the tender things are huddled together for shelter during the cold months of winter. Here I observed some South American plants, such as Cacti, Aloes, &c., which have found their way here, although yet unknown in China, a fact which shows the enterprise of the Japanese in a favourable light. A pretty species of Fuchsia was also observed among the other foreigners. In one garden I saw a large number of a species of Acorus with deep green leaves. These were cultivated in fine square porcelain pots, and in each pot was a little rock of agate, crystal, or other rare stone, many of these representing the famous Fusiama, or "Matchless Mountain" of Japan. All this arrangement was shaded from bright sunshine, and protected from storms by means of a matting which was stretched overhead. There was nothing else in this garden but the Acorus above mentioned, but of this there must have been several hundred specimens. Taken as a whole, the pretty nankeen square porcelain pots, the masses of deep green foliage, and the quaint forms and colouring of the little rocks, produced a novel and striking effect, which one does not meet with every day.

The nurseries at Dang-o-zaka are also situated in the north-east suburbs of Yeddo. This place is in a valley amidst the most charming scenery; indeed go where one may the scenery is remarkable for great beauty. On the hill sloping down to the valley there is a pleasure garden, which seems a favourite place of resort with the good people of Yeddo. Here I observed a number of well stocked fish ponds, and several people amusing themselves with the rod and line. The most curious objects in this garden were ladies made up out of the flowers of the Chrysanthemum. Thousands of flowers were used for this purpose, and as these artificial beauties peeped upon the visitors out of the little alcoves and summer-houses, the effect was oftentimes rather startling. The favourite flowering Plum trees were planted in groves and avenues in all parts of the garden, while lakes and islands of rockwork added to the general effect.

After walking round the pleasure garden, inspecting all its nooks and out of the way places, I left it in search of others which contained a better collection of plants. With the aid of my two Ya-kunins or Government officers, who accompanied me in all my excursions, I found on the hill above the town a road lined with nurseries resembling those of Su-mae-yah. Each of these nurseries was crowded with plants cultivated both in the ground and in pots, many of which proved of great value and interest.

The most remarkable feature in the nurseries of Su-mae-yah and Dang-o-zaka, is the large number of plants with variegated leaves. It is only a very few years since our taste in Europe led us to take an interest in, and to admire those curious freaks of nature called variegated plants. For anything I know to the contrary the Japanese have been cultivating

taste for a thousand years. The result is that they have in cultivation, in a variegated state, almost all the ornamental plants of the country, and many of these are strikingly handsome. Here is a list of a few to give some idea of the extent and number of these extraordinary productions:—Pines, Junipers, Retinosporas, Podocarpus, Illiciums, Andromeda japonica, Euryas, Eleagnus, Pittosporum Tobira, Euonymus (yellow), Aralia, Laurus, Salisburia adiantifolia. I suppose we must look upon the Aucuba japonica of our gardens as a variegated variety of that species. Then there is a variegated Orchid! a variegated Palm! a variegated Camellia, and even the Tea-plant is duly represented in this "happy family!" The beautiful Sciadopitys verticillata, which is no doubt "one of the finest Conifers in Asia," has produced a variety which has golden striped leaves.

All these things, and many more, are now on the wide ocean on the way to Europe, where we propose to establish them in a new home. While they pursue their long and lonely voyage let us hope they may be favoured with fair winds and smooth seas, and with as little salt water as possible, which sadly disagrees with their constitution. *R. F.*

THE GORILLA.

"Pro aris et focis."

I must absolutely hang this African ape, in order to save from utter discredit what I have written on the monkey-family in my 3d Series on Natural History, published by Longman & Co., London.

At page 299 of his "Explorations and Adventures" in Western Africa, Mr. Du Chaillu says: "This Gorilla was an adult male." At page 304 he says: "We stood side by side, and awaited the advance of the hideous monster. He advanced upon us by starts, as is their fashion." Again: "The remorseless enemy came upon the negro, not with a sudden spring like a leopard, but with a slow vindictive certainty, which is like fate." At page 58 he says: "The male Gorilla is literally the king of the African forest." Again: "He (the Gorilla) and the crested lion of Mount Atlas are the two fiercest and strongest beasts of this continent." At page 304: "He (the Gorilla) rose slowly from his haunches, at once faced us, uttering a roar of rage." And again: "He was not afraid of us." At page 434, he says: "When the animal became aware of our approach, he at once came towards us." So much for the stupendous courage of this ape-monarch of the African forest.

Now for his Majesty's dastardly cowardice.

At page 349, Mr. Du Chaillu says: "The adult male is also shy, and I have hunted all day long at times without coming upon my quarry, when I felt sure they were carefully avoiding me." At page 243, he says: "They (the Gorillas) are very difficult of approach; the slightest noise alarms them, and sends them off." At page 62, he says: "The secluded habits of this animal (the Gorilla), which lives only in the darkest forests, and carefully shuns all approach to man." At page 357, he says: "The usual mode of progression of the animal is on all fours, and resting on the knuckles." At page 356 he says: "His (the Gorilla) manner of approach gave me once more an opportunity to see with how much difficulty he supports himself in the erect position." At page 350 he says: "In no other animal is the foot so well adapted for the maintenance of the erect position."

But I am tired with quoting such manifest contradictions and absurdities.

Make haste, I prythee, Mr. Ketch, with the halter. The Gorilla must swing. Its carcass may be sent down to Walton Hall. I have an epitaph for its gravestone, viz.:—

"The remains of the mighty Gorilla, the 'Lord of the African forest,' the butcher of negroes, and the terror of all white travellers, are buried here.
This Ape was rogue and knave in all its stages;
It lied like Lucifer, and gulled our sages."

Charles Waterton, Walton Hall, June 15.

Home Correspondence.

Table Decoration.—I was much gratified by your notice in last Number of the superiority of Mr. March's (or rather his sister's) three stands of Ferns and flowers and the admirable effect they produced, which I had the pleasure of seeing and admiring. I trust we shall no longer be furnished at flower shows by gardeners and lady amateurs with bulky "floral devices," unshapely masses of colour using up many otherwise useful flowers and a precious amount of time in their elaboration, and in the words of your lady correspondent only reminding one of "a many coloured Jack in the Green." Now I would like all classes of the community (and among even the lowest I hope a love of flowers and better taste is being diffused) to take some hints, such as are indicated in your article. Exhibitions of Art Manufacture at Kensington and elsewhere have done much to bring under notice of the humblest cheap receptacles of earthenware, glass, or other material for the reception of their bouquets, so that we need no longer have the cottager thrusting his clumsy bunch of Stocks or Marigold into an old jug or spoutless teapot. But last not least, I have a word or two to say on the subject of foliage for bouquets, among those who cannot be expected to have a supply of Adiantums and other graceful forms from the green house or stove. It is amazing how little these substitutes are known or cared for by many who should know better. I met a lady lately, of good taste in other matters, who in default of better material had a nice bouquet of flowers encircled by common Parsley. A few of very hardy border plants and shrubs which every gardener knows should be kept for this purpose, and in cases of emergency the nearest hedge-row would afford the leaves of an Umbellifer or Bryony rivalling in elegance many leaves produced in our gardens. In Covent Garden the fronds of our commonest Ferns are sold in quantities for decorative purposes, but graceful as these are I do not think they excel in beauty and elegance some of our commonest Umbelliferæ, such as the various species of Chærophyllum, Anthriscus, Scandix, Angelica, and especially the deep green feathered fronds of Meum athamanticum, which I grow for the purpose, and consider equal in appearance to many exotic Cheilanthes and even Trichomanes. The advantage over Ferns of keeping longer and affording a mere copious supply is also a considerable recommendation. Such plants grow in greater or less variety and quantity in every district of the country, as well as near towns, so that a constant supply of one sort or another during three-fourths of the year might be depended on. It would be worth the while of those who deal largely in bouquets to grow some of the best of these in quantity, which might enable them to be sold at a lower rate than those made up of more expensive material. *Phyllophilus, York.*

Rainfall, May 1861:—

Stations.	Height of Gauge. Above the Ground. Ft.	in.	Above Sea Level. Feet.	Total for the Month. Inches.	Depth of Rain. Greatest fall in 24 Hours. Depth. Inches.	Date.	Rainy Days.
Little Bridy, Dorset	0	4	348	1.64	.69	11	9
Barnstaple, Devon	0	6	31	1.40	1.05	11	5
Castlefield, Calne, Wilts	0	11	330	1.01	.21	11	12
Camden Town, London	0	4	100	1.40	.69	11	11
Finchley Road, London	0	4	270	1.24	...	..	..
Ditto ditto	36	4	306	.83	...	..	..
Oundle, Northampton	20	0	124	1.07	.90	11	8
Norwich	0	0	30	1.84	.48	12	12
Derby	5	0	179	.63	.23	12	9
Manchester	3	0	106	1.01	.27	31	11
North Shields	3	0	124	1.42	.37	31	21
Dumfries	0	0	63	.75	.30	31	17
Nookton, Leven, Fife	0	6	80	1.49	.40	30	18
Sandwick, Orkney	2	0	78	2.01	.36	30	16

Remarks:—

Little Bridy.—Sleet and hail on the 8th; temperature on 17th 81.5, on 22d 81.8 degrees.

Camden Town.—Steady rain from an early hour on the 11th; the total fall on that day was 1.088 inch, but as .498 fell before 9 a.m. on that day the fall is for comparison with other stations entered as above.

Oundle.—Hail and snow on the morning of the 4th.

Derby.—Mean (14 years) rainfall for May 1.90 inch.

Manchester.—Dr. Dalton's average for 47 years is 2.446 inches.

North Shields.—Rain on the 30th, .275 inch.

Dumfries.—On the 9th and 10th snow showers; 12th Hawthorn in blossom; 14th Cuckoo heard.

Sandwick.—Mean of the previous 20 years, 1.55 inch.

Camden Road Villas.

Oak Galls.—Some weeks ago a notice appeared in your columns relative to the galls which have infested the Oak the last two or three years, and a hope expressed that the late severe winter had perhaps destroyed them. I am sorry to say "the wish was father to the thought." I wrote then to my son, who is with Mr. Standish at Bagshot, and asked him to examine some for me; his reply was, they were nearly all alive. I was there myself a month ago, and examined a large number; fully one-half had already eaten their way out of the Galls, on "murderous thoughts intent," while of those that I opened there was a very small percentage indeed in which the grub was dead—I should certainly say, not one in a dozen. Whatever else may rid us of the pest, it is evident frost will not do so. *D. Deal.*

New Fern lost.—I sent to the exhibition of the Royal Horticultural Society on the 5th inst. a new Fern named Hypolepis distans, which was placed amongst the miscellaneous subjects, but owing to an oversight on my part it could not be entered in the usual way. My brother, who is in London, received the plant at the Euston Square Station, and took it across to the Gardens; but on going for the plant on Friday morning it could not be found, and although we have made inquiries no tidings of it can be obtained. It was in a pot fully 10 inches in diameter. May I ask you to make my loss known, as it is possible it may have been taken by mistake with other plants. *William Dean, Bradford Nursery, Shipley, Yorks.*

Ripe and Unripe Crops of Grapes on the same Vine.—I herewith send you an example of two crops of Grapes growing on the same Vine; it is a young plant on which I have been experimenting, and perhaps its history may be interesting. The ripe crop consists of 13 bunches, the berries averaging from 2 to 3 inches in circumference (one of those sent is rather more), and beautifully black. The green crop consists of 12 bunches, just in a nice state for thinning; they are all thinned, except the one from which the enclosed shoulder is sent, and which has been saved for the purpose. They are very nice bunches, but I do not think the largest will weigh more than 1 lb. I also enclose a leaf to show the vigour and healthiness of the plant. If you will kindly notice these facts in order that they may be referred to, I intend, with your permission, to furnish a paper or two on the means used to produce these crops, and to show that we often put ourselves to a great deal of unnecessary trouble in such matters. My worst difficulty will be to describe the soil. Could you assist me if I was to forward a sample of what the Vine is growing in? [Yes.] I have some idea of exhibiting a bunch of each crop side by side. Besides the novelty of the thing, if it can be repeated (and I see no reason to doubt it, as the wood is ripening well), it would be very convenient to those whose space is limited for planting to have a successional crop on the same Vine, and this not on laterals, but on the regular bearing wood. *Jasper Standstill, Bourton.* [The ripe Grapes were of the finest possible colour and quality. The young ones were in the highest health. The leaf was superb and a foot in diameter. Pray let us hear more.]

Peculiar Atmospheric Smells.—Can any of your meteorological readers inform me whether the peculiar smell pervading the air on certain occasions has ever been satisfactorily explained? Last evening (June 14) just after sunset, a rather strong wind from the N.E. brought up a dry mist accompanied by an odour somewhat resembling burning peat, of a more decided character than I ever before remember to have noticed. At 6 this morning (June 15) there was a haziness remaining in the air and the odour still perceptible. *J. C. H., Chelmsford.*

Effects of the Winter.—You have already published so many lists of plants "killed, wounded, or missing" by the action of the last severe winter, that I venture to send a list of some of my survivors; having been singularly fortunate amidst such a general destruction. With the exception of Araucaria braziliensis, which is dead, I cannot note one killed. Araucaria imbricata is uninjured. A large plant, standard, of Magnolia grandiflora lost its leaves, but is shooting strongly again; other plants are unhurt. The following I may mention as uninjured:—Grevillea rosmarinifolia, Pittosporum Tobira; different varieties of Yucca, Pinus insignis, upwards of 50 feet high, quite untouched; ditto Webbiana, Morinda, and excelsa; Berberis nepalensis, intermedia, japonica, Darwinii; this last has been in splendid flower, and with Escallonia macrantha, together with Deutzia scabra and Weigela rosea, have been most ornamental this spring; Arundinaria falcata, Arundo Donax, Benthamia fragifera, Phormium tenax, Beschornera yuccoides, Pawlovnia imperialis, and Dracæna indivisa. Pampas Grass has been muchcut by wind, but is quite safe. Euonymus japonicus, a few plants killed, some damaged by E. wind, but many quite safe; this plant seems to have suffered generally more than almost any other. Myrtles are cut by wind, but are shooting strong. Lastly I must mention plants of Heliotropium peruvianum, Cantua dependens, and Lophospermum scandens, which although cut down by frost, have survived, and are now making strong and vigorous shoots. Of Sikkim Rhododendrons, Falconeri, Dalhousianum, ciliatum, fulgens, Hodgsoni, and Thompsoni, are uninjured, and appear quite hardy; Gibsoni and White Indian Azalea have flowered profusely. *T. Philpotts, Porthwidden, Truro.*

Rice.—I extract the following from "Household Words." It must not be supposed that Rice in the larger acceptation of the word is represented by "the finest Carolina," or "the best London cleaned Patna." There is no more affinity between these white artificial cereals and the "real original" staple food of India and the East, than is to be found between a sponge cake and a loaf of genuine farm-house bread. Perhaps no greater fallacy exists than the common belief in the poverty of the nutritive qualities of Rice. That may hold good in regard to the Rice consumed in this country, but certainly not if applied to the common Rice of many parts of the East. A hard working Indian labourer would not make a meal on our "finest Carolina" if he could get it as a present; he would know that he could not do half a day's work on it, even though he swallowed a full Indian allowance, and that is saying a good deal. Perhaps it may be thought that there is no such thing as a hard day's work in India, and that, therefore, there can be no good grounds for vouching for the nutritive properties of the grain of these countries. If so it makes another of the rather long list of popular modern fallacies. I have seen as hard work, real bone and muscle work, done by citizens of the United Kingdom in the East, as was ever achieved in the cold West, and all upon ric-

and curry—not curry and rice—in which the rice has formed the real meal, and the curry has merely helped to give it a relish as a sort of substantial Kitchener's Zest or Harvey's Sauce. I have seen likewise Moormen, Malabars, and others of the Indian labouring classes, perform a day's work that would terrify a London porter or coalheaver, or a country navvy or ploughman; and under the direct rays of a sun that has made a wooden platform too hot to stand on in their shoes without literally dancing with pain, as I have done many a day within 6° of the line. Are you aware whether the Rice, as made use of in the East Indies, can be obtained in this country? It would be a cheap and excellent article of diet for our labouring classes and others. *East Indian Rice.* [Perhaps some Correspondent will be able to answer this inquiry.]

Kureel Tree.—I have just received some berries of the Kureel tree from a correspondent near Lahore; can you give me any information about its cultivation? Some seeds not in the berry, received some months ago, have been sown in a hothouse without success. It is described as "a beautiful shrub when in flower, but it fades in a week. When it is going to flower it makes little shoots and puts out two leaves on them. All the rest of the year the twigs are green, but perfectly bare and dead at the ends. The Kureel is said by some to be the wild Caper." My correspondent thinks it would grow best by suckers, and asks what sort of roots it would be best in this case to send, the woody or fibrous? It strikes its roots from 5 to 15 feet into the ground, and those that run along the top are woody, and those that go deep are softer. I enclose one of the berries. *Rose.* [This Kureel is the Capparis aphylla, a kind of Caper bush. The seeds are good.]

Geranium Sports.—I beg to send for your inspection flowers from two plants of Rollisson's Unique Geranium, each of which produced the purple and lilac flowers sent; and in one instance, as you will observe, the two colours are united in the same truss. Is this sport a common occurrence? Would you also please to let me know which Dendrobe the accompanying flower belongs to? *R. P., Pinchos, Anglesey.* [The Dendrobium is too much withered to be named.]

Societies.

Royal Horticultural: *June* 15.—*The Fine Arts Committee* assembled this day, H.R.H. the Prince Consort, President, in the Chair. There were also present the Lord Llanover, Sir Coutts Lindsay, Bart., Mr. Henry Hope, Mr. Wentworth Dilke, Mr. Sidney Smirke, R.A., and Mr. R. Westmacott, R.A. The object of the meeting was to make a communication to the Sculptors of the country. The following is a list of Sculptors and others connected with that department of the Fine Arts who had been invited by the Committee to attend, almost the whole of whom were present, viz:—Messrs. Baily, R.A.; Foley, R.A.; Mac Dowell, R.A.; Marshall, R.A.; Weekes, A.R.A.; Baron Marochetti, A.R.A.; Adams, Bacon, Behnes, Bell, J. Davis, E. Davis, Durham, Earle, Edwards, Hancock, Jones, Lough, Leigchild, Miller, Munro, Nicol, Noble, Physick, Papworth, Stephen, Theed, Thomas, Thornycroft, Thrupp, J. Westmacott, Woodington, and Woolmer.

June 11 (*Floral Committee*). — Messrs. Veitch sent on this occasion two Fuchsias with white corollas — one called Elegans flore pleno; the other Elegans alba. The same firm also furnished a spotted Pelargonium with a brilliant ground colour, called Topping's Lady Churston, of which mention was made in our report of the Royal Botanic Society's exhibition last week; it received a Label of Commendation as a useful decorative plant. Mr. Cant, Colchester, sent blooms of a magnificent Tea Rose, which he stated he had under the name of Aurora. but which had been lost to the public, and which he proposed sending out again. The Committee entertained a very high opinion of it, but wished to compare it with another Rose of the same class, which it was supposed to resemble, before deciding on it. It was, therefore, reserved for next Meeting. Mr. W. Paul contributed a seedling Rose raised from Jules Margottin, of good properties and vigorous habit, of a bright rosy crimson shade of colour, good shape, cupped, and of good substance of petal. He proposed to call it Beauty of Waltham Cross. For this a first-class Certificate was awarded. Mr. Standish again exhibited the collection of Japanese plants sent home by Mr. Fortune, to several of which awards were made.

June 11 (*Fruit Committee*).—Mr. Standish exhibited three large and handsome bunches of Ingram's Hardy Prolific Muscat Grape; they were well shouldered, and the berries were of good size, of a deep black colour, and with a fine thick bloom; the flavour also was excellent. From the fine condition of the fruit, and the high opinion that was expressed at former Meetings upon the merits of this variety, the Committee awarded to it the special prize of 5*l.* placed at the disposal of the Committee by Mr. W. Wilson Saunders. Mr. Standish also exhibited very fine bunches of White Frontignan Grapes, and four handsome Vines in pots, the latter of which were awarded a Certificate of Commendation. H.R.H. the Prince Consort, President of the Society, sent a dish of very fine fruit of the Mango: these were large, oval, and somewhat flattened on the sides: the flesh was thick, very juicy and richly flavoured. F. Darwin, Esq., of Kirkhill Hall, near Ottley, presented a collection of 49 sorts of Kidney Beans, collected in Madeira, all of which were reported to have been sown in the Garden at Chiswick.

June 18 (*Election of Fellows*).—The following were balloted for and duly elected, viz.—

H. W. Arney, Esq.; Mrs. H. W. Arney, Lady Alvanley, R. Alexander, Esq.; Sir J. Russell Bailey, Bart.; Miss Bartlemore, C. Barron, Esq.; W. R. Basham, M.D.; The Bishop of Bath and Wells, Lord A. Wentworth Beauclerc, F. Bentley, Esq.; Mrs. J. B. Bergne, Right Hon. Sir M. Berkeley, K.C.B.; Earl of Bessborough, A. H. Bevan, Esq.; E. Birkbeck, Esq.; H. Bollen, Esq.; Mrs. A. M. Bradshaw, Mr. J. Burly, P. Bicker Caarten, Esq.; H. Cazenove, Esq.; Viscount Chelsea, Lady Chichester, S. Churchill, Esq.; Viscountess Combermere, F. Comyn, Esq.; J. T. Conquest, M.D.; George Edward Copley, Esq.; Lord Craven, Lady Cremorne, Mrs. Crewe, Mrs. M. Cridland, Miss M. Curwen, C. B. Danbuz, Esq.; Earl of Darley, J. Dashwood, Esq.; Lady Charlotte Denison, Sir H. Dymocke, Bart.; C. A. Ellis, Esq.; L. A. Ellis, Esq.; Mrs. Else, G. F. M. Esmeade, Esq.; J. Llewellyn Evans, Esq.; J. H. Foley, Esq., M.P.; Mrs. Lane Fox, W. Fraser, Esq.; J. B. Gobb, Esq.; John Gay, Esq.; Mrs. Gillett, Earl de Grey, J. Green, Esq.; H. Grisewood, Esq.; W. Gulliford, Esq.; Mrs. M. Hakes, Sir R. N. C. Hamilton, Bart.; J. H. Hamilton, Esq., M.P.; Sir T. Hare, Bart.; G. Hatfield, Esq.; Rev. E. C. Hawtrey, D.D.; T. B. Haywood, Esq.; J. H. W. Hibbert, Esq.; M. Higgins, Esq.; Mrs. Hinchman, T. Hugham, Esq.; L. Howard, Esq.; Z. A. Jessel, Esq.; Mrs. H. Joliffe, W. Jones, Esq.; Miss E. G. Kennard, C. Kieser, Esq.; H. Kingsford, Esq.; S. Knill, Esq.; F. Lambert, Esq.; Miss Lawrence, Mrs. Lee, P. Lewes, Esq.; W. H. Lintott, Esq.; Right Hon. Lady Londesborough, Mrs. L. Longdon, Earl of Longford, Mrs. Lyall, W. Lysley, Esq.; J. R Macleay, Esq.; A. MacGown, Esq.; Lady Magnay, Duke of Marlborough, H. Mathews, Esq.; H. McCalmont, Esq.; Lord Metnuen, Col. Meyrick, Mrs. Middleton, F. Milded, Esq.; Lady L. Mills, C. Millward, Esq.; — Mitchell, Esq.; J. D. Mullens, Esq.; Miss Mynors, Thos. Naghten, Esq.; Geo. O. Newton, Esq.; Wm. Nichols, Esq.; E. P. Nisbet, Esq.; D. Norton, Esq.; Mrs. M. Ollivier, O. S. Onley, Esq.; Lady Otway, Rev. H. J. Owen, Bishop of Oxford, Sir L. Palk, Bart., M.P.; W. H. Palmer, Esq.; G. A. Partridge, Esq.; Major Peach, G. W. Petter, Esq.; J. Pilgrim, Esq., R. B. Postans, Esq.; W. Poultney, Esq.; Lady Price, Lord G. Quin, Mrs. H. Ramsay, C. Ramsden, Esq.; J. G. Rebow, Esq.; P. Reeve, Esq.; W. H. Ripley, Esq.; M. E. Rodocanchi, Esq.; L. Rosenthal, Esq.; C. Sisson, Esq.; R. M. Skinner, Esq.; Captain Smith, J. Smith, Esq.; Viscount Somerton, J. Stephens, Esq.; J. P. Stocker, Esq.; Lady Sterling, Viscountess Strangford, G. H. Strutt, Esq.; W. Thorpe, Esq.; Mrs. C. C. Townshend, Major Vivian, Col. H. Vyse, Mrs. H. Vyse, Mrs. Walker, J. Watney, jun., Esq.; F. West, Esq.; The Lady Wharncliffe, W. Wheelwright, jun., Esq.; H. C. White, Esq.; S. F. Widdrington, Esq.; Miss E. Wolfe, Miss Wyburn, and J. H. Campbell Wyndham, Esq.

Botanical of Edinburgh: *May* 9.—Dr. Lowe, President, in the chair. The following communications were read:—I. "Observations on some hitherto undescribed Plants from New Zealand." By Dr. Mueller, Melbourne. II. "Notice of some of the Economic Uses of the Coco-Nut Palm (Cocos nucifera) in Southern India." By Hugh Cleghorn, M.D. The author remarked:—"Many botanists have described the manifold uses of the Coco Palm. Of early writers, Marco Polo, Kæmpfer, and Loureiro, collected much accurate information. Among later authors, Marshall, Seemann, and Drury have added to our knowledge of the tree." He alluded to some of the economic uses not usually noticed: particularly the process of collecting the juice, as practised by the Sáuár. It is well known that the leaves furnish material for mats, thatch, screens, purdahs in Zenanas, &c. The finer nerves of the pinnules are employed in constructing a superior description of mat. The fibrous husk of the nut yields Kayár, from which ropes and cables are made, and with which mattresses are stuffed. When the husk is cut across and the inner shell removed, a hard brush is formed which is much used for polishing waxed furniture, and for many other purposes. The hard shell (Endocarp), besides its use for ladles, &c., affords when burnt a good black pigment, occasionally employed in colouring the walls of houses. The albumen and the milk are used as an ingredient in curries (and no pillau or curry is considered complete without them): the milk is also used in the arts. The kernel is pounded and subjected to strong pressure for the purpose of yielding the Coco-oil of commerce. The manufacture of this oil constitutes a regular trade on the western coast of Hindostan. Toddy is drawn from the tree for six months of the year. The process of extracting the sap is as follows:—When the spathe is a month old, the flower-bud is considered sufficiently juicy to yield a fair return to the (Sáuár) toddy drawer, who ascends the tree with surprising ease and apparent security, furnished with the apparatus of his vocation. This apparatus and the mode of ascent were described and illustrated by Dr. Cleghorn in his paper. A year's practice is requisite before the Sánár becomes an expert climber. The spathe when ready for tapping is 2 feet long and 2 inches thick. It is tightly bound with strips of young leaves to prevent expansion, and the point is cut off transversely to the extent of an inch. He gently hammers the cut end of the spathe to crush the flowers thereby exposed that the juice may flow freely. The stump is then bound up with a broad strip of fibre. This process is repeated morning and evening for a number of days—a thin layer being shaved off on each occasion, and the spathe at the same time trained to bend downwards. The time required for this initiatory process varies from five to fifteen days in different places. The time when the spathe is ready to yield toddy is correctly ascertained by the chattering of birds, the crowding of insects, the dropping of juice, and other signs unmistakeable to the Sánár. The end of the spathe is then fixed into an earthen vessel, and a slip of leaf is pricked into the flower to catch the oozing liquor and convey the drops clear into the vessel. After the juice begins to flow the hammering is discontinued. A man attends to 30 or 40 trees, which do not bleed so freely during the heat of the day as at night. Forty trees yield 12 Madras measures of juice—about one and a half to two gallons—the times of collecting being seven in the morning and five in the evening. Jaggery (coarse brown sugar), is procured by boiling down fresh toddy over a slow fire, a gallon yielding about a pound. Jaggery mixed with lime forms a strong cement, and takes a fine polish. It is to this mixture—in part at least—that the Madras Chunam owes its celebrity. *Wood*—The trunk is only used for temporary purposes; when fresh cut it possesses great elasticity, and is for this reason particularly well adapted for temporary stockades which are exposed to cannon shot. Coco Palms are easily transplanted, and often with advantage. Some of the fibrous radicles are cut away—a little manure and a handful of salt being applied to the roots each time.—III. "Account of a Botanical Trip to Ben Ledi, with Pupils, in July, 1860." By Professor Balfour.—IV. "Letter from Dr. Kirk of the Zambesi Expedition," dated 2d December, 1860. Communicated by Professor Balfour. Dr. Kirk writes—"Of all the sights I have seen—and I think, from description, of all the sights of that sort in the world—there is nothing to equal the Victoria Falls. Dr. Livingstone had greatly understated the depth; I suspect the great Fall is 400 feet. I do not know if any description will make the matter intelligible; for you will suppose, in spite of me, that the ground falls in level. No such thing; it is a wide valley with hills, a mile or so off on either side, and about 400 feet high. The Zambesi is about a mile wide, with many islands; its course is suddenly crossed by a fissure in the basalt rock—a mile long, 350 feet deep, and about 80 feet wide. Now, the river falls clear down to the bottom at once—the ground beyond is the same level as that above the Falls. At the bottom of the fissure the water runs transversely, and escapes by a narrow fissure at right angles, placed in the eastern third: but there is another fissure parallel to the first, and into this the water is discharged, and flows west, then doubles again to the east; still, remember, in the bottom of the zig-zag crook, and always 400 feet under the level of the adjacent country. It turns back to the west, and we did not see it again until about five miles below, where it was still in the deep gulley cut out of the tolerably level ground; but there the sides slope, so that it would be possible to climb down, and this state of matters continues at least half way down to Sinamane. This is a wonder of the world, and no sketch could convey the least idea of it unless by a master painter in oil. There is no fall equal to it for depth, amount of water, and singularity of structure. As the water descends it becomes broken up into rain, while masses spout out from the rest and leave tails like comets. In the fissure at noon you see a double rainbow. The opposite side is as perpendicular, and the spray falling on the rock runs down in constant streams, but as it flows from some projecting edge it is licked up again with the ascending vapour, once more to form part of the thick rain which constantly falls on whichever side the wind may blow. The island in the middle is constantly moist from the vapour of the Fall." Mr. Wm. Gorrie exhibited young trees of Pinus Laricio or Corsican Pine, and remarked that it was the best of all the European Pines for deal timber, and the quickest in attaining a useful size. It has been used near Manchester for railway sleepers when only 30 years old.

Notices of Books.

The Cotton-Ryot. Bombay: Chesson & Woodhall.

This is a lively and suggestive Pamphlet, in the form of a letter addressed to the *Bombay Times* on the present local aspect of cotton matters, by Mr. H. D. Rae, of the Bombay Revenue Survey.

The author is well acquainted with his subject, and has no hesitation in expressing his opinion upon one of the most important questions that now engage the attention of English statesmen. Since those who are interested in the matter will certainly procure the pamphlet for themselves, we content ourselves with a very few remarks. The author classes the regenerators of India in eight groups, one of which, at p. 13, is quite original to us, for though we have heard of all except the last "White-washing of the Pauper Ryot," as parts of a scheme for the regeneration of India, we have never understood that the proposers viewed them as other than mere parts of a great whole. Our own impression has long been that had a little of the Indian debt been systematically appropriated to productive public works, such as the extension of irrigation and facilitating internal commerce by the formation of good roads, the profits resulting from that part would have paid the interest easily of the whole, and we even think we may go further and add principal as well. But this most unhappily was a view the good old Company could never be induced to take. It was either too grand for their comprehension or they

felt themselves hampered in their proceedings by Parliamentary interference. The correctness of this view is we think established by the fact that nearly all their great public works have paid from 70 to 100 per cent. on the total outlay within a year or two of their completion. One striking case out of many may be referred to. The Guntoor district, lying along the banks of the Kistnah river, has always been subject to slight scarcities every two or three years. An able engineer in that district took the trouble to survey it carefully, and reported to Government, if we mistake not, somewhere about 1810, that by an expenditure of under 100,000*l.* the whole of that large and populous district might be fully irrigated from the river, famines and scarcities prevented in all time coming, and the revenues augmented tenfold. Subsequent experience has shown that principal and interest would have been paid almost before the works were completed. The Court would not listen to anything that could be urged on the subject. At last a real famine swept the district, man and beast perished by thousands, and in one year two or three times the amount of revenue was lost, beyond what would have prevented the catastrophe; and 10 years after the district had not nearly recovered from its effects: indeed we even doubt if it has yet, though it is now 30 years since it happened. And what is worse, the works so urgently recommended 50 years ago are not yet carried out; but are now, we believe, thanks to General Sir Arthur Cotton's perseverance, in progress, and when completed will change a comparatively poor into one of the richest districts in India.

On the subject of the Cotton supply we feel disposed to adopt rather sanguine views. It is a six months' crop or little more, and the stimulus of remunerating prices will more than treble the produce the first year; and if there is only shipping to bring it to England, and sufficient facilities for baling, the supply from India will we expect astonish those in this country who are accustomed to estimate the future by the past. What India wants is a fair field and no favour, which has not hitherto been accorded.

There has been much virtuous indignation expended on the so called "middle men," but much can be urged in their favour, for they in the first instance supply the sinews of war to the cultivators, who are an improvident set of people. Fee simple lands, with a small land tax such as we have to pay in this country, would be the greatest boon to India; but it is hard to do without the money. The difficulty might however be easily got over by compounding for the land tax at the rate of 15 or 21 years' purchase, which, carried on at a regulated rate, would keep the wheels of Government going very smoothly for many a year to come, and encourage the investment of that capital in the improvement of land which is now worse than wasted in nonsensical native ceremonies.

One word more. There seems to be no end to Indian short comings in the payment of public works; and the present rulers seem to be following in the track of their predecessors by stopping all the works now in progress that can be stopped. Surely that policy is suicidal, which makes the generation that executes public works pay wholly for them for the benefit of their successors.

The Proprietors of the 8th edition of the *Encyclopædia Britannica* have worthily terminated their labour by the publication of one of the most skilful and complete indexes with which we are acquainted. It contains a full and complete enumeration of the multifarious subjects treated of in the work, thus bringing into one view the varied and scattered information not indicated by respective heads and titles.

Garden Memoranda.

PRUSSIA: THE BOTANIC GARDEN, BERLIN.—I went by rail to Berlin, for the most part passing through a series of extensive flat, sandy plains. From the windows of the carriage I could observe several plants which are either strangers to the British Flora, or rarely met with in this country. The sandy banks in many places were yellow with the flowers of Helichrysum arenarium; and Cichorium Intybus, with Gentiana Pneumonanthe, are also common plants there. Among the cultivated crops was one I had not previously seen, namely, the succulent yellow Lupin, Lupinus succulentus, which is grown extensively in some parts of Germany, and appears to delight in the poor sandy soils on which it is generally cultivated. The appearance produced by the golden yellow flowers of this plant in such masses is very beautiful. It then occurred to me that this Lupin might prove of considerable value for cultivating on the light sandy soils which abound so extensively in many parts round the sea-board of this country, and are now producing little else except bent. At any rate, it would surely be worth a trial; but in doing so, the seeds would require to be sown early, after the frosts have passed, in order that the plants may have all the advantage of the growing season; for when experimenting on crops which grow well on the Continent, it ought to be kept in view that although the mean annual temperature of those countries may be only equal to that of our own, the heat there is much greater during summer than it is here, and the winters colder. On making further inquiry about the Lupin crop, I learned that the farmers grow it in many instances for the purpose of ploughing it in green as manure into the land on which other crops are to be raised.

At the Berlin Botanic Garden, one of the principal objects of attraction is the great new Palm-house, which was lately built, and is now occupied with fine plants. It is 170 feet long by 54 high and 50 wide, covered with ridge and furrow roof in double sashes. It is heated by both steam and hot water. The former is generated from boilers placed underground, and chiefly used for the purpose of supplying bottom heat to the plants, the largest of which are placed on hollow pillars to which the steam has access. It can also be admitted to the body of the house through apertures, so as to render the atmosphere as moist as a vapour bath, or shut off at pleasure by closing the apertures. Judging from the appearance of the plants, they like the treatment they are subjected to. Long adventitious roots were, in many instances, protruding from the stems of some Palms, and many species of other plants; thus affording proof of the damp atmosphere they are grown in. It would be impossible, as well as undesirable, in a brief notice like the present, to mention a tithe of the old and interesting plants to be observed in the Berlin collection. I shall, therefore, confine my observations to a few of the more remarkable kinds. The number and size of the tree Ferns are features most likely to attract the notice of English visitors; and the following rough measurements of a few will give some idea of their dimensions: Cyathea aurea, with stem about 20 feet high; Hemitelia integrifolia, stem 5 feet; Alsophila obtusa, stem 15 feet, with several others of great size, among which are Alsophila inermis, Angiopteris longifolia, Pteris castaneanus, Diplazium grandifolium, and Cyathea mexicana. Next in interest, according to my estimation, were the numerous species of Pandani, some of which form such grotesque figures when large. Pandanus utilis was full of fruit, which are singular looking black globular masses; Pandanus furcatus was also in flower, as were some of the species of Cyclanthus and Carludovica. Some of the Palms are already noble specimens, and not a few rare kinds among them. A large species of Strelitzia, resembling Strelitzia augusta, but said to be different from it, I had not previously seen. It is there called Strelitzia Nicoläi, and came from the Botanic Garden at St. Petersburgh to the Berlin garden. Another remarkable plant was a large species of Bamboo Cane, Bambusa latifolia. The leaves of this Cane are nearly 6 inches wide, and the canes much stronger than those of the plant generally cultivated in British collections. The Agave tribe of Amaryllidaceous plants, which are so great favourites on the Continent, are well represented at Berlin, and some fine specimens among them. There is also a good collection of the globular-formed Cacti, so well known from the figures published of many of these by Dr. Pfeiffer and the late Inspector Otto. The hardy trees are neither very numerous nor large, but I observed a good species of Poplar among them, which I am not aware has yet been grown in Ireland. It is there called Populus laurifolia, and forms a tree 60 feet high, with large shining leaves.

From Berlin I went to Potsdam, to see the terraced gardens, &c., at Sans Souci, which are a curiosity in their way. There are seven tiers of terraces rising one above the other, each of which is faced by a brick wall, which walls are occasionally covered with glazed sashes, according as the crops of Figs, Grapes, Peaches, &c., require protection. A number of large and among them curious forms of Gourds were lying on the walks, attached to the Vines, which were planted on the borders, and allowed to trail over some parts of the walks, producing a pleasing effect on the terraces.

In Germany fine foliage appears to be more prized than mere showy flowers, in which respect the art of flower gardening differs materially there from the manner it is practised in England. At Sans Souci, the beds on the Grass were filled with such plants as the Dwarf Fan Palm, Chamærops humilis, Caladiums, and Cannas of sorts; and even our common Rhubarb found a place among the number, and played no mean part as an ornamental plant. In other beds the large Grass Arundo donax, with varieties of Indian Corn plants, formed good contrasts to those which were occupied with Pelargoniums, &c. To the eye of an English gardener, who cultivates 20 kinds of scarlet Pelargoniums each differing slightly in colour of flower and in foliage, with twice that number of shades of colour among his beds of Verbenas, such plants as I have stated will no doubt appear coarse and incongruous; but let the two methods be placed before the eye of a good landscape painter, I can readily opine which he will choose. The new Orangery, which is, I dare say, by the time I write finished, is on a surpassing scale of magnitude. It is 1000 feet long, by 45 wide and 25 high. In general appearance it seems a massive heavy building, with pillars of cut stone along the front, between the upright sashes; and at the back part there is a sort of gallery, raised about 8 feet above the level of the floor. I believe it is intended for a winter promenade for the officers of the household, &c., as well as for sheltering plants. In front new terraced flower gardens have been commenced, which will ultimately have a magnificent effect, if carried out on a scale commensurate with the great conservatory.

Near Sans Souci is the extensive nursery collection of M. Fricke, at Augustin, where, I believe, the largest quantity of Palms are cultivated for sale which is to be found in any single establishment in Europe at the present time. One large range of conservatories, about 400 feet long, was mostly filled with Palms and Ferns, and other smaller houses with many very rare plants. This collection seemed to me to bear a greater resemblance to that which the Messrs. Loddiges, at Hackney, had 20 years ago than any other I have seen, and the prices asked were very reasonable. A large plant of Dasylirion acrotriche was then in flower, this being the first time I had seen this species blooming. *Moore's Report to the Royal Dublin Society.*

Miscellaneous.

What Destroys Ships.—As being at present resident in London, I had not the opportunity of examining personally the action of "the worm" upon the bottoms of ships, I paid a visit to an establishment where I could see these planks at my ease. I accordingly introduced myself to the son of Mr. Castle, Baltic wharf, Milbank, close to Vauxhall Bridge. Mr. Castle buys old ships and breaks them up for firewood, which he sells at a cheap rate, and capital fires they make. One gentleman, he tells me, has had a set of furniture made from the Oak planks of these old ships. On the wall outside the premises are fixed the figure-heads of some of the ships that have been broken up; they are more or less artistically carved, and therefore worth preserving: and here we have a curious collection, such as George IV., Neptune, Queen Adelaide, Acheron, W. Manning, Jupiter, and Lord Sidmouth. Over the door of the counting-house is an immense wooden arm holding out a money bag, which is gilt; it belonged to the figure-head of the ship Commerce, and is not a bad emblem of the office over which it is fixed. Mr. Castle kindly showed me over the yard, having previously taken from his desk a fine specimen of Teredo-bored wood which he had preserved from one of his ships. One of the workmen informed me that they found "the worm" in old ships, and generally in ships that had been sailing in tropical climates. It prefers African Oak and Teak, for "them things has as nice appetites as we have ourselves." Last year he found in the Flamer and the Bathurst, which were broken up, a great number of "them short worms with hard heads that makes long holes and lines them with cement as they go along" (a capital description of Teredo). "These two ships were quite full of them; they scrunched under the feet, and the birds came and picked them out to eat; they will get in anywhere where the copper is knocked off the bottom of the ship, and we finds 'em principally on the 'flats' of the vessel; when they comes to an iron or copper bolt they turns a one side and goes round it, as they don't like it." This man promised to save for me the next good specimen he obtained. I observed in several portions of wood among the bones and skeletons of the ships that were about the yard, a most interesting natural preservative process which takes place in Oak ships which are fastened together with iron. I found many bits of Oak-wood stained of a blue ink-like colour. Here then is the explanation; the iron of the bolt becomes decomposed by the action of the water, and combines with the tannic acid in the Oak, thereby forming, as everybody knows, genuine ink. The wood saturated with this ink resists the action of the water better than the un-inked wood, and the worm will not bore into it. I obtained several fine specimens of this wood; the stained part tastes bitter, exactly like ink, when crushed between the teeth. This same phenomenon may be observed in Oak gate-posts in the country which have iron fastenings or nails driven into them. *Buckland's Curiosities of Natural History, 2nd series.*

Death of a Missionary.—Soon after our arrival at the Red Lake Mission we learned that the Roman Catholic Missionary had been frozen to death two days previously, in an attempt to cross the ice during a snow storm, from a promontory about two miles away from the Mission. He had been visiting a camp of Ojibways, who warned him of the perils of a return across the ice during the storm, and invited him to pass the night in their wigwams; but the missionary thought that he would not incur any danger of freezing during so short a traverse, although the thermometer indicated a temperature of 25° below zero, at the opposite station. He was frozen within 200 yards of the Mission House, near to which were a number of log houses, tenanted at the time by half-breeds and Indians. When the body was found on the following morning, a number of Indians set themselves to trace his steps from the Ojibway camp across the ice, a difficult undertaking, in consequence of the high wind which was blowing at the time having, to an inexperienced eye, obliterated all traces of his steps. With astonishing accuracy these wild men read the brief history of his journey, and related the incidents to me as we stood on the banks of Red Lake, with the Ojibway village and the course of the unfortunate missionary in view. "There," said my dusky informant, pointing to the ice not more than half a mile from the houses, "there he first turned his back to the wind, and there he knelt to pray," the Indian suiting the action to the word, and kneeling in the attitude which the track showed the missionary had assumed. Now he faced the wind and ran against the blinding snow and pitiless storm; here he turned his back again; there his tracks showed how he slipped and fell, and

once again where he knelt to pray. The marks of his fingers were seen on the crust of snow lying in frozen patches on the ice. Once more he fell, rose again, knelt for a while, and made a last effort to push against the storm. They came at length to where he had fallen for the last time, and subsequently knelt with his hands on the ice, his head touching the snow. He was found with hands clasped in the attitude of prayer, his head bent upon his breast. The barking dogs at the Mission must have been aware that he was approaching, notwithstanding the gloom of evening and the drifting snow, for they bayed fiercely in the direction he was coming about the time he was supposed to have fallen. The half-breeds heard the dogs and looked out in expectation of seeing the missionary approach, but as the dogs soon ceased to bark they thought it was a false alarm, and did not go to meet and assist him. It was painfully interesting to watch the Indians relate the narrative of this short but terrible journey from the information they had gathered on the almost trackless ice and snow. The imitation of the actions and motions of the poor missionary, his attitude of prayer, his drooping head touching the cold ice, his backward wanderings, were all so faithfully represented, so true to nature, that the reality seemed to be occurring before me, rather than the solemn mimicry of a savage.—*Hind's Narrative of the Canadian Red River Exploring Expedition.*

Effect of Fungi on Roots.—The following may possibly be of interest. In a garden where I am directing some improvements was a large Portugal Laurel, which, without any apparent cause, had gradually decayed. Upon examining the soil, however, about its roots large patches of a yeasty looking Fungus were conspicuous; and on still further scrutiny, the half-rotten stump of a tree felled some two or three years ago, revealed itself. The Laurel has just been grubbed up, and on nearly the whole of its roots are traces of the mycelium of a Fungus. This has, I imagine, killed the tree, the primary cause being the decaying tree stump. *L. in Florist for June.*

Remarkable New Australian Tree.—Mr. Stuart in his journal speaks of a magnificent tree in the far north country, which sheltered himself, his party, and all the horses beneath its wide-spreading branches. He brought a few seeds to Adelaide, and we have had the pleasure of seeing a leaf from one of the young plants. It was received by our member, Mr. Serjeant, from a relative of his in Adelaide, and was by him submitted to Messrs. Thomas Lang & Co., nurserymen here, who, however, were unacquainted with the plant. They got the opinion of our learned botanist, Dr. Mueller, of Melbourne, and we have much pleasure in giving the following extract from his letter to Messrs. Lang & Co.:—"The leaf transmitted for my inspection proves that the famous umbrageous tree belongs to the genus Erythrina. I am of course not in a position to state whether the species is a new one, or any of the four of tropical Australia already known, the leaf being very young. In Stuart's botanical collection submitted to me I find only a leaf of the Erythrina bilobs, which I discovered in 1856 during Gregory's expedition. I described it in Sir William Hooker's Journal, 1857, p. 21. The species is said by Mr. Stuart to be frequent in Central Australia. We saw it only on one spot, where it formed but a small tree. More frequently we noticed the Erythrina vespertilia of Bentham (see Mitchell's Tropical Australia, p. 218), but this never attained any great size, and I am therefore inclined to consider the magnitude of the particular individual tree alluded to by Mr. Stuart as an exceptional state, the effect of circumstances most favourable to the growth of the plant. The two other coral trees as yet known belong to Eastern Australia. *Melbourne Observer.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Let shading be used with caution at all times whenever the weather is in any way dull. As plants will soon be ripening their young wood, they want as much light and even moderate sunshine as possible. In the case of Orchids this is especially necessary, in order that the young leaves and pseudo-bulbs may be thoroughly matured. Plants already in this condition, or nearly so, should be removed forthwith to a cool house, and care taken not to induce them to push again, as a fresh start would interfere with their flowering next year. Dendrobium nobile and others of that class sufficiently advanced in growth should also be moved to a house where they could have a moderate and steady temperature, abundance of air, and little water till their stems are ripe and their flower buds formed. Those Orchids which are still in a growing state should be placed in the most favourable positions and encouraged by a nice temperature, for ripening and hardening any growths which they may yet make. Afterwards let them be put gradually to rest.

FORCING DEPARTMENT.

Pinery.—Attend carefully to growing stock, keeping the bottom-heat regular, and the atmosphere moist, and use every means to secure rapid vigorous growth. This will not be obtained, however, unless all is right at the root, therefore attend well to watering, and never allow any of the plants to become pot-bound. Give air moderately to young stock, and shut up early in the afternoon, giving the plants a gentle syringing and the house a good steaming by wetting every available surface. Continue to pot a few suckers, as they can be obtained of sufficient strength, and do not allow too many to be produced by one plant, as they weaken each other. Indeed, no sucker should be allowed to grow to any size that is not likely to be wanted for stock, and unless in the case of any scarce sort, never more than two on a plant. Plants growing in beds of soil must be very carefully attended to with water, giving enough at each application to moisten the whole body of soil; for unless this is attended to the bottom of the bed will sometimes get quite dry, while the surface is moist.

Vineries.—The inside borders of houses intended to furnish a late supply of Grapes should soon be well soaked with manure water, so as to allow of their becoming dry before the fruit is ripe, for damp would be most injurious then, and anything likely to cause it should be avoided. Muscats beginning to ripen should be assisted with fire-heat, for it is hardly possible to ripen these properly at any season without artificial heat; and those for late use should be pushed on so as to get them ripe by the end of August, at the latest; for those ripened later in the season are seldom of good quality, and we have always found them to hang better when ripened early in autumn than those that are ripened later in the season.

Figs.—The second crop on the earliest trees will be fast advancing; as soon as the fruit begins to ripen the atmosphere should be kept dry and rather cool, giving air freely every fine day, and using a little fire on wet cloudy days, to prevent damp and allow of a gentle circulation of air. Use every care to keep the foliage clean and healthy, and clear of insects, and do not crowd the young shoots.

Melons.—Plants on which the fruit is ripening should be kept dry at the root, and freely exposed to air on fine days.

Peach House.—Use means to eradicate insects, if any, from the early house; the trees should be perfectly free from them before the lights are removed. Syringe copiously to destroy red spider, dust freely with sulphur for mildew, and smoke with tobacco for green-fly.

Cherries.—Reduce the moisture when the fruit begins to colour, and increase the heat a little to accelerate the process of ripening. Keep the roots well supplied with water.

FLOWER GARDEN AND SHRUBBERIES.

Cuttings of Roses (where they can be obtained) may now be taken, and planted in a close cold frame in a northern aspect. In about a month they will have shown a disposition to strike root, when they may be taken up carefully, potted, and plunged in a slight bottom heat. Treated thus they make nice plants in a short time, and if kept under slight protection during winter will fill their pots with roots and be ready for planting out next May. Pink pipings put in early will now be ready for transplanting, and if so this should be done at once, as they will require time to fully establish themselves, so as to prevent frost from injuring them. If the situation ultimately intended for them is vacant they may be planted there at once; but if occupied at present by something else, let the young Pinks be planted 4 inches apart on reserved beds in an open situation, the soil of which should consist chiefly of light loam, to which may be added some charcoal-dust or charred refuse. The rotten manure from an old Mushroom bed answers very well for Pinks, as it encourages a mass of fibres, and produces a healthy but not over gross development of top. As regards bedding plants some memoranda respecting their arrangement next season should be made, when their colours have become fully developed. Of the flower garden a rough plan should be made, the beds on which should be numbered and correspond with an accompanying list of plants with which it may be intended to fill them, and along with this should be the quantity required for each bed. In this way accurate information is at once obtained of the quantity of plants which must be propagated by cuttings, and both by these and seed in spring. Disappointment is thus prevented on the one hand, and waste of time and labour on the other. Whilst half hardy plants are in full beauty, a tasteful eye will easily discover the weak and improvable points, and by closely observing the more satisfactory part, will readily perceive the most desirable future arrangement.

HARDY FRUIT AND KITCHEN GARDEN.

Successional sowings of Spinach should be made as soon as those earlier put in appear above ground. Get a good breadth of Lettuce and Endive planted out for the autumn supply, and sow some hardy sort of Lettuce for later crops. Dig down exhausted plantations of early Strawberries as soon as the fruit is off them and get the ground planted with winter Broccoli; make a further sowing of Turnips. Attend to cutting and drying herbs as they come into bloom. Get a good breadth of Cabbage planted thickly in rich ground for early winter use.

COTTAGERS' GARDEN.

Early Potatoes are backward this year; but as soon as they are up plant the ground with early Ulm Savoy. They may be allowed to stand a foot apart each way. A little Spinach may also soon be put in. The destruction of weeds will require considerable attention; the weather now being favourable they grow with rapidit

STATE OF THE WEATHER AT CHISWICK N AR LONDON

For the Week ending June 20, 1861, as observed at the Horticultural Garden.

June.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind	
Friday 14	6	30.044	30.002	82	44	63.0	61½	56	E.	[illegible]
Satur. 15	7	30.001	29.941	85	51	68.0	64	57½	E.	[illegible]
Sunday 16	8	30.010	30.002	80	52	66.0	64	58	E.	[illegible]
Mon. 17	9	30.021	30.006	81	44	62.5	65	59	E.	[illegible]
Tues. 18	10	30.058	30.010	82	56	69.0	65	59	S.W.	[illegible]
Wed. 19	11	30.010	30.000	89	52	70.5	65½	59½	S.E.	[illegible]
Thurs. 20	12	29.887	29.809	84	51	67.5	65½	60	E.	[illegible]
Average..		30.004	29.967	83.3	50.0	66.6	64.3	58.4		[illegible]

June 14—Dry haze; very fine; overcast; cool at night.
— 15—Dry slight haze; hot and very dry air; fine.
— 16—Dry haze; very fine; sultry; overcast.
— 17—Fine; very fine; overcast.
— 18—Fine; dry haze; very fine; densely overcast at night.
— 19—Light hazy clouds and fine; very fine; sultry and very hot.
— 20—Slight rain; sultry; thunder storm with heavy rain commenced at 1 P.M.; very fine at night.

Mean temperature of the week 6 deg. above the average.

RECORD OF THE WEATHER AT CHISWICK

During the last 35 years, for the ensuing Week, ending June 29, 1861.

June.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 23..	73.9	48.7	61.3	13	0.41 in.	2	2	4	1	3	16	5	[illegible]
Mon. 24 ..	73.6	49.4	61.5	12	0.49	—	3	5	1	2	15	9	[illegible]
Tues. 25..	72.5	50.4	61.4	17	0.72	1	1	6	2	5	11	6	[illegible]
Wed. 26..	73.7	50.5	62.1	16	1.00	1	2	4	2	2	12	5	[illegible]
Thurs. 27..	74.0	50.8	62.4	19	0.80	3	2	2	2	3	16	6	[illegible]
Friday 28..	73.3	49.9	61.6	13	0.65	3	2	6	1	3	11	6	[illegible]
Satur. 29 ..	72.8	48.9	60.9	9	0.22	3	4	3	1	1	14	5	[illegible]

The highest temperature during the above period occurred on the 27th, 1826—therm. 93 deg.; and the lowest on the 24th, 1859—therm. 34 deg.

Notices to Correspondents.

Bedding Plants: *An Old Gardener.* The person who advises your mistress that such plants ought not to be watered when first planted out, but kept dry till July, does not know what he talks about. The great point is to get a good start, by means of water and a warm border; when July comes the plants will then be well established and can usually take care of themselves.

Grapes: *J K H I.* Your berries are not mildewed; but suffering from cold wet roots, either now or some time since. The Muscats are much more tender than others, and, with Frontignans, are always the first to suffer.—*H. J., Brompton*, says that the rust complained of by a late Correspondent is owing to the berries having been syringed with dirty water, and he adds the advice never to water Grapes overhead after they have set. Upon this point he must be set right. Rust is never caused by the use of *dirty* water, but by *cold* water. Undoubtedly it is wrong to syringe Grapes when swelling with any kind of water. Nature endeavours to prevent the access of rain by a canopy of leaves over every bunch; man thinks he knows better and is punished accordingly.

Insects: *E K S.* Your Mangel leaves are now infested with the full grown larvæ of some dipterous fly. The only remedy is to pick off the infested leaves and burn them. Please send some direct to Professor Westwood, Oxford, in order that their economy may be investigated.—*Old Sub.* Your creature is one of the hair worms (Gordius aquaticus). The motion of the air you allude to is caused by the rarefaction of the adjacent atmosphere and the movement caused by the cooler air rushing in. *W.*

Lilium giganteum: *H G.* We have received the photograph: but are we really to understand that the plant bore the cold of last winter without any protection to its roots? Had it no covering of straw, or of ashes, or some such matter? We should be much obliged by a reply on this point.

Monstrous Canterbury Bell: *Anon.* The same curious sport was figured in the *Gardeners' Chronicle* for 1852, p. 483.

Mowing Machines: *Inquirer.* We really cannot open the door to criticisms upon advertisements. Buyers must exercise their judgment, aided by *private* enquiry.

Names of Plants: *Berry Hill.* Cleome rosea.—*Anon.* The plant from Cabul is Dianthus crinitus.—*A Sub.* You have sent *more than four.* Pray observe the rule that if more are sent we cannot even look at them.—*G J.*, 1, Cynanchum vincetoxicum; 2, perhaps Dracocephalum Moldavica, but a miserable bit; 3, Asphodelus luteus; 4, Astragalus galegiformis.—*A P.* We have so little skill in decyphering illegible writing that we are not sure that we read your note aright. If your question is whether the plant you have sent is Dendrobium nobile we reply—yes, as far as any judgment can be formed from withered flowers.—*G.* Pinus pumilio.—*W. 6 Roberts.* Send it here.

Ponds: *A L D.* There is no remedy except carrying a current of water through it.

The New Horticultural Gardens: *Viator.* We see nothing in the *Saturday Review* which requires notice. For what does the writer of the article say? He ridicules the procession at the opening; says that Cabinet ministers appeared in shabby over-coats; and that "the remarkable composition which the newspapers designate offering up a prayer" was out of place with bonnets and flirtation; matters of social taste about which one man's opinion is as good as another's. Then he thinks that horticultural fêtes at which you see flowers you may not pluck and fruit that you may not eat are but dull affairs; this we leave him to settle with sight-seers. In the next place he admired the exhibition, and especially the dinner table decorations, which produced "what was really an interesting and novel contest;" from which we infer that the writer is a bonvivant. As to the garden itself he thinks the arcades a success, but the outline of the conservatory ungraceful, is puzzled to know how the garden and its colonnades will harmonise with the buildings hereafter to surround them, but as matters now stand congratulates the Society and the Commissioners upon the design and execution of the colonnades. Then as to the garden as a garden he thinks that the principle which governs the design of geometrical gardens is well applied, and that no other could have been adopted. "The picturesque is higgledy piggledy was impossible." But he complains that there are no old trees in this garden hardly 6 months old, and is of opinion that the new Lime trees and other trees will probably die, a gardening question in which we beg leave to differ from the *Saturday Review.* Then, although the principle that governs the design of geometrical gardens is well applied, still the reviewer does not approve of the design. He would have had it treated "upon a bold and large scale;" what was wanted was a "succession of bold stages," by which we understand him to mean something that by no conceivable means except the introduction of ladders could have been realised in a space so circumscribed as South Kensington; Wimbledon Common would have been the place for that. In conclusion he condemns Mr. Nesfield's "execrable polychrome beds," because "the polychrome of a garden should consist in the polychrome of flowers and of flowers only." If that be so, then for about 6 months in the year English gardens can have no polychrome whatever, but must present an unvarying tint of green. Mr. Nesfield's motto is *alienis mensibus æstas;* that motto his reviewer utterly repudiates. Such a dispute we cannot pretend to adjust.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.

CONCENTRATED TURNIP MANURE, equal in value to the preceding.

Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."

Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

THE LONDON MANURE COMPANY.
(ESTABLISHED 1840,)
Are now prepared to send out the following MANUFACTURED MANURES:—

SUPERPHOSPHATE OF LIME, of best quality.
DISSOLVED BONES, AND BONE MANURE FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN AND ROOTS.
CORN MANURE FOR TOP DRESSING.
MANGOLD MANURE.

They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate to be obtained entirely from Bones.

The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE OF SODA, SULPHATE OF AMMONIA, and every Manure of value.

116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

LAWES'S MANURES

The Manures manufactured by J. B. LAWES for the present season of 1861, are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME £6 6
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES .. 5 5
LAWES'S BARLEY, GRASS, AND MANGEL MANURES 8 0

These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.

Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.

American and other Cakes at market prices.

Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.: and Liffey Buildings, Eden Quay, Dublin.

Farm Buildings.

LOANS may be obtained under the General Land Drainage and Improvement Company's Act for the full amount required by the Owners of settled Estates, Incumbents, Trustees, Bodies Corporate, &c., for the erection of Farm Houses, Farm Buildings, and Labourers' Cottages designed by their own Agents and sanctioned by the Inclosure Commissioners.

The loans are repaid by a Rent Charge on the estate for any term the Landowner may fix, not exceeding 31 years.

No investigation of title being required or notices given to Reversioners or Mortgagees, no legal expenses are incurred.

The Company furnish designs of every description, and undertake the entire responsibility of the works wherever desired by Landowners.

No profit whatever is taken by the Company on any works they execute, the actual expenditure only approved by the Inclosure Commissioners, with a commission thereon, being charged in all cases.

Applications to be addressed to WILLIAM CLIFFORD, the Secretary, at the Offices of the Company, 52, Parliament Street, London, S.W.

THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c. IN ENGLAND AND WALES AND IN SCOTLAND.

The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.

For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

Reaping and Mowing Machines.

BURGESS AND KEY, 95, Newgate Street, E.C. Prizeholders for the best Agricultural Machinery Manufactured.

ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price 42*l*. 10*s*.

TESTIMONIALS.

A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following:—

From Mr. JOHN RICHARDS, *Bailiff to* Dr. N. CARNE, *Dimland Castle, Glamorgan.*

"I beg to certify that I have for five years worked Messrs. Burgess & Key's Reaper, in my master's Home Farm, and also accompanied it when lent to tenants on the estate. During the above mentioned period the Machine has not cut less than 1,000 acres of all kinds of crops, with the same two knives as first had with the Machine. Dr. N. Carne having given up farming, the machine is now in the hands of his tenant, Mr. D. Thomas, of Llanrwst, and is in excellent order."

M'CORMICK'S REAPER for Manual Delivery. Price 25*l*.

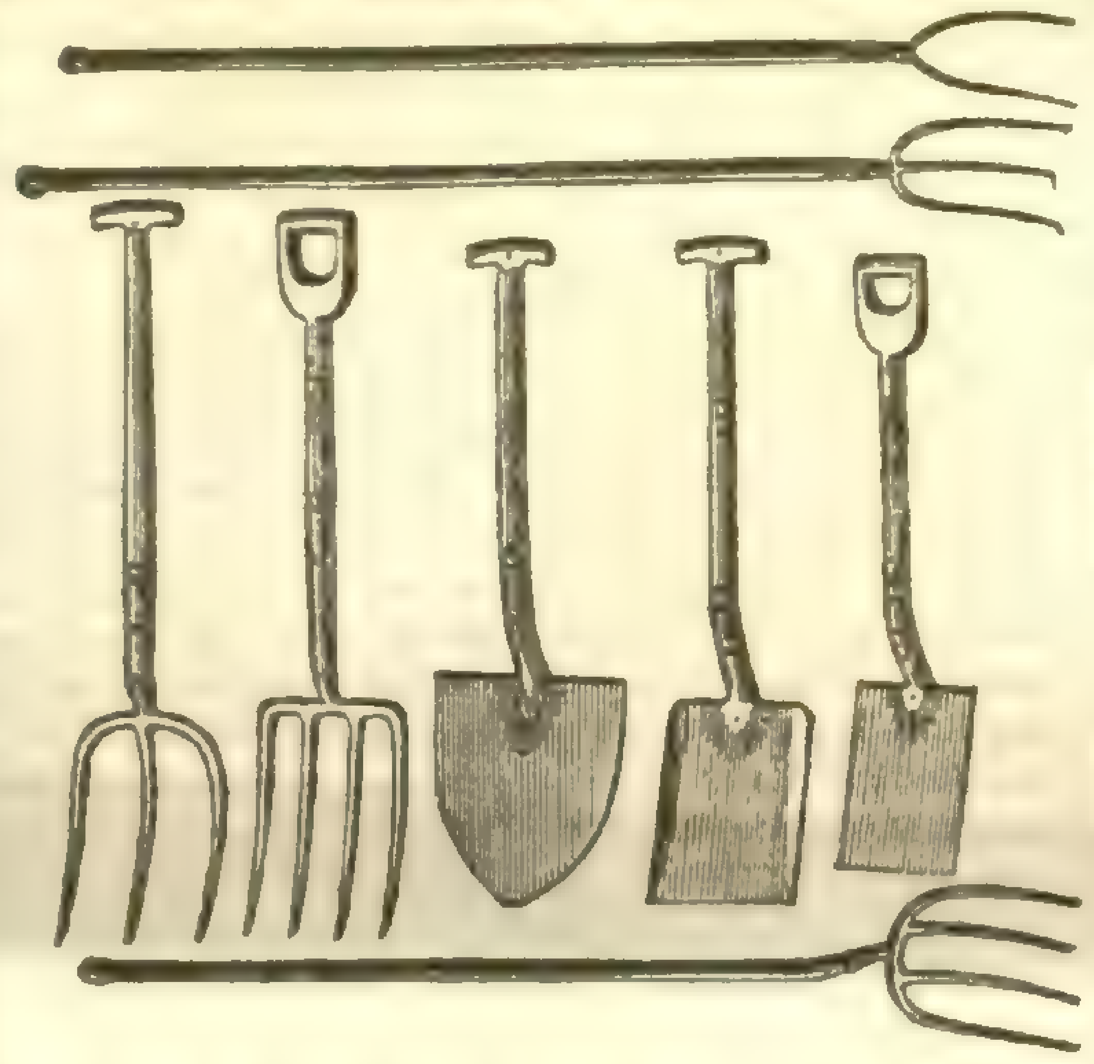
ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30*l*.

COMBINED REAPER AND MOWER—Two-Horse Machine. Price 35*l*.

The last Machine is fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.

These Prices include Packing and Delivery at any Railway Station.

PATENT SPADES AND SHOVELS, HAY, MANURE, AND DIGGING FORKS.

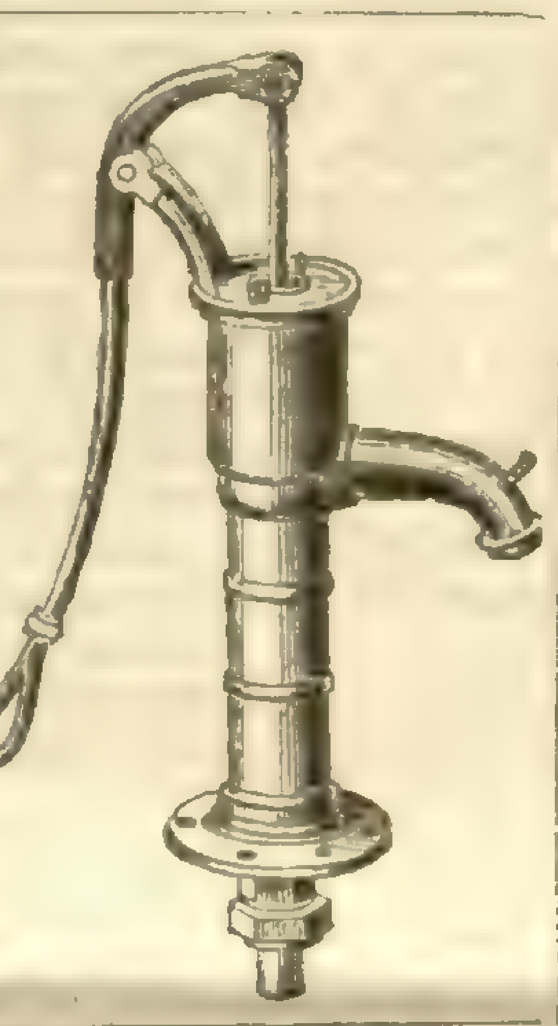


Made from one solid piece of cast-steel, without welding or rivetting. Warranted to wear out at least three of the ordinary ones, and to work sharp and bright to the last.

S. & J. received the Special Prize for these articles at the Royal Society's Show at Canterbury last year, and First Class Medals and Prizes at every other Exhibition at which they have been shown.

Invented, Patented, and Manufactured by SPEAR & JACKSON, Etna Works, Sheffield.

J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25*s*. 6*d*. each.



IRON YARD AND GARDEN PUMPS
3 feet 6 inches under spout
2½ 3 3½ inch
43*s*. 53*s*. 60*s*. each.

J. TYLOR and SONS manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.

PUMPS of J. TYLOR & SONS' manufacture to be obtained of Plumbers in all parts of the United Kingdom.

J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

JOHN WARNER AND SONS, Crescent, Cripplegate, E.C.

WARNERS' PATENT VIBRATING STANDARD PUMPS.

No. 35.

PATENT CAST-IRON PUMPS for Farms, Cottages, Stable Yards, &c., where the Well does not exceed 25 feet in depth; fitted with WARNER'S Patent Metal Bucket and Valve, which cannot clog in action. These Pumps can be made right-handed, left-handed, or with handle opposite the nose by removing four screws only.

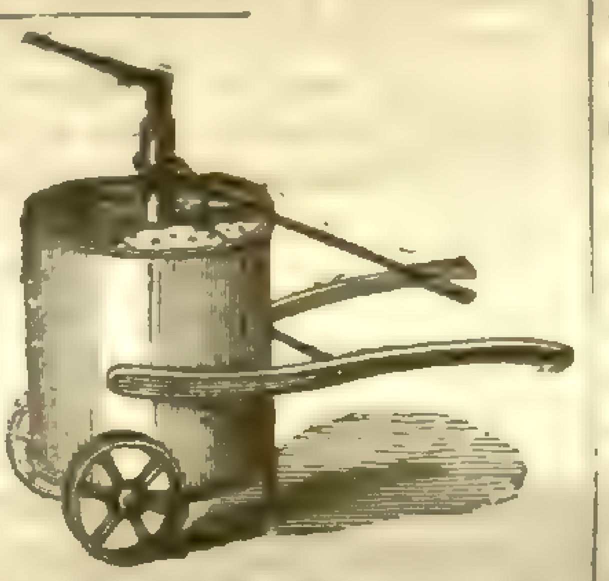
Diameter.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead, gutta percha or cast iron flanged pipe as required.	1 1 0
2½ ,, long	3 ,, 3 ,,		1 10 0
3 ,, ditto	3 ,, 6 ,,		2 4 0
3½ ,, ditto	3 ,, 6 ,,		2 9 0
4 ,, ditto	3 ,, 6 ,,		2 18 0

2½ ,, short, with 15 feet of Lead Pipe attached, ready for fixing 2 0 0
2½ ,, long ditto ditto ditto 2 14 0

The short-barrel Pump is very convenient for fixing in situations of limited height and space for the supply of Coppers and Sinks in Wash-houses, with soft water from underground tanks, or in Hot, Forcing, and Plant Houses; they may be fixed, when desired, under the stage.

No. 579½.

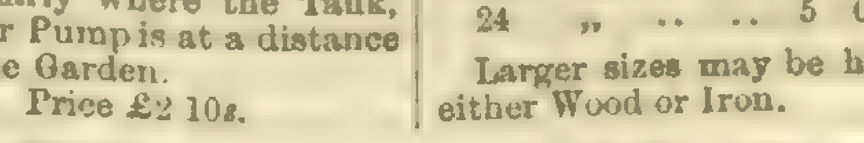
WARNERS' SWING GARDEN BARROW (holding about 35 gallons) is intended for all large establishments where much watering is done by the Watering Pot. By its use the Gardener will save much time and labour, particularly where the Tank, Pond, or Pump is at a distance from the Garden.
Price £2 10*s*.


No. 554½.

WARNERS' GALVANIZED IRON TUB GARDEN ENGINE, with Registered Spreader, is strongly recommended for durability and low price, viz:—

10 gallons £2 15 0
16 ,, ... 3 15 0
24 ,, ... 5 0 0

Larger sizes may be had in either Wood or Iron.


BRASS SYRINGES, from 9*s*. to 21*s*.

May be obtained of any Ironmonger or Plumber in Town or Country, at the above prices, or of the Patentees and Manufacturers,

JOHN WARNER & SONS, 8, Crescent, Cripplegate, London. E.C.

☞ Engravings sent on application.

POA ANNUA.—This Grass is alluded to in a Leader of the *Gardeners' Chronicle* of the 17th inst. "It is adapted to any case where the early appearance of Grass is required for any special purpose." It is suitable also for sowing in shady places and under trees.

GEORGE GIBBS & Co. having just received from one of their Collectors upwards of 10 cwt. of Poa annua, beg to offer fine heavy Seed, just harvested, price 2*s*. 6*d*. per lb.

GEORGE GIBBS & Co., Seedsmen, 26, Down Street, Piccadilly.

The Agricultural Gazette.

SATURDAY, JUNE 22, 1861.

THE power required to pull a frame-work of ploughs at work, as drawn by steam-power, includes (1) the draught of the rope by which it is pulled, (2) the draught of the plough due to its mere weight, (3) the actual labour of cutting and turning so many furrow slices, and (4) the draught of the rope behind it, which it pulls with it to the further end of the field, in order that by this rope it may be pulled back again.

In the case of FOWLER'S plough the engine travels along one side of the field, and the anchorage along the other side, and the rope is carried round a single pulley on each. The anchor pulley is a mere carrier; the engine pulley has a so-called clip groove, its cheeks being hinged so that any rope between them lying tight in its bed is held the more tightly the more the pull upon it.

This clip drum draws the rope forward until the link which was close to the anchor touches the engine, and then the motion being reversed this link is sent back again to the same place. In this link the plough frame is placed, which is thus drawn to and fro: but it would be drawn to and fro along the same line were it not that some time during each traverse of the implement the engine moves forward of itself, and the anchor pulley being put in gear with other wheels within the anchor frame, winds the anchor too exactly one breadth of the implement along the headlands. The plough is thus sent back always on a fresh breadth, and so the work proceeds until engine and anchorage respectively have reached the ends of their respective headlands.

The headlands may not be parallel, and then the rope must be lengthened or shortened to suit the varying interval between them. This is now very cleverly done by a self-acting apparatus on the plough-frame. The implement is not merely a "link" in the chain—it not only receives both ends of it as a link would do, but winds a surplus of each up on two separate drums, fore and aft of its own frame, and these two drums are geared to each other so that each pulls upon the other, and tends to wind the other up. A certain fraction of the engine pull thus goes to tighten the rope, and whenever the rope is slacker by reason of a shortening furrow than this fraction of the draught permits, the slack is wound up by it—and on the other hand when the divergent courses of the anchorage and engine enforce a lengthening of the rope, then, under protest of this same fraction of the draught, the drums unwind and pay out rope sufficient. Independently of a great saving of time in that being self-done which formerly took many stoppages and frequent manipulation to effect—there are several incidental advantages connected with it. As, for instance, the draught rope is thus kept at the requisite degree of tightness upon the clip-drum of the engine, which thus holds it without that liability to slip which when it is loose sometimes takes effect. And, as another instance, when the plough strikes upon a landfast stone, instead of the brunt of the shock being borne simply by the draught rope and its attachments to the engine and the plough frame, it is by the connection of the pull rope and the slack rope through the drums thus geared together at once distributed over every part of the apparatus in the field.

In estimating the effect of this gear work on the draught of the plough, it is of importance to bear in mind the distinction between the mere tightness of the rope and the pull of the engine on it. The rope might be screwed up almost to breaking: a dynamometer placed as a link in its circuit would be stretched and might indicate a ton, and yet, provided its bearings were on friction rollers, a child might pull it round. It is plain that the only mischievous effect of a tightness all round arises from the increase of friction. Besides the *beneficial* effects already named there is this additional one, that the rope is more easily carried on the comparatively few rope-porters which are generally seen in the field; and the saving of draught by the saving of dragging is but a part

of this advantage, for upon the quantity of this dragging of rope upon the ground depends friction, not only wasteful of the power employed, but wasteful of the rope itself, which, as our readers know, is a very serious item in the cost of steam ploughing.

This rope gear then, which makes the forward rope pull the hind rope tight, while it increases the friction on the bearings at either end, lifts the rope off the ground, and so diminishes friction there, and it pulls upon the other side of the engine pulley, thus not only hindering all chance of slipping, but in fact helping to pull it round.

The other sources of draught in ploughs and other steam-driven implements must be discussed next week.

AT a recent meeting of the Newcastle Farmers' Club, an excellent account of our reaping and mowing machinery was given by Mr. JACOB WILSON of Woodburn. There will probably be a much more extensive use of the mowing machine during the next four weeks in this country than has ever hitherto been witnessed, and we therefore extract from this paper and from other sources some of the more recent experiences of the various forms of this machine which are before the public. The three mowers which now chiefly compete for English custom, are BURGESS and KEY'S, CRANSTOUN'S, and BAMLETT'S —the last made by Mr. SAMUELSON, of Banbury. We have frequently seen them all at work. At Pontefract last year in particular the three competed.

The land set apart for the trial of mowing machines on that occasion was well adapted by the strength of its crop and the unevenness of its surface to test their ability to deal with difficult circumstances. The excellent quality of their performance enabled the judges to award a commendation to all the machines that were on the ground. They were four in number:—1. CRANSTOUN'S, costing 22*l.*; BURGESS & KEY'S, costing 30*l.*; KEARSLEY'S, of Ripon (price not stated); and BAMLETT'S, costing 20*l.* They were set to work across the somewhat awkward ridges, and accomplished their task at the rate of about 3 roods and 10 perches per hour. Judging, however, rather by the quality of the performance and the simplicity and cheapness of construction than by differences on a time trial, which when the time is short and the differences small are of little help to guide the judgment, the first prize was awarded to Mr. CRANSTOUN for WOOD'S American mower, and the second to Mr. CLAY for BURGESS & KEY'S mower—and the other two machines upon the ground were commended. The first prize machine was evidently the lightest on the ground in actual weight, and therefore in draught; it required less attendance than the others at the land's end, owing to its self-acting apparatus for getting out of gear when necessary—and it was one of the cheapest and simplest of construction. The second prize machine made excellent work, and is provided with several means of adjusting itself to varying circumstances. These, however, add to its weight and cost. The fourth machine, provided with a jointed cutter, which lies or hangs from it on the surface to be cut, made excellent work; and when a somewhat slighter construction of some of its parts shall be adopted, it will no doubt be a first-class implement. Its weight and consequent draught were originally both too great.

It is this fourth machine which is now being sent out by SAMUELSON of Banbury. We abridge from the *Devizes Gazette* an account of a recent trial of it along with BURGESS & KEY'S machine, on the farm of Mr. W. SAINSBURY, in which both proved thoroughly efficient. They were tried on Clover and Sainfoin, both of them heavy crops.

"SAMUELSON'S was the first to go to work, and cut the crop down with a cleanness and precision which beat all the mowing by hand we ever saw. BURGESS & KEY was quickly by the side of its rival. At first the former seemed to have rather the advantage in the closeness of its cut; but after a slight alteration in the adaptation of its knives, the latter cut as perfectly, and it would have puzzled the keenest judge to decide which cut the crop closest and cleanest. Owing to some accident to one of the pins in SAMUELSON'S machine soon after it had set to work, it was unable to turn so easily as it otherwise might have done, and this of course gave BURGESS & KEY rather the advantage, added to which the machine of the latter firm appeared lighter and more easy of draught, and being worked with a pole and a pair of horses greater steadiness was given to its operations. Another favourable difference observable in BURGESS & KEY'S machine was that owing to the construction of its wheels, it interfered less with the swath on its return than SAMUELSON'S. But on the other hand it was evident that the action of both wheels on the knives of SAMUELSON'S machine would be very advantageous in cutting crops on uneven ground—the knife by this action adapting itself to the wheel at however great an inclination it might go; and then again it has this advantage, that it is equally adapted to reaping as well as mowing, and is cheaper. Representatives of both firms were present,—SAMUELSON'S agent pointing to what his had accomplished last week on Mr. F. LAVINGTON'S farm at Poulshot (where it worked with one of its wheels in a water gutter at an angle of 45 deg., and yet cut its ridges out as clean as on level ground), as a proof of the perfect adaptation of his machine to every description of land; besides which, he contended, it possessed this great advantage, that it could be used as a reaper at a very small expense. BURGESS & KEY'S representative, on the other hand, contended that his machine was superior in one very great essential—viz., that it was lighter of draught; and as regarded the flexibility of its cutting powers, it was said to be quite equal to its rival, and at a small additional cost could also be adapted as a reaper. As far as the work done on Mr. SAINSBURY'S farm is concerned, it was unexceptionable—each of the machines cut the crop as even as a lawn; and we are told that it is a matter of no consequence however much the crop may be laid; if it were rolled, it could be cut equally well. The pace was about 3 miles an hour; at which about 8 or 10 acres might be thrown in a day; but it appeared to be rather stiff work for horses, and in the opinion of those present, to cut that quantity four horses would be required, to relieve each other at intervals.

"After the machines had worked on the Clover, they were put into a piece of Sainfoin close by, and each here had another trial, with equal success to that which had attended their previous operations —in fact, as far as cutting the crop went, there could be no mistake; the only question seemed to be as to the comparative superiority of the two machines in other respects. It is but right to say that SAMUELSON'S machine laboured under great disadvantages, owing to the mishap which occurred to it soon after starting, and which there were no means at hand to remedy. Still, as far as the work it made was concerned, it did it well, and fully exhibited the principle upon which it is constructed."

There can be no doubt that the mowing machine is now a standard implement of the farm, and that thousands of them will this summer be at work in the hands of English farmers.

DOUBLE CULTURE OF ROOT CROPS, &c.

DOUBLE culture of root crops has been practised for many years with varied success. We have grown upon the same land mixed crops of Mangel Wurzel and Carrots, after the plan adopted at Badminton a few years ago, a statement of which appeared at the time in the Journal of the Royal Agricultural Society of England. We have also grown Mangel and Beans in alternate rows; also Swedish Turnips and Beans, Carrots and Beans, as well as Turnips and Rape amongst the Bean crop.

The result of the Mangel and Carrot crop was very satisfactory; there were 27 tons of Mangel and 13 tons of Carrots per acre. This weight of crop may be expected under generous treatment in favourable seasons, for when it is considered how much space is required for the Mangels to spread their leaves, and on the other hand how little room is required for the Carrot greens, each crop seems to interfere with the other as little as possible; the space between the rows being 2 feet, gives ample room for both crops to come to high perfection.

The mixed crop of Mangel and Beans was also successful, the yield proving, on the average of two seasons, 20 tons of Mangel and 6 sacks of Beans per acre; if we take the value of this double crop at its feeding price it stands very high, and certainly higher than the average of root crops alone. The value of the other root crops where mixed with Beans, viz., Carrots, Swedes, Turnips, &c., was good, but not equal to the Mangels, as they were more affected by the fly, wire-worm, &c., by reason of the Bean crop preventing the late spring tillage required; whereas, the Mangel being of necessity put in early, started fair with the Beans, and held their own against the shading of the Bean crop, particularly when the Beans were topped, as is the practice in garden culture, the topping being also attended with favourable results in the crop of Beans.

Having been large growers of Potatoes for the past 15 years, we were however as much opposed to their culture in the field previous to the attack of Potato blight as we are now in favour of it; finding that since the disease has attacked the crop, as much or more money per acre has been realised from the diminished crop (owing to the higher price they bear in the market) as was obtained at the former period; although the crops were then much larger, the haulm more gross, and the varieties in cultivation much later than now, such is the advantage of the early sorts, and the result of the haulm being attacked by the blight, that the crop does not extract so much nutriment from the soil, and consequently leaves the land in much higher condition for the succeeding corn crops, and whether our succeeding corn crop has been Wheat or Oats it has uniformly proved the best crop of the farm, whereas formerly, when the late varieties of Potatoes were grown, it was rare to see an average produce of grain from the succeeding crop.

There has, however, been some drawback upon the state of the land after the Potato crop in field culture (when the haulm has been struck down by blight), because the crops are mostly sold by the acre, or dug by the grower on his own account; in either case delay usually occurs, and the crop is not raised until after harvest; in the mean time, especially upon highly tilled land, the weeds will make astonishing growth, and in wet seasons like the past their progress has been so rapid after the fall of the Potato leaf, that before the crop could be lifted, the weeds must be either mowed down by the scythe, or hand-pulled at a great expense, and it is easy to understand how the growing a heavy crop of weeds must result in a great deterioration of the soil for the production of after crops.

Having suffered greatly from the before-named cause for some years, we were induced last season to try a plan of double culture, in order if possible to occupy the land in the autumn with a valuable crop of roots, in lieu of a damaging crop of weeds. Our Potato crop for the season 1860 consisted of 6 acres of York Regents, 6 acres of Fortyfolds, and 7 acres of the Fluke variety of Potatoes, making together 19 acres; the whole of which land was seeded with Norfolk White Round Turnips, in the following manner:—The Potatoes having been horse-hoed and hand-hoed in due season, and the land being perfectly clean, it was then ready for the usual process of earthing or hilling as it is termed, which was done with a one-horse double-mould plough during the second and third week of June; and every day during the time of earthing, we sowed with Bennett's broadcast seeding harrow about a pound of seed per acre, just before the plough, which as it proceeded buried all the Turnip seed and lifted it on to the ridge, in which position the seed when it vegetated was well placed to avail itself of the manure which had been previously deposited in the rows for the Potato crop, and in either case, both where yard manure or guano was used, the Turnip plants struck their roots directly into the manure; and although the young plants maintained themselves with some difficulty owing to the gross foliage of the Potatoes, yet, as soon as the blight destroyed the Potato leaf the Turnips grew in a most extraordinary manner, and to some extent this may be attributed to the fact of the land being ridged, the furrows in a wet season like the past taking away rapidly all superfluous water. The disposal of the crop of Potatoes and Turnips was effected in the following manner:—The Fluke Potatoes, although attacked with blight in the haulm, the same as the Fortyfolds and York Regents, were however sound in the tubers, and were sold at 20*l.* per acre in the land, whilst the Fortyfolds and Regents were diseased and sold for less than 10*l.* per acre in the land. The Potatoes were all lifted between the 1st of October and the 14th of November, the Turnips were removed by clearing 20 rows at a time, the Potato diggers following, and as fast as the 20 rows of Potatoes were dug, the next 20 rows were cleared of Turnips by women, who carried them on to the land entirely cleared, where they were prepared for the stack, the greens being separated from the roots, and each being placed in separate heaps, carts following to remove the roots to the stack, and the greens for daily consumption; the result of the Turnip crop on the field first cleared (being in the full vigour of growth) I estimated at 15 tons per acre of roots and greens; on the second field at 22 tons per acre of roots and greens; and on the last field, which was not cleared until the 14th November, the crop was weighed in several parts, and found to contain 19 tons 16 cwt. of roots, and 8 tons of greens per acre; the whole of the Turnip crop was cleared before the roots were full grown, and whilst the greens were very gross, the number of roots per pole varied from 300 to 400. The crop was never hoed or thinned, and proved no expense until digging time. The greens were given daily during six weeks to 16 head of fatting bullocks, besides pigs. The bullocks made good progress, receiving at the same time 4 lbs. of cake each per day, with a little pasture hay, but no other green food, and the whole of the manure arising from the consumption of the Turnip greens was removed from the cattle-boxes, and immediately applied to the land from whence the greens were taken, as a preparation for the succeeding Wheat crop. The roots were also removed daily, a large portion being stacked in an adjoining field and consumed thereon by sheep, a considerable portion being stacked near the homestead for feeding bullocks, &c., and were in use during the whole winter as late as the first week of April. Another portion was however sold on the land with the Potatoes to the market

gardeners. The whole of this double crop was removed from the land, and a dressing of Box manure applied and the land sown to Wheat, which at the present time is as fine a crop as can be seen. *J. B.*

THE BUTTERCUP.

THE name Buttercup, by which so many species of the botanical genus Ranunculus are popularly known, has been given in the mistaken notion that the rich colour of spring-made butter is due to their yellow flowers. It is, however, now known that the feeding of cows on good grass is alone sufficient to result in the production of a richer cream and consequently of the best butter. So far, indeed, from considering the Buttercup as of any value as a feeding plant, we are induced to look upon it as a poisonous genus, the species of which are all more or less deleterious, so that at best its occurrence either in the meadow or the arable field should be looked upon and welcomed only as a weed.

Viewing them, then, in this light, we purpose directing attention more particularly to the undermentioned species, which for our purpose may be distinguished as follows:—

Fig. 1. *Ranunculus bulbosus.*—Bulbous-rooted Buttercup; calyx (*a*) reflexed, that is turned downwards; flower-stalk ribbed; root bulboid, the shape of a small Turnip.

Fig. 2. *Ranunculus acris.*—Tall Upright Buttercup; calyx erect; its stalks cylindrical, hairy.

Fig. 3. *Ranunculus repens* (Creeping Buttercup).—Calyx upright; flower-stalk ribbed; root bulbless; stem with runners (scions) shooting out from the base close to the ground, which root and establish new plants after the manner of the scions of the Strawberry. Seed (*a*) a flattened disk with a small projecting beak.

Fig. 4. *Ranunculus arvensis* (Corn Buttercup).—Known by its peculiar tuberculated or spinose seeds.

1. Ranunculus bulbosus.
2. „ acris.
3. Ranunculus repens. *a*, Seed of ditto, magnified.
4. „ arvensis. Seed of, magnified.

In reference to 1 and 2 we have much pleasure in referring to a practical case which was brought before us in a letter from Mr. Bowick, the intelligent Bailiff to Lord Leigh, of Stoneleigh Abbey, to which end we quote the correspondence:—

"Stoneleigh Abbey Farm, Kenilworth, June 14, 1860.

"Sir,—I shall be glad if you will favour me with advice as to the eradication of the Ranunculus tribe from our pastures. Two specimens are herewith sent; one bulbous-rooted, the other not. The former is by far the more prevalent. As to the distribution of the plant on the 800 acres of grazing and meadow land, I may say that it seems very whimsically to take up its abode here and there in family groups or patches, ranging from a few square yards to nearly 8 acres in some cases. At others it is more thinly and evenly dispersed over a large tract of land. It is alike met with in sandy or heavier clay soil, on dry land, as well as on that which may have room for a little more draining. On some fields it abounds greatly, so as to be an immense aggressor, and to prevent grazing where its clusters abound; on others, such as 300 or 400 acres of similar land closely grazed by sheep and deer, scarcely a plant is to be seen. On richly manured pastures (farm-yard dung) as well as on the poorest the same plant is to be met. We want to know how best to get rid of it, and economically if possible; should you suggest (1) Mechanical Means, as mowing, rolling, beating, pulling, &c.; (2) Natural Means, as grazing heavily, and with what stock; (3) Manurial Means, as by any kind or class of artificials. The soil is chiefly of medium character, subsoil generally clay, resting on the new red sandstone, prime Oak and Elm growing land.—I am, &c.,

"To Professor Buckman." "THOS. BOWICK."

To this application we returned the following notes and directions, which we find are being acted upon, and we can readily believe with a great amount of benefit.

"Cirencester, Dollar Ward, June 11, 1860.

"Sir,—The specimens sent are Ranunculus bulbosus, Bulbous Buttercup, and R. acris, the Upright Buttercup. The Bulbous Crowfoot is an indication of poverty in the soil, being found alike in light lands and in poor clays, when not very wet. The Upright Crowfoot, where it abounds in quantities, is seldom mixed with much of the preceeding, and is a clear evidence of wet and want of draining. Well drained sound land is mostly free from this pest, and as it is local it indicates a want of local drainage which will get rid of it. As regards the other, the R. bulbosus, the best method of getting rid of it is early spring rolling and bush harrowing, to be succeeded by closely folding sheep upon the land; if at night taken from the wet Turnip crops the better. This should be done to the extent to prevent seeding if possible, which it will do to a considerable degree the first year; and if repeated there will be but few left, which will all soon disappear from the improved state of the soil which these processes will induce. The folding should be done thickly, without reference to the sheep feeding, as the treading and manure will improve the Grass and discourage the Ranunculus at the same time. The plan here indicated will embrace all the three means suggested in your letter. (1) Mechanical, by the treading; even constant walking or exercise will destroy it in the Grass wherever such is practised. (2) Natural, by the depasturing preventing seeding. (3) Manuring, in the urine and dung of the sheep, thus thickly applied and trodden in.—I am, &c.,

"To Mr. Thos. Bowick." "JAMES BUCKMAN."

3. Ranunculus repens (Creeping Buttercup), in as far as the farm is concerned, is mostly a weed in arable land. It is, however, a true native of the ditch, or the moist corner in which the larger plants grow, but those that have the creeping habit to the fullest extent are found in the arable, and more particularly in seeds. Here it is usually planted with the seeds themselves, very few samples of Rye-grass being free from this pest. In three cases in which the flat seeds (3, *a*) of this plant were separated, we made out the following sum of Ranunculus seeds:—

a. Perennial Rye-grass	= 12,800	per bushel.
b. Pacey's Rye-grass	= 15,360	„
c. Imported Italian	= 20,480	„

and the history of its growth appears to be that a seedling plant is developed the first year; this flowers and then sends out scions in every direction the second, and if the soil happens to suit it these scions go on producing others incredibly fast, until it occupies some feet of ground, killing the forage plants before it. Sometimes, indeed, the flowering and establishment of scions takes place the first year, but in either case the ground becomes covered with the weed by the time the crop ought to be utilised.

The accompanying diagram illustrates the manner in which one of these plants was observed to spread:—

DIAGRAM OF THE INCREASE BY SCIONS OF THE R. REPENS.
a. The central or parent plant.—Scale half an inch to a foot.

Here we had more than 70 scions, and if we bear in mind that each of these scions may become the centre of a growth like that of the parent, and that besides each may flower from two to four flowers say on an average; this will give us a sum as under—

70 scions × 3 flowers for each scion × 25 seeds for each flower: this will = 5,250 seeds + 70 scions as the reproductive element of a single seed.

No wonder then that we should here and there see bright yellow patches of Buttercups in our seeds, from which, however, they may be kept—1st by not sowing them; 2d, if sown, the farmer should learn more about their nature and hoe them out the first year, the slight cost of this being amply repaid in the increase of the crop, for the young Clovers cannot advance where the Buttercup takes possession.

4. The R. arvensis is peculiarly a denizen of poor clays, from which it has doubtless got the name in Gloucestershire of "Hunger Weed." Its seeds are not unfrequently to be found with Vetch seed, and we have lately examined a sample of Sainfoin which contained a large quantity. It is so poisonous a plant that in Vetches which are cut green, it should be guarded against. We doubt, however, if cattle ever eat it, when it grows in positions where they can choose. It seeds with the corn, and is gathered therewith, in which case the seeds find their way with other refuse to the manure heap, in which it is resown.

We might here mention a common weed in pastures, namely R. ficaria, the Pilewort Buttercup, a plant with bright yellow flowers and heart-shaped leaves, which grows very abundantly in damp places under trees; but in such places it is not very mischievous, as its herbage is usually dead before the Grass grows, and if the trees be thinned out and their shoots lessened this species soon disappears.

There is one species of Crowfoot, which though only remotely connected with weeds, yet from its mischievous tendency must not be altogether omitted in this place. We refer to the Ranunculus aquatilis (the Water Crowfoot). This, as its name implies, is a denizen of the river, in which its long flexile floating stems, and capillary leaves thickly studding the water, with the silver stars of flowers, combine to render a not unpleasing effect. Still, if we can only imagine the derangement in the circulation of our own systems by threads of lymph choking up the arteries, we may have some idea of the obstruction to arterial land drainage by having the rivers kept up and impeded in their flow by a plant of this description. Under these circumstances, then, the Water Crowfoot should be destroyed, and this can only be done by raking it out of the stream before it has seeded, taking care that this be done in the smaller tributaries that flow into the larger stream, or the seeds will always be being sown anew.

We are aware, however, that this cannot always be

done, for although we may have command of part, yet we may not so of the whole of the waters, and thus we see that for the purposes of effective arterial drainage some provision for the removal of obstructions of this kind is absolutely necessary. *J. B.*

STATISTICS OF FARM LABOUR.

IT is proposed in this chapter, in the first place, to specify the quantity of hand, horse, and steam power actually employed on a number of known farms, selected so as to be characteristic, as far as possible, of our different soils and different styles of management; then to compare and contrast these instances, so as to determine how much horse and hand labour is employed per acre in good and average agriculture; and, lastly, to give such tables from the latest returns of the population and their occupations as throw light upon the whole amount of farm labour in the country.

Labour on Light Soils.—I give three instances:—(1.) My first is that of an extremely light soil farm, lately reclaimed from Sherwood Forest in Nottinghamshire. It varies from a mere sand to a gravelly sand, in many places containing boulders. Its character is indicated by the fact that a day's ploughing is equal to 1 acre in the case of the deepest work, and 1½ or even 2 acres in that of light fallow ploughing—the average ploughing of all sorts being about 1¼ acre daily, done in 8 or 9 hours—2 horses to a team. The extent of the land under cultivation is 930 acres, all arable; 350 acres are in grain crops; 350 are in one and two years' Clover; 20 acres are in Pulse crops; and 210 acres are in fallow crops—as Turnips, Mangel Wurzels, &c. Twenty horses suffice for the cultivation of the land, being one pair to every 90 acres; or, deducting the acreage in Clover, one pair for every 56 acres of land actually under the plough. Steam power is employed only for threshing the grain crops. The hand labour of the farm is as follows:—

The average number of persons constantly employed is 24 men and 18 boys. This however includes a foreman and a wheelwright. In harvest additional hands are hired for various periods. In July and August some 30 boys are engaged in singling Turnips and in weeding. The wages paid in 1858, deducting the wheelwright, were 1245*l.* 12s. 2*d.*; in 1859, the wages paid were 1147*l.* 8*s.* 11*d.* The extra harvest wages paid amounted, in the two years, to 156*l.* 17*s.* 7*d.*, and 216*l.* 13*s.* 3*d.* respectively. The average sum annually paid for hand labour amounts thus to 1383*l.* 5*s.* 11*d.*, or as nearly as possible, 30*s.* per acre.

(2.) My next two instances are of comparatively light fen land, in the counties of Cambridge and of Lincoln. The following are the particulars given me of a farm near Chatteris. The soil is very light and non-adhesive: a character, however, which it is gradually losing by lapse of time, for many fen farmers break up a good deal of their clean fallow lands with 4 or 6 horses in a large plough, bringing up the subsoil, which is clay, and mixing it with the top soil. They then plough from 10 to 14 inches deep; but the usual depth of ploughing is for Wheat 5 or 6 inches; and on the higher lands they cultivate from 6 to 8 or 9 inches deep. Two horses easily plough 5 roods a day on the fen; on the high lands early in the season 2 horses will plough from 3 to 4 roods per day; but in winter and spring, when the land gets wet and sticks a good deal, they usually plough with three horses at length, to avoid treading, and they plough just three roods daily.

The farm consists of 900 acres of plough land and 120 acres of pasture: 450 acres are in grain crops, 150 in Clover, 65 in Pulse (Beans, Peas, &c.), and 235 in fallow crops (Turnip, Mangels, Rape). The horses needed number 29—one pair for every 62 acres of arable land, or, taking Clovers out, one pair for every 52 acres of actually ploughed land.—The hands regularly employed, are about 30 men throughout the year, and 20 to 30 women, girls, and boys, from April to November. Of this number, 6 men during winter, not so many in summer, are employed at piece-work. Extra hands are employed for reaping and during harvest time, but at no other period. The wages paid amount to about 1560*l.* a year; and it is to be taken into account, as affecting the amount of labour, that 40 acres of Potatoes are grown as one of the fallow crops, and that weeding on fen lands is an expensive item. This amount, deducting 5*s.* an acre for the pastures, is 34*s.* per acre on the arable land.

(3.) The following are particulars of another farm, also of fen land, but in which the process of ploughing up the clay subsoil has been carried further, so that the soil is peat upon clay over not more now than one-half of the farm; over the remainder the clay is ploughed up, and it needs a great deal of rolling to give it sufficient solidity for the Wheat crop. The ploughing may be reported at 1¼ acre daily on the average for each pair of horses. The general depth of cultivation is 5 inches; for, though they plough deeper for fallow, yet the peat decomposes, and they lose the depth in the course of a year, and find it prejudicial to any other crop to plough deeper than it was fallowed.

The land is 790 acres in extent; or, deducting roads, and drains, and waste, 760 acres, of which about 100 acres are pasture, 130 are Clover, 330 acres grain crops, 90 acres Flax and Pulse, &c., and 110 acres are fallow crops; 20 horses are employed—one pair for every 60 acres of arable land; or deducting Clovers, one pair for every 53 acres of land actually under the plough. The wages paid for hand labour during the past three years (1856 to 1858) were, 1414*l.*, 1305*l.*, and 1061*l.*, averaging 1260*l.*; which, deducting 5*s.* an acre for the pasture land, is 37*s.* an acre. The number of men during three months from Lady-day averaged 28 weekly. During August, September, and October, they averaged about 22, independently of which 300*l.* were spent in harvest wages. During the remainder of the year they averaged about 20. In addition to this, from 16 up to nearly 40 boys and girls, and from 8 to 12 women, are employed during the spring and summer months. The whole labour during the three years already specified is represented in the following Table, in which the work is given as occupying so many weeks of one man, woman, or child.

Year.	Number of Weeks of one			Equal to Employment throughout the Year for so many			Harvest Wages in addition.	Total Wages.
	Man.	Woman.	Boy or Girl.	Men.	Women.	Boys or Girls.		
							£	£ s. d.
1856	1312	210	651	25	4	12½	800	1414 14 0
1857	1314	147	665	25	8	12½	300	1304 16 9
1858	1164	131	660	22½	2½	12½	245	1060 16 0
Average.	1263	163	659	24	3	12½	281	1260 2 3

The use of steam power on these farms is confined to the work of threshing out the grain. *From Morton's Hand Book of Farm Labour.* (Longmans.)

(To be concluded next week.)

CONTINENTAL IRRIGATION.

IN a late article we gave a brief description of the mode of irrigation known as the system "ados," and as practised in the Campines of Belgium. We now propose briefly to describe the cultorial management of irrigated meadows.

The first point to be attended to is deeply digging with the spade, or raising by means of the plough the surfaces of the ridges on which the Grass is cultivated. In doing this care should be taken to keep the general outline of the works intact; and to maintain the original upper surface of the soil at the top.

"Spade" and "plough" work have each their advocates. But all are at one as to the necessity that exists for getting rid of stagnant water in all soils destined to bear crops, of whatever kind these may be. To this end all writers are agreed as the importance of an energetic movement of the soil, and in strong lands drainage is indispensable to maintain the soil in the condition the most favourable to vegetation.

These principles, applicable to the land cultivated for crops, are no less so—nay, perhaps, in a higher degree—to those converted into irrigated meadows. Irrigation introduces continually on the soil a quantity of water, which, without provision made by a deep digging remains stagnant, and destroys in the long run the meadows, no matter with what care they may have been at first made.

All the digging should be done the winter preceding the spring at which the Grass seeds are sown: under the influence of alternate rain and frost the clods of earth are pulverized, and the air penetrating into the soil disengages the acids which a soil long deprived of atmospheric influences possesses in such abundance. Experience has demonstrated to us, says M. Keelhoff, that the meadows sown immediately after the digging gave results 30 per cent. inferior to those where the seed was sown in the spring following the winter, in which the digging had been effected.

After the digging has been attended to, and the soil left to the ameliorating influences of the winter's frosts, &c., the sowing of the Grass seeds is next to be considered. This operation is however preceded by others having for their object the complete finishing of the channels, and the perfecting of the sides of the "ados," all of which have been put into more or less incorrect form by the crumbling down of the soil under the action of the frost. In order to bring all these into perfect form, the water is introduced into the channels which supply the water to the ridge, and to the channels placed at the summit of the ridge. The water is allowed to remain for three or four days. Afterwards the edges of the channels are finished so as to be about 1½ inch above the level of the water flowing through them. The next operation is to secure the exact levelling of the edges of the channels at the summits of the ridge, so that the water admitted to them shall uniformly shed over the sides in thin and regular sheets. To effect this the inequalities are got rid of, the depressions filled up with the projections taken away. The sides of the ridge are then finished, all stones and foreign substances likely to impede the regular flow of the water being taken up and removed.

The whole being thus prepared, the sowing may be commenced, preceding it with, if necessary, an application of manure. The seed should be sown very thickly, so that the roots interlacing may speedily form a firm surface. Calm weather should be chosen for the sowing; the time being the months of April or May. If the seed is put in before the end of May, a cutting may be obtained towards the end of August: if delayed till July or August, the Grasses acquire so little development that the frosts of winter generally injure them, greatly reducing the yield in the summer following. A light harrowing is used by some in order to cover the seed; but M. Keelhoff denounces the practice as bad, as the seed by it is often buried too deeply and does not come up. In place of a harrow he recommends a wooden rake. In light lands and in dry weather it is necessary before sowing the seed to allow the water to flow into the channels at the head of the ridge, in order to bring the soil to a proper degree of freshness, and to maintain it till the vegetation is vigorous. To this end the water is also admitted from the channels which carry off the water, finally from the ridge to those channels placed at the base. The first season after sowing, all the moisture necessary to the due increase of vegetation is derived from the infiltration of the water through the soil, not by its shedding over the surface in the manner ultimately designed.

The quantity and kind of seed employed is a matter of the greatest importance; the importance of having true seeds is obvious enough, and has often and well been dilated upon in the pages of this Journal. The "kind" of seed is also of great importance, for some are calculated under the influence of irrigation to give a maximum of vegetation, others a minimum, while others are absolutely killed by it, and finally disappear. M. Keelhoff, who has tried in the Campines nearly all the varieties of seed, found that those which gave the most vigorous vegetation were Lolium perenne, Phleum pratense, Holcus lanatus, Poa pratensis, Alopecurus pratensis, Anthoxanthum odoratum, Cynosurus cristatus, Clover. The following is nearly the mixture he employs:—

Lolium perenne	16 lbs.
Phleum pratense	6 "
Alopecurus pratensis	25 "
Holcus lanatus	25 "
Cynosurus cristatus	5 "
Poa pratensis	5 "
Anthoxanthum odoratum	10 "
Clovers	8 "
Per acre	100 lbs.

This mixture, says M. Keelhoff, may appear too heavy, but he has found that where less seed is used, the results are unfavourable. M. Debay gives the following mixtures for different soils:—

For a Sandy Soil:—

Phleum pratense	2 lbs.
Agrostis vulgaris	6 "
Holcus lanatus	4 "
Poa trivialis	6 "
Trifolium repens	12 "
Medicago maculata	3 "
Lathyrus pratensis	3 "
Per acre	36 lbs.

For a Sandy Soil with a slight admixture of clay:—

Phleum pratense	2 lbs.
Poa trivialis	6 "
Festuca elatior	6 "
Lolium perenne	4 "
Avena pubescens	3 "
Vicia sepium	2 "
Lotus corniculatus	2 "
Trifolium pratense	10 "
Per acre	35 lbs.

For a Calcareous Soil:—

Bromus pratensis	5 lbs.
Dactylis glomerata	4 "
Avena elatior	4 "
Lolium perenne	2 "
Poa trivialis	9 "
Poa pratensis	2 "
Poa angustifolia	2 "
Medicago maculata	2 "
Trifolium pratense	6 "
Trifolium fragiferum	4 "
Per acre	40 lbs.

For a Clay Soil:—

Phleum pratense	2 lbs.
Alopecurus pratensis	4 "
Poa trivialis	9 "
Festuca pratensis	4 "
Festuca elatior	3 "
Peucedanum officinale	3 "
Medicago maculata	2 "
Trifolium pratense	10 "
Lathyrus pratensis	2 "
Vicia sepium	10 "
Per acre	41 lbs.

In order to protect the young Grasses, it is sometimes the practice to sow either Oats or Buckwheat

with the seeds. If Oats they are cut down when the ear is formed, and used as forage. The Buckwheat is cut down in grain; should it however be much laid it is advisable to mow it, in order to prevent the smothering of the young plants.

Where the meadows are much exposed to the north and north-east winds, "curtains" of Elder trees may be planted at the sides; these love humidity, and the leaves rapidly decay, and add to the vigour of the Grasses on which they fall.

A plan of preparing the land before laying it out for irrigated meadows is favourably mentioned by M. Keelhoff. This is to crop the land for three or four years preceding: this not only prepares the soil for the reception and cultivation of the Grasses, but it is found to be very profitable. The first year the newly turned over land is planted with Potatoes, with a strong application of manure. The second year Potatoes are again taken with a less result than that obtained the first year. The third year a crop of Rye mixed with Grass seeds is taken off. *R. S. B.*

Home Correspondence.

Fat Stock at Cattle Shows.—The great and successful meeting of the Bath and West of England Agricultural Society is over, and the remarks that I made at the half-yearly meeting of the Royal Agricultural Society were fully verified. In almost every case the fattest animal took the prize. In the sheep classes as usual the judges were blamed, but I think without much reason. My sheep were not ruined by fat, and as the shepherds said, "Sir, it is no use to show a sheep unless he is very fat"—indeed, unless you are content to run a great risk of spoiling them; and as I said at the meeting of the Royal it is a great evil, but I know not how to remedy it unless every man signs a protest to give neither corn nor cake. A vast many animals are kept entirely for showing, are never used for breeding purposes. My experience goes to show this over-feeding is more injurious to the male than female animals. You can only get a small per centage of the over-fed females to breed, but those that do produce good progeny. I wish judges would look more to the points of the animals, the character, &c., and not depend so much upon the tape to measure them. At the West of England several said the tape settled the prize; if this is so it is most unfair, for where 2, 3, and 4-year old sheep are shown in one class it is absurd and unjust to give it to the one measuring the most. There should be every allowance made for age. The loss in getting up animals to this ruinous state of fatness is very great, and many of our best flockmasters now cease to show. *T. Beale Broome, Salperton Park, Gloucestershire, June 13.*

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

A Weekly Council was held on Wednesday the 19th June, Mr. Thomas Raymond Barker, V. P., in the chair.

The names of candidates for admission into the Society having been read, a copy of the Revue Agricole de l'Angleterre, by Monsieur de la Tréhonnais, was presented by the author, for which the thanks of the Society were ordered.

Mr. Caird, M.P., read a paper on British Wool, illustrated by samples from various parts of the country.

It was announced that Mr. Chadwick, C.B., would read a paper on the 26th inst., on successful examples of the half time principle of instruction to children engaged in agriculture.

Farmers' Clubs.

Reading: *Steam Cultivation.*—The various methods of applying steam-power to the cultivation of the land is in all districts more or less engaging the attention of enterprising farmers. Each appears to be good in its way, and a great improvement upon the system to which farmers have been long accustomed; and until time and experience shall have determined the superiority of one over the other, there will be great interest evinced by farmers to ascertain the relative merits of the two systems. The announcement that Mr. William Smith, of Woolston, would deliver a lecture to members and friends of the Reading Farmers' Club, awakened unusual attention to the subject among farmers in the district. The usual quarterly discussion meeting took place in Messrs. Sutton's reading room. Mr. J. B. Spearing, of Moulsford, occupied the chair, and some of the principal agriculturists of the district were present. Mr. Smith read the following paper:—

There have been many attempts to apply steam to the cultivation of the soil. However, three modes stand out before all others, namely, the imitation spade, or rotatory digging system; the ploughing, or turn-over system; and that which is now termed the cultivating, or Woolston system. Of either the first or the second of these you will not expect that I should say much, for it would be invidious on my part, and of little value in your eyes, that I should come here to speak of that of which I have had but little or no experience, or to appear to depreciate that which I do not adopt. There can be no doubt that under certain circumstances, each may have its merits. *The Rotatory or Digging system* seems to me to be striving to do too much; one of our best and most effective helpers is Nature, whose inherent atmospheric agencies are always at hand, and ready enough to assist us if we will but, at the right time, seek her aid, which is supplied without cost or charge. All the rotatory plans which I have seen, appear to aim at dispensing with her assistance in preparing the seed bed, and seek, by a single process, to reduce the soil to a fine tilth. This requires the expenditure of very great force of power, and when it is done, it does not produce so good a seed-bed as Nature will make for us. *The ordinary Plough or Turn-over system* adheres simply to the ordinary plough or turn-over system; this is what most of us have been accustomed to from our very childhood; we naturally regard it with much favour, for we are none of us very ready to be driven from our old modes of thought and practice; its very neat and agreeable appearance prepossesses us in its favour; the long, beautifully cut furrow slices challenge our admiration; and besides this, it possesses one decided advantage—it does not require vigilant superintendence; we can pass over a field a day or two after it has been ploughed and can see whether the ploughman has well performed his work or not. In very deep, clean, and light soils, where a pair of horses can break up an acre and a half in a day—a thing which I have heard of, but have never seen,—it is very doubtful, to my mind, whether anything we have found in the steam engine can possibly surpass it. At the same time, I believe that most people are pretty well acquainted with the reasons which I urge to show the inutility of this plan in general, and the advantage of the third system in particular. *The Cultivating, or Woolston system.*—The main argument which I use is that, since there are many of our most pernicious weeds which are not destroyed by being simply put under the ground, but are, perhaps, the rather increased by being replanted, I do not think that such damaging plagues ought to be turned under, but that they ought, on the contrary, to be kept as near the surface as possible. I could produce more than one instance which have come under my own observation, where the deep turning over of lands containing such pernicious weeds has been attended with considerable expense and inconvenience. The root having been placed lower beneath the surface, has been with greater difficulty found and eradicated. If, with regard to all vegetable roots, burying and killing were the same thing, the matter would be very different: but we farmers find for certain that if we ever attempt to bury a root of twitch, or of some other of our weeds, they will, as surely as the spring comes round, again raise up their heads in judgment against us. We have all of us known for years what the burning suns, immediately after midsummer, will effect in making our fallows; most of us have seen the marvellous effect which followed the Biddle and Ducie Cultivator, when they upturned the enormous clods to the burning rays of the summer sun; but we found out, too, to our cost, the fearful effect which they produced on the condition and constitution of our horses. And with management, too, and steam, we may make the shivering frosts available to effect the same object. *To increase the cultivated inches of our sea-grasped isle, we must double the depth of our cultivation.*—But you will say, what has this to do with steam cultivation? Exactly this:—It is the prelude to it. None of us, with any observation, can have failed to see how every piece of available waste land has been sought to be brought into a state of cultivation; while in these islands it is a certain fact that but little more could be got from the grasp of the sea. Our limits are circumscribed; our only course was, if possible, to increase the produce of the soil; we had to keep up with the increase of our population, and by consequence, the increase of our wants. We observed that our naturally deep soils were the better: hence our aim to make our thin soils deeper: hence our subsoil ploughs and efforts after deep cultivation. But these deep ploughings and overturning subsoilings were in many instances failures, because the raw and unprepared earth was all at once brought to the surface. In fact, they seemed to succeed only where the soil was deep and naturally rich, to a depth at least as great as that which was to be turned up; and therefore, subsoiling and deep-ploughing were coming into some discredit, because the benefit of the result did not equal, in many cases, the expense of the outlay. My own attention, as well as that of many others, was directed to this point. I made an attempt to increase the depth of the seed-bed, but my attempt was made in a different way from that of most other people. My aim was to break into the subsoil and to move it, but to leave the greater portion near, but not in the exact position where it had lain for ages, while only small portions were on each occasion to be brought up to the surface. By this process, I obtained two very important and valuable results—my drainage was in a remarkable way improved, and substances were brought to the surface which, though in their original position and condition they were entirely unproductive, possessed in themselves elements of fertility, and capacities of absorbing and releasing fertilising powers from the atmospheric agencies with which they were acted upon. *The Active Qualities of Clay.*—These are clear proofs that our subsoils are not merely lifeless, valueless masses of matter, but they exhibit properties which show that they will help us when brought up and exposed to the influence of the air, frost and rain. Dr. Voelcker shows that our subsoils are full of such qualities. A sufficient proof to indicate that in our subsoils there is a mine of wealth beneath our feet, and steam cultivation shows us the way to get at it. I tried to get at this with horses, but I cannot say that the resulting advantages were equal to the cost expended. The toil and turmoil were something enormous; the horses, the ploughmen, the harness and implements, were always in fault, the work was not done in time, the treading of the horses partly undid the very work they were intended to perform. The waste of their strength too in not regularly exerting their power together was another source of loss. Just at that time the idea of applying steam to do this work occurred to me. I felt convinced from my experiments that it was (though to many eyes it might seem a backward step) in reality a great move forward in the practice of agriculture. The indurated pan beneath our clay soils which impeded the efficiency of their drainage, I had succeeded in breaking, and then, by steam, the consolidation which attended the passage of our horses would be obviated, and the expedition which it would introduce would enable us to perform what we had to do at the very time when it ought to be done: thus we should obtain greater efficiency in our operations, greater expedition in the performance of them, and better and more frequent opportunities in their application. The first advantages that I anticipated have been fully realised; the state of my own farm and that of the farms of others who have adopted the system bear ample testimony of this. Neither in the question of expense is there any reason to complain. My own practice on this point, extending over a period of full four years, gives a result of an average amount, including the cost for the operations, where horses have been employed for preparing a seed bed, at 10*s.* 10*d.* per acre. I must observe that in my own practice I very seldom cross my own land with steam. In fact I confine my work to those difficult operations which cannot be efficiently performed by horses at all. For I find by experience that one efficient smashing up if it is done at a reasonable time is almost enough of itself to produce a proper seed bed. Besides this you will find that when land has been once or twice well cultivated by steam its tenacity is considerably diminished, and it requires less power than it did at the first. However, these things may be there is the concurrent testimony of every person who has judiciously tried it that the cost of steam cultivation is much less than that of horse cultivation; and in all the heavier processes I am convinced that the latter will be found to be double that of the former. I come now to what I may call the practical knowledge which I have obtained as the result of my experience, and first as to draining. This is a most essential point of all good farming. Our farm buildings should be in such a position as to reduce our horses to the lowest point consistent with good management; roads should be so arranged as to take the least quantity of land; and the harder they are the better, for a one-horse cart cannot be worked over deep rutty roads. While the re-arrangement of fields is not of that paramount importance which is urged by some, since when the windlass plan is employed we can cultivate fields of any shape, yet straight-sided fields are most easily cultivated; and we should do well to get rid of all useless hedges, and with them, the filth which they contain. We can clean fields as clean as a garden, but so long as we retain a useless number of filthy hedges (and they are generally so), our clean fields are in danger of being contaminated by them, to say nothing of the land they cover, and the cost of keeping them in order. With respect to hilly and uneven land, there is no difficulty in cultivating this. The engine should be placed at the best point for the engine driver to see the implement at both ends of the field; it matters little to the working or power of the engine, whether it is the top, middle, or the bottom of a hill, but the steam cultivator works best up and down hill. This also, if cross cultivating is done by horses, (which I generally advise) relieves them by giving them the side hill work, or as it may be termed the flat work. As to uneven surfaces, the implements are so constructed as readily to adapt themselves to every thing of the sort that occurs in practice. Now, gentlemen, I generally find that the heavy land farmer will stop me with three such questions as the following:—As I have no manure, how am I to get it to prepare my fallows at Michaelmas? What are the advantages of putting up the land into ridges during the winter? And what good is there in that yellow clay which you advise me to fetch up and mix with my top soil? In reply to those objections. First—How are we to have our manure ready at the autumn? My own practice has been to have a year's manure at this season of the year. It has been carted from the yards at convenient seasons, and deposited close to the spot where it is to be used, ready immediately after harvest to be put on the fields that are intended for Beans and roots. Thus, I can get it on quickly when the land is in a good state for carting over. It may be said that there is a loss in letting manure lie so long before putting it upon the land. I can only say that I have not found it so. But, even if there is, it is nothing in comparison with the advantage it gives by expediting the autumn culture and preparing our fallows before Christmas. The difficulty of obtaining the manure at first may be obviated by the use of a little artificial manure; and by keeping back a portion of the farm-yard manure for three or four years, the whole thing may be readily effected. The advantage of putting land into ridges for the winter to act upon it is immense; the elements perform the work of tillage far more effectively than any system of machinery can; the soil acquires a flaky snow-like appearance, thus saving clod-crushing, rolling, and other mere brute-force operations. None but those who have seen or tried it can conceive the enormous advantages obtained by this plan of operation. On my lighter lands I have produced in this way 30, 40, 50, and more than 50 tons of roots to the acre, without the application of a single grain of artificial manure. On my heavy clays, on land which it was said would not grow roots at all, I have produced 18 tons of Swedes to the acre and have used only 10 loads of good farm-yard manure, made without oil-cake; and I am not the only one who has done this. A neighbour of mine has carried out the same plan with like success. We avail ourselves of the assistance of Nature, and she helps us with no niggardly hand. Thus then, you will see that steam may be profitably used as a great and powerful auxiliary in cultivating our soils, but that the best season for applying it is from Michaelmas to Christmas; it then brings us forward in the whole of our processes. My own conviction and practice are, that every available acre on our farms ought, if possible, to be smashed up before the frosts, which usually begin about Christmas, set in; that steam is best applied to perform those operations which require the exertion of great and uniform application of force, and that, since we cannot dispense with the use of horse-power entirely, we shall act wisely in using it only in the numerous, essential though less onerous applications which occur in the cultivation of the soil.

Mr. G. Shackel spoke in favour of steam cultivation, and remarked that the time was now rapidly approaching when ploughing by steam would be as general as threshing by steam. It must tend to a great saving of horse labour, besides the advantage of having the work much better done, and at the proper season of the year. From what he had seen, he was in favour of Fowler's steam, though he was not prejudiced against Mr. Smith's cultivator, believing that each had its advantages. One great objection to the use of the steam cultivator was the expense of the wire rope, which was apt frequently to break and to cost fully 1*s.* per acre. Then again, he regarded the plough as doing more good to the land than the cultivator, because it went into the earth and turned it up, whilst the cultivator dealt chiefly with the surface in breaking it up. He held the opinion that farmers were much indebted to the enterprise and ability of Mr. Smith in introducing a system which was an improvement upon the old system of cultivation.

Mr. Turner, Steward to Mr. Benyon, M.P. for Berks, stated that he had used Mr. Smith's cultivator, and had found it answer satisfactorily.

Mr. Horsburgh, of Englefield, had seen Mr. Smith's cultivator at work on the Royal farms near Windsor, and thought the great drawback was the expense of the wire rope.

Mr. Boxall, of Strathfieldsaye, expressed his belief that the steam cultivator would do more to clean the land than any plough, although he did not think that farmers would be able to dispense with the plough altogether.

Mr. Smith replied, and thanked Mr. Shackel for the testimony he had borne to the importance of steam cultivation. With regard to the cost of the wire-rope, that would not be found so great as was anticipated by Mr. Shackel.

Thanks were voted to Mr. Smith and to the chairman.

Morayshire, *May 3: On the Past and Present Condition of Farm Servants.*—Mr. Geddes, the Secretary of the Club, read a paper. The Club had formerly resolved that the best system of boarding and lodging farm servants in that district was, that married servants should be provided with comfortable lodgings close to the steading, and that single men should be accommodated in the farmers' kitchens.

Condition of Farm Servants 40 years ago.—On looking back nearly 40 years, as man and boy, and all that time intimately connected with the farming pursuits of this county, I cannot

say that as regards their moral conduct I perceive any material difference. Thirty-five or 40 years ago there were no bothies in this district, neither were there any cottages for farm servants in the close proximity of the steading. The servants, whether married or single, men or women, were all fed in the farm kitchen. The men slept in an outhouse close to the stable, commonly named a barrack, there being but little light and not much cleanliness. Their beds, however, were regularly made every day, and as regarded warmth there was not much to complain of. The women slept in the farm-house, and were supposed to be under lock and key. At this period, servants were not difficult to manage with regard to their food, which consisted pretty much of what it does now, and what I believe it will continue to be—viz., Oatmeal and milk diet, with vegetables, and occasionally a flesh-meat dinner—Oatmeal porridge and milk, both good of their kind, continue the favourite diet; and the only difficulty is, in this non-dairy county, to continue throughout the year the needful supply of milk. My recollection brings back now and then the use of the same coarse language, the same indecencies, and the same sensual conduct, as it is now a-days so much the fashion to charge the farm servant with. They were certainly more under the control and influence of their minister than they are now, and felt a much more wholesome dread of ecclesiastical punishment than they now do. In another point of view you have now a better skilled workman, a more intelligent and better educated man, and though he will now stick up more for his hours and his rights, yet, upon the whole, I think he is a more efficient man now than then, and in a pecuniary sense of view is entitled to higher wages. At that period wages ranged from 5*l.* to 6*l.* and 7*l.* for six months, and they may now be put down at 2*l.* 10*s.* more per half-year, or 5*l.* more annually, with bed and board of course in addition.

Origin of Bothies.—About this period, however, a considerable change took place in the habits and character of the tenantry, widening as it seemed the connection between servant and master, each class becoming more distinct, and the effect of this perhaps occasioned the more frequent disagreement about the feeding of servants. I cannot see that the so-called bothy system is, when well conducted, a worse system than the farm kitchen for the morals or conduct of the inmates. You have a comfortable, clean, tidy, well kept place—with plenty of light and plenty of fire—surrounded by meal chests, a table, chairs, and the necessary culinary furniture. For such a place a woman is employed to clean out the bothy daily, light the fires, heat the water, and bake the bread; every man has his own store or chest containing his own feeding allowances and anything else he may choose to treat himself to—such as tea, coffee, and butter. In a separate apartment you have beds for sleeping in, and this room is likewise swept out daily, and the beds regularly made up. I believe the fault of this system is that masters do not take sufficient interest in conducting the general affairs of the bothy, by laying down certain rules which must be rigidly adhered to, and furnishing the inmates with periodicals or other sources of amusement of an instructive or harmless nature. Among many other model bothies I have seen, I may mention that what came nearest to my idea of what a bothy ought to be, was one that I happened to see upon a large farm in Forfarshire, upon the estate of Lord Southesk, planned, I think, by his lordship, and which I shall endeavour to describe from my recollection. The kitchen or eating apartment was at one end—a large, spacious, well lighted and well aired room, suitably furnished; off this place a small room, a closet, containing a fine supply of water, with a bason, &c., for washing; a passage down the centre of the building, off which, on either side, were a number of small rooms or cells, each containing a bed and room for the man's chest. By this arrangement each man had his own room, and if so inclined, could separate himself from the others for rest or study, and this I looked upon as the beau-ideal of what a bothy should be. It is difficult to define what a bothy really is—many people associate the name with everything that is bad and uncomfortable, but this is incorrect; I have seen and ate and drank in bothies which would bear a very different construction.

The Cottage System.—The expense is a great barrier to the system being carried out so fast as many think desirable. It is no doubt more expensive to a tenant viewing it in a temporary light, and in the same light not more advantageous; but, taking a more extended view, and looking to the fine race of agricultural servants you are the means of raising in this manner, besides the comforts you know that your servants can enjoy in this way, and consequently securing a more permanent class of labourers about you. I feel, and I have long felt, that it is the duty of proprietors and tenants to encourage this system as far as lies in their power, and which I think is within their power more fully than is generally considered. I believe it is a great mistake insisting upon building expensive and extensive cottages for farm servants. They do not want them or require them; in fact, I have seen, in many instances, that they are anything but desirable for them, their families or means not being co-existent. I should like to know how any of us with nothing but our farms to live by would feel if the landlord erected a mansion house with some 30 or 40 apartments, and told us, you are expected to furnish all these comfortably and suitably—to keep your house and garden and grounds in a perfect state. Would we not say—"Why, our profits will not afford it. We require the money necessary to furnish this house to stock our farms, and if it was furnished, we could not afford to occupy the rooms." Now, don't you think that something of the same feeling exists with the farm servant, who generally marries with but little means, and has enough to do to furnish two rooms and a closet with the plainest furniture? These two rooms and a closet will, in most instances, give all the necessary means to provide for the decencies of life, while at the same time, if got up plainly, they will cost but little as compared with those so much talked of as being necessary, while they will be much more suitable for the man's income and furnishings, and fully as comfortable. Under the cottage system, when the men, and more particularly the wives, are prudent and thrifty, there are few work people better off. I have persevered in it for nearly 20 years, and in many cases I have had much satisfaction—in others, I have had the reverse; but having tried every system of keeping servants, I am quite of opinion that on every large farm there ought to be a few cottages. Apart from all else, these cottages have an ameliorating effect upon the unmarried men of the bothy, who visit them in the same fashion as any of your bachelors visit the families of your more fortunate married neighbours, and who doubtless feel the consoling effects of female society.

Farm Servants not Worse than most other Classes of their own standing.—In the first place, while I do not say that our farm servants are without reproach, yet I maintain that, as a body, they are fully equal, in morality and general intelligence, to most other classes of their own position in life. And take them as a whole, I wish to know where you will find a better conducted class. At this moment, I have nearly 40 of them under my immediate charge, and although I believe I have not the character of being what is called an easy or a slack master, yet I have seldom or ever occasion to find fault, and then, a word through a foreman will, in most cases, remedy the evil; while, on the other hand, I acknowledge with gratitude that, during ticklish times of seed and harvest, I have ever seen great willingness to forward the object in view. Then, with regard to their honesty, in so far as touches money, I can vouch for it. As a body, they are scrupulously so. Among a portion of them there is a feeling with regard to a strict defining of mine and thine, but this applies more to what they erroneously consider as legitimate perquisites, than any downright pilfering—such as produce of the farm and fuel. So much for their moral conduct. Take them in another point of view. Ten hours of healthy labour is about what is required of them, and they are always sure of food and lodging. Their wages are such as will clothe them comfortably, and if they are prudent, and wish it, they can save money besides. In fact, farm servants, whether single or married, living in cottages attached to the farm, need never know want; and if in bad health, they or their families are looked to by their employer.

Poaching.—There is one vice, however, which, within the last 10 or 12 years, has increased to a great degree among our farm-labourers, and one which I cannot condemn too much—I allude to poaching. I mean by snaring, netting, and trapping—all night work, and generally for the purpose of selling the produce, and not for the purpose of feeding their families. I have no excuse for such an offence; particularly when you consider that the wife of the labourer, and the mother of his children, generally disposes of what I can only designate as stolen goods. I am aware that many farmers view this in quite a different light, and rather give a tacit encouragement to it than otherwise. This feeling, no doubt, proceeds from suffering by an over-preservation of game, and which, I know, rankles in the bosoms of most men suffering from such a cause. I would strongly, however, warn our farm and day labourers to avoid the practice, whether encouraged by their employers or not. It is one which gains upon a man, and leads to grief in the end, and is quite incompatible with the character of an honest and trustworthy labourer.

After the reading of the foregoing paper, the Rev. Mr. Weir, of Drainie, expressed his concurrence in the able paper by Mr. Geddes. Servants had certainly improved, and the attention farmers were bestowing on them would lead to further improvement. He knew some worthy persons among them—one he particularised, who, having risen in his sphere, was enabled, through the kindness of Linkwood and Lord Seafield, to become tenant of a small farm in his old age. It would be well if industrious servants could look forward to something of this kind.

Mr. Cushny said: My own impression, with regard to farm servants as a class, is, that they are certainly not worse than any equally numerous class in the country. And the question is, how does it happen that they get such a bad name? I think I can see several distinct reasons for this. One reason is, that too many people in discussing the question have slumped the agricultural population together, and included under the name of agricultural labourers, not only half-yearly and yearly farm servants, but navvies, hedgers, ditchers, drainers, and day-workers of all kinds, even mole-catchers! Another error has been a political one, and, through the farm servant, it has been wished to strike at the farmer and landlord. The farm servant had been represented as a down-trodden serf—a man degraded, merely as the cattle in the tents, and also worse looked after and cared for! Now, having drawn this dark picture—you all know in what a dark picture it has been drawn—these men proceed to tell us that the landlord and farmer are to blame for this state of matters—that state of matters being all the while half the creation of their own prolific fancy. The remedies they propose are to do away with the law of entail, with large estates, and large farms, upsetting things altogether, giving universal suffrage, and I don't know what palliatives and remedies. I do not believe in the extent, the value, the efficacy of that remedy; I do not believe that our farm servants are half so wretched, half so wicked as they are represented to be. I do not believe in any sweeping measures of reform, but I do most earnestly desire to see crofts and farms to which the farm servant may retire after he has saved a little money; I also earnestly desire to see more cottages for farm servants; for I believe that early marriage is a cure—the cure—for one, at least, of the evils we all lament. I desire to see a more friendly feeling between the employers and the employed. There is the place where the shoe pinches. But the way to accomplish these things is not in rash and intemperate attacks on this and that class, but by our uniting all classes—from the peer to the peasant, including, of course, the parson as well as the farmer—in this great and good work. I should be sorry to see the day when you treated your servants as the facetious periodical supposed you to do—as you do your pigs, your cattle, and your horses! For though you may tend and feed the latter more carefully than the former, the beauty in the pork or the pig is its fatness: the man's is his upright character as a Christian; and I hold that, although it is your duty, as it is the duty of every employer, to provide for your servants decently; though it is your duty to set him a good example of social and religious duty; though it is your duty to give him good advice, yet if you (the master) go beyond this and interfere with the domestic privacy of the servant, with his liberties as a British subject, then I say you go entirely out of your place, and however good your intentions, you may do much mischief. I do not wish to see your Ladies Bountiful entering the cottages of your rural labourers, dictating how to wash the dishes or feed the pigs. British subjects ought to be left to the freedom of their own will in these things. The difficulty under which you labour is how to find suitable accommodation; but this, I think, is now much simplified by the Act of Parliament passed last Session, by which it was provided that proprietors were allowed to burden their lands with the expenses of building cottages for farm servants just as they are enabled to do with drains and dykes; they can borrow money for this purpose at 6¾ per cent.; and if the tenant will afford carriages, I should imagine that three cottages could be built for about 100*l.*; and for these cottages the tenant and landlord between them would have to pay 6*l.* 10*s.* or 7*l.* a-year, which, where tenants and proprietors are inclined to work harmoniously, would not be a serious matter. I have therefore every hope that, so far as this branch of improvement is concerned, it will go on rapidly; and when this Club and other such like bodies can take the matter up, there is good reason to augur every success. Another origin of much abuse is the feeing market. It may seem presumptuous in me to offer advice in such matters to farmers, but I have been all my life associating with farm servants and their employers, and I only ask you fairly to consider any suggestions I here throw out. With respect to servants, let every master personally engage all his servants. I have no doubt your grieves are good and trustworthy men as a general rule; but they have not and cannot be expected to have that knack of discovering a man's character in reading his countenance which the farmers themselves possess, nor have the same deep interest in finding out a man's previous character and conduct. The servant generally looks on the man who engages him as his master; he may call you master, but he looks to the grieve as his true master. Employers thus often lose their influence over their servants, so much so that I believe the grieve is often better respected than the master himself. I would say: Wherever you engage servants, whether in the feeing market or in the register office (an institution which I hope may soon be introduced here), engage them yourselves. When your men come home, whether to the bothy, or farm-kitchen, or cottage, I think it ought to be a rule that the master should take an early opportunity of calling on them, inquiring whether they are comfortable, whether they have any reason of complaint, also as to the church to which they belong, telling them plainly and mildly, though firmly, as to the rules to be kept at night, and of the conduct that is expected of them on Sundays, which you know are fruitful subjects of quarrel. In defence, arm yourselves with a large Bible to be left on the bothy table, with an earnest recommendation that it should be studied by all the inmates. This would be nailing the colours to the mast—defining your character and what you wished your servants to be. It would have an effect greater than either you or I can anticipate. I have been thus particular as to the way in which to begin with your servants, because I believe that a thing that is well begun is half-ended.

After some further discussion, the Chairman intimated the finding of the meeting in the following terms:—That the condition of the farm servant has been steadily improving these many years past; that a very marked improvement has taken place since the subject was discussed by the Club seven years ago; that the cottage and bothy systems appear best adapted to meet the views both of master and servant, as possessing, in many respects, advantages over the system of boarding servants in the kitchen. The meeting then adjourned.

Notices of Books.

A Compendium of the Veterinary Art. By James White. Longmans.

This is the 19th edition of a standard work—entirely reconstructed with additions and alterations by Mr. Spooner, of Southampton, than whom no one is more competent to bring the work up to the present state of veterinary science. We extract from the preface the following account of recent changes in the profession:—

"The changes amongst the teachers in the veterinary profession have not been few. Mr. Sewell, who succeeded Mr. Coleman as senior Professor, has gone to 'that bourne whence no traveller returns;' and so have the Turners, good men and sound practitioners, and more recently still, Mr. W. Percivall, so well known for his excellent writings. Bracy Clark and Youatt had long preceded them, and a host of lesser note have followed in the same mournful train.

"An accident to which the profession is peculiarly liable has deprived us at middle age of Karkeek of Truro, a man of science as well as a sound practitioner; an excellent writer, and one whose honourable labours under the mantle of our great Agricultural Society were calculated to reflect credit on the profession to which he belonged. Such labours as these the teachers at our colleges should not ignore, nor pass over as unworthy of notice.

"Mr. Charles Spooner continues to occupy the post of senior Professor, to which he succeeded at Mr. Sewell's decease.

"Mr. Simonds, as Professor of Cattle Pathology, &c., has, besides his lectures, contributed many excellent papers on branches of this science to the Journal of the Royal Agricultural Society, which Society continues its liberal grant to the Veterinary College.

"It is to be regretted that some more successful means are not adopted for attracting from all parts of the country information and inquiries on this important branch of science, Cattle Pathology.

"Professor Morton has very recently retired from the chair of Chemical Professor and Lecturer, which he has so long and so ably filled; but he continues, however, with Professor Simonds, the management of 'The Veterinarian,' which, since Mr. Percival's death, has been conducted by them.

"Mr. Varnell is still the able Anatomical Demonstrator and Lecturer, and has constructed many useful instruments.

"The examination of pupils, and the granting of diplomas, are now conducted by a separate institution, the College of Veterinary Surgeons, a chartered body, having Mr. Gabriel for its secretary. Some benefit has resulted from this change, but not to the extent anticipated by its promoters.

"In Scotland there are two Veterinary Schools, one long conducted by Mr. Dick, connected with the Highland Agricultural Society, and the other more recently by a young and talented man, Mr. John Gamgee."

Treatise on Mills and Mill Work. By W. Fairbairn, Esq., C. E., &c. Longmans.

This is the first part of an elaborate treatise, in which definitions, formulæ, and examples are given, along with illustrative figures and historical notices, so as to make at once an instructive and interesting book on what is not generally an interesting subject. It will in these days, when the millwright and the farmer have close relations, find many an agricultural student. As an account of the advance made by the former as well as the latter of late years, we extract his portrait drawn by Mr. Fairbairn, as he was before the days of Mechanics' Institutes:—

"It used to be a custom, before the days of Mechanics' Institutes, for the millwrights to form one for themselves in every shop. Their meetings were generally held at a public house on Saturday evening; and many were the times when long discussions on practical science and the principles of construction were carried on between rival disputants with a fiery eagerness which not unfrequently ended in a quarrel, or effected a settlement by the less rational but more convincing argument of blows. It was a rough way of imparting knowledge, but it was not worse than that practised in the schools and seminaries of the day, where the application of the rod was the general remedy for dull apprehensions and indocile minds. This was beginning at the wrong end, endeavouring to impart knowledge through the sensitive parts of the

body, instead of appealing to the higher organs of the intellect. The principal difference between the Millwrights' Institute and such schools was, probably, that the former was the more ferocious of the two, as the rival disputants hit harder under the influence of potations than would now, fortunately, be tolerated. On more peaceful occasions, however, it was curious to trace the influence of these discussions on the young aspirants around, and the interest excited by the illustrations and chalk diagrams by which each side supported their arguments, covering the tables and floors of the room in which they were assembled. The great objection to these gatherings was, however, the angry feeling too frequently aroused, and the injurious influence of the place of meeting, which gave rise to prolonged debates under the encouragement of the landlord, who on most occasions was appealed to as referee in all matters in dispute.

"The above is no overdrawn statement of the condition of the millwrights some 50 years ago. Their education and habits were those of the times in which they lived. There were then no schools for the working classes but those of the parish, nor any libraries or mechanics' institutes; and after the usual course of reading, writing, and accounts, the millwright was thrown upon his own resources in the attainment of the knowledge which might aid him in his profession."

Comparative Value of the Different Feeding Substances for Horses.

This is the reprint of a paper read before the Royal Dublin Society by Mr. John Dowling (student in the evening Practical Chemical Class, Museum of Irish Industry), and published in the Society's Journal. It is a detailed account of analyses and results—of foods and feeding in the stable, in which various grains and other material were administered in recorded weights. The work done and the different modes of feeding are entered in a table, which is thus described:—

"In Table I. I have calculated the mileage from known data: the return journey is not included in the calculation, as the horses simply returned with the empty carts.

"The cost per single ton I have made out, as it shows at one glance whether it would be cheaper to employ horses or to keep them. If we wish to employ horses, the charge is 1*s.* 8*d.* per ton; but, if we keep them, the cost is about 1*s.* 0¼*d.* per ton—viz., 7*d.* for the driver, 4¾*d.* for the food, and 1*d.* for repairs of harness, cart, and rent.

"From this statement, it would seem that the keepers of horses had a direct profit of about 7¼*d.* per ton. Now, in reality, they have no such gain, as I have not, as may be perceived, noticed the depreciation in value of horses (which are bought young, and at a high price, and sold, after some time, at a reduced price), nor the interest of the money invested in the horses and carts."

Miscellaneous.

Important to the Seed Trade.—A case of considerable importance to sellers and buyers of Grass seeds was adjudicated upon by Mr. Serjeant Howley, at the Thurles Quarter Sessions. It was a civil bill action, at suit of John Doran, a farmer residing at Archestown, in this county, against Mr. Joseph Molloy, hardware and seed merchant, Thurles, for 15*l.* loss occasioned to plaintiff, by defendant, as alleged, having given him a quantity of Trefoil instead of Clover seed. Plaintiff was examined, and proved the purchase last year from defendant, of what purported to be, and what was given to him as Clover seed, but afterwards turned out to be Trefoil. In his cross examination by Mr. Dwyer, solicitor, (who with Mr. Molony appeared for defendant), Doran admitted that he bought two different kinds of seeds (French and English) on the occasion in question, and sowed them in separate fields, but was unable to state in which field he had sown the English and which the French; there was only one of the fields he had complaint to make of; the other produced a good crop of Clover. Mr. Molloy was examined, and deposed that he obtained the seeds from the stores of Mr. Phelan, J.P., the well-known seed merchant of Clonmel, and that he sold them to plaintiff exactly as he got them. An assistant in Mr. Phelan's establishment proved that the seeds sold to Mr. Molloy were pure and genuine, and he produced a sample of them for the inspection of any agriculturists in court. Mr. Dwyer addressed the Court for the defence, and stated that, even admitting plaintiff's statement to be true, it did not militate against his client, as it was a fact well known to farmers, and probable his lordship was also aware of it, that Trefoil may, as had often been known to be the case, lie apparently dormant in the ground for years, and afterwards spring up so strongly as to choke the young Grass seeds which had been sown only the season previously; and that that was the case in the present instance, he was sure any one who knew the high character both of Mr. Phelan and Mr. Molloy felt fully convinced. Mr. John Hely Owen, of the Queen's County, was then called, and he proved that he had known instances in which Trefoil sprung up as a natural product of the soil; at all events it had appeared where it had not been sown for many years previously, and he mentioned one instance in which a farmer, who had put down White Clover, had, at the time he expected to see a good crop of Clover, nothing but a prolific yield of Trefoil, and it was only the following year—the second season after sowing—that his Clover made its appearance, and rewarded him for his money and labour. The Chairman granted a dismiss. There was another case similar to the foregoing, brought by a man named Long, against same defendant, set down for hearing, but plaintiff after the first decision consented to a like rule, without going into the merits. The cases created considerable share of interest among the local farming community. *Nenagh Guardian.*

Calendar of Operations.

JUNE.

THE ISLE OF ELY.—Summer has at length arrived, and we have warm genial weather, which forms a perfect contrast to the cold and rain we experienced during the whole of the summer months of 1860. The last few days have been decidedly hot—brilliant sunshine, with the thermometer ranging from 76° to 78°. Upon the whole the weather has been dry, and vegetation has not assumed so rich a garb as is frequently the case when showers are more frequent. We have, however, had a few showers, although some of them have been very partial. On the 5th we had thunder, and in some circumscribed localities heavy rain and hail storms. We understand the lightning struck a tree and shivered it to shreds in Mr. Gardner's Park, at Chatteris. Many say they never saw a tree so riven. The hail also fell very thickly in this neighbourhood, but we have not heard of any serious injury having been done to the crops. A more general rain fell early on the morning of the 10th, which exerted a most beneficial influence upon all our fen crops, whether of corn or otherwise. The hot weather we have since experienced has rendered a further shower necessary, and the generality of lands will soon require further moisture. We may now be expected to venture some further opinions as to the prospects of the coming harvest. We have all along reported unfavourably of the Wheat crop, and we regret we cannot, even now, with all the brilliant weather we enjoy, change the tenor of our remarks. On thousands of acres the plant is hopelessly thin, and even where otherwise is running up quickly into spindle, without tillering. There is the prospect of our reaping one of the lightest crops of straw we have had for many years. What the yield may be according to the straw cannot yet be estimated; but according to the acres, in the generality of instances, it must, we conceive, be very light. Harvest, with ordinary summer weather, will probably be here by the beginning of August, possibly a few days earlier. In 1858 we saw the first ear of Wheat bursting on the 4th June, and began to cut Wheat on the 24th July. In 1859, we saw the first on the 3d June, and began harvest on the 26th July. In 1860, it was the 16th June when we gathered the first bursting ear, and the 18th August when we began to cut Wheat. This year we observed the first breaking ear on the 8th inst. In 1858 from bursting to reaping was 50 days; in 1859, 53 days; in 1860, 63 days. The weather doubtless will exert considerable influence upon the time required for bringing the grain to maturity. But taking 1858 as an average season, and calculating from that, it will bring us to 31st July or 1st August for beginning Wheat harvest. Oats are short and in many instances thinned seriously with wireworm. Beans are thin generally. Peas blossom well and promise an abundant crop. Mangels are thin and a very irregular crop; some good, and others worthless. The corn trade is languid in the extreme, and prices recede. *Your Fen Reporter.*

STATE OF THE WEATHER—BERKSHIRE.

For the Week ending June 20: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the surface.	Rain.	Wind	Barometer.
		Max. in Sun.	Max. in Shade	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	14 ..	93.2	80.0	54.3	70.4	61.7	..	E.	29.70
Saturday	15 ..	92.0	80.6	55.0	70.6	63.4	..	N.E.	29.62
Sunday	16 ..	95.0	81.6	54.9	71.6	64.3	..	N.E.	29.76
Monday	17 ..	85.0	73.4	52.0	65.6	63.8	..	N.E.	29.90
Tuesday	18 ..	92.0	75.6	49.0	66.6	64.7	..	S.E.	29.80
Wednesday	19 ..	93.2	80.0	53.5	73.0	66.0	..	S.	29.75
Thursday	20 ..	98.0	84.0	58.0	74.5	67.6	..	N.W.	29.52

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

POULTRY.—The supply has hardly been as large the last week as during the preceding one. It is not only that, true to the practice of all markets, good prices brought a large supply, and that again caused heaviness and reduction, but hay harvest is now becoming general round London and in the Southern Counties. This has considerable influence on the supply, as at many of our large country markets there is little or no trade during hay making. Small lots of fresh killed good sized fowls will in all probability make larger prices during the next fortnight than at any future period of the present year.

	Each.—s.	d.		s.	d.
Large Fowls	4	0	to	4	6
Middling ditto	3	0	,,	3	3
Chickens	2	0	,,	2	6
Geese	5	0	,,	5	6
Ducklings	2	6	,,	3	0
Pigeons	0	7	,,	0	8
Rabbits	1	3	,,	1	4
Wild ditto	0	8	,,	0	9

STEAM CULTIVATION: *Broad Hinton, near Swindon.* The original statement of Mr. Stratton's experience, taken from notes upon the spot, estimated the cost he had incurred for rope at 37*l.* per annum, viz., five eighths of the cost of a new complete rope. When about to go to press last week, however, a letter was received intimating that this was in error, and giving such instructions as appeared to us to require the alteration in that statement which eventually appeared (see p. 559). We learn now that besides the original rope sent with the plough, the Messrs. Stratton have purchased four 50-yard lengths for headlands, and one other new headland rope of 110 yards. There is now also another new plough rope of 450 yards on its way. Supposing the old one which it is to replace is worth only 10*l.*, and taking into account that the short lengths are only half worn out, after use since October 1859, it appears to us that our original estimate of cost of rope per annum was nearer the mark than that which was substituted for it, and probably the cost of rope at Broad Hinton ought to be put down at 50*l.* a year, and the cost of ploughing must be put at 9*s.* an acre instead of 11*s.*

JOHN FOWLER, JUN., 28, Cornhill, London, E.C.—Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free.

CHURNS.—The Royal Agricultural Society's Prize Churn is the best invented. Butter produced in 12 minutes. Price 30*s.* and upwards.
Full particulars forwarded on application to BURGESS & KEY, Agricultural and Gardening Machinery Stores, 95, Newgate Street, E.C.

Parkes' Steel Digging Forks.
BURGESS AND KEY, 95, Newgate St., E.C., London, being the Wholesale and Retail Agents for these celebrated Tools, have always a large Stock on hand from which their Customers may select what they may require.
ANTHONY'S PATENT AMERICAN CHURN.—The FIRST PRIZE was again awarded to this Churn in Competition with several others at the Chester Meeting of the Royal Agricultural Society; it has obtained the First Prize given by the Society at every Meeting since 1850.
Messrs. BURGESS & KEY, 95, Newgate Street, E.C., strongly recommend it as the most perfect Churn now in use. Full particulars sent on application.

MAJOR MUNN'S PATENT HORSE-HOE OR TURNIP THINNER, and MAJOR MUNN'S PATENT REAPER, MOWER, AND GRASS CUTTER.—These Implements have been entered for the Trials to be made at Leeds at the Royal Agricultural Society's Meeting in July next.
For Licenses to construct these implements or to purchase the Patent Right, &c., apply to the Patentee, or Messrs. LEAKEY, CHAPMAN, & CLARKE, Solicitors, 24, Lincoln's Inn Fields, London, W.C.

MR. SMITH begs to call the attention of his brother Farmers to some New Inventions that he has just patented, which are progressing, and will shortly be before the public, viz.:—
A WINDLASS, without a cog wheel or counter shaft upon it, yet it will go out of work of itself at the touch of a spring, and can be made and sold at 10*l.* less than any windlass that has as yet appeared.
A COMBINED MACHINE that will Cultivate, Drill, and Harrow at the same operation.
A ROPE PORTER, self-shifting, yet the most simple and without a wheel upon it.
The price of a Complete Set of Tackle is as follows:—

	£	s.	d.
New Patent Windlass and Rollers with Anchors, &c., complete	£92	0	0
1400 yards of Steel Rope	61	0	0
Patent Cultivator, No. 3.	15	0	0
Two extra Tines to add to No. 3 to make a 5 Tined Cultivator of it, in which form it has been used by Mr. Bignell and Mr. Dring for two years, and found to work well	2	0	0
Total	£170	0	0

Woolston, June 22, 1861.

HENRY J. MORTON AND CO.,
2, Basinghall Buildings, Leeds.
Galvanised Iron Water Cistern
for Cottage Houses, &c., to contain 50 gallons, 26*s.*; 80 gallons, 31*s.* each; and 140 gallons, 37*s.*, and fitted with tap, keeping the water perfectly sweet and clean; will not rust or corrode. Cisterns of all sizes.
Galvanised Iron Pumps
for Liquid Manure or Domestic Use, 3 inches diameter, 30*s.* and 32*s.* 6*d.* each; Tail Pipe for same at from 10*d.* per foot.
Galvanised Iron Swing Water Barrows
for Garden or Farm use, containing about 20 gallons, entirely formed of iron, 35*s.* 0*d.* each.

For Watering Gardens, Lawns, &c,
HANCOCK'S VULCANISED INDIA-RUBBER TUBING is made in 60 feet lengths, and of any size for Union-joints to attach it to Cisterns or Water Mains.
PRICE PER FOOT.

Size.	½ inch.	⅝ inch.	¾ inch.
No. 1, Slight	5*d.*	6*d.*	7*d.*
No. 2, Medium	8*d.*	9*d.*	10*d.*
No. 3, Stout	10*d.*	11*d.*	1*s.*
No. 4, For Mains	1*s.* 2*d.*	1*s.* 3*d.*	1*s.* 5*d.*

PRICE OF BRASS FITTINGS.

Hand Branch, 12 in. long, with Stopcock, Movable Rose, and Jet	4*s.* each.
Spring Spreader	3*s.* ,,
Union Joint, ½ inch	1*s.* ,,

JAMES LYNE HANCOCK, Manufacturer, Vulcanised India-Rubber Works, Goswell Mews, and 8, Goswell Road, London, E.C.
N.B. Illustrated Price Lists on application.

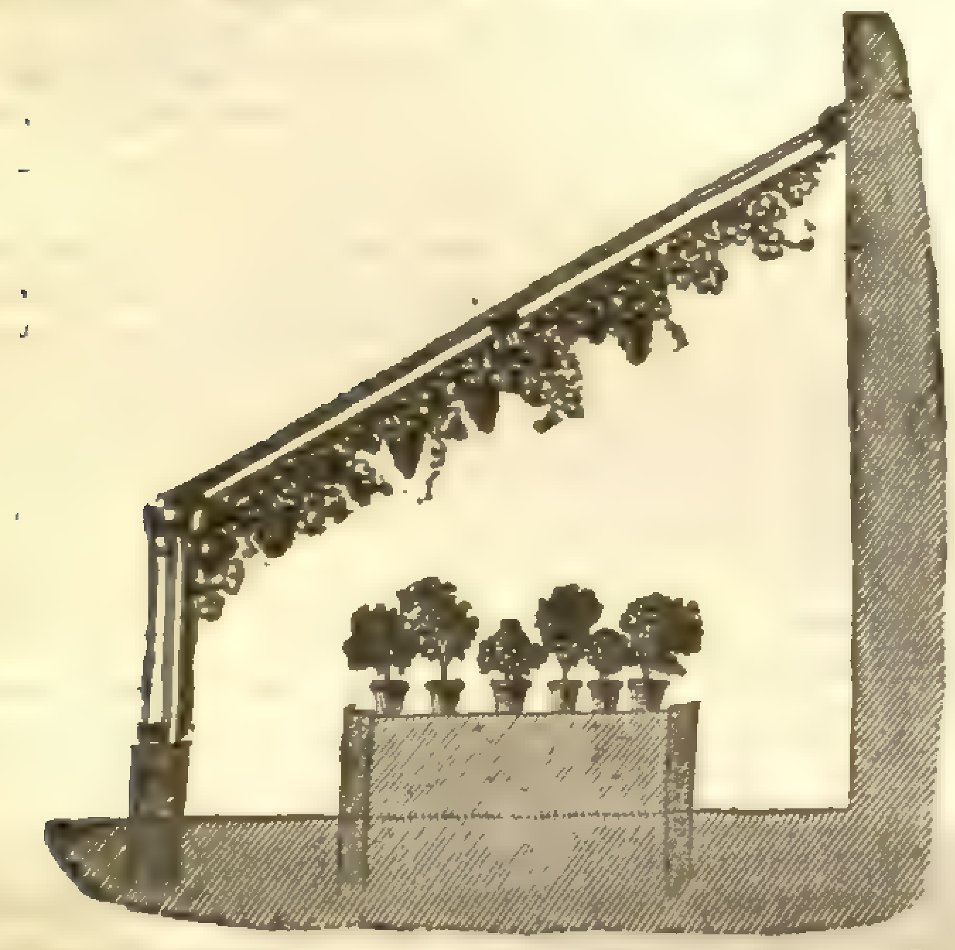
200 CUCUMBER AND MELON BOXES, AND LIGHTS, AND FROM 400 to 500 LIGHTS FOR PITS OF ALL SIZES KEPT IN STOCK.
Glazed and Painted complete, ready for immediate use. Packed and sent to all parts of the kingdom.
JAMES WATTS & Co., Hothouse Builders and Hot-Water Apparatus Manufacturers, near the Green Man, Old Kent Road, London, S.E.

MARQUEES.—Rick Cloths, 30 ft. by 30, 5*l.*, Tarred and Corded at edges like ships' sails. Other sizes in proportion. Marquees, new, lofty, and extensive, on Hire, completely fitted up for any occasion. Garden Tents, and Tents for Cricket Clubs. New and Secondhand.
R. RICHARDSON, White Horse Factory, Bidborough Street, Judd Street, W.C. Office: 99, Euston Road, London, N.W.

"FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.
PROTECTION FROM THE COLD WINDS & MORNING FROST.
"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.
Two yards wide .. .. 1*s.* 6*d.* per yard run.
Four yards wide .. .. 3*s.* per yard.
An improved make, 3 yards wide, 2*s.* 6*d.* per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1*s.* 4*d.* per yard run.
ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.
"It is much cheaper than mats as a covering."

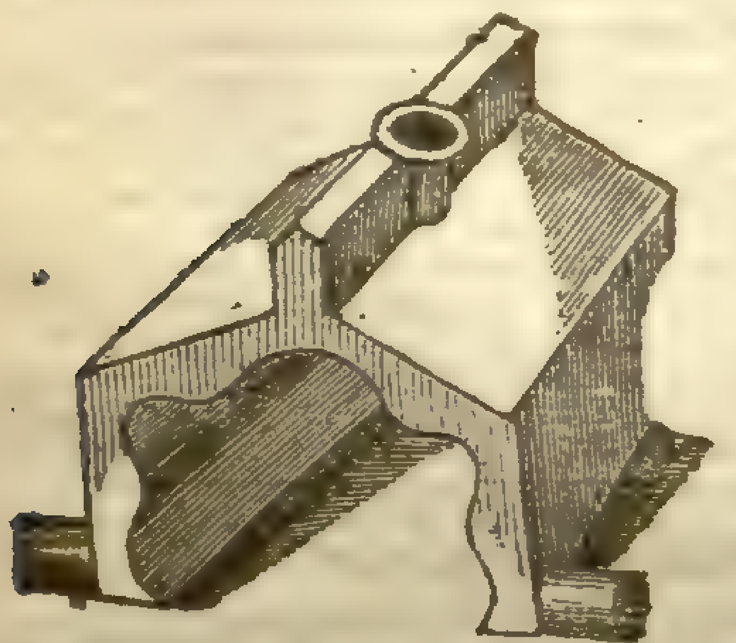
HOT-WATER APPARATUS FITTED in every description of Hothouses, Mansions, Churches, Chapels, &c., on the most approved principle, by J. MEREDITH, Vine Cottage, Garston, near Liverpool.
N.B. First-class references may be had on application.

Hothouses for the Million.



HOTHOUSES FOR THE MILLION. — On the principle invented and patented by Sir Joseph Paxton, M.P., combining simplicity, cheapness, excellence, and durability, being capable of fulfilling, in the most perfect manner, all the requirements of Horticulture. Lean-to Houses, 30 feet in length, can be had for less than 17*l*. Span Roofs, 30 feet in length, for 33*l*.; and all other dimensions at equally low prices. Delivered free to any Railway Station round London.
Illustrated Circulars, with Lists of Prices, can be had on prepaid application to SAMUEL HEREMAN, 7, Pall Mall East, London.

T. M. LOBJOIT'S PATENT HOT-WATER BOILERS are acknowledged by all who have them in use to be the most powerful Boilers now known, and are the most economical, requiring less fuel and attention than any other. They are made of various sizes, suitable for heating the smallest Greenhouse to the largest Conservatory, Churches, and Buildings of all descriptions.

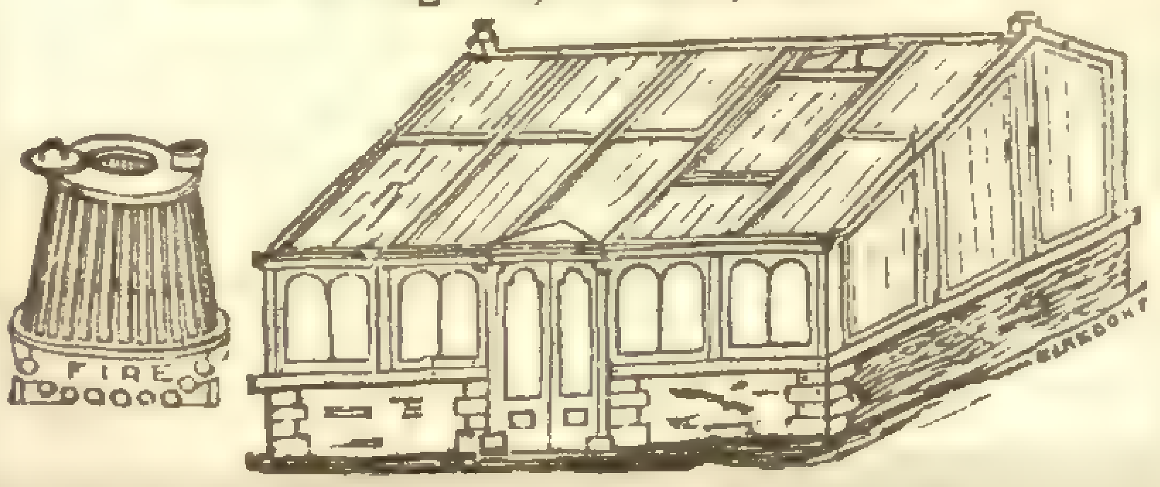


Testimonials forwarded on application to THOS. M. LOBJOIT, Hot-Water Apparatus Manufacturer, General Smith, &c., Turnham Green, W., and at Acton, Middlesex, W.

By Her Majesty's Royal Letters Patent.

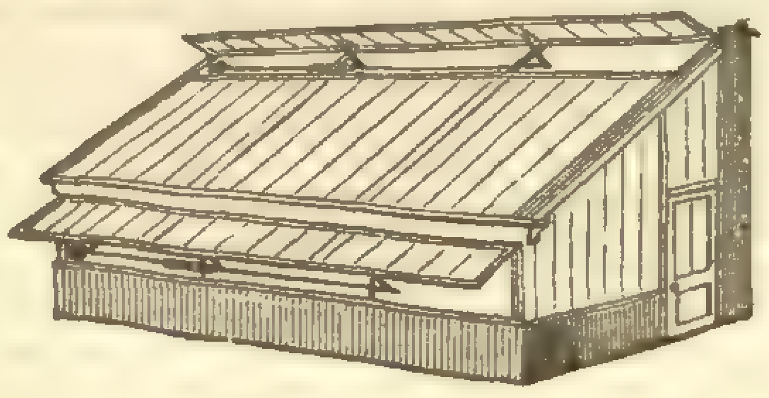
E. DENCH, 152, King's Road, Chelsea, S.W., Inventor, Patentee, and Sole Manufacturer of PATENT GALVANISED IRON GREEN and HOTHOUSES, &c.
These Patent Houses are manufactured complete, with excellent strong glass, for 1*s*. 3*d*. per foot super. References to any amount can be given of their superiority over any other for use and durability.
Several Second-hand ones for Sale, a bargain, the ground being required for building where they stand, at Granby Nursery.

West of England, Ireland, and Wales.



V. SKINNER (late Partner with J. WEEKS & Co.) Horticultural Builder and Hot-Water Apparatus Manufacturer. Establishments Heated on the ONE-BOILER SYSTEM. Plans and Estimates on application.
Bridewell Street, Bristol.

T. G. MESSENGER, Horticultural Builder and Hot-Water Apparatus Manufacturer, Loughborough.



T. G. M.'s Patented DIVISIONLESS HORTICULTURAL BUILDINGS are cheaper, more durable, and lighter in appearance than any other made. The Ventilation is effected by a simple and much admired mechanical arrangement.

T. G. M.'s Patented TRIANGULAR TUBULAR BOILER for Heating Buildings with Hot Water has been extensively adopted by gentlemen who are willing to testify to its great efficiency and economy of fuel. Plans, Estimates, Testimonials, and every information sent free upon application.

JOHN VOKINS, 2, York Place, Chelsea, London, S.W., Horticultural Builder and Hotwater Apparatus Manufacturer. Tubular Boilers from 3*l*.

Card.

SAMUEL N. McGERROW, General Horticultural Builder, Knotty Ash, near Liverpool.
Reference permitted to the Nobility and Gentry throughout Great Britain and Ireland.

Greenhouses, Orchard Houses, &c.

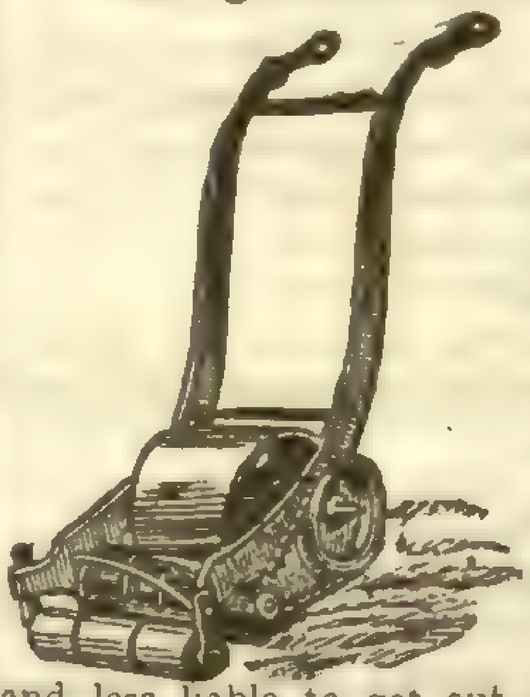
H. FREEMAN'S Horticultural Works, Triangle, Hackney, N.E. Established 20 years. Substantially made Greenhouses, glazed, ready for fixing. 42 feet by 13 feet, 50*l*.; 21 feet by 13 feet, 28*l*.; 12½ feet by 10 feet, 15*l*. Orchard Houses 10 per cent. cheaper. A large assortment kept.
Estimate given for Heating, or any branch in iron or wood.

Horticultural Works and Hot-Water Apparatus Manufactory,
Kensal Green, Harrow Road, London, W.

JOHN TAYLOR AND SON beg to call the attention of the nobility and gentry to the very superior manner in which they Erect all kinds of Conservatories, Vineries, Greenhouses, &c., combining every improvement with elegance of design and durability of materials and workmanship.
Their VENTILATING APPARATUS for the Fronts and Roofs of Houses has given the highest satisfaction. Churches, Chapels, Schools, Entrance Halls, Public Buildings, &c., heated with Hot-Water Apparatus in a most economical and efficient manner.
J. T. & Son have great pleasure in referring to numbers of the nobility and gentry by whom they are extensively engaged.

TENTS, &c.—A quantity of Government Bell Tents and Marquees, suitable for Rifle Companies, Cricket Clubs, &c.; also Rick and Hay Cloths, Ropes, &c. Prices on application to JOHN MORISON, 25, Norton Folgate, N.E.

Green's Patent Noiseless, Double Action, Self-Sharpening, Self-Cleaning, Grass Cutting, Collecting, and Rolling Machines for 1861.



THESE are the only Machines working at the Crystal Palace, Regent's Park Gardens, and hundreds of places where others have been set aside. Can also be seen at the Royal Horticultural Society's Gardens, Kensington, W.
They have proved to be the best and have carried off every prize that has been given in all cases of Competition. The sale has now reached above 200 weekly. Above 8000 have been sold within the last four years.
The above machines are the most simple and easy to work, and less liable to get out of order than any other Lawn Mowers extant.
Illustrated Price Lists may be had of THOMAS GREEN, Smithfield Iron Works, Leeds; or W. GREEN, 2, Victoria Street, bottom of Holborn Hill, London, E.C.
Orders from unknown correspondents must be accompanied by a reference or remittance.

SAMUELSON'S SILENT, SELF-CLEANING, LAWN MOWERS
WITH MANWARING'S AND BOYD'S PATENT IMPROVEMENTS.

THESE STANDARD MACHINES ARE NOW CONSTRUCTED WITH A SIMPLE AND DURABLE SILENT DRIVING GEAR.

PRICES: Including Packing Case, and Carriage paid to any Railway Station in the Kingdom.

	Width	Boyd's & Manwaring's Patent.	Manwaring's silent gear only.
Manual Power.	12 inches wide	£5 0 0	£4 12 0
	16 "	6 15 0	6 7 0
	19 "	7 10 0	7 0 0
	22 "	8 0 0	7 10 0
Pony Power.	22 inches wide	£9 5 0	£8 15 0
	25 "	12 0 0	11 10 0
	30 "	14 14 0	14 0 0

From SHIRLEY HIBBERD, Esq., F.R.H.S., *Author of "Rustic Adornments," "The Town Garden," "Garden Favourites," &c., and the Editor of the "Floral World."*

"The Samuelson's Lawn Mower, with Boyd's Improvements, paid its cost in one season, in the saving of labour alone. Instead of the old bother of scythe sharpening, sweeping, rolling, and loitering, the Grass is mown now almost by looking at it, the turf improved by a regular and clean cut, and the operation one of enjoyment and healthy exercise. Instead of "making a toil of pleasure," one can now make a pleasure of toil, and gain time and strength that used to be wasted. I have a good collection of the best garden tools and implements, and I value the Lawn Mower above them all.
"SHIRLEY HIBBERD, F.R.H.S., Stoke Newington, London, W, March 18, 1861."

ORDERS Direct, or through Dealers, will be executed according to priority of receipt. May be obtained at the WORKS, BANBURY; at Mr. SAMUELSON'S Warehouses in Newcastle; Stockton; York; Shrewsbury; Bristol; and at Blackhall Place (near the Cattle Market), Dublin. Also of all Ironmongers and Seedsmen, and at

MR. SAMUELSON'S WAREHOUSE, 76, CANNON STREET WEST, LONDON.

Calceolaria Seed, ex. ex.

STEPHEN BROWN (late Bass & Brown) continues to supply Seed from the same first-rate private Grower as for years past, and which has annually given the most unqualified satisfaction. The flowers are splendid in colour, richly spotted, of excellent form, large, and of great variety. Packets, 2s. each; small packets, 1s.

CALCEOLARIA NANA GRANDIFLORA PRÆCOX.—Very fine continental variety, exceedingly dwarf, novel and beautiful, with a profusion of bright flowers of great variety. Packets, 2s. each.

PRIMULA FIMBRIATA.

FIMBRIATA KERMESINA SPLENDENS.—A velvet-like crimson, ex. fine, surpasses all others by its brilliant and bright colours, 2s. 6d. per packet.

FIMBRIATED.—Mixed rose and white, fine, 1s. per pkt.

FIMBRIATA STRIATA.—Superb new white, striped with red, very beautiful, 1s. per packet.

Also, separately named or mixed, very Choice Seeds of Geranium, Hollyhock, Carnation, Picotee, &c.; also Choice Mixed Pansy, Cineraria, Petunia, Polyanthus, Verbena, and other Choice Florist Flowers.

SEED CATALOGUES on application.

Stephen Brown, Seed Grower and Importer, Sudbury, Suffolk.

Extra Choice Seed.

JOHN DOBSON and SONS beg to recommend the following as very superior, being Home-saved:—

CALCEOLARIA.

Dobson's Superb Hybridised Calceolaria, 1s. 6d., 2s. 6d., 3s. 6d. and 5s. per packet.

CINERARIA.

Dobson's Superb Cineraria, 1s., 2s. 6d., and 5s.

Woodlands Nursery, Isleworth, W.

Choice Seeds.

DOBSON'S SUPERB HYBRIDISED CALCEOLARIA, saved from our unrivalled collection. Three thousand packets sold in 1860, and sent all over the world; in sealed packets, 1s. 6d., 2s. 6d., 3s. 6d., and 5s. each, with directions for sowing.

⁎ We are just now harvesting our new stock, which is even superior to any we have ever yet offered to the public, owing to the immense variety we have; and we are sparing no trouble or expense in its popularity continuing, as it has been, second to none. The plants from which the seed is being saved are now in bloom, and are well worthy a visit from lovers of this beautiful class of plants.

John Dobson & Sons, Seedsmen, Isleworth, W.

NEW ROSE.—MADAME STANDISH is the hardiest of all Roses; those which stood out of doors during the whole of the late severe winter not having lost a bud, whilst most others were destroyed by thousands. The growth is very rapid; the foliage magnificent; colour, a clear pale pink; petals smooth, round, and finely imbricated; the form cannot be excelled, and it is a thorough Perpetual, being, in fact, one of the finest Roses ever offered. Plants now ready, 10s. 6d. each. Madame Standish must not be mistaken for Mrs. Standish, which was sent out by Miellez, of Lille.

John Standish, The Royal Nursery, Bagshot.

Roses in Pots.—The best New and Old.

BENJAMIN R. CANT has a splendid stock of healthy Plants in pots (most of them on their own roots), of all the Leading Sorts, both New and Old. If planted now a season will be gained.

A LIST of Sorts with Prices (which are moderate) will be furnished on application.

B. R. C. will be prepared with a good supply of Standard and Dwarf Roses for autumn planting, early orders for which are solicited.

St. John's Street Nursery, Colchester

New Phloxes and Pentstemons.

DOWNIE, LAIRD, and LAING beg to offer their new Sets of Twelve of each of the above. Having been selected from many thousand Seedlings, they offer them with every assurance that they will give the same satisfaction as those hitherto sent out by them. Price 30s. per set. The usual discount to the Trade. CATALOGUES may be had free on application.

D., L. & L. have also a large Stock of BEDDING PLANTS, which they offer at 20s. per 100.

Stanstead Park Nursery, Forest Hill, S.E.; and at 17, South Frederick Street, Edinburgh.

Choice Seeds.

B. S. WILLIAMS begs to recommend the following as very superior, and which have annually given general satisfaction.

	Per packet—s. d.
Primula sinensis dentiflora	2 0
,, ,, ,, albiflora	2 0
,, ,, ,, finest mixed	2 0
Calceolaria, herbaceous, finest mixed	2 6
Cineraria cruenta. ,, ,, ...	2 6

SEED CATALOGUES on application.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway

New Phalænopsis with Variegated Foliage.

B. S. WILLIAMS has great pleasure in offering for the first time strong Plants of Phalænopsis Schilleriana, which have just arrived in the finest possible condition. This beautiful species is quite distinct from all others in cultivation; the leaves are similar in form and equal in size to those of P. grandiflora; ground colour dark green, with irregular bands of white over the whole surface. Flowers flesh-coloured; size, about two-thirds of those of P. amabilis, and produced in great profusion from strong branching stems, one of which may be seen at the Nursery, which has borne upwards of 100 flowers, a portion of which are still attached. Price can be had on application.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway.

RAYNBIRD, CALDECOTT, and BAWTREE, Seed Merchants and Growers, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E.C.

Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.

Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

The First Prize at Birmingham.

SUTTON'S IMPERIAL GREEN ROUND TURNIP.—At the Great Root Show, held in Birmingham in December last, the first Prize for White-fleshed Turnips was awarded to Sutton's Imperial Green Round, grown by George Mangles, Esq.

Sutton & Sons recommend this as one of the best Turnips for the main sowings, being large, well formed, very juicy, and if not sown before the middle of July will keep well till spring, when it is invaluable for the ewes and lambs.

Price of Seed very moderate according to quantity required.

Reading, June 29.

CLAPTON NURSERY, LONDON, N.E.

HUGH LOW & CO.

HAVE pleasure in submitting to the notice of admirers of Hardy Ornamental Trees the annexed LIST OF CONIFERS, which is COMPOSED ENTIRELY OF SPECIES WHICH HAVE WITHSTOOD UNINJURED THE SEVERITY OF THE PAST WINTER. Particular attention is invited to the Californian Conifers, such as Picea amabilis, grandis and nobilis, Cupressus Lawsoni, Thuja gigantea, Abies Williamsoni, and A. Douglasi. The seeds from which all these plants were raised were collected by the renowned traveller Mr. William Lobb, to whom belongs the credit of sending seeds of these fine Trees in such quantities as to enable H. L. & Co. to offer the plants at previously unheard of prices.

H. L. & Co. feel persuaded these low prices will induce gentlemen planting for effect to make large use of the finest and most ornamental Trees of the known world. Abies Williamsoni having been confounded with A. Mertensiana, H. L. & Co. append a description of the true species from the pen of Mr. W. Lobb.

Abies Williamsoni, synonymes Abies Pattoni, Abies Hookeriana, must not be confounded with Abies Mertensiana, as it sometimes has been, as Mertensiana is altogether a different plant, very closely resembling the Hemlock Spruce.

Remarks by Mr. William Lobb.

ABIES WILLIAMSONI, A. HOOKERIANA, OREGON COMMISSION.—This noble tree was first discovered by Dr. Newberry, on the Cascade Range in Oregon, in lat. 44° North. Some time after it was noticed by Murray on Scots Mountain in California, in lat. 41° 20 North, lon. 122° 37 West. Since then I saw it in great abundance on the highest peaks of the Sierra Nevada, near the head waters of the North Tributary of Feather River, also more southerly towards Lake Bigler, in lat. 39° 30 North, lon. 120° 15 West.

Of all the Coniferous trees that have been introduced from this country, this will doubtless prove the most ornamental and useful. In habit of growth and general appearance, it much resembles the Deodar, but being more thickly branched and more densely clothed with foliage, it is by far a more handsome tree. It occupies the most elevated parts of the Sierra Nevada, and seldom descends lower down than 100 yards from the line of perpetual snow. In most situations it forms a tree from 100 to 120 feet high, with a trunk sometimes 3 feet in diameter. The branches spread out horizontally with the main stem, drooping at the extremities. The leaves are thickly set round the stem, solitary and tufted, about two-thirds of an inch long, rich grass green above, pale green beneath, those at the points of the branchlets spreading silvery white below. The cones are about 2 inches long, and about an inch in diameter in the thickest part; when young, dark purple; when old, pale brown, with the scales much reflexed. The male flower or catkins are two eighths of an inch long, violet purple. The wood is of a reddish colour, close and fine grained, and remarkable for strength and durability. As an ornamental tree for parks and pleasure-grounds, or for general planting, no tree can be more recommendable, and judging from the soil and situation in which it grows, it may be considered the hardiest of the Californian trees.

	Each. s. d.	Dozen. s. d.	100 s. d.
Abies cephalonica, 2 years	..	8 0	50 0
,, cilicica, strong	5 0		
,, ,, 2 years	..	8 0	60 0
,, Douglasi, the fine tree which produced the flag-staff recently fixed in Kew Gardens, 6 inches	..	8 0	50 0
,, Douglasi, 9 to 10 inches	1 0	9 0	65 0
,, ,, 12 to 15 inches	1 6	12 0	
,, inverta, Weeping Spruce	21 0		
,, Menziesi, 1 year	..	..	15 0
,, ,, 2 years	..	4 0	30 0
,, ,, 9 inches	..	6 0	45 0
,, orientalis, strong	3 6	30 0	
,, Pinsapo (see Picea) 4 years	2 6	24 0	
,, ,, 1 year	..	3 0	21 0
,, pygmæa	3 6		
,, pyramidalis, stout .. .. 5s. to	7 6		
,, taxifolia (Mertensiana) 3 years ..	1 0	9 0	60 0
,, Williamsoni (Hookeriana, Pattoni) 1 year; not less than six plants can be sold, as the seedling plants are potted in store pots	3 6	30 0	240 0
Cedrus africanus, (Mount Atlas Cedar) 2 years	..	4 0	24 0
,, africanus, 6 to 8 inches	1 0	9 0	60 0
,, Deodara	..	18s.–90s.	
,, ,, robusta, 18 inches ..	3 6		
,, ,, viridis, 15 inches	3 6		
Cephalotaxus Fortuni fœmina	..	18s.–24s.	
,, ,, mascula	..	18s.–24s.	
Chamæcyparis thurifera	3 6		
Cryptomeria japonica, 2 years stores ..	..		10 6
,, ,, 9 in single pots ..	..	4 0	24 0
Cupressus ericoides (Retinospora)			
,, ,, 6 inches	..	9 0	63 0
,, ,, 9 inches	..	12 0	90 0
,, funebris	..	12 0	
,, Goveniana, 2 years	..	4 0	30 0
,, Lawsoni, 1 year	..	6 0	45 0
,, ,, 2 years	1 0	9 0	
,, ,, 1½ feet to 2 feet ..	5 0	54 0	
,, ,, 1 foot	3 0	30 0	
,, macrocarpa, 1 year	..	4 0	30 0
,, ,, 2 years	..	6 0	45 0
,, species California, apparently intermediate between Macrocarpa and Goveniana, 2 years	..	6 0	45 0
,, Nutkaensis (Thujopsis borealis)			
Juniperus Cracovia	1 6	12 0	
Libocedrus decurrens (Thuja gigantea) 1 year	2 6	27 0	150 0
,, 3 years	5 0	42 0	
Picea amabilis, true, 3 years, 6 inches, fine stout plants	5 0	42 0	300 0
,, grandis, true, 3 years, 7 inches, fine stout plants	5 0	42 0	300 0
25 will be charged at rate per 100, and when 100 of each kind are ordered, 10 plants will be added free of charge.			
Picea nobilis, true, 3 years	7 6	84 0	
,, ,, ,, 2 years	5 0	42 0	

	Each. s. d.	Dozen. s. d.	100 s. d.
Picea nobilis, 1 year, true	2 6	27 0	150 0
,, Nordmanniana, 2 years	..	42 0	300 0
,, ,, 3 years	5 0		
,, nova species, Vancouver's Island, foliage very dark green, strong plants 9 to 12 inches 10s. 6d. to	15 0		
,, pichta, 3 year	2 6		
Pinus Benthamiana, 1 foot	2 6	24 0	
,, contorta, 1 foot	3 6		
,, Cembra	..	9s.–18s.	
,, excelsa, 2 years	..	..	35 0
,, ,, stout	..	12 0	
,, Jeffreyi, 2 years	3 6		
,, Lambertiana, 2 years	2 6	25 0	200 0
,, macrocarpa, 1 year (Coulteri) ..	2 6	24 0	
,, ,, fine plants, 1½ feet ..	5 0		
,, monticola, 3 years	3 6		
,, ponderosa, 2 years	2 6	21 0	
,, Sabiniana, 1 year	2 6	24 0	
,, Taurica, 2 years	..	..	50 0
,, ,, 1 foot, stout	..	12 0	
,, tuberculata, 2 years	3 6	30 0	
Podocarpus Andina, 6 inches	..	36 0	
,, ,, 1 foot	5 0		
,, nubigena, 3 years	7 6		
Retinospora (Cupressus) ericoides	..		
Salisburia adiantifolia, 1 to 1½ feet	2 6		
Taxodium sempervirens, 9 to 12 inches ..	1 0	9 0	
,, distichum (Deciduous Cypress) 12 to 18 inches	..	9 0	
Taxus adpressa, 9 inches	1 6	12 0	
,, ,, 1 foot	2 6	18 0	
,, ,, 18 to 20 inches	5 0		
,, baccata, gold striped	2 6		
,, Dovastoni (the Weeping Yew), 12 inches	..	18 0	
,, elegantissima, 4 to 6 inches	..	12 0	
,, ,, 6 to 9 inches	..	18 0	
,, ,, 9 to 12 inches	..	24 0	
,, ericoides, (very distinct) 6 inches ..	3 0	30 0	
,, fastigiata (Irish Yew) 1 to 1½ feet	..	..	30 0
,, ,, 1½ to 2 feet	..	..	42 0
,, ,, 4 feet	..	24 0	
,, ,, 5 feet	..	30 0	
,, Makoyi (coriaceus) 6 to 9 inches ..	2 6	24 0	
,, ,, 1 to 1½ feet	..	42 0	
Thuja aurea, 9 to 12 inches	2 6	24 0	
,, filiformis (Biota pendula)	2 6		
,, gigantea (Libocedrus decurrens) 1 yr.	2 6	27 0	150 0
,, ,, ,, ,, 3 yrs.	5 0	42 0	
,, Lobbi (Menziesi), 2 years	1 0	10 0	75 0
,, ,, 20 inches fine, from seed ..	7 6	90 0	
,, ,, 24 to 30 inches	10 6	120 0	
Thujopsis borealis, 9 inches	..	18 0	
,, ,, 1 foot	..	24 0	
,, ,, 1½ to 2 feet	..	42 0	
Torreya grandis	10 6		
Wellingtonia gigantea, 1 year	2 6	27 0	240 0

With two or three exceptions the whole of these plants are in pots and can be thus safely removed at any time.

A Complete CATALOGUE of the very extensive Collection of PLANTS and TREES grown at the Clapton Nursery will shortly be ready for distribution.

The Gardeners' Chronicle.

SATURDAY, JUNE 29, 1861.

MEETINGS FOR THE ENSUING WEEK.

Wednesday, July	3—Royal Botanic	2 P.M.
Saturday, —	6—Crystal Palace (Rose Show)....	Noon

On Monday last the final and crowning ceremony of inaugurating the Garden of the Royal Horticultural Society took place at South Kensington, when the Queen planted a tree there as a companion to that planted by Prince Albert on the 5th inst. Precisely at 10 o'clock in the morning Her Majesty, accompanied by their Royal Highnesses the Prince Consort, the Princess Helena and the Comte de Flandres, arrived at the Garden, where the Queen was received by the Earl of Ducie, the Lord Bishop of Winchester and other members of the Council.

The spot chosen for the tree was exactly opposite that selected on the last occasion, but on the other or western side of the Garden. Upon reaching the ground another beautiful Wellingtonia, also provided by Messrs. Veitch & Son, was found to be the subject of the interesting proceeding. A spade having been presented to the Queen, Her Majesty threw several good shovelfuls of earth upon the roots, after which the Queen, with a most gracious smile, delivered the spade to Mr. James Veitch, Jun. Mr. Dilke having briefly returned thanks to Her Majesty in the name of the Council, the Queen passed into the Conservatory, where the Countess of Ducie had the honour to present her son Lord Moreton, a little gentleman four years old, and we believe the youngest Fellow of the Society under the rank of Royalty.

The Queen being still in deep mourning, Her

MAJESTY'S visit was necessarily private, so that very few persons could be present on the occasion.

—— WITH a view to encourage the attempts now making to cultivate a taste for MUSIC among the people, the Royal Horticultural Society has authorised the appearance TO-DAY in the Garden at South Kensington of the Amateur Bands that have been formed in the Metropolitan Police Force. This is of course with the sanction of Sir RICHARD MAYNE. We understand that the men have acquired their knowledge of music entirely at their own expense, and by practice during the hours when they can be spared from the regular tours of duty. As the Bands have not been long formed, and this will be their first appearance in public, due allowance will doubtless be made for any little defects which critical ears may discover. The experiment of thus introducing popular music is a highly interesting one, and we doubt not will be appreciated. It is announced that the Bands will play from 4 to 7 o'clock P.M.

SEVERAL species of Conifers are subject to a disease strongly resembling in some of its characteristics the gumming of Peaches and Apricots. The bark first becomes diseased, the secreting surface is affected, and no new wood is formed beneath the diseased bark. This indeed soon shells off, and resin is copiously discharged from the exposed surface. An attempt is made by the surrounding active bark to heal the wound, but the attempt is generally abortive, and the trunk is in consequence covered with unsightly cankerous scars, while the timber is irreparably injured.

In one case which came before us some years ago, the evil was clearly traced to the trees being planted above an impervious stratum of conglomerate. In a second case, forwarded to us from the North of England by Sir W. C. TREVELYAN, in 1859, and noticed twice in our Journal for that year, the disease was confined to the dampest parts of an old stone pit, and the decay was complicated by the presence of a little Peziza (P. calycina), the spawn of which penetrated the wood in every direction. In this case it was clear that the affection had commenced before the new growth, as no wood had been deposited beneath the diseased bark.

A case not altogether dissimilar, but apparently in an earlier stage than the last, has just been forwarded to us from Dorsetshire, where it has made its appearance most unexpectedly and extensively in a flourishing plantation of Scotch Fir of 12 years' growth on the chalk downs.

The truncheon before us, which is nearly a yard in length, exhibits at the healthy base five perfect rings and four above, besides a narrow imperfect ring which has acquired scarcely a fourth of its proper thickness. When a section is made through the diseased parts, it appears that about half the wood of 1860 was formed before the commencement of the disease, and, as in the second case mentioned above, new wood has been formed around the denuded patches, which is more or less affected by the diseased portions, up to the time when the truncheon was cut. The disease has not made quite so much progress as in that just mentioned, and in consequence the scars, and more especially their edges, are at present not so rough; but there is little doubt that they will never be fairly covered with new bark, supposing the disease to have originated in conditions of temperature and moisture which have now passed away, so as to form clean healthy looking stems such as the trees exhibited before they were attacked.

Taking the case in connection with that of Sir W. C. TREVELYAN, which clearly arose from damp and cold, and considering that so far as our specimen teaches us, it arose during the cold, wet, dark summer of 1860, we have little doubt that it originated from the peculiar climatic conditions of last year. Unhappily where gum and resin aggravate a wound, there is in general little chance of its being fairly covered, as is often the case with wounds in Pears and other trees when suffering from external causes. The experience of another season will show whether there is any prospect of recovery; if not, the sooner the faulty trees are removed the better.

The surface of the old denuded wood is now covered with a thin coat of extremely minute irregular brown matted threads, which are studded with minute black bodies filled with myriads of globose colourless spores. These probably are a peculiar condition of some Lichen, and have no necessary connection with the disease.

It will however be worthy of inquiry as the autumn advances whether the trees, like those of Sir W. C. TREVELYAN, produce a crop of the pretty scarlet and white Peziza which especially attracted his attention. If so, our Correspondent would probably favour us with specimens. *M. J. B.*

—— WE learn by advices from India that the foolish CINCHONA SCHEME of Mr. MARKHAM has definitively failed, all his plants and cuttings having died. It is, however, consolatory to know that two Calisaya plants taken by Dr. ANDERSON to Ceylon are doing well under the care of Mr. THWAITES, who has already propagated them, and that seed collected by Mr. SPRUCE in Peru and sent to India by Sir WM. HOOKER is growing freely at Calcutta, many of the seedlings having three pairs of leaves already. As soon as the rains set in more seeds will be sown; and thus by the exercise of a little knowledge our great Indian possessions will have obtained for a few guineas what ignorant zeal has been most strangely permitted to waste thousands in not obtaining.

—— The lovers of WILD NATURE will be glad to learn that Messrs. LONGMANS are about to bring out an edition of the admirable *Vegetations-Ansichten* of KITTLITZ, representing in 24 exquisite plates the Vegetation of the Coasts, &c., of the Pacific Ocean, as sketched by him during the exploring voyage of the Russian corvette "Senjawin," under the command of Admiral (then Captain) LÜTKE, in the years 1827—29.

The original plates will be copied on a reduced size in photography. The letterpress will be translated by Dr. SEEMANN, whose familiarity with exotic vegetation renders him peculiarly qualified for the task. The work is to appear in the middle of July, when we shall fully notice it.

—— If you want to have BIG PEARS or other fruit just work on the stalk that bears them the point of an adjoining shoot; then you shall see what you will see. So says a French amateur, enthusiastic in the fruit line. If you want big Gourds just bore a little gimlet hole in their rind when the fruit is a few weeks old, and push in a long piece of cotton wick with the loose end in a pan of water. The cotton will suck up the water, the Gourd will suck the cotton, and by the time your fruit is ripe you will have the hugest Pumpkin that was ever seen—a Pumpkin, we suppose, such as was made into CINDERELLA'S carriage. So says some gentleman, called by an architect at Ghent by the harmonious name of a Cucurbitomaniac.

OZONE.

BESIDES the gases oxygen and hydrogen, the two main constituents of our atmosphere, there are other chemical bodies present which in a greater or less degree, according to their greater or less activity and amount, exercise a certain influence on the health and wellbeing of both human and vegetable life.

Ozone was the name given by Dr. Schönbein, of Bâle, in 1843, to an element which he detected in small proportion in the air; an element which, as scientific investigation has since shown, plays a very important and beneficial part in the economy of nature.

Ozone is, probably, always present in the atmosphere, though in a state of comparative inactivity, or else is only in such minute quantity as to sometimes defy detection by our ordinary tests. Some chemists believe ozone to be merely common oxygen under a different chemical condition to that which it usually exists in; however this may be, and there seems very good grounds for thinking their opinion correct upon the matter, its functions are important in the extreme. It was at first thought that the presence of ozone could only be detected by the sense of smell; hence the name given to it by its discoverer (ὄζω, I smell). But it was found to possess another characteristic, viz., its oxidising property; and a test by which its presence and amount could be determined was immediately contrived.

By preparing strips of paper with a solution of starch and iodide of potassium, the ozonometer, or ozone detector, is made. If we expose these prepared slips of paper to the free action of the atmosphere, protected from rain and the direct rays of the sun, the presence of ozone, if in sufficient quantity, will be indicated by the discoloration of the paper; the darker or lighter shades of colour showing the greater or less degree of activity of the ozone. One of the most useful purposes it serves is in oxidising and so destroying the noxious vapours which from many causes rise sometimes into the atmosphere and prove so prejudicial to our health. Its office seems to be to eat up, as it were, the poisonous exhalations from the dank marsh or crowded town; and thus to act the part of an atmospheric scavenger, unseen yet ever active. It also helps in a great measure to provide the food for plants by oxidising the various compounds in the ground on which the fertility of the soil so greatly depends. Ozone is found to be present in the greatest quantities on the tops of mountains and high lands, by the sea side, and after storms have cleared the air. The circumstances which seem most favourable to the development of ozone are a south, south-west, or west wind, and an atmosphere saturated with moisture; on the other hand an easterly or north-east wind always conduces to lessen the amount of ozone, especially if the air be in rapid motion.

It is found in least quantity—frequently the amount is so small that science is unable to detect its presence at all—in low and marshy lands, in the centre of large continents, and in towns. The reason of this is to be ascribed to the fact that in such places the discharge of sulphuretted hydrogen gas from decaying animal and vegetable matter is much greater than in other localities, and consequently all the ozone in the air has been used up in its character of oxidiser, thereby destroying itself; and thus is no longer capable of manifesting its presence by discoloring the strips of test paper.

During the cholera epidemic of 1854, when meteorological investigations were made on an extensive scale in and about the metropolis by order of the Board of Health, Mr. Glaisher observed that the amount of ozone at the stations of low elevation was very insignificant; and that at most of the densely crowded thoroughfares and in the neighbourhood of the river none was shown throughout the cholera period. On the other hand, at the higher elevations and those more removed from the heart of the city, ozone was constantly indicated; and at other and intermediate stations it was occasionally shown.

Every practical gardener and agriculturist knows the invigorating influence on his plants and trees of the first hours of the day, when the sun first shoots his horizontal beams above the horizon, dispelling the vapours of the night with his genial rays. But it is not generally known that these beneficial results and intense vitality are in a great measure owing to the presence of highly active ozone. It would seem that there is a peculiar chemical action set up by these first early beams of the sun in passing through the atmosphere; calling into vigorous being, as it were, by a touch of his golden beams, certain conditions of oxygen not always existing in such force and quantity, producing that element which, for the want of a better name, we call ozone.

Not only to the vegetable kingdom is ozone good and useful, but to animal life also its beneficial influences spread. Any one who is in the habit of being out in the air shortly after sunrise cannot fail to have noticed the exhilarating effect produced upon the nerves, and the pleasurable sensations which seem to flood the early riser as he inhales the sweetness of the "incense breathing morn;" the same phenomena are felt after a thunder storm has cleared the air. These grateful effects are probably due to our taking into the lungs at that time a larger admixture of ozone than at other periods of the day: there its tendency is to destroy any refuse matter it may meet with; cleansing the tissues of any foreign and injurious deposits. It has long been proverbial that early rising is highly conducive to the beauty of the complexion, and experience has shown the truth of the general belief. This probably is also due to the air when in a high chemical condition (in other words highly impregnated with ozone) being allowed free play on the cuticle, thus clearing and rendering healthy the functions of the skin.

We have much to thank this valuable and kindly agent of nature for, though but little, comparatively speaking, is as yet ascertained respecting its exact nature. It is a well known fact that some plants thrive particularly well by the sea side. The Potato is a familiar example. May not this be accounted for from the circumstance of ozone being more active in such situations than at more inland spots?

In the county of Dorsetshire it is a common prejudice to think vegetables brought from the coast, about Portland, superior to all others; and there is undoubtedly satisfactory grounds for this preference. Now, there is no difference, either in soil or cultivation, between those grown on the coast and those from the more inland gardens to account for the decided superiority of the former over the latter. Hence we are compelled to look to other influences; and ozone immediately suggests itself to the impartial observer as the chief cause of this difference. During nearly the whole of the year ozone is indicated in large amounts on this part of the south coast. *C.*

THE TRUE GORILLA.

HAVING laid the phantom-ape of Mr. Du Chaillu, I would fain present to the readers of the *Gardeners' Chronicle* an orthodox account of the real one. The Gorilla then, alias the black ape of Western Africa, is an ape in every point of view; differing in colour from the Orang Outang of Borneo. Like its congeners, it is produced in the trees of the forest, and it lives and dies in them. Being an animal with *non*-retractile claws or nails to its feet, it defends itself by means of the mouth alone: and cruel is its bite.

The Orang Outang of the east, and the Gorilla of the west, are the largest apes hitherto discovered. But, if what we read in the Asiatic Researches be correct, the ape of Sumatra is the largest.

The arms of the Gorilla are beautifully proportioned to their uses. In the giant trees of Africa's interminable forests, these arms enable the Gorilla to transport its huge body from branch to branch with wonderful ease and safety; on the ground they would be an incumbrance to it. But in the trees they are its mainspring, and when put in motion the speed of the ape is most

astonishing. See my account of the monkey family in the third volume of "Series of Natural History." Now that the power of steam enables us to travel far and near, the time has arrived when Africa's hitherto unknown solitudes are open to our adventurers.

If he who journies thither in quest of genuine zoology does not find the Gorilla or black ape of Western Africa exactly what I have described it to be, I shall be quite ready to confess that I have hitherto been under a delusion with regard to the nature and habits of the monkey family. *Charles Waterton, Walton Hall, June 24.*

MYCOLOGY, No. LIV.

Agaricus rachodes, *Vitt.* The subgenus *Lepiota* (so named from λεπις, a scale) is technically distinguished from *Amanita*, with which it agrees in its stem being distinct from the part which bears the fructifying surface, by the universal veil being concrete with the cuticle and breaking up with it into scales, or more rarely into warts, whereas in *Amanita* the cuticle, though often closely adhering to the volva, is always really distinct, and is apparent in its integrity between the warts. The gills are quite or nearly free, in which circumstance they differ from those of the following subgenus *Armillaria.*

The species are divisible into two primary sections, the first of which has a dry, the second a viscid pileus. Of the second division we have but a single British species, *A. gliodermus.* The first section, of which we have many British representatives, forms four distinct groups, each of which contains well known and generally diffused species. The first group is characterised by the whole Fungus when young being inclosed in a distinct volva, which separates horizontally at the margin so as to leave a bulb-like base to the stem. The stem in consequence is not permanently coated by the veil, and the ring, which is more or less moveable, is distinct from the volva. It is moreover in general deeply sunk above into the substance of the pileus. To this division belongs our present subject, together with the well known *A. procerus* and several closely allied species.*

In the second division the ring is fixed, and confluent with the veil, or coated with it, and the stem being more distinct from the beginning is similarly covered, or as the botanical phrase is, peronate or hosed. It does not, as in the first section, penetrate the substance of the pileus. The ermine-headed *A. cristatus*, so common in gardens, belongs to this division.

In the third division, which comprises *A. cepæstipes*, No. II., the universal veil is distinct from the stem, the ring is more or less persistent, and the stem distinct from the beginning.

In the fourth division, of which *A. granulosus*, remarkable for its various colours and mealy pileus, is the type, the ring is continuous with the cuticle, and the universal veil not distinguishable from it. The stem and pileus are separate from the first.

A. rachodes is distinguished from *A. procerus*, with which it is often confounded, by the pileus being more globose when young, by the generally distinctly marginate bulb, and the stem being free or nearly free from the spots which give *A. procerus* a snake-like appearance. The flesh moreover becomes red when bruised in fresh specimens, but not when the Fungus has lost its moisture. It is not uncommon in this country in grassy plots under trees, and is one of the species which make their appearance occasionally in hot beds or in the Mushroom house.

Authorities differ much as to its qualities. Some pronounce it unpleasant in taste and odour, and unfit for food if not absolutely poisonous, while others, and amongst them Mrs. Hussey, than whom there is no better authority, pronounce it excellent when eaten in substance. It affords, even when partially dried by the air and sun, an excellent though scanty ketchup, and like some forms of *Agaricus arvensis* should be gathered when just arrived at perfection to exhibit its best qualities. Both it and *A. procerus* are sold indiscriminately in Covent Garden for ketchup, and bear a good price in consequence of their admitted excellence. *A. rachodes*, however, is preferred as yielding more abundant juice. Mrs. Hussey informs us that they should not be treated as the common Mushroom and its allies, by simply sprinkling them with dry salt, but that they should be chopped up and placed in a proper quantity of brine. Such ketchup must of course be used in moderation, and should never be boiled. *M. J. B.*

* Our figure however represents a form in which the bulb is immarginate. A figure of the young state of the ordinary form will be found at page 910 of our volume for 1860.

Agaricus rachodes, *Vitt.* From an original sketch.

NOTES MADE DURING A GOVERNMENT EXPEDITION TO THE VITI OR FIJI ISLANDS.

By Berthold Seemann, Ph.D., F.L.S.

Mr. W. T. Pritchard, H. M. Consul in Fiji, son of the British representative at Tahiti, when the well known differences arose between the French and Queen Pomare, came to England in 1859 in order to communicate to her Majesty's Government that Cakobau, King of Viti or Fiji, had ceded the whole group over which his sway extended, a country about as large as Wales, to the Queen of Great Britain. When, soon after, Mr. Pritchard returned to his post, with intimation that the Government had taken the cession into consideration, the King and chiefs in council acknowledged, ratified, and renewed the cession, and made the Government and jurisdiction over to the Consul, so that the country actually is an integral part of the British dominions. The Fijians cannot draw back, but the English Government has still the option to reject their offer, if the newly acquired territory should prove a less acceptable acquisition than it has been represented to be. In order to obtain more ample information than had come to hand, it was determined to despatch a commission to inquire into the political, social, and physical condition of the country; and in the beginning of 1860, Col. Smythe, R.A., and myself, had the honour to be selected for this task by the Colonial Office. Specimens of Cotton, which had been brought home by Mr. Pritchard, gathered from shrubs naturalised in Fiji, had been sent to Manchester, and drawn the attention of the Cotton Supply Association to that group, as a possible source of future supplies; and we were instructed to gather all the facts which could throw light upon the subject. Our object having been attained, I returned to England on the 10th of March last, and now beg to offer such a selection from my notes as may prove interesting to the readers of the *Gardeners' Chronicle.*

I left Southampton on the 12th of February, 1860, for Sydney, in one of the Peninsular and Oriental Company's steamers, and after a passage of four days reached Gibraltar. The public promenade, or Alameda as it is termed, though no avenue at all, but a regular garden, is worth visiting, when coming from Northern Europe. All is so different. Fine trees of Schinus Molle, with their elegant foliage, dwarf Fan Palms, and Date trees meet the eye, intermingled with Poplars and Furze, to remind you that you are still in Europe. The beds, instead of being edged with Box, are surrounded with low Aloes. The American Agave seems too quite at home, and scarlet Geraniums stand the winter without injury. They had, however, suffered slightly from the night frosts of late, which my Spanish cicerone assured me was rather an uncommon occurrence.

Another four days brought us to Malta, a bleak looking island, for which man has done so much and nature so little. From the high ramparts of Valetta the eye, passing over the fortifications and harbours, surveys nothing save stones and the dark dull foliage of a few Olive trees and Date Palms. The ground in Valetta being valuable, there are no gardens attached to the houses; only the courts of some of the public buildings are planted with Orange trees (imported from Sicily), Eriobotrya japonica, Tecoma capensis, and different Araucarias. The principal tree here, as at Gibraltar, seems to be Schinus Molle, an old acquaintance of mine, met with in the highlands of Mexico, South America, the Cape of Good Hope, and all parts of the globe where water is scarce and the thermometer high. Like the camel, it can consume a great deal of water when it has an opportunity, but go without it when no chance offers of procuring any. Outside the gates of Valetta are the Floral Gardens, an institution established by the old Knights of Malta, enclosed by high walls, and adorned with one or two grottoes. The walks are straight and well kept. But having said so much I have said all. A collection of large curious flower pots, looking as if they had seen many generations, contained only common garden plants, many of which seemed to long for a more genial climate. Even the few things that will grow are covered with dust, there being so little rain, and the principal labour of the "Court" gardeners seems to be washing their nurselings. Notwithstanding dust and siroccos, a great many cut flowers are offered for sale, and magnificent bouquets were sent on board the steamer, consisting of Violets, Roses, Geranium-leaves, Pulsatillas, Jonquils, and others. Curiosity was deeply excited by some flowers which none of our passengers had ever before observed; even I was at first puzzled, but on looking closer found them to be white and red Radishes, ingeniously cut, so as to resemble Camellias and other flowers, a harmless trick, recommending itself to the notice of gardeners during the winter season. Often these common things introduced with taste are very effective; I remember very well seeing a wreath in which the shells of a few garden snails had been distributed with great advantage.

On the 24th I found myself at Alexandria. The land around the town is low. Regular forests of Date trees, a number of windmills with six wings, seeming to crawl like so many great spiders over the hills, and the so-called Pompey's Pillar, are the objects which first strike you. A ride through the town and its outskirts initiated me into all the often-described mysteries of the place, and the next morning the railway took me to Cairo, the capital of Egypt, where I had to stop at Shepherd's Hotel until the arrival of the steamer at Suez. There is a fine large square in front of the hotel, full of shady trees, amongst which Acacia Lebbek and Nilotica, Tamarix orientalis, and Sycamores are conspicuous. The square itself is well kept and full of Roses, Oleanders, Acacia Farnesiana, and other sweet-scented flowers; the walks are well watered, and in the afternoon a band of music plays, and the *beau monde* of Cairo takes its promenade. I endeavoured to get a glimpse at the viceregal gardens,

but the ladies of the harem happening to walk there, admission was out of the question.

On the 26th of February I paid a visit to the pyramids of Gizeh. It was still quite dark when I left Cairo, mounted on a large Egyptian donkey; and, passing through the interminable suburbs, crossed the Nile at Rhoda Island—donkey, boy, and myself all going over in the same boat. It was now daylight: the sun was gilding the distant pyramids, rising behind a forest of Date trees. The village of Gizeh, on the other side of the river, was all bustle, and the market presented an animated scene. Dates seemed to be the chief article; but I only saw a few fruits of the Gingerbread tree, and never got even a glimpse of the plant itself during my stay in Egypt. All the Carrots offered for sale were of a purplish colour; there were also the unexpanded flowers of the Date. The donkey pushing its way through the dirty crowd, I was soon in a fine avenue of Tamarisks and Acacias, straggling Opuntias crowding the sides, and ere long entered a plantation of Date trees of considerable extent. A grove or forest of Palms has always something overawing, and I can well understand how this feeling could find vent in all that is noble in architecture; for the old Egyptians merely imitated a grove of Palms in building a temple. That at Edfoo, as may be seen in the published prints, shows whole rows of columns, the capitals of which are close imitations of the crowns of Date Palms. Architects have expended a deal of ingenious speculation on the peculiar swelling observable in some of the Egyptian columns, of which the Date Palm could not have been the prototype, as its trunk is uniformly cylindrical. Can any one doubt, after reading Dr. Barth's work on Central Africa, that the ventricose trunks of the Deleb Palm (Borassus æthiopum, Mart.), so common in districts bordering on Egypt, have supplied the idea? The Greek, never too proud to steal, but ever too proud to acknowledge what he learnt from the barbarians, substituted as capitals of columns, the leaves of the Acanthus for that of the Date Palm, but in Gothic architecture the Palm again displayed itself in greater purity. In our oldest Cathedrals I can well trace the type of Phœnix dactylifera, the pointed arch being the meeting of two fronds, but must declare my utter inability to discern in them any resemblance to our northern Beech woods, from which the idea is said to have been taken.

The country about here is perhaps the most typical of all Egypt. At the background, in a sandy desert, three great pyramids are towering into the bright unclouded sky, swarthy Bedouins with flowing robes, strings of camels loaded with green fodder and fibres of the Date tree, groves of Palms, small villages with flat roofed houses, all tend to make up a picture with which the mind has been familiar from childhood. On approaching the pyramids the alluvial soil, and with it cultivation of Wheat, ceases; but that of blue Lupines had been carried successfully into the very heart of the desert, reminding one of the flourishing crops of the same kind of plants seen in the sandy plains of Northern Germany, where formerly nothing was supposed to grow, save Birches, Pinus sylvestris, and Buck Wheat. However, I had not much time to speculate on the possibility of turning the desert to account, being now close to the pyramid and the Sphynx, on whose face the paint of a thousand years' standing was still visible. No sooner had the Bedouins caught sight of me than they made a regular rush for their new victim, and ere 20 minutes were over I found myself on the pinnacle of Cheops. Three of these children of the desert dragged me up, in spite of all remonstrance; they would not hear of my feeling giddy, or longing to take breath after climbing a certain number of steps, some of which were 4 feet in height; they let me have no rest until I was at the top, where certainly a grand panorama presented itself; the valley of the Nile, so highly cultivated and thickly peopled, forming a striking contrast with the arid desert so closely adjoining it.

Leaving Cairo at 10 o'clock in the morning, I reached Suez at 2 P.M. on the same day. There is not a single tree visible after you leave the Egyptian capital, only here and there a few low bushes; but there were none of them near the different stations where the railway stopped to gratify my curiosity. I found a number of Helix desertorum, a shell which has been known to live for years without food, which I can fully believe, since there was not a blade of Grass for miles around where I picked it up. The prospect does not improve on nearing Suez. There is nothing of cultivation; but if M. Lesseps is to render his canal across the Isthmus permanently available, horticulture will be called upon to do what it has done for the barren Island of Ascension—literally change a desert into a garden. The difficulties of making the canal are probably not so formidable that engineering skill could not overcome them. If plenty of capital be forthcoming the canal will be dug. The far greater difficulty would be to keep the channel free from sand. You cannot pave miles of country on both sides of its banks, but must keep down the sand by planting it with such trees, shrubs, and herbs as will grow under the existing unfavourable circumstances. No little skill would be required to accomplish this task, and at first it looks utterly impossible. A few years ago, when the different Governments took the French scheme into consideration, that of Austria appointed a committee, of which, fortunately, several men familiar with African deserts were members. Dr. Kotschy then recommended that cultivation should commence at the different wells and oases, that by improving and extending the vegetation of these places moisture would be attracted, and the necessary protection for the canal gradually be formed. Of course this could only be accomplished by the untiring labours of years, but that it can be done the Island of Ascension demonstrates. Indeed it numbers amongst the greatest triumphs of man that, by destroying the woods he should be able to reduce the amount of rain and to guarantee sunshine to places formerly drenched by continued showers, and by planting groves cause moisture, rain, and fertility, where formerly all was drought and sterility.

(To be continued.)

Home Correspondence.

Poisonous Leguminous Plants of Swan River.—Another of these pests of the pastures of South-West Australia was brought to me the other day by J. T. Cook, Esq., of Perth, which proved to be the Gastrolobium Callistachys, Meisner, a plant not hitherto known to be poisonous. This gentleman informs me that it is only late in the year that the sheep are poisoned, whence I infer that, as with other Leguminous plants, the seeds alone may be deleterious; in the meantime specimens of this species have been given by Mr. Cook to Dr. Hofmann for chemical analysis, and the result will no doubt be important to settlers and to science. The other poisonous Swan River Gastrolobia are G. bilobum, Br., identified by Dr. Harvey, and G. oxylobioides, Benth., and spinosum, Benth., identified by Drummond. There are also other genera of the same section of Leguminosæ containing poisonous species. *J. D. Hooker.*

Changeableness of Florets.—Your notice and figures of new Japanese Chrysanthemums induce me to draw the attention of your readers to the frequency with which florets similar to those of the "Dragon Chrysanthemum" may be met with among semi-double flowers not only in this genus but in several others of the same family. I have numerous sketches of such florets exhibiting every intermediate stage between true tubular florets and those that are two-lipped or strap-shaped, some of these transgressing in a very inconvenient manner the limits assigned to the genus or even to the sub-order to which they belong. So common indeed are such changes that I should have deemed it unnecessary to trespass on your time and space were it not that the example set by the Japanese ought not to be lost upon our cultivators, especially when Nature so often shows the way to form veritable Dragons. *Maxwell T. Masters.*

Preservation of Manure and Prevention of Offensive Smells.—I have recently had an opportunity, at Dorchester, of inspecting a species of manure prepared on a plan which has been advocated by the Rev. H. Moule in a pamphlet entitled "National Health and Wealth." * What I saw was a substance looking exactly like earth mould, closely packed in a small wooden box, and so entirely free from any sort of offensive odour, that small portions may be taken from the box and sent by post for inspection or analysis. A couple of such boxes stood on the window-ledge of the experimenter's study, and appeared as if they were the intended receptacles of some delicate flower seedlings. What was my astonishment on being told that four-fifths of the matter contained in each box consisted entirely of excreta, and that the remaining fifth alone was earth mould. The original portion of earth had been five times employed in the patent receptacle invented by Mr. Moule, and had thus become converted into a manure of the highest value without any kind of inconvenience, and without any sort of offensive odour inherent in the resulting substance. I must refer to the pamphlet named above for an account of the process; your readers will there find a clear and short explanation of the whole affair. For my own part, when I look at the vast sums expended in some of our country towns on a laborious and often ill-conducted system of water drainage, and then add the very large sum annually given in this country alone for artificial manures, I cannot but look to this simple process as one which might chance to effect a revolution very much to the profit of the whole nation. *E. H. S., Blandford St. Mary's, near Blandford.*

Peculiar Atmospheric Odours.—Under this head a Correspondent in your impression of last week inquires if any satisfactory explanation can be given for such a phenomenon (lately observed by him). Dr. Schönbein, of Bâle, was the first to notice this peculiar odour during the action of a very strong electric machine, and during the decomposition of water by a galvanic battery. The same effect is produced naturally by the decomposing action of the atmospheric electricity, particularly under certain conditions, on some of the chemical constituents of our gaseous envelope: the element thus created is called by meteorologists Ozone; and has separate and important functions of its own to perform in the economy of Nature. It is not always to be detected by the smell unless present in large quantities and under the very favourable circumstances observed by your Correspondent; science has certain other means of detecting its presence at all times. *Henry C. Criswick.* [See an article on Ozone in another column.]

Geranium Sports.—Your Correspondent R. P. (see p. 578) asks if a lilac sport on Rollisson's Unique is uncommon. I think not, as I have frequently had the same sport appear on it when grown strongly in pots under glass, some branches producing all lilac flowers, while others had some lilac ones and some crimson. Half the truss has also come crimson and the other half lilac as mentioned by R. P. *W. Heale, Westerham, Kent.*

Taxus adpressa.—Dr. Hooker's remarks on Thuja pendula brought to my remembrance that Taxus adpressa is not a Japanese plant, at least it was not imported from that country. I think you will find that it originated some years ago in the nurseries of Messrs. Francis & James Dickson, at Upton, near Chester, and was found by accident in a large piece of seedling Quicks; the original plant was in the nursery at Upton some few years since. The late Mr. Knight, of the Exotic Nursery, Chelsea, purchased a plant of Messrs. Dickson, and it was disseminated from the King's Road Nursery. As Mr. Francis Dickson did not send it out for some years after that, not having sufficient stock, it was first named T. brevifolia. This I learned from Mr. F. Dickson, with whom I lived four years as foreman. Gordon states that it was found on mountains in Japan, and I think it has been generally understood that that was its origin. *William Heale, Westerham, Kent.*

Lilium giganteum.—I send a photograph of our plant of Lilium giganteum which grew here last year in the open air and was greatly admired by all who saw it. We are about 12 miles S.W. of Lowestoft, the most easterly point of England. The plant is sprouting again, but will not, I think, blossom this year. I should mention that it was planted out finally in the autumn of 1858, and there it has remained undisturbed ever since. It has, however, been protected during winter by having a bee-hive placed over it, filled in the inside with cut hay, and over that was put a hand-glass to throw off the wet; then in 1860 it produced a fine spike, surmounted by 13 very fine blossoms, equal to what have been produced under glass. *R. G.* [The photograph represents a very fine specimen of this plant, nearly 12 feet high, with 13 flowers expanded at its summit, growing in the angle of a high-walled garden. It is the finest we have seen; and the ingenious method of saving it from cold in winter conveys useful advice to those who have other tender roots to shelter. In the country old used-up beehives can be easily had.]

Rearing Death's-head Moths and Dragon Flies.—For some years I have succeeded very well in rearing different kinds of Sphinx moths, especially the Death's-head, by placing the caterpillars as soon as caught under a common wire dish cover (such as is used to protect meat from flies), on a moderately soft garden border, with sprays of the leaves that may be required set in the ground beneath it, the soil being well turned up against the edges of the cover to prevent the escape of the caterpillars. The fresh air appears to agree with them much better than the method so often practised of keeping them in a room, and their food is easily replaced without disturbance, whilst the fresh soil beneath is ready to afford them an undisturbed bed till their rising time the following year, when the waiting dish cover is ready to receive them and keep them safely for their owner. A modification of the same plan answers well with dragon flies. If a number of the grubs, nearly arrived at maturity, are placed in a small tub with pond water, and a few rough stones and weeds to cling amongst, and the dish cover or a piece of net strained smoothly and tightly over sticks, the perfect insects and their cast coats will soon be found hanging to the net-work, and the collector saved much labour and possibly gratified with the curious sight of their change. *E. O.*

Earth Heating.—In your Paper of late there has been several articles on earth-heating, a subject I have thought much on for many years, and one idea I always entertained was that early vegetables might be obtained by that means, and at no very great expense. At present I do not mean to enter on the subject as to how earth-heat may be applied, but merely to state the result of a trial made on heated ground this spring. A short time before Christmas last I engaged to make out a new place in South Yorkshire. The situation is a very exposed one, and has a very uneven surface; about half an acre of it has coal underneath, which has been on fire for many years, consequently the surface is warm, and some parts very hot, and is very likely to continue so for years to come. Having got a corner levelled, by way of trial, Potatoes were planted on the 15th January, and were ready for use by the middle of April. They had no protection whatever, except earthing up occasionally. On February 4 I sowed Peas, which were quite ready for use on the 20th of May. On March 2 I sowed Peas again, and gathered pods of fine quality on the 4th of this month (June). On March 12 I sowed Turnips, which were ready and got for use the first week in May; also Carrots, which were sown on the 24th January. Several sorts of Potatoes, planted on the 12th of March, have been in daily use for nearly four weeks; Radishes and small salad dug since the end of February; fine Lettuce for upwards of two months past. All were left to the mercy of the weather, not the slightest covering of any kind being

* Bradbury & Evans, 2nd Edition, 1s.

used. Had they been protected from the cold rough winds, from which they suffered much, the result would have been undoubtedly better. Taking into account the cold, backward spring, and the part of the country, I think it may be considered early, and that it shows what would be the effect of having earth heated. *A. C. Lumbie, Blackburn, Rotherham.*

Effect of Frost on Trees.—Your readers' attention has lately been called by several of your Correspondents to the disastrous effect of the frost of last winter upon Hollies, and in your last Number it is stated that Oaks have also suffered severely, and in some cases are quite killed by its severity. It is probable that in no place in the kingdom have Hollies suffered more than they have done in the Forest of Needwood. Here they formed, until the late frosts, very fine features in park scenery, numbering, as they did, thousands of trees, varying in height from 10 to 50 feet, giving a fine example of what may be called an indigenous winter garden. One large group of Hollies, extending over several acres of ground, and numbering perhaps 5000 trees (not bushes) demands special notice. Last autumn these were a magnificent sight, covered as they were with their beautiful coral-like berries, and although their beauty had often been told to me, I was not prepared for such a sight; but, alas! all that was then wrapped in evergreen splendour is now a forest of dead trees; the same being now in process of cutting down and clearing away. Oaks have also suffered, but not to the same extent as they are reported to have done in the Park of Castle Howard and its vicinity. Many fine old trees occupying low situations are looking very sickly, but I have seen none quite leafless. Nor are Oaks and Hollies the only trees of the forest that have suffered; Maples may be added to the list, several very fine trees occupying open situations are quite dead, and many others present a very unhealthy appearance. The Maples generally were, however, last summer infested with the black aphis, and I have no doubt injured to a very great extent. This may have contributed in no small degree to their death. *J. D.*

Bouquets Decorated with Parsley Leaves.—I have tried "Phyllophilus's" mode of making bouquets with common Parsley instead of Ferns, but I have discovered that my lady does not like them. I made a very nice bouquet, put common Parsley round its edges, and sent it to my lady, who to my surprise returned it to me with these words written on a small strip of paper. "Lady —— sent for a bouquet, not for Parsley for the cook, and hopes that this mistake will not be made again." I therefore conclude that your Correspondent knows as much about bouquets as he does about decorating the dinner table. *A. Y.*

Prince of Wales Raspberry.—I find this to be a vigorous grower, a great bearer, and to produce fruit of excellent flavour, particularly last season, the worst in this part for hardy fruits of all kinds for many years. I intend to discard all other kinds, and grow nothing but Prince of Wales. On a long row of it in which the canes were left full length, the crop was very heavy. I never shorten the canes, as I find that by leaving them full length I get greater crops. *W. H.*

Societies.

Royal Horticultural: *June 25.*—At this meeting some very pretty new Rhodanthes were shown by Mr. W. Thompson of Ipswich. One of them, called R. maculata, was awarded a first-class certificate, and another form of it, R. maculata alba, received a commendation. This plant has the general character of R. Manglesii, but is more robust, with larger flower heads and more ovate leaves; the inner face of the ray florets is also stained with a deeper rose colour towards the base. The variety alba differs in having pure white flowers, and forms a pretty contrast. Another, called R. atrosanguinea, is distinct but smaller flowered and less expanded, as shown on this occasion; the leaves are here more elongated than in R. Manglesii, and the disk is of dark bronzy hue, giving a very different appearance to the rosy-coloured blossoms. It is a pretty plant, but less showy than the former. A first-class certificate was also awarded to a Dracæna called ferrea variegata, shown from the garden, to which it had been presented by the Messrs. Lee of Hammersmith. It is variegated like terminalis, but has broader leaves like ferrea, and is a very fine decorative foliaged plant. Coleus Verschaffelti, a handsomely stained-leaved plant resembling C. Blumei in its general features, Cupania Pindaiba, an elegantly pinnated-leaved shrub from Brazil, and a variegated Cobœa scandens, all from Mr. Bull of Chelsea, were severally commended; as also were two handsome summer Phloxes exhibited by Messrs. Downie, Laird, & Laing, named Reine blanche, a fine white, and Lydia, a French white with purple eye. Mr. G. Smith's Fuchsia Mammoth, a very large double-flowered sort of excellent habit, received a first-class certificate; the same award was made to a finely-laced Pink called Delicata from Mr. Turner of Slough, and also to a Pink called Lady Rokeby, exhibited by Mr. Bragg, Slough.

June 28.—The Right Hon. the Earl of Ducie in the Chair. On this occasion the following were elected Fellows, viz:—

The Marchioness of Ailsa, Edward Alder, Esq.; F. Bailey, Esq.; F. Barber, Esq.; Mrs. Maria G. Bellew, Lieut-Col. J. Bourne, F. Braby, Esq.; Mr. Brigden, Mrs. Brooke, Mr. T. Brown, Baron de Brunnow, T. D. Calthrop, Esq.; Sir Joseph Copley; H. W. Currie, Esq.; Mrs. M. De Lisle, Alfred Denison, Esq.; — Edwards, Esq.; — Edwards, Jun., Esq.; Miss. M. D. Edwardes, J. S. Entwisle, Esq.; Rev. E. Gardiner, J. Girdwood, Esq.; Mrs. Lewis Gower, H. Grassett, Esq.; S. Gregory, Esq.; Sir Hector Greig. H. Griffiths, Esq.; Lady Heathcote, J. Henderson, Esq.; J. Hertz, Esq.; T. Hobbs, Esq.; Mrs. George Hooper, R. Horner, Esq.; H. A. Ince, Esq.; W. H. Ince, Esq.; Mrs. Elizabeth Kilvington, Lady Knatchbull, Sir John Kynaston, Donald Lamach, Esq.; Miss Sarah Lawson, Marchioness of Londonderry, J. Loveland, Esq.; C. R. F. Lutwidge, Esq.; Miss Ellen McCallan, H. Miles, Esq.; Miss Millman, R. Napier, Esq.; Mrs. Alexander Ogilvy, Col. F. Paget, Major E. L. Parry, C. J. Phillips, Esq.; Major B. Ramsay, D. Reid, Esq.; W. Russell, Esq.; Mrs. G. Scovell, Miss Scovell, J. L. Seager, Esq.; Mrs. Shadwell, Mr. W. Simpson, Miss Mary M. Speer, Lady Templemore, Mrs. Griffith Thomas, J. Thorne, Esq.; Mrs. D. Thwaites, J. Toussaint, Esq.; Sir J. Tyler, Lady Jane Walsh, E. Weyman, Esq., Lady Willoughby D'Eresby, and J. Wilson, D.D.

Royal Society of Tasmania, *Nov. 20.*—Tasmanian Timber.—The Secretary read extracts from letters on the subject of the late unsuccessful attempt to introduce salmon into Tasmania. The inference to be drawn from these letters was entirely in confirmation of the views of the Select Committee of the House of Assembly, and of the course adopted by the Government, in respect of the management of the fresh experiment, for which a vote of 3000*l.* has passed the Legislature. The Secretary then read an extract from a letter, dated Sept. 18, 1860, from Sir W. J. Hooker, on the subject of timber for ship-building.

Dr. Crowther observed that sufficient attention was not generally paid to the proper season for felling our timber, which he considered was from February to the end of August. He thought our Blue Gum (Eucalyptus Globulus) and Stringy Bark (E. gigantea) superior to Oak, for they were not subject to dry rot as Oak was. He advocated the immersion of timber immediately after being felled, in sea water, after the American plan, in order to prevent its splitting. The salt water by its density excluded the sap. He regarded the timber of the Stringy Bark as quite equal to that of the Blue Gum for all purposes to which the latter is applicable, and gave illustrations of its endurance under very unfavourable circumstances. In capability of resistance to the injurious effects of moisture, especially in the case of posts at the portion near the surface of the ground, it was not to be surpassed. He took up a Stringy Bark gate sill, which had been on the ground for 14 years, and found it perfectly sound. He had a barge 20 years old, the Stringy Bark planks of which were still quite sound. Instances had occurred of great carelessness on the part of ship-builders, in using timber from which the sap-wood had not been removed,—and the timber was attacked by insects, and decayed; but beneath the sap-wood it would have been found in a thoroughly sound condition. He had sent 150 sleepers of Blue Gum and Stringy Bark to London by the Cissy, and had directed his agent to distribute them gratuitously. With respect to the timber forwarded to England for the use of the Admiralty in 1851, he knew that it was cut in large flitches and the heart portions were left; they of course decayed,—and persons appointed in England to inspect the timber exclaimed, "Why it's rotten at the heart: this timber is altogether worthless." Now, they all knew that the heart of our timber trees, unlike that of the Oak, was very inferior to the external portion,—and, indeed, was quite unfit for use. It ought not to have been sent at all. He spoke of the value of the timber of the Peppermint tree (Eucalyptus amygdalina), and of the Gum-topped Stringy Bark, but stated that the Swamp Gum (E. viminalis? var.), though an excellent wood for palings and shingles, was entirely unfit for ship-timber.

The Secretary read an extract from a letter from Mr. R. C. Gunn, who observed that the best time, in his opinion, for felling our timber was "from January to May—that is to say, from the time when the summer heat checked all growth until the first autumn rains induced the circulation of the sap." After remarking upon the desirability of having the timber of all our species of Eucalyptus tested, he went on to remark that "the Blue Gum had been lauded at the expense of the other species of Eucalyptus. He saw a pump, made of Stringy-bark, which had been down for 20 years, and even the portion between wind and water was as sound as a piece of wood could be." He trusted that the Stringy Bark "would not be permitted to be ranked as second to Blue Gum until it had been fairly proved to be inferior."

The Secretary read extracts from a paper by Mr. James Mitchell, formerly a Commissariat Officer in Hobart Town, "on the strength, durability, and value of the Timber of the Blue Gum, and of some other Eucalypti of Tasmania, for ship-building, &c.," which was read at a meeting of the Society in 1851. Mr. Mitchell enlarged on the importance of water-seasoning, and remarks that—"in the case of the Gum woods the water partially dissolves the brown astringent substance which fills the pores and carries off the acid; and by thus rendering them more open the subsequent drying goes on faster, and so uniformly, that the rents and openings which so materially damage this timber in the estimation of those unacquainted with its qualities, are mainly prevented." He went on to remark "that the layers of the Stringy Bark are nearly equal to those of the Blue Gum, rather more open; but when good specimens are placed by the side of Blue Gum the difference is not readily perceived." He also observes that "its durability in houses, when free from sap, is very great—the shingles being considered good for 20 years." Mr. Mitchell appends to his paper a letter from Mr. J. Watson, a ship-builder of Hobart Town, in which Mr. Watson remarks, "I have found the Blue Gum, of which almost any quantity can be procured, equal to English Oak in durability, and superior to it on account of the great lengths that can be obtained. For kelson pieces, lower or upper deck beams, wale-planks and stringers, I consider it to be unrivalled; it takes the steam well and there is no fear of its spauling in working round a full bow. Timber that I have had placed in water for three or four months, then taken out and exposed to the air for about the same time, I have found to stand equal to Oak. Fine crooks for rising floors, keel-knees, and breast hooks for the largest ships built, could be obtained of this gum. In all my experience in repairs of colonial-built vessels I have never observed any appearance of dry rot."

The Secretary stated that he had forwarded to the Secretary of the Society of Arts, a paper "On the Commercial Value of Tasmanian Timber." In that paper he had mentioned three kinds of gum timber as being particularly valuable,—namely that of the Blue Gum, the Stringy Bark, and the Peppermint tree,—all three kinds being adapted for works requiring great span, strength, and stability. He had shown that the comparison with Oak, Saul, and Teak was in favour of our timber. He had remarked on the durability of the Blue Gum and Stringy Bark,—and had pointed out the reason why our timber did not rank high at Lloyd's,—namely, that sufficient attention had not been paid to the best time for felling the trees, and the proper management and seasoning of the timber. He had then compared the cost and durability of Larch and Gum sleepers,—and had concluded by expressing an opinion, that he felt himself thoroughly justified in commending our timber to the notice of engineers and builders in England;—and had observed that we should feel greatly indebted to the Society of Arts if, through the Society's influence, we could obtain a footing for Tasmanian timber in the English market. The discussion was concluded by the following resolution:—"That the Government be respectfully requested to address the Secretary of State for the Colonies on the subject of Tasmanian timber,—to point out its valuable qualities for ship building, and to urge the propriety of commissioners being sent from England, to inspect and report upon the forests of Tasmania, and the quality of the timber." *From the Hobarton Mercury.*

Notices of Books.

Explorations and Adventures in Equatorial Africa, &c., &c. By Paul B. Du Chaillu. 8vo, Murray, pp. 479.

What this book is it has become almost superfluous to say. For weeks the public journals, political, literary, and scientific, have been filled with extracts and criticisms; it has been the great topic of conversation in society, and its author has been the lion of the season. By some he has been exalted to the rank of a Humboldt, by others degraded to that of Munchausen. His stories, on the one hand, have been accepted with entire belief, on the other have been stigmatised as mere inventions. Had it not been, indeed, for the indifferently preserved specimens of Natural History which Mr. Du Chaillu exhibits, it would have been doubtful in the minds of some whether he had ever seen an African forest. Suspicion of the trustworthiness of his statement could hardly fail to be excited when it was remarked that his original figures of animals were unacknowledged copies of well-known plates, that the map of his journeys was so vague that it might have been drawn up without quitting a slave-dealer's Barracoon, and that the pictorial representations of his adventures, which no white man had witnessed, had undoubtedly been made "to order" by some clever artist. Nor must it be forgotten that the custom of writers beyond the Atlantic to mystify Europeans has produced its natural consequence by creating disbelief in all American tales which cannot be authenticated. Now Mr. Du Chaillu is of American extraction, and came to this country from the United States, where alone his Natural History collections had been examined.

The account he gives of himself is that his father had formerly a factory on the W. African coast, that he had resided at the mouth of the Gaboon river for several years, and so had gained a knowledge of the Coast natives and their language, and that after some absence he returned from America to this coast in October, 1855, for the purpose of exploring the country for two degrees north and south of the equator, and for collecting objects of Natural History. During the next four years he travelled in the interior, and "the volume now respectfully presented to the public has been written out from his faithfully kept (daily) journals." During those travels Mr. Du Chaillu states that he travelled, always on foot, about 8000 miles, and "shot, stuffed, and brought home" a very large number of birds, quadrupeds, and other animals. About the value of these collections and the number of "new species" they contain we can form no opinion. Our Zoologists shake their heads, but in public are silent, with the exception of Dr. J. E. Gray of the British Museum, who, with the amenity that distinguishes him, has pronounced *ex cathedrâ* as it were some-

by no means complimentary remarks upon the merits of Mr. Du Chaillu's novelties.*

Amidst this conflict of opinion, and in the absence of all positive evidence, it may seem presumptuous to say a word in favour of Mr. Du Chaillu. Nevertheless he has really been so run down that we must endeavour to place him and his book in a more fair position than they at present occupy. In the first place it is to be remembered that something very like proof exists in this country of such a person as Mr. Du Chaillu having been among the Fans, a race of cannibals, his account of whom and of their customs has been much discredited. Whether, therefore, his statements are to be relied upon or not, there is good reason to believe that he had the opportunity of becoming acquainted with the habits of these savages. Neither can any doubt be reasonably entertained of his being familiar with the negroes on the West Coast itself. The question, therefore, in reality is narrowed into the amount of credit due to the account of what happened to him in those countries.

Naturalists have fallen into the mistake of regarding his book as a work of *science written by a scientific traveller*; and they have consequently exacted an amount of accuracy which it does not possess. In doing this critics would have been right had they formed a right opinion of the book; but they did not. It does not seem to have occurred to them that it is a string of travellers' stories, and nothing more. We must own that in having this estimate formed of him the author has to thank himself. That Mr. Du Chaillu has no pretension to be considered a scientific traveller is evident enough. To talk learnedly as he does of his new species, and of his discoveries about apes and other animals, is, we take it, a piece of vanity not altogether unpardonable in an adventurer, and natural in an ill-informed man, but not a sufficient ground for hunting him down. Moreover he possesses a fertile imagination, and this may explain the true meaning of some of his statements, which are no doubt flights of fancy, that have been so frequently told to admiring audiences as to have gradually become fixed in his mind as truths in which he now believes. Old Captain Ross suffered under a similar hallucination, swearing to the day of his death that there must be mountains at the bottom of Lancaster Sound, because he saw them there and set them down in his log. Mr. Du Chaillu is not the first traveller who has been thought to draw a long bow; and he would not have been worried for doing so had he let science alone. Moreover, some of his tales may have arisen out of not understanding what he was told, and not seeing correctly what he saw, as in the case of the ape that builds "nests" in which it never sits. Observe what our traveller says:—

"As I was trudging along, rather tired of the sport, I happened to look up at a high tree which we were passing, and I saw a *most singular-looking shelter built* in its branches. I asked Okabi whether the hunters here had this habit of sleeping in the woods, but *was told*, to my surprise, that this very ingenious nest was built by the nshiego mbouvé, an ape, as I found afterwards, which I put in the genus Troglodytes, and called Troglodytes calvus; an animal which had no hair on its head—so Okabi told me. *I saw at once* that I was on the trail of an animal till now unknown to the civilised world (!) A naturalist will appreciate the joy which filled me at this good fortune. I no longer felt tired, but pushed on with renewed ardour and with increased caution, determined not to rest till I killed this nest-building ape. One such discovery pays the weary naturalist-hunter for many months of toil and hardship. I felt already rewarded for all the inconveniences and expenses of my Camma trip. I have noticed that it is always at the most unexpected moment that such a piece of luck befalls a poor fellow. I saw many of these nests after this, and may as well say here that they are generally *built* about 15 or 20 feet from the ground, and invariably on a tree which stands a little apart from others, and which has no limbs below the one on which the nest is placed. I have seen them at the height of 50 feet, but very seldom. This choice is probably made that they may be safe at night from beasts, serpents, and falling limbs. They *build* only in the loneliest parts of the forest, and are very shy, and seldom seen even by the negroes. Okabi, who was an old and intelligent hunter, was able *to tell me* that the male and female together gather the material for their nests. This material consists of leafy branches with which to make the roof, and Vines to tie these branches to the tree. The tying is done so neatly, and the roof is so well constructed, that until I saw the nshiego actually occupying his habitation, I could scarce persuade myself that human hands had not built it. It throws off rain perfectly, being neatly rounded at the top for this purpose. The material being collected, the *male goes up and builds the nest, while the female brings him the branches and Vines*. The male and female do not occupy the same tree, but have nests not far apart. From all I have observed, I judge that the nshiego is not gregarious. The nest are never found in companies; and I have seen even quite solitary nests occupied by very old nshiegos-mbouvé, whose silvery hair and worn teeth attested their great age. These seemed hermits who had retired from the nshiego world (!) They live on wild berries, and *build their houses* where they find these. When they have consumed all that a particular spot affords, *they remove and build new houses*, so that a nest is not inhabited for more than eight or *10 days*." (!)

The italics are ours. He is told, for it is all hearsay, by "an old and intelligent hunter" that this roof, oddly enough called a nest, is built by Mr. and Mrs. Ape, who work together in real conjugal harmony—*arcades ambo*. Mr. Du Chaillu did not witness the loving work, but he believes what Okabi, his "intelligent" informant, told him. What he did see was the "nests." Of that we have no doubt, and if he will step into a Herefordshire orchard he will see plenty more, although there are no apes to sit under them, and they are not so big as those in the kingdom of King Shimbouvenegani, and not much like the faithful picture drawn from the imagination, which adorns our author's pages. What he saw were doubtless parasitical Loranths, built by a far more skilful hand than that of an ape or his wife.

The tales he tells about the Gorilla may we think be reconciled with the same theory. He saw the beast, he heard all manner of stories about it, and he may have repeated them till at last truth and fiction became inextricably confused in his memory. We heard not long ago a very eminent professor assuring his class that the Gorilla lies in wait in the lower branches of trees watching for passers by; and when a luckless savage comes within arm's length he stoops down and seizes his victim by the head, which he quickly twists off. Du Chaillu denies the truth of this absurd story, which he refers to negro superstition. Our acute friend Mr. Waterton has very properly questioned the accuracy of the tales which Du Chaillu has himself brought home, and until their truth shall have received satisfactory confirmation we must range ourselves on the side of the experienced Yorkshire naturalist. Nevertheless we do not believe that the Gorilla stories are all fable; we dare say his roar is not that of a lion, or even of a cow, and as to his beating his breasts we regard that as a figurative expression thrown in for the sake of effect. But we see no reason to doubt that the Gorilla may have flattened and bent a gun-barrel with his teeth. The enormous osseous structure of his head shows him to be capable of such a feat, especially when he has nothing stronger to bite than a "park paling" gun, such as is made for the African trade.

Upon the whole we must refuse to concur in the belief that our author's book is a tissue of tales only as veracious as those of Defoe, and that he has done nothing in the way of African discovery. On the contrary we think there is internal evidence to show that he has seen the countries he describes, mixed with the people, and examined their productions, although with little skill. And if we withhold our credence from much that his volume contains it is not because we impute bad faith to their author, but regard him as over credulous, ill informed, over talkative, and unacquainted with the exactitude required in books of voyages and travels if they are to command the respect of the public on this side the Atlantic.

* These are happily hit off by the witty author of Monkeyana (see ante, p. 481), a continuation of whose amusing squib has accidentally found its way into the Editor's Box of the *Gardeners' Chronicle*.

Doctor John Edward Gray
In a very rude way
  Pronounces Du Chaillu a rogue
Who tells stories for acts,
And fictions for facts,
  Thus writing himself into vogue;

That the track on his map
Is a well devised trap,
  His pictures imagination;
That his skins are all old,
And the book he has sold
  A monstrous exaggeration.

Should it happen some day
That the said Doctor Gray
  Came across a Gorilla alone,
The beast with one crash
Would settle his hash,
  And no one his loss would bemoan.

R. Geogr. Soc. Apartments, Whitehall Place.

GARDENERS' ROYAL BENEVOLENT INSTITUTION.

The Eighteenth Anniversary Dinner of this Institution took place on Wednesday evening at the London Tavern, where a large company sat down to dinner.

Behind the Chair was a brilliant bank of Geraniums, chiefly from the Royal Nursery, Slough, and an abundance of bouquets also adorned the tables.

The Chair was filled by the Rev. J M. Bellew, S.C.L., and amongst the company present were Sir Arthur Buller, M.P.; General Ramsay, R. A. Ward, Esq., R.A.; E. Yates, Esq.; J. E. C. Koch, Esq.; Captain Lees, Examiner for India; Joshua Trueman, Esq.; Abel Chapman, Esq.; Robert Wrench, Esq., Treasurer; Dr. Skey, &c. &c.

The Chairman in proposing the first toast, after a few prefatory remarks, said that he was sure they would receive the toast of their Queen with the same pleasure and satisfaction with which he gave it. It was a toast which properly had the first place at every public dinner of Englishmen, as he felt sure it was a toast which had the first place in every Englishman's heart. They would all recollect an anecdote in history touching the gardens in the Inns of Court in olden days, when a Rose was cut off to signify the predicted fate connected with the wars betwixt the houses of York and Lancaster. But in these peaceful times they were happy to look upon the Rose in another and a gladder light—in connection with the Shamrock and the Thistle; and long might they be typical of the union betwixt Englishmen, Irishmen, and Scotchmen, and of that association amongst all of these which best denotes their living happily under a good and virtuous Queen and a noble Constitution. Happy was it for them that they were banded together for the sterling purpose of upholding the dignity of the Throne and the honour of the Sovereign; and honouring her not only as the Sovereign, but above all as being the best on the roll of English monarchs, because her best love is in the progress and prosperity of her people.

God Save the Queen having been sung, the Chairman next gave the health of His Royal Highness the Prince Consort. He said it would ill become him to pass over the name of His Royal Highness without adverting to his connection with the Royal Horticultural Gardens just established at Kensington, and without expressing his acknowledgements, in which he was sure they would all join him, of the high regard His Royal Highness had towards, and the interest he took in, and the patronage he extended to Horticulture. He believed that few matters were dearer to the heart of the Prince Consort than the advancement of horticulture in this kingdom. He would add to the toast "The Prince of Wales."

The Chairman next gave "The Army and Navy." He said that, although a clergyman, and although it might seem somewhat out of place for a man of peace to talk of arms, yet, whatever his character or profession, he could not but feel the deep debt of gratitude the country owed to its Army and Navy. He had often heard eulogiums passed on the services, and although such were properly complimentary, they were not absolutely needed, for there was no Englishman but who thoroughly appreciated them. After a graceful allusion to the Volunteers, of whom the Rev. Chairman spoke most highly, the toast was drunk with acclamation.

Capt. Lees acknowledged the toast on behalf of the Army, and Capt. Riviere in a few words returned thanks for the Volunteers.

The Chairman briefly gave "The Houses of Lords and Commons;" with them he would take the liberty of associating the name of his friend Sir Arthur Buller. He need but say, in reference to the toast, that in every emergency he trusted, as he believed, that the House of Commons would be found by the side of the liberties of the people; as the pioneers of progress, rather than following on the heels of the country. So far as his friend to whom he had alluded was concerned in the business of the evening, he could answer for him taking great interest in horticulture. Nay, when he was in India he was President of the Horticultural Society of Bengal; and he might add that he thought if they could induce Sir Arthur to be their chairman next year it would be productive of a great deal of money to the Institution.

Sir Arthur Buller, M.P., very humorously returned thanks in a few words, and

The Chairman then rose to give the toast of the evening—"Success to the Institution." He said—"In one of his genial satires our great author Goldsmith has told us that 'eating seems a grand ingredient in all English parties of general business or amusement.' When a church is to be built, or a hospital to be endowed, the directors assemble, and instead of consulting upon it they eat upon it, by which means the business goes forward with success.' There is no question that such has in all ages been a characteristic of the English people, and despite the castigation which many of our London charities received a year ago at the hands of 'S. G O.,' in the *Times*, I cannot help thinking that public dinners will continue to be great sources of revenue to the multitudinous objects of philanthropy with which this great City abounds. We all know how much we are the creatures of custom; and if there be one custom to which we are more recurrently prone than another, it is that of eating one's dinner. It would require a great many 'S. G. O.'s' to eradicate this intermittent custom, I think, for I fail to see that what is necessary in private must become evil in public. In anticipation of the elegant, artistic, and bountiful banquet at which we are assembled to-night, I have lately been studying the philosophy of public dinners, and asking myself why our charities benefit so largely by them? Why would not a tea-party do as well? Would there not be an equal 'feast of reason and flow of soul' in a plentiful participation in that beverage which 'elevates but not inebriates'—supplied from say 'No. 1, St. Paul's Churchyard?' I answer, No. Tea and scandal are always associated with one another in our minds, and scandal is the pulling people down, while charity is the building them up. '*In vino veritas*' we have been taught. Perhaps we may with equal truth read, '*In vino caritas*;' for there is no doubt while the washy Bohea has a vituperative tendency the satisfying dinner promotes feelings of benevolence, charity, and *bonhommie*. We are told of the Chinese Emperor, whose dinner produced in him such cosmopolitan kindness that, having dined 'he gave leave to all the kings of the earth to dine!' and in the same groove of prandial brotherly love I think I have heard of a civic dignitary who, after his turtle and port, exclaimed, 'If any one wants a little bill doing, now's the time.' Some of my literary friends round me might perhaps, furnish the public with an interesting essay—some future 'Cornhill' or 'Temple Bar,' some Thackeray or Sala, or perhaps some Edmund Yates, might teach the city the laws and relations between the laws and science of Gastronomy and the Ethics of Charity. The theme would not be unworthy of their pens, the moral of which would probably be, that when we enjoy a good dinner, the replete satisfaction of the appetite leads us to pity those who cannot secure equal gratification; and so, according to the true laws of gravity, like two buckets at a well, the full vessel has a natural tendency to pull up the empty one. We, gentlemen, are the full vessels. we have eaten and are full; and I hope. in obedience to those laws which connect gastronomy and charity, that we feel that post-prandial impulse to which I have alluded—to pull up the empty vessels. I congratulate myself that, in drawing your attention to the empty vessels concerning which I have to speak, no laborious, no nice task lies before me. I have no difficulties to contend with—no suspicions to disperse—no questionable accounts to apologise for—not even a bit of wholesome debt to plead. Your debt is a perfect catapult of elocution at a public dinner; it bowls down everything before it, and leaves the audience stumped. I am totally deprived of all those tales of danger and hair-breadth 'scapes with which Chairmen often have to deal. Everything before me seems calm, peaceful, serene. The Treasurer wears an unruffled face; and the treasury, albeit not groaning under the apoplexy of riches, is nevertheless solvently convalescent; and we can say of the maternal Gardeners' Benevolent Institution and its offspring—receipts, that 'Mother and child are doing well.' I am about to propose their health, and to wish them 'Many happy returns of the day.' But in doing so, I am sure what is wanting to make me eloquent will be an agreeable deficit. It must be satisfactory, however, to know that the 'Gardeners' Benevolent Institution' only wants cherishing, nourishing, and feeding to grow up into a very handsome specimen of humanity, and that it inherits no diseases of constitutional weakness from the want of friends; neither does it betray any fatal symptoms of consumption in the chest.' It becomes younger children of a family to be modest and retiring; it also becomes the public to pat them on the head—encourage them; and at dessert slip the avuncular and patronising sovereign into the child's palm—a little evidence of respect for the parent, and 'Well done, my little boy—go on and prosper' to the child. This, gentlemen, is our position to-day. In the great family of metropolitan charities, we, as one of the younger children, are very modest and retiring; but we are returned home to-day for our Holidays, bringing our school account with us—which record of our tasks we invite you to examine—confident of your approval. Allow us therefore to come in at your dessert. We will now, if you please, sit down with you and share your plates, and though we don't say it

(we are so modest), nevertheless we think it. You ought to pat us on the head, and slip your sovereigns into our hands, and say 'Well done, you little gardener boys. God bless you! go on and prosper.'"—The rev. speaker then went on to give the following account of the Institution:—"We first began our tasks and took to our books in 1838; but, we regret to say, were not then so diligent as we might have been. However, in 1842, we turned over a new leaf—gardeners, you know, are fond of turning over new leaves—and since then we have accumulated stock in the Three per Cents. to the amount of 5100*l.* During the last year, as you will see by the statements before you, we gained an income of 1559*l.*, and spent 1117*l.*, so that we start this year with a pretty little bulbous root as a balance in hand in the forcing-house of Stocks—our favourite flower; having 442 shoots known by the name of yellow guineas. In this healthy financial condition we have been enabled to sustain 51 pensioners—31 males and 20 females; and on the 10th of the coming month we shall be enabled to add seven more to our number. I think every one who listens to me must rejoice to hear this eminently satisfactory statement. But how much more pleasing is the contemplation when we think, in its modest and unpretending way, how much good this 'Gardeners' Benevolent Institution' is doing. We were a few months since familiar with the melancholy street-chant of the 'frozen-out gardeners,' who 'had no work to do.' To night an appeal is made to us on behalf of those far more deserving objects of charity who have had work to do, and who have done it honestly, hardly, laboriously; but now have it no more because they are frozen out; the frosts of age having settled on their heads, and, as our Shakspere says—

"Time has worn them into slovenry!"

Years ago, when I was a little boy at Lancaster, my grandfather presented me with 'Main's Popular Botany'—recommending that study and a garden to my love. I remember well his words as he gave me the book—'I have observed that those who love a garden are generally laborious and sober men.' There are a vast number of you who listen to me directly connected with gardening; and I hope your observations of gardeners generally can confirm that assertion. If you turn to the list of pensioners it will be found to support the observation; for the youngest is 62, the majority upwards of 70, and there are five above 80, while one has nearly completed the fourscore years and ten of which the Psalmist speaks! In statistics, longevity is an evidence of sobriety, and therefore it greatly enhances my pleasure to-night to feel that I am pleading the cause of sober, thrifty, hard-working men, who, having fallen into the sere and yellow leaf, are probationers for your charity, not only on the ground of age, but that their grey hairs are crowned with honour, and respectability. Shakspeare makes his grave-digger declare there are 'no ancient gentlemen but gardeners.' The gardener's business in an ancestral point of view has certainly the stamp of ancientness upon it, since it was the calling of the first parent of us all, and moreover, until the days of the last man we shall be dependent on the gardener's energies. Its business combines in itself more of the *utile et dulce* than any other calling in the world. By the sweat of his face mankind is fed; by the taste of his calling the earth is beautified. There is poetry in all he does There is a direct donation to the benefit of man in all he works. It is for these men, then, in their decline, and for their widows that I plead. In the sunshine of their days they have been our benefactors and our friends. They have fed our bodies and our taste for all that is lovely and exquisite in nature. Look round this room to-night, and let Nature in her luxuriance be the most eloquent petitioner in behalf of her own craftsmen—

"From yon blue heavens above us bent
The grand old gardener and his wife
Smile."

Yes! they must smile when they see on earth still living among men—despite all our sins—all our faults and our failings—some remains of that period when man was spotless and pure—some evidences of those domestic virtues—some remnants of those benignant charities with which at Time's early dawn a beneficent Creator adorned the heart of his creatures, and, contemplating the work, proclaimed that 'all things were very good.'" (Loud and continued cheering followed the Rev. Chairman's brilliant speech.)

E. Yates, Esq, then, in a very amusing speech, gave the health of "The Chairman." Of the manner in which he had performed his duties it behoved him not to speak; it was evident without any reference of his own to it. Having gracefully and warmly spoken of the eloquence and deep pathos of his rev friend—of his kindness of heart, and of the warm interest he took in everything where benevolence and charity were concerned, the speaker asked them to drink to his hearty good health.

The Chairman briefly acknowledged the toast, saying it was much pleasure to him to be present on such an occasion, and he had the further pleasure to announce that his friend on his right, Sir Arthur Buller, had consented to take the Chair at the anniversary next year. He would conclude by proposing the health of the Treasurer—Mr. Wrench, to whom the Society was much indebted for his exertions.

Mr. Wrench returned thanks in a few words, hoping their pockets, as well as their hearts, would be touched by the eloquence of their kind Chairman, and that plenty of funds would be the result. He had had a note from a friend whom he need not, perhaps, name, giving 51*l.* 6*s.* 6*d.*, per Messrs. Glyn & Co, with the all-meaning words—"More to follow."

The Secretary then read the list of subscriptions, which (with what was added before the business closed) amounted to upwards of 300 guineas.

J. E. C. Koch, Esq. (President of the Society) then very briefly gave "The Royal Horticultural and Botanical Societies of London;" and after a few more toasts were drank and responded to, the meeting broke up at an advanced hour.

Miscellaneous.

Birds and their Value.—In the Senate on Monday M. Bonjean read a report on four petitions praying that measures might be taken to preserve birds which destroy insects hurtful to agriculture. The report, which occupies five columns of the *Moniteur*, is an amusing essay upon insect-eating birds, their habits, anatomy, and species of food. It treats at length of the ravages of insects, and the importance to man of the objects they destroy. France is infested with thousands of species of insects of terrible fruitfulness, nearly all of which prey on what should serve the purposes of man. The first section of the report is headed "Importance of Birds to Agriculture." It states that the wire-worm consumed 160,000*l.* worth of corn in one department alone, and was the cause of the three deficient harvests which preceded 1856. Out of 504 grains of colza gathered at hazard at Versailles, all but 296 had been rendered worthless by insects. The reduction of yield in oil was 32.8 per cent. In Germany, according to Latreille, the Phalæna monacha consumed whole forests. In Eastern Prussia three years ago more than 24,000,000 cubic metres of Fir had to be cut down because the trees were attacked by insects. Man is unable to cope with these destroyers of the produce of his labour. His eye is too dull to perceive and his hand too slow to catch them. Without the aid of birds he would be vanquished in the struggle. The commission excludes birds of prey, such as magpies, ravens, &c., with the exception of buzzards and rooks, from the benefit of its protection, because the buzzard consumes about 6000 mice yearly, and the rook an incalculable amount of white worms. Sparrows are rehabilitated, and their usefulness shown by reference to the fact that when their destruction was attempted in Hungary winged insects increased so rapidly that rewards for the destruction of sparrows were suppressed and given for bringing them back. Frederick the Great ordered the destruction of sparrows because they ate his Cherries; but in two years' time he found his Cherries and all other fruits consumed by Caterpillars. In a sparrow's nest on a terrace in the Rue Vivienne were found the remains of 700 cockchafers. Owls, and birds of that class, which agricultural ignorance pursues as birds of evil omen, ought to be welcomed. They are 10 times more useful than the best cats, and not dangerous to the larder. The martens that were killed were found to have in their stomachs the remains of 543 insects. After further illustrations of the same nature, the report proposes the prohibition of all means of destroying birds save by fire-arms, with the exception of nets for wild ducks and palmipedes generally, and the prohibition of bird-nesting and destruction of eggs or young birds. The petitions were referred to the Minister of Commerce and Public Works. *Times.*

The Ensete Banana.—The celebrated James Bruce, of Kinnaird, was unquestionably one of the most remarkable travellers of the last century, but he unfortunately obtained little credit during his lifetime for his many interesting discoveries. It was left for future travellers to confirm their accuracy; and if we consider the state of science at the time Bruce became a traveller, and the multitude of objects that his researches embraced, it must be allowed that few have displayed more accuracy, and none more indomitable energy. It is now nearly 100 years since Bruce entered Abyssinia with the view of discovering the source of the Nile. It was then that he found the remarkable plant to the illustration of which we have devoted two plates, and which would still have remained unknown to us to the present day (save from Bruce's description and really accurate figures), but for the kindness of Walter Plowden, Esq., our late British Consul at Mussowah, who sent the seeds of this plant to me in 1853, under the native name "Ansett." From our ignorance of the appearance of the seeds of any Banana (the cultivated Bananas and Plantains do not perfect their seeds), we did not at first recognise these seeds as connected with that family of the vegetable kingdom; but the growth being rapid in our Palm-house, we soon discovered our plant to be the "Ensete" of Bruce (not Enseté, as written by Poiret). But if this distinguished Abyssinian explorer was wrong in pronouncing it, as he did, to be "no species of Musa," we must remember that he could have only been acquainted with the Bananas known in cultivation; and he certainly well distinguished his plant from these. "It is true," he says, "the leaf of the Banana resembles that of the Ensete; it bears figs,* and has an excrescence (the spadix) from its trunk, chiefly differing from the Ensete in size, etc.; but the Figs of a Banana are in shape of a Cucumber, and this is the part that is eaten. The Fig is sweet, though mealy, and of a taste highly agreeable. It is supposed to have no seeds" (the flowers being abortive), "but the Figs of the Ensete are not eatable; they are of a tender, soft substance, watery, tasteless, and in colour and consistence similar to a rotten Apricot; they are of a conical form, crooked a little at the lower end, about an inch and a half in length, and an inch in breadth where thickest. In the inside of these there is a large stone, half an inch long, of the shape of a Bean or Cashew-nut, of a dark-brown colour." And again, the stem of the Banana, as is well known, is an annual, bearing its fruit as soon as its stem and foliage have attained their full size, and then perishing down to the root, and no part of the stem can be eaten. "The body of the trunk of the Ensete for several feet high is esculent; and while young, is, when cooked, the best of all vegetables, tasting like Wheat-bread not perfectly baked. . . . When you make use of the Ensete for eating, you cut it immediately above the roots, and perhaps a foot or two higher if the plant is advanced in age; you strip the green from the upper part till it becomes white, where it is soft, like a Turnip well boiled; if eaten with milk and butter, it is the best of all food." To understand clearly the part that is eaten of the Ensete, we must consider the mode of growth of the plant. The leaves, at least the very broad sheathing bases, all spring from a large, very solid, but fleshy, pure-white, conical rhizome (fibrous with roots beneath), and constitute the stem, and they are of so coarse a nature, and so full of fibre and air-cells, as to be totally unfit for food. But in the centre of this is the axis, formed of the peduncle or scape, which bears the spadix at the extremity in course of time (10 years according to Bruce, three to five years from our experience). This is as thick as a man's arm, pure white, as is the sheath formed by the broad bases of the petioles that surround it, rises gradually from the rhizome, increases in length, bearing large membranaceous close-pressed bracts, and, where it emerges from the sheathing leaves, one or two small, foliaceous bracts, carrying up with it the later-formed upper leaves with the infant spadix. Now it is while the centre, or scape, is young and tender, in a state exactly analogous to the "Cabbage" in Palms and in Cycadaceous plants, etc., that it is excellent and nutritious: as soon as it is mature it turns hard, and is no longer eatable. Bruce has given a representation of this scape, stripped of its external covering. The Ensete appears to be peculiar to Abyssinia, particularly abundant in Naree, growing in the great swamps and marshes of that country, formed by rivers rising there which have no outlet. It comes to great perfection at Gondar, but most abounds in that part of Maitsha and Goutto west of the Nile, where there are large plantations of it, and is there, almost to the exclusion of anything else, the food of the Galla inhabiting that province. At Maitsha they cannot grow grain, and vegetable food would therefore be very scarce were it not for this plant. Not only botanically has Bruce discussed this fine plant, but historically, as connected with the mythology of Egypt. "We see," he says, "in some of the Egyptian antique statues the figure of Isis sitting between the branches (foliage?) of the Banana-tree, as it is supposed, and some handfuls of ears of Wheat; you see also the hippopotamus ravaging a quantity of Banana trees. But the (true) Banana is not a plant of the country, and could never have entered into the list of their hieroglyphics; for this reason, it could not figure anything permanent or regular in the history of Egypt or its climate. I therefore imagine that this hieroglyphic was wholly Ethiopian, and that the supposed Banana, which, as an adventitious plant, signifies nothing in Egypt, was only a representation of the Ensete, and that the record in the hieroglyphic of Isis and the Ensete-tree was something that happened between harvest and the time the Ensete-tree came to be in use, which is in October. The hippopotamus is generally thought to represent the Nile, that has been so abundant as to be destructive. When, therefore, we see upon the obelisks the hippopotamus destroying the Banana, we may suppose it meant that the extraordinary inundation had gone so far as not only to destroy the Wheat, but also to retard or hurt the growth of the Ensete, which was to supply its place. I do likewise conjecture that the bundle of branches of a plant, which Horus Apollo says the ancient Egyptians produced as the food on which they lived before the discovery of Wheat, was not the Papyrus, as he imagines, but this plant, the Ensete, which retired to its native Ethiopia upon a substitute being found better adapted to the climate of Egypt." For all the above information we are mainly indebted to the labours of Bruce. *Botanical Mag.* tt. 5223-4.

The Primitive Ocean.—The greatest of all histories, traced in mighty characters by the Almighty himself, is that of the earth-rind. The leaves of this giant volume are the strata which have been successively deposited in the bosom of the sea, or raised by volcanic powers from the depths of the earth; the wars which it relates are the Titanic conflicts of two hostile elements, water and fire, each anxious to destroy the formations of its opponent; and the historic documents which bear witness to that ancient strife lie before us in the petrified or carbonified remains of extinct forms of organic existence—the medals of creation. It is only since yesterday that science has attempted to unriddle the hieroglyphics in which the past history of our planet reveals itself to man, and it stands to reason that in so difficult a study truth must often be obscured by error; but although the geologist is still a mere scholar, endeavouring to decipher the first chapters of a voluminous work, yet even now the study of the physical revolutions of our globe distinctly points out a period when the molten earth wandered, a ball of liquid fire, through the desert realms of space. In those times, so distant from ours that even the wildest flight of imagination is unable to carry us over the intervening abyss, the waters of the ocean were as yet mixed with the air, and formed a thick and hazy atmosphere through which no radiant sunbeam, no soft lunar light, ever penetrated to the fiery billows of molten rock, which at that time covered the whole surface of the earth. What pictures of desolation rise before our fancy, at the idea of yon boundless ocean of fluid stone, which rolled from pole to pole without meeting on its wide way anything but itself. Ever and ever in the dark-red clouds shone the reflection of that vast conflagration, witnessed only by the eye of the Almighty, for organic life could not exist on a globe which exclusively obeyed the physical and chemical laws of inorganic nature. But while the fiery mass with its surrounding atmosphere was circling through the icy regions of ethereal space (the temperature of which is computed to be lower than 60° R. below freezing point), it gradually cooled, and its hitherto fluid surface began to harden to a solid crust. Who can tell how many countless ages may have dropped one after the other into the abyss of the past, ere thus much was accomplished; for the dense atmosphere constantly threw back again upon the fiery earth-ball the heat radiating from its surface, and the caloric of the vast body could escape but very slowly into vacant

* The French call the small-fruited kinds "*Figues Bananiers.*"

space. Thus millions of years may have gone by before the aqueous vapours, now no longer obstinately repelled by the cooling earth-rind, condensed into rain, and, falling in showers, gave birth to an incipient ocean. But it must not be supposed that the waters obtained at once a tranquil and undisturbed possession of their new domain, for, as soon as they descended upon the earth, those endless elementary wars began, which, with various fortunes, have continued to the present day. As soon as the cooling earth-rind began to harden, it naturally contracted, like all solid bodies when no longer subject to the influence of expanding heat, and thus in the thin crust enormous fissures and rents were formed, through which the fluid masses below gushed forth, and, spreading in wide sheets over the surface, once more converted into vapours the waters they met with in their fiery path. But after all these revolutions and vicissitudes which opposed the birth of ocean, perpetually destroying its perpetually renewed formation, we come at last to a period when, in consequence of the constantly decreasing temperature of the earth-rind, and its increasing thickness, the waters at last conquered a permanent abode on its surface, and the oceanic empire was definitively founded. The scene has now changed; the sea of fire has disappeared, and water covers the face of the earth. The rind is still too thin, and the eruptions from below are still too fluid to form higher elevations above the general surface; all is flat and even, and land nowhere rises above the mirror of a boundless ocean. This new state of things still affords the same spectacle of dreary uniformity and solitude in all its horrors. The temperature of the waters is yet too high, and they contain too many extraneous substances, too many noxious vapours arise from the clefts of the earth-rind, the dense atmosphere is still too much impregnated with poisons, to allow the hidden germs of life anywhere to awaken. A strange and awful primitive ocean rises and falls, rolls and rages, but nowhere does it beat against a coast; no animal, no plant, grows and thrives in its bosom; no bird flies over its expanse. But meanwhile the hidden agency of Providence is unremittingly active in preparing a new order of things. The earth-rind increases in thickness, the crevices become narrower, and the fluid or semi-fluid masses escaping through the clefts ascend to a more considerable height. Thus the first islands are formed, and the first separation between the dry land and the waters takes place. At the same time no less remarkable changes occur, as well in the constitution of the waters as in that of the atmosphere. The farther the glowing internal heat of the planet retires from the surface, the greater is the quantity of water which precipitates itself upon it. The ocean, obliged to relinquish part of its surface to the dry land, makes up for the loss of extent by an increase of depth, and the clearer atmosphere allows the enlivening sunbeam to gild here the crest of a wave, there a naked rock. And now also life awakens in the seas. Fuci wonderfully similar to those of the torrid zone begin to grow; corals, shell-fish, cephalopods, annelides, crustaceans: but no terrestrial animal breathes the air, heavy and thick with carbonic acid; and the land, small when compared with its present extent, remains a dreary waste. Life however continually adds to its conquests. Numerous islands rise above the ocean, and are gradually decorated with a rich vegetation; rich indeed, as to its vast profusion we are indebted for our inexhaustible coal-fields, the basis and solid groundwork of our commercial grandeur. Extinct genera and species of Palms, Ticadeæ, dendritic Ferns, Lycopodiaceæ, Sigillariæ, similar to our present Cactuses, Calamites, Stigmariæ, and various Coniferous plants, composed those wonderful primitive forests, whose dense thickets covered the swampy low-lands, and reflected themselves in the waters of the surrounding ocean. Beautiful no doubt was that ancient vegetation, and luxuriant beyond all conception at a time when a tropical climate reigned over the entire surface of the earth; but no warm-blooded quadruped enjoyed their shape, no bird enlivened them with his song. Only the tones of inanimate nature, the roaring of the sea against the forest-crowned cliffs, or the moaning of the wind in the feathery fronds, interrupted their awful silence. Meanwhile the ocean was already full of life. Monstrous sharks pursued the timorous herds of the smaller fishes; numerous corals fringed the coasts, crustaceous trilobites swarmed in the waters; goniatites, cephalopods similar to the nautilus, stretched out their tentacular arms in quest of prey; and elegant forms of stalked star-fishes, the voracious encrinites and pentacrinites, were spread over the bottom of the ocean. But time moves on, and creation again appears in a new vesture. Many of the islands of the coal-period have sunk beneath the waves, while other and broader lands have arisen. The continual deposits on the bottom of the ocean by which the composition of sea-water is gradually changed, the luxuriant vegetation through which the dense air loses a great part of its carbonic acid, perhaps also modifications in the temperature of the seas and atmosphere, have, in the now following period of secondary formations, changed the conditions of life, and impressed new forms upon animal and vegetable existence. Now first the forest and the bush are pervaded with a more active life, though still of an inferior nature, a life in which crocodiles, tortoises, opossums, and colossal bat like pterodactyls play a prominent part, where the noble mammal appears only in his lower grades, and the repulsive reptile stands forth as lord of the creation. In the waters there reigns at this period a monstrous race of gigantic lizards, whose approach puts even the voracious shark to flight. *Hartwig's The Sea and its Living Wonders.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Attention must soon be paid to late growing plants in borders; for while in active growth they require a good deal of water, and insects are more troublesome than in the case of plants at rest. Give Luculias especially plenty of water at the root, and an occasional supply of clear weak manure-water to old plants that may not be growing freely until they have made sufficient wood to ensure a good display of flower. As has been previously stated, however, manure-water must not be given to young specimens in vigorous health, as in that case it would only induce too gross a growth, a condition in which they seldom flower profusely. In order to secure fine heads of bloom from this plant it should be allowed a few weeks of comparative rest, after, say about the middle of next month, keeping the roots rather dry, and exposing the plants as freely to air as can be done without injury to the foliage or the health of their neighbours. Brugmansia sanguinea is also a useful plant for winter and early spring flowering when managed so as to have it pruned and rested about this time. See that large specimens of Camellias are not allowed to get too dry at the root after they have set their buds, for shedding of the latter is often due to this cause. Young and vigorous plants however frequently require to be watered rather sparingly to prevent their making a second growth. Cinerarias for late flowering should now be growing freely, and should be shifted when necessary, for if they are to form large specimens for flowering late in autumn or early winter, they must not be permitted to sustain any check. Get cuttings of favourite Roses rooted and pushed forward so as to have them sufficiently strong and established to stand the winter.

FORCING DEPARTMENT.

Pineries.—Air should now be given liberally to young stock in dung pits, in order to secure strong stocky growth. The plants should not, however, be exposed to draughts, for these would not serve the end in view; a moderate circulation should however be secured at night, giving no more during the day than may be necessary to prevent the temperature getting too high. This, with careful attention to the state of the roots, keeping the bottom heat regular, the soil in a nice healthy state as to moisture, and giving a liberal supply of manure water to such as are well rooted, will be found much more conducive to growth than exposing the plants too freely, which would probably check and throw them into fruit prematurely. Use every means to afford plants swelling their fruit a thoroughly moist atmosphere, sprinkling passages, &c., frequently, and shutting up early, giving a gentle dewing with the syringe, and saturating the atmosphere by sprinkling every available surface; also give plenty of clear strong manure water at the root until the fruit begins to change colour, when the soil should be kept rather dry, which will improve the flavour.

Vineries.—Attend to former directions as to thinning the fruit in houses intended to furnish a late supply, and see that the bunches are severely thinned, and also that the crop left is not too heavy in proportion to the strength of the Vines. Where the fruit is swelling, be careful to maintain a moist state of the atmosphere, and give every possible attention to the roots, keeping the border in a healthy state as to moisture, and if watering is found necessary, use good strong manure water. Give abundance of air where the fruit is colouring, and do not allow plants in pots to remain in the house to cause damp, which despite every care in ventilating is apt to settle on the berries and spoil the bloom. Where the fruit is ripe and expected to hang for some time, the atmosphere of the house should be kept as cool as possible; but a little fire-heat will probably be necessary occasionally in order to keep the atmosphere dry during very damp weather.

Peaches and Nectarines.—Expose the ripening crop as much as possible to the sun and admit plenty of air, to give colour and flavour to the fruit. Late houses, where the fruit is swelling, should have an increased day temperature, with plenty of moisture. Thin and tie in the shoots in the last house.

Cherries.—As soon as the crop is gathered, remove the trees to a shady situation and keep them syringed and watered; the pots should be plunged, or the plants taken out and planted in a northern aspect. Those plants in pots intended for forcing next season should not suffer from drought or from the effect of Cherry-fly.

Figs.—The second crop on the earliest trees will be fast advancing; as soon as the fruit begins to ripen the atmosphere should be kept dry and rather cool, giving air freely every fine day, and using a little fire on wet cloudy days, to prevent damp and allow of a gentle circulation of air. Use every care to keep the foliage clean and healthy, and clear of insects, and do not crowd the young shoots.

Melons.—Plants on which the fruit is ripening should be kept dry at the root, and freely exposed to air on fine days.

FLOWER GARDEN AND SHRUBBERIES.

Propagation of stock for next season must soon receive consideration, so as to have strong well established plants before winter, and without the necessity of keeping them so close or warm as to induce weakly and watery growth. It cannot be too often repeated that to be able to winter bedding stock safely with ordinary care, the cuttings should be put in sufficiently early in the autumn to allow of having them well established and fit to be exposed to the open air by the middle of September. Begin with such as are found to be the most tedious to propagate. Hollyhocks are general favourites, but they do not afford cuttings freely, and are in general not over plentiful about most places. These should therefore be examined often in search of any cuttings which they may afford, as those rooted early will make strong plants for next season. Attend to the tying up of these and Dahlias, and go over the masses of Verbenas, &c., frequently for the purpose of regulating the growth, so as to keep it orderly and neat.

HARDY FRUIT AND KITCHEN GARDEN.

During the present month every attention should be given to trained fruit trees. All wall trees especially should be gone over in time, and the shoots thinned and stopped to admit air and light among the fruit and young shoots, which will greatly assist the formation of fruit buds for the following season. Old Pear trees in particular, that are unfruitful, should be subjected to this treatment. Keep Peach trees free from green fly by means previously advised, and dust sulphur on shoots affected with mildew. Use the garden engine occasionally in warm weather, to clean the trees and prevent red spider. Tomatoes must be regularly attended to, keeping the shoots thin and stopping them at one cluster of fruit. Herbs as they come into flower should be cut and dried for winter use. They can either be hung up in bags to keep them clean or rubbed out and bottled.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending June 27, 1861, as observed at the Horticultural Garden.

June.		Moon's Age.	Barometer.		Temperature.					Wind.	Rain.
					Of the Air.			Of the Earth.			
			Max.	Min.	Max.	Min.	Mean	1 foot deep.	2 feet deep.		
Friday	21	13	29.918	29.813	79	58	68.5	65	60	E.	.36
Satur.	22	○	29.902	29.722	76	49	62.5	65½	60½	S.W.	.01
Sunday	23	15	29.749	29.662	77	51	64.0	65	60½	S.W.	.02
Mon.	24	16	29.827	29.777	77	52	64.5	64½	60	S.W.	.10
Tues.	25	17	29.795	29.618	68	41	54.5	64½	60	S.W.	.15
Wed.	26	18	29.625	29.565	75	44	59.5	63	58½	S.W.	.05
Thurs.	27	19	29.741	29.666	80	44	62.0	63	59½	N.	.03
Average..			29.794	29.688	76.0	48.4	62.2	64.3	59.8		.72

June 21—Foggy; showery; overcast and warm; densely overcast; rain.
— 22—Uniformly overcast; close and warm; very fine.
— 23—Very fine; thunder and lightning at noon; very fine.
— 24—Very fine throughout; rain at night.
— 25—Rain; showery; fine at night.
— 26—Low dusky clouds; heavy showers, and bright sun at intervals very fine.
— 27—Showers; fine; low white clouds; very fine at night.
Mean temperature of the week ½ deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending July 6, 1861.

June and July.		Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds.							
							N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday	30..	72.9	49.1	61.0	12	0.80 in.	1	6	4	1	4	11	5	3
Mon.	1	71.9	51.7	61.8	16	1.18	1	5	5	—	4	10	6	4
Tues.	2..	73.2	52.0	62.6	12	0.22	2	5	3	—	5	9	9	2
Wed.	3..	74.4	51.5	62.9	15	0.78	1	6	2	1	3	12	8	2
Thurs.	4..	76.2	50.8	63.5	11	0.33	1	2	4	1	6	11	8	2
Friday	5..	77.6	51.2	64.4	13	0.59	1	4	—	4	6	9	9	2
Satur.	6..	76.3	51.1	63.7	14	0.45	1	1	3	2	4	15	6	3

The highest temperature during the above period occurred on the 5th, 1852—therm. 97 deg.; and the lowest on the 30th, 1859—therm. 35 deg.

Notices to Correspondents.

Books: *G P.* Bentham's Handbook of British Botany.

Bulbs: *Amelia.* Order them in the beginning of August; require them to be delivered by the beginning of September, and plant them very early in October.

Figs: *J S.* The fruit falls in consequence of the branches not being able to feed it, and that no doubt arises from something wrong at the roots.—*Ficus faber.* You will find full information in the last edition of Rivers on the *Orchard House.*

Fungi: *C M.* Your Fungus on Tragopogon is Ustilago receptaculorum, Fries.—*Under Gardener.* Your Peziza is very interesting. It is close to P. hirta, but undescribed. More specimens would be acceptable. *M J B.*

Glazing: *Croydon.* You will not be able to *grow* plants well in a house one-third of whose sashes is opaque; but it will make a good *propagating* pit.

Insects: *I C.* The Spinach and Mangel Wurzel leaves are blotched by the maggots of a small two-winged fly (Tephritis—?). The only remedies are to pluck off the leaves and burn them, or to squeeze the blotch between the finger and thumb so as to destroy the insects. Please send some specimens in a box to Professor Westwood, Oxford.—*W L.* Your Broccoli plants are infested at the roots with the grub of the Anthomyia Brassicæ, a two-winged fly scarcely distinguishable from the common house-fly. The infested plants should be pulled up and burnt, and the holes limed or brined. The roots may also be searched for the oval-shaped orange pupæ, which should also be destroyed, as the generations of these insects in the summer months are very rapid.—*Rev. G H B.* Thanks for the diseased Mangel Wurzel leaves. You shall hear more in detail shortly. In the meantime pluck off and burn the infested leaves. *W.*

Names of Plants: *W B.* The large leaf belongs to Ulmus montana, the Witch or Scotch Elm: the other to U. campestris. The first is the most valuable; but both are good in *soils that suit them.*—*B A B.* The West Indian Horse-eye is we suppose the Bean of Hymenæa Courbaril. The old monthly Rose does not answer well.—*Lilies.* The common yellow Lily is L monadelphum; the common Orange is L. bulbiferum.—*Ignoramus.* 1, Cotyledon Umbilicus; 2, Rhinanthus Crista Galli; 3, Juncus acutus; 4, Hieracium Pilosella.—*John Davis.* Anthyllis vulneraria, worthless.—*Dis.* It is the American Hornbeam, Carpinus americana. Planera is quite another thing.—*J W D.* No numbers attached. Gymnogramma Calomelanos; Adiantum cuneatum; Selaginella cuspidata.—*W J.* Ionopsis paniculata.—*Sub.* 1, not in flower; 2, Lonicera involucrata; 3, Genista tinctoria; 4, Juniperus communis.—*Ignoramus.* 1, Veronica agrestis; 2, Veronica scutellata; 3, Scutellaria galericulata; 4, Potamogeton crispus.

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SUPERPHOSPHATE OF LIME, of best quality.
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2, Old Palace Yard, Westminster, S.W.
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1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
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WORKS OF DRAINAGE of any extent are EXECUTED by the GENERAL LAND DRAINAGE AND IMPROVEMENT COMPANY on all descriptions of property, whether freehold, entailed, mortgaged, trust, ecclesiastical, corporate, or collegiate.

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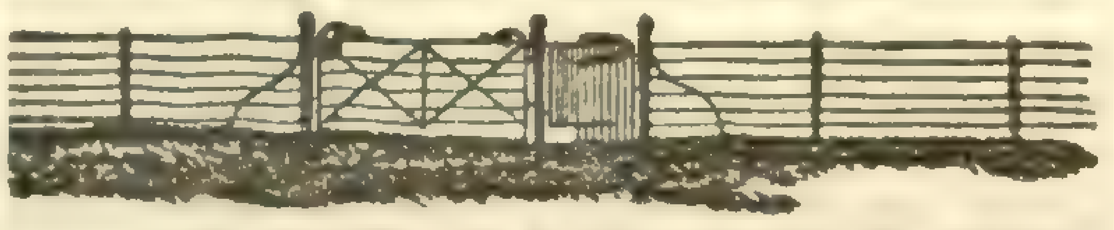

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This fence is far cheaper than posts and rails, or any kind of iron fencing; and possesses four times the strength of solid bars. Will not rust nor corrode. Upwards of 1200 miles of this Fencing supplied.

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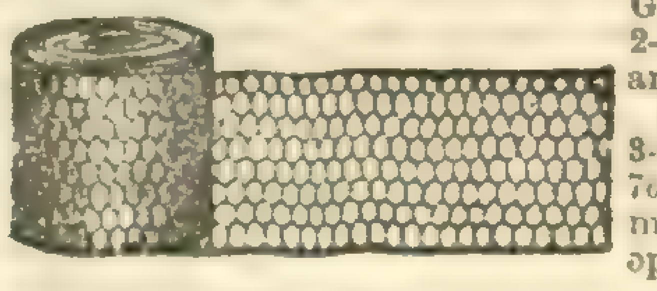

Galvanised, 24 ins. wide, 2-inch mesh, 5½d., 7½d., and 9½d. per yard.

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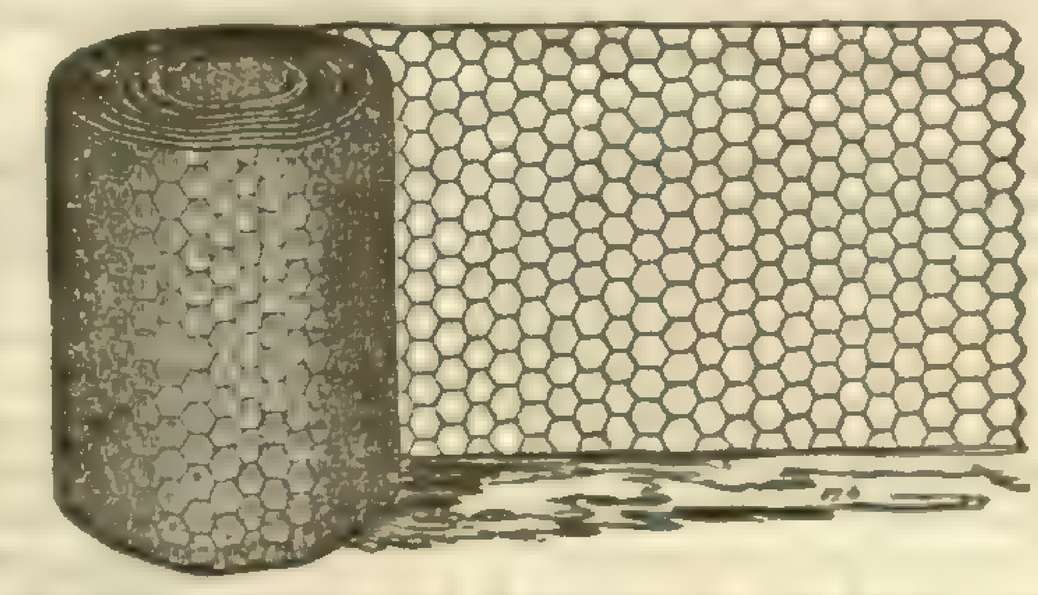

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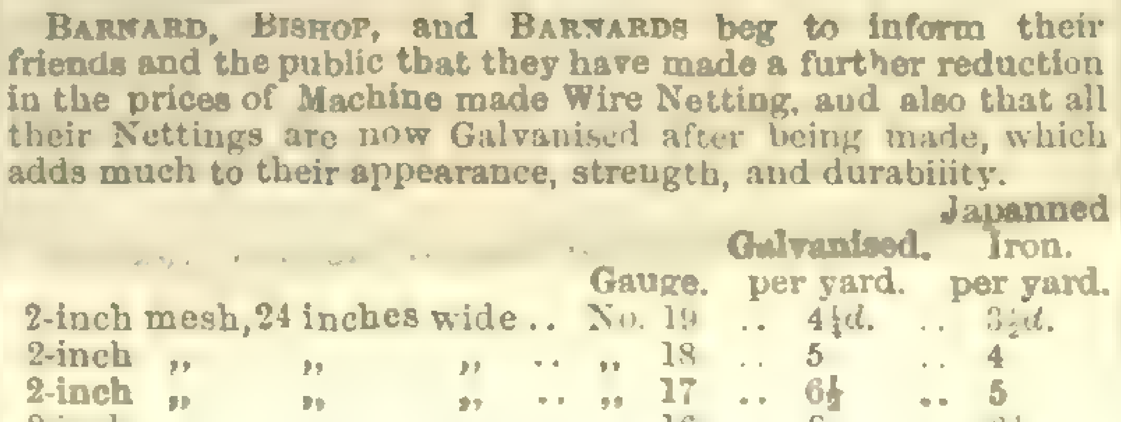
2-inch mesh, 24 inches wide ..	No. 19	.. 4½d.	.. 3½d.
2-inch „ „ „ ..	„ 18	.. 5	.. 4
2-inch „ „ „ ..	„ 17	.. 6½	.. 5
2-inch „ „ „ ..	„ 16	.. 8	.. 6½
1½-inch „ „ „ ..	„ 19	.. 4¾	.. 4
1½-inch „ „ „ ..	„ 18	.. 6	.. 4¾
1½-inch „ „ „ ..	„ 17	.. 7	.. 5½
1½-inch „ „ „ ..	„ 16	.. 9	.. 7

All the above kinds can be made any width (under 6 feet), at proportionate prices.

Strong Galvanised Poultry Netting, 7½d. per yard, 3 feet wide. Galvanised Sparrow-proof Netting for Pheasantries, 11d. per yard, 2 feet wide. Wire Netting of every mesh from half an inch to 6 inches.



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New Patent Windlass and Rollers with Anchors, &c., complete	£92 0 0
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Two extra Tines to add to No. 3 to make a 5 Tined Cultivator of it, in which form it has been used by Mr. Bignell and Mr. Dring for two years, and found to work well	2 0 0
Total	£170 0 0

Woolston, June 29, 1861.

SHAW'S TIFFANY FOR SHADING, &c.—

Sold in Pieces.	Per piece.—s. d.
No. 1, 20 yards long, by 38 inches wide	5 0
No. 2, do., do., the same material, manufactured with a Patent Mineral Solution to prevent it from rotting ..	6 0
No. 3 (double strength), 18 yards long by 39 inches wide ..	7 6
No. 4 (treble strength), 18 yards long by 39 inches wide ..	9 0

Sold by all respectable Seedsmen. See that every piece is marked "Shaw's Tiffany," Manchester. Samples and Circulars sent free by post.

JOHN SHAW & Co., 29 Oxford Street, Manchester.

POA ANNUA.—This Grass is alluded to in a Leader of the *Gardeners' Chronicle* of the 17th inst. "It is adapted to any case where the early appearance of Grass is required for any special purpose." It is suitable also for sowing in shady places and under trees.

GEORGE GIBBS & Co. having just received from one of their Collectors upwards of 10 cwt. of Poa annua, beg to offer fine heavy Seed, just harvested, price 2s. 6d. per lb.

GEORGE GIBBS & Co., Seedsmen, 26, Down Street, Piccadilly.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.—LEEDS MEETING, 1861.
PROGRAMME:—

MONDAY, July 15.—The Implement Yard open from 7 o'Clock in the Morning, at an admission-charge of 5s. for each person.

The Judges to inspect the Live Stock, and to award the Prizes.

At 1 o'Clock (or as soon after as all the Judges shall have delivered in their awards, of which notice will be given), the Cattle Yard will be open without additional payment. Arrangements have been made for distinguishing the Animals that have won the Prizes, immediately the Judges have made their awards. The Show Yard will be closed at 6 o'Clock in the Evening.

TUESDAY, July 16.—The General Show Yard of Cattle, Horses, Sheep, Pigs, Implements, Flax, Wool, Cheese, and Butter, open to the Public from 6 o'Clock in the Morning till 6 in the Evening; admission, 2s. 6d. each person.

WEDNESDAY, July 17.—Public Dinner at 5 P.M., in the Town Hall. The Earl of POWIS, President, in the Chair. Tickets, 10s. each, to be obtained of the Secretary.

The General Show Yard open to the Public from 6 o'Clock in the Morning till 6 in the Evening. Admission, 2s. 6d. each person.

Public working of the Steam Cultivators, on land in the neighbourhood of the Town, during such hours as the Stewards may determine.

THURSDAY, July 18. } The General Show Yard open to the
FRIDAY, „ 19. } Public from 6 o'Clock in the Morning till 6 in the Evening. Admission, 1s. each person.

FRIDAY, July 19.—General Meeting of the Members in the Town Hall, at 11 o'Clock in the Forenoon.

Governors' and Members' Tickets to be had on application to the Secretary.

By Order of the Council,
H. HALL DARE, Secretary.
12, Hanover Square, London, W., June 29.

The Agricultural Gazette.

SATURDAY, JUNE 29, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

TUESDAY,	July 2	—Steam plough trials begin near Leeds.
WEDNESDAY,	— 3	—Agri. Society of England .. .. Noon
FRIDAY,	— 5	—Suffolk Agri. Society at Ipswich.

—— ON Wednesday, July 10, Messrs. HENRY STRAFFORD & CARTER JONAS will dispose by auction of the Babraham flock. Mr. JONAS WEBB has for 40 years been a breeder of Southdowns, and for the last quarter of a century he has been known wherever the English farmer lives, or the English language is spoken by the farmer, as the leading breeder of Southdowns. The Babraham flock has indeed for many years had more even than a continental supremacy and reputation—and the assemblage a few days hence at Babraham will be as truly an International gathering and competition as any that is to take place next year.

Mr. WEBB has announced his determination not to breed another sheep for letting or for hire. This year's lambs are to be sold next year; but otherwise this will be the last opportunity that will be ever given of purchasing the produce of that unrivalled skill which has so long and so successfully been devoted to the improvement of the Southdown breed of sheep.

One hundred 2-year-old and aged rams, 25 lots of yearling ewes, 110 yearling rams, 14 lots of 2-year-old ewes, 15 lots of 3-year-old ewes, 29 lots of full mouthed ewes, and 10 lots of broken mouthed ewes, will be distributed on July 10. In all 210 rams and 865 ewes will then be sold. We cannot doubt that the meeting will prove a great landmark in the history of English live stock.

We hope next week to give the history and present condition of the Babraham flock.

—— We understand that it is not BAMLETT's, as stated last week, but BALL's American machine which is being brought out by Mr. SAMUELSON. It was exhibited at Pontefract last year, but not until after the competitive trials were over. It possesses remarkable powers as a mower of uneven ground.

—— Some months ago the seizure of a large quantity of diseased meat in Newgate Market, said to have been sent by Mr. SETH SEYMOUR, a Dorsetshire farmer, was announced. Mr. SEYMOUR was prosecuted by direction of the City authorities; and as the conduct complained of is undoubtedly a crime of very serious consequence, it was right that a prosecution should be instituted. It is, however, of some importance in such matters, that the offence be charged upon the real offender. The sheep sent up in carcase to the market were not the property of Mr. SEYMOUR, and neither he nor the owner, when directions were given for their slaughter, knew that they were otherwise than healthy. Of course Mr. SEYMOUR, who surrendered for his trial last week before the Central Criminal Court, was honourably acquitted.

——We have taken from the columns of the Albany *Country Gentleman* an account of the Thorndale shipment of Short-horns, to which reference was made in these columns the other day. We add here a list of the several animals, their purchasers, and prices:—

The 2d Duke of Thorndale has been sold to Messrs. HOWARD & ROBINSON for 400 guineas; the 3d Duke of Thorndale has been sold to Mr. MACINTOSH for 300 guineas; the 4th Duke of Thorndale has been sold to Mr. HALES for 400 guineas; the Thane of Oxford has been sold to Colonel PENNANT for 250 guineas; Imperial Oxford has been sold to Mr. LAWFORD for 200 guineas; 4th Lady of Oxford has been sold to Mr. MCINTOSH for 250 guineas. These have thus averaged 300 guineas. Besides these a young bull, Hero of Thorndale, has been sold to Mr. WELCH for 200 guineas. The seven animals have thus fetched 2000 guineas, and Mr. THORNDALE has received the sum he gave to English breeders some years ago for their sires the two Grand Dukes.

AGRICULTURAL education is a subject which has always been regarded as one of the deepest possible interest. The leading men who founded the Agricultural Society of England were largely instrumental in establishing the Royal Agricultural College at Cirencester, where sons of the more wealthy class of farmers can receive an excellent course of instruction in the sciences which relate to the pursuit of farming. We have not yet succeeded in this country in establishing any system of agricultural instruction for the humbler but more numerous class of farmers. There are however a few isolated cases in which agricultural training is successfully used as an element of school instruction in the parish schools. But it will be found that in all these the results are accomplished by the spirited efforts of individuals rather than through any systematic scheme devised by educationists. The fact of so much good having been accomplished in this way can leave no room for doubting that the diffusion of correct knowledge of the principles of husbandry could be most effectually promoted through the common schools of Britain. For our part we must say we can see no reason why a few well written manuals on agriculture should not be read in every rural school in the empire. And the working of the Irish National School system, in which agriculture forms a prominent element of instruction in many schools, confirms our views on this point.

We have been induced to make these observations by the perusal of a copy of a new edition of the "Handbook to the Model Farm, Glasnevin, and of Agricultural Education in Ireland," by Mr. BALDWIN, of Glasnevin, in which the subject of agricultural education is clearly and briefly put before us.

Mr. BALDWIN has, in this little volume, done good service to the system with which he is connected, and to agricultural education generally. His opinion on the question is entitled to much consideration. As a tenant farmer's son, who, as he tells us, in boyhood saw and took part in the work incidental to a farm of about 100 acres of land, he understands the wants of Irish tenant farmers; and for the last 10 or 12 years he has been actively engaged in supplying them with correct information, as an officer of the Irish agricultural school system, of which he writes, and of the capabilities of which he is himself an excellent illustration.

Summarising Mr. BALDWIN's statistics we find: 1st, that since the introduction of agricultural instruction into the national schools of Ireland, there have been instructed in the leading scientific and practical facts of modern husbandry 50,000 boys, besides 2000 young men who, as agricultural boarding pupils, have undergone a regular apprenticeship to agriculture on the larger school farms. Assuming that as many as 50 per cent. of them are now employed as land factors, land stewards, or farmers in Ireland, he would give an average of forty of them to each county in Ireland. The teaching and example of these men must have conduced very considerably to the progress of Irish agriculture.

2d. The cost of agricultural instruction in the Irish *ordinary* National Schools is about 3s. 4*d*. per boy, per annum. In our English agricultural and other industrial schools, the Committee of Council on Education allow 5s. for each industrial scholar when a special industrial instructor is employed, and 2s. 6*d*. when the ordinary teacher conducts the industrial department. In addition, the Committee of Council makes grants to industrial schools equal to half the rent of the premises specially hired for the purpose, and one-third the cost of tools or raw materials for labour.

So far the comparison is favourable to the Irish system on the score of economy. In Ireland, however, the larger schools cost considerably more, but of these Mr. BALDWIN does not supply us with the figures.

The principal point on which we are just now anxious to fix attention, is that a large amount of most useful agricultural instruction is afforded in many of the rural national schools of Ireland, at a very small cost to the state: and that what has been thus accomplished may be found equally beneficial in this country. The success of the Irish agricultural school system is due to those statesmen and public men who, viewing Ireland without prejudice, and the Irish people without distrust, have sought every opportunity of raising the standard of intelligence—social and industrial—of the people, and who, to use the words of the present Premier, considered "there could not by possibility be a better application of money in Ireland than in teaching the people how best to cultivate their land." [There will be found elsewhere in our columns this day a short report of Mr. CHADWICK's valuable paper on the half-time system of education which he proposes for the children of agricultural labourers, and a successful instance of which is furnished by the experience of Mr. PAGET, M.P., near Nottingham.]

ON BRITISH WOOLS.

[Mr. Caird read the following paper on this subject at last week's meeting of the Royal Agricultural Society. The official report not having been prepared until after we went to press, could not be given in our last week's paper.]

Mr. CAIRD said:—There has been an immense increase in the importation of foreign and colonial wool during the last 20 years; yet the price of British wool has not only undergone no diminution, but its production continues to be one of the most profitable branches of our agricultural industry. The total importations have increased from 45,000,000 lbs. in 1842, to 133,000,000 lbs. in 1859; of which our own colonies and possessions furnished 82,000,000 lbs. From Germany and Spain there has been in that period a diminution of over 4,000,000 lbs.; but from other European countries, chiefly from Russia, the Low Countries, Denmark and Portugal, there has been an increase of 20,000,000 lbs. From our own colonies and possessions the increase during that time has been as follows, in round numbers:—from Australia the increase has been during 20 years from 13,000,000 lbs. to 54,000,000 lbs.; from South Africa the increase has been from 1,000,000 lbs. to 14,000,000 lbs.; from the East Indies it has risen from 4,000,000 lbs. to 14,000,000 lbs. in the year, that is between 1842 and 1859. These figures show an increase so enormous that we cannot but be amazed that the price of home-grown wool continues, in the face of such imports, to be remunerative. But if we attempt to estimate the total produce of the United Kingdom, the results will appear still more remarkable. The number of sheep in the three kingdoms may be taken at 30,000,000. The total produce of wool may be estimated at 120,000,000 lbs. In 1842, the home-grown wool could not have exceeded 100,000,000 lbs. A comparative statement of the supply will stand thus: in 1842, both the home and foreign supply amounted to 145,000,000 lbs.; in 1859, the home and foreign supply amounted to 253,000,000 lbs.; making a total increase of 108,000,000 lbs., which shows an increased supply in the growth of one of our great staples of manufacture to the extent of nearly 75 per cent., and this not followed by any diminution of price to the home producer. This has been caused partly by the increasing prosperity of the woollen manufacturers at home, but partly also by their increase abroad. France alone took from us, in 1859, 6,000,000 lbs. of British wool, and upwards of 12,000,000 lbs. of colonial wool. She took the largest portion of Irish wool, and France and other foreign countries relieved our market on the whole, in 1859, of 28,000,000 lbs. of wool, which was equal to three-fourths of the whole produce of Scotland and Ireland. The practical point to which I am anxious to direct your attention is the change that has taken place in the relative prices of different kinds of wool, and the importance of a knowledge of this to the British farmer. The competition to which we are chiefly exposed lies in the shorter and finer qualities of wool. From Australia, the East Indies, South Africa, and South America, we received, in 1859, upwards of two-thirds of our imported wool. And the whole of that region, which will most probably continue to increase most rapidly in its produce of wool, is unsuitable to the production of the lustrous long wools which are now in great demand. The British islands produce this kind of wool in the greatest quantity. A small portion comes from the north of Europe and Ireland; but hitherto we have held in our hands almost a monopoly of this supply, and as Nature has given us this advantage we ought to make the most of it. The short fine wools of this country, such as the Down and Cheviot, formerly sold at double the price of Lincoln or long combing wool. When the colonial wool trade had no existence in 1811, Cheviot wools were worth 2*s*. 6*d*. per lb., when the Lincoln brought no more than 1*s*. per lb. But in proportion as the market has begun to be supplied with fine Australian wool, the relative values of the two have greatly altered. In July 1851, the Lincolns had reached within 2*d*. per lb. of half-bred Cheviots, and in 1856, within 1*d*. per lb.; and in May, 1861, the Lincoln long wool was the dearer of the two. The change in price as between the Down and Lincoln wools has been equally great. The two kinds of wool are used in the manufacture of different classes of goods. Coburgs are made from Australian, merino, Down, and other fine short wools of which there is a constantly increasing supply. Orleans and lustres are made from the lustrous long wools for which there is a constantly increasing demand, and a limited supply. In the short fine wools there is no lustre whatever; in the long wool lustre is a most important quality. Alpaca and mohair are introduced to a small extent to produce lustre in the cloth; but as the supply of that description of wool is only 2 per cent. of the whole import, it will be obvious how little that will affect the price of home-made lustrous wools. There is a great and increasing demand for *Orleans* and mixed alpacas, and of lustrous goods in which the object is not merely fineness to the touch, but a lustrous appearance. Besides the British demand, there is an increasing French demand both for that kind of wool and for the goods manufactured from it. The French manufacturers already take the most of the long lustrous wool of Ireland. I have been favoured by my friend Mr. Foster, M.P. for Bradford, with specimens of the various wools at present used by the manufacturers of the West Riding, with the prices affixed to each, which I now beg to lay on the table for the inspection of the Society. The practical conclusion to which I arrive is that the British wool-grower should develop as much as possible that kind of wool which is least subject to foreign and colonial competition, and for the production of which he fortunately possesses both the most suitable soil and climate, and the supply of which can be best increased by good farming, liberal feeding, and with a large frame of mutton, as well as a large fleece of wool. For this purpose the best cross probably that can at present be adopted on suitable soils would be by using the improved Lincoln or Leicester ram, in which the desirable qualities of length, lustre, strength and fineness of wool seem to be best combined.

Professor Wilson agreed with Mr. Caird as to the necessity of a distinct breed of sheep to give that peculiar lustre to the wool, and in regard to the effect that good feeding will have upon the produce of wool. The Lincoln has a distinct price in the market on account of its lustrous properties. But there is another breed competing with it, and that is the Romney Marsh. All Europe comes to us for improved breeds of sheep, for horses, and machinery. We have the great trade in the three branches of agriculture. And if the Continent were better acquainted with our peculiar breeds of sheep, and with the peculiar condition of the wool market and the requirements of the people generally, we should have them coming to us for sheep to the same extent that they now come to us for other cattle. In 1855 we exhibited in Paris a collection of English agricultural produce, and one of the principal features was our wool produce. Fair market fleeces of every breed, and also of all the more successful crosses, were collected by Professor Wilson, and created great interest. Cheviot was one of the wools that was most valued for manufacturing purposes; and from the information obtained it appeared that the day for the fine qualities of wool was rapidly passing away. We now none of us wear the fine Saxony cloths that we used to wear when merino wool sold at a high price. The great object of the day now is to have a cheaper article that can be worn by the many, and clear-headed farmers on the Continent see that they have not a demand for the expensive short wools; and it will be their policy to change their merinos to a breed of sheep that shall give more mutton, a larger frame, and a larger quantity of a cheaper description of wool. In Australia and New Zealand the flocks are kept out in the open air, the animal secretes its wool under natural conditions, and the fibre throughout is equal. But when you come to the Continent—take the case of Moravia and Silesia—you can, with a microscope, distinctly see the secretion that has taken place during the cold months of winter, differing in size and in form from that which is secreted during the warm months of summer. You do not see that in the Australian wools. At the Exhibition in Paris there was a great deal of interest taken in the wools. Baron Barathen got the first prize for the finest wool, a magnificent Moravian merino fleece; this

weighed about 14 ounces, and that was the produce of a sheep of five years old, and the wool was worth four francs. On that occasion Professor Wilson produced a Lincoln fleece that was the produce of a sheep 14 months old, and it weighed 20 lbs.; and the price was valued at 10d. per lb. at that period (it is worth more now). Of course it was decided that the latter was the most valuable description of sheep for all purposes. Mr. Southey, the greatest agent for the Australian and New Zealand wool, sent a bale of wool that weighed 350 lbs., and this was estimated by the French experts as equal in quality and in market value to Baron Barthen's choice fleece. That at once showed that the foreign growers could not successfully compete in the wool market with England and her colonies; and it is believed that the tendency that was then generated, and has been growing since, is for the foreigner to give up growing these fine class wools upon small animals, and to substitute for them the large frame sheep, carrying more wool of a lower price. To do that they will have to come to England to obtain some of our stock to cross with their own. France for some eight or ten years has been adopting this policy. Those very high class merinos are now nearly all replaced by what they call the Metis merino, a cross breed; and those are giving way to another cross, chiefly with the Leicester, which they call the Dishley merino, which are making an immense deal more mutton and much heavier fleeces than the merino did before. At the same time the wool is of a quality equal to the requirements for the best manufactures of the present day.

Mr. Gurdon Rebow had crossed his grazing flock of Southdowns with the Leicester. The hogget then made 8½ lbs. half bred, and 7 lbs. all Down—but the whole flock was 6 lbs. on the average for the hogget, and 5 lbs. for the pure Down. He sold the hogget at 22d. last year, and the flock at 20d. If we can get 1½ lb. = 2 lbs. more wool, and at least 10 lbs. more in the carcase, with the same amount of feeding, we certainly ought to do so. He tried to cross with the Cotswold the year before last, and he had them feeding one against the other; but the Cotswolds were so enormously voracious, that they would not bear comparison with the others.

The Chairman: But you get it back in mutton.

Professor Wilson: We must not lose sight of the fact that wool cannot be made for nothing, and that the amount of food required to make 1 lb. of wool will make 3 lbs. of meat. Therefore, we have to consider the relative value of wool and meat.

Mr. Hobbs said he was aware we could produce wool almost of any quality and any length. He had seen a specimen of wool 30 inches in length off a Lincoln sheep. It was two years' growth. We must not consider that we can have either the Leicester or the Lincolnshire flock in the South of England, or get that fine quality of wool which they get on the continent, unless we house our sheep and feed them as they do. We cannot get a fine quality without housing. We get a finer quality by yarding our sheep; but with our system of folding—with the ammonia which certainly affects the wool as much with our Southdowns as with the merinos—we shall never be able to gain that lustre which we desire with long or short wools. In the South of England, wherever there are large flocks of sheep that are accustomed to walk daily over a large tract of poor land, and where the folding with Turnips is very much carried out, we can have our short-woolled sheep of a greatly increased length of staple, and with a quality of wool nearly as fine. There is another point that requires great consideration, and that is, respecting the management. We do not in the spring of the year feed our flocks sufficiently well. We look to one point only, when we should look to both. Nothing would pay the flockmaster better than feeding the sheep in the spring of the year with generous food, especially with oilcake. If, however, you begin feeding your sheep with oilcake in the spring, and then take it off merely for a week, the wool stapler will tell you of it. The oil flows into the wool, and if it is checked even by a week's poverty, or almost by one night's exposure to bad weather, it will greatly deteriorate the quality of the fleece.—A Down flock would not now be considered as yielding a fair amount of wool if it did not average a pound, or a pound and a half, more than a Down flock would yield 20 years ago, when the animal was smaller than at the present time.

In reference to the Society taking action in connection with this subject at the International meeting, Professor Wilson said:—It will not involve great outlay, because most of those things would be given to us; and if we had to purchase, which it is desirable to do, to be independent of the market, the articles would always have a market value. I would offer to undertake the matter without any remuneration. I am anxious to see it carried out by somebody; and I think the only two departments which could take it up would be this Society or the Board of Trade.

Mr. Hobbs: We shall have our own exhibition.

Professor Wilson: It is no good unless we have a comprehensive one, representing every breed, and every cross breed, and giving all the information upon every fleece exhibited, as we did in France. There was a large label, giving the name of each breed, and we divided them under three heads—short, intermediate, and long. We gave the different districts from which the breeds came, the average weight of the fleece, what the wool was required for, the average price at the time, and other particulars; and these labels were thought so valuable, that M. Morny, who has charge of agriculture in France, requested to have them all.

Mr. Gurdon Rebow: Do you not think that something of the same kind will be done with our own exhibition?

Professor Wilson: No; I am sure not. You will have perhaps a few exhibitors, not above eight or ten, and they will exhibit only portions, which, in the absence of the whole, will be of no value—I mean for commercial purposes.

Colonel M'Dougal: If classed together, they will be very valuable.

Professor Wilson: And form a very interesting exhibition.

Mr. G. Rebow: Could not a communication be made from this Society to the Commissioners, or to the Board of Trade?

Professor Wilson: The Commissioners could not touch it. The Board of Trade might attend to it; but more probably they would refer it back to us, as having a greater interest in the matter than themselves. They profess to be a board of consultation, and not an executive body.

Colonel M'Dougal: I certainly think the Society ought to see to it.

Professor Wilson: What matter even if it costs 50*l*. or 100*l*.? But it would not amount to anything like that sum.

The Chairman suggested that the subject should be brought before the Council for consideration.

Mr. Hobbs said he would take an opportunity of bringing the subject before the Council.

Professor Wilson: Will this meeting express any opinion as to its desirability? If you are inclined to think that such a representation would be desirable, it would strengthen Mr. Hobbs's hands in bringing the subject before the Council.

Mr. Hobbs moved, "That this meeting tender its thanks to Mr. Caird for his interesting paper on the different varieties of wool produced in this country, and considers that it would be desirable for the Society to adopt means to ensure a full representation of the various descriptions of wool at the Great Exhibition of 1862."

The motion was unanimously adopted.

THE THORNDALE SHIPMENT OF SHORT-HORNS.

[We extract the following account of the Short horns sent across the Atlantic by Mr. Thorne, from the columns of the Albany *Country Gentleman*.]

The Thorndale shipment of Short-horns to England, to which we have heretofore alluded, has now taken place. Samuel Thorne, Esq., having returned from his recent tour abroad several weeks since, at once made preparations to send out the following animals in accordance with arrangements completed by him with several leading English breeders during his absence, and they accordingly sailed by the City of Baltimore a week ago Saturday (May 18), under charge of Thomas Galbraith, herdsman to Mr. T. The list includes six bulls and one heifer, viz.:—

BULLS.

Name.	Dam.	Sire.
2d Duke of Thorndale	Duchess 71st	2d Grand Duke
3d do. do.	1st Duchess of Thorndale	Grand Turk
4th do. do.	Duchess 66th	Duke of Gloster
5th do. do.	do.	Grand Turk
Thane of Oxford	Maid of Oxford	do.
Imperial Oxford	Oxford 13th	2d Grand Duke

HEIFER.

4th Lady of Oxford	Maid of Oxford	2d Grand Duke

Also One Bull Sold to go to Ireland, and Shipped from New-York, April 19th.

Hero of Thorndale	Lalla Rookh	Grand Turk

Here is an aggregate of eight animals which we shall spare with great regret from the Thorndale herd and the Short-horns of the country. But their exportation is by no means "carrying coals to Newcastle;" for it is precisely such blood that is now in demand in England, where breeders have often regretted that the "Yankees," with such long purses and daring bids, should have succeeded in carrying off so many of the gems of the best herds. In the reigning confusion here, however, they would hardly have commanded the attention at present which their merits and lineage deserve; and we await with no less confidence than pleasure the verdict our British friends shall pass upon their breeding and "bringing up."

To have prophesied 10 years ago that by this time we should be re-shipping Short-horns to the mother country would scarcely have been rated as a prediction of very great probability; and yet those who watched the succession of purchases made by Mr. Thorne, and his subsequent combination of the Morris herd with his own, were quite prepared for the occurrence of the present event. It is worthy of this particular notice for two reasons: as affording evidence in the alacrity of English breeders to procure these Short-horns, of the genuineness of the estimate they placed upon what they have heretofore sold to us, and as proving to other countries, and to other parts of our own country, that as good Short-horn stock may now be obtained here in our midst, as by going to the very district from which it sprang. And this foreign demand will not stop here if our farmers do not wake up from the apparent lethargy into which they seem to have fallen just now; and by preparing themselves to pay with sufficient liberality for what it has cost so much enterprise and money in the first instance to import, out-bid the demands of breeders elsewhere. The history of Short-horns in this country is a curious one, large prices and quick demand having alternated now and then with a time of comparative neglect—sure afterward to be deeply regretted and atoned for in prices still higher, and a demand still wider.

Nevertheless, we can scarcely hope that any warning from us will be heeded at present, while all interests are comparatively swallowed up in the one great and justly engrossing question that involves our national existence. Still, if there are any who are inclined to think that "we already have 'improved blood' enough in our stock both at the East and West," and that consequently we may safely look on with unconcern when the transportation of our best begins—we cannot forbear reminding them how few there are who yet pay any judicious attention to the character of the stock they are breeding, in proportion to the vast number who actually sell off their select animals to the drover and butcher as regularly as every year comes round, and keep only the "culls" at home to stamp defect and deterioration, instead of improvement, upon coming generations. Is there no effort necessary to counteract the results that must inevitably follow such a course of procedure?

We desire, indeed, to have improved stock—whether Short-horn, Hereford, Devon, or Ayrshire—accessible to the farmer at reasonable prices. And this can never be permanently the case, unless there is a demand sufficiently wide to encourage local breeders, who can in turn keep up their herds from such establishments as those of Thorne, Alexander, Sheldon, and others in other breeds, without the cost and risk of importing for themselves. The truth is that farmers are to have a certain market, we believe, for all they can raise or sell for a year or two to come; and it is now, therefore, precisely the time in which they should avail themselves of whatever financial stagnation may elsewhere exist, to secure better farm stock of every kind. And we sincerely hope, if our friend at Thorndale makes any farther shipments to England, that his customers there may first have to out-bid a competition from our own farmers, as animated as our importers have always had to contend against at the great sales abroad.

STATISTICS OF FARM LABOUR.

(*Concluded from p. 584.*)

Labour on Medium Soils.—(1.) My first instance is that of a small farm, wholly arable, in Gloucestershire. It consists of 260 acres of a soil varying from a light and shallow stony brash over limestone rock to a somewhat clayey loam. There is a fixed steam-engine of about six-horse power, by which all the threshing is done, and seven horses did all the horse work of the farm during the time I knew it; and as all the root crops were carried home, and only one-eighth part of the arable land was in Clover, the labour of cultivation was very heavy. This was equal to 74 acres of arable land, or about 64 acres, deducting the portion in Clover, to each pair. I have the labour account of this farm for three years, during which the wages had averaged about 700*l*. varying from 9*l*. and 10*l*. a week during winter, to 14*l*. and 15*l*. during spring and summer, and 20*l*. to 40*l*. during harvest. Ten men during winter, and 13 or 14 in summer, with as many as 14 or 15 women and boys during the spring and summer season, and 3 or 4 during winter, were constantly employed. The wages were to a great extent paid by the piece: as much as 200*l*. out of 700*l*. were thus paid. On the whole it amounted to nearly 54*s*. per acre, one of the largest expenditures in ordinary arable farming which I have known.—(2.) The following particulars relate to a first-class arable farm in East Lothian. Its extent is 650 acres; and it employs 21 work horses, or one pair for every 62 acres, which, deducting 120 acres of Clover, is equal to one for about every 50 acres of land actually under the plough. No fewer than 80 acres are each year in Potatoes, which has no doubt considerable influence on the manual labour bill. The following are the hands employed:—1 overseer, 1 shepherd, 10 ploughmen; 3—engine-man, barn-man, and overseer of outworkers, 2 cattlemen, 5 hedgers and labourers, and 35 lads and women. Besides these, 25 or 30 people are employed for 3 or 4 weeks at harvest, and 10 or 12 women are kept on until the Potatoes are secured. Reaping machines have enabled the tenant to dispense with the labour of 30 or 40 people during harvest time. The labour of this farm must cost at least 1200*l*. a-year, or nearly 40*s*. per acre.—(3.) The following relates to a farm in Northumberland of 310 acres arable and 110 acres pasture, most of which is a flat alluvial soil, partly light and partly good deep loam—all good Turnip land. Fallows are ploughed 8 to 9 inches deep with two horses, and 12 inches with three horses, wherever the land allows; lea land is ploughed 4 to 6½ inches deep; Turnip land for corn 5 inches. Eight horses are needed, a pair for every 78 acres of arable land, or, deducting 57 acres of Clover, one for every 63 acres of plough land. On this farm only seven men and nine women are employed regularly, and seven men and seven women for a month extra during harvest. The wages cannot exceed 500*l*. a year, or about 32*s*. an acre on the arable land.—(4.) On a farm in Oxfordshire of 300 acres, 100 of which are meadow and the remainder gravel, clay, and clay loam, 25 acres being in Clover, 7 horses are employed, being a pair for every 57 acres of arable, or for every 50 of *ploughed* land. The staff of labourers consists of 14 men, 5 boys, and 4 women, all of whom, except the women, who do not turn out in bad weather, are employed throughout the year. All the farm work, harvest included, is done by the regular hands, the land being of such various character as to bring the harvest in at various periods, so as to be easily manageable. The labour bill here must be at least 450*l*. a year; or deducting 5*s*. an acre for the pastures, upwards of 40*s*. an acre.—(5.) The College farm at Cirencester is described as follows:—260 acres are a useful marl with stones; the soil deep enough to allow of 7-inch ploughing, and sufficiently retentive to render it stiff working land in moist weather; 100 acres are of a light and shallower soil, sometimes occupying the slopes of the hills, where there are not more than 2 inches of earth; 40 acres are a strong clay marl. Three horses in line are needed for 6 to 7-inch ploughing. From 1 acre (lea ploughing) to ¾ (in winter) is a day's ploughing. For working these 400 acres arable and 40 acres pasture 11 horses are required, equal to one pair for every 72 acres arable, or, deducting 100 acres of Clover, for every

54 acres of actually *ploughed* land. The labour bill amounts to 700*l.* a year, or about 34*s.* 6*d.* an acre on the arable part of the farm. The labourers employed are as follows:—Team-men: 3 men, 2 young men, 1 boy; cattle-men: 3 men and 1 boy during four months, 3 men and 3 boys during eight months; day labourers: rather above 8 on an average throughout the year; boys rather more than 4; women rather above 4 on an average.—(6.) Of two large farms near Lechdale, Wiltshire, I have particulars of the labour annually employed. They include no less than 2000 acres of arable land, and 430 of pasture; and the following are the hands employed in July and November respectively:—

	July.	November.
Men and Lads with Teams	51	40
Do. do. „ Sheep	8	14
Do. do. „ Cattle	5	11
Do. Labourers	53	45
Women	61	25

This will represent an average employment of 95 men, 20 boys, and 40 women throughout the year. The labour bill cannot fall short of 3200*l.* a year, or 32*s.* an acre on the arable land.

The horses employed on these farms are 43 in number, with 7 teams of oxen. If these oxen be put equal to 13 horses we shall have 28 pairs to 2000 acres of arable land, one to every 71 acres or thereabouts; or, deducting about 500 acres of Clover and some Fern, a pair to every 53 acres of actually ploughed land.

(7.) My last instance under this class of soils is of a farm also on the Cotswold range, and for the most part of shallow brashy soil, consisting of rather more than 400 acres arable, and 280 acres pasture; 12 horses are employed, equal to one pair for every 68 acres arable, or, deducting no less than 174 acres of Clover, &c., one pair for only 40 acres of actually ploughed land. The handwork of the farm is done by 23 men, 7 boys, and 10 women, besides extra occasional hands for reaping, Turnip-hoeing, and sundries. If we add 75*l.* for this extra harvest work, the labour bill of this farm will probably exceed 750*l.* annually, amounting to 34*s.* per acre of the arable land, if we deduct for the probable expenditure on the pastures.

Labour on Stiff Soils.—It is on these soils especially that steam power is likely to find general employment in the cultivation of the land. It will not, however, displace manual labour, for it will enable the cultivation of a more laborious class of crops—Mangel Wurzel, for instance, in place of Vetches—enabling thus the keeping of a larger live stock through the year, which will require a proportionally larger number of attendants. I have four instances in illustration of the labour of stiff soils, and on most of them the steam plough is at work.—(1.) *Woolstone Farm in Buckinghamshire*, for the most part a heavy soil, 112 acres arable land, and 70 acres Grass land, employs regularly 3 horses and an eight-horse power engine, which is employed on an average during 14 days in ploughing, and during other 14 days in threshing. Seven men and 4 boys are employed regularly on this farm, and their wages must amount to at least 250*l.*, or deducting 20*l.* a year for the pastures, 2*l.* 2*s.* per acre per annum. The horse labour on this farm is equal to one pair to every 74 acres of arable land, or, deducting 12 acres in Clover to every 66 acres of actually ploughed land.—(2.) On a farm of 590 acres of arable land, 65 acres of water-meadow, and 160 acres of down land, in Wiltshire, the labour bill amounts to about 1170*l.* a year, which, deducting for pasture-land, is about 38*s.* an acre. This pays for 31 men, 17 boys, and 14 women and girls. The horse labour on this farm is done by 16 large cart horses and 22 ponies, the latter being worked three or four in a plough, and reckoning them at their comparative value with ordinary cart horses, the whole may be considered equal in force to about 28 of the latter. Of the 590 arable acres, 120 are in Clover or other artificial Grass; 120 are in roots or other summer and autumn food; and 350 acres are in corn, including Turnip seed.—(3.) On a clay land farm of 520 acres arable, and 200 acres pasture, there are employed with slight variations, 30 men, 7 women, and 12 boys, throughout the year, with 70 additional men for three weeks during harvest time. 24 horses were employed, which was a pair for every 43 acres of the arable land, until steam power was employed in cultivation. Since then, one third (eight) less are needed from the termination of Wheat sowing till the commencement of harvest: but the other part of the year (*i.e.*, during harvest and during autumn cultivation, of which, even with the aid of steam, enough cannot be done) gives work for as many horses as ever; so the difficulty is met in this way—four horses are parted with, and from the others 4 to 6 colts are annually bred, the foals are weaned early, and the mares are brought to work again just when they are wanted. The labour of the farm, calculated at ordinary wages, must cost 1200*l.* a year, which, after deducting for the pasture-land, is at least 2*l.* 4*s.* per acre.—(4.) My fourth instance is of land near Faringdon, of which one half is pasture, and the whole is a dairy farm. It is 600 acres in extent, and 150 cows are milked, which of itself requires 15 constant hands. The whole hand labour of the farm costs nearly 800*l.* a year, and is done by the following hands upon the average:—22 men, 8 women, 10 boys. Deducting for the pasture, the labour of the farm amounts to at least 46*s.* an acre over the arable land. An engine is used for threshing and cutting chaff for cattle, and grinding food for pigs, and a set of Fowler's steam-ploughing tackle is also found to answer exceedingly well in the cultivation of the land.

Average Quantity of Labour Employed.—Taking those cases of which the full particulars are given, viz., 13 out of the 14 farms described—we have the following gross results:—On 7824 acres of arable land, and 1690 of pasture, 242 horses are employed, and work is given to 359 men, 134 women, and 143 boys and girls, costing, on the whole, not less than 14,323*l.* This, if we deduct 423*l.* for the pastures, is equal to about 33*s.* per acre of arable land. The horse labour of these farms amounts, on the average, to one pair for every 65 acres of arable land, or for every 49 acres of actually ploughed land. *J. C. Morton's Handbook of Farm Labour.*

REARING OF CALVES.

THE rearing of calves has often been discussed in the leading agricultural journals, still there exists a variety of opinions, and a great diversity of practice on a subject of every year's experience from time immemorial, and that by a large body of intelligent agriculturists. Having for the last five years reared upwards of forty calves a year, and having tried the different systems generally practised, we will give our experience as concisely as possible. After many experiments we find that calves when allowed to suck the cows invariably thrive the best, it being the most natural for the young animal. Although there are some objections to the practice, such as where a valuable herd of cows is kept for breeding purposes, by allowing the calves to suck their dams they are not likely to become in calf again, or even to take the bull at all while the calf is allowed free access to the cows, and although the calves thrive better and are less subject to disease when allowed to suck the cow, they invariably sink and lose condition more when weaned than those which are brought up by hand, unless they continue to receive the milk to much greater age. We begin weaning about the first of October and continue till the middle of April, when we generally leave off. Having some well bred cows which are kept principally for breeding, we purchase young dairy cows of the Shorthorn breed likely to give a good quantity of milk, and also of a kindly disposition to fatten readily when dry, as they are all generally sent off fat from Grass in the autumn, they being all dried of their milk by the middle of May and just in time for the feeding pastures. Each cow keeps two or three calves for the first six or eight weeks after calving, according to the quantity of milk she yields. The calves are all weaned at about eight weeks old, and another lot bought in to take their place. The cows are well kept; they receive Swedes or Mangle half bushel per head per diem, with 3 lbs. flour—two-thirds Bean, one-third Barley, with plenty of cut chaff—two-thirds straw, one-third hay. The chaff and flour are mixed together and moistened with water. The calves are suckled twice a day, at stated hours.

The calves purchased for rearing are all males of the Short-born breed, and we are very particular in their selection. We prefer the red or roan to any other colour, though we seldom have an opportunity of knowing anything of the sire and rarely anything of the dam, as we frequently buy them of men who attend the different fairs and markets, those men purchasing the calves from the jobbers who buy cows for the London market. Still we are very seldom deceived in an animal of this kind. When the calves are weaned from the pail, which, everything being considered, we reckon the best system, we begin by giving three quarts of new milk at 7 o'clock A.M., and the same quantity again at half-past 4 P.M. If the calf has never been allowed to suck the cow there is less difficulty in teaching the young animal to drink, by allowing it to suck the fingers, and while doing so introduce the hand into the milk; they will after a time or two take it without any difficulty. We continue the 6 quarts of new milk for the first three weeks, at the end of which we substitute 2 quarts per day of skim milk; at the same time we reduce the quantity of new milk 4 quarts per day, the allowance for the fourth week being therefore 4 quarts of new milk and 2 quarts skim per day. The fifth week we reduce the quantity of new milk 2 quarts more, and in this way continue, till at the end of six weeks the allowance is 6 quarts per day of skim milk. After another week we begin to lessen the quantity of milk and substitute a portion of water, till at the age of from 8 to 12 weeks we discontinue the milk altogether. Those which are weaned in this way we find take more readily to other food, and although they may not be so blooming as those of the same age which have been sucking the cows, they generally are the best at the end of the next two or three weeks. There is little difficulty in teaching them to eat oilcake; at or before they are three weeks old we begin by putting small pieces of cake into the animal's mouth, as soon as it has received the allowance of milk; they suck it and soon begin to take it of their own accord. While they are receiving milk, a pen is provided or a stall in the cowhouse converted into a loose box in which the young animals are kept. We generally keep from three to five together; we prefer the lesser number, as we find them more healthy and thrive better when not lying too thick together.

It is necessary, in order to secure the health and comfort of the young animal, that due attention should be paid to cleanliness and warmth. All animals feed most quickly where due attention is paid to an equable temperature, other things being equal, and to no animal does this more fully apply than to young calves. The pen or boxes have small mangers fixed to the wall to hold their food; these mangers stand 18 inches from the floor, are 8 inches deep by 6 inches wide at bottom. Each pen is also furnished with a trough, in which is constantly kept some clean water for them to drink. Having tried various substitutes for milk or the oleaginous substances it contains—Oatmeal, Linseed, &c., when given in fluid, or made into gruel, all tend to make the calf pot-bellied—if given in sufficient quantity to produce any favourable result, our experience is in favour of oilcake broken to the size of Beans, which with a little perseverance and attention they may be taught to eat at a very early age. This, with a little Wheat-flour mixed with some nice sweet hay chaff, we consider the best substitute for the fatty matter contained in the milk. This Wheat-flour is ground by a common stone mill on the farm, from any light or tail corn which is not fit to send to market. This the calves are very fond of, and eat it with avidity when only a few weeks old. As soon as they are weaned they are removed from the pens into some low open hovels, having yards in front; they are divided into boxes or divisions 20 feet square, each division is sufficient to hold six animals. They have mangers in the hovel, and water-troughs in the division or fence, these two lots are supplied from one trough here. Their food consists of cake, flour, chaff, and roots.

During the summer they have the run of a Grass paddock during the day, but return regularly to their yards at night; the following winter they are kept in larger yards, and which contain a greater number of animals. Their bill of fare for this winter is 2 lbs. of Oilcake, half a bushel of cut roots, with cut chaff ad *libitum.* The chaff has a small quantity of flour or pollard mixed with it, is moistened with water, and the whole mass turned over; this is done the day previous to using it. By this means they eat the chaff with more relish, and moistening it prevents the flour being wasted. They are put to Grass the following summer, generally from the 15th to the 20th of May, or as soon as the pastures are in a state to receive them; they remain there on second-rate land till about the end of October, when they are brought home and tied up in the stalls. The daily allowance is then 4 lbs. *linseed-cake*, 4 lbs. flour—$\frac{3}{4}$ Bean, $\frac{1}{4}$ Barley, 1 bushel *of cut roots with cut* chaff; the flour and chaff is mixed as already described. At about the end of December the quantity of cake is increased to 8 lbs. and the flour to 6 lbs.; this they continue to receive till they are sold to the butcher during the months of March and April, when they weigh on an average 90 stones of 8 lbs. per bullock, and under two years and six months old. At this season of the year beef generally makes 5*s.* per stone, we often make 9*s.*, but taking that as an average would make the value of each beast 22*l.* 10*s.* The cost of keeping to this age will be as follows:—

	£	s.	d.
One calf	£2	0	0
Milk, &c., 9 weeks..	1	5	0
Cake, Grass, &c., 43 weeks, at 1*s.* 6*d.*	3	4	6
2d year, Nov. till May, cake, flour, roots, &c., 2*s.* 6*d* per week for 26 weeks..	3	5	0
May till November, Grass, 26 weeks, at 2*s.* 6*d*	3	5	0
3d year, November till April, 20 weeks, at 8*s.*	8	0	0
	£20	19	6

Which leaves a gain to each animal of 1*l.* 10*s.* 6*d.* besides the manure.

Purging or diarrhœa is one of the most frequent and fatal diseases to which young calves are subject. This disease is most frequently brought on by neglect and bad management. The milk with which it was fed has become too cold, or the calf may have been exposed to a cold dirty pen, either of which may disarrange the system and produce purging, which if not quickly arrested will soon prove fatal. The receipt we have used with successful results is an old one:—Prepared chalk, 2 drachms; powdered opium, 10 grains; powdered catechu, $\frac{1}{2}$ drachm; arrow-root, 1 ounce; essence of peppermint, 5 drops: give twice a day in a pint of milk. After a cure has been effected, great care should be taken to prevent if possible a recurrence of the disease. A lump of rock salt should be kept within the animal's reach; this we consider very beneficial to the health of cattle at all ages, and whether in the stalls or the Grass fields.

Costiveness is another disease to which young calves are subject. This is generally produced by coagulation of the milk in the fourth stomach, by which its passage through it is obstructed. We have found Epsom salts, in doses of 2 oz. dissolved in hot water, and the dose repeated at intervals of six hours, produce the most favourable results. The husk is another disease to which calves are frequently liable; at times it takes an epidemic form and proves fatal to hundreds of cattle; in many cases the windpipe is nearly filled, and the air passages of the lungs are completely closed by countless numbers of small worms. These incessantly irritate the windpipe and delicate tubes of the lungs as to produce an almost continued cough. In order to rid the system of these unwelcome occupants, oil of turpentine, 1 oz.; linseed oil, 4 ounces, ...

repeated at intervals of two days, will sometimes destroy the parasites. A mixture is prepared and sold by Mr. Merrick, Veterinary Surgeon, Northampton, which has been extensively used for the hoose in calves and lambs, and strongly recommended by those who have proved its efficacy.

Calves are also very liable to a skin disease commonly known as titter or ringworm; it is very infectious, and soon spreads through the whole stock of young cattle. It may be cured by rubbing the affected parts with a mixture of linseed oil and sulphur, or with iodine ointment; the latter we consider the best. In dressing the cattle having ringworm care should be taken by the person so employed to thoroughly wash his hands afterwards with hot water, as it is easily transmitted to the human subject. *"Ich Dien."*

THE IMPROVEMENT OF PASTURES.

RECENTLY I had presented to me a copy of a Prize Essay* on the Improvement of the Pasture Farming of Suffolk, and as it is a subject in which as a Farm Manager in the Eastern counties I am deeply interested, I have perused it with no little avidity to become acquainted with "those dictates of a well-tested experience," and "those condensed truths" which the tenor of the Introduction induced me to anticipate; and, as it appears to me that the information it affords relative to Grasses is calculated to mislead rather than to guide on a point of the greatest importance, I venture in the interest of my fellow agriculturists to offer a few observations which I trust may prove deserving of notice.

It is perfectly clear that our pastures are far from being in a satisfactory condition, and, in accordance with other readers of our standard agricultural authorities, I can, with a few reservations, which may furnish matter for a future paper, readily subscribe my humble approval of the plans of draining, tillage, &c., recommended in Mr. Bond's Essay for the preparation of grounds intended for pasturage purposes, and I am convinced that when the water-wheel and other obstructions to our rivers and water-courses have become features of the past, and our landowners have met their tenants in leases and other agreements simply in a spirit of justice, we shall be able to see our way to a solution of the problem of profitable pasturage farming equally as satisfactory as the result already accomplished in the case of arable husbandry.

We may presume that our author, in taking up the subject of Grasses for our instruction, would as a matter of course certainly make himself acquainted with such works as Sinclair's "Hortus Gramineus Woburnensis," Lawson's "Agrostographia," Parnell's "Grasses of Britain," &c., and he must therefore be aware that the inferences to be drawn from his illustration of the comparative value of Grasses at page 15, and from his subsequent table of chemical analysis, are decidedly at variance with opinions recorded by authorities entitled by general consent to the highest consideration.

As it is desirable that the contradictions referred to should be clearly exhibited, I will append a list of the natural and artificial Grasses mentioned in the tables at pages 16 and 17 of the Essay, arranging them in the order of their value according to Mr. Bond's analysis, and then furnish relative extracts from the writers above-named for comparison.

The two examples of what is called "Grass from a water meadow" will be omitted, as the name does not appear to denote any kind in particular, and no good purpose therefore can be served by taking it into consideration.

TABLE I.—ANALYSIS OF NATURAL GRASSES, IN 100 PARTS, BY MR. BOND.

	Flesh-forming Principles.	Fatty Matter.	Heat-producing Principles.	Woody Fibre.	Mineral Matter or Ash.	Water.	How often recommended by Mr. Bond in his mixtures.
1. Meadow Cat's-tail, or Timothy	4.86	1.5	22.85	11.32	2.26	57.21	2
2. Meadow Barley ..	4.50	.94	20.05	13.03	2.54	58.85	..
3. Crested Dog's-tail	4.13	1.32	19.64	9.80	2.38	62.73	2
4. Cocksfoot ..	4.06	.94	13.30	10.11	1.59	70.00	3
5. Soft Brome ..	4.05	.47	9.04	8.46	1.35	76.62	..
6. Upright Brome	3.78	1.85	.83	19.00	2.11	[illegible]	..
7. Hard Fescue ..	3.70	1.02	12.46	11.83	1.66	69.33	3
8. Oat-grass	3.54	.87	11.21	9.37	2.36	72.65	..
9. Yorkshire Fog ..	3.49	1.02	11.92	11.94	1.93	69.70	..
10. Smooth-stalked Meadow	3.41	.86	14.15	12.49	1.95	67.14	2
11. Perennial Rye ..	3.37	.91	12.08	10.06	2.15	71.43	3
12. Downy Oat	3.07	.92	19.16	13.34	2.01	61.50	..
13. Yellow Oat	[illegible]	[illegible]	[illegible]	[illegible]	1.72	[illegible]	1
14. [illegible] Rye	[illegible]	[illegible]	12.80	13.47	1.09	[illegible]	..
15. Common Quaking	[illegible]	1.45	22.60	17.00	4.17	51.85	..
16. Rough-stalked Meadow	2.58	.67	10.54	[illegible]	2.26	[illegible]	2
17. Annual Meadow	[illegible]	.71	10.79	6.50	[illegible]	79.14	..
18. Italian Rye ..	2.47	.80	14.11	4.82	2.21	75.61	2
19. Meadow Foxtail	2.44	.72	[illegible]	6.70	1.55	80.20	2
20. Sweet Vernal	[illegible]	.65	8.74	7.15	1.24	[illegible]	2

* An Essay on the Improvement of the Pasture Farming of Suffolk, and which obtained by the award of the Judges in [illegible], the Suffolk Agricultural Association the prize presented by the Right Hon. Lord Henniker.

TABLE II.—ANALYSIS OF ARTIFICIAL GRASSES IN 100 PARTS.

21. Cow-grass (1st sample) ..	6.30	.92	9.42	..	..	..	3
22. Black Medick, or Trefoil	5.70	.94	7.73	..	..	..	3
23. Bush Vetch ..	4.64	.58	6.66	..	..	..	..
24. Sainfoin	4.32	.70	10.73	..	..	..	..
25. Red Clover ..	4.27	.69	8.45	..	..	..	..
26. Cow-grass (2d sample) ..	4.22	1.07	11.14	..	..	..	..
27. Tares	4.04	.52	6.75	..	..	..	..

Thus, referring to the above Table, it would appear that Timothy is the best of all natural Grasses. It is certainly a most valuable kind, but that it is not the best of all is shown in the "Agrostographia," where it is observed that "compared with others it is deficient as an early spring crop;" and Parnell remarks that "the deficiency in the produce of the aftermath, and the slowness of its growth after being cut, are defects which are not compensated by the superior quantity of nutritive matter contained in the stems of the seed crop."

Meadow Barley, the second on the list, is not mentioned in the "Agrostographia," as that work is devoted exclusively to a selection of kinds possessing some decided economic worth—but Parnell says of it "that although an early spring Grass containing a considerable amount of nourishment when in flower, it is not recommended for hay," nor can Mr. Bond entertain a very exalted opinion of its merits, as he never once mentions it in any of his prescriptions. Crested Dogs-tail and Cocksfoot follow next in succession, and are unquestionably excellent kinds.

Soft and Upright Brome are the 5th and 6th on the list. Of the first Parnell remarks that "its being an annual producing a scanty supply of herbage which is not relished by cattle are disadvantages which are not compensated by its early growth;" and of the last named, "that it seems to be not much relished by cattle, and but little adapted for pasture land." It is true they produce an abundance of seeds much relished by sparrows and other small birds and by pheasants—admirable properties certainly in the eyes of bird fanciers and game preservers, but as certainly no great recommendations to the favourable notice of the farmer, and no great reason why they should take precedence of such a Grass as Hard Fescue, which Parnell, Lawson and Sinclair rank as one of the first in valuable qualities.

Of the common Oat-grass Parnell observes that "its agricultural merits are but little known in this country," and from what is said of it in the "Agrostographia" those merits are not of a high order, nor will a knowledge of the fact that the troublesome Knot-grass is one of its varieties add much to its popularity. It is also described "as yielding a very small proportion of nutritive matter, and this little even avoided by horses, cattle, and sheep, on account of its disagreeably bitter taste."

Yorkshire Fog is presented as the next in value, and the author of the "Agrostographia" remarks of it "that it is very productive and of easy cultivation, but that it is of little value for either hay or pasture, as in either state it is disliked by cattle, probably on account of its spongy nature." Parnell's and Sinclair's observations are to the same effect.

Of the Smooth-stalked Meadow-grass it is shown by Lawson that "although valuable for a large and early produce, it is necessary to use it with considerable caution, as on some soils it is subject to the disease called 'rust,' which will extend to other Grasses around it," and Parnell says that "when intended for hay it must be cut while in flower, for if allowed to remain till the seed is ripe a loss of more than one-fourth of the whole crop is sustained."

This concludes our observations on the 10 superior natural Grasses according to our Essayist's analysis, and we will now proceed to examine how far his rule accords with the dicta of the writers whom we have quoted in reference to his inferior Grasses; and as I am perhaps already occupying too much space, I will confine my notice to the five last examples. Parnell remarks of the Rough-stalked Meadow-grass, that "although it does not succeed well on dry and exposed situations, it is most valuable to the agriculturist on moist, rich, and sheltered soils." Sinclair speaks of it in the highest terms, and Lawson mentions it most favourably.

The Annual Meadow-grass is certainly a troublesome weed in gardens, but our authorities say its recommendation as a pasture Grass is justified by the greediness with which it is devoured by cattle.

No authority need be quoted, I imagine, in favour of Italian Rye-grass, as its great merits are sufficiently known to farmers to place it in a higher position than Mr. Bond's mode of estimate has assigned it.

Of the Meadow Foxtail it is observed by Lawson "that it is one of our earliest and best Grasses, and that it constitutes the greater portion of many of the richer pastures of Britain." Parnell and Sinclair express a similar high opinion of its merits, and this, be it remembered, is one of the kinds especially pointed out by Mr. Bond as being deficient in fat and flesh-producing principles.

Sweet Vernal is the last on the list, and though perhaps not of the most valuable for fattening purposes, it is worthy of high consideration from "the well known fact that pastures where it abounds produce the finest flavoured mutton;" and also as according to our authorities it produces an early spring growth and a superior nutritive aftermath.

In the Table of artificial Grasses it will be seen that Black Medick, commonly called "Trefoil" or Yellow Clover, is shown to be inferior in value only to Cow-grass, and therefore superior to all the other Grasses, natural or artificial, subjected to analysis by Mr. Bond. The writer of the "Agrostographia" however remarks on it "that although its produce is bulky, cattle are not generally fond of it, and that it should enter but sparingly into mixtures." It may also be noticed, and it is deserving of especial attention, that the two examples of Cow-grass furnish very different results in their analysis, of fully one-third of valuable properties in favour of the first instance.

Influenced by our Essayist's admirable introductory aphorisms, my impression has been up to this point that his attention would have been altogether devoted to the purpose expressed in his title page, and I am therefore rather surprised by the display at pages 17 and 18 of analyses of plants and weeds which the veriest agricultural tyro graduating at the plough tail surely knows are neither available for nor troublesome to our pasture grounds.

It would have been equally as pertinent to his ostensible object to have paraded a table of the chemical constituents of Kidney Beans, Wheat and Peas, as I imagine they are quite as well adapted for permanent pastures as either the common Tare or the Bush Vetch, a plant usually growing in woods and hedgerows; and perfectly as reasonable to have enumerated the various properties discoverable in the tissue of Groundsel, Chickweed, and Goose-grass, as they are just as troublesome in our permanent pastures as either of the two weeds, Charlock and Scarlet Poppy, which may be observed scientifically masqueraded in the Essay as Sinapis arvensis and Papaver Rhœas, accompanied by the common Wild Sorrel as Rumex acetosa, and the Upright Crowfoot as Ranunculus acris, in deference no doubt to the peculiar and intense aversion of business men, "who usually read neither for amusement nor occupation."

A stranger to the Eastern Counties might readily suppose, from this seemingly necessary recourse to the corn field for examples of the worthlessness and waste of weeds, that the management of our pastures cannot have been so "infamous" or even so "bad" as to justify those heavy censures which our Essayist, as the representative of Suffolk's agriculture, is called on to endure. Sorry I am, however, to say that such an impression would be a decided mistake, and that very little botanical knowledge would discover in our pasture grounds no lack of subjects for the exercise of the analyst's skill in the shape of Docks, Horse Daisies, Hemlocks, Thistles, Keiks, Sedges, Horse Knops, Rushes, Hassocks, &c.; indeed so numerous and troublesome are they that even the writer of the supplementary Essay, our "Friend to Improvement" "frae ayont the Tweed," for so I suspect him to be from a characteristic caution he exhibits in confining his observations to facts and matter evidently within his ken, appears to have lost his equanimity, as otherwise he might have

> Turned the weeder clippers aside,
> And spared the symbol dear.

By his mode of estimate Mr. Bond establishes certain premises regarding the value of various Grasses, and I would now proceed to consider his application of those data in his treatment of that most important part of his subject which occurs under the head of the fourth proposition of his Essay.

On examining the preceding Table of natural Grasses, it will be observed that there are 20 kinds, arranged in the exact order of their agricultural value, as by Mr. Bond's analysis, and it might therefore be supposed that the first 10 on the list would be recommended by him at least more generally than the 10 last named:—not so, however, for while he appears in practice to ignore the existence of five of his superior sorts, he actually prescribes in his mixtures for permanent pastures not less than six of the kinds he has so conclusively proved, according to his system, to be remarkably deficient in good qualities, two of them being the very lowest in his scale of value.

This somewhat unique if not very logical use of facts, besides being confusing to ordinary comprehensions, has a plain tendency to excite a question of the soundness of our Essayist's premises and deductions in other branches of his theme, and necessarily to defeat in a great measure the objects so generously sought to be gained by the Right Hon. donor of the prize, and therefore, as well as in vindication of the Censor's decision, it may be desirable in his next Edition to explain those inconsistencies, and to furnish the particulars of some one of the many cases of improvement quoted throughout the Essay. The instance referred to at page 22 would evidently be a decided and interesting example, judging from the remarkable effect the results seem to have produced upon the tenant.

Referring to the lists of mixtures of permanent Grasses on the 20th and subsequent pages, it will be noticed that no quantities are mentioned, and that apropos of so important an omission and regarding selections for mixtures we are informed "that kinds and proportions are subject to variation according to circumstances." Such is precisely the case, and this

proposition indeed embraces the pith of our principal difficulty, and the point on which a little plain practical information would have been invaluable.

We are, as was before confessed, perfectly conscious that our pastures are in a very unsatisfactory condition. We are also deeply impressed with a sense of the desirability and necessity for improvements; and so far as the preparation of land by draining, tillage, &c., is concerned, we are not perhaps altogether ignorant of the best systems to be followed to that end; but of the individual histories of Grasses, their peculiar adaptations to certain soils and exposures, of the various periods of their greatest productiveness, &c., we possess comparatively but little information, and consequently are not sufficiently acquainted with those combinations of kinds which render the pastures of certain districts richer and more productive than the Grass lands of other localities where clearly there are no advantages of soil, situation, climate, or cultivation.

Mr. Bond's Essay signally fails to meet this requirement, and although in referring us to a highly respectable seedsman he suggests what in good faith appears to him the only feasible alternative in the present state of our knowledge, still I cannot admit that his care of the question is yet legitimately concluded; nor ought we without reproach to rest content till we have thoroughly mastered a subject which unquestionably is the farmer's own. *P. Mitchell, Rainham, Essex.*

Home Correspondence.

Crops in Yorkshire.—We have had for the last few weeks as fine weather as could be desired—warm air and frequent showers. The thermometer has frequently registered 60° as the coldest point. The progress made by all our crops during this period has been wonderfully rapid. Wheat has grown well, and has almost suddenly burst out into ear. I had no difficulty in finding in this neighbourhood ears fully out on Friday last, the 21st inst.; last year I could not find one until July 2. We seem, therefore, nearly a fortnight earlier with Wheat in shooting this year as compared with last year, and there is generally a fair but not a great crop of that important grain on the ground. Oats promise to be an average crop, but it is too early to speak with confidence about them yet. Barley when it was sown at a proper season looks well, but a deal of land was left unsown until very late by farmers waiting for rain, and on all this late sown land the crops look thin and patchy. Beans are flowering early and well, but they are very short. Turnips—in Turnip soil—are forward and looking very promising—but much strong land intended for Turnips will have to remain naked fallow. Potatoes look well. Grass promises a full and early crop. *H. J. Turner, Richmond.*

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

At a WEEKLY COUNCIL on the 26th June, 1861, the Right Hon. the Earl of Powis, President, in the chair, Mr. Chadwick, C.B., read a paper on the half-time principle of instruction to children engaged in agriculture, from which we make the following extracts.

Mr. Chadwick said, after some preliminary remarks, he believed the future progress of agriculture to be largely dependent on the improvement of the education and the intelligence of the working hands. He quoted the case of the Scottish farmer, able to pay higher wages to the higher style of labourers whom he employs.

"I have known of instances of advanced agriculturists of this class coming south, attracted by the better climate and lower rent of the land, looking at farms there. But when they examined the condition of the labourer to which they would practically be confined by the law of settlement, when they found the low state of intelligence and the habits they would have to deal with to work a change of system, they determined that the lower price of land was not a sufficient compensation for encountering the difficulties presented, and they withdrew from the 9*s.* a week ill-educated and ill-conditioned labourer, and the 20*s.* an acre land."

In reference to the style of education in common and parish schools, Mr. Chadwick stated:—

"The common doctrine of school teaching requires an attendance of five hours a day in winter and six hours a day in summer, up to the 13th or 14th year, to impart what is deemed a sufficient elementary education, consisting chiefly in moderately good reading, writing a plain hand, and the elements of arithmetic. Now, if the agricultural populations had everywhere good school teachers close at hand, in well appointed schools, this is an amount of attendance involving a sacrifice of the wages and services of children which, against the increasing demand for them, will not be given by parents except upon very strong compulsion. But a close examination shows that such a sacrifice of time, at the ages in question, is not only unnecessary but positively mischievous, mentally as well as bodily. A mass of evidence will be found, by those who choose to consult it as laid before Parliament, that good teaching, three hours a day, practically imparts as much book instruction in less than three hours a day as is now commonly imparted in six. Children engaged in agriculture, as well as those at work in factories, with agricultural children working part of each day, as well as on alternate days, with good school teaching, are found to be equal in book attainments, and superior in their aptitudes for applying them, to the long-time school children taught in the common method. The evidence which I have collected, and which will be submitted to Parliament, establishes the fact that supposing a child to have been trained in a good infant school, say from his fourth or fifth to his seventh year, and that he enters a well constituted half-time school, conducted under a good certificated teacher with the aid of pupil teachers, he may be taught to read intelligently, to write a fair hand, and to get into habits of good spelling—be taught the principles of arithmetic up to decimal fractions really much better in three years than he is now taught in the common method in six years. In other words, the elements of education may be indelibly impressed upon him by his tenth year; that is to say by the time he is of any bodily capability for productive service; by the time the parents will, and too commonly must have his wages, or must have his self-support to aid the subsistence of the increasing family. But this economy of result, it must be borne in mind, is only obtainable by the application of a higher order of teaching power than is at present commonly found in the schools of rural districts. What that is was denoted in the schoolmasters' returns to the previous census, from the fact that 700 of them were signed with marks, and that in nearly one-half the schools reading only was taught."

Mr. Chadwick then discussed the advantageous physical results of a half-time system of education.

"Most farmers are now aware that if colts are worked too young, old and strong horses are not obtained; and that every colt is worked injuriously and wastefully if it be worked the same stages as full grown horses. Yet we permit this to be done with children, the future stock of labour of the country. We permit them to be overworked mentally, as well as physically. Six hours of sedentary mental effort is as long a stage as adults can stand from day to day. Six hours is a full stage of mental work for young prize men at the Universities; those who go beyond it generally fail. Six hours school teaching from day to day wears out the school teachers; yet the present educational theory expects that amount of mental effort from day to day from infants; and I am propounding it as a novelty and a discovery that such an amount of attention is really not got from young children. It is the common practice to work young and growing children bodily also during the same stages, or during the full working hours as adults."

Mr. Chadwick then referred to the experience of Mr. Paget, M.P, of the actual result of the half-time system in the instance worked by himself. The details of this case must be given next week, and meanwhile we give one of Mr. Chadwick's concluding remarks:—

"Having submitted this statement, you will probably ask me—What can we do in the matter? On which, my lords and gentlemen, I am tempted to answer, what cannot you do if you will only set seriously about it? I myself ask your consideration of what you may do, and whether it might not be well to refer it to a special committee of the Council to consider what may now be done to give effect to that provision of your charter which requires you to take measures for the improvement of the education of those engaged in agriculture—on which topic you have everything before you. You have committed yourself to nothing; having done nothing as a Society, you are in the advantageous position of having nothing mischievous, such as now abounds in common schools, to undo."

Mr. Chadwick then referred to the desirableness of publishing the evidence especially of Mr. Paget's success with a view to his experience being copied. This we hope next week to do.

Sir Edward Kerrison proposed that the thanks of the meeting should be voted to Mr. Chadwick for the interesting paper which he had read. He had taken much interest in the subject of the union of parishes for the purpose of school instruction, but he regretted to add that his experience, derived from acting for five years as chairman of a Board of Guardians, and in other ways, did not lead him to think that such unions would be generally practicable or successful. The distance between the school and the field was too great; even those who were desirous of instruction would look out for inferior teaching nearer home. That the farmer would cordially co-operate with a system which would cut each day into two was out of the question; it was very doubtful whether he would concur in a plan for teaching on alternate days. The course practically open to all friends of education in purely agricultural districts is to maintain a good day school for the younger children, and open a night school for older lads. In such a night school he had seen 70 lads and men out of a population of from 800 to 900. He must add one remark on the comparison which Mr. Chadwick had drawn between the appearance of English and foreign labourers. He had seen a good deal of, and travelled a good deal in France, Belgium, and Germany, but did not remember to have seen labourers who as a race were physically superior to the English workman. The different rates of mortality at home and abroad confirmed him in this view of the comparative vigour of the races.

Lord Walsingham seconded the vote of thanks, which was carried unanimously.

The Council then adjourned to the 3d July.

ESSEX AGRICULTURAL: ROMFORD.—*June 25.*—The Essex Agricultural Society is one of those provincial associations which have been resuscitated during the past few years. This is its fourth annual meeting since its establishment. The funds collected by the county on the occasion of the Royal Agricultural Society's meeting at Chelmsford were more than sufficient for the demands upon them, and the greater part of the surplus was granted to the county society; and in this case the National Society thus conferred the advantage not only of a single week's agricultural excitement and stimulus, but of a permanent local institution for the maintenance of that stimulus. Since the Chelmsford meeting accordingly at Colchester, Chelmsford, Saffron Walden, and now at Romford, a meeting has been annually held at which several hundred pounds have been given as prizes for live stock and implements.

On this occasion the show was held in the beautiful park and grounds of Mr. McIntosh, near Romford.

It will be seen from the following comparative statement that this year's show has been especially distinguished by the large entry of implements:—

The following is a comparative statement of entries at the Annual Shows since the commencement of the Society:—

	1858 Chelmsford	1859 Colchester	1860 S. Walden	[illegible] Romford
Horses	143	109	137	[illegible]
Cow Stock	83	51	103	[illegible]
Sheep	36	52	69	[illegible]
Pigs	42	22	24	[illegible]
Wool	7	9	6	[illegible]
Poultry	61	85	78	[illegible]
Implements	—	458	355	[illegible]

Had the weather been favourable the meeting must have been an entire success. There was sufficient competition for prizes open to all England to bring many of our best breeders of live stock and manufacturers of implements together; and the county contains in the Suffolk horse and the Essex hog, and in the herds of several good breeders of Short-horns, and the flocks of several breeders of Southdowns, not to mention the factories of several first-class implement makers, the materials of a first-rate agricultural show within itself. The weather was lamentably wet throughout, and greatly checked the enjoyment of the day.

The Premiums offered for *Stallions having served in the County* were awarded, 1st to Mr. Brown of Felsted, for *Hero*, who also ran the winning horse in the All England class very close, 2d to Mr. Jonas Webb's *Rising Star*, and 3d to Mr. Christy's *Proctor*. Four young stallions were shown in class of two years old, and the 1st and 2d prizes were taken by Mr. Badham of Bulmer, and Mr. Cockerell of Little Easton.

In the two classes of Cart Mares, Mr. Brittain of Dagenham, and Mr. Colvin of Pishiobury, took 1st and 2d prizes for mares not under four years old; and Sir T. Barrett-Lennard, Mr. Carter of Danbury, and Mr. Walker of Wennington, took 1st, 2d, and 3d prizes for mares with foal at foot. The young classes fairly represented the Suffolk breed—the best probably in the island, certainly in England, for farm purposes, and Sir T. Barrett-Lennard (3 prizes); Mr. Pigot of Beckingham Hall, Mr. Ward of Mersea (2 prizes); Mr. Clayden of Littlebury, and Rev. G. Davies of Ingatestone, were the prize holders.

Three pairs of plough mares were shown for Premium 10, which was taken by Mr. Hicks of Navestock.

The competition for the prize open to all England was very good. Mr. Thomas Crisp of Butley Abbey took it with *Marquis*, a magnificent Suffolk cart stallion, which has already been successful at Swaffham and elsewhere.

No fewer than 30 entries competed in 11 classes for prizes offered for riding and coaching horses; but in only some of the classes was the show a good one. The 1st prize thorough-bred stallion, shown by [illegible] Barker, of Ingatestone, was disqualified. In the [illegible] of brood-mares no prizes were awarded; and in some sections the number was very small. The prize open to all England for thorough bred stallions was awarded to Captain Barlow's *Middlesex.*

The judges in the horse classes were Messrs. Crane, Spooner, and Cox, for agricultural horses; and Messrs. H. Corbet (of the Farmers' Club) and Thurnall for riding horses.

In the *Cattle Classes* there was a good deal of merit and some mediocrity, both as to the individuals of each class and as to the classes generally. The animals shown were almost exclusively of the Short-horn breed. The 1st prize for the best Short-horn bull was taken by Mr. Sturgeon for *Emmet*, certainly a [illegible] coarse shouldered animal, though possessed of other good points. The 1st two-year-old prize bull was *Comedian*, shown by Mr. Christy, of Roxwell. Comedian is a large red roan bull, bred by Mr. Adkins of Milcote, and one of his "Charmer" tribe. Mr. Clayden, of Littlebury, showed a good red and white yearling bull, *Earl of Essex*, which took the 1st prize in its class; and Mr. Sworder's *Duplicate*, a well-bred roan, taking the 2d prize in this class, was remarkable for straight back and thick fleshy rib.

There was a very fine show of pure-bred Short-horn cows, and the 1st prize was taken by Mr. Jonas Webb, with a remarkably fine red cow, in what may be said exhibition order.

The 1st prize for 2-year-old heifers went to Waterloo 24—a rare roan heifer, purchased at [illegible] Bolden's sale as a calf, and well managed since. [illegible] is the property of Mr. McIntosh.

There was a good class of yearling Short-horn heifers—Mr. Christy, of Roxwell, was the successful exhibitor.

Heifers of other breeds were mostly Alderney and Guernsey, and some very fine animals of that breed were shown by Mr. Fisher Hobbs, Mr. Gurney, and others.

One of the best made cows on the ground was that shown by Mr. Barnard, of Harlow, which took the first prize in the Dairy class—remarkably long, and straight, and wide, with a magnificent bosom.

The prize of 15*l.*, open to all England, for a bull of any age of a pure breed, was awarded to Mr. Jonas Webb, for a roan (*Sir Charles*) of great length and good quality. Among the other animals in this class was *Chanticleer*—full of Duchess blood, remarkable for vigour and quality, shown by Lord Feversham; and *Prince Leopold*, a large white bull shown by Mr. E. C. Kerrison.

The *Sheep Classes* were not as a rule particularly good, Messrs. Fisher Hobbs, Bramston, and Sir T. B.

Lennard were the chief exhibitors of Southdowns, and Messrs. Emson and Portway were exhibitors of the Black-faced Suffolk breed. Mr. Fisher Hobbs was successful in most of the classes of Down sheep. No prize was awarded to the yearling class, for lack of quality! though we understand there were yearlings there bred by the Duke of Richmond and purchased at a long figure at his sales. In the class open to all England the difficulty of contrasting the different breeds arose, and it was a question whether the prize should be awarded to Mr. Rigden's Down or to Mr. Aylmer's Cotswold, both first-rate of their respective breeds. The recommendation of the judges was that a prize should be given to each.

There was a fair show of *Pigs*, 18 boars and 14 lots of sows competed in five classes. Here, too, different breeds were shown in the same classes; the comparatively small and fine Essex black, with the large Yorkshire white and the comparatively coarse Berkshire. One of the best on the ground was the first prize black boar pig shown by Mr. Clayden, of Littlebury—the sire a boar of Mr. Sexton's, the dam by a boar of Mr. Fisher Hobbs. Mr. Fisher Hobbs showed a pen of 3 boar pigs in the old class—being a few hours too old for the younger class—which were commended. The 1st prize went to Mr. Sworder, of Stapleford, for a white 1 year and 4 months old boar.

The *Implement ground*, occupying several acres, was well filled with assortments of all farm implements from the steam-engine and threshing machine to spade and hoe, contributed by Messrs. Ransome, Garrett, Picksley, Sims & Co., of Leigh; Ashby of Stamford, Page of Bedford, and others, besides the well-known county manufacturers Coleman, Woods, Bentall, Hunt, &c. There were 43 stands and 549 entries. Among the other attractions of the day, not to speak of the magnificently timbered park, in which, thanks to Mr. McIntosh, the whole was exhibited, were a Flower-show and Poultry show, and military bands. And it is right to add that an additional gratification was given, especially to agricultural spectators, by the sight of several of Mr. McIntosh's herd of Short-horns, some of which, in addition to those competing for the Society's prizes, were brought into the park for inspection. Among them are Lady Oxford 4th and the third Duke of Thorndale, lately imported from America, to which reference have already been made in these columns. Mr. McIntosh has in these animals of Kirkleavington blood, and in Waterloo 16 and 24, also of Mr. Bates's breeding, as well as in others of first rate tribes, the elements of a herd which must in a few years stand second to none in the country. His American bull is a superb animal, thick, deep, fleshy and symmetrical, and of first rate quality.

Farmers' Clubs.

NEWCASTLE: *Lord Kinnaird on Reaping Machines.*—The following letter to Mr. Wilson, of Woodburn, was read by him in the course of his able lecture on reaping by machinery, lately delivered before the Newcastle Farmers' Club:—

"I consider that we are indebted to the Rev. P. Bell, and to his brother, Mr. G. Bell, for the reaping machines at present in use, and I would refer you for further details to the *Journal of Agriculture* of the Highland Society, published by Blackwood & Sons, Edinburgh, for January, 1854, in which is a very interesting account, headed 'Bell's Reaping Machine.'

"My reason for giving Mr. Bell and his brother the credit is, that, although several patents had been formerly taken out during many previous years, nothing of any note had resulted from them—and the American machines forwarded to this country, the] originals of those now in use, were constructed subsequently to Mr. Bell's—a larger number of which were sent to America, and there imitated.

"I got one at the time, but was obliged to lay it aside, in consequence of the weight, iron being almost wholly used in its construction. Mr. G. Bell, however, naturally feeling a parental affection for this his own creation, persevered with it, and brought it at length to great perfection. He made an arrangement for its manufacture with Mr. Crosskill, and it is known in England as 'Crosskill's Bell,' but at present it is [illegible]red by Mr. Watson, of Errol, North Britain, and it [illegible] frequently used by farmers in Scotland. There is an [illegible] the 'Expenses in cutting and stooking white crop [illegible] Bell's Reaping Machine' in the Number for April [illegible] of the *Scottish Farmer and Horticulturist*, which is [illegible] looking at.

"[illegible]gst the first, if not the first machines which came [illegible]ca, was Hussey's, and I immediately procured one [illegible] cut the corn—depositing it behind, the driver [illegible] at the side. The necessity for lifting the corn at once, [illegible] the horses to pass on coming round again, is objec[illegible] but the great defect was that the cutter choked.

"[illegible] McCormick's was, I believe, the next machine which [illegible] from America—to this was attached Bell's reel for [illegible] the corn towards the knives, and a man sat on a bar at [illegible] with a rake, and put it into sheaves. The great merit [illegible] machine was the serrated cutter, which, with some [illegible]ation only, is adopted in every machine at the [illegible]ay, thus doing away with Bell's shears and scissors [illegible]ey's smooth knife. I was so much pleased with [illegible]'s plan of cutter that I bought the machine, and established a private work for the manufacture of reaping machines, being satisfied that, to bring them to perfection, much time and ingenuity would be requisite, and that the self-delivery was indispensable. I engaged a very ingenious blacksmith, since, I regret to say, dead, and by dint of carrying out not only my own ideas, but the very valuable suggestions I received from practical men, I succeeded in producing a very workable implement, but I found, in practice, that there were so many contingencies to be provided against—such as hard, soft, unequal ground, grain laid, &c.—that the machine would require many improvements, especially in its simplification, before any ploughman would be enabled to work it, or an ordinary blacksmith repair any part which might give way. The difficulty was that as it was impossible to postpone the cutting of the crop, there was not time for remedying any defect which might be discovered, and affording the opportunity of another experiment. At last, I resolved to make arrangements for a field of Wheat to be kept for the purpose of experiments, and I believe the last portion was not cut till the beginning of November; but I was amply rewarded—the result being that I have got a most complete implement, and one which I have used constantly for the last three or four years; indeed I have four, as I consider that on a good sized farm, a couple of machines are of great use. I gained the first prize at two meetings of the Highland Society of Scotland, but did not exhibit at the English Society last year, though I intend to do so at Leeds this year. I will now proceed to give you my opinion, founded on considerable practical experience, on reaping with machinery, and on the different machines now in use,—of course my opinion can only be taken for as much as it is worth.

"In the first place, I consider that a reaping machine without self-delivery is an imperfect implement in so far, that it is no saving of expense, while one great advantage, that of corn being laid down lightly on one side, to which reference will hereafter be made, is lost. On the other hand, there is no doubt that where hands are scarce, or on small fields and very hilly ground, one with self-delivery may be used with advantage. A considerable number of these have been sold by different makers, and I suspect the cheaper rate at which such can be made, than the self-delivery machines, has been an inducement to farmers to purchase them, in spite of their requiring two men, one to drive, the other to take off, which last is not able to do a good day's work if the crop is heavy; and, indeed, even with a light crop of Wheat, no man can continue such work for a number of days consecutively, whatsoever he may do for a mere exhibition. There are, I know, several ingenious plans for assisting the raker, but nothing equals the self-delivery. It is difficult to form a fair estimate of the respective merits of machines seen only at shows, as on such occasions they are driven rapidly, which makes them cut better, but the fatigue consequent thereon to the horses makes this rate of speed impossible in practice. The self-delivery machines, however, which I am about to mention, do not require to be driven fast in order that their work may be performed well. I will only speak of those with which I am practically acquainted, namely, Wood's, Bell's, Burgess & Key's, and my own. Wood's combines mowing and reaping, a combination which, at first sight, appears advantageous, but which, I am satisfied, does not answer in practice. Wood's mowing machine is a useful implement, but the bar is too weak—yields in passing over uneven ground, whereby the cutters are impeded in their action, and some part must give way. The provision for rising and falling according to the inequalities of the ground is ingenious, and is in this respect superior to Burgess & Key's mowing machine, which is also tolerably effective. It is comparatively easy to cut seeds, but close meadow Grass presents greater difficulties to the action of machinery. Wood's reaper, though light, is superior, in my opinion, to either of the other three above-named, but will need several improvements before it comes into general use.

"Next, with regard to Bell's, this is a very perfect reaper, which has gained many prizes, and is extensively used by farmers. It has the great advantage of passing through gates easily; it also cuts out a breadth of the crop for itself, which in the case of all other machines, has to be done by the hand, or with the scythe, but which is, in fact, no real objection in practice. A very ingenious plan has been devised by Mr. Bell for laying the corn, if required, in sheaves, considered by some as advisable, in which opinion I do not concur, as I believe it takes away from one of the benefits of reaping machines to which I shall refer later, that of the advantages derived from the mode of depositing the grain by self-delivery machines. My objection to the machine is, that it is heavier in draught than mine, and requires a driver of some little experience; but, nevertheless, it is a very good implement.

"I now come to Burgess & Key's reaper. This is the most generally used self-delivery reaper of any which has yet been invented. Like mine, it is an improvement on McCormick's, the delivery being effected by means of revolving screens, and it does its work admirably. It is also driven in the same manner by a man sitting in front, who has complete command over the working gear, as well as over the horses. Any ploughman, with common intelligence, can be taught in a brief period of time to manage a machine driven from the front. It lays the corn very evenly, though, perhaps, not quite so well as Bell's, and, in some cases, apparently better than mine; but it is only in appearance, the outside straws being caught by one of the screws, are laid at right angles to the machine, covering the deposits beneath, which lie more or less obliquely. The external layer, however, looks well to the eye, and may tell at a show, but is of no practical benefit. The objection I find to this machine is, that it is rather heavier to drive than mine, and that, with a heavy crop of Wheat, the screws do not catch the grain, and stoppages are frequent. With mine, on the contrary, the heavier the crop the better it cuts; but, with regard to light Barley crops, Burgess & Key's machine has, I think, the advantage. Bell's, I should say, has the merit of being equally efficient in both cases. I have endeavoured to give, fairly, my own impressions of these machines with which I am acquainted. I will now proceed to describe, as far as I can, the difference between my machine and those above mentioned.

"These self-delivering machines are worked by means of a pole, with a pair of horses, like an ordinary carriage. In Bell's case the pole is behind, and the horses, to all appearance, push the machine forward; but, in fact, the bars being attached to the end of the pole, the traction of the horses upon these propel the machine. In mine, one horse works in shafts with an outrigger, affording greater command over the machine for turning and backing. The plan for raising and depressing the cutters is simple. The draught of the machine light—not harder to work for a pair of horses, if so hard, as ploughing. When the corn is standing, one man and a pair of horses cut down with ease one imperial acre per hour. When the corn is laid, it is less, as it may be necessary to take the grain either in face or sideways, in which case the machine can only work one way, returning empty. The delivery of the grain is by means of bands passing over a smooth surface, similar to Bell's. These are more easily driven than the screws, and, as I have said, are better adapted to a heavy crop. My machine, if well made, works season after season, requiring little or no repair. The advantages of cutting by machinery with a self-delivery are these:—First, a saving of expense, and frequently also of a great portion of the crop; secondly, less risk of shaking out the grain; and, thirdly, independence from the necessity of obtaining extra hands, in many places very difficult to procure, and attended with many evils.

"The machine is used at a period when horses are not so much required, so that additional food is all the outlay the farmer is put to, and the extra hands are reduced to the few required for binding up. Some seasons it is true that only part of the crop can be cut by machinery—that portion which is standing or laid only one way; for, if much twisted, like last year, it can only be accomplished by hands. Granting, however, that but half is cut by machinery, a great saving is even then effected, for much grain is lost by being allowed to stand for want of hands. There are seasons when it ripens simultaneously, and it consequently becomes over ripe and shakes out. I have seen fields quite green in spring from this cause. This the machine obviates completely. Not only is it more expeditious, but it lays the corn down so gently that no grain is shaken out; and from the mode of its deposition, the heads sloping downwards, allowing the wet to run off and the free circulation of air through the loosened stalks, the grain is ready to be carried or bound up, as the case may be, much sooner, and is not so liable to injury from wet weather as under the old system. I saw the effect on a field of Barley which was subjected to a week's rain; and while the one-half was uninjured, the other half which was tied up had sprouted.

"A man and a pair of horses, allowing a two hours' rest, can, unassisted, easily cut down 10 imperial acres per day; but it would be more advantageous to work the machine the entire day without stoppage, by means of relays of men and horses. The grain may lay till it is either fit for carrying, or the binders are ready to enter the field.

"I have endeavoured to comply with your request, and I have also endeavoured to state, as impartially as I can, my opinion of the different machines which have come under my notice. It is, perhaps, natural that I should have a bias in favour of my own; and my long experience of its merits may excuse the preference. I believe it would have been more generally used in Scotland, had not the maker, to whom I entrusted it after the death of the blacksmith to whom I alluded, turned out some very imperfectly made machines. However, I trust that you and your friends may have the opportunity of judging of its merits, such as they are, at Leeds.

"I am fully convinced that no new invention can be brought out without a series of trials and disappointments. Improvements may very possibly still be made; but, at any rate, I have no doubt that, before many years, reaping machines will be considered as necessary an adjunct to every farm as any other implement now in use."

Miscellaneous.

The Labourer on the Continent.—The system of small farms (*la petite culture*) so generally prevalent throughout the Continent, markedly so in France and Belgium, induces a condition of things vastly different from that prevalent in this country; and hence we find that the class of men who hire themselves out for farm labour is not in any way so important as the class with us. Farm labourers are not numerous, as large farmers requiring their services are anything but numerous themselves. Their place is taken by the body of peasant proprietors, who may be said, in general terms, to represent our agricultural labourer class. I have travelled pretty extensively on the Continent, and I confess to having formed a very favourable opinion as to the condition of the agriculturists of the lower ranks. Time will only permit me however to glance at their condition in Belgium; more especially that part of it—Flanders—where cultivation stands so deservedly high. Wages are not great; a farmer in the neighbourhood of Courtrai, who farmed about 90 acres, told me that he gave his labourers 67 centimes a day, that is about 7*d.* per day with an ample supply of provision—meat, bread and soup. From a franc to a franc and a quarter may be stated perhaps as the average without provisions. Nearly all the labourers have small plots of ground, which they have time to cultivate, and which they do with the most pains-taking care. That the condition of the labourer is in every way a comfortable one, even a cursory investigation will easily show. The clothing is wonderfully good, far above—especially in the linen department—that of our labourers. In the districts where the small plots of land are cultivated by the present proprietors pleasant signs of personal and household comfort abound everywhere. The village streets through which one passes show little of the squalid untidiness which too often greets the eye of the traveller in this country; and seldom is he offended with the sight of children bouncing about in all the Arab freedom of dirt and rags which characterises too many of the rising youths of our own villages. Nor, let me add—which possibly is one grand reason of all this comfort—do you see the drunkard staggering through the streets in the hopelessness of confirmed degradation. The cottages are small, and scantily furnished, according to our ideas of furnishing; but a scrupulous cleanliness atones for this, and adds a charm which abundance of furnished wealth without it would not give. The personal dress of both sexes gives you the idea of great comfort, although in the materials employed you have no evidence of the abundance of money. It simply tells of small funds laid out to highest economical advantage, than which nothing I conceive is more satisfactory in peasant life. *Mr. R. S. Burn before the London Farmers' Club.*

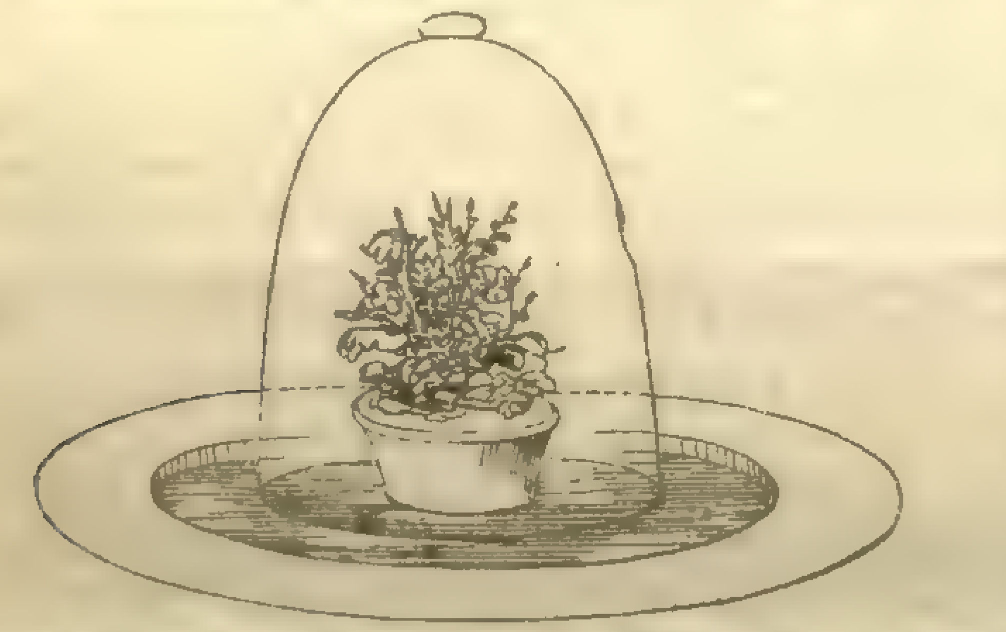
How John Bull is Fed.—

Amongst the shipments per the Waterford steamers for England during the week ending on Saturday last were 1290 pigs, 295 cows, 132 sheep, 2940 bales of bacon, 767 firkins of butter, 720 cwt. of lard, 4160 barrels of Oats, 1020 sacks of flour, 80 sacks of oatmeal, 290 cases of eggs, 293 packages of poultry, 52 boxes of salmon, 478 barrels of ale, porter, &c.—*Clonmel Advertiser.*

Our contemporary does not state how all this is paid for. John Bull does not demand credit for what he consumes. He pays for it in gold; and although he may be a heavy feeding animal, his gold circulates in this country, and without him the Irish stall-fed ox and the fat sheep would not remunerate the stock-breeder or farmer for the capital he employs, or the risks he runs from the casualties of disease until his cattle are prepared for market. The manufacturing districts of England are our best consumers. Liverpool, Glasgow, and Manchester are the ordinary markets for Ireland, which, it is presumed, is an integral portion of the empire; and why should not the farmer "buy in the cheapest and sell in the dearest market," according to a great authority in political economy? It is not desirable that people of any class should live as did their ancestors a hundred years ago. It would not be profitable for the landed proprietor or the farmer to breed stock to kill and eat—nay, to invite all their neighbours to an open house to consume the produce of the soil. This patriarchal system has vanished since the Incumbered Estates Court was established. It did

cut flowers have to be carried in the hand, or be sent to a distance, some other arrangement becomes necessary. The quantities of fresh flowers that are continually reaching London from the distant country seats of the wealthy classes, show that good gardeners know well enough how to manage. Our remarks are therefore not intended for them, but for the crowd which does not know; and we confine ourselves to such mistaken methods as come within our own experience. Those indeed who doubt the necessity of our remarks should see the state in which flowers are frequently reaching us.

Many suppose that if flowers are guarded by *something soft*, they run no risk of injury; and so they wrap them in cotton wool, or nice dry Moss. Of all contrivances this is at once the commonest and the worst. Cotton wool is one of the driest materials we know of, and Moss is another. When cut flowers are placed among dry cotton wool the latter sucks out of them what water they can give up, and distends itself by emptying them. The same of Moss. Both too are dirty substances sticking to the surface of flowers, from which they cannot be easily detached. A favourite protection to a bouquet is a clean dry cambric pocket handkerchief, wrapped tenderly round it; this is almost as bad as cotton wool, and for the same reason, except that it does not become entangled among the flowers. A very clean, very dry, deal box, pierced with air-holes, is employed by some, the flowers being wrapped in dry tissue paper and laid loosely one over the other. Dryness, again, in this case asserts its power, and still the flowers die, the currents of air that of necessity set through the holes adding greatly to the mischief. It will be easily understood that errors of the same kind may be com-



mitted in other directions. What then should be done?

It is clear that the grand object is to stop their insensible perspiration, or at all events to reduce it as low as possible. This is to be effected by securing a damp and tranquil atmosphere, as is well shown by the freshness of flowers carried in a man's hat in hot weather; they do not fade, because the dampness caused by perspiration from the head effectually stops all perspiration from the flowers themselves. When sent by post nothing is better than wrapping them in oiled paper; when carried otherwise a piece of wet sponge fastened inside a wooden box, or layers of wet brown paper, or wet flannel as a lining to the box, or freshly gathered Cabbage leaves with their under side placed next the flowers, are unobjectionable. If the box is of tin well secured at the lid, then a source of constant moisture is less requisite, for the leaves and flowers themselves will form an atmosphere of sufficient dampness for a short time. Another method which answers extremely well when flowers are gathered in dry weather, is, as soon as they are cut, to throw them into a bag, like a carpet bag, made of mackintosh. If the snap of such an article closes well, flowers will remain fresh all day long in a broiling sun, as some botanical travellers well know. The reason why such flowers are preserved is still the same; the air around them is damp. Tourists who hunt after wild flowers, or Ferns, should provide themselves with a bag of this description.

If we could hope that these hints would be remembered we should see no more instances of misapplied care producing an effect exactly the reverse of what is intended.

COUNT LAMBERT, a great Russian landed proprietor living at Odessa, states that having failed for 16 consecutive years in his attempts at fixing the DEEP BLOWING SANDS on his estate, by Pinasters, and Acacias, he had at last succeeded by the aid of the tree called AILANTHUS. No wonder that his difficulty should have been so great, considering that the desert operated on is a foot deep in sand resting on solid rock. Having heard something of the hardy constitution of Ailanthus, its indifference to good land, and its running roots, he eventually took to planting it on his *dunes* (Norfolcicè *denes*), and with such complete success that his shifting unmanageable plains (Norfolcicè *brecks*) are now solidified and covered with an almost impenetrable forest, so entirely have the running roots taken possession of the land. How Count LAMBERT proceeded in the work of planting does not appear; but from the expression "on fait chaque année des *semis*" it seems probable that he sowed the land directly. Other landholders in the neighbourhood have followed his example, so that the tree has been increased "prodigiously." Measures, says M. GUÉRIN-MÉNEVILLE, are now taking to introduce among the plantations the new silkworm from Japan which feeds on Ailanthus (see *Gard. Chron.*, p. 508). Here is another great matter, how to make sea banks impenetrable, practically solved. It is to be hoped that planters will at once try what can be done with Ailanthus on our own sandy shifting coast, among the "Marrum" banks.

—— In a late Number of Van Houtte's *Flore des Serres*, a little known plant called ASPIDISTRA ELATIOR is strongly recommended for the decoration of sitting rooms. It is represented as capable of living there for any length of time without suffering in the smallest degree, and being indifferent to temperature, a high and a low one agreeing equally well with its constitution.

The beauty of the plant consists wholly in its leaves, which are 2 feet long by 3 inches broad, leathery, bright green and striped more or less with white. The flowers are insignificant. All that is necessary to preserve its beauty is to keep it always in the shade, and tolerably dry in winter, at which season wet is fatal to it. As to its soil, it requires a light substantial mixture of peat and rotten leaves, with plenty of water in hot weather when it is growing.

—— M. NAUDIN reports, in the same work, that among the PALMS cultivated out of doors in the mild climate of Cannes, where *Rhapis flabelliformis* died last winter, *Jubæa spectabilis* retained all its verdure; and appears to be hardier than the Date Palm itself. A hint for the growers of greenhouse Palms in England.

—— At the meeting of the Imperial Horticultural Society of Paris on the 23d of August 1860, Monsieur GOSSE, a nurseryman at Courbevoie, exhibited Easter Beurré Pears (*Bergamotte de Pentecôte*) in perfect condition. Mr. GOSSE had kept them in a fruit room formed in a *very dry* cellar, where there was no current of air, and wrapped them each in common grey unsized French paper. He had for several years followed this plan, and always with excellent results. *Flore des Serres*, No. 155.

—— Those of the gardening world who propose to be in France next September may be glad to know that the GREAT AUTUMN SHOW of the Imperial Paris Horticultural Society comes off on the 21st, 22d, 23d, and 24th of that month. It is announced to cover 1300 square yards, and to be held in the house of the Society, Rue de Grenelle, St. Germain, No. 84.

The principal objects of exhibition will be New Vegetables, New Fruits, and New Plants; New Seedlings, finely grown specimens, examples of forced or retarded flowering, collections of Vegetables, collections of Fruit, Peaches, Plums, Cherries, and other stone fruit, Grapes, Pine Apples, groups of Hothouse plants: Orchids, Palms, &c.; groups of Greenhouse plants: Fuchsias, Horseshoe Geraniums and their mules, Petunias, Verbenas, Hanging Plants, sets of hardy plants: Rose trees in pots, Cut Roses, herbaceous plants, Annuals, Gladioli, China Asters, Balsams, Phloxes, Dahlias, Chrysanthemums, Bouquets, flowers for the hair, and flowers arranged for table decoration (*garnitures de table en fleurs naturelles*). So that there is something to satisfy amateurs of all tastes and means.

Those foreigners who wish to exhibit should apply for instructions to M. ROUILLARD at the address above mentioned.

New Plants.

238. RHODANTHE ATROSANGUINEA. *J. Drummond in litt.*

R. foliis radicalibus spathulatis caulinis lineari-oblongis obsoletè trinerviis sessilibus, caulecorymboso, involucri squamis erectis, flosculis disci atrosanguineis.

At the last meeting of the Floral Committee of the Royal Horticultural Society, Mr. Thompson, of Ipswich, exhibited some charming new Rhodanthes. One was pure white; another called *maculata*, with the characters of the old *Manglesii*, but taller, more robust, and somewhat larger in the flower head, was distinguished by having the beautiful rosy involucral leaves stained deep crimson at the base, so as to produce the appearance of the yellow disk being set in a rich dark ring.

The third, a perfect gem, had been sent from Limestone Hills, Champion Bay, Western Australia, by Mr. James Drummond, under the name of *Rh. atrosanguinea*. Although the flower heads were smaller than in *Rh. Manglesii* they have the great merit of possessing a crimson centre instead of a yellow one; and the plant throws up from the very base its flowering branches without stopping till they form a perfectly flat-topped mass. The effect is exceedingly pretty, and the plant promises to be one of the most elegant annuals of its class.

Mr. Thompson has favoured us with the following memorandum respecting the species.

Out of doors it grows about 7 or 8 inches high, and will make a neat edging, for which it is more suited than *Manglesii*, being more bushy and tufted. The specimens vary, however, in this point, and also in the intensity of the colour of the disk, as well as in the length of the inner bracts forming the ray. Some of the flowers are quite an inch across. Both *maculata* and *Manglesii* seem to require stopping, but the *atrosanguinea* does not.

NOTES MADE DURING A GOVERNMENT EXPEDITION TO THE VITI OR FIJI ISLANDS.

BY BERTHOLD SEEMANN, PH.D., F.L.S.

(*Continued from* p. 600.)

I departed from Suez on the 28th of February, steaming down the Red Sea, which by the bye is not at all red, as I have seen it sometimes in old paintings, but of a fine deep blue colour. Commentators have long agreed that it was simply by an error of translation that it received its present name, the word rendered red being said to mean by some a certain seaweed, by others a "bullrush." I am afraid we have here more of the "bull" than the rush, the shores of the Red Sea being at present quite destitute of any such plant. The third day after our leaving Suez the heat began to be oppressive, and on nearing Aden—"Hell with the fire put out," as the Indian passengers pleasantly term it—our clothes began to feel like the shirt of Nessus. The bare rocks, rising from the water's edge, rather tend to remind one of the heat one is suffering, than to divert attention from it. There is not the faintest attempt made at this place to cultivate anything. Yet the statement so often met with in books of travel, that there is not a blade of any kind to be found, has long since been disproved by people accustomed to look a little more closely into such matters. I was not quite so fortunate in my harvest as the author of "Half-an-hour's Botanising at Aden," but in about ten minutes I collected half a dozen species, among them a shrubby Reseda, some Capparideæ, and a Papilionaceous herb; any person remaining for some time will no doubt be able to add to even Dr. T. Anderson's recent Flora of this curious locality. At the cantonment, a few miles from here, Figs, Acacias, and Capparis have been planted, and are watered from a well in the neighbourhood.

Having coaled we proceeded on our voyage, passing Cape Gardafui, and reaching Port Louis, Mauritius, on the 17th of March. The rainy season being just about to terminate the island looked all verdure, Peter Botte and the other high peaks being enveloped in clouds, whilst the excessive moisture loading the air, combined with a temperature of 90° in the shade, would have rendered the comparison with a vapour bath not inappropriate. Early on the following morning I paid a visit to the markets, where I was rather disappointed in seeing so little fruit, it not being the right season. Bananas (Musa chinensis), were plentiful: there were only a few Alligator Pears (Persea gratissima) and Mangoes; Oranges sold at a shilling a-piece; the Tomatoes offered were chiefly a small round kind, which I was told possessed a much more delicate flavour than the larger sort commonly grown. There is a great number of varieties of this fruit, a very fair collection of which I saw in Sir William Denison's private gardens at Sydney, where a goodly assortment of Capsicums and Musas, for all of which the late Governor-General has a particular fancy, were cultivated. New to me as pot-herbs were bundles of herbaceous Solanums (S. oleraceum and S. nigrum) and Amarantus tristis. The Nightshades, I was informed, were eaten by both the white and coloured population, but the Amarantus only by the Malays living in the island. The road leading to the Botanic Gardens was in excellent condition, and lined with Tamarinds, Mangoes, Casuarinas, Cocoa-nut, Date, and Betel-nut Palms, the hedges consisting of Opuntias and American Aloes. On drawing near Pamplemousses, where the garden is situated, I had good glimpses of the Sugar-cane fields, always a refreshing sight. The extension of these crops in Mauritius seems to have nearly reached its limits. Already the occasional want of rain warns the planters that no more trees must be cut down, and that the remnant of native vegetation still existing must be religiously preserved. In order to attract moisture Casuarina trees are now planted in great numbers, and they will no doubt materially aid in keeping the island supplied, whilst at the same time they greatly add by their graceful habit to the beauty of the scenery.

Mr. Duncan, the superintendant of the Botanic Garden, received me kindly, and showed me over the

VIEW OF THE ARCADES AND FIRST TERRACE IN THE GARDEN OF THE ROYAL HORTICULTURAL SOCIETY, SOUTH KENSINGTON.

establishment. It is not often that one sees a garden in the tropics. A fine villa, shaded by groves of Palms and gigantic Fig trees, may look very pretty in a picture, but to the astonishment of our northern minds, people in the tropics will rather cut down every vestige of vegetation near their abodes, and let them bask in the sun the whole day long, than run the risk of getting fever or being continually annoyed by mosquitoes. Even to those who have travelled much a tropical garden is therefore a sight not often lighted upon. But that at Mauritius has besides high claims upon our notice. There is so much to be seen and wondered at that you hardly know where to begin. In one part there is the Traveller's Tree, the Urania speciosa, not in isolated specimens, but in groves, almost large enough to lose oneself in. The effect which such masses of this plant cause is striking, and I can imagine what a singular appearance they must impart to the landscapes of Madagascar. Mr. Duncan, with the few hands that he has to keep so extensive an establishment in order, has made many happy improvements. The lakes, islands, and rivulets, as well as the grouping of the trees display taste and judgment. There is one fine avenue, a background to which is formed by the singular Peter Botte, presenting a beautiful picture. In order to protect the visitor from the rays of the sun, rows of Palm trees have been planted on both sides of the principal walks, which not only effects that object, but enables you to see the flower beds. About a hundred different kinds of Palms are cultivated, some of which from the small islands about Mauritius appear to be new. There were fine specimens of the Arenga saccharifera, and several of the Hyophorbe indica with *forked* trunks. A double Cocoa-nut (Lodoicea sechellarum) was pointed out as being 25 years old, but not having as yet formed any stem. It was standing on a little hillock, and Mr. Duncan recommends its being planted in well-drained places, and attributes the reason why those sent to England have died to their being kept rather too wet. I was much interested in a fine HorseRadish tree (Moringa robusta), the bark of which can hardly be distinguished from our common Horse Radish except that it is perhaps rather more pungent. I had never before beheld such large specimens of the Kigelia pinnata. The peduncle of this tree is perhaps one of the most singular in the whole vegetable kingdom, being as many as 30 feet, or even more in length, the point continuing to grow and produce flowers for years. These long tough "ropes," hanging down from the crown of the tree, loaded with numerous Gourd-like fruits, produce a strange effect, reminding one of the Mucuna altissima and congeners of that species; but whilst the peduncles of the Mucunas are annual, those of the Kigelia are perennial productions. I also saw here for the first time a plant, of the existence of which I had previously heard in Mexico, its native country, namely a variety of the Poinsettia or Euphorbia pulcherrima, with white bracts. Mr. Duncan, at my request, forwarded living plants to Kew, so that the variety will no doubt soon find its way into other gardens. Poinsettia pulcherrima is certainly a plant of the real beauty of which few have a true conception. On the table land of Mexico it is seen in nearly every garden, flowering about Christmas time; hence its name of Noche bueno. A well-grown bush, loaded with large gay coloured bracts, is a truly magnificent sight, probably never beheld in Europe, because the shrub is generally treated as a hot-house plant, whilst its proper place would seem to be the greenhouse. In Mexico I found it wild several thousand feet above the sea level, and about Durango cultivated in great perfection, though there are often night frosts during its flowering season. Perhaps more curious than the white Poinsettia was a semi-double Ixora, there being so few instances of Rubiaceous plants becoming double, and I do not remember any other save Serissa fœtida and Gardenia florida. Mr. Duncan raised it from seeds. Phyllarthron Commorense, which has never been known to flower in Europe, here attains 12—18 feet in height, and annually bears pink blossoms and whitish fruits, as large as a little finger, made into jellies, though they are almost tasteless. Garcinia Cochinchinensis has borne fruit, said to be more acid than that of the Garcinia Mangostana,—also an inmate of the garden. Rubus rosæfolius fl. simpl. is still wanting in Europe, if I mistake not, though the double variety has long been cultivated there, exactly as happened with Clerodendron fragrans and Kerria japonica. It grows wild in humid places of the island, and its fruit being slightly acid is used in the same way as Raspberries. I asked Mr. Duncan whether the Rhipsalis found in Mauritius were wild or merely naturalised; and he expressed his belief that they were truly wild, adding that he knew a species with white, another with red berries. In this he is indirectly supported by the discovery of Rhipsalis, made by Welwitsch on the mountains of Western Africa. The adopted generalisation that all Cactaceæ are indigenous to the New World requires therefore some modification. There seems to be no doubt that the native country of these Rhipsalis is in the Old World, whatever there may be about that of the common Opuntia. I was much interested in the Fernery, the place where the Orchids are kept, and the flower pots *grown*, the latter being pieces of bamboo, each joint forming a vessel, which certainly has the advantage of never breaking. Most of the flower beds were edged with Malpighia coccifera and Serissa fœtida, producing a pretty effect. The Madagascar Lace-leaf plant (Ouvirandra fenestralis), in high condition, was kept in a secluded part of the garden, as it had previously suffered too much from the inspection of the interested. There was also a number of new and unnamed plants, obtained from Madagascar and other islands of this region, and Mr. Duncan much regretted that since Bojer's death there was nobody in the island who could name them correctly. He has since applied for a competent person to be appointed for this especial duty, but as he is to be a practical gardener at the same time, and as the salary (200*l*. per annum) is less than that of a common copying clerk in Port Louis, I believe the office is still vacant. A person with sound botanical knowledge would find here a fine field; new plants constantly turning up, and old ones presenting good materials for observation. One of the greatest checks upon the prosperity of the garden are the hurricanes and floods, by which the labour of years is often destroyed in a few hours. Mr. Duncan pointed out to me the effects of the last great hurricane, and they appeared truly awful. A great deal has been done to counteract the ravages of the water, but that is accompanied with difficulties, and I learn with deep regret that since my visit one of Mr. Duncan's little grandchildren was drowned in one of the very floods which he has made so many efforts to stave off.

(To be continued.)

TIMBER FORMING.

GROWING trees wholly for the sake of timber is not at the present time of the same necessity as formerly, iron being extensively substituted in many cases, and wood being imported at a cheap rate. Nevertheless good sound timber of home growth will always be in demand for naval purposes, agricultural implements, and machines; and on estates where there is plenty of wood, labourers' cottages may be well and substantially built for much less outlay than if the timber portion of the materials were not on the spot. Trees therefore still constitute an important item in the value of estates, as purchasers are well aware. Planting trees in land that is well adapted for the growth of corn and green crops is certainly not now to be recommended in this or any other country where grain has to be imported to make up an annual deficiency in the supply necessary for the support of the inhabitants. Still, were the whole country arable, trees, judiciously interspersed, would prove advantageous; for setting aside their intrinsic value, that of the crops would be enhanced by shelter in our variable climate. It is well known that sudden checks by cold are highly injurious to vegetation, hence the practice of gradually "hardening off" plants before they are subjected to a colder temperature than that in which they had been previously growing, or one which would stop their growth if at once exposed to it. Trees do this; they prevent the effects of sudden changes from heat to cold, and consequently prove beneficial to vegetation. Supposing crops are in a vigorous growing state in hot sunny weather with south or south-west winds, and if, as is often the case, these conditions should be reversed, the weather suddenly becoming cloudy and cold, with a wind from north or north-east sweeping over the island at the rate of 30 or 40 miles an hour, then, in one day, the previously heated air would be off to the continent, or over a portion of the Atlantic, if no trees existed to obstruct the sweep of the wind. Where such is the case the warm air is moved along in an uninterrupted current, its place being occupied by an immediate influx of cold air; and thus vegetation is subjected to a sudden chill. On the contrary, where there are trees warm air lurks for some time at least in their shelter, mixing by degrees with the eddying sweeps of the colder air, and thus mitigating its intensity and injurious effects.

It is evident that if this view is just, trees in a variable climate like that of Britain are beneficial to crops, and therefore may be planted sparingly with advantage in arable land. There are also places where agricultural crops cannot be grown, but in which trees o some kind or other will succeed. There is of course no reason why these localities should not be planted with the most suitable species of trees, such as will prove remunerative after deducting all expenses of planting and after-management, and more especially if for the latter *mis-management* is not substituted, and practically carried out at greater expense than would be necessary to rear good, useful, and consequently valuable timber. On this important point we think some observations may be made; for notwithstanding all that has been written on the subject, it seems necessary that more attention should be directed to it. If trees are necessary, their good management ought to be considered equally so.

Let us take two simple examples, one of proper management, the other of the contrary. Two young plants, of the same species of tree, are as similar as possible. They are planted under precisely the same circumstances and make equal growths. After some years, both are inclined to fork, two shoots on each becoming competitors for the leadership. One man, perhaps the proprietor himself, in passing foresees the consequence, and with any light instrument, such as a pruning knife, or a penknife, cuts off the top of one of the aspirants; the other continues its erect and now undisputed course, and the tree forms the *bulk of its timber in one solid stem*. In the other tree the two leaders are allowed to grow up side by side, and thus instead of one good stem, *two small imperfect ones* are the result of neglect discovered too late for effectual remedy. But the old saying, "Better late than never," is in similar cases of forest mismanagement frequently acted upon, and it is decided that one of the two must be cut off. Such means as were employed for the removal or check of the young competitor will not now avail: and instead of a penknife, or in default of that even the finger and thumb, a saw must be employed to cut off the twin stems. The wound will heal over in time, but it has been found that any branch exceeding 4 inches in diameter when separated from the trunk of a tree leaves a shake in the timber from the wound downwards to the root. All the vessels employed in conveying sap to the branch previous to its amputation may possibly become diseased when they have no branch to supply, even although the wound may be completely covered over with fresh wood and bark. Frequently, as regards external appearance, all seems perfectly sound, when internally a portion is actually rotten, and communicating the elements of decay to the yet healthy adjoining tissues, so that the main trunk, which ought to be the most valuable part, is rendered unfit for any purpose for which good timber is requisite. In short, the whole tree is of very little value compared with the one that had no wound inflicted except that required to check a young aspiring shoot. That was necessary, otherwise there would have been two slender stems instead of one solid trunk; but better these than spoil the whole by removing one after it had acquired too large dimensions for the operation to be safely performed. That this has been too much practised any carpenter that has worked pruned timber will testify. The consequences of the timely single cut, and those resulting from the total neglect of it till too late, are not exaggerated in the above example; and the conclusion to be drawn from it is, that trees should either be pruned when young or not at all. With a few saws, hatchets, or other pruning instruments, a few workmen can soon cut off a thousand rather large branches, and thus render unsound the timber of a thousand trees. This may be no fault on the part of the workmen; but heavy responsibility rests with some one who ought to have had intelligence enough to direct them otherwise. Doubtless amongst forest trees many irregularities of growth are to be seen which might have been easily prevented by knowledge and foresight when they commenced to be formed, and when the mere stopping of certain young shoots was all that was required to prevent the necessity of future interference with the natural growth of the trees.

In pruning plantations attention should be principally directed to the disposition of the young shoots. A tree must have branches to bear foliage, for without this wood cannot be formed; but a regularity should prevail among the branches. These being derived from shoots, it follows that irregularities among shoots give rise to others among branches. Of the latter as many should be provided as do not overcrowd each other; nor should many be allowed to issue close together on one part of the stem whilst above them for a long way the stem is naked. If this is allowed to be the case the tree will not taper regularly, and its timber will prove cross-grained and liable to break easily at the place whence the many branches derive their origin. Presuming that the branches are regularly disposed as regards distance, care must be taken that no one becomes overstrong for the rest, nor for the upright leader.

These directions are few and simple; but on their being acted upon or the contrary depends the greater or less value of immense property, public as well as private. *T.*

Home Correspondence.

Rust on Grapes.—Many reasons have been adduced as to the cause of this malady; but few people appear to me to arrive at the right conclusion in the matter. Some say sweaty hands cause it, others greasy hair, and others, again, attribute it to syringing with cold water. I believe none of these to be the real cause. The root of the evil, in my opinion, is allowing moisture to settle on the berries in the morning through not giving air sufficiently early; then, when air is given, the evaporation is so rapid that the surface of the berry is cooled similar to the wet bulb of a thermometer, killing the epidermis of the berry. Some good Grape growers like to get a dew on the berries before giving air; but in most cases where that plan is adopted, air must be given very gradually, and then the moisture settling often causes bright spots to appear similar to those caused by the sprinkling of water on them, but more regularly dispersed over the bunches. Another cause, but not so general, is the sprinkling of flues or pipes when very hot, producing steam in the house; in this case only the bunches nearest the heating power get affected. I have occasionally experimented with a bunch or two, passing them through my hands,

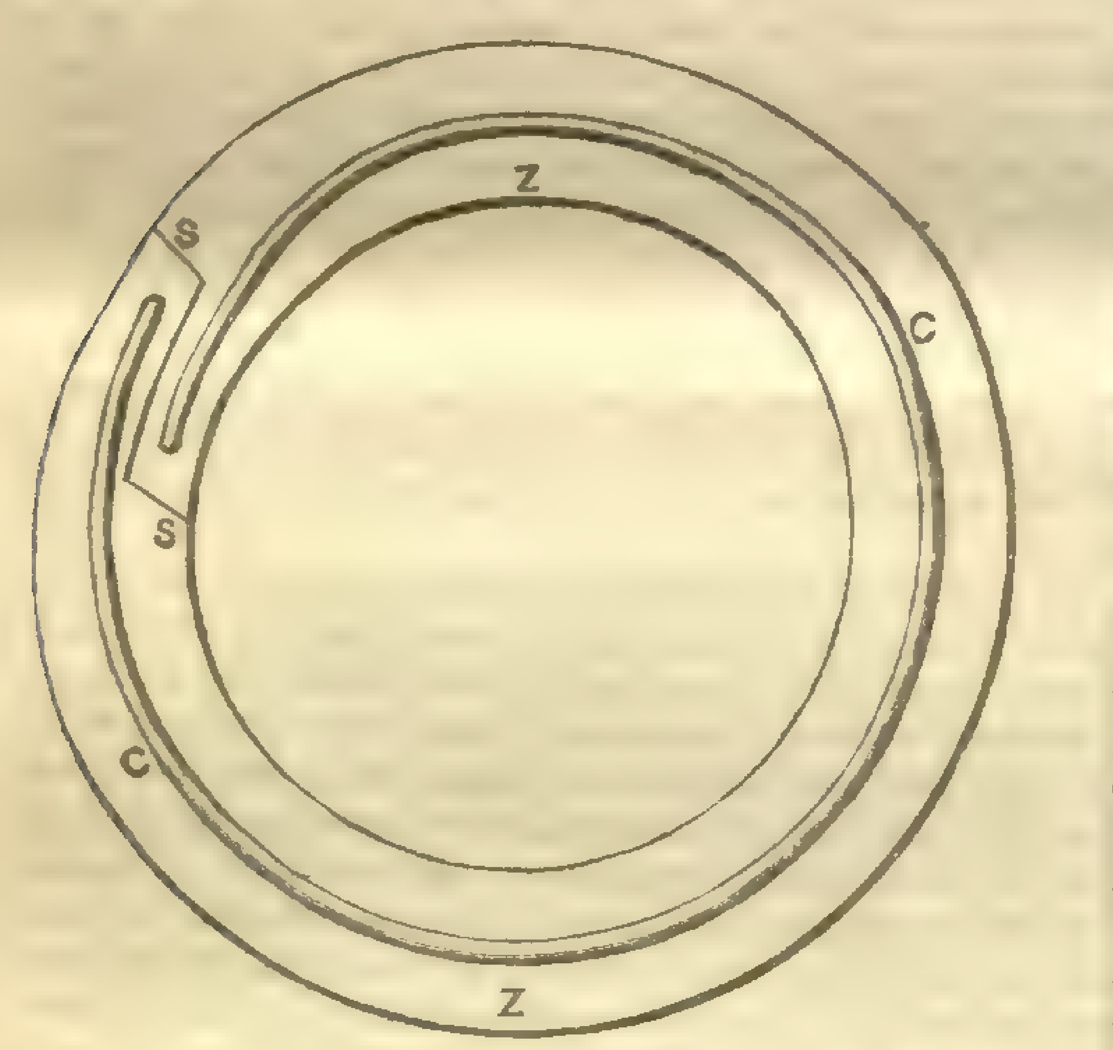
but it failed to produce rust. Older heads than mine may see other reasons, but if care is taken to give air early, and avoid cold draughts, there will be but few complaints about rust on Grapes. One thing is rather strange in reference to rust, and that is that Frontignans and St. Peters are not so liable to it as Black Hamburgh. Can any one assign a reason why they are not? *J. Gadd, The Garden, Willersley.*

Diseased Oaks.—Your Correspondent writing from Sherborne, near York, states that he has observed this year numbers of diseased Oaks. I have done the same in this locality, and have attributed it to the severity of the last winter acting injuriously upon the half ripened wood of the preceding summer. There are several on this estate, and four or five near Matlock Bath railway station are quite dead, and up the valley of the Derwent towards Chatsworth there are many in the same state. The soil on which they grew is strong loam resting on limestone. *J. Gadd, Willersley, Matlock.*

Rose Sports?—I have budded a multiflora Rose with a Géant des Batailles bud, and the enclosed is a bloom from the bud. Does budding high coloured sorts on multiflora or Noisette Roses generally change their colour? *J. C. B.* [We think there must be some mistake; the bloom sent is white resembling Acidalie, and has nothing to do with either multiflora or Géant des Batailles.]

Onosma tauricum.—Can any of your readers inform me how this pretty perennial may be propagated, in the absence of seeds, which do not appear to be ever ripened, at least not on my own specimens? *Jacques.*

Galvanic Slug and Snail Shocker.—Having a few pet plants which slugs and snails are particularly fond of as food, I have devised the following simple and efficacious mode of protecting them against their and my enemies; and as this plan may be useful to some of your readers, I herewith send you a description of my galvanic circle. Procure a flat ring of zinc, large enough to encircle the plant; make a slit in the ring after the manner of a key-ring, so that it can be put round the stem of the plant and then rest upon the ground. Now twist a copper wire into a ring very nearly of the same circumference as the flat zinc ring, and putting it round the plant let it rest upon the zinc, as in the illustration. No slug or snail will cross that magic circle; they can drag their slimy way upon the zinc well enough, but let them but touch the copper at the same time and



they will receive a galvanic shock sufficient to induce them at once to recoil from the barrier. It will, of course, become evident that mural fruit can in a similar way be protected by fastening along the wall two narrow ribbons of the metals mentioned. Other applications of this principle will doubtless be made in many gardens as the occasions arise. In the illustration Z Z is the zinc, S the slit in it, C C the copper wire. *Septimus Piesse, Chiswick.*

A Foundling Cuckoo.—In the centre of my flower garden is a fountain in a tank of water surrounded by a rockwork of stones and run brick. Some weeks ago having seen a pied water-wagtail frequently running about on it, I searched for and found a nest in a very snug place under a slanting piece of run brick. Soon four eggs were laid, certainly by the water-wagtail, and in course of time they were hatched. I did not observe anything peculiar about the young birds at the time, but a week or so afterwards I was much surprised at seeing the nest occupied by one monster with a very wide orange-coloured mouth, a young cuckoo, which has grown most rapidly, and is now far too large for the nest. The parent birds are incessantly on the move to supply his wants, and come with their mouths full of insects. The question is—how could it have got there? I feel certain that the old cuckoo could not have even crept in to lay her egg. Did she take it in in her beak, as these birds are reported to do? It must have been introduced after the wagtail began to sit, so the period of incubation is probably shorter than that required for the wagtail family. The rockwork is in full view of the house, my children are constantly running round it, and the gardeners dipping cans for water, and the fountain playing. When looked at the young cuckoo ruffles his feathers, swells himself out, and pecks most savagely at any one's finger held near him. What became of the wagtail's own children I cannot find out. *H. R.* [Run-bricks are we presume the half vitrified masses called "burrs" near London.]

The Toad a Bee-eater.—This morning a swarm came out of one of my hives and settled on a Box bush; it was hived, and the hive placed upon the board on the ground amongst the shrubs. As four of us were watching it to see the bees go in, a large toad suddenly made his appearance at the edge of the board, in (for a toad) the most excited state; he snapped up a bee which was running at the edge of the board, then another, shutting his eyes as he swallowed them, as if it was the best thing he had tasted for a long time; after the third bee one darted at and stung him on the back, when he made a precipitate retreat, but soon reappeared and clambered up on the board and snapped up two bees at once most cleverly. We saw him eat eight in two or three minutes; his brilliant eyes were fixed on the bees as they ran, his movements most rapid as he snapped them up, never missing a chance. How many more he ate I know not, as he escaped me and got under the plants close by. *H. R.*

Societies.

Royal Botanic, *Regent's Park: July* 3.—The Society's concluding exhibition for the year took place on this occasion. The display both of fruits and flowers was excellent for the season, and the weather being favourable, the attendance of visitors was large.

Mr. May, gr. to J. Spode, Esq., showed as usual the best collection of 16 Stove and Greenhouse Plants, all large and well flowered. Among them were the Willow-leaved Ixora in admirable condition, Allamandas, Azalea Gledstanei, and others still loaded with blossom; the handsome violet purple flowered Pleroma elegans, each bloom of which is as round and large as a five shilling piece; Phœnocoma proliferum and other Everlastings; Franciscea confertiflora, the sweet smelling Rhynchospermum jasminoides, and a white-flowered Cape Heath. Among plants from Mr. Peed, who also showed in this class, were a white-flowered Ixora, a large Cape Heath, Allamandas, Hederoma tulipiferum, one or two Vincas, Dracophyllum gracile, Franciscea confertiflora, Rondeletia speciosa, and the pale blue Roella ciliata. From Mr. Baxendine came Hoya bella, Rhynchospermum jasminoides, Clerodendron splendens, and Combretum purpureum, a fine specimen of Stephanotis floribunda, one or two kinds of Epacris, and a yellow-blossomed Heath.

In collections of 10 Stove and Greenhouse Plants, Mr. Green, gr. to Sir E. Antrobus, Bart., stood first. Among plants sent by him were Pleroma elegans, Rondeletia speciosa, Allamandas, Franciscea, Erica depressa, Kalosanthes, Hederomas and Statices. From Mr. Chilman came Stephanotis, Dipladenia crassinoda, various Cape Heaths, and other plants, the names of which differed little from those already mentioned. Mr. Kaile also showed some good specimens in this class; but they were insufficiently in flower, and therefore made but little display compared with what they would have done had they been in better condition.

Messrs. Fraser, Cutbush, and Rhodes showed good groups of 12 Stove and Greenhouse Plants, among which were Dipladenia crassinoda, Stephanotis floribunda, Dracophyllum gracile, one of the best varieties of Erica tricolor, Everlastings of different kinds, the showy Kalosanthes coccinea, the Javanese Ixora, Statice imbricata, Allamandas, and Clerodendron Kæmpferi.

Among groups of 6 Stove and Greenhouse Plants the best came from Mr. Page, gr. to W. Leaf, Esq., of Streatham. It contained Allamanda grandiflora, Dracophyllum gracile, Erica tricolor, Stephanotis floribunda, Pimelea Hendersoni, and a Cape Heath. Mr. Tegg, gr. to Baron Hambro, who was second, sent Statice Holfordi, Kalosanthes coccinea, one or two Everlastings, and Mitraria coccinea; the last was not, however, in first-rate condition as regards bloom.

Of Plants remarkable for the beauty of their foliage, collections came from Messrs. Williams, Jackson, Lee, Cutbush, Henderson, and others. Among them were some wonderfully fine specimens of Ferns, Palms of different kinds, Marantas, Caladium Chantini, capitata, Belleymei, and others; Crotons, Rhopalas, Dieffenbachias, Aspidistra lurida variegata, fine examples of the spotted-leaved Coltsfoot (Farfugium grande), Cyanophyllum magnificum, Aralia Sieboldi, with deeply cut palmate leaves; variegated Begonias of different kinds, Cordyline and Dracæna indivisa, Alocasia metallica, and Ficus Leopoldi; the last a handsome plant, with large bright green obovate leaves some 15 inches in length and nearly a foot across. Messrs. Veitch had some fine variegated Begonias.

Cape Heaths were shown in admirable condition and in tolerable abundance; among them were obbata, some of the best varieties of tricolor and ventricosa, Parmentieri rosea, mutabilis, unusually well coloured; Shannoni and depressa. We also noticed two new kinds from Messrs. Jackson, one a long slender tubed flesh-coloured sort, named Douglasi, and the other a buff kind, called nobilis, in the way of Alberti. Both looked as if they might prove acquisitions.

Orchids were well flowered, especially the best group, which came from Mr. Stone, gr. to J. Day, Esq., of Tottenham. It contained the pretty blue Vanda cærulea, the large white Cattleya Wageneri, Lælia purpurata, and another handsome kind with deep crimson lip; one or two varieties of Lady's Slipper, Saccolabium guttatum and præmorsum, the White Butterfly plant, Anguloa Clowesi, with five large clear yellow blossoms, Phalænopsis rosea, Aerides maculosum, the pretty Dendrobium Farmeri, and the yellow brown-barred Odontoglossum Insleayi. From Mr. Milford, gr. to J. McMorland, Esq., who was second, came Cypripedium villosum, the charming crimson-flowered Cattleya superba, Dendrobium formosum, D. primulinum, with pink sepals and petals, and large pale yellow trumpet-shaped lip; the bright orange Epidendrum vitellinum, and Lælia purpurata. Mr. Peed sent among others the clear yellow Oncidium sessile, O. Lanceanum, Cypripedium hirsutissimum, and Trichopilia tortilis.

Among groups of 12 Orchids the best came from Mr. Baker, gr. to A. Bassett, Esq. It contained Phalænopsis amabilis, one of the best varieties of Cypripedium barbatum, Aerides affine and odoratum, Dendrobium Devonianum, a beautiful specimen covered with orange, pink, and white flowers; and Vinda suavis. From Stratford Mr. Bunney sent a nice group, in which was a very fine plant of Miltonia spectabilis, covered with flowers; also Calanthe Masuca, and a beautiful example of one of the best kinds of Bearded Lady's Slipper. Mr. Woolley furnished among others the rare Dendrobium Griffithi, finely in bloom.

Collections of Orchids came from Messrs. Green and Chilman. They contained Oncidium Lanceanum, various Dendrobes, Aerides, Saccolabiums, Lady's Slippers and Phalænopsis.

New plants were numerous; but they chiefly consisted of things which have been described by us in previous Numbers. From Mr. Bull came two pretty Anæctochilus, and Mr. Williams sent Phalænopsis Schilleriana, not in flower, but the dried flower spike was shown along with it; Mr. Veitch had Libocedrus tetragona, and one or two other Japanese kinds, also Mimulus cupreus, a variety which it is thought will prove unusually suitable for beds; Messrs. E. G. Henderson a variegated Chinese Primula, a double Petunia called elegans, and a new Chamæcyparis; Mr. Ferguson contributed a white Petunia, regularly and beautifully striped with purple; and last but not least was a beautiful example of the handsome golden variegated variety of Cupressus Lawsoniana, which is one of the hardiest and best of the fine tribe to which it belongs. This came from Mr. J. Waterer. There were also some tree and other Ferns from Mr. Standish.

The display of Cut Roses was excellent. To Mr. Turner was awarded the first prize for single blooms, among which were very fine examples of Gloire de Dijon, Auguste Mie, Louis XIV., Madame Vidot, Comtesse Cecile de Chabrillant, and Victor Verdier. From Mr. Laing of Twickenham came a nice box, in which were beautiful blooms of Wm. Griffiths, Boule de Nanteuil, and Madame Hector Jacquin. In large collections the best came from Mr. Mitchell of Piltdown, the best in whose stand were Madame Rivers, Comtesse Cecile de Chabrillant, Louis XIV., Prince Leon, Madame Hector Jacquin, Auguste Mie, Gen. Jacqueminot, and Senator Vaise. Messrs. Paul & Son also had Louis XIV, Madame Rivers, and Gen. Jacqueminot, in excellent condition. From Miss Crawshay, of Caversham, came Madame Vigeron, Lord Raglan (very fine), and Gen. Jacqueminot. C. A. Hanbury, Esq., sent beautiful blooms of Coupe d'Hébé. From Mr. Standish came some promising seedlings. Mr. Francis also showed well.

While speaking of cut flowers we must not omit a stand of Verbenas from Mr. Perry, of Birmingham, in which were some fine kinds; also some handsome kinds of Phloxes from Messrs. Paul & Son, Cheshunt. We also noticed some Pansies from Mr. Dean, and Carnations and Picotees from Mr. Turner of Slough.

Ferns, in most instances large and wonderfully well grown, occupied the shady nooks and recesses on the side of the tent next the Conservatory. Beautiful collections came from Mr. Williams and Mr. Day of Tottenham. Among them were enormous masses of Gleichenias, Platycerium grande, Cyathea Smithii, Lygodium polystichum, Pteris argyræa, cretica and tricolor, Todea pellucida, Drynaria morbillosa, Hymenodium crinitum, and Adiantum trapeziforme. Other collections were also shown in excellent condition, and we noticed one or two nice groups of British varieties.

Pelargoniums were perfect as usual, and formed an important feature of the show. The best came from Mr. Turner, who furnished beautiful plants of Prince of Prussia, G. Severyns, Bianca, Queen of Scarlets, Desdemona, Leviathan, Viola, Ariel, Lucifer, Prince of Wales, Bacchus, and Empress Eugénie. Among Messrs. Fraser's plants, which were placed second, were Excelsior, Governor General, Duke of Cambridge, Sanspareil, The Bride, Mazeppa, and Meteora. Messrs. Dobson sent Lucifer, Bacchus, Fancy, Scaramouch, King of Scarlets, Leviathan, Madame Hortado, Viola, Fairest of the Fair, Flora, Evelyn, and Monarch. In groups of six new kinds, Mr. Turner showed Lord Clyde, Transcendent, Sunset, Lady Taunton, Glowworm, and Rembrandt. His six large plants were also beautiful specimens of skilful cultivation; the sorts were Viola, Governor-General, Sanspareil, Fairest of the Fair, Mr. Hoyle, and Saracen. In Fancy kinds, the last-named exhibitor was also first with nice plants of Musjid, Claudianum, King of the Fancies, Captivation, Zoë, and Beauty. Messrs. Fraser also showed a good group. In the Amateurs' Class the best collection was shown by Mr. Shrimpton, who sent

Acme, Delicatum, Electra, Princess Royal, Claudianum, and Cloth of Silver. Messrs. Bailey and Hollingsworth also contributed well grown collections. Of Ordinary Varieties (amateurs) the best came from E. Foster, Esq., Clewer Manor, near Windsor; the sorts were Glow-worm, Bijou, Perdita, Bacchus, Lord Clyde, and Autocrat. The same exhibitor also furnished a collection of 10 plants in fine condition; the sorts were Lord Clyde, Desdemona, Flora, Bianca, Prince of Wales, Leviathan, Viola, Lightning, and Ariel. Mr. Bailey also showed in this class. Of Scarlets, one or two groups were shown: but they contained little new or remarkable.

Of Seedling Pelargoniums Mr. Nye, gr. to E. Foster, Esq., sent some remarkably fine things, among which were Conflagration, crimson scarlet with deep black spot on the upper petals, fine in quality and shape; Kettle drum and Mdlle. Patti, both highly promising rose-coloured sorts of different shades with clear throat; also Lord Chancellor and Eldine, both excellent dark kinds. Leander and Butterfly, from Worton Cottage, were captivating kinds, also Regina formosa, Emma, Sylph, Fidelea, and Maiden Fair; the last is a promising white variety. There were also other yearlings which we hope to see reproduced next season. Rosy Gem, a richly coloured sort, was shown by Mr. Bull, and we noticed one or two good additions to the variegated class, especially two kinds called Sunshine and Sunset.

Fuchsias were excellent, especially those from Mr. Young, gr. to R. Barclay, Esq., Highgate.* These were remarkable not only for profusion of bloom but for fine growth, many of the plants measuring over 7 feet in height. The varieties were Senator, Prince Imperial, Prince of Orange, Flower of France, Guiding Star, and Omer Pasha. It will be seen that half of these are new varieties. A good group was also shown by Mr. Page, whose sorts were Souvenir de Chiswick, British Sailor, Venus de Medici, Pearl of England, Crinoline, and C. Hayes. We also noticed a kind with white corolla, called Princess of Prussia.

Calceolarias were again shown in good condition by Mr. Burley, of Limpsfield. The names of the sorts have been given by us on former occasions. C. Canari[illegible]is (Smith), clear yellow, looked a useful sort for b[illegible].

Fruit was plentiful and good, especially Grapes. In Miscellaneous Collections the first prize was awarded to Mr. Henderson, Trentham. It contained two Queen Pine Apples, Trentham Black and Golden Hamburgh Grapes, a good dish of Banana (Musa Cavendishi), Noblesse Peaches, Elruge Nectarines, Sir C. Napier Strawberries, Bigarreau Napoleon Cherries, and Trentham Hybrid Melons. Mr. Tillyard, gr. to J. Kelk, Esq., sent excellent dishes of Green Gage and Victoria Plums, Violette Hâtive Peaches; Oscar, Goliath, Victoria, British Queen, and Alpine Strawberries; Queen Pine Apple, Black Hamburgh and Muscat Grapes; Trentham Hybrid and Strathfieldsaye Melons; Raspberries, and Elton and Tartarian Cherries. From Mr. Ruffett, gr. to Lord Palmerston, came a Providence and two Queen Pine Apples, Muscat of Alexandria and Black Hamburgh Grapes, Gallande Peaches, a dish of small Moor Park Apricots, White Ischia Figs, Elruge Nectarines, and British Queen Strawberries. Messrs. Dawson, Allen, and Turnbull also showed collections in which were fine specimens of Myatt's Surprise Strawberries, Black Hamburgh, Muscat and Chasselas Musqué Grapes, Peaches and Nectarines of different kinds, and one or two Melons.

Pine Apples were numerous and good. In sets of our fruit Messrs. Young, Bailey, and Barnes showed well, and the first two exhibitors had also fine specimens of Providence. Of Queens, the best were furnished by Messrs. Williamson, Davis, and Gardiner, but good examples of this variety also came from Messrs. Bray and Tillyard. Among other sorts there was an extremely fine Enville, weighing 7 lbs. 2 oz., from Mr. Young, and a Black Prince weighing 8 lbs. 3 ozs. from Mr. Floud; the last was hardly ripe, but the first was in all respects perfect. A good Blood Pine also came from Mr. Ruffett.

In the class of three dishes of Grapes, the best came from Mr. Henderson, gr. to the Duke of Sutherland at Trentham, who sent beautiful specimens of Trentham Black, Golden Hamburgh and Black Hamburgh. Mr. Drewitt, who was placed second, had capital bunches of Chasselas Musqué, without crack or blemish; Bidwell's Seedling, a good looking sort, and Lady Downe's Seedling, the last a useful late variety. Mr. M. Henderson, gr. to Sir George Beaumont, Bart., also sent three good bunches, as did also Mr. Embry, Chadwell Heath. Muscats were contributed in excellent condition by Mr. Peed of Norwood, to whom the first prize in this class was awarded; and a similar mark of distinction was also placed on a beautiful box of White Muscadine from Mr. Bailey, gr. at Shardeloes, near Windsor. Of Bowood Muscat we observed some fine examples, but they were unripe, and the same remark applies to the Golden Hamburgh, several exhibitions of which were contributed on this occasion. Black Prince, in good condition as usual, came from Mr. Hill, gr. to R. Sneyd, Esq.; and West's St. Peter's from Mr. Allport, gr. to H. Akroyd, Esq. From Mr. Little, Stoke Court, near Slough, and Mr. Bousie, also came some good specimens of skilful Grape growing. Of Black Hamburgh, in the shape of single dishes, excellent fruit came from Messrs. Henderson, Payne, Young, Allen, and Hill, to whom prizes were awarded in the order in which their names stand. Of Vines in pots there were one or two good exhibitions; among them we noticed examples of Ingram's Prolific Muscat. The last came from Mr. Standish.

* Mr. Young is desirous of knowing on what grounds his collection was placed second, "inasmuch as all who saw it said it ought to have been first;" and he hopes that some one of the judges will explain.

Peaches and Nectarines were numerous, and in most instances good. In the class of four dishes, the best came from Messrs. Dawson, Little, Frost, Henderson, and Turnbull. The sorts were chiefly Royal George and Violette Hâtive Peaches, and Elruge and Violette Hâtive Nectarines. In the class of two dishes Mr. Snow sent beautiful fruit of Violette Hâtive and Gallande Peaches; and Messrs. Cameron, Judd, Rawbone, Little, Smith, Drewitt, Hawkins, Tillyard, and Dunn, also showed well in this class. With the exception of Downton and Tawney Nectarines, and Noblesse and Barrington Peaches, the sorts were not different from those just named.

Of Apricots, Plums, and Figs, there were no separate exhibitions, though some were shown in collections; and Cherries were confined to Black Tartarian, Bigarreau, and Elton. Mr. Ferguson showed a large basketful from a cool house, in which it was stated frost had been very severe as late as May last. They looked unripe; but the card assured us that they were quite eatable, and that growing Cherries in cool span-roofed houses would be sure to pay any person who attempted to grow them largely in that way.

Strawberries were good. Mr. Turner showed beautiful boxfuls of Oscar, Admiral Dundas, Sir C. Napier, and Eleanor. Messrs. Lidgard, Kaile, Bailey, and Reeve, also showed fine fruit of British Queen, Sir C. Napier, Bath Victory, Sir Harry, and Keene's Seedling. We also noticed a dish of Bicton White.

Melons were plentiful, and generally speaking good. Among scarlet sorts Gem still keeps a high place; green-fleshed kinds were in many instances unnamed. Among the best were however, Trentham Hybrid, Egyptian, and Strathfieldsaye.

ENTOMOLOGICAL: *June* 3.—J. W. Douglas, Esq., President, in the chair. Mr. Bond exhibited on behalf of the Rev. Joseph Greene, two species of Eupithecia, E. tripunctata and E. trisignata, not hitherto recorded as natives of Britain; and two remarkably large male examples of Eunomos illunaria, found at Newrath Bridge, County Wicklow. Sir John Hearsey exhibited some beautiful drawings of the transformations of Indian Lepidoptera, executed from nature by the members of his family. Mr. Solomons exhibited some rare and interesting Coleoptera, including a fine example of Myrmidonia Haworthi, found in Penge Wood, Sydenham; also Staphylinus latebricola and S. fulvipes from Folkestone. Mr. Smith exhibited a living example of Aspidomorpha Stæ Crucis, a most splendid Indian species of Cassida, lately received by the British Museum, and the only one of several which reached this country alive, the brilliant metallic colours vanishing soon after death; General Hearsey observed that he had noticed this beautiful insect in plenty in the Island of Salsette. The President exhibited on behalf of Mr. C. Fenn, a singular male (!) example of Saturnia Carpini, the wings of which on one side presented the coloration of the female of that species. Mr. Waterhouse exhibited a series of a species of Ceuthorhynchus allied to C. sulcicollis, Gyll, and hitherto confounded with that species. Mr. W. pointed out its distinguishing characters, and read a description of it, proposing the specific name of inornatus. The Secretary read a paper by Mr. T. V. Wollaston on the Ptinidæ of the Canary Islands.

Notices of Books.

A Week at the Land's End. By J. T. Blight. 12mo. Longmans.

If well written pages, plenty of very good woodcuts, a useful map, and a thorough knowledge of the subject constitute a first-class guide book, this must certainly be so ranked. The author, who resides at Penzance, takes the traveller over every inch of ground where there is anything to see or to find, between St. Ives and St. Levan, as the most southerly church of Cornwall is called. With scraps of history and tradition, antiquarian speculations upon Druidical monuments and the extinct Cornish tongue, are gracefully intermingled bits of natural history, and indications of the whereabouts of rare Mosses, Lichens, Seaweeds, and plants that blossom in spots too remote to be known to any except local botanists. His account of the neighbourhood of a place called the Mousehole is a fair example of the way in which botanical rarities are introduced:—

"Near the Mousehole, about a quarter of a mile from the village, is another platform on which cannon were mounted. It is a very difficult scramble down the face of the cliff to get at the cavern; at the entrance it is about 50 feet high; the roof is a mass of dark green, being entirely covered with Ferns, which hang down in the most graceful manner; perhaps the Asplenium marinum grows nowhere so fine as it does here: one specimen I gathered a short time since measured 2 feet in length, but it is frequently seen much longer; in other parts of the kingdom where it is found its length rarely exceeds 6 or 7 inches. It is not confined to this particular spot, but is met with generally along the coast, especially in caverns. The beach here is covered with great loose rocks, very fatiguing to walk over, some of them immediately at the base of the cliff being overspread with trailing weeds which creep down from the top of the precipice, hanging about in wild luxuriance. They do not at all seem timid to approach the great waves, yet in winter they must lose the ground they gain in summer and be ruthlessly swept away. I have seen growing here, in great vigour, within a few yards of the surf, a not very common variety of the great Bindweed, Calystegia sepium, having flowers beautifully striped with pink. Hookeria lætevirens is also found in one or two caves along this part of the coast; indeed, it is the only known English habitat for this rare Moss, as it is also for an Irish Alga, Cladophora Brownii. It is a singular fact that Mr. Ralfs has met with several plants in the westernmost part of Cornwall, which are found in Ireland, but observed nowhere else in this island. In a smaller cave at a short distance from the Mousehole, the collector of Diatoms may always meet with Denticula tenuis. In a cavern still farther west, Protonema cryptarum occurs, and on the rocks above Pottia crinita and Psora atrorufa. At the back of Mousehole pier the junction of the slate and granite, and several interesting veins of granite in the slate, may be distinctly seen at low water."

"Kerris Roundago, an elliptical structure of Celtic days, is more than a mile west of the church. It is not much out of the way from the high road to Lamorna; indeed, this track will be found of much interest, particularly so to the botanist. Kerris Moor, which must be passed, affords many species of Diatomaceæ and Desmidieæ. On Trevelloe Cairn, itself worthy of a visit, are rare lichens; Sticta scrobiculata, Cetraria sepincola, Alectoria jubata, and Parmelia diatrypa. On Castallack Cairn, which is nearer Lamorna, may be found Andræa Rothii and Jungermannia setacea."

Nor is his account of Lamorna and its famous granite works less worthy of extract:—

"Long before we reach Lamorna, we hear the ringing of the workmen's tools, and the explosions by which the granite is riven for use. The jumper, the tool employed for boring the rock, is simply a long bar of iron pointed with steel; large quantities of gunpowder are used, and one slice of granite thus split off is sometimes large enough to form the side of a moderate sized house. Of course such ponderous masses cannot be removed, and they must be again blasted into smaller pieces. A block taken from the quarries in 1851, was wrought to an obelisk and sent to the Great Exhibition; its height was upwards of 22 feet, its weight 21 tons. Several men are employed in working the blocks into regula forms, ready for depositing in their respective portions in buildings, and large quantities are used in public works throughout the kingdom. A stage was erected and vessels were laden at the cove, but as it is rather a dangerous place for navigation—the vessels being only able to get in with certain winds—the practice appears lately to have been abandoned, and the stone is drawn on waggons to Penzance, whence it is shipped. The granite quarries of Lamorna are among the most important in Cornwall: the granite is of very superior quality, but it is remarkable that that on the eastern side of the valley is alone valuable: the frequent occurrence of quartz veins on the western side renders the granite unfit for building purposes where large masses are required; some veins of this coarser kind extend across the valley. The porphyritic granite, which is studded with large crystals of felspar, sometimes 2 or 3 inches in length, producing a very singular appearance, will be seen here in great abundance, whilst the natural joints of the rock cannot fail to strike the most casual observer; these materially facilitate the progress of the workman. Many rare lichens enrich the rocks at Lamorna, such as Parmelia diatrypa and speciosa, Roccella tinctoria, Lecidea steilunata and Lecanora aipospila. The Roccella fuciformis was formerly abundant and fine on some rocks on the eastern side, but has been destroyed in prosecuting the quarry works; it may still be found along the coast between the cove and the Logan Rock. The valley of Lamorna runs up a considerable distance into the country: it is a very picturesque spot, especially this lower part, where trees form shady arches over the little stream which here divides the parishes of St. Paul and St. Buryan; nearer the shore fine piles of granite wreathed in garlands of Ivy rear their heads

'High o'er the river's darksome bed.'

The stream twists and turns around great rocks, and the little waterfalls in its course are as well worthy the attention of the artist as those seen on large rivers. A short way up, amid the dense foliage, we catch a glimpse of the water flashing over a mill-wheel; we then follow along a 'green lane,' which is little traversed. Trewoofe, or, as it is commonly called Trove, is situate in this woody land; it lies near the high road which leads from Paul to the southern parts of St. Buryan, and which would have been the nearest route to the Logan Rock if we had not intended to visit Lamorna and the coast. The doorway of the ancient mansion house of Trewoofe is curious, the jambs being quaintly carved with figures and devices, and the arms of the Trevalis family are

over the arch. On this estate are the remains of a triple intrenchment, a subterranean passage is connected with it, in which, it is said, during the rebellion a party of Royalists hid themselves from the troopers of Fairfax. This charming valley resounds in the summer time with the songs of birds, and it is a spot well known to the sportsman, as the first flights of woodcocks are often marked by their being seen on their arrival in this valley, which about a quarter of a mile farther on expands itself into a broad bottom, varied with cultivated and swampy ground, and frequented in winter by snipes, wading-birds, and wild-fowl of various species: including wild duck, widgeon, teal, pintail ducks, shovellers, pochards, tufted ducks, golden eyes, &c.; according to the intensity and duration of the frost. Amongst the waders, the common heron, bitterns occasionally, and one of the rarest and most beautiful of the tribe, the purple heron, have been obtained from this spot. Besides the common snipe, several species of the sandpiper are found in this locality, including the common sandpiper, as well as the redshank, and dusky sandpipers. At Trevelloe, close by Trewoofe, a beautiful British bird, the golden oriole, was captured during the past summer, and of which, on account of its rarity, it has been thought proper to give an illustration. The body is of a very deep yellow, almost approaching orange; the greater portions of the wings and tail are black."

The lovers of the romantic are above all others those for whom this marvellous south-western corner of our island has irresistible charms; as when seated on the great granite hummock of the Land's End they think upon the far-famed and long lost Lyonnesse where—

"'All day long the noise of battle roll'd
Among the mountains by the winter sea,
Till all King Arthur's Table, man by man,'

had fallen

'Around their lord, King Arthur.'

"It connected this promontory with the Scilly Isles. The period in which the great inundation occurred overwhelming this tract must have been very remote indeed—long before Phœnician vessels sailed on these waters, long before—

'Victorious legions, by the Cæsar led,
Cleaved the rough wave to Britain's hostile shore'—

ages ere the Saxon and the Dane swept like tornadoes over the land. No records have fixed the date; but the tradition hangs over the sea like a mist which can neither be grasped nor penetrated. We are to believe that it was a fair and beautiful land, rich and fertile, and possessing no less than 140 churches, all by one terrible convulsion swept away for ever. 'Morning had dawned upon as bright as scene as ever met the eye. At evening, there was nought from what was then first termed the Land's End to St. Martin's Head, but a howling and boiling wilderness of waves, bearing here and there upon its bosom a fragment from the perished world beneath, or a corse tossed upon the billows, over which sea-birds wheeled and screamed.' Those who have told the tradition strangely blend distant periods of history together; but in confirmation of the assertion that the land did exist, fishermen, in recent times, are reported to have drawn up portions of doors and windows: and the rocks in the channel which rise above the sea, are said to crown the summits of the hills of the submerged territory. About midway between the Land's End and Scilly are the 'Seven Stones' which the Cornish called 'Lethas,' and the space within the stones 'Tregas' a dwelling. There is also a story to support the tradition of the Lyonesse, or Lethowsow, relating to one Trevillian, who swam on horseback to the shore during the inundation, and in memory thereof the family bears for its arms, gules, a horse, argent, issuing out of the sea. Geologists have written that the Lyonesse existed only in imagination; that from the present natural appearances of the cliffs such a separation of land never happened. Thus is modern science as ruthless as the ocean, and the fond and marvellous stories and traditions of ancient days are swept away; and we are to believe only what we really see and feel."

But we must break off. There is hardly a page in the little volume that would not bear quotation, and we are doing no more than justice to the author when we congratulate him upon having produced A MODEL LOCAL GUIDE BOOK.

Dr. Grant, Professor of Zoology in University College, London, has issued (through Taylor & Walton) a tabular view of the primary divisions of the Animal Kingdom, intended to serve as the *Outline of an Elementary Course of Recent Zoology*. We recommend it to students of all ranks. In a dedication to Mr. Darwin, the learned professor compliments him with having "with one fell sweep of the wand of truth scattered to the winds the pestilential vapours accumulated by species mongers." He further prophesies that Darwin's next movement will be to "dispel the remaining clouds of mystical supernatural typical intrusions which still hang on the horizon of the sublime prospect now opening to the view of the natural animalization of the orbs of space by the same simple laws which govern the physical and chemical phænomena with such wondrous harmony throughout the rest of the material universe." Brave words these, my masters!

Scrambles in Serk (Longmans) is a very good little eighteenpenny pamphlet giving an account topographical, historical, viatorical, geological, and meteorological, of a strange little rock commonly called Sark, one of the Channel Islands, in which it is easier to scramble than to walk—a capital place for a honeymoon or a few days thorough idleness in the long vacation. There is a good map for the reader who has a mind to take our advice.

A monthly periodical called the *Technologist*, containing good practical articles upon the natural products of the world in their application to Arts and Commerce, has just completed its first volume (Kent & Co.) The author, Mr. P. L. Simmonds, is well acquainted with such subjects, and his work ought to be in the hands of all commercial men as well as of others. The last Number contains accounts of the Tusseh Silkworm (with a figure), of the Vegetable products of Siam, of the Mineral Oils of America, of India-rubber plants, and other matters of interest.

TRADE LISTS RECEIVED.—*Louis Van Houtte, Ghent, Catalogue des Bulbes, Griffes et tubercules à fleurs.* As usual M. Van Houtte is first in the field with his bulb catalogue, which is extremely rich. We observe that the Dutch are reducing Ixias to subjection to gardeners, and that such names as Aristides, Brutus, Cæsar, Hercules, &c., are falling into column in their Catalogues.

Calendar of Operations.

(*For the ensuing week.*)

PLANT DEPARTMENT.

CONSERVATORY, &C.—As has been previously observed see that sickly or badly rooted specimens, if any, are kept free from red spider; also that young stock is not allowed to suffer from want of pot room, and during bright weather attend carefully to watering, giving weak liquid manure to all plants in free growth that are likely to be benefited by it. Such stove plants as may have been removed to this house while in bloom should be replaced in heat as soon as their beauty is over, in order to permit their young wood to get ripened before short days set in. Orchids must be carefully shaded during sunny days, but when the weather is at all cloudy allow them as much light as they will bear without injury. Keep the foliage clear of insects and dust by frequent syringings or spongings, as may be necessary.

FORCING DEPARTMENT.

PINERIES.—Air should now be given liberally to young stock in dung pits, in order to secure robust growth. The plants should not, however, be exposed to drying winds by giving back and front air liberally on drying days, for this would not serve the end in view; but a moderate circulation should be secured at night, giving no more during the day than may be necessary to prevent the temperature getting too high. This, with careful attention to the state of the roots, keeping the bottom heat regular, the soil in a nice healthy state as to moisture, and giving a liberal supply of manure water to such as are well rooted, will be found much more conducive to strong stocky growth than exposing the plants too freely to hot drying winds, which would probably check and throw them into fruit prematurely. Use every means to afford plants swelling their fruit a thoroughly moist atmosphere, sprinkling passages, &c., frequently, and shutting up early on the afternoons of bright days, giving a gentle dewing with the syringe, and saturating the atmosphere by sprinkling every available surface; also give these plenty of clear strong manure water at the root until the fruit begins to change colour, when the soil should be kept rather dry, which will improve the flavour.

VINERIES.—See that bunches for use late in the season are severely thinned, and also that the crop left is not too heavy in proportion to the strength of the Vines. Where the fruit is swelling, be careful to maintain a moist state of the atmosphere, and give every possible attention to the roots, keeping the border in a healthy state as to moisture, and if watering is found necessary, use good strong manure water. Give abundance of air where the fruit is colouring, and do not allow plants in pots to remain in the house to cause damp, which, despite every care in ventilating, is apt to settle on the berries and spoil the bloom. Where the fruit is ripe and expected to hang for some time, the atmosphere of the house should be kept as cool as possible; but a little fire heat will probably be necessary occasionally in order to keep the atmosphere dry.

PEACHES AND NECTARINES.—Go over the trees as soon as the crop is gathered, and cut away all useless shoots, such as are not required for fruiting next season or for filling up vacant places; when this is done, give the trees a good syringing with the garden engine, and if the borders are dry, and the trees are weakly, a good soaking of manure water would greatly assist them for another season. Give air night and day; and if the weather is warm, the sashes may be removed altogether about the end of the month, which will assist in ripening the wood. Expose the fruit in the succession house as much as possible to air and light as soon as it begins to ripen, for the purpose of giving better colour and flavour. Keep the atmosphere dry and a little warmer through the day, with air at all times in favourable weather. Water the borders if dry.

FLOWER GARDEN AND SHRUBBERIES.

Trimming, staking, and pegging down must be well followed up at this period where neatness and order are essential. See that sufficiently strong stakes are applied to plants with heavy foliage. Keep Roses as much as possible free from insects, and if time can be spared dead blooms should be removed. Budding may soon be proceeded with. Let Carnations and Picotees be layered.

HARDY FRUIT AND KITCHEN GARDEN.

Attend to previous directions in regard to the thinning and stopping the young shoots of all trained fruit trees, and now make the final thinning of Peaches and Nectarines, of course leaving the heaviest crop on the most vigorous trees and strongest branches. As a general rule, no two fruit should be left together. Plums of the large kinds, as well as the finer sorts of Pears, should also be thinned if the crop is too heavy. Young Peach and Apricot trees, when making over-vigorous leaders, should have the points of the branches shortened, to encourage them to make other shoots less vigorous, and of a fruitful character; this will obviate the necessity of shortening them back at the winter pruning. Strawberries will require frequent waterings during dry weather. Layer the runners intended for pot culture, as well as those required for making new plantations. All spare runners may be cut away, and keep the plants free from weeds. Thin and stop shoots of Figs as soon as they have made a growth of about 6 inches, and remove all useless growth from out door Vines. Keep the fruit close to the wall, and shaded by the foliage from the sun. Tomatoes must be regularly attended to, keeping the shoots thin and stopping them above a cluster of fruit.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending July 4, 1861, as observed at the Horticultural Garden.

June and July.		Moon's Age.	Barometer.		Temperature.					Wind.	Rain.
					Of the Air.			Of the Earth			
			Max.	Min.	Max.	Min.	Mean	1 foot deep.	2 feet deep.		
Friday	28	19	29.813	29.687	79	55	67.0	64½	59½	W.	.16
Satur.	29	20	29.842	29.688	72	45	58.5	64½	60	N.W.	.00
Sunday	30	[illegible]	30.050	29.957	69	43	56.0	64½	60	N.W.	.00
Mon.	1	22	30.161	30.070	78	55	66 5	63½	60	N.	.05
Tues.	2	23	29.926	29.916	78	49	63.5	65	60	N.[illegible]	.0[illegible]
Wed.	3	24	29.836	29.799	79	44	61.5	65	60	N.[illegible]	.00
Thurs.	4	25	29.600	29.278	67	47	57.0	64	60	S.[illegible]	.12
Average..			29.889	29.771	74 5	48.3	61.4	64.4	59.9		.33

June 28—Very fine throughout the day; rain at night.
— 29—Very fine; low white clouds; rather boisterous.
— 30—Fine; cold and dry air; fine; a comet seen at night.
July 1—Very fine throughout; rain at night.
— 2—Fine; low white clouds; overcast; fine.
— 3—Fine; overcast and fine; rather cloudy; fine.
— 4—Cloudy; densely clouded and rather boisterous; rain; fine at night.

Mean temperature of the week ½ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, *ending July 13, 1861.*

July.		Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds.							
							N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday	7..	73.6	51.8	62.7	18	0.34 in.	2	2	4	4	5	12	5	1
Mon.	8..	73.7	50.4	62.0	18	0.48	—	2	5	2	2	10	8	6
Tues.	9..	73.9	50.1	62.0	15	0.82	4	—	3	1	3	8	10	6
Wed.	10..	74.3	51.4	62.8	13	0.48	2	2	2	1	4	12	5	7
Thurs.	11..	74.8	51.4	63.1	9	1 07	4	—	4	1	5	7	8	6
Friday	12..	75.3	50.7	63.0	12	1.10	1	2	5	—	4	9	8	6
Satur.	13..	75.7	51.7	63.7	12	0.92	—	3	5	—	1	21	4	1

The highest temperature during the above period occurred on the 12th, 1859—therm. 93 deg.; and the lowest on the 7th, 1860—therm. 36 deg.

Notices to Correspondents.

GAZANIAS: *F D.* The Gazania rigens (not ringens) of gardens, which is perhaps the G. speciosa of books, has smoother leaves than Gazania Pavonia, in which they are regularly pinnatifid with elliptic lobes, and sprinkled with rigid hairs above and on the ribs beneath; the flowers of the latter are deeper coloured, but not so freely produced. In G. rigens the leaves are either simple or furnished with 3 or 4 long narrow lobes, smooth above, but with a few distant marginal spine-like hairs. The genus Gorteria as now restricted does not include any of these plants.

NAMES OF PLANTS: *M. Castle Cary.* Ornithogalum pyrenaicum.—*S.* 1, Sedum Aizoon; 2, S. oppositifolium; 3, not Cyrtomium falcatum, but Polystichum acrostichoides; 4, Trifolium olympicum certainly.—*D. Davies.* An Aristolochia without leaves, apparently A. Sipho. *C F T.* 1, Geranium pratense; 2, Valerianella olitoria or Lambs Lettuce, the Mâche of the French; 3, Matricaria Chamomilla or false Chamomile.—*W T.* The native Indigo of W. Australia is unknown to us; Indigofera ervoides is, we believe, the only species from that coast. The Convolvulus is possibly C. Preissii. Linum candidissimum is nothing but the large flowered Linum monogynum.—*J S P.* Silene quadridentata. Galls formed by some insect.—*J. W.* The number sent is over the stipulated quantity—viz. 4.—*P. P. B.* It looks like a bit of Acer Negundo.—*E. S.* Phlomis fruticosa.—*H E L.* It seems to be a young state of Angelica sylvestris.

PRUNING DEAD WOOD: *W G.* It is immaterial whether you cut out dead wood now or at any other period. Do it when most convenient. The new wood of your Laurels, Hollies, &c. will ripen very well if we have an average autumn.

SEEDLING STRAWBERRY: *G B.* The fruit was putrid when it arrived. Strawberries demand very careful packing, so that the berries may neither be bruised by their own weight nor by that of others.—Those from *A Subscriber, Bath,* are in the same state, quite bruised and rotten.

SHOW PLANTS: *J H.* If the Geranium is now in three pieces it ought not to be shown as a single plant; Pot Roses are inadmissible if more than one in a pot.

SPRING WATER: *R A M.* Spring water is objectionable for two reasons and no others. It is too hard, that is to say it contains too much lime, in which case it disagrees with Heaths, American plants, &c.; or it is too cold. The latter is its common fault; and a grievous one it is. If warmed by exposure to the sun the latter fault is got rid of. Use rain water when it can be had, and well water when there is nothing better. Nitrate of soda is a good dressing. The brown will become green.

VEGETABLES: *R T S.* We do not think it possible to answer your questions without knowing much more about the wants of the family. Consult Mr. Cuthill, your neighbour.

VINE BORDER: *Jasper Standstill* received. The earth is under examination. We presume that the garden is on the top of some hill or cliff. Pray let us have the rest of your communication, so that t may appear in a complete state.

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861, are now ready for delivery at his Factories, at the following prices:—
LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME £6 6
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES .. 5 5
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These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
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BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.
CONCENTRATED TURNIP MANURE, equal in value to the preceding.
Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

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(ESTABLISHED 1840,)
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SUPERPHOSPHATE OF LIME, of best quality.
DISSOLVED BONES, AND BONE MANURE FOR PASTURES.
CONCENTRATED URATE.
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MANGOLD MANURE.
They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate to be obtained entirely from Bones.
The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE OF SODA, SULPHATE OF AMMONIA, and every Manure of value.
116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

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LOANS may be obtained under the General Land Drainage and Improvement Company's Act for the full amount required by the Owners of settled Estates, Incumbents, Trustees, Bodies Corporate, &c., for the erection of Farm Houses, Farm Buildings, and Labourers' Cottages designed by their own Agents and sanctioned by the Inclosure Commissioners.
The loans are repaid by a Rent Charge on the estate for any term the Landowner may fix, not exceeding 21 years.
No investigation of title being required or notices given to Reversioners or Mortgagees, no legal expenses are incurred.
The Company furnish designs of every description, and undertake the entire responsibility of the works wherever desired by Landowners.
No profit whatever is taken by the Company on any works they execute, the actual expenditure only approved by the Inclosure Commissioners, with a commission thereon, being charged in all cases.
Applications to be addressed to WILLIAM CLIFFORD, the Secretary, at the Offices of the Company, 52, Parliament Street, London, S.W.

THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
To LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c. IN ENGLAND AND WALES AND IN SCOTLAND.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
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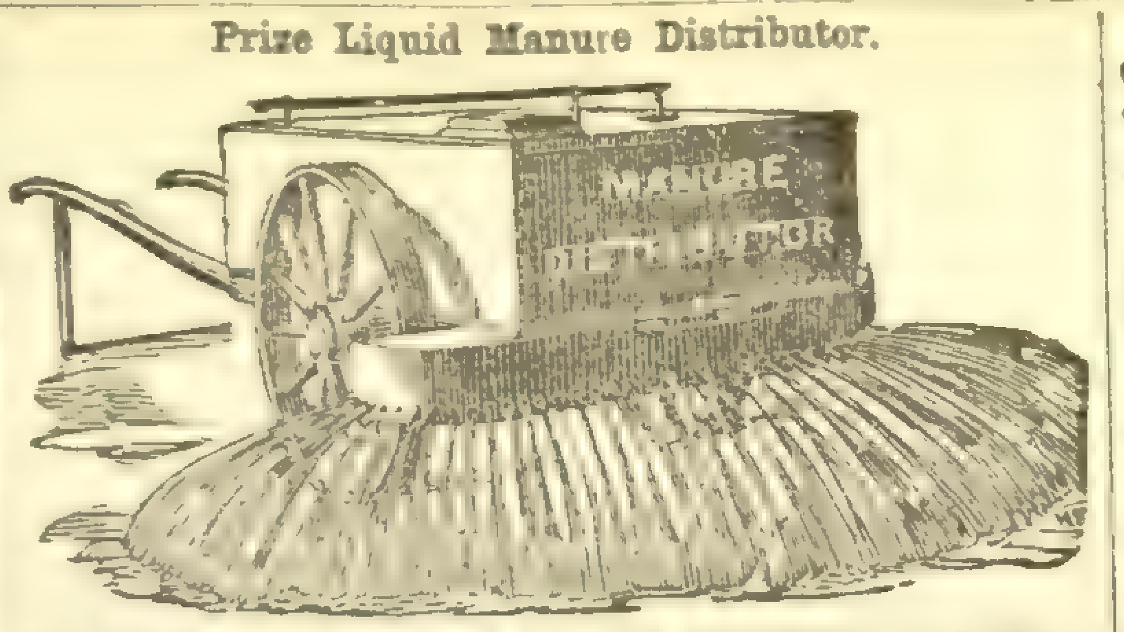
Reaping and Mowing Machines.
BURGESS AND KEY, 95, Newgate Street, E.C. Prizeholders for the best Agricultural Machinery Manufactured.
ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price 42*l.* 10*s.*
TESTIMONIALS.
A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following:—
From MR. JOHN RICHARDS, *Bailiff to* DR. N. CARNE, *Dimland Castle, Glamorgan.*
"I beg to certify that I have for five years worked Messrs. Burgess & Key's Reaper in my master's Home Farm, and also accompanied it when lent to tenants on the estate. During the above mentioned period the Machine has not cut less than 1,000 acres of all kinds of crops, with the same two knives as first had with the Machine. Dr. N. Carne having given up farming, the machine is now in the hands of his tenant, Mr. D. Thomas, of Llanrwst, and is in excellent order."
M'CORMICK'S REAPER for Manual Delivery. Price 25*l.*
ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30*l.*
COMBINED REAPER AND MOWER—Two-Horse Machine. Price 35*l.*
The last Machine is fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.
These Prices include Packing and Delivery at any Railway Station.

Prize Liquid Manure Distributor.



JAMES'S PATENT LIQUID MANURE DISTRIBUTOR OR WATER-CART, warranted not to choke up or otherwise get out of order. It is thoroughly adapted for Drill Crops, or Pasture Land, or for Watering Streets; has been awarded NINE FIRST PRIZES.
Full Particulars and Testimonials may be obtained of the Patentee, ISAAC JAMES, Tivoli Waggon Works, Cheltenham.
N.B.—Improved LIQUID MANURE PUMPS, either fixed or portable.

J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25*s.* 6*d.* each.

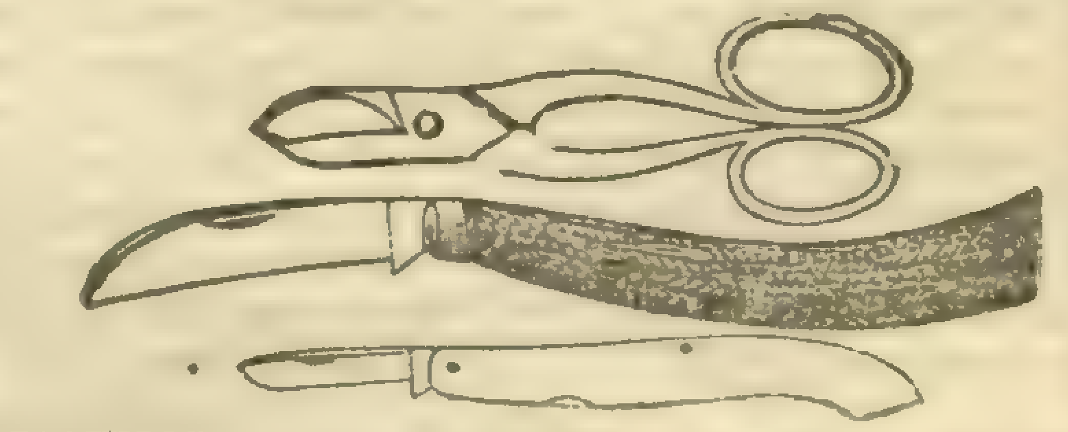
IRON YARD AND GARDEN PUMPS
3 feet 6 inches under spout

2½	3	3½ inch
48*s.*	53*s.*	60*s.* each.

J. TYLOR and SONS manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.
PUMPS of J. TYLOR & SONS' manufacture to be obtained of Plumbers in all parts of the United Kingdom.
J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

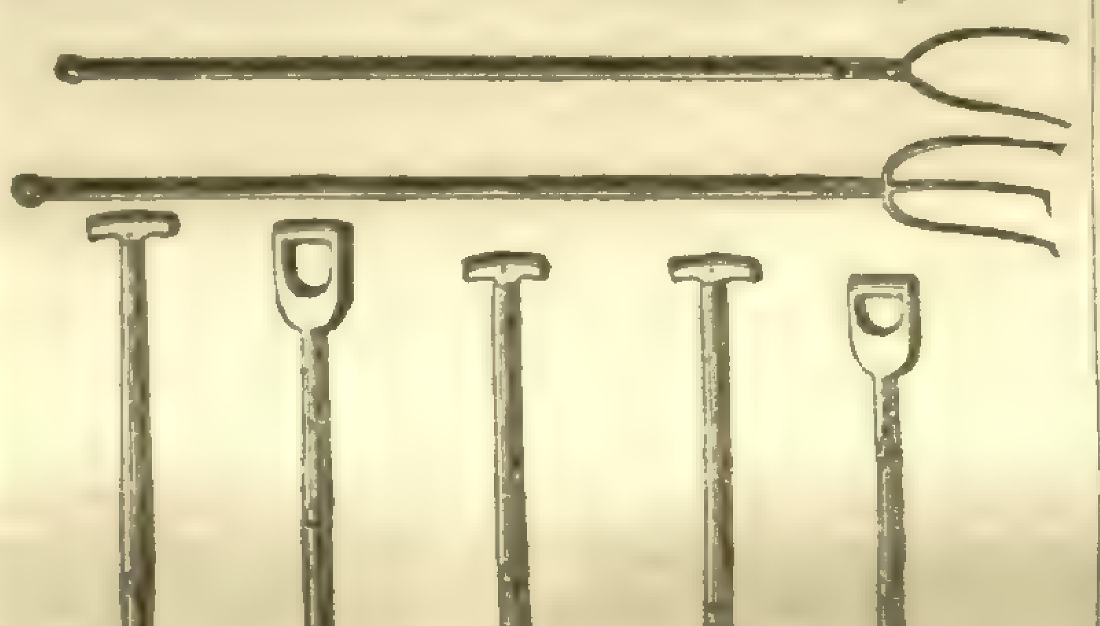
JOSEPH HAYWOOD AND CO.,
MANUFACTURERS OF
PRUNING AND BUDDING KNIVES,
SPORTSMAN'S, and all kinds of POCKET CUTLERY.
Dealers in Gambia Garden Shears, Scissors, Syringes, &c.
Glamorgan Works, Sheffield.

Paxton Works, Sheffield, Established 1738.



SAYNOR AND COOKE'S warranted PRIZE PRUNING and BUDDING KNIVES, SCISSORS, &c.
Sold by all respectable Nurserymen and Seed Merchants in the three Kingdoms.

PATENT SPADES AND SHOVELS, HAY, MANURE, AND DIGGING FORKS,



Made from one solid piece of cast-steel, without welding or rivetting. Warranted to wear out at least three of the ordinary ones, and to work sharp and bright to the last.
S. & J. received the Special Prize for these articles at the Royal Society's Show at Canterbury last year, and First Class Medals and Prizes at every other Exhibition at which they have been shown.
Invented, Patented, and Manufactured by SPEAR & JACKSON, Etna Works, Sheffield.

JOHN FOWLER, JUN., 28, Cornhill, London, E.C.—Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free.

MAJOR MUNN'S PATENT HORSE-HOE OR TURNIP THINNER, and MAJOR MUNN'S PATENT REAPER, MOWER, AND GRASS CUTTER.—These Implements have been entered for the Trials to be made at Leeds at the Royal Agricultural Society's Meeting this month.
For Licenses to construct these implements or to purchase the Patent Right, &c., apply to the Patentee, or Messrs. LEAKEY, CHAPMAN, & CLARKE, Solicitors, 24, Lincoln's Inn Fields, London, W.C.

Parkes' Steel Digging Forks.
BURGESS AND KEY, 95, Newgate St., E.C., London, being the Wholesale and Retail Agents for these celebrated Tools, have always a large Stock on hand from which their Customers may select what they may require.
ANTHONY'S PATENT AMERICAN CHURN.—The FIRST PRIZE was again awarded to this Churn in Competition with several others at the Chester Meeting of the Royal Agricultural Society; it has obtained the First Prize given by the Society at every Meeting since 1850.
Messrs. BURGESS & KEY, 95, Newgate Street, E.C., strongly recommend it as the most perfect Churn now in use. Full particulars sent on application.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.—LEEDS MEETING, 1861.
PROGRAMME:—
MONDAY, July 15.—The Implement Yard open from 7 o'Clock in the Morning, at an admission-charge of 5*s.* for each person.
The Judges to inspect the Live Stock, and to award the Prizes.
At 1 o'Clock (or as soon after as all the Judges shall have delivered in their awards, of which notice will be given), the Cattle Yard will be open without additional payment. Arrangements have been made for distinguishing the Animals that have won the Prizes, immediately the Judges have made their awards. The Show Yard will be closed at 6 o'Clock in the Evening.
TUESDAY, July 16.—The General Show Yard of Cattle, Horses, Sheep, Pigs, Implements, Flax, Wool, Cheese, and Butter, open to the Public from 6 o'Clock in the Morning till 6 in the Evening; admission, 2*s.* 6*d.* each person.
WEDNESDAY, July 17.—Public Dinner at 5 P.M., in the Town Hall. The Earl of Powis, President, in the Chair. Tickets, 10*s.* each, to be obtained of the Secretary.
The General Show Yard open to the Public from 6 o'Clock in the Morning till 6 in the Evening. Admission, 2*s.* 6*d.* each person.
Public working of the Steam Cultivators, on land in the neighbourhood of the Town, during such hours as the Stewards may determine.
THURSDAY, July 18. } The General Show Yard open to the
FRIDAY, „ 19. } Public from 6 o'Clock in the Morning till 6 in the Evening. Admission, 1*s.* each person.
FRIDAY, July 19.—General Meeting of the Members in the Town Hall, at 11 o'Clock in the Forenoon.
Governors' and Members' Tickets to be had on application to the Secretary.
By Order of the Council,
H. HALL DARE, Secretary.
12, Hanover Square, London, W., July 6.

The Agricultural Gazette.

SATURDAY, JULY 6, 1861.

MEETINGS FOR THE FOLLOWING WEEK.
MONDAY, July 8 till SATURDAY, — 15 } Trials of Implements at Leeds.

THE trials of steam ploughs and cultivators commenced at Leeds on Tuesday last, and no one of the spectators could fail to admit that at length cultivation by steam power is an established fact in agriculture.

No fewer than nine competitors appeared upon the ground, and the hold which FOWLER, on the one hand, and HOWARD, on the other, seem to have upon the attention of agriculturists, does not deter others from competing for a share of that enormous trade which is certain to arise out of steam cultivation between the manufacturer and the farmer in all well cultivated districts. Besides these two, who surpassed all previous efforts in the quiet, business-like efficiency of their work, Mr. ROMAINE with his rotatory cultivator, constructed on the principle advocated by Mr. HOSKYNS, did admirable work. And in the field after Turnips which they were severally required to prepare as for a Barley crop, no result was equal to his.

Four tests besides those of the dynamometer are being put in operation—the preparation of Turnip land for Barley, the grubbing of a Clover lea, the preparation of Clover land for Wheat, and fallow cultivation on heavy clay soil. None of them were completed on Thursday night. Messrs. HOWARD and FOWLER had finished their cultivation for Barley; the former grubbing and cross grubbing and leaving the land in good order, rather rough however for the seed; the latter completing the process at one operation with a combined cultivator and harrow, working the ground more deeply, but leaving it still rougher; but several other 4-acre plots have still to be accomplished in this field. Messrs. ROBY of Lincoln, RICHARDSON of Kirton, working BEARD'S apparatus, HAYES of Stony Stratford and others, delayed by accident, or otherwise, had still to finish them.

On the Clover lea, where ordinary threshing engines of 8-horse-power were alone at work,

FOWLER and HOWARD, and BEARD were the only competitors who had by that time finished. The judges have thus, as yet, but a portion of their task completed.

The circumstances of the trial, excepting the pressure of enormous crowds of spectators (for many thousands crowded round the implements), have been unusually favourable. Mr. BRADY NICHOLSON of Garforth, about 8 miles from Leeds, one of the most active members of the Local Committee, when all attempts at procuring land elsewhere had failed, placed his farm at their disposal, and several large fields of 30 to 60 acres have accordingly been taken up for the purpose.

A few years ago this could not have been done. But since then this farm, and indeed the whole of the Gascoigne estate, under the management of Mr. THOMAS FOX, has been greatly improved. On Mr. NICHOLSON's farm of 750 acres for instance, 10 miles of old fences have been grubbed—new fences have been placed—cottages have been built, and drainage been effected. And the same energy and spirit which provided land for the public trials of the steam ploughs, and placed the shops and forges of the adjoining colliery at the disposal of exhibitors in difficulties, and laid half a mile of planks around the trial fields as seats for the accommodation of tired spectators, is seen both in the successful cultivation of this particular farm, and in the general management of the property.

It is seen among other things in a very interesting experiment in sheep feeding, which has been organised by Mr. FOX, and is being carried out near the trial grounds by the neighbouring tenants, wherein 8 lots of 10 or a dozen shearhogs of as many different breeds, viz., Cotswolds, Leicesters, Shropshires, Southdowns, Lincolns, Bambrough sheep (Leicester and Cheviot), and Ripley sheep (Leicester and Teeswater) are folded each on 2-acre plots of Clover and seeds, not of very good quality, receiving 3 lbs. of oilcake daily, and being weighed at intervals. We shall next week refer again to this experiment, and give in detail the results of the steam-plough trials.

IT is not to be denied that the man who on every occasion of a short-coming publishes the fact, although he lays the responsibility of it on the wrong shoulders, possesses a certain usefulness which should help to excuse him in the eyes even of those who are wrongly blamed.

It appears to us that Mr. MECHI is in danger of establishing his right to the very moderate kind of praise which behaviour of this kind thus deserves. The "wretched condition of our present agriculture" has been long his text; though how so bright and genial a temperament as his should be absorbed by the gloomy aspect of particular districts, and fail of being inspirited by the evidence of energy and progress all around us, we cannot understand.

On Monday last, however, he far surpassed all former instances of this tendency by a letter to the *Times*, which argued for the need of 7*l.* per acre being spent on drainage, 12*l.* per acre being spent on buildings, 11*l.* per acre being spent on dressings of various kinds, 4*l.* per acre being spent on subsoiling, and removal of fences, and roadmending, and 2*l.* 10*s.* being spent on steam machinery. The letter will be found in another column. It seems that "many millions of acres of poor stiff clays and exhausted Grass lands" are to be rendered profitable in this way by an investment of from 20*l.* to 36*l.* per acre!

It is the unusual dependence of the country during the past year on imported food which has excited him to this extraordinary proposition. Many millions of pounds have been paid to foreigners for Wheat and flour, and "this enormous abstraction from our annual profits has disturbed our financial arrangements, and ruined or crippled merchants, manufacturers, and tradesmen, &c."

What sort of result then might not be expected if Mr. MECHI were to put his hands into the national purse and abstract 36*l.* per acre for investment over "many millions of acres of poor Grass land!" And even if this could be accomplished, how far would it tend to hinder the recurrence of a visitation like the season of 1860? It was not only nor even chiefly on the poor stiff clays that the country last year suffered. We are suffering from the diminished produce of the great corn-growing districts, which are not the districts of our stiff clays. Drainage would no doubt help the farmer of such lands in a season like the past—but we know whole neighbourhoods of first-rate land, possessing a perfect natural drainage, on which the Wheat was not worth last year 5*l.* per acre. Would drainage or subsoil ploughing, farm buildings or "a suitable residence for a tenant of capital," have remedied or prevented a failure so enormous as that! The fact is, we are dependent not only on the soil, which Mr. MECHI would spend so many millions in improving, but upon light, and heat, and air, which, so far as their natural supply is concerned, are beyond our influence. And a cold wet summer, like that of 1860, will always reproduce the disastrous harvest of last year; and we doubt not it will do so should it occur a century hence, even though Mr. MECHI's grandson may then have the pleasure of observing how the urgent and perpetual remonstrance of his ancestor has everywhere at length deepened, drained, and marled and limed the soil, and covered it with guano, bones, and sewage, and supplied good farmeries and "suitable residences for tenants of capital!"

HIS Imperial Highness the PRINCE NAPOLEON did many English farmers the honour of a visit during last autumn. He examined the improvements on Lord LEICESTER's estate in Norfolk, and on Lord YARBOROUGH's estate in Lincolnshire. He witnessed Mr. HUDSON's high farming at Castle Acre, and Mr. TORR's good management and first-class Short-horn herd at Aylesbury. His route lay among the tenant farmers of East Lothian and of Ayrshire. He visited Glasnevin College near Dublin, and Lord PEMBROKE's farm near Salisbury. Probably at none of these places could he have realised so perfectly the present status and condition of English agriculture as he would have done by a visit to the great Thames-side manufactories of manure, as for instance to the manufactories of superphosphate and other manures established by Mr. LAWES at Deptford and near Barking. Certainly at none of them could he have found the records of an agricultural experience at once so well defined and so instructive as on the home farm of Mr. LAWES at Rothamsted near St. Alban's. It is to be hoped that a visit was paid here also, and that thus an adequate impression was obtained, not only of the professional skill and enterprise of English agriculturists, but also of the contributions which through Mr. LAWES and Dr. GILBERT have been made in England to the sciences of agriculture generally.

It is no part of our business to inquire how it is that an Eton boy, an Oxford graduate, and the inheritor of an old family estate, has come to be an agriculturist, a scientific man, and manufacturer. Let it suffice to say, that fortunately for English agriculture all these characteristics have been united in one whose personal enterprise, no less than his public spirit, has impelled him to a long series of costly and laborious researches, in which many thousands of pounds have been spent, to the great benefit of English farmers and to the increased reputation of English agriculture. How highly these labours have been estimated here is proved by the token of gratitude and good-will presented to Mr. LAWES by English agriculturists some years ago, when large sums of money were contributed by them and spent on the erection of a laboratory which was handed over to him for the more convenient prosecution of his labours.

In what those labours have consisted may be gathered from a mere list of his contributions to the volumes of the English Agricultural Society's Journal. These include reports on Agricultural Chemistry; on Turnip Culture; on LIEBIG's Mineral Theory; on the Fattening Qualities of different Breeds of Sheep; on the continuous Cultivation of Wheat and Barley; on the influence of Manures on Pasture Land; on the Growth of Red Clover; on recently manufactured Cattle Foods; on the Composition of Oxen, Sheep, and Pigs. And they contain not the speculations of an enthusiastic amateur, but the closely-packed results of original and laborious research; elaborate papers to which reference will be made by many generations of students yet to arise; and in the meantime they are gradually and permanently influencing farm practice in a very remarkable degree. Whether on the art of feeding and growing plants, or on the practice of feeding and rearing animals, no such body of light has ever emanated from any single source as has been of late years thrown from Rothamsted.

This has been owing for the most part to the large scale on which experiments have been there conducted. Their extent is seen in the many large fields on a farm of several hundred acres which have been devoted to experiments on the cultivation of Grasses, of Clover, of Wheat, of Turnips, of Barley. For the quantities of material subjected to analysis in the course of them, it is enough to say that entire animals are dealt with in the laboratory. And as to the length of time involved in these experiments, observations extending over periods of 10, 15, and nearly 20 years can now be quoted. No wonder that a greater confidence than has ever yet been placed by agriculturists in the doctrines of scientific men is felt in Mr. LAWES, who speaks from the experience of an old farmer as much as from that of an agricultural chemist.

It is impossible to travel in one journey over the territory of the Rothamsted investigations, or even to take the reader with us over that surface of the research which is presented to the eye of one who takes a walk through the fields, the *stalls*, the yards, the laboratory, in Mr. LAWES' hands. In one field you see the singularly well marked results exhibited in Grass land by persistence in a scheme of manuring wherein every separate dressing has been continued year after year on the same plots. In fields of Wheat and Barley, which have borne these crops respectively for a number of years, you see the results exhibited in a varying promise both of straw and corn, arising from a similar practice now continued for 16 or 17 years in dressings with varying quantities of nitrogenous and mineral compounds. Elsewhere you see the remarkable results of a research into the nature of the Clover sickness. In the laboratory you may watch with interest not only the progress of whatever particular research may be at the time on hand, but in an admirably classified and arranged series of specimens you have the results of all previous investigations into the composition of plants and animals grown and fed under varying conditions.

The farm is large enough to provide an adequate supply of labourers, so that the fairness of an experiment in the field is ensured. Manures may be applied or cultivation may be conducted over a large extent in a short time—and thus the whole of an extensive surface is submitted to comparative trials under similar conditions of weather. These experiments, both in the field and in the laboratory, thus prosecuted by a private gentleman, do, we believe, surpass in extent, duration, and agricultural value those not merely of any previous or contemporary investigation, but of any society or institution under government patronage.

Probably one of the most interesting of the series at this time of the year, is that which relates to the effect of manure on Grass land. It is only since 1856 that a series of half-acre plots on the parks round Rothamsted House have been set apart for this experiment. Sixteen of such plots have been manured year after year with various dressings of manure, and each plot has retained since the commencement its own treatment; and in this way the independent effect of sawdust, of salts of ammonia, of nitrate of soda, of mixed mineral manure, and of various combinations of these, was at length exhibited.

At the close of the third year the results were sufficiently obvious to enable a most valuable report of them, which is published in the 19th and 20th volumes of the Agricultural Society's Journal.

In the fourth season, when we saw these plots, they exhibited differences not merely of luxuriance of growth, but of actual vegetation, so that the limits of each were defined, and plainly enough to be seen a long way off. A surface of ordinary pasture, containing the same variety of herbage throughout which is ordinarily seen in pasture land of medium quality, was rapidly becoming parcelled out as if sown out of entirely different seed bags. The plots which had been dressed year after year with ammoniacal salts were red with the flower of Rumex, those which had been dressed with mixed mineral manure were full of Clover. The Grasses flourished under nitrogenous manure to the relative exclusion of other plants—leguminous plants flourished under superphosphate and alkaline salts, to the relative exclusion of the Grasses. A difference so great produced by only three years of treatment shows how rapidly our Grass lands will answer to the conditions in which the cultivator places them. Taking (1) the unmanured plot, (2) the plot manured with ammoniacal salts alone, (3) that which was manured with mixed mineral manure alone, (4) the plot treated with mixed minerals and ammonia, and (5) that which received annually a dressing of farm-yard manure, then the per-centage in the third year of Grassy stems, Grassy leaf, leguminous

herbage, and weedy herbage respectively, was as follows:—

	1	2	3	4	5
Grassy stem	50	36	42	72	70
Grassy leaf	26	53	30	25	18
Leguminous herbage	5	2	23	0	4
Weedy herbage	16	6	2	2	7
Shedded seeds, &c.	3	3	3	1	1
	100	100	100	100	100
Total produce per acre in lbs. ..	2691	3928	3726	6652	4507

This table is extracted from Mr. Lawes' report, omitting the decimals. Taking 1 and 5 to represent the natural composition of the pasture under bad and good ordinary management respectively, see what a difference is produced by the application of special manures. Leguminous plants were increased from 4 or 5 to 23 per cent. by mineral manure; weeds were reduced from 16 or 17 to 2 per cent.; Grassy leaf was increased from 18 or 20 to 53 per cent. by ammoniacal manure. The last line of the Table is added to show the influence of these manures on the *quantity* of the produce. The figures give the weight in lbs. per acre of the average crop during three years. The increase may not be, generally has not been, enough to pay for the cost of the treatment, but that does not affect the value of the experiment. The farmer soon finds out at what rate of application manures will repay their cost, and in the meantime he has in those results from Rothamsted a sure guide to the kind of influence exerted by the several dressings offered to him in the market on the pastures to which he may be disposed to apply them.

No mention of Rothamsted is perfect which omits a reference to the admirably organised allotment grounds and allotment clubs for labourers which Mr. Lawes has here established. Their history and influence are most graphically described in No. 1 of Mr. Dickens's "All the Year Round," to which we must refer our readers. The object of the "Friar Bacon," to whom, according to this account of "The Poor Man and his Beer," the credit of their success is due, was to help the people to "a little self-governing, and a little homely pleasure, by showing them the way to better things and advising them; but never acting for them, never interfering, and above all, never patronising them." And so the allotment club, the pig club, and those little concerts by the ladies of his own family, a reference to which appears in another column, have been established by Mr. Lawes to the great advantage of his neighbours.

—— At the late half-yearly meeting of the Highland Society, it was resolved to postpone the Kelso meeting in 1862, because of the International gathering next year. And it was at the same time proposed as to the show of stock that the Highland Society should express to the English Society their willingness to find money, and Scotch stock, and Scotch judges to go to London to the Exhibition of the London Society; and the directors are about to ascertain whether the English Society will agree to such a proposal. If the decision of the English Society proves to be favourable to the views of the Highland Society, it is proposed that the directors take advantage of the show in Perth, to hold a great public meeting for the purpose of promoting the holding of a show of stock in London, exclusive of the show of implements.

—— At a recent meeting of the Hungerford Farmers' Club the increasing amount of the county rate in Berkshire and Wiltshire was the subject of discussion, and the need of some disposing power over the county expenditure being vested in the rate-payers, and the expediency of providing for the formation of a financial board in each county, to consist of two or more delegates from each Board of Guardians, in addition to the magistrates in their official capacity, to regulate this increasing expenditure, was insisted on.

THE BABRAHAM FLOCK.

The dispersion of the Babraham flock which is to take place next week is looked upon by many as a national calamity.

"Where are we to go for our rams?" This is the exclamation of many a first rate breeder of Southdown sheep, whose reputation has hitherto to a great extent depended on his annual July visit to the Babraham sale. The answer is, "You must do as Mr. Jonas Webb himself has done." Here is a flock which has been wholly self-sustained for more than a quarter of a century. Not a ewe has been bought since Mr. Drewitt's sale some 20 years ago, when Mr. Webb was the purchaser of a lot or two; nor has a ram been brought to Babraham since then, nor for a dozen years before it. And yet the size, weight, vigour, quality and productiveness, the reputation and intrinsic value, of the Babraham flock, have been year by year improving.

Is Mr. Webb's secret among the lots in next Wednesday's Catalogue—will Messrs. Strafford and Carter Jonas put the exclusive possession of it up to public competition? On the contrary, any one may have it for nothing—has, indeed, already had it any time these 40 years. Unlike his predecessor Robert Bakewell, the great breeder of Leicester sheep, Mr. Webb is the most genial and communicative of men; and his "secret," and the employment and results of it, are the constant topic of his conversation with his agricultural visitors. The secret is, indeed, no new thing; but by itself it avails but little. It is the eye which detects every brood of young partridges nestled under the roadside fence as you drive rapidly between the station and the farm, thinking and conversing of quite other things—that catches sight of a solitary weed observable above the general level of the corn field, and of every speck glistening in the sunshine on the distant fallow; it is a judgment of extraordinary acuteness, soundness, and self-reliance—and a resolution whose tenacity will not yield, though the decision of the Agricultural Society and its judges be repeatedly against it—these are what has made the "secret" in Mr. Jonas Webb's hands productive of such extraordinary results.

Everybody knows on the one hand, that "breeding in and in" may end in constitutional delicacy and disease; and on the other, that "breeding in and in" produces animals capable of transmitting with extraordinary certainty the characters they have inherited; and everybody knows that a good sheep has a good saddle of mutton, good shoulders, and good legs of mutton. It is not however everybody that knows how to attain the last of the results, and avoid the first without losing the second. Not only Mr. Webb's "secret," but his judgment, eye, and resolution, are necessary for this purpose.

They have been in operation now for nearly 40 years at Babraham, and through Babraham they have exerted an extraordinary influence on flocks of short-woolled sheep all over England, and Europe and America. It is now 38 years since Mr. Jonas Webb commenced his career as a breeder of Southdown sheep. His original flock was acquired by purchase of the best ewes and rams he could obtain from five different quarters, among which may be named the flocks of Mr. Ellman of Glynde, Mr. Saxby, and Lord Gage. He has thus had five separate families to work upon—and the means have thus been provided of retaining the requisite distance of relationship between the sexes. Following the rule of Nature in the case of all wild gregarious animals, rams of extraordinary vigour and quality have been freely used on ewes more nearly related to them, but as a general rule a third, fourth, or fifth cross of different blood has been desired before the same animals by their descendants come together again. The labour of recording pedigrees with a view to the preservation within a single flock of the distinctions thus required has now become excessive; and the constant care and attention needed in the selection of such animals for use in the flock as shall, in spite of these distinctions of family, both give that uniformity of family likeness so observable over the whole, and preserve and enhance the character and quality as good sheep which the flock possesses in so extraordinary a degree, have become a burden. Mr. Webb has therefore at length resolved at once to part with the whole.

Nearly 1000 sheep are thus to be brought to the hammer on July 10. The family relationships of the several lots will be published in a second edition of the Catalogue next Wednesday, so that purchasers may provide themselves with just that variety of blood with which Mr. Webb himself has had to deal—and the pamphlet which records the day's proceedings will no doubt be hereafter quoted as the great standard of reference in the history of the Southdown breed.

Mr. Webb entirely gives up Southdown breeding for the future, confining his tastes that way exclusively hereafter to Short-horn cattle, the labour of recording pedigrees and relationships being in that case taken off his hands, as it is for all other herds, by Mr. Strafford, whose Herd Book annually records the extension of the breed.

Since the commencement of the Babraham flock, its successes in competition with other short-woolled sheep have been unparalleled. For many years previous to the first meeting at Oxford of the English Agricultural Society, prizes open to all England were offered by the Essex Agricultural Society, and at Saffron Walden year after year all the head prizes were cleared by Mr. Webb. These were among others for fat sheep, and in these cases not only against all English breeders of Southdowns, but against all other breeds of sheep whatever; and shearhogs weighing 42 lbs. a quarter from his flock, proved at once the precocity and the weight of the "small" Southdown breed. At Oxford Mr. Webb's sheep were passed over by the judges, but immediately afterwards at the Saffron Walden show half-a-dozen shearling ewes, including those thus passed over, were exhibited, with a challenge for superiority open to all England for a hundred guineas — which remained unaccepted. At the Cambridge show Mr. Webb took the first prizes in both the ewe classes and in shearling rams. In the class of older rams the Duke of Richmond was successful, but the ram then shown by Mr. Webb was shown by him again next year at Liverpool, where he was easily successful, and his sons were first and second at Derby in the following year.

Many instances of this kind have occurred where the sheep placed first in Mr. Webb's own judgment but undecorated by the official judges has, on being shown again, been put in the place he held in Mr. Webb's estimation. Thus a ram named Perfection figures largely in the Catalogue. Mr. Webb had refused 120 guineas for him. He was shown at Shrewsbury and was passed over by the judges, who awarded the prize to his half-brother, for whom Mr. Webb had refused 40 guineas. This half-brother was afterwards let by Mr. Webb for 40 guineas—and Mr. Lugar offered him 150 guineas for "Perfection," which, however, he refused. He was afterwards shown at Newcastle, and took the first prize in his class. Again, at Exeter, Mr. Webb's sheep had been unaccountably neglected by the judges, but they were shown again at Windsor, where they and their immediate produce took five prizes out of six in the ram classes, and both the prizes for shearling ewes. And the "Rejected" of Exeter figures largely in the pedigrees of the flock—showing the confidence of the breeder in his own judgment as against that of those appointed by the Society. At Chelmsford, also, where the first prize sheep was one of Mr. Overman's, the second prize was a sheep of Mr. Webb's, but the sheep with which he declared to win was not noticed. The family however of this unnoticed sheep were shown next year at Salisbury and took first prizes there.

It is needless to run through the list of Mr. Webb's successes—they are to be seen not only in the prizes won by sheep from Babraham, but in the prizes awarded to the Duke of Richmond, to Mr. Rigden and to other Southdown breeders—to Mr. Humphries and other Hampshire Down breeders, and even to breeders of the Shropshire sheep—for the Babraham blood has spread its influence far and wide. At the Paris show, Mr. Webb took all the prizes which he showed for; and among the heirlooms of his family will be a magnificent silver candelabrum, presented to him by H.M. the Emperor of the French as an acknowledgement of his unrivalled skill.

Several of the sheep named in the Catalogue have taken their names from the successive meetings of the Royal Agricultural Society where they achieved distinction; and Windsor, Liverpool, Shrewsbury, Northampton, York, the "Archbishop" (of Canterbury) have all thus left their mark in the present condition of the flock. Among the sires of the flock, however, are others whose influence has been equally good, such as the "Rejected" of Exeter; "Fancy Boy," passed over at Gloucester; "Perfection," not noticed at Shrewsbury, and others—which Mr. Webb, confident in his better judgment, has used as largely.

We may next week, in our report of the sale, give a fuller account of previous occasions of the kind, and of the prices which particular sheep of the Babraham flock have reached. In several instances 500*l.* has been refused for single sheep; in many instances 250*l.* has been received for single sheep. The highest price reached at any of the annual lettings was 193 guineas for a ram to go to New York, bought by Mr. J. C. Taylor of that State. The average reached has generally exceeded 30*l.* over sales of from 60 to 100 sheep in number. No ewes have hitherto been disposed of from the Babraham flock in this country, though some have been sent to the Continent. They are bred from at Babraham as long as they will breed—and that is till a great age. Among the crones to be sold next Wednesday, there is not one which has not this spring had a lamb (or two); but among them are some of a great age; and it is one of the articles in the creed at Babraham that there is no end to a Southdown ewe or a Suffolk mare. For the latter clause of the belief there are grounds in the remarkable history of a first-class Suffolk stallion which was shown at Romford last week, and will be shown at Leeds, and for the former there are grounds enough in Mr. Webb's experience.

We must not, however, tire our readers with too long a report at present. They will find on the ground next Wednesday* undoubtedly the premier flock of the English Southdown breed—and in the opinion of competent judges the best flock of sheep of which the present century can boast.

Besides his ability as a Southdown breeder, Mr. Webb has, as already named, one of the best and largest herds of Short-horns in the kingdom, dating from more than 20 years back, and dating also from successive sales of Mr. Bates, Lord Ducie, and others, where he has been a purchaser. He exhibited successfully both in the bull and cow classes at Romford the other day; he has exhibited successfully at previous meetings of the Royal Agricultural Society, and he will exhibit bulls next week at Leeds. Purchasers of such stock from the Continent and from Australia, as well as from first-class herds in England, are his customers; and the history of the growth and present status of the herd may well occupy the attention of our readers another day.

But it is not only the flock nor yet the herd alone which attracts visitors to Babraham; they will next Wednesday find themselves in a district second to none in England for cleanly and successful cultivation.

* It may be as well to state here that all trains from London on that day (including the express) will stop at Whittlesford Station, two miles from Babraham, where vehicles will be provided.

Nowhere this year have we seen more promising crops of Wheat, or better promise of a Barley crop, than at Babraham—nowhere a fuller plant of Clover, notwithstanding that the 4-field course of cropping has been long adopted. The Alsike Clover in particular, which Mr. Webb has used for seven years, is a remarkably fine plant—it and the white and red Clover take the place in succession of the Clover crop in the rotation, so that each would come round once every 12 years but for the intervention of Sainfoin, which increases the interval. Nowhere is there to be seen a better promise of Swedes and Turnips, nor (in spite of bad seed) of Mangel Wurzel, nor better crops of Vetches and of Rape. There is nothing like keeping a good flock of well bred Southdown sheep, and a liberally managed herd of Short-horns, for ensuring the condition of the land. The Clover receives most of the manure of the farm for Wheat, the Wheat stubble is broken up for Mangel Wurzel and Turnips grown almost entirely—the former entirely—on the superphosphate sent out by the Blood Manure Company. This quarter folded over by sheep comes up for Barley, which again is seeded down with red, white, and Alsike Clover respectively.

The flock are folded now on the Clovers and young Rape, the only addition which the ewes receive being a few Mangels still scattered over the fold where the keep is somewhat deficient, the rams receiving some cake in troughs besides the Mangels. Everywhere a lump of rock salt is accessible in the fold for their use. For uniformity of character, and that including wonderful symmetry of shape, firmness of flesh, and quality of wool, they are unequalled anywhere.

STEAM CULTIVATION.

Stevington, near Bedford.—On the property of his Grace the Duke of Bedford, and on the Bedford side of the village of Stevington, on the crest and either side of one of those waves of land which the surface of the Oxford clay there presents, lies the Tithe farm of Stevington, occupied for some years by Mr. William Pike. It is a tract naturally of poor clay soil. Its character, where unassisted by good cultivation, is sufficiently shown by certain remarkably poor crops in fields close by—and the influence of drainage and deep tillage on it is equally manifest in the superior character of the Wheat and other crops on the farm of Mr. Pike.

This farm was formerly in many fields, and cultivated in narrow ridges, the only drainage of the land being by the shallow surface furrows between those lands. Since it has been in the occupation of Mr. William Pike, he has, at the expense of his late landlord, reduced the number of the fields to twelve; and from a small size, involving endless loss of labour on headlands, he has increased their size to an average of about 30 acres. He has also drained the land 4 feet deep, and thoroughly cultivated it by steam-power. The extent farmed by Mr. Pike has till lately been about 475 acres, of which 357 were arable; and 15 horses were employed, in five 3-horse teams, upon this extent. Now about 600 acres are farmed, of which 420 acres are arable; and the whole is managed with 10 horses and an 8-horse-power engine, working grubbers on the Woolston system. It is hardly possible to estimate the saving of the labour thus effected, because whereas formerly the horse-power of the farm was organised in so many teams, each with ploughman and boy, now there is but one man in the management of the stable, and lads or men at the ordinary wages are sent out with the horses according to the work they are engaged upon. If, however, the additional land requires the same horse-power per hundred acres as was needed on the original farm, then in place of 10 horses 17 or 18 must have been needed, and the cost saved is that of about 2½ 3-horse teams, or probably 250*l.*, *i.e.*, supposing that the horses retained cost as much per head as they used to do when no auxiliary steam-power shared in the work. This, however, I do not suppose that they do, and probably Mr. Pike's mere saving by the use of his 8-horse engine and cultivating apparatus does not fall short of 300*l.* a-year.

The land is now cultivated in a general way on a six-year course of cropping, viz., (1) Barley, (2) Grass and Clover, (3) Wheat, (4) Beans, (5) Wheat and Oats, (6) Mangel Wurzel, Turnips, and Vetches. The present cropping of the land is as follows—125 acres are in Wheat, of which 105 were partly after Beans, cross-grubbed by steam-power before sowing, and partly after Clover, having been cross-grubbed also by steam-power more than once before the previous harvest time, and then horse scarified and harrowed. The remainder was after horse cultivation. There are 60 acres of Beans after Wheat, its stubble having been dressed with farm-yard dung, and then ploughed by horse-power. There are 60 acres of Grass and Clover; 20 acres now in Vetches have been cross-grubbed after a manuring; 25 acres in Mangels and Turnips have been cross-grubbed in autumn, and again steam scarified and crossed in spring; 50 acres in Barley and 25 acres in Oats make up the extent of the farm, and were got in after steam cultivation.—By "cross-grubbing," it is meant that the operation was repeated.

More horse cultivation than usual was done last year. Clay land was fit only on rare occasions, and both horse and steam-power are thus used to the utmost. Mr. Pike has had Mr. Smith's grubber worked by an ordinary threshing engine since July, 1858. Since that time in No. 1, a fifty acre field, 120 acres have been cross grubbed; in No. 2, 36 acres have been cross-grubbed successively for Barley, Beans, and Wheat; in No. 3, 36 acres have been cross-grubbed for Oats and for Barley—this field is now in seed; in No. 4, of 40 acres, 22 have been cross-grubbed for Turnips; 40 acres have been cross-grubbed for Barley, and have since been horse-ploughed; in No. 5, 20 acres were in seed in 1859—this was once cross-grubbed for Wheat, and has since been cross-grubbed for Vetches, which is the crop in 1861; in No. 6, 20 acres have been grubbed one way for Wheat and 10 acres of it have been grubbed for Turnips in 1861; in No. 7, 22 acres were cross-grubbed for Wheat in 1860, and horse-ploughed for Barley this year; in No. 8, 27 acres were cross-grubbed for Wheat in 1860, and have since been thrice cross-grubbed for Mangels. Of No. 9 (35 acres), 17 acres were twice cross-grubbed for Mangel Wurzel in 1859, and one-way grubbed for Barley in 1861; 18 acres were cross-grubbed for Barley in 1859—they were in seed in 1860, and have been cross-grubbed for Wheat in 1861; No. 10 (30 acres) was cross-grubbed after a manuring for Beans in 1860, and again cross-grubbed this spring for Barley. Nos. 11 and 12 (15 and 20 acres) have not yet been cultivated by steam.

I give these figures in detail in illustration of the particular inquiries made in order to determine the exact quantity of work accomplished since the steam grubber has been worked on this farm. The whole average thus specified amounts to 731 acres cross-grubbed, *i.e.*, doubly worked. In addition to this Mr. Pike has since informed me after an examination of his books that he has also cross-grubbed for hire 300 acres of land. For this he charges 25*s.* an acre, the coals being supplied to the employer.

Excluding this item from our consideration in the meantime, and assuming that 730 acres—double cultivated between July 1858 and June 1861—correspond to 250 acres annually; let us see what the cost of the steam cultivation on this farm is. The average performance of the engine, including all stoppages except removals, has been 6 acres daily once cultivated. To do 250 acres twice would therefore occupy at least 83 days; but every removal takes at least 3 hours, and there would be nine or 10 removals during the year. Adding 3 days for these, there are 86 days' work of the steam-engine to be charged upon the steam cultivation of the farm. The following is the labour and its cost per week:—1 engine, 16*s.*; 1 ploughman, 11*s.*; 2 men shifting anchors, 22*s.*; 1 man at windlass, 12*s.*; 1 Porter boy, 6*s.*; 1 boy and horse with water cart, 24*s.*: the whole amounts to 3*l.* 19*s.* or 13*s.* 2*d.* daily. In addition to this we add the cost of coals, 10 cwt. at 19*s.* a ton on the ground, or 9*s.* 6*d.* daily. The oil at 5*s.* a gallon costs about 1*s.* a day.

The daily cost thus comes to 23*s.* 6*d.*, and this over 86 days amounts to about 100*l.* Against put the engine and apparatus, costing about 510*l.*, we must put 10 per cent. or 51*l.* for depreciation, and 5 per cent., or 25*l.* 10*s.*, for interest of capital. The cost of repairs may perhaps be satisfied by an annual charge of 15*l.*; and for tear and wear of rope we have the following items: 1400 yards of iron wire rope originally purchased, 50*l.*; steel ropes, 1400 yards since purchased, 60*l.* Probably the annual charge needed to maintain this may be made on the theory that the rope will last three years, and 25*l.* a year may suffice for this particular. Adding up these items we have a sum total of 216*l.* 10*s.* to be charged against the farm for steam cultivation. Putting 216*l.* against 500 acres once grubbed in the course of the year, we have a charge of about 8*s.* 7*d.* an acre for the grubbing. And there are two additional considerations in favour of steam power (1) that if there had been a larger farm this steam-power would have displaced a much larger number, and consequently much heavier cost of horses. This is plain from the fact that Mr. Pike has done 100 acres of cross cultivation each year for hire, besides the cultivation of his own farm: and if two-fifths of the cost of rope, repairs, depreciation, and interest be deducted because 200 acres have been annually one-way grubbed elsewhere, for every 500 acres done at home, then the charge upon the farm will be 170*l.* a year, or less than 7*s.* an acre for the work. And (2), there is the principal fact of all steam cultivation, that its quality is superior to that accomplished by horse-power. It is especially so on clay land such as Mr. Pike cultivates. This was apparent in the good colour and vigorous growth of the Wheat upon the farm. Mr. Pike informed me that during the three years of his steam cultivation, on several of the 10 fields already specified he has not used the plough at all. Even the mixing of manure with the soil is done by the grubber. No plough is used to bury it. It is laid upon the land and grubbed to and fro, and thereby mixed sufficiently. The cleanness of the land, too, is a fair testimony to the quality of cultivation by implements which stir, but do not overturn the soil.

Mr. Pike has till lately used the grubber invented by Mr. Smith of Woolston, with the turnbow apparatus for turning the tool at the land's end. Latterly he has used the cultivator of Messrs. Howard, each tine of which is double, pointing both fore and aft, so that no turning at all is needed, the claw which follows in the wake of the working tooth as it goes coming into operation in its turn as it comes back again. The windlass is Messrs. Howard's new one; the rope and anchors are the same as have been long in use. The engine is stationary in the middle of the side of a long rectangular 50 acre field, beside a pond from which it pumps its supply of water. The rope goes from it right across the field to the middle of the opposite side, and there the tool stands; it works between that point and one end of the farther side, and the anchors are shifted backwards along that end and along the midway line of the rope, which travels round a triangle formed by the position of the windlass and the straight furrow of the grubber which parallelly approaches the engine side of the field as the work proceeds. The other half of the field is done in like manner, and were another such field to lie on the other side of the engine, 100 acres could thus be done without ever shifting its position. Two thousand yards of rope or thereabouts would, however, be required; and we have yet to learn the amount of draught which the mere to-and-fro movement of the amount of rope takes out of the power of the engine, but the rope is kept well off the ground by extra porters.

Mr. Pike is perfectly satisfied with that mere stirring of the soil which is effected by the cultivator, and he is also perfectly satisfied with Mr. Howard's cultivating implement, which has been substituted for the Woolston grubber with its turnbow. It may, however, be mentioned here, as it will shortly be submitted to public competition with Mr. Fowler's balance plough at Leeds, that Messrs. Howard have introduced a frame of ploughs on the Marquis of Tweeddale's plan, in which three ploughs with right-hand mould-boards alternate with those having left-hand mould-boards; the one series working when travelling to, and the other, after turning at the land's end upon the horizontal axis which carries both, coming into operation when travelling fro—the furrows being thus all laid one way.

The arrangements for lifting this horizontal axis, and for guiding the frame which carries all, are exceedingly simple, and under the easy control of the ploughman, who, as he sits upon the carriage, can alter depth and breadth of each with remarkable facility, and the whole is an exceedingly compendious and apparently efficient and well packed apparatus.

Castle Hill Farm, near Cricklade.—This farm has been in the occupation of the family of Mr Edmund Ruck for 70 years. Landlord and tenant have each been more than satisfied during that long term of years, and now Lord St. Germains, to whom the property belongs, sanctions all that his tenant desires to do in the formation of a steam-cultivated farm; and while the latter is grubbing fences and putting in drains, and making roads, and throwing fields together for the efficient use of the cheaper power, the former is building cottages on the farm for the labourers who are *not* to be put out of employment by the substitution of the engine. I went into some of the new cottages on this and an adjoining farm, and more comfortable accommodation for a labourer's family could not be desired. They cost the landlord 230*l.*, and the tenant about 30*l.* per pair, the one in labour and materials, the other in labour of haulage, &c. Both seem equally interested in the well-doing of the cottager, and the influence of steam-power applied to cultivation in dispensing with much of the labour of young boys in the stable and elsewhere, is rejoiced in as likely to induce a prolonged and more efficient education at school.

Castle Hill Farm is 740 acres in extent, of which about 640 are arable; it lies on the junction of several oolitic beds, and is on one side bounded by the river. The soil is thus of various quality, most of it however being a strong calcareous clay. It used to lie in small fields, but Mr. Ruck has now, by the destruction of nearly 400 chains, 5 miles, of old fences, thrown the land into 9 fields of 70 acres each. Formerly the land was cultivated "as you could do it," but as a general rule Wheat came once in three years, and fallow was also every three years as a general rule. You lost your chance, sometimes unavoidable, sometimes because of getting in a crop, sometimes because of the foulness of the land. Even so the weather has often beaten those who trust to ordinary means. And thus last autumn many lost their chance of getting in their Wheat. The possession of the steam plough saved Mr. Ruck's seed time, and his Wheat was looking remarkably well when I saw it five or six weeks ago.

The land is now cultivated, part of it on a 4-years' and part of it on a 5-years' course of crops; the nine fields and the varying character of the land enabling these two rotations to be adopted. The lighter land, 280 acres, is in four fields, growing Wheat, Turnips, Barley, Clover; the heavier land will be five fields growing Wheat, Vetches, Mangel Wurzel and sheep keep, Wheat, Clover, and Beans manured. The Clover is kept down till late in the year for the sake of the ewe flock, and is then broken up for Beans, instead of Wheat.

Mr. Ruck has had Fowler's steam plough since February of last year, and has worked it with remarkable success. He had for several years intimated to Mr. Fowler that as soon as his engine would displace seven ox teams he would become a purchaser, not-

withstanding that he has always contended for the comparative cheapness of ox labour; the superiority of the engine as to depth and quality of work, and its influence on the labourer, being the advantage by which he expected to be repaid.

As soon, therefore, as Mr. Fowler was prepared to displace so large a quantity of draught power by his engine it was sent to Castle Hill. The farm was formerly worked by nine horses in 3-horse teams and 28 oxen. It is now worked by only nine horses, all the oxen having been displaced except one kept for the use of the shepherd.

It is however only fair to add that while the extra work of drainage, enlarging fields, and making roads proceeds, more labour goes on upon the farm than will hereafter be required. In the meantime the cultivation of these nine 70-acre fields and the 100 acres of pasture is carried on by a 12-horse-power engine, and Fowler's 4-furrow plough, nine horses, and about 950*l.* worth of manual labour, besides the salary of a bailiff, and the cost of tradesmen's bills.

To understand the expenditure which has been saved, we must remember that even if, as Mr. Ruck had always argued, oxen retained their value while at work so as to cost the tenant nothing, yet there would be at least 12*s.* a week paid for every team of four during probably about 35 weeks of the year, and the wages of one man to look after all the teams when not at work during the remainder of the year; and the price thus paid as wages formerly and not paid now amounts to about 157*l.* In addition to this we have the fact that Mr. Ruck is about to increase his flock of 450 to 600 ewes, partly owing to the increased fertility of the land, partly because he no longer feeds a herd of 28 oxen, in both cases owing to his adoption of the steam plough. And it is a very moderate estimate which puts the profit of the new arrangement at 200*l.* a year; so that without taking into account tradesmen's bills, depreciation and repairs of implements, and assuming that as much capital will be invested in live stock now as there was in the days of ox-labour, yet 357*l.* are added to the resources of the farm by the displacement of the oxen

And now to understand the cost of the engine by which this displacement has been effected: I find on inquiring field by field that since February 1860, and up till the middle of April 1861, 555 acres had been ploughed, and 764 acres had been worked by the same implement with the scarifying breasts, making 1319 acres worked in all. This corresponds to the very large extent of at least 1000 acres per annum cultivated by the engine during the very wet and difficult year of 1860. This has been accomplished at the rate of 7 acres a day upon an average, including time lost in removals, &c.; and the engine has thus been worked upwards of 140 days in the year. The fuel consumed is about 10 cwt. daily, costing 10*s.* or thereabouts upon the ground, and the oil costs about 1*s.* a day. The wages per week are—engineer, 1*l.*; ploughman, 1*l.*; anchorman, 12*s.*; two porter hands at 6*s.* each; and one boy and horse for coals and water, 1*l.* 4*s.* This amounts to 4*l.* 8*s.* a week, or 14*s.* 8*d.* a day, and their wages over 140 days are about 102*l.* per annum. The fuel and oil in like manner, at 11*s.* a day, cost 77*l.*

The repairs during the period include an injury to plough and anchor from running into anchor when working in a fog when the signals could not be seen—a cogwheel broken out of the gearing for the forward motion of the engine—repairs of porters for the rope and three dozen plough-shares, in all about 15*l.* The tear and wear of rope has been considerable, owing to the lower groove in the drum which carries it below the engine, being cut a little deeper than the upper one, thus causing either a stretch or a grinding of the rope by which it was broken. In all, owing to this injury, and the natural tear and wear of rope arising from ordinary use, 50*l.* are charged to Mr. Ruck for additional purchase of rope; he is however stronger in rope now than he was at first, and if 40*l.* per annum be charged on this account it will be a fair account of the expenditure on this item during the first year of Mr. Ruck's experience.

We have to add to these items 39*l.*, being 5 per cent. on the capital invested, and 78*l.*, being 10 per cent. for depreciation in value. And the total annual cost of the steam plough comes out 346*l.* per annum, rather less than 7*s.* an acre.

This is certainly very much cheaper than the work can be done in any other way. The quality of the ploughing is superior to that done by horses, and most of it is good 3-horse work, worth at least 12*s.* or 14*s.* for hired labour, and probably actually costing the farmer 9*s.* or 10*s.* A saving of more than one-third the cost, and a great improvement of the quality of the work, are well worth trying to effect—they are to be accomplished according to Mr. Ruck's experience by the use of Mr. Fowler's engine and apparatus, even in the unimproved state in which on this farm it has hitherto been used. And so convinced are Mr. Ruck's neighbours of this that he informs me Mr. Fowler will obtain a number of orders around Cirencester as soon as the improvements in his apparatus shall have proved themselves at Leeds and elsewhere.

The Castle Hill Farm is interesting, not only for its steam cultivation but for its herd of pure-bred Shorthorns, which though only a few years established, have already distinguished themselves at Gloucester and other shows.

I had an opportunity of testing the draught of the cultivating apparatus, *i. e.*, of the balance plough with four cultivating breasts, and the following results may be recorded:—

1. ON THE EFFECT OF INCREASING DEPTH.

Distance from Engine.	Depth.	Gross Draught of Plough.	Draught of Slack Rope.	Nett Draught.
Yards.	Inches.	Cwt.	Cwt.	Cwt.
50	7½	12½	½	12
100	8½	16	?	16
150	9½	24½	2½	22
200	5	12	2½	10
250	6	15½	2¾	12¾
300	9½	20½	3	17

When going from the engine the draught of the rope drawn behind the plough commenced with nothing and increased up to 3 cwt. when near the anchor and 300 yards were out. On coming back the dragged rope commenced with fully 350 yards, the length of the furrow, and increased up to 700 yards. At first the rope, wholly dragged, took 5½ cwt. to pull it. When wholly carried it then took 3¼ cwt. Again allowed to drag till near 600 yards were dragging, it took 7½ cwt. to pull it. The rope was then put on the porters again and the draught fell to 4¾ cwt. With the anchor put in gear and moving forward another ½ cwt. of draught was taken up. These figures are interesting as showing the importance of an apparatus which shall ensure the rope being properly carried. In illustration of the character of the soil I may further notice that a common horse-plough turning a furrow 5 inches by 10, took about 2¾ cwt. to draw it; and when turning a furrow 6 inches by 10, it took about 3½ cwt. of draught.

FARM CAPITAL.

THE following letter has been addressed to the *Times* by Mr. Mechi:—

"Sir,—You have devoted your columns to the very important question of clothing our people. May I ask you to do the same as regards feeding them? If the anticipation of a short supply or an increased price of cotton fills the public mind with alarm, surely still more anxious should we feel about corn, the food of the people.

"Since our last disastrous harvest we have paid to foreigners 40,000,000*l.* for foreign corn, being some 30,000,000*l.* over and above our usual average payments. This enormous abstraction from our annual profits has disturbed our financial arrangements, ruined or crippled many of our merchants, manufacturers, and traders, has increased the value of money, has limited credit, and thrown out of employment, wholly or partially, large masses of our industrial population. Farmers and those depending upon them have suffered more than any other class, for they have incurred the expense of preparing for an ordinary crop, but have failed to obtain it or its equivalent in price. Under such circumstances it becomes our duty to inquire how and to what extent such a calamity might have been mitigated, and how much loss and suffering might have been avoided. The great and principal cause of our misfortune has been our generally imperfect mode of farming, which is unable to meet the emergencies and difficulties of an unpropitious season.

"Such a summer as the last dispels the illusions of the *laissez faire* system, and teaches a stern lesson to that large class of agricultural non-improvers who greatly predominate, both as landlords and tenants, over the comparatively limited number who have profitably applied commercial principles to the cultivation of the soil.

"Painful and striking was, indeed, last year the contrast between a well-drained and deeply cultivated soil, having all modern and necessary appointments, and that on which no such means had been applied. The percentage of difference was too great to be measured by any reasonable charge for interest upon improvements. If I said as between the two the difference was 100 per cent. in favour of the perfected farm it would be in very great many cases far below the truth. Not only in quantity was the advantage in certain crops as 2, 3, and 4 to 1, but in quality there was also the difference of a large rent per acre on the selling price.

"I know that these statements will cause much anger and discontent, but I pledge myself for their correctness over a very large area that came within my own personal observation; and it is the duty of every well-wisher to his country to speak the truth and expose the nakedness of the land with a view to its improvement. Did I believe that this non-improved and unhappy condition of agriculture arose from want of means or of opportunity it would be useless to complain, but I know, from long practical observation, that it is a want of belief in the profit of improvement on the part of both landlords and tenants (quite as much the former as the latter) rather than a want of means which retards progress. It is a comfortable, but very unprofitable self-satisfaction with things as they were, and the want of commercial calculation and comparison of well-known *data*, that envelope the agricultural mind in a haze of stagnation and non-progression. There are many millions of acres of exhausted Grass lands and poor stiff clays which now bind the tenant in poverty and discontent that would be rendered profitable by an investment of from 20*l.* to 36*l.* per acre in the following improvements:—

	£	s.	d.
Drainage	7	0	0
Subsoiling or deepened cultivation	2	0	0
Removal of hedgerows, trees, and improvement of roads	2	0	0
Covered yards and good farm-buildings ..	7	0	0
Suitable residence for a tenant of capital ..	5	0	0
Steam machinery for various purposes ..	2	10	0
Burnt clay, chalk, or lime	5	0	0
Guano, bones, and other manures	8	0	0
Sewage irrigation where practicable	3	0	0

So here is a total of landlords' and tenants' improvements which, conjointly, would certainly result in individual and national profit.

"I am speaking practically on the matter, and I know that it would be a happy circumstance for the generality of clay-land farmers to have their present rents doubled, or even tripled, provided that the increased rental represented a fair interest on a sum expended on landlords' improvements.

"Whether these improvements are to be effected by individual or associated capital it is not for me to say, but it does strike one as extraordinary that ready millions can be found for almost every undertaking or scheme, British or foreign, except for the amendment of British agriculture, the safest of all and the most required.

"This proves to me that the national mind has not been sufficiently directed to this object, or disbelieves in agricultural investment as a source of profit.

"Our agricultural shortcomings are, indeed, enormous. If the residuum of the 40,000,000*l.* worth of foreign corn which we have just consumed had found its way to the land by irrigation, instead of poisoning our rivers, it would have resulted in a large profit to the British people. Farmers would have considered such a waste suicidal and insane had that amount of corn been consumed by their animals and so disposed of

"Taking the acreage of the United Kingdom our gross agricultural capital may be estimated:—As landlords' investment, 24*l.* per acre; tenants' investment, 4*l.* 10*s.* to 5*l.*; rental, 1*l.*; produce, 3*l.* 15*s.* per acre. These figures are humiliating as compared with the best instances of agricultural progress, which represent much more than double these amounts. A paltry increased produce equal to 6*s.* 8*d.* per acre (the average value of one bushel of Wheat), would, on our acreage of 60,000,000, give us an addition to our food of 20,000,000*l.*, being nearly double the amount of our average annual foreign corn importation.

"I know that this, and very much more than this, can be done with profit to the agriculturist and to the country at large by even moderate improvement. We shall then no longer present the humbling spectacle of a nation which, having by enormous investments and exertions clothed the universe, has yet neglected to produce a sufficiency of food for its own people.

"A long experience has taught me that nothing is more certainly profitable than judicious agricultural improvement. *J. J. Mechi, Tiptree Hall, Kelvedon, Essex, June 29.*"

HALF-TIME LABOUR IN CULTIVATION.

[The following paper was read last week before the English Agricultural Society by Mr. Chadwick.]

IN availing myself of the permission you have accorded me of bringing forward the subject of the education of the children of those employed in agriculture, allow me to say that I do so to some extent to ask consideration and counsel as to what may be addressed elsewhere, and what may be done, inasmuch as some of the observations which I may make would be trite and indecorous even, if they were held to be addressed to those gentlemen by whose immediate presence and attention I am honoured. I have however now to submit to the Council the results of long observation and of some late extensive investigations, tending to the establishment of what are deemed new educational principles, some of which are peculiarly applicable to agricultural and thinly spread populations. Apart from those higher considerations of duty which are the proper province of the ecclesiastical authorities, I propose to deal with those of a lower economical class. I believe that the future progress of agriculture is largely dependent on the improvement of the education and the intelligence of the working hands. I have before had occasion to state, on the authority of persons specially conversant with the mechanical inventions available for agriculture—that there is now as much sound mechanical labour-saving invention unused, as there is of labour-saving machinery used, but that the bulk is altogether unused, and that which is used in consequence makes wretchedly slow way in consequence of the prevalent ignorance and incompetency of the labourers to use it, including the want of competent foremen to direct it. But the progress of agriculture will now soon require more of labour-saving machinery, such as is in general use in some of the American States, and for its direction more of skilled labour, for where machinery saves labour it creates labour.

I had occasion some time ago to take some French Commissioners to see an estate in Scotland, where, in the middle of the last century, the tillage was of about the standard in which the average tillage of France now is—namely, of about 14 or 15 bushels of Wheat the acre. Then the wages were about 6*d.* a day, the rent about 10*s.* an acre, and the farmers starving. Now there is, in the example I presented to them, an advanced use of steam, reaping machines and other machinery, with more yet to be introduced, such as the steam plough, wages for more of intelligent and better conditioned labourers at 16*s.* a week. The farmers are now paying a rent (which includes interest on capital for drainage and other improvements) of 3*l.* an acre. The average yield of Wheat, which I cite as a measure of progress, upwards of 40 bushels per acre, directed by better educated farmers, good capitalists, who look like field marshals.

I have known of instances of advanced agriculturists of this class, whom I would denominate 40 bushels per acre men, coming south, attracted by the better climate and lower rent of the land, looking at farms there; but when they examined the condition of the labour there, to which they would practically be confined by the law of settlement, when they found the low state of intelligence and the habits they would have to deal with to work a change of system, they determined that the lower price of land was not a sufficient compensation for encountering the difficulties presented, and they withdrew from the 9*s.* a week ill educated and ill conditioned labourer, and the 20*s.* an acre land. Agriculturists of this class I was informed went over to Ireland during the lower sales of the Encumbered Estates Act, but when they examined the condition of the 8*d.* a day labour there, they declined to bid any price for the land.

The state of education amongst the labourers in large tracts of country may be inferred from the low state of education amongst the farmers, a large proportion of whom are completely illiterate. When I proposed an education test, simple writing, ability of

the county as well as borough voter to write his name, political leaders of both parties declined to adopt it, expressly on the ground of the large proportion of their respective constituents whom it would disfranchise. An election agent of my brother-in-law, who was then member for North Lancashire, asked me whether I was aware that the qualification I proposed would disfranchise 1100, at least, of his constituents? I know otherwise of this low state of education from the difficulty of finding overseers in some districts who can keep accounts or make the public returns proper for the office. We talk of the progress of education, but what is it? In the militia regiments not one-half commonly can read or write. The rate of the diminution of marksmen and women in the marriage registers has only been seven per cent. in 16 years, or only half per cent. per annum; and the last return gave 33 per cent. of marksmen, and at this rate of progress some 60 years would be required to extend the very inferior quality of education which is proved to be imparted to three-fourths of those who are now passed through the elementary schools, and who are ranked as educated.

Whilst then the future of agriculture requires a higher order of intelligence for its progress, conditions are to be apprehended from which the present condition of intelligence will be still further lowered, relatively, in the increasing wages and demand for labour in the towns, and more especially in the increasing facilities and temptations to emigration, particularly for the best educated and best conditioned young couples. In some rural districts a positive decrease of population is shown by the last census, and the general complaint is that the bulk of the emigrants are of the better conditioned classes.

The proper inducements to marriage of the best character, not of the reckless but the provident and orderly, are means of educating and rearing children, with the prospect of cheerful homes. But what are the common prospects presented for the training of children, to speak of no others? At home the young who would marry have commonly the prospect of only half a cottage or a squalid residence in the lower district of a town, and in either town or village have too frequently only inferior schooling for their children. In the colonies with higher wages, they have more room, larger residences, and more facilities for the physical upbringing of their children. Those who have relatives in or near the towns of the New England States will learn that good common public schools are provided by the state, in which a sound elementary education is given in public schools in common with the children of other classes.

Whatsoever may be the extent to which the drain of the more intelligent labourers by emigration may be diminished, one means of doing so will be better provision and security for the more hopeful upbringing of children, and at all events it will be needful to make exertions to bring up the intelligence and general condition of those who remain.

The great obstacles to adequate school teaching are: first, the demand for the labour of children, now increasing with the increasing scarcity of the labour of adults; and next, a greater obstacle than persons who have not studied the subject of education are fully sensible of, the very inferior quality of the school teaching which is commonly provided for agricultural populations, comparatively to that which is now provided for town populations, or, indeed, that which under the existing conditions it is practicable to provide for thinly populated rural districts.

Large fundamental objections, as I may assume that I have elsewhere proved, attach to the common practice of the physical as well as the mental training of very young children in urban as well as in rural districts.

The common doctrine of school teaching requires an attendance of five hours a day in winter and six hours a day in summer, up to the 13th or 14th year, to impart what is deemed a sufficient elementary education, consisting chiefly in moderately good reading, writing a plain hand, and the elements of arithmetic.

Now, if the agricultural populations had everywhere good school teachers close at hand, in well appointed schools, this is an amount of attendance involving a sacrifice of the wages and services of children which, against the increasing demand for them, will not be given by parents except upon very strong compulsion. After about the tenth year, when the labour of boys and the domestic services of girls becomes productive, it is not to be expected that wages should be sacrificed by the labouring agricultural population for the common sort of book instruction, of the advantages of which they cannot be expected to be sensible.

But a close examination shows that such a sacrifice of time at the ages in question is not only unnecessary but positively mischievous, mentally as well as bodily.

I have had moreover occasion to submit for the information of the Education Commissioners a mass of evidence (of much of which an excellent digest will be found in the "Suggestions on Education" by one of them, Mr. Senior), evidence from eminent and successful school teachers in all parts of the country, proving that they exhaust the capacity of profitable attention in half-hour hard lessons; that voluntary attention is not maintained to more than four half-hour lessons requiring mental effort in the morning, and two half-hour hard lessons in the afternoon; that they do in fact exhaust the power of voluntary attention—the only quality of attention which is profitable, in less than three hours of daily teaching with the average of children; and except to amuse or to occupy the time of children, as nurses do, to keep them out of harm's way, all attempt to teach or to occupy them beyond those hours with lessons requiring sedentary mental labour is worse than waste.

On the other hand, a mass of evidence will be found by those who choose to consult it, as laid before Parliament, that good teaching three hours a day practically imparts as much book instruction in less than three hours a day as is now commonly imparted in six. Children engaged in agriculture, as well as those at work in factories, with agricultural children working part of each day, as well as on alternate days, with good school teaching are found to be equal in book attainments, and superior in their aptitudes for applying them, to the long-time school children taught in the common method.

This new principle will be found to conciliate the demands of time for school teaching with the demands for service at home or in the field more largely than may be at first apparent—more largely than is represented by the half daily school hours. But I am enabled to propose a still larger conciliation of school teaching in years with the demands for the agricultural services of young children. The evidence which I have collected, and which will be submitted to Parliament, establishes the fact, that supposing a child to have been trained in a good infant school, say from his fourth or fifth to his seventh year, and that he enters a well-constituted half-time school conducted under a good certificated teacher, with the aid of pupil teachers, he may be taught to read intelligently, to write a fair hand, and to get into habits of good spelling—be taught the principles of arithmetic up to decimal fractions, really much better in three years than he is now taught on the common method in six years. In other words, the elements of education may be indelibly impressed upon him by his tenth year; that is to say by the time he is of any bodily capability for productive service, by the time the parents will, and too commonly must have his wages, or must have his self-support to aid the subsistence of the increasing family.

But this last result is to be obtained only by the classification of numbers; by an educational division of labour, as well as by competent trained school teachers. Where such classification is available (as I shall be prepared to show it may be in agricultural districts, or within two or three miles of towns, more extensively than is commonly supposed) there, by the division of educational labour, whilst the quality of the school teaching is improved, its expense is greatly reduced. Thus the common expense of good school teaching power by a certificated teacher, in the best of the common separate village or parochial schools, is at least 2*l*. per annum for six years, or 12*l*. per head from the time of leaving the infant school, to obtain the amount of elementary instruction which educationists have hitherto set down as a minimum requirement. On the scale of the larger half-time schools, the expense of a higher class of school teachers is only at the rate of 1*l*. per annum, and the time required, three years. In other words four pupils may have imparted in three years well the elementary powers, at the same expense that is now incurred for teaching them to one boy comparatively ill. The boy who in three hours a day, or in three years, has learnt as much as another who has been occupied in school for double that time, will, it may be unnecessary to observe, have acquired far better mental habits of attention and alertness, as upon the practical experience of employers is found to be the case. So much is this so that I have been assured by considerable employers of labour that they have ceased to employ long-time pupils when they can get short-time scholars.

But this economy of result, it must be borne in mind, is only obtainable by the application of a higher order of teaching power than is at present commonly found in the schools of rural districts. What that is was denoted in the schoolmasters' returns to the previous census, from the fact that 700 of them were signed with marks, and that in nearly one-half the schools reading only was taught. Miss Nightingale, who began her career of benevolence as a schoolmistress, gives an instance of one who was made a schoolmaster because he was "past minding the pigs." The inspectors' reports are replete with examples of the sort of appointments which most characterise small parishes, whether poor or not. "Sometimes," says Mr. Frazer, "men are appointed as teachers because they can do nothing else; sometimes they are old servants; sometimes it is erroneously supposed that a person in too weak health for ordinary employments is strong enough to keep a school. Once I found a mistress with only one arm; twice a master with only one leg; once a master who in addition to having lost a hand was subject to epileptic fits; once a mistress who was as deaf as a post. In one large parish the master just appointed was said to be a man of notoriously bad character, in another a man in utterly broken health receiving parochial relief."

In my observation, confirmed by that of inspectors of wider means of observation, you have only to examine the manner of man or woman who is acting as a school teacher, to anticipate a great proportion of the moral as well as intellectual results upon the pupils and their condition in after life.

(To be continued.)

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

MONTHLY COUNCIL, *Wednesday, July* 3.—Present, the Earl of Powis, President, in the Chair; Lord Feversham, Lord Leigh, Lord Tredegar, Lord Walsingham, the Hon. W. G. Cavendish, M.P.; the Hon. Col. A. N. Hood, Sir E. Hulse, Bart.; Sir J. V. B. Johnstone, Bart., M.P.; Sir Watkin W. Wynn, Bart., M.P.; Mr. Raymond Barker, Mr. Barnett, Mr. Barrow, M.P.; Mr. Barthropp, Mr. Bramston, M.P.; Mr. Caldwell, Colonel Challoner, Mr. Druce, Mr. Frere, Mr. Nesbit Hamilton, M.P.; Mr. Hamond, Mr. Fisher Hobbs, Mr. Holland, M.P.; Mr. Wren Hoskyns, Mr. Humberston, M.P.; Mr. Hudson, Mr. Lawrence, Mr. Milward, Mr. Pain, Mr. Pope, Mr. Shuttleworth, Mr. Torr, Dr. Voelcker, Mr. Burch Western, Professor Wilson, and Mr. George Wood.

Alfred Morrison, Esq., of Fonthill House, Hindon, was elected a Life Governor of the Society.

The Earl de Grey and Ripon, of Studley Royal, Ripon, was elected a Governor of the Society.

Thirty-eight new Members were elected.

FINANCES.—The Hon. Colonel Hood, Chairman of the Finance Committee, presented the Report, from which it appeared that the Secretary's receipts during the past month had been examined by Messrs. Quilter and Ball, the Society's accountants, and were found correct. The balance in the hands of the bankers on June 30 was 2229*l*. 13*s*. 8*d*. The quarterly balance sheet, and statement of subscriptions and arrears was presented; the amount of arrears now due being 650*l*.

Journal.—Mr. Thompson, chairman, reported that the President's Prize of 50*l*. for the best Essay on Yorkshire, was awarded to the Essay bearing the motto "Spero," and on opening the motto paper the author was found to be Mr. W. Wright, of Sigglesthorne Hall, Holderness.

In Class VIII. (1861) the prize of 10*l*. was awarded to Mr. C. E. Wratislaw, of Woolscot, Rugby, for his Essay "On the amount of capital required for the profitable occupation of a farm," motto "Deo adjuvante."

In the same Class the Essay with the motto "Vide et crede" is commended.

Subjects for Essays for 1862. The following are recommended:—

1. The comparative advantages of trenching, subsoiling, and double ploughing .. .. ..
2. County Report, Staffordshire .. ..
3. The comparative advantages of fixed and moveable steam-power, and of single and double dressing threshing machines .. ..
4. Improvements in hay-making .. .. ..
5. Miscellaneous .. ..

Further suggestions are invited from Members of Council and of the Society.

The Report of the Special Committee appointed to consider the question of the admission of a Short-hand Writer or Reporter from the Press to the Weekly Meetings of the Council was received, and the further consideration of the subject was postponed till November, it being resolved that sufficient notice of the subject had not been received by members of Council.

COUNTRY MEETING.—Lord Walsingham, Chairman of the General Leeds Committee, reported the completion of the Show-yard at Leeds, to the satisfaction of Mr. Brandreth Gibbs, Honorary Director of the Show. The trials of steam cultivators at Garforth, near Leeds, will continue during the present week, and are a subject of great interest to a multitude of spectators.

MEETING OF 1862.—A Committee, consisting of the Marquis of Downshire, the Earl of Powis, Lord Feversham, Lord Leigh, Lord Portman, Lord Talbot de Malahide, Lord Walsingham, the Right Hon. The Speaker, the Hon. Col. Hood, Hon. W. Cavendish, M.P.; Hon. A. Vernon, Sir J. Johnstone, Bart., M.P.; Sir J. V. Shelley, Bart., M.P.; the Right Hon. R. Nisbet Hamilton, Mr. Barnett, Mr. Bramston, M.P.; Mr. Brandreth, Mr. Caird, M.P.

Colonel Challoner, Mr. Brandreth Gibbs, Mr. Fisher Hobbs, Mr. C. Wren Hoskyns, Mr. Jones, Mr. Milward, Mr. Pain, Mr. Thompson, M.P., and Mr. Torr were appointed to superintend and carry out the necessary arrangements for the Meeting of the Society next year in the Regent's Park.

On the motion of Mr. Fisher Hobbs, seconded by Professor Wilson, it was resolved, that in order to make the different varieties of wool better known, it is desirable that a full and comprehensive collection of fleeces of all our native breeds of sheep be exhibited by the Society at the International Exhibition of 1862, and a committee was appointed for carrying out this object.

The Agent of the New Zealand Government having applied to the Council for a set of the Society's Journals for presentation to the Library of the House of Representatives of that Colony, it was resolved that the request be granted.

The Council then adjourned, it having been resolved that the Weekly Meetings be suspended during July on account of the pressure of business attendant on the Leeds Meeting.

Farmers' Clubs.

TAMWORTH: *The Relations of Landlord and Tenant*.—At a late meeting of the agriculturists of Tamworth and its neighbourhood, an address on this subject was given by John Peel, Esq. The following report is an abridgement of Mr. Peel's address:—He said: The result of recent agricultural improvements has been that the crops which had been raised on certain farms were such as would have appeared fabulous in times gone by, and it had been demonstrated beyond a doubt that the produce of the earth was capable of extension to an almost indefinite degree by the further application of skill and capital. Agriculturists from all parts of the world had visited this country to see the appliances adopted. There was one feature, however, with which every foreigner must have been struck. He would perhaps go and examine a farm conducted on the very best principles of the present day, and he would look with wonder upon the amount of grain and animal food annually obtained from it; but after seeing this he would be induced to extend his observation a little further, and visit the farms immediately surrounding it—farms perhaps of equal capabilities to the one he had already inspected—and on comparing the annual results which proceeded from the labours of those employed upon them he would find them ridiculously small. His natural impression would be that it was surely for the good of this country that the whole surface of the land should have the benefit of these improvements in cultivation; that surely the farmers of England were wanting in intelligence and energy, and a sense of their own interests, or they would follow the example of those who had attained such eminent success. But if he were to ask the question of some in that room, he would be met with the reply that it was not that the farmers of England were wanting in intelligence or energy; that it was not that they were not alive to their own interests and the public good, but it was that high farming was very expensive; that it was an operation which required the permanent outlay of a great amount of capital in machinery, implements, manures, and stock; and that when a man had taken a farm, and made that outlay, he had no security of a sufficiently continued length of occupation to enable him to recover that money he laid out, or of compensation at the termination of his occupancy for improvements made in the soil.

The custom of letting and taking land varied, as they were all aware, in different parts of the country. In some parts, land was let upon leases of lengthened periods, and in others it was let from year to year; but he believed, with the exception of one favoured spot in England, the county of Lincoln, there was no well-understood system of tenant right; and the consequence, in his opinion, was that the people did not feel that perfect security in the tenure of their farms which would induce them to lay out their money with that liberal and free hand with which they would have cultivated land belonging to themselves.

In some parts of the country, again, the custom was to grant long leases. In one part especially, with which he was very familiar, the practice was to grant leases for 14 years' occupation without tenant right. The practical effect of the system was what he should have anticipated. When a man took a farm, he began by farming up for seven years, and then he farmed down for another seven, thus submitting the land to alternate periods of fertilisation and the converse; and at the end of the lease, generally speaking, the land in that part of the country was left in a position worse than at the beginning. He believed long leases on the whole to be very disadvantageous to the landlord; but it was only in a small portion of England that the practice of granting long leases existed at all. Generally speaking, he believed, the system was, and especially in their own neighbourhood, for farms to be let from year to year. There was still considerable difference in the mode of letting land on different estates even here; for with some the practice was to have agreements—tolerably lengthy ones some of them—signed by the tenant, and sometimes the landlord. So far, however, as these agreements had come under his own observation, they simply amounted to this: they bound over the tenant to go through a certain routine of cropping, to do certain things and to abstain from doing others, under serious if not ruinous penalties. In none of these agreements had he ever found equally stringent clauses upon the landlord for neglecting to do his duty.

He came now to ask a question rather than make a statement. He asked those present who had more knowledge than he had, did they feel sufficient security at the present moment in the occupation of their farms, and in such continued length of occupation as induced them practically to apply all that skill which they, in the course of their experience, had attained, and all that capital which remained conveniently at their command to the cultivation of their land? If it were true that he could not go upon a farm of any men among them and say, Why don't you do so and so? but he met with the reply, When shall I get my money back again?—if I should wish to go into some other kind of business, how much of my money shall I leave in the land? If they told him such a case was possible, they might come to the fair conclusion that there was not sufficient security to induce that amount of application of capital to the land which would best conduce to the welfare of the people. He believed the remedy would be found in a simple contract being entered into between landlord and tenant, that should define the obligations of the landlord on the one hand, and the duties of the tenant on the other; and which should affix certain penalties to the non-performance of duty for both contracting parties. He had ventured to draw up the form of an agreement which might possibly effect these ends. He begged, however, that it might be perfectly understood that if even this were deemed a good and valid kind of agreement, he would recommend them to put it into the hand of their legal adviser, to let him see that it was likely to carry out the purposes for which it was intended. The agreement was as follows:—

"AN AGREEMENT MADE BETWEEN HUGH BROADACRES, ESQ., ON THE ONE PART, AND GEORGE THOMPSON, FARMER, ON THE OTHER PART.

"The said Hugh Broadacres, Esq., for himself, his heirs, and assigns, doth agree to let unto the said George Thompson, who for himself, his heirs, and assigns, agrees to take, that messuage or farm-house, called ——, with the barns, stables, fold-yards, garden, and outbuildings thereto belonging, together with all those closes, pieces, or parcels of arable, meadow, and pasture land, situated in the township of ——, containing about — acres of land, with the rights and appurtenances thereto belonging, to have and to hold the same for the term of — years, at the yearly rent of £ —, payable half-yearly, the first payment to commence and be made on the 29th September next ensuing.

"The said Hugh Broadacres, Esq., engages to deliver up to the said George Thompson the said farmhouse, with the buildings and premises, gates, ditches, and fences, in perfect condition and repair, or to put them in such condition with all possible despatch, it being agreed that no rent shall become due until the execution of such necessary repairs be completed.

"The said George Thompson engages to use, manage, and cultivate the land in a farmer-like manner, and according to the improved system of agriculture, and not to plough, break up, or convert into tillage any part of the aforesaid meadow or pasture land under a penalty of £ — per acre; and to keep in good and substantial repair the said farmhouse and buildings, with the gates, ditches, and fences in and about the said premises, the landlord providing materials; and in case of such provision not being made within one month after the notice given, the said George Thompson shall purchase the necessary materials at the nearest mart, and deduct the cost thereof from the next payment of rent.

"The said George Thompson shall not at any time during this demise sell any hay, Grass, Clover, straw, fodder, or roots, grown on the said premises, under a penalty of £ — per load, but shall consume the same, and shall use and spread all the manure, dung, and compost that shall be made therefrom upon those parts of the land which most require it.

"The said George Thompson, on the termination of his occupancy, shall leave all of such manure, dung, or compost, made from the last year's crop, for the use of the said Hugh Broadacres, Esq., or the incoming tenant, without being allowed any consideration for the same.

"The said Hugh Broadacres, Esq., or the incoming tenant, shall take any hay or straw which may remain unconsumed at the time of quitting (not exceeding — tons of the former and — tons of the latter) at a consuming price; any further quantity to remain on the premises for the use of the said Hugh Broadacres, Esq., or the incoming tenant, without any consideration whatever.

"It is also further agreed that if the said George Thompson shall purchase and use upon the land any lime, bones, guano, or other manure of acknowledged efficacy, the value of such purchases shall be divided as follows:—Lime or bones into — equal parts; guano into — equal parts, and other manures in proportion to their durability. And on quitting, the said George Thompson shall receive from the said Hugh Broadacres, Esq., so much of such expense as shall be in proportion to such number of years as shall fall short of — or — years' occupancy of the said farm after incurring such last-mentioned expense, and shall also be allowed one-third of the cost of all oilcake and other corn and artificial food consumed on the premises during the last year of his occupancy.

"And lastly, it is agreed that the value of all claims which the said George Thompson is entitled to by this agreement shall be left to the valuation of two indifferent persons, one to be appointed by the landlord or incoming tenant, and the other by the said George Thompson, his heirs or assigns, and if they cannot agree, then to be referred to an umpire, who shall be appointed before they go into arbitration, and whose decision shall be final."

He believed already the landlord body were convinced that it was greatly to their advantage that covenants of this kind should exist. Speaking generally, he believed that nine-tenths of them were favourable to the system. It was the tenant-farmers who did not desire it. From his own experience with the landlord class, there was not one in a hundred who would wish to do anything wrong, and would not wish their own duties to be as well defined as those of their tenants. He did not anticipate the slightest difficulty if once the tenantry should be persuaded that the system proposed were desirable.

MR. KNIGHT looked upon the aristocracy of England with the greatest respect. There were not greater patriots, better men, or more true-hearted Englishmen than were to be found amongst them. His own ancestors occupied one whole lordship; and from the mutual confidence which existed between landlord and tenant, their tenure, though a yearly one, spread over two or three centuries. The land held by a gentleman to his left there was held from a high-minded member of the aristocracy, who made very little change; and to attempt to make out that sort of agreement in such a case, although apparently advantageous to the tenant, would be disadvantageous to him for the time being. He confessed, however, that he saw in Mr. Peel's observations a very important element where they had to deal with a money-making landlord. If there were not that thorough understanding and high-minded feeling which were connected with the aristocracy of this country, such an agreement was calculated to prove of considerable service.

MR. MAY could not but think Mr. Peel had viewed the matter of contracts in a very plain, common sense, and commercial light. Circumstances were now so changed, and there was such a different kind of agriculture being introduced, steam power, amongst other things, was effecting such a material alteration, and of course buildings and other matter would have to follow in their train, that some additional security would necessarily be required. He himself farmed without an agreement; but he had that feeling of thorough confidence in his landlady, that he could improve to an almost unlimited extent, and yet feel perfectly safe. But exceptional cases were not general ones. One remark made by Mr. Peel, that land was capable of improvement to an indefinite extent, he thought was hardly correct.

MR. PEEL.—The extent has not been defined, at any rate yet.

MR. MAY: No, but he thought it was very limited. Most of them could bear witness that if they tried it to a certain extent, and manured too highly, they were almost sure to get less grain. His own opinion was that, if they were not exceedingly careful in topdressing, they did harm instead of good; and as such he did not think they could calculate upon a much larger yield of Wheat than well-cultivated farms produced. He would, however, have a perfectly dry cultivation, and have farms well drained; but still he thought it should not go forth to the world that they could have any amount of farming they pleased. His opinions on the question of tenant right were those of Mr. Peel's. He thought that if compensation were given for the tenant's outlay, it would result in a feeling of security, which would be unquestionably beneficial.

MR. ARGYLE had been for more than a quarter of a century connected with two estates in the neighbourhood, upon which not a tenant would be found who would complain of his landlord, though the one was occupied without a scrap of paper, and the other with agreements. The one occupied without a contract, indeed, was perhaps the best cultivated. The agreements of the other estate embodied pretty nearly the provisions which Mr. Peel would introduce, and yet he scarcely remembered an instance in which they had had occasion to refer to the contracts. Where there was a good understanding between landlord and tenant it could not affect that agreement to know that there was a safe and binding contract; and where there was no understanding, it was very desirable that there should be something which a tenant, in case of the death of the other party, might fall back upon, and say, "Here is our contract." But matters of this nature did not affect merely agricultural persons, they affected the public. It was desirable that every acre of land in this country should be properly cultivated, and made to yield as much corn and grain as possible. The public had a claim upon every acre; and if, for want of a proper understanding between landlord and tenant, that acre did not produce by one bag of Wheat what it ought to produce, the public were eventually the losers. It was, therefore, essential that those mutual obligations which had been referred to should be made, for though in the case of Mr. May there was no misunderstanding to-day, there might be one to-morrow.

MR. CHEATLE believed there was a great quantity of land in this country which would be improved to a considerable extent, and its produce consequently vastly increased, if remuneration were made for unexhausted improvements. He quite agreed with Mr. Peel as to the consumption of everything on the land. If he were possessed of an estate of 10,000 acres, he would not allow a tenant to sell anything off unless he brought back something like it.

The CHAIRMAN said Mr. Knight and Mr. Cheatle had both spoken of the invidious nature of an application to a landlord who bore a high reputation; but he (the chairman) thought each of these instances favoured the argument for agreements generally. From all the information he had been able to gain on the subject, he believed the worst cases of litigation which had ever taken place had arisen from that very circumstance. The landlord's character had been so excellent that the tenants had laid out their money as freely as if the land had been their own. The landlord had then died, and the heir appointed valuers, who on inspecting the estate naturally raised the rents of those farms in good cultivation, and lowered those of farms in a bad condition, whereas the practice should be reversed.

MR. JOHNSON said land had its natural value: and if land at a natural value of 30s. and 2*l.* were improved so as to be worth 2*l.* and 30s. respectively, he thought the tenant was entitled to the difference. Where land-valuers were employed, they never studied the capabilities and what he called the natural value of the land, but simply looked at the state of the crops and its present condition.

MR. PEEL, in rising to reply, was glad that this discussion had given several gentlemen an opportunity to eulogise their own landlords, but they must remember that those landlords were not immortal. If there had not been a universal sentiment of the positive necessity of an agreement, every one who had spoken had said it was better to have one.

The CHAIRMAN said that as the discussion had been brought to a termination, he had a resolution to propose. It was as follows: "That this meeting, having listened to the lucid statement of Mr. Peel, is of opinion that he has clearly proved that the land would be cultivated more beneficially to landlord, tenant, and the country generally, if the agreements under which they farmed were more clear and definite, and that it is of the highest importance that a clause should be invariably introduced giving full compensation for unexhausted improvements."

MR. BARTON moved that the resolution be altered so as to embrace the words, "that it is essential that a written contract should be made in every instance."

The resolution, in the amended form, was then put to the meeting and carried unanimously.

Notices of Books.

A Plea for Arterial Drainage, Embankment, and Improvement. By G. H. Dean, Agricultural Engineer and Surveyor.

This is a thin octavo volume, giving (1) an outline history of Romney Marsh and of the great level of the Fens; (2) a list of Acts of Parliament connected with the Fen district; (3) an enumeration of Public Drainage Acts, and those granted to public companies for the purpose of assisting landowners in improving their lands; (4) reasons for obtaining a comprehensive arterial drainage outfall, embankment, and reclamation Act; (5) chapters on rivers, drainage, reclamation of land, irrigation, and warping. These subjects are treated in the partial manner which was inseparable from the plan of so small a book; but there are indications enough in its 130 pages that the author understands his subject, though he has not written a work exhausting it for the information of his readers.

A Treatise on the Steam Engine in its various Applications. By John Bourne. Being the Fifth Edition of a Treatise on the Steam Engine by the Artizan Club. Longmans.

A quarto volume of 500 pages, full of information for the scientific man, the millwright, manufacturer, and agriculturist, for among the "various applications of the engine" here treated are those to agriculture. We do not see, however, any reference to the steam machinery now employed in the cultivation of the land. The volume is amply illustrated by no fewer than 27 plates and 546 woodcuts.

Miscellaneous.

A Cow, the property of Mr. Sewell, of Hethersett Hall, near Wymondham, Norfolk, gave three calves on Sunday, June 9, all of which, with the mother, are alive and doing well; two are fatting and the other weaning.

Concerts for the People: Rothamsted. — The concert was in Friar Bacon's laboratory; a large building near at hand, in an open field. The bettermost people of the village and neighbourhood were in a gallery on one side, and in a gallery opposite the orchestra. The whole space below was filled with the labouring people and their families, to the number of 500 or 600. We had been obliged to turn away 200 to-night, Friar Bacon said, for want of room—and that not counting the boys, of whom we had taken in only a few picked ones, by reason of the boys, as a class, being given to too fervent a custom of applauding with their boot-heels. The performers were the ladies of Friar Bacon's family, and two gentlemen; one of them, who presided, a Doctor of Music. A piano was the only instrument. Among the vocal pieces, we had a negro melody (rapturously encored), the Indian Drum, and the Village Blacksmith; neither did we want for fashionable Italian, having *Ah! non giunge*, and *Mi manca la voce*. Our success was splendid; our good-humoured, unaffected, and modest bearing, a pattern. As to the audience, they were far more polite and far more pleased than at the Opera; they were faultless. Thus for barely an hour the concert lasted, with thousands of great bottles looking on from the walls, containing the results of Friar Bacon's million and one experiments in agricultural chemistry; and containing too, no doubt, a variety of materials with which the Friar could have blown us all through the roof at five minutes' notice. God Save the Queen being done, the good Friar stepped forward and said a few words, more particularly concerning two points; firstly, that Saturday half-holiday, which it would be kind in farmers to grant; secondly, the additional Allotment-grounds we were going to establish, in consequence of the happy success of the system, but which we could not guarantee should entitle the holders to be members of the club, because the present members must consider and settle that question for themselves: a bargain between man and man being always a bargain, and we having made over the club to them as the original Allotment-men. This was loudly applauded, and so, with contented and affectionate cheering, it was all over. *All the Year Round, No.* 1.

Calendar of Operations.

JULY.

Berwickshire, Merse Farm: *July* 1.—It is many a long month since the weather was so suited to the requirements of the farmer. June has throughout afforded frequent and moderate showers, and a fine growing heat; avoiding the extremes of drought or wet. Of the small breadth of Wheat sown before winter, much is thinly planted. Late sown Barley on some strong soils is almost nowhere, but, with this exception, spring corn is healthy and vigorous. Some Barley is fully shot, and other corn following; so, with a continuance of favourable weather, we may look for harvest in the third week of August. Turnip sowing is finished in good style; the seed has brairded speedily, and the flea has scarce been seen. Thinning occupies all hands, and Swedes are about finished, notwithstanding some delaying showers. The few pieces of Mangel are not doing much. We are afraid they were too late in being sown. Potatoes cover an extended area; they are growing fast. Grass abounds beyond all recent experience, but still stock for slaughter are not readily sold, owing perhaps to the heat. Our neighbours of the hills seem not to have got the better of the winter before last. Cheviot Ewe hoggs we understand are scarcely to be got.—*J. T.*

STATE OF THE WEATHER—BERKSHIRE.

For the Week ending July 4: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
		Max. in Sun.	Max. in Shade	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs	Degs.	Ins.		
Friday	28 ..	87.0	73.0	52.5	66.2	64.6	..	N.W.	29.60
Saturday	29 ..	84.0	74.0	54.0	66.2	65.0	0.05	N.W.	29.47
Sunday	30 ..	75.0	70.0	47.5	60.0	61.0	0.01	N.W.	29.85
Monday	1 ..	72.0	67.0	44.5	57.0	62.6	..	W.	30.00
Tuesday	2 ..	82.0	73.0	58.0	67.7	63.4	0.05	W.	29.70
Wednesday	3 ..	76.0	70.9	49.5	61.2	63.6	..	W.	29.75
Thursday	4 ..	78.9	72.0	50.0	62.5	63.2	..	S.	29.32

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Botany and Zoology. *F L G.* Mr Henfrey and Mr. Buckman have written on several departments of the Botany of Agriculture; and Professor Low's work on the Domesticated Animals is a good work on their relation to general zoology. Dr. Lindley's Theory of Horticulture may meet your wish as to a book on the Botany of Agriculture. But we do not know of manuals of the kind you seem to desire.

Poultry.—The approaching end of the London Season has its influence on the market, but the moderate supply prevents the great fall in prices that we have sometimes to record at this time There has been a great demand during the month of June, and prices have been satisfactory. They are now above the average of former years.

	Each.—s. d.		s. d.
Large Fowls	3 6	to	4 0
Small ditto	2 6	,,	3 0
Chickens	2 0	,,	2 6
Goslings	4 6	,,	5 0
Ducks	2 6	,,	2 9
Pigeons	0 8	,,	0 9
Rabbits	1 4	,,	1 5
Wild ditto	0 8	,,	0 9

Gutta Percha Tubing for Watering Gardens.

THE GUTTA PERCHA COMPANY have the pleasure to acknowledge the receipt of the following

Testimonial from Mr. J. Farrah, *Gr. to* Boswell Middleton Jalland, Esq., *of Holderness House, near Hull.*

"I have had 400 feet of your Gutta Percha Tubing, in lengths of 100 feet each, with union joint, in use for the last 12 months for watering these gardens, and I find it to answer better than anything I have ever yet tried. The pressure of the water is very considerable, but this has not the slightest effect on the tubing. I consider this tubing to be a most valuable invention for Gardeners, inasmuch as it enables us to water our gardens in about one-half the time, and with one-half the labour required."

Manufactured by the Gutta Percha Company, Patentees, 18, Wharf Road, City Road, London, E.C., and sold by their Wholesale Dealers in town and country.

GLASS PRESERVE JARS.—

	Without Lids.	With Lids.
3 inches diameter	0s. 4½d. ..	0s. 6½d. each.
4 ,, ,, ...	0 6 ..	0 9 ,,
5 ,, ,, ...	0 8 ..	0 11 ,,
6 ,, ,, ...	0 10 ..	1 2 ,,
7 ,, ,, ...	1 0 ..	1 4 ,,
8 ,, ,, ...	1 4 ..	1 8 ,,
9 ,, ,, ...	1 8 ..	2 2 ,,
10 ,, ,, ...	2 0 ..	2 8 ,,

Intermediate Sizes in proportion.

BEE GLASSES.

4 ins. diameter	0s. 6d. each	9 ins. diameter	1s. 8d. each
5 ,, ,,	0 8 ,,	10 ,, ,,	2 0 ,,
6 ,, ,,	0 10 ,,	11 ,, ,,	2 6 ,,
7 ,, ,,	1 1 ,,	12 ,, ,,	3 0 ,,
8 ,, ,,	1 4 ,,	Not made above 12 inches.	

James Phillips & Co., 180, Bishopsgate Street Without, London, E.C.

HENRY J. MORTON AND C[o.]
2, Basinghall Buildings, Leeds.

Galvanised Iron Water Cistern
for Cottage Houses, &c., to contain 50 gallons, 26s.; 80 gal[lons] 31s. each; and 140 gallons, 37s., and fitted with tap, keep[ing] the water perfectly sweet and clean; will not rust or co[rrode]. Cisterns of all sizes.

Galvanised Iron Pumps
for Liquid Manure or Domestic Use, 3 inches diameter and 32s. 6d. each; Tail Pipe for same at from 10d. per foot.

Galvanised Iron Swing Water Barrows
for Garden or Farm use, containing about 20 gallons, ... formed of iron, 35s. 0d. each.

Garden Border Edging Tiles.

F. AND G. ROSHER, Cement, Brick, and S... Merchants, beg to invite attention to their ... Stock of Ornamental Garden Border-edging Tiles in ... Cotta, Terro-Metallic ware, and Red ware. They present ad[van]tages over Box or Grass-edging in that they afford no har[bour] for slugs, &c., take up less room, and once laid, require ... further attention.

They may be had of various patterns at F. & G. R.'s Premises, Ward's Wharf, Upper Ground Street, Blackfriars, S.; ... Kingsland Road Wharf, near the Canal Bridge, London, N.E.

N.B. Sketches of patterns sent by post on application. Garden Vases and Ornamental Flower Boxes for Windows ... Balconies in stock.

ORNAMENTAL PAVING TILES for Conserv[a]tories, Halls, Corridors, Balconies, &c., as cheap ... durable as Stone, in blue, red, and buff colours, and capa[ble] of forming a variety of designs.

Also WHITE GLAZED TILES, for Lining Walls of Baths, Dairies, Larders, Kitchen-ranges, &c. Grooved Terro-metallic and other Stable Paving Bricks of great durability, Clinkers, Red and White Wall-Copings, Glazed Drain Pipes, ... To be obtained of F. & G. Rosher, at their Premises as above.

GLASS WAREHOUSE.—ESTABLISHED 1750.

THOMAS MILLINGTON,

87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.

REDUCED TARIFF FOR HORTICULTURE, PICTURES, AND DWELLINGS.

ORCHARD-HOUSE SIZES.

Supplied to Mr. Rivers and many others.

In. by In.		16 oz.	21 oz.
20 .. 12	Common, per 100 feet,	13s. 6d.	18s.
20 .. 13			
20 .. 14	Super ,,	16s.	23s.
20 .. 15			

SMALL SQUARES.

In. by In.	In. by In.	Per 100 feet.	Per fo[ot]
6 .. 4	8 .. 6	Common	1¼d.
6½ .. 4½	8½ .. 6½	11s. 6d.	
7 .. 5	9 .. 7	Super.	1½d.
7½ .. 5½	9½ .. 7½	12s. 6d.	

SQUARES IN 100 AND 200 FEET BOXES.

Inches by Inches.	Inches by Inches.	Inches by Inches.	Inches by inches.	Inches by inches.		P. 100 feet.	P. ...
10 .. 8	12½ .. 9½	13 .. 10	15 .. 10	13½ .. 11½	4ths.	12s. 6d.	
10½ .. 8½	13 .. 9	13½ .. 10½	12 .. 11		3ds.	14s. 3d.	
11 .. 9	12 .. 10	14 .. 10	12½ .. 11½	14 .. 11	2ds.	18s.	
12 .. 9	12½ .. 10½	14½ .. 10½	13 .. 11		1sts.	21s. 6d.	
15 .. 11	15 .. 12	16 .. 13	24 .. 14	24 .. 16	4ths.	13s. 6d	
16 .. 11	16 .. 12	17 .. 13	20 .. 15	20 .. 17	3ds.	16s.	
17 .. 11	17 .. 12	20 .. 13	22 .. 15	20 .. 18	2ds.	19s. 8d.	
18 .. 11	18 .. 12	23 .. 13	24 .. 15	.. ..	1sts.	24s.	
13 .. 12	20 .. 12	20 .. 14	20 .. 16	.. ..			
14 .. 12	22 .. 12	22 .. 14	22 .. 16	.. ..			

If less quantity than 100 feet is taken, a moderate charge made for package.

GLASS CUT TO ANY GIVEN SIZES NOT ON LIST.

16 oz.—4ths, 1¾d., 2d., and 2½d. per foot.
,, 3ds, 2¼d., 2½d., and 3d. per foot.

21 oz.—4ths, 2¾d., 3d., and 3½d. per foot.
,, 3ds, 3½d., 4d., and 4½d. per foot.

HARTLEY'S IMPROVED PATENT ROUGH PLATE.

Not accountable for breakage.

GENUINE WHITE LEAD	32s. 0d. per cwt.	LINSEED OIL	2s. 7d. per gal.
ANTI-CORROSION PAINT	34 0	BOILED	3 0
LINSEED-OIL PUTTY	8 0 ,,	TURPENTINE	—

BLACK, GREEN, and all other kinds of PAINTS, VARNISHES, BRUSHES, &c.

ST. PANCRAS IRON WORKS,

OLD ST. PANCRAS ROAD, N.W.

IRON HURDLES, FENCING, AND GATES.

THE PROPRIETORS OF THE ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON,

WERE AWARDED THE

SILVER MEDAL of the ROYAL AGRICULTURAL SOCIETY for their IRON HURDLES AND GA[TES]

which, by their peculiar construction, are more than twice as strong and durable as those in ordinary use. Lists per post on application. Gates from 30s. to 50l.

The Hurdles can be seen in process of Manufacture at the Works.

GAME WIRE NETTING.

PROFESSOR VARNELL'S ENAMELLED AND WROUGHT-IRON STABLE FITTINGS.

These Patent Mangers and Stable Fittings obtained the Commendation and the Silver Medal of the Royal Agricultural Society of England and the Royal Agricultural Society of Ireland, are adopted by the Royal Veterinary College, and Professor Spooner of that Institution states that they should be used by all who value the health and comfort of their horses. They can be had plain, galvanised, or enamelled.

A Show Room is devoted entirely to every description of Stable Furniture, and full-sized stalls and loose boxes are erected for inspection at St. Pancras Iron Works.

ADDRESS—THE MANAGERS,

ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, N.W.,

Opposite Old St. Pancras Church.

Plants of Cabbage, Savoy, Kale, Broccoli, and Cauliflower.

JOHN CATTELL begs respectfully to inform the public that he has a plentiful supply of Plants of the above superior true sorts, which he will forward to order on receipt of postage stamps or Post Office order, made payable here, at the following prices, package included.

All the sorts of Early Cabbage, Savoy, and Kale, including Brussels Sprouts, 6d. per 100, 4s. 6d. per 1000. All the sorts of Autumn and Spring Broccoli, 8d. per 100, 5s. 6d per 1000. Early and Late Cauliflower and Red Pickling Cabbage, 10d. per 100. Drumhead or Cattle Cabbage, 3s. 6d. per 1000.

Packages containing plants to the value of 1l. and upwards, will be delivered Carriage Free to London, Croydon, and the Eden Bridge Station of the South Eastern Railway.

Seed of CATTELL'S Reliance Cabbage may be had free by post at 1s. per packet containing half an ounce.

Nursery and Seed Establishment, Westerham, Kent.

To Architects and Landscape Gardeners.

THE RUGBY BURIAL BOARD hereby give Notice that they are prepared to receive PLANS and SPECIFICATIONS with TENDERS.

1st. For laying-out and Planting the proposed New Burial Ground at Rugby, containing 7 acres 3 roods 2 perches.

2d. For the Erection of two Chapels, Entrance Lodge, Dead House, and Fencing.

A Plan of the Ground may be seen, and Instructions as to the requirements of the Board may be obtained, at the Office of the Board.

The Plans and Specifications may be either for laying-out and Planting the Ground, or for the above Buildings and Fencing, or may combine both, but the Board reserve the right to select either the Plan for Laying-out the Ground, or the Plan for the Erection of the Buildings, or the Plan combining both at their discretion.

Plans and Specifications with separate Tenders are requested to be sent in to the Office of the Board, Chapel Street, Rugby, on or before the 31st day of August next.

By Order of the Board, E. G. WRATISLAW, Clerk.

Cypripedium Insigne Maulii.

WM. MAULE AND SONS beg to call the attention of lovers and cultivators of Orchids to this new and splendid variety of Cypripedium, which they have great pleasure in introducing. It received a First-class Certificate from the Royal Horticultural Society, and is figured and fully described in the *Floral Magazine* for this month, "July."

The Stock is limited, and will be distributed shortly in strict rotation when a sufficient number of orders are received.

Price 105s. each, with the usual discount to the Trade.

WM. MAULE & SONS have duplicates of the below enumerated very select and choice kinds of ORCHIDS, to offer, most of which are English grown plants, and taken from flowering specimens, so that their varieties may be relied on as correct and of the best description.

	s.	d.
Aerides Foxbrush ..	105	0
,, odoratum major ..	10	6
,, suavissimum or flavescens ..	105	0
,, affine, light and dark pink and spotted vars., 42s.—	63	0
Anæctochilus Lobbii ..	42	0
,, Lowii	42	0
,, cordatus	31	6
,, Xanthophyllus ..	21	0
Calanthe vestita rubro oculata ..	15	6
,, vestita lutea oculata	15	6
Cattleya Acklandiæ ..	63	0
Cymbidium Mastersii ..	63	0
Cypripedium caudatum	105	0
,, Lowii	105	0
,, villosum	84	0
,, hirsutissimum ..	63	0
,, barbatum multiflorum ..	10	6
Cypripedium barbatum grandiflorum superbiens	84	0
,, Uropedium Lindenii	105	0
Dendrobium Devonianum	10	6
,, Farmerii, white and rose coloured variety	21	0
,, Cambridginiana ..	15	0
Lælia purpurata, the best variety, each ..	63	0
Saccolabium ampulaceum	105	0
,, præmorsum, "true"	105	0
Vanda cærulea .. 63s.—	105	0
,, suavis, "Rollisson's" variety	105	0
,, suavis, "Veitch's" best variety ..	210	0
,, teres, free blooming varieties ..	15	6

The above quotation of prices are for good established plants; in some instances they may be had larger or smaller, at proportionate prices.

☞ GENERAL CATALOGUE on application.

The Nurseries, Bristol, July 13.

JEAN VERSCHAFFELT'S Nursery, Ghent, (Belgium)

CAMELLIA LEOPOLD 1er, a Ghent Seedling.—This very splendid novelty has been exhibited by J. V. at the last winter show of the Royal Botanical Society of Ghent (in March, 1861), where it was very much admired by all lovers of that beautiful tribe of plants, and was awarded the 1st prize for the finest seedling Camellia. It has since been sent to the exhibitions of Brussels (Société Royale de Flore), Tournay and Lacken, where it was also rewarded, and considered a first-rate novelty; and certainly no Camellia collection should be without it.

This Camellia is of a very fine ornamental habit; very large leaves, of a dark green; the flowers are of the largest size, exactly imbricated, of a bright scarlet uniform colour, turning to blue on the top of the petals; it is in fact perfection, and a very free flowering variety.

J. V. has much pleasure in announcing that he has decided upon sending out this superb novelty on and after the 1st of October next, at the following moderate terms:—

Fine plants (well grown), 1 to 1½ feet high, 21s. each.
Do. do. do. with flower-buds, 31s. 6d. each.
A very few larger plants at 42s. each.

One plant over for every three taken.

A carefully coloured plate will be sent to each subscriber. The subscription list is open now, and early orders are solicited, as it will be sent out in strict rotation.

J. V. has much pleasure in announcing that he will send out on and after September 1 next, the following New Plants, viz.

AZALEA INDICA PROFESSEUR LEMAIRE.—This charming novelty is of a quite new description, of a very dwarf and compact habit; the flowers are of a beautiful rose colour, with the upper lobe and a third part of the two following lobes of a deep red turning to violet, and richly spotted with crimson; a very abundant flowering variety. Nice plants, 8s.; stronger plants, 12s.

RED FLOWERED ROSE SOUVENIR DE LA MALMAISON (à fleurs rouges).—This is a seedling from the well known Souvenir de la Malmaison, of which I purchased the entire stock; it has the same leaves and wood as the type, but produces very freely its splendid flowers of a deep rose, and of the same shape as the Malmaison. Dwarf summer grafts, in pots, 8s each.

HETEROTOMA LOBELIOIDES (Zucc.)—A curious little thing sent from Mexico in 1858 by Messrs. Tonel, to their brother Mr. Aug. Tonel, in Ghent, from whom I purchased the stock; the flower represents a kind of bird, of a rich red and golden yellow colour. (It will be shortly figured in Van Houtte's Flore des Serres, &c.) Price 8s. each.

One plant over for every three taken.

All orders to be sent directly to JEAN VERSCHAFFELT, Nurseryman, 43, Rue de la Caverne, Ghent (Belgium).

☞ A reference required from unknown correspondents.

NEW GRAPE, INGRAM'S HARDY PROLIFIC MUSCAT.—This is the most fertile and the best setter of all Grapes. The bunches are from 12 inches to 14 inches in length, having black oval berries, with the peculiar vinous flavour of the Hamburgh, yet more piquant, and combined with a slight spice of Muscat, so as to tone down the acid without satiating the palate. The flavour is new, and has been pronounced by one of the first judges of this country to be the finest flavoured of all Grapes. The fruit is such, that the more it is eaten the more it is liked. In this Grape we have the *gardener's friend* and the *gentleman's bonne bouche*. It is impossible to grow the Vine without producing fruit, and owing to its ripening in a much lower temperature than the Black Hamburgh, it is the very best sort for a greenhouse or Curate's Vinery, and in ordinary summers it, no doubt, will ripen against a wall in the open air. The footstalk of the berry is so stiff and strong that it cannot shank off. For those countries where the Vine is cultivated in large quantities in the open air and where they have now only coarse and tasteless kinds, this will be the greatest acquisition. It has been exhibited before the Royal Horticultural Society's Fruit Committee, and obtained a First Class Certificate; the fruit shown being cut from a Vine struck from a single eye that was only 14 months old from the time of putting in the eye till cutting the Grapes. The fruit this year will be ripe from the middle of May to the end of June, when intending purchasers are invited to call and judge for themselves. Plants will be ready to send out Aug. 1, at 21s. and 42s. each: and a few extra strong at 63s. each.

JNO. STANDISH, Royal Nursery, Bagshot.

ROYAL HORTICULTURAL SOCIETY.—FIRST GRAND ROSE SHOW, JULY 10, 1861.

LIST OF AWARDS.

CLASS I.—96 Varieties, 1 Truss of each. (Nurserymen.)
1st Prize, J. Mitchell, Piltdown Nurseries, Maresfield, Sussex, 7l.
2d, John Keynes, Salisbury, 5l.
3d, Edwin Hollamby, Tunbridge Wells, 3l.
4th, Messrs. Paul & Son, Old Cheshunt Nurseries, Herts, 2l.
Extra, Wm. Paul, Waltham Cross, N., 1l. 10s.

CLASS II.—48 Varieties, 1 Truss of each. (Nurserymen.)
1st, John Cranston, King's Acre Nurseries, near Hereford, 4l.
2d, Benjamin R. Cant, Colchester, 3l.
3d, John Keynes, Salisbury, 2l.
4th, R. Laing, Twickenham Nurseries, S.W., 1l.
Extra, E. P. Francis, Hertford, 15s.
Extra, Edwin Hollamby, Tunbridge Wells, 15s.
Extra, Messrs. Paul & Son, Old Cheshunt Nurseries, Herts, 15s.
Extra, Charles Turner, Royal Nurseries, Slough, 15s.

CLASS III.—24 Varieties, 3 Trusses of each. (Nurserymen.)
1st, John Keynes, Salisbury, 2l. 10s.
2d, Messrs. J. & J. Fraser, Lea Bridge Road, Leyton, Essex, 2l.
3d, R. Laing, Twickenham Nurseries, S.W., 1l. 10s.
4th, John Cattell, Westerham, Kent, 1l.
Extra, Benjamin R. Cant, Colchester, 15s.

CLASS IV.—24 Varieties, 1 Truss of each. (Nurserymen.)
1st, John Keynes, Salisbury, 2l.
2d, Charles Turner, Royal Nurseries, Slough, 1l.
3rd, John Cattell, Westerham, 10s.
4th, Benjamin R. Cant, Colchester, 5s.

CLASS V.—48 Varieties, 1 Truss of each. (Amateurs.)
1st, John T. Hedge, Reed Hall, Colchester, 6l.
2d, Miss L. Crawshay, Caversham Park, Reading, 4l.
3d, John Hollingworth, Maidstone, 3l.
4th, Geo. T. Brush, Gr. to Joseph Tritton, Esq., Norwood, 2l.

CLASS VI.—24 Varieties, 1 Truss of each. (Amateurs.)
1st, W. Corp, Milford, Salisbury, 4l.
2d, J. T. Hedge, Reed Hall, Colchester, 2l.
3d, A. Moffatt, Gr. to Viscount Maynard, Dunmow, Essex, 1l.
Extra, equal 3d, Mr. Worthington, Caversham Priory, near Reading, 1l.
4th, W. Mercer, Esq., F.R.H.S., Grove House, Staplehurst, 10s.

CLASS VII.—18 Varieties, 1 Truss of each. (Amateurs.)
1st, Rev. W. F. Radclyffe, Rushton Rectory, Blandford, 3l.
2d, Mr. E. Moore, Horsell, near Woking, Dorset, 1l. 10s.
3d, J. T. Hedge, Reed Hall, Colchester, 1l.
4th, George T. Brush, Gr. to Joseph Tritton, Esq., Norwood, S., 10s.

CLASS VIII.—12 Varieties, 1 Truss of each. (Amateurs.)
1st, J. T. Hedge, Reed Hall, Colchester, 1l. 10s.
Equal, W. Corp, Milford, Salisbury, 1l. 10s.
2d, Rev. H. Helyar, Pendomer, Yeovil, 1l.
3d, George T. Brush, Gr. to Joseph Tritton, Esq., Norwood, S., 10s.
4th, Rev. Mr. Child, Little Easton, Dunmow, Essex, 5s.
Equal, Mr. E. Moore, Horsell, near Woking, Surrey, 5s.

CLASS IX.—12 Roses, 12 Varieties, in 13-inch pots. (Open.)
No Competition.

CLASS X.—50 Roses, 12 Varieties, in 8-inch pots. (Open).
2d, Charles Turner, Royal Nurseries, Slough, 4l.

CLASS XI.—20 New Roses, 10 kinds, in 8-inch pots. (Open.)
No Competition.

CLASS XII.—12 New Roses of 1860-1, Single Trusses, distinct. (Open.)
1st, Messrs. J. & J. Fraser, Nurserymen, Lea Bridge Road, Leyton, 2l.
Equal, B. R. Cant, Nurseryman, Colchester, 2l.
2d, J. Standish, Royal Nurseries, Slough, 1l. 10s.
3d, John Keynes, Nurseryman, Salisbury, 1l.

CLASS XIII.—Collection of Moss Roses, Single Trusses. (Open.)
1st, Messrs. Paul & Son, Old Cheshunt Nurseries, Herts, 3l.
2d, Edwin Hollamby, Nurseryman, Tunbridge Wells, 2l.

CLASS XIV.—18 Tea-scented Roses, Single Trusses. (Open.)
No award given.

CLASS XV.—Decorated Basket or Vase of Roses. (Open.)
No competition.

CLASS XVI.—Miscellaneous.
Extra, J. Veitch & Son, Exeter and Chelsea, 1l. 10s.
Do., J. Mitchell, Piltdown Nursery, Maresfield, Sussex, 1l. 10s.
Do., J. Standish, Royal Nurseries, Bagshot, 1l.
Do., E. Hollamby, Nurseryman, Tunbridge Wells, 1l.
Plants of Disa grandiflora were again exhibited in fine condition by J. Leach, Esq., King's Road, Clapham Park.

GROUPS OF MISCELLANEOUS STOVE AND GREENHOUSE PLANTS were also exhibited by

Messrs. Veitch & Son, Royal Exotic Nursery, Chelsea (the centre group of Ornamental Plants in Japan and China Vases).
Mr. J. Standish, Royal Nurseries, Bagshot (Stove and Greenhouse plants.)
Messrs. Lee, Vineyard Nurseries, Hammersmith (Stove and Greenhouse Plants).
Messrs. A. Henderson and Co., Pine Apple Place, Edgware Road (Stove and Greenhouse Plants).
Messrs. J. & J. Fraser, Nurserymen, Lea Bridge Road (Stove and Greenhouse Plants).
Mr. W. Bull, F.R.H.S., King's Road, Chelsea (Stove and Greenhouse Plants).
Mr. Charles Turner, Royal Nursery, Slough (groups of Geraniums and Fuchsias, and stands of Verbenas and Picotees).
Mr. Thomas Gaines, Battersea (groups of Pelargoniums, &c.)
Messrs. Dobson and Pearce, 19, St. James's Street (2 sets of Dinner Table Decorations.)

THE GARDENERS' ROYAL BENEVOLENT INSTITUTION.—At a General Meeting of the Members of this Institution, held on Wednesday, July 10, for the purpose of electing Three Pensioners, the following was the result of the Ballot:—

CANDIDATES.

Name.	Application.	Age	Votes.
WILLIAM CROUCHER	Eighth	71	232
JOHN MACKINTOSH (a Subsciber 5 years) ..	Eighth	70	827
MARGARET MITCHINSON (Husband subscribed 7 years)	Sixth	67	278
THOMAS JENKINS (a Subscriber 11 years) ..	Fifth	73	772
JAMES WALLIS	Fifth	83	290
GEORGE ANNABALL	Fourth	64	155
JAMES FAIRBAIRN (a Subscriber 9 years) ..	Second	78	668
ROBERT PARKER	Second	60	281
THOMAS SMITH (a Subscriber 7 years) ..	Second	63	16
ROBERT DRAPER (a Subscriber 6 years) ..	First	67	50
GEORGE DUCK	First	75	29
ELIZABETH JUDD	First	68	494
WILLIAM KER (Subscribed 15l. 15s.) ..	First	61	76
THOMAS MAY	First	82	121
JOHN THOMAS WILLMER	First	74	58

The Meeting then declared JOHN MACKINTOSH, THOMAS JENKINS, and JAMES FAIRBAIRN, as having the greatest number of Votes, duly elected Pensioners of this Society.

July 13, 1861. EDWD. R. CUTLER, Secretary, 14, Tavistock Row, W.C.

ROYAL BELFAST BOTANIC AND HORTICULTURAL COMPANY (LIMITED).

GRAND FRUIT AND FLOWER SHOW, Open to the United Kingdom, to be held in the Royal Botanic Gardens, Belfast, on FRIDAY, August 9, when the following Prizes, given specially by several noblemen and gentlemen of the neighbourhood, will be competed for:—

PLANTS.

Class 1.—For the best Collection of 24 Stove and Greenhouse Plants, including Pelargoniums, Fuchsias, and Heaths:—1st prize, 15l.; 2d prize, 10l.; 3d prize, 5l.; 4th prize, 3l.

Class 2.—For the best Collection of 10 Ornamental Foliaged Plants (distinct varieties):—1st prize, 7l.; 2d prize, 3l.; 3d prize, 2l.

Class 3.—For the best Collection of 12 Hothouse Ferns (distinct varieties):—1st prize, 10l.; 2d prize, 5l.; 3d prize, 3l.

Class 4.—For the best Collection of 24 British Ferns (distinct varieties):—1st prize, 5l.; 2d prize, 3l.; 3d prize, 2l.

Class 5.—For the best Collection of 6 Hand Bouquets:—1st prize, 3l.; 2d prize, 2l.; 3d prize, 1l.

Class 6.—For the best Collection of 8 Pelargoniums:—1st prize, 2l.; 2d prize, 1l.

Class 7.—For the best Collection of 8 Fuchsias:—1st prize, 2l.; 2d prize, 1l.

Class 8.—For the best Collection of 12 Carnations and Picotees (distinct varieties):—1st prize, 2l.; 2d prize, 1l.

Class 9.—For the best Collection of 12 Roses (three flowers in a truss):—1st prize, 2l.; 2d prize, 1l.

FRUITS.

Class 10.—For the best Collection of Fruits (exclusive of Pines):—1st prize, 15l.; 2d prize, 10l.; 3d prize, 5l.; 4th prize, 3l.

Class 11.—Grapes, for the best 6 bunches, any variety:—1st prize, 5l.; 2d prize, 3l.; 3d prize, 2l.

Class 12.—Pines, for the best 3 of any sort:—1st prize, 3l.; 2d prize, [illegible]; 3d prize, 1l.

VEGETABLES.

Class 13.—For the best Collection of Vegetables:—1st prize, 3l.; 2d prize, 2l.; 3d prize, 1l.

All Entries close on July 31.

All Plants, &c., forwarded to the Botanic Gardens, the day before the Show, will be carefully attended to.

The local Railways and the agents of all the Steamers trading to Belfast have kindly consented to bring over and return all specimens for exhibition free, but at the exhibitor's risk.

Noblemen and Gentlemen from all parts are requested to become competitors in this Show. Schedules of the Prizes and all other information can be had at the Company's Offices, 47, Arthur Street, Belfast.

*** All former Advertisements withdrawn.

GEORGE A. CARRUTHERS, Secretary.

Belfast, July 13.

The Gardeners' Chronicle.

SATURDAY, JULY 13, 1861.

SOME four years ago, in the gay Springtide, and when all things else were glad, there arose from the gardens of a country clergyman a song of lamentation. In those jocund days, when the sweet vernal air was jubilant with the music of the bridegroom birds, this nightingale in his bower of Roses, pressing his theological bosom, after the approved Philomelan fashion, against the sharpest thorn of some robust Noisette, sent forth from the depths of his divine despair a piteous plaint and wail. All inharmonious as such a strain might seem, and dissonant as dirge at wedding-feast, it evoked at once in the Roseries of England, from York to Devon, a responsive echo, until, just as at the Opera, Covent Garden, a mournful solo is sometimes followed by a grand triumphant chorus, the plaint became a pæan of victory. For the burden and the keynote of his song was this—that while the Dahlia, the Carnation, the Tulip, the Chrysanthemum, and even the hirsute and vulgar Gooseberry, held separate and independent Levées of their own, H.M. the Queen of Flowers was not only denied Her Royal privilege of precedence, but had never yet been allowed a single Drawing Room.

Whereupon the dormant loyalty of her subjects awoke, as though the plea were a pin. Her Commander-in-Chief came forth upon his mount of Roses at Sawbridgeworth, and, deaf to the fond

entreaties of POMONA, calling to him from his orchard houses—"Oh stay, the maiden cried, and rest"—shouted for the battle. The great Generals of Hertfordshire rallied around him; the land bristled with blades, with the discoloured steel of the veteran's pruning-knife, and with the dainty weapon of the volunteer; and it was plain to all men, that there was to be among florists a restoration of the Royal family, and that their Queen was to have her own again. The nightingale removed his breast from the thorn, and whistled festively.

Most blithely, when in the following summer, July 1, 1858, the FIRST GRAND NATIONAL ROSE SHOW was held in St. James's Hall, and "in the days of its childhood, 'twas like a sweet dream to sit 'mid the Roses, and hear that bird sing" out the names of the winners of *Six and Thirty Silver Cups!* The experiment, entirely successful, became thenceforth an institution.

The *Second* Exhibition took place on the 23d of June, 1859, and in the rooms of Hanover Square. All was again *couleur de rose*, and the introduction of Roses in pots gave an additional charm to the scene.

The *Third* Show was held in the Crystal Palace on the 12th of July, 1860. Nearly 17,000 persons went to see and smell; and the authorities have in consequence originated a Rose Show of their own. May the cutting flourish like the parent stock, and long live our Queen in her Palace at Sydenham.

The *Fourth* National Rose Show was held on Wednesday last, in conjunction with the Great Rose Show of the Royal Horticultural Society, and in the beautiful Gardens of Kensington has found, we may hope, its happy and abiding home. Organised and established by Fellows of the Royal Horticultural Society, by them it has been handed over to the Society's parental care and tutelage, and nothing could be more affectionate or auspicious than the youthful wanderer's welcome. A perfect accommodation and a most noble company have made the reception such as must secure a life-long union between sire and son.

It is unnecessary to dwell upon the advantages of an institution which brings the favourite flower of the English people before them as no catalogues nor descriptions can; and which, by exciting the emulation and satisfying the interests of the growers for sale, has very materially improved both the quality and cultivation of the flower.

These advantages will be increased, both to the exhibitors and to the public, as, under the auspices and with the unique resources of the Royal Horticultural Society, the Exhibition of Roses is developed. New plans and new prizes are already in contemplation, and so earnest and general a desire is expressed to enthrone the Queen of Flowers at Kensington with a grandeur worthy of her state, that the suggestion quite deserves a discussion whether it would not be wise to appoint *a Rose Committee* to make arrangements for future Shows. No improvement can be made as to management, or as to means at the Gardens, but a more tasteful diversity and happier combinations may be applied to the Roses themselves. We had on Wednesday the best Rose Show that a season most unfavourable, and a scheme but partially developed, would allow; but with ordinary weather, and with the lessons of experience, we may confidently expect in 1862 such a show of Roses, as eye hath never seen

"Since, high in Paradise,
O'er the four rivers the first Roses blew."

IT is reported that the Council of the Royal Horticultural Society intend to renew next year, in some form, the prizes for TABLE DECORATION. It is as well therefore, before the peculiarities of the recent competition are forgotten, to place before the reader a faithful representation of the three combinations which obtained prizes on the 5th of June. In order that no error may have crept into these figures the art of the photographer has been called in; for he cannot add or omit anything, and thus we have an absolute certainty that the groups were neither more nor less than what is now shown—except, of course, as regards colour.

The merit of the skilful arrangements to which the first prize was awarded has been much discussed; and those who cannot perceive how superior graceful form is to mere heaps of colour, have not hesitated to condemn the judgment that conferred it. Surely the accompanying engravings will lead them to modify their opinion. To us it seems impossible not to see that, however handsome the other groups may have been, they were unmistakeably inferior to that produced by Mr. MARCH and his family.* For how did he obtain his beautiful effect? Not by masses of flowers of priceless value, quite unfit for the purposes of a dinner table, to last for a few hours; but by some Ferns, some Lycopods, a few Roses, some Forget-Me-nots, Vine leaves, and small clusters of Grapes. Any body, with the most modest income, could imitate this. More resplendent decorations may be within the reach of the upper ten thousand, but of nobody else. The business of all great associations for the improvement of the social condition of the masses, and the Horticultural Society is nothing else, as its new name Royal implies, is to employ its means for the general benefit, and not for the advantage of a few; and if the taste displayed at the most modest board is improved that is in itself a considerable gain. Your Museums of Science and Art, with all their parliamentary grants, are for nothing else—in the intention of the public at least.

We need not describe the groups forming the subjects of the 2d and 3d prizes. With the clever combinations of colour which they possessed they were doubtless fine examples of table decoration. But it must be owned that with all its beauty, No. 2 was lumpish, and that No. 3 owed its effect to its stands, its costly Grapes and costlier Pine Apples.

"TÆDET QUOTIDIANARUM HARUM FORMARUM!" exclaimed a yellow-skinned old gentleman, after walking through one of our great Metropolitan Exhibitions; "there are Heaths and Geraniums, and Orchids and Roses, and Strawberries and Grapes, and then there are Grapes and Strawberries, and Roses and Orchids, and Geraniums and Heaths over again. It is always the same. Why can't the Gardeners bring forward something new? The only thing novel that I have seen in this year 1861 was a trial of skill among Ladies who know how to dress up a dinner table, and that was worth all the rest of the show." Had our worthy grumbler looked at home he might have found bread and meat and beer and wine, and wine and beer, and meat and bread over and over again; and he would perhaps have thought it sinful to repine at that. We trust, however, that his longing will be satisfied when he sees again, as he might have seen last Wednesday at the Royal Horticultural Exhibition, no quotidian form, but one of the most unusual and most glorious examples of the diversity of the Floral world. It was like presenting an epicure, not with a new sauce or a new dish concocted *à la Soyer*, but with an entirely new description of delicate food.

There grows at the Cape of Good Hope a marvellous plant called DISA GRANDIFLORA. When this daughter of the earth was first brought prominently under the notice of modern English cultivators, the following language was employed, in one of our scientific works, to describe it:—

"It is the finest Orchidaceous plant found at the Cape of Good Hope, and we may almost add in the world, whether we regard the large size of its regal flowers, or the brilliant colours by which they are accompanied. The magnificent specimens from which the accompanying drawing has been made were sent in a dried state from the Cape by Mr. HARVEY, who remarks that the specimen is the largest he ever saw, the stem being 2½ feet high, and the flowers 5½ inches from tip to tip of the expanded sepals. It occurs in various parts of the colony, but principally on Table Mountain, where it is so common, according to Mr. HARVEY, that every stream is literally bordered with it in March. Sir JOHN HERSCHEL tells us, that the temperature of the situations where it is found *is occasionally* as low as 31½°, and also occasionally as high as 96½°. Its habitat is on the margin of pools of standing water, the drainage of the boggy slopes of the Mountain, wherein its roots are immersed. These are dry or nearly so in summer. In such localities it is of course frequently involved in the dense mist of the clouds, which, even in the hottest months, often cover its habitation for a week or a fortnight uninterruptedly. Alas! that I must add that it has hitherto proved uncultivable. It occasionally indeed is imported, and in the year 1825 it even flowered at South Lambeth, near London, in the garden of Mr. WILLIAM GRIFFIN, a zealous and well-known collector of bulbous and other plants. But it soon disappeared, and no other English specimen seems to have been put on record."

This was in the year 1841. Than the consequence of this announcement, and a noble plate that accompanied it, nothing can more strongly show how entirely difficulties in the art of gardening are removable by skill and perseverance. In 14 years the possibility of growing the plant had been proved beyond all question. In July 1854, a fine example of *Disa grandiflora* was placed on the exhibition table at Chiswick by CHARLES LEACH, Esq., of Clapham Park. The manner in which he proceeded to secure so great a result was ascribed by himself to having treated it as a greenhouse plant, and not drying it off for rest, as is usually done with Cape bulbs. He had not been able to perceive that his plant had ever been perfectly at rest, "leaves seem either to be lengthening or offsets coming up." It was this peculiarity which determined him upon continuing to give the plant water all the year round—moderately, of course, during winter, while the thermometer was ranging between 35° and 45°, and freely during the other parts of the year. Mr. LEACH suspected that, in its native habitats, though long continued heat and drought may cause all foliage to die down, the roots, nevertheless, in the ravines where it grows, remain continually moist. "With me, however, a change of habit seems to take place, and the offsets of last autumn and winter become the flowering plants, not of this, but of next year; whilst those now in flower will die down, leaving an abundance of plants, scarcely half grown, and followed soon afterwards by fresh offsets. Rough fibrous peat is the soil I use, with a good portion of silver sand; good drainage, of course—and, from the results I have obtained, I see no reason why this very beautiful species should not be found in the greenhouse of every one disposed to bestow the same care upon it which he gives to his Geraniums, and similar plants."

In the following year Mr. SMITH, a gardener living at Cape Town, in a letter to the *Gardeners' Chronicle* expressed his entire agreement with Mr. LEACH's expectation, that there is no reason why this fine plant should not be found in every greenhouse in Europe. Eight years ago he had procured tubers of it, had potted them in a mixture of decaying turf and white sand, covered the surface with living sheets of Bryums, and placed the pots in the shade of trees, where they had remained ever since without shifting, receiving (as they are evergreen) water once every day. Under this treatment they bloomed freely. What amount of frost they will endure he could not say, but he had frequently seen Potatoes destroyed with frost in a garden in which the Disa had been uninjured.

It is six years since this question was last introduced into our columns; during that period Mr. LEACH has been assiduously watching his Disa, and with such success has he been varying his management that he has at length arrived at the gratifying but most unexpected conclusion that its cultivation has now become so easy that any one possessing a greenhouse or pit in which it may be kept from frost during winter may grow it, and that so abundantly as to leave no doubt in his mind that in a few years it will be seen decorating, during the summer months, not only our gardens, but the parks and grounds of those who have in them ponds and streams of water.

In what way this attempt is to be made will be apparent from the following memorandum with which Mr. LEACH has favoured us:—

"With regard to the Disa, it should be borne in mind, that it is a mountain, and a bog plant, which means, that it abominates a close stove or orchid house, and that it delights in water. The other treatment is as follows:—When done flowering, let the pots be plunged into ashes in the open garden, fully exposed to sun and air—there let them remain, watered moderately in dry weather, and with a handlight over in long continuous rain, and to protect them against frosts—till October or November, when they should if necessary be shifted into larger pots, and removed into a greenhouse, where, just protected from frost, and near the glass, syringed over twice a day, the young offsets will continue to grow, and the parent bulbs will again shoot up. In February a little increase of heat may be given, and in March and onwards a syringing, even three times a day, will not be too much; and the natural increase in the temperature will then suffice to bring up the flower stems in May and June, at which time a little more heat in a warm and airy conservatory will do no harm.

"At the Cape, the Disa, I am told, dies down—here I find that it does not require to do this; the young offsets coming up long before the old plant gives any sign of taking the species of rest

* The Editor is requested by Mr. MARCH to state, in answer to many inquiries, that Messrs. DOBSON & PEARCE, of 19, St. James's Street, have been commissioned to carry out his designs for the glasses used on this occasion, and that they are now ready to supply them.

FIRST PRIZE

SECOND PRIZE

THIRD PRIZE

produced by drought. I am further informed, that at the Cape, while the open country is burnt up with the hot rays of the sun, Table Mountain enjoys the benefit of the celebrated Table Cloth [of clouds], with which the South-easters cover it during the summer season; and I conclude that the Disa in this way has plenty of moisture at its roots during the dry season, while at other times it luxuriates in water."

We understand that in consequence of the dull cold weather of the last few days a plant that Mr. LEACH had destined for the Royal Horticultural Society, was not so forward on the 10th as was expected. "To make up for this," writes that gentleman, "I send two other specimens, one with *one* flower-stem only, but that within 2 inches of *three feet high*; the other is the growth of 18 months, from a small offset sent me from Hamburg by G. U. SCHILLER, Esq., last January twelvemonth, and then only 2 inches high. This specimen shows admirably the productiveness of the Disa, and the robustness which it attains under the treatment already indicated, leaving me no doubt but that in a few years it will vie in our gardens with Geraniums and other half-hardy plants. It is now three or four years since I shared some masses of earth which I had received from the Cape with Mr. SCHILLER, of Hamburg, led to do so by the inquiry of our mutual friend Mr. SKINNER, of Guatemala, as to where a plant or two could be obtained. The offset just alluded to was produced from one of them, and when sent to me was accompanied with a report from Mr. SCHILLER's gardener of the treatment adopted by him in that gentleman's grounds. His mode of culture, I have no hesitation in saying, is far better than that by which I grew this plant some five or six years ago; and to my following it may be attributed, I am quite sure, the fine condition in which I now have an abundance of plants, several of the younger ones of which have been out of doors these two months; some plunged in ashes, some in water up to the rims of the pots, all apparently doing equally well, protected during the day from hot sun by a Tiffany shading, and on cold nights by a handlight."

Surely this is an event of which gardeners may well be proud. They have long since tamed the untameable epiphytal race, and we doubt not that the time is at hand when the beautiful terrestrial Orchids of Europe will be grown as easily as Daffodils. In the meanwhile, in order that there may be no loss of time or absence of means in placing *Disa* in the hands of others, Mr. LEACH authorises us to announce that he will be happy to present to the Committee of the Gardeners' Benevolent Society, 20 young and healthy plants to be disposed of by those gentlemen as they may think most calculated to produce a little benefit to the Institution. These are seedlings doubtless, sprung up from the seed self-sown in the ravines from whence the earth had been taken of some lumps received last spring from the Cape.

NOTES MADE DURING A GOVERNMENT EXPEDITION TO THE VITI OR FIJI ISLANDS.

BY BERTHOLD SEEMANN, PH.D., F.L.S.

(Concluded from p. 625.)

ON the 5th of April I landed at King George's Sound, S.W. Australia, where a settlement is springing up, called the town of Albany. There is a nice little unfinished church, but not yet any continuous street, all the houses being detached. Convicts from Swan River were making roads. On the whole there was very little stir in the place. I could see no fields, and the soil looks sandy and poor, but it nevertheless produces good crops when taken a little trouble with. We obtained some excellent bunches of Grapes and fine Apples. The Potatoes and Cabbages were very good. Most of our passengers had a ramble over the hills, and brought on board armsful of gay flowers, fine Acacias, Melaleucas, Callistemons, Epacrideæ, and Papilionaceous plants. Indeed I never visited a spot so full of fine things; at every step you met something pretty and interesting. Quite close to the landing place I hit upon a patch of Cephalotus follicularis, growing in a swamp, and protected from the sun's rays by rank herbage. The Nuytsia floribunda, a member of the Mistletoe family, is still abundant, and when loaded with its bright orange-coloured flowers, affords a magnificent spectacle. Its leaves may be aptly compared to French Beans. It has been in the Botanic Gardens at Sydney for years, but if tradition may be relied upon, the trees now found there were attached to the roots of a Callistemon, and in removing them from King George's Sound, Callistemons and all were taken up. All hope of raising it from seed in the ordinary way must be given up; Mr. Ch. Moore at Sydney tried it repeatedly; the seeds certainly germinated freely, made a few leaves, but then they died off. Perhaps by sowing them upon the roots of plants to which the Nuytsia is parasitically attached, the same favourable result might be expected as accompanied the treatment pursued in respect to Orobanches. Bidwill's observation that Nuytsia has three cotyledons is certainly correct, as I had an opportunity of seeing in Sydney. Psoralea pinnata, from the Cape of Good Hope, has become naturalised in this district, and is spreading fast. Many of the hedges consist of purple-flowering Pelargoniums, amongst which one of our European Brizas has established itself.

In the evening the natives, hideously ugly and incredibly dirty, dressed in kangaroo skins, got up a corobery or dance, the fire illuminating the grotesque scene being kept up by Gum trees, Melaleucas, and splendid specimens of Banksia speciosa, which I felt quite sorry to see sacrificed. I obtained a good deal of useful information about Western Australia from Mr. George Maxwell, who has been in this colony for nearly 20 years, and is well acquainted with its botany. He has discovered many new plants described in Dr. F. Mueller's valuable contributions to the Australian Flora. He gave me an interesting account of the gigantic dimensions attained by the Macrozamias, some of which he found to be 9 to 10½ feet in circumference, and 12-15 high. He is willing to supply seeds, dried and living plants, and may be relied upon as a trustworthy agent by those who may choose to employ him.

Our steamer entered Port Phillip on the 14th of April, and I went on shore with the mail, in order to pay a flying visit to the Botanical and Zoological Gardens of Melbourne. There is a fine macadamised road between Sandridge and Melbourne, and part of the way there are houses, which, like those of the port, have a very temporary look. A large sugar refinery, which imports its raw material from the Mauritius, seems almost the only exception. The country is low and swampy in one part, and densely covered with the common Brake Fern in the other; here and there are a few dead or dying Gum-trees. Few houses, several of them so-called half-way houses, are seen on the road, near which Acacia mollissima and Lophantha are to be found. Entering the Melbourne Gardens from the City Bridge, a double line of Eucalyptus globulus has been planted, trees of unparalleled rapidity of growth, and capable of resisting the drought to which that special locality is much exposed. Interplanted with Elms, they will in time form a fine avenue to that part of the gardens where the principal collections are kept. I was sorry to miss Dr. Mueller, the director, who had gone to see the governor; but was fortunate enough to find Mr. Wilhelmi, his secretary, an intelligent young man, who has explored parts of the Australian continent. The establishment of, and the way in which the gardens are kept up, does great credit to the colony of Victoria, and to those conducting it. Innumerable must be the disappointments that gardening operations in such a country must experience from hot winds, floods, and long droughts. But notwithstanding these drawbacks, the collection of rare and valuable plants is very great, and in a few years, when all the plantations are grown up, the gardens will be very fine, even considered from an æsthetic point of view. Due advantage has been taken of the Yarra river, with slight undulations of the ground, and you have several striking views of the city of Melbourne and other rising towns. The whole grounds consist of 120 acres, 20 of which are under cultivation, and the rest form a park reserve, in which a handsome building for the herbarium has been erected. There are several hothouses of considerable dimensions, and a very fair representation of the orders of the natural system. In a young colony like Victoria, where a great population suddenly arrived and spread over a country, of the peculiarities of which we formerly knew little or nothing, great demands for information, seeds, and plants, are constantly made upon an establishment like this. The constant questions arise, what will grow, and what will not grow, and how are certain plants to be treated? Dr. Mueller has made numerous experiments having a direct practical bearing, the results of which are made public. For instance, a great drawback to the colony is the rapid decay of wooden fences. Attention was therefore directed to plants suitable for hedges, and various prickly Acacias and Hakeas, the Osage Orange, Hawthorn, Cape Broom, South African Ceanothus, Whin and Prickly Pear, have been tried in the garden, and officially recommended. Similar experiments have been made with trees adapted for avenues, and the Oriental Plane has been found to be the most suitable of all deciduous trees for planting along public promenades.

On the 16th of April I entered Port Jackson, certainly one of the most magnificent sights it has ever been my fortune to beheld. The number of cottages and villas dotted about the hills, half concealed amongst Acacias and Araucarias, the different little bays, bold rocks, forts, gardens, and vessels of all descriptions are not easily forgotten. The Sydney garden is situated in the Domain, a park reserve much superior to that of Melbourne. There are some very fine old specimens of trees, and I could be tempted into a detailed account if Dr. Bennett had not recently furnished one in his "Gatherings of a Naturalist." I obtained several good photographs of the most striking objects, such as the large Araucaria excelsa, the pride of the garden, a group of Phœnix sylvestris, and tree Ferns. A collection of Dammaras is particularly note-worthy, consisting of D. australis, orientalis, vitiensis, robusta, ovata, obtusa, and Moorei. Botanists may as yet not have been able to form good specific characters for these trees, but there can be no doubt that they are all distinct, and more than mere varieties. Some of them are now 40 feet high, and begin to develope their respective habits. The colour of the branchlets and branches is also very different in different species; for instance, in Dammara australis it is purple, in others green, or brownish yellow. Again, the degree or total absence of glaucousness must be taken into consideration, to say nothing of marks of difference not lost in drying the specimens. There is only one of these Dammaras about the generic claims of which I entertain doubts, and that is D. Moorei. No cones of this tree have ever been found, though there has been no lack in looking for them; judging from its peculiar habit, its thin pendulous branches and opposite leaves, I am inclined to consider it a Podocarpus, there being a whole section of that genus with Dammara-like leaves, and nobody has as yet been able to point out the exact difference, if there be any, between the leaves of that section and those of the Dammaras. That part of the garden bordering the harbour, containing Allan Cunningham's Monument, surrounded by Weeping Willows, has of late been much improved, the banks having been so far extended as to cover the extensive mud flats that used to appear at low water. The ground thus acquired has been planted with representatives of the natural orders, and been made into a lawn, where the band plays, and the fashionable world congregates on certain days of the week. The funds at the disposition of the garden are rather limited, and great inconvenience is experienced for want of even the most necessary pits, and one or two good hothouses. Judging from the crowds of visitors, the garden is popular, and the legislature ought not to grudge money for putting it into proper working order. Mr. Moore has recently commenced giving annually a series of lectures, which are reported to have materially aided to popularize botany in the colony.

Home Correspondence.

The Last Season.—If everyone contributed his quota of losses by the late season, there would be no end to your list, and the planting of exotics might be unnecessarily discouraged. I am, therefore, induced to point out the peculiar combination of adverse cases which operated in 1860, and which might not occur again for a century, and in doing so would encourage nurserymen to continue to provide a supply for the planter. Although the degree of frost last winter was very great, yet it was not unprecedented. But it happened to be preceded by one of the coldest and wettest of summers, the consequence of which was that the growth of the plants was not perfected, and they could not resist the cold that succeeded. I think this is fully proved by the destruction or injury of many native plants. The combined operation of a cold sunless summer and of intense frost in winter may not occur again for a century; and those who plant exotic trees or shrubs may hope to enjoy them and transmit them to succeeding generations, even though they cannot hope for the longevity of our native trees, in all those procured from foreign countries. These considerations may induce the buyer and seller to begin again, and if we also adopt the recommendation of protecting the roots in severe winters it may prove an additional security against the recurrence of such losses as those experienced in 1860. *Thos. C. Brown, Further Barton, Cirencester.*

Table Decoration.—I have just seen "A. Y.'s" animadversion on my remarks on Table Decoration in a previous *Gardeners' Chronicle*. If he will refer to these again he may, I think, easily infer that I agree with his lady and the great majority, I believe, in regarding Parsley as an unsuitable foliage for bouquets. I wished to be concise, and then said that my lady friend who had the Parsley in her bouquet had good taste in other matters, thereby indicating what I believe ninety-nine in a hundred of your readers would readily understand—that I considered the Parsley reminded one more of the kitchen and dinner table than of the flower-garden and drawing-room. For the same reason I would exclude Fennel and some other herbs, though I would not be so fastidious as some are who object to the foliage of Asparagus. There are some sorts of wild foliage which are unsuited for this purpose on account of their disagreeable scent, of which the graceful leaves of the Geranium Robertianum is an instance. *Phyllophilus.*

Judges at the Regent's Park.—May I ask through your columns if the report is true that the judges at the Botanical Show on July 3d had *dined* before they made their awards? Such glaring misjudgment surely never was equalled since Geraniums, Fuchsias, and Fruit were shown. The loudly expressed dissatisfaction of every one present who was well versed in flowers and fruit will, I hope, elicit from the judges some reply through your columns. *A Visitor.*

Effects of the Winter.—Several of my trees, which appeared wholly to escape injury, or to escape with only partial injury from the severities of the last winter, seem now to be gradually dying. Besides one

or two smaller ones, a very fine Pinus insignis has made its spring shoots (and some of them are vigorous ones), and yet has one or two other branches dying. This is particularly the case with a low choice Juniper; though it has made its spring shoots (but not very vigorously), branch after branch seems now to be dying back. Can you tell me what is the cause of this? Whether there is any remedy for it? and whether I should cut off the dead parts? and if so, to what extent? *N. B. A.* [This dying off is doubtless attributable either to general or local injury resulting from the frost. The trees are fast using up the vitality left in them, and the discharge of their functions being either arrested or impeded, death follows if the injury is deep-seated and general, or if the damage is slighter and more circumscribed the limbs perish. You can do nothing but cut away the dying parts, not too severely, and in the case of very choice plants, afford some shelter from the strong sunshine which is putting everything to the test.]

Roses.—Will some of your Rose-growing Correspondents kindly state whether they find any difficulty in growing George IV. and Billiard in the perfection which they used formerly to attain. Some 28 years ago, I recollect George IV. was the most conspicuous Rose in Hooker's Rose nursery, at Brenchley. Wherever the eye lighted upon a Rose tree of surpassing splendour, whether far or near, it always proved on inquiry to be George IV. Some 8 or 10 years later Billiard occupied the same position. I have had a standard Billiard with 37 shoots, varying from 5 to 6 feet long, covered with bloom, in short a vast umbrella of Roses. Now I cannot make either of these Roses flourish. My old plants have dwindled away, and are all but dead, and the newly budded ones will not flourish, however abundant the supply of manure given to them, and though grown in the same soil and situation in which they once luxuriated. Some few others of the older Roses, especially Hybrid China, present the same phenomenon, but these two are the most remarkable for their decay. *An Old Rose Grower.*

Cuckoos.—Having seen "H. R.'s" account of a foundling cuckoo, I beg to ask some information as to the best means to rear a cuckoo through the winter. I have one now quite tame and healthy, taken from a pied wagtail's nest about a month since. I am feeding it with soft bread and raw mutton. Is it possible for me to keep it through the winter? as my friends say I cannot keep it longer than December. Is any instance on record in which they have been kept through the winter and have sung in the spring? *R. D.*

Societies.

ROSE SHOW AT THE CRYSTAL PALACE, *July* 6.—An excellent exhibition of Cut Roses was held here on this occasion. Not only were the stands unusually numerous; but considering the severity of last winter the blooms were for the most part in tolerably good condition.

In the Nurserymen's Class the best collection of 96 blooms came from Mr. Mitchell, of Piltdown, Maresfield, who sent beautiful examples of—

Hybrid Perpetuals.—Alexandrine Bachmeteff, large bright red; Auguste Mie, fine glossy pink; Anna Alexieff, beautiful bright rose; Baronne Hallez, dark red; Baronne Laray, rich pink, large and double; Baronne Prevost, Boccace, bright crimson; Buffon, shaded velvety crimson; Caroline de Sansal, pale flesh; Cardinal Patrizzi, rich dark crimson scarlet; Cleopatra, delicate rose; Col. Cambriels, shaded crimson; Col. de Rougemont, in the way of Baronne Prevost; Comte de Paris, dark crimson; Comtesse Cecile de Chabrillant, beautifully cupped pink Rose; Dr. Juliard, lilac shaded rose; Dr. Ruschpler, rosy pink; Duc d'Ossuna, bright rosy carmine; Duchess of Norfolk, purplish crimson; Duchess of Sutherland; Duchess of Orleans, lavender blush; Dominique Daran; Clement Marot; Eugène Sue, bright rose; Faustin Helye, pale rose; General Jacqueminot, in excellent condition, rich and glowing; General Forey, bright scarlet; Gloire de Santenay, crimson scarlet, nearly as bright as General Jacqueminot; Gustave Coraux, shaded crimson; Jules Margottin, rich rose, large and fine; Kleber, rosy scarlet; Léonice Moise, dark crimson; Lord Raglan, rich crimson scarlet; Lord Palmerston, bright rosy scarlet; Louis Gulino, purplish rose; Robert de Brie; La Reine; La Ville de St. Denis, fine rosy carmine; Louis Chaix, shaded bright red; Louise Magnan, one of the best whites of its class; Louise Odier, fine bright rose; Oriflamme de St. Louis, brilliant carmine; Madame Boll, bright rosy pink; Madame Bruny, delicate peach; Madame Charles Crapelet, an excellent rosy scarlet new Rose; Madame Rivers, delicate pale Rose; Madame Domage, glossy Rose; Madame Vidot, like Madame Rivers; Madame Masson, dark crimson; Madame Schmidt, rosy pink; Madame Laffay, rosy crimson; Madame Hector Jacquin, fine deep rose; Madame Knorr, fine rosy pink; Madame Vigernon, deep rose, large and full; Madame Melanie, Monsieur Joigneaux, Madame Comtesse, pale rose; Mademoiselle Therèse Appert, delicate pink, large and pretty; Maria Portimer, purplish crimson; Maréchal de la Brunerie, light rose; Marquise Boccella, pale rose; Mrs. Elliott, still a good old rose; Noemi, fine glossy pink; Palestro, rosy lilac; Paul Dupuy, Prince Leon, fine cherry red; Paul Emile; Sénateur Vaisse, a magnificent new rosy crimson; Souvenir de Beranger, large rose; Souvenir de la Reine d'Angleterre, a large showy variety, under some circumstances a little coarse; Souvenir de Leveson Gower, splendid dark red; Triomphe de Lyon, velvety crimson; Triomphe des Beaux Arts, dark velvety crimson; Victor Verdier, large good Rose; Victorie de Magenta, purplish crimson; Wm. Griffiths, fine lilac Rose.

Bourbons.—Dupetit Thouars, still one of the best of the high coloured kinds in this class; Dr. Berthet, rosy scarlet; General Blanchard, bright rose; Baron de Noirmont; Marquise de Balbiano, rosy pink; Souvenir de Malmaison; and Victor Emmanuel, crimson shaded scarlet.

Noisette.—Triomphe de Rennes, a rather handsome yellow Rose.

Teas.—Devoniensis, Elise Sauvage, yellow; Gloire de Dijon in fine condition; La Pactole, pale yellow; Louise de Savoie, sulphur; Souvenir d'un Ami, a fine variety; Souvenir d'Elise, and Vicomtesse Decazes.

Moss.—Baron de Wassenaer, and Crested Moss.

Hybrid Chinas.—Coupe d'Hébé, still one of the best of our favourite old Roses.

Other collections of 96 blooms were furnished by Mr. Keynes, of Salisbury, Mr. William Paul, Messrs. Paul & Son, and Mr. Hollamby, of Tonbridge Wells. Among these were fine blooms of Louis Odier, Madame Boll, rosy pink and fine in form; Transon Goubalt, Mathurin Regnier, La Ville de Bruxelles, Moss Lanei, Crested Moss, Latour d'Auvergne, large and showy; Madame de Cambacérès, Prince Regent, General Jacqueminot, Madame Knorr, one of the best autumn Roses we possess; Duchess of Orleans, Alexandrine Bachmeteff, Madame Vidot, La Ville de St. Denis, large and fine; White Bath Moss, Duchess of Norfolk, Anna Alexieff, Evêque de Nîmes, Jules Margottin, Wm. Griffiths, Madame Domage, large, but loose; Cardinal Patrizzi, a very dark kind; General Castellane, Lord Raglan, Prince Leon, Coupe d'Hébé, Souvenir de Malmaison, Duke of Cambridge, Chénédolé, Pauline Lansezeur, a fine lilac variety; Charles Lawson, Comtesse Chabrillant, a compact fine Rose, beautiful in the bud; Princess Royal, a good Moss; Col. de Rougemont, in the way of Baronne Prevost, but coarser; Gloire de Dijon, bronzy yellow, rich and good; Common Moss, Robin Hood, still a good Rose; Madame Willermoz, in beautiful condition; Louis Chaix, not near so fine as we have seen it; Triomphe des Beaux Arts, a very dark velvety rose; General Simpson, Acidalie, an old but fine variety; Prince Imperial, large, but coarse; Géant des Batailles, Louis Peyronny, the yellow Vicomtesse Decazes, Alice Leroy, Souvenir d'Elise, Paul Perras, Baronne Prevost, Pauline Labonté, salmon; Laura Raymond, Niphetos, large and fine; and Auguste Vacher, fine yellow.

In the class of 48 varieties, fine collections were shown by Messrs. Cranston, Keynes, Tiley, Hollamby, and Cant. Among these we remarked beautiful blooms of Anna de Diesbach, Bacchus, glowing crimson, scarlet; M. Hector Jacquin, fine in the bud state; Madame Rivers, a charming variety; Charles Lawson, a fine large useful Rose, and General Castellane; the last is perhaps one of the most fragrant of Roses.

Of 24 varieties, beautiful blooms of the following were furnished by Mr. Keynes, to whom the first prize was awarded, viz., Duchess of Orleans, Triomphe de Rennes, Pius IX., General Jacqueminot, Madame Vigeron, Léon des Combats, Comte de Nanteuil, Madame Rivers, Madame Vidot, Comtesse de Chabrillant, Lord Raglan, Enfant du Mont Carmel, Joan of Arc, Souvenir de Leveson Gower, Sénateur Vaisse, Anna de Diesbach, Francis I., Jules Margottin, Gloire de Vitry, General Castellane, La Ville de St. Denis, Paul Dupuy, Pauline Lanzezeur, and Victor Verdier, one of the best of the new Roses of last year. Other exhibitions in this class came from Messrs. Cranston, Laing, Cattell, and Cant. Among the varieties were Juno, Madame Phelip, Boula de Nanteuil, Charles Lawson, Comtesse de Chabrillant, Duchesse d'Orleans, Evêque de Nimes, General Jacqueminot, Géant des Batailles, Gloire de Vitry, Lord Raglan, La Ville de St. Denis, Madame Knorr, Madame Rivers, Madame Vidot, Mathurin Regnier, Pauline Lanzezeur, Prince Léon, Stephanie Beauharnais, William Griffiths, Léon des Combats, Souvenir de Malmaison, Enfant du Mont Carmel, Lady Stuart, a variety in the way of Madame Rivers; La Reine, Caroline de Sansal, a fine variety, but this year small in size; Narcisse, Sulphur, one of the very hardiest of Tea Roses; and Souvenir de Malmaison, the last very large and fine.

In the class of 12 varieties Mr. Keynes showed beautiful blooms of Madame Hector Jacquin, Souvenir de Malmaison, Gloire de Vitry, Gloire de Dijon, Paul Dupuy, Madame Vigeron, Léon des Combats, Madame Vidot, La Ville de St. Denis, General Jacqueminot, Comte de Nanteuil, and Sénateur Vaisse, the last one of the finest Roses in the whole exhibition. Mr. Cant and others also showed well in this class.

Of 24 varieties, three trusses of each, by far the best came from Mr. Keynes, who contributed the following sorts, viz.:—William Griffiths, Souvenir de Leveson Gower, Pauline Lanzezeur, Gloire de Dijon, Léon des Combats, Virginal, Mathurin Regnier, Comte de Nanteuil, Francois I., Madame Rivers, General Jacqueminot, Jules Margottin, Madame Vidot, Evêque de Nimes, Madame Miellez, General Castellane, Comtesse de Chabrillant, Victor Verdier, Mademoiselle Therèse Appert, La Ville de St. Denis, Lord Raglan, Lady Stuart, Paul Dupuy, and Triomphe de Rennes. Mr. Laing of Twickenham likewise had an excellent stand, as had also Messrs. Fraser, Mitchell, and Cattell.

Amateurs also showed good collections on this occasion. Exhibitions of 36 blooms came from Mr. J. T. Hedge, Mr. Keele, gr. to A. Lawrence, Esq.; Mr. Hollingsworth, Mr. Evans, gr. to C. N. Newdegate, Esq., M.P.; Mr. Thornycroft, and Mr. Rowland; among these the best came from Mr. Hedge, who also won the 1st prize for 24 blooms. Messrs. Corp, Thurland, Moffatt, Mercer, and Walker likewise showed in the last named class. In these collections we observed good blooms of most of the leading kinds whose names are recorded above.

Of 18 varieties shown by the class of exhibitors last named, the best came from Mr. Dennis, gr. to H. S. Hayward, Esq., Polkington, and Mr. Hedge was second. Among the kinds were grandissima, Caroline de Sansal, Lord Raglan, Baronne Prevost, Vandal, M. Vidot, one of the best of the light varieties; Emperor Napoleon, La Reine, General Pelissier, Julie d'Etanges, Boule de Nanteuil, still a good old Rose; Prince Regent, Duchess of Norfolk, Madame Heraud, Madame Hector Jacquin, Victor Trouillard, Madame Masson. Duchesse d'Orleans, Cardinal Patrizzi, Madame Place, Lady Stuart, Gloire de Vitry, Madame Knorr, General Simpson, General Castellane, Gloire de Parthenay, Madame de Cambacères, Prince Leon, Géant des Batailles, Mathurin Regnier, Lord Raglan, William Griffiths, Noëmi, Jules Margottin, Madame Rivers, Triomphe de l'Exposition, and Louis Peyronny.

In the class of 12 varieties Mr. Corp, Millford, Salisbury, had the best blooms; but good boxfuls also came from Wm. Smith, Esq., Norwood; the Rev. Mr. Guild, Dunmow; and T. Noakes, Esq., Lewisham. Among these we noticed fine blooms of General Jacqueminot, Gloire de Dijon, Anna Alexieff, a very good variety; Smith's yellow Noisette, a charming variety when caught in good condition, as this was; Duke of Cambridge, bright rose; Jules Margottin, which is universally admitted to be one of the very best of its class; and Léon des Combats, also a good Rose. We also observed Emperor Napoleon, a very dark kind, but it was small, thin, and bad in shape. Empereur de Maroc also belongs to the same class, but is perhaps a trifle better in form.

Of new Roses, which were shown by Messrs. Standish, Fraser, Paul & Son, and others, descriptions will be found in our report of the meeting at South Kensington, which appears in another column.

Mr. Turner, of the Royal Nursery, Slough, showed some small plants in 8-inch pots, finely bloomed and in excellent condition as regards health.

ROYAL HORTICULTURAL: *July* 8 (*Ordinary Meeting*).—The following new Members were elected on the occasion, viz.:—

Sir W. Abdy, Hon. Miss Arden, H. D. Baylan, Esq.; H. Berger, Esq; D. Blane, Esq.; Mrs. Borthwick, J. C. Bowring, Esq; H. De Burgh, E. Burmester, Esq.; Miss. K. E. Cobden, Marquis of Donegal, A. H. Dendy, Esq; Miss E. H. Douglas, Dowager Countess of Ellesmere, Mrs. Ellis, Mrs. C. Ellis, Miss M. Geraldine Elliott; T. J. Eyre, Esq.; W. S. Fry Esq., Miss Heneage, Mrs. P. Hepburn, G. A. Jermyn, Esq.; B. Jones, Esq.; J. S. Judge, Esq.; Countess of Longford, W. F. Lawrence, Esq.; Mrs. Lewis, Mr. J. Lucking, Mrs. M. Melton, C. Meredith, Esq.; R. Mills, Jun., Esq.; G. Mitchell, Esq.; J. T. Mounsey, Esq.; G. Moore, Esq.; D. Forbes Mitchell, Esq.; J. T. Oxley, Esq.; J. Patrick, Esq.; J. Sills Pidgeon, Esq.; J. H. Pollen, Esq.; R. Mills, Esq.; T. Pearson, Esq.; Major P. A. Reynolds, Mr. Jas. Rigmaiden, Lieut.-Col. Cross, W. Scott, Esq; H. B. Sheridan, Esq.; R. Tattersall, Esq.; W. T. Taylor, Esq.; Lieut.-Col. William Watson, W. White, Esq.; Lady Wiseman, Lady E. Wyndham, Countess of Ir-borough, and A. Leak, Esq.

July 9 (*Floral Committee*).—Though not a full meeting there were some very interesting subjects produced. One of these was a dwarf compact-spiked double herbaceous Delphinium, called alopecuroides, which came from Mr. G. Wheeler, Warminster. Another was a remarkably large and attractive bright scarlet Verbena of good properties, called Foxhunter, from John Miller, Esq., Upwey; and a third, a really pretty dark-coloured double-flowered Clarkia, shown by Messrs. Carter. These all received and well deserved first-class certificates. An elegant finely cut greenhouse Fern, Hypolepis distans, from Mr. W. Dean, of Bradford, received a commendation; as did also a very distinct and pretty species of Primula, from South Chili, and a dwarf showy Calandrinia, in the way of umbellata, from the same country, both from Messrs. Veitch & Son, Chelsea; and a pretty Nemophila called discoidalis elegans, from Messrs. Charlwood & Cummins; this latter was of a light mulberry maroon distinctly bordered with white, and was extremely elegant. Mr. Bull, of Chelsea, had several novelties, the best of which, Phalaenopsis Schilleriana, a fine species, was not sufficiently grown. From Mr. G. Smith, Hornsey Road, were two new Verbenas, The Moor, a deep blood red with maroon eye, of excellent habit, and Fireball, a vivid scarlet, besides a box of splendid cut Verbenas, which gained a special award; Messrs. Downie, Laird, & Laing sent a fine dwarf crimson Stock, of very rich colour; and Mr. Conway, Brompton, had a free blooming Nosegay Pelargonium, called Crimson Bedder.

July 9 (*Fruit Committee*).—At this meeting several Strawberries were exhibited, to one of which an award was made. Mr. Standish also exhibited examples of Muscat Troveren Grape, of which favourable mention has already been made in our columns. Mr. Ingram's

Hardy Prolific Muscat Grape was also shown in good condition by the last named exhibitor.

July 10.—(*Rose Show.*)—Of the main features of this, in all respects, great exhibition of Roses, some account will be found in another column. We will therefore at once proceed to details.

Among collections of 96 varieties the best was again contributed by Mr. Mitchell of Piltdown; Mr. Keynes was second, Mr. Hollamby third, and Messrs. Paul & Son fourth; Mr. William Paul was awarded an extra prize. In these exhibitions we remarked excellent blooms of Victor Emmanuel, a purplish slate-coloured kind; General Jacqueminot, Triomphe de Rennes, yellow; Gloire de Santenay, Baron Gonella, a promising new sort; Sénateur Vaisse, in brilliant condition; Clement Marot; Paul Ricaut, Anna Alexieff, Madame Charles Crapelet, beautiful rosy purple; King David, rich dark velvety crimson; Madame Boll, a fine new Rose; Eugénie Lebrun, dark crimson; Victoire de Magenta, purplish crimson, in this instance rather small in size; Jules Margottin, a Rose which must ever stand at the head of its class; Impératrice Eugénie; Elise Sauvage, yellow; Triomphe d'Amiens, a most beautiful new Rose; M. Hector Jacquin, and Louise Magnan, a white hybrid perpetual of good size, form, and substance.

In the class of 48 varieties excellent collections came from Messrs. Cranston, Cant, Keynes, Laing, Francis, Hollamby, Paul & Son, and Turner. Among these were fine blooms of Madame Charles Crapelet, Louis XIV., one of the richest and best of the new Roses; Madame Boll, Madame Bonnaire, a good white hybrid perpetual; Victor Verdier, Louis Chaix, Charles Lawson, Prince Leon, Oriflamme de St. Louis, a kind nearly as brilliant as General Jacqueminot; Comtesse Cecile de Chabrillant, Lord Raglan, and Anna Alexieff; Duc Decazes, a fine dark rose; Arago, Paul Ricaut, General Castellane, William Jesse, Chenédolé.

In the class of 24 varieties, 3 trusses of each, Mr. Keynes showed the best collection, in which were fine specimens of Madame Vidot, Victor Verdier, Souvenir de Leveson Gower, Triomphe des Beaux Arts, Madame Pauline Villot, beautiful rosy crimson; Gloire de Dijon, Anna Alexieff, Virginal, Mathurin Regnier, Madame de Cambacérès, Mdlle. E. Appert, Souvenir de Malmaison, M. Miellez, Madame Hector Jacquin, La Ville de St. Denis, Dr. Brettonneau, Madame Knorr, Lord Raglan, Jules Margottin, Evêque de Nîmes, Triomphe de Rennes, Léon des Combats, and Madame Rivers. The next exhibition of 24 came from Messrs. Fraser, and consisted of Madame Charles Crapelet, glowing rosy crimson; Mathurin Regnier, Pauline Lanzezeur, Mdlle. Therèse Appert, Sénateur Vaisse, brilliant, large and fine; Sophie Coquerel, Clestine, Maria Portemer, Lord Raglan, Victor Verdier, Duc d'Ossuna, small compact rose; Virginal, in lovely condition, the white and delicate pink centre forming a beautiful contrast; Gen. Jacqueminot, Madame Vigeron, Madame de Cambacérès, Léonice Moise, Duchess of Norfolk, Jules Margottin, Madame Rivers, Madame Knorr, Louis XIV., Comtesse Cecile de Chabrillant, Leveson Gower, and Madame Vidot. Mr. Laing of Twickenham sent Souvenir de la Reine d'Angleterre, Duchess of Orleans, Boula de Nanteuil, Lord Raglan, Baronne Prévost, Gloire de Dijon, Géant des Batailles, Queen, La Ville de St. Denis, Madame Rivers, Paul Perras, General Simpson, William Griffiths, Madame Hector Jacquin, Paul Dupuy, Victor Verdier, Lamartine, Prince Leon, Madame de Cambacérès, Souvenir de Malmaison, Crested Moss, Comtesse Lacépède, and Anna Alexieff. Mr. Cattell and Mr. Cant also showed good collections.

In the class of 24 varieties, one truss of each, the first prize was awarded to Mr. Keynes, of Salisbury, for fine blooms of Boula de Nanteuil, Evêque de Nîmes, Souvenir de Malmaison, Lafontaine, a large fine showy Rose; Gloire de Dijon, Victor Verdier, Juno, Prince Léon, Mathurin Regnier, Comtesse Cecile de Chabrillant, Gloire de Vitry, Virginal, Madame Hector Jacquin, Madame Vigeron, Jules Margottin, Madame Rivers, Madame Knorr, Dr. Brettonneau, Alexandrine Bachmeteff, and Queen of Denmark. Mr. Turner, of Slough, to whom the second prize was awarded, sent Comtesse Cecile de Chabrillant, Louis XIV., Anna Alexieff, Virginal, Leveson Gower, Auguste Mie, Léon des Combats, Vicomtesse Decazes, Baronne Prevost, Duke of Cambridge, Sénateur Vaisse, Victor Verdier, Pauline Lanzezeur, Madame Domage, Jules Margottin, Gloire de Dijon, Duchess of Norfolk, Comte de Paris, Eugene Appert, General Simpson, Mdlle. Therèse Appert, General Jacqueminot, Pius IX., and Gloire de Vitry. Among those sent by Mr. Cattell were Cloth of Gold, the only bloom we saw of this variety.

In the amateurs class of 48 varieties the first prize was awarded to Mr. J. T. Hedge, Reed Hall, Colchester, who sent among other fine blooms Madame Cambacérès, Virginal, Anna Alexieff, Gloire de Dijon, Duchess of Buccleugh, Charles Lawson, Victor Verdier, Mathurin Regnier, Rubens, Oriflamme de St. Louis, brilliant, but a little thin of petals; Leveson Gower, Jules Margottin, Madame Vidot, Juno, Coupe d'Hébé, Clara Sylvain, Charles Duval, Lafontaine, large and very showy, but a little thin in the centre; Mathurin Regnier and General Jacqueminot. Miss Crawshay of Caversham, who was second in point of merit, contributed a nice collection, in which were fine flowers of Paul Ricaul, Géant des Batailles, small; the old, but yet good Rose Robin Hood; Gloire de Dijon, Madame Vidot, Prince Albert, Alexandrine Bachmeteff; Charles Lawson, Souvenir de Malmaison, La Ville de St. Denis, Lord Palmerston, Paul Perras, Evêque de Nîmes, the last a brilliant small Rose. Mr. Hollingsworth and Mr. Brush also showed well in this class.

Of 24 varieties Mr. Corp had a fine collection, a few of the best in which were Auguste Mie, General Jacqueminot, Gloire de Dijon, Madame Knorr, General Castellane, Prince Leon, Lord Palmerston, and Leveson Gower. Among Mr. Hedge's flowers, which took the second prize, we noticed Coupe d'Hébé, Charles Lawson, Mathurin Regnier, Gloire de Dijon, Anna Alexieff, General Jacqueminot, and Charles Duval. Among Mr. Moffatt's 24 blooms, which were placed third, were Brennus, Comte de Nanteuil, Mathurin Regnier, Souvenir de Malmaison, Chénédole, and Gloire de Santenay. Mr. Worthington, who had equally fine blooms, sent among others Senateur Vaisse, Prince Leon, Victor Verdier, and Anna Alexieff. Mr. Mercer also showed in this class.

In exhibitions of 18 sorts, the Rev. W. F. Radclyffe, of Ruston, was placed first; he had beautiful blooms of Triomphe de Rennes, La Ville de St. Denis, Paul Dupuy, Gloire de Dijon, Sir J. Franklin, a brilliant variety; Gloire de Santenay, Souvenir de l'Angleterre, Louis XIV., Comtesse Cecile de Chabrillant, Mrs. Elliott, Géant des Batailles, Lafontaine, Mathurin Regnier, Solfaterre, Gen. Jacqueminot, and William Tell. Mr. Moore, of Horsell, near Woking, was second; among the sorts which he showed were fine flowers of Safrano, Auguste Mie, Gloire de Dijon, Lord Raglan, Souvenir de Malmaison, Louis Odier, and William Griffiths. From Mr. Hedge and Mr. Brush, who were placed third and fourth, came Narcisse, Delphine, a kind like Niphetos; Charles Lawson, and other sorts, all of whose names have already been mentioned.

Of 12 varieties, the best came from Mr. Hedge, who sent Charles Lawson, in good condition; Madame Knorr, Lafontaine, purplish rose; Delphine, Vandael, dark mulberry; Juno, La Ville de St. Denis, Gloire de Dijon, Madame Hector Jacquin, Coupe d'Hébé, General Jacqueminot, and Charles Duval. Equally fine blooms also came from Mr. Corp, who sent Madame Knorr, Lord Raglan, Gloire de Vitry, Pauline Lanzezeur, Paul's Victoria, a fine large delicate pink variety, General Jacqueminot, Virginal, Comtesse Cecile de Chabrillant, Leveson Gower, Juno, Gloire de Dijon, and Evêque de Nîmes, the last small, but brilliant in colour. The Rev. H. Helyar, Yeovil; Mr. Brush, Mr. Child, and Mr. Moore also furnished good blooms in this class, some of the best of which were Kean, Madame Ory, Emperor de Maroc, Madame Duchere, Louis Bonaparte, and Madame Legras, the last a small white sort.

New Roses of 1860-61 were shown by Messrs. Fraser, Cant, Standish, and Keynes. Among these the best were Madame Standish, pink shaded rose; John Standish, velvety purplish rose; Rev. Reynolds Hole, rosy salmon, robust and free flowering, new in shade of colour and very promising; Gregoire Bourdillon, like a small Géant des Batailles; André Desportes, purplish rose and very fragrant; Madame Furtado, rose, compact and beautiful; Marguerite Appert, like M. Vidot; Gen. Washington, good, in the way of Robin Hood; Comte de Falloux, brilliant but small; John Waterer, bright promising sort; Triomphe d'Amiens, as shown mottled crimson, compact and very fine; Sénateur Vaisse, a glorious Rose of 1860; Mdlle. Bonnaire, a good addition to white Hybrid Perpetuals; La Boule d'Or, fine golden yellow Tea; Madame Charles Crapelet, beautiful purplish rose; Rubens, a good white Tea; Victor Emmanuel, purplish slate, a good addition to the Bourbon class; Gloire de Santenay, crimson; Louis XIV., rich velvety crimson, a charming rose; and Duc de Magenta, the last a creamy white Tea Rose. Others were also shown, but not in good condition.

Two or three exhibitions of Moss Roses were contributed, but they were not good. The best among them are still the Crested and Common Moss.

Of Roses in small pots Mr. Turner again showed an attractive collection, to which an award was made.

A large and fine collection of cut Roses was shown by Messrs. Veitch; but not for competition. We also noticed nice boxfuls from other growers put up merely for purposes of decoration.

Though this was really a Rose Show, and the Queen of Flowers reigned supreme, yet a variety of elegant plants and other objects graced the Conservatory in which the flowers were arranged, and by the variety they afforded added very much to the interest and beauty of the scene. Foremost amongst these miscellanies should perhaps be mentioned Mr. March's dinner table decorations, two charming sets of which, set up by the same artistic hands as the originals which gained the special prize on June 5th, and now devoted entirely to flowers, accompanied also by some smaller elegantly formed glasses for bouquets, were shown by Messrs. Dobson & Pearce, of St. James's Street, by whom the glasses are being manufactured. A central group of fine-foliaged plants, which was contributed by Messrs. Veitch & Son, consisted of Palms, Dracænas, Caladiums, Araucarias, Begonias, Anæctochili, &c., and was very effective; and the same gentlemen contributed in addition three tastefully filled Wardian cases, and a second group of plants containing many rare and handsome specimens, among which were a pretty Primrose from South Chili, shown before the Floral Committee on the preceding day, and a showy dwarf Calandrinia, resembling umbellata, introduced from the same country. These collections were tastefully set up in handsome china bowls and vases, and in ornamental terra-cotta stands. Similar groups were contributed by Messrs. A. Henderson & Co., Pine Apple Place, who had again the fine purple Japanese Maple; by Mr. Standish, Bagshot, who had his newly-introduced Japanese plants, and two finely grown pot specimens of Ingram's hardy prolific Muscat Grape; by Messrs. J. & C. Lee, Hammersmith, who had some choice Ferns; by Messrs. J. & J. Fraser, Lea Bridge Road, who had a very fine Kalosanthes; and by Mr. Bull, Chelsea, who had amongst many novelties some capital samples of the variegated Agathea. Charles Leach, Esq., of Clapham Park, again exhibited the Disa grandiflora—remarkably fine examples, one stem bearing four of its large and beautifully coloured flowers. This was one of the finest things in the exhibition. Mr. Turner, Slough, had a variety of showy subjects, namely, a group of admirably bloomed small Fuchsias, another of Pelargoniums, another of Petunias, and stands of cut blooms of Verbenas, Carnations, and Picotees. Messrs. Paul & Son, Cheshunt, had a stand of good summer-blooming Phloxes; Mr. G. Smith, Hornsey Road, some very fine cut Verbenas, and a well-grown plant of Calceolaria canariensis, which is perhaps the best of the yellow-flowered shrubby section; Mr. Gaines, Battersea, had a group of Pelargoniums; and a few additional contributions were transferred from the Floral Meeting of the preceding day. Three magnificent bunches of Black Hamburgh Grapes, weighing together 9¼ lbs., were shown by Mr. Young, gr. to Viscount Barrington. We noticed also a charming group of anatomised leaves and seed-vessels from John Hawes, Esq., of Adelphi Terrace. Some admirably executed Paper Roses, set up in a pair of tasteful groups, came from Mr. Helbronner, of Regent Street; and others were contributed by Mrs. Higginson, of the Pantheon.

On this occasion there was likewise displayed in one of the corridors facing the garden Mr. Theed's series of statues and busts intended for the Wellington College; of these the following is a list; they will be allowed to remain in the garden, we understand, till the end of this month.

STATUES.

1. MARSHAL LORD BERESFORD. Organised and commanded the Portuguese Army, and won the battle of Albuera. Presented by The Primate of All Ireland.
   " The late Marquis of Waterford.
   " The present Marquis of Waterford.
   " Mr. Beresford Hope.
   " Mr. Pack Beresford.
   " Mr. Willoughby.
   The likeness from the original Bust by W. Behnes, Esq.
2. THE RIGHT HON. LORD HILL. Commanded the Second Division throughout the Peninsular War, in which it acted for the most part as a separate corps; and who was at the head of one of the corps into which the army was divided at Waterloo. Presented by his nephew, the present Lord Hill.
3. THE RIGHT HON. LORD LYNEDOCH. Commanded at Barrosa, and was afterwards second in command of the Peninsular Army till nearly the end of the War. Presented by Thomas Graham, Esq.
4. SIR GEORGE MURRAY. The Duke's Quartermaster-General in the Peninsula, and his personal friend. Presented by his daughter, Mrs. Boyce.

BUSTS.

1. SIR JAMES MCGRIGOR. Head of Medical Department in the Peninsula. Presented by his son, Sir Charles R. McGrigor, Bart.
2. GENERAL SIR CHARLES COLVILLE. Commanded the Fourth Division at Salamanca, and a Division afterwards at Waterloo. Presented by his son, the Right Hon. Lord Colville.
3. THE RIGHT HON. LORD HARDINGE. Personal friend of the Duke, distinguished in the Peninsula; English Commissioner with the Prussian Army in the Waterloo campaign; and member of the Duke's Administration in 1828. The likeness from the original bust by J. H. Foley, Esq., R.A. Presented by the Dowager Viscountess Hardinge.
4. FIELD-MARSHAL THE EARL OF STRAFFORD. Commanded a Brigade in the Peninsula, and a Brigade of Foot Guards at Waterloo. Presented by himself (recently deceased).
5. GENERAL SIR JOHN OSWALD. Commanded Fifth Division at Vittoria. Presented by his son, T. T. Oswald, Esq.
6. GENERAL SIR WILLIAM PONSONBY. Commanded Brigade of Cavalry after Vittoria, and at Waterloo, where he was killed. Presented by Lord Ponsonby.
7. GENERAL SIR JOHN SLADE. Commanded Brigade of Cavalry in the Peninsula. Presented by Wyndham Slade, Esq., his son.
8. GENERAL SIR J. GASPARD LE MARCHANT. Commanded Brigade of Heavy Cavalry; killed at Salamanca. Presented by Sir Denis Le Marchant, Bart.
9. GENERAL SIR LOWRY COLE. Commanded Fourth Division from 1810 to the End of the War. Presented by the Misses Cole and the Right Hon. Lord Enniskillen.
10. GENERAL SIR WILLIAM HOUSTOUN. Commanded Seventh Division at Fuentes de Onore. Presented by Sir George Houstoun Boswell.
11. THE RIGHT HON. LORD LYNDHURST. Leading Member of the Duke's Administration in 1828. Presented by himself. The likeness from the original bust by W. Behnes, Esq.
12. GENERAL SIR RONALD FERGUSON. Commanded Brigade in Vimiera Campaign. Presented by Lieut.-Col. Robert Ferguson, M.P.
13. THE MOST HON. THE MARQUIS OF LONDONDERRY (CASTLEREAGH). Foreign Secretary in Lord Liverpool's Administration, with whom the Duke, as ambassador to France, concluded the treaty of peace at Paris. Presented by his nephew, the present Marquis.
14. THE RIGHT HON. THE EARL OF ABERDEEN. Leading member of the Duke's Administration in 1828. Presented by himself (recently deceased).
15. GENERAL SIR GEORGE TOWNSEND WALKER. Commanded Brigade of Fifth Division that escaladed the town of Badajoz. Presented by the late General's children.
16. THE RIGHT HON. LORD HARRIS. Under whom the Duke served at the siege of Seringapatam. The likeness from

the original bust by H. Weeks, Esq., A.R.A. Presented by his son, the present Lord Harris.

17. GENERAL SIR DENIS PACK. Commanded in the Portuguese Army, and distinguished on various occasions. Presented by Pack Beresford, Esq.

18. THE RIGHT HON. LORD EDWARD SOMERSET. Commanded Brigade of Cavalry in the Peninsula, and Household Brigade of Cavalry at Waterloo. Presented by Colonel Edward Somerset, Assistant Quarter-Master General, Portsmouth.

19. GENERAL ROBERT CRAUFURD. Commanded the Light Division from 1809, till killed at the beginning of the storming of Ciudad Rodrigo, 1812. Presented by his son, G. R. Craufurd, late of 2d Dragoon Guards.

20. GENERAL SIR ROBERT ANSTRUTHER. Commanded Brigade in Vimiero Campaign. Presented by his son, Sir Ralph Anstruther, Bart.

21. THE RIGHT HON. LORD COWLEY. Brother of the Duke. Presented by the present Right Hon Lord Cowley.

Notices of Books.

Letter to John Bright, Esq., M.P. By William Lucas Sargant, one of his Constituents. Simpkin, Marshall, & Co. (A pamphlet.)

This is a political pamphlet, and the *Gardeners' Chronicle* is not a political paper. We therefore can only say that if any one wishes to learn how Mr. John Bright, M.P. for Birmingham, can be skinned alive, he will learn it from Mr. Sargant's letter, in comparison with which the shirt of Nessus was a coat of down.

The Ferns of Derbyshire, illustrated from Nature. Edited by W. E. Howe, with a Preface by the Rev. Gerard Smith, B.A. London: Wertheim & Co.; Derby: Bemrose & Sons.

A thin octavo book consisting of figures printed in colours, of 22 species of British Ferns known to inhabit Derbyshire, the 20 plates accompanied by as many pages of brief descriptive matter, and the whole introduced by a few "thoughts and memoranda upon Ferns," giving a view of their general structure. The figures are somewhat rude but sufficiently characteristic, and some of them good, and the names employed are those now in general use; it may be taken, therefore, as a useful local guide. We agree entirely with the following passage from the Preface:—"If the lover of Ferns has much to fear from the plough, the draining tile, and the axe, he has an equally dark prospect of desolation and annihilation before him through the rapacity of the modern traders in Ferns. A bearded dealer in our northern Fern treasures visits the southern counties to present the bait of a host of captive Woodsia stolen away from every known mountain home, and offered in exchange for the Fern varieties of the lowland. In a few years what must be the inevitable issue? Even private botanists are found to gather with no sparing hand, and if our island is still to be counted the habitat of a native Flora, we would earnestly commend the lovers of plants that are to come after us, to the consideration of existing collectors." A synopsis of the genera is given. There does not appear to be any new fact recorded.

Under the name of *Wild Flowers worth Notice* (Hardwicke), and with the assistance of Mr. J. E. Sowerby, Mrs. Lankester has prepared a small volume, prettily illustrated, containing a selection of some of our native plants "which are most attractive from their beauty, uses, or associations." In all 96 species are figured and described. They will doubtless render many a country stroll more interesting than ever to young persons who love the beauties of wild nature.

Miscellaneous.

Sale of Books.—The late Rev. Prof. Henslow's Library was sold in King Street the other day by Mr. Stevens. From the priced Catalogue we glean the following. Sowerby's English Botany, 12 vols., coloured, together with 10 small portfolios containing Botanical and other works by Sowerby, coloured plates, realised 20*l.*; Curtis's British Entomology, 8 vols., coloured, 18*l.* 10*s.*; Annals of Natural History, 1st series 20 vols., 2d ditto 20 vols., and 3d series 4 vols. and 16 numbers, 13*l.* 10*s.*; Hooker's Flora Tasmaniæ and Essay, 2 vols., 11*l.* 10*s.*; Ditto Flora Novæ Zelandiæ, 2 vols. in 1, 8*l.* 15*s.*; Ditto Flora Antarctica, 2 vols., plates, 7*l.* 10*s.*; Transactions of the Linnean Society, 17 vols. and 19 parts, 10*l.* 10*s.*; Turner's Fuci, 4 vols., folio, 7*l.* 15*s.*; Works of the Palæontographical Society, 13 vols., plates, 10*l.* 10*s.*; Wight's Icones Plantarum Indiæ, 6 vols., 10*l.*; Endlicher's Genera Plantarum, 5*l.* 5*s.*; Ehrenberg's Infusions-Thierchen, with atlas of 64 plates, 10*l.* 5*s.*; Harvey's British Seaweeds, 4 vols., coloured, 5*l.* 12*s.*; Hooker and Greville's Icones Filicum, 2 vols., 5*l.* 17*s.* 6*d.*; Sowerby's Coloured Figures of English Fungi, 2 vols., 5*l.* 7*s.* 6*d.*; Hooker's British Jungermanniæ, 3*l.* 10*s.*; ditto, Illustrations of Ferns, coloured, 4*l.*; Decandolle's Prodromus, 14 vols., 4*l.* 6*s.*; Greville's Scottish Cryptogamic Flora, 6 vols, coloured, 4*l.* 17*s.*; and Loudon's Arboretum Britannicum, 8 vols. in 6, 3*l.* 5*s.*

Barbarous Customs of Prairie Indians.—In order to understand the character and nature of wild prairie Indians, they must be seen in their tents when well supplied with provisions and disposed to be cheerful and merry. In the prairies when on horseback, they are often quiet and watchful, always on the look out, and when even 20 or 30 are in a band, they generally manage to see a suspicious object in the distance at the same moment, so that a simultaneous note of exclamation is uttered by most or all of the party. In hunting the buffalo they are wild with excitement, but no scene or incident seems to have such a maddening effect upon them as when the buffalo are successfully driven into a pound. Until the herd is brought in by the skilled hunters, the utmost silence is preserved around the fence of the pound: men, women, and children, with pent up feelings, hold their robes so as to close every orifice through which the terrified animals might endeavour to escape. The herd once in the pound, a scene of diabolical butchery and excitement begins; men, women, and children climb on the fence, and shoot arrows or thrust spears at the bewildered buffalo, with shouts, screams, and yells horrible to hear. But when the young men, and even women jump into the arena amidst the dying and the dead, smear themselves with blood, thrust their arms up to the shoulders into the reeking bodies of their victims, the savage barbarity of the wild prairie Indian shows itself in its true colours. Not even a scalp dance over many fallen foes, affords such a terrible picture of degraded humanity as a large band of prairie Indians, some hundreds in number, during and after the slaughter of buffalo in the pound. *Hind's Narrative of the Canadian Red River Exploring Expedition.*

Calendar of Operations.

(*For the ensuing week.*)

PLANT DEPARTMENT.

CONSERVATORY, &c.—All kinds of soil used in potting and shifting should now be laid in without delay, except in cases where it is as yet unfit for storing. Store them up neatly in narrow ridges so as to be safe from wet and yet exposed as much as possible to the action of the air; and as success in plant growing very much depends upon having suitable soil for potting, no trouble or expense that may be necessary to procure this should be spared where well grown specimens are expected. Loam of moderately good quality may be obtained in most neighbourhoods, but good peat is not so easily got; this is absolutely necessary, however, for the growth of choice hard-wooded plants, and should be procured at the proper season so as to have it in a fit state for use at the right time. Stove plants flowering in the conservatory will require attention, especially Achimenes and things of that sort, which should be gone over every day in cloudy weather, carefully picking off decayed flowers, &c. Twiners on the roof, if any, which have done flowering may be thinned out, so as to prevent their shading the house too much, for after this season permanent shade should be avoided. Young stock in cold pits intended to flower next season should be exposed as much as possible in order to ripen the wood.

FORCING DEPARTMENT.

PINERIES.—Those who intend commencing the culture of Pines on the planting out system cannot begin at a more favourable season than the present. The bed should be from 18 inches to 2 feet deep, and should consist principally of good rich mellow turfy loam, well broken up, and carefully intermixed with a liberal sprinkling of clean sand, and a small proportion of leaf soil or good rich fibry peat; for when rough turfy soil is used and the bed is ever, from any cause, allowed to get thoroughly dry, it is very difficult to moisten it again, as the water passes off through the lumps without penetrating them. But if the loam is well broken up and mixed with some leaf soil or peat and sand, it will be found to take water freely enough, and the roots will be as much under command as when the plants are grown in pots. Persons commencing this method of growing Pines should also endeavour to avoid planting out pot-bound plants, for these, whether young or old, seldom strike freely into the fresh soil, and are apt to fruit prematurely; but if such plants must be turned out, then care should be used to make the soil firm about the balls, so as to prevent the water passing off without moistening the balls.

VINERIES.—Every possible attention must be afforded young Vines planted this spring where strong rods are expected. Let a vigorous root action be secured and endeavour to get the wood well ripened.

CUCUMBERS.—Attention should be given daily to these; linings should be renewed when necessary to maintain a steady bottom heat. Stop and thin the shoots, so that they do not get matted together; top dress with rich soil those that have been some time in bearing; water freely and close the frames early in the afternoon; plant out those sown last month, and sow more towards the end of this month, for the winter supply. Keep the plants hardy by giving plenty of air.

MELONS.—These require plenty of air and moisture while the fruit is swelling, and in hot weather the sashes may be drawn off altogether through the day with advantage. Keep the plants free from all useless growth; when the fruit approaches maturity less moisture is needed. If woodlice are troublesome place the fruit on bricks over a shallow pan of water.

FLOWER GARDEN AND SHRUBBERIES.

Go over the flower beds frequently and remedy any defects that may be perceptible without loss of time, for the bedding-out plants are enjoyed but for a comparatively short season; and now that they are in beauty every means should be used to render them as effective as possible by maintaining the most perfect order and neatness. Where the stock is clean and growing vigorously this will involve considerable labour, and it will be necessary to go over the beds, frequently pegging down where necessary and cutting back such of the shoots as may incline to encroach upon the edging of the beds. Advantage must soon be taken of leisure hours to put in cuttings, and when once begun use every possible dispatch with this work until there is a good stock in a fair way for rooting of such things as are known to be difficult to winter except in the shape of well established plants. Keep gravel walks perfectly clean and smooth by weeding, sweeping, and rolling as may be necessary. Keep climbers on walls within due limits.

HARDY FRUIT AND KITCHEN GARDEN.

It may be advisable to go over such trees as are over-luxuriant, and stop about half the shoots, beginning of course with the strongest, for a general stopping at this time would probably be of little further service than to induce the production of a mass of useless spray, whereas stopping the stronger shoots of those which incline to grossness will divert the sap into the weaker ones, which will be strengthened while the buds on the shoots that have been stopped will become full and pump without starting into growth. Should it be found that the roots after stopping incline to start into growth, it will be advisable as soon as the fruit is gathered to open a trench at a moderate distance from the stem of the tree, cutting the stronger roots. This will be of the greatest service in checking growth, and will probably do more towards securing ripe wood than anything else that could be adopted. Get the Strawberry plantation intended to stand for next season trimmed as soon as convenient, cutting off and clearing away the runners so as to afford the leaves plenty of room.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending July 11, 1861, as observed at the Horticultural Garden.

July.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind	Rain.
Friday 5	26	29.278	29.275	71	46	58.5	63	59	S.W.	[illegible]
Satur. 6	27	29.421	29.310	73	53	63.0	62	59	S.	[illegible]
Sunday 7	28	29.510	29.367	75	50	62.5	63	59	W.	[illegible]
Mon. 8	●	29.711	29.636	75	45	60.0	65	60	S.W.	[illegible]
Tues. 9	1	29.868	29.823	78	48	63.0	65	60	N.W.	[illegible]
Wed. 10	2	29.915	29.866	75	40	57.5	65	60	N.W.	[illegible]
Thurs. 11	3	29.912	29.747	74	41	57.5	64	60	N.W.	[illegible]
Average..		29.659	29.575	74.4	46.1	60.2	63.8	59.6		[illegible]

July 5—Cloudy and fine; showery in forenoon; clear and fine at night.
— 6—Rain; fine; rain in heavy showers at night.
— 7—Showery; occasionally fine; overcast, fine.
— 8—Very fine, thunder showers, with lightning at night.
— 9—Overcast; very fine; slight rain; lightning at night.
— 10—Uniformly overcast; slight drizzle; very fine; cold at night.
— 11—Very fine throughout; clear and cold at night.

Mean temperature of the week 2½ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending July 20, 1861.

July.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 14..	76.1	51.7	63.9	13	0.64 in.	—	3	3	1	5	12	10	1
Mon. 15..	76.0	50.4	63.2	18	1.46	1	4	3	—	4	17	[illegible]	1
Tues. 16..	76.3	50.6	63.5	14	1.60	2	3	4	—	2	16	7	1
Wed. 17..	76.1	52.0	64.0	12	0.56	2	—	2	2	4	15	[illegible]	3
Thurs. 18..	74.8	51.2	63.0	18	1.22	—	—	1	—	5	17	[illegible]	4
Friday 19..	72.8	51.0	61.9	20	0.60	2	1	1	1	7	13	[illegible]	[illegible]
Satur. 20..	72.3	51.2	61.7	21	0.72	1	1	3	—	1	17	10	[illegible]

The highest temperature during the above period occurred on the 14th, 1847—therm. 93½ deg.; and the lowest on the 18th, 1851—therm. 39 deg.

Notices to Correspondents.

BOOKS: *G Cross.* By all means study Bentham's Handbook of the British Flora, and, if you can spare the money, take in Sowerby's British Wild Flowers, a beautiful and really good book costing only 3*s.* a month.—*Birmingham.* We cannot say anything in favour of Mr. D.'s books. It is unfortunately too often the case now-a-days that men write on subjects they know very little about.

CABBAGES: *Provincial.* What is called the Battersea, is that usually grown for the London market.

DEODARS: *G E.* Sow your seeds now in pans filled with yellow loam, and place them in a cold frame till they are large enough to transplant out of doors.

GUM IN CUCUMBERS: *E N K*, and *J L D.* Gross feeding combined with a cold damp condition of the earth in which the roots are placed, is a very prolific source of disease of this kind, and a check of any kind, especially if caused by cold and accompanied by undue moisture, is very likely to induce it. The best remedy is the application of genial mild bottom heat, and the use of a free open healthy soil. Perhaps your soil is altogether unsuited to Cucumbers.

INSECTS: *Henry.* Your Peaches are attacked by the Aphis Persicæ. Syringe with lime-water and soap-suds, washing the shoots afterwards with clear water; or can you not invent some plan for fumigating the shoots with Tobacco smoke?

NAMES OF PLANTS: *York.* 1, Hypericum pulchrum; 2, Jasione montana; 3, Hypericum humifusum.—*A Y.* Bromus asper; 2, Glyceria fluitans.—*Old Sub.* 1, Galium palustre; 2, Jasione montana; 3, Rubia peregrina: 4, Senecio Jacobæa.—*W. S.* Holcus lanatus; 2, Alopecurus pratensis; 3, Arrhenatherum avenaceum; 4, Aira cæspitosa.—*C W S.* Not Galium erectum, but apparently G. saxatile, as far as we can judge in the absence of fruit.—*W D F.* It looks like Rumex alpinus, but is not complete enough for positive identification.—*A Subscriber.* 1. Campanula rhomboidalis; 2. Cistus Helianthemum, chocolate-coloured variety; 3. Viola calcarata; 4. Rhodiola rosea. —*W K.* 1, Lastrea decurrens, sometimes called Polypodium decursive-pinnatum; 2. Adiantum Capillus-veneris; 3, Asplenium ebeneum; 4, Pteris geraniifolia.—*F J G.* Periploca græca.

NOTICE TO QUIT: *J R.* We cannot undertake to settle legal differences. You must consult a solicitor.

SEEDS FROM THE FIJIS: *Wrotham.* We have handed them to the Royal Horticultural Society.

VILMORIN: *M J B.* Quai de la Mégisserie.

VINE-GROWING: *Bourton.* Be so good as say where this place is. In Shropshire? Bucks? Berks? or Warwickshire? There is a Bourton in each of those counties. The soil is apparently of the chalk formation of the Lias.

VINES: *Walter.* If you examine the roots you will find them more or less dead or diseased. Shanking is never owing to any other cause than the inability of roots to feed the leaves which feed the berries. If the roots are not dead or injured then you will find that they are affected in some way, as digging down among them will show.

LAWES'S MANURES.

The Manures manufactured by J. B. LAWES for the present season of 1861, are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME £6 6

LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES .. 5 5

LAWES'S BARLEY, GRASS, AND MANGEL MANURES 8 0

These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.

Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.

American and other Cakes at market prices.

Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.

CONCENTRATED TURNIP MANURE, equal in value to the preceding.

Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."

Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

THE LONDON MANURE COMPANY.
(ESTABLISHED 1840,)
Are now prepared to send out the following MANUFACTURED MANURES:—

SUPERPHOSPHATE OF LIME, of best quality.
DISSOLVED BONES, AND BONE MANURE FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN AND ROOTS.
CORN MANURE FOR TOP DRESSING.
MANGOLD MANURE.

They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate to be obtained entirely from Bones.

The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE OF SODA, SULPHATE OF AMMONIA, and every Manure of value.

116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

JOHN FOWLER, JUN., 28, Cornhill, London, E.C.—Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.

Catalogues containing Prices and Testimonials sent post free.

JAMES AND FREDK. HOWARD, Britannia Iron Works, Bedford, Manufacturers of

CHAMPION PLOUGHS	HORSE RAKES
STEAM PLOUGHS or CULTIVATORS	HORSE HOES
HARROWS	SCARIFIERS
	And other Implements.

Catalogues with full particulars sent free on application.

Reaping and Mowing Machines.

BURGESS AND KEY, 95, Newgate Street, E.C. Prizeholders for the best Agricultural Machinery Manufactured.

ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price 42l. 10s.

TESTIMONIALS.

A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following:—

From Mr. JOHN RICHARDS, *Bailiff to* Dr. N. CARNE, *Dimland Castle, Glamorgan.*

"I beg to certify that I have for five years worked Messrs. Burgess & Key's Reaper in my master's Home Farm, and also accompanied it when lent to tenants on the estate. During the above mentioned period the Machine has not cut less than 1,000 acres of all kinds of crops, with the same two knives as first had with the Machine. Dr. N. Carne having given up farming, the machine is now in the hands of his tenant, Mr. D. Thomas, of Llanrwst, and is in excellent order."

M'CORMICK'S REAPER for Manual Delivery. Price 25l.

ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30l.

COMBINED REAPER AND MOWER—Two-Horse Machine. Price 35l.

The last Machine is fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.

These Prices include Packing and Delivery at any Railway Station.

WRIGHT'S STACK PRESERVER.—The frequent loss occasioned through the spontaneous combustion of Hay, Barley, &c., render this unfailing Preserver of the greatest importance to every Agriculturist. It is so simple in its construction and use that it cannot be injured by the commonest labourer, and if used before ignition, is infallible in its results.

When first it is suspected that the rick is too much heated, a chimney should be made in the part of the rick where it is most needed, and loss or deterioration even in colour will infallibly be prevented, and the destructive practice of cutting away a large part of the rick rendered needless. A circular aperture is quickly made by boring with the machine as low in the rick as may be required, adding each length as is found necessary. It is easier to work the handle backwards and forwards than continually round the same way.

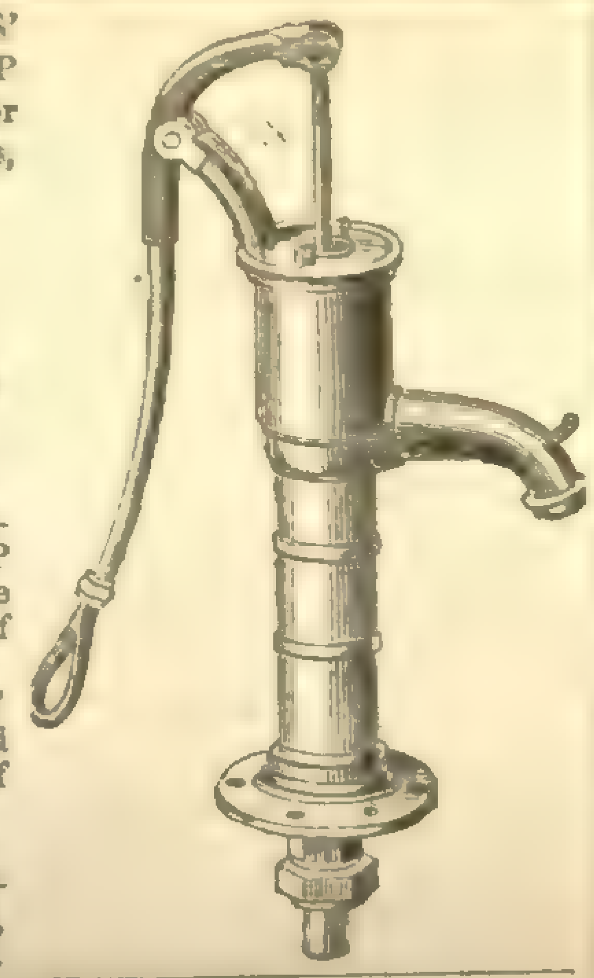
It should be borne in mind that the loss occasioned by stacks destroyed by overheating cannot be recovered from any Fire Office.

The price is so low and the security it offers is so certain and important, as to recommend the possession of it to every farmer. Price in Case, with Lock and Joints, 2l. 5s.

It has been used in the neighbourhood of the Manufacturer for more than 40 years with unfailing success.

Orders accompanied with a Post-office Order for 2l. 5s., payable to JOHN WRIGHT, Ironmonger, Chipping Ongar, will be executed on receipt.

J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25s. 6d. each.



IRON YARD AND GARDEN PUMPS

3 feet 6 inches under spout		
2½	3	3½ inch
43s.	53s.	60s. each.

J. TYLOR and SONS manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.

PUMPS of J. TYLOR & SONS' manufacture to be obtained of Plumbers in all parts of the United Kingdom.

J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

Prices Reduced.

H. J. MORTON AND CO., Galvanised Iron Works, 2, Basinghall Buildings, Leeds.

GALVANISED IRON ROOFING

for Farm Buildings and other Roofs; the cheapest, most durable, and neatest Roofing in use; also Spouting at 10½d. per yard.

WIRE STRAND CABLE FENCING

(formed of Twisted Wires like a rope or cable), the strongest, cheapest, and neatest fence in use, will resist the largest cattle, and will not bend or get out of form by trespassing upon or over. Price, with five lines of the Galvanised Strand, iron main posts, and pronged Standards, 1s. 2½d. per yard.

This fence is far cheaper than posts and rails, or any kind of iron fencing; and possesses four times the strength of solid bars. Will not rust nor corrode. Upwards of 1200 miles of this Fencing supplied.

GALVANISED GAME AND POULTRY NETTING.

Galvanised, 24 ins. wide, 2-inch mesh, 5½d., 7½d., and 9½d. per yard.

Galvanised, 24 ins. wide, 1-inch mesh, 4d., 5d., and 7d. per yard. The Netting made any width, and with openings of any size.

GALVANISED IRON CHAIN CAMP STOOLS & CHAIRS, POULTRY FOUNTAINS & FEEDERS, PRONGED DAHLIA RODS AND ROSE STAKES, &c.

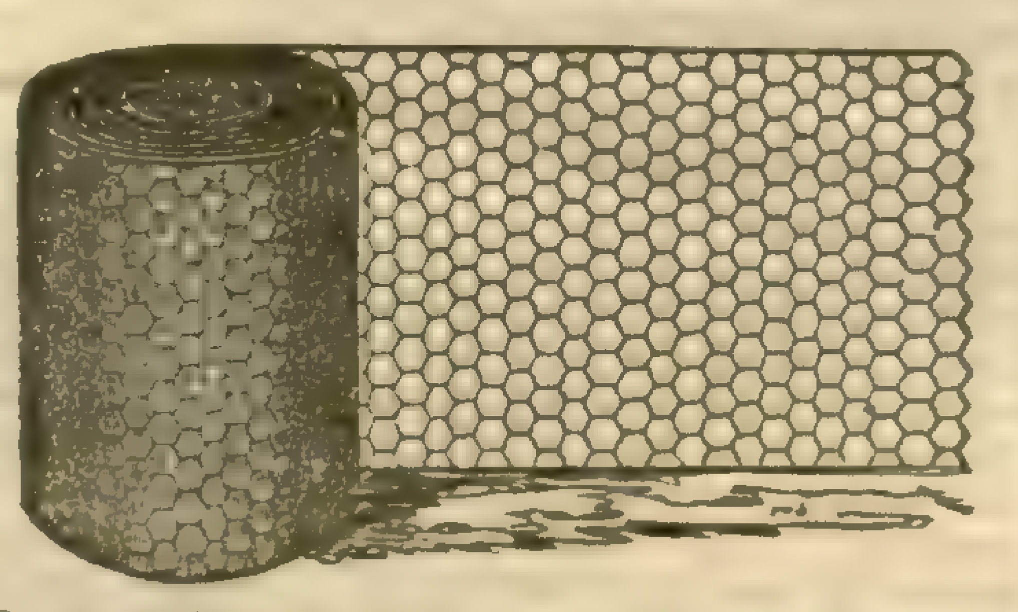
Strong CATTLE HURDLES from 2s. per yard.

PATENT IMPROVED GAS WORKS of all sizes, for the use of Private Houses, Mansions, Railway Stations, Mills, Collieries, Mines, Villages, &c. Works from 10 to 500 lights estimated for. The works can be entrusted to an ordinary labourer.—Apply to

HENRY J. MORTON & Co. 2, Basinghall Buildings, Leeds.

BARNARD, BISHOP, AND BARNARDS, Norwich.

FURTHER REDUCTION IN THE PRICE OF WIRE NETTING.—APRIL, 1861.



BARNARD, BISHOP, and BARNARDS beg to inform their friends and the public that they have made a further reduction in the prices of Machine made Wire Netting, and also that all their Nettings are now Galvanised after being made, which adds much to their appearance, strength, and durability.

	Gauge.	Galvanised. per yard.	Japanned Iron. per yard.
2-inch mesh, 24 inches wide ..	No. 19	.. 4½d.	.. 3½d.
2-inch ,, ,, ,, ..	,, 18	.. 5	.. 4
2-inch ,, ,, ,, ..	,, 17	.. 6½	.. 5
2-inch ,, ,, ,, ..	,, 16	.. 8	.. 6¼
1⅝-inch ,, ,, ,, ..	,, 19	.. 4¾	.. 4
1⅝-inch ,, ,, ,, ..	,, 18	.. 6	.. 4¾
1⅝-inch ,, ,, ,, ..	,, 17	.. 7	.. 5½
1⅝-inch ,, ,, ,, ..	,, 16	.. 9	.. 7

All the above kinds can be made any width (under 6 feet), at proportionate prices.

Strong Galvanised Poultry Netting, 7½d. per yard, 3 feet wide. Galvanised Sparrow-proof Netting for Pheasantries, 11d. per yard, 2 feet wide. Wire Netting of every mesh from half an inch to 6 inches.

Reduced Price of WIRE FENCING, and GALVANISED WIRE ROPE FENCING, suitable for the home trade or the colonies.

Five wires, 3 feet 6 inches high, pronged Standards, 8 feet apart, one wrought iron straining post and straining screws to each 100 yards of Fencing, 10d. per yard.

The same with Galvanised Wire Rope, 1s. per yard.

Illustrated Catalogues, with prices of every variety of Wire Fencing and Wire Netting, forwarded free on application.

☞ Wire Fencing and Netting delivered Carriage Free at all the principal Railway Stations.

"FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.

PROTECTION FROM THE COLD WINDS & MORNING FROST.

"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.

Two yards wide .. .. 1s. 6d. per yard run.
Four yards wide .. .. 3s. per yard.

An improved make, 3 yards wide, 2s. 6d. per yard run.

Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard run.

ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.

"It is much cheaper than mats as a covering."

Land Drainage.

WORKS OF DRAINAGE of any extent are EXECUTED by the GENERAL LAND DRAINAGE AND IMPROVEMENT COMPANY on all descriptions of property, whether freehold, entailed, mortgaged, trust, ecclesiastical, corporate, or collegiate.

Repayment may be made by the Landowner as successive portions of the works are completed; or the actual expenditure, with a commission thereon, may be charged on the property improved, by way of rentcharge on the estate created for various terms of years so as to adapt the rate per cent. of annual charge to the circumstances of the tenants.

No investigation of title being required, or notices given to Reversioners or Mortgagees, no legal expenses are incurred.

Works of Irrigation, Enclosing, Wood Grubbing, Road Making, and Farm Buildings are executed in a similar manner.

Landowners desirous to execute any of the Improvements by their own Agents, and charge the outlay and expenses on the Estate, may obtain Loans for the purpose.

Applications to be made to WILLIAM CLIFFORD, the Secretary, at the Offices of the Company, 52, Parliament Street, S.W.

THE LANDS IMPROVEMENT COMPANY.—Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.

TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &C. IN ENGLAND AND WALES AND IN SCOTLAND.

The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, or any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.

For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

ROYAL AGRICULTURAL SOCIETY OF ENGLAND.—LEEDS MEETING, 1861.

PROGRAMME:—

MONDAY, July 15.—The Implement Yard open from 7 o'Clock in the Morning, at an admission-charge of 5s. for each person.

The Judges to inspect the Live Stock, and to award the Prizes.

At 1 o'Clock (or as soon after as all the Judges shall have delivered in their awards, of which notice will be given), the Cattle Yard will be open without additional payment. Arrangements have been made for distinguishing the Animals that have won the Prizes, immediately the Judges have made their awards. The Show Yard will be closed at 6 o'Clock in the Evening.

TUESDAY, July 16.—The General Show Yard of Cattle, Horses, Sheep, Pigs, Implements, Flax, Wool, Cheese, and Butter, open to the Public from 6 o'Clock in the Morning till 6 in the Evening; admission, 2s. 6d. each person.

WEDNESDAY, July 17.—Public Dinner at 5 P.M., in the Town Hall. The Earl of Powis, President, in the Chair. Tickets, 10s. each, to be obtained of the Secretary.

The General Show Yard open to the Public from 6 o'Clock in the Morning till 6 in the Evening. Admission, 2s. 6d. each person.

Public working of the Steam Cultivators, on land in the neighbourhood of the Town, during such hours as the Stewards may determine.

THURSDAY, July 18. } The General Show Yard open to the
FRIDAY, ,, 19. } Public from 6 o'Clock in the Morning till 6 in the Evening. Admission, 1s. each person.

FRIDAY, July 19.—General Meeting of the Members in the Town Hall, at 11 o'Clock in the Forenoon.

Governors' and Members' Tickets to be had on application to the Secretary.

By Order of the Council,
H. HALL DARE, Secretary.

12, Hanover Square, London, W., July 13.

The Agricultural Gazette.

SATURDAY, JULY 13, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

MONDAY, July 15		Great Meeting at Leeds—the Implement Yards opening on Monday morning, and the Cattle Yards so soon as the Judges have completed their awards
TUESDAY, — 16		On Tuesday evening at a *Conversazione* given by the Mayor Prof. Wilson will read a paper on Steam Cultivation.
WEDNESDAY, — 17		The Society's Dinner will be held on Wednesday at 6 P.M. in the Town Hall.
THURSDAY, — 18		
FRIDAY, — 19		

IT is plain that besides the colours of the painter a good many other things in this world need to be "mixed with brains." Obedience to mere rule,

however strict and careful, will not of itself suffice for the attainment of success. This is as true among farmers as it is among artists; and the past week has afforded a notable illustration of its truth. On Wednesday last the Babraham flock was dispersed to all quarters of the earth by Messrs. STRAFFORD and CARTER JONAS; and the effect of "brains"—the only thing that Mr. JONAS WEBB ever crossed his sheep with—was shown in the unprecedented prices which were realised.

We last week gave a number of particulars in the past history of the Babraham flock, and we this week give a full report of the sale—persuaded that large as is the portion of our space which it must occupy, it is right that the *Agricultural Gazette* should contain a record in detail of what must prove a great landmark in the history of the Southdown breed of sheep.

It will be seen by a reference to our report that all the leading Southdown breeders of the country were present or were represented at the sale last Wednesday; and foreign Governments as well as private flockmasters of other countries were also present by their agents. In addition there were several thousands of agriculturists on the ground, attracted only by the fame of the owner and his flock, and by the certainty that the day was to prove memorable in the history of English agriculture.

There never was a keener international contest, and there cannot be a doubt that many of the best-bred sheep in England are to leave our shore, as its result. It is a fortunate thing, however, for the country that the circumstances, the skill and resolution, and the "brains" to which we owe them are left behind, able to put others of equal value in their place. The highest priced ram, No. 89, a two-shear sheep, was bought for 260 guineas by Mr. HUDSON, of Castle Acre, for Mr. J. C. TAYLOR, of Holmdale, New Jersey, U.S. On the other hand, the highest priced ewes —Lot 6, a pen of five shearling sheep— were bought by Sir THOMAS LENNARD, Bart., for 34 guineas apiece, after a sharp competition with French and German agents. In both these cases the price is, we believe, unprecedented in the history of the breed. Other noteworthy particulars will be gathered from a perusal of the report; the averages stand as follows:— 99 2-year old and aged rams made 3052*l.* 7*s.*, or 30*l.* 16*s.* 8*d.* each—three of their number selling for 100 guineas and upwards each, and one realising 260 guineas: 199 shearling ewes made 2203*l.* 19*s.*, or 11*l.* 1*s.* 5*d.* each—no fewer than 120 of them realising more than 10*l.* each, and five of them making 34 guineas apiece; 109 shearling rams made 2710*l.* 1*s.*, or 24*l.* 17*s.* 3*d.* each, two of them realising upwards of 100 guineas; 105 2-year-old ewes made 7*l.* 15*s.* each; 115 3-year-old ewes made 6*l.* 4*s.* a piece; 230 full-mouthed ewes made 4*l.* 11*s.* 4*d.* each; and 110 aged ewes made 3*l.* 12*s.* 4*d.* apiece. In all 967 sheep were sold for 10,922*l.* 2*s.*, or 11*l.* 5*s.* 10*d.* each; and Mr. STRAFFORD, who with Mr. CARTER JONAS conducted the sale, may be congratulated on having his name connected with a sale which will stand first among those of English flocks, as that of Tortworth, conducted by the same auctioneer, does among sales of English herds.

MR. BRANDRETH GIBBS is once more in his glory. He has again organised what will prove the most successful meeting the Royal Agricultural Society has ever known. The shimmer of the white-roofed tents in the valley of the Aire tells where the sisters—Manufactures and Agriculture —embrace upon their first meeting. All is prepared for a great display. The country will visit the busy, populous, thriving town; the town enjoy its holiday in the country, and return to its vocations with a truer sense of the value of agriculture, and of the great intelligence of those who follow country pursuits. The farmer will see in Leeds what becomes of his wool and of his Flax, of his Wheat and Barley. The manufacturers and operatives will enter the 25 acres enclosed by the Society, and saunter along a row 1½ mile long of machinery that is new to them; and they will admit the evidence presented there of an intelligent progress in the field quite equal to anything Leeds can boast of in her factories.

The same power which is developing the energies of the town is developing those of the country. The self-working implement has gradually filled up the place of those who have gone to the gold fields of Australia and elsewhere, and thus the Census of the year tells us of diminished rural population in the face of better and more extensive culture of the land than was ever known before.

This development is strikingly apparent in the present results of steam culture, which has within six years made a most enormous stride, and from the Leeds trial field will receive an impetus which no amount of prejudice will or can withstand.

Those who look through our report in another column will acknowledge that there is reason enough for congratulation. The question has no longer to be decided—"Is steam-power an economical substitute for horse-power for tillage purposes?" for every one is convinced that now steam-power is the only appliance by which the latent fertility of our stiff, cold, clay lands can be educed. And those who take a review of the 5488 implements of the Leeds Show will have the conviction impressed more and more deeply upon them that a tremendous stride has been made since the farmers were driven to rely upon their own efforts and ceased to hang listlessly upon "expectations."

For its own sake the Society has done well to pitch its tents at Leeds. Their stands and cattle sheds will be thronged by intelligent visitors from morning till night. The population of Leeds alone is 207,000, and it is surrounded by "little villages," many of which number 8000, 10,000, and 12,000 inhabitants. And besides them there are lines of railway stretching on all sides which will bring thronging crowds of people desirous to share in the pleasures of the meeting. The steam trials have been unwontedly successful. In the other classes competition is very strong. The Show will be more than one-fifth larger than that at Canterbury. Nearly all the recusant implement manufacturers have returned to their first love, though she is but an arbitrary and perverse mistress.

REAPING MACHINES IN EAST LOTHIAN.

[The following letter from an agriculturist in East Lothian to a friend in Herefordshire, has been handed to us for publication.]

To your inquiry about reaping machines, and the opinions of our farmers regarding such implements, I fear that nothing very decided about the superiority of any particular machine can be stated.

Two very successful competitions took place during last harvest, one at Longniddry in this neighbourhood, and another at Clefton, in West Lothian. In both instances all the machines worked throughout a long trial without either stoppage or breakage. But let me first state the ordeal to which the reapers were subjected.

The test of excellence was the manner in which the work was performed. Now in every case this was owing far more to the expertness of the people attending the machine than to the machine itself; and it sometimes happened that the reaper which made the best work and the reaper which made the worst were identical in every respect. In neither of the competitions alluded to had the ground been prepared for machine reaping, and occasionally a reaper was slightly affected by coming in contact with a stone; but the injury did not arise from any defect in the reaper, but to ill-luck in the allotted space.

Our friend Mr. J—— H—— thinks Gardner & Lindsay's reaper the best which appeared at Longniddry.

Mr. J—— T—— uses both Bell's and Gardner & Lindsay's reapers, but gives a decided preference to Bell's. He says that Bell's reaper with a delivery like the dancing shakers of the threshing machine (Dockery's shaker) would form the best reaper, and he has taken steps to construct one.

Mr. H——, of H——, has for years past cut all his crops with four of Bell's reapers, the ground being hilly, and extending to nearly 1000 acres yearly.

Mr. S—— S——, from his experience of the past harvest, prefers Bell's reaper to Gardner & Lindsay's.

Mr. J—— T—— thinks Douglas of Kirkaldy's reaper the best which appeared at Longniddry. It is characterised by a self-delivery in sheaf, but the delivery was not complete, and many people considered Douglas's machine the coming reaper.

Mr. J—— H—— prefers Halliday's reaper with a tilting board resembling Hussey's.

Many more agriculturists of our acquaintance could be brought forward to testify to the reaping machine, but as a general rule every person is partial to the reaper which he himself uses.

Mr. A—— H——, who furnished the crops for the competition at Longniddry, and closely attended on the competition, says that four or five reapers performed equally well, and that it is immaterial which of them is selected to operate.

Mr. A——, who furnished crops for the West Lothian competition, and who obtained the first and second premiums with Gardner & Lindsay's reaper, says that he prefers the reaper made by Kemp, Nicholson, & Murray of Stirling to all others.

Mr. J—— M—— thinks Cuthbert's two-horse reaper the best, chiefly on account of its lightness of draught and its adaptation to hilly land. He also says that Burgess & Key have sent out an excellent light reaper.

Mr. G—— G——, who acted as one of the judges at Clefton, and who had a good deal of controversial correspondence regarding it, told me that he considered four or five of the reapers equally good, and that any difference in their performances was owing to the people attending them.

Mr. P—— M——, also a judge at Clefton, told me in Edinburgh Corn Exchange, that he considered Kemp, Nicholson, & Murray's, and Cuthbert's, the best reapers, but could not decide between the two, and on calling three or four farmers to his aid, we found that no two of them agreed in opinion.

I myself witnessed the competition of reapers at Longniddry, and came to the conclusion that four or five of the reaping machines are equally effective. No doubt the driving principle of the machinery differs in some, and so also does the principle of delivery; and in these respects must the superiority of one reaper over another lie. I did not minutely examine the driving gear of all the reapers nor their mode of delivery; and even if I had done so, my imperfect knowledge of mechanics might not have enabled me to decide correctly. The tilting board for assisting to sheaf is in great favour, but there are certain states of crops as well as of weather when it is proper to lay the cut grain in swath, so it is desirable that a reaping machine should either sheaf or swath the crop at pleasure, but no such reaper has appeared.

It may now be held as certain that the cutting of four or five different reapers is equally good, perhaps faultless; that all of them may be constructed of the same materials, and of any required size, and that none of them are liable to break nor difficult to repair. I saw reapers going empty as well as cutting the crop across ridges, while the horses were trotting.

It seems to me of no great consequence whether a reaper only cuts one way or cuts both in going and coming across a field, because in the one case double the number of hands would be required, while in the other the horses have a relaxation from labour. From nine to twelve good hands are required to bind and stook to a sheafing reaper, cutting one way at ordinary speed. With an increase of speed there require to be additional hands to keep all tidy. Two machines cutting but one way will do considerably more work than a machine cutting both going and coming, while the assisting hands perform their tasks more satisfactorily. The reaper which cuts one way could be employed as a rake in returning, provided that care is taken to place the stooks in a straight line.

In East Lothian nearly two-thirds of crop 1860 were cut by reaping machines, and I now consider them to be fairly established as an implement of the farm, and that their use is likely to extend yearly. The position which the reaper has now taken with us is perhaps less owing to the improvements which the machine has recently undergone, than to the prejudice against softening down. Formerly nearly all of the farm servants, and the whole of the itinerating harvesters were hostile to the reaper. Now, the ploughmen are interested in its success, and all hands engage willingly in performing their respective tasks. I cannot conclude without saying, that however well the reaper may cut and lay down the crop, the machine is so unwieldly as to be entirely out of date.

DISPERSION OF THE BABRAHAM FLOCK.

ON Wednesday last this celebrated flock of Southdown sheep was sold by auction by Messrs. Strafford and Carter Jonas. The weather, which had been wet before the hour of commencement, cleared and was delightful during the remainder of the day. Among the spectators on the ground were the owners or representatives of probably nearly every Southdown flock of any distinction in the kingdom. The Dukes of Bedford, Newcastle, Devonshire, and Richmond, the Marquis of Bristol, the Earls of Radnor, Sandwich, Falmouth, Yarborough, and Winchelsea, Lords Braybrooke, George Manners, St. Leonards, Sondes, Chesham, Walsingham, Feversham, and North, were among the purchasers. Lady Pigott and Lady Granville have also bought some of the lots; and among professional men, Messrs. Rigden, Lugar, Waters, Torr, Samuel Jonas, S. and H. Webb, Gorringe, Cane, Scott Skirving, Phillips of Wantage, and many others, were present as buyers. Many foreigners were on the ground, and carried off some of the best sheep. Barons Nathusis, Jagow, &c.; Herren Zoepritz, Fischer, Zimmerman, and Losser from Germany; Count Bouillé; MM. Malet, Zolichy, De Trehonnais, Hamot; Messrs. Taylor of New York

White of Buenos Ayres, and Philpott of Australia, have carried away a large portion of the flock. After the sale of the older Rams and Shearling Ewes—about 1500 sat down to luncheon under the presidency of Mr. Stratford the auctioneer. Business was resumed about half-past 3 o'clock, and completed by half-past 7, a very large portion of the company remaining till the close.

In all 968 sheep were sold; 99 two-year-old and aged rams fetched 3052*l.* 7*s.*, 109 shearling rams realised 2710*l.* 1*s.*, 199 shearling ewes made 2203*l.* 19*s.*, 105 two-year-old ewes were sold for 813*l.* 15*s.*, and 455 older ewes realised 2142*l.* The whole of the Babraham flock above the age of lambs was thus disposed of for the sum of 10,922*l.*, averaging 11*l.* 5*s.* 8*d.* apiece. The lambs of the year remain on hand, to be disposed of next year, when Mr. Jonas Webb will finally give up that connexion with Southdown breeding which has made his name so widely and so honourably known.

The following is a complete list of the flock, their purchasers and prices:—

I. TWO-YEAR-OLD AND AGED RAMS.

No. on Catalogue.	Age years	Purchasers.	Price.
			Guineas
1	6	Mr. Hutchinson	28
2	5	Mr. Gorringe (Sussex)	21
3	"	Mr. Wood	42
4	"	Baron Nathusis	21
5	4	Mr. Henry Webb	10
6	"	Herr Zimmerman	23
7	"	Lord Feversham	32
8	"	Duke of Newcastle	21
9	"	Mr. Henry Webb	25
10	"	Mr William Taylor	33
11	"	Mons. Frederick Hamot	26
12	"	Mr. Davis of Wenlock	23
13	"	Mr. Livesey	14
14	"	Lord Chesham	28
15	"	Mr. Samuel Webb	21
16	"	Mr. Henry Webb	10
17	"	Duke of Newcastle	18
18	"	Mr. Burgess (Blandford)	13
19	"	Sir R. Throckmorton	42
21*	"	Mr. Gingell (Ongar)	12
22	"	Duke of Devonshire	100
23	"	Mr Henry Webb	16
24	"	Sir R. Throckmorton	32
25	"	Mr. Samuel Jonas	15
26	3	Mr. Ashby (Eastbourne)	14
27	"	Mr. Lawrence (Cirencester)	16
28	"	Mr. Stenning (Eastbourne)	17
29	"	Lord Sondes	19
30	"	Baron Nathusis	15
31	"	Mr Filder (Eastbourne)	12
32	"	Mr Slater	10
33	"	Mr Everington	10
34	"	Duke of Bedford	32
35	"	Mr Sworder	11
36	"	Herr Zoepritz	31
37	"	Mr. Filder	18
38	"	Mr. Webb	12
39	"	Mr. C Turner (Lincoln)	33
40	"	Mr Walton (Wisbech)	14
41	"	Baron Nathusis	24
42	"	Mr John Webb	16
43	"	Mr John Webb	16
44	"	Mr. Lugar	30
45	"	Mr. Sexton (Ipswich)	26
46	"	Mr. Rigden (Sussex)	62
47	"	Mr Disburn	70
48	2	Mr. John Webb	20
49	"	Mr. Scott Skirving (E. Lothian)	10
50	"	Mr. Hen. Webb	16
51	"	Mr. Dashwood	17
52	"	Mr. Wm. Taylor (Bristol)	20
53	"	Mr Jones (Fakenham)	22
54	"	Herr Zulichy (Prussia)	21
55	"	Mr H. Thurnall	35
56	"	Sir J. Hampden	17
57	"	Herr Zulichy (Prussia)	13
58	"	Mr. Bullock	11
59	"	Baron Jagow	31
60	"	Mr. Bosanquet	16
61	"	Mr. Philpott (Australia)	15
62	"	Mr Farquharson	29
63	"	Mr Bosanquet	24
64	"	Mr Filder	20
65	"	Mr. J. O Parker	27
66	"	Lady Grenville	18
67	"	Mr Garrett	20
68	"	Mr. John Webb	18
69	"	Baron Jagow	15
70	"	Mons. de la Trehonnais	12
71	"	Mr Purvis	13
72	"	Mr. Ashby	23
73	"	Mr C Turner	30
74	"	Mr. Colvin	20
75	"	Mr Philpott (Australia)	20
76	"	Earl of Sandwich	17
77	"	Mr Bullock	15
78	"	Mr. Crisp	70
79	"	Mr. Sewell	15
80	"	Mr Farquharson	30
81	"	Mr. Philpott (Australia)	31
82	"	Ditto Ditto	25
83	"	Mr Henry Webb	37
84	"	Herr Zoepritz (Germany)	27
85	"	Herr Losser (Prussia)	26
86	"	M. Hamot (France)	125
87	"	Mr S. Webb	22
88	"	Baron Nathusis	51
89	"	Mr J. C. Taylor (U.S.)	260
90	"	Lord Winchelsea	45
91	"	Herr Fischer (Germany)	51
92	"	Mr. Jones (Norfolk)	86
93	"	Mr. Richardson	21
94	"	Lord Radnor	35
95	"	Mr Hubbard	41
96	"	Marquis of Bristol	25
97	"	Lord Winchelsea	30
98	"	Mr. Nisbet Hamilton	20
99	"	Herr Zoepritz	44
100	"	Herr Zulichy	20

* No. 20. Ill and not offered.

The sum received for 99 old rams was 2907 Guineas—3052*l.* 7*s.*, or 30*l.* 16*s.* 8*d.* each.

YEARLING EWES.

Number on Catalogue.	Number of Sheep.	Purchasers.	Per head.	Total.
			Guis.	Guis.
1	5	Baron Nathusis	20	100
2	5	Baron Jagow	12	60
3	5	Lord Braybrooke	13½	67½
4	5	Mr. Philpott (Australia)	12	60
5	5	Herr Zoepritz	11½	57½
6	5	Sir T. Lennard	34	170
7	5	Mr. Dulany (U.S.)	13	65
8	5	Mr. Philpott (Australia)	13½	67½
9	5	Lord St. Leonard's	16½	82½
10	5	Mr. Dulany (U S.)	13	65
11	10	Lord Falmouth	10½	105
12	10	Mr. Richardson	11	110
13	10	Duke of Devonshire	12	120
14	10	Mr. Philpott (Australia)	10½	105
15	10	Herr Fischer (Germany)	11	110
16	10	Mons. Malet	10½	105
17	10	Herr Meyer	10	100
18	10	Mr. Rigden	8	80
19	10	Lord Falmouth	7	70
20	10	Ditto	7½	75
21	10	Mons. de la Trehonnais	7	70
22	10	Mr. Jones (Norfolk)	6½	65
23	10	Count Bouillé	7	70
24	9	Baron Nathusis	6	54
25	10	Lord Falmouth	6½	65

199 Shearling Ewes made 2099 Guineas—2203*l.* 19*s.*, or 11*l.* 1*s.* 5*d.* each.

SHEARLING RAMS.

Number on Catalogue.	Purchasers.	Per head.
		Guineas.
101	Mr. Jones	28
102	Mr. Henry Webb	25
103	Mr. Dulany	74
104	Mr. Henry Webb	30
105	Mr. Farquharson	20
106	Mr. J. C. Taylor (U.S.)	55
107	Mr. Farquharson	110
108	Lord George Manners	41
109	Mr. J. C. Taylor (U S)	100
110	Mr. Howard (Bedford)	25
111	Lord Yarborough	25
112	Duke of Newcastle	38
113	Marquis of Bristol	23
114	Mr. Hubbard	36
115	Herr Fischer	34
116	Mr. John Webb	21
117	M de la Trehonnais	14
118	Mr. Page, of Bradwell	16
119	Mr. C. Howard (Bedford)	25
120	Mr. C. Howard, ditto	22
121	Mr. Woolston (Wellingborough)	16
122	Mr Filder (Sussex)	20
123	Count Bouillé	80
124	Mr. Garrett	14
125	Mr Hubbard	30
126	Lord Sondes	20
127	Mr. Marjoribanks	31
128	Mr. Ashby	15
129	Lord Chesham	24
130	Duke of Richmond	72
131	Mr. Ashby	16
132	Lord North	31
133	Mr. Bell (Dorsetshire)	37
134	Mr Ashby	25
135	Lord Walsingham	42
136	Lord Winchelsea	28
137	Duke of Richmond	40
138	Mr. J. Clayden, of Littlebury	26
139	Mr. Everett	26
140	Mr. Sexton	24
141	Mr. Jepson	26
142	Mr. Martin Slater	18
143	Duke of Newcastle	40
144	Mr. Davidson (Wenlock)	16
145	Mr. Joynson	18
146	Mr. Philipps	14
147	Mr. Tomline (Orwell Park, Ipswich)	27
148	Lord Falmouth	46
149	Mr Martin Slater	20
150	Mr. Tomline	30
151	Mr. Biddell	16
152	Mr. Philipps (Barton)	13
153	Mr. White (Buenos Ayres)	17
154	Ditto ditto	24
155	Sir Willoughby Jones, Bart.	32
156	Mr. Hubbard	32
157	Mr. Adeane	16
158	Mr. White	16
159	Ditto	21
160	Mr. Samuel Jonas	21
161	Mr. White (Buenos Ayres)	14
162	Mr. Sewell	14
163	Duke of Newcastle	18
164	Mr. H. Waters	14
165	Mr. S. Clayden	14
166	Mr. Ashby	15
167	Mr. Ruttley (Kent)	16
168	Mr. Taylor (Bristol)	14
169	Mr. Biddell (Playford)	11
170	Lord Sondes	13
171	Lord Radnor	26
172	Mr. Burgess	14
173	Mr. White (Buenos Ayres)	22
174	Mr. Henry Waters (Sussex)	14
175	Mr. Ashby	12
176	Mr. Stone	13
177	Mr. Page (Bradwell)	11
178	Mr. Biddell (Playford)	10
179	Mr. T. Webb	9
180	Mr. Hodgson	23
181	Mr. Biddell (Playford)	12
182	Mr. Everett	36
183	M. Trehonnais	10
184	Mr. Scott Skirving (East Lothian)	37
185	Mr. Biddell (Playford)	11
186	Mr. Ashby	11
187	Mr. S W. Dashwood	11
188	Mr. Henry Waters	10
189	Mr Everett	26
190	Mr Ashby	16
191	Dead	
192	Lord Falmouth	17
193	Mr. S. Webb	11
194	Mr. Taylor (Bristol)	13
195	Mr. Stone	22

SHEARLING RAMS—*Continued.*

Number on Catalogue.	Purchasers.	Per head.
		Guineas.
196	Mr. T. Webb	10
197	Mr. Brown (St. Neot's)	9
198	Mr. Cane (Sussex)	8
199	Ditto ditto	36
200	Ditto ditto	16
201	Ditto ditto	20
202	Mr. Martin Slater	8
203	Mr. Scott Skirving (Haddington)	11
204	Mr. Dashwood	13
205	Mr. Samuel Webb	20
206	Mr. Henry Webb	12
207	Mr. Gingell (Ongar)	14
208	Mr. Henry Webb	14
209	Mr. Lovell	11
210	Mr. T. Webb	10

109 Shearling Rams made 2581 Guineas—2710*l.* 1*s.*, or 24*l.* 17*s.* 3*d.* each.

TWO-YEAR OLD EWES.

Number on Catalogue.	Number of Sheep.	Purchasers.	Per Head.	Total.
			Guis.	Guis.
26	5	Mr. John Waters	7	35
27	5	Mr. Thorne (U.S.)	13½	67½
28	5	Herr Fischer	10½	52½
29	5	Mr. Taylor (Bristol)	7½	37½
30	5	Mr. J. C. Taylor (U.S.)	7½	37½
31	5	Mr. Thorne (U.S.)	12	60
32	5	Herr Zimmerman	9	45
33	10	Mr. Taylor (Bristol)	6	60
34	10	Herr Zoepritz (Germany)	5½	55
35	10	Mr. John Waters	6½	65
36	10	Herr Fischer	7	70
37	10	Mr. Perkins	5½	55
38	10	Mr. Scott Skirving	7	70
39	10	Baron Nathusis	6½	65

105 2-year-old Ewes made 775 Guineas—813*l.* 15*s.*, or 7*l.* 15*s.* each.

THREE-YEAR-OLD EWES.

Number on Catalogue.	Number of Sheep.	Purchasers.	Per Head.	Total.
			Guis.	Guis.
40	5	Mr. Rigden	10	50
41	5	Mr. Gingell (Ongar)	7½	37½
42	5	Sir Thos. Lennard, Bart.	8	40
43	5	Mr. Bosanquet	6½	32½
44	5	Mr. Sexton (Suffolk)	7½	37½
45	5	Ditto ditto	6	30
46	10	Mr. White (Chevington)	6½	65
47	10	Ditto ditto	5	50
48	10	Duke of Devonshire	7½	75
49	10	Mr. Achurch (Huntingdon)	5½	55
50	10	Mr Taylor (Bristol)	5½	55
51	10	Mr. Perkins	4½	45
52	10	Lord Sondes	4	40
53	10	Mr Hodgson (Gilson Park)	4½	45
54	5	Mr Slater	4½	22½

115 3-year-old Ewes made 680 Guineas—714*l.*, or 6*l.* 4*s.* each.

FULL-MOUTHED EWES.

Number on Catalogue.	Number of Sheep.	Purchasers.	Per Head.	Total.
			Guis.	Guis.
55	5	Duke of Devonshire	6½	32½
56	5	Mr. John Clayden	5	25
57	5	Mr. Bosanquet	4	20
58	5	Mr. Hutchinson (Peterhead)	7	35
59	5	Mr. Taylor (Bristol)	4½	22½
60	5	Mr. Achurch (Essex)	6	30
61	5	Mr. Henry Webb	5½	25
62	5	Mr. A. Church	6	30
63	5	Mr. J. Waters	5½	27½
64	5	Mr. S. Jonas	4½	22½
65	10	Mr. Scott Skirving	4	40
66	10	Mr. H. Webb	4½	45
67	10	Mr. S. Jonas	4	40
68	10	Mr. H. Webb	4½	45
69	10	Lady Pigott	4	40
70	10	Ditto	4	40
71	10	Mr. S. Webb	3½	35
72	10	Lady Pigott	3½	35
73	10	Sir T. Lennard	7½	75
74	10	Mr. Dimsdale	3½	35
75	10	Mr. Scott Skirving	5	50
76	10	Sir T. Lennard	3½	35
77	10	Mr. S. Webb	3½	35
78	10	Mr. Page (Bradwell)	3½	35
79	10	Mr. Ostler	3½	35
80	10	Mr. S. Webb	3½	35
81	10	Mr. Hodgson (Gilson Park)	3½	35
82	10	Mr. Henry Webb	4	40

230 Full-mouthed Ewes made 1000 Guineas—1050*l.*, or 4*l.* 11*s.* 4*d.* each.

BROKEN-MOUTHED EWES.

Number on Catalogue.	Number of Sheep.	Purchasers.	Per Head.	Total.
			Guis.	Guis.
83	10	Mr. Henry Webb	3	30
84	10	Mr H. Thurnall	3	30
85	10	Lady Pigott	3	30
86	10	Mr. Henry Webb	4	40
87	10	Mr. Ford	3½	35
88	10	Ditto	4½	45
89	10	Mr. Henry Webb	3	30
90	10	Mr. Gorringe	3	30
91	10	Mr. Sexton	3	30
92	10	Mr. Henry Webb	3	30
93	10	Ditto	3	30

110 Old Ewes made 360 Guineas—378*l.*, or 3*l.* 12*s.* 4*d.* each.

THE REAPING MACHINE.

The Royal Agricultural Society have acted wisely in dividing reaping machines into three classes, viz., self-delivery, manual-delivery, and combined reapers and mowers; for each of which they offer liberal prizes, by which system much more satisfactory results will be obtained, as the judges will have less difficulty in coming to a decision, and it will also prevent the absurd and contradictory awards which so puzzle and mislead rather than convince those who do not know something of the matter. A proper system of classification will also check any partiality on the part of those advocating swathe-delivery against sheaf-delivery machines, and *vice versâ*; but indeed it is not for the judges, but for the public themselves to decide on the system best suited to their respective farms, according to special and peculiar circumstances, after which it becomes the business of the judges to give their opinion as to the best machines in each class separately, after an efficient trial. The ensuing Leeds show in July will afford a magnificent and unprecedented opportunity for a thorough inspection of reaping as well as other machines; and being within such easy access, I trust that the farmers of this county will not fail to avail themselves of this rare treat. The reaping machine is now an established and necessary implement of the farm, but the great question in the minds of those not yet possessing one is, "Which ought we to have?" To simplify this question the principle of delivery must first be settled, and this involves a still further inquiry as to the extent of occupation of arable land; its geological position, *i. e.* whether hilly or flat; whether it is drained, and if not; as to its ridges and furrows; the number of regular labourers on the farm as well as attainable labour, and other minor points. For large farms I am an advocate for swathe-delivery, because I consider it best suited to our climate; but in making this assertion, in the presence of so many wedded to the sheaf-delivery principle, I am perfectly aware that I am treading on dangerous ground; however, I anticipate that this point alone will furnish a subject for discussion, which is so much required in this Club, and so essential to the healthy tone of every Farmers' Club. I will, however, proceed to give you my reasons, in as literal a manner as possible, why I consider the swathe as a superior system of delivery to the sheaf, and especially on large farms. At first thought I might have imagined that by cutting and sheafing the corn in one process, a great deal of unnecessary extra labour and trouble would be saved, as the sheaves would then be bound at once and put into stook: a mode of reasoning which seems very plausible and satisfactory in the case of a tropical climate, or even in our own in the event of a fine harvest; but on further deliberation—still observing the question of climate as *par excellence* my guiding star—I would begin to see that if corn was cut either in a slightly green state, or in the smallest degree damp, and in this condition delivered in the compact form of a sheaf, and immediately tied up—as must be the case where a back delivery with tipping platform is used—and then put into stook, I might wait till the end of harvest before it would be fit to stack, and even then the probability is that it would have a fusty smell, and be moulded in the centre of the sheaf. In corroboration of this, a friend of mine tells me that during the two wet harvests of 1856 and 57, he used a small sheafing machine, in consequence of which the corn never became dry in the middle of the sheaf, from the fact of its being delivered in the form of a sheaf, in so compact a manner that the wind was unable to penetrate it, whereas that even cut by the sickle, or mown, and afterwards sheafed, was in a fair condition for the season, therefore he was obliged to lay the machine aside for the future. Now, what is the effect of corn being delivered in the form of a swathe in damp weather? Why, that it falls from the platform by its own weight, assisted by a gentle vibratory motion, in a finely divided and uncompressed condition on the stubble, which bears it off the ground, and thus allows the air to permeate the whole. If this be permitted to remain for five minutes prior to being sheafed, it must have a beneficial effect; but supposing it be left for three or four days in a fine season, it may then be sheafed, thrown into heaps, and carted to the stack at once, without the intermediate process and trouble of stooking, being a system which we frequently pursue at Woodhorn. Again, in wet weather, the rain runs directly through the swathe, owing to its being deposited so lightly and resting on an evenly cut stubble; the slightest breeze or faintest glimmer of sunshine soon drying up the moisture, leaving the corn generally in an uninjured condition; in proof of which I may instance the past harvest of 1860, when, having a large breadth of Wheat ripening simultaneously, I was obliged to keep my machine at work for very long hours, even cutting faster than I could take it up; and when thus engaged a heavy rain came, whilst one field was still lying in swathe, in which position it had to remain for upwards of a week, till the weather cleared up, when we, of course bound it without further loss of time, throwing the sheaves into heaps, and carting them to the stack immediately. And what was the result of this exposure to a week's annoying rain? that I have sold this very Wheat within this last month, in this market, for 15*s.* 6*d.* and 15*s.* 9*d.* per boll (62*s.* and 63*s.* per quarter.) It is a mistake and a short-sighted notion, then, I maintain, to imagine that because corn is sheafed immediately after a sheafing machine, and put into stook, it is in a safe position, as we are told by the advocates of the system, and I am even prepared to assert that corn cut by a swathe-delivery machine, and stooked immediately, will be fit for the stack three days earlier at least than that cut and stooked at the same time by a sheaf-delivery machine; and, consequently, the risk of injury to which the latter is liable, by a prolonged exposure to the weather, must be increased. On a large farm, also, the whole of your hands are employed, even children, and you are, at the same time, independent of extra labour; whereas, in using a small sheafing machine, a very limited number of hands only are necessary for one machine, and if you increase the number of your machines in proportion to the extent of corn to be cut, you then multiply the wear and tear of your working parts, and in case of an accident or breakage, your hands come to a stand still. We harvest the whole of our crop with our own staff, which consists of from 27 to 30 hands; these work in gangs of three, and are arranged in systematic order, as follows:—1. A boy or girl to make the bands; 2. A woman to sheaf the corn with long teethed rakes; and 3. A man to bind and stook; by this means nine or ten swathes are taken up at once in a direction contrary to the course of the machine, and I find that each gang can take up—according to the manner in which it is laid—from 1 to 2 acres per day, at a cost of about 4*s.* per acre. I may here mention that a self-sheafing rake—independent of a reaping machine—has been lately invented by a Mr. Rix, a Hertfordshire farmer, and very successfully used in Norfolk. I have one of them, but have not yet tried it. Another advantage of swathe-delivery is, that you may start your machine as early in the morning as you like, and thus have a quantity cut and ready for sheafing when your labourers turn out; or in case of a heavy dew, it may be cut and left till the middle of the day to dry, which cannot be conveniently done by a sheafing machine. The vexed question of the comparative draught of the two systems, is one involving many points which yet require investigation, having frequently been so artfully disguised as to mislead the judges and public on this all-important point. The power consumed in self-delivery machines is in the weight of the machine,—the cutting, and the delivery;—the proportion due to each varying according to the state of the ground and crops, but in every case the delivery must consume as much as the cutting. Taking for granted then that the power required for delivery is equal to the power required for cutting, it will readily occur to any one how unreasonable it is to place two machines of different capabilities side by side in a trial of draught, viz:—No. 1. A self-delivery machine cutting 5 feet 8 inches; No. 2. A manual delivery machine cutting 4 feet 10 inches, to each of which is applied the same power, viz., two horses; and it cannot be a matter of surprise to hear as the result of this trial, that No. 2 "is not so heavy on the horses as No. 1 (the cause of this difference is not asked) because not only is No. 2 doing just half the work, but it is cutting 10 inches less than No. 1. In No. 2 the corn is simply cut, being delivered by manual force, whereas in No. 1 it is both cut and delivered by the machine; and, therefore, supposing that they both cut the same width, and that you even allow three horses for the self-delivery machine, there would then be a saving of 50 per cent. in favour of self delivery. Besides this, from what little experience I had during two seasons with manual delivery machines, I have come to the conclusion that this important point in reaping—the delivery—is a Herculean task, never intended for human hands to accomplish; and it is a somewhat striking fact, that we seldom hear of a man laying aside a self, or swathe delivery machine in favour of manual, or sheaf-delivery, whereas the reverse change is not unfrequent. In the case of small farms, or small fields, and under other special circumstances, I do not intend my remarks to apply; however, I conceive that the great hindrance to a more general use of the larger self-delivery machines exists in the first cost, which is considerable; but I may cheer those hesitating individuals who do not yet own a machine, by telling them that I cleared 15*l.* over and above the prime cost of my machine in the first harvest. I have thus stated to you my opinion of the two systems generally employed in the cutting of our grain crops by machinery, but although the circumstances under which the reaping machine has to operate are exceedingly uncertain and variable, yet there are some which are more favourable to its success than others. These are a regular and standing crop, a thorough drainage of land, and a subsequent levelling of the surface; an absence of water-cuts and furrows, as well as of large stones; properly prepared land by rolling, &c.; by a careful observance of these few points, the chief obstacles to reaping by machinery will be removed. Too much should not be expected from reaping machines, but they ought to be considered as a great means of assisting the farmer in securing his crops within a reasonable time, without making him entirely independent of labourers.

The necessity which so long existed for a reaping machine arose from a combination of circumstances, such as the simultaneous ripening of most of our grain crops; the increased breadth of our arable land, with an increased acreable produce; the migration of our labourers from the agricultural to the manufacturing districts; the constantly increasing emigration to Australia and other colonies, from Ireland, whence we used formerly to receive a regular inundation of reapers; and the consequently enormous wages during harvest. The advantage of the use of a reaping machine then, is self-evident, in lessening the expense to the farmer in the harvesting of his crops, whilst the labourers are at the same time receiving fair wages; in performing the work at the proper time, and in a superior manner, with the usual staff of labourers employed on the farm; in the saving of corn from shaking; in an increase of the quantity of straw from close cutting; expedition in the general routine; the more rapid process of drying, therefore putting it into condition for stacking in a much shorter time than by the old system, and hence allowing less risk of injury from unfavourable atmospheric influences.

The flail has received its doom, and been superseded by the threshing machine, and the sickle will soon follow in its wake, and be unknown to a new generation. The jealousy and hatred, languor and fatigue, pain and uneasiness, consequent on a large band of reapers, each vieing with his neighbour, ruthlessly striking and tearing away in their headlong course under a scorching sun, in itself work not human, will be replaced by contentment and satisfaction, hilarity and sprightliness, and above all by health and true enjoyment; whilst the reaping machine, the great cause of this transmutation, deriving its power from another source than the hand of man, will be hailed by all classes of the agricultural community as the greatest boon and desideratum that was ever added to the implement yard of the British farmer. *Mr. Wi[illegible] before the Newcastle Farmers' Club.*

THE HORSE SHOW AT LEEDS.

[The following interesting letter discussing the principles on which the awards of prizes to breeding stock should be made applies not only to the thorough-bred horse, but to thorough-bred stock in all the classes which are to be shown at Leeds next week. We take it from the *Times* of July 11.]

The entire thorough-bred horse is usually regarded in this country in connection with turf speculation, and, consequently, commands only a moiety of public interest. We take the lowest view of his capacities when we look upon him only as a means of transferring so many hundred pounds from one pocket to another—a view neither true nor politic, and one which, if generally adopted as correct, would still further lower the tone of a national amusement, which requires a great amount of whitewash to render it even tolerable. The fact is that the English people are content to submit to the inconveniences of the modern system of racing for a great object. That object is the improvement of the breed of horses and the support of its prestige.

We are very glad to find that the agricultural meeting at Leeds proposes to put this matter on its proper footing. We are there to see the highest class of English thorough-bred horse put upon his trial,—not as a racehorse, subservient to the interests of a single master, but as the propagator of his species, and of all the high qualities which we imagine are inherent in good blood. In this view it becomes a great English question. The public has an interest hitherto unknown in thorough-bred racing stock; and, independently of our national pride, to every man who drives a pair of phaeton horses, or saunters through Rotton Row from 12 to 2 on a high-priced hack, the question becomes one of more or less importance.

Now, there are two or three points affecting this case and so keenly discussed at the present moment by sportsmen, that I may ask pardon for trespassing upon space so valuable as that of the columns of *The Times*. When we hear that there are no less than 125 entries for the horse show, and that they comprise some of the most fashionable and highest priced stallions of the day, we can be hardly said to over-estimate the importance of the discussion. The question is this:—Will the object of the meeting be best attained by deciding upon the merits of the horse from the excellence of his stock, or from the physique of the animal himself? A *primâ facie* view of the case would probably insist upon the excellence of the stock as a *sine quâ non* in arriving at a favourable judgment. The first object in awarding the prize is the benefit to be derived by the public. It can only be the improvement of the breed of horses in this country. The first and highest legitimate vocation of a thorough-bred stallion is as a sire. As a sire he comes before the judges, and as such he must take rank among his peers. He may not be perfect in form; he may have certain disqualifications on that head; he may lack fashion, or carriage, or substance; but if, like Voltigeur, he can claim to be the progenitor of the greatest number of really good horses of his day, the business seems all over but shouting. Nay, he may, perchance, be himself an infirm horse, like the Cure, but if there be any credit due to the product of the Royal paddocks this year he can scarcely miss a favourable verdict, more from the judge's experience than his eye.

This at first sight seems a very simple case, and the deductions from it clear and logical; but upon a moment's reflection a whole host of difficulties oppose this conclusion. First of all, notwithstanding the *dictum* of Abdel Kader, in favour of the sire, how much or how little has the dam to do with the excellence of the foal; and this especially when, from the reputation of the horse, all the best mares in England have been sent to him? The difficulty of decision in this case appears so obvious that it is but waste of time to dwell upon it. Or what shall we say of the impossibility to decide upon the excellence of the stock when the various qualities of each are to be taken into consideration—form, quickness, temper, or endurance? Whence is to come the mass of evidence so necessary upon these points? "Who shall decide when doctors disagree?" What again is to become of the claims of all the young horses, faultless perhaps in shape, but as yet untried, which give still every promise of adding to the already world-wide reputation of our English studs? A Judge would scarcely feel himself justified in summarily dismissing their claims upon his attention, even though the established merits of such horses as Stockwell, Voltigeur, or the Cure were in the scale.

Blemishes and imperfections which do not detract from utility present a serious obstacle to judicial criticism upon the subject. We do not speak of very decided cases, which may be put out of court at once, but lighter ones, in which there can be no possibility of transmission, and which only affect the animal in question. Anything approaching unsoundness ought, in our opinion, to be rejected at once; and this may be a reason why some very eminent veterinarian authority should occupy a place on the bench. In fact, upon the face of it, there do appear certain difficulties in this view of the business

which would induce us to lean to the much more easy and more palpable task of deciding upon the merits of the horse per se, and which may include not only his structure, form, fashion, levelness, and general appearance, but even his temper, healthfulness, substance, or activity, and other qualities of which he is known to be possessed.

It is desirable, at all events, that some principle should be acted upon, and that the decision should be the result of some laws, rather understood than strictly defined. We believe that such was the case last year at Middleburgh, and that a decided tendency was exhibited to regard the entire horse as a studhorse only. The first and second prizes, if we remember rightly, were assigned respectively to Voltigeur and the Cure —remarkable, as we have above stated, for the excellence of their stock, though in themselves not having the impersonation of such extraordinary merit. The judges were selected with a due regard to a knowledge of the animal more, perhaps, as a racehorse than anything else. An eminent breeder of racing stock and a well-known and extensive trainer were aided in their deliberations by the real Rhadamanthus—a gentleman so closely connected with the Turf, and yet occupying so peculiar a position with respect to it, that he must have brought to bear upon the question a very great amount of knowledge with the most perfect impartiality. It seems difficult for a great breeder to divest his mind of a partiality for a certain blood; while a trainer, however eminent, will have some preconceived notions on the same point, and tolerably strong ones; but the referee ought to combine great knowledge with an unbiassed judgment beyond any other gentleman equally intimate with the business. He should be the very Epicurus of the Turf, and regard all its pleasures as a stern matter of business and philosophy. We have already suggested that veterinarian knowledge should form a strong element in the judicial amalgam. We almost feel inclined to say that two of the judges should be selected from the most eminent veterinary surgeons in England, and the third should continue to be chosen, as at present, from among gentlemen who have the most knowledge, with the least probability of prejudice, on such matters,—the first to be the exponents of the principle, the latter the "'Ορθωτης τοῦ νόμου."

We plead the importance of the subject as an excuse for the length of our remarks. We are far from desiring to dictate to the judges, whoever they may be, what should be the basis of their decision; but we venture to call their attention to these points because the interests of not only our national sports, but of thousands of persons, are involved in a just view of the case. *Sub Umbrâ, in the Times.*

HALF-TIME LABOUR IN CULTIVATION.

(Concluded from p. 634.)

THE future population of a large proportion of the agricultural districts can only be retrieved from such adverse conditions, I apprehend, by local combinations of educational means, by educational unions in the principle and much of the organisation of the district pauper schools. For this the half or short school time principle offers new and important advantages; for whilst it gives to parents an early and larger share of the produce of the children's services, it furnishes the administrators of the local educational funds the means of obtaining double or largely increased educational power without any increase of the ordinary rate of expense. It will enable a better quality of schoolmaster to serve in different parishes or districts on alternate days, or to teach a half-time set of children in the morning, and youth or an advanced set of scholars in an evening school after their hours of work. It will furnish the means of meeting the wants of very thinly populated districts by circulating masters. I am enabled to adduce examples of the gain in efficiency, with the gain in time, as well as the reduction of the expense of teaching, by bringing the educational means of a district, voluntary as well as endowed, under one management, and by an improved classification a better division of labour. I must refer those who desire to see this exemplified, to a paper which is to be laid before Parliament. The advantages of the division of educational labour are brought to agricultural populations within two, three, or four miles of a town, though as yet without the additional advantages of the short or half school time principle.

Besides the defects of mental training there is yet a great defect in the physical training of children, in which defect the rural populations participate, though not to the same fearful extent as town populations.

Most farmers are now aware that if colts are worked too young, old and strong horses are not obtained, and that every colt is worked injuriously and wastefully if it be worked the same stages as full grown horses. Yet we permit this to be done with children, the future stock of labour of the country. We permit them to be overworked mentally as well as physically. Six hours of sedentary mental effort is as long a stage as adults can stand from day to day. Six hours is a full stage of mental work for young prize men at the universities. Those who go beyond it generally fail. Six hours school teaching from day to day wears out the school teachers, yet the present educational theory expects that amount of mental effort from day to day from infants, and I am propounding it as a novelty and a discovery that such an amount of attention is really not got from young children.

It is the common practice to work young and growing children bodily also during the same stages, or during the full working hours as adults. Now, one object which I had with my colleagues of the Factory Commission of inquiry in proposing a compulsory attendance for three hours in a school, besides securing them what we deemed a due amount of book instruction, was that for those three hours we should prevent them being in the factory, and should enforce for them a shorter stage of work there than the adult stage, whatever that might be, and that practically we should compel the adoption of double sets of children to work during the same stage as one set of adults. By a fatal error, the securities for the quality of the half-time teaching were struck out of the Bill, and a good half-time teaching has only been obtained accidentally, but as a security against overwork. Medical officers attest that it has had considerable effect, that there are fewer deformed, male and female, workers, and that they are now better grown than formerly. Of course, living and working in a purer air, agricultural children are working by no means under the like unfavourable conditions, but still throughout the agricultural districts young children are worked during the same stages as adults, that is to say, there is injurious infantile overwork in rural districts calling for remedy. At the agricultural exposition in Paris, the spindle shanks, the bent forms of the English agricultural labourers contrasted unfavourably with the peasantry of most other nations; yet the food-producing power of the wages those same agricultural labourers of ours receive, even the 8s. or 9s. wages of Dorset, Buckinghamshire, or the other counties, gives them the means of obtaining better food than is consumed by three-fourths of the farmers of France, of Belgium, or Switzerland; it gives them white bread instead of black—if they would dispense with their beer it would give them meat every day, whereas three-fourths of the farmers on the continent, all the small farmers almost everywhere, can only get meat on feast days, and scarcely ever on Sundays. To early overwork and defective physical training, is, I apprehend, mainly due the bodily defects of the English labourer, which the drill sergeant in great part remedies when he gets them before they are too far gone.

The matter to which I would draw attention as of the most special importance of any which I can submit to you for consideration, is a full and fair trial of the half school time principle by Mr. Charles Paget, a member of the Society and member for Nottingham, who has introduced the system in a village connected with his own estate. He gives testimony concurrently with my friend the late Mr. Wolryche Whitmore, of Bridgenorth, that the mental attainments of the agricultural half school time scholars are quite up to those of the long school time scholars. In citing a portion of Mr. Paget's examination, which I took for the information of the Education Commissioners, I would direct more particular attention to that part of his testimony which relates to the effect of the half-time system on the physical development of agricultural children.

"I am convinced, from my own observation, and am confirmed by the report of the schoolmaster, that the half-time scholars made progress fully equal to that of the others who are full time. In an examination, out of nine first class scholars five were half-timers. The schoolmaster compared the circumstances of the children, as equally as he could, as to the comparative intelligence of the parents and previous training, and he was fully satisfied as to the equality of the half-time scholars' attainments. The schoolmaster's own estimate of the value of work in combination with school teaching may be shown by this:—He had himself a son, who was about sixteen years of age, and who assisted him as a sort of pupil teacher in the school. The father asked me whether I would consent to let this boy work on my farm on the same terms, and for the same wages as the other boys, namely sixpence a day. On my agreeing to do so, the boy came for about a year, and the father now declares that he would not, for many pounds, forego the advantages that his son had derived from the alternate work on the farm and in the school. The boy, who was thin and weakly when he began, is now a fine and well-grown young man, having gained weight during his year's work. It is a very striking result, that the alternation of school attendance with labour appears to conduce to the bodily improvement of the agricultural lads, who, instead of growing up with the low, heavy, slouching gait which is the result of continuous work, grow up straight, carry themselves well, and look bright and intelligent. In the case of the schoolmaster's son, the wages were not necessary to the father, because he has an endowment of 90*l*. a year. In my view, the example would be of great advantage for the improvement of pupil teachers in the agricultural districts; it would be of advantage to them, in teaching the children of agriculturists to know the work of the farm, and to be able to give practical lessons from experience of the work to be done."

"I have made inquiries of employers, and they unanimously express themselves satisfied. The fact is, that the boys leave school prepared for work. My bailiff observed to me, upon that topic, what advantage the half-time boys had over him, for they were already accustomed to work when they left school, whilst he, having stayed in school until he was nearly 14, found his first six months' work in a farmer's place very severe indeed; he also says that the boys work much better on the alternate days than when they come every day. The fact is, as I have elsewhere stated, that on the half-time system they are never weary either of school or of work. At 14 years they have received not only a very fair amount of the rudiments of learning, but they have also acquired a knowledge of the business of life, and are ready to enter into service, with all that skill arising from habits of labour, combined with hardihood from exposure in out of doors work, which the farmer who hires them has a right to expect. They are much better servants than the mere schoolboy would be. Their school life being compared not with a holiday, but with a day of labour, they look upon it as a rest, and their associations with books are not irksome, but agreeable, so that they will retain what they have acquired. The schoolmaster also feels the advantage of this system. The boys attend more regularly than the average of children, and remaining to a later age, their attainments are higher and they give a higher tone to the school. Mr. Spencer, the master of our school, declares that any master who has once experienced the benefits of the system will be very unwilling to forego them. This alternate system of labour and rest appears to be indicated by our nature, in which the activity of the body is a good preparation to the activity of the mind, and every hard-working professional man has found that the best rest for his over tasked mind is in bodily exertion. Much more than satisfied with the results of my experiment, I would earnestly request that any of the friends of education, who have in it their power, will repeat it. The principle is one which admits of a very wide application. Already has a manufacturer in Nottingham voluntarily adopted it, with satisfactory results to 40 boys in his employ; and I believe that our middle classes might give their sons, up to the age of 20, an alternation of a day of college and gymnastic exercises with a day in the counting-house, and thus, with God's blessing, confer upon them that inestimable boon, a sound mind embodied in a healthy frame."

"The effect in the families is represented by the mothers as being most gratifying. They say that they could not spare both children, but they could spare one, and that when one comes home the children talk together of what has been done at school in the course of the day. I had a particularly good example of the working of the system with one of my boys. He had got tired of school, of the long-time schooling, and also of the long-time work on the farm, and he did not fulfil his duties satisfactorily in either position. On the half-time system, he went both to school and to work with alacrity, and was improved in both, and having now left school he is a very steady servant. My belief is, that on the old system he would have been lost. His father is quite of that opinion."

Mr. Edward Senior, one of the Commissioners of the Poor-law Board of Ireland, where the half school time system has been adopted for pauper children in connection with the public agricultural schools, and Dr. Kirkpatrick, the inspector of those excellent institutions, give concurrent testimony as to the mental, moral, physical, and industrial success of the half-time schools. Mr. Brogan, one of the sub-inspectors of these schools, states, that on his first entrance into the duties of his office, 'I was so appalled by the state of insubordination I witnessed, as well as by the haggard miserable state of the boys, a large proportion of whom were under medical treatment from diseases incidental to their neglected condition, that I was giving up in despair of being able to effect any improvement in them. I took heart of grace, however, and began to work in earnest. Three hours each day (10 till 1 o'clock) were devoted to literary instruction in the school," and "four hours, 2 to 6, to industrial work on the farm, in which every boy who was enabled to be of the slightest was engaged. I got the guardians to allow them an increased dietary, and it was surprising the change which a few months effected in their physical appearance. From being pale, cadaverous looking beings, whose miserable appearance would excite the pity of beholders, they became cheerful and healthy. Nor was the change in their moral nature less marked than in their physical appearance. From being notoriously vicious and insubordinate they became quiet and obedient to my directions, whether in school or when working on the farm. Neither was their progress in the school in any way retarded by the industrial employment outside, as a reference to the reports of their district inspector will, I believe, fully testify."

In respect to such important examples as that given by Mr. Paget, it is yet to be borne in mind that by a stronger classification, obtainable by means of district school unions, and by more and superior teaching power, the time in school devoted to mental culture may be still further economised to the gain of productive service, as well as of health, for the shorter the time in which numbers are congregated together, even in well ventilated schools, and few yet are, the better it is for their health.

By union, and by the economy of the existing educational means, the physical training together with the moral training may be still further improved. In the simple form in which he has introduced the half-time principle, the bodily improvement, I apprehend, is due mainly to the removal or mitigation of the causes of bodily injury, to a reduction of mental over-work, of injurious bodily constraint and inaction, as well as to a reduction of the confinement in impure air, together with a reduction of bodily over-work, *i.e.*, work during the same stages as adults in the field. In the document to which I refer will be found a mass of evidence, how much farther we carry mental and rural as well as physical improvement by gymnastic exercises, comprising the military drill, and, best of all, a combination of the naval with the military drill, in some of the best district schools. By the testimony of employers I prove that if we were a nation of Quakers, and regarded civil service alone, if there were never more to be any war, it were nevertheless worth while to have the military drill taught in all schools, simply to increase the productive value of the pupils as labourers in after life. By the drill, which may be

commenced at the fifth year, and be well completed before the tenth, before children are fit for work, you impart all that is comprehended under the term discipline, habits of prompt attention, prompt obedience, self-restraint, patience, order. Four drilled men (and still more, drilled youth) are, for common labour, worth five undrilled; the drilled lift together, pull together, and with increased effect. An able French statesman, one of the most accomplished agriculturists in Europe, the writer of the best agricultural treatise, I believe, on the authority of friends more advanced in agricultural literature than myself, the most able of any that exists—Count Gasparin, speaking of the effect of military discipline on agricultural population, says, that if the labour of the peasant, farmer, or labourer's son can be spared by a little more activity on the part of the other members of the family, but, above all, if it be necessary to get into debt to raise the price of a substitute, the father of the family cannot be too strongly advised not to prevent his son joining the army. "We have," says the Count, "experienced much good effects from this advice that we cannot too often repeat it here. The families who have followed it have saved their money; and they have seen their son return, more vigorous, more intelligent, more respectful, more capable, having lost his rusticity (sauvagerie de la campagne) and become more capable of dealing with men with more ease and consideration. Our discharged soldiers are in general the best subjects of their villages; it is amongst them that we find our best foremen and our best stewards, whilst their brothers who have remained at home remain only common loutish labourers." Now if you consult the evidence of the experience of our best half-time schools where physical training, by means of the military drill, is introduced, you will see that qualities such as the Count ascribes to the training in the adult stage in the French army, are imparted in the infantile or the school stage, in some district half-time schools, with permanent effect. Formerly, and now in badly managed schools upwards of 60 per cent. of the orphan children turned out ill; but in the best managed district half-time schools, where there is this physical training, the failures to the extent of disqualifying for respectable employment are reduced, as will be seen by the evidence, to an average of less than two per cent.

Having submitted this statement, you will probably ask me—What can we do in the matter? On which, my lords and gentlemen, I am tempted to answer—What cannot you do if you will only set seriously about it? I myself ask your consideration of what you may do, and whether it might not be well to refer it to a special committee of the Council to consider what may now be done to give effect to that provision of your charter, which requires you to take measures for the improvement of the education of those engaged in agriculture; on which topic you have everything before you. You have committed yourself to nothing; having done nothing as a Society you are in the advantageous position of having nothing mischievous, such as now abounds in common schools, to undo. In the meantime, I might ask the consideration and the promulgation of the evidence on the subject for the consideration of the members of the Society. Some of you, I trust, will be able to follow Mr. Paget's example. Others, I hope, may be led to exercise their influence to promote the voluntary formation of local school unions on the principle of the union at Faversham in Kent, of which Lord Sondes is the President, and of which an account will be found in the evidence which I expect will be laid before Parliament. I wish, however, to apprise my friends—farmers, guardians, and others—that I wholly dissent from the Commissioners' recommendation of county of borough and county educational rates. I assert that by district school unions on the half-time principle, as I think that I have proved, that the existing educational funds, public and private, may be made to suffice for the education of the children of each class of the community, each in its grade, and for their superior physical as well as mental training; that a much larger population may be trained and educated well at the expense now incurred for educating not more than two-thirds of it in a very inferior manner.

There is one means for the promotion of the education of persons engaged in agriculture, which I would submit to the Council they might adopt; namely, they might offer prizes for the production of agricultural school books. In going over schools I have met with nothing of the sort. I have spoken to school inspectors, and they know of nothing of the sort in existence. In books of arithmetic the sums, if they are not abstract, instead of concrete as they ought to be, have only town examples, in which an agricultural lad may be expected to take the least interest. The examples should be in wages, in food, in clothing, in work, and in common things about him. Accomplished members of the society might occupy themselves well in going into their own, or the schools of their neighbourhoods, and trying to improve the lessons. They might contribute lessons which they found to succeed the best with children of different ages, and to sustain voluntary attention by the interest excited in the lesson itself.

Ladies might try lessons on household matters in girls' schools, and contribute the most successful. No lessons or teaching which are untried with various classes on the principle of sustaining attention by their own interest, are to be relied upon, however clever they may seem to us. For improvement in agricultural school books, I imagine volunteer exertions must be looked to, for all the eminent and successful school teaching I have met with or heard of has been in town schools employed on town boys. Besides books for the earlier stages of instruction, agricultural reading books are wanted for evening schools. Mr. Morton promises some elementary works, and I have no doubt that he will realise his promise. But there is more to do than one individual may accomplish. In Belgium an excellent set of elementary agricultural works has been got up under the auspices of the Government. What the Society for the Diffusion of Useful Knowledge did for general literature might not the Society for the promotion of agricultural knowledge do for its diffusion by getting out special elementary works?

I trust that you will encourage the expectation that some practical exertions may be made by the Society to bring up to the front our great agricultural community.

Home Correspondence.

Harvest Dates.—I send enclosed a tabular statement of the times of earing, flowering, and harvesting of the cereals on my farm here from 1852 up to the flowering of this season, which may interest some of your readers. If this season be an average one, we may reckon upon the Wheat harvest commencing in the second week of August. The peculiar feature of the present season has been the hitherto total absence of the turnip fly.

Year.	Wheat in ear.	Barley in ear.	Oats in ear.	Wheat in flower.	Begin Harvest. Wheat.	Begin Harvest. Barley.	Begin Harvest. Oats.	Finish Harvest.
1852	June 18	June 25	June 19	June 27	August 5	August 9	July 28	August 28
1853	,, 16	,, 20	,, 21	,, 25	,, 18	,, 11	August 12	Sept. 7
1854	,, 20	,, 23	,, 20	,, 25	,, 21	,, 18	,, 10	,, 4
1855	,, 23	,, 30	,, 27	,, 30	,, 13	,, 23	,, 14	,, 8
1856	,, 22	,, 28	,, 28	,, 29	,, 7	,, 27	,, 14	,, 6
1857	,, 10	,, 22	,, 22	,, 18	July 29	,, 20	July 30	Aug st 25
1858	,, 10	,, 17	,, 17	,, 14	,, 23	,, 9	August 2	,, 23
1859	,, 12	,, 12	,, 11	,, 19	,, 27	July 28	,, 8	,, 20
1860	,, 24	,, 24	,, 24	July 5	Sept. 1	Sept. 11	,, 28	Oct. 3
1861	,, 14	,, 21	,, 20	June 21	..	..	..	..

Charles M. Caldecot, Holbrook Grange, Rugby, July 4.

Wind Power.—I do not agree with your answer to "Honestus" in a recent Number. Is it fair to condemn wind as a motive power for farmyard purposes, because you cannot "always command" its services? I say it is not. And having used wind power at my farmstead since February 1860, and having suffered very little inconvenience in consequence of the inconstant nature of the power, I am entitled perhaps to say so. Nor should I have suffered any had I possessed sufficient store-room to enable me to reserve a supply of prepared food, in case of a calm occurring. I found the saving in the coal account, and in the labour of its carriage a very important item, and that with Peill's 2-horse-power wind engine, I could cut chaff in a moderate wind at a cost of 1s. per ton, and when the wind was more powerful the engine was equal to 5 or 6 horse-power, driving chaff-cutter, pulper, corn crusher, and Lloyd's flour grinding and dressing mill, all together. I have used steam for many years, and say not one word against it as a motive power for general purposes, but where constant work is not required, as at a farm yard for chaff cutting, and crushing corn, &c., then I believe that wind or water will be found more economical than steam. Pulping roots will now form a very important item in farm management; it must be done by some fixed power, the work is too heavy for manual labour. You must pulp three or four times a week, and on a moderate sized farm it would be tedious to have to get up steam so often. The slightest breeze of wind will drive a pulper, and the "turning on" to work is done in an instant. Others like myself who have steam-engines are nevertheless now adapting their premises for wind power, and I think on a farm of less than 700 or 800 acres, the cost of steam will be found to place it at a disadvantage compared with either of the elements before mentioned. *Edward Wortley, Ridlington, Uppingham.*

Societies.

ANNUAL MEETING OF THE ROYAL AGRICULTURAL SOCIETY AT LEEDS.

The trials of steam ploughs and cultivators to which so many have looked forward with interest are now going on. We must as yet satisfy ourselves with the simple facts of quantity and quality of work done without saying anything about price. Our readers can calculate for themselves for the present, but as soon as anything reliable is obtained, the final particulars shall be at once placed before them.

It must be pretty generally known, and yet we may as well repeat it, that the Royal Agricultural Society offers two prizes; the first of 100*l*., to be awarded in one sum to the exhibitor of the best application of steam-power to tillage purposes, the second of 100*l*., which may be awarded in one sum or split up according to the suggestion of the judges.

For the purpose of testing the various systems of steam cultivation now before the public, the Society has obtained at a distance of 8 miles from Leeds, two fields, one of 32 and another of 50 acres. These fields are immediately contiguous upon the right of the Leeds and Lilley road. The last crop upon one has been Turnips, which was fed off by sheep, and since then the land has been stirred, and now presents a bare surface. The next piece is a Clover lea. Both fields are well situated, and admirably adapted for the trials of ploughs and cultivators. Upon both of them a 6-inch furrow is said to be good 3-horse work, but no dynamometrical experiments have been made to prove this much.

On Monday the 1st July, the three gentlemen appointed as judges, Mr. Sewel Read of Plumstead, Mr. Owen Wallis of Overstone Grange, and Mr. Owen of Rotherham, assisted by Mr. Amos of Southwark, Consulting Engineer to the Royal Agricultural Society, met to set out the work for those competitors who were rivals for the first prize. What we may term the Turnip field was selected for this purpose, and those who had taken up their position on Tuesday were as follows:—Romaine, with his locomotive Rotary digger; Fowler, with his large 12-horse-power engine traversing the headland; Richardson and Darley-cum-Beard, with a locomotive engine, and double furrow plough pulled behind it, and also a stationary engine, Beard's windlass and a double furrow plough hauled by rope, and ploughing in ridges; Roby and Co., with 10-horse stationary engine and windlass combined; Wilson, with stationary 6-horse engine, the windlass being affixed beneath the boiler; and Messrs. Howard with a 10-horse-power engine. The implement employed by Fowler was the 4-furrow plough, this being converted into a "digger" and a "cultivator;" that employed by Wilson (which however did no work), was Mr. Smith's No. 3 "smasher;" Roby worked with a newly patented 3-furrow plough, and the Messrs. Howard with their new patent cultivator already described in these columns.

On Tuesday at noon Messrs. Howard commenced work upon a 4-acre plot, which they finished in about five hours, taking a breadth each way of 4½ feet and a depth of 7 inches; but as the rock lay near the surface the operation took more time than was absolutely needed for it. Upon baring the bottom the necessity was shown for a second grubbing to make a perfect job. The grubber accordingly crossed the work on Wednesday, but though the bottom was thoroughly cut, the surface was too rough to fulfil the judge's conditions. A good seed bed as for Barley was required, but having crossed the work the surface was rougher than it was after the implement's first journey, and required a roll and a harrow before it could be ready for the drill. In another part of the field, Mr. Fowler had a plot of 4 acres assigned to him, upon which he at first commenced with his "digger," followed by a harrow, swinging from one side, and which was changed for the cultivator at a subsequent period during the same Tuesday afternoon. But neither the digger, which is formed by 4-furrow plough frames, armed with Cotgreave breasts, and by which the soil is heaved up and deposited as though by the spade, nor the "cultivator," which has been often described, made the required seed bed for Barley. The surface was rougher than Howard's. It was clear enough that the operation was too strong, and that too much of the churlish subsoil was made to replace the soil which was cast down. Both Howard and Fowler were in the same predicament. The object was to produce a more comminuted surface with no greater expenditure of power. Romaine showed them how to prepare a seed bed for Barley or anything else, at one operation. This rotary digger, now too well known to need description, performed to the admiration of the vast crowds of people who flocked to witness the novelty. Never has the pet theory of circular motion, as applied to agriculture, been better exemplified than it was on Wednesday at Garforth, when Mr. Romaine's implement traversed the bounds of the 4 acres measured out to him, and worked towards the centre. The rotary cultivator has never done so much, or so much so well as it then did. The soil was most beautifully fitted when that ponderous machine and its alarming tail had passed over it for any seed the sower might desire to deposit. The depth was a uniform 6½ inches, and there was no doubt about every particle of the soil having been moved. The operation was fully worth 20s. per acre; and to accomplish it somewhere about 20-horse-power was exerted, and 2 men employed. The depth, as we have said before, was about 6 to 7 inches, the length of the digger 7 feet, the space passed over in a minute 5 yards; so that, including stoppages, about 7 to 8 acres might be cultivated during a 10-hour day. But, excellent as the work was, no great quantity could be done. The boiler was weak, and refused to perform its duty.

This hindrance, however, was simply accidental, and might have been obviated by more care. Like so many of these mechanical contrivances, no trial was given to this one before it left the shop where its material existence commenced, and its weak points remained to be detected therefore upon the Garforth field instead of at home, to the mortification of those concerned.

The second prize of 100*l.*, which may be broken up and apportioned to various parties according to the decision of the judges, was intended to bring out sets of apparatus which could be employed with the ordinary portable farm engines of 8 or 10-horse-power commonly found upon farms of a medium size, and always upon larger ones. The Judges directed those who attended to compete for the prize to set to work upon about 4 acres each of the Clover ley. This they were to cultivate with a pressure of 45 lbs. of steam. Hayes & Crowley, Fowler, Kirby & Beard, commenced upon these plots on Wednesday afternoon, the 3d; and Howard, who did not finish crossing the Turnip field plot till late the same afternoon, on Thursday morning.

Of Kirby & Beard it is not necessary to say anything, since they were not able to conform to the conditions, and were obliged to plough the land. Hayes & Crowley were only united to show the merits of their several inventions; Hayes of his hauling windlass, Crowley of his cultivator and mode of traction. Of the latter it will be necessary only to say that it is a modification of Fowler's plough, in form, resembling the juncture of two triangular scarifiers back to back, balanced at the point of union, upon a pair of large wheels. Of the windlass which hauled it we may mention that it is remarkable principally for dispensing with the services of a man, and allowing the engine to keep running when the plough is not at work. The course of the plough in fact is under the command of the anchor-men, who have nothing to do, when required, but to jerk a cord, which traverses the field, and by withdrawing a bolt, and disengaging a sliding bar, shifts the driving strap from either of the two pulleys in connection with the drums, to the loose one between them. There are points about this invention which are well deserving of notice. Messrs. Howard employed a 10-horse engine, and set his pretty windlass beside it. A connecting shaft fitted with vulcanised india-rubber universal joint drove the latter with great ease and regularity. The implement used was the cultivator, so fitted with shares as to cut all the land. The depth of the work was 6 inches, the measure of a bout 6 feet, the length of the plot 304 yards, and its breadth 54.

Mr. Fowler came out in quite a new, or to speak more properly a new *old* guise. He started from the stationary engine system, and has been at much pains to improve upon it, as he considers, by the introduction, 1st of engine and anchors, traversing the headlands, and then of engine and single anchor, traversing opposite headlands, the plough simply being driven up and down between them. There were many men however who entertained a great objection to a headland upon a headland, because they urged that the headlands were thereby rendered unfit for cultivation and would grow nothing. There were others who said they could not afford to buy an engine especially adapted to steam cultivation, but would be glad to adventure upon a simple apparatus to be driven by an engine suitable for other work. Mr. Fowler very wisely therefore set about doing what he was asked to do, and having simplified his tackle, introduced the clip drum, and contrived to work his plough with a taut endless rope perfectly suspended, made one other step, and produced a separate windlass or drum, capable of being driven by any 8-horse engine whatever.

Like Howard, he drives the drum with a spindle and universal joint. He works with an 8-horse single cylinder engine limited to 45 lbs. pressure, and carried 3 furrows 7 inches deep. On looking over the work it struck me as very good. There was a good inch difference between Howard's and Fowler's, but Howard finished in less time than Fowler, the latter being 4 hours 36 minutes about his work, and the latter about 6 hours. That inch difference in depth indicates more power than is generally imagined, the ratio of power required increasing in inverse proportion to the depth. Howard's work appeared better broken, Fowler's to be in the largest clods. Howard's 3¾ acres, ploughed 5 to 6 inches deep in 4 hours 36 minutes, excluding headlands, shows the work to have been done at the rate of 8 acres in 10 hours. Fowler's 3¾ acres, broken up in six hours, 7 inches deep, shows a rate equal to 6¼ acres in 10 hours. But we must remember that while Fowler worked with an 8-horse single cylinder engine, with 45 lbs. of steam pressure, Howard employed one of 12-horse-power, double cylinders, with from 40 to 50 lbs. of steam pressure.

It is difficult to come at results, but as nearly as we can estimate, the Howard did 3 roods per day for every horse power engaged, while Fowler did pretty much the same, only his work was deeper and his power less. The work on both sides, however, was of a very superior kind, and such as gave great satisfaction. Both Messrs. Howard and Mr. Fowler secured several customers, and certainly made great way with the public.

But while Howard was doing this cultivating, Fowler had set out his big tackle to plough an 8-acre piece of the same Clover ley. He commenced this on Thursday afternoon, but was obliged to give up after he had made two bouts, in consequence of a breakage. On Friday he continued, and finished it in 8 hours 10 minutes, exclusive of the work done on the previous day. Messrs. Howard moved to an adjoining plot of like dimensions on Friday, and competed with Fowler for the production of a seed furrow. They worked for the first time during the trials their turn-over plough, which takes three furrows. The work it performed was exceedingly good, having what some people would call a much better harrow-edge than Fowler's, and being more compressed. There were those on the ground who preferred Fowler's furrow, however, shattered as it was; it was certainly a full inch deeper than Howard's. He employed his 12-horse engine, carrying four furrows at once 7 inches deep. Howard, employing a 10-horse double cylinder engine, took three furrows 6 inches deep, and was 14½ hours engaged upon the piece, allowing for stoppages, with 60 lbs. pressure. Headlands are not included. We have on this showing 4½ acres ploughed per day of 10 hours at a cost of something like 7*s.* 7*d.* per acre, while horse labour upon the same land would have cost fully 10*s.* per acre at a like depth.

On Saturday Fowler was moved to another piece on the same Clover ley. The contents were 6½ acres. He took his small tackle to it with 8-horse single cylinder engine, and performed the greatest achievement yet recounted in the annals of steam culture. Carrying four furrows 6 inches deep, with 50 lbs. of steam, the whole was completed in 7 hours 38 minutes, which is equal to 4-5ths of an acre per hour, or about 8½ acres in 10 hours. The expenses, calculated in the usual way, amount to 4*s.* per acre, so that in this case there seems more disparity between the two competitors than in any former instances. These figures are of course only approximate, but still we believe in the main they will be confirmed by the report to be issued by the Judges on Monday with the awards.

A great deal of conversation has occurred upon the field respecting the cause of the difference between the two systems, and there seems no other way to account for it than by supposing a vast amount of power to be absorbed by the Howard slack rope, which is saved to propel the machine in Fowler's. Some experiments have in fact been instituted with a view to test this matter, and we append some notice of them which has appeared in the *Leeds Mercury.*

Those who are not acquainted with the facts relating to the traction of wire rope arrived at in various collieries, will hardly be prepared to believe that 800 yards of 2½-inch steel rope, running on the ground, will take over 5-horse power to pull it at a speed of three miles an hour, and that the same rope efficiently carried on well made porters, can be pulled by three-quarters of a horse power. It is not necessary, however, to refer to colliery experiments. No later than Wednesday, Mr. Amos directed his attention, and that of the Judges, to the same subject, and by the aid of his dynamometer brought out the following most astonishing results. To drag 450 yards of wire-rope without porters, weighing 4 lbs. per fathom, it required a power which may be expressed as 527 lbs., while the same rope, supported upon porters, required a power equal only to 58 lbs.

Another experiment was made yesterday, under the superintendence of Mr. Amos, jun., which led to nearly the same result, and it will be followed by several in the course of this day, which will, we believe, go far to establish as an agricultural fact, what is already acknowledged to be a fact in the colliery districts, that the power required to drag a slack rope upon the ground without supports is equal to one-twentieth of its weight.

Messrs. Roby & Co. did a little work on Friday and Saturday, but nothing that requires notice. On Saturday Hayes, with his windlass, hauled Crowley's cultivator across the work which had been done on Wednesday and Thursday by himself, Beard & Kirby, Fowler & Howard, in the Clover field, but with no very good results. Subsequently Howard's steam harrow was sent across the same work, with capital results; and then a Norwegian harrow, which did little or no good. The trial field was closed early on Saturday afternoon in favour of the half-holiday movement, which came as a welcome reprieve to all concerned in these proceedings, whether judges, exhibitors, workmen, or reporters. It had been trying work. Some portion of the time the weather had been cold, wet, and dusty too, and at no time, except Saturday, very fine. The heavy thunder storm of Sunday made the Clover ley plough more easily by nearly one cwt. per furrow it might be conjectured. There must be some truth, too, in this conjecture, because whereas Howard, engaged upon precisely the same work, worked at 60 lbs. pressure on Saturday, on Monday he only required 42 lbs. This fact shows how careful the judges should be to insure that every trial is commenced and ended on the same day, as circumstances may be so changed within 12 hours as to render the experiment valueless.

The judges throughout have acted with the utmost fairness and patience, doing all that could be desired of them. Excepting in one particular, they have, we think, given unbounded satisfaction. It has been said that Fowler has been allowed to go beyond his boundaries to plough his plot and its headlands, when he should have confined to the 8 or 6 acres allotted to him, and with that space do all that was required, just as though a stone wall had enclosed the space. It might have been well perhaps to have confined him to such a completion of his work, and probably he would not have shown to so much advantage as he has if such had been the directions; but still as he does not pretend to do his headlands, or at least only the one upon which he runs, leaving the remainder for a horse plough, it seems scarcely necessary to take much notice of the matter. Of course the judges take cognisance of the fact, and will make what deductions they think fit for it, so that if their report appears on Monday, the public will not have been much misled by the apparent gain Fowler has obtained from this cause. Altogether too much is made of this headland question, and some people propose to cut it very short by laying down permanent engine ways throughout their farms, where the hedges and hedgerows and ditches now cumber the land, and beautify the landscape.

On Monday the judges having some idea that a three cornered bit would prove a very difficult morsel to Fowler, directed him to set down to one of the character, which he did. He did this a little less nimbly than Howard would have done, and was stopped by some derangement in the contrivance for gathering slack rope on the plough; but he performed the work and then steamed down to take up his position upon the ridge and furrow of the heavy land in Mr. Furnes's occupation, whither Howard followed him. Mr. Fowler's 12-horse self-propelling engine set down to a six-acre plot in half a hour, and worked a three-furrow plough. One end of the field was a fearfully stiff clay, which almost over taxed the strength of the apparatus, while the remainder of the greater length of the furrow was land, in which four or five furrows might have been driven with ease. The 12-horse engine kept on with great difficulty, and finished the piece in about nine hours and 10 minutes, cutting a furrow in some places 7, and in others 9 and 15 inches deep.

Mr. Howard, after bravely grappling with the difficulties of the position, abandoned the plough for the cultivator, and with better success. The plough having only been recently invented and not much tried, requires strengthening in certain parts before it is ready to cope with such tremendous clay as it was expected to pierce and lay in furrows on Tuesday. With the cultivator Howard was only about 15 minutes in time after Fowler, working with a 10-horse engine. A second plot was then measured to each, on which Fowler with the small tackle and 8-horse engine and 50 lbs. pressure, carried two furrows 7 inches deep; and Howard, with 10-horse engine and 40 lbs. pressure, going a little wide and not quite so deep, started next to him. They were both in work when we left, and more land is set apart for them, so that it will be quite Saturday before they finish.

It will be seen at once that the trial since the second day has laid between Howard and Fowler. There are those who know how the award will be made. We will however venture upon no surmises, and will only record our great satisfaction with the trials as a whole. They have been conducted in a most business like and impartial manner, and all must wish, if ever they compete again, that they may meet with the urbanity and consideration displayed by Messrs. Read, Wallis, and Owen. To Messrs. Howard, Fowler, and all concerned, the thanks of the public are due in an especial manner for coming to contest for the prize, and for the exhibition of so much perseverance and temper under circumstances calculated to impair both.

Miscellaneous.

A Trial with Different Breeds of Sheep.—In a seed-field on the Parlington estate, distant about a quarter of a mile from the steam trial ground of the Royal Society, an interesting experiment with the various breeds of sheep is now in progress, to prove which sheep are the best adapted to the soil of the district. A 16-acre field has been taken; 600 hurdles purchased, to divide the field into 2-acre plots; and sheep of various breeds have been procured from the following flockmasters: The first compartment contains 10 Cotswolds, purchased from Edmund Ruck, Esq., Castle Hill, Cricklade. The second division comprises 12 Leicesters, selected from the flock of Mr. Hill, Sledmere, and descended from the pure Sir Tatton Sykes blood—in fact, the worthy baronet himself selected them, prior to going to the Leeds market, wishing his tenant to carry them on for exhibition. The next division is the most interesting, as in this class one out of each lot is selected — the gigantic Lincoln, the symmetrical Leicester, the large-framed Cotswold, the pure and elegant Southdown, the celebrated Shropshire Down, the fast-grazing Baumshire, and the improved Leicester and Teeswater cross are all feeding together—quite a pleasing study for the sheep-fancier. The fourth allotment contains 10 pure Shropshire Downs, sent by Mr. G. Preece, of Shrewsbury, and procured from first-class breeders. The pure Southdowns are from the flock of Mr. G. S. Foljambe, of Osberton, Notts, possessing all those attributes of character, quality, and symmetry for which that gentleman's stock are so highly renowned. The Lincolns adjoining them are wonderful animals, bred by Mr. Greetham, of Stainfield House, and bought out of the 200 which were sold at Lincoln April Fair for 72*s.* each: these sheep each clipped a fraction short of 15 lbs. of wool. The next lot came from St. Boswell's, Scotland, representing a cross between the Leicester and Cheviot, very highly thought of for their grazing properties, and noted also for their rapidity of gaining flesh. The last lot are a cross between the Leicester and the Teeswater, bred in the neighbourhood of Ripley, and that have at various times been successful at the Parlington show. They look well in the wool, and clip about 10 lbs. The sheep have been all weighed and numbered. The members of the Parlington Club are deserving the thanks of

agriculturists for carrying on this experiment in so plucky a manner, and procuring the sheep from such first-class men. The sheep will commence cake next week, except the odd mixture, which are being tried without cake. *Correspondent of Mark Lane Express.*

Calendar of Operations.

JULY.

BORDER OF THE FENS, *July* 8.—The growing corn is rapidly arriving at maturity, and bids fair to be tolerably productive. From various causes the crops came up thin, much of the Wheat appeared weak, and on light soils, as in the fens, suffered from the severe weather. A considerable breadth remains to this day thin of plant, and cannot yield an average; on the other hand, wherever there was anything like "a plant" the crops have surprisingly improved, and from not having been forced at any time the Wheat is remarkably strong in the straw, so that although we have had some of the heaviest rains ever remembered, yet their effect in "laying" the corn has been comparatively trifling. The large amount of downfall in June has not, as far as we can perceive up to this time, been injurious, the weather having been seasonably warm; but we should feel some alarm at a much longer continuance of wet, particularly if a fall of temperature was also to occur, as we might then expect to meet with that dark dull appearance that betokens blight. It has been a favourable spring for the growth of weeds, also for their extirpation, where this necessary work was undertaken in time; for if a field is weeded before the young corn is too high, *i. e.* as soon as the weeds are big enough, a party can go over it twice and do no mischief, while at a more advanced stage it could be done once and that imperfectly. This remark arises from the fact that during April and May we could have as many children and as often as we pleased, but in June they were so much in demand that it was quite a favour to get them, and we had to speak for them a week before they could be spared for our turn. Barley looks well, the ears very fine. Oats look magnificent, and we have already noticed both Barley and Oats showing a ripening tint which would speedily become white and "magpyish," with a few days of dry and warm weather. Beans are not generally a good crop, and the fly has infested a good many, notwithstanding the sharp winds and dowsing showers which have of late prevailed. Turnips come up in heaps and require immediate attention, but Mangels are in too many cases a failure, and as the season is now far advanced where deficiency is decidedly apparent nothing remains but to plough up and put in Yellow or White Turnips. The pastures are good, and cattle of all kinds doing well, but the haymaking season has not yet presented those pleasing features with which poets and Cockneys so delight to invest it. The early mown crops of Grass were scanty, and almost spoiled by wet; Clover has been cut in fear and carried in haste, and there is now considerable fear lest the wash hay will be drifted to the sea instead of being carted to the yard. There have been many hands inquiring for work, so that we may suppose even at this busy season all are not fully employed. Wages remain at 12*s*. a week; mowing Grass, if a good crop, 4*s*. an acre; Clover ditto, 3*s*.; Turnips, to flat hoe and single, 8*s*. to 9*s*. an acre. Wool is gradually recovering from the late depression; the yield is this year spoken of as good. *J. W., Peterborough.*

WEST SUSSEX: *July* 2. We have for some time been favoured with fine weather for the growing crops, perhaps a little too wet at times for securing the Clover hay in good order, but still most of it has been got in in fair condition; the crop has not been heavy, but the breadth mown has been quite as great as usual, the season having been so favourable to the pastures, that less of it has been fed than we thought would be required. The Wheat crop has improved wonderfully, and where it has been left, even though so thin it will yield fairly, and we do not expect to be far below an average. Barley and Oats are good, so are Peas, but the Bean crop is blighting very much, and has the appearance, at present, of nearly a failure. Mangel is said to be generally a poor plant; it has come up very irregularly, and grows very slowly, but Swedes are extremely good, have come up quickly, and grow rapidly. Potatoes are at present looking more than usually healthy, and if they keep free from disease a few weeks longer will be above an average crop. The supply of corn in our market falls off, and prices are lowering; there is still a little to thresh, and it will probably come to market about the beginning of harvest. From present appearance we should say that harvest will begin about the end of this month or early in the next. Peas will be fit in a fortnight more. All hands are now ully employed, but still there are sufficient for the work. *G. S.*

STATE OF THE WEATHER—BERKSHIRE.

For the Week ending July 11: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
		Max. in Sun.	Max. in Shade.	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	5 ..	64.0	63.0	50.5	57.0	62.0	0.40	S.W.	29.18
Saturday	6 ..	66.0	64.0	49.0	57.0	61.0	0.17	S.	29.29
Sunday	7 ..	74.0	69.0	56.5	64.0	61.8	0.52	N.W.	29.40
Monday	8 ..	81.0	72.0	55.5	65.0	62.7	0.06	W.	29.58
Tuesday	9 ..	84.0	73.0	50.0	64.2	63.0	0.23	N.W.	29.73
Wednesday	10 ..	88.0	73.0	55.0	67.7	63.7	..	W.	29.80
Thursday	11 ..	80.0	71.0	50.0	62.7	63.6	..	W.	29.78

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

BRAN: *A Small Farmer* asks—"Is there any proved method of preserving bran or pollard from this time till March or April next?"

GUANO: *J L R.* An opinion derived from mere inspection by the eye and nose is worth very little. The guano however appears to us adulterated; and you had better have it analysed.

INQUIRER: Your sample of seeds, instead of being as represented imported Italian, consists mainly of what we take to be Bromus arvensis; it is a parcel of rubbish, and worth less than nothing. *J. B.*

"JUMPERS" IN HAMS: *J P.* As soon as hams are dry from the smoking-house, before the time of flies has come, wash them over with thick whitewash—the side with the skin on is protected sufficiently by it; when dry wash them over a second time. A third and fourth coat of whitewash may be necessary until a solid covering, without cracks, is formed, which is security against all flies. The whitewash will prevent the hams becoming dry; it has only to be scraped off well before boiling. Some persons sew the hams in calico bags, but the whitewash alone has by long experience been proved the best mode of keeping hams through the summer, and in this way the cook may constantly have them in sight, so that if by any accident the flies have got in, she can at once use the only remedy, viz., to cook and eat.

THE WOOLSTON SYSTEM.

MR. SMITH

INVITES the attention of all parties who contemplate Cultivating their Land by Steam to the following Letters, which are a fair sample of about 100 that he has received from Gentlemen who have adopted his System:—

LEICESTERSHIRE.

"High Cross, Leicestershire, June 10, 1861.

"Dear Sir,—The tackle I had from you in March continues to give the greatest satisfaction, and I have not at all altered my opinion, viz.. that the smashing up will beat the turnover system. The first work I did was to prepare 60 acres of land for Barley, all of which looks as well as I could wish it. I then worked my Turnip fallows, all of which are sown, or ready for sowing. I have since been working some very tenacious foul land for my neighbours, who are very much pleased with it. A great number of agriculturists have been to see the work, and I think the most prejudiced are becoming converts to steam cultivation.—I remain, yours truly,

"W. Smith, Esq." "J. TOONE."

WARWICKSHIRE.

"Bickmarsh Hall, Alcester, Warwickshire, June 5, 1851.

"Sir,—In reply to your note of the 3d inst., asking for my opinion of your system of steam culture, I am glad to be able, upon the whole, to report favourably of it. I only commenced about the middle of last October, and the autumn having been unusually wet, together with a long and severe frost following it, a good deal of hindrance occurred. However, having a great quantity of land to get over I persevered, and lost no opportunity of forwarding the work when the weather was at all favourable. The quantity cultivated is 280 acres, but a great portion has been done twice over; enough to make the total at once over 420 acres. In addition to this (and contrary to your advice) I ordered a double furrow plough, with which, at the expiration of the frost, I ploughed upwards of 30 acres of old Sainfoin ley. But I am free to confess that I am not at all satisfied with the process of ploughing by steam upon this kind of land, the greater part of which is a strong lias clay, requiring as large a surface as possible to be torn up and exposed to the atmosphere; and this object, in my opinion, is far better accomplished with the cultivator than the plough. There is also another consideration worthy of notice, and which seems to have been mostly overlooked, viz., that after the cultivator clay land is immediately ready for the harrow and the drill; whereas, after ploughing it requires to remain until either frost or rain comes to pulverise it. For this reason hundreds of acres in this neighbourhood had to stand over last autumn to be sown in the spring. I cannot conclude without tendering you my best thanks for your invention, which, as compared with any other that I have witnessed, is the most simple and effectual.—I am, Sir, yours respectfully,

"W. Smith, Esq., Woolston." "P. DAVIS."

HEREFORDSHIRE.

"Red House, Eaton Bishop, Herefordshire, June 19, 1861.

"Sir,—In reply to yours of the 3d, respecting your system of steam cultivation, I beg to say, that as far as my practice and experience have carried me, I can with all confidence recommend it as being most emphatically the greatest boon to large agriculturists yet introduced, for thoroughly bursting up those portions of the earth which have laid undisturbed for a great length of time. Not having seen its effects upon the growth of crops, I cannot say what increase may be therein; but at the same time I apprehend it will be something considerable.—I am, Sir, yours very respectfully,

"W. Smith, Esq." "FREDERICK DRINKWATER."

BUCKS.

"Hanslope Park Farm, Bucks, June 7, 1861.

"Dear Sir,—In reply to your inquiries I beg to say, that after having travelled about the country to look at the different ways and implements employed to cultivate the land by steam, I came to the conclusion that yours was the most economical; and, therefore, gave my order to you, and I am now fully satisfied with the result, having worked it upon some very heavy clay land, and have no doubt that for general use your three-tined Implement is the best I have seen.

"Yours very truly,

"Mr. Smith." "B. THOMASON."

WILTS.

"Oare House, Marlborough, Wilts, June 6, 1861.

"My dear Sir,—I with pleasure comply with your desire to learn how your steam tackle and system answer in this neighbourhood. Since March I have cultivated 410 acres of a variety of soils, but principally white malm clay. The work when cross cultivated is excellent; the clay land in particular is brought into a very mellow pulverised state, far superior to any work by horse labour, and at a less expense. I pay my men 1*s*. 6*d*. per acre with the five-share, and 2*s*. with the three-share cultivators. I find engine driver and water. The men have averaged 13*s*. per week. The breakages have been very few indeed (tell my friend, your man Tom, this); we have only parted the rope in three places from last July; and my blacksmith's bill for the year is only 4*l*. for repairs of tackle. I approve the system of cultivation by scarifiers, but think most land should be likewise ploughed; at any rate, until worked for some years by steam. On sand land, annual weeds grow much more numerously after the scarifier than the plough, for when buried deep they perish, and the land is not hot enough to vegetate many seeds before the corn is sown in the spring. Of course we can hoe land, but sometimes we don't, and some do not like drilling spring corn. I think, therefore, you should add a four-share plough to your tackle. Most large holders of land in this neighbourhood intend to cultivate by steam; they like your tackle, but wish to be able to plough by steam likewise.—Believe me, yours most truly,

"W. Smith, Esq." "EDWD. GOODMAN."

SOMERSETSHIRE.

"East Quantoxhead, June 13, 1861.

"Dear Sir,—It affords me great pleasure to inform you, that I have done upwards of 300 acres with your steam cultivator, to my entire satisfaction. The greater part of the work has been done on a stiff clay; and the crops are looking better after the cultivator than after the ploughs. I should not like to be without it—I am, Sir, yours truly,

"Mr. Smith, Woolston." "WM. TAYLOR."

BEDS.

"Bickerings Park Farm, June 28, 1861.

"Dear Sir,—Received duly to hand your letter this morning; and in reply I am fully decided in favour of your cultivator doing its work in first-rate style. You beat the Messrs. Howard in having the turning bow, which is evidently far before the Messrs. Howard's system of going backward and forward; they cannot get in or out at land's end, and are obliged to have a few short goes to put their work straight. The Messrs. Howard's engine was an eight-horse, working up to a pressure of 85 to 90 lb. of steam, and scarcely a day passed but what there weret wo or three breakages. Amount of work done was on an average 4 acres per day, including breakages. Your set of tackle was worked by an eight-horse engine, up to a pressure of 45 lb., doing its work in first-rate style, doing from 6½ to 7 acres per day, and done 44 acres once over and 22 twice, and only one breakage all throughout. I will write again in the course of a week, and furnish you with all particulars as to cost per acre.—I am, yours truly,

"Mr. Smith." "THOMAS HERBERT."

NORTHAMPTONSHIRE.

"Fineshade, Wansford, Northamptonshire, April 21, 1861.

"Sir,—I feel so pleased with your cultivating apparatus that I cannot help thanking you for the help it has given me. I am quite sure you deserve the thanks of the whole agricultural world.

"Last Friday week I began an 18 acre field of Bean stubble, I think in as bad a state as a field could be—a stiff clay in parts of it. I broke it over three times in seven days, without moving the engine, in first-rate style; and it now don't look like the same field. I have made a contract with the men for 1... per acre, coal not included, to take the work as it comes, and they earn very good wages, are quite satisfied, and so am I.

"I cannot thank you half enough for the help it has given me this spring. The weather being favourable have done ... near 300 acres with it; some once, some twice, and some three times—the more times the better—at 3*s*. per acre, weather permitting. Again thanking you for bringing out such a useful implement, I am, Sir, your obedient servant,

"WILLIAM BARKER,

"Farm Steward to E. H. C. Monckton, Esq.

"W. Smith, Esq."

KENT.

"Chart Sutton, Staplehurst, Kent, June 17, 1861.

"Dear Sir,—It gives me much satisfaction to be able to report most favourably of your system of cultivation by steam, and of the simple and practical character of the tackle by which the work is done. Upon medium soils, and especially upon heavy clays, your smashing-up process is most effective; in seasonable weather a far better and much more economical fallow can be made by your cultivators in a month than we can usually effect during a whole season with the plough. With steam power we can work effectively on soils, when in such a wet state that it would be most injurious to cultivate with horse power; and we possess the very great advantage of being in a position to do a great deal of work which ... work.

"A large portion of my land consists of very heavy clay, notoriously very tenacious and unmanageable; it affords a good opportunity to test the merits of your system and the strength of the apparatus. So far as I have gone, I feel bound to say that I am thoroughly satisfied in both respects; and that the results fully justified the statements which you have placed before the public, relative to the system which you have so ably advocated.—I am, Dear Sir, yours truly,

"P. S. PUXLEY."

"Mr. W. Smith."

CORK COUNTY.

"Dinhane Castle, Mill Street, County Cork, June 28, 1861.

"Dear Sir,—I am much pleased with the steam cultivator, and have done a great deal of work with it at a small cost compared to horses. But I do not think the system would do without ploughing; and now that Howard has brought out one, I am certain that steam cultivation will be greatly on the increase. As it is easily worked by ordinary labourers on a farm, I have been cultivating bog land for Turnips where no horse could walk, and certainly it has done the work in first-rate style.

"I have seen several accounts on steam cultivation ... most absurd and exaggerated description, which I consider liable to lead farmers astray. For instance, in Bell's Weekly *Messenger* of June 3 a Mr. Cooper (or some one for him) states that it goes down to the depth of 27 inches, and that he can go from one field to the other and get to work in one hour and a half. If he goes down from 15 to 16 inches, and gets to work in five hours, he is doing very well.

"I am, Dear Sir, yours, &c.,

"JOHN R. S. WALLIS."

"W. Smith, Esq."

[The attention of the Editor of *Bell's Weekly Messenger* having been called to this letter, he wrote to Mr. Cooper on the subject, and that gentleman in reply says:—"Your reporter is quite correct about the draining tool; the cultivator ... worked from 14 to 15 inches deep; the pan was broken ... the sharp-edged draining tool was pressed down 27 inches ... several places with ordinary pressure. The ground was ... in such a condition that I shall be happy to repeat the trial in the presence of any one who may doubt the fact. As to the time occupied in shifting the cultivator on the farm (... 350 acres), it is generally done in about two hours, and ... distance on the day in question was about 200 yards, and ... removal was effected in about the time stated by your reporter. I shall feel a pleasure in showing any one who may call upon me what can be done by the cultivator."]

Mr. SMITH also begs to call the attention of his Brother Farmers to some NEW INVENTIONS that he has just Patented, and which will shortly be before the Public, viz.:—

A WINDLASS without a cog-wheel or counter-shaft upon it, yet it will go out of work of itself at the touch of a spring, and can be made and sold at 10*l*. less than any Windlass that has yet appeared.

A COMBINED MACHINE, that will Cultivate, Drill, and Harrow at the same operation.

A ROPE PORTER, self-shifting, yet the most simple, and without a wheel upon it.

The price of a Complete Set of Tackle is as follows:—

NEW PATENT WINDLASS and ROLLERS, with Anchors, &c., complete	£93
1400 Yards of STEEL ROPE	61
PATENT CULTIVATOR, No. 3	15
Two extra Tines to add to No. 3, to make a Five Tined Cultivator of it, in which form it has been used by Mr. Bignell and Mr. Dring for two years, and found to work well	2
Total	£170

Woolston, July 13.

INDELIBLE GARDEN TALLIES. — Mark your Tallies of wood, parchment, or zinc for the greenhouse or garden, with Dunn's PATENT SOLID MARKING INK PENCIL, and they will be indelible. Retail at Messrs. Butler & McCulloch's and Messrs. Hooper & Co., Covent Garden, W.C.; J. Carter & Co., 257, High Holborn, W.C.; T. Brigden, Railway Arcade, London Bridge, S.E.; and all Nurserymen and Seedsmen, Chemists, Stationers, &c. With screw-holder, complete, 1s. 6d. each; will refill for 1s.; by post for 19 penny stamps.

Wholesale by J. Lusher, 19, Holborn Hill, E.C.; Barclay & Sons, Farringdon Street, E.C.; or any other wholesale house; and John Mackay, 121, George Street, Edinburgh.

N.B. These Pencils are unequalled for marking indelibly on Linen, &c., for which purpose a much finer point is made, at the same price, than that contained in the Gardener's Pencil. Exposure to light or heat renders it permanent.

Royal Horticultural Society.

MR. MARCH'S FLOWER GLASSES, which obtained the First Prize for Decoration of the Table at the above Society's Exhibition, are by his permission supplied by Messrs. Dobson & Pearce, of 19, St. James's Street, where the Prizes are now exhibited, and where alone they can be had.

To Nurserymen, Florists, and Others.

A QUANTITY of Stout SHEET GLASS for Sale, suitable for Horticultural purposes. Sizes 34 by 26, to 44 by [illegible]. [illegible] per [illegible], containing 300 feet.
Apply to B. Moss & Co., 45, Leman St., Goodman's Fields, E.

GLASS PRESERVE JARS.—

	Without Lids.	With Lids.
3 inches diameter	0s. 4½d.	0s. 6½d. each.
4 ,, ,,	0 6	0 9 ,,
5 ,, ,,	0 8	0 11 ,,
6 ,, ,,	0 10	1 2 ,,
7 ,, ,,	1 0	1 4 ,,
8 ,, ,,	1 4	1 8 ,,
9 ,, ,,	1 8	2 2 ,,
10 ,, ,,	2 0	2 8 ,,

Intermediate Sizes in proportion.

BEE GLASSES.

4 ins. diameter	0s. 6d. each	9 ins. diameter	1s. 8d. each
5 ,, ,,	0 8 ,,	10 ,, ,,	2 0 ,,
6 ,, ,,	0 10 ,,	11 ,, ,,	2 6 ,,
7 ,, ,,	1 1 ,,	12 ,, ,,	3 0 ,,
8 ,, ,,	1 4 ,,	Not made above 12 inches.	

James Phillips & Co., 180, Bishopsgate Street Without, London, E.C.

GLASS WAREHOUSE.—ESTABLISHED 1750.

THOMAS MILLINGTON,

87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.

REDUCED TARIFF FOR HORTICULTURE, PICTURES, AND DWELLINGS.

ORCHARD-HOUSE SIZES. SMALL SQUARES.

Supplied to Mr. Rivers and many others.

In. by In.		16 oz.	21 oz.
20 .. 12			
20 .. 13	Common, per 100 feet,	13s. 6d.	18s.
20 .. 14	Super ,,	16s.	23s.
20 .. 15			

In. by In.	In. by In.	Per 100 feet.	Per foot.
6 .. 4	8 .. 6	Common	1½d.
6½ .. 4½	8½ .. 6½	11s. 6d.	
7 .. 5	9 .. 7	Super.	1¾d.
7½ .. 5½	9½ .. 7½	12s. 6d.	

SQUARES IN 100 AND 200 FEET BOXES.

Inches by Inches.	Inches by Inches	Inches by Inches.	Inches by inches.	Inches by inches.		P. 100 feet.	P. foot.
10 .. 8	12½ .. 9½	13 .. 10	15 .. 10	13½ .. 11½	4ths.	12s. 6d.	1½d.
10½ .. 8½	13 .. 9	13½ .. 10½	12 .. 11		3ds.	14s. 3d.	1¾
11 .. 9	12 .. 10	14 .. 10	12½ .. 11½	14 .. 11	2ds.	18s.	2¼
12 .. 9	12½ .. 10½	14½ .. 10½	13 .. 11		1sts.	21s. 6d.	2¾
15 .. 11	15 .. 12	16 .. 13	24 .. 14	24 .. 16	4ths.	13s. 6d	1¾d.
16 .. 11	16 .. 12	17 .. 13	20 .. 15	20 .. 17	3ds.	16s.	2
17 .. 11	17 .. 12	20 .. 13	22 .. 15	20 .. 18	2ds.	19s. 8d.	2½
18 .. 11	18 .. 12	23 .. 13	24 .. 15	.. ..	1sts.	24s.	3
13 .. 12	20 .. 12	20 .. 14	20 .. 16	.. ..			
14 .. 12	22 .. 13	22 .. 14	22 .. 16	.. ..			

If less quantity than 100 feet is taken, a moderate charge made for package.

GLASS CUT TO ANY GIVEN SIZES NOT ON LIST.

16 oz.—4ths, 1¾d., 2d., and 2½d. per foot.
,, 3ds, 2¼d., 2½d., and 3d. per foot.

21 oz.—4ths, 2¾d., 3d., and 3½d. per foot.
,, 3ds, 3½d., 4d., and 4½d. per foot.

HARTLEY'S IMPROVED PATENT ROUGH PLATE.

Not accountable for breakage.

GENUINE WHITE LEAD	32s. 0d. per cwt.	LINSEED OIL	2s. 7d. per gall.
ANTI-CORROSION PAINT	34 0 ,,	BOILED ,,	3 0
LINSEED-OIL PUTTY	8 0 ,,	TURPENTINE	——

BLACK, GREEN, and all other kinds of PAINTS, VARNISHES, BRUSHES, &c.

HOTHOUSES FOR THE MILLION,

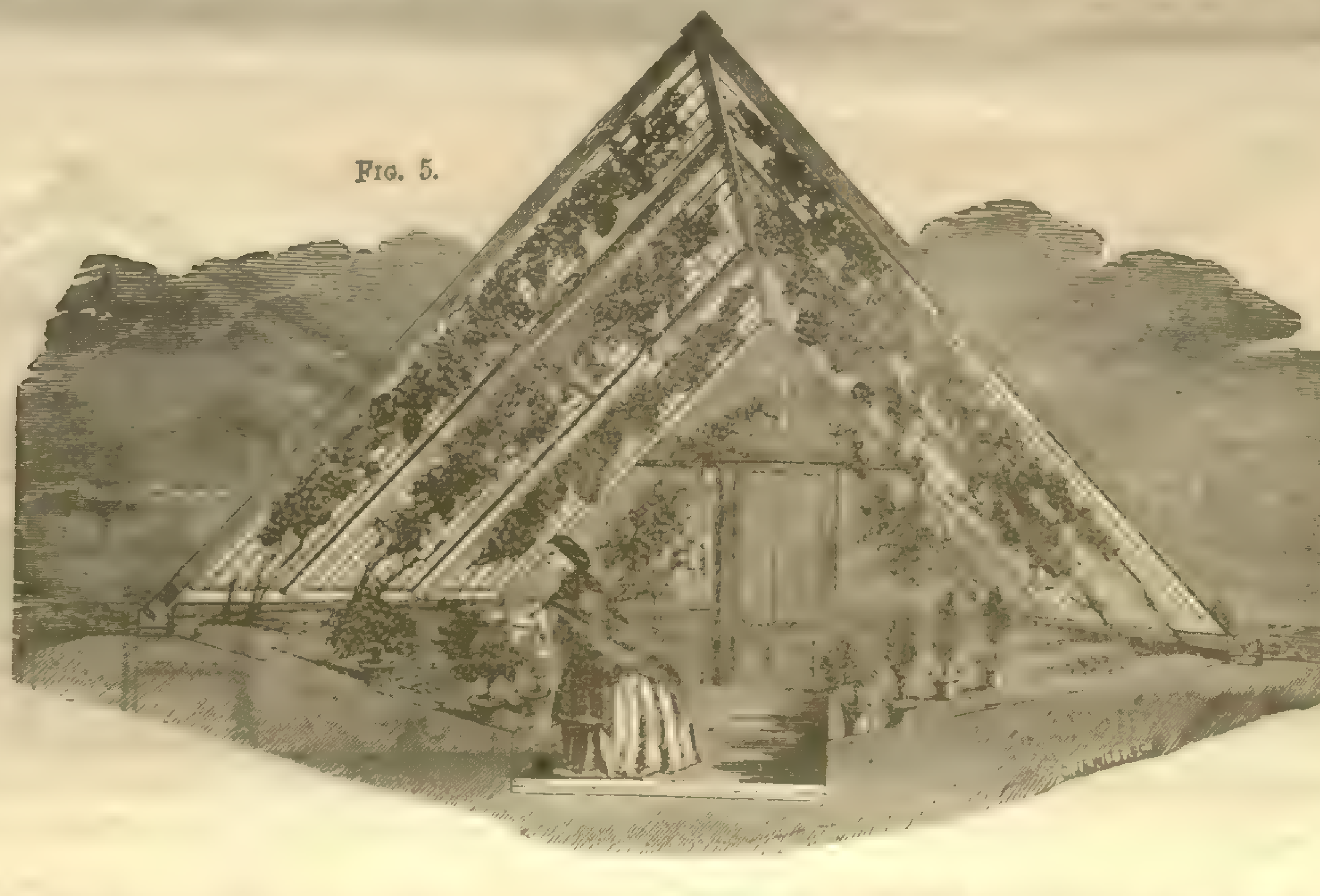
ON THE PRINCIPLE INVENTED AND PATENTED BY

SIR JOSEPH PAXTON, M.P.

COMBINING SIMPLICITY, CHEAPNESS, EXCELLENCE, AND DURABILITY.

BEING CAPABLE OF FULFILLING IN THE MOST PERFECT MANNER ALL THE REQUIREMENTS OF HORTICULTURE.

Fig. 5.



The Prices of Lean-to Houses complete are as follows:—

Ft. In.	8 ft. Lights	10 ft. Lights	12 ft. Lights	14 ft. Lights	16 ft. Lights
20 7 in length	£12 0 0	£16 0 0	£21 0 0	£28 10 0	£34 5 0
31 3 in length	16 10 0	21 2 6	26 10 0	37 12 0	45 16 0
41 11 in length	20 18 0	26 18 6	33 7 6	46 14 0	57 7 0
52 7 in length	25 12 6	32 15 0	40 5 0	55 16 0	68 18 0
63 3 in length	30 6 0	38 10 0	47 2 6	64 18 0	80 10 0
73 11 in length	34 12 6	43 15 0	53 7 6	74 0 0	92 0 0
84 7 in length	39 6 0	49 11 6	60 5 0	83 2 0	103 11 0
95 3 in length	43 19 0	55 10 0	67 2 6	92 5 0	115 2 0
105 11 in length	48 17 6	60 12 6	73 10 0	101 10 0	126 13 0

The Prices of the Span-roofed Houses, with Water-troughs, Doors, and Ends complete, are as follows:—

Ft. In.	8 ft. Lights	10 ft. Lights	12 ft. Lights	14 ft. Lights	16 ft. Lights
20 7 in length	£24 0 0	£32 0 0	£42 0 0	£57 0 0	£68 12 0
31 3 in length	33 0 0	42 5 0	53 0 0	75 4 0	91 14 0
41 11 in length	41 16 0	53 17 0	66 15 0	93 8 0	114 16 0
52 7 in length	51 5 0	65 10 0	80 10 0	111 12 0	137 10 0
63 3 in length	60 12 0	77 0 0	94 5 0	129 16 0	161 0 0
73 11 in length	69 5 0	87 10 0	106 15 0	148 0 0	184 0 0
84 7 in length	78 12 0	99 3 0	120 10 0	166 4 0	207 2 0
95 3 in length	87 18 0	111 0 0	134 5 0	184 10 0	230 4 0
105 11 in length	97 15 0	121 5 0	147 0 0	203 0 0	253 6 0

If only one end is required a corresponding deduction will be made. The 14 and 16 feet lights are made stronger than those of less dimensions.

The above prices do not include package, railway freight, heating apparatus, or erection.

ILLUSTRATED CIRCULARS WITH LISTS OF PRICES CAN BE HAD ON PREPAID APPLICATION TO

SAMUEL HEREMAN, 7, PALL MALL EAST, LONDON, S.W.

JOHN WEEKS & COMPANY,

HORTICULTURAL BUILDERS AND HOT-WATER APPARATUS MANUFACTURERS

TO

HER MAJESTY THE QUEEN,
H.R.H. THE PRINCE CONSORT,
H.R.H. PRINCE DEMIDOFF, FLORENCE,
THE ROYAL HORTICULTURAL SOCIETY OF LONDON,
THE ROYAL BOTANIC SOCIETY, REGENT'S PARK,
THE BOTANIC SOCIETY, LIVERPOOL,

AND NUMEROUS PUBLIC COMPANIES.

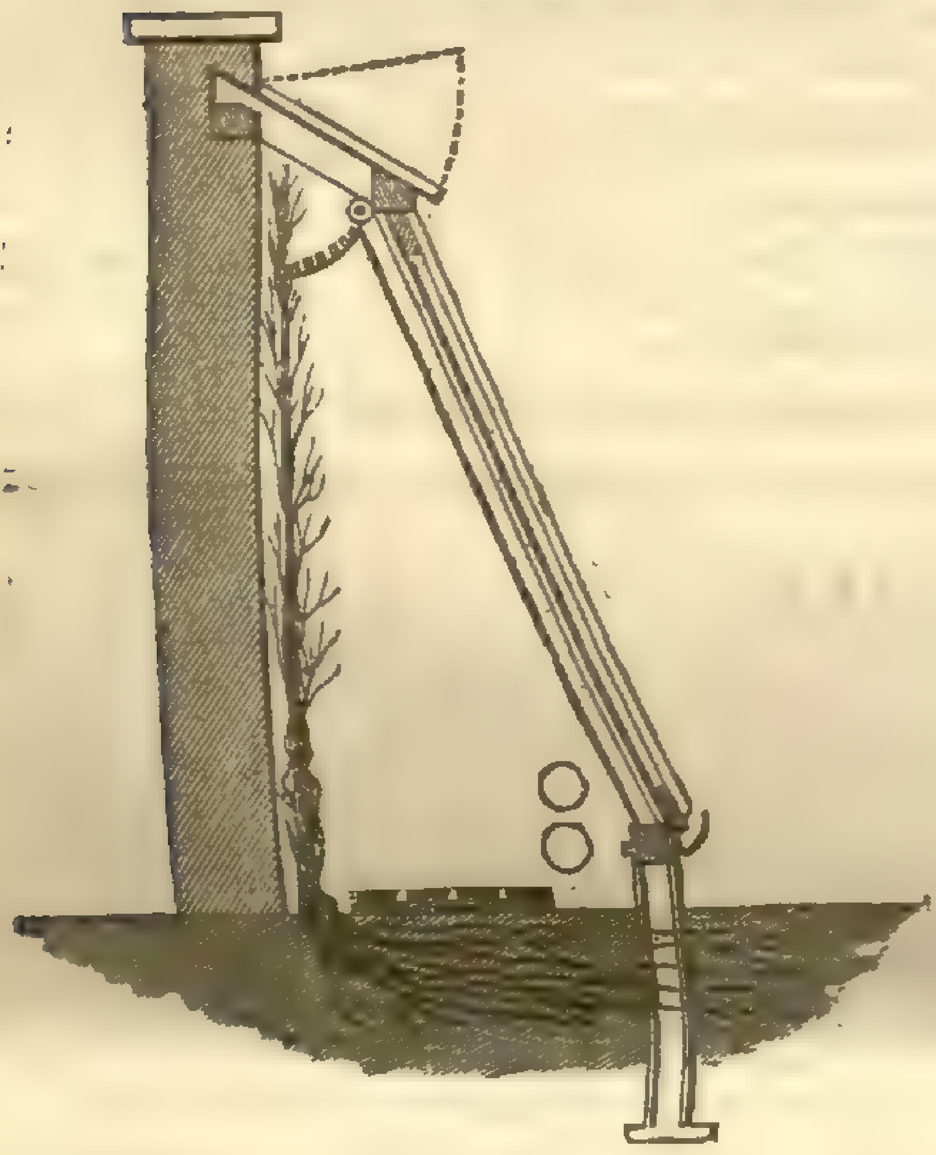


Fig. 33.

Fig. 32.

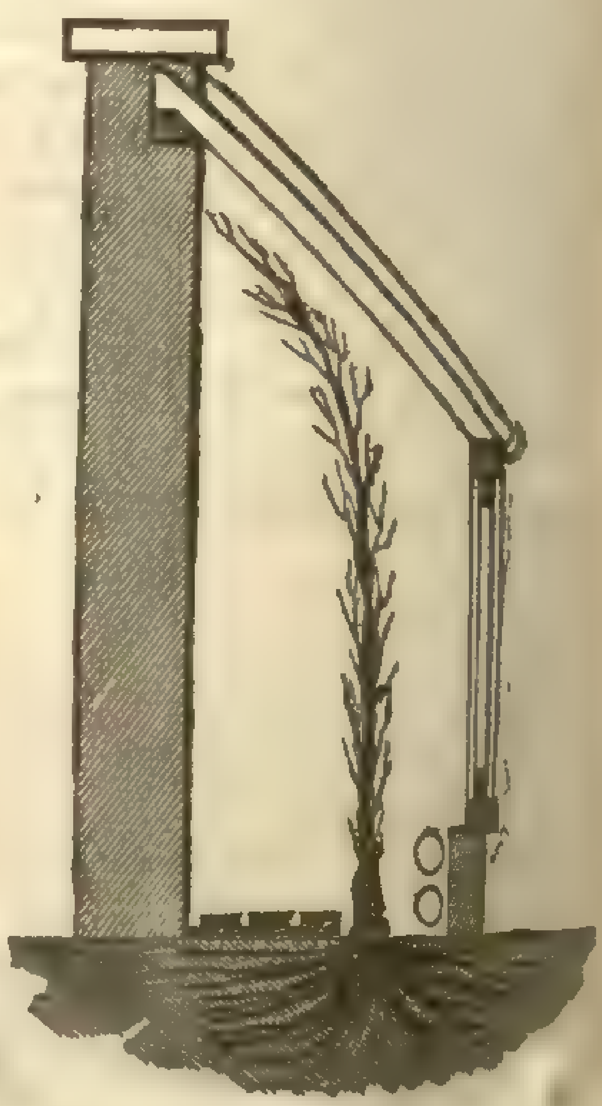


Fig. 31.

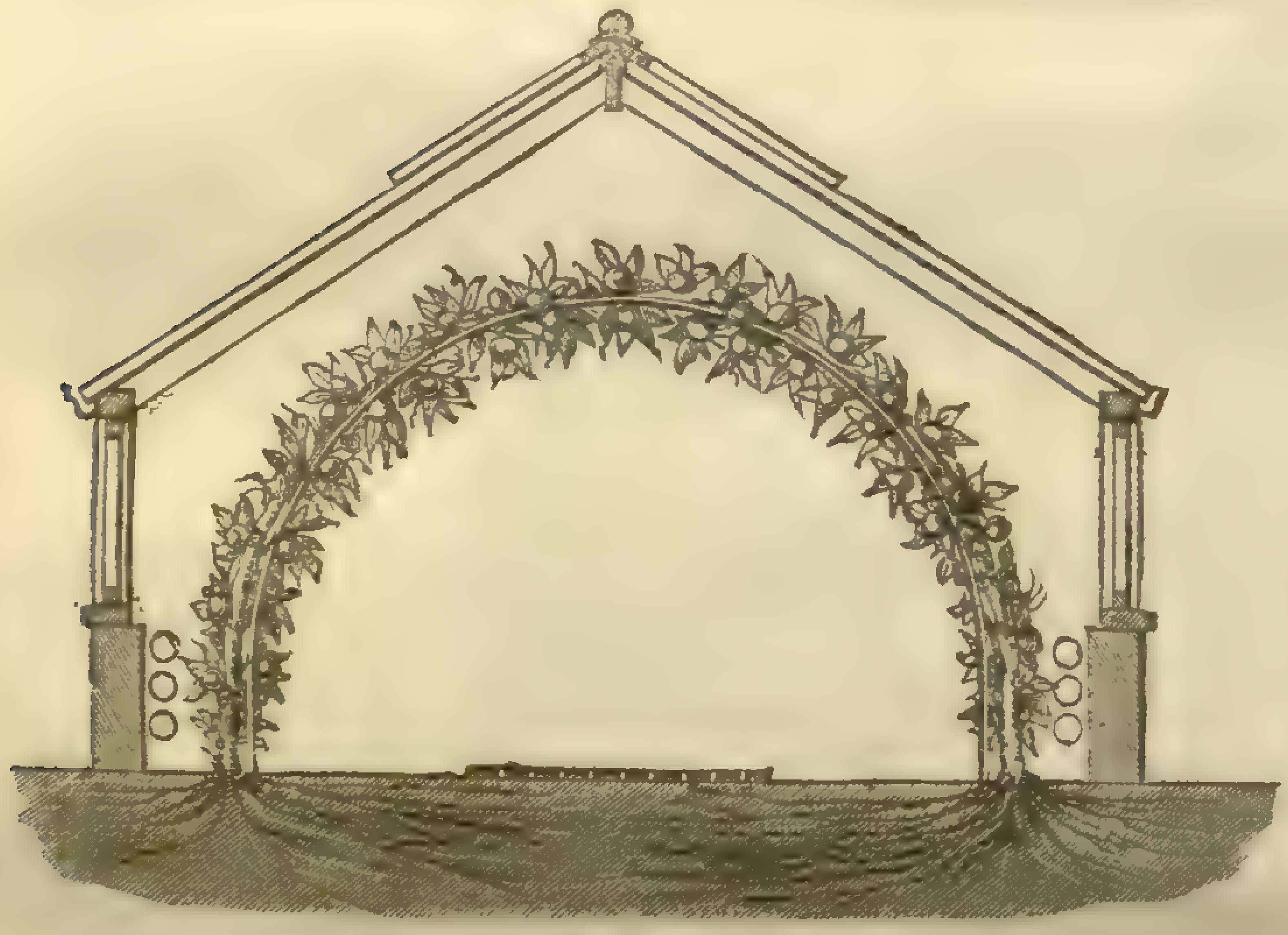


Fig. 34.

Fig. 37.

THE severe frosts which have of late characterised our spring seasons, greatly to the injury and in many instances to the entire destruction of Wall Fruit, rend[er it] necessary to adopt such precautions as will in future not only prevent a recurrence of the sad disaster, but give increased vigour to the trees, and secure abun[dant] crops. For this purpose JOHN WEEKS & COMPANY manufacture a very SUPERIOR GLASS STRUCTURE, portable, and requiring no BRICK, STONE, or o[ther] similar foundation.

The front is supported upon small Cast-iron Flanged Standards, stationed from 4 to 6 feet apart, capable of being inserted in the ground at any period without [the] least risk of damaging the existing roots. All those in operation are giving entire satisfaction.

WEEKS' IMPROVED VENTILATING APPARATUS is highly commended.

WEEKS' IMPROVED UPRIGHT TUBULAR BOILER has, from its infinite superiority to all others, won for itself an unparalleled and world-wide reputation, and in proof of the universal satisfaction given, Messrs. WEEKS have the pleasure to state that nearly One Hundred unsolicited and most flattering Testimonials have reached them, expressing the warmest encomiums upon the mighty results of their justly termed "WONDERFUL BOILER" during the late severe winter.

The LARGEST HOT-WATER APPARATUS in EUROPE, containing nearly THREE MILES of PIPING, was erected by J. WEEKS & COMPANY.

JOHN WEEKS & COMPANY, HORTICULTURAL BUILDERS, ENGINEERS, AND IRONFOUNDERS,
KING'S ROAD, CHELSEA, S.W.

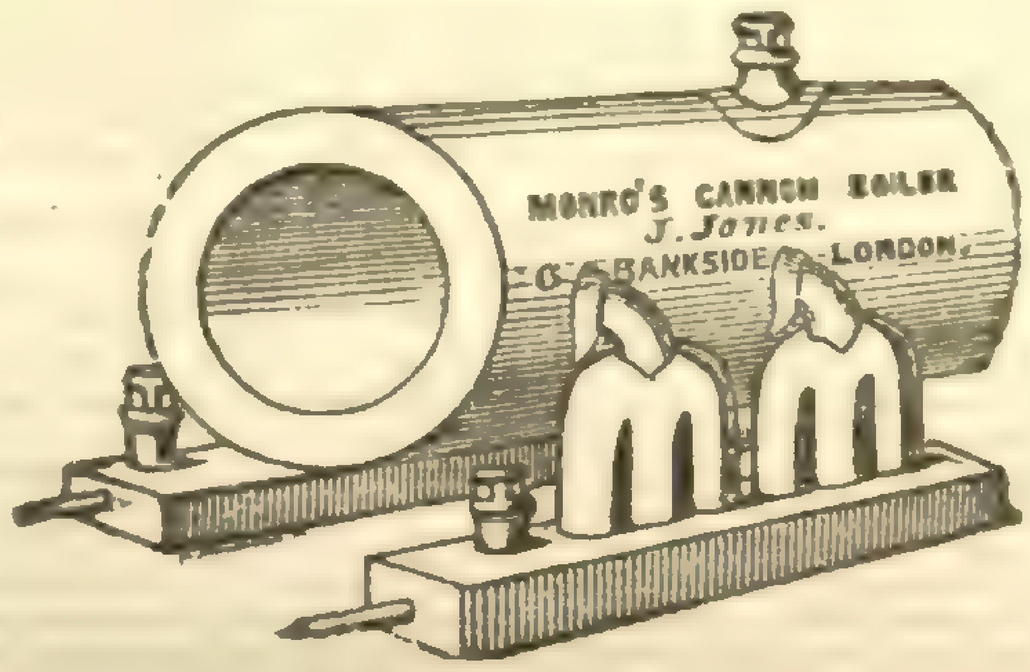
Plans, Estimates, and Pamphlets free on application.

J. JONES'S HOT-WATER APPARATUS.

PRICE.

24-inch Wrought Iron	£6 10 0
36-inch Wrought Iron	8 10 0
48-inch Wrought Iron	12 0 0

Larger sizes if required.



MONRO'S CANNON BOILER.

These Boilers are now acknowledged by all who have used them to be the best Boiler at present invented. They are both economical in their first cost, and also in the consumption of fuel. They require but little space to fix them in, and when set the total height of brickwork need not be more than 3½ feet, consequently they can be fixed in many places where it would be impossible to set an Upright Boiler. These Boilers are now made of various sizes, suitable to heat from 500 feet to 3000 feet of 4-inch pipe, and are kept in stock and sold only by

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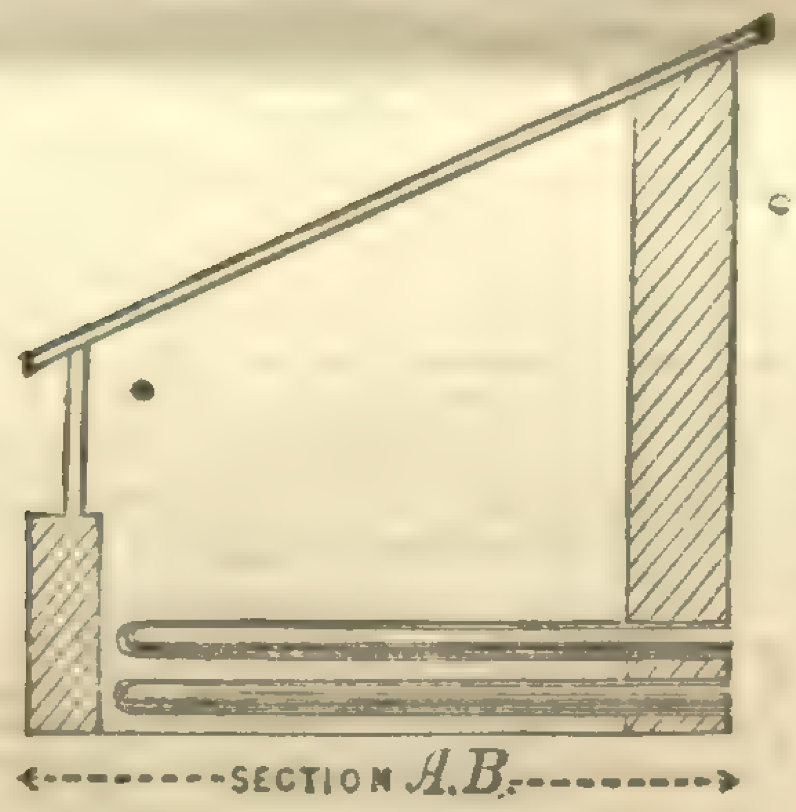
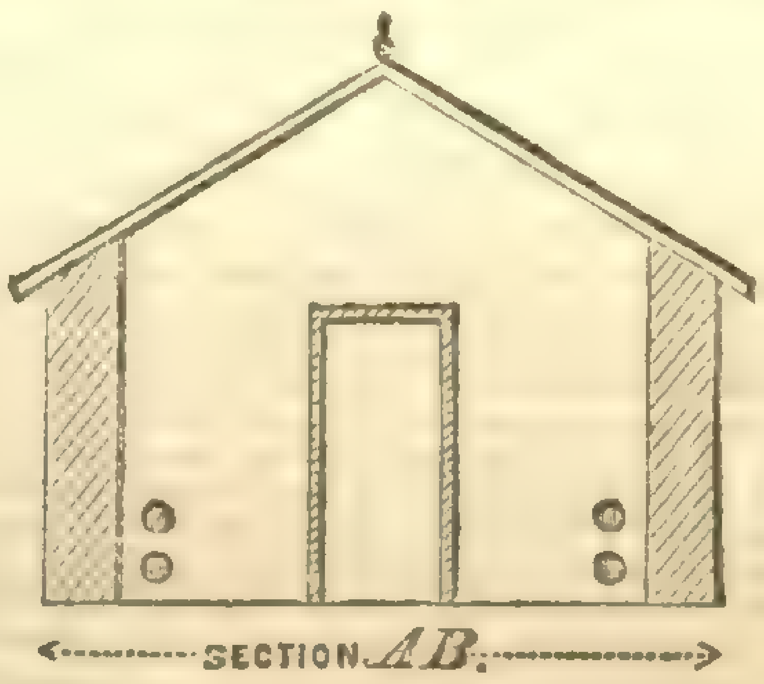


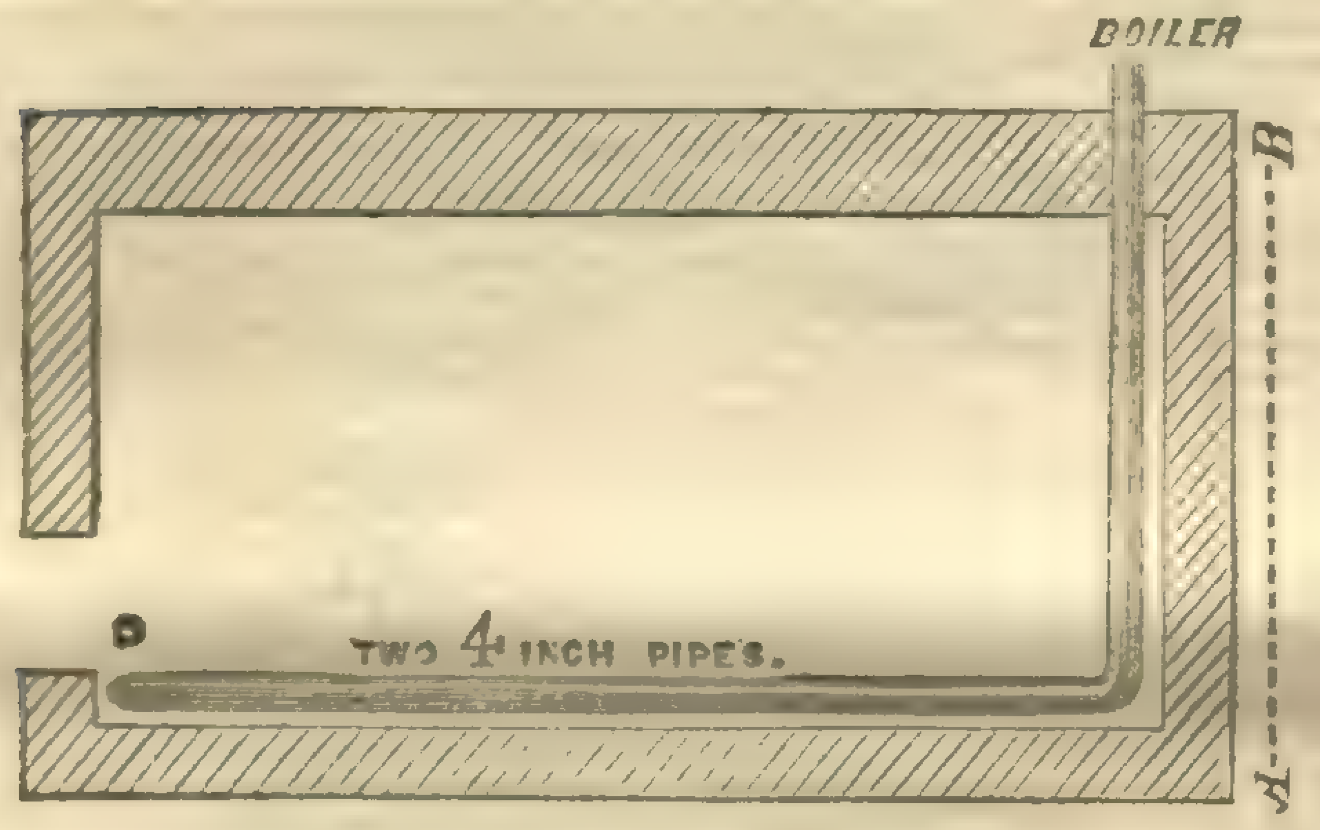
J. JONES,

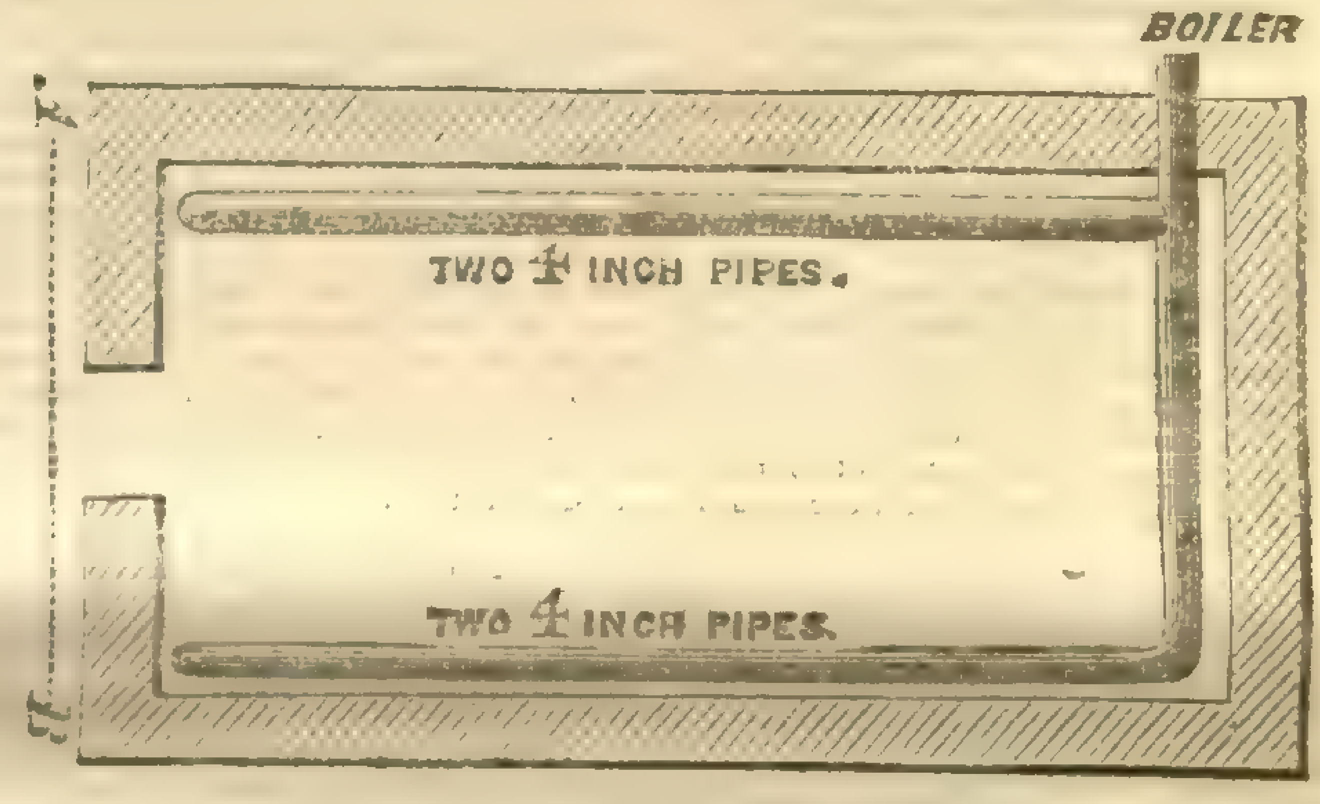
6, BANKSIDE, SOUTHWARK,

LONDON, S.E.

PLAN No. 3.







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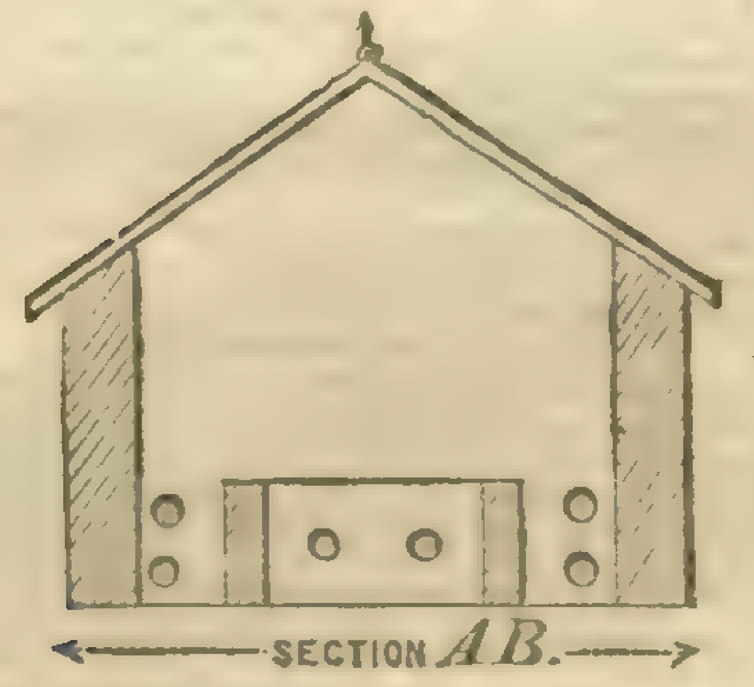
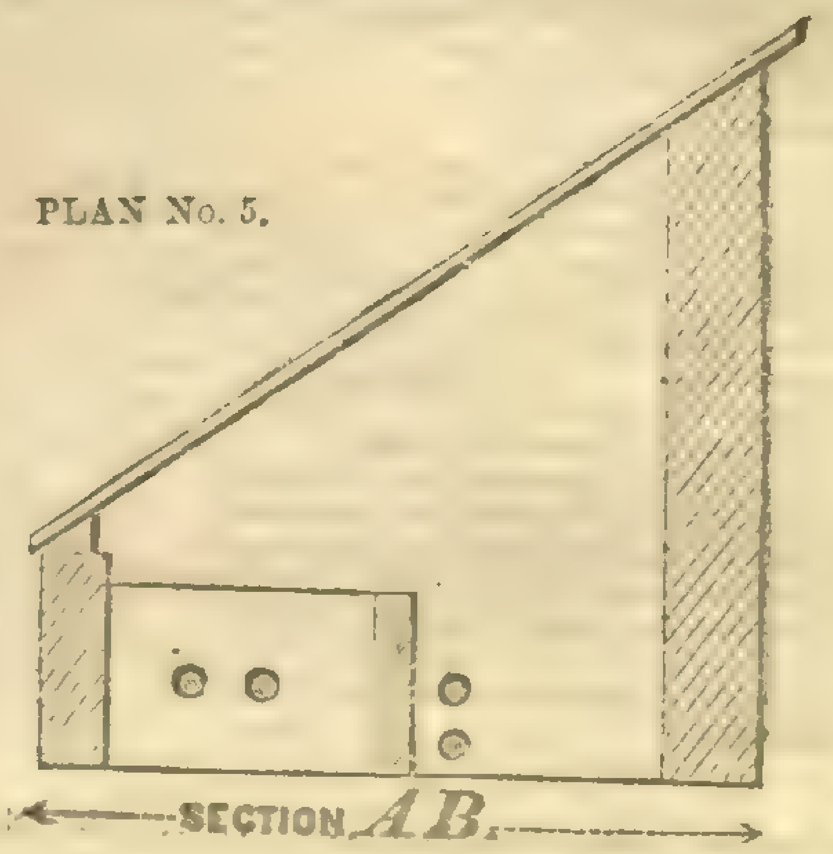


ESTIMATES

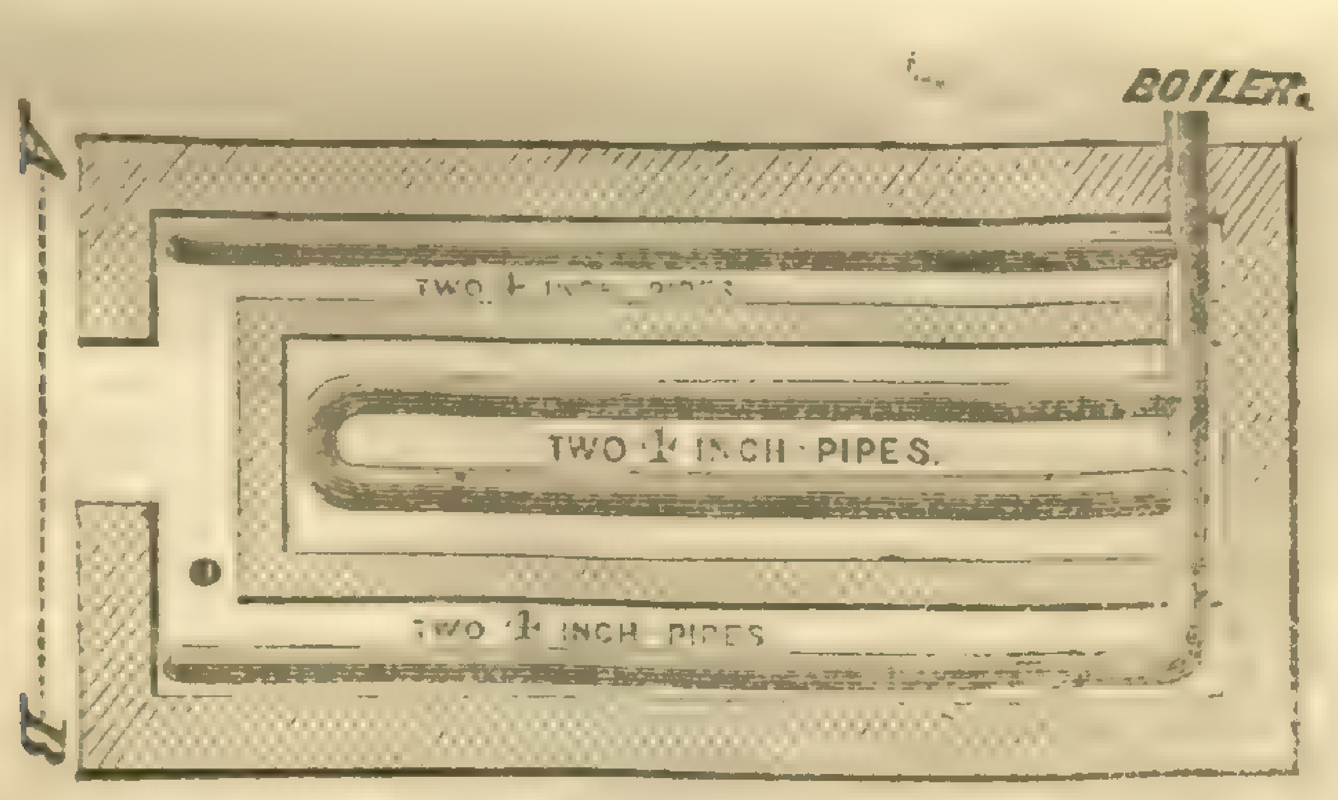
FOR

HOT-WATER APPARATUS,

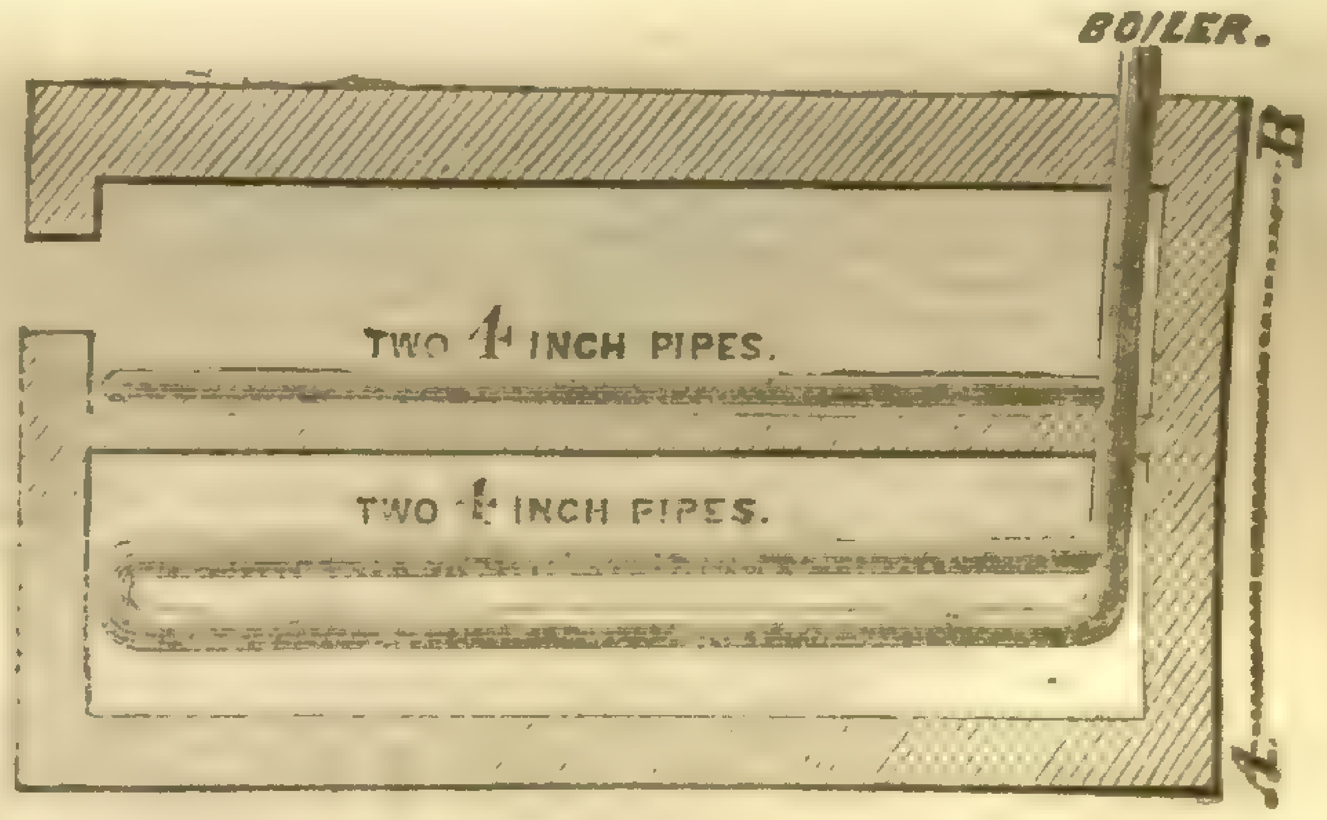
PLAN No. 5.



as shown in any of the annexed plans, and with Pipes of any size as required, delivered Free to any Railway Station, or erected complete in any part of the country, with CANNON, SADDLE, or CYLINDER BOILERS, will be sent, with an ILLUSTRATED CATALOGUE, free on application to



J. JONES,



HOT-WATER APPARATUS MANUFACTORY, 6, BANKSIDE, SOUTHWARK, LONDON, S.E.

Calceolaria Seed, ex. ex.

STEPHEN BROWN (late Bass & Brown) continues to supply Seed from the same first-rate private Grower as for years past, and which has annually given the most unqualified satisfaction. The flowers are splendid in colour, richly spotted, of excellent form, large, and of great variety. Packets, 2s. each; small packets, 1s.

CALCEOLARIA NANA GRANDIFLORA PRÆCOX.—Very fine continental variety, exceedingly dwarf, novel and beautiful, with a profusion of bright flowers of great variety. Packets, 2s. each.

Primula Fimbriata.

FIMBRIATA KERMESINA SPLENDENS.—A velvet-like crimson, ex. fine, surpasses all others by its brilliant and bright colours, 2s. 6d. per packet.

FIMBRIATED.—Mixed rose and white, fine, 1s. per pkt.

FIMBRIATA STRIATA.—Superb new white, striped with red, very beautiful, 1s. per packet.

Also, separately named or mixed, very Choice Seeds of Geranium, Hollyhock, Carnation, Picotee, &c.; also Choice Mixed Pansy, Cineraria, Petunia, Polyanthus, Verbena, and other Choice Florist Flowers.

SEED CATALOGUES on application.

Stephen Brown, Seed Grower and Importer, Sudbury, Suffolk.

Geraniums, Herbaceous and Alpine Plants, Orchids, Chrysanthemums, Hardy Variegated Plants, &c.

B. S. WILLIAMS begs to inform his friends and patrons that a PRICED and DESCRIPTIVE CATALOGUE of the above, to which are added supplemental Lists of Fuchsias, Stove, Greenhouse, and Hardy Plants, Ferns, Ornamental Foliage and Variegated Plants, Fruit Trees, &c. (which include the best new plants of the season,) is now published, and will be forwarded post free on application.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, London, N.

New Phalænopsis with Variegated Foliage.

B. S. WILLIAMS has great pleasure in offering for the first time strong Plants of Phalænopsis Schilleriana, which have just arrived in the finest possible condition. This beautiful species is quite distinct from all others in cultivation; the leaves are similar in form and equal in size to those of P. grandiflora; ground colour dark green, with irregular bands of white over the whole surface. Flowers flesh-coloured; size, about two-thirds of those of P. amabilis, and produced in great profusion from strong branching stems, one of which may be seen at the Nursery, which has borne upwards of 100 flowers, a portion of which are still attached.

Price can be had on application.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway.

CLAPTON NURSERY, LONDON, N.E.

HUGH LOW & CO.

HAVE pleasure in submitting to the notice of admirers of Hardy Ornamental Trees the annexed LIST of CONIFERS, which is composed entirely of species which have withstood uninjured the severity of the past Winter. Particular attention is invited to the Californian Conifers, such as Picea amabilis, grandis and nobilis, Cupressus Lawsoni, Thuja gigantea, Abies Williamsoni, and A. Douglasi. The seeds from which all these plants were raised were collected by the renowned traveller Mr. William Lobb, to whom belongs the credit of sending seeds of these fine Trees in such quantities as to enable H. L. & Co. to offer the plants at previously unheard of prices.

H. L. & Co. feel persuaded these low prices will induce gentlemen planting for effect to make large use of the finest and most ornamental Trees of the known world. Abies Williamsoni having been confounded with A. Mertensiana, H. L. & Co. append a description of the true species from the pen of Mr. W. Lobb.

Abies Williamsoni, synonymes Abies Pattoni, Abies Hookeriana, must not be confounded with Abies Mertensiana, as it sometimes has been, as Mertensiana is altogether a different plant, very closely resembling the Hemlock Spruce.

Remarks by Mr. William Lobb.

ABIES WILLIAMSONI, A. HOOKERIANA, OREGON COMMISSION.—This noble tree was first discovered by Dr. Newberry, on the Cascade Range in Oregon, in lat. 44° North. Some time after it was noticed by Murray on Scots Mountain in California, in lat. 41° 20 North, lon. 122° 37 West. Since then I saw it in great abundance on the highest peaks of the Sierra Nevada, near the head waters of the North Tributary of Feather River, also more southerly towards Lake Bigler, in lat. 39° 30 North, lon. 120° 15 West.

Of all the Coniferous trees that have been introduced from this country, this will doubtless prove the most ornamental and useful. In habit of growth and general appearance, it much resembles the Deodar, but being more thickly branched and more densely clothed with foliage, it is by far a more handsome tree. It occupies the most elevated parts of the Sierra Nevada, and seldom descends lower down than 100 yards from the line of perpetual snow. In most situations it forms a tree from 100 to 120 feet high, with a trunk sometimes 3 feet in diameter. The branches spread out horizontally with the main stem, drooping at the extremities. The leaves are thickly set round the stem, solitary and tufted, about two-thirds of an inch long, rich grass green above, pale green beneath, those at the points of the branchlets spreading silvery white below The cones are about 2 inches long, and about an inch in diameter in the thickest part; when young, dark purple; when old, pale brown, with the scales much reflexed. The male flower or catkins are two eighths of an inch long, violet purple. The wood is of a reddish colour, close and fine grained, and remarkable for strength and durability. As an ornamental tree for parks and pleasure-grounds, or for general planting, no tree can be more recommendable, and judging from the soil and situation in which it grows, it may be considered the hardiest of the Californian trees.

	Each. s. d.	Dozen. s. d.	100 s. d.
Abies cephalonica, 2 years	..	8 0	50 0
,, cilicica, strong	5 0		
,, ,, 2 years	..	8 0	60 0
,, Douglasi, the fine tree which produced the flag-staff recently fixed in Kew Gardens, 6 inches	..	8 0	50 0
,, Douglasi, 9 to 10 inches	1 0	9 0	65 0
,, ,, 12 to 15 inches	1 6	12 0	
,, inverta, Weeping Spruce	21 0		
,, Menziesi, 1 year	..	..	15 0
,, ,, 2 years	..	4 0	30 0
,, ,, 9 inches	..	6 0	45 0
,, orientalis, strong	3 6	30 0	
,, Pinsapo (see Picea) 4 years	2 6	24 0	
,, ,, 1 year	.	3 0	21 0
,, pygmæa	3 6		
,, pyramidalis, stout .. .. 5s. to	7 6		
,, taxifolia (Mertensiana) 3 years ..	1 0	9 0	60 0
,, Williamsoni (Hookeriana, Pattoni) 1 year; not less than six plants can be sold, as the seedling plants are potted in store pots	3 6	30 0	240 0
Cedrus africanus, (Mount Atlas Cedar), 2 years	..	4 0	24 0
,, africanus, 6 to 8 inches	1 0	9 0	60 0
,, Deodara	..	18s.–90s.	
,, ,, robusta, 18 inches ..	3 6		
,, ,, viridis, 15 inches	3 6		
Cephalotaxus Fortuni fœmina	..	18s.–24s.	
,, ,, mascula	..	18s.–24s.	
Chamæcyparis thurifera	3 6		
Cryptomeria japonica, 2 years stores ..	..	..	10 6
,, ,, 9 in single pots ..	..	4 0	24 0
Cupressus ericoides (Retinospora) ,, ,, 6 inches	.	9 0	63 0
,, ,, 9 inches	..	12 0	90 0
,, funebris	..	12 0	
,, Goveniana, 2 years	..	4 0	30 0
,, Lawsoni, 1 year	..	6 0	45 0
,, ,, 2 years	1 0	9 0	
,, ,, 1½ feet to 2 feet ..	5 0	54 0	
,, ,, 1 foot	3 0	30 0	
,, macrocarpa, 1 year	..	4 0	30 0
,, ,, 2 years	..	6 0	45 0
,, species California, apparently intermediate between Macrocarpa and Goveniana, 2 years	..	6 0	45 0
,, Nutkaensis (Thujopsis borealis)			
Juniperus Cracovia	1 6	12 0	
Libocedrus decurrens (Thuja gigantea) 1 year	2 6	27 0	150 0
,, years	5 0	42 0	
Picea amabilis, true, 3 years, 6 inches, fine stout plants	5 0	42 0	300 0
,, grandis, true, 3 years, 7 inches, fine stout plants	5 0	42 0	300 0
25 will be charged at rate per 100, and when 100 of each kind are ordered, 10 plants will be added free of charge.			
Picea nobilis, true, 3 years	7 6	84 0	
,, ,, ,, 2 years	5 0	42 0	

	Each. s. d.	Dozen. s. d.	100 s. d.
Picea nobilis, 1 year, true	2 6	27 0	150 0
,, Nordmanniana, 2 years	..	42 0	300 0
,, ,, 3 years	5 0		
,, nova species, Vancouver's Island, foliage very dark green, strong plants 9 to 12 inches 10s. 6d. to	15 0		
,, pichta, 3 year	2 6		
Pinus Benthamiana, 1 foot	2 6	24 0	
,, contorta, 1 foot	3 6		
,, Cembra	..	9s.–18s.	
,, excelsa, 2 years	..	..	35 0
,, ,, stout	..	12 0	
,, Jeffreyi, 2 years	3 6		
,, Lambertiana, 2 years	2 6	25 0	200 0
,, macrocarpa, 1 year (Coulteri) ..	2 6	24 0	
,, ,, fine plants, 1½ feet ..	5 0		
,, monticola, 3 years	3 6		
,, ponderosa, 2 years	2 6	21 0	
,, Sabiniana, 1 year	2 6	24 0	
,, Taurica, 2 years	..	..	50 0
,, ,, 1 foot, stout	..	12 0	
,, tuberculata, 2 years	3 6	30 0	
Podocarpus Andina, 6 inches	..	36 0	
,, ,, 1 foot	5 0		
,, nubigena, 3 years	7 6		
Retinospora (Cupressus) ericoides	..		
Salisburia adiantifolia, 1 to 1½ feet	2 6		
Taxodium sempervirens, 9 to 12 inches ..	1 0	9 0	
,, distichum (Deciduous Cypress) 12 to 18 inches	..	9 0	
Taxus adpressa, 9 inches	1 6	12 0	
,, ,, 1 foot	2 6	18 0	
,, ,, 18 to 20 inches	5 0		
,, baccata, gold striped	2 6		
,, Dovastoni (the Weeping Yew), 12 inches	..	18 0	
,, elegantissima, 4 to 6 inches	..	12 0	
,, ,, 6 to 9 inches	..	18 0	
,, ,, 9 to 12 inches ..	..	24 0	
,, ericoides, (very distinct) 6 inches ..	3 0	30 0	
,, fastigiata, (Irish Yew) 1 to 1½ feet	..	..	30 0
,, ,, 1½ to 2 feet	..	..	42 0
,, ,, 4 feet	..	24 0	
,, ,, 5 feet	..	30 0	
,, Makoyi (coriaceus) 6 t 9 inches ..	2 6	24 0	
,, ,, 1 to 1½ feet	..	42 0	
Thuja aurea. 9 to 12 inches	2 6	24 0	
,, filiformis (Biota pendula)	2 6		
,, gigantea (Libocedrus decurrens) 1 yr.	2 6	27 0	150 0
,, ,, ,, ,, 3 yrs.	5 0	42 0	
,, Lobbi (Menziesi), 2 years	1 0	10 0	75 0
,, ,, 20 inches fine, from seed ..	7 6	90 0	
,, ,, 24 to 30 inches	10 6	120 0	
Thujopsis borealis, 9 inches	..	18 0	
,, ,, 1 foot	..	24 0	
,, ,, 1½ to 2 feet	..	42 0	
Torreya grandis	10 6		
Wellingtonia gigantea, 1 year	2 6	27 0	240 0

With two or three exceptions the whole of these plants are in pots and can be thus safely removed at any time.

A Complete CATALOGUE of the very extensive Collection of PLANTS and TREES grown at the Clapton Nursery will shortly be ready for distribution.

Choice Seeds.

B. S. WILLIAMS begs to recommend the following as very superior, and which have annually given general satisfaction.

	Per packet—s. d.
Primula sinensis dentiflora	
,, ,, ,, albiflora	2 0
,, ,, ,, finest mixed	2 0
Calceolaria, herbaceous, finest mixed	2 0
Cineraria cruenta, ,, ,, ...	2 6

SEED CATALOGUES on application.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway.

To the Seed Trade.

THOMAS AYRES, Wholesale and Retail Seedsman and Grower, Biggleswade, Beds, has to dispose of a large quantity of TURNIP SEED, in large or small quantities. The stock includes Skirving's Liverpool Swede, Ayres Improved Liverpool Swede, Purple Top Swede, Marshall's Improved Purple Top Swede, Green Top Yellow Swede, Round Green, Green Globe, White Globe, Red Globe, Red Tankard, Green Tankard, Dale's Hybrid, and a few other varieties.

Price on application.

N.B. A few Cwt. of ONION and PARSNIP SEED to dispose of.

WHEELER'S ORANGE GLOBE MANGEL,
WHEELER'S IMPERIAL SWEDE,
GRASS SEEDS for PERMANENT PASTURE,
GRASS SEEDS for LAWNS,

And all other Seeds of the same excellent quality which has rendered our Farm Seeds so celebrated.

We offer our Seeds at the lowest price consistent with their being good and pure, at the same time deliver them carriage free by rail, and allow 5 per cent. discount for cash.

Our Book of FARM SEEDS sent free for 3 stamps.

J. C. Wheeler & Son, Seed Growers, Gloucestershire.

RAYNBIRD, CALDECOTT, and BAWTREE, Seed Merchants and Growers, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E.C.

Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.

Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

Cabbage Seed

CATTELL'S DWARF BARNES and CATTELL'S DWARF RELIANCE may be had as usual, free by post for 12 penny stamps per packet, the former containing one ounce, and the latter half an ounce. May be sown as early as the middle of July, and will not run to seed the following Spring.

These two are the earliest and best Cabbages in cultivation. See remarks by P. A. W. in *Gardeners' Chronicle* of Feb. 2, 1861, page 99.

Nursery and Seed Establishment, Westerham, Kent.

GRAPE VINES from EYES.—Strong healthy Plants of the undermentioned kinds may be obtained, and by being now planted a year will be gained. They are exposed to greenhouse temperature, and can therefore be safely transmitted to any distance.

Hamburgh Black	Frontignan, White
,, Wilmot's	Muscadine, Reeves's
,, Mill Hill	,, Royal
,, Pope's	Barbarossa, Black
,, Victoria	Gromier du Cantal
,, Golden (Busby's Stockwood)	Lady Downes's Seedling
,, Champion	Chasselas Musqué
,, Muscat	Prince, Black
Muscat of Alexandria	Sweet Water, old
,, Cannon Hall	,, large white
,, Bowood	,, Grove End
,, Barnes's	Tokay, White
Frontignan, Grizzly	,, Charlesworth
,, Black	Tripoli, Welbeck
	Trentham, Black

R. Glendinning, Chiswick Nursery, London, W.

Buckland Sweetwater Grape.

J. IVERY and SON feel great pleasure in announcing that this fine variety gained the First Prize against all other White Grapes (except Muscat) at the Royal Horticultural Society's Exhibition on the 5th and 6th ult.; the three magnificent bunches shown by Mr. Wm. Hill, Gardener to R. Sneyd, Esq., Keele Hall, were the admiration of all who saw them.

It was again awarded the First Prize at the Royal Botanic Society's Exhibition on the 12th ult., being there shown by the same successful grower.

(Copied from *Gardeners' Chronicle*, June 8.)

See report thus:—"Among White Grapes were three wonderfully fine bunches of Buckland Sweetwater, from Mr. Hill; the three together weighed 6 lbs. 4 oz.; they were stated to have been the produce of a graft put on a Black Hamburgh in March, 1860. These formed one of the chief features of the Fruit Show."

(Copied from *Cottage Gardener*, June 11.)

See report thus:—"The Buckland Sweetwater was by far the best White Grape there, and will be the gardener's best friend in White, as the Hamburgh has always been in Black."

J. I. & Son can supply strong plants, from 5 to 10 feet, for immediate planting, at 10s. 6d. and 21s. each, and likewise strong plants of all the most approved kinds, a PRICED LIST of which will be forwarded on application to the Dorking Nursery.

Dorking Nursery.—July 20.

NEW GRAPE, INGRAM'S HARDY PROLIFIC MUSCAT.—This is the most fertile and the best setter of all Grapes. The bunches are from 12 inches to 14 inches in length, having black oval berries, with the peculiar vinous flavour of the Hamburgh, yet more piquant, and combined with a slight spice of Muscat, so as to tone down the acid without satiating the palate. The flavour is new, and has been pronounced by one of the first judges of this country to be the finest flavoured of all Grapes. The fruit is such, that the more it is eaten the more it is liked. In this Grape we have the *gardener's friend* and the *gentleman's bonne bouche.* It is impossible to grow the Vine without producing fruit, and owing to its ripening in a much lower temperature than the Black Hamburgh, it is the very best sort for a greenhouse or Curate's Vinery, and in ordinary summers it, no doubt, will ripen against a wall in the open air. The footstalk of the berry is so stout and strong that it cannot shank off. For those countries where the Vine is cultivated in large quantities in the open air, and where they have now only coarse and tasteless kinds, this will be the greatest acquisition. It has been exhibited before the Royal Horticultural Society's Fruit Committee, and obtained a First Class Certificate; the fruit shown being cut from a Vine struck from a single eye that was only 14 months old from the time of putting in the eye till cutting the Grapes. The fruit this year will be ripe from the middle of May to the end of June, when intending purchasers are invited to call and judge for themselves. Plants will be ready to send out Aug. 1, at 21s. and 42s. each: and a few extra strong at 63s. each.

Jno. Standish, Royal Nursery, Bagshot.

Choice Seeds, free by post.

WM. PAUL, Son and Successor to the late A. Paul, (of the Cheshunt Nurseries) has to offer the following Seeds of the best quality:—

Calceolaria, mixed	1s. to 2s. 6d.	per packet
Cinerarias	1s. to 2 6	,,
Primula sinensis, mixed ..	1s. to 2 6	,,
Hollyhock	1s. to 2 6	,,
Sweet William	0 6	,,
Delphinium formosum	0 3	,,
Œnothera Drummondii nana ..	0 6	,,
Polyanthus, mixed	6d. to 1 0	,,
Antirrhinum ,, ...	0 6	,,

Address William Paul (the Christian name in full), Cheshunt Nurseries, and Seed Warehouse, Waltham Cross, N.

Strawberry Plants and Catalogue.

W. J. NICHOLSON desires to inform his numerous friends that he can now supply well-rooted laid Runners of a great number of varieties, and in August more than 200 sorts, including the newest and all the best. All true to name.

A DESCRIPTIVE CATALOGUE of the above may be had of the Grower as under, and a greatly enlarged and corrected Catalogue is now being prepared for the next year, when some splendid new sorts will be sent out, whose merits are above all praise, or the vulgar bray of the trumpet.

William James Nicholson, Egglescliffe, near Yarm, Yorkshire.

To Noblemen, Gentlemen, and Others.

PROTHEROE and MORRIS respectfully announce that their extensive Collection of ROSES is now in bloom, and are unusually fine this season. The AMERICAN PLANTS, for which their Nursery is so celebrated, are most luxuriantly healthy and beautifully setting with flower buds, which, with their Fruit Trees and general Nursery Stock, are well worthy an inspection.

Trains leave Fenchurch and Bishopsgate Streets 12 times daily for Leytonstone Station, which adjoins the Nursery and is 20 minutes ride.

American Nursery, Leytonstone, N.E.—July 20, 1861.

The Gardeners' Chronicle,

SATURDAY, JULY 20, 1861.

MEETING FOR THE ENSUING WEEK.

Tuesday, July 23 { Royal Horticultural (Floral Committee), at South Kensington .... Noon

Horticulture, whether regarded as an art or a science, a pursuit or a profession, now occupies more of the attention of the educated classes than at any previous period. Now horticulture essentially consists in subjecting living organisms to the wants, tastes, and caprices of man, who obliges the plant he wants or admires in its natural condition to live where he pleases, however far from its native haunts; and who requires the plant he does not want or admire in that condition to change its form, or colour, or habits, and assume such as will render it valuable to him, or beautiful in his eyes. It is true that many ends are served by good horticulture, and many qualifications, scientific, artistic, and economic, are required to make a good horticulturist; but all these would avail nothing, were the life of the plant not given into man's hand, and with it the apparent power to *change its nature and condition*. Such being the case, it behoves those who are engaged in expounding the phenomena of life to take cognizance of the experimental methods employed by gardeners; and it equally behoves the intelligent gardener to pause at intervals in his operations, and ask himself how he is prepared to answer the queries of the naturalist, who should ask him what great biological principles the practice of his profession teaches. As an example, we may suppose the naturalist to say, "The seed, bud, or root you hold in your hand is that of a newly imported plant, whose past history you think is nothing to you, and whose future is perhaps as little if you are so clumsy as to kill it in your operations; nevertheless it involves a history older than that of your own race, it is one link in a chain of life of whose beginning you can know nothing, but of whose future, if you propagate it, your profession ought to enable you to predicate something: what is that something?—for instance, will all future links be like the present or the contrary?" Your answer will be, that if you have time and opportunity you can almost certainly make the progeny of this seed larger, also alter its colour, very likely its form, and perhaps even its constitution. It asked for evidence you point to the multifarious changes brought about by horticultural skill; to the new Gloxinias, Fuchsias, and Begonias, to the spotted-leaved Aroids and other plants which had no existence in nature a few years or even one year ago: or the still more wonderful cases detailed in our columns, as that of the Begonia frigida changing its whole floral organisation, the Thuja pendula originating from T. orientalis in Loddiges' nursery, and to the Platanus acerifolia springing up (according to old Miller) under the shade of P. orientalis. In all these cases, and many others might be quoted, the change between the original plant and its progeny is so great that had they been independently imported, even from the same country, their common origin would never have been suspected.

Now it is the prevalent opinion amongst horticulturists, and young gardeners especially, that with the exception of the sudden sports last mentioned, the change is effected by the operator influencing the plant, and *causing it to vary*; but the principal object of this article is to show, that the general result deduced from the practice of gardening is, that the operator exerts no influence whatever, he alters nothing, makes no new variety even; he has always the power of extinguishing life, and often of perpetuating it, but not of altering any of its manifestations in the progeny he rears. Before proceeding to expound this apparent paradox it should be said that this is no question of Darwinism or its alternative; to such a clear thinker as Mr. Darwin (for he thinks and reasons clearly enough, though he may carry his conclusions beyond proof or probability) much of what follows must be self-evident.

What is written here is for the consideration of gardeners, men who are in general acute observers, and laborious experimenters, and successful ones too (witness the successive new varieties exhibited at our shows); but whose profession leaves them little time for abstract reasoning.

The tendency to produce a variable offspring is inherent in the constitution of every plant, and is, indeed, a necessity of its existence; there is no such thing as a repetition of the parent in the progeny. Nature supplies the gardener with varieties, and all he can do is to exert his skill in choosing which of them is best suited to his wants, and again selecting from its progeny what is still better suited, and so on till his wants are satisfied—there is no reason to suppose that the first progeny of the seed, had it been left to itself, would have differed aught from that it produced under the gardener's care; the difference is that in the former case the survivors would, *cæteris paribus*, have been those most like the parent, in the latter they are those the gardener cares to keep. It is to this inherent power of variation and its apparent universality that the attention of horticulturists should now be directed, for it involves first principles in Biology. There is a passage in Dr. Hooker's "Introduction to the Tasmanian Flora," which broadly announces that author's belief in incessant variation, and which, if true, goes far to overthrow the dogma that "each plant can vary only within certain limits." It is this:—"All vegetable forms are more or less prone to vary as to their sensible properties; no organ is exactly symmetrical, no two are exact counterparts, no two individuals are exactly alike, no two parts of the same individual exactly correspond, no two species have equal differences, and no two countries present all the varieties of a species common to both, nor are the species of any two countries alike in number and kind."

The fact that no part of an individual is ever exactly reproduced is familiar enough. It is a common school-boy's trick to bet that another cannot match a blade of Grass, or leaf of Hawthorn. Every gardener knows how difficult it is to keep the progeny true to the parent; that the same garden variety does not originate in two independent nurseries, and that the races of one plant raised in Belgium differ from the races of the same raised in France, Holland, or England. The same holds good in other matters; the psychologist tells us that the intellect of one man is never exactly reproduced in another, and the painter and sculptor assure us that it is the same with the human form and face. Moreover, we are completely ignorant of what differences will appear in the progeny of any plant or animal; all we know is that there will certainly be differences between all the progeny and their parent, and that they may be so great, as in the cases of the Thuja and Begonia mentioned above, as to exclude all idea of a common parentage. So it is with the human individual. Fancy asking a painter on the strength of a life-long intimate acquaintance with your own and wife's persons and family, to paint a portrait of your infant son as he is to be when arrived at manhood, or asking a tutor who has presided over the education of both parents to prognosticate the college career of their offspring. The notion is ridiculous; but why should it be so if as a rule the resemblances prevailed over the differences?

Moreover, there is great reason to believe that the tendency of the successive progenies is to depart further and further from the original standard and seldom or never to return to it; and this, if proved, is a still more valid refutation of the doctrine that there are limits to the variations of each kind of plant. The logical consequence of such a rule of centrifugal variation is, that the only limits are what reversion interposes. In conclusion, no one pretends to know what have been the varieties of any garden plant previous to its historic origin. We all know that it will never reproduce its exact counterpart, but as we cannot tell in what the departure from the type is to be, the saying that it will vary only *within certain limits*, either has no meaning or a false one.

Those who may have spare time on their hands might render some service to gardening and botany by carefully registering all species of plants producing double flowers or exhibiting any tendency that way. The result would prove interesting. We know that amongst flowers which are polypetalous, symmetrical, and furnished with an indefinite number of stamens, a far greater inclination prevails to become double than amongst unsymmetrical polypetalæ, especially if they have a definite number of stamens, and that amongst the unsymmetrical monopetalæ the fewest deviations from the normal state occur. But in order to ascertain the exact proportions, a regular census taken of the whole Vegetable Kingdom as it presents itself from a "double" point of view in 1861 must be taken. Any person with an average amount of information and application would be fit for this task. He should start with clear ideas on the subject. None save truly double flowers should be registered. Chrysanthemums, Dahlias, Chinese Asters, Daisies and other Composites misnamed

"double" should be excluded, since the appearance of doubling in those plants is caused merely by an alteration of the florets of the disk into the form of those of the ray. Nor should species like the "double" Guelder Rose, as the Viburnum Opulus roseum is sometimes called, be admitted, as the process by which that originally unsightly product assumes the shape and appearance of a snow-ball is simply by *all* the flowers becoming sterile. There should be a separate column for those monopetalous plants producing what is termed "hose in hose," such as is witnessed in Primroses, Cowslips, Daturas, and Petunias.

Curious results might be expected from the inquiry—"What country contains the greatest number of species that have given birth to double flowers. Are Australia and Polynesia the only ones which have not furnished their share? And is the tendency to become double entirely confined to the northern hemisphere?" It would be important to know *all* the natural orders in which a tendency to become double has been observed, as it might possibly throw some light upon the still unexplained process by which the stamens are converted into petals. There is a number of orders in which no such deviation from the normal state has as yet been observed. Again, in other large tribes of plants a few solitary instances have be n recorded. Thus amongst the Rubiaceæ, one of the most extensive of the whole Vegetable Kingdom, only two cases are familiar to us—Serissa fœtida and Gardenia florida; and we are now able to add a third, Ixora grandiflora, (see previous page) raised by Mr. DUNCAN of the Mauritius Garden.

It will be observed that the four stamens of the plant have been transformed into ovate acuminate petals (a magnified figure of one of which is seen on the right of our drawing). The beauty of this pretty species is thereby much increased, and under skilful management greater perfection may be attained, whilst the fact that the Ixoras have now fairly entered the list as double flowers, will open a new view to our florists.

NOTES ON ROSES AND INQUIRIES ABOUT THEM.

1. *An Old Rose Grower* (see p. 650) must cut down George IV. and Billiard to the stump next spring, and renew the ground with stiff soil, field ashes, and black dung, and let them grow as they like for a year. The next year they will bloom as well as ever. Hybrid Chinas, Hybrid Bourbons, and Noisettes require to be cut down occasionally to keep them in repair. Marie Portemer and Ravel, both ex cellent H.P.'s, will supply the colours of both.

2. *A Visitor* (see p. 649) may be critically right with respect to judges at the Royal Botanic Show, but who will act if they are to be arraigned? It is a golden rule with competitors that after the award is made not a word is said; but they may "grumble internally and gnash with their teeth." At Wimborne, some years back, to an old woman was awarded a second prize instead of a first; in her indignation she lifted up the three huge Cabbages over her head and violently bounced them down on the ground, and then walked off "majestically," declaring that she would never grow another Cabbage again as long as she lived. I shall never forget the peals of laughter! I suppose we are all occasionally like the old woman.

3. *The Judges at the National.*—I can testify to the great pains the Rev. S. R. Hole, Mr. Wood, and my friend Mr. Worthington took to award the prizes fairly without fear, favour, or affection. Such a pan of noble Roses as Mr. Cranston's 48 singles of course gave no trouble. The word "first prize" was already written upon them. The same may be said, among amateurs' Roses, of Mr. Hedge's most masterly pan of 48 singles.

3. *Trebles.*—These should on no pretence be allowed to be separated. The judges have no time to trace them out, and are obliged to assume their correctness.

4. *Showing Corymbs of Roses.*—Corymb showing is merely ornamental showing. A single specimen with or without buds, as the case may be, with good foliage, is all that you have a right to ask for. We do not want Roses with three or four expanded flowers jammed together. We want sufficient room round each Rose to view the "outline." Outline, thickness of petal, seriation of petals, and decision of colour, I am happy to see, are beginning to tell. In country places, I fear, huge rough Roses with rough aspect will a little while longer (not long) find favour. Symmetrical Roses are what people admire in the garden, and they should be appreciated in the show box.

5. *The two best Roses in the Show.*—Senateur Vaisse and Louis XIV. were the two best, and the former was the best Rose I ever saw. Both these specimens were in an uncompeting pan, next Mr. Mitchell's radiant and beautiful Surplusage. I do not know the owner's name. In the same pan were Duc Decazes (one of my four stars for 1862), Souvenir de Montceau, and Princesse Mathilde, three dark and beautiful coloured Roses. The Duc was first rate. Maroc and Quintinie (still the largest and best dark Rose) must look out. Maroc is small but extremely beautiful.

6. *The best Mottled Rose*, and choice, was Triomphe d'Amiens, which will bloom here in a few days, nice habit.

7. *The best light Roses*, and choice, were L'Elégante, Madame Bonnaire, and Tea Silene. This last was in Mr. Hollingsworth's elegant pan of delicate coloured Roses.

8. *New Roses that have bloomed here since my former account.*—M. Melanie, deep purple, is in the style of Beaux Arts. Alexandrine de Belfry is a very handsome, choice, and distinct Rose. It is peach blush, flat, tight, and looks like an Axminster carpet nicely sheared. Gloire de Santenay is a lustrous scarlety crimson, free from stains, petals first class for series and substance; the colour is fixed and good, and the flower endures long. The wood and foliage are excellent. I have two trees on first class Briars. This is out and out the best new Rose, taken at all points, that I have yet bloomed. Belle de Bourg la Reine is also on a good Briar; it is a show Rose all over; it is large, circular, and very substantial, and of a nice colour. It is not equal to the former in growth of wood. Reine des Violettes will bloom in a few days. La Boule d'Or is a nice plant. It bloomed three Roses for its first series, and now has seven for its second; it is a long pointed bud, and the colour, "out of doors," was golden yellow. It will be a first-rate glass Rose, and very efflorescent. Madame Furtado is now out, and is a facsimile of the one in the *Florist*. M. Bonnaire will not bloom awhile, as my cat deposited her kittens on the top of it. Aristide, yellow, is a first-rate wall Rose, a strong grower, hardy, and an abundant bloomer. You must not cut it when young; but let it alone, and it will break from head to foot, and flower abundantly; it is pale yellow outside, and chrome yellow in. In my ornamental box of 170 gratis Roses at the National, there were 10 clusters of this Rose, 10 of Dijon, 10 of Solfaterre, and 6 of Rennes, which, with the three yellows in my first prize 18, will make 39 yellow Roses. I believe that this number exceeded the whole exhibition of yellows. *W. F. Radclyffe, Rushton Rectory, Blandford, Dorset.*

THE AUSTRALIAN EXPLORING EXPEDITION.

(From the *South Australian Register*.)

INFORMATION of the most deeply interesting character with respect to the progress of discovery in the centre and north of Australia has lately reached us. Mr. Stuart has returned from an expedition in which he has not only reached the centre of the continent, but has also virtually crossed to the northern coast, inasmuch as he has overlapped the points to which previous explorers have penetrated from the north. At length, then, "the mystery of the interior," as it has so long been designated, is solved. Enough is known to warrant us in making the assertion that the centre of this long impervious continent is neither a shallow sea nor a sterile desert. It is, on the contrary, an elevated region, on the whole fertile, and by no means destitute of water.

From the statements made by the Government, we learn that Mr. Stuart reached a point at least 1300 miles from Adelaide in a straight line, and within 300 of the north-west coast of the Gulf of Carpentaria. Through all this journey his principal difficulty was a tract of country about 60 miles across, not a desert, but destitute of water. Most of the country traversed is fitted for the support of human life, for it is inhabited by natives; all of whom up to the warlike tribe by whom the explorers were stopped were perfectly friendly, and rendered them considerable service by supplying them with animal food. As for animal life, there would seem to be no difficulty whatever; for the country is described as clothed most luxuriantly with native Grasses of some familiar and some unknown varieties, including a new plant specially adapted to the sustenance of horses. It would seem too, that nature has not been unmindful of the prospective wants of civilised man in the far interior, having already planted there that essential concomitant of civilisation—the Potato. Of course, the uncivilised natives do not understand the virtues of the Solanum, and eat the apples instead of the tubers. There is enough in what has already transpired to justify the hope that Mr. Stuart's discoveries will prove sources of immense advantage to Australia, as well as topics of world-wide interest and lasting memorials of his energy and skill. The only published statement of the recent journey of Mr. Stuart and his companions is the following, which was despatched by that gentleman to Mr. Chambers immediately on his arrival in the settled districts of the colony:—

"As Mr. Goyder is despatching a mail for town, I embrace the opportunity of writing to inform you that I arrived here on the 1st inst., after a fearful journey, in a very exhausted state. I am sorry to say that I have been unable to make the north-west coast. The difficulties have been more than I was able to overcome. After making the centre, I was assailed by that dreadful disease, the scurvy, which completely prostrated me and rendered me quite helpless. Still I persevered, and endeavoured to reach the mouth of the Victoria River on a north-west course, but was obliged to relinquish the attempt three separate times through the want of water. The country in which I got the first course was an immense plain of red light soil, covered with nothing but Spinifex and large Gum trees,—not a blade of Grass. On this the horses were three days without a drop of water; and had I not been fortunate enough to drop in with a native well I should have lost nearly all of them. I then tried again twice to the eastward to round this horrid plain if I could. The result was the same. I was now forced to go back into the centre. Three miles to the north of the centre is a high hill, on which I planted the flag, and named it Central Mount Sturt. From this I could see ranges to the north-east, which gave me a better idea of the country for water, and I thought I might get an opening that would lead me to the north-west of Gum and Spinifex Plain. I therefore proceeded in that direction to lat. 19° 22 min., long. 134° 18 min. From this I again made another attempt to make the Victoria on a north-west course, but again I was obliged to retreat from the want of water. On this trip I regret to say that I had the misfortune to lose three horses, which perished from the want of water. We were 111 hours without a drop of water, under a burning hot sun, and heavy sandy soil to travel on. After this journey I gave up all hopes of making the Victoria, and tried for the Gulf of Carpentaria, in the hope of cutting a creek that was carrying off the surplus waters of the lake in a course more to the eastward. On it I reached lat. 18° 47 min., and found myself upon long plains of alluvial soil covered with Grass, and surrounded by low stony hills, with a few Mulga and Mallee bushes on them; but on the plains there is not a bush above two feet high. Not a drop of water could we find; my horses being without water two days and a night, and in such a weak state that I was afraid to risk their being without water for a longer time, lest I should lose the lot, and I was therefore again compelled to fall back to the last water. The next course I tried was W.N.W., towards some very distant hills. One day's journey brought me to a creek, having very large and long waterholes, situated in lat. 18° 50 min., long.——., running towards the N.E. This I determined to follow, thinking it might be the fall of the country, towards the Gulf. Next morning I traversed it down, but found it running more to the east than I expected. At six miles the water ceased, the creek becoming narrower and deeper, and the bed sandy. I continued for 15 miles, but from that there was no chance of water further down. It was running direct for the eastern and grassy plain. Seeing that, I determined to return to my last night's camp and continue my former courses to the distant hills, which I supposed to be about 30 miles off, but when within seven miles I was attacked by a number of natives, who endeavoured to prevent me from crossing the creek. Three times they came rushing to the attack, but were repulsed. They also endeavoured to surround us and cut us off from the horses, but that I prevented. They were the first natives I encountered, and were in appearance tall, powerful, muscular men—bold, daring, and courageous, not at all frightened by either us or the horses, but rushing boldly to the charge. It was nearly dark when they came upon us, when we were in the middle of a small scrub. There was no sign whatever of any of them being near as we approached the creek. The moment we entered the scrub they were upon us. Every bush seemed to have hidden a man, and upwards of 30 attacked us in front, and how many more there were endeavouring to surround and cut us off from our packhorses I cannot tell. As soon as I was able to stop the mad career of those in my front I pushed the horses across the creek to an open space of ground, which was a more favourable position for us. We now had them all in our rear. They set fire to the Grass all round, and the shouting and yelling from numerous voices was most fearful. It was with difficulty we could restrain the horses from bolting away. It now became so dark that I was unable to see what their movements were, and I thought it more prudent to continue on my course, and we now that they kept without range of our guns, and we proceeded up the creek to our last night's encampment. They still followed us, but at a distance. Seeing that, and their number being so great and the scrub extending nearly close to the creek, I did not think it prudent to remain there, where I could be easily cut off. I therefore fell back upon a long open plain that I had crossed the day before. This we reached about 11 o'clock at night, and turned out the horses to feed. The natives seemed to have lost our track at where we encamped before, for I could hear nothing of them through the night; but immediately after sunrise we could see signal smokes springing up all around us. They were again upon our track. During the night I took into consideration the position in which I was then placed—my horses tired and weary, three of them unable to be longer than one night without water; the men had complained six weeks before this of being so weak from want of sufficient food that they were unable to perform their duty (their movements were more those of men 100 years old than of young men of 25); and myself being so unwell that I was unable to sit in the saddle the whole day without suffering the most excruciating pain; our provisions scarcely sufficient to carry us back, and now being in the midst of hostile natives, who were wily, bold, and

daring—so much so that I could see at once that my party would be unable to cope with them, although we gained the advantage at first. In a short time they would be able to wear us out. If I proceeded I should leave enemies behind, and in all probability meet with enemies in front. Thus would I have to fight my way to the coast and back again. To do that with only two men and myself and having six packhorses to look after would be utterly impossible. I could only act on the defensive; we were sure to be cut off in some way or other. Could I have made friends of them I would have gained the coast, but they would take no notice of all the signs of friendship I made. Even after they had made their first charge upon us I endeavoured to conciliate them, but it was of no avail. We received a shower of boomerangs and spears for our trouble, one of which struck my horse. They were then within 40 yards of us, and it was high time to stop their further advance, which was accordingly done. If I proceeded I was cut off by them; all the information I had obtained would in all probability be lost. I therefore made up my mind, with great reluctance, to return. In returning I was surprised at the extraordinary rapidity with which the waters were drying up. I was depending upon the winter rain to bring me back; none fell. We had not as much as would wet a shirt through from March to the 26th of August. I intended making another trial to reach the Victoria from a creek five days' journey to the south-west, in which I had found large holes of water; but when I returned to it I found it very much reduced, and saw that the case was hopeless. If I delayed, my return would have been cut off until rain fell, and we were unable to hold out till that time, which would not be before September. I was fortunate in arriving at this decision, for on returning I found many of the water-holes dry which I thought would have lasted much longer. A week's delay would have prevented my return. In many places we obtained scarcely enough for the horses. I met with no desert, but with three or four Mulga scrubs, the broadest a little more than 60 miles; the ranges not higher than Flinders Range, and many not near so high. The saltbush and flat-topped hills ceased in lat. 25 deg., and Spinifex Grass, sandstone, granite, quartz, slate, and ironstone commenced and continued as far as I went."

We understand from private sources that Mr. Stuart has discovered a large lake in the northern interior, the extent of which he could not see with the naked eye. He represents its waters as being blue, and therefore in all probability of considerable depth, and as containing large quantities of fish. It lay to the right of his track as he proceeded northwards. Mr. Stuart also came upon an extraordinary pillar of sandstone, perfectly isolated and upwards of 100 feet high.

A new expedition has been fitted out under Mr. Stuart's guidance, and consists of 10 men, besides himself and Mr. Kekwick, and 35 horses.

THORN HEDGES.

A PORTION of a paper read to the Monks Kirby Agricultural Society appeared in your columns of the 1st June (see p. 513), and I think it must have been overlooked, as some points in it are not in harmony with modern ideas of hedge management.

The writer of it seems to recommend two rows of Quicks, and laying, *i.e.* plashing, and condemns the system of switching altogether. He wishes to induce the Society to try several experiments on the subject in the way set forth in his paper, and he adds that by following his method the Society of Monks Kirby would be able to show the best fences in the country. For the benefit of the members of the Society in question, however, and for that of the inexperienced in general, I would recommend them not to put themselves to the expense of purchasing two rows of Quicks, as from long experience I could always get one row to make a good fence in due time, where Thorn would be likely to succeed. The best hedges can also be raised by the very method your Correspondent condemns, for I have always found that there are no Thorn hedges like those switched yearly, and if you visit the Lothians of Scotland you will find fences there of Thorn kept in excellent condition in that way, not by plashing. Wedge-shaped hedges are best, *i.e.* sharp at top, from 4 to 5 feet in height, and from 2 to 2½ feet in width at bottom. Were all hedges kept in that style, we should not see so many unsightly fences as are still to be found in many ill-cultivated districts. Some of them, through being cut by some formidable weapon, very unlike a proper switching billhook, resemble more the top of a haystack than a well cut hedge; they measure from 4 to 6 feet broad at bottom, and from 2 to 3 feet wide at top, and from what I read it appears to me that this style is kept up at Monks Kirby. This is however not worse than plashing, and leaving them for six, eight, or 10 years as recommended by your Correspondent.

For instructions in planting, rearing and keeping of hedges I would recommend the Society of Monks Kirby to the "Forester," (third Edition), in which Mr. Brown points out the only way by which they ought to be treated when required for fences, and from long experience I have found this plan to be best. I myself have often recovered hedges that had been plashed by cutting, and where gaps occurred filling in with Beech. But I never saw a hedge made what could be called a fence by plashing, and am of opinion that all the bad fences in England are to be attributed to this treatment, as the oftener they are plashed the thinner they get at bottom, owing to the way in which they are mutilated at the stools, which are chiefly operated on by cutting downwards. Most people know that in pruning the cleaner the cut the better for the health of the plant, while the kind of treatment just indicated is quite the reverse. The layers and the stool both become dead in course of time, and have to be removed.

All hedges if wished to continue as efficient fences ought to be cut up and kept switched annually, and they should be cut by men trained to the work and not by labourers. They can be cut and switched by proper workmen at the rate of from 15*s.* to 20*s.* per mile, according to height. Proprietors would do well, therefore, to have the fences on their estates kept in proper order. As for railway companies they seem to take pleasure in upholding both a hedge and wooden paling for a long time, all of which arises from their non-employment of proper skill in the management of their Thorn hedges.

It has often occurred to me that hedges will never be kept as they ought to be until farmers are bound to keep and hand over their hedges in condition at the expiry of their lease, as they are usually bound to sow out so many acres of new Grass on leaving their farms. I am aware that to those who know the value of good fences such is not required, but there are many who only make their own use of them, unmindful of the after expense of renewing them. I trust that the members of Monks Kirby Society will not spoil any of their hedges by plashing, nor run the expense of buying plants for two rows of Quicks, as one row will serve the purpose of making a good young hedge. *Wm. Gough.*

REPORT ON THE

VOYAGE OF PROFESSOR DE VRIESE IN THE ARCHIPELAGO OF THE DUTCH EAST INDIES,

UNDERTAKEN BY COMMAND OF THE KING OF THE NETHERLANDS, FOR THE IMPROVEMENT OF CULTIVATION. BY PROFESSOR SURINGAR.

[Originally published in the "Algemeene Kunst- en Letterbode," 1861, No. 10, and republished in "La Flore des Jardins des Pays-Bas," 1861, p. 45.]

OUR readers are aware that Professor de Vriese returned to Leyden last March, after an absence of three years and a half. We earnestly trust that sufficient health and strength may be granted to him, to enable him so to publish the results of his investigations for the good of science and industry as to exhibit their full practical value.

Our readers will remember that M. de Vriese, after preparations made both in England and France, as well as at home, started in October, 1857, by the overland mail, with the intention of first passing a month in the island of Ceylon, where Coffee is largely cultivated in the mountains of the interior. It was of great importance to observe the exact process followed in its preparation, so as to compare it with that practised in our islands. In spite of his short visit, M. de Vriese also examined many other productions of this island, formerly one of the pearls of the crown of the Netherlands. He landed in Batavia early in January, 1858. According to the Royal orders, the aim of this voyage, in general terms, was as follows:—

1. To ascertain the state of cultivation of all the extensive products of the East Indies, especially in Java; and more particularly of those which are most important to the commerce of the Netherlands.
2. To examine the nature and possible improvement of the different soils.
3. The means of extending cultivation.
4. And the means of improving it.
5. To investigate new products which might be introduced; and to endeavour to extend others which are not generally cultivated.

Prof. de Vriese devoted the greatest part of his time to the island of Java; travelling in all directions through this large island, and embodying the results of his researches in several reports to the Government of the Indies. It is scarcely necessary to remark that his stay in the different districts was prolonged according to the requirements of the cultivation or the different branches of industry. We will first refer to the Preanger-Regentschappen, comprising one-seventh of the island and especially the district of Bandong, so important on account of the manufactories where coffee is prepared according to what is called the East Indian method. M. de Vriese successively visited all the countries producing Coffee and Indigo, and devoted much attention to individual and general cultivation in these countries. He especially examined those products at present least cultivated, with a view to the more general introduction of, for instance, Cotton and Cocoa; he also carefully examined the cultivation and diseases of Paddy (Rice).

After having thoroughly explored the island of Madura, the learned traveller proceeded to the Archipelago of the Moluccas. During this year, a young and talented man, named M. A. H. Servatius, joined him as secretary. At the same time, on the recommendation of M. de Vriese, the inspector, M. J. E. Teysmann, was desired to visit the Moluccas for the purpose of examining the Cotton plantations. They left Sourabaija in December, 1859; and after having visited the island of Timor (Koepang and Timor Delhi) M. de Vriese arrived with his two companions at the Islands of Banda, and examined nearly all the Nutmeg plantations in Lonthoir (or Great Banda) and Neira. They afterwards traversed the isle of Amboyna in all directions, especially examining the cultivation of Cocoa, for the encouragement of which Government has made great sacrifices. The Governor of the Moluccas, M. Goldmann, accompanied M. de Vriese in his excursions; and they successively visited Saparna, the southern coast of Ceram, and the plain of Makariki. The latter island M. de Vriese selected as particularly suitable for the cultivation of Cocoa, Tobacco, Indigo, &c. On his return to Amboyna, Prof. de Vriese embarked for the island of Boeroe, for which purpose Government had placed at his disposal the sloop Pallas. Passing the island of Amblaann and the straits of Manipa, they coasted the eastern shores of Boeroe; they then repeatedly crossed the plain of Kajeli, which had been recommended for a European colony; and with the same view they visited the southern parts of Boeroe, and of the island of Oki. Ternate and Tidore were next visited, with the northern parts of Halmaheira; and they also partially explored the eastern side of this hitherto little known island, as far as the Isthmus of Dodinga, discovering many extensive and fertile plains.

Embarking in H.M.'s steamer Etna, they crossed to the Island of Batjan, which contains valuable coal mines; after which they sailed for the Minahassa of Menado, to the north of Celebes: this country was carefully examined, with an eye to the cultivation of Coffee.

Finally, in the second half of the year 1860, our traveller visited some parts of the interior of Java, especially the so-called independent provinces, governed by native princes.

M. de Vriese completed his expedition by a visit to the N.W. coast of Borneo; to a mountainous tract in the interior of Sumatra, and on the western side of that island; and to the district of Benkoelen. From what we have been able to ascertain, it is particularly in the Dutch possessions, not on the island of Java, that the greatest number of new and important products have been discovered.

This rapid sketch will show the importance of this voyage, as regards commerce and industry. We await with much interest the publication of the results of these investigations, commenced on so vast a scale and carried out with such indefatigable zeal; and we sincerely trust that M. de Vriese may be amply rewarded for the personal sacrifices which he has made, for the dangers which he has passed through, and for the fatigue and labour inevitably attendant on an expedition at once so eminently scientific, and so conducive to the interests of commerce and humanity.

Home Correspondence.

Opening of a Palm-spathe with an audible report.—About 11 A.M. on Sunday last, two young men (Gale and Hilary) employed in the great Palm stove of the Royal Botanic Gardens, Kew, were startled by a report almost loud enough to have proceeded from a pistol. On looking round, it was found that one of the large Seaforthia elegans, the Palm producing the Moreton Bay canes of commerce, had burst its spathe, and in doing so forced off the remnant of an old leaf-stalk, about 3 feet long and more than a foot broad. For a long time Alexander von Humboldt (compare "Views of Nature" and "Cosmos") stood alone amongst the moderns as an observer of this curious phenomenon, which reminded him of Pindar's Dithyrambic on Spring, and the moment when in the Argive Nemæa "the first opening shoot of the Date Palm announces the coming of balmy spring." It was subsequently confirmed by Schomburgk ("Travels in British Guiana," ii. p. 376), but there has been no other confirmation, which renders the observation made at Kew highly acceptable. The sudden bursting with an audible report is probably due to a great accumulation of heat developed by the anthers whilst enclosed inside the spathe. From the familiar manner in which Pindar alludes to this loud bursting, one would be inclined to infer that the phenomenon was a common one with regard to the Date Palm. Yet it is strange that we have no modern observations on that plant; at least I could find none when I wrote my "Popular History of the Palms"—Humboldt and Schomburgk relating to Oreodoxa regia. *Berthold Seemann.*

Heated Vine Borders.—Some weeks ago this subject was discussed in your columns, and the Vine borders at Kingston Hall, the seat of Lord Belpr, were alluded to. I called there the last week in June, and found the Vineries so full of fruit that I am induced to send you a few words on the subject. There are four Vineries in one structure, the divisions of which consist of glass. The entire length is 120 feet, and the width 29 feet, length of rafter 30 feet 3 inches. The roof is on the ridge and furrow principle, and there is not more than from 5 to 6 feet fall from the back to the front of the house. The Vines are planted in the centre of each ridge, and in addition to front ventilation, air is admitted at the front of each ridge, and the rafters are all let into a hollow ventilated wall. The border rises above the path level, and is 42 feet in width, 20 feet of which is chambered on arches, the front pipes of the houses passing along the entrance to the arches. The border averages about 16 inches in depth, and rises from the path level 4 feet 6 inches (chambers included) to the front of the house. The range has a glass front 3 feet in height. On entering the first house I was delighted with the wonderful crop of Grapes—each house being completely loaded with fine bunches, quite as close at the bottom of the plant as at the top, and as the bunches were all so fully exposed in consequence of the foliage being above them in the ridge, the four houses presented an appearance not readily forgotten. The end divisions each contains 10 Vines, the other two 12 Vines each. Each ridge is 30 inches in width. One of the centre houses was devoted wholly to Muscat Grapes, every plant carrying on an average 44 fine bunches, all hanging at a regular distance as though they had been placed there. Another house just ready for cutting was planted with two White Frontignans in fine character, three Black Hamburghs, Wilmot's Black Hamburgh, Golden Hamburgh, Muscat Muscadine, a good white Grape; Grizzly Frontignan, and Richmond Villa Black Hamburgh, a fine variety with a very close bunch, and of a deeper colour than the other varieties of Black Hamburgh. Each Vine in all the houses carried on an average 44 bunches. *W. Dean.*

Monstrous Plantain and other Floral Sports.—I send you a singular morphological freak in a common Plantain, every head on which is transformed in the same way. I also remark on our farm, and generally in this neighbourhood, the extreme frequency of white sports on most of the wild flowers. I enclose an instance in Trifolium perenne. I have likewise noticed quite commonly the following plants quite white, viz., Erica vulgaris, cinerea, tetralix, Ajuga reptans, Orchis, Jasione montana, also salmon-coloured; two or three varieties of Thistle, Myosotis palustris, Pedicularis vulgaris, and others. They occur chiefly on deep boggy land on the

shores of Blacksod Bay. *Benjamin B Billington, Roy Towers, Balmullet, Mayo.* [The Plantago referred to has its bracts changed into leaves, a not uncommon occurrence.]

Ailanthus and Sand Plants, &c.—I see a paragraph in your columns, in which Ailanthus is put forward as a plant fit for moving sands, or falling banks also, I presume, and I wish to recommend preferably any of the Balsam Poplars which run any distance by the root—the Abele also; but perhaps best of all is Pterocarya caucasica, which spreads so as to be quite a nuisance in a garden, and which has a finer head and foliage than the Ailanthus. Of smaller plants I think Elæagnus argentea, and some of the tough dwarf Willows that grow in mountain torrents, would be most serviceable, together with Hippophae rhamnoides. The railways ought to plant these creeping-rooted things on their embankments. I see also mentioned that Jubæa spectabilis—I believe the same as the little Cocos chilensis—lived out at Cannes. So it has this winter at Abbotsbury, but slightly protected. I have tried Rhapis flabelliformis, but never could succeed with it. *I.*

Rainfall in June, 1861 :—

Stations.	Height of Gauge. Above the Ground. Ft. in.	Height of Gauge. Above Sea Level. Feet.	Depth of Rain. Total for the Month. Inches.	Depth of Rain. Greatest fall in 24 Hours. Depth. Inches.	Depth of Rain. Greatest fall in 24 Hours. Date.	Rainy Days.
Little Bridy, Dorset	0 4	348	4.24	.77	16	19
Barnstaple, Devon	0 6	31	2.56	.36	17	18
Castlefield, Calne, Wilts ..	0 11	330	2.74	.76	21	14
Camden Town, London ..	0 4	100	2.18	.39	1	18
Finchley Road, London ..	0 4	270	1.82	....	..	.
Ditto ditto ..	36 4	306	1.20	....	..	.
Oundle, Northampton	20 0	124	1.64	.35	26	15
Norwich	0 0	30	..	....	..	.
Derby	5 0	179	1.24	.22	1	13
Manchester	3 0	106	2.15	.44	29	16
North Shields	1 0	124	3.76	.60	15	16
Dumfries	0 5	63	2.90	1.25	22	18
Nookton, Leven, Fife	0 6	80	1.55	.95	25	14
Sandwick, Orkney	2 0	78	.78	.34	20	8

REMARKS:—

Little Bridy.—Thunderstorms on the 15th, 16th, and 25th.

Castlefield.—The rain during the month was chiefly from thunderstorms.

Camden Town.—Thunderstorms on the 5th, 20th, and 23d.

Oundle.—Thunderstorms on 23d and 24th.

Derby.—Mean (14 years) rainfall, 2.65 inches.

Manchester.—Dr. Dalton's mean (47 years) 2.60 inches.

Dumfries.—Violent thunder-storm on the 22d: temperature on the 14th, 82° in the shade, and the Wheat coming into ear.

Nookton.—Fine month with passing showers.

Sandwick.—Mean for previous 20 years' 2.14 inches. This being the driest June for that period except 1857, when there was only .56 of rain.

G. J. Symons, Camden Road Villas, N.W.

Judges at Regent's Park (see p. 649).—Allow me to say one word in behalf of the judging at the late exhibition in Regent's Park. It is not my purpose to enter upon a defence of the judging; it requires none. I only wish to say that it is my business to attend to the judges, and to receive and publish their respective reports. I therefore can affirm that it would be difficult to find men more anxious, more able, or more determined to be right in their awards. Gentlemen competent to be good judges are rare, and are seldom covetous of the office. The judges of plants are elected by the exhibitors themselves, not by the Society; it will therefore be but fair to the exhibitors, and I am sure it will be very agreeable to the late judges, to be released, till at any rate they receive by re-election the renewed confidence of the exhibitors. *Robert Marnock.*

Ridge Cucumbers.—My gardener is much perplexed by the sudden deaths among his ridge Cucumbers—Short, Prickly Green, and Frogmore, which have spread so as to cover about 8 feet wide. They flag one day and die the next without apparent cause. There is some slight appearance of fungoid disease on the leaf, like the Potato disease, but not enough to account for death. Some died before the glasses were removed, others since. The situation is most favourable—a ridge on a sloping bank with south exposure—and there is neither excess nor want of moisture. The soil of the ridge is pure leaf-mould, principally of Spanish Chesnut and Oak, about half decayed, say two to three years old, on which Vegetable Marrows were grown last year. Neither loam nor sand, nor dung were added to it, and the bed is about 18 inches thick. Fruit is produced in abundance, but none swells, all turning yellow and dying off, and from time to time the plants die. I attribute this to the soil, which I think too cold, damp, and innutritious. My gardener maintains that everybody would grow Cucumbers in such material if they could get it, and that nine times out of 10 Cucumbers are grown in such soil. I have no experience in the matter, and wish to know who is right, as the present result is very unsatisfactory. *J. R.* [This is new doctrine. Loam is believed by most men to be indispensible to the Cucumber and Melon.]

Geranium quercifolium floribundum.—Valuable as the Scarlet Tom Thumb is for purposes of general decoration, this rivals it in abundance and continuation of bloom, and it has the desirable quality of bearing well exposure to wind and rain. It is very suitable for covering pillars in conservatories and back walls of greenhouses, as it continues in bloom till near Christmas. This season we have large baskets arranged in the following order:—Along the side of a flower garden walk, first, Tom Thumb Geranium; second, Silverleaf Bijou (a most excellent kind, as the variegation is so good); and thirdly, Quercifolium floribundum, alternately, and the effect produced by the three kinds is all that could be wished. We strike the cuttings early in the season, and by judicious treatment as to potting, topping, and tying out the shoots, fine specimens are obtained in good time for the decoration of the flower garden. *Edmund Shepstone, The Gardens, Castle Bernard, Bandon, Cork.*

Societies.

LINNEAN: *June* 20.—G. Bentham, Esq., President, in the chair. Prof. Huxley exhibited a fine specimen of Hyalonema ——, the property of Mr. Veitch (to whom it had been sent by his son from Japan), and made some explanatory observations respecting it. Gen. Sir John Hearsey exhibited a collection of new or rare insects made by himself in India, together with a series of drawings illustrating the transformations of Indian insects. Sir C. Bunbury exhibited a flowering specimen of Æsculus indica, grown at Barton Hall, Suffolk, from seed sown in 1851. The tree was stated to be now 20 feet high, and to be flowering for the second time. Dr. Carpenter exhibited the cocoons of the Tusseh Silk-moth of the Deccan (Saturnia Mylitta), from which silk is extensively manufactured at Wurrungul, in the Nizam's dominions. The following gentlemen were elected Fellows:—Senjee Pulney Andy, M.D.; Peter Jones, Esq.; and J. T. Head Cotsell, Esq. The following papers were read:—1. "Notes on Malvaceæ and Sterculiaceæ;" and 2. "On Fissicalyx and Prioria, two recently published genera of Leguminosæ," both by the President. 3. "On the discovery of Carex ericetorum, Poll., as a native of Britain," by C. C. Babington, M.A., Professor of Botany in the University of Cambridge. This species of Sedge had been gathered both by Mr. J. Ball and Mr. Babington so long ago as 1838, on the Gogmagog hills, and Mr. Babington's attention having been recently called to it by Mr. Ball, he has been successful in again finding it at a short distance from Cambridge, probably not far from the spot where it was first gathered. Having now no doubt of its being C. ericetorum, and a true native of the country, he ventured to announce it as an addition to the British Flora. "This," he observes, "is no 'split' from a recognised species, but a plant allowed by botanists to be a true species. At first sight it much resembles C. præcox, and inhabiting similar ground may have been overlooked in many places. To the practised eye it has a decidedly different appearance when growing, for the white edge of the scales of both kinds of its spikes gives it a silvery look very different from the dark hue of C. præcox." The fertile spikes were stated to be more ovoid and closer together than those of C. præcox; and the glumes to be obovate, very blunt, with a pale margin which is finely ciliated, especially at their tip. The specimens were about 3 or 4 inches high. Though only known as a British plant in this one locality, its restriction to one spot is unlikely, and it may probably be found in other chalk districts in the south east of England. 4. "On three Oaks of Palestine," by Dr. J. D. Hooker. During a short tour in Syria last autumn, in company with Mr. Hanbury, Dr. Hooker had paid especial attention to the Oaks of that country, in the hope of being able to throw some light on their confused history. From his rapid movements he was however only able to obtain an accurate idea of the commonest kinds, namely Q. pseudo-coccifera, Q. Ægilops, and Q. infectoria, out of which three species it was stated that 13 had been made in Syria alone, and probably an equal or greater number in Asia Minor, and other parts of the Levant. Q. pseudo-coccifera was found to be by far the most abundant tree throughout Syria, covering the rocky hills of Palestine especially with dense brushwood 8 to 12 feet high, thickly covered with small evergreen rigid leaves, and bearing acorns abundantly. On Mount Carmel it formed nine-tenths of the shrubby vegetation, and was almost equally abundant on the west flanks of the Antilibanus. Owing to the indiscriminate destruction of the forests in Syria this Oak rarely attains its full size; there are but few good trees, one of which is the famous Oak of Mamre, called Abraham's Oak, popularly supposed to indicate the spot where grew the Oak or Lentisk (for it is disputed which), under whose shade the patriarch pitched his tent. This tree is revered accordingly by Jews, Mahomedans and Christians. In general habit it much resembles the Q. Ilex as grown in this country, but does not branch so much from the base. The branches on the west, where exposed to the winds of the Mediterranean, are much stunted, denser, and more rigid than on the east, where they are more pendulous. Q. infectora was found in great abundance on the east slopes of Libanon, on the rocky hills of Galilee, and on the summit of Mount Carmel, in all these localities forming a small tree 15 to 20 feet high, or a sparingly branched bush. It bore an abundance of spherical galls of a deep red-brown colour, which are probably not different from the Aleppo gall, though they may be inferior in quality. Neither this, nor another smaller gall noticed on what was believed to be the same tree, were collected in Syria, so far as Dr. Hooker could ascertain. The Valonia Oak, Q. Ægilops, though like Q. pseudo-coccifera very gregarious in Syria, does not form a bush or growth of underwood as the latter does, but rises on a stout gnarled trunk, 3-7 feet in girth, to the height of 20-30 feet. It is abundant on Mount Tabor, on the hills east of Nazareth, and on the north-west flank of Carmel, forming scattered rather round-headed densely leafy trees, giving an open park-like appearance to the landscape. 5. "On some species of Oak from Northern China, collected by Dr. W. F. Daniell," by W. Carruthers, Esq. 6. "Upon the nerve proceeding to the vesicles at the base of the Halteres, and on the sub-costal nervure on the wings of Insects," by Dr. J. B. Hicks.

BOTANICAL OF EDINBURGH: *Thursday, June* 13.—The following donation to the Museum of Economic Botany was announced:—From Rev. Mr. Thomson, Old Calabar—Stem, leaves, flower and fruit of Physostigma venenosum (Balfour), Calabar ordeal Bean; also, other fruits and seeds. Professor Balfour noticed the addition of Dr. Greville's collection of Lichens to the University Herbarium. The collection consists of 64 genera and 498 named species, besides 86 sheets of unnamed specimens. The following communications were read:—"I. On the Physical Features of the Central Part of British North America, with special reference to Areas of Botanical Distribution." By James Hector, M.D. Dr. Hector's remarks were founded on the botanical results of the late Government expedition sent to explore that region under the command of Captain Palliser. It was accompanied by Mons. Bourgeau as botanist, and the collection made, as named and distributed from Kew, consists of 819 species of flowering plants and Ferns, which is more than one-third the total flora of British North America. An extensive collection of seeds and vegetable products was also obtained by M. Bourgeau, and from the former many interesting and beautiful plants have already been raised for the first time in this country at the Royal Botanic Gardens at Kew. The country from which the collection was made extended from Lake Superior to the Rocky Mountains, and may be divided into four areas, each characterised by its peculiar vegetation. From Lake Superior to Lake Winipeg is a low mountainous region, covered by an extension westward of the characteristic forest vegetation of Canada. This does not extend far beyond the Red River Settlement, however, near which place the Oaks, true Sugar Maples, Cedar, Ash, and Plum trees cease to be met with, only a few of the Ash-leaved Maple (Negundo) and the "bastard Elm" straggling west in the river courses to the Saskatchewan. As far as the forest is concerned, the whole distance from Lake Winipeg to the Rocky Mountains, the "subarctic province," in which the only trees are Spruce, Scrubby Pines with Balsam and Aspen Poplars and Birch, bounds the northern limit of the Central Continental arid tract, which is characterised by the Cactus and Artemisia. Between the northern zone, which is occupied by extensive morasses or sombre forests of worthless timber, and the arid plains where the tough clay soil being without any vegetable mould to protect it bakes under the heat of the sun in early spring, so that it only serves to support a sparse growth of wiry Grasses and Carices, there exists a valuable belt of land from which the timber has been slowly cleared by successive fires. This has arisen from the "Edge of the Woods" having been the favourite camping-ground of the Indian tribes who live by the chase of the bison; and the great fires which every year start from their encampments and sweep the country have gradually carried the limit of the "Thick woods" 80 to 100 miles north of its original position, thus naturally preparing a valuable and continuous fertile track which stretches across the continent, and is adapted for easy agricultural settlement. This region is covered with luxuriant natural pasture abounding in Vetches and other nutritious plants, and having an undulating surface dotted with groves and clumps of Aspen Poplars, which, though worthless as building timber, are yet sufficient for firewood, and add greatly to the beauty of the country. The northern province and the arid tract being the second and third areas, the fourth is that along the eastern base of the Rocky Mountains, where many of the plants of the western slopes of the continent are first met with, among which is the Douglas Spruce and a few others of the Pine group. The Alpine region it

the Rocky Mountains is from 6500 to 9000 feet above the sea-level, but is very variable from their abrupt and craggy aspects. Of 50 plants collected at 8500 feet, 15 were common Alpine forms of the Scotch mountains. Much of the paper was occupied by a description of the physical geography and meteorology of the region, with a view to show the proper position which its flora occupies in relation to the other botanical areas of the northern part of the continent, and Dr. Hector's views on this subject were explained by reference to a map on which the different areas were coloured. The very marked *representative similarity* was alluded to between the Canadian flora and that of the Pacific coast, many of the forest trees having no well marked specific differences; and as there are no trees of any similar forest growth in the central part of the continent, intermediate in character and position, the inference was drawn that we must look for some other link between those two areas, and which is probably to be found by taking into consideration the oscillations in latitude of the vegetation at different periods, as recently suggested by Dr. Hooker. II. "Biographical Sketch of the late Prof. Henslow." By Prof. Balfour.

ENTOMOLOGICAL, *July* 1.—G. R. Waterhouse, Esq., V.P., in the chair. General Sir J. B. Hearsey exhibited a case of insects of great rarity, collected by himself in the neighbourhood of Darjeeling. Mr. Baly exhibited a fine series of Hispidæ, collected by Mr. Bowring in China and the Philippine Islands; Mr. T. Smith, a specimen of Braula cæca, a very curious parasite allied to Hippobosca, which infests the hive bee; it had not been previously observed in this country, and had been found upon a specimen of the Apis ligustica, which had however been bred in the neighbourhood of Exeter, where the parasite was taken by Mr. Woodbury. Specimens of Ammæcius brevis, a new British species of Aphodiidæ, taken on the sands at Southport, near Liverpool, were distributed among the members, and specimens of a black variety of Tillus elongatus were exhibited, with the suggestion that they were possibly distinct from the common species. Mr. MacLachlan exhibited specimens of both sexes of the curious white aquatic moth, Acentropus niveus, taken at Hampstead. Mr. Desvignes read descriptions of 11 new British species of Ichneumonidæ, belonging to the genus Bassus. Mr Stevens exhibited a box of Lepidoptera, collected by Mr. Trimen at the Cape of Cood Hope, and announced the publication of a work on the Butterflies of South Africa by that gentleman. Mr. Stevens also exhibited specimens of a new British Curculio, Nedyus Cræ, taken at Mickleham. Mr. Stainton exhibited specimens of Birch leaves, brought from Scarborough by Mr. Wilkinson, infested by a larva which, after mining in the substance of the leaf, cuts out a circular case about an eighth of an inch in diameter. Captain Cox exhibited drawings of Wheat infested by the larvæ of Chlorops tæniopus; he had found, however, that although the central stem was destroyed, the side shoots were very vigorous and numerous. General Hearsey observed that in the Punjaub it was the custom of the natives to mow off the first shoots of the Wheat in order to obtain a second crop. Mr. Stainton exhibited some curious galls found upon Silene nutans: and Mr. Robinson some drawings of exotic Coleoptera collected by Mr. Wollaston. Captain Cox made some observations on the advantage of introducing various wild flowers into gardens with the view of attracting rare insects which confined themselves to such plants. Mr. MacLachlan read some remarks on the improbable origin of varieties of Microlepidoptera, owing to the difference of the plants on which different specimens were fed. This paper led to considerable discussion.

Notices of Books.

Alpine Byways, or Light Leaves gathered in 1859 *and* 1860; by a Lady. Small 8vo. Longmans. pp. 232.

With a laudable disregard of all beaten tracks and a commendable curiosity to see something new, the fair authoress of the narrative before us struck into the higher and more inaccessible alpine passes where ladies fear to go; and to her satisfaction discovered that "anticipated difficulties vanish upon nearer approach"—in which respect a journey in Switzerland is very like the journey of life.

How unusual was our traveller's line of march will be seen from a mere enumeration of the places she describes:—Murren and the Schilthorn, Engelberg and the Titlis, the Gries and Albrun Passes, the Rawyl Pass and Andermatt, the Valleys of Sixt and Champery, the Panoramas of the Graian Alps, Breuil and the St. Theodule, the Riffel and Cima di Jazi, Ascent of the Metteihorn, Mattmark and the Monte Moro, the Col de Barranca and Varallo,—assuredly these places are not in all men's mouths. What was seen, how difficulties were overcome, what succeeding travellers should do, is told in an extremely agreeable manner, and we should think a party of friends bent on a Continental tour could not do better than follow in our traveller's footsteps, provided they can rise early, fare hardly, climb stoutly and disregard wet jackets. One specimen of the lady's adventures will tell gentle tourists what they must prepare to face. The scene is on the Titlis, a huge mountain mass between Altorf and Grindelwald.

"The changing aspect of the weather at midday warned us not to lengthen our stay; and, after spending an hour on the summit, we turned to face the deep snow through which we must plunge. Soon we were able to slide down more rapidly, and when we reached the steep slope of ice, C——'s previous problem was quickly solved. The younger guide took her in charge, and, holding her in a firm grasp, commenced a glissade, which increased to such extreme velocity that H—— looked on in perfect horror, almost expecting to see them both disappear in a crevasse at the end of their career! The man, however, knew well what he was about, as he proved when his pole escaped from his hand, and he threw himself cleverly down in front of C——, to stop her impetus until he could recover the pole. Then, looking triumphantly at the height from which they had descended, he said, very complacently, "Sie können sehr gut laufen." D—— and myself followed rather less rapidly, for at one time Couttet had us both in charge, and his care was great; but when, after depositing C—— safely on the snow field, the young man returned to us, D—— had the satisfaction of taking a downward flight under his wing. Thus we all descended merrily, and although the snow had become so moist and soft that we sunk in over our knees at almost every step, we reached the rocky *arête* in a quarter of the time which the ascent had occupied. We scrambled down and round the awkwardly steep corners, often stopping to admire the grand glaciers and magnificent scene around. After resting a few minutes on the ridge, we should have finished the descent very easily, had we not found ourselves entering a dark cloud, which now hung like a canopy over the valley, and quite concealed Engelberg.

"The old guide took leave of us about half way down, in order to return the same evening to his home at Engstlen. His companion was to remain until he had led us to the place where the horses were ordered to await us. Meanwhile, the mist grew thicker, and we heard distant mutterings of thunder, which reverberated among the mountains. Soon heavy drops fell, announcing the coming storm; then drenching rain and hail rattled on the umbrellas, with which we were fortunately provided. The footway led through spungy underwood, each track being a watercourse, and we splashed along without much confidence in our route—the fog and hail making it very difficult to judge of the direction which we were taking. At last, when the storm cleared off, we found ourselves on a projecting knoll, overlooking the lake, where we ought to have received answers to the calls given in the expectation of discovering the retreat of the men and horses. Apparently they were neither within sight or sound. We began to fear that the stupid old man from Meyringen was again in fault, or that they must carelessly have missed the right place, and pursued the bridle way to a lower point, where it again intersects the footpath. There was no alternative but to send the Engstlen guide round to ensure our not leaving the horses behind us, while we continued the descent straight down a very steep and trying path, called the Pfaffenwand. This was an unwelcome addition to our walk, as regarded my husband, who seemed to have strained one of his knees, and nearly exhausted his powers. Couttet hastened on to seek tidings of the wanderers in the valley below, and we followed leisurely, congratulating ourselves that sunshine had succeeded the storm. Both C—— and I were much too wet to induce us to mount, even if the horses appeared. We therefore decided, when we reached the meadows, to leave D—— with his father, to await the result of the search, while we found our way on to Engelberg, and get things ready for their arrival. We had still a long half hour's walk before us, and the village was quite hidden by a steep wooded hill, beneath which it is situated. Fortunately we thus gained some shelter, for another shower came on. Our wet umbrellas had previously been given into Couttet's charge, and we made our *entré* in somewhat ludicrous plight, with our cloaks over our heads and wet up to our knees.

"The appearance of such 'unprotected females' evidently created some surprise when we entered the hotel, and said we had come from the Titlis. When our dilemma was understood, the 'Angel' and its inmates received us most hospitably, and the good people busied themselves most kindly in providing us with slippers and dry garments; indeed, I might have been fully equipped *à la Suisse* had all their hearty proffers been accepted."

The narrative is accompanied by clever views of scenery, and useful little maps.

Garden Memoranda.

HARDWICK HALL, BURY ST. EDMUNDS, THE SEAT OF LADY CULLUM.—There are not many places which repay a special visit better than this. It is about a mile and a half from the town of Bury St. Edmunds, whose interesting ruins are so well known to every antiquary. At the end of a drive through a well wooded park the house presents an imposing frontage, and on entering, the visitor is struck by the singular taste displayed in the arrangement of the many choice articles of *vertù* with which it abounds. The entrance hall leads to the first of a series of conservatories and other houses well stocked with plants usually cultivated under glass, and forming a splendid range of about 900 feet, including Vineries and Peach house. The first house is fed from the others, and is arranged with much taste. The content of all the parts of the range are looking healthy, but the chief attraction is the noble collection of plants with variegated foliage. The Caladiums are in great vigour and in the highest beauty, their leaves resplendent with a great variety of hues, and of an immense size. Their admirable cultivation does great credit to her ladyship's intelligent gardener, Mr. Fish. Mingled with these, and tastefully adjusted, are numerous exotics flourishing excellently, and a Banana bearing fruit. Achimenes growing in baskets with a mossy compost are hung round, and have a pleasing effect. At this time, one very attractive object, reaching to the roof of one of the houses, is a great Datura, 16 feet in height, and now producing an abundance of flowers of fine size. This was said to be the second produce of blossoms during the present year. It is a plant of unusual magnitude and singular beauty. In the Peach house the trees are planted as standards in a border, and they are apparently in perfect health, and bearing an extraordinary crop of fruit, which promises to be very fine; and the effect is pleasing as they are passed in the walk through the long range. One Vine is of immense size and looks healthy, and generally the crop of Grapes is good, and the Black Hamburghs are of good size and ripening and colouring well. The walls of some of the houses are covered with very large Fig trees, bearing a quantity of fruit of the finest kind. Other walls are covered with Citrons, the fruit of which is of great size; and in another house a spreading tree of the purple Guava bears enough to render the fruit in the proper season available for dessert. It is scarcely necessary to say the Camellias, Azaleas, Geraniums, and Fuchsias are in abundance and thoroughly well managed, for it is only a certain space that can be given to the notice of the contents of this fine series of houses.

At the end of the range is a small Orchid-house with Cattleyas, Aerides, and other Orchids, and immediately adjoining a sort of nursery for the variegated exotics which make such a splendid show in the places previously alluded to. It presents a long bed of every conceivable hue, and every plant seemed in fine luxuriant growth, and the same position appeared to agree with some rare and showy Ferns of interesting new sorts. In the cultivation of these plants Mr. Fish has shown much judgment and skill, and the entire length of these attractive houses cannot be traversed without affording the lover of the garden the greatest pleasure. It is such a consecutive series of glass erections for the cultivation of all sorts of plants as is but seldom seen. Before this range of houses is the flower garden, rich in innumerable things for bedding out, and affording quite a splendid sight. The flower beds are well laid out and unusually large, and they are surrounded by arches in wire-work round which are twined Roses that have fortunately escaped the frost. Near these is a splendid Cedar and some other noble evergreens, and immediately in front of the conservatories are a great number of elegant vases filled with flowering plants well arranged as to colour. Ribbon beds, as they are called, are made also near the same spot, and consist of Lobelias, Geraniums, Calceolarias, and other suitable things, *mixed with choice Begonias* of every species. Mr. Fish has saved an immense number of variegated Begonias for this purpose, and they promise most favourably. The idea appears to be a novel one, but it seems likely to be very successful, and if these beautiful plants will do in the open border, they will add not a little to the effect which may be produced in our flower gardens. As forming one of the lines in a ribbon border, the appearance is singularly pleasing, as may be supposed, and the experiment is worthy of an extensive trial. All the grounds fenced in from the park and connected with the garden are in excellent taste. The fine Pinuses, Deodaras, Araucarias, and other things which suffered in so many places, have survived the Christmas frost here. Many Roses were killed, but more escaped, and the Rose garden looks in full beauty. There is a great extent of Rhododendrons of the best kinds, so mingled with evergreens and deciduous trees as to have an appearance of great skill in the laying out of the part of the grounds devoted to them, and in the woods are multitudes of less rare kinds, looking perfectly natural. There are also arcades of Yews and Box, always green and in summer affording cool promenades; in a lovely dell is a tasteful arrangement of the trunks and other portions of old trees, about which a variety of Ferns are growing, and the whole gives something of the effect of a pretty rockery. Surrounded by shrubs there is a curiously grotesque statue of a giant with a club which was set up in honour of Queen Elizabeth, when she made her progress in Suffolk, and is a specimen of the singular taste of that age. Altogether Hardwick is a place well worthy of a visit, and would afford no small gratification to any lover of assiduous and successful gardening. It is also a example of what may be done in a flat country where Nature is not favourable to the development of the picturesque; and nowhere will the cultivation of the beautiful variegated exotics now introduced into our stoves be found more successful or exhibiting a more brilliant effect. At certain times Lady Cullum kindly opens her grounds for a flower show, and thus affords the public an opportunity of enjoying the sight of her fine range of conservatories, and a promenade in her extensive and lovely grounds.

Miscellaneous.

Royal Horticultural Society's Gardens, South Kensington.—At the promenade to-day, the splendid band of the Royal Engineers from Chatham, and also the band of the 1st Life Guards are to attend and play; and on Saturday next, the last public day of the season, the Metropolitan Police bands, who made so favourable an impression upon their first appearance there, will again perform in conjunction with the 1st Life Guards band.

Gigantic Serpents.—We have all been accustomed from childhood to regard with awe the enormous serpents of the hot and damp intertropical forests; though the specimens carried about in travelling menageries have but little contributed to nurture the sentiment. A couple of coils of variegated mosaic, looking like a tesselated pavement, about as thick as a lacquey's calf, wrapped up in the folds of a blanket at the bottom of a deal box, we had difficulty in accepting as the impersonation of the demon which hung from the branches of an Indian tree, and, having pressed the life out of a buffalo in his mighty folds and broken his bones, swallowed the body entire, all but the horns. Here again there is incertitude and disappointment; and the colossal dragon, which looms so large in the distance of time and space, grows 'small by degrees and beautifully less' in the ratio of its approach to our own times and our own eyes. Yet enough of size and power remains, even when all legitimate deductions are made, to invest the great boa with romantic interest, and to make the inquiry into its real dimensions worthy of prosecution. * * * The old Roman historians report that the army of Attilius Regulus, while attacking Carthage, was assaulted by an enormous serpent, which was destroyed only by the aid of the military engines crushing it with huge stones. The skin of this monster, measuring 120 feet in length, was sent to Rome, and preserved as a trophy in a temple till the Numantine war. Several writers mention the fact, and Pliny speaks of its existence as well known. Diodorus Siculus mentions a serpent which was captured, not without loss of human life, in Egypt, and which was taken to Alexandria; it measured 30 cubits, or about 45 feet in length. Suetonius records that one was exhibited in front of the Comitium at Rome, which was 50 cubits, or 75 feet in length. It is probable that these measurements were all taken from the skin after having been detached from the body. I have had some experience in skinning serpents, and am therefore aware of the extent to which the skin, when dragged off by force, is capable of stretching: one-fourth of the entire length may not unfairly be deducted on this account. But even with this allowance, we must admit, unless we reject the testimony of sober historians, who could hardly have been mistaken so grossly as to warrant such rejection, that serpents did exist in ancient times which far exceeded the limits that have fallen under the observation of modern naturalists. There is a well-known picture by Daniell, representing an enormous serpent attacking a boat's crew in one of the creeks of the Ganges. It is a graphic scene, said to have been commemorative of a fact. The crew had moored their boat by the edge of the jungle, and, leaving one of the party in charge, had gone into the forest. He lay down under the thwarts, and was soon asleep. During his unconsciousness an enormous python emerged from the jungle, coiled itself round the sleeper, and was in the act of crushing him to death, when his comrades returned. They succeeded in killing the monster, "which was found to measure 62 feet and some inches in length." This seems precise enough; but we should like to know whether the measurement was made by the Lascars themselves, or by any trustworthy European. A correspondent of the Edinburgh Literary Gazette has told, with every appearance of life-truth, a thrilling story of an encounter which he had with an enormous boa on the banks of a river in Guiana. Awaked, as he lay in his boat, by the cold touch of something at his feet, he found that the serpent's mouth was in contact with them, preparing, as he presumed, to swallow him feet foremost. In an instant he drew himself up, and, grasping his gun, discharged it full at the reptile's head, which reared into the air with a horrid hiss and terrible contortions, and then, with one stroke of his paddles, he shot up the stream beyond reach. On arriving at his friend's house, it was determined to seek the wounded serpent, and several armed negroes were added to the party. They soon found the spot where the crushed and bloody Reeds told of the recent adventure, and proceeded cautiously to reconnoitre. Advancing thus about 30 yards, alarm was given that the monster was visible. "We saw through the Reeds part of its body coiled up, and part stretched out; but, from their density, the head was invisible. Disturbed, and apparently irritated, by our approach, it appeared, from its movements, about to attack us. Just as we caught a glimpse at its head we fired, both of us almost at the same moment. It fell, hissing and rolling in a variety of contortions." Here one of the negroes, taking a circuit, succeeded in hitting the creature a violent blow with a club, which stunned it, and a few more strokes decided the victory. "On measuring it, we found it to be nearly 40 feet in length, and of proportional thickness." I do not know how far this story is to be relied on; but if it is given in good faith, the serpent was the longest dependable example I know of in modern times. Still, "*nearly* 40 feet" is somewhat indefinite. *Gosse's Romance of Natural History.*

Calendar of Operations.

(*For the ensuing week.*)

PLANT DEPARTMENT.

CONSERVATORY, &c.—No time should now be lost in completing any repairs that may be required by houses devoted to the growth of plants, for if wet weather should set in the protection of glass will be required earlier than would be necessary under more favourable conditions. Continue to keep the conservatory gay by a selection from the reserve houses of the showiest plants in bloom; carefully tie out the different varieties of Lilium lancifolium before they come into flower; two other good autumn-flowering plants should likewise have similar attention, viz., Crowea saligna and Plumbago capensis; these are invaluable for purposes of autumn decoration, as are also the different kinds of Kalosanthes. Attend to the proper regulation of climbers, and give weak liquid manure to plants in bloom, to maintain them in vigorous health, and assist the late flower-buds to open. After greenhouse plants have been placed under protection, whether of a permanent or merely temporary character, an unlimited supply of air must be given them day and night. Pot on Chrysanthemums, and stake them securely as they advance. The stock of autumn and winter flowering plants should not be stopped after this, but have every encouragement to assist in ripening their wood early, that no difficulty may arise in getting them into bloom at the time wanted. Daphnes, Oranges (of different kinds), Myrtles, and Gardenias intended for forcing should be removed to a cool airy house to rest.

FORCING DEPARTMENT.

PINERY.—Finish potting, both of the fruiting and succession plants, as soon as circumstances permit, that time may be allowed them to complete their growth before the dull days of autumn. In re-plunging them allow plenty of room between the plants for their growth during the next three months, and keep them as near the glass as the form of the pit or house will permit. Keep up a steady bottom heat at 80°, to facilitate a quicker growth of the root after potting; it may gradually decline a few degrees as the plants advance. Syringing should be discontinued (unless in dry airy houses) as the days shorten, except in the case of plants swelling their fruit, which will require a moist atmosphere. Air should be freely given on all favourable occasions; but the plants will enjoy being closed up early in the afternoon at a temperature of 85° or 90° for three or four hours, giving as much air afterwards as will produce a gentle circulation during the night. Water fruiting plants with liquid manure when dry; where the fruit is cut from those kinds which do not produce suckers freely, the stools should be shaken out of their pots and repotted in deep and less-sized pots, plunging them in a brisk bottom heat; this will generally induce them to produce a supply.

VINERY.—Ripe Grapes should be occasionally looked over, to remove decaying berries. Wasps, though not plentiful this year, are sometimes troublesome, and, to prevent their entrance, tack hexagonal or other netting on slight frames, and place them over the sliding sashes and ventilators; all late growths should be stopped back, but preserve the principal leaves untouched, until they die naturally.

FLOWER GARDEN AND SHRUBBERIES.

Cuttings of choice herbaceous plants, Carnations, Picotees, &c., put in early, should be pricked out or potted immediately they are struck, to get established. Early struck Pansies may be planted out for autumn blooming. Young seedling Wallflowers, Brompton Stocks, Sweet Williams, and other biennials, should either be planted out into reserve beds, or where they are to flower. The propagation of bedding plants must soon be commenced; therefore make notes of desirable new things. The present will prove a favourable time to propagate by cuttings most kinds of Roses. Choose the ends of the shoots for the purpose with the bottom part partly ripened. Noisettes, Bourbons, Chinas, and Hybrid Perpetuals will strike freely in sandy soil if selected as just directed. If evergreens are to be removed do not let it be forgotten that during the whole of August and September is the best season for transplanting them.

HARDY FRUIT AND KITCHEN GARDEN.

Early Potatoes in some instances are reported to be becoming diseased; those on soils most unfavourable to their keeping sound should therefore be taken up and used first. Store them in small quantities in sheds, lofts, &c., to dry, before attempting to pit them; for probably some may turn diseased even after they are up. If not already sown, lose no time in getting in Lettuce, &c. A crop of dwarf French Beans should be sown under a south wall, for a late supply; and an empty Melon pit maybe planted later, keeping the sashes off. Prune off superfluous shoots from Tomatoes against walls, that they may not shade the ripening fruit. The leading shoots may be pinched out when sufficient fruit is set, which will assist to ripen the crop. Chilies, in pots or frames, should be kept free from green-fly; a little manure water will help those in pots.

COTTAGERS' GARDEN.

A few Cabbages may still be planted 9 inches apart, every alternate one to be drawn for greens, the rest to stand later. If a little Parsley has been sown during summer let it be thinned out so as to afford what remains strength to stand the winter.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending July 18, 1861, as observed at the Horticultural Garden.

July.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind.	Rain.
Friday 12	4	29.664	29.555	81	57	69.0	63	60	S.	[illegible]
Satur. 13	5	29.521	29.435	81	55	68.0	64	60	S.	[illegible]
Sunday 14	6	29.605	29.514	78	53	65.5	65	60	S.	[illegible]
Mon. 15	[illegible]	29.621	29.553	77	50	63.5	64	60	S.	[illegible]
Tues. 16	8	29.714	29.611	72	42	57.0	64	60½	W.	[illegible]
Wed. 17	9	29.881	29.787	74	55	64.5	64½	60½	S.W.	[illegible]
Thurs. 18	10	29.750	29.650	73	52	62.5	64	60	S.W.	.00
Average..		29.679	29.586	76.5	52.0	64.3	64.1	60.1		[illegible]

July 12—Partially overcast; very fine; rain at night.
— 13—Fine; very fine; rain.
— 14—Very fine; rather boisterous; densely overcast; rain.
— 15—Rain; very fine throughout.
— 16—Very fine; low dusky white clouds; fine; cold at night.
— 17—Clear; very fine; windy.
— 18—Overcast; cloudy; fine at night.
Mean temperature of the week ½ deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending July 27, 1861.

July.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 21..	73.2	51.0	62.1	15	0.54 in.	2	1	3	1	4	12	9	3
Mon. 22..	73.4	52.0	62.7	19	1.37	3	3	2	1	3	11	[illegible]	2
Tues. 23..	74.2	53.0	63.6	17	0.70	1	5	5	2	3	10	5	4
Wed. 24..	72.6	52.1	62.3	12	1.16	1	7	4	2	3	12	3	3
Thurs. 25..	73.9	49.8	61.8	9	0.36	2	6	3	—	2	9	11	2
Friday 26..	73.1	51.4	62.3	16	1.22	2	1	4	2	4	13	6	4
Satur. 27..	74.6	52.2	63.4	16	0.98	2	3	5	2	3	11	6	[illegible]

The highest temperature during the above period occurred on the 25th, 1844—therm. 92 deg.; and the lowest on the 25th, 1860—therm. 34 deg.

Notices to Correspondents.

AILANTHUS: *C.* The plant mentioned as growing on the sands near Odessa is Ailanthus glandulosus. It is there employed with success to bind together the sand banks of the coast, and therefore must grow well in places much exposed to blasts from the sea and in its immediate vicinity. The Ailanthus does not require much heat to ripen its wood.

EMIGRANTS: *H Wilson.* The climate of Vancouver is like that of Cornwall; of Queensland like Lisbon. It is impossible to say how far Cotton growing may be profitable in the latter. It will undoubtedly thrive there; but whether it will pay or not depends on the supply of labour. We should prefer Vancouver. There is no trouble with the Indians, and the colony is prosperous for agricultural people, especially if they know how to raise vegetables, will work themselves, and can rough it.

EXHIBITIONS: *V P.* The regulation is so worded that Pelargoniums are clearly admissible: unless there is some qualifying clause in another part of the Schedule.

GREENHOUSES: *R S D.* Use Hartley's rough horticultural plate; the length of the panes not material, only recollect that the larger they are the more it costs to repair breakage. Run 3-inch hot-water pipes all round, with as large a boiler as you can afford. We know nothing of the boiler you mention, but any sort will do for so small a job. Buy the cheapest and simplest cast-iron one within your reach.

INSECTS: *J R.* Your Pear and Cherry leaves are infested with the slimy larvæ of the black saw-fly, Selandria Æthiops. Dust the leaves with lime, or syringe them with lime water carefully. *W.*

NAMES OF FRUITS: *John Roberts.* The Nectarine is the Violette Hâtive; the Peach is very probably the Grosse Mignonne, but Peaches and Nectarines sent for names should be accompanied by a leaf from the tree which produced the fruit, and the size of the flowers, whether large or small, should also be stated, if known. The Grape appears to be the Cannon Hall.—*F D.* Your Seedling Apple from the Norfolk Beaufin is very like that sort in size, form, and hardness of the flesh, but the latter is sweeter than that of its parent, and the colour is not so dark. It appears worthy of cultivation on account of its long sound keeping property.‖

NAMES OF PLANTS: *A. H.* 1. Appears to be Anchusa sempervirens, but the specimens are insufficient; 2, Echium vulgare.—*H G.* 1, Orobus niger; 2, Lactuca muralis; 3, Passiflora racemosa; 4, Fraxinus heterophylla.—*S G. Hamden.* No numbers: Digraphis arundinacea; Agrostis alba; Triticum repens; and apparently Festuca pratensis.—*C F T.* 1, Chenopodium ficifolium, apparently but a very odd example; 2, Lysimachia Nummularia; 3, Nasturtium sylvestre. Specimens smeared down with gum, as yours were, are hardly examinable.—*C L.* The Grass is attacked by a Fungus of which you will hear more next week.—*C I.* 1, Alopecurus agrestis; 2, Agrostis vulgaris; 3, Hordeum murinum.—*V P.* Schizæa dichotoma.—*A Sub.* 1, Spiræa salicifolia; 2, Spiræa bella; 3, Another Spiræa, probably ariæfolia, but a miserable morsel; 4, Symphoria racemosa.—*Ignoramus.* *W F.* Scleranthus annuus, not Sagina apetala.—1, A morsel of Jungermannia Blasia: 2, A morsel of some Euphorbia; 3, Narthecium ossifragum; 4, Ornithopus perpusillus.

POTATOES: *Peter Bunn.* The bodies growing on your haulm are merely Potatoes formed in daylight, and in contact with air. Earth the haulm up, and they will become marketable Potatoes.

PRESERVING FLOWERS FRESH: *A Subscriber.* The figure of flowers under a bell-glass in the *Gardeners' Chronicle* of July 6, is intended to represent flowers standing in a vase of water, as well as there being water in the plate in which the vase stands. If the ends of the flower stalks are merely in a dry vase the flowers will even then preserve their freshness; but not for so long a time. There is no card-board shown. The bell-glass is of glass and nothing else.

PROLIFEROUS PLANTAGO MAJOR: *J Mc R.* It is not very uncommon to find this making a panicle; but your specimen is the finest we have seen.

STRAWBERRY: *Sub.* Very good; but in what does it differ from British Queen?

VARIEGATED ELMS: *G B* sends specimens from near Ilminster of the silver-striped Hertfordshire Elm, and asks why they have become variegated this year, never having been so before. This variety is undoubtedly more handsome than usual this year; but we almost doubt the accuracy of the statement that the trees in question have suddenly assumed a variegated state. If it really is so it is a remarkable occurrence, for according to our Correspondent nine old Elms, two quite 50 feet high, are now in the variegated condition.

VINERY: *A Constant Reader* will not be able to ascertain the cost of constructing his Vinery unless he submits a plan to some builder; or applies to one of the many advertisers. Perhaps for so small a job it would be best to employ a country carpenter and glazier. It ought not to cost more that 1*l.* per foot run.

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861, are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME	£6 6
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES ..	5 5
LAWES'S BARLEY, GRASS, AND MANGEL MANURES	8 0

These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.
CONCENTRATED TURNIP MANURE, equal in value to the preceding.
Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

THE LONDON MANURE COMPANY.
(ESTABLISHED 1840.)
Are now prepared to send out the following MANUFACTURED MANURES:—
SUPERPHOSPHATE OF LIME, of best quality.
DISSOLVED BONES, AND BONE MANURE FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN AND ROOTS.
CORN MANURE FOR TOP DRESSING.
MANGOLD MANURE.
They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate to be obtained entirely from Bones.
The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE OF SODA, SULPHATE OF AMMONIA, and every Manure of value.
116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

Reaping and Mowing Machines.
BURGESS AND KEY, 95, Newgate Street, E.C. Prizeholders for the best Agricultural Machinery Manufactured
ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price 42l. 10s.
TESTIMONIALS.
A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following:—
From Mr. JOHN RICHARDS, Bailiff to Dr. N. CARNE, Dimland Castle, Glamorgan.
"I beg to certify that I have for five years worked Messrs. Burgess & Key's Reaper in my master's Home Farm, and also accompanied it when lent to tenants on the estate. During the above mentioned period the Machine has not cut less than 1,000 acres of all kinds of crops, with the same two knives as first had with the Machine. Dr. N. Carne having given up farming, the machine is now in the hands of his tenant, Mr D. Thomas, of Llanrwst, and is in excellent order."
M'CORMICK'S REAPER for Manual Delivery. Price 25l.
ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30l.
COMBINED REAPER AND MOWER—Two-Horse Machine. Price 35l.
The last Machine is fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.
These Prices include Packing and Delivery at any Railway Station

JOHN FOWLER, JUN., 28, Cornhill, London, E.C.— Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free.

The Agricultural Gazette.

SATURDAY, JULY 20, 1861.

THE English Agricultural Society may be congratulated on a most successful anniversary at Leeds. Never have its yards been better filled with illustrations of the live stock of the farm—rarely have they more perfectly illustrated the machines of agriculture—and of certain classes of machines never has the trial been so careful or so clearly indicative of high merit. Steam ploughing is at length admitted by every one to be practically accomplished. The reaper and the mower by horse-power are now everywhere being introduced, and the skill and ingenuity of machinists are everywhere doing more cheaply and more perfectly, and more rapidly, that which has hitherto been done tediously and painfully by horse or hand. The proof of all this given at the Leeds Meeting has interested both townsmen and agriculturists, and immense crowds of spectators have been daily present, both at the trials of machines, and latterly in the yards where they are exhibited.

The weather on the whole has been favourable to the meeting. With the exception of rain last Monday, a showery Thursday, and a wet day now and then during the trial week, it has been for the most part what spectators and exhibitors have liked—cool, dry, and breezy.

Leeds is too large a place to be excited into such enthusiasm as Gloucester, Exeter, or even Canterbury displayed on similar occasions—and no arches speaking welcome, and comparatively few flags have enlivened the streets of the dingy conglomeration of workshops which it is. Nevertheless the thousands of a town population have kindly welcomed thousands of country folks, and have been taught the magnitude and importance of agricultural affairs so as they had never previously known them. And the Society will benefit by a larger revenue than has hitherto been received at the show-yard doors, notwithstanding the privilege of free admission to its members, now for the first time granted. The following has been the attendance on the four first days of the week.

On Monday,	2027 visitors paid	£505	19	0
On Tuesday,	10,250 ,, ,,	1281	5	0
On Wednesday,	18,823 ,, ,,	2352	17	6
On Thursday,	74,000 ,, ,,	3700	0	0

So far, therefore, as known when we go to press, the Leeds Meeting compares favourably with those of Warwick and of Chester, which stand highest on the list of the Society's annual experience.

The show-yard of the Agricultural Society is certainly an admirable ware room. It is difficult to imagine any market-place to which an agricultural machinist would be better pleased to bring his goods. Nowhere is there such a thoroughfare of customers—much mixed up no doubt with mere idle sightseers and "excursionists"—yet amongst the multitude which slowly pass by each stand are men from every English county and probably every European country who use or need such tools as are there exhibited. And they are all now wide awake to the need of economising labour, and to the importance of cheapening production by the aid of machinery. One would think that the makers of such machinery would gladly submit to almost any drawback and meet any difficulty rather than lose the opportunities which such a gathering affords. And yet some of our leading manufacturers have declined being present. Messrs. RANSOME, of Ipswich; Messrs. GARRETT, of Saxmundham; Mr. SAMUELSON, of Banbury, all first-class manufacturers, do not exhibit their machines, notwithstanding such an opportunity of selling them. Of course no one can be expected to attend unless it be worth his while; and considering the expenditure—many hundred pounds a year—which is thus incurred, these firms do not think it worth their while, notwithstanding the four following sources of remuneration which these meetings, according to the lately published letter of Messrs. RANSOMES & SIMS on the subject, open to them. They say:—

The remuneration which a manufacturer receives from exhibiting at the annual shows arises in the following manner:—

1. By direct sales in the show-yards.
2. By subsequent sales in the district of which the show is the centre, and arising from the inhabitants of the district becoming acquainted with his machines, of which they were previously uninformed.
3. By sales of implements in Great Britain and foreign countries, in consequence of their having received the Society's prizes.
4. By the value which the public place on the prizes awarded by the Society, as an evidence of character on the part of the manufacturer, or guarantee of the excellence of his productions.

On the first three heads the trade books of any one who has been an exhibitor for a number of years afford him full evidence, and we are of opinion that the advantages obtained under them do not outweigh the disadvantages attending the present imperfect manner of conducting the trials to which all exhibitors at the Annual Meetings of the R. A. S. E. are nevertheless compelled to submit, under penalty of exclusion from the show-yard.

It is to the fourth head that we have hitherto been accustomed to look for a return of our expenses and exertions, and it is our present belief, founded on consideration of the Society's Reports in its own Journal—on articles in the English press—in foreign agricultural journals—and acquaintance with the views of a large circle of practical agriculturists, that the awards of the Society are no longer looked upon as a solid guarantee of excellence to the extent which they formerly were; and that the agricultural public consider the interest which an established manufacturer has in the maintenance of his reputation, effectually forbids his sending out any articles which will not properly perform their work, and offers a far better guarantee to the purchaser, that he will obtain money's worth, than any honorary distinction founded on the present system of trials.

We state the case as it is put by Messrs. RANSOMES, and our readers will find their statement given fully in our advertising columns. It is of course the interest and desire of the Agricultural Society that the trials to which they subject the implements submitted for their examination be as careful and complete as possible; and we believe that latterly these trials have rather gained than lost in public estimation. It is however certain that so advantageous a market as the Show-yard of the Society affords must ultimately secure attendance of salesmen and exhibitors, let the drawbacks be what they may; and Leeds has, we believe, contrasted favourably with recent meetings of the Society as to the quantity of business done by manufacturers and exhibitors of live stock.

Besides the attractions presented by the National Society, the Yorkshire Agricultural Associations have offered prizes which have drawn together a very attractive exhibition. There has not indeed been much competition for these prizes in the show-yard, but in the Music Hall in Albion Street a very interesting collection of plans of cottages and farm-buildings has been exhibited, in competition for exceedingly liberal prizes. The awards for cottages will probably be generally acquiesced in; but we very much mistake if those for farm-buildings, and especially that of the leading prize, be not generally condemned. We refer to the subject here, although it is more fully alluded to in another page, in the hope that a full discussion of this subject in our columns may tend to the determination of what ought to be the guiding principles in the designing of buildings for the farm.

UNQUESTIONABLY the leading feature of the Leeds Show has been the thorough examination given to the subject of steam ploughing by the three most competent judges appointed by the Society. For a fortnight have they been submitting the existing machinery to every test by which merit was to be determined, and the details of their award will be found in another page. It has been given almost wholly in favour of FOWLER's apparatus as now constructed, and we cannot doubt the soundness of their decision. The advantage of steam as the cultivating power lies in its especial adaptation to the tillage of stiff clay soils, and the superiority of FOWLER's system was more than ever apparent in the clay land trials to which it was subjected.

It is in the distinction thus given to a new implement that the responsibility of the Society's judges chiefly lies. The award of merit in a competition of old implements, such as sowing machines for instance, which while old are also costly, will probably not affect their sale at all. Messrs. HORNSBY's implements, Messrs. GARRETT's implements, Mr. SMITH's implements, have each their respective countries, and they do not, cannot indeed, encroach on one another. A man who has used a drilling machine for 20 or 30 years properly believes that he wants no guidance from an agricultural society in the purchase of a new one; and accordingly makers of sowing machines do not attach much importance to the prizes by which the Society chooses to distinguish one or more among its rivals. It is when such distinctions affect new apparatus that they are most influential. There is an enormous hitherto untouched field before the makers of steam plough apparatus for instance, and the persistent award of judges, after patient examination into the rival methods, in favour of FOWLER's apparatus cannot but be of the utmost importance.

Recent agricultural statistics declare the Wheat lands of this island to exceed 4,000,000 acres, the Barley land to approach 3,000,000 acres, the Oat crop to exceed 2,000,000 acres, the Potato crop to exceed 700,000 acres, the Turnip crop each year to approach 3,000,000 acres, and other crops to exceed 700,000 acres, while 900,000 or more are in bare fallow. At least two-thirds of all this—nearly 15,000,000 acres—can be cheaper ploughed and worked by steam than it can by horses. Here are 10,000,000 acres to be cultivated in the year, 15,000,000 to 20,000,000 acres of ploughing to be done—2,000,000 days' work for a 12-horse-power engine. But there are not more than 120 days in the year on which it is generally convenient to set the engine ploughing—and we therefore want 15,000 steam-engines to do the work. Mr. FOWLER, Messrs. HOWARD, CLAYTON & SHUTTLEWORTH, and TUXFORD, and all the agricultural machinists of the day, may set to work in concert or in rivalry as they please: there is ample room for all; and more than all will accomplish for many years to come. Of course a great proportion of the arable land of the country is mixed up with pasture land in small portions which must be worked by horse-power—unless by steam for hire; and there are vast tracts of plough land in the hands of those who have not capital for the operation of steam ploughing, but that a

large and increasing remainder will be ultimately cultivated by the steam plough and steam cultivator we cannot doubt. If three-tenths of the agricultural horse-power of England may be displaced by steam (and this will leave a remainder amply sufficient for the cultivation of small farms and for the work of carriage and other lighter operations on large farms), then 240,000 horses have to be displaced, and their work will be easily accomplished by less than three-quarters that quantity of horse-power in steam, thus bringing out the quantity of engines needed as 15,000 of 12-horse-power, at which it was estimated before.

It is not however only for this country that our steam-plough makers will be at work. Every monthly mail brings our machine-makers some hundreds of orders from Australia—the export trade in agricultural machinery to Germany and France is a greatly increasing trade—our leading manufacturers have agents in Paris, Vienna, and other *leading continental cities*—Russian proprietors losing the labour of their serfs are seeking independence of them—the great international gathering is to take place next year. Who can doubt that the work of providing steam cultivating apparatus for all who in this country and elsewhere are about to cultivate their land by steam will be almost an impossibility during the next few years?

There is no one who has had a harder or more uphill fight than Mr. FOWLER for the attainment of the success which is now about to reward him. He has throughout contended for a system adapted to better than the average circumstances of English farming—to large fields, systematic agriculture, and the great scale generally; and thus he has had not only to convince the farmer of the merit of his apparatus, but of the economy and profit of a higher style of agriculture altogether than is generally prevalent. His methods are at length proved applicable also to more limited operations and confined positions; but it is still in the open country and on the great scale that his plans are most effective. Confident in their ultimate success, he has seized on every possible improvement of which they were capable; and at enormous cost of money, labour, resolution, patience, thought, he has at length achieved pre-eminence.

—— IT is announced that Professor WAY has associated himself in partnership with Mr. T. M. EVANS, who has been many years in his laboratory at Welbeck Street. This arrangement, whilst affording the same guarantee for the accuracy of analysis as heretofore, will secure the earliest report upon samples entrusted to Messrs. WAY & EVANS for examination.

BARON LIEBIG ON THE ACTION OF PERUVIAN GUANO.

[For the following interesting extract of a letter from Baron Liebig we are indebted to Dr. Blyth, Queen's College, Cork.]

"Munich, June 14, 1861.

—— "There is a very prevalent opinion among agriculturists that guano produces a greater effect than an artificial mixture containing the same quantity of bone phosphate (3 Ca O, PO_5) and of nitrogen in the form of salts of ammonia. I have myself observed in experimenting on a piece of meadow land, that those portions on which guano was strewed became very soon conspicuous by darker green Grass, whilst an artificial mixture, as above stated, appeared to exert scarcely any action.

"This hitherto unexplained rapidity of action is due to the presence of oxalic acid in Peruvian guano.

"When guano is extracted with water, a solution is obtained which contains about 2 per cent. of phosphoric acid, and 6 to 8 per cent. of oxalate of ammonia. If, however, guano be mixed with water, and the moistened mass be left standing for some days (just the state in which it would be in the soil), it is found on extracting with water from time to time a portion of the moistened mass, that the amount of phosphoric acid has increased, and that of oxalic acid diminished. This reaction continues many days, the quantity of soluble phosphoric acid daily increasing in proportion to the diminution of oxalic acid, until at last the oxalic acid almost entirely disappears from the solution, and in its place is now found a corresponding amount of phosphoric acid. The idea immediately occurs that from the long contact with water the phosphate of lime and oxalate of ammonia decompose each other into oxalate of lime and phosphate of ammonia.

"But in a neutral solution of oxalate of ammonia, phosphate of lime is not decomposed, or at least only very slowly. There must, therefore, be in guano some other substance which is the means of causing, in the moist manure, the decomposition of the earthy phosphate. This substance is sulphate of ammonia, which is always present in Peruvian guano. In fact, on adding a little sulphate of ammonia to a mixture in water of oxalate of ammonia and of freshly precipitated phosphate of lime, mutual decomposition of the last two salts took place in a few hours. The sulphate of ammonia renders the phosphate of lime somewhat soluble, and thus promotes its decomposition by the oxalate of ammonia.

"The action of guano is therefore two-fold; depending, in the first place, on its soluble nitrogen compounds; and in the second, on its soluble phosphates. In this last respect its effect is similar to that of a superphosphate.

"The foregoing decomposition in guano depends evidently to a greater or less extent on the weather. Continued moderate moist weather promotes the conversion of the insoluble phosphoric acid into a soluble form, whilst heavy falls of rain retard it, by washing out the oxalate of ammonia. Hence from this dependence on time and moisture, we are not always certain of this transformation taking place in this manure in the soil.

"I have discovered a very simple method of rendering the action of guano constant in connection with the conversion of the phosphoric acid into a soluble form. It consists in moistening it a day or two before its application with a little water, to which a small quantity of oil of vitriol has been added, so as to render it distinctly acid. Under these circumstances decomposition takes place rapidly, and is completed in a few hours. The whole of the phosphoric acid, corresponding to the quantity of oxalic acid present, is separated from the lime, and rendered soluble by union with ammonia; and the oxalic acid disappears entirely as an insoluble oxalate of lime.

"I am very anxious that agriculturists may be induced to make comparative experiments with guano alone, and after being moistened with dilute sulphuric acid. "I am, my dear Blyth,

"Yours very truly,

"JUSTUS VON LIEBIG."

"*Dr. Blyth, Queen's College, Cork.*"

GREAT MEETING OF THE ROYAL AGRICULTURAL SOCIETY AT LEEDS.

IN order to compress within a limited space as full a report as possible of those points of immediate interest which have attracted notice during the past week, we are forced to postpone until our next Number a detailed account of the implement yard with its multifarious contents. It must suffice to say that on entering the yard of nearly 30 acres by the Aire, there is on the one hand a magnificent display of machinery in motion, and on the other several sheds, of which the leading features are the stands of Messrs. Lawson and Gibbs with their admirable collections of plants and seeds; while before us, in a succession of parallel shedding from end to end of the space, are machines of the field, the farmyard, feeding-house and granary, as well as a multitude for domestic use, ranged in several hundred stands by as many exhibitors. Nearly 6000 articles are thus exhibited, of which the catalogue is a more bulky volume than ever.

Beyond the implement sheds lies the cattle yard, and to this we shall first take our readers. Thereafter we give a short account of the two competing steam cultivating apparatus. To this will be added a further report of implement trials: and lastly there will be an account of the cottage and farm-building plans competing, in a most interesting exhibition, for the Yorkshire Society's prizes. The whole gathering has been brought together in competition for about 3250*l*., offered in prizes, viz., 2500*l*. by the Society, and the remainder by the local committee. Thus 520*l*. has been offered for implements, 750*l*. for horses, 750*l*. for cattle, and about the same for sheep and pigs—while wool, cheese, flax, and cottage plans, &c., take up the remainder.

THE CATTLE YARDS, which were opened early in the afternoon of Monday, were never at any previous meeting of the English Agricultural Society filled with more perfect illustrations of the best breeds of the live stock of the farm. In particular the Short-horn classes are a wonderfully fine show.

SHORT-HORNS.

No fewer than 38 animals competed for the prizes offered for bulls under 6 and more than 2 years old, and they included the prize-takers of many previous shows, among others, "Malachite," shown by Mr. Peel of Clitheroe, and "Lord John Russell," who has taken five 1st prizes at provincial shows, and is a long and straight 3-year-old roan bull, shown by Lord Kinnaird, of Perthshire. Both of these are commended by the judges, as is a light roan bull "Prince Frederick," also a prize-taker elsewhere, shown by Sir C. R. Tempest, Bart. The 1st prize bull is "Skyrocket," by 5th Duke of Oxford, shown by Lord Feversham. He is a 4 year and 8 months old roan bull of very massive proportions, with deep hind quarters and great width. Mr. Langston, M.P., of Sarsden, takes the second prize with "Royal Turk," a rich roan 3 years and 2 months old, possessed of good quality and great width over the loin and rib. Mr. Dickenson, of Wigan, takes the 3d prize with a red and white 2½-year-old bull, "Duke of Holland." Mr. Jonas Webb is highly commended for his 5-year-old roan bull "Earl of Hardwicke," as is Mr. Banks Stanhope, M.P., for a dark roan bull "George the First."

The younger class of bulls are represented by 40 animals between 1 and 2 years old. The [illegible] taken—the first by Mr. Taylor of Whalley, [illegible] with "Orion," by 6th Duke of Oxford, the 2d [illegible] Jonas Webb's "Englishman," and the 3d by [illegible] Trevelyan, Bart., of Northumberland. Many [illegible] best herds in Yorkshire are well represented [illegible] class.—Sir C. Tempest of Broughton Hall, Mr. [illegible] Stackhouse, Settle, Mr. Ambler of Halifax [illegible] Fawkes, of Otley, also exhibits 4 young bulls [illegible] them "Doctor Faustus," who handles with [illegible] touch as if of Duchess blood. They are all [illegible] show condition as Mr. Fawkes contends—*not* [illegible] condition according to the mischievous fashion [illegible] Thirty-seven bull calves are shown in the [illegible] the 1st prize is given to Mr. Howard of Bid[illegible] Bedford, and the second to Mr. Ambler of [illegible] There are several entries in this and other classes [illegible] Colonel Towneley's herd, but the animals are not for[illegible] coming, and the show no doubt loses by the absence [illegible] these illustrations of the Towneley herd, which have [illegible] past years done it so much credit in the show-yard [illegible] the Society.

It is however in the female classes, we think, that [illegible] Short-horns are this year most effective; and [illegible] Bates' blood carries everything before it, as [illegible] does in some of its tribes in first-class animals among [illegible] bulls; for both Lord Feversham's 1st prize old [illegible] Mr. Taylor's 1st young bull are of one of Mr. [illegible] families. It is however the Duchess tribe as exhibited [illegible] Captain Gunter of Wetherby, which has here [illegible] reasserted that distinctive superiority which has [illegible] been claimed for it. There is a magnificent class [illegible] cows over 3 years old, including Captain Gu[illegible] "Duchess 77," Mr. Ambler's "Wood Rose," Mr. [illegible] "Queen Mab," Lady Pigot's "Empress of Hind[illegible] and "2nd Duchess of Gloucester"—all well known [illegible] Duchess 77 was first shown as a calf in 1858 [illegible] Wetherby show and not noticed by the judges, [illegible] yearling at Warwick, where she took the 3d prize [illegible] Gundry's "Faith" being 1st, and a Douglas heifer [illegible] She was 2nd at the Durham show, Lady Pigot's [illegible] Rose being first. She was first at the [illegible] Society's show at Hull, and again at Ulverstone [illegible] same year. In 1860 she was placed 1st at [illegible] Messrs. Jolly, of Warlaby, and Johnson, of [illegible] being judges. She was second at Canterbury, [illegible] Ambler's Wood Rose being placed above her by [illegible] judges—Messrs. Parkinson, of Leyfield, and [illegible] of Hexham. She was placed first and took the [illegible] Bishop Auckland, Messrs. Hubbard of Penrith [illegible] Rain of Guildford, being judges. She was first [illegible] class at Pontefract, Mr. Booth's Queen of the [illegible] being second, and "Wood Rose," her Canterbury con[illegible] queror, not being noticed by the judges. She [illegible] at Ulverstone, Messrs. Douglas, of [illegible] Thompson, of Anlaby, being judges, and [illegible] received the cup as the best female in the [illegible] the cup as the best *animal* in the yard. She was [illegible] first at Alnwick, and for the seventh time in [illegible] victorious at the North Lancashire show Mr. [illegible] Mr. Clark, of Long Sutton, and Mr. Stratton [illegible] Swindon, being judges. So extraordinary [illegible] success is almost unparalleled. But she continues [illegible] standing first in her class this year again [illegible] She is now 3½ years old, has had a capital calf [illegible] 6 or 7 months gone in calf again. She is of [illegible] roan colour, possessed of extraordinary fineness [illegible] good hair, enormous width of loin and back [illegible] arched ribs, good prominent bosom, remarkabl[illegible] neck and shoulders. She is getting a little [illegible] the rump, which makes her look rather [illegible] She is a remarkably good looking animal, [illegible] appearance of lots of life and vigour—presenting [illegible] respect a contrast to the sleepy, sleek, but [illegible] Short-horn Wood Rose, again by her side, [illegible] placed before her at Canterbury, and has [illegible] peatedly competed with her but in vain.

The second cow in this class is "Queen Mab" [illegible] has long stood in the very first class of Short-[illegible] extraordinarily good in her fore-quarters, and [illegible] everywhere else. We understand, however, that [illegible] test against the award has been made on the [illegible] that she is not in calf. Lady Pigott takes [illegible] prize with the 2d Duchess of Gloucester, a cow [illegible] Mr. Jonas Webb, and descended from Lord [illegible] herd. In this class also is Mr. Booth's Queen [illegible] Vale, which stood second in the heifer class at [illegible] last year.

In the next class (heifers under 3 years old) [illegible] Gunter again shows the twin Duchesses, 78 (roan) [illegible] 79 (white), whose career is almost as remarkable [illegible] of Duchess 77. They are, in the first place, [illegible] four remarkable calves which Duchess 67 (bought [illegible] at Lord Ducie's sale for 350 guineas) produced [illegible] years. Duchess 67 has indeed now produced [illegible] generations 13 or 14, thus illustrating the fecundity [illegible] addition to the other good qualities, of the [illegible] tribe. Her two twin daughters were 1st and [illegible] yearlings at Ulverstone, 1st and 2d as yearlings [illegible] Canterbury (78, the roan, being first in both [illegible] They competed in the 2-year-old class with Duchess [illegible] at Bishop Auckland, when 77 was put first, 79 [illegible] second, and 78 (roan) third. At Dumfries they [illegible] beaten by Mr. Douglas's "Clarionet." Duchess [illegible] (roan) was then put second, and Duchess 79 [illegible] At Ulverstone 77 was first, 79 was second, and 78 [illegible] At Alnwick, and again at the North Lancashire [illegible] ing, 79 was highly commended, 78 being also [illegible]

North Lancashire 79 was second, 78 being shown. Duchess 79, the white, has thus had precedence of her sister in four cases, and *vice versâ* in three. In the present case the roan is placed first and the white is only highly commended, the second prize being awarded to Mr. Booth's "Soldier's Bride." Mr. Robinson, of Clifton Pastures, takes the third prize with "Claret," and two very well matched roan heifers by Buckingham, exhibited by Mr. Stratton of Broad Hinton, are commended.

The class of yearling heifers includes 34 very beautiful specimens of the breed, and here again Captain Gunter takes first prize with Duchess 83, a dark roan heifer with splendid loin and quality, and great and equal width along the back. She is a daughter of Duchess 73, a red and white cow, and one of the best Duchesses in existence. "Gracilis," shown by Mr. Lascelles, takes the second prize, and "Catalpa," by Mr. Peel, the third. Mr. Marjoribanks, Mr. Holland, Captain Gunter for Duchess 83, are commended. Lady Pigott is also commended for Victoria 33d, a Booth's heifer bred by Mr. Ellison, of Lough Glynn, and Mr. Ruck, of Castle Hill, Cricklade, whose herd we referred to the other day in this paper, is commended for "Graceful 17," a light roan 1 year and 4 months old heifer. In the class of heifer calves Mr. Marjoribanks takes the first prize with "Rose of Bushey," and Mr. Atherton, of Speke, the second prize with "Lady Barrington 6th." Colonel Towneley has a number of entries, but makes no appearance.

The judges of Short-horns were Mr. Thompson, of Annaby, Mr. Maynard, and Mr. Ladd. The following are their awards:—

SHORT-HORNS.

Class I. Bulls Calved on or before the 1st July, 1859, and not exceeding 6 years old (38 entries).—1st prize, 30*l.*, Lord Feversham, of Duncombe Park, Helmsley, Yorkshire, "Skyrocket," 4 years 8 months 5 days, sire 5th Duke of Oxford; 2d, 15*l.*, J. H. Langston, M.P., of Sarsden House, "Royal Turk," roan, 3 years 2 months, sire Heart of Oak; 3d, 5*l.*, J. Dickinson, of Balcony Farm House, Upholland, Wigan, "Prince of Holland," red and white, 2 years 6 months, sire Prince's Eye. Highly Commended: J. B. Stanhope, M.P., of Revesby Abbey, Boston, "George the First;" Jonas Webb, of Babraham, "Earl of Hardwicke;" J. H. Langston, M.P., "Lord of the Harem;" William Hall, of Butterwick, Ganton, "Young Blue Boy." Commended: Sir C. R. Tempest, Bart., of Broughton Hall, "Prince Frederick;" Lord Kinnaird, K.T., of Rossie Priory, Perthshire, "Lord John Russell;" Jonathan Peel, of Knowlmere Manor, "Malachite;" John Armstrong, of Patterton, Chesterfield, "Bolingbroke;" Henry Ambler, of Watkinson Hall, "Great Eastern;" Edward Holland, of Dumbleton Hall, "Duke of Cambridge."

Class II. Bulls Calved since the 1st of July, 1859, and more than 1 year old (40 entries).—1st, 25*l.*, John Taylor, of Moreton Hall, Whalley, Lancashire, "Orion," roan, 1 year 4 months, sire 6th Duke of Oxford; 2d, 15*l.*, Jonas Webb, of Babraham, "[illegible]," roan, 1 year 9 months, sire Sir Charles; 3d, [illegible] Bart., of W[illegible], Newcastle-upon-Tyne, "[illegible] Prince," dark roan, 1 year 5 months, sire [illegible]. Highly Commended: Sir C. R. Tempest, Bart., "Facsimile;" William Wright, of Sigglesthorne Hall, near Hull, "Lord of Windsor;" Jonathan Peel, of Knowlmere Manor, "Sultan;" Thomas Barnes, of Westland Moynalty, County Meath, "Friar Tuck;" F. H. Fawkes, of Farnley Hall, "Doctor Fausius;" The Duke of Montrose, "Victor Royal." Commended: J. Charlesworth, of Headfield, Dewsbury, "General Monk."

Class III. Bull Calves above 6 and not exceeding 12 months old (37 entries).—1st, 10*l.*, C. Howard, of Biddenham, Bedford, "Lord Stanley Spencer," white, 9 months, sire Hayman; 2d, 5*l.*, Henry Ambler, "Windsor Augustus," roan, 8 months, sire Windsor. Highly Commended: William Carr, of Stackhouse, Settle, "Don Windsor;" Edward Bowly, of Siddington House, Cirencester, "Duke of Normandy." Commended: Jonathan Peel, Yorkshire, "Morisco;" Sir Anthony de Rothschild, Bart., of Aston Clinton, Tring, "Sheriff;" Lord Feversham, of Duncombe Park, "Romilius;" F. H. Fawkes, of Farnley Hall, "Guerilla."

Class IV. Cows in Milk or in Calf, above 3 years old (41 entries).—1st, 20*l.*, Captain Gunter, of The Grange, Wetherby, Yorkshire, "Duchess 77th," dark roan, 3 years 7 months, sire 4th Duke of Oxford; 2d, 10*l.*, Richard Booth, of Warlaby, Northallerton, "Queen Mab," roan, 5 years 8 months, sire Crown Prince; 3d, 5*l.*, Lady Pigott, of Branches Park, Newmarket, "2d Duchess of Gloucester," red, 4 years 8 months, sire Cheltenham. Highly Commended: Henry Ambler, Yorkshire, "Wood Rose;" Richard Booth, of Warlaby, Northallerton, Yorkshire, "Queen of the Vale." Commended: Henry Ambler, "Necklace;" the Hon. Col. Pennant, M.P., "Grand Duchess;" Lady Pigott, of Branches Park, "Empress of Hindostan."

Class V. Heifers in Milk or in Calf, not exceeding 3 years old (14 entries).—1st, 15*l.*, Captain Gunter, of the Grange, "Duchess 78th," twin sister to Duchess 79th, dark roan, 2 years 11 **months, sire 6th Duke** of Oxford; **2d, 10*l.*, Richard** Booth, of **Warlaby, Northallerton, "The Soldier's Bride,"** white, 2 **years 5 months, sire Windsor; 3d, 5*l.*, Joseph** Robinson, **of Clifton Pastures, Newport Pagnell, "Claret,"** roan, 2 years [illegible], sire British Prince. Highly Commended: Captain Gunter, of The Grange, Wetherby, Yorkshire, **"Duchess 79th," twin sister to Duchess 78th. Commended: Sir Charles R. Tempest, Bart., "Harmless;" Hon. and Rev.** Thomas Henry Noel Hill, of Berrington, Shrewsbury, "Lady **Magdalen;"** Jeffery Bulmer, of Darlington and Aislaby Grange Farm, Darlington, "Princess Royal 2d;" Richard Stratton, of Stapleton, Bristol, "Lady Hinda;" Richard Stratton, of Stapleton, Bristol, "Kathleen."

Class VI. Yearling Heifers (61 entries).—1st, 15*l.*, Captain Gunter, of The Grange, Wetherby, Yorkshire, "Duchess 83d," dark roan, 1 year 5 months, sire Archduke; 2d, 10*l.*, The Hon. G. Edwin Lascelles, of Moor Hill, Harewood, "Gracilis," roan, 1 year [illegible] months, sire Archduke 2d; 3d, 5*l.*, Jonathan Peel, of Knowlmere Manor, "Catalpa," red, 1 year 1 month, sire Vatican. Highly Commended: John Peel, "Graceful." Commended: Stewart Marjoribanks, of Bushey Grove, "Joyful;" Captain Gunter, "Duchess 82d;" Francis Wethered, of Ravensden House, Bedford, "Miss Garibaldi;" Edward Holland; Lady Pigott, of Branches Park, Newmarket, Suffolk, "Victoria 33d;" Edmund Ruck, of Castle Hill, Cricklade, Wilts, "Graceful 17th."

Class VII. Heifer Calves above 6 and under 12 months old (43 entries).—1st, 10*l.*, Stewart Marjoribanks, Herts, "Rose of Bushey," red, 11 months, sire Great Mogul; 2d, 5*l.*, Thomas Atherton, of Chapel House, Speke Garston, Liverpool, "Lady Barrington 6th," red, 10 months, sire 2d Duke of Cambridge. Highly Commended: William Carr, of Stackhouse, Settle, "Windsor's Queen;" Robert Tennant, of Scarcroft Lodge, Leeds, "Yorkshire Rose;" Joseph Robinson, of Clifton Pastures, "Fashion." Commended: Stewart Marjoribanks, "Blushing Bride;" Jonathan Peel, white; Charles Howard, of Biddenham, Bedford, "Lady Sabrina Spencer."

HEREFORD CATTLE.—Of bulls under 6 years five are shown, and of these Mr. Rea of Pembridge shows the 1st and 2d prize animals. They are both well made beasts, not handling so kindly as their brethren in the Short-horn class, but full of meat in the right places, and of large growth for their age. The 2d prize animal is a very long large animal, somewhat coarser than the other and one year older. In yearling bulls six animals are shown, the 1st prize going to an exceedingly neat and well made dark coloured young bull, exhibited by Mr. Hill, of Golding Hall, Shrewsbury. The 2d prize is taken by Mr. Wright, of Oswestry, with a bull within a few days of two years old, remarkably good over the loin, and with well sprung ribs.

The class of bull calves contains five specimens, all of them 10 months old, and of extraordinary size for their age. The 1st prize goes to Mr. Hill, of Shrewsbury; the 2d to Mr. Williams, of Leominster.

Eight Hereford cows are shown, some of them with calves by their side. Mr. Naylor's 1st prize cow is a very large-bodied short-legged beast, extraordinarily deep in the twist, and good in loin and flank, handling as kindly as a good Short-horn.

Only 3 heifers are shown in Class 5, three prizes are awarded to them. They are very good specimens of the breed, varying a good deal in colour and condition. The 1st prize heifer shown by Mr. Turner is too fat for a breeding animal. Six yearling heifers and 3 heifer calves are exhibited. The list of prizes is given below. The judges were Messrs. J. Duckham, E. L. Franklin, and S. Bloxside.

DEVONS.—**But a short show of these small but exquisitely symmetrical animals appears at Leeds, as** indeed might have been expected, owing to the distance **from their county. 7 old bulls, 5 yearling bulls, 5 bull calves, 2 cows, 3 heifers, 10 yearling heifers, and 2 heifer calves make up the show.** The heifers exhibited **by Mr. Pope of Great Toller, the whole class of yearling heifers, the cows and bulls of H.R.H. the Prince Consort, Mr. Turner, Mr. Bodley, and Mr. Hole, are beautiful specimens of a beautiful breed.**

There is but a meagre exhibition of cattle other than those of the three great leading breeds. A couple of Sussex cattle, 3 or 4 of the little Breton, 4 good specimens of the red Norfolk polled dairy breed; 4 Shorthorn cows, competing for the local prizes offered for Dairy Cattle, and a single specimen of the polled black **Angus breed, make up the whole. This Angus bull has** a rare rib, sirloin, and round of beef, great width of bosom, and remarkable fineness of bone. "Young Panmure" was referred to in an account of Mr. Bowes' **farm given in last year's *Agricultural Gazette* by our correspondent, Mr. Bowick.**

The officiating Judges were Messrs. Coleman, Smith, and Tretbewy.

The following was the award in the Hereford and Devon and other classes:—

HEREFORDS.

Class I. Bulls calved on or before the **1st of July, 1859, and not** exceeding 6 years old (5 entries).—1st, 30*l.*, Thomas Rea, of Westonbury, Pembridge, 2 years 8 months, sire Sir Benjamin; 2d, 15*l.*, Thomas Rea, of Westonbury, "Silvius," 3 years 8 months 2 weeks, sire Sir Benjamin; 3d, 5*l.*, George Bray, of Haven Dilwyn, Leominster, "Haven," 5 years and nearly 4 months, sire Twyford. Highly Commended: William Perry, of St. Oswald, Cholstrey, 2 years 9 months. Commended: W. C. Morris, of Whitwick, Ledbury, "Admiration."

Class II. Bulls calved since the 1st of July, 1859, and more than 1 year old (6 entries).—1st, 25*l.*, Richard Hill, of Golding Hall, Shrewsbury, "Milton," 1 year 10 months, sire Chanticleer; 2d, 15*l.*, E. Wright, of Halston Hall, Oswestry, "Halston," 1 year 11 months, sire Magnet 2d; 3d, 5*l.*, William Perry, of St. Oswald, "Lord Wellington," 1 year 11 months, sire Noble Boy. Commended: John Naylor, of Leighton Hall, Welshpool, "Royal."

Class III. Bull Calves above 6 and not exceeding 12 months old (5 entries).—1st, 10*l.*, Richard Hill, of Golding Hall, "Pitchford," 10 months, sire Chanticleer; 2d, 5*l.*, John Williams, of St. Mary's, Kingsland, Leominster, "Lincoln," 10 months, sire Van Tromp. Commended: H.R.H. the Prince Consort, "Ajax," 10 months 2 weeks, sire Maximus.

Class IV. Cows in milk or in calf, above 3 years old (8 entries).—1st, 20*l.*, John Naylor, of Leighton Hall, "Laura," **4 years** 11 months, sire Silvester; 2d, 10*l.*, Philip Turner, of **Leen**, Pembridge, Leominster, "Countess," 3 years 11 months, **sire Silurian**; 3d, 5*l.*, Robert Leyshon, of Bridgend, "Islandress, 5 years 9 months, sire Prince Albert. Highly Commended: Executors of the late Lord Berwick, "Agnes," 4 years 9 months, sire Attingham. Commended: John Williams, Kingsland, "Hostess 2d," 4 years 8 months; late Lord Berwick, of Cronkhill, Shrewsbury, Salop, "Beauty."

Class V. Heifers in milk or in calf, not exceeding 3 years old (4 entries).—1st, 15*l.*, Philip Turner, of Leen, "Ruby," 2 years 6 months, sire Felix; 2d, 10*l.*, John Naylor, "Rose," 2 years 11 months, sire Tom of Lincoln; 3d, 5*l.*, Robert Leyshon, of Island Farm, "Welsh Lass," 2 years 10 months, sire Spot.

Class VI. Yearling Heifers (6 entries).—1st., 15*l.*, William Perry, of St. Oswald, "Beauty," 1 year 11 months, sire Noble Boy; 2d, 10*l.*, John Naylor, "Plum," 1 year 11 months, sire Grenadier; 3d, 5*l.*, James Marsh Read, of Elkstone, Cirencester, "Theora," 1 year 9 months, sire Sebastopol. Commended: H.R.H. the Prince Consort, "Dido."

Class VII. Heifer Calves, above 6 and under 12 months old (4 entries).—1st, 10*l.*, Executors of the late Lord Berwick, "Adela," 6 months, sire Severn; 2d, 5*l.*, John Williams, of St. Mary's, Kingsland, "Duchess," 10 months, sire Van Tromp. Commended: Philip Turner, of Leen, "Jessamine."

DEVONS.

Class I. Bulls calved on or before the 1st of July, 1859, and **not exceeding 6 years old (9 entries).—1st, 30*l.*** John Bodley, of Stockley Pomeroy, Crediton, "Perfection," 3 years 1 month, sire Napoleon 1st; 2d, 15*l.*, George Turner, of Barton, "Prince **Frederick," red, 3 years 9 months, sire Australian; 3d, 5*l.*, H.R. Highness the Prince Consort, "The Colonel," 3 years 9 months, sire Zouave. Commended: John Halse, of Pulworthy Farm, Molland, "Prince."**

Class II. Bulls calved since the 1st of **July, 1859, and more** than 1 year old (6 entries).—1st, 25*l.*, **Walter Farthing**, of Stowey Court, Bridgewater, "Viscount," 1 year 7 months, sire Sir Peregrine; 2d, 15*l.*, James Merson, of Brinsworthy, "Young Salisbury," 1 year 5 months, sire Napoleon; 3d, 5*l.*, George Turner, of Barton, sire Prince Frederick. Commended: J. C. Halse, of Pulworthy, "Louis Napoleon."

Class III. Bull Calves, about 6 and not exceeding 12 months old (5 entries).—1st, 10*l.*, Walter Farthing, of Stowey Court, Bridgwater, sire Sir Peregrine; 2d, 5*l.*, H.R.H. the Prince Consort, "Crown Prince," 7 months, sire Napoleon. Highly Commended: Wm. Hole, of Hannaford, "Pioneer." Class Commended.

Class IV. Cows in Milk or in Calf, above 3 years old (4 entries).—1st. 20*l.*, H.R.H. the Prince Consort, "Ilex," 5 years 1 month, sire Baronet; 2d, 10*l.*, George Turner, of Barton, "Piccolomini," 6 years 5 months, sire Duke of Devon.

Class V. Heifers in Milk or in Calf, not exceeding 3 years old (3 entries).—1st, 15*l.*, Edward Pope, of Great Toller, Maiden Newton, "Rosebud," 2 years 7 months, sire Napoleon 2d; 2d, 10*l.*, Jas. Hole, of Knowle House, Dunster, Somerset, 2 years 7 months, sire Napoleon; 3d, 5*l.*, Edward Pope, of Great Toller, "Fancy 4th," 2 years 7 months, sire Napoleon 2d.

Class VI. Yearling Heifers (10 entries).—1st, 15*l.*, Walter Farthing, of Stowey Court, 1 year 6 months, sire Leopold; 2d, 10*l.*, James Merson, of Brinsworthy, "Favourite," 1 year 10 months, sire Prince of Wales; 3d, 5*l.*, James Merson, of Brinsworthy, "Favourite," 1 year 10 months, size Prince of Wales. Highly Commended: Geo. Turner, of Barton, "Canterbury Belle;" James Hole, of Knowle House, Dunster.

Class VII. Heifer Calves, above 6 and under 12 months old **(3 entries).—1st, 10*l.*, James Davey, of Flitton Barton, South Molton, "Princess Alice,"** 6 months, sire Duke of Flitton; 2d, **5*l.*, George Turner, of Barton, "Songstress." Commended:** Wm. Hole, of Hannaford, "Isis."

SUSSEX CATTLE.

Class I. No entry.

Class II. Bulls Calved since the 1st of July, 1859, and more than 1 year old (1 entry).—10*l.*, John and Alfred Heasman, of Angmering, Arundel, "Viscount," 1 year 3 months, sire Marquis.

Class III. No entry.

Class IV. Heifers in Milk or in Calf, not exceeding 3 years old (1 entry).—10*l.*, John and Alfred Heasman, "Maid of Ham," 2 years 6 months, sire Marquis.

Class V. No entry.

OTHER ESTABLISHED BREEDS,

Not including the Short-horn, Hereford, Devon, or Sussex Breed.

Class I. Bulls Calved on or before the 1st of July, 1859, and not exceeding 6 years old (4 entries).—10*l.*, Alexander Bowie, of Mains of Kelley, Arbroath, Forfarshire, "Young Panmure," Polled Angus. Commended: Samuel Camfield Baker, of Chelsea.

Class IV. Heifers in Milk or in Calf, not exceeding 3 years old (6 entries).—10*l.*, Lord Sondes, of Elmham Hall, Thetford, Norfolk, "Daisy," 2 years 3 months, Norfolk or Suffolk Polled. Commended: Lord Sondes, of Thetford; Samuel Camfield Baker, of Chelsea.

Class V. Yearling Heifers (2 entries).—5*l.*, Lord Sondes, of Thetford, "Rosebud," Norfolk or Suffolk Polled.

DAIRY CATTLE.

PRIZES OFFERED BY THE LEEDS LOCAL COMMITTEE.

Cows, for Dairy Purposes, in-Calf or in-Milk.

1st, 10*l.*, John R. Middleborough, of South Milford, near Milford Junction, Yorkshire, "Red Rose," 10 years 4 months, Shorthorn, in-calf; 2d, 5*l.*, Henry Ambler, of Watkinson Hall, Halifax.

HORSES.

To say that the show of horses at Leeds on the whole was good, is merely to repeat that the universal expectation was realised. **Yorkshire, indeed, is so famed for its horses that we were less surprised at the general excellence that prevailed than we were to find that several classes were badly filled and others weakly** supported. It might be that distant competitors were unwilling to enter the list against breeders of such celebrity as those of Yorkshire, or otherwise that local breeders were frightened by their own shadows or that of their neighbours. Thus it was that amongst the agricultural horses two classes had only one entry, and one class, though tempted by three prizes, was not deemed sufficiently meritorious to receive one. **Limiting our observation to the heavy horses, we find, with pleasure, that the deficiencies of some classes were greatly redeemed by others. Two of the best classes** we consider were the 2-year-old agricultural fillies, and **that for pairs of working mares or geldings. The latter, which contained no bad animals, showed what very capital horses are worked in the neighbourhood.**

To commence, however, with the 1st class, we find 27 entries, out of which there were a few that for the benefit of society should be deprived of the power of perpetrating further injury, but the remainder were for the most part very superior animals. This class, though on the whole much better than at Canterbury, **was inferior to both Warwick and Chester. The 1st and 2d prizes were given to Suffolks, Mr. Jonas Webb's Rising Star, and Mr. Crisp's Marquis, both very capital horses of very equal merit. These horses competed at Romford a few weeks since at the Essex show, when the respective positions were the reverse of the present.** Since then, however, a **considerable improvement has been effected on the Rising Star, whose carcase cannot now be objected to as** too light; **showing superior action and capital feet he was enabled to steal a march over the Marquis, a** splendid horse with greater symmetry and quality, but whose feet appeared to have been injured by shoeing or other causes. Both horses are very free from the defects which often prevail amongst the Suffolks. **Many bystanders thought, not without reason, that the first prize should have been given to No. 475, the winner of** the third, a large and splendid specimen of the middling counties breed—**an active horse, though massive enough to have competed successfully in the dray-horse class at Warwick, where he gained the first prize.** In some of the midland counties an agricultural horse is a dray-horse, and if sufficiently active there is no reason why he should not be. This certainly was a magnificent animal, but it was the existence of a fault rather than a **want of sufficient merit which weighed against him, and pulled him down to a third rate position.** We take

his opportunity of cautioning bystanders not to make hasty criticism on the decision of the judges; for whilst they have a good opportunity of discerning merits, they have not the same opportunity as the judges of discovering defects that may weigh against them. In this class, Mr. Reed's English Glory, a good and powerful bay Northamptonshire horse, was highly commended and reserved as next to the prize animals, as it well deserved; whilst Mr. Snowden's bay Leicestershire horse (479), and Mr. Biddle's nice chesnut horse, received commendations. There were several Lancashire black horses, good active animals, but somewhat deficient in the middle.

In the class of agricultural 2-year-old stallions we must confess that we were somewhat disappointed. It was not so well filled or so high in merit as the Chester or Warwick shows. This is often a very interesting class, but it is one which depends very much on the surrounding district, as owners are unwilling to risk the dangers of a long journey for a young entire horse. It is interesting because it affords a striking opportunity for watching the development of great excellencies and their after history in the older classes, as well as the proofs of the perpetuation of the good qualities of the prize winners of the latter class. The prize winners in this class were Mr. Butler (498) with his fine bay colt Young Lincoln, occupying the first position, and Mr. Mills' dark chesnut—both these were from Lincolnshire, whilst the third prize was taken by Mr. Holland, M.P., who breeds a capital sort of bay cart-horse. A chesnut Suffolk belonging to Mr. Wilson, No. 491, was highly commended, and well deserved it; and a promising iron grey (488), from Berkshire, the property of Mr. R. Belcher, as well as a very fine colt belonging to Mr. John Demmant, received commendations. There were 13 horses entered in this class, but several put in no appearance.

Class 3, mares and foals for agricultural purposes, had only 9 entries. A black mare with a good foal was the winner of the 1st prize, a powerful useful animal; whilst the 2d prize was given to 506, a chesnut, but not a Suffolk, belonging to Mr. Proude and bred in Yorkshire. The Prince Consort's Clydesdale mare received the 3d prize, but she barely deserved it. This class on the whole was not so good as might have been anticipated.

Class 4, for 2-year-old fillies, was a capital class. His Royal Highness Prince Albert sent the winner, No. 514, a very fine bay filly got by the Chelmsford prize horse Britain, a brown Clydesdale of much promise, strong with good action, beating however with some difficulty a splendid Suffolk belonging to Mr. John Ward, Colonel Pennant's filly by Matchless, the Salisbury prize horse, was more easily beaten with the beautiful mare which was beaten at Chelmsford by Britain, but which was second to the bay Nonpareil in the prize for All England at Chester. Mr. Ward's (519) second prize filly was a beautiful chesnut, worth more than 100*l.*, with good back, loins, quarters, and legs, and, if she does not grow too much is likely to produce winners hereafter. The third prize filly was a dark grey filly; Colonel Pennant's was also a very promising animal. Mr. S. Wotton's chesnut Suffolk by the "Rarey" horse Hero (511), was highly commended; and Mr. John Clayden's very nice Suffolk filly, by the prize winner in the first class, received a commendation.

We now pass on to the dray-horse class, which generally contains some noble animals, and was not wanting this year. This class affords a great encouragement to the heavy horses, as it enables them to win a prize here and there if they are sufficiently active to come out again, as is the case of Mr. Taylor's horse (475), in competition for an agricultural prize. We do not see that this is objectionable, because in the midland counties they are used as farm horses until they are old enough for the London brewers, to whom they are sold at long prices. The attendant of No. 475 was very sulky, because he only got a 3d prize, and consequently neglected to put on the horse the card which denoted it. We heard him assert that the horse girthed 10 feet when he began his work for the season, but on reference to the tape it proved to be 7 feet 10 inches, and no bad girth either.

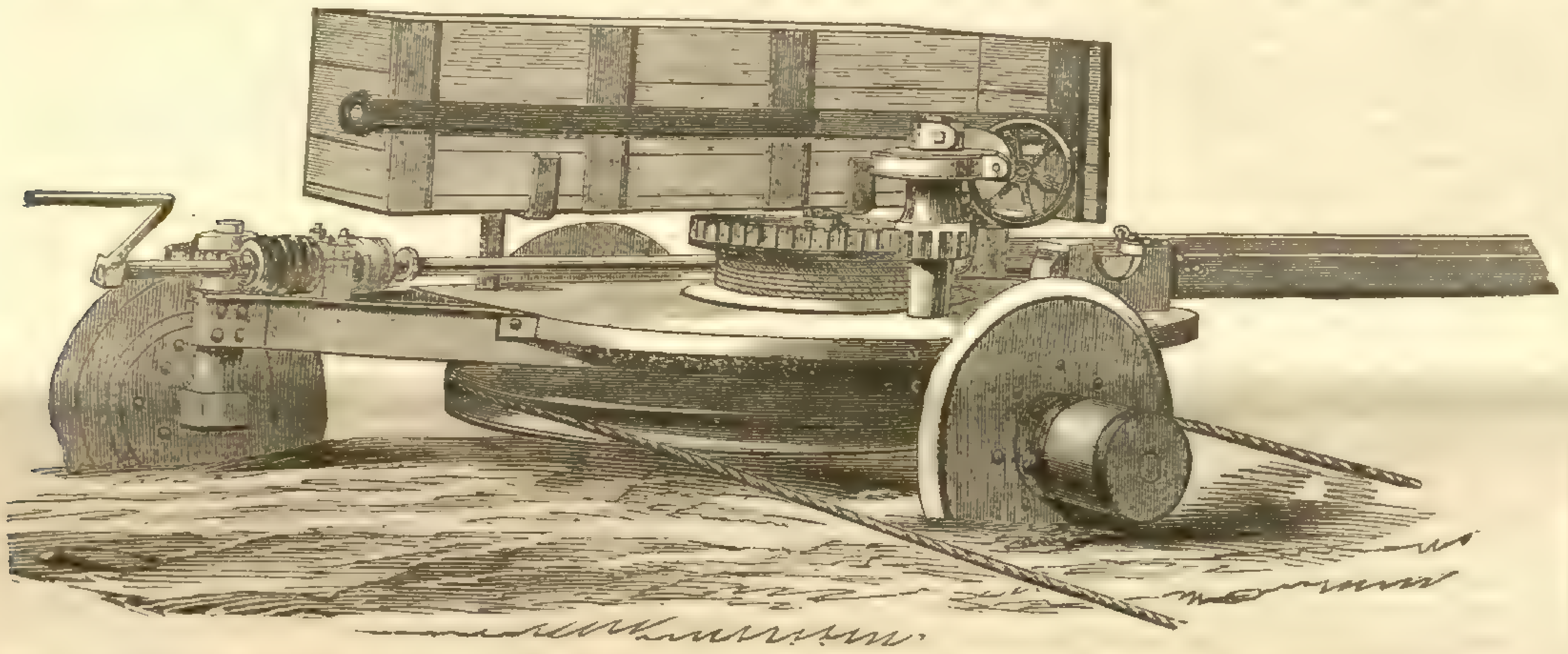


FIG. 1.—FOWLER'S MOVING ANCHOR, ILLUSTRATING THE MODE IN WHICH THE GUIDANCE OF THE OUTER WHEELS OR DISCS IS EFFECTED. (See page 683.)

—To return, however, from this digression, we ... prize in the dray-horse class was earned by N... massive grey horse belonging to Mr. Gibson, ... castle-upon-Tyne, and one, though a little ... about the legs, and weighing no doubt upwards ... ton, was yet remarkably active, and thus obtained ... 1st prize, which would but for a reason have ... given to Mr. Demmant's Emperor (No. 325) ... bay horse, large, compact, and powerful, yet ... a pony. The 2d prize was given to No. 523, ... bred near Bristol, but coming from Dev... Though his progenitors were unknown, he ... modestly termed in the Catalogue "The Invinc... very fine active horse, however. The 3d prize ... to No. 522, a very promising three-year-old g... Lancashire; and No. 526, though not quite p... to the hocks, was commended.

The 2-year-old drays, Class 2, had only three ... petitors, and from drawbacks and want of merit ... prizes were not awarded.

The dray-horses, Class 2, had only three entries, ... as we have before remarked, for want of merit ... other reasons gained no prize.

In the next Class 3, for dray mares with foals ... only two were entered, but were considered of ... merit to receive the two prizes awarded, No ... Mr. Fullard's bay mare Peterborough; and ... a mare from Cumberland but bred in Derbyshire.

The dray 2-year-old fillies in Class 4 had ... entries, both of fair merit and therefore ... prizes.

The next four classes were for Special Prizes ... by the Local Committee, but in Class 9, for ... dray horses, a poor compliment was paid to the ... mittee, for there was only one entry, a pair of ... geldings from Manchester, possessing a fair am... merit, and receiving the prize, but not ... hundreds which traverse the London ... The next, however, was a capital class, viz., ... Agricultural purposes, Class 10. There were 18 ... and all were good. The 1st prize animals were ... and chesnut, a splendid pair, not exactly ... although by the same horse, but stepping well ... and strong, symmetrical, and active. They belong... Messrs. W. Moxon & Son, of Pontefract, and were ... Yorkshire. The 2d prize went to 546, Mr. ... Norton, for a capital brown pair which, though ... respectively Lion and Tiger, moved very cordi... well as actively together. The same owner exhi... a brown and black, a fine pair, and very deserv... commended, whilst 546, Mr. John Thomas Pe... bay mare and gelding, received a high commenda... The Duke of Newcastle's pair of greys, a mare ... gelding, as well as Mr. Angas' black pairs, deserved the ... mendations they received, as well as the class gener...

Only one horse was exhibited in the next Class 1... agricultural three-year-old geldings—a useful an... but barely deserving the prize. Our last class ... three-year-old mares was not well supported. ... were entered, and the prize awarded to No. 53...

FIG. 2.—FOWLER'S 8-HORSE STATIONED ENGINE, WORKING A SEPARATE CLIP DRUM BY WHICH THE PLOUGH IS DRAWN TO AND FRO BETWEEN TWO MOVING ANCHORS ON OPPOSITE HEADLANDS.

...bt. Garside, of Leeds, for his black mare filly, which ...erved the prize, but there was no reservation or com...endation in this class.

In concluding our remarks on the agricultural horses, ...e think that Yorkshire could have done better in ...any of the classes, an observation which the excellence ...f the class of pairs of agricultural animals strongly ...pports, for this class was principally composed of Yorkshire horses.

We must postpone our remarks on the light horses till next week, merely observing here that it was on the whole a splendid show altogether, although we certainly expected to see a much larger number of Cleveland horses as well as mares. Some splendid horses were exhibited in the thorough bred classes as well as the hunting classes, and the novelty of having a large space of ground railed off, round or within which every class of horses in their turn promenaded, added greatly to the attractions of the show and the interest of this particular branch. The large number of people who collected round the spacious ring devoted to the purpose every afternoon, expressed their pleasure as well as exercised their criticism, and afforded the best possible proof of the success of this innovation.

We omit our critique of the thorough-bred class until next week. It will be seen that the leading prize is taken by "Nutbourne."

The Judges of thorough-bred horses were the Hon. Col. Cotton, Mr. F. Weatherby, Captain White, and Lord Tredegar. The Judges of light horses were Messrs. C. Nainby, H. Thurnal, and R. S. Waters; and the Judges of agricultural horses were Messrs. J. Atkinson, J. H. Wood, and W. C. Spooner. Their awards were as follows:—

HORSES.

Thorough-bred Stud Horses (having served mares during the season 1861), which, in the opinion of the Judges, are best calculated to improve and perpetuate the breed of the sound and stout thorough-bred horse for general stud purposes—19 entries.

1st, 100*l.*, John Wyatt, of Nutbourne, Emsworth, Hants, "Nutbourne," chesnut; 2d. 25*l*, Tom Hussey, of Stud Farm, Skirmett, Henley-on-Thames—sire The Baron. Highly Commended: Thomas Groves, of Park House, Spofforth, Wetherby, "Lord Fauconberg;" John Johnstone, of Broadholm, Lockerby, Dumfriesshire, "Fazoletto." Commended: Thomas Humphrey Pedley, of Stubbing Court, Chesterfield, "Drumour."

CLEVELAND HORSES.

Class I. Stallions of any age (8 entries).—20*l.*, Henry Rickatson, of the Angel Hotel, Wetherby, "Golden Hero."

Class II. Mares three years old and upwards (3 entries). —10*l.*, John Smith, of Long Newton, Darlington, "Wonderful Lass." Highly Commended: George Holmes, of Toll Gavel, Beverley, "Polly."

Class III. No entry.

OTHER HORSES.

Class I. Stallions suitable for getting Hunters (14 entries).—1st, 25*l.*, Joseph Webster, of Allerston, Pickering, York, "Canute;" 2d, 15*l.*, J. & C. Moffat, of Kirklington Park, Kirklington, "A British Statesman;" 3d, 5*l.*, Thos. Groves, of Park House, Spofforth, Wetherby, "The Hadji."

Class II. Broad Mares, with Foal at foot or in Foal, for breeding Hunters (8 entries).—1st, 15*l.*, William Bousfield, of Gardener's Arms, Pilling, Fleetwood-on-Wyre, "Molly;" 2d, 10*l.*, A. Hauxwell, of Prospect House, Thirsk; 3d, 5*l.*, not awarded.

Class III. Broad Mares, with Foal at foot or in Foal for breeding Hackneys (9 entries).—1st, 15*l.*, Job Aspinall, of Mount Tabor, Halifax, "Sylla;" 2d, 10*l.*, Richard Cook, of Huggate, Pocklington; 3d, 5*l.*, W. B. Wainman, of Carrhead, Cross Hills, "Kate."

PRIZES OFFERED BY THE LEEDS LOCAL COMMITTEE.

Class I. Blood Hunters, Mares, or Geldings, 5 years old, two crosses (5 entries).—1st, 20*l.*, Walter Holdforth, of Burley, Leeds, "Burgundy;" 2d, 10*l.*, George Holmes, of Toll Gavel, Beverley. Highly Commended: John Batty, of Bishop Monkton, Ripon. Commended: Sir George Strickland, Bart., Boynton. Class Commended.

Class II. Blood Hunters, Mares, or Geldings, 4 years old, 2 crosses, (14 entries).—1st, 15*l.*, J. W. Pease, of Woodlands, Darlington, "Adam Bede;" 2d, 5*l.*, Richard Botterill, Garton, Driffield, "The Emerald Isle." Highly Commended: S. Musgrave, of Market Weighton, "Neck-or-Nothing.

Class III. Hunting Mares or Geldings, 3 years old (4 entries). —1st, 5*l.*, Thos. C. and John B. Booth, of Killerby, Catterick, "Bachelor."

Class IV Coaching Stallions (3 entries).—1st, 10*l.*, James Harker, of South Cliff, Hotham, Brough, "Rainbow."

Class V. No entry.

Class VI. Coaching Brood Mare, with a Foal, or stinted (2 entries).—1st, 5*l.*, Capt. Gunter, of The Grange, Wetherby, Yorkshire, "The Flying Deer."

Class VII. Roadster Stallions (12 entries).—1st, 10*l.*, William Jackson, of St. Peters, Wiggen Hall, near Lynn, Norfolk, "Quicksilver;" 2d, 5*l.*, William Johnson, of Billinghay, Sleaford, "Merry-legs."

Class VIII. Roadster Mares or Geldings, any age, under 15½ hands (19 entries).—10*l.*, John Wilson, of Roundhay, near Leeds, "Jack."

Class IX. to XII. inserted below.

Class XIII. Gelding Ponies, under 14 hands (11 entries).—1st, 5*l.*, C. Matthews, of Great Driffield, "Azote." Highly Commended: W. Ingham, of Armley, Leeds, "Perfect;"

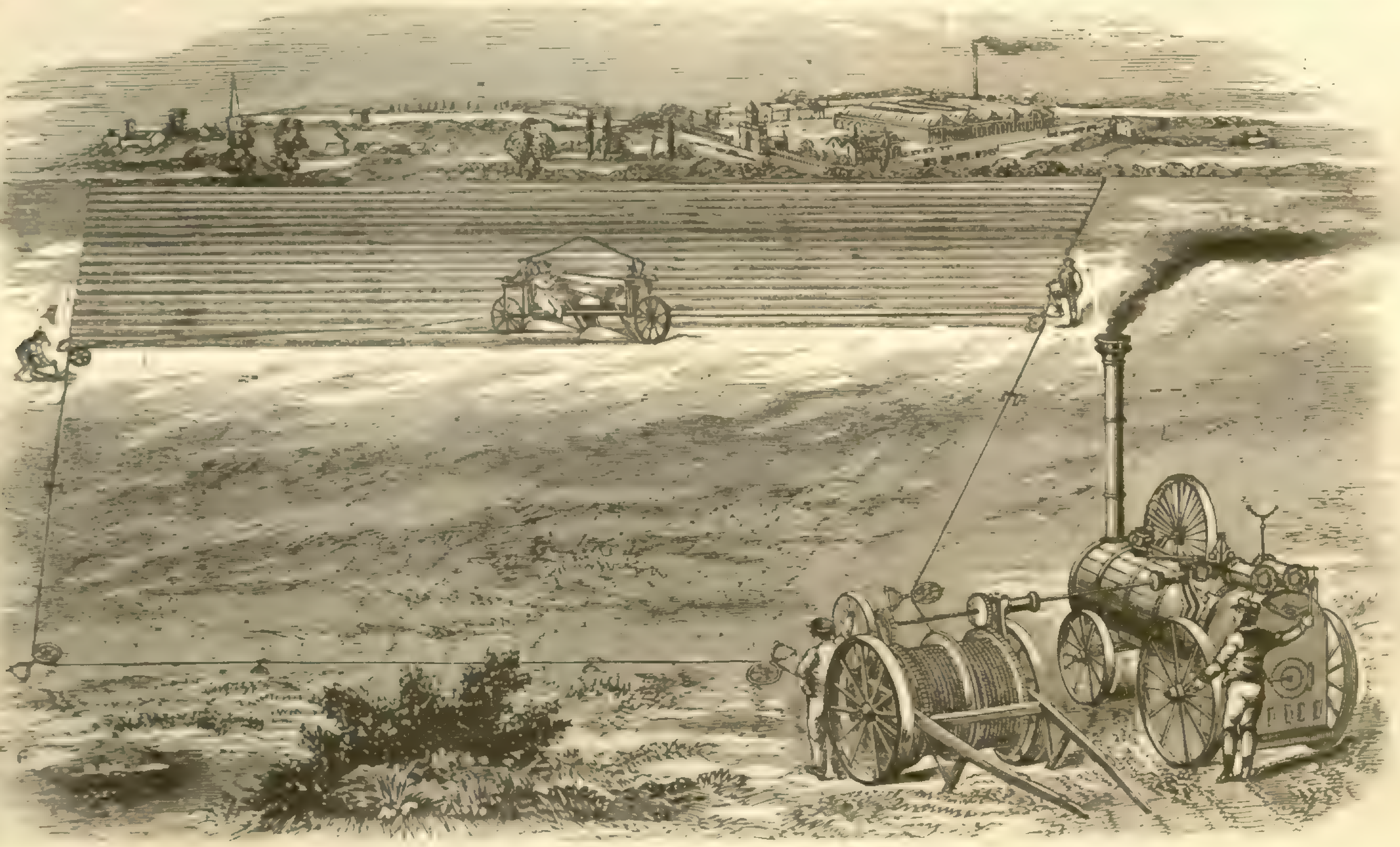


FIG. 3.—HOWARD'S 8-HORSE ENGINE AND WINDLASS, SHOWING METHOD OF CULTIVATION ON HIS PLAN (see page 683).

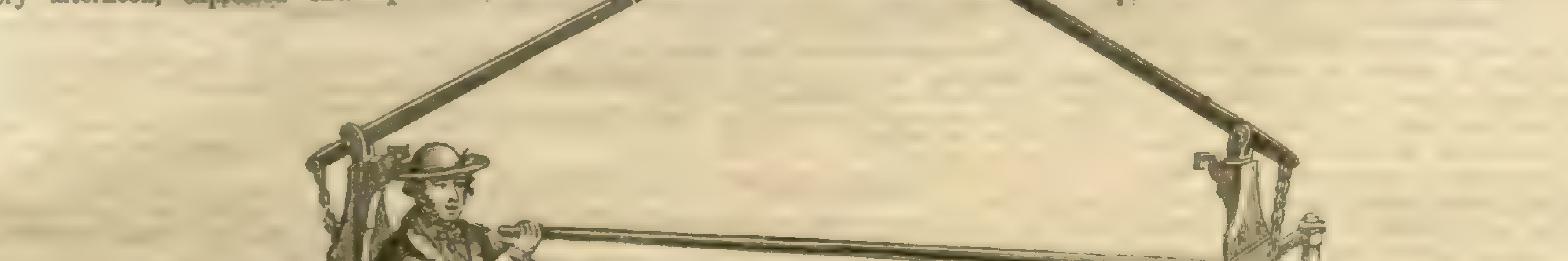


FIG. 4.—HOWARD'S NEW TWO-FURROW REVERSING PLOUGH.

George Holmes, of Toll Gavel, Beverley, "Charley." Commended: R. Johnson, of Bridge Street, Gainsborough, "Wonder."

Class XIV. Mare Ponies, under 14 hands (3 entries).—5*l.*, James Abbey, of Crimple, Knaresborough, "Lucy."

Class XV. Mares or Gelding Ponies, under 12 hands (5 entries).—5*l.*, J. Witham, of Gledhow, Leeds, "Little Wonder." Commended: J. G. Taylor, Shipley, "Jessy;" J. G. Taylor, "Bessy."

Prize offered by Lord Londesborough, 20*l.*, for Hunting Colts, 3 years old (15 entries).—S. Musgrave, of Market Weighton, "Overplus." Highly Commended: Richard Thomas, of the Crwys Farm, Cardiff, "Master Stewart."

AGRICULTURAL HORSES GENERALLY.

Class I. Stallions for Agricultural Purposes, foaled on or before the 1st January, 1859 (28 entries).—1st, 25*l.*, Jonas Webb, of Babraham, Cambridge, "Rising Star;" 2d, 15*l.*, Thomas Crisp, of Butley Abbey, Wickham, Market, Suffolk, "Marquis;" 3d, 5*l.*, Benjamin Taylor, of Peterborough, "England's Glory." Highly Commended: Matthew Reed, of Beamish Burn, Chester-le-Street, "England's Glory." Commended: Herman Biddell, of Playford, "Colonel;" John Snowdon, of Stonesby, Waltham, "Ploughboy."

Class II. Stallions for Agricultural Purposes, foaled in the year 1859 (18 entries).—1st, 20*l.*, Edwin Butler, of Balderton, Newark, "Young Lincoln;" 2d, 10*l.*, Thos. Mills, of Harmston, "Samson;" 3d, 5*l.*, Edward Holland, of Dumbleton Hall. Highly Commended: W. Wilson, of Baylham Hall, Ipswich. Commended: Richard Belcher, of Stanford, Faringdon; John Hemmant, of Thorney, Cambridgeshire.

Class III. Mares and Foals for Agricultural Purposes (9 entries).—1st, 20*l.*, E. Sumpter, of Billinghay Dales, Billinghay, Lincoln, "Trip;" 2d, 10*l.*, William Proude, of Kirk Hammerton, Green Hammerton; 3d, 5*l.*, H.R.H. the Prince Consort, "Young Sally." Highly Commended: J. G. Attwater, of Hallingwood Farm, Cheltenham, "Frolic." Commended: E. C. Sutherland-Walker, of Crow Nest, near Halifax, "Bess."

Class IV. Two-year-old Fillies for Agricultural Purposes (12 entries).—1st, 15*l.*, H.R.H. the Prince Consort, "Mary;" 2d, 10*l.*, John Ward, of East Mersea, Colchester; 3d, 5*l.*, the Hon. Colonel Pennant, M.P., of Penrhyn Castle, "Sally." Highly Commended: S. Wolton, of Newbourn Hall, Woodbridge. Commended: J. Clayden, of Littlebury, Saffron Walden, "Bonny."

DRAY HORSES.

Class I. Stallions foaled on or before the 1st of January, 1859 (9 entries).—1st, 25*l.*, Robert Gibson, of Newcastle-upon-Tyne, "Young Blythe," grey, 10 years, bred by Wm. Beatie, of Easton, Cumberland, sire Blythe; 2d, 10*l.*, William King, of Witleigh Inn, Tiverton, Devon, "Invincible," brown, 9 years 1 month, bred by J. Hutson, of East Brent, near Bristol, sire Invincible, dam unknown, sire of dam unknown; 3d, 5*l.*, James Ashcroft, of Wavertree, near Liverpool, "Champion of England." Commended: John Manning, of Orlingbury, near Wellingborough.

Class II. Stallions foaled in the year 1859 (3 entries).—No prize awarded.

Class III. Mares with Foal at feet (2 entries).—1st, 20*l.*, Thomas Fullard, of Thorney, near Peterborough, "Star;" 2d, 10*l.*, Joseph Roberts, of Marlborough, Egremont, Cumberland, "Blossom."

Class IV. Fillies foaled in the year 1859 (2 entries).—1st, 15*l.*, John Kay Farnworth, of Alderley Edge, Chorley, "Lincoln Jewel;" 2d, 10*l.*, John Gay Attwater, Cheltenham, "Blossom."

PRIZES OFFERED BY THE LEEDS LOCAL COMMITTEE.

Class IX. Pairs of Dray Horses, Mares or Geldings, or Mare and Gelding (1 entry).—10*l.*, William Carver, of Manchester.

Class X. Pair of Mares or Geldings, or Mare and Gelding, for Agricultural Purposes (9 entries).—1st. 10*l.*, Wm. Moxon & Sons, of Pontefract, "Farmer;" 2d, 5*l.*, Joseph Norton, of Nortonthorpe Hall, Huddersfield, "Lyon." Highly Commended: John Thos. Pearson, of Parkside, Headingley. Commended: Joseph Norton, of Nortonthorpe Hall; Duke of Newcastle.

Class XI. Geldings three years old, for Agricultural Purposes (1 entry).—5*l.*, William Bradley, Bawtry, Lincolnshire, "Royal."

Class XII. Mares three years old, for Agricultural Purposes (4 entries).—5*l.*, Robert Garside, of No. 3, Elmwood Place, Leeds, "Beauty."

SHEEP.

Fuller notes of the sheep classes must be postponed until next week. For the present we must be contented with remarking on the general superiority of the long-woolled classes, and the extraordinarily large and effective show of Shropshires. The breeders of the Shropshire sheep certainly adopt the only way to make their merits known: every opportunity of publicity is seized with energy; and no classes at our animal shows are more fully represented. Of Leicesters, there are 34 shearling rams, 21 older rams, and 9 pens of shearling ewes; and Mr. Sanday, who is as usual successful, Col. Inge, Messrs. Barton and Turner, are the leading exhibitors. Of Southdowns, 24 shearling rams, 13 older rams, and 8 pens of shearling ewes are shown. Jonas Webb's sheep are missed. Mr. Rigden fills his place with remarkably good and successful sheep; and Lords Walsingham and Radnor, and Messrs. Heasman, of Arundel, are among the prize-takers.

Of Shropshire sheep no fewer than 56 shearling rams, 23 older rams, and 17 pens of shearling ewes are exhibited; Messrs. Horton and Holland, M.P., taking the leading prizes. Cotswolds are well represented; 35 shearling and 18 older rams, and eight pens of shearling ewes, competing for the prize. Hampshire and Oxfordshire Downs are shown in large numbers, the former taking the prizes, and Messrs. Humfrey and King, breeders of them, for the most part dividing the awards. 45 shearling and 22 older rams, and 10 pens of ewes are shown; our notes of them and other classes will be given next week.

The Judges of Sheep were—in Leicesters, Messrs. N. Stone, Luke Borman, T. Twitchell; in Southdowns, Messrs. Peter Purves, H. Overman, H. Fookes; in Shropshires, Messrs. Charles Randell, G. Cureton, E. Gough; in Long-wools, Messrs. Hugh Aylmer, W. Bartholomew, Henry Bateman; in Short-wools, Messrs. J. Rawlence, J. S. Homer, Edward Little, and the following was their award:—

LEICESTER SHEEP.

Class I. Shearling Rams (26 entries).—1st, 20*l.*, Lieut.-Colonel Inge, of Thorpe Constantine, Tamworth; 2d, 10*l.*, William Sanday, of Holme Pierrepont; 3d, 5*l.*, William Sanday. Highly Commended: Lieut.-Colonel Inge. Commended: Thomas Edward Pawlett, of Beeston.

Class II. Rams of any other Age (21 entries).—1st, 20*l.*, William Sanday, of Holme Pierrepont; 2d, 10*l.*, William Sanday; 3d, 5*l.*, William Sanday. Highly Commended: John Borton, of Barton House, Malton. Commended: John Borton; John Borton. Class Commended.

Class III. Pens of 5 Shearling Ewes of the same Flock (9 entries).—1st, 20*l.*, William Sanday; 2d, 10*l.*, Lieut.-Col. Inge; 3d, 5*l.*, George Turner, of Barton, Exeter.

SOUTHDOWN SHEEP.

Class I. Shearling Rams (24 entries).—1st, 20*l.*, William Rigden, of Hove, Brighton; 2d, 10*l.*, William Rigden; 3d, 5*l.*, John and Alfred Heasam, of Angmering, Arundel.

Class II. Rams of any other Age (13 entries).—1st, 20*l.*, William Rigden; 2d, 10*l.*, William Rigden; 3d, 5*l.*, Lord Walsingham, of Merton Hall, Thetford. Highly Commended: Lord Walsingham. Commended: Lord Walsingham; Lord Walsingham.

Class III. Pens of 5 Shearling Ewes of the same Flock (8 entries).—1st, 20*l.*, The Duke of Richmond, of Goodwood; 2d, 10*l.*, Lord Walsingham; 3d, 5*l.*, Earl of Radnor, of Coleshill House, Highworth, Wilts. Highly Commended: J. and A. Heasman, of Angmering, Arundel. Commended: J. and A. Heasman.

SHROPSHIRE SHEEP.

Class I. Shearling Rams (56 entries).—1st, 15*l.*, Thomas Horton, of Harnage Grange, Shrewsbury; 2d, 10*l.*, J. & E. Crane, of Shrawardine, Shrewsbury; 3d, 5*l.*, Anne Baker, of Grendon, Atherstone. Commended: J. & E. Crane.

Class II. Rams of any other age than Shearling (42 entries).—1st, 15*l.*, Edward Holland, of Dumbledon Hall, Evesham; 2d, 10*l.*, Thomas Horton, of Harnage Grange; 3d, 5*l.*, Thomas Horley, jun., of The Fosse, Leamington. Highly Commended: Wm. Orme Foster, of Kinver Hill Farm, Stourbridge. Commended: Thomas Horton, of Harnage Grange; Wm. O. Foster, of Kinver Hill Farm.

Class III. Pens of 5 Shearling Ewes of the same Flock (17 entries).—1st, 15*l.*, W. O. Foster, of Kinver Hill Farm, Stourbridge; 2d, 10*l.*, J. & E. Crane, of Shrawardine, Shrewsbury; 3d, 5*l.*, John Evans, of Uffington, Shrewsbury. Highly Commended: J. & E. Crane, of Shrawardine. Commended: J. & E. Crane; J. Coxon, of Freeford, Lichfield; the Earl of Dartmouth.

LONG-WOOLLED SHEEP.

Not qualified to compete as Leicesters.

Class I. Shearling Rams (35 entries).—1st, 20*l.*, Robert Garne, of Aldsworth, Northleach; 2d, 10*l.*, William Lane, of Broadfield Farm, Northleach; 3d, 5*l.*, James Walker, of Northleach. Highly Commended: E. Handy, of Sierford, Cheltenham. Commended: William Lane; Robert Garne; Robert Garne.

Class II. Rams of any other age (18 entries).—1st, 20*l.*, William Lane, of Broadfield Farm, Northleach; 2d, 10*l.*, John King Tombs, of Langford, Lechlade; 3d, 5*l.*, Robert Garne. Highly Commended: William Lane. Commended: Edward Handy.

Class III. Pens of 5 Shearling Ewes, of the same Flock (8 entries).—1st, 20*l.*, George Fletcher, of Shipton Sollars, Cheltenham; 2d, 10*l.*, William Lane; 3d, 5*l.*, William Lane. Highly Commended: George Fletcher, of Shipton Sollars. Commended: William Lane.

SHORT-WOOLLED SHEEP.

Not qualified to compete as Southdowns or Shropshire Sheep.

Class I. Shearling Rams (45 entries).—1st, 20*l.*, William Humfrey, of Oak Ash, Chaddleworth, Wantage; 2d, 10*l.*, Stephen King, of Old Hayward Farm, Hungerford; 3d, 5*l.*, William Humfrey, of Oak Ash. Highly Commended: John Bryan, of Southleigh, Witney; John Bryan. Commended: John Bryan; John Bryan; John Bryan.

Class II. Rams of any other age (22 entries).—1st, 20*l.*, William Humfrey, of Oak Ash; 2d, 10*l.*, Stephen King; 3d, 5*l.*, William Humfrey. Highly Commended: John Bryan, of Southleigh; George Henry Barnett, of Glympton Park, Woodstock; William Browne Canning, of Chisledon, Swindon. Commended: William Browne Canning, of Chisledon; Joseph Druce, of Ensham, Oxfordshire; John Bryan, of Southleigh.

Class III. Pens of 5 Shearling Ewes (10 entries).—1st, 20*l.*, William Humfrey, of Oak Ash; 2d, 10*l.*, Stephen King, of Old Hayward Farm; 3d, 5*l.*, John Washbourne Brown, of Uffcott, Swindon. Highly Commended: W. B. Canning of Chisledon.

PRIZES OFFERED BY THE LEEDS LOCAL COMMITTEE.
LONG-WOOLLED SHEEP.

Neither Leicesters nor Cotswolds.

Class I. Shearling Rams (2 entries).—10*l.*, John Lynn, of Church Farm, Stroxton, Grantham, Lincolnshire.

Class II. Rams of any other age.—10*l.*, Joseph Simpson, of Spofforth Park, Wetherby.

Class III. No entry.

MOUNTAIN SHEEP.

Class I. No entry.

Class II. Pens of 5 Cheviot Ewes of the same flock (2 entries).—5*l.*, the Hon. Colonel Pennant, M.P.

Class III. Blackfaced Rams of any age (2 entries).—5*l.*, N. Barker, of Bransdale, Kirby Moorside.

Class IV. Pens of 5 Blackfaced Ewes of the same flock (1 entry).—5*l.*, Samuel Newall, of Easthy, Skipton.

Class V. Lonk Rams with dark or mottled faces (1 entry).—5*l.*, Jonathan Peel, of Knowlmere Manor, Clitheroe.

Class VI. Pens of 5 Lonk Ewes, with dark or mottled faces, of the same flock (2 entries).—5*l.*, Jonathan Peel, of Knowlmere Manor. Highly Commended: David Lambert, of Silsden, Keighley.

PRIZE OFFERED BY LORD LONDESBOROUGH.

Pens of 5 Leicester Ewes of the same flock, not being shearlings (3 entries).—10*l.*, Wm. Lovel, of Nafferton Grange, Driffield. Highly Commended: George Walmesley, of Rudston, Bridlington.

PIGS.

Leeds has always been distinguished by its exhibitions of pigs. On the present occasion, however, of course it is no mere local show. Two rows of shedding, extending half the length of the show, include 125 lots, many of them pens containing sows and their litters and others lots of three. The white and the black, the large and the small, the Yorkshire, Suffolk, Berkshire, Essex, and other breeds are illustrated. The classes are most of them exceedingly well filled. Prizes going to all quarters of the island, and many of them retained in the neighbourhood of Leeds, as will be seen by the list below. The 1st prize in Class 4 goes to a remarkably long straight white pig, of enormous growth for its age, which is under one year, and not so excessively fat as some of the others in its class.

Mr. Sexton's black pigs, Mr. Sadler's Berkshire, a remarkably large and fine class of small white breeding sows, are among the features of the exhibition.

Messrs. J. S. Turner, E. P. Squarey, and W[illegible] officiate as judges, giving the prizes as follows:—

Class I. Boars of a Large Breed, of any [illegible]—1st, 10*l.*, John Bullock, of Brick Lane, Bra[illegible] Samuel Woodhouse, of Norley Hall, Frodsham. [illegible] mended: John Dyson, of the Adelphi Hotel, Leeds.

Class II. Boars of a Small White Breed (1[illegible] entries)—[illegible] H.R.H. the Prince Consort; 2d, 5*l.*, Lord Wenlock. Highly Commended: John Harrison, jun., of Hea[illegible] Stockport.

Class III. Boars of a Small Black Breed (? entries)—[illegible] Thomas Crisp, of Butley Abbey; 2d, 5[illegible], G. M. S[illegible] Wherstead Hall, Ipswich. Highly Commended: [illegible]

Class IV. Boars of a Breed not eligible for [illegible] Classes (8 entries).—1st, 10*l.*, George Brown, of [illegible]ston Place, Leeds; 2d, 5*l.*, William B. Wainman, of [illegible] Crosshills. Highly Commended: John Charlesworth, [illegible]field, Dewsbury.

Class V. Breeding Sows of a Large Breed of any [illegible] entries).—1st, 10*l.*, W. B. Wainman, of Carrhead, [illegible] 2d, 5*l.*, W. J. Sadler, of Bentham and Calcott, Crickla[de, Wilt]shire. Highly Commended: W. B. Wainman.

Class VI. Breeding Sows of Small White Breed (29 entries)—1st, 10*l.*, W. B. Wainman, of Carrhead; 2d, [illegible] of 6, Foundry Street, Halifax, Yorkshire. Hi[illegible] Sir G. O. Wombwell. Class generally Commended.

Class VII. Breeding Sows of a Small Black Breed [illegible]—1st, 10*l.*, William Hatton, of Addingham, Lee[ds; 2d,] Thomas Crisp, of Butley Abbey. Highly Commended: [illegible] Crisp.

Class VIII. Breeding Sows of a Breed not eligible [for the] preceding Classes (10 entries).—1st, 10*l.*, J[illegible] Nortonthorpe Hall, Huddersfield; 2d, 5*l.*, W[illegible] Wainman, of Carrhead. Highly Commended: Mich[illegible] of Fox Inn, Leeds

Class IX. Pens of 3 Breeding Sow Pigs of a Large [illegible] any colour, of the same litter, above 4 and under [illegible] (2 entries).—1st, 10*l.*, the Rev. Henry G. Bailey, [illegible] 2d, 5*l.*, Henry S. M'Clintock, of Randalstown, Antrim.

Class X. Pens of 3 Breeding Sow Pigs of Small W[hite Breed] of the same litter, above 4 and under 8 months old [illegible]—1st, 10*l.*, Lord Wenlock, of Escrick, Yorkshire; [illegible] Wenlock. Highly commended: H.R.H. Prince Consort.

Class XI. Pens of 3 Breeding Sow Pigs of Sm[all] Breed of the same litter, above 4 and under 8 mon[ths] 1st, 10*l.*, Samuel Wolton, of Kesgrave, Woodbridge.

Class XII. Pens of Three Breeding Sow Pigs of a [illegible] eligible for the preceding classes, of the same litter, 4 and under 8 months old (3 entries).—1st, 10*l.*, J[illegible] hill, of Heckmondwike, Leeds.

We add here the awards of prizes for a small [illegible] cheese, butter, wool, and Flax; none of which [illegible] or indeed, considering their limited scale, possess great interest:—

CHEESE.

Class I. Cheese, one or more, not less than [illegible] nor less than 6 months old (4 entries).—1st, 5*l.*, T. D. [illegible] of 61, Briggate, Leeds; 2d, 3*l.*, T. D. Appleby.

Class II. Six Cream Cheeses (1 entry).—1st, [illegible], E. A[illegible] of Manston Lodge, Whitkirk, near Leeds.

BUTTER.

Class I. Best, one or more, Rolls or Pats of Butter [illegible] 20 lbs. (4 entries).—1st, 5*l.*, Mary Abbey, of Crimple [illegible] Yorkshire.

Class II. Best, one or more, Rolls or Pats of B[utter] [illegible] than 5 lbs. (2 entries).—1st, 3*l.*, William Bradley, [illegible] Carrhead, Crosshills, Yorkshire.

WOOL.—LONG-WOOLLED.

No. 1, Class I. Six Fleeces deep staple and [illegible] Hogs not exceeding 9 lbs. (4 entries).—1st, [illegible] Barroby, of Dishforth, Thirsk, Yorkshire, [illegible] Leicester; 2d, 5*l.*, Christopher Barroby, of Baldersby, [illegible] Yorkshire, long-woolled Leicester.

No. 2, Class I. Six Fleeces deep staple and bright [illegible] Ewes not exceeding 6 lbs. (2 entries).—1st, 10*l.*, Messrs. [illegible] & J. B. Booth, of Killerby, Catterick, Yorkshire, L[illegible] 2d, 5*l.*, Christopher Barroby, of Baldersby, Tarsk, [illegible] long-woolled Leicester.

No. 3, Class II. No entry.

No. 4, Class II. Six Fleeces deep staple and bright [illegible] Ewes, 6 lbs. or upwards (2 entries).—1st, 10*l.*, Messrs. [illegible] J. Booth, of Killerby; 2d, 5*l.*, Christopher Barroby, of Baldersby.

No. 5, Class III. Six Hog Fleeces (4 entries).—[illegible] Thomas Horton, of Harnage Grange; 2d, 5*l.*, Ann Baker, of Grendon, Atherstone.

No. 6, Class III. Six Ewe Fleeces (5 entries).—[illegible] Walsingham; 2d, 5*l.*, Lord Sondes. Commended: [illegible] Walsingham.

SHORT-WOOLLED.

No. 7, Class IV. Six Hog Fleeces (3 entries).—[illegible] Thomas Horton, of Harnage Grange, Shrewsbury; [2d,] 5*l.*, Edward Holland.

No. 8, Class IV. Six Ewe Fleeces (5 entries).—1st, [illegible] Walsingham; 2d, 5*l.*, Lord Sondes.

FLAX.

Class I. Green Flax, English grown, and exhibited by the grower only, pulled from fields of 5 acres and [illegible] (2 entries).—1st, 9*l.*, James Manning, of Trent [illegible] borough, Lincolnshire, grown on warp soil, [illegible] once grown in England, sown first week in April, [illegible] acre; 2d, 6*l.*, Lord Kinnaird, of Rossie Priory, [illegible] grown on alluvial clay, sown first week in Ma[rch] [illegible] seed, 2 bushels per acre; 3d, 3*l.*, no award.

Class II. Green Flax, English grown, and ex[hibited by the] grower only, pulled from fields of 10 acres a[nd] [illegible] (1 acre).—1st, 12*l.*, James Manning, of Trent [illegible] borough, Lincolnshire, grown on warp soil fr[illegible] once grown in England, sown first week in April, [illegible] acre; 2d, 8*l.*, and 3d, 4*l.*, no award.

Class III. Green Flax, English grown, and exhibited by the grower only, pulled from fields of 20 acres [illegible] (4 entries).—1st, 15*l.*, Thomas Large Henley, of [illegible] Calne, Wiltshire, grown from English seed, sown [illegible] 2 bushels per acre; 2d, 10*l.*, James Manning, of [illegible] Gainsboro', Lincolnshire, grown on warp soil, from [illegible] sown 29th March, 1861; 2 bushels per acre; 3d [illegible] Wells, of Booth-Ferry House, grown on warp, and [illegible] seed, sown 5th, 4th, and 6th days of April; [illegible]

Class IV. Prepared Flax, to be exhibited by the [illegible] only; retted, scutched, and handled into [illegible] (6 entries).—1st, 20*l.*, James Garth & Arthur M[illegible] Patrington Flax Works, Patrington, Hull, Yorkshire; [2d, 10*l.*,] Richard [illegible] Robert Chase, of Eye, Suffolk; 3d, 5*l.*, Richard [illegible] Crambeck Welborn, Yorkshire, grown from [illegible] 2 bushels per acre.

Class V. Retted, scutched, and hand-scutched Flax [illegible]—1st, 20*l.*, Richard Bielby, Crambeck Welborn; 2d, 10*l.*, [illegible] Beachell, of Rawcliffe, Selby; 3d, 5*l.*, James Manning, [of] [illegible] House, Gainsboro'.

Show of Dogs.—We must not close our account [illegible] live stock exhibited at Leeds without mention of the [illegible]

[illegible] and interesting show of dogs exhibited under shedding in a yard near the central railway station. Nearly [illegible] specimens of all the leading breeds, from the noble bloodhound to the tiny toy terrier—included harriers, beagles, greyhounds, bloodhounds, pointers, of which there was a very large display indeed; setters, equally numerous, retrievers, spaniels, mastiffs, Newfoundlands, bulldogs, sheepdogs, all kinds of terriers, Italian greyhounds, pugs, and toy terriers. No foxhounds had been entered, otherwise the show was exceedingly complete. The judges were Lord Neville, Sir W. Cooke, Bart., Captain Harrison, Captain Spencer, and other gentlemen. The show was one of the most popular entertainments of the week, and excited a great deal of interest.

THE STEAM PLOUGH AT LEEDS.

Those who read our last week's account of the trial of steam ploughs will not be surprised that the award of the Society's judges has given the 100*l*. prize offered for the most economical application of steam-power to the cultivation of the soil to Mr. Fowler, for his 12-horse-power engine, moving anchorage, and plough; and of the 100*l*. offered for the most economical application of the ordinary threshing engine of the farm to steam cultivation, 75*l*. to Mr. Fowler and 25*l*. to Mr. Howard. Besides these a silver medal is given to Mr. Hayes for his clever windlass for the same purpose; and the same to Mr. Roby for his combined engine and windlass.

It very soon became plain that Fowler and Howard were the only two competitors on the ground between whom any real rivalry lay, and the rapidity, depth, and thoroughness of the work accomplished by the former, when compared with the power which the dynamometer showed to be put forth by him, left no doubt as to where the award of superiority must lie. In the former case, as our readers know, an engine moves along one headland and an anchorage moves along the opposite headland, while between the two and looped around a horizontal sheave or drum on each a wire rope stretches. The ploughing apparatus is a link in this rope, and the engine is worked alternately, so that this link is drawn to and fro between the headlands. The plough is a frame balanced on the axles of a pair of large wheels, and carrying three or four ploughs at either end facing one another. On reaching the further end of the field the working end is lifted, and the other being depressed comes into operation on the return journey. The two ends of the draught rope, carried respectively round the anchor pulley and round the clip drum under the engine, meet on the plough frame and are respectively wound on two small drums and tightened, so that a few rope porters in the length of the furrow carry most of it off the ground. This tightening or slackening has hitherto been done by hand, and a good deal of delay has been the consequence. Now it is done by connecting the two drums together, so that the pull upon the foremost drum tends to wind up the other. A certain fixed fraction of the draught thus always goes to keep the rope tight, and a great many most economical consequences follow. There is (1) economy of time, for the delay of winding up or letting out slack was of serious consequence. (2) There is the economy of the rope itself, for it is now lifted off the soil and but little wear in consequence ensues; and many acres probably could now be ploughed before the rope should lose its coat of paint. (3) There is the economy of power, for a drag of the rope on the ground not only wore away the rope itself, but it exhausted the power of the engine. Wire rope of the size used for a 4-furrow plough takes more than 1 cwt. per 100 yards to drag it along. (4) There is an economy in the matter of breakages and repairs, for if the plough should be brought up upon a landfast rock instead of the brunt coming simply on the draught rope, which would either snap or pull the framework of the plough to pieces, it is through the pull of the one drum upon the other immediately spread all over the field wherever the rope goes; and being distributed over every bearing which the rope affects, it is more likely to be borne uninjured; and lastly (5), there is an economy as regards the general efficiency of the engine, for it is precisely this constant and uniform tautness of the rope around the sheave beneath the engine, which enables the ingenious clip groove to do its work in holding the rope without slipping. The arrangement adopted by Mr. Fowler is indeed now almost entirely automatic. And instead of a large number of hands, the ploughman (whose mere weight in his seat effects that connection of the two drums on the plough frame to which we have been alluding), the engineer, a boy to attend the anchor, and a couple of porter lads to shift the bearings of the rope as the plough comes up, are all that are needed to the working of the apparatus. The anchor, too, is now no longer bound to move only in a straight line—a very neat and simple arrangement for guiding the disc wheels enables the anchor lad to guide it along a tortuous headland, and the engine may move of itself along a similar one opposite to it, and the self-acting slack gear on the plough will let out or take up rope corresponding to the varying length of the furrow between the two. The moving anchor is shown in the figure (1) in page 680.

One of the most ingenious of Mr. Fowler's recent adaptations of the engine is in the case of the ordinary 8-horse-power threshing engine, which is represented in figure 2 on page 680. It is stationed at a corner of the field and there made to actuate a clip-drum on a frame work, which abuts upon and is tied to that of the engine; and around this clip drum the rope passes and is taken to two moving anchorages at either end of the plough furrow. The rope thus surrounds a triangle, and the anchor movement being put in gear whenever necessary, both anchors move along the headlands while the plough goes to and fro between them. The diminishing length of rope as the furrow approaches the point where the engine and the clip drum stand is of course taken up by the self-acting slack gear on the plough; and nothing can be more quiet, business-like, and satisfactory than the process.

We have also given drawings of the engine and windlass used by Mr. Howard; the rope winds and unwinds on the two drums alternately, and the rope which goes from them round the four sides of the unploughed part of the field draws the cultivator or the plough to and fro between the two headlands which are the sides at either end. Figure 3, page 681, shows the mode of working it. The anchors are shifted bodily by a man at either end of the plough furrow, so as to suit the new position which on every return of the tillage implement the furrow occupies. That windlass which is out of gear rests on its inner rim on a block of wood which is a self-acting drag upon it, so that the rope from it is paid out reluctantly, and the other windlass then in gear has thus not only to pull the plough home but also to unwind its reluctant neighbour. There is, however, an advantage in this, inasmuch as the rope is thus kept tight and so lifted off the ground from porter to porter. In addition to a to-and-fro grubber (every tooth in which is forked, facing both east and west, each coming into work alternately as it is drawn to and fro along an east and west furrow) Mr. Howard has now in use a very ingenious frame of ploughs resting on wheels at either end. Two or three ploughs below and two or three above are slung upon a horizontal axle between these wheels. Fig. 4, p. 681, represents a two-furrow plough. The axle itself is lifted at the end of the furrow, and one half turn being given to it the upper ploughs descend and come into work on the return journey. The ploughman has easy control over the position of this axle, and can lift or depress it as he chooses while it is at work. He can also easily guide the wheels and so regulate the breadth of the land which his ploughs are taking at a time. The main difficulty in the perfect operation of the ploughs depends on the wheels which support it at so far apart. If the ground were level this would not be a difficulty, but whenever not a perfect level, then the plough may be almost lifted out of work at one time while it sinks deeply into the soil at another. Accordingly in the award of the judges the fitness of the implement for level land is especially alluded to.

In Fowler's plough, which is supported on a single pair of wheels immediately before the ploughs, this difficulty is hardly felt at all.

TRIALS OF FIELD IMPLEMENTS.

STEAM PLOUGHS.—We have a few more incidents to relate about the trials of steam-cultivators and ploughs upon the heavy land. The Clover lea, in ridge and furrow, upon which they were placed, formed a thorough, and yet a very unsatisfactory testing ground. One end of the field was a heavy clay, while the other was a light soil. Fowler could scarcely carry three furrows over the heavy part, but could with ease have taken five over the light. Fowler set down in the first field with the 12-horse-power engine and large tackle, ploughing 2 acres, 3 roods, 21 perches, and scarifying 5 acres, 2 roods, 19 perches, in about 9 hours 16 minutes, with considerable effort. Howard with double cylinder 10-horse engine was obliged to abandon the plough after doing 1 rood, 33 perches, and scarified the remaining 5 acres, 2 roods, 29 perches of the plot, finishing about 15 minutes after Fowler. Fowler and Howard started then upon a 3-acre piece, the former with an 8-horse-power single cylinder engine, the latter with 10-horse-power. Fowler scarified 2 acres, 3 roods, 7 perches, and ploughed 1 rood, 31 perches, 7 inches deep, carrying 2 furrows, with a pressure of 50 lbs.; and Howard scarified the whole piece with 10-horse power engine at 40 lbs. of steam pressure to a less depth. Fowler and Howard then cross scarified, the one 3 acres, 2 roods, 29 perches on the near side of the trees, and the other 1 acre, 2 roods, 36 perches; Fowler doing his in 5 hours 45 minutes, with 5 cwt. of coals; and Howard in 1 hour 45 minutes, with 198 lbs.

Subsequently a whole field of 12 acres 14 perches was assigned to Fowler, of which he ploughed the whole, excepting 3 roods, in 12 hours, with 18 cwt. of coal. Howard similarly was set to 10 acres and 16 perches, which we believe he finished with cultivator in 19 hours 25 minutes. As we have no correct data as to time or coals, however, we will not undertake to speak positively on this head. It seems however that the judges, after testing the two systems with the utmost care and discretion, have awarded the whole prize to Fowler in the 1st class, and the 1st in the second; or giving particular attention to the wording of their awards, they desire to mark Fowler's as the best application of steam-power to the cultivation of the soil before the public, and the most useful one upon the generality of soils in its adaptation to the ordinary portable engine. Howard is distinguished as a good apparatus attached to the ordinary farm engine, upon light descriptions of soil, and as such it will be a most popular machine. The compactness of the whole renders it, together with its beautiful workmanship, an object of great admiration.

SOWING MACHINES.—On Tuesday morning, at 9 o'clock, the judges, Messrs. Huskisson, Thompson, and Druce, commenced their labours. Some 40 or 50 drill and manure distributors were to be put through their performances.

The first class of drills tried were the corn drills and drills for general purposes—each in turn was inspected. The judges noted price, dimensions, mechanical arrangement, before the preliminary canter was made up and down the length of the field. Those machines which showed merit sufficient to entitle them to pass to a higher examination were then tested with grain. After a good many had been sent home to the yard, the drills of G. Malthouse, of Grantham; Teasdale, of Burnston; James Coultas, jun., of Grantham; Priest & Woolnough, of Kingston-on-Thames; R. J. Reeves, of Bratton; Holmes & Sons, of Norwich; Gowan & Sons, of Market Drayton; and Coultas & Son, of Grantham, were called out, and these were gradually weeded. Directions were given to prepare each drill for the deposition of 8 pecks of Wheat an acre. To find out how far performance tallied with profession, bags were tied upon the cups on the down journey; the contents of these bags was measured on the headland into a pint mug, and the pint mug into a peck measure. The length of the journey being known and multiplied by the width of the drill, the part of an acre sowed was ascertained to a fraction, and the rest of the sum easily arrived at. With respect to the trial of their capacity as depositors, they were fitted to discharge 40 bushels of artificial manure. There was nothing particularly new about these machines. Coultas, jun., of Grantham, had introduced a very convenient arrangement by which he could diminish or increase the accommodation afforded to seed or manure, and by the addition of iron arms, patent axles, and iron sides, in place of wooden ones, the strength of his machine was much increased. Holmes's also seemed a very workmanlike implement, with no pretension to an excellence it did not possess. It looked as though it was built by men who could work a drill as well as put one together. They have introduced a level upon the box-lid by which the attendant can see at a glance when his box deviates from the true line in an undulating country. Almost all better drills possessed hill-side movements.

After these drills those of a general character for small occupations were introduced, varying from 17*l*. to 25*l*. Coultas, jun., Hensman, and Holmes & Sons, certainly showed the most perfect machines, and of the whole of them we preferred Hensman's for its lightness, simplicity, and adaptability. The trial was long and closely contested. The rain put an end to it on Thursday night, but it was again resumed on Friday, and followed by that of drills for Turnips and other roots on the ridge and flat; on the flat and ridge separately. The trial was conducted with great impartiality by the judges, and the result brought out the best implement, Holmes & Sons and R. & J. Reeves standing 1st and 2d in the 1st class, Coultas and Priest & Woolnough 1st and 2d in the 2d, and Gower & Sons 1st in the 3d. These drills are all simple and effective. When these awards were decided, the small seed drills followed suit, of which Coultas, jun., decidedly showed the best, with a double acting machine, the Rye-grass being distributed in front and the Clover seed behind, to avoid an objection made to drilling the two mixed, for it is found in practice that the Clover seed sinks to the bottom of the bag, and that the cups deal principally with the Rye-grass.

The MANURE DISTRIBUTORS next were trotted out for inspection. Chambers's performed by no means well at the beginning with the soot, but when the ashes were applied it deposited with great evenness, though as a whole it was far from maintaining its known character. The real merit of the invention, however, will place it above such accidental failures, and the judges very properly awarded the 1st prize to it. Holmes & Sons stood 2d.

HORSE HOES.—For this trial two fields were provided in sight of Kirkstall Abbey. For the trial of the general purpose hoes, Isaac Spight, Hunt & Pickering, Priest & Woolnough, and Holmes & Sons were the chief competitors, and certainly made excellent work. Judging by beauty of mechanical arrangement we certainly decided in favour of Spight's hoe. The Judges doubtless, however, are correct in giving the 1st prize to Priest & Woolnough, which cut through the Couch bed in which the Turnips were sown in a very workmanlike manner. In the single horse-hoe trial there were about 21 competitors, which were speedily thinned by the departure to the yard of all complicated contrivances for expanding by screws, or which weaken the parts, and proceed on the false principle of recognising and legitimatising bad drilling. The Busby Implement Company, Page & Co. of Bedford, and Messrs. Howard of Bedford, had a sharp struggle for the place of honour, which the Busby Company gained, Page coming 2nd. Page's hoe possesses excellent qualities. The beam of the hoe plays in the bar which connects the steerage wheels by means of a swivel, which gives it perfect freedom to

either side, while another joint near the connection in the beam itself, gives equal freedom up and down. The sliding bar for the shares are each arranged, and the whole is beautifully gat up. Messrs. Howard also showed excellent workmanship and mechanical merit, and would have done better had it been well set. Their force at that time however were busy with the rakes and haymakers, and the little hoe had to fare as it could. Major Munn, a Kentish gentleman, exhibited a combined implement as general purpose hoe, ridge hoe, Turnip thinner, and "Nigger" extirpator, which had special merits of its own, but did not seem to impress the judge very much.

A new implement was tried on the Friday, which is so suggestive that we must say a few words about it. We mean Samson's and Jewel's combined paring and breaking cultivator, from Jersey. It first worked as a parer upon a piece of Rye stubble, taking a width of 2 feet, and cutting to a depth of 2, 3, 4, to 6 inches, breaking each furrow to pieces, and leaving the vegetation upon the surface, with 4 horses. We went to look at the implement in the mews where it resided during the Smithfield Show-week at Christmas, and were then so much struck with its promise of utility that we were glad to see it at Leeds, where it created an undeniable sensation, and set many steam men a-thinking. A square iron frame containing 5 ploughs is set in diagonally upon a carriage between 4 wheels, the two in front being for steerage. Behind each plough breast double forks are made to revolve at a very rapid rate, so as to catch the furrow pared, and destroy its coherence in the most summary manner, the forks gaining their motion in the same way as the knife of the grass mower. The implement is intended to represent a system of culture. The land is first pared by it to any moderate depth, and then broken up deeply by another arrangement, and thoroughly prepared in two operations for a seed bed without the assistance of the common plough. Upon our lighter descriptions of soil it will be found a very valuable acquisition. A silver medal has been awarded to the inventor.

Mowing Machines.—The trial of the mowing machines was long and interesting; on Wednesday afternoon there was a preliminary trial. There were tested three American mowers of Mr. Cranston, of King William Street, London; four of Messrs. Burgess & Key, of Newgate Street, London; two of Mr. Samuelson, of Banbury, and other machines exhibited by Mr. Brigham & Bickerton, Mr. Hellard, Mr. Prentice, Mr. Wray, Mr. Bamlett, Mr. Mackay, Messrs. Pickslay & Sims, Mr. Nicholson, Mr. Kearsley, and Mr. Cuthbert of Bedale. This matriculative examination only left Messrs. Cranston, Burgess & Key, and Samuelson, to compete on Thursday. They were set to cut 3 roods of a good crop of Grass, wet and unfavourable for the operation at the bottom, growing upon rather rough ground. Cranston & Samuelson completed their plots in about equal time, that is 48 minutes, while Burgess, more leisurely, occupied about an hour. All the machines cut beautifully, though all occasionally stopped to have their knives freed from clogging Grass. Burgess and Key had set their cutters too near the ground, and so met with more stoppages than need have been the case. Their machine has the merit of being so wide in frame that the travelling wheels run clear of the swathe instead of pressing it down, and if of stronger build, and perhaps heavier draft for the team than some of the other machines, is incomparable for durability and excellence of working parts. Owing to some mistake this firm competed with a machine built expressly to encounter the heaviest description of Grass crops, and consequently of one of more than ordinary weight, so that when the draft was tried, the result was much against it. Cranston's American machine is of lighter draught than any, well made, but apparently on a principle too slight to stand the brunt of prolonged work in English bulky hay crops. Samuelson's mower made excellent work, but ran too much on the last-mown swathe; and while the method of providing for the free play of the cutter-bar is very ingenious, we doubt if the details of construction are as mechanically perfect and durable as they might be. We shall next week give a further report of this trial. We regret that any mistake should have arisen during this contest. The award makes Burgess appear second to Cranston, chiefly, we understand, on the score of draft. By mistake the merit of the former was made to depend on the performance of their worst machine; for at a recent trial in Holland, the machine with which Burgess should have competed, and that of Cranston, are both put at an equal draft—Burgess's cutting bar being a few inches longer than Cranston's.

Haymakers.—As to the haymakers, no question could exist as to the superiority of Messrs. Howard's, an implement into which they have introduced the excentric movement by which they have so much improved their cultivating windlass. The first operation threw the Grass to a much greater height than Nicholson's machine, which was the only rival of importance, and distributed it with greater evenness, and in the operation of tedding it displayed very great superiority over the other haymakers, lifting with circumspect and gentle movement the hay for the free circulation of the air. His, indeed, is almost a more valuable movement than the first, and is one which the makers of hay for the London market and growers of Clover will view with considerable satisfaction. In all points this is a very clever and beautiful contrivance, and is only equalled in workmanship by the unrivalled horse-rake manufactured by this firm, which, after a very patient trial, received the whole of the prizes in its class.

AWARD OF THE JUDGES OF IMPLEMENTS.

STEAM CULTIVATION.

50*l.* to John Fowler, jun., of 28, Cornhill, London, for 12-horse power steam cultivating apparatus and plough, suitable for ploughing land of all descriptions.

50*l.* to John Fowler, jun., for ditto, suitable for scarifying, grubbing, and breaking up land of all descriptions.

50*l.* to John Fowler, jun., for steam cultivating apparatus and plough, with 8-horse power portable steam-engine (worked at 10-horse power), suitable for ploughing land of all descriptions.

25*l.* to John Fowler, jun., for ditto, suitable for scarifying, grubbing, or breaking up land of all descriptions.

25*l.* to James and Frederick Howard, of Britannia Iron Works, Bedford, for windlass, which may be attached to any ordinary portable steam-engine, and used for working steam ploughs or cultivators; and also for a set of ploughs and a cultivator, which may be used on mixed and light soils having a level surface.

Silver Medal to Edward Hayes, of Stony Stratford, Bucks, for patent self-acting windlass, which may be attached to any ordinary portable steam-engine, and used for steam cultivation.

Silver Medal to Robey & Co., of Lincoln, for 12-horse power portable double-cylinder steam-engine, with Chandler and Oliver's patent drum ploughing windlass, suitable for steam cultivation.

GRASS MOWERS.

Mr. W. M. Cranston, London, 8*l.*, for prize grassmowing machine, patented by Walter A. Wood, of Hoosick Falls, New York.

Messrs. Burgess & Key, London, 7*l.*, for mowing machine, invented by Mr. Wm. Burgess.

The North of England Implement Company, York, 5*l.*, for patent mowing machine, with folding and flexible knife, invented by Mr. Ball, Ohio, U.S., improved and manufactured by Mr. Samuelson.

SOWING MACHINES.

10*l.* (first prize) to James Coultas, jun., of Grantham, for corn and general purpose drill.

3*l.* (second prize) to James Coultas & Son, of Grantham, for ditto.

2*l.* (third prize) to R. J. Reeves, of Bralton, Wilts, for ditto.

10*l.* (first prize) to James Coultas, jun., for drill for corn only.

5*l.* (second prize) to Holmes & Sons, of Norwich, for ditto.

5*l.* to J. Coultas, general purposes drill and steerage for small occupations.

5*l.* to W. Hensman & Son, of Leighton Buzzard, for corn and root drill and steerage for ditto.

10*l.* (first prize) to Holmes & Sons, Norwich, for drill for Turnips and roots.

5*l.* (second prize) to R. & J. Reeves, for ditto.

6*l.* (first prize) to J. Coultas, jun., for ditto (on flat only).

4*l.* (second prize) to Priest & Woolnough, for ditto.

5*l.* to A. W. Gower & Son, of Market Drayton, for ditto (on ridge only).

7*l.* (1st prize) to R. and J. Reeves for water drill.

3*l.* (2d prize) to W. Watkinson, of Louth, Lincolnshire, for ditto.

7*l.* (1st prize) to J. Coultas, jun., for drill for small seeds.

3*l.* (2d prize) to Holmes & Sons, for ditto.

7*l.* (1st prize) to W. Hensman & Son, for drill presser.

3*l.* (2d prize) to G. W. Robinson, of Barton-on-Humber, for ditto.

7*l.* (1st prize) to Thomas Chambers, jun., for manure distributor.

3*l.* (2d prize) to Holmes & Son, for ditto.

6*l.* (1st prize) to Trustees of William Crosskill, of Beverley, for ditto for liquid manure.

4*l.* (2d prize) to Isaac James, of Cheltenham, for ditto.

HORSE HOES.

7*l.* (1st prize) to Priest & Woolnough, of Kingston-on-Thames, for horse-hoe for general purposes.

5*l.* (2d prize) to Hunt & Pickering, of Goulding-works, Leicester, for ditto.

3*l.* (3d prize) to Isaac Speight, of Brigg, Lincolnshire, for ditto.

5*l.* (1st prize) to Carson & Toone, of Warminster, for single horse-hoe for ridge and flat.

3*l.* (2d prize) to the Busby Implement Company, ditto.

2*l.* (3d prize) to Edward Page & Co., of Bedford, for ditto.

5*l.* to John Eaton, of Thrapston, for horse-hoe for thinning Turnips.

CARRIAGES.

7*l.* to Thomas Milford & Son, for pair-horse waggon.

3*l.* to the Trustees of William Crosskill, ditto.

7*l.* to the Trustees of William Crosskill, other waggons.

3*l.* to Thomas Milford, ditto.

6*l.* to Trustees of William Crosskill, for single-horse carts.

2*l.* to Mr. Thomas Milford, for ditto.

2*l.* to the Busby Implement Company, for ditto.

6*l.* to the Trustees of William Crosskill, for two-horse carts.

2*l.* to Mr. John Spencer, for ditto.

2*l.* to Mr. John Barker, for ditto.

5*l.* to Trustees of William Crosskill, for harvest cart.

3*l.* to Messrs. Pickering & Houlgate, for market-cart on springs.

2*l.* to Trustees of William Crosskill, for cheap market-cart on springs.

EXHIBITION OF PLANS OF COTTAGES AND FARM BUILDINGS.

Among the most interesting sights afforded to the agriculturist at Leeds during the past week has been the collection of plans and models brought together in competition for prizes offered by the Yorkshire Agricultural Society. The prizes offered by the Society, and the awards of the Society's judges, are stated as follows:—

1.—For the best plan of a Double Cottage, containing not less than three bedrooms in each; the cost not to exceed 220*l.* the pair, 25*l.* Prize plan, Messrs. Richardson & Ross, Darlington.

2.—For the best plan of a Double Cottage, containing two or three bedrooms in each; the cost not to exceed 180*l.* the pair, 25*l.* Prize plan, J. B. Corby, Stamford, Lincoln.

3.—For the best plan of a Single Cottage; the cost not to exceed 120*l.*, 25*l.* Prize plan, W. M. Boden, and J. T. Lee, Egremont, Birkenhead.

4.—For the best plan of a pair of Cottages, of irregular design; the cost not to exceed 210*l.*, 10*l.* For the second best do., 5*l.* Insufficient merit. No prize awarded.

In the Catalogue Mr. Strickland classifies the plans as follows:—

(1).—37 Cottages on the plan, or nearly so, of the prize plan published by the Royal Agricultural Society, in the year 1849. This plan has the advantage of being within four walls, and the disadvantage of making passages of both the living rooms. A few plans with a recess at the back are placed with the plans in this class, because they are in all others exactly similar.

(2).—30 Cottages of a similar plan, but with the [...] going up out of the scullery.

(3).—18 Cottages in which the entrance is placed [...] thereby avoiding making a passage of the living room [...] the best plan of a cottage within four walls; but [...] that there is in general a difficulty in arranging the [...] plan well.

(4).—22 Plans in which the staircase is placed [...] living room and the scullery; a very good constr[...] cottage with two bedrooms, but not for one with [...]

(5).—28 Cottages with the entrance in a recess [...] the stairs in front of the part recessed. The advan[...] form of cottage have been before pointed out.

(6).—15 Plans in which the staircase is placed [...] between the scullery and the pantry; an almost e[...] arrangement with the last.

(7).—11 Cottages with a recess in front, and the stairs [...] the living room and scullery, like Class 4. This [...] ought to be as good an arrangement as the other [...] have never yet seen or been able to draw a plan arran[...] without some serious defect in it.

(8).—18 Cottages with a kitchen and parlour, or kitche[...] one bedroom on the ground floor. It will be seen on [...] at the plans that this kind of cottage requires an [...] different mode of construction from that with the living [...] and kitchen on the ground floor, and three bedrooms above [...] requires much more investigation than it has hitherto rece[...] which is proved by the fact that there is only one plan [...] the whole 320 (that by Mr. Cross, of Harrow) of th[...] which probably is the best adapted to producing [...] cottage of this kind.

(9).—10 Cottages in which the parlour or kitch[...] back, and the stairs facing the entrance. It is chie[...] only fitted for situations near towns where frontage [...]

(10).—9 Plans in which it is attempted to adapt [...] plan of the other kind of cottage to this kind. A[...] of them will clearly enough show the impossibility [...]

(11).—36 Plans not coming within any of the a[...] are chiefly slight variations of the three first classes [...] of which is any advantage gained, that I can see, [...] useless additional expense is incurred.

(12).—21 Cottages with only an entrance at the ba[...] of them in a recess at the back, and therefore resem[...] in construction, and very nearly as good.

(13).—8 Plans with one or more bedrooms on the gr[...]

(14).—8 Pairs of Cottages in which the space in the [...] plan is distributed between the two, differently [...] the ground plan. Much advantage may be gained [...] the committee who awarded the prizes did not [...] these of sufficient merit to receive the prize offer[...] form. Two or three of the best of these were sen[...] prizes in Class 1 and 2.

(15).—6 Plans of one story cottages.

(16).—35 Plans only adapted for single cottag[...] equally adapted for one of a pair are placed within [...]

This classification greatly assists the exam[...] the immense number of plans that are exhibit[...]

The prize cottage by Messrs. Richardson & [...] Darlington, is one of Class 4, in which the s[...] placed between the kitchen and the living r[...] provides a side porch, pantry, and cellar; a [...] 13 feet by 11 feet 6 inches, and a kitchen 1[...] $7\frac{1}{2}$ feet on the ground floor, and 3 bedroo[...] $11\frac{1}{2}$ feet by $10\frac{1}{4}$ feet, $11\frac{1}{2}$ feet by $7\frac{1}{2}$ feet [...] room and scullery respectively, and one 8 [...] 4 inches over doorway, &c. The elevation [...] effective, and cottage-like. The cost [...] A pair has been erected for the [...] opposite the show-yard of the Socie[...] double cottage costing under 180*l.*, by Mr. J. B. [...] of Stamford, for which a prize of 25*l.* is [...] also simple and convenient, and affords [...] accommodation.

Besides this prize cottage, Nos. 1, 2, and 3, i[...] sent by Mr. Blackmore, of Rotherham, we[...] mended. Nos. 1 & 2 in Class 8, sent respec[...] Mr. Cross, of Harrow, and Mr. Taylor, of [...] borough, were also spoken well of.

Farm Buildings.—Twenty-seven sets of [...] pete for the prize of 50*l.*, offered for the best [...] buildings for a farm of 500 acres, and 19 sets [...] the prize offered for the best plan for a farm of [...] The successful architects are Mr. Watson of [...] in the former case, and Messrs. Hicks & Is[...] and P. D. Tuckett of London in the latter. [...] admirers of the decision in the former [...] Mr. Watson's farmery consists of a line of [...] buildings with granary on upper floor, cros[...] by barn and engine house, which extends [...] on one side, and as a straw house and [...] extends some 70 or 80 feet on the other side [...] on either side of this straw house under [...] are lines of feeding boxes. Of equal length [...] with this, at right angles therefore to the [...] line of granary, &c., and at either [...] there extends the stable and the cow [...] the intervening spaces are divided equal[...] roof covering some 15 feet in width, viz. a [...] way and cribs on either side of it for fee[...] the yard. There are thus four central [...] enclosed by five lines of building extendin[...] main granary line. Opposite the ends of [...] vening yards, at a roadway distance from the [...] cart shed, implement house, store house [...] house, under a line of roof parallel with the [...] The distribution of parts seems to us [...] incoherent; the connection between place[...] use is dependent on each other is often [...] slightest; access to each is often extremely [...] the system of open yards, now generally [...] is here sanctioned.

We do not understand the nature of the [...] and shall be glad to learn the grounds [...] it was made. Half the horses in the s[...] half the cows in the byre have most awkward [...] their respective ends of the stable and the by[...] Turnip house is here and there all over the [...] straw has to be carried with great [...] through many doorways and narrow passage[...] the straw house to the stable and byre.

is no easy way of loading at the granary. The carpenter has the whole body of buildings between him and the saw bench, the threshing machine is perched in the most awkward corner of the threshing floor, and the waggons have to draw up in an angle of the outside yard in order to be unloaded. The engine and boiler are separated by a long interval, the poultry house is up in an upper chamber, and we presume geese, turkeys, ducks, &c., have to climb two pair of stairs; the hay loft is 100 feet long, and there is only one door way to it. There is no shed or covered floor for artificial manures. The lean-to roof at the ends of the yards have no support whatever shown in the plan; and the sections and elevations and the plans do not correspond. The judges who awarded the 30*l.* prize to so crude and ill designed and in many particulars absurd a plan ought to speak in their own defence.

The system of covered farmeries is well illustrated in the plan designed by Messrs. Isaacs & Hicks of Bath, to which the 25*l.* prize is awarded. A square of 80 by 120 feet is covered by a roof in five ridges, abutting on a two-storied building at one end, in which are barns and granary. The space thus covered is allotted for cart-sheds, implement house, piggeries, &c., around its outside, where it is open to the air; and within it is allotted to stable and byres for horses and cows, and yards for cattle, and calves, and sheep, chaff room, Turnip house, mixing house, together and convenient to the feeding houses. The estimate for the building is 960*l.*, corresponding to 4*l.* 16*s.* 6*d.* an, acre or a probable rise of rent of 6*s.* or 7*s.* an acre, which is more than most tenants would be likely to give for a mere improvement to country accommodation.

No. 2 in this class, by Mr. Chancellor, of Chelmsford, is in some respects a simpler plan than that which takes the prize. It, too, is on the covered-yard principle, and in its general principle resembles those erected on Mr. Garth's property near Twyford.

No. 18 in this class and 26 in the former class are by Mr. Wilkinson, of Oxford, and are both greatly superior to the prize plan—a covered yard between lines of stable and of cattle boxes receives the soiled litter for both. They abut upon a higher set of buildings, including waggon house with granary over head, and Turnip stores and chaff house, &c., with threshing floor and straw house over head. The whole is compact and commodious.

We were sorry to see so few spectators of what is certainly one of the most instructive items in the week's entertainment; but indeed the plans need to be studied instead of merely inspected, and we understand that the Yorkshire Agricultural Society will very soon issue in a separate pamphlet a descriptive account of the exhibition, accompanied by woodcuts of the chief plans of cottages and buildings.

Those who wish to obtain this pamphlet should send in their names to J. Hannam, Esq., Secretary to the Yorkshire Agricultural Society, Kirk Deighton, Wetherby.

Several other particulars of interest in our report must be postponed until next week; among them an account of Professor Wilson's lecture on steam cultivation, and a report of the public dinner to members of the Society and their friends in the magnificent Victoria Hall.

STATE OF THE WEATHER—BERKSHIRE.

For the Week ending July 18, observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air. Max. in Sun.	Max. in Shade.	Min.	Mean.	Temperature of Soil 1 foot below the Surface.	Rain	Wind	Barometer.
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	12 ..	66.[illegible]	[illegible]	[illegible]	[illegible]	62.3		S.	29.50
Saturday	13 ..	[illegible]	[illegible]	[illegible]	[illegible]	62.6	[illegible]	S.E.	29.40
Sunday	14 ..	[illegible]	[illegible]	[illegible]	[illegible]	61.0	[illegible]	S.W.	29.36
Monday	15 ..	83.0	74.0	55.0	66.7	61.3	..	S.	29.[illegible]
Tuesday	16 ..	[illegible]	[illegible]	[illegible]	[illegible]	61.7	.02	W.	29.50
Wednesday	17 ..	[illegible]	74.[illegible]	45.5	61.[illegible]	[illegible]		W.	29.74
Thursday	18 ..	[illegible]	[illegible]	[illegible]5	64.7	64.5	..	S.W.	29.60

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

POULTRY.—It is more curious to note the various changes in a market than people are disposed to imagine. Some time since we had occasion to remark that a period of unusual dearness and positive dearth corresponded exactly with a time when the weather rendered hatching and rearing impossible, and now when we have to note a general falling off in all prices, save one, we see that the supply of the poultry market, small and insignificant as it may appear to some, is governed by the same laws and calculations, and ruled by the same causes as more important ones. It would seem there is a limit to the value of fowls, or rather that there is a certain price which ought to satisfy the breeder or fattener of a fowl. Thus, the calculation seems to have been, and it is a good one, that if a fowl will make 6*s.* at three months old and only 7*s.* at five, it is better to sell at three. Hence while large fowls maintain a large price, the smaller ones are difficult of sale.

	Each.—s. d.		s. d.
Large Fowls	4 6	to	5 0
Middling ditto	3 0	,,	3 6
Chickens	1 9	,,	2 0
Goslings	5 0	,,	5 6
Ducks	2 0	,,	2 6
Pigeons	0 8	,,	0 9
Rabbits	1 4	,,	1 5
Wild ditto	0 8	,,	0 9

TO THE EDITOR OF *THE GARDENERS' CHRONICLE AND AGRICULTURAL GAZETTE.*

AMONG the many thousands of Visitors to the Show Yard of the ROYAL AGRICULTURAL SOCIETY at LEEDS this week, probably some asked the question, "Why do not RANSOMES AND SIMS exhibit at this great gathering?" We beg to place before the Public a brief statement, which will prevent any misconception as to our reasons for declining to exhibit.

Up to the year 1848 we were regular Exhibitors at the Royal Agricultural Society's Meetings, at which time we had received from the Society a First Prize in every class in which we competed, and also Two Honorary Gold Medals, an honour awarded to no other Maker since the origin of the Society. We re-commenced exhibiting in 1852, and since that time have received from the Society the following Prizes and Medals:—

For Ploughs, Eight First Prizes, Two Silver Medals, and Three Second Prizes.
For Scarifiers, Two First Prizes.
For Field Rollers, One First Prize.
For Horse Rakes, One First Prize.
For Horse Threshing Machines, Two First Prizes.
For Steam Threshing Machines, One First Prize.
For Steam Engines, Two First Prizes, and Two Second Prizes.
For Steam Boilers, One First Prize.
For Grinding and Crushing Mills, One First Prize, and Two Silver Medals.
For Bruising Mills, One First Prize.
For Patent Root Cutters, One First Prize.
For Chaff Cutters, One First Prize.

Making a Total of
Twenty-two First Prizes. | Four Silver Medals
Six Second Prizes.

And also
Three Third Prizes | Eight High Commendations
One Fourth Prize | Eleven Commendations

Which is certainly no mean amount of success, and indicates a position more difficult to attain than that of a prizeholder in any one class or section of machinery.

It will be evident that such a position cannot be attained by any firm without the exercise of considerable enterprise and expense, and without great personal exertion on the part of its heads and chief officers, to whom the question therefore arises, "Is this exertion and outlay adequately remunerated?" The remuneration which a manufacturer receives from exhibiting at the Annual Shows arises in the following manner:—

1. By direct Sales in the Show Yards.
2. By subsequent Sales in the district of which the Show is the centre, and arising from the inhabitants of the district becoming acquainted with his Machines, of which they were previously uninformed.
3. By Sales of Implements in Great Britain and Foreign Countries, in consequence of their having received the Society's Prizes.
4. By the value which the public place on the Prizes awarded by the Society, as an evidence of character on the part of the Manufacturer, or guarantee of the excellence of his productions.

On the first three heads the trade books of any one who has been an exhibitor for a number of years afford him full evidence, and we are of opinion that the advantages obtained under them do not outweigh the disadvantages attending the present imperfect manner of conducting the Trials to which all Exhibitors at the Annual Meetings of the R.A.S.E. are nevertheless compelled to submit, under penalty of exclusion from the Show Yard.

It is to the fourth head that we have hitherto been accustomed to look for a return of our expenses and exertions, and it is our present belief, founded on consideration of the Society's Reports in its own Journal,—on articles in the English Press,—in Foreign Agricultural Journals,—and acquaintance with the views of a large circle of practical Agriculturists, that the Awards of the Society are no longer looked upon as a solid guarantee of excellence to the extent which they formerly were; and that the Agricultural public consider the interest which an established Manufacturer has in the maintenance of his reputation, effectually forbids his sending out any articles which will not properly perform their work, and offers a far better guarantee to the purchaser, that he will obtain money's worth, than any honorary distinction founded on the present system of trials.

It will also be evident, that exactly in proportion to the high position which any Manufacturer has attained, will the stringency of this prohibition against making inferior articles extend; and also, that in the same proportion is it a matter of the greatest importance to him, that any public competition to which he may submit his manufactures should be conducted on a basis clearly defined at the outset,—at a suitable season,—with proper mechanical and personal staff to carry out the trial, and well-informed men to act as judges.

No one who has regularly attended the Meetings of the Royal Agricultural Society of England during the last seven years can have failed to observe, that the difficulties of thoroughly conducting the Trials have annually increased, and that, as these difficulties have not been met by an equivalent exertion on the part of the Executive of the Society to overcome them, the results have annually become less satisfactory to the public and to the Exhibitors.

Under this feeling, we saw that it was necessary for us, as Manufacturers, either to seek for a more severe and thorough system of Trial, the results of which should inspire confidence at home and abroad, or to abstain from taking part in a competition which was costly, and attended with great derangement to our general trade, and which, whatever was the issue, did not affect our standing with the public, in a degree proportionate to the expense and labour which it necessitated.

We therefore sought, by letter to the Council, by personal interviews with the Implement Committee, and by conversations with various Members of the Council, to arrive at a satisfactory interpretation of the Prize Sheet for the Canterbury Meeting, and the basis on which the Trials there would be conducted; but failing to obtain this, we resigned whatever advantage might have arisen from exhibiting at that Meeting.

Subsequently to that Meeting, the Council placed three of its members engaged as Agricultural Engineers on the Implement Committee; and at the request of these gentlemen, we sent them a paper of suggestions for rendering the Trials more severe and satisfactory.

By the time that it was necessary to make the entry for Leeds, we could not learn that the arrangements made for that Meeting materially differed from those of previous years, and we felt that we must either again abstain from exhibiting, or appear to the world to have factiously, and without just reason, stayed away from Canterbury.

In such a position, there was, of course, no choice, and we were therefore unrepresented at the LEEDS MEETING.

Here, probably, if any one has read so far, he would ask the questions: "What do you want?" "What will satisfy you?" To these inquiries we say, That no arrangements will satisfy us unless they succeed in convincing the Agricultural public at home and abroad, that they may rely upon the decisions of the Society as practically correct.

Now in order to effect this it appears to us essential—

1. That the Trials of each class of Implements should be of much longer duration, and conducted at that season of the year when the Implements under trial would be used in the practical operations of the Farm.
2. That Implements intended for use on various soils or crops should be tried thoroughly on each soil or crop for which they are intended, and under conditions approaching as nearly as practicable to those of every-day use.
3. That the Prize Sheet should be expressed in terms which will definitely express the object which the Society wishes to encourage, and should be accompanied by a Statement of the Instructions which will be given to the judges, as to the standard which the Society considers perfect work, and the basis which is to govern their decisions.
4. That there should never be less than three judges to every class of Implements, two of whom should be chosen for Agricultural, and one for Mechanical knowledge; and that two of the three at least should not have served as judges of the class for which they are then acting within the previous three years.
5. That a more ample Mechanical Staff should be provided by the Society, and that only properly qualified Mechanics, responsible to the Society, should be allowed to attend on the judges, register the dynamometric results, or take any official part in the Trials.
6. That the Awards of Prizes should be accompanied by a report, explanatory of the trials and of the reasons which have governed the decision of the judges; and that this should be given to the Exhibitor simultaneously with the prize card—thus enabling the public who visit the show yard to form their own judgment of the Awards.

We know that trials on such a basis as this would be costly in time and money to the Society and to the Exhibitors; but the results would be really valuable, and by taking only one class of Implements annually, (e. g. Ploughs one year, Scarifiers and Cultivators another year, and so on,) Trials of well-established Implements would not become of so frequent recurrence; more time would be given for real improvement; and the incessant rage for novelty, damaging alike to the farmer and to the manufacturer, would at any rate not be stimulated by the Society.

We do not think it our proper function as competitors to draw up or suggest the details by which the results are to be arrived at. This would be more thoroughly arrived at if the Council of the Royal Agricultural Society of England would appoint an extraordinary Commission—not of necessity chosen from its own members exclusively—and entrust to them the duty of drawing up a statement of the results which ought to be required by an Agriculturist from any class of Implements at present invented,—a statement of the requirements at present unsupplied by the Agricultural engineer, and to which his invention should be directed; and a plan for thoroughly carrying out the Trials which should be necessary to test the merits or demerits of Inventions submitted to compete for the Prizes offered.

Such a Commission might be formed without much difficulty, and if it thoroughly examined the subject, could put the question of Implement Trials, for some years to come, on a footing satisfactory to all, whether Agriculturists or Manufacturers, which would, in our opinion, tend to restore that confidence in the Society's decisions which they have at present lost.

In the prospect of the Great Exhibition of 1862—in the management of the Agricultural Department of which the Royal Agricultural Society will probably take a leading part—that Society stands as it were on trial, as a national body professing to represent the Agriculturists of Great Britain—who will expect from the Members of the Society such a performance of their representative duties as will raise the Society to its proper position in the eyes of Great Britain and the world; the present is therefore a peculiarly fitting time for the appointment of such a Commission, in a broad and liberal spirit, worthy of the position which British Agriculture has attained.

Until these matters are settled, and arrangements made for carrying them into practice, the Society would obviate the causes which prevent us from exhibiting under the present imperfect system of Trial, by rescinding the rule which makes competition for their Prizes compulsory on all exhibitors; in lieu thereof providing that those who declined to compete should restrict their Exhibition to Implements which they could exhibit in actual work, and which they should be bound to keep ready to put to work for the inspection of any one who wished, during the whole time that the Show Yard was open to the public.

Such a course would entail no trouble on the Society; it would provide for the extension of the most interesting part of the Annual Shows, viz., the Moving Machinery, and gives the buyer every opportunity of forming his judgment soundly; whilst it would protect the Manufacturer from being compelled to submit his productions to a system of Trial, which, by common consent, is imperfect and unsound.

We have a hearty interest in the prosperity of the Royal Agricultural Society, and we trust that the foregoing explanation of our position will vindicate us from the imputation of any hostility to the Society, or any unworthy motives in the course we have taken.

We can but be proud of the position of our country amongst the Agriculturists of the world; the higher that position rises, the greater will become national and individual prosperity; and we are firmly convinced that the more thoroughly the great National Society scrutinizes the objects contemplated in its Charter, and uncompromisingly works for their development, the greater will be the respect with which it is looked upon by all nations; that the more thoroughly business-like it renders the Mechanical Department of the Annual Meetings, the higher will Great Britain stand as the Implement Market of the world; and we doubt not that a continuance of the enterprise and energy which have placed our Firm in the position it now occupies, will secure for us a fair share of success in the future, however severe any trials may be in which we are competitors.

Yours respectfully,

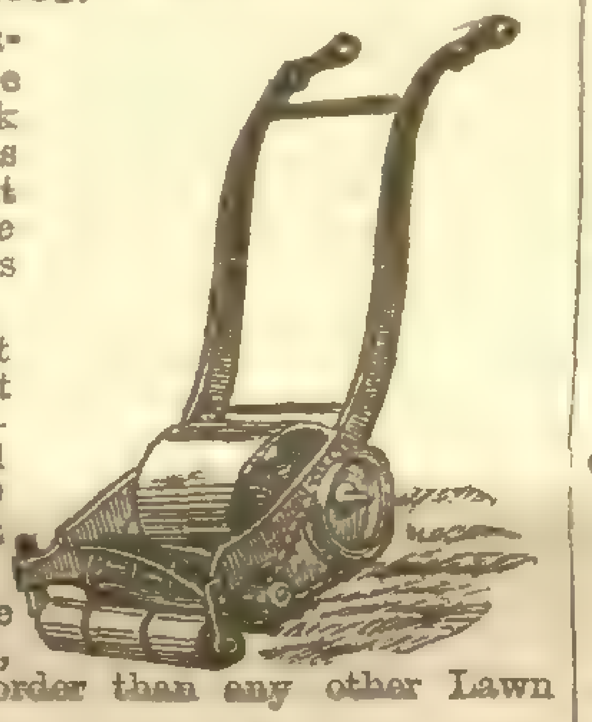
Ipswich, July 20

RANSOMES AND SIMS.

PUBLIC TRIAL OF LAWN MOWERS.—A Public Trial of Lawn Mowers took place at the Leeds Royal Park, in connection with the Horticultural Society, for the benefit of the Leeds Infirmary on Monday, the 15th inst., when the Judges awarded to Mr. Thos. Green, of Leeds, 3*l.* for the best Horse Machine; 2*l.* for the best Double-handed Machine; and 1*l.* for the best Single-handed ditto, being the whole of the prizes awarded. Although all the Mowing Machine Makers were invited to attend, the only competitors were Mr. Samuelson and Mr. Green.

For particulars apply to Mr. Thos. Green, Smithfield Iron Works: and at the Depôt, 2, Victoria Street, Holborn Hill, E.C.

Green's Patent Noiseless, Double Action, Self-Sharpening, Self-Cleaning, Grass Cutting, Collecting, and Rolling Machines for 1861.



THESE are the only Machines working at the Crystal Palace, Regent's Park Gardens, and hundreds of places where others have been put aside. Can also be seen at the Royal Horticultural Society's Gardens, Kensington, W.

They have proved to be the best and have carried off every prize that has been given in all cases of Competition. The sale has now reached above 200 weekly. Above 8000 have been sold within the last four years.

The above machines are the most simple and easy to work, and less liable to get out of order than any other Lawn Mowers extant.

Illustrated Price Lists may be had of Thomas Green, Smithfield Iron Works, Leeds; or W. Green, 2, Victoria Street, bottom of Holborn Hill, London, E.C.

Orders from unknown correspondents must be accompanied by a reference or remittance.

GRASS MOWING MACHINE.
First Prize, Royal Agricultural Society.

On June 27 and 28, at the Great Exhibition of Agricultural Machinery, held near Rotterdam, Messrs. Burgess & Key's celebrated Grass Mower, after two days' severe competition with Wood's and the best known Machines, was awarded the FIRST PRIZE.

Orders should be given immediately to secure delivery this season.

J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25*s.* 6*d.* each.

IRON YARD AND GARDEN PUMPS
3 feet 6 inches under spout

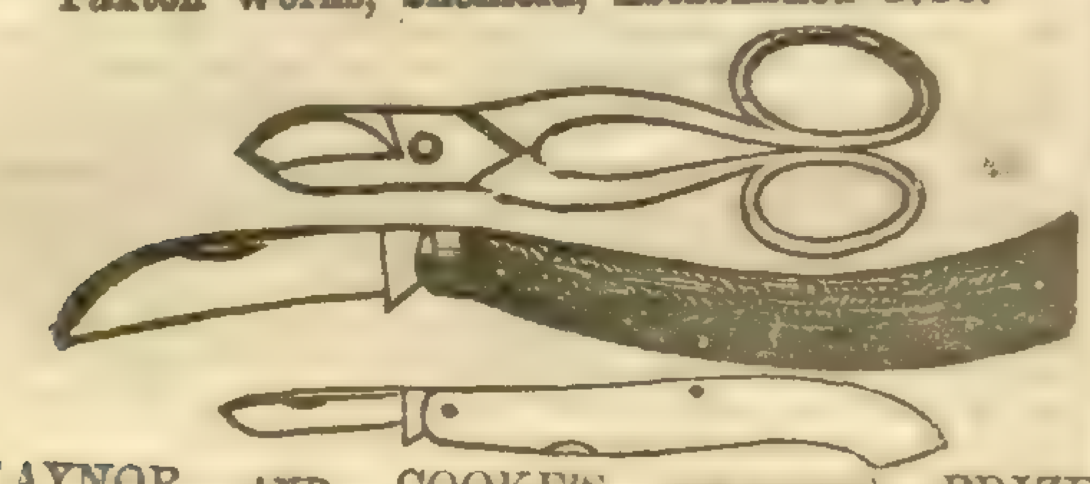
2¼	3	3¼ inch
43*s.*	58*s.*	60*s.* each.

J. Tylor and Sons manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.

PUMPS of J. Tylor & Sons' manufacture to be obtained of Plumbers in all parts of the United Kingdom.

J. Tylor & Sons, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

Paxton Works, Sheffield, Established 1738.



SAYNOR AND COOKE'S warranted PRIZE PRUNING and BUDDING KNIVES, SCISSORS, &c. Sold by all respectable Nurserymen and Seed Merchants in the three Kingdoms.

Garden Border Edging Tiles.

F. AND G. ROSHER, Cement, Brick, and Tile Merchants, beg to invite attention to their varied Stock of Ornamental Garden Border-edging Tiles in Terra Cotta, Terro-Metallic ware, and Red ware. They present advantages over Box or Grass-edging in that they afford no harbour for slugs, &c., take up less room, and once laid, require no further attention.

They may be had of various patterns at F. & G. R.'s Premises, Ward's Wharf, Upper Ground Street, Blackfriars, S.; and Kingsland Road Wharf, near the Canal Bridge, London, N.E.

N.B. Sketches of patterns sent by post on application. Garden Vases and Ornamental Flower Boxes for Windows and Balconies in stock.

ORNAMENTAL PAVING TILES for Conservatories, Halls, Corridors, Balconies, &c., as cheap and durable as Stone, inblue, red, and buff colours, and capable of forming a variety of designs.

Also WHITE GLAZED TILES, for Lining Walls of Baths, Dairies, Larders, Kitchen-ranges, &c. Grooved Terro-metallic and other Stable Paving Bricks of great durability, Clinkers, Red and White Wall-Copings, Glazed Drain Pipes, &c. To be obtained of F. & G. Rosher, at their Premises as above.

JOHN WARNER AND SONS, Crescent, Cripplegate, E.C.

WARNERS' PATENT VIBRATING STANDARD PUMPS.

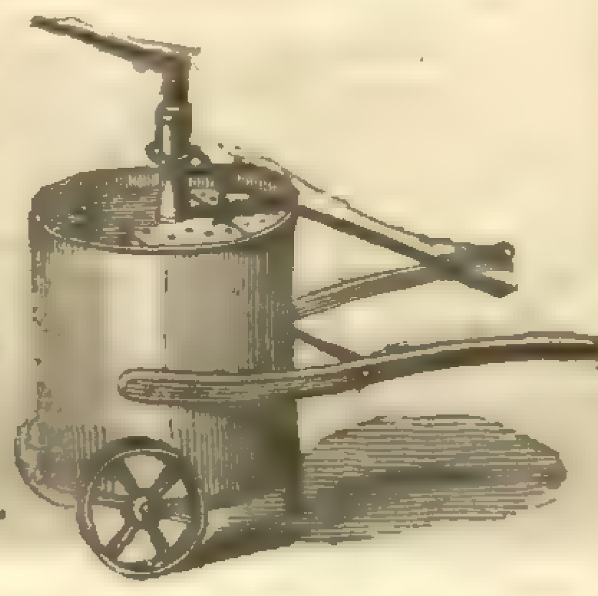
No. 35.

PATENT CAST-IRON PUMPS for Farms, Cottages, Stable Yards, &c., where the Well does not exceed 25 feet in depth; fitted with Warner's Patent Metal Bucket and Valve, which cannot clog in action. These Pumps can be made right-handed, left-handed, or with handle opposite the nose by removing four screws only.

Diameter.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead, gutta percha or cast iron flanged pipe as required.	1 1 0
2½ ,, long	3 ,, 3 ,,		1 10 0
3 ,, ditto	3 ,, 6 ,,		2 4 0
3½ ,, ditto	3 ,, 6 ,,		2 9 0
4 ,, ditto	3 ,, 6 ,,		2 18 0
2½ ,, short, with 15 feet of Lead Pipe attached, ready for fixing		....	2 0 0
2½ ,, long	ditto	ditto ditto	2 14 0

The short-barrel Pump is very convenient for fixing in situations of limited height and space for the supply of Coppers and Sinks in Wash-houses, with soft water from underground tanks, or in Hot, Forcing, and Plant Houses; they may be fixed, when desired, under the stage.

No. 579½.



No. 574½.

WARNERS' SWING GARDEN BARROW (holding about 35 gallons) is intended for all large establishments where much watering is done by the Watering Pot. By its use the Gardener will save much time and labour, particularly where the Tank, Pond, or Pump is at a distance from the Garden.

Price £2 10*s.*

WARNERS' GALVANIZED IRON TUB GARDEN ENGINE, with Registered Spreader, is strongly recommended for durability and low price, viz:—

			£	s.	d.
10 gallons,	iron..		2	15	0
16	,,	do...	3	15	0
24	,,	do...	5	0	0
14	,,	oak..	5	10	0
21	,,	do. ..	6	18	0

Larger sizes may be had in either Wood or Iron.

BRASS SYRINGES, from 9*s.* to 21*s.*

May be obtained of any Ironmonger or Plumber in Town or Country, at the above prices, or of the Patentees and Manufacturers,

John Warner & Sons, 8, Crescent, Cripplegate, London, E.C.

☞ Engravings sent on application.

By Her Majesty's ... Letters P...

E. DENCH, 152, King's Road, Chelsea, Inventor, Patentee, and Sole Manufac... PATENT GALVANISED IRON GREEN and HOTHO... These Patent Houses are manufactured comp... excellent strong glass, for 1*s.* 3*d.* per foot super ... to any amount can be given of their superiority over ... for use and durability.

Several Second-hand ones for Sale, a bargain, the ... being required for building where they stand, at ... Nursery.

West of England, Ireland, and Wales

V. SKINNER (late Partner with J. Weeks & ...) Horticultural Builder and Hot-Water ... Manufacturer. Establishments Heated on the ON... SYSTEM. Plans and Estimates on application.
Bridewell Street, Bristol.

JOSEPH HAYWOOD AND CO.,
Manufacturers of
PRUNING and BUDDING
KNIVES,
SPORTSMAN'S, and all kinds
of POCKET CUTLERY.

Dealers in Gambia Garden Shears, Scissors, Syringes, &c.

Glamorgan Works, Sheffield.

CAST-IRON GARDEN ORNAME...

TAZZA.

Size.
22 inches diameter by 14 inches high .. ..
30 inches ,, by 22 inches ,, ...
42 inches ,, by 25 inches ,, ...

The above may also be had with Pedestal.

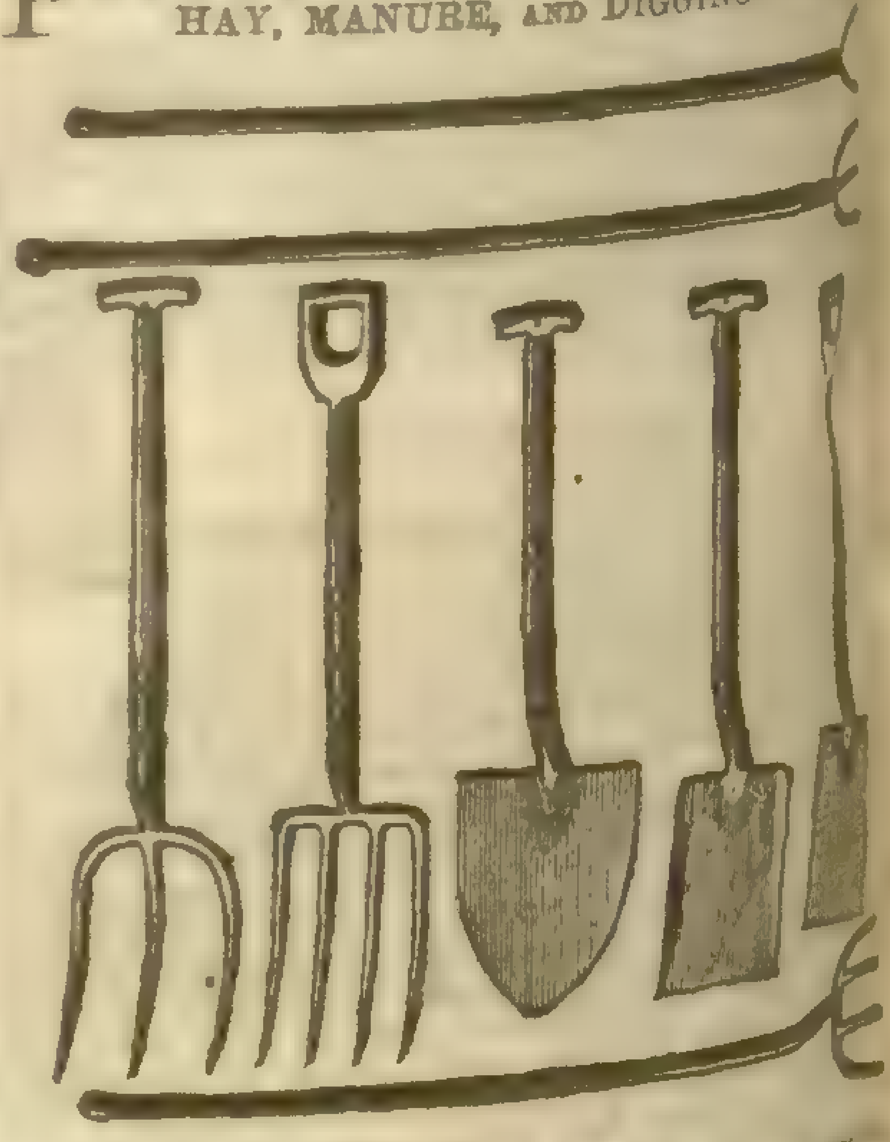
PRICES of TAZZA and PEDESTAL.

Size.
22 inches diameter by 28 inches high .. ..
30 inches ,, by 43 inches ,, ...
42 inches ,, by 46 inches ,, ...

J. Jones has much pleasure in stating that he ha... entirely new Stock of Cast-Iron Garden Ornamen... prising Vases of various patterns, Garden Seats o... and of both Plain and Ornamental Designs, Flow... Tables, &c.; he therefore requests that all parties ... such Castings will favour him with a visit to ... Show Rooms, where the above may be seen fitte... use, and he has no doubt they will prove to their sa...

Orders to the amount of 5*l.* and upwards Carria... any Railway Station in England. Post-office ... made payable to John Jones, Borough, S.E.

PATENT SPADES AND SHO... HAY, MANURE, and DIGGING FORK...



Made from one solid piece of cast-steel, without ... rivetting. Warranted to wear out at least thre... ordinary ones, and to work sharp and bright to the la... S. & J. received the Special Prize for these artic... Royal Society's Show at Canterbury last year, and Fir... Medals and Prizes at every other Exhibition at wh... have been shown.

Invented, Patented, and Manufactured by Spear & J... Etna Works, Sheffield.

ST. PANCRAS IRON WORKS,
OLD ST. PANCRAS ROAD, N.W.

IRON HURDLES, FENCING, AND GATES.

THE PROPRIETORS OF THE ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON,
WERE AWARDED THE
SILVER MEDAL of the ROYAL AGRICULTURAL SOCIETY for their IRON HURDLES and GATES,
which, by their peculiar construction, are more than twice as strong and durable as those in ordinary use.
Lists per post on application. Gates from 30*s.* to 300*l.*

The Hurdles can be seen in process of Manufacture at the Works.

GAME WIRE NETTING.

PROFESSOR VARNELL'S ENAMELLED AND WROUGHT-IRON STABLE FITTINGS.

These Patent Mangers and Stable Fittings obtained the Commendation and the Silver Medal of the Royal Agricultural Society of England and the Royal Agricultural Society of Ireland, are adopted by the Royal Veterinary College, and Professor Spooner of that Institution states that they should be used by all who value the health and comfort of their horses. They can be had plain, galvanised, or enamelled.

A Show Room is devoted entirely to every description of Stable Furniture, and full-sized stalls and loose boxes are erected for inspection at St. Pancras Iron Works.

ADDRESS—THE MANAGERS,
ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, N.W.,
Opposite Old St. Pancras Church.

Garden Border Edging Tiles.

F. and G. ROSHER, Cement, Brick, and Tile Merchants, beg to invite attention to their varied Stock of Ornamental Garden Border-edging Tiles in Terra Cotta, Terro-Metallic ware, and Red ware. They present advantages over Box or Grass-edging in that they afford no harbour for slugs, &c., take up less room, and once laid, require no further attention.

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Also WHITE GLAZED TILES, for Lining Walls of Baths, Dairies, Larders, Kitchen-ranges, &c. Grooved Terro-metallic and other Stable Paving Bricks of great durability, Clinkers, Red and White Wall Copings, Glazed Drain Pipes, &c.

To be obtained of F. & G. Rosher, at their Premises as above.

Gutta Percha Tubing for Watering Gardens.

THE GUTTA PERCHA COMPANY have the pleasure to acknowledge the receipt of the following *Testimonial from* Mr. J. Farrah, *Gr. to* Boswell Middleton Jalland, Esq., *of Holderness House, near Hull.*

"I have had 400 feet of your Gutta Percha Tubing, in lengths of 100 feet each, with union joints, in use for the last 18 months for watering these gardens, and I find it to answer better than anything I have ever yet tried. The pressure of the water is very considerable, but this has not the slightest effect on the tubing. I consider this tubing to be a most valuable invention for Gardeners, inasmuch as it enables us to water our gardens in about one-half the time, and with one-half the labour required."

Manufactured by the Gutta Percha Company, Patentees, 18, Wharf Road, City Road, London, E.C., and sold by their Wholesale Dealers in town and country.

For Watering Gardens, Lawns, &c,

HANCOCK'S VULCANISED INDIA-RUBBER TUBING is made in 60 feet lengths, and of any size for Union-joints to attach it to Cisterns or Water Mains.

Price per Foot.

Size.	½ inch	⅝ inch	¾ inch	Price of Brass Fittings.
Slight ..	5d.	6d.	7d.	Branch, 12 in. long, with Stop-
Medium ..	8d.	9d.	10d.	cock, Rose, and Jet, 4s. each.
Stout ..	10d.	11d.	1s.	Spring Spreader 3s. each.
For Mains	1s. 2d.	1s. 3d.	1s. 5d.	Union Joint, ½ inch, 1s. each.

JAMES LYNE HANCOCK, Manufacturer, Vulcanised India-Rubber Works, Goswell Mews, and 8, Goswell Road, London, E.C.

N.B. Illustrated Price Lists on application.

GLASS PRESERVE JARS.—

	Without Lids.	With Lids.
3 inches diameter	0s. 4½d. ..	0s. 6½d. each.
4 " "	0 6 ..	0 9 "
5 " "	0 8 ..	0 11 "
6 " "	0 10 ..	1 2 "
7 " "	1 0 ..	1 4 "
8 " "	1 4 ..	1 8 "
9 " "	1 8 ..	2 2 "
10 " "	2 0 ..	2 8 "

Intermediate Sizes in proportion.

BEE GLASSES.

4 ins. diameter	0s. 6d. each	9 ins. diameter	1s. 8d. each
5 " "	0 8 "	10 " "	2 0 "
6 " "	0 10 "	11 " "	2 6 "
7 " "	1 1 "	12 " "	3 0 "
8 " "	1 4 "	Not made above 12 inches.	

James Phillips & Co., 180, Bishopsgate Street Without, London, E.C.

Card.

SAMUEL N. McGERROW, General Horticultural Builder, Knotty Ash, near Liverpool.

Reference permitted to the Nobility and Gentry throughout Great Britain and Ireland.

HOT-WATER APPARATUS FITTED in every description of Hothouses, Mansions, Churches, Chapels, &c., on the most approved principle, by J. Meredith, Vine Cottage, Garston, near Liverpool.

N.B. First-class references may be had on application.

J. VOKINS, 2, York Place, Chelsea, S.W.—HOTHOUSES, fixed, complete from 1s. 4d. per foot; HOTWATER APPARATUS for same, with 2-inch pipes, 9d. per foot; 3-inch ditto, 1s.; 4-inch ditto, 1s. 2d.; Dips and other castings, 21s. per cwt.

TUBULAR BOILERS, from 3l.

GREENHOUSES, made of good Yellow Deal, at 8d. per foot; if Glazed and Painted, 1s. per foot.

PIT LIGHTS painted complete, 8s.; a quantity ready made. Also Greenhouses, viz. Lean-to, 24 feet long and 12 feet 6 ins. wide, price 34l.; do., 22 do. by 11 do., 28l. A span roof, 16 feet wide and 27 feet long, 40l.

Apply to Joseph Smith, New Road, Hammersmith, W.

Greenhouses, Orchard Houses, and Conservatories.

H. FREEMAN'S Horticultural Works, Triangle, Hackney, N.E. Established 20 years. Substantially [illegible] 42 feet by [illegible] feet, [illegible] feet by 1[illegible] feet, [illegible]. Orchard Houses [illegible] per foot [illegible]. A large assortment kept.

Estimates [illegible] for Heating, or any branch in iron or wood.

Horticultural Works and Hot-Water Apparatus Manufactory,

Kensal Green, Harrow Road, London, W.

JOHN TAYLOR and SON beg to call the attention of the nobility and gentry to the very superior manner in which they Erect all kinds of Conservatories, Vineries, Greenhouses, &c., combining every improvement with elegance of design and durability of materials and workmanship.

Their VENTILATING APPARATUS for the Fronts and Roofs of Houses has given the highest satisfaction. Churches, Chapels, Schools, Entrance Halls, Public Buildings, &c., heated with Hot-Water Apparatus in a most economical and efficient manner.

J. T. & Son have great pleasure in referring to numbers of the nobility and gentry by whom they are extensively engaged.

SMALL PLEASURE STEAMERS, fitted for Lakes or Rivers and every description of Experimental and other Engineering work. Charges moderate.

S. Smith, 204, High Holborn, London, W.C.

CARSON'S ORIGINAL ANTI-CORROSION PAINT is now used extensively for all kinds of Out-door Work, such as Iron, Wood, Stone, Brick, Compo, Cement, &c., and has been proved, after a practical test of 70 years, to surpass any other Paint.

For fuller particulars, see No. 25 of the *Gardeners' Chronicle*, Page 572, or apply to Walter Carson & Sons (Successors to the Inventors), 9, Great Winchester Street (near the Royal Exchange), London, E.C.

No Agents throughout the United Kingdom.

Oil Paint no longer Necessary.

HILL & SMITH'S PATENT BLACK VARNISH for preserving Iron Work, Wood, or Stone. This Varnish is an excellent substitute for oil paint on all out-door work, and is fully two-thirds cheaper. It may be applied by an ordinary labourer, requires no mixing or thinning, and is used cold. It is used in the grounds at Windsor Castle, Kew Gardens, and at the seats of many hundreds of the nobility and gentry, from whom the most flattering testimonials have been received, which Hill & Smith will forward on application.

Sold in casks of about 30 gallons each, at 1s. 6d. per gallon, at the Manufactory, or 1s. 8d. per gallon paid to any station in the kingdom.

Apply to Hill & Smith, Brierley Hill Iron Works, near Dudley, from whom only it can be obtained.

TANNED NETTING at Reduced Prices.—200 square yards, 10s.; 500 yards, 24s.; 1000 yards, 47s. SCRIM CANVAS for WALL FRUIT, GREENHOUSE SHADES and TULIP COVERS.

Address in full,

Frederick Edgington, Marquee, Flag, and Banner Manufacturer, Thomas Street, Old Kent Road, London, S.E.

TANNED NETTING for Fruit Trees, at reduced prices; 200 square yards, 10s.; 500 yards, 24s. Screen Canvas for Wall Fruits; Tulip Covers, Sun Shades, and Awnings; Rick Cloths, with Poles and Ropes complete; Marquees, Tents, and Flags, for sale or hire.

Edgington & Co., 17, Smithfield Bars, London, E.C.

TANNED GARDEN NETTING for preserving Seed Beds, Fruits, Strawberries, from Frost, Blight, Birds, &c., and as a Fence for Fowls, &c. 1 yard wide, 1½d.; 2 yards, 3d.; 3 yards, 4½d.; and 4 yards, 6d. per yard in any quantity, may be had at Chas. Wright's, 376, Strand, W.C.

Greenhouse and Flower-pot Sticks Varnished:—1 foot, 3d.; 1½, 4d.; 2, 5d.; 2½, 7d.; 3, 10d.; 4, 1s. 6d. per dozen. Dahlia Sticks Varnished, per dozen:—3 feet, 1s. 6d.; 4, 2s. 6d.; 5, 3s.; 6, 3s. 6d. An allowance to Nurserymen.

Important to Gardeners, &c.

SUPERIOR NEW GARDEN NETTING, to be had in pieces of any size (cheap), on application to Mr. A., 23, Esk Terrace, Whitby.

Wasps. The Wasps are Coming.

HAYTHORN'S HEXAGON and CHISWICK GARDEN NETS are guaranteed to protect all kinds of Fruit from Wasps, Flies, Birds, &c. These Nets are used and recommended by the principal Gardeners.

For testimonials, patterns, and prices, please direct to Mr. Haythorn, Nottingham.

TENTS, &c.—A quantity of Government Bell Tents and Marquees, suitable for Rifle Companies, Cricket Clubs, &c.; also Rick and Hay Cloths, Ropes, &c. Prices on application to John Morison, 25, Norton Folgate, N.E.

Important to Grape Growers.

SPARY'S FUMIGATOR and MILDEW ANNIHILATOR (Invented and Patented by Edward Spary, F.R.H.S., Queen's Graperies, Brighton), for destruction and prevention of Mildew in Grapes, Vines, and Plants, without injury to the Fruit or Foliage.—Vide *Gardeners' Chronicle*, April 13, page 351.

Sold wholesale by John Warner & Sons, 8, Crescent, Cripplegate, E.C.; Retail of any Ironmonger, or Nurseryman and Seedsman, 25s. each. The material is sold in packets (with full directions for use) at 1s. 3d. each, and wholesale by Mr. W. D. Savage, Chemist, 65, Edward Street, Brighton; Messrs. Barclay & Sons, 95, Farringdon Street, London, E.C.

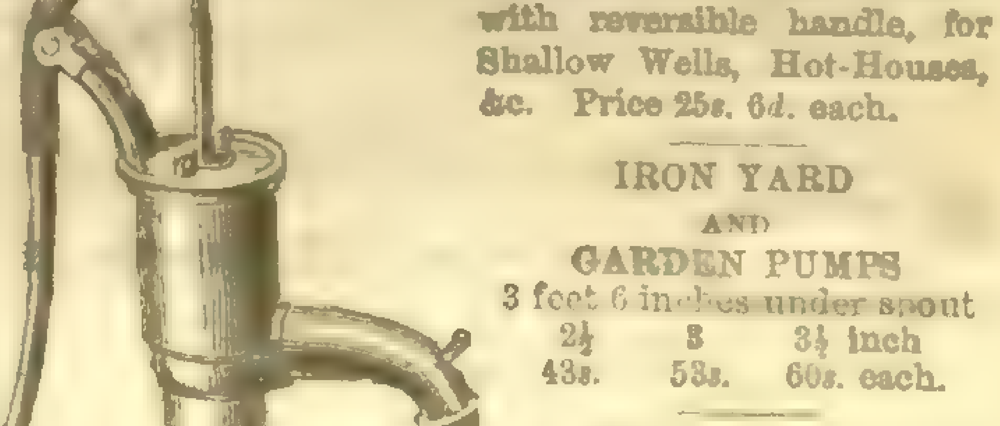
Prospectuses, with Testimonials, to be obtained of the Patentee, Brighton.

TRIAL of LAWN MOWERS.—On the 15th inst. a Public Trial of Lawn Mowing Machines (in connection with the Floral, Horticultural, and Entomological Exhibition, held on the 16th, 17th, and 18th inst., in the Infirmary Gardens, Leeds), took place in the Leeds Royal Park. The only competitors were Mr. Samuelson and Mr. Green, the latter of whom obtained the Three Prizes offered, viz.:—[illegible]l. for Horse Lawn Mowing Machine; 2l. for Double-handed Mowing Machine; and 1l. for Single-handed Mowing Machine. The Judges were Mr. Carr, Gardener to John Cooper, Esq., Gledhow; and Mr. Ellis, Gardener to E. Hudson, Esq., of Roundhay.

N.B. All the Mowing Machine Makers were invited for competition.

Priced Lists may be obtained on application to Thos. Green, Leeds; or from W. Green, at the Depôt, 2, Victoria Street, Holborn Hill, E.C.

Paxton Works, Sheffield, Established 1738.



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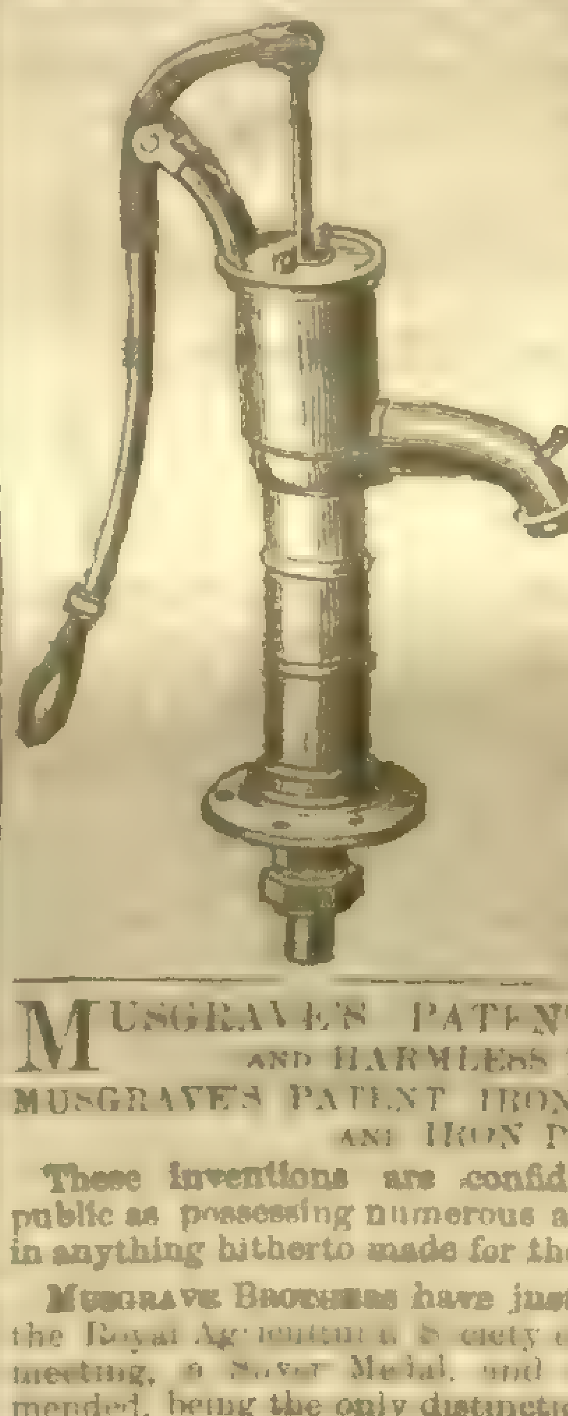

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3 feet 6 inches under spout

2½	3	3½ inch
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J. Tylor & Sons, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

MUSGRAVE'S PATENT STABLE FITTINGS and HARMLESS LOOSE BOXES. MUSGRAVE'S PATENT IRON COW HOUSE FITTINGS, and IRON PIGGERIES.

These inventions are confidently recommended to the public as possessing numerous advantages not to be met with in anything hitherto made for the same purposes.

Musgrave Brothers have just received from the Council of the Royal Agricultural Society of England, at the late Leeds meeting, a Silver Medal, and two Awards of Highly Commended, being the only distinction conferred on any exhibitor in this class.

Full particulars and prices will be sent on application to Musgrave Brothers, Ann Street Iron Works, Belfast.

GLASS WAREHOUSE.—ESTABLISHED 1750.

THOMAS MILLINGTON,

87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.

REDUCED TARIFF FOR HORTICULTURE, PICTURES, AND DWELLINGS.

ORCHARD-HOUSE SIZES.

Supplied to Mr. Rivers and many others.

In. by In.		16 oz.	21 oz.
20 .. 12	Common, per 100 feet,	13s. 6d.	18s.
20 .. 13	Super ..	20s.	22s.
20 .. 14			
20 .. 15			

SMALL SQUARES.

In. by In.	In. by In.	Per 100 feet.	Per foot.
6 .. 4	8 .. 6	Common	1½d.
6½ .. 4½	8½ .. 6½	11s. 6d.	
7 .. 5	9 .. 7	Super.	1¾d.
7½ .. 5½	9½ .. 7½	12s. 6d.	

SQUARES in 100 and 200 FEET BOXES.

Inches by Inches.	Inches by Inches.	Inches by Inches.	Inches by inches.	Inches by inches.		P. 100 feet.	P. foot.
10 .. 8	12½ .. 9½	13 .. 10	15 .. 10	13½ .. 11½	4ths.	12s. 6d.	1½d.
10½ .. 8½	13 .. 9	12½ .. 10½	12 .. 11		3ds.	14s. 3d.	1¾
11 .. 9	12 .. 10	14 .. 10	12½ .. 11½	14 .. 11	2ds.	18s.	2¼
12 .. 9	12½ .. 10½	14½ .. 10½	13 .. 11		1sts.	21s. 6d.	2¾
15 .. 11	15 .. 12	16 .. 13	24 .. 14	24 .. 16	4ths.	13s. 6d	1¾d.
16 .. 11	16 .. 12	17 .. 13	20 .. 15	20 .. 17	3ds.	16s.	2
17 .. 11	17 .. 12	20 .. 13	22 .. 15	20 .. 18	2ds.	19s. 8d.	2½
18 .. 11	18 .. 12	23 .. 13	24 .. 15	.. ..	1sts.	24s.	3
13 .. 12	20 .. 12	20 .. 14	20 .. 16	.. ..			
14 .. 12	22 .. 12	22 .. 14	22 .. 16	.. ..			

If less quantity than 100 feet is taken, a moderate charge made for package.

GLASS CUT TO ANY GIVEN SIZES NOT ON LIST.

16 oz.—4ths, 1¾d., 2d., and 2½d. per foot.
" 3ds, 2½d., 2¾d., and 3d. per foot.

21 oz.—4ths, 2¾d., 3d., and 3½d. per foot.
" 3ds, 3½d., 4d., and 4½d. per foot.

HARTLEY'S IMPROVED PATENT ROUGH PLATE.

Not accountable for breakage.

GENUINE WHITE LEAD	32s. 0d. per cwt.	LINSEED OIL	2s. 7d. per gall.
ANTI-CORROSION PAINT	34 0 "	BOILED	3 0
LINSEED-OIL PUTTY	8 0 "	TURPENTINE	—

BLACK, GREEN, and all other kinds of PAINTS, VARNISHES, BRUSHES, &c.

JOSEPH HAYWOOD AND CO.,

Manufacturers of

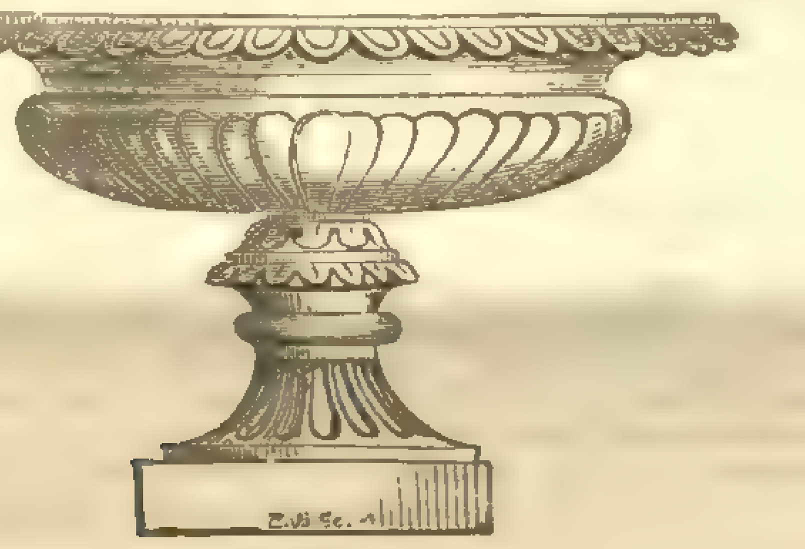
PRUNING and BUDDING KNIVES,

SPORTSMAN'S, and all kinds of POCKET CUTLERY.

Dealers in Gambia Garden Shears, Scissors, Syringes, &c.

Glamorgan Works, Sheffield.

CAST-IRON GARDEN ORNAMENTS.



TAZZA.

Size.	Price.
22 inches diameter by 14 inches high	£1 5 each.
30 inches „ by 22 inches „	2 5 „
42 inches „ by 25 inches „	3 15 „

The above may also be had with Pedestal.

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Size.	Price.
22 inches diameter by 28 inches high	£1 15 each.
30 inches „ by 43 inches „	3 8 „
42 inches „ by 46 inches „	4 15 „

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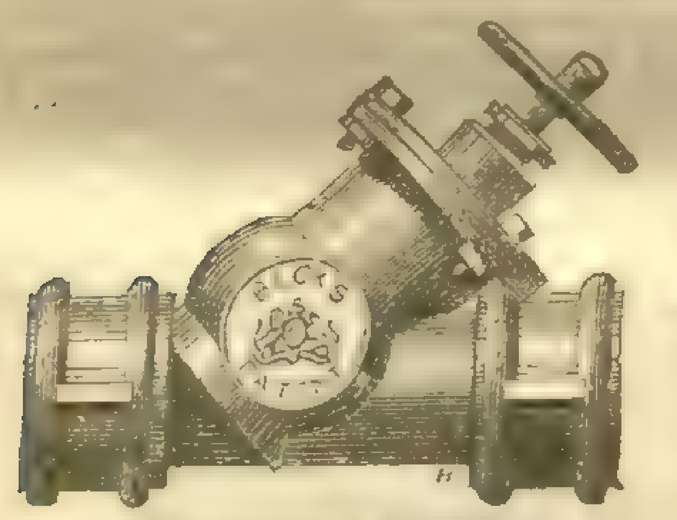
Orders to the amount of 5*l.* and upwards Carriage Paid to any Railway Station in England. Post-office Orders to be made payable to John Jones, Borough, S.E.

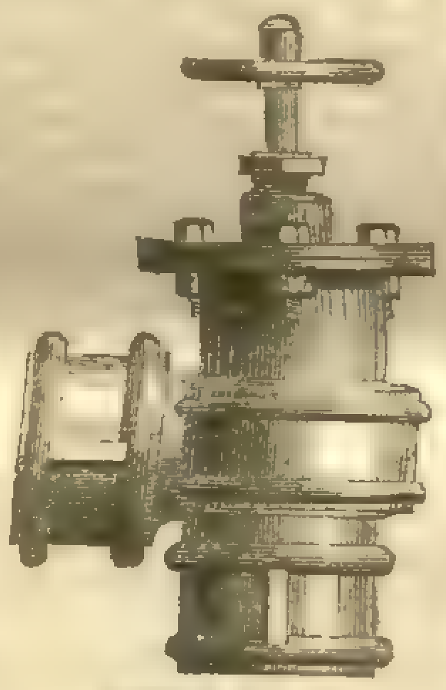
Horticultural Works, Danvers Street, Chelsea, S.W.

BECK'S PATENT

HOT WATER VALVE.



Horizontal Valve.
2″ 18*s.* 6*d.*; 3″ 25*s.*; 4″ 30*s.*



Angle Valve.
2″ 17*s.*; 3″ 23*s.*; 4″ 28*s.*

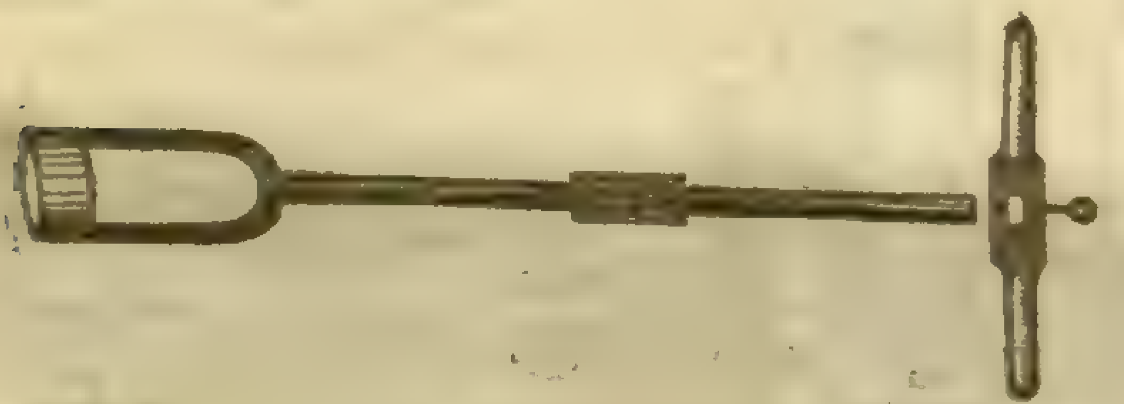
JAMES GRAY, Sole Agent, begs to call attention to this most simple and perfect Valve ever invented. It is perfectly water tight, and is never liable to get out of order, or to get fixed by standing.

To Architects, Engineers, Gardeners, & Others.—Beck's Patent Valve has been submitted to several of the most scientific men of the day, and has invariably met with unqualified approval. A liberal Discount to the Trade.

Conservatories, Greenhouses, Vineries, and every description of Hothouse erected on the most improved principles, and of best materials, at the lowest possible price consistent with good workmanship.

Heating by Hot Water in all its branches. Boilers of every approved description, Tubular, Saddle, Conical, &c.

James Gray, Horticultural Works, Danvers Street, Paulton's Square, King's Road, Chelsea, S.W.



WRIGHT'S STACK PRESERVER.—The frequent loss occasioned through the spontaneous combustion of Hay, Barley, &c., render this unfailing Preserver of the greatest importance to every Agriculturist. It is so simple in its construction and use that it cannot be injured by the commonest labourer, and if used before ignition, is infallible in its results.

When first it is suspected that the rick is too much heated, a chimney should be made in the part of the rick where it is most needed, and loss or deterioration even in colour will infallibly be prevented, and the destructive practice of cutting away a large part of the rick rendered needless. A circular aperture is quickly made by boring with the machine as low in the rick as may be required, adding each length as is found necessary. It is easier to work the handle backwards and forwards than continually round the same way.

It should be borne in mind that the loss occasioned by stacks destroyed by overheating cannot be recovered from any Fire Office.

The price is so low and the security it offers is so certain and important, as to recommend the possession of it to every farmer. Price in Case, with Lock and Joints, 2*l.* 5*s.*

It has been used in the neighbourhood of the Manufacturer for more than 40 years with unfailing success.

Orders accompanied with a Post-office Order for 2*l.* 5*s.*, payable to John Wright, Ironmonger, Chipping Ongar, will be executed on receipt.

Prices Reduced.

H. J. MORTON and CO., Galvanised Iron Works, 2, Basinghall Buildings, Leeds.

GALVANISED IRON ROOFING

for Farm Buildings and other Roofs; the cheapest, most durable, and neatest Roofing in use; also Spouting at 10½*d.* per yard.

WIRE STRAND CABLE FENCING

(formed of Twisted Wires like a rope or cable), the strongest, cheapest, and neatest fence in use, will resist the largest cattle, and will not bend or get out of form by trespassing upon or over. Price, with five lines of the Galvanised Strand, iron main posts, and pronged Standards, 1*s.* 2½*d.* per yard.

This fence is far cheaper than posts and rails, or any kind of iron fencing; and possesses four times the strength of solid bars. Will not rust nor corrode. Upwards of 1200 miles of this Fencing supplied.

GALVANISED GAME AND POULTRY NETTING.

Galvanised, 24 ins. wide 2-inch mesh, 5½*d.*, 7½*d.*, and 9½*d.* per yard.

Galvanised, 24 ins. wide, 3-inch mesh, 4*d.*, 5*d.*, and 7*d.* per yard. The Netting made any width, and with openings of any size.

GALVANISED IRON CHAIN CAMP STOOLS & CHAIRS, POULTRY FOUNTAINS & FEEDERS, PRONGED DAHLIA RODS and ROSE STAKES, &c.

Strong CATTLE HURDLES from 2*s.* per yard.

PATENT IMPROVED GAS WORKS

of all sizes, for the use of Private Houses, Mansions, Railway Stations, Mills, Collieries, Mines, Villages, &c. Works from 10 to 500 lights estimated for. The works can be entrusted to an ordinary labourer.—Apply to

Henry J. Morton & Co. 2, Basinghall Buildings, Leeds.

BARNARD, BISHOP, and BARNARDS, Norwich.

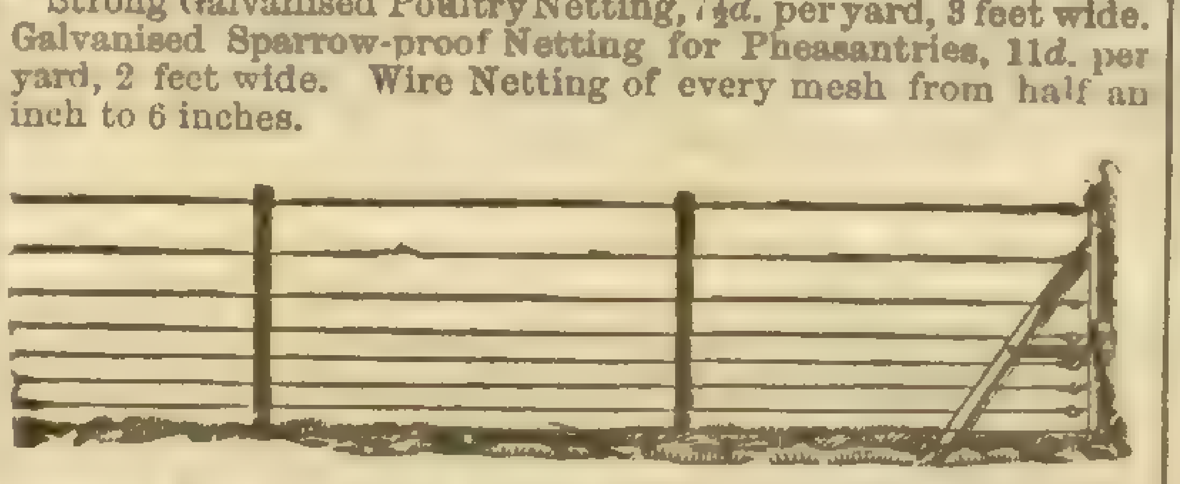
FURTHER REDUCTION in the PRICE of WIRE NETTING.—April, 1861.

Barnard, Bishop, and Barnards beg to inform their friends and the public that they have made a further reduction in the prices of Machine made Wire Netting, and also that all their Nettings are now Galvanised after being made, which adds much to their appearance, strength, and durability.

	Gauge.	Galvanised. per yard.	Japanned Iron. per yard.
2-inch mesh, 24 inches wide ..	No. 19 ..	4½*d.* ..	3½*d.*
2-inch „ „ „ ..	„ 18 ..	5 ..	4
2-inch „ „ „ ..	„ 17 ..	6½ ..	5
2-inch „ „ „ ..	„ 16 ..	8 ..	6½
1⅝-inch „ „ „ ..	„ 19 ..	4¾ ..	4
1⅝-inch „ „ „ ..	„ 18 ..	6 ..	4¾
1⅝-inch „ „ „ ..	„ 17 ..	7 ..	5½
1⅝-inch „ „ „ ..	„ 16 ..	9 ..	7

All the above kinds can be made any width (under 6 feet), at proportionate prices.

Strong Galvanised Poultry Netting, 7½*d.* per yard, 3 feet wide. Galvanised Sparrow-proof Netting for Pheasantries, 11*d.* per yard, 2 feet wide. Wire Netting of every mesh from half an inch to 6 inches.



Reduced Price of WIRE FENCING, and GALVANISED WIRE ROPE FENCING, suitable for the home trade or the colonies.

Five wires, 3 feet 6 inches high, pronged Standards, 8 feet apart, one wrought iron straining post and straining screws to each 100 yards of Fencing, 10*d.* per yard.

The same with Galvanised Wire Rope, 1*s.* per yard.

Illustrated Catalogues, with prices of every variety of Wire Fencing and Wire Netting, forwarded free on application.

☞ Wire Fencing and Netting delivered Carriage Free at all the principal Railway Stations.

BRADFORD'S PATENT WASHING MACHINE —"My terms of delivery as usual—A month's trial before payment—a severe ordeal for a domestic machine, but which I have now the greater confidence and pleasure in submitting to intending purchasers."

New Improvements in Bradford's Washing Machinery.

It is with pleasure that I give publicity to the improvements and additions made in my Washing Machines during the last few months.

My original Machine has now been before the public four years, during which, time and experience have fairly tested it, and while proving its excellence, have also suggested improvements, both in construction and mechanical detail: the result is, the labour of working is reduced to the smallest possible minimum, while the efficiency is increased, and a compactness and convenience of detail in the arrangements for both Washing, Wringing, and Mangling attained, that at once wins over prejudice, and secures the congratulation of my customers in a manner to cause me regret, that the Machines of my original customers (to whom I am so much indebted) do not possess the same advantages.

Most obediently, T. Bradford.

Thos. Bradford, Patentee, Cathedral Steps, Manchester; and 63, Fleet Street, London, E.C.

Works, Queen Street, Salford, Manchester.

SHAW'S TIFFANY for SHADING, &c.

Sold in Pieces. Per piece.—

No. 1, 20 yards long, by 38 inches wide .. ..

No. 2, do., do., the same material, manufactured with a Patent Mineral Solution to prevent it from rotting ..

No. 3 (double strength), 18 yards long by 39 inches wide ..

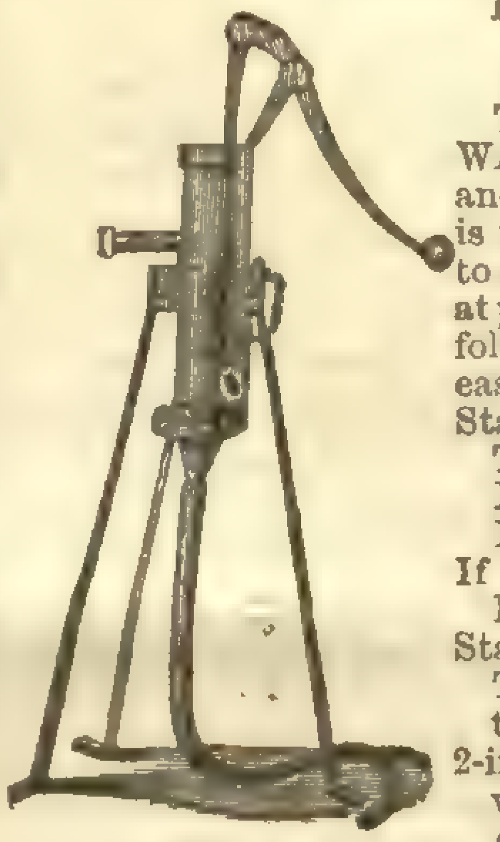
No. 4 (treble strength), 18 yards long by 39 inches wide ..

Sold by all respectable Seedsmen. See that every piece is marked "Shaw's Tiffany," Manchester. Samples and Circulars sent free by post.

John Shaw & Co., 29, Oxford Street, Manchester.

JOHN WARNER and SONS, Crescent, Cripplegate, E.C.

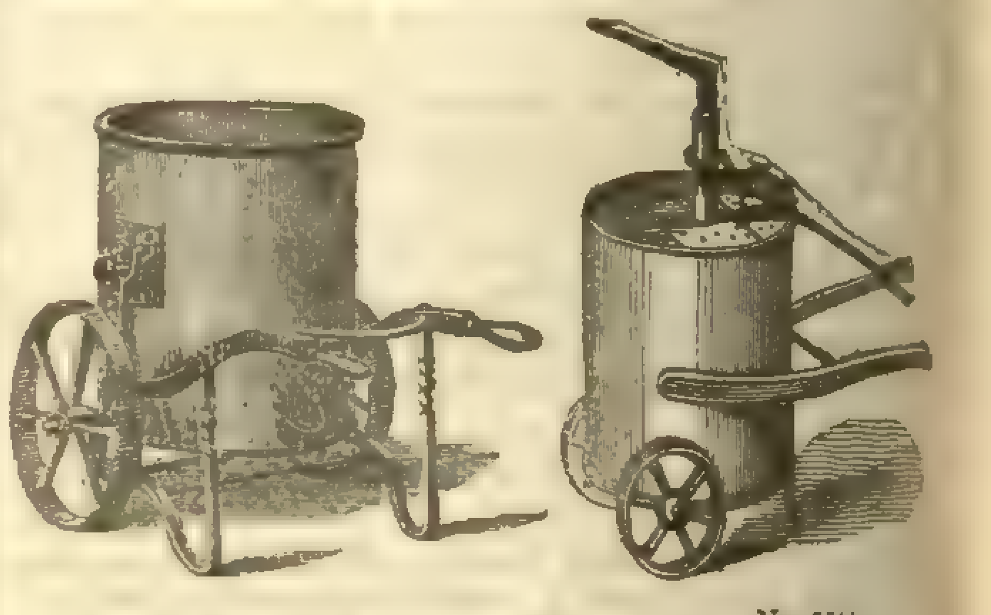
IMPROVED LIQUID MANURE OR GENERAL PORTABLE PUMP.



No. 42.

These Pumps are fitted with Warner's Patent Bucket and Valve, and cannot clog in action. The Barrel is made of Galvanised Iron, not liable to corrode, and can be raised or lowered at pleasure on the stand, the legs of which fold together, and may be carried with ease by one man to tank or pond.

	£ *s.* *d.*
Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe	2 1[illegible]
If fitted with Barrel of Planished Copper	3 1[illegible]
Stand and Pump, with plain Tail Pipe, for tying on Suction Pipe	[illegible]
2-inch Patent Rubber and Canvas Flexible Suction Pipe, on wires, either 10, 12, or 15 feet .. .. per foot	[illegible]



No. 579½.

WARNERS' SWING GARDEN BARROW (holding about 35 gallons) is intended for all large establishments where much watering is done by the Watering Pot. By its use the Gardener will save much time and labour, particularly where the Tank, Pond, or Pump is at a distance from the Garden.

Price £2 10*s.*

No. 554½.

WARNERS' GALVANIZED IRON GARDEN ENGINE, with Registered Spreader, strongly recommended for durability and low price, viz.:—

10 gallons, iron..	£2 15
16 „ do...	3 15
24 „ do...	[illegible]
14 „ oak..	[illegible]
24 „ do...	[illegible]

Larger sizes may be had in either Wood or Iron.

BRASS SYRINGES, from 9*s.* to [illegible]

May be obtained of any Ironmonger or Plumber in the Country, at the above prices, or of the Patentees and Manufacturers,

John Warner & Sons, 8, Crescent, Cripplegate, London, E.C.

☞ Engravings sent on application.

Le Sommier Elastique Portatif.

HEAL and SON have patented a method of making a Spring Mattress portable. The great objection to the usual Spring Mattress is its being so heavy and cumbersome.

The SOMMIER ELASTIQUE PORTATIF is made in [illegible] separate parts, and when joined together has all the elasticity of the best Spring Mattress. As it has no stuffing of wool or horse hair, it cannot harbour moth, to which the usual Spring Mattress is very liable; the prices, also, are much below those of the best Spring Mattresses, viz.:—

3 feet wide by 6 feet 4 inches long		.. ..	£2 5
3 feet 6 in.	„	„	2 10
4 feet	„	„	2 15
4 feet 6 in.	„	„	3 0
5 feet	„	„	3 5
5 feet 6 in.	„	„	3 10

The SOMMIER ELASTIQUE PORTATIF therefore combines the advantages of elasticity, durability, cleanliness, portability, and cheapness.

An Illustrated Catalogue of Bedsteads, Bedding, and Bed Room Furniture sent free by post on application.

Heal & Son, 196, Tottenham Court Road, W.

BATHS and TOILETTE WARE.—William S. Burton has ONE LARGE SHOW ROOM devoted exclusively to the display of Baths and Toilette Ware. The stock of each is at once the largest, newest, and most varied ever submitted to the public, and marked at prices proportionate with those that have tended to make his establishment the most distinguished in this country. Portable Showers, [illegible]; Pillar Showers, 3*l.* to 5*l.*; Nursery, 15*s.* to 32*s.*; Sponging, [illegible] to 32*s.*; Hip, 14*s.* to 31*s.* 6*d.* A large assortment of Gas Furnace, Hot and Cold Plunge, Vapour, and Camp Shower Baths. Toilette Ware in great variety, from 15*s.* 6*d.* to 45*s.* the set of three.

THE BEST SHOW of IRON BEDSTEADS in THE KINGDOM is WILLIAM S. BURTON'S.—He has FOUR LARGE ROOMS devoted to the exclusive show of Iron and Brass Bedsteads and Children's Cots, with appropriate Bedding and Bed Hangings. Portable Folding Bedsteads, from 11*s.*; Patent Iron Bedsteads, fitted with dovetail joints and patent sacking from 14*s.* 6*d.*; and Cots, from 15*s.* 6*d.* each; handsome Ornamental Iron and Brass Bedsteads, in great variety, from 2*l.* 13*s.* 6*d.* to 20*l.*

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Now ready, price 5s. 6d., being Third Edition, considerably enlarged,

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AN ELEMENTARY INTRODUCTION TO THE STUDY OF THE SCIENCE IN ITS RELATION TO AGRICULTURE.

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HONORARY MEMBER OF THE ROYAL AGRICULTURAL SOCIETY OF ENGLAND, PROFESSOR OF CHEMISTRY TO THE HORTICULTURAL SOCIETY OF LONDON; LECTURER ON CHEMISTRY IN THE HONOURABLE EAST INDIA COMPANY'S MILITARY SEMINARY AT ADDISCOMBE, &c. &c.

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"In accordance with numerous suggestions, very considerable additions have been made to this little book, in preparing it for a new edition; several important practical matters, not treated of in any former editions, having been introduced. Brief descriptions of the more important of the domestic arts, such as Wine and Vinegar Making, Brewing, the Manufacture of Spirits, Baking, Cheese-making, Cookery, &c., have been added, together with some account of the Scientific Principles involved in those arts. Numerous recent analyses of agricultural crops have likewise been given, and the whole has been carefully revised and corrected."

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XYLOIDINE
YEAST
Yeast as manure
Yeast, artificial
Yeast, bad
Yeast, dry
ZINC
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Zinc, oxide of
Zinc, sulphate of

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CALCEOLARIA NANA GRANDIFLORA PRÆCOX.—Very fine continental variety, exceedingly dwarf, novel and beautiful, with a profusion of bright flowers of great variety. Packets, 2s. each.

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Stephen Brown, Seed Grower and Importer, Sudbury, Suffolk.

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CATTELL'S DWARF BARNES and CATTELL'S DWARF RELIANCE may be had as usual, free by post for 12 penny stamps per packet, the former containing one ounce, and the latter half an ounce. May be sown as early as the middle of July, and will not run to seed the following Spring.

These two are the earliest and best Cabbages in cultivation. See remarks by P. A. W. in *Gardeners' Chronicle* of Feb. 2, 1861, page 99.

Nursery and Seed Establishment, Westerham, Kent.

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B. S. WILLIAMS begs to inform his friends and patrons that his CATALOGUE of the above is now ready, and will be forwarded post free on application. Early orders are solicited, as their successful cultivation depends in a great measure on early planting.

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Geraniums, Herbaceous and Alpine Plants, Orch Chrysanthemums, Hardy Variegated Plants, &c.

B. S. WILLIAMS begs to inform his friends patrons that a PRICED and DESCRIPTIVE LOGUE of the above, to which are added mental Lists of Fuchsias, Stove, Greenhouse, and Plants, Ferns, Ornamental Foliage and Variegated Fruit Trees, &c. (which include the best new plants season,) is now published, and will be forwarded post application.

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New Phalænopsis with Variegated Foliage.

B. S. WILLIAMS has great pleasure in offe for the first time strong Plants of Phalænopsis leriana, which have just arrived in the finest possible tion. This beautiful species is quite distinct from all others cultivation; the leaves are similar in form and equal in size those of P. grandiflora; ground colour dark green, with gular bands of white over the whole surface. Flowers coloured; size, about two-thirds of those of P. amabilis, and produced in great profusion from strong branches, of which may be seen at the Nursery, upwards of 100 flowers, a portion of which are still attached.

Price can be had on application.

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ROYAL HORTICULTURAL SOCIETY.

SCHEDULE OF PRIZES.

GRAND SHOW OF DAHLIAS AND OTHER CUT FLOWERS,

WEDNESDAY, SEPTEMBER 11, 1861.

The Special Regulations can be had of Mr. Eyles.

Exhibitors of cut flowers to provide their own stands. Entries in each class to be exhibited in separate stands of the following dimensions:—

	Length.	Breadth.	
48 Dahlias, 2 stands	4 ft. each.	1 ft. 6 in.	Height of stands 6 inches behind, and 4 in front.
24 Dahlias, 1 stand	4 „ each.	1 „ 6 „	
12 Dahlias, 1 stand	2 „ each.	1 „ 6 „	
48 Roses, 2 stands	4 „ each.	1 „ 6 „	
24 Roses, 1 stand	4 „ each.	1 „ 6 „	
24 Hollyhocks, 1 stand	4 „ each.	1 „ 6 „	
24 Asters, 1 stand	2 „ each.	1 „ 6 „	

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
1. 48 Dahlia Blooms. Distinct. .. .. (*Nurserymen*)	8 0	6 0	4 0	
2. 24 Dahlia Blooms Distinct. .. .. (*Nurserymen*)	5 0	3 0	2 0	1 0
3. 18 Dahlia Blooms Fancies, distinct .. (*Nurserymen*)	4 0	3 0	2 0	1 0
4. 24 Dahlia Blooms Distinct .. .. (*Amateurs*)	6 0	4 0	3 0	2 0

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	[illegible]
5. 12 Dahlia Blooms. Distinct. .. .. (*Amateurs*)	4 0	3 0	2 0	[illegible]
6. 6 Dahlia Blooms. Distinct. .. .. (*Amateurs*)	2 0	1 10	1 0	[illegible]
7. 12 Dahlia Blooms. Fancies, distinct .. (*Amateurs*)	3 0	2 0	1 0	[illegible]
8. 48 Cut Roses. 3 trusses, distinct .. (*Nurserymen*)	4 0	3 0	2 0	
9. 24 Cut Roses. 3 trusses, distinct .. (*Amateurs*)	4 0	3 0	2 0	[illegible]
10. 24 Cut Roses. Distinct. Single blooms. (*Open*)	2 0	1 0	0 10	
11. 12 Roses, in pots, not more than two of one kind (*Open*)	5 0	4 0	3 0	
12. 12 Hollyhocks, in spikes. Distinct .. .. (*Open*)	3 0	2 0	1 0	
13. 12 Hollyhocks, single flowers. Distinct .. (*Open*)	2 0	1 0	0 15	
14. 24 German Asters. "Quilled," distinct .. (*Open*)	2 0	1 0	0 15	[illegible]
15. 24 French Asters. "Tasselled," distinct .. (*Open*)	2 0	1 0	0 15	[illegible]
16. 24 Gladiolus, cut spikes. Distinct .. .. (*Open*)	2 10	1 10	1 0	
17. 12 Gladiolus, cut spikes. Distinct. .. (*Amateurs*)	1 10	1 0	0 10	
18. 12 Pots of Gladiolus. Distinct. Not more than 3 in each pot .. .. (*Open*)	3 0	2 0	[illegible]	
19. 24 Phloxes, single trusses. Distinct .. (*Open*)	2 0	1 0	[illegible]	
20. 12 Phloxes, in pots. Distinct .. .. (*Open*)	3 0	2 0	[illegible]	
21. 24 Verbenas, 5 trusses of each. Distinct .. (*Open*)	1 10	1 0	[illegible]	
22. Miscellaneous. For Flowers not specified .. (*Open*)	1 10	1 0	[illegible]	

GRAND FRUIT AND CHRYSANTHEMUM SHOW,

WEDNESDAY and THURSDAY, NOVEMBER 6 and 7, 1861.

The Special Regulations can be had of Mr. Eyles.

FRUIT.

A dish of Grapes to consist of 3 bunches; of Apples, Pears, Oranges, Lemons, and such like, 6 fruits of each; and of Plums, 9 fruits.

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.
A. Collection of Fruit .. .. (*Fruiterers only*)	4 0	3 0	
B. Collection of Fruit .. .. (*Private Growers*)	6 0	4 0	3 0
C. Pine Apples, collection of. 3 distinct kinds	4 0	3 0	2 0
D. Pine Apple. Single fruit, any variety	2 10	2 0	1 0
E. Grapes White Muscat. Basket of, not less than 10 lbs. weight	4 0	3 0	2 0
F. Grapes, White Muscat. Single dish	2 10	2 0	1 0
G. Grapes, White. Any other variety, single dish..	2 10	2 0	1 0
H. Grapes, Black Hamburgh. Basket of, not less than 10 lbs. weight..	4 0	3 0	2 0
I. Grapes, Black Hamburgh Single dish	2 10	2 0	1 0
J. Grapes, Frankenthal or Dutch Hamburgh. Single dish ..	2 10	2 0	1 0
K. Grapes. Black. Any other variety, single dish	2 10	2 0	1 0
L. Pears, dessert, collection of, 1 dish of each	4 0	3 0	2 0
M. Pears, dessert, collection of 6 dishes, distinct kinds	3 0	2 0	1 0
N. Pears, dessert, collection of 3 dishes, distinct kinds ..	1 10	1 0	0 10
O. Pears, dessert. Single dish, any variety	1 0	0 15	0 10
P. Pears, kitchen. Uvedale's St. Germain. Single dish	1 0	0 15	0 10
Q. Pears, kitchen. Catillac. Single dish	1 0	0 15	0 10
R. Pears, kitchen. Single dish, any variety	1 0	0 15	0 10
S. Pears. Heaviest 5 fruits, dessert	1 0	0 15	0 10
T. Pears, Stewed, jar of	2 0	1 10	1 0

Note.—These are to be prepared without sugar, spice, or any colouring matter, and to be shown in white glass jars. Ladies are particularly invited to cause jars of fruit to be sent for examination.

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.
U. Apples, dessert, collection of, 1 dish of each	4 0	3 0	2 0
V. Apples, dessert, collection of 6 dishes, distinct kinds	3 0	2 0	1 0
W. Apples, dessert, collection of 3 dishes, distinct kinds	1 10	1 0	0 10
X. Apples, dessert. Single dish, any variety	1 0	0 15	0 10
Y. Apples, kitchen, collection of 1 dish of each	4 0	3 0	2 0
Z. Apples, kitchen, collection of 6 dishes, distinct kinds.. ..	3 0	2 0	1 0
AA. Apples, kitchen, collection of 3 dishes, distinct kinds.. ..	1 10	1 0	0 10
BB. Apples, kitchen. Single dish	1 0	0 15	0 10
CC. Apples, kitchen. Heaviest 5 fruits..	1 0	0 15	0 10
DD. Pommes Tapes; that is to say, Apples dried in the same way as Normandy Pippins; of which an account is given in the *Gardeners' Chronicle* for 1860, p. 932. Note.—It must be observed that this process is quite different from that employed in preparing Norfolk Beefings			
EE. Oranges, Lemons, &c., collection of 1 dish of each	3 0	2 0	1 0
FF. Oranges, 4 plants, in pots or boxes, bearing fruit	3 0	2 0	1 0
GG. Oranges, best specimen of Tangerines, in pot	1 10	1 0	0 10
HH. Melons. Single fruit, any variety	1 0	0 15	0 10

Class.	1st Prize. £ s.	2d Prize. £ s.
II. Plums. Single dish, any variety	2 0	1 10
JJ. Strawberries. Single dish	1 0	0 10
KK. Currants. Single dish	0 10	[illegible]
LL. Raspberries. Single dish	0 10	[illegible]

Note.—Fruit specified in the above Classes will be excluded from MM.

MM. Miscellaneous .. .. 60s., 50s., 40s., 30s., 20s.

CHRYSANTHEMUMS.

Exhibitors of Cut Flowers to provide their own stands, of the following dimensions:

For 24 Blooms, 1 stand 4 feet long, 1 foot 6 inches broad.
For 12 „ „ 2 „ „ „
For 6 „ „ 1 „ „ „

Height of stand, 6 inches behind, 4 inches in front.

☞ Preference will be given to plants trained in the bush-like or pyramidal

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.
1. 6 Plants. Distinct varieties, on single stems (*Nurserymen*)	4 0	2 0	1 0
2. 6 Plants. Distinct varieties, on single stems (*Amateurs*)	6 0	4 0	2 0
3. 8 Plants. Distinct varieties, on single stems (*Amateurs*)	2 10	2 0	1 0

Note.—Pots not to exceed 11 inches in diameter in Classes 1, 2, and 3.

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.
4. 6 Plants, Pompons. Distinct varieties, on single stems .. .. (*Nurserymen*)	4 0	2 0	1 0
5. 6 Plants, Pompons. Distinct varieties, on single stems .. .. (*Amateurs*)	6 0	4 0	2 0
6. 6 Standard Chrysanthemums or Pompons .. (*Open*)	4 0	2 0	1 0

Note.—Pots not to exceed 8 inches in diameter in Classes 4, 5, and 6.

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.
7. 6 New varieties of the current year	2 0	1 0	0 10
8. Single specimen, single stem, either Chrysanthemum or Pompon .. .. (*Open*)	1 0	0 15	0 10
9. 24 Cut blooms. Distinct .. .. (*Nurserymen*)	2 0	1 0	[illegible]
10. 24 Cut blooms. Distinct .. .. .. (*Amateurs*)	3 0	2 0	1 0
11. 12 Cut blooms. Distinct .. .. .. (*Amateurs*)	1 10	1 0	0 10
12. 6 Cut blooms. Distinct .. .. .. (*Amateurs*)	0 15	0 10	[illegible]
13. 6 Cut blooms. Distinct. Anemone flowered (*Open*)	0 15	0 10	[illegible]
14. Best group of cut blooms .. .. (*Open*)	2 0	1 0	0 10

New Seed saved from

J. DOBSON AND SONS' Superior Collections, now ready, in sealed packets.

CALCEOLARIA, hybridised, ex. ex., 1s. 6d., 2s. 6d., 3s. 6d., and 5s.
CINERARIA, from only the very best, 1s., 2s. 6d., and 5s.
PRIMULA, finest fringed, 1s., 2s. 6d., and 5s.
PANSEY, from the best known kinds, 1s. and 2s.
STOCK, Intermediate, Scarlet, 6d.

Post Free on receipt of Stamps for the amount.
Woodlands Nursery, Isleworth, W.

New Seeds for Present Sowing at Reduced Prices, Carriage Free.

SUTTON AND SONS can now supply the undermentioned for immediate sowing:—

Early Six Weeks Turnip	Italian Rye-grass
Pomeranian White Globe ditto	Permanent Meadow Grasses
Imperial Green Globe ditto	Fine Lawn Grasses
Lincolnshire Red Globe ditto	Trifolium incarnatum
Smart's Mousetail ditto	Mustard and Rape
Green Stone ditto	Brown Cos Lettuce
Drumhead Cow Cabbage	Hardy Hammersmith ditto
Sutton's Imperial Earliest Garden Cabbage	Early London Cauliflower
Wheeler's Imperial ditto	Fine Walcheren ditto
Enfield Market and others	Onion, of sorts
	Early Horn Carrot

Calceolaria, Cineraria, Primula, and other choice Flower Seeds 1s. per packet.

PRICED LISTS of the above new or fresh Seeds may be had on application addressed

SUTTON & SONS, Royal Berkshire Seed Establishment, Reading.

The Gardeners' Chronicle.

SATURDAY, JULY 27, 1861.

THE summer pruning of Vines is a question just now largely occupying the attention of our Correspondents, if we may judge from the communications which reach us, and of which the following is an example:—

"I cultivate my Vines on the spur system, and plant many Vines in one house, so that it is desirable, in order to obtain as much light and air as possible, to cut away all superfluous shoots. Planting my Vines in the centre, and against back walls of Vineries, I fruit from 1 foot above ground upwards. Now may I cut away shoots that have no bunch on them, and how near the main stem? May I cut away closely all laterals on the spurs between the bunch and main stem? and, as I shall *not* require one third of the *top leading* shoot to remain permanently, may I cut or stop this *at once* to the extent required? and may I cut, close in, any laterals on such leading shoots? As I find gardeners are not generally **acquainted with the spur system, now so much liked, your kindly answering these questions, and giving physiological reasons for your opinion, will be of great service to many gardeners.** *A Subscriber.*"

The information sought by our Correspondent involves many considerations of importance, amongst which a correct knowledge of the peculiar habit and mode of bearing which is characteristic of the Vine is one of the most prominent. In most of our cultivated fruits, such as the Apple, the Pear, and the stone fruits, such as the Cherry, Peach, and Plum, the crop is either borne directly on the branches developed in the preceding year from buds formed in the axils of the leaves, or else it is produced on the short stunted-looking branches of older growth, which are called spurs. **In both cases a distinct kind of bud known as a "fruit-bud" is organised during the summer's growth, and becomes recognisable as such as soon** as or even before that growth is matured. It follows that in all this class of fruits there can be no crop produced **unless the conditions of** growth during **the preceding year have been such** as to secure the formation, in sufficient abundance, of the "fruit-buds" to which allusion has been made.

The habit of the Vine is altogether different from this. It bears its clusters on the young shoots **of the current year's** growth, and not directly on the branches of the preceding season, and these bearing or productive shoots **may be** developed from any part of the stem, either from the old or the young wood. By the system of close spur-pruning, as it is **called, the stem of an** old Vine may be so pruned **that nothing would** remain but a gnarly and **apparently budless rod,** and yet from such a bare pole buds hitherto latent or dormant would be found to burst forth, often with much vigour, and every shoot thus produced would be eligible for bearing fruit. These latent buds, be it observed, had their origin in the axils of leaves borne around the bases of young shoots which existed perhaps many years previously; and although covered by **successive layers of alburnum, such** buds retain **the power of bursting into active** growth, when stimulated to do so by a sufficiently strong flow of sap, and especially when there is no more ready outlet provided in the form of prominently placed buds, for the pent-up vital force of the plant. While on the other hand, if perfectly organised buds are present in abundance, these latent buds are rarely **if ever stimulated into growth.**

The Vine, it will then be seen, bears fruit only **on young shoots of the current year's growth;** and **these shoots may proceed from any part of the** stem, whether old or young, wherever buds either prominent or latent exist. Under favourable circumstances every one of these young shoots may become fruit-bearing, whilst if the circumstances connected with their growth are unfavourable, they may all produce leaves only and no fruit.

The most favourable circumstances under which **Vines can be placed,** with the view to the production **of fruit, are those in which the plants** have secured to them a full and regular supply of sap, and in which at the same time the leaves are **most thoroughly and favourably exposed to the** action of light and air, so that this sap may be properly elaborated for the sustentation of the whole plant, roots and top. There is in the growth of plants a reciprocity of action between the roots and the leaves, which, in artificial cultivation, is too frequently overlooked. Without sap elaborated by the healthy action of the leaves the roots **cannot long continue to be formed;** and without healthy roots the leaves cannot be produced beyond the small extent of development which may be derived from the store of sap previously existing in the stem and branches, which store, when growth commences, is soon exhausted. So long, therefore, as the reciprocal action between roots and leaves is duly maintained, so long will the plant, whether it be a Vine or a plant of any other kind, continue in health and vigour, all other conditions being favourable: but if this reciprocity is not maintained the vigour of the plant must decline.

Now it is by **pruning** that we can direct an **increased** supply of sap to particular parts, for by cutting away a considerable portion of a shoot, leaving only a few buds to receive the whole of the sap that would otherwise have been distributed amongst many, those few become stimulated to produce larger and more vigorous shoots and leaves and buds for future bearing than would have been the case if many more had **shared the same amount of supply. By pruning, moreover, the amount of foliage may be so** regulated, that the whole may be properly and duly **exposed to light. In the case of Vines it is from** enlarged and vigorous shoots, leaves, and buds, the **result of such judicious pruning, that large clusters and large berries are obtained.**

But in endeavouring to secure these advantages of pruning, it is possible to err by carrying the process too far. **Intent on exposing the** leaf-surface to the light, **the extent of that surface may** be so much **reduced as injuriously to affect the general vigour of the plant. The shoots may be** so excessively **thinned and shortened** that the leaves which they **can possibly bear** may not **present a surface area equal to one-fourth of that** of the glass under which they are grown, and the **consequence of** this **would be that the** Vines could accomplish little more than one-fourth of the general building up, **so to speak, of their growth; the consolidation of their tissues, or in gardening phrase the maturation and ripening of their wood,** which would be effected if foliage to the extent of the remaining three-fourths of the area exposed to **light had been retained. This of course applies to** established Vines in which a vigorous root action exists.

A young Vine left to its natural growth, and not subjected to any accident or artificial check, would present in each succeeding year a more **extended leaf-surface; at least it would do so for very many years. It would be well if Vines trained under glass could be** permitted to do the same: **but instead of this, the space being limited, they soon fill out that which is allotted to them, and no scope is left for an annual increase of foliage.** Consequently, **the amount of leaf surface must become** stationary, sooner or later, according to the size of the structure, and the rapidity of growth in the Vines. These should nevertheless be encouraged to fill the house with foliage as soon as possible, their annual increase being progressive; and never even when they have **reached their limits** should they bear a less amount of leaf-surface than in the previous year. This rule, if attended to, **would do much towards** preventing failures of the **crop.** and towards silencing the complaints we constantly hear about badly-made borders.

It may safely be **affirmed that the first aim in** Vine-culture should **be that of growing every year** an abundance of foliage, *as much indeed as can be grown without overcrowding.* To bear this amount of foliage there must, **consistently with the above-named condition, be an aggregate length of shoots produced; but these may be** either few and long, exemplifying what is called the long-rod system of pruning, **or they may be** comparatively numerous **and short, which is the** characteristic of the spur system of pruning. Good crops and fine fruit may be obtained by **following either system; but as a rule, the largest** bunches and berries are obtained **from the long** rods. The reason of this is, that more leaves can be grown on a long shoot than on a short one, and other conditions being equal the long shoot consequently becomes thicker towards the base; from this, when cut **back at the winter pruning,** a **stronger bearing** shoot is developed than would be **the case from a smaller rod, and being stronger this is capable of forming a larger bunch than** could be obtained from smaller wood. As great a weight of fruit may, however, be obtained by the spur-system as by the other, for the bunches though smaller may be more numerous.

These general remarks will have afforded a general reply to the inquiries of our Correspondent; but we may add a few more particular remarks on **each of the questions propounded:—1.** It is to be understood, that none of the shoots are superfluous provided **they have space to expose** their foliage duly to the light; **but if there is not sufficient space to effect this, they must be stopped in their growth** so that the leaves may not crowd or overshadow each other. 2. Although shoots **may have no bunches on them, they must not be cut away, so long as they have space to grow.** 3. The laterals between the bunch and main-stem should be cut off above their first joint; they might have been pinched off entirely at an early stage of their development. 4. The leading shoot should be permitted to grow as far as space will permit, but the laterals should be removed from it, except one just below the point at which it is found that it will be necessary to stop the leader itself; afterwards, this remaining lateral is to be pinched back to one joint.

THE EFFECTS OF THE CIVIL WAR IN AMERICA **are already felt in the progress or rather paralysis of science. With the exception of the Crimean** episode, it is so long since any great or prolonged **war has taken place** between civilised people, that few now living can recollect what effect the interruption of pacific relations had upon scientific intercourse. The Crimean campaign was wholly exceptional; instead of operating as a stoppage upon the acquisition of scientific knowledge, it added to it, and specimens from the seat of war which were formerly rare became common from mutual intercommunication between the belligerent nations. The war in America would seem in **this respect to promise less happy results.** The following lines dated in May, **received not long ago from one of the most eminent** naturalists in the Northern United States, **places this in a somewhat graphic light. "I hoped ere this to be able to send you a copy of the first part of my new work. But the civil war broke out just as my drawings were made, and although the text has been in print for several weeks, all the men I** engaged have become draftsmen in another sense **from that in which I engaged them. I was about** preparing several papers for printing; **but the excitement of the last three weeks has unsettled everybody, and there will be no more study until** we are accustomed to the novel sensation of being at war with those who were recently our best friends.. The rising of the people of the **North is** one of the grandest things you could **imagine. Never was** a nation so unprepared **for war as the** people of the Free States three weeks ago. Now, everybody is drilling; all business is suspended, and no one knows how he will get money for the next year, so there is ample time for military instruction. I trust, however, that the great energy put forth by the North, and our greatly more abundant resources of money and men, **as well as** the willingness of every one to make any sacrifices, will soon put a stop to this scheme of breaking up the country for the purpose of satisfying the ambition of a few leaders thrown out of power by **a change of administration. I fear that these things are not of much interest to you who live so** far away, but we feel here as if our whole future usefulness was compromised by the Southern **movements, and since they on their part are equally determined, I fear a very bloody war is before us."**

MYCOLOGY.—No. LV.

Agaricus personatus, *Fr.*—This well-known species belongs to the fourth sub-genus of *Agaricus* (Tricholoma), so named from θριξ, a hair, and λωμα, a veil, a name it must be confessed formed on the old principle of contraries, scarcely a species showing any trace of a veil. It professedly, however, imports nothing more, than that where a veil is present it consists simply of a little pubescence not matted together into a membrane. The sub-genus is a large one, and contains many important species. The essential character depends on the want of a closely woven veil; on the central somewhat fleshy stem, which is not furnished with a distinct bark as in *Collybia;* and above all in the gills being sinuated behind, and not truly decurrent. The sub-genus is distinguished from *Amanita* and *Lepiota* by the stem not being distinct from the part which bears the gills, from *Armillaria* in the absence of a woven veil, and from *Collybia* in the stem not being cartilaginous externally. Some species of *Pleurotus* differ merely in their excentric stems and growth from decayed wood, though such a habitat is not unknown in *Tricholoma*, as for example in the beautiful yellow gilled *A. rutilans*, which is so conspicuous on Pine stumps from its red velvety head. This however seems in Sweden to grow upon the ground in Pine woods. Not a single poisonous species is known to exist in the sub-genus, and many of them are excellent articles of food. In no division can experiments be made with greater safety.

In his most recent work on Agarics, Fries divides Tricholoma into seven sections.

1. Pileus viscid in wet weather, often streaked or granulated, but very rarely floccose or torn into scales. Stem fleshy, generally solid, never quite naked. We have several species belonging to this section, such as the meal-scented brown *A. albobrunneus*.

2. Pileus dry, the cuticle breaking up into threads or cottony tufts. Stem between fleshy and fibrous, never quite naked. Some of the commonest Agarics of our Fir-woods, as *A. terreus*, are representatives.

3. Cuticle rigid, never viscid, commonly breaking up into little grains or smooth scales. Substance in general hard and brittle. *Ag. cartilagineus* is an example.

4. Cuticle none; pileus quite dry, at first more or less silky, then smooth, neither floccose nor scaly. The beautiful but strong scented *A. sulphureus*, which is not rare in our woods, is an example. Experiments with this species are not likely to be made, as its peculiar scent, like that of gas tar, is sure to excite disgust.

5. Pileus very fleshy, often spotted as if drops of water had rested upon it, or minutely cracked when dry. Almost all the species are of early growth, and several, as *A. gambosus*, No. XXIII., are well-known articles of food.

6. Pileus at first compact, then spongy, obtuse, even, smooth, moist but not viscid. To this section belongs the subject of our present illustration.

7. Pileus thin, more or less umbonate, when moist having a watery aspect (hygrophanous), when dry becoming pallid. *A. grammopodius*, which like *A. personatus* occurs in pastures, is our best native example.

A. personatus is known at once by its livid smooth thick obtuse pileus, perfectly free from any trace of an umbo, which has a sleek appearance when moist, and by its fibrillose bluish stem, from whence it has received the common name of Blewits, under which it is frequently sold in Covent Garden Market. It is extremely common in rich moist pastures, where it grows either solitary or in large rings. It forms an acceptable dish, when gathered in dry weather. As it absorbs moisture so rapidly it is not worth attention in very wet weather. When gathered on a dry morning in well exposed pastures, it is an excellent species if well broiled and seasoned with Chives and other sweet herbs, though it has a peculiar flavour, which, like that of Olives or Laver, is not acceptable to every palate.

It is curious that this species, though one of the few exposed for sale in London, does not make its appearance in continental markets. Indeed it seems little known on the Continent, and does not appear in the works of Vittadini and Roques. Its principal use in London is for ketchup, but it is too watery in general for that purpose; and when dry, the little which it affords is not of good quality. The only species with which it is likely to be confounded, if the white spores and blue stems are properly considered, is *A. nudus* and its varieties. That species, however, has the pileus and gills more or less tinted with violet, and is one of our most beautiful Agarics, while this has a far more modest exterior. It derives its specific name of *personatus* or masked, from its having formerly been confounded with the very different *Cortinarius violaceus*. *M. J. B.*

Agaricus personatus, *Fr.* From an original sketch.

ATMOSPHERIC ELECTRICITY.

Electricity has a twofold sphere of action, indirectly in causing the precipitations of aqueous vapour, and with it certain ammoniacal or acid matter—in its evident relation to the phenomena of the distribution of heat—and in its effect in producing variations in the atmospheric pressure; these may be called the indirect means through which electricity is rendered subservient to the wants of nature since it is through, and depending upon other meteorological processes that the above-mentioned phenomena are experienced. Directly, its influence, both on the entire animal and vegetable world, is not less powerful and important than its indirect action, in stimulating the nerves and promoting the circulation of the organic juices. Whilst the indirect influence of electricity is only occasional, and at some seasons greater than at others, in different parts of the earth so widely differing in amount; its direct influence, on the other hand, is ever at work, pervading every particle of matter. There is scarcely any function of nature the performance of which does not give birth to this unseen but powerful agent. The mighty ocean is a fruitful source of electricity; the tiny inland rivulet also supplies its quota—the rank and tangled forests of America, as well as the meanest leaf that springs in the cottage garden.

Electricity is of two kinds, negative and positive, the positive kind being that most usually present; during a storm both kinds are always, or nearly always, exhibited, and usually change from the one to the other with great rapidity. We have frequently observed during the passage of clouds highly charged with electricity that, as the first edge of the cloud reached the zenith the previous positive electricity, as shown by instruments for the purpose, has changed to negative, remained so during its passage, and again has become positive on the cloud leaving the zenith of the place. According to Peltier, slate grey clouds have resinous or negative electricity, and white, rose and orange-coloured clouds have the vitreous or positive kind. It is during the time of electric storms and tempests that the existence and mighty power of this invisible agent is most forcibly brought before us; we there trace it in all its terrible grandeur and energy. When such an explosion takes place it is owing to a larger amount of electricity being in one place than is usual, and the equilibrium must be restored by its dissipation or dispersion over a wider field of space; it is then we see the vivid lightning flash dart either from cloud to cloud, or from a cloud to the earth, accompanied by thunder—the concussion caused by the rapid passage of the electric matter through the air.

Lightning seems to be of three kinds: the zigzag form, sometimes called forked; that without any definite form, which is by far the most common in these latitudes, illuminating a great portion of the heavens in its passage; and lightning in the form of globes of fire. The time of duration of the two former kinds is scarcely appreciable, probably less than the thousandth part of a second; the latter kind is much slower in its passage, as its appearance sometimes lasts for two or three seconds, or even more. It is when the phenomena of electricity take place on a large scale, as in a storm, that it exerts its gre[at] indirect influence, causing those violent summer [rain]falls with which every one is familiar. Every fla[sh of] lightning, as it darts through the atmosph[ere,] has the power of disengaging some acids from [the] moist air which is brought with the rain d[own] to the earth, proving highly conducive to the prog[ress] of vegetable life. But it is not only during [the] occurrence of storms that electricity is actively [em]ployed in the work for which nature designed [it.] When not a cloud obscures the celestial vault, [and] not the lightest air disturbes a single leaf, the at[mo]sphere is always in a state of electric tension, i[n a] greater or less degree. The much vexed question [of] its primary source is still a contested point; whe[ther] it is evolved, as has been maintained by som[e,] by the evaporation of impure liquids; or to chemi[cal] decompositions taking place on the surface of th[e] ground; to the unequal distribution of heat in the various atmospheric strata; or whether, as P[ouillet] suggested, its existence is due to the growth of pl[ants,] is difficult to determine satisfactorily. Most probab[ly] it has its origin in more than one of these sources, a[nd it] might perhaps be more difficult to say where it [is] than where it is generated.

In fine and calm weather the electricity [of the] atmosphere is invariably of the positive kind, a[nd its] tension is the strongest in the evening; during [fogs its] tension is usually very strong, and sometimes c[hanges] from positive to negative. It is a pretty sure si[gn of a] run of bad weather when the electrometer in[dicates] the presence of the negative kind; during falls o[f snow] the kind alternates repeatedly, during hail perma[nently] negative electricity is a[...] The amount of electricity [like] all other meteorological [pheno]mena, has its periods of [...] maxima and minima as w[ell as] the longer epochs as [...] from season to season [...] diurnal range may be [...] follows:—

At sunrise the atmospheric [elec]tricity is weak; it continu[es to] increase as the sun rises [above] the horizon, and the vapours collected in the lower [strata] of the atmosphere. Th[e in]crease of the electric [...] with the age of the day [con]tinues, in summer, [till] 7 o'clock; in th[e ...] autumn till abou[t ...] morning; and [in the winter] months till 10 o'[clock]. Generally, the electricity [...] rapidly decreases after reaching its maximum, and by [...] 2 o'clock in the afternoon it is usually not [...] stronger than at sunrise. The minimum occurs, [in sum]mer, between 5 and 6 p.m., and in winter at 3 [...] The minimum lasts longer than the maximum[...] the sun declines it begins again to increase, es[...] at the moment of the sun's reaching the horiz[on ...] on increasing during twilight, and reaches its [...] maximum at some one or two hours after sunset[...] this period the lower strata of the atmosphe[re ...] loaded with vapours, as in the early m[orning ...] and night dews fall. From this time the ele[ctricity] decreases again rapidly until the next m[orning.] During fine weather the positive electricity is [...] in winter than in summer, and varies [...] between these two periods.

Thunder storms occur most frequently in Eu[rope in] the months of June, July, August, Septem[ber,] October, or generally speaking during the summ[er and] autumn. In England winter storms are rare, [but] in more southern Europe they occasionally [take] place, and that too with considerable violence.

Electric storms are of a far more severe cha[racter in] equatorial regions than with us, as indeed [...] supposed, from the great rapidity with which [...] tion goes on, and also from the quick and ra[...] tion of those parts; as we approach nearer [...] are of still more rare occurrence and of fe[...] till they entirely disappear within some 5[...] latitude. *C.*

NEW GARDEN FERNS.

45. Asplenium obtusilobum, *Hooker, Icones Pl[antarum]*, t. 1000.

Dwarf, tufted, stoloniferous; fronds erect, firm, gloss[y ...] ovately lance-shaped, pinnate; pinnæ pinnatifid, with [...] shaped segments, the larger of which are 2-3 [...] smaller entire; sori few solitary on the margin [...] ments; stipes and rachis compressed, narrowly wing[ed ...] as well as the veins sparingly stellate-scaly.

This very distinct Fern has recently been [in]troduced to this country along with many other inter[esting] plants by Sir Daniel Cooper, late Speaker of the Le[gis]lative Assembly, Sydney, and is now in possession [of] Mr. Veitch, of the Royal Exotic Nursery, Chelsea. [It] is a native of the New Hebrides, and was describ[ed a] short time since by Sir W. J. Hooker from spec[imens] gathered in the island of Tanna, by Mr. C. Moore. [The] plant proves to be a very pretty little tufted Fern [...] firm dark green smooth shining fronds, of sma[ll ...]

3 to 5 inches high, and elegantly divided in a pinnato-pinnatifid way, into narrowish wedge-shaped lobes, of which the lower are usually separated at the end into about three bluntish teeth, while the others are evenly bifid, and the smaller ones undivided. The fronds are narrow, tapering from the base upwards, and the pinnæ are short, more or less obliquely ovate in outline. Very few sori appear to be produced, and these solitary on the margin of the segments, opening outwards, as in the Darea group to which the species belongs. The plants are furnished with scattered stellate almost hair-like scales on the rachis and veins. The fronds form a thick dwarf tuft, out of which grow numerous stolones forming at intervals little black buds, from which plants are developed. It will therefore become a very elegant dwarf greenhouse basket Fern.

47. TODEA SUPERBA, *Colenso, Tasm. Journ. Nat. Sc.* ii. 188. LEPTOPTERIS SUPERBA, *Presl.*

Fronds very short-stalked, pellucid-membranaceous lanceolate, much attenuated at the base, bipinnate; pinnæ linear-oblong acuminate, the lower deflexed; pinnules pinnatifid with numerous crowded narrow entire or forked segments; rachides clothed with brown setæ; sori oligocarpous, consisting of spore-cases thinly scattered along the veins.

This beautiful Fern, which is one of the loveliest of its race, was exhibited before the Floral Committee of the Royal Horticultural Society a short time since, by Mr. Veitch, of Chelsea, and was awarded, as it richly merited, a first-class certificate of merit. The fronds have the Hymenophyllum-like texture of the now common species known as T. pellucida but more correctly named T. hymenophylloides; it is, however, very distinct in its general aspect from that also beautiful plant. The differences consist mainly in the outline of the fronds, which in T. superba are strictly lance-shaped, tapering very much towards the base, and shortly instead of elongately stalked; and in the direction of the segments, which in T. hymenophylloides spread out flat in one plane, but in T. superba are much more crowded, and turned upwards, bristling over the whole surface of the frond. It is further distinguished by its stout stipes and main rachis, and by the copious bristly or hair-like scales which clothe the underside of the main and partial rachides. The fronds are from 2 to 4 feet long in the mature plant. Mr. Colenso describes the older ones as spreading outwards, while the younger ones, generally three in number, circinate and of a lighter green, rise in the most graceful suberect manner from the centre. This quite accords with the habit of Mr. Veitch's plant, in which, though yet small, the fronds spread out in a gracefully arching manner. These Todeas are closely related to the Osmunda, and like it form thick rootstocks, which sometimes acquire a trunk-like character. Todea superba is a native of New Zealand, and consequently a greenhouse species. *T. M.*

POISONOUS PLANTS OF THE VITI OR FIJI ISLANDS.

BY BERTHOLD SEEMANN, PH.D., F.L.S.

VEGETABLE poisons are extracted by certain natives who make a profound secret of their art, and it would require an intimacy of years before any reliable information on this point could be elicited. I was ready to make presents of hatchets, knives, and other valued articles to get some insight into their toxology, but Mr. Pritchard, H.B.M. Consul, begged me to abstain; the natives would take alarm at my inquiry, and if perchance any great man should be taken ill or die during my visit, it would at once be said that I, availing myself of the knowledge acquired, had administered a fatal dose—a most undesirable thing in the present state of political transition. The Fijians have both slow and acute poisons, and when a man is gradually sinking (often, no doubt, from a very different cause) it is readily believed that "he has a dose." He will then seek the advice of some skilful native physician, if possible one at Bau, the capital, to administer the necessary antidotes and restore him to health. However, very often there is no time to interpose between the fatal dose and its consequences, the effect being almost instantaneous. When, in October 1860, I revisited Cakaudrove, a poisoner had just been strangled by order of the ruling chief, he having been detected in putting a certain drug in a cigarette which proved fatal to the smoker. The poisoner, on finding himself condemned to die, not only pleaded guilty to this crime, but also confessed to having been instrumental in bringing about the death of no less than 300 individuals, all victims to his infamous art.

There being no chance of gaining any direct information about the more subtle poisons from the lips of the natives themselves, an examination of all plants possessing narcotic properties would supply the deficiency, if it were not for an anomaly, as yet insufficiently explained, that certain species, shunned as poisonous in one country, are eaten with impunity in another. There are Mushrooms which in England are absolutely noxious, on the Continent wholesome food. In Fiji the leaves of the Boro yalo ka ni gato (Solanum oleraceum, Dun.), a spiny species closely allied to Solanum nigrum, Linn., and those of the Boro dina (Solanum anthropophagorum, Seem.), as well as the fruit of the latter and that of the Boro Sou or Sousou (Solanum repandum, Forst.), are eaten, the latter in soups with Yam. I was in some measure prepared for this, having seen quantities of the first-named species, as well as the Black Nightshade itself, (Solanum nigrum, L.) exposed for sale in the markets of Port Louis, Mauritius, and learnt, on inquiry, that they were common pot-herbs, eaten both by the white and coloured population, as intimated by Bojer in his Hortus Mauritianus. A species of Strychnos is met with in Viti Levu, but I have not been able to learn whether the natives are aware of its containing strychnine. A kind of Upas tree (Antiaris sp.), commonly termed "*Mavu ni Toga*," probably because it has been introduced from the Tonga Islands, was formerly planted about heathen temples, and is even now to be found in towns and villages. It is a middle sized tree, with a thick crown of dark foliage, oblong glossy leaves, and a fleshy fruit of the size of an Apricot, covered with a velvety skin of a most beautiful crimson colour. A gum exuding from the stem and branches is used for arrows. The exact nature of its poisonous qualities has not yet been ascertained. That they are not equal to those ascribed to the true Upas tree of Java (Antiaris toxicaria, Leschen.) is proved by the manner in which the natives handle it; but it is impossible to say whether one of the reasons for its cultivation near temples, and its probable introduction from Tonga, may not be found in its yielding a poison, of which the heathen priests may have occasionally made use.

Among the trees most dreaded by the natives on account of their noxious qualities, the Kau Karo, literally Itch-wood, occupies a prominent place, and seems to act somewhat like Rhus venenata, or Semecarpus Anacardium. Mr. Pritchard and myself first heard of its existence during our visit to the southern shores of Vitu Levu in July, 1860, and we were fortunate enough to obtain specimens of the tree on the banks of the river, proving it to be the Oncocarpus Vitiensis, A. Gray, an Anacardiaceous plant. The tree, when fully developed, is about 60 feet high, having large oblong leaves, and a very curious corky fruit, somewhat resembling the seed of a Walnut. On handling the specimens a drop of the juice fell on the hand of one of our party, and instantly produced a pain equal to that caused by contact with a red hot poker. Mr. C. A. Egerström, a Swedish gentleman residing on the island of Naigani, had been still more unfortunate in his accidental contact with the Kau Karo, and on visiting his hospitable roof on the 2d of July, 1860, he was just recovering from the effects of the accident. Having desired a native carpenter to procure him a spar suitable for a flag staff, one was brought of Kau Karo, about 42 feet long and 22 inches in girth at the foot, having a white wood, and a green bark, not unlike that of the Vau dina (Paritium tiliaceum, Juss.). Ignorant of the poisonous qualities of the tree, Mr. Egerström himself peeled off the bark, and found the sap beneath it was plentiful. "In the evening,"—I quote Mr. Egerström's own words, in a letter to the British Consul,—"I was troubled with considerable itching about my legs and every part of my body which had come in contact with the spar, especially about the abdomen and lower parts, having sat across the tree when barking it. All the parts affected became red and inflamed, breaking out in innumerable pustules, which emitted a yellowish matter with a nauseous smell. The itching was exceedingly painful and irritating, and my arms having been bare when operating upon the tree, also became inflamed and broke out as already described. The neighbouring natives who came to watch my proceedings, now warned me, too late, not to touch the tree, as it was a poisonous one, and advised my keeping quiet and not to touch or scratch the parts inflamed. This advice, however, I could not follow, the irritation for several days being excessive. I employed no remedy, but bathed daily, as usual, in fresh water, although advised to the contrary, and did not get rid of the injurious effect of the Itchwood for nearly two months."

Another tree, the contact with which is avoided by the Fijians, is the Sinu gaga (Excoecaria Agallocha, Linn.), or Poison-Sinu, called so in contradistinction to the Sinu damu (Leucosmia Burnettiana, Bth. = Dais disperma, Forst.?), and the Sinu mataiavi (Wikstrœmia indica, C. A. Meyer), both of which, like the Sinu gaga, are littoral plants. The Sinu gaga is found in Mangrove swamps, or on dry ground, or just above high-water mark. It is 60 feet high, has a glossy foliage, oblong leaves, and minute green flowers arranged in spikes. It is difficult to exterminate, for unless the stumps are taken up, innumerable young shoots spring up the moment the main stem is felled. When the tree is wounded an abundance of white milky juice flows, which causes a burning effect on coming in contact with the skin. Some natives, however, can handle this poisonous juice with perfect impunity (*era sinu dranu*), analogous to what I witnessed in the Manzanillo or Manchineel tree of tropical America, the sap of which caused me the greatest agony after it had accidentally entered my eyes, and never raised even as much as a blister on being allowed to dry on the hands of a travelling companion. The smoke of the burning wood affects the eyes with intolerable pain, exactly as does that of the Manchineel tree, of which I gave an instance in the Narrative of the Voyage of H.M.S. Herald, vol. i., p. 141,—one of our boat's crew becoming blinded for several days after lighting a fire with Manchineel wood. None but those who have been sufferers from the effects of these poisons can form any adequate conception of the agonies endured and courage displayed by a Fijian, who voluntarily submits himself to be cured of leprosy by the smoke of Sinu gaga wood. The Rev. W. Moore, of Rewa, was well acquainted with a young man of the name of Wiliami Lawaleou, who underwent the process of being smoked. Mr. Moore gave me the full particulars of this remarkable case when being his guest in 1860, and he has also published a full account of it in "The Wesleyan Missionary Notices," Sidney, 1859, p. 157, which I may be allowed to paraphrase here. After stating that he knew Wiliami as a fine healthy young fellow, Mr. Moore was surprised to find him one day much altered by the effects of leprosy. Some time after he again met him full of health, and on inquiry learnt the treatment adopted to bring about this change. Taken to a small empty house, the leper is stripped of every particle of clothing, his body rubbed all over with green leaves, and then buried in them. A small fire is then kindled, and a few pieces of the Sinu gaga laid on it. As soon as the thick black smoke begins to ascend the leper is bound hand and foot, a rope fastened to his heels, by means of which he is drawn up over the fire, so that his head is some 15 inches from the ground, in the midst of the poisonous smoke. The door is then closed, and his friends retire a little distance, whilst the poor sufferer is left to cry and shout and plead from the midst of the suffocating steam; but he is often allowed to remain for hours, and finally faints away. When he is thought sufficiently smoked, the fire is removed, the slime scraped from the body, and deep gashes cut in the skin until the blood flows freely. The leper is now taken down and laid on his mats to await the result—in some cases death—in many life and health. Wiliami had undergone this fearful process. He had taken some of the youths of the place, and on the way to the smoking house told them his pitiable condition, his shame as an outcast, and his willingness to suffer anything to obtain a cure, and much would depend on their firmness. They were not to be moved by his groans and cries, and for the love they bore him he begged them to do the operation well, and threatened to punish them if they performed it only half. Imagine the scene! They proceed to the lonely house. Wiliami's companions, as much afraid of overdoing as underdoing their sad task, leave the poor leper drawn up by his heels in the midst of a thick black smoke; they retire to some distance, and presently are horrified by his piteous cries and groans. Some weep, some run home, others rush into the smoking-house to take him down, but, with Spartan-like endurance, he commands them not to terminate his suffering until the process is complete. At last they release him. He is faint and exhausted. The operation has been successful, Wiliami is no longer a leper, but again walks God's earth a healthy man.

The *Nettles*,—those mosquitoes of the vegetable kingdom, irritating but never killing as they do,—are collectively termed "Salato," a name also including those animals familiarly known as Sea-nettles. There are two kinds. The Salato ni coro is an annual weed (Fleurya spicata, Gaud. var. interrupta, Wedd.), which abounds about towns and villages (hence the specific appellation of "ni coro"), and although the virulence of its sting is not to be compared to that of our European Nettles, the natives so carefully avoid all contact with it, and ran away in such fright when I gathered specimens for the herbarium, that one is tempted to fancy their skins more keenly affected by it than ours. Still greater is their dread of an Urticaceous tree (Laportea sp.), 40 and 50 feet high, which they simply term "Salato" (Nettle), and which, when touching the skin, produces a burning pain, similar to that ascribed to the sap of Malawaci (Trophis anthropophagorum, Seem.). Milne (Hook. Journ. and Kew Gard. Misc. ix. p. 110), states that its sting is felt for months. "I am suffering at this moment," the writer continues, "from an accident which occurred a month ago. There is no eruption, but it is most painful when exposed to the influence of water."

The materials employed by the natives for poisoning, or rather stupifying fish, a custom as prevalent all over Polynesia as it is amongst the Indians of America, are the square fruit of the Vutu rakaraka (Barringtonia speciosa, Linn.), and the stem and leaves of the Duva gaga (Tephrosia piscatoria, Pers.), both plants growing in abundance on the sea-beach, just above high-water mark. As soon as these materials—pounded to render them more efficacious—are thrown into the water or drawn through it by means of a line or creeper to which they have been attached, the fish turn on their backs, and appear on the surface. They are probably stupified, and are thus easily taken, but they soon recover their lost activity, and are believed not to die from the effects of the treatment they have received.

Home Correspondence.

Pilogyne suavis.—This is the name under which a pretty little climbing plant is cultivated in almost every garden on the continent. I do not find the name in any book I have, nor have I ever seen the plant in this country. I tried to bring it home with me from Prussia a few years ago, but I found so many objects of interest on the journey that I was longer on the way than I

had anticipated, and unfortunately my plant died. I think it has recently been introduced by Mr. Thompson, seedsman, of Ipswich. It is universally employed in Germany and Belgium for hiding the bare stems of Standard Roses, and making little festoons between them, or for any similar purpose. As it is a very neat and pretty plant, not inclined to become a rampant grower, it is particularly adapted for this purpose, and it has become so great a favourite there that it is found in every garden. So common is it that, as is often the case with things with which we are most familiar, its history seems to have been lost, for no one could tell me its native country. Most likely it is from the Cape of Good Hope. I should think it is a cucurbitaceous plant; its flowers are very small and inconspicuous, of a creamy white colour, but almost hidden among dense foliage. If I can trust my memory I never saw any but male flowers upon the plant, at any rate I am sure it never produced seed. The leaves are harsh to the touch, five-lobed, and not more than 1 inch or 1½ inch in diameter. The treatment Pilogyne requires is as simple as could well be desired. In autumn a few cuttings are struck and kept in store pots in a warm greenhouse through the winter. In the spring they are potted off; if there be not a sufficient number, a stock can soon be obtained, for they strike as readily as Verbenas; they are hardened off with the bedding plants, and as soon as the weather permits, planted wherever they may be required. They need but little further attention; a string being placed where the festoon is required the plants attach themselves to it, and very soon produce a wreath of verdure. This plant has yet another good quality to recommend it; in the evening, or after a shower of rain, it emits a very pleasant faint musk-like perfume. If the time should ever come when it is thought advisable to extend the cultivation of what our neighbours call Blatt-Pflanzen (foliage plants) beyond the limits of our stoves and conservatories, if we ever carry out extensively the idea of arranging plants in beds in the open air merely for the effect to be produced by their leaves, instead of for the colour of their flowers—should we, in fact, seek beauty of form as well as beauty of colour—then Pilogyne suavis must not be forgotten. I am afraid, however, that under the present circumstances this pretty little plant would be looked upon as nothing better than a mere weed by many in this country. *C. W. C., Royal Botanic Gardens, Kew.*

The Winter of 1860-1 *and its Effects.*—I have perhaps had more than the generality of loss to deplore from the effects of the last severe winter, in which the thermometer fell to 10° below zero. All my common and Portugal Laurels were killed down to the ground, but are springing up again from the roots; Sweet Bay trees, Phillyreas, Alaternuses destroyed, and common Privet and Furze killed down to the ground. The only Pine trees which survive without injury are sylvestris, Laricio, Pallasiana, Jeffreyi, austriaca, Douglasi, and Nordmanni. Fine plants of Benthamiana, 7 feet high; insignis, 30 feet; and Sabiniana, 46 feet high, have been completely killed; the latter was the finest specimen I ever saw, and girthed 5 feet 6 inches at 2 feet above the ground. This loss is irreparable. Many of these plants did not exhibit fatal symptoms until February had commenced. I find the Wellingtonias have been much injured; but they are fast recovering themselves. Cephalotaxus Fortuni mas and pedunculata killed, Fortuni femina much injured, evergreen Oaks scarcely surviving, and the common British Oaks are very much damaged. *Oswald Mosley, Rolleston Hall, Burton-on-Trent.* —— *Abbotsbury, Dorset.*—PLANTS KILLED:—Coronilla glauca, Mandevilla suaveolens, Carex oligocarpa, Eucalyptus globosa, Araucaria gracilis, Coprosma rotundifolia, Olea americana, Quercus rugosa and lanceolata, Pycnopteris Sieboldi, Quadria heterophylla. PLANTS MUCH INJURED:—Escallonia pterocladon, Eucalyptus resinifera, Laurus glauca or aggregata, Lonicera japonica, Coronilla valentina, Pittosporum Tobira, Coprosma undulata, Rosa sinica, Rubus rotundifolius, Psoralea glandulosa, Brugmansia sanguinea. PLANTS SAFE:—Laurus Borbonia, Viburnum rugosum and japonicum; Edwardsia chrysophylla, flexifolia, and macrocarpa; Maytenus chilensis, Rhamnus californicus, Citharexylon, Euonymus citrifolius and fimbriatus; Plagianthus Dampieri, Woodwardia radicans, Iris reticulata. PLANTS UNTOUCHED:—Pinus longifolia, tenuifolia, and filifolia; Quercus reticulata, confertifolia, sclerophylla, inversa, glabra, agrifolia, incana, and virens; Styrax officinale, Laurus japonica and canariensis; Olea excelsa, Ilex cassine and Dahoon, magellanica and furcata, Drimys Winteri, Tasmannia aromatica, Illicium religiosum, Asplenium lucidum and drepanum. *I.*

Effects of the Winter on Oaks and Hollies.—There can, I think, be very little doubt that the diseased Oaks mentioned by your Correspondent were injured by last winter's frost, as Mr. Gadd of Willersley observes. Any one who is travelling by the Great Northern Railway near Tuxford may see a great many in this condition if he will look out of the window. Mr. Legard a fortnight ago mentioned in your columns instances of the same at Castle Howard; and at Howsham (where, as I told you some weeks ago, so many old Hollies have been killed) Oaks of all ages in great number have been nearly, and in some cases, I believe, quite killed by the winter. The same has been the case more or less all over the country. Besides this, I have observed, between Malton and Scarborough, in the valley, many Ash trees similarly injured. At this place and elsewhere I find the common field Maple, Acer campestre, thus injured; the Walnut in several places in this neighbourhood; a number of fine trees of the White Willow, Salix alba, near Driffield; old trees of the black Italian Poplar in the same neighbourhood; and one or two Beech trees at Howsham. In all these cases the injury extends very far beyond last year's wood, and in the case of the Beech, Maple, and Ash has probably depended on the individual not being in perfect health; but this does not apply to the Oak, Walnut, White Willow, and Holly, which certainly are not proof against a winter like the last. The common Broom and Gorse, also, are almost universally killed to the ground. Several trees and shrubs, especially Conifers, which in ordinary seasons may be injured when the above trees would not suffer in the least, are none the worse for last winter's frost. The Picea Webbiana and Taxodium sempervirens are instances of this. From all this we may learn that we must not conclude that any little known tree or shrub is ill suited for cultivation in England because it was injured by last winter. *C. W. Strickland, Hildenley, Yorkshire.*

Chitty's variety of Campanula rotundifolia alba.—At the exhibition of the Royal Botanic Society, July 3, a certificate was awarded to Mr. Chitty, florist, of Stamford Hill, for six plants of a seedling variety of Campanula rotundifolia. There was scarcely anything more beautiful in the exhibition; the plants were of great size, and formed symmetrical pyramids loaded from head to foot with snow-white bells, producing an

effect remarkable for chastity in these days of general neglect of old-fashioned herbaceous favourites. I measured one of them, and its dimensions were as follows:—height, 2 feet 6 inches; circumference, 3 feet 6 inches. So far they were examples of what good culture can effect with very simple materials. But the point of special interest is the distinctness of this seedling variety, which is capable of forming specimens of a size which could not be attained with the original, and the flowers are individually twice as large, so that it was not surprising many of the gardeners should have supposed it a distinct species. There is no departure from the type in the structure of the flowers, except in the matter of size, a greater rotundity of the bell, and a more snowy whiteness. These however are qualities of such importance that it appears to me only just to the raiser that he should have a word of praise. The variety occurred in a batch of seedlings raised in 1857, since which date it has continued constant, showing not the least tendency to revert to its old form. Bedding plants occupy so much time in the gardens of the present day that it is but seldom anything more than the most casual attention is given to hardy herbaceous plants; but what a field do they offer for similar improvements, and is there not a peculiar interest attaching to them which we shall never experience in all our efforts after gorgeous colouring? *Shirley Hibberd, Stoke Newington.*

Wells.—I am anxious for some information respecting the sinking of a well under the following circumstances. I have a house situated in a beautiful locality, fitted for the residence of a large family, but ill supplied with water. The village, half a mile off, abounds with excellent water from wells, and a beautiful spring from the chalk hills on the other side only a very half-mile off. So that on all sides the house is surrounded with excellent water. The soil is gravel sand just off the chalk. Many wells have been sunk to a depth of 70 feet, but a sort of ironstone soil, in which is supposed to taint the water, has invariably been bad. Is it probable that if I sunk below this stratum I could exclude the water from it and get to good water, for it is most tantalising to be obliged to submit to being supplied by rain-water from tanks in a neighbourhood noted for the excellence of its water, seeing it on all sides when leaving my small park? The well-sinkers in the neighbourhood give me no encouragement to try to obtain water, as they say it has been attempted many times during the last 40 years without success, but they have always stopped when meeting this sort of ironstone stratum, and they never meet with water above it. *Aqua.*

Judges at Regent's Park.—May I be allowed to say that I think Mr. Marnock's proposal (see page 674) will be received by exhibitors with satisfaction. Although I have been an exhibitor at every show but one, during the last two seasons, I have received no intimation of any election of the kind mentioned. May I ask what the form of election is; if it is periodical, if the judges are elected singly, and by whom they are nominated? I am pleased to have this opportunity of acknowledging Mr. Marnock's uniform courtesy in the administration of an office which is not at all times an agreeable one. *W. Young, Gr. to R. Barclay, Esq., West Hill House, Highgate.*

Potato Disease.—Unmistakable cases of Potato disease have again broken out in this locality since a week, where all appeared luxuriant and healthy. Yet unhappily the evil is manifest in many rich and close planted plots, in all its usual virulence. I know no better alternative to prevent its contagion running from one plot to another than our old recourse, viz.: cut off the tops close to the ground, bleeding them as it were from the roots to avert contamination in the tubers. Thus they may be safely left in the ground to ripen or harden till wanted for use, and the ground may be cropped between the rows with Cabbages, Turnips, &c. The stumps of the Potatoes will serve as index where to take them up without disturbing the later crops of Greens, &c., and no material loss need be sustained, as must inevitably happen in the absence of such a precautionary measure. *A. Hardy, Maldon, Essex.*

Disa grandiflora and Effects of the Winter.—You have done ample justice to this plant and its cultivator Mr. Leach, and have gladdened my heart by encouraging those who grow something else than German Asters, and Scarlet Geraniums. Not that I despise these, but I do like gardeners who can grow something else also. I have escaped last winter wonderfully. Not even Benthamia fragifera injured seriously, though a standard bush 6 feet high; it grows among Laurustinus. The only deaths I know of are—Lamarque, among Noisettes, a very old Rose, years old, a Standard; and Passiflora cœrulea, against a south wall; and a Chinese Ilex, I forget what species. I have however lost Fortune's Camellia-flowered Double Peach. The other two varieties have escaped; I think the cold wet summer of last year was the cause of death rather than the mere cold of last winter. I believe it is my 500 feet above the sea that saved my more tender plants. Down at Tunbridge Magnolia grandiflora, 30 years old, was killed. *J. R., River Hill, Sevenoaks.*

Potatoes.—The Potato disease must continue to create a deep interest in all classes, and although it is probably the mode of cure I propose may have been tried by others, I am anxious again to bring it into notice. The plan is simply as follows:—Let the quantity required for the ensuing season remain in the ground, giving them an additional covering of earth to protect them from ordinary frosts; and at the time of planting, after having properly prepared your ground to receive the seed, take up the Potatoes, and immediately plant those that are sound; every suspicious Potato to be rejected. This, with early earthing up, and allowing the surrounding surface of the ground to be kept shaded or moist from the overtopping haulm, which must be considerably cut in before the flower buds appear, is all that can be done, except, perhaps, an occasional hoeing and stirring of the surface. I think so much depends on a free exposure of the soil to the influence of the sun and air, and the seed having remained in the ground through the winter unaffected by frost and other causes, which would destroy all the unsound Potatoes, affords the best promise of an uncontaminated set. But so long as we continue in profound ignorance of the causes creating epidemical diseases amongst ourselves, so long will the mysterious epidemics in the vegetable kingdom be hidden from us, and our treatment of both one and the other must continue as heretofore entirely empirical. As soon as any can tell me the why, and the how, and the what it is that a healthy man paying a short visit in our fens comes home with, and from that time, perhaps, for months afterwards every other day gives him a regular paroxysm of fever, I may hope to learn something about the Potato disease, but not before. Are not the vital electric forces of the nervous systems of plants and animals disturbed through the atmospheric electric

disturbances? *Thomas Ingle, M.D., Emsworth, Hants.* [Plants have not a nervous system that we know of.]

Bell's Composition for destroying Mildew.—I have received so much benefit from the composition I here mention, that for the good of others similarly circumstanced, I send you a notice of it. I had three Peach trees in full bearing, and till then in apparent health, attacked last summer in every shoot by mildew. It destroyed all the fruit of course. This year it has again appeared, if possible with more virulence. I tried syringing, watering the roots, &c., but without any benefit, when I happened to see Mr. John Bell's composition for destroying mildew advertised. I sent for two bottles and applied it twice as directed; and, to my surprise, I find it has totally eradicated the pest to all appearance. I used so small a quantity that even with the carriage [illegible] miles added it cost me next to nothing. I have so often been tormented by mildew before, without knowing how to stay its ravages, that I send this in hopes other amateur gardeners may benefit by it. Mr. Bell lives at Norwich. My trees were out of doors; of course in houses the composition must [illegible] *W. D. F[illegible] [illegible] Rectory.*

Fertilisation of V[illegible].—Following the suggestion made by Mr. Darwin at page 552, a week or two ago, I thought that I would try if the tropical kinds of Vinca could be induced to produce seed, which is never the case under cultivation if left to themselves. I impregnated eight flowers, and in the course of a few days had the satisfaction of seeing that the pistils in seven cases were swelling well. The erect double follicles are now in several instances more than an inch long; in one which I opened the seeds appeared to be perfect, but they are not yet ripe. The plant upon which I tried the experiment was the white-flowered variety of Vinca rosea. I used the pollen from the same plant as I wished also to see if this variety would reproduce itself by seed, or if it will revert to the normal colour of the species. I merely passed a hair down the tube of one flower after another as an insect might insert its proboscis in its search for nectar. *C. W. C., Royal Botanic Gardens, Kew.*

Ridge Cucumbers.—We have a ridge of Cucumbers that have died away in a similar manner to those of "J. R." (see p. 671). The description he gives of the situation and appearance of the plants is exactly the same as ours, but I do not think the soil is the cause of disease; for those we have are planted in a mixture of loam, well-rotted manure, leaf mould, and silver sand—in fact, the same compost has been used for Cucumbers in frames with perfect success. The disease appears to [illegible] the plants at the collar, just above the surface, as the roots seem perfectly healthy. *W. F., Hants.*—It may be consolatory to "J. R.'s" gardener to know that he is not alone unsatisfactory in Cucumber growing, as in several large establishments within a few miles of each other, symptoms the same as he describes in the most destructive form have swept off not only ridge Cucumbers but Cucumbers and Melons under glass, where [illegible] were employed for their well doing, and under gardeners distinguished for growing good fruit. The disease (for disease it is) in some cases shows itself in spots on the leaf, which it speedily [illegible], and spreads all over the plants; at other times the [illegible], generally the strongest and most healthy, [illegible]. I have seen one light or hill cut off, while others finished their work admirably. I have had [illegible] Cucumbers share the same fate in rich maiden loam as well as on a rotten leaf heap. This year about the middle of April the enemy showed itself in a twelve-light frame of Melons, which were in great vigour, and under close attention as to heat, air, and moisture. Every day for three weeks they got worse, and at last I took the frame off and planted another bed. [illegible] each side of the plants referred to, under less favourable circumstances, have produced fine fruit; 35 Melons have been cut from five lights, all weighing from $2\frac{1}{4}$ to $3\frac{1}{2}$ lbs. The foliage remains perfectly healthy, though some of the finest [illegible] when the fruit was setting. There are eight [illegible] at present quite free from disease and in fine health, growing in old turf pits with no other [illegible] Melons [illegible] Potatoes were grown. Two years ago I [illegible] Melons out of the same pits, which had no preparation except levelling the soil after lifting early Potatoes. The same season I had a fine crop in the open air without any artificial heat whatever; after the fruit was cut the plants remained strong and healthy till the heavy rains of September finished them. [illegible] frames that season were all [illegible] diseased. I have a plot of Rhubarb attacked with the same disease. It would be gratifying to hear reports on this important matter from others of your experienced readers. *M. K. S., Woodbridge.*

Reviews.

Our Social Bees. By A. Wynter, M.D. (Robert Hardwicke.)

Under this somewhat quaint title, Dr. Wynter has collected a number of scattered papers on various subjects, originally contributed to different periodicals. Some, of course, are but of slight interest, but the majority are well worthy of being rescued from the waste paper basket, and presented to the public in a more accessible form than the cumbersome folio containing a year's numbers of the *Times* or *London Review*. Dr. Wynter seems to have got up his subjects carefully and accurately, and he writes both pleasantly and clearly, placing even statistics before us in an attractive and readable form. He moreover possesses the art of condensing his materials into a small compass, and frequently, on concluding one of his short articles, we are surprised by the amount of information we have gained from it. Indeed, except that the volume is bulky, and therefore somewhat heavy, it would make a charming travelling companion, being precisely the sort of book to be taken up for a short period, and to be laid down without losing the thread of the narrative. There is, in fact, none to lose. Some of the sketches are evidently the results of holiday excursions, and the Lakes, North Wales, and the Tyrol, are dwelt upon with the enthusiastic enjoyment of one, the best part of whose life is spent in London. That this is the case with our author we cannot doubt, not only from the delight with which he escapes from its dust and noise, but also from the intimate acquaintance he shows with its ways and institutions. Of the 44 articles comprised in this book, more than half relate to London, or to things which, if not entirely belonging to the metropolis, yet originate and have their head-quarters there.

In the many contrivances daily invented for the more rapid transmission of thought, whether in the shape of letters or messages, he is peculiarly *au fait*, and the machinery of the Post Office and that of the Electric Telegraph are described with a graphic pen. The network of wires which, high over head, crosses and recrosses the metropolis in all directions, is familiar to the eye of every Londoner; and most educated persons understand more or less accurately the method by which it is worked. We doubt, however, if many are acquainted with a contrivance recently introduced into the City, and which our author has happily designated "the suction post," by means of which not only the message, but the very paper on which it is written, is transmitted with all but the celerity of the telegraph. To those who have never heard of the Pneumatic Despatch Company, the following account of their mode of proceeding will be interesting:—

"Five metal tubes, of from 2 to 3 inches in diameter, are seen trained against the wall, and coming to an abrupt termination opposite the seat of the attendant who ministers to them. In connection with their butt ends other smaller pipes are soldered on at right angles; these lead down to an air pump below, worked by a small steam-engine. There is another air pump and engine, of course, at the other end of the pipe, and thus suction is established to and fro through its whole length. Whilst we are looking at the largest pipe we hear a whistle: this is to give notice that a despatch is about to be put into the tube at Mincing Lane, two-thirds of a mile distant. It will be necessary therefore to exhaust the air between the end we are watching and that point. A little trap-door—the mouth of the apparatus—is instantly shut, a cock is turned, the air-pump below begins to suck, and in a few seconds you hear a soft thud against the end of the tube, the little door is opened, and a cylinder of gutta-percha incased in flannel, about 4 inches long, which fits the tube, but loosely, is immediately ejected upon the counter; the cylinder is opened at one end, and there we find the despatch."

Dr. Wynter indulges in many speculations on this plan; foreseeing the time when letters from the district post-offices will all be "sucked" to St. Martin's-le-Grand, and when sorted, expelled by the same method to the various railway termini; and since he states that an experimental tube has been laid down from Charing Cross to the General Post Office, it is far from improbable that this speculation may eventually be realised. He even goes further, and prophesies its use as a Parcels' Delivery Company:—"Some time towards the end of the century, we may perchance hear the householder giving directions to have his furniture sucked up to Highgate—for hills form but little impediment to the new system of traction—or the coal merchant ordering a waggon-load of coals to be shot into the pipe for delivery a dozen miles distant. And this new power, like the trunk of the elephant, is capable of being employed on the most trivial as well as upon the weightiest matters."

Perhaps the paper entitled "Britannia's Smelling Bottle" would prove most attractive to gardeners, since it contains an account of the method by which different flowers are made to yield up their scents for the benefit of the perfumer. The cultivation of flowers for this purpose is carried on to an enormous extent in the south of France; the weight of blooms from which the odour is there extracted, being reckoned by thousands of pounds. Highly purified fat is used for the purpose of absorbing the scent, which is thus transferred to the perfumer, who then re-extracts it from the fat by the aid of spirits of wine, for which it has a still stronger affinity. Quoting Mr. Septimus Piesse's book on the art of perfumery, Dr. Wynter shows us how few are the kinds of flowers which are cultivated for their scent alone, and says:—"Why should we not grow flowers for their odours as well as for their colours? There are scores of flowers in our gardens that would yield admirable extracts with a little pains. For instance, there is Heliotrope, the Lily of the Valley, Honeysuckle, Myrtle, Clove Pink, and Wallflower. We have extracts of all these flowers in the perfumers' shops, but they are nothing but skilful combinations of other scents." He further suggests that every lady might be her own perfumer, and gives us from Mr. Piesse's book a receipt for obtaining scent from Heliotrope, or any other sweet-scented flower. Now that our gardens are in full beauty and perfume, some of our fair readers may like to try the experiment for themselves, and we therefore give them the benefit of the receipt:—

"At the season when the flowers are in bloom, obtain 1 lb. of fine lard, melt it and strain it through a close hair sieve, allowing the liquid fat as it falls from the sieve to drop into cold spring water; this operation granulates and washes the blood and membrane from it. In order to start with a perfectly inodorous grease, the process may be repeated three or four times, using a pinch of salt and a pinch of alum in each water; it is then to be washed five or six times in plain water; finally, remelt the fat, and cast it into a pan, to free it from adhering water. Now put the clarified fat into a glue-pot, and place it in such a position near the fire of the greenhouse, or elsewhere, that will keep it warm enough to be liquid; into the fat throw as many flowers as you can, and there let them remain for twenty-four hours. At this time strain the fat from the spent flowers, and add fresh ones; repeat this operation for a week; we expect, at the last straining, the fat will have become very highly perfumed, and when cold may be justly termed *pomade à la héliotrope*. To turn this pomade into an extract fit for the handkerchief, all that has to be done is to cut the perfumed fat into small pieces, drop it into a wide-mouthed bottle, and cover it with highly rectified spirit, in which it must remain for a week. When strained off the process will be completed."

These short extracts will serve to show the varied character of Dr. Wynter's book, and the amount of information to be obtained from it. As might be expected, some of the articles are inferior to the rest, but on the whole we have been greatly pleased with the volume, and take our leave of its author with the feeling that we have been conversing with a man of intelligence and observation.

Garden Memoranda.

MESSRS. FRASER'S NURSERY, LEA BRIDGE ROAD, ESSEX.—To lovers of Fuchsias a visit to this nursery at present will form a real treat; for hundreds of these plants are now in blossom, and among them are some of the best kinds in cultivation. A considerable portion of the show house has been devoted to them, and being nicely arranged they make an effective and pleasing display. Other houses are also occupied with them, and being in small pots, and varying as they do from 2 feet to $2\frac{1}{2}$ feet in height, they form nice subjects for almost any kind of decoration, where medium-sized well bloomed plants are required. Among dark sorts, the most conspicuous were Kettleri, salmon, with dark corolla; Sir Colin Campbell, a fine double variety; Great Eastern, a free growing large flowered sort very suitable for rafters or pillars; and Crinoline, a variety with wide spreading corolla, very different in form from kinds usually cultivated. Among light kinds the most remarkable were Dr. Livingstone, which had a white top and pinkish lilac corolla, new and distinct in appearance; Silver Swan, a drooping free flowering sort; Schilleri, a fine kind; England's Glory, a highly useful variety; and Princess Alice, a small neat sort, free-flowering and distinct in character from any of the preceding. Among kinds with white corollas was one larger and more double than Princess of Prussia, which is also a good kind, and when well grown very attractive.

Of double Petunias, and the better varieties of scarlet and salmon-coloured Geraniums, there was a fine display; and we noticed a large stock of Gardenia radicans major and Boronia serrulata, the last extremely healthy and beautifully green. Kalosanthes, both in and out of doors, were flowering freely, and at this season few plants are more effective; they may even be induced to blossom profusely in a small state. Of Stocks out of doors a charming assortment is now in bloom, and consisting, as they do, of all the best kinds, the display which they make is truly grand. We also noticed a double variety of the showy Dianthus laciniatus, and a thriving collection of Hollyhocks, which are scarce this year.

Greenhouse plants, for its fine collection of which this nursery has long been famous, are now out of doors, with the exception of Azaleas, which are still under glass; among the latter were many excellent specimens well set with bloom buds, and the same may be said of Camellias, some of which flowered well against a back wall even during the sunless summer of last year. In the stove Ixoras are at present one mass of bloom; even very small plants are flowering freely, as are also Allamandas and Dipladenias, all of which together make a fine display.

Among glass structures lately erected here are two large orchard houses for the growth of fruit trees in pots generally; but at present they are chiefly occupied with Peaches and Nectarines, which are in excellent condition. Extensive ranges of houses have also been put up for the rearing of young Vines, of which Messrs. Fraser have a large collection, to which great attention is paid; in winter the Vine houses are filled with

mall Tea and other tender Roses in pots, and they also answer for propagating houses.

Out of doors, in addition to an extensive collection of ordinary nursery stock, Roses are largely grown, and though so near London they bloom freely and are very convenient for inspection. The following is a list of a few of the best new kinds, classified according to colour:—

Hybrid Perpetual: White or Blush.—Princesse Impériale Clotilde, Mademoiselle Bonnaire, Virginal, Empress Eugénie, Mademoiselle Eugénie Verdier. Rose.—Madame Furtado, Comtesse Cecile de Chabrillant, Parmentier, Madame Boll, Victor Verdier, Anna de Diesbach, Marquess de Paris, Belle de Bourg-la-reine, Robert de Brie, Madame Eugène Verdier. Dark Rose.—Vainqueur de Solferino, Madame Charles Crapelet, Alexandre Breton, Rosine Parron, Eugénie Lebrun, Triomphe d'Alençon. Brilliant Red.—Admiral Nelson, General Washington, Madame Pierson. Crimson Scarlet.—Le Sénateur Vaisse, Gloire de Santenay, Eugène Appert, Louis XIV. Dark Crimson.—Léonce Moise, Madame Melanie, Madame Pauline Villot, Abd-el-Kader, Prairie de Terre Noir, Duc Decazes, iomphe d'Amiens, Princesse Mathilde, François Arago Triomphe de Lyon.

In addition to the above, Madame Levainville is also a very distinct kind; colour salmon, shaded with cerise.

Among Tea-scented sorts, the following were conspicuous, viz.:—Duc de Magenta, flesh-coloured; Madame Sertot, white; La Boule d'Or, yellow; and Madame Blacket, rose.

Phloxes are also largely grown here; the best appeared to be M. Comte Vigier, bright rose, crimson centre; Madame Aubin, bright rosy crimson; Docteur Lacroix, crimson purple, bright red centre; M. Forgeot, purplish lilac; Prince Troubetskoy, rosy lilac, crimson centre; Louis Lierval, rich rosy crimson; Apollon, brilliant dark purplish crimson; Alexandrine Bellet de Varennes, peach colour with red centre; Victor Hugo, purplish crimson with dark centre; Madame Marceaux, shaded white with purple centre; Madame de Brobéque, white, shaded and striped with lilac; Souvenir d'un Ami, rich purple; Madame de Wendel, white with large purple centre; and Boule de Neige; the last is the finest white.

The little flower-garden at the entrance is at present gay with the more effective sorts of bedding plants; and altogether this nursery will now amply repay a visit.

Miscellaneous.

The Waves of Ocean.—Thus, according to the joint testimony of the most eminent nautical authorities, the waves in the open sea never attain the mountain-height ascribed to them by the exuberant fancy of poets and exaggeration-loving travellers. But when the tempest surge beats against steep crags or rocky coasts it rises to a much more considerable height. The lighthouse of Bell Rock, though 112 feet high, is literally buried in foam and spray to the very top during ground-swells, even when there is no wind. On the 20th November, 1827, the spray rose to the height of 117 feet above the foundation or low-water mark, which, deducting 11 feet for the tide that day, leaves 106 feet for the height of the wave. The strength of that remarkable edifice may be estimated from the fact, that the power of such a giant billow is equivalent to a pressure of 3 tons per square foot. Speaking of the force of waves on coasts, Dr. Lyell mentions the transportation of a block of stone 90 feet from its bed, which was 8 feet 2 inches by 7 feet, and 5 feet 1 inch in its dimensions; and of another still larger one, up an acclivity, to a distance of 150 feet. Mr. Stephenson also tells us that a block of gneiss at Skerryvore, containing 504 cubic feet, and upwards of 40 tons in weight, was carried by the waves 5 feet from the place where it lay. Such are the elementary powers which man has to encounter in the erection of his harbours, his breakwaters, and his lighthouses, and over which his architectural skill achieves so many glorious triumphs. During the most violent gales the bottom of the sea is said, by different authors, to be disturbed to a depth of 300, 350, or even 500 feet, and Sir Henry de la Beche remarks that when the depth is 15 fathoms, the water is very evidently discoloured by the action of the waves on the mud and sand of the bottom. But in the deep caves of ocean all is tranquil, all is still, and the most dreadful hurricanes that rage over the surface leave those mysterious recesses undisturbed.—*Dr. Hartwig's Sea and its Living Wonders.*

Calendar of Operations.

(*For the ensuing week.*)

PLANT DEPARTMENT.

CONSERVATORY, &c.—It is now time to provide and encourage an assortment of flowers adapted for blooming late in autumn and early winter. Camellias, if forced into wood, will be tolerably forward. They should be kept out of doors in a good place on cool flags or cool ashes to prevent worms from deranging the drainage. Chrysanthemums should now or very soon receive their last shift if possible, using chiefly good fibrous loam for the purpose with plenty of charcoal. This is the best way to keep them stiff in habit and to preserve their lower leaves. Any necessary amount of strength may be imparted to them when the flower buds are formed by good liquid manure. Successions of Brugmansias, Clerodendrons, Euphorbias, Poinsettias, &c., should receive a last shift in order that they may produce a rich display in the conservatory. Climbers on ornamental trellises should be occasionally cut back with the view of having a succession late in the season when flowers become scarce. A batch of such things as Thunbergias, Ipomœas, Jasmines, Stephanotis, Passifloras, &c., should be got up ornamental trellises without delay; Clematis bicolor and C. azurea grandiflora force well in early spring; rest them behind a shady wall in June and July, and they will flower again in October and November. These latter plants although perfectly hardy are well adapted for conservatory trellises. Keep late-growing Orchids at the warmest end of the house. Give air liberally in the early part of the day.

FORCING DEPARTMENT.

PINERIES.—Plants growing in dung pits must be freely supplied with air to prevent their getting drawn, and they should also be kept near the glass and not allowed to stand too closely together, for strong robust plants need hardly be expected unless this is attended to, and weakly drawn ones seldom or never yield fine fruit. Give careful attention to such as are swelling; afford them plenty of warmth and moisture, and as much manure water at the root as the soil will bear. Remove useless suckers and gills as soon as they are perceived, which, if left, only rob the fruit and weaken the sucker which it may be necessary to leave on the plant for keeping up the stock. Do not allow young stock in free growth in the succession pits to stand too closely together, nor to sustain any check through neglect in watering, or the want of pot room. Plants growing in beds of soil must also be carefully attended to with water, keeping the soil in a nice moist state. Where rapid growth is required keep as warm and moist as can be done without drawing the foliage, and give plenty of strong clear manure water at the root, and the plants will make rapid progress for the next two months.

VINERIES.—See that Vines from which the fruit has just been cut are free from insects, giving the foliage an occasional washing with the engine if red spider is at all troublesome; and use every precaution to keep the leaves in health as long as possible. Prevent the growth of laterals, which only shade and injure the principal foliage. Late Grapes colouring should be assisted with slight fires during wet cloudy weather, especially Muscats, which, after this season, where they are not already all but ripe, will require gentle fires, unless the weather should prove bright and sunny.

PEACHES.—The principal points to be attended to now are keeping the foliage free from insects, tying in growing shoots, keeping the borders in a proper state as regards moisture, and giving a sufficiency of air. Where the crop is nearly ripe cease watering, and expose every fruit to the sun's rays by removing any leaves that may happen to cover it. If this is not done, the shaded fruit will be deficient in colour.

MELONS AND CUCUMBERS.—If the weather is bright dew the plants overhead once or twice a week, observing always to use a finely perforated rose for the purpose, as a heavy stream breaks down the leaves, which often do not return to their proper position. For the same reason, when the plants require water at the roots, it is best not to use a rose, but to introduce the spout of the watering pot between the leaves. Sow seeds of Cuthill's Black Spine or some other free bearing Cucumber for fruiting in fire-heated pits.

FLOWER GARDEN AND SHRUBBERIES.

In some neighbourhoods black fly has been troublesome to Dahlias, Asters, &c. Where such is the case tobacco-water and soap-suds may be used with advantage. The strength of the mixture should be tested by dipping some of the shoots worst affected into it and using it sufficiently strong to kill the insects, but not so much so as to injure the leaves. It should be applied in the evening when there is a prospect of a dry night, using a fine syringe or finely rosed watering-pot, and giving enough to moisten the whole of the foliage. Go over beds of Verbenas frequently and remedy any defect that may be perceptible without loss of time. Where the stock is growing vigorously pegging and training will involve considerable attention, and it will be necessary to inspect the beds frequently, removing decayed flowers, and cutting back such of the shoots as may incline to encroach upon the edging of the beds. Keep herbaceous plants neatly tied up, and cut off the flower stems of any that are becoming unsightly. Take advantage of leisure hours to put in cuttings of choice things. Keep gravel walks smooth and neat by weeding, sweeping, and rolling.

HARDY FRUIT AND KITCHEN GARDEN.

It may still be advisable to go over such trees as are over luxuriant and stop about half the shoots, beginning of course with the strongest; for a general stopping at this time would probably be of little farther service than to induce the production of a mass of useless spray, whereas stopping the stronger shoots or those which incline to grossness will divert the sap into the weaker ones, which will be strengthened, while the buds on the shoots that have been stopped will become full and plump without starting into growth. The only effectual method, however, of curing a gross habit of growth when this is the case in ordinary seasons is root pruning, or keeping the roots within proper limits by means of shallow, well drained borders. Should it be found that the shoots after stopping incline to [illegible] into growth, it will be advisable as soon as the fr[uit is] gathered to open a trench at a moderate dista[nce] from the stem of the tree, cutting the stronger r[oots]. This will be of the greatest service in checking gro[wth] and will probably do more towards securing ripe w[ood] than anything else that could be adopted. Early Pe[ars] should be gathered before they are quite ripe, which their juiciness will be increased. Get Str[awberry] plantations intended to stand for next sea[son] trimmed as soon as convenient, cutting off [and] clearing away the runners so as to afford the lea[ves] plenty of room. Attend to providing plenty of Lettu[ce], Endive, &c., for winter salads; also see that there [is] a good bed of Parsley provided in some sheltered sp[ot] where it can be readily protected in severe weather.

COTTAGERS' GARDEN.

As observed in former Calendars, let all spare ground from Potatoes or otherwise be followed up with w[inter] crops of some kind. Amongst the most valuable sta[ple] the old Green Kale and Cottagers' Kale. The ea[rly] Ulm Savoy is also very useful, provided it is go[t in] sufficiently early and on well manured ground.

STATE OF THE WEATHER AT CHISWICK NEAR LOND[ON],
For the Week ending July 25, 1861, as observed at the Horticultural G[arden].

July.		Moon's Age.	Barometer.		Temperature. Of the Air.			Of the Earth	
			Max.	Min.	Max.	Min.	Mean	1 foot deep.	2 feet deep.
Friday	19	11	29.688	29.640	74	57	65.5	63¼	60
Satur.	20	12	29.668	29.648	77	52	64.5	63	59½
Sunday	21	○	29.749	29.682	73	52	62.5	63¼	60
Mon.	22	14	29.743	29.587	74	45	59.5	64	60
Tues.	23	15	29.757	29.539	71	54	62.5	63	60
Wed.	24	16	29.823	29.666	69	56	62.5	62½	59½
Thurs.	25	17	29.664	29.551	68	58	63.0	63¼	59¾
Average..			29.724	29.616	72.3	53.4	62.8	63.3	59.5

July 19—Densely overcast; drizzly; overcast; boisterous at night.
— 20—Overcast; very fine; low clouds; fine; rain at night.
— 21—Rain; overcast; very fine throughout
— 22—Cloudy and fine; slight rain; overcast at night.
— 23—Rather boisterous; slight shower; very fine.
— 24—Overcast; showers; rain at night.
— 25—Boisterous with slight rain; overcast and boisterous clouds; rain.

Mean temperature of the week ½ deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending August 3

July and August.		Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.
Sunday	28..	76.0	52.4	64.2	18	1.39 in.
Mon.	29..	75.5	50.9	63.2	14	1.31
Tues.	30..	74.5	51.3	63.0	17	0.88
Wed.	31..	74.9	51.0	63.0	13	0.66
Thurs.	1..	75.9	51.3	63.6	17	1.23
Friday	2..	75.6	52.5	64.0	16	1.03
Satur.	3..	74.8	51.3	63.0	18	0.50

The highest temperature during the above period occ[urred] 1846, and 2d, 1856—therm. 92 deg.; and the lowest on [...] therm. 35 deg.

Notices to Correspondents.

DOUBLE DAHLIAS: *E A M.* There is nothing unus[ual in such] cases, which are analogous to twin Cucumbers, [...] and the like.

FUNGI: *C L.* Your Grass is infected with a curi[ous] Hypocrea typhina. *M J B.*

GRAPES: *Jasper Standstill* will oblige us by compl[ete] account of the way in which he obtains two crops o[n] on the same Vine. His information is very interes[ting but] incomplete, and we should be glad to have the wh[ole for] the public at once.—*G M.* It is impossible for us to [say what] has happened. The berries look as if they had been [...] in a morning and then immediately exposed to a br[ight sun]. They are in a bad state, the cause of which c[an only be] ascertained on the spot.

INSECTS: *J B.* Your Pear leaves are infested with the larvæ of the black Sawfly (Selandria Æthiops) [...] leaves with powdered lime and syringe them [with] water. *W.*

NAMES OF PLANTS: *Dalmally.* Lysimachia quadrif[olia ...] Spiræa tomentosa, Ledum latifolium, the other [...] flower.—*S H.* 1, Poterium polygamum; 2, Lys[imachia vul]garis; 3, White Campanula rotundifolia; 4, [...] nemorosa we believe.—*Terra.* Agrimonia Eupat[oria] and Galium verum.—*J B.* Aristolochia labiosa and [...] spicatum we believe, but the specimen is insuf[ficient].—*B A B.* 1, Salix pentandra; 2, Lycopodium compla[natum].—*W K.* 1, Probably a fragment of Selaginella Marten[sii ...] in fructification. Such specimens are quite unfit [...]—*Cavanensis.* It is not possible to name with accur[acy] bits of the scaly Conifers. Yours may be either a [...] or a Juniper; and it may be Juniperus phœnicea or [...] Lambertiana, or any one of a dozen other species. [...] of fruit has it, and from what country does it come?

POTATOES: *J N.* There is no good reason to believe [...] stops mildew. You had better earth up the ha[ulm] as you can, by taking soil deeply from between t[he rows] or from the paths if you adopt the lazy-bed system.

SEA COAST TREES IN HANTS: *C M F.* All the va[...] Evergreen Oak, Ailanthus glandulosus (a tree) [...] Pinaster will perfectly resist sea breezes, and [...] invaluable shelter, within which numerous comm[on shrubs] and herbaceous plants will thrive. We do not t[hink ...] vases of Maltese stone will stand our winters. The[y are too] porous.

SKELETON LEAVES: *M E H.* These are prepared by loo[se] [maceration] in water, for, say, as much as six or eight month[s]; [the] remains of pulp are then picked off with needles, [and the] whole is bleached with chloride of lime or simple chl[orine or] the fumes of sulphur.‡

VINE BORDERS: *Young Gardener.* By all means kee[p the] border comparatively dry if you wish your ripe Gra[pes to] hang for some time. Wooden shutters, tarpauling, [in] short anything that will throw off wet will answer th[e pur]pose. But look sharp after red spider.‡

WOODLICE: *W C.* Mr Cuthill states that he finds boiling [water] to be the best cure for these. It must however [be] applied carefully round the sides, between the ced[...] wall. You must also, as a matter of course, rem[ove the] toads out of the pit before using the boiling water.‡

MISC: Two shillings will be given for a copy of the *Gar[deners'] Chronicle* of December 1, 1860, by Messrs. Hatchard [...] 187, Piccadilly.—*C M F.* Rhododendrons and Aza[leas will] thrive if planted in a wide border, properly made, un[der the shade] of Fir-trees, which are not close together. The S[...] Rose will do out of doors. It is quite hardy.

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861, are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME £6 6
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES .. 5 5
LAWES'S BARLEY, GRASS, AND MANGEL MANURES 8 0

These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.

Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.

American and other Cakes at market prices.

Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.: and Liffey Buildings, Eden Quay, Dublin.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.

CONCENTRATED TURNIP MANURE, equal in value to the preceding.

Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."

Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

THE LONDON MANURE COMPANY.
(ESTABLISHED 1840,)
Are now prepared to send out the following MANUFACTURED MANURES:—
SUPERPHOSPHATE OF LIME, of best quality.
DISSOLVED BONES, AND BONE MANURE FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN AND ROOTS.
CORN MANURE FOR TOP DRESSING.
MANGOLD MANURE.

They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate to be obtained entirely from Bones.

The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE OF SODA, SULPHATE OF AMMONIA, and every Manure of value.

116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &C. IN ENGLAND AND WALES AND IN SCOTLAND.

The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.

For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W

Land Drainage.

WORKS OF DRAINAGE of any extent are EXECUTED by the GENERAL LAND DRAINAGE AND IMPROVEMENT COMPANY on all descriptions of property, whether freehold, entailed, mortgaged, trust, ecclesiastical, corporate, or collegiate.

Repayment may be made by the Landowner as successive portions of the works are completed; or the actual expenditure, with a commission thereon, may be charged on the property improved, by way of rentcharge on the estate created for various terms of years so as to adapt the rate per cent. of annual charge to the circumstances of the tenants.

No investigation of title being required, or notices given to Reversioners or Mortgagees, no legal expenses are incurred.

Works of Irrigation, Enclosing, Wood Grubbing, Road Making, and Farm Buildings are executed in a similar manner.

Landowners desirous to execute any of the Improvements by their own Agents, and charge the outlay and expenses on the Estate, may obtain Loans for the purpose.

Applications to be made to WILLIAM CLIFFORD, the Secretary, at the Offices of the Company, 52, Parliament Street, S.W.

Reaping and Mowing Machines.

BURGESS AND KEY, 95, Newgate Street, E.C. Prizeholders for the best Agricultural Machinery Manufactured.

ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price 42l. 10s.

TESTIMONIALS.

A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following:—

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CRYSTAL PALACE. — SUMMER SHOW OF POULTRY, PHEASANTS, ORNAMENTAL WATER FOWL, PIGEONS, AND RABBITS, AUGUST 26, 27, 28, and 29. Entries close on Saturday next, July 27.

Apply to Mr. W. HOUGHTON, Secretary to the Show.

The Agricultural Gazette.

SATURDAY, JULY 27, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

MONDAY, July 29		
TUESDAY, — 30		
WEDNESDAY, — 31	Great Meeting of the Highland Society at Perth.	
THURSDAY, Aug. 1		
FRIDAY, — 2		
WEDNESDAY, — 7		
THURSDAY, — 8	Royal Agricultural Society of Ireland at Belfast.	
FRIDAY, — 9		

—— THE Leeds Show has thrown nearly 10,000*l.* into the coffers of the Agricultural Society. The following are the exact returns of attendance on the five days; and it must be remembered that they do not include the attendance of members whose privilege of free access to the yards does not appear to have been a very costly grant on the part of the Council, the attendance on those days on which we made inquiry not having exceeded 300 or 400.

Monday	.. 2,027 visitors, paid	£506	15	0
Tuesday	.. 10,260 ,,	1281	5	0
Wednesday	.. 18,823 ,,	2352	17	6
Thursday	.. 73,824 ,,	3691	4	0
Friday	.. 40,368 ,,	2018	8	0
Total	.. 145,292	£9850	9	6

The following Table, which we extract from *Bell's Messenger*, shows the amount received for admission, with the entries of live stock and implements at each show:—

Year.	Locality.	Money paid for Admissions.	Entries of Live Stock.	Entries of Implements
1839	Oxford	[£1235	249	23
1840	Cambridge ..	3416	352	36
1841	Liverpool ..	4106	319	312
1842	Bristol	4202	510	455
1843	Derby	1969	730	505
1844	Southampton ..	2432	716	99
1845	Shrewsbury ..	1682	527	93
1846	Newcastle ..	2168	775	110
1847	Northampton ..	2473	580	142
1848	York	2514	866	146
1849	Norwich ..	2360	799	145
1850	Exeter	2493	769	418
1851	Windsor ..	3397	1226	—
1852	Lewes	1184	828	105
1853	Gloucester ..	2734	931	128
1854	Lincoln	3378	939	130
1855	Carlisle	3260	1076	121
1856	Chelmsford ..	2988	906	151
1857	Salisbury ..	3447	1462	156
1858	Chester	6187	1444	197
1859	Warwick ..	5459	1601	236
1860	Canterbury ..	2689	891	204
1861	Leeds	9855	1027	356

In explanation of this Table it should be stated that the years 1840, 1841, and 1842 include the receipts for dinner. The years 1841, 1842, and 1843 show the number of implements exhibited and not the number of implement exhibitors. No contributions by the locality was made until 1844, when Southampton offered 1000*l.*

Thus the largest sum ever received by the Society at any of its annual meetings has been at Leeds.

—— The reports from several of the Southern Counties in another page must be read with the remembrance that since they were written we have had a week or more of, for the most part, very wet, ungenial weather, which has been greatly against the healthy ripening of our earlier grain crops, and has besides done great injury to the Potato crop, of which very poor accounts are coming in. The disease has made an early appearance and seems unusually energetic.

—— On Tuesday evening in the House of Commons Lord J. RUSSELL, in reference to a question notice of which appeared on the business-paper, stated that the British Government had received no information to the effect that the Peruvian Government intended to open the guano trade. On the contrary, the information received was that the late contract having been cancelled, the Peruvian Government intended to propose for tenders for a new contract. What the British Government had done was to ask the Peruvian Government not in selling the guano to ask beyond a certain price, and to make that price equal to all nations, so that no favour would be shown to any one.

Major PARKER said that while we had imported last year about 30,000,000*l.* sterling worth of corn the importation of this valuable fertiliser had greatly fallen off. The House had been reminded by a petition presented by the grand jury of Leitrim that the Peruvian Congress had endeavoured to do away with the monopoly by which the English farmer was charged 2*l.* 5*s.* per ton more than his American rival. If this resolution of the Peruvian Congress should be carried out the English farmer would be saved 500,000*l.* a-year. The trade in Peruvian guano was now in a most unsatisfactory state, and he trusted that the Government would energetically urge upon the Government of Peru to make some reduction in the present enormous export charge levied on guano.

THE crops of Mangel Wurzel in the South of England are said to be affected with blight. A crushed leaf, very difficult to decipher, has been sent us as affected with "the blight" from the neighbourhood of Southampton; and wretched as its condition is, enough remains to show that the plants are smothered with aphis, for which unfortunately there is no certain cure, except such as would involve a greater expense than the worth of the plants. It is said also that some grub is injuring the roots in certain districts, and there are other more general complaints, which, however, we have not been able to realise.

It is very probable indeed from the peculiar condition of the weather, that such succulent plants should suffer from the imperfect formation of cellular tissue accompanied by a deficiency of the green granular matter in a portion of the cells, to which the healthy green tint of plants is due, for we have seen several instances of this disease, and think it very probable that some cases of blight are due to it. Indeed, in the specimen before us, we fancy that we see indications of such a condition. Mangel Wurzel is subject to two other affections which are more or less injurious, the one due to a small rustlike parasitic Fungus which covers the leaves with its dusty pustules, and the other arising from the contamination of old tap-roots which were left in the soil the previous year. This, however, occurs only where the plant is grown year after year on the same ground, and is in consequence far more common in Sugar Beet than in the peculiar varieties cultivated in this country.

Accounts have also appeared in agricultural journals that Wheat is affected with rust and mildew to a great extent. This may be true enough of rust as regards white Wheat, but it is too early to have much mildew at present. We have seen rust more prevalent in white Wheats, especially in the variety called Russian White, which has red smooth chaff, than we ever remember it. It is, however, confined to particular spots, and while in one field not a single leaf is free, insomuch that a person walking through the Wheat is completely painted with the spores, of a fine rust red; an adjoining field, separated only by a hedge, has not a rusty leaf. So long, however, as the rust is confined to the leaf, it is we believe perfectly harmless. The grain swells in spite of it, and the only effect is that the flag dies a little earlier, which is not undesirable when it is too luxuriant. If, however, it gets to any extent upon the chaff, much more if it attacks the seed itself as is some-

times the case, it is very mischievous. At present there need be no alarm about mildew, at least in such districts as we have examined, where we see not the slightest trace of it.

There is indeed a notion that rust is merely a form of mildew, and this may be true, but if so it is a harmless form. The true rust which botanists know under the name of *Trichobasis Rubigo vera*, if a form of mildew, preserves its own characters to the end, and merely presents a second form of fruit, a circumstance which is exceedingly common amongst the lower Fungi. It may exist in company with mildew, but it also more frequently is developed, without a trace of mildew intermixed. As far then as its immediate effects upon the plant go, it may be treated as a distinct parasite, though advanced botanists may look upon it as offering a case of what they call dualism, which may be easily understood on a comparison with such plants as Marigold and Orach (Atriplex), which produce seeds of two distinct forms. Its ultimate effects may, indeed, be injurious, as if it be really a second form of mildew, it is capable of propagating that pest.

The case is quite different with *Trichobasis linearis*, which is in fact merely the young state of the mildew. When once that supposed species makes its appearance, it is quite certain that there will be mildew to a greater or less extent. While the spores of the one remain unaltered though intermixed with the true bipartite spores of the mildew, the other exhibits every intermediate state of form and colour.

We gave last year a figure of some compound Barley analogous to mummy Wheat. The produce of the grains when sown is the common Chevalier Barley, two ears only being branched, and those to a far less extent than the parent ears. *M. J. B.*

SINCE the publication of the paper on the Buttercup at page 583, we have received the following communication relating to *Ranunculus arvensis*—the Corn Buttercup.

This letter so graphically pourtrays the perplexity experienced by the advent of a weed, that its study will be found to be highly instructive as illustrating some curious points in the natural history of weed growth. We shall therefore give it in full, and afterwards make a few comments thereon. It is from Mr. J. RIX, jun., of Lulsley Court, near Worcester:—

"Since taking to farm an estate in Worcestershire, in the valley of the River Teme, I have met with a weed that has puzzled my brain and that of many others that I have shown it to. It happens to grow in only one field in any part of this county by all inquiries that I have made, and that happens to be a field on my farm, and it also happens that this field will grow nothing else. The field is 11 acres, 5½ of which are on the limestone formation, and the rest on the red sandstone. It is naturally a very good working piece, and would bear capital crops, if each crop was not smothered with this weed. I at first thought it was the common Buttercup, but find, by comparing them, that the leaf and seed is quite different. The field was of Wheat, which crop belonged to the outgoing tenant, but off the 11 acres I am sorry to say he reaped the benefit (on account of this weed) of only 9 pecks of Wheat, and the straw of course was good for nothing but to be burnt. I worked the land by ploughing, and let it lie the winter, and then sowed it with Vetches, which promised for a good crop, when up popped this dreaded weed, and it was a case of 'woe to poor Vetches.' After being disappointed in my Vetch crop I folded sheep on the land, and what Vetches were left they ate, but not the weed. I had the weed mowed and burnt; I then again worked the land, and have planted it this year again with Wheat after giving it a good coat of manure; and it was at one time the most promising piece of Wheat on my farm, of which Wheat I have 62 acres. But, alas! I was disappointed again, for the weed came up, and in triple the quantity it ever has before, and it has already destroyed the whole of my Wheat crop. It is most laughable to think, that the more you try to destroy it the worse it is. We have many people come from all parts on this side of the county, to see the field, and a great many have named it 'The Devil's Close' and I have hoed it a great many times but to no effect; it still comes the thicker. I have sent you a small root of it; the weed generally grows about 8 inches higher than the one I have sent, and my field now has a most beautiful yellow appearance. If you would please be so kind as let me know the name of my *beautiful enemy* I should esteem it for ever a favour."

This case well illustrates the rapidity with which a weed when transported in seed or otherwise to a new district will take possession of the land if the soil be but suitable for it, and it is besides curious to note how luxuriant the plant grows from the "change," for the "small root" sent by our Correspondent is 15 inches high, and if as he states the "weed generally grows about 8 inches higher," we do not wonder that even the Wheat should be overtopped and smothered by its gigantic enemy.

Now, with respect to the Wheat looking so promising, this is not unusual where the land works well, and is in a comparatively genial climate; but the highly successful growth of the Corn Buttercup, the "Hunger-weed" of the farmer, is an evidence that the land is of a poor cold stiff nature, such as the Buttercup delights in, and so, while it could get on well, even in early spring the Wheat would be falling off from sheer want, as the little nutriment in the soil would be taken possession of by the hardier interloper.

In all probability its introduction was due to the Vetches, as its seed is not at all unfrequent in samples of Vetch seed, though less so than that of the *Agrostemma Githago* (Corn Cockle), which as it is as large as the Vetch and somewhat approaching it in colour, too often passes muster without challenge, indeed to such an extent, that the other day we estimated as much as one-fifth of Corn Cockle in a sample of Vetch seed as we took it out of the sack. This plant is indeed mischievous; but the Buttercup, on the other hand, is highly deleterious, so that it is well that the cattle refuse to eat it. Perhaps one or both of the following reasons may account for our Correspondent not having got rid of his "beautiful enemy."

1. It ripens individual flowers successively, so that even while the plant is fresh and green and in the full vigour of flowering, from one to two or three flowers may have ripened; and as they produce on an average as many as six seeds each, even if killed then a good provision may have been supplied for its increase; but besides this several plants will of necessity have been overlooked and so have been left to mature and sow the whole of their seed.

2. When threshing the first crop of Wheat, what became of the filth, and among it the seeds of the Buttercup? Was it burnt? We have no doubt if a searching inquiry could be instituted it somehow or other got to the manure heap, with which it was again spread over the soil.

However, it is pleasing to know that good farming will soon get this pest under, and the readiest means thereto are—draining, liberal manuring, never allowing the weed to seed on the ground, and care to avoid sowing the objectionable seed either in the seed for the crop or in the application of refuse from the farm-yard or from the manure heap.

These remarks may be considered as a practical appendix to the recent paper on the Buttercup, and tends to show what an interesting inquiry the commonest weed may lead to.

THE SHEEP CLASSES AT LEEDS.

THERE are causes at work to which are owing great and important changes in the sheep classes. This change was very visible at Leeds, and we shall be pardoned for prefixing a few observations to a slight analysis of the supply. The cry is for more wool and mutton. The people require to be fed, and to be fed by home produce; they require raw material of a certain class for manufacture and a great deal more of it. It becomes the question therefore with sheep-breeders whether they will rigidly hold by their old orthodoxy, or in the eye of that old faith become heterodox for the sake of the common weal. We perceived at Leeds that public favour which has so long clustered about the woolly beauty of the Southdown is deserting that animal, and distributing the awards of opinion and patronage upon sheep that have larger frames and longer wool, and not only is this strikingly manifested in England, but we hear that certain parts of Australia to which Merino sheep have been sent in great quantities, are now transmitting orders to their agents for long-woolled animals. What did we see at Leeds but a poor show of Southdowns as to numbers, a respectable one of Leicesters, a remarkably fine one of Shropshire, Hampshire, and Oxfordshire Downs, and a superlative show of Cotswolds? Why the Lincoln heavy-woolled sheep were not also represented we cannot tell, particular as their home is contiguous to Leeds.

Mr. Caird is perfectly right in directing public attention to the fact. Sheep must become great objects of agricultural enterprise, and the breeder will not keep on to raise small mutton and fine wool, when great mutton and long lustrous wool is demanded by a fashion that does not seem at all likely to change. The light wools can be grown in other countries, and in our colonies with great facility, but so far as we see the heavier wool cannot; it becomes our duty then to abandon upon the true free trade principle the growth of fine wool, with which we can be more cheaply supplied from abroad, and cultivate a wool for the production of which our climate gives us special advantages. The big heavy-woolled sheep of Gloucester and Lincolnshire must be used to cross and increase the size of the smaller breeds, care being taken in the emprise to lose no good property for which small breeds are valuable.

Let us recur to the Southdowns. There were ... entries only; who are the men making these en... Principally the Duke of Richmond, Lord Walsing... Sir Thos. Lennard, amongst the nobility, and Mr. Ri... Mr. Heasman, and Mr. Waters, amongst ... breeders. Some may ask, Not Jonas Webb? ... reply, not Jonas Webb; and there is something signi... in the fact of his retiring from this branch of bus... though we are far from assigning any positive cause ... it; but as he had the good sense to adopt the ... breed at the right time, and rise upon it to fame ... fortune, perhaps it may be that the same good se... teaches him to abandon a standing point conside... dangerous. That some 900 sheep made 11,000*l.* ... be urged as a significant fact in a contrary directio... and we are not about to discuss it; all we would do ... to remind men who saw both Shropshire and Downs ... as to the difference in size, colour, and wool. Th... owners may have a fancy which they can afford to indulg... and it would be well to let the breed be in their h... as a stock which is necessary to be retained, and ... be at some future time of more value to the ... than it is at present, while the general body of ... turn their attention to give a practical reply ... popular demand for more wool and mutton. ... Shropshire classes there were nearly 100 entries, ... ing pens of ewes in the singular, from the flocks ... Earls of Aylesford and Dartmouth, Mr. Hamilton, ... Bowen, Mr. Horton, Mr. Crane, Mr. Mansel, ... Foster, Mrs. Baker, Mr. Holland, and Mr. Coxon. ... aged Ram class was particularly good. Mr. Ho... sheep, second in this class and first in the sho... class, are grand specimens of the breed; pla... thrown out, neck and rump fully developed. So... the class were a little thin in the thighs. The... were three commendations, and one high comm... tion, and three prizes awarded in the class f... consisting of 16 pens, is a fact which speaks for ... Mr. Crane's great roomy animals, maintaining the ... character in head and frame to a remarkable deg... was a pleasure to look upon, and Mr. Foster's ... five showed very superior breeding.

There were 60 entries in the class devoted ... woolled Sheep not qualified to compete as Lei... in other words of Cotswolds, with the exception of ... Merinos and one or two specimens of a Lin... with the Leicester blood. Ten out of this ... entries were made by Mr. Beale Brown, but ... fine sheep they are scarcely up to the mark ... possibly he is sacrificing this year to next, ... intends making a push for the Regent's ... Mr. Gillett, Mr. Hardy, Mr. Fletcher, Mr. ... Lane, Mr. Garne, and Mr. Ruck are ... The class is not under titled patronage, ... upon the list, and probably because the ... class are too revolutionary. The Shearling class ... bigger than we ever saw it. There were ... types, and the public was evidently very ... prised by the grand proportions and beauti... The two little Merinos looked quite uncom... in the neighbourhood of these lordly fellows, ... skulked in one corner of their pens, holding down ... heads sulkily.

The class of Short-woolled not qualified to ... as Southdowns or Shropshire Sheep, presented ... an uneven face. Oxford and west country Downs ... mixed up with Cheviots and improved Hampshire. ... first there were 45 entries, of the second 21, of the ... 2, and of the fourth 9. The difficulty the judges ... have experienced in dealing with a lot so dis... tioned in size and so different in character, ... been very great, and surely the Oxfordshire ... sufficiently numerous, and are sufficiently chara... to merit a class to themselves for the future. ... Duke of Marlborough, Mr. Brian, Mr. King, ... Barnett, Mr. Gaskell, Mr. Charles Howard, Mr. ... plary, Mr. Joseph Druce, are the principa... amongst the competitors. There were 65 ent... Leicester Sheep. Mr. Sanday, Mr. Creswell, ... Inge, Mr. Turner, Mr. Wiley, Mr. Powlett, Mr. ... being competitors. Mr. Sanday showed five ... shearlings, and Lieut.-Colonel Inge, with Mr. ... blood, won the first prize; Mr. Sanday being ... third. Indeed, Mr. Sanday seems in this bre... it all his own way.

The Mountain Sheep were good, though ... number, but they do not require anything to ... them.

Amongst the Boars of a large breed, Mr. ... showed one of special size, but the evidence ... better breeding were with Mr. Bullock's ... Woodhouse's. In the class for Boars of ... white breed, Lord Wenlock fairly equals his ... Highness the Prince Consort, while in the ... three breeding sow pigs of the same breed ... him. These pigs at Windsor the other day looked ... beating, but here at Leeds they found their level. ... whole class of breeding sows of a small white ... deserved special commendation. Mr. Crisp ... well with the black breed. The four and eight mo... old pigs of various breeds were astonishing.

MEANS OF SAVING THE POTATO CROP.

THE Anniversary of the Potato blight of 1845 ... July (this day). Nothing could exceed in appearance ... the present promise of the crop; which, treacherous ...

699-700 & 701-702 at back.

late years it has proved, and disappointing to the hopes of the poor, is once more put down in greater breadth than ever. The haulm is everywhere very luxuriant; and early garden sorts, already abundant in the market, give token of considerable excellence in the crop. But all depends upon its keeping dry—all depends upon St. Swithin, who, whilst we write, has enlisted the aid of the comet and continues to give testimony of his watery approach on the 15th in intermittent but copious showers, which, however, are travelling about electrically, and if plentiful, very partial. Still, until a confirmed settlement occurs in the weather, the Potato crop is in danger; and a friend who has prudently filed all the precautionary suggestions in this year's *Agricultural Gazette*, has thrust them into our hand for the purpose of renewing attention to some of those measures as exceedingly valuable and likely to prove very efficacious in case of need, although we dare say that in repeating the substance of them most readers will readily recognise them as having already been printed by us *in extenso*.—The first of these remedies for the Potato disease, in order of date, is that of Mr. Miles, of Bristol, which appeared early in February. He states that in all Potatoes affected by the disease there is to be found a degree of moisture in excess of that appertaining to sound Potatoes, even before the disease is visible to the naked eye. This gradually increasing, the disease appears, and the character of the plant becomes changed—complete rottenness succeeding comparative soundness sometimes in the course of a single day—oftener in a single hour. Then follows the story of the Russian professor (Bollman, of St. Petersburg), who accidentally overheated or rather overdried some hundredfolds (seed Potatoes) sent him, from having placed them on the back of a stove and forgotten them till the planting season. Shrivelled as they were when planted, they flourished to such a degree that, although every other Potato in the country was more or less affected by disease, they were entirely free from the disorder. This put the professor upon the plan of stove-drying his seed Potatoes—some of them till nearly charred—but they grew, and although in 1855 the disease was general, not one of the professor's Potatoes were affected. The experiment is said to have been repeated in 1856 with the same results. In 1857 upward of 3 acres planted with kiln-dried Potatoes, produced 1600 bushels, and not a diseased Potato among them. Professor Bollman then in 1858 erected a drying-house with heated floors, and the landed proprietors around have imitated him by similar erections on their different estates within the last two years. Mr. Miles also notices that by constantly raising new varieties of Potato from seed, the ravages of the disease would seem for a time capable of being evaded, as in the case of the Fluke Kidney, which, for the first two years after its introduction and general cultivation, was free from disease, although last year Flukes would appear to have become an incident to it as regents and Fortyfolds; but the kiln-drying process he evidently thinks infallible. The next recommendation, it may be remembered, was contained in a letter read before the Royal Agricultural Society, February 20th, from Mr. Leonard Short, gardener to John Mildford, Esq., Coaver, Exeter. He stated that when he found the leaves of his Potatoes diseased, he immediately covered them entirely with earth, leaving the roots high and dry, the ridges being not less than 30 inches apart. The consequence he says is that every tuber remains perfectly sound without spot or blemish. This he suspects may arise from the exclusion of atmospheric influence as well as moisture. Whilst digging as healthy Potatoes as ever grew, he has found that some sown a few feet distant, but not earthed up, were decayed and useless. This treatment he asserts to be equally applicable to all kinds of soil and Potato—and to fields as well as gardens. In Norfolk in the third week of March, 1856, he planted two acres of Potatoes in a stiff clay soil 30 inches apart, and 10 inches to the furrow. The Potatoes, when well up, were hand-hoed and kept clean till the beginning of June, then earthed up with a double breasted plough; and in the middle of July a single furrow was taken from between the rows by "Howard's patent plough," laying the furrow slices on the tops. As a test, some of each variety were left unearthed. On taking up the crop in October every tuber of those covered in the way described was found quite sound and healthy, whilst half of those unearthed-up were diseased and useless. Those who hesitate to adopt this method implicitly, may at all events try the experiment on a scale of greater or less magnitude; we only hope that the season may be dry enough to enable us to escape the disease. Finally we have the more popular inquisitions of "C. of Hornsey," published in March, and which we have reason to believe many in our neighbourhood have adopted on our recommendation. He assumes it to be satisfactorily demonstrated, by microscopical examinations, that the disease is due to the deposition by the atmosphere of a minute Fungus, "which, taking up its habitation first upon the leaf and haulm of the Potato plant, propagates with astonishing rapidity, and ultimately finds its way to the tubers and completely destroys them." He experimented for a counteractive, set his Potatoes in double rows instead of single, the two rows occupying a foot in width, with a foot of vacant space outside each row. They were planted on the level and hoed up at the usual time. Now comes the important step; when the haulm had reached its full growth, about the 1st of July, he turned it over right and left towards the vacant spaces, by adding earth between the rows and pressing down the haulm so as to drive it from the erect position, and allow the rain, instead of descending to the roots, to run off upon the vacant space. He planted Regents and Flukes: one portion of the Regents on the old system and a larger portion on the new—the Flukes entirely on the new. The land was a heavy clay, as bad as can possibly be for Potato growing. On the new system, however, the Regents proved a good crop; on the old plan a complete failure. Of the Flukes (an excellent crop) not one in a hundred were bad, although his neighbours for miles around lost their crops without exception. Others have tried the plan and proved its efficacy. A gentleman planted a lot of Potatoes, and being lumbered with a lot of plants, for which he had not room, allowed them to be thrown down on part of the Potato bed. On afterwards removing these and digging the Potatoes, he found to his surprise that those on which the planks had lain were in excellent condition, whilst those exposed in the ordinary manner were diseased. By turning down the haulms he believes that the Fungus is washed off the plant not downwards to the tubers, but into the naked soil, where it perishes for want of nutrition. It will be sufficiently easy for most farmers to give these several methods a trial and let us know what they think of them; but some perhaps may, "laying this and that together," arrive opportunely at some means of saving our Potato crop, from what has now been said. *W. W. Fyfe, Charminster, near Dorchester, Dorset.*

MISSISSIPPI BELOW NATCHEZ.

A ROW of a quarter of an hour brought us to the levée on the other side. I ascended the bank, and directly in front of me, across the road, appeared a carriage gateway and wickets of wood painted white in a line of park palings of the same material, which extended up and down the road as far as the eye could follow, and guarded widespread fields of Maize and Sugar-cane. An avenue of trees with branches close set, drooping and overarching a walk paved with red brick, led to the house, the porch of which was just visible at the extremity of the lawn, with clustering flowers, Rose, Jessamine, and Creepers clinging to the pillars supporting the verandah. The proprietor, who had espied my approach, issued forth with a section of sable attendants in his rear, and gave me a hearty welcome. The house was larger and better than the residences even of the richest planters, though it was in need of some little repair, and had been built perhaps 50 years ago, but it had belonged to a wealthy family who lived in the good old Irish fashion, and who built well, ate well, drank well, and—finally, paid very well. The view from the Belvedere was one of the most striking of its kind in the world. If an English agriculturist could see 6000 acres of the finest land in one field, unbroken by hedge or boundary, and covered with the most magnificent crops of tasselling Indian Corn and sprouting Sugar-cane, as level as a billiard-table, he would surely doubt his senses. But here is literally such a sight. Six thousand acres, better tilled than the finest patch in all the Lothians, green as Meath pastures, which can be cultivated for 100 years to come without requiring manure, of depth practically unlimited, and yielding an average profit on what is sold off it of at least 20*l.* an acre at the old prices and usual yield of Sugar. Rising up in the midst of the verdure are the white lines of the negro cottages and the plantation offices and Sugar-houses, which look like large public edifices in the distance. And who is the lord of all this fair domain? The proprietor of Houmas and Orange-grove is a man, a self-made one, who has attained his apogee on the bright side of half a century, after 25 years of successful business.

When my eyes "uncurtained the early morning" I might have imagined myself in the magic garden of Cherry and Fair Star, so incessant and multifarious were the carols of the birds, which were the only happy coloured people I saw in my southern tour, notwithstanding the assurances of the many ingenuous and candid gentlemen who attempted to prove to me that the palm of terrestial felicity must be awarded to their negroes. As I stepped through my window upon the verandah a sharp chirp called my attention to a mocking-bird perched upon a Rose bush beneath, whom my presence seemed to annoy to such a degree that I retreated behind my curtain, whence I observed her flight to a nest cunningly hid in a creeping Rose trailed around a neighbouring column of the house, where she imparted a breakfast of spiders and grasshoppers to her gaping and clamorous offspring. While I was admiring the motherly grace of this melodious flycatcher a servant brought coffee, and announced that the horses were ready and that I might have a three hours' ride before breakfast. At Houmas *les jours se suivent et se ressemblent*, and an epitome of the first will serve as a type for all, with the exception of such variations in the kitchen and cellar produce as the ingenuity and exhaustless hospitality of my host were never tired of framing.

If I regretted the absence of our English agriculturist when I beheld the 6000 acres of cane and 1600 of Maize unfolded from the Belvedere the day previous, I longed for his presence still more when I saw those evidences of luxuriant fertility attained without the aid of phosphates or guano. The rich Mississippi bottoms need no manure, a rotation of Maize with Cane affords them the necessary recuperative action. The Cane of last year's plant is left in stubble, and renews its growth this spring under the title of ratoons. When the Maize is in tassel, Cow Peas are dropped between the rows, and when the lordly stalk, of which I measured many 12 and even 15 feet in height—bearing three and sometimes four ears—is topped to admit the ripening sun, the Pea vine twines itself around the trunk, with a profusion of leaf and tendril that supplies the planter with the most desirable fodder for his mules in "rolling time," which is their season of trial. Besides this, the corn blades are culled and cured. These are the best meals of the Southern racehorse, and constitute nutritious hay without dust. The Cow Pea is said to strengthen the system of the earth for the digestion of a new crop of Sugar-cane. A sufficient quantity of the cane of last season is reserved from the mill and laid in pits, where the ends of the stalk are carefully closed with earth until spring. After the ground has been ploughed into ridges these canes are laid in the endless tumuli, and not long after their interment a fresh sprout springs at each joint of these interminable flutes.

As we ride through the waggon roads, of which there are not less than 30 miles in this Confederation of four plantations, held together by the purse and the life of our host, the unwavering exactitude of the rows of Cane, which run without deviation at right angles with the river down to the cane-brake, two miles off, proves that the negro would be a formidable rival in a ploughing match. The Cane has been "laid by"—that is, it requires no more labour—and will soon "lap," or close up, though the rows are 7 feet apart. It feathers like a Palm top; a stalk which was cut measured 6 feet, although from the ridges it was but waist high. On dissecting it near the root we find five nascent joints not a ¼ of an inch apart. In a few weeks more these will shoot up like a spyglass pulled out to its focus.

There are four lordly Sugar-houses, as the grinding mills and boiling and crystallising buildings are called, and near each is to be found the negro village, or "quarter," of that section of the plantation. A wide avenue, generally lined with trees, runs through these hamlets, which consist of 20 or 30 white cottages, single storied and divided into four rooms. They are whitewashed, and at no great distance might be mistaken for New England villages, with a town-hall which often serves in the latter for a "meeting-house," with, occasionally, a row of stores on the ground floor.

The people, or "hands," are in the field, and the only inhabitants of the settlements are scores of "picaninnies," who seem a jolly congregation, under the care of crones, who here, as in an Indian village, act as nurses of the rising generation destined from their births to the limits of a social Procrustean bed. The increase of property on the estate is about 5 per cent. per annum by the birth of children.

We ride an hour before coming upon any "hands" at work in the fields. There is an air of fertile desolation that prevails in no other cultivated land. The regularity of the cane, its gardenlike freedom from Grass or weeds, and the *ad unguem* finish and evenness of the furrows, would seem the work of nocturnal fairies, did we not realise the system of "gang labour" exemplified in a field we at length reach, where some 30 men and women were giving with the hoe the last polish to the earth around the cane, which would not be molested again until gathered for the autumnal banquet of the rolling-mills.

Small drains and larger ditches occur at almost every step. All these flow into a canal, some 15 feet wide, which runs between the plantation and the uncleared forest, and carries off the water to a "bayou" still more remote. There are 20 miles of deep ditching before the plantation, exclusive of the canal, and as this is the contract work of "Irish navvies," the sigh with which our host alluded to this heavy item in plantation expenses was expressive. The work is too severe for African thews, and experience has shown it a bad economy to overtask the slave. The Sugar-planter lives in apprehension of four enemies. These are the river when rising, drought, too much or unseasonable rain, and frost. The last calls into play all his energies, and tasks his utmost composure. In Louisiana the Cane never ripens as it does in Cuba, and they begin to grind as early in October as the amount of juices will permit. The question of a crop is one of early or late frost. With two months' exemption they rely, in a fair season, upon a hogshead of 1200 pounds to the acre, and if they can run their mills until January the increase is more than proportionate, each of its latter days in the earth adding saccharine virtue to the cane. *The Special Correspondent of the Times.*

THE IMPLEMENTS OF THE FARM.

(1.) *The Plough.*—Probably the most interesting and elaborately-discussed topic, in the first volume of the English Agricultural Society's Journal, is the draught of ploughs. The question "Swing *versus* Wheel" in ploughs was then a first-class agricultural controversy, and the charge of prejudice on one side and on the other was probably true of both, until the experiments of Mr. Handley and of Mr. Pusey had shown that the universal preference in Scotland, and the occasional preference in England, could only "here and there" be justified

and that, as a general rule, the addition of the wheel enabled better work at a less expense of draught. What has been the subsequent history of this question? It has, at length, been taken almost entirely out of the region of dispute, and a single fact may be regarded as conclusive of it. Probably no plough-makers of the present day have a larger or more widely-scattered body of customers than the Messrs. Howard of Bedford. They inform me that during the last six years 30,000 ploughs have left their works, and of these "not more than 25 out of every 1000 have been swing-ploughs!" Other first-class makers, both of a longer and more recent reputation, Messrs. Ransome and Messrs. Hornsby, would, I believe, relate a similar experience. Of course, the almost unanimous voice of those who purchase ploughs must at length be taken as a better test of quality and value than any single or repeated ploughing-match, however carefully superintended, can be; and I believe the leading manufacturers of the plough, reflecting the experience of their customers, will now give an almost unanimous verdict in favour of the wheel.

(2.) *The Value of the Cultivator or Grubber* as a tillage implement was gradually realised during the early years of the English Agricultural Society's career. Biddell's scarifier was described in the first volume of the Journal. The Uley cultivator soon afterwards attained distinction at the annual exhibitions. "Cat's-claw" and other "drags," in their turn, achieved a reputation; and Bentall's "broadshare" and Coleman's scarifier are now probably in the foremost rank. Finlayson's grubber, and modifications of it, adapted to pair-horse cultivation, preceded all these; but this is nearly the subsequent history of the implement. There is not, among the lessons of recent agricultural experience, one of more general utility, hardly one of greater importance, than the serviceableness of the cultivator as a tillage implement. Though, however, it is admirably illustrated on thousands of farms, and well represented in the annual show-yards of our leading societies, it has hitherto received no adequate illustration in the pages of their Journals and Transactions. It is to be attributed to the extension of land-drainage, that an implement which stirs the soil is gaining ground over one which turns it over. Stirring implements cannot be used when land is wet. The soil may be turned with impunity, and even with advantage, when stirring it would only knead and injure it. But on all drained clay soils it is becoming more and more the practice to plough only before winter, and to depend on the cultivator and harrow for obtaining tilth in spring. This prevailing practice is, of course, leading to an increased manufacture of this class of implements. If we had before us the accounts of all the agricultural implement makers of the country for the past few years, they mould most likely tell us that in nothing has there been a more marked agricultural progress than in the extended use of the cultivator, scarifier, and grubber, as a substitute partly for the plough, and partly for the heavy drag-harrow.

In order to ascertain the increased use of different classes of agricultural machines, in illustration of the lessons of recent agricultural experience, I lately made inquiries on this and other points of most of our implement-makers. Unfortunately, many (one of the leading makers of cultivators and broadshares among them) did not think with me, that the figures obtained in this way would be trustworthy illustrations of my subject; and as it is only from some of them that I have obtained returns, their figures may really show not only the tendency of general agricultural experience, which is what I wish to exhibit, but also the waxing or the waning reputation of the individual manufacturer, with which in these pages I have nothing to do. It is nevertheless interesting, in connection with this subject, to know that a single leading manufacturer has sent out many thousands of cultivators during the past five years, and is now executing orders at the rate of several dozens weekly; and taking the experience of a less well-known manufacturer to represent the increase of a merely local demand, it is interesting to learn from a maker who has only lately begun their manufacture, that during the past four years he has sent out 25, 36, 87, and 183, respectively, of his patent cultivator.

The use of the cultivator with the occasional employment of the plough, instead of the use of the plough with the occasional employment of the cultivator, is now, and as a lesson of recent agricultural experience, generally admitted to be the most economical way to the attainment of tilth. On clay land especially, as already said, a single ploughing before winter is almost all that such land should receive throughout the year. Spring work should, if possible, be confined to the use of implements which stir the furrow-slice, and the seed-bed should be prepared upon the winter-weathered surface. No other surface, turned up by a spring ploughing, can be generally reduced so easily or perfectly by the roller and the harrow.

(3.) *Turnip-cutters, &c.*—Following now the order, not of the year's agricultural progress, but of general agricultural history, I will refer to Turnip-cutters, chaff-cutters, and machines for economising and utilising food. Referring to the Turnip-cutter, Mr. Pusey said: —"Its advantage is two-fold—saving the teeth of old ewes, for which the Swedish Turnips especially are too hard—saving the waste of this valuable root, which, when partially scooped out by the sheep, is rotted and trampled about with great waste. The economy effected by this simple machine has been stated to us, by an authority which would at once be admitted as very high, to be no less than one-third of the whole produce."*

The chaff-cutter, again, had long been well known to agriculturists; and, as named by Mr. Pusey, its use had that year been the subject of discussion before the Harleston Farmers' Club. The use of both of these machines has, however, latterly enormously extended. Chaff-cutters are turned out annually in thousands by single firms; and a single maker supplies to order nearly 5000 Turnip-cutters a year. Cake-breakers and corn-crushers—implements of the same class—rarely used when Mr. Pusey wrote, are even more rapidly coming into general employment. The following are the number of cake-breakers made during the last five years by a firm not specially noted, that I have ever heard, for this particular implement—they were 172, 332, 264, 399, and 822 respectively. The winter of 1859-60, to which this last large number related, was indeed a great stimulant to the manufacture and the use of the whole of this class of machines. Scarcity of food enforced every possible method of economising it; and no other is so efficient as the mixture of palatable and nutritious food with that which, though nutritious, is not particularly palatable. Chaff-cutters cut up poor hay and straw; and Turnip-cutters and root-pulpers, and corn-crushers, and cake-breakers reduce roots and corn and cake to a condition in which they can be mixed with this chaff, and so induce cattle to consume it.

Another manufacturer of oilcake-breakers, who had made 50 or 60 annually (only 49 in 1859), had orders for 107 in 1860; and his manufacture of corn-crushers has exceeded 400 annually during the past six years. A third gives the following as his manufacture of chaff-cutters for the four past years—200, 420, 550, 760; while his corn-crushers during the same four years have been 40, 90, 110, and 130. And, as showing the increase of demand in a particular locality, I add the figures of a Shropshire manufacturer, whose name appears but rarely in the show-yards of our leading societies. During the past few years he has made of chaff-cutters annually, 16, 18, 22, 28, 90, 135, respectively. These items, then, are evidence enough of the increasing use of this class of implements.

The economical use of much food that has hitherto been wasted, which we owe to the increased employment of Turnip-cutters and chaff-cutters, &c., has latterly rapidly extended since the invention of the root-pulper, an instrument of which the manufacture dates only from about four years ago, but which has come most rapidly into use.

The Turnip or the Mangel Wurzel is by this machine reduced much more nearly to a pulp than it can be by any Turnip-cutter—not even excepting Moody's of Warminster, to which, however, very satisfactory testimony is given in the sequel—and thus a more thorough mixture of dry chaff of straw or hay with the juices of the root can be effected; and so an agreeable taste is substituted for that which, in the case of inferior hay, is unpalatable, and makes it less valuable as food than its composition indicates. The use of the pulper shared with that of all other machines of this class an enormous extension during the winter of 1859 and '60.

In the southern part of the island the severe October frost of 1859 caused a great destruction of roots; and a short supply of hay brought chaff-cutters and Turnip-pulpers into general use for turning such roots and hay as were available to the best account, along with an unusually large admixture of straw for quantity, and cake and grain for quality. It is in the use of these two classes of machines, rather than in that of steaming apparatus, that the ordinary practical farmer will find his cheapest plan of turning inferior fodder to account. Steaming apparatus is nevertheless coming more rapidly than hitherto into general use. A single manufacturer, who during the ten years previous to 1855 had made 200 sets of apparatus for this purpose, has made 300 in the five years since that time, of which 95 were sent out in 1860.

(4.) *The Use of the Threshing Machine* dates from 1780; that of the same machine on wheels, and moveable from farm to farm, dates from 1841. In 1842, Mr. Pusey, speaking of agricultural machinery, adverted to two circumstances: one, that a manufacturer declares that his threshing-machines, which seven years ago only threshed 15 quarters of Wheat in a day on an average, now thresh 25; the other, that in accordance with a suggestion made in the first number of the Journal, travelling threshing-machines worked by steam were brought forward by two makers at Bristol, Messrs. Ransome, of Ipswich, and Mr. Cambridge, of Market Lavington, in Wiltshire. He adds that Mr. Howden, and the Messrs. Tuxford, of Boston, had each constructed for travelling men similar machines, which were then commonly let for hire in the Fens of Lincolnshire. This was the commencement of what has latterly been the most remarkable illustration of agricultural progress that can be named. There is no class of machines of which the usefulness and economy have so rapidly commended themselves to farmers generally. Of this the enormous extension of the locomotive steam-engine, till lately used exclusively for the driving of the movable threshing-machine, is sufficient proof. At the close of 1859, returns from the leading manufacturers enabled me to state,† that in the past four years 40,000 horse-power had been added to the forces used in agriculture in steam engines. Messrs. Clayton & Shuttleworth, of Lincoln; Garrett, of Saxmundham; Hornsby, of Grantham; Ransome, of Ipswich; and Tuxford, of Boston, were then furnishing 10,000 horse-power annually to the farmer; and Messrs. Clayton, of Lincoln, were sending out 10 engines weekly, or 4000 horse-power per annum. The following is the history of their manufacture:—In 1849 they exhibited their first portable steam-engine and threshing-machine at the Norwich Show of the Royal Agricultural Society of England. In the year 1851 they sent out 140 portable engines; in 1855 the number increased to 491; and during 18.. it extended to over 500. Their engines are made from 3 to 20-horse power; the average in 1851 was 5-horse power; in 1855 it was nearly 7-horse power; and the demand for the larger-sized engines has continued on the increase.

Messrs. Tuxford, of Boston, who send out four or five engines weekly, chiefly of 8 or 10-horse power, also state that they, too, have a gradually increasing demand for engines of a larger power. These have been also employed for driving the locomotive threshing-machine. The more powerful engines of the class are now gradually coming into use for other purposes, as for the Woolston grubber or Fowler's "steam-plough;" but hitherto the enormous additions to our power provided have been used in driving threshing-machines, generally now of threefold the ability of the "improved" machines of Mr. Pusey's manufacturer; and able, therefore, to set free an immense number of labourers lately employed all winter at the flail, for other work of greater importance. Probably in nothing does the difference between our present agriculture and that of twenty years ago, thus appear more striking than in the winter work of the agricultural labourer in England.

(5.) *The Reaping Machine.*—Coming down to a recent period, we reach the first appearance of the reaping-machine in English agriculture. Invented many years ago in Scotland, and afterwards rewarded by the Highland Society—actually used on the farm of the brother of the inventor annually since its invention—it was not until after its appearance in the American Department of the Great Exhibition in 1851, that it was first introduced to English agriculture; and it now bids fair to make almost as great a change in the winter work of the agricultural labourer here, as the threshing-machine has effected in his labour during winter. Since 1851 Messrs. Burgess & Key have sold 2800 of their reapers, of which near 800 were sold during the past two years. Crosskill has sold 500 of Bell's reapers, and 800 of Hussey's; and of various other forms of Hussey's reaper, made by 12 separate manufacturers, many thousands must have been in use last harvest. Dray has sold ... form of it; Mr. Cranstoun tells me that he has ... 250, and 498, in three successive years, of Wood's modification of it. The Cuthberts, of Bedale, have made ... 100, and 500 of theirs. Mr. Wray, of Leeming, near Bedale, in the last six years has sold 7, 15, ... 95, 312 of his. And how extensively the machines of other makers, less known at our end of the island, are employed in Scotland, may be gathered from the fact that in East Lothian alone 119 machines of Gardner and Lindsay of Stirling, with smaller numbers of other makers, were last year employed.

There was hardly ever a worse haymaking season than that of 1860; and every such assistance as ... and hay-tedding machines and horse-rakes give in the process of haymaking is an immense economy. ... of these implements are being increasingly used. ... tedders are turned out by individual makers at the rate of 500 annually; horse-rakes at the rate of 400 ... by one maker, and 1000 a-year by another.

Mr. Boby, of Bury St. Edmunds, states that of his well-known corn-screen the following numbers have been manufactured during the last six years:— ... 100; in 1856, 300; in 1857, 400; in 1858, ... in 1859 and 1860, 1803!

Of Cartwright's chain-harrow, an implement ... for mere surface treatment of the land, as in "... seeds or breaking clods, a single manufacturer sent out in 1857 26; and in the following years ... 281; and in nine months of 1860, 333. Of ... Potato-digger, Mr. Coleman, of Chelmsford, ... 100; but others manufacture it, and many more ... fore are in use. I understand from Mr. Reeves, of Bratton, that nearly 600 water-drills have been sent out by them within the past six years. It is an implement of great usefulness in dry seed times, the merits of which were the subject of an excellent report ... published paper by Mr. A. S. Ruston, of Chatteris. And lastly, of an extremely useful implement ... lately invented and manufactured by Messrs. ... Hindley, of Bourton, near Wincanton—their ... weaving machine for the cheap manufacture of ... 16 were sold in 1859, and 146 in 1860.

There is no unfairness to other manufacturers in thus specifying individual makers, when the object is by illustrations of the estimation in which any particular instrument of their invention is held, to point out to agriculturists the serviceableness of special implements.

* Royal Agricultural Society's Journal, vol i.

* Journal of the Society of Arts, Dec. 9, 1859.

† Royal Agricultural Society's Journal, Vol. xx., p. ...

with the use of which some of them may be unacquainted. *Mr John C. Morton, on Recent Agricultural Experience in the Bath and West of England Society's Journal.*

HUNGARIAN AGRICULTURE.

The Rural Economy of Lower Hungary.—Mr. Dunn lately read a paper on this subject before the Wintrith Farmers' Club, fully reported for the *Dorset County Chronicle*, which is always full of useful agricultural information. We take the following extracts from its columns:—

Lower Hungary is a vast plain, said to comprise an area of 35,000 square miles, through which flow the rivers Danube, Theis, Drave, and Maros, all of which are navigable to a considerable extent for craft of light draught of water. These rivers afford means for carrying on much of the internal commerce of the country, and form the outlets for the exportation of its agricultural produce. There are several railroads connecting the more important districts with Vienna, the fares on which are moderate; and as the leading roads are kept in good order by Government, and tolerably well made, there is, on the whole, not much to complain of in the way of convenience for the transit of goods or for personal travelling. Generally the soil is easy of tillage, and only moderately cohesive, really good brick earth being difficult to find. The climate is marked by extreme cold in winter, and very great heat in summer. The rapidity of growth during the summer is almost equal to that within the tropics. The whole tribe of Cereals flourish, and some of the Legumes, Indian Corn and the Vine coming to great perfection; fruit of all sorts is abundant and of excellent quality. The Melon, Hemp, and Flax all succeed, and form considerable articles of production among the small holders of land, especially the Germans. Tobacco is also grown to some extent with good success. The Turnip in any of its varieties cannot be cultivated with the same success our climate admits, but Mangel does very well. It is not a healthy country, being particularly trying to a native of this country.

There are no fences, and, being but scantily wooded, much of the country, from the style of allotment for cultivation, presents the appearance of a vast Fordington Field. The price of land of the best value for agricultural use does not much exceed 10*l*. per acre, inferior quality selling at even half of that sum. Rents are high in proportion to the price, ranging from 12*s*. to 20*s*. per acre for good arable land, and from 6*s*. to 12*s*. for pasture. The great staple crops are Wheat, Barley, Oats, Rye, Vetches, Indian Corn, and Rape, for its seed. The use of artificial fodder crops is not very great; a few patches of Lucerne may be met with in a day's ride, but Vetches form the principal crop cultivated for fodder. Hay made from natural Grass is both abundant and of good quality. The extent of some farms held in occupation by proprietors is very great, 2000 or 3000 acres of arable land is not thought anything extraordinary.

The fertility of much of the plain of Lower Hungary is so great that the combined effects of slovenly farming, frequent cropping, and scanty manuring, have failed as yet to produce sterility or to diminish in any appreciable amount the quantity or quality of the produce; and when the uppermost few inches have become less productive than heretofore, a year's rest and a little deeper and better cultivation reinvigorates it to a surprising extent.

There is no well understood rotation of cropping followed. Wheat is very commonly taken after Vetches and Indian Corn; Rape for seed requires either a summer fallow or to succeed some ameliorating crop, as Vetches made into hay; Barley, Oats, and Rye come in as stop gaps anywhere. Land for Wheat is ploughed once, the seed ordinarily ploughed in, a turn with a bush harrow being all the dressing given. Barley, Oats, or Rye, may be sown as is the Wheat, though some people prefer sowing these on the top and bush-harrowing them in. The drill has not come into much use. Wide intervals will not do at all for cereals in that climate, the quantity of weeds which come up choking the crops of corn; hoeing is not possible of accomplishment in the time it is necessary to be done, and we all know that even Garratt's hoe is useless if the weeds be a few days too old. The climate precludes winter feeding, and, as in many instances, the tenantry will live 10 miles from their farms, everything is carried off the land annually, with but very little manure being returned. The following are considered fair crops—viz., Wheat from 16 to 20 bushels per acre; Barley, 20 to 30; Rye, 16 and upwards; Oats, 25; Rape, 20 to 40; and Indian Corn, 25. The price of Wheat last season may be set down at about 30*s*. per quarter; Bannat Wheat, 35*s*.; Barley, 20*s*.; Oats, 14*s*.; Rye, 24*s*.; Indian Corn, 16*s*.; and Rape, 40*s*. Potatoes are not extensively cultivated. The quality is, however, moderately good, and I am inclined to think, from the price at which they sold, 12*s*. per sack, Potatoes would prove remunerative if well attended to and planted on the best land. Hungary has not many farmeries, but the buildings of those are of the most substantial kind. The great proportion of the houses of the peasantry are built with earth, rammed into a frame; as the wall advances the frame is removed, and if it be kept quite dry and lightly plastered, a wall made like this will last any man's lifetime. It costs about 9*s*. for labour, besides the fuel to make 1000 bricks. Tiles are used for roofing many of the new buildings. There are no barns, nor sheds for loose cattle: provision is made for tying by the neck all ages of neat cattle and horses. Warm stables are also made for the sheep to lie in at night, and ample accommodation is provided for pigs. A spacious granary of three stories at least is always built on the most convenient site, which, with the whitewashed walls of the other buildings conspire to give a very imposing appearance to a farm from a distance, more especially as crowding together is avoided, and the ground plan covers a large area. The dwelling-houses of the landed gentry are commodious, some of them even elegant edifices, in which their owners live in great comfort for the most part, and now and then in a style of refined luxury. The peasantry congregate in villages and hamlets in miserable looking hovels of one story, and earthen floors; the agricultural labourers, who are engaged by the year, are too often compelled to herd together in a style revolting to humanity, and prejudicial to health, and everything else by which man is distinguished from an animal.

The hours of work all the year round are just so long as the sun is up, with an interval for dinner, varying from one hour in winter to two in summer. A first-class bailiff is paid equal to 60*l*. per annum, with fuel, and he is allowed the luxury of a room to himself and family, and perhaps a kitchen attached thereto; a master smith, or wheelwright, about 50*l*., with like additions to a bailiff; journeymen smiths and wheelwrights equal to 10*s*. or 12*s*. per week; bricklayers, 2*s*. per day in winter, and 3*s*. in summer; machinists, 14*s*. to 18*s*. per week; under bailiffs, equal to 30*l*. per annum, lodging and fuel; day labourers, 9*d*. to 10*d* per day in winter to 1*s*. 3*d*. in summer; in harvest 1*s*. 8*d*. per day may be given. Yearly ploughmen, shepherds, &c., are paid in one or other of the following methods—viz., equal to 10*l*. in cash, 5 qrs. Wheat, 127 lbs. bacon, 63 lbs. salt, with such lodging as has been described; the value of the whole being equal to 200 florins, besides the lodging and fuel. By the other method they receive the before-named allowance of Wheat, bacon, and salt, 2*l*. 8*s*. in money, have a cow kept, and permission to graze on the farm two or three pigs, to which is added a slice of land on which to grow Indian corn; this latter mode is much better liked by the men than the other; it gives a greater quantity of food, and is productive of better results in regard to temperance and health. Very much work is done by task or job. When hay is made a contract is entered into, which provides for cutting the Grass, turning it, raking the hay together, and putting it up into cocks of about half-a-ton each—the whole costing about 2*s*. per acre, and half-a-pint of spirits. Barley is mown and gathered into cocks of similar size, and the ground raked for about 2*s*. 6*d*. per acre, and an allowance of spirits or wine. Indeed, all contracts require to have a portion of drink included in the payment. Wheat or Rye and Oats are cut, tied and stitched, and the ground raked at 4*s*., 1 peck Wheat, 1¼ lb. bacon, 1¼ lb. salts, and 1 pint diluted spirits per acre. Tares for seed cost as much as Wheat. Flat hoeing Indian Corn or Mangel costs from 1*s*. 8*d*. to 2*s*. per acre, and the talismanic half pint of schnaps. Setting out Mangel costs double the flat hoeing. Wheat may be cut for a fifteenth part, and a crop of Rape may be cut and threshed, cleaned roughly, and carted home for the fourteenth part or so; and in like manner Corn is threshed by contract at a fourteenth part. The way this last named operation is performed is by treading out the grain from the straw by horses' feet, and the winnowing is done by throwing the chaff and grain into the air of a windy day, by which rude means thousands of quarters are annually prepared for market. I have had as many as 100 horses all at work treading my employer's Wheat out at one time, and as each three horses require two men, they formed, I assure you, a fine troop. The way the work is done is thus—first a space some 50 feet diameter is pared with shovels, then the surface is beaten and trodden quite hard: water being thrown over it if dry to enable the floor to harden into a proper degree of smoothness; the floor being prepared, it is covered with sheaves or loose corn, as the case may be, to about two feet in depth, six or eight horses are then tied together by the heads, and a string long enough to reach the centre attached to one of the outsiders, by which a man holds while he drives the animals at a sharp trot over the grain; after the top is sufficiently trodden a turning is given, which brings into requisition the services of the other men; the process is repeated until the whole straw and grain are separated, when the straw is carried to a stack and the floor refilled. At night the chaff and grain are thrown into a heap in the centre, which may be made to receive the produce of a week's treading before any winnowing takes place. All this time the people sleep in their waggons, and the horses feed on the floor if no Grass be near good for anything. A few of the more advanced use a simple blower to clean, but the great bulk is threshed and cleaned as described without other machinery than a shovel and a horse's hoof. The catalogue of implements is generally meagre in the extreme—a light waggon, which costs some 60 florins, a plough, and bush-harrow, with a scythe, and a wooden pitch-fork, comprise the entire collection of a farm managed according to established practice. Improvement has, however, begun. There are a good number of portable steam engines and threshing machines at work in different districts; the reaping machine and the hay-maker too may be seen at work, and a good number of horse-power threshing machines were made last year by an English firm established in Vienna. English ploughs are there in sufficient number to test their value.

Last year beef sold in Vienna at 4½*d*., at Arad 3*d*., and in the villages at about 2¼*d*. per lb.; veal was worth about 3*d*. anywhere, and pork about 4*d*.; mutton varied from 2*d*. to 3*d*. The trade is free in dairy produce and poultry: butter sold at 8*d*. per lb., cheese at nearly as much, geese 2*s*. each, fowls 1*s*. a pair, ducks 1*s*. 2*d*. a pair, and eggs 3*d*. per dozen.

I have already said that about one-half the land is under some kind of culture; and therefore it is that Hungary is quite as much pastoral as agricultural; and besides the quantity of cattle annually bred within itself, vast numbers are brought from Transylvania both for work and to fatten. The Barley, Indian corn, and Rye, are used chiefly in distillation. The Barley is made into malt, which is ground, and mixed with Indian corn and Rye meal, 10,000 lbs. of which mixture ought to give 250 gallons at least of raw spirit, the mucilage from which affords enough food to fatten simultaneously 250 oxen of about 45 score each, provided to this a little hay be added to prevent scouring. This is a very convenient scale on which to conduct distillation.

The sheep are mostly Merinos. In winter they are fed on straw, in summer driven to the scantiest pastures the farm affords, under the protection of men and dogs; by night they are brought to a house or fold. When full mouthed a brace of wethers may be worth 20*s*. I sold a lot of old ewes for less than 10*s*. a pair, after making them tolerably fat, and the purchaser only made one farthing a pound on his meat over the price he paid. In the matter of shearing and washing some commendation is due; there is no hurry or scramble to get the washing over half-done, and, if one washing does not make the wool clean, a second is given. The wool is weighed from each sheep as shorn, and immediately put into sheets. The shearers are mostly women, but they acquire only a very minimum amount of skill in handling the shears. Nevertheless this is the only thing connected with sheep management it would be worthy to retain were there any idea to take root of effecting improvements in this branch of rural economy. The quantity of wool is about 2lb. per head for an average of all ages, in a flock of say 3000, and for this annual return and some 10*s*. per head at last for the carcass, many thousands of sheep are maintained until full-mouthed before disposal, and few of the ewes are ever killed until they lose their front teeth. It is quite common to find ewes put to breed at 10 years old and upwards. From this one would think that a large annual accumulation in numbers would result, but as the deaths during summer and spring are generally great in number, especially among lambs and tegs, the increase is not so rapid after all. No one expects to have more than two-thirds the number of tegs, to the ewes from which they came alive, when a year old; and I have known 1700 ewes not produce more than 1200 lambs alive in the month of May. Foot-rot is very prevalent, and apoplexy will sometimes decimate a flock in the hot season. Dipping is not practised, nor is there any general system of dressing adopted to secure immunity from skin diseases or get rid of parasites, yet these pests do not cause so much mischief as might be supposed from the crowded and unhealthy state in which the miserable looking creatures are compelled to lie in the sheep houses. It may perhaps excite your surprise that sheep farming should be continued at all under circumstances by which so small a return is made.

Cattle rearing and fattening are attended with much better remunerative results. The breed is by no means a bad one. The oxen are most excellent workers, hardy, and possess considerable aptitude to fatten. They are of a dirty white colour, have long spreading horns, and, in point of quality and bone, are not very dissimilar to the Sussex breed. The cows are not very good milkers; but this is immaterial where dairy husbandry is at zero, and where the cow is only kept as a wet nurse to the calf, and where the heat of the climate almost prohibits the making of butter of decent quality. Milk is, indeed, an article of some importance to the small farmers in the immediate vicinity of cities; but, beyond the nearest retail trade, or for supplying a household, the cow has little to do with making up the profits of farming after the calf is weaned. There is nothing very remarkable about the way in which the cattle are treated during their growth. In winter they live on straw and what hay can be allowed, and in summer are allowed such pasturage as is to be found in the locality. When an ox is four or five years old, he may be worth 7*l*. or 8*l*.; a good cow and calf about 5*l*. or 6*l*.; and young cattle downwards in proportion to age. The oxen weigh, when decently fat, some 40 or 50 score, and may be worth from 10*l*. to 15*l*. to the grazier. The fattening and rearing are not carried on simultaneously by the generality of breeders; certain districts are devoted to one or other of these branches. There is plenty of land on which an ox can be fattened per acre during the summer months; this leaves a handsome profit to the owner, and from this source arises much of what wealth there is among the agricultural class. It requires about six or seven months to fatten an ox on the refuse from a distillery, and is only successful after the constitution has become habituated to the nature of the food.

Oxen are the principal motive power in agriculture,

and a very good as well as economical power they are; four of them, as has already been remarked, are driven in a plough by one man, who contrives to get through a very fair day's work. They are driven in yokes, with a pole, to which the plough is attached, coming between them; as wood is cheap this is the least expensive method of harnessing, and four teams, or 16 oxen, are commonly set apart to 200 acres arable land. Pigs are reared and fed in great numbers. The sort is a good one, not very unlike the celebrated variety of Lord Radnor in colour and description of hair; they weigh, when fat, 15, 18, or 20 score. In summer they are depastured in flocks like sheep, for which they are frequently mistaken at a distance by the uninitiated traveller. I have seen as many as 200 breeding sows kept on one farm, and the produce from which does not suffice for supplying this description of stock. I do not know if it be the climate or the method of management, or both combined, which affects the quality of the meat made both in Hungary and the American Continent, but this I am certain of, that but little of the Hungarian beef would make second quality price in our best markets. This and the expense of transit must of necessity forbid any competition being carried on in beef; mutton is out of the question altogether—who ever heard of a real ripe fat Merino? Pigs offer a much more likely chance of success, the pork is of very tolerable quality, and where the curing process is properly effected, possibly bacon and ham might be sent here with profit. In Hungary the greater portion of the bacon is melted into lard and used as dripping for cooking vegetables, and as the demand for this is extensive, there is no great surplus left for exportation. But pig breeding might be prosecuted to an enormously increased extent, did it once appear such would prove remunerative. At present the British agriculturist has no cause for alarm by competition in any kind of stock from this quarter.

THE SHOW OF LIGHT HORSES AT LEEDS.

We observed in our last week's report that the show of light horses at Leeds was with some exceptions as good as could have been expected. The 750*l.* which the liberal assistance of Yorkshire had enabled the Royal Agricultural Society to afford in the way of prizes for the breeders of horses; and of which the lighter breeds came in, as they deserved, for the larger share, succeeded in attracting a noble display of animals, about 150 in number, such as is rarely witnessed and as this country alone could exhibit.

To begin with the thorough-bred Special Class, for which 100*l.* was offered: this was deemed of sufficient importance to require the attendance of no less than four special judges; noble lords and colonels in the army having condescended to accept the office. It is well in the first place to consider the peculiar wording of the conditions under which this prize was to be awarded. It runs as follows:—"Thorough-bred stud horses, &c., which in the opinion of the judges are best calculated to improve and perpetuate the breed of the sound and stout thorough-bred horses for general stud purposes." It is evident, according to the wording of the conditions, that the object of the Council was not to give the prize simply to the animal best calculated for getting hunters, or it would have been so stated in simple terms. It was not the best horse for half-bred mares, but for thorough-bred mares—the horse best calculated for perpetuating the stout and sound thorough-bred, or race horse. He might be the grandsire of hunters but not the sire. The Jockey Club ought to be much obliged to the Royal Agricultural Society for the encouragement thus given to racing, and should next year return the compliment by offering an equal amount at the Metropolitan Show. Stoutness in racing phraseology means the ability for maintaining speed for a long distance, such as two to four miles, carrying a good racing weight. It implies not only a proper outward conformation, but a perfection both of the structure and functions of the internal organs which no eye can detect or inspection discover. In order therefore that the judgment should be correct it was essential that the judges should know the history and pedigree of the animals brought before them. Presuming this was the case they very properly gave the first prize to the horses which at two years old beat the after winner of the Derby in 1859, and the conqueror in the following year of the winner of the St. Leger. Thormanby may justly be considered as the best horse of his year at three years old, and although the race was short in which he was defeated by Nutbourne in 1858, yet it has never been stated that he was otherwise than in good health and condition. There is therefore fair ground for supposing that if Nutbourne had not broken down and had been well ridden, he would have been first or second for the Derby. He was thus the highest class horse in the Show, and it was then for the judges to consider whether there was any fault or defect in his formation that should neutralise his historical merits. He was of course not sound, as the remains of the break-down of the near foreleg were very palpable to the eye, but he was passed as having no hereditary defect. Though by no means overburthened with flesh, he was big enough and powerful enough for his purpose, deep in the chest and ribs with a good back and loins and powerful hind quarters, and both thighs and hocks good. Some thought his shoulders too heavy, but this is nothing but the large development of the shoulder blade with its proper amount of muscle, and nothing superfluous. Thus Nutbourne had, as he deserved, the first prize. About the second, the 25*l.*, we are by no means so satisfied. It was won by Sir John Barleycorn (owned by Mr. Tom Hussey), got by the Baron, and was 12 years old—old enough to have had opportunities of establishing the fact as to being the sire of stout and sound thorough-bred horse. He was a fine horse, but not so well furnished, we thought, as some others in the Show. He appeared to have been recently fired in one of the forelegs. We should have thought that he had outlived all necessity for this severe treatment, seeing that he was dedicated to the future. He had to compete with Claret, and Fazoletto, and Comet, and Codrington, the latter an amazingly powerful as well as handsome horse, and the former as well as Comet and many others standing forward in the foremost rank as second-rate horses. The very first-rate horses, the stoutest of the stout and the sires of stout winners, were of course at home in their boxes, refusing to listen to the voice of the charmer, charm he never so wisely. The tune of 100*l.* was not high enough for the winners of thousands. Some of the horses shown were doubtless disbarred at the Royal, and it is to be hoped for sufficient reasons, having liberty, however, to practise in the provinces as much as they pleased.

A break-down, as it is termed by racing men, is not a hereditary disease; it is in fact a strain, and its result a thickening of one or both of the flexor tendons of the forelegs. There are generally premonitory symptoms, such as a slight enlargement, heat, and tenderness, the result of training or trials, and then if he were taken out of training and treatment adopted it would probably be successful, but the trainer never runs out the colt, and therefore does not know when he is first lame, and thus the trials continue and the end is a break down; the sinew is double in size, and though the lameness may disappear and the swelling subside to a great extent, the horse in ninety-nine cases in a hundred can never race again. We have however loitered too long with the thorough-breds, and in conclusion we must acknowledge that the exhibition was very attractive, although the question may still be unsolved—*Cui bono?*

We next come to the Cleveland horses—Class 1 being stallions of any age, and Class 2 mares three years old and upwards. We were very much surprised to find that in the first there were only eight entries; three in the second, and none in the third class. Where are they gone? Have they been crossed and crossed and nearly crossed out. Granted, that the most realising horse for the London market is the produce of the Cleveland mare by the thorough-bred horse; how can this be secured unless the pure Cleveland breed be kept up? The prize in this class was given to Mr. Henry Rickatson for Golden Hero, a strong useful horse, but by no means so grand as many we have seen; he was evidently of the breed specified and well adapted to get useful harness horses for heavy carriages and farm work as well as mares to cross with thoroughbreds. Several horses exhibited in this class were by no means Cleveland.

Mr. Cockshott's Young Melbourne and Mr. Holmes's Sultan were both good horses.

In the Cleveland mare Class the prize was taken by Mr. Smith's Wonderful Lass, a bay 6-year-old mare, with remarkable symmetry, all of which was by no means owing to Cleveland blood.

Three prizes were offered for Class 1, stallions suitable for getting hunters, which was a good and well-filled class, having twelve entries. The prize was gained by Canute, a monstrous fine chesnut horse; and A British Statesman, a bay 4-year old, belonging to Messrs. Moffatt, gained the 2d prize, whilst the 3d fell to Young Harkaway. Elcott, with two crosses of the Defence blood, was a favourite of many bystanders.

The brood-mares for breeding hunters had seven entries, the 1st prize going to Mr. Bousfield for his fine old mare Molly; Mr. Maxwell gaining the 2d prize with his brown mare by Dr. Sandrago. It is evident that all the mares in this class were more than half-bred, were in fact sufficiently well bred for hunters themselves without a further cross of blood. We next come to Class 3, brood mares for breeding hackneys. The prize was given to a chesnut mare 20 years of age belonging to Mr. Job Aspinall, and the second prize to Mr. Wainman's bay mare Kate, 14 years old. It does not speak well for the rising generation to allow two such old mares to carry off the prizes. Action had much to do with it no doubt as well as shape. The third prize went to Mr. Cook for a 7-year old mare.

We next come to the prizes offered by the Local Committee; and first we have blood hunters, mares or geldings, 5-year-old (two crosses). The description appears somewhat contradictory, though perhaps not to Yorkshire eyes. We understand by blood hunters, thorough-breds; whilst the condition of two crosses we interpret as having a cross of thorough-bred on both sides. There were five entries. Mr. Holdworth's 5-year-old chesnut gelding Harkaway, by the Ugly Buck, dam by Harkaway, stout blood on both sides, well deserved the prize, the second going to Mr. Holmes's brown, closely run by Mr. Bitty's chesnut. The next class was for 4-year-olds, and was much better filled, having indeed 13 entries. Adam Bede, a splendid chesnut, gained the 1st prize for his owner, Mr. Pease; Mr. Botterill's chesnut, The Emerald Isle, taking the second. This was a capital class. [illegible] noticed particularly a remarkably fine grey hor[illegible] property of Mr. Musgrave, and several others [illegible] great merit. The 3-year-old class was also very [illegible] though with only four entries Bachelor, [illegible] colt, winning the prize, beating Mr. Clarke's [illegible] the commended horse, and two other good anima[illegible]

It is a matter of regret that the geldings in the three classes had not been left entire and distr[illegible] in the provinces for stud purposes, in the place [illegible] numbers of thorough-bred weeds that travel [illegible] sowing the seeds of mischief far and near. Government could not possibly do better than de[illegible] certain sum in prizes for horses best calculated [illegible] getting cavalry horses, the stamp of horses valuable [illegible] so many purposes.

We now arrive at Class 4, coaching stallions, which we are surprised to find only three entries; [illegible] entry for Class 5, and only two entries for Class 6 coaching brood mares. The 1st prize was given [illegible] James Harker for his bay 3-year old, Rainb[illegible] other named; whilst the Flying Deer, a strange [illegible] for a coaching mare, got the prize in Class 6.

Roadster stallions, Class 7, had 12 entries, and [illegible] good class. The first prize went to Mr. J[illegible] Quicksilver, a red roan, bred in Lincolnshire, [illegible] active compact horse, but with a lighter carca[ss] [illegible] should be. Action no doubt determined the [illegible] whilst want of soundness prevented other [illegible] horses in this class from reaching the goal. Merr[illegible] an old name belonging to a rare trotting breed, [illegible] the second prize—the owner being Mr. Johnson.

We find in this class and the next there were [illegible] of the Merrylegs breed—may their shadows nev[er] [illegible] less! The Roadster mare and gelding class [illegible] entries, the prize going to Mr. Wilson for his old [illegible] Jack of the Merrylegs breed. Mr. Ward, [illegible] Maxwell, and Mr. Bickers had also some [illegible] animals in this class.

We now come to the ponies, Class 13, being [illegible] geldings under 14 hands: Mr. Mathews' Am[illegible] the prize, and was a very clever animal. Mr. H[illegible] Charley, as well as Mr. Ingham's Perfec[illegible] highly commended. Mr. Johnson's roan deserv[illegible] commendation. These were very good animals.

Mr. Abbey's Lucy was the prize winner [illegible] mare class, whilst in the class under 12 han[ds] [illegible] Witham's Little Wonder, a capital pony, [illegible] prize, and Mr. Taylor's piebald Bessie, a comm[enda]tion. With her companion of the same colour [illegible] a capital fancy pair for harness purposes.

The last Class we have to notice is that for [illegible] 3-year old colts, the prize being given by [illegible] borough. It was a capital class, with 15 [illegible] finest colt we thought was a grey, Lucks [illegible] to Mr. John Watson — a promising weight-ca[rrying] horse, but unfortunately having been worked [illegible] he has thrown out a thoroughpin. The prize [illegible] fairly earned by Mr. Musgrave's Overpl[illegible] chesnut colt, very handsome and with much substa[nce]. Mr. Thomas's Master Stewart, a bay, well deserv[ed] his high commendation, and the Class altogether deserved commendation.

In concluding our report we must observe, [illegible] although in very many instances Yorkshire [illegible] have done better, yet considering the number of [illegible] and the number of animals exhibited (nearly 25[illegible] great qualities of many of them and the very few [illegible] mediocrity, it was on the whole a noble Show.

The fact that all the horses exhibited have to [illegible] a veterinary examination, and thus many with [illegible] hereditary diseases are condemned altogether, [illegible] others with minor defects often lose several poin[ts in] consequence without being disqualified, should [be] enough to deprecate that hasty criticism that [illegible] often displayed. Public animals and public men are subjects for criticism; but it is most unfair to say, as was [illegible] last week by a cotemporary, that the Suffolks were [illegible] to win prizes when a certain gentleman was [illegible] The writer must have been oblivious of the fact [illegible] there were two other judges at Leeds besides the [illegible] alluded to—one a Lincolnshire and the other [illegible] shire farmer, neither of whom had the slightest [illegible] towards the Suffolks. Then, again, at the Roy[al] [illegible] at Chelmsford, the first agricultural prize was [illegible] a Clydesdale; at Chester the All England [illegible] given to the bay Nonpareil; at Warwick [illegible] country bay horses were winners of the 1st [illegible] three classes. In all these instances, and in [illegible] others, Suffolks competed well, and the judge [illegible] to acted, and in two instances with only one compa[illegible]

Home Correspondence.

Improvement of Grass Lands. — Much of [illegible] permanent pastures of this country is capable of [illegible] improvement; and it is only in some districts pe[illegible] favoured by nature that the best feeding Grass[es] are indigenous, and where the soil retains the moisture in sufficient quantity for the healthy development [of] those Grasses. A soil capable of retaining moisture [for] a considerable time would be more productive of [illegible] in the midland counties, with an average rainfall [of] 24 inches, than the same soil would be in Lancashire [or] the west of Scotland, where the rainfall is very much greater: in the latter case deep draining would be necessary, and would be the first step towards increasing the produce. In the spring of 1855 a field [illegible]

16 acres of strong loam came under our management. At this time it was under a crop of mixed seeds, the previous crop having been Barley. It was broken up in 1850 from permanent pasture, having been down for many years, but was never of much value for grazing; a few store sheep during the summer was all it ever would keep. Mowing the seed crop for hay early it kept a few sheep till the 10th of October, when it was ploughed up and sown with Wheat, which was a light crop—3½ qrs. per acre. About the middle of November 1856 the field was ploughed up for the winter: in doing this we used the common plough drawn by two horses, turning a furrow 6 inches deep by 9 inches wide, Grey's subsoil plough following the common plough and stirring the subsoil to the depth of 12 inches, thus moving the whole of the soil to the depth of 18 inches. It remained in this state till the spring of 1857, when it was again ploughed, scuffled, and cleaned, having been very full of Twitch. The weather being favourable we got it tolerably clean by the 10th of July, when it was drilled with common Green-top Turnips 18 inches wide; at the same time 4 cwt. of Lawes' superphosphate was applied with Chandler's liquid manure drill. The Turnips came up well and were a good crop. We began eating them off on the 29th of October, and finished them on the 8th of December. The sheep received ½ lb. oilcake each per diem while eating them off. It was ploughed up during the winter and drilled with Wheat on the 28th of January 1858, at which time it was sown down into permanent pasture with the following mixture:—Anthoxanthum odoratum, (Sweet scented Vernal Grass), 2 lbs.; Cynosurus cristatus (Crested Dogstail), 2 lbs.; Dactylis glomerata (Rough Cocksfoot), 5 lbs.; Festuca duriuscula (Hard Fescue), 3 lbs.; Festuca elatior (Tall Meadow Fescue), 2 lbs.; Festuca pratensis (Meadow Fescue), 2 lbs.; Lolium italicum (Italian Rye-grass) 8 lbs.; Lolium perenne (Common Rye-grass), 10 lbs.; Poa trivialis (Rough-Stalked Meadow Grass), 4 lbs.; Cichorium Intybus (Wild Chicory), 2 lbs.; Trifolium hybridum (Alsike Clover), 2 lbs.; Trifolium pratense perenne (Cow-grass), 2 lbs.; Trifolium repens (White Clover), 5 lbs. The seeds were supplied by the Messrs. Sutton of Reading; they cost 34s. per acre. I believe each sort was true and of very good quality, as we have from time to time been able to gather the whole of the different varieties sown growing in the pasture. Before sowing the seed the land was well rolled in order, as far as possible, to prevent them from sinking too deep in the soil; they were then sown by the common seed box. In order to deposit the seed with the greatest possible regularity, we had them sown twice over, once lengthways and once across, a pair of light harrows followed by the roller finished the operation. At harvest the Wheat was hand-reaped, and the stubble being left high greatly sheltered and protected the young seeds during the winter. Having grown rapidly at spring we had the whole field folded with feeding tegs, which received a liberal allowance of oilcake; it was stocked the 8th of April and kept 280 till the 27th of May, from which date it was laid till the 17th June, when it was stocked with 8 cows and 15 sheep, which it kept till the 1st of July, when the sheep were taken out and two heifers and seven two-year-old steers put in, which it kept till the 12th of August. From this date till the 10th of November the stock was five heifers and 50 sheep. It was then laid till the 15th of May, 1860, when it was stocked with 14 two-year-old steers and 17 sheep till the 1st of June, at which time the Grass was growing rapidly. We then had all the sheep taken out and 15 yearling steers put in, making in all 29 head, which it kept till the 8th of August, when 12 steers were taken away, leaving 17, which remained till the 26th of October, it being then laid till the 10th of May 1861, when it was stocked with 14 two-year-old steers, 17 ewes, and 34 lambs, which it has kept till the present date, July 5th, and is now a good pasture. There is some good grazing land not far distant, but this field is much earlier, and I think will soon make a good feeding pasture. *G. Murray.*

The Crops.—Winchester.—The crops in Hampshire, as in all others, have improved beyond the expectations of the most sanguine, so uniformly favourable has been the weather since the middle of May. A more genial June was never experienced, a plentiful supply of moisture at the commencement, then a fine interval of sunshine for the hay, and when the greater part of that was carted in good order, a return to warm genial showers. Hence on every side we see the land well planted with flourishing Turnips, Swedes, and other root crops, with scarcely a failure to be found. All the corn crops also, the majority of which presented so unpromising an appearance up to Old May-Day, have been resuscitated as if by magic. Many of the weak-looking, stunted, thin seeds, which were almost given up as lost, have grown into fair promise, and even the thinnest crop may with a little more such weather, prove more productive than much larger bulks of the beaten and battered produce of 1860. The forward Wheat where well planted is decidedly good, the blooming time was all that could be desired, and the ears are many chested, and promise to be well filled, but that portion of the crop which came into blossom after the 30th of June, is by no means so well set. On that day, the one on which the comet first appeared, the temperature underwent a sudden change; it became boisterous and cold, with a slight frost or two at night, and so continued until the 8th of July. This unfortunate interval had a serious effect on the Wheat then shooting into ear. On examination many empty capsules will be found, from which the forward growth seems completely free. But for this drawback the Wheat crop in this locality would, according to present appearances, have been a full average on the average sown, but this is short about one-tenth of the usual quantity. Cutting will commence generally about the 1st of August. Barley and Oats bid fair for a good average crop, but these also vary much, some being very luxuriant, while other fields are thin and patchy. Beans bad in this county, but Peas very good. Altogether the prospects are cheering, and fortunate it is that they are so, for notwithstanding all that steam and high farming can do, the seasons are yet omnipotent for good or for evil, and the long continuation of unfavourable seasons both for corn and stock, now of some 18 months' duration, has had the effect of draining many a farmer's pocket to the very bottom. We are beginning to want sun to "finish off" the Wheat; if the weather remains dull as now another week, the quality of the Wheat may not be of the first order. *John T. Twynam, Winchester.*

Crops in East Kent.—The time has now arrived when we can (in this district) speak with confidence of the coming harvest. Our common Peas are most of them cut and will be an average crop. Blue Peas are not good, and all the more delicate varieties are very thin in consequence of the wet last autumn; few were harvested in condition fit for seed. Oats are a good crop; many of them have already fallen before the scythe, the sample will be heavy. Wheat and Barley harvest will be general the first week in August; the yield will be large, and if we have fine weather for the harvest the quality will be good. Beans are generally very inferior, short of straw, and but very few pods and those not well filled. Sainfoin and Clover, which are much grown here, were fair crops, and where made into hay generally well secured. Grass hay is later, and though not seriously injured the showers have been so frequent as to make the process tedious and expensive. Swedes are very good and so are Turnips generally. Mangel Wurzel has quite failed in many instances, and where there is a plant it is unkind and does not grow well. A very large breadth of Potatoes is planted; the disease is showing itself on the haulm and we have some of the tubers affected in gardens, those in the fields appear unaffected as yet. Our labourers are well employed; wages for the last year have been 14s. per week for all able agricultural labourers, and appearances seem to indicate that there is likely to be a scarcity of hands in the coming harvest. *East Kent, July 24.*

Specimens of Grasses.—As there appears to be no question of the superior feeding and milk-producing qualities of some species of Grasses, &c., as compared with others, I think it would be an excellent thing if Prof. Buckman, or some other person of authority in such matters would prepare specimens at the present time, and offer them for sale through the medium of the agricultural press. I am quite certain the great majority of farmers, and many seedsmen, are ignorant of the names of Grasses, and that one kind is substituted for another without any consideration of the consequence. I should therefore like to put the farmer in the position to say "that is not the Grass I ordered." These specimens might be put up in collections of 25, 50, or 100 species, and could be sold for a mere trifle beyond the expense of postage. I should like to see a collection of the kind in every school and village library in the country, each species properly mounted with its botanical and popular name; also a table showing the chemical feeding and milk-producing qualities, and likewise the kind of soil for which it is the most suitable. Under such arrangement a man might select the Grasses most suitable for his purpose, and by a little extra care in seed sowing we might soon obtain mixtures of really valuable kinds instead of (as is the case at the present time) mixtures, two-thirds of which are weeds of the most worthless description. It is a notorious fact that the Grass land farming is a disgrace to the country, and with some few worthy exceptions it must be admitted it has not kept pace in improvement with arable farming, but if the same facilities were offered, and the Grass farmer had the means of procuring really true and genuine seeds, we no doubt should soon see some improvement in Grass farming. At present a tenant, if not prohibited by the covenants of his lease, is afraid to break up a piece of old sod, because he is afraid he may never see the field in the same profitable state again; but if he was certain of getting prime seeds he would then not be afraid to break up an old pasture and give it a good fallowing and cleaning, as he would know that the feeding quality would be much improved. For my own part, and I judge from observation and experience in many different parts of the country, I feel convinced there is scarcely an acre of Grass land, the produce of which could not be doubled, and in many cases be increased tenfold. The time will come, must come, when less than 3 to 5 acres of land will be considered necessary for the keep of a cow throughout the season; indeed there is no reason why under a proper system of management 1 acre of good Grass should not be sufficient, and as rents increase, and they will increase, it will be. A more extensive system of cultivation must be followed, and dairy and grazing farmers will find it cheaper to double the produce of the land they already hold than to double the acreage with a corresponding increase of rent, taxes, and labour. *A. P. W.*

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

LEEDS: GENERAL MEETING.—This was held at the Town Hall on Friday, the Earl of Powis in the chair. The thanks of the Society were given to the Mayor and Corporation of Leeds for the reception accorded to the Society; also to the Railway Companies for the satisfactory arrangements which they have made in connection with the Show; also to the Local Committee for the excellent manner in which they had carried out the local arrangements. Mr. Beale Browne suggested in reference to future railway arrangements that the offer of the companies to convey stock free was virtually useless, because, in that case, they were sent in goods' trucks, which were shunted so frequently that there was great risk of injuring the animals, and in a previous year one of his best animals, sent by a goods' train, had had its shoulder dislocated. He suggested that the railway companies should afford some better facilities, such as were offered by the Great Western Railway, who allowed the exhibitor to travel third class with his cattle and pay half fare, instead of compelling the exhibitor to pay for a special train. One gentleman had had to pay 20*l.* for the conveyance of his horses from Suffolk to the present exhibition.

On the vote of thanks to the Local Committee, Mr. Fisher Hobbs said that on no former occasion had the Society received such services as they had from the local committee of Leeds. All their wishes and desires had been fulfilled; and he might specially mention that the arrangements which the local committee had made for supplying provender for the cattle in the showyard had given great satisfaction to the exhibitors. The council would look back for many years to come upon the handsome manner in which the town of Leeds had received the Society, and the extraordinary accomodation and attention which had been bestowed upon the officials. Mr. Hobbs bore testimony to the invaluable services of Mr. Eddison, mentioning that the proposed sites for the Show which were in the first instance shown the inspection committee were such as they could not have recommended to the council, but on the second day of the committee's visit, Mr. Eddison, after considerable exertion, was enabled to offer the present beautiful site. Mr. Hobbs likewise spoke in terms of the highest praise of the orderly and respectful behaviour of the thousands who had visited the showyard on Thursday. Mr. B. Gibbs, the honorary director of the showyard, supported the resolution in terms very complimentary both to Mr. Eddison and the committee. The resolution was carried with acclamation.

On the usual inquiry being made if any member had any observation to make, Mr. Beale Browne made some remarks upon the evils arising from the over-feeding of cattle and the leaving of too much wool on sheep. He suggested that all sheep brought to the Society's Show should be fairly shorn a fortnight before they were exhibited, and that all cattle and sheep should be fed upon purely vegetable food, the exhibitors and their servants being ready if necessary to make an affidavit that they would not let the animals have corn, cake, or drugs. He commented very strongly upon the evils of artificial and over-feeding, stating that animals which were so fed would deceive the most experienced judges. As an illustration he mentioned that he bought a large, ugly two-year old filly which his servant afterwards fed so outrageously that it obtained the first prize at the Society's Show at Gloucester. He would give the horse to any man who could find an uglier animal in Gloucestershire.

Mr. Woolf (Gloucestershire), thought that the reserved fund of the Society was too large, and suggested that 10,000*l.* should be the limit. Many gentlemen whom he had solicited to be subscribers had mentioned this as a reason for their declining to do so.

The Hon. Col. Hood, Chairman of the Finance Committee, said that the amount of the reserved fund was not too large, considering the liabilities of the Society.

Mr. Eddison reminded Mr. Woolf that the Society lost 2000*l.* by the exhibition at Canterbury last year.

Mr. W. B. Denison thought that the Society ought to make some arrangement for bearing more of the expenses attending its annual shows, and throwing less burden upon the local committee. He suggested, for instance, that the expense of providing the land for the trial of steam cultivators should be defrayed by the Society.

Mr. Hobbs, in reference to the remarks made by Mr. Woolf, said that the reserve fund of the Society, which amounted to about 14,000*l.*, was barely sufficient to meet the liabilities attendant upon it. The Society was really not a wealthy one, and he hoped that before another year expired the number of its members would be increased from 4600 to 10,000 members. A vote of thanks to the Earl of Powis for his services as President during the year was then most cordially adopted, and the proceedings of the meeting terminated.

THE ANNUAL DINNER OF THE SOCIETY took place in the magnificent Town Hall, under the Presidency of Earl Powis. Six hundred persons were present, including

the Duc d'Aumale, the Duc de Chartres, the Mayor of Leeds, Lords Walsingham, Feversham, Tredegar, Galway, and many other distinguished guests. Among the speeches of the evening may be named those of Mr. Denison, Lord Walsingham, and Mr. M. Milnes.

Mr. W. B. Denison said—They had now got to the third day of the show, and he heard on all hands that the meeting was considered to be one of the most successful which had ever been held. In two respects, he could say, without fear of contradiction, that it was more successful than any of its predecessors; in the first place, the amount offered in prizes considerably exceeded that before given, the total sum reaching nearly 3200*l.* In the second place, the entries of stock were nearly 200 more than at any previous meeting of the Society. (Cheers). There was one other point on which they as Yorkshiremen might congratulate themselves, namely, that the majority of prizes had been carried off by Yorkshire breeders. The Society, as many of them were aware, was established 23 years ago, for the special purpose of improving the condition of the farmer and the cultivation of the soil, by means of collecting information, and by holding yearly meetings at different places where different classes could come together to compare notes, and to see stock which in other parts of the country was pre-eminent for its excellence. Within his own short experience he had seen immense improvement, especially in Short-horns, and it was a source of great satisfaction to find that the first prize was taken by a noble lord belonging to their own county. It was an old, but happily now all but obsolete idea, that the interests of agriculture and commerce were antagonistic. They had, however, long ago discovered that, so far from being antagonistic, they were identical. It was easy to be understood that the increased produce which it was the object of this Society to promote, would be of little value if it were not for the increased consumption of the large towns. He believed that the visit of the Royal Society to Leeds would do an immense deal of good, and would encourage their manufacturers and machine makers to pay more attention than they had hitherto done to the manufacture of articles connected with agriculture. They had the satisfaction of seeing, in connection with this branch of the subject, that their worthy Mayor, in conjunction with Mr. Fowler, had carried off the first prize for steam cultivators. He hoped that such a fact would stimulate them to further efforts, and would encourage his worship to apply his great practical skill and engineering ability to the discovery of other appliances equally valuable.

Lord Walsingham said, it had been asked why it was that the Royal Agricultural Society of England should hold its country meeting in a great manufacturing town like Leeds? But such persons seemed to forget that Leeds was, very much more than appeared to the ordinary observer, connected with agricultural industry. What was the ancient and great staple trade of the town? The manufacture of cloth. And were not all farmers engaged in wool growing deeply interested in that manufacture? For himself he knew that the prosperity of his own district was greatly dependent upon Leeds and Bradford, and he thought therefore that they had only paid a fitting compliment to these important manufacturing towns by holding their meeting here this year. There was this additional reason why they should come to Leeds—that it had become of late years the seat of the manufacture of one of the most interesting applications of steam power to cultivation. They had already heard that Fowler's steam-ploughing apparatus was manufactured by their Chief Magistrate, and in the skill which had been applied Leeds had contributed very much to the success of those experiments which they had witnessed within the last week or 10 days.

Mr. M. Milnes, M.P., said he gave the toast of "Agriculture, Manufactures, and Commerce." He knew nothing in England which should dissever town and country; and this, he believed, was the principle on which the Royal Agricultural Society was founded. This was the true historical principle. How was it that the mighty steppes of Russia, glowing with the most magnificent cereal produce, had nevertheless been unable to give progress and power to that great empire? Was it not because their attention was confined exclusively to those processes? Was it not that, without manufactures, they could do nothing? It was this—the two great interests of agriculture and commerce, united with an intelligence radiating from a thousand quarters—which had enabled the Royal Agricultural Society to meet in the great town of Leeds, and which made them feel as if every one of them was a co-partner in the destiny of England. He knew how feebly any one voice could do justice to so great a subject. They would have done better to have represented the toast symbolically—to have had his friend Mr. Huxtable, the great agriculturist, the Mayor, as a great manufacturer, and some Marshall or Gott, as the representative of their commercial community, standing together in a monster group, and which would have represented the toast far better than he was able to do. After a somewhat long Parliamentary life, he knew nothing which had been to him more delightful than to have seen every year during that time all classes in England coming nearer together. He had seen the great fissures which separated various interests rapidly and sensibly closing. He had seen that there was no longer an agricultural party nor a manufacturing party in the House of Commons; that old interests and old prejudices had passed away; and they now felt that old jealousies were gone and extinct, and that they had all no other desire than to do that which should most conduce to the general interests of England. They would, he felt sure, carry away from that Hall a bright memory of that day of social union—in which the social union of the table was only symbolical of the social union which they had witnessed in the farm-yard, where the implements invented by the skill and intellect of the mechanician were seen associated with those magnificent animals reared by the agricultural intelligence of England, and where they had witnessed, walking in pleasure and delight, all classes of society, utterly unconscious of any difference of principle, and only knowing one great interest—the interest of their country.

LECTURE ON STEAM CULTIVATION BY PROFESSOR WILSON.

On Tuesday evening the Mayor of Leeds gave a Conversazione in the Victoria Hall, and received a large and distinguished party of guests, most of whom had been attending the Agricultural Meeting. And in the course of the evening Professor Wilson, under the auspices of the Leeds Philosophical Literary Society, gave a lecture on Steam Cultivation, in the Crown Court, in the presence of a large number of the Mayor's guests. We have not room for even a *resumé* of his remarks. He alluded to the ancient history of the plough and the modern history of steam cultivation. The following passage relates to the importance of any method which shall enable the farmer to choose the proper season for his operations:—

See what the requirements of tillage are, and what capacity steam has for forwarding the various operations. After certain crops, Wheat cannot be sown until the sheep have done their forage or the produce has been stored; on mixed soils or on heavy lands there is always a portion, often a very large one, of the Wheat crop driven to late sowing by unfavourable weather, or sown with the ground in an improper state, or else both late, and with an imperfect seed bed, resulting in a defective plant, late tillering in spring, and mildew and deficient yield at harvest. On retentive soils, where a week's work often hangs on the vicissitude of a shower, half the produce is sometimes forfeited by the farmer having to plod on with his slow teams through an unfavourable seed time. With a steam representative many of these drawbacks would entirely disappear, and all of them be lessened, and the work be completed more efficiently and in half the time of the present system. In getting in spring corn between the catching showers of February, March, and April, how much would the average yield be raised, and the success of the crop be secured, by a machine that could reduce weeks into days, and begin its work before a horse would be allowed to put his foot upon the soil. What a proportion of our root crop is backwarder and inferior in bulk to the rest, for want of having been able to get in all at that golden moment when the best portions were sown. One of the boasts of drainage was that it rendered the farmer independent of the seasons, but it remained for the steam cultivator to complete his independence by giving him the power to choose his own time for his necessary tillage operations. Again, on light soils, and where the climate gives an early harvest, advanced farming claims more than one crop a year—it is simply want of power to carry out the processes of preparation quickly enough that limits the spread of so desirable and so profitable a system. Then the rapidly increasing practice of autumnal cultivation, for which our leading farmers are providing themselves with steam machines, scarcely looking for any further advantage rom them. After the Clover leas and spring corn stubbles are prepared for Wheat sowing, there are the Wheat stubbles to be fallowed for the green crops, usually a tedious and costly affair; with winter and spring ploughings, scarifyings, draggings, rolling, and harrowings, before a satisfactory tilth is obtained and all the Couch and other weeds got rid of, while on many strong clays a whole year's fallow is required, before the necessary conditions can be secured. But an autumn day's dry tillage, when the root weeds are young and weak, and the temperature of the earth and atmosphere high, is of far more value than a week's work after the cold and rains of winter, and with the cultivator in its various forms we can pulverise the soil with the efficiency of the old Roman plough, and leave it either open or ridged up to the mellowing action of the still powerful sun. We may fairly expect by autumnal cultivation to save two ploughings in the fallowing, the land is kept more clean, and at a lower cost; moisture is retained in the Turnip land by avoiding tillage during the drying winds of the spring; and on clay soils a root crop is obtained upon part of the otherwise bare fallow. Yet only under the most favourable circumstances, and in but few localities, can this advanced and desirable system be carried out successfully, owing to our limited power and the pressure of other operations. So that steam tillage endows us, as it were, with a new faculty, cleansing and preparing our land at a reduced cost, fertilising it by autumnal exposure to the sun and air, forwarding the preparation for our spring seeding, and placing within our reach profitable crops, which hitherto have been comparatively unattainable. This is no imaginary picture; it may be seen as the result of a four years' practice at Woolston, where a strong and cold clay farm of the most pauperising character under the old system, has been converted into a soil, "deep, rich, absorbent, and friable as a garden." The ruinous dead fallow is abolished, yet the farm is a pattern of cleanly culture, and without purchasing artificial manures, very heavy crops of roots and grain are grown with a produce and a regularity quite unknown before. This change has been effected by the new system of steam cultivation, which has produced a regular increase of at least 8 bushels per acre, while the entire cost of preparing the land for seed has been (on the average of the four years) only 11*s.* per acre. Mr. Mechi tells us that he has found a like increase on his heavy Essex clays, due to the employment of Fowler's steam plough, and in some light soils in Suffolk the effects were equally satisfactory. The superior power of steam to horses in time, in force, and in cost, all and each of deep importance to the farmer, would be more recognised, were we to give a little more consideration to the cost of horse power than is usually done.

Professor Wilson then referred to the kind of examination which the subject now requires:—

Hitherto our trials have had reference to the comparative merits of the implements used, and important results have been obtained as to their relative drafts in the same soil. What we want now is to ascertain the comparative resistance of different soils, and then calculate the cost of draft per acre in each. This would give at once a clear notion of the important part that steam is likely to play in our field operations. We have a good starting point for our calculations in the known value of the draft force of a horse. Every one knows the enormous difference in the texture of our soils, which our somewhat imperfect dynamometers have shown us to have a range of draft of from 2 cwt. to 12 and 14 cwt. for the 6 × 9 furrow, and yet few of us have correct ideas of the different cost of Norfolk and Kent ploughing, or of the increasing ratio of expense where the resistance exceeds that which horse power can economically overcome. The draft power of a horse in ordinary condition is estimated at $1\frac{1}{4}$ to $1\frac{1}{2}$ cwt. Let us take the maximum, which would show us that a soil offering a resistance of 3 cwt. was a fair test of a pair horse power, and that they would readily do such work, without extra keep, and without losing condition. Double this draft, and make your horses struggle through it, and what is the result? Either they must do considerably less amount of work in the same time, or they consume an increased amount of food, or they must speedily show by their depreciated condition the wear and tear which has silently been going on by the uneconomical expenditure of their powers. Force cannot be generated—it must have its equivalent somewhere—either time or material must be given to balance it, and either or both of these must be paid for somehow. From my own calculations, I am inclined to think that the money equivalent of horse power 6 × 9 furrow per acre in ploughing is about 2*s.* 6*d.* per cwt. of draft on the lightest soils, but that this ratio of cost increases with any increase of resistance offered. Now if we could draw out any scale of this sort, it would readily be seen upon what soils horse power could economically be employed, and where steam could be introduced with advantage in the cultivation of the farm,—for we must recollect that steam owes no allegiance to the laws that limit animal power.

SCOTTISH METEOROLOGICAL. — At the half-yearly general meeting of this Society, Mr. Gibson read the report of the Council. Mr. Milne Holme stated the objects for which the Society was established, which were of a three-fold character. The first of these was to investigate all facts of a meteorological nature, so far as they affected the temperature and climate of the country. The second was to turn these facts as far as possible into some practical use. The third object was to disseminate throughout the country whatever meteorological information they could obtain. The latter was one of their primary objects. ... far had they been instrumental in carrying ... They had established throughout the country ... stations, from which they got information of the ... required. That information was conveyed ... members by means of their reports. From the ... they had obtained a considerable amount of ... ledge regarding the state of the temperature ... country in a variety of places of a very valuable ... to farmers and others. They had found, for example, by means of these agencies, that during the coldest months of the year the temperature of ... the northern parts of Scotland was warmer ... was in the southern parts. They had also discovered that pulmonary consumption prevailed to a much ... extent in several places in the West of Scotland ... in southern and eastern parts of the country. During the three coldest months in the year the highest temperature had been found in Argyleshire. They ... also seen that in the higher districts of the country vegetation had been exceedingly well preserved ... these months, while in the lower districts it had ... almost destroyed. These were useful facts. ... to the rain that had fallen, it had been generally ... posed that extensive drainage had a considerable ... ence in lessening the amount in localities ... plan had been adopted. From facts, how... had fallen under the observation of the ... it had not appeared that that was ... Another important point to which attention ... directed was the subject of the atmosphere ... that they might be able to predict the nature ... coming weather. That they would yet be able ... that with tolerable certainty, he fully believed ... could be no doubt that the difficulty of pre... what kind of weather was coming to them was very great, unless they were in a position to ... it was in places at a distance, and in the surrounding districts. He had seen, near the mouth of the ... great floods coming down at a time when there ... rain, and when there had been none for some time previously. Now, if he had been in possession ... knowledge of the state of the weather and ... localities from which these floods had come, he ... have been able to predict what was to be expected ... the locality he had mentioned. It was the same ... the world at large. If they did not know what was going on at a distance, it would be impossible ... to predict what kind of weather was in store for ... home. Mr. Home proceeded to speak of the ... and its influence in modifying the temperature ... British islands, and then passed on to ... study of meteorology stood at present ... the same state that the science of ... olden times; but that the time was ... clearer notion would prevail in the one ... it had done in the other.

HIGHLAND: *The Perth Show.*—At the ... yearly meeting of this Society the Secretary ... following comparative list of entries from ... 1852:—

	1861.	1852.
Cattle	343	313
Horses	149	135
Sheep	587	661
Swine	65	50
Poultry	818	186
Dairy produce	80	123
Implements	740	329
Total	2282	1900

The implements, though put down at only 740, ... likely to turn out nearly 1000. They had ... ground in the neighbourhood of the showyard ... trial of implements, and all the local arrangements had been made, and every assistance and co... had been given by the local authorities.

The Kelso Show.—This show was proposed ... place next year, but in consequence of the ... International Exhibition a movement was made ... district to get the show postponed, thinking ... bable that the Great International Exhibition ... seriously interfere with it. The idea of postponing the show till 1863 was very seriously and ... sidered, and a meeting was held at Kelso of ... moters of the show, at which it was unanimously resolved, "That in the opinion of this meeting ... Great International Exhibition which is ... in London in 1862 would materially ... Highland and Agricultural Society's Show, ... intended to be held at Kelso in that year, and ... is expedient to postpone the latter show till ... 1863; and the meeting, therefore, respectfully ... the directors of the Highland and Agricultural Society to make arrangements for postponing the show ... Kelso from 1862 till the year 1863." The directors were quite unanimous in concurring with the ... sentation, the more especially as it emanated from ... district itself. With reference to this subject, he ... mention that the idea had been since mooted of ... Highland Society taking some share in the ... International Exhibition; and the Duke of Buccleuch had undertaken to inquire if the Highland Society could be represented there. His Grace was now ... believed, at work on the matter; and there was ... thought, no doubt as to their being able to ... sanction of the English Society for what the Highland Society proposed to do.

Reviews.

Arthur Young's Farmer's Calendar; describing the Business necessary to be Performed on Various Kinds of Farms during every Month in the Year. Twenty-first Edition, re-written and extended. Parts I. to V. By John Chalmers Morton. With Numerous Illustrations. London: Routledge, Warne, & Routledge, 2, Farringdon Street. 1861.

The purpose of the new edition is thus described in the prospectus:—

"First published 90 years ago, this celebrated work reached its tenth edition in 1814, and its twentieth in 1836, having been then edited by John Middleton, Esq., the author of the 'Survey of Middlesex,' published by the Board of Agriculture.

"During the quarter of a century which has since elapsed, agriculture has benefited by scientific research, by mechanical ingenuity, by extended resources, and by increasing skill, vastly more than during any similar period in our history. Fertility has been increased by the operation of new processes, and of new implements, by the importation and the manufacture of new manures; by the cultivation of new plants; and by the maintenance of a larger stock of improved animals. National Societies have stimulated and directed improvements, by publishing both failures and successes; and we have now, from agriculturists and from scientific men, abundant records and satisfactory explanations of every branch and kind of agricultural experience.

"Since 1836, agricultural chemistry, by which farm processes and results are explained, has grown up, and risen indeed to the rank of a science. Agricultural mechanics have almost entirely altered the machinery by which these processes are effected: and an agricultural literature, describing, justifying, urging all these changes, has, during this period, been created."

The aim of the new edition is by confining the work as in the original edition to the practical details of farm business, to provide a systematic work on agriculture at one-sixth the cost of the Cyclopedias and Books of the Farm, in which every department of theory and practice is treated in detail.

One-half the work has now appeared. Besides an enumeration of the things each month which need to be done, there is given every month a more full and complete discussion of one or more important agricultural subjects to which the attention of the farmer is during the successive seasons of the year directed. Part I. discusses land drainage and manure-making, besides the more particular operations of the month. In like manner the February section treats of the relations of landlord and tenant, and the erection of farm-buildings; the March division treats of seeds and of artificial manures; in April crop rotations, steam cultivation, Grass seeds and sowing, are described, besides the regular and detailed monthly calendar; May treats of breaking-up Grass lands, payment of labour, Turnip culture, &c.

The work is illustrated by numerous wood engravings. Although nominally Arthur Young's Calendar, originally intended to be a mere extension of that work, and still carried out upon its model, yet there is little of Arthur Young's writing in its pages. The former edition was found almost entirely unsuited to the year 1861, and whatever the dishonesty—the unintentional dishonesty—of the title, an almost entire displacement of the contents of the work was found unavoidable. Mr. Morton has often availed himself of the assistance of contributors to the *Agricultural Gazette*, and in particular has benefited by a collation of the numerous calendars of operations which have appeared in our past volumes.

We give the following extracts:—

(1.) *Composts and Manure Heaps.*—The growth of plants involves the building up of a great variety of materials; and manure, which is the food of plants, helps the natural supply of almost all the ingredients thus required. Of some there may be unlimited abundance in the air, and of others the soil contains enough; and yet even of these an artificial addition tends to the increase of fertility: while of others the natural store is so limited, that on the attention of the farmer to this important part of his business depends from year to year the crops he may expect. The manures he adds contain many of the necessary ingredients, and they are so far composts. It is necessary that these ingredients be thus combined and mixed, not only because the greater the variety present the greater also will be the power of the mixture to meet those wants of a rapidly growing plant which arise out of an imperfect natural supply in the soil where it is growing—not only because in such a mixture one ingredient often detaches others from combinations in which they are lying dormant, and so makes them useful that the total fertilising effect of the mixture is greater than the sum of the fertilising powers of the separate ingredients would have led you to expect—but also because that chemical action in which the growth of plants consists, requires for its continuance that the atoms which are thus built up within the growing structure should be successively presented in a nascent, *i. e.* just detached condition. On analysing any product of a plant after the completion of its growth, various elementary substances are found—carbon, hydrogen, nitrogen, oxygen, chlorine, phosphorus, and certain metals. None of these substances would be useful as manure applied alone. But substances containing them are sucked in by the leaves and roots of plants; and being decomposed within the plant by the varying play of chemical affinity under the influence of light and heat and life, these substances yield up their ingredients in that just-detached or nascent state when chemical affinity exercises the greatest power: and by it accordingly they are at once rebuilt as the habit of the plant directs. Carbon thus enters the plant as carbonic acid gas, being absorbed from the air by its leaves, and (washed into the ground by rain) sucked in by its roots. Oxygen and hydrogen enter it combined as water and in various other ways—nitrogen in ammonia, nitric acid, &c.—chlorine in common salt, which contains it combined with the metal sodium—phosphorus in phosphoric acid, as contained in various soluble phosphates. Any soluble substance which, contains any of these ingredients, combined or mixed, is a manure from which plants can feed themselves and grow.

"And they are contained in farm-yard dung—in all vegetable and animal substances—in many mineral substances, as marl, lime, clay, and various mineral salts—in many wasted substances, as the sewage of the town, and the refuse products of many of the manufactures—in many imported substances, guano, bonedust, nitre, &c. Many of these ingredients are now used in the manufacture of artificial manures, in which they are rendered more soluble, and mixed in proportions more adapted to the presumed requirements of different crops. Of these I shall speak in March, when your purchases of them should be made. To clays, marls, and lime, reference will be made in the autumn, when they are more generally applied. It is the management of the dung heap which will occupy our attention now.

"After the life has gone which holds the ingredients of a living plant together in the forms its several products there presented, their former and natural chemical affinities, which have been held in abeyance by it, again come into play. And these products thus tend to resume the former combinations out of which they arose. This process is hastened by the presence of heat and moisture. In any moistened heap of vegetable matters accordingly, the work of decomposition goes on with rapidity; and the oxygen which had been given out to the air during the growth of the plant is re-absorbed, to enable the resumption of the old condition of things. If therefore the heap be moved occasionally, so as to let the oxygen of the air have free access to it, the process is quickened, and the rotting goes on rapidly. The old affinities coming into play, the old combinations ensue; and so the carbon and the hydrogen reunite with oxygen, forming carbonic acid and watery vapour, both of which fly off into the air from which they originally came, the nitrogen resumes the form of ammonia and also escapes, and the minerals are detached from their fixed positions in the vegetable, and are liable to be washed away.

"This is, in fact, the process which goes on in a dung heap. The straw and other vegetable matters are there mixed with the dung of animals which, generally containing more of the nitrogenous ingredients of plants, is more liable to this re-arrangement of its elements, and thus acts the part of a ferment; and the whole accordingly rots rapidly in contact with the air, and thus great waste ensues. The skilful management of the dung heap succeeds in checking the waste, and saving the volatile and soluble substances which, if unrestrained, escape. It thus secures for the soil, and the next crop upon it, materials which would otherwise be wasted."

(2.) *Farm Buildings: Descriptions of the Kirtlington Farmery.*—"The other illustrations of Mr. Wilkinson's covered yards are taken from Northbrook Farm, Kirtlington, near Oxford, the property of Sir G. Dashwood, Bart. On this farm there was already a considerable quantity of shedding and other buildings, available for many of the purposes of the farm; and Captain Dashwood, in whose hands the farm has for several years been, wisely resolved to retain it all until a few years' experience should have fully determined the requirements of the land under its altered management; and accordingly it is only that part of a farmery required for the accommodation of the working and the feeding cattle that is new. The principle of covered yards, as here carried out, is thus perhaps more strikingly illustrated than where the attention of the spectator is drawn away by lofty barns, elaborate machinery, or any other more striking department of a complete set of farm buildings. There is no better established truth in the theory of agriculture than that which makes all growth, whether of the animal or plant, to be an actual building up of the matter within reach of either available for its nutrition. It is this growth which is the whole business of the farmer; and it therefore tends greatly to his success if the process be carried out without waste, *i. e.*, if the food of animals be burned (for that is the proper word), as little as need be in their lungs; and if all the manure, which is the food of plants, be carried direct from the feeding-house where it is made to the soil with which it is to be incorporated. To this end animals should be fed in warm and sheltered places, and dung should be made under cover. These are the two points for which special provision is made by covered yards for feeding stock. And at Northbrook, as at the Royal farm, the system is well carried out. A central yard, 30 feet by 90, somewhat excavated below the ground on either side of it, has a row of stabling for the farm horses on one side of it, and of piggeries, and cow-stalls, and cattle-boxes on the other side of it, along its whole length. The stable contains stalls for 14 horses, and the soiled litter from them is thrown into the covered yard on one side of it; while the dung from the piggeries and the cows and cattle is in like manner thrown into the central covered yard upon its other side. The dung from all sorts of cattle, whether in store or fattening condition, and however fed, is thus mingled together, and supplies a quantity of fertilising matter of uniform quality made as well as it can be. It is trodden under foot and mixed with the litter, and the excrement, of a large number of heavy fatting oxen in the central yard—and suffering no injury whatever by the washing of rain, is in the best possible condition for fertilising the land. At the end of the stalls and piggeries on one side of the covered yard is the steaming-house, where cut straw of Oats, and Beans, and hay chaff, mixed with broken Rapecake, are steamed, and afterwards given along with cut roots to the live stock; and easy access is also given to cattle in open yards on the southern side of the buildings, provided with shedding which is part of the roofing of the general quadrangle. Light is provided from the roof: and the openings at either end are manageable by louvre boards and windows, so as to regulate the ventilation. The roof of the central yard is also higher than the rest, and ventilation and light are given through the side walls."

Calendar of Operations.

JULY.

BERKSHIRE.—The high temperature of this month has greatly contributed to improve our corn crops. Though stormy it has been everything the farmer could wish, with the exception of the 8th inst.; we had then a violent thunder storm accompanied with torrents of rain. On some land where the Barley was heavy, it has done mischief by laying and twisting the ears just commencing to fill. The Wheat never looked better, strong in the straw, a good colour, and heavy in the head, having this season tillered well; bids fair for an abundant crop. Oats where grown in this district look extremely forward and good. Beans and Peas remarkably good; Peas are ready for the sickle, and will fall in a few days. Hay crop: both Meadow and Clover never mowed a better swath, and in most places have been made well. Mangel Wurzel generally is light or backward and patchy, with many failures. Swedes are in all this district looking excellent; if hands can be got to hoe and single out, promise to be a bountiful yield. If we have from now six or seven weeks good harvest weather, we shall fill our rickyards and granaries with the fruits of the season, that will amply repay the energetic farmer for all his toil and anxiety. Wheat promises to be a good average; Barley an excellent average; Oats, fair and good; Potatoes looking well, at present free from blight; Beans fair, and on some lands never better; Peas very good. Harvest will commence about the first or second week in August. *Thomas Forsham, Snelsmore Hill East, Newbury, Berks, July 20.*

CAMBRIDGESHIRE: *Isle of Ely.*—Since our last report was written we have had an "abundance of rain." Showers have been partial, but heavy, and frequently accompanied by thunder and lightning, and in one or two instances by hail, which has occasioned considerable loss where uninsured. We would strongly urge all our neighbours to insure forthwith. For the first time since the breaking up of the frost in January have we a favourable report of the Wheat crop to present. Hitherto we have had to complain of thinness of plant, and sickliness of appearance, which threatened to afford only a very slender produce; but during the last month the copious showers and favourable temperature have wrought marvellous changes; and we never remember to have seen so poor and unpromising a crop when breaking into the ear, so hopeful and promising when fully out in the ear. The ear is thick and large, and appears filling well; and up to the present the Wheat has presented a beautiful bright hue, indicative of good quality and freedom from blight and mildew, and should these appearances continue we shall doubtless have a better crop, both as regards quantity and quality, than we have had for the last three or four years; at least on those lands where there is a sufficiency of plant. The Oat crop, where uninjured by the wireworm, is good, and promises a full average yield. Beans remain healthy, and where well planted will probably produce an average crop. Peas are exceedingly well podded, and will shortly be fit to cut. The early sown Poland Oats with the present high temperature are ripening very fast, and will probably many of them be ready for the sickle by the end of the coming week. We scarcely expect to cut Wheat before some time in the first week of August. Our attention has lately been directed to the increase of wireworms, and the fearful losses sustained by our farmers in consequence. This is doubtless very much owing to the foolish short-sighted policy pursued by farmers themselves, who, because they find the rooks and small birds on the farm do slight injury occasionally, have adopted the unwise practice of seeking to destroy by poisoned corn these supposed foes but truly best friends of theirs. This practice of destroying these wholesale consumers of wireworms, because they occasionally eat a little corn also, cannot be too strongly condemned; and if farmers consult their own interests, they will only banish when needs be, and encourage when advantageous to do so, but never destroy. Mangels grow fast, and are likely to be a heavy crop where there is a full plant. Grass keeping is plentiful.—*Fen Reporter.*

DORSETSHIRE: *Corfe Castle.*—Wheat, under average; Barley, average; Oats, over average; Peas, good; Potatoes, taken with blight everywhere a few days ago, before that very luxuriant in growth; Turnips and Mangels excellent; hay, an average. *W. J. Voss.*

HAMPSHIRE: *Southampton, July 16.*—The Wheat, although very thin and unpromising during the winter and spring months, has wonderfully improved, and may now be considered likely to yield an average crop. The Barley will probably exceed an average. Oats may also be considered a full average. Peas unusually good. Beans a total failure, and ploughed up for the most part, and sown to roots, &c. The hay, both field and meadow, a bare average produce and badly got up, scarcely any without damage more or less. Mangels are a thin plant, but promising, except in some instances, where the crop has been destroyed by a species of blight and mildew. Swedes and Turnips of all varieties, and both early and late sowing, are a fine regular plant, and very growing. Although we have known seasons as kindly for their growth,

yet we can never before recollect a total absence of all the enemies to the plant. Potatoes are flourishing greatly, and at present are more promising than any season since 1845, the first year of the blight; some of the early varieties are, however, tainted with the disease to some extent, showing that further on in the season we may expect to see them attacked more or less with blight. *Joseph Blundell.*

SUSSEX: *Folkington, Willingdon.*—In this neighbourhood the Wheat is progressing as favourably as can be desired, but the acreage is less than usual and in many places too thin to produce an average crop. Oats, Barley, and Peas are very promising. Beans generally bad. Mangel very indifferent. Turnips good. The disease has made its appearance very generally amongst the Potatoes the last few days. *H. Scott Hayward, July 16.*

WEST DORSET: *July 24.*—During the months of June and July showers have been so frequent and severe, that although the Wheat crop generally is not heavy, those pieces which are the exception have been considerably "laid." The "standing" corn, however, presents a healthy appearance, and a promise of "full ears." Barley looks well, but Oats are "thin." Of Beans and Peas the account is favourable. Mangels are now recovering from the effects of a dry May; Swedes and Turnips are promising, but all root crops unusually weedy. The hay harvest is not yet completed, and in consequence of the dry spring, very scanty; a considerable quantity of hay was "put together" in fine condition during the very commencement of July, otherwise the weather has been most trying, and those who waited for "better times" entertained but a delusive hope. Pastures are full of Grass. Flax is now being "pulled;" the crop is not so good, nor does it command so good a price as it has realised during several past years, this may be attributed chiefly to the dullness of trade in the manufacturing towns of the immediate neighbourhood. Potatoes, which until the third week of July were all that could be desired, are now more easily detected by the nose than by the "eye," and complaints of the "disease" very general. It is likely that harvest will commence about the third week in August. May the weather be more favourable then than it is at the time I am writing. *W. P.*

WILTSHIRE: *Avebury.*—The present appearance of the crops is much more favourable than at the corresponding time of last year. The Wheat I consider of a full average crop; Barley also; Oats, some very good and some very bad, on the whole there may be an average taking the breadth; Beans looking well; Peas good. The weather has been rather unfavourable for the progress of hay-making, Swedes and Turnips never more promising. *Geo. Brown, July 15.*

STATE OF THE WEATHER—BERKSHIRE.

For the Week ending July 25: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air. Max. in Sun.	Max. in Shade.	Min.	Mean.	Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	19 ..	68.0	67.0	54.5	61.0	63.8	0.02	S.W.	29.55
Saturday	20 ..	64.0	65.0	58.0	61.2	63.0	0.37	S.W.	[illegible]
Sunday	21 ..	78.0	74.0	55.5	65.7	64.0	0.86	S.W.	[illegible]
Monday	22 ..	72.0	70.0	54.5	62.7	64.[illegible]	..	S.W.	[illegible]
Tuesday	23 ..	78.0	71.6	56.0	65.[illegible]	64.3	0.05	S.W.	[illegible]
Wednesday	24 ..	76.0	69.0	50.0	61.[illegible]	63.8	0.03	S.W.	[illegible]
Thursday	25 ..	75.0	71.0	53.0	64.0	63.3	0.14	S.	[illegible].52

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

BARN GALLON OF MILK: *M A.* It is 17 pints; and is a gal[lon] known to us, the price at the railway station was 1*s.* 5*d.*

BEER: Δ. says:—"Can you inform me what is the usual allowance of beer to hay-makers on a gentleman's place near London? I have just made off two meadows of 5 acres each, and my gardener charges me 1*l.* 13*s.* on one, and 1*l.* 15*s.* 6*d.* on the other for beer. He states to me that a certain allowance of pints is customary while mowing, a different number when 'making,' and a different number when carting. I have for many years been dissatisfied with this item, and at last have thought of applying to you to set me right, and shall feel much obliged if you will do so." [The charge is preposterous. We don't know what is usual near London, but in the country a gallon per acre to mowers, and a gallon a day to men and a couple of quarts apiece to women in making and carting is ample allowance.]

BOOKS: *E M S.* Lindley's "School Botany" for a beginner. There is no book on the management of a small farm of a few acres, with fruit, kitchen, and flower gardens.

CULTIVATION OF HEATH SOILS: *G L.* You will find papers on it distributed through our agricultural journals, but no book specially on the subject.

HARVEST BEER: *Cor.* The charge is excessive. In good weather, all your expense of haymaking—including mowing and putting together in rick, but not including horse-labour—ought not to be more than 10*s.* an acre.

POULTRY.—Our quotations will vary little from last week. The trade gets worse, but the supply is very moderate. Everything still tells us of scarcity, and there are not wanting complaints that fowls do badly. In many places, they have not been healthy all the year; in others they appear to blight and die, and the yards that are well stocked with healthy inhabitants are the exceptions. The chickens do not get enough sun. If any of our readers have failed in rearing their usual numbers, either for stock or the table, we advise them to try some sittings in August. We did so last year with success. They supplied us with good tender poultry through the winter and left hardy stock birds besides. The seasons are now so altered that November is neither so dreary nor so trying spite of its damp as March, with its bitter easterly winds.

	Each.—s. d.		s. d.
Large Fowls	4 0	to	4 6
Middling ditto	3 0	„	3 6
Chickens	2 0	„	2 3
Green Geese	5 6	„	6 0
Ducklings	2 3	„	2 6
Rabbits	1 3	„	1 4
Wild ditto	0 8	„	0 9
Pigeons	0 7	„	0 8

SWINE: *Armiger.* We fear that we can afford you little clue as to the cause of mortality amongst your pigs, as you say that they were comfortably housed, and neither too high nor too low in condition. It probably had reference to the food the animals had subsisted on. We should recommend an oily laxation a few days previous to pigging, such as Linseed oil. *W C S.*

WIND-POWER: *J P.* Mr. Peil's address, and other particulars, will be found in our advertising columns.

ERRATA: In the report of the horses at the Leeds show in last Number, page 690, first column, line 35, and third column, line 8, for "Denmant" read "Hemmant;" also second column, line 5, read "and more easily Colonel Pennant's filly by Matchless, the Salisbury prize horse with the beautiful mare, which was beaten at Chelmsford by Britain, but was second to Nonpareil at Chester for the All England prize."

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The Gardeners' Chronicle.

SATURDAY, AUGUST 3, 1861.

BY the time that these remarks issue from the press crowds will be swarming on the road from England to Paris; for that must be the main artery of travel now that MACDONALDING is triumphant on the Rhine, and nobody cares to expose himself to its application by German officials. Let us then invite some of the many horticulturists

passing southwards to give us some account of what they see in Paris, as it appears to English eyes. There is plenty to look at in their own line, much to study, and doubtless something to learn. More especially will it be interesting to know the truth of certain statements that have reached us from time to time for the last few years.

We are assured that nothing here is equal to the beauty of the simple arrangements of colour observable in the public gardens of Paris; and that of the Tuileries is more especially held up as an example. French flower gardens are asserted to be as superior to English in tasteful grouping as a Paris shop window is to one in London. By all means let us profit by our clever neighbours.

Wonders are said to have been worked in the once ugly Bois de Boulogne. A chain of lakes has been obtained from the water of the Seine, and marvellous cascades have learned to tumble over gigantic precipices, so that the whole place looks like the river St. Lawrence and the Falls of Niagara. There too is a wonderful avenue near Baron Rothschild's country-house formed of trees unknown to Parisian gossips, but called by an unlearned friend *Arbres aux Haricots.* What are they? Nothing, we are assured, can be compared to the new *Jardin d'acclimatation*, and its "vast hothouses," its fine collection of half-hardy trees, its birds, its beasts, and its graceful walks. We are curious to learn the effect it produces on those who are familiar with our Zoological and Horticultural Gardens (that at Chiswick we mean) and our Regent's Park.

Our ancient friend, the *Jardin des Plantes,* should also be visited, and compared with our own Botanic Gardens. Has that also enjoyed the advantage of Imperial smiles? and how do it and the *Jardin d'acclimatation* bear to be compared with each other? Having ourselves known it since the year 1817, we regard it as a venerable scientific object; and trust that it is not forgotten in the new magnificence of the noble French metropolis.

Then there are the old trees about the *Place de la Concorde*, and in the *Champs Elysées*. Are they as thriving as M. Robert reported them to be, and has the scoring and scraping their bark done them so much good? and are they at all stag-headed? and does our villainous Scolytus prey upon them? We should also like to know what the unguent is with which the wounds in those trees are dressed, and whether it has the miraculous properties ascribed to it.

Nor must the reports made a year or two since about trees 50 feet high having been successfully transplanted when in full leaf be forgotten. What has become of those trees, and if alive how do they look? What, moreover, is the effect of the Ailanthus where used in the Boulevards? and what sort of tree looks best in those long roads? As the trees are all young, or at least the most of them, we may possibly obtain hints useful in our own metropolis; unless indeed the dry warm soil of Paris produces an effect which cannot be obtained near London.

The large trees just alluded to are said to have been formed in some Nursery at or near Vincennes. Such a nursery would be worth a visit, for the purpose of seeing how specimens 50 feet high are prepared for removal in full leaf without perishing. For ourselves, we cannot refrain from doubting whether the skill shown by the Paris gardeners is really so much greater than our own clever men exhibit. If it is we desire to profit by their example; if it is not we shall be glad to have a false impression removed, and some of the amateurs now about to visit the gay capital are perfectly capable of forming a correct judgment, as well as certain to pronounce an honest one.

Every day's experience shows more forcibly what an important part Fungi bear in the production of disease. Neither the gardener nor agriculturist, who do not recognise this truth, can be considered as occupying a high position in their respective professions, and it is on this account in connection with the practical bearings of the subject that we so often have occasion to advert to it.

It will at once be allowed that any very striking instance of the effects of these vegetables on the human frame has a tendency to promote faith in their powers on the lower organised productions which are the objects of cultivation, and to diminish confidence in the notion which is so prevalent that Fungi are incapable of producing disease, but are on the contrary the effects of disease already established. The utter wrongness of this notion has often been exposed in our columns, and we shall not now go over the old ground but at once proceed to the extraordinary case before us.

A short time since a pamphlet was forwarded to us from Bombay by Dr. Carter, Professor of Anatomy and Physiology in the Grant Medical College, together with illustrative specimens preserved in spirits, relative to an extraordinary disease which has prevailed in several parts of India, and which is known there under the name of the Fungus disease. Two distinct forms of it occur, but our observations will be directed principally to the more striking of the two. The part which is affected is the foot, extending as far as the lower part of the legbone where it joins the ancle. In the first instance the foot swells, especially at the instep, and presents very much the same appearance as when it is affected with scrofula. After a time the surface is studded with the orifices of ulcers, from which a blood-stained matter containing a greater or less quantity of pus is given out, and the disease gradually increases to such an extent that the constitution is undermined or exhausted, and the only remedy is amputation quite above the affected part. Partial amputation is utterly useless, or only of temporary benefit, as, if every portion of the diseased part is not removed, the affection is sure to recur. On close examination the ulcers are found to lead to variously sized cavities in the bones, which are honeycombed in every direction, the apertures presenting all dimensions, from that of a Pea to a Walnut. The apertures or cells are filled with dense black matter, tough on the outside, and so closely resembling Truffles that a casual inspection of the specimens preserved in spirits apart from any information as to their origin would at once induce one to refer them to that tribe of Fungi. The fungous masses when divided present a radiated structure, and are composed of necklace-like threads, or closely compacted cells, like those of a *Sclerotium:* but towards the margin there are always some fine threads, resembling those of an *Oidium*, the terminal joints of which fall off and germinate exactly after the fashion of yeast globules. Towards the centre of the mass there are often delicate gelatinous threads attenuated at one end, or externally covered with minute granules of a slimy appearance. No attempt has hitherto been made to propagate the Fungus apart from the matrix, and we can therefore say nothing as to its real nature, though we feel convinced that it is a mere condition of some common mould, and perhaps from its dark colour is a form of some *Cladosporium* or *Polyactis*. Its powers of absorbing the bone and making for itself a cavity remind one of the effect of some Lichens on hard rocks, if we may compare small things with large, for the ship-worm does not more surely and thoroughly penetrate the solid Oak than this Fungus does the hard bony structures in which it is located. Amongst Fungi which occupy a place in the very substance of vegetable structures, we may call attention to the sclerotioid bodies which are formed within the pith or stems of plants, as the rose-coloured *Sclerotium* which occurs in Rushes, and which Mr. Currey has proved to be a dormant condition of a *Peziza*, or the large black form which occurs in the stems of Sunflowers or other large herbaceous plants, the perfect state of which is not yet known. Or if we look to more solid parts of vegetables or woody trunks, we may call attention to the enormous leathery sheets known under the name of *Æglostroma*, which penetrate the firmest timber whether in its natural place of growth, or after it is fabricated.

The other form of disease in outward characters resembles the first very closely, but the red matter which oozes from the apertures of the foot, calling to remembrance the poet's description of the diseased foot of Philoctetes, is filled with bodies which are multiplied by quaternate cell division, which like the well-known *Sarcina* remind one of Algæ rather than Fungi. In one case there were dark subglobose bodies surrounded by a border of those curious anomalous crystals which are so frequently formed by different salts when influenced by morbid organic matter, the bodies themselves consisting of granular masses, reminding one of some of the minute Algæ figured by Kützing in his genus *Microhaloa*.

We are not aware that any case has been seen in our hospitals, though the Guinea-worm disease contracted in India, which has been so well illustrated by Dr. Carter, is not infrequent. It is possible, however, that the rare case of perforating ulcer of the foot, producing destruction of the bone, mentioned in the "Union Médicale," April 16, 1861, may be of a somewhat similar character. *M. J. B.*

SCIENTIFIC CULTURE OF THE STRAWBERRY.

BY LEONARD WRAY.

Amongst our British fruits the Strawberry is very high rank, and is justly esteemed both for table and for preserves. A very large extent of is appropriated to its culture, much capital pended, and no small amount of "art" is exhi[illegible] bringing this fruit before the public in its [illegible] condition.

Size, colour, and flavour have been studied successfully, as the large and beautiful spe[illegible] which are exhibited at the various horticultural [illegible] and in the windows of our fruit-sellers, fully de[illegible] strate. New varieties are eagerly sought for found, by the great Strawberry growers—as M[illegible] Turner, Robertson, and a host of others; and result of their intelligent labours we see, and [illegible] appreciate, in those choice, new varieties—the "Osca[illegible] the "Wizard of the North," the "Surprise," the "E[illegible] press Eugenie," the "Mammoth," the "Prolific H[illegible] bois," &c.

These are of the highest excellence; and, in [illegible] thern climate, can possibly not be surpassed [illegible] of size, colour, flavour, and juciness—points [illegible] ously aimed at by our great Strawberry gr[illegible] we may well inquire whether these varieties [illegible] them, fulfill all those conditions, so neces[illegible] really perfect Strawberry plant. In fact, we [illegible] must, ask the question, "Is Science brought to [illegible] the art of Strawberry culture in this country?"

We fear that we shall "offend the susceptibili[illegible] great number of professionals and amateurs, [illegible] express our opinion, that in the culture of the [illegible] berry in the United Kingdom, science has no[illegible] applied in aid of the art so liberally bestowed.

We take the ground, that so hardy a plant [illegible] certainly appertain more to open field culture [illegible] the elaborate and expensive horticulture of the [illegible] The former may be designated as a naturali[illegible] under man's care and supervision; the latter [illegible] forced and unnatural (*id est*, an artificial) [illegible] more suited to the requirements of a tender [illegible] than to the hardy Strawberry.

Growing wild, close to the Falls of Mon[illegible] (near Quebec), we have seen and eaten [illegible] flavoured fruit, the intense frosts of Cana[illegible] Labrador hurting it not. In the sweltering [illegible] Charleston and Savannah (in South Carolina [illegible] Georgia) we have feasted upon it for many [illegible] the year, the tropical heat doing it no harm. [illegible] Alpine heights, and in the hot valleys [illegible] meets us again. Far up on the Him[illegible] beyond "Nynee Tal," and even the [illegible] man, this kindly plant offers its [illegible] weary and adventurous traveller. Down [illegible] heated vales of Cashmere, we find it expanded [illegible] greater size, and remarkable for its lusciousness [illegible] aroma.

Why, then, is this plant treated in England [illegible] weak and tender exotic? Why is it so pampered [illegible] swathed, so swaddled, and its hardy habit so [illegible] ignored? It is because science has not [illegible] applied to the art of growing this great gift [illegible]

The productions of Myatt, Turner, and [illegible] admirable in their way, and for the especial [illegible] tion for which they are grown—viz., for the [illegible] Belgravia, and of the richer classes; but [illegible] million, and for those great preserve-makers [illegible] & Blackwell, Batty & Co., and others, wh[illegible] millions of families with Strawberry jam and [illegible] small and very thick-bottomed pots, their [illegible] culture are wholly unsuitable, and the supply [illegible] is totally inadequate to the demand.

Let us now examine into the causes of [illegible] let us see if science will not aid us in bringing [illegible] very different state of things.

Botanists have been too much in the habit [illegible] mulgating the doctrine, that, in the Strawberry [illegible] the male and female organs exist in a perfect [illegible] whereas, generally speaking, this is by no [illegible] case, for the sexual difference is peculiarly [illegible] in almost all varieties of Strawberries.

Let us sow the seed of a Strawberry, [illegible] find, on a careful examination of the [illegible] we have obtained Staminates, Pistillates [illegible] phrodites; that is to say, Staminates or [illegible] Pistillates or female plants—neither of which [illegible] will bear a single berry—and hermaphrodites [illegible] plants in which the male organs are perfect [illegible] female organs more or less imperfect. It is [illegible] has been particularly insisted on in respect [illegible] varieties (especially amongst the white kinds) [illegible] some of these hermaphrodites possess both the [illegible] and female organs in perfection; but, although [illegible] taining a strong doubt upon that point ourselves [illegible] are nevertheless quite aware that, in particular [illegible] stances, they do possess female organs very [illegible] perfect, sufficiently so, indeed, to lead to the [illegible] belief. On the other hand, we know that, in the [illegible] majority of cases, so very imperfect are the [illegible] organs in these hermaphrodites, that they seldom [illegible] duce other than a very scanty crop of inferior [illegible] perfect berries.

The most vigorous of all are the staminates, or [illegible] males, abounding in large flowers, and sending [illegible] profusion of runners; the pistillates flower very [illegible] dantly, but have small blossoms, and very few ru[illegible]

the hermaphrodites bear a medium sized flower, and throw out numerous strong runners.

For the purpose of the high-priced Strawberry grower, the better kinds of hermaphrodites may and do answer admirably well, seeing that their object is to obtain only a few very large-sized berries on each plant; but place these plants in an open field, deprive them of their finely prepared mould, and their hand-glasses, their artificial impregnation, and the unremitting care and watchfulness of their human attendants, and the truth would soon become apparent: they would be dead failures. In a word, for a general crop they are quite unsuitable.

About the year 1809, the celebrated horticulturist, Keen, from amongst his seedlings, picked out all those which had borne a heavy crop of fruit, and planted them in a bed by themselves, quite apart from those that had proved sterile, or had borne but lightly. Spring came, and with it his pet seedlings put forth a profusion of bloom, but his surprise was intense when he saw that there was no swelling whatever for fruit. His intelligent mind prompted a critical examination of the flowers, and then he discovered that the pistils, or female organs, were perfect, but that there were no stamens, or male organs; consequently, that his famous fruit bearers were pistillates, or pure females. Having thus stumbled upon a very important discovery, his next step was to examine his other seedlings, and, finding that they possessed male organs in perfection, he plucked a number of their flowers, placed them in phials of water, and suspended these in different directions immediately over his bed of pistillates. His experiment was eminently successful; the pistillates began immediately to swell for fruit, and every blossom produced its berry.

These celebrated plants were known under the name of "Keens' seedling," but it is doubtful if they are in existence at this day, the variety so called now being a very favourite hermaphrodite, and not a pistillate. The reason for this is not difficult of explanation. Fine bearing pistillate plants are carefully removed from all others, and planted by themselves, perhaps, in some gentleman's garden, being regarded as a great treasure; the next season, abundance of blossom, but no fruit. This first miscarriage may be attributed to late frosts, slugs, &c.; so another season is awaited, but the same result disgusts both master and gardener, and the poor unmated females are declared worthless, and are cast on the dungheap. In this manner profuse bearers are thrown away, and the partial bearing hermaphrodite takes their place, and gives rise to the universal complaint, "How badly my Strawberries do bear! I had a fine show of bloom, very fine, but somehow or other I have had scarcely any fruit. It is provoking!" Yes, so it is—very provoking, indeed; and, knowing and feeling this, we are now endeavouring to diffuse a little information on the subject, hoping that our readers will circulate this information, as well as take advantage of it in their own practice.

After Keen, a Mons. Duchesne arrived at a similar knowledge of the sexual differences in the Strawberry plant; but as far as the practice in England is and has been concerned, it really seems as if the discovery made and published by Keen had been entirely lost sight of. We have conversed with some of our largest and most eminent nurserymen and seedsmen, and have even ventured in our innocence to speak on the subject of staminates, pistillates, and hermaphrodites to the fruitsellers in Covent Garden Market and in the City; but the blank looks of some, and the honest confession of others that they really did not know anything about the matter, would lead us to the conviction, that, if these sexual differences are known and recognised at all in England, it must be by very few indeed. It may be that some of the Strawberry growers possess this knowledge; but, if so, they keep it remarkably secret, perhaps that they may reap the greater (supposed) advantage from its exclusive practice, although we can scarcely imagine this. We were ourselves as ignorant on this subject as the English public at large, until we visited the town of Cincinnati, in the United States, and had the matter clearly explained to us by our highly esteemed friend Robert Buchanan, the celebrated wine grower of Cincinnati—a gentleman who, together with Nicholas Longworth, has done so much real good for his country. In Mr. Buchanan's instructive little *brochure* on "Grape Culture" is included some very interesting letters, statements, and reports upon the culture of the Strawberry plant; and, as these afford most valuable information, we shall briefly allude to them.

It appears that a plain, uneducated market gardener, of the name of Abergust, removed some 46 years ago from Philadelphia to Cincinnati, and went largely into the cultivation of the Strawberry, in which he marvellously surpassed all his neighbours by means of a secret method of managing the culture, and which method he had most successfully practised at Philadelphia. So well did he keep his secret, that for very many years it was not even guessed at; and he supplied nine-tenths of all the Strawberries consumed in Cincinnati, making thereby a very handsome competency. To give Mr. Longworth's own words, "While I could, from one-fourth of an acre, scarcely raise one bushel of Strawberries, he (Abergust) would raise 40 bushels. His fruit was much larger than any other brought to market, and commanded from 25 cents (1*s*.) to 37½ cents (1*s*. 6*d*.) per quart. His secret he kept to himself, and my attention was first led to the subject by a casual remark of his son's to me one day in my garden—that I must get very little fruit, as my plants were all males. I then investigated the matter, and soon discovered that there were what he called male and female plants—a fact I communicated to our market gardeners. The result was that Strawberries rapidly increased in our market, until as fine as Mr. Abergust's were sold at from 3 cents (1½*d*.) to 10 cents (5*d*.) per quart."

There can be little doubt that his gardener, Abergust, obtained his knowledge, either directly or indirectly, from Mr. Keen, who had promulgated the information he had acquired, some short time previously. Through Mr. Longworth, Keen's discovery and Abergust's secret was thoroughly ventilated in the United States, and is now universally know in that part of America, where Strawberry growing is carried on to an extent little dreamed of in this country. One individual grower (Mr. Culbertson, of Cincinnati) sends to market sometimes 4000 to 5000 quarts a day, employing 60 persons to pick them. Numerous cases are known of 5000 quarts per acre being obtained in one season; and it is held as an indubitable fact, that, by cultivating hermaphrodites (as we do in England) instead of pistillates, only from one-tenth to one-third of a crop can be obtained.

By far the largest and most delicious Strawberries in the world, to our knowledge, are those of Chili; and we think plants and seeds from that country might advantageously be brought and domesticated here. Certainly the finest Strawberry plant we have ever seen is that of Mr. John Robertson, of Paisley, which is known under the name of "The Wizard of the North" (that is, supposing the authorised coloured drawing of the plant, in full bearing, to be a true and faithful representation). Sundry apparently respectable and trustworthy persons testify by letter to having seen it, with 78 fine large fruit at one time upon a single plant.

Having obtained a good pistillate, one would be apt to suppose that we had the utmost we could reasonably hope for; but in this we should err very greatly indeed; for Mr. Charles Peabody, of Columbus, in Georgia, has clearly demonstrated that it is possible to obtain a succession of fruit from the same plants for many months in the year, instead of only one bearing. This most indefatigable gentleman has in truth reduced the culture of the Strawberry to a perfect science. His is no small garden cultivation, but comprises many large fields, embracing a very considerable acreage, and justified by more than 15 years' constant observation and experience. His plan deserves all possible attention and respect. He selects some good pistillate of an ever-bearing variety; and, to impregnate this, he also chooses a good, ever-bearing hermaphrodite, planting seven rows of pistillates, then one row of hermaphrodites and so on throughout the field. For many years the varieties he employed were the Hovey's Seedling pistillates, and the Early Scarlet hermaphrodites, both flowering regularly together, and both being ever-bearing. Recently he has widely disseminated a seedling of his own, and named after himself.

It is believed that all these valuable seedlings have been originally obtained by judicious crosses with the hardy, ever-bearing, or monthly, wild Strawberry, such as the monthly Alpine, or others of a similar type. Certain it is, that not only Mr. Peabody, but numerous other persons throughout the States, obtain by simple field culture a continuous bearing of fruit, from early spring until the winter's frost sets in—a thing altogether unknown in this country, although quite as practicable here as there.

Mr. Peabody, in his statement, given in the "United States Agricultural Report," says:—

"It is now well known throughout the Southern States that for many years I have cultivated the Strawberry extensively, and have had from my beds a constant succession of fruit six months, and frequently 10 months, in the year. While I am now writing (Dec. 24) one of my beds (of an acre) is loaded with ripe fruit, specimens of which I have sent to New Orleans, Montgomery, Charleston, New York, &c. This bed has scarcely produced a runner the past season, the causes of which will be found in my method of culture. I prefer a sandy soil—that is, a sandy loam with a good admixture of vegetable matter in which the plants stand 8 to 10 inches apart. In the fall of the year I go over the field with sharp hoes, cutting up all runners, and leaving them on the ground to decay. Somewhat later, I cover the whole field with partially decomposed leaves from the woods or swamps; the rains of winter beat down these leaves; the fruit-germ finds its way through them, and the first mild weather of spring the blossoms appear. If I desired to obtain an abundance of leaves and strong runners all over my beds, I should employ animal manure; but as I want fruit, and no runners, I never use animal manure of any kind—nothing but leaf-mould, and an occasional sprinkling of wood-ashes. The leaf-mould keeps the ground cool and moist, and the fruit clean; and does not stimulate the roots to make runners. Whatever runners are made, cut off close; keep the ground clear of Grass and weeds, and manure with leaf-mould. Beds thus formed and cultivated will, to my certain knowledge, continue productive for 12 years, and, I have every reason to believe, as much longer as this system of culture is continued. Strawberries so cultivated are remarkable for their lusciousness and rich aroma. A very continual watering, whilst bearing, is desirable—as the crop is wonderfully increased, both in quantity and quality, thereby."

Such is Mr. Peabody's mode of raising this delicious fruit; and although we have not the fine climate of Georgia, and may not expect fruit in an open field in December, yet we certainly can adopt the course of treatment that he so clearly points out to us. Our course, then is to plant the best ever-bearing pistillate, and hermaphrodite impregnator; to use no manure but leaf-mould, or other suitable decayed vegetable matter, with an occasional sprinkling of wood-ashes; to keep all runners off; and to water very frequently during the time of fruiting.

The best descriptions of Strawberry for planting, generally, in England would be, in our opinion, "Hovey's Seedling," the "Early Scarlet," "Longworth's Prolific, "M'Avoy's Superior," and the "Extra Red" (all American varieties, the Prolific, Superior, and Extra Red being seedlings from Hovey's Seedling by one of our best English hermaphrodites), if we could obtain them in this country; but unfortunately there are none to be had, unless imported from the United States. The English varieties appear to be all hermaphrodites, from the seed of which famous pistillates may be obtained by any who will take the trouble to attempt it.

Those particularly celebrated at this moment are the Oscar (of Mr. Charles Turner, Royal Nurseries, Slough), the Wizard of the North (of Mr. J. Robertson, Linside Nursery, Paisley), the Empress Eugenie (of Mr. Myatt, of Deptford), and two or three well-known varieties. The Oscar is a particularly fine, well-flavoured, firm, and large-sized Strawberry; and said to be a cross between the British Queen and Keens' Seedling. The Wizard is said to be between the Elton Pine and Keens' Seedling, producing a large handsome berry and an abundant crop. The Empress Eugenie has been remarkably large this season, of a dark blood-red colour, very juicy, rather soft, and with a very strong perfume, somewhat similar to the Musk Melon. We believe this is also called the "Crimson Queen."

We cannot ourselves feel any confidence in an alleged cross between one hermaphrodite and another, unless we are perfectly certain that the pollen of the one was applied to the bud of the other, previous to its opening; for almost simultaneously the pollen of its own stamens is matured, and the least motion causes it to fall upon the pistils, which they enclose, and self-impregnation ensues at once. If, however, the pollen from one kind be applied to the bud of the other, just before it opens, the subtle influence descends to the pistils, and impregnation is effected, surely and certainly, before the flower has yet opened, or its own stamens have had time to burst and shed their pollen. This is the opinion of Mr. Peabody, verified by some 20 years' experience, and we fully adopt his views upon this point. As a matter of course, pistillates being pure females, cannot impregnate themselves; their artificial impregnation is therefore perfectly easy, and the cross resulting is beyond doubt.

In conclusion we may remark, that (more or less) all hermaphrodite Strawberry plants appear to become more and more imperfect as they get older, until, in some cases, they will not bear a single perfect berry; and we believe that even the very best hermaphrodite (however perfect it may appear when young), will, in a few years, exhibit this inherent tendency to infertility. *From Simmonds's Technologist.*

[What say our great Strawberry growers to these speculations and statements drawn from the other side the Atlantic?]

Home Correspondence.

Thunderstorms.—In an article signed "C." on electricity in your last (see p. 696), he concludes by saying, "As we approach nearer north they (storms) are of still more rare occurrence and of feeble nature till they entirely disappear, within some 50° of north latitude." Now what latitude does he mean? Every school-boy knows that London is in latitude 52° or 38° from the pole, and 50° from the pole would be about the north of Spain. It may be a misprint, but turn it how you will it is an incorrect expression. Now with regard to the fact. I have often seen it stated that thunderstorms are "unknown within the Arctic circle;" but it is an error. I have spent three summers in the extreme north of Norway, in lat. 70° to 71°, and many and severe were the thunderstorms I have experienced when camped out on the rivers of Finmark, or as it is commonly called "Lapland," which is the most northern district of the globe inhabited by any one except Esquimaux, and in the same latitude as "Boothia Felix," near where the relics of poor Franklin were recently discovered. "*Investigator*," *Carlton Club.*

Cucumber Disease.—Allow me to indorse the statement of your Woodbridge Correspondent (see p. 699) respecting the disease in Cucumbers and Melons. We have had it here little or much since last July, but so virulent has it been this season that we have failed to produce a Melon of more than ordinary quality, as the foliage has been nearly consumed before we could ripen

the crop. I was in hopes that we should have lost the disease as the winter set in, but it stuck to us right through our winter Cucumbers, and appeared in a more aggravated form this season. It is not, as your Correspondent states, confined to Cucumbers and Melons, as here all the family of Cucumis has been badly attacked; a large batch of ornamental Gourds is entirely killed by it. Rhubarb and French Beans alike share its ravages. That there is nothing in the treatment of them to produce this I feel certain, as they have at all times been attended with the greatest care, and the young plants have been entirely killed before leaving the seed pot, so much so that I have had to get plants from a distance. The pits here are first-class structures for Melon growing, and are well heated by hot water. I may add that I have tried to arrest it by using Gishurst, sulphur, soda, lime-water, &c., but without any good effect. I find that a damp atmosphere only aggravates the evil; the moisture of a dung-pit rapidly decomposes the damaged tissue. A gentleman has just written to me to say that a friend has used the following with good success, viz.: 2 gallons of coal tar, 7 lbs. of soda, to 7 gallons of soft water, applied over the foliage by means of a syringe or water pot. Suffolk has long been famous for Cucumber growing, and many of the best sorts have originated in this country, among which may be named Ipswich Standard and Volunteer; a superb brace of the latter was shown at the May show at Colchester by Mr. Hall, but Cucumbers and Melons have been but poorly represented at our shows this season. *J. Sheppard, Gr., Woolverstone Park, near Ipswich.*

Cupressus Lawsoniana.—The perfect hardiness of this plant is established beyond doubt, and its rich and elegant habit will always ensure it a place in the first collections; but I am anxious to know if it is usual for small plants of this species to produce cones? I have a number of little plants growing in the open grounds, where they have been exposed without the least protection during the past severe winter. They are healthy and growing freely, are about 18 inches to 2 feet high, and covered with cones of a light slate colour. As I have not observed a similar precocity among plants of this species during my travels, I shall feel obliged if some of your correspondents will kindly say whether or not it is likely the seeds will ripen. *W. Barron, Sketty.*

Shanking of Grapes.—What is the reason that my Muscats of Alexandria shank? The roots are inside, and the borders are made on flags; the soil is about 2 feet deep, and consists of nothing but chopped turf, lime rubbish, and a few half-inch bones, with an occasional top-dressing of manure. We have Black Hamburgh and Trentham Blacks in the same house; the last two are doing remarkably well, while some of the Muscats are going quite black, and what I call shrivelled at the ends; they are just beginning to bloom. I have been examining the border this afternoon, and I find that it is rather dry; but I have purposely withheld moisture on account of the other Grapes colouring. Do you think that this is the cause of the evil? The Vines were planted last April twelvemonth, and are now each carrying four fair-sized bunches. Do you think that too many, or do you think that it is the partial dryness at the root which has caused the shanking? *A Young Gardener, Fairfield, Manchester.*

Judges at Regent's Park (see p. 698).—It may be agreeable to Mr. Young and others to know that the last election of Judges for Regent's Park took place on May 4, 1860, at the Bay Tree, St. Swithin's Lane, near the Bank. The exhibitors (140) were invited by circular. Mr. Young had not then become an exhibitor at Regent's Park. *Robert Marnock.*

Pilogyne suavis (see p. 697).—I have cultivated this pretty little plant for several years; for neatness and compactness of growth nothing can excel it, and for covering stems of Standard Roses or for little festoons it is invaluable. The scent too is delicious; in short it is a plant which no gardener should be without. *W. F. P., Cheltenham.*

A Country Flower Show: Judge for yourself.—Before touching the marrow of my subject, so to speak, allow me to say that our worthy Squire proposed having a flower show in the village. To make everything clear, without running any risk of libel, you must understand that our Squire lives in a large white house at the east end, and has by far the best garden for miles round. He superintends all himself and claims a right to all by-blows which might come in the way of his so-called gardener, consequently the lion's share of the prize money would be his. Judge for yourself. His man Hugh, to whom the name of gardener does not exactly apply, spread it abroad that *they* could guarantee to take all the first prizes, which was another proof that vile self had got in. However, the thing went on, the prize money was collected, the day was appointed, and the large ball-room at the Angel was bespoke for the field of battle, where any one might get what they wanted in the course of the day. The little back parlour was also secured for the transaction of business, or I should say, for the convenience of a few worthies possessed of the second sight, settling how matters were to be decided. Having a strong aversion to all public-house shows I sent in a protest against it, which was looked upon as spite, because the landlord and our Squire were so very nearly connected. This gave rise to two or three meetings in the little back parlour, when it was considered the safest plan to make me one of the three judges, especially as Hugh said, "there would be no chance of mistakes on that day." The tidings of such an event went like wild fire. When the day came there was such a to do. What with vans, covered carts, and large baskets one could scarcely get into the yard. Hugh said it was no use for folks coming from a distance—I could see he was in the "gall of bitterness," ready to say anything to anybody who would listen to him. After the plants, &c., had all been set in their proper places, and all the exhibitors turned out by Mr. Park, master of the ceremony, we, the honoured three, were admitted. Our instructions were in the form of a schedule drawn up by the Squire himself, who knew best how to suit his own purpose; judge for yourself. As for the plants, as a whole, they were not to be laughed at. There were three collections of twelves. The first and second were so very much like what I saw at poor old Chiswick 22 years ago that it would be superfluous to say one word about them; and so might the third be passed over, only they came from the white house at the east end. In the middle stood two large plants of Stephanotis floribunda and Allamanda neriifolia, then Hoya carnosa and Cissus discolor, then again on each side of these stood Euphorbia splendens, Begonia argyrostigma, Cuphea strigillosa, Crowea saligna, Aphelexis humilis, Statice puberula, and on the two ends Gloxinias; all more or less one-sided, and none of them over-burdened with flower. Hugh's Roses, cut on the previous evening by the young ladies and placed in the boxes, were put into the stove all night to open a few more buds; but inadvertently they had been given no water. "What a pity! who would have thought it?" The buds were not opened, and all the full expanded blooms had become a mass of loose petals. So far Hugh was right. There could be no mistake here. Next came his Verbenas, all very good, beautifully dressed up in perforated paper frills. First they were, had the number of trusses specified not been exceeded; but through that they were disqualified, which was a very unfortunate affair for some people. After having done our duty, large cards which had been printed for the purpose were laid down in front of the various objects considered worthy of them. All being ready and the hour for opening arrived, Hugh in the capacity of *aide-de-camp* was among the first to enter. Nor was it long before his worship made his appearance, asking to see the judges. "How is this, gentlemen, you have only given me a third prize?" was the first salute. "Why," said I, rather sharply, "because they are inferior to the plants to which a second is awarded." "I don't see that; my plants were brought out of the houses this morning, and to be considered inferior to these which may have been hawked about at shows for this last month—why, the thing is ridiculous." "Come along," said I; "you shall judge for yourself. Now, what do you consider the best plant in your collection?" After a little hesitation he pointed to Stephanotis. Then said I, "I will match it with this Heath (E. Hartnelli). Turn them round; which is the best?" "Well," said he, "I cannot say." "Very well, that's a tie; now again, what's your next?" "But you do not mean to say that collections of plants are judged individually?" "To be sure they are. When two collections appear equally balanced, and yet a difference must be made, the judges, if judges they are, will commence with the two best plants in each collection, weighing them, as it were, one against the other, giving and taking points as the case may be (ties go for nothing), then the next two, and so on to the last, when the points are summed up, and the plants which have gained the highest number are said to be first." "Eh, so particular as all that." "Yes, and every judge ought to be able to give a satisfactory reason why he gave this or that prize. For instance, you have lost the second prize to-day by three points, or three ties and two against seven, as a judge would say." "Well, just let's see what you have given the other things. Oh, dear," said he, when he came to his Roses. "What has Hugh been about?" "Hugh had nothing to do with them except bring them here; he brought them out of the stove where the young ladies put them last night, and forgot to give them water." "H'm!" said he, "and I suppose you could not give them a prize?" "Certainly not; there are no two ways of judging here, no splitting of hairs and then grappling for the thickest side, as the judges must have done the other day at the great show in London." "Why, my dear," addressing his daughter, who was with him, "they have given you nothing for your beautiful Verbenas, for all the trouble you were at with them." "Allow me to say that the rules of the show, in this case, have not been complied with, consequently they are disqualified." "How unfortunate!" This example is not without its parallel. So long as self-seeking is present and those in high positions use their power to secure decisions in their own favour, all flower shows must drop to pieces, as many have done from the same cause. *An Old Showman.*

A Golden-leaved Elm.—If any of your readers happen to be journeying to Cambridge by the Eastern Counties rail they may see on the right hand, after passing the Roydon station, some very beautiful pendulous Elm trees standing detached in the hedgerows. These trees are so remarkable that the late A. J. Downing, the "London of the United States," when on a visit to me, was much struck with their resemblance to the Elms (Ulmus americana) planted in the towns and villages of Massachusetts, which are all remarkable for their graceful pendulous growth. The Elms alluded [to] above are varieties of Ulmus glabra, with which [the] eastern part of Hertfordshire and the western [and] northern parts of Essex are thronged. In Her[t]fordshire these Elms are called Hertfordshire Elms, sometimes narrow-leaved Wych Elms; [they] nearly all bear seed most abundantly, so [that] varieties without end exist in the parks and hedgerows. Early in June the seed is blown over the face of [the] country, and one is inclined to imagine that a [whole] district would become an Elm forest if left uncultivated for a few years. I mention the tendency in [this] species (Ulmus glabra), to vary from seed merely [to] introduce the golden-leaved sort, and to point out [its] probable origin, which is undoubtedly from seed. Within a short distance of the above-mentioned Elms, but nearer to the Burnt Mill station than the Roydon, is the Rectory House of Little Parndon, and in [a] hedgerow near the house by the side of the road [are] some Elm trees growing, a row of them. In this row [is] one which for many years has been called the "Golden Elm." Like its neighbours it is perhaps from 50 to 60 feet in height, and like them it is in full health and vigour, but its leaves instead of being green are of the richest golden yellow, so that it towers up like a monstrous Laburnum in full bloom, one of the most beautiful and remarkable trees ever seen. I have known the tree for 30 years, and for a long time I laughed at my neighbours' admiration of it, for I thought, as it grew on a dry bank, its leaves turned prematurely yellow in a dry summer. I was, I fear, too "wise in my own conceit," for it gains its rich golden hue when its foliage is in full vigour. This season it is brighter than ever. I last saw it about the end of June, and can fully testify to its singular and beautiful appearance. It is a pleasant walk from Burnt Mill Station to Little Parndon Rectory. The tree stands by the road side, and I hope some of your tree-loving readers will make a pilgrimage to it. *T. R.*

Water and Deep Wells.—"Aqua" will obtain water by boring the chalk, but will probably have to go to a great depth, and he can, by bricking the well down through the sand, keep out the iron-stained water. Only well sinkers of his neighbourhood can say the depth he will have to go. *D.*——If your Correspondent will give the exact locality of his house an answer might be given to his question. "The soil is gravel and sand just off the chalk" is too indefinite a description. As I have turned my attention to this subject, I shall be happy to give him any information in my power, either by direct communication or through yourselves. *J. C. Clutterbuck, Long Wittenham, Abingdon.*

Societies.

ROYAL HORTICULTURAL: *July* 29.—(*Special General Meeting*).—The following Fellows were elected on this occasion, viz.:—

Mrs. Angell, J. Armitage, Esq.; Lord Aveland, Capt. [illegible] Barlow, Capt. W. Barron, Mrs. Thos. Bazley, A. Bell, Esq.; [illegible] Bennett, Esq.; T. T. Bernard, Esq., M.P.; G. P. Bidder, jun., Esq., M.A.; Lord Camoys, Mrs. Fitzroy Campbell, S. L. [illegible] Esq.; J. A. Chowne, Esq.; G. Cockle, Esq., M.A.; [illegible] Cooper, Lord Cranstoun, Viscount Curzon, M.P.; T. [illegible] Esq.; T. De Bille, Esq.; C. Derby, Esq.; Capt. W. P. [illegible] G. Drummond, Esq.; Right Hon. Sir D. Dundas, M.P.; [illegible] Ede, Esq.; Capt. W. C. Elwes, R. Errington, Esq.; [illegible] Canterbury, P. W. Flower, Esq.; Miss C. Foxwell; [illegible] Giffard, Rear-Admiral the Hon. Sir F. W. Grey; E. H[illegible] Esq.; Mr. R. Hibberd, Col. Charles Hind, J. G. Howard; the Rev. Charles Ibbotson, F. C. Jodrell, Esq.; the Countess of Kinnoull, C. M. Lampson, Esq.; F. P. B. Martin, Esq.; [illegible] Capt. W. H. Molyneux, R.N.; Miss Murray, C. Musgrave; the Marquis of Northampton, Mrs. W. H. Ollivier, [illegible] Esq.; Major F. J. S. Parry, F.L.S.; F. Rodewald, Esq.; Lady Roe, the Earl of Sefton, J. Smith, Esq.; T. B. S[illegible] Esq., M.P.; H. E. Surtees, Esq.; the Hon. and Rev. [illegible] Talbot, J. T. Taylor, Esq.; Mr. Charles Thomas, [illegible] Thompson, Esq.; the Viscount Torrington; D. E. C. [illegible] Esq.; and C. Webber, Esq.

GARDENERS' AND AMATEURS' HORTICULTURAL [SOCIETY], HOBART TOWN: *April 24th.*—The autumn show of fruits, flowers, vegetables, &c., took place at the [illegible] Hall, commencing at 2 o'clock. The show of fruits, especially Apples, Pears, Grapes, Plums, &c., contributed by members of the Society, exceeded all former exhibitions, in size, variety, and quality. There was also some remarkably fine collections of vegetables and a good show of floral productions. The Royal [Botanic] Garden furnished collections of fruits of rare kinds, and likewise a number of choice plants, for exhibition. Two samples of new fruits called respectively [illegible] apiculata and Eugenia Ugni attracted much attention. In the fruit department, many of the old prize-takers were again successful. Mr. J. Chatterton, gardener to J. Solomon, Esq., received a 1st prize for a splendid collection of fruits; and to Mr. W. Smith (who occupies the garden formerly Mr. Hollinsdale's) was awarded the society's silver medal for a very choice collection of fruits, which was particularly admired for size and beauty. Among the Apples were Alexanders, Scarlet, Orange and Crown Pippins, Wellingtons, Blenheim Oranges, Seedlings, Loan's, Royal and Golden Pearmains, [illegible] Ribstones, French Crabs, Mob's Codlins, Kirk's Lord Nelson, Johnson's Seedling, Cornish Gilliflower, [illegible] fordshire Foundlings, Golden Russet, &c., and Pears, Napoleon, Bonchrétien, Chaumontelle, Nouvelle, [illegible] velle, Buck, Aikin's Incomparable, with Grapes, Filberts, English Damsons, mixed Nuts, English Cob Nuts, Melons, grown in the open air, &c. To the same contributor was also awarded a 1st prize for a

plate of Royal Pearmains. Mr. W. Thomas obtained 1st prizes for a dish of Lamb Abbey Pearmains, Golden Russets (very large); 2d prizes for New Rock Pippins, Sturmer Pippins, and Gooseberry Pippins; in Plums, Mr. Thomas also gained a 1st prize for Cox's fine late reds (very large) and a 3d prize for a fine sample of dried Plums. Mr. R. Backhouse, as usual, was a large contributor and carried off several prizes:—for Alexanders, 2d prize; French Crabs, 2nd prize. We also noticed a dish of very large and heavy Apples (King Pepin) to which, however, no prize was awarded. The same contributed an extraordinarily fine sample of Nouvelle Merveille Pears weighing from 12 to 14 ounces each, larger of the sort than have been seen for years, and for which was deservedly awarded a 1st prize. Mr. J. Osborne exhibited Bedfordshire Foundlings which gained 1st prize, Rhode Island Greening, 2d prize, Pomme de Neige Pears, 2d prize, Hamburgh hothouse Grapes (very fine), 1st prize. The same contributor also gained several other prizes. In Apples, Mr. J. Cato obtained 2d prizes for Alfristons and Stone Pippins. Mr. Hayward for Americans, a large kind, and Blue Pearmains, 2d prizes, and 1st prizes for Court Pendu Plats, and Scarlet Pearmains. To Mr. Chatterton was awarded a 2d prize for Stone Pippins, and 1st prize for a good sample of dried Plums. A 1st prize was gained by Mr Hayward for White Crystal Grapes grown in the open air. In the Amateur Class a collection of Apples sent by W. Giblin, Esq., obtained a 1st prize, and a dish of Scarlet Pearmains a 2d prize. A 3d prize was awarded to the same gentleman for Cornish Gilliflower sample. Mr. J. Dickinson gained the Society's medal for an excellent collection of Apples, and for Ribstone Pippins he obtained a 2d prize. In the Amateur Class likewise we observed several prizes awarded to Mr. J. C. Hall, who obtained a 1st prize for a very large Blenheim Orange, another 1st prize for French Crabs, a 3d prize for Claygate Pearmains, and several others. A second prize was gained by Mr. W. Culf for Stone Pippins. The exhibition of fruit was well sustained, and it was remarked by several practical men that there was not in the history of this colony any thing like the collection brought together on this occasion. We might notice that among the choice samples sent from the Royal Society's Garden were Pomme de Neige, Beachamwell, Claygate Pearmain, Court Pendu Plat, Cockle Pippins, Golden Harvey, Aromatic Russets, &c. A wax model of a large Pear grown at Rookwood, Three Hut Point, cast from a plaster of Paris model by Mrs. Luckman, attracted considerable observation. There was also a wax model of a collection of fruit by the same lady, enclosed in a glass case, sent for exhibition only. In addition to the plants sent from the Society's Garden, there was a good show of floral contributions, several of which obtained prizes. A collection of cut Dahlias sent by Mr. Chatterton gained a 2d prize, and for cut flowers, Mr. W. Smith was also awarded a 2d prize. The vegetable part of the exhibition was attractive. A 2d prize was given to Sir H. E. F. Young for a good collection of vegetables, and a 1st prize to Mr. J. Hayward for another collection in which some monster Carrots and Parsnips were conspicuous. Among some very large Pumpkins exhibited was one sent by W. Archer, Esq., weighing 92 lbs., for which a 1st prize was awarded. Mr. Chatterton gained a 2d prize for a Pumpkin weighing 74 lb., and a very large Pumpkin was sent by Mr. W. Vince of Sandy Bay, for exhibition only. The Judges, Messrs. Begg, Abbott, T. Giblin, and Dehl, were necessarily occupied till a late hour in examining the contributions, owing to the great number and variety to be judged. As announced, Hewlin's band was in attendance and played during the afternoon. Among the visitors were His Excellency Sir H. Young, Lady Young, Mr. Justice Smith, and a large number of ladies. A deputation of the Exhibition Commissioners examined the varieties of fruit in the afternoon with a view, we presume, to the objects of the Exhibition. A plate containing specimens of Gansel's late Bergamot Pear (new), and Triomphe de Jodoigne, grown by J. Carson, Esq., of Victoria, was shown by Mr. E. Lipscombe, who received them from Mr. Carson, who has taken considerable interest in the collection of fruits for the Victoria Exhibition. The Exhibition was opened again in the evening, the hall being brilliantly lighted with gas. In consequence of the general desire expressed by many visitors, including His Excellency the Governor, the Exhibition will be continued this day, a deputation from the Committee having obtained the sanction of his worship the Mayor for that purpose. *Hobart Town Mercury.*

Notices of Books.

In *Wild Life on the Fjelds of Norway* (Longmans), Mr. Wyndham relates what he saw and did during a visit to the snow-clad mountains of Norway. In offering his pages to the public the author indulged a hope that they would afford a more intimate acquaintance with the rural life of the peasantry than is to be found in other English works on that country. We think he has fully succeeded. We think more. His style is so agreeable, his descriptions so graphic, and his power of observing correctly so considerable that he has not only produced an entertaining volume, but one that claims a permanent place in the library as a work of scientific reference. Observe how he deals with a scrap of natural history :—

"The willow grouse is a most beautiful bird, of about the same size as the red grouse of Scotland. During the winter months the plumage is of a pure white, but in summer the head and breast are of a reddish hazel-brown, while the wings are *partly* white, and the rest of the body is interspersed with white feathers. When disturbed it utters a hoarse croaking, similar to, though much more frog-like than, the call of the red grouse. The mountains, about the limit of the Birch tree, an altitude just at this part of about 2600 feet, are the resort of this bird, and it is seldom found much below the limit of the Fir tree.

"The ptarmigan, on the other hand, frequents those parts of the mountains which are above the limit of all shrubs, whence it is called *Fjeld*-rype-mountain-grouse (Lagopus *alpinus*), while the Willow grouse is called *Skov* rype, wood-grouse (Lagopus *sub*-alpinus). The food of the latter bird I found to be Whortleberries, &c., and the young leaves of the Mountain Willow. It appears to be more plentiful than the ptarmigan, and, from its frequenting lower regions, is more easily obtained. In winter the natives shoot them with rifles, as they lie half-buried in the snow. There cannot be the least doubt of the Willow-grouse and ptarmigan being distinct birds, for their plumage and habits are so entirely different; but whether the *red* and Willow-grouse be identical seems still scarcely decided. Short thick bill, stouter tarsi, white wings, and difference of eggs are the chief points of distinction. For my part, although all the old birds which came under my notice had only *partially* white wings, I should incline to the opinion of the species being distinct. It might be worth while, in those parts of Scotland where the red-grouse have suffered much from the disease, to give the Willow-grouse a trial, as it affords very good sport." Let our lovers of grouse shooting bear in mind these words. The justice of the remark can be ascertained without the aid of the Acclimatation Society.

The traveller in Norway must be no laggard; the country indeed might be recommended to volunteers in search of training for next campaign :—

"Nothing is more striking than the feeling, constantly impressed upon one while travelling over the fjelds of Norway, of the necessity of always pushing onwards lest the quarters for the night should not be reached before dark. Soon therefore the packs were replaced on the ponies, and our caravan once more continued its course. The coldest and most dreary part of the fjeld seemed now to have been reached, for the patches of snow were of greater extent and much more frequent than they had hitherto been, and sometimes we even crossed large streams over bridges of snow.

"It was about an hour after our fresh start that the scene of most unrivalled beauty and savage grandeur burst upon us. Solitude and silence reigned supreme: the latter broken only by the roar of a mountain torrent, foaming and tossing as it rushed headlong down from its icy birth-place, at one time leaping over masses of ice, at another losing itself to sight as it plunged beneath a wide mass of snow—only emerging to renew its angry and turbulent course.

"Immediately before us, still partially covered with the winter's ice, and bounded on the southern side by frowning cliffs of snow, the milky waters of a glacier-fed tarn reposed in calm stillness. Beyond this, again, the huge Smörstab Bræen (glacier), stretching far and wide in either direction, rose abruptly almost out of the waters of the lake. Then sloping upwards it reached at last the dark rocks, jutting up from out of the ice, and forming a row of huge fantastic peaks which towered to the height of at least 7000 English feet above the sea. On our right lay a line of mighty rocks, covered with extensive fields of ice dipping almost into the lake, while to the left the undulating tract of moss-clad rocks extended far and wide.

"Such a scene we would willingly have gazed upon at our leisure, but again we were forced to hurry on as the nearest habitation was yet distant. Onwards, therefore, and still onwards, we toiled over rocks and tracts of snow. Some of these were of considerable depth, not less than 20 feet: but as they were all apparently drifts they gave but little idea of what the uniform depth of snow might have been. Our caravan of four men, three ponies, a foal which followed its dam, and Shot, presented a most picturesque appearance as it wended its way in single file over the snow. The old man with the umbrella, though he spoke but little, was very energetic on the march, and boldly pushed forward as pilot whenever it was doubted whether the snow were perfectly safe."

How provisions are to be had in this wild kingdom, and what they cost may be learned from the following scrap :—"So having nothing to press us we sat down to a quiet breakfast of trout, and afterwards held a consultation as to the means of obtaining a fresh supply of bread, coffee, sugar, and candles.

"A village called Bjölstad, in Hedal, about five-and thirty English miles to the north-east, was the nearest place from which these articles could be procured. First we applied to the old fisherman at the huts, but he making a most unreasonable demand, his services were at once refused. But by good luck there happened by chance to be a man here from this very village of Bjölstad, and having apparently no occupation he readily consented to undertake the expedition. Having told him that we should provide the pack-pony, we required of him to state his own price. One dollar (4s. 6d.) was the reply, and with this offer we immediately closed: it being very reasonable, considering that the whole distance there and back was no less than 70 miles, which could not be accomplished under three days."

In conclusion Mr. Wyndham gives his readers ample and minute advice as to how they should equip themselves and what they should do, thus rendering his volume indispensable to a Norwegian traveller. Let us further add that it is abundantly illustrated with chromoliths of scenery, woodcuts, and maps.

The Revelation: with a short, plain, continuous exposition. By S. Smith, Vicar of Lois Weedon. 8vo, Ridgway. Pp. 109.

In this volume our great agriculturist appears in a new character. The spade is laid aside; Wheat and Mangel rest in their storehouses; the round frock is exchanged for the cassock, and we are now presented with a specimen of the spiritual husbandry of Lois Weedon. The author's field is no longer the glebe of the vicarage, but the Book of Revelation, to the study of which Mr. Smith has for many years applied his learned leisure. His purpose is to make plain that which is beyond ordinary comprehension, and to show that so far as time has run events have been consistent with the revelations to the Saint in Patmos. It is not for us to criticise such a work; our duty terminates in mentioning its appearance, and giving an example of the manner in which the Reverend author has executed his difficult task. We select a few sentences in Chapter III., corresponding to verses 6, &c., of Chapter VIII. of the original :—

"And the seven angels prepared themselves to sound; and the judgments which followed at the blast of the four first trumpets, were the irruptions, one after another, of vast destructive barbarian armies from the north, upon the western empire of Rome.

"2. And the first sounded. And there burst in upon the Empire the Gothic hordes: and their symbol was—hail and fire mingled with blood. And they were cast upon the earth, and the third part of the earth was burnt up, and the third part of the trees was burnt up, and all green Grass was burnt up.

"3. And the second angel sounded. And the symbols of destruction which followed represented the Vandals, and their ravages by sea, and on the sea-coast of the empire. As it were a great mountain burning with fire was cast into the sea, and the third part of the sea became blood, and the third part of the creatures that were in the sea, which had life, died; and the third part of the ships was destroyed.

"4. And the third angel sounded. And there fell from heaven a great star, burning as it were a lamp; and it fell upon the third part of the rivers, and upon the fountains of waters; and the name of the star is called Wormwood. It was the fiery leader of the Huns, who came burning and destroying along the course of the great rivers, westward. And the third part of the waters became wormwood, and many men died of the waters, because they were made bitter."

Our readers will see from this in what manner the obscure passages in the original are elucidated by interweaving in the text what our learned friend conceives to be their full meaning.

Messrs. Longmans have published in a thin 8vo volume a reprint of *a popular treatise on Comets* by Arago, translated by Admiral Smyth and Professor Grant. Such names are the best guarantee of the fidelity of the work. The editors notice the great comet of the present year, in the following words :—

"One of the most splendid comets of modern times. It appeared suddenly in the northern sky on the evening of June 30, 1861. The head was considerably brighter than a star of the first magnitude. The tail, even when viewed in the strong twilight, measured 70° in length. The elements have been computed by Mr. Hind. The distance of the comet from the earth on the evening of the 30th June amounted to about 13 millions of miles. It is now receding from both the sun and the earth. The elements inserted above must of course be regarded as only a first approximation to the true orbit. The comet has exhibited physical changes similar to those which characterised the great comet of 1858. It will probably continue visible for some time. It is not identical with the great comet of 1556, or any other recorded comet."

The Technologist (Kent & Co.), vol. I, is a useful collection of reports and essays upon the application of science to arts and manufactures. The practical experience of Mr. Simmonds has rendered him an excellent editor, and his work, which appears in monthly parts, will be found a convenient guide to those interested in commercial products. The first volume, now just completed, contains articles on drugs, paper, textile materials, manures, perfumes, spices, quicksilver, ivory, silkworms, and a great variety of other matters, among which is a paper on the Strawberry by Mr. Leonard Wray, which we reproduce in another column for the sake of those who adopt the unisexual ideas of Mr. Longworth on which Mr. Wray's paper is founded.

A fifteenth edition of *Black's Picturesque Tourist in Scotland* (A. Black & Co., Edinburgh) shows conclu-

sively how much such a work is wanted. It now forms a stout volume of 635 pages, with a capital set of indexes, many maps, and plans of towns, and a profusion of views engraved on steel or wood. Most of the latter are charming specimens of art. In the present edition is embodied much information communicated by tourists who, having used the work, appreciate its excellences and desire to remove the little defects of former editions.

Garden Memoranda.

Dalkeith Park, the Seat of his Grace the Duke of Buccleuch.—A good many new houses have recently been erected here, chiefly for the growth of fruit, in which, as well as in plants, a decided improvement is observable. Muscat Grapes are very fine. one of the largest bunches weighing about 5 lbs. One large Vinery recently got up measures 110 feet in length, and contains a fine crop. This house is intended to supply Grapes after Christmas. The sorts consist of two-thirds Lady Downe's Seedling and one-third West's St. Peter's. Early Peaches, which are over, have been a heavy crop. There is here a Peach wall 210 feet long and 11 feet high, protected with glass; the trees are young, healthy, and producing a moderate crop, the glass having been recently put up. When this house, however (for so it must be called), gets into full bearing, it will produce a large supply of Peaches and Nectarines. There is an Apricot wall the same length, also covered with glass. In Pineries were some very fine fruit, weighing from 7 lbs. to 8 lbs.; the plants are 18 months old, and grown in 12-inch pots, a wonderful improvement on the system generally adopted 18 or 20 years ago.

In the greenhouse department Geraniums had been very fine, but they were almost over. Fuchsias, Balsams, &c., were in beautiful condition. A house has been recently fitted up for Heaths, of which Mr. Thomson has a fine lot of large plants and a great many young ones coming on. The winter and spring flowering varieties are largely grown, as the family is generally at Dalkeith about that season, and flowers are then in demand.

In stoves is a well-grown collection of Caladiums, Begonias, and other plants; some of the new Achimenes were in full flower and most beautiful. Victoria Regia had three blooms on it, but unfortunately they were not sufficiently developed for minute inspection. The first bloom opened on the 2d of July, and Mr. Thomson stated that there had been one bloom every second day since.

In the bedding-out department only 10 or 12 distinct colours are employed. Lobelia speciosa is a great favourite, and comes true from seed, which is always saved from the finest and most vigorous plants. Calceolaria aurea floribunda, Purple King, and Lady Victoria Scott Verbenas, Tom Thumb and other Geraniums, Alyssum variegata, Gazania splendens, and Centaurea ragusina, are the principal plants grown. One single specimen of Centaurea was planted in the centre of each of the Lobelia plots, and produced a soft and pleasing contrast with the Lobelia and Lady Victoria Scott Verbena. The latter is a seedling raised by Mr. Thomson from Miss Trotter, but has a great advantage over its parent in being a far freer growing variety and of a finer colour. It was a complete sheet of blossom, and seemed to stand the rain well, and keeps good till the end of the season—out of 40,000 plants bedded out, 6000 are Lady Victoria Scott. *J. A., July* 30.

Calendar of Operations.

(*For the ensuing week.*)

PLANT DEPARTMENT.

Conservatory, &c.—Azaleas, which do not seem inclined to start freely into growth, should, if possible, be placed in a moist situation, and be afforded every possible attention, to induce them to make vigorous growth. Specimens in heat, which have their bloom-buds well formed, should be removed to a cool house, or a sheltered shady situation out of doors, but they must be protected from drenching rains. Young plants, of choice or other kinds, which it may be desirable to increase in size as much as possible, should, if they are setting for bloom, be stopped regularly over and encouraged to make another growth. See that the whole stock, particularly plants in heat, is free from black thrips, and spare no trouble to keep the plants clear of this pest. Camellias which have fairly formed their bloom-buds should either be placed out of doors, or in a cool dry house, keeping them rather dry at the root in order to prevent their making a second growth, which young vigorous plants are apt to do if kept in a close moist situation after they have formed their flower-buds. Any of the plants which may require more pot-room should be repotted at once, so that the roots may get hold of the fresh soil before the blooming season, for these seldom bloom finely unless the pots are moderately filled with roots. If there are sickly or badly rooted specimens of other plants here they must be frequently examined for red spider, or they may become a nursery for that pest, and it will soon spread to adjoining plants. See that young stock is not allowed to suffer from want of pot-room, and attend carefully to watering, giving weak liquid manure to all plants in free growth that are likely to be benefited by it. Such stove plants as may have been removed to this house while in bloom should be placed in heat again as soon as their beauty is over, in order to permit the young wood to get ripened. Plants that require repotting should be kept in doors after shifting until the roots get hold of the fresh soil. Attend well to young stock, which will now be growing freely; keep the shoots nicely regulated, and shaped as may be necessary, to secure well-formed specimens, and use every care to afford these a moist atmosphere, sprinkling them overhead early on the afternoons of bright days, and reducing the air. Spare room, if any, may be occupied with Fuchsias and soft-wooded plants.

FORCING DEPARTMENT.

Pineries.—Continue to give air liberally to young stock in order to secure strong stocky growth. The plants should not, however, be exposed to draughts, for these would not serve the end in view; a moderate circulation should however be secured at night, giving no more during the day than may be necessary to prevent the temperature getting too high. This, with careful attention to the state of the roots, keeping the bottom heat regular, the soil in a nice healthy state as to moisture, and giving a liberal supply of manure water to such as are well rooted, will be found much more conducive to growth than exposing the plants too freely, which would probably check and throw them into fruit prematurely. Use every means to afford plants swelling their fruit a thoroughly moist atmosphere, sprinkling passages, &c., frequently, and shutting up early, giving a gentle dewing with the syringe, and saturating the atmosphere by sprinkling every available surface; also give plenty of clear strong manure water at the root until the fruit begins to change colour, when the soil should be kept rather dry, which will improve the flavour.

Vineries.—Maintain a moist growing heat in late houses; give a little fire-heat, especially to late Muscats. If mildew make its appearance dust sulphur on the fruit and leaves, and keep the house a little warmer than usual; it may be easily washed off again with the syringe after the mildew has disappeared, or try Bell's Composition mentioned last week. Keep the houses containing ripe Grapes well aired, and free from moisture. Cut out all decayed or unhealthy berries. Remove the sashes as soon as the crop is cleared, if the wood is ripe and the leaves beginning to decay. Vines in pots should be watered often with strong liquid manure; those intended for fruiting next season should be stopped as soon as they are the desired length; cut out the lateral shoots when the wood begins to ripen. Attend to former directions as to thinning the fruit in houses intended to furnish a late supply, and see that the bunches are severely thinned, and also that the crop left is not too heavy in proportion to the strength of the Vines. Where the fruit is swelling, be careful to maintain a moist state of the atmosphere, and give every possible attention to the roots, keeping the border in a healthy state as to moisture. Give abundance of air where the fruit is colouring.

Cherries.—Remove the trees to a shady situation and keep them syringed and watered; the pots should be plunged, or the plants taken out and planted in a northern aspect.

Peaches and Nectarines.—As soon as the crop is gathered the trees should be looked over, and all useless shoots, such as are not required for next season, should be cut away. Well wash the trees, and water the borders if very dry. If the wood is well ripened, and the weather is warm, the sashes may be removed. Expose crops ripening as much as possible to sun and admit plenty of air, to give colour and flavour to the fruit. Late houses, where the fruit is swelling, should have an increased day temperature, with plenty of moisture. Thin and tie in the shoots in the last house.

FLOWER GARDEN AND SHRUBBERIES.

Trimming, staking, and pegging down must be well followed up where neatness and order are observed. See that sufficiently strong stakes are applied to Dahlias, Hollyhocks, Larkspurs, Phloxes, &c. Keep Roses as much as possible free from insects, and if time can be spared dead blooms should be removed. Autumn-blooming sorts will be greatly benefited by an occasional supply of manure water. Let Carnations and Picotees be layered as soon as the shoots are in a proper state for that purpose.

HARDY FRUIT AND KITCHEN GARDEN.

Proceed with thinning and nailing in young shoots of all wall trees, if any remain unfinished. Peaches in particular should now be kept closely nailed in, to get the wood ripened, and to give the fruit every advantage of air and light. Remove a portion of the leaves where the fruit is too much shaded, and at the same time remove any nails that are likely to come in contact with it. If the weather is dry before the crop ripens, give the borders a good watering. Wash the trees occasionally and trap earwigs; perhaps the easiest way to rid the trees of them is to place short pieces of Bean stalks or other hollow stems in different parts of the trees, and look them over every other day, blowing the contents into a bottle, and replacing the tubes as before. Protect all ripe fruit intended for use late in the season with nets or canvas, and mat up Currants and Gooseberries for late use. As soon as the crop of Strawberries is gathered, go over the beds and cut away all runners; fork the soil about the plants, to encourage them to make a good growth before the growing season is past. Layer runners for new plantations. Use the garden engine occasionally in warm weather to prevent red spider. Finish planting Broccoli and Winter Greens as speedily as possible. Make the principal sowing of Cabbage for spring use; and plant those sown last month for Coleworts. Sow Brown and hardy Cabbage Lettuce towards the end of the month for spring use; plant out those sown last month in a warm situation; these will probably be useful in November. Water the late crops of Celery in dry weather, and continue to earth up those in a forward state. Sow Turnips soon, and make a sowing of Early Dutch at the end of the month, for use in spring. Sow Early Horn Carrot—these should remain in the ground for winter use. Sow Tripoli Onion, also prickly Spinach for winter and spring supply. Any Potatoes, in which symptoms of disease have appeared, should be taken up and used first.

COTTAGERS' GARDEN.

As observed in former Calendars, let all spare ground from Potatoes or otherwise be followed up with crops of some kind. Amongst the most valuable are the old Green Kale and Cottagers' Kale. [illegible] Ulm Savoy is also very useful, provided [illegible] sufficiently early and on well manured ground.

STATE OF THE WEATHER AT CHISWICK NEAR [illegible]
For the Week ending August 1, 1861, as observed at the Horticultural [illegible]

July and August.		Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth. 1 foot deep.	Of the Earth. 2 feet deep.
Friday	26	18	29.664	29.484	72	41	56.5	63¼	[illegible]
Satur.	27	19	29.735	29.654	71	44	57.5	63	[illegible]
Sunday	28	20	29.960	29.783	74	39	56.5	63	[illegible]
Mon.	29	[illegible]	30.034	29.753	78	52	65.0	63	[illegible]
Tues.	30	22	29.850	29.773	77	45	61.0	62¾	[illegible]
Wed.	31	23	29.987	29.946	74	51	62.5	63	[illegible]
Thurs.	1	24	30.010	29.935	77	42	59.5	63¾	[illegible]
Average..			29.891	29.672	74.7	44.9	59.7	63.1	[illegible]

July 26—Boisterous; thunder, lightning and heavy rain; fine.
— 27—Fine; low heavy clouds and showers, with hot sun [illegible] fine.
— 28—Fine throughout; cold at night.
— 29—Fine; very fine; warm at night.
— 30—Boisterous; some low dusky clouds; slight flying showers.
— 31—Fine throughout; rain at night.
Aug. 1—Fine; very fine; cold at night.
Mean temperature of the week 3¼ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Aug. 10, 1861.

August.		Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds.
Sunday	4..	75.6	51.3	63.4	16	0.85 in.	[illegible]
Mon.	5..	73.7	51.7	62.7	17	0.88	[illegible]
Tues.	6..	72.6	51.1	61.9	16	0.58	[illegible]
Wed.	7..	74.5	50.4	62.4	11	0.57	[illegible]
Thurs.	8..	74.7	49.6	62.2	14	0.50	[illegible]
Friday	9..	74.5	50.2	62.4	13	0.40	[illegible]
Satur.	10..	75.3	52.8	64.1	17	1.06	[illegible]

The highest temperature during the above period occurred on the [illegible] 1842—therm. 93 deg.; and the lowest on the 6th, 1833—therm. [illegible]

Notices to Correspondents.

Books: *H F.* Try Thompson's Gardener's Assistant.—*[illegible] Subscriber.* Kemp's How to Lay Out a Garden. [illegible] next year to give a good many designs for laying [illegible] beds.

Double Petunias: *C M.* Next week.

Flower Beds. We are preparing to publish examples [illegible] best patterns of English and Foreign Flower beds [illegible] or uncoloured as may be necessary. If any of our readers [illegible] spare us designs that have been executed and proved [illegible] factory we shall be much obliged to them. Coloured [illegible] are most useful.

Fungi: *Agaricus.* We cannot say how many varieties [illegible] Fungi are decidedly poisonous. Whoever maintains [illegible] there were only two knew nothing about the matter [illegible] are many.

Heating: *A Constant Reader.* For your purposes it [illegible] advisable to employ the tubular boiler of either [illegible] Ormson. Each is excellent, but both require [illegible] setting.

Names of Plants: *Cedo Nulli.* 1, Filago germanica; [illegible] of Asperugo procumbens, we believe; 3, Agrostemma Githago; 4, Spergula arvensis.—*F H C.* Agrostis [illegible] —*A Subscriber.* 1, Gentiana asclepiadea; 2, Spiraea [illegible] tosa; 3, Berberis aristata; 4, Philadelphus [illegible] *F T.* 3, Achillea Ptarmica, with Circaea lutetiana [illegible] arvensis without numbers.—*M L* We are not [illegible] with either. The "Cypress" has been before [illegible] occasion, but without information as to the country [illegible] from and the fruit it bears no answer can be [illegible] Quercus sessiliflora.—*W S.* 1, Arundo Donax; [illegible] angustifolium; 3, Lysimachia nummularia; [illegible] officinalis.—*Milton.* 1, Sedum album; 2, [illegible]

Patents: *Islip.* Apply to the Mechanics' Magazine [illegible] Court, Fleet Street, London.

Potatoes: *Hereford.* It is not possible to impregnate [illegible] Potato with the Physalis known by the name of [illegible] Gooseberry, and if it were possible, it would not [illegible] tuber.

Roses: *E J H.* Examples of abnormal development [illegible] that you have sent are by no means uncommon [illegible] nature of such changes is fully explained in our [illegible] 1855, p. 516 ‡

Squirrels: Your evidence is gone to Mr. W. for his [illegible] You will doubtless hear next week.

Strawberries: *Sub.* Mr. K.'s address is Lyncombe Vale, [illegible]

Vines: *Sandy.* The little green excrescences on the [illegible] sides of the leaves do no harm. They however indicate [illegible] the atmosphere of your house is too warm and moist [illegible] that there is insufficient ventilation.‡—*H G.* No one can [illegible] what ails your Grapes without personal inspection [illegible] house.

Misc: *T C.* Cucumbers for purposes of exhibition should [illegible] short-necked, long, even, straight, and fresh, with [illegible] blossom if possible adhering to the end of the fruit. [illegible] Verbenas are usually shown in trusses varying in [illegible] composition according to the rules of different societies. [illegible] That of the Royal Horticultural Society advertised [illegible] requires five heads to a truss; other societies sometimes [illegible] for three; consult the schedule of your society and comply with its rules.‡

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861 are now ready for delivery at his Factories, at the following prices :—

LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME £6 6
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES .. 5 5
LAWES'S BARLEY, GRASS, AND MANGEL MANURES 8 0

These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.
CONCENTRATED TURNIP MANURE, equal in value to the preceding.
Of these Manures Dr. Voelcker says :—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

THE LONDON MANURE COMPANY.
(ESTABLISHED 1840,)
Are now prepared to send out the following MANUFACTURED MANURES:—
SUPERPHOSPHATE OF LIME, of best quality.
DISSOLVED BONES, AND BONE MANURE FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN AND ROOTS.
CORN MANURE FOR TOP DRESSING.
MANGOLD MANURE.
They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate to be obtained entirely from Bones.
The London Manure Company also supply PERUVIAN GUANO (direct from Messrs. A. Gibbs & Sons), NITRATE OF SODA, SULPHATE OF AMMONIA, and every Manure of value.
116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

HENRY J. MORTON AND CO.,
2, Basinghall Buildings, Leeds.
Galvanised Iron Water Cistern
for Cottage Houses, &c., to contain 50 gallons, 26s.; 80 gallons, 31s. each; and 140 gallons, 37s., and fitted with tap, keeping the water perfectly sweet and clean; will not rust or corrode. Cisterns of all sizes.
Galvanised Iron Pumps
for Liquid Manure or Domestic Use, 3 inches diameter, 30s. and 32s. 6d. each; Tail Pipe for same at from 10d. per foot.
Galvanised Iron Swing Water Barrows
for Garden or Farm use, containing about 20 gallons, entirely formed of iron, 35s. 0d. each.

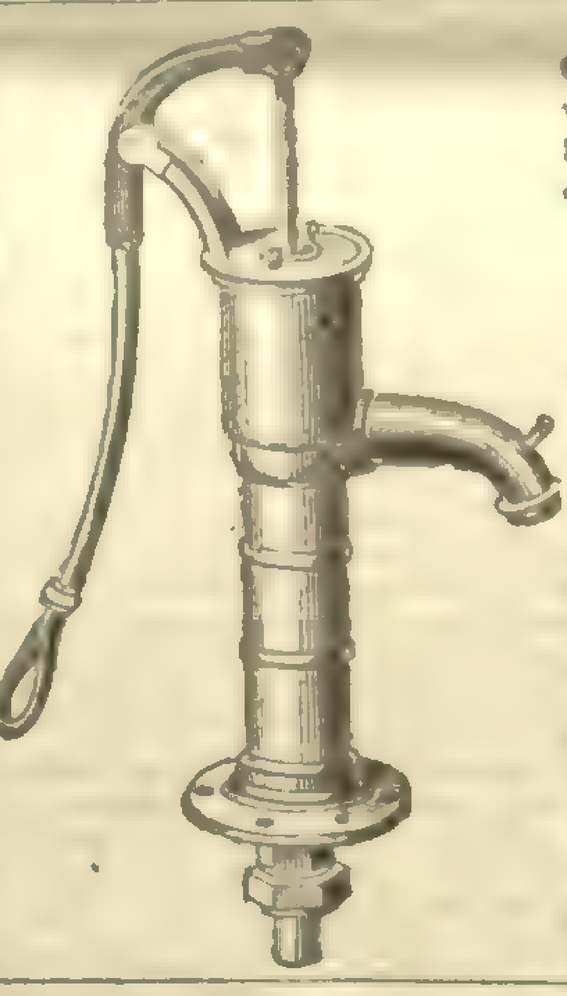
Parkes' Steel Digging Forks.
BURGESS AND KEY, 95, Newgate St., E.C., London, being the Wholesale and Retail Agents for these celebrated Tools, have always a large Stock on hand from which their Customers may select what they may require.
ANTHONY'S PATENT AMERICAN CHURN.—The FIRST PRIZE was again awarded to this Churn in Competition with several others at the Chester Meeting of the Royal Agricultural Society; it has obtained the First Prize given by the Society at every Meeting since 1850.
Messrs. BURGESS & KEY, 95, Newgate Street, E.C., strongly recommend it as the most perfect Churn now in use. Full particulars sent on application.

Reaping and Mowing Machines.
BURGESS AND KEY, 95, Newgate Street, E.C. Prizeholders for the best Agricultural Machinery Manufactured.
ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price 42l. 10s.
TESTIMONIALS.
A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following :—
From Mr. JOHN RICHARDS, *Bailiff to* Dr. N. CARNE, *Dimland Castle, Glamorgan.*
"I beg to certify that I have for five years worked Messrs. Burgess & Key's Reaper in my master's Home Farm, and also accompanied it when lent to tenants on the estate. During the above mentioned period the Machine has not cut less than 1,000 acres of all kinds of crops, with the same two knives as first had with the Machine. Dr. N. Carne having given up farming, the machine is now in the hands of his tenant, Mr. D. Thomas, of Llanrwst, and is in excellent order."
M'CORMICK'S REAPER for Manual Delivery. Price 25l.
ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30l.
COMBINED REAPER AND MOWER—Two-Horse Machine. Price 35l.
The last Machine is fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.
These Prices include Packing and Delivery at any Railway Station.

Agricultural Implements of Established Reputation.
RICHARD GARRETT AND SON,
Leiston Works, Suffolk,
persevere in giving their most earnest attention to the manufacture of their well known Farm Machinery, having had 40 years' practical experience of the requirements of the English Farmer, aided by every appliance that can be made use of, for rendering it thoroughly practical, simple in construction, efficient in use, and moderate in cost; and it is with the fullest confidence in being able to give entire satisfaction that R. G. & SON earnestly solicit the combined patronage of their numerous friends and agriculturists generally.
THE RECENT LEEDS MEETING.—A full detailed statement of the cause of R. G. & SON being absent from the above meeting will be sent postage free to any address on application.
*** Reference is permitted to parties using R. G. & SON'S improved Machinery in most parts of Great Britain.
Estimates, Plans, Drawings, and Catalogues sent postage free to any address.
RICHARD GARRETT & SON, Manufacturers and Inventors of first-class Agricultural Machinery, Leiston Works, Suffolk.

Prize Liquid Manure Distributor.

JAMES'S PATENT LIQUID MANURE DISTRIBUTOR OR WATER-CART, warranted not to choke up or otherwise get out of order. It is thoroughly adapted for Drill Crops, or Pasture Land, or for Watering Streets; has been awarded NINE FIRST PRIZES.
Full Particulars and Testimonials may be obtained of the Patentee, ISAAC JAMES, Tivoli Waggon Works, Cheltenham.
N.B.—Improved LIQUID MANURE PUMPS, either fixed or portable.



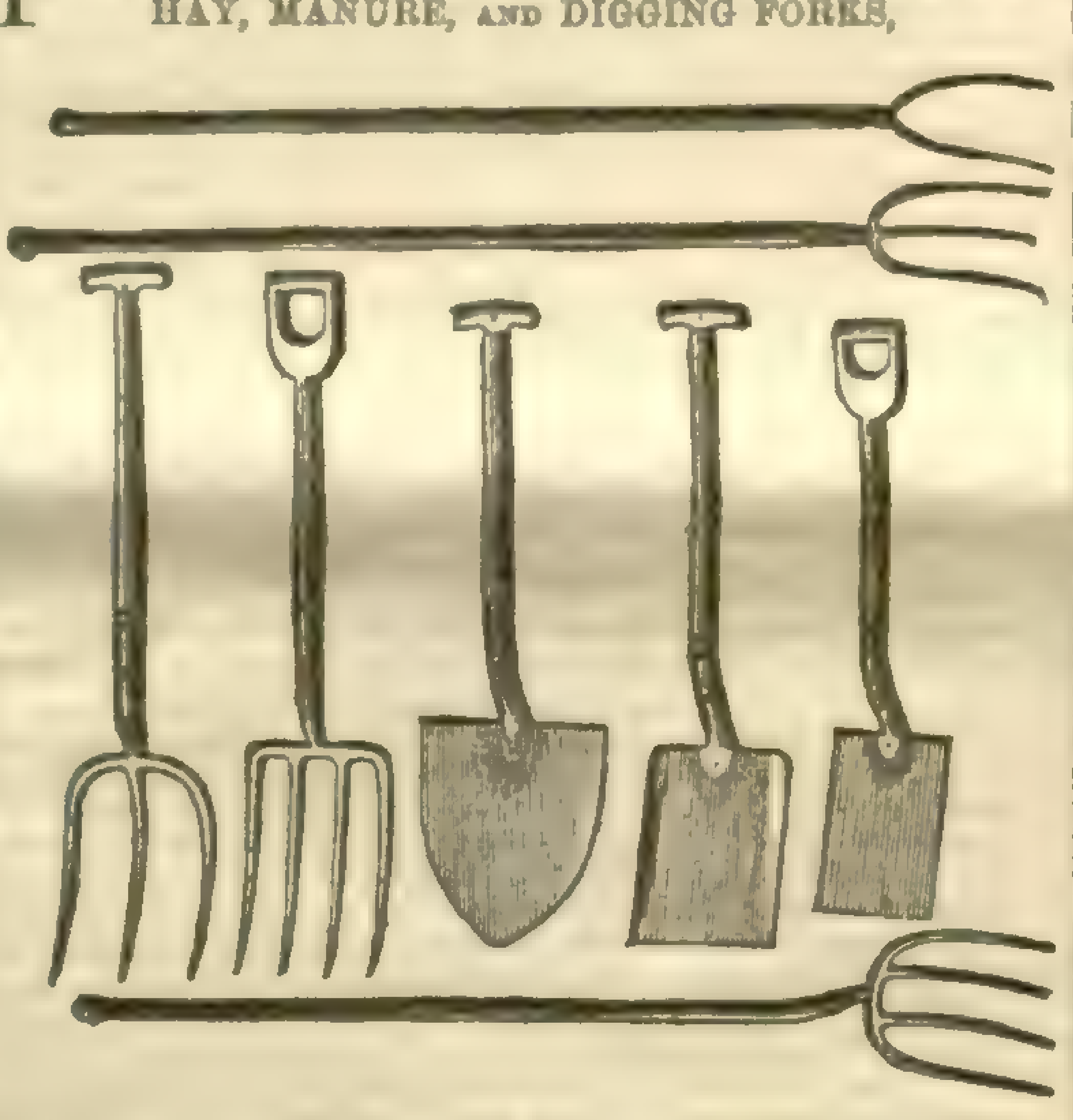
J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25s. 6d. each.

IRON YARD
AND
GARDEN PUMPS
3 feet 6 inches under spout
2½ 3 3½ inch
43s. 53s. 60s. each.

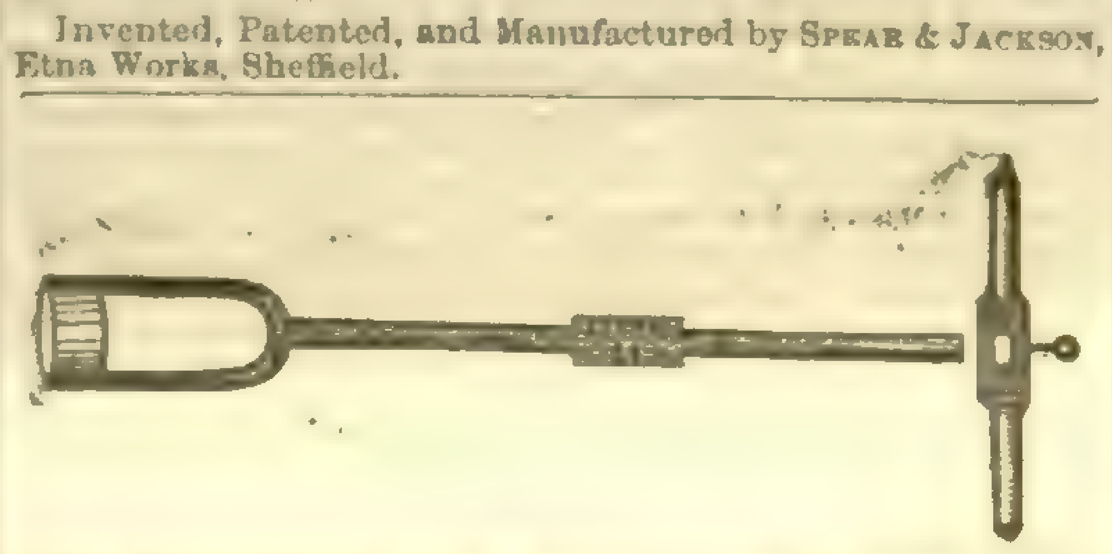
J. TYLOR and SONS manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.
PUMPS of J. TYLOR & SONS manufacture to be obtained of Plumbers in all parts of the United Kingdom.

J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

PATENT SPADES AND SHOVELS, HAY, MANURE, AND DIGGING FORKS,



Made from one solid piece of cast-steel, without welding or rivetting. Warranted to wear out at least three of the ordinary ones, and to work sharp and bright to the last.
S. & J. received the Special Prize for these articles at the Royal Society's Show at Canterbury last year, and First Class Medals and Prizes at every other Exhibition at which they have been shown.
Invented, Patented, and Manufactured by SPEAR & JACKSON, Etna Works, Sheffield.



WRIGHT'S STACK PRESERVER.—The frequent loss occasioned through the spontaneous combustion of Hay, Barley, &c., render this unfailing Preserver of the greatest importance to every Agriculturist. It is so simple in its construction and use that it cannot be injured by the commonest labourer, and if used before ignition, is infallible in its results.
When first it is suspected that the rick is too much heated, a chimney should be made in the part of the rick where it is most needed, and loss or deterioration even in colour will infallibly be prevented, and the destructive practice of cutting away a large part of the rick rendered needless. A circular aperture is quickly made by boring with the machine as low in the rick as may be required, adding each length as is found necessary. It is easier to work the handle backwards and forwards than continually round the same way.
It should be borne in mind that the loss occasioned by stacks destroyed by overheating cannot be recovered from any Fire Office.
The price is so low and the security it offers is so certain and important, as to recommend the possession of it to every farmer. Price in Case, with Lock and Joints, 2l. 5s.
It has been used in the neighbourhood of the Manufacturer for more than 40 years with unfailing success.
Orders accompanied with a Post-office Order for 2l. 5s., payable to JOHN WRIGHT, Ironmonger, Chipping Ongar, will be executed on receipt.

JOHN FOWLER, JUN., 28, Cornhill, London, E.C.—Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free.

£1000 upon the WOOLSTON SYSTEM against any other system of Steam Cultivation.
For price of apparatus and particulars apply to Mr. W. SMITH, Woolston, Bletchley Station.

Wind Power.
J. R. PEILL, 17, New Park Street, Southwark, S.E., begs to inform intending purchasers that he has now increased facilities for Manufacturing the Patent Wind Engines for Pumping, Grinding, Chaffcutting, Pulping, &c.
Prospectuses and all information may be obtained by enclosing one postage stamp, and a Wind Engine in full work may be inspected on the premises daily.

Steam Threshing.
FOR SALE, A Portable Combined THRESHING AND WINNOWING MACHINE (without Engine), by Barrett, Exall, and Andrewes.
The above is nearly new, and well adapted either for a Portable Machine or Barn Fixture. Threshes clean, and will take in long straw.
Apply to CHARLES PASCALL, Engineer, South Norwood, S.

Farm Buildings.
LOANS may be obtained under the General Land Drainage and Improvement Company's Act for the full amount required by the Owners of settled Estates, Incumbents, Trustees, Bodies Corporate, &c., for the erection of Farm Houses, Farm Buildings, and Labourers' Cottages designed by their own Agents and sanctioned by the Inclosure Commissioners.
The loans are repaid by a Rent Charge on the estate for any term the Landowner may fix, not exceeding 21 years.
No investigation of title being required or notices given to Reversioners or Mortgagees, no legal expenses are incurred.
The Company furnish designs of every description, and undertake the entire responsibility of the works wherever desired by Landowners.
No profit whatever is taken by the Company on any works they execute, the actual expenditure only approved by the Inclosure Commissioners, with a commission thereon, being charged in all cases.
Applications to be addressed to WILLIAM CLIFFORD, the Secretary, at the Offices of the Company, 52, Parliament Street, London, S.W.

THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &C. IN ENGLAND AND WALES AND IN SCOTLAND.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.
For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

MANCHESTER AND LIVERPOOL AGRICULTURAL SOCIETY.
Patrons—The Right Hon. the EARL of DERBY, K.G.; and LORD EGERTON of TATTON.
President for the Year—FRANCIS D. P. ASTLEY, Esq.
The ANNUAL SHOW OF HORNED CATTLE, HORSES, SHEEP, PIGS, POULTRY, DOGS, CHEESE, BUTTER, SEEDS, ROOTS, FRUIT, IMPLEMENTS, MACHINERY, and MISCELLANEOUS ARTICLES will take place at Ashton-under-Lyne on WEDNESDAY and THURSDAY, September 11 and 12.
Premiums amounting to upwards of 1100l (including considerable Special Prizes) will be competed for on this occasion.
Entries Close on August 14.
Prize Lists and Forms of Entry may be had by applying to Messrs. W. MARSHALL and S. H. HYDE, Honorary Secretaries to the Local Committee, Ashton-under-Lyne; Mr. W. G. MOORE, Agent, 2A, Half-Moon Street, St. Ann's Square, Manchester; or from T. B. RYDER, Secretary.
2, Elliot Street, Clayton Square, Liverpool.—August 3.

The Agricultural Gazette.

SATURDAY, AUGUST 3, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

TUESDAY,	Aug.	6	General Meeting of the Royal Agricultural Society of Ireland at Belfast.
WEDNESDAY,	—	7	
THURSDAY,	—	8	
FRIDAY,	—	9	

A LARGE portion of our present impression is occupied with reports of the present appearance of the crops in various parts of the country. We shall probably on this day fortnight give our usual annual tabular report from some hundreds of correspondents in all our English counties and most of the Scottish, Welsh, and Irish counties, when the character of the harvest will have been more decidedly declared. But in the meantime the opinion already formed of it in the chief corn growing districts is worth knowing, and we make no apology, therefore, for filling so many columns with these reports. They are upon the whole favourable; the weather has latterly been wetter

than in most districts has been desired, but no harm has yet been done, and the sunshine of the last few days has been of immense service to the country. Both grain and green crops have benefited, and though the evils of an imperfect plant in the case both of Wheat and Mangel Wurzel cannot be remedied, yet in all probability the ultimate yield per acre will be greater than was at one time expected. The principal misfortune of the year, so far as is yet known, is the general prevalence and virulence of the Potato disease.

The list of subjects on which the Journal Committee of the Royal Agricultural Society seek for information has just been published. So meagre a programme has never before been issued. Fifty pounds for another county report—this time of Staffordshire; twenty pounds apiece for an essay on trenching, subsoil ploughing or "double ploughing" (whatever that may mean), and for an essay on the relative advantages of fixed and moveable steam-engines, and "single and double" threshing machines (whatever they may be), and 10*l.* apiece for "Improvements in Haymaking," and for "miscellaneous"(?) complete the list of offers and directions; and "further suggestions are invited from members of Council and of the Society."

The whole affair is a confession of inability and failure. Compare it with the lists issued by Mr. Pusey 10 or 15 years ago, when a sum varying from 200*l.* to 400*l.* was annually offered for essays on 15 or 20 subjects, and hardly ever failed to call forth information for which the prizes were awarded. The contrast is complete. A few petty subjects are now named for discussion: very paltry prizes are offered for competition; and we repeatedly hear it announced that none of the essays in this and the other class deserve publication.

The "suggestion" we have to offer is that a more liberal scale of premiums be adopted, and that the topics to which attention is directed be selected more for their accordance with current agricultural progress and interest. Reaping by machinery—ploughing and cultivation by steam power—the influence of the premium system on our first-class breeding stock—the relative merits of certain breeds of sheep—the history and performances of particular families in the Shorthorn breed of cattle—on all of these and many other topics there is an immense deal of indefinite and inarticulate estimate, impression, and information which we should all be glad to see accurately collected and expressed. Mr. Samuel Sidney's "suggestion" made long ago that the history of all the prize cows and heifers in the Short-horn classes at the Society's annual exhibitions ought to be written, is one, for instance, which ought to have been remembered by the compiler of this year's prize list. Instead of asking for information about deep ploughing, on which everybody knows all that can be said, or on "double and single threshing machines," and "haymaking" and "any other subject," the list should have run more like this:—

1. One hundred pounds will be given for the best and most detailed account of steam cultivation, its expenses and results, over not less than 10,000 acres.

2. Fifty pounds will be given for the best account of both corn and hay harvest, contrasting the process as done by machinery and by hand respectively over at least 2000 acres, during at least a couple of seasons.

3. Fifty pounds will be given for the best history of the individual Short-horns successful in the cow and heifer classes of that breed at the annual meetings of the Society since its establishment. And the list might be extended to almost any length, with the certainty, if adequate reward be offered, of obtaining readable and useful information on points on which the majority of men in actual business as farmers are just now in doubt, and want information and advice.

We do not suppose that a report of Staffordshire, however fully written, will affect the farm practice of one man in one thousand who may read it. We are quite certain that an account of reaping by machinery and ploughing by steam-power will be immediately influential on farm practice over large districts.

PRESENT APPEARANCE OF THE CROPS.

Berkshire: *Thatcham, July* 29.—The appearance of the Wheat crop in this neighbourhood at present encourages a hope quite different to what was felt at this period last year; it is well headed, and but little appearance of blight except in spots. A thin plant in many fields will be a great drawback, yet nearly an average crop may be expected. Barley and Oats will exceed an average. Peas are good. Beans are variable. Mangels, Swedes, and Turnips are a good plant and promise well. The hay-making has been an expensive affair, but where it has not been too much hurried it will come out a very useful article. *John Adnams.*——*Aldbourne, Hungerford, July* 29.—I send you my opinion of the present crops. Wheat, a fair average, although the ears are defective by red gum; reaping general, August 5. Barley, average, symptoms of premature ripeness. Oats, average. Beans, blighted. Peas, very large crop. Vetches, well podded. Mangels, a poor crop. Swedes and Turnips, unusually good. Hay, Sainfoin, a failure. Clover, &c., average. Meadow (dry), average. Meadow (watered), heavy. Very little of the above made well, and but little spoilt. *Thomas Chandler.*

Cambridgeshire: *Chatteris, July* 30.—Wheat: generally a thin plant, but greatly improved since breaking into the ear. Where a full crop very much laid by the heavy and oft-repeated storms, but still ripening bright and kind in most instances. Standing crops are short in the straw, have a thick good ear, and are kind and promise to be of good quality. There is scarcely plant enough upon the ground to yield an average produce of grain, unless it prove an almost unprecedented season for quantity. Wheats on the early lands will be fit to reap about the beginning of next week should the weather continue dry and favourable. Oats, generally a good crop, but in some instances injured by wireworm; Polands now being cut; not long in straw, but good in quality. Beans, various; some too thin a plant, others much too thick. Where too thick not so well podded, but where moderately planted full of corn. Slightly injured by fly. Peas, a good crop. The early varieties now being cut; full of pods and promising to yield well. Potatoes: plenty of top to them, but unmistakeable signs of disease, and, we fear, in a virulent form. Mangels going on well; plant thin in many instances. Coleseed, very much injured by storms at the time of sowing; many acres re-sown. Hay, crop of seeds very heavy and mostly well secured. Meadow-land hay an average crop and all in. Grass-keeping superabundant; especially Clover eddishes. Barley, very little grown. The few fields about are a full crop, and laid a good deal. *A. S. R.*

Cheshire: *Tarvin, July* 30.—The Wheat crops present an unusually varied aspect according to the time of sowing, the quality of the soil and its state of cultivation; much of the early sown autumnal Wheat promises to be a good crop, but the late sown is generally very thin on the ground and full of weed; the same remarks will also apply to the spring sown, that sown about the end of January and beginning of February being decidedly better than the late, which was affected by the dry weather. The crops however have a healthy appearance and stand well; it is therefore probable that although thin on the ground, the yield will be good according to the bulk and will not prove much below an average. Barley is promising but laid a good deal on the best soils, we may however calculate upon a fair average; and the same will apply to Oats excepting on the very stiff soils and on those the crop must prove very defective. The late hay crops have exceeded our expectations, but the weather having been showery, much of it is discoloured and of course injured to a certain extent; pastures where in good heart are full of Grass. The Mangel crop is a very imperfect one generally, partly owing to the very dry weather after planting but chiefly to the want of good seed, which this season has been felt to a great extent throughout the kingdom. Those who were so fortunate as to obtain good seed and put it in whilst there was moisture in the land are enjoying the hope of having a good crop. With few exceptions, Swedes are looking well, but we frequently hear complaints of "club," "finger and toe," &c. We can perceive the early sown Barley and Oats changing colour fast, but we do not expect the harvest to be general before the third week in August and some of the crops will be very late. The Potato crops are good and hitherto there is not much appearance of disease. *W. P.*

Cornwall: *Tregoose, Truro, July* 27.—The Wheat crop in this neighbourhood has been so exposed to the late strong winds and heavy rains that I fear it has sustained considerable injury, and expect a deficiency. Barley and Oats promise to be beyond average. Hay, at first deficient in quantity, has been greatly injured by the continued rain. *J. Michell.*

Derbyshire: *Idridgehay, Wirksworth, July* 30.—I consider the state of the crops in this district as under: viz., Wheat, thin but healthy. Barley, not sufficient grown in the district to justify an opinion. Oats, good. Harvest will be general at the end of August or early in September. Hay crops a good average, but the season so bad that a great deal remains uncut. Small quantities stacked, the remainder in every stage, some becoming much damaged. Seeds: the Rye and Grass seeds appear to have grown well, but the crops with very few exceptions are deficient in Clover. Beans with two or three exceptions a decided failure. Peas running very much to straw, cannot ripen for want of sun and less wet. Mangel very irregular; the Mangel seed particularly has missed, and gives the crops a very patchy appearance. Turnips: these crops are looking generally well, and I have not heard of the usual complaint about the fly this year. Root crops will be very expensive, so difficult to keep clean owing to continual wet. *John Parkin.*

Elgin, or Morayshire: *Forres, July* 29.—I never saw a better prospect of grain crops. Wheat, Barley, Oats, and Rye are just now all far above an average in appearance. Early sown Turnips got a favourable start, and particularly in dry soil, form a cover on the ground, and are very vigorous. Those that were later sown are suffering from excess of moisture and the want of favourable weather for cleaning, rain having fallen almost daily for the last six or seven weeks. The Potato crop is unusually vigorous, and yields a rich display of blossom, but has not yet arrived at that stage of ripeness at which the disease so frequently prevails. The hay crop is above an average, but it has been much bleached and injured by the weather, and is not yet secured. From the present state of the weather it is difficult to say when the harvest will become general, but that is not likely to be before the 20th August, and it may be considerably later. On account of the moist atmosphere during the time the Wheat was in blossom, it is doubtful whether the crop will yield in proportion to the present appearance. One thing is certain, that the bulk of all the grain crops will be far above the usual average. *John Grigor.*

Essex: *Great Dunmow, July* 30.—I have consulted two or three highly respectable farmers of our immediate neighbourhood, and they agree with me that there is a good prospect here as to the crops. I should say of Wheat and Barley we appear likely to have a full average; this is not an Oat country, but what there is are looking exceedingly well. The hay harvest has been trying, but a good deal is well got up. Mangel and Turnips: the former not a first-rate plant, but each much better than was expected. Forward Potatoes much better than of late years, but the disease is complained of as progressing. *A. Barfield.*

Gloucestershire: *Didmarton, July* 31.—Taking a circuit of about six or seven miles in this neighbourhood on the light lands, being the edge of the Cotswold Hills, I think the Wheat and Oats will be about a fair average; Barley rather overaverage; Peas and Beans variable; roots: Mangels patchy, not good generally; Swedes and Turnips, regular plant and growing, but not clean. Hay a fair crop on the whole. Sainfoin and Clover rather light, but great part, particularly the English, made badly. Grass keep very plentiful, and although much rain has fallen, the pastures are not trodden like last year. We shall begin cutting Wheat and Oats either the end of this week or early part of next. The corn is (as we term it) scrawled and twisted, causing waste in cutting, but not much beaten down close to the ground. *Stiles Rich.*

Kilkenny: *New Ross, July* 30.—The crops in this county suffered much in the early spring from the dry weather, and are suffering now quite as much from the excessive wet. Present appearances are:—Wheat thin; nearly average. Barley, average. Oats, poor and backward. Potatoes good, but the blight is developing itself very fast owing to the wet. Mangels a missed crop. Turnips very good, but want sun. Hay light and greatly damaged. *Dawson Milward.*

Lincolnshire: *Peterborough, July* 29.—The Wheat crop generally thin, but is at present healthy in appearance; the straw is strong and the ear fine; we do not estimate it to be quite an average crop. We had extremely heavy storms of rain last week, so that the fen farmers do not consider they are yet out of danger from blight; a few pieces are laid by the wet. Barley will, we think, be an average crop; it is ripening gradually with a full ear. Oats bid fair to yield more than an average. Beans have improved, and where not affected by the fly will be a fair crop. Peas are again in jeopardy from the catching weather. We hear some complaints of the disease among Potatoes; a few days of fine weather would make a great alteration. Harvest is expected to commence on the 5th, and will be general in the second week in August. *J. W.*——*Deeping St. Nicholas, Spalding, July* 31.—Our Wheat crop is not forward enough to give a decided opinion upon, so much depending upon the weather during the next fortnight; the past has been very wet, this week has commenced more favourably. In giving a report of a district, the term "fen" does not now strictly express the character of the soil it is applied to in this locality. We have clay, silty, and peaty surfaces, all called fen. The Wheat crop on all the peaty and light soils was so much damaged by frost during the winter, that although it has recovered more than was expected in the spring, it will cut up a very light crop. On the heavier soils it will, if well ripened, be a good average crop, and, from present appearance, of good quality. Oats a full average crop, and will be ready to cut about the 12th of August. Beans, not many grown, only moderate. Potatoes very much diseased. Mangels generally not well planted, but an extra breadth sown, and with hot weather may have an average quantity. Coleseed suffering from wet and backward; hay a full crop, but very much damaged. *Thos. Atkin.*

Norfolk: *Denver, July* 27.—The crops up to the last few days have been looking very promising, but now the weather is anything but favourable; heavy thunderstorms having beaten them down very much, and if we do not get favourable weather to ripen the corn, I am afraid the mildew will be likely to make its appearance, and of course it will have a bad effect upon the Barley and Oats, &c. Peas, what few we have, are promising; and as to Beans we have scarcely any, the seed being so defective they have most of them been ploughed up and put in with Oats, &c. Wheat, Barley, and Oats, if not injured by weather between this and harvest, will be a fair average crop. Peas good. Mangels (various) want dry warm weather. Turnips are very promising; a beautiful plant, but now want dry and warm weather. Hay a fine crop, but very little got well, and a great deal out in the field at present. Potatoes have been looking well up to this, but are now beginning to show symptoms of the old disease. We shall not commence harvest in general before the middle of next month, unless the weather sets in warm and dry. Any further information in my power I shall be happy to give, if required. *Thos. Brown.*——*North Walsham, July* 27.—In this district, and I may add in the county generally, our crops are promising. Wheats not so bulky in appearance as in some seasons; indeed they are short in straw, but the ears are larger and seem pretty well filled. The quality will be far superior to that of last year. The tempest storms have knocked a few fields down during the past week; but the corn was too forward to take any serious injury. On the whole, I may venture to say the Wheat crop will be a good average, and, with a fine harvest, probably a little beyond it. Barley and Oats on light soils were punished by the long drought, but on all good soils they promise well both for yield and quality. Hay generally a light crop, and not well secured—indeed, a portion of it must have been much injured. The root crop is various. Mangel Wurzel not well planted; many hundreds of acres ploughed up and sown with Turnips; where the plant is good it makes but slow growth. Swedes came up in two growths, and present a very uneven appearance. Where sown early, and the seed at once vegetated, the crop cannot be more promising; but where the seed laid long on the ground, the crop, though not deficient in plant, cannot be an average. Beans are short, and not well planted; this crop by no means promising. Harvest will commence here about the [illegible] August. Should the present showery weather continue it may be a few days later. *W. Cubitt.*

North Wilts: *Swindon, July* 31.—The Wheat crops in this neighbourhood are promising, nearly an average; there is a deficiency in the ear from the midge or red gum in the earliest portions, but not to a serious extent. With fine weather we shall be reaping next week. Barley, Oats, and Beans are a bulky crop, and should they ripen kindly will be over an average. Potatoes have looked well up to within the last week or 10 days, but are now badly diseased in the haulm. Roots in general are very promising; but the weather being very stormy and hindering for the hay making, has caused the hoeing to get somewhat behind. Fine weather is now wanted for everything. *T. A.*

Rutland: *Empingham, July* 29.—Wheat: although the crop is rather thin on the ground, it has much improved lately, especially where Talavera Wheat was introduced in the spring to fill up the crop, and the yield will probably not be much below the average. Barley: There are some pieces which seem to be ripening prematurely, but notwithstanding this the crop is good, and is expected to be full average. Potatoes: a good crop. Beans and Peas promise well. Turnips; the disease has again made its appearance. Turnips are good, but Swedes and Mangels are rather thin on the ground. *W. Fancourt.*

Somersetshire: *Wincanton, July* 30.—The Wheat is generally thin on the ground, but looking well. The Barley and Oats particularly good. (No Beans grown in the district.) Mangel Wurzel a good plant. Swedes and Turnips very good, but greatly in want of sun for hoeing. Potatoes very bad and rapidly getting worse, with so much wet, and so low a temperature. *James Eastment.*

Suffolk: *Framlingham, July* 29.—Our neighbourhood is looking full of luxuriance from the frequent showers. The corns are healthy but not bulky. Harvest will be generally begun here about the 14th August. In forwarder districts here and there Peas or Talavera Wheat have been secured, and new Peas at market. We grow few or no Peas or Oats. From the extreme wetness of the last summer no cleaning could be accomplished, and hoeing this summer has cost extra money. Partly from immaturity of the seed Wheat, and partly from the too much rain, the Wheats planted badly; many were seeded a second time and many left too thin to give hopes of a crop. From the spring the weather has suited the Wheats, and the crop will be far beyond expectation, say a full average. Barleys, from a long spell of dry

weather, were looking ill early, but have much improved since we have had broken weather; they show a good ear and will be a fair crop generally; on favoured spots they are splendid. Beans very good and free from filth (lice or blight). Clovers and Grasses good crops, and generally well secured, although weather has been ticklish. Second math Clovers very good and plenty of Grass seed. Mangels generally backward and mended with Turnips. *Geo. Edwards.*

SUSSEX: *July* [illegible].—The bad seed time we had last autumn very much delayed the sowing of the Wheat crop, and on the heavy land lessened the breadth usually sown. From loss of plant a considerable extent of Wheat was in the spring ploughed up, and many fields or parts of fields left were very thinly planted. Where the plant is good there will be a good crop, though considerably laid by the late wet weather. On the whole the Wheat crop in this district must be under an average. The Barley and Oats very good; Beans a failure from the blight; Peas very good. Some pieces of Mangel Wurzel are very good, but owing to the bad quality of the seed the crop is not generally good. Swedes and Turnips never promised better. The Potatoes have been looking remarkably well, but the disease has made its appearance. I first noticed it on the 21st of this month. Harvest will be pretty general about the 2d or 3d of August. *West Sussex.*

WARWICKSHIRE: *Moreton, Stratford-on-Avon, July* 27.—I hear that although much of the autumn sown Wheat is too thin to be a full crop, yet that it is greatly improved, and that the ears are large. So much of the land lost its plant that I cannot think it will be an average crop. In my own case all, except what was drilled after the frost, I estimate to be [illegible] to the [illegible] of such crops, and [illegible] a darker [illegible] than indicates a healthy condition. The Barley is far more promising, and from what I am told, should suppose it will yield a full average produce; the early sown is already showing the colour of harvest, and is generally a full crop. The Beans are a good deal attacked by blight, which appears to interfere with the growth of the straw more than the probability of a crop of corn, for they promise to yield better than for many seasons past. I hear the Peas are well podded, and a good crop of straw also—some are already cut. The hay, which was a very heavy swath, is almost entirely spoiled, few persons having been fortunate enough to save any without its having had rain on it. The pastures are very luxuriant, Clover abounding where in common seasons it is almost unknown. Swedes are most vigorous, and promise to be as good as can be wished, but Mangels are very disappointing; the seed in many instances was defective, and of course produced a bad plant, and where by good fortune a full one was obtained the crop is unpromising; it is universally injured by the maggot in the leaf, and the plants so attacked cease to grow; the bulbs of mine are no larger than they were three weeks ago. I fancy that it would be much benefited by dry weather, and hope it is not yet too late in the season for it to become a better crop than present appearances indicate. *J. C. Adkins.*——*Stoneleigh Abbey Farm, Kenilworth, July* 27.—Wheat looking well, save cases of thin plant, and others of lodging; bold ear, average promise; wants sunshine. Barley full average crop, stands up well, turns colour fast. Oats good on light soils, many cases of thin plant, well eared. Beans very good, plenty of straw, fairly podded. Peas fair, but very foul. Hay average bulk, more than half damaged; one-eighth yet to mow; old hay scarce. Clover: abundant crops, much damaged, aftermath promising. Mangels: one-third of the crops good, the rest bad. Swedes never better. Potatoes very fine; disease in garden. Carrots very good. *T. Bowick.*——*Berkswell, July* 30.—Wheat on good land well farmed will be above average crop, of very good quality; on cold land badly managed it is very thin on the ground, and will be under average crop. Barley, Oats, Beans, and Peas are all a good crop where good seed was sown. The roots are all looking remarkably well, Hay a very good crop, but much damaged. *W. Aitchison.*

WESTER ROSS: *July* 27.—A more genial or better growing season the farmer could scarcely desire; indeed so fine has the weather been throughout that there has been little room for an approach to grumbling. Latterly we have had a good deal of rain, which has retarded somewhat the hay harvest, but the Wheat appears to have got safely through the blooming season, and till now the crops have stood better than we anticipated. Fortunately, immediately after the heavy rains we have had, a smart breeze got up, which speedily set the prostrated crops a-waving again, and we now expect that, with the exception of a few fields, the thorough maturing of the grain will not be prevented. Both autumn-sown and spring Wheat are abundantly strawed, yet generally not over heavy, and as it is now well advanced in filling, and with ordinary weather will come early to the sickle, we expect a plentiful yield of grain of greatly better quality than that of last year. Barley is beyond an average in bulk, and the quality of the grain in many fields is in danger of being deteriorated should the season continue wet as it now is. Oats, delighting as they do in abundance of wet, are thriving apace, and are to be a superior crop. Nearly everywhere they are good; in soil early or late, ill or well cultivated. The hay is rather under an average crop in weight per acre, although from the abundance of pasture a greatly larger breadth has been cut than usual. From the severity of the winter, or some other cause, the Clover has been greatly thinner than usual. Pastures have been so flourishing that the difficulty has been in keeping them down, and to accomplish this store cattle rose to an exorbitant price. From the heavy falls of rain the later sown Turnips have come slowly to the hoe, and now the singling is scarcely completed. The earlier sowings are well advanced, and the drills in many fields are well closed over. Potatoes are generally looking well, but already rumours of disease are heard.

WEST SUSSEX: *July* [illegible].—We are now at the beginning of harvest, with weather anything but encouraging. During all this month it has been very unsettled, and the barometer has been lower on the average than any month during the year; and though no great quantity of rain has fallen, yet it has been so stormy and changeable that hay-making has been a very troublesome operation, and some has been made in rather poor order towards the latter part of the time. The crop too has been rather light, the spring having been so cold and backward; but Grass for cattle, though coming late, has been plentiful for the past two months. Mangels generally grow slowly, and will probably be as light a crop as last year, but Swedes and Turnips are better than usual; the fly has hardly touched them, and if Peas are got off soon a good part of the land will be Turniped. The Potato disease has come again, and rather severely; it has been a heavy blow to many, as we were expecting a good crop, the appearance having been better than usual. Some are digging and selling off as fast as possible, fearing that what may be gained in size may be lost by the rot, and as a consequence the price has come down low, [illegible] per ton. Respecting harvest we shall have it general in the beginning of next week, and there is already some Barley and Wheat cut, and many will begin this week if the weather look anything like settled. The Wheat crop is better than last year, the ear is heavier, but still it is not so perfect as we could wish, there being many blighted corns on it, and being thin in many places on the ground we must not look for an average crop. Barley is generally good, and rather more forward than usual compared with Wheat. Oats are also a good crop. Peas, which are nearly all cut but few carried, are a very good crop. Beans are a good deal blighted, but will not be so deficient as was at one time feared, perhaps a fifth or sixth below an average. There is not much old corn standing unthreshed, and most of it will find its way to market before the new come in. Though the market is not over supplied yet sales are dull, no one buying but to supply their daily wants. All kinds of lean stock are plentiful and a dull sale though dear. Work is now well done up, and all are waiting to begin harvest. *G. S.*

WILTSHIRE: *Avebury, July* 26.—From the continuation of rain we are not looking quite so well. Wheat has been very much blown about, which will cause more thin corn by its being crippled at the root. Still, should it go on from this time well, I think it will be a good average. Some of the Oats are very bad, and some good; the same with Barley, still on the whole there may be an average. Beans are showing blight. Peas good. Continual rains are much against everything—bad for the hay at present, much against cleaning Swedes and Turnips; great changes may take place now before the sickle. Potatoes at present looking well. *George Brown.*

Home Correspondence.

Cost of Haymaking.—I was much surprised on reading your last impression. In Notices to Correspondents, headed "Harvest Beer," you say the whole expense of making hay, not including horse labour, ought not to be more than 10s. per acre. I think your statement may lead some astray. I give you my experience of some years. Having 400 acres to secure, and trying all I know, I can never get it done much under 30s. per acre, with the aid of hay-making machines and horse rakes (but not mowing machines, having tried four, I cannot get one to do the work well). If the above is not a misprint, myself, with many others, would be very glad to be put into the secret of getting hay for 10s. per acre, even in fine weather. I have this year let 150 acres at 25s. per acre, and found horses, carters, and machines, and it did not pay the contractors. *Charles Panter.* [Ten shillings an acre is the cost at which we have often let the cutting and making of large quantities of hay in Gloucestershire, barring only the employment of the farm teams in carrying it. No doubt in the answer to our correspondent the locality ought to have been stated. Probably you make two loads an acre where we made one, and your men and hands require 3s. 6d. to 4s. a day where ours were satisfied with 2s. to 2s. 6d. It is certainly the fact that 10s. an acre was the price paid, under circumstances where 2s. 3d. to 2s. 9d. an acre, with a gallon of beer, was the price per acre for mowing.—In one instance within our knowledge when a Gloucestershire tenant left a farm, including 400 acres of Grass land, all the haymaking was let for 8s. to 10s. 6d. per acre.]

Societies.

HIGHLAND AND AGRICULTURAL: *Perth.*—Before proceeding to notice in detail the matters worthy of note connected with this meeting of the Highland Society—which parenthetically we may say promises in accordance with the gradual growth which has always distinguished its meetings to be the best yet held—we must crave the reader's permission to say a word in connection with a point in the management of the Society which reflects but little credit on its managers. We refer purposely and pointedly to the treatment which the members of the Press meet with in the matter of admission to the showyard in advance of the members and general public. It is the expression of a simple truth, when we say that it would be difficult for the leading agricultural societies to over-estimate the value of the services which the Press has performed for them, in making known their proceedings and commenting upon their results. And in view of the value of such services, the existence of which can as little be ignored as their importance to the cause of agriculture can be under-estimated, it does seem hard that in place of the members of the Press having all those facilities which would at once lighten their labours and economise their time, red tape rules, as puerile as they are absurd, meet them on every side, keeping back their admission to the scene of their labours to the utmost verge of their time, and rendering these labours all the more arduous when admission comes. The interests of the public demand that we should protest against the absurdity of a rule which rigidly excludes the members of the Press from the showyard before the crush and confusion of the public admission comes to hinder them in the making of their records in that quietness which they are fully and fairly entitled to. We know—none better—the expense and trouble which the Press go to, to obtain information for the benefit of their readers, and they have a right on this, if on no higher ground, to have all the facilities thrown in their way to obtain this, which the Society can afford.

The Society's officers would be rather surprised if, some show time, the Press should refuse to report its proceedings at all. We do not write on an unimportant point—it concern readers as well as reporters. We are not aware that the Royal Agricultural Society of England has suffered in its interests by the courtesy which a few days ago its Council showed to the Press; is the Highland Society more important or of higher dignity than the Royal, that it cannot show the like; or are its laws like those of the Medes and Persian laws which cannot be altered? Let us now give such a report as our materials will allow.

In stock there is the sum of 983*l.* given for first and second prizes; 108 bronze medals for third prizes; and as extra prizes, 12 silver and 7 gold medals; the money prizes being divided as follows:—125*l.* to the Shorthorns, 125*l.* to the polled, 96*l.* to the Ayrshire, 93*l.* to the Highland. Horses, 212*l.*; ponies, 18*l.*; black-faced sheep, 54*l.*; Cheviot, 54*l.*; Leicester, 54*l.*; long-woolled other than Leicester, 54*l.*; South-down 54*l.*; swine, 54*l.* In the poultry classes, 33 silver and 33 bronze medals. In dairy produce, 56*l.* is given for first and second prizes, with 7 bronze medals for third.

In the implement department 196*l.* is distributed in first, and 78 bronze medals as second prizes.

A glance at the leading features of the implement department may now be taken. As our readers are aware, the whole of the implements are divided into classes or sections, according to their use in the field or the steading; these sections amounting in number to 78. Whatever may be said against this system in a commercial point of view, as throwing obstacles in the way of the exhibitors driving—as the term goes—a capital trade, there can be no doubt that it is philosophically correct, and throws every facility in the way of the patient observer. Certainly to this arrangement the members of the press are at all events greatly indebted, for it enables them to make their comparative observations with remarkable facility and certainty.

The number of entries is very satisfactory, and the names of the well-known exhibitors show the business interest which our leading men take in the Society's shows. In ploughs of all sorts there are 65 entries; in cultivators 20; rollers, 17; harrows, 21; swing or whippletrees, 17; sowing machines of all classes, 51; manure distributors, solid, 2; liquid, 2; and 7 entries of machines for pulverising guano. For horse-hoes there are 19 entries, 1 machine for singling Turnips, and 3 for raising Potatoes. In fanners and winnowing machines 12, weighing machines 16, straw cutters 19, Turnip cutters 17, root washers 2, Linseed and oil-cake breakers 18, 3 in steaming apparatus, in churns 16, and 2 in cheese presses, carts 19, together with a number of other entries of gates, hurdles, &c., which our space does not permit us to notice here.

The English makers are represented by the well-known firms of E. H. Bentall, of Heybridge, Maldon, Essex; Clayton, Shuttleworth & Co., of Lincoln; the trustees of W. Crosskill, of Beverley; Messrs. Garrett & Son, of Saxmundham, Suffolk; Richard Hornsby & Sons, Grantham; J. and F. Howard, of Bedford; Francis Morton & Co., of Liverpool; E. Page & Co., of Bedford; Picksley, Sims & Co., of Leigh, near Manchester; Robert & John Reeves, of Bratton, Westbury, Wilts; Richmond & Chandler, of Salford, Manchester; Williamson Brothers, Kendal.

Taking these in the order above given, we notice that Mr. Bentall enters specimens of his harrows, straw-cutters, Turnip-cutters, Turnip-pulpers, Linseed-bruisers, oil-cake breakers, grain-grinders. Messrs. Clayton & Shuttleworth enter specimens of their 8-horse portable engine and portable double blast threshing machine. The trustees of W. Crosskill enter specimens of their Norwegian harrows, land rollers, liquid manure distributing machines, winnowing machines, root washers, grain bruisers or grinders, one-horse carts, harvest carts, light spring carts, wheel-barrows, and bone mills. Messrs. Garrett & Son enter specimens of their portable steam engines, threshing machines, corn drill, horse hoe and broadcast manure distributor. Messrs. Hornsby & Sons enter specimens of their ploughs and washing machines. Messrs. J. & F. Howard enter their steam cultivating apparatus (to be tried on Thursday, in a field near Perth), ploughs, wheel and swing, harrows, and their horse rake and haymaking machines which took the prizes at Leeds this year. Messrs. Morton & Co. enter specimens of their fencing, gates, netting, &c., and a model of a cottage of galvanised corrugated iron, and of a farm-yard roof 100 feet square. Messrs. Page enter specimens of their ploughs, harrows, swing trees, horse-hoe, straw cutter, oilcake-bruiser, brick, tile, and pipe-making machine, and horse-rakes. Messrs. Picksley, Sims, & Co. enter specimens of straw-cutters, Turnip-cutters, Turnip-pulpers, Linseed-bruisers, grain-grinders, portable steam engine, reaping machine. Messrs. Reeves & Son enter specimens of their drill sowing machine for grain, Turnip and manure drill, manure distributor, and a machine for cutting and destroying Thistles. Messrs. Richmond & Chandler enter specimens of their well-known chaff-cutters, sowing machine for Grass seeds, guano pulveriser, Turnip-cutter, steaming apparatus, root washers, Linseed-bruisers, oilcake breaker, grain-grinder, horse gear, and portable steam engine and boiler. Messrs. Williamson Brothers enter specimens of their portable steam engines, threshing machines, turbines, corn brusher, Turnip sowing machine, oilcake mills, and fanners for dressing grain, &c.

The work in the implement department, so far as the public was concerned, commenced with the plough trials at South Muirton, some two miles from Perth, on the Dunkeld Road. The land chosen was excellently adapted for the purpose of the trials, calculated to show well off the work done by the ploughs. This work was upon the whole well done; it was certainly however distinguished by many inequalities, and on some inferior work could be detected with no great research. The work of Messrs. Hornsby, Mr. Allan, of Culthill, Dunkeld, and Mr. Martin, of New Scone, was undoubtedly the best on the field; although considerable differences

of opinion certainly existed as to which had the fairest right to be considered the best. The judges gave the palm of merit to Mr. Allan's plough, the light draught of which created some surprise. It is no new thing to say that this decision did not please all parties.

The implement yard, thrown open to the members and public on Wednesday morning, presented in its several departments but little novelty. The display was comparatively small, and presented a marked contrast to the fullness and suggestiveness of the miles of shedding at Leeds. Time—for the post with its inexorable promptitude waits for no man—admits of our giving but a meagre notice of what novelties there were. In the broadcast sowing machine section a modification of the ingenious apparatus displayed at the Smithfield Club Show was exhibited by J. Moyes, Pulwearie Mill, Kirkcaldy. As our readers may remember, for the apparatus was described in our columns, it consists of a tin receptacle attached to a canvass bag going round the neck of the labourer; at the front part of the receptacle a small vane is made to revolve by means of simple bevil gearing. As the grain passes through the apertures of this revolving vane, it is scattered abroad by its centrifugal action, covering a space 30 feet wide. The improvement in the apparatus exhibited is the adoption of a sliding shutter, which keeps the grain in while the canvass bag is being filled.

In the section Sowing-machine for Turnips, James Arres, Woodside, of Culloden, Inverness, exhibited a machine somewhat remarkable for the daring simplicity of its arrangements. The seed is placed in two inverted white glass bottles, the bottom parts being cut off and covered with lids, by removing which the bottles can be filled with seed. Graduated scales are attached to the exteriors of the bottles. The seed is delivered from the necks of the bottles to the regulating cross barrels, which are fitted on to the through axle of the machine. It appears that one of these machines has been in use for the last 14 years without accident, which speaks well at all events for the strength of the glass bottles, if not for the carefulness of the attendants.

In the Turnip-sowing machine of James Robertson, Coupar Angus, an ingenious scraper is adapted. This is of the same curve as the curve of the roller, but placed a little below its axle. The curved scraper is attached at each end to two side bars, which are jointed to the axle of the main rollers; these side bars are carried back and support at their extremity the usual small rollers for finishing off.

We almost exhaust the novelties of the implement yard when we notice a sowing machine for Mangels, of Charles Hay, Freelands, Ratho. In this the seed is deposited in bunches or lumps, dibble fashion. The tube through which the seed passes from the hopper is furnished with a concentric circular plate provided on its upper surface with a series of projections; the tube is made to revolve, and as the projections revolve they take out the seed from the hopper, which drops down the interior of the tube. In place of passing directly to the ground, it is led off by a lateral sloping tube to the interior of a chamber provided with a series of apertures placed round its outer periphery. This chamber is fixed to the interior side of a hollow rotatory disc, which presses into the soil, forming a furrow in which the seed falls as it drops at intervals from the revolving chamber. Opposite the disc another is placed, which carries on its central axis a small mitre wheel, gearing with the mitre on the end of the revolving vertical tube or seed shaft.

We may possibly return to a minuter and fuller description of the contents of the implement yard; meanwhile we annex the prize list:—

Two-horse Plough for general purposes.—1st, J. D. Allan, Dunkeld; 2d, G. Ponton, Linlithgow. Highly Commended, R. Hornsby & Sons, Grantham.

Deep-furrow Plough.—1st, John Gray & Co., Uddingstone, Glasgow; 2d, R. Hornsby & Sons.

Subsoil Plough for two Horses.—1st, J. Kirkwood, Tranent; 2d, J. Gray & Co.

Norwegian Harrow.—1st, W. Kirkwood, Portobello; 2d, J. Inglis, Liberton.

Pulverising Land-roller.—W. Crosskill, Beverley.

Consolidating Land-roller.—1st, R. Wight, Longniddry; 2d, W. Crosskill.

Broadcast Sowing-machine.—1st, T. Sherriff, West Barns, Dunbar; 2d, A. Dick, Liberton.

Drill Sowing-machine.—1st, T. Sherriff; 2d, T. Sherriff.

Sowing-machine for Grass Seeds.—Kemp, Murray, & Nicholson, Stirling.

Sowing-machine for Turnips.—1st, R. Wight; 2d, Peter M'Lellan, Abernethy.

Sowing-machine for Turnips.—1st, R. & J. Reeves, Bratton, Westbury; 2d, R. Law, Shettleston, Glasgow.

Sowing-machine for Mangel.—C. Hay, Ratho; 2d, Peter M'Lellan.

Sowing-machine for Carrots.—T. Sherriff.

Three-row Sowing-machine for Beans.—1st, T. Sherriff; 2d, J. & W. Anderson, Dunbar.

One-row Sowing Machine for Beans.—J. & W. Anderson.

Machine for Pulverising Guano, &c.—1st, W. Kirkwood; 2d, T. Sherriff.

Machine for Distributing Guano.—1st, R. & J. Reeves; 2d, W. D. Young & Co., Edinburgh.

Pipe or Tile Machine.—1st, G. Finlayson, Arbroath; 2d, E. Page & Co., Bedford.

Tiles or Pipes for Field Drainage.—1st, Christie & Son, Stirling; 2d, A. Meldrum, Seafield, St. Andrew's.

Glazed-socketed Pipes for Sewerage.—1st, J. Robson, 47, Cook Street, Glasgow; 2d, R. Brown, Ferguslie, Paisley.

Tools for Cutting Field Drains.—Michael Jack, Peggy's Mill, Cramond.

Tools for Cutting open Drains in Hill Pastures.—Michael Jack.

Hand Implements for the Farm.—1st, J. D. Allan, Dunkeld; 2d, W. Millar, Stanley.

Fanners.—1st, J. Richardson, Brunton Place, Carlisle; 2d, J. Richardson.

Fanners for Grass Seeds.—1st, J. Richardson; 2d, J. Spence, Craigkelly, Bruntisland

Weighing-machine for Grain.—1st, Herriot & Co., Glasgow; 2d, A. & W. Smith & Co., Glasgow.

Straw-cutter for Hand. 1st, Picksley, Sims, & Co, Leigh, near Manchester; 2d, Richmond & Chandler, Salford.

Straw-cutter for power.—1st, Richmond & Chandler; 2d, E. Page & Co., Bedford.

Turnip-cutter for Cattle.—1st, F. H. Bentall, Maldon, Essex; 2d, J. Wingate, Alloa.

Turnip-cutter for Sheep.—E. H. Bentall.

Turnip-cutter for Sheep, attachable to a Cart.—1st, T. Sherriff, Dunbar; 2d, J. Kirkwood, Tranent.

Machine for Pulping Turnips.—1st, Picksley, Sims, & Co.; 2d, E. H. Bentall.

Root-washer.—1st, W. Crosskill, Beverley; 2d, Richmond & Chandler.

Linseed-bruiser.—1st, E. H. Bentall; 2d, Richmond & Chandler

Oilcake-bruiser.—1st, Richmond & Chandler; 2d, E. H. Bentall.

Grain Grinder or Bruiser.—1st, Picksley, Sims, & Co.; 2d, Richmond & Chandler.

Steaming Apparatus.—1st, A. & W. Smith; 2d, Smith & Co., Glasgow.

Feeding Troughs for Byres.—1st, John Robson, Glasgow; 2d, R. Brown, Paisley.

Feeding Troughs for Sheep.—1st, W. Kirkwood, Portobello; 2d, John Robson.

Sheep Fodder Rack.—1st, W. Kirkwood; 2d, James Kirkwood.

Churn by Hand.—1st, Robert Tinkler, Penrith; 2d, P. M'Lellan, Abernethy.

Churn by Power.—1st, R. Tinkler; 2d, James Eastwood, Blackburn.

Cheese Press.—1st, Smith & Co., Glasgow; 2d, A. & W. Smith.

Dairy Utensils.—Philip Hunter, 64, Nicolson Street, Edinburgh.

One-horse Cart.—1st, A. Scrimgeour, Methven; 2d, Robert Young, Auchterarder.

Harvest-Cart.—1st, J. & W. Anderson, Dunbar; 2d, J. Williamson, Camplebridge, Thornhill.

Light Spring-Cart.—W. Crosskill.

Farm Harness.—Hay Downie, Corstorphine, Edinburgh.

Stack-pillars with Framework.—1st, W. D. Young & Co.; 2d, Perry & Son, Glasgow.

Field-gate of Iron.—1st, W. D. Young & Co.; 2d, T. Wight, Perth.

Field-gate not entirely of Iron.—Thomas Gorrie, Perth.

Iron Hurdles.—1st, W. D. Young & Co.; 2d, Thomas Wight.

Iron Netting for Sheep-fence.—Thomas Wight.

At a meeting of General Committee and Judges, Mr. Hall Maxwell made a comparative statement of the entries at the Perth Show in 1852 and 1861. In 1861 there were 338 cattle against 313; horses, 155 against 135. In sheep, however, there was a decrease, and there were in 1861, 616, against 662 in 1852. In swine there was an increase, 79 against 50. In poultry, 390 against 186. In dairy produce there was a decrease in 1861, there being only 91 against 133. In implements there was a large increase as compared with 1852, there being in 1861 850, against 335 in the former year. Mr. Hall Maxwell also said that after the Dumfries Show pleuro-pneumonia had broken out among certain stock which had been exhibited there, and a correspondence had taken place upon the subject. Several intending exhibitors to the Perth Show had declined sending their stock forward if that of certain other exhibitors was allowed to come into the yard. He was sorry that any stock was to be withdrawn on such grounds. The stock objected to was that of Mr. Collie, near Elgin, and that of Lord Strathallan. Lord Strathallan had then deponed to his cattle having been free of disease for eight months, and Mr. Collie that his was free of it for four months.

Professor Dick said that pleuro-pneumonia might be communicated otherwise than by infection, and thought there was no risk in admitting to the Show Mr. Collie's stock.

The Duke of Athole said he was an exhibitor, and he was not under the slightest alarm in admitting Mr. Collie's stock, which he moved should be admitted.

The motion, after some further discussion, was agreed to, and it was ultimately agreed that no stock should be withdrawn after having been once in the yard.

The following is the Award of Prizes:—

CATTLE.

Short-horn.

Bull calved before Jan. 1, 1859.—1st, A. Cruickshank, Sittyton; 2d, S. Campbell, Kinnellar, Aberdeen; 3d, G. H. B. Home, of Argaty, Doune.

Bull calved after Jan. 1, 1859.—1st, J. Anderson, Bridge of Allan; 2d, Duke of Montrose; 3d, William Marr, Tarves.

Bull calved after Jan. 1, 1860.—1st, A. J. Balfour, Prestonkirk; 2d, William Stirling, of Keir, M.P.; 3d, W. S. Turnbull, Huntingtower.

Cow of any Age.—1st, R. Booth, Warlaby; 2d, R. Booth; 3d, D. Ainslie.

Heifer calved after Jan. 1, 1859.—1st, R. Booth; 2d, A. and A. Mitchell, Alloa; 3d, James Douglas, Athelstaneford.

Heifer calved after Jan. 1, 1860.—1st, J. Douglas; 2d, J. Douglas; 3d, J. Douglas.

Bull calved before Jan. 1, 1859.—1st, T. Lyell, Kirriemuir; 2d, A. Paterson, Blackhillock, Keith; 3d, A. Jardine, Lockerby.

Bull calved after Jan. 1, 1859.—1st, T. Lyell; 2d, J. Leslie, Blairgowrie; 3d, Trustees of Robert Scott.

Bull calved after Jan. 1, 1860.—1st, R. Walker, Montbletton, Banff; 2d, Trustees of Robert Scott; 3d, J. Collie, Ardgay.

Cow of any age.—1st, J. Collie; 3d, Earl of Southesk.

Heifer calved after Jan. 1, 1859.—1st, Trustees of Robert Scott; 2d, do.; 3d, do.

Best Heifer calved after Jan. 1, 1860.—1st, J. Leslie; 3d, J. Collie.

Ayrshire.

Bull calved before Jan. 1, 1859.—1st, Robert M'Kean, Lumloch, Bishopbriggs; 2d, Duke of Athole.

Bull calved after Jan. 1, 1859.—1st, J. Stewart, Strathaven; 2d, David M'Gibbon, Bathgate; 3d, J. Marshall, Motherwell.

Cow in Milk of any age.—1st, Earl of Strathmore; 2d, J. Frew, Kilsyth; 3d, John Marshall.

Cow in Calf of any age.—1st, J. Wilson, Roslin; 2d, G. Dunlop, Stewarton; 3d, J. Stewart.

Heifer calved after Jan. 1, 1859.—1st, Earl of Strathmore; 2d, J. Frew, Kilsyth; 3d, J. Stewart, Dunlop.

Heifer calved after Jan. 1, 1860.—1st, J. Stewart; [illegible] Stewart; 3d, G. Dunlop.

Highland.

Bull calved before Jan. 1, 1858.—1st, Marquis of Brea[dal]bane; 3d, Neil Mackellar, Kilmartin, Lochgilphead.

Bull calved after Jan. 1, 1858.—1st, R. D. Campbell; 2d, John M'Laren, Blair-Athole; 3d, Duke of Ham[ilton].

Bull calved after Jan. 1, 1859.—1st, Marquis of Breadalbane; 2d, R. D. Campbell; 3d, A. Pollok, Tarbert.

Cow of any age.—1st, D. M'Laren, Callander; 2d, A. [illegible] 3d, Marquis of Breadalbane.

Heifer calved after Jan. 1, 1858.—1st, A. Pollok; [illegible] Campbell; 3d, Marquis of Breadalbane.

Heifer calved after Jan. 1, 1859.—1st, Marquis of Breadalbane; 2d, D. M'Laren; 3d, Marquis of Breadalbane.

HORSES.

For Agricultural Purposes.

Stallion Foaled before Jan. 1, 1858.—1st, William [illegible] Lochend, Kilbirnie; 2d, J. Barr, Erskine; 3d, R. S[illegible] Kincardine.

Entire Colt Foaled after Jan. 1, 1858.—1st, J. Barr, [illegible] Peter Crawford, Strathblane; 3d, D. Crawford, Kilbarchan.

Entire Colt Foaled after Jan. 1, 1859.—1st, David Lo[illegible] Renfrew; 2d, James M. Russell, Haddington; 3d, M. [illegible] Gree, Beith.

Entire Colt Foaled after Jan. 1, 1860.—1st, Samuel Ch[illegible] Kilbarchan; 2d, J. Scott, Kirkton, Renfrew; 3d, W. Ke[illegible] Midcalder.

Mare (with Foal at foot) Foaled before Jan. 1, 1858.—[illegible] A. Naismyth, Granton; 2d, R. Murdoch, Cambus[lang]; [illegible] J. Watson, 21, Bath Street, Glasgow.

Mare in Foal, foaled before Jan. 1, 1858.—1st, [illegible] Balquhanran, East Kilpatrick; 2d, D. Robertson, [illegible] 3d, D. Logan, Renfrew.

Filly Foaled after Jan. 1, 1858.—1st, W. Pa[illegible] Riddell, Duntocher; 3d, J. Kerr.

Filly Foaled after Jan. 1, 1859.—1st, Andrew [illegible] Cardross; 2d, R. Findlay, Glasgow; 3d, John Barr, [illegible]

Filly Foaled after Jan. 1, 1860.—1st, J. M'[illegible] Matthew Scott, Kilmalcolm; 3d, James Eason, Inchs.

Ponies.

Pony Mare not over 14 nor under 12 hands.—1st, [illegible] Leslie, Thorn, Blairgowrie; 2d, A. Home, Blairgo[wrie]; [illegible] John Chapman, Abernethy.

SHEEP.

Blackfaced.

Best Tup not more than Four Shear.—1st, A. C[illegible] Lochgilphead; 2d, Alexander Campbell; 3d, Heirs [illegible] Watson, Biggar.

Shearling Tup.—1st, John Maclaren, Blair-Athole; [illegible] Thomas Murray, Penicuik; 3d, James Craig, New Cu[illegible]

Pen of Five Ewes, not more than Four Shear.—1st, [illegible] M'Laren; 2d, John M'Laren; 3d, Thomas Murray.

Pen of Five Shearling Ewes.—1st, Allan Pollok; 2d, [illegible] Drife, Sanquhar; 3d, John & Joseph M'Laren, Kirmen[illegible]

Cheviot.

Tup not more than Four Shear.—1st, James Brydon, [illegible]law, Langholm; 2d, Thomas C. Borthwick, Hopsrig, [illegible]holm; 3d, Thomas Brydon, Moffat.

Shearling Tup.—1st, Thomas Brydon; 2d, Thomas Bo[rth]wick; 3d, James Brydon.

Pen of Five Ewes not more than Four Shear.—1st, James Brydon; 2d, Thomas Borthwick; 3d, John Carruthers, [illegible]

Pen of Five Shearling Ewes.—1st, James Brydon; 2d, Thomas Borthwick; 3d, William G. Hunter, [illegible]

Leicester.

Tup not more than Four Shear.—1st, John [illegible] 2d, Thomas Simson, Lauder; 3d, Peter Reid, [illegible]

Shearling Tup.—1st, James Beattie; 2d, George Simson, [illegible] Kelso; 3d, James Beattie.

Five Ewes not more than Four Shear.—1st, Peter Reid; [illegible] David Wallace; 3d, H. A. Rannie.

Five Shearling Ewes.—1st, George Simson; 2d, Peter Reid, [illegible] 3d, Thomas Simson.

Long-woolled other than Leicester.

Tup not more than Four Shear.—1st, The Earl of Wemyss and March; 2d, John Gibson, Woolmet, Dalkeith; 3d, Lord Kinnaird.

Shearling Tup.—1st, The Earl of Wemyss and March; [illegible] John Gibson; 3d, Lord Kinnaird.

Five Ewes not more than Four Shear.—1st, John Gibson; 2d, Lord Kinnaird; 3d, R. Scot Skirving, Drem.

Five Shearling Ewes.—1st, Lord Kinnaird; 2d, R. S[cot] Skirving; 3d, John Gibson.

Southdown.

Tup not more than Four Shear.—1st, the Duke of Richmond; 2d, R. Scot Skirving; 3d, R. Scot Skirving.

Shearling Tup.—1st, the Duke of Richmond; 2d, R. [Scot] Skirving.

Five Ewes not more than Four Shear.—1st, Earl of [illegible] 2d, R. Scot Skirving; 3d, R. Scot Skirving.

Five Shearling Ewes or Gimmers.—1st, Duke of Richmond; 2d, R. Scot Skirving; 3d, R. Scot Skirving.

SWINE.

Boar, Large Breed.—1st, W. B. Wainman, Carhead, [illegible]hills; 2d, John Laing, Kinross; 3d, John Laing.

Boar, Small Breed.—1st, W. B. Wainman; 2d, David [illegible]

Sow, Large Breed.—1st, W. B. Wainman; 3d, [illegible] Carswell, Barrhead.

Sow, Small Breed.—1st, W. B. Wainman; 2d, Lord Kin[naird]; 3d, Thomas Findlay.

Three Pigs not exceeding Eight Months Old.—1st, [illegible] Wainman.

Three Pigs not exceeding Eight Months Old, Small Breed.—1st, George Mangles, Givendale, Ripon; 2d, John [illegible] Cross Arthurlie, Barrhead; 3d, Earl of Wemyss and March.

Miscellaneous.

The Duke of Bedford and Steam Cultivation.—Some four years ago, when steam ploughing had scarcely begun to attract public attention, a tenant farmer on the estate of the Duke of Bedford was enterprising enough to purchase for his own use a steam cultivating apparatus which he has successfully employed upon his farm, consisting of poor and strong clay land, on which he has succeeded in growing heavy crops of both corn and roots. The late Duke of Bedford took great interest in the experiment, and from time to time witnessed the results. Yesterday this enterprising tenant, whose name as a pioneer in steam cultivation is well known throughout England, was presented with a handsome silver tea-service, bearing the following inscription:—

"Presented to Mr. William Pike, of Stevington Lodge Farm, in testimony of his being the first tenant on the Bedford estate who showed the practicability of cultivating a clay land farm by steam power, by his landlord, William, eighth Duke

[illegible] by this present carry out the intention of his [illegible], Francis, seventh Duke of Bedford, K.G."

The presentation took place at Bedford, in the presence of a number of his Grace's tenants, and was accompanied by the following letter :—

"Belgrave Square, July 24.

"Sir,—I have pleasure in carrying out the intention of my [illegible]. I congratulate you on the success which has attended your [illegible] exertions. I hope that success will continue, [illegible] you may be amply remunerated for your outlay of capital, and have good health and long life to enjoy the fruits of your enterprising labour. It will be gratifying to me to learn hereafter that these anticipations are realised.

"Yours faithfully,

"Mr. William Pike, Stevington. "BEDFORD."

STATE OF THE WEATHER—BERKSHIRE.

For the Week ending August 1 : observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air. Max. in Sun.	Max. in Shade	Min.	Mean.	Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	26	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	S.W.	[illegible]
Saturday	27	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	W.	[illegible]
Sunday	28	[illegible]	[illegible]	44.5	59.2	[illegible]	[illegible]	W.	29.9[illegible]
Monday	29	[illegible]	[illegible]	46.5	60.2	[illegible]	..	S.W.	29.90
Tuesday	30	[illegible]	[illegible]	51.[illegible]	65.5	[illegible]	.	W.	29.64
Wednesday	31	74.[illegible]	[illegible]	46.5	60.5	63.0	0.02	S.W.	29.8[illegible]
Thursday	1	76.0	76.0	51.5	62.2	63.5	0.15	S.W.	29.90

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain gauge is 7 feet from the ground.

Notices to Correspondents.

GRASS : *J J.* The Grass is the Avena flavescens—Yellow Oat Grass. Your notes on the change in the meadow resulting from cultivation are very interesting, and we shall hope to remark further upon the subject at some future time. The little book on Meadow and Pasture Grasses by Professor Buckman of Cirencester will perhaps be the best for your purpose. Sowerby is publishing Engravings of Grasses, which are well done, and therefore somewhat costly.

IMPORTATION OF AGRICULTURAL PRODUCE, LIVE STOCK, &c., for the Six Months ended June 30, 1861 : *R.* :—

I. ARTICLES FREE OF DUTY.		Importations. 1860	1861
Oxen, bulls, and cows	No.	17,198	22,045
Calves	,,	7965	6,187
Sheep and lambs	,,	76,415	46,674
Swine and hogs	,,	2,492	4,309
Bark, for tanners' or dyers' use ..	,,	164,607	114,906
Bones (whether burnt or not, or as animal charcoal)	tons	24,508	26,068
Flax	cwts.	459,998	865,770
Guano	tons	67,448	89,255
Hemp	cwts	12[illegible],275	1[illegible]8,948
Oil seed cakes	tons	48,[illegible]	[illegible],913
Potatoes	cwts.	76,142	136,418
Bacon and hams	,,	191,562	226,970
Beef, salt	,,	178,656	84,564
Pork, salt	,,	110,076	75,058
Butter	,,	321,404	380,933
Cheese	,,	165,015	226,865
Eggs	No.	93,1[illegible]	110,085,120
Lard	cwts	141,[illegible]	203,018
Wool	lbs.	65,277,617	57,694,430

II. ARTICLES SUBJECT TO DUTY.

		Importations. 1860	1861	Entered for Home Consumption. 1860	1861
Wheat	qrs.	1,394,432	3,664,529	1,394,4[illegible]	3,664,529
Barley	,,	1,032,812	913,322	1,032,81[illegible]	913,322
Oats	,,	832,180	896,458	832,18[illegible]	896,458
Peas	,,	97,929	199,545	97,929	199,545
Beans	,,	197,675	256,531	197,675	256,531
Indian Corn, or Maize	,,	742,125	1,347,224	742,125	1,347,224
Wheatmeal & Flour	cwt	1,429,536	3,677,461	1,429,536	3,677,461
Indian Corn-meal ..		2,132	3,099	2,132	3,099

LAND AGENCY : *R L Rennie.* We do not know any such book as you imagine. Professor Low's work on "Landed Property" comes nearest the thing.

MANURE IRRIGATION : *Ignoramus* asks Mr. Blackburn if there are any objections to the use of cold spring water? what height is it requisite the tanks should be above the land to be irrigated, in order to distribute the liquid by pressure? and what have been the results on Peat Moss meadows and dry upland pastures? Can the system be properly carried out in paved cattle sheds, &c., without incurring the expense of placing the cattle, &c., on boards?

MR. SHEARINGTON'S "MODERN SYSTEM OF FARRIERY": *D P Davies.* We have not read the work and therefore are unable to give any opinion upon it. *W C S.*

POULTRY : London is out of town. The men who drive the vans from the South-Eastern, Brighton, Eastern Counties, and Great Northern Railways, no longer wake some of her Majesty's lieges, and frighten others as they gallop to the market at Leadenhall. The porters are no longer waiting their arrival ; the salesmen and their assistants look almost with contempt—certainly with indifference—on the packages as they reach their stalls, and the buyers saunter about like men who have nothing to do. The season is over ; there is no one in town, and the weather makes speculation in perishable goods a certain and speedy loss. But all this is foreseen and expected ; it always was so, and always will be in August. If such a state of trade occurred in June, November, or March, every one would notice it, and all would be asking why and how it happened, but now it is a natural state of things, and coming after a period of much excitement and scarcity, it is accepted as such by senders, buyers, and salesmen.

Large Fowls	Each	3s. 6d.	to	4s. 0d.
Middling ditto	,,	2 6	,,	3 0
Chickens	,,	1 9	,,	2 0
Geese	,,	5 0	,,	5 6
Ducklings	,,	2 6	,,	3 0
Pigeons	,,	0 8	,,	0 9
Rabbits	,,	1 3	,,	1 4
Wild ditto	,,	0 8	,,	0 9

WEANING CALVES : *Ich Dien* would much oblige us by his address. A reader of his account of rearing calves would like to know how old the cows are when he begins weaning, viz. in October ; if he purchases them with calves by their side or not ; if he lets them dry the following April or May preparatory for fattening ; and what would be the average value of those calves when fit to turn out to Grass?

Gutta Percha Tubing for Watering Gardens.

THE GUTTA PERCHA COMPANY have the pleasure to acknowledge the receipt of the following *Testimonial from* Mr. J. FARRAH, *Gr. to* BOSWELL MIDDLETON JALLAND, Esq., *of Holderness House, near Hull.*

"I have had 400 feet of your Gutta Percha Tubing, in lengths of 1[illegible] feet each, with union joint, in use for the last 12 months for watering these gardens, and I find it to answer better than anything I have ever yet tried. The pressure of the water is very considerable, but this has not the slightest effect on the tubing. I consider this tubing to be a most valuable invention for Gardeners, inasmuch as it enables us to water our gardens in about one half the time, and with one-half the labour required."

Manufactured by the GUTTA PERCHA COMPANY, Patentees, 18, Wharf Road, City Road, London, E.C., and sold by their Wholesale Dealers in town and country.

"FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.

PROTECTION FROM THE COLD WINDS & MORNING FROST.

"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for [illegible] and floricultural purposes, for preserving [illegible] and flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.

Two yards wide .. .. 1s. 6d. per yard run.
Four yards wide .. .. 3s. per yard.
An improved make, 3 yards wide, 2s. 6d. per yard run.

Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard run.

ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7 Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.

"It is much cheaper than mats as a covering."

FOR SALE, on very advantageous terms, 7 HOT HOUSES, GREENHOUSES, and CONSERVATORIES of all sizes and shapes.

Apply for further particulars to E. DENCH, King's Road, Chelsea, S.W.

GLASS FOR GREENHOUSES.—

SHEET GLASS, Stock Sizes, 16 oz.

Boxes included.	3rds.	4ths.
11 by 9, 12 by 9, 13 by 9, 14 by 9 .. / 12 ,, 10, 13 ,, 10, 14 ,, 10, 15 ,, 10 ..	14s. 0d.	12s. 6d.
13 ,, 11, 14 ,, 11, 15 ,, 11, 16 ,, 11 .. / 14 ,, 12, 15 ,, 12, 16 ,, 12, 17 ,, 12 .. / 18 ,, 12, 19 ,, 12, 20 ,, 12 .. / 16 ,, 13, 17 ,, 13, 18 ,, 13 .. / 19 ,, 13, 20 ,, 13, 21 ,, 13 .. / 16 ,, 14, 17 ,, 14, 18 ,, 14 .. / 19 ,, 14, 20 ,, 14, 21 ,, 14 ..	16s. 0d. per 100 feet.	13s. 6d.

English Glass of the above sizes, 18s. per 100 feet.

SMALL SHEET SQUARES, IN 100 FEET BOXES.

6 by 4	6½ by 4½	7 by 5	7½ by 5½	11s. 6d
8 ,, 6	8½ ,, 6½	9 ,, 7	9½ ,, 7½	
		10 ,, 8	10½ ,, 8½	12 6

Boxes 2s. each, returnable at full price.

GLASS FOR ORCHARD HOUSES,
As supplied by us to Mr. Rivers.

		16 oz.	21 oz.
20 in. by 12 in. / 20 in. by 13 in.	Common	13s. 6d.	£1 1s.
20 in. by 14 in.	Superior do.	16 0	1 3
20 in. by 15 in.	English Glass	18 0	1 9

The above prices include the Boxes.

Perforated Glass for Ventilation. Patent Plate and Polished Plate Glass. Ornamental and Coloured Glass.

London Agents for Hartley's Improved Patent Rough Plate.

Linseed Oil, Genuine White Lead, Carson's Paints, Paints of various colours ground ready for use.

Milk Pans, Propagating Glasses, and every description of Glass for Horticultural purposes.

JAMES PHILLIPS & Co., 180, Bishopsgate Street Without, London, E.C.

TRIAL OF LAWN MOWERS.—On the 15th inst. a Public Trial of Lawn Mowing Machines, in connection with the Floral, Horticultural, and [illegible] Exhibition, held on the 16th, 17th, and 18th inst., in the Infirmary Gardens, Leeds, took place in the Leeds Royal Park. The only competitors were Mr. Samuelson and Mr Green, the latter of whom obtained the Three Prizes offered, viz. :—3l. for Horse Lawn Mowing Machine ; 2l. for Double-handed Mowing Machine ; and 1l. for Single handed Mowing Machine. The Judges were Mr Carr, Gardener to John Cooper, Esq., Gledhow ; and Mr. Ellis, Gardener to E. Hudson, Esq., of Roundhay.

N.B. All the Mowing Machine Makers were invited for competition.

Priced Lists may be obtained on application to THOS GREEN, Leeds ; or from W. GREEN, at the Depôt, 2, Victoria Street, Holborn Hill, E.C.

Important to Gardeners, &c.

SUPERIOR NEW GARDEN NETTING, to be had in pieces of any size (cheap), on application to Mr. A., 23, Esk Terrace, Whitby.

TANNED NETTING for Fruit Trees, at reduced prices ; 200 square yards, 10s. ; 500 yards, 24s. Screen Canvas for Wall Fruits ; Tulip Covers, Sun Shades, and Awnings ; Rick Cloths, with Poles and Ropes complete ; Marquees, Tents, and Flags, for sale or hire.

EDGINGTON & Co., 17, Smithfield Bars, London, E.C.

TANNED GARDEN NETTING for preserving Seed Beds, Fruits, Strawberries, from Frost, Blight, Birds, &c., and as a Fence for Fowls, &c. 1 yard wide, 1½d. ; 2 yards, 3d. ; 3 yards, 4½d. ; and 4 yards, 6d. per yard, in any quantity, may be had at CHAS. WRIGHT'S, 376, Strand, W.C.

Greenhouse and Flower-pot Sticks Varnished :—1 foot, 3d. ; 1½, 4d. ; 2, 5d. ; 2½, 7d. ; 3, 10d. ; 4, 1s. 6d. per dozen. Dahlia Sticks Varnished, per dozen :—3 feet, 1s. 6d. ; 4, 2s. 3d. ; 5, 3s. ; 6, 3s. 6d. An allowance to Nurserymen.

For Watering Gardens, Lawns, &c.

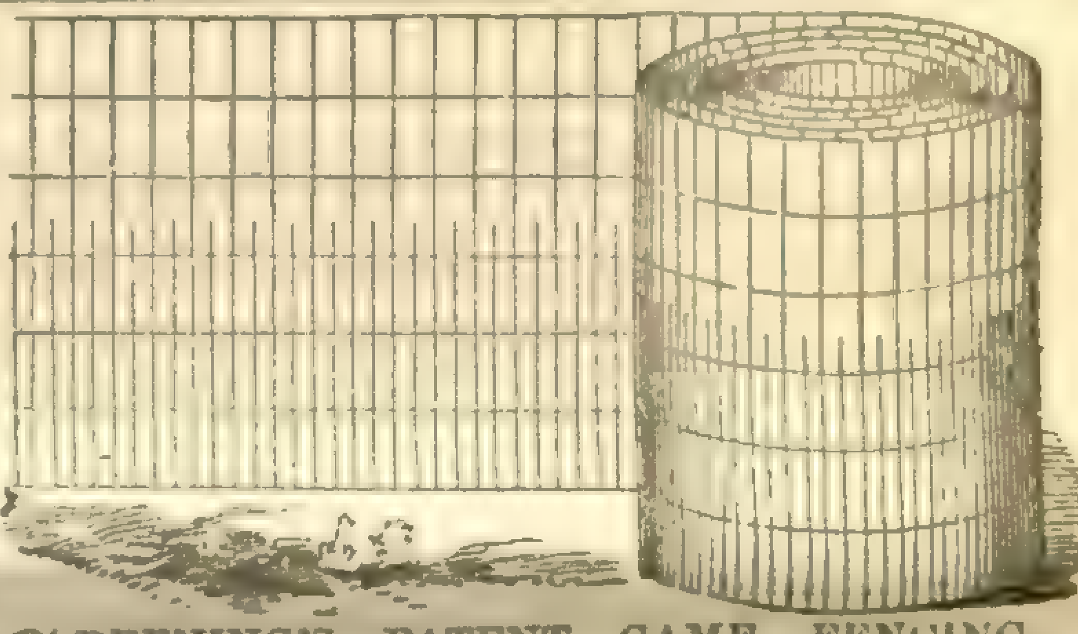
HANCOCK'S VULCANISED INDIA-RUBBER TUBING is made in 60 feet lengths, and of any size for Union-joints to attach it to Cisterns or Water Mains.

PRICE PER FOOT.

Size.	½ inch	⅝ inch	¾ inch	PRICE OF BRASS FITTINGS.
Slight ..	5d.	6d.	7d.	Branch, 12 in. long, with Stopcock, Rose, and Jet, 4s. each.
Medium ..	8d.	9d.	10d.	
Stout ..	10d.	11d.	1s.	Spring Spreader 3s. each.
For Mains	1s. 2d.	1s. 3d.	1s. 5d.	Union Joint, ½ inch, 1s. each.

JAMES LYNE HANCOCK, MANUFACTURER, Vulcanised India Rubber Works, Goswell Mews, and 8, Goswell Road, London, E.C.

N.B. Illustrated Price Lists on application.



GREENING'S PATENT GAME FENCING.—

Testimonial from WM. INGRAM, Esq., *Gardener to his Grace the* DUKE OF RUTLAND.

"I find it extremely convenient, elegant in appearance, and perfectly efficient as a rabbit fence. I shall certainly employ it in preference to the usual Wire Netting whenever I require anything of the kind."

New Illustrated Catalogue of all kinds of Iron and Wire Fences, Iron Gates, &c., now ready and post free, on application to GREENING & Co.

Victoria Iron and Wire Works, 81, Oxford Street, Manchester.

THOMAS MILLINGTON,
HORTICULTURAL GLASS WAREHOUSE,
87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.

ESTABLISHED 1750.

Fig. A.

Fig. B.

PRESERVE JARS.

Figs. E.

Fig. C.

Fig. F.

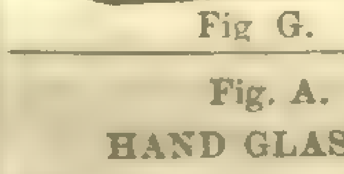


Fig. G.

Fig. D.

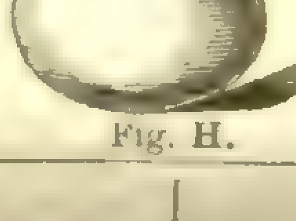


Fig. H.

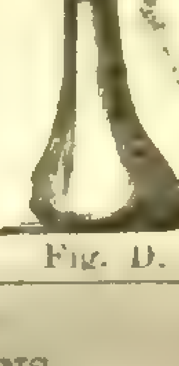


Fig. D.

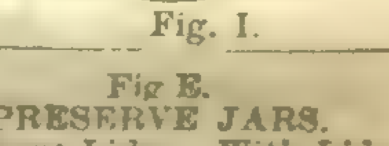


Fig. I.

Fig. A. HAND GLASSES.

12 inches ..	6s. 0d.	each
14 ,, ..	7 0	,,
16 ,, ..	8 0	,,
18 ,, ..	9 0	,,
20 ,, ..	10 0	,,
24 ,, ..	12 0	,,

If open top 1s. extra.

Fig. B. PROPAGATING GLASSES.

2 inches ..	0s. 3½d.	each
4 ,, ..	0 5½	,,
6 ,, ..	0 8	,,
10 ,, ..	1 4	,,
12 ,, ..	1 9	,,
16 ,, ..	3 6	,,
18 ,, ..	5 0	,,
20 ,, ..	7 0	,,

Fig. C. MILK PANS.

6 inches ..	0s. 6d.	each.
10 ,, ..	1 0	,,
14 ,, ..	1 9	,,
18 ,, ..	2 9	,,
20 ,, ..	3 3	,,
22 ,, ..	3 9	,,
24 ,, ..	4 6	,,
26 ,, ..	5 6	,,

Fig. E. PRESERVE JARS.

	Without Lids.	With Lids.	
3 inches	0s. 4½d.	0s. 6½d.	ea.
4 ,,	0 6	0 9	,,
5 ,,	0 8	0 11	,,
6 ,,	0 10	1 2	,,
7 ,,	1 0	1 4	,,
8 ,,	1 4	1 8	,,
9 ,,	1 8	2 2	,,
10 ,,	2 0	2 8	,,

Fig. D. HYACINTH GLASSES.

Common .. 3s. 0d. per dozen,
Improved .. 3 6 ,,

CROCUS GLASSES.

Common .. 2s. 0d. per dozen.
Improved .. 2 6 ,,

Fig. F. HYACINTH DISHES.

6 inches ..	1s. 0d.	each.
9 ,, ..	1 6	,,
12 ,, ..	2 6	,,

Fig. G. CUCUMBER TUBES.
1d. per running inch.

Fig. I. ROLLING PINS.
1½d. per running inch.

OPAL DITTO.

14 inches ..	3s. 6d.	each
16 ,, ..	4 0	,,
18 ,, ..	4 6	,,

Fig. H. FISH GLOBES.

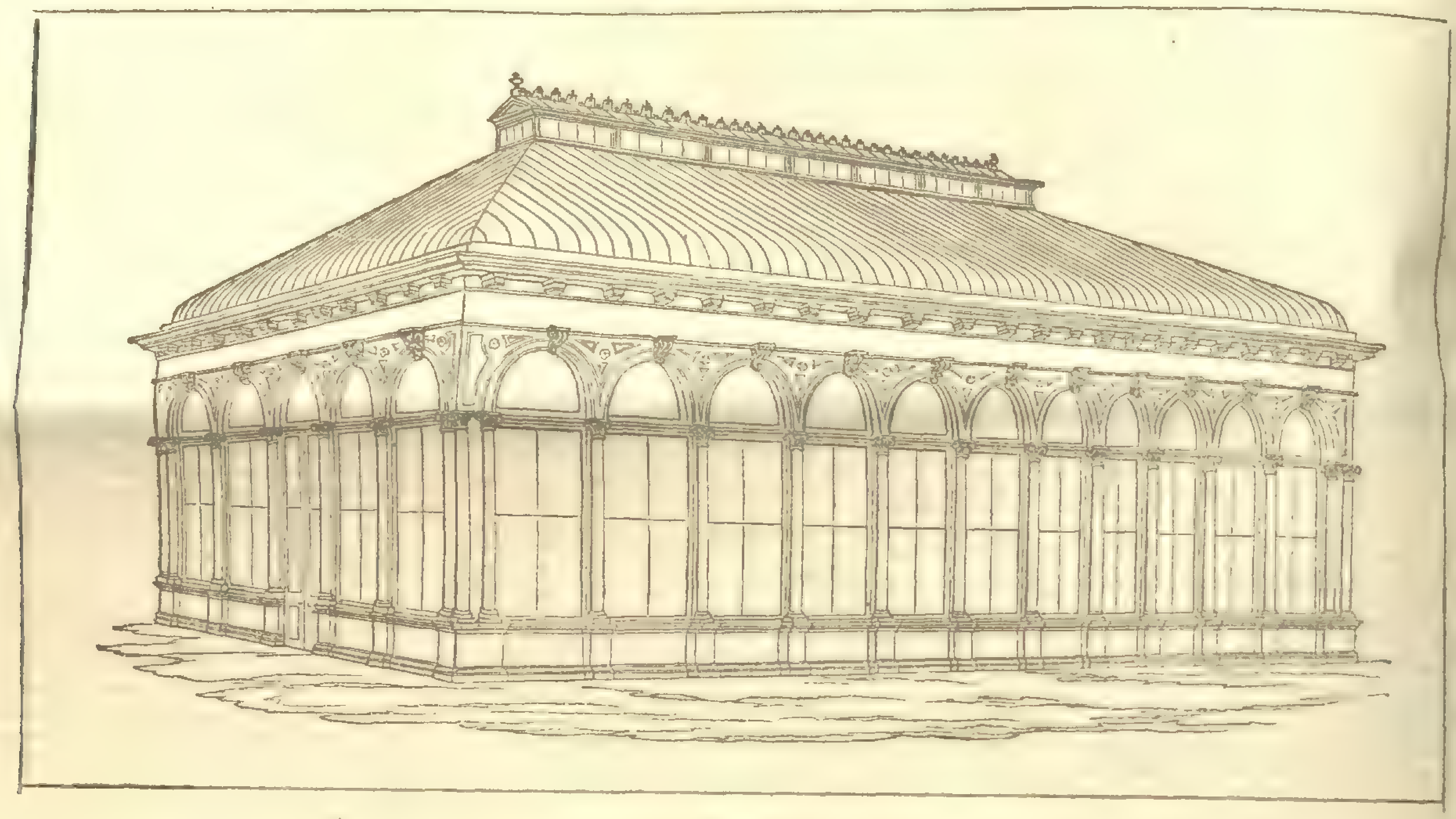
	With Feet.	Without Feet.	
8 inches	1s. 9d.	3s. 6d.	each.
10 ,,	2 3	4 0	,,
12 ,,	3 0	4 6	,,
14 ,,	4 0	6 6	,,
16 ,,	5 0	9 0	,,

Intermediate Sizes in proportion.

Crystal Glass Shades, Ebony and Gilt Stands, Gas and Lamp Glasses, Chimneys and Globes, &c.

☞ *For Window and Orchard House Glass see Advertisement of July 30.*

HORTICULTURAL BUILDER TO **HER MAJESTY,**



AND

HOT-WATER APPARATUS MANUFACTURER

TO THE COMMISSIONERS OF

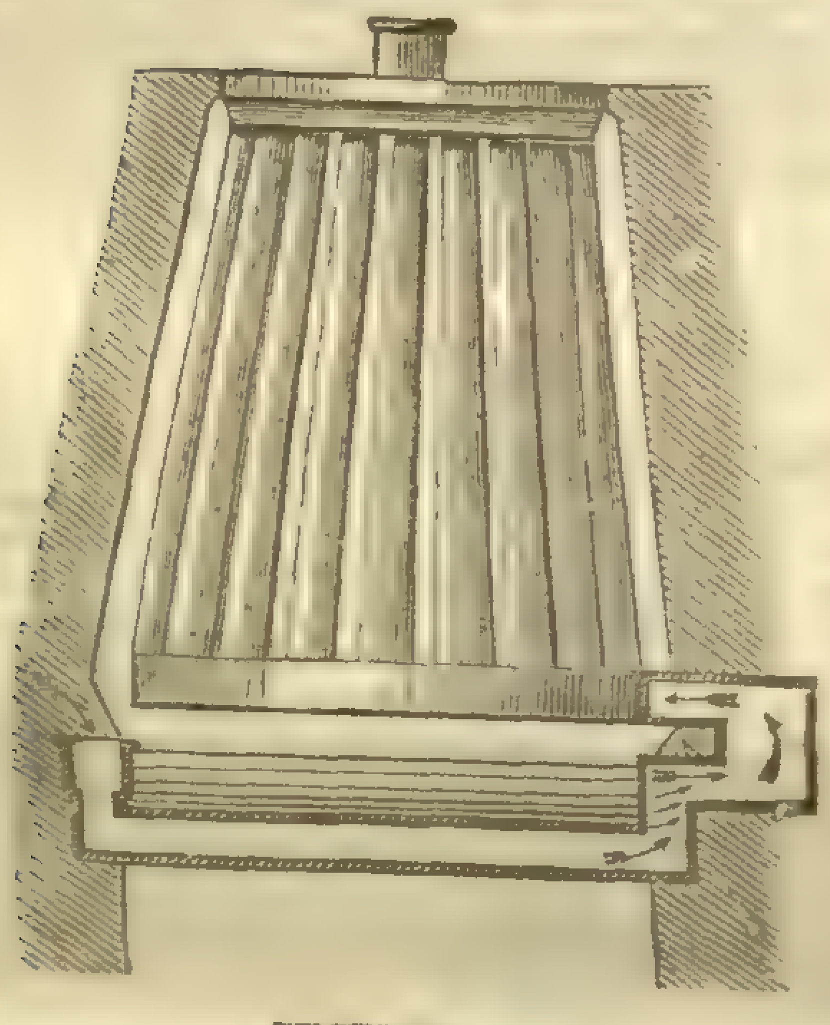
HER MAJESTY'S ROYAL PALACES AND PUBLIC BUILDINGS,

AND TO

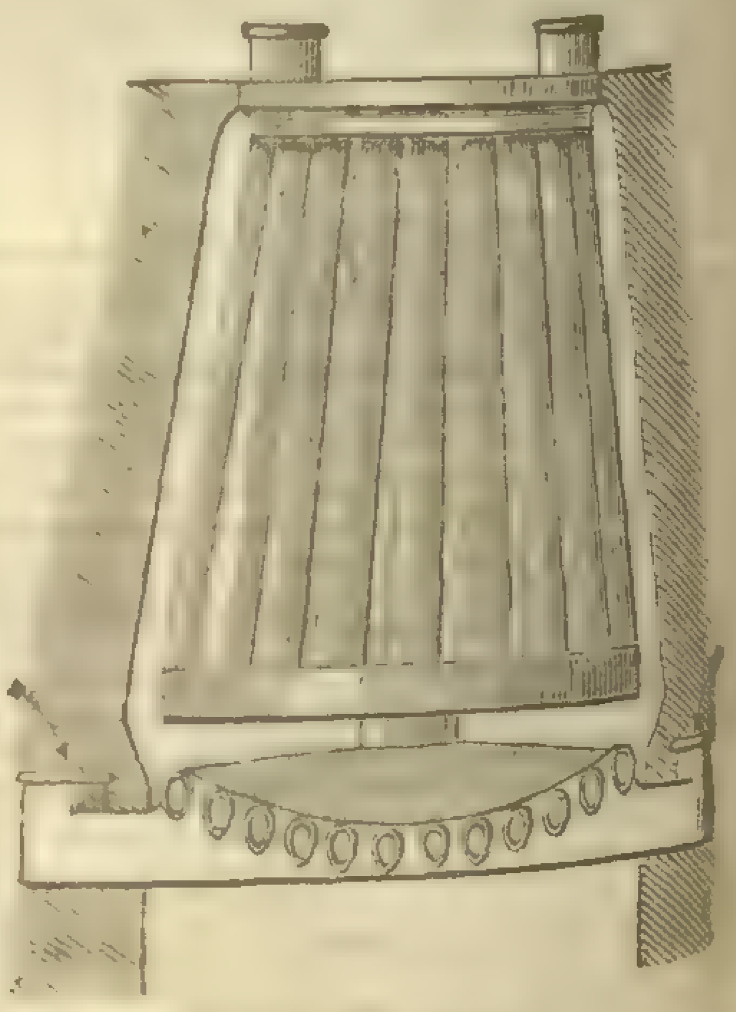
THE ROYAL HORTICULTURAL SOCIETY OF LONDON.

HENRY ORMSON, Horticultural Builder and Hot-Water Apparatus Manufacturer,
STANLEY BRIDGE, KING'S ROAD, CHELSEA, LONDON, S.W.

BY HER MAJESTY'S ROYAL LETTERS PATENT.



SECTION.



SECTION.

ORMSON'S PATENT JOINTLESS TUBULAR BOILER

Is now from Practical Tests allowed to be the best ever invented for Efficiency, Power, and Economy, and from the following Facts it will be manifest to every person's understanding that it must be infinitely more safe for carrying out the One-Boiler System than any other Upright Tubular Boiler. For instance the ordinary old-fashioned Jointed Upright Tubular Boilers made by all other manufacturers, having 20 tubes for the Boiler, and 12 tubes for the Waterway Furnace bars, would have 64 joints made of cement and rope yarn all exposed to the direct Action of the Fire, whereas in Ormson's Patent there is not One Joint upon which the Fire can act, hence the great advantage and security of this Patent.

These Boilers are made of various sizes so as to suit the Amateur, or for heating the Largest Establishments on the One-Boiler System.

Horticultural Buildings of every Description Manufactured by Steam-Power Machinery. Lowest Prices and best Materials.

PLANS, SPECIFICATIONS, AND ESTIMATES FREE ON APPLICATION.

HENRY ORMSON, Horticultural Builder and Hot-Water Apparatus Manufacturer,
STANLEY BRIDGE, KING'S ROAD, CHELSEA, LONDON, S.W.

GLASS FOR GREENHOUSES.—
ENGLISH GLASS.
16 ounces to the foot, in Sheets averaging 40 by 30, packed in Cases containing 300 feet, at 3l. 3s. per Case.
FOREIGN SHEET GLASS.
16 ounces, 4th quality, 300 ft., 1l. 19s. 9d.; Superior, 2l. 14s. 6d.; 21 ounces, 3l. 6s.; Superior, 4l. 1s.
GLASS FOR ORCHARD HOUSES,
As supplied by us to Mr. Rivers.

		16 oz.	21 oz.
20 in. by 12 in.			
20 in. by 13 in.	Common	13s. 6d. ..	£1 1s.
20 in. by 14 in.	Superior do.	16 0 ..	1 3
20 in. by 15 in.	English Glass	18 0 ..	1 9

GLASS cut to any given sizes not on the List.
16 oz.—4ths, 1¾d., 2d., and 2¼d. per foot
" 3rds, 2¼d., 2½d., and 3d. per foot
21 oz.—4ths, 2¾d., 3d., and 3½d. per foot
" 3rds, 3½d., 4d., and 4½d. per foot
SMALL SHEET SQUARES, in 100 feet Boxes.

6 by 4	6½ by 4½	7 by 5	7½ by 5½	11s. 6d.
8 " 6	8½ " 6½	9 " 7	9½ " 7½	
	8½ " 6½	10 " 8	10½ " 8½	12 6

Boxes 2s. each, returnable at full price.
London Agents for Hartley's Improved Patent Rough Plate.
Linseed Oil, Genuine White Lead, Carson's Paints, Paints of various colours ground ready for use.
Milk Pans, Propagating Glasses, and every description of Glass for Horticultural purposes.
James Phillips & Co., 180, Bishopsgate Street Without, London, E.C.

TANNED NETTING for Fruit Trees, at reduced prices; 200 square yards, 10s.; 500 yards, 24s. Screen Canvas for Wall Fruits; Tulip Covers, Sun Shades, and Awnings; Rick Cloths, with Poles and Ropes complete; Marquees, Tents, and Flags, for sale or hire.
Edgington & Co., 17, Smithfield Bars, London, E.C.

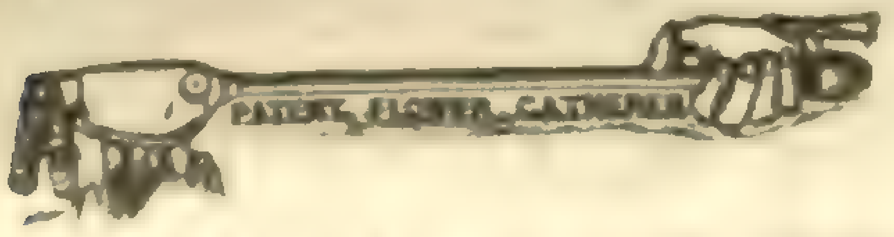
Important to Gardeners, &c.
SUPERIOR NEW GARDEN NETTING, to be had in pieces of any size (cheap), on application to Mr. A., 22, Esk Terrace, Whitby.

For Watering Gardens, Lawns, &c,
HANCOCK'S VULCANISED INDIA-RUBBER TUBING is made in 60 feet lengths, and of any size for Union-joints to attach it to Cisterns or Water Mains.

Size.	½ inch	⅝ inch	¾ inch	Price of Brass Fittings.
	Price per Foot.			
Slight ..	5d.	6d.	7d.	Branch, 12 in. long, with Stop-cock, Rose, and Jet, 4s. each.
Medium ..	8d.	9d.	10d.	
Stout ..	10d.	11d.	1s.	Spring Spreader 3s. each.
For Mains	1s. 2d.	1s. 3d.	1s. 5d.	Union Joint, ½ inch, 1s. each.

JAMES LYNE HANCOCK, Manufacturer,
Vulcanised India-Rubber Works, Goswell Mews, and 8, Goswell Road, London, E.C.
N.B. Illustrated Price Lists on application.

GMELIN'S PATENT FLOWER AND FRUIT GATHERERS, with which a Lady can gather a Flower



from the back shelves of a Greenhouse or the centre of a Flower bed without any difficulty or chance of injuring the plant. It cuts the flower or gathers the fruit, and holds it (until released by the hand) so gently as not to disturb the bloom of the ripest Peach.
To Fruit Growers they are particularly useful, as small branches, bunches of Grapes, Vine shoots, fruit, &c., may be cut at any height from the ground without climbing. Prices 18s., 20s., 22s., and 24s. each.
Patentees: A. Gmelin & Co., Crosby Hall Chambers, Bishopsgate, E.C.; and sold by Mr. Kernan, Florist, Great Russell Street, Covent Garden, W.C.; and at the American Stove Warehouse, 155, Cheapside, E.C.

SHAW'S TIFFANY for SHADING, &c.—
Sold in Pieces. Per piece.—s. d.
No. 1, 20 yards long, by 38 inches wide 5 0
No. 2, do., do., the same material, manufactured with a Patent Mineral Solution to prevent it from rotting .. 6 0
No. 3 (double strength), 18 yards long by 39 inches wide .. 7 6
No. 4 (treble strength), 18 yards long by 39 inches wide .. 9 0
Sold by all respectable Seedsmen. See that every piece is marked "Shaw's Tiffany," Manchester. Samples and Circulars sent free by post.
John Shaw & Co., 29, Oxford Street, Manchester.

"FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.
PROTECTION from the COLD WINDS & MORNING FROST.
"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.
Two yards wide .. .. 1s. 6d. per yard run.
Four yards wide .. .. 3s. per yard.
An improved make, 3 yards wide, 2s. 6d. per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard run.
Elisha Thomas Archer, Whole and Sole Manufacturer, 7 Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.
"It is much cheaper than mats as a covering."

Gutta Percha Tubing for Watering Gardens.
THE GUTTA PERCHA COMPANY have the pleasure to acknowledge the receipt of the following Testimonial from Mr. J. Farrah, Gr. to Boswell Middleton Jalland, Esq., of Holderness House, near Hull.
"I have used 400 feet of your Gutta Percha Tubing, in lengths of 100 feet each, with union joint, in use for the last 12 months for watering these gardens, and I find it to answer better than anything I have ever yet tried. The pressure of the water is very considerable, but this has not the slightest effect on the tubing. I consider this tubing to be a most valuable invention for Gardeners, inasmuch as it enables us to water our gardens in about one half the time, and with one-half the labour required."
Manufactured by the Gutta Percha Company, Patentees, 18, Wharf Road, City Road, London, E.C., and sold by their Wholesale Dealers in town and country.

HEATING BY HOT WATER.

J. JONES,

IRON MERCHANT AND HOT-WATER APPARATUS MANUFACTURER,

6, BANKSIDE, LONDON, S.E.

J. JONES supplies or erects complete HOT-WATER APPARATUS for Heating GREENHOUSES.

Illustrated Catalogues and Estimates on application.

J. JONES supplies or erects complete HOT-WATER APPARATUS for Heating CONSERVATORIES.

Illustrated Catalogues and Estimates on application.

J. JONES supplies or erects complete HOT-WATER APPARATUS for Heating VINERIES.

Illustrated Catalogues and Estimates on application.

J. JONES supplies or erects complete HOT-WATER APPARATUS for Heating FORCING HOUSES.

Illustrated Catalogues and Estimates on application.

J. JONES supplies or erects complete HOT-WATER APPARATUS for Heating CUCUMBER or MELON PITS with Pipes for Top or Bottom Heat.

Illustrated Catalogues and Estimates on application.

J. JONES supplies or erects complete HOT-WATER APPARATUS for Heating ORCHARD HOUSES.

J. JONES supplies or erects complete HOT-WATER APPARATUS for Warming COACH HOUSES, HARNESS ROOMS, &c.

J. JONES supplies or erects complete HOT-WATER APPARATUS for Warming HALLS, BILLIARD ROOMS, &c.

J. JONES supplies or erects complete HOT-WATER APPARATUS for Warming the whole of HOUSES, to suit the requirements of the Cottage or the Mansion.

J. JONES supplies or erects complete HOT-WATER APPARATUS for Warming CHURCHES, CHAPELS, and every description of PUBLIC BUILDING.

J. JONES has the largest Stock of HOT-WATER PIPES and CONNECTIONS.

J. JONES has the largest Stock of BOILERS of the most approved construction.

J. JONES has a large Stock of CAST-IRON GARDEN ORNAMENTS, CHAIRS, SEATS, TABLES, GARDEN ROLLERS, VASES, &c.

J. JONES fits up CONSERVATORIES with IRON STAGES, STANDS, COLUMNS, VASES, FOUNTAINS, &c.

J. JONES sends EXPERIENCED MEN to all parts of the country to take particulars of work required to be done when desired, before giving an Estimate for the work.

J. JONES will be happy to forward PRICES and ILLUSTRATED CATALOGUES for any description of CASTING delivered to Wharf or Rail in London, or to any Railway Station in England.

J. JONES will forward free of charge PLANS and ESTIMATES for every description of HOT-WATER APPARATUS.

J. JONES, Hot-Water Apparatus Manufacturer,

6, Bankside, London, S.E.

Card.
SAMUEL N. McGERROW,
General Horticultural Builder,
Knotty Ash, near Liverpool.
Reference permitted to the Nobility and Gentry throughout Great Britain and Ireland.

J. VOKINS, 2, York Place, Chelsea, S.W.—HOTHOUSES fixed, complete, from 1s. 4d. per foot; HOTWATER APPARATUS for same, with 2-inch pipes, 9d. per foot; 3-inch ditto, 1s.; 4-inch ditto, 1s. 2d.; Dips and other castings, 21s. per cwt.
TUBULAR BOILERS, from 3l.

HOT-WATER APPARATUS FITTED in every description of Hothouses, Mansions, Churches, Chapels, &c., on the most approved principle, by J. Meredith, Vine Cottage, Garston, near Liverpool.
N.B. First-class references may be had on application.

Horticultural Works and Hot-Water Apparatus Manufactory,
Kensal Green, Harrow Road, London, W.
JOHN TAYLOR and SON beg to call the attention of the nobility and gentry to the very superior manner in which they Erect all kinds of Conservatories, Vineries, Greenhouses, &c., combining every improvement with elegance of design and durability of materials and workmanship.
Their VENTILATING APPARATUS for the Fronts and Roofs of Houses has given the highest satisfaction. Churches, Chapels, Schools, Entrance Halls, Public Buildings, &c., heated with Hot-Water Apparatus in a most economical and efficient manner.
J. T. & Son have great pleasure in referring to numbers of the nobility and gentry by whom they are extensively engaged.

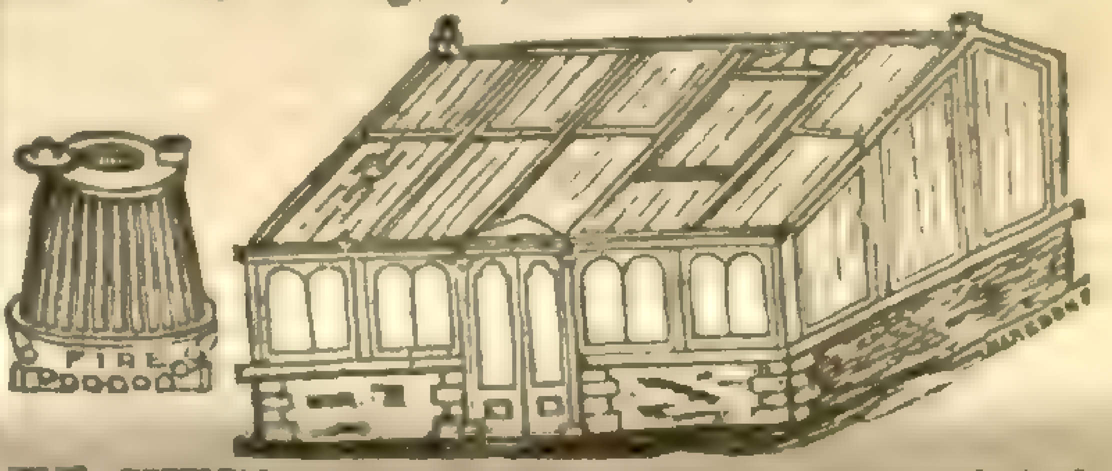
Greenhouses, Orchard Houses, &c.
H. FREEMAN'S Horticultural Works, Triangle, Hackney, N.E. Established 20 years. Substantially made Greenhouses, glazed, ready for fixing, 42 feet by 13 feet, 50l.; 21 feet by 13 feet, 28l.; 12½ feet by 10 feet, 15l. Orchard Houses 10 per cent. cheaper. A large assortment kept.
Estimates given for Heating, or any branch in iron or wood.

CONSERVATORY for SALE.—A handsome first-rate Span Roof, with Cant Ends, Conservatory, 47 feet long 18 feet wide, quite new.
To be seen at H. Freeman's, Triangle, Hackney, N.E.

FOR SALE, on very advantageous terms, 7 HOT-HOUSES, GREENHOUSES, and CONSERVATORIES of all sizes and shapes.
Apply for further particulars to E. Deacon, King's Road, Chelsea, S.W.

HORTICULTURAL TOOLS, LAWN MOWERS, &c., delivered Carriage Free. Also Chaff-cutters at 50s. each, Churns 25s. Price Lists post free.
Burgess & Key, Manufacturers, 95, Newgate Street, London, E.C.

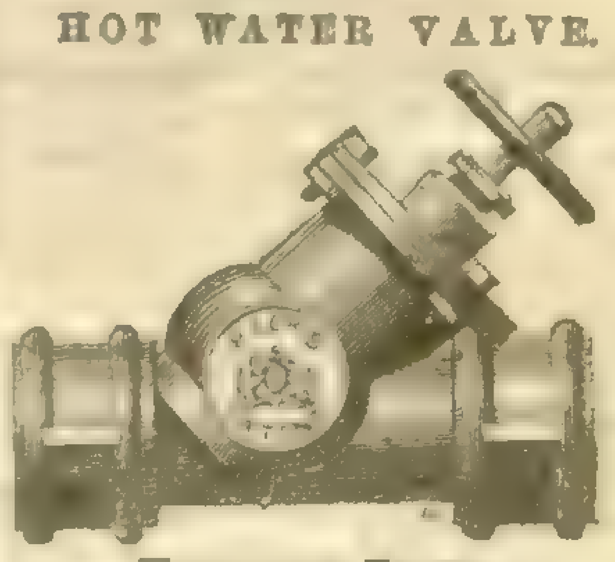
West of England, Ireland, and Wales.



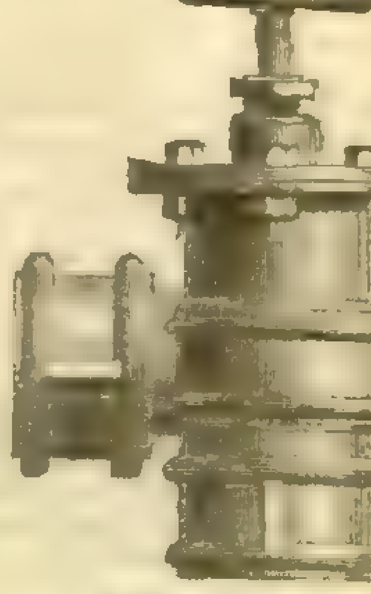
V. SKINNER (late Partner with J. Weeks & Co.), Horticultural Builder and Hot-Water Apparatus Manufacturer. Establishments Heated on the ONE-BOILER SYSTEM. Plans and Estimates on application.
Bridewell Street, Bristol.

Horticultural Works, Danvers Street, Chelsea, S.W.

BECK'S PATENT
HOT WATER VALVE.



Horizontal Valve.
2" 18s. 6d.; 3" 25s.; 4" 30s.



Angle Valve.
2" 17s.; 3" 23s.; 4" 28s.

JAMES GRAY, Sole Agent, begs to call attention to this most simple and perfect Valve ever invented. It is perfectly water tight, and is never liable to get out of order, or to get fixed by standing.
To Architects, Engineers, Gardeners, & Others.—Beck's Patent Valve has been submitted to several of the most scientific men of the day, and has invariably met with unqualified approval. A liberal Discount to the Trade.
Conservatories, Greenhouses, Vineries, and every description of Hothouse erected on the most improved principles, and of best materials, at the lowest possible price consistent with good workmanship.
Heating by Hot Water in all its branches. Boilers of every approved description, Tubular, Saddle, Conical, &c.
James Gray, Horticultural Works, Danvers Street, Paulton's Square, King's Road, Chelsea, S.W.

MUSGRAVE'S PATENT STABLE FITTINGS AND HARMLESS LOOSE BOXES.
MUSGRAVE'S PATENT IRON COW-HOUSE FITTINGS, AND IRON PIGGERIES.

These inventions are confidently recommended as possessing numerous advantages not to be found in anything hitherto made.
At the late Meeting of the Royal Agricultural Society at Leeds, Musgrave Brothers received a Silver Medal, and two Awards of "Highly Commended," being the only Prizes conferred on any competitor in this class.
Full particulars will be sent on application to the Inventors and Makers, Musgrave Brothers, Ann Street Iron Works, Belfast.

Clapton Nursery, London, N.E.

HUGH LOW and CO. have now ready for distribution a CATALOGUE for the present season of their Collection of PLANTS, TREES, SHRUBS, &c. It extends to 87 pages, and contains priced Lists of Stove and Greenhouse Plants, Orchids, Ferns and Lycopods, Azaleas, Camellias, Ericas, Geraniums of all kinds, Fuchsias, Verbenas, Petunias, Chrysanthemums, Phloxes, Conifers, Hardy Shrubs, Fruit Trees, and numerous other articles.

To the Seed Trade.

THOMAS AYRES, Wholesale and Retail Seedsman and Grower, Biggleswade, Beds, has to dispose of a large quantity of TURNIP SEED, in large or small quantities. The stock includes Skirving's Liverpool Swede, Ayres' Improved Liverpool Swede, Purple Top Swede, Marshall's Improved Purple Top Swede, Green Top Yellow Swede, Round Green, Green Globe, White Globe, Red Globe, Red Tankard, Green Tankard, Dale's Hybrid, and a few other varieties.

Price on application.

N.B. A few Cwt. of ONION and PARSNIP SEED to dispose of.

WANTED, for the ORCHARD HOUSE, several sorts of PLUMS, PEARS, PEACHES, APRICOTS, FIGS, &c., in Pots. Parties having a surplus, may forward description of sorts, prices of each, and place where they may be seen, to J. B., Messrs. Redgate & Co., 13, George Street, Mansion House, E.C.

New Phalænopsis with Variegated Foliage.

B. S. WILLIAMS has great pleasure in offering for the first time strong Plants of Phalænopsis Schilleriana, which have just arrived in the finest possible condition. This beautiful species is quite distinct from all others in cultivation; the leaves are similar in form and equal in size to those of P. grandiflora; ground colour dark green, with irregular bands of white over the whole surface. Flowers flesh-coloured; size, about two-thirds of those of P. amabilis, and produced in great profusion from strong branching stems, one of which may be seen at the Nursery, which has borne upwards of 100 flowers, a portion of which are still attached.

Price can be had on application.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway.

Geraniums, Herbaceous and Alpine Plants, Orchids, Chrysanthemums, Hardy Variegated Plants, &c.

B. S. WILLIAMS begs to inform his friends and patrons that a PRICED and DESCRIPTIVE CATALOGUE of the above, to which are added supplemental Lists of Fuchsias, Stove, Greenhouse, and Hardy Plants, Ferns, Ornamental Foliage and Variegated Plants, Fruit Trees, &c. (which include the best new plants of the season,) is now published, and will be forwarded post free on application.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, London, N.

Vines from Eyes.

THOMAS RIVERS respectfully calls attention to his collection of VINES from Eyes in Pots. The largest in the kingdom. The plants are of various descriptions from dwarf bushes in fruit and rods for planting in Vineries and ground or Curates' Vineries, to fine rods 8 to 10 feet in length, capable of bearing next season from 10 to 12 bunches each.

A DESCRIPTIVE CATALOGUE will be ready in a few days, which will be sent post free on application.

Nurseries, Sawbridgeworth, near the Harlow Station.

Vines, Vines, Vines.

WILLIAM CUTBUSH, Jun., Barnet Nurseries, Herts, begs to invite an inspection of his fine Stock of Fruiting and other Vines in Pots, consisting of all the best varieties in cultivation. The following are remarkably strong and fine, from 8 to 12 feet in length, viz., Muscat Hamburgh, Muscat of Alexandria, Golden Hamburgh, Bowood Muscat, Lady Down's Seedling, Trentham Black, Buckland's Sweetwater, Black Hamburgh, &c. List and Prices on application. Also to his Stock of Specimen and Half-specimen New Holland Plants, Indian Azaleas, Stove Plants, &c.

W. C. Jun. would also especially call the attention of Mushroom Growers to his very superior Mushroom Spawn, for which he has the highest testimonials from the most eminent Gardeners in the United Kingdom, and which he can with the greatest confidence recommend. References on application.

ROYAL HORTICULTURAL SOCIETY.

SCHEDULE OF PRIZES.

GRAND SHOW OF DAHLIAS AND OTHER CUT FLOWERS,

WEDNESDAY, SEPTEMBER 11, 1861.

The Special Regulations can be had of Mr. Eyles.

Exhibitors of cut flowers to provide their own stands. Entries in each class to be exhibited in separate stands of the following dimensions:—

	Length.	Breadth.	
48 Dahlias, 2 stands	4 ft. each.	1 ft. 6 in.	Height of stands 6 inches behind, and 4 in front.
24 Dahlias, 1 stand	4 „ each.	1 „ 6 „	
12 Dahlias, 1 stand	2 „ each.	1 „ 6 „	
48 Roses, 2 stands	4 „ each.	1 „ 6 „	
24 Roses, 1 stand	4 „ each.	1 „ 6 „	
24 Hollyhocks, 1 stand	4 „ each.	1 „ 6 „	
24 Asters, 1 stand	2 „ each.	1 „ 6 „	

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
1 48 Dahlia Blooms. Distinct. .. .. (*Nurserymen*)	8 0	6 0	4 0	
2 24 Dahlia Blooms Distinct. .. .. (*Nurserymen*)	5 0	3 0	2 0	1 0
3 18 Dahlia Blooms Fancies, distinct .. (*Nurserymen*)	4 0	3 0	2 0	1 0
4 24 Dahlia Blooms Distinct .. .. (*Amateurs*)	6 0	4 0	3 0	2 0
5. 12 Dahlia Blooms. Distinct. .. .. (*Amateurs*)	4 0	3 0	2 0	1 0
6. 6 Dahlia Blooms. Distinct. .. .. (*Amateurs*)	2 0	1 10	1 0	0 10
7. 12 Dahlia Blooms. Fancies, distinct .. (*Amateurs*)	3 0	2 0	1 0	0 15
8. 48 Cut Roses. 3 trusses, distinct .. (*Nurserymen*)	4 0	3 0	2 0	
9. 24 Cut Roses. 3 trusses, distinct .. (*Amateurs*)	4 0	3 0	2 0	1 0
10. 24 Cut Roses. Distinct. Single blooms. (*Open*)	2 0	1 0	0 10	
11. 12 Roses, in pots, not more than two of one kind (*Open*)	5 0	4 0	3 0	
12. 12 Hollyhocks, in spikes. Distinct .. .. (*Open*)	3 0	2 0	1 0	
13. 12 Hollyhocks, single flowers. Distinct .. (*Open*)	2 0	1 0	0 15	
14. 24 German Asters. "Quilled," distinct .. (*Open*)	2 0	1 0	0 15	0 10
15. 24 French Asters. "Tasselled," distinct .. (*Open*)	2 0	1 0	0 15	0 10
16. 24 Gladiolus, cut spikes. Distinct .. .. (*Open*)	2 10	1 10	1 0	
17. 12 Gladiolus, cut spikes. Distinct .. (*Amateurs*)	1 10	1 0	0 10	
18. 12 Pots of Gladiolus. Distinct. Not more than 3 in each pot .. .. (*Open*)	3 0	2 0	1 0	
19. 24 Phloxes, single trusses. Distinct .. (*Open*)	2 0	1 0	0 15	
20. 12 Phloxes, in pots. Distinct .. (*Open*)	3 0	2 0	1 0	
21. 24 Verbenas, 5 trusses of each. Distinct .. (*Open*)	1 10	1 0	0 10	
22. Miscellaneous. For Flowers not specified .. (*Open*)	1 10	1 0	0 15	

GRAND FRUIT AND CHRYSANTHEMUM SHOW,

WEDNESDAY and THURSDAY, NOVEMBER 6 and 7, 1861.

The Special Regulations can be had of Mr. Eyles.

FRUIT.

A dish of Grapes to consist of 3 bunches; of Apples, Pears, Oranges, Lemons, and such like, 6 fruits of each; and of Plums, 9 fruits.

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.
A. Collection of Fruit .. .. (*Fruiterers only*)	4 0	3 0	
B. Collection of Fruit .. .. (*Private Growers*)	6 0	4 0	3 0
C. Pine Apples, collection of. 3 distinct kinds	4 0	3 0	2 0
D. Pine Apple. Single fruit, any variety	2 10	2 0	1 0
E. Grapes. White Muscat. Basket of, not less than 10 lbs. weight	4 0	3 0	2 0
F. Grapes, White Muscat. Single dish	2 10	2 0	1 0
G. Grapes, White. Any other variety, single dish..	2 10	2 0	1 0
H. Grapes, Black Hamburgh. Basket of, not less than 10 lbs. weight..	4 0	3 0	2 0
I. Grapes, Black Hamburgh Single dish	2 10	2 0	1 0
J. Grapes, Frankenthal or Dutch Hamburgh. Single dish ..	2 10	2 0	1 0
K. Grapes, Black. Any other variety, single dish	2 10	2 0	1 0
L. Pears, dessert, collection of, 1 dish of each	4 0	3 0	2 0
M. Pears, dessert, collection of 6 dishes, distinct kinds	3 0	2 0	1 0
N. Pears, dessert, collection of 3 dishes, distinct kinds ..	1 10	1 0	0 10
O. Pears, dessert. Single dish, any variety	1 0	0 15	0 10
P. Pears, kitchen. Uvedale's St. Germain. Single dish.. ..	1 0	0 15	0 10
Q. Pears, kitchen. Catillac. Single dish	1 0	0 15	0 10
R. Pears, kitchen. Single dish, any variety	1 0	0 15	0 10
S. Pears. Heaviest 5 fruits, dessert	1 0	0 15	0 10
T. Pears, Stewed, jar of	2 0	1 10	1 0
Note.—These are to be prepared without sugar, spice, or any colouring matter, and to be shown in white glass jars. Ladies are particularly invited to cause jars of fruit to be sent for examination.			
U. Apples, dessert, collection of, 1 dish of each	4 0	3 0	2 0
V. Apples, dessert, collection of 6 dishes, distinct kinds	3 0	2 0	1 0
W. Apples, dessert, collection of 3 dishes, distinct kinds	1 10	1 0	0 10
X. Apples, dessert. Single dish, any variety	1 0	0 15	0 10
Y. Apples, kitchen, collection of 1 dish of each	4 0	3 0	2 0
Z. Apples, kitchen, collection of 6 dishes, distinct kinds.. ..	3 0	2 0	1 0
AA. Apples, kitchen, collection of 3 dishes, distinct kinds.. ..	1 10	1 0	0 10
BB. Apples, kitchen. Single dish	1 0	0 15	0 10
CC. Apples, kitchen. Heaviest 5 fruits..	1 0	0 15	0 10
DD. Pommes Tapés; that is to say, Apples dried in the same way as Normandy Pippins; of which an account is given in the *Gardeners' Chronicle* for 1860, p. 932. Note.—It must be observed that this process is quite different from that employed in preparing Norfolk Beefings	3 0	2 0	1 0
EE. Oranges, Lemons, &c., collection of 1 dish of each	3 0	2 0	1 0
FF. Oranges, 4 plants, in pots or boxes, bearing fruit	3 0	2 0	1 0
GG. Oranges, best specimen of Tangerines, in pot	1 10	1 0	0 10
HH. Melons. Single fruit, any variety	1 0	0 15	0 10
II. Plums. Single dish, any variety	2 0	1 10	1 0
JJ. Strawberries. Single dish	1 0	0 10	0 5
KK. Currants. Single dish	0 10	0 7	0 5
LL. Raspberries. Single dish	0 10	0 7	0 5

Note.—Fruit specified in the above Classes will be excluded from MM.

MM. Miscellaneous .. .. 60s., 50s., 40s., 30s., 20s., 10s.

CHRYSANTHEMUMS.

Exhibitors of Cut Flowers to provide their own stands, of the following dimensions:—

For 24 Blooms, 1 stand 4 feet long, 1 foot 6 inches broad.
For 12 „ „ 2 „ „ „
For 6 „ „ 1 „ „ „
Height of stand, 6 inches behind, 4 inches in front.

☞ Preference will be given to plants trained in the bush-like or pyramidal form.

Class.	1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
1. 6 Plants. Distinct varieties, on single stems (*Nurserymen*)	4 0	2 0	1 0	
2. 6 Plants. Distinct varieties, on single stems (*Amateurs*)	6 0	4 0	2 0	1 0
3. 3 Plants. Distinct varieties, on single stems (*Amateurs*)	2 10	2 0	1 0	
Note.—Pots not to exceed 11 inches in diameter in Classes 1, 2, and 3.				
4. 6 Plants, Pompons. Distinct varieties, on single stems .. .. (*Nurserymen*)	4 0	2 0	1 0	
5. 6 Plants, Pompons. Distinct varieties, on single stems .. .. (*Amateurs*)	6 0	4 0	2 0	1 0
6. 6 Standard Chrysanthemums or Pompons .. (*Open*)	4 0	2 0	1 0	
Note.—Pots not to exceed 8 inches in diameter in Classes 4, 5, and 6.				
7. 6 New varieties of the current year	2 0	1 0	0 10	
8. Single specimen, single stem, either Chrysanthemum or Pompon .. .. (*Open*)	1 0	0 15	0 10	0 10
9. 24 Cut blooms. Distinct .. .. (*Nurserymen*)	2 0	1 0	0 15	0 15
10. 24 Cut blooms. Distinct .. .. .. (*Amateurs*)	3 0	2 0	1 0	0 7
11. 12 Cut blooms. Distinct .. .. .. (*Amateurs*)	1 10	1 0	0 10	0 5
12. 6 Cut blooms. Distinct .. .. .. (*Amateurs*)	0 15	0 10	0 7	0 5
13. 6 Cut blooms. Distinct. Anemone flowered (*Open*)	0 15	0 10	0 7	
14. Best group of cut blooms .. .. (*Open*)	2 0	1 0	0 10	

Roses in Pots.—The best New and Old.

BENJAMIN R. CANT has a splendid stock of healthy Plants in pots (most of them on their own roots), of all the Leading Sorts, both New and Old. If planted now a season will be gained.

A LIST of Sorts with Prices (which are moderate) will be furnished on application.

B. R. C. will be prepared with a good supply of Standard and Dwarf Roses for autumn planting, early orders for which are solicited.

St. John's Street Nursery, Colchester.

NEW ROSE.—MADAME STANDISH is the hardiest of all Roses; those which stood out of doors during the whole of the late severe winter not having lost a bud, whilst most others were destroyed by thousands. The growth is very rapid; the foliage magnificent; colour, a clear pale pink; petals smooth, round, and finely imbricated; the form cannot be excelled, and it is a thorough Perpetual, being, in fact, one of the finest Roses ever offered. Plants now ready, 10s. 6d. each. Madame Standish must not be mistaken for Mrs. Standish, which was sent out by MIELLEZ, of Lille.

JOHN STANDISH, The Royal Nursery, Bagshot.

ROSES.—Grand National Rose Show, Royal Horticultural Society's Garden, Kensington Gore, July 10.

The FIRST PRIZE for 48 varieties was awarded to JOHN CRANSTON, King's Acre Nurseries, near Hereford.

M. Common	H.P. Madame Knorr
H.B. Charles Lawson	,, Madame Vigneron
H.P. Alexandrine Bachmeteff	,, Maria Portemer
,, Anna Alexieff	,, Monsieur Joigneaux
,, ,, de Diesbach	,, Mrs. Rivers
,, Auguste Mie	,, Prairie de Terre Noir
,, Comtesse Cecile de Chabrillant	,, Prince Léon
,, Duchesse d'Orleans	,, ,, Imperiale
,, Duchess of Norfolk	,, Princesse Mathilde
,, Géant des Batailles	,, Reine des Violettes
,, Général Jacqueminot	,, Reine Mathilde
,, ,, Simpson	,, Sénateur Vaisse
,, ,, Washington	,, Sophie Coquerel
,, Léon des Combats	,, Souvenir de Montceaux
,, Lælia	,, ,, de la Reine d'Angleterre
,, Lord Raglan	,, Triomphe de l'Exposition
,, L'Oriflamme de St. Louis	,, Victor Verdier
,, Louis Chaix	B. Acidalie
,, Louis XIV.	,, Louise Odier
,, Madame Boll	,, Sir Joseph Paxton
,, ,, Bonnaire	,, Souvenir de la Malmaison
,, ,, Charles Crapelet	T. Gloire de Dijon
,, ,, de Cambacérès	,, Madame Falcot
,, ,, Hector Jacquin	,, Narcisse

The above, together with all the leading new and old varieties, can be supplied in the autumn; DESCRIPTIVE CATALOGUES of which will be forwarded Post-free on application.

Early Orders are respectfully solicited.

ROSES.—Grand Rose Show, Crystal Palace, July 6, 1861.

The FIRST PRIZE for 48 varieties was awarded to JOHN CRANSTON, King's Acre Nurseries, near Hereford.

H.B. Paul Ricaut	H.P. Louis Chaix
P.M. Madame Edouard Ory	,, Madame de Cambacérès
D.P. Julie de Krudner	,, ,, de Manoel
,, Manoury	,, ,, Hector Jacquin
H.P. Alexandrine Bachmeteff	,, ,, Vidot
,, Alphonse Karr	,, Mademoiselle Alice Leroy
,, Anna Alexieff	,, ,, Thérèse Appert
,, Arthur de Sansal	,, Maria Portemer
,, Baronne Hallez	,, Mathurin Regnier
,, ,, Prévost	,, Mrs. Rivers
,, Cardinal Patrizzi	,, Pauline Lansezeur
,, Caroline de Sansal	,, Prince Leon
,, Comtesse Cecile de Chabrillant	,, Reine de Danemark
,, Duchess of Norfolk	,, Souvenir de la Reine d'Angleterre
,, Evêque de Nîmes	,, ,, de Leveson Gower
,, François Arago	,, Triomphe de l'Exposition
,, Géant des Batailles	,, Virginal
,, Gen. Jacqueminot	B. Acidalie
,, ,, Simpson	,, Louise Odier
,, Jules Margottin	,, Souchet
,, L'Enfant du Mont Carmel	T. Gloire de Dijon
Léon des Combats	,, La Sylphide
,, Lælia	,, Narcisse
,, Lord Raglan	,, Vicomtesse Decazes

The above, together with all the leading new and old varieties, can be supplied in the autumn; DESCRIPTIVE CATALOGUES of which will be forwarded post free on application.

Early orders are respectfully solicited.

NEW GRAPE, INGRAM'S HARDY PROLIFIC MUSCAT.—This is the most fertile and the best setter of all Grapes. The bunches are from 12 inches to 14 inches in length, having black oval berries, with the peculiar vinous flavour of the Hamburgh, yet more piquant, and combined with a slight spice of Muscat, so as to tone down the acid without satiating the palate. The flavour is new, and has been pronounced by one of the first judges of this country to be the finest flavoured of all Grapes. The fruit is such, that the more it is eaten the more it is liked. In this Grape we have the *gardener's friend* and the *gentleman's bonne bouche*. It is impossible to grow the Vine without producing fruit, and owing to its ripening in a much lower temperature than the Black Hamburgh, it is the very best sort for a greenhouse or Curate's Vinery, and in ordinary summers it, no doubt, will ripen against a wall in the open air. The footstalk of the berry is so stiff and strong that it cannot shank off. For those countries where the Vine is cultivated in large quantities in the open air and where they have now only coarse and tasteless kinds, this will be the greatest acquisition. It has been exhibited before the Royal Horticultural Society's Fruit Committee, and obtained a First Class Certificate; the fruit shown being cut from a Vine struck from a single eye that was only 14 months old from the time of putting in the eye till cutting the Grapes. The fruit this year will be ripe from the middle of May to the end of June, when intending purchasers are invited to call and judge for themselves. Plants are now ready, at 21s. and 42s. each: and a few extra strong at 63s. each.

JNO. STANDISH, Royal Nursery, Bagshot.

WHEELER'S ORANGE GLOBE MANGEL,
WHEELER'S IMPERIAL SWEDE,
GRASS SEEDS FOR PERMANENT PASTURE,
GRASS SEEDS FOR LAWNS,

And all other Seeds of the same excellent quality which has rendered our Farm Seeds so celebrated.

We offer our Seeds at the lowest price consistent with their being good and pure, at the same time deliver them carriage free by rail, and allow 5 per cent. discount for cash.

Our Book of FARM SEEDS sent free for 3 stamps.

J. C. WHEELER & SON, Seed Growers, Gloucestershire.

New Seeds for Present Sowing at Reduced Prices, Carriage Free.

SUTTON AND SONS can now supply the under-mentioned for immediate sowing:—

Early Six Weeks Turnip	Italian Rye-grass
Pomeranian White Globe ditto	Permanent Meadow Grasses
Imperial Green Globe ditto	Fine Lawn Grasses
Lincolnshire Red Globe ditto	Trifolium incarnatum
Smart's Mousetail ditto	Mustard and Rape
Grey Stone ditto	Brown Cos Lettuce
Drumhead Cow Cabbage	Hardy Hammersmith ditto
Sutton's Imperial Earliest Garden Cabbage	Early London Cauliflower
	Fine Walcheren ditto
Wheeler's Imperial ditto	Onion, of sorts
Enfield Market and others	Early Horn Carrot

Calceolaria, Cineraria, Primula, and other choice Flower Seeds, 1s. per packet.

PRICED LISTS of the above new or fresh Seeds may be had on application addressed

SUTTON & SONS, Royal Berkshire Seed Establishment, Reading

To Architects and Landscape Gardeners.

THE RUGBY BURIAL BOARD hereby give Notice that they are prepared to receive PLANS and SPECIFICATIONS with TENDERS.

1st. For laying-out and Planting the proposed New Burial Ground at Rugby, containing 7 acres 3 roods 2 perches.

2d. For the Erection of two Chapels, Entrance Lodge, Dead House, and Fencing.

A Plan of the Ground may be seen, and Instructions as to the requirements of the Board may be obtained, at the Office of the Board.

The Plans and Specifications may be either for laying-out and Planting the Ground, or for the above Buildings and Fencing, or may combine both, but the Board reserve the right to select either the Plan for Laying-out the Ground, or the Plan for the Erection of the Buildings, or the Plan combining both at their discretion.

Plans and Specifications with separate Tenders are requested to be sent in to the Office of the Board, Chapel Street, Rugby, on or before the 31st day of August next.

By Order of the Board, E. G. WRATISLAW, Clerk.

Plant Stolen.

A plant of CALADIUM VEITCHI having been Stolen from the ROYAL EXOTIC NURSERY, CHELSEA, Messrs. VEITCH & SON hereby offer a reward of

FIFTY POUNDS

to any person who will give such information as shall lead to the detection and conviction of the THIEF; also

FIFTY POUNDS

to any person who will give such information as shall lead to the detection and conviction of the RECEIVER of the STOLEN PLANT.

THE ENTIRE STOCK OF THIS PLANT SHOULD BE WITH MESSRS. VEITCH & SON AT EXETER AND CHELSEA, AS IT IS ONE OF THEIR OWN INTRODUCTION, AND THEY HAVE NEVER PARTED WITH A SINGLE PLANT OF IT. It is so distinct a plant that it is easily known from all the Caladiums, and Messrs. VEITCH & SON would solicit information from any one who may chance to see a plant of it in any other person's possession.

Royal Exotic Nursery, Chelsea.—August 10.

The Gardeners' Chronicle.

SATURDAY, AUGUST 10, 1861.

MEETINGS FOR THE ENSUING WEEK.

TUESDAY, Aug. 13 { Royal Horticultural (Floral and Fruit Committees) at S. Kensington, Noon

A SHORT time since we received from a Correspondent signing himself *Jasper Standstill*, samples of ripe and very young Grapes taken from the same Vine. The writer stated that he had sent an example of two crops of Grapes growing on the same Vine; the ripe crop consisting of 13 bunches, the berries averaging from 2 to 3 inches in circumference, and beautifully black; the green crop consisting of 12 bunches just ready for thinning. He also enclosed a leaf to show the vigour and healthiness of the plant. Mr. STANDSTILL also proposed to explain at a future time the means used to produce these crops, and to show that we often put ourselves to a great deal of unnecessary trouble in such matters. "Besides," he added, "the novelty of the thing, if it can be repeated (and I see no reason to doubt it, as the wood is ripening well), it would be very convenient to those whose space is limited for planting to have a successional crop on the same Vine, and this not on laterals, but on the regular bearing wood." Since the ripe Grapes sent us were of the finest possible colour and quality, the young ones in the highest health, and the leaf superb and a foot in diameter, we expressed a desire to have further particulars concerning the experiment.

Mr. STANDSTILL then informed us that about six years ago the place where his Vines now grow "was covered with a few Spruce Firs, struggling hard for existence in a bleak situation. We were then about putting it into shape for a framing ground for Cucumber pits, &c., to be heated by hot water. In order to do this we had to lower the whole of it about 3 feet to correspond with the adjoining ground for a kitchen garden. Some of your readers may be ready to say, What a fine opportunity for collecting the top spit of turf to form the future Vine borders! Such, however, was not the case, for we considered it only fit to send away to bottom the roads and cow-yards, and many a load was thus got rid of. Before we had got to the desired depth we came in contact with the mixture I have sent for your examination, and which (though in its present state it appears loose enough) could scarcely be penetrated with a pickaxe. In some places the rock prevailed, in others the sand; and again, certain mixtures of what appeared to be oyster shells reduced to something like white soap—the latter in layers of about 6 inches. Amongst the rocky portion (and often embedded in it so hard as to require a mallet and chisel to dislodge it) were found various petrified shells, &c. We have some large specimens of them here built in the walls or lying loosely about. I am persuaded that, if such soil could be obtained and the conditions here attending it complied with, there would need no more preparation for a Vine than a Gooseberry bush. I shall be much surprised if chemistry finds much in it to feed the Vine, and I hope it will not, for I have long been of opinion that the mechanical condition of the soil is of far more consequence than the chemical. How deep these materials go I cannot say, but we find the sand at the bottom of the wells, causing the water after heavy and long continued rains to have the appearance of thin gruel, although we have no chalk nearer than 3 or 4 miles."

Along with this came a bag of yellowish calcareous soil, and a good many fossil shells and ammonites, among which were fragments of Pholadomya and Ostrea with indeterminable univalves of the oolitic formation. Other circumstances led us to infer that the Vinery must be on high ground. In confirmation of this guess we received the following additional information.

"You are quite right in presuming that the garden is on the top of some hill or cliff. It is however but a small hill, something like a huge mole hill. It may be about half a mile from side to side, situated in the Vale of White Horse, about half way between Swindon and the far-famed White Horse Hill, and is exposed to every wind that blows. Although its dimensions are small, the materials of which it is composed are various; the soil in general exceedingly good, fit for almost anything but American and such like plants. About eight years ago it was determined to make a new garden here. The spot selected for the kitchen garden consisted for the most part of stone, lying near the surface, which was quarried out for building and roadmaking, and replaced with fresh soil; consequently we have about an acre of first-rate garden ground. On the north-west side is the frame ground, part of which is solid rock, so hard that we had great difficulty in cutting out the stoke hole for the houses and pits. Within a few yards of this you find a bed of sand of unknown depth, and again within about the same distance is the composition of which I sent you a sample. On this spot was built a span-roofed pit, facing north and south, by Mr. Lewis of Stamford Hill, the floor of which is about 3 feet below the ground level. One end of this pit was intended to grow a few stove plants in, and the other for such as required less heat. In the stove end was built a brick tank to hold water, the hot water pipes for bottom-heat in a chamber passing through it, so that when kept filled there was a constant vapour rising, so beneficial to growth, but (as we are in the habit of saying) so detrimental to Grapes when near ripening. This you have proof has not been the case in the present instance. From the description given of the situation, you will easily perceive that no artificial drainage is necessary. Although the pits are underground so much, and no gutters to the wall plates, we have no need of drains, with the exception of one to carry off the water when washing the floor. The Vine bearing the two crops is planted on the north side, and receives all the water that runs off the house, only that the stem where it enters the brickwork is protected by about a solid foot of turf placed firmly over it. This, in my opinion, is the chief place to protect, and is of more importance than covering the border. To this protection, and the impossibility of water lying anywhere in the neighbourhood of the roots, I attribute our success. Yesterday we had a very heavy thunderstorm, but in an hour after you could scarcely have discovered that any rain had fallen, the soil at an inch deep being perfectly dry. On the 26th of August, 1857, the Vine was planted with an idea of obtaining a few early Grapes. My employer smilingly asked, "Do you think to grow Grapes in such a place as that?" He was here from London this evening, and walking into the pits his first remark was, "Why, what a crop of Grapes you have got here!" (alluding to the late crop, the early one being partly gone and the remainder going to-morrow, except one bunch which will be left as a matter of curiosity). For the first two years the Vine was confined to the stove compartment, but exhibiting signs of extraordinary growth, I made a hole through the glass partition in the angle over the door and let it grow. Last year it made a shoot so strong that I ventured to leave about 14 feet of it to fruit, making 26 feet well cropped, and I believe it would have done just as well if it had been left longer. As there seems no bounds for the roots, so it appears there is no necessity to circumscribe the space for the top. We have other Vines doing well in a prepared border, but I imagine this one would beat any of them under the same treatment. I was first led to think of planting it in such materials, from having noticed the Vines round the cottages by the wayside, all of which

exhibited signs of health. Having lived some years in the neighbourhood of London and seen mildew in its worst forms, I was surprised that no trace of it was to be found here; and I have never seen but one instance of it, and that was about 9 or 10 miles off. I thought therefore that either the pure air or soil must have something to do with it; this, however, I leave for wiser heads to settle, but it is a fact that I have planted several Vines in various places and they do quite as well as those planted in prepared borders. Meanwhile I believe the two great things to be attended to, are deep extensive drainage and materials that will never run together; and then, I think, we may concrete or otherwise cover our borders, for I never recollect our soil being damper than what I send you, as the water passes off without penetrating beyond a few inches, and the rain from the roof sinks along the foundation. If therefore, it is necessary for Vines to have a great quantity of water, the one in question has a long way to travel for it."

Now remains the question, a rather important one, whether Mr. STANDSTILL's double crop of good Grapes, and beautiful foliage, is owing to some peculiarity in the chemical condition of the soil, or to its mechanical state, loose, dry, warm, and penetrable to an unknown depth. Upon this point we took the liberty of consulting one of the most eminent practical horticulturists of England, who is acquainted with the geology of the country where the Grapes are grown. His reply is as follows:—

"Bourton," whence Mr. JASPER STANDSTILL writes, "is a village in the Vale of White Horse, but I know nothing of it except by passing through it. Judging from the locality the place described will be either on the upper green sand or coral rag formations; from the writer's description of it most probably the former. The fertility of the soil is no doubt owing to the presence of either the phosphates or carbonates of lime, &c., or to both combined, as they are frequently found in both of the above strata, arising from the decomposition of extinct crustacea and testacea which existed at the time the sands and limestones were formed, and which appear in some places to have been swept into hollows and destroyed in immense quantities. The writer *has evidently come upon one of these deposits, which has enriched the soil with fertilising matter very congenial* to the Vine.

"An examination of the soil sent will show whether it is green sand or calcareous (oolitic). If the former it may resemble the phosphate deposits found near Farnham in the same strata, which however are partly formed from coprolites.

"From a well dug in the coral rag I once obtained a similar mass of shells (principally bivalves, as the writer states his are) and decomposed matter resembling a soapy white clay. This was spread over a meadow, and the effect was almost magical, exceeding anything I ever saw with guano. On obtaining an analysis of it it was found to contain a large per-centage of phosphates and carbonates, and a small one of the sulphate of potash, but owing to the well being in the centre of a town I could not excavate to get much of it, or it would have paid well. I tried a shaft in the nearest field I could get to it, but this particular deposit did not extend so far."

It is therefore probable that the success of the Vine growing at Bourton is to be ascribed in part to the chemical condition of the soil, about which Mr. JASPER's employer will perhaps cause some analytical chemist to report, and in part to its mechanical state, assisted however by a good deal of horticultural skill.

The history of the double crop still remains to be told, and upon that we hope soon to receive a full practical description.

ADVICES from Naples announce THE DECEASE of PROFESSOR MICHAEL TENORE, on the 19th of July, in the 81st year of his age, after having held the direction of the Botanic Garden in that city, of which he was also the founder, for half a century. He was the author of a *Flora Napolitana* in five volumes folio, and of many other works on botanical and horticultural subjects; and was well known to English visitors for the courtesy with which he uniformly received those who took an interest in his favourite science.

MYCOLOGY.—No. LVI.

AGARICUS GEOTROPUS, *Bull.*—Fries remarks that there are three natural groups of white-spored Agarics, of which the first includes *Amanita, Lepiota,* and a portion of *Armillaria,* in which the part which bears the gills (Hymenophorum) is quite distinct from the stem; the second another portion of *Armillaria,* together with *Tricholoma, Clitocybe,* and *Pleurotus,* in which the Hymenophorum is continuous with the fleshy stem when present, and the third *Collybia, Mycena,* and *Omphalia,* in which the stem is equally continuous, but has externally a cartilaginous coat. We now arrive at the second subgenus, *Clitocybe,* of the second group, which is equally abundant in species with *Tricholoma,* and like that contains several esculent Agarics. Most of the species grow upon the ground, amongst leaves in woods or amongst Grass in pastures, and in either situation species occur which may be eaten with safety, and which if nicely prepared afford excellent food.

AGARICUS GEOTROPUS. Copied by permission from Greville's Cryptogamic Flora.

The subgenus derives its name from two Greek words, κλιτος, a declivity, and κυβη, a head—intended, we suppose, to express the inversion of the pileus which occurs in many species. The essential distinction from *Tricholoma* however depends upon the mode of attachment of the gills, which are not sinuated behind, but either abruptly adnate or much attenuated and running down the stems. From *Omphalia* they differ in the nature of the stem, which is fleshy and not cartilaginous. They are often difficult of determination, as the characters are not striking. Fries distributes them in five sections as follows:—

1. Pileus convex, then plane, obtuse, with the gills adnato-decurrent. Not shining when wet or changing colour as the moisture is absorbed (hygrophanous). *A. nebularis,* No. VI., an excellent species, belongs to this section, as does also the greenish woodland *A. odorus,* which is so remarkable for its agreeable scent like that of Aniseed. To this also belongs *A. dealbatus,* a curious form of which is figured in *Gardeners' Chronicle,* 1861, p. 312.

2. Pileus thin at the margin, subumbonate; gills unequally decurrent, so that on one side they are decurrent, on the other frequently adnate in the same individual. We have no well known species of this group.

3. Pileus at length funnel-shaped. Not hygrophanous. Gills very decurrent. To this section belongs the subject of our present notice, with several other species, and amongst them *A. giganteus,* which forms vast rings, the individuals in which are sometimes a foot in diameter. Most of the species form good articles of food when young and free from insects.

4. Pileus cup-shaped, thin, hygrophanous. Gills at first adnate, then decurrent. To this belongs the brown *A. cyathiformis,* which is so common in our fields in autumn, together with several woodland and meadow species.

5. Pileus flattened or depressed, hygrophanous. Gills adnate, sometimes with a decurrent tooth. To this group belongs *A. fragrans,* which is easily recognised by its anise-like scent, resembling that of *A. odorus.*

A. geotropus is a striking species, and often occurs in large quantities, forming rings about the roots of trees. The pileus is at first convex, but soon becomes flattened and at length depressed, but generally retaining its well-marked central boss. When examined with the lens, if young, it is minutely tomentose, so as frequently to retain the impression of the fingers when touched, though to the naked eye it appears smooth. The colour is usually of a rich cream white, though occasionally without any pink shade. The stem is straight attenuated upwards, and more or less fibrillose. The gills are crowded, and run a considerable way down the stem.

A form of this with a far less depressed pileus, *A. subinvolutus* of Batsch, occurs principally near Fir trees, which is excellent when cooked, and almost equal to *A. nebularis.* The species is sometimes difficult to distinguish from *A. giganteus* and *infundibuliformis,* but as they are wholesome no dangerous mistake can occur in this direction. No ordinary observer could confound with it such milky Agarics as agree in form, but are of doubtful reputation. *A. exsuccus,* with its distant brittle gills and dead white more or less tomentose pileus, ought certainly not to be confounded. *M. J. B.*

NEW JAPANESE PLANTS.

THERE was on this occasion produced a very interesting and valuable collection of plants, sent from Japan by Mr. R. Fortune. These were exhibited by Mr. Standish, F.R.H.S., to whose care they had been confided; and though only a few days removed from on board ship, they were in the most perfect health. With reference to the hardiness of these plants, Mr. Standish stated that the Sciadopitys verticillata, all the Retinosporas, Thujopsis dolabrata, and the different forms of Osmanthus, were natives of the hills near Yeddo, and consequently would be remarkably hardy; as a proof of which he mentioned that Mr. Barron had the Thujopsis standing in the open ground last winter, without the slightest injury from frost, though the serious amount of destruction amongst evergreen shrubs and trees, caused by the past winter, around Derby and Nottingham, and indeed almost everywhere in the midland counties, is well known. This collection of Mr. Fortune's Japanese Plants had been already exhibited at the Fête on the 5th of June, and the more important of them had on that occasion received awards. These latter, which were now necessarily passed over as having been already judged by the Society, consisted of the following, namely:—

Retinospora obtusa.—A fine evergreen tree of the Arbor-vitæ race, forming, according to Siebold, a straight bole 60 to 80 feet high. Of this, a nice little bushy specimen was shown. It had flat flabellate dark green spray, which from the small size of its scale-like foliage had a good deal of general resemblance to some of the smaller circinate species of Selaginella. There were both green-leaved and variegated-leaved forms, the latter being blotched with white; and of these the green-leaved or typical form had received a

Silver Banksian Medal, and the variegated-leaved form (R. obtusa variegata) a Certificate of Merit.

Retinospora lycopodioides.—Under this provisional name was included, on June 5, in the miscellaneous portion of the group, a rather pretty-looking plant (others of which, shown by Mr. Veitch as Cryptomeria sp., had received a Certificate of Merit). It is apparently a plant of spreading growth, with the branches terete and leafy all round: distinguishable, therefore, from the Retinospora and Thujopsis, already mentioned, by a feature analogous to the difference which exists between the true species of Lycopodium and those now referred to Selaginella. The leaves of this plant are small obtuse green scales, which produce a kind of papillate appearance on the branches.

Retinospora argentea.—Another provisional name for a plant with densely glaucous or silvery spray, which colour was especially marked on the lower surface. The plant was not enough developed to show its true character.

Sciadopitys verticillata.—One of the finest Conifers of Japan, or, after the Deodar, of all Asia. Mr. Standish exhibited two nice bushy young plants in perfect health, a foot high, showing the aspect presented by the long linear blunt ended foliage, and also its peculiar whorled arrangement. Some of the older leaves on these young specimens measured 3 inches in length. This had received a Silver Knightian Medal at the exhibition on June 5th.

Thujopsis dolabrata variegata.—This was a fine variegated variety of Thujopsis dolabrata, apparently of a lax and spreading habit, the branches flattened and glaucous beneath, very much resembling those of some of the free-growing kinds of Selaginella. This variety differed from the ordinary form in having its twigs freely blotched with white, producing a pretty and well-marked variegation. It had obtained a Silver Banksian Medal at the great exhibition already alluded to.

Podocarpus variegatus.—A dense growing little bushy shrub, thickly clothed with short broad ovate shining leaves, variously striped with white. It was a neat looking plant, and had received a Certificate of Merit on June 5th.

Podocarpus microphyllus variegatus.—This had the leaves linear-lanceolate, and sparingly striped.

Taxus longifolia.—A provisional name for a long linear-leaved shrub or tree, which, if hardy, will prove a very handsome plant. The plant was, however, quite small.

Bambusa variegata.—A pretty tufted striped-leaved Grass, apparently dwarf, and perhaps useful in formal gardens. This had already received a Certificate of Merit.

Aucuba japonica.—Of this species, which is familiar in English gardens in the variegated state, there was included in this fine collection the original or green-leaved state, both male and female plants; the latter bore orange-coloured oblong-ovate berries, about the size of the pomes of the large-fruited species of Cratægus. It had on a previous occasion obtained a Certificate of Merit.

Eurya sp.—This was distinguished as a "broad-leaved Eurya;" it has moderate-sized elegantly-acuminated Camellia-like foliage, broadly margined, and more or less blotched inwards with white, and the young foliage comes out stained with a fiery-orange-colour, which gives the plant a bright, extremely interesting, and showy character. It received a First-class Certificate.

Raphis flabellata variegata.—Of this well-known elegant dwarf Palm, the present form had the leaves striped more or less with white.

Gardenia radicans fol. variegatus.—A beautiful little green-house shrub, with long narrow leaves edged with white, and bearing the well-known fragrant flowers of this species. The plant had been previously exhibited before the Committee by Messrs. Veitch & Son (see p. 240).

Daphne variegata, with the leaves narrowly edged with white. It was distinct from the plants already in cultivation, but was not sufficiently developed.

Elæagnus japonicus variegatus had the leaves neatly edged with cream-colour.

Thea viridis variegata.—The Tea plant, with variegated leaves.

Buxus obcordata variegata.—A very pretty little variegated Box tree, with remarkably short obtuse, sometimes retuse or obcordate, leaves, of about half an inch in diameter.

Euonymus variegatus.—Something like E. japonicus, but with smaller leaves, having a broad central yellowish blotch.

Illicium variegatum.—A neat-looking plant, probably referrible to I. anisatum. It had grey-marbled leaves, slightly edged with white, and was commended as a pretty variegated shrub.

Osmanthus aquifolius variegatus nanus.—A nice-looking Oleaceous shrub, with neat flat Holly-like sharply-toothed or sinuately-spinose leaves, margined and marbled with creamy-white. The leaves were small, and the plant of dwarf twiggy growth. It was awarded a First-class Certificate. There was in the collection an Osmanthus aquifolius variegatus of larger growth, and with larger and broader leaves, scarcely less effective; and also, the typical green-leaved form of the species. *Proceedings of the Royal Horticultural Society, June 11, 1861.*

NOTES ON THE PLANTS OF PERU.—No. I.

The writer (who was attached to the last Cinchona expedition)* proposes to give an account of his voyage to South America for the Cinchona Succirubra, or "Red Bark" of commerce; of the propagation of that species in the forest, on the western slopes of Chimborazo; of its removal from thence to Guayaquil; and of the system of treatment pursued during the voyage from South America, *viâ* Southampton to India. It may be stated that of the 600 "Red Bark" plants shipped in Wardian cases at the port of Guayaquil in South America, nearly 500 reached India in a state of perfect health.

I left Southampton on April 17, 1860, in the Royal Mail Steam Packet Company's steam-ship Atrato, my instructions being to proceed direct to Guayaquil, and, on arrival there, to communicate with Mr. Spruce and follow his instructions. Mr. Spruce, an eminent botanist, who has explored the banks of the Amazon and several of its larger tributaries, and afterwards crossing the Cordilleras *viâ* Jarapota, reached Hambato, was employed to make collections of seeds, and to get if possible, a collection of young plants together by the time I should reach Ecuador. During the outward voyage, nothing of any particular interest was observed until the steamer reached Colon on the Isthmus of Darien, where for the first time I looked on a tropical vegetation. Viewed from Colon the appearance of the isthmus is that of a low lying marshy country, thickly studded with mound-like hills, or rather cairn-like mounds; for in general they are not more than 50 or 60 feet in height, and are in many places strewn with large boulders. The whole country as far as the eye can reach—mound and plain alike—is covered by an intensely green, impenetrable forest. Around Colon I observed many fine specimens of Cocos Nucifera, (now said to be dying out in some of the West India Islands), which presented a most vigorous and healthy appearance. On the way across the Isthmus the aspect of the vegetation is altogether grand and imposing. The trees of the forest, lofty though they be, are literally covered with climbers and Bromelias. The great bulk of the climbers seemed to consist of Passifloras and Ipomœas. In several places here and there I observed open glades, from perhaps 3 to 4 acres in extent, covered by what seemed to be a species of Diplazium, intermixed with a few young seedling Palms. From the general system pursued in the cultivation of Ferns in England, I had always been given to understand that in order to cultivate those plants successfully a certain amount of shade during the sunny days of summer was absolutely necessary; but here they were growing most luxuriantly under the rays of a tropical sun, without any shade whatever. On reaching the town of Panama, on the western coast of South America, I found several clumps of Plantains (Musa sapientum), growing near the village, some of them showing fine bunches of fruit. The leaves of the Plantains are here much torn and broken, even before they become fully developed; but this is owing to their being planted in open places, where a very gentle breeze of wind would produce the results just mentioned. I subsequently observed on ascending the gloomy banks of the Guayaquil River, where there are many large plantations of M. sapientum, that the leaves in most instances remain perfect on the plants until their period of decay. Around the town of Panama the natural vegetation is less luxuriant than that on the eastern side of the isthmus, owing perhaps to the shallowness of the soil and rocky character of the surrounding country. On some of the ridgy hills near the town I observed several species of Cacti, and many of the people have hedges of the more robust-growing species planted around their gardens; they form an effectual protection against the ravages of swine, &c. I noticed also a species of Momordica, growing plentifully on stony ground around the town.

I left Panama by steamer on the afternoon of the 9th of May, and reached Guayaquil late on the evening of the 13th. After leaving Panama, as we sailed along the coast, I could see the white chalk-like hills of New Grenada and the mist slowly rising from off their summits. A great many of the rugged hills which are seen along this coast are almost entirely bare masses of rock without the least signs of vegetation. On approaching the Gulf of Guayaquil the land gradually becomes more flat, and on entering the Guayaquil River the large tracts of country seen on each side seem almost on a level with the sea. The country is covered far and wide with something green; but in appearance greatly inferior to the gigantic vegetation seen on the eastern side of the Isthmus of Darien. On passing up the Guayaquil River, I saw large masses of Pontedera crassipes and Pistia Stratiotes, growing together and forming little islands, which floated up and down with the flow and ebb of the tide. On arrival at Guayaquil I was informed by Mr. Mocatta, her Majesty's Vice-Consul for Ecuador, that Mr. Spruce, who was still sick at Hambato, had written to him that on my arrival at Guayaquil I was to remain there until he should be able to communicate with me. Having therefore much spare time on hand, I used to make little excursions every morning to a low ridge of rocky cairn-like hills which stretch away to the north of Guayaquil, hoping to find there, growing in a natural state, some of the tropical vegetation with which I had been familiar in other lands. The great bulk of the plants around Guayaquil chiefly consists of species belonging to the order Leguminosæ, rising in the scale from annuals to wide spreading trees. Many Tree Acacias continue in flower all the year round, and their long black pods intermixed with green foliage and yellow flowers give them a very interesting appearance. On the hills near Guayaquil I did not find on examination the vegetation so interesting as I had anticipated. However, I found an abundance of semi-arborescent Acacias, Ipomœas, Bignonias, Convolvulus, Passifloras (some of which bore very handsome flowers), and the Castor Oil plant (Ricinus communis). One day, on descending to the base of a rocky cliff, on one of those low hills, I found the ground for some distance in front of the cliff covered with that most beautiful climber Ipomœa Learii in full bloom. This was certainly the finest floral display made by any single plant I had yet seen; for not only was the ground for some distance from the base of the cliff studded with its large blue flowers, but the adjacent shrubby and herbaceous vegetation was ornamented and festooned in like manner. The base of this rock afterwards became my most frequent place of resort, and I subsequently detected, growing on the face of the cliff, an Adiantum, a Pitcairnia, and a very singular looking species of Begonia, with small crisped ovate leaves and small lilac-coloured flowers.

From this period I henceforth ceased to wonder that the unnatural treatment to which some plants are subjected in hothouses in England failed to destroy them; for here the shallow debris of rock, on which those plants were growing, was as dry and as devoid of moisture as if it had been newly taken out of a burning furnace. The Adiantum had not, I could see, lived a great while on this dry precipice; but the Begonia had (judging from its length of knotty twisted rhizome-like stem) struggled on for several years. It had long been my earnest desire to see some species of Orchids growing in a natural state, but after much searching among the old Lichen-covered trees which are scattered over those hills, I failed to detect a single plant. I had seen, however, in the verandahs of several houses in the town of Guayaquil some fine healthy looking plants of Oncidium Papilio, and so I set myself sedulously to inquire from whence the plants were brought. But after much time I could only learn that the plants were found in (el monte) the wood; and, as the country, whichever way one might look, was covered by a vast expansive forest, the information derived was of little value.

Subsequently, however, on ascending the Guayaquil River, I had many opportunities afforded me for noting the peculiar circumstances under which this beautiful tribe of plants seemed to flourish; but this must form the subject of another paper. *Robert Cross.*

* Not Mr. Markham's.

Home Correspondence.

Parisian Horticulture.—You are right in stating that a visit to Paris will produce something interesting as well as instructive; there is plenty there to look at, much to study, and something to learn. This I can confirm from experience. I was in Paris about two months ago to see what I could respecting landscape gardening and horticulture as practised in France. The first thing I met with new to me, and also an improvement on our style of managing London streets, was the way in which the trees were planted and attended to. Leaving the railway station I visited the Boulevard de Sebastopol, which is almost a new street, lined with trees. Here, to prevent people from walking close to the latter, a circular iron trellis, about 5 feet in diameter, was put up in two parts, which were let into the pavement, so that the public could walk over them. Such a plan permits of the trellis being quickly taken up, the tree watered or manured, or fresh trees planted if the first did not succeed. This street reminded me of Oxford Terrace on the one side, and Cambridge Terrace on the other, in London, the latter being planted with common shrubs and enclosed by iron fences. Ask our friends to compare the Boulevards with this style of street-planting when they return from Paris. Could not our New Exhibition Road be improved by planting trees, like the Boulevard de Sebastopol? Plane trees would do for London; they look best of any thing in Paris. *J.N.*

Shanking of Grapes.—A "Young Gardener" asks, What makes his Muscat of Alexandria Grapes shank? Let me advise him to study his Vine, not in the contracted view in which it is so frequently presented to us under finger and thumb pinching, and the mistaken but well-meant eulogy, How very neat they look! the consequence of a thousand ties; but as a most interesting plant that would certainly do well in his border if treated with the addition of a fair supply of well used brains. With all due repect to his former instructors, let him be convinced that he has yet himself to teach; and to strengthen this conviction I would inform him that there is not a gardener in the world who from his statement could tell him why his Muscats shanked. Having for some years acted upon the advice which I now give, I can now show a Muscat house that will be ripe in a fortnight where there is not a single berry shanked, and where some of the bunches are 13 inches long from the top shoulder to the bottom of the

bunch; moreover, the absence of shanking in the long bunches is a proof that in the treatment (which is in many points original) I have removed them a respectable distance from the evil complained of. Should your Correspondent, or any one else, express a desire to know the particulars of my management, I will be most happy to communicate it to them either privately or through the medium of your columns. *W. Porter, Quinta Gardens, near Ruabon.* [We shall be happy to be the means of publishing your practice.]

Saponaria calabrica.—From the French Horticultural Journal of 1860, I copied the notice of a new bedding flower called Saponaria calabrica, and procured some of the seed from Paris. From this we have raised plants enough to fill two round beds, 4 feet in diameter, a standard Rose occupying the centre. The effect is beautiful, and it attracts much attention, no one having seen the flower before, though it may be known to you. Its colour is deep rose, the size of the flower that of Forget-me-Not. It masses well together, and is said to flower till the month of October; at a distance the effect is much like bright Heather, viewed nearer it is of a more delicate shade. The directions were to sow it in April or May. *G. and H., Marlow, Bucks.* [Saponaria calabrica is certainly very pretty, but anything rather than a novelty.]

Vincas.—I am surprised at "C. W. C.'s" assertion in your Number for July 27, that "Tropical Vincas never produce seed under cultivation if left to themselves," for I find both the white and pink kinds seed most profusely; in proof of this I enclose a small spray with seed pods on it. They sow themselves in the neighbouring pots, but the produce has never been different from the parent plants. *F. A. P.*

Judges at Regent's Park.—Like the other Judges at the last exhibition in the Royal Botanic Gardens, I was disposed to pass by as unworthy of notice the scrap published at p. 649 of your Paper; but finding that the subject is still harped upon in your columns, and knowing that the reiteration of complaints sometimes makes them appear well founded, as might be the case in this instance if the unsupported assertions of "A Visitor" are not contradicted, I am induced to ask that person if he will oblige the Judges by making some specific charge against them. If he can point out one instance of the "glaring misjudgment" he talks about, I will venture to say that the judges concerned will be able to justify their decision. *J. B. Whiting, one of the Judges of Fruit.*

Clubbing.—The reason of my troubling you with this communication is to obtain all the information I can respecting that disease known by the name of club in plants, and as Mr. Westwood is a contributor to your periodical, and one of the most distinguished entomologists of the day, I have great faith that he may be able to suggest a radical remedy. This pest I have had for upwards of four years, and although it is not so bad as it was some time ago, yet it is sufficiently bad to make it very desirable to get rid of it. Numbers of opinions have been given as to what is a panacea, yet without any avail. A gardener of a friend of mine told me that if I would take equal parts of lamp-black and soot, and mix it with water and dip the roots in it before planting, that would be a specific. This I have tried, both by mixing it with urine and water, yet without the slightest benefit. In a seed catalogue for this year, under the head Cabbage, lime is recommended to be dusted in the hole before planting. This I have tried, and have no hesitation in saying that it makes the disease ten times worse, so much so that the plants were so diseased that they were obliged to be removed, and therefore all my autumn Cabbages are lost. An article in the "Cottage Gardener" for 1857, by Mr. Robson, recommends soot and charcoal, or dusting with lime, but this from my experience is useless. He also recommends trenching, and this if I cannot succeed without it must be resorted to. Another contributor to the periodical just named, says that the disease is peculiar to poor soils. Now, this is just the reverse of my experience, for what has fallen under my own observation is, that it is peculiar to rich soils, and in proof of this my neighbour, who is also troubled with it, finds plants which were planted on his Asparagus bed (the richest soil in the garden) were worse affected than any others. Another contributor to the "Cottage Gardener" suggests the use of hydro-sulphate of lime (or gas lime), which contains a small quantity of sulphur, and which he says would be noxious to the larvæ. This I have not tried, being thoroughly tired of the name of lime. I am sure from the experiments I have tried that all alkalis more or less increase the disease. I have tried potass, soda, and lime, mixed both with water and urine (which contains a small portion of ammonia), but in all cases the club was decidedly worse. Instead of it arising from the poorness of the soil, I attribute it to over-manuring, and in consequence of that impression have not applied any for four years. Now if Mr. Westwood or any other Correspondent could recommend a specific by means of which I could get rid of this pest I should be extremely thankful. *Thomas Tomkyns.*

Strawberries.—In reference to some of the statements made by Mr. Leonard Wray, I would venture to make a few observations. I am ready to endorse what he states with regard to Oscar and Eugénie. They are good Strawberries. Add the Belgian variety, La Constante and Wonderful (very similar in all respects to Sir Walter Scott), and you have four of the best novelties that I have tried. I should not, however, think that Eugénie (raised by Knevitt) is the same as the Crimson Queen. This latter and the Frogmore Pines, are the only ones that I think of trying next year. I find that new Strawberries, whether British or foreign, are generally not better than those we have already, At any rate the new ones are not sufficiently distinct. We do not except for amateur amusement heaps of sorts. Those that we want in England are good average croppers, hardy plants that run early and quickly establish themselves, and are successional and good flavoured. In our fickle climate, Strawberries that come in before there is any power of sun, or during the heavy rains in the second week of July, are flavourless, and more or less acid. We want some one to raise a good August Strawberry, as it is usually a hot sunny month. No doubt Mr. Rivers's ridge glasses would be very valuable aids to the ripening of very early Strawberries or very late. I perfectly agree with what Mr. Wray has said with regard to stewing Strawberries under glass, like Orchids, and also with what he has advanced about coddling up Strawberries in winter. If ground is properly prepared by trenching (it is astonishing how deep the roots of Strawberries will descend) and runners are planted in the first or second week in July, they will defy the severest winter without protection, and will crop well over the first year. Plants thus firmly put in, so that the ground cannot pitch from the plant, will crop here well for at least four years. It is best then to change the plants. With regard to Americans; from a correspondent in the United States I learn, that whether it be Roses or Strawberries, they like "quantity," and think more of that than of form and quality. Myatt's Surprise will of course fill pottles quicker than most sorts. I have discarded it chiefly because my garden sloping from the sun I could not colour or ripen it. I measured one some years ago with the inches marked on tape, and found it to be 6½ inches in circumference. It is a good cropper, brings its whole crop up to a great size, and succeeds well for four years. In sunny gardens I have seen it quite a fine scarlet, still I should not think it was Myatt's masterpiece. My object, however, is not to run down any man's productions, but to recommend such as do well here. And I may observe that Strawberries which will not do well in one garden may be very good in others. As regards the few American sorts that I have tried, Triumph and Le Baron are the two best. Hovey's Seedling I did not like, and the American Scarlet is too small. If the Americans want hardy plants and great croppers then the following will please them, viz., Sir C. Napier, Ne Plus Ultra, Sir Harry, May Queen, earliest of all Rushtonienses (my seedling, 2nd rate), Marquise de Latour Maubourg, Captain Cook, Salter's Jucunda (late), Excellente, Wizard, and Alice Maude. If hardy plants, good croppers, and good flavour are required, then Rivers's Eliza, Oscar, Wonderful, Empress Eugénie, La Constante, and Trollop's Victoria are the ones that I should recommend. Eleanor is the finest late Strawberry, but not so hardy as Jucunda. The British Queen is still at the head of all Strawberries, and where she likes the soil she will crop as heavy as Myatt's Surprise. The more she is exposed to all four winds, and the less she is coddled, the healthier and the more robust she is. I should have thought that the maiden soil of America would have placed her at the head of market Strawberries in America. Of Hautbois I recommend Belle Bordelaise; of white Strawberries, the Beeton Pine. As Mr. Wray will have nothing to do with Belgravia, it is useless recommending Filbert Pine, Carolina Superba, Scarlet Pine, Pineapple, and such like. As far as my memory carries me, my correspondent in America recommended to me McAvoy's Superior, Peabody's Seedling, Haarlem Orange, and also Wilson's Albany. This last he said was the best for rich or poor. He mentioned one or two others, but I have forgotten them: Marylandica, I believe, was one. There is one other novelty here, sent just before Christmas, which is very hardy, large, and handsome. viz., Frewin's Beauty of England, but till I have given it a fair trial, I will not add to the above. Nothing could winter better, or grow quicker or robuster. I like what Mr. Peabody has said about cultivation, but in our gardens, abounding in Espaliers, I do not find horse and pig manure, decayed till it is black as bride-cake, bad for mine. Wood ashes are good, as containing potash, which is the grand constituent of a Strawberry, but they must be put on with caution, or they will burn the surface roots. They are, moreover, great retainers of moisture, too much so in cold wet summers. There is one other thing in which I quite agree with Mr. Wray—the disgraceful culture of this noble fruit in England "generally." *W. F. Radclyffe, Rushton, Blandford.*——Allow me to say in reference to Mr. Leonard Wray's account of American Strawberries, that I have above 20 American sorts, most of which are excellent bearers and good preservers, being a little acid; others are of good flavour, and most of them, though only about the medium size, are good for market, but of all those named below not one is ever bearing, like the Alpine. I therefore imagine that this country does not suit them, or Mr. Wray must be mistaken. To the question—"Is science brought to bear on the art of Strawberry culture in this country?" I say yes; and without so much trouble as our friends in America seem to give themselves about Staminates, Pistillates, and Hermaphrodites. We have only to plant a field or garden with our best sorts, and we get a crop of excellent Strawberries, such as will bear to be compared with any in the world. Practice and common sense are all that is required for their production out-of-doors, but science does assist us in producing forced Strawberries. I generally have ripe Strawberries six months out of the 12. A friend of mine writing the other day from near Dublin says: My receipts for Strawberry fruit alone this season are close on 100*l*. One orchard house produced from Princess Frederick William in pots 13*l*., about 1*d*. each. Is not this something like scientific culture? What say the great growers about London and Edinburgh? I sent some of the American sorts to the Royal Horticultural Society for trial along with many others. A public report of the same would doubtless now be of use. The following is a list of American Strawberries grown by me, viz:—Brighton Pine, Munroe's Scarlet, Unique Scarlet, Jenny Lind, Champion, Boston Pine, Wilson's Albany, Scott's Seedling, Marylandica, Hooker, Peabody's Seedling, Haarlem Orange, Psyche, Yowa, McAvoy's Superior, Pivas Minston's Seedling, Charles's Favourite, Hovey's Seedling, Le Baron, Hudson's Bay, Calypso, Triomphe, Fillmore, Imperial Scarlet, Eclipse, Chili, of four varieties. *William J. Nicholson, Egglescliffe, near Yarm, Yorkshire, Aug.* 6.

Thunderstorms.—In your last Number a correspondent points out an obvious error occurring in a note upon electricity (see p. 696), where it is stated that thunderstorms are unknown within 50° of north latitude. The error was made in the copy furnished to the printer, in which 50° was substituted for 70° in the original MS.; and unfortunately it escaped subsequent detection. With regard to the extreme rarity of thunderstorms in places far north, Kaemtz observes (see Walker's translation, page 361), "Thus during a sojourn of six years in Greenland, latitude 70°, Gisecke heard thunder but once; and all travellers agree on this point." It would therefore seem that the storms experienced by "Investigator" were quite exceptional to the general rule. *C.*

Societies.

Botanical of Edinburgh: *July* 11.—Prof. Balfour, V.P., in the chair. The Chairman stated that in a recent letter received from Mr. A. G. More, of Bembridge, the death of Mr. Albert John Hambrough, of Steephill, near Ventnor, Isle of Wight, is recorded. Mr. Hambrough was a distinguished naturalist in that part of England, and was always ready to assist botanists who visited the island. He made important additions to the flora of the island, and his name is noticed frequently in Mr. W. A. Broomfield's "Flora Vectensis." Mr. More says:—"His death is a sad loss to natural history in this island. In him I have lost a most kind and valued friend, the only fellow botanist in the island." The following communications were read:—I. "Notice of a Botanical Trip to Ben Lawers and Schihallion in September, 1860; by W. Keddie, Esq., Lecturer on Natural Science, Glasgow." Professor Balfour having taken up his autumn residence at Aberfeldy last year, the writer gladly accepted an invitation from his old friend and teacher to join him in a quiet botanical ramble to Ben Lawers and Schihallion. At Aberfeldy they were joined by Bell, who was commissioned from the Botanic Garden, Edinburgh, to collect Ferns. We devoted the 4th and 5th of September to the exploration of Ben Lawers; and, after strolling through the grounds and garden of Taymouth Castle on the 6th, visited Schihallion on the 7th. With the aid of the morning coach from Aberfeldy, we were at the foot of Ben Lawers at a seasonable hour, and having engaged our lodging at a comfortable inn situated on Loch Tay, at a spot convenient for commencing the ascent, we at once buckled on our vasculums, and began our journey. Ben Lawers is known to be one of our loftiest Scottish mountains, being 4015 feet high, and consisting of mica-slate, mingled with chlorite slate, and exhibiting remarkably contorted forms where the surfaces are exposed in the upper precipices. The water-courses below show beds of limestone inter-stratified with the schist. The mountain is equally celebrated for its alpine plants and the extensive and varied views obtained from its summit. Dr. Macculloch gave the palm to Ben Lawers, after having ascended almost every principal mountain in Scotland; and, oddly enough, he mentions that on the hill he met "two missionaries from the Edinburgh garden, with huge tin boxes slung over their shoulders, who seemed to be in a perfect ecstasy of happiness." The lapse of some 40 or 50 years had on the present occasion diminished neither the bulk of the boxes, the gaiety of their bearers, nor the prospects with which they made their way directly over the shoulder of the hill to the corrie, overlooking Lochna Ghat, the field of their operations for the day. The following were among the plants collected this day:—Draba incana, Cerastium alpinum, Cherleria sedoides, Silene acaulis, Sagina subulata, Rubus saxatilis, R. Chamæmorus, Sibbaldia procumbens, Epilobium alpinum, E. alsinifolium, Cornus suecica,

Hieracium alpinum, Saussurea alpina, Erigeron alpinus, Arctostaphylos Uva-ursi, Polystichum Lonchitis, and Polypodium alpestre. Various cliffs and crevices were examined for Cystopteris montana, not a vestige of which could be detected in its old haunts, but Woodsia hyperborea was found in considerable quantity on the precipitous face of the corrie, which was ascended by Bell with the fearlessness of a cragsman. The ascent to the summit was reserved for the succeeding day. The corrie occupies a secluded recess in the north-eastern declivity, where the view is closed in on the south by a ridge of the mountain, and only some glimpses of the distant heights of Strathtay are revealed. The snow of the previous winter still lay in thick wreaths among the crevices of the rocks. The lofty cliffs overhanging the corrie were cast into shade by the mists drifting down the ravines from the upper ridges, unvisited by the sunshine which, in the valley below, was diffusing cheerfulness and warmth over the green strath and the yellow corn fields. The weathered micaceous rocks, twisted into a thousand fantastic forms, and grouped in fanciful combinations, imparted additional wildness to the scene. Next day we started betimes, and took a straight course for the summit of the hill, which was reached after a stiff climb without our meeting with many plants which we had not picked the day before. With the exception, perhaps, of Ben Lomond, the view from the top of Ben Lawers is not equalled by that of any other mountain in the Highlands, and the day was favourable for enjoying it. Although the lake below appeared without a ripple on its surface, the mountain top was swept by a strong breeze, which rendered it difficult to maintain one's footing on the more exposed ridges. The sun shone brightly, and the mountain and vale were disclosed in the clear atmosphere as far as the eye could reach. The fertile banks of the loch lay extended below, from the rich woods of Killin to where the sylvan beauties of Taymouth mingle in the view with the remoter hills and plantations of Tayside. Ben More is the most prominent mountain to the westward, beyond which rise the peaks of Ben Lomond and the other hills overlooking Loch Lomond. Schihallion is recognised by its graceful outline and isolated position on the north; and far beyond, in the same direction, may be descried the rounded summit of Ben Cruachan, and the conical peaks of the hills overlooking Glencoe and Loch Etive. The eye could take in on the north-east the outlines of the snow-capped summits of the mountains surrounding the sources of the Dee; and southwards were discernible the ranges of Strathmore and Strathearn, the Sidlaws and the Ochils. We proceeded to explore the disrupted rocks in the cavity to the south-west of the summit, the part exposed to the prevailing winds, and where the storms of ages have worn the ridge into the appearance of a volcanic crater. The moist rocks on this unpromising height have long been known as a station for Saxifraga cernua, one of the rarest of British plants. We were fortunate in obtaining a few specimens, which, as is usually the case, were in an immature state, but readily identified by their bulbiferous stem and well-marked leaves. Saxifraga rivularis we did not observe, although it has been found on the mountain. Draba rupestris occurs also sparingly in the crevices of these exposed rocks. Thalictrum alpinum, and some of the more common alpines, are comparatively plentiful. Following the course of the bare inhospitable ridge to the northward, we again sought the productive cliffs of the corrie, and examined the side opposite to that which occupied our attention on the previous day. Here, in the channels of the rills and the crevices of the dripping rocks, were found quantities of Myosotis alpestris, which, although not absolutely amongst the rarest, was by far the most beautiful of our alpine treasures. The first sight of this lovely Myosotis, with its bright azure flowers glistening in the spray, would have been an ample reward for more than the toil of twice ascending Ben Lawers; and its frequent recurrence on the moist cliffs—sometimes within reach, sometimes (happily for our too eager acquisitiveness) beyond it—was a source of ever new delight. Haunting the same humid rocks were Saxifraga nivalis and S. stellaris. On the 6th the party examined the grounds of Taymouth, under the guidance of Mr. Murray, the head gardener. On the 7th they visited Schihallion, without any definite idea of its botanical character, but with a lively interest in the hill itself, not only as forming a conspicuous and imposing feature in the scenery of the district, but still more particularly on account of its having been chosen by Dr. Charles Hutton and Dr. Maskelyne for their experiments to determine the density of the earth, and also from the subsequent observations of Prof. Playfair on its geological structure. The lower part of the hill exhibits, in sections cut by the streams, beds of micaceous and hornblende slate interstratified with crystalline limestone, but the upper part, forming the great bulk of the hill, consists of granular quartz, compact and homogeneous, and capable only of supporting a meagre vegetation. The summit, which terminates in a narrow plain about a mile in length, is covered almost exclusively with Lichens and a few Mosses. To the botanist it affords probably as few attractions as any mountain in Scotland. The plants gathered on the flanks and lower slopes were the following, viz.:—Thalictrum alpinum, Genista anglica, Rubus chamæmorus, Hippuris vulgaris, Saxifraga aizoides, S. hypnoides, var., S. stellaris, Cornus suecica, Vaccinium myrtillus, Pyrola secunda, Empetrum nigrum, Salix arbutifolia, Listera cordata, Tofieldia palustris, Carex rigida, Festuca ovina, var. vivipara, and Lycopodium Selago; a specimen of Polystichum Lonchitis was gathered having 130 fronds. At the summit the rocks were crusted over with Lecidea geographica, and amongst other Lichens, Cetraria islandica, Scyphophorus bellidiflorus, and Cladonia rangiferina were not unfrequent. Among the Mosses — Pogonatum alpinum, Dicranum fuscescens, Andræa rupestris, Hypnum denticulatum, Trichostomum lanuginosum, and Fissidens osmundoides." II. "On some of the Stages of Development in the Female Flower of Dammara australis." By Dr. Dickson. The author gave the results of a partial investigation which he had been able to make of the development of the female flower of this New Zealand Conifer, a plant of which had produced cones in one of the hothouses in the Royal Botanic Garden here. The author believed that his observations were confirmatory of Baillon's views as to the bicarpellary nature of the Coniferous flower (ovule of Robert Brown). He also showed that the so-called squamæ fructiferæ in Dammara must be considered as the leaves of the cone-shoot, corresponding to the "scales" in the cone of Araucaria; but differing essentially from the squamæ fructiferæ in our common Coniferæ (Pinus, Abies, &c.), which are structures axillary to the leaves of the cone-shoots. III. "On the Homologies of the Floral Organs of the Phanerogamous and higher Cryptogamous Plants." By Dr. Lowe. IV. "Notice of Localities in Scotland for some Rare Plants." By Prof. Balfour. V. "List of Plants growing in the Bangalore Garden, Mysore." With remarks by Dr. Cleghorn. Mr. W. Lowe sent leaves of the common Oak, assuming a remarkably large size. The following note accompanied them:—"I send a couple of leaves of the common Quercus Robur, which were given to me by W. Steppings, Esq., of Setch, near Lynn. One of them measures 9 inches in its transverse diameter, and though somewhat larger than the generality of the leaves, yet the entire foliage of the tree is something very remarkable. No doubt this is owing to the effects of the late severe frost, which, by diminishing the number of buds, has caused an increase in the nutrition of those that remain. I do not remember to have seen anything so fine as the branches which were sent to me." Various monstrosities of Roses have been sent to the Botanic Garden this summer. At St. Colm, Mr. Parker reported that almost all the Roses were proliferous, producing numerous flower buds from the receptacles, and all surrounded by a common calyx. From Broomhall Park, Sheffield, Mr. Allan sent similar specimens. In some of them the calyx was developed in the form of large leaves, like the ordinary ones of the Rose.

Notices of Books.

Twenty-four Views of the Vegetation of the Coasts and Islands of the Pacific, with Explanatory Descriptions. By F. H. Von Kittlitz. Translated from the German and Edited by Berthold Seemann, Ph.D., F.L.S. Longmans. Small 4to. 1861.

Although the original of this remarkable work was published in Germany several years ago—we believe in 1847 or 8—it has hitherto remained almost unknown to the English reader. And yet, if ever a book deserved to be in the hands of all lovers of art and admirers of the aspects of wild nature, it was surely this; for the author, a most accomplished draughtsman, and an enthusiastic traveller, enjoyed opportunities of sketching exotic scenery such as few with his great talent have possessed. It is said indeed that similar views by Ferdinand Bauer are to be found in the library of one of our public offices, but they have never seen the light; and those of Kittlitz stand foremost among representations of Vegetable Physiognomy.

When the expedition to the Pacific under the command of Capt., since Admiral, Lütke was organised, the Russian Government took care that a naturalist and artist should accompany it. The former was Dr. Mertens, the latter our author, who gives the following account of the manner in which he executed the commission entrusted to him:—

"On the departure of the Russian corvette 'Senjawin,' in 1826, the botanists of St. Petersburg suggested that, as opportunity offered, as many portraits and characteristic sketches of the vegetation as possible should be taken. Although unacquainted with botany, I was deeply interested in carrying out this suggestion, and in my mind's eye conceived a series of pictures, from which the following may have borrowed its form. Still want of time, generally experienced by the naturalists of exploring expeditions, would probably have prevented me from carrying my resolution into effect, if the nature of my occupation had not essentially tended to favour it. Sporting and collecting zoological objects constantly brought the features of the vegetation before my eyes. Setting out with the determination to construct a view, I generally succeeded in accomplishing it during the short time that we used to remain at anchor in each place, provided I had collected the necessary materials. These consisted—1, in a sketch of any comprehensive landscape in which generally several, according to the principal peculiarities of the soil, were joined; 2, in a sufficient number of portraits of the larger plants, occupying the respective soils, and which, unless already embodied in the general sketch, might unhesitatingly be introduced. A rough draft of the whole was generally made directly after leaving the country to which it referred, when the survey of nothing save sky and water did not interfere with the vivid recollections of impressions just received. A few possible mistakes were guarded against by the presence of Dr. Mertens, my dear friend and travelling companion, who generally knew well the plants illustrated, had collected them himself, and had preserved what he had seen fresh in his memory. Thus these 'views,' even when originating, were under the control of a wholesome criticism. It was long the favourite idea of my friend to write to them explanatory letterpress; and if his unexpected death had not prevented the carrying out of his plan, the whole would have been an interesting work, whereas now the plates may rather suffer from want of fuller explanations than here given."

Lütke's expedition having looked at the Coast of Chili, thence stood away across the Pacific, and visited the Philippines, the Carolines, and the Marianne or Ladrone islands, afterwards examining the coast of the Russian possessions in Kamtchakta, Unalaschka and Sitka. In all these places sketches of the vegetation were made such as no art short of that of the photographer of scenery could usually execute, and we owe the eminent publishers our thanks for having placed the work before us in an English dress. The translator is Dr. Seemann, himself a distinguished naturalist, personally acquainted with the scenery depicted by Von Kittlitz; which has enabled him not only to produce a faithful translation but to amend or explain many obscure, or inexact passages in the original.

The work consists of 24 views, of which 1 is on the arid coast of Chili; 2 are in the impenetrable forests and mountains of Sitka, a Russian settlement just to the North of our own British Columbia; 1 in Unalaschka, the dreary treeless Queen of the Aleutian Archipelago; 6 in the Carolines, whose splendid tropical vegetation offers a marvellous contrast with the tamer scenery of the north; then follow 6 scenes in the Ladrone islands, if possible more interesting than those of the Carolines; next in order follow 6 views in cold and comfortless Kamtchatka, that eastern corner of the old world, where the vegetation is that of swamps, and grassy plains, open forests of Birch and Poplar and Pine woods, the gloomy abode of bears unterrified by the nightly crash of falling trees; finally the eye is relieved by the light and graceful scenery of the Philippines.

Well may Dr. Seemann exclaim—

"Are all the virgin forests destined to perish by the axe before one master hand will attempt to preserve their grandeur on canvas for the instruction of posterity? Are our descendants to possess nothing save the bare descriptions of the gigantic trees of Western America? When every vestige of them shall have disappeared, will it be believed that in our days there existed vegetable monsters whose age was not calculated by hundreds but by thousands of years, whose summits overtopped those of our highest cathedrals, and rivalled the pinnacles of the great pyramids? Are we to have nothing save miserable daubs of the dazzling autumnal changes of colour undergone by the flora of Canada and the United States? Is the majestic grandeur of a coral reef under the bright skies of the South Sea no theme of inspiration? Are the beauties of a coral bed, reflected through the crystal waters of the ocean, with all the manifold form, colour, vegetable and animal life, a veritable "*sea-scape*" out of the region of the *land*-scape painter? There is every reason to suppose that art itself would be as greatly benefited as science is by their votaries extending the sphere of their studies. In order to seize upon the features peculiar to a country, one must be able to compare them with those of others. To appreciate at one glance the characteristic beauties of England or Europe, one must have seen more than England or Europe; and artists would be able to improve even upon their present style of shady lanes, &c., if they had spent a few nights in the desert, made several excursions in a virgin forest, or seen the mighty working of the icy masses in the arctic and antarctic circles."

Surely not. If young artists can put on the red shirt of Garibaldi, and leave for the rude discomforts of camp life the happy easy homes of England, there is no reason why their superfluous energy should not be directed to scenes like those that occupied the pencil of von Kittlitz.

"When," observes Dr. Seemann, "every branch of science, enlarging its horizon, is seized with a laudable desire to take a comprehensive grasp of the matter appertaining to its respective department; when no historian who values his repute, now writes the history of a country without ascertaining its bearing and relationship to that of the whole earth; when no geologist dares to advance conclusions without knowing what his brethren have brought forth; when no zoologist can publish the fauna, no botanist the flora, of a district without examining the surrounding regions: when philologists no longer attempt explanations without having examined the whole range of human speech, artists have, in contradistinction to this general tendency towards universality, remained essentially 'local.' The fact that North America may

now be reached within a week, at less expense than Italy, and the antipodes in forty days, seems to be quite lost upon them, and the treasures there to be found are doomed to be hidden until laid bare by the wand of some future artistic magician."

The plates of the edition before us, having been somewhat reduced from the original, are reproduced in photography, and we think it will be conceded that a more successful operation of the kind has rarely been carried out. If they have not the rough vigour of the originals they have certainly exchanged it for nothing less than an exquisite miniature finish.

Long as this notice has become we cannot dismiss von Kittlitz's charming volume without an example of his mode of description. We select one of the shortest: that of a swampy forest on Ualan, one of the Caroline islands:—

"Immediately adjoining the Mangroves is a description of forest peculiar to the tropics. The adjacent ground, just above high-water mark, becomes inundated in consequence of the high tide forcing back the water about to be discharged by rivers and rivulets. A soil thus periodically submerged, of course, never becomes dry, and only somewhat firm by gigantic roots of the trees occupying it. In Ualan, these swampy forests have a twofold character. Where the underwood consists of the creeping Hibiscus populneus, they are almost impenetrable; where this is wanting, there is, under the huge bower formed by the crown of large trees, a wider prospect. The underwood is composed of numerous stems, the crowns of which have not been able to attain the height of the larger trees, and have therefore remained undeveloped. The greater number of them belong to Barringtonia acutangula; the fine drooping bunches of flowers were often seen on the ground. The stems are decorated with epiphytical Ferns, amongst them most prominent Asplenium Nidus, at a greater or lesser elevation, and imparting a striking character to the landscape. No less elegant ornaments are the isolated Freycinetias, which in Ualan are mostly growing epiphytically, and replace by their long growth the great Orchids of the West Indies. They are shown quite in the foreground of the picture. On the left is a large Cordia, of which, however, only the stem, surrounded by the smaller ones of Barringtonia acutangula. The principal figures are several gigantic Fig-trees, as they are often met with in these forests. Those here illustrated may be assumed as having established, above the heads of other trees, a connection with each other by means of their branches, as is common in these kind of plants throughout India, where these form entire forests, the stems of which are connected. These are the far-famed Banyan trees, regarded as sacred in some places. Amongst the wonderful phenomena of the vegetable kingdom, as displayed in the tropics, they occupy the first place, and the botanist pauses before them, as the geologist does before some rocks, in order to decipher the hieroglyphics of their formation. The most striking peculiarities of these trees are their aërial roots, which, springing from the bark, grow downwards, often from a considerable height, but as soon as they strike the ground they enter it and form a new stem. They also have, in a prominent degree, a tendency of growing together as soon as their different parts touch each other, as is the case in other plants, especially some creepers, which causes that extremely fantastic shape generally observed in these trees. The present species differs from other kinds of Banyan with which we became acquainted, not only in its astonishing height (our illustration shows only the lower parts of the stems), but especially by its drooping aërial roots appearing in bundles of tender, originally disconnected fibres, which gradually grow together, and, after reaching the ground, increase in thickness, by which the new stem soon loses, more or less, all traces of its originally having been disconnected. The height of the whole is so considerable that the crowns reach above that of other trees, and here and there form as it were a forest above a forest, often visible for some distance. The spectator standing below soon loses sight of the upper parts of the tree, and only notices accidentally the connexion existing amongst trees which at first view would seem to be perfectly disconnected. * * * All the young saplings growing about here and bearing leaves were those of the Barringtonia acutangula, which does not disdain to occupy an epiphytical character on these large masses of wood. The often-mentioned Ferns here abound. The bark of this colossal tree is very soft, and of a brownish-yellow colour, whilst the young roots, as long as they are not metamorphosed, are more of a rusty brown. There is also a strong spiny reed, which at first sight was thought to be a Pandanus, but which belonged to the Cyperaceæ. It grows here gregariously, but isolated in the higher parts of the island, especially on rivulets in forests."

Miscellaneous.

Cure for the Potato Disease.—Now that this disease has become so prevalent in some parts of this country, it will, doubtless, be useful to many of our readers to learn a plan which has been discovered that bids fair to perform a cure of the complaint. Mr. Superintendent Jeffs has, at North Petherton, some rows of Potatoes, in the haulm of one of which he recently discovered signs of disease. Adopting a mode which has found favour with many persons in the same predicament, he cut off the leaves close to the ground in order to prevent the disease from spreading to the potatoes. Afterwards he scattered some slaked lime, in a warm state, over the row, and he found that it formed a kind of cement over the stalks which had been cut, and prevented the sap from exuding. It is believed this stopped the progress of the disease, as on digging the row the Potatoes were found to be quite sound, and kept well, but in order to test the efficacy of the cure, he has treated another row in the same way, and has merely cut the haulm from a third row, leaving a fourth in a natural state of growth. The result of this experiment will prove interesting, and we trust it will turn out satisfactorily.—*Bridgwater Times, Aug. 7.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Plants intended to supply a floral display under glass during autumn and winter must now be looked to. Let the stock of Begonias have another shift if not already in pots sufficiently large. Keep the plants thin that their foliage may be kept from injury. Crowea saligna and Plumbago capensis are both valuable autumn-blooming plants, and the latter is almost indispensable for cut flowers. Attend to Chrysanthemums, water freely with liquid manure; good specimens should be aimed at rather than a few fine blooms. The earliest winter flowering Heaths and Epacrises should now or soon be placed under cover, as it will forward their blooming; give air, however, freely. The potting of Hyacinths, Narcissus, &c., for forcing, must soon occupy attention; about equal portions of good fibrous loam and decayed leaf-mould with silver sand will be the best soil for them if for forcing, but well-decomposed cow-dung must be substituted for the leaf-mould when the bulbs are intended for late flowering. After potting place them on a dry bottom and cover the pots 2 to 3 inches deep with old tan or ashes, preserving them at the same time as much as possible from heavy rains; under this treatment they will fill their pots with roots, and will be in readiness for forcing when wanted. Ixoras, which have bloomed, and which it may be desirable to increase in size as fast as possible, should be cut back, re-potted if necessary, thoroughly cleaned, tied out, and placed in the warmest end of the house. These, if properly attended to, will make a fine growth before winter. Attend to re-potting all young growing stock, as may be necessary, keeping it well supplied with water at the root, and the whole of the plants free from insects. Be careful to maintain plenty of moisture in the atmosphere, and give air freely on fine days, but not so as to cause drying currents to pass through among growing plants.

FORCING DEPARTMENT.

Pineries.—A rather dry state of the soil about the roots and also of the atmosphere is essential during the ripening of the fruit where high flavour is an object, therefore be careful not to over-water plants on which the fruit is approaching maturity, and it will be advisable to use slight fires during the present dull rainy weather, so as to allow of giving sufficient air to prevent a stagnant state of the atmosphere, for fruit of first-rate quality cannot be expected from plants growing in a sodden soil or a damp unhealthy atmosphere. Endeavour to afford growing stock a steady bottom-heat of about 70°, and keep it well supplied with manure-water at the root, but avoid getting the soil too wet. As fire-heat will soon be necessary to a considerably larger extent than has been the case during summer, care must be exercised to secure a properly moist state of the atmosphere, keeping the evaporating pans or troughs regularly supplied with water, and moistening the floors, &c., frequently, as any sudden change from a moist to a dry state of the atmosphere would be most injurious to growing stock, and also to plants swelling their fruit. Be as sparing of fire-heat, however, as circumstances will allow, and shut up early on the afternoons of bright days. Where young stock is grown in dung-pits care must be exercised after this season not to get the plants weakly through keeping them too close and warm, giving air freely on every favourable opportunity, and sufficient command of warmth should be secured from the linings to allow of giving a little air at night and on warm cloudy days.

Vinery.—Inspect ripe Grapes and remove all decayed or unhealthy berries; keep the house well aired and free from moisture. Maintain a moist growing temperature in the late house; if mildew appears, dust sulphur over both fruit and shoots, it may afterwards be washed off without injury; but perhaps the best preventive of this pest is heat and moisture regularly maintained from the time the fruit is set till it begins to ripen. Encourage the growth of Vines in pots by frequent waterings with liquid manure; stop them as soon as they have attained the desired length, and cut out all lateral shoots as the wood ripens. When the crop is cleared from early Vineries, the wood ripe, and the leaves beginning to decay, the sashes may be removed altogether.

FLOWER GARDEN AND SHRUBBERIES.

Propagation of all the more important bedding-out plants must soon be pushed on as quickly as possible; late struck cuttings are bad to keep through the winter through having an insufficient amount of roots and ill-matured wood. Let Scarlet and other Geraniums struck in the open ground be taken up and potted immediately they have made roots; they will require a close frame for a week or two, when they should be placed on a dry bottom in a southern exposure to harden them for the winter. For the same purpose Verbenas, Petunias, &c., struck in pans and intended to be kept in them through the winter, should be placed in a similar situation, at the same time stopping the points of the shoots. It should in fact be a point to keep them as hardy as possible by fully exposing them, until they are placed in their winter quarters. Mignonette for winter and spring flowering may yet be sown. Phloxes and other herbaceous plants will now be making a tolerably good show.

HARDY FRUIT AND KITCHEN GARDEN.

Commence layering Strawberry runners in small pots for forcing; pot for early work as soon as they are well rooted; place the plants in a situation fully exposed to air and light; set the pots on coal ashes to prevent worms from entering them. The following are among the best kinds for forcing:—Keen's Seedling and May Queen for early work, and Ingram's Prince Arthur, Sir C. Napier, and Oscar for later crops. Gather Pears and Apples as they ripen; water late crops of Celery if the weather should become dry; plant Broccoli and other winter Greens, and the principal sowing of Cabbages for spring use must soon be made. Sow also Brown Cos and Hardy Hammersmith Lettuce, and plant out sorts formerly sown in a warm situation; a few Turnips may also be put in, and a little Early Horn Carrot. Cut Herbs if not already done, and dry them for winter use.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending August 8, 1861, as observed at the Horticultural Garden.

August.		Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind.	Rain.
Friday	2	25	29.785	29.627	82	51	66.5	63	59½	S.	[illegible]
Satur.	3	26	29.934	29.735	67	55	61.0	63	59	S.W.	.01
Sunday	4	27	30.028	29.974	79	47	63.0	62	59	W.	.00
Mon.	5	28	29.926	29.856	80	41	60.5	64	60	S.W.	.00
Tues.	6	●	30.043	29.912	78	43	60.5	64	60	W.	.00
Wed.	7	1	29.999	29.766	76	55	65.5	65	60	S.W.	.13
Thurs.	8	2	29.734	29.663	68	53	60.5	64½	63	S.W.	.15
Average..			29.921	29.790	75.7	49.3	62.5	63.2	59.6		.3[illegible]

Aug. 2—Cloudy and fine; very dry air; fine; lightning at night; slight rain.
— 3—Cloudy; boisterous; densely overcast.
— 4—Overcast; fine throughout.
— 5—Cloudy and fine; very fine; dry air, fine; cold at night.
— 6—Fine; very fine throughout.
— 7—Fine; very fine; overcast; rain at night.
— 8—Densely overcast; rain; densely overcast; fine.

Mean temperature of the week ½ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending August 17, 1861.

August.		Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday	11..	75.6	51.8	63.7	17	0.78 in.	1	1	3	1	5	14	9	1
Mon.	12..	74.8	50.9	62.8	13	0.47	2	2	1	1	6	12	—	4
Tues.	13..	73.9	50.4	62.1	16	1.14	1	3	2	3	5	14	2	5
Wed.	14..	72.1	50.9	61.5	14	0.79	—	9	4	2	2	11	5	2
Thurs.	15..	72.7	50.0	61.3	14	0.61	4	5	4	1	4	—	3	5
Friday	16..	73.4	51.7	62.6	15	0.58	—	2	4	2	4	11	8	4
Satur.	17..	76.2	50.7	63.4	19	1.12	4	2	1	2	5	7	12	2

The highest temperature during the above period occurred on the 11th, 1835 and 15th, 1842—therm. 92 deg.; and the lowest on the 13th, 1839—therm. 32 deg.

Notices to Correspondents.

Coral Tree: *J P.* The plant you have sent is Erythrina laurifolia. It will flower if you give it a good rest in autumn in the hot sun; and then in February set it going with a smart bottom heat and moist atmosphere.

Emigration: *Vancouver.* You shall have an answer next week. Enquiries in a sure quarter have to be made.

Fruit Trees: *E S.* You state that your wall facing the east is quite exposed—south to the sea—north no protection. It would be desirable to know in what part of the country your locality is. Presuming it is in the south, Pears will succeed with proper shelter; but this ought to be the first consideration. Each end should be flanked with a high wall, projecting at least 12 feet, for immediate shelter, until a more effectual one can be obtained from trees. The Pinus Pinaster should be employed, as it is well adapted for resisting the sea breeze. You may plant the following kinds of Pears, which we have seen grown to good perfection very near the sea, but sheltered from the breeze, on the south coast:—Beurré de Capiaumont, Marie Louise, Louise Bonne (of Jersey), Knight's Monarch, Passe Colmar, Glou Morceau, Thompson's, and Winter Nelis. †

Insects: *Sir W T.* Your moth from the Dates came to hand so completely spoiled by its journey that it was not recognisable. *W.*

Judges in the Regent's Park: *W Y.* We have published your complaint, and Mr. Marnock's answer. We cannot carry the matter further on your side.

Names of Plants: *J Smith.* It is Nycterinia fragrans. The night scented Stock is Mathiola tristis.—*A Subscriber.* 1, Polygonum divaricatum; 2, Menziesia polifolia, white; 3, Lysimachia vulgaris; 4, Colutea arborescens.—*E B P.* 1, Mentha sativa; 2, Clinopodium vulgare; 3, Rhamnus Frangula; 4, Stachys sylvatica.—*F A P.* Santolina Chamæcyparissus.—*D.* Nepeta nuda. We fear it is too tall and too gray for bedding purposes. Some Nepetas are far dwarfer and handsomer.

Transplanting: *R H.* We repeat it "In the whole of August and September Evergreens may be removed." We add "and are best removed;" doubtless for this simple reason, that the earth is then warm and the plants root immediately if properly treated. But of course they must be removed with care; if the roots are made bare and allowed to become too dry Evergreens will not remove well at any season—unless they are very small. And yet American plants thrown about for two or three days in a hot dry place in August have not missed the moving; but that risk had better not be run.

Vines: *G H E.* Fire heat should only be given now to dry up damp, and thus prevent it from rotting the Grapes. Your outside border should also be covered to throw off heavy rains. Pines that are not fruiting should have very little fire heat given them at this season. ‡

Misc.: *G W.* The volumes are yearly; they are rather bulky, and many subscribers omit the *News* for this reason; you will see that the paging enables you to adopt either plan.

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861 are now ready for delivery at his Factories, at the following prices:—
LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME £6 6
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES .. 5 5
LAWES'S BARLEY, GRASS, AND MANGEL MANURES 8 0
These Manures can be obtained of MR LAWES, or through the appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Latley Buildings, Eden Quay, Dublin.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.
CONCENTRATED TURNIP MANURE, equal in value to the preceding.
Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

THE LONDON MANURE COMPANY.
(ESTABLISHED 1840,)
Are now prepared to send out the following MANUFACTURED MANURES:—
SUPERPHOSPHATE OF LIME, of best quality.
DISSOLVED BONES, AND BONE MANURE FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN AND ROOTS.
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MANGOLD MANURE.
They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate to be obtained entirely from Bones.
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116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

JAMES AND FREDK. HOWARD, Britannia Iron Works, Bedford, Manufacturers of
CHAMPION PLOUGHS | HORSE RAKES
STEAM PLOUGHS or CULTIVATORS | HORSE HOES
HARROWS | SCARIFIERS
And other Implements.
Catalogues with full particulars sent free on application.

JOHN FOWLER, JUN., 28, Cornhill, London, E.C.—Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free.

£1000 upon the WOOLSTON SYSTEM against any other system of Steam Cultivation.
For price of apparatus and particulars apply to Mr. W. SMITH, Woolston, Bletchley Station.

Wind Power.
J. R. PEILL, 17, New Park Street, Southwark, S.E., begs to inform intending purchasers that he has now increased facilities for Manufacturing the Patent Wind Engines for Pumping, Grinding, Chaffcutting, Pulping, &c.
Prospectuses and all information may be obtained by enclosing one postage stamp, and a Wind Engine in full work may be inspected on the premises daily.

TENTS, &c.—A quantity of Government Bell Tents and Marquees, suitable for Rifle Companies, Cricket Clubs, &c.; also Rick and Hay Cloths, Ropes, &c. Prices on application to JOHN MORISON, 25, Norton Folgate, N.E.

Agricultural Implements of Established Reputation.
RICHARD GARRETT AND SON, Leiston Works, Suffolk,
persevere in giving their most earnest attention to the manufacture of their well-known Farm Machinery, having had 40 years' practical experience of the requirements of the English Farmer, aided by every appliance that can be made use of, for rendering it thoroughly practical, simple in construction, efficient in use, and moderate in cost; and it is with the fullest confidence in being able to give entire satisfaction that R. G. & SON earnestly solicit the combined patronage of their numerous friends and agriculturists generally.
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BURGESS AND KEY, 95, Newgate Street, E.C. Prizeholders for the best Agricultural Machinery Manufactured.
ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price 42l. 10s.
TESTIMONIALS.
A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following:—
From Mr. JOHN RICHARDS, *Bailiff to* Dr. N. CARNE, *Dimland Castle, Glamorgan.*
"I beg to certify that I have for five years worked Messrs. Burgess & Key's Reaper in my master's Home Farm, and also accompanied it when lent to tenants on the estate. During the above mentioned period the Machine has not cut less than 1,000 acres of all kinds of crops, with the same two knives as first had with the Machine. Dr. N. Carne having given up farming, the machine is now in the hands of his tenant, Mr. D. Thomas, of Llanrwst, and is in excellent order."
M'CORMICK'S REAPER for Manual Delivery. Price 25l.
ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30l.
COMBINED REAPER AND MOWER—Two-Horse Machine. Price 35l.
The last Machine is fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.
These Prices include Packing and Delivery at any Railway Station.

Investment of Savings and Capital.
THE CONSERVATIVE LAND SOCIETY SHARE DEPARTMENT, 5 per cent. per annum. Deposit Department 4 per cent. ditto. The Interest Warrants issued half-yearly, and Withdrawals at fixed periods, according to the amounts, large or small. No partnership liability, and the taking of land is entirely optional. Prospectuses sent free of charge. CHARLES LEWIS GRUNEISEN, Secretary.
Offices: 33, Norfolk Street, Strand, London, W.C.

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WORKS OF DRAINAGE of any extent are EXECUTED by the GENERAL LAND DRAINAGE AND IMPROVEMENT COMPANY on all descriptions of property, whether freehold, entailed, mortgaged, trust, ecclesiastical, corporate, or collegiate.
Repayment may be made by the Landowner as successive portions of the works are completed; or the actual expenditure, with a commission thereon, may be charged on the property improved, by way of rentcharge on the estate created for various terms of years so as to adapt the rate per cent. of annual charge to the circumstances of the tenants.
No investigation of title being required, or notices given to Reversioners or Mortgagees, no legal expenses are incurred.
Works of Irrigation, Enclosing, Wood Grubbing, Road Making, and Farm Buildings are executed in a similar manner.
Landowners desirous to execute any of the Improvements by their own Agents, and charge the outlay and expenses on the Estate, may obtain Loans for the purpose.
Applications to be made to WILLIAM CLIFFORD, the Secretary, at the Offices of the Company, 52, Parliament Street, S.W.

THE LANDS IMPROVEMENT COMPANY.—Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c. IN ENGLAND AND WALES AND IN SCOTLAND.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
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3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.
Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.
For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

FREE STUDENTSHIP IN THE EDINBURGH NEW VETERINARY COLLEGE, Authorised under Royal Sign Manual. WINTER SESSION, 1861-62.—Gentlemen desirous of commencing a Course of Study to qualify as Veterinary Surgeons are informed that all who enter on the 6th November, 1862, and who have not attended a Veterinary College before, will be admitted to compete for a FREE STUDENTSHIP at the close of the Winter Session. The conditions of the competition, and any farther particulars, may be learned from Professor JOHN GAMGEE, New Veterinary College, Edinburgh.

MANCHESTER AND LIVERPOOL AGRICULTURAL SOCIETY.
Patrons—The Right Hon. the EARL OF DERBY, K.G.; and LORD EGERTON OF TATTON.
President for the Year—FRANCIS D. P. ASTLEY, Esq.
The ANNUAL SHOW OF HORNED CATTLE, HORSES, SHEEP, PIGS, POULTRY, DOGS, CHEESE, BUTTER, SEEDS, ROOTS, FRUIT, IMPLEMENTS, MACHINERY, and MISCELLANEOUS ARTICLES will take place at Ashton-under-Lyne on WEDNESDAY and THURSDAY, September 11 and 12.
Premiums amounting to upwards of 1100l. (including considerable Special Prizes) will be competed for on this occasion.
Entries Close on August 14.
Prize Lists and Forms of Entry may be had by applying to Messrs. W. MARSHALL and S. H. HYDE, Honorary Secretaries to the Local Committee, Ashton-under-Lyne; Mr. W. G. MOORE, Agent, 2A, Half-Moon Street, St. Ann's Square, Manchester; or from T. B. RYDER, Secretary.
2, Elliot Street, Clayton Square, Liverpool.—August 10.

The Agricultural Gazette.

SATURDAY, AUGUST 10, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

THURSDAY,	Aug. 15	Meeting of the Cleveland Agri. Society
FRIDAY,	— 16	at Yarm.

COMPLAINT is in many quarters made of the destruction of the Mangel crop by a grub which eats out the inner substance of the leaf. Mr. MOORE, of Coleshill, Berkshire, informs us that his crop of 20 acres will thus, in all probability, be wholly destroyed. The attack commenced when the plant was about a month old, and now every plant seems yielding to the destructive enemy. The specimens sent for our inspection are half eaten up by a short yellowish grub, five or six of which are to be seen in every leaf. They are the maggots of a fly named *Anthomyia betæ*, and are one of a genus of small flies not unlike the common house fly in appearance, whose species furnish a number of the grubs which attack the roots of Turnips and Cabbages, and the tubers of rotten Potatoes. This attack is no new thing in the history of the Mangel crop. We have seen crops much injured in this way almost every year during the last 14 or 15 years.

The insect is described in vol. viii., p. 412, of the Agricultural Society's Journal, where, however, the injury it is capable of inflicting is very much under-estimated.

MR. BAILEY DENTON'S Advertisements in another column deserve to be borne in mind. It is a good thing for agriculturists generally and for agricultural labourers in particular, that well-paid places are open for well-conducted young men with scholarship enough to read instructions or to keep accounts. It would have a most beneficial influence on the whole class of farm labourers to let them know, what is the case, that numbers of good places are open to young men of good character accustomed to field work and able to read and write, where they may at once earn 3s. a day, with the certainty, if they are possessed of resolution and intelligence and a sufficiency of the imperative mood, of rising to well-paid posts of superintendence and trust.

THE question will very soon arise—not: In whose case may the steam-drawn plough be expected to be profitable?—but: Where may it not be at once adopted with certainty of success?

Let us take the case of a light land farm upon the chalk—wholly arable, and only 400 acres in extent—already so skilfully and economically managed that 13 horses suffice for its cultivation, notwithstanding that there is a great deal of haulage during the year, both of produce and manure, and notwithstanding that only one-seventh part of the land is each year in Clover and Grass. A 13-horse farm, and a light land farm as well, is, one would think, hardly the place for the steam plough. Nevertheless, two years' experience of the steam plough on such a farm has amply satisfied the occupier—a tenant farmer—that his enterprise has been successful—that on the lightest soil there is a great advantage in being able to make the full use of good seasons for cultivation, and in ability to plough 12 inches deep, even though chalk and flint be every now and then thrown upwards to the surface. And he now declares that on entering a farm, even though no larger than 400 acres, and those light soil, he would as a first investment spend 700l. or 800l. on a steam plough.

The case of "Little Woodcote Farm" deserves examination, for there is much of great agricultural interest in its history, apart from its successful cultivation by steam power, which is the point by which it is principally distinguished.

It lies—a tract of open country and light calcareous soil of various depth—upon the chalk, about a mile from the Carshalton Station on the London and Epsom Railway. Mr. ARNOT, who is in the fifth year of his lease of it, brought to its cultivation four years ago the habits, experience, and prejudices of a Forfarshire farmer; and though in several things the county of Surrey and its circumstances have since modified his opinions, yet he finds essentially that the style of farming adopted in the North answers perfectly in the South. He came a stranger to the locality and brought much that was new and strange along with him; nevertheless his plans have been carried out without any question or difficulty on the part of his labourers. As an instance we may mention that his horses have been all along worked in pairs, going out at 6 A.M., coming in for their mid-day meal at 11, going out at 1 P.M., and coming home at 6. So radical a change as this of the system of the neighbourhood, where the farm teams go out at 7 A.M. and come in at 3 P.M. or thereabouts, stopping half an hour in the field to bait, has been adopted, of course to the great economy of his management, without any difficulty put in his way by his labourers. The cottages upon the farm are rented with it. 12s. a week all the year round and a cottage are the wages paid to ploughmen and other constant labourers on the farm; and the ownership of their cottages gives of course the tenant all the power he needs in the direction of his men.

Again, the rotation adopted is for the most part Scotch—no less than one-seventh of the land is in Potatoes, which as a principal farm crop is new to the district. Only one-seventh is in Clover; this is followed by Wheat; the Wheat stubble is deeply cultivated, and in the following spring the land is planted for the most part with Mangel Wurzel—40 or 50 acres being in Mangels, and the remainder of that seventh, 10 or 15 acres, being in Turnips. The Mangels are followed by Oats, and these by Barley. The stubble is again thoroughly cleaned

and deeply tilled for Potatoes, which are followed by Wheat, with which Clover and Grass seeds are sown.

The style of cultivation, too, is Scotch; a 10 and even 12-inch furrow in the case of all stubble ploughing for fallow crops is not a Surrey practice. The ridge system of culture for Mangel and Turnips—the horse culture of the Potato crop—all this is more Scottish than English.

The organisation of farm labour is Scotch, and turns out perfectly adaptable to English labourers. The horse labour has been already referred to. How economical the management of hand labour is plain from the fact that on a farm of 400 acres, of which two-sevenths are in fallow crop, and only one-seventh in Clover, the sum paid in wages has varied from only 460*l.* to 480*l.* a-year.

The reaping of the grain crops is almost wholly done by BURGESS & KEY's reaping machine.

In 1857, 176 acres were thus reaped and tied and stooked for 38*l.* 19*s.* 7*d.*, or 4*s.* 5*d.* per acre. In 1858, 179 acres were reaped for 40*l.* 17*s.*, or 4*s.* 6*d.* per acre. In 1859, 183 acres were reaped for 41*l.* 2*s.* 8*d.*, or 4*s.* 5*d.* per acre. In the difficult harvest of 1860, 208 acres were reaped for 52*l.* 17*s.* 8*d.*, or 5*s.* 1*d.* per acre.

Of course every one knows that the mere cost of an operation is no criterion of its economy—that, in particular, cheap and careless harvest work is often dear enough in the end—that tying and stooking a good crop will alone often cost 5*s.* an acre—and that slow and costly hand-reaping carefully performed may be cheaper in the end than hasty and ill-done harvest work by machinery. Nevertheless it is well worth knowing that by the aid of BURGESS & KEY's reaper the cutting and tying of crops of average bulk is in this instance done to the satisfaction of an energetic farmer for 4*s.* 6*d.* to 5*s.* an acre. This sum includes wages and repairs, but no charge for horses. How satisfactorily and rapidly the work has proceeded is plain from the fact that the driver of the machine is paid for his work at the rate of only 2½*d.* per acre, the average performance during the season, extraordinary as it may seem, having actually been 20 acres daily, cut by two pairs of horses, which are changed for one another during the day.

The manuring of the farm is to a great extent in accordance with Scottish rather than English management. One-half more than the rent is paid annually for guano, superphosphate, nitre, bones, and farmyard dung. These are applied to Potatoes, Mangel Wurzel, and grain crops, while the home manure is applied to green crops and to Clover, so that, as Mr. CAIRD once said in one of his farm reports, "It is the custom to manure for every crop upon this farm."

We doubt not that on hundreds of Surrey farms rent is paid as easily and farm capital proves as profitable as where the management is on Mr. ARNOT's, or the Forfarshire plan. The enumeration of the several features of his system as being of Scottish origin is not intended for the disparagement of English agriculture in general or that of Surrey in particular. It is only for illustrating the fact that management may be successfully transplanted, and that if the main circumstances on which its success depends be present, such variations of soil and even of climate as in our island corn-growing land exhibits may be disregarded to a greater extent than is generally supposed.

Mr. ARNOT has ample supply of manure at his command; he has the best market in the world for Potatoes and for Mangel Wurzels close by him; he has ample supply of labourers when they are needed—and he has gone into deep culture and fallow cultivation of green crops, though they are both to a great extent new to the district, with well-founded confidence in their results.

As regards many of the details of his management, we doubt not he must ultimately fall in with English practice. He will probably ultimately manure his Clover for Wheat—he will ultimately more systematically hoe his corn crops, and not depend for the cleanness of the land, as heretofore, so entirely on the thoroughness of the fallowing given to the land during the growth of his green crops, and he may ultimately approach more nearly English practice in the management of his live stock. On the other hand we have not the remotest idea that he will ever give up his Scottish management of horse and manual labour, or his depth of cultivation, or lastly his steam-ploughing, by which he is mainly distinguished from his neighbours. Let us now turn to his experience on this point.

Mr. ARNOT has had FOWLER's 10-horse-power steam-engine and ploughing apparatus since the harvest of 1859. He has thus had two full years' experience of it, though owing to its somewhat late arrival in 1859, and the wet season of 1860, he cannot yet be said to have done a full year's work. His apparatus, rope, and engine cost 700*l.* It is all of the old fashioned make, and he is now about to add the improvements which have since been effected in it; so that on this ground also he may expect his experience of its usefulness and economy to improve. He works a three-furrow plough, and by the substitution of a subsoiler for one of his ploughs, he is able either to plough all one way, or to stir and at the same time throw two furrow slices together ridgewise.

The farm is in 14 fields, averaging therefore about 27 acres each; but some of the fields are much above the average size, and lie near together, so that in one case 120 acres can be ploughed without any other than the self-worked shifting of the engine and tackle. The ploughing of the farm is almost wholly done by steam. Clovers are turned over 6 inches deep for Wheat; Wheat stubble is ploughed 10 or 12 inches deep for Mangels and for Turnips; these are either fed or pulled, and the land is ploughed shallow, 5 or 6 inches deep, for Oats; the Oat stubble is ploughed shallow and cleaned for Barley; the Barley stubble is ploughed 12 or 14 inches deep for Potatoes; and the Potato land is ploughed shallow for Wheat. Besides this an extra ploughing is sometimes needed by a foul Barley stubble for Potatoes; and both the Potato land and the Mangels are ribbed for receiving the manure in autumn if possible. This is then covered up by the horse-plough, whose work is confined to this and to the cultivation of one or two small and inconveniently shaped fields. The work done each year by the steam plough on this 400 acre farm has thus been 393 acres in 1859-60, and 389 acres in 1860-61. It has been done at the rate of 6 or 7 acres a day for ordinary ploughing, and 3 acres a day (1 acre per furrow) when at the 12 and 14 inch deep work. It may average on the whole 5 acres a day, including all stoppages and removals, and has thus taken close upon 80 days for its accomplishment. Besides this, however, 150 acres have been ploughed during the time for neighbours, at a charge, including everything, of 12*s.* an acre. The engine is also used for threshing purposes, and 220 acres at home, and 250 acres elsewhere, are thus threshed out for hire.

The cost of repairs has been uncommonly small—including a new cogwheel, repacking cylinders, and a thorough overhaul and cleaning of the whole apparatus at the end of two years—besides the replacement of shares and sharpening of coulters for the plough, and the gradual wearing of the rope porters. In all it has not nearly reached 10*l.* a year, at which, nevertheless, we put it.

The tear and wear of rope is reported as follows:—A new 400-yard rope, lately bought, costing 35*l.*, has made the stock stronger and better than it was at the beginning. This charge may therefore be put against more than 2 years' work, and is equal to about 15*l.* a year.

The weekly cost of labour when at work is as follows:—engineer, 18*s.*; ploughman, 14*s.*; anchor lad, 9*s.*; two porter lads, 6*s.* each; horse and water-cart, about 24*s.* weekly—in all, 3*l.* 17*s.* weekly, or as nearly as possible 12*s.* a day. The cost for oil is 1*s.* a day, and for fuel at 9 or 10 cwt. a day it may be put at 10 shillings daily. The charge for depreciation at 10 per cent. is 70*l.* a year, and for interest of capital 35*l.* a year. The whole annual cost may thus be estimated:—

Labour, 80 days	£48
Fuel and oil, 80 days	44
Repairs and rope	25
Depreciation and interest of capital ..	105
Total	£222

But 500 acres of threshing and 70 or 80 acres per annum of steam ploughing for hire, equal in all to at least 40 days' work per annum, are also done by this engine. And the profits of this work should be deducted from this sum before Mr. ARNOT's experience of his investment can be accurately described. At any rate the whole of the sum charged for interest and depreciation of capital ought not to be put against the ploughing. The sum of 222*l.*, at which if there had been no other use for engine and apparatus, his cost must have been estimated, is equal to 11*s.* 0*d.* per acre over the work accomplished, much of which however was 12 inches deep. But if the proper share of the interest and depreciation of capital be charged upon its work elsewhere for hire, the cost of steam ploughing will not exceed 190*l.*, or 10*s.* 6*d.* an acre. But it is probable that Mr. ARNOT would contend that the engine is not 30*l.* worse than when he purchased it two years ago; and one half of this, with interest of capital, will amount to 50*l.*, two-thirds only of which should be charged against the ploughwork—and 150*l.* would thus appear to be the annual cost of ploughing 400 acres, or 7*s.* 6*d.* an acre. In fact, he might very well claim that this sum should be still further reduced by all the profit of his hire elsewhere, which can hardly be put at less than 20*s.* a day, and this on 40 days per annum will amount to 40*l.*, or more; so that the net cost to him of his machinery has not been more than 110*l.* a year, or 5*s.* 6*d.* an acre over his ploughing.

What did it use to cost him when he worked 13 horses on his farm? He now works six horses. His horses get 2½ bushels of Oats, and 2½ trusses of hay weekly each, during seven months:—

30 weeks at 11*s.* amount to	£16 10 0
22 weeks on Clover, &c., at 5*s.*	5 10 0
The annual food per horse costs	£22 0 0

The annual charge for depreciation, farrier, blacksmith, saddler and implements is at least 5*l.* per horse, and for interest of capital in horse and implements at least 2*l.* more. This makes the annual cost of each horse 29*l.* The wages paid, in cash and cottage, to ploughmen is at least 32*l.* per pair, or 16*l.* per horse, and the whole cost is thus equal to 45*l.* per horse per annum; which over 7 horses amounts to 315*l.* per annum—one-half more than the expenditure, even on the highest estimate, upon the engine which has displaced them, and nearly double what Mr. ARNOT has actually incurred when he deducts his profits on its hire.

We give the experience of this small light land farm in full detail—because if Mr. ARNOT has found steam-power answer for its cultivation, though employing the old and smaller form of the apparatus, there cannot be a doubt of the improved and full-sized engine and machinery being a profitable substitute for horses on three-fourths of the arable land of this country.

Let us add, as greatly strengthening the whole case, that Little Woodcote is in no sense a "crack" or "model" farm. It is in the occupation of a rent-paying tenant, who is only gradually getting it into condition, and who most reluctantly permits the publicity we have given to his experience.

STEAM CULTIVATION.

SARSDEN, NEAR CHIPPING NORTON.—What a mistake is made by the gentlemen in charge of the Royal Agricultural Society's Journal in continuing to ask for heavy and necessarily desultory and incoherent county reports! They cannot be otherwise than a mere medley of unconnected particulars. There is not a county which has a uniform geology to give it that unity of character proper for the subject of an agricultural essay—hardly one with climate of sufficient uniformity to ensure a common colouring of the kind which that would give to its agriculture. And there are influences almost as powerful as those of climate and geology, the varying degrees of which tell even more obviously on the agriculture of a district, none of which are uniform over any large extent together. So that, take a whole county, and you have hill and valley, rock and sand and clay, lease and tenancy at will, wealth and poverty of both owner and occupier, energy and listlessness, each telling its own tale, and rendering the result so piebald and such patchwork that it is evident the name of the county must be the mere cover for a parcel of fragments.

An agricultural essay is most perfect when it discusses a single point, process, or result in farm experience—it is still definite and instructive when it relates one man's experience either on a farm or an estate, even though he has had to deal with a variety of circumstances—but it is little more than an inventory of details if it professes to describe a district whose only unity or coherence is political or geographical. What for instance is Gloucestershire farming or Staffordshire farming? There is nothing which can be so designated—or rather the designation applies to half a dozen different things, each of which may be proper for a separate discussion, but which have nothing in common but the name of the county to justify their being mixed up together.

Probably the best sort of report which could be asked for of the same class with these county descriptions would be one relating the history of particular estates, which though they may be under the influence of varying soil and varying climate will yet each of them display the influence of uniform and persistent management. Let the Agricultural Society, for instance, commission a report on the history and present condition of the Duke of Bedford's property around Woburn. Nothing would be likely to do more for the encouragement of land improvement and of right relationship amongst the owners, occupiers, and labourers of the soil than such a history as that.

There are many other properties in the hands of intelligent and enterprising owners whose history would be equally instructive. Such, for instance, is the

estate to which this paper mainly relates. During the past 13 years 60,000*l.* have been spent by Mr. Langston, M.P., upon his property at Sarsden, on farm buildings, land drainage, and other improvements, under the superintendence of Mr. Andrews, his agent. Eight entirely new sets of farm houses, barns, sheds, yards, &c., have been erected, besides several new farm houses with certain portions of the outbuildings new. In other cases the dwelling houses have been enlarged as well as many outbuildings rebuilt; and there are also instances where the farm buildings have been greatly improved, though the dwelling house hitherto has not been altered.

Permanent steam-power with shaftings and pulleys for threshing, chaff cutting, crushing and grinding corn have been erected on many of the farms; and on others permanent shafting and pulleys for performing same work with locomotive steam power, &c.

The history in detail of all this expenditure would be most instructive, and it would be seen how liberality and energy on the part of the landlord tends to the prosperity and energy of the tenantry, and thus to the welfare of the labourer.

The Lodge and Mount farms under Mr. Savidge's management would in themselves be an admirable subject for description in any agricultural journal. Their history and the results of their management succinctly related would have in their way the same sort of educational influence on readers as is ultimately given by means of them to the young men whom Mr. Savidge receives as pupils in his house. Good farm buildings and machinery; well managed labour; newly completed permanent improvements in the way of enlarged fields, good roads and drainage; the steam plough; a good mixture of arable and pasture land, extending in all over 1050 acres, of which 760 are arable; a first-class herd of Short-horns: all these furnish material enough for most instructive examination and discussion.

I confine myself for the most part at present to Mr. Savidge's experience of the steam plough. He farms 760 acres of arable land and nearly 300 acres of pasture. The land is chiefly on beds of the oolitic formation, and varies in character from a very stiff calcareous clay to an open brashy soil upon limestone. On the heavy land the 10-horse locomotive engine which worked a 3-furrow plough with difficulty when first employed, has already so lightened the texture of the land by deep and thorough culture, that 4-furrow work is now as easy to it as 3-furrow work used to be.

The land is cultivated on a five-field course: 1, Turnips; 2, Oats, the latter part of the sheep fold being sown with spring Wheat, of which Mr. Savidge annually sows a large extent, and some in 1860 put in so late as even the 24th of May came to maturity. After the Oats and the spring Wheat comes (3) Barley, which is thus secured of good quality, being less liable to luxuriant growth; (4) Clover and (5) Wheat follow in succession. Of these crops Oats and Wheat are put in on a single furrow, Barley follows a scarifying and ploughing of the Oat-stubble, and the Turnip break, which includes some Vetches sown on the Wheat stubble and afterwards broken up for late Turnips, receives two or three ploughings. There is thus on a farm of 760 acres arable ample work for a steam plough, and Mr. Langston is about to replace his original 10-horse engine and three-furrow plough by one of Mr. Fowler's 12 horse power engines and four-furrow ploughs with all the latest improvements, and transfer the 10 horse-power plough, with the first improvements added, to two other farms also in his cultivation.

When I walked over the farm early in the month of May nothing could look better than the promise of the grain crops, or the preparation for the Mangel Wurzel and root crops. A 40-acre piece of Oats was as fine a sight of its kind as could anywhere be seen; and the spring Wheat where latest sown was just coming through. The Barley, too, was exceedingly promising. The Wheat looked vigorous and of good colour, and the Clover, partly already fed off, was as strong and full a plant as could be desired.

Mr. Savidge had then had two years and two months' experience of a three-furrow plough worked by Fowler's 10-horse engine. During that time, which included a great deal of unseasonable weather, 683 acres had been ploughed from 6 to 12 inches deep, and 451 acres had been scarified. The ploughing was on the average at the rate of 5 acres a day, including all removals and stoppage; and the scarifying was at the rate of 12 to 14 acres a-day. The scarifying was done by an implement of Mr. Savidge's invention and manufacture. It is in fact a conversion of the three-furrow balance plough into a grubber or scarifier. The whole daily cost in wages is 10*s.* 6*d.*; and as 683 acres of ploughing have taken 135 days to do, and 451 acres scarifying have taken about 35 days to do, there have been wages paid on 170 days, equal to 89*l.* 5*s.* in all. Besides this,—

170 days' consumption of coal has cost	£84	10 0
And the consumption of oil has been	8	10 0
Making together	£93	0 0

The wear of rope, according to experience hitherto during 2 years and 2 months of the old apparatus, is believed to be at the rate of 30*l.* every other year for a certain portion, and 25*l.* every three years for the rest—in all about 24*l.* a-year, or for the period 52*l.* The cost of repairs has been about 18*l.* during the time.

The cost of the apparatus, including new implements, has been in all 860*l.* This includes a new drum put under the engine, a new plough, and the manufacture of a scarifier. The sum chargeable for depreciation per annum at 10 per cent. which, as all along stated in these papers, is an enormous overcharge, thus amounts to 86*l.*, or for two years and two months no less than 176*l.* 6*s.* 8*d.*, and for interest of capital, at 5 per cent., it is 88*l.* 3s. 4*d.* The following then are the items chargeable against the work done:—

Wages, 170 days	£89	5	6
Coals and oil, ditto	93	0	0
Rope and repairs (2 years and 2 months) ..	70	0	0
Depreciation ditto ditto ..	176	6	8
Interest of capital ditto ditto ..	88	3	4
	£516	15	0

This amounts to about 9*s.* an acre over the 1130 acres accomplished. I retain the charge of 10 per cent. for annual depreciation of value, as it has been brought to bear in all my previous estimates, but it is plain that it is an excessive charge, and that it bears with excessive effect in a case like this, where the sum has to be divided over a comparatively small number of days during the year. For it is obvious that where only from 70 to 80 days' work per annum is done by the steam plough, this large item will very materially increase the cost per acre of the ploughing and scarifying. The more work that can be done within the year the cheaper will it be.

In the meantime Mr. Savidge, though his steam plough work has not upon the whole been so very cheap, has by the use of it displaced upon the farm a much more costly apparatus by which that work had been previously accomplished, and with much less efficiency.

He has been able to do without 16 bullocks and 10 horses since his steam plough was bought; the latter were many of them hardly average farm horses, some being old carriage horses and the like; but on the other hand a smaller number than is now in use would suffice; and Mr. Savidge estimates the actual displacement by his 10-horse engine on the farm at four 4-ox teams and three 3-horse teams. The former, it is plain, cost a good deal of money, because the wages of a man and boy were paid for each team during at least six months in the year, and a man was needed to look after the whole during the remainder of the year. And the wages alone would amount to at least 120*l.* in 12 months. The cost of three 3-horse teams too in that time cannot be put at less upon the whole than 300*l.* The food of the oxen ought to be charged, because it would have maintained an additional flock of at least 160 sheep worth 200*l.* a year. And if the expenditure on those heads be added together for two years and two months, it will enormously exceed the cost incurred by the steam-ploughing apparatus. And it is only fair to add that the calculations of cost incurred by the altered management were made before the present improvements in Mr. Fowler's steam plough, &c., were completed, and that, consequently, from this time the expenses per acre will be considerably lessened.

CROPS IN NORTHERN GERMANY AND SCOTLAND.

HAVING left Germany on the 21st ult. I forward a sketch of the crops and condition of that country, and also of our home harvest prospects.

The vernal commencement of this season was inauspicious in northern Germany. A very mild March stimulated an early spring growth, the Larch trees obtained their beautiful fringe-dress of living green, quickly to change to the death-shade of brown, and the early sown Oat reared its delicate braird to the light, more than the one half to be killed by a relapse of winter during April—a continued northern blast, icy spiracles, frost, hail, and snow in the lap of spring. From the middle of May, onward throughout June and the greater part of July, the season has been warm and genial, with timely thunder showers as the moisture of the soil, left by winter, became evaporated, stimulating to high fertility the dry siliceous soils of low Germany (the sand banks of a former ocean), and yielding one of the finest crops they have ever produced. When I left, the Rye harvest (a good crop) was commencing, that of the excellent Barley and Wheat would soon follow, to be succeeded by the luxuriant flowery Buckwheat and heavy, though in some places thin, crop of Oats. Here Nature has been abundantly propitious in all that relates to man's subsistence, excepting in one product of material importance—the Potato, which two weeks ago never gave higher promise. At the time I left this crop had, in every field more or less, been stricken with blight, the peculiar putrid odour strongly felt, and the leaves in many places sloughing off, leaving the stems standing bare, the rich lilac and white starry blossoms with orange centre, and the once verdant leaves now all uniformly blackened. The rot in the dry siliceous soils of Germany does not usually extend to the tubers, which ripen though they do not swell, and the root and sometimes the bared stem remain sound, the latter acquiring small new leaves. It is fortunate that the other crops promise all to be good. The deficit in the Potatoes will hence be the less felt. This or a similar blight in some seasons affects other vegetables—the tall Fern, Horse Chesnut, Teucrium, the field Grey Pea, and it is said the Vine under the name of oïdium. The disposing cause seems to be an excess of water in the juices of the plant, heat, and much loose electricity. The last is found to pervade dead organic matter, causing speedy corruption in flesh, rapidly throwing milk, beer, wine, dough, into the acetous change, and no doubt also interferes with the vital attractions of the living, inducing putrid disease. It loosens the vis vitæ as it were, cooks the substance of the larger organism into digestible food to the numerous animalcular destroyers which pervade and feed upon superior life. To strengthen the vitality of the Potato tuber I have in Germany many years ago exposed my seed Potatoes in early autumn for several weeks on a dry airy knoll one layer thick. This at the same time dries and greens the tuber, renders it proof against a slight frost, and hastens and strengthens the vegetation when planted in spring, and may render the plant less disposed to blight. Previous to the commencement of the blight this season in Germany we had for fully three weeks thunder showers daily and frequently sheet lightning at night, and to this moisture, loose electricity, and warmth as disposing causes the blight is no doubt owing. The warmer portion of England has also under like circumstances been seriously affected, while the northern and cooler portion of England and Scotland has not as yet been touched, or only slightly, in the damp rich gardens. These latter countries have had thunder showers enough, and the absence of the blight must be attributed to the greater coolness, and that the plant has not yet reached the period of growth most susceptible of blight.

In the central counties of Scotland the crops generally, including Potatoes, Turnips, hay and pastures, will reach a full average, that is under fair coming circumstances. The Wheat is a little under average in acreage, but the other cereals are proportionally extended. The rain has been rather in excess for the later-sown Turnips, and has retarded the cleaning and growth in damp bottomed land, but the earlier sown are in luxuriant growth. Yesterday and to-day we have had in the Carse of Gowrie a heavy western gale with showers, and the crops are a good deal laid, tossed, and shaken about, and to experience much damage should moist weather continue. But with August, good weather generally sets in after a moist July.

Grain in the exporting countries of the continent, especially in the direction of the Black Sea and Egypt, and also in North America, seems in abundance,—plenty of the old crop remaining, and an excellent new crop coming to hand. This old and new abundance must lower prices in Britain and France, both of which may require a foreign supply of Wheat. But as no other country, with the exception perhaps of Belgium, will be short of self-supply, the British and the comparatively small requirements of France and Belgium will not nearly consume the surplus of other lands.

Paying a little attention to the weather in Holstein during the three first weeks of July, it being our hay-harvest time, I could not but admire the regularity of the atmospheric phenomena. After a fine morning, generally about mid-day or mid afternoon, a number of centres of round cumuli clouds would collect in the wide horizon, each to be the parent of a thunder shower. After a little while each of these would increase largely, and stretching downward would embrace the ground with a dense cover, electric explosions would then take place, and rain often in large drops would fall, and sometimes hail, the large rain drops probably hail melted in its descent. These thunder clouds generally moved northward or eastward, the district immediately under them as they marched onward partaking of the shower. Immediately preceding the shower a gust of wind of only a minute or a few minutes' duration occurs, and when the shower is past the bright sun returns. The formation of these cumulus-cloud-nests in the atmosphere appears electric. I regret I had not a small balloon or kite to send up into the accumulating cloud, with a metallic conductor down to the ground, or a few cannon to batter the cloud with shot, or a large mortar to throw strongly detonating shells to explode in the bosom of the wig-like mass of vapour. Some of these might have either a cloud-dispelling or a rain-producing effect, and I recommend the experiment to be carried out by some of our scientific corps of volunteer artillery, as affording at the same time an excellent exercise practice. It is probable that man will yet attain a greater mastery over the elements, extending to the regulation of rain and cloud. It is said that a heavy cannonade lulls the wind and produces rain, the latter perhaps by the vibration-shock collapsing the hollow mist vesicles which go to form cloud, as it would a soap-bubble. Volcanic detonation is said also to produce rain-fall. We have never heard whether the almost net-work of wires extended above London in any way affects the formation of the dense London fog, or the rainfall, or the electric state of the London atmosphere. The difference as to ozone in the cities and the country and the defect of oxygen in large cities presents an interesting field of inquiry. In our Scots towns of only a few thousand inhabitants we find that the heat-requiring fruits, such as the Jargonelle Pear, attain a larger size, even on standards, and ripen earlier than in the country. London from its vast extension may be expected to afford some interesting results regarding the atmospheric influence of cities. I intended to have said something of the character and condition of the

German people, to have pointed out the strange infatuation of our government to court those who ere long may become our enemies, and to neglect our natural friends in northern Germany, and of the disposition of our press to follow the same wayward course. I may in a future letter make these statements good. *Patrick Matthew, Gourdie Hill, Errol, July* 31.

PRESENT APPEARANCE OF THE CROPS.

ABERDEENSHIRE: *July* 30.—The months of May, June, and July have been exceedingly favourable for vegetation, and in consequence every description of crop looks well, and promises to be a full average, in many cases much above that. The grain crops are luxuriant, and are perhaps a week or two earlier than last year, while Turnips and Potatoes are well forward, and as yet without any symptoms of disease. The hay crop is in a somewhat critical state, in consequence of the continued rains, and much of it is yet exposed in the fields; the yield is abundant. Pasture Grass was never seen so plentiful, and hitherto there has been a want of cattle to eat it down. The growth, however, is now somewhat checked. Since the middle of July we have had rains almost daily, and repeated thunder storms, and portions of the grain crops have been lodged; but up to this time they have mostly regained their footing, and should the month of August turn out dry, they will ripen well. It is too early to calculate as to the probable time of harvest, every thing will depend on the weather of the coming month, but we hope by the kindness of Providence that reaping will have commenced by the 1st of September. The foregoing report applies chiefly to the north-west and upper districts of this county. *James Macdonald.*

BERWICKSHIRE: *Edington Mains, Chirnside, Ayton, July* 31.—Upon all the dry friable soils of this district, where in good condition, the crops look very well indeed. There is much less than the usual average of Wheat, but what there is looks well. Barley and Oats, in the circumstances specified, are also very good. There are few Beans growing this year, and what there are, are a poor crop. Turnips brairded freely, and were this year all but exempt from the attacks of the fly. In general this crop looks well, but I regret to say that upon a closer examination the "finger and toe" disease is found to be prevalent. Potatoes look very well, and as yet are free from disease. The taint has however been observed in gardens since the 25th inst. Pasturage is everywhere unusually abundant, but much of it has got so overgrown that it has suffered much in quality. The weather latterly has been most unfavourable for hay-making, and much of that crop is still afield in a very unsatisfactory state. On all the strong soils in the lower parts of the Merse the crops are much inferior to what I have described above. In numerous cases neither Barley nor Turnip seed germinated owing to the unkindly state of the soil, and such pieces now present a very ragged and discouraging appearance. There will probably be a beginning of harvest work about the 20th August. *John Wilson.*

BUCKINGHAMSHIRE: *Bradwell, Stony Stratford, Aug.* 1.—The appearance of the crops now is thus:—Wheat: a light crop of straw; ears good; but the general belief is a yield below average. Some few pieces will be ready to cut in 10 days, but Wheat reaping will not be general until the 19th August. Barley: Generally a promising crop, an average one. Some few pieces will soon be ready. I think of cutting a small piece of 5 acres on Monday, the 5th. Oats: Generally short in straw, but an average crop. Oats are not a great deal grown here. By the 8th or 10th, if this sunny weather lasts, I shall begin to reap a 10-acre field. Beans an average crop. Peas scarcely any grown. Swede Turnips very promising; full plant. Mangold a thin plant; not more than half a crop. Potatoes: Magnificent looking as regards their haulm; as yet no diseased tubers dug (excepting in gardens), but the haulm appears spotted. Hay never so badly got in; scarcely a good hay rick in the neighbourhood. Stock of all sorts appear to thrive. On the whole, notwithstanding the frequent thunder storms, it has been a good time during June and July for dairy produce. I shall be always glad to give you any local information. *W. G. Duncan.*

DERBYSHIRE: *Idridgehay, Wirksworth, August* 1.—In my report written on Tuesday last I stated that I thought harvest would be general towards the end of August or beginning of September. The crops look as if they would be ready by the third week in August. I did not name Potatoes. So far they are healthy, and the earlier kinds that have been gathered yield well. I have only heard of a few odd diseased ones. We have had two or three days of fine weather, and they are getting in the hay as fast as possible. *John Parkin.*

DEVONSHIRE: *Stancombe, near Kingsbridge, Aug.* 3.—The Wheat plant with us was thin in the early spring, improved so much during the month of May that it promised a fair average crop; but the continual storms of rain and wind in the last four or five weeks have so damaged it that I see no prospect of an average crop. Barley through the entire district was finer than it has been for many years past; it is so lodged now we fear the result. Turnips have not grown well in consequence of the wet. Mangel Wurzel is a very short crop in consequence of the seed sown being bad. Hay promised a good crop, but has been much damaged by rain. Apples less than third of a bearing. Potatoes in the last few days completely gone. *Samuel Cornish.*

ESSEX: *Kelvedon, Aug.* 5.—We begin harvest to-morrow. Wheat near an average. Barley over average. Beans and Peas over average. Oats good. Turnips good. Mangel gappy and slow growing. The quality of all grains will, I think, be superior. The kernels are very large and well developed. Although Wheat did not branch as usual the heads are large and thick and hard, and will no doubt yield well according to straw. There are very few laid frothy crops; most of the corn stands well. Much Wheat has been cut in the valleys, and I hear of several samples of new Wheat at our local markets. 72*s.* per qr. was paid for new Talavera on the 3d, at Colchester market. White Clover seed, although it flowered abundantly, does not seed well. Potato bines are now just diseased. The Potatoes are however large and abundant. Many are removing the bines. *J. Mechi.*

GLOUCESTERSHIRE: *Winchcomb, Aug.* 3.—Wheat average; Barley good; Oats average; Peas and Beans above average; Turnips excellent; Potatoes abundant, but disease appearing; Hay good in quantity, but much injured by rain; Grass very abundant. *John F. Peacey.*

HUNTINGDON.—The crops in this neighbourhood are rapidly approaching maturity; some pieces of Oats and Wheat are already cut, and harvest will be general about the 8th of August. Wheat is thin upon the ground, but the ears generally are large and well filled. Taking into consideration the short breadth sown, and the more than usual proportion of spring Wheat, we think this crop cannot possibly reach an average. Barley universally a fine crop. Oats a full average crop. Beans various; where bad seed was used they are thin and patchy, but generally they are well podded. Peas a very fine crop. Mangel Wurzel a patchy crop. Turnips universally look well. Potatoes never were a finer crop, but are already showing symptoms of disease. Crops of Grass light on the high lands, a fair crop on the meadows.——*Godmanchester, July* 31.—Wheat, Barley, Oats, Peas, and Beans, are an average crop. The quality of all corn promises to be fine. Turnips very good. Potatoes very fine, but partially diseased. Mangel Wurzel fair crops. Some parties have commenced reaping Wheat. *Robt. Beart.*

KENT: *Wingham, Aug.* 2.—I began to cut my Wheat last Wednesday, the 31st ult., but the general day hereabouts will be next Monday; only a few have commenced cutting Wheat. Peas are cut, and a fair breadth of Oats and Barley is cut. Although there are a few thin Wheats, they die remarkably healthy, as yellow as gold. Wheats will be above an average and of good quality; the same by Barley, Oats and Peas. Beans have suffered by the black louse. It will be a short harvest if fine weather; and as we are three weeks earlier than last year, and we have plenty of hands, and all the corn standing, we must expect a low price of produce. In another 10 days I shall be able to speak more correctly as to produce. *Robert Matson.*

LINCOLNSHIRE: *Ludford, Market Rasen, Aug.* 3.—The crops in this neighbourhood must be light. The Wheats are thin, but generally upstanding. The Barleys will very many of them besides being thin be of two growths. The Oats are thin. All the corn is filling very well. The thinness of the corn is attributable in some measure to the bad quality of the seed last year. Potatoes have commenced going as bad as ever. The Turnips are tolerably well planted, but have not grown much lately. The last week has been more favourable weather, consequently the harvest prospects are looking more cheerful, for until the last few days we have had an immense quantity of rain, I should say as much as last year, only the weather has not been so cold with it. The seeds and Grass crops are nearly all harvested, but not so well as could be wished. *William Wingate.*

MID LOTHIAN: *Bonnington, Ratho, Aug.* 5.—The crops are slowly ripening. Dull, grey, showery weather retards harvest. It will not be general before the 24th. Wheat is rather under average, not greatly so. Barley full average, and Oats a fair crop. Beans unequal. Potatoes the same, with far less promise than last year; and Turnips improving and promising. Hay a fair rather full crop. Pasture good.

NORFOLK: *Crown Bank, Wymondham, July* 31.—The crops are wanting a continuance of the present favourable weather to bring them to maturity. Farmers, who are generally styled grumblers, are determined this year to get rid of this epithet, and acknowledge that although their crops are not altogether what they could wish them to be, they are looking upon the whole much more promising than last year, and some of the Wheats bid fair to be very prolific; the ear is of good length and size, the plant or straw very even in length, of fair average height, and fair in bulk. Barleys are much better than last year, and promise an average yield of a fair medium quality. A large breadth of Oats, about an average crop. Peas very prolific, a good length of straw and plenty of fair sized pods. Beans not above three-quarters of a crop, with few pods, the Beans planted very uneven owing to the ordinary seed deposited, many of which never came up; and the few which did have been attacked with lice, consequently but a poor crop. These remarks are general, but to particularise: there are a few fields planted with good seed and extra quantity; these are promising well and escaped the vermin. There are also a few fields of Wheat, which owing to the state of the land, the time of sowing and the seed, are thin in plant and partially mildewed, and although large ears cannot be a prolific crop. Oats and Barley are thin in places and far from a good crop, but these are exceptions. The hay harvest has been a tedious one, the Clovers pretty fair, the Trefoil layers very thin, owing to their being so forward last harvest when the Barley was cut, which weakened them so much that they could not withstand the past winter's frosts, few fields carted in prime order. Meadows much the same condition, some about until this week, and some just cut. Mangel Wurzel plant worst known for years, but I think the thin plant will not be all loss, as they promise to be of extraordinary size; many were transplanted, many Cabbages also were put in vacant places, and with white Turnips employed for a similar purpose, there will be a tolerable plant of Mangel, &c. White Turnips are excellent crop. Swedes are so with few exceptions. A few Oats are cut. One field of Wheat, and harvest will be general about August 9 or 12. *W. H. Taylor.*

NORTH LANCASHIRE: *Holker, Aug.* 3.—Grain crops of all descriptions are short in the straw, but good in the ear. During the last three weeks we have had a great deal of rain, and if it continues much longer the Wheat crop will be endangered. I think we have a very small acreage of Wheat in this district this season. The hay crop is light and much of it not well secured. Turnips came up well, but I hear many complaints of wire-worm and grubs. Mangels are rather thin on the ground. Potatoes look well, though there are some complaints of the disease in those grown in the gardens. The fall of rain in July has been 5.498 inches. *Geo. Drewry.*

WORCESTERSHIRE: *Vale of Evesham, Aug.* 2.—The month preceding the harvest of 1861 has been a most anxious one. Day after day the dark clouds charged with electric fluid and dropping rain in continuous showers over the face of the earth have greatly damaged the hay and Clover crops. Fears were entertained for the corn crops, but I rejoice to say that with few exceptions these have been benefited rather than injured by the rainy weather, which has filled the ear of the early and accelerated the growth of the late planted grain, so that the entire crops on the sandy loams and better descriptions of land are good. Besides, I am now of opinion that the heavy showers and high winds have cleansed the atmosphere, and washed away and destroyed the black aphis that threatened destruction to our root and Bean, Pea and Vetch crops. Therefore in reporting generally for the Vale of Evesham, Wheat on the sandy and better class of soils is nearly an average crop, as is also Barley, Oats, Beans, and Peas; but on the cold clays and poor soils the Wheat is thin, and although fine in the ear would be very much below an average crop. The Barley and Oats are generally good on these soils, and the Beans where not severely blighted will be nearly an average crop. Wheat cutting will commence about the 7th of August, and a fair proportion of Barley and Oats will be ripe about that time, but harvest will not be general before the 12th or 14th of the month. Potatoes are very much spotted with blight on the haulm, but at present the tubers are sound in the field crops, excepting certain sorts where the land is highly manured, and these are going diseased. They are a good deal damaged in the gardens, but from the vigorous character of the haulm and strength of the root I imagine the damage will not be so great as was at first apprehended. There is only a partial crop of Apples and Pears, here and there a sprinkling, while the majority of orchards are barren and fruitless. *H.*

YORKSHIRE: *Rainton, near Thirsk, July* 31.—The weather for some time has been very showery; fortunately it has taken a favourable change. A less breadth of autumn Wheat has been sown; it has, however, shot out much thicker than was expected, but still is not an average crop. The ears are remarkably well filled, and after such a dry summer it may be expected to yield well in proportion to the quantity of straw. Spring-sown Wheat is light; Barley fair, but not an average; Oats good; Beans good, though the average is very limited, many persons having used their own seed, which being damaged by frost never germinated. All corn crops are standing, a laid crop being quite exceptional. Hay and Clover hay light, the latter particularly so, and various harvested. Much Grass is still to cut, as many persons have been unwilling to mow during such changeable weather. Potatoes are good, and no disease as yet. Turnips promising, and Mangels bad, but very few were sown, as the autumn was too wet for cleaning the land. *Peter Nesfield.* —— *Richmond, July* 31.—We have had very showery weather in this neighbourhood during the last few weeks, and in consequence there has been more expense incurred in getting hay than usual. What has been secured, however, is generally in fair condition, and the crops more than an average. There is still a good deal of hay in the fields, and a considerable breadth of Grass not cut yet. The showery weather has suited all root crops, and when the land was in condition, and the seed put in at a proper time, the Swedes are looking beautiful. I saw several fields yesterday where the rows were 27 inches asunder, and not a bit of soil could be observed, the Turnips having fairly met. Potatoes too look very promising, and thus far I have seen not the least sign of disease among them. All Corn crops have greatly improved during the last month, and generally promise a full average. Barley, since it came into ear, has grown well, and is I think more than an average crop. There are several fields of Barley in this neighbourhood which will be cut in ten days, though the general harvest will not be for some time after that, much of course depending on the weather. *H. J. Turner.*

Home Correspondence.

The Cultivation of Trifolium incarnatum and Italian Rye-grass on Corn Stubble for early Spring Feed.—Immediately the corn is carried drag the stubble with heavy harrows, sow the seed and roll afterwards, which is all the cultivation necessary. Another good practice is to sow while the corn is being cut, in which case neither harrowing nor rolling is necessary. The end of August or first week in September is the latest time to ensure a good plant, though it is usual to sow later; but in such case the crop, which is generally weak, is pretty sure to be lost during the winter. These remarks apply equally to Trifolium incarnatum and Italian Rye-grass sown separately, or to a mixture of them both. The quantity of seed sown per acre should be as follows:—For a crop of Trifolium incarnatum: A. 28 lbs. of seed per acre will ensure a full plant; or B. 20 lbs. Trifolium incarnatum, and ½ bushel Italian Rye-grass. For a crop of Italian Rye-grass: C. 3 bushels of seed will ensure a full plant; or D. 2 bushels Italian Rye-grass and 12 lbs. Trifolium incarnatum. Any of the above quantities of seed will produce a heavy crop of highly nutritious green food in the following May or June. The advantage of sowing some Italian Rye-grass with the Trifolium is that it protects the Clover from the effects of severe frosts. The small quantity of Italian Rye-grass (B) is sufficient for that purpose; but if the larger quantity (D) is sown, several succession crops of Rye-grass may be cut during the summer. The Trifolium incarnatum produces one heavy cutting only. A dressing of *Peruvian guano*, 2 cwt. per acre, at the time of sowing is useful, but by no means necessary. The new late flowering varieties of Trifolium are cultivated in exactly the same manner as the common; they are useful if a late cutting is desired, but the seed is higher in price than the common, owing to the failure of the crop on the continent. *Sutton & Sons, Royal Berkshire Seed Establishment, Reading.*

Horse-hoeing Turnips.—The following passage from a recently published paper in the Journal of the Bath and West of England Agricultural Society appears to me to deserve the attention of agricultural readers this month:—"It is worth noting, though long a well-established fact, that the continued use of the horse-hoe tends to the rapid and continuous growth of the plant. During last year's wet summer the Turnip received no material check, and thus early sowing was not followed, as it generally is, by the attack of mildew; indicating that any means, natural or artificial, by which the growth of the crop is constantly maintained, will tend to hinder these attacks. Among such means, there is none more efficient than frequent deep hoeings among the plants. This is especially the case in dry weather. A large active surface for the attraction and retention of moisture is thus provided within the soil, and cracks by which drought penetrates the land are prevented; but even during the past wet season, benefit has been experienced from the frequent use of the hoe. Thus speaking of a green fallow crop, Mr. Ruston says:—

"'A frequent use of the horse-hoe during dry days was found to be highly advantageous, as it allowed the air again to penetrate the soil, which it otherwise could not do, where the surface was sodden with continual rains.'

And Mr. Horswell, of Tavistock, writes as follows:—

"'In the past very wet season the seed vegetated quickly, but it was soon checked by the cold, the leaf of the Turnip changed to a bluish colour, and the leaves of the Carrot and Mangel Wurzel were light and unhealthy, caused by so much cold water in the earth; but I found by using the horse-hoe with narrow feet, and working them 6 or 7 inches deep, which is rather heavy work for two horses, that the cold water was let off and the Carrots and the Mangel Wurzel soon grew more rapidly, and presented a healthier appearance. I believe I owe the much better crop I had than my neighbours on the same soil to my repeatedly using the hoes in the above manner during the summer up till October. The hoe needs to be set narrow, so that the rows may not be injured; and that every bit of soil may be broken it is necessary to go twice between each two rows, keeping close to one side forward, and the other backwards.'

It is proper to add here, that no efficient drill horse-hoeing is possible unless the interval between the rows of plants to be thus cultivated exceed 2 feet. Two horses ought to be used abreast; and, to avoid trampling the stirred land, every alternate drill should be taken up by a pair of horses yoked tandem-fashion. The tines of the horse-hoe ought to be narrow-pointed,

and the two outermost should be set so as to work within 3 or 4 inches of the plants: and in the case of Turnip-culture the deepest and most efficient stirring ought to be given as soon as the young plants can be discerned on the top of the ridge." *M. S.*

Agricultural Statistics.—The magistrates of the Soke of Peterborough having expressed a wish to learn the sentiments of the farmers respecting a circular to Sir G. C. Lewis, suggesting the expediency of employing the police to obtain returns of acreage of cropping, Mr. Webster, of Peakirk, observed at a meeting of the Board of Guardians at Peterborough, held July 20, "that though the subject of Agricultural statistics was not exactly one to come before the Board, yet as the Guardians were nearly all farmers, and the question was a public one, he thought they would not be doing much wrong in noticing it. The magistrates had been asked to obtain a return of the number of acres under different sorts of cropping, to get which the Government had taken much trouble. In some places it had been sanctioned, in others not. As one of the farmers of this neighbourhood, he should be sorry to stand in the way of procuring information thought desirable by the country, as if any obstacle was offered it would appear as though farmers had something behind the scenes which they were afraid of being made known. "Now he did not think there was anything they need be afraid of, and if the constabulary or other persons were employed to go over the farms they would, he believed, not find much out. For his own part, if an inspector was appointed to go over his farm once a year, he should make no objection. Mr. W. then gave notice that he would bring the subject before the board on the following week, and at a meeting held July 27th, he proposed that the board approve of the Government plan, for obtaining statistical returns through the agency of the police, saying "that he thought it very desirable the country should know what land was under cultivation and what crops were grown, when they saw how three or four frosty nights or a continuance of wet weather affected the markets, both at home and on the continent, and he thought it would then be not difficult to get an approximation to an average,. The motion was seconded by Mr. Hetley, of Orton. Mr. Pank of Oxney, proposed an amendment that the question be considered that day six months, as he thought it would be of no advantage to the farmers, but would throw them into the hands of the free traders. Mr. Wright of Helpstone seconded the amendment. On a show of hands nine were held up for the amendment, and 12 for the original proposition, which was declared carried. The Rev. W. Strong, a magistrate, then said that now the question was decided, he might venture to speak. The object of the magestrates in placing the plan before the public was to ascertain the feelings of the farmers on the subject; the success or failure of the measure depended upon them, and as a majority of the board was favourable, he hoped that those who were at present unfavourable to the system would see that they had nothing to fear.

The Steam Plough and Reaping Machine.—I have read with much attention and interest your recent articles on steam cultivation and the reaping machine, &c., and the more I read the more I see and feel that the time has arrived when all degrees of prejudice and difference of opinion must yield before the superiority of the steam plough and the reaping machine over the common plough and sickle. I have long and ardently wished to see corn cut by machinery, and am confidently expecting the time when a perfect implement will be produced for the benefit of the farmer and the people. But for the present I must say with others, "Which one am I to have?" We want one that will cut all sorts of white straw crops, whether they are laid or standing, light or heavy; it may be in a beautiful level field of Wheat free from weeds, or in another field not overdone with straw or corn, with a considerable quantity of rubbish, across ridge land and water furrow, &c.; and finally to self-deliver the corn, either in swathe or sheaf, as desired. Can any of your numerous readers or correspondents kindly inform me where such a machine is to be found, or which is generally considered to be the best at present? One great obstacle to their success appears to be the pace at which the horses are obliged to walk, being fatiguing to the animal, and what a farm horse is unused to; perhaps this might be remedied by steam or by some alteration in the gear, &c. Manufacturers may forget or perhaps may not be aware that farm horses have but one pace, and that a very slow one. I have often looked to make myself certain whether they moved or not, while the express train has whirled past at the rate of 40 miles an hour. So much for the difference in the main object, which is "power;" there is no limit to the power of steam, you have only to properly apply it. This power, being so immensely superior to that of horses, must ultimately be employed to till the land; and then why should it not be employed to draw a reaping machine, being a power that never tires and an expense easily calculated? *W. S.*

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

MONTHLY COUNCIL: *Wednesday, August* 7.—Present—Colonel Challoner, Trustee, in the Chair, the Hon. W. G. Cavendish, M.P.; Colonel the Hon. A. N. Hood, Sir Watkin W. Wynn, Bart., M.P.; Mr. Raymond Barker, Mr. Barnett, Mr. Charles Cautrell, Mr. Druce, Mr. Frere, Mr. Brandreth Gibbs, Mr. Fisher Hobbs, Mr. Holland, M.P.; Mr. Hamond, Mr. Hudson, Mr. Lawrence, Mr. Pope, Mr. Rigden, Mr. Shuttleworth, Mr. Smith, Mr. Western, Professor Wilson.

30 New Members were elected.

Mr. Charles Randell, of Chadbury, Evesham, was elected a Member of Council in the room of the Right Hon. the Earl of Romney, resigned.

FINANCES.—The Hon. Colonel Hood, Chairman of the Finance Committee, presented the report, from which it appeared that the Secretary's receipts during the past month had been duly examined and found correct. The balance at the banker's on the 31st July was 1985*l.* 10*s.* 8*d.*, since which the sum of 10,567*l.* 10*s.* 7*d.* had been received from the Society's bankers at Leeds. Cheques were drawn for the prizes and other expenses connected with the meeting, and it was recommended that 3000*l.* be invested in the New 3 per Cents. This sum includes 350*l.* received on account of Life Compositions. The prize awarded to Mr. Thomas Groves, of Park House, Spofforth, Wetherby, York, was withheld in consequence of his not having complied with the rule of the Society set forth in the Prize Sheet, viz., that exhibitors of stallions which have been allowed to leave the Show-yard for the night will be required to have them brought back to the yard every morning during the whole period that the Exhibition lasts. The report was adopted.

WOOL.—The report of the Committee appointed to carry out the resolution of the Council constituting the Society as exhibitors of wool at the International Exhibition of 1862 was received. Sufficient space in the building at South Kensington had been granted by her Majesty's Commissioners, and it was determined that a full and complete collection of fleeces should be made, comprising all the breeds of Long-wool, Intermediate, and Short-wool; that two fleeces of each breed should be exhibited if practicable, and that breeders and merchants throughout the country should be requested to send specimen fleeces to the Society for the purpose of exhibition. A grant of 100*l.* was requested from the Council to enable the Committee to carry out this measure. The report was adopted.

MEMBERS IN ARREAR.—It was resolved that in printing in the forthcoming Journal the list of members, the names of those whose subscription remained unpaid to the 31st December, 1859, should be omitted.

The consideration of the motion that the fleeces shorn from off the sheep shown for the Society's Prizes be exhibited with each pen of sheep, and of the proposed amendment—That inspectors of sheep be appointed to examine the animals on their admission into the Show-yard, with instructions to reject all sheep that have not been fairly and entirely close shorn—was postponed till the monthly meeting of the Council in December, the motion for postponement having been carried by a majority of 10 votes to 3.

The Secretary reported that a Deputation consisting of Viscount Strathallan, the Right Hon. R. Nisbet Hamilton, Sir Thomas Gladstone, and Mr. G. W. Hope, M.P., from the Highland and Agricultural Society of Scotland, accompanied by the Earl of Powis, late President, and Mr. H. Hall Dare, Secretary of the Royal Agricultural Society of England, waited upon the Secretary of State for Foreign Affairs on the 5th July, to represent to his Lordship the high price of guano obtained from the Peruvian Government under the contract which existed with Messrs. Anthony Gibbs & Sons, and to solicit his assistance in obtaining for the Agricultural interest a reduction of the heavy export dues charged on that article, as well as accurate information through the consular agents of the available extent of this manure.

The Council having then granted the usual vacation to the Secretary and clerks, adjourned over the autumn recess to Wednesday, the 6th November.

THE ROYAL AGRICULTURAL SHOW AT BELFAST.—The energy and intelligence of the northern province of Ireland have been called into requisition at this year's meeting of the Royal Agricultural Society of Ireland. It is needless to institute comparisons which affect provincialism, and which would only lead to no useful result. We have followed Royal shows in their itinerant progress through the various provinces of Ireland. We have watched their influence, and more especially the enthusiasm and public spirit which they have excited. We have seen more excitement among the warm Southerns, and more of the glowing rapture of the Celt in the West; but on no occasion have we seen that the show was made a more useful means of instruction than at this Royal meeting. We cannot speak with precision, though safe in saying, we have seen a larger attendance than at Belfast; but at no previous show have we witnessed the prevalence of so large a number of men earnestly bent upon gaining information. And this, after all, might have been expected by those who are conversant with the circumstances of Irish agriculture. In the North there is a race of industrious tenant farmers, whose prosperity has grown with the growth of industrial spirit and industrial enterprise in that province.

For our own part we cannot say the success of the show has at all exceeded our expectations. On the whole, perhaps, our hopes have not been realised. The meeting has, however, been successful and useful; and were the Royal Irish Agricultural Society only to enter a little more into the spirit of modern agricultural progress, and to infuse into its proceedings a little freshness and vigour, and to address itself more to the sympathies and wants of the tenant-farmers of Ireland, we could augur for it a still wider measure of support and success.

Short-horns.—It is impossible that we could in this week's impression give a full critical review of all the points of interest in the exhibition. Our despatch is forwarded ere some of the prizes are awarded. We will, therefore, give the prize lists as best we can hereafter, and offer a few passing remarks on the Short-horns.

In Section I., Bulls calved on or after Jan. 1, 1859, it will be seen that Lord Kinnaird won 1st prize with Lord John Russell; the second place being awarded to Volunteer, the property of Lord Bangor. Volunteer is a little deficient behind the shoulder; handles well, though covered with short hair. Lord John gives a fair elastic touch; and has a better developed flank than his competitor.

In the next section we were not much prepossessed in favour of either of the prize animals. Henry the Eighth out of Hopewell has a mellow hide, is a robust two-year old bull, but his legs are rather long. The 2d prize animal in this section, Priam, got by Musician, is a spotted animal. His touch is not so mellow, nor so silky.

In Section III., Bulls calved on or after 1st January, 1860, Lord Talbot De Malahide gained 1st prize with Victor Emmanuel, which is a very showy animal, nice and pleasing to look at, but there his merits chiefly end. He is light on the breast. We were glad to see a successful Irish breeder, Viscount Monck, once more in that place of distinction to which his judgment and spirit as a breeder of Short-horns entitle him. Adam Bede, with which his lordship wins his laurels on this occasion, is a nice animal, possessing good points, including a full flank, but a little harsh in touch. On the whole this was a good Section. There are some exceedingly promising animals, such as Young Edwin, exhibited by Mr. Patteson of Dundalk, and whose pliable skin indicates health, vigour, and usefulness. Edwin, though out of Booth's Bridesman, commanded no attention from judicial eyes at Belfast.

Of the Bull Calf class little need be said. No "eye for Short-horns" will dispute the award, though the second prize calf is an animal of promising sweetness.

The Full-grown Cow class justly excited no small amount of attention. Already one of the Royal Irish Cups has crossed the Channel, and forms a monument of honourable rivalry among the prized plate at Towneley Hall. And on this occasion the example of the renowned breeder of Royal Butterflies is creditably followed by Mr. Eastwood, who we believe is agent to the gallant Colonel. Mr. Eastwood entered three cows, the famous Rosette of Royal Irish renown, and Emma and Faith, the former bred by Colonel Towneley, the latter by Mr. Grundy. Rosette did not put in an appearance; but among such associates as Mr. Christie's Queen Beauty the Second, Faith won 1st and Emma 2d rank. If we mistake not, Mr. Eastwood's success at the Royal Irish meeting is now crowned with the permanent possession of the Challenge Cup, for which he has so honourably contested.

Section 6 scarcely calls for any special remark, Mr. Christie's Queen Mab 2d being decidedly the queen of the class.

In Section 7—Heifers in milk or calf, and calved in 1859—Captain Ball carried away 1st and 2d honours. Few will deny him the merit of deserving it. We cannot help admiring the peculiar style in which Mr. Ball shows his animals. Models of symmetry and good breeding, they attract the eye without prize cards or Royal ribbons. Rochester and Nightingale are old favourites. The former is a sweet animal. The Nightingale, a beautiful white, does not handle so well.

In the next Section, Captain Ball gains still higher laurels. His Pride of Adare not only obtains 1st prize, but effectually assists her two placid and stylish associates, Flirtation and Peahen 11th, in winning the Waterford Cup, value 100*l.* We must own, however, that the Pride won her position at Belfast by a neck and neck competition. Mr. Crosbie's Florentine, which stands second, is a fine animal, well-shaped, not quite equal, it is true, in quality to the Pride, but of more substance. If Florentine's eyes peered out a little brighter from their orbs the contest would, we apprehend, be still closer. As it was, one of the most successful of Irish Short-horn breeders declared for the Kerry dame.

In conclusion, we have only to remark, that we have heard some of the best stock in Ireland was not exhibited at this meeting; the cause is not explained. It may console those who have held back to find that though their presence would have been acceptable, yet a respectable exhibition can be held without them.

Implements.—The implement department of the Exhibition was on the whole satisfactory. The entries were numerous. Many of the leading English, Irish, and Scotch manufacturers exhibited some of their best constructed implements and machines. There was in short quantity and quality. The most interesting feature in connection with this department was the trial of mowing and reaping machines, of ploughs, harrows, &c., which took place on Tuesday at the Knex

Station, on the County Down Railway. The mowing machines commenced operation on a field of Clover, a rather light crop. All appeared to do the work in an admirable manner; but those that attracted the greatest amount of notice were Wood's, Burgess & Key's, and Samuelson's. A few local manufacturers also competed, but were entirely thrown in the shade by these Leviathan exhibitors. The trial of this class of machines would in every way have been more complete, and satisfied the larger number of spectators, had it taken place in a piece of old meadow ground. The haymaking machines were then set to ted out the Grass, which was operated on by the mowing machines. Smith Brothers' new patent hay-maker deserves particular notice. This machine is entirely on a new principle; all the tines are placed on barrels consecutively in pairs, so that it separates the Grass much better, draught much less, and is never liable to clog.

Simultaneous with the working of the mowing and hay-making machines was the ploughing. This was carried out on a piece of old lea well suited for the purpose. Gray's ploughs, of Uddingston, seemed to take the lead in making cleaner work and packing the furrow slices in a superior manner; but he was ably followed up by his powerful Irish rival in this department, Gray of Belfast, in turning the furrow over at a better angle. If our Belfast friend would adopt the improved construction of the English mouldboard, we have no doubt but that it would make a material improvement in the working of his ploughs.

The principal reaping machines were Burgess & Key's, Cuthbert's, Samuelson's, and Wood's. The trial was performed on an Oat crop, pretty heavy, and somewhat lodged. The visitors seemed to be prepossessed with the working of Cuthbert's machine, which on the whole did its work well. The others failed to a certain extent when cutting with the incline of the crop. It was remarked, however, by some present that the latter machine would not have proved so successful if its working had been in the hands of an inexperienced person. The proprietor, in this case, as in all others, we believe, managed the implement himself.

Farmers' Clubs.

Croydon.—*The Norfolk Rotation.*—At a late meeting of the Club Mr. Wood read a paper on this subject, from which we make the following extracts. Mr. Wood advocated the five year course of Turnips, Wheat, Barley, seeds, and Wheat.

I believe this course to be a good one in all respects, and the part taken in the discussion of the subject brought forward by Mr. James Thomas, then of Lidlington Park, Woburn, Bedford, and now of Dibden Manor, Southampton, at the London Farmers' Club, is quite in accordance with my opinions on this subject. In the report for Dorsetshire, published in the Journal of the Royal Agricultural Society, we find it stated that the five-course system is becoming general; and in the report for Lancashire we are told that Barley after Wheat is the best management. With such antecedents there would be no doubt about the success of the Clover crop, and after a luxuriant crop of Clover but little of that of the Wheat. Mr. Paine, of Beds, says that all land is not fitted for Turnips; but where it is, if they commenced one course of five years Mangel Wurzel, and the next course with Turnips, we should not experience much difficulty in getting a good Turnip crop. He says however that we cannot get two crops of Wheat in five years without incurring the cost of 2 or 3 cwt. of guano per acre in one of those years. Mr. Owen Wallis, of Northampton, thinks the five-course system a good one for sandy soils; that it gives greater opportunities for clearing or eradicating any Couch-grass that might present itself in the Wheat crop, before the Barley was required to be sown; they would get more Barley than if sown after Turnips; that with a liberal dressing for the Turnip crop, and feeding the sheep upon the Turnips, a Barley crop was so heavy as to destroy the seeds, or so to weaken them as to render them but of little value for the first year. Mr. Pile, of Hants, said in the part of the country where he resided the four-course system was generally followed; but a friend of his, who occupied and farmed his own land, had told him that it would ruin any man in England to be bound down irrevocably to that system. The plan adopted by his friend was simple, being merely to sow half his Barley crop after Wheat, and half after Turnips or Swedes. Now the best malting Barley grew after Wheat, and if he was bound to the four course, he could not do this. I do not agree with Mr. Paine that we cannot grow two crops of Wheat in five years without incurring the cost of 2 or 3 cwt. of guano per acre in one of those years, for if we take into consideration that on a farm of 350 acres, of which perhaps about 50 acres would be wood, pasture, and buildings, leaving 300 acres for cultivation, we would have but 60 acres of roots instead of 75, and we dress 30 with dung and 30 with light manure, when the Turnips are fed off, the ground would be quite good enough for the Wheat. In the next year if 30s. per acre be expended in light manures a good crop of Barley and seeds must follow. It appears to me also that you would have dung enough for the 30 acres that had received the light manure for the roots; and that which had received the dung, even if mown twice, would by good management, bear a good crop of Wheat, and would be that which should come in for the dung the next root crop. A five-course, which includes two years' seeds, will do mischief; but a five-course such as I advocate, namely, Turnips, Wheat, Barley, seeds, and Wheat, will have no such effect. On the contrary, it will afford facilities for the more complete eradication of rubbish, and in the end will return a much greater profit.

I will now give you the results, or rather the particulars of the calculations into which I have entered, for the purpose of showing that in addition to its other advantages the five-course is the best in a pecuniary point of view, and will then leave you to discuss its merits or demerits.

Present Four-course Rotation for 20 Years.

Turnips	Mangel	Swedes	Turnips	Mangel
Barley	Barley or Oats	Barley	Barley or Oats	Barley
Clover	Seeds	Clover	Seeds	Clover
Wheat	Wheat	Wheat	Wheat	Wheat

A Five-course agreeing with our present Four course.

Turnips	Mangel Wurzel	Swedes	Turnips
Wheat	Wheat	Wheat	Wheat
Barley	Barley or Oats	Barley	Barley or Oats
Clover	Seeds	Clover	Seeds
Wheat	Wheat	Wheat	Wheat

The Five-course I propose on all Lands that will grow Sainfoin.

Turnips	Wheat	Wheat	Wheat
Wheat	Mangel Wurzel	Swedes	Turnips
Barley	Wheat	Wheat	Wheat or Oats
Sainfoin	Barley or Oats	Barley	Sainfoin
Sainfoin	Clover	Seeds	Wheat

Dr. Shorthouse had written to Mr. Bass the other day, at Mr. Wood's request, for information as to his rotation of crops, knowing that he had been making some observations about the growing of Barley after Turnips, and the inferior quality of Barley thus produced. The following was Mr. Bass's reply:—

"I beg to state that the prevailing rotation on the Barley soils in Staffordshire places Barley after Turnips, but we never get really fine quality by that course. My own rotation is—Turnips, Barley, or Wheat, Clover, Wheat, followed by Barley or Oats. We get very little fine Barley from the midland counties. Berkshire, Wiltshire, Suffolk, Norfolk, in the order I have placed them, furnish us the kindest, and brightest, and boldest Barley. My present buyers inform me that the best samples are for the most part after Wheat, and that early sowing—February, for example—is of the utmost importance in securing fine quality. I need hardly say that the quantity is not so great after a second white crop as after Turnips, but I think there is no doubt there would be a larger quantity of marketable malting Barley by the course I have indicated."

Reviews.

Confidential Papers communicated to "The Syrian Improvement Committee." (Printed for private distribution.)

Having received permission to refer in these columns to this pamphlet, notwithstanding its private and confidential endorsement, we give its contents such publicity as may call the attention of capitalists and others to what appears to be literally a field capable of most profitable cultivation. Mr. Edward Whitty, on whose personal knowledge most of its statements are made, has long been resident in the country, and is intimately acquainted with the resident authorities both British and Turkish. He is, moreover, a practical agriculturist, and his opinion as well as his statements of fact are therefore entitled to consideration. The following are his observations on "the eligible nature of Syria for agricultural purposes:"—

"Leave will be granted by the Porte to select land anywhere, and in what quantities the English may wish.

"This land will naturally require large capital to work it profitably; this capital is to be supplied by Englishmen.

"All mines, minerals, &c., on this land will be secured to the Company during their term of occupation, on the same terms as railway companies now existing there have got them.

"The land to be held under lease as may hereafter be agreed upon, or as I proposed to H. E. Fuad Pasha, in a way similar to that of land companies in Ireland purchased under the Encumbered Estates Court.

"The Porte will guarantee to the Company six per cent. interest on all capital invested; when this six per cent is realised, the Company are to pay the Government, out of the *net* profit, rent for the land, namely, the deeme, or tenth of the produce.

"If the profits of the Company exceed 10 per cent., the Government are to get two per cent. in addition to the rent of the land, but no more afterwards, even though the profits reach 50 per cent.

"On the expiration of the term of occupation the Company are *still* to have a claim on the Government, who are bound to repay them a certain portion of the originally invested capital, such portion to be estimated by arithmetical calculation, allowance to be made for use and occupation.

"The Porte to give protection to the Company for life and property, but consular protection or interference not to be claimed by them.

"The Company to get the land for any description of agriculture they may wish. In my opinion general agriculture, such as that carried on in England and Ireland, would pay immensely.

"Most part of Syria is admirably suited for Cotton: to the growth of this, if such be their object, the Company could at first confine itself in a great measure, until the natives had learned the proper method of cultivation, and the advantage it would be to themselves to grow it; the Company could then turn themselves to, in my opinion, the more paying occupation of general agriculture—a certain and good market for Cotton, the great desideratum in Syria, having been first established for the native growers."

Mr. Whitty specifies a number of well-watered plains and other districts more or less accessible, and more or less free from the incursions of Bedouins, and therefore more less fitted for the purposes of the Company which he wishes to organise. The following describes one of his proposed tracts:—

"West of Hums and north of Tripoli, from the mountain ridge to the sea, is a splendid plain, watered by a thousand streams from Lebanon; it extends along the whole coast from Tripoli on the south to Tartous on the north, varying from one to six miles in breadth; almost every part of it would produce Cotton, the other parts of it corn and other food for the agriculturists' support. There is here in Tripoli a small harbour, where the produce of the land could be embarked for England. In the plain of Nablous, south of Esdraelon, about 500,000 lbs. weight of Cotton is grown annually; this is sold at prices varying from 5*d.* to 5½*d.* per lb.: such Cotton in England would fetch at least 9*d.* per lb."

This is believed to be one of the most eligible situations available "for many reasons:—1st. There is in contemplation by Government the formation of a main road eastward from the seashore, and but one mountain to cross. 2. I believe it not to be subject to the raids of the Bedouins, and so can be very easily protected. 3. Plenty of water. 4. A harbour convenient for export. 5. The French and Austrian mail steamers call there regularly. 6. Very healthy, but this I cannot as yet state of my own knowledge." Mr. Whitty specifies many other districts available for his purpose, and he says, "besides these, there are other ways in which much money might be safely made by individual capitalists, viz., by purchasing private estates about Damascus. As the laws at present exist, no Frank can possess land in the Ottoman empire; but it can be done, and is done thus, by entering into partnership with a native subject: such properties are at present in the market by thousands, but no one there has any money to buy them: as an instance, one property adjoining the town of Damascus, consisting of 1000 acres of the best land in the world, abundantly watered by the Pharpar, was sold a few weeks ago for 600*l.*; another similar estate, of about the same extent, called Zebdini, belonging to Mustapha Honasli, who was executed at Damascus, is to be sold; this is eight hours from Damascus, and for it has been offered 580*l.*; and there are hundreds of similar estates in the market at present. If a company be formed, it would be well that some of these properties be looked after, and before the purchase be effected, learn privately, will the government roads run near or through them, and be guided accordingly."

It is not likely that Mr. E. Whitty will obtain from agriculturists, or those especially interested in English agriculture, the capital for which he proposes profitable investment in Syria. It is in English agriculture rather than that of Syria that we hope to find English capital increasingly invested. Nevertheless we gladly offer Mr. Whitty the publication of his proposals in our columns, and we think it probable that the eligibility of the districts which he names for the cultivation of the Cotton plant will in the present excited state of the Cotton market secure for his proposals the attention they deserve.

An Account of the late extraordinary Durham Ox, with Remarks on the great advantages to be derived both by the Breeder and the Public, from the encouragement of such a Breed. To which is added a List of the Places where he was Exhibited, from May, 1801, till February, 1807, during which time he travelled upwards of 3000 miles. By John Day. Published for the Author. 1807.

The Smithfield Club have not been alone in their belief that the value of a breed of live stock is best illustrated by an exhibition of them in their fattened state. Probably no single thing has done so much in a short time to convince the public generally of the value of the Short-horned breed as Mr. Day's travelling show of the fat ox bred by Mr. Charles Colling, for which, with his travelling carriage, he paid the sum of 250*l.* on the 4th of May, sixty years ago.

The pamphlet in which the history of this animal is recorded is now rarely to be met with. We have lately had the pleasure of looking at a copy belonging to Mr. Dixon, of Caistor, who in his own person unites the Short-horn breeders of the present date with those of Colling's time; and we have been struck both with the enthusiasm of the writer and the remarkably good English which he writes. If Mr. Day were himself the author of these pages, he was one of the most accomplished showmen who ever travelled the country. Hear him express his admiration of the animal, and describe his purchase of it:—

"It seldom happens, when a man of even ordinary capacity eagerly dedicates his whole life to any particular pursuit, especially under every advantage of daily practice and constant observation, that he has not a tolerable confidence in his own sagacity. This was, in some degree, my case. Mr. Colling was unquestionably an intelligent respectable breeder, and a very competent judge of cattle, and Mr. Bullmer a dealer of considerable experience; but though both of them entertained a very high opinion of the superior make and beauty of the Durham Ox, yet my own admiration of that exquisite symmetry and form, which not only distinguished this animal from all others of his species, but which so exactly accorded with my own ideas of a living model completely perfect, was the consideration which chiefly enhanced his value in my estimation. Indeed, thousands of superficial observers have since talked in raptures of the size, the weight, and the colours; while the best judges were equally struck with those minute and happy proportions of shape, which at once constitute beauty and substance.

"Nine days had scarcely elapsed, before it appeared that I had no reason to complain of my purchase; for, on the 14th of May I had an offer of 500 guineas for the Ox, which I refused. On the 13th of June following, I had a second offer of 1000*l.*; and, on the 8th of July, a third offer of double the last sum; so that, in little more than two months, I could have had 1750*l.* more than my purchase money."

Mr. Day proceeds to describe the breed of his ox, and declares that he resembles nearest the "Short-horned or Dutch breed."

"But even from this kind he is easily distinguishable, by marks very obvious to common attention. The eyes are much more prominent than in those of the Dutch breed—the head itself much smaller, and so tapering to the muzzle, as to approach almost to the likeness of a deer—the tail is more light and fine—the skin and hair, all over, much softer, and the feel incomparably more kind and mellow."

He adds that ever since he can remember his breed was denominated the Ancient Holderness.

"Tradition has it that they were originally natives of Brittany, and introduced into this country in very remote times. One thing, however, is certain, that they were well known at Holderness, in Yorkshire (from whence the breed derives its name) long before any of the Dutch breed were brought over to England."

It seems plain that either Mr. Day is misapplying names, or that in the hands of others since his time they have come to be differently applied. The "Durham Ox" of Mr. Charles Colling's breeding was of the same family as is now known under the general denomination Short-horn; and, descended from Colling's herd, he differed from others nominally of the same breed just as animals of Bates's or Booth's blood differ in quality from the general run of Short-horns. We extract further remarks on the breed to which this animal belonged, begging the reader to bear in mind that the Holderness breed, which Mr. Day here praises at the expense of the so-called "Short-horned Dutch" breed, can be no other than the originals of the present breed known as Short-horns.

"It is said of the large kind of the Short-horned Dutch breed (to which the Durham Ox has already been compared) that they eat more food, and feed slower, than almost any other breed. Here they differ greatly from the Ancient Holderness, for the latter are remarkably moderate eaters, and as quick feeders as the small Highlanders themselves; two advantages the most essentially conducive to the profit of the breeder. I can with truth affirm, that I have known Oxen, both of the Dutch and other breeds, of the same age at which I bought the Durham Ox, that consumed more food than he, though scarcely more than half his size and weight; and even then, far from being sufficiently fattened for the butcher. Indeed, I do not know any breed that holds out so many inducements to the breeder as the Ancient Holderness; for, in addition to what has just been observed, they are exceedingly active and hardy, and will thrive on any kind of land where middling-sized cattle are usually depastured. When I bought the Durham Ox of Mr. Bullmer at five years of age (as already noticed) he was about 27 cwt.—that is, 216 stone, 14 lbs. to the stone; or 378 stone, 8 lbs. to the stone; and in the very best condition for the slaughter. This circumstance alone must convince the unprejudiced breeder, that no other description of cattle holds out such a prospect of gain as the breed in question.

"Moderate eating and quick feeding, however, are not the only excellences of the Ancient Holderness. It is an observation, which the experienced and intelligent breeder cannot fail to make, with respect to all cattle destined for human sustenance, that the truer and finer the form of the animal, the better will be the quality, and the greater the quantity of meat when fattened. This was remarkably so in the instance before us. The Durham Ox not only fatted well on the prime parts, commonly called the fatting points—such as the hips, rumps, ribs, flank, twist, shoulder, &c. &c.—but spread his fat so generally, that he might be said to have little or no offal at all. Every part of the carcase cut up excellently; and, therefore, such an animal is as profitable to the butcher as to the breeder. There was no part could be called a coarse piece; and when it is considered that the difference between what is called the best and worst parts of beef is reckoned not less than 100 per cent., of what incalculable advantage must it be to the breeder to attend to the propagation of an animal to whom nothing coarse is to be found, and who produces so small a proportion of meat that can even be called inferior to the best."

Having said thus much on the shape and form of the breed to which the Durham ox belonged, and on the quality of the beef, Mr. Day concludes:—

"That if that animal which fattens the quickest, and produces the greatest quantity of the best meat, with the least offal, be a valuable description of live stock, this will be found to answer every expectation."

The history of the Short-horns during the present century proves that Mr. Day's conclusion has been almost universally adopted, carried out, and realised.

Miscellaneous.

Agricultural Statistics.—The communication which has been addressed by Sir G. C. Lewis, Home Secretary, to the chairmen of various quarter sessions throughout the kingdom, relative to the collection of agricultural statistics by means of the county constabulary, was considered at the Quarter Sessions for Wilts, Somerset, and Gloucester, last week. In the former county the following motion by the Rev. Prebendary Fane was carried unanimously, "That the duties of the police force having been defined on the first institution of that force, this Court would not recommend the imposition of further duties upon that body. The inquiries suggested by the Secretary of State would, in the opinion of the Court, place the police force in an inquisitorial position, the unpopularity of which would much impair their usefulness." The Somersetshire magistrates deferred the consideration of the matter till the ensuing Session. At Gloucester it was resolved to render the Government every assistance in the collection of the proposed statistics. In Essex, Surrey, Suffolk, and Norfolk, the scheme has been coldly received; in fact, in some quarters an objection was manifested to agricultural statistics altogether, and most decidedly to the project propounded by the Home Office.

Red versus White Wheats.—It is generally admitted that the red varieties of Wheat are much less liable to sprout in a season like the past than the white sorts; but my experience, extending over a period of thirty-four years, enables me to say, that where the soil and climate is favourable, and the land in a good state of cultivation, the white Wheats pay best, and during the above-named period have not sprouted in the harvest-field oftener than once in seven years; and I hold this to be an important fact in the consideration of the subject, and I have thus never been deterred from sowing the best varieties of white Wheat upon farms where the soil and climate were favourable. Again with regard to white Oats, the earliest sorts have the advantage in a wet season, being fit for the sickle fourteen days sooner than the ordinary black kinds—a matter of immense importance, when we find that all wet seasons are productive of late harvests, and the advantages of early cutting whilst the days are longest are obvious; and the same remark applies to the Wheat crop to a certain extent, as most of the white sorts are the earliest to ripen. *Mr. Blundell, in the Bath and West of England Agricultural Journal.*

Remedies for the Potato Disease.—I have now to mention a circumstance, which I think is worthy of note, as showing how uncertain are the remedies prescribed for mitigating the Potato disease. On the acre in question I planted the Potatoes precisely in the manner recommended by Dr. Lang in his pamphlet entitled "The Potato Disease, its Causes and Remedies." The main features of his plan, which I followed out, are these. The Potatoes to be planted in drills 24 inches apart; the sets to be inserted 4 inches deep, and 15 inches apart. Lime and salt in certain proportions to be used as manure. And as one of the most effectual preservatives against disease, the plan alluded to especially advises repeatedly earthing the Potatoes up with fine earth. Now for the results in my own case. The crop, as I have already mentioned, was very much diseased, probably one-third of the whole crop. The plants were carefully earthed up time after time, some of the drills three times, and a few by way of experiment, four times. And it is a positive fact, especially noticed by the labourers who dug up the whole crop, that the drills which were four times earthed up were less productive than those which had been earthed up only three times. And as regards the lime, I tried lime and salt on some of the drills, and dung on others. Where the lime was, the Potatoes were a trifle less diseased, and less in number; where the dung was applied, they were rather more diseased, but certainly more in number, so that the produce of sound Potatoes was about equal. And this was all the profit I realised from a plan which is said (that of earthing up repeatedly) to be "the only effectual preventive to the ravages of the disease." *Rev. J. Vincent, Jacobstow, Exbourne, in the Bath and West of England Agricultural Journal.*

STATE OF THE WEATHER—BERKSHIRE.

For the Week ending August 8: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air.				Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
	Max. in Sun.	Max. in Shade.	Min.	Mean.				
	Degs.	Degs.	Degs.	Degs	Degs.	Ins.		
Friday 2 ..	81.0	73.0	50.0	63.5	64.0	..	S.E.	29.61
Saturday 3 ..	82.0	75.0	52.0	65.2	63.4	0.20	S.W.	29.65
Sunday 4 ..	69.0	65.0	54.5	60.7	62.6	0.01	S.W.	29.86
Monday 5 ..	81.0	73.0	50.0	63.5	63.5	..	S.W.	29.79
Tuesday 6 ..	84.0	74.0	49.5	64.2	64.4	..	W.	29.93
Wednesday 7 ..	82.0	72.0	47.0	62.0	64.0	..	S.W.	29.89
Thursday 8 ..	81.0	74.0	57.5	67.5	64.2	0.06	S.W.	29.58

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

ADDRESS: *Mr. G. Singer's* address has been mislaid. Will he be good enough to forward it.

POULTRY.—The market is still going on as it was, and there will be little alteration for some time. The house is closed, every one is out of town, the tenders are at harvest. Small supply and small demand are the order of the day at Leadenhall.

Large Fowls	Each	3s. 6d.	to	4s. 0d.
Middling ditto	,,	2 6	,,	3 0
Chickens	,,	1 6	,,	1 9
Geese	,,	5 0	,,	5 6
Ducklings	,,	2 6	,,	3 0
Pigeons	,,	0 7	,,	0 8
Rabbits	,,	1 3	,,	1 4
Wild ditto	,,	0 7	,,	0 8

ROSHER'S PAVING TILES. We have seen specimens of the so-called "Grooved Terro-metallic Stable Paving Brick," which appear to us perfectly to unite indestructibility with the form adapted for a good flooring for the stable.

Garden Border Edging Tiles.

F. AND G. ROSHER, CEMENT, BRICK, and TILE MERCHANTS, beg to invite attention to their varied Stock of Ornamental Garden Border-edging Tiles in Terra Cotta, Terro-Metallic ware, and Red ware. They present advantages over Box or Grass-edging in that they afford no harbour for slugs, &c., take up less room, and once laid, require no further attention.

They may be had of various patterns at F. & G. R.'s Premises, Ward's Wharf, Upper Ground Street, Blackfriars, S.; and Kingsland Road Wharf, near the Canal Bridge, London, N.E.

N.B. Sketches of patterns sent by post on application. Garden Vases and Ornamental Flower Boxes for Windows and Balconies in stock.

ORNAMENTAL PAVING TILES for Conservatories, Halls, Corridors, Balconies, &c., as cheap and durable as Stone, in b , red, and buff colours, and capable of forming a variety of designs.

Also WHITE GLAZED TILES, for Lining Walls of Baths, Dairies, Larders, Kitchen-ranges, &c. Grooved Terro-metallic and other Stable Paving Bricks of great durability, Clinkers, Red and White Wall-Copings, Glazed Drain Pipes, &c. To be obtained of F. & G. ROSHER, at their Premises as above.

Prices Reduced.

H. J. MORTON AND CO., Galvanised Iron Works, 2, Basinghall Buildings, Leeds.

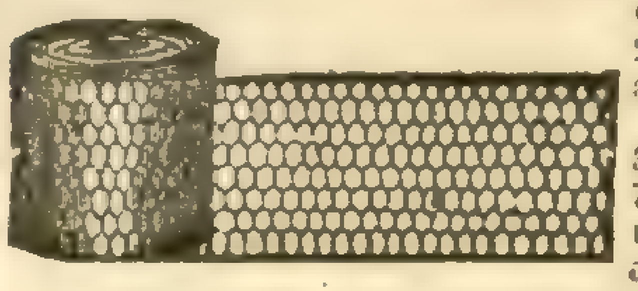
GALVANISED IRON ROOFING for Farm Buildings and other Roofs; the cheapest, most durable, and neatest Roofing in use; also Spouting at 10½d. per yard.

IRE STRAND CABLE FENCING

(formed of Twisted Wires like a rope or cable), the strongest, cheapest, and neatest fence in use, will resist the largest cattle, and will not bend or get out of form by trespassing upon or over. Price, with five lines of the Galvanised Strand, iron main posts, and pronged Standards, 1s. 2½d. per yard.

This fence is far cheaper than posts and rails, or any kind of iron fencing; and possesses four times the strength of solid bars. Will not rust nor corrode. Upwards of 1200 miles of this Fencing supplied.

GALVANISED GAME AND POULTRY NETTING.



Galvanised, 24 ins. wide 2-inch mesh, 5½d., 7½d., and 9½d. per yard.

Galvanised, 24 ins. wide, 3-inch mesh, 4d., 5d., and 7d. per yard. The Netting made any width, and with openings of any size.

GALVANISED IRON CHAIN CAMP STOOLS & CHAIRS, POULTRY FOUNTAINS & FEEDERS, PRONGED DAHLIA RODS AND ROSE STAKES, &c.

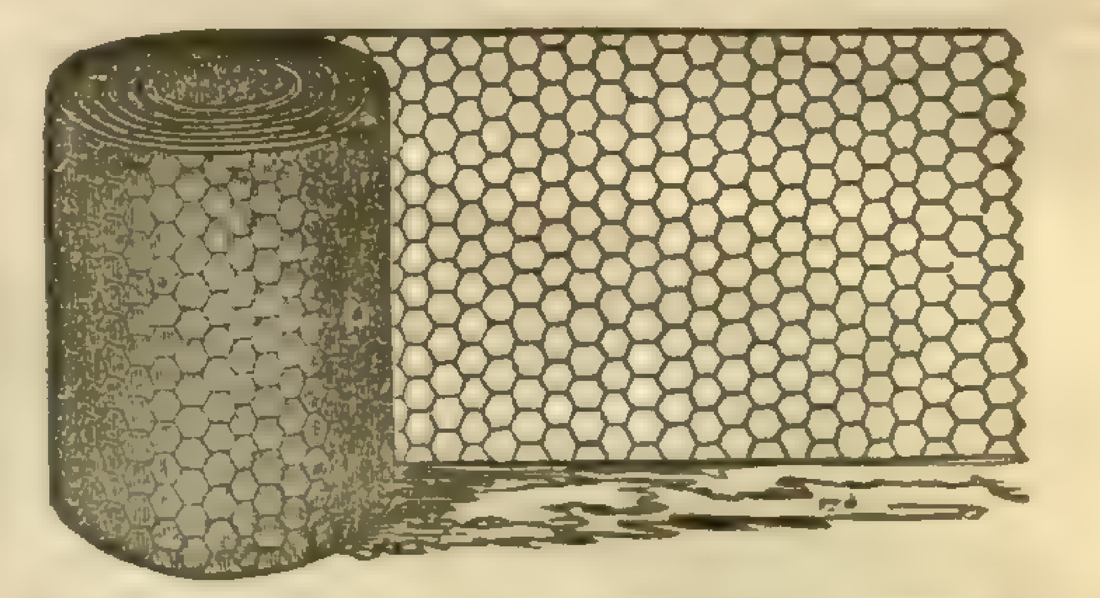
Strong CATTLE HURDLES from 2s. per yard.

PATENT IMPROVED GAS WORKS of all sizes, for the use of Private Houses, Mansions, Railway Stations, Mills, Collieries, Mines, Villages, &c. Works from 10 to 500 lights estimated for. The works can be entrusted to an ordinary labourer.—Apply to

HENRY J. MORTON & Co. 2, Basinghall Buildings, Leeds.

BARNARD, BISHOP, AND BARNARDS, Norwich.

FURTHER REDUCTION IN THE PRICE OF WIRE NETTING.—APRIL, 1861.



BARNARD, BISHOP, and BARNARDS beg to inform their friends and the public that they have made a further reduction in the prices of Machine made Wire Netting, and also that all their Nettings are now Galvanised after being made, which adds much to their appearance, strength, and durability.

	Gauge.	Galvanised. per yard.	Japanned Iron. per yard.
2-inch mesh, 24 inches wide ..	No. 19	.. 4½d.	.. 3½d.
2-inch ,, ,, ,, ..	,, 18	.. 5	.. 4
2-inch ,, ,, ,, ..	,, 17	.. 6½	.. 5
2-inch ,, ,, ,, ..	,, 16	.. 8	.. 6½
1⅝-inch ,, ,, ,, ..	,, 19	.. 4¾	.. 4
1⅝-inch ,, ,, ,, ..	,, 18	.. 6	.. 4¾
1⅝-inch ,, ,, ,, ..	,, 17	.. 7	.. 5½
1⅝-inch ,, ,, ,, ..	,, 16	.. 9	.. 7

All the above kinds can be made any width (under 6 feet) at proportionate prices.

Strong Galvanised Poultry Netting, 7½d. per yard, 3 feet wide: Galvanised Sparrow-proof Netting for Pheasantries, 11d. per yard, 2 feet wide. Wire Netting of every mesh from half an inch to 6 inches.

Reduced Price of WIRE FENCING, and GALVANISED WIRE ROPE FENCING, suitable for the home trade or the colonies.

Five wires, 3 feet 6 inches high, pronged Standards, 8 feet apart, one wrought iron straining post and straining screws to each 100 yards of Fencing, 10d. per yard.

The same with Galvanised Wire Rope, 1s. per yard.

Illustrated Catalogues, with prices of every variety of Wire Fencing and Wire Netting, forwarded free on application.

☞ Wire Fencing and Netting delivered Carriage Free at all the principal Railway Stations.

TRIAL of LAWN MOWERS.—On the 15th inst. a Public Trial of Lawn Mowing Machines (in connection with the Floral, Horticultural, and Entomological Exhibition, held on the 16th, 17th, and 18th inst., in the Infirmary Gardens, Leeds), took place in the Leeds Royal Park. The only competitors were Mr. Samuelson and Mr. Green, the latter of whom obtained the Three Prizes offered, viz. :—3*l.* for Horse Lawn Mowing Machine; 2*l.* for Double-handed Mowing Machine; and 1*l.* for Single-handed Mowing Machine. The Judges were Mr. Carr, Gardener to John Cooper, Esq., Gledhow; and Mr. Ellis, Gardener to E. Hudson, Esq., of Roundhay.

N.B. All the Mowing Machine Makers were invited for competition.

Priced Lists may be obtained on application to Thos. Green, Leeds; or from W. Green, at the Depôt, 2, Victoria Street, Holborn Hill, E.C.

Oil Paint no longer Necessary.

HILL & SMITH'S PATENT BLACK VARNISH for preserving Iron Work, Wood, or Stone. This Varnish is an excellent substitute for oil paint on all out-door work, and is fully two-thirds cheaper. It may be applied by an ordinary labourer, requires no mixing or thinning, and is used cold. It is used in the grounds at Windsor Castle, Kew Gardens, and at the seats of many hundreds of the nobility and gentry, from whom the most flattering testimonials have been received, which Hill & Smith will forward on application.

Sold in casks of about 30 gallons each, at 1*s.* 6*d.* per gallon, at the Manufactory, or 1*s.* 8*d.* per gallon paid to any station in the kingdom.

tfo Hill & Smith, Brierley Hill Iron Works, near Dudley, rom whom only it can be obtained.

CARSON'S ORIGINAL ANTI-CORROSION PAINT is now used extensively for all kinds of Out-door Work, such as Iron, Wood, Stone, Brick, Compo, Cement, &c., and has been proved, after a practical test of 70 years, to surpass any other Paint.

For fuller particulars, see No. 25 of the *Gardeners' Chronicle*, Page 572, or apply to Walter Carson & Sons (Successors to the Inventors), 9, Great Winchester Street (near the Royal Exchange), London, E.C.

No Agents throughout the United Kingdom.

J. TYLOR and SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25*s.* 6*d.* each.

IRON YARD AND GARDEN PUMPS

3 feet 6 inches under spout

2½	3	3½ inch
43*s.*	58*s.*	60*s.* each.

J. Tylor and Sons manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.

PUMPS of J. Tylor & Sons' manufacture to be obtained of Plumbers in all parts of the United Kingdom.

J. Tylor & Sons, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

THOMAS MILLINGTON,

HORTICULTURAL GLASS WAREHOUSE,

87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.

Established 1750.

Fig. A.

PRESERVE JARS.

Fig. B.

Fig. C.

Figs. E.

Fig. F.

Fig. G.

Fig D.

Fig. H.

Fig D.

Fig. I.

Fig. A. HAND GLASSES.

12 inches	..	6*s.* 0*d.* each
14 ,,	..	7 0 ,,
16 ,,	..	8 0 ,,
18 ,,	..	9 0 ,,
20 ,,	..	10 0 ,,
24 ,,	..	12 0 ,,

If open top 1*s.* extra.

Fig. B. PROPAGATING GLASSES.

2 inches	..	0*s.* 3½*d.* each.
4 ,,	..	0 5½ ,,
6 ,,	..	0 8 ,,
10 ,,	..	1 4 ,,
12 ,,	..	1 9 ,,
16 ,,	..	3 6 ,,
18 ,,	..	5 0 ,,
20 ,,	..	7 0 ,,

Fig. C. MILK PANS.

6 inches	..	0*s.* 6*d.* each.
10 ,,	..	1 0 ,,
14 ,,	..	1 9 ,,
18 ,,	..	2 9 ,,
20 ,,	..	3 3 ,,
22 ,,	..	3 9 ,,
24 ,,	..	4 6 ,,
26 ,,	..	5 6 ,,

Fig E. PRESERVE JARS.

	Without Lids.	With Lids.
3 inches	0*s.* 4½*d.*	0*s.* 6½*d.* ea
4 ,,	0 6	0 9 ,,
5 ,,	0 8	0 11 ,,
6 ,,	0 10	1 2 ,,
7 ,,	1 0	1 4 ,,
8 ,,	1 4	1 8 ,,
9 ,,	1 8	2 2 ,,
10 ,,	2 0	2 8 ,,

Fig. D. HYACINTH GLASSES.

Common .. 3*s.* 0*d.* per dozen,
Improved.. 3 6 ,,

CROCUS GLASSES.

Common .. 2*s.* 0*d.* per dozen.
Improved.. 2 6 ,,

Fig. F. HYACINTH DISHES.

6 inches	..	1*s.* 0*d.* each.
9 ,,	..	1 6 ,,
12 ,,	..	2 6 ,,

Fig. G. CUCUMBER TUBES.

1*d.* per running inch.

Fig. I. ROLLING PINS.

1½*d.* per running inch.

Opal Ditto.

14 inches	..	3*s.* 6*d.* each
16 ,,	..	4 0 ,,
18 ,,	..	4 6 ,,

Fig. H. FISH GLOBES.

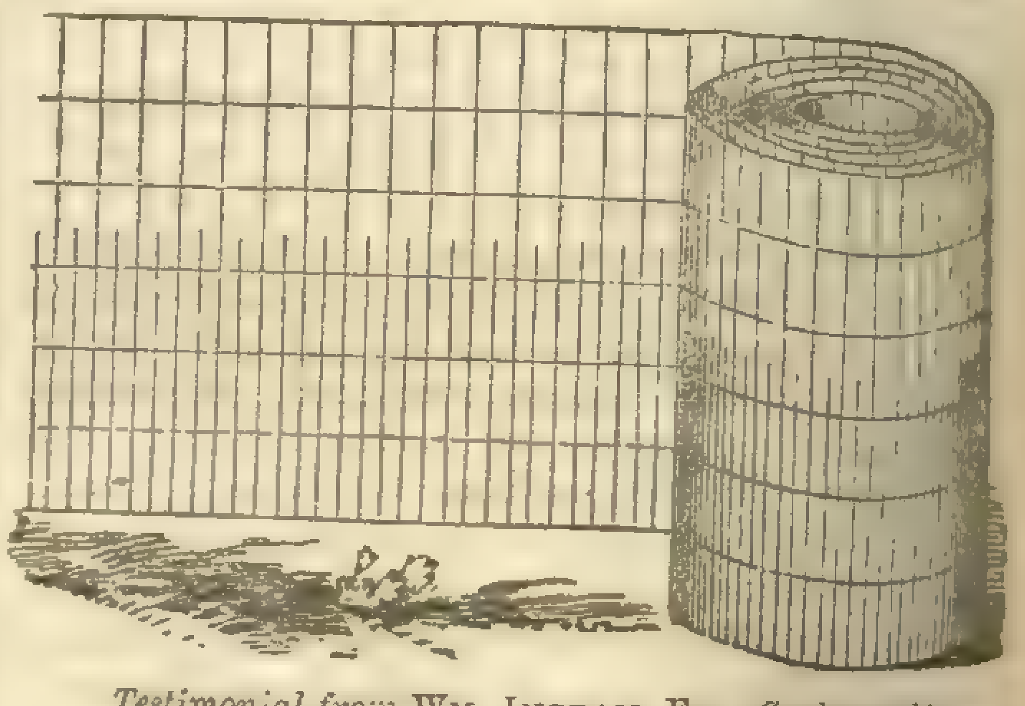
	With Feet.	Without Feet
8 inches	1*s.* 9*d.*	3*s.* 6*d.* each
10 ,,	2 3	4 0 ,,
12 ,,	3 0	4 6 ,,
14 ,,	4 0	6 6 ,,
16 ,,	5 0	9 0

Intermediate Sizes in proportion.

Crystal Glass Shades, Ebony and Gilt Stands, Gas and Lamp Glasses, Chimneys and Globes, &c.

For Window and Orchard House Glass see Advertisement of July 30.

GREENING'S PATENT GAME FENCING.—



Testimonial from Wm. Ingram, Esq., *Gardener to his Grace the* Duke of Rutland.

"I find it extremely convenient, elegant in appearance, and perfectly efficient as a rabbit fence. I shall certainly employ it in preference to the usual Wire Netting whenever I require anything of the kind."

New Illustrated Catalogue of all kinds of Iron and Wire Fences, Iron Gates, &c , now ready and post free, on application to Greening & Co.

Victoria Iron and Wire Works, 81, Oxford Street, Manchester.

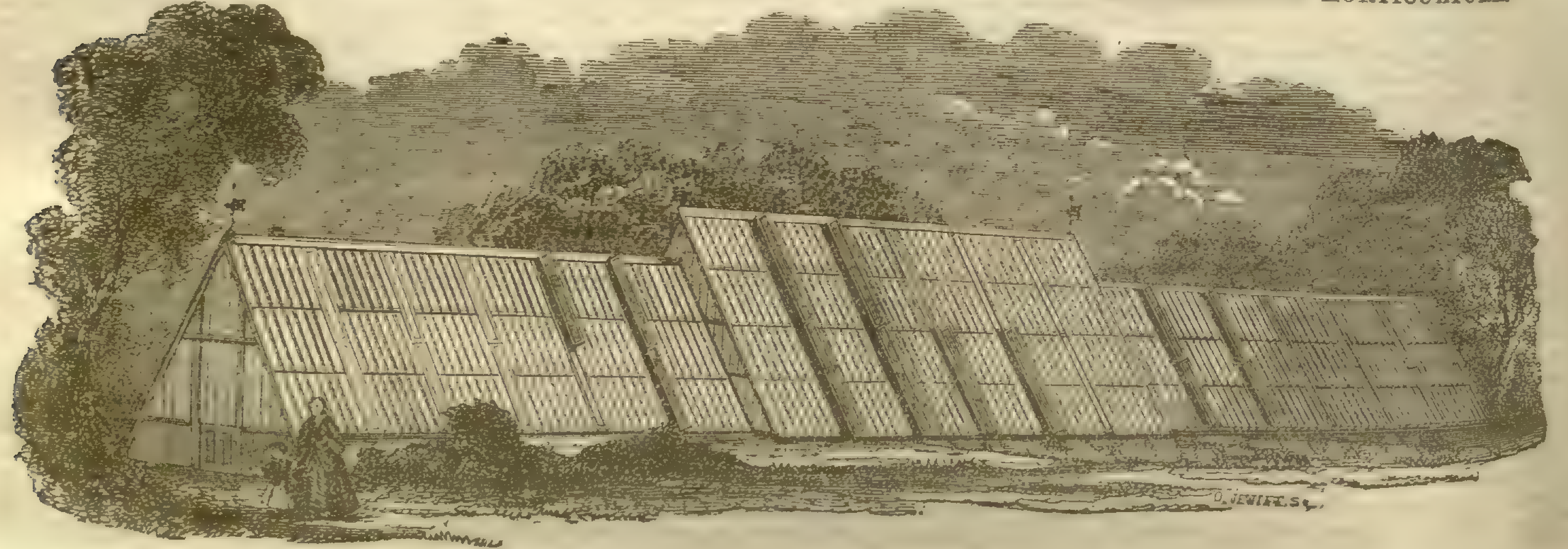
HOTHOUSES FOR THE MILLION,

ON THE PRINCIPLE INVENTED AND PATENTED BY

SIR JOSEPH PAXTON, M.P.

COMBINING SIMPLICITY, CHEAPNESS, EXCELLENCE, AND DURABILITY.

BEING CAPABLE OF FULFILLING IN THE MOST PERFECT MANNER ALL THE REQUIREMENTS OF HORTICULTURE.



The Prices of Lean-to Houses complete are as follows:—

	8 ft. Lights	10 ft. Lights	12 ft. Lights	14 ft. Lights	16 ft. Lights
20 7 in length	£12 0 0	£16 0 0	£21 0 0	£28 10 0	£34 5 0
31 3 in length	16 10 0	21 2 6	26 10 0	37 12 0	45 16 0
41 11 in length	20 18 0	26 18 6	33 7 6	46 14 0	57 7 0
52 7 in length	25 12 6	32 15 0	40 5 0	55 16 0	68 18 0
63 3 in length	30 6 0	38 10 0	47 2 6	64 18 0	80 10 0
73 11 in length	34 12 6	43 15 0	53 7 6	74 0 0	92 0 0
84 7 in length	39 6 0	49 11 6	60 5 0	83 2 0	103 11 0
95 3 in length	43 19 0	55 10 0	67 2 6	92 5 0	115 2 0
105 11 in length	48 17 6	60 12 6	73 10 0	101 10 0	126 13 0

The Prices of the Span-roofed Houses, with Water-troughs, Doors, and Ends complete, are as follows:—

Ft. In.	8 ft. Lights	10 ft. Lights	12 ft. Lights	14 ft. Lights	16 ft. Lights
20 7 in length	£24 0 0	£32 0 0	£42 0 0	£57 0 0	£68 12 0
31 3 in length	33 0 0	42 5 0	53 0 0	75 4 0	91 14 0
41 11 in length	41 16 0	53 17 0	66 15 0	93 8 0	114 16 0
52 7 in length	51 5 0	65 10 0	80 10 0	111 12 0	137 10 0
63 3 in length	60 12 0	77 0 0	94 5 0	129 16 0	161 0 0
73 11 in length	69 5 0	87 10 0	106 15 0	148 0 0	184 0 0
84 7 in length	78 12 0	99 3 0	120 10 0	166 4 0	207 2 0
95 3 in length	87 18 0	111 0 0	134 5 0	184 10 0	230 4 0
105 11 in length	97 15 0	121 5 0	147 0 0	203 0 0	253 6 0

If only one end is required a corresponding deduction will be made. The 14 and 16 feet lights are made stronger than those of less dimensions.

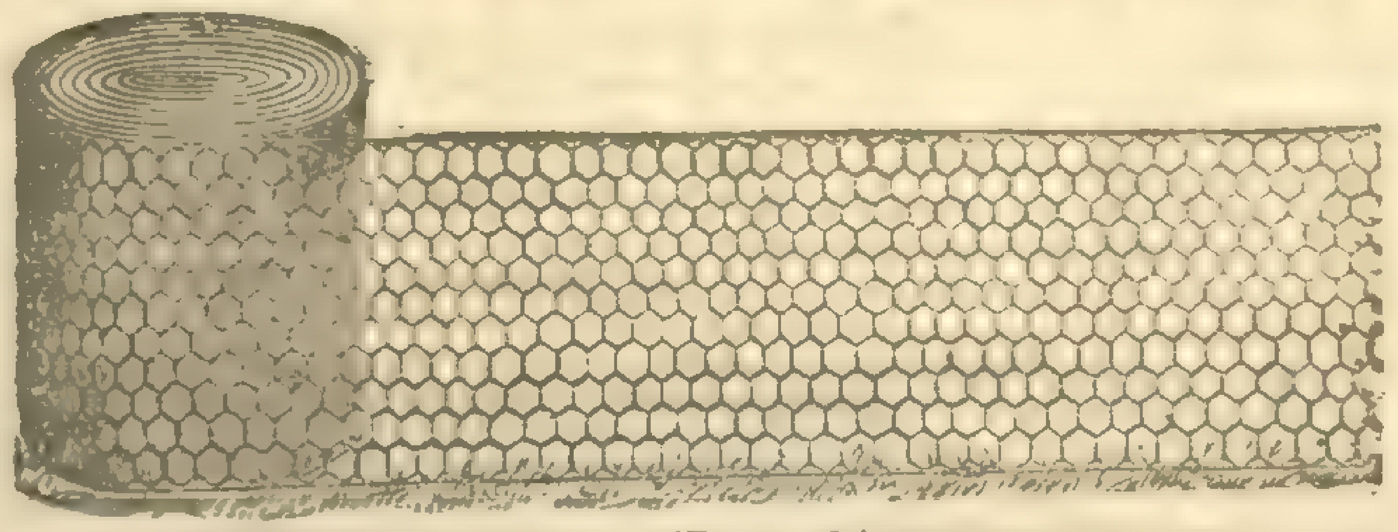
The above prices do not include package, railway freight, heating apparatus, or erection.

Illustrated Circulars with Lists of Prices and Cards to view houses in operation in the neighbourhood of London can be had on application to

SAMUEL HEREMAN, 7, PALL MALL EAST, LONDON, S.W.

NEW IMPROVED PREMIUM WIRE NETTING.

GREAT IMPROVEMENT WITH REDUCED PRICE.



PRICES PER LINEAL YARD, 24 INCHES HIGH:—

Size of mesh.	Mostly used for	Light.		Medium.		Strong.		Extra Strong.	
		Japanned.	Galvanized.	Japanned.	Galvanized.	Japanned.	Galvanized.	Japanned.	Galvanized.
2¼ inch	Hares, Dogs, Poultry	3d.	4d.	3¾d.	5d.	4½d.	6d.	5½d.	7d.
2 inch	Game or Poultry Netting	3½d.	4¼d.	4d.	5d.	5d.	6½d.	6½d.	8d.
1½ inch	Small Rabbits, Hares, &c.	4d.	4¾d.	4½d.	6d.	5½d.	7d.	7d.	9d.
1¼ inch	Smallest Rabbits	5d.	6d.	5¼d.	7d.	7d.	9d.	9d.	11d.

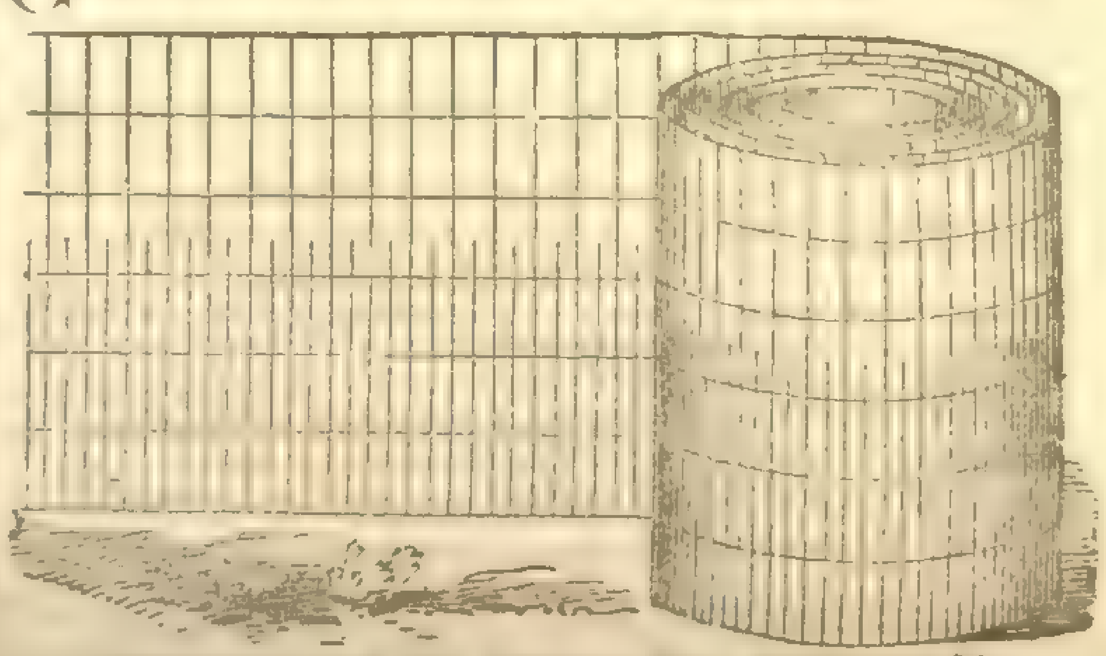
Quantities of 100 yards or upwards delivered free at nearly all the principal Railway Stations and Shipping Ports in England; and 200 yards or upwards delivered free to most parts of Scotland and Ireland.

J. B. BROWN & CO., 18, CANNON STREET, CITY, LONDON, E.C.

TANNED NETTING for Fruit Trees, at reduced prices; 200 square yards, 10s.; 500 yards, 24s. Screen Canvas for Wall Fruits; Tulip Covers, Sun Shades, and Awnings; Rick Cloths, with Poles and Ropes complete; Marquees, Tents, and Flags, for sale or hire.

EDGINGTON & Co., 17, Smithfield Bars, London, E.C.

GREENING'S PATENT GAME FENCING.—



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Victoria Iron and Wire Works, 81, Oxford Street, Manchester

WEEKS'S UPRIGHT TUBULAR BOILER.

SUBJOINED IS THE REASON WHY

WEEKS'S ONE-BOILER SYSTEM

HAS BECOME THE ORDER OF THE DAY FOR HEATING BY HOT-WATER.

WEEKS'S No. 1. BOILERS are heating upwards of			200	feet of Pipe.
WEEKS'S No. 2. BOILERS	"	"	300	"
WEEKS'S No. 3. BOILERS	"	"	600	"
WEEKS'S No. 4. BOILERS	"	"	1500	"
WEEKS'S No. 5. BOILERS	"	"	4000	"
WEEKS'S No. 6. BOILERS	"	"	12,000	"

The above statistics being accounts of hundreds of apparatus disseminated throughout EUROPE in practical operation, J. WEEKS & COMPANY publish them with the pleasing satisfaction that all who may honour them with their esteemed commands must effect enormous savings both in fuel and labour by the adoption of their ONE-BOILER SYSTEM.

JOHN WEEKS & COMPANY,

HORTICULTURAL BUILDERS AND HOT-WATER APPARATUS MANUFACTURERS,

KING'S ROAD, CHELSEA, S.W.

*** *Illustrated Catalogues, Designs, and Estimates forwarded free on application.*

HOTHOUSES FOR THE MILLION,

ON THE PRINCIPLE INVENTED AND PATENTED BY

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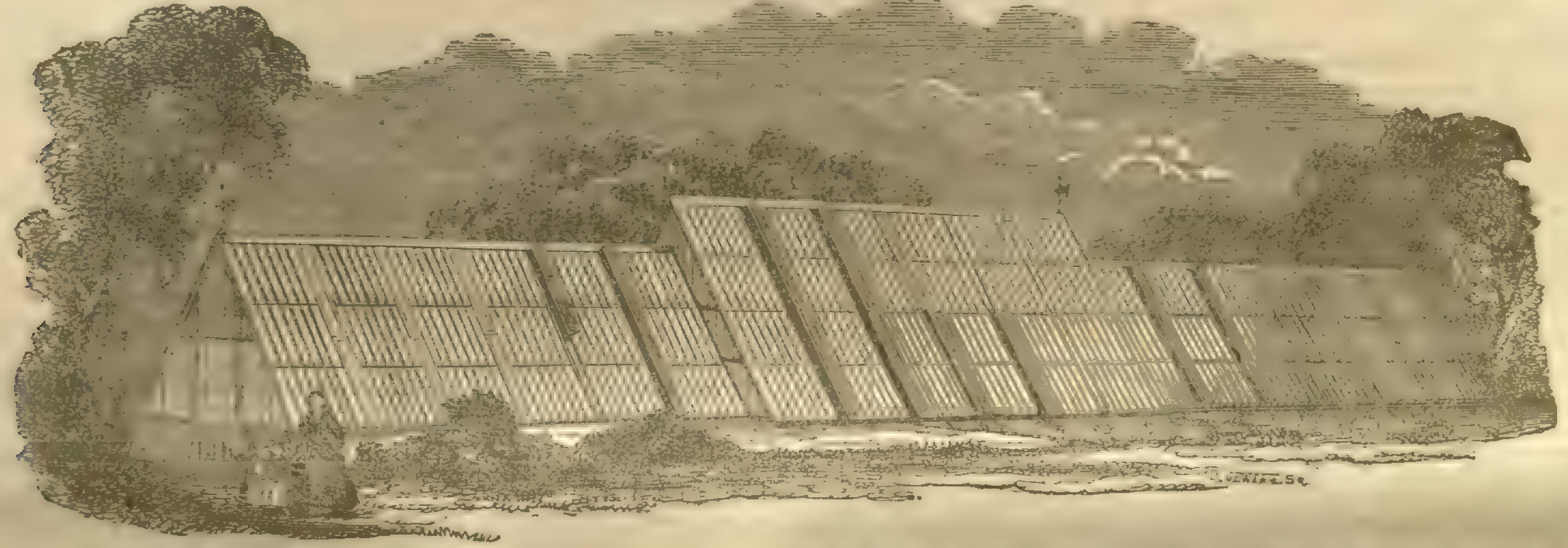

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41 11 in length	20 18 0	26 18 6	33 7 6	46 14 0	57 7 0
52 7 in length	25 12 6	32 15 0	40 5 0	55 16 0	68 18 0
63 3 in length	30 6 0	38 10 0	47 2 6	64 18 0	80 10 0
73 11 in length	34 12 6	43 15 0	53 7 6	74 0 0	92 0 0
84 7 in length	39 6 0	49 11 6	60 5 0	83 2 0	103 11 0
95 3 in length	43 19 0	55 10 0	67 2 6	92 5 0	115 2 0
105 11 in length	48 17 6	60 12 6	73 10 0	101 10 0	126 13 0

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41 11 in length	41 16 0	53 17 0	66 15 0	93 8 0	114 16 0
52 7 in length	51 5 0	65 10 0	80 10 0	111 12 0	137 10 0
63 3 in length	60 12 0	77 0 0	94 5 0	129 16 0	161 0 0
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SAMUEL HEREMAN, 7, PALL MALL EAST, LONDON, S.W.

August is the best Month in the Year to Sow to insure Success.

DOBSONS' SUPERB HYBRIDISED CALCEOLARIA.—The variety obtained from a packet of this Seed is acknowledged to be far superior to any other ever offered before.

New Seed in sealed packets, 1s. 6d., 2s. 6d., 3s. 6d., and 5s. each, now ready.

For Testimonials and List of Agents, see *Gardeners' Chronicle* of July 13, 1861.

J. Dobson & Sons, Seedsmen, Woodlands Nursery, Isleworth, W.

WHEELER'S ORANGE GLOBE MANGEL,
WHEELER'S IMPERIAL SWEDE,
GRASS SEEDS for PERMANENT PASTURE,
GRASS SEEDS for LAWNS,

And all other Seeds of the same excellent quality which has rendered our Farm Seeds so celebrated.

We offer our Seeds at the lowest price consistent with their being good and pure, at the same time deliver them carriage-free by rail, and allow 5 per cent. discount for cash.

Our Book of FARM SEEDS sent free for 3 stamps.

J. C. Wheeler & Son, Seed Growers, Gloucestershire.

NEW SEEDS FOR AUTUMN SOWING.

PETER LAWSON & SON,

SEEDSMEN TO THE QUEEN,

LONDON AND EDINBURGH,

CAN now supply New Seed of TRIFOLIUM INCARNATUM, ITALIAN RYE-GRASS, DWARF ESSEX RAPE, &c., of fine quality.

They are also prepared to supply all the NATURAL GRASSES, either separate or in mixtures, for laying down Permanent Pastures, Lawns, Public Parks, Cemeteries, &c., orders for which will be carefully and promptly attended to.

27, GREAT GEORGE STREET, WESTMINSTER, S.W.

ROYAL HORTICULTURAL SOCIETY.

SCHEDULE OF PRIZES.

SHOW OF DAHLIAS AND OTHER CUT FLOWERS,

WEDNESDAY, SEPTEMBER 11, 1861.

The Special Regulations can be had of Mr. Eyles.

Exhibitors of Cut Flowers to provide their own stands. Entries in each class to be exhibited in separate stands of the following dimensions:—

	Length.	Breadth.	
48 Dahlias, 2 stands	4 ft. each.	1 ft. 6 in.	Height of stands 6 inches behind, and 4 in front.
24 Dahlias, 1 stand	4 ,, each.	1 ,, 6 ,,	
12 Dahlias, 1 stand	2 ,, each.	1 ,, 6 ,,	
48 Roses, 2 stands	4 ,, each.	1 ,, 6 ,,	
24 Roses, 1 stand	4 ,, each.	1 ,, 6 ,,	
24 Hollyhocks, 1 stand	4 ,, each.	1 ,, 6 ,,	
24 Asters, 1 stand	2 ,, each.	1 ,, 6 ,,	

Class.		1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
1. 48 Dahlia Blooms. Distinct.	(Nurserymen)	8 0	6 0	4 0	
2. 24 Dahlia Blooms Distinct.	(Nurserymen)	5 0	3 0	2 0	1 0
3. 18 Dahlia Blooms Fancies, distinct.	(Nurserymen)	4 0	3 0	2 0	1 0
4. 24 Dahlia Blooms Distinct	(Amateurs)	6 0	4 0	3 0	2 0
5. 12 Dahlia Blooms. Distinct.	(Amateurs)	4 0	3 0	2 0	1 0
6. 6 Dahlia Blooms. Distinct.	(Amateurs)	2 0	1 10	1 0	0 10
7. 12 Dahlia Blooms. Fancies, distinct	(Amateurs)	3 0	2 0	1 0	0 15
8. 48 Cut Roses. 3 trusses, distinct	(Nurserymen)	4 0	3 0	2 0	
9. 24 Cut Roses. 3 trusses, distinct	(Amateurs)	4 0	3 0	2 0	1 0
10. 24 Cut Roses. Distinct. Single blooms.	(Open)	2 0	1 0	0 10	
11. 12 Roses, in pots, not more than two of one kind	(Open)	5 0	4 0	3 0	
12. 12 Hollyhocks, in spikes. Distinct	(Open)	3 0	2 0	1 0	
13. 12 Hollyhocks, single flowers. Distinct	(Open)	2 0	1 0	0 15	
14. 24 German Asters. "Quilled," distinct	(Open)	2 0	1 0	0 15	0 10
15. 24 French Asters. "Tasselled," distinct	(Open)	2 0	1 0	0 15	0 10
16. 24 Gladiolus, cut spikes. Distinct	(Open)	2 10	1 10	1 0	
17. 12 Gladiolus, cut spikes. Distinct	(Amateurs)	1 10	1 0	0 10	
18. 12 Pots of Gladiolus. Distinct. Not more than 3 in each pot	(Open)	3 0	2 0	1 0	
19. 24 Phloxes, single trusses. Distinct	(Open)	2 0	1 0	0 15	
20. 12 Phloxes, in pots. Distinct	(Open)	3 0	2 0	1 0	
21. 24 Verbenas, 5 trusses of each. Distinct	(Open)	1 10	1 0	0 10	
22. Miscellaneous. For Flowers not specified	(Open)	1 10	1 0	0 10	

FRUIT AND CHRYSANTHEMUM SHOW,

WEDNESDAY and THURSDAY, NOVEMBER 6 and 7, 1861.

The Special Regulations can be had of Mr. Eyles.

FRUIT.

A dish of Grapes to consist of 3 bunches; of Apples, Pears, Oranges, Lemons, and such like, 6 fruits of each; and of Plums, 9 fruits.

Class.		1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.
A. Collection of Fruit	(Fruiterers only)	4 0	3 0	
B. Collection of Fruit	(Private Growers)	6 0	4 0	3 0
C. Pine Apples, collection of. 3 distinct kinds		4 0	3 0	2 0
D. Pine Apple. Single fruit, any variety		2 10	2 0	1 0
E. Grapes. White Muscat. Basket of, not less than 10 lbs. weight		4 0	3 0	2 0
F. Grapes, White Muscat. Single dish		2 10	2 0	1 0
G. Grapes, White. Any other variety, single dish		2 10	2 0	1 0
H. Grapes, Black Hamburgh. Basket of, not less than 10 lbs. weight		4 0	3 0	2 0
I. Grapes, Black Hamburgh Single dish		2 10	2 0	1 0
J. Grapes, Frankenthal or Dutch Hamburgh. Single dish		2 10	2 0	1 0
K. Grapes. Black. Any other variety, single dish		2 10	2 0	1 0
L. Pears, dessert, collection of, 1 dish of each		4 0	3 0	2 0
M. Pears, dessert, collection of 6 dishes, distinct kinds		3 0	2 0	1 0
N. Pears, dessert, collection of 3 dishes, distinct kinds		1 10	1 0	0 10
O. Pears, dessert. Single dish, any variety		1 0	0 15	0 10
P. Pears, kitchen. Uvedale's St. Germain. Single dish		1 0	0 15	0 10
Q. Pears, kitchen. Catillac. Single dish		1 0	0 15	0 10
R. Pears, kitchen. Single dish, any variety		1 0	0 15	0 10
S. Pears. Heaviest 5 fruits, dessert		1 0	0 15	0 10
T. Pears, Stewed, jar of		2 0	1 10	1 0
Note.—These are to be prepared without sugar, spice, or any colouring matter, and to be shown in white glass jars. Ladies are particularly invited to cause jars of fruit to be sent for examination.				
U. Apples, dessert, collection of, 1 dish of each		4 0	3 0	2 0
V. Apples, dessert, collection of 6 dishes, distinct kinds		3 0	2 0	1 0
W. Apples, dessert, collection of 3 dishes, distinct kinds		1 10	1 0	0 10
X. Apples, dessert. Single dish, any variety		1 0	0 15	0 10
Y. Apples, kitchen, collection of 1 dish of each		4 0	3 0	2 0
Z. Apples, kitchen, collection of 6 dishes, distinct kinds		3 0	2 0	1 0
AA. Apples, kitchen, collection of 3 dishes, distinct kinds		1 10	1 0	0 10
BB. Apples, kitchen. Single dish		1 0	0 15	0 10
CC. Apples, kitchen. Heaviest 5 fruits		1 0	0 15	0 10
DD. Pommes Tapés; that is to say, Apples dried in the same way as Normandy Pippins; of which an account is given in the *Gardeners' Chronicle* for 1860, p. 932. Note.—It must be observed that this process is quite different from that employed in preparing Norfolk Beefings		3 0	2 0	1 0
EE. Oranges, Lemons, &c., collection of 1 dish of each		3 0	2 0	1 0
FF. Oranges, 4 plants, in pots or boxes, bearing fruit		3 0	2 0	1 0
GG. Oranges, best specimen of Tangerines, in pot		1 10	1 0	0 10
HH. Melons. Single fruit, any variety		1 0	0 15	0 10
II. Plums. Single dish, any variety		2 0	1 10	1 0
JJ. Strawberries. Single dish		1 0	0 10	0 5
KK. Currants. Single dish		0 10	0 7	0 5
LL. Raspberries. Single dish		0 10	0 7	0 5

Note.—Fruit specified in the above Classes will be excluded from MM.

MM. Miscellaneous .. .. 60s., 50s., 40s., 30s., 20s., 10s.

CHRYSANTHEMUMS.

Exhibitors of Cut Flowers to provide their own stands, of the following dimensions:—
For 24 Blooms, 1 stand 4 feet long, 1 foot 6 inches broad.
For 12 ,, ,, 2 ,, ,, ,,
For 6 ,, ,, 1 ,, ,, ,,
Height of stand, 6 inches behind, 4 inches in front.

☞ Preference will be given to plants trained in the bush-like or pyramidal form.

Class.		1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
1. 6 Plants. Distinct varieties, on single stems	(Nurserymen)	4 0	2 0	1 0	
2. 6 Plants. Distinct varieties, on single stems	(Amateurs)	6 0	4 0	2 0	1 0
3. 3 Plants. Distinct varieties, on single stems	(Amateurs)	2 10	2 0	1 0	
Note.—Pots not to exceed 11 inches in diameter in Classes 1, 2, and 3.					
4. 6 Plants, Pompons. Distinct varieties, on single stems	(Nurserymen)	4 0	2 0	1 0	
5. 6 Plants, Pompons. Distinct varieties, on single stems	(Amateurs)	6 0	4 0	2 0	1 0
6. 6 Standard Chrysanthemums or Pompons	(Open)	4 0	2 0	1 0	
Note.—Pots not to exceed 8 inches in diameter in Classes 4, 5, and 6.					
7. 6 New varieties of the current year		2 0	1 0	0 10	
8. Single specimen, single stem, either Chrysanthemum or Pompon	(Open)	1 0	0 15	0 10	
9. 24 Cut blooms. Distinct	(Nurserymen)	2 0	1 0	0 15	0 10
10. 24 Cut blooms. Distinct	(Amateurs)	3 0	2 0	1 0	0 15
11. 12 Cut blooms. Distinct	(Amateurs)	1 10	1 0	0 10	0 7
12. 6 Cut blooms. Distinct	(Amateurs)	0 15	0 10	0 7	0 5
13. 6 Cut blooms. Distinct. Anemone flowered	(Open)	0 15	0 10	0 7	0 5
14. Best group of cut blooms	(Open)	2 0	1 0	0 10	

Dutch and other Bulbs.

B. S. WILLIAMS begs to inform his friends and patrons that his CATALOGUE of the above is now ready, and will be forwarded post free on application. Early orders are solicited, as their successful cultivation depends in a great measure on early planting.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, N.

New Phalænopsis with Variegated Foliage.

B. S. WILLIAMS has great pleasure in offering for the first time strong Plants of Phalænopsis Schilleriana, which have just arrived in the finest possible condition. This beautiful species is quite distinct from all others in cultivation; the leaves are similar in form and equal in size to those of P. grandiflora; ground colour dark green, with irregular bands of white over the whole surface. Flowers flesh-coloured; size, about two-thirds of those of P. amabilis, and produced in great profusion from strong branching stems, one of which may be seen at the Nursery, which has borne upwards of 100 flowers, a portion of which are still attached.

Price can be had on application.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway.

Geraniums, Herbaceous and Alpine Plants, Orchids, Chrysanthemums, Hardy Variegated Plants, &c.

B. S. WILLIAMS begs to inform his friends and patrons that a PRICED and DESCRIPTIVE CATALOGUE of the above, to which are added supplemental Lists of Fuchsias, Stove, Greenhouse, and Hardy Plants, Ferns, Ornamental Foliage and Variegated Plants, Fruit Trees, &c. (which include the best new plants of the season,) is now published, and will be forwarded post free on application.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, London, N.

To Exhibitors.—New Calceolaria Seed.

J. DOBSON AND SONS' splendid Hybridised Calceolarias invariably carry off the first prizes wherever exhibited. They are unequalled for quality, form, variety, and habit. Sealed packets 1*s.* 6*d.*, 2*s.* 6*d.*, 3*s.* 6*d.*, and 5*s.*

The Trade supplied on reasonable terms.

Woodlands Nursery, Isleworth, W.

Roses in Pots.—The best New and Old.

BENJAMIN R. CANT has a splendid stock of healthy Plants in pots (most of them on their own roots), of all the Leading Sorts, both New and Old. If planted now a season will be gained.

A LIST of Sorts with Prices (which are moderate) will be furnished on application.

B. R. C. will be prepared with a good supply of Standard and Dwarf Roses for autumn planting, early orders for which are solicited.

St. John's Street Nursery, Colchester.

NEW ROSE.—MADAME STANDISH is the hardiest of all Roses; those which stood out of doors during the whole of the late severe winter not having lost a bud, whilst most others were destroyed by thousands. The growth is very rapid; the foliage magnificent; colour, a clear pale pink; petals smooth, round, and finely imbricated; the form cannot be excelled, and it is a thorough Perpetual, being, in fact, one of the finest Roses ever offered. Plants now ready, 10*s.* 6*d.* each. Madame Standish must not be mistaken for Mrs. Standish, which was sent out by MIELLEZ, of Lille.

JOHN STANDISH, The Royal Nursery, Bagshot.

ROSES.—Grand National Rose Show, Royal Horticultural Society's Garden, Kensington Gore, July 10.

The FIRST PRIZE for 48 varieties was awarded to JOHN CRANSTON, King's Acre Nurseries, near Hereford.

M. Common
H.B. Charles Lawson
H.P. Alexandrine Bachmeteff
,, Anna Alexieff
,, ,, de Diesbach
,, Auguste Mie
,, Comtesse Cecile de Chabrillant
,, Duchesse d'Orleans
,, Duchess of Norfolk
,, Géant des Batailles
,, Général Jacqueminot
,, ,, Simpson
,, ,, Washington
,, Léon des Combats
,, Lælia
,, Lord Raglan
,, L'Oriflamme de St. Louis
,, Louis Chaix
,, Louis XIV.
,, Madame Boll
,, ,, Bonnaire
,, ,, Charles Crapelet
,, ,, de Cambacérès
,, ,, Hector Jacquin
H.P. Madame Knorr
,, Madame Vigneron
,, Maria Portemer
,, Monsieur Joigneaux
,, Mrs. Rivers
,, Prairie de Terre Noir
,, Prince Léon
,, ,, Imperiale
,, Princesse Mathilde
,, Reine des Violettes
,, Reine Mathilde
,, Sénateur Vaisse
,, Sophie Coquerel
,, Souvenir de Montceaux
,, ,, de la Reine d'Angleterre
,, Triomphe de l'Exposition
,, Victor Verdier
B. Acidalie
,, Louise Odier
,, Sir Joseph Paxton
,, Souvenir de la Malmaison
T. Gloire de Dijon
,, Madame Falcot
,, Narcisse

The above, together with all the leading new and old varieties, can be supplied in the autumn; DESCRIPTIVE CATALOGUES of which will be forwarded Post-free on application.

Early Orders are respectfully solicited.

ROSES.—Grand Rose Show, Crystal Palace, July 6, 1861.

The FIRST PRIZE for 48 varieties was awarded to JOHN CRANSTON, King's Acre Nurseries, near Hereford.

H.B. Paul Ricaut
P.M. Madame Edouard Ory
D.P. Julie de Krudner
,, Manoury
H.P. Alexandrine Bachmeteff
,, Alphonse Karr
,, Anna Alexieff
,, Arthur de Sansal
,, Baronne Hallez
,, ,, Prévost
,, Cardinal Patrizzi
,, Caroline de Sansal
,, Comtesse Cecile de Chabrillant
,, Duchess of Norfolk
Evêque de Nimes
,, François Arago
,, Géant des Batailles
,, Gen. Jacqueminot
,, ,, Simpson
,, Jules Margottin
,, L'Enfant du Mont Carmel
Léon des Combats
,, Lælia
,, Lord Raglan
H.P. Louis Chaix
,, Madame de Cambacérès
,, ,, de Manoel
,, ,, Hector Jacquin
,, ,, Vidot
,, Mademoiselle Alice Leroy
,, ,, Thérèse Appert
,, Maria Portemer
,, Mathurin Reguier
,, Mrs. Rivers
,, Pauline Lansezeur
,, Prince Leon
,, Reine de Danemark
,, Souvenir de la Reine d'Angleterre
,, ,, de Leveson Gower
,, Triomphe de l'Exposition
,, Virginal
B. Acidalie
,, Louise Odier
,, Souchet
T. Gloire de Dijon
,, La Sylphide
,, Narcisse
,, Vicomtesse Decazes

The above, together with all the leading new and old varieties, can be supplied in the autumn; DESCRIPTIVE CATALOGUES of which will be forwarded post free on application.

Early orders are respectfully solicited.

BANBURY HORTICULTURAL SOCIETY (OPEN PRIZES).—The 15th ANNUAL EXHIBITION of this Society is fixed for TUESDAY, August 27, when in addition to the usual number of Prizes to be competed for by Members, the following are offered, open to all England, on payment of an Entrance Fee of 2*s.* 6*d.* :—

For the best 6 Stove and Greenhouse Plants, either in Flower or Ornamental, of at least four different genera, but not Fuchsias or Annuals, first prize, 3*l.* ; second, 2*l.*

For the best 24 Dahlias, 24 varieties, first prize, 3*l.* ; second, 2*l.*

For the best 18 Hollyhocks, 2 blooms of each, first prize, 3*l.* ; second, 2*l.*

For the best 12 varieties of Verbenas (5 trusses in a bunch), first prize, 1*l.* 10*s.* ; second, 1*l.*

For the best Collection of Fruit, grown by the exhibitor, first prize, 2*l.* ; second, 1*l.*

The Judges may withhold any prize if the production exhibited is not considered worthy.

Intended Exhibitors must give notice to the Secretary on or before Friday, August 23.

The Society will, if requested, convey the productions from and to the Railways.

The Bands of the Coldstream Guards and the 3d Oxfordshire Rifle Volunteers will play during the day.

E. J. HARTLEY, Acting Secretary.

57, High Street, Banbury.

DURHAM FLORAL AND HORTICULTURAL EXHIBITION, MUSICAL PROMENADE, DANCE, AND GALA.—The Committee of the Durham Floral and Horticultural Society have great pleasure in announcing that their ANNUAL EXHIBITION of FLOWERS, FRUITS, and VEGETABLES, will be held in their spacious tent, which will be erected, by the kind permission of W. L. Wharton, Esq., in the New Park, North Road, on WEDNESDAY, August 28.

Liberal Money Prizes are offered to General Exhibitors by the Society; besides Vases, &c., as Prizes to Ladies for Wax and Paper Flowers, and Hand and Table Bouquets of Natural Flowers.

Exhibitors from a distance will receive their Prize Money at the close of the Exhibition, and those residing in or near Durham will be paid the evening following.

All Specimens for Competition must be placed upon the Tables at 10 o'Clock in the morning, and the Tent cleared for the Judges at 11 o'Clock. The Show will finally close at half-past 6 o'Clock, and the Grounds will be cleared at dusk.

To prevent disappointment, Exhibitors requiring Trucks for the Conveyance of Plants by Rail, should inform the Secretary at least a Week previous to the Show. The Committee will pay the Carriage for Plants by Railway.

The Committee have engaged Mr. A. Clinton's celebrated Model Military Band, which will perform a choice selection of Music during the afternoon; and in the evening will play for Dancing, to commence at 4 o'Clock.

The North-Eastern Railway Company will afford visitors the usual facilities, for which see their Bills.

Admission to the Grounds: 1*s.* each from 1 to 4 o'Clock; and from 4 o'Clock, 6*d.* each. Children half price during the whole of the day.

Exhibitors living in Durham or the vicinity must pay their Subscriptions previous to the day of Show.

Tickets may be had of Mr. PROCTER, Stationer, Market Place, Durham, and at the Park Gates.

RUGBY HORTICULTURAL AND COTTAGE GARDENERS' SOCIETY.

President—The Earl of Denbigh.

The Annual Exhibition of FLOWERS, FRUITS, and VEGETABLES, open to all England, will be held at Rugby on FRIDAY, August 30, when upwards of 400 Prizes will be awarded.

The open class for CUT FLOWERS consists of 24 Prizes, from 5*s.* to 4*l.*, in addition to Prizes for STOVE and GREENHOUSE PLANTS, FRUIT and VEGETABLES.

The Band of the 4th Warwickshire Volunteers will perform during the Exhibition.

For schedules and particulars apply to

JOHN S. SAVAGE,
Rugby, Aug. 17. Hon. Secretary, Rugby.

LEICESTER AND LEICESTERSHIRE FLORAL AND HORTICULTURAL SOCIETY.

President—The Right Hon. Earl Howe

The AUTUMN SHOW of the above Society will be held on the Leicester Race-course on WEDNESDAY, September 4. In addition to a large number of Prizes, a Silver Cup and two other Prizes will be offered for the best Collection of Fruit (grown by the Exhibitor), open to all England.

Further particulars may be had by applying to the Hon. Secretary, Mr. WM. PENN COX, Market Place, Leicester.

BRIGHTON AND SUSSEX FLORICULTURAL AND HORTICULTURAL SOCIETY.

The EIGHTH ANNUAL GRAND AUTUMN SHOW will be held on WEDNESDAY and THURSDAY, September 18 and 19, at the Royal Pavilion. Prizes to the amount of 350*l.* are offered for PLANTS, FRUITS, CUT FLOWERS, &c.

The RAILWAY CUP, value 10*l.*, is offered for the best group of three stands of Fruit and Flowers for the Decoration of the Dinner Table. Beautiful arrangement will be the test in this Exhibition. Ladies are invited to compete. The prizes will be awarded by a jury of Ladies.

Schedules of Prizes can be had on application to the SECRETARY, 9d, St. James's Street, or of E. SPARY (General Superintendent of the Exhibition), Queen's Graperies, Brighton.

By the kind permission of Colonel Perceval, the celebrated Band of Coldstream Guards will attend each day, conducted by Mr. Godfrey, sen.

By Order of the Committee,
Brighton, August 17. EDWARD CARPENTER, Secretary.

WORKSOP FLORAL AND HORTICULTURAL SOCIETY.—The AUTUMN SHOW of this Society will be held on THURSDAY, the 5th of September. In addition to the usual Prize List, the following Extra Prizes open to all growers will be offered for competition.

For the best Collection of Fruit, to consist of 8 Dishes, 6 distinct varieties, 1st Prize, 5*l.* 5*s.* ; 2d Prize, 3*l.* 3*s.* ; 3d Prize, 1*l.* 10*s.* Entrance 3*s.* 6*d.*

For the best 3 Vines in Pots, 1st Prize, 2*l.* 2*s.* ; 2d Prize, 1*l.* 1*s.* ; 3d Prize, 10*s.* 6*d.* Entrance 2*s.* 6*d.*

For the best 6 Bunches of Grapes, 3 Black and 3 White, 1st Prize, 1*l.* 1*s.* ; 2d Prize, 15*s.* ; 3d Prize, 10*s.* Entrance 2*s.*

For the best Queen Pine Apple, 1st Prize, 1*l.* 10*s.* ; 2d Prize, 15*s.* ; 3d Prize, 7*s.* 6*d.* Entrance 2*s.*

For the best Pine of any other variety, 1st Prize, 1*l.* ; 2d Prize, 10*s.* 6*d.* ; 3d Prize, 5*s.* Entrance 1*s.* 6*d.*

Entrance for the whole of the above Prizes, 8*s.*

N.B. A Dish of Fruit to consist of, Grapes 3 bunches, Peaches 6, Nectarines 6, Pears 12, Apples 12, Plums 9, Pine 1, Melon 1, Strawberries 36, Cherries 50.

For the best 12 Dissimilar Blooms of Dahlias, 1st Prize, 1*l.* 1*s.* ; 2d Prize, 10*s.* 6*d.* ; 3d Prize, 5*s.* Entrance 1*s.* 6*d.*

For the best 12 Single Blooms of Hollyhocks, distinct varieties, 1st Prize, 1*l.* 1*s.* ; 2d Prize, 10*s.* 6*d.* ; 3d Prize, 5*s.* Entrance 1*s.* 6*d.*

GEORGE BAXTER, Honorary Secretary.

☞ Worksop is situate in North Notts, in the centre of the Dukeries, on the direct Line of the Great Northern, with the Manchester, Sheffield, and Lincolnshire Railway.

GRAND FLORAL AND HORTICULTURAL FETE. OPEN TO ALL ENGLAND.

To be held on THURSDAY, September 26, on the Northampton Race-course, in connection with the Annual Show of the Northamptonshire Agricultural Society.

Prizes to the amount of 200*l.* will be offered for Plants, Fruits, Cut Flowers, &c., including three Silver Cups, as follows:—

Class 1, Thirty-six Dahlia Blooms, distinct, a Silver Cup, value 5*l.* ; 2d prize, 2*l.* 10*s.*

For best Collection of Fruit, Silver Cup, value 5*l.* ; 2d prize, 2*l.* 10*s.*

12 Stove or Greenhouse Plants, fine foliage, without reference to bloom, and not more than three plants of one genus, a Silver Cup, value 5*l.* ; 2d prize, 2*l.* 10*s.*

Schedule of Prizes and further particulars may be had on application at DORMAN'S Library, Northampton.

New Seeds for Present Sowing at Reduced Prices, Carriage Free.

SUTTON AND SONS can now supply the undermentioned for immediate sowing:—

Early Six Weeks Turnip	Italian Rye-grass
Pomeranian White Globe ditto	Permanent Meadow Grasses
Imperial Green Globe ditto	Fine Lawn Grasses
Lincolnshire Red Globe ditto	Trifolium Incarnatum
Smart's Mousetail ditto	Mustard and Rape
Grey Stone ditto	Brown Cos Lettuce
Drumhead Cow Cabbage	Hardy Hammersmith ditto
Sutton's Imperial Earliest Garden Cabbage	Early London Cauliflower
	Fine Walcheren ditto
Wheeler's Imperial ditto	Onion, of sorts
Enfield Market and others	Early Horn Carrot

Calceolaria, Cineraria, Primula, and other choice Flower Seeds, 1*s.* per packet.

PRICED LISTS of the above new or fresh Seeds may be had on application addressed

SUTTON & SONS, Royal Berkshire Seed Establishment, Reading.

TRIFOLIUM INCARNATUM (present price) 5*d.* to 6*d.* per lb.

VILMORIN'S NEW TRIFOLIUMS, with "Practical Hints on its successful Cultivation," showing how 2 to 3 tons per acre of the most nutritious hay may be secured; the advantages of sowing it where broad Clover is thin, and its superiority to Tares as green food.

PAGE & TOOGOOD having secured a large breadth from the most careful growers in this district, where better crops are produced than in any part of England, offer it at the above low rate for cash; price to the Trade per post.

Italian Rye-grass, 5*s.* per bushel.
New Turnip Seed, 8*d.* per lb.

New Rape Seed, 4*d.* per lb. | New Mustard Seed, 4*d.* per lb.

WINTER VETCHES and WINTER OATS as soon as harvested.

PERMANENT PASTURE and LAWN GRASSES as sown at Osborne for the last 7 years.

CALCEOLARIA and CINERARIA, 1*s.* per packet, saved from one of the finest collections in Europe.

Seeds for exportation to all parts of the world.

Royal South Hants Seed Establishment, Southampton.

The Gardeners' Chronicle.

SATURDAY, AUGUST 17, 1861.

WHEN mother EVE first awakening from sleep, after having reposed, as MILTON tells us, "under a shade, on flowers," and hand in hand with her "sole partner" found it a delightful task

"To prune these growing plants, and tend these flowers,"

she did but foretaste the similar experiences of Eden, which have since then been a never-failing delight to the fair daughters of her race. We need no other argument to show cause why flowers should everywhere be welcomed within the home circle, and why window gardening should be permitted to become a domestic institution.

And such, in truth, it has become. We speak not now of the dwellers in the pleasant country, where one has but to pass the threshold to tread the velvet turf amidst flowers of all hues, but we refer to the dwellers in towns and cities, immured within the prison walls of their houses, and either doomed to perpetual imprisonment there, or compelled by circumstances to renounce for a considerable portion of the year the enjoyments of a country life. Let the eye but glance along the lines upon lines of human abodes wherein these prisoners dwell, and the many attempts at window-gardening which meet its gaze will bear evidence of a wide-spread love of flowers, bearing, we may believe, something of the impress of that to which the poet alludes as existing in Eden in the days of innocence.

But window gardening in situations such as we have referred to is, in truth, a pursuit of gardening under difficulties. There are the smoke and the bad air; there are the wants of light and of space; and there is the expense. No doubt these are real hindrances, and great hindrances, too, but they are not insurmountable. The grosser impurities occasioned by the smoke may be shut out by means of glass, or removed by loving handiwork, and the air deprived of these is not so bad after all but that plants will live and grow in it as well as human beings. Light may be obtained sufficient for the purpose; and if the space is limited that surely can only be a reason for limiting the number and size of the plants which are cultivated, not

for excluding them altogether. And as to expense, that canker worm of many a pleasure, we are assured, in a very useful little book* devoted to this subject, which has recently been published, that it is after all, under judicious management, a mere trifle. The writer alluded to argues thus:

"The cost may, at first sight, appear a serious consideration, but it is so only in the case of those who will do nothing cheaply; and knowing as I do, by my own experience, what a display of flowering plants may be kept up throughout the year for a sum within 12*l.*, I cannot believe that many persons who really care for flowers will on this account be withheld from having them. Indeed, I fully believe that 2*l.*, well laid out, would suffice to produce a far more beautiful and tasteful effect than is accomplished for a sum more than 10 times larger by the gardener who contracts to furnish relays of flowering plants for the stands of London residents. To those who are fond of flowers, moreover, it is vexatious, just when they have begun to watch some plant with interest, and to observe its growth, to hear that the man has been to change the plants, and to find that they have lost it!"

Written as this book obviously is for well-to-do lovers of flowers, the estimate of from 2*l.* to 12*l.* per annum for a continuous supply of flowering plants will not raise a serious obstacle to the extension of window gardening amongst the class to whom it is addressed.

And then as to the time required for the requisite attention to these pet plants, we find the necessary duties summed up with a tone of experienced assurance thus:—"Opening a window, giving a supply of water, and sometimes devoting an hour or two to potting and re-potting, or to planting cuttings and sowing seeds, is generally all the attention which house-plants demand; indeed, one half-hour daily, well employed, would amply suffice for all such gardening duties."

These difficulties being all overcome, there would still remain the necessity for some practical knowledge of plant management, in order to enable any lady to become her own in-door or window flower-gardener, which is the problem for solution. This practical information appears to be very well supplied in the book to which reference has been made. Indeed this is its very object. The management of seeds and cuttings, the operations of potting and watering, and the various wants of the plants during the several seasons of the year, each come in for their share of comment, from which we select a few scraps of advice.

The beginner is strongly advised to adopt a few good old-fashioned plants—well-known and approved shrubs and flowers, and he is reminded that when these are flourishing it will be time enough to seek after newer subjects; for "a prudent gardener, so far from despising old plants, acknowledges that it is only by their known good qualities that they have held their own so long against all new comers." Seed pots, and cutting pots too, should be sunk in moist sand, being packed in it up to their rims. This saves watering, with all its attendant ills. Cuttings may be of two kinds; woody pieces, which strike root, though slowly, even without heat, and almost without care; and young green shoots, which must be kept moist and warm. The former may be treated by an American method, which is to lay them amongst slightly damped moss, or to drop them lightly into a wide-mouthed bottle, having a piece of damp sponge at bottom, and covered with muslin over the top; in either case a callus is soon formed, and the cuttings then root readily as soon as planted. With the latter, which require a totally different treatment, the grand secret is never to let them flag. For Verbenas, Calceolarias, Pansies, Heliotropes, and Chrysanthemums, shallow pans are suitable; indeed common saucers answer perfectly. They are to be planted into silver sand an inch deep or less, and water enough is to be poured in to make a thin sheet of it above the sand; the lower leaves are to be cut off, and the stalks of the little inch-long tops of the young shoots stuck well down into the sand. They are better for some sort of shade and heat, if it be only the warmth of a chimney-piece; or they may be put over a basin of hot water refilled twice a day, with a glass for shade, or with a rolled up cover of tissue paper, in the absence of any proper propagating case. Before the water in which they are grown has dried up they will be almost all of them beautiful little rooted plants, ready to be put into small pots full of light good soil. Nothing helps to keep old or established plants in health more than washing; and throughout the summer season this can hardly be done too often. To prolong the blooming time every fading flower should be instantly cut off. To keep Azalea flowers from falling a single drop of strong gum-water is to be dropped underneath the flower where it sinks into the calyx. "German Ivy," called Ipomœa hederæfolia, but by which we suspect *Senecio mikanioides*, sometimes called *Delairea odorata*, and *Breonia palmata*, is meant, is strongly recommended for the purpose of forming a leafy screen in a plant case. So the writer gossips on, and the reader will read on in pleasant companionship.

There is as much interest in the preservation as the production of flowers, and hence the "hot-water cure" for cut flowers comes in for mention. When cut flowers have faded after having been placed in a bouquet, or perhaps worn for a whole evening in a head-dress, they may be revived in the morning by cutting half an inch from the lower end of the stem, and putting this end instantly into boiling water. The thickest textured flowers amend most readily. Flowers that have lain the whole night on a table, after having been worn for hours, have been renovated next morning in this way by a cupful of hot water. Carnations, Azaleas, Roses and Geraniums may be thus treated, and have been known to keep fresh afterwards, almost as long as if they had been newly gathered. For keeping flowers in water, firmly-powdered charcoal in which the stalks can be stuck, placed at the bottom of the vase, is a wonderful preservative, rendering the water free from obnoxious impurities. What lady has not experienced the unpleasantness and inconvenience attendant on preserving flowers in water, especially in summer, when no such preservative has been employed.

We shall shortly recur to this subject of window-gardening.——*

* Indoor Plants, and How to Grow them for the Drawing-room, Balcony, and Greenhouse: containing clear instructions by which ladies may obtain, at a small expense, a constant supply of flowers. By E. A. Maling. With a Frontispiece. London: Smith, Elder, & Co.

In the beginning of last year (*Gard. Chron.*, p. 4) we drew attention to some extraordinary results said to have been obtained by Prof. Buckman in his cultivation of Grasses. He believed that he had proved that in the course of cultivation *Poa aquatica* and *Glyceria fluitans*, two widely different species, lost their distinctions and became identical; that the same thing happened between the Fescues called *loliacea* and *pratensis*; and that the wild Parsnip had become ennobled under his hands in the same way as the wild Carrot was formerly under the management of the elder Vilmorin.

M. Decaisne, the able professor of Agriculture in the experimental department of the Garden of Plants in Paris, one of the most acute of living Botanists, and an extremely cautious experimentalist, being engaged in the same line of enquiry, and having become desirous of seeing some of the living results of Professor Buckman's experiments, that gentleman readily acceded to a request that he would furnish them; and in the spring a small parcel was forwarded to Paris. (It is necessary to remark that although it passed through our hands we were prevented by other occupations from examining it). We have now before us a report on the subject from M. Decaisne himself.

"I was very much obliged to you for the specimens of *Glyceria* (*Poa*) *aquatica* which you were good enough to send over from Mr. Buckman. Thanks to this authentic information the value of the experiments mentioned last year in the *Gardeners' Chronicle* begins to appear. Towards the end of last year I myself had collected and sown seeds of *Glyceria fluitans* and *G. spectabilis* (Poa aquatica). At this moment G. fluitans sown in dry ground is in full flower, without having lost any one of its characters in the smallest particular. Each plant forms a close tuft, from which arise many flowering branches, which spread over the ground just as they do in water. We have therefore, in this instance, no transmutation.

"As to *Gl. spectabilis* it is not as yet in flower, but its creeping rhizomes, thick yellowish green shoots, and broad leaves with rough sheaths leave no doubt as to its identity with its type. My experiment shows therefore that Glyceria fluitans and Gl. spectabilis remain unchanged.

"The curious circumstance attending the account of transmutation related by Mr. Buckman is that it rests upon a palpable mistake. The two specimens he was so good as to send me in neither case belong to the genus *Glyceria*, but are in both instances *Poa sudetica*! This brings down the whole scaffolding with which his theory was constructed.

"If, however, Mr. Buckman has fallen into an error about Poa, I believe that others have done the same in the case of Carrots. That is to say, for four years past I have placed myself in the same conditions as were described by M. Vilmorin, and nothing has come to pass. Wild Carrots remain field Carrots still. I cannot but believe that when M. Vilmorin saw them changing to red, yellow, and purple, such changes must have been brought about by accidental crossing. Insects must have conveyed the pollen of cultivated Carrots to the wild ones, and thus intermediate conditions have been obtained.

"May I add that I have no confidence in the discovery of a Broccoli on the cliffs of Cornwall. I am perfectly acquainted with the wild Cabbage of our French coast, and I cannot bring myself to believe it the parent of our cultivated races. However we shall learn in time, for I have been engaged for several years in experimenting on the subject."

Such is our learned friend's view of a very curious subject. As to a Broccoli wild in Cornwall we can easily conceive such a stranger to appear, without tracing his pedigree up to the ancient stock of *Brassica oleracea*, whose lineage may still be pure. For may it not have been a poor runaway from Penzance, where acres of Broccoli are cultivated for the London market? As to wild plants that have "broken" in the hands of one observer remaining obstinately unchanged in those of another, it is very possible that that which is probably in all cases a matter of mere accident, may only occur now and then to some fortunate experimentalist. We know for certain that Coe's Golden Drop Plum was a seedling from a Green Gage; yet how many seedlings have been raised without such another piece of good fortune. We believe it would puzzle even a De Morgan to calculate such chances.

The bitter cups, said to be made of Quassia wood, which are now so commonly sold by chemists to produce a tonic draught, are, so far as we have seen, for the most part made of very indifferent materials, the outer portion being not only mere sap, which must contain a small quantity comparatively of the bitter principle, but sap in a state of incipient decay and often highly impregnated with Fungus spawn. We were not surprised, therefore, to receive this morning from a Correspondent, several specimens of a very pretty exotic Fungus, which had grown from the wood of a specimen in which water had been allowed to stand for some days. We have seen the Fungus before on wood in hothouses, and either the same or a very closely allied species is not uncommon in collections of Fungi from the warmer parts of the New World. It is a pretty species of *Stilbum* with a grey stem and a flesh-coloured head inclining more or less to orange. This among many other instances is a proof that if wood impregnated with the spawn of Fungi were sent home, and placed under proper conditions in our hothouses or conservatories, we might introduce many objects of interest or ornament. We recommend the subject, which is not without its value, to intelligent collectors. *M. J. B.*

LARGE ORCHARD-HOUSE TREES.

Cultivators of trees in pots in orchard houses are, I apprehend, but yet in their infancy as regards the knowledge of what may, can, and will be done; for the system from the first seems to have been considered as adapted for small gardens and small means rather than for those who require large quantities of fruit on full-grown trees in large houses. I partook of this feeling to a great extent, and much enjoyed cultivating my pretty bush trees in 13-inch pots, capable of bearing from three to four dozen of fruit each. It was only last November that being much struck with the robust appearance of some Peach, Nectarine, and Apricot trees, from 8 to 10 years old, that had been growing from six to eight years in 13-inch pots in my small span-roofed orchard house, 14 feet wide and 9 feet high—I asked myself the question "Why should I cramp the growth of these trees, now I have a house 24 feet wide and 12 feet high?" I replied to this self-questioning by promptly procuring some 18-inch pots, re-potting all my largest trees, and placing them on the border (not raised) in the centre of my large house.

I must confess that I felt some misgivings as to their well doing, for the lower part of each ball of earth and roots was so solid, and at the lower part the roots were so large and so compactly coiled, that I found it impossible to loosen them so as to admit fresh compost among them. Visions of strangulation (for according to Mr. Barron's theory a coiled root cannot convey a proper supply of sap to any tree) troubled me, and I looked forward to the growth of this season with much interest.

The trees blossomed freely, and in most instances

set a fine crop of fruit, and have made the most vigorous and healthy growth I ever witnessed. Some of their stems are as large as one's wrist, and in a short time they will rival in thickness the arm of a moderate sized man; they have made shoots from 3 to 5 feet in length; are now as they stand in their pots 7 feet high, and in the course of a year or two they will fill all the central part of the house, and then being suffered to bear large quantities of fruit their growth will in a great measure be arrested. There is nothing, I dare say, new in this, but with many orchard-house cultivators, and with all the opponents of the system, it seems to be a fixed idea that when trees are cultivated in pots small quantities only of fruit must be expected. I have now pyramidal Plums and Pears, 10 years old, placed in these large 18-inch pots, and can see that they are capable of bearing large quantities of fruit. Large trees of Cherries, with their shoots pinched in, form beautiful and productive pyramidal trees, and ripen their fruit in great perfection. In short, I seem, although comparatively an old orchard-house cultivator, to have only been hitherto a schoolboy in practice, and have only just reached the brink of mature knowledge as to what may be done with large glass structures.

In repotting my large trees I did not take all the earth from the roots, but merely loosened the upper part of the ball, which was full of young roots, taking away a portion of it and allowing the lower part of the ball to remain nearly in its solid state, removing the large pieces of crocks which were firmly imbedded in the mass. I was almost tempted to shake every particle of earth from the solid lump, and reduce the large coiled roots with the knife, but I feared to lose my chance of a crop of fruit this season, and so I acted contrary to what I suppose would have been good gardening practice, and I shall for the future continue to be a sort of garden outlaw in repotting large fruit trees. The compost I used was two-thirds stiff yellowish loam and one-third rotten manure, with some sand, the compost firmly rammed in round the ball of roots and earth.

Peach and Nectarine trees in orchard-houses have not felt the effects of the cold wet summer of last year equal to trees on walls, but they have suffered to a certain extent, for among my trees are several which blossomed in great perfection and set an abundance of fruit, which, instead of swelling and increasing in size as usual, nearly all dropped off. This misadventure for the most part is confined to the late Peaches; the early sorts, such as Acton Scott, Early York, and some other early kinds standing side by side with the trees that have failed, are full of fruit. Some trees planted out, and which *would* keep on growing till last Christmas, blossomed finely, but shed all their fruit, reminding us of that great truism in fruit culture, "No ripe shoots, no ripe fruit;" more plainly, the shoots and buds of a fruit tree must be well ripened the preceding season to bear a crop of healthy fruit.

How nearly I had forgotten a most important feature in the cultivation of large trees in large pots. If the surface of the earth in the pot is covered with rotten manure and refuse shoddy—called I think "stercus," equal parts, 3 to 4 inches in depth, the trouble in watering is much lessened, the compost keeps down evaporation most effectually, so that even in hot weather the trees will do with water only twice a week, but then each time will require 4 or 5 gallons. *Alpha.*

THE NEW ARCADIAN FIR (ABIES REGINÆ AMALIÆ, *Heldr.*).

BY BERTHOLD SEEMANN, PH.D., F.L.S.

IN 1859 it was reported that in the mountains of Arcadia a forest three leagues long had been discovered, entirely composed of a Fir, which when cut down, say a foot or two above ground, would invariably throw out from the old stump a number of symmetrically formed stems—not branches—and even if undisturbed, its main stems would frequently put forth from the *old wood* branches and secondary stems. The Greek botanists insisted that no other Fir displayed this striking peculiarity to such an extent, and that the Fir was an altogether new species. This an anonymous writer in Germany, who had never seen the plant, was inclined to call into question, chiefly because he thought that Greece had been so well explored botanically that it was impossible that a forest of such extent, composed of a Conifer so striking in habit, could exist without having been noticed by the number of travellers who have visited the country. As the wise men of Greece, who had every reason to be proud of their discovery, were not inclined to allow their achievements to be doubted, a spirited polemic took place between Athens and Munich, the result of which was that the opinion prevalent amongst Greek botanists was thought to be correct, and as the materials for framing good specific characters for this new Fir were insufficient, the Greek Government dispatched two expeditions to Arcadia, the last of which returned in June last, bringing numerous specimens and several photographs of the tree. One of the latter has been kindly forwarded by Dr. Landerer, of Athens. It is certainly not a very good one, but it exhibits sufficiently the curious habit of the plant, and it has been thought advisable to have an almost exact facsimile of it prepared for these columns, rather than an improvement upon the original, which, of course, any skilful artist could easily have worked out.

The first notice of this Fir was obtained in 1856 by Mr. Schmidt, Curator of the Royal Gardens at Athens, who received cones from Arcadia which he thought different from those of the common Grecian Apollo Fir (Abies Apollinis, Link.). He forwarded some of the seed to Mr. Haage at Erfurt, in whose catalogue they were mentioned as Pinus Peloponnesiaca, a name since changed by Heldreich for that of Abies Reginæ Amaliæ, in compliment to the Queen of Greece, who is indefatigable in causing parks, gardens, and plantations to be established, not only in her capital, but in all parts of the Hellenic kingdom. Schmidt had never seen the tree, nor was he aware of its peculiarities until Messrs. Balsamaki and Origoni, Inspectors of the Royal Forests, reached Khrysovitsi, a village 1½ league from Tripolitza, in Central Arcadia, where about 1500 feet above the sea, a whole forest was encountered, extending from Khrysovitsi in a northwesterly direction towards Alonistena and Magouliana, covering Mount Rhoudia and the adjacent valleys, and thus having an extent of about 3 leagues long and 1 to 1½ league broad. One of the reasons why a forest of such dimensions remained unknown is said to be owing to the circumstance that the very locality it occupies was, until recently, a nest of notorious robbers, and carefully avoided, not only by isolated botanical travellers, but also the great French expedition during the years 1828, '29, '30. One of the spots in the forest is to this day known as *Tsaltù élato* (Tsaltu's Pine), Tsaltu having been a bold robber chief, the Fra Diavolo of the district.

It appears that the country people are in the habit of cutting down the Pine for various economic purposes, when the stump immediately throws out several new stems. This is not the case with the Abies Apollinis,

a fact according to Mr. Bayer well known to the country people, who on that account term Abies Reginæ Amaliæ "Hémeron élaton" (*i.e.* tame Pine), in contradistinction to the Pinus Apollinis, which they call "Agrion élaton" (wild Pine). When left undisturbed and when growing in favourable localities, Abies Reginæ Amaliæ attains 55 feet in height and 2 to 3 feet in diameter. In trees that have been cut down the new stems attain 18 to 20 feet in height and 1½ foot in diameter. They are of very unequal size, some assuming greater dimensions at the expense of the others. There are usually 3 or 4 stems on old stumps originating around its summit. We are still without a good technical description of this Abies, but it is said to differ chiefly from Abies Apollinis, independent of its peculiarity of habit, in having more obtuse and sparse leaves, less crowded together, and much smaller and shorter cones, scarcely ever measuring more than 5 to 6 inches. Moreover Dr. Landerer assures me in a letter just received that the last expedition has brought home a complete set of specimens, both flowering and fruiting, and that all doubt as to Abies Reginæ Amaliæ being a new and distinct species can now be answered in the affirmative.

The plant is to be had in several German nurseries; it is said to be planted on the continent on a large scale, and it may prove valuable for poles.

Home Correspondence.

Paris Gardens and Parks.—I intend to go the tour of Paris, in the hope of answering some at least of the inquiries you make, and begin with the trees in the public places there. Don't believe all that ignorant travellers report, or self-complacent gardeners. The trees have none of the merit and little of the faults that have been ascribed to them. They are very like our London trees; some are good, some bad. As for the curative processes ascribed to M. Robert, I have not been fortunate enough to discover their effects. If the Elm trees die in our Parks so they do here, and I think to as great an extent, considering how much younger they are than those in Hyde Park. Many of the trees, Horse Chesnuts and others, are stag-headed, and therefore on the road to ruin in the Tuileries Garden and Champs Elysées; some have nothing left them to do except to die outright. In the Avenue de Marigny indeed, which as you know is the most fashionable bit of street in Paris, with the Imperial Palace on one side, and houses of "high society" on the other, the trees are in woeful plight. Many are miserable old Elms, which have been I suppose under the doctor's hands, for they have been scored from top to bottom, and the wounds are now healing or healed; but I do not see that they have gained much by the operation. In some places the "scores" or incisions are closed, in others the lips are still far asunder. What strikes me as most remarkable is that the bark of these old trees does not sound hollow, nor do I see any of the circular holes in it by which the presence of the Elm-bark beetle (Scolytus) is indicated. All the wounds caused by scoring or slitting the bark have been covered by some kind of plaister, which smells and looks very like a preparation of coal tar. Be it what it may it is certainly a capital preparation. The French seem to cut bark to the quick; to smear the live wound and the naked wood if there be any, having first scraped away all loose or decaying pieces, and new wood and bark form rapidly beneath it. More next week. *V., Rue Castiglione.*

American Strawberries.—Mr. Wray's article, I must confess, gives one a strange idea of American "science" as regards Strawberry growing. Theorists generally assert that in order to have Strawberries from certain kinds it is indispensable to plant males or hermaphrodites in the immediate neighbourhood of females, which otherwise would remain sterile. Having devoted for 12 years all my time to the culture of this valuable fruit, I have often tried the experiment in order to see whether the theorists are right or wrong, and I have come to the conclusion that there is no more necessity for adopting their system than there is to put a cock in a poultry yard in order to make the hens lay eggs. Several times I had planted the old true Chili (female) and some of the American pistillate varieties under glass, carefully excluding air, and never one single bloom failed to perfect its fruit. I of course do not mean to pretend that seeds from such fruit would germinate. In my opinion there should not exist the least doubt on the subject; on the contrary, Strawberry growers should carefully destroy male (staminate) plants, if they have such in their grounds, as it is to these we must attribute the discredit into which the valuable old Hautbois has fallen, in consequence of people believing they would be obliged to grow the two sexes conjointly in order to secure a crop. The male Hautbois being sterile, and in consequence a tremendous runner, soon overpowers the female, and the bed becomes barren or nearly so. As regards Scarlet American Strawberries, none can be compared as to beauty or richness of flavour with our good English, French, or Belgian seedlings; but there are some, especially females or pistillates, that come in very early and yield enormous crops; they are on this account valuable as market fruit, whilst others—staminates, or imperfect hermaphrodites—such as Haarlem Orange, McAvoy's Superior, &c., &c., are utterly worthless, being nearly barren. In conclusion I beg to mention that La Constante—according to Mr. De Jonghe a cross between Myatt's Prolific and Wilmot's Prince Arthur—is decidedly of unquestionable merit, and I hope will soon find its way into every garden, and dispel the prejudice many English growers have against Continental Strawberries. I have observed this sort in 20 different soils and situations, and never found it in fault. *Ferdinand Gloede, Les Sablons, Moret-sur-Loing, France, August* 13.

Double Crop of Grapes.—"Jasper Standstill" does not say whether his double crops occur every year, or whether it is only during the present exceptional season that they have been produced. I send you some young shoots of a Black Hamburgh (the first crop of which is now beginning to turn colour, not having been forced), each of which you will see has sent forth a fresh bunch of blossom buds for a second crop, even sometimes on the young shoots of the laterals which already support a bunch of full-grown Grapes. Only ordinary and very simple treatment has been bestowed on this Vine, so that the production of a second crop of blossom must be owing to the season. Whether the conditions of such a season can be artificially reproduced or whether the tree can sustain a double crop annually are questions for your consideration. I send also part of one of several bunches of Sweetwater Grapes. About three weeks ago some of the berries turned dirty purple, became mouldy at the base of the stem, and fell off; the stem itself shrivelling up. Sulphur was used, which checked the mould, but the stems of the whole bunches are now shrivelling, and the berries drying up. To what is this owing? [Probably to unripeness somewhere in the system.] The other bunches on the same tree are in good health and beginning to ripen. *I. O. Westwood, Henley House, Oxford, August* 12.——From what has been said respecting double crops of Grapes, I am induced to forward you a shoot bearing not only two crops, but

making an effort to furnish a third, in the shape of a very small bunch, each being produced on a fresh break, and that proceeding from the first eye beyond the bunch last formed. These shoots, or rather continuous shoot, I suppose can hardly be termed laterals, being in one instance the eye which would have remained dormant till next year had not the lateral been cut back. I also forward you another shoot from a similar eye, showing two bunches beyond a large bunch which I have not cut. It seems to me that fruit may be produced from those eyes at any time by cutting off all laterals. My Vine is a large old one, planted without any prepared border in the natural loam in which evergreens and other shrubs succeed better than in any artificial compost. I may remark that bunches showed in abundance on second growths all over the Vine, but they have not been allowed to remain. My first crop, as you see, being late, there would be little chance of a second crop doing any good where plants are stored in a greenhouse temperature during winter. *W. Young, Gardener to R. Barclay, Esq., West-Hill House, Highgate.*

Transplanting Box.—Do you include Box edgings in the note you give about transplanting evergreens at page 738? *Box, Newcastle-on-Tyne.* [We have no experience with Box-edging planted in August.]

Bees.—Could any of your readers oblige me with any suggestions for defending my apiary from the attacks of wasps, which this season are unusually numerous. I have searched the locality well for nests, but I suspect that these are in corners of private gardens in the neighbourhood, to which I have not access. I have trapped a great many, but the greatest destruction, amounting to some hundreds of bees daily, appears to me to arise from the wasps meeting the returning bees in the air, and engaging them in single conflict. *Geo. F. Barrell, Colney Hatch, N., August 12.*

Emigration, Vancouver.—Will you be so kind as to inform a gardener who is thinking of emigrating to Vancouver's Island, if you believe it will answer his purpose to send over in the autumn a good collection of the best kinds of fruit-trees from this country, such as Apples, Pears, Plums, and Cherries. Mr. Pemberton speaks of the Grape as an article of considerable profit. Are we to understand that it is cultivated there in open vineyards, and that it ripens its fruit for making good wine? if so, I think the Apricot and Peach would ripen in the open garden as dwarfs, and it might answer to take out some of our best hardy Grape Vines, Peaches, and Apricots. Having a few hundred pounds, do you not think it would be better to send out a portable wooden house from this country, as they can be had cheap here, and from the high price of labour there houses must be very expensive. I find that all kinds of goods can be sent out by sailing vessels round Cape Horn at from 50*s.* to 60*s.* per ton measurement. I expect that a good collection of kitchen garden seeds will be wanted, and the seeds of fruit-trees may be useful, but of flower seeds I have great doubts, as I expect the colony is too young for anything but what is really useful. *Vancouver, July 6.* [Since the climate of Vancouver is very like that of the driest and best parts of England, you can judge for yourself what will do there. As to Grapes they must have glass, as with us; walls against which the hardy sorts may be trained are scarce; and you can hope nothing from Vineyards. The Grapes mentioned by Mr. Pemberton must come up from California, and no doubt realise a large profit upon their sale. Peaches do not succeed as open standards; Apricots probably would. On no account take out a wooden house. You may build one for yourself for 40*l.*; there being lumber—that is, timber prepared for building—in abundance, and cheap. Good vegetables and good fruit are in great demand; and the richer settlers will buy European flowers. By all means take a wife with you. Town lots, best suited for market gardening, are dear—say 40*l.* or 50*l.* an acre. Country lots at a distance from Victoria, capital land, may be bought from the Colonial Government for 4*s.* 2*d.* an acre, payable by instalments in three years: but they must be *bonâ fide* occupied, or the grant becomes void. Don't take out cutting tools such as axes, as they are cheap in Victoria, of excellent quality. We should take out seeds of common English trees, Sycamore, Laurel, Beech, Chesnuts, both sorts, Holly, Whitethorn, Furze, Ivy—and the best English fruits. You will find Ward's cases, with live plants, very expensive to send round Cape Horn. As this is a matter of much importance to you, we will see you personally, if you send your address.]

Judges at Regent's Park (*see p.* 736).—I have no wish to bandy words with Mr. Whiting, but as he promises a justification I will just mention an instance or two of the "glaring misjudgment" alluded to. In Fuchsias Mr. Young's were first in merit and Mr. Harper's about third or fourth. In Pelargoniums Messrs. Dobson's were superior to those which were placed before them, and Mr. Parmenter's were inferior to Mr. Shrimpton's. A misunderstanding, rectified late in the day, caused the fruit to be included in the list of misjudgments. I suppose that is the reason why Mr. Whiting has volunteered to answer my letter. I imagine that the exhibitors will await the judges' justification with some interest. *A Visitor.*——Mr. Whiting surely cannot be serious in asking for instances of "glaring misjudgment" at the last show in Regent's Park. Does he think that there were none present capable of forming a correct opinion but judges in office. *Incredulous.*

Censors.—As an old showman and Chiswick and Regent's Park judge of some eighteen years' experience, I may perhaps be permitted to state that I think, as a rule, as good men are got together for censors at our great exhibitions as the country can produce; but somehow or other I have never seen the best men put in the places where they would be most useful. Perhaps a clever forcing and flower-gardener is put to judge miscellaneous collections, Heaths and Orchids, not knowing many of the plants he has to adjudicate upon, and being quite inexperienced in their particular and individual treatment; thus in Heaths a persoluta, perspicua, ventricosa, Bergiana or propendens, being large, fresh, and showy, may be considered superior to smaller plants of Massoni, Sprengeli, tortuliflora, obbata, or aristata major, though one good plant of either of these has more cultural merit than a van-load of the free-growing varieties. Again, an expert plantsman is set to judge florists' flowers, while perhaps a professed florist is occupying the same post among the fruit. I have many times, both in town and country, positively refused to be placed in such an anomalous position, and if others would do likewise, there would be less occasion for complaint among exhibitors. I would also suggest to managers that if they would consult one or two of the most experienced growers, they would render them invaluable service in the management of their prizes,—but it is useless to have good men if they are put to work they are unacquainted with. *P. A. W.*

Rainfall, July 1861:—

Stations.	Height of Gauge. Above the Ground. Ft.	in.	Above Sea Level. Feet.	Depth of Rain. Total for the Month. Inches.	Greatest fall in 24 Hours. Depth. Inches.	Date.	Rainy Days.
Little Bridy, Dorset	0	4	348	5.53	1.22	5	24
Barnstaple, Devon	0	6	31	5.80	.98	27	24
Castlefield, Calne, Wilts	0	11	830	3.62	.71	4	
Camden Town, London	0	4	100	2.42	.40	27	18
Finchley Road, London	0	4	270	2.72	...	..	..
Ditto ditto	36	4	806	2.02	...	..	..
Oundle, Northampton	20	0	124	5.80	1.53	25	22
Norwich	0	0	30	5.43	1.28	8	19
Derby	5	0	179	4.30	.69	20	27
Manchester	3	0	106	3.68	.58	11	26
North Shields	1	0	124	2.87	.91	13	29
Dumfries	0	5	63	3.95	.75	25	24
Nookton, Loven, Fife	0	6	90	2.41	.89	26	20
Sandwick, Orkney	2	0	78	3.40	.83	25	17
Norwich (June)	0	0	80	1.32	.44	2	11

REMARKS:—

Little Bridy.—1.20 in. of rain fell on 26th.

Barnstaple.—Much thunder with heavy rain on 27th.

Camden Town.—Thunder 1.40 p.m. on 7th; thunderstorms on 12th, 26th, and 27th.

Oundle.—The rains of this month have been very heavy, exceeding those of July, 1860, by 4.64 in.; 1.20 in. fell on the 6th.

Derby.—Average (14 years) 3.02 in.

Manchester.—Dr. Dalton's average (47 years) 3.71 in.

North Shields.—Frequent showers, especially at night.

Dumfries.—Showery month; violent gale with rain on the 30th, Fruit-trees much damaged; .70 in. of rain on 17th.

Nookton.—Temperature below the average.

Sandwick.—Average (20 years) 2.54 in.

G. J. Symons, Camden Road Villas, N.W.

From Death to Life.—I send with this part of a branch cut from a subevergreen Oak called the Fulham Oak. This tree, like all the species and varieties of evergreen Oaks seemed in April to be dead from the effects of the severe frost last winter. Deep cuts were made in various parts of the branch, part of which I send you, even down to the heart, but no living tissue could be discovered; all seemed brown and utterly dead; the chips even, taken from the cuts, burnt freely, like sear wood. The shoots from this branch, above and below where it was severed from the trunk, all burnt freely like faggot wood. The tree was condemned as being quite dead; it was not however rooted up, for in 1838, after that severe winter, and again last year, 1860, I had seen some marvellous resuscitations of apparently dead trees, particularly of trees of Quercus Ilex and its numerous varieties, and so the tree was spared. As soon as the warm weather visited us, early in June last, I observed the principal branches and shoots, those even not larger than one's finger, to be studded with minute buds; these by the beginning of July were leaves and shoots in almost a vigorous state of growth, and the tree is now full of life, except the very small twigs, which have not passed from the dead to the living world. Cases of the kind I have described are doubtless plentiful this season, for at Hyde Hall, the seat of the Earl of Roden, are some trees of the common Evergreen Oak (Quercus Ilex), a century old, which were apparently dead to the heart in April, now alive and full of green leaves and shoots; but they are not the less curious, and a few words from an experienced physiologist like yourself on the interesting phenomenon of the circulation of the sap in dead wood would gratify many readers. *T. R.*

Potatoes.—My Potatoes are in as bad a state as I ever remember to have seen them. My Turnips (a most splendid crop) are rapidly rotting, and many are filled with a semi-fluid offensive matter. The Lettuces in various parts of the kitchen garden (tied in for hearting) have nearly all fallen down, and are rotting; the roots are found generally decayed, and one mass of a greenish aphis-looking insect near the surface of the soil, whilst lower down there are numbers of little grubs or worms. The Cabbages, Savoys, and others of the Brassica, are what the gardener terms blind; the leaves are curled up and thickened, but free from insect. The Beans, where early, spoiled by black fly; and the Peas are all more or less blighted or mildewed. Many of the Plum and Cherry trees are destroyed, and those on the walls as well have been ravaged by fly—grey, green, and black—besides mealy bug and red spider, in spite of the syringe and various specific insect killers. I never witnessed anything more lamentable and disheartening, and well may the question be asked—How comes all this? and what can be done to remedy these evils? The fears I expressed, I well remember, in the earlier Numbers of the *Gardeners' Chronicle*, that the vast amount of electricity generated by the frictional action of our locomotives and other steam machinery let loose into our atmosphere, might possibly disturb those delicate balances and combinations so essential to animal and vegetable life, and I predicted epidemical visitation in both kingdoms as a probable consequence, if the air we breathed (through which all the vital functions are sustained) was even infinitesimally changed in its constituent properties or proportions; and although my fancies were pooh-poohed at by the learned expounders of electrical laws, I still continue to regard them with some favour; and many years since, when I first witnessed the experiments at the Polytechnic with Armstrong's hydro-electric machine, and saw the enormous electric force that was generated by a single puff of steam through the metallic tubing collected in large Leyden jars and exploded through masses of iron and other solid bodies with a report of a cannon, I could not forbear pondering on the amount which must be continually, night and day, thrown off on land and sea into the atmosphere, and asking myself the question—What becomes of all this developed mighty power, this *primum mobile* of the universe? I suspect ozone—supposed to be oxygen acted upon by electricity, and now so readily detected in the atmosphere—to be in some way one result of this largely developed electric force. But what effect on the animal and vegetable functions may arise from the atmosphere being more or less charged with ozone I am not aware of any endeavour having been made to ascertain. That at various times epidemical visitations on man and beast and the vegetable tribes have occurred, and of somewhat similar characters to those now existing, is probable, as causes may have operated to induce a somewhat similar electric state of the atmosphere; but I do not believe any parallel of persistency can be produced from any reliable records; and despite all our care matters appear to be proceeding from bad to worse, and are now assuming so serious an aspect that Government interference or rather aid should be gained to carry out the most searching inquiry into the causes producing such disastrous results. The Vine disease is an epidemic, and sulphur is said to be a specific; if so, how does it operate? In the valuable tabulated report of last year in the *Gardeners' Chronicle*, the Potato crop in Scotland showed a very remarkable immunity from disease, and I think for some seasons previously the Scotch crop was less affected than ours; but I do not know whether any inquiry was made regarding this fact—much as regards the various aspects, whether on a southern, eastern, or western slope, what mountains were in the neighbouring districts, and what winds these sheltered the crops from? as a negative electricity is said to prevail during N. and N.E. winds, and a positive from the opposite quarters. Soils, manures, different modes of sowing and planting, &c., have availed little to arrest the plagues. Chemistry and the microscope can unravel little respecting causes and I think if it is possible (and why not?) to subject the various vegetable productions to atmospheres under different electrical conditions, and especially those plants which have manifested the greatest susceptibility, we might be led into a clearer knowledge of this mysterious and universal agent—in its operation on vital action brought about by its influence on our atmosphere. I have jotted down some of the thoughts that for years have held possession of my mind. *Thomas Ingle, Ensworth.*

Notices of Books.

The Oxonian in Iceland: by the Rev. F. Metcalfe, M.A. Longman & Co.

In spite of the stormy sea to be crossed, the discomforts and the bad accommodation to be encountered, Iceland presents attractions to those adventurous wanderers who would quit the beaten track of European travel, and seek excitement and novelty in the most unfrequented region they can find. And certainly a ruder and wilder spot cannot well be found within an equal distance of England. But he who visits its shores, and still more he who would penetrate its interior, must be inured to fatigue, careless of his sleeping quarters, and able to make a meal on whatever may be set before him; and with these qualifications, and a well filled purse, he may hope successfully to explore Iceland. As with most primitive nations hospitality is the rule, and the traveller is sure of a supper and some sort of bed, provided only night does not overtake him far from human habitation; but since this is but too frequently the case, his travelling equipment must include a tent, and every requisite for camping out. He must further provide himself with waterproof garments and coverings; for in common with other mountainous countries, its climate is so rainy as to be a serious drawback to the pleasures of travelling, not only as exposing tent and traveller to a frequent deluge, but also from the rapidity with which the bridgeless rivers become swollen torrents; in fording which, man and horse are in danger of being swept away.

The author of the present volume claims for himself the honour of having penetrated further into

Iceland than any traveller since Henderson in 1815; and he seems to be a gentleman possessing considerable powers of observation, with a knowledge of natural history and geology, well versed in Icelandic history and traditions, capable of conversing with the natives in their own language, and encountering in a cheerful spirit the various discomforts to which he was subjected. With these accomplishments, he ought to have succeeded in producing an interesting book; but we are compelled to state that this is not the case. Owing to the disjointed and incoherent style in which it is written, it is a laborious achievement to wade through his pages; and the perpetual change from the past to the present tense, often in the same sentence, is both bewildering and irritating, while the attempts at wit and smart writing often raise a smile, but it is at the author's expense: we cannot consider it witty to speak of the "spokey backfins" of whales,—"the rocks having got to loggerheads,"—"sack-packed females,"—"the cavern-mouthed boy,"—"a slantindicular waterfall," &c.

It is difficult to extract a passage on any one subject, from the way in which several are mixed together; conveying the idea that the author has simply copied the contents of his note-book, without any arrangement of the facts recorded. Perhaps the following is a fair specimen of his style. "The flat shores of the Krutafiord, along which I ride next day, are strewn with large pieces of onyx and chalcedony in great quantities. I call at the Sysselman's, Johannes, on the road. While coffee is preparing, we drink a bottle of port to the dregs. The fact is that Icelandic travel is very destructive of the tissues, and alcohol is not only not injurious, but necessary to the system. Fortified with these refections, and cigars, we start in company in the best possible humour, defying the bitter north wind and clammy fog. At Kolbeinsá abides the pilot of the Krutafiord, Gislason, who is away catching sharks. His daughter, Gudrun, does the honours. The constant fish diet requires an antidote, which Nature has provided ready to hand. Scurvy-grass (Skarfakál) grows thickly upon the sides of the turf-covered houses. On the shore beyond is a piece of rock some 50 feet high, washed by the surge. It is composed of short basaltic pillars lying *horizontally*. In the bare lava-sand, on the shores of the Skalholtvik, I first see that beautiful lemon-coloured flower, the Papaver nudicaule, in full bloom. I meet with specimens of it all along the north-west coast, but always on bare sand or shingle. This year's seeds are not nearly ripe, but last year's seed-vessels are still hanging to the plants full of seed, and I gather some to take to England. They have encountered a winter's snow, but this probably has an antiseptic power; as an old traveller in Iceland, Mohr, in his natural history of the country, states that he found the last year's Crowberries quite fresh and good after a winter's immersion."

The best chapter in the book is the last, wherein minute directions are given for the benefit of any one intending to visit Iceland. Had the whole volume been written as carefully and clearly as this chapter, the task of reading and reviewing would have been far more agreeable. It is a great pity that Mr. Metcalfe should have put his book together in such a careless manner, since there is much of real interest in it; and many slight notices scattered through it show that his materials are ample, and only need to be presented in a more readable form. He has collected many Icelandic traditions and superstitions both peculiar to the country, and also variations of those current among other nations. He has also recorded many observations on birds and other animals, of which we recommend the following to Mr. Darwin's notice:—

"At the mouth of Skarfadal we pass another lake, divided by a narrow bank of shingle from the sea, which is said to abound with fresh-water cod. Their piscine forefathers were no doubt as fond of salt water as cod-fish are generally, but their descendants finding themselves in a lake, which gradually became less and less salt, made a virtue of necessity, and acquiesced in the novel order of things."

Botanical notices are few, and chiefly consist in the naming of the plants observed in the course of the journey. The following facts however deserve to be recorded:—

"In the ferryman's cottage I see bunches of Millefolium hanging up to dry, from which the natives prepare a tea, said to be good for purifying the blood. Dried and powdered, it is sprinkled on wounds."

"The morasses are deep, but fortunately they are covered with the Grass called by the Icelanders Reidingras, or Horbladka (Menyanthes trifoliata), the power of which, to prevent the horse and rider from sinking in, is truly wonderful. Wherever you spy the Bog Cotton (Fifa), beware; but wherever the thickly matted felt of the Menyanthes is to be seen, you may advance boldly. The water beneath may ooze through the Grass, and the matting may bend under your weight for several square feet around; but if the horse is clever, and can step lightly—and Icelandic horses when they like can step very lightly indeed—its tenacity is proof against his hoofs."

"In the church I see drying a quantity of Dryas octopetala, called Riupnalyng, from its being the chief food of the ptarmigan in winter. The natives prepare a tea from it, which is good for the jaundice."

"It is difficult to reconcile the accounts in the Sagas of grain-crops raised in Iceland, with the actual experience of later times. In the experiment here tried, a quarter of a barrel of seed-corn only yielded half a barrel of produce. Eggert Olafson goes so far as to assert that there is no proof of ripe hard grain ever having been harvested in Iceland. Even in Faro the scanty grain-crop has to be dried artificially. It is possible, however, that the climate has become colder from the accumulation of snow and ice, which has certainly encroached in many parts of the country, especially in the south."

Routledge's Illustrated Natural History for July is occupied by Pigeons, the Dodo, Curassows, Pheasants, Turkeys, Peacocks, and Barn-yard Fowls. The wood engravings are beautiful. The account of the wild peacock is probably new to many readers:—

"The peacock is an Asiatic bird, the ordinary species being found chiefly in India, and the Javanese peacock in the country from which it derives its name. In some parts of India the peacock is extremely common, flocking together in bands of 30 or 40 in number, covering the trees with their splendid plumage, and filling the air with their horridly dissonant voices. Captain Williamson, in his 'Oriental Field Sports,' mentions that he has seen at least 1200 or 1500 peacocks within sight of the spot where he stood.

"They abound chiefly in close-wooded forests, particularly where there is an extent of long Grass for them to range in. They are very thirsty birds, and will only remain where they can have access to water. Rhur plantations are their favourite shelter, being close above so as to keep off the solar rays, and open at the bottom sufficiently to admit a free passage for the air. If there be trees near such spots, the peacocks may be seen mounting into them every evening towards dark to roost; and in which they generally continue till the sun rises, when they descend to feed, and pass the midday in the heavy coverts.

"They are very jealous of all quadrupeds, especially of dogs; no doubt from finding the jackal, and probably the tiger, to be such inveterate enemies. When peacocks are discovered in a tree, situated on a plain, if a dog be loose or hunt near it, the bird will rarely remove from it, though it will probably show extreme uneasiness.

"Though pea-fowls invariably roost in trees, yet they make their nests on the ground, and ordinarily on a bank raised above the common level, where in some sufficient bush they collect leaves, small sticks, &c., and sit very close. I have on several occasions seen them in their nests, but as I refrained from disturbing them they did not offer to move, though they could not fail to know that they were discovered. They usually sit on about a dozen or 15 eggs. They are generally hatched about the beginning of November, and from January to the end of March, when the corn is standing, are remarkably juicy and tender. When the dry season comes on, they feed on the seeds of weeds and insects, and their flesh becomes dry and muscular—very different from what it is under more favourable conditions.

"Peacock shooting, although an exciting sport, is a dangerous one, the tiger feeling himself suited by the Rhur and other vegetation in which the peacock delights, so that an inexperienced sportsman may suddenly find himself face to face with a tiger, and run a strong chance of being himself the object of pursuit. Old hunters, however, who know the habits of the peacock, find that bird extremely useful in denoting the presence of tigers. When the peacock finds itself in close proximity to a tiger, or even a wild cat, it raises the sound of alarm, which is a loud hoarse cry, answered by those within hearing. The bird then utters a series of sharp quick grating notes, and gets much higher into the trees, so as to be altogether out of reach of the tiger's claws.

"In character, the peacock is as variable as other creatures, some individuals being mild and good-tempered, while others are morose and jealous in the extreme. One of these birds, living in the north of Ireland, was a curious mixture of cruelty and fun. He had four wives, but he killed them all successively by pecking them to death, for what cause nobody could find out. Even its own children shared the same fate, until its owner put the pea-fowl eggs under a sitting hen, and forced her to hatch the eggs and tend the young far out of his sight.

"His great amusement was to frighten the chickens. There were two iron troughs in which the food for the chickens was placed daily, and to which they always resorted as soon as their food was poured into their troughs. No sooner had they all assembled than the peacock would erect his train, rattle his quills together with that peculiar rustling sound that is so characteristic of these birds, and march slowly towards the chickens. The poor little birds would slowly back away from the trough as the peacock advanced, not liking to lose sight of their food, and not daring to remain in defiance of their persecutor. By degrees he got them all into a corner, crouching together and trembling, when he would overshadow them with his train, place the ends of the feathers against the wall so as to cover them completely, rattle the quills heartily so as to frighten them extremely, and then would walk off looking quite exultant at the trick he had just played. He did not care for eating their food, but left the trough untouched."

We have before us the following new guides to tourists:—*Black's Guide to Sussex*, and *Black's Guide to Kent* (pp. 474), each with a map and illustrations. These volumes form part of a general guide to the South Eastern Counties of England, and will prove very convenient companions to tourists. The maps, the great want of travellers, are most especially clear as well as full.—There is also an eleventh edition of *Black's Picturesque Guide to the English Lakes*, with a geological sketch by Phillips. It is accompanied by very clever outline sketches of scenery by Flintoft, plenty of maps, some illustrations, and very useful information for travellers.—Mr. Murray has also added to his famous handbooks one *for Travellers in North Wales*: it has a capital loose travelling map, and gives a copious account of everything worth attention in the district, whether geological, ecclesiological, historical, or topographical. There are occasional scraps of natural history, but they want extension; as for example in the case of Snowdon, whose interesting flora demands something more than a barren, and not quite accurate, list of names; had the localities of the rare plants on the mountain been given, as they easily might be, the interest of the chapter to pedestrians would have been greatly enhanced.

DANGSTEIN.

This—the delightful residence of Reginald Henry Nevill, Esq.—occupies a conspicuous position in the north-western corner of the county of Sussex, on the northern side of the main road leading from Midhurst to the important market town of Petersfield, in Hampshire, each of the places just named being distant something more than 5 miles. The mansion forms an interesting feature in the surrounding landscape; its beautiful cornices and parapets, together with its glittering dome, peering high over the trees in which it is embosomed. The principal approach is circuitous and steep. Starting at right angles from the main road immediately in front of the mansion, it is something more than a mile in length, reaching the entrance at the northern side through a handsome avenue of thriving Deodars some 20 feet in height.

There is also another approach from the Hampshire side through narrow and intricate lanes, but this it is expected will after a time be altered, and then improved approaches will doubtless be made both from Midhurst on the eastern, and Petersfield on the western side.

The mansion itself is a beautiful specimen of the classic style of Grecian architecture, erected for the late Capt. Lyon in the year 1836-7 by Knowles; it is in three divisions; the middle or main portion is approached by a flight of steps leading to a majestic portico in the centre, over which is a pediment and entablature supported by columns carried up to the roof. The eastern division, containing the offices, has recently been considerably extended in a sunken area. On the western side is a conservatory, surmounted by a glass dome, and supported by a Grass terrace, in front of which is a pretty geometric flower garden 115 feet square; beyond is a Pinetum entered between a pair of noble specimens of Cupressus torulosa, some 30 feet in height. Among the Conifers here are good examples of Cryptomeria Lobbii, Abies Smithiana, Douglasii, and Brunoniana, and Pinus insignis. A. Brunoniana is 10 feet in height, and covers with its spreading branches an area of 30 feet in circumference. The southern side is bordered by an avenue of Araucaria imbricata, and the northern by an American garden, into whose clumps is introduced an admixture of flowering plants all growing vigorously on the light sandy soil of this elevated situation, and appearing to have suffered little from the severity of last winter. The south front is in the same beautiful style as that of the opposite side, and rests upon a wide spreading lawn, which of late years has been opened up and blended with another demesne, recently acquired, from which an exquisite view is obtained. On the receding foreground are dotted about many beautiful trees, amongst which cattle range at will, giving animation to the scene. Beyond is a succession of low hills, the rounded tops of some of which are covered with coppice and hard wood, with a mixture of Scotch and other Firs, whose sombre character produces a striking contrast in early May with the young foliage of the other trees. The whole of the beautiful landscape is screened from sea breezes by the distant South Downs, and some of which are covered with trees and undergrowth to a considerable height, whlle ill are remarkable for the fine herbage with which they are clothed. On the western front Hampshire spreads out its fertile fields, and in the foreground, somewhat to the left on the summit of a depressed hill, is situated the pretty village of Reigate, its cheerful looking cottages contrasting finely with its grey church tower; another hill whose summit is clothed with Furze and Heather may also be seen in the distance, and the richly wooded and highly cultivated country beyond is studded with mansions, substantial homesteads, and comfortable-looking cottages. Petersfield with its pleasing lake likewise comes effectively into view, and the whole is backed by an amphitheatre of hills some 300 feet in height, the steep sides of which are covered with hanging woods which terminate

at Norehill and Selborne on the extreme right—the latter a lovely spot famous as being the residence of that distinguished naturalist Gilbert White; the former a detached hill rising up in the midst of the plain and sending forth two streams into two different seas—the one, a branch of the Wey, passes into the Thames and thence into the German Ocean at the Nore; the other, an arm of the Arun, waters the lovely scenes I have just attempted to describe, and falls into the English Channel on the southern coast.

Dangstein, as will therefore be seen, is remarkable for the beauty of its situation and the exhilarating atmosphere by which it is encompassed; moreover, since it came into the possession of Mr. and Lady Dorothy Nevill, it has been distinguished not only for its beautiful gardens and admirable collection of rich and rare exotics, of which both Mr. Nevill and her ladyship are passionately fond, but also for the extensive improvements which are constantly being made in the general appearance of the place. To the southern front of the mansion are to be added a terrace and panel garden, the former 310 feet in length encircled with balustrade fences, statuary, vases, &c., and the new sunken offices at the eastern side will no doubt be screened by an architectural wall, instead of as at present by a Laurel hedge. The conservatory is approached from the western terrace by a flight of steps under a portico, the pediment and entablature of which are supported by Doric columns; in the centre is a raised stone bed, from which the pillars spring that support the dome. [This house, which was planted by the writer of this paper some 20 years ago, is now about to undergo some important alterations, and to be refilled with plants remarkable for the beauty of their foliage.

The approach to the gardens is from the eastern end of the southern front, crossing a drive and entering by a portcullis gateway; on the right is a ravine whose rugged and irregular sides are clothed with many interesting plants, amongst which I noticed a standard Mistletoe and an excellent example of Pampas Grass; on the opposite side, facing the entrance to the kitchen garden, are also scattered on the Grass several choice specimens of trees and shrubs. Proceeding onwards, a small border on the left comes into view, and on the opposite side a new panel kitchen garden, which is just being formed out of a neglected ravine; it is 420 feet long, 266 wide, and the depth of panel is 11 feet; when finished it will be divided by walks of a suitable width into 12 rectangular plots; the sides of the panel slope at about an angle of 45°. On the banks already finished early vegetables and Strawberries are found to grow vigorously; the northern side is bounded by a Laurel hedge and double embanked Grass terrace, on which the main range of houses is situated; it is 420 feet long and 23 feet wide. *D.*

(To be continued.)

Miscellaneous.

Gardening in St. Giles's.—A Movement in the Right Direction.—One of the last of these efforts has been made by the Rev. E. Bayley in the encouragement of horticulture in St. Giles's! This by many will be looked upon as a forlorn or Quixotic endeavour; but the results, so far as the experiments have been carried out, have been very encouraging. The show has brought out plants grown in windows in some of the most miserable parts of St. Giles's; and the arrangements made placed those in the worst conditions on a comparative equality with each other; and although many of the flowers showed the blackened appearance which might be expected in such localities, the exhibition had an interest to gardeners and others. It brought out the ingenuity of the young aspirants to horticultural honours. One produced a young Chesnut tree; another an Oak; a third a Walnut tree; another an Orange tree—all from their several nuts, pips, or seeds—for prizes are offered for things not in bloom, and therefore nothing was excluded. *Builder.*

How a Cuttle-fish (Octopus) *can behave.*—Those who are familiar with the poulpes and cuttles of our coasts will readily allow that there is something more than usually repulsive in their appearance. Their flabby, corpse-like fleshiness, now lax and soft, now plumping up, their changes of colour, the livid hue that comes and goes so strangely, the long lithe arms with their cold adhesive powers, their uncouth agility, their cunning adroitness and intelligence, and especially the look of their ghastly green eyes, make them decidedly "no canny." It does not need that they should be sufficiently colossal in dimensions to throw their arms over a ship's hull and drag her under water, as oriental tales pretend, and as old-fashioned naturalists believed, to induce us to give them a wide berth. It would not be pleasant to be entwined in the embrace of those arms; and we can sympathise with Mr. Beale, who has described his feelings during an encounter which he had with a beastie of this sort, while engaged in searching for shells among the rocks of the Bonin Islands. He was much astonished at seeing at his feet a most extraordinary-looking animal, crawling towards the surf, which it had only just left. It was creeping on its eight legs, which, from their soft and flexible nature, bent considerably under the weight of its body, so that it was lifted by the efforts of its tentacula only a small distance from the rocks. It appeared much alarmed at seeing him, and made every effort to escape. Mr. Beale endeavoured to stop it by pressing on one of its legs with his foot; but although he used considerable force for that purpose, its strength was so great that it several times liberated its member, in spite of all the efforts he could employ on the wet and slippery rocks. He then laid hold of one of the tentacles with his hand, and held it firmly, so that it appeared as if the limb would be torn asunder by the united efforts of himself and the creature. He then gave it a powerful jerk, wishing to disentangle it from the rocks to which it clung so forcibly by its suckers. This effort it effectually resisted; but, the moment after, the apparently enraged animal lifted its head, with its large projecting eyes, and, loosing its hold of the rocks, suddenly sprang upon Mr. Beale's arm (which he had previously bared to the shoulder for the purpose of thrusting it into holes in the rocks after shells), and clung to it by means of its suckers with great power, endeavouring to get its beak, which could now be seen between the roots of its arms, in a position to bite. A sensation of horror pervaded his whole frame, when he found that this monstrous animal had fixed itself so firmly on his arm. He describes its cold, slimy grasp as extremely sickening; and he loudly called to the captain, who was similarly engaged at some distance, to come and release him of his disgusting assailant. The captain quickly came, and taking him down to the boat, during which time Mr. Beale was employed in keeping the beak of the Octopus away from his hand, soon released him by destroying his tormentor with the boat-knife, when he disengaged it by portions at a time. This Cephalopod measured across its expanded arms about 4 feet, while its body was not bigger than a man's fist. *Gosse's Romance of Natural History.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Where valuable stove plants have to be kept here in bloom they will require careful management to prevent their being injured by damp, and they must not be over-watered at the root, as stove plants are soon injured in a low temperature if kept too wet underground. Give air freely on bright days, but if the house contains many stove plants it will be advisable to shut up rather early in the afternoon, so as to retain a little warmth for the night, and in the event of wet cloudy weather continuing it will probably be found necessary in old-fashioned badly glazed houses to use a very little fire heat to preserve the blossoms of tender things; and this should be seen to before handsome specimens get disfigured or ruined for the season, for these in bloom are not over plentiful about most places, and are therefore worth caring for. Keep everything in this house as clean and neat as possible, removing decayed flowers and leaves, &c., immediately they are perceived, and examine pot specimens frequently, particularly such as may not occupy the most suitable places, turning them partly round in order to expose all their sides equally to light and air.

FORCING DEPARTMENT.

Pineries.—As has been before stated, a rather dry condition of the soil about the roots and also of the atmosphere is essential during the ripening of the fruit where high flavour is an object, therefore be careful not to over-water plants on which the fruit is approaching maturity, and it will be advisable to use slight fires on dull days, so as to allow of giving sufficient air to prevent a stagnant state of the atmosphere, for fruit of first-rate quality cannot be expected from plants growing in a sodden soil or a damp unhealthy atmosphere. Endeavour to afford growing stock a steady bottom-heat of about 85°, and keep it well supplied with manure-water at the root, but avoid getting the soil too wet. As fire-heat will soon be necessary to a considerably larger extent than has been the case, care must be exercised to secure a properly moist state of the atmosphere, keeping the evaporating pans or troughs regularly supplied with water, and moistening the floors, &c., frequently, as any sudden change from a moist to a dry state of the atmosphere would be most injurious to growing stock, and also to plants swelling their fruit. Be as sparing of fire-heat, however, as circumstances will allow, and shut up early on the afternoons of bright days, so as to husband the sun's influence as much as possible. Where young stock is grown in dung-pits, care must be exercised after this season not to get the plants weakly through keeping too close and warm, giving air freely on every favourable opportunity, and sufficient command of warmth should be secured from the linings to allow of giving a little air at night and on cloudy days.

Cherries.—Remove the trees to a shady situation and keep them syringed and watered; the pots should be plunged, or the plants taken out and planted in a northern aspect.

Peaches and Nectarines.—As soon as the crop is gathered the trees should be looked over, and all useless shoots, such as are not required for next season, should be cut away. Well wash the trees, and water the borders if very dry. If the wood is well ripened, and the weather is warm, the sashes may be removed. Expose crops ripening as much as possible to sun and admit plenty of air, to give colour and flavour to the fruit. Late houses, where the fruit is swelling, should have an increased day temperature, with plenty of moisture. Thin and tie in the shoots in the last house.

FLOWER GARDEN AND SHRUBBERIES.

Where cuttings of Verbenas and such like things are wanted in quantity, they should be inserted rather thickly in deep pans or shallow pots in which they can be wintered, as they will be got established sooner in this way than would be the case if they were to be potted off before winter, and we have frequently found cuttings managed in this way to winter fully as well as stronger plants; and except plants intended to furnish cuttings in spring it is very immaterial how small bedding plants are before winter, provided they are well rooted without having been got up in a close warm atmosphere to render them sappy and tender. Many, through anxiety to secure large plants, keep bedding-out stock close and moist until late in autumn, and frequently in frames on dung beds, where size is soon obtained; but plants treated in this way are necessarily so soft and tender that it is almost impossible to keep them during winter without serious loss. Therefore avoid keeping such things too warm after this season, and if they are placed in bottom-heat give air whenever it can be done so as to prevent weakly growth.

HARDY FRUIT AND KITCHEN GARDEN.

Look frequently over varieties of Pears ripening, and gather those that are fit; for if allowed to hang after they are ripe, birds are sure to find them and will attack the fruit before it is fit for gathering, so that the crop will probably be spoiled unless it can be netted up. Where Currants are covered with mats—which by the bye are very inferior to close nets for this purpose and much more expensive—the trees should be uncovered occasionally on fine dry days so as to expose the fruit thoroughly to the air in order to prevent its being injured by damp, &c. Trim and dress Strawberry plantations, and be careful to injure the leaves of the plants as little as possible, and avoid deep digging between the rows, which is of no further use than to injure the roots, as the Strawberry rather prefers a somewhat firm soil.

COTTAGERS' GARDEN.

Follow up cleanly cultivation, and stir the soil among all growing crops. Employ leisure time in collecting materials for manure; remember that all decaying vegetable refuse is valuable in this respect, especially after having been well watered with the contents of the cesspool.

STATE OF THE WEATHER AT CHISWICK NEAR *LONDON*,
For the Week ending Aug. 15, 1861, as observed at the *Horticultural Garden*

August.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature. Of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind	Rain.
Friday 9	3	29.889	29.880	71	57	64.0	64	60	S.W.	.02
Satur. 10	4	30.046	29.979	81	56	68.5	65	60½	S.W.	.00
Sunday 11	5	29.965	29.896	82	54	68.0	66	61	W.	.00
Mon. 12	6	29.889	29.700	89	61	75.0	67	61½	S.W.	.01
Tues. 13	7	29.983	29.822	82	44	63.0	68	62½	W.	.09
Wed. 14	8	30.032	29.818	79	59	69.0	67½	63	S.W.	.00
Thurs. 15	9	29.771	29.764	77	55	66.0	67	62½	S.W.	.00
Average..		29.939	29.837	80.1	55.1	67.6	66.3	66.6		.03

Aug. 9—Densely overcast; cloudy; overcast; slight rain.
— 10—Very fine throughout.
— 11—Very fine; densely overcast at night.
— 12—Very fine; very hot and dry; fine.
— 13—Cloudy; very fine throughout.
— 14—Very fine; dry air; very fine.
— 15—Cloudy.

Mean temperature of the week 5 deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending August 24, 1861.

August.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 18..	73.5	52.0	62.8	13	0.38 in.	2	6	5	3	4	[illegible]	[illegible]	1
Mon. 19..	73.0	52.3	62.6	17	0.42	2	4	3	2	3	9	9	3
Tues. 20..	72.6	51.7	62.1	15	0.45	2	2	3	1	5	11	11	3
Wed. 21..	72.3	50.1	61.2	13	0.62	3	2	1	1	7	13	10	3
Thurs. 22..	71.4	50.2	60.8	13	0.67	2	2	3	—	4	10	10	2
Friday 23..	71.7	49.3	60.5	18	0.95	2	3	3	1	3	11	11	2
Satur. 24..	71.5	48.3	59.9	16	0.24	1	7	3	—	5	[illegible]	[illegible]	3

The highest temperature during the above period occurred on the 11th, 1842—therm. 92 deg.; and the lowest on the 21st, 1850—therm. 32 deg.

Notices to Correspondents.

Books: *P.* We are unacquainted with J. Wood's "Elements of the Weather." It has not been sent for review.

Insects: *W L.* Your Pear trees are infested with the slimy larvæ of the Sawfly, Selandria Æthiops. They may be killed with powdered lime or by being syringed with lime water. The usual laws of insect life account for their spreading when they have once become acclimatized. *W.*

Lean-to Houses: *J C.* The best aspect for a lean-to house on Sir Joseph Paxton's principle, is south or south-west.

Musk: *Dunmow.* There are not two varieties of the common Musk (Mimulus moschatus), one which blossoms, and one flowerless, but more strongly scented.

Names of Plants: *T. Swain.* 1, Medicago arborea; 2, Glaucium luteum; 3, Calamagrostis Epigæos.—*Taffy.* 1, Stachys sylvatica; 2, Achillea Ptarmica; 3, Juncus Bufonius; 4, Polygonum lapathifolium.—*W W F.* The red Heath is only a chance variety; you will find it in the nurseries where collections of hardy Heaths are kept.—*J M M.* Medicago intertexta.—*G R N.* 1, Linaria vulgaris; 2, Pulicaria dysenterica; 3, Betonica officinalis; 4, Eupatorium cannabinum.—*Wetherby.* 1, Scrophularia verna; 2, Sagina procumbens; 3, Lapsana communis; 4, Prenanthes muralis.—*Una.* We are sorry to say that the specimen sent is quite insufficient to enable us to answer your inquiry. It *must* be in flower. Perhaps you will repeat the question with better materials.—*A Subscriber.* Terribly bad specimens. 1, Sedum populifolium; 2, some Rudbeckia; 3, Potentilla fruticosa; 4, Spiræa opulifolia.

Fungi: *Cadland.* It is Polyporus squamosus, figured at p. 975 of our last year's volume. The Elm tree or stub on which it grows is rotten.—*W C.* Your Fungus is a peculiar condition of Rœstelia cancellata. You must pick off all the affected leaves as soon as possible and burn them. *M. J. B.*

Water-Rats. If a Subscriber will put phosphoric rat-poison in their holes, they will soon disappear

LAWES'S MANURES.

The Manures manufactured by J. B. LAWES for the [illegible] season of 1861 are now ready for delivery at his [illegible] at the following prices:—

LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME £6 6
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES .. 5 5
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SUPERPHOSPHATE OF LIME, of best quality.
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[116], Fenchurch Street, E.C. EDW. PURSER, Secretary.

THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.

TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &C. IN ENGLAND AND WALES AND IN SCOTLAND.

The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.

For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

The Agricultural Gazette.

SATURDAY, AUGUST 17, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

TUESDAY, Aug. 27 } Meeting of the Kent Agri. Society
WEDNESDAY, — 28 } at Dartford.

THE Wheat crop of 1861 will certainly prove to yield below the average produce. This is a very serious conclusion to arrive at—but it is not possible for any reader of the reports we have received, which are epitomised in other pages, to avoid it. Our authorities, from four to six in every English county, are the most likely men in their respective localities to form an accurate estimate of prospects. All over the best districts of the island the present time is late enough to justify the formation of a confident opinion; and a glance at the names will show that we have here the opinions of the best qualified men known to English agriculture. Take Norfolk, Suffolk, Berkshire, Northamptonshire, Yorkshire, the Lothians —any first-class county—you will find among our Correspondents the names of men well known as the best of our English agricultural authorities; and upon the whole it will be found that the opinions given are against the probability not only of a first-class harvest, but as regards all autumn sown grain and all stiff clay soils, of a merely average yield. Now, autumn sown grain and stiff clay soils are Wheat and Wheat soils respectively; and accordingly it will be seen that on the whole the returns of opinion as to the Wheat crop are unfavourable. Not, of course, so unfavourable as those of last year, but still, so far as the Wheat crop is concerned, promising nothing whatever to remedy the past most disastrous season which English agriculturists have known.

Spring corn however is generally good. Barley and Oats, especially the latter, may be expected to yield unusually well. Beans are blighted, and they are also thinly planted, owing to the use of inferior seed. Peas are generally very good.

Potatoes are almost universally attacked with the disease; which is this year unusually early in its appearance, and threatens to be unusually mischievous in its effect.

Hay has been in all late districts "got" with much difficulty; and a fair crop is damaged to the extent of at least one-half.

Turnips and other green crops are generally very promising; but Mangel Wurzels and Carrots are not half planted, owing to failure of the seed.

On the whole we have on all Turnip and Barley soils the probability of a good season—while the prospects of Wheat and Bean growers, and of clay land farmers generally, are unfavourable.

We add the figures which give the classification of the reports, and for the purpose of comparing 1861 with previous years (1860 having been an unusually bad harvest, and the previous three years being unusually good harvests) we add the figures for the Wheat crops of those years respectively:—

REPORTS OF CROPS, 1861, &c.

Crops.	Under average.	Average.	Over average.	Total.
Wheat, 1857......	13	50	74	137
Do., 1858......	8	92	101	201
Do., 1859......	46*	120	20	186
Do., 1861......	93	46	1	140
Wheat, 1861......	114	76	14	204
Barley ,,	29	94	75	198
Oats ,,	28	80	102	210
Beans ,,	71	44	29	144
Peas ,,	13	37	61	111

* This column of the returns of 1859 included reports from the less important Wheat districts.

—— WE learn with satisfaction that after considerable doubt thrown upon the probability of next year's annual meeting of the English Agricultural Society being held in the immediate neighbourhood of London, space has at length been granted for it in the Battersea Park, where a plot of 30 acres, to be drained and otherwise fitted for the show, is to be allotted for the purpose. It is also proposed to hold the meeting earlier in the season, so that it shall coincide more perfectly as to time with the advent of that multitude expected next year as students and spectators of the wonders of the International Exhibition.

SOME weeks ago a Correspondent of this Paper complained that among the costs of making 10 acres of hay near London, his bailiff had charged 3*l*. 8*s*. 6*d*. worth of beer. Our reply was, that the charge was preposterous—that a gallon of beer per acre during mowing, and as much during making, was a most liberal allowance; while in good weather the whole cost of mowing and making and ricking, exclusive of horse labour, ought not to exceed 10*s*. per acre. On this Mr. CHARLES PANTER, another Correspondent, expresses his surprise:—Having 400 acres to secure, and trying all he knows, he can never get it done much under 30*s*. an acre, with the aid of haymaking machines and horse rakes but not mowing machines, for having tried four he cannot get one to do the work well. He has this year let 150 acres for 25*s*. an acre, and has found horses, carters, and machines, and it did not pay the contractors.

Now in answer to this we have only to repeat that 10*s*. per acre is the cost at which we have often let the cutting and making of large quantities of hay in Gloucestershire, barring only the employment of the farm teams in carrying it; but that the cost no doubt varies both with the crop and the wage of the locality. Where 2*s*. daily with beer is a satisfactory wage, and 1 ton per acre a satisfactory crop, haymaking must cost less than where 3*s*. with beer and a couple of loads per acre are the wage and crop respectively. Nevertheless it appears to us that our Correspondent might be the better for knowing what the experience of Gloucestershire dairy farmers still is on this head; and though no one need go out of Middlesex to learn how to make good hay, it certainly appears to us that he might very well take a journey which should teach him how to cheapen it.

The following is the information we have since received from three Gloucestershire farmers:—

(1) The first occupies a dairy farm of two or three hundred acres in the vale of Berkeley. He has "no accurate account of what it has cost" him in any one year for haymaking, but he states what he "considers it has cost per acre annually." He always mows from 100 to 120 acres a year, and generally lets his Grass "to mow and make, at 8*s*. an acre, with a horse and hay-tedder to go over it once." Without this machine he must give 9*s*. at least, and he considers it costs him 2*s*. an acre for beer and cider in addition to this, and then 2*s*. more for his men to stack it away, making with the machine 12*s*. an acre, and without it 13*s*. an acre. This does not include thatch, "for which probably 1*s*. an acre more must be charged." We know this farm perfectly, and know its tenant to be one of the best dairy farmers of the district.

(2) The agent for the Earl of DUCIE in the same neighbourhood has been giving "10*s*. an acre this year for mowing and making hay (no beer being allowed)." The crop was about an average. This does not include the use of the the farm teams, or of the men with those teams in helping to carry it, but it includes everything else except thatch, and it thus tallies exactly with the answer given to our Correspondent.

(3) By far the most explicit piece of information on this subject remains however to be given. Mr. HARRISON of Frocester Court, who occupies one of the best dairy farms in Gloucestershire, extending over about 500 acres of the rich calcareous loam stretching from the oolitic hills into the vale of Gloucester, has been kind enough to give us the following particulars of his experience during the last 10 years in the cost of haymaking.

In 1851 the whole cost in manual labour, *i.e.*, mowing, making, carrying, ricking, thatching, over 123 acres, was 7*s*. 6*d*. per acre. In 1852 the cost over exactly the same extent was 8*s*. 8*d*. per acre.

In 1856 the whole cost of mowing and making (including some acres of Clover), "thatching and all," was 8*s*. an acre over 145 acres. In 1857 the whole cost over 154 acres was 61*l*., or about 8*s*. an acre.

In 1859 the mowing machine was used in addition to the hay-tedder and horse-rake, and the whole cost of manual labour in mowing, making, carrying, ricking, and thatching 170 acres, was only 6*s*. an acre. The quantity of beer and cider consumed is about 2 gallons per acre during the whole process—but of course it and every other item of the cost varies immensely with the weather. When that is difficult the process is correspondingly tedious and expensive. But the figures given state accurately the whole cost incurred in the years which have been named. The following particulars of crops and labour may be added. The weight of hay per acre on this farm is put at from 20 to 30 cwt. per acre. The same men all the year round are employed, and extra hands (excepting a few women) are rarely engaged at haymaking time. The men have the same wages as at other periods of the year, viz., from 11*s*. to 12*s*. a week. Cider is given to them in addition during the harvest work. From 8*s*. to 10*s*. an acre is the ordinary rate of the neighbourhood for contracts to mow and make hay; but the plan is not generally approved of. If the weather be fine it can be made for less, and if not the persons engaged to make it for you are rarely a sufficiently large party to make the most of the favourable intervals, and the hay is spoiled. Let us add that in the case of two of the seasons whose details have been sent to us, the labour of making 145 and 154 acres lasted between mowing and thatching from June 14 till August 1, and from June 5 till August 7, respectively. The cost of mowing has been generally 2*s*. 6*d*. per acre with 9*d*. extra for beer and cider.

These figures do, we think, entirely justify the answer given to our Correspondent, which Mr. PANTER thought to have been a misprint—and even taking differences in wages, crop, and other circumstances into account, are sufficiently different from those given by him as the result of his own experience, to make further inquiry into the subject worth his while.

BURSLEDON, NEAR SOUTHAMPTON.

MR. BLUNDELL'S management of his small farm is so entirely the result of his own judgment and experience that it would require his own able pen to do justice to its details; a very imperfect sketch is all that can be attempted here. The natural advantages are its southern aspect, mild climate, and generally good soil, especially the upper part, where the sandy soil is naturally drained by its height above the subjacent clay, an indication that there must be much useful land in this often sterile formation.

The old buildings isolated at the top or clustered round the dwelling-house at the foot of the hill have no

utward attraction, and consist for the most part of thatched barns, ordinary stables, sheds, yards, &c., without any attempt at modern improvement; yet we find them well adapted to the system which is carried out. A lofty straw-thatched barn may be made one of the healthiest though perhaps not most convenient buildings for box-feeding at all seasons: equable in temperature, airy and well ventilated at all times. The neat cattle are either reared from the stock on the farm, or bought by careful selection from other breeders. If steers they do not leave the boxes until finally disposed of at an early maturity to be slaughtered, being fatted without a check; the milch cows are allowed a run by day on the pasture in summer. The condition of the cattle thus kept speaks in favour of the system. The details of all successful feeding must always be more or less a matter of daily judgment and discretion. The cattle receive no hay; straw, chiefly white Canada Oat straw, sliced roots, Mangel, the ordinary Turnip—no Swedes are grown—cake meal are the staple of the winter food. The dung which is allowed to accumulate to a certain extent, is disposed of in the ordinary way.

The sheep stock are a flock of horned ewes, for rearing and fattening early lambs. The ewes, not Dorset, as usually seen in the neighbourhood, are from Bridgewater of a very superior quality; they are bought yearly in summer in lamb by a West Country Down sheep. Such as are bred by Mr. W. Humfrey, of Oak Ash, are preferred, as imparting that kindly character to the lamb which commands the best price in the market. We may remark that the type of these Bridgewater ewes warrants the supposition that from such ewes the best Hampshire or West Country Downs may have derived a portion of their blood. Their size and that of their lambs is quite exceptional, the latter, it is said, attaining the weight of an ordinary full-grown sheep. The farm is cleared of the whole flock, which are fatted off as soon as possible. The flock is penned on the land in a moveable fold, without any protection, though the lambs sometimes fall as early as November. They are allowed, as is usual, a forward run closely followed by the ewes. Both are fed with Turnips, Mangels, cake, hay, Peas, &c., the lambs receiving the best of Dutch Clover hay cut before it flowers, Carrots passed twice through the gardener's cutter to cut them into dice. The Turnips, except those sown on the stubbles, are pitted as the Mangels in the fields or at home.

The tillage is deep; as the high condition of the soil stimulates the growth of weeds, they are collected in the root crops after the hoe, and placed in heaps till opportunity offers to remove them from the land. The rotation is of the most elastic character, fitted as it should be in all good farming to the requirements of the soil, rather than that the soil should be treated with reference to the rigid maintenance of a regulated course, especially on small farms. We nevertheless give a rotation as far as our memoranda made on the spot will permit. Taking the farm of 100 acres it is thus divided into five portions:—Two-fifths Wheat, one-fifth Potatoes, one white Oats, one Grass followed by roots. No Barley is grown, as from the high farming Oats are considered the safest crop. To grow these crops 60 out of 100 acres are manured every year. To follow out the rotation take the one-fifth in Potatoes: first the tilth is scarified and dunged in addition to which sometimes 4 cwt. of guano per acre is applied to the open furrow in which the Potatoes are planted under the plough; with the last hoeing Turnip seed is sown. These are drawn to be stacked before the Potatoes are dug, the tops are given to the stock. Wheat follows seeded with Clover, which is often cut as green food or even hay in the autumn. One-fifth white Oats, which are preferred if occasion should require to late-sown Wheat. These are cut rather green generally followed by stubble Turnips, the crop of two lands being shocked on one, the plough working before the Oats are carried. These Turnips are usually fed on the ground; if as often is the case they stand late in the spring, and are fed by the lambs when in flower, the stalks are cut off and the bulbs passed through the cutter, dusted with American cake meal, and consumed by the stock, who eat them readily when so prepared. As a general rule all the roots are dusted with cake meal. Sometimes the Oat stubble is seeded with Trifolium incarnatum in the autumn; this, as the stubble Turnip, is followed by Mangel or Carrots, which are hand-thinned and given to the stock. The Swede is not here deemed so profitable as the afore-named roots. One-fifth Grass, followed sometimes by roots the same year, makes way for Wheat, and with the Potato ground gives two-fifths for the Wheat crop.

It should be noticed that the stalls of the stables are coated with a layer of loam from 4 to 6 inches thick, the surface sloping towards the manger; the bedding rests on this, which when saturated is removed as manure. This at the same time prevents ammoniacal exhalations, and leads to economy in manure, and to all appearance neither produces inconvenience to the horse or wastes the litter. These details, which might be further extended, are here given as illustrations of economy combined with high farming, which as in this requires no great outlay in buildings, where such cannot be had, but the simple adaptation of such as are found on any ordinary farm. *J. C. C.*

AYRSHIRE COWS.

[At the late meeting of the Ayrshire Agricultural Society, the following results were obtained at the milking competition.]

Seven cows were entered for this competition. The competing cows were brought to the Star Hotel on the evening of Thursday last, to undergo the preparatory milking. Each owner was allowed to remove his cow and feed it as he pleased, it being arranged that they were to be brought to the Star Hotel on the mornings and evenings of Friday and Saturday to be milked. The Judges appointed by the Association were Mr. John Struthers, Slaphouse, and Mr. A. B. Telfer, Ayr, attended by Mr. Smith, Prestwick. The milk from each cow was collected separately, and each milking, as shown by the annexed tabular statement, weighed; and the churning of the produce of each cow took place on Monday afternoon.

The first prize of 5*l.* has been gained by the cow No. 6, belonging to Mr. Wallace, Kirklandholm. The yield of milk at the four milkings was 114 lbs. 2 oz., averaging 28 lbs. 8 oz. 5 drs. The second cow belonged to Mr. Reid, Clune. Her yield at the four milkings was 109 lbs. 6 oz., averaging 27 lbs. 5 oz. 5 drs. The cow second in yield of milk gained the prize of 5*l.* for the largest produce in butter, being 3 lbs. 6½ oz.; while the cow that gave the largest quantity of milk only gave in butter 1 lb. 9½ oz. There is a very marked difference here, and it is somewhat remarkable that the cow that gained the largest quantity of milk is the lowest of all the competing cows in the yield of butter. The following is a list of the awards:—

I. For the Ayrshire Cow yielding the greatest weight of milk at four successive milkings, 5*l.*, Robert Wallace, Kirklandholm, St. Quivox; for the do. do. yielding the second greatest weight of milk at said milkings, 3*l.*, Wm. Reid, Clune, St. Quivox.

II. For the Ayrshire Cow yielding milk at said milkings from which the greatest value of butter is made, 5*l.*, contributed by William Patrick, Esq., of Roughwood, Wm. Reid; for the do. do. yielding milk, as above, from which the second greatest value of butter is made, 3*l.*, James Hendrie, Belston, Ayr.

The following table shows the quantities of milk produced at the various milkings, with the average, also the amount of butter:—

No.	Cow belonging to	1st Milking, Friday Morning. lbs.	oz.	2d Milking, Friday Night. lbs.	oz.	3d Milking, Saturday Morning. lbs.	oz.	4th Milking, Saturday Night. lbs.	oz.	Total Quantity of Milk. lbs.	oz.	Average. lbs.	oz.	Amount of Butter Produced. lbs.	oz.	Time occupied in Churning. Hrs.	Min.
1	Archd. Wilson, Carrick Street, Ayr ..	22	14	21	14	27	12	24	6	90	14	24	8.6	2	20	0	25
2	*J. Wilson, Old Mill, New Cumnock ..	..		..		..		..		..		..		..		..	
3	James Hendrie, Balston, Ayr ..	22	5	24	11	26	0	24	4	97	4	24	5	2	14½	0	50
4	William Reid, Clune, St. Quivox ..	23	0	25	7	11	3	22	9	82	3	20	8.75	2	9	0	45
5	William Reid, Clune, St. Quivox ..	30	15	25	12	24	12	27	15	109	6	27	5.5	3	6½	1	45
6	R. Wallace, Kirklandholm, St. Quivox ..	28	11	28	6	28	14	28	3	114	2	28	8.5	1	9½	2	5
7	R. Wallace, Kirklandholm, St. Quivox ..	25	5	28	13	23	9	22	0	94	11	28	8.25	1	15	1	45

* Did not come forward.

The following is the kind of food used during the competition:—

No. 1.—One bushel draff, Mangel, Bean-meal, Oatmeal, Mangel juice with Oatmeal.

No. 3.—Mangel boiled and Bean-meal.

Nos. 4 & 5.—Cut Grass with 2 lbs. Bean-meal, 1 lb. Oatmeal, 1 lb. bran, and ½ lb. oil-cake.

Nos. 6 & 7.—Grass during the day, and Mangel night and morning, with 3 lbs. of Oatmeal, and 3 lbs. of Bean-meal. No. 7 refused to eat the meal.

THE PRESENT APPEARANCE OF THE CROPS.

FROM THE REPORTS (AUG. 10) OF OUR OWN CORRESPONDENTS.

COUNTY.	WHEAT.	BARLEY.	OATS.	BEANS.	PEAS.	POTATOES.	HAY.	MANGEL WURZEL.	TURNIPS, &c.	HARVEST GENERAL.	NAME AND ADDRESS.
SCOTLAND. INVERNESS.	Under average	Full average	Over average	....	....	Average; diseased	Light crop	....	Various	Sept. 1	A. Simpson, Beau
	....	Looks well	Over average	....	....	Abundant; diseased	Excellent; injured	....	Good	Sept. 7	H. A. W. Ainslie, F William
MORAY	Over average	Over average	Over average	Good	....	Good	Average	....	Average	End of Aug.	J. Grigor, Forres
ELGIN	Much over average	Over average	Superior	....	....	Very much diseased	Very heavy	....	....	Sept. 1	J. Hamilton, Forres
ABERDEEN.	Good	Full	Very good	....	....	Fine	Very large	....	....	Sept. 10	J. McDonald, Hunt
	Average	Good	Good	Fair	....	Promising	Abundant	....	Good	Sept. 15	J. Laing, Peterhead
PERTH	Under average; thin on clays	Average; except on clays	About average	Average, except on clays	Average, except on clays	Nearly average	Almost average	....	Average	End Aug.	D. Edie, Bridge Earn
	About average	Under average	Average	Unequal	....	Perhaps average	Damaged	....	Good	Sept. 15	P. Graham, Keir
FORFAR	Average	Average	Over average	Not average	....	Disease	Average	....	Average	Sept. 1.	W. Smith, Brechin
	Under average	Average	Over average	Under average	Average	Everywhere affected	Average	....	Average	Later	R. Colville, Chance
	Not average	Average	Good average	Not near average	....	Many fields bad	Good	....	Promising	Aug. 24	H. Bell, Montrose
STIRLING ..	Near average	Under average	Under average	Much under average	....	Good	Under average	....	Generally average	End Aug.	A. Buchanan, Whi house Farm
....	Average	Average	Rather over average	Greatly under average	....	Average	Average	....	Rather over average	Beginning Sept.	——, Stirling
FIFE	Sound and average	Average	Not average	Short	....	Fine, except faults of sprouting	Average	....	Promising	Aug. 20	W. Veitch, Kinghorn
	Not average	Average	Full average	Under average	....	Not average	Average	....	Average; but late	Sept. 1	J. Morton, St. Andrew's
MID LOTHIAN	Not average	Average	Average	Not average	Not average	Not average	Average	....	Over average	Aug. 21	J. Pitcairn, Kinnaird
	Average	Average	Average	Unequal	....	Very unequal	Full average	....	Promising	Aug. 23	J. Melvin, Ratho
	Average	Average	Average	Under average	....	Various: disease in gardens	Average	....	Promising	Sept. 1	P. McLagan, Pumpherstone

APPEARANCE OF THE CROPS—(*Continued*).

COUNTY.	WHEAT.	BARLEY.	OATS.	BEANS.	PEAS.	POTATOES.	HAY.	MANGEL WURZEL.	TURNIPS, &c.	HARVEST GENERAL.	NAME AND ADDRESS.
SCOTLAND. MID-LOTHIAN	Promising to be average	Fair average	Full average	Light crop	...	Generally good	Average	....	Promising	Sept. 1	J. Hislop, Midcalder
	1-4th short of average	1-4th more than average	Full average	Average	....	Promising well	Average	Over average	Over average	Aug. 22	—, near Dalkeith
LANARK	Not average	Average	Average	Much under average	Under average	Bare average	Average	....	Average	Aug. 25	D. Gairdner, Hamilton
	Well headed, but thin: want of sun	Average	Good	Rather inferior	....	Good	Average	....	Various	Sept. 10	J. Mackenzie, Wishaw
AYR	Not average	Average	Full average on light soils	Average	....	Disease appearing	One-third under average	....	Scarcely average	Sept. 1	H. W. Ralston, Lagg
	Under average	....	Over average	Fair	....	Over average, but taking disease	Light; not secured	Generally bad	Good	Sept. 1	W. McJannet, Irvine
PEEBLES ..	Strong and full average	Full average	Full average	....	....	Promising	Scarcely average	....	Luxuriant	End of Aug.	J. Lyle, Innerleithen
HADDINGTON	Injured by fly; under average	Large breadth; average	Over average	Small breadth; average	....	Large breadth; not average	Over average	....	Average	Aug. 19	P. Shirreff, Haddington
BERWICK ..	Good	Good	Good	Very poor	....	Good; but much diseased	Full crop; all got	....	Good; Finger and Toe	Aug. 26	J. Wilson*, Chirnside
	Not average	Not average	Average	....	....	Average	Average	....	Not average	Aug. 20	J. Logan, Stitchell
DUMFRIES	....	Below average	Good	....	....	Good; but diseased	Heavy; but spoiling	....	Promising	Middle Sept.	J. Little, Laingholm
	....	Not average	Full average	....	....	Promising; but diseased	Good; but rotting	Failure	Good	Middle Sept.	—, —
WIGTON	Not average	Fair	Average	....	....	Getting diseased	Average	....	Average	End of Aug.	A. H. M'Clean, Stranraer
	Under average	....	Average	Under average	....	Over average early diseased	Not average	...	Average	Aug. 23	D. M'Culloch, Auchness
	Under average	Average	Over average	Average	....	Luxuriant; diseased in gardens	Over average	....	Promising	Aug. 19	G. Hope, Drem
ENGLAND. NORTHUMBERLAND	Under average	Average	Full average	Poor	Fair	Promising	Heavy; and all got	Partial failure	Very promising	Aug. 20	J. Grey, Dilston
	Not average	Average	Average	Average	Average	Good; but diseased	Over average	....	Good	Aug. 19	J. Laing, Coldstream
	Autumn sown average; spring sown light and bad	On light soils full average; on strong land bad	On light soils, average; on strong land under average	Very various	Average	Dangerous	Clover hay light; meadow hay very good	....	Over average	Beginning of Sept.	J. Wilson, Morpeth
	On light soils average	Over average	Average	Average	Average	Over average	Not average	....	Over average	Aug. 12	} T. P. Dods, Hexham
	On heavy soils under average	Not average	Not average	Not average	Not average	Under average	Not average	....	Below average	End of Aug.	}
CUMBERLAND	Average	Over average	Over average	....	....	Over average	Not average	....	Over average	End of Aug.	T. Wilson, Ullswater
	Full average	Over average	Average	....	....	Diseased	Light	....	Various	Sept. 1	J. Rigg, Wigton
	Under average	Average	Not average	Not average	....	Average	Not average	....	Not average	Aug. 20	T. Gibbons, Longtown
	Thin	Average	Thin	....	....	Good; diseased	Average	....	Average	End of Aug.	—, Penrith
DURHAM	Pretty good	Fair	Fair	Over average	Average	Over average	Good; not well got	....	Generally good	End of Aug.	R. B. Dixon, Durham
	Average	Good	Good	....	Good	Promising	Average	....	Late crop	Sept. 1	G. Bell, Durham
YORKSHIRE	Full 1-3d under average	Early sown good; late half a crop	Full average	Very moderate	Very inferior	Very good, but showing disease	Good average; mostly well got	....	Very good; 1-4th over average	Sept. 1	J. Outhwaite, Catterick
	Rather thin, but generally good	Over average	Very good	....	....	Good	Average; not well got	....	Very good	Aug. 21	Brady Nicholson, near Leeds
	Not average	Fair; near average.	Middling	....	....	Pretty good	Good	....	Very good	Aug. 20	T. Taylor, Darrington
	Thin and injured	Injured	Injured	Not average	....	Good	Average	Indifferent	Good	End of Aug.	—, —
	Scarcely average	Very thin	Good	Average	....	Good; disease showing	Partly damaged	Complete failure	Excellent	Aug. 19	J. Hannam, Wetherby
	Average	Full average	Average	Average	Under average	Very promising	Average	....	Promising	Aug. 24	H. J. Turner, Richmond
	Full average, though rather thin	Over average	Very good	Good and clean	....	Luxuriant	Good	....	Very promising	Aug. 20	H. Briggs, Wakefield
	Below an average	Good crop where sown early	Good generally	Very bad	Tolerably good	Great deal of disease	Good crop	Very bad	Favourable	Aug. 20	J. Clarke, near Hull
	Not average	Not average	Good	Fair	....	Good; but diseased	Light	....	Very promising	Aug. 14	P. Stevenson, Thirsk
WESTMORELAND	Under average	Full average	Under average	Under average	....	Promising hitherto	Under average	....	Good	Sept. 10	W. Key, Casterton
	Average	Average	Average	....	....	Over average	Under average	....	Over average	Sept. 1	J. Robinson, Warcop
LANCASHIRE	Hardly average	Average	Over average	Not good	....	Very well	Generally light	Failure	Good	Aug. 20	R. Bell, St. Helen's
	Nearly average	Full average	Full average	....	....	Partly diseased	About average	Various	Good	Aug. 13	G. W. Fowler, Liverpool
	Two-thirds of crop	Average	Under average	Over average	....	Good; partly diseased	Under average	Half a crop	Good	Aug. 20	F. Twining, Wigan
	Well fed, but short	Well fed, but short	Well fed, but short	Various	....	Good, but diseased	Light; not well got	Good	Various	Aug. 15	George Drewry, Holker
	Not average	Average	Quality good	Hardly average	....	As yet healthy	Average	....	Average	End of Aug.	R. Robinson, Garstang
CHESHIRE ..	Thin, under average	Full crop	About average	Fair	....	Good, but diseased	Various	Improving	Quality good	Aug. 19	W. Palin, Tarvin
	Under average	....	Over average	Full average	....	Promising	One-third under average	Defective	Under average	Aug. 12	W. B. Burnham, Wirral
DERBYSHIRE	....	....	Average	....	....	Average	Over average; badly got	....	Average	Sept. 10	B. Swaffield, Hartington
	Under average	Average	Over average	Under average	Average	Becoming diseased	Over average; hurt	Under average	Average]	Aug. 20	J. Parkin, Idridgehay
NOTTS	Quite average, except on clays	Fair average	Good	Very thin	Very thin	All gone in the top	Good, but four-fifths spoiled	Thin and late	Good	Aug. 14	—, Holme Pierrepont
	Very thin	Not average	Thin	Average	Not average	Very indifferent	Most spoiled	Bad	Good	Aug. 22	J. Buckley, Loughborough
	Average	Average	Average	Average	Average	Very bad	Damaged	....	Sickly	Aug. 12	C. Walton, Newark
	Not average	Average	Good	Not average	....	Diseased	Not well got	Not average	Good	Aug. 12	—, Notts.
	Below average	Very middling	Fair	About average	Pretty good	Very much diseased	Badly got	....	Fair; promising	Aug. 15	W. Chowler, South Mirkham
LINCOLNSHIRE	Short of average	Average	Good	....	....	Diseased	Good	....	Good	Aug. 16	F. Sowerby, Aylesby
	Much under average	Good	Full average	Various	....	Very bad	Very good; well got	Not full crop	Good	Aug. 20	—, Caistor
	Much under average	Average	Under average	Very good	Average	Fair but much diseased	Average	....	Over average	Aug. 20	W. Dudding, Wragby
	Average	Over average	Average	Over average	Over average	Good	Heavy	....	Good	Aug 20	Croft Sharpley, Louth
	Average	Average	Average	Average	....	Diseased	Good	....	Good	Aug. 19	E. Darby, Sleaford
	Not average	....	Good	Moderate	....	Badly diseased	Full crop; poor quality	Fair	Very poor	Aug. 16	J. Aitken, Deeping St. Nicholas
	Plant thin; ear good	Fair; not heavy	Good crop	Seldom worse	Thin but well podded	Badly diseased	Heavy crop; ill got	Various	Good	Aug. 20	J. Clarke, Long Sutton
	Doubtful	Average	Various	Fair crop	....	Worse than ever	Fair; moderately got	....	Very good	Aug. 25	W. Wingate, Market Rasen
RUTLAND ..	Rather under average	Over average	Full average	Average	Average	Much diseased	Damaged	Patchy	Good	Aug. 19	W. Fancourt, Empingham
LEICESTER .	Not average	Average	Average	Not average	Good	Good, but diseased	Average, but hurt	....	Very good	Aug. 20	J. Spencer, Knossington
STAFFORDSHIRE	Winter-sown thin and mildewed: under average	Full average	Full average	Generally thin	Under average	Disease rapid	Full crop; ill got	Not good	First-rate	Aug. 20	—, Penkridge
SHROPSHIRE	Not average	Average	Average	....	....	Much diseased	Average; ill got	....	Promising	End Aug.	E. Davies, Much Wenlock
	Under average	Average	Average	....	About average	Good, but diseased	Light, and ill got	Fair	Very good	End Aug.	R. Shirley, Mearslow
	Under average	Fair	Average	Very bad	Good	Badly diseased	Much damaged	Indifferent	Very good	Aug. 16	S. Bowen, Ludlow

* Mr. Wilson's report refers to the light soils of his neighbourhood. On the clay lands of the county the crops are very inferior.

APPEARANCE OF THE CROPS—(*Continued*).

COUNTY.	WHEAT.	BARLEY.	OATS.	BEANS.	PEAS.	POTATOES.	HAY.	MANGEL WURZEL	TURNIPS, &c.	HARVEST GENERAL.	NAME AND ADDRESS
ENGLAND. HEREFORDSHIRE.	Not average	Full crop	Good	....	Average	Good, but diseased	Average; good deal injured	....	Very promising	Aug. 14	P. N. Elw... sep C...
	Much under average	Very good	Good	Good	Good	Much diseased	Light; ill got	Not good	Good	Aug. 12	T. Duckham, E...
	Fair crop; rather blighted	Over average	....	....	Very good	Diseased	Good, but 4-5ths spoiled	Failure	Good	Aug. 6	W. Price, Bena... Ross
	Under average	Average	Average	....	....	Over average	Not average	....	Over average	Aug. 15	H. Price, C... Monmouth
	Not average	Average	Average	Not average	Average	Diseased slightly	Average; ill got	....	Over average	Aug. 11	J. Mathews, ... more
WORCESTERSHIRE.	Average	Average	....	Not average	Not average	Good, some diseased	Light; hurt	Indifferent	Good	Aug. 6	R. Smith, D...
	Not average	Good	Good	Blighted	Good	Diseased	Various	Indifferent	Good	Aug. 14	J. R. Randell, ...
	Very thin and under average.	Average	Average	Not average	Good	Fair, but much diseased	Light and half spoiled	....	Good	Aug. 19	J. Rawlings, ...
	Blighting and under average.	Good	Average	Good but blighted	Average	Very much blighted	Ill got	....	Improving	Aug. 15	H. Hudson, Pe...
WARWICKSHIRE.	Much improved, but too thin for a crop	Full crop and very fine	....	Generally good	Good	Great produce; much diseased	Capital crop; ill got	Badly, but improving	Very good	Aug. 17	J. C. Adkins, Str... on-Avon
	Average	Not average	Good	Over average	Average	Much diseased	Great crop, 2-3ds damaged	....	Very promising	Aug. 15	J. F. Tulloch, W... hall
	Average	Full average	Fair	Good	Over average	Good but diseased	Deficient; ill got	Middling	Good	Aug. 8	T. Bywick, S...
NORTHAMPTON	Not average	Not average	Average	Blighted	Average	Diseased	Damaged	Various	Various	Aug. 17	J. H. Barberry, ...
	Much below average	Full average	Full average	Good	Fair; hurt	Good, but diseased	Fair crop; variously got	Good	Good	End of Aug.	J. B. Smeaton, ...
	Rather under average; early sown defective	Generally over average	Very good; over average	Very good; over average	Various; on the whole over average	More diseased than in any previous year	Very little; well got	Very indifferent	Good plant; much diseased	Middle of Aug.	Owen Wallis, ... Grange
	Thin and good ear, not ripening well	Good	Good	Irregular	Good	All going	Light; ill got	Inferior	Various	Middle of Aug.	W. Shaw, ...
	Much under average	Average	Rather under average	Good	Good	Much diseased	Very light; ill got	....	Over average	Aug. 15	P. Love, Northam...
HUNTINGDON	Average	Average	Average	Average	Average	Fine; much diseased	Light	....	Very good	Aug. 12	R. Beart, Godmanchester
CAMBRIDGESHIRE	Not average	Over average	Full average	Average	Over average	Over average	Not average	....	Very good	Aug. 8.	P. Purves, Br...
	Generally good, but where thin mildewed	Materially less than usual	Generally good	Under average	Full average	Good, but showing disease	Half a crop ill got	Half a crop	Full plant; hurt by drought	Aug. 8	Jonas Webo, Ba...
	Not average; some blight	Average	Various; average	Average	Good	Very badly diseased	Good	....	Bare average	Aug. 10	A. S. Ruston, Cha...
	Good here, but under average around	Good; average	Good crop	Bad in the district	Good	Diseased	Various	....	Not improving	Aug. 12	John Hudson, Cas... acre
NORFOLK ..	Fair average	Fair average	Good	3-4ths of a crop	Full crop	Average	Not average	Not average	Full average	Aug. 12	W. H. Taylor, Wym... ham
	Hardly average	Fair crop	Very good	....	Average	Worse than ever	Good; ill got	Not good	Good	Aug. 12	T. Brown, Dan... Market
SUFFOLK ..	Good	Not average	Good	....	Good	Very diseased	Light crop	....	Pretty good	Aug. 12	H. B., Rougham
	Average	Average	....	Average	....	Diseased	Average	....	Deficient	Aug. 14	G. Edwards, Framlingham
	On light soils, average	Average	....	Not average	Generally good	Rapidly diseased	1-3d spoiled	Not so much grown	Improving	Aug. 10	C. Wilton, Wickham Market
	On clays, 1-3d under average	Under average	....	Blighted							
	Average	Average	Not average	Not average	Average	Good; partly hurt	Light; well got	Very good but thin	Done well	Aug. 8	*T. Crisp, Butley Abbey*
	Fair crop	Various	Very good	Various	Excellent	Very diseased	Moderate; well got	Fair	Well	Aug. 12	H. Edwards, Woodbridge
	Average	Not average	Not average	Average	Average	Much diseased	Good; ill-got	Failure	Generally good	Aug. 12	L. O. ..., Saxmundham
BEDFORD ..	Average	Average	Average	Good	Good	Much diseased	Ill got	Not good	Not good	Aug. 12	W. Lavender, Biddenham
	Not average; some blight	Good	Average	Promising	Good	Ill; diseased	Not average; ill got	Bad	Good	Aug. 12	W. Pike, Stevington
BUCKS......	Under average	Average	Average	Average	Average	Much diseased	Average; ill got	Bad	Good	Aug. 15	W. G. Duncan, Bra... well
	Generally good	Good	Good	Blighted	Good	Good; but diseased	Good	....	Very good	Aug. 10	E. Evans, Windsor
	Not average	Average	Average	Over average	....	Badly diseased	Under average	....	Very good	Aug. 12	A. Fraser, Clyvine
	Not average	Average	Average	Various	Good	Diseased	Not average	Good	Good	Aug. 16	W. Smith, Wo...
	Good; but much under average	Very good	Light	....	....	Generally diseased	Light; ill got	....	Very promising	Aug. 19	G. R. G. Relph, ...
	On light soils fair; on clays very thin	Average and good	Very good	Average; but blighted	Heavy; but hurt	Good; but diseased	Under average; very ill got	Injured by grub	Falling off	Aug. 17	F. Beckingham, Ma... mouth
	Rather thin	Fair	Good	Injured	Fair	Disease extending	Light, and ill got	Look well	Good	Aug. 12	W. H. Little, Abergavenny
GLOUCESTERSHIRE	1-5th under average	Average	Average	1-4th under average	Full average	Full crop; badly diseased	Bare average; half spoiled	Failure	Fair	Aug. 12	W. Woodward (... miles round ...bury)
	About average	Over average	Average	Under average	Excellent	Hurt	Light; ill got	Bad	Good	Aug. 10	J. Coleman, Cirencester
	Average	Average	Over average	Below average	Over average	Average; blighted	1-3d under average	....	Over average	Aug. 7	E. Ruck, Castle Ha...
	Hardly average	Full average	Average	Good, somewhat blighted	Over average	Much diseased	About average	....	General plant	Aug. 14	G. Edmonds, ... Leach
	Rather under average	Over average	Over average	Under average	Average	Good; but diseased	Under average	....	Good	Aug. 12	J. Cobham, Thornbury
	About average	Over average	Average	Various	Full average	Diseased	Fair; ill got	....	Over average	Aug. 12	S. Rich, Didmarton
	Barely average	Full average	Average	Good	Over average	Very badly diseased	Good quantity, poor quality	Not average	Excellent	Aug. 12	J. F. Peacey, Wa... comb
OXFORD	Not average	Good	Good	Good	Good	Much diseased	Not average	Failure	Good	Aug. 5	S. Druce, Eynsham
	Full average on light soils; thin and poor on clays	Full crop, and over average	Good crop and good quality	Good	Over average	Great crop, much diseased	Average, ill got	Not half a crop	Full plant	Aug. 10	M. Savidge, Sarsden
BERKS......	Various: about average	Generally very good	Thin, but well covered	Average, partly blighted	Never better	Very much blighted	Moderate, good aftermath	....	Not going on well	Aug. 5	J. Owen, Clapton
	Barely average	Good	Good	Average	Variable	Good, but diseased	Good; ill got	Thin and unhealthy	Good	Aug. 12	E. W. Moore, Coleshill
	Good	Average	Not average	Much blighted	Good	Much blighted	Not average	. . .	About average	Aug. 12 !	S. M. Plummer, Pe... more
	About average	Over average	Average	Various	Over average	Blighted	Average	....	Satisfactory	Aug. 8	J. Adnams, Newbury
	Fair average	Uncertain	Average	Blighted	Excellent	Worse than ever	Short and ill got	Deficient	Good	Aug. 10	T. Chandler, ... bourne
	Average	Good average	Average	Very good	Very fine	Much diseased	Fair	Light and patchy	Good	Aug. 8	T. Fordham, New...
	Short, good	Average	Good	Excellent	....	Diseased	Fair	....	Good	Aug. 2	J. Williams, Abingdon
	Full average	Good	Good	....	Good	Much diseased	Average	....	Good	Aug. 1	J. B. Spearing, M... ford
HERTS......	Average	Full average	Full average	Under average	Full average	Good, going	Light	Thin	Good plant	Aug. 10	——, St. Alban's
	Over average	Average	Over average	Very bad	Over average	Diseased	Average; ill got	....	Very good	Aug. 12	J. B. Lawes, Rothamsted
	Thin, but ripening kindly	Good quantity and quality	Generally good	Blighted	Good	....	Light, and ill got	Thin	Very good	Aug. 10	G. Webb, Redburn
ESSEX	Below average	Over average	Over average	Over average	Over average	Abundant, but diseased	Not average	Bad	Very good	Aug. 7	J. J. Mechi, Kelvedon
	Thin, and under average	Full crop	Fair average	Damaged	Good	Bad	Fair, ill got	Half a crop	Promising	Aug. 5	H. Dixon, Witham
	Full average	Full average	Over average	Average	Very good	Capital, but going	Average, well got	....	Good	Aug. 12	W. Barfield, Dunmow
	Under average	Under average	Average	Not average	Over average	Partly diseased	Not average	Thin	Averag	Aug. 5 !	A. Hardy, Maldon
	Good average; various	Look very fine	Never finer	Various	Very good	Not so bad as last year	....	....	Not good	Aug. 8	G. Wilkins, Wix, Manningtree
	Good	Good	Fair	Good	Good	Blighted	....	Middling	Good	Aug. 7	C. Hall, Romford

APPEARANCE OF THE CROPS—(*Continued*).

COUNTY.	WHEAT.	BARLEY.	OATS.	BEANS.	PEAS.	POTATOES.	HAY.	MANGEL WURZEL.	TURNIPS, &c.	HARVEST GENERAL.	NAME AND ADDRESS.
ENGLAND.											
MIDDLESEX	Average	Average	Average	Blighted	Average	Symptoms of disease	Average	....	Good	Aug. 7	C. Webster, Uxbridge
	Under average	....	Average	Much blighted	....	Full crop; blighted	Over average	Under average	Good	Aug. 7	T. Hewitt, Cranford
SURREY	Under average	Full average	Good	....	Light	Good, but blighted	Light	....	Late	Aug. 6	——, Carshalton
	Under average, being thin of plant	Good	Over average	Very deficient	Average	Half rotten	Average; ill got	2-3ds of a crop	Late; good	Aug. 6	W. Willis, West Molesey
KENT	Average; hurt by wind	Over average	Full average	3-4ths of average	Average	Various	Good	Bad	Good	Aug. 1	W. Manser, Ramsgate
	Average	Generally average	Over average	Not yielding good	Over average	Much diseased	Good	Thin	Good	Aug. 14	Mark Sandford, Dover
	Thin, but good average	Over average	Exceedingly good	Very bad	Over average	Better than for years	Short crop	Deficient plant	Good	Aug. 5	R. Matson, Wingham
SUSSEX	Barely average	Average	Average	Much under average	Average	Much diseased	Average, fairly got	Improving	Good	Aug. 6	H. S. Hayward, Folkington
	Under average	Fair	Average	Rather blighted	Good	Blighted	Average	....	Average	Aug. 19	J. Brotherston, Robertsbridge
	Under average	Over average	Over average	Very bad	Very good	Diseased	Medium	Partial	Good	Aug. 5	H. E. Sadler, Chichester
HANTS	Average	Good	Good	Blighted	Good	Good; diseased	Not average	Bad	Good	Aug. 9	H. Raynbird, Basingstoke
	Average	Over average	Over average	....	Over average	Badly diseased	Average; damaged	....	Never better	Aug. 5	J. Blundell, Southampton
	About average; but short acreage	Full average	Average	Not average	Over average	Luxuriant; but diseased	Not average	....	Very promising	Aug. 6	J. T. Twynam, Winchester
WILTS	Barely average	Good	Good	Good	Good	Large crop; ¼ diseased	Good; ill got	....	Good	Aug. 14	——, Chalk Hill, near Swindon
	Average	Over average	Fair	Middling	Good	Sadly diseased	....	....	Fair promise	Aug. 13	J. Stratton, Manningford, Bruce
	Average	Average	Over average	Average	Over average	Good; but going	Average; ill got	....	Promising	Aug. 15	G. Brown, Avebury
SOMERSET ..	Over average	Very good	Over average	Various	Very good	Worse than ever	Rather light and ill got	....	Generally good	Middle of Aug.	J. W. Eastment, Wincanton
	Under average	....	About average	....	....	Good, but disease showing	Nearly spoiled	....	Rather over average	Sept. 6	——, Brendon Hills
	Good	Average	Thin	Good	Good	Partly diseased	Indifferent	....	Good	Aug. 20	C. P. Collyns, Dulverton
	Thin; under average	Over average	Over average	....	Over average	Never worse	Much hurt	....	Good	Aug. 13	R. Damen, Dorchester
DEVON.....	Deficient	Good	Not average	....	....	Blighting	Various	Various	Good	Aug. 13	G. Langdon, Barnstaple
	Thin; under average	Inferior	Inferior	....	...	Good; but diseased	Light	Bad	Good	Middle of Aug.	P. Cowan, Tawstock
DORSET	Not average	Average	Full average	....	Good	Diseased	Average	....	Good	Aug. 15	W. J. Voss, Corfe Castle
	Under average	About average	Average	....	Good	Much diseased	Short	....	Promising	....	J. Furmedge, Beaminster
	Under average	Average	Various	Fair	Good	Bad	Light; ill got	....	Good	Aug. 12	W. J. Pope, Bridport
	Thin but well-filled	Good	Various	....	Good	Good but going	Light; ill got	Bad	Good	Aug. 10	G. Turner, Barton
	Bad	Average	Average	....	....	Diseased	Ill got	....	Inferior	Aug. 15	——, Totness
	Under average	Average	Very fine	....	....	Much diseased	Good; damaged	Bad	Late, but good	Aug. 15	S. Cornish, Kingsbridge
	Rather under average	Over average	Over average	....	....	Good crop; going	Underaverage; ill got	Failure	Very fine	Aug. 12	R. W. Clark, Plymouth
	Thin, weak, and below average	Full average	Very unequal	....	....	Fine, but going	Late; light; ill got	Poor	Luxuriant	Aug. 20	J. Benson, Tavistock
CORNWALL	Thin	Good	Good	....	....	Much diseased	Ill got	....	Good	Aug. 15	J. D. Simmons, Killiganoon
	Under average	Full average	Over average	....	....	Good, but diseased	Light	....	Good	Aug. 7	J. Wills, Launceston
	Under average	Average	Over average	....	....	Much diseased	Deficient	....	Various	Aug. 13	J. Michell, Truro
WALES.											
CAERNARVON	Not full crop	Light	Light	Light	Light	Partlydiseased	Light	....	Fine	End of Aug.	J. Williams, Bodafor
CAERMARTHEN	Good; thin	Very good	Average	....	....	Very good, but going	Half average	....	Not good	Mid. of Aug.	J. Burnell, Llanelly
	Under average	Average	Average	Not average	....	Bad	Bad	....	Average	Aug. 19	J. Muscott, Jun., Langharne
IRELAND.											
	Tolerably good	....	Very good	....	....	Very fine, rumours of disease	Tolerable	....	Very fine	Middle of Sept.	——, Garvagh
DERRY	Good	Good	Full average	....	....	Good; blight commencing	Over average	....	Promising	Sept. 1	C. Pollock, Magherafelt
ANTRIM	Under average	....	Good	Bad	Average	Leaves spotted	Light	....	Good	Aug. 25	J. Burmiston, Randerstown
TYRONE	Not average	Good	Over average	....	....	Good	Good	....	Very good	Aug. 20	W. Paterson, Newtown Stewart
DOWN	2-3ds of average	Full average	Full average	Full average	....	Good, but diseased	Light crop	....	Luxuriant	Aug. 17	J. Andrews, Comber
	Barely average	Scarce and late	Late; average	Good	Scarce and late	Greatly diseased	Good average	....	Good	Sept. 1	W. M'Cleary, Portaferry
ARMAGH ..	Not good	Under average	Good	Good	....	Slightly diseased	Average; ill got	....	Good	End Aug.	W. Boyd, Armagh
	Not good	....	Excellent	....	....	Blight appearing	Good	....	Very good	Sept. 8	R. B. Hardy, Cowley Hill
FERMANAGH	Not average	....	Over average	Average	....	Good; going	Not average	....	Average	End Sept.	A. Mair, Brookboro'
MONAGHAN	....	....	Average	....	....	Diseased	Light	....	Pretty good	Sept. 1	Rev. T. Middlemiss, Castleblaney
LEITRIM....	....	....	Above average	....	....	Blighted	Weighty	....	Good	Sept. 15	J. Lindsay, Manor Hamilton
LOUTH......	Sound, but light	Average	Not average	Tolerably good	....	Luxuriant, but diseased	Sadly deficient	Lost	Excellent	Sept. 1	W. M'Culloch, Dundalk
ROSCOMMON	Not average	....	Over average	....	....	Under average	Average	....	Over average	Mid Sept.	J. Kelly, Booklodge
	....	....	Over average	....	....	Bare average	Average	....	Very good	Mid Sept.	D. Boyd, Springfield
MAYO	Average	Very good	Excellent	....	....	Luxuriant, but going	Excellent	....	Very fine	Sept. 1	G. Hildebrand, Westport
CAVAN	....	....	Very fine	....	....	Very good, but diseased	Various	....	Promising	Sept. 1	T. Chambers, Bailieboro'
	....	....	Very well	....	....	Fine, but blighted	Much injured	....	Good	Mid Sept.	J. H. Nesbitt, Capt., Belturbet
WESTMEATH	Average	Light	Short	....	....	Diseased	Average	....	Good	Sept. 1	W. Newburn, Mullingar
CARLOW	Average	Not average	Average	....	....	Over average	Much under average	....	Good	Aug. 25	J. De Renzy, Clonegal
GALWAY..	....	Fair	Good	....	....	Stalks blighted	Good	....	Promising	Middle of Sept.	G. Lamb, Mountbellew
CLARE	Not average	Not average	Light	....	....	Diseased	Injured	....	Average	Aug. 20	W. Digan, Killaloe
	Half crop	Not average	Not average	....	....	Rotting	Bad	....	Various	Aug. 20	E. Bennett, New-market-on-Fergus
TIPPERARY	Bad	Good	Good	....	....	Blighted	Good	....	Good	Aug. 24	W. Ryall, Cashel
	....	....	Over average	....	....	Diseased	Average	....	Average	Aug. 26	R. D. Bolton Massy, Ballywire
WEXFORD	Fair	Good	Light	....	....	Diseased	Light	....	Very good	Middle of Aug.	G. Glascott, P. P., Camolin
KILKENNY	Half average	Average	Average	....	....	Blighted	¾-ths average	....	Not average	Aug. 15	P. Grace, Freshford
KERRY	Middling	Middling	Good	....	....	Various	Good	....	Good	Sept. 1	J. Creagh, Tarbert
	Good	....	Very good	....	....	Very good	Short	....	Very good	Sept. 8	J. O. Sullivan, P. P. and V. G., Kenmare
CORK	Much under average	Average	Good	....	....	Under average	Average	Failed	Good	Aug. 20	F. H. Twinam, Kanturk
	Bad	Good	Good	....	....	Good; going	Good; ill got	....	Good	End of Aug	D. Clanchy, Charleville
	Not average	Average	Not average	....	....	Average	Much under average	....	Over average	Middle of Aug.	J. Byron, Shanballymore
	Not promising	Good	Short	....	....	Injured	Not average	....	Good	End of Aug.	S. Piddell, Kildorrey

Home Correspondence.

Highland and Agricultural Society's Meeting at Perth.—In your report of the above meeting we are mentioned as exhibitors of ploughs. Will you allow us to state that we declined to compete for any of the Society's prizes, or perhaps our names would have appeared as usual on the prize list. *James and Frederick Howard.*

Our Last Wheat Crop.—The corn calculation for the harvest year (August to August) being now ended, it appears by it that the money value of the Wheat crop of 1860, in England and Wales, is less by 11,400,000*l.*, than was the average money value of the crops of 1855-6-7-8, and 9, and the diminished value to the growers of crop 1860, as compared with the average of the five preceding years, is to the extent of 60*s.* per acre. *Corn Rent Registry, P. Cowan, Tavistock, Devon, August* 10.

Somersetshire.—"The present appearance of the crops," Mid-Somerset, August 6, is—Wheat, average crop; straw, spotted in places; Oats, above average; out-mowing general; Peas look well, many cut; Beans, average; Potatoes, disease virulent on heavy clay, worse than last year; Swedes and Turnips good; Mangels vary; early hay made very well, much of the late hay spoiled; Apples, not the fourth of a crop in this part of Somersetshire; 5*l.* a ton, price of good old hay in this part of Somersetshire; harvest will be general next week. *H. L., Keinton, Somersetshire.*

The Potato Disease.—Last week (July 31st) I inspected with a friend upwards of 100 allotment gardens for the purpose of determining prizes for cultivation and produce for a horticultural society in this neighbourhood. The Potato disease had then shown itself, somewhat later than last year, but threatening as fatal a result, and since then it has been daily and rapidly spreading, and in field cultivation coming under my notice it appears equally destructive. In the midst of this blight and upon the same character of soil, I have a field of five acres, cultivated upon the system of which I gave a detailed account in the *Agricultural Gazette* of last year, to which your readers may refer. Up to this day my field appears in full vigour of growth, and promises a good crop, and if this fine sunny weather continues, I think I may hope to have—not an entire freedom from this great calamity, but a great proportion of sound Potatoes. I have abandoned the old varieties, Shaw's, Regents, &c., and have replaced them with seed from Scotland, Ireland, and Lancashire. My friend Mr. Skirving sent me a sort called Wellington's from them last year. I had 90 bushels of sound to only three unsound. From the rest of my crop last year I had two-thirds good. My men are instructed to look out for any spots which appear in Potatoes as well as in other plants, and if the yield and quality of these tubers appear promising, they are set apart for future planting. I have two acres which have been thus selected. Improved varieties of Wheat and other grain owe their origin to careful observation of this kind. *Henry Dixon, Dorward's Hall, Witham.*

The Management of Sheep.—I have read the article on sheep in your Paper of July 29. I have long wished to have a flock of cross-bred sheep, but have been deterred by fear of not succeeding. This is a Down country (large Westdowns, not Southdowns). I have been very successful in breeding lambs from both Cotswold and Leicester rams; but these I have always sold fat. My farm is more suited to a breeding flock, having good rough pasture for the ewe flock, and I am determined to keep one. The point is—what shall it be? (1) a Down flock; (2) cross-bred ditto to breed from the cross and so in time establish a flock; if so, should it be Leicester or Cotswold rams? (3) to cross with either Cotswold or Leicester and fatten the whole produce, buying in each year ewes to replace the old ones no longer fit to breed from, as they do in Norfolk and other parts of England? One drawback to the first is that by introducing each year fresh sheep I may get foot-rot or other disease. No. 2 is the best, if with ordinary care and judgment I can succeed. I dare say you can advise me of your own knowledge as to this; if not you can gain the information for me. Assuming you advise me against this No. 2, what do you say to Nos. 1 and 3 in regard to each other. If you advise in favour of No. 2, can I get 150 half-bred ewes, at a market price, at any fairs? *Correspondent.* [We should be glad if this inquiry should lead to a discussion of the important subject to which it refers.]

Societies.

ROYAL AGRICULTURAL SOCIETY'S SHOW AT BELFAST.—[We add to our remarks on the Cattle Classes given last week the following report of the Sheep and Swine exhibited.]

The Sheep Classes.—It struck us as not a little remarkable that the sheep classes at this Great National Exhibition seemed to possess so little interest to the intelligent tenant farmers of Ulster. Our old friend, Mr. Owen's shepherd, whom you cannot more highly compliment than by a minute inspection of the best points of his best sheep, was not in his usual mood. Mr. Thunder, too, who has spared neither money nor pains to exhibit at our national shows a class of sheep worthy of the soil of Meath, seemed disappointed at the small share of appreciation accorded to his noble Leicester shearling ram, of as pure blood and in some points as meritorious as Holmpierrepoint ever produced. This animal stood second at Leeds, and was hired for seventy guineas by the spirited breeder of Navan. He is entered in the catalogue as having been bred by the exhibitor, but that is a mistake, as he was bred by Mr. Sandy. He wins for Mr. Thunder on this occasion the first prize and the Cork Challenge Cup, value 50*l.*, as the best shearling ram in the long-woolled classes. Even Mr. Owen's zealous and intelligent shepherd, whose zeal for the success of his master's sheep equals that of the master himself, saw nothing wrong in being placed second (as he was) to such a well-ribbed, well-set, and well bred shearling. Mr. Marris, of Lincolnshire, who exhibited several animals in this section, could not rise higher than a high commendation, Mr. Owen, of Blesinton, having taken second and third prizes.

In the Aged Ram Class Mr. Owen's two-shear Leicester was placed, and a splendid first he made. The fickle fortune of our shows has been singularly illustrated in the case of this animal. A royal medallist at the Dublin meeting, he was sent to the Cork local show last week, not without hopes of success. The presiding genius there did not think him worthy of any notice. The Belfast judges have shown more judgment; for this is perhaps as good an Irish bred Leicester as there is in Ireland. His chest is capacious and his back is broad and even. Mr. Marris got second prize in this section, and Mr. Owen third. In the section devoted to pens of five shearling ewes Mr. Marris was first, Mr. Owen second.

In next section, pens of five grown ewes, Mr. Owen first; second, Lord Bangor; commended, Sir F. Heygate, Bart. In section "pens of five ewe lambs," C. P. Leslie, M.P., was first. Of the long-woolled sheep not qualified as Leicesters there were some good Cotswolds and Lincolns. Mr. Carroll, of Nenagh, exhibited the best sheep in this section. Mr. Page, a sheep dealer, and who is industriously driving a trade with Irish flock owners, showed a few good Lincolns. In the Southdowns Mr. Scott Skirving, of Drem, N.B., had it all his own way, having carried off all the prizes in the four sections into which the class was divided, amounting to 32*l.* Why is it that all Ireland exhibited made only five entries for the eight prizes in these four sections?

Among the short-woolled sheep not qualified as Southdowns we were glad to notice very excellent Shropshires. Mr. Broughton's shearling Shropshire ram, which won the first prize in his section, and the Cork Cup, value 50*l.*, as the best shearling of all the short-wools, is a fine specimen of this now established breed. With the exception of this valuable prize the bigger half of the prizes went to Mr. C. W. Hamilton, of Dunboyne, who has laboured with great success to introduce this breed to the notice of Irish sheep farmers. In the aged ram class he got first and second prizes, and his pen of five shearling ewes was first, Mr. Broughton's coming in second.

The Pigs at Belfast formed the best collection which we have seen at any meeting of the Royal Irish Society. This, too, was the department of the exhibition which seemed to attract the largest attendance. As you went round and round again to study the points of some animal you were generally jostled in this section. Among the Shorthorns you had ample room, and in the sheep you had the ground all to yourself. And certainly, the pig fancier could in the pens at Belfast cultivate his taste and improve his judgment. The class was divided into two great classes, large and small, which is quite right, so far as it goes. But why not go a step farther? why not separate the breeds? everybody knows that the Berkshire, the Yorkshire, &c., have well marked characteristics—that each, too, is best adapted to a given set of circumstances. Now, surely, that being so, it is impossible fairly and justly to decide in a general way between a good Berkshire and a good Yorkshire.

Let us apply these remarks to the 1st section, Young Boars. Mr. Becker, of Waterford, won 1st prize with a capital Berkshire; Mr. Wainman, of Yorkshire, gaining 2nd place with a splendid Yorkshire pig. We have some experience of these two breeds; and with the result of that experience before our mind we are at a loss to comprehend on which principle the judges proceeded. We have no doubt they have acted to the best of their judgment and according to their instruction, but even supposing that one of them used, as was stated in the show yard, an opera glass, still the principle of the adjudication remains fallacious.

In Section II., Boars between 18 and 36 months, the 1st and 2nd prize pigs are Berkshire. The former belongs to Mr. Glenn, of Londonderry, the latter to Lord Clermont. Both are good boars. The 1st is 30 months old; the other 19, and is a symmetrical beast, whose every limb is well set.

In Section III., Young Sows, Lord Clermont also stands 1st with a Berkshire; Mr. Young of Ballymena, 2nd, with another of the same race, and of rare width and quality along the back; Mr. Wainman being highly commended for his Yorkshire, Kate Coverly.

In Section IV., Grown Sows, Lord Lurgan won first place with a very handsome Cumberland (white) against a capital second Berkshire belonging to Mr. Joyce, of Waterford. In the small breed divisions Mr. Wainman carried off the lion's share of the prizes, three out of four firsts, and one second, all with his famous eared Yorkshires.

The section in which Mr. Wainman was ... the aged sow class (VIII.) in which he was ... Mr. Glynn with a very fine Berkshire. In ... Young Sows, Mr. Wainman's first prize animal ... Bird, pigged February 1860, is perfect in ... We must congratulate Mr. Wainman on the ... his skill and enterprise. He has put increased ... valuable joints, and diminished the less valuable ... Most of the visitors to pen 486 enjoyed a ... the diminutive snout and head, coat and ... lucky occupant. Mr. Blakiston, of Belfast ... proud of his second prize in such select ... the Young Boar class, Lord Clermont's ... Cumberland boar played a capital second to Mr. Wainman's First Fiddle, whose progeny are of the ... quality as the Lucky Bird.

And in Section VI., Aged Boars, the ... Education Commissioners' "Captain" made ... second to Mr. Wainman's "Broughton." The ... of pure Windsor descent, and reflects no discredit on the Windsor blood.

CIRENCESTER COLLEGE: THE THIRD ... DINNER OF THE ROYAL AGRICULTURAL COLLEGE ... took place at the Scarborough Hotel, Leeds ... 16th of July last. There was a large attendance of members, who are all either old or present ... the Institution at Cirencester, and the ... also favoured with the presence of E. H... M.P., who kindly presided; Messrs. E. B... Burn, P. M'Lagan of Pumpherstone, and E. ... Cricklade. Several speeches were made ... proposed, principally in reference to the ... were very pleased to learn from the Hon. ... report that the Society is flourishing, and ... increasing list of members proves that the ... the Society, viz., the enabling members to meet ... annually and renew their friendly feelings, ... compose and discuss their varied experience ... thoroughly appreciated. It was announced that ... meeting of 1862 would be held at the Crystal Palace.

Miscellaneous.

Wells: The Relations of Machinery to the Labourer.—Last week John Berriman was indicted for publishing a malicious libel.—It appeared that the prisoner ... been in the police force of this county, but had left. Since that time he had been a labourer and ... keeper. On the 22d of June, some time in the night, a placard was affixed to the church-door of Portbury, near Bristol. That placard was in the handwriting of the prisoner, and some paper was found in the prisoner's house which exactly fitted and corresponded with the half-sheet of paper upon which the libel was written. A farmer in the neighbourhood stated that he used a mowing machine, and he believed that the threat contained in the placard was that it was intended to set fire to his property. The following was the libel:—

CAUTION.—"In consequence of so much Machinery ... into the agriculture districts, it is well known has ... many honest Families of common Necesseries; the Thrashing Machine, for instance, was brought to work well, ... two Mens labour through the winter on every Farm of ... acres. Now, as winter aproaches, so many men ... wanted; what am I to do? I have work'd for ... summer. Oh, the Waywarden will give you work ... roads; you can earn a shilling a day cracking stones ... a man can do if he choose to work all weathers and ... his Constitution, if not there is an order for the Union Workhouse. That has passed off quiat (for why); if I ... behind now I shall be able to make it up in the ... Reaping and Mowing, for I must work 18 hours ... to get myself out of dept. But now this piece of Machinery known as the Mowin Machine is brought to work, ... time to think how we are going to live winter ... But whoever have it to work on their farm must ... all know if a Farmer have his premises burnt ... Cattle its all insured; I must write to the office ... amount of damage, the money is forthcoming, generally ... as much claimed as the property destroyed. But the ... companies are not too strong; if there is a great ... they must give way. "So do not depend all on Insurance." ...

Mr. Prideaux contended that even should the ... consider this placard to be in the handwriting of the prisoner, still it was not a libel, for a man has a ... to express his sentiments and feelings on any ... if he did not do so in terms calculated to do ... mischief. There was no proof that the prisoner posted up the libel; and with regard to the ... found in the prisoner's house, some person might have borrowed the half-sheet of the prisoner.—The ... Judge, in summing up, said this was a case ... the particular attention of the jury. This ... described to be a seditious libel, but a malicious ... with three intents—first, to incite the Queen's ... to meet and break the peace, and to set fire to ... tural machines and other property of persons ... about; secondly, to incite to riot and tumult; thirdly, to incite the Queen's subjects to ... property of such farmers and inhabitants as ... a mowing machine, and to induce the Queen's ... to commit the crime of arson. They must be satisfied that the defendant published this libel ... were not satisfied that the defendant published ... then there would be an end of the case, and they ... the defendant. If they found he did publish ... then they must consider whether or not ... malicious libel. Generally speaking, the construction of a written instrument was matter for the ...

the judge, but not so in a case of this description. The law had provided that the jury were to determine whether it was a libel or not. The first question, therefore, would be whether the defendant had published the paper. Then came the question whether this was a libel or not. He was bound to declare his opinion, but that was not to rule them. They were to decide for themselves. It seemed to him that whether this was a libel or not would depend upon the intent with which it was written. It was open to any person to discuss a question of public import, and if he did so in a calm and temperate manner it was no libel. In his opinion, if the defendant published this paper with either of the intents he had mentioned, it was a libel.—The jury found the prisoner *Guilty*, but recommended him to mercy on the ground of his good character.—The learned Judge then proceeded to pass sentence. The prisoner was not even an agricultural labourer, and therefore had not even that poor excuse to urge. It was therefore a most wicked act, and he must sentence him to six months' imprisonment.

The New Drainage Act.—Let me congratulate agricultural England on having obtained "An Act to Amend the Law relating to the Drainage of Land." It is a measure that will take its rank with the General Enclosure Act and the Tithe Commutation Act in the benefit it will afford the landed interest specially, and the country generally. The Act, as might be expected from its character, contains some practical defects, which will command amendment when its working powers are tried, and those defects are made apparent to landowners as well as to engineers; as it stands, however, it contains many enlarged and most valuable provisions for outfall drainage. We do not obtain this boon before it is due. We have only to examine the quantity and character of the corn now coming to the sickle to appreciate how much the produce of this country depends upon deep under-drainage and deep cultivation. The crops throughout are remarkably well headed, but it will be found that the length and weight of the ears are in proportion to the depth of stirred soil; and to retain unaltered the old laws relating to the present shallow, tortuous, obstructed outfall channels, while the efforts of individuals are directed to increasing the depth of under-drainage, and to secure by steam cultivation and other appliances the deepening of productive soil, was a strange inconsistency. The new Act will allow landowners under proper restrictions to deepen and straighten existing watercourses and enlarge the outfalls, so as to meet the growing requirements of the day; it provides for the removal of mill obstructions; it will facilitate the formation of districts for drainage without special legislation; and it will empower private owners to procure outfalls through lands belonging to other owners. Every agriculturist will recognise the value of these powers. If the committee appointed by the Hanover Square meeting in December last has done its duty in placing before the Government the requirements of the country, I am sure the landed interest will acknowledge that the Government and the Legislature have responded to the call with a determination to give them a practical and sound measure. *J. Bailey Denton, in the Times, Stevenage, Herts, August* 8.

Girdwood's Edinburgh Wool Sales: August 8.—At this sale the attendance of buyers was larger than usual, and from the favourable turn in trade, stimulated by the lowering of the rate of discount, and the prospect of a good harvest, prices for white wools took a considerable start over even the wool fairs of last week, and an advance on all white Cheviot and half-bred wools of 3*s*. to 5*s*. was obtained. Laid wools have not as yet met with so much inquiry, but now that white wools have rallied so much, laid Cheviots will speedily participate in the advance. Prices for them were, however, good for what were sold. The following may be quoted as the prices of fair to good wools—Half-bred hogs, 36*s*. to 40*s*. 6*d*.; ewes, 32*s*. to 35*s*.; cross hogs, 32*s*. to 35*s*.; Cheviot hogs, 32*s*. to 37*s*. 6*d*.; ewes, 31*s*. to 34*s*. 6*d*.; black-faced white, unwashed, 14*s*. to 16*s*. 6*d*., washed, 16*s*. 6*d*. to 22*s*.; laid Cheviot, 18*s*. to 22*s*. unwashed, and 20*s*. to 25*s*. 6*d*. for washed wools, 26*s*. 6*d*. being refused for hogs which are held for a higher figure.

Calendar of Operations.

AUGUST.

South Essex: *August 5th*.—Harvest is general. Wheat, a very good crop, and up to the mark where it was sown early with prime seed. Of my Piper's or Improved Smoothy variety, not one ear appears infected with any disease even on a large breadth. Halletts's Pedigree Nursery kind also proves with me constant and pure in stock, and with no defects, though it was unavoidably not sown till the spring. The late Autumn-sown Wheats generally are not so good, especially where last year's immatured seed have been used; this planted badly, and much of that which did vegetate proves bunted, or infested with many stinking black powdery ears or grains. The spring-sown appears to have taken more kindly than usual, and it is well that it is so, but it ought to be borne in mind that this is but an exception, which takes place but seldom only in cool and dry summers like the present. Barley and Oats are good; the latter however, as well as some of the early uncut Wheats, are shedded or beaten out by the late boisterous winds, and especially on the 3rd inst, it is reported on some farms to an extent of two sacks per acre; but two or three bushels is certainly very common. It must be admitted too, that much of the unripe corn is seriously injured by being battered and bruised by the late gales which have so unusually prevailed. Beans and Peas will be a full crop, and especially the latter. Potatoes cannot be well spoken of, but the last dry fortnight appears to have been conducive to their ripening, and where they are not crowded, are dying off with a yellow hue, and the tubers are apparently sound. Others however are black and seriously infected as usual with disease. Turnips and Mangels are doing well where a plant is secured. All my experimented crops, Wheat, Barley, Oats, Peas, and Beans, and also seeds of various kinds on the Lois Weedon principle, and on my "Improved plan of it by the Plough," instead of by the spade, are full average crops, and are satisfactory, exceeding my sanguine expectations. They are all secured, except the Wheat, and are about to be thrashed, and the same moiety of land is replanted with Turnips and Mangels, which are in a flourishing condition. Mangels, Swedes, and Potatoes sown and planted in double rows on the centre of the 7ft. 4in. stetches only, fully answer what they were intended to do on the plan, with no weeds to interfere, or to be maintained. Aftermaths of Grass and Clover are extremely short, and fruit crops are generally failure. Labourers are plentiful, but not cheap. *A. Hardy, Maldon, Essex.*—— *August 12th.*—Up to the 5th inst. I flattered myself (as did many more) that the Wheat crop and others of this year would be up to the mark; save what had befallen it by being brushed out by the winds, and this unfortunately was the forwardest and best, and I reported accordingly. Many other attentive observers and reporters were of the same opinion at that date. Since then, however, sudden heat and blighting winds have prevailed, and it is painful to know that the Wheat crop and others have undergone a sad change by being blighted, or mildewed; and this not particularly where it was misplanted, thin and weedy; so let it not be falsely attributed to this circumstance only, though this may be at fault and aggravate the case. The evil is on all the winter and spring sown crops which had made a grand effort by tillering in summer to produce late ears, as if to make up or repair the losses sustained by the slugs, and misplants from unripened seed of 1860, and other contingencies of the last wet and deplorable season. Now (August 12th) all crops late and early appear to be ready to be cut at one time, and have certainly too hastily approached to an apparently ripened condition, being ready a fortnight sooner than they could reasonably have been expected to have perfected their growth. On the whole I now fear that there will be a sad deficiency in bulk, though it may not be in quality, being much drier than last year's produce, and therefore more useful. But it is now absolutely certain that only some few early cereals will come up to or exceed an average crop, if all do not come below it; though certain fields very early sown with the best of over year seed may be superfine, such have been harvested before the blight took place, and are safe. Our climate of late years seems to have undergone a change, and of so doubtful a character, that to secure successful issues of many crops, the only remedy is to sow earlier than usual. I hope and trust it is not the case as I have described it in other districts where more rain has fallen during summer than in Essex: but I fear it is universal. *A. Hardy, Maldon.*

STATE OF THE WEATHER—BERKSHIRE.

For the Week ending August 15: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
		Max. in Sun.	Max. in Shade.	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs	Degs.	Ins.		
Friday	9 ..	74.0	72.0	57.5	65.2	64.0	0 14	W.	29 78
Saturday	10 ..	80 0	76 0	57.0	67 5	64 0	..	N.W.	29 94
Sunday	11 ..	88 0	78 0	58 5	70 7	65 7	..	W.	29 87
Monday	12 ..	86 0	78.0	60 0	71.0	66.8	..	S.W.	29.66
Tuesday	13 ..	91.0	85.0	58.5	73.2	67.8	..	W.	29.75
Wednesday	14 ..	85.0	75.0	49.5	64.7	67.2	..	S.W.	29.90
Thursday	15 ..	82.0	74.0	61.5	69.7	66.6	..	S.W.	29.65

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Address: *Ich Dien* has given us his address, which we shall be happy to hand to our correspondent.

American Horse Power: *R H H.* would be very glad to know the experience of any person who has used one of these Machines, particularly of 1-horse power. Hartas, of Pickering, Yorkshire, used to make them, and many of these machines are used in London stables for cutting chaff, &c. They are especially useful when the space at disposal is limited and valuable.

Brittany Cow: *J Williams.* Messrs. Baker, the Pheasantry, Chelsea, are dealers in these, but inquiry in your own neighbourhood will probably discover some one who has got such a cow and is already tired of her.

Emigration: *S P S.* We are unable to answer your question. You had better acquire experience on the spot before investing your capital; and we should recommend avoiding any partnership except one made there after experience both of the work and of one another under it.

Foot Rot: *Constant Reader.* Sulphate of lime powdered, 1 oz.; Sulphate of zinc powdered, 1 oz.; Creosote, 1 scruple; Stockholm Tar, 4 ozs.; Lard, 4 ozs.; to be made into an ointment and applied occasionally to the feet of the sheep and between the claws. *W C S.*

Pastures: *R H H.* The usual practice with regard to the droppings on the pastures is to knock them abroad when they have arrived at a certain degree of consistency. We believe that an old man and donkey cart might be usefully employed constantly during summer in collecting them and forming a heap, wherever there is extent and herd enough to give him work.

Poultry.—We have had an exceptional state of things as regards the supply of goods to our market all this year, but the present quantity sent is so much below the average that we can hardly attribute it all to the competition of harvest, but fancy positive scarcity must have to do with it. There have also been strange diseases among fowls in many parts of England. They have appeared to be blighted, and have what is technically termed "gone wrong" without visible cause. Prices have been, if anything, a shade better than last week. Grouse have begun their season, and as it seems the North and South are never to flourish at the same time, so after many years of complaint from Scotland that grouse were fast becoming extinct, and numerous guesses as to the reason why English moors were exempt from the scourge, we this year have the tables reversed. England has none—Scotland has plenty. We can hardly give any quotation of them this week; let it suffice to say, young birds on the 12th and 13th were scarcer than was ever known, and consequently dearer, as much as 12*s*. and 13*s*. being given.

Large Fowls	Each	4*s*.	0*d*.	to	4*s*.	6*d*.
Middling ditto	,,	2	6	,,	3	0
Chickens	,,	2	0	,,	2	3
Geese	,,	5	0	,,	5	6
Ducks	,,	2	6	,,	2	9
Pigeons	,,	0	7	,,	0	8
Rabbits	,,	1	4	,,	1	5
Wild ditto	,,	0	8	,,	0	9

To Prevent Mange: *Constant Reader.* Keep the sheep clean and dry and in good condition, and avoid infection. *S. W. S.*

THE FEEDING SEASON.—Horse and Cattle Food 35*s* per cwt.; Pig Food, 16*s*.; Dog Biscuit, 15*s*.; Compressed Beef Greaves, 12*s*. and 16*s*.; Indian Corn Meal, 14*s*.; Rice Meal for Pigs, 7*s*. 6*d*. and 9*s*. 6*d*.; Rice for Chickens, 10*s*. and 13*s*. An allowance per Ton. Remittance with Order will insure immediate delivery.
W. Jopp & Co., 6, Cross Lane, St. Mary-at-Hill, Eastcheap, E.C

No more Mildew.

JOHN BELL'S COMPOSITION for destroying Mildew on Vines, Peach and Nectarine Trees, &c., made and sold only by John Bell, in bottles, 1*s*. 6*d*., 2*s*. 6*d*., and 5*s*. each, at his Seed Warehouse, 10 and 11, Exchange Street, Norwich. A 1*s*. 6*d*. bottle is sufficient to make 12 gallons.
Agents Wanted.

Magnified Aphides.

NEAL'S PATENT APHIS PASTILS.

The following is one of upwards of 70 Testimonials received by J. Neal from gentlemen personally unknown to him.

"Half a packet, at the cost of a shilling, effectually smokes a house 50 feet long by 10 feet wide, which requires the use of half a pound of Tobacco, or 1 lb. of Tobacco Paper. The Aphis is effectually destroyed, and plants with the tenderest foliage remain uninjured.
"William Paul, F.R.H.S.,
"Cheshunt Nurseries."

Sold by all principal Seedsmen.
Price 1*s*. and 2*s*. per packet

Patentee, J. Neal, Birmingham.

KEATING'S PERSIAN INSECT DESTROYING POWDER.—Poultry, Dogs, and Plants, are effectually freed from Fleas and all other Vermin with which they are infested, by the above Powder, which is quite harmless to animal life. The Farmer, the Gardener, or the Sportsman, will therefore find it invaluable. Bugs, Cockroaches, Beetles, Moths in Furs, and every other species of Insect are also instantly destroyed.
Sold in Packets, 1*s*., 2*s*. 6*d*., and 4*s*. 6*d*. each, or post free for 14, or treble size for 36 postage stamps, by Thomas Keating, Chemist, 79, St. Paul's Churchyard, London, E.C.

Important to Grape Growers.

SPARY'S FUMIGATOR and MILDEW ANNIHILATOR (Invented and Patented by Edward Spary, F.R.H.S., Queen's Graperies, Brighton), for destruction and prevention of Mildew in Grapes, Vines, and Plants, without injury to the Fruit or Foliage.—Vide *Gardeners' Chronicle*, April 13, page 351.
Sold wholesale by John Warner & Sons, 8, Crescent, Cripplegate, E.C.; Retail of any Ironmonger, or Nurseryman and Seedsman, 25*s*. each. The material is sold in packets (with full directions for use) at 1*s*. 3*d*. each, and wholesale by Mr. W. D. Savage, Chemist, 65, Edward Street, Brighton; Messrs. Barclay & Sons, 95, Farringdon Street, London, E.C.
Prospectuses, with Testimonials, to be obtained of the Patentee, Brighton.

HENRY J. MORTON and CO., 2, Basinghall Buildings, Leeds.

Galvanised Iron Water Cistern
for Cottage Houses, &c., to contain 50 gallons, 26*s*.; 80 gallons, 31*s*. each; and 140 gallons, 37*s*., and fitted with tap, keeping the water perfectly sweet and clean; will not rust or corrode. Cisterns of all sizes.

Galvanised Iron Pumps
for Liquid Manure or Domestic Use, 3 inches diameter, 30*s*. and 32*s*. 6*d*. each; Tail Pipe for same at from 10*d*. per foot.

Galvanised Iron Swing Water Barrows
for Garden or Farm use, containing about 20 gallons, entirely formed of iron, 35*s*. 0*d*. each.

Agricultural Implements of Established Reputation.

RICHARD GARRETT and SON, Leiston Works, Suffolk,
persevere in giving their most earnest attention to the manufacture of their well-known Farm Machinery, having had 40 years' practical experience of the requirements of the English Farmer, aided by every appliance that can be made use of, for rendering it thoroughly practical, simple in construction, efficient in use, and moderate in cost; and it is with the fullest confidence in being able to give entire satisfaction that R. G. & Son earnestly solicit the combined patronage of their numerous friends and agriculturists generally.
The Recent Leeds Meeting.—A full detailed statement of the cause of R. G. & Son being absent from the above meeting will be sent postage free to any address on application.
*** Reference is permitted to parties using R. G. & Son's improved Machinery in most parts of Great Britain.
Estimates, Plans, Drawings, and Catalogues sent postage free to any address.
Richard Garrett & Son, Manufacturers and Inventors of first-class Agricultural Machinery, Leiston Works, Suffolk.

Reaping and Mowing Machines.

BURGESS and KEY, 95, Newgate Street, E.C. Prizeholders for the best Agricultural Machinery Manufactured.
ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with Burgess & Key's Screw Delivery Platform. Price 42*l*. 10*s*.
Testimonials.
A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following:—
From Mr. John Richards, *Bailiff to* Dr. N. Carne, *Dimland Castle, Glamorgan.*
"I beg to certify that I have for five years worked Messrs. Burgess & Key's Reaper in my master's Home Farm, and also accompanied it when lent to tenants on the estate. During the above mentioned period the Machine has not cut less than 1,000 acres of all kinds of crops, with the same two knives as first had with the Machine. Dr. N. Carne having given up farming, the machine is now in the hands of his tenant, Mr. D. Thomas, of Llanrwst, and is in excellent order."
M'CORMICK'S REAPER for Manual Delivery. Price 25*l*.
ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30*l*.
COMBINED REAPER and MOWER—Two-Horse Machine. Price 35*l*.
The last Machine is fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.
These Prices include Packing and Delivery at any Railway Station

JOHN FOWLER, Jun., 28, Cornhill, London, E.C.—Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free

£1000 upon the WOOLSTON SYSTEM against any other system of Steam Cultivation.
For price of apparatus and particulars apply to Mr. W. Smith, Woolston, Bletchley Station.

For Watering Gardens, Lawns, &c.

HANCOCK'S VULCANISED INDIA-RUBBER TUBING is made in 60 feet lengths, and of any size for Union-joints to attach it to Cisterns or Water Mains.

Price per Foot.

Size.	½ inch	⅝ inch	¾ inch	Price of Brass Fittings.
Slight ..	5*d.*	6*d.*	7*d.*	Branch, 12 in. long, with Stop-cock, Rose, and Jet, 4*s.* each.
Medium ..	8*d.*	9*d.*	10*d.*	
Stout ..	10*d.*	11*d.*	1*s.*	Spring Spreader 3*s.* each.
For Mains	1*s.* 2*d.*	1*s.* 3*d.*	1*s.* 5*d.*	Union Joint, ½ inch, 1*s.* each.

JAMES LYNE HANCOCK, Manufacturer,
Vulcanised India-Rubber Works, Goswell Mews, and 8, Goswell Road, London, E.C.
N.B. Illustrated Price Lists on application.

CARSON'S ORIGINAL ANTI-CORROSION PAINT is now used extensively for all kinds of Out-door Work, such as Iron, Wood, Stone, Brick, Compo, Cement, &c., and has been proved, after a practical test of 70 years, to surpass any other Paint.
For fuller particulars, see No. 25 of the *Gardeners' Chronicle*, Page 572, or apply to Walter Carson & Sons (Successors to the Inventors), 9, Great Winchester Street (near the Royal Exchange), London, E.C.
No Agents throughout the United Kingdom.

Oil Paint no longer Necessary.

HILL & SMITH'S PATENT BLACK VARNISH for preserving Iron Work, Wood, or Stone. This Varnish is an excellent substitute for oil paint on all out-door work, and is fully two-thirds cheaper. It may be applied by an ordinary labourer, requires no mixing or thinning, and is used cold. It is used in the grounds at Windsor Castle, Kew Gardens, and at the seats of many hundreds of the nobility and gentry, from whom the most flattering testimonials have been received, which Hill & Smith will forward on application.
Sold in casks of about 30 gallons each, at 1*s.* 6*d.* per gallon, at the Manufactory, or 1*s.* 8*d.* per gallon paid to any station in the kingdom.
Apply to Hill & Smith, Brierley Hill Iron Works, near Dudley, from whom only it can be obtained.

THOMAS MILLINGTON,
HORTICULTURAL GLASS WAREHOUSE,
87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.

Established 1750.

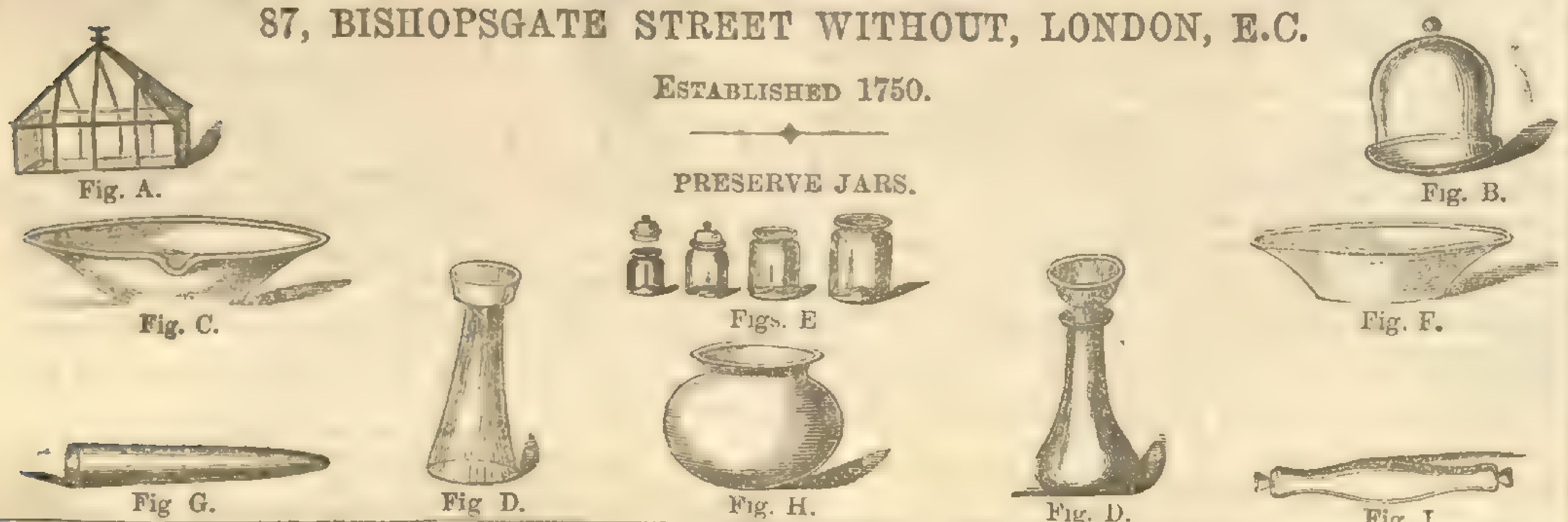


Fig. A. PRESERVE JARS. Fig. B. Fig. C. Figs. E Fig. F. Fig G. Fig D. Fig. H. Fig. D. Fig. I.

Fig. A. HAND GLASSES.

12 inches	..	6*s.* 0*d.* each
14 ,,	..	7 0 ,,
16 ,,	..	8 0 ,,
18 ,,	..	9 0 ,,
20 ,,	..	10 0 ,,
24 ,,	..	12 0 ,,

If open top 1*s.* extra.

Fig. B. PROPAGATING GLASSES.

2 inches	..	0*s.* 3½*d.* each.
4 ,,	..	0 5½ ,,
6 ,,	..	0 8 ,,
10 ,,	..	1 4 ,,
12 ,,	..	1 9 ,,
16 ,,	..	3 6 ,,
18 ,,	..	5 0 ,,
20 ,,	..	7 0 ,,

Fig. C. MILK PANS.

6 inches	..	0*s.* 6*d.* each
10 ,,	..	1 0 ,,
14 ,,	..	1 9 ,,
18 ,,	..	2 9 ,,
20 ,,	..	3 3 ,,
22 ,,	..	3 9 ,,
24 ,,	..	4 6 ,,
26 ,,	..	5 6 ,,

Fig E. PRESERVE JARS.

	Without Lids.	With Lids.
3 inches	0*s.* 4½*d.*	0*s.* 6½*d.* ea.
4 ,,	0 6	0 9 ,,
5 ,,	0 8	0 11 ,,
6 ,,	0 10	1 2 ,,
7 ,,	1 0	1 4 ,,
8 ,,	1 4	1 8 ,,
9 ,,	1 8	2 2 ,,
10 ,,	2 0	2 8 ,,

Fig. D. HYACINTH GLASSES.
Common .. 3*s.* 0*d.* per dozen,
Improved .. 3 6 ,,

CROCUS GLASSES.
Common .. 2*s.* 0*d.* per dozen.
Improved .. 2 6 ,,

Fig. F. HYACINTH DISHES.

6 inches	..	1*s.* 0*d.* each.
9 ,,	..	1 6 ,,
12 ,,	..	2 6 ,,

Fig. G. CUCUMBER TUBES.
1*d.* per running inch.

Fig. I. ROLLING PINS.
1½*d.* per running inch.
Opal Ditto.

14 inches	..	3*s.* 6*d.* each
16 ,,	..	4 0 ,,
18 ,,	..	4 6 ,,

Fig. H. FISH GLOBES.

	With Feet.	Without Feet
8 inches	1*s.* 9*d.*	3*s.* 6*d.* each
10 ,,	2 3	4 0 ,,
12 ,,	3 0	4 6 ,,
14 ,,	4 0	6 6 ,,
16 ,,	5 0	9 0 ,

Intermediate Sizes in proportion.

Crystal Glass Shades, Ebony and Gilt Stands, Gas and Lamp Glasses, Chimneys and Globes, &c.

☞ *For Window and Orchard House Glass see Advertisement of July 30.*

GLASS FOR GREENHOUSES.
SHEET GLASS, Stock Sizes, 16 oz.
Boxes included.

11 by 9,	12 by 9,	13 by 9,	14 by 9 ..	3rds. 14*s.* 0*d.*
12 ,, 10,	13 ,, 10,	14 ,, 10,	15 ,, 10 ..	
13 ,, 11,	14 ,, 11,	15 ,, 11,	16 ,, 11 ..	
14 ,, 12,	15 ,, 12,	16 ,, 12,	17 ,, 12 ..	16*s.* 0*d.* per 100 feet
18 ,, 12,	19 ,, 12,	20 ,, 12	.. ..	
16 ,, 13,	17 ,, 13,	18 ,, 13	.. ..	
19 ,, 13,	20 ,, 13,	21 ,, 13	.. ..	
16 ,, 14,	17 ,, 14,	18 ,, 14	.. ..	
19 ,, 14,	20 ,, 14,	21 ,, 14	.. ..	

English Glass of the above sizes, 18*s.* per 100 feet.

SMALL SHEET SQUARES, in 100 feet Boxes.

6 by 4	6½ by 4½	7 by 5	7½ by 5½
8 ,, 6	8½ ,, 6⅜	9 ,, 7	9½ ,, 7
		10 ,, 8	10½ ,, 8

Boxes 2*s.* each, returnable at full price.

GLASS FOR ORCHARD HOUSES,
As supplied by us to Mr. Rivers.

		16 oz.
20 in. by 12 in.		
20 in. by 13 in.	Common	.. 13*s.* 6*d.*
20 in. by 14 in.	Superior do. ..	.. 16 0
20 in by 15 in.	English Glass ..	.. 18 0

The above prices include the Boxes.

Perforated Glass for Ventilation. Patent Plate and Polished Plate Glass. Ornamental and Coloured Glass.
London Agents for Hartley's Improved Patent Rough Plate.
Linseed Oil, Genuine White Lead, Carson's Paints, Paints of various colours ground ready for use.
Milk Pans, Propagating Glasses, and every description of Glass for Horticultural purposes.

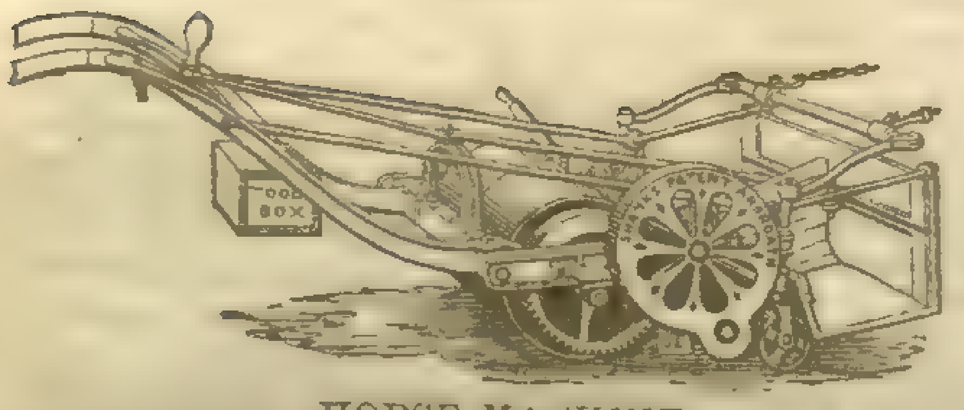
James Phillips & Co., 180, Bishopsgate Street Without, London, E.C.

PATENT SPADES and SHOVELS, HAY, MANURE, and DIGGING FORKS,

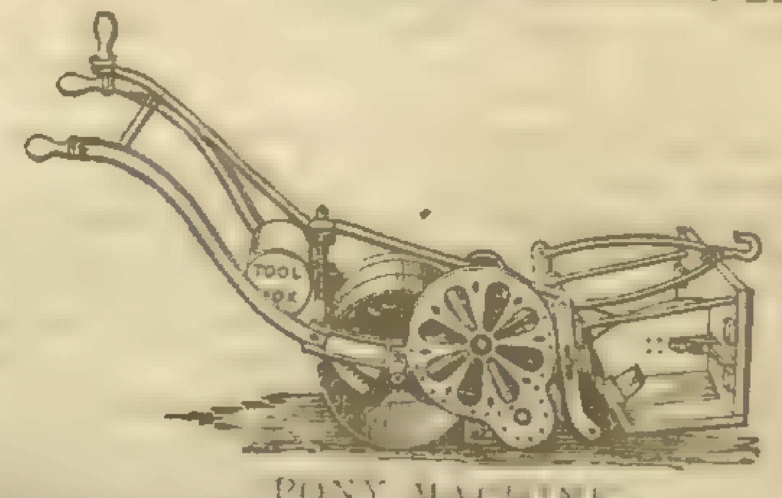
Made from one solid piece of cast-steel, without welding or rivetting. Warranted to wear out at least three of the ordinary ones, and to work sharp and bright to the last.
S. & J. received the Special Prize for these articles at the Royal Society's Show at Canterbury last year, and First Class Medals and Prizes at every other Exhibition at which they have been shown.
Invented, Patented, and Manufactured by Spear & Jackson, Etna Works, Sheffield.

SHANKS' NEW PATENT LAWN MOWING, ROLLING, COLLECTING AND DELIVERING MACHINE FOR 1861.

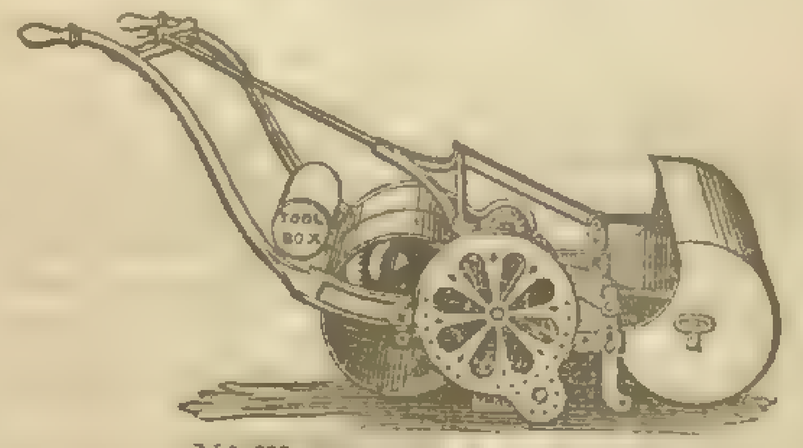
WITH SILENT MOTION IF SPECIALLY DESIRED.



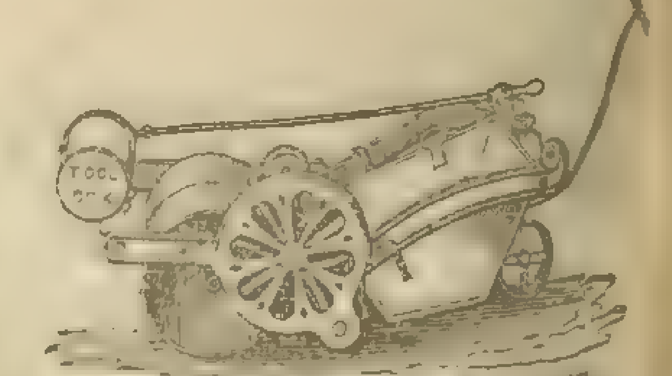
HORSE MACHINE.



PONY MACHINE.



NEW HAND MACHINE.



OLD HAND MACHINE.

THE SHANKS' NEW PATENT MACHINE for 1861 Mows the Grass Wet or Dry, on Lawns uneven or otherwise, in a much neater manner than the Scythe, at half the expense. These celebrated Machines have established their deserved reputation not only in every part of the United Kingdom, but throughout Europe, and also in India, Australia, America, and other countries.

PRICES:

SHANKS' NEW PATENT HORSE MACHINE.
Including Box of Tools for Sharpening, &c., and Directions.

Width of Cutter.			
No. 1.—48-inch Machine	...	£28 0 0	*Drawn by a Horse.*
No. 2.—42-inch Machine	...	26 0 0	
No. 3.—36-inch Machine	...	22 0 0	
No. 4.—30-inch Machine	...	19 0 0	*Drawn by a Horse or strong Pony.*

Boots for Horses' Feet, 24*s.* per set.

SHANKS' PATENT PONY AND DONKEY MACHINE.
Including Box of Tools for Sharpening, &c., and Directions.

Width of Cutter.			
No. 5.—30-inch Machine	... ...	£15 15 0	*Drawn by a Pony.*
No. 6.—28-inch Machine	... ...	14 10 0	
No. 7.—25-inch Machine	... ...	12 10 0	*Drawn by a Donkey.*

Boots for Pony, 21*s.*; Donkey, 16*s.* per set.

SHANKS' NEW PATENT HAND MACHINES, FOR PUSHING OR DRAWING SEPARATELY OR TOGETHER.
Including Box of Tools for Sharpening, &c., and Directions.

No. 8.—24-inch Machine...	...	£8 17 6	*Easily worked by Two Men*
No. 9.—22-inch Machine...	...	8 7 6	
No. 10.—19-inch Machine...	...	7 12 6	*Easily worked by a Man and Boy.*
No. 11.—16-inch Machine	... ...	£6 17 6	*Easily worked by a Man.*
No. 12.—13-inch Machine	... ...	6 2 6	*Easily worked by a Boy.*
No. 16.—12-inch Machine	... ...	5 5 0	

The Patent Delivering Apparatus if attached to the Hand Machines, 20*s.* extra.

*** *The Machines are warranted to give ample satisfaction, and if not approved of may be at once returned.*
The Prices, with a small charge for packing, include delivery at most of the Railway Stations in England.

SOLE AGENTS FOR LONDON:
J. B. BROWN & CO., 18, CANNON STREET, CITY, LONDON, E.C.

Geraniums, Herbaceous and Alpine Plants, Orchids, Chrysanthemums, Hardy Variegated Plants, &c.

B. S. WILLIAMS begs to inform his friends and patrons that a PRICED and DESCRIPTIVE CATALOGUE of the above, to which are added supplemental Lists of Fuchsias, Stove, Greenhouse, and Hardy Plants, Ferns, Ornamental Foliage and Variegated Plants, Fruit Trees, &c. (which include the best new plants of the season,) is now published, and will be forwarded post free on application.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway.

CAMELLIAS, well set with Flower Buds, 18*s.* per doz.; AZALEAS, do., 18*s.*, 21*s.*, 24*s.* per doz., and some very large, 30*s.* per doz.; ORANGE TREES, 21*s.* per doz. The largest collection of British and Foreign FERNS in the Trade. All kinds of Greenhouse and Stove Plants. Gold Fish, 4*s.*, 5*s.*, 6*s.*, 7*s.* 6*d.*, and 9*s.* per doz., 2*l.* per 100, 18*l.* per 1000; Land Tortoises 1*s.* each, 10*s.* per doz. Salamanders, Green Lizards, and Chameleons.

R. Green, 154, Kingsland Rd., 55 doors from Shoreditch Church.

New Pansies, 1861-62.

DICKSONS and CO. will be prepared to offer, on and after 1st October, the following New Pansies, which they can with confidence recommend as first-class Show Flowers:—

INVINCIBLE—White, with medium belt, and top petals of rich deep purple, blotches large, dense, and well displayed, of great substance, and fine form, 5*s.*

LORD OGILVIE—A dark self, free of shading round the eye; this is decidedly one of the finest show flowers in this class and cannot fail to give satisfaction, 5*s.*

MRS. HOPKINS—White, with broad belt, and top petals of fine purple, blotch dense and large, a first-rate flower, 5*s.*

THE BRIDE—Pure white, with narrow belt, and top petals of bluish purple; a distinct and fine show flower, 5*s.*

VESTA—A beautiful primrose self, with fine large dark blotch, fine form and great substance; quite distinct from any flower in the class of light selfs, 5*s.*

VICTORIA—White, with medium belt, and top petals of very dark purple, blotches large and dense; quite distinct from any in this class, 5*s.*

The usual Discount to the Trade.

1, Waterloo Place, Edinburgh.—August 1861.

New Fuchsias, Petunias, and Verbenas of this Season.

HENRY WALTON, Edge End, Marsden, near Burnley, begs to offer nice young plants of FUCHSIAS of the following varieties Purchasers' selection, free by post, 12*s.* per dozen; H. W.'s selection 9*s.* per dozen:—Alarm, Always-ready, Ambassador, Annie, Bianca, Black Prince, Clara, Colleen Bawn, Comte de Hainaut, Comte de Preston, Coronal, Figaro, Forget not, General Borremans, Goliath, King of Purples, Lord Elcho, Mammoth, Madame Cornelissen, Masterpiece, Pioneer, President, Perseverance, Prince Leopold, Raphael, Rifleman, Robin Hood, Star of the Night, Striata, Solferino (Lemoine's), Triomphe Cornelissen, Venetia, Victor Emmanuel, and White Lady.

PETUNIAS, double and single, both English and Continental varieties, 9*s.* per dozen.

VERBENAS, English, Continental and American varieties, 6*s.* per dozen.

Orders to the amount of 5*s.* and upwards free by post. The Trade liberally dealt with.

Caladium Belleymei, nice plants, 7*s.* 6*d.* to 10*s.* 6*d.*
" Wighti, " 10*s.* 6*d.*
" Chantini, " 3*s.* 6*d.*
" Neumanii, " 3*s.* 6*d.* to 5*s.*
" Verschaffelti, " 3*s.* 6*d.*
" Brongniarti, " 3*s.* 6*d.* to 5*s.*
Cyanophyllum magnificum, 5*s.* to 7*s.* 6*d.*
Bougainvillea spectabilis, 3*s.* 6*d.* to 5*s.*
" Westeana, 3*s.* 6*d.* to 5*s.*
Begonias, select varieties, 12*s.* to 18*s.* per dozen.

Post-office Orders payable at Nelson, in Marsden, Lancashire.

New Seeds for Present Sowing at Reduced Prices, Carriage Free.

SUTTON and SONS can now supply the under-mentioned for immediate sowing:—

NEW TRIFOLIUM INCARNATUM.
Early Six Weeks Turnip
Drumhead Cow Cabbage
Sutton's Imperial Cabbage
Enfield Market and others
Italian Rye-grass
Permanent Meadow Grasses
Fine Lawn Grasses
Mustard and Rape
Early London Cauliflower
Fine Walcheren ditto
Onion, of sorts | Early Horn Carrot

Calceolaria, Cineraria, Primula, and other choice Flower Seeds, 1*s.* per packet.

PRICED LISTS of the above new or fresh Seeds may be had on application addressed

Sutton & Sons, Royal Berkshire Seed Establishment, Reading.

TRIFOLIUM INCARNATUM (present price) 5*d.* to 6*d.* per lb.

VILMORIN'S NEW TRIFOLIUMS, with "Practical Hints on its successful Cultivation," showing how 2 to 3 tons per acre of the most nutritious hay may be secured; the advantages of sowing it where Broad Clover is thin, and its superiority to Tares as green food.

Page & Toogood having secured a large breadth from the most careful growers in this district, where better crops are produced than in any part of England, offer it at the above low rate for cash; price to the Trade per post.

Italian Rye-grass, 5*s.* per bushel.
New Turnip Seed, 8*d.* per lb.
New Rape Seed, 4*d.* per lb. | New Mustard Seed, 4*d.* per lb.

WINTER VETCHES and WINTER OATS as soon as harvested.

PERMANENT PASTURE and LAWN GRASSES as sown at Osborne for the last 7 years.

CALCEOLARIA and CINERARIA, 1*s.* per packet, saved from one of the finest collections in Europe.

Seeds for exportation to all parts of the world.

Royal South Hants Seed Establishment, Southampton.

WHEELER'S ORANGE GLOBE MANGEL,
WHEELER'S IMPERIAL SWEDE,
GRASS SEEDS for PERMANENT PASTURE,
GRASS SEEDS for LAWNS,

And all other Seeds of the same excellent quality which has rendered our Farm Seeds so celebrated.

We offer our Seeds at the lowest price consistent with their being good and pure, at the same time deliver them carriage free by rail, and allow 5 per cent. discount for cash.

Our Book of FARM SEEDS sent free for 3 stamps.

J. C. Wheeler & Son, Seed Growers, Gloucestershire.

RAYNBIRD, CALDECOTT, and BAWTREE, Seed Merchants and Growers, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E.C.

Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.

Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

New Turnip Seeds from Selected & Transplanted Bulbs.

JAMES FAIRHEAD and SON, Lewisham, Kent, S.E., have secured in fine condition some large parcels of the above—of warranted Stocks, which they can offer advantageously.

NEW SEEDS FOR AUTUMN SOWING.

PETER LAWSON & SON,

SEEDSMEN TO THE QUEEN,

LONDON AND EDINBURGH,

CAN now supply New Seed of TRIFOLIUM INCARNATUM, ITALIAN RYE-GRASS, DWARF ESSEX RAPE, &c., of fine quality.

They are also prepared to supply all the NATURAL GRASSES, either separate or in mixtures, for laying down Permanent Pastures, Lawns, Public Parks, Cemeteries, &c., orders for which will be carefully and promptly attended to.

27, GREAT GEORGE STREET, WESTMINSTER, S.W.

NEW BULB CATALOGUE.

MESSRS. E. G. HENDERSON & SON

RESPECTFULLY ANNOUNCE THEIR

GENERAL DESCRIPTIVE BULB CATALOGUE for 1861,

SENT POST FREE ON APPLICATION,

In which is given lasting notes on the respective adaptation, treatment, &c., of the various tribes, including an extensive collection of Miscellaneous Bulbs and Tuberous-rooted Plants for Winter and Early Spring Forcing, in Drawing-room, Greenhouse, Hothouse, and Conservatory decoration.

In contrast with last year, the present one has proved highly favourable in maturing the growth of Flower Bulbs, which present every prospect of a fine display of bloom in their respective seasons.

THE BULB GUIDE.

Amateur growers will find this work a useful and economical guide for making selections, pointing out as it does the most desirable species and varieties in each genus, with their descriptive features and their culture. Many gardeners, for want of this knowledge in Bulbs, fail from not giving the proper season of rest, situation, and other points of management that differ so much from Plant Culture, and consequently this most beautiful tribe is often lost or otherwise defectively treated.

Price 1*s.* 6*d.* Post free in exchange for 18 stamps.

A Copy of the Bulb Guide will be included with all orders amounting to 42*s.* and upwards.

Bulbs and Seeds are forwarded Free of Carriage throughout the Kingdom, on the conditions named in the Bulb Catalogue.

WELLINGTON ROAD, ST. JOHN'S WOOD, LONDON, N.W.

Dutch Flower Roots.

JAMES VEITCH, Jun., Royal Exotic Nursery, Chelsea, S.W., begs to announce that he has received his annual supply of Bulbous Roots from Holland, and is pleased to say that they are particularly fine and in excellent condition. CATALOGUES are now ready and will be forwarded on application.

J. V., Jun., desires to impress upon those who patronise him the great advantage of giving him their orders early, as the successful cultivation of Bulbs depends in a great measure upon their being planted early in the spring.

THE SPARKENHOE FARMERS' CLUB.—OPEN TO ALL ENGLAND.

Entries for Fruit and Flowers close on September 4.

The next Annual Meeting of this Club will be held at Market Bosworth, on WEDNESDAY, September 11, when nearly 600*l.* will be given in Prizes—nearly 100 Premiums being offered for Fruits, Plants, and Flowers, including the following:—

	£	s.	d.
For the best collection of Fruits	5	5	0
Second best ditto	2	2	0
For the best collection of Dahlias	5	5	0
Second best ditto	2	2	0
For the best collection of Roses	2	2	0
Second best ditto	1	1	0
For the best Group of Paper Flowers	2	2	0
Second best ditto	1	1	0

Prize Lists, rules, and certificates may be had free of expense at my office, and all entries must be returned to me properly filled up on or before Wednesday, September 4.

Entries will be conveyed at moderate rates from the Oxford Station on the Leicester and Burton line, and Omnibuses will run at a cheap fare on the day of the show, tickets for which must be obtained two days before the Show day from Mr. Pettifor, Stag and Pheasant, Leicester.

Ashby-de-la-Zouch, Leicester, August 24. Thomas Davenport, Secretary.

RUGBY HORTICULTURAL and COTTAGE GARDENERS' SOCIETY.

President—The Earl of Denbigh.

The Annual Exhibition of FLOWERS, FRUITS, and VEGETABLES, open to all England, will be held at Rugby on FRIDAY, August 30, when upwards of 400 Prizes will be awarded.

The open class for CUT FLOWERS consists of 24 Prizes, from 5*s.* to 4*l.*, in addition to Prizes for STOVE and GREENHOUSE PLANTS, FRUIT and VEGETABLES.

The Band of the 4th Warwickshire Volunteers will perform during the Exhibition.

For schedules and particulars apply to John S. Savage,

Rugby, Aug. 24. Hon. Secretary, Rugby.

LEICESTER and LEICESTERSHIRE FLORAL and HORTICULTURAL SOCIETY.

President—The Right Hon. Earl Howe

The AUTUMN SHOW of the above Society will be held on the Leicester Race-course on WEDNESDAY, September 4. In addition to a large number of Prizes, a Silver Cup and two other Prizes will be offered for the best Collection of Fruit (grown by the Exhibitor), open to all England.

Further particulars may be had by applying to the Hon. Secretary, Mr. Wm. Penn Cox, Market Place, Leicester.

BRIGHTON and SUSSEX FLORICULTURAL and HORTICULTURAL SOCIETY.

The EIGHTH ANNUAL GRAND AUTUMN SHOW will be held on WEDNESDAY and THURSDAY, September 18 and 19, at the Royal Pavilion. Prizes to the amount of 350*l.* are offered for PLANTS, FRUITS, CUT FLOWERS, &c.

The RAILWAY CUP, value 10*l.*, is offered for the best group of three stands of Fruit and Flowers for the Decoration of the Dinner Table. Beautiful arrangement will be the test in this Exhibition. Ladies are invited to compete. The prizes will be awarded by a jury of Ladies.

Schedules of Prizes can be had on application to the Secretary, 96, St. James's Street, or of E. Spary (General Superintendent of the Exhibition), Queen's Graperies, Brighton.

By the kind permission of Colonel Perceval, the celebrated Band of Coldstream Guards will attend each day, conducted by Mr. Godfrey, sen.

By Order of the Committee,

Brighton, August 24. Edward Carpenter, Secretary.

GRAND FLORAL and HORTICULTURAL FETE. OPEN TO ALL ENGLAND.

To be held on THURSDAY, September 26, on the Northampton Race-course, in connection with the Annual Show of the Northamptonshire Agricultural Society.

Prizes to the amount of 200*l.* will be offered for Plants, Fruits, Cut Flowers, &c., including three Silver Cups, as follows:—

Class 1, Thirty-six Dahlia Blooms, distinct, a Silver Cup, value 5*l.*; 2d prize, 2*l.* 10*s.*

For best Collection of Fruit, Silver Cup, value 5*l.*; 2d prize, 2*l.* 10*s.*

12 Stove or Greenhouse Plants, fine foliage, without reference to bloom, and not more than three plants of one genus, a Silver Cup, value 5*l.*; 2d prize, 2*l.* 10*s.*

Schedule of Prizes and further particulars may be had on application at Dorman's Library, Northampton.

The Gardeners' Chronicle.

SATURDAY, AUGUST 24, 1861.

MEETING FOR THE ENSUING WEEK.

Tuesday, Aug. 27 { Royal Horticultural (Floral Committee) at S. Kensington .... Noon

Never before has this Journal been so continually applied to for advice as to the cause of dying limbs of trees and failing crops, and the remedy for such a state of things. In the spring the Peach and Nectarine trees refused to push on open walls; and in houses, although they flowered, not a fruit would stone. Apricots were not much better. Figs were worse than either. Then, when growth did commence, wood was weak and watery; spindling shoots died back; myriads of insects seized upon the struggling foliage; Plum trees

looked like field Beans devoured by the fly; even the hardy Black Currant curled its leaves, while its berries shrunk into insignificance. Now that some of this mischief has been repaired by time and fine weather, and vitality is again asserting its supremacy, the cry continues to be raised, and Vines which have stood pretty well are becoming blotched and spotted and miserable; of which we have a notable example before us from new well built and as we understand well managed Vineries (of *A Reader*); or they are breaking into secondary shoots, with second or even third crops of debilitated flowers.

That all this mischief is to be laid at the door of the summer—we beg pardon, of the summerless—season of 1860 there cannot be a doubt. Its consequences are shown in so many different ways, the symptoms of injury are so multifarious, that it may seem paradoxical to refer them all to the same common cause. But it must not be forgotten that peculiar structure and diverse constitutions, and dissimilar circumstances will necessarily cause the result of a fatal season to manifest itself in an almost infinite variety of ways.

We should be much mistaken if we supposed that fruit trees only bear witness to what has happened. Let us take a tour round a garden, and what do we see? The common Musk (*Mimulus moschatus*) leaves are turning black on the suckers that survived the winter. Tree Roses have pushed, and died, and their withered remains hang shabbily on the other living branches. The small flowered American Horsechesnut (*Pavia parviflora*) has yellow half-dead shoots among its otherwise healthy foliage; and the pretty tufts of flowers are thin and few. *Kœlreuteria* has endeavoured to elaborate a few branches, but the brown hand of Death has reached them. The Common Honeysuckle, which started so fair in April, is still encumbered by shrivelled shoots which the gardener has forgotten to remove. Many American Thorns still bear witness to a struggling vitality, having perished here and there for want of support. As for Common Laurels they seem to have been in the agony of death; and although life is now passing vigorously through their larger limbs, small side twigs are perishing daily, even branches are suddenly stricken with death, and their whole system is so enfeebled that it is only with difficulty and by very slow degrees that they can relieve themselves of their useless leaves. The Oregon Mahonias are in a similar condition, though not so sick; and as for Tree Pæonies they are reduced to the last stage of debility, as is now shown by their wiry shoots and shrivelling dingy foliage. Of all this the early spring gave warning; even Crocuses, the hardiest of flowers, blossomed ill; Hyacinths rotted, and the young shoots of Asparagus died back when but a few inches long. The charming Ostrich Fern (Struthiopteris), usually so stout and strong, although at first it proudly vindicated its reputation for hardihood, in a few short weeks became sear and broken down. And it will be found that the hybrid Gladioli are dying back in many places.

How then was it that all this mischief was produced? The answer is obvious. It is an axiom in Vegetable Physiology that no plants can remain in health whose wood is not ripened; and the term wood is not confined in its application to what in common parlance bears that name, but extends to the whole perennial system of a plant. Thus the corm of a Crocus, or the fleshy bulb of a Hyacinth, or the succulent fangs of an Asparagus are as much the wood of those plants, as timber is of the Oak. As for the term ripening, its signification is the perfect growth of every part, the hardening of all the perennial structure, the removal of all superfluous sap, the complete conversion of soluble into insoluble secretions, as of gum into starch, and so on, and by this last means the provision of abundant natural food in the interior of a plant for the organs it is to form in a succeeding season. Given this and a plant is healthy; remove any one condition and its debility is inevitable.

Some persons wonder that the effect of unripened wood should not be immediately seen when growth recommences. Sometimes it is. When it is not, the circumstance seems owing to the presence of a small and insufficient quantity of natural food, which, for a time more or less short, is able to nourish new shoots. Just as an Elm tree, when felled in its ripe old age, will continue to sprout from its trunk until all the food its trunk contained is exhausted. The cases are exactly parallel.

What now is the remedy? What was the preventive? Preventive there was none, and nothing can be more unjust than to charge to the unskilfulness of gardeners what has been the will of Providence. The misfortune is one that must be borne with patience. And patience must of itself remedy the disaster if God so wills it. So far as human means extend, the early removal of all that obstructs the free circulation of air and admission of sunlight, a total abstinence from late pruning, and, when trees are under glass, as in Orchard Houses, the exclusion of damp, and the use of dry fire heat at the end of the season, offer the best security for the re-establishment of healthy vegetation.

In order to cultivate and keep up a supply of flowers in rooms and windows, some means beyond the mere will or wish to do so, and the necessary knowledge, are required; and to this question the second division of MALING's book already referred to (see p. 754) is devoted.

Among the first requisites are space and fittings—either a small conservatory, or such contrivances as a glass case, or flower-stand occupying a window recess, a balcony more or less covered, a hanging garden, or a window-sill. Another requisite is a heated or forcing case for keeping up a supply of flowers for the conservatory or flower-stand at certain seasons. The heat required is however very simple and readily obtainable, and at little cost. The forcing case which is described and strongly recommended for general adoption on account of the success which has attended its use, is 3 feet long, 18 inches wide, and the same in height, and its cost, including the heating apparatus, was not more than two guineas. The "boiler"—a zinc hot-water case, which fits into the bottom, and in spring, when artificial heat is most needed, is filled night and morning with boiling water—gives a heat varying from 55° to 75°, and would readily yield 90°, especially when the silver sand in which the pots are to be kept plunged, is properly moistened. The end, sides, and top of this case are each formed of one large pane of glass, the top and one side being separately framed, so as to take in and out, in order to give greater facility both for cleaning and arranging the plants within. Small brass buttons fix the glazed panels in their place, and a hook attached to the upper part catches the side, and retains it when desirable in such a position as to leave it 1 or 2 inches open. "I very seldom have mine entirely closed, except at night, and when containing plants in blossom the entire front panel is often kept out all day." This is the secret of success.

For a stand, to be placed in the centre of a conservatory or in a window recess, basket work lined with zinc and coloured to suit the house or room in which it is to stand, is most strongly recommended; or instead of this a wooden one in the form of a tray 5 or 6 inches deep, rustic in pattern and varnished for conservatory use, or made of china tiles when intended for the drawing room. In these, which are to have a solid stand to rest upon, the pots are to be plunged, the bottom being silver sand and the packing cleansed Moss. Hanging baskets are preferred to be of wickerwork painted, as being lighter and not liable to rust like iron will. For balconies and windows the boxes, which are always necessary there, may be made of earthenware, tiles, or wood. A very pretty arrangement in such a situation is made by covering the front and ends of a box with MINTON's tiles, which are just 8 inches square, and vary in price from 1*s*. to 2*s*. 6*d*. each, the most expensive, of mixed colours, being for this purpose certainly the least handsome.

It is of little use to expend all the care and trouble, to say nothing of cost involved in these preparations, on plants ill adapted for the tiny greenhouses and plant cases, or even to grow nice specimens of appropriate kinds unless they are afterwards suitably arranged to produce a pleasing effect. The author (or authoress, for surely there is evidence of a lady's hand in some of the allusions which follow), gives some very pointed instructions on these matters, a portion of which we may venture to quote:—

"I may as well mention two rules by which I am guided in seeking to increase my stock of available plants. The first being, that grand-named plants, which have no common name, unless very newly come out, are generally a delusion and a snare to the inexperienced, as any well-known flower that is worthy of such special culture very soon acquires some familiar name. Those plants even which retain their learned titles soon gain if they are really pretty household names as well, and thus they become naturalised and are kindly received amongst us. To know a plant was introduced long ago, is to me the greatest of recommendations, as it is only by sweetness or by beauty that it first becomes common, or afterwards maintains its ground. My second rule regards colour both of leaf and blossom. I have not much liking for plants of variegated foliage for indoor use. On a small scale I find it simply patchy: it gives so much the impression of plants that are dying off.

"For groups of colour meant to be effective I would recommend every one to study for a short time some of the painter's rules as to the arrangement of colours. Patchy flower-stands are nearly as bad as patchy paintings, a bad arrangement of colour quite spoils what would otherwise be a very pretty group, and even when at last the eye may instinctively lead one right, it is very vexatious to have brought on together a set of plants the colours of whose flowers kill one another utterly or produce a scattered or poor effect. It is really surprising how the addition of even one magnificent flower will sometimes make a whole stand look shabby and unfilled.

"I will give one instance: Lately I saw a flower-stand holding about 18 pots enclosed by a glass case. It was arranged with 7 or 8 good sized Myrtles, Begonias, and Geraniums, some Lilies of the Valley, and some Ferns and Moss. I think there were three—it may have been only two—splendid pure white Hyacinths, two or three bright pale pink ones (very common but very pretty), one pot of exquisite rose and white Van Thol Tulips, a few Snowdrops, and many pale blue Scillas and pure white Crocuses as an undergrowth. The effect certainly was most lovely; but just as I was admiring it, a remarkably fine dark blue Hyacinth was added to the plants already there, with a pot also of equally fine blue Crocuses; and when I looked at it again I was perfectly astonished at the change. The whole looked poor and unsatisfactory. One had a sensation of wishing it to be filled up into a mass of flowers; there was no blending of colours, everything seemed dislocated, and the whole was spoiled. Of course the obnoxious flowers were very soon removed; but I confess I needed no further lesson on the inexpediency of a combination of purple and pink flowers. The cold pale blue of the Scillas (*Nemophila colour* that is) made everything still *fresher and more* clear; but purple was simply overwhelming *mud!*

"The principles applicable to colours in dress, as well as in painting, may very well be applied to the arrangement of flowers. The abundant green, of course, is a very softening element; still there are combinations to be avoided, even with its aid. For example: mixtures—always cloudy—of three or four different shades of one colour, and the juxta-position of one colour with another containing one of its principal component parts, or of two of which the separate parts would combine. The fact of scarlet containing yellow, and crimson containing blue, illustrates both my propositions. Purple containing red will not do with pink, while with scarlet it is altogether bad.

"Scarlet, crimson, and pink, should always, I think, be mixed, each and alone, with white; but with scarlet creepers of pale primrose, and with rose-colour, those of pale blue, like the Forget-me-not or Scillas, would often probably look pretty, when the other colours had a great preponderance of red. All the white should be of exactly the same shade. The perfectly clear pure tint of one colour may suit, notwithstanding, perfectly with that of another as pure into which its own colour does not in the least enter. This being so simple is always most artistic.

"Pink, and pale cold blue—as in the Hyacinth Norma, and Scillas, or the pink Geranium and blue Nemophila, or the pale common China Rose, full blown nearly, with the climbing blue Passion-flower, are the contrasts that are really lovely. White and crimson, scarlet and dark green, or grey Heliotrope colour and crimson are amongst the number; and when many colours must be used, by means of the grey Heliotrope, or of white or green, a division may always be made, breaking up (almost imperceptibly, except by effect), the whole into groups of perfect separate harmony together, like a succession of beautiful varied chords."

In this way, and by the aid of plants of ever-green foliage, though the flower-stand may be piled up with red, the effect may be so softened down that the mass may be neither heavy nor gaudy; and though a few sprigs of pallid pink and white should be the only materials to arrange as far as colour is concerned, they may be so placed as to

appear neither poor nor thin; the scarlet in the one case rendering the cool dark green a refreshment to the eye, and the starry white in the other relieving the monotony of the verdure. There should always, in every situation, whether it be in a small conservatory, a glass case, a flower-stand, a hanging garden, or even a window-sill—the latter being kept brighter and fresher because of its small extent, be a preponderance of bright fresh-looking evergreens. The chief secret lies in having good distinct and well selected colours showing amidst this green groundwork.

A glass case of 3 feet long, half as much in width, and 2 feet high, should have something like the following evergreen or background plants:—Two or three Myrtles, of which one now seldom sees half enough; one or two Geraniums for their foliage; a Begonia; small-leaved Ivy trailing along the top; a Maidenhair Fern; a Pteris longifolia or serrulata, which are amongst the best and most easily grown of Ferns for cases; a couple of Selaginellas, denticulata and apoda, or some such prettily creeping Moss-like plants. This gives 10 or 11 permanent occupants, and the case, which will hold about 18 5 or 6-inch pots, or a larger number of 4-inch ones, is to be filled up with a removable and frequently varied selection of flowering subjects, of which about a dozen and a half will be required for each month.

We may perhaps hereafter find space to offer a few comments on the plants which have been found suitable for this particular branch of gardening; in the meanwhile we can assure our fair readers that they will find a variety of hints in this book on "Indoor Plants" which, if they are apt scholars, will teach them "how to grow them." —— *

We observe that "the finest collection of Orange trees known to exist" is announced for sale by auction on the 16th September, at Bois de Flines, near Tournay. They are described as consisting of 30 pairs of very strong plants, remarkable for their beauty and extraordinary vigour, their stems being 18 to 20 inches in diameter, and the heads from 2 to 2½ yards through. Apply for further information to Mr. Verschaffelt, nurseryman, 43, *Rue de la Caverne*, Ghent.

THE LATE Dr. ANDREW SINCLAIR, M.D., F.L.S.

Intelligence has lately been received from New Zealand of the death by drowning of this estimable man and ardent botanical collector, during an exploring expedition undertaken at his own cost, and chiefly for botanical purposes, to the glacier-bound mountains of the Middle Island.

Dr. Sinclair has long been favourably known in botanical circles, from the collections he formed when surgeon of the surveying expedition of H.M.S. Sulphur on the Pacific coasts of North and South America, under the command first of Captain Beechey, and afterwards of Sir Edward Belcher, which collections are published partly in the supplement to Hooker & Arnott's account of the Botany of Beechey's voyage, and partly in Bentham's Botany of the Sulphur's voyage. Of Dr. Sinclair's naval career little else is known to us. He entered the service somewhere about the year 1824, and was promoted to surgeon's rank in 1829, but it was not till the aforesaid voyage in 1834 that he appears to have devoted his leisure to natural history. In 1842 he was employed as surgeon of a convict ship, and visited several Australian ports, collecting diligently every where. From Australia he went to New Zealand, for the purpose of spending some weeks with the Antarctic expedition, in which his friend Dr. Hooker was then doing the duty of naturalist. During a second voyage in the same capacity to Australia, he met with Captain (now Admiral) Fitzroy, who was on his way to New Zealand as Governor, and who took Dr. Sinclair on with him as his private secretary.

Not long after his arrival Dr. Sinclair succeeded to the post of Colonial Secretary, which he held thereafter during the governments of Captain Fitzroy, Sir George Grey, and Colonel Brown. During all which period his delight was in botany, and in its furtherance he spent all his spare time.

On the establishment of parliamentary government in New Zealand Dr. Sinclair visited England, and soon after received a pension from the colony. But being still bent on the exploration of his favourite island, and being especially desirous to collect materials from the Middle and Southern Islands, for a supplement to Dr. Hooker's Flora, he returned in 1859. After several months' sojourn in Auckland and in Nelson, from whence he visited the mountains of that province, he latterly repaired to Canterbury, and made arrangements with Mr. Haast, for visiting Mount Cook, and perhaps crossing the glacier-bound central range to the west coast, an arduous journey for a man of his age, but one of the most interesting, geographically, geologically, and botanically, that could be undertaken in the New Zealand Islands. From this he was destined never to return; the intelligence of his death was first received from his companion Dr. Haast, the geologist to the party, and in more detail latterly from his old and attached friend and fellow botanist, C. Knight, Esq., F.L.S., of Auckland. The accident occurred through an imprudent attempt to cross the swollen Rangitata river on foot, at a ford where the stream is divided by an island. Dr. S. appears to have crossed with his horse to the island, but the animal having there escaped from him, he proceeded on foot into the second branch, when the current proving too strong he was carried down and drowned, and the body discovered some time afterwards lying on a spit of sand. Mr. Knight thus writes:—

"Auckland, May 6, 1861.

"My dear Dr. Hooker,—Mine is a sad duty to-day. Our old and dear friend Dr. Sinclair was drowned on the 26th of March, when attempting to cross the river Rangitata in the Middle Island. He had accompanied Mr. Haast (a countryman and friend of Dr. Hochstetter) to explore the sources of that river, and had completed the exploration of the western branch up to the base of Mount Cook. He had collected new plants, none of which have been sent up here, but I understand that Mr. Haast will send a set to your address. I had accompanied our friend as far south as Nelson, and never knew him so cheery and companionable. He made arrangements there with Mr. Haast to explore together the country round the base of Mount Cook and to ascend that mountain together; and he entertained great hopes of adding to your knowledge of the botany of our Southern Alps. I went further south to Dunedin, where I stayed a month, and on returning just missed seeing Dr. Sinclair, as he was starting from Christchurch for Mount Cook. His niece has lately received a letter, written a few days before his death, in which he describes the glaciers of the Southern Alps, and the risk the party was exposed to from the rupture of a field of ice.

"I may, however, add in explanation of the length of time that elapsed before the body was found, that Mr. Haast, on the return of Stringer to the camp, proceeded with every possible speed down the river, which he found much swollen. On arriving at the spot where Dr. Sinclair had crossed over to the island, he found the river too deep and rapid to be forded. He at once set up a lofty pole with a letter fixed to it, stating what had happened. He then searched lower down the stream, looking out anxiously for the body of his lost companion, if by chance it had been left on one of the spits of the river. Very soon the banks became impracticable, and he was compelled to strike inland, and was at length stopped by a swampy creek (late in the evening) where he had to camp. Soon after he saw an alarm fire some distance off on the opposite side of the river. The next morning he started by daylight, and when he again reached the river it was still impossible for persons on foot to cross it. At about 10 A.M. he was overtaken by a party of three horsemen. They stated that the stray horse had arrived at the station about dusk, and that they had immediately lighted a large fire for the guidance of the dismounted horseman, whom they feared had met with an accident. That in the morning they took up the track of the horse, crossed the ford, and found Mr. Haast's note, but they had seen no signs of Dr. Sinclair. The party being now all mounted crossed the river about 3 miles below the place where the accident occurred, and at sunset found the body about 300 yards below the ford which Dr. Sinclair had endeavoured to cross. The body was lying on a spit of land, the head resting upon the right arm and the left arm extended down the body. The face was much bruised. The body was lying *nearly* dry. I do not myself think it probable that life was not entirely extinct when it was stranded; 300 yards was a long distance to be in the water, and the bruises on the face show that the head had been frequently brought in contact with the stones of the bed of the river. The body was borne to a neighbouring spot, where he himself had admired with Mr. Haast the extreme beauty of the scenery around. His name and untimely end will be long remembered in the district where he had so well laboured to extend our knowledge of its resources and its natural history."

Dr. Sinclair was a man remarkable for shrewdness of character, ardent love of knowledge, fondness of communicating it, and as an assiduous collector of plants and animals. He made no pretensions to a knowledge of scientific subjects, though he read largely and often observed well; he loved them for their own sakes, and pursued them for no other purpose than the benefit of science, generally presenting his zoological collections to the British Museum and his botanical to Sir W. Hooker. Of ancient and modern history and *belles lettres* he was extremely fond, and having during his many years' service in the Royal Navy visited numerous parts of the globe, and especially the classical shores of Italy, Greece, and Asia Minor, his stores of information were both varied and great. He further had a keen relish for society, love of music and art, and was a most amiable man and engaging companion in the bush or at sea, and to old or young in the drawing-room or school-room. Dr. Sinclair never married, but many will mourn his loss, as that of a most judicious, disinterested, and warm-hearted friend, and his name will ever be prominent as one of the pioneers of botanical discovery in the Pacific coasts of South America and New Zealand, and as the active promoter of all branches of science in the latter colony. *J. D. H.*

NOTES ON THE BOTANY OF JAPAN.—No. VII.

(*See page 576.*)

There is a place named Ah-sax-saw on the eastern side of Yeddo, which is renowned for its large Buddhist Temples, its Tea houses, and its gardens. The gardens were reported to contain an extraordinary collection of Chrysanthemums, and I was therefore in duty bound to pay them a visit. M. L'Abbé Gerard, of the French Legation, who had visited the place on a former occasion, was good enough to accompany me. A sharp ride of an hour-and-a-half brought us to Ah-sax-saw. Its massive temple was seen looming at the further end of a broad avenue. An ornamental arch or gateway was thrown across the avenue, which had a very good effect, a huge belfry stood on one side, and a number of large trees, such as Pines and Salisburia adiantifolia, surrounded the temple. Each side of the avenue was lined with shops and stalls open in front like a bazaar, in which all sorts of Japanese things were exposed for sale. Toys of all kinds, looking-glasses, pipes and gimcracks of a like nature predominated. Had it been covered over with glass it would have been a good representation of Lowther Arcade, or some place of that kind at home. Crowds of people followed us as we entered the avenue who had evidently seen little of Europeans before, but although somewhat noisy they treated us with the most perfect civility and respect. On our arrival at the head of the avenue we found ourselves in front of the huge temple, and ascended its massive steps. Its wide doors stood open; candles were burning on the altars, and priests were engaged in their devotions. It was the old story over again—unmeaning sounds, beating of drums, tinkling of bells, &c., which I had so often heard when a guest in the Buddhist Temples of China.

The Temple has numerous Tea-houses attached to it for the accommodation of visitors and devotees. Adjoining them are many pretty gardens with fish ponds, ornamental bridges, artificial rockwork, and avenues of Plum and Cherry trees, which seem the favourite ones at all the Tea houses and temples of Japan. This place is most famed in the vicinity of Yeddo for the variety and beauty of its Chrysanthemums. At the time of our visit they were in full bloom, and most certainly would have delighted the eyes of our Salters, Brooms, and Birds had they found themselves so far away from Hammersmith, the Temple, or Stoke Newington. I procured some extraordinary varieties, most peculiar in form and in colouring, and quite distinct from any of the kinds at present known in Europe. One had petals like long thick hairs, of a red colour, but tipped with yellow, looking like the fringe of a shawl or curtain; another had broad white petals striped with red like a Carnation or Camellia, while others were remarkable for their great size and brilliant colouring. If I can succeed in introducing these varieties into Europe they may create as great a change amongst Chrysanthemums as my old protegé the modest "Chusan Daisy" did when she became the parent of the present race of Pompones.

The Japanese gardener understands the art of Chrysanthemum culture rather better than we do, and produces blooms of wonderful size. This is done by great care, good soil, and by allowing only one or two blooms to be perfected at the end of a shoot.

The Tea plant was common in these gardens, and was frequently used as an edging for the walks. In this position it was kept clipped, and had a pretty and novel appearance. In other places in this district I observed it cultivated rather extensively for the sake of its leaves. There is also in the gardens of Ah-sax-saw a collection of living birds and other animals for the amusement of visitors who may happen to be fond of this branch of natural history. I observed green pigeons, speckled crows, a fine large eagle, gold and silver pheasants, Mandarin ducks, rabbits, and squirrels amongst the collection. Altogether, there are many things here calculated to amuse and instruct the good people of Yeddo when they come out for a holiday, and when the Plum and Cherry trees are in blossom, these gardens must be very enjoyable. *R. F.*

THE MANETTI AND THE BRIAR.

As a great deal has been written both for and against the use of the Manetti stock for Roses, I venture to offer a few remarks on the subject from personal experience.

I have grown Roses on the Briar and Manetti for some years, and until last severe winter I found little difference in either stock, for each had its good properties; but the results of our last severe winter have compelled me to give an unconditional preference to the Manetti.

My reason for preferring this stock to the Briar is this. In spite of the intense cold of last winter I lost only 5 per cent. of Roses on the Manetti, whilst upon the Briar I am sorry to state that my loss was 75 per cent. This fact is, I conceive, greatly in favour of the Manetti as a hardy stock, superior in one of its most essential qualities to the Briar. I am also confirmed in the opinion formed of the Manetti from the circumstance that my case is far from being a solitary one. The following is a list of Roses which withstood, upon the Manetti stock, the intense frost of

12° below zero, viz., Adelaide Fontaine, Alex. Bachmeteff, Alphonse Karr, Auguste Mie, Acidalie, Baronne Prevost, Baron Hallez, Cardinal Patrizzi, Caroline de Sansal, Colonel Rougemont, Comte de Nanteuil, Comtesse Cécile de Chabrillant, Comte de Montego, Dr. Leprestre, Duchess of Orleans, Duchess of Norfolk, Duchess of Sutherland, Dr. Marx, Dr. Berthat, Du Petit Thouars, Evêque de Nimes, Géant des Batailles, Gen. Jacqueminot, Henri Lecoq, Jules Margottin, Justine, La Fontaine, La Reine, La Ville de St. Denis, L'Enfant de Mont Carmel, Lion des Combats, Lælia, Lord Palmerston, Lord Raglan, Louise Peyronny, Madame Cambacérès, Madame Domage, Madame Knoll, Madame Place, Madame Vidot, Mademoiselle Thérèse Appert, Marie Portemer, Mathurin Regnier, Monsieur de Montigny, Monsieur Ravel, Mrs. Rivers, Madame Laffy, Madame Lamoricière, Madame Désirée Geraud, Mrs. Elliott, Paul Dupuy, Prince Leon, Pauline Lansezeur, Prince Albert, Proserpine, Paul Joseph, Queen Victoria, Rebecca, Reine de la Cité, Reine Mathilde, Reveil, Souvenir de l'Angleterre, Souvenir de Leveson Gower, Souvenir de la Malmaison, Souchet, Triomphe de Lyon, Triomphe de Paris, Triomphe des Beaux Arts, George Peabody, William Griffiths, Sir Joseph Paxton, Louise Odier, Madame Phelip, Monsieur Jard, Gloire de Dijon. These Roses have not only survived the winter's blast (although cut down by the frost within an inch of the junction), but have grown more vigorously, are much cleaner in foliage, and have bloomed better than in previous years; whilst the Briar Roses that have survived have done but moderately, with the exception of Madame Cambacérès. This Rose has grown well and bloomed profusely.

The only Rose on the Manetti that has not done so well is Adelaide Fontaine. I have two plants of it, and what is remarkable they are like twins in form and feature, but still I will not say that this variety will not do capitally on the Manetti. I will, however, give it another situation, and try it another year; on the other hand I have some magnificent BUSHES of La Ville de St. Denis, Angleterre, Auguste Mie, Monsieur Ravel, Jules, Mathurin Regnier, Géant, Prevost, Paxton, Madame Vidot, Cambacérès, Leveson Gower, Peyronny, Jard, Lecoq, Hallez, Sutherland, Caroline de Sansal, Portemer, Lord Raglan, and some others—even dwarfs, such as Paul Joseph, Dupuy, Dr. Leprestre, Thouars, Souchet, and Prince Leon, are surprisingly fine. I think I have shown good and substantial reason for speaking well of the Manetti, and strongly recommend my brother amateurs to grow more of it than they have hitherto done. I have made it a rule that whatever Roses I had on the Briar to have the same on the Manetti, consequently I have kept sorts that I otherwise would have lost, and which are now blooming splendidly.

The only drawback, if it can be so called, that the Manetti has is its inclination to throw up suckers; a little watching will, however, obviate this. The Briar has the same tendency; besides, the Manetti gives us an advantage over the Briar, inasmuch as we can layer Roses on the Manetti, and so have them on their own roots if desired; this we can hardly do on the Briar.

I am just about giving an order for a lot of first-class new Roses, the cream of this year's catalogues, and I will order them all to be on the Manetti, and to be sent from the nursery the first week in November if the wood be ripe.

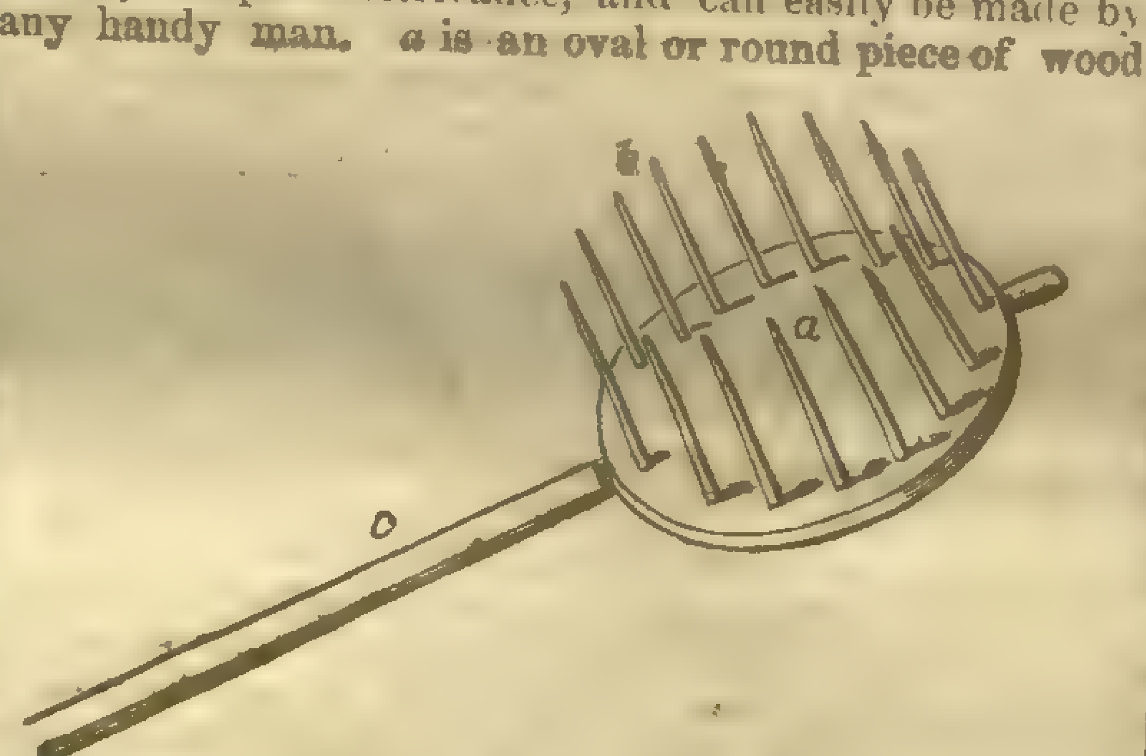
I may observe, in conclusion, that the old adage, "there is no rule without an exception," was truly verified in my esteemed friend the Rev. W. F. Radclyff's Rosery, for I believe he did not lose more than 5 or 6 per cent. of his Briar Roses. I saw them from the 24th to the 30th of June, and a more glorious bloom could hardly be contemplated; perhaps it would be well if he would be kind enough to inform us how he preserved them. *Jno. Milne, Derringham, Spring Bank, Hull.*

Home Correspondence.

Paris Trees.—Since my last I have had another stroll through this marvellous city; and a few more of your inquiries may be answered. You ask what has been the fate of trees 50 feet high transplanted in full leaf; of these I can learn nothing; if they are to be found I should like excessively to see them, for in a dry place like Paris their really successful removal would be something to surprise us islanders. Perhaps some French authority, M. Robert himself for example, would have the kindness to tell you where they are. Neither do I perceive on the Boulevards, or Boulevarts as people now write, signs of a certain process of scraping off the old bark of old trees, to which you allude. I saw something of the sort a few weeks ago in the Bois de Vincennes, where some young Elms had been so treated; and they looked well; but whether they would not have looked quite as well without the scraping I cannot say. Speaking of Vincennes I found plenty of good looking Elms on the road to that fortress; but I venture to predict that they are not quite happy, for they grow little at the top and much at their lower branches, a pretty sure sign that they are already fighting for their lives either with the soil or something else. As to a nursery for rearing large trees I believe there is some such establishment at Nogent or Brie sur Marne, but these places are too far off for the visit of an idle man. This however I can vouch for, that, come from where they may, while many of the newly planted trees are very handsome and extremely well grown, others are beyond description ugly. Of the former there is a striking example in the case of a line of Plane trees on one of the Quais, forming a marvellous contrast with wretched old Lime trees next the Rue de Rivoli; of the latter you may find a rather extraordinary specimen on the left of the Vincennes road. The weather is too hot to write more just now, so I must step in to Galignani's. *V., Rue Castiglione.*

Paris Horticulture.—During these last 12 months I have visited Paris very often for the express purpose of ascertaining what could be seen in the form of gardening, and my first impression was that a good deal might be learnt, but on closer inspection on a recent visit, I came to the conclusion that English gardening was much superior to Parisian both as regards flowers and tree management. I cannot speak of fruit, as I have seen few private gardens, it being difficult to get access to them; an order from the *régisseur* or *propriétaire* is indispensable. Such, however, as Baron Rothschild's, near the Bois de Boulogne, is an exception. It is quite true that such things as Caladiums, Begonias, Cannas, Musas, and stove plants of that description may be seen grouped in and around the Champs Elysées, but to an English eye they look more like weeds, planted as they are in beds covered with stable litter; this is put on for the purpose of keeping the beds moist, and not only these but all other beds that contain anything in the shape of flowers are covered with this litter, and in many instances dry straw is more prominent than flowers. This practice seems to be general in France, as I noticed Orange tubs and beds at Versailles treated in the same way, the only difference being that the dung was more decomposed. Its appearance is however offensive to ladies of taste, as my lady employer begged me when I came here to try and discontinue its use, and this year the roots of Caladiums, Cannas, &c., are enjoying it out of sight in beds of loam. I am of the same opinion as your Correspondent "J. N." respecting the young trees in the Boulevard de Sebastopol; I should like to see all the other roads planted in the same way, more particularly those that have dead and dying trees towering above a lot of young ones. The former, I believe, are those that were planted in summer, and that have never survived the transplanting, although this and last year have been so favourable to newly planted trees. Their roots appear to me too deep. Whether the fault is in planting or in the making up of the walks afterwards I cannot say; the fact, however, of the trunk being of an uniform size from the surface of the walk upwards induces me to believe that numbers of them are buried at least a metre. The healthiest trees and most thriving are Horse Chesnuts, especially those at the Tuileries, which are better than anywhere else; but they are too much crowded, consequently many of them are diseased. The Ailanthus forms a beautiful avenue planted alternately with Chesnut. The Plane tree makes a noble object, but it requires care in its young state; if planted separately in avenues it is apt to grow crooked. We have numbers here, forming the remains of an old avenue, from 15 to 20 feet in circumference. French garden tools generally are worthless, the spade with its brush-like handle is perfectly useless for any sort of ground-work whatever, and I will venture to say that an Englishman with an English spade will turn over more ground in one day than a Frenchman with a French spade will do in three days, taking into account of course the whole body of soil turned over. *H. K., France.*

Fruit Gatherer.—Having seen an advertisement for the sale of an article to cut flowers and collect fruit, in a late number of your Paper, I send you a sketch of one shown me by a friend, similar to those used in Germany for collecting Apples, Pears, and other large fruit; it is a very simple contrivance, and can easily be made by any handy man. *a* is an oval or round piece of wood



into which are inserted a number of rounded pegs *b*, sufficiently apart to admit of the branch of the tree (bearing the fruit) being passed through. You then gently pull the pole *c*, and the fruit remains in the reservoir. The other article is expensive, and also can be used for collecting flowers, but this contrivance is very easily obtained, and for gathering fruit from a height appears to be *multum in parvo*. *E. A. M., Wicklow.*

Foliage Masses.—To secure a good summer show of flowers under the deep shade of large trees is no easy matter, and in the approach to a dwelling, plants that might be otherwise suitable (*e.g.* Ferns, &c.,) are not sufficiently showy and promenadish. Having to contend with such a difficulty I have tried this year a ribbon of foliage plants in front of a symmetrically planted line of evergreens. The effect is so good that I would not exchange it for the showiest arrangement of ordinary bedders, even if the shaded nature of our site did not preclude the possibility of such a thing. The ribbon consists of Perilla Nankinensis for the back row, 18 inches wide; Antennaria margaritacea, a fine old fashioned silvery leaved herbaceous plant, 15 inches; purple Orache and Perilla mixed, and kept down by tipping, 12 inches; variegated Arabis for front row, 8 inches. I find the mixture of purple Orache and Perilla far preferable to either used alone; the effect is dense and rich, and the portwine colour of the Orache when the sun shines takes the funereal hue out of the Perilla completely. I find that the Orache should be sown late to hold on well to the end of the season. I sowed my batch this season in March, and now it is very difficult to keep the plants from seeding, and the tops are of very little use to strike for succession after they have begun to flower. Perillas root from cuttings in a week or eight days, and make capital plants for use late in the season if wanted. *Shirley Hibberd, Stoke Newington.*

Bees.—Would any of your Correspondents kindly furnish me with some information respecting taking beehives. I propose taking mine, which are very strong, with Messrs. George Neighbour & Sons' Fumigator, No. 12—the one used by means of bellows and with the prepared Fungus Messrs. Neighbour & Son recommend; but as I never took them in this way before I am in great fear of killing them by over-fumigation, and should be so much obliged if any one would tell me about how many puffs of Fungus into each hive will be sufficient to stupify without killing the bees. *L. A. G.*

Japan Lilies.—In the conservatory of a gentleman residing in Heaton Norris are 12 specimens of Lilium lancifolium, exhibiting 152 beautiful well-grown flower-buds in a very forward state. Two of the plants are of the great height of 6 feet 6 inches, each having 22 flowers from 11 branches. The other specimens, which average 5 feet 6 inches, show a fraction more than 10 flowers each. The bulbs were furnished from the stock of Messrs. Carter & Co., of High Holborn. *James Lomax, Stockport.*

Manure to Conifers.—In the case of Trees which were injured by frost, is it advisable to excite their roots with manure or not? I speak especially of Firs and Cypress. *F. C.* [Don't manure Conifers on any account whatever.]

Tempora Mutantur.—In the year 1509, the 1st of Henry VIII., Queen Catharine of Arragon could not procure a *salad* in the kingdom, till Henry sent to the Netherlands for a person who understood the method of raising the necessary ingredients. *J. B.*

Judges at Regent's Park (see p. 756).—I am in no degree responsible for the alleged misjudgment of Fuchsias and Geraniums at the late Royal Botanic Society's exhibition, therefore I shall leave that part of the subject to be dealt with by the parties concerned. As regards fruit, however, I will just ask "A Visitor" to explain why he made a public charge against the Judges which he now acknowledges there was no foundation for. If he can give no better reason than the one put forth at p. 756, many will be "incredulous" as to that having been the real motive for his attack upon us, because the rectification of the "misunderstanding" (which was not the fault of the Judges) must have been well known to him at the time he wrote that attack. For my part I can only look upon it as an unworthy attempt to hold the Judges up to public ridicule; whether such a course is calculated to benefit exhibitors or exhibitions time will determine. It is far from my intention to claim a monopoly of knowledge for "Judges in office," who are no more infallible than exhibitors or visitors; but I do claim for them the right to be treated with common courtesy and fairness. *J. B. Whiting.*—Now that "A Visitor," agreeably with Mr. Whiting's request, has come down from his sweeping assertion of general misjudgment to the indication of particular cases, I feel it incumbent upon me as one of the Judges of florist flowers at the exhibition referred to to reply to his charges in so far as affects myself—prefacing my observations, however, by the remark that the inference naturally drawn from his letters is that he sets himself up as superior to the whole of the Judges engaged upon that occasion, and that he feels himself capable of doing their collected work in about the same, or it may be in less time than that taken by them all, notwithstanding the crowded period of the day during which the exhibition is open to the public, and without the advantages of pursuing his operations in quietness. Does this self-appointed censor, though blessed with such transcendent powers of discrimination, think that he would be able to perform the duties of the Judges and award the prizes more justly than those complained of?—if so, and he can persuade the electors to embrace that opinion, it would be economy on the part of the Society to supersede those practical but useless individuals who have recently proved their incapacity, and substitute him in their place. With all his discrimination, I am afraid, however, that "A Visitor's" judgment in this case is superficial; surely, had he taken the trouble to thoroughly examine the plants, he would not have committed himself so egregiously. To come to the point at once: in the first place, he asserts that Mr. Young's Fuchsias were first as regards

merit, and Mr. Harper's about third or fourth. This I deny. If your Correspondent mistakes size for quality, No. 4, which was Mr. Young's collection, may have had claims to precedence. Plants being of good size merely add to the general effect, and are useless without more sterling qualities; if large plants do not approach the standard by which florists' flowers are judged so nearly as smaller plants do, a visitor will always find the former low down in the prize list. In fact, at the June show, and also at one of the shows last year, the smaller plants took the first prize. To resume, Mr. Harper's plants, though not so large as Mr. Young's, were very effective, and they were well contrasted as regards varieties. Mr. Young had the whole of the back branches brought forward to make a front, and this was not very neatly done, to say the least of it. Mr. Harper's on the contrary were as good behind as in front, in fact they were symmetrical. Of Mr. Young's collection of six plants, two had seen a deal of service; one plant was an invalid and should have been left at home under the care of a nurse. In Letters C D the prizes were as follows: Nos. 1, 3, 2, 4, 5. As to the relative merits of the several collections, there were not two opinions amongst the censors. In Letters C E "A Visitor" has fallen into the same error that he fell into in that of C C, but with more apparent reason. Nos. 3 and 6 at first gave the judges some little trouble, for looking at them in front as a whole, No. 6 told upon the eye, but then the judges examined the plants closely and found Mr. Parmenter's infinitely superior to Mr. Shrimpton's; those of the former were young and healthy, full of bloom and buds, and the individual flowers were tolerably perfect. While on Mr. Shrimpton's plants there were more blooms, they were inferior in quality; in fact, there were scarcely any perfect flowers upon his plants; they were stale and much past their best; the backs were naked and the foliage was sickly. I have now given some of the more prominent reasons which influenced my judgment in the cases complained of; the awards were conscientiously and impartially made, and I trust that the explanations I have given will prove satisfactory. The office of Judge is an onerous one, and the person filling it is always liable to be assailed; each thinks his productions better than those of his competitors, and the consequence is he is greatly disappointed. Such a one often attributes partiality to the Judges, and in this he is backed by others. I would here mention that I know but three of the exhibitors of florist flowers, viz., Messrs. Turner, Dobson, and Fraser. In conclusion, I think that it would be satisfactory to the judges and only fair towards them if "A Visitor" were to throw off his anonymous name and proclaim who he is. I also think that it would have been as well if he had contented himself with making his charge and not have endeavoured to make political capital out of the suggestion that the censors were incapable of forming a correct judgment because they had dined; they had not dined, however, and if they had, that would have had no effect upon their judgment. *A. Parsons, Danesbury, Welwyn, Herts.*

Wellingtonia.—I send a few sprigs of Wellingtonia about 5 years old, growing on a fairly dry bank of marly soil. Some are seared at one point of the stem, and all beyond that point is dying, others are seared and dead at the points of the sprigs; the former mischief running mostly at the upper, the latter at the lower part of the plant; and in every case, as far as I can see, on the growth of last year. Am I right in attributing the evil, which is very disfiguring, to the severe frosts of last winter? I can detect no insect such as affect Pinus. *J. J. R., Helston.* [This tree is so subject to the partial loss of its twigs that we suppose the present case to be merely an exaggeration of a constitutional peculiarity, intensified by a wet bad summer in Cornwall. Some remarks on the subject are offered in a leading article.]

Tree Wounds.—My only Mulberry tree, which forks into two large branches at the height of 6 feet, was split by one of the late spring gales at the junction down to within a foot of the ground. I had it braced together about 10 feet above the fork by an iron chain, and just below by a band of iron. But the fissure could not be got to close, and remains about 2 inches open. A large piece of lead has been laid over the top to keep leaves and wet from falling down, but I find that an accumulation is going on sideways. The bracing does not keep the half-severed branch from moving. Will the friction increase the rupture? Will the dust, &c. tend to decay the tree inside? If so, what am I to do to fill up the crevice and prevent the friction? *Ravenswood.* [Yes. You had better fill the crevice with pitch when the wound is quite dry, and secure it better. The chain cannot be firmly fixed. An iron band bolted together would be better.]——A very fine old Evergreen Oak, having many large branches springing from the stem within a few feet of the ground, has lately lost one of these branches, which by its fall has left an extensive hole, by which it appears that there is much decay and many fissures in the stem. It has been recommended to pour hot pitch into these fissures—would such a proceeding be likely to injure the tree? [No.] It has also been recommended to caulk the fissures with oakum like a ship's side—is such a proceeding likely to be efficacious? If neither of these operations can be recommended, what course should be followed? The tree is unusually large, and much valued, so that a good deal of trouble would not be grudged to preserve it. *Custom House Quay, Ireland.* [The caulking is needless if the pitch can be introduced properly. Our Paris Correspondent speaks of some preparation of coal tar used instead of pitch. But whatever you do be sure to pare or scrape away all decayed wood till you reach the quick.]

Potato Disease.—The following is the process I followed last autumn with my Potatoes, and the result therefrom. They were very bad, not more than one part in four being fit for food. I took them up in September and divided them into three sorts; viz., the few that were good I put by themselves; the bad I made two sorts—the small and really rotten I threw into the hogsty, the rest of them I put into an outhouse and sprinkled some unslacked lime all over them, letting them lay unprotected till February; the lime protected them from frost. I then planted what had any signs of life in them, which consisted of about three sacks. The sorts planted were the pink-eyed Fortyfold and red Ashleaf. I am now raising them (Aug. 1), and am happy to inform you that I have not found one diseased among them, and have taken up several rods; in fact they are the best crop I have had for years, and if there was one sound Potato planted it was by accident. My ridge Cucumbers are sharing the same fate as those of some of your correspondents; they are dying off daily. I have had about 30 fine plants with fruit from 4 to 6 inches long now lying dead on the ground, which a few days back were in the most luxuriant health. *James Woods, Harwich, Essex.*

Notices of Books.

In a thin 4to volume on *The Climate of England*, by Mr. George Shepherd, C.E. (Longmans), the author after adverting to our universal ignorance of the cause of variations in the seasons announces that it has "now pleased Almighty God that he should be the humble means in His hands, if not entirely to solve this great question, at least to discover the key to the solution of the problem, which has remained, for want of an observer, upwards of 6000 years a mysterious secret. It opens up a vast field of investigation; another curtain is now withdrawn, and as we gaze on the panorama before us, wonder upon wonder bursts on our astonished vision. The storms which sweep with terrific violence over land and sea, the deluges of rain which bring their terrors, and threaten almost our very existence, the famines which desolate the plains of India, and carry off thousands of our fellow subjects by all the horrors of starvation, are all spread out as it were on a map before us, if our past observations had been taken sufficiently accurate for our guidance. I feel," he adds, "overwhelmed at the magnitude of this discovery, and at the new duties which now devolve on each one of us if we are to protect the wealth and homes of England. But let the task be boldly met, and we shall find for every thorn in our path a sweet-scented, blooming Rose, and for every briar a Myrtle-tree, to make our duties and labours pleasant. For if the humble philosopher's labours are severe in investigating nature's great laws, how stupendous the reward!" The discovery thus made is stated to be, that the planet Jupiter, not excepting Saturn, Uranus, Neptune, or the smaller planets, and those great wanderers the Comets, as they revolve in their respective orbits round the sun, control, both directly and indirectly, the meteorology of our climate. "I think it is so conclusive that there remains not a shadow of doubt as to the great fact." The fine weather we almost always enjoy is we are assured when Jupiter is in the constellations Gemini and Cancer, a phænomenon which Mr. Shepherd considers to be entirely due to the "*sweet influences of Pleiades and the bands of Orion.*" There are however "perturbations," but they are entirely due to "Cometic influences." "From 1801 to 1804, we have good years, fine seasons with abundant crops. In each of these years a small comet is discovered in the heavens. (See Mr. Hind's History of Comets) But instead of 1804 and 1805 being wet and cold years, as is the case in the succeeding cycles, only 1805 is a very wet, cold year with late and deficient crops,—altogether a disastrous year; the years 1806, 1807, and 1808, we have three very fine years. But in 1807 a *fine comet* is visible in the heavens, and we enjoyed a bountiful harvest; 1808 also a fine bountiful year, but with heat so intense that men and cattle died in various parts of the kingdom; while the year 1809 is the reverse of all this, a cold, wet year, with late deficient crops, and as disastrous as 1805. It appears clear that the comet of 1807 caused the perturbation in 1804, changing that year from *wet* to *dry*, and also the '*intense heat in* 1808.' During the years 1810 and 1811, we have again very fine fruitful years with bountiful harvests. In 1811, a splendid comet is visible in the heavens; a second fine comet is also visible the same year. Although both comets were large, yet, beyond producing bountiful years with fine seasons, there is no perturbation in the cycle, excepting in 1804 before described. In 1812, the cycle again commences with a most dreadful year; it is described as a dry, cold, late spring, a treacherous summer, with a wet autumn, very deficient crops, and cold winter. Notwithstanding this disastrous change in the climate, a comet was visible that year in the heavens, which without doubt produced a corresponding drought in other latitudes."

We cannot afford room for further extracts. Mr. Shepherd is of opinion that "the time has now arrived when we ought to substitute the word 'astronomy' for that of 'meteorology.' It is quite clear that all the changes to which the earth's climates are subject are due entirely to astronomical phenomena." In illustration of his theory he furnishes a chart of the Constellations showing the period of Jupiter's revolution round the sun and the principal stars in each constellation. As evidence of its truth he has prepared some elaborate and very interesting tables of the Climate of England from 1656 to 1861. And as a test of its truth he predicts of 1861 as follows.—

Spring.—Cold, severe frost and snow to end of February.

Summer.—Fine April, and fine growing summer.

Autumn.—Fine autumn, good crops.

Winter.—Mild to December.

The work appeared about a month ago; time alone will reveal its value, for like all such subjects it depends entirely upon facts. If it is really the planet Jupiter that determines the nature of the seasons, if multiplied observations show this to be so, then all reasoning is superfluous. Mr. Shepherd however has an explanation, for the nature of which the reader will turn to his pages, as also for his views upon the question of sewage, with which his profession naturally leads him to deal. Upon that matter we have only to remark that as usual with civil engineers the difficulty of collecting and applying sewage is far too much overlooked.

DANGSTEIN.

(*Continued from* p. 758.)

On the western end is a noble house in three divisions, covering a space 80 feet long and 50 feet wide, the centre or main portion being 30 feet in height; in front were tastefully arranged beds gay with flowering plants. Entering this principal feature of the range from the western end, the first compartment contains many fine specimen plants, among which were the following, viz. Chloranthus inconspicuus, 3 feet 6 inches in diameter and as much in height, coming freely into flower; this is said to be used by the Chinese for scenting teas. I also noticed Euphorbia splendens, 6 feet high and as much wide, loaded with flowers; Heliconia bicolor and Braziliensis, the former finely in flower, its scarlet and white bracts producing a dazzling effect; Franciscea latifolia, sweet as Primroses; Ixora javanica, a beautiful specimen, 3 feet 9 inches by 3 feet 3 inches, coming finely into flower; Hexacentris mysoriensis, 3 feet 6 inches in height, and as much in width; Centradenia floribunda and rosea, both fine specimens—the former 4 feet by 3 feet 6 inches, the latter 3 feet 6 inches every way. Amongst these Begonias and other fine-foliaged plants were arranged with good effect. Some noble specimens of Stanhopeas and other Orchids were suspended from the roof. Among creepers on the rafters, somewhat carelessly trained, were Momordica balsamina and Thunbergia latifolia. The central portion has a noble appearance, and is especially rich in fine foliaged plants, among which a handsome Cyathea had a stem 8 feet in height, from which were produced fronds 10 feet in length; supporting it were Maranta zebrina, 4 feet by 10 feet; Elais guineensis, with leaves 9 feet in length; Maximiliana regia, with leaves 10 feet in length; Cycas revoluta, 8 feet through, and making a fine growth of new leaves; Corypha australis, with leaves 10 feet in length; a fine specimen of Wax Palm, with foliage 9 feet in length. Sabal Blackburnia and Livingstonia Borbonica, both fine specimens, had an excellent effect. Intermixed with other Palms were also Ficus Leopoldi and elastica, both in beautiful condition, the former 12 feet in height—the latter reaching the roof and rooting freely from the stem. The deadly Upas Tree was likewise here 20 feet in height, and Musa Sapienta, which had reached the roof, was producing large clusters of fruit. Associated with these were also good specimens of Jatrophas, Screw Pines, Bamboos, Cinnamon trees, and others of great interest.

On the front shelf were, moreover, many fine plants, amongst which I noticed Argand Oil tree, Dion edule, Ilex Paraguensis, Chusan Palm, &c. The rafters were tastefully covered with Passionflowers, amongst which baskets of Stanhopeas and other Orchids were suspended, altogether producing an excellent effect. A recess in the northern side is devoted principally to Orchids and Ferns; in the centre is a raised bed and water tank, round which are arranged many beautiful and rare specimens, conspicuous amongst which were Pitcher plants, the New Zealand Todea pellucida, Miltonia spectabilis, 8 feet in circumference; also Brassias, Oncids, Dendrobes, Cattleyas, and Cymbidiums, together with large specimens of Stanhopeas and Acinetas in baskets suspended from the roof. In the western end is a closely glazed case, 13 feet long and 2 feet wide, devoted to the culture of Anæctochili, of which there were some 320 plants, all in the best possible health, producing foliage of the most exquisitely beautiful description. This case has a false bottom of perforated zinc, into which each pot is fitted to about half its depth, allowing a slight bottom-heat to ascend from the heating apparatus; the whole is painted white, and has a clean and neat appearance.

Among Ferns under green bell glasses on benches at the north and eastern ends were Trichomanes reniforme, muscoides, spicatum, rigidum, and anceps,

all particularly interesting kinds; also nice plants of Hymenophyllum hirtellum, abruptum, and polyanthum. The third compartment is devoted to the cultivation of fine foliaged plants, of which there are here many beautiful specimens, and among them Dracæna Draco, a portion of the original plant from the Marquess de Souzal's garden in the island of Teneriffe, presented to Lady Dorothy Nevill by Mr. Skinner. The rafters were skilfully covered with climbing plants from amongst which hung down specimen Orchids in baskets.

Further eastward on the terrace is situated the greenhouse, a span-roofed erection 52 feet long, 32 feet wide, and 16 feet 6 inches in height. The back and front are 7 feet 6 inches in height, the former opaque, and furnished inside with a raised bank of earth faced with sandstone, on which the pots are placed. There are also shelves at the front and ends of the house; one at the entrance end contained a collection of British Ferns; the other was gay with Geraniums, Calceolarias, Cinerarias, Fuchsias, Roses, &c., and amongst them were several cagefuls of British birds. The central portion contained large plants of Witsenia corymbosa, Indian Rhododendrons, Camellias, Oranges, Loquats, Tea trees, two large specimens of Camphor tree, and others; in an upright glazed case on the back wall, where water is constantly trickling from a perforated pipe, was likewise a fine plant of the Killarney Fern; also specimens of Hymenophyllum tunbridgense and Wilsoni, all in fine health and very beautiful. Passionflowers, Lapageria rosea, and other climbers were trained on the rafters, and on the northern side suspended baskets of flowering plants had a good effect.

On the eastern end is the Fernery, a span-roofed erection 52 feet long and 26 feet wide. It has a reservoir in the centre, and is laid out in raised beds of earth faced with rugged sandstone, between which tortuous paths are introduced with good effect; the back wall, supporting pillars, and eastern end have also similar rustic decorations, which are well clothed with Lycopods. Among Ferns suspended from the centre of the roof over the water tank was a beautiful Goniophlebium subauriculatum, the fronds of which were 15 feet in length, drooping gracefully to the water. A noble example of Woodwardia radicans, also suspended, was an object of much interest. Drynaria coronans and morbillosa were placed on Oak blocks; and scattered about elsewhere were Davallia aculeata and divaricata, Balantium Culcita, Gymnogramma tartarea, Lastreas of different kinds, Cyathea aculeata, Dicksonia antarctica, Marattia cicutæfolia, Angiopteris evecta, and many other fine specimens. A large and beautiful plant of Nephrolepis davallioides suspended from the roof had five fronds 6 feet in length; Alsophilas were throwing up vigorous fronds; Cibotium Barometz and Schiedianum were also splendid examples of their respective kinds, the fronds of the latter being 15 feet in length. *Cyathea medullaris had leaves 12 feet in length, and C. arborea fronds 8 feet long.* Of specimens such as these was this glorious assemblage of rare and beautiful plants made up. Here and there the rugged sandstone ornamentations of this house were sparingly covered with Mosses and seedling Ferns, and Lygodium was creeping over the roof. On the front shelf were several cases of lizards, which, viewed as they were here amongst graceful foliage, had a fine effect. In the centre of the north side is a pair of noble folding glass doors which open into Lady Dorothy Nevill's museum, a room 14 feet square fitted up with cabinets, in which are contained a botanical library and numerous specimens of woods, tropical fruits, &c., both dried and preserved, together with other objects of botanical and historical interest. The walls too are adorned with drawings and photographs of interesting subjects. On a table in the centre of the room, which is replete with curiosities, lies the catalogue of the Dangstein collection, an admirable specimen of penmanship executed in various colours by Lady Dorothy Nevill herself. On this table is also placed the book for visitors' names—a long array beginning with that of the Bishop of Winchester, and continued on through many pages, consisting of autographs of all grades from the highest peer to the humblest lover of gardening who may have been induced to view the choice and admirably cultivated collection of fine plants for which this charming place is so distinguished.

The whole of the noble structures just described are very efficiently heated by a combination of hot water and hot air, and the smoke is carried up a high chimney at some distance from the buildings, all within which exhibited order and neatness, and every plant was correctly labelled, the name being clearly and boldly written on a large wooden tally. Such an assemblage of beautiful specimens, however, are worthy of a better description of label than that which is attached to them, viz., one that would tell its own tale, and no one knows better how to execute such a label than Lady Dorothy Nevill herself. Behind these houses is a space 65 feet in width, bounded on the eastern end by the gardener's cottage, a beautiful and well finished Elizabethan structure, with a pretty flower garden at the southern end, extending to the front of the terrace—a delightful spot, from which peeps of the distant South Downs are obtained through the trees and over the parapets and roof of the mansion. The principal terrace is terminated at the eastern end, beyond the flower garden just noticed, by an aviary now in course of erection, 48 feet long and 28 feet wide, which is to be filled with birds of handsome plumage. The open space of ground behind the houses already adverted to contains two pits each 36 feet long by 12 feet 6 inches wide, in which are some good examples of Heaths and other hard-wooded plants. Another space is left for similar ranges, and on other plots on which Cranberries are growing and fruiting freely, it has been determined to erect three houses for the cultivation of Orchids 80 feet long, and 18 feet in width. Beyond these ranges of glass under the shade of lofty trees is a hardy Fernery, filled chiefly with British and North American species planted amongst irregular masses of roots and sandstone rock, with ample walking room between, and although the situation is dry, many of the plants are becoming well established and effective. To the right are thriving specimens of rare Conifers. *D.*

(To be continued.)

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c.—Hyacinths and other Dutch bulbs are now arriving. Those for early forcing should be procured and potted, and even, as we have before stated, where that is not intended there will be a better chance of getting good bulbs early than late when all the best shall have been selected and bought up. Small Orange trees in pots for forcing for winter decoration should now be fully exposed in order to get their wood well ripened. The Mandarin being a free grower with a dwarf bushy habit and small foliage, and a most abundant bloomer, is probably the best for this purpose; but any of the varieties flower profusely provided the wood is thoroughly ripened in autumn. These and Daphnes should be grown largely wherever sweet scented flowers are in demand in winter. Take care also to have plenty of Salvia splendens, which is an exceedingly gay plant and very useful for mixing among Chrysanthemums in the show house.

FORCING DEPARTMENT.

PINERIES.—Any of the stock in pots which may appear to require repotting should be examined and shifted at once, if that is found necessary, in order that the roots may get hold of the fresh soil before short days and long nights set in, when it will not be safe to encourage growth. And any necessary re-arrangement of plants growing in the open bed should also be effected as soon as possible, as with a little care this can be done at present with very little risk of checking the plants, so as to throw them into fruit, and there is also plenty of time to get them well established after removal before the dormant season. Encourage plants expected to show fruit next January to make vigorous growth, for these should be sufficiently advanced by the middle or end of October to allow of keeping them rather cool and dry through November and December, so as to check and thoroughly ripen their growth, as unless this is attended to there will be considerable risk about getting them to show fruit at that season. Plants which have been prepared for fruiting, and which it is desired to get up at once, should be encouraged with a moist warm atmosphere, keeping the soil about their roots in a healthy state as to moisture. Some dislike to apply water at the root in the case of plants that have been kept dry for a time to check growth, and withhold it until the fruit is perceptible; but this is a mistake, causing loss of time as well as injuring the plants, as unless root action is encouraged, plants cannot be expected to start freely. If artificial treatment must be resorted to in order to get the plants to fruit at the desired time, there is no method so certain or so little injurious to the plants as keeping them cool and dry for a month, exposing them to as much sunshine as the foliage will bear without scorching, and then affording them a moist warm temperature and a brisk bottom heat, giving sufficient water at the root to properly moisten the soil. Take off and pot, or plant out suckers at short intervals, as they can be obtained of sufficient strength, for having a regular succession of plants is the most likely way to secure a regular supply of fruit.

VINERIES.—Take advantage of the present comparatively dry weather to give air freely in houses where the ripening of the wood is the object aimed at, and if a little fire-heat is used, with air, this will be much more efficacious now than later in the season.

FLOWER GARDEN AND SHRUBBERIES.

In addition to cuttings, have a reserve stock of strong plants in pots, which is safe practice where a large quantity of bedding material is required, and where there is proper convenience for growing and propagating in spring, these will furnish a large quantity of cuttings next March, which will form equally good plants by turning-out time as cuttings put in now. In the case of such things as Ageratums, Heliotropes, and dwarf Lobelias it is useless wintering young stock, as these grow so freely in heat, and are so easily propagated from soft cuttings, that a few good sized old plants which require but little room or attention in winter will furnish a very large quantity by turning-out time. See however where there are not plants to furnish spring cuttings that plenty are got in, so as to provide while it can be done against the risk of being short of stock at planting-out time. Roses may be propagated by cuttings; choose the ends of shoots with the bottom part in a tolerably firm state.

HARDY FRUIT AND KITCHEN GARDEN.

Potatoes on wet soils should be taken up wherever the haulm is at all decayed to prevent them from rotting. Take advantage of dry days to get Celery earthed up, first thoroughly soaking the rows with manure water; also apply quicklime where slugs are troublesome. On heavy soils it is sometimes necessary to surround the plants with sand or sifted ashes to prevent their rotting off in winter, which they are apt to do if surrounded with soil that holds much wet. Where anything of this kind is necessary it will be advisable to defer earthing up till late in the season, as frequent soilings of this sort would be very troublesome. Also pull up early Onions where ripe, and get them thoroughly dried. Thin young crops of Turnips, Spinach, &c., before they become weakly and drawn. Stir the surface of the soil deeply among growing crops to admit air to the roots, and keep down weeds. Recently planted Strawberries will be benefited by occasional applications of manure water. Get some ground manured and dug or trenched for another crop whenever time can be spared for that kind of work.

COTTAGERS' GARDEN.

High cultivation amongst all green crops will amply repay any extra labour it may require. Hoeing or even forking amongst growing crops, provided the roots are not injured, is highly beneficial, and will prove a sort of fallow for successive crops. Keep down weeds, and let order and neatness be observed everywhere.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,

For the Week ending Aug. 22, 1861, as observed at the Horticultural Gardens.

August.	Moon's Age.	Barometer.		Temperature.					Wind.	Rain.
				Of the Air.			Of the Earth.			
		Max.	Min.	Max.	Min.	Mean	1 foot deep	2 feet deep.		
Friday 16	10	29.813	29.812	67	43	55.0	66	62½	S.	[illegible]
Satur. 17	11	30.024	29.967	74	43	58.5	64½	62	S.W.	[illegible]
Sunday 18	12	30.027	29.799	76	53	64.5	64	62	S.W.	[illegible]
Mon. 19	13	29.922	29.904	72	42	57.0	65	62	S.W.	[illegible]
Tues. 20	○	30.067	30.002	75	37	56.0	64½	61½	S.W.	[illegible]
Wed. 21	15	30.169	30.156	72	38	55.0	63	61	W.	[illegible]
Thurs. 22	16	30.239	30.071	71	55	63.0	63	60½	S.W.	[illegible]
Average..		30.037	29.958	72.4	44.4	58.4	64.3	61.6		[illegible]

Aug. 16—Overcast; rain; very fine at night.
— 17—Fine; very fine throughout.
— 18—Fine; dry air; very fine.
— 19—Fine; cloudy; very fine; brisk wind.
— 20—Clear and fine; very fine; dry air; cold at night.
— 21—Fine throughout; cold at night
— 22—Very fine; cloudy; slight rain at night.

Mean temperature of the week 2¾ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK

During the last 35 years, for the ensuing Week, ending August 31, 1861.

August.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds.							
						N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 25..	71.3	50.8	61.0	15	0.62 in.	2	2	1	1	5	14	[illegible]	6
Mon. 26..	72.5	48.8	60.7	11	0.61	3	2	3	—	6	9	[illegible]	[illegible]
Tues. 27..	72.8	50.0	61.4	11	1.23	1	2	4	—	1	10	[illegible]	9
Wed. 28..	72.5	50.0	61.2	16	0.22	2	5	3	—	5	9	[illegible]	4
Thurs. 29..	71.4	48.3	59.8	14	0.58	4	3	4	1	2	1	6	[illegible]
Friday 30..	71.8	48.4	60.1	8	0.92	2	5	1	—	5	8	5	3
Satur. 31..	70.8	48.1	59.4	15	1.31	2	6	3	2	2	5	[illegible]	5

The highest temperature during the above period occurred on the 25th, 1859—therm. 89 deg.; and the lowest on the 29th, 1850—therm. 32 deg.

Notices to Correspondents.

BOOKS: *W R.* There is no *cheap* work with plates of Orchard-house fruits, nor can there be. Rivers on the Orchard House, Pearson on the same, and Hogg's Fruit Manual are authorities.—*Geo. M.* Sanders on the Vine for a Vinery, and Hoare on the Vine for the open air. We cannot answer private enquiries.

CUBA BAST: *S H.* This material consists of the layers of the liber of Paritium elatum, a Malvaceous tree.

FOREST TREES: *Swindon.* We quite agree with you in the opinion that hardy timber trees never looked better than this year; but cannot acquiesce in the belief that they have to thank a cruel winter for their improvement. The real cause of their restoration to vigour was the rain of last year, which filled the great subterranean reservoir and thus brought the roots once more within the reach of the moisture of which they stood in such urgent need.

GARDENING IN ST. GILES'S: *C S T.* seeing a paragraph thus headed in our columns of August 17, copied from a weekly paper, alluding to some flower show which had been held for the encouragement of the growers of plants in London windows, asks if any of our correspondents can favour him with information as to where a more detailed account of the attempt can be obtained?

GRAPES: *Jasper Standstill.* We would recommend you to exhibit them at the Royal Horticultural Society's meeting, to be held at South Kensington on the 10th of September next.

NAMES OF PLANTS: *H T.* 1, 3, not in flower; 2, Kœlreuteria paniculata; 4, Staphylea pinnata.—*R C.* 1, Heliotropium undulatum; 2, Alstromeria psittacina; 3, Tradescantia virginica; 4, Orobus vernus, but why flowering so late?—*W.* Cotyledon orbiculata, of the natural order Crassulaceæ.—*A !* 1. Arundo Phragmites; 2, Holcus lanatus.—*Yorkshire Lass.* 1, Solidago virgaurea; 2, Thalictrum minus; 3, Sisymbrium officinale; 4, Chenopodium Botrys. We go no further than No. 4.—*C G.* 1, Blechnum Spicant var. strictum; 2, Cystopteris bulbifera; 3, Menispermum canadense.—*J G C F.* 1 and 2, Forms of Gymnogramma chrysophylla; 3, Gymnogramma Calomelanos.

PICOTEES: *Rutland.* The flowers are all producing another flower in their centre. This causes the first flower to burst. The mischief is caused by exuberant growth, the effect of a soil too rich and perhaps too damp.

POTATO BLIGHT: *Amelia.* Next week.

TREE TRANSPLANTERS: *Eileanach.* You will find the information, and much more, in Barron's *British Winter Garden*, a very useful book. There is no reason why a house should not be roofed in the manner you propose. It was thus that the first Crystal Palace was covered in. But the work must be very good or it will leak.

VANCOUVER: *G. F.* The *good* farm labourer is now worth 1s. a-day or 35*l.* a year and board.

VINE MILDEW: *Ignoramus.* If you will but follow the advice so often given, or adopt the practice now universal, namely to dust the mildewed places with flowers of sulphur, you will certainly kill the Oidium,—unless the remedy has been too long deferred. The cause of Oidium is unknown.

WORK: *Danby.* We are obliged to differ from you. Upon your own showing the gardener has acted sensibly and to your best interest. It is to be hoped that the steward, who knows nothing of gardening, has not been permitted to influence your own better judgment.

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ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price 42l. 10s.
TESTIMONIALS.
A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following:—
From MR. JOHN RICHARDS, *Bailiff to* DR. N. CARNE, *Dimland Castle, Glamorgan.*
"I beg to certify that I have for five years worked Messrs. Burgess & Key's Reaper in my master's Home Farm, and also accompanied it when lent to tenants on the estate. During the above mentioned period the Machine has not cut less than 1,000 acres of all kinds of crops, with the same two knives as first had with the Machine. Dr. N. Carne having given up farming, the machine is now in the hands of his tenant Mr. D. Thomas, of Llanrwst, and is in excellent order."
M'CORMICK'S REAPER for Manual Delivery. Price 25l.
COMBINED REAPER AND MOWER—Two-Horse Machine. Price 35l.
The last Machine is fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.
These Prices include Packing and Delivery at any Railway Station

For Watering Gardens, Lawns, &c.

HANCOCK'S VULCANISED INDIA-RUBBER TUBING is made in 60 feet lengths, and of any size for Union-joints to attach it to Cisterns or Water Mains.

PRICE PER FOOT.

Size.	½ inch	⅝ inch	¾ inch	PRICE OF BRASS FITTINGS.
Slight ..	5d.	6d.	7d.	Branch, 12 in. long, with Stop-cock, Rose, and Jet, 4s. each.
Medium ..	8d.	9d.	10d.	
Stout ..	10d.	11d.	1s.	Spring Spreader 3s. each.
For Mains	1s. 2d.	1s. 3d.	1s. 5d.	Union Joint, ½ inch, 1s. each.

JAMES LYNE HANCOCK, MANUFACTURER, Vulcanised India-Rubber Works, Goswell Mews, and 8, Goswell Road, London, E.C.
N.B. Illustrated Price Lists on application.

Gutta Percha Tubing for Watering Gardens.

THE GUTTA PERCHA COMPANY have the pleasure to acknowledge the receipt of the following *Testimonial from* MR. J. FARRAH, *Gr. to* BOSWELL MIDDLETON JALLAND, Esq., *of Holderness House, near Hull.*
"I have had 400 feet of your Gutta Percha Tubing, in lengths of 100 feet each, with union joint, in use for the last 12 months for watering these gardens, and I find it to answer better than anything I have ever yet tried. The pressure of the water is very considerable, but this has not the slightest effect on the tubing. I consider this tubing to be a most valuable invention for Gardeners, inasmuch as it enables us to water our gardens in about one-half the time, and with one-half the labour required."
Manufactured by the GUTTA PERCHA COMPANY, Patentees, 18, Wharf Road, City Road, London, E.C., and sold by their Wholesale Dealers in town and country.

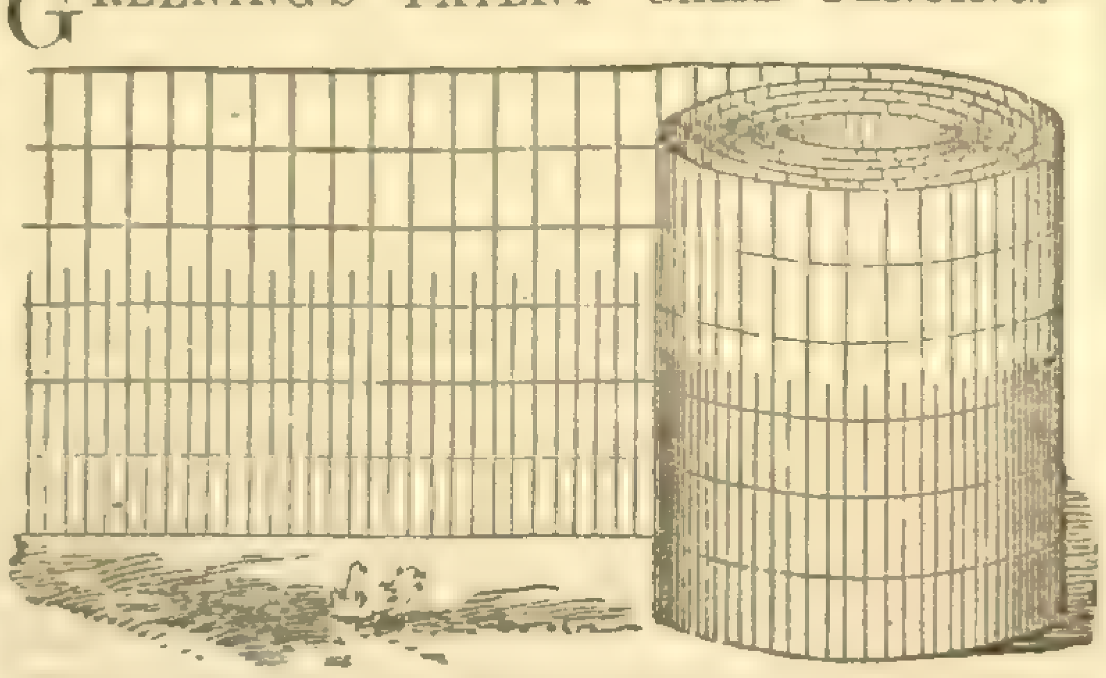
"FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.
PROTECTION FROM THE COLD WINDS & MORNING FROST.
"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.
Two yards wide .. .. 1s. 6d. per yard run.
Four yards wide .. .. 3s. per yard.
An improved make, 3 yards wide, 2s. 6d. per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard run
ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.
"It is much cheaper than mats as a covering."

CARSON'S ORIGINAL ANTI-CORROSION PAINT is now used extensively for all kinds of OUT-DOOR WORK, such as IRON, WOOD, STONE, BRICK, COMPO, CEMENT, &c., and has been proved, after a practical test of 70 years, to surpass any other Paint.
For fuller particulars, see No. 25 of the *Gardeners' Chronicle*, Page 572, or apply to WALTER CARSON & SONS (Successors to the Inventors), 9, Great Winchester Street (near the Royal Exchange), London, E.C.
No Agents throughout the United Kingdom.

Oil Paint no longer Necessary.

HILL & SMITH'S PATENT BLACK VARNISH for preserving Iron Work, Wood, or Stone. This Varnish is an excellent substitute for oil paint on all out-door work, and is fully two-thirds cheaper. It may be applied by an ordinary labourer, requires no mixing or thinning, and is used cold. It is used in the grounds at Windsor Castle, Kew Gardens, and at the seats of many hundreds of the nobility and gentry, from whom the most flattering testimonials have been received, which HILL & SMITH will forward on application.
Sold in casks of about 30 gallons each, at 1s. 6d. per gallon, at the Manufactory, or 1s. 8d. per gallon paid to any station in the kingdom.
Apply to HILL & SMITH, Brierley Hill Iron Works, near Dudley, from whom only it can be obtained.

GREENING'S PATENT GAME FENCING.—

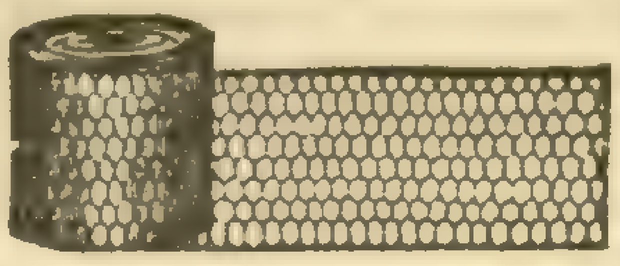


Testimonial from WM. INGRAM, Esq., *Gardener to his Grace the* DUKE OF RUTLAND.
"I find it extremely convenient, elegant in appearance, and perfectly efficient as a rabbit fence. I shall certainly employ it in preference to the usual Wire Netting whenever I require anything of the kind."
New Illustrated Catalogue of all kinds of Iron and Wire Fences, Iron Gates, &c., now ready and post free, on application to GREENING & Co.
Victoria Iron and Wire Works, 81, Oxford Street, Manchester.

Prices Reduced.

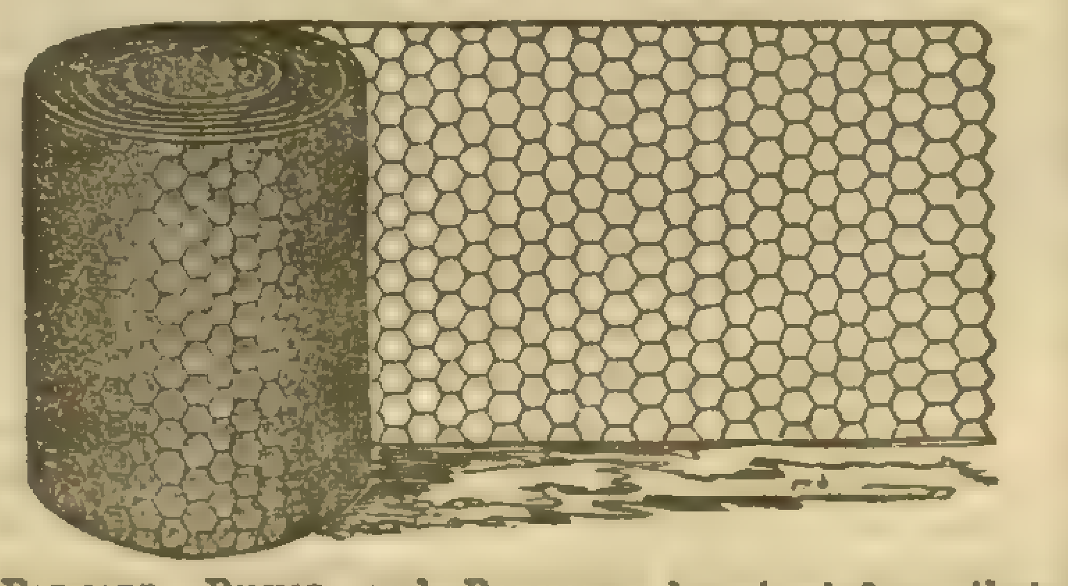
H. J. MORTON AND CO., Galvanised Iron Works, 2, Basinghall Buildings, Leeds.
GALVANISED IRON ROOFING
for Farm Buildings and other Roofs; the cheapest, most durable, and neatest Roofing in use; also Spouting at 10½d. per yard.
WIRE STRAND CABLE FENCING

(formed of Twisted Wires like a rope or cable), the strongest, cheapest, and neatest fence in use, will resist the largest cattle, and will not bend or get out of form by trespassing upon or over. Price, with five lines of the Galvanised Strand, iron main posts, and pronged Standards, 1s. 2½d. per yard.
This fence is far cheaper than posts and rails, or any kind of iron fencing; and possesses four times the strength of solid bars. Will not rust nor corrode. Upwards of 1200 miles of this Fencing supplied.
GALVANISED GAME AND POULTRY NETTING.



Galvanised, 24 ins. wide 2-inch mesh, 5½d., 7½d., and 9½d. per yard.
Galvanised, 24 ins. wide, 3-inch mesh, 4d., 5d., and 7d. per yard. The Netting made any width, and with openings of any size.
GALVANISED IRON CHAIN CAMP STOOLS & CHAIRS, POULTRY FOUNTAINS & FEEDERS, PRONGED DAHLIA RODS AND ROSE STAKES, &c.
Strong CATTLE HURDLES from 2s. per yard.
PATENT IMPROVED GAS WORKS
of all sizes, for the use of Private Houses, Mansions, Railway Stations, Mills, Collieries, Mines, Villages, &c. Works from 10 to 500 lights estimated for. The works can be entrusted to an ordinary labourer.—Apply to
HENRY J. MORTON & Co. 2, Basinghall Buildings, Leeds.

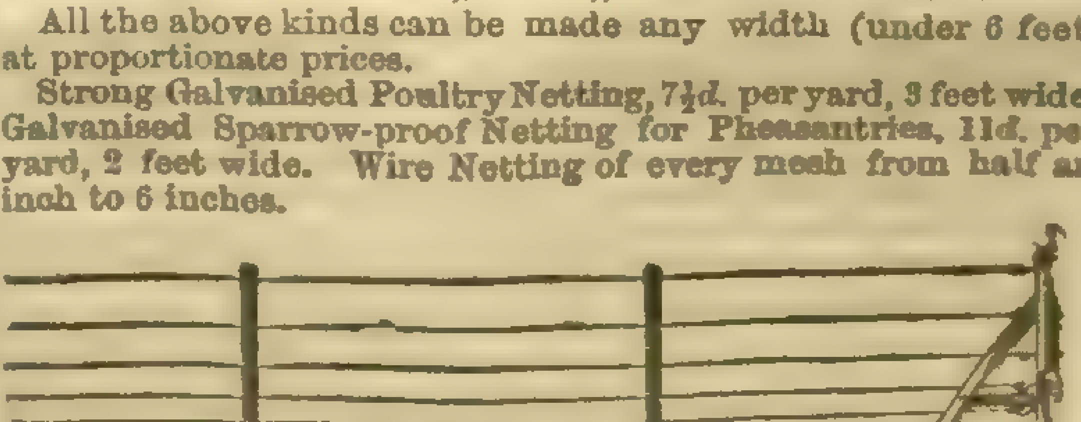
BARNARD, BISHOP, AND BARNARDS, Norwich.
FURTHER REDUCTION IN THE PRICE OF WIRE NETTING.—APRIL, 1861.



BARNARD, BISHOP, and BARNARDS beg to inform their friends and the public that they have made a further reduction in the prices of Machine made Wire Netting, and also that all their Nettings are now Galvanised after being made, which adds much to their appearance, strength, and durability.

	Gauge.	Galvanised. per yard.	Japanned Iron. per yard.
2-inch mesh, 24 inches wide ..	No. 19	.. 4½d.	.. 3½d.
2-inch „ „ „ ..	„ 18	.. 5	.. 4
2-inch „ „ „ ..	„ 17	.. 6½	.. 5
2-inch „ „ „ ..	„ 16	.. 8	.. 6½
1½-inch „ „ „ ..	„ 19	.. 4¾	.. 4
1½-inch „ „ „ ..	„ 18	.. 6	.. 4¾
1½-inch „ „ „ ..	„ 17	.. 7	.. 5½
1½-inch „ „ „ ..	„ 16	.. 9	.. 7

All the above kinds can be made any width (under 6 feet) at proportionate prices.
Strong Galvanised Poultry Netting, 7½d. per yard, 3 feet wide. Galvanised Sparrow-proof Netting for Pheasantries, 11d. per yard, 2 feet wide. Wire Netting of every mesh from half an inch to 6 inches.



Reduced Price of WIRE FENCING, and GALVANISED WIRE ROPE FENCING, suitable for the home trade or the colonies.
Five wires, 3 feet 6 inches high, pronged Standards, 8 feet apart, one wrought iron straining post and straining screws to each 100 yards of Fencing, 10d. per yard.
The same with Galvanised Wire Rope, 1s. per yard.
Illustrated Catalogues, with prices of every variety of Wire Fencing and Wire Netting, forwarded free on application.
☞ Wire Fencing and Netting delivered Carriage Free at all the principal Railway Stations.

THE LONDON MANURE COMPANY, (ESTABLISHED 1840,)
Are now prepared to send out the following MANURES:—
CORN MANURE FOR AUTUMN SOWING.
SUPERPHOSPHATE OF LIME.
DISSOLVED BONES FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN.
PERUVIAN GUANO, NITRATE OF SODA, SULPHATE OF AMMONIA, and every other Manure of value.
116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.
CONCENTRATED TURNIP MANURE, equal in value to the preceding.
Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861 are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME	£6 6
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES ..	5 5
LAWES'S BARLEY, GRASS, AND MANGEL MANURES	8 0

These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &C. IN ENGLAND AND WALES AND IN SCOTLAND.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.
Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.
For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

Land Drainage.

WORKS OF DRAINAGE of any extent are EXECUTED by the GENERAL LAND DRAINAGE AND IMPROVEMENT COMPANY on all descriptions of property, whether freehold, entailed, mortgaged, trust, ecclesiastical, corporate, or collegiate.
Repayment may be made by the Landowner as successive portions of the works are completed; or the actual expenditure, with a commission thereon, may be charged on the property improved, by way of rentcharge on the estate created for various terms of years so as to adapt the rate per cent. of annual charge to the circumstances of the tenants.
No investigation of title being required, or notices given to Reversioners or Mortgagees, no legal expenses are incurred.
Works of Irrigation, Enclosing, Wood Grubbing, Road Making, and Farm Buildings are executed in a similar manner.
Landowners desirous to execute any of the Improvements by their own Agents, and charge the outlay and expenses on the Estate, may obtain Loans for the purpose.
Applications to be made to WILLIAM CLIFFORD, the Secretary, at the Offices of the Company, 52, Parliament Street, S.W.

FREE STUDENTSHIP IN THE EDINBURGH NEW VETERINARY COLLEGE, Authorised under Royal Sign Manual. WINTER SESSION, 1861-62.—Gentlemen desirous of commencing a Course of Study to qualify as Veterinary Surgeons are informed that all who enter on the 6th November, 1861, and who have not attended a Veterinary College before, will be admitted to compete for a FREE STUDENTSHIP at the close of the Winter Session. The conditions of the competition, and any farther particulars, may be learned from Professor JOHN GAMGEE, New Veterinary College, Edinburgh.

The Agricultural Gazette.

SATURDAY, AUGUST 24, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

TUESDAY,	Aug. 27	Meeting of the Kent Agri. Society at Dartford.
WEDNESDAY,	— 28	

IT is one of the most difficult things in the world to apply the "rule of three" in matters agricultural. A farm bears a certain relation in point of extent—say as one thousand is to *one*—to the plot set apart as its garden; but the produce of the farm is not therefore one thousand times the produce of the garden. The rule requires that the things compared be of the same "denomination," and this the garden and the farm cannot be said to be: each may be described as to their acreage, by the use of the same terms, but the

acres in the two cases respectively cannot be said to be of the same name or denomination. They differ in the depth and thoroughness of their tillage, in the artificial fertility of their soil, and above all in the quantity of superintendence and care which they receive. These differences are real and interfere with the realization of estimates formed in disregard of them. The last named is the most important of them all in every case where life either animal or vegetable is concerned. Our Correspondent Mr. BURCHAM has often pointed out how large schemes of cultivation in which steam-power is to displace the hand-worked spade and the horse-drawn plough, may fail of all they promise owing to the quantity of superintendence in detail which every living thing requires, and which operations on the great scale cannot give them. And all his attempts to bring steam cultivation to a successful issue have been based on the importance of preserving this detailed care and superintendence so necessary to complete success. The need of them is certainly greater in the case of animals than in the case of plants; a cottager will make a single cow or a single brood of chickens profitable, while a Company for the supply of London with milk or poultry would be sure to fail. This individual care and superintendence is, however, needed in the case of plants as well as animals; and everybody knows that the gardener will do more than the farmer in the production of specimens. It is well to bear in mind that owing to this unavoidable difference in the conditions of the two cases, a certain distrust is justifiable of all agricultural inferences from horticultural experience.

Let us, however, exactly understand within what limits this distrust is to be allowed. And to this end we may reason again from the analogies of animal life. There is a work called COATES's Herd Book, of which 12 volumes, containing records of perhaps 20,000 animals, have appeared. A single entry of the parentage of each of these cattle, occupying perhaps half-a-dozen lines, in one or other of these volumes, indicates the mere fact that special attention has been bestowed on each. It has been bred with an object in view, and its pedigree is known. What, then, is the upshot of this individual oversight and care: these animals are worth more than animals of equal size and health, which have been bred without any special individual aim or superintendence, by from 50 to 500 per cent., and even more. Turn these same animals adrift, give them no more than general superintendence, and in the course of a very few years they will lose their valuable properties.

It is no mere whim or fashion, no mere accidental or market value that makes them worth so much—the possession of a pedigree is a real and intrinsic merit. It is the fact that animals on which this care has been exercised for successive generations possess the power of transmitting with certainty the good qualities they have inherited; and this is a power of the very highest value to the cattle breeder. A good illustration of this power is quoted from a recent number of the *Oxford Journal* in a foot-note.*

Now although a man who has grown 10 quarters of Wheat per acre over 10 square yards in a garden plot cannot anticipate next year a similar produce per acre over 10,000 times that extent—yet if, like the breeder of good Short-horns, he has for so many years followed up the treatment of the produce until of the last year's growth he can say that it has inherited its productiveness through a number of annual generations, each of which has in succession exhibited this valuable quality in an increasing degree, then like the Short-horn breeder he may confidently believe that under ordinary treatment the next generation of the series will certainly exhibit the character of its predecessors. Carelessness will ultimately destroy its character; ordinary care will barely retain it; special carefulness will improve it.

A well bred Short-horn heifer has yielded 8 cwt. of beef at 22 months old. No one can reason from this fact to the conclusion that ordinary feeding will bring about corresponding results over a herd of one or two hundred animals; but from the history of that and other heifers of good pedigree, he may make sure, by breeding from similar stock, of animals which shall be capable of a similar return.

And, just so, on a square yard of garden ground Wheat has been grown at some hardly credible rate per acre. No one would expect under ordinary agricultural circumstances to reap a corresponding return on the Wheat fields of a farm; but from the history of that and other plots of Wheat having a good *pedigree* (if there be such a thing in such a case), he may make sure, by the use of such grain as seed, of a crop which shall show a strong tendency to exhibit the character for productiveness which it has inherited.

Now, the purpose of this long preamble is to introduce the announcement that there is such a thing as a "Pedigree Wheat." Probably all good sorts originating in single selected ears have more or less a pedigree—a certain proportion of the produce has each year been rejected as inferior, and from the remainder only, the grain has been derived which is ultimately offered in the seed market. We have however lately made the acquaintance, first in the advertising columns of our agricultural papers and latterly in the fields where the crop was being cut, of a true "pedigree" Wheat. The enormous ear represented in an advertisement, which looks like an object in the microscope, is the fairly drawn portrait of an ear which we have in our hand as we write. The lowest set of florets shown in the figure has been broken off—it was gathered early and before being fully ripe, in order that it might be sketched, and it has somewhat shrunk, not however more than a quarter of an inch in length, and correspondingly in width. The sets are generally of five grains each, four at either end, and there are 15 sets on each side of the rachis. It is probably the most extraordinary ear of Wheat that was ever grown. We have, however, a box before us containing many ears of 14 sets on either side, and containing from 90 to 114 grains in each. And having been over Mr. HALLETT's garden and Wheat fields, at the Manor House, Brighton, we can vouch for the extraordinary character of the plants which occupied the garden plot (about the 14th part of an acre) where the seed had been dibbled a foot apart in every way, at the rate of $4\frac{1}{2}$ pints per acre—and of the crops on two adjacent fields, the one dibbled at the rate of 1 peck per acre, and the other drilled in the ordinary way at the rate of 6 pecks per acre.

The interesting point in Mr. HALLETT's Wheat however is not the extraordinary character of individual specimens—this might be the result of an accidental concurrence of fortunate circumstances—it is the fact that this character has been inherited. It is now the fourth year since Mr. HALLETT commenced the careful cultivation of the Wheat plant. Commencing with an ear of Nursery Wheat four years ago, he has year by year selected most carefully the produce of the finest ears as seed for the next year's crop, and improving every successive harvest, he has at length more than doubled the size of the original ears.

What a careful register he has preserved of all his doings—how intensely the influence of "individual oversight and care" has been exerted—is plain from the plan before us of his experimental plot, where the position of every seed, the number of ears the plant derived from it has yielded, and the value and history of particular ears are recorded. We have in this plan an exact account of the successive rows A, B, C, &c.; and of the successive plants A 1, A 2, A 3, &c. And the following is a summary of some of these rows:—

Rows.	Plants or Stools.	Ears.	Misses.	Ears per Plant or Stool.
A	14	400	—	[illegible]
B	11	282	1	[illegible]
C	9	205	5	[illegible]
D	15	342	—	[illegible]
E	14	322	—	[illegible]
F	14	276	—	[illegible]
G	14	306	—	[illegible]
H	12	317	2	[illegible]
I	13	304	1	[illegible]
J	14	430	—	[illegible]
Total ..	130	3184	9	[illegible]

And then follows a calculation founded on the "rule of three," from which it appears that the produce is equal to 1,001,880 ears per acre, and that 560,000 grains of Wheat or thereabouts filling a bushel it only needs an average of 55 grains of Wheat per ear to produce 100 bushels per acre, whereas the average number of grains on two of the poorer plants were [illegible] grains per ear.

A calculation of this kind, however, is of little agricultural value; but the thing which is of immense agricultural value is that a "pedigree" Wheat will hand down the character of its ancestry—and if through a number of generations good qualities have been exhibited, those qualities will be certainly handed down, and the produce will make an effort to develop them, even in unfavourable circumstances. Perhaps the extreme detail of Mr. HALLETT's superintendence during the progress of his experiment will best be gathered from the following letter with which we have been favoured from him since our visit to his farm, where we were not fortunate enough to meet him.

"I now send you in a case with lid (fastened with a screw, over which is my seal), some of my very finest ears, among them the original from which the engraving was taken. I must ask you to bear in mind, however, that my drawing was made early in July, and while accurately faithful as to the number of sets and length, is not accurate as to the details of the chaff-glumes, as is the drawing (unfinished) which I made yesterday of what I consider my best ear, in fact the best I ever saw. This drawing is a fac-simile of this ear, up one side of which are 63 grains. It has 15 'sets,' the bottom one containing 4 grains, the next 5 grains, and the two next sets 6 grains each. It is this latter characteristic which I am now endeavouring to develope, as this, combined with number of sets, will give far greater produce than mere length. The ear Z 87, for instance, contains 123 grains, while A 17, the original of the engraving, contains but 113, so far as one can be sure of, but it was gathered so early that it is difficult to say exactly if there might not have been two or three more. I send you, however, its fellow ear (see the other A 17), to show what it would have been if allowed to be matured. No other long ear, however, exceeds 108 or 110.

"A 5 (114 grains) is of the same length as Z 87, and like it in general character—the sets 15 in number and closer together.

"As the 'stool' Z 87, from which the ear represented in the accompanying drawing is taken, is the 'stool' with which I start afresh this year, I am afraid to send you the original, lest any accident might happen; but the drawing is accuracy itself. I measured all the lengths with the compasses. My intention is to use this ear as my present starting point, starting again next year with the stool from that one of its grains which proves itself, upon counting the whole, to be the best.—"Will the grains from the sets containing six produce more sets of six than the others? I shall try this.

"While upon this point, let me remark, that having found an ear this year which by some means had in coming into ear lost its upper half, I noticed that the result of the sap of the whole ear being concentrated upon half of it was that

* "More than half a century ago, when CHARLES COLLING's herd was sold, a young heifer, named Duchess, was bought by Mr. THOMAS BATES, of Kirkleavington. From her has descended a tribe of Short-horns known as Duchesses, which are believed to possess all the leading merits of the breed in extraordinary degree. In particular they are possessed of a remarkably soft and silken touch—of abundant hair and other indications of vigour—of most symmetrical form—great and equal width of back, well arched ribs, and prominence and width of bosom. Several of this tribe were exhibited at Leeds, and they were almost uniformly successful. Duchess 77, a three-year-old cow, which has carried off the first prize in her class whenever she has been shown, was first this year in the most remarkable class of cows that has probably been ever got together. Duchesses 78 and 79 (twins)—the one a roan and the other a white yearling heifer at the Canterbury Show last year—and then placed first and second in their class, were here shown in a very first-rate and numerous class of young cows, and they again occupied the head of the list. And it is not only in the pure-bred Duchesses that this extraordinary merit appears, but wherever a cross of the same blood has been given it appears to have unusual influence, and most of the prize-taking and commended animals owe their successful position at Leeds to influence of this kind. This is one of the results of what is called in-and-in-breeding. Animals which have inherited again and again in the course of their pedigree the qualities which relationship in blood has conferred in common, possess those qualities much more enegetically than others do in whom they are observed for the first time. A cross-bred ram may have a very desirable coat upon his back, and a very well-made carcase of mutton within that coat, but it is exactly a toss up whether his progeny acquire the character of his sire or that of his dam. If sire and dam for generations back have exhibited constancy and uniformity of character, then that character is certain to re-appear in their offspring, which in his or her turn will possess still greater power of transmitting good tendencies to the following generation. It is thus that not only in the Duchess blood, but in other tribes descended from the Kirkleavington herd, we have as the result of Mr. BATES's resolution, patience, skill, and constancy. qualities which re-appear in generation after generation until an animal may now be safely characterised as good if known to be of BATES's blood. BATES's blood, or rather BATES's *brains*—for it is the mental, and, in many important particulars, the moral character of the breeder which is reflected in now so many different herds—is merely another word for patient persistence in breeding from animals of a given type, in great measure disregarding the question of relationship, if they possessed the requisite health and vigour of constitution. Of course, when evils of any kind are inherited, as a tendency to disease or weakness of any kind, breeding in-and-in will intensify and hand that down with as much certainty as any other quality—but the natural law of breeding, which obtains amongst gregarious animals where the strongest sire is the father of the herd or flock—to the almost entire disregard of previous natural relationship—is a safe one to follow. It is a natural law of this kind that gives to particular herds and flocks where they have been long under the control of one man their uniformity of character from year to year. The thing is as true in flocks of sheep as it is in herds of cattle; and Mr. JONAS WEBB's flock of Southdowns, which has just been scattered by the auctioneer to all lands, will no doubt perpetuate and extend the influence of Mr. JONAS WEBB's skill and character just as widely as those of THOMAS BATES are felt on both sides of the Atlantic at the present day."

this was developed to an extraordinary degree with very full 'sixes,' and an attempted seventh in a set. This suggests to me to try next year the cutting off, say in March, from a 'stool,' every stem but one, concentrating upon one ear the 'root power,' so to speak, of 20 or 30!

"If the result be what I anticipate, although it would not be legitimate to show this as a specimen of my Wheat, it would be perfectly legitimate to show the progeny resulting from such a concentration of vital power in the parent. What do you think of this?

"It has been the great leading idea of my life, that the starting with an accidentally large ear is a very different thing from starting with a similar ear the result of descent, or pedigree. Take the case of two heifers identical in every respect but pedigree—the one what she is by accident, the other by design; the one worth 300*l.* the other 25*l.* From the former you may get any imaginable kind of progeny, from the latter only a good kind; in other words, you have fixity of type. And the good qualities gain the force, as it were, of impetus, by continual accumulation.

"If a farmer wants a good Cabbage, Mangel, or Turnip, his instinct leads him to select a good parent—the same with regard to animals, horses, cattle, or dogs—but the moment he approaches the cereals he no longer adopts the principle which he knows in other cases to be right.

"Is the trouble it would be the cause of this? Let us see. From one grain planted in September, 1859, I shall this year, September 1861, drill 40 acres. A whole ear in 1859 would have planted 80 times as much. Now all farmers should be continually trying this as a matter of business, employing any kind of Wheat they think likely to suit their purpose.

"I do not say that my Wheat is the only Wheat that can be thus improved, far from it. All Wheat may be improved, though not to the same extent.

"I merely say that I can offer them the only Wheat at this present moment in existence which has been so 'bred' for years successively, and that if they prefer to pay me for the trouble I take rather than do it themselves, they can with one bushel, costing less per acre for seed than common Wheat, grow enough in one year to stock their farm, and may by purchasing a bushel annually replenish their stock with a generation more advanced.

"I send you one of the sections of my ground planted with 4½ pints per acre—1,001,880 ears per acre. You saw the 6 peck crop below the house—$9\frac{7}{24}$ yards counted gave 1802 ears, or 934,120 per acre. I dare not give expression to my real convictions as to what may be grown. These are not the opinions of the enthusiast, but the result of 12 years' devotion to this subject. Difficulties I know may be raised, but they are imaginary rather than real, and I may conscientiously say that I do not know of any which ought for a moment seriously to be weighed in the balance against the advantage of such a rational system of growing Wheat as the one I am determined to promulgate, whereby alone can any practical and universal increase of our crops be effected.

"If planted early in September 1 peck will resist wireworm more successfully than 8 pecks in November. The plants are in fact as inaccessible in March and April to the ravages of wireworm as are ordinary crops in June and July.

"But rational seeding requires also that it be done at a rational time—it is as wrong to employ 2 gallons per acre in November and December, as 2 bushels per acre in August or September.

"I have never yet had a positive failure with this seeding. I do not however consider my 10-acre field thus planted as a success, but I shall this year plant 40 acres with 40 pecks the first half of next month."

Let us add that we give this detailed account of Mr. HALLETT's success, because it is an illustration of a general truth. Any of our readers gifted with the requisite patience, perseverance, and powers of observation, may realise it in his own experience. The produce of our crops is the result of mere average and annual treatment; the produce of our live stock is the result of a long continued effort on the part of our best breeders. Everybody knows that owing to this effort our cattle and sheep have individually and on the average increased immensely in weight and profitableness. Let the same effort be made on behalf of our cereal and other grains, and we doubt not Mr. HALLETT's expectation of a similar improvement there will be fully realised.

SHEEP SALES, 1861.

COTSWOLDS:—*Mr. Robert Lane, of the Cottage Farm, near Northleach.*—They were admitted to be the best lot of rams ever offered on the hills, and the noted character of Mr. Lane's flock brought, as usual, a very large company, including gentlemen from all parts of the kingdom. Bets were made previously to the sale that the average would reach 20*l.*, but no one for a moment ever imagined that the 36 Cotswold rams would reach the unprecedented sum of 34*l.* 10*s.* 8*d.*, yet such was the fact. The highest price realised was 120 guineas! this was for Lot 13, which was knocked down to Mr. G. Fletcher, of Shipton; the next highest was 102 guineas! for Lot 6, knocked down to Mr. W. Lane, of Broadfield. The other principal lots were knocked down as follows:—Lot 1, 80 gs., to Mr. Tombs; 3, 46 gs., to Mr. Walters; 4, 86 gs., to Mr. Gillett, of Fawler; 5, 81 gs., to Mr. Right; 7, 45 gs., to Mr. Fletcher, of Shipton Olliffe; 8, 26 gs., to Mr. Wigmore, of Hereford; 12, 71 gs., to Mr. Walters; 14, 36 gs., to Mr. Howell; 15, 54 gs., to Mr. Cother; 16, 32 guineas, to Mr. Lord, of Stanton Harcourt; 17, 37 gs., to Mr. Craddock, of Eastington; 19, 41 gs., to Mr. Handy, of Sierford; 20, 50 gs., to Mr. Garne, of Kilkenny; and 21, 22 gs., to Mr. Fowler. The remaining lots went from 19 gs. to 8 gs., and the total amount of the sale was 1254*l.* 5*s.*

Mr. Mumford Sexton, of Wherstead, Suffolk, has let 80 Cotswold rams and sold 40 more, including ram lambs, two-shears, and shearlings. The lots let ranged from 6*l.* 6*s.* to 26*l.* 5*s.* each, and those sold from 5*l.* 15*s.* 6*d.* to 29*l.* 8*s.* each, every lot being disposed of.

Mr. William Cother's (Middle Aston).—The 30th annual sale of Cotswold rams from this flock included 4 shearlings and a two-shear sheep to be let, and 55 shearlings. The four shearling sheep made 21 guineas, 17 guineas, 11 guineas, and 10 guineas each. The sale of the shearlings followed, and realized higher prices than usual, several of them making 20 guineas, 15 guineas, 14½ guineas, 12½ guineas, and 10 guineas each. The average of the whole sale was 9*l.* 18*s.* 2½*d.*, being nearly 1*l.* a head more than last year, a fact which fully bears out the opinion expressed before the sale, that the sheep surpassed any that Mr. Cother had previously submitted to public competition.

LEICESTERS:—*Mr. Sanday's, Holme Pierrepont.*—We append a few of the higher prices in each class:—Shearlings: By B. G., dam by No. 1, 30 guineas; Mr. Gould, Newhall. By B. G., dam by M. U., 33 guineas; Mr. Kendall. By B. G., dam by Y. H., 37 guineas; Mr. Abraham. By L. X., dam by G., 71 guineas; Mr. Thunder. By G. N., dam by C. S., 65 guineas; Mr. Hall, Scarborough. Two-shears: By W. X., dam by No. 3, 32 guineas; Mr. Wedge. By G. N., dam by A. Y., 40 guineas; Mr. Hall, Scarborough. By W. X., dam by G., 50 guineas; Mr. Torr, Aylesbury, Manor. By W. X., dam by M. U., 48 guineas; Mr. Turner, Barton, Exeter. Three-shears: By G. N., dam by D. Y., 30 guineas; Mr. Watkins. By G. N., dam by W., 40 guineas; Mr. Dickson. By G. N., dam by A. Y. 45 guineas; Mr. Meade, Kinsale, Cork. By G. N., dam by W., 70 guineas; Mr. Torr. Four-shears: By C. S., dam by W., 17 guineas; Mr. Somerville.

Mr. Aylmer, Abbey Farm, Westacre, near Norwich.—100 ram lambs, 80 one-shear rams, and 40 two-shear rams were offered. The first made an average of 4*l.* 15*s.* 4*d.* each, the *maximum* being 8*l.*; the second averaged 8*l.* 17*s.* 6*d.* each, the top figure being 30*l.*; and the third realized 6*l.* 17*s.* each, the highest price being 21*l.*

Trinity Farm, Cambridge.—Mr. W. Bennett's annual sheep sale. Of 60 rams 24 were sold, which realised from 6*l.* to 13*l.*, averaging 8*l.*

SHROPSHIRE: *Edward Holland, Esq., M.P., at Cullabine Farm, Dumbleton, near Evesham.*—The sheep had not been housed, and the ewes and theaves offered were in a fair store state, not having been pampered with artificial food. "Patentee 2d," the Leeds prize aged ram, upon which we especially remarked in our report of that meeting, was, at the wish of many breeders, included in the catalogue; but his stock being of a very promising character, Mr. Holland wished to use him another season, and wisely placed the reserve of 105*l.* upon him, upon which sum there was no advance. Ten aged rams and 20 shearlings were sold, realising an average of 15*l.* 16*s.* 0½*d.* each. The ewes were then offered, and as a lot must be regarded as quite first-class, 200 averaging 2*l.* 17*s.* 4*d.* each. Colonel Pennant, who has tested the suitability of the breed for the North Wales district, purchased 25 of the best theaves at an average of 4 guineas each.

Mr. C. R. Keeling, Yew Tree Farm, Penkridge.—The rams comprised 26 shearlings, and six aged sheep, and were brought forward in good working condition. The average obtained for the whole number was 11*l.* 15*s.* each. The Marquis of Anglesea became the proprietor of the highest-priced sheep at 29 guineas; the Earl of Shrewsbury and Talbot and the Earl of Lichfield being also purchasers, whilst others found owners in Tipperary, Lancashire, and other distant localities. One hundred ewes were sold, realising 2*l.* 11*s.* 8*d.* per head, passing into the hands of the Marquis of Anglesea, Messrs. Bradburne, Brewster, Dean, Holland, Jackson, Lander, Peake, Pullen, and others.

Mr. Sampson Byrd, Leese Farm, near Stafford.—Twenty-three shearling and two three-shear rams, sold at an average of 18*l.* 1*s.* 7*d.* per head. This flock has produced many remarkable show sheep, of which "Patentee," the Canterbury winner, and "Patentee 2nd," the Leeds prize aged ram, may be more especially noticed. Nearly all the shearlings were of the "Patentee" blood; and no doubt to that fact the high average obtained may in a great measure be attributed. The first shearling was let to Mr. Locker at 11 guineas, and was a very long, useful sheep, with fine quality of wool, and was, we thought, very cheap. No. 2 was also let, at 22 guineas, Mr. S. Wright being the purchaser. E. Holland, Esq., M.P., was again a customer for the "Patentee" blood, and bought No. 3, a wide-sprung shearling, with a capital fat back and good mottled features. No. 4 was secured by Mr. Preece, and we congratulate that gentleman on obtaining possession of one of the largest and at the same time truest made shearlings we have seen this season. No. 7 was indeed a plum, and after a brisk competition was secured by Messrs. Crane at 42 guineas. The only point we thought might be improved was his neck; had this been good, this animal might fairly have been named "Perfection." Messrs. Horley, Marsh, Birch, Thornton, and Willoughby Wood were all purchasers of "Patentee" shearlings, at prices ranging from 17 to 38 guineas. The two three-shears were on low legs, and displayed great size, with heavy kernels and briskets; Messrs. Keeling and Nichols were the purchasers, at 22 and 20 guineas respectively.

Mr. T. Horley, Fosse Farm, near Leamington.—Every sheep had been barely shorn, and with the exception of those shown at the Royal Agricultural Show at Leeds, were fed entirely on the land, never having been housed. The first lot subjected to competition was (to hire) the Black Prince, which, after a spirited competition was knocked down to Mr. Winterton, Wooley Villa, Hinckley, fetching 52 guineas being the highest price realised. Lot 3, a two-shear which won a third prize this year at Leeds, fell to Mr. Crossland, Burbidge, near Hinckley, for the low sum of 21 guineas, in consequence of Mr. Horley reserving him till the 20th of September. Four others were put up to hire, fetching severally 35, 20, 11, and 18 guineas, making a total of 157 guineas, averaging 27*l.* 3*s.* 2*d.* each. The sheep for sale were now offered, the highest making 25 guineas, the lowest 7 guineas, averaging very nearly 15 guineas each. Twelve lots of theaves were then put up, which also realised excellent prices. The average of the 30 rams offered for competition to hire and sell was a little over 17 guineas each.

Colonel Dyott and Mr. Coxon, Freeford, Lichfield.—Mr. Preece, of Shrewsbury, sold and let 43 rams, of the usual high character which these flocks have attained, at an average of nearly 12 guineas each. The highest price obtained was 53 guineas, for "Patent," a son of the renowned "Patentee," which became the property of Messrs. Thacker and May, of Elford. The prices of the remaining lots ranged from 28 to 7 guineas. About 100 theaves were offered, which realised about 50*s.* per head.

Mr. R. H. Masfen, Pendeford, near Wolverhampton.—The sheep had all been fairly shorn, and were shown in that condition which cannot fail to be satisfactory to purchasers, that is, they were not unnaturally forced by over-feeding; and although this way of bringing out his rams may prevent Mr. Masfen's average reaching what is obtained by other breeders, yet he has the satisfaction of seeing the same customers from year to year, and also of being free from the complaints which those who adopt a higher degree of feeding must ever endure. The highest price obtained for a shearling was 31 guineas; and this animal, of the true Shropshire type, with a very level top, fine masculine head on a good neck, and with the quality of a Southdown, fell to Mr. Canning, of Sherborne, near Warwick, after a sharp competition with J. Taylor, Esq. Mr. Coxon bought a remarkably heavy-fleshed three-shear ram at 22 guineas. The total number disposed of was 30, of which six were let; the average for the whole being 12*l.* 10*s.* 11*d.* The sale of the ewes followed, the 12 pens making from 50*s.* to 100*s.* per head, the average being 3*l.* 3*s.* 6*d.* for 60 sheep; Messrs. Bradburne, Gristie, Horley, Jackson, and Sidney being the principal purchasers.

The Annual Sale of Shropshire Sheep at the Flash, near Shrewsbury.—Out of the 200 rams offered 180 were either sold or let. Jonathan Scarth, Esq., selected 60 of the best bred ewes, and a remarkably fine ram, for the foundation of a flock by a friend of his in Yorkshire. Mr. J. H. Bradburne, of Pipe Place, Lichfield, purchased Messrs. Crane's prize ewes at 9½ guineas each. Mr. Hutton secured one of Mr. Horton's prize rams at a high figure. Mr. H. J. Sheldon, of Brailes House, became the purchaser (for Lord Willoughby de Broke) of Mr. A. H. Minor's magnificent 50-guinea ram, and Viscount Hill purchased his best yearling at 25 guineas. But the highest price obtained during the day was by Mr. Maddox, of Harley, who obtained for a splendid short-legged grandson of Mr. Adney's "Patentee," 85 guineas, the purchaser being Mr. Randall, one of the judges at the Royal Agricultural Society's meeting at Leeds. We give the prices at which the sheep sold, ranging from the highest to the lowest:—Messrs. Crane's rams (35), from 9 guineas to 30 guineas; Rev. C. P. Peter's rams (8), 10 guineas to 34 guineas; Mr. H. Smith's rams (25), 10 guineas each; Mr. John Evans's rams (20), 11 guineas each; Mr. Stanier's rams (6), from 7 guineas each; Mr. Maddox's (of Harley)

rams (10), from 7 guineas to 35 guineas; Mr. Claridge's rams (10), 9 guineas each; Mr. Meire's rams (17), let and sold at 9 guineas each; Lord Wenlock's rams (17), from 6 guineas to 10 guineas each; Mr. H. J. Sheldon's rams (16), let and sold from 6 guineas to 21 guineas; Mr. Lander's rams (9), 7 guineas to 13 guineas each; Mr. Thornton's rams (5), 8 guineas each; Mr. Horton's rams (17), sold and let at sums ranging to 70 guineas each; Mr. A. H. Minor's rams (6), from 15 guineas to 50 guineas; Messrs. Crane's ewes (80), from 3 guineas to 9½ guineas each; Mr. H. Smith's ewes (40), sums ranging to 5½ guineas each; Mr. Evans's rams (60), sums ranging to 5 guineas each; Messrs. Claridge and others, from 2½ to 3 guineas.

West Country Downs: *Mr. Rawlence, of Bulbridge, Fisherton* (120 ram lambs and 24 rams).—One lamb was let to Captain Harbin, of Newton House, Yeovil, for 30 guineas, another to Mr. Pyle for 18½ guineas, and others were let at 16 guineas, 13 guineas, 14 guineas, 11 guineas, 10 guineas, &c. The lambs sold realised good prices; a pair of lambs were sold at 32 guineas, Mr. Galpin being the purchaser; other pairs fetched 19 guineas, 17 guineas, 15 guineas, 14½ guineas, 13 guineas, and other good prices. Two rams were let for the season at 21 guineas each. The average of the sale was 7*l.* 2*s.* 10¾*d.* each.

Oxfordshire Downs: *Ram Sales at Oxford.*—Messrs. Franklin & Gale sold in the Cattle Market 35 Oxfordshire Down ram lambs, from the Gatehampton flock; 34 were sold at prices varying from 4*l.* 5*s.* to 17*l.* 10*s.* A very splendid lamb, bought by Mr. J. T. Gale, of Orplands, Essex, fetched 17*l.* 10*s.*; another, bought by Mr. Joseph Franklin, of Ewelme, 11*l.* 10*s.*; and one bought by Mr. W. Chillingworth, of Cuddesdon, 10*l.* 10*s.*; the average was 6*l.*

Hampshire Downs: *Ratfin Farm, Amesbury, Mr. Olding.*—One ram was let (for one month only) for 30 guineas, another for 27 guineas, and so on respectively (for the same short period) at 17½ guineas, 12½ guineas, 11 guineas, 10 guineas, &c.; a two-teeth ram also letting (for 18 days' use only) for 20½ guineas. Pairs of lambs sold respectively for 26 guineas, 20½ guineas, 17 guineas, 16 guineas, 15½ guineas, 15 guineas, 13½ guineas, 12½ guineas, 11 guineas, 10 guineas, 9 guineas, 8 guineas, and a few pairs of very young lambs at even lower prices; single ram lambs also sold at full prices.

TRIAL OF REAPING MACHINES AT LEEDS.

Aug. 22.—I have unfortunately little to tell with respect to the trial of Reaping Machines at Garforth near Leeds, for up to the time of the post leaving on Thursday very little if anything like actual contest had occurred. The trial commenced upon the Wednesday, according to agreement, but Wednesday was spent in singling those machines that were to go for final trial, and after Burgess and Key and Crosskill had cut an acre or so against time to-day (Thursday), the rain came down in such a manner as to render the abandonment of the field a matter of necessity.

Operations on Wednesday were commenced upon a 30-acre field of Wheat, a fine 36-bushel crop, bright stiff straw, all standing and presenting a most favourable opportunity for one and all competitors. Crosskill's Trustees' machine walked in first, followed by its three propelling horses, and cut a broad headland round the entire piece, and then set it out in 1 and 2 acre plots. This done, some 20 machines ranged themselves upon the headland, and prepared for work. Of the self-delivering machines Lord Kinnaird, and Messrs. Prentice, Cranston, Hillard, Crosskill's Trustees, Burgess & Key, were exhibitors; of combined Grass-mowers and Corn-reapers Messrs. Cranston and Burgess & Key were exhibitors; and of machines with manual delivery Messrs. Beckwith & Son, Cranston, Burgess & Key, Cuthbert & Co., Sawney, Brigham & Bickerton, Coates, Picksley & Sims, and Spencer, were exhibitors.

The first trial was made with the combined machines of Burgess & Key of Newgate Street, London, and W. M. Cranston, King William Street, London Bridge. The former is a combination of the exhibitors' Allen's Grass-mower and a Hussey. It was drawn by two horses, and delivered either at side or behind by manual labour. The frame is mounted upon three wheels—two large wheels of equal size, from one of which motion is derived, and a third behind which acts like a castor for running freely in any direction. The motion of the cutter bar and other particulars are too well known to need description. Cranston's machine is also known, but I will notice one important improvement in the introduction of a ratchet motion for throwing the knife out of gear when the machine is being backed. This was drawn by two horses, and carried two men, one for the manual delivery of the grain to one side. Both machines made a like cut of a little less than 4 feet, though the reputed cut is 4 feet 6 inches—and they worked fairly. It may be said they are both perfect Grass mowers, but not perfect mowers of Corn; but if people will have cheap combined machines they are such as will meet, and do meet, with a ready sale at so low a price as 35*l.* each. Mr. Cranston then put into competition, if such it could be called, a combined machine with self-delivery motion. The grain in this falls upon a rhomboidal table, having a groove or slot extending all round its four sides; and below, coincident with this, is an endless linked chain, encircling four small wheels at the four corners; one of these wheels receiving motion, by means of very simple bevel gearing, from the main driving wheel. The chain of course is made to traverse continually round the platform, though hidden in the groove. A pin is fixed to one link of the chain, and connected to the foremost end of a long rake-bar, the other end of which can slide through an eye in a swivel-pin at the back of the machine; and as the runs round the rake is thus caused to sweep intermittently across the platform, pushing the corn to one side and then drawing it off behind the platform. From the manner in which this rake worked on Wednesday it seemed to be better adapted to a light than a heavy crop. The contrivance however is very ingenious, although, owing to some accidental circumstance, it failed to work well.

The next class treated to the preliminary cantèr was that which won laurels at Canterbury, though it will scarcely do so well here, since the Society sees that it committed something like an error last year in giving to the public a bit of advice the public possessed too much good sense to receive. However, a prize is offered for reapers with manual delivery, and therefore they will now occupy their proper place, and not again come into competition with self-delivering machines; before which throughout the country it is impossible they can stand a chance.

In this class Burgess & Key brought out their original M'Cormick with side hand delivery, price 25*l.*, which made capital work, and seemed surprisingly light behind the two horses—cut 5 feet. Messrs. Beckwith & Son, of North Lees, Ripon; Cuthbert & Co., of Bedale; Sawney, of Beverley; and Coates, of Middleham, took into action various modifications of the Hussey principle. Messrs. Brigham & Bickerton of Berwick-upon-Tweed competed with their Aultman machine, with double-hinged knife-bar, which adapts itself to all qualities of ground, and tilting platform. The machine worked by Messrs. Picksley & Sims of Manchester has a tipping platform, and a contrivance by which the knife is thrown instantly out of gear, and that by Spencer of Doncaster has Wray's method of giving motion to the cutter bar, and Dray's tipping platform, and Cranston's is such as I have already described it. Of these, each making a bout or two, Cuthbert's left the cleanest bottom, best sheaf, and fewest ears. Picksley & Sims and Spencer's followed, the prices of these machines being respectively 23*l.* 10*s.*, 25*l.*, and 22*l.* Some were deficient in dividing irons, and left a very ragged edge, and the standing corn much shattered, so that the straws thrown down were sure to have their ears cut off too short to be gathered. When the preliminary trial of the class was finished, late on Wednesday afternoon, the self-delivery machines were brought to the scratch, Crosskill's Trustees' improved Bell taking the lead. It is no mistake to call this an improved machine. I have deemed it almost hopeless, for every attempt to improve seemed to render it more cumbersome and unmanageable. It has long been said that Burgess & Key is without a rival; but they will find something much like a rival in this new start given to the Beverly reaper. In the first place it makes a cut of 8 feet 3 inches, with three horses; in the second it weighs 5 cwt. lighter than it did; in the third it is reduced in price to 37*l.*, and has a less draught. These are all substantial advantages, and such as the admirers of this machine will be glad to know of. The limitation of power was always a great drawback to its use, because in heavy crops two horses were sufficient to propel it; but three now carry it before them with considerable comfort at a fair pace. The pitch of the platform is reduced, and the endless India-rubber bands which move round it are fitted with fingers to carry off the corn which falls upon them. The delivery is now effected on either side at pleasure, and a very simple contrivance is added for giving the swathe as it leaves the platform the requisite turn. The cutter bar is elevated and depressed by means of little wheels in front of and beneath the platform. The whole in fact is simplified, enlarged, and lightened, and were it not for irregularities of the land, which cause it some difficulty, would cut its way without question, and with as much ease as Burgess & Key's. *R.*

Home Correspondence.

Agricultural Statistics, Ireland, 1861.—Return, showing, in Statute Acres, the Extent under Flax in Ireland in 1860 and 1861, compiled from Returns obtained by the Constabulary.

Provinces.	Extent of Land under Flax.		Difference between 1860 and 1861.	
	1860.	1861.	Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.
Total of Ulster ..	123,424	143,036	19,612	..
Total of Munster .	1,666	1,518	..	148
Total of Leinster ..	1,289	1,143	..	146
Total of Connaught	2,216	2,169	..	47

	1860.	1861.
	Acres.	Acres.
Total Acreage under Flax in Ireland ..	128,595	147,866
Increase in 1861		19,271

Extent of Flax grown in Ireland in each of the following years:—

1854.	1855.	1856.	1857.	1858.	1859.	1860.	1861.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
151,403	97,075	106,311	97 721	91,646	136,282	128,595	147,866

The foregoing return of the area under Flax is published, as in previous years, in anticipation of the General Abstracts, now in course of preparation, showing the acreage under each crop and the number of live stock, by counties and provinces,—which will, I trust, be ready for the press early in the course of the month. I do not apprehend that any difference of importance will be found between the acreage under Flax as here given, and as it will appear in the more detailed tables in course of compilation. *William Donnelly, Regis'rar-General, Agricultural and Emigration Statistics Office,* 5, *Henrietta Street, Dublin, August* 10.

Societies.

The Isle of Man.—At the late fourth annual exhibition of this Society the entries of cattle were much more numerous, of horses considerably better, of sheep much larger, of pigs more successful than on any of the previous occasions on which this Society has held its annual meeting. There were 103 head of cattle, exclusive of extra stock, of which 50, or nearly one-half, were pure bred Short-horns, the remainder being Ayrshires, Galloways, and cross-breeds; 96 farm horses and roadsters of various ages; 79 sheep, principally of the Leicester, Lincoln, Cotswold, Shropshire Down, and mountain breeds; and 16 pigs, classified as belonging to the large or small breed. In the condition as well as the number of the animals exhibited a marked improvement upon last year's show was also manifest, and the south-side farmers were better represented at this than last year—the result, perhaps, of the more central situation in which the exhibition was held. One-half of the cattle exhibited this year were of the Short-horn breed, and were undeniably superior to those shown last year at Ramsey.

Take for instance the roan bull, "Marquis of Lorn," the property of Mr. E. C. Farrant, of Lezayre, which has won this year (as well as last) the first prize in Class 1. In symmetry almost perfection; back level as a board; quarters and loins exceedingly good; and ribs, shoulders, and breast not perhaps to be excelled. The bulls belonging to Mr. Cadman and Mr. J. I. Clucas were likewise greatly admired, and received the second and third prizes in this class. The animal nearest approaching the winner, however, in point of symmetry and breed was Mr. E. Gell's bull "Second Grand Turk," which has twice borne away the first prize, and last year obtained the second.

The horses were remarkable for symmetry, colour, and good action. The first prize was awarded to a splendid animal, "Black Prince," belonging to Mr. C. C. Kissack, of Middle, aged 2 years and 2 months.

The Sheep presented no particular feature of excellence, and were thought to be inferior to those shown on former years. Whatever was wanting in the quality of the sheep, however, was amply compensated by the improvement in the appearance of the Pigs exhibited. They were more numerous than last year, and amongst them were some of the primest specimens we have ever seen, and there was not a merely ordinary one in the whole collection. The samples of butter were very numerous, and of such uniform excellence that the judges, with all their experience, had considerable difficulty in deciding between the respective competitors. Indeed, two samples of the fresh butter—those shown by Mr. P. Killey, Marown, and Mr. Kelly, Castleward—were so similar in excellence that the judges called in the assistance of an umpire, but still could not decide; they therefore recommended that the first and second prizes should be added together and divided between the two exhibitors. The third prize for fresh butter was awarded to Mr. Lumsden, Glenaspet, and the fourth to Major Bacon, Seafield. A few improved implements connected with the various departments of agriculture were also exhibited, including M'Cormick's reaping machine, and a compact and well contrived reaping machine upon an improved principle, manufactured and exhibited by Mr. Daniel Kelly of Kirk Michael. Several specimens of grain and roots were shown, the most remarkable being some Poland Oats of this year's crop, of extraordinary size, from Ballakilley, St. John's, and some new six-rowed Barley, grown by Major Bacon, at Staward. There were also shown a few prolific ears of Giant Wheat grown by Mr. Windsor, which excited great astonishment; and some very large Potatoes and Gooseberries from Mr. Fargher's Rose Mount Gardens. As a proof of the steady progress made by the Society since its establishment, we would refer to the subjoined list of the number of entries in the various classes at the different exhibitions held by the Society since its commencement:—

	1858	1859	1860	1861
Cattle	54	110	94	103
Horses	44	63	83	96
Sheep	35	54	54	79
Pigs	17	16	9	16
Poultry	17	18	18	21
Butter	28	18	25	29
Cheese	7	8	9	8
Manx Grain ..	12	0	0	0
Turnips	13	0	0	0
Implements ..	11	47	34	36
Extra Stock ..	31	41	22	31
Total	269	375	348	419

At the dinner held in the afternoon, his Excellency the Lieutenant-Governor said that having been

that day, for the first time, present at their exhibition of stock, he felt highly pleased with what he had seen, and he had looked upon it, too, with the eye of a farmer, for to his cost he might say that he had been a farmer for about 27 years, though perhaps rather an experimental one. Especially had he been surprised when visiting the exhibition that day to see such a display of horned cattle in the Isle of Man, though he was previously aware that the Isle of Man was celebrated for good beef. With a natural feeling of allowable pride, however, in the county from which he came, he thought they could beat them in sheep. He had not that day seen amongst those exhibited a Hampshire Down, the breed for which the county from which he came was so justly celebrated, although there certainly was on the field a beautiful pen of sheep exhibited by the Lord Bishop,—and which he believed had taken a prize. He was also very glad, too, to see that the Society was not limited to any particular part of the Island, but supported by gentlemen from all parts, which must always be the case if they wished to make it a successful Society. He was glad, too, to see that a large number of the prizes went this year to the north of the Island; this would stimulate the residents in the south and centre of the Island, and then next year they might hope to have still greater competition. In the course of the observations which he had made since his arrival on the Island, he had remarked that they farmed extremely well, especially as regarded root farming. During the few days on which he had recently visited England, he had traversed a large district of country, and in no place had he seen such fine Swedish Turnips as he had seen near Castletown, especially on the farm of his valued friend Mr. Gawne. *Greatly abridged from the Manx Sun.*

STATE OF THE WEATHER—BERKSHIRE.

For the Week ending August 22: observed by Mr. J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air. Max. in Sun.	Max. in Shade.	Min.	Mean.	Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
	Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday 16 ..	78.0	74.0	55.5	65.7	66.0	0.08	S.W.	29.73
Saturday 17 ..	80.0	72.0	45.0	60.5	65.0	0.03	S.W.	29.87
Sunday 18 ..	82.0	72.0	51.0	61.0	64.6	..	S.W.	29.88
Monday 19 ..	81.0	73.0	53.0	65.0	64.7	..	W.	29.80
Tuesday 20 ..	77.0	70.0	48.0	60.7	64.0	..	W.	29.90
Wednesday 21 ..	76.0	68.0	44.0	58.0	63.0	0.06	N.W.	30.05
Thursday 22 ..	83.0	71.0	47.0	62.0	62.6	..	S.W.	30.06

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

COCOA-NUT FIBRE NETTING: *C H L.* asks for the experience of any of our readers on this as compared with ordinary netting [Next week].

DRAINAGE: *G.* By all means carry your drains in the direction of the inclination, otherwise, because water will not run up hill, one side only of your drains will work. In your clay by no means allow the distance from drain to drain to exceed 25 feet. You must scarcely expect to do your work, 4 feet deep, at less than 4*l.* 10*s.* per acre, considering the price of your pipes, and the stony subsoil. If you employ 1½ inch pipes for the first length of each drain, using 2-inch pipes when the accumulation of water shows it to be necessary, the outlay will be somewhat reduced. The article Drainage in "Morton's Encyclopædia of Agriculture" will afford much valuable information.

MANGEL WURZEL: *R W R.* says: "A crop of Mangel Wurzel, some Yellow Globe, and some Long Red, which up to the present time have been looking extremely healthy and growing well, have been suddenly attacked in the leaves in the manner of the enclosed specimens. I can detect no insect upon them. I do not mean that all the leaves are gone as bad, but there is scarcely a plant that has not some leaves affected." [If you look further you will find the grub to which we alluded the other day. Your specimens contained some.]—*G. Murray, Overstone*, reports the Mangel crop in this neighbourhood has suffered greatly from the attack of Anthomyia betæ, as mentioned in our last impression; the eggs are deposited on the under side of the leaf, and as soon as they are hatched eat their way through the cuticle and feed on the fleshy part, giving the leaf a scalded or blistered appearance, by which its important functions in the process of growth are greatly retarded or completely destroyed. We think in a few days the maggots will disappear, and the plants recover, as the injury is mostly confined to the outer leaves, though it is now too late to expect a productive crop.

NORTHAMPTONSHIRE: *Overstone, Aug.* 15. Wheat is reported here as under average; Barley good average; Oats average; Beans and Peas variable, but with fine weather will be an average. Began harvest Aug. 12. Potatoes unusually abundant; nearly the whole of the tubers diseased. Hay crops light and the greater part secured in inferior condition.

POULTRY.—Poultry offers so little variation at present, the demand and supply are alike so small, that we hail the grouse as subject matter and make them the burden of our report. The opinion we gave at the outset of the season is fully borne out. There are very few young birds from the English moors, and the old ones give unmistakeable evidence of much disease, far more than we have ever seen so early in the season. There is a good proportion of young in the Scotch baskets, but they are small, and evidently much later bred than the English. Appearances have not been so favourable from Scotland for many years. We hope sportsmen will be merciful and not shoot too hard. Speaking as we do of a market, we can but be sorry so many good birds are spoiled by the careless way in which they are packed. They are heaped into boxes and baskets almost as closely as if they were trodden in.

Large Fowls	Each	3*s.* 6*d.*	to	4*s.* 0*d.*
Middling ditto	,,	2 6	,,	3 0
Chickens	,,	1 6	,,	1 9
Geese	,,	5 0	,,	5 6
Ducks	,,	2 6	,,	2 9
Rabbits	,,	1 4	,,	1 5
Wild ditto	,,	0 8	,,	0 9
Pigeons	,,	0 8	,,	0 9
Young Grouse	,,	2 0	,,	2 8
Old ditto	,,	0 9	,,	1 0

THE FEEDING SEASON.—Horse and Cattle Food, 35*s.* per cwt; Pig Food, 16*s*; Dog Biscuit, 15*s*; Compressed Beef Greaves, 12*s* and 16*s*; Indian Corn Meal, 14*s.*; Rice Meal for Pigs, 7*s.* 6*d.* and 9*s.* 6*d.*; Rice for Chickens, 10*s.* and 13*s.* An allowance per Ton. Remittance with Order will insure immediate delivery.
W. JUPP & Co., 6, Cross Lane, St. Mary-at-Hill, Eastcheap, E.C.

No more Mildew.

JOHN BELL'S COMPOSITION for destroying Mildew on Vines, Peach and Nectarine Trees, &c., made and sold only by JOHN BELL, in bottles, 1*s.* 6*d.*, 2*s.* 6*d.*, and 5*s.* each, at his Seed Warehouse, 10 and 11, Exchange Street, Norwich. A 1*s.* 6*d.* bottle is sufficient to make 12 gallons.
Agents Wanted.

NEAL'S PATENT APHIS PASTILS.

Magnified Aphides.

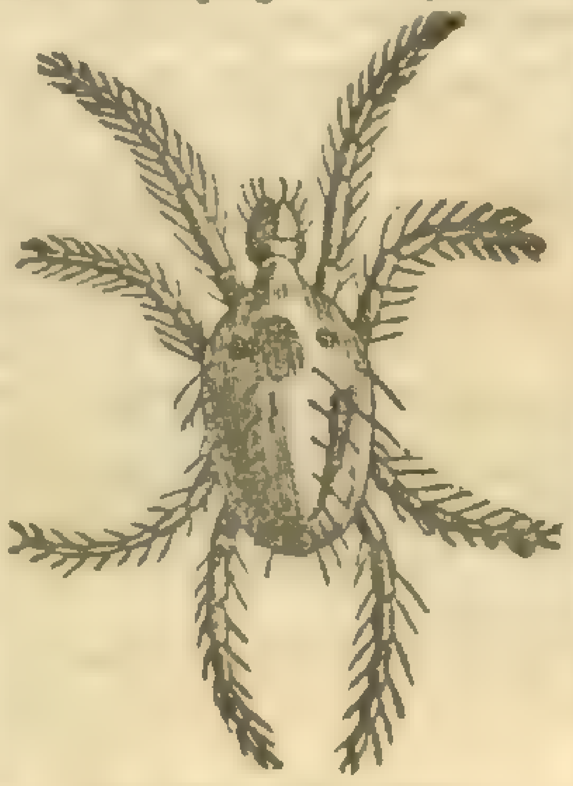
The following is one of upwards of 70 Testimonials received by J. NEAL from gentlemen personally unknown to him.

"Half a packet, at the cost of a shilling, effectually smokes a house 50 feet long by 10 feet wide, which requires the use of half a pound of Tobacco, or 1 lb. of Tobacco Paper. The Aphis is effectually destroyed, and plants with the tenderest foliage remain uninjured.
"WILLIAM PAUL, F.R.H.S.,
"Cheshunt Nurseries."

Sold by all principal Seedsmen.
Price 1*s.* and 2*s.* per packet

Patentee, J. NEAL, Birmingham.

GISHURST COMPOUND, for preventing and destroying Red Spider, Mealy Bug, Mildew, Thrips, Scale, Green and Brown Fly, American Blight, Ants, &c., and Bed Bugs, contains no deleterious ingredient, is recommended in *Gardeners' Chronicle, Cottage Gardener, Field*, Mr. Rivers' *Orchard House*, 9th edition, and Dr. Hogg's *Gardeners' Year Book for* 1861.



RED SPIDER MAGNIFIED.

Full directions for use and particulars of the experience of many great Gardening authorities are enclosed with the boxes of Gishurst. These are supplied retail through any Nurseryman and Seedsman at 1*s.*, 3*s.*, and 10*s.* 6*d.* each, wholesale, by PRICE'S PATENT CANDLE CO., LIMITED.
If the smell be disliked, make the solution 48 hours before use.

KEATING'S PERSIAN INSECT DESTROYING POWDER.—Poultry, Dogs, and Plants, are effectually freed from Fleas and all other Vermin with which they are infested, by the above Powder, which is quite harmless to animal life. The Farmer, the Gardener, or the Sportsman, will therefore find it invaluable. Bugs, Cockroaches, Beetles, Moths in Furs, and every other species of Insect are also instantly destroyed.
Sold in Packets, 1*s.*, 2*s.* 6*d.*, and 4*s.* 6*d.* each, or post free for 14, or treble size for 36 postage stamps, by THOMAS KEATING, Chemist, 79, St. Paul's Churchyard, London, E.C.

Important to Grape Growers.

SPARY'S FUMIGATOR AND MILDEW ANNIHILATOR (Invented and Patented by EDWARD SPARY, F.R.H.S., Queen's Graperies, Brighton), for destruction and prevention of Mildew in Grapes, Vines, and Plants, without injury to the Fruit or Foliage.—Vide *Gardeners' Chronicle*, April 13, page 351.
Sold wholesale by JOHN WARNER & SONS, 8, Crescent, Cripplegate, E.C.; Retail of any Ironmonger, or Nurseryman and Seedsman, 25*s.* each. The material is sold in packets (with full directions for use) at 1*s.* 3*d.* each, and wholesale by Mr. W. D. SAVAGE, Chemist, 65, Edward Street, Brighton; Messrs. BARCLAY & SONS, 95, Farringdon Street, London, E.C.
Prospectuses, with Testimonials, to be obtained of the Patentee, Brighton.

HORTICULTURAL TOOLS, LAWN MOWERS, &c., delivered Carriage Free. Also Chaff-cutters at 50*s.* each, Churns 25*s.* Price Lists post free.
BURGESS & KEY, Manufacturers, 95, Newgate Street, London, E.C.

FOR SALE, on very advantageous terms, 7 HOT-HOUSES, GREENHOUSES, and CONSERVATORIES, of all sizes and shapes.
Apply for further particulars to E. DENCH, King's Road, Chelsea, S.W.

GREENHOUSES FOR SALE at the following extra low Prices, viz.:—Span-roof, 16 feet 6 inches by 27 feet, 45*l.*; Lean to, 12 feet 6 inches by 24 feet, 34*l.*; ditto, 11 feet by 22 feet, 28*l.* Roof Lights to cover space, 37 feet by 12 feet 6 inches, well adapted for a Glass Wall, 25*l.* The above are warranted of good materials.
Greenhouses made to order at 8*d.* per foot; if glazed and painted, 1*s.* Pit Lights, painted complete, 8*d.*; if unglazed, 4½*d.*

Garden Border Edging Tiles.

F. AND G. ROSHER, CEMENT, BRICK, and TILE MERCHANTS, beg to invite attention to their varied Stock of Ornamental Garden Border-edging Tiles in Terra Cotta, Terro-Metallic ware, and Red ware. They present advantages over Box or Grass-edging in that they afford no harbour for slugs, &c., take up less room, and once laid, require no further attention.
They may be had of various patterns at F. & G. R.'s Premises, Ward's Wharf, Upper Ground Street, Blackfriars, S.; and Kingsland Road Wharf, near the Canal Bridge, London, N.E.
N.B. Sketches of patterns sent by post on application. Garden Vases and Ornamental Flower Boxes for Windows and Balconies in stock.

ORNAMENTAL PAVING TILES for Conservatories, Halls, Corridors, Balconies, &c., as cheap and durable as Stone, in blue, red, and buff colours, and capable of forming a variety of designs.
Also WHITE GLAZED TILES, for Lining Walls of Baths, Dairies, Larders, Kitchen-ranges, &c. Grooved Terro-metallic and other Stable Paving Bricks of great durability, Clinkers, Red and White Wall-Copings, Glazed Drain Pipes, &c.
To be obtained of F. & G. ROSHER, at their Premises as above.

MORTON'S IMPROVED REAPING MACHINE, guaranteed to work satisfactorily. A few in stock for immediate delivery. Price 15*l.*
J. B. BROWN & CO., 18, Cannon Street, City, London, E.C.

GLASS FOR GREENHOUSES.—
SHEET GLASS, Stock Sizes, 16 oz.

Boxes included.				3rds.	4ths.
11 by 9,	12 by 9,	13 by 9,	14 by 9 ..	14*s.* 0*d.*	12*s.* 6*d.*
12 ,, 10,	13 ,, 10,	14 ,, 10,	15 ,, 10 ..		
13 ,, 11,	14 ,, 11,	15 ,, 11,	16 ,, 11 ..		
14 ,, 12,	15 ,, 12,	16 ,, 12,	17 ,, 12 ..		
18 ,, 12,	19 ,, 12,	20 ,, 12	.. ..	16*s.* 0*d.*	13*s.* 6*d.*
16 ,, 13,	17 ,, 13,	18 ,, 13	.. ..	per 100 feet.	
19 ,, 13,	20 ,, 13,	21 ,, 13	.. ..		
16 ,, 14,	17 ,, 14,	18 ,, 14	.. ..		
19 ,, 14,	20 ,, 14,	21 ,, 14	.. ..		

English Glass of the above sizes, 18*s.* per 100 feet.
SMALL SHEET SQUARES, IN 100 FEET BOXES.

6 by 4	6½ by 4½	7 by 5	7½ by 5½	11*s.* 6*d.*
8 ,, 6	8½ ,, 6⅝	9 ,, 7	9½ ,, 7½	
		10 ,, 8	10½ ,, 8½	12 6

Boxes 2*s.* each, returnable at full price.
GLASS FOR ORCHARD HOUSES,
As supplied by us to Mr. Rivers.

		16 oz.	21 oz.
20 in. by 12 in.			
20 in. by 13 in.	Common	13*s.* 6*d.*	£1 1*s.*
20 in. by 14 in.	Superior do.	16 0	1 3
20 in. by 15 in.	English Glass	18 0	1 9

The above prices include the Boxes.
Perforated Glass for Ventilation. Patent Plate and Polished Plate Glass. Ornamental and Coloured Glass.
London Agents for Hartley's Improved Patent Rough Plate.
Linseed Oil, Genuine White Lead, Carson's Paints, Paints of various colours ground ready for use.
Milk Pans, Propagating Glasses, and every description of Glass for Horticultural purposes.
JAMES PHILLIPS & Co., 180, Bishopsgate Street Without, London, E.C.

CAST-IRON GARDEN ORNAMENT

TAZZA.

Size.	Price.
22 inches diameter by 14 inches high	£1 5 each.
30 inches ,, by 22 inches ,, ...	2 5 ,,
42 inches ,, by 25 inches ,, ...	3 15 ,,

The above may also be had with Pedestal.
PRICES OF TAZZA AND PEDESTAL.

Size.	Price.
22 inches diameter by 28 inches high	£1 15 each.
30 inches ,, by 43 inches ,, ...	3 3 ,,
42 inches ,, by 46 inches ,, ...	4 15 ,,

J. JONES has much pleasure in stating that he has now an entirely new Stock of Cast-Iron Garden Ornaments, comprising Vases of various patterns, Garden Seats of all sizes, and of both Plain and Ornamental Designs, Flower Stands, Tables, &c.; he therefore requests that all parties in want of such Castings will favour him with a visit to his extensive Show Rooms, where the above may be seen fitted ready for use, and he has no doubt they will prove to their satisfaction.
Orders to the amount of 5*l.* and upwards Carriage Paid to any Railway Station in England. Post-office Orders to be made payable to JOHN JONES, Borough, S.E.

JOHN WARNER AND SONS,
BELL and BRASS FOUNDERS to HER MAJESTY,
HYDRAULIC ENGINEERS, BRAZIERS, &c.,
8, Crescent, Cripplegate, London, E.C.

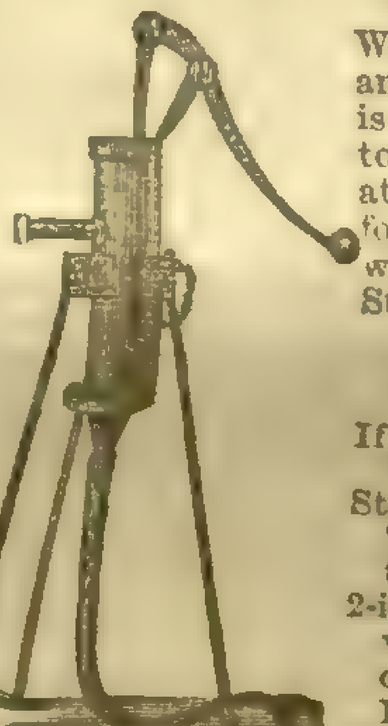
No. 35.

WARNERS' PATENT CAST-IRON PUMP, for raising Water from Wells not exceeding 25 feet in depth.

Diameter of Barrel.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead,	1 1 0
2½ ,, long	3 ,, 3 ,,	gutta percha	1 10 0
3 ,, ditto	3 ,, 6 ,,	or cast iron	2 4 0
3½ ,, ditto	3 ,, 6 ,,	flanged pipe	2 9 0
4 ,, ditto	3 ,, 6 ,,	as required.	2 18 0

2½ ,, short, with 15 feet of Lead Pipe attached, ready for fixing 2 0 0
2½ ,, long ditto ditto ditto 2 14 0
This Pump is fitted with J. W. & SONS' Patent Vibrating Standard, Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.

WARNER'S IMPROVED LIQUID MANURE OR GENERAL PORTABLE PUMP.



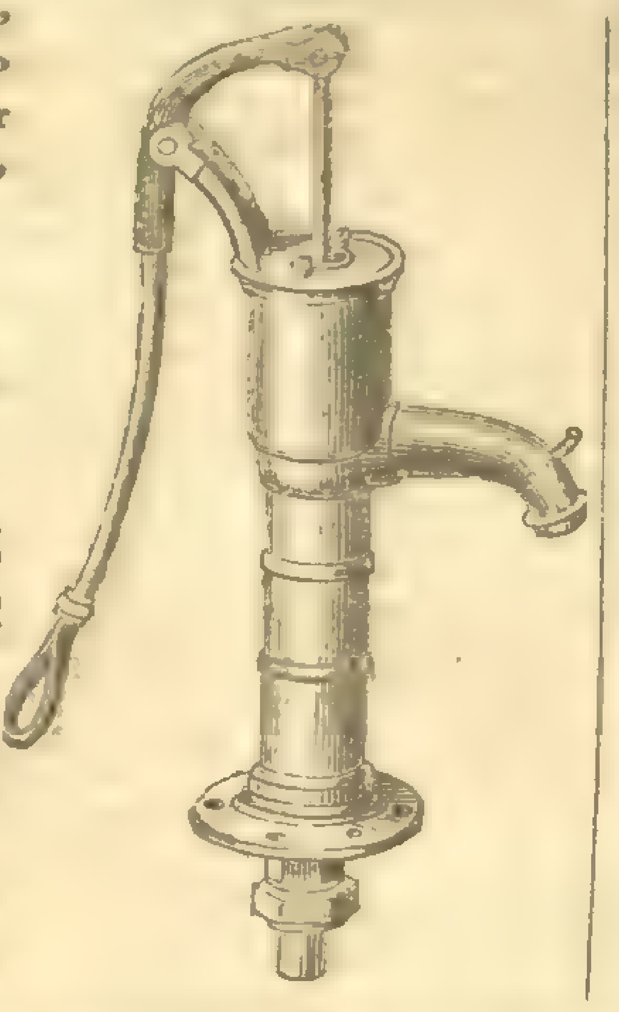
No. 42.

This Pump is fitted with WARNER'S Patent Bucket and Valve, and cannot clog in action. The Barrel is made of Galvanised Iron, not likely to corrode, and can be raised or lowered at pleasure on the stand, the legs of which fold together, and it may be carried with ease by one man.

	£ s. d.
Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe	2 15 0
If fitted with Barrel of Planished Copper	3 4 0
Stand and Pump, with plain Tail Pipe, for tying on Suction Pipe	2 9 0
2-inch India Rubber and Canvas Flexible Suction Pipe, on wires, in either 10, 12, or 15 feet lengths .. per foot	0 2 5

No. 43 is a similar Pump to the above, without stand, but with strong wrought-iron straps, for fixing to water cart or plank, price 2*l.* 5*s.*
Every description of Machinery for Raising Water, by means of Wheels, Rams, Deep Well Pumps, &c.; also Fire and Garden Engines, &c.
J. W. & SONS' Illustrated Catalogue forwarded post free on application.
The above may be obtained of any Ironmonger or Plumber in Town or Country, or of the Patentees and Manufacturers, JOHN WARNER & SONS, 8, Crescent, Cripplegate, London, E.C.

J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25s. 6d. each.



IRON YARD AND GARDEN PUMPS

3 feet 6 inches under spout

2½	3	3½ inch
43s.	53s.	60s. each.

J. Tylor and Sons manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.

PUMPS of J. Tylor & Sons' manufacture to be obtained of Plumbers in all parts of the United Kingdom.

J. Tylor & Sons, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

TENTS, &c.—A quantity of Government Bell Tents and Marquees, suitable for Rifle Companies, Cricket Clubs, &c; also Rick and Hay Cloths, Ropes, &c. Prices on application to John Morison, 25, Norton Folgate, N.E.

PROTECTED BY THE CUTLERS' COMPANY
CORPORATE MARK.

JOSEPH HAYWOOD AND CO.,

Manufacturers of PRUNING and BUDDING KNIVES, SPORTSMAN'S, and all kinds of POCKET CUTLERY.

Dealers in Gambia Garden Shears, Scissors, Syringes, &c.

Glamorgan Works, Sheffield.

GREEN'S PATENT LAWN MOWERS have proved to be the best, and have carried off every prize that has been given in all cases of competition. They are noiseless in working, self-sharpening, self-cleaning, simple in construction, and easier to work and less liable to get out of order than any other Lawn Mowers extant.

Illustrated Price Lists may be had of Thomas Green, Smithfield Iron Works, Leeds; or 2, Victoria Street, Holborn Hill, London, E.C.

N.B. Old Machines repaired and made as good as new.

SHAW'S TIFFANY FOR SHADING, &c.

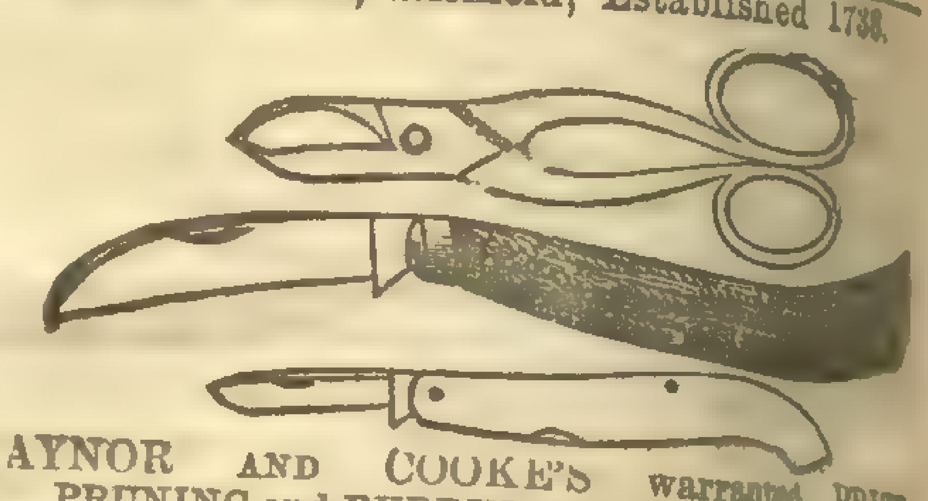
Sold in Pieces. Per piece.—s. d.

No. 1, 20 yards long, by 38 inches wide .. .. ..
No. 2, do., do., the same material, manufactured with a Patent Mineral Solution to prevent it from rotting .. 5 [illegible]
No. 3 (double strength), 18 yards long by 39 inches wide.. .. 6 [illegible]
No. 4 (treble strength), 18 yards long by 39 inches wide.. 7 [illegible]

Sold by all respectable Seedsmen. See that every piece is marked "Shaw's Tiffany," Manchester. Samples and Circulars sent free by post.

John Shaw & Co., 29, Oxford Street, Manchester.

Paxton Works, Sheffield, Established 1738.



SAYNOR AND COOKE'S warranted PRIZE PRUNING and BUDDING KNIVES, SCISSORS, &c. Sold by all respectable Nurserymen and Seed Merchants in the three Kingdoms.

Important to Gardeners.

WE beg respectfully to inform you that we are now supplying Nurserymen and Seed Merchants with an article superior in quality to anything we have hitherto been able to offer, in PRUNING, BUDDING, and GRAFTING KNIVES, VINE and PRUNING SCISSORS, GARDEN SHEARS, &c., owing to their being tempered under an entirely new process, which renders the blade tough and not liable to break, and also gives the edge a lasting keenness which we can warrant them to retain for at least double the time they would under the old method of tempering, thus facilitating the work and saving the time usually lost by having constantly to renew the edge by sharpening, consequently making them more durable in wear and better adapted for all kinds of work, every blade being guaranteed of the same temper.

Caution. None are genuine except marked Saynor, or Saynor, Maker. Other marks would cause the purchaser disappointment.

ALL AFFLICTED WITH WEAK EYES may obtain instant relief by using Dr. Warner's EYE WATER, which removes all inflammation arising from cold, dust, or constitutional causes.—Sold in bottles, 2s. 9d. and 4s. 6d., by Hannay, Oxford Street, W.; Sanger, Oxford Street, W.; Edwards, St. Paul's Churchyard, E.C.; Hooper, King William Street, City, E.C., and all Chemists. Of whom may also be had, Dr. Warner's LOTION, a certain cure for sore and ulcerated legs, burns, and scalds, and bites of insects, and in cases of inflammation is invaluable. *In bottles, 1s. 1½d. and 2s. 9d.*

ST. PANCRAS IRON WORKS,

OLD ST. PANCRAS ROAD, N.W.

IRON HURDLES, FENCING, AND GATES.

THE PROPRIETORS OF THE ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, WERE AWARDED THE SILVER MEDAL of the ROYAL AGRICULTURAL SOCIETY for their IRON HURDLES AND GATES, which, by their peculiar construction, are more than twice as strong and durable as those in ordinary use. Lists per post on application. Gates from 30s. to 500l.

The Hurdles can be seen in process of Manufacture at the Works.

GAME WIRE NETTING.

PROFESSOR VARNELL'S ENAMELLED AND WROUGHT-IRON STABLE FITTINGS.

These Patent Mangers and Stable Fittings obtained the Commendation and the Silver Medal of the Royal Agricultural Society of England and the Royal Agricultural Society of Ireland, are adopted by the Royal Veterinary College, and Professor Spooner of that Institution states that they should be used by all who value the health and comfort of their horses. They can be had plain, galvanised, or enamelled.

A Show Room is devoted entirely to every description of Stable Furniture, and full-sized stalls and loose boxes are erected for inspection at St. Pancras Iron Works.

ADDRESS—THE MANAGERS,

ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, N.W.,

Opposite Old St. Pancras Church.

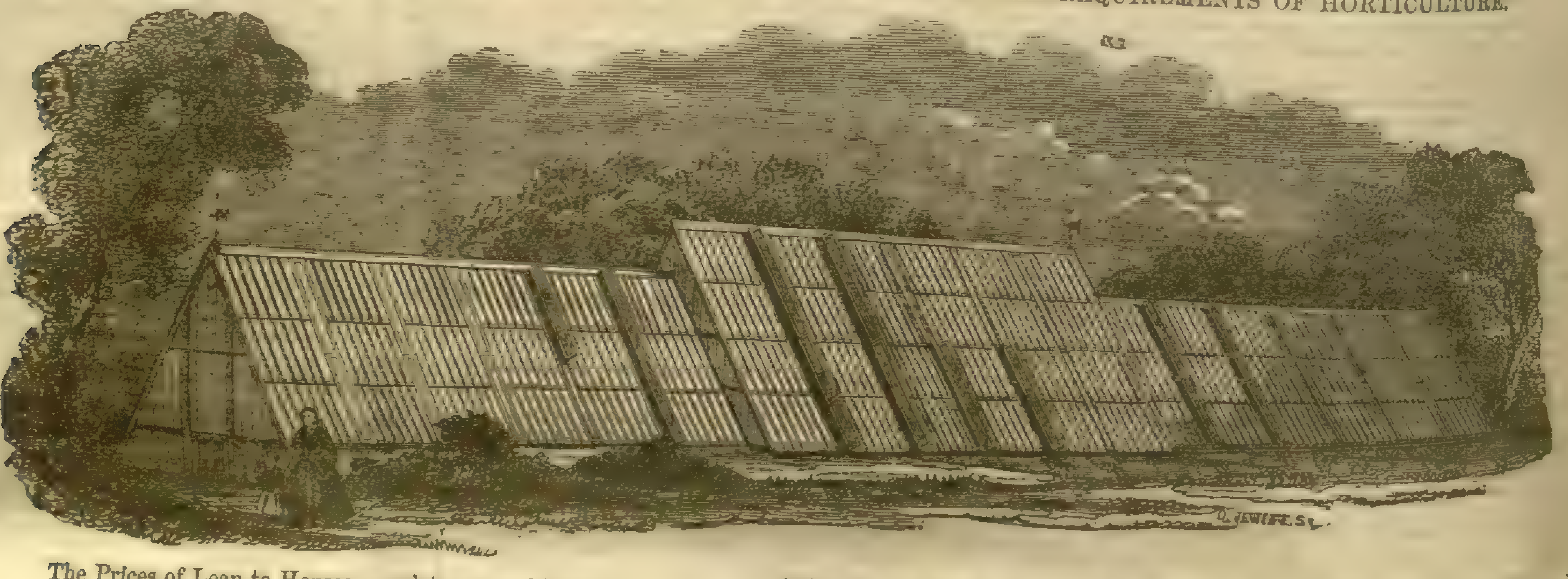
HOTHOUSES FOR THE MILLION,

ON THE PRINCIPLE INVENTED AND PATENTED BY

SIR JOSEPH PAXTON, M.P.

COMBINING SIMPLICITY, CHEAPNESS, EXCELLENCE, AND DURABILITY.

BEING CAPABLE OF FULFILLING IN THE MOST PERFECT MANNER ALL THE REQUIREMENTS OF HORTICULTURE.



The Prices of Lean-to Houses complete are as follows:—

Ft. In.	8 ft. Lights	10 ft. Lights	12 ft. Lights	14 ft. Lights	16 ft. Lights
20 7 in length	£12 0 0	£16 0 0	£21 0 0	£28 10 0	£34 5 0
31 3 in length	16 10 0	21 2 6	26 10 0	37 12 0	45 16 0
41 11 in length	20 18 0	26 18 6	33 7 6	46 14 0	57 7 0
52 7 in length	25 12 6	32 15 0	40 5 0	55 16 0	68 18 0
63 3 in length	30 6 0	38 10 0	47 2 6	64 18 0	80 10 0
73 11 in length	34 12 6	43 15 0	53 7 6	74 0 0	92 0 0
84 7 in length	39 6 0	49 11 6	60 5 0	83 2 0	103 11 0
95 3 in length	43 19 0	55 10 0	67 2 6	92 5 0	115 2 0
105 11 in length	48 17 6	60 12 6	73 10 0	101 10 0	126 13 0

The Prices of the Span-roofed Houses, with Water-troughs, Doors, and Ends complete, are as follows:—

Ft. In.	8 ft. Lights	10 ft. Lights	12 ft. Lights	14 ft. Lights	16 ft. Lights
20 7 in length	£24 0 0	£32 0 0	£42 0 0	£57 0 0	£68 12 0
31 3 in length	33 0 0	42 5 0	53 0 0	75 4 0	91 14 0
41 11 in length	41 16 0	53 17 0	66 15 0	93 8 0	114 16 0
52 7 in length	51 5 0	65 10 0	80 10 0	111 12 0	137 10 0
63 3 in length	60 12 0	77 0 0	94 5 0	129 16 0	161 0 0
73 11 in length	69 5 0	87 10 0	106 15 0	148 0 0	184 0 0
84 7 in length	78 12 0	99 3 0	120 10 0	166 4 0	207 2 0
95 3 in length	87 18 0	111 0 0	134 5 0	184 10 0	230 4 0
105 11 in length	97 15 0	121 5 0	147 0 0	203 0 0	253 6 0

If only one end is required a corresponding deduction will be made. The 14 and 16 feet lights are made stronger than those of less dimensions.

The above prices do not include package, railway freight, heating apparatus, or erection.

Illustrated Circulars with Lists of Prices and Cards to view houses in operation in the neighbourhood of London can be had on application to

SAMUEL HEREMAN, 7, PALL MALL EAST, LONDON, S.W.

HOTHOUSES FOR THE MILLION,

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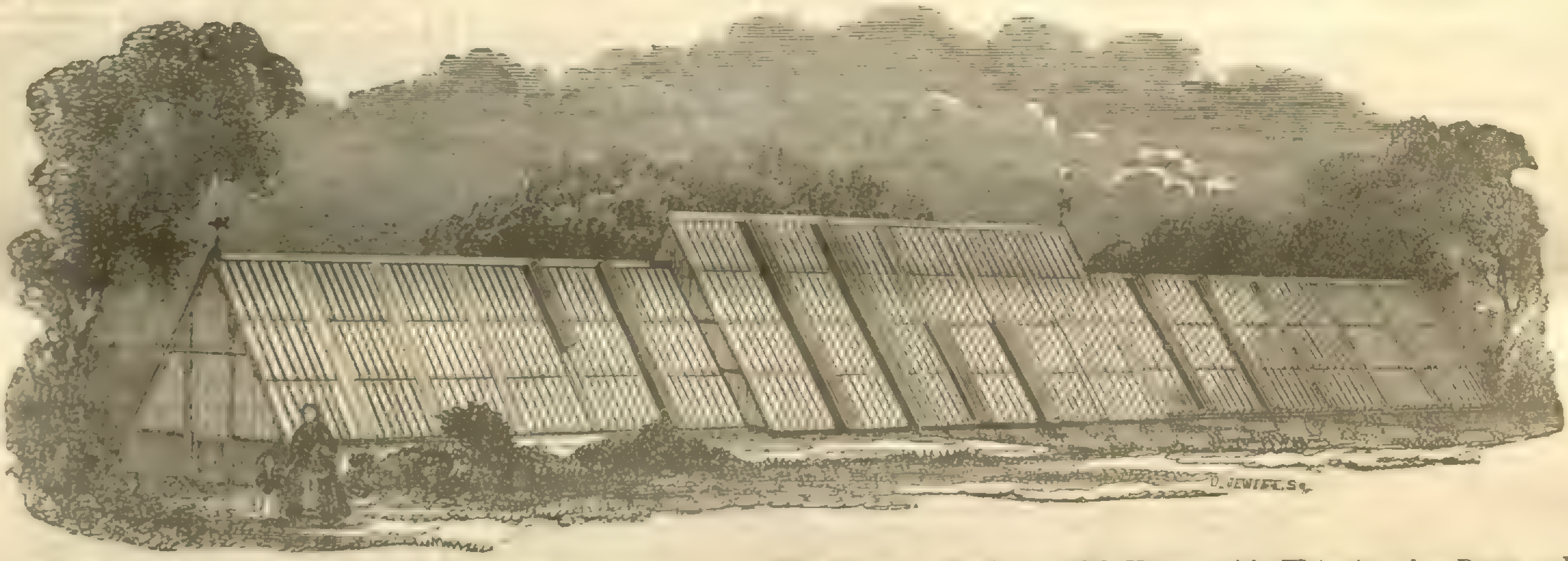

The Prices of Lean-to Houses complete are as follows:—

Ft. In.	8 ft. Lights	10 ft. Lights	12 ft. Lights	14 ft. Lights	16 ft. Lights
20 7 in length	£12 0 0	£16 0 0	£21 0 0	£28 10 0	£34 5 0
31 3 in length	16 10 0	21 2 6	26 10 0	37 12 0	45 16 0
41 11 in length	20 18 0	26 18 6	33 7 6	46 14 0	57 7 0
52 7 in length	25 12 6	32 15 0	40 5 0	55 16 0	68 18 0
63 3 in length	30 6 0	38 10 0	47 2 6	64 18 0	80 10 0
73 11 in length	34 12 6	43 15 0	53 7 6	74 0 0	92 0 0
84 7 in length	39 6 0	49 11 6	60 5 0	83 2 0	103 11 0
95 3 in length	43 19 0	55 10 0	67 2 6	92 5 0	115 2 0
105 11 in length	48 17 6	60 12 6	73 10 0	101 10 0	126 13 0

The Prices of the Span-roofed Houses, with Water-troughs, Doors, and Ends complete, are as follows:—

Ft. In.	8 ft. Lights	10 ft. Lights	12 ft. Lights	14 ft. Lights	16 ft. Lights
20 7 in length	£24 0 0	£32 0 0	£42 0 0	£57 0 0	£68 12 0
31 3 in length	33 0 0	42 5 0	53 0 0	75 4 0	91 14 0
41 11 in length	41 16 0	53 17 0	66 15 0	93 8 0	114 16 0
52 7 in length	51 5 0	65 10 0	80 10 0	111 12 0	137 10 0
63 3 in length	60 12 0	77 0 0	94 5 0	129 16 0	161 0 0
73 11 in length	69 5 0	87 10 0	106 15 0	148 0 0	184 0 0
84 7 in length	78 12 0	99 3 0	120 10 0	166 4 0	207 2 0
95 3 in length	87 18 0	111 0 0	134 5 0	184 10 0	230 4 0
105 11 in length	97 15 0	121 5 0	147 0 0	203 0 0	253 6 0

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Illustrated Circulars with Lists of Prices and Cards to view houses in operation in the neighbourhood of London can be had on application to

SAMUEL HEREMAN, 7, PALL MALL EAST, LONDON, S.W.

SUBJOINED IS THE REASON WHY

WEEKS'S ONE-BOILER SYSTEM

HAS BECOME THE ORDER OF THE DAY FOR HEATING BY HOT-WATER.

WEEKS'S UPRIGHT TUBULAR BOILER.

WEEKS'S No. 1. BOILERS are heating upwards of			200 feet of Pipe.	
WEEKS'S No. 2. BOILERS	„	„	300	„
WEEKS'S No. 3. BOILERS	„	„	600	„
WEEKS'S No. 4. BOILERS	„	„	1500	„
WEEKS'S No. 5. BOILERS	„	„	4000	„
WEEKS'S No. 6. BOILERS	„	„	12,000	„

The above statistics being accounts of hundreds of apparatus disseminated throughout Europe in practical operation, J. Weeks & Company publish them with the pleasing satisfaction that all who may honour them with their esteemed commands must effect enormous savings both in fuel and labour by the adoption of their ONE-BOILER SYSTEM.

JOHN WEEKS & COMPANY,

Horticultural Builders and Hot-Water Apparatus Manufacturers,

KING'S ROAD, CHELSEA, S.W.

*** *Illustrated Catalogues, Designs, and Estimates forwarded free on application.***

Strawberry Plants.

CUTHILL'S FIVE SORTS now sending out. They lasted 61 days this year. See former advertisements or write for a List.

STRAWBERRY and MUSHROOM PAMPHLETS, &c. Best MUSHROOM SPAWN.

James Cuthill, Camberwell, London, S.

Strawberry Plants and Catalogue.

W. J. NICHOLSON can now supply well-rooted laid runners of nearly every known variety, from the oldest down to all the splendid new sorts of the present time. A CATALOGUE of more than 200 sorts sent by applying to the Grower,

William James Nicholson, Egglescliffe, Yarm, Yorkshire.

STRAWBERRIES.—Admiral Dundas, British Queen Myatt's Eliza, Sir C. Napier, and Oscar, 3s. 6d.; Black Prince, Elton Pine, Eleanor, Keens' Seedling, May Queen, Prince of Wales, Princess Alice Maud, and Wizard of the North, 2s. 6d. per 100.

Double White NARCISSUS, 20s.; Double Yellow do. and Double DAFFODILS, 15s. per 1000. Purple Martagon and Orange LILIES, 10s. per 100.

George Cornwell, Seedsman, &c., Barnet, Herts, N.

SANSPAREIL STRAWBERRY (Culverwell's) was awarded a first class Certificate of Merit by the Fruit Committee of the London Horticultural Society. Dr. Hogg, the Secretary, speaks of it thus:—"A long tapering fruit with an uneven surface; the colour is of a dark blackish red, and the flesh is extraordinarily firm, solid, and red throughout, and very richly flavoured. It forces well, and on account of its bearing carriage well is adapted for forcing early and for market."

Henry May having purchased the stock of the above fine Strawberry, will be prepared to send it out the first week in September. Fine strong runners, at 6s. per dozen, or 40s. per 100. Also extra runners laid into pots at 8s. per dozen.

Price to the Trade on application to Henry May, the Hope Nurseries, near Bedale, Yorks.

STRAWBERRY PLANTS.—Now ready for sending out, fine strong healthy Plants of all the newest and most approved varieties in cultivation. The plants are such as will give every satisfaction to all purchasers; including the following well known varieties:—

GENERAL HAVELOCK.—The finest early Strawberry grown. To a grower for market this Strawberry is invaluable. It comes in before any other known early variety. The berry is of good form, large size, a splendid cropper, first-rate for early forcing, and not to be surpassed for preserving, being of a beautiful red colour throughout. It is the hardiest known variety grown, having stood the severity of last winter without failing in a plant, or the slightest injury to its early fruiting. Price 5s. per 100; extra strong for pots, 7s. 6d. per 100.

RIVAL QUEEN.—The finest flavoured of any variety, 4s. per 100.

SIR C. NAPIER.—Universally pronounced to be the No. 1 Strawberry, 5s per 100.

FROGMORE LATE PINE (Ingram). RIFLEMAN (Ingram), see Advertisement. 30s. per 100.

ECLIPSE (Reeve).—New, see Advertisement. 12s. per dozen, or 4l. per 100.

	per 100.—s.	d.		per 100.—s.	d.
Oscar (Turner) ..	5	0	Cremont's Perpetual ..	4	0
Prince Arthur ..	7	6	Admiral Dundas ..	4	0
Magnum Bonum ..	4	0	Prince of Wales ..	3	6
Carolina Superba ..	4	0	Eleanor	3	6
Victoria	3	6	Prolific	3	0
Bicton Pine	4	0	Myatt's Eliza	3	6
British Queen ..	4	0	Black Prince	3	0
Omar Pacha ..	4	0	Filbert Pine	4	0
Keens' Seedling ..	3	6	Elton Pine	3	6
Sir Harry	3	6	Fertilised Hautboy ..	3	6
Myatt's Surprise ..	3	6	Wizard of the North ..	3	6

and all other varieties worthy of cultivation, at equally reasonable prices.

HOLLYHOCK SEED.—Saved from the finest and best flowers. 1s. per pkt.

The true OLD BATH COS LETTUCE SEED.—The best ever cultivated. 1s. per pkt.

GRIFFIN'S ALMA LETTUCE.—Stands the winter well, and requires no tieing. 1s. per pkt.

CINERARIA.—Extra fine quality, 1s. per pkt. POLYANTHUS, 1s. per pkt. ANTIRRHINUM, 1s. per pkt. SWEET WILLIAM, 1s. per pkt. DELPHINIUM FORMOSUM, 6d. per pkt. CALCEOLARIA, extra good, 1s. per pkt. TILEY'S EARLY MARROW CABBAGE has proved to be the finest flavoured in cultivation. 2s. per oz.

The Strawberries are sent package free, and the Seeds postage free.

Remittances are expected to accompany all Orders in Cash, or penny postage stamps.

Edward Tiley, Nurseryman and Seedsman, 14, Abbey Church Yard, Bath.

SPLENDID NEW STRAWBERRY "ECLIPSE" (Reeve).—Mr. Willis Reeve, of Apton Hall, Rochford, Essex, begs to intimate that he has appointed Messrs. Veitch & Son, of the Royal Exotic Nurseries, Chelsea and Exeter, his sole agents for the distribution of the above new and really fine Seedling Strawberry.

It is an early variety, coming in at the same time as Keens' Seedling, and is a most abundant bearer. It forces remarkably well, producing large and handsome fruit with a rich Pine flavour, which is a character rarely met with in any other forced Strawberry. In form it is large, conical, inclining to a cock'scomb shape, of a beautifully uniform light crimson colour, with firm and juicy flesh.

It was exhibited before the Fruit Committee of the Royal Horticultural Society on May 8, 1860, when it was highly spoken of, and requested to be shown again. It was accordingly a second time submitted to the Committee on the 14th of May last, and was then awarded a First Class Certificate for its superior merit. It has also received prizes at the Crystal Palace and Romford Exhibitions, and has been highly approved of by the most competent judges.

Strong plants will be ready for delivery after the 1st of September next at the under-mentioned prices:—

Per dozen .. .. 12s. | Per hundred £4 0s. 0d.

Prices to the Trade on application, and a list of those who have ordered and will be able to supply plants of it, will appear next week.

Messrs. Veitch & Son, in the full belief that the above Strawberry is a decided acquisition and improvement on all other varieties, have become the agents for its distribution.

It has been grown out of doors in the gardens of the Royal Horticultural Society during the past season, and has proved one of the most prolific and richest flavoured varieties in the Collection. The Fruit Committee highly recommend it as a valuable variety for a general crop as well as one of the best forcing Strawberries.

They are having a Coloured Plate prepared, which will be distributed to the Trade who order 50 Plants and upwards.

Orders for the above will be executed strictly in the rotation in which they are received.

Royal Exotic Nurseries, Chelsea and Exeter.—Aug. 31.

Vines from Eyes.

THOMAS RIVERS respectfully calls attention to his collection of VINES from Eyes in Pots. The largest in the kingdom, nine houses, each from 60 to 70 feet in length, being devoted to their culture. The plants are of various descriptions, from dwarf bushes in fruit and rods for planting in Vineries and ground or Curates' Vineries, to fine rods 8 to 10 feet in length, capable of bearing next season from 10 to 12 bunches each.

A DESCRIPTIVE CATALOGUE is now ready, and will be sent post free on application.

Nurseries, Sawbridgeworth, near the Harlow Station.

Strong Vines from Eyes.

JAMES DICKSON and SONS have now ready for immediate planting, very strong Vines from Eyes in pots, with rods from 5 to 9 feet long, of all the leading varieties.

Also a large stock for fruiting in pots, with well ripened short jointed wood, with rods from 10 to 14 feet and very stout, of all the leading varieties.

An inspection of the above is invited, the stock consisting of nearly 2000 of such as cannot fail to give the greatest satisfaction. The Trade liberally dealt with.

The "Newton" Nurseries (close to the Railway Station), Chester.—Aug. 31.

Vines, Vines, Vines.

WILLIAM CUTBUSH, Jun., Barnet Nurseries, Herts, begs to invite an inspection of his fine Stock of Fruiting and other Vines in Pots, consisting of all the best varieties in cultivation. The following are remarkably strong and fine, from 8 to 12 feet in length, viz., Muscat Hamburgh, Muscat of Alexandria, Golden Hamburgh, Bowood Muscat, Lady Down's Seedling, Trentham Black, Buckland's Sweetwater, Black Hamburgh, &c. List and Prices on application. Also to his Stock of Specimen and Half-specimen New Holland Plants, Indian Azaleas, Stove Plants, &c.

W. C. Jun. would also especially call the attention of Mushroom Growers to his very superior Mushroom Spawn, for which he has the highest testimonials from the most eminent Gardeners in the United Kingdom, and which he can with the greatest confidence recommend. References on application.

NEW GRAPE, INGRAM'S HARDY PROLIFIC MUSCAT.—This is the most fertile and the best setter of all Grapes. The bunches are from 12 inches to 14 inches in length, having black oval berries, with the peculiar vinous flavour of the Hamburgh, yet more piquant, and combined with a slight spice of Muscat, so as to tone down the acid without satiating the palate. The flavour is new, and has been pronounced by one of the first judges of this country to be the finest flavoured of all Grapes. The fruit is such, that the more it is eaten the more it is liked. In this Grape we have the *gardener's friend* and the *gentleman's bonne bouche*. It is impossible to grow the Vine without producing fruit, and owing to its ripening in a much lower temperature than the Black Hamburgh, it is the very best sort for a greenhouse or Curate's Vinery, and in ordinary summers it, no doubt, will ripen against a wall in the open air. The footstalk of the berry is so stiff and strong that it cannot shank off. For those countries where the Vine is cultivated in large quantities in the open air and where they have now only coarse and tasteless kinds, this will be the greatest acquisition. It has been exhibited before the Royal Horticultural Society's Fruit Committee, and obtained a First Class Certificate; the fruit shown being cut from a Vine struck from a single eye that was only 14 months old from the time of putting in the eye till cutting the Grapes. The fruit this year will be ripe from the middle of May to the end of June, when intending purchasers are invited to call and judge for themselves. Plants are now ready, at 21s. and 42s. each: and a few extra strong at 63s. each.

Jno. Standish, Royal Nursery, Bagshot.

To the Trade.

NEPHRODIUM MOLLE CORYMBIFERUM,
ATHYRIUM FILIX FŒM. CORYMBIFERUM.

EDWIN COOLING having a large stock of the above, with other elegant and distinct Ferns, offers them to the Trade on liberal terms. Prices on application.

Edwin Cooling, Mile Ash Nurseries, Derby.

Caution to the Public.

ISAAC DAVIES begs to inform the Public that a Traveller of a London Nursery has obtained Drawings of his RHODODENDRON PRÆCOX from him under the specious pretext of soliciting orders for his plants; but in place of which he substitutes a Rhododendron from his employer's Nursery somewhat like it in foliage. To put purchasers on their guard he publishes the following names, being all the Nurserymen that have bought plants from him:—

Wm. Skirving and Thos. Davies & Co., Liverpool; Waterer & Godfrey, Thos. Jackson & Son, G. Jackman & Son, and W. Fletcher, Surrey; John Hally, Blackheath; Messrs. Ballantyne & Son, Dalkeith.

Larkfield Nursery, Wavertree, near Liverpool.

VARIEGATED and SCARLET GERANIUM CUTTINGS.

Bijou, the finest variegated out,	3s.	0d.	per doz.,	20s.	0d.	per 100
Flower of the Day	2	0	,,	15	0	,,
Tom Thumb (true)	1	6	,,	10	0	,,
Named Scarlets of the finest sorts	2	0	,,	15	0	,,

Bijou plants, 6s. per doz.; large stock do., 18s. per doz.

PANSIES, all the choicest show flowers, 6s. per doz.

All orders to be accompanied by a remittance.

Henry Brown (late Charles Finch), Bounds Green, Colney Hatch, N.

New Fuchsias, Petunias, and Verbenas of this Season.

HENRY WALTON, Edge End, Marsden, near Burnley, begs to offer nice young plants of FUCHSIAS of the following varieties Purchasers' selection, free by post, 12s. per dozen; H. W.'s selection 9s. per dozen:—Alarm, Always-ready, Ambassador, Annie, Bianca, Black Prince, Clara, Colleen Bawn, Comte de Hainaut, Comte de Preston, Coronal, Figaro, Forget not, General Borremans, Goliath, King of Purples, Lord Elcho, Mammoth, Madame Cornelissen, Masterpiece, Pioneer, President, Perseverance, Prince Leopold, Raphael, Rifleman, Robin Hood, Star of the Night, Striata, Solferino (Lemoine's), Triomphe Cornelissen, Venetia, Victor Emmanuel, and White Lady.

PETUNIAS, double and single, both English and Continental varieties, 9s. per dozen.

VERBENAS, English, Continental and American varieties, 6s. per dozen.

Orders to the amount of 5s. and upwards free by post. The Trade liberally dealt with.

Caladium Belleymei, nice plants, 7s. 6d. to 10s. 6d.
,, Wighti, ,, 10s. 6d.
,, Chantini, ,, 3s. 6d.
,, Neumanii, ,, 3s. 6d. to 5s.
,, Verschaffelti. ,, 3s. 6d.
,, Brongniarti, ,, 3s. 6d. to 5s.
Cyanophyllum magnificum, 5s. to 7s. 6d.
Bougainvillea spectabilis, 3s 6d. to 5s.
,, Westeana, 3s. 6d. to 5s.
Begonias, select varieties, 12s. to 18s. per dozen.

Post-office Orders payable at Nelson, in Marsden, Lancashire.

Geraniums, Herbaceous and Alpine Plants, Orchids, Chrysanthemums, Hardy Variegated Plants, &c.

B. S. WILLIAMS begs to inform his friends and patrons that a PRICED and DESCRIPTIVE CATALOGUE of the above, to which are added supplemental Lists of Fuchsias, Stove, Greenhouse, and Hardy Plants, Ferns, Ornamental Foliage and Variegated Plants, Fruit Trees, &c. (which include the best new plants of the season,) is now published, and will be forwarded post free on application.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway.

New Phalænopsis with Variegated Foliage.

B. S. WILLIAMS has great pleasure in offering for the first time strong Plants of Phalænopsis Schilleriana, which have just arrived in the finest possible condition. This beautiful species is quite distinct from all others in cultivation; the leaves are similar in form and equal in size to those of P. grandiflora; ground colour dark green, with irregular bands of white over the whole surface. Flowers flesh-coloured; size, about two-thirds of those of P. amabilis, and produced in great profusion from strong branching stems, one of which may be seen at the Nursery, which has borne upwards of 100 flowers, a portion of which are still attached.

Price can be had on application.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway.

Hyacinths, Tulips, &c.

JAMES GARAWAY and CO.
have just received from the
Most Celebrated Dutch Growers
their
First Importation
Of the above and other Bulbs,
And are supplying the same, of
Best Quality, at the Lowest Possible Prices.
CATALOGUES with full particulars on application.
James Garaway & Co.,
Durdham Down Nurseries,
Bristol.

Roses.

JOHN KEYNES, Nurseryman, Salisbury, begs to offer to Amateurs for the Autumn the finest Plants, both Dwarfs and Standards, in the kingdom.

CATALOGUES on application. Early orders solicited, as the stock is very limited.

Salisbury, Aug. 31.

Roses in Pots,

On their own Roots, now ready for sending out.

WM. WOOD and SON refer with pleasure to their immense Stock of the above, "the largest in the Kingdom."

If the plants are planted out now a season will be gained. Prices on application.

Woodlands Nursery, Maresfield, near Uckfield, Sussex.

NEW ROSE.—MADAME STANDISH is the hardiest of all Roses; those which stood out of doors during the whole of the late severe winter not having lost a bud, whilst most others were destroyed by thousands. The growth is very rapid; the foliage magnificent; colour, a clear pale pink; petals smooth, round, and finely imbricated; the form cannot be excelled, and it is a thorough Perpetual, being, in fact, one of the finest Roses ever offered. Plants now ready, 10s. 6d. each. Madame Standish must not be mistaken for Mrs. Standish, which was sent out by *Miellez, of Lille*.

John Standish, The Royal Nursery, *Bagshot*.

ROSES.—Grand National Rose Show, Royal Horticultural Society's Garden, Kensington Gore, July 1[illegible].

The FIRST PRIZE for 48 varieties was awarded to John Cranston, King's Acre Nurseries, near Hereford.

M. Common
H.B. Charles Lawson
H.P. Alexandrine Bachmeteff
,, Anna Alexieff
,, ,, de Diesbach
,, Auguste Mie
,, Comtesse Cecile de Chabrillant
,, Duchesse d'Orleans
,, Duchess of Norfolk
,, Géant des Batailles
,, Général Jacqueminot
,, ,, Simpson
,, ,, Washington
,, Léon des Combats
,, Lælia
,, Lord Raglan
,, L'Oriflamme de St. Louis
,, Louis Chaix
,, Louis XIV.
,, Madame Boll
,, ,, Bonnaire
,, ,, Charles Crapelet
,, ,, de Cambacérès
,, ,, Hector Jacquin
H.P. Madame Knorr
,, Madame Vigneron
,, Maria Portemer
,, Monsieur Joigneaux
,, Mrs. Rivers
,, Prairie de Terre Noir
,, Prince Léon
,, ,, Imperiale
,, Princesse Mathilde
,, Reine des Violettes
,, Reine Mathilde
,, Sénateur Vaisse
,, Sophie Coquerel
,, Souvenir de Montceaux
,, ,, de la Reine d'Angleterre
,, Triomphe de l'Exposition
,, Victor Verdier
B. Acidalie
,, Louise Odier
,, Sir Joseph Paxton
,, Souvenir de la Malmaison
T. Gloire de Dijon
,, Madame Falcot
,, Narcisse

The above, together with all the leading new and old varieties, can be supplied in the autumn; DESCRIPTIVE CATALOGUES of which will be forwarded Post-free on application.

Early Orders are respectfully solicited.

ROSES.—Grand Rose Show, Crystal Palace. July 6, 1861.

The FIRST PRIZE for 48 varieties was awarded to John Cranston, King's Acre Nurseries, near Hereford.

H.B. Paul Ricaut
P.M. Madame Edouard Ory
D.P. Julie de Krudner
,, Manoury
H.P. Alexandrine Bachmeteff
,, Alphonse Karr
,, Anna Alexieff
,, Arthur de Sansal
,, Baronne Hallez
,, ,, Prévost
,, Cardinal Patrizzi
,, Caroline de Sansal
,, Comtesse Cecile de Chabrillant
,, Duchess of Norfolk
Evêque de Nîmes
,, François Arago
,, Géant des Batailles
,, Gen. Jacqueminot
,, ,, Simpson
,, Jules Margottin
,, L'Enfant du Mont Carmel
Léon des Combats
,, Lælia
,, Lord Raglan
H.P. Louis Chaix
,, Madame de Cambacérès
,, ,, de Manoel
,, ,, Hector Jacquin
,, ,, Vidot
,, Mademoiselle Alice Leroy
,, ,, Thérèse Appert
,, Maria Portemer
,, Mathurin Reguier
,, Mrs. Rivers
,, Pauline Lansezeur
,, Prince Leon
,, Reine de Danemark
,, Souvenir de la Reine d'Angleterre
,, ,, de Leveson Gower
,, Triomphe de l'Exposition
,, Virginal
B. Acidalie
,, Louise Odier
,, Souchet
T. Gloire de Dijon
,, La Sylphide
,, Narcisse
,, Vicomtesse Decazes

The above, together with all the leading new and old varieties, can be supplied in the autumn; DESCRIPTIVE CATALOGUES of which will be forwarded post free on application.

Early orders are respectfully solicited.

Gladiolus.

PAUL AND SON'S fine collection of this noble Flower is now in full bloom.
Address PAUL & SON, "Old" Nurseries, Cheshunt, Herts.

Hollyhocks.

PAUL AND SON'S fine collection of this noble Flower is now in full bloom.
The Nurseries are reached in one hour by fast trains from Bishopsgate to Cheshunt Station (one mile from the Nursery), leaving London at 9.30 A.M., 12.45, 2.30, 3.30, 5.10 P.M.
Old Cheshunt Nurseries, Herts.

Roses.

PAUL AND SON'S splendid collection is now in full condition for planting out, as Dwarfs on own roots or worked low on the Manetti. Also a fine selection of Standards for Autumn planting. A fine stock of Strong Vines from eyes of all the best varieties for fruiting in pots or planting out.
Address PAUL & SON, "Old" Nurseries, Cheshunt, Herts.

GRASS SEEDS.—10 cwt. Crested Dogstail, or "Cynosurus cristatus;" 5 quarters imported Italian Rye-grass, 5 quarters Cocksfoot, &c. The advertiser respectfully offers the above at a low rate in large or small quantities. Samples forwarded on application to
JOSEPH MAY, Seedsman, 15, Wellington Street, Strand, W.C.

Mushroom Spawn.

JOSEPH MAY begs to inform his customers he has some of the best quality this season. Directions sent for growing them on the most simple plan.
Collections of DUTCH and other FLOWER ROOTS for greenhouse or outdoor culture, from 10s., 15s., 20s., and upwards.
15, Wellington Street, Strand, W.C.

Milltrack Mushroom Spawn.

WM. CUTBUSH AND SON are now able to supply the above at 7s. 6d. per bushel.
N.B. None is genuine unless a pamphlet with our signature attached is enclosed in each packet.
Highgate Nurseries, London, N.

25,000 Ranunculuses.

CAREY TYSO, FLORIST, &c., Wallingford, Berks, having housed in excellent condition his unrivalled collection of Ranunculuses, offers them in assortments of

50 superior kinds, one root each	£1 0 0
25 Do. Do. Do.	0 10 0
100 Fine Mixed .. .. .. 8s., 15s., and	1 0 0

He also offers a great bargain to the Trade, a splendid mixture, at 40s. per 1000.
ANEMONES, HYACINTHS, TULIPS, IRISES, NARCISSUS, JONQUILS, CROCUSES, &c., for Autumn planting. CATALOGUES gratis for one label.

New Catalogue for 1861.

AMBROISE VERSCHAFFELT, NURSERYMAN, Ghent (Belgium), has now ready his NEW GENERAL CATALOGUE OF PLANTS, containing a quantity of new and rare Plants.

Camellias and Indian Azaleas with Flower Buds.

A. VAN GEERT, NURSERYMAN, Ghent, Belgium, begs respectfully to state that he is now ready to supply fine Camellias and Indian Azaleas of the choicest varieties, well set with flower-buds. The price and size will be sent on application.

New Catalogue of Plants.

A. VAN GEERT has the pleasure of announcing that his New General Catalogue of Plants, with a splendid Design of the Establishment, is just published, and will be sent to correspondents on application to Mr. A. V. G., Ghent, or to Mr. R. SILBERRAD, 5, Harp Lane, Great Tower Street, E.C.
A. VAN GEERT, Nurseryman, Ghent, Belgium.

Dutch Flower Roots.

JAMES VEITCH, JUN., ROYAL EXOTIC NURSERY, Chelsea, S.W., begs to announce that he has received his annual supply of Bulbous Roots from Holland, and is pleased to say that they are PARTICULARLY FINE and in EXCELLENT CONDITION. CATALOGUES are now ready and will be forwarded on application.
J. V., Jun., desires to impress upon those who patronise him the great advantage of giving him their ORDERS EARLY, as the successful cultivation of Bulbs depends in a great measure upon their BEING PLANTED EARLY IN THE SEASON.

Choice Flower Seeds.

ROBERT PARKER begs to offer the following New and Genuine Seeds, all of which are recommended with the greatest confidence:—

CALCEOLARIA, herbaceous, finest mixed,	per pkt.,	2s. 6d.
CINERARIA, finest mixed	"	2 6
PRIMULA SINENSIS FIMBRIATA ALBA	"	2 0
" " " ROSEA	"	2 0

Exotic Nursery, Tooting, Surrey, S.

New Seeds for Present Sowing at Reduced Prices, Carriage Free.

SUTTON AND SONS can now supply the under mentioned for immediate sowing:—
NEW TRIFOLIUM INCARNATUM.
Early Six Weeks Turnip
Drumhead Cow Cabbage
Sutton's Imperial Cabbage
Enfield Market and others
Italian Rye-grass
Permanent Meadow Grasses
Fine Lawn Grasses
Mustard and Rape
Early London Cauliflower
Fine Walcheren ditto
Onion, of sorts | Early Horn Carrot
Calceolaria, Cineraria, Primula, and other choice Flower Seeds, 1s. per packet.
PRICED LISTS of the above new or fresh Seeds may be had on application addressed
SUTTON & SONS, Royal Berkshire Seed Establishment, Reading.

TRIFOLIUM INCARNATUM (present price) 5d. to 6d. per lb.
VILMORIN'S NEW TRIFOLIUMS, with "Practical Hints on its successful Cultivation," showing how 2 to 3 tons per acre of the most nutritious hay may be secured; the advantages of sowing it where broad Clover is thin, and its superiority to Tares as green food.
PAGE & TOOGOOD having secured a large breadth from the most careful growers in this district, where better crops are produced than in any part of England, offer it at the above low rate for cash; price to the Trade per post.
Italian Rye-grass, 5s. per bushel.
New Turnip Seed, 8d. per lb.
New Rape Seed, d. per lb. | New Mustard Seed, 4d. per lb.
WINTER VETCHES and WINTER OATS as soon as harvested.
PERMANENT PASTURE and LAWN GRASSES as sown at Osborne for the last 7 years.
CALCEOLARIA and CINERARIA, 1s. per packet, saved from one of the finest collections in Europe.
Seeds for exportation to all parts of the world.
Royal South Hants Seed Establishment, Southampton.

NEW SEEDS FOR AUTUMN SOWING.

PETER LAWSON & SON,

SEEDSMEN TO THE QUEEN,

LONDON AND EDINBURGH,

CAN now supply New Seed of TRIFOLIUM INCARNATUM, ITALIAN RYE-GRASS, DWARF ESSEX RAPE, &c., of fine quality.
They are also prepared to supply all the NATURAL GRASSES, either separate or in mixtures, for laying down Permanent Pastures, Lawns, Public Parks, Cemeteries, &c., orders for which will be carefully and promptly attended to.

27, GREAT GEORGE STREET, WESTMINSTER, S.W.

NEW BULB CATALOGUE.

MESSRS. E. G. HENDERSON & SON

RESPECTFULLY ANNOUNCE THEIR

GENERAL DESCRIPTIVE BULB CATALOGUE for 1861,

SENT POST FREE ON APPLICATION,

In which is given lasting notes on the respective adaptation, treatment, &c., of the various tribes, including an extensive collection of Miscellaneous Bulbs and Tuberous-rooted Plants for Winter and Early Spring Forcing, in Drawing-room, Greenhouse, Hothouse, and Conservatory decoration.
In contrast with last year, the present one has proved highly favourable in maturing the growth of Flower Bulbs, which present every prospect of a fine display of bloom in their respective seasons.

THE BULB GUIDE.

Amateur growers will find this work a useful and economical guide for making selections, pointing out as it does the most desirable species and varieties in each genus, with their descriptive features and their culture. Many gardeners, for want of this knowledge in Bulbs, fail from not giving the proper season of rest, situation, and other points of management that differ so much from Plant Culture, and consequently this most beautiful tribe is often lost or otherwise defectively treated.

Price 1s. 6d. Post free in exchange for 18 stamps.

A Copy of the Bulb Guide will be included with all orders amounting to 42s. and upwards.

Bulbs and Seeds are forwarded Free of Carriage throughout the Kingdom, on the conditions named in the Bulb Catalogue.

WELLINGTON ROAD, ST. JOHN'S WOOD, LONDON, N.W.

CARTER'S FIRST-CLASS SEEDS OF
CALCEOLARIA, 2s. 6d. per packet.
" new blotched, 2s. 6d. per packet.
CINERARIA, 2s. 6d. per packet.
PRIMULA, mixed fringed, 1s. per packet.
" dark carmine fringed, 2s. 6d. per packet.
" pure white fringed, 2s. 6d. per packet.
JAMES CARTER & Co., 237 & 238, High Holborn, London, W.C.

ROBERT LEITCH begs respectfully to inform his friends and the public generally that he has purchased the whole of the STOCK in TRADE of the late Mr. William Bogie, of the Kimmeter Green Nurseries; and he trusts, by assiduity and attention, to merit a continuance of the patronage so liberally bestowed on his predecessor.
Having a large Stock of FOREST, FRUIT, and ORNAMENTAL TREES, he can offer them to the Trade on advantageous terms.
Kimmeter Green Nurseries, Annan, Dumfriesshire.—Aug. 31.

HEREFORD HORTICULTURAL SOCIETY.—The SECOND EXHIBITION of this Society for the present season will be held on the Castle Green, SEPTEMBER 12 (instead of the 5th, as previously announced), when special prizes will be awarded for STOVE and GREENHOUSE PLANTS, DAHLIAS, COLLECTION of FRUIT, &c.
Plants, &c., intended for competition must be on the Green by 12 o'Clock. The Exhibition will close at 6 P.M.
J. EDWARDS, Esq., F.H.S., Censor.
For Schedules, &c., apply to W. SMITH, Florist, &c., Hereford.

BRIGHTON AND SUSSEX FLORICULTURAL AND HORTICULTURAL SOCIETY.
The EIGHTH ANNUAL GRAND AUTUMN SHOW will be held on WEDNESDAY and THURSDAY, September 18 and 19, at the Royal Pavilion. Prizes to the amount of 350l. are offered for PLANTS, FRUITS, CUT FLOWERS, &c.
The RAILWAY CUP, value 10l., is offered for the best group of three stands of Fruit and Flowers for the Decoration of the Dinner Table. Beautiful arrangement will be the test in this Exhibition. Ladies are invited to compete. The prizes will be awarded by a jury of Ladies.
Schedules of Prizes can be had on application to the SECRETARY, 96, St. James's Street, or of E. SPARY (General Superintendent of the Exhibition), Queen's Graperies, Brighton.
By the kind permission of Colonel Perceval, the celebrated Band of Coldstream Guards will attend each day, conducted by Mr. Godfrey, sen.
By Order of the Committee,
Brighton, August 31. EDWARD CARPENTER, Secretary.

GRAND FLORAL AND HORTICULTURAL FETE, OPEN TO ALL ENGLAND.
To be held on THURSDAY, September 26, on the Northampton Race-course, in connection with the Annual Show of the Northamptonshire Agricultural Society.
Prizes to the amount of 200l. will be offered for Plants, Fruits, Cut Flowers, &c., including three Silver Cups, as follows:—
Class 1, Thirty-six Dahlia Blooms, distinct, a Silver Cup, value 5l.; 2d prize, 2l. 10s.
For best Collection of Fruit, Silver Cup, value 5l.; 2d prize, 2l. 10s.
12 Stove or Greenhouse Plants, fine foliage, without reference to bloom, and not more than three plants of one genus, a Silver Cup, value 5l.; 2d prize, 2l. 10s.
Schedule of Prizes and further particulars may be had on application at DORMAN'S Library, Northampton.

The Gardeners' Chronicle.

SATURDAY, AUGUST 31, 1861.

MEETING FOR THE ENSUING WEEK.

WEDNESDAY, Sept. 4 } Crystal Palace Dahlia and Fruit
THURSDAY, — 5 } Show.

IT is to be feared that this year's experience will be unfavourable to ORCHARD HOUSES. It is certain that in many places the trees are barren of fruit, and in no better condition than such as are out of doors. Nevertheless we are assured that when "proper care" has been taken there is no falling off in productiveness. What then is the reason that A. has plenty and to spare, while B. looks at his sterile trees in despair? and what is meant by "proper care?"

Upon the last subject Mr. PEARSON, of Chilwell, has undertaken to enlighten the public* in a useful pamphlet, and we are glad to see that Mr. RIVERS is joined at last by so practical a man. He endorses the opinion long ago expressed in our columns that the old fashioned gardeners who set their faces against these buildings committed a great mistake, as some have found to their cost. Upon this point his observations are such as our horticultural friends will do well to bear in mind.

"Now let me say a word to those gardeners who, having learnt their business, are afraid to commence a culture they do not understand, or who really do not believe in the orchard-house. Whatever you may do or say, they will be built. Gentlemen will not be satisfied to be without fruit, when their neighbours have plenty; or to have two or three kinds only, instead of a variety of sorts, lasting over a long period, and varying in appearance and quality. You will find it pleasanter, in cold spring weather, to be under glass, than nailing trees against a wall. For four or five months the orchard-house is no trouble. If walls already exist, they will be very convenient for choice Pears, and you will have a chance, by the same means, of furnishing Ribstone Pippin Apples, White Calvile, &c., fit to be eaten. In advertisements we shall soon see, 'Wanted, a Gardener familiar with Orchard-house Culture.' These structures, being without fire heat, are such

* *A few Hints on the Construction and Management of Orchard Houses.* (Virtue, 1s.)

agreeable places to walk in during cold east winds, and afford so much comfort to the aged and infirm, that they will be built, and young gardeners will do wisely to learn how to manage them."

It is perfectly clear that those who wish to ensure a crop of such fruit as Peaches and Nectarines and Apricots must cease to believe in walls, except in very favourable situations. Mr. RIVERS long since showed that for 140*l.* it was possible to cover 2400 square feet, roughly indeed, but serviceably, and Mr. PEARSON now states that he has "built a house covering 2700 feet square, on 18 inches of brick work above the surface; the walks are paved with black and buff quarries, the bricks laid in Portland cement, and the whole finished in a style fit for *any* garden, at a cost of 230*l.*, or about 1*s.* 8*d.* a square foot of ground covered." Of this house he gives a photograph which shows that it much resembles "Sigma's," described at p. 692 of the *Gardeners' Chronicle* for 1859. Like us he points out the advantage if not necessity of taking care that the dimensions are ample enough to secure the interior against too low a night temperature at the blossoming season.

"An Orchard-house should not be less than 20, nor more than 30 feet in width. No fire being used to keep out frost, a wide house, containing a large body of air, will cool more slowly than a narrow one; and plants blooming in a 20 foot house would be safe from frost, when those in one 14 feet wide might be in danger. If a house be more than 30 feet, it must have a ridge and furrow roof, which, though necessary when large spaces have to be covered, is more expensive and much heavier in appearance. To grow fruit of fine flavour, light is the great requisite; and that the sun should shine equally as possible on both sides, it is desirable that your house be span-roofed, if possible, having one end towards the south. I have no hesitation in saying, the span-roof is the best form for either the growth of Vines or plants. Vines, in a lean-to house of any height, require a ladder to prune or gather the fruit, and there is always a tendency to produce the finest foliage and fruit on the upper part of the rods; whilst by being trained across a span roof, the sap is checked, the growth rendered more equal, and both Vines and fruit are more within reach. *Plants, in a lean-to house, invariably draw towards the light; whilst in a span-roofed house, they have the advantage of light on all sides.*"

That we have arrived at a knowledge of the best way to manage an Orchard House we are far from asserting. On the contrary it is probable that we have as yet but a few glimpses of what will be hereafter fundamental rules. Take for example the mere growth of the trees in pots; how is that best managed? and for how many years will potted trees last? Upon this last point Mr. PEARSON says:—"I have seen trees which have never been re-potted, but only top-dressed for nine years, and which are as healthy as ever. My belief is, that the average life of Orchard-house trees will be greater than those trained on open walls, subject as these latter are to so many injurious influences. The Orange has long been cultivated in pots and tubs, and trees are in existence, in perfect health, hundreds of years old, as all know who have visited Versailles. As an experiment, and to show what might be done with a Peach tree, I had a small plant of Royal George Peach potted in what is called a two quart pot: it was not allowed to root through the bottom, and it was well fed by manure water; 13 Peaches were ripened, and these were amongst the best fruit in the house. Early in the autumn, before it shed its leaves, it was taken up, all the earth shaken from its roots, and placed again in the same pot, and it has now seven fine Peaches on it. The plant has only three small shoots, is about 18 inches in height, and is in better health than last year."

As to their management it is already evident, as Mr. RIVERS long ago pointed out, that plenty of skilfully prepared manure water, applied at the right time, is one of the most indispensible elements of success. Mr. PEARSON'S advice is as follows:—"When the fruit is the size of Walnuts—say the middle of June—give them manure-water once a week—not drainings from a manure yard, or guano water, but made in the following manner:—Take a mixture of sheep, horse, and cow manure, in equal parts, or any of them, if you cannot get all three, and put it into a trough or old tub; then cover it with scalding water, to kill all insects and their eggs; afterwards add water, and let it settle, using the supernatant liquor. When you add fresh water, stir it up from the bottom, and let it settle again. The value of these manures, if employed separately, is in the order I have placed them."

The losses sustained this year in Orchard Houses are we think susceptible of a simple explanation, which itself shows that much has still to be learned from experience. There can be no doubt that the reason why Peaches, &c. in orchard houses either did not blossom, or blossoming were unable to stone their fruit, was the unripened wood. Continual rain last year kept the air constantly damp, and absence of sun increased the mischief. The temperature was extremely low for the autumn; plants, instead of halting in the career of growth, drying and hardening their tissues, organising flower-buds and laying up food on which those buds could feed when the period allotted by Nature arrived, continued to push, gained water as fast as they lost it, provided no store of future food, and generated abortions instead of flowers. To this one consequence only was possible; and that we have witnessed in the failure of the crop of fruit. Where houses were crowded, in consequence of the trees being planted out, or where extraordinary means were not taken to secure full sunlight, such as it was, and to provide as free a circulation as was obtainable, the mischief has been greatest. Where long experience pointed out a remedy for the defects of the season, the failure has been comparatively small. This is the case at Sawbridgeworth, where Mr. RIVERS has had a tolerable crop of Peaches, notwithstanding adverse influences, as the astrologers would say. To this we ourselves bear witness, having received specimens of a capital new seedling Peach, better in flavour than the Early Ann, ten days earlier, and, as we learn from Mr. RIVERS, very much hardier, the trees in the open ground having survived, when all others were killed. We would suggest that this should be called "RIVERS' Earliest." It is not the smallest merit of the Orchard House that it thus enables seedlings to be brought forward rapidly, and their fruit to be well ripened so as to show the true quality, even without the aid of a wall. Out of a multitude of seedlings coming forward at Sawbridgeworth, many another of stirling value will doubtless soon present itself in a state to be satisfactorily judged. Of one of these, called the Early Albert, there is no doubt of the excellence.

We gather from Mr. PEARSON'S remarks that he is inclined to ascribe failures in Orchard Houses to the blossoms not being set by insects.

"Most persons know that the farina or pollen of the stamens must come in contact with the pistil, if perfect fruit is to be produced. To this end Providence has placed honey in the nectaries of flowers, as an attraction to bees and other insects, which, in buzzing about, distribute the pollen. A moment's consideration of this subject will explain the cause of many failures. Of course the farina cannot fly, if not in a dry state. A damp atmosphere, therefore, tends to prevent the setting of fruit. It will be an advantage to have your plants in bloom, when there is a chance of the weather being warm enough to allow of ventilation, and the assistance of bees, to fertilise the flowers. The span-roofed house affording the means of ventilation near the ground on both sides, the whole length of the house is much superior to the ugly glazed sheds, called lean-to houses, generally built. If Orchard-house trees are in good health, and the weather be warm when they are in bloom, and bees in abundance, they will probably set three times the fruit they can bring to perfection; but as it is better to leave nothing undone to ensure success, we always fertilise the flowers by touching them with a camel hair pencil, in the middle of a warm sunny day. It takes but a very short time to go over every plant in a large house. It is the opinion of many besides Dr. DARWIN, that not only is the pollen of some varieties of a species stronger than others, but that when applied to a different plant or variety, it is more efficacious. In using a perfectly dry camel hair pencil, it will be found, that though the farina of each bloom may be distributed, but little can be carried away by the brush. Let us, then, take a lesson from Nature. Pull off a bloom and open it lengthwise, and it will be found sticky with honey in the inside; insert the brush, and it will then, when afterwards used, be soon covered with pollen, and you will thus cross variety with variety. If the petals soon begin to drop and leave the base of the flowers attached to the tree, you have been successful, and may hope for a crop. I have been thus explicit, because aware that this is a matter of importance, and often neglected."—Good advice, no doubt, but we do not believe it to have anything to do with this year's failures. All the pollen in nature, though applied by the practised hand of DEAN HERBERT himself, would have been unable to secure a crop of fruit. Undoubtedly blossoms, when there were any, might have been set; but how were they to stone? There was the difficulty; and that difficulty was beyond remedy.

WE see by a printed notice sent through the post from France that M. VICTOR CHATEL of Angers believes that he understands how to cure the VINE MILDEW. The first thing is to scrape the bark perfectly clean in winter, and then to paint the rods with milk of lime, salt, and sulphuret of potassium. The second is to pinch off the leaves of the second growth, and all the young soft green wood, following up the operation by also pinching off the other young leaves that follow; leaving the dark green fully formed leaves to do the work of foliage. It is positively asserted that this answers, the Mildew Fungus only attacking young imperfectly formed leaves. But, we are tempted to ask, if the Fungus is thus removed, what becomes of the colour and flavour of the Grapes that remain? Or are the full-grown leaves alone sufficient for the exigencies of the Vine?

CUCUMBER DISEASE.

THE disease in Cucumbers about which your Correspondents are complaining is no doubt "Chlorosis," upon which Mr. Berkeley and myself wrote rather extensively some five or six years ago. At that time Mr. B. considered the disease constitutional, but I, on the contrary—upwards of 25 varieties, collected from various parts of the United Kingdom, and some from the continent, being all diseased—attributed it to local causes, such as unsuitable soil and bad leaf-mould in particular. Subsequent experience has led me to modify that opinion, and though I am not prepared to assign the disease to any definite cause, I think I am sufficiently experienced to advise as to the mitigation of its virulence, and the production of a good supply of fruit. I know no disease more capricious in its visitations or inexplicable in its attacks. Sometimes a whole house or a whole plant may be affected, or again, only a single leaf, or a few leaves, upon a single plant; while many times after dressing a house of plants and thinning out the fruit, leaving just sufficient for a fortnight's or three weeks' supply, I have found within 48 hours three-fourths of the fruit withered as if each had been burnt by a hot iron. Again, to-night or to-morrow morning you pass through a house of plants and admire the splendid and dew-bespangled foliage, and think—"Well, for once I am all right, the disease will not touch these plants;" but vain hope, the morning is gleamy, the sun at times shining out intensely. At noon you look again, some of the plants are flagging, the edges of leaves which a few hours previously were set with pearls are unmistakably seared, and by night are as completely collapsed and dried up as if a red-hot coke had been under each for the preceding six or eight hours. Oh, how is this? that confounded foreman has given too much air, and this cold "north-easter" has dried up the leaves, but we will remedy this to-morrow. To-morrow comes and the house is kept like a vapour bath, and scarcely a breath of air passes through it, but still the plants flag! How can it be? Plants generally only flag in a dry atmosphere, but here it appears impossible to prevent their flagging. Yes, as Mr. Sheppard (see p. 717) has remarked, "coddling is of no use;" you must go on the opposite tack if you think to check or modify the virulence of the disease; nursing or coddling is useless, and if you wish to get your plants into a fruitful state you must make them as hardy as possible. Commence this by gradually lowering the temperature by night to 55° or 60°, and to effect this admit all the night air you can, so long as it is warmed before it comes in contact with the foliage. With a low night temperature, and a free admission of air, it may be found difficult, especially if the bed is shallow, to maintain sufficient bottom heat. Should such be the case, cover the surface three or four inches thick with Moss, or if that is difficult to procure, substitute dry Beech or Oak leaves. This will prevent the escape of heat, and also induce the roots to come to the surface. Cucumbers delight in Moss and old Mushroom dung; and these two substances alone, properly supplied with heat and water, will produce fruit as good as can be had. With a week or two's cooler treatment, the plants will assume a more vigorous character, and instead of being the poor attenuated things they were, the leaves will become strong and robust, and the points of the lateral shoots as thick as your forefinger. A plant thus grown has some strength to repel disease, and though you may occasionally lose a leaf or two and some fruit, yet as a whole plants slowly grown are much more certain to produce a supply than the coddled things too generally seen. I am not prepared to say that the disease can be entirely prevented; I believe

under the most systematic management it will sometimes present itself, and frequently when least expected; but with common care its virulence may be so far modified as to render its visitations comparatively harmless.

In the spring of this year I sowed six varieties, grown in six different counties. For a time while they were in pots, and even after they were planted out in separate compartments in the fruiting Pine-house, they looked very well, but one bright day when they were about a yard high, they flagged, and some of the leaves became dried up. For a fortnight or so this flagging continued, sometimes to such an excess as to render it imperative to envelope the whole plant in a shading of tiffany during the hottest part of the day, but as the plants gained strength, and they gained much from the roots being allowed admission into the Pine-bed, the disease nearly left them, and now we rarely see a diseased leaf. Some Melons in the same house, of a variety I knew to be diseased, were grown to a good size in 9-inch pots, and as the disease did not show itself I resolved to keep them in the pots, allowing the roots to pass through into the compartments prepared for them, and they have progressed most satisfactorily, scarcely a leaf being spotted. One plant, however, was planted out, and there the disease showed itself at once. Thus it would appear that a moderate healthy growth as compared with great luxuriance is subversive of the disease in Melons, a fact worth attention.

Now as regards Cucumbers for winter work, if the plants are not already in rough leaf not a day should be lost in sowing the seed; it is of the utmost importance that the plants should be grown as vigorously and slowly as possible. As explained more than 20 years ago, the whole secret of a good supply of fruit through the winter depends upon a proper accumulation of sap in the autumn; and indeed, if you have not health and strength and fruit-producing qualities in the plant before the end of October, you must not expect to get them afterwards. Having got these qualities use them wisely; take but two or three fruit from a plant at the same time, and avoid everything like coddling. A good syringing and a vapour bath for the plants for an hour or two may be all very well for the plants after Christmas, when the light is increasing; but the same treatment in November and December would be positive madness, and only calculated to produce a good crop of mildew. A comparatively very cool well ventilated atmosphere is suitable for Cucumbers during the dull winter months. The syringe may be almost laid aside, but the walls, path, and bed must be sprinkled occasionally when the weather is bright. With this treatment the disease need not cause much trouble, and when you have got a good established plant keep it as long as you can, even to two or three seasons; but if your plants are diseased and you take the first and all the fruit you can get, you will most assuredly very quickly pay the penalty of your indiscretion. *W. P. A.*

ON THE DELETERIOUS EFFECT OF LIGHT ON POTATOES.

THE influence of light on vegetation is now regarded as a matter of the utmost importance, and although the precise mode of action may not be always understood, yet powerful effects of it are everywhere perceptible. In its absence leaves become blanched that would otherwise be green. Roots that are white underground become green when exposed. Turnips, white beneath, are green or perhaps red above, and many kinds of fruits, naturally pale, colour under bright sunlight. By the action of light on leaves, the different secretions peculiar to plants are formed, such as gum, sugar, starch, oils, and even in certain kinds of plants deadly poisons. In some plants, too, the secretions due to the action of light are in certain portions harmless and nutritious, whilst in other parts of the same plant, through the same agency, highly deleterious principles are formed. The Potato offers an example. Everybody knows that its tubers contain wholesome food, and it is also generally known that the stems, and especially the apples or seed vessels, are deleterious. But the treatment to which the Potato is sometimes subjected is calculated to develope the poisonous quality in the tubers themselves, a change which can only take place during exposure to light. The poison found in the green parts of Potatoes is called Solanine. This exists in several species of Solanum, "and is found in considerable quantity in the shoots of Potatoes. To obtain it the shoots are bruised, and acted on by water acidulated with sulphuric acid. It is very poisonous" (Turner's "Elements of Chemistry.") Liebig says it is a powerful poison.

Although the stems of Potatoes, according to the authorities just quoted, contain, in notable quantity, the noxious and easily extracted principle, so dangerous in its concentrated form, yet the tubers grown underground and kept in the dark are floury and white when cooked, if the variety of Potato is good, and quite free from acrid taste, which is one of the characteristics of Solanine, and a sure indication of its presence. But the Potato tuber is in reality a sort of stem, for it is furnished with buds, which, under favourable circumstances, push into shoots, as buds do on stems above ground. It is therefore highly susceptible of the influence of light, for although both its skin and flesh are white, they soon become green by exposure; and the continued presence of light renders them as green as stems above ground. It is said that pigs have been killed by giving them Potatoes greened to this extent. Such of course could not be sold for human food. For this purpose Potatoes exposed to light must be housed or otherwise shaded before the green tinge is apparent, at least to the naked eye. But under the impression that the tubers keep better after having well basked in the sun, many cultivators are in the habit of turning them up, and spreading them out on the surface of the ground in bright sunny weather. This has the effect of greatly deteriorating their quality. Notwithstanding disease, really good Potatoes can be found; but even slightly diseased ones, with the infected portions cut away, are infinitely better than quantities of others which, though they have a goodly appearance, have been greened. Instead of being white and floury when cooked they are yellow and have a disagreeable acrid taste, which can scarcely be disguised, or if it should, there is no proof that the deleterious effects of the acrid principle are counteracted. At all events it would certainly be very desirable that such means should be adopted as would prevent that principle being generated, or in other words the tubers should be kept as much as possible in the dark instead of exposing them to light. The advantage of exposure as regards better keeping is doubtful, whereas the deterioration it occasions in the quality of the tubers as an article of food is certain. I have thus endeavoured to draw attention to the subject, and it is the duty of every one who is aware of the deleterious effects of light on the Potato to explain it to those who are not; for a knowledge of it if acted upon would prove beneficial to both rich and poor. ||

Home Correspondence.

Transmutation of Species.—The article in a late number of your paper, on the different results obtained by M. Decaisne and Prof. Buckman in their experiments on Poa (Glyceria) fluitans and P. aquatica, gives a strong instance of the hasty conclusions to which the most eminent naturalists are liable to come when their first experiments appear to support preconceived theories. Your assertion that M. Decaisne is "one of the most acute of living botanists and an extremely cautious experimentalist," I most cordially join in, and I would add that the manner in which he has of late years treated the question of species shows that his truly scientific mind is ever in search after truth, although it may prove to be opposed to his former opinions. On the question, however, of the origin of cultivated plants, I believe that his and Prof. Buckman's theories are in direct opposition to each other. M. Decaisne has maintained, in argument with myself, that the majority of our cultivated species which are not now found in a wild state were created specially for the use of man at the same time as or after the creation of man, whilst Prof. Buckman's belief is in their ready derivation from wild species often apparently very different, in support of which he has given me numerous instances as having come under his own observation. And both these observers appear to me to have been led into a confirmation of their theories by experiments instituted more for the purpose of proving a fact than of investigating an open question. We all know how many errors genealogical experiments on plants are liable to, requiring frequent attention during their whole duration, which may extend from one season of growth to several years. Provision must be made against spurious fertilisation, substitution of seeds, misplacement of labels, mistaking of plants springing from seeds already in the soil for those of the seed sown, the perishing of the seedlings raised and the substitution of others self sprung from other plants of the same garden, &c.—all accidents which I have known to occur frequently in botanical and experimental gardens not subject to the extreme care exemplified by Messrs. Decaisne and Naudin. That some such accidents have occasionally happened in the numerous and otherwise important experiments of Prof. Buckman I have every reason to believe, from various circumstances of extraneous evidence; and it is perhaps to some accidental error that must be ascribed the transmission to M. Decaisne of two specimens of Poa sudetica for those of P. flaituns and P. aquatica. On the other hand, M. Decaisne's experiments are as it were in proof of a negative, which can never lead to a certain conclusion, and can only be admitted as strong evidence when carried on through a number of generations (years even in the case of annuals) under every variety of condition (soil, climate, treatment, &c.) which can be imagined. In both cases experiment on cultivated plants should be compared with the most authentic and varied observations on wild ones; and when the two lead to different conclusions there are increased grounds for repeating the experiment again and again, with every precaution that can be devised. The questions alluded to by M. Decaisne belong to two classes—changes of the ordinary state of a species into a different race, analogous to those which observation leads us to believe may take place in a wild state; and transmutation from one species into another species, which in a wild state we find to be constantly and totally distinct under all circumstances, without any tendency to producing intermediates, excepting hybrids of temporary duration. To the former class belong the changes from the wild to the garden Carrot, from the wild to the garden Parsnip, from the wild Cabbage to the Broccoli. On the other hand the change from Poa fluitans to Poa aquatica is a transmutation analogous to that from Trifolium repens to T. hybridum, which was amongst those which Prof. Buckman announced as having effected at the Association meeting at Cheltenham in 1858. Long observation of wild and half-wild Carrots, Parsnips, Beetroots, &c., wild and half wild as well as cultivated, has convinced me that the cultivated races will under certain circumstances degenerate into the wild form, and therefore even if M. Decaisne should for the next 10 years in the Paris Garden fail in producing a red succulent-rooted Carrot from the slender yellow-rooted wild one, that would not convince me that Vilmorin was mistaken in believing that he did succeed by the fifth generation. On the other hand, a close observation of Poa fluitans in a variety of situations, in water, in mud, or almost dry, in open ditches and in dense woods, and in various countries (made with a view to investigating the various species fabricated out of it) has never shown me the slightest tendency towards the P. aquatica; and it would require the very strongest evidence of impossibility of mistake or error, from the gathering of the parent seed to the flowering of the seedling, to convince me of the transmutation of the one into the other. *G. B.*

Paris Public Gardens.—I don't think the arrangements here for decorating the public gardens with flowers would excite the admiration of your Nesfields and Paxtons and other great authorities in England. There is nothing like the grand blaze of colour and magnificence of effect that may be seen in such places as Clifden and Trentham or South Kensington. Smaller results satisfy the Parisian taste. They should be described as very pretty—not more. Common flowers are arranged with skill, undoubtedly, and where care is taken to preserve the indispensible trimness of a parterre the effect is agreeable enough. Where trimness is neglected, as in the *Jardin d'acclimatation*, the flower beds look like ordinary village compositions. In the garden of the Tuileries for instance, the only bits that struck me much were noble vases filled with scarlet Geraniums and white Petunias intermingled. The effect was admirable; the white stars sparkled on the scarlet and green background, and reminded me of our own wild Pinks gleaming from the ruins of an ancient castle. You may judge for yourself what the effect must be of the following arrangement in a long bed about 4 feet wide. I note it down as it is in the Tuileries garden. In the first place the middle line of the bed is planted in the following order:—1. a Tree Rose, 2. a Dahlia, 3. an Althæa frutex, 4. a Hollyhock, 5. a Tree Rose, and so on, the same order of succession being preserved. These standards are about 4 feet apart. The ground is closely covered with the following succession of colours: 1. scarlet, 2. crimson, 3. yellow, 4. red, 5. violet, 6. white; and then scarlet &c. in the same order. The scarlet is furnished by Scarlet Geraniums, the crimson by some Fuchsia like globosa, the yellow by Calceolaria, the red by red Geraniums, the violet by Ageratum, and the white by Pyrethrum. These plants form either circles or lozenges round the standards, and are prevented from running together by narrow crossbands of Mignonette and Heliotrope, alternately. Some external flower beds are set in broad frames of Ivy pegged down carefully and perpetually trimmed by hand; of this the effect is good. Here and there are introduced plants of Canna; which do not produce so pleasing a variety as I expected. Some of them indeed, with dirty red flowers, are the reverse of handsome. An attempt has also been made in the Bois de Boulogne to introduce Cannas as a kind of edging to clumps of dwarf Musas; but the leaves of these last are torn to tatters by wind and look hopelessly shabby; a defect for which no vigour on the part of the Cannas can make amends. Thus you see I am by no means in extasies at the public flower gardens here, which owe much of their grand effect to the superb vases, statuary and architectural embellishments among which they are placed. *V., Rue Castiglione.*

Town Gardening.—It is with much pleasure I observe that this subject is again urged upon the attention of persons whose lot in life is cast in towns. In a short article I wrote about this time last year I tried to represent the love of flowers on the Continent, but though my remarks were followed by the very liberal offer (on the part of some unknown friend) of 100 Roses as a beginning, no town or village took the matter into consideration. It is certainly most desirable to cultivate a taste for flowers among the working classes, and I am compelled to acknowledge that I have observed a much greater desire on the part of those members of the humbler classes resident abroad to grow such flowers as their limited means can obtain than is manifested by our countrymen and women. There are however some exceptions, and here the credit in the first instance is due to the landlord, clergyman, or some other influential person connected with the locality. I hope ere long we may be able to furnish to your Paper, which has already done so much for horticulture, a weekly or monthly report of the improving taste displayed in window gardening. I quite agree with your remarks about the removal of plants when supplied by a nurseryman. I cannot see the charm of hiring

plants unless indeed as mere ornament, and surely artificial flowers would answer that purpose. I have long been a resident in this city, and never was I without my plants; but I have a small greenhouse to supply my rooms, and as I am generally away in summer I devote my attention chiefly to growing plants for winter, and I remark that at this season they do better than in summer. This I attribute to the exclusion of air, impregnated as it is by smoke and other offensive matters, which retard the health and growth of flowers. I find a small house quite necessary also, and by keeping up a growing heat I have a very fair supply of plants and flowers all through the season. As you remark, cleanliness is the great desideratum; and I find this can best be maintained by the use of a syringe. I am now about to prepare for the winter, and shall at once put down some Hyacinths, Crocuses, and Tulips, which I hope to have in blossom about Christmas. Later in the season I will put down Hyacinths for a more advanced period. I am sure the little book to which you refer is very useful, but I cannot agree with the writer respecting the hot-water system. I must say that I think a cold bath would be more likely to revive the drooping bouquet than boiling water. *E. A. M., Dublin.*

Red Spider.—The whole of the foliage of two Hawthornden Apples of 20 or 30 years' growth has been destroyed in the manner of the enclosed by red spider, which appears to me now to have taken refuge in the folds of the bud, there to lie wait for next year's crop of leaves, in the mean time destroying many of the buds, as you will see has occurred in this shoot. Is there any remedy? Is it possible to wash the whole of the shoots in the winter with any preparation fatal to the Acarus? By analogy of its congener in the human body a preparation of sulphur might be expected to succeed, but how is it to be applied? For several years I have observed the buds of the trees cankering away, and their fruitbearing, which had been abundant, greatly falling off. Two or three years ago, indeed, I had a good crop, but scarcely one free from maggot, which I imagine could only be got rid of by destroying the larvæ in the turf beneath the tree during the winter. Your advice on both points will oblige *Rus in Urbe.* [As soon as the leaves have fallen wash your trees with sulphur and whitewash. At the same time sweep up all the fallen leaves and *burn* them. Repeat the lime and sulphur in April, before the buds open. As to the maggot, we should pare away 3 or 4 inches of the top soil beneath the trees, and burn with the leaves.]

Manetti Rose — Manuring Conifers. — Will you oblige me by describing the Manetti stock for Roses, or give the more common name of the plant, if it has one? As regards manure for Conifers, you say, "don't manure them on any account whatever." During many years I have with good effect put the grass, prunings of trees, &c., in cleaning plantations, over the roots of Conifers. By this means the roots are protected from severe frost, and the decay of these substances greatly assists the growth of the plants. *J. P. M.* [Yes; but "these substances" are not manure in the proper meaning of the word. You will find all about the Manetti stock in our volume for 1857, p. 469. It has no other name.]

Cocoa Nut Fibre.—I have had no experience of this as a netting, but I think its rope superior to any other sort, as it is almost indestructible, and does not shrink or expand when the weather changes as Hemp does. I have used it this year for supporting Peas instead of sticks, and I find it to answer very well. I have employed it as a permanent clothes line, being constantly out in all weathers, for about five or six years, and afterwards turned into box cord. I have had it some seven or eight years, and it would now stand a strain that no new clothes line would; it is the same size as an ordinary clothes line. *S. G.*

Bees.—In reply to "L. A. G." (see p. 774), I would say apply the fumigator, avoiding heat therefrom; keep the ear close to the hive, the noise will be great at first, but will gradually subside; and when it has done so, take off the hive and expose the bees to the air. *P.*

Potatoes.—I have tried the effect of laying down the haulms of, and earthing up a part of, my Potatoes. The result is that those I served so are perfectly free from disease, while those I did not operate on are more than half rotten. They were planted in a stiff loam on a clay bottom, with no manure, early in April, and taken up Aug. 23. The crop was good, with very few Chats in it; many were of large size, some weighing more than three quarters of a pound. The variety is called "Foreign Shaws." *S. G.*

Ransome's Patent Stone.—Inquiries are frequently made as to the imperishability and general usefulness of the Patent Siliceous Stone manufactured by Messrs. Ransome of Ipswich. On the subject of its alleged "imperishability" I can offer no opinion, nor perhaps will any mortal man venture to do so. But as to its suitability for garden decoration I can offer the testimony of five years' experience in its behalf, and as the season for alterations and improvements is approaching a few remarks may be useful. One of the most prized of my in door decorations is a vase of Ransome's stone fitted with a glass lantern for Ferns, which occupies one of the windows of the drawing room; and irrespective of its massive proportions and graceful outlines, it has always been an object of admiration by persons of taste for the bright crystalline beauty of the material, and the richness of its foliated ornaments. When first fitted, I had grave doubts as to the value of this stone, and could have said but little in its favour, except as to its fineness of texture and Carrara sort of colour, for it exuded a white efflorescence for several weeks together, owing to some decomposition (perhaps) of the alkaline flux with which the particles of silex are run together. Since that ceased it has remained unaffected by the damp of the soil in which the Ferns are planted, the grain of the stone has resisted smoke and dust, and I believe if a new vase of the same pattern were placed beside it, there would be some difficulty in determining from the state of the material only any difference between the new and the old. But the proper test for such a material is full exposure to the weather, and having had some experience with artificial stones of various makers for fountains and other similar purposes, I would give the preference to this over all others to endure wear and tear and remain unchangeable. My forecourt is furnished with a jardinet, of which I furnish a sketch. I have had similar constructions in other materials and have noted these obvious differences: that Ransome's stone maintains its newness of character better than any, and has none of the appearance of a composition. Portland cement is largely used in what is generally known as a substitute for stone, and hence the deadness of colour in those materials. Ransome's stone has a life and sparkle about it; it is as nearly snow-white, perhaps, as any good unpolished marble. In other materials there is a large proportion of black mixed with the white, which results in the production of a very bad grey—the colour of linen badly washed and dried in the midst of London smoke. The last two winters have been very trying to materials of this kind. I had a considerable number of Hogg's edging tiles in use,

which have weathered all storms well for seven years, till the last winter, when the frost catching them when soaking wet shivered them into chips. The same thing takes place with the stone goods got up by country masons, which consist generally of common plaster faced with Portland: the expansion is not equable, and the two materials part for ever; Minerva and Apollo shed their skins without compensating by the display of symmetrical skeletons. Now, though Ransome's stone absorbs water largely, as may be proved by testing its specific gravity under various circumstances, frost appears to have no effect upon it; and my jardinet has about it a sufficient amount of small work in the four horns to be powdered to dust by a hard frost, if frost were capable of touching the material at all. But every scroll is as perfect now as when first fitted, and the whole affair can be made as bright and snowy and new in appearance in half an hour, as if it had but just been laid down. The confervoids which coat stony surfaces with a green stain take to it as readily as any other hard substance, and the simplest mode of removing them I find is to wash the fabric with a strong brine, first cleansing away the dust from the scroll-work by means of a stiff brush. My gardener used to wash it with Portland, about a handful of Portland to a pail of water, and I believe this is a common practice. It is certainly a bad practice; brine is the best regenerator. As to the artistic merits of the works produced in this material there can be no doubt they far surpass in appropriateness and excellence of design anything of the kind hitherto produced, and I can imagine no finer feature on a terrace than a set of stone flower boxes and a central jardinet, to be kept furnished all the year round with the very best stock the gardener can command for them. I furnish my stone bed about half a dozen times in the course of the year, and grow successions for the purpose in pots. As here represented, it is furnished with potted Conifers for winter; those are removed for Hyacinths and Tulips; then yellow Alyssum and Aubrietia, next Fuchsias, Pompone Chrysanthemums to follow, &c. The best effect I have had this season was a bed of Iberis Kermesina; and when that was over a selection of foliage plants was used, these to give way soon to Pompones. The lifting up of the plants above the level without the necessity for an unsightly mound is something gained in the display of graceful subjects, especially with such architectural accessories as are supplied in this material. *Shirley Hibberd, Stoke Newington.*

Double Crops of Grapes on the same Vines.—I fear your Correspondents are, like myself, so fully occupied that they cannot give sufficient heed to the things they read, and therefore let them slip. I will, however, try to set them right. At the 15th line from the bottom of the 2d column of your impression of the 10th inst. it reads thus:—"For the first two years the Vine was confined to the stove compartment, but exhibiting signs of extraordinary growth, I made a hole through the glass partition in the angle over the door and let it grow." This and what follows shows that this is the first year that a late crop has been attempted; and here I would take the opportunity of replying to your own remarks in the last three lines of the same page. The whole history has, I think, been told, as to obtaining the early crop in the stove end, and the late one in the cooler compartment, by simply allowing the Vine to occupy both places, keeping the cool one as cool as it was safe to do so without injury to greenhouse plants. I was not, however, prepared for a difference of three months in the ripening of the fruit, but such is the case, and there was no more sign of the sap being in circulation after the shoot passed the hole in the glass partition than if it had belonged to a separate Vine, till the warm weather in spring set it in motion. I can hardly suppose that Mr. Young's remarks have any reference to my case, as he states that his fruit is produced on fresh breaks after stopping the shoots, whereas in the beginning of the paper referred to above I have distinctly said (21 lines from top) "and this not on laterals but on the regular bearing wood." It is a very common thing for Vines to break into fruit on being stopped, and I have often seen the fruit thus produced become as black as possible, although the forced crop was deficient in colour, from which circumstance a very good lesson may be learnt as to the treatment required when colouring. We should however try to prevent such breaks as much as possible, and it is the only thing I have been afraid of with regard to the forced part of the Vine in question, and to prevent this I have let the laterals ramble about, lest the excitement going on at the late end should cause the early ripened wood to break again before winter, in which case the Vine will suffer from want of rest. *Jasper Standstill.*

Vines at North Elswick Hall.—I took an opportunity last week of looking over the Vineries at North Elswick Hall, near Newcastle-upon-Tyne, the residence of Henry Milvain, Esq. There are two houses, divided by a partition and extending 80 feet from end to end; the height is 14 feet, and width about the same. The construction of the Vine border is somewhat dissimilar from the ordinary method. Inside the house, at 4 or 5 feet from the front lights, a wall about ... high runs from end to end; the border is ... within this space, and is consequently elevated above the level of the area; the border outside, composed chiefly of rotted turves and cow-dung mixed with ... rubbish, is also raised above the level of the ground (say 3 feet next the house), and dips considerably towards the south. There was no expense incurred in excavating, or concreting; the surface soil was simply removed, a drain cut along the front, and the materials for the border deposited in the form I have mentioned. And now for the result. On the 15th of May, 1858, 38 Vines, one half of which are Black Hamburghs, and the other half Muscats, Frontignans, &c., were planted alternately outside and inside; those outside were planted rather shallow, and introduced beneath the wall plate, which rests upon brick pillars about 5 feet apart, so that ... part of the stem is exposed to the frost. The Vines planted outside have excelled those inside. In the same autumn the Vines reached the tops of the rafters (... 16 feet) and half way down the back wall. They were cut back, and in 1859 the wood pushed away vigorously, some of the canes measuring 3 inches in circumference. In 1860 the rods were magnificent, and a few bunches, each weighing $4\frac{1}{4}$ lbs., were obtained. This present year, 1861, there have been 350 bunches, averaging 2 lbs. each, but many are 3 and 4 and 5 lbs in weight, so ... the 38 Vines have produced 700 lbs. of Grapes of first-rate quality in respect of flavour, size, and colour. I am informed that the gardener, Mr. Macpherson, is in his 83d year, and that to his good management, and the excellent construction of the Vine border, the above results are attributable. *M. P. J.*

Judges at Regent's Park (see p. 774).—Mr. White's remark on the fallibility of judges has received an ... illustration in the shape of Mr. Parsons' letter. ...

Young's Fuchsias five had no tie, except such as were necessary to prevent the branches from breaking down under their load of bloom. Size was not their only merit; they were well contrasted as to colour, and their quality was faultless. I have reason to know that Mr Young's desire was to issue a challenge for rejudgment, if the judges had not by their delay in replying put such a course out of the question. Mr. Parsons' remarks might have been applied with some truth to a collection of Fuchsias shown on the occasion, but not to Mr. Young's. *T. M. M.*——I would recommend Mr. Whiting to direct his chagrin against those who caused the "misunderstanding." If the judges chose to stake their reputations on Mr. Parsons' justification, I can have no objection. I simply repeat my statement, and leave it, with the "justification," in the hands of the floriculturists who were present at the late show. I will add, however, for the information of those who were not there, that in one of the prize collections of Fuchsias there were three plants in one pot, and that in Mr. Harper's collection there was about a quarter of a mile of thread. I could give Mr. Parsons a few more such facts if it were necessary, but competent men who saw the plants will want no more evidence to enable them to award the palm for "superficial knowledge and observation." Of course, owing to the limited number of judges, an election even cannot be a real test of the exhibitors' opinions. I do not desire the office of judge, I am not an exhibitor, and mine is only the Englishman's creed—"A fair field and no favour." *A Visitor.*——I should not have troubled you again on this subject were it not for the statement put forth by Mr. Parsons as a "justification." Mr. P. says that my plants were tied to a face; that I emphatically deny. Five out of six of my plants were tied only to a single stick, and no attempt to "face" them would have added to their beauty or effect. That none of my plants required a nurse I think the judges themselves will admit; or why was my collection placed second? I claim for my plants quality, size, and profusion of bloom over any other collection shown. Mr. Harper's only merit was freshness. His collection contained a variety discarded even when I was serving my apprenticeship. My plants were examined by six of our leading florists (whose names I am not at liberty to mention), and by them they were pronounced to be decidedly first. Mr. Parsons' case seems like that of a man in despair. I ask no favour and will accept no compromise. *W. Young.* [Here we must stop this discussion.]

Societies.

Royal Horticultural: *Aug. 27.—(Floral Committee).*—A considerable number of interesting plants and flowers was produced. Mr. W. Chater, Saffron Walden, received Frst class Certificates for Hollyhocks Countess Russell and Ne plus ultra, the former a peach-blossom, the latter a light rosy purple; and the same award was made to Messrs. Downie, Laird, and Laing for another variety called Lady Dacres, with pale salmon-coloured flowers; Invincible, a salmon rose, and Lady King, deep crimson, from Mr. W. Chater, were commended. Messrs. E. G. Henderson & Son showed amongst other variegated Pelargoniums, two beautiful varieties of the tricolor section, or those marked with a red zone or belt; they were named Sunset and Mrs. Pollock, and both received first-class certificates. A Commendation was given to a pink flowered silver-edged sort called Pelicatum from the same growers. Of Dahlias the following were Commended:—Maria Carter, a white heavily rose tipped flower; Imperial, a fine amaranth; Fair Maid of Bath, a delicate purple-tipped white: all from Mr. Keynes; and Charlotte Dorling, a bright light purple-tipped sort from Mr. Turner. Messrs. Low & Co., Clapton, showed a pretty new Anæctochilus called Bulleni, just received from Borneo; it had bronzy green leaves, marked with three distinct coppery stripes, and was awarded a First-class Certificate; as was a pretty creeping Fern from the same source, sent under the name of Arthrobotrya articulata, but probably an undescribed species of Polybotrya. Another First-class Certificate was granted to Pentstemon Lobbianus, a pretty hardy sub-shrubby species of neat Myrtle-like habit, with remarkably short gaping yellow flowers, shown by Messrs. Low. Pollia purpurea, a neat purple-leaved stove herb, from Messrs. Low and Mr. Bull, received a Commendation, as being a useful plant for small houses, in which it might be employed for grouping with leaves of other colours.

Notices of Books.

The Brewer's Meteorological and Statistical Guide (Longmans) is a work by Mr. Giles, a Hop Merchant in the Borough, the object of which is thus explained by himself. After pointing out the extraordinary fluctuation in the prices of Hops, varying as they do from 3*l.* to 25*l.* per cwt. according to the season, and the importance of some authentic information concerning the way in which weather may be expected to influence so uncertain a crop, the author proceeds thus:—"The trade has had no tables or statistics to enable a sound judgment to be formed, the registered heat and wet has never been so classified as to give any determinate and reliable information of importance; therefore I humbly think the value of such a work as this cannot be over-estimated, not only to those engaged in those pursuits of commerce, to which the following tables more *particularly* refer, but I think it will prove very valuable also to those engaged in agricultural pursuits or commerce connected therewith, either directly or indirectly, and that they may derive valuable information from the perusal of the figures, as bearing on the probabilities of the coming crops of Clover and Wheat especially, as well as Barley, &c.; of this persons engaged in those pursuits will be best able to judge; but to the Hop-grower, factor, merchant, or brewer, reliable information, grounded on facts deduced from science, must be of so much consequence that I think it needs no apology for sending forth this to the public to judge for themselves as to its intrinsic merit, especially when we bear in mind that the annual average amount of money laid out by brewers in the purchase of Hops is upwards of two millions."

The general result of Mr. Giles's investigation amounts to this:—"That when the thermometer stands at a certain heat at given months in the year, that a very large crop is certain without an exception." He does not however profess "to state that in *every* instance where one year has been nearly analogous to another in the number of inches of rain falling from the 1st October to the 1st October (for the wet of every autumn has a most important bearing on the coming crop, and the Tables of Heat the same), that the quantity of Hops grown has been the same, without an exception, but in 45 years such an exception is very rare. What is more uncertain than life or certain than death? Nevertheless, by taking the average duration of human life, a certain deduction or inference can be arrived at by life insurance offices, by means of statistical information, to make their profit a certainty, and so with other offices of like character. But you will ask, if the character of heat and rain is of such importance, how are we to know this *before* it takes place? Our answer is this: From the first hour of the first drop of rain falling in September, October, November, and December being in excess, or otherwise, is either favourable or adverse to the coming crop; if an excess, you may consider, without a dry spring to compensate, the crop would be short, so that in January some important information is obtained; if we have a wet fall and wet spring, and the latter should be cold, the odds are two to one against our growing an average crop, so that in the spring you would again know what to do; but in May, June, July, and August, from the first of these to the last valuable information is given; but nature frequently compensates us (though giving us a wet autumn) by the amount of rain falling in spring and summer being much below the average, and a high temperature and heavy fall of rain in July or August, as for example in the year 1859." The volume is full of calculations and tabular statements, in support of the author's views, for which we must refer the reader to the 123 pages occupied by the subject.

Mr. Bowley, the skilful Manager of the Crystal Palace, in a pamphlet called "*The Exhibition of* 1862: How are the Working Classes throughout the Kingdom to Get to It?" raises a very important question. His object is to show that, let the attractions of the Exhibition be what they may, it will be physically impossible to convey the multitude thither in the absence of an immediate construction of more railway accommodation. He calculates that 12 millions of people will visit the Exhibition if they can get there, which, as matters stand, would be so difficult as to amount to an impossibility. He urges the necessity of an immediate consideration and commencement of the junction of one mile and a quarter between the end of Cromwell Road and the West End junction railway. "No cuttings, no heavy embankments are required. It would run nearly on the level. Four lines of railway, perhaps with a loop or circle at the Cromwell Road end, so as to avoid shunting or drawing back the carriages, would suffice. Temporary wooden sheds or stations are all that would be at present needed. If this is managed economically it must give a handsome return for outlay. Were this done, all difficulty would disappear."

A sixth volume of Mr. Stainton's elaborate *Natural History* of the little moths called *Tineina* (Van Voorst) is before us, containing admirable figures and most careful descriptions of 24 species of genus Depressaria, or Flat-body, so called from their abdomen being flat, or depressed:—

"*Habit of Larva.*—The majority of the larvæ of this genus feed on the leaves of plants, and turn down the edge of the leaf so as to form a sort of tubular habitation; from this, if disturbed, they retreat with great rapidity, and the extraordinary muscular power and activity of the leaf-feeding larvæ of this genus is something inconceivable by those who have not witnessed it. As the egg is very frequently deposited in spring, the larvæ are found in the summer months, and the perfect insects are developed at the end of summer or in autumn. There is only a single brood in the year.

"Some larvæ feed in the heads of umbelliferous plants, either constructing slender silken tubes among the stalks of the umbel or drawing the parts of the umbel together, and so distorting the growth of the plant. A few of those which feed in the interior of the umbels are of a more sluggish habit than the rest of the genus.

"The larvæ grow rapidly, and do not attain their full colouring till the last moult, in which stage some of them are highly beautiful. Several larvæ, which have a black head when young, have the head of a pale green when they attain the last moult."

The species are often named after the plants on which they feed.

Trade Lists Received.—Catalogue of Hyacinths and other Bulbous Roots imported and grown by B. S. Williams, Paradise Nursery, Holloway.—General Catalogue of Stove, Greenhouse, and Ornamental Foliaged Plants, &c., cultivated and offered for sale by A. Laing, East Riding Nurseries, Beverley, Yorkshire.—Catalogue of Hyacinths and other Bulbous Roots, imported and sold by R. Parker, Exotic Nursery, Tooting, Surrey.

DANGSTEIN.

(*Concluded from p.* 776.)

A range of Orchard houses is situated some distance south of and in front of the western portion of the plant houses. The first is constructed on Rivers's original plan, and is 91 feet long and 12 feet 6 inches in width, with a sunken walk in the centre, and flap boards in front and at the top and bottom of the boarded back for the purposes of ventilation; it is filled with strong bushy little trees, which at one time had been grown in pots but are now turned out. Plums, Apricots, and Figs were heavily laden with fruit. Peaches and Nectarines, here as elsewhere, are a short crop; the trees had retained their foliage during winter, consequently the wood did not ripen, and the blossoms, being imperfect, dropped off without setting. Vines were trained up the roof at 5 feet apart from each other; they were producing fine bunches of fruit, which usually ripens well in this house.

The next, a tropical Orchard-house, is spanned roof, 40 feet long, 24 feet wide, and 10 feet 6 inches in height. In the centre and round the sides are beds which are sunk some distance under the level of the floor, and two hot-water pipes are introduced under each. The roof was slightly covered with Passionflowers, on which there was an excellent crop. This house was filled with excellent trees, many of them heavily laden with fruit; amongst other things were several Mandarin Oranges, 5 feet in diameter, just out of flower and well set with fruit; Guavas (P. Cattleyanum) producing an excellent crop; nice plants of the Akee-tree, Madagascar Plum, Wampee tree, Mangosteen, Manna tree, Lucuma obovatum and deliciosum, Star Apple, Sugar cane, and Allspice trees. Rose Apples, 5 feet in height and as much through, were well set with fruit, and there were likewise good specimens of Coffee tree nicely in flower. The Kau Apple from Kaffirland, a singular plant, was also conspicuous, as were likewise Alphonso Mango, 6 feet high and as much through, several plants of Aniseed in fruit, Nutmegs, and vigorous plants of Musa Cavendishi. Suspended over a cistern of water at the western end of the house were some noble specimens of Platycerium grande, stemmaria, alcicorne, and others. Attached to this house is a propagating pit 11 feet 6 inches square, whose heated beds were full of cuttings in different stages of growth.

The next range is some distance to the south of the Orchard houses; it consists of a stove 102 feet long and 15 feet 6 inches wide, span-roofed and in four divisions, having a walk the entire length of the centre and beds on either side. Entering from the western end the first compartment is filled with plants growing into specimens, amongst which Solanum atropurpureum was a fine example. The southern side of the second house has a hot-water tank running its whole length, in which Nelumbiums, Lymnocharis, Pontaderia, and Nymphæ, &c., are grown. In a square corner apart from the main tank, in which tepid water is constantly running, were 5 fine plants of the Madagascar Lattice-plant, the delicate skeleton leaves of which had a singular appearance. Along with these were also Side-saddle plants; and the left-hand bed was filled with Mosses, Ferns, and other fine-foliaged plants, conspicuous among which were Gleichenia necistophylla and Alocasia metallica, a noble plant, whose bronzy-looking foliage contrasted strikingly with the many exquisite forms of fine plants with which it was associated.

A third division contained a fine collection of Caladiums and Begonias, beautiful specimens, and Stephanotis floribunda trained gracefully on the opaque portions of the roof added variety and fragrance to this interesting compartment.

The fourth division contained examples of Ferns, amongst which the New Zealand Cyathea dealbata and the gold and silvery powdered-leaved kinds were conspicuous. In a glazed case kept for the propagation of Anæctochili were many fine plants of that charming class, little inferior in size or beauty to the admirable masses with which the great case in the principal range of houses is filled. Gloxinias, Achimenes, and Caladiums are also grown here in large quantities. A shelf immediately under the ridge of the roof, during its entire length, was filled with Strawberries, which were when I saw them just ripe—an admirable crop of fine fruit. Returning by the descending main walk the walled-in portion of the garden is reached by an entrance on the eastern side. Against a west wall

on the left of the entrance is a Fig-house or case 37 feet long and 5 feet 6 inches wide, consisting of a perpendicular skeleton frame, on the bottom or sill of which the lights rest, and on the top of the wall; they are moved from the top by means of a pulley, and can be brought up to the perpendicular frame so as at once to expose the whole to the full influence of the atmosphere when required. The trees were in excellent condition, and producing good crops. On the southern aspect of the north wall is a range of glass structures in four divisions, 114 feet long and 13 feet wide. The first is devoted to the growth of Orchids, and contains many noble examples of that fine tribe in admirable condition. In front is a wide shelf, and a raised earth bed faced with rugged sandstone, amongst which Lycopods and Ferns are arranged with much taste, occupied the central portion of the house, and formed a suitable place for setting large specimens on. Here were several fine plants of Veitch's variety of Vanda suavis, from 3 feet 6 inches to 4 feet 6 inches in height, and having from four to six flower spikes on a plant, and from 10 to 15 blossoms on each spike; also other Vandas, equally fine; two charming plants of Sarcopodium Lobbii, 2 feet 6 inches through; Cattleya lobata, 2 feet 6 inches in diameter; Dendrobium Dalhousieanum, finely in flower; Cœlogyne cristata, 2 feet 6 inches in diameter, and producing some 30 spikes of flower; various fine plants of Saccolabium, the rare Cypripedium caudatum roseum; Lælia purpurata, Cymbidium eburneum, and various Aerides and Oncids. On the back wall was Vanilla, whose shoots ran more than 30 feet in length, producing both flower and fruit. Combretum purpureum and Hoyas were trained sparingly on the rafters. The second house in the range is a Vinery, and contains a fair crop of good sized bunches nearly ripe. High tan beds formerly occupied the centre of this and other houses, but of late years they have been lowered nearly to the floor; against the back wall are Figs in the shape of large trees removed from the open garden and now laden with fruit; in front is a wide shelf on which was a plentiful supply of French Beans, and above was another shelf on which were Strawberries; a third shelf of similar character occupied the upper part of the back wall and was laden with the same description of fruit; on the floor were Roses and other plants. The third house is also a Vinery in which was a good crop of Grapes; it is fitted up with shelves the same as the last and produces crops of similar character; on the floor are Fig trees in pots. The fourth house, also a Vinery, has a stage for Geraniums in the centre, and on shelves are Strawberries, as in the other houses. On the same wall is a Peach-house, 28 feet long and 13 feet wide, with a fixed roof and upright glass front; the trees are trained on the back wall, and on an arched trellis in front, and have produced an excellent crop, although they had suffered considerably last season from an overdose of glycerine wash.

On the eastern aspect of the western wall is a Peach case, 60 feet long by 14 feet 6 inches wide, and of the same construction as the other case mentioned above; by means of this an excellent crop has been secured.

The walls, which are of stone, are tolerably well covered with healthy fruit trees. Plums in particular are an excellent crop; the natural soil however is too light for stone fruits. Peaches in particular are short-lived in such a medium. Within the walls the garden is formed into rectangular plots by walks of a suitable width composed of sandstone, which is at once firm, dry, and elastic to the feet, and has the additional merit of being easily kept in order. Bordering the walks are dwarf trees, chiefly circular espaliers consisting principally of Pears and Apples tolerably well furnished with fruit. Early vegetables in such a soil and situation are all that can be desired. West of this garden is the Melon ground, consisting of several ranges of frames on dung beds; in front of these is a herb and reserve garden for half hardy plants; here is also a large shed in which many gardening operations are conducted during weather unfavourable for out-door work, and in a portion of it Mushrooms are grown during summer. There is also an excellent Mushroom house in the range of sheds behind the forcing houses, in which several beds are producing excellent crops.

It may be well here to observe that the sheds, and, in short, every portion of the garden, displayed the greatest order and neatness, reflecting much credit on Mr. Vair, the gardener, by whose well-directed energies these gardens have not only been steadily improved, but a large and choice collection of plants have been grown into admirable specimens, many of them of unsurpassed beauty. Leaving these delightful grounds by the carriage drive in the Deodar avenue, there is on the right near the termination of a sinuous ravine an elegant cottage and school-house. These are situated on a platform of Grass on which a pretty flower garden and shrubbery have been formed; and are backed by a Heath-clad hill which contrasts strikingly with the rich scenery of the neighbourhood. Here six orphan children find the comforts of a home, and from 50 to 60 others are daily educated.

On the southern end of the school-house is a tablet containing the following inscription:—

A.D. 1853.
ERECTED BY
DOROTHY NEVILL.
A THANK OFFERING FOR MANY BLESSINGS.
PSALMS CXVI, V. 12."

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—The time has now arrived when plants intended to supply a floral display under glass during autumn and winter must have attention. Let Begonias have another shift if not already in pots sufficiently large. Keep the plants thin that their foliage may be kept from injury. Crowea saligna and Plumbago capensis are both valuable autumn-blooming plants, and the latter furnishes large supplies of cut flowers. Attend to Chrysanthemums, water freely with liquid manure; good specimens should be aimed at rather than a few fine blooms. The earliest winter flowering Heaths and Epacrises must soon be placed under glass, as it will forward their blooming; Hyacinths and Narcissus, for forcing, must soon occupy attention; about equal portions of good soft loam and decayed leaf-mould with silver sand will be the best soil for them if for forcing, but well-decomposed cow-dung must be substituted for the leaf-soil when the bulbs are intended for late flowering. After potting place them on a dry bottom and cover the pots 2 or 3 inches deep with old tan or ashes, preserving them at the same time as much as possible from heavy rains; under this treatment they will fill their pots with roots, and will be in readiness for forcing when wanted. Van Thol Tulips for forcing may be potted early next month. Place them on coal ashes, and cover them as recommended for Hyacinths, and early in November remove them into heat; the principal bulk need not be potted until late in October, and a last batch of Tournesol or Rex Rubrorum towards the end of November.

FORCING DEPARTMENT.

Pineries.—Comparatively dry conditions both as to soil and atmosphere should be observed during the ripening of the fruit, therefore be careful not to over-water plants on which the fruit is approaching maturity, and it will be advisable to use slight fires during rainy weather, should that occur, so as to allow of giving sufficient air to prevent a stagnant state of the atmosphere, for fruit of first-rate quality cannot be expected from plants growing in a sodden soil or a damp unhealthy atmosphere. Endeavour to afford growing stock a steady bottom-heat of about 85°, and keep it well supplied with manure-water at the root, but avoid getting the soil too wet. As fire-heat will soon be necessary to a considerably larger extent than has been the case during the summer, care must be exercised to secure a properly moist state of the atmosphere, keeping the evaporating pans or troughs regularly supplied with water, and moistening the floors, &c., frequently, as any sudden change from a moist to a dry state of the atmosphere would be most injurious to growing stock, and also to plants swelling their fruit. Be as sparing of fire-heat, however, as circumstances will allow, and during the present bright weather shut up early in the afternoon. Where young stock is grown in dung-pits care must be exercised after this season not to get the plants weakly through keeping them too close and warm; give air freely on every favourable opportunity, and sufficient command of warmth should be secured from the linings to allow of giving a little air at night and on warm cloudy days.

Vinery.—Inspect ripe Grapes frequently, and remove all decayed or unhealthy berries; keep the house well aired and free from moisture. Maintain a moist growing temperature in the late house; if mildew appears, dust sulphur over both fruit and shoots; it may afterwards be washed off without injury; but perhaps the best preventive of this pest is heat and moisture regularly maintained from the time the fruit is set till it begins to ripen. Encourage the growth of Vines in pots; stop them as soon as they have attained the desired length, and cut out all lateral shoots as the wood ripens. When the crop is cleared from established Vines, the wood ripe, and the leaves beginning to decay, the sashes may be removed altogether.

FLOWER GARDEN AND SHRUBBERIES.

Propagation of all the more important bedding plants should now be pushed on as quickly as possible; late struck cuttings, as has often been remarked, are bad to keep through the winter through having an insufficient amount of roots and ill-ripened wood. Let Scarlet and other Geraniums struck in the open ground be taken up and potted immediately they have made roots; they will require a close frame for a week or two, when they should be placed on a dry bottom in a southern exposure to harden them for the winter. For the same purpose Verbenas, Petunias, &c., struck in pans and intended to be kept in them through the winter, should be placed in a similar situation, at the same time stopping the points of the shoots. It should in fact be a point to keep them as hardy as possible by fully exposing them, until they are placed in their winter quarters. Mignonette for winter and spring flowering may yet be sown. Phloxes will still be making a tolerably good show, and should have care bestowed on them. Let the borders be cleaned and neatly raked over, filling up vacant places with spare Chrysanthemums, spring struck Pansies, or spring flowering bulbs. All evergreens in unsuitable situations should now be moved as soon as possible; where transplantation is intended the middle of next month is perhaps the best time of the year for the operation. Deciduous shrubs and trees, as a matter of course, should not be transplanted until they have shed their leaves. The roots may, however, now or soon be cut round preparatory to removal.

HARDY FRUIT AND KITCHEN GARDEN.

The earliest Apples and Pears should be gathered as they ripen. Early fruit more particularly is the better for being gathered a few days before it ripens on the tree, as in the latter case it usually turns mealy directly. Protect finer kinds of fruit from wasps. Peaches and Nectarines should likewise be gathered a day or so before they are quite ripe. Earth up Celery as it advances in growth; plant out Cabbage sown last month for Coleworts. Brown Cos and hardy Cabbage Lettuces should be sown for spring use, and prepare a rich piece of ground in a sheltered situation, and plant out those sown last month. If the season is not too severe they will be useful through the early part of the winter. Finish planting Broccoli and all winter Greens. Sow Chervil, American Cress, and Parsley in a sheltered situation. Sow Early Horn Carrot to remain in the ground for winter use. Cut herbs, if not already done, and keep the hoe moving among all growing crops. Potatoes, which are diseased to a considerable extent in some places, should be taken up as soon as ripe; infected ones should be carefully separated from the others and used first. The rest may be stored in small quantities where they can be conveniently inspected to see how they are keeping.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending Aug. 29, 1861, as observed at the Horticultural Garden

August.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind	Rain
Friday 23	17	30.046	30.032	79	48	63.5	63	60½	N.W.	[illegible]
Satur. 24	18	30.139	30.052	72	46	59.0	61	61	W.	[illegible]
Sunday 25	19	30.153	30.070	75	52	63.5	62½	60½	N.W.	[illegible]
Mon. 26	20	30.169	30.153	80	42	61.0	63	60½	W.	[illegible]
Tues. 27	21	30.225	30.141	87	44	65.5	64	61	W.	[illegible]
Wed. 28	[illegible]	30.080	29.824	83	45	64.0	64½	61	S.W.	[illegible]
Thurs. 29	23	29.963	29.800	78	50	64.0	64½	61½	W.	[illegible]
Average		30.110	30.010	79.1	46.7	62.9	63.7	60.8		[illegible]

Aug. 23—Hazy; fine, some low white clouds; very fine.
— 24—Fine, cloudy, very fine.
— 25—Heavy dew, fine, cloudy; densely overcast.
— 26—Fine; very fine, light clouds; fine; cool at night.
— 27—Very fine, hot and dry, with bright sun; very fine.
— 28—Slight haze, very fine, hot, dry, and cloudless.
— 29—Overcast, very fine throughout.
Mean temperature of the week 2¼ deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Sept. 7, 1861.

Sept.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 1..	70.2	47.5	58.8	18	1.50 in.	3	4	3	4	3	10	4	4
Mon. 2..	70.3	47.4	58.8	13	0.44	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Tues. 3..	[illegible]	47.9	[illegible]	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Wed. 4..	[illegible]	46.[illegible]	58.4	15	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Thurs. 5..	[illegible]	47.3	58.5	15	0.90	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Friday 6..	69.5	45.6	57.5	15	0.70	[illegible]	[illegible]	4	—	1	12	6	1
Satur. 7..	69.4	47.5	58.4	17	0.55	1	[illegible]	6	1	6	11	2	2

The highest temperature during the above period occurred on the 1st, 1843—therm. 85 deg.; and the lowest on the 7th, 1855—therm. 28 deg.

Notices to Correspondents.

Books: *E H.* We will inquire.

Florists' Flowers: *T H G.* We disapprove of all "appliances used for dressing Dahlias and other florists' flowers." We believe tweezers are chiefly used.

Insects: *S U.* Your caterpillar is that of the elephant hawk moth. It is not a rare species, generally feeding on the Ladies Bed-straw.—*A Y.* Your two wasps appear to be only varieties, rather more or less marked with yellow, of the common wasp. You must narrow the mouth of your hives so as to prevent the entrance of the wasps, which being larger than the bees require a larger entrance. The mode you mention of killing them with fumes of turpentine is well known. We had not previously heard of wine being used as a remedy for bees' stings. *W.*

Mushrooms: *Beckenham.* They must have been attacked in a very unusual manner by some of the insects that prey upon them. They always contain maggots when old and produced in the open field. As to Elemi Figs, they are only the best quality of Turkey Figs. You cannot by any possibility dry English grown Figs so as to keep—unless you boil them in sugar.

Names of Fruits: *Kelly.* 1, White Costin; 2, Keswick Codlin; 8, Unknown—too unripe.

Names of Plants: *D T.* 1, Polygala vulgaris; 2, Vaccinium Vitis Idæa; 3, Hypericum Androsæmum; 4, Andromeda nitida.—*S W.* We believe it is Impatiens Roylei, but so small and bad a specimen cannot be accurately determined in the large and difficult genus to which it belongs.—*Dornden.* Your handsome Indian Grass is Erianthus Ravennæ.—*A J.* 1, Erysimum cheiranthoides; it has this year come up in many places where Erysimum Perofskianum, or what was called so by the seedsman, was sown; 2, Physostegia virginica.—*T F T.* 1, Origanum vulgare; 2, Inula dysenterica; 3, Stellaria holostea.—*F A P.* Melilotus officinalis.—*Mrs. R.* Spargelerbsen is Lotus tetragonolobus. Melchbohne is a name we are unacquainted with; the pod belongs to one of the varieties of Haricot beurné, itself a sort of Mange-tout.—*J S.* The Cherry Plum, Prunus cerasifera.

Peach Trees: *Blandford A H.* There is no doubt about the mischief being produced by red spider, which swarms on the leaf you have sent. As we presume your Orchard House has no heating apparatus you had better unnail the trees, wash the wall with lime and sulphur, and then shut up close for 24 hours. Trellis will do no good in your case. Red spider is easily subdued if attacked in time, but if allowed to become numerous is a formidable enemy. There is no disease.

The International Exhibition of 1862: *R B.* There is no foundation for the statement that it is in contemplation to form an approach direct from the Kensington Road to the great conservatory of the Horticultural Society, and, by a mutual arrangement with that body, to make a combined charge at this point for entrance to the gardens and the Exhibition. To be of any great use, even if formed, it would be first necessary to make a road through Hyde Park.

Trees in Pots: *An Amateur.* Next week. In the meanwhile we refer you to a leading article in another column.

Vines: *J P.* Instead of checking the Vines by lifting them now cut their roots carefully, which will secure your object.

JOHN FOWLER, Jun., 28, Cornhill, London, E.C.— Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free.

£1000 upon the WOOLSTON SYSTEM against any other system of Steam Cultivation.
For prices of apparatus and particulars apply to Mr. W. Smith, Woolston, Bletchley Station.

JAMES AND FREDERICK HOWARD, Britannia Iron Works, Bedford, Manufacturers of STEAM CULTIVATORS, STEAM PLOUGHS, CHAMPION PLOUGHS, HARROWS, HORSE RAKES, & HAYMAKERS.
Catalogues, with full particulars, sent free on application.

Wind Power.

J. B. PEILL, 17, New Park Street, Southwark, S.E., begs to inform intending purchasers that he has now increased facilities for Manufacturing the Patent Wind Engines for Pumping, Grinding, Chaffcutting, Pulping, &c.
Prospectuses and all information may be obtained by enclosing a postage stamp, and a Wind Engine in full work may be inspected on the premises daily.

HENRY J. MORTON AND CO., 2, Basinghall Buildings, Leeds.
Galvanised Iron Water Cistern
for Cottage Houses, &c., to contain 50 gallons, 26s.; 80 gallons, [illegible] and 100 gallons, [illegible], and fitted with tap, keeping the water perfectly sweet and clean; will not rust or corrode. Cisterns of all sizes.

Galvanised Iron Pumps
for Liquid Manure or Domestic Use, 3 inches diameter, 30s. and 32s. 6d. each; Tail Pipe for same at from 1s. [illegible] per foot.

Galvanised Iron Swing Water Barrows
for Garden or Farm use, containing about 20 gallons, entirely formed of iron, [illegible] each.

Parkes' Steel Digging Forks.

BURGESS AND KEY, 95, Newgate St., E.C., London, being the Wholesale and Retail Agents for these celebrated Tools, have always a large Stock on hand from which their Customers may select what they may require.
ANTHONY'S PATENT AMERICAN CHURN.—The FIRST PRIZE was again awarded to this Churn in Competition with several others at the Chester Meeting of the Royal Agricultural Society; it has obtained the First Prize given by the Society at every Meeting since 1859.
Messrs. Burgess & Key, 95, Newgate Street, E.C., strongly recommend it as the most perfect Churn now in use. Full particulars sent on application.

Reaping Machines.

BURGESS AND KEY, 95, Newgate Street, E.C. Prizeholders for the best Agricultural Machinery Manufactured.
ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with Burgess & Key's Screw Delivery Platform. Price 42l. 10s.
Testimonials.
A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following:—
From Mr. John Richards, *Bailiff to* Dr. N. Carne, *Dimland Castle, Glamorgan.*
"I beg to certify that I have for five years worked Messrs. Burgess & Key's Reaper in my master's Home Farm, and also accompanied it when lent to tenants on the estate. During the above mentioned period the Machine has not cut less than 1,000 acres of all kinds of crops, with the same two knives as first had with the Machine. Dr. N. Carne having given up farming, the machine is now in the hands of his tenant, Mr. D. Thomas, of Llanrwst, and is in excellent order."
M'CORMICK'S REAPER for Manual Delivery. Price 25l.
COMBINED REAPER AND MOWER—Two-Horse Machine. Price [illegible]
The last Machine is fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.
These Prices include Packing and Delivery at any Railway Station.

Garden Border Edging Tiles.

F. AND G. ROSHER, Cement, Brick, and Tile Merchants, beg to invite attention to their varied Stock of Ornamental Garden Border-edging Tiles in Terra Cotta, Terro-Metallic ware, and Red ware. They present advantages over Box or Grass-edging in that they afford no harbour for slugs, &c., take up less room, and once laid, require no further attention.
They may be had of various patterns at F. & G. R.'s Premises, Ward's Wharf, Upper Ground Street, Blackfriars, S.; and Kingsland Road Wharf, near the Canal Bridge, London, N.E.
N.B. Sketches of patterns sent by post on application. Garden Vases and Ornamental Flower Boxes for Windows and Balconies in stock.

ORNAMENTAL PAVING TILES for Conservatories, Halls, Corridors, Balconies, &c., as cheap and durable as Stone, in blue, red, and buff colours, and capable of forming a variety of designs.
Also WHITE GLAZED TILES, for Lining Walls of Baths, Dairies, Larders, Kitchen-ranges, &c. Grooved Terro-metallic and other Stable Paving Bricks of great durability, Clinkers, Red and White Wall-Copings, Glazed Drain Pipes, &c.
To be obtained of F. & G. Rosher, at their Premises as above.

THE LANDS IMPROVEMENT COMPANY.— Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
To Landowners, the Clergy, Estate Agents, Surveyors, &c. in England and Wales and in Scotland.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.
Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.
For further information, and for forms of application, apply to the Honourable William Napier, Managing Director, 2, Old Palace Yard, Westminster, S.W.

THE LONDON MANURE COMPANY (Established 1840,)
Are now prepared to send out the following MANURES:—
CORN MANURE for AUTUMN SOWING
SUPERPHOSPHATE of LIME
DISSOLVED BONES for PASTURES.
CONCENTRATED URATE.
BLOOD MANURE for CORN.
PERUVIAN GUANO, NITRATE of SODA, SULPHATE of AMMONIA, and every other Manure of value.
116, Fenchurch Street, E.C. Edw. Purser, Secretary.

BURNARD, LACK, and CO.'S CONCENTRATED SUPERPHOSPHATE of LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.
CONCENTRATED TURNIP MANURE, equal in value to the preceding.
Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to Burnard, Lack, & Co., Sutton Road, Plymouth.

LAWES'S MANURES.
The Manures manufactured by J. B. Lawes for the present season of 1861 are now ready for delivery at his Factories, at the following prices:—
LAWES'S PATENT TURNIP MANURE, and BONE SUPERPHOSPHATE OF LIME £6 6
LAWES'S SUPERPHOSPHATE OF LIME from BURNT BONE or MINERAL PHOSPHATES .. 5 5
LAWES'S BARLEY, GRASS, and MANGEL MANURES 8 0
These Manures can be obtained of Mr. Lawes, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
Address John Bennet Lawes, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

MANCHESTER AND LIVERPOOL AGRICULTURAL SOCIETY.
The FOURTEENTH ANNUAL SHOW of HORNED CATTLE, HORSES, SHEEP, PIGS, POULTRY, SPORTING DOGS, CHEESE, BUTTER, SEEDS, ROOTS, FRUIT, VEGETABLES, FLOWERS, IMPLEMENTS, MACHINERY, &c., will take place at Ashton-under-Lyne on WEDNESDAY and THURSDAY, September 11 and 12.
Premiums amounting to upwards of 1100l. (including considerable Special Prizes) will be awarded on this occasion.
Entries of Stock, &c., closed on the 19th ult.
The Show Yard will be open to the Public by Tickets sold on the spot, admitting One Gentleman and a Lady, or Two Ladies, on Wednesday, September 11, from 10 to 6, at 2s. 6d. each, and on Thursday, Sept. 12, from 8 to 4 (when the Show will finally Close), at 1s.
The PUBLIC DINNER will take place on the First Day of the Show in the Ashton Town Hall, at 4.30 p.m. F. D. P. Astley, Esq., will preside. Tickets, 3s. 6d. each, may be had from Messrs. Jennison, in the Show Yard; or meantime, from them at Bellevue, Manchester.
T. B. Ryder, Secretary.
2, Elliot Street, Liverpool.—August 31.

The Agricultural Gazette.

SATURDAY, AUGUST 31, 1861.

MEETINGS FOR THE FOLLOWING WEEK.
Wednesday, Sept. 4—North Lancashire, at Chorley.
Thursday, — 5—Cheshire Agri. Soc. at Chester.

The history of reaping machine competitions for the awards of the Prizes offered by the Royal Agricultural Society of England is curiously various and self contradictory.

In 1851 the late Mr. Pusey praised the performance of M'Cormick's reaper, then without a self-delivering apparatus, characterising it as especially fit for cutting Barley and Oats when not intended to be bound into sheaf; recommending Hussey's, however, as better adapted for cutting laid corn or crops on steep ridges. M'Cormick's reaper received a Council Medal at the Exhibition in 1851, Hussey's reaper did not receive one, though Mr. Pusey, acting chiefly on information of its merits supplied to him by Mr. H. S. Thompson, declared that it deserved one.

In 1852, at the Lewes trials, Messrs. Garrett received the Society's silver medal for Hussey's reaper, and Crosskill received a commendation for Bell's reaper, which then appeared in England for the first time, called out from its long seclusion in the Carse of Gowrie by the success of its offspring the American machines. In the report of that year Hussey's machine was described as cheap and handy, and good where there is no Clover among the corn to hinder its being at once tied in sheaf. M'Cormick's is described as useful and efficient, and if well manufactured not liable to be stopped. Bell's mode of delivery was spoken of as being the best, and securing for it its commendation.

In 1853, at Gloucester, the trial, conducted under extremely unfavourable circumstances as to weather, resulted in the award of 20l. to Bell's reaper; while M'Cormick's reaper, now made by Burgess & Key, received a high commendation, and Dray's Hussey was simply commended.

In the following year, at Lincoln, Dray's Hussey received the Society's prize of 20l., and Crosskill was commended for Bell's reaper.

The trials of the Carlisle meeting were adjourned till a month or more thereafter, when a very patient and prolonged examination of the machines at work took place under the best possible circumstances as to weather on Sir W. Miles's property at Leigh Court, near Bristol. Burgess & Key then received the prize of 30l. for M'Cormick's reaper, to which they had then attached their well-known screw delivery platform, making it thus a perfect self-delivering machine. And the prize of 20l. was given to Forbush & Co. for Hussey's reaper, to which they had attached a radiating roller platform, enabling it also to act as a self-delivering machine. Dray was on this occasion highly commended for Hussey's reaper, delivering by hand the cut corn in bundles in the wake of the machine.

In 1856 the Chelmsford trials were undertaken by adjournment on Mr. Fisher Hobbs' farm at Boxted Lodge, near Colchester, under very favourable circumstances, both as to weather and as to crops. Crosskill's Bell then received the first prize of 20l.; Burgess & Key's M'Cormick received 15l., and Dray & Co.'s Hussey received an equal prize of 15l.

In 1857 the trials at Salisbury resulted in the prize of 10l. being given to Burgess & Key's M'Cormick, which had then attached to it for the first time an apparatus for dividing the standing corn from the swathe that was being cut, which greatly facilitated its operations. To Crosskill's Bell, 6l. was awarded, and to Lord Kinnaird's form of M'Cormick's reaper, 4l. was awarded. There was a trial of mowing machines for the first time, when Clayton's "Eagle" mowing and reaping machine received 15l., and Dray's mowing machine received 5l.

There were no trials of reaping machines at Chester or at Warwick. At Canterbury, however, the prizes of the local committee were competed for by Burgess & Key, McCormick, Cuthbert's Hussey, and Dray's Hussey; and we give the report of the judges as being the last authoritative award in any way connected with the annual meetings of the English Agricultural Society:—

"The implements were set to work in a piece of Wheat—an average crop for the season—which was laid at places in two or three directions by a roller, and they were afterwards taken to a light piece of Barley in which there was a strong plant of Clover.

"During a short preliminary trial Dray's machine nipped off some of the Wheat ears, and left them in small lumps, about two rods apart; this defect was caused by a screen on the platform in front of the man who delivered the cut corn, and as it could not be remedied in the field, the judges required Mr. Dray to retire from the contest.

"The other two reapers cut the Wheat remarkably well except where badly laid; in this respect they were considered to be equal in merit; furrows and bottom rubbish appeared to offer no impediment to the progress of the machines.

"The judges were unanimously of opinion that, in doing a certain quantity of work in a given time, Burgess & Key's machine had the advantage in the proportion of 10 to 7, and that the delivery of the crop, when cut, was better effected by their machine in the proportion of 6 to 4.

"That in lightness of draught Cuthbert's machine had the advantage in the proportion of 14 to 9, and that in the cost of cutting and binding up the corn, Cuthbert's machine had the advantage in the proportion of 6 to 4.

"That in simplicity of arrangement, in the strength and durability of the working parts of the machine, Cuthbert's appeared to have the advantage in the proportion of 6 to 4.

"That in compactness, handiness in transit and management, and in price, Cuthbert's machine had the advantage in the proportion of 4 to 2.

"The judges were placed in some difficulty on account of one of the competing machines being provided with a self-acting side-delivery, by which the crop when cut, was laid in a continuous swathe; the other machine being adapted for the delivery of the crop by manual labour at the side at intervals, in a fit state for binding up.

"The judges considered that, in heavy crops of corn, the self-acting delivery would give Messrs. Burgess & Key's machine a considerable advantage over Cuthbert's, and that the excess in draught in Messrs. Burgess & Key's machine may, to some extent, be attributed to the power requisite to keep the self-delivering apparatus in operation, but they have some doubt whether the weight of the larger machine would not be found objectionable on retentive soils in wet seasons.

"The judges were of opinion that, with crops of an average length and bulk of straw, the cut corn could be delivered at the side from Cuthbert's machine in a fit state for binding up, by manual labour, without further exertion than is usual in the extra hard work of harvest operations; and that for light crops, or where the corn is laid or scrawled, Cuthbert's machine is preferable to Burgess & Key's.

"The prize of 10l. was unanimously awarded to Mr. Cuthbert's machine, and Messrs. Burgess & Key's machine was highly commended."

Excluding this last trial as not strictly of the same rank with the others, we have the following list of awards to the rival reapers:—

Name of Machine.	Number of 1st Prizes.	2d Prizes.	High Commendation.	Commendation.
"McCormick," as made by Burgess & Key ..	3	1	1	[illegible]
"Bell," as made by Crosskill ..	2	1	..	2
"Hussey," as made by Dray ..	2	1	1	1

The trials just held at Leeds have given the first prize to Crosskill's Bell's reaper, and the second to Burgess & Key's M'Cormick, while Hussey's reapers as made by Cuthbert, Picksley

& SIMS, &c., are a class by themselves. Adding this and last year's awards to the above table, we have an almost perfect uniformity in the number of first prizes, second prizes, and commendations given to the different classes of reaping machines in use. And Mr. PATRICK SHIRREFF's judgment, formed last year, may be pronounced correct—that every man, if he has acquired the art of working it well, may pronounce his own machine the best. His further assertion, that BELL's reaper is so cumbrous and unwieldy that it must now be pronounced out of date, has indeed been disproved by the recent award at Leeds; but then our Correspondent's report of the trial there shows that the improvements lately made upon it have been directed especially to the removal of that cumbrousness and weight which have hitherto permitted its rivals to surpass it.

A PLEA FOR SMALL BIRDS.

M. MARSHAL, ex-Deputy of La Meurthe, the Agricultural Society of Toulon, the Acclimatization Society of Nancy, and M. P. Schoeffer, of Robertsau (Haut-Rhin), have petitioned the French Corps Législatif, requesting that steps may be taken for the preservation of those birds that destroy insects detrimental to agriculture.

"These four petitions (says the *Moniteur*) deserve the highest attention from the Senate.

"They are not inspired (says the report), as might be supposed at a first glance, by a Platonic sentimentality in favour of a class of living creatures doomed to a destruction which does not legitimatize for man the supreme law of his own preservation. However honourable and justifiable such a sentiment might be in the opinion of a sound philosophy, that is not the sentiment which inspires the petitioners. If practical and sensible men ask from you a more efficient protection for birds than is actually allowed by the law, they do not do so out of love for the birds: it is solely in the interests of agriculture, very seriously endangered, that they affirm that men ought not to be allowed to continue to destroy the only auxiliaries which can efficaciously stop the propagation of insects, the bane of all cultivation.

"These petitions give rise to many questions of fact and right, which we will rapidly examine. As regards the first, in default of all personal competency, we have consulted, in so far as it was in our power and the time we could devote to it, the highest authorities in natural history and agriculture. It is, therefore, in their name, so to say, that we submit to you certain facts for affirming which we had not the requisite qualifications. Moreover, let us say, *en passant*, that the importance of the right of petition is now so fully recognized by all classes, as admitted by the Senate, that our most important questions have been everywhere most favourably received. [The reporter owes special thanks to M. Geoffroy Saint-Hilaire, and to his worthy colleague M. Florent Prévost.]

"PARAGRAPH 1.—THE IMPORTANCE OF BIRDS TO AGRICULTURE.

"I. There exist in France, Gentlemen Senators, many thousand species of insects, nearly all of them endowed with fearful fecundity, to the detriment of our most precious vegetables, those which provide food for man, wood for building purposes or burning. [The fearful fecundity of insects is one of the most established facts of natural history. In one single *phlæotribus*, so fatal to the Olive, a naturalist counted 2000 eggs. In recent years to stop the ravages of the *nonne* an attempt was made in East Prussia to collect the eggs. In one day, in one single *verderie*, four bushels, or about 180,000,000 of eggs were collected. In another *verderie* of Upper Silesia, towards the Austrian frontier, in nine weeks 117 kilogrammes were collected, representing 230,000,000 to 240,000,000. (Dr. Gloger, in an article dedicated to the Cardinal Archbishop of Bordeaux, in the seventh volume of the *Bulletin* of the Society for the Protection of Animals, page 322.)]

"The robust Oak has for enemies the *Lucanus*, and the *Cerambyx heros*.

"The Elm is infested by the destructive *scolytus*.

"The Pine and the Fir succumb under the attacks of the *bostrichus*, of the *nonne*, of the *scarabæus typographus*.

"The tree of Minerva, the valuable Olive, sees its wood perforated by the *phlæotribus*; while its fruits are devoured by the innumerable larvæ of the Olive fly (*dacus oleæ*).

"The Vine in many localities can scarcely resist the ravages of the *pyrales*.

"Corn and other cereals are attacked in their roots by the white worm (larvæ of the cockroach); grown up, before the ear is formed, by the *cecidomyia* or Wheat-midge; later, when the grain is formed, by the *Calandra granaria*.

"Colza (Rape) and other cruciferous plants have enemies no less numerous. Different varieties of *Haltica* destroy the plant as it shoots up from the earth; other parasites wait till the pod is formed to take up their domicile there and feed themselves on the grain.

"The roots of all vegetable substances are eaten up by snails and other insects, while the larvæ of the *bruchus* live concealed in Peas and Beans (*lentilles*), only leaving the pod.

"Does what the insects have spared remain to the agriculturist? No; a multitude of moles, field-mice, and rats, after having lived in the fields to the detriment of the harvest, enter the granary and levy a new tax upon it.

"Who could calculate the losses which result to agriculture from all these united causes?

"It is only since a few years that science has understood that it had a great social duty to fulfil; it is only since yesterday, so to speak, that these questions have been studied; statistics, therefore, as yet, only provide incomplete *data*, which must not be quoted too hastily.

"Nevertheless, the complaints of the Vine-growers attest the enormity of the evil in that particular branch of cultivation.

"As regards grain (*céréales*), the amount destroyed in one single year in one of our Eastern departments by the Wheat-midge is estimated at four millions of francs (160,000*l.*). [*Ami des Sciences* of August 9, 1857.]

"In a special notice, and according to a great number of facts carefully studied, M. Bazin does not hesitate to attribute to this insect the insufficiency of the harvests from which we suffered so much in the three years which preceded 1856; in many fields the loss was more than half the crop. [Notice on an Insect which has caused the greatest Ravages among our standing Crops. Paris, 1856; in 8vo. 32 pages, with plates.]

"As regards Rape a report, very ably drawn up by one of the professors of the old agricultural institution of Versailles, has shown, by most carefully made investigations on a crop belonging to that establishment, that on 20 siliqua taken by chance and giving 504 grains, only 296 grains were healthy; the remainder were eaten up by insects or destroyed by their contamination. That, consequently, there was a loss in oil of 32 8 per cent.; and more especially on a harvest which produced 4500 francs it was necessary to calculate a loss of 2700 francs, which, could it have been avoided, would have realised 7200f.

"In Germany, according to Latreille, *la nonne* (*Phalæna monacha*) has destroyed whole forests. [Latreille, *Histoire des Insectes*]. In 1810 the *bostrichus* had so invaded the forests of Tannebuch, in the department of the Röer, that an order was issued to cut down and burn the forest—trees, branches, roots, and brushwood. [Baudrillart, *Dictionnaire des Forêts, V. Insectes.* Gadirler, *Police des Chasses*, page 172 and following.]

"In East Prussia, contrary to all forest rules, three years ago 24 millions of cubic feet of forest were ordered to be felled, because the trees were perishing from the attacks of insects. [Dr. Gloger, Berlin, *loco citato*, page 322. M. Tschudi's *Des Insectes et des Oiseaux*, pages 14 and 15, quotes analogous facts no less remarkable.]

"Our Admirals will give you much better information than we can respecting the *termites* which, principally at La Rochelle and Rochefort, destroy the timber in our naval dockyards, and even the registers of the archives.

"However considerable these ravages are, it is surprising that they are not even greater when the prodigious fecundity of these evil species are considered; and if God in His wisdom had not provided a remedy, vegetation would have disappeared from the face of the earth.

"II. In fact, against such enemies man is powerless. His genius may enable him to follow the course of the planets, to penetrate mountains or steer a ship against a storm; he can kill or bend to his will the monsters of the forests; but in presence of these myriads of insects which, from every point of the horizon, settle upon his fields, cultivated with so much care, his strength is sheer weakness. His eye is not even sharp enough to discern many of them, his hand too slow to catch them. [The Wheat-midge is a fly of two millimètres in length; the cockchafer five millimètres; the *pyralis* 20 millimètres. As regards the eggs, they are almost imperceptible.] And even were he to annihilate them by millions they would re-appear by milliards. From above, from below, from right to left, they come in legions innumerable, without relapse. In this invincible army which advances to the conquest of the labour of man, each member has its month, its day, its season, its tree, its plant; each knows its own battle-ground, and never mistakes its post.

"At the beginning of the world man would have succumbed in this unequal struggle if God had not given him in the bird a powerful auxiliary, a faithful ally, who wonderfully accomplishes the task which man is incapable of performing. [Buffon, quoted by Gadibled, p. 178. Michelet, *L'Oiseau, passim.*]

"This providential mission of birds for a long time was considered a poetical exaggeration: now, thanks to the labours of modern naturalists, and especially of M. Florent Prévost, assistant naturalist at our Museum of Natural History, it ranks as one of the best demonstrated truths of science.

"With the assistance and facilities given him by the administrators of the Crown lands and forests, and after a series of studies perseveringly followed for nearly 40 years, this modest and learned investigator has succeeded in ascertaining experimentally, week by week, the alimentary system of the birds of our clime. By a careful examination of the remnants of food found in their stomachs he has been able to define, for each species, not only in what proportion they feed upon insects, but what particular insects they seek out and destroy, and consequently what vegetables they protect against their enemies.

"The stomachs thus examined are preserved in a triple form; they form the commencement of a new collection, which will rank among the most interesting in the museum. In addition, M. Prévost has drawn up careful tables, which illustrate the results obtained.

"Many of these studies, not yet made public, have more than once been brought forward by M. Geoffroy Saint-Hilaire, and have received the most honourable recognition from the Academy of Sciences and from other learned societies. [M. Geoffroy Saint-Hilaire, *Acclimatation des Animaux Utiles*, pp. 122 and following, and especially p. 125, note 2.] With a readiness, for which we are happy to have an opportunity of thanking M. Florent Prévost publicly, he has placed at the disposal of your reporter all his collections and drawings, and, what is more, that inexhaustible complacency of which our experiment stands so much in need.

"We cannot think of submitting these interesting documents to the Assembly; but, should any of our colleagues express a wish to see them, we could add to this report, in the printed report, two or three of those drawings which would give an idea of the degree of certainty at which the skilful naturalist has arrived respecting facts which it seemed scarcely possible to ascertain.

"From the *ensemble* of these remarkable researches it results that, in the point of view of the services rendered to agriculture, the 300 species of birds that lay eggs in our country may be divided into three principal classes:—

"CLASS I.—In the first class we shall place the birds which are decidedly noxious, at least indirectly, as they destroy a number of insect-eating birds (*oiseaux insectivores*). They belong to birds of prey, and are nearly all day birds (*oiseaux diurnes*): [There are 27 species of them] and in that of the omnivorous, crows, magpies, and jays. [Tschudi, *Les Insectes Nuisibles et les Oiseaux*, pp. 25 and 26, Paris, 1860; Gloger, already quoted.]

"In this general proscription of these two malefactory orders justice demands that an honourable exception must be made in favour of the common buzzard and the honey-buzzard, each individual of which destroys annually about 6000 mice; [Tschudi, p. 24; Gloger, p. 302.] and especial full grace must be given to the rook and harvest crow, which render such valuable services in destroying the white worm, and which are easily distinguished from the other crow species by the metallic rays on their plumage. [Gloger, pp. 305 and 307.]

"CLASS II.—In the second class must be placed the granivorous birds (*granivores*), or, more correctly, the birds with double alimentation; for, with the exception of the pigeon, there is not a single bird in this class that is exclusively granivorous; all feed, according to the seasons, on grain and insects alternately. Detrimental in the first respect, useful in the second, there ought to be, according to M. Geoffroy de Saint-Hilaire, a balance drawn between the services which they render and the damage they commit [Gloger, pp. 314 and 324. Geoffroy Saint-Hilaire, *Acclimatation*, p. 125]. Such are sparrows and other *gros-becs*. M. Florent Prévost and some other naturalists entertain a bolder opinion, and maintain that the good they do far exceeds the mischief; and facts seem to justify the opinion.

"Of these suspected birds, the one that enjoys the worst character is doubtless the sparrow, so often pointed out as an impudent pilferer.

"Now, if the facts mentioned in the petitions are exact, according to the opinion of many this bird ought to stand much higher than he is reputed. In fact, it is stated that, a price having been set upon his head in Hungary and in Baden, this intelligent felon left those countries; but it was soon discovered that he alone could manfully contend against the cockroaches and the thousand winged insects of the lowlands, and the very men who offered a price for his destruction offered a still higher price to introduce him again into the country. [M. Marschall, petition No. 152, and M. Dumast, petition No. 391.] It was a double expense—the ordinary punishment of hasty measures. Frederick the Great had also declared war against the sparrows, which [illegible] respect his favourite fruit, the Cherry. Naturally the sparrows could not pretend to resist the Conqueror of Austria and emigrated; but after two years not only were there no Cherries, but scarcely any other sort of fruit—the [illegible] ate them all up; and the great King, victor on so many fields of battle, was happy to sign peace at the cost of a few [illegible] with the reconciliated sparrows. [Tschudi, already quoted, p. 19.] Moreover, M. Florent Prévost has shown that, according to circumstances, insects form at least one half—or a much larger proportion—the food of the sparrow. It is exclusively with insects that this bird feeds its young [illegible] behold a remarkable instance:—At Paris, where, nevertheless, the fragments of our own food provide ample aliment for the sparrow, two of those birds having built their nest on a terrace of the Rue Vivienne, the elytra of cockroaches thrown out of the nest were collected, and numbered 1400. Thus one little *ménage* had destroyed [illegible] cockroaches to feed one single brood. [A fact verbally [illegible] to the reporter by M. Florent Prévost. See, moreover, [illegible] Chatel, *Utilité et Réhabilitation du Moineau* (Angers, [illegible] M. Dupont, in the *Transactions of the Royal Society: Bulletin de la Société d'Acclimatation de Nancy*, 1859, p. 35.] Let us [illegible] in favour of the discharge of this culprit, that the sparrow [illegible] become almost domesticated, inasmuch as he only lives [illegible] the domiciles of man, and perhaps, like him, has been [illegible] by excess of civilisation.

"At Montville (Seine Inférieure) crows (*corneilles*) had been doomed. It was soon found that their ravages could not be compared to those they prevented, and the crow was honourably re-established. [Baron Dumast, *Extrait du Bulletin de la Société d'Acclimatation de Nancy*, 1857, pp. 10 and 11.]

"CLASS III.—If the sparrows and the crows make us pay for their services, there are other birds—and they are [illegible] numerous—which render us gratuitous services. They are, first of all, the night birds of prey, as bats, barn-owls [illegible] others [Baron Dumast, *Extrait du Bulletin de la Société d'Acclimatation de Nancy*, 1857, pp. 10 and 11], which ignorance [illegible] persecutes as birds of evil omen. Agriculturists ought [illegible] them; for, ten times better than the best cats, and without threatening the larder like them, the birds of this order [illegible] a determined war against rats and mice, so detrimental [illegible] stacked corn or grain in barns, and destroy in the fields [illegible] of field-mice, moles, and dormice, which without these [illegible] hunters would become an intolerable scourge. [Gloger, in the work already quoted, p. 301, relates that in 1857, on a property near Breslau, in Silesia, 200,000 mice were caught in one [illegible]. A manufacturer there allowed one centime a dozen for the [illegible] and at that price the more skilful catchers earned 22 sols a-[illegible] They invaded the barns in such numbers that more than [illegible] were killed in a small barn which had been cleared out [illegible] cleansed.]

"Pointing out the ravages committed by these little nibblers in the fields and plantations, Buffon gives an idea of how they multiply; in three weeks he had caught more than 2000 in a plantation of 40 acres. [Buffon, *Histoire Naturelle*, tome viii., p. 328, and following.] According to observations made by the English naturalist White, a pair of white barn-owls destroy daily at least 150 little nibblers. Where is the cat that could give such a result? [Tschudi, p. 23. *Mémoire de M. Chatel de Pire. Lettre de M. Leroy Girardin au Journal du Loiret.*] Let us add that it is these birds alone that can give chase to moths and night insects, many of which are most destructive. [Tschudi, p. 23.]

"Finally, Gentlemen Senators, but incontestably in the first rank for the service they render us, come the birds that live on insects only (*les oiseaux purement insectivores*) [In France there are 69 species, of which 25 only are resident (*sédentaires*).] creepers, woodpeckers, fern-owls, the various species of swallows, but especially the charming [illegible] all these are *insectivores*, vulgarly designated under the [illegible] tive expressions of *petits-pieds* or *becs-fins*—nightingales, thrushes, black-caps, redbreasts, redtails, wagtails, grasshopper-larks, pewets, wrens, troglodytes (?), that friend of the cottage (? the robin), who all vie with each other in rendering us inappreciable services, as gratuitous as they are badly rewarded, because their value is not properly estimated.

"Allow me, then, to quote an example which M. Prévost gives respecting the marten. Ten of those birds were killed between the 15th of April and the 29th of August, at the close of day, as they were returning to their nests. The insects of which the remains were found in their stomachs, amounted to no less than 5432, giving to each day for each bird an average of 543 insects destroyed. Another statement gives analogous results to the hedge sparrow, and among the insects thus destroyed figure precisely our most formidable enemies—the weevil, the *pyralis*, the cockroach, and a host of others.

"You will easily understand, gentlemen, the mischief done by these insects if you call to mind that the cockroach deposits from 70 to 100 eggs at a time, which soon are transformed into white worms, which for two or three years live exclusively upon the roots of our most valuable vegetables. The weevil produces from 70 to 90 eggs, which, laid in so many grains of corn, become larvæ that eat them all up. Thus, one single weevil destroys a whole ear of corn. The *pyralis* lays from 100 to 130 eggs in as many shoots of Vine. Thus attacked, the shoot pines and dies. From 100 to 130 Grapes are thus destroyed by one pyrale before their formation.

"And now, if you will compare the two orders of figures which I have just submitted to you, admitting that on 500 insects destroyed in one day by a single bird there be only one-tenth of these noxious creatures; for example, 40 weevils and 10 *pyralis* (and this is below the mark)—that is to say, on an average, 3200 grains of corn, and 1150 Grapes (*grappes de raisin*), which in one day this little bird will have saved you.

"Give as large a margin as you choose to any other natural causes which might have stopped the ravages of these insects, reduce as much as you choose that of the bird, and there still remains enough to justify the profound saying of a contemporary:—'The bird can live without man; but man cannot live without the bird.'

"And, in fact, who but the little bird could be continually looking out for and catching the weevil five millimètres in length, while depositing its eggs in a cornfield in the young incipient grain? Who could catch the small butterfly of the *pyralis* when flying about with the same object in view?

"Who, especially, could find those minute eggs and larvæ of which one single *mésange* consumes 200,000 in one year. [Gloger, p. 323.]

"III. Doubtless, grateful man has placed these indispensable auxiliaries, these friends and faithful allies, under his special protection; he, doubtless, has endeavoured to destroy the hostile species which wage war against them,—the bird of prey that seizes them on the wing, the snake that glides into their nest to eat the young brood, and often the mother with the young ones. No, as if once more to justify the fable,—

"'Mais trouve bon qu'avec franchise,
"'En mourant, au moins je te dise,
"'Que le symbole des ingrats,
"'Ce n'est point le serpent, c'est l'homme.'

Yes, man, who, by a strange blindness, shows himself the most terrible enemy of these gentle and useful creatures. More cruel than the kite and hawk, who kill to feed, he destroys them for the simple love of destruction. The gun is not murderous enough; it is, moreover, preserved for noble game; it is by all sorts of contrivances, such as nets, birdlime, traps, &c., that these charming and indispensable little friends

are persecuted by man, to whom they were given by a wise Providence.

"Gentlemen, I will spare you a description of these barbarous scenes; but what I must point out to you is the disastrous number of useful birds which are doomed to destruction throughout the whole of France, especially in the Eastern and Western departments.

"As soon as the return of spring brings back to our lands from the shores of the Mediterranean those faithful allies which our winters had forced to emigrate, such is the reception they receive. In the vicinity of Marseilles and Toulon, and of other towns and villages of the coast, all the eminences are provided with implements for catching these birds; and, on the testimony of a man worthy of belief who has specially studied the subject (M. Sace), during the few months this *chasse* lasts 100 to 200 beccaficas fall daily to each *chasseur*. [Letter of M. Sace quoted by M. G. Saint-Hilaire, *Acclimatation et Domestication*.]

"The petition of the Toulon Committee therefore exaggerates nothing when it affirms that these birds are destroyed by myriads on their passage, to the great detriment of our Central and Northern Departments, where they arrive in such small numbers as not to fulfil their Providential mission.

"In the Eastern Departments, especially in Old Lorraine, analogous facts are demonstrated, as shown in the petition of the Acclimatation Society of Nancy. [Baron Dumast. Extract from the *Bulletin de la Société d'Acclimatation du Nord-est*, annexed to one of the petitions.]

"And wherefore this 'butchery,' as it is styled by the Toulon Committee? Is the right of man to feed on animals to be invoked? Surely it is not on such a plea that the destruction of these little creatures could be justified, each of which is scarcely a mouthful. Are these humming birds of the Old World, which are little more than a tuft of feathers, to be placed in the category of food? No, not food, but rather a coarse gluttony.

"And yet, if it was calculated, even at the lowest estimation, how many sacks of corn, barrels of wine and oil are represented by a dish of these victims, it would be found that Lucullus in his full glory never gave so costly a repast; and to find an example of such luxury we should have to advert to Cleopatra's pearl!

"Moreover, this miserable excuse of satisfied sensuality cannot even be invoked by these *chasseurs*, who, by way of showing their skill, will fire at a swallow, perhaps carrying food to her young brood. To these men, cruel from thoughtlessness, we may be allowed to observe that, by destroying 500 insects during the day, that swallow had rendered a greater service to humanity than if 10 *chasseurs* had returned home with full bags.

"Is it not, also, from sheer ignorance that the peasant nails against his barn door the owl, the fern owl, and other birds by which his unhappy skill has deprived his fields and granaries of their natural protectors? Why does he not rather nail up his cat?

"And as if it was not enough that man should carry on this war of extermination, behold the very children in youthful carefulness—'that age without pity,' as La Fontaine styles it—devoted to bird nesting. Eggs or birds, all the same to them. They break the first and torture the others to death.

"And the parents of these young monkeys, instead of whipping them and sending them back to school, placidly tolerate these acts of cruelty. Parents and children are probably ignorant of that noble passage of Scripture:—

"'If a bird's nest chance to be before thee in the way in any tree, or on the ground, whether they be young ones or eggs, and the dam sitting upon the young, or upon the eggs, thou shalt not take the dam with the young: but thou shalt in any wise let the dam go, and take the young to thee; that it may be well with thee, and that thou mayest prolong thy days.' [Deuteronomy, chap. xxii., verses 6 and 7. Note of Translator.—The quotation in the French is not correct. It says:—'Thou shalt not take either the dam *or the young ones*.' Deuteronomy *justifies* taking the young ones.]

"In default of knowing Scripture they ought, at least, to know their own interests.

"The amount of mischief done in this respect is incalculable. Some children have brought home 100 eggs in one day. [According to an approximate calculation, M. Gosselin estimates the number of birds' eggs destroyed annually in France at 80,000,000 to 100,000,000. It is by thousands of milliards that must be counted the insects which the birds produced by those eggs would have destroyed.—(Note.—*Manuscrite Communiquée par* M. G. Saint Hilaire.]

"How have these defenceless species been able to survive this determined warfare? That is one of those mysteries which can only be explained by the wonderful goodness of God, who incessantly redeems the faults of his favourite creature—man.

"Let us look the matter in the face. The evil is great, and if we do not take care it will be beyond a remedy.

"Some species have already abandoned us. The stork no longer builds his nests on our cottage roofs; the smaller species are rapidly diminishing; insects are increasing in proportion, to the great detriment of agriculture. Prompt and energetic remedies are required. What are those remedies? Let us resume them in a few words."

The Report then reviews the actual existing laws on "*La Chasse*" in France, and proposes a reform with a view to the protection of those birds which are of service to the agriculturist. The Report concludes as follows:—

"It cannot be denied that the reforms proposed by the petitioners will clash with many prejudices, with many established customs in different parts of the country. Would it not be well to try persuasion before having recourse to coercion?

"The petitioners request that the Ministers of Agriculture and of Public Instruction shall concert together to give simple and clear instructions to schoolmasters, which would afford useful occupation in their classes. Already many ecclesiastics—among others the Cardinal Archbishop of Bordeaux, have taken the initiative in this moral as well as agricultural instruction; there is every reason to hope that they will be seconded in this good work by our respected country curates.

"From these various considerations, Gentlemen, the Committee proposes that the four petitions in question be laid before the Minister of Agriculture, Commerce, and Public Works."

[The Senate decided that the petitions should be presented as requested.]

[*** We borrow this from the *Times*, with some slight corrections. Many others appear to be called for, but as we have not the original French report we are constrained to take the translation mainly as we find it.]

THE REAPING MACHINE AT LEEDS.

The second trial of draught on last Friday morning discovered less difference between Crosskill's Trustees' machine and Burgess & Key's. It was made by Mr. Amos with the utmost care, and is one of the most satisfactory tests that has ever been employed. All parties concerned seemed perfectly satisfied. The result shows, that although the cut of Crosskill's is 2 feet 7 inches greater than Burgess's, yet that the draught is greater by 2 stones in the latter than it is in the former. Taking the time of the experiment, the ground traversed, the width of cut, and the average registered draught, we arrive at a very clear view of the money value of the difference between these reapers, or of the advantage of one above the other. If Burgess & Key reap 50 acres of Wheat for a certain sum of money, Crosskill's Trustees can reap 78 acres for the same sum.

This conclusion is arrived at by merely taking the power expended as registered by the dynamometer. There may or may not be other advantages which counterbalance these on the side of Burgess and Key. For instance one man more is required by the Beverley machine than by its rival; there is considerable difficulty in turning it, and time is lost in each such operation at the rate of 30 seconds an end. It is hard to work on unlevel land or across furrows, and would under such circumstances be very likely to spring in its points and give way in a very short time. These and some other considerations may seriously diminish the advantages already noted, while they may be increased also, on the other hand, by reckoning points of superiority which are not indicated by the dynamometer. Thus it is no slight matter that the machine is quite independent of mow men upon entering a field; that the crop can be cut from the wind or to the wind, and that when cut the field lies in just one-third the number of swathes for the gatherers than it does by the use of a machine cutting only 5 feet 8 inches, which is Burgess and Key's width. These are the conflicting elements upon which a decision is to be made, and a judge must needs be a clever person to weigh a balance nicely between them.

It will be a matter of surprise to many doubtless, to see Crosskill's Bell's reaper thus reviving. Everybody considered it doomed. Its epitaph had been composed years ago. It never actually ceased to exist, but it always kept growing worse and worse, the reports of it were less and less favourable, and every public exhibition showed it to be the victim of some fresh malady added to its former complication of disorders. A change of doctors seems to have given it a new lease of life, still care must be exercised that hope be not raised too unduly, we scarcely know yet how it will work. In its present form it has cut but few acres, and although the judges were in our opinion perfectly correct in placing it on the prize list above Burgess and Key's, the public will not in haste abandon a machine whose reputation is so firmly established for one as yet untried. We hope the economy shown by the dynamometer in power expended may be fully confirmed in other respects, and we see no reason why this may not be the case.

The five manual delivery machines picked out for final trial were Beckworth & Sons, of North Lees, Ripon, price 19*l.*; Wm. Sawney, of Beverley, price 22*l.*; Messrs. Picksley & Sims, of Leigh, near Manchester, price 25*l.*; and two of Messrs. Cuthbert's, of Newton-le-Willows, price 22*l.* and 23*l.* 10*s.*, all save one founded upon the Hussey principle. Cuthbert's has of late years taken the prize in this class whenever it has come into competition, and last year it even took the prize from the self-delivery class in the estimation of the judges of the Kentish committee. At Garforth it worked admirably with two horses, one man and one boy driving and one man raking off; but in comparison with Picksley & Sims the horses and men were a good deal strained, and were going at a pace that could not be kept up all day. So very perceptible was this that the judges directed Mr. Amos to test the power required to work the two, and it was found that Picksley & Sims' to cut 10 inches more than Cuthbert & Co.'s, exerted a power expressed by the dynamometer as 4 stones less than Cuthbert's. The draught of the one was 14 stones and the cut 5 feet 3 inches, while of the other the draught was 18 stones and the cut 4 feet 3 inches. To the eye this reading and the fact were singularly coincident—the horses upon Picksley & Sims' reaper looked as though they had nothing to do, and it was proved that there really was very little occasion to employ two horses at all. Besides this the drop platform very much eased the labour of the rake-man. The vibration of the cutter-bar being very rapid—about 6 to every foot advance—the horses were allowed to walk at an easy pace. The presence of a little wheel just beneath the base of the shaft in a line with the knives, aids materially to protect them against unevenness of the land. Both machines were made well, and did their work well; but there was just this difference detected by the dynamometer, which if the sum were reduced to units of power would display an astonishing comparison between the two. And yet a few weeks ago these two machines were put through a similar trial, and Cuthbert's stood 1st and Picksley's 2d! This fact shows with what care judges should exercise the power entrusted to them by the public. The Kent Local Committee recommends Cuthbert's reaper with manual delivery to the country in preference to Burgess & Key's self-delivery, at a time when we are advancing towards perfect mechanical appliance; and another set of judges place Cuthbert's before Picksley & Sims, with the same means of coming to a truer conclusion before them as were within the reach of the gentlemen who have just awarded the prizes at Leeds. The judgment of one set of men may be reversed by another in the matter of the form and character of a bull because it is a matter of taste, but in such a case as this last there can be no excuse. The implement maker and the implement buyer are both misled and disappointed. Where the Prize system is maintained by efficient judges it is an admirable institution, but when the judges are inefficient the results are very detrimental to all parties concerned.

We are glad that no award was made to the combined Corn reapers and Grass mowers. Their work in the Wheat was slovenly and unsatisfactory in the extreme; and if people will buy them they will at all events not do so on the authority of the Royal Agricultural Society. *R.*

PROGRESS OF IRISH AGRICULTURE.

The following is the speech of his Excellency the Lord Lieutenant at the late meeting of the Royal Agricultural Society of Ireland at Belfast:—

"*If this were the time and the occasion*—which happily it is not—for a mere party speech, or a sort of political survey of passing events, I might possibly light upon one or two considerations and incidents connected with Ireland which might not seem to be altogether of so comfortable and reassuring a character; but, gentlemen, standing here as the guest of the Royal Agricultural Society—as a visitor to the splendid show of the year 1861, in the town of Belfast—I feel, I thankfully feel, that I am placed on a higher level, and command a far wider field of a noble horizon—from this vantage ground. Thus—I say it with all the experience of my twelfth year of direct connection with the government of Ireland—I say it with the reservation that some elements of future uneasiness and disturbance may not even now be wanting, yet in my judgment Ireland has never exhibited such an exemption from general crime, from political agitation, or from physical distress and privation as that which she now enjoys. And I need not say, that these are considerations which far outweigh all others in the satisfaction they impart; and with the full consciousness how small any personal contribution might be to those mighty blessings, it is enough for happiness and for gratitude to have been allowed to witness them. But I can almost fancy that some one might here interpose and say, 'Talk to us of prosperity, when the returns of last year undoubtedly show a falling off in some kinds of agricultural produce, especially, perhaps, in the yield of Wheat, and when the census of the last decade, or interval of 10 years, shows a decrease of nearly a million souls.' Now, with respect to this decrease of the population, there can be no doubt that the famine and pestilence which worked such fearful havoc upon the immediately preceding decade left its mark also upon that which has succeeded it; but there is no question that the continuous flow of emigration is the chief cause of the great reduction which has ensued in the number of the people. If the number of emigrants from Ireland itself, exclusive of those who have left other ports of the United Kingdom, is allowed for, there would have been in the last decade, from 1851 to 1861, an increase in Ireland close upon 40,000. The decrease has been least observable in the province of Ulster, which seems mainly, I imagine, to be attributable to that mixed agricultural and manufacturing industry which there prevails. I need not tell you that no such decrease at all has taken place in the town of Belfast. With respect to the place in which we are now assembled, I shall give only the dates of three successive periods, which sufficiently tell their own story. The population of Belfast 100 years ago, in 1760, amounted to 8600 souls; in 1831, 30 years ago, it amounted to 48,224; and in the year 1861, in which I now address you, it amounts to 119,200 souls. Nor has wealth been left behind population. I find in the valuation for local assessment the fixed capital in building and other rateable property in Belfast was, a quarter of a century ago (in 1836), 115,000*l.*; in 1861 it has risen to 305,000*l.* History bears record to the efforts of successive viceroys, from the Earl of Stafford to the Earl of Clarendon, to advance the linen manufactures of the north of Ireland. Probably the *moisture* of the climate (may I admit *so much?*) is more favourable to the production of Flax than of other cereal growths. I need not remind you in Belfast how much that place owes to her Murlands and Mulhollands, and many more. It may be sufficient to mention that in the last year there were exported from Belfast 65,000,000 or upwards yards of linen, valued at about 2,000,000*l.* sterling, and, at the same time, yarns and threads to the amount of 3,000,000 lbs. weight, valued at 7?4,000*l.* The improvements which have been effected in the noble harbour of this town have amounted within twenty years to half a million of money, and this without any aid from public grants: and within the same comparatively short period the tonnage of vessels and the harbour receipts have been much more than doubled. Now, it may be inferred how material a contribution this liberal and splendid community, together with its group of connected and associated towns, must have made to the consumption of agricultural produce. But I have already stated to you, gentlemen, the amount of decrease which has occurred on the whole population of Ireland in the last ten years. Now, with respect to the productiveness of the country within the same period, the land under cultivation—either under tillage or in meadowing and pasture—in 1841 was 13,000,000 of acres; in 1851—I suppress the slight addition that the odd hundreds would make—it was above 14,000,000; in 1861 it is above 15,000,000 of acres. The live stock, which forms so interesting an item in the exhibition of the Royal Agricultural Society, was valued in 1841 at 21,000,000*l.*; in 1851, at 27,000,000*l.*; in 1861, at 33,000,000*l.*; and this independently of the improvement of quality in the animals, which I believe is by every one admitted to be very great, amounting, perhaps, to 25 per cent. Along with this great increase of productiveness there has been a very striking diminution of the small holdings and of the wretched cabins of the peasantry. Now, gentlemen, *these figures which I have passed in rapid review* surely show that with largely increased production and a *largely increased producing area, there has been a considerable* diminution of population. Now, taking these two together, we must look upon the result as being occasioned by better labour, better directed, with a larger application of capital. The social and the *necessary* consequence of this is, that the working classes must obtain better wages; they are better fed, better clothed, better lodged, they can get better education for their children, and most gratifying it is to me to find that in Ulster, or, I believe, to speak with more strict accuracy, in the two counties of Down and Armagh, one-sixth of the population is in attendance in the primary schools—either those under the National Education Board or under the Church Education Society—which is an average equal to that of Prussia, where the attendance of the children is compelled by law. I referred before to the diminution of physical suffering. Now, what is the case with respect to the direct expenditure for the relief of the poor all over Ireland? The fund from which it is drawn has, there is no doubt, largely increased. The value of property rated to the relief of the poor in 1851 was 11,614,000*l.* In 1860 it had increased nearly a million—it was 12,2?0,000*l.* Now, with this larger amount of funds for the purpose of drawing upon, I find that the total expenditure of the medical as well as ordinary poor law relief

in 1851 amounted to 1,150,000*l*. In 1860 it had fallen to 558,000*l*., being less than half what it was 10 years ago. And lastly, with respect to crime, to which I also referred, it appears that those specially reported to head-quarters in 1850 amounted to 10,639; in 1860 they had fallen to 3531. Now, my lords and gentlemen, it seems to me that this constitutes a summary of which Ireland may be justly proud. Not indolently proud. I would advise her to be grateful for the past, and alert and emulous for the future. There are many here, some of whom will follow me to-night, who can speak with far greater knowledge and authority of the characteristic features of the show which we have witnessed in the show-yard for these two days. They will be able to tell you of any shortcomings—if shortcomings there are—and of those excellencies which I feel no doubt in my own mind are great and striking. If the condition and prosperity of agriculture in Ireland suggest any prominent point of advice, in my judgment it would be, I would say to you, to take care of your green crops, of your provision of winter food for cattle, so that you may be supplied with a greater quantity of manure than is now possessed in many districts, which is an indispensable groundwork of increased tillage; and I think it may be worthy of some consideration whether planting might not be resorted to with advantage in some of the more hilly and exposed districts of this country for the shelter of cattle. However I feel most thankful that the genius of Ireland is becoming every day more and more awake to the manifold and multifarious refinements and claims of her agriculture; and most pleasing, indeed, in one point of view, though painful to excess in another, is the contrast which is presented by such a sight as the show-yard now open in Belfast with the scenes which are being enacted among that great people which has so many common ties and common interests with us across the western waters. Here, gentlemen, we scan an area itself connected with all the operations of busy and extended commerce now spread before our gaze—the representative specimens of every form of peaceful agriculture—the sleek herds and fleecy flocks, the iron implements and lustrous damasks; there, gentlemen, we read of nothing but masked batteries and the angry glare of bayonets, and the fierce charge and the panic rout. May the time soon come which will enable us and other friendly well wishers—as I am sure in our hearts we all are of that great country—will enable us and others to interpose our friendly mediation, if (which would be far better) they do not themselves compose their sad and guilty quarrels. But however that may be, I trust that we, at least, with humble and hopeful hearts, may long preserve the inestimable blessings we enjoy, and strive to transmit them bright and undimmed to the coming generations."

His Excellency resumed his seat amid loud and reiterated applause.

SUBSTITUTE FOR ROOTS AND HAY.

WHEN I undertook to write on this subject, I was aware that my own experience alone was not sufficient data for guidance. I therefore made some inquiries among my agricultural friends, in different districts where I was aware that different systems of feeding were adopted, and before alluding to any systems that have been conducted under my own superintendence, I shall first give you the benefit of these inquiries; I shall next take the results of my own experience; and then conclude with what, in my estimation, are the most economical substances to be used, *in conjunction with a limited supply of roots and hay, for keeping store cattle in growing condition, and in fattening or preparing grazing cattle for the butcher.* The most elaborate of these replies is from Mr. Coleman, Woburn, which I regret time will not permit me to give in full. The system of using prepared food has long been adopted for feeding cattle at the "Park Farm." Mr. Coleman writes thus:—

"Your question I am quite unable to answer, as, under all circumstances, it is impossible to say what is the best substitute for roots. But I suppose your friends want to find out how to keep cattle, both for store and feeding purposes, without so great a consumption of artificial food as has this year been employed to make up for the bad quality and short supply of roots and hay of last season. The article which I think may be made much more use of than at present is straw; of this but few farmers know the real value; and were more care taken in the harvesting and preparing of it for our cattle, it would play a much more important part in the economic feeding of stock than it does at the present moment. Any description of straw I consider to be of little value when given in its long or natural state; it must be cut and mixed up with hay, roots, meal, &c., to make it palatable, and when so treated goes a long way to supply the deficiency so much complained of this season, viz., a short root and bad hay crop." In describing the system of preparing food, Mr. Coleman writes:—"I will now detail, for the benefit of your friends, the plan I pursue now, and which I think is one that enables me to keep one third more stock than on the dry or Norfolk system. The corn or meal I use is ground, and then boiled; the chaff is placed in layers of about 6 inches in thickness, in large cisterns; upon this chaff a thin coating of pulped or cut roots is spread, and upon the roots a portion of the boiling mucilage is poured, to which, after being slightly mixed, is added more chaff, roots, and mucilage, until the cistern is quite full. It is then left for 24 hours, in which time fermentation takes place; and with three parts of straw and one of inferior hay, 1 lb. of Linseed meal, half a bushel of roots per head per diem, I have had 80 head of store cattle all winter, that have kept in good condition, thriven, and done well. With fatting cattle the proportion of hay is greater, and I generally commence with 4 lbs. of meal or cake, and gradually increase to 8 lbs., which quantity I rarely, if ever, exceed. My mixture usually consists of 1 lb. Linseed to 4 lbs. of Barley, Lentils, or other corn meal: it boils down and makes a much better mucilage. Upon 120 acres of roots, 100 of upland hay, 80 of pasture hay, I never had less than 250 head of cattle all winter: 80 fat ones sold at Christmas, and I shall get rid of 80 more before this month is up: 80 store cattle, &c., and over 1000 sheep. I hesitate not to say, had it not been for the consumption of straw I could not have kept much more than half the number. As to feeding stuffs, Linseed cake holds the highest place. Cotton seed cake is much used in this neighbourhood. I prefer it when things are at Grass, or receiving large quantities of roots. Most of the meal, I find, answers better when mixed with Linseed meal than when used alone." Mr. Lillie writes me as follows:—"My practice for the last six years has been to use the pulper, and mix with straw, chaff, &c. The first year I fermented the mixture. Cattle are very fond of it, and it is very wholesome, but it is so difficult to keep in proper state that I have abandoned it. For example, every change of weather has its effect; in frosty weather it will take four days or more, and I have it found fail altogether; in fine weather I have had it quite hot in 24 hours. My allowance of roots is 56 to 70 lbs. per day, for 100 store beasts, mixed with sufficient chaff to serve as fodder, and mix it to lay 24 hours. I have found no artificial food to beat good Linseed cake. Prices are so nearly on a par generally between cake and other feeding stuffs that I have seldom been inclined to give it up, even on the score of economy. I never give cake until the last two months, beginning with 3 lbs and finishing with 6 lbs. To store cattle I never give cake; they do exceedingly well on the mixture, and keep much more healthy than on roots and straw separately. There is no doubt but by the system of preparing food for cattle many of the most valuable ingredients are greatly economized; on the other hand, the cost of attendance is nearly, if not quite, double what it is on the old system of feeding on roots and fodder alternately. But I am satisfied that all this is saved on roots alone; thus, as it were, converting labour into food. A good thing for young store cattle is molasses liquefied in warm water, and sprinkled over the heap; they will eat it with avidity."

I shall only give you one more of these communications. In writing to Mr. M'Culloch, he sends me his published experiments (embracing 63 cattle and 21 lots), fed on auxiliary food in conjunction with roots, at Logan Main, and conducted for two seasons. They are the most comprehensive and complete that have yet been laid before the public. As they are already before the public, I shall only read you Mr. M'Culloch's conclusions:

"The two facts of greatest practical value brought out by these experiments are the superiority of cooked over uncooked food as an auxiliary to roots. By merely boiling the same quantity of Bean-meal (4 lbs.), instead of giving it raw, an equal result is produced by 71 cwt. of Mangels as by 84 cwt., and with Swedes the cooking of the auxiliary Bean-meal makes a saving over the raw meal of 27 cwt Swedes: or, to put the value of the cooked food in another light, it appears that an ox fed on Turnips alone consumed daily 150 lbs. Swedes, while one with 4 lbs. raw Bean-meal consumed daily 130 lbs. Swedes, and another with 4 lbs. Bean meal cooked consumed daily 100 lbs. Swedes, the 4 lbs raw Bean meal being an equivalent to 20 lbs. of Turnips; whilst by merely cooking it, it became equal to 50 lbs. Turnips. So simple a process must recommend itself, by the above surprising and satisfactory results, to every feeder of live stock."

Having thus given you the experience of others in different districts, I shall now explain to you the system we adopt in feeding cattle in our own establishment; and before doing so, allow me to bring under your notice some experiments we have conducted, in order to find the most economical food in conjunction with roots and hay. These experiments have recently been given to the public in the Highland Society's Journal, therefore I shall only state the results: Six bullocks that were bred upon the farm were equally divided into single boxes. They were supplied with cut roots, the first month Swedes, the second Swedes and Mangels mixed, latterly Mangels; in addition they had 6 lbs. rough or low meadow hay cut into chaff, and 5 lbs. oil-cake, or value to that amount. They were divided into three lots of two each: Lot 1 had 5 lbs. oil-cake each bullock, Lot 2 Barley and Wheat-meal to the same value, and Lot 3 bruised Linseed. The oil-cake cost 10*l*. 10*s*., Barley and Wheat-meal 8*l*. 15*s*., and the bruised Linseed 13*l*. per ton. The experiment lasted four months, or 112 days; each bullock was weighed before putting up, and every successive month. It was found that the increase at the end was as follows:

Lot 1. Oil-cake gained live weight		637 lbs.
Lot 2. Wheat and Barley meal	do.	667 lbs.
Lot 3. Bruised Linseed	do.	718 lbs.

It is thus shown that Linseed gave most weight for value consumed, and oil-cake the least. As already stated, the experiment was continued for 112 days; we, therefore, find that each bullock during the time consumed 5 cwt. oil-cake, or value to that amount, 6 cwt. hay chaff, and 90 cwt. of roots. It is found that the average increase was 337 lbs. each live weight, which is equal to 16 stones (14 lbs.) dead. The feeding statistics will stand as follows:—

	£	s.	d.
5 cwt. oil cake at 10*l*. 10*s*.	£2	12*s*.	6*d*.
6 cwt. low meadow hay, at 60*s*. per ton	0	18	0
16 weeks' attendance at 1*s*. 6*d*. per week	0	8	0
	3	18	6
16 stones of beef gained at 8*s*. per stone	6	8	0
	£2	9	6

Thus leaving us 49*s*. 6*d*. for 90 cwt. of roots consumed, or 11*s*. per ton. I have been rather prolix in describing this experiment, because it is the opinion of several present that bullocks never pay for food consumed. Now, let us see how our northern friends manage their roots, and how they feed. Mr. M'Combie, Lillyfour, writes me from Aberdeen in answer to my inquiries:—

"I fat from 300 to 400 beasts annually—my average price for them in London this season has been 35*l*. a head; I never exceed 4 lbs. oil-cake and 2 lbs. bruised Oats a beast per day; they have what Turnips they can consume, and Oat straw *ad libitum*. 12*l*. per acre is my average profit in feeding on Aberdeen yellow and Swedish Turnips. I sometimes realise less—often more; but the above is my average."

Now wherein lies this great difference between the feeding statistics of this cannie Aberdeenian and Mr. Alderman Mechi, who has so strongly expressed his opinion of the unprofitableness of fatting stock, characterising them as a necessary evil? It may be surmised that northern roots are more nutritious; but I am inclined to think there may be another difference. To my knowledge our northern friend is a shrewd judge of lean stock; he only selects those likely to pay for food consumed. I have no means of knowing how the alderman selects the animals he means to fat; but, judging from the specimens I observed when I had the privilege of looking over his farm, they were not the best adapted for converting food into beef to supply the million. Therefore, I am inclined to think it was not the food which made the difference; it was the beasts which consumed it. I have no doubt it is often the selection of our lean stock which makes the grazing box pinch us. On referring to Mr. Lawes' (Cirencester) "Handy book," we find he realises, after charging 10*s*. per ton for his roots, which agrees pretty well with our own experiment; and if we take Mr. M'Combie's Turnips at 25 tons per acre, which we are justified in doing, it will appear that properly selected and judiciously fed bullocks will leave some 10*s*. per ton for roots consumed, which is contrary to the opinion of many members present. We have thus shown how roots may be profitably consumed, even by bullocks, if we could manage to raise them successfully; but in this we have to contend against the variations of seasons in regard to rain and temperature, in which we have found the effect during that ever-to-be-remembered season—1860. On our farm we grow annually some 40 to 50 acres of Swede and Mangel, to be drawn to the homestead for consumption. Last season we were some 15 tons an acre short of the crop of 1859. With the same number of stock on hand, and some 500 to 600 tons of roots short, our brains were a little taxed as to how we should get over the winter. However, we adopted the mixing system, and derived a great advantage therefrom. The dry food we cut into chaff, and mixed with a limited quantity of roots; our artificial food, principally Linseed, we mixed with damped chaff; for our dairy cows we used Bean-meal, mixed in the damp chaff. In short, our food was all mixture; and I can now, with confidence, recommend it to the members of this Club; for our beasts did equally well with one-third of roots, and we had no symptoms of that detestable scouring which is sure to follow injudicious use of neat roots. I shall now state what I have found to be the most economical artificial food in conjunction with a limited quantity of roots and hay. For all beasts fatting I would use bruised Linseed and Bean-meal in equal proportion, mixed with damp chaff; four times a day—hay chaff and corn morning and mid-day, with chaff and roots intervening. If hay is limited, use straw chaff in the roots. When roots are short, for store beasts I would recommend 1 lb. Linseed, mixed in damp chaff, and 2 to 3 lbs. Cotton cake. For dairy cows I would recommend 1 lb. Linseed, and 2 to 3 lbs. Bean-meal—if cooked, all the better. In this branch I would strongly recommend liberality, as it is "from the mouth the cream comes." I have refrained from any detail on steaming or pulping, as yet we have not adopted that system in our establishment; I have read to you the communication kindly sent by those parties by whom it is practised, and on well-arranged establishments I have no doubt it is satisfactory. However, the mixing system may be adopted by all who use Gardner's cutter and one chaff-cutting machine. One system I cannot too strongly bring under your notice; it is that described by Mr. M'Culloch:—

"I adopted the system one season in fattening some four score beasts, and I never had animals do better. It may be adopted by every one that has a copper. To every quart of water when boiling put 1 lb. of Bean meal, well stirred. The fire is then withdrawn, and the jelly can be mixed with any quantity of Linseed meal, &c., or chaff meant to be used. If given to the animals while warm, they will eat it with avidity. Any other artificial food may be used in conjunction with the Bean meal, but that should be the standard for cooking."

According to Mr. M'Culloch's experiments, 4 lbs. of Bean-meal, when cooked, became equal (in conjunction with a fair quantity) to 50 lbs. roots. I shall leave it with you to decide which can be raised the cheapest. I shall only just advert to the artificial food we now find in the market. Oil-cake (like guano in the manures) is, and will be, the standard, most especially for fattening things. Rape-cake is no favourite of mine, unless in conjunction with more palatable food. It is not eaten with relish. Cotton seed cake I can highly recommend for store beasts or sheep; but it is inferior for fattening. In some of my experiments in fattening it stood very low; but in using it for store cattle, I found they did remarkably well upon it, and all stock are fond of it. It being but recently introduced, I wrote to Mr. Lawes concerning its chemical properties. He kindly wrote me as follows: "The decorticated Cotton seed cake has not yet received the attention among farmers it deserves. For certain purposes it is most valuable, and store beasts will do better upon it than upon the same weight of Linseed cake. The manure is more valuable than that from any other substance. Good decorticated cake should be of a bright yellow colour, with little or no husk in it. It should appear oily, and without any acid taste." There are many more substances, but I can only recommend those I have found to answer my purpose.

I conclude with an allusion to the vexed question of manure, where our friend the alderman buried his 200*l*. value of beautiful roots, and on that I must refer you to Mr. Lawes' valuable published tables on the value of manure made from different substances, into which time will not permit me to enter. I shall only draw your attention to one item. In the experiment recorded to you, as conducted at our homestead, it was shown that Barley and Wheat-meal, at one given price, produced more beef than oil-cake did. But in referring to Mr. Lawes' tables it will be seen that the manure produced from a ton of the said meal is only valued at 31*s*., while that produced from oilcake is put down at 92*s*., thus giving 61*s*. more value in manure from oil-cake, when the beef realised was nearly on a par. So much for facts and figures for our future guidance. *Mr. Horne before the Rye Farmers' Club.*

Home Correspondence.

Management of Sheep.—Your "Correspondent" has touched on a most important subject. He puts forth three questions. As he is in a Down country he is probably well informed as to the breeds of West-downs, whether such as bred by Mr. Humfrey of Oakash, with a strong dash of Southdown blood (Jonas Webb) Mr. King, or the, so to speak, coarser animal bred by Mr. F. Budd, of Hatch Warren, and other well known Hampshire and Wiltshire breeders. This is to a certain extent a geographical and geological question—why otherwise are cross bred flocks seldom found in Down countries, or why do they prevail in the vales north of the chalk range, and south of the Leicester and Cotswold districts? If this be so, it answers his question in favour of No. 1, and he must trust to judgment and care to avoid foot-rot and disease. As to No. 2, it is notoriously difficult to get 150 really good half-bred ewes, to say nothing of the difference of type pervading such a flock. I live in a cross breeding district, and have now a small flock of very good cross-bred ewes whose lambs will all be fatted. No ram that could be selected would give to their produce such an identity of type as to commend it as a flock from which hereafter to breed. The selection of the ram must be entirely a matter of judgment, and must have reference to the cross to which they are put, the object being generally to counteract the preponderating character in the ewe. The thorough cross breeder would advise a cross-bred ram, others would take the Cotswold or the Westdown. Leicesters are not used here. If he wishes to give the question a fair trial he will breed his own cross. Take known instances. To a flock of Sussex Down ewes put a half-bred Cotswold and Westdown ram, if more carcase is wanted, use a ram from a large Westdown ewe by a half-bred Cotswold and Westdown; the produce fails to realise the anticipations of the breeder and tends to the mongrel. Again, begin with the Southdown ewe and Cotswold ram slightly crossed with Leicester, and continue this breed when so crossed; the first cross is the best, and the produce will tend to deterioration. Again, begin with the Westdown ewe and Cotswold ram, and you have a noble animal in fleece and carcase; breed on, and with all your judgment and knowledge of selection, you will find it very difficult to maintain any definite type, and prevent the natural tendency of all animals to revert to the distinctive features of one or the other of the original stock. No. 3 would probably be the best money speculation, because the first cross would give you just the animal that in fleece and carcase would bring the best price if "the whole produce were fatted," and the process repeated and kept up by continually replacing the draft ewes. The effect of this on the stock of sheep needs no comment. A full discussion of this subject is much to be desired. *J. C. C.*

Agricultural Statistics.—I see by a late Number of your Paper that the Government is desirous to ascertain the agricultural statistics of England, on the same plan as that so long, and, as is represented, so successfully practised in Ireland. I see also that many of the English farmers object to this species of inquisition. At first the people of Ireland generally speaking had a similar objection, but from a very different cause. However the Irish, with scarcely an exception, gave up all opposition, and rendered every reasonable assistance to the police in collecting the statistics, and notwithstanding that and the much vaunted correctness of the Irish statistics, there never yet was a greater fallacy, especially as regards the value of farm stock, though the most simple and most readily ascertained. In fact the statistics as published by the Irish Registrar-General, afford no correct guide either to the Irish farmer, Irish landlord, provision merchant, or the legislature, nor service to any one in the world except a few leading politicians and political writers, especially at your side of the Channel; and if some of the recommendations which accompanied them and to which they gave rise were acted upon, it would in the first instance effect the ruin of all classes dependent at all on agriculture in Ireland, whilst the effect on England both at home and abroad would be dreadful to contemplate. If asked—can I prove these things? I say "Yes, before any properly constituted tribunal in the United Kingdom." From the foregoing some of your readers may suspect me to be opposed to the collection of agricultural statistics. That suspicion would be quite unfounded, as I can readily prove by many acts of my own, one of which was the drawing up and passing a series of resolutions at the Enniscorthy board of guardians not long since, and without a dissentient highly approving of such collection, and reporting upon, provided such be correctly and fairly done, as ours certainly is not. A copy of these resolutions was sent to our Registrar-General, too late to be acted upon this year it is true, but to signify to him the necessity of his observing more circumspection in future. If asked—can such be ascertained with any degree of accuracy? I answer "Yes, and with the greatest ease," provided the Registrar-General will go rightly about it, and with very little additional cost over that which is now quite uselessly and, as many impartially minded and best informed men believe, mischievously expended. This done, a mass of the most valuable information could be had for the benefit of all classes generally, but for the Irish farmers and Irish landlords more especially, being the classes who stand most in need of it. I could give you many examples to prove all I state, and much more than I have even hinted at, but I fear now to do so. I should be but provoking a discussion such as some might think unsuited to your pages. And without even running such risk I can say a good deal more that the English farmers should know before they lend themselves to the collection of agricultural statistics, if to be done as ours were done—up to this time at least. *Edward Carroll, P. L. G., Enniscorthy Union, Cranmore House, Newtownbury.*

"*More Beef, &c.*"—The Indian striped or riband Grass which is cultivated in gardens would answer admirably for hay. In rich grounds the plants are frequently four feet high. What a burden of hay would a field so cropped produce! Cattle are exceedingly fond of it, the seeds easily saved, so that a person might soon have enough for a rood, and from that save again and again for as many acres as he chooses. It is probable that the crop might be too large to be made on the field where it grew, but if so, it would be worth while to carry part into another field. (Liquid Guano and Pigeon's dung, if distributed with "Liquid Manure Distributors," improve moist meadows very much by extirpating bad kinds of Grasses, bringing white Clover in its stead, and augmenting the crops.) *J. B.*

The Game Question.—Sir Bourchier Palk Wrey, Bart. has made over the whole of the game on his North Devon property in the parishes of Tawstock, Tawton, Justow, and Braunton to the occupying tenants. Each tenant will have the game on his own farm, by the payment of a small sum for such farm per acre per annum.

Tarred Canvas has been found advantageous to cover ricks of hay and corn temporarily before thatching. What is there to prevent carrying this system still further in rainy seasons by covering stooks of corn, and cocks of hay or corn, when in the fields, with pieces of tarred canvas, say a yard square, pegged to the ground by a tag and cord at each corner before stacking? *George Walcott.*

The Cow Parsnip.—Will you have the goodness to inform me the name and nature of the enclosed plant. Is it wild Parsnip? It grows in great abundance in meadows in the Black Forest, and is cut either for hay or green fodder. I was informed by a Scotch lady I met there that it grows also in great abundance in woods and wild places near her place in Fifeshire, and is there called Cowkeep. *Essex.* [Your lordship's plant is the Cow Parsnip (Heracleum Sphondylium). Hooker says hogs are fond of this plant, and it is said to be wholesome and nourishing for cattle in general. We have experimented upon it as cattle food, but cannot recommend it. When it is in quantity in the pastures it is objectionable as taking up so much of the place of what might be better.]

Societies.

CRYSTAL PALACE POULTRY SHOW.

When this sheet is in our reader's hands, the lower part of this splendid building will no longer resound to the crowing of cocks. The implements will no longer be out of doors (by the way, as they stood on the flower slope, we could not help thinking that even they wanted rain), and all will be as it was. It may be that some of our readers will be curious to know where the show was held, after the destruction of its old locality. Well, it was where it ought to be; it was among the agricultural implements. The connection between the two should not be forgotten. Too often poultry is like the doctor: appreciated when wanted, snubbed when not in request. We are very desirous to see our agricultural friends take it up. It has been almost an annoyance to know, that while people have been called maniacs for their love of poultry; while it has been matter of remark that every one kept it; the supply in the markets has fallen off. We have thought the question sufficiently important to justify enquiry, and we have been told by those who know, that the falling off of poultry is just in proportion to the increase in the size of the farms. Small farmers raise a great deal of poultry and sell it all the year round; large ones care little for it, except as an article of food. "Esto perpetua," say we, and may they always eat poultry, because that will be our security that the 70*l.* or 80*l.* per year, or the 100*l.* or 150*l.* are not an object. Sooner or later the question will be seen aright, it must make way; the enormous sums of money sent abroad for poultry and eggs will be partly kept at home, and many a straitened household may improve its circumstances by the help of poultry, or a poor town invalid be grateful for the new laid egg brought within his or her means. Then the practical utility of these gatherings will be seen: then it will be known, the object to be attained was not only a bird of cheerful plumage and harmonious contour, but this was to be an open book in which poultry information could be found. Whatever the requirements might be, whether eggs or fowls, the information could be had. An intended poultry keeper can ascertain with the help of his catalogue the birds that thrive best in certain counties and on certain soils. Not the least important lesson to be learned, is, that the ridiculous plan of keeping cross bred fowls, or fowls of no breed at all, is exploded; all exhibitors here not only true but high bred birds of their respective classes. In the days when accurate statistics can be had, people will be astonished at the millions that have left England for poultry. This will be the day of triumph of poultry shows, and of the nobility, professional men, and others who have done that for a pastime in the teeth of every disadvantage, which others neglected, although it seemed part of their calling.

Before treating of the most remarkable birds in the several classes, we must mention it has been an unfavourable year for chickens. This will account for the absence of some names that are generally to be met with.

Spanish were highly meritorious in their several classes. We were very sorry to see in some instances undoubted proof of trimming, and we think we could see the penalty paid by such pens. Messrs. Rodbard, Martin, Fowler, and Wright showed excellent chickens.

Dorkings were as usual a show in themselves. The Hon. W. W. Vernon deserved his success. His pen was unusually good, but it was very close work between the other prize and the highly commended birds. We must refer our readers to the prize list for them, merely asserting they were very meritorious. We can say as much for the pullets. The single cocks were admirably chosen. Captain Hornby took the first prize, and his bird was claimed; Mr. Lewry was second, and Lady Julia Cornwallis third. We are glad still to report favourably of the White Dorkings. They keep up their size, and Mr. Lugwood and the Rev. F. G. Hodson deserve mention. The Cochin Chinas, Buff and Cinnamon, were very far above the average, and the old "Kings of the Castle" had to give up before Mr. Kellaway. Miss Musgrove's Partridge Cochin pen was among the best we have ever seen. Cocks of this breed must have black breasts. With the exception of the prize pens, we did not think highly of the White Cochins; Mr. William Dawson's were very beautiful. Miss Musgrove and Mr. Kellaway were again successful for Single Cocks. Brahma Poutra chickens were very beautiful; Lady Louisa Thynne and Mr. Fowler deserved their prizes. Mrs. Fergusson Blair showed an excellent Brahma Cock, which deservedly took a first prize. The game classes were very good, and ministered as usual to the triumph of Messrs. Vernon, Horton, and Archer. Mr. Fletcher took four prizes in these classes. The Pencilled Hambro's were all good, but the Golden was unquestionably one of the best classes we ever saw; Messrs. Munn and Martin deserve notice. Mr. Oxley overcame all competitors for Single Cocks. The Golden Spangled were not so good as the Silver; the latter were very strong, and Lady Julia Cornwallis's hen was an excellent one. The Black Poland with white tops were admirable; the Golden very poor. The Silver left nothing to desire, Mr. G. C. Adkins took the prizes for this and the next class. The Malays are always good at the Crystal Palace, and they were so now. The distinct breeds showed badly. The Bantam classes afforded an unbroken triumph to Mr. Harvey Dutton Bayley, except in the White colour. The Rev. P. W. Story showed some beautiful birds.

Ducks were very good; Mrs. Seamans took both prizes with pens weighing 21¾ and 21¼ lbs. Mrs. Fergusson Blair sent from Scotland and gained the prize for Rouen Ducks. The Black ducks were beautiful. Mr. Manfreed's prize Goslings weighed respectively 40¼ and 38¾ lbs. Mrs. Blair again was first in Grey Geese, 48½; White, Mrs. Seamans, weighed 48 lbs. There was a large show of good Turkey poults, weighing from 8 to 10 lbs. each.

The judges were Messrs. Hewitt and Baily.

Northumberland: *August* 8.—The annual exhibition of stock and agricultural implements under the auspices of this important society, took place this day at Newcastle; it being (according to the rules of the Society) five years since the town was last honoured with a similar visit. Few agricultural associations have been more efficiently or satisfactorily worked, as all who have been acquainted with its history will bear witness, than the Northumberland Agricultural Society.

The show was held in the Bull Park, on the edge of the Town Moor. The exhibition, as a whole, was of very superior character; though in some classes the entries were deficient in number. The latter remark is especially applicable to the entries of Short-horn stock. They were an uncommonly good class in point of quality; but the entries were few. The fact seems to be, that many competitors are dissuaded from entering when it becomes generally known that two or three fine animals are likely to compete, against which there is no chance whatever of success. This appears to have been the case in the present show; and it was suggested by several persons on the ground that, without some system of handicapping, it was hopeless to expect better numerical entries. These great competitors, remarked an observer at our elbow, keep their heifers drinking new milk, and in every way overfeed them; and so produce an unfair species of competition, against which animals subjected to ordinary feeding cannot stand any chance. In the Short-horn bulls there were five entries. The first prize was carried off by Mr. William Lambert's "Master Annandale;" Messrs. Browell's "Cœur de Lion" coming second; and Mr. Thomas Hunt's "Havelock" third.

This result reverses the decision at the Durham County Show at Darlington; where "Cœur de Lion" carried off first prize. The prize bull here, "Master Annandale," was generally thought, on the show-ground yesterday, to be the premier animal of the two; and the judges' decision, so far as we heard, was generally approved. "Master Annandale," it will be remembered, won the Highland Society's first prize, last year, at Dumfries; the second prize at the Northumberland Society's meeting last year at Alnwick; and the first prize at the Tyneside Agricultural Society's meeting last year. In the yearling bulls, the premium prize was won by Sir Walter C. Trevelyan's "Gipsy Prince," which also won the first prize at Darlington. As respects the other two prizes, there was a very hard tie between Mr. John Angus's "Raspberry," and Mr. John Atkinson's "Fertility;" the latter carrying the honour after a hard contest. In bull calves, Sir Matthew White Ridley's entry carried off the first prize; and Mr. Thomas Jolly's entry the second prize. In Short-horned cows, Mr. Richard Booth's "Queen Mab" was the winner; his "Queen of the Vale" carrying off the second prize. Sir M. W. Ridley also showed two excellent cows in this class, which were commended. The heifers were of extra good quality; Mr. Booth's "Soldier's Bride" carrying off the honours; and Mr. Jefferey Bulmer's "Princess Royal" the second prize. In the yearling heifers the awards of the judges excited some criticism; Mr. Thomas Jolly's "Roseneath," although receiving only the high commendation of the judges, being, in the opinion of many, superior to both the prize animals. For the premium given by Sir M. W. Ridley, for heifer calves, there were two entries—one by himself, and another by Mr. Thomas Trotter, Bywell, light roan, calved April 16, 1861, by Orpheus (15,030) dam Queen of the Tyne, by Abraham Parker, (9856), gd Emma, by Sir Harry (10,201). The judges had the greatest possible difficulty in deciding upon the merits of these two entries; although there must have been a wide difference in the feeding of the two animals. Mr. Trotter's animal was five months younger than Sir Matthew White Ridley's. On the whole, the Short-horn show, though not large, was of premier quality.

Passing on to the *Sheep*, we have to report here also that the entry was small; but there was some first-class stuff on the ground. The fact is, that our Northumbrian farmers do not consider the south country sheep at all well adapted for the Cheviot ranges of their native county; and do not like to bring the white heads of the north to compete with the blue heads of the south. It will be seen from the prize list that the first, second, and third prizes in Leicester sheep were all carried away into Yorkshire. For shearling rams, the prizes all went to Kelso. In Cheviot sheep, the honours all remained in the Cheviot district.

The *Horses* in all classes were both numerous and excellent. The blood horses excited special admiration. In fact, the show was pronounced by every one to be very satisfactory; but we heard much dissatisfaction expressed with the decision of the judges, especially in brood mares.

The *Pigs* were a splendid lot; but here, again, most of the honours went into Yorkshire. The following comparative statements of entries at several of the Society's shows, since the Hexham Show eight years ago, will be read with interest:—

	Hexham. 1853.	1858.
Bulls	20	32
Cows and Heifers	27	40
Leicester Sheep	70 pens	44 pens
Cheviot Sheep	29 pens	34 pens
Horses	74	142
Swine	24	28
	244	320

	Morpeth. 1859.	Alnwick. 1860.	Newcastle. 1861.
Short-horned Cattle ..	58	61	38
Sheep (pens)	71	93	68
Horses	116	110	130
Swine	14	29	31
Implements	130	190	176
	389	483	443

There was a falling off in the number of entries in this class, when compared with last year's show at Alnwick. The falling off was only in numbers; for some of the implements showed improvements the want of which has gradually become more discernible as the use of machinery has come into use on an extensive scale in farming operations. Nearly all the principal manufacturers of agricultural implements were represented by some article useful in farming economy.

The Annual Dinner of the Society was held in the Town Hall; the Hon. Henry George Liddell, M.P., Eslington Park, in the chair. The Chairman gave "Prosperity and Success to the Northumberland Agricultural Society."—He said: "I should do scanty justice to this Society, and to those who maintain and promote its operations, if I measured its value and usefulness only by its exhibitions of rivalry in stock and implements. We must not forget that the Society has other offices to discharge. One of its most valuable—if not the most valuable—of its functions is to be found in its awards of prizes to agricultural labourers. These prizes are as important as those which may be awarded either to owners or occupiers of land. Often have I observed with delight the interest excited by the ploughing and hedge-cutting matches of this Society; when as much emulation is to be seen amongst the labourers as we have seen to-day amongst the exhibitors in our show ground. I have often watched the honest pride and satisfaction of some of these competitors, the zeal of the fresh competitors, and the eagerness of those who had successfully competed before, to prevent their honours being wrested from them. Then, as you know, there is the show of entire horses earlier in the year. In fact, one may say generally that the shows and operations of this Society are channels by which the experience, practical knowledge, and inventions of every individual, though living in the remotest district, may be made available for the purposes, uses, and advantages of all. It is through these and similar societies that the lecturer, the experimental chemist, and the mechanic, each bear their share and quota of information to the common stock of knowledge bearing on the culture of the soil. We must remember the valuable treatises which are circulated through the medium of such societies; the admirable discussions and practical lectures in our farmers' clubs and kindred societies; and we must remember that it is by such means that the founders and supporters of such societies have invested agriculture with combined action—a most important feature where large forces are employed. Union is always strength; and it is by these great channels of communication that benefits are conferred upon English and foreign agriculturists. Not that we are likely to gain much from foreign farmers; but still French ingenuity, and American invention, and English perseverance are all brought into a harmonious course of action, and each benefits one by the other. I am reminded that the year 1862 will be a great epoch in English social history. England is about to summon the nations of the world to exhibit their arts and industry. The Royal Agricultural Society has wisely determined to hold its annual meeting in London in that year; and I hope and believe that the English farmers will be there in large numbers to prove to those nations that not only in the loom and the furnace are they prepared to hold their proud pre-eminence as the greatest producing country in the world. I hope the English farmer, and the Northumbrian farmer too, will be present to show that though the foreigner may have sunnier climes and more favoured and fertile soils, we in England have made chemistry to supplement the defects of our climate, and that there is no soil which we cannot, by skilful mechanical appliances, render productive and useful. Though we may borrow ingenuity and invention from the foreigner, he has much to learn from Anglo-Saxon industry and indomitable energy. Amid all the improvements, which are very great, in the culture of the soil, in the breeding of stock, and in the manufacture of implements, I trust the agriculturists of England will never incur the reproach that they are thinking more of the animal than the man. I trust they will never incur the imputation that, in improving the soil and improving their cattle, they are neglecting the welfare of the agricultural labourer. Although it would be unjust to imply such a reflection in the face of the numbers of cottages and schools which are arising in almost every village around us, I do think that in the whole range of agricultural operations, here yet remains the widest scope for improvement. The improvement of cottages goes further than appears on the surface. Sanitary arrangements and considerations enter very largely into moral results; and if we wish to endear our agricultural labourers to the soil, we must give them comfortable dwellings. If we do not, we must not complain if they carry their labour to more favoured scenes. The history of every country will show that the agricultural population are the bone and sinew of every nation. I have no wish to disparage the skill or circumstances of our artisans; but they are necessarily more unsettled than the agricultural classes. It is to the agricultural classes you must look for the settled element in the state; and you must, therefore, render their condition as comfortable as their circumstances will permit. I take a great and deep interest in this subject; and it is one in which a noble example has been set by many large manufacturers, in the improvement of their workmen's dwellings. I hope to see this example followed by a great improvement in the cottages of agricultural labourers. With these few remarks, which I fear have extended further than I had any right to presume, I beg to give you 'Success to the Northumberland Agricultural Society.'" *Newcastle Courant.*

Tyneside.—At the recent annual meeting of this Society there was a somewhat diminished entry of Short-horns; but the animals shown were of high merit. Two bulls, successful at other shows, were entered, and obtained the first prizes in the classes in which they were exhibited. They were "Cœur de Lion," a magnificent animal, belonging to Messrs. Browell & Co., which gained the first prize in its class at the recent Durham County Show at Darlington; and "Gipsy Prince," a yearling bull belonging to Sir W. C. Trevelyan, Bart., which gained the first prize in its class at Darlington, and the third at the Royal Agricultural Society's Show at Leeds. The sheep were about an average in number and quality. The show was great in horses—draught, hunters, and harness horses—numbering altogether about 60. For the hunters a special prize of 10*l.* was offered; and, after a series of trials at hurdles, it was awarded to Mr. G. H. Burrell's "Verdant Green." Swine were about an average show both in numbers and merit. A considerable quantity of agricultural implements, including some reaping machines, were exhibited by the North of England Implement Company; and Messrs. Pattinson, Dawson, Spencer, & Co., Hexham—the reaping machine attracting special attention. Two new features of the show, introduced this year, were very successful, an entry of 22 being made for a prize for cur dogs, and 12 for a premium for the best sample of butter.

Mr. Grey, of Dilston, proposed the toast of the evening—"Success to the Tyneside Agricultural Society."

He said:—A society of that kind, however, did not embrace all the objects which were included in the improvement of agriculture; but it did embrace, or nearly embraced, that which he held to be of the greatest possible consequence—the branch of agriculture which was found to be most conducive to the interests of this country and most profitable to those engaged in it. That was the production of butcher meat. It happened that things were very much changed since he first knew farming. At that time it was the fashion to consider Wheat as the criterion of value. Those times had passed away however. It turned out now too that the most profitable description of agricultural produce was that produced by the live stock on their farms. There were many countries of the world in which the climate was much more favourable to the produce of Wheat and grain than their own, and where it could be raised to much greater advantage and at much less risk than in their own; it would therefore be a wise thing for them to betake themselves to that description of produce in which they were able to excel. No country in the world could excel us in grazing; he spoke not of England alone, but he included the sister countries of Scotland and Ireland, and there was no country in the world where root crops could be grown, or where the feeding of cattle or sheep could be conducted to such good purpose as in ours. It was, he thought, on all occasions a most pleasant sight to the agriculturist to see, upon the breezy fields, a lot of cattle or flocks of sheep, without any trouble to him, feeding themselves on produce which had been brought up to their very mouths. They required comparatively little expenditure, and they did that for themselves which the agriculturists could not do for them. If therefore they selected the best description of stock that could be had, their next object was to make the land as profitable and as productive for the feeding of that stock as possible. There were yet many pastures in that country which were capable of great improvement, by draining and top-dressing; and that was an object to which the attention of farmers should be particularly directed. It was very desirable, and well worth while, to try to make the land produce the kind of Grass which was the most nutritious kind for flocks to graze upon, and which would not only make it come early into root in spring, but cause it to preserve its nutritious qualities late in autumn. By draining, they were well aware that they could extend the growth of their root crops to a much greater extent than they had done of late; and it was in that way that they could excel all other countries, and bring to market a greater quantity of beef and mutton than they could produce anywhere else. But it was not there that they were to stop. Farming had of late years assumed a scientific character which it had not possessed 50 or 30 years ago. They were now, by the knowledge of chemistry and the application of science, able to discover what were the qualities required in the manure for the production of certain crops, and what were required to be applied to certain soils to make up any deficiency which might exist in them. A great stride had been made in that respect of late years; and instead of the predictions of ruin to all farmers and farming operations, which were common during the time of protection, they knew that the land had increased in value and in demand, that labourers are obtaining much better wages than they did before, and that, in fact, everything had been going forward instead of backward, as had been predicted. They found, under those circumstances, that the farmers themselves were much more intelligent, and he hoped better paid too. He ought to say something about the different descriptions of food they gave to their cattle, and to which it was due that at that time they were able to produce double the quantity of beef and mutton they could raise in former years. Some people he had met with were inclined to laugh at the idea of cooking food for animals, but he thought that that was not an idea which ought to be derided. They could hardly expect that animals would go on with one kind of food so well as they would do if their diet was varied. He thought a general benefit arose from changing the description of food; and even those things that were called condiments, not good actually, but a preparation of food,—something that contributes to the welfare of the animal—to the purity of its blood, and its general condition of health, might be made valuable to the general improvement of the stock. Many people were inclined to ridicule things which were bolstered up with a great many advertisements; and if they saw Thorley's food for cattle stuck up before them in a railway station, with the representation of a very miserable horse before taking the food, and a very flourishing one after doing so, there was certainly something ridiculous in the idea; but he was not going to say that there was anything ridiculous in the substance or use of such applications. How was it that they themselves used sugar and cream to their tea, and mustard to their meat? Something ought surely to be given to an animal for the purpose of assisting it in its digestion of food; and therefore, instead of laughing at those things, they ought to examine into them, try them, and make experiments with them. For himself, he believed that Thorley's food, if mixed with proper food, would be extremely valuable, and give a healthy condition to their animals. He had deviated very much from what he intended going into, but these things were matters for consideration; and as they improved in knowledge and progressed in science, they would be able to find still more that there were a great many things which could be made contributory to the improvement of their stock. There were other things which contributed to the improvement of agriculture, but which were not brought to the test at a show like that. He need only refer to the improvement in implements. They did not in that Society, because they had not funds for the purpose, give premiums for implements; and he did not regret it altogether, because he had never yet seen any very satisfactory results arise from the trial of implements at public societies. A great number of implements were brought together, and they might in some measure judge of the manufacture, and of the stuff they were made of; but it was a mere matter of accident, for no one could make such a trial as would lead to a proper decision in so superficial a manner. He had attended in former years many exhibitions in different parts of the country, and he had never known very satisfactory results to arise from these trials of implements. He thought the time had arrived when they would agree with him in saying that it was needful to have something introduced into agricultural affairs to lighten the expense of hand labour and manual work. He knew something on the subject, and should call their attention to an institution which seemed likely to throw some light upon the subject. Mr. Grey then proceeded to read several letters which he had received in reference to

association for the purpose of cultivating land almost, if not entirely, by steam. One of the letters was from the promoters of the company, soliciting his support; and another was from Earl Grey, stating that at his request he had examined the ... of the company, as far as he was able, and was quite ... of their success. He thought that company offered a ... reason for the experiment being tried. After a few remarks respecting the adaptation of machinery to cultivation, he gave the toast which he had proposed, coupling with it the name of Mr. Stephenson, the Secretary. *Newcastle Courant.*

Notices of Books.

Agricultural Science applied in Practice. (Groombridge.) Mr. Wallace Fyfe, the author of this work, has lately protested against the title of a work recently published by Messrs. Routledge ("Farming made Easy; or Agricultural Science reduced to Practice") as essentially a plagiarism of the title he had himself adopted. We call attention to the resemblance of the titles, in order that, whether it be accidental or intentional, it may not mislead. Mr. Wallace Fyfe is well known as an agricultural writer, and his little work on Agricultural Science is also well known as a useful contribution to agricultural literature.

Miscellaneous.

The Harvest.—I beg to give you the result of my observations and inquiries, while moving from place to place during the last eight days in most of the counties from the Tees to the Thames. I think the Wheat crop over the whole kingdom is below an average; but this grain is entirely different in its character from what it was last year. Then, from the want of sunshine, the grains were long, coarse, and thick-skinned; now each corn is plump, thin-skinned, and full of fine flour. As I write I have before me a sample of Red Wheat, grown on the strong clay in Cleveland, and stacked on the 24th inst., which is as plump and fine in the skin as Rice: it is dry enough to grind now, and I have not a doubt but it weighs 63 lbs. or 64 lbs. per bushel, while the same Wheat from the same soil last year did not weigh more than 58 lbs. to 60 lbs., and was not fit to grind alone before Christmas. I examined bolder samples in Cheshire, Warwickshire, and other Southern counties, but not one of them was more promising for flour than the Yorkshire sample above described. On the whole, and in few words, I am persuaded that the Wheat crop, though under average in quantity, is of higher quality than usual, and will immediately be available for general use. Barley is about an average crop, and will be a much better sample than it was last year. Oats are scarcely an average in bulk, but will be an average, I think, in yield, and the sample will be exceedingly fair. Beans, on suitable land, are a fair crop and well podded. Swede Turnips in the north, on well-cultivated farms, are a splendid crop; in the south they are later sown, and do not look so well. Potatoes are a full crop, and with a few partial exceptions the general field crop has not yet suffered from disease. *H. J. Turner, Land Agent, Richmond.—Times, Aug. 30.*

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended August 29; observed by Mr. J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air. Max. in Sun.	Max. in Shade.	Min.	Mean.	Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
	Degs	Degs	Degs	Degs.	Degs.	Ins		
Friday 23 ..	79 0	69 0	56.5	63 0	62.0	0.05	W.	29.93
Saturday 24 ..	82 0	73 0	51.0	64 2	62.6	..	W.	30.00
Sunday 25 ..	72 0	67 0	49 0	59.2	61 8	..	N.W.	30.07
Monday 26 ..	92 0	73.0	54.0	68.2	62 3	..	N.W.	30.06
Tuesday 27 ..	92 0	76 0	47.0	65.5	63 0	..	N.W.	30.14
Wednesday 28 ..	98 0	81 0	51 0	70 2	64.0	..	S.	29.95
Thursday 29 ..	92 0	77.0	51.0	67.7	64.0	..	N.W.	29.77

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

CROPS IN HERTFORDSHIRE.—The report of the Wheat crop from Rothamsted was "about average." It was mis-read *above* average, and then it was printed "over average."

FOOTHALT IN SHEEP: *J D.* Paris plaister powdered, 1 oz.; sulphate of zinc, powdered, 1 oz.; creosote, 1 scruple; Stockholm tar, 4 oz.; lard, 4 oz., to be made into an ointment and applied occasionally to the feet of the sheep and between the claws. This prescription was published a week or two ago.

LAND AGENCY: *Alpha.* Your best plan is to reside with a land agent who is also a farmer for a year or two, and so acquire the necessary skill and knowledge; you will thus have an opportunity of proving your ability in whatever business he may ultimately charge you with, and so gradually acquire a connection which may lead to an appointment.

NAMES OF PLANTS: *Robert Turnbull.* The specimen sent is the Carline Thistle (Carlina vulgaris), a plant common to upland, more especially on calcareous soils. It is very variable in height, but even the least exposed plants seldom attain to a foot. Your example has never been cropped by the sheep, which wisely leave them alone.

POULTRY.—There is really no trade except for grouse. The supply of them is small, and prices are maintained in consequence. It is difficult to make any quotations for poultry, as there is no regular trade.

Large Fowls	Each	3s. 0d.	to	3s. 6d.
Middling ditto	„	2 0	„	2 6
Chickens	„	1 6	„	1 9
Grouse	„	2 0	„	3 6
Geese	„	5 6	„	6 0
Rabbits	„	1 4	„	1 5
Wild ditto	„	0 8	„	0 9
Pigeons	„	0 7	„	0 8

JOSEPH HAYWOOD AND CO.,
MANUFACTURERS OF PRUNING AND BUDDING KNIVES, SPORTSMAN'S, and all kinds of POCKET CUTLERY.

Dealers in Gambia Garden Shears, Scissors, Syringes, &c.

Glamorgan Works, Sheffield.

J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25s. 6d. each.

IRON YARD AND GARDEN PUMPS

3 feet 6 inches under spout		
2½	3	3½ inch
43s.	53s.	60s. each.

J. TYLOR and SONS manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.

PUMPS of J. TYLOR & SONS' manufacture to be obtained of Plumbers in all parts of the United Kingdom.

J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

GLASS FOR GREENHOUSES.—
SHEET GLASS, Stock Sizes, 16 oz.

Boxes included.	3rds.	4ths.
11 by 9, 12 by 9, 13 by 9, 14 by 9 .. / 12 „ 10, 13 „ 10, 14 „ 10, 15 „ 10 ..	14s. 0d.	12s. 6d
13 „ 11, 14 „ 11, 15 „ 11, 16 „ 11 .. / 14 „ 12, 15 „ 12, 16 „ 12, 17 „ 12 .. / 18 „ 12, 19 „ 12, 20 „ 12 .. .. / 16 „ 13, 17 „ 13, 18 „ 13 .. .. / 19 „ 13, 20 „ 13, 21 „ 13 .. .. / 16 „ 14, 17 „ 14, 18 „ 14 .. .. / 19 „ 14, 20 „ 14, 21 „ 14 .. .	16s. 0d. per 100 feet.	13s. 6d.

English Glass of the above sizes, 18s. per 100 feet.

SMALL SHEET SQUARES, IN 100 FEET BOXES.

6 by 4	6½ by 4½	7 by 5	7½ by 5½	11s. 6d
8 „ 6	8½ „ 6¾	9 „ 7	9½ „ 7½	
		10 „ 8	10½ „ 8½	12 6

Boxes 2s. each, returnable at full price.

GLASS FOR ORCHARD HOUSES,
As supplied by us to Mr. Rivers.

20 in. by 12 in. / 20 in. by 13 in. / 20 in. by 14 in. / 20 in. by 15 in.		16 oz.	21 oz.
	Common	13s. 6d. ..	£1 1s.
	Superior do.	16 0 ..	1 3
	English Glass	18 0 ..	1 9

The above prices include the Boxes.

Perforated Glass for Ventilation. Patent Plate and Polished Plate Glass. Ornamental and Coloured Glass.

London Agents for Hartley's Improved Patent Rough Plate.

Linseed Oil, Genuine White Lead, Carson's Paints, Paints of various colours ground ready for use.

Milk Pans, Propagating Glasses, and every description of Glass for Horticultural purposes.

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"FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.

PROTECTION FROM THE COLD WINDS & MORNING FROST.

"FRIGI DOMO," a Canvas made of pure prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.

Two yards wide .. .. 1s. 6d. per yard run.
Four yards wide .. .. 3s. per yard.

An improved make, 3 yards wide, 2s. 6d. per yard run.

Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard run.

ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.

"It is much cheaper than mats as a covering."

JOHN WARNER AND SONS,
BELL and BRASS FOUNDERS to HER MAJESTY,
HYDRAULIC ENGINEERS, BRAZIERS, &c.,
8, Crescent, Cripplegate, London, E.C.

No. 35.

WARNERS' PATENT CAST-IRON PUMP, for raising Water from Wells not exceeding 25 feet in depth.

Diameter of Barrel.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead, gutta percha or cast iron flanged pipe as required.	1 1 0
2½ „ long	3 „ 3 „		1 10 0
3 „ ditto	3 „ 6 „		2 4 0
3½ „ ditto	3 „ 6 „		2 9 0
4 „ ditto	3 „ 6 „		2 18 0

2½ „ short, with 15 feet of Lead Pipe attached, ready for fixing 2 0 0
2½ „ long ditto ditto ditto 2 14 0

This Pump is fitted with J. W. & SONS' Patent Vibrating Standard, Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.

WARNER'S IMPROVED LIQUID MANURE OR GENERAL PORTABLE PUMP.

No. 42.

This Pump is fitted with WARNER'S Patent Bucket and Valve, and cannot clog in action. The Barrel is made of Galvanised Iron, not likely to corrode, and can be raised or lowered at pleasure on the stand, the legs of which fold together, and it may be carried with ease by one man.

Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe .. .. 2 15 0 (£ s. d.)

If fitted with Barrel of Planished Copper 3 4 0

Stand and Pump, with plain Tail Pipe, for tying on Suction Pipe 2 9 0

2-inch India Rubber and Canvas Flexible Suction Pipe, on wires, in either 10, 12, or 15 feet lengths .. per foot 0 2 5

No. 43 is a similar Pump to the above, without stand, but with strong wrought-iron straps, for fixing to water cart or plank, price 2l. 5s.

Every description of Machinery for Raising Water, by means of Wheels, Rams, Deep Well Pumps, &c.; also Fire and Garden Engines, &c.

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HORTICULTURAL GLASS WAREHOUSE,
87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.

ESTABLISHED 1750.

Fig. A.

Fig. B.

PRESERVE JARS.

Figs. E.

Fig. C.

Fig. F.

Fig G.

Fig D.

Fig. H.

Fig. D.

Fig. I.

Fig. A. HAND GLASSES.

12 inches	..	6s. 0d. each
14 „	..	7 0 „
16 „	..	8 0 „
18 „	..	9 0 „
20 „	..	10 0 „
24 „	..	12 0 „

If open top 1s. extra.

Fig. B. PROPAGATING GLASSES.

2 inches	..	0s. 3½d. each.
4 „	..	0 5½ „
6 „	..	0 8 „
10 „	..	1 4 „
12 „	..	1 9 „
16 „	..	3 6 „
18 „	..	5 0 „
20 „	..	7 0 „

Fig. C. MILK PANS.

6 inches	..	0s. 6d. each
10 „	..	1 0 „
14 „	..	1 9 „
18 „	..	2 9 „
20 „	..	3 3 „
22 „	..	3 9 „
24 „	..	4 6 „
26 „	..	5 6 „

Fig E. PRESERVE JARS.

	Without Lids.	With Lids.
3 inches	0s. 4½d.	0s. 6½d. ea.
4 „	0 6	0 9 „
5 „	0 8	0 11 „
6 „	0 10	1 2 „
7 „	1 0	1 4 „
8 „	1 4	1 8 „
9 „	1 8	2 2 „
10 „	2 0	2 8 „

Fig. D. HYACINTH GLASSES.
Common .. 3s. 0d. per dozen,
Improved .. 3 6 „

CROCUS GLASSES.
Common .. 2s. 0d. per dozen.
Improved .. 2 6 „

Fig. F. HYACINTH DISHES.

6 inches	..	1s. 0d. each.
9 „	..	1 6 „
12 „	..	2 6 „

Fig. G CUCUMBER TUBES.
1d. per running inch.

Fig. I. ROLLING PINS.
1½d. per running inch.

OPAL DITTO.

14 inches	..	3s. 6d. each.
16 „	..	4 0 „
18 „	..	4 6 „

Fig. H. FISH GLOBES.

	With Feet.	Without Feet
8 inches	1s. 9d.	3s. 6d. each
10 „	2 3	4 0 „
12 „	3 0	4 6 „
14 „	4 0	6 6 „
16 „	5 0	9 0 „

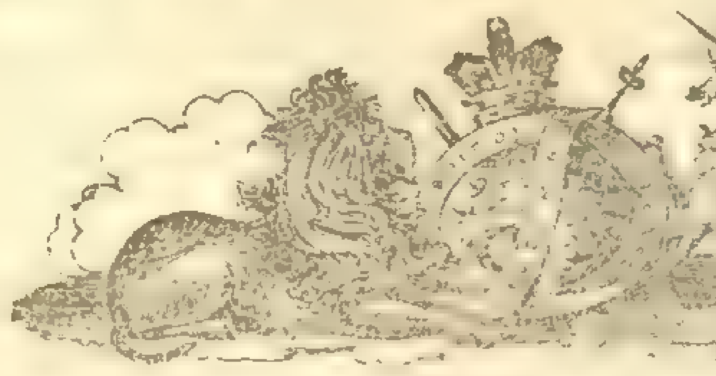
Intermediate Sizes in proportion.

Crystal Glass Shades, Ebony and Gilt Stands, Gas and Lamp Glasses, Chimneys and Globes, &c.

☞ *For Window and Orchard House Glass see Advertisement of July 30.*

CARSON'S

ORIGINAL ANTI-CORROSION PAINT,



PATRONISED BY

THE BRITISH GOVERNMENT,
THE FRENCH GOVERNMENT,
THE RUSSIAN GOVERNMENT,

H.R.H. THE PRINCE CONSORT,
MOST OF THE NOBILITY AND GENTRY,
THE DOCK COMPANIES,

RAILWAY AND CANAL COMPANIES,
THE PRINCIPAL COLLIERIES,
MILL-OWNERS, IRON MASTERS, &c. &c.

The Anti-Corrosion Paint is now used extensively for all kinds of

OUT-DOOR WORK,

and has been proved, after a practical test of 70 years, to surpass any other Paint. It is applicable to Wooden Houses, Farm and other Out-Buildings, Fencing, Gates, &c.; also Iron Roofing, and every description of Iron Work, while for

PUBLIC EDIFICES, MANSIONS, VILLA RESIDENCES,

and every kind of Brick, Stone, Compo, &c., it is unrivalled, presenting the appearance of fine cut stone, and will positively become harder than the same a few months after it is laid on. It is undoubtedly the only Paint that will stand on

CONSERVATORIES, GREENHOUSES, FRAMES, &c.,

and is in consequence largely used by the Nobility and Gentry, also many eminent Horticulturists, for such purposes.

The Anti-Corrosion is Lower in Price, and lasts twice as long as the Best White Lead; at the same time is economical in application, as

ANY PERSON CAN LAY IT ON.

It is a powder, requiring neither grinding nor tinting, and will keep any length of time, and sold in the following

COLOURS.

Colour	Price
White Stone	34s. per cwt.
Light ditto	32s.
Drab or Portland ditto	32s.
Bath ditto	32s.
Light and Dark Oak	30s.
Bright Red	28s.
Dark ditto (or Brick Colour)	26s. per cwt.
Lead Colour	26s. per cwt.
Light and Dark Chocolate	26s. per cwt.
Black	26s. per cwt.
Bright Green	46s.
Deep Green	46s.
Blue (for Carts and Waggons)	46s.

Five cwt. delivered Carriage Free to any Station in England and Wales, and by Water to any Port throughout the United Kingdom.

TESTIMONIALS.

From Dr. Andrew Robertson, *Indigo, Tarland, Aberdeenshire, Commissioner to* H.R.H. The Prince Consort, *Balmoral Castle, Ballater, Aberdeenshire.*

"The Paint gave every satisfaction."

Extract of a letter from His Excellency Baron Brunow, *Russian Ambassador, to the Russian Consul General in London.*

"In 1841 Mr. Walter Carson, Anti-Corrosion Paint Manufacturer, furnished the Imperial Ministry of War with 10 casks of Dry Paint. Those colours, after a trial of 10 years, have given the most satisfactory results. They were used for painting Gun Carriages."

From the Rev. T. B. Wright, *Broughton Rectory, Brigg, Lincolnshire.*

The Paint gives great satisfaction. Among other things, I used it in painting the lights of a Greenhouse, the wood of which, from exposure to the sun, had become in places much cracked. The Paint filled up the cracks, and remains, apparently, as hard as stone, effectually keeping out the wet; it has also been most useful in keeping the panes of glass in their place, and preventing them being shaken out, by the putty falling out.

From J. T. Brooks, Esq., *Flitwick Manor, Ampthill, per* Mr. C. P. Wynter.

The Paint answers the purpose very well for which it was intended; that is, as an impenetrable barrier to rain for Melon and Cucumber frames; and I have not the least doubt of its durability for years to come.

From the Rev. Thomas Philpotts, *Porthgwedden, Truro, Cornwall,* (Mr. G. Austen, *Gardener*).

Yours is certainly the best Paint I have ever used for the roofs of Hot and Greenhouses. Previous to using it, we could get no kind of white lead to stand the attraction of the heat in summer, from the glass, which yours does perfectly.

From Thomas Rant, Esq., *Chedeston Park, Halesworth.*

Your Paint was used on the house and all the outbuildings 12 years ago, and I have great pleasure in stating, the durability of it far surpasses any other Paint I have ever seen used.

Subsequently Mr. R. says—Allow me to express to you my entire satisfaction in using your excellent Paint. I can show some on this place which has been done 16 years, and is now very sound.

From the Rev. R. F. Meredith, *Sewcombe Rectory, Yeovil.*

My gardener, after 25 years experience, states it to be the most lasting Paint he has ever met with, for out door work, and quite superior to White Lead for the outside of hothouses.

From Sir Edwyn Scudamore Stanhope, Bart., *Holme Lacy, Hereford.*

I have been in the habit of using your Anti-Corrosion Paint for out-door work for upwards of ten years, and have found it stand remarkably well, both on wood and Iron; and if you think my testimony of any service, you are at liberty to add it to that of others.

From Messrs. R. R. Whitehead & Co., *Royal George Mills, near Manchester.*

We like the appearance of your Red Paint when applied to Iron, and we think it will fully answer our expectations.

Subsequently—About ten years since we used some of your Paint on wood-work outside, and find it now perfectly good, though dirty.

From Thomas H. Tuckett, Esq., *Surveyor to the Dunfermline Road Trustees, Cane, by Park, Dunfermline, N.B.*

The use for which I require it is to paint Toll-gates. I have found it to answer remarkably well, and have used nothing else since it was recommended to me some years ago by my friend Mr. Burn, of Cuttle Hill House.

From the Rev. W. C. Edgell, *Uggeshall Rectory, Wangford, Suffolk.*

It will be some satisfaction to Mr. C. to know that some of the wood-work, now about to be repainted, has not been touched since 1846 (11 years), when it was coated with the Anti-Corrosion Paint.

From John Cridland, Esq., *East Hoathly, Sussex.*

I have now used your Anti-Corrosion Paint rather more than 10, or I think 12 years, and am convinced that it is superior to any other Paint, particularly for out-door work and farm purposes. I can safely say, it has saved me a great deal of repairs, as also expense, by using it on the wood-work of Barns, &c.

From William Scot, Esq., *of Craigmuie, Moniaive, by Dum*...

The painter, a good professional man, now admits that your Anti-Corrosion Paint is excellent for all the purposes in your advertisement; and I may add, that the tinted Pa... which I have used for plaster walls inside, have stood with... a blemish for these five or six years.

From G. Holland Ackers, Esq., *Moreton Hall, Congleton, Cheshire* (Mr. C. W. Mounsdon, *Head Gardener*).

What was used upwards of ten years since, has answered every expectation.

From John Candy, Esq., *Baliol Park, Prior Park Road, B*...

June 21st, 1858. Having in the years 1841 and 1851 used considerable quantities of your Anti-Corrosion Paint, both which stands good now, &c.

From the Rev. J. Seagram, *Aldbourne, Hung*...

About 15 years ago I painted a small Granary with your Anti-Corrosion Paint, which resisted the effects of the weather, though in a very exposed situation, till the present time, when I think it right to repaint it; I will therefore thank you to send, &c.

From Henry Ambler, Esq., *Watkinson Hall, Halifax.*

No better out-door Paint than Messrs. Walter Carson & Sons' need be used, having used it for upwards of 11 years.

The Original Anti-Corrosion Paint is only to be obtained of

WALTER CARSON & SONS,

SUCCESSORS TO THE INVENTORS,

9, GREAT WINCHESTER STREET, OLD BROAD STREET, LONDON, E.C.

NO AGENTS.

Dutch Flower Roots.

JAMES VEITCH, JUN., ROYAL EXOTIC NURSERY, Chelsea, S.W., begs to announce that he has received his annual supply of Bulbous Roots from Holland, and is pleased to say that they are PARTICULARLY FINE and in EXCELLENT CONDITION. CATALOGUES are now ready and will be forwarded on application.

J. V., Jun., desires to impress upon those who patronise him the great advantage of giving him their ORDERS EARLY, as the successful cultivation of Bulbs depends in a great measure upon their BEING PLANTED EARLY IN THE SEASON.

RAYNBIRD, CALDECOTT, AND BAWTREE, SEED MERCHANTS and GROWERS, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E C.

Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.

Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

TRIFOLIUM INCARNATUM (present price) 5*d*. to 6*d*. per lb.

VILMORIN'S NEW TRIFOLIUMS, with "Practical Hints on its successful Cultivation," showing how 2 to 3 tons per acre of the most nutritious hay may be secured; the advantages of sowing it where broad Clover is thin, and its superiority to Tares as green food.

PAGE & TOOGOOD having secured a large breadth from the most careful growers in this district, where better crops are produced than in any part of England, offer it at the above low rate for cash; price to the Trade per post.

Italian Rye-grass, 5*s*. per bushel.
New Turnip Seed, 8*d*. per lb.
New Rape Seed, 4*d*. per lb. | New Mustard Seed, 4*d*. per lb.

WINTER VETCHES and WINTER OATS as soon as harvested.

PERMANENT PASTURE and LAWN GRASSES as sown at Osborne for the last 7 years.

CALCEOLARIA and CINERARIA, 1*s*. per packet, saved from one of the finest collections in Europe.

Seeds for exportation to all parts of the world.

Royal South Hants Seed Establishment, Southampton.

New Seeds for Present Sowing at Reduced Prices, Carriage Free.

SUTTON AND SONS can now supply the under-mentioned for immediate sowing:—

NEW TRIFOLIUM INCARNATUM.
Drumhead Cow Cabbage
Sutton's Imperial Cabbage
Enfield Market and others
Italian Rye-grass
Permanent Meadow Grasses
Fine Lawn Grasses
Mustard and Rape
Early London Cauliflower
Fine Walcheren ditto
Onion, of sorts | Early Horn Carrot

Calceolaria, Cineraria, Primula, and other choice Flower Seeds, 1*s*. per packet.

PRICED LISTS of the above new or fresh Seeds may be had on application addressed

SUTTON & SONS, Royal Berkshire Seed Establishment, Reading.

The Gardeners' Chronicle.

SATURDAY, SEPTEMBER 7, 1861.

MEETINGS FOR THE ENSUING WEEK.

TUESDAY,	Sept. 10	Royal Horticultural (Fruit Committee) at S. Kensington .... Noon
WEDNESDAY,	— 11	Royal Horticultural (Grand Dahlia Show) at S. Kensington ...... 1 P.M.

THE last show but one of the present year takes place on Wednesday next, in the CONSERVATORY OF THE ROYAL HORTICULTURAL SOCIETY, and now that the building is cleared of scaffold poles we are able to give our readers a correct view of the interior of what is certainly one of the most graceful edifices of the kind that have yet been constructed. It is not intended for a hothouse, but for a hibernatory or winter garden, in which the temperature will be so regulated as never to be oppressive, or unsafe to enjoy in even the worst of cold weather; and we venture to predict that when filled with beautiful plants it will become the favourite resort of invalids as well as of mere lovers of flowers.

We have on a former occasion stated that the design of the building is one of the happiest examples of the artistic skill of Capt. FOWKE, R.E. It is entirely constructed of glass and iron, and has been erected by Mr. KELK at the northern extremity of the new garden at South Kensington, is 240 feet in length and 59 feet in width, exclusive of corridor and gallery, which together measure 23 feet in width. The extreme height is 70 feet. The height from the floor to the top of the iron columns which support the roof, is 39 feet; that from the floor to the gallery, 22 feet. The span of the arched roof, which is a perfect semicircle, is 44 feet; the columns are 15 feet apart.

The accompanying view (see p. 811) of the interior shows more particularly the north side of the building, where there is an arcade and two noble flights of stairs leading to the gallery, whence through a doorway the visitor passes to the top of the upper external arcades of the garden itself. The view from these stairs is extremely pretty. The arcade which carries the galleries forms an effective feature, very cleverly treated; it is constructed with twisted terra cotta columns about 8 feet in height, cap and base, connected by ornamental red brick circular arches, lighted up with a row of white diamond-shaped spots.

On the outside of the conservatory is a neat verandah, about 18 feet in height and 15 feet in width, passing along the front and ends. Its roof is carried on light iron columns rising from behind handsome vases of flowers that decorate at intervals a pretty open balustraded balcony. Here there is in all weathers a dry and agreeable walk, from which the surrounding garden with its manifold beauties can be inspected with comfort.

The general colour of the outside of the building is pale green, a tint that harmonises well with surrounding objects; purple stripes have however been introduced into the columns of the verandah and other conspicuous parts, which give them a more striking appearance than that of the rest of the ironwork. Blinds broadly striped brown and white are stretched across the whole of the roof inside, and looked at from without through the glass have by no means a disagreeable aspect.

The gallery already mentioned is to be decorated with flowers, in which it is intended that those of early spring shall be first admitted. Others will follow as spring advances.

Heating has been executed by Mr. WEEKS, and is effected by means of hot water in 4-inch iron pipes sunk in the floor, and covered with handsome iron gratings. These pipes are attached to two of WEEKS's largest tubular boilers, which are found to work perfectly, and to raise the temperature to any height required. Another smaller sized boiler feeds a series of pipes that warm the galleries. It may be worthy of remark that by means of stop-cocks such command is obtained over the different portions of the heating apparatus, that failure can hardly occur under any circumstances, inasmuch as any one of the boilers can be made to do the work of both should such an arrangement become necessary.

A lantern ventilator runs the whole length of the roof; further ventilation is secured at three different elevations at the sides of the building by means of sashes hinged at top and moving outwards, in addition to which are several horizontal underground channels communicating with the pipes in their beds at one end, and with the outer air at the other. By these means a suitable temperature can be maintained even during the warmest weather, a point of much importance in a house of this description and size.

The interior of the building will be occupied permanently by fine plants in pots and tubs, such as Orange trees, Camellias, Acacias, &c.; but at present, with the exception of the vases which terminate the galleries, and a small recess on the north, which are filled with Palms, the interior is nearly empty.

We observe that the Council of the Society invite the assistance of those who possess plants which have grown too large for the houses in which they are at present placed, and we should think the Garden is likely to have many contributions of the kind. The expense of conveying them to Chiswick will of course be paid should offers of specimen plants be accepted; and as such specimens are seldom saleable their possessors will have an opportunity of assisting in the embellishment of a great public garden without cost to themselves.

IN days of yore the CALCEOLARIA held as an ornamental pot plant a much higher position in public estimation than it does at the present time. Looking back along the vista of the past it is not indeed difficult to understand how this has come about, seeing that the most showy section of the family, the herbaceous class, has been suffered to become little more than a set of annual varieties, which however beautiful cannot be perpetuated, and hence have no hold on the good opinion and affections of lovers of flowers. They want, moreover, the compensating quality of fixedness of character when raised from seeds, which is an essential to popularity in subjects having so short a duration. Indeed instead of fixity of character the race to which allusion is now made is remarkable for its variability, almost endless variations being comprised within the produce of a minute pinch of seed.

It was not so formerly as regards duration. The varieties grown in the days of one's boyhood, though wanting in the size and colouring of those seen in the present day, were of a decidedly perennial character, and hence could be perpetuated. A favourite variety of Slipperwort might then be regarded as a permanent plant to be increased and distributed, and was certainly not the fleeting evanescent object it has now become. The loss of this permanent or perennial character is a misfortune, for it cannot be denied that the blossoms of the herbaceous race are much finer, and the plants altogether more gay and ornamental in character than those of the shrubby series. The latter group alone presents anything like persistence at the present time, and indeed affords the only varieties admitting of definite extension and perpetuation. These characteristics have rendered the shrubby Calceolarias favourites with flower lovers, and they have their uses, as, for example, in flower-gardens and for bedding purposes; but all the attempts that have been made to impart to them the higher decorative features incidental to increased size and enriched and varied colouring have failed; and latterly so uncertain and capricious has been their behaviour even in the flower-garden, that this perennial shrubby race is in danger of sharing the fate which has already fallen upon the now fleeting herbaceous varieties.

No doubt the annual character which the herbaceous Calceolaria has assumed is in great measure attributable to the introduction of C. pendula, a short-lived species, remarkable in its day for robustness of character, for profusion of flowers, and for the pretty spotting of its brightly-coloured lip; and partly also to the intermixture of this kind with the bright-flowered but "miffy" and delicate C. corymbosa. These had, indeed, a certain charm in their day, and drew many admirers after them; they were petted and became the nursery mothers of a brilliant progeny, and who could turn contemptuously from bevies of such pretty, pouting, pursing lips? but the penalty had to be paid, and it has been paid. The perennial character of the plant has been obliterated; the pursing lips greet us once and are gone. The herbaceous Calceolaria has for all practical purposes become an annual.

Some of our readers doubtless remember C. arachnoidea and C. purpurea, species of a truly perennial duration cultivated some quarter of a century ago, but which are probably now lost. Here were the materials which should have been employed to give the character of permanence to the improving race of herbaceous varieties. Even now they are worth seeking out for such a purpose; but probably there exists in our gardens a species but recently introduced, which may serve the same end, and at least will be capable of imparting a new feature of delight, that of fragrance, to the brilliant Slipperwort family. At a recent meeting of the Floral Committee of the Royal Horticultural Society, Messrs. Veitch produced a Chilian species of this genus, which may give hope to hybridisers, and we trust may do something to bring the Calceolaria back to to its former position in public esteem. The little species to which allusion has been made, and which, on account of its sweetness, it is proposed to call C. suavis, though itself almost too small and chaste to create a sensation among the flaunting varieties with which we are familiar—this pretty little species, which was unfortunately nearly out of flower when exhibited, has evidently very much the habit of the old C. arachnoidea, and its leaves are covered like it with white cobwebby hairs. If experience should prove it to be of perennial habit, not a day should be lost in bringing its influence to bear upon the herbaceous varieties of the florist, in order to give them something of the same permanence of character. Its sweetness is an entirely novel feature, which we may expect to find very soon infused into the finer cultivated forms. Then with its perennial habit reinstated, and its flowers "improved" to the completest degree of *embonpoint*, of colours rich and varied, and odoriferous withal, who shall say that the Calceolaria will not again occupy a high place in public esteem?

WE may take this opportunity of reminding the raisers of Seedling flowers, that at the grand exhibition of DAHLIAS to be held at South Kensington during the ensuing week, an opportunity will be afforded for the production of Seedlings of this fine autumnal flower; and that the examination of subjects of this nature, including such other novelties as may be brought forward, has been deputed to a sub-committee of the Floral Committee, who will be empowered to award certificates to deserving novelties. We also notice that on account of the close proximity of its ordinary meeting day to the public exhibition the Committee has announced that the ordinary meeting will not take place, but that any objects coming within its province will instead be received fresh on the morning of the 11th inst., subject to the regulations for the management of the exhibition.

ORCHARD HOUSE TREES AND ORCHARD HOUSES.

I HAVE read with interest your leader on Orchard-house culture, and am induced to think it may not be out of place to give you some account of the sorts of Peaches and Nectarines that after blooming abundantly dropped their blossoms without setting their fruit, and also a list of such sorts which have borne and are bearing abundantly. This will I think amply support your statement as to the cause of many trees failing to bear in Orchard houses, owing to their shoots not being ripened last year. I must mention that

nearly all the trees referred to are in pots and standing side by side in one house.

Sorts of Peaches that have failed to give fruit this season—

Crawford's Late	Desse Tardive
Late Admirable	Heath Clingstone
Walburton Admirable	Old Newington
Gregory's Late	Salway
Barrington	

Sorts of Peaches that have borne and are bearing a full crop:—

Abec	Violette Hâtive
Early York	Noblesse
Early Savoy	Early Anne
Early Grosse Mignonne	Acton Scott
Red Nutmeg	Cooledge's Favourite
Grosse Mignonne	Royal Charlotte
Crawford's Early	

These are all early ripening sorts, and reasoning *à priori*, the fact supports your opinion that the shoots must be well ripened to produce fruit. The late Peaches, as a rule, make their growth later than the early kinds, and did not last season ripen their shoots. My Nectarine trees, with the exception of the Roman and Early Newington, two Clingstone, and rather late sorts, are crowded with fruit.

Manure Water.—In the later editions of the "Orchard House" I have very faintly recommended this stimulant, so dangerous in unskilful hands, and like dram drinking often giving disease and death rather than health and vigour. Flock-masters who can get a supply of sheep's manure cannot err in using it to make liquid manure, but how few cultivators can get a supply of that substance. Doctors should differ about little matters—proper conclusions are often arrived at from such variations of opinion, and so I differ from my friend Pearson, and say that unless you have an experienced gardener and can have access to that mild yet efficient stimulant sheep's manure, give no liquid manure. It must be some five or six years since I have used any, and my trees are more vigorous and productive than ever. This is owing, I think, to my giving two or three dressings of strong surface manure during the summer, which by the frequent waterings the trees receive is carried down to the roots so gradually as to be thoroughly digested. Ground shoddy, now called "stercus," mixed with some rotten manure and half a pound of guano (the "Phospho Peruvian" is the best) to a peck of the compost, forms a surface dressing inodorous and excellent. With this compost my trees are more vigorous and flourishing than I ever saw them, and I have Peaches on the trees at this moment measuring 9 inches in circumference.

Pavements for Orchard Houses.—In this matter I differ also from Mr. Pearson. Pavements of brick, stone, or slate absorb much mixture, and give it out very slowly, so that in walking in your orchard house in early spring or in autumn, such pavements feel cold and uncomfortable, and are probably dangerous to delicate constitutions. In my opinion there is nothing equal to gravel. A path made with it well sifted and of a binding nature is always dry and agreeable, and seems to give out a healthy atmosphere in which it is a pleasure to breathe.

Fumigation.—In spring when the aphis family is on the move—and what a pest they were last spring—and when the blossom buds are just bursting, fumigation is the best of all modes to destroy aphids. I employed last spring the tobacco paper prepared by Messrs. Griffiths & Avis of Coventry, having heard from a friend that it was "medicated" and highly destructive to aphis life. I have never found anything of the kind equal to it, for used most bountifully in a Cherry house full of the black aphis, I feared injury to the young leaves, but not a leaf was touched and every aphid destroyed, so I have ceased to think of employing a brush, and any of the killing liquids, fumigation being attended with so little trouble.

Distributing the Pollen.—Mr. Pearson's method of doing this is most efficient, and would form a very agreeable mode of spending an hour or two in a bright sunny morning of April; for hybridising nothing can be more perfect, but it is enough to alarm a cultivator that has but little spare time of a morning; it is an agreeable pastime, but not at all necessary, which fact may relieve the minds of some cultivators. When my host of trees are in bloom, and when the day is sunny and bright, I walk among them and give each tree a sharp rap with a stout stick. I had not a bee in my house last spring and yet I have a fine crop of fruit.

Rooting through the Pots not always necessary.—The house in which the greater portion of my bearing Peach trees are cultivated happens to stand on a heavy clay soil. Last year I found the borders, although drained, much too damp. I therefore raised many of my trees by placing under each pot two bricks parallel to each other, and 4 or 5 inches apart, thus making the drainage very free. I soon saw my trees change from a slight tinge of yellow to dark green, and I knew that all was right. This season I had the back row of trees in my 14 feet orchard house nearly all placed on bricks, and many in the front row. I have given them one extra surface dressing this season, and I think they have required a little more water, but this has run through so freely, carrying with it the spirit of the surface dressing, that I never saw such robust health in potted trees. With this mode of culture, *i. e.*, placing the pots on bricks and giving an extra surface dressing, some trouble is saved; but in houses standing on dry soils the cultivator may hesitate before carrying it out.

Orchard Houses should be all Glass and Wood or Iron.—I am at this moment building a house 100 feet by 24, all glass roof, sides, and ends, and no bricks (how I hate them—ugly, heavy, clumsy things), and no boards. The roof of course is of glass, in pieces 20 inches wide; the sides are of longitudinal bars, grooved to let in glass, with a glazed shutter 2 feet in width. The sides are supported by light Oak pillars (I should have preferred iron), the roof by light iron pillars inside. It is a leading idea with me that large orchard houses should be as light and fairy-like in their structure as possible. No bricks, no stone, no cement should be used in building them; all should be glass. There can be no architectural beauty in a structure of glass. The first Crystal Palace was a stack of glass, the present is the same; so that the builder ought to give to all such structures a lightness of construction *sui generis*, and so please the world by a combination of extreme lightness with much strength.

Planting out Trees in Orchard Houses.—This is as yet a "vexed question." The cultivation of untrained trees under glass is new, and it requires at best from four to six years to know if trees can be planted out as permanent trees in the borders of a large orchard house with a good chance of success, and without fear of their growing too rampantly. Trees in 18-inch or 20-inch pots grow so well and bear so abundantly that it is questionable if we should not "leave well alone," but in gardening this will never do, nor in farming. Friend "Sigma" planted out standard Peach trees in his 30-feet wide house three or four years since. They were planted in the central border and grew most luxuriantly. In 1859 they bore a large crop of fine fruit; but this season they have failed, for his gardener last year would persist in deluging the border with water, and with the same consistency gave them no fire heat, so that the trees grew like Willows, and are this year as bare of fruit as a Willow. The trees were not planted judiciously, but in a strange confused manner. In a house 24 feet up to 30 feet wide, in which it is intended to plant out Peach and Nectarine trees and to suffer them to grow to their full extent without root-pruning or checking them in any other way than summer pinching to a certain extent—not so much as potted trees—some attention should be paid to their arrangement. In a house of the former dimensions the central border will be about 7 feet wide, in the latter 10 feet wide, in neither can more than one row of permanent trees be planted. These should be in the centre of the border (standards with 5 feet stems), and 5 feet apart, removing at the end of five years every alternate tree, leaving those remaining to form large bearing trees, 10 feet apart, and shading all the central part of the house. During their growth potted trees may be cultivated to a great extent, and half-standard trees be planted in the side borders. To be able to walk under the shade of one's standard Peach trees loaded with their beautiful fruit seems something Eden-like and very charming. In small span-roofed houses trees that are planted out must be lifted and replanted every year; they soon, like the eels, become used to it and do very well.

The Future of Orchard Houses.—I have a firm belief that our culture of fruits has up to the present day been a mere scratching on the surface. England will one day be more abundantly and more cheaply supplied with choice fruits than any nation on the face of the earth. Glass and iron and timber are all cheap, but very little skill is required to manage fruit trees under glass when no artificial heat is used; a sharp countryman with a few written directions will often do better than a gardener used to the old routine of culture. Such men when the time comes will be found, and Orchard houses full of large Peach trees will be as "common as Cucumbers." I am just on the eve of building a house 100 feet by 24, with enough means of heating to resist severe frost in winter; this I shall form into an Orange grove, planting the whole house with Tangerine and St. Michael's Orange trees, solely to bear fruit; such houses will soon be common when once the initiative is given.

My Autumnal-Top Dressing.—This must not be confounded with the spring and summer surface dressing. I am quite inclined to believe that I owe my unvarying success in the pot culture of fruit trees in a great measure to a proper choice of the above. I have always used the same compost, which is simple enough. Towards midsummer I procure horse-droppings from the roads (our gravel is calcareous), and place them in a round heap, hollow in the centre; the hollow is filled with night soil diluted, and as soon as it has soaked in it is filled again and again, the heap is then left undisturbed till the middle or end of October, and is then mixed with some tenacious loam, equal parts; the luxuriance given to trees by this compost is something marvellous.

Roof Openings.—Although Mr. Pearson found these necessary in his Cucumber house on account of red spider—which, by the way, can always be kept away by the proper application of sulphur—for orchard houses of the width of 30 feet and under they are perfectly unnecessary. They break the agreeable continuity of a large spanned roof, and are, I repeat, useless. I have an opening under each gable of my 24 feet wide house of about a foot deep unglazed; it is quite amusing to watch the two currents of heated air making their egress when the sun shines.* To observe this more accurately, as we cannot see air, I have suspended at each end a piece of Cotton wadding. When the weather is cloudy and still, they hang perpendicularly and motionless, but as soon as the sun comes out, they are carried out by the heated air, so as to be horizontal. From a thermometer placed in the centre of the house, and about 18 inches from the apex of roof, shaded from the sun, I find the temperature is on the average, 6 degrees higher above than below, the thermometer below being 5 feet from the ground. This increase of heat should not be lost, and I intend to train a vine or two all through the houses just under the ridge board.

I have said much more than I thought (or ought) to have done on the subject of orchard houses, but it seemed to me that slight misconceptions should be noticed and the result of constant observation given to the world, so that the system may continue to work well. *Thos. Rivers, Sawbridgeworth.*

* This house is ventilated by a 2 feet shutter on each side, 18 inches from the ground, and, the doors at each end, the ventilation is perfect.

Home Correspondence.

The Arbre aux Haricots: Parisian Avenues.—I think it is now possible to say something about the trees used here for Avenues, and for the roads called Boulevards. In the first place as to Ailanthus, which has been praised so much,—believe me it is undeserving its good character. Some of the trees, indeed, are tall and graceful, but their leaves are small, many are bearing their seed-vessels, and here and there you meet with a case of sudden death. No wonder. The dry soil and hard pavement kill them, as well as Horse Chesnuts and Lime trees. Ailanthus is a fine tree in humid England, but is out of place where the air is dry. Nothing suits the Paris Boulevards so well as Spanish Planes, *Platanus acerifolia*, the hot summers and dry soil in winter are what they want. Some newly-planted rows of this tree are most beautiful—not a dead leaf, nor a sickly specimen, nor a ragged bough, but all as fresh and green and vigorous as if called into existence by command of the Emperor. How strange then is it that the few Oriental Planes seen here and there should be unhealthy; yet that is the case, as may be found on the Boulevard des Italiens (I think, or else the Bonne Nouvelle.) Locust trees (*Robinia Pseudacacia*) do well, and are excessively handsome; so I do not understand why there is so few of them. What do you suppose is the Arbre aux Haricots, that I mentioned lately as a new introduction? It is neither more nor less than our old friend Pawlovnia. An honest cabby told me that it has gained its name because it bears Haricot Beans without the pod! but that in reality it was a sort of Palm Tree. Here then we have a capital example of what Pawlovnia is worth; for a few plants may be seen on the Boulevards, and there is a very long avenue of it alongside Baron de Rothschild's fine château in the Bois de Boulogne. You cannot imagine anything more ugly. Its fat ungraceful branches form a lumpish head, covered with broad leaves of the dirtiest possible green. It does not give more shade than a Plane; I doubt if it grows faster after a few years, and the dusky violet fragrant flowers that it bears in spring seem to me a very poor compensation for a hideous canopy all the summer long. Nor is its look its only fault. It requires a great deal of labour to render it even tolerable. A man must be employed to destroy all the weak spray that appears at intervals during the growing season, on the boughs beneath the canopy of leaves, and which would render it intolerable. So you must have no Pawlovnias in our London Parks. *V., Rue Castiglione.*

A Plea for Small Orchard Houses.—It is all very well for Mr. Rivers and Mr. Pearson to talk about their large houses, 100 feet long and 24 feet wide. They seem to forget the original idea, which was to give the poor garden amateur a chance of cultivating Peaches and Nectarines in gardens where walls did not exist. I at once seized upon it, and owe a deep debt of gratitude to my small span-roofed orchard house, 14 feet wide, 9 feet high in the centre, and 5 feet high at the sides. This kind of house is so much more easily put together than the large structures mentioned in your columns, that I fully believe any ingenious man after buying his rafters at the steam-sawing mills may build a house 40 feet long for 20*l.*; but then he must be his own carpenter, glazier, and painter, or nearly so. As to Mr. Pearson's caution about frost doing mischief in small houses, once within the last seven years I was very near losing my crop, as an April frost was unusually severe; but one pan of charcoal, which was lighted at 10 P.M., saved all but some Apricots, which stood near the door at the end facing north-east. I admire the large houses lately built very much, for I can see that a new phase of orchard house culture is fast approaching, and that large umbrageous trees of Peaches and Apricots will in the course of a few years be grown under glass. I observe that Mr. Pearson gives lean-to houses a slight prog with his lance. When the use of lean-to houses is understood by the cultivator, they are most invaluable structures; for the cultivation of very early Grapes in pots or otherwise, for very early Peaches and some other crops, no form of buildings can compete with them. For orchard houses, unless for those who are limited in their wishes or their purses, they are not

so "nice," as wife says, as span-roofed houses. Good and fine fruit may however be grown in them; the finest Peaches I ever saw grown on trees in pots were grown, I think, in 1854 at Black Rock, near Dublin, the seat of Thomas Bewley, Esq., and they were grown in two lean-to "glass-roofed sheds," their sides and fronts and backs half-inch boards covered with asphalte felt. Mr. B. has lately, I believe, built an orchard house 69 feet wide, but I question if he has grown better Peaches than he grew in the very humble structures he first built. I prefer span-roofs for orchard houses, but I do not despise the humble lean-to. Most of us remember the advent of the thin pamphlet called the "Orchard House," early in 1852, the proceeds of which were dedicated by Mr. Rivers to the repairs of his parish church—a good beginning, and which has gone through nine editions, "enlarged and improved"—a success unprecedented, I believe, in garden literature.

ROYAL HORTICULTURAL SOCIETY'S GARDEN, SOUTH KENSINGTON.—INTERIOR OF CONSERVATORY LOOKING EASTWARD.

The idea was seized eagerly by some, and, as usual with new ideas, was opposed by many. Failures, of course, occurred, but the system annually makes steady progress, and must do so, because everything connected with it is the result of sound common-sense calculation. With Mr. Rivers it has never failed, and from a recent view of his trees, many of which have been under pot culture ever since 1860, I can plainly see that it cannot fail, for such vigorous health and productiveness I never before saw in Peach, Nectarine, and Apricot trees. One more plea for small houses: the trees in them are near to the glass, and their fruit ripens from a week to ten days earlier than in large houses. *Persica.*

Projecting Glass Copings.—Twenty years ago I planted a border with Peaches and Nectarines. For many years they did well—12 at least; after that time they began to deteriorate, the leaves always curling in spring and suffering much from aphis, and gradually they have dwindled away, the tips dying, then a branch, then a limb, and the last winter has with one exception killed the remnant. Some few years ago I placed over

two trees a glass erection, projecting 1 foot at the top and 1 yard at the bottom of the light, which was 2 feet from the surface of the soil; one of these has apparently recovered. Two years ago I put over the others a projecting glass coping extending 2 feet 6 inches from the wall. These have all died, but where an Apricot had been planted in the room of a Peach, that has done well. I have an inclination to replant the border after adding to it decayed turf, but I should like to know whether the glass coping I have mentioned is of any real use, or whether to be useful it should descend nearly to the border, and if so at what angle, or whether it would do to be perpendicular. The wall faces south, but is exposed to the east wind. *Henry*. [The coping was rightly placed and cannot have done harm. The trees died from some very different cause.]

Cure for Mildew and Aphides.—My experience will not enable me to pronounce with the degree of certainty that nostrums are usually advertised, but I am disposed to think so favourably of the effects of the following as a late winter dressing for Vines and fruit trees on walls and dwarf standards as a protection against mildew and insect pests, that should you deem it in any way worthy more general notice you will perhaps allow it a place in your columns. The material is prepared as follows:—Mix well in coarse powder one part of nitre or saltpetre, two parts of sulphur, and two parts of fresh slaked lime quite dry. When mixed throw it into a fire-proof pipkin or common crucible at a red heat, so that it may be thoroughly deflagrated. After cooling let the mass be reduced to a finish powder. Now, allowing the above quantities to be in pounds, one gallon of boiling water is to be poured by degrees on the powder, and the mixture is to be kept and stirred occasionally until cold, when some pure blue clay is to be incorporated in quantity sufficient to bring the whole into the consistency of paint, with which the trees are to be carefully dressed when the buds are just beginning to swell, of course carrying the brush from below upwards. For Vines half a pound of this sulphuretted compound, added to one gallon of boiling water and stirred up till cool, may be used, clear of the sediment, over the leaves with a fine rose syringe, occasionally, according to the season, shutting up the lights for two or three hours; when, if the sulphuretted vapour remains too strong in the house, the lights may be opened for free ventilation. I believe if due attention is given to the preparation and to its application, it will be found very efficacious, and I shall be happy to hear it proves so in the hands of those who know how to employ it properly. I may add a useful recipe for aphis on Peach, Plum, Cherry, and other fruit trees on walls:—1 lb. refuse Barbadoes Aloes, coarsely powdered; 4 lbs. best soft soap, boiled gently in a gallon of water, stirring frequently for two hours. This to be added to 5 gallons of hot water, in which several handful of bruised Bay leaves have been infused for an hour; and when poured off from the sediment may be occasionally applied with a light syringe, whilst the young leaves are expanding; the mixture when dry on the foliage leaves a film which the aphis will avoid. Let the under surface of the leaves be syringed as well as the upper. *T. J.*

Vines Poisoned by Carrion.—As my Grape Vines are poisoned by too much animal matter having been put into the border, I should be obliged if you could inform me, whether if they were taken up and replanted in maiden loam the poison would die out of them the first year, so that I might expect a crop the second season without the foliage scorching or the fruit shanking, I am supposing that the Vines grow well the first year after replanting; they have been planted four years, and are 4 or 5 inches in circumference. If the poison does not die out the first year, then I should purpose planting new Vines. What say your Correspondents? *T. T. H.*

Manuring Conifers.—Having observed in a late Number a warning to a Correspondent, "Don't manure Conifers on any account whatever," I beg to inform you that, two years ago, finding a large Deodar which had been moved the previous year, and a P. Webbiana which had shown a large number of cones, looking weak, I mulched them both with a good barrow full of stable-dung. So far from doing them any injury, it appears to have been of great benefit, as their growth and foliage have much improved. *J. Phillpotts.* [Then we must conclude that to withhold manure is a prejudice. Perhaps those who have Conifers at command will try the experiment and report.]

Cuckoo.—In reply to the question in your Number, dated July 13, with reference to keeping a cuckoo over winter, I beg to state that I have kept cuckoos from the nest till the following March, when I lost them by an accident. I have also kept the Night Jar the same length of time. *William Rayner, Surgeon.*

Spiræas.—Will you oblige me with the name of the Spiræa I enclose. I have grown it for several years as a companion to Humea elegans, and its creamy white blossoms form an agreeable contrast with the bronze colour of the Humea; the leaves also give the plant a noble appearance on terrace bank. *J. H. Smith, Hummanby Hall, York.* [Spiræa barbata—the Indian form of our wild S. Aruncus.]

Variegated Aloe.—A very fine specimen of this plant is now in bloom in the Gardens of the Bristol Zoological Society, a Tiffany house, 40 feet high, with a glass roof, having been erected for its reception there. The plant in question is the property of Robert Leonard, Esq., of Clifton, in whose family it has been for nearly 60 years, and it can be traced back for more than 20 years prior to the time of its coming into the family of its present owner, so that this gigantic exotic must be now nearly if not quite a century old, at which age the common Aloe is said to bloom in this country. The plant in the Clifton Gardens, with its mast-like stem, and enormous tufts of yellow blossoms, is a magnificent object, and will well repay a visit, the more so as it seems doubtful if this species of the Aloe has ever before bloomed in England; and it may be a very long period before another opportunity of witnessing such a sight may occur. *R. C.*

Cyanophyllum magnificum.—A plant of this in my stove crumples at the end of the leaves, otherwise it appears in good health. My gardener (a good one) has written to one of the best gardeners in England, who reports the same of his own plants and those of his neighbours. What is the cause, and what is the remedy? *Cavanensis.* [We have no experience. Will some good plant-grower advise our Correspondent?]

Societies.

CRYSTAL PALACE HORTICULTURAL EXHIBITION.—A Dahlia and Fruit Show was held here on Wednesday and Thursday last; but although the day was favourable it was very thinly attended. As regards fruit the display was good, more especially of Grapes, which were in some instances excellent, and there was an abundance of Dahlias, Hollyhocks, and Asters, the last, both French and German, large and fine.

Of Miscellaneous collections of Fruit the best came from Mr. Henderson, gr. to the Duke of Sutherland, at Trentham, who sent remarkably fine bunches of Black Hamburgh, Muscat, and Lady Downes' Seedling Grapes, a Montserrat Pine Apple, Trentham Hybrid Melon, Violette Hâtive Nectarines, and Royal George Peaches. From Mr. Tillyard, gr. to J. Kelk, Esq., came a second collection, in which were some particularly large and well ripened Muscat Grapes, the berries possessing that beautiful golden tinge which is the chief distinguishing characteristic of this variety when in perfection; a Prickly Cayenne Pine Apple, a Melon, some Peaches and Nectarines, Morello Cherries, and Magnum Bonum Plums. Messrs. Dawson, Page, Young and Kaile also showed good collections, in which were Muscat and Black Hamburgh Grapes, Plums, Peaches and Nectarines, Pine Apples, Apricots, and Melons.

Pine Apples were scarce; the best Queen was stated to weigh 5½ lbs., and came from Mr. Page, gr. to W. Leaf, Esq. Mr. Dalrymple, gr. to C. H. Leigh, Esq., and Mr. Young, gr. to C. Bailey, Esq., also had good fruit of this variety. Mr. Bull, Nurseryman, King's Road, likewise contributed one or two Queens. From Mr. Young came a well ripened Black Jamaica, and we noticed one or two Prickly Cayennes.

Grapes, as has already been stated, were good. In the class of boxes of 12 lbs., first prizes were awarded both to Mr. Harrison of Weybridge, and to Mr. Meredith of Garston, near Liverpool; in both instances the variety shown was Black Hamburgh, large, black, and beautifully covered with bloom. From Mr. Solomon, Peckham Rye, came well ripened Muscats; and Mr. Frost, gr. to E. L. Betts, Esq.; Mr. Young, gr. to W. H. Stone, Esq.; and Mr. Dwerrihouse, gr. to Viscount Eversley, sent excellent Black Hamburgh. The best two dishes Black Hamburgh came from Mr. Meredith, and Mr. Simmonds, gr. to J. Smith, Esq., Dorking. The first prize for two dishes of Muscats was won by Mr. Frost, who furnished beautiful fruit of that variety, as did also Mr. Meredith and Mr. Reid, gr. to T. N. Farquhar, Esq., Sydenham. The largest Grapes of any kind came from Mr. Dwerrihouse, who contributed a noble bunch of Black Hamburgh, and Mr. Meredith also had a fine bunch of the same variety. The last weighed 5 lbs. 2 oz., but it was a double bunch, both issuing from one eye.

The prizes offered for Muscat Hamburgh were carried off by Mr. Henderson, gr. to the Duke of Sutherland; and Mr. Smith, gr. to Lord Tenterden. Both showed good fruit, but Mr. Henderson's bunches especially were excellent—large, well-ripened, and finely coloured.

Of Peaches and Nectarines the best came from Mr. Henderson, of Trentham; and Messrs. Goldsmith, Kaile, Tillyard, Packman, and Holder, also showed good fruit. The sorts consisted of Barrington, Chancellor, and Royal George Peaches, and Violette Hâtive, Pitmaston Orange and Elruge Nectarines. We also noticed large and beautifully ripened fruit of the Salway Peach, a good late variety, to which a prize was awarded.

For Green-fleshed Melons a 1st prize was awarded to Mr. Bailey, and a 2d to Mr. Pottle, for his variety. Dr. Cooper, of Slough, and Mr. Blair, Bank Grove, near Kingston, had the best red-fleshed kinds, both of which appeared to be Turner's Gem.

Brown Turkey Figs, large and fine, were contributed by Mr. Spivey, gr. to J. A. Houblon, Esq., Hallingbury.

Cherries consisted wholly of Morellos, of which beautiful dishes were furnished by Mr. Betteridge, Milton Hall, Steventon; Mr. Dawson, gr. to Earl Cowper, and Mr. Snow, gr., Wrest Park, Beds.

Of Plums, Mr. Snow and Mr. Whiting showed good dishes of Greengage, Jefferson, Kirks', and Washington. Other varieties consisted of Goliath, Ponds' Seedling, Magnum Bonum, and Coe's Golden Drop.

The best Dessert Apples were contributed by Mr. Mortimore, gr. to Miss Browne, Carshalton. The varieties were Ribston, Red Quarrenden, Braddick's Nonpareil, Golden and Claygate Pearmain, and Kerry Pippin. Mr. Newton, gr. to G. Grahame, Esq., Enfield Chase, who was second, sent beautiful fruit of the last named variety, much larger and finer than those in the first collection; also Downton Pippin, Devonshire Quarrenden, Ribston, and King of the Pippins. From Mr. Turnbull, gr. to Lady Lambert, came Kerry Pippin, Nonpareil, Fearn's Pippin, King of the Pippins, and Ribston.

Kitchen Apples were numerous. The best came from Mr. Heather, gr. to R. Pulsford, Esq., Kingston; and Mr. Mortimore, Mr. Newton, and Mr. Frost, also showed in this class. Among the sorts exhibited were Bedfordshire Foundling, Wellington, Golden Noble, Gloria Mundi, Flower of Kent, Alfriston, Kentish Fill-basket, Five-crowned Pippin, and Yorkshire Greening.

Of Pears, Mr. Harrison, Oatlands, Weybridge, sent, as he always does, magnificent fruit of Marie Louise, Gansel's Bergamot, Duchesse d'Angoulême, Hacon's Incomparable, Louise Bonne of Jersey, and Passe Colmar. Mr. Holder and Mr. Hutcheson also showed good fruit of Beurré d'Amanlis, B. Rance, Louise Bonne, and Williams' Bon Chretien. Jargonelles were also produced by Mr. Harrison and others. The largest Pears shown consisted of a dish of Duchesse d'Angoulême, from Mr. Harrison. These were very fine fruit. The best flavoured Pears were Beurré d'Amanlis and Jargonelle.

The Judges highly commended a collection of Grapes in pots, Peaches, Nectarines, and Plums shown by Sir Joseph Paxton, from one of his "houses for the million." These were in every way excellent fruit.

Of Dahlias there was a fine display, and the blooms generally were in excellent condition. In the class of 48 varieties, Mr. Keynes, of Salisbury, was first, and Mr. Kimberley, of Coventry, second; in that of 24 blooms, Mr. Keynes was also first, and Mr. Turner of Slough second. Among the varieties were Lilac Queen, Pluto, Mr. Stocken, Sir George Douglas, Chairman, Earl of Shaftesbury, Hon. Mrs. Trotter, Lord Palmerston, Jenny Austin, Golden Drop, Miss Pressley, Pioneer, Mrs. Pigott, Lord Taunton, Bravo, Sidney Herbert, Triomphe de Pecq, Heroine, Lady Popham, Mrs. Waters, Dinorah, Mr. Keynes, Duke of Roxburgh, Rosebud, William Dodds, Pandora, Mrs. Vyse, Mrs. Critchett, and Tippy Bob. Mr. Legge, Mr. Walker, Mr. Allen, and Mr. Cattell also showed in these classes.

In Fancies, Mr. Keynes was first, Mr. Kimberley second, and Mr. Turner third. Among varieties shown by these exhibitors were Harlequin, Lady Paxton, Queen Mab, Countess of Bective, Mary Lander, Garibaldi, Leopard, Flirt, and many other well-known kinds, all in excellent condition, both as regards freshness, size, and beauty.

In the Amateurs' Class Mr. Dodds, of Salisbury; the Rev. C. Fellows, of Norwich; Mr. Perry, Mr. Charlton, and Mr. Woodward, all furnished good stands, in which there were, in addition to the sorts named above, Criterion, Norfolk Hero, Clara Novello, Madge Wildfire, Mrs. Dodds, Hugh Miller, Donald Beaton, Joy, Lady Elcho, Village Gem, George Brown, G. Elliott, and Silver Queen.

Fancy Dahlias in the Amateurs' Class were contributed by Mr. Perry, Mr. Dodds, the Rev. C. Fellows, and Mr. Corp. Among the sorts were Harlequin, Enchantress, Inimitable, Queen Mab, Countess of Bective, Lady Paxton, Pauline, Enchanter, Flirt, Leopard, C. Perry, Carnation, Oliver Twist, Zebra, Pluto, Impératrice Eugénie, Confidence, Mrs. Jones, and Blondin.

Several Seedling Dahlias were shown, among which the best were perhaps Pope's Lord Derby, rich bright maroon and very perfect in form; Black Prince, a very dark variety from Mr. Keynes, and Minnie Dodds, shown by Mr. Dodds, of Salisbury; others consisted of Honeycomb, a white and red kind, from Mr. Kimberley; Countess of Portsmouth, Illustrious, Sir J. Outram, and Reliance, from Mr. Rawlings; Blondin, Alderman and Lady Elcho from Mr. Dodds; and Charlotte Dorling, Captain Harvey, and others from Mr. Turner.

Verbenas were shown by Messrs. Perry, Minchin, and Patey. The first were chiefly seedlings; those from Mr. Patey, though very fine, had evidently been injured by travelling.

From Mr. Standish came a beautiful exhibition of Gladioli, well varied in colour and highly interesting. These received as they deserved a large share of attention. Messrs. Youell sent examples of Brenchleyensis, but they were by no means so fine as we have seen them from that firm on former occasions.

Of Hollyhocks some fine spikes were shown by Messrs. Downie, Laird, and Laing, Mr. Wm. Chater, and Mr. Bragg. The first sent Hon. Mrs. Cochrane, Beauty, Rosy Gem, John Pow, Lady Dacres, Purple Prince, Flora McDonald, William Deans, W. Blackwood, David Flowlis, Golden Fleece, and Lord Loughborough. Mr. Chater had Hermione, Admiration, Joshua Clarke, Monarch, Excelsior, Mignonette, La Dame Blanche, Amaranthus Surpasse, Mrs. Chater, Jaune, Lady King, and Lady Braybrook. Of Seedlings, the best were Prince Imperial (Bircham), a very fine shining mulberry; Queen Victoria (Chater), rose; George Keith, crimson; and Stansted Rival (Downie, &c.) reddish salmon.

Of Cut Roses, boxfuls were furnished by Messrs. Laing, Keynes, and Turner, but they unmistakably

showed the ill effects of the late dry weather. The best among them were Senateur Vaise and Louis XIV., very fine new kinds, in whose praise too much can hardly be said; Celine Forestier, a yellow sort, was also good, and we likewise noticed a few blooms of Cloth of Gold. In the Amateurs' Class Mr. Hollingsworth showed handsome blooms of Vicomtesse Decazes, Nephetos, Madame Bravy, and Madame Willermoz.

Among Miscellaneous subjects were Calceolarias and other cut flowers, various Gourds, a very fine group of Tritoma Uvaria from Mr. Cutbush, and a collection of fruit trees in pots. The last was shown by Messrs. Lane, of Great Berkhampstead.

Notices of Books.

The Vicar of *Cottingham* near Hull has published a *history of the place*, which is probably not much known for anything but its cheeses. Out of some antiquarian research, local traditions, and personal knowledge, the author has produced a very readable pamphlet, in which the natural history of the locality is not neglected. We must however beg to assure the learned Vicar that Professor Lindley did not found the Natural System of Botany as he supposes, and that Dahl the Swede did not introduce the cultivation of the Dahlia. There are other little matters too which require revision. The following bit of experience may be useful to some of our readers:—"About three years after the Church had been completely restored, there appeared, in the form of Fungi springing up in different parts of the Church, the unmistakeable tokens of the dry rot. Sufficient provision had not been made for currents of fresh air beneath the floor. Very rapid was the progress of this secret and insidious foe. In a short time the nature of the wood was completely gone; seat after seat began to decay; and it was not unusual to see a living Fungus, as white and as large as a common plate, displaying its unwelcome face, in the courts of the Lord's house. But special friends are raised up for special occasions. By the untiring energy and noble generosity of the late John Cowie Williamson, Esq., one of the churchwardens, this sad calamity was completely mastered. Nothing but the floor was destroyed; and all the carved work of the sanctuary was preserved. By the free use of corrosive sublimate, and making ample provisions for currents of air to pass under the floor, the terrible invader has been completely banished." The work is published by Leng of Hull, and contains a view of Cottingham Church, and a brass of Nicholas de Luda, once a rector of the place, who died in the year 1383.

On Food. (Hardwicke, 8vo). Under this title Dr. Lankester gives the world in a new form the six *Lectures on Food noticed at p. 102 of our volume for 1859*, and six others which had been prepared for delivery, like the others, at the South Kensington Museum, but which the authorities of the Museum did not allow to be delivered, it being "considered desirable that my public instructions at the Museum should be discontinued." We cannot but regret to see the exaggerated stories about the impurity of London water persisted in. Surely such claptrap matter is unworthy of science. We fear too that the statements contained in the lectures will not always bear criticism. What can be meant for instance, by the assertion that "In the young state the seeds of *most Palms* are filled with a cool fluid consisting mostly of water. This fluid is drunk by the inhabitants of the countries in which they grow;" unless it be that all seeds when young enough consist of little except mucilage and water, so that they may be sucked, although when ripe they become as hard as horn. What too can have led our learned friend to give a figure of Canella alba as that of the Cinnamon tree, or a most barbarous and really imaginary drawing as a representation of the Coffee tree; or a scarcely less vile woodcut as a portrait of the common Thorn Apple? If this was the sort of matter that the Brompton authorities decided upon discontinuing, we must reluctantly express the opinion that they only did what public interest imperatively demanded.

Trade Lists Received.—In Butler & McCulloch's (of Covent Garden) Catalogue of Dutch and Cape Bulbs just received we find the following useful advice respecting the culture of Hyacinths in water:—"So handsome are the glasses now used for Hyacinths, that this is, undoubtedly, a most elegant and interesting way of growing them; dark coloured ones are to be preferred, as the roots instinctively shun the light. Place the bulb on the top, and fill the glass with pure rain or soft water, so as almost to touch its base. The glasses should then be placed in a perfectly dark, cool, but not damp situation, and, in the course of three or four weeks, the bulbs will have become sufficiently rooted, and may be removed to the light. In all cases a flower-stand or table close to the window is the most desirable position; nevertheless, the Hyacinth may be grown successfully on the mantel-piece, or on the centre table of the room, provided there be sufficient light. The Dutch have another very interesting mode of culture—they take a flat dish, either crystal or porcelain, about the depth of a soup plate, and, according to its size, place 3, 6, 9, or 12 strong healthy bulbs in about half an inch of water. In a few days the roots begin to spread out horizontally, and so clasp each other, that, in the course of a few weeks, they form a natural support for the group. The bulbs may, or may not, be covered with Moss.

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Whatever watering may be necessary here should be done early in the day so as to allow of getting the superfluous moisture dried up before night, and later in the season if cold dull cloudy days should occur it will be advisable to use a little fire-heat with air during the day so as to secure a moderately dry state of the atmosphere before night. Use fire-heat very sparingly, however, and only when it may be necessary to prevent injury from damp, or to prevent the temperature falling below 40°, or where things are brought from warmer houses it will hardly be safe to allow the night temperature to average below 45°; but in houses containing a mixed collection of plants there is more danger to be apprehended from a high night temperature than from keeping it somewhat lower than may be suitable for some of the inmates. Azaleas which have ceased growing and which have set well for bloom, should now be kept as cool and hardy as possible. Dutch Bulbs must be purchased and treated as recommended last week, and Chrysanthemums for early flowering well attended to with water, and otherwise encouraged to make good growth.

FORCING DEPARTMENT.

Pineries.—Plants swelling their fruit must be assisted with a warm moist atmosphere, for it is difficult to get Pines to swell properly after this season, unless the atmosphere can be kept warm and moist. Therefore use sufficient fire-heat to secure a night temperature of at least from 65° to 70°, and 75° by day, allowing it to rise considerably with sunshine, and admit a little fresh air during the day when the weather is mild, using sufficient fire-heat to allow of doing this without lowering the temperature; and if there is the means of admitting fresh air so as to bring it into contact with the pipes on its entrance into the house, a little may be admitted with advantage in all states of the weather, and in the case of houses which have to be kept warm in winter there should always be some contrivance for admitting fresh air under or against the heating apparatus so that it may get warmed before coming into contact with the plants, and with proper arrangements a moderate supply may be admitted constantly without requiring any extra amount of fuel to keep up the temperature. Also endeavour to secure a steady bottom-heat of about 85°, and endeavour to keep the soil about the roots in a properly moist state, giving clear, rather strong, manure-water when necessary; but if the atmosphere is kept properly moist the soil will not require much water for some time. It is very difficult however to get Queen Pines to swell properly after this season, and any plants of this variety showing now should, unless in cases where ripe Pines of any size or quality will be valuable early next spring, be kept cool and dry as soon as they have done flowering, until the middle or end of January, and then be afforded a brisk moist temperature; and treated in this way, we have often found them to swell off exceedingly well, and where ripe Pines in winter are in demand Cayennes, Black Jamaica, and Montserrats should be grown to furnish the supply from November to April, for those not only swell better in winter than Queens, and the larger sorts of blacks, but are also less liable to be hard and inferior in quality. Fruit approaching maturity must also be kept warm, but the atmosphere should be kept rather dry, admitting fresh air freely on every favourable opportunity.

Vineries.—Use gentle fires when the weather is damp in houses where the fruit is ripe, but only just sufficient to keep the atmosphere dry. Use brisk fires in houses where the fruit is not yet ripe, giving air freely, and be careful to guard the foliage from insects, particularly where the fruit has to be kept for any length of time after it is ripe.

Peaches.—As the trees will now be freely exposed to air day and night, very little attention will be required here for the present. The foliage should, however, be kept clear of red spider, by an occasional washing with the engine where necessary, so as to preserve it in health until it has performed its functions and decays naturally.

FLOWER GARDEN AND SHRUBBERIES.

It will soon be time to think of housing tender plants from which cuttings are to be taken next spring, or which are to be used again next season. Variegated Geraniums will not bear much frost, and where the plants have to be wintered in situations which are not very suitable for them they should be taken up before they are at all injured, as they will be much more liable to damp and die back in winter if the wood is at all touched by frost. Unless where there is a sufficient stock of these they should not be cut back, as is usually done with the old Scarlets, but should be kept over the winter just as they are lifted from the beds, and cut back early in spring after starting them into growth, when the cuttings will root very freely in heat, and in the case of Flower of the Day, or other free growers, will make useful sized plants by turning out time, and even the strongest growers of these do not cover a bed very quickly unless planted thick, and the plants should therefore be wintered in as large a state as the accommodation will permit. Rooted Verbenas, &c., must be well attended to, keeping them perfectly clear of green fly, and exposing them freely to air on every favourable opportunity, so as to prevent anything like growth after the season, and keep the plants hard, in which state they will be much less liable to fog off under a week or two's confinement in winter than if they were kept in a growing soft state until overtaken by severe weather. Things which are not sufficiently established must, however, be treated somewhat more kindly, and should have a gentle bottom-heat to encourage roots, but do not keep the atmosphere close or moist.

HARDY FRUIT AND KITCHEN GARDEN.

Look frequently over Pears and Apples ripening, and gather those that are fit for storing. Where Currants are closely netted up the trees should be uncovered occasionally on fine dry days, so as to expose the fruit thoroughly to air, in order to prevent injury from damp. Trim and dress Strawberry plantations; and take advantage of dry days, when the ground is in working order, to take up and store roots, stacking them in sand in a cool place where they will be conveniently got at when wanted for use. Onions must be stored in a dry state, or they will not keep.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending Sept. 5, 1861, as observed at the Horticultural Garden.

August and Sept.		Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Temperature of the Air. Min.	Temperature of the Air. Mean	Of the Earth, 1 foot deep	Of the Earth, 2 feet deep	Wind.
Friday	30	24	30.170	30.120	74	38	56.0	65	61½	W.
Satur	31	25	30.327	30.079	84	35	59.5	64	61½	W.
Sunday	1	26	30.061	29.898	83	42	62.5	64	61	N.W.
Mon.	2	27	29.932	29.846	80	53	66.5	65	61½	W.
Tues.	3	28	29.775	29.736	73	47	60.0	65	61½	S.W.
Wed.	4	●	29.931	29.860	74	44	59.0	63½	61	S.W.
Thurs.	5	1	30.006	29.825	78	59	68.5	63	61	W.
Average			30.171	29.909	78.0	45.4	61.7	64.2	61.3	

Aug. 30—Very fine; heavy dew; cloudy; cold at night.
— 31—Slight haze; fine; very fine throughout, cold at night.
Sept. 1—Heavy dew; very fine throughout.
— 2—Very fine; quite cloudless; dry air, and bright sunshine; overcast.
— 3—Cloudy, with brisk wind; fine; rain at night.
— 4—Overcast; densely clouded; fine; overcast.
— 5—Lightly overcast and fine; very fine throughout, dense overcast.

Mean temperature of the week 7 deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Sept. 14, 1861.

Sept.		Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday	8..	68.8	47.5	58.1	15	0.65 in	5	7	2	2	3	12	3	[illegible]
Mon.	9..	68.4	48.2	58.3	15	1.09	—	6	2	3	5	10	7	2
Tues.	10..	69.3	46.4	57.9	18	1.27	—	4	4	1	7	8	9	2
Wed.	11..	68.2	45.0	56.6	10	0.68	2	6	1	2	5	6	9	4
Thurs.	12..	68.6	44.8	56.7	14	0.49	4	5	1	4	2	7	11	1
Friday	13..	67.8	45.6	56.7	16	0.42	2	3	6	2	3	6	8	5
Satur	14	66.7	46.4	56.5	18	0.84	1	4	[illegible]	4	3	[illegible]	[illegible]	[illegible]

The highest temperature during the above period [illegible] 1858—therm. 86 deg.; and the lowest on the 11th and 12th, 18[illegible]—therm. 28 deg.

Notices to Correspondents.

Books: *E H.* inquires for some published work giving designs for entrance lodges, gardeners' cottages, &c., the name of publisher, and the price. Can any Correspondent recommend a really good book of the kind? A Correspondent complains that he has twice applied to Virtue & Co. for Pearson on Orchard Houses, published by them. This seems very uncivil conduct, unless some explanation can be given of the cause of a refusal to supply what the advertisement says can be procured of this firm. We have sent our Correspondent's letter to Mr. Pearson (Chilwell, near Nottingham).

Evergreens: *G P.* On no account whatever cut your Evergreens down before the end of March or beginning of April. A saw will be a proper instrument, but the wounds should be smoothed afterwards by a knife or some other sharp instrument.

Garden Memoranda: *R T.* You surely do not suppose that we allow gardeners to describe their own places and to praise themselves.

Gas Heating: *G B H.* There is nothing to prevent gas being fit for garden purposes, except the apparent impossibility of hindering its escape into the atmosphere breathed by plants, to which it is fatal. We cannot advise you to spend money upon a further attempt.

Insects: *Sir W C T.* We believe the mites on the ears of the wild rabbits to be a new species of Dermanyssus or Dermaleichus. The specimens were too shrivelled up to admit of examination. Please to send a few in spirits to Mr. Westwood, Oxford University Museum. *W.*

Jute.—This is the fibre of an Indian plant named Corchorus capsularis. You will find a full account of it in the Number of the Technologist just published. It is only used for coarse work.

Names of Plants: *Lt.-Col. G.* Acer Negundo, the Ash-leaved Maple.—*J H, Chester.* The seed from New Zealand which you say is used there for tea, belongs to some Veronica, but we cannot say to what species. It will be a greenhouse plant in this country.—*J C W.* We are sorry to say it is impossible to name small specimens of young Conifers, unless in flower or fruit; 1 and 2 seem to be Junipers; 3 looks like Cephalotaxus drupacea; and 4 may be some Yew, but we cannot be certain.—*G.* Bignonia grandiflora.—*J L A.* Veronica maritima, Nepeta micrantha, Agrostemma coronaria, and Spiræa Aruncus.—*J G W.* A purple variety of Setaria viridis, and Pteris longifolia.

Orchids: *C D.* We will see and reply next week.

Plants in Pots: *An Amateur* may shift his trees if he likes, but he had better wait till the leaves are off. They seem to have been unskilfully managed to have their roots in the state described. Put one Vine to each rafter.

Pyrethrum: *J D.* The white flowering plant thus called by our Paris correspondent, *V.*, is seen everywhere in that city. It is as far as we recollect the Pyrethrum (or Chrysanthemum) grandiflorum. We fear it would run too much to leaf in this climate.

Rose-showing: *S. Freeman.* All depends on the terms of the schedule. Roses cut from pot-plants ought not to be shown as cut Roses, unless it is expressly permitted by the schedule.

Strawberries: *L D.* Cuthill's Black Prince, Keens' Seedling, British Queen, Sir Harry, Oscar, Frogmore Late Pine, and Rifleman may possibly answer your purpose. ‡

Misc.: *G R.* We cannot pretend to say, among so many great foreign growers of Roses and Gladiolus, who is the greatest.

THE LONDON MANURE COMPANY
(ESTABLISHED 1840,)
Are now prepared to send out the following MANURES:—
CORN MANURE FOR AUTUMN SOWING.
SUPERPHOSPHATE OF LIME
DISSOLVED BONES FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN.
PERUVIAN GUANO, NITRATE OF SODA, SULPHATE OF AMMONIA, and every other Manure of value.
116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

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CONCENTRATED TURNIP MANURE, equal in value to the preceding.
Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861 are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME	£6 6
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Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
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SHAW'S TIFFANY FOR SHADING, &c.—
Sold in Pieces. Per piece.—s. d.

No. 1, 20 yards long, by 38 inches wide	5 0
No. 2, do., do., the same material, manufactured with a Patent Mineral Solution to prevent it from rotting ..	6 0
No. 3 (double strength), 18 yards long by 39 inches wide..	7 6
No. 4 (treble strength), 18 yards long by 39 inches wide ..	9 0

Sold by all respectable Seedsmen. See that every piece is marked "Shaw's Tiffany," Manchester. Samples and Circulars sent free by post.
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BURGESS AND KEY, 95, Newgate Street, E.C. Prizeholders for the best Agricultural Machinery Manufactured.
ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price 42l. 10s.
TESTIMONIALS.
A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following:—
From Mr. JOHN RICHARDS, *Bailiff to* Dr. N. CARNE, *Dimland Castle, Glamorgan.*
"I beg to certify that I have for five years worked Messrs. Burgess & Key's Reaper in my master's Home Farm, and also accompanied it when lent to tenants on the estate. During the above mentioned period the Machine has not cut less than 1,000 acres of all kinds of crops, with the same two knives as first used with the Machine. Dr. N Carne having given up farming, the machine is now in the hands of his tenant Mr D. Thomas, of Llanrwst, and is in excellent order."
M'CORMICK'S REAPER for Manual Delivery. Price 25l.
COMBINED REAPER AND MOWER—Two-Horse Machine. Price 35l.
The last Machine is fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.
These Prices include Packing and Delivery at any Railway Station

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This Company is possessed of the most simple, expeditious, and inexpensive powers for taking Outfall Drains through the Lands of adjoining Proprietors—the cost of exercising such powers has not exceeded 5l. in any case.
Draining, Inclosing, Irrigating, Warping, Road Making, and all kind of Land Improvements executed on Entailed, Mortgaged, or other Properties; the whole cost can be a charge on the Lands permanently, or it might be made redeemable at any fixed time in one or more sums, or by half yearly instalments over any term of years, at the option of Proprietors.
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Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
To LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c. IN ENGLAND AND WALES AND IN SCOTLAND.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
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Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
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For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

FREE STUDENTSHIP IN THE EDINBURGH NEW VETERINARY COLLEGE. Authorised under Royal Sign Manual. WINTER SESSION, 1861-62.—Gentlemen desirous of commencing a Course of Study to qualify as Veterinary Surgeons are informed that all who enter on the 6th November, 1861, and who have not attended a Veterinary College before, will be admitted to compete for a FREE STUDENTSHIP at the close of the Winter Session. The conditions of the competition, and any farther particulars, may be learned from Professor JOHN GAMGEE, New Veterinary College, Edinburgh.

BRACKLEY AGRICULTURAL AND HORTICULTURAL SOCIETY.
President for 1861.—J. L. STRATTON, Esq., Sundeston House.
Vice President—Hon. P. BARRINGTON, Westbury Manor.
The ANNUAL MEETING of this Society for PLOUGHING MATCHES, Show of ROOTS, FLOWERS, FRUIT, and VEGETABLES, will be held at Brackley, on TUESDAY, September 17, 1861.
Prizes are offered for the best specimens of Flowers, Fruit, and Vegetables in the Open, Gardeners', Amateurs', and Cottagers' Classes.
The celebrated Band of the Coldstream Guards will attend.
Schedules of Prizes will be forwarded upon application to
R. J. RUSSEL, Honorary Secretary. Brackley.

MANCHESTER AND LIVERPOOL AGRICULTURAL SOCIETY.
The FOURTEENTH ANNUAL SHOW OF HORNED CATTLE, HORSES, SHEEP, PIGS, POULTRY, SPORTING DOGS, CHEESE, BUTTER, SEEDS, ROOTS, FRUIT, VEGETABLES, FLOWERS, IMPLEMENTS, MACHINERY, &c., will take place at Ashton-under-Lyne on WEDNESDAY and THURSDAY, September 11 and 12.
Premiums amounting to upwards of 1100l (including considerable Special Prizes) will be awarded on this occasion.
Entries of Stock, &c., closed on the 19th ult.
The Show Yard will be open to the Public by Tickets sold on the spot, admitting One Gentleman and a Lady, or Two Ladies, on Wednesday, September 11, from 10 to 6, at 2s. 6d. each, and on Thursday, Sept. 12, from 8 to 4 (when the Show will finally Close), at 1s.
The PUBLIC DINNER will take place on the First Day of the Show, in the Ashton Town Hall, at 4.30 P.M. F. D. P. ASTLEY, Esq., will preside. Tickets, 3s. 6d. each, may be had from Messrs. JENNISON, in the Show Yard; or meantime, from them at Bellevue, Manchester.
T. B. RYDER, Secretary.
2, Elliot Street, Liverpool.—Sept. 7.

The Agricultural Gazette.

SATURDAY, SEPTEMBER 7, 1861.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

WEDNESDAY, Sept.	11	Sparkenhoe.
WEDNESDAY, —	11	Manchester and Liverpool Society at Ashton-under-Lyne.
THURSDAY, —	12	
SUNDAY, —	15	East Flanders at Ghent.
MONDAY, —	16	
TUESDAY, —	17	Great Sale of the late Lord Berwick's Herefords, &c., at Cronkhill, near Shrewsbury.
WEDNESDAY, —	18	
THURSDAY, —	19	
WEDNESDAY, —	18	Warwickshire Society at Stratford-on-Avon.
WEDNESDAY, —	18	Staffordshire Agri. Society at Wolverhampton.
THURSDAY, —	19	
FRIDAY, —	20	

WE could last year call attention to the first Part of the Agricultural Society's Journal for 1860 on the 8th day of September. This year no notice has been possible of the corresponding Part for 1861 until the 7th of the month. The publication was, however, we believe, actually accomplished (in accordance with a recent bye-law of the Society) before the end of August; and it would have appeared before had the Editor been supplied with the reports of the Judges of Implements at Leeds. These have not been forthcoming, and accordingly we shall have to wait till February, 1862, for an official account of the steam cultivators and steam ploughs and other implements tried at the annual meeting in July last.

It is certainly not impossible to prepare such reports within a month of the event to be reported. The columns of the daily newspapers and of the weekly agricultural journals prove how rapidly and well such reports can be at once prepared and published. The work of trying and examining the implements shown at Leeds was distributed in four divisions among a dozen judges; and it is unpardonable that the grounds of the decisions which they made are not yet in the hands of the Society. It may be that the gentlemen employed cannot give up their time in harvest, although public spirited enough to devote a week or two early in July to the work of adjudging the premiums of the Society. If so, an official reporter should be appointed to receive the notes taken during the process of adjudication, and put them in form for immediate publication. And any how the Editor ought to have prepared a personal report of the reaping and steam cultivation done, to meet a default of this kind, and so prevent its recurrence in the future. We are bound to add that the report of the cattle show, which has been prepared in time for the current Number, is exceedingly meagre. With the exception of the Hereford and Devon cattle, and the Shropshire sheep, and some classes of the Horses, which are described with more minuteness, the account given is inferior in interest and utility to those which appeared in the daily and weekly papers immediately after the meeting. What service for instance is done by the three lines which are all the long-woolled herds of sheep receive:—"This class now commonly signifies Cotswolds and Lincolns; of the former there was a splendid show, but the Lincolns were not even represented." Mr. FISHER HOBBS, it should be added, makes some useful remarks on the nursery department of the cattle show, to which reference will hereafter be made.

Under this head, too, we have to remark that the published prize lists do not *name* the cattle which receive the awards, although by a resolution of the Council this was directed to be done. What the difficulty may be which has hindered it we do not know; it is plain that without the names a record of this kind is almost useless.

Let us now turn to the other contents of the volume. It opens with a prize Essay on Stock Breeding, by Professor HENRY TANNER. There is then a useful paper, also a prize Essay, by Messrs. RAYNBIRD of Basingstoke, on the Adulteration of Seeds, in which Professor BUCKMANN'S investigations into the subject, published in the *Agricultural Gazette*, are largely quoted. Then follows the most important article of the series—"On the Composition of Cheese," by Dr. VOELCKER, containing an immense mass of research, well arranged so as to exhibit clearly the lessons it conveys. The importance of keeping the milk *sweet* and *clean*—the need of observing a uniformity of temperature at which to add the rennet—the importance of patience in the separation of the whey—the advantage of scalding the curd when still lying broken in the midst of the whey—the necessity of a slow and gradual breaking of the curd—the importance of sweet rennet of the proper strength, are all discussed. A great many facts, too, are brought to bear upon the uncertainty which exists in cheese-making. The variety in the quality of milk, and in the composition of whey, curd, and cheese, are also illustrated by them; and the utility of various dairy implements is discussed. The theory of the formation of curd is yet unformed, and no explanation yet devised seems capable of meeting all the facts of the case. Dr. VOELCKER also gives an interesting account of prolonged experiments in manures for Swedes. The Farming of Yorkshire is described by Mr. WRIGHT, and that of Nottinghamshire by Mr. PARKINSON. Mr. BOWICK and Major McCLINTOCK give detailed and instructive reports of their experience in the rearing of calves. Messrs. LAWES and GILBERT give most useful reports of experiments in the feeding of cattle and sheep; and a good essay on Farm Capital by the late CHARLES WRATISLAW is followed by a long note of comment from the Editor, to which reference is made elsewhere.

Mr. HERBERT makes his annual report of the consumption of meat in the metropolis, and Mr. GLAISHER gives his periodical account of the weather of the year.

There is thus the usual variety of topics in the pages of the present Number.

The department of cattle breeding and feeding occupies indeed more than its usual share of attention; short papers on the adulteration of seeds and on the growth of Swedes being the only reference to plant cultivation; and the subject of soil culture, if we except the Editorial note, being almost entirely omitted. This division of interest over the agricultural field does not correspond to that felt out of doors just now. Steam cultivation and land drainage have this year occupied more attention than they have ever done before, and a report of progress under these heads ought to have been given. It was no doubt expected that the former subject would have been discussed in the report of the Judges at Leeds; and the public will share in the disappointment of the Editor, that the report in question was not forthcoming in time for publication.

NOT only has rust been extremely prevalent this year amongst Wheat, but at this moment, in some districts, the Grass in meadows and amongst the Clover is affected to such an extent that the labourers walking through the field or engaged in mowing are thickly powdered with the spores. Though rust may be innocent enough in the Wheat crop, the case is very different with Grass, where the plant and not the seeds is the source from whence the farmer's profit is to arise. Grass cannot be rusty without suffering both in weight and quality, even though it should not be decidedly deleterious.

We have been consulted however as to this latter point, but unfortunately we have no data upon which to found any decisive opinion. Few

analyses of Fungi have ever been made, and none as far as we know of the rust of Grasses and Corn crops. It is a well known fact that stock suffers when Grass is infested with Ergot. Premature labour arises often from its presence, and it has been suggested to us that pastures cannot be good for cattle where the leaves of Grass are extensively covered with parasitic Fungi. As however there are wholesome as well as unwholesome Fungi, and there are no decisive examples to show that evil has arisen from the presence of rust, we can only at present remain in a state of philosophic doubt, waiting till some one shall analyse the Fungus, and make experiments on its properties. As the plant is so small this may at first sight seem almost impossible, but rust is often so prevalent that there would be little difficulty in collecting a sufficient quantity both for analysis and experiment by sweeping meadows or corn crops where it abounds with a coarse cloth, to which the spores would adhere abundantly. When collected, the substance should be submitted to a first-rate chemist, with an especial charge to compare the result with the known analyses of wholesome and deleterious Fungi. The question is of consequence in more than one direction, and especially with reference to the nature of the oily matter which might be collected from rust when distilled.*

While on the subject of wholesome and unwholesome Fungi, it may be mentioned that three Zouaves were reported as dying a few days since in the military hospitals of Versailles from eating Mushrooms. The particular species is not stated, but the bad symptoms did not arise till 18 hours after they had been eaten, when constant vomiting, violent pains in the stomach, a small pulse, cold skin, and pinched face were apparent; in fact, almost every symptom of cholera except extreme purging. All three died in 24 hours. The crisis which preceded death was characterised by convulsions so strong as to necessitate the use of the strait waistcoat. On *post mortem* examination, congestion of the stomach and of the upper part of the intestinal canal was found.†

It would be well if cases of sudden disease, passing rapidly through its several stages and ending in death, should arise amongst stock in pastures where rust abounds, to bear the instance just mentioned in mind. The peculiar symptoms should be noted and reported, and a careful *post mortem* examination made by some skilful veterinary surgeon. Extensive inflammation and convulsions of extreme severity may, however, sometimes arise from very simple causes, where there is at first sight good ground for attributing the cause to some deleterious matter, taken either accidentally or by design. Last May, within two or three days of each other, three fine beasts in our neighbourhood were seized with inflammation and strong convulsions, living but a few hours after the seizure. The stomach in every case was highly congested, the food forming dry plates almost as destitute of moisture as oilcake. The intestines, especially above, were in a high state of inflammation, and the convulsions almost incredible. A few particles of common blue paint were found in the stomach, and it was at first thought that the lead might have induced constipation. It was however suggested that the stock had access to a piece of ground which had been laid down the previous summer for Grass, in which there were numerous tussocks of coarse dry Bent from the seed having been injudiciously chosen. These were in consequence mowed and carted away, and there were no more cases of illness. All unpleasant suspicions of poisoning vanished, and some experience was gained, though at a great sacrifice.

Such cases warn us to be cautious in our inferences. The question, however, of our Correspondent as to the effects of rust will not, we hope, be carelessly laid aside, but followed out to some positive conclusions. It shows moreover the great importance to the farmer of having some accurate notions as to the nature and properties of the parasites with which the objects of his care are infested. *M. J. B.*

* There is little doubt that oily matter would come over, as every spore contains several globules of oil of greater or less size.

† British Medical Journal, 1861, p. 239.

STEAM CULTIVATION.

Berden Hall, near Bishop Stortford.—This estate has passed within the last few years into new hands. Formerly the property of Mr. Calvert, the London brewer, who had during his ownership supplied it with capital farm buildings, it has lately been purchased, the greater part of it by the trustees of Christ's Hospital, and the remainder by Mr. Gosling, a London banker. The fine old mansion, dating from 1657, which is the residence of the tenant, is now being placed in thorough repair; and while the landlords are directing most liberally the permanent improvement of the property, the tenant, Mr. Roberts, is carrying out with equal energy improvements in the cultivation of it. As soon as he was assured of his tenancy under the new ownership he purchased Fowler's apparatus, ordering the engine of greatest power then sent out with it, and it has accordingly been at work since October 1860. It was a bad season last autumn for prosecuting steam cultivation, and the engine only arrived in October, but up till harvest time this year Mr. Roberts had already ploughed 440 acres; * and since, as well as during harvest, he has already ploughed 8 or 9 inches deep 50 acres of stubble. The best month in the year yet remains for him before his first year finishes, and if weather favours him he may add other 120 to 150 acres to his year's performance. The amount done during 12 months will then have been from 600 to 640 acres. And this, considering that a great portion of the land is extremely heavy, that it is the old unimproved 12-horse power apparatus that has been used, and above all, that the autumn of last year was almost lost by the wetness of the weather, is very satisfactory work.

The Berden Hall Farm includes about 750 acres, of which 60 or 70 are permanent pasture. Some 300 acres of it at either end of the estate are extremely heavy land, receiving a thorough bare fallow once every six years as the only possible way (so they say) to successful cultivation; 200 acres is a loamy soil of good quality over a white chalky clay, and the remainder is a light soil. 300 acres accordingly are cultivated according to the following rotation:—(1) Bare fallow, (2) Wheat, (3) Clover or trefoil, (4) Wheat, (5) Beans or Peas, (6) Wheat; and 400 acres or thereabouts are cultivated on the 4-course rotation, (1) Turnips and other root crops, (2) Barley, (3) seeds, (4) Wheat. But the rotations are not very strictly adhered to. Oats are sometimes taken after Wheat; Trefoil is over a considerable extent of the heavy land taken after Wheat to receive a bastard fallow after being fed off with sheep or mown for hay; and in some cases, as this year, the quantity of bare fallow is increased at the expense of the Beans; and in place of Turnips a considerable breadth of Mangel Wurzel is grown. The cultivation and cropping this year for instance does not include any Beans at all; it includes 240 acres of Wheat, 80 acres of Barley, 80 acres of Oats, and a large extent of bare fallow.

How large the quantity of labour the work of cultivation involves may be gathered from the following statement of the mere ploughings, and scarifyings or grubbings, which the several crops receive:—

	Acres ploughed.
Wheat in any case, whether it be seed furrow after a fallow, or after seeds or Beans, receives 1 ploughing	=250
Barley receives 1 ploughing	=100
Beans after Wheat, 1 ploughing	= 50
A bare fallow receives a 4-horse ploughing out of stubble—a 3-horse ploughing (turning back) in spring)—a 3-horse cross-ploughing—a 2-horse ploughing (turning back), and a horse ploughing into lands, in succession; besides as many harrowings and rollings as the weather points out to be necessary—in all	=250
Turnips receive one 4-horse ploughing in autumn, two scufflings in spring; one 3-horse ploughing and another scuffling afterwards	=500

There are thus no less than 1150 acres of ploughing or its equivalent needing to be done per acre, besides harrowings, rollings, and carriage of manure and crop; and a great portion of this ploughing, all the first furrow out of corn stubble, has been done with four horses in a team. No wonder that Mr. Roberts sought cheaper and more efficient means of cultivation than horse-power afforded him.

The cultivation and general work of Berden Hall Farm at first took 24 horses; latterly it had taken 22. Since the steam plough has been adopted it has been done by 14 horses. The work of at least eight horses has thus been saved. To ascertain the cost of this it will be necessary to calculate the cost of 12, for they are managed in teams of six, a man and boy managing each six in the stable. When they are worked in teams of four, then two sixes are arranged in three teams, and an extra man and boy are needed; when in teams of three then two men and boys are needed, and when in teams of two, then other two men are required. The average of the year's work may be considered as accomplished by 3-horse teams—and the wages thus of four men and four boys may be charged per annum. This at 13*s.* for the horse keepers, and 11*s.* for other men, and 11*s.* for the boys, over 52 weeks, is 166*l.* 8*s.*

The food of the horses is during about 10 months of the year 2 bushels of Oats, one-sixth of a bushel of Beans, and 2 trusses of hay, making apiece equal to nearly 10*s.* a week over at least 40 weeks; while during the remaining 10 or 12 they receive half the quantity of corn with green Clover *ad lib.*, equal to at least 7*s.* a week. This amounts per annum to 24*l.* 10*s.*, or over 12 horses to 294*l.* To this we add for farrier, harness maker, blacksmith, depreciation of value and interest of capital, 5*l.* a horse, or 60*l.* in all, making 354*l.* on this account. Add 2*s.* an acre for annual charge of implements worked by these horses, and we have about 35*l.* or 40*l.* to add, making in all the sum of about 560*l.* for 12 horses; or about 373*l.* for 8 horses, as the expense saved by dispensing with them.

* This includes 50 acres three times, and 70 acres twice gone over with the plough.

Let us now find out what has been the cost incurred by the use of the steam plough in their stead. The work actually done during the twelve months, assuming only a moderate performance during the month of September, will prove at least 600 acres of ploughing. And nothing can be more perfect than the thorough disturbance and disintegration which the land is now receiving. This work has been accomplished at the rate of 5, 6, 7, and 8 acres a day, including all stoppages and removals. When I saw it last Monday it was upon the point of finishing 42 acres at the end of its eighth day; but then it was extremely deep and heavy work, and the 3-furrow plough only was in operation. In the case of lighter work, when the 4-furrow plough can be used, 8 acres a day can be as easily done as 5 can be when 3 furrows only are worked at once. If six acres a day be put as an average performance it must be held to include all ordinary stoppages and the time during which the plough has been at work in the past 12 months, including last year's ungenial weather, then comes out about 100 days. The daily cost of wages is for engineer, 3*s.*; ploughman, 2*s.* 6*d.*; anchor man, 1*s.* 8*d.*; two porter lads, 1*s.* each; water cart and boy, 4*s.* The daily cost in oil is about 1*s.* 4*d.*, and the daily cost of coals, so much as 15 cwt. being daily burned, is 15*s.* The total daily cost of wages and materials is thus 28*s.* 6*d.*, and the annual charge over 100 days is thus 142*l.* 10*s.*

The cost of repairs has been hardly anything.

One thorough overhaul of engine cost	£5
6 plough breasts broken	3
40 ploughshares	2
Injury to rope porters, &c., say	5
In all	£15

The cost of rope is ascertained with greater difficulty. The quantity supplied originally was one long steel rope of 400 yards; shorter links of steel rope = 400 yards; headland ropes = 300 yards. Of these, the shorter links and the headland rope will probably last five years; the long 400 yards rope, which alone passes round the engine pulleys, and has all the wear and tear which in the old-fashioned arrangement it receives, is perhaps nearly half worn. Mr. Roberts is about to get another 400 yards length for heavy work, and will use the half-worn rope for lighter work for perhaps two years longer, when the new rope will take its place, and thereafter if the wear continues at the past rate, a new long rope would have to be bought every two years, and new short ropes every five years. If therefore

the half of a long rope	£22
and the fifth of the other rope	8
be charged, we shall have	£30

to put down for the year's expenditure in rope. Let it be remembered that the new arrangement (by which the slack rope is kept off the ground), and the new clip drum, will together effect an immense saving upon the past wear and tear, so that this item for future years will no doubt be much diminished. It is however my object to state only actual experience, and 30*l.* are therefore charged for the past year on account of rope. Add for interest of capital 5 per cent. on 800*l.*, or 40*l.*, and 10 per cent. for depreciation or maintenance of value, or 80*l.*; and we have a total expenditure of 307*l.* 10*s.* Let it be remembered that this charge of 10 per cent. is undoubtedly an excessive charge, and is only put down because it has been adopted in all the previous instances of this series. From this amount however we have to deduct the sum of 50*l.*, which has heretofore on this farm been paid for hire of steam-engines for threshing grain, and which will not for the futnre be incurred, because the 12-horse-power engine will be perfectly efficient—indeed much more so than those engines which have been hired hitherto. There thus remains a sum of 257*l.* 10*s.* as the annual expenditure on steam-power in place of 373*l.* hitherto incurred by horse-power. Divide the 257*l.* amongst the 600 acres of ploughing accomplished, and we have a charge per acre of very little more than 8*s.* 7*d.* per acre.

Now, this ploughing is a great deal of it more than the former 4-horse work, and all the rest is at least equal to the former 3-horse work; and we may therefore estimate the great advantage which Mr. Roberts has experienced by the substitution of steam-power for horses. It is impossible to doubt that an immense advantage is to be in the future reaped by the fertilising and cleaning influence of such deep and thorough work as his clay land and corn stubbles are now for the first time receiving. And when the clip drum is substituted for the present cumbrous arrangement of pullies underneath the engine, and when the self-acting slack gear is at length substituted for the present arrangement, which involves so much waste of time and wear and tear of rope, all these advantages will be achieved at a great diminution of cost.

Berden Hall Farm is interesting in other ways besides its steam cultivation. Several hundred acres of it have been drained from 30 inches to 3 feet deep, at 1 perch interval, and Mr. Roberts prefers this comparatively shallow draining to deeper work. Eighty or

100 acres of woodland have been grubbed and added to the arable land of the farm. A flock of 300 large-framed well-bred Hampshire Down sheep are kept, and their produce are sold as fat lambs during the spring and early summer months. A dairy of 20 capital cows is kept, so as to yield butter all the year round. A large stock of improved Essex pigs is kept. All the best implements are in use—drills, horse-hoes, grubbers, manure-distributors, reaping machine, threshing machine, chaffcutters, root pulpers, &c. The farm buildings are well arranged and exceedingly complete. The farm house is one of the finest old mansions of its class in the country. Most of the cottages of the labourers both there and in the villages between it and the Bishop Stortford station are exceedingly good, and new five and six-roomed cottages are in the course of erection by the landlords, the Governors of Christ's Hospital, at the cost of 400*l.* per pair! That the interests of the labourers are observed both by landlord and by tenant is plain from the fact that under the existing energetic management not only is the cottage accommodation improving, but the quantity of wages paid per annum is increasing, notwithstanding the last addition in the shape of the steam plough to the machinery of the farm.

I ought to add that the farm is about 25 fields, of which one is 114 acres in extent, another 92, three of 50, and five between 20 and 40. There is thus a considerable extent of large open fields already well fitted for the operation of the steam plough—though a good many fields of smaller size, under 10 acres, yet remain and need to be thrown together before the whole farm is prepared for the economical adoption of steam culture.

LIABILITY FOR THE USE OF A PIRATED INVENTION.

Torrington: Before John Tyrrell, Esq., Judge, August 7.

CAMBRIDGE'S PATENT CHAIN HARROWS.

Cambridge v. *Down.*—Mr. L. Bencraft said the plaintiff was the well-known agricultural implement maker of St. Phillip's Iron Works, Bristol, and the defendant was a wheelwright living at Merton, in this county. The action was brought to recover damages from defendant for the infringement of a patent, which secured to the plaintiff the right to manufacture an implement well known in husbandry—the self-expanding chain harrow. Chain harrows had been used for many years, but they were, before the date of plaintiff's improvements, mere masses of chain welded together and expanded by an iron or wooden bar. In April, 1857, plaintiff conceived and obtained a patent for his first improvement—it had reference to the expanding bar. The old bar gave the harrow such rigidity, laterally, as effectually to prevent it from adapting itself to the unevenness of the land; to remedy this defect, plaintiff invented a bar composed of several links coupled together breadthways of the harrow by joints. The harrow was thus kept expanded to its full width, but, at the same time, was allowed to yield to any inequality or unevenness of the surface of the land. Another improvement was effected by the same patent. The links composing the harrow were so arranged that one row should not follow the preceding one, but should work between the lines formed by the preceding row of links. By this plan the ground was cut finer, and more effectually pulverised, than by the old construction. In March, 1859, the plaintiff obtained a patent for further improvement on the old implement, by making the harrow in *detachable* parts by means of hooks. The usefulness of both inventions was indisputable—prizes, medals, and certificates of merit, had been awarded to plaintiff for it by the Bath and West of England, and other agricultural societies; but the best proof of their merit was the fact that plaintiff had this year turned out not less than 1500 sets from his manufactory. In 1858, he exhibited at the Bath and West of England's Show, at Barnstaple, and from that period he found that throughout this and the adjoining county, copies of his invention had been pirated by country blacksmiths, in great numbers. The law was perfectly clear: whoever, directly or indirectly, used the invention was guilty of an infringement; and if any person employed means only colourably different to produce the same result as the patent, he was as liable in law as if he made an exact copy. Neither could any one, legally, construct what might actually be an improvement of the patent. Plaintiff having expended a considerable sum in obtaining his patent, had resolved to spare no trouble or expense in detecting and punishing parties who chose to set his rights at defiance. He had accordingly despatched a person through this part of the country to make detections, and the result had been the present case, and three others for hearing to-day. Plaintiff had no vindictive feeling in the matter, but he gave notice, that after publicity and warning had been given in these cases, he should, in all future cases, press for substantial damages.—Witnesses then proved that in the month of April last, defendant had made and sold to Mr. James Snell, of Grange Farm, Merton, a chain harrow, which contained the principle of plaintiff's first patent—the flexible expanding bar.—Defendant, in answer to the case, said he was quite unaware that he had infringed any patent, or that there was any such patent in existence.

Cambridge v. *Heard.*—This case was similar to the last; the defendant being a smith at Dolton, and being charged with having manufactured a chain harrow in July last for Mr. Thomas Snell, of Dolton, the same being an infringement of both plaintiff's patents.

Cambridge v. *James Snell.*—Mr. Bencraft said in this and the next case an important question arose, though it was one upon which no manner of doubt could exist. The defendant was a respectable yeoman, living in Merton, and this action was brought against him for an infringement of plaintiff's patents by "using" the spurious implement made by Down. On reference to the patent, which he produced, it would be seen that her Majesty had granted to the plaintiff her special licence "that he, and no others (but such as he at any time might agree with) should and might make, 'use,' exercise, and vend, within this kingdom his said invention." It was, therefore, unquestionable, that whoever should use a piratical copy of plaintiff's invention was liable to him in an action for damages. Plaintiff conceived that as long as persons could be found to buy an article, mechanics would be found to construct it, but that if the illegal using could be stopped he should have no occasion to complain of people making. Under these circumstances he had fully determined to bring actions against all agriculturists found using these harrows, and in all future cases he should press for heavy damages.

Cambridge v. *Thomas Snell.*—This case was precisely similar to the last, the action being brought to recover damages from defendant, a respectable yeoman in Dolton, for using the chain harrow made by the defendant in the second case heard. In both cases Mr. Dennis Kingdon represented the defendants. He said they did not deny using the implement in question. That they were not aware it was illegal to do so, and as soon as they found it was they ceased to use it.—Mr. Bencraft, in reply, said he had no doubt this was the case, and that farmers laboured under the mistake of supposing that if they ordered a harrow slightly different from the patent they might use it with impunity. It was, however, as they would find, quite impossible that they could, directly or indirectly, avail themselves of the principle of the invention, without legal liability. He repeated that these actions against the farmers using the harrow had been brought as a public notice and warning, and he was resolved in all future cases to press for heavy damages.—His Honour said:—No doubt the makers had substantially infringed the patent; and it was equally an offence to use a chain harrow which was an infringement. As plaintiff did not press for full damages, he should give judgment for 1*l.* in each case; costs to be paid on the sum claimed, and if defendants objected to this his judgment would go against each defendant for 5*l.* *Abridged from North Devon Journal.*

LARGE WHEAT EARS.

Wheat being of so much importance and the ear the most prominent feature of the plant, no excuse need be offered for noticing some large ears in my possession.

The grains of Wheat are commonly arranged in two opposite and parallel rows on the ear or rachis, and attached by means of the chaff to joints or notches, the apex of the ear also having one or more grains adhering to it. In ordinary crops Wheat ears have from 10 to 19 fertile notches and from two to four grains on the notch. This season I have found many ears of different varieties with 25 and 27 fertile notches, having from four to seven grains on a notch. I have also culled several ears of a bearded unnamed seedling with eight and nine grains on some of the notches. The history of these extraordinary ears is not a little remarkable.

My nursery collection of Wheats was put into the ground on the 31st January, and unfortunately on soil infested by wireworms, and their extensive devastations led me to conclude that in some places the crop was lost. Accordingly a portion of the ground was reseeded with Barley and covered by means of the common harrow. With the advance of the season a portion of Wheat plants revived and grew vigorously, producing the ears in question. The soil had produced Potatoes in 1860 with a small allowance of manure, and no top-dressing had been applied to the Wheat or to the mixed Wheat and Barley crop of the present year. There is certainly nothing peculiar to the varieties of Wheat or to the management of the soil to account for these fine ears, and their size is mainly due to the wireworm having thinned out the plants. It is perhaps a law of the farm that without ample space and nourishment no plant can be largely developed. Whoever wishes to ensure large ears of Wheat must seed thinly.

Varro, one of the old Roman writers on agriculture, recommended that the largest Wheat ears should be selected for seed, but hitherto all my attempts have failed to change the characteristics of any well-defined variety. As an illustration it may be mentioned that I sowed in spring last the seeds of two stalks with two ears on each stalk, but the produce had but one ear on the stalk. *Patrick Shirreff, Haddington, Sept. 2.*

EXPERIMENTAL AGRICULTURE.

During the late agricultural meeting at Perth, a lecture on this subject was delivered by Dr. Anderson, Professor of Chemistry in the University of Glasgow. He said:—There is no point in regard to which opinions have undergone a more complete change than in all that relates to the application of experiment to the elucidation of agriculture. The time is not long gone by when to call a man an experimental farmer was the reverse of complimentary; while at the present moment, those who engage most actively in the prosecution of agricultural experiments are the very men whose opinions on purely practical points are most highly valued. It is not difficult to trace the cause of this change. The old experimenters were really blind guides, because they had no definite principles to direct them. They tried experiments at random, and used this or that substance, not because there was any good reason to suppose that it was capable of giving results, but merely on the chance of something of interest or importance turning up. The change of opinion which has taken place in regard to the value of experiments is mainly due to the fact that agriculture has taken on a scientific form; it has imported into it knowledge derived from other sources, and whether he be acquainted with science or not, every one engaging in agricultural pursuits ought to know that he is handling a scientific art, and the more clearly and distinctly this change and its inevitable consequences are recognised, and the more quickly the practical farmer accommodates himself to it, the more rapid will be the future progress of agriculture.

My object on the present occasion is to discuss some of these matters, and more especially to consider the mode in which experiments ought to be conducted, and the precautions which ought to be taken if they are to be successful and trustworthy. The truth is, a great part of the experiments we make bear to the science they are meant to extend, somewhat the same relation that the scaffolding does to the building—it is void in constructing, and is destined to disappear when the edifice is complete. In agriculture we are now just laying the foundations, in some parts only preparing the ground, and beyond a doubt many of the experiments now made are destined to disappear, and be replaced by others, but they are not on that account the less necessary, nor is the merit of those who make them the less. The object of all agricultural experiments is essential and economical aid. It is that of increasing by artificial means the productive capacity of the soil. But this result may be arrived at either directly by the study of a particular case, or indirectly by establishing general principles. The former method is limited in its application, the latter more extended and capable of being applied under a variety of circumstances, and has consequently a higher value. Whatever method the agricultural experimenter may resolve to adopt, there are a variety of matters to which it is necessary for him to attend if he wishes his results to be valuable, and these I shall endeavour to set before you as clearly as possible. In the first place, then, it is of paramount importance that we should have a definite object in view. He should set out by carefully considering the nature of the facts he wishes to establish, and examining the literature of agriculture in order to ascertain whether similar experiments have been made before. If he finds any previous results they should be carefully studied, and should they show any discrepancies the cause ought to be inquired into, and in those which he is about to make, he should endeavour so far as practicable to arrange the conditions so as to eliminate their source. Having settled all these points, it is of the utmost importance that the experimenter should not undertake too much. He should bear in mind that the most important part of his experiments, and that which more perhaps than any other requires his personal superintendence, viz., the weighing of the crop, must take place at harvest time, when he himself and his men are all most busily occupied, and when it is difficult to find hands to do what is absolutely required. What can be done at spring-time is not so easily accomplished in autumn, and the risk is that the weighings are slurred over, and the experiments become valueless, or, which is worse, misleading. The most common error is to undertake too much.

The next point is to fix the field in which the experiments are to be made, and, in doing this, there is very great scope for care and attention.

It is not advisable that the land should have been in high cultivation, nor should it have received any large and unusual manuring, because in a great number of cases the effect of it not being fully exhausted, it may interfere to a greater or less extent with the results. Care should also be taken to ensure uniformity of soil and treatment of every part of the field. No one who has not had practical experience of the thing can have any idea of how difficult it is to find even 3 or 4 acres of soil of absolutely uniform character or composition, and yet experimenters often omit to adopt any means of ascertaining the limits within which the crop produced on any soil varies. The only mode commonly adopted is to make the experiments in duplicate; but this, though a precaution which ought never to be omitted, for other reasons is not all that is requisite. The fact is, that to get really good results, the spaces on which experiments are to be made should be fixed the year before, and the same crop being grown in the same manner over the entire field, the quantities produced on each of these plots should be separately weighed, and thus the limits of the natural variation determined. Strictly speaking this should be done for more than one year, because different seasons produce different effects. Thus, for example, during a dry season the crop over a whole field may be quite uniform, but during a moist year, from one part of the field lying lower, or on a more retentive subsoil than the other a difference may be developed. It is scarcely to be expected that experimenters in general should be in a condition to do all this, and to provide so long beforehand for the experiments they are about to make, but something should undoubtedly be done. He should at all events select a portion of a field he knows to yield a tolerably uniform crop, which has a soil of uniform texture, resting throughout on the same kind of subsoil, and should avoid one of the general productive capabilities of which he is ignorant. He should bear in mind, however, that mere ocular inspection of a crop is a very fallacious guide as to its uniformity; indeed, every practical farmer knows how easily he is thus misled, and that it constantly happens that crops which are estimated as nearly the same, differ very widely when brought to the test of weight, and the reason is that the eye judges by the general appearance of the crop, and not by the portion of it which is valuable. Thus, for example, the luxuriant growth of the leaves of the Turnip does not always prove that there is a proportionate development of bulb, although it may very often do so.

The size of the plots on which the experiments are to be made is also a matter involving many important considerations.

It is usually maintained that the larger they are the better, and there is no question about the advantage of making experiments on a considerable scale, but I have no hesitation in

stating that this may be carried too far. It is obvious that when the plots are of a considerable size, the risk of errors arising from inequality in the characters of the soil is to a certain extent diminished, but this again is counterbalanced by the consideration that we proportionately reduce the number of experiments made, because there are many persons who might be inclined to devote an acre or two to a series of experiments, who would grudge the extra space, trouble, and expense which would be entailed, if each plot were to be of that size. The fact is, that the size of the spaces may be very moderate, provided the experimenter is careful, and the soil has been proved to be of uniform quality, and thus preliminary experiments extending over a year or two, made with the express intention of establishing this point, may in the long run be the source of material economy. When the plots are small the chief direction in which risk of error is to be encountered, lies in the necessity for more careful measurement, and in the chance of the manures being mixed at the edges of the adjoining spaces, or the roots of the crop passing over and taking advantage of the manure not intended for them. Supposing the size of plots to have been determined, the land is carefully measured out and marked with large, distinct, and permanent pins fixed in the corner of each plot, enough being measured to give two spaces for each measure, and two without any application for comparison.

This being accomplished, the manures are to be prepared for application.

For this purpose the quantity to be used ought to be turned out of the bags upon a clean stone or wooden floor, carefully mixed with spades, breaking down any lumps and the whole passed through a sieve. A sample should then be taken for analysis, by lifting a handful from each of four or six parts of the heap, which should immediately be put in a dry bottle. It is very desirable, also, that the soil should be analysed and examined as to its physical properties, but I hesitate to advise this being done, because our knowledge of the chemistry of the soil is still very imperfect, so much so, indeed, that it is often impossible to derive any definite conclusions from it. In the present state of scientific agriculture, I am inclined to think it would be infinitely preferable to endeavour to obtain more information regarding the meteorology of the season in which the experiments are made, and more especially to determine the amount and distribution of the rainfall. When the crop has reached maturity, the time at which it should be harvested and weighed is a point of very great importance, and gives scope for much exercise of judgment and attention on the part of the experimenter. The usual practice, as is well known, is to collect the produce of each plot on the same day; but this is a most fallacious plan, and I have no doubt has led to many of those discrepancies which appear so puzzling. It is well known that there are certain manures which cause the crop to arrive at perfect maturity sooner than others, and this point ought in all cases to be taken into consideration, for unless the produce of each crop be gathered when fully ripe, no comparison can be instituted between them, and when it is borne in mind that there may be a difference of a week or a fortnight in the ripening of the plots, it is easy to see that unless this be attended to the results may prove exceedingly erroneous. Of course, if the whole of the produce be allowed to stand until the latest plot is thoroughly ripe, the error will not be so serious, but it is not altogether avoided because the over ripe crop is exposed to risk while waiting for the others. If it be a grain, for example, and windy weather arrives, a portion of it may be shed. Supposing the experiment in the field to be successfully terminated, the crop housed and weighed, there comes last of all the question whether its weight is an accurate test of its value. In general it is assumed to be so, but we know very well that this is not a correct assumption. If a grain for example, it will vary in quality, and its bushel weight and appearance will form an important element in determining the price given for it; and further it may differ in composition.

In the case of a root crop especially, difference in composition is a most important matter, and has very great influence on its value.

Thus, it is no uncommon occurrence to find two crops of Turnip, one containing eight and the other ten per cent. of solid matters, that is of real nutriment, and it is obvious that if in an experiment we produced 20 tons per acre of a Turnip containing 8 per cent. of solids, and in another 16 tons, containing 10 per cent., and relied upon weight, we should consider the former greatly to surpass the latter, although in point of fact they would be exactly equal. Hence we infer that in order to attain perfection the crops should be analysed, so that their composition might be determined. Nay, we may go still further, and add that in the case of a substance, and as cattle food, its nutritive value ought to be determined by actual feeding experiments, and that a grain should be sent to the mill, and the proportion of bran, and coarse and fine flour it yields be ascertained. It will be seen from what I have said that the precautions required for obtaining really good experiments are very numerous, and that where great accuracy is required, much care, attention, and labour are required.

Such then being the various points which require the attention of the experimenters, we come now to consider the individual methods we ought to examine.

It may be asked indeed what subjects do not require to be studied, for there is scarcely a department of agriculture on which labour may not be profitably expended, and I have been surprised to observe how difficult it is to find definite information even on the most fundamental points. The experimenter may therefore make up his mind that there is no difficulty in finding matter for inquiry, and that almost anything he does will be valuable, although naturally there are some subjects of more general interest, and more universal importance than others, and which it is above all things desirable to have clearly established. Among these may be particularly mentioned the conditions under which the more common artificial manures may be most usefully applied. Of course many experiments have been made in which these substances are compared with one another, but it is not so easy to ascertain the relations they bear to farmyard manure. In many instances these substances, and more especially Peruvian guano, are used as substitutes for dung. Thus a farmer has resolved to give to a particular crop 20 tons of manure, but he runs short, and desiring to use Peruvian guano to make up the deficiency, the question arises of how much of the latter is equivalent to a ton of the former. That is to say, how much guano should he use with the prospect of obtaining an amount of crop equal to that which the dung will give. There is no point in regard to which I have found greater differences of opinion among practical men than this, and the reason no doubt lies in the fact that the two things are not strictly comparable, their mode of action being in many respects different; dung lasting over a long series of years, and guano having a more limited action. Still it would be most important to have a more definite idea on this point than can be derived from the facts at present at our disposal, and to do this it would be necessary to have several series of experiments made in different parts of the country in such a manner as to be completely comparable, and continued through several seasons, and on different descriptions of soil. Suppose 20 tons of farmyard manure to be used at the standard, another plot might be manured with 10 tons and 3 cwt. guano, another with the same quantity of manure and 4 cwt. guano. Further, there should be spaces without dung, but with 6 and 8 cwt. of guano per acre, and also others in which 10 tons of farmyard manure used alone are contrasted with the effect of 3 and 4 cwt. of guano alone. The whole of the experiments being then discussed and compared, we should be able to see whether the guano in these quantities acted as a substitute for the dung on that crop, and then if the subsequent crops were also weighed, we should see how much the permanence of the one exceeded that of the other. The permanence of the action of different manures is a matter affording large scope for enquiry, and on which our present information is very scanty. It is well known that some manures have no permanent effect, but exhaust their whole influence on the crop to which they are applied, and they act chiefly as stimulants, as they have been called, that is to say, they add little to the soil, but bring into play its latent capabilities. This is particularly the case with nitrate of soda, and every one must remember the interest which was excited some years since by some experiments of the late Mr. Pusey, in which a very small application of that salt produced a very remarkable increase in the crop. Again, let us look at the facts connected with the use of superphosphates, which, as one of the most important of all manures, requires especial study. The ground upon which the use of the manure was founded was, that by rendering the phosphates soluble they become more accessible to the plant. It is now known, however, that plants don't take their food from solution, hence the principle is wrong, and moreover, no sooner does a superphosphate become distributed through the soil than the lime and other substances with which it comes in contact bring back the phosphates into their original state of insolubility, although of course they are more effectually spread through the soil than they would otherwise have been. Here then, it may be alleged that it is minute subdivision which has been influential in promoting the action of the phosphates; but if this is so, what would be the effect of using a larger quantity of insoluble phosphates. A ton of superphosphates contains about 7 cwt. of phosphates soluble and insoluble, and costs about 7*l*. For the same money, we can buy in the shape of bone-ash 16 or 17 cwt. of phosphates, and in coprolites 30 to 35 cwt. What effect, then, it may be asked, would be produced by the application of a ton of ground coprolites to the acre? Although it might be less at first, might not its permanence of action render it as useful or more useful in the long run? Should it prove that the action of the superphosphate is more powerful, we come to ask what is the effect due to the sulphate of lime or gypsum of which superphosphates contain nearly half their weight; and thus we should be led to try a mixture of insoluble phosphates and gypsum, being well assured that, if they act thus mixed, they can be obtained more cheaply than in the form of superphosphate. On the other hand, it is possible that the effect of the manure may be in part due to the acid it contains acting upon the soil and promoting those changes which are known to be constantly proceeding in it, and are bringing the valuable matters from an inert into an active condition. Hence we see indications for the performance of a series of experiments in which a superphosphate is used on one plot, and the bone ash and sulphuric acid from which it was made separately on two others. Still, it is possible that uniformity of distribution may be one of the most important points, and here again the experimenter is led in another direction. If we consider that when 3 cwt. of a manure is used per acre, this amounts to little more than an ounce to each square yard, we cannot fail to seet hat uniformity of distribution must here be very imperfect, unless it is assisted by the solubility of the manure when the rain completes for us that which the hand does imperfectly. We can, however, secure additional uniformity if we mix the manure with some substances which are intended to give it bulk.

Home Correspondence.

Harvest of 1861.—We finish harvest to-day. A glorious month this has been—scarcely a shower of rain—but plenty of brilliant sunshine. Corn of every description of first-rate quality, hard, dry, and ready for the miller and maltster. There will be no complaint of indifferent bread or bad beer. The Potato blight (a Fungus-growth no doubt) was checked by the extremely dry weather, and the roots are but little affected. My own Potatoes are excellent in quality and of good size, and I think it is generally so hereabouts, much to the comfort and advantage of the labourer, as it will economise his consumption of bread. My Barley was never so good, so abundant in reedy straw, and so heavy to handle. Oats (black) are heavy, and will probably yield quite 11 quarters per acre. Beans also good. Wheat never branched in the spring, but will yield well, according to the straw. I threshed 6 acres; produce 4 quarters 1 bushel per acre; sold at 60*s*. per quarter; weight 64 lbs. per bushel. I expect my average will be something over 4 quarters, which is from 8 to 12 bushels below my ordinary average. I hear of very deficient threshings all round this neighbourhood, and it must certainly be a short Wheat crop, but very fine in quality. Scarcely any tail Wheat. Mangel Wurzel has vastly improved, and I think mine will be a fair crop, but not so heavy as usual. The leaves look very healthy now. The change took place after the soil got warm; until then the leaves were sickly and infected. Turnips would be better for rain. Deep cultivation keeps mine going after Tares. Several of my stubbles are ploughed up or scarified, and we begin again to burn earth on Monday. The prospect for clean condition and warmth of soil contrasts most favourably with last year, and promises well for the ensuing year. I manage to keep going 54 bullocks, cows, and calves, and 100 sheep, all doing well; but they must have plenty of water, especially the sheep, or they will not eat their Grass, green Clover, and Rape cake. Fattening sheep folded on the Red Clover (well on the bloom) drink five pints daily per head. It is a sad mistake to keep sheep without water in dry weather; they will not eat enough to fatten. Seeds of all kinds appear abundant, except White Clover. The crop came on so gradually this harvest, and the Wheat straw was so short that there was no pressure or extra demand for labour.—*J. J. Mechi, Tiptree, Aug.* 31, 1861.

The Lois-Weedon Practice of Husbandry.—I have this year a few acres of various cereals, Wheat, Barley, and Oats, also Beans, Peas, roots, Potatoes, &c., grown satisfactorily and profitably on the system, though unfavourably circumstanced by being obliged from the wetness of the late summer, autumn, winter, and spring to deviate from the true rule of operations, viz., planting on clean and fallowed land, and not being able to sow many of them till February which ought to have been sown in September, and especially the Wheat. As it is, however, I am in ecstacies at their extraordinary productions, and I know thereby, and moreover by long past experience, that the scheme is not impracticable, resting assured that as they do well under such a season as last, they would do still better under more favourable auspices. Not only can full average crops of corn be grown to advantage on this my revised plan by steam-power or the common plough, and its usual accompaniments, instead of the spade or fork (though these must be kept in view and not cast off), but Beans and Peas and many seeds, roots, &c.; and moreover all the leading articles in the garden department, vegetables, fruit, &c., including early Potatoes (and here I would invite the attention of market gardeners as equally suited to their practice). All these crops may be varied every year in such manner as that no one crop need be grown or repeated where the same kind grew the year before, embracing at the same time a clear fallow on one-half the land every year, and that in the barren furrows, where nothing scarcely could grow to perfection were it there, they being deprived of the best of the soil for the support of the inner crops, and thus in a few years to grow but very few weeds, none being allowed to seed. Let it be distinctly understood that the scheme embraces at one and the same time an average crop and a clean fallow on each half of the land every year. Clean culture, as growing no weeds, combined with deep cultivation, and draining where necessary, viz., on dropsical soils only, are points of vast importance to be considered, and ere long in my humble estimation and opinion, when my plan is accomplished and adopted of performing it well on small plots by the common plough, and as deeply (where required) as by steam on larger breadths, substituting for the manner in which the Rev. S. Smith of Lois Weedon performs it with the spade, will be productive of a complete revolution in agricultural and horticultural science. Above all, whether it is my scheme or anybody else's, for growing crops without any or but few weeds, it will, I trust, be fraught with great good and extensive usefulness for the public weal, which is the main point I am driving at, inasmuch as there will be but few weeds to battle with after none being allowed to seed. Manual and horse labour in agriculture will then, I conceive (though this of course is partly theory), be lessened to a degree never before achieved or even thought of. Moreover, by having occasion for doing the horse work only in summer weather, or it may be when dry in winter, there will be but few clots to deal with, for I contend that we shall then have but few or none of them, even on very heavy land, when treading by the horses and oxen is only performed in summer or in dry weather, instead of in the wet wintry season, wherein it is now obliged to be done. Two horses will then be able to perform as much amount of work in one day, and with as much comparative ease, and in a more effectual manner by far, than three can do it now under the slovenly and imperfect system, to say nothing of what steam will accomplish—that, no doubt, will crown all. Thus it will lessen the number of horses and labourers now required to a very great extent. Manual labour will be less, and as a consequence the labour market will also be lessened, as fewer labourers will be required; and those who have been privileged with a fair share of education will be directed to better, if not nobler attainments or employments; and I see no reason why they should not have equal rights to enjoy them as others. (The "Half-time Education and Labour Scheme," by Mr. E. Chadwick, is, I trust, a step in the right direction to effect this object, and I humbly pray God it may prosper.) Then there is the cost, wear and tear of heavy and costly implements too; they would be very much reduced, and many of them now cumbersome and useless would be discarded altogether, having little or no use for them; and others better adapted for the lighter work introduced in their stead. Machinists no doubt will have their wits sharpened, and will not fail to do their parts in this particular. There is the grand saving, too, and cost of half the seed corn to take into consideration and out of our accounts, both as it regards the farmer's interests and the nation's weal. Of course if only half the land is to be sown only half the quantity of seed will be required than is now used, whether sown thick or thin according to the discretion or will of the cultivators. Another important part of the practice is, that it professes not to cause the soil to become sterile, though followed up for a series of years. The truth of this part of the statement I find is very much questioned by correspondents; but whether it is a fact or not that all soils would admit (and I question it myself) of being cropped continually without manure, it does not follow that there is a necessity to do without it, as any one who adopts the practice can if he chooses add manurial applications, or he can use his own discretion in sowing his usual quantity of seed, and if it be really necessary and valuable, as a consequence his crops will be benefited in degree. *A. Hardy, Maldon, August*, 1861.

Small Birds.—In the valuable "Plea for Small Birds," which I was very glad to see transferred to your pages, notwithstanding your corrections there

appear still to be several inaccuracies, which might no doubt be set right by reference to the original French document. Should not cock-chafer be generally substituted for cockroach; and is it not an entire mistake to include moles among granivorous animals? Are they not solely insectivorous, and thus, when allowed to live, beneficial to our crops? as I have been told by an extensive corn-farmer in Scotland that he considers them, except occasionally, when in the pursuit of insects they burrow under and throw out of the ground a drill of Turnips. A bird most useful to farmers does not appear in the list of his friends; perhaps it may not be so common in France as in this country, but the common black-headed gull destroys in spring myriads of slugs, moths, and other noxious insects, following the plough, or skimming over the meadows in pursuit of them. The curious mistake occurs in one column of ranking the bat among birds. An illustrated edition of the memoir, adapted to our climate, would be a valuable boon to our agriculturists and farmers. *W. C. Trevelyan, Wallington.* [Cockroach is no doubt a mistake for cockchafer.]

Societies.

DURHAM: The following notes of the recent meeting of this Society at Darlington are taken from the columns of a contemporary:—

The Shorthorn classes produced a few good animals. 20*l.* for the best bull (any age) went to Messrs. Browell, Apperby, and Throckrington, near Newcastle-on-Tyne, for Cœur-de-Lion, four years old, a bull of more size than symmetry; and the second prize to Mr. H. Ambler's Great Eastern, two years seven months, "commended" at Leeds, where his conqueror here was too late in his entry. "Best bull under two years old," Sir Walter Trevelyan, Bart., of Walkington, Gipsy Prince, one year six months old, also bred by Mr. Ambler. This was the third prize bull at Leeds, while Mr. H. Ambler himself won the second prize with White Gamester, of the same age; and also the prize for the best bull calf with a nine months son of Windsor—the very clever straight-backed roan that was also second best at Leeds; and Captain Gunter was second with roan President. The 10*l.* for the best cow in milk or in calf, we need hardly say, Captain Gunter won with the Leeds first prize cow Duchess 77th, and was second in same class with Duchess 78th; also the winner in the "under 3-years old" class at the Royal Show. Here she was just two days over the three years. Her lovely and well-known white twin-sister stood next her, and shared the admiration of all. Lady Pigot's Empress of Hindostan and Mr. Booth's Lady Grace and Queen of the Vale, and Mr. Ambler's Woodrose were also in this class. In the next, for 2-year old heifers, Mr. Booth's most perfect white Soldier's Bride was an easy winner, and was also decorated with the laurels of the day—the 100-guinea piece of plate, for "the best Short-horned breeding animal in the yard," to be won three years in succession before the absolute property of the winner. Capter Gunter won it last year with Duchess 77th, and has now to resign it to Mr. Booth. Mr. Jeffry Bulmer, of Aislaby Grange, was second with Princess Royal Second; carried off the Tenant Farmers' 25-guinea cup, as best in the yard under the same rules; and Mr. Bulmer having also won it last year, has but to repeat his success in '62 to hold it for ever and aye. Captain Gunter's white Duchess was the best yearling heifer, and Lady Pigot's The Lady Elfrida the second; the latter of great size and very fat, but somewhat patchy and coarse about the throat. Her ladyship also won with Princess Edward the prize for the "best heifer calf."

Mr. Simpson, of Spofforth Park, Tadcaster, and Mr. Wiley, divided the "Leicester and long-woolled sheep prizes." Mr. Beale Browne exhibited three fine Cotswold rams from Gloucestershire, which were regarded by many persons as superior to the Leicesters in wool, size, and early maturity.

BERKELEY AND THORNBURY.—The ploughing matches were held on Wednesday last at the Earl Ducie's Example Farm, a situation singularly adapted to the purpose. The land appropriated to the occasion was an extensive piece of Clover ley on a strong loamy soil. In consequence of the dry weather we have lately experienced, the land, especially the surface, was hard. Four ploughs were entered for the Champion's prize, including Messrs. Hornsby's of Grantham, and Messrs. Howard's of Bedford. The Silver Cup for farmers' sons had five entries, and the class for ploughmen ten.

An excellent implement, Snowdon's paring plough, was exhibited at work on an adjoining piece of ground and elicited, as was justly due to it, universal approval. It is capable of skimming the surface lightly or penetrating to the depth of 4 or 5 inches, thus forming cuttings convenient either for gathering off or burning.

A novel exhibition also took place on some adjacent land of three milking cows attached to a plough. However much the owner of them may rejoice in the unnatural proceeding, he is not likely to obtain converts to the system.

The following are the awards of the Judges:—

The Champion's Prize, open to any competitors, 5*l.*, George Brown, in the employ of Messrs. Hornsby, of Grantham; the prize for farmers' sons, The Silver Cup, Wm. Hopkins, jun.; 2d, 2*l.*, Thomas Chandler. The Ploughmen's prize, Peter Bateman: 2d, Henry Williams, both in the employ of Earl Ducie; 3d, George Keen, in the employ of Mr. Harris, of Cam. Commended: Worthy Hayes, in the employ of Mr. James Thomas.

Reviews.

The Journal of the Royal Agricultural Society of England. Vol. XXII., Part 1.

The Editor of the English Agricultural Society's Journal received his appointment because he had been a University man. He had had certain opportunities of agricultural experience, and that was in his favour; but he had received a University education, and that ensured both his fitness for the office and his election to it.

It was desirable that Mr. Frere should be able to discuss the merits, faults, and wants of English agriculture, and thus be ready to point out the way, whenever useful progress seemed likely to be made; but it was essential that he should do all this in a good and pure example of the English tongue.—"Our Journal," so his apologist and advocate declared, "is read in all countries its pages must illustrate not only our agriculture but our language—and we must maintain that high literary standard which Mr. Pusey has given it." The inference was unavoidable. Twenty or thirty candidates for the vacant chair appeared, many of them known as agriculturists, and even as agricultural writers; only one, however, had received a University education, and Mr. Frere, unknown either as agriculturist or as writer upon agriculture, was therefore appointed.

Far be it from us to disparage a University education: its training is doubtless the best possible preparation for every kind of special education which success in life requires. We must confess, however, that it somewhat staggers faith in the power or merit of a Cambridge University education for the purpose indicated, to find that it is not in the agricultural but in the literary style of the Journal, so far as that is due to its Editor, that its most obvious shortcomings have occurred.

Take the Number just issued as an example. We do not now refer to contributions by other writers, but to those from the Editor's own pen.

Mr. Frere has not contributed many pages to this Number of the Journal. Indeed the only lengthened article from his pen is an appendix to the late Mr. Wratislaw's essay on Farm Capital, including a comment upon certain faults usually prevalent in valuations between an outgoing tenant and his successor. In this critique he declares (1), that in spite of "the aspirations and lively anticipations" of agricultural writers, the acts of cultivation valued to an incoming tenant are still in general a costly and most cumbrous series; and (2), that custom or the mere choice of the outgoing tenant decides in an arbitrary and most expensive way what the works of tillage to be performed shall be.

Under the first head he contrasts the opinion that a single deep ploughing before winter ought, if followed by the cultivator and harrow, to suffice for the year's tillage of even fallow crops, with the fact that valuations generally include a long series of ploughings as well as of harrowings and scarifyings all through the early spring as well as autumn months. Under the second head he writes as follows:—

"It may be affirmed that a custom which empowers the outgoing tenant to perform acts of tillage otherwise than as directed by the landlord or his delegate, and to charge at a rate which leaves a profit, is a part of tenant-right which has hardly a redeeming feature, and acts prejudicially on the recognition of other allowances which may more justly claim to be made for mutual benefit; although its abolition must be attended with this limitation—that the tenant must be empowered to proceed according to the custom of the country, if not otherwise instructed in due time.

"Where allowances are made for manures purchased, or rich feeding stuffs consumed in preceding years, the allowance, even if somewhat in excess of the benefit realised, or liable to abuse, tends to keep the soil at that artificial pitch of fertility, which is found to give the best economical results, and from which it is never depressed without far greater subsequent loss to the man on whom the restorative process devolves, than immediate gain to him who perhaps feels that he is only extracting what he himself had deposited

"The object of maintaining land constantly in a clean state by tillage is probably of equal importance with the preceding, but the machinery at present in use to secure this end is at best very imperfect, and, under the form here considered, has no influence in checking that supineness to which the withdrawal of the stimulus of self-interest naturally leads, but is merely a clumsy stopgap to prevent an utter standstill."

When a writer is communicating valuable information, the reader pardons the obscurity of the language. Its meaning may be worth extracting, and he will labour to discover it. But if it be an argument and not a mere history or relation that is addressed to him his attitude is entirely different. He is then defendant; and it cannot be expected that he will share in the labour of his own conviction.

If the argument does not reach him in spite of himself, or at least without his help, it must be considered useless. What then, it may be asked, is the use of such an argument as is attempted in the passage we have quoted? The affirmation in the first of these involved and tedious sentences cannot be admitted. The distinction between the rule as to manures and that about tillage operations implied in the second sentence is one which cannot be justified. The third sentence is utterly unintelligible; and what the machinery can be, which is described in it as "a clumsy stopgap to prevent an utter standstill," we are at a loss to imagine. The rest of the paper is similarly written, and the whole is far enough away from that pure and lucid style of English composition which the readers of the Journal were to have always had before them.

Not only, however, are the ideas imperfectly represented, but we believe that for the most part they are agriculturally mistaken. So far as we understand the writer, he expresses his dislike of a liberal interpretation of what is now called tenant right. He states the aim and object of his criticism thus:—

"These remarks are intended rather to call attention to sound principles than to suggest special courses of action. In some neighbourhoods very great practical difficulties may exist in the way of their being carried out, but at least, if the principles be recognised as sound, adverse customs will not be allowed to spread if they exist, or to be introduced if they have not yet got hold. England always deals very tenderly with vested interests, and is wise and far-sighted in so doing. In the matter before us the only vested rights at all in conflict with the public good are those of tenants in possession."

This is plain enough. It is the demand on behalf of the outgoing tenant that is disliked. Mr. Frere would refuse at the end of a tenancy the liberal valuation of all the acts of husbandry which are required by good and energetic management, and substitute for it a system of rules by the landlord and his deputy. The cultivation of the last year, or rather of "several years preceding the termination of a tenancy" is we presume to be specified in the lease; the tenant is to enter without payment into the labours of his predecessor, and he is to leave similar work behind him for the unbought benefit of his successor. This is, at any rate, the tendency of the arrangement which is preferred. The present system is described as a "usage based on a concession;" and a liberal tenant right is pointed at by Mr. Frere as the "growth to excess" of a usage of this kind.

This is indeed departing from the rules and maxims of the great man whose chair he fills. Mr. Pusey, too, had discussed the relations of the takers and holders of farms. The great object of his political life was to obtain a legal recognition of what is now called a mere concession. His hopes of any general agricultural progress hinged almost entirely on this recognition, whether by law or usage, of an outgoing tenant's property in the soil. He recognised, for example, the immense importance for agricultural progress, of the difference between "ground straw and water with a little horse dung," which is "farm manure" in the absence of a liberal tenant right, and "good bullock dung," even though coupled with a bill for per centages on feeding stuffs, which will be left upon the farm where the rules of a liberal tenant right prevail. The two are considered as of nearly equal value by Mr. Frere. Another case is, however, named between them—where the incoming tenant finds "a somewhat better manure than the first," to be taken at a valuation. And the three are characterised in the following remarkable specimen of English slipshod:—

"The alternatives are none of them very satisfactory: the second being probably the least so, as most matter of guess-work; the first perhaps least riskful to the individual, if the land has a good staple, so as to bear for a while the forcing of artificials; the latter decidedly for the public weal as maintaining the fertility of the soil, and therefore to be adopted, if it can be done with proper security for the interests of both parties concerned."

The second, the first, and the "latter" of these "alternatives" may be none of them satisfactory, but one or other of them is unavoidable; and that which pays the outgoing tenant as well for his last year's labour as for any other, while it tends to maintain fertility at a constant mark, is surely to be preferred.

Reference is made elsewhere to the other contents of the current Number of the Journal. Many of them are most interesting and valuable. But we feel the want of reference to points of current agricultural interest. There is nothing in it about steam cultivation, nothing about reaping machinery, nothing about the sheep-rot, nothing about land-drainage and outfalls—all of them leading agricultural subjects which have raised the curiosity and hope, or have occupied the attention and excited the anxieties of the farmer during the past year. We believe, however, that a reader accustomed to commonly good English on the one side and to the ordinary professional standard of our agricultural periodicals on the other, will be struck not more with these faults of its agricultural editorship than with those of a purely literary character to which we have adverted.

Miscellaneous.

The Steam Plough.—I cannot conclude this notice of the steam engine without observing the changes it is destined to effect in the cultivation of the soil. It is but a short time since it was thought inapplicable to agricultural purposes from its great weight and expense. But more recent experience has proved this to be a mistake, and already in most districts we find that it has been pressed into the service of the farmer. The small locomotive, mounted on a frame with four wheels, travels from village to village with its attendant the threshing machine, performing the operations of threshing, winnowing, and cleaning at less than one half the cost by the old and tedious process of hand labour. Its application to ploughing and tillage on a

large scale is, in my opinion, still in its infancy; and I doubt not that many members of this Association will live to see the steam plough in operation over the whole length and breadth of the land. Much has to be done before this important change can be successfully accomplished; but with the aid of the agriculturist preparing the land so as to meet the requirements of steam machinery, we may evidently look forward to a new era in the cultivation of the soil. *Mr. Fairbairn, President of the British Association at Manchester, Sept. 4.*

Agricultural Produce of Ireland for 1860.—The acreage under tillage is shown in the following table:—

Crops.	Extent cultivated in		Increase or Decrease in 1860.	
	1859	1860	Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.
Wheat	464,175	466,415	2240	..
Oats	1,982,662	1,966,304	..	16,358
Barley	177,894	181,099	3205	..
Bere and Rye ..	13,198	12,734	..	464
Potatoes	1,200,347	1,172,079	..	28,268
Turnips	322,137	318,540	..	3597
Mangel Wurzel ..	26,906	31,986	5080	..
Cabbage	31,680	22,785	..	8895
Flax	136,282	128,595	..	7687
Hay	1,437,111	1,594,518	157,407	..
Total Increase			102,663	

The fluctuations in the yield per acre of these crops in 1859 and 1860 were as under:—

Crops.	Produce per acre.		Increase or Decrease in 1860.	
	1859	1860	Increase.	Decrease.
Wheat in brls. of 20 stones	5.3	4.6	.	.7
Oats „ 14 „	6.6	7.2	.6	.
Barley „ 16 „	7.0	7.5	.5	.
Bere „ 16 „	7.5	7.1	.	.4
Rye „ 20 „	4.8	4.7	.	.1
Potatoes „ 20 „	28.9	18.7	.	10.2
Turnips in tons	10.7	8.3	.	2.4
Mangel Wurzel in tons ..	11.4	9.1	.	2.3
Cabbage in tons	10.4	8.3	.	2.1
Flax in stones of 14 lbs. ..	25.3	29.6	4.3	.
Hay in tons	1.6	2.0	.4	.

The acreable yield of the principal crops in 1859 and 1860, by provinces, is shown in the following table:—

Provinces	Estimate Average Yield per Statute Acre.										
	Wheat, brls. of 20 stones.		Oats, barrels of 14 stones.		Barley, brls. of 16 stones,		Bere, brls. of 16 stones.		Rye, barrels of 20 stones.		Potatoes, brls. of 20 stones.
	1859	1860	1859	1860	1859	1860	1859	1860	1859	1860	1859
Leinster .	5.2	4.1	6.5	7.4	7.1	7.5	7.9	7.5	5.7	5.3	29.4
Munster .	5.1	4.8	7.0	7.9	7.2	7.7	7.0	6.4	3.9	3.9	25.9
Ulster ..	6.1	5.5	6.4	6.8	6.5	7.0	6.4	6.6	4.9	4.9	32.0
Conna'ght	4.8	4.1	6.8	7.0	6.9	7.3	7.3	6.3	4.6	4.5	26.9
Ireland	5.3	4.6	6.6	7.2	7.0	7.5	7.5	7.1	4.8	4.7	28.9

Provinces	Potatoes, brls. of 20 stones.	Turnips, tons.		Mangel Wurzel, tons.		Cabbage, tons.		Flax, stones of 14 lbs.		Hay, tons.	
	1860	1859	1860	1859	1860	1859	1860	1859	1860	1859	1860
Leinster .	15.3	8 9	7.4	10.4	8.5	10.3	8.7	22.9	24.6	1.4	1.9
Munster .	17.3	10.7	7.9	12.2	9.4	9.2	7.4	23.1	23.5	1.7	2.0
Ulster ..	20.3	12.3	9.1	12.5	9.7	10.8	7.9	25.4	29.8	1.8	2.1
Conna'ght	21.3	12.4	9.5	13.2	10.7	12.4	9.7	24.0	23 1	1.8	2.0
Ireland	18.7	10.7	8.3	11.4	9.1	10.4	8.3	2[illegible].3	29.6	1.6	2.0

The following is the estimated produce of the principal crops grown in 1859 and 1860, and the increase or decrease in the latter year:—

Crops.	Estimated Produce.		Increase or Decrease in 1860.	
	1859	1860	Increase.	Decrease.
	Quarters.	Quarters.	Quarters.	Quarters.
Wheat	1,468,475	1,271,588	..	196,887
Oats	[illegible],170,856	8,841,924	671,068	..
Barley	694,004	750,245	56,241	..
Bere	18,111	14,113	..	3,998
Rye	27,792	27,896	104	..
	Tons.	Tons.	Tons.	Tons.
Potatoes	4,329,523	2,741,380	..	1,588,143
Turnips	3,462,071	2,627,978	..	834,093
Mangel Wurzel ..	307,946	290,241	..	17,705
Cabbage	329,997	188,711	..	141,286
Flax	21,577	23,760	2,183	..
Hay	2,321,779	3,206,402	884,623	..

Mr. Girdwood's Edinburgh Wool Sales: June 26.—At this sale the attendance of buyers was very large, and at the rates ruling at the English Wool Fairs they were inclined to operate to a limited expense. These prices are about 3*d*. per lb. under what was obtained for a few lots at the previous sale, at which operations were on the most limited scale, indicating extreme caution on the part of purchasers. Trade is still dull and consumption limited; but with lower prices of corn, Wools may be prevented from receding further in price. Half-bred Hogs, 33*s*. to 37*s*., and 38*s*. refused for a prime lot; Ewes, 30*s*. to 32*s*. 6*d*.; Cross Hogs, 27*s*. to 32*s*.; Cheviot Hogs, 31*s*. to 34*s*.; Ewes, 29*s*. to 32*s*.; Black-faced White, 13*s*. to 17*s*., washed, 16*s*. to 19*s*.; Laid Cheviot Ewes, 20*s*. to 21*s*.; Hogs, 21*s*. to 25*s*. per stone.

Calendar of Operations.

SEPTEMBER.

BERWICKSHIRE MERSE FARM, *Sept.* 2.—During the past month our rainfall amounts to 2.4 inches spread over 20 days. Generally the weather has been showery, with a high temperature and a good deal of wind. About the 20th, when harvest became general, there was a sprinkling of Oats shaken, and many heads were knocked off the ripe Barley; but beyond that there is nothing lost. The greater part of the crop is now cut, except spring Wheat, and—an unusual crop with us—late Barley. Oats have turned out bulky; Barley quite the reverse. Much Wheat is thin on the ground and small of head; but, being mostly spring sown, lateness is as bad a fault as it need have. We are afraid the ravages of the fly will become apparent in the measure. If this fine "winning" weather continues, we may expect fine quality of grain. From a fourth to a third sort may be now in stack, and plenty ready to be carried straightway. The barometer, however, has fallen much these two days, and the signs of the sky are by no means assuring. The supply of Irish reapers has been limited, and wages little below a guinea a week and victuals. Turnips still give good promise, but Potatoes are all going, the haulm at least; though unbroken dry weather might largely save the tubers. Pastures were overgrown at midsummer, and are now correspondingly dead; but the stubbles are uncommonly well planted with Clover, and live stock will rejoice on the removal of the stooks. In the meantime, forward cattle must be kept up with cake or Tares. Reaping machines are in very general use where crops are moderate; and popular favour seems to support manual delivery. If that class of machines be from their light draught to prevail, a side delivery of the sheaf will be found more generally useful than the usual back delivery. *J. S.*

WESTER ROSS, *Sept.* 2.—After the harvest has been well nigh completed in the south of England amidst glorious weather, and after not a little of the new crop has reached the market in first-rate condition, a commencement has been made in cutting in the far north in circumstances greatly different, and causing not a little anxiety. From the beginning of August until the last week of the month we had not one dry day throughout; and now, although the weather is somewhat improved, it is far from being settled. Last week we had a few good days, and a large breadth was cut, but on Saturday rain fell nearly the whole day, and towards the evening in torrents. To-day we have been at work again, but have been much interfered with by heavy showers. We hope that as harvest has now reached us good weather is also on its way north, and that yet we will be able to report that the whole crop has been safely ingathered. As yet no part of it has reached the stackyard in this quarter. With the exception of crops over-heavy and early laid, the grain appears well filled, and with fine weather will be of good quality. The bulk will not be beyond an average, a great part of it proving thinner on the ground than was anticipated. The earlier sown Turnips look well, and promise a full crop; the later sowings having been too long water-logged must fall far short of an average. The disease is performing its work amongst the Potatoes in a most effectual manner. Everywhere the stems are already blackened, or are undergoing that process, and the more advanced tubers are sadly perishing.

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended September 5; observed by Mr. J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air.				Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
	Max. in Sun.	Max. in Shade.	Min.	Mean.				
	Degs.	Degs.	Degs	Degs.	Degs.	Ins.		
Friday 30 ..	83.0	75.0	53.0	66.0	63.8	..	W.	30.00
Saturday 31 ..	82.0	72.0	43.0	60.0	63.2	..	W.	30.15
Sunday 1 ..	91.0	75.0	44 0	63.5	63.0	..	S.E.	29.94
Monday 2 ..	92 0	78.0	49.0	67.0	63.2	..	N.W.	29.84
Tuesday 3 ..	89.0	72.0	55.5	68.0	63.4	0.02	S.W.	29.66
Wednesday 4 ..	76.0	70.0	51.0	63.0	63.0	0.02	W.	29.80
Thursday 5 ..	73.0	69.0	55.5	63.2	62.5	..	W.	29.90

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

COCOA-NUT FIBRE: *C H L.* Apply to Wildey & Co., Holland Street, Blackfriars Road.

DOMESTIC ECONOMY: *G L E.* We will endeavour to obtain the information which you ask for.

EXPERIMENTS IN ARTIFICIAL MANURES: *Appleton House.* All Mr. Lawes's experiments are reported in past volumes of the English Agricultural Society's Journal.

FINGER AND TOE: *A Constant Reader.* The remedy is lime and liberal cultivation. If you put a dressing of lime on the Grass and Clover preceding Wheat and Oats, and then a dressing of dung on the stubble for a succeeding crop of Turnips, it is possible that they will be free from finger and toe. Your manure, 7 cwt. Rape dust, 6 cwt. lime from gas works, 6 cwt. of lime, and 1 cwt. of salt per acre seems designed on the right plan for treating the disease.

MUSTARD: *An Old Subscriber.* Sheep will eat it if folded on. They should be folded when the blossom is forming, but not opened. As to the quantity of ground to be given at once to 100 sheep, that can only be stated by one who has seen the crop.

POULTRY.—The immutable law of the season shows itself in the market as in everything else. The approach of autumn, while it speaks to some of shortening days and diminished heat of weather, marks its approach with us by the quotation of such things as are only saleable at given times. Three weeks since we added grouse to our weekly list; we were in the middle of August; now we speak of partridges we are in September. In a short time we shall speak of pheasants, and they will be the last. We shall not have to speak of any improvement in trade till after October, nor will there be any increase in the value of poultry as understood to represent fowls, ducks, and the inhabitants of a farmyard, for some time to come. The effect of game being in season is to lessen the demand for poultry.

Large Fowls	Each	3*s*. 6*d*.	to	4*s*. 0*d*.
Smaller ditto	„	2 3	„	2 6
Chickens	„	1 9	„	2 0
Rabbits	„	1 4	„	1 5
Wild ditto	„	0 8	„	0 9
Pigeons	„	0 8	„	0 9
Grouse	„	1 9	„	3 0
Partridges	„	0 9	„	1 6

SHEEP v. RABBITS: *H W C.* You will find all about their relative power of consumption in an experiment described by Mr. Bright in Morton's Cyclopædia, Art. GAME.

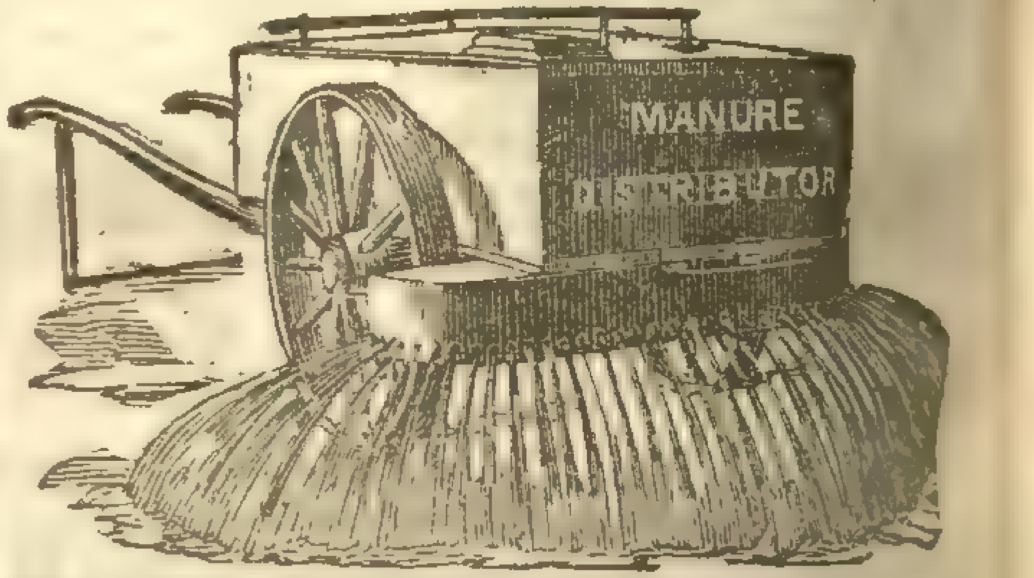
JOHN FOWLER, JUN., 28, Cornhill, London, E.C. Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free.

£1000 upon the WOOLSTON SYSTEM against any other system of Steam Cultivation.
For price of apparatus and particulars apply to Mr. W. [illegible] Woolston, Bletchley Station.

JAMES AND FREDERICK HOWARD, BRITANNIA IRON WORKS, Bedford, Manufacturers of STEAM CULTIVATORS, STEAM PLOUGHS, CHAMPION PLOUGHS, HARROWS, HORSE RAKES, & HAYMAKERS.
Catalogues, with full particulars, sent free on application.

TENTS, &c.—A quantity of Government Bell Tents and Marquees, suitable for Rifle Companies, Cricket Clubs, &c.; also Rick and Hay Cloths, Ropes, &c. Prices on application to JOHN MORISON, 25, Norton Folgate, N.E.

Prize Liquid Manure Distributor.



JAMES'S PATENT LIQUID MANURE DISTRIBUTOR OR WATER-CART, warranted not to choke or otherwise get out of order. It is thoroughly adapted for [illegible] Crops, or Pasture Land, or for Watering Streets; has been awarded NINE FIRST PRIZES.
Full Particulars and Testimonials may be obtained of the Patentee, ISAAC JAMES, Tivoli Waggon Works, Cheltenham.
N.B.—Improved LIQUID MANURE PUMPS, either fixed or portable.

J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25*s*. 6*d*. each.

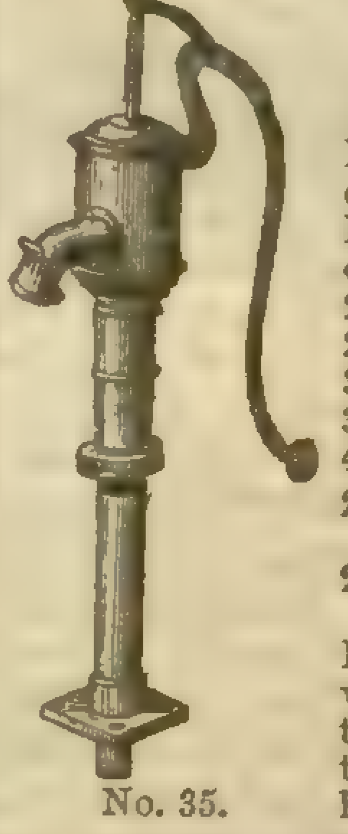
IRON YARD AND GARDEN PUMPS
3 feet 6 inches under spout
2½ 3 3½ inch
43*s*. 53*s*. 60*s*. each.

J. TYLOR and SONS manufacture *PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.*

PUMPS of J. TYLOR & SONS' manufacture to be obtained of Plumbers in all parts of the United Kingdom.

J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

JOHN WARNER AND SONS, BELL and BRASS FOUNDERS to HER MAJESTY, HYDRAULIC ENGINEERS, BRAZIERS, &c., 8, Crescent, Cripplegate, London, E.C.

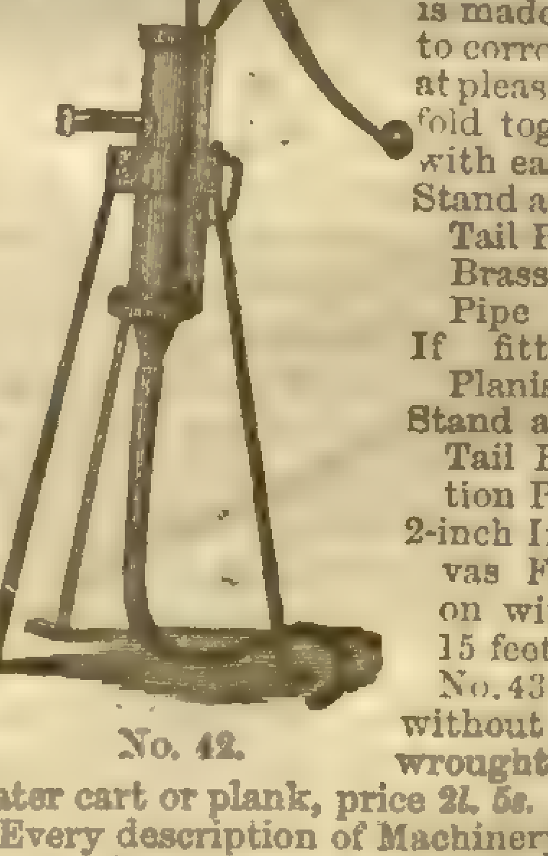

No. 35.

WARNER'S PATENT CAST-IRON PUMP, for raising Water from Wells not exceeding 25 feet in depth.

Diameter of Barrel.	Height.		£ s. d.
2¼ in. short	1 ft. 7 in.	Fitted for lead, gutta percha or cast iron flanged pipe as required.	1 1 [illegible]
2½ „ long	3 „ 3 „		1 1[illegible] 0
3 „ ditto	3 „ 6 „		2 4 [illegible]
3½ „ ditto	3 „ 6 „		2 9 [illegible]
4 „ ditto	3 „ 6 „		2 15 [illegible]
2½ „ short, with 15 feet of Lead Pipe attached, ready for fixing			2 [illegible]
2½ „ long ditto ditto ditto			2 14 [illegible]

This Pump is fitted with J. W. & Sons' Patent Vibrating Standard, Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.

WARNER'S IMPROVED LIQUID MANURE OR GENERAL PORTABLE PUMP.


No. 42.

This Pump is fitted with WARNER'S Patent Bucket and Valve, and cannot clog in action. The Barrel is made of Galvanised Iron, not likely to corrode, and can be raised or lowered at pleasure on the stand, the legs of which fold together, and it may be carried with ease by one man.

	£ s. d.
Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe	2 15 [illegible]
If fitted with Barrel of Planished Copper	3 4 [illegible]
Stand and Pump, with plain Tail Pipe, for tying on Suction Pipe	2 [illegible] [illegible]
2-inch India Rubber and Canvas Flexible Suction Pipe, on wires, in either 10, 12, or 15 feet lengths .. per foot	0 2 [illegible]

No. 43 is a similar Pump to the above, but without stand, but with screw and wrought-iron straps, for fixing to water cart or plank, price 2*l*. 5*s*.

Every description of Machinery for Raising Water, by means of Wheels, Rams, Deep Well Pumps, &c.; also Fire and Garden Engines, &c.

J. W. & SONS' Illustrated Catalogue forwarded post free on application.

The above may be obtained of any Ironmonger or Plumber in Town or Country, or of the Patentees and Manufacturers, JOHN WARNER & SONS, 8, Crescent, Cripplegate, London, E.C.

ROYAL HORTICULTURAL SOCIETY. GRAND SHOW OF DAHLIAS AND OTHER CUT FLOWERS, on Wednesday, Sept 11.

AWARDS OF THE JUDGES.

CLASS 1.—48 DAHLIA BLOOMS, distinct (Nurserymen).
1st Prize, Mr. John Keynes, Salisbury, 8l.
2d do., Mr. John Harrison, Darlington, 6l.
3d do., Mr H. May, near Bedale, Yorkshire, 4l.
4th do., Mr. Charles Kimberley, Stoke, near Coventry, 2l.

CLASS 2.—24 DAHLIA BLOOMS, distinct (Nurserymen).
1st Prize, Mr J. Keynes, Salisbury, 5l.
2d do., Mr H Legge, Edmonton, 3l.
3d do., Mr. H. May, near Bedale, Yorkshire, 2l.
4th do., Mr J Harrison, Darlington, 1l.
Extra do., Messrs. Downie, Laird, & Laing, Forest Hill, S.E., 10s.

CLASS 3.—18 DAHLIA BLOOMS, FANCIES, distinct (Nurserymen).
1st Prize, Mr. J. Keynes, Salisbury, 4l.
2d do., Mr H. Legge, Edmonton, 3l.
3d do., Mr. Charles Kimberley, Stoke, near Coventry, 2l.
4th do., Messrs Downie, Laird, & Laing Forest Hill, S.E., 1l.

CLASS 4.—24 DAHLIA BLOOMS, distinct (Amateurs).
1st Prize, Rev. C. Fellowes, Shottisham Rectory, Norwich, 6l.
2d do., Mr. Wm Dodds, Salisbury, 4l.
3d do., Mr. Chas. J. Perry, Castle Bromwich, near Birmingham, 3l.
4th do., Mr. W. P. Barnard, Darlington, 2l.
Extra do., Mr. W. Corp, Milford, Salisbury, 1l.

CLASS 5.—12 DAHLIA BLOOMS, distinct (Amateurs).
1st Prize, Mr. W P. Barnard, Darlington, 4l.
2d do., Rev. Chas. Fellowes, Shottisham Rectory, Norwich, 3l.
3d do., Mr. W. Dodds, Salisbury, 2l.
4th do., Mr. Chas J Perry, Castle Bromwich, near Birmingham, 1l.
Extra do., Mr. Thos. Charlton, Kibworth, near Harboro', Leicestershire, 10s

CLASS 6.—6 DAHLIA BLOOMS, distinct (Amateurs).
1st Prize, Mr. John Pope, Smith Street, Chelsea, 2l.
2d do, Rev. C. Fellowes, Shottisham Rectory, Norwich, 1l. 10s
3d do, Mr. W. P. Barnard, Darlington, 1l
4th do., Mr. H. Glasscock, Rye Street, Bishop's Stortford, 10s.

CLASS 7.—12 DAHLIA BLOOMS, FANCIES, distinct (Amateurs).
1st Prize, Rev. C. Fellowes, Shottisham Rectory, Norwich, 3l.
2d do, Mr. C J. Perry, Castle Bromwich, near Birmingham, 2l.
3d do., Mr. W Dodds, Salisbury, 1l.
4th do, Mr. W Corp, Milford, Salisbury, 15s.

CLASS 8.—48 CUT ROSES, 3 trusses, distinct (Nurserymen).
1st Prize, Mr J. Mitchell, Pilt Down Nurseries, Maresfield, 4l.

CLASS 9.—24 CUT ROSES, 3 trusses, distinct (Amateurs)
1st Prize, Rev W. F. Radclyffe, Rushton Rectory, Blandford, Dorset, 4l.
2d do., Mr. J Hollingsworth, Maidstone, 3l.
3d do, Dr. Cooper, Slough, Bucks, 2l.

CLASS 10.—24 CUT ROSES, distinct single blooms (Open).
1st Prize, Mr. John Keynes, Nurseryman, Salisbury, 2l.
2d do., Mr R. Laing, Twickenham Nurseries, S W., 1l.
3d do, Messrs. W. Cutbush & Son, Highgate Nurseries, N., 10s.

CLASS 11.—12 ROSES in pots, only 2 of one kind, (Open).
No Competition.

CLASS 12.—12 HOLLYHOCKS, in Spikes, distinct, (Open).
1st Prize, Messrs. Downie, Laird, & Laing, Edinburgh and London, 3l.
2d do., Mr. W. Chater, Saffron Walden, Essex, 2l.

CLASS 13.—12 HOLLYHOCKS, Single Flowers, distinct (Open).
1st Prize. Mr. Henry May, Hope Nurseries, Bedale, Yorkshire, 2l.
2d do., W. Minchin & Son, Hook Norton, Oxon, 1l.
3d do., Messrs Downie, Laird, & Laing, Forest Hill, S.E., 15s.
4th do., Mr. W. Chater, Nurseries, Saffron Walden, 7s. 6d.

CLASS 14.—24 GERMAN ASTERS, "Quilled," distinct (Open).
1st Prize, Mr R. H Betteridge, Steventon, Berks, 2l.
2d do, Mr. Thos Westbrook, Abingdon, Berks, 1l.
3d do., Mr. W. Molyneux, Nuneham Park, Oxford, 15s.
4th do., Messrs. W Minchin & Son, Hook Norton, Oxon, 10s.

CLASS 15.—24 FRENCH ASTERS, "Tasselled," distinct (Open).
1st Prize, Mr Chas. Sandford, Walthamstow, 2l.
2d do, Mr R. H Betteridge, Steventon, Berks, 1l.
3d do, Mr W. Sandford, Woodford, Essex, 15s.
4th do, Mr. R. Penwill, Gr to J Browning, Esq, Leyton, 10s.

CLASS 16.—24 GLADIOLUS, Cut Spikes, distinct (Open)
1st Prize, Mr. John Standish, Royal Nurseries, Bagshot, 2l. 10s.
2d do., Messrs. G. Paul & Son, Old Cheshunt Nurseries, Herts, 1l. 10s.
3d do., Messrs. W. Minchin & Sons, Hook Norton, Oxon, 1l.

CLASS 17.—12 GLADIOLUS, Cut Spikes, distinct (Amateurs).
No Competition.

CLASS 18.—12 POTS OF GLADIOLUS, distinct, 3 in each pot (Open).
1st Prize, Mr. John Cattell, Nurseryman, Westerham, 3l.

CLASS 19.—24 PHLOXES, Single Trusses, distinct (Open).
1st Prize, Mr. J. Standish, Royal Nurseries, Bagshot, 2l.
2d do., Mr. J. Cattell, Nurseryman, Westerham, 1l.
3d do., Messrs. W. Cutbush & Son, Highgate Nurseries, N., 15s.

CLASS 20.—12 PHLOXES in Pots, distinct (Open).
1st Prize, Mr John Cattell, Westerham, 3l.
2d do, Mr. John Standish, Royal Nurseries, Bagshot, 2l.

CLASS 21.—24 VERBENAS. 5 Trusses of each, distinct (Open).
1st Prize, Mr. C. J. Perry, Castle Bromwich, near Birmingham, 1l. 10s.
2d do., W. Minchin & Son, Hook Norton, Oxon, 1l.
3d do, Dr. Cooper, Slough, Bucks, 10s.

CLASS 22.—MISCELLANEOUS. For Flowers not specified (Open).
*1st Prize, Mr. J. Mitchell, Pilt Down Nurseries, Maresfield, 1l. 10s.
†2d do., Mr C. Turner, Royal Nurseries, Slough, 1l.
3d do., J Veitch & Son, Royal Exotic Nursery, Chelsea, 15s.
Extra do, Mr M Pitchmant, Lower Edmonton, 10s.
Extra do., Mrs Conway, Old Brompton Nurseries, S.W., 10s.
†1st do., Mr G Uzzell, Gr. to the Dowager Duchess of Northumberland, Twickenham, S.W., 1l. 10s
*1st do., Mr J Standish, Royal Nurseries, Bagshot, 1l. 10s.
†2d do, Messrs. W. Cutbush & Son, Highgate Nurseries, N., 1l.
Prize, Messrs. J. Veitch & Son, Chelsea, S.W., 3l
Do, Messrs J. & C. Lee, Nurserymen, Hammersmith, 2l. 10s.
Do, Mr. W. Bull, King's Road, Chelsea, S.W., 2l.
Do., Mr. R. Glendinning, Turnham Green, W., 2l.
Do., Messrs. H. Lane & Son, Nurserymen, Great Berkhampsted, 2l.

Total amount of Prizes Awarded, 154l. 2s. 6d.

JUDGES.
Mr Thomas Moore, Physic Garden, Chelsea, S.W.
Mr Charles Edmonds, Chiswick House, W.
Mr. William Barnes, Camberwell, S.
Mr. W. Holmes, Hackney, N.E.
Mr. J. Cook, Notting Hill, W.
Mr. Joshua Robinson, Colnbrook, Bucks.

BRIGHTON AND SUSSEX FLORICULTURAL AND HORTICULTURAL SOCIETY.
The EIGHTH ANNUAL GRAND AUTUMN SHOW will be held on WEDNESDAY and THURSDAY, September 18 and 19, at the Royal Pavilion. Prizes to the amount of 350l. are offered for PLANTS, FRUITS, CUT FLOWERS, &c.
The RAILWAY CUP, value 10l., is offered for the best group of three stands of Fruit and Flowers for the Decoration of the Dinner Table. Beautiful arrangement will be the test in this Exhibition. Ladies are invited to compete. The prizes will be awarded by a jury of Ladies.
Schedules of Prizes can be had on application to the SECRETARY, 96, St. James's Street, or of E SPARY (General Superintendent of the Exhibition), Queen's Graperies, Brighton.
By the kind permission of Colonel Perceval, the celebrated Band of Coldstream Guards will attend each day, conducted by Mr. Godfrey, sen.

CONVEYANCE OF PLANTS, &c.
Through the liberality of the Directors of the South Coast Railway, the Committee have the pleasure to announce to Exhibitors—that Plants, &c., for Exhibition will be conveyed to Brighton from all Stations and back whence they came Free of Charge
The Plants, &c., from London must be delivered at Bricklayers' Arms Station, Willow Walk, Bermondsey, not later than 8 P.M. on the day preceding the Show, to be delivered to the Exhibitors early on the following morning at the Brighton Station.
Where Plants are loaded in the owners' vans and carriages, trucks will be required; of which notice should be given to the Superintendent at London Bridge or Bricklayers' Arms, at least 24 hours before, to prevent disappointment.
No van for transit on a carriage-truck must be loaded more than 9 feet from the ground.
Vans will be in readiness at the Brighton Station on the morning of the Show, to convey Plants, &c, to the Pavilion.
N B —Exhibitors accompanying from London Bridge or Victoria must have them booked previous to their departure for Brighton By Order of the Committee,
Brighton, Sept. 14. EDWARD CARPENTER, Secretary.

TRIFOLIUM INCARNATUM (present price) 5d. to 6d. per lb.
VILMORIN'S NEW TRIFOLIUMS, with "Practical Hints on its successful Cultivation," showing how 2 to 3 tons per acre of the most nutritious hay may be secured; the advantages of sowing it where broad Clover is thin, and its superiority to Tares as green food.
PAGE & TOOGOOD having secured a large breadth from the most careful growers in this district, where better crops are produced than in any part of England, offer it at the above low rate for cash; price to the Trade per post.
Italian Rye-grass, 5s. per bushel.
New Turnip Seed, 8d. per lb.
New Rape Seed, 4d. per lb. | New Mustard Seed, 4d. per lb.
WINTER VETCHES and WINTER OATS as soon as harvested.
PERMANENT PASTURE and LAWN GRASSES as sown at Osborne for the last 7 years.
CALCEOLARIA and CINERARIA, 1s. per packet, saved from one of the finest collections in Europe.
Seeds for exportation to all parts of the world.
Royal South Hants Seed Establishment, Southampton.

Dutch Flower Roots.
JAMES VEITCH, JUN., ROYAL EXOTIC NURSERY, Chelsea, S.W., begs to announce that he has received his annual supply of Bulbous Roots from Holland, and is pleased to say that they are PARTICULARLY FINE and in EXCELLENT CONDITION. CATALOGUES are now ready and will be forwarded on application.
J. V., Jun., desires to impress upon those who patronise him the great advantage of giving him their ORDERS EARLY, as the successful cultivation of Bulbs depends in a great measure upon their BEING PLANTED EARLY IN THE SEASON.

The Gardeners' Chronicle.
SATURDAY, SEPTEMBER 14, 1861.

A SMART Easterly wind and a fierce September sun welcomed the visitors last Wednesday to the Garden of the Royal Horticultural Society at South Kensington, where, as the advertisements had announced, there was to be a grand Show of Dahlias and other autumnal flowers. The meeting was a happy one, marred by neither accident nor the frowns of JUPITER PLUVIUS; all was dry, trim and agreeable; the flowers put on their sweetest smiles; the air was filled with music; the gay uniforms of the military bands, those of the Royal Artillery and Royal Engineers, glittered in the sun, and would of themselves have lighted up the ground, even in the absence of the brilliant dresses of all which remains of the fashionable world in the month of September.

The Show was held in the still empty Conservatory, which was once more the centre of floral attraction. There were long lines of all sorts of autumn flowers, hardy and tender, and of "new" plants from the neighbouring nurseries. Tree frogs jumped about in a glass case to the admiration of the young, and fruit from an Apple tree grafted on a Pear tree excited the speculation of the old. Some fine trees from the Duke of WELLINGTON, who had presented them to the Society, served to show what the appearance of the Conservatory would be when filled with plants of ample size.

In the outer world the lawn was deliciously green, Mr. NESFIELD's polychrome beds looked like Persian carpets, the hammer and chisel were withdrawn from the architectural works, and all would have been silent but for the many tongued crowd, and the clang and clash and long drawn harmony of the military musicians. Near the entrance two noble bronze figures of Victory, a recent acquisition, seemed with extended wings about to leap from their pedestals and join the throng; and had the water works been far enough advanced to play the whole scene would have been perfect. That however is a pleasure still to come. Of the details of the show a full report appears in another column. Our own remarks must be very brief.

The finest thing beyond all comparison was a superb specimen of the glorious Lapageria rosea, from the garden of Her Grace the Duchess Dowager of NORTHUMBERLAND. It covered 36 square feet on a flat trellis, and bore 36 gorgeous crimson bells. To have thus succeeded in reducing so refractory a plant to perfect obedience reflects very great credit upon Mr. Uzzell the Duchess's gardener.

There were also some of the new Caladiums, of which we cannot say much. C. Baraquinii is for instance nothing more than a bad bicolor; but then Caladium Belleymii is a real gem, perfectly distinct, and most effective among green-leaved plants. What can be more elegant than its large halberd-shaped thin green leaves, bordered and powdered with silver?

As a curiosity nothing could be more striking than a plant growing on a board, exhibited by Mr. WILLIAMS, from Manila. The *Times* compares it to tree frogs in single file; we should rather describe it as a line of green tortoises glued to the ground. In all probability it is some species of the curious genus Dischidia.

We were disappointed in the Gladiolus department. Doubtless the specimens, looked at individually, were very handsome, but they want colour, and owing to their bad foliage will never answer well for garden decoration unless planted in masses. But no massing would make the new kinds equal to the glorious Brenchleyensis.

Far better suited to produce breadth of rich colour are the many fine varieties of Phlox, which are evidently feeling the effect of being taken under the protection of the florists. And we venture to predict that in a few years they and the exquisitely beautiful China Asters will have driven the lumpish Dahlia out of the field. We do not mean that Dahlias will disappear; there will always be some admirers of the plant, who may even prefer it to the many tinted Aster; just as some people like Onions, and some like Peaches. All we mean is that our Horticultural Societies will cease to invite visitors to their Dahlia shows, but will promise the public in their stead a grand display of Asters and Phloxes.

WHEREVER it is desired that success should be realized in the flowering of SPRING BULBS, it is a matter of present urgency that a supply of sound, perfect, and thoroughly ripened bulbs should be secured. This is to be done *now*, while they are just freshly imported, and before they have had time to become deteriorated by long continued exposure to the atmosphere, or to become exhausted by premature growth. The kinds of bulbs which are most extensively cultivated for purposes of spring decoration, such as the Hyacinth, the Narcissus, and the Tulip, with which the corm-forming Crocus may be associated, are naturally of a soft, fleshy consistence, with a thin loosely adherent skin, which does not very perfectly prevent the evaporation of their juices, and hence the importance not only of avoiding all unnecessary exposure to the air, but also of speedily placing the bulbs beyond reach of harm, from this source at least, if a vigorous bloom is sought to be obtained.

Since the bulb, in plants of this nature, is the storehouse of food provided for nutritive purposes during at least all the earlier stages of development, up to the production of the flowers, it is obvious that the shrivelling process which must go on if the bulbs are not protected, is nothing more nor less than a direct injury to the vegetative organs of the plant, and can only result in a languishing developement and a deteriorated bloom. On the other hand, by judicious early selection and planting, and after such a season as the past, which must have matured the bulbs thoroughly, a rich and vigorous bloom may be anticipated.

There are one or two points both as to the selection and management of the HYACINTH, the most important of the bulbous group, to which it may be useful to direct the attention of amateur cultivators. The first point is as to the class of varieties to be grown. No doubt there is a prevalent feeling, under the influence of which preference is given to double over single flowers generally, and under this influence the inexperienced cultivator might be led to prefer the double before the single

Hyacinths. Without denying the beauty of some of the double kinds, it may nevertheless be asserted in general terms that the single varieties are the preferable ones for ordinary decorative purposes. They are more vigorous in constitution than the double-flowered sorts, often of brighter hues, and generally, they produce more compact and massive flower-spikes, so that of the two groups they are really the more ornamental in the majority of instances, whilst for culture in glasses they are decidedly and at all times preferable.

Another point of some importance where effect only is the object in view, is to make a good selection of a few distinct and decided colours rather than to multiply shades and varieties, which after all the trouble that may be taken with them will not yield half so satisfactory a result as the fewer decided colours. Especially is it unnecessary for mere decorative purposes to have recourse to high-priced varieties, the value of which in many cases is merely nominal, and dependent rather upon a limited supply, than upon their intrinsic merit. There are of course among these, as among other flowers, new and also improved varieties to be met with; indeed there has been of late years a marked advance in the quality of new kinds of Hyacinth, so that those who seek for novelty will here find a fair share of encouragement to obtain them; but the point we would particularly impress on our inexperienced readers is this, that such varieties, novel and high-priced as they may be, will afford them no advantage, looking at the matter as a mere question of ornamental display. The interest to be elicited from the cultivation of novelties such as these, will be dependent on other sources.

Well, then, single-flowered varieties of low or moderate price being determined on, we may mention, as a guide to the inexperienced, a few of the sorts we should ourselves select on account of their merit from the point of view in which we are considering them. And, first, among the whites: there are Grand Vidette, Grand Vainqueur, and Queen Victoria, all forming noble spikes, with bells as pure as the snow-drift; besides Madame Van der Hoop and Mont Blanc, equally fine but higher priced. Tubiflora and Elfrida are magnificent blush varieties, remarkable for the boldness of their flower-spikes and the size of their flower-bells, both ranking amongst the best of this colour. L'Unique is a pretty pucy purple sort, rather novel, but yet reasonable as to cost. Of blues, there are Baron van Tuyll, rich deep indigo; Orondatus, clear porcelain blue; and Grand Lilas, delicate light azure, all fine cheap sorts, the latter being one of those with very large bells. We must not overlook Argus, one of the most charming varieties in existence, bearing flowers which have a bright cobalt tube, a deep clear indigo limb, and a conspicuous white throat; this sort is, however, rather more costly than some of those already named. Prince Albert, which is one of the cheapest, is also one of the best of the very dark or black purples. Among the reds, Norma, a waxy pink, and Robert Steiger, a bright crimson, are telling sorts; and Sultan's Favourite, a pale rose with deeper stripes, and Belle Quirine, a bright crimson rose, are also very effective—none of them being high priced, like Florence Nightingale and Solfaterre, which latter are nevertheless as high in quality as in cost, the former a pale pink with carmine stripes, the latter a brilliant fiery red. The yellows are of less importance. Among the double-flowered sorts, Duke of Wellington, pale rose; Milton, deep red; La Tour d'Auvergne and Prince of Waterloo, white; and Bloksberg and Laurens Koster, blue, are fine, and every way desirable for general cultivation.

Those who have a taste for the newer and choicer varieties should not fail to grow the following sorts:—Argus, already mentioned; Lina, the brightest and deepest of all the crimsons; Snowball, a pure white, with the most "improved" blossoms yet seen among Hyacinths; General Havelock, a magnificent deep black purple; Solfaterre, a fiery red; and Lord Clyde, one of the new purplish-tinted sorts. All of the foregoing are remarkable for their superior quality and beauty.

Latterly there has appeared a somewhat distinct-looking class of single Hyacinths, remarkable for the size of their flower bells, which are nearly twice as large as those of the ordinary kinds. These have a noble appearance when flowered from strong bulbs, and when cultivated so as to develope fully their naturally sturdy habit. We have mentioned some of these among the varieties already alluded to, but with the view of directing especial attention to the group, we may here specify some of the more prominent of the varieties, namely, Elfrida, Tubiflora, Couronne de Celle, and Grand Lilas.

There are few brighter and more beautiful spring flowers than the Hyacinth, whether grown in forcing houses for the decoration of the conservatory and drawing-room, or placed in glasses of water, or in bowls or vases of Moss, and treated throughout as household plants, or grouped in the beds of the flower garden. Few flowers, indeed, prove so brilliant and pleasing as these in the latter situation, to which we may more specially refer hereafter. At present, it may be useful to many readers who are their own cultivators if we briefly recapitulate some of the prominent features of in-door culture.

First as to glasses. Those known as Tye's Hyacinth Glasses are much to be preferred, on account of their appearance, to those of the older form. They may be had of plain colours or ornamented, and should be accompanied by the wire supports for the flower spikes, now commonly provided. The bulbs should be firm, clear, and evenly formed, not over large (the different sorts vary considerably in size) and perfectly sound. The glasses should be nearly filled with *soft water*—just so that when the bulb is placed in its position it may all but touch the surface of the water. After planting they should be set away in a close dark place where the temperature is moderate and equable, and the atmosphere at least not parching; no place is better than an ordinary cellar. They may remain in this position for a month or six weeks until roots have become freely developed, and then may be removed to a cool room, and gradually inured to bear exposure to the full light. The glasses are to be kept filled up with water as it wastes; and the water is not to be used at a temperature below that of the room, and need not be changed unless it becomes offensive, which is seldom the case. A cool room, where they can be fully exposed to light, is the best place for them after the leaves are put forth; but in cold weather they must be removed from the window at night or they will be liable to sustain an injurious check if the temperature falls very low. A portion may be accelerated by being kept in a warm living room after they begin to grow.

When cultivated in bowls or vases, the vessel may be filled either with clean damped Moss or moistened sand, the former being pressed moderately firm. In either case the bulbs should be placed so as to leave about one-third of their upper surface exposed. Like those in glasses they should be set in a dark dampish place to root, before being exposed to light or stimulated by heat. The colours too should be tastefully grouped, and the varieties selected with reference to their vigour, so that the tallest may occupy the centre of the group.

By another plan it has been recommended to place the bulbs in a flat dish of porcelain, glass, or other material, in which about half an inch of water is first put. Under such conditions the roots are sure to spread horizontally and to clasp each other so as to form a mutual support. Shallow vessels of ordinary pottery ware might be planted in this way, and afterwards set into ornamental dishes, the coarser material being hidden by a covering of moss.

After all, however, there is no mode of culture within doors which is so thoroughly satisfactory as pot-culture, and we conclude this notice with the following very judicious summary of this method of cultivation from the Bulb Catalogue of Mr. W. Paul, of Waltham Cross, who has been a successful exhibitor, and herein explains the ground of his success:—

"Hyacinths in pots may be potted from September to Christmas, in order to secure a succession of bloom. October is perhaps the best time for potting the mass. Fill the pots with a compost of turfy loam with a plentiful admixture of sand and well decayed manure. Five and 6-inch pots are the sizes ordinarily used; but I prefer a deeper pot with more upright sizes, and would recommend such when it can be procured. In potting, one-third of the bulb should be left above the surface of the soil, and the pots should be placed on the level ground, out of doors, having previously taken precautions to prevent the ingress of worms through the holes at the bottoms of the pots. Cover the pots with 6 inches of cinder ashes, coarse sand, or any porous material, leaving them so covered for at least a month, then removing them at intervals as required to a cold frame or forcing house. As the leaves expand, place the pots close to the glass; give plenty of air and water, and protect from frost."

EFFECTS OF THE FROST IN THE ROYAL GARDENS, KEW.

The effects of last winter have been so little felt at Kew, compared with almost any other locality, far or near, the statistics of whose losses have been published, that I have held back the following list (drawn up in May last) for several weeks, lest any of the plants therein mentioned should, during the summer heat, show signs of previous injury. Such, however, has not been the case, and I therefore send it, premising that it refers entirely to the Pleasure-ground under Mr. Williamson's charge, and by whom the lists are drawn out.

The soil throughout the Pleasure-ground, as elsewhere in the Kew district, is very light and sandy, consisting for the most part of alternate beds of sand and gravel; the vegetation consequently burns very much during the summer, and the demand for leaf-mould and better soil by the plants is insatiable. In point of number of species and varieties the collection in these grounds is very large indeed; the aim being to render it a complete arboretum or illustration of all the trees and shrubs that will bear the open air in that locality. Owing to the nature of the soil and climate, however, there are whole groups of plants that do not at all succeed; as, for instance, the majority of Spruce Firs, Larches, Ash, Elders, Clematis, many Piceas (Webbiana, pectinata, &c.), very many kinds of Roses, and such plants generally as thrive on clay or other retentive soils, or that require a cool or rocky subsoil. Within the last 20 years also the level of the Thames has been permanently lowered, withdrawing a large supply of moisture from the roots of the trees; a vast number of trees have been cut down in the course of the laying out the grounds; and the consequent death of others, and disappearance of Mosses, Hepaticæ, &c., on the barks of the survivors, and on the ground, testify to the increased drought of the locality. Nevertheless, when it is considered that we have bad indifferent specimens of all such plants as do not thrive, and that the following list is a faithful one of all that have been killed or cut down to the ground, it is evident that the locality is a most favourable one for a botanical collection in the most essential respect of climate that could well be selected. Within a few hundred yards, on the opposite (clayey) side of the Thames, the destruction has been ten times greater than at Kew: and whole groups of plants such as Deodars, Common Laurels, Hollies, Rhododendrons, Araucarias, &c., which have been materially injured or killed in the neighbourhood of London or elsewhere, are absolutely unscathed at Kew; and of common Evergreens the Laurus nobilis and Phillyrea alone lost many of their leaves, and these are already replaced.

With regard to the third list, that of plants which have wholly escaped, it might have been indefinitely extended, had it been intended to contain the names of all the plants which have been killed or hurt elsewhere—it contains only the most important, tender, or otherwise remarkable (for novelty, &c.) of these. I shall be glad to answer any questions regarding others, or to supply any deficiencies that may be useful to any of your correspondents.

In the Botanic Garden proper, our losses have been even less proportionally than in the Pleasure-ground, but then many of the trees and shrubs which are planted out in the Pleasure-ground are against sheltered walls in the Garden. In the hardy herbaceous grounds very little has been lost; but on the other hand we rarely put tender plants into those beds, or such as do not very constantly prove hardy, for nothing is so unsightly to visitors and disappointing to those in search of plants, as great gaps in the beds where the species sought should be found.

In the great Palm House the cold was manifestly felt by many of the plants, and has I think proved generally beneficial to them, for the foliage throughout the ensuing summer has been quite superb.

I. PLANTS KILLED BY THE FROST.

Cistus, all except 2 species mentioned below	Solanum crispum
Thea viridis	Fabiana imbricata
Euonymus japonicus	Quercus nivea
Ceanothus rigidus	Pinus Hartwegii
,, papillosus	,, insignis, several
,, dentatus	,, radiata ,,
Ulex nana	,, patula
,, stricta	,, sinensis
Cerasus ilicifolia	Cupressus sempervirens, small
Photinia serrulata	,, funebris, several
Stranvæsia glaucescens	,, *thurifera*
Eugenia apiculata	,, *Uhdeana, several*
Pernettya angustifolia	,, *Goveniana, many*
Erica arborea	,, Benthamii
,, australis	,, Several other unnamed Mexican species
,, codonodes	Juniperus tetragona
Ilex Cassine	,, flaccida
,, Dahoon	Abies Brunoniana and jezoensis, doubtful
,, Perado	Platanus acerifolia, young plants only
,, cornuta	
,, microcarpa	
Fontanesia phillyreoides	
Jasminum Reevesii	

II. PLANTS KILLED TO THE GROUND ONLY.

Colletia horrida	Picris formosa
,, cruciata	Myrsine retusa
Spiræa pubescens	Griselinia littoralis
Escallonia, all the sp.	Arundinaria falcata
Hydrangea quercifolia	Gynerium argenteum

III. THE FOLLOWING HAVE PROVED QUITE HARDY.

Cunninghamia sinensis	Hypericum oblongifolium
Picea bracteata	Limonia trifoliata
Pinus australis	Skimmia japonica
Pseudo-Larix Kæmpferi	,, laureola
Biota meldensis	Camellias, various
Cryptomeria japonica	Ceanothus integerrimus
,, ,, nana	Colletia serratifolia
,, Lobbii	Piptanthus nepalensis
Cupressus Lawsoniana	Spiræa grandiflora
,, Nutkaensis	Bupleurum fruticosum
,, M'Nabiana	Weigelia rosea
,, Knightiana	,, amabilis
,, macrocarpa	Senecio Cineraria
Fitz-Roya patagonica	Azalea amœna
Libocedrus chilensis	Arbutus Menziesi
Retinospora ericoides	Rhododendron glaucum
Thuja gigantea	,, ciliatum
Cephalotaxus Fortuni	,, Blandfordiæflorum
,, drupacea	,, Hodgsoni
Dacrydium Franklinii	,, Falconeri
Saxegothæa conspicua	,, niveum
Pæonias, Fortune's var.	,, campylocarpum
Illicium floridanum	,, Wallichii
,, religiosum	,, arboreum
Tasmania aromatica	Ilex latifolia
Mahonia japonica	Ligustrum japonicum
,, intermedia	,, Fortune's new sp.
,, Bealii	Polygonum vacciniifolium
Berberis Wallichiana	Buxus, sp. China
,, concinna	Myrica californica
Cistus ladaniferus	Quercus glabra
,, laurifolius	Fagus antarctica
Acer villosum	,, betuloides
	Chamærops Fortunei

J. D. Hooker.

Home Correspondence.

Paris—The Jardin d'Acclimatation.—If you pass through the Arc de Triomphe into the Bois de Boulogne your attention is arrested in an afternoon by a line of carriages collected before what are evidently the gates of some place of public resort. Step into a little lodge, pay a franc, and you are ushered into a sort of ill-kept plantation, with a great conservatory on the left hand, some greenhouses on the right, and winding walks among spaces enclosed by wirework or rails

Within these enclosures are specimens of birds and animals as in the Zoological Gardens, London. This is what in somewhat pompous language is here called the Garden of Acclimatation, in which all sorts of trees are to become hardy, and all sorts of birds, beasts, insects, and creeping things are to be inured to the climate of Paris—the grand conception of some brilliant visionary. Not having seen the *Journal de la Société*, if there be one, or its *programme*, I don't know the limits assigned to this great idea, nor have I succeeded in learning anything of it more definite than what I have stated. You must therefore be contented with hearing what I saw, so far as experiments in acclimating plants are concerned. Be it known, then, to all men that the Society recognises the necessity of learning experimentally whether Pinus Sabinians is hardy, and if Magnolia grandiflora will live out in winter. You English will stare at this when you remember that the Pinus is among the hardiest of all trees, and how good M. Boursault used to grow the Magnolia a quarter of a century ago in his garden in Paris. Another object of experiment is the Hungarian White Linden (Tilia alba), of which a wretched gouty individual, grafted half standard high, is perishing under the hands of some acclimatizing executioner. I mention these as examples of the childish way in which horticultural experiments (!) are conducted here. The whole affair is in that respect absurd. To be sure there are specimens of *Araucaria Bidwilli* and *excelsa* in tubs; but I could not make out how keeping them in such a manner was likely to solve any problem in the art of acclimatizing. In like manner I was equally perplexed to discover how it is proposed to acclimatise other species by growing them in a great conservatory or stove, I am not sure which, with a beck winding through the middle of some handsome "specimen" plants, as our fellow countrymen call them. But of this enough; it is not worth dwelling on such a subject. The situation is admirable: airy, dry, nicely wooded, and the very place for well conducted trials; and all must regret that the Garden of Plants, with its staff of highly educated, experienced officers and most able professors, should be doomed to inaction on the skirts of the wine market and dirty Rue Copeau, instead of being transferred to the beautiful Bois de Boulogne, now the resort of the best classes, who will neither drive nor walk to the miserable place where all the treasures of Paris in Natural History are literally stowed away. One redeeming feature in this Jardin d'Acclimatation must not however be forgotten. It has a capital *Magnanerie* or gallery of Silkworms, a very pretty building in which the worms of the Ailanthus, the Ricinus and the White Mulberry have been diligently employed all the summer in exhibiting themselves to the public, hard at work on the leaves to each peculiar. When I saw them last the leaves of Ailanthus were alive with young worms, and some great green fellows were nearly full grown. This was by far the most interesting object in the Garden. The prettiest is a tiny cottage made of Cane-work, and fitted up with charming Cane furniture, of which you cannot boast the like in England. I have close by me (*Rue de la Paix, No. 25*) a shop-full of such articles which I recommend everybody who can afford a guinea apiece for garden chairs to go and see. *V., Rue Castiglione.*

Orchids, Fertilization of.—I have been endeavouring during several years to make out the many contrivances by which British Orchids are fertilised through insect agency. I am very anxious to examine a few exotic forms. Several gentlemen have kindly sent me specimens; but I have not seen one of Lindley's grand division of Arethuseæ, which includes the Limodorideæ, Vanillideæ, &c. If any one would have the kindness to send me a few flowers and buds of any member of the group, packed in a small tin canister, by post, addressed as below, he would confer a very great favour on me. Would you have the kindness to inform me, if in your power, whether the late Professor Morren has published anything (and where) on the fertilisation of Orchids by insect agency? *Charles Darwin, Down, Bromley, Kent.* [We are unable to answer this question, and must refer it to others. After searching through Morren's multitudes of pamphlets, we find nothing on Orchids except an academical dissertation on Orchis latifolia, and some remarks on the cause of the movements in the lip of Megaclinium.]

Manuring Conifers.—I was struck by the caution given to avoid manuring Conifers, as I can well remember seeing outside of Holt, in Norfolk, Cromerwards, two plantations of Spruce and Larch, one on each side the road, well fenced in, and with boards painted opposite each other, with words as near as I recollect as follows:—"These are planted in well manured ground," and date. The other had on it—"These were planted in unmanured ground," date the same as on the other board. The manured trees were at least twice as high, and had a far more robust and healthy appearance than those unmanured. It is more than 20 years ago, and the boards may yet exist. I may also mention that a few years since I planted three Deodars, and the most sickly one, which I hardly expected to get up, I placed immediately over the spot where I had recently buried my splendid old favourite setter. At first it made very slow progress; but for the last two or or three years, when it may be supposed the roots had reached the dead carcase, the growth has become most vigorous, the colour of the foliage peculiarly beautiful, and its branches far more stout than the other two; which, however, are very handsome. Hence I infer that manuring many of the Conifers may be safely and advantageously practised. *Thomas Ingle, M.D., Emsworth, Hants.* —— In September, some eight or nine years ago, I had nearly the whole of my stock of Coniferous plants removed and heavily manured with half-rotten horse and cow dung. At the end of the same week the question was asked through your Paper whether or not the application of manure would injure an Araucaria. The reply was, "Yes, it is poison to the whole race." I thought if that is correct I have certainly committed a serious blunder, but I patiently waited and watched the result. Nothing could be more satisfactory than the growth and appearance of the plants the following season. Since then I have invariably applied manure whenever I removed plants of the kind in my own nursery, and always with the same satisfactory results. Therefore I have always recommended the application of manure whenever necessary, or an opportunity occurred for using it. As an illustration of what I have stated, I beg to say that about twelve months ago I sold a handsome specimen of Picea Nordmanniana to a lady in this neighbourhood, who always superintends and directs the transplantation of trees, &c., herself. A compost of manure and soil was prepared for this plant, including three barrow loads of the former. Nothing can exceed the healthful appearance of this tree just now; it has made sixteen inches of leader this season. *John Grier, Ambleside, Windermere.* —— Would your Correspondent "J. Philpotts" inform me whether the "good barrowfull of stable-dung" which he applied to his "Deodar and Picea Webbiana" was fresh from the stable or rotten? because I am of opinion that a mulching of any kind would be beneficial, inasmuch as it would keep the roots uniformly moist, and also prevent the ground from cooling by evaporation. Conifers forming a prominent feature in the grounds under my care, I am anxious to possess correct data respecting them. *Crostonian.*

Calceolarias (see p. 809).—I hail with pleasure the hint thrown out respecting the merits of the two kinds of Calceolarias, viz., shrubby or perpetual, and the herbaceous or annual kinds. Some five or six years ago I was induced to commence growing Calceolarias, as I saw clearly that the herbaceous kinds must wear out. I therefore selected some of the most healthy of the shrubby kinds to commence on, more particularly angustifolia, and a variety called Kayii, having proved them both to be healthy parents, and the result of my first batch was General Havelock, Emperor, &c. My object always has been to get decided fixed character and colour. I have now by me two plants of the same seedlings that I raised in 1857, and they measured when in perfection last season 4 feet through, and I am in hopes of saving them for next season. I quite agree with your Correspondent respecting the duration of the Calceolaria. I well remember seeing handsome shrubby kinds shown at Chiswick 30 years ago, and they made a beautiful display, and why should they not now, as any one can have my strain of shrubby kinds in bloom from May to October. My sorts are equally valuable for the border or flower garden, which makes them doubly useful. I have them now beautifully spotted and blotched, equally as rich in colour as the herbaceous kinds. *James Burley, Limpsfield, Surrey.*

Vines in Pots.—I exhibited on Thursday last three Grape Vines in pots at Worksop exhibition; they were admitted to be very superior to any at the show, and averaged 13 bunches each. To my surprise on entering the tent, after the judges had made their awards, I found a card containing these words placed on my Vines—"Disqualified—grown in open border." Now I have scores of witnesses who could prove that they were grown in pots, and that they had never been plunged, although they had partly rooted from the bottom or crock hole into some old tan on which they stood. These Vines were taken to Worksop and back in an open van, remained there all night in a crowded tent, the exhibition not having closed until 11 o'clock, and they are now at this moment fresh and good and still fit to be exhibited again. I had a large trellis made to fix the Vines on in order that they might travel safely, and had also a large forked iron placed into the pots to steady them. This caused me in order to balance the Vines to drop them into larger pots; I then filled the cavity with Moss and water to keep them from drying, knowing that they had to remain until the second day. I believe that I have stated all particulars in full. The schedule states only these words—"For the best three Vines in pots." Mine were decidedly the best. Can they withhold the prize from me on the grounds stated in their card above alluded to?—I feel that they cannot. Had the Vines been plunged and rooted all over the top of the pot they might have objected, but as the Vines were fairly grown in pots, as per schedule, and so exhibited, I believe that I can claim the prize, can I not? *Edward Bennett, Osberton Hall, Worksop, Notts.* [Undoubtedly.]

Orchard Houses.—Allow me to make a few remarks in answer to your very indulgent notice of my little pamphlet. I know you will pardon my taking exception to what you have said on fertilisation of Peach blooms; believing it to be a matter of necessity in many cases, I feel jealous of anything being said which has a tendency to lessen the idea of its importance. I am aware that some kinds will, when well ripened, set their blooms without assistance, but I have proved by experiment that it is unsafe to trust to others. The partially ripened state of the wood and almost total absence of bees, of course tend much to aggravate the consequences of neglect this season, but I have the most positive proof that manual fertilisation alone made the difference between a crop and a failure in several instances. There are four houses in this immediate neighbourhood which were all furnished from our nurseries with plants which had all been cultivated together. Two of these houses are under the care of good gardeners, and they are entire failures in point of fruit this season. These men acknowledged that they did not think it necessary to follow the advice they had received. The third house, erected by the same builder, and of the same size as the others, 60 × 20, is managed by a man who was a labourer a few years ago. Feeling in want of information he came over several times in the spring to have a talk with our foreman. His house has been full of very fine fruit, and his master says he has had to give much of it to his friends. The fourth case is still more striking; after nearly all our best plants were sold, and what were left were nearly in bloom, we had to fill an orchard house just built near Burton on Trent. Of course most of the trees were inferior to those supplied in the former cases. With the exception of being most tastefully painted and paved, this house was exactly built as the others, and by the same person. Being near the dwelling, and a new source of pleasure, the lady of the establishment took it into her own hands, and managed it entirely, and did not think it unnecessary to follow directions. Most of the plants fruited; some were full, and I will venture to say, for well ripened well grown trees, and perfectly clean foliage, she might challenge the country. In our own house we had not more than six or seven trees without fruit (though it had been crowded by sale trees the previous season); many bore from 30 to 50 Peaches of the finest quality, some few of which remain. From the 1st of August till the present date few have seen our house without tasting the fruit, and if you were to see the number of stones reserved for sowing and the seedlings of the two last years you would be more than ever convinced that Rivers' orchard houses are a great fact. One thing is certain—what has been done for years without a failure and at so little cost, others will be required to do. I could not help laughing when a nobleman's gardener came and offered 9*s*. a dozen for my Peaches only a few days ago. His Grapes are amongst the finest in England, but he has no Peaches this season nor any worth having last; and as the best walls are all occupied with Peach and Apricot trees, they are equally without fine Pears. When paying a visit last season to Mr. Ingram, at Belvoir Castle, and seeing the magnificent specimens of Pears grown on the walls, I could not help thinking how foolish it was to cover a south wall with glass for Peaches instead of building an orchard-house and planting the wall with Pears. *J. R. Pearson, Chilwell.*

Peas.—It may be important to many of your readers to know that Veitch's Perfection Pea will withstand drought and mildew better than most, perhaps any Pea, in cultivation. When other Peas can scarcely be kept alive with copious waterings it continues to produce abundance of tender Peas of excellent flavour. So convinced am I of its excellency that in future I will sow only it and Daniel O'Rourke, the latter for early gathering. *W. Craw, Westbury.*

Roses.—Will any of your readers give their experiences as to the two plagues which are now afflicting the Rose trees—mildew and thrips? The Roses have made excellent growth with me this year, and the show of buds for the autumnal bloom of Hybrid Perpetuals is most promising, but mildew attacks the new shoots, gets round the flower stalks and destroys the flowers. The Roses that escape this fate open for a day or two, and then go off as though they had been scorched, and are found to be infested with myriads of thrips. Does the same cause produce the two plagues, and are they to be attributed to the long drought we have had here? And what is the best remedy? I have dusted with flowers of sulphur all the mildewed parts of the trees, and in some cases have arrested the progress of the disease, but one class of Hybrid Perpetuals—the Géant, Lord Raglan, Cardinal Patrizzi, and General Jacqueminot—seems completely overpowered by the mildew. The thrips are a most grievous and provoking enemy. Yesterday I had a beautiful show of blooms just opening on Madame Laffay, Madame Vidot, and L'Enfant de Mont Carmel; this morning they are all destroyed. I shall be glad of any suggestions whether as to cause or remedy. The mildew does not seem to be due to any peculiarity of situation. My garden lies high, has pure air, and the plants out in the open are as much affected as those which are under the shrubbery trees, and many kinds are not touched at all, while the next tree is covered with mildew. China Roses are freest, and then the climbers, but Gloire de Dijon is slightly affected and has been kept in good condition only by our constant attention. Would you advise cutting in the young shoot that are most affected? Brennus seems specially liable to mildew. *Coventry.*

Vincas.—A writer in your columns (p. 699) states that he caused Vinca rosea to seed at the Royal Gardens, Kew, by imitating the action of an insect in inserting its proboscis, as I had succeeded with the common Periwinkle. By implication it may be pre-

sumed that V. rosea had not previously seeded at Kew. But another writer, "F. A. P." (p. 736), states that his Vincas seed profusely. Mr. Horwood, gardener to G. H. Turnbull, Esq., of this place, has just been so kind as to bring me a small plant of Vinca rosea with nine flowers fertilised by the insertion of a horse-hair, and it now bears nine fine pods. Mr. Horwood says he has grown many plants for the last eight or nine years, and never before saw a pod. What can be the cause of the difference in the results obtained on the one hand by "F. A. P.", and on the other by the writer from Kew and Mr. Horwood? Will "F. A. P." have the kindness to state, if he sees this notice, whether his plants were in a greenhouse with the windows left open, so that the moths could get access at night? *Charles Darwin, Down, Bromley, Kent.*

Societies.

Royal Horticultural: *Sept. 9.—(Election of Fellows.)*—The following new Members were elected on this occasion:—

G. A. Ashby, W. Banting, E. Baring, J. Bulmer, Esqs.; Earl of Carnarvon, Rev. George Case, Mrs C. Christie, A. Cox, J. Disraeli, G Farsdon, Esqrs.; Mr. Favier, Mr. G. Frost, Mr. G. Gandell, Miss Emily Hawkins, Major Jones, B King, Esq; W. L. Merry, Esq.; Right Hon. J. Moncrieff, G. Nelthropp, Esq.; Mrs. H. Norton, G. Paine, Esq; Major Phibbs, P Rolt, Esq; Lieut. Colonel Salkeld, W. Sterickel, Esq.; Sir G. Grant Suttie, Bart.; Mr. C. F. Taylor, W. Thomas, Esq.; Mrs. Thornton, Hon. Mrs. D. Ward, Colonel Wigram, and H. C. Wise, Esq.

Sept. 11: (*Dahlia Show*).—A great exhibition of Dahlias and other cut flowers took place in the Society's New Garden at South Kensington, on Wednesday last, and, notwithstanding the late dry weather and the destructive attacks of thrips, which have been more than usually prevalent this season, we never before remember to have seen a finer display of this favourite flower than that which graced the benches of the conservatory, to which the exhibition was confined. Nor were Asters much behind them in point of beauty; indeed the size of some of the reflexed French kinds was quite a matter of astonishment to all who had not been made acquainted with the rapid improvement which has taken place in this flower of late; the quilled kinds, too, were unrivalled for fine form and compactness; and we noticed some small Pompone and other varieties which, when more extensively grown, cannot fail to be favourites. Of Hollyhocks, Gladioli, Phloxes, and Roses there were likewise beautiful collections, and the side shelves were filled with plants in pots, which being tastefully arranged, and presenting great variety both of foliage and flower, gave additional interest to the exhibition, which was in every respect perfectly successful.

In the Nurserymen's Class of 48 Dahlias the best collection was furnished by Mr. Keynes of Salisbury, who sent magnificent blooms of Disraeli, Cherub, Col. Wyndham, Joy, Warrior, Golden Drop, Lord Palmerston, Mauve, Lilac Queen, Sir George Douglas, Kimberley's Queen, John Keynes, Earl of Shaftesbury, Lord Cardigan, Umpire, Sidney Herbert, Mrs. Church, Mr. Critchett, Hugh Miller, King of Sweden, Lollypop, Mrs. Dodds, George Elliott, Pioneer, Robert Bruce, Marquess of Beaumont, Mr. Boshell, Mrs. Trotter, Leopard, Oscar (a fine new reddish scarlet variety), Rosebud, Lady Douglas Pennant, Seedling Goldfinder, Imperial (a new mulberry-coloured sort), Rosa, Pandora, Chairman, Commander, Triomphe de Pecq, Jenny Austin, Lady Franklin, Andrew Dodds (a promising new dark purple kind), Goldfinder, Mrs. Bailhache, Juno, Perfection, and Mrs. Waters. The next collection in point of merit came from Mr. Harrison, of Darlington, who had, in addition to the varieties named in Mr. Keynes' stand, good examples of Heroine, Beauty of Slough, a very fine bloom of Fanny Keynes, Mrs. Wheeler, Incomparable, Duke of Roxburgh, Lady Bolton, Beauty of Helperton, Princess of Prussia, Bellona, Grandmaster, Midnight, Village Gem, Bell, John Harrison, Alice, John Dory, Ruby Queen, Mrs. Legge, Annie, Compacta, Mary Ann, Mrs. Pigott, Empress, Madge Wildfire, Lady Popham, Sir C. Campbell, Neville, Keynes, and Admiral Dundas. Other collections were contributed by Mr. Henry May, Bedale, Yorkshire; Mr. Kimberley, Stoke, near Coventry; and Mr. Legge, of Edmonton. In these stands we observed fine blooms of Pre-eminent, Criterion, Touchstone, Mrs. Wyatt, Conqueror, Peri, Lord Clyde, Brentford Hero, Mentor, Dinorah, Mr. Stocken, Regulator, Salvator Rosa, Miss Caroline, George Brown, Deutche, Monarch, Mrs. Keynes, Duke of Wellington, King, Eclipse, Lady Taunton, Lady Paxton, Rifleman, Lord Eversley, Yellow Beauty, Harbinger, Splendid, Duchess of Kent, Delicata, Strafford's Gem, and Flower of the Day.

In the class of 24 blooms (Nurserymen), Mr. Keynes again won the first prize with an excellent stand, which however did not contain anything different from varieties already mentioned. Messrs. Legge, May, Harrison, Downie, Laird & Laing, and Cattell also all showed in this class, and received prizes in the order in which their names stand. Of blooms from those exhibitors not already mentioned we observed Miss Watts, a good white kind; Norfolk Hero, Sir F. Bathurst, Magnificent, Marchioness of Abercorn, and Miss Vyse.

In the Amateurs' class of 24 blooms, the best came from the Rev. C. Fellows, Shottisham Rectory, Norwich, who furnished among others fine blooms of Madame Alboni, Majestic, Purple Standard, Bravo, and Clara Novello. From Mr. Dodds, of Salisbury, who was placed second, came Emperor, Annie Ross, and Mrs. Dodds; and Mr. Perry, Mr. Barnard, and others had beautiful examples of Model, Comet, Etonia, Primrose, Perfection, Miss Pressley, Standard Bearer, Miss Burdett Coutts, Enchantress, Beeswing, Lord Bathurst, Duchess of Northumberland, Brentford Hero, Masterpiece, Amazon, and Yellow Beauty.

In stands of 12 blooms (Amateurs), Mr. Barnard, of Darlington, had the best collection, in which were admirable specimens of Chancellor, Lilac Queen, Chairman, Earl Shaftesbury, John Dory, Lady Popham, Jenny Austin, Duke of Roxburgh, Mrs. Bailhache, Mrs. Pigott, and Triomphe de Pecq. The Rev. C. Fellows was placed second, and there was a fine stand from Mr. Charlton, of Harborough, who probably would have gained the first prize in this class, had not two of his flowers, viz., Golden Drop and Triomphe de Pecq, been faulty in the centre; otherwise for size and quality they were unsurpassed. Messrs. Dodds and Perry also showed well in this class.

Stands of six blooms (Amateurs) were numerous and fine; among the varieties however we did not see anything different from what has already been reported on. The best were contributed by Mr. Pope, of Smith Street, Chelsea, and the second best by the Rev. C. Fellows, of Shottisham, near Norwich.

In the class of Fancy Dahlias, 18 blooms (Nurserymen), Mr. Keynes was first with beautiful examples of Harlequin, Pluto, Splendid, Queen Mab, Souter Johnny, Miss Jones, Starlight, Zebra, Conqueror, Baron Alderson, Garibaldi, Pauline, Impératrice Eugénie, Lady Paxton, Leopard, Confidence, Mary Lander, and Mark Antony. The next stand in point of merit came from Mr. Legge of Edmonton, who had in addition to the kinds just named, Invincible, Princess Charlotte, Charles Perry, Unique, Cleopatra, Favourite, and Topsy. Mr. Kimberley, who was third, sent Elegans, Triomphe de Robeaux, Pretty Polly, Lady Paxton, Honeycomb, Madame Sherrington, Miss Herbert, Leonard, Beauty of High Cross, Flirt, and Fairy Queen. From Messrs. Downie, Laird, & Laing, who contributed a 4th stand, came Norah Crena, Mrs. Charles Kean, Salamander, Ethel, Jessie, Wm. Corp, and Strafford's Gem, the last a dark rose, prettily tipped with yellow. In other collections to which no awards were made, we noticed good blooms of Fairy Queen, Emperor de Maroc, Rev. Joshua Dix, Oliver Twist, and Summertide.

In the class of 12 Fancy Dahlias (Amateurs) there were some nice stands, the best of which came from the Rev. C. Fellows, who contributed Harlequin, Elizabeth, Conqueror, Oliver Twist, Lady Paxton, Madame Alboni, Queen Mab, Flirt, Baron Alderson, Ethel, Pauline, and Summertide. In other collections, which were furnished by Messrs. Perry, Dodds, Corp, and others, were examples of Comus, Carnation, Blondin, Charles Perry, Butterfly, Countess of Bective, Wonderful, and Favourite, all in excellent condition, well selected as to colour, fresh and beautiful.

Messrs. E. G. Henderson showed a nice stand of Pompone varieties.

Of Hollyhocks, magnificent spikes were shown by Messrs Downie, Laird, and Laing, whose sorts were Golden Fleece, Stansted Rival, Mrs. F. McKenzie, William Deans, Empress Eugenie, Dr. Canny, Excelsior, Monarch, David Fowlis, William Blackwood, Memnon, Rosy Gem, and Lady Dacres. Mr. Chater also showed good spikes of Princess, Lady King, Mont Blanc, Mrs. Chater, Grandis, Excelsior, Regina (a brilliant carmine coloured seedling), Mary Ann, Senator, and Queen Victoria. Of single blooms Mr. Henry May showed a stand remarkable for their great size and beauty; some of them could not measure less than 5 inches in diameter, and although they had travelled all the way from Yorkshire they maintained their freshness well throughout the day. Their names were Mrs. Cochrane, crimson; Walden Masterpiece, fawn; Memnon, crimson; Empress Eugénie, fawn and white; Perfection, lilac; Lizzy Robarts, white; Ossian, crimson; Yellow Defiance; Mrs. Wardrop, crimson; Regina, pink; Lord Loughborough, crimson; and Lord Taunton, Mulberry. Messrs. Minchin also had good blooms, conspicuous; among which were Havelock, bright red; Jaune, yellow; and Cynthie, pink.

Asters, which were present in large numbers, were deservedly objects of great attraction. They consisted of what are called quilled German and tasselled French kinds; of the latter there are two classes, the incurved and reflexed, but we do not think they look well when mixed together in the same stand. These were of all shades of colour, and many of them were most beautifully striped. The quilled varieties from Mr. Betteridge, of Steventon, to whom the first prize was awarded, were in every way excellent, and showed what can be done with this flower under skilful treatment, and the stand of large kinds from Mr. Sandford, Walthamstow, were equally remarkable for beauty and fine growth. Nor must we overlook a collection sent all the way from Erfurt by Mr. F. W. Wendell, nurseryman there. In this what were called Crown Asters were particularly handsome. They had large white centres broadly bordered with purple and crimson. Some small growing Ranunculus flowered and Pompone sorts were also greatly admired, and notwithstanding the distance they had travelled they were in good condition, as were also new French kinds which appeared to be an improvement on the older varieties, both in size and doublenesss. Asters in pots came from Mrs. Conway of Brompton, and a fine collection of them filling a circular table in the centre of the building came from the Society's Garden at Chiswick.

Gladioli were shown in large quantities, but they have not been good this year; even the handsome Brenchleyensis itself is poor compared with what it was last season. The best came from Mr. Standish of Bagshot, in whose collection the following were the most remarkable, viz.:—Miss Ingram, a nice sort, with yellow throat and crimson feather; Lady Caroline Legge, clear white, with crimson lip, very large; Miss Graham, pure white, with bright crimson feather, very striking; Bridesmaid, large pure white; Miss Porter, white, with singular dark lip; Goldfinder, lemon and bright yellow; Juliet, lemon with pink feather; Lady Emilie Seymour, salmon pink, a fine bold flower; Mrs. Menzies, pink, beautifully marked with crimson; Mrs. Hole, creamy blush, carnation striped, clear and beautiful; Col. Hood, scarlet feathered with crimson; J. W. Lane, scarlet with white stripes, yellow throat and crimson feather—a fine bold flower; Mr. Duffield, reddish violet with crimson feathers; Achille, deep red shot with lake, throat yellow; Donald Beaton, pink striped and blotched with maroon on all the petals; Mr. Rucker, scarlet with white throat and crimson feather—a very large flower; Mowbray Morris, fine scarlet, shaded white throat and deep crimson feather; Prime Minister, scarlet with violet throat; Towardi, deep salmon, a fine bold flower; and Madame Vilmorin, deep rosy purple with crimson feather. From Messrs. Paul & Son also came some fine spikes, and Mr. Cattell, of Westerham, contributed a collection in pots.

Phloxes, which were exhibited in the shape of cut spikes, and in pots, were really beautiful; the best came from Mr. Standish, in whose stand were fine examples of Madame Lierval, brilliant crimson; M. Forest, equally good in colour, but smaller; M. Amazili, pink with crimson eye; M. Moisson, white with pink eye; George Washington, crimson; John Standish, white with pink eye; Madame Mars..., white with large bright rosy eye; and Madame Vilmorin, a large flesh-coloured sort, flushed with rose. Messrs. Cattell and Cutbush also showed some handsome varieties, the most striking among which were Triomphe de Twickle, pink striped with white; Dr. Josset and Madame Rougier, the last white with pink eye.

Of Verbenas the best stand was contributed by Mr. Perry, of Castle Bromwich, near Birmingham. The sorts were chiefly seedlings unnamed, all large and handsome. Messrs. Minchin and Dr. Cooper of Slough also showed some fine varieties, the best of which were Mrs. Moore and Garibaldi among violet sorts with white eye; Great Eastern, pink with yellow eye; Fairest of the Fair, white with pink eye; and, among Scarlets, Firefly and Géant des Batailles.

Cut Roses were shown by Messrs. Mitchell, Keynes, Laing, and Cutbush, and very pretty they were; but still not so fine as they ought to have been. Mildew has made sad havoc among many of them, and owing to the weather being so dry little growth has been made, and consequently few and comparatively poor blooms. Mr. Mitchell's were best; but in all the stands were fair flowers of most of the leading kinds. From our occasional correspondent, the Rev. W. Radclyffe, of Blandford, came a good collection, which was placed first among amateurs and was greatly admired. Among new kinds, Senateur Vaise and Louis XIV. are gems which must long hold a first place among Roses, and we noticed some good examples of Lord Ra... and Gen. Jacqueminot, which seemed to have stood the drought well.

Miscellaneous subjects were numerous, and formed a prominent feature of the exhibition. First among them must be mentioned the fine Lapageria rosea from Mr. Uzzell, gr. to the Duchess Dowager of Northumberland, alluded to in another column. This had expanded flowers on it and multitudes of buds, ... which occupied every flower stalk. It was grown in a pot in which it had always been kept, in damp ... mixed with a very little silver sand. No admixture of loam had been used, but plenty of drainage, and while growing and flowering a good supply of water. These, together with a cool greenhouse temperature, were the only agents employed to bring about the glorious result which it was the good fortune of those who attended the show to witness, and which do great credit to Mr. Uzzell's skilful management. Next in point of ... was a fine collection of miscellaneous plants from Messrs. Veitch, in which were some fine examples of the ... looking Caladium Veitchi, Alocasia metallica, and a ... gated kind; various feathered Amaranthus from ... and others of dwarfer growth and more brilliant ... leaves from Japan; also some Japanese ... described in former reports; fine basketfuls of ... glossum grande and other plants, either remarkable for the beauty of their leaves or flowers. Messrs. Lee ... Mr. Bull also showed collections of miscellaneous ..., in which were various Palms, Ferns, Cordylines, ... gated Yuccas, Theophrastas, Cyanophyllums, ..., among which the most striking was the white ... leaved C. Belleymei, Alocasia metallica, and ... reddish brown-leaved Coleus Verschaffelti. The ... was shown by Mr. Bull. From Mr. Glendinning, of Turnham Green, came an interesting collection of Conifers in pots, including Wellingtonia gigantea, and other favourite sorts. Japan L... shown in good condition by Messrs. Turner, ...

... others, and there were long benchfuls of Orchard-house trees in fruit from Messrs. Lane & Son, of Great Berkhampstead. From Mr. Macintosh, of Hammersmith, were two finely grown plants of Veronica meldensis and Andersoni.

Of Fruit a small basketful of Mill Hill Hamburgh Grapes from Mr. Drummond, Beechwood, Tunbridge Wells, attracted much attention on account of the great size and beauty of the berries, which were finely covered with bloom. Of the bunches individually little could be seen; but the berries were in every way perfect. Two good Queen Pine Apples were shown by Mr. Bray, and Mr. Conolly of Hazelwood Castle, Tadcaster, exhibited examples of Ribston Pippin Apples from a graft inserted in the centre of a trained Jargonelle Pear Tree. This has survived three years, during the two last of which it has borne Apples of the usual size and flavour. Of Salway Peach, a good yellow-fleshed late variety, we noticed some fine fruit from Mr. Turner, of Slough.

Various thermometers and other garden implements were shown by Mr. Casella of Hatton Garden, and some handsome Majolica vases and other devices in China were contributed by Messrs. Philips, of Bond Street.

The subjects which fell within the province of the Floral Committee, and were adjudicated upon by a sub-committee of that body, formed an interesting feature of the exhibition. Of New Plants Messrs. Veitch & Son had some nice young vigorous seedling examples of the very elegant Japanese evergreen Conifer, Retinospora pisifera, which obtained a first-class award. Messrs. Veitch also showed young seedling plants of the equally beautiful R. obtusa, which species had already received the highest reward given by the Society. Messrs. E. G. Henderson & Son had a very pretty little trailing Sedum from Japan, one of Siebold's introductions, and named by him S. carneum variegatum; it is of branching habit, with reddish terete fleshy stems, and linear leaves in whorls of three, broadly margined with cream colour; the flowers, which were not however produced on the plants exhibited, are yellow; it will probably be a neat plant for rockwork or for small hanging baskets, and received commendation on these grounds. A fine-looking Gesnera called refulgens, not in bloom, but with handsome velvety mottled leaves, something like an enlarged form of cinnabarina, shown by Mr. Bull, obtained a similar award. Along with the latter was a plant hardly showing its character of the powdery Gymnogramma trifoliata, with long erect fronds and narrow pinnæ like Willow leaves. Mr. Standish had a singular-looking creeping plant with dull brown and green bell-shaped flowers, which was called Campanumœa campanulata; and Mr. B. S. Williams again showed his "unknown plant from Manilla," alluded to in another column, Phalænopsis Schilleriana, and a little blush-coloured Ionopsis.

Among the Seedling Dahlias, of which a goodly number were submitted for judgment, Lord Derby, exhibited by Mr. Pope, was pronounced the flower of the year; its blossoms were large and full, of good outline, and of a bright rosy-crimson or crimson purple. The variety had been commended late last season, and now obtained a first-class certificate, as also did a variety called Model, shown by Mr. C. J. Perry; this latter was a medium-sized flower, of good form, and of an orange buff colour. The following obtained commendations, namely: Goldfinder and Black Prince from Mr. Keynes, the former a chrome-yellow slightly red-tipped at the back of the florets, the latter a useful dark shaded flower of average size; Mrs. Bush, from Mr. Turner, a bright rose of average properties, rewarded for its pleasing colour; Reliance and Countess of Portsmouth, from Mr. G. Rawlings, the first a useful striped blush, the second a creamy white tipped with rosy purple; Delicata, from Mr. C. J. Perry, a rosy fawn colour, likely to prove a useful variety; and an unnamed orange red seedling from Mr. Henshaw. Various other seedlings were shown by Mr. Turner, Mr. Harrison, Mr. Dodds, Mr. Perry, Mr. Rawlings, Mr. Keynes, Rev. C. Roe, Mr. Pope, Mr. Cooling, and Mr. Vincent.

Some very fine Hollyhocks were shown, and First-class Certificates were given to Mr. W. Chater for Lady King, a fine crimson scarlet; and Invincible, a delicate salmon-colour. Prince Imperial, a highly coloured dark claret from Mr. Bircham, was commended.

Notices of Books.

The 14th Number of Weddell's beautiful *Chloris Andina* is before us, carrying the letter-press through Umbellifers up to Melastomads, p. 224. Riocreux's drawings are as usual exquisite specimens of pictorial botany.

In a pamphlet called *Diagnoses Plantarum Orientalium*, Fenzl has described a few species collected in Asia Minor by Tchihatcheff. The notes upon the old Alyssum alpestre occupy seven pages. Sobolewskia stylosa of Boissier is elevated to the rank of a genus called Physalidium. Unfortunately there is no Index to the contents of the pamphlet, in place of which we have four closely printed columns of Errata in 69 pages.

Messrs. Major & Son of Leeds (Longmans) have published in the form of a thin 4to called the *Ladies' Assistant*, twenty uncoloured designs of various dimensions for flower gardens. They will probably be useful to amateurs, who can profit by their merits and avoid their defects. Nos. 10, 14, and 19 are the best. As for No. 20, it would look well, but would sorely perplex an ordinary workman to lay it out.

TRADE LISTS RECEIVED.—STEPHEN BROWN'S (of Sudbury) Catalogue of Dutch and Cape Bulbs and Flower Roots.—WILLIAM BULL'S (of King's Road, Chelsea) Retail Catalogue of New and Rare Plants.

Garden Memoranda.

ROYAL BOTANIC GARDEN, KEW.—Seldom has this great garden presented so many attractions at one time as it does at present. Out-door bedding plants are now at their best; the few ill-effects of the last severe winter, alluded to in another column, have become imperceptible; deciduous trees have not yet put on the "sear and yellow leaf;" and the finely kept lawns, owing to the recent occasional heavy rains, are beautifully green, and soft and elastic to the tread. Nor are subjects under glass less devoid of interest. The contents of the water houses are the admiration of everybody, more especially the Royal Water Lily (Victoria Regia), which has already produced a great many flowers, and others in different stages are preparing to succeed them. This may be seen in the old aquarium, where a vigorous plant has completely filled the tank allotted to it with leaves of great size, some of them measuring as much as 5 feet 6 inches in diameter. It is planted in loam, mixed to the extent of nearly one-half with well rotted stable and cowdung and a little silver-sand. Nepenthes, Marantaceous plants and others remarkable for the beauty of their leaves occupy the side shelves of this house, and form a handsome framework which sets off the water plants to excellent advantage. The large aquarium near the great Palm House also exhibits a rich and striking vegetation. Among climbing plants on the roof at the entrance is a fine looking white veined, heart-shaped-leaved Aristolochia (A. leuconervia), which deserves attention on account of the beauty of its foliage; on rafters were Momordica Charantia, and Snake Gourds with tempting long scarlet fruit, and upright pillars round the water were covered with Cissus discolor, which being united at bottom, hung in festoons all round the tank, and had a fine effect. Among Ferns, Sugar Cane and other plants in pots set in the water, was a handsome white blotched-leaved variety of Alocasia macrorhiza, which cannot fail to become a favourite among variegated stove plants where large and striking foliage is the object sought for. Victoria Regia has commenced flowering in the centre tank; small side basins are filled with Nelumbiums and other slender growing aquatics, and altogether this house is at present unusually ornamental.

In the great Palm Stove some alterations in arrangement are being effected, one of the most important of which is an attempt to form, by means of Passion flowers and other evergreen climbers, a Gothic arch over the pathways. Plants on shelves, too, instead of being in pots on a gravel-sprinkled surface edged with green Lycopod, as heretofore, are to be planted out in boxes, so as to present a dense rich mass of luxuriant vegetation; and a portion of shell, on which the experiment has been tried, speaks well for its success, the plants being in the best of health, fresh and beautiful in appearance. The magnificent Palms, too, for which this house is remarkable, look unusually healthy and vigorous. Caryota urens, a noble plant 66 feet or more in height, is both in flower and fruit; noble examples of Sabal umbraculifera and Seaforthia elegans are also fruiting, as are likewise several Musas. Last season one of the latter produced a bunch of fruit weighing 56 lbs., and several of the pips weighed 8 oz. The glorious Musa Ensete, mentioned at p. 1105 of our volume for last year as having fruited, is dead, but in its place we found a vigorous young plant of the same variety, which in 18 months has grown nearly as many feet. Its ample leaves are beautifully green, clean and handsome; in a short time, therefore, this promising specimen may be expected to even more than rival in beauty and luxuriance its far-famed predecessor. The Palms planted out some time ago in sunken beds near the centre of the building have evidently now become fully established and are succeeding admirably. Climbers on the roof, which is being painted, are being re-arranged, and when finished will have a neat and tidy appearance. Amongst them we noticed a good specimen of Mandevilla suaveolens producing a profusion of fragrant white flowers. While speaking of climbing plants, Lapageria rosea, which is in flower here, should also be enumerated. When in blossom few plants are more handsome, and it is easily grown provided the soil is good fibry peat, deep, porous, and well drained. Under such conditions too much water can hardly be given it when growing and in flower; but in winter it should be kept a good deal drier, so as to give it a season of rest. Thus treated it is found to flower freely every year.

In a cool house filled with hardy plants of unusually interesting character was Pilogyne suavis, the pretty sweet-smelling climbing plant mentioned by our Correspondent "C. W. C." at p. 697. Though perfectly hardy, supports in greenhouses covered with its slender stems and bright green leaves have a neat and pleasing aspect.

In a warm stove behind the old Museum were thriving specimens of Stevensonia grandifolia, a comparatively new Palm from the Seychelles Islands, and one which, when better known, will be a favourite, its rich orange ribs and bright green plaited leaves forming an agreeable contrast with one another. Associated with it were many interesting plants, such as the Bread fruit (Artocarpus incisa), Clove-tree (Caryophyllus aromaticus), Lace-bark (Lagetta lintearia), and the epiphytal Vanilla aromatica.

Orchids, whose bad condition has long been a subject of complaint, are, we are glad to record, improving. Most of them have made good growth, and all of them are emitting clean and vigorous roots. They may therefore soon be expected to be on an equally satisfactory footing with plants in other departments of this establishment.

The house devoted to the cultivation of Aroideæ and Bromeliaceæ is as usual filled with plants in most excellent health; of the former class those most noteworthy at present are, Philodendron grandifolium; Anthurium cordifolium, A. acaule, A. coriaceum, Monstera deliciosa, and of the latter we may mention Billbergia Moreliana, B. rosea, Vriesia speciosa, Pitcairnia Olfersii, P. fulgens, and P. Funkiana.

Of Cinchonas, about which so much has of late been written, there are here many hundreds of one supposed to be micrantha, and as many of succirubra, ready for transmission to India. They have been raised from seeds sent to Kew by Mr. Spruce and Mr. Pritchett. The last-named kind looks extremely healthy, and grows as freely as a Willow; but the others seem more tender, and are not in quite such good condition. All are, however, very satisfactory. The seeds were sown in pans this spring in heat; they germinated freely, and the plants are now in 3-inch pots, which for most of them will very soon be too small. Such plants when hardened a little may be expected to travel well, and there can be little doubt that they will reach their intended destination in safety. Singular to relate, one plant of succirubra, although sown along with the others, is now about 2 feet in height, with leaves 8 inches in length, and nearly as much in width, while its companions are not more than 3 inches in height. Its stem is proportionally thick, but very full of pith. This unusual amount of vigour is however quite an exception, for the others are very uniform both in height and size of leaf.

Among novelties were some promising young Palms from the Mauritius, Phyllogathis rotundifolia, a Javanese Melastomad, with handsome obovate deeply nerved leaves and an extremely handsome variegated variety of Dammara orientalis with white and green striped foliage. This was lately imported from Japan, and is grafted on Podocarpus elongata, on which it seems to succeed; it must certainly be regarded as a great acquisition. Dammara orientalis itself is fruiting in the great Palm stove.

The principal Fern house is being repainted and otherwise repaired; the magnificent collection of these plants, for which Kew is justly famous, is therefore for the present accommodated in other houses. In the Cactus house little alteration was observable since our last visit. The introduction of Lycopodium denticulatum along the side shelf is, however, a wonderful improvement; and if it were also planted along the edge of the bed on the other side of the path, the improvement would be still greater. The lively green thus furnished is refreshing and pleasing to the eye. Arundo conspicua, a new importation from New Zealand, resembling the Pampas Grass, but not so robust, was in flower in the border; and on the rafter was Hoya carnosa in full flower, though the sashes have been down for two months, and the house kept cool.

Greenhouses, while their ordinary inmates are out of doors, are kept gay with Fuchsias, of which we noticed a fine collection, tree Ferns, Daturas, and various half-hardy flowering plants. Than these houses nothing could be better; the ordinary free blooming things being tastefully intermixed with plants remarkable for the beauty of their leaves, had a varied and interesting appearance, well deserving careful attention from all who have the opportunity of inspecting them.

To deciduous flowering trees and shrubs considerable additions have of late been made in the shape of Spiræas, Guelder Roses, Philadelphus coronarius, White Broom, Cydonia japonica, Azaleas, Ribes sanguineum, Almonds, and double-flowering Peaches. These when in bloom will contrast well with, and serve to enliven the evergreen shrubs with which they are associated. Tritoma Uvaria, which for years has flowered freely here, is this season scarcely worth looking at; the plants being unprotected got sadly cut up last winter at Kew as well as in other places.

The flower beds, as has already been remarked, are excellent, both as regards selection of plants and contrast of colour; one bed having Purple King Verbena in the centre, with a band of Tom Thumb Nasturtium round it, and edged with Cerastium tomentosum, had a fine appearance, as had also another composed of Punch Geranium edged with variegated Mint. Other pretty masses consisted of Flower of the Day Geranium with Brilliant round it, and outside of all Purple King Verbena. Purple Zelinda Dahlia edged with yellow Calceolaria also looked well, as did circular beds of Cannas surrounded with variegated Mint. The last are however

susceptible of improvement. Lord Raglan Verbena edged with the grey leaved Stachys lanata made an attractive mass, and near the great Palm House were four excellent beds, each consisting of blue Ageratum in the centre, surrounded with bands of Punch Geranium and Cerastium. Purple King Verbena in the centre, with Brilliant Geranium and Flower of the Day round it, likewise made even showy beds. For dark colour in the way of leaves, Purple Orache has been tried; but it is not so good as Perilla nankinensis. The beds immediately in front of the great Palm House are very full of flower, and round the lake the vases, which are filled with Tom Thumb Geranium, have a striking and brilliant effect.

In the pleasure grounds, which are separated from the Botanic Garden by a wire fence, a lake upwards of 4 acres in extent is in course of formation. The Grassy slopes round it have been finished for some time, and are planted with Kilmarnock and other Weeping Willows; but the centre is as yet dry and shapeless. When completed and filled with water it will add a delightful feature to these grounds. It is to be furnished with ornamental water fowl, for which an island or two in the centre will form suitable retreats. Pipes of large size communicating with the Thames are to supply water. Near this lake is a pretty little dell approached through miniature Spruces and surrounded by ornamental rootworks, in whose crevices lurk many interesting plants intermixed with Rhododendrons, Vincas, Ferns, Foxgloves, Verbascums, Berberries, Heaths and Willows. Rockworks covered with Ivy and hardy Ferns also occupy other portions of this extensive tract of Arboretum, which is likewise rendered varied and interesting in character by means of clumps of shrubs systematically arranged. Among the latter were groups of Rhododendrons, in which the large leaved Sikkim argenteum had stood the severity of last winter unhurt. R. Falconeri, another large leaved kind, was also uninjured, as were likewise R. campanulatum and ciliatum. It must, however, be observed that these have a very dry bed and are canopied by large forest trees.

The new winter garden or conservatory is progressing rapidly; the brickwork of the main body of the building is in a forward state, and the octagons connecting the centre with the wings are finished and ready for the reception of plants, which are at present out-of-doors. The wings are, however, not yet commenced; some time must therefore necessarily elapse before the whole is finished. The site selected for this building is the west side of the great avenue leading to the pagoda. It is to stand on a broad earthen terrace about 4 feet in height, ascended by flights of steps. The central portion of the house is 212 feet 6 inches in length, and 137 feet 6 inches in width. Each of the two wings is to measure 112 feet 6 inches long, and 62 feet 6 inches wide; and the two intermediate or connecting octagons are 50 feet in diameter. The total length of the building is said to be 582 feet. It will present an ornamental continuous façade, having wide glazed openings and stuccoed pillars on a stone plinth 2 feet high. The centre roof is to be 60 feet in height, and constructed of wrought iron framed arched principals, springing at 36 feet 6 inches above the floor, from cast iron standards, 3 feet wide, which are bolted down to granite blocks bedded in brickwork and cement. The standards are joined together at the springing of the principals, and at this level is to be constructed a gallery from which, like that in the great Palm-house, an extensive view of the interior of the building can be obtained. A portion of each standard will be continued 8 feet above the gallery floor, to support an upper roof whose rafters are of wrought iron 52 feet in length, with accommodation on each side for sliding sashes. The wings are to be 37 feet 9 inches high in the centre, the roofs formed by wrought-iron arched ribs springing from cast-iron columns, which are to serve as rain-water pipes, as in the central part; cast-iron spandrils are to support rafters on which the lights traverse. The whole of the vertical sashes are to be hung on centres, and by means of these and moveable top lights it is believed that ample ventilation will be secured. As regards glass it is to be tinted green like that of the great Palm-house. Vaults under the octagons contain the heating apparatus, which is to consist of 4-inch iron pipes attached to eight boilers—tubular round the fire with conical screw tops, and well set in brickwork; iron gratings on the terrace outside supply light and air to the passages leading to these boilers. The latter are fed at top; four it is thought will be sufficient for warming the building under ordinary circumstances; but it was deemed advisable to be secure against accident; therefore four more are to be in readiness should occasion render their assistance necessary.

The new flagstaff (see p. 432), a stick of Douglas Fir, 159 feet in height, and the finest ever imported, continues to be the admiration of everybody, and near it has been made recently a pleasant excavation, whose Grassy sides are planted with Pæonies, Cistuses, Hibiscus, St. John's Worts, Ceanothuses, and other plants many of interesting character. The centre is filled with Berberis and Clematis; of the latter Henderson, vitalba, and lanuginosa are in flower.

From what has been stated it will be seen that these gardens are annually being greatly improved in appearance, and the interest felt in them by the public is shown by the increased numbers that flock to them. On Sunday the 18th ult. no fewer than 13,780 persons entered the grounds, and visitors on week days are in proportion. Last year the total number was 425,314.

We may add, that a drinking fountain has been erected at the end of a wall near the old museum, and that a long riband bed near the same place is an object of considerable attraction. This last is cut off from the rest of the garden by a border of Ivy.

Miscellaneous.

Variegated Oak.—A common Oak tree growing near Mawley, the seat of Sir Edward Blount, containing upward of 30 feet of timber, was struck on the 26th June, 1838, by lightning, during a severe thunderstorm which passed over that part of the country. The tree did not appear to have suffered at the time, but shortly afterwards the foliage, which was previously green, as in other trees of the same species, became beautifully variegated, and has continued ever since to produce variegated leaves, and otherwise to maintain quite a healthy appearance. *Scottish Farmer.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c.—Many of our summer favourites will now be on the eve of departure here, if not already gone, and their place must be studiously supplied with plants peculiar to the autumn months. Brugmansias and Clerodendrons make an admirable display at this period, and some large specimens should be grown late every season for this purpose. They do admirably through the summer in any common Vinery or Peach-house, provided they are duly supplied with water, and kept free from insects. Let all Orange trees, Camellias, or other large specimens still out of doors be brought under cover before danger from frost is to be apprehended. Amongst Climbers, Stephanotis and Lapageria, grown on ornamental trellises, show themselves peculiarly eligible to be introduced here on the decay of other flowers. Jasminums, especially J. sambac, are also valuable thus treated. As regards Orchids several of the Dendrobiums, Aerides, Saccolabiums, Vandas, &c., will still make considerable growth, but Cattleyas should not be encouraged to grow after this time, if good blooms are required; young specimens may, however, be kept growing still, for the sake of size. Stanhopeas should now have a diminished supply of water, as well as decreased temperature; those still growing may be watered freely. Francisceas are very ornamental plants, and well adapted for those who have only one house. F. Hopeana, although an old kind, is still very useful, and moreover very fragrant. The young rambling shoots should be constantly stopped; this will induce them to bloom freely, and keep the plants in a bushy state. Stout young Mignonette plants, potted immediately, and treated like cuttings for a week or more, will flower nicely in November and December, when every little matter of this kind will be acceptable. Cyclamen Atkinsi is a nice little thing grown in pots, for those of limited room; indeed, the whole family of the Cyclamens is particularly ornamental, and easy of cultivation. Linum trigynum is a pretty winter flower, and one or two should grace every collection. As before observed, continue daily to house anything likely to suffer by the autumn frosts.

FORCING DEPARTMENT.

PINERIES.—Those grown in dung pits should now receive a free circulation of air, and a very moderate supply of water, in order to harden them for the winter. Shut up a very considerable amount of solar heat to late-swelling fruit, letting the thermometer sink to 70° at night. In all these matters it is of vast importance, more especially in spring and autumn, to observe a steady relation between heat and light.

VINERIES.—Vines intended for very early forcing may now be pruned, stopping all their wounds immediately with some white lead to prevent bleeding in spring. This course is necessary with young and gross Vines. Late Grapes will now require a fire occasionally, when dull or rainy days supervene; let it be lighted early in the morning, and suffered to burn out by 4 o'clock in the afternoon, giving abundance of air all the time, and the same freely all night. Avoid all use of water within the house.

PEACH HOUSE.—Go over the trees in the late houses, and cut away all small shoots that are not required for fruiting next season or for filling any vacant space; this operation will greatly assist in ripening the wood, by more exposure to air and light. Remove the sashes, and water the inside borders if very dry.

STRAWBERRIES.—These may yet be potted for late forcing. Clear away all weeds and runners from those potted last month, and water occasionally with liquid manure. Keep the pots in an open situation.

MELONS.—Late Melons will not require much water after this time. Keep up a good heat if there is any convenience to do so, that plenty of air may be given through the day, otherwise make the best of sun-heat. Cucumbers bearing in frames should have the linings renewed when the heat declines; thin and stop the shoots so that they do not get matted together. Water with liquid manure once a week, and cover the frames with mats when the nights are cold.

FLOWER GARDEN AND SHRUBBERIES.

Every attention should be paid at this period to collecting seeds of popular flowers for mixed beds or masses next year. The Petunias, Salvia patens, the various Pentstemons, Calceolarias, Antirrhinums, and a host of annuals and other things, may be thus collected. Gardeners in general can scarcely be expected to save many seeds; those who have small gardens may, however, do much in this way. Some of the climbers also produce seeds, such as Tropæolums, Maurandyas, Lophospermums, &c. Planting of bulbs for very early work should soon be proceeded with. Borders or beds deficient in the Snowdrop, the Crocus, or the Narcissus, should have some introduced. The main planting, however, may be reserved for the early part of November. A few of the earlier sorts of Hyacinths may also be planted, covering them 4 or 5 inches in depth, and surrounding the bulb with sand.

HARDY FRUIT AND KITCHEN GARDEN.

Look over early Pears, and watch their ripening, as the generality of the early kinds require gathering before they are ripe; for if allowed to hang too long on the trees, the flavour will be greatly deteriorated, and the flesh dry and spongy. It is a good plan to go over the trees at different times, and gather them as they approach maturity, and store them in a cool room. The earliest dessert Apples are best gathered from the trees as they may be required for use. Judging from appearances, wasps are likely to be very troublesome during the present month; therefore, use every means to destroy them, as well as every other insect. Late Peaches should have a good soaking of water at the root, and wash the trees occasionally till the fruit is ripening. Remove a portion of the leaves that cover the fruit, so that it may have full exposure to sun and light. As soon as any Peach trees are clear of the crop, go over them and clear away all dead leaves and useless shoots; afterwards wash them with the garden engine. Protect late Plums with hexagon netting or tiffany, to preserve the fruit from flies and wasps. Cut out old canes, and tie up the bearing shoots of double bearing Raspberries. Keep tying autumn Lettuce, and sow a raised bed in a warm situation with Radishes; these will come in through November, and even up to Christmas, with a slight covering occasionally.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending Sept. 12, 1861, as observed at the Horticultural Garden.

Sept.		Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Of the Air. Min.	Of the Air. Mean.	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind.	Rain.
Friday	6	2	29.785	29.67[illegible]	74	56	65.0	64	61	S.W.	.12
Satur.	7	3	29.979	29.8[illegible]	71	47	59.0	64½	61½	W.	.00
Sunday	8	4	30.038	29.8[illegible]	69	37	53.0	63	61	S.W.	.18
Mon.	9	5	29.806	[illegible]	73	41	57.0	61½	60½	W.	.00
Tues.	10	6	[illegible]	[illegible]	73	36	[illegible]	[illegible]	[illegible]	N.	[illegible]
Wed.	11	7	[illegible]	[illegible]	72	[illegible]	[illegible]	[illegible]	[illegible]	N.E.	[illegible]
Thurs.	12	8	[illegible]	[illegible]	75	[illegible]	[illegible]	[illegible]	[illegible]	S.W.	[illegible]
Average			29.944	29.861	72.4	41.1	[illegible]	62.4	60.4		.30

Sept. 6—Cloudy and windy; fine; rain at night.
— 7—Fine; windy; low clouds; fine.
— 8—Fine; cloudy and fine; densely overcast; rain.
— 9—Fine; exceedingly fine throughout.
— 10—Cloudless and fine; very fine; [illegible]; fine; cold at night.
— 11—Foggy; slight haze; fine; cold at night.
— 12—Dense fog; very fine; clear and fine.
Mean temperature of the week 1 deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Sept. 21, 1861.

Sept.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 15	67.1	46.5	56.8	17	0.63 in.	1	5	5	2	7	4	5	[illegible]
Mon. 16	68.4	48.4	58.4	15	0.50	3	6	5	1	9	4	6	[illegible]
Tues. 17	68.8	46.7	57.8	14	0.90	1	5	[illegible]	2	2	12	6	[illegible]
Wed. 18	[illegible]	44.8	[illegible]	17	0.84	[illegible]	[illegible]	3	1	2	9	5	5
Thurs. 19	66.5	45.4	55.9	17	0.60	[illegible]	[illegible]	3	1	5	6	[illegible]	[illegible]
Friday 20	66.8	44.3	55.6	16	0.45	3	5	4	4	[illegible]	6	[illegible]	[illegible]
Satur. 21	66.7	45.0	55.8	18	0.50	2	[illegible]	6	2	6	6	[illegible]	[illegible]

The highest temperature during the above period occurred on the 17th, 1843—therm. 84 deg.: and the lowest on the 17th, 1840—therm. 29 deg.

Notices to Correspondents.

*** Many letters have arrived too late, and for others we are unable to find room this week. We particularly regret this in the case of *Robt. Foster*, *W. Lakeman*, *E. M.*, *D of Dev.*, and our highly valued friend *C. W.*

COTTINGHAM.—Next week.

GINGER: *M W.* Place it in a smart bottom-heat till it has begun to grow freely; then take care that it has plenty of water and as much air as a Melon; when it has completed its growth gradually dry it off. When the leaves are withered will be the time to take it up. As to the Beans, treat them like forced Kidney Beans.

GRAPES: *Q.* You must either wrap them in muslin bags, or destroy the flies by poisoned paper such as that called Moure. Or you may boil Nux vomica in water and sugar, and present the poisoned syrup to their attention.

NAMES OF PLANTS. *Windermere.* We believe the little [illegible] about you is Bass thornless Rose now in great luxuriance about you is Bass Wilsoni.—*A B.* Potamogeton crispum.

PEACH WALL: *T H.* You may hang tiffany from the glass coping in the early season when the blossoms are setting, but remove it as soon as frosts are gone; and pull it up like a curtain every fine day or your blossoms are very likely not to set.

PLUM STOCKS: *S B.* The Damas noir stock is not quite the same thing as the common Damson. We doubt whether by double working the Muscle you can grow on it any Peach whatever. No such working can give the Muscle the constitution of the Pear Plum Stock.

STRAWBERRIES: *W H.* What are black beetles? Half the beetles in England are black, and their modes of life are as different as their form. No answer can be given without knowledge of what the insects are of which you speak.

THE AUTUMN GROWTH OF TREES: *C B.* says: A question having arisen whether Oaks and other forest trees have put forth their Midsummer shoots, or not, this year (the almost universal opinion being that they have not), since it is a curious point in regard to vegetation, he wishes to ask our Correspondents what their observation has been with regard to it. Whether the usual course of nature has, or has not been checked?

THE LONDON MANURE COMPANY
(Established 1840.)
Are now prepared to send out the following MANURES:—
CORN MANURE for AUTUMN SOWING.
SUPERPHOSPHATE of LIME
DISSOLVED BONES for PASTURES.
CONCENTRATED URATE.
BLOOD MANURE for CORN.
PERUVIAN GUANO, NITRATE of SODA, SULPHATE of AMMONIA, and every other Manure of value.
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LAWES'S PATENT TURNIP MANURE, and BONE SUPERPHOSPHATE OF LIME £6 6
LAWES'S SUPERPHOSPHATE OF LIME from BURNT BONE or MINERAL PHOSPHATES .. 5 5
LAWES'S BARLEY, GRASS, and MANGEL MANURES 8 0
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American and other Cakes at market prices.
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ANTHONY'S PATENT AMERICAN CHURN.—The FIRST PRIZE was again awarded to this Churn in Competition with several others at the Chester Meeting of the Royal Agricultural Society; it has obtained the First Prize given by the Society at every Meeting since 1850.
Messrs. Burgess & Key, 95, Newgate Street, E.C., strongly recommend it as the most perfect Churn now in use. Full particulars sent on application

"FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.
PROTECTION from the COLD WINDS & MORNING FROST.
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Two yards wide .. .. 1s. 6d. per yard run.
Four yards wide .. .. 3s. per yard.
An improved make, 3 yards wide, 2s. 6d. per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard run.
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To Landowners, the Clergy, Estate Agents, Surveyors, &c. in England and Wales and in Scotland
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BRACKLEY AGRICULTURAL and HORTICULTURAL SOCIETY.
President for 1861.—J. L. Stratton, Esq., Sundeston House.
Vice President.—Hon. P. Barrington, Westbury Manor.
The ANNUAL MEETING of this Society for PLOUGHING MATCHES, Show of ROOTS, FLOWERS, FRUIT, and VEGETABLES, will be held at Brackley, on TUESDAY, September 17, 1861.
Prizes are offered for the best specimens of Flowers, Fruit, and Vegetables in the Open, Gardeners', Amateurs', and Cottagers' Classes.
The celebrated Band of the Coldstream Guards will attend.
Schedules of Prizes will be forwarded upon application to
R. J. Russel, Honorary Secretary, Brackley.

SMITHFIELD CLUB CATTLE SHOW, 1861.—The ANNUAL SHOW of FAT CATTLE, SHEEP, and PIGS, will take place on DECEMBER 10, 11, 12, and 13, at the Bazaar, King Street, Portman Square. The last day for Certificates of both Stock and Implements to be returned to the Hon. Secretary is Friday, November 1.
The following Forms of Certificates are now ready, and intending Exhibitors in applying for them need only quote the letters and state how many of each they require.
Cattle.
Form A—Ox or Steer
B—Cow or Heifer
C—Beast in Extra Stock
Sheep.
Form D—Pen of 3 Wethers
E—One Sheep in Extra Stock
Pigs.
Form F—Pen of 3 Pigs.
G—One Pig in Extra Stock.
Prize Sheets with Rules and Regulations and Forms of Certificates as above may be obtained of
B. T. Brandreth Gibbs, Hon. Sec.,
Corner of Half-Moon Street, Piccadilly, London, W.
N.B. All communications on the Club's Business should have the words "Smithfield Club" outside, to distinguish them from private letters.

The Agricultural Gazette.

SATURDAY, SEPTEMBER 14, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

Sunday,	— 15	East Flanders at Ghent.
Monday,	— 16	
Tuesday,	— 17	Great Sale of the late Lord Berwick's Herefords, &c., at Cronkhill, near Shrewsbury.
Wednesday,	— 18	
Thursday,	— 19	
Wednesday,	— 18	Warwickshire Society at Stratford-on-Avon.
Wednesday,	— 18	Staffordshire Agri. Society at Wolverhampton.
Thursday,	— 19	
Friday,	— 20	

Several of our columns are this week filled with a report of the past harvest from various parts of the country. It will be seen that our previous reports of the crops are fairly borne out. There has been over the larger part of the island a fine harvest month since the former date. In the north and west the weather has been wet and difficult for harvest work. Even in the south and midland England, however, the Wheat is almost everywhere described as below an average—more emphatically so indeed than it was formerly reported. But there can be no doubt that while the crop is described as under average—a sack, a quarter, one-fourth, 10 bushels, and even one-half in one place under average—yet the bushels which have been harvested are heavier and contain much better flour and much more of it than they did last year. The quality of the crop is a thing affecting its value to the grower and to the consumer quite as much as the quantity; and the great weight and fine sample of the new Wheat will go a great way towards redeeming the character of the crop.

—— Now that so many illustrations are arising of the care which is being taken in the selection and breeding of sorts of Wheat, it may be interesting to some of our readers to be told that a few gallons of three different Wheats which took prizes at the last agricultural exhibition in Melbourne have been placed at our disposal by Messrs. J. Wilson & Son, of New Bond Street, to whom they had been consigned. If any of our readers wish for half a pint of this grain for experimental purposes, and will send a sample bag with an address upon it to our office, and instructions as to the route it is to take, we shall be happy to forward it as directed.

A question has been lately put to us by an agriculturist of some consideration, and in the present year a large Wheat grower, the answer to which may be of some interest to farmers in general. His complaint is that a considerable portion of his Wheat is blind, that is mere straw without any trace of an ear, or if the rudiments of an ear are present there are but slight remains of chaff if any, or occasionally at the very base of the spike there is a solitary perfect grain. Happily, in the present instance, we have had an opportunity of examining the crop, which is not always possible when questions are proposed, and the explanation is easy enough.

Had the Wheat really proved blind, the case would not have been entirely without parallel. Every one knows that plants of the Cabbage tribe, from some unknown cause, are frequently abortive in our fields and gardens, from the development of the axis being suddenly stopped, and that in such cases there is often no tendency to push the lateral buds so as to remedy the first defect. Such a condition sometimes, though we believe very rarely, takes place in Wheat. In Barley we have seen it more frequently, though never to any serious extent. The case however before us does not come within the same category. There were indeed plenty of the so-called blind ears, but it was clear that in every case there had been a fracture at the base of a pre-existent ear, so that the supposed blindness was apparent and not real. An examination of those plants in which the skeleton of the ear, or as botanists call it the rachis, only remained, or some slight traces of husk, at once revealed the origin of the earless stalks. The Wheat when young had been extensively infested with smut. The dusty seeds, together with the thin filmy bags, the remains of the husk, which contained them had been blown away, and except where one or two grains had escaped the infection, there was nothing like chaff. These skeleton ears were often extremely brittle, and the strong winds which have been so prevalent this summer had broken many of them off, so as make superficial observers think that no ear had ever been developed.

"Line upon line, and precept upon precept, here a little and there a little" is no less necessary to the general mass of our agriculturists than it is in the grand business of life. Though so much is said continually of the common diseases with which corn is infested, there are few farmers comparatively who distinguish between rust and mildew, or between smut and bunt, and they suffer in consequence by paying high prices for highly vaunted remedies which cannot possibly avail them. The seeds of the smut are blown far and wide over the country, almost as soon as the infected ear bursts through the sheath, and even supposing that any chemical preparation would destroy the small portion of smut which might still adhere to the Wheat after being threshed, a portion which in most instances would be almost infinitely small, though in a crop so infested as that before us there might possibly be enough adhering to the rachis to cause future mischief, there would still be so much already in the fields that no previous precautions could avail.

Smut however is seldom of much consequence in the Wheat crop, and we believe that it is principally in the spring sown Wheats that it has been prevalent. The quick growing Wheats, and indeed white Wheats in general, are peculiarly subject to the attacks of Fungi.

We noticed a few weeks back the extraordinary prevalence of rust in some districts. The crops in which it appeared showed a strong tendency to become mildewed, and doubtless, but for the late happy change in the weather, the produce would have been greatly affected. One especial crop, however, which was once almost as yellow from rust as a field of Turnip seed, and in which mildew was rapidly making its appearance, has now been

secured, and it is clear that the rust has not in the slightest degree affected the seed, which is as fine and plump as can well be imagined. A farmer who can distinguish rust from mildew, will never be afraid for his crop, so long as rust alone prevails. When mildew on the contrary has once attacked the corn, every day of moist warm weather is abstracting a marked proportion from the nutritive matter of his grain, and feeding the mildew at its expense. *M. J. B.*

THE HARVEST OF 1861.

Ayrshire: *Lagg by Ayr, Sept.* 10th. — My opinion of the crops in this county is much the same as that formerly given, and I subjoin a short notice for each of the crops usually grown in this neighbourhood. Wheat, considerable under average; Oats, full average, will not generally be heavy; Beans, average; Barley, good average; Turnips, fair, want dry weather much; Potatoes, almost all gone, worse than for many years; Mangold, above an average. I consider the Wheat crops generally about one-fourth under average this year, and the sample in many places will be inferior, owing to the extreme prevalence of wet weather, and want of sun. *A. W. Ralston.*

Cambridgeshire: *Babraham, Sept.* 7.—We have threshed but a very little Wheat, and that is not put up or finished dressing, therefore we can give you no idea as to the yield. The quality of our Wheat and the neighbourhood is very good. We have not threshed any Barley yet, nor do I know any one who has a sufficient quantity to infer what the yield may be. The opinion of nearly every one who has threshed Wheat is that the yield is below an average, and in many cases great complaints are made. *S. J. Webb.*

Cornwall: *Tregoose, Truro, Sept.* 7.—Divine Providence having favoured us with splendid weather for harvest, we have secured our Wheat in prime condition; and although I adhere to my former expressed opinion, that we have not an average crop, I think the yield will be quite equal to expectation. Our Barley and Oats are very good, and will no doubt yield very satisfactorily. *M. Michell.*

Devonshire: *Tawstock Manor, Barnstaple, Sept.* 10. —The character of the corn crops for 1861 as given by the growers themselves, may be comprised in one word, and that word is—"bad"—and bad it is feared they will prove. There are, no doubt, exceptional fields of Barley and Oats where the crops may be pronounced good, but as a rule they are inferior, and the yield will be one-third under an average. Barley moreover—except in isolated cases where it was sown unusually early—met with an unpropitious seed time; the grain committed to the ground for the general crop germinated irregularly owing to the drought which then prevailed; a second braird appeared at an interval of a month after the appearance of the first, terminating, as was to have been expected, in an unevenly ripened crop, and the produce a thin hungry sample. Wheat it is believed will be the worst crop of that grain which has been grown for many years, and may or may not reach to one-half of an average yield; the growth of straw is also one-third short; and now that the crop is harvested, two ricks instead of three is the proportion presenting itself to notice in our rick-yards. The weekly sales of Wheat, as officially reported for each county in England, if duly registered for some months after a finished harvest in any particular county, and compared with the quantity reported as sold during the corresponding period of a previous year in the same county, usually predict the character of the yield of such last harvest in such county; as yet, however, it is too soon to judge of crop 1861 by this standard or come to a sound conclusion from the slender data afforded by the few weeks' sales which have just passed over, but so far as they go, they indicate a deficiency greater than that of last year, when it must be remembered the Wheat crop was one-third under an average. The following are the figures:—

	1860	1861
Reported sales of Wheat in Devonshire from 1st week in August to 1st week in September—5 weeks.	Qrs. 2189	Qrs. 1449

As regards the above falling off for 1861 one remark may be made; it is this: old Wheat is always on sale in the same market with the new; this season, however, there is little old on hand, and of course little to market, and it is just possible that the apparent deficiency, so far, of 1861, as compared with 1860, is attributable to that circumstance. *P. Cowan.*

Dorsetshire: *Dorchester, Sept.* 9.—The threshing in this district about confirms the previous estimate, except that Wheat on the average will be rather more deficient than was expected. Barley and Oats over an average. *R. Damen.*

East Lothian: *Haddington, Sept.* 11.—A great deal of grain having lately been threshed out by high winds, I now estimate the crops of this county as follows. Wheat, much under an average; Barley, considerably under an average; Oats, above an average; Beans, above an average; Potatoes, under an average, and a large portion of the crop tainted; Turnip, an average. *Pat. Shirreff.*

Fen District, Cambridgeshire: *Chatteris, Sept.* 9. —Wheat has cut up light in bulk, and upon fen soils has suffered more or less from mildew the quality will consequently be very various. We have seen one sample weighing only $57\frac{1}{2}$ lbs. per bushel, and another weighing $66\frac{1}{4}$ lbs.; so great is the range of quality. The estimated yields of this crop are not being realised. From the little we have threshed ourselves and from the information we have derived from fen farmers in this neighbourhood, the yield will be one quarter per acre less than the crop was estimated to produce at the time of harvesting it. And taking the entire Wheat crop in this immediate locality, we cannot now place the yield at more than two-thirds of an average crop, but the quality we conceive will be quite an average. Oats: reports as to the yield of this crop are somewhat various and conflicting. In some instances the produce is very light, in others perhaps up to an average. We should, if called upon with our present information to estimate this crop, place it at about 2 quarters per acre below last year. The quality is fine, and nearly all the samples we have seen are very heavy. These are the only two corn crops that we are able at present to speak of with any certainty as to their yield. As to the other crops we have no information which will enable us to alter our previous report of them. All the corn in this district is secured, and in the finest possible condition. The continued drought has seriously affected our green crops, and indeed all vegetation. Mangels require rain or the bulbs will be small. Coleseeds are a patchy broken crop, and symptoms of maggot and disease are everywhere apparent. Potatoes are less injured by disease than was expected. The dry weather of August appeared to stay its ravages, and the haulm, more than the tubers, is affected. *Alfred S. Ruston, Aylesbury House.*

Forfarshire: *Ferryden Farm, Montrose, Sept.* 7.— Wheat is not anything like a good average in bulk, but generally the quality is good: ear so bushy that I anticipate a better return than the quantity would at first lead me to expect. It has not yet been tested. Barley, a fair average crop, will be mostly of good quality. Oats a heavy crop; grain plump and fine. Potatoes, with exceptional fields, gave promise of a good yield some weeks ago. Now they are universally smitten with disease. Late planted fields will be, I think, almost a failure, as they had reached no size, and disease entirely checks enlargement of the tubers. Upon the whole I estimate the loss all round at half the crop. Turnips still promise a fine crop, notwithstanding slight threatenings of finger and toe. Beans fewer sown than usual, many of them bad from frosted seed. Not an average. *A. Bell.*

Galloway: *Auchnea, Sept.* 7.—I subjoin my opinion of the probable results of the crops of this district of Wigtownshire. Wheat will be much under an average yield; Oats about an average; little Barley sown; Beans, few sown; Potatoes very much diseased. on many farms will be worth little; Turnips will be under average, unless very favourable weather ensues; Mangel Wurzel, a very poor crop. The weather of late has been very much against all kinds of crop, and very unfavourable for harvest operations. *A. H. M'Clean.*

Gloucestershire: *Royal Agricultural College, Cirencester, Sept.* 9.—Our harvest was finished Sept. 7, and we have cause for great thankfulness on account of the splendid weather which has characterised the harvest month, and which has enabled us to put together 200 acres of corn in unusually good condition. 150 acres were cut by Burgess & Key's reaper, which again worked remarkably well, especially on Wheat, cutting about 12 acres a day, leaving a very even clean stubble. With the Barley crop it was less successful, as much of it was a good deal laid and scrawled, and the softer nature of the straw prevents such close cutting as is desirable. When the crop stands up well, and is tolerably long, nothing can make better work, and the swathe lies so light that rain injures it far less than when mown, and if it is to be tied, a practice we should strongly recommend in all cases where it is practicable, very superior work can be made, owing to the very even manner in which the swathe is laid. With regard to the yield of the Wheat crop, it is the opinion of those who have commenced threshing that we shall hardly reach an average produce. Much of the Wheat was thin on the ground—in some places it was affected by mildew, and generally there was some slight deficiency from the effects of red gum, the maggot of the Wheat midge. The quality of the samples is generally good, and the weight per bushel high. With regard to our own crop, a considerable increase has been obtained from the application of top dressings in the spring, consisting of nitrate of soda 1 cwt., guano $\frac{1}{2}$ cwt., and 3 cwt. of salt per acre, and in some cases 5 to 10 bushels of soot additional. From a series of experiments we have the most satisfactory results; and to mention one instance, the application of $1\frac{1}{2}$ cwt. of nitrate of soda and 3 cwt. of salt gave us an increase of 14 bushels of Wheat per acre over a corresponding plot unmanured. Barley is short in the straw with a yielding head; the quality is not first-rate though useful, and will probably produce about an average crop. Oats are an average, sample fine. Beans more or less blighted, and the yield will be very variable. The root crop (except Mangels, which are backward and patchy) is generally good, but owing to the rather long dry weather is not likely to turn out quite so bulky as was at one time expected. Potatoes are partially but not very seriously diseased. J[illegible] Coleman.

Lancashire: *Sept.* 10.—The weather for the past ten days has been stormy and wet, and on Monday a deluge of rain fell, and it is difficult to say what loss may be sustained, for though the greater part of the corn is cut a very small portion is stacked. From my own judgment, as well as what I can learn from other observers, there is no doubt the following will be the probable yield of crops in this neighbourhood. Wheat one-third deficient in corn and straw, but quality good. Barley under average. Oats very various, and from not having ripened off evenly will not be an average. Beans not largely grown, but good. Potatoes diseased but not so badly as was supposed; the crop not heavy. Mangels diseased in the leaf and do not promise a heavy crop. Swedes, where not diseased with fingers and toes, look very healthy. The stackyards will not be well filled. *Francis Twining, Parbold Hall.*

Lincolnshire: *Long Sutton, Sept.* 9.—I have great pleasure in answering your note. It is only by such means, in the absence of agricultural statistics, that a fair and reliable approximation to the truth or fact can be attained. The harvest in this district is nearly completed, only a few scattered plots remaining in field. Threshing has been pretty general, and we can speak with tolerable accuracy as to the result. Wheat has so far proved good in quality, but in no instance has the yield been truly satisfactory, or attained to the expectation of the growers; weight heavy. Oats fully come up to expected yields; Barley fine in quality, but yield deficient; Beans very various in quality and yield; Peas fair quality, and yield good; Mangels growing up nicely; Turnips improving; Coleseed favourable; Potatoes have less rapidly decayed this fine season. *John Clarke.*

Mid Lothian: *Bonnington, Ratho, Sept.* 9.—Wheat scarcely an average. Barley, ditto. Oats average. Beans fair, late. Turnips good, promising. Potatoes have been checked in growth prematurely by the disease, and to all appearance will not yield more than a half of the amount of sound Potatoes as did last year's crop. Wheat nearly all secured; half of the Barley and Oats still in the fields. Weather unsettled; rain every day. *James Melrin.*

Morayshire, *Sept.* 9.—Since I reported last on the state of the crops in this quarter, we have had another month of wet weather. Harvest became general during the last week of August, and a considerable portion was cut down during the last three days of that month, which were comparatively dry, and here and there a few stacks were brought in. Since that time the cutting has been limited to a few dry hours which occurred occasionally; so harvest operations are almost at a stand, although the crops generally are quite ripe. At present there is little appearance of dry weather. In some fields Wheat and Barley are considerably lodged, and an undergrowth is beginning to appear; apart from this the straw has still a bright and healthy appearance, and the Wheat, though perhaps the least abundant, is still expected to yield at least an average. The Potato fields have of late undergone a sad change—the blight has fallen very severely, and the tubers are fast decaying. The loss will be heavy, as the breadth this season is unusually great. Early sown Turnips in dry soil hold on with great vigour, but on the whole the wet has retarded the general crop very much, and it is now certain it will be much under an average. *John Grigor.*

Norfolk: *Crown Bank, Wymondham, Sep.* 10.—At the time of my last report our farmers were anticipating quantity as well as quality; but the result upon threshing has disappointed many of them fall 6 bushels to 1 quarter per acre, or where 4 quarters were expected about 3 or $3\frac{1}{2}$ quarters is found nearer the mark. but I think while the ear was rather deficient, there has not been sufficient allowance made for the difference of a thin crop and a good crop of straw on the ground. I think the quality, although very good, will not prove so superb when taken on the average. Some few samples appear which are below 63 lbs. per bushel, and I think that the farmers in general thresh their best Wheats first. Beans are of first-rate quality, also Oats, Peas, and Barley, save some of the latter, which is rather pie-bald but still very heavy in weight. The farmers having threshed but little at present of their crop of spring corn, it is impossible to estimate the yield, but I think it will be an average of former years. *W. H. Taylor.*

Northamptonshire: *Overstone Grange, Sept.* 9.— I beg to inform you that the Wheat crop of this neighbourhood is, in my opinion, nearly a fourth below an average as to quantity. Barley, Oats, Beans, and Peas are a full average crop, and generally of fine quality. *Owen Wallis.*

Northampton Fens: *Peterborough, Sept.* 9.—On Friday last, Sept. 6, we finished our harvest after a month of the finest weather possible, and in another day or two it will all be well secured under thatch. Generally speaking the crops stood thinly on the ground, consequently the work was soon done, and there being plenty of hands the cost was less than usual. Wheat was cut and tied in this district at from 8*s.* to 10*s* per acre; in some cases less where the crop was very inferior, and in the fens many pieces of Wheat fall under this description, only yielding from 1 sack to $1\frac{1}{2}$ sack an acre. On high land much of the Wheat is fine, and though thin of plant we hear of 4 to 5 quarters per acre being obtained. Upon the whole we set down

the produce of Wheat as less than an average. Barley is generally a pretty crop and weighs well; it is above an average yield both in quantity and quality. Oats, also, are fine and abundant. Beans ditto. Potatoes are partially diseased, but have to some extent recovered from the prevailing complaint. Turnips and Coleseed have done well lately, but of Mangels there are but few good pieces, the cases being frequent where it has been deemed necessary to plough them up, and consequently we look forward to a deficiency of winter keep. Straw will be scarce; there will be hardly any tail corn for the stock as last year; and we therefore anticipate that hay and cake will be much in request. *J. W.*

NORTH LANCASHIRE: *Holker, Sept.* 9.—I see no reason to alter the opinion I gave you in my last letter respecting the grain crops in this neighbourhood. A good deal is still out in the fields. We have had a very wet harvest, though very little injury has been done so far. We had 7½ inches of rain in August. The Turnips are suffering a good deal for want of dry weather. In many places the land is so wet that we cannot get into them to do any good. Potatoes are more diseased than they have been for many years. *Geo. Drury.*

NORTH LINCOLNSHIRE: *Aylesby, Sept.* 10.—Nearly the whole of the Wheat and Barley are secured in this part of the country in excellent condition; quality very good: but I am sorry to say the yield will be very deficient, to what extent we hardly can tell as yet, the threshing being very partial. We have likewise a short acreage. *F. Sowerby.*

NORTHUMBERLAND: *Sept.* 9.—The harvest in this valley is just about finished; should this week prove favourable all the low lands will be cleared. On some farms the crop is all secured. Very little has yet been threshed, but what has been has yielded well and is of beautiful quality. Wheat and Barley have both cut up light, and even though the yield will be good, I do not think that either will reach an average crop. The fine quality will however in my opinion go far to make up for the short quantity. Oats have cut up better than was expected, and will on good lands prove a full crop and of good quality. Beans are light. Peas good. *Thos. P. Dods.*

OXFORDSHIRE: *Sarsden, Sept.* 10.—The whole of the white corn in this district is now carted and the ricks secured, and never do we remember a finer harvest. The little Wheat threshed in this part is well spoken of, quality fine and a good yield to the straw. Barley a great crop, quality rather rough and yellow, yet it must malt well, having become ripe before it was cut. Oats a full crop, and the straw will be equal to some of the hay; it is a great saving of labour in harvesting this crop when all is tied up, and we yearly see less mown and carted loose. Peas and Beans a full crop, quality very fine. *Matthew Savidge.*

SHROPSHIRE: *Munslow, Church Stretton, Sept.* 9.—In reply to your favour of the 5th inst. respecting the crops in my immediate neighbourhood, I beg to inform you that we have had some beautiful weather until the end of last week, then showery, and on Sunday a good deal of rain fell—just what we wanted for the Turnips, Grass, &c. Another week of good weather will about complete the harvest just round here; but of course there will be some to do after then in the late counties. The Wheat has cut up very light, a third less straw than last year; but from what I can learn from parties who have threshed it is of good quality; though on the whole very much under average in quantity. Barley a full average. Peas and Oats an average crop. Swedes and Turnips very good, and growing well. Mangels tolerably good but thin, owing I think in a great measure to bad seed. Grass keep rather plentiful just now. *Richard Shirley.*

WILTSHIRE: *Overtown, Sept.* 9.—I am not able to say much more respecting the crops of corn now than before harvest, not having threshed. Some state the yield not to be as good as they expected, and some persons say they are quite as much as they thought them to be. I do not expect they will be quite an average in this neighbourhood, but the quality is very fine and dry, being principally carted in the fine week before last; there is nothing more out but late Oats and Beans. *T. H. Redman.*

YORKSHIRE: *Garforth, Leeds, Sept.* 9.—I led home to the threshing machine one day and dressed up from that day's threshing 60 quarters Wheat, cut with the reaping machine out of the field next the steam trial ground. I only dressed out 12 bushels of tail out of 60 quarters, and sold the bulk mixed Wheat for 60*s.* per quarter 16 days ago. I do not know what quantity of land the corn was threshed from. The Wheat crop is safe in this neighbourhood, and carried in splendid condition. I think it will not be so deficient in our locality as was once expected. It goes into less room, the great weight of the sheaves in some way accounting for that. The first sown Barleys are good, the later sown uneven and light. Turnips in this locality excellent, Potatoes touched with the disease. Lambs unhealthy. *B. Nicholson.*——*Hessle, near Hull, Sept. 7th.*—The Wheat crop is short of an average crop, upon low land 6 bushels per acre, and upon high good land from 2 to 3, with quality rather variable but generally good, and well harvested, one-third better per quarter of Wheat than the Yorkshire Wheat last year. Oats a good crop; Barley tolerably good where sown soon; Beans bad; Potatoes better than expected; Turnips good; Mangels very bad. The white corn has bulked up into a little room, except Oats, which are good. Other corn I think will not yield well. *John Clark.*

MANAGEMENT OF LABOURERS.

As so much of the capital required in farming depends upon the cost and economical application of manual labour, and more attention has been paid of late years to the comfort and condition of the agricultural labourer, I think that a short account of the mode in which I deal with my men will not only be interesting to those who are desirous of promoting their social improvement—a matter in which I am myself much interested, but will not be out of place in this Essay considered in a commercial light only.

When I entered on my present farm, seven years ago, I found everything had been allowed to go out of repair—even the rick-pillars were broken down and the ricks built upon their ruins or upon the ground; and hardly in any place did I find two unbroken rails standing together in the rickyard-fence. The labourers were dissatisfied, only partially employed, and even sent home at 8 or 12 o'clock in the day if the weather turned out unfavourable after they had come to work in the morning, thus being allowed to make only part wages however willing they might be to work. The landlord of course had the rick-pillars rebuilt and the fences repaired, and I set to work to put the labourer upon a different footing. I took for some days the opportunity of quietly watching the labourers who had previously been employed on the farm, at their work, and selected those who appeared most likely to answer my purpose. The wages paid at that time to the best men, when a whole week's work was done, were 11*s.* per week from Michaelmas to Lady-day, and 11*s.* to 12*s.* per week, with a daily allowance of 1 quart of beer per man per day, from Lady-day to Michaelmas. There was an extra allowance in harvest-time of 1 quart of beer and 1 gallon of ale per man per day, although in practice the allowance was unlimited when carting was going on.

	£	*s.*	*d.*
I calculated that the one quart of beer per day from Lady-day to Michaelmas, at 6*d.* per gallon was 9*d.* per week, or for the whole period ..	0	19	6
The extra quart of beer per day at 6*d.* per gallon, and the gallon of ale at 1*s.* per gallon, for the six weeks during which the hay and corn harvests and covering in the ricks usually last, was	2	0	6
Making a total cost for beer per man of ..	£3	0	0

In consequence of the constant disputes about the beer, and the discontent which I had seen ensue at different places when a petition for more beer had been refused, I determined not to give any beer, but a money allowance instead. This I thought would not only put an end to a constant source of annoyance, but would enable me to ascertain the exact cost of every act of husbandry. I therefore informed the men one Saturday night that I intended to give no beer. At this they were disposed to murmur, but I set that to rights by informing them that during a great part of the time they really did not want the beer, and that they would find coffee better for them, although they could not do without beer in harvest time or when they worked extra hours; and by asking them whether the beer they received was worth 2*l.* 12*s.*, or 1*s.* a week for the year, to each of them. They admitted that it was not, and I then offered to hire them from that time, Lady-day, till the following Michaelmas at 13*s.* per week without beer, they being bound to serve me, and I to find them work, wet or dry, and to give them so much of the harvest work by the piece as they could do well. They accepted this offer having only the alternative of leaving. Of course it was not necessary for me to show them that I was a clear gainer by the transaction, the extra 1*s.* a week, or 26*s.* for the time, being much less than the cost of the usual allowance of beer. But I considered that I was doing them no injury, inasmuch as I was to find them regular work for the whole time, whether immediately profitable to myself or not.

This being an entirely new mode of proceeding in this part of the country, I anticipated some little difficulty in carrying it out. The men, however, seemed very pleased with their full pay, and everything went on very smoothly until haymaking began, when a few men began complaining that they could not work without beer. Bottles were very ostentatiously filled with water at the ponds, and their contents drunk, as a hint to me.

I took no notice of this except by a good-humoured joke, advising them to get their wives or sweethearts to make them a good lot of tea or coffee to bring with them the next day, as they would find that better than the water. These hints not being sufficient to soften my hard heart, more open murmuring was tried, and the men began to work carelessly, coming off the rick to go to the ponds or pumps to drink after unloading one load, and before they would commence another. They also exhibited other signs of mutiny. This of course could not be allowed, and after calling the men together, I told them I was not going to stand any such nonsense; I had kept my part of the bargain and they must keep theirs. They had had their money, and if they chose to spend it in other ways than in buying beer, it was no concern of mine. But I would have the work done, and I expected them out of their wages to buy such a quantity of beer as would enable them to work properly. Finally, I ended by offering to release any of them who wished it from their bargain upon their returning me the extra 1*s.* that I had paid them. But I said they might depend upon one thing, that I would let all the hay rot on the ground before I allowed my men to master me. One man began grumbling: I said, "Here is your money till to-day; take your clothes and go off the premises instantly." There was no more trouble; the others all returned to their work, and from that day till this I have never heard one word about beer.

We soon got to understand each other better, but I never offered to pay them for overtime, putting them on their honour, as it were, and giving a moderate quantity of beer as an acknowledgment, when the work was kept on after eight o'clock at night, and telling them that we should not disagree at Michaelmas. At Michaelmas I gave to each man who had behaved well, whether he continued with me or whether I replaced him by another, half a ton of the best coals, which is worth here from 9*s.* to 10*s.* delivered. At Michaelmas also no man to whom I made the offer hesitated to accept my offer of 13*s.* a week for the next twelve months, and with the exception of what had occurred during the first summer I have never had a dispute with my men, and once only have I had to punish a man for refusing to work.

I still continue giving at Michaelmas to every man who has been with me the preceding six months at least, and behaved well, coals, a waterproof cape, flannel, or some other thing which he selects as most useful to him; I also give the boys a proportionate allowance. My labourers and I now work together upon the most cordial terms; I never have a man offer to leave me. I have the pick of the village, although I let them clearly understand that I can make no more of my produce than my neighbours, and will pay no more for labour. But at the same time they perfectly understand that I am willing to pay in such a manner, as to enable them to make the most of their strength and skill. I consider for my own part that, taking the average wages usually paid here to the best man for the twelve months at 11*s.* 6*d.* per week without beer, adding 1*s.* per week or 2*l.* 12*s.* per annum for beer (although the calculation above made shows that the beer actually costs more), and also 6*d*, per week or 26*s.* per annum for extra beer, making in the whole 13*s.* a week, and setting it all against the overtime, for which I do not pay, my labour does not actually cost me more than other people pay for theirs. And if a man is able out of his 11*s.* 6*d.* a week to clothe and maintain himself and his family, and pay his rent also, then I consider that the extra 1*s.* 6*d.* a week, which is spent entirely on food as I arrange it, ought to give me a man physically more fit to do his work. And in practice I find this to be the case. I have not only the gratification of being told by the vicar that my men, both married and single, are amongst the most respectable and well conducted in the village, but I have been repeatedly told by the neighbouring farmers: "I can't think what you do with your men. As soon as my back is turned I have little work done, but come by your farm when I will, your men are always at work." A labourer who feels himself well used will soon repay his master 2*d.* a day, or 1*s.* a week, by working with a will and not idling.

I should not be doing justice to the men themselves if I closed this part of my Essay without stating that, independently of a good day's work being given for a good day's pay, there is such a good feeling amongst them, that several times in the course of a year, when it has been a very wet day, I have found them not come to work, preferring to forfeit their wages rather than ask me for work when they knew that there was none of a nature immediately profitable to me to be done. And this they have done notwithstanding that they are well aware that I am bound to pay them, wet or fine, if they come, and that I always contrive to have some jobs which can be done under cover at such times. I also pointed out to them the best way of buying their beer.

Each man now buys for his own consumption one 18-gallon cask of ale at 1*s.* a gallon, and another 18-gallon cask of beer at 6*d.* per gallon, direct from the brewer, instead of purchasing it at double that price in small quantities at the public house. This again gives them to spend in extra beer or anything else they like, 25*s.* per annum, being the difference between the actual cost of the beer they buy, and the 2*l.* 12*s.* I allow for it. The first year I guaranteed payment to the brewer, but ever since that time they have easily obtained credit. But I fancy they have seldom availed themselves of that facility since I showed them that by paying cash they could get 5 per cent. discount upon it. During the late very untoward season I secured all my hay (more than 30 acres) in first-rate condition during the few fine days we had, without using a tedding machine, and carried and stacked my corn (nearly 100 acres) in quite as good order as my neighbours. To effect this, notwithstanding that I often kept on carrying until 10 or 11 o'clock at night, one 18-gallon cask of 1*s.* ale and two or three lots of soup, were all the extra supplies and expenses required.

I consider that by not idling about my men save me in the course of the year much more than the value of the coals, &c., which I give at Michaelmas, although that is a gratuity entirely within my own discretion, and no part of the bargain which I make

with them. *The late Charles Wratislaw, of Rugby, in the Journal of the Agricultural Society.*

[We add the following note by Mr. Frere:—

The author met the Editor at Leeds by agreement; discussed with him the pages relating to the heavy land farm; made an appointment for the next day to report upon the suggested alterations, and continue the revision; but in the interval he was seized by an illness which terminated fatally in three or four days. An acquaintance thus brief had, however, sufficed to inspire a lively interest and proportionate regret for the sudden death of one whose business like habits, acuteness, and zeal gave promise of valuable service to the cause of agriculture.]

Home Correspondence.

The Journal of the English Agricultural Society.—By the bye-laws of the Royal Agricultural Society it is provided that "an Editor shall be appointed of literary and scientific ability at a salary of 500*l.* per annum," and it is further provided (see No. 115 of the resolutions in the Number of the Journal just issued) that the said Editor "shall be instructed to correct any inaccuracies of style" in the judges' reports. We were told when Mr. Frere was appointed that if we had not got an Editor of great agricultural knowledge (which some of us were foolish enough to imagine an essential qualification for the post), at least we had got a man of great literary attainments, who would take care that, whatever might become of its agriculture, the Society's Journal should be a well of English pure and undefiled for foreign agriculturists to refresh their knowledge of the English language at. Notwithstanding this flourish of trumpets, when the oracle at length spoke in the first Number of the Journal published under his care, whatever might be the "literary" merit of the utterances, they certainly maintained the character of oracles ancient or modern in being wholly unintelligible. This was very fairly shown up at the time in the *Agricultural Gazette.* Fairly, I say, for when in selecting an editor for an Agricultural Society, Agriculture is put aside to make room for "literary" attainments, we are entitled to expect the latter to be the crême de la crême. However, it might have been said, perhaps, that Mr. Frere had not got accustomed to his elevation, and was suffering from nervous distraction of mind in consequence; but this must now have quite abated, and yet we find the Editor who is "to correct the inaccuracies of style" in the judges' reports writing such a jumble as would have disgraced any schoolboy, and would have secured his being plucked at any examination. His style may very properly be termed the confused and unintelligible, if we are to characterise it from his notes on poor Mr. Wratislaw's paper on Farm Capital, or from his note upon his notes, for this freak is one of our Editor's peculiarities of "style" also. That I am not jesting every member of the R. A. S. E. may satisfy himself by examining the Journal for himself; and as examples here let Mr. Frere say his say. In his note on his notes; at the beginning of his notes he says: "There are considerations which point strongly to the inexpediency of pressing forward publication until not only the work of adjudication, a task which cannot be shunned, but also that of revision by editor and author conjointly, has been deliberately performed. Under any circumstances, the essays of unsuccessful competitors returned upon the award being announced, will often get a priority in publication.—It will rest with author and editor by subsequent painstaking to convert perhaps a slight advantage in merit into a substantial superiority. But concert, time, and a stock in hand are essential to reconcile these aims and ends with the demands for punctual publication." Oh! for the shade of Cobbett! What "adjudication?" "Unsuccessful competitors" for what? What "awards?" "Priority of publication" of what? What is "perhaps a slight advantage in merit?" and what, oh what! is "a stock in hand" which is essential to reconcile these aims and ends with the demands for punctual publication?—Let us try the middle of the notes. "Under most circumstances when the right moment can be freely chosen, skill and energy, if combined with some mechanical ingenuity, will probably solve the problem, but it is not easy thus to seize the exact moment for every spot in the farm, whilst some weeds there are which, while dormant, are tortured in vain, and when enlivened by the progress of spring do not much regard the mere combing of the cultivator or the scratching of the harrow. For such foes extermination is no doubt the proper remedy, but, like certain tribes of men whose extinction has been decreed by high authorities, the race is stubborn, and if scotched reappears whenever it gets an opening. Nevertheless as the two poles of profitable farming are now increased receipts from stock on the one hand and decreased outlay from economical cultivation on the other, it is of the highest importance that every man should do his utmost to approach, as nearly as possible, to the theory of perfection, viz., single inversion of the soil."—Now for the end of this most lucid rushlight thrown on summer's day. "On the other side if there are rights not established, which on the whole might conduce to agricultural wealth and so benefit the public, this is partly on account of the risks they involve, the difficulty of adjusting the terms arising from our imperfect knowledge, the exaggerated form which these rights sometimes assume, and some apprehension of that strong English leaning of which we have just observed the favourable side, to sanction the growth even to excess of any usage based on concession. P. H. Frere."—Is this the man to whom judges and essay writers are to submit reports and essays to have their "inaccuracies of style" removed, and who is "to convert perhaps a slight advantage in merit into substantial superiority." Surely Mr. Hoskyns, Mr. Thompson, and Mr. Acland must feel greatly delighted with their work and their protegé. This is not however the general feeling of the members of the Royal Agricultural Society of England, who are beginning to look round to see if there be no cure within reach, and if it be not possible to send Mr. Frere to some more congenial literary employment where his talents will be more appreciated. *An indignant Member of the Royal Agricultural Society of England.*

Cattle Feeding.—Mr. Grey of Dilston is reported to have said at the Tyneside Agricultural Society's meeting: "There was no country in the world where root crops could be grown or where the feeding of cattle or sheep could be conducted to such good purpose as ours." I conclude "feeding" means fattening, but what is the experience of 99 farmers out of 100 upon this subject? Three years ago I examined the books of the occupier of the largest arable farm in England; it was his opinion, and it appeared from his accounts, he lost at that time 3*l.* per head upon each of his fat bullocks. To-day I happened, before reading Mr. Grey's speech, to ask a neighbour who keeps the best stock of any of the farmers in my district, whether feeding paid. His reply was he lost 5*l.* per head upon each animal. If other counties do worse than this, no wonder that the agricultural community is poor! I do not say that rearing or keeping for a certain time horned cattle is usually unprofitable, but I do not remember meeting any landlord or tenant who admitted that he received in money the sum he had expended in feeding cattle upon roots, grain, or oil-cake, notwithstanding the high price we have for some years been paying the butchers for beef. *Inquisitor.*

Societies.

MANCHESTER AND LIVERPOOL.—The 14th annual meeting of the united societies took place on Wednesday and Thursday this week at Ashton-under-Lyne. A very large show of cattle and horses, a good show of dogs, and a considerable collection of agricultural implements received the awards of the Society's judges, and the examination and admiration of many thousands of spectators. Upwards of 10,000 visited the yard on the first day, and at the dinner held on that day the Chairman, F. D. Astley, Esq., was able to contrast that number with 2322 who visited the show yard of the Society on both the days of their first annual show in 1848.

Among the successful exhibitors of stock, Mr. Ambler, of Halifax, took the first prize in all the classes of Short-horn bulls; Lady Pigot took the prize for best cow or heifer in milk or in calf, and also for the best pair of two-year-old heifers. Mr. Atherton, of Chapel House, Garston, near Liverpool, was exceedingly successful in a number of classes open to tenant farmers, taking the prizes for the best bull calf; the best cow for dairy purposes; the best lot of 4 dairy cows; the best pair of 2-year-old heifers; the best pair of 1-year-old heifers, and the best lot of calves.

A very large show of horses was exhibited, and the prizes went to Mr. Heaton, of Middleton, for the best agricultural stallion; to Mr. Robinson, of Grove Inn, near Manchester, for the best draught stallion; to Messrs. Hargreaves and Craven of Manchester, for the best stallion adapted for road purposes, and to Mr. Fanshaw of Preston for the best thorough-bred stallion. The Earl of Derby received the Society's Medal for the best stallion kept by a landowner for the benefit of his tenantry.

The growth of the Society to its present successful dimensions was referred to by speakers at the dinner, who gave the following figures representing the attendance on the years named:—in 1848, 2322 on two days; in 1852, 2668 on two days; in 1856, 5817 on two days; in 1861, at Ashton, 11,000, paying 660*l.* on the first day.

The judges of cattle were Mr. Unthank, of Penrith; Mr. T. Torr, of Great Grimsby; and Mr. Wilmot, of Buxton. The judges of implements were Mr. Garforth, of Dukinfield Iron Works; Mr. T. J. Rowley, of Chesterfield; and Mr. Teasdale, of Birkenhead. The exhibition of implements was contributed largely to by Messrs. Richmond & Chandler, of Salford; Messrs. Smith & Ashby, of Stamford; Messrs. Crosskill, of Beverley; and Messrs. Roby, of Lincoln, &c.

Farmers' Clubs.

SPARKENHOE, *Sept.* 11.—"All work and no play makes Jack a dull boy." So says the old adage, and assuredly there is much of truth in it. Do we not all feel the better for "a day out," whether from the field, the factory, the mine, or the workshop? And the farming world does its full share, everyone must admit, to afford such holidays to the general public, as well as to the members of its own fraternity. The autumnal meetings of provincial societies, when conducted with spirit and energy, as most of them are, bring together teeming thousands of our town, village, and country population. All meet together on equal terms, some for one object and some for another, and good feeling as well as enlarged ideas result from the association. And it is pleasing to observe that the best features of the best societies are gradually being turned to account by those which have hitherto been of a more backward character.

Among the best conducted of those societies which are to some extent local in their nature, we have no hesitation in regarding the Sparkenhoe Farmers' Club as one of the foremost. Their annual meeting generally comes off with great—nay increasing—success, a success which is not the result of chance, or a combination of favourable circumstances, but which is worked out and ensured by the combined efforts of its committee and more influential members. And the meeting in the grounds of Sir A. B. C. Dixie at Market Bosworth, on Wednesday, formed no exception to previous results. It was unmistakably a better meeting than any of its predecessors. Talk of the advantages of railway communication—and they certainly cannot be undervalued—here was a very large and influential gathering at a place where the steam whistle has never sounded, and where, in fact, it is said not to be very likely that it will soon find its way. We have, however, only space to refer, in very general terms, to the leading features of the day.

Steam cultivation of course attracted great attention, and much anxiety was evinced as to which quarter the 50*l.* prize would find its way to. Of the seven entries only four were doing duty on the ground. Mr. Kirby with his double plough had been disqualified for being too late in reaching the ground, or some such reason, Messrs. Hands and Harris, of Stoneleigh, who entered Fowler's tackle, were unable to put in an appearance, and another plot was also vacant. The work therefore lay between two exhibitors. Mr. Terrell, who had both Smith's tackle (manufactured by Messrs. Howard) and Messrs. Howard's new implement; and another gentleman who worked the tackle of Mr. Hayes, all of them fully described in these columns ere now. The judges had no great difficulty in endorsing the opinion of the public, which was undoubtedly in favour of Messrs. Howard's own cultivator. The horse ploughing also had a full share of interested visitors; and the importance of the match may be estimated from the fact that the three great plough-making firms—Messrs. Ransomes, Howard, and Hornsby—were each represented by their crack ploughmen, Powell, Purser, and Brown; the fortunes of the day fairly falling to the last named makers. Hancock's pulverising plough was also worked in another field, and its performances were greatly admired by many of the visitors.

In the Show-ground matters wore a most animated appearance. A thoroughly good collection of machinery and implements—some of them in motion—were exhibited by several firms. Hunt & Pickering, of Leicester, carried off the palm in this direction, and very deservedly so. Their Canterbury prize universal roller mill, the Leeds prize horse-hoe, and a large number of other articles, made a very effective display. Haywood, Ashby & Co., Ball, and others, were also deserving of attention.

The show of cattle was assuredly not the strongest feature of the meeting. In the Short-horn classes there was a decided want of character, and they could have been well weeded out to have the number of entries. The best aged bull, and also the best in the younger class, the former being the sire of the latter—were both sent from Derbyshire by Sir John Crewe, of Calke Abbey. But good entries were also made by Mr. Bradburne and Lord Howe—and there our commendation must end. Never, probably, since the days of Bakewell, has a larger or better show been made among the Long-horns. If this meeting is to be taken as any criterion, the breed must be said to be "looking up." But then it was right in the centre of the Long-horn Citadel, and we should have looked for a good entry at Market Bosworth, if anywhere. Fat oxen and cows were both fairly represented—the honours of the former going to Lord Howe for a very pretty Devon, and to Mr. Swinnerton for a Short-horn steer, of which we shall probably hear more at the winter meetings. Among the fat cows also, Mr. Faulkner, who obtained the first prize, will have a tough customer for other comers, if she finds her way to Bingley Hall or Baker Street. Milk cows produced nothing remarkable. And the same sweeping statement need only be slightly modified respecting the long-woolled sheep. The classification is not the best which might be chosen. Among short-wools there were some good entries, which we cannot now enumerate; Mr. Horley's fairly shorn 2½ year old Shropshire ram carrying all before him. And in truth he looked better in his level frame, from which 11 lbs. of wool had been cut at the proper season, than those entries—and we regret to say that they were the majority—which had received such an amount of clipping and singeing as must have taken days to execute.

Pigs were not a numerous, though they were in point of quality a very good entry. And the horses, both saddle and draft, were such as ought to be seen in so noted a county as Leicester.

Fruit, flowers, roots, cereals, shepherd's dogs, music, gay attire, and a very excellent dinner—well served by the landlord of the Newdegate Arms, Nuneaton—we

can do no more than enumerate. And we close with the expression of a hope that many of our provincial societies may be led to emulate the public spirit which evidently animates the minds of our Sparkenhoe friends.

Framlingham: *Sept. — Management of Farm Horses.*—It had been hoped that N. Barthropp, Esq., of Cretingham, would be present to introduce the subject, and to give the Club the benefit of his valuable experience. Unfortunately Mr. Barthropp was unable to attend, and the meeting was thrown upon its own resources.

Mr. D. Smith read portions of the paper on farm horses in Morton's Cyclopædia of Agriculture. The article gave a mass of detailed practical advice on the breeding, rearing, and management of farm horses, advising great care and attention to certain points in selection for breeding, and enforcing the necessity of good pasturage. Oats were stated to be an indispensable food, and Beans were recommended with certain limitations. Turnips and Beet were good, but the value of Carrots had been overrated. Cooked food was recommended. Horses that were regularly worked ought to be but very sparingly turned to Grass. The net expense of the keep of a farm horse was estimated at 20*l.* 5*s.* per annum, but if the value of the horse, with farriery, harness, &c., were included, the figure would be 25*l.* 5*s.* Those were the figures which had been given by a gentlemen of great experience, and were spoken of as being a low estimate.

The Chairman, Mr. Pierson, expressed his opinion with regard to the management of farm horses, that farms should feed themselves. He believed that it was more profitable to breed their colts than to buy their horses. In breeding he was very anxious that his foals should be born as early in April as possible—it was much better then, for many reasons, than at a later period. They were then enabled to bring their mares into work at seed time. He thought the mare should rest with the foal longer than they were generally allowed to do. He never spared his mares less than 4 or 5 months. If he could get them to work again in the middle or latter end of September he was satisfied, and if they were in good strength then he felt he had done what was right. He was of opinion that in this district, having no marshes or anything of that kind to put their horses upon, they could in no case bring up their young stock much better than in the yard. There was one objection, however, to that, which was the heat of the manure and the softness of the ground; which caused the feet of the colts to grow badly and out of shape. The remedy he had adopted for that was this: he had ordered the colts to be an hour every day out upon the hard road. He had a roadway near his farmyard, which was a good hard stone road, and the men who attended to the pigs and the poultry took an opportunity every day to open the yard gates, and the colts were allowed to run and play for an hour upon the road. In consequence of doing that, he had no difficulty with their feet; but if he confined them in the yard, he found their feet got out of shape and form, and it was a difficult thing in after years to get them right. He had kept his colts so till they were three years old. He could turn them out into the meadow only in the hot season of the year, and then he saw they stood half the day in the shade of the trees; which was proved by the way in which the ground was trodden under the trees. But to turn them out on to the hard road for a short time every day was a nice freedom and exercise for them. He confessed, however, he preferred yarding them in the night, especially as there was no opportunity of running them upon the marshes. He thought they could not bring up a colt under 30*l.* He did not think there was a farmer in that room who would say, considering the loss of time of the mare, and all the expenses of bringing up a colt to three years old, that it could be done under 30*l.* They would tell him then that they could go into the market and buy a horse for 30*l*; but to rear the colt themselves was like putting money in a savings bank—the outlay was of such a kind that it was little felt; the food they consumed off the farm would not in all probability have been turned to so good account in any other way, much of the labour that was expended upon them was labour that would, to a certain extent, have been wasted, and altogether, although it was perfectly fair to say that the colt had cost 30*l.* to rear, the farmer would not be 30*l.* lower in cash for having reared it. He therefore recommended the home breeding of the colts. He would advise the farmer to take care to have a good thorough-bred mare; for a good mare cost no more to keep than another; and a good stallion was also not less necessary. He should be sorry to find any serious fault with our stallions, but he regretted to say, from some unhappy cause, they had not been quite so good of late, they had been brought up with less bone than formerly. He strongly advised the farmer breeding colts to go to the best market with respect to the breed and condition, and rear his stock from the very best progeny. One of the questions he would ask the club was whether the mare should be taken for breeding at 3, 4, or 5 years old. He did not recommend breeding from the oldest mares, but from the young, strong, healthy ones, and he would ask the members of the Club their opinion as to the best age.

Mr. Cracknell—I should say four years old.

The Chairman continued, repeating that he never if he could help it turned the colts out into the meadows; it was cheaper and better to keep them feeding in the yard. He was inclined to think that some Tares and Beet, and some Clover of the first or second crops mown, and thrown into the yard, were preferable to turning the colts into the meadows. With regard to corn, he gave a bushel in a week; in the warmer weather a larger supply of Oats, and the proportion of Beans he increased at Wheat seed time. If they did not look well, he added a peck of Beans. He considered Beetroots or Swedes excellent food, but he always made it a rule to cut them. Formerly they used just to cut down the centre of the root, but by that plan the teeth of the colt were often hurt, and it was much better to cut them smaller. He generally trussed his hay, for when he allowed it to be taken from the stack he must say he found it wasted rather fast. He gave a truss and a half of hay in a week, but his men complained that that was too little. There was another point he would allude to. He knew it was customary to litter down the stable for the sake of making manure. He never did that. When that was done there was an escape of ammonia which he was confident was injurious to the colt. He knew many would say he was wrong in this particular, but he believed he prevented noxious vapours by the course he took, and further, he fancied he did not need to litter his stables. Another practice with him was always to grind his Oats, and he believed he saved money by it. He sent his Beans and Oats to be ground together, and he gave of that what was equal to a bushel before grinding. Now, he should like to hear the opinion of his brother members upon some of these points.

Mr. W. Jeaffreson said he had been much interested in what he heard, but for the most part it went directly against his own experience. His horses never did so well as on the meadow. He thought a good piece of pasture was an excellent thing for a horse. Then, again, he did not agree that Oats were a very profitable food for them; he gave the preference to Beans, for it was not so much the difference between the farinaceous and albuminous constituents, but the Beans contained a principle which Oats did not—they contained an element highly conducive to the growth of animal substance. Some remarks had occurred in the article read by the hon. secretary, advising care with regard to temper in the selection of stallions. Now, how was a person to judge of the temper? They all knew they must not rely upon the character given of them by the owners, for according to them the horses were all perfection. They must have some rule for judging of the temper, and for his part he would tell them candidly that he was a phrenologist, and he looked at the heads of the horses. If the horse had a very broad forehead, and ears were set much apart, the animal would be obstinate, and if the ears were very near each other, the horse was timid, and indirectly vicious, but if the ears were moderately separated, they got a character giving rise to firmness in moderation.

The Chairman.—You would say a narrow forehead, and ears close together, would be bad signs.

Mr. Jeaffreson.—The ears clustered together betoken a timid horse, and a timid horse is a dangerous animal. But if you get the ears far apart, and the forehead contracted, you may also be certain that is not a good horse.

The Hon. Secretary.—I have a mare you could run a wheelbarrow between her ears, and she is a most vicious brute.

Mr. Jeaffreson.—But she is not timid?

The Hon. Secretary.—No.

Mr. Kent thought the mare might be put to work the last week in July, or the first week in August. Otherwise he found the colt had been kept in a state of dependence too long and could not shift for itself in the winter. He generally put the mares to work at harvest.

Mr. Ashford did not think the mares needed rest so long as had been stated. He put them to work a little in three or four weeks.

The Chairman said he would put it to the meeting, whether August or September was the better time for taking the foal away from the mare.

A majority of the meeting declared in favour of August.

A decided opinion was expressed by several members that the horses were frequently injured by the stuff that was put upon them to make their coats look well; but it appeared there was not so much of that done now as formerly.

Mr. Ashford said, he wished the Royal Agricultural Society would offer a prize to machine makers for a good available machine by which the farmer could grind his own corn, and cut his own chaff; for by sending the corn to be ground there was so much lost by way of toll.

The Honorary Secretary.—Is not Turner's crushing machine sufficient?

Mr. Gray said no system but the one stone over the other would do. He ground his Beans as fine as he could that way, and made his chaff with it.

Mr. Ashford made some remarks in favour of fine grinding, saying, that four pecks of meal ground fine were equal to five pecks ground coarse.

Mr. Cracknell said he had a little mill of Ransomes, by which he could grind a bushel of Oats in 10 minutes.

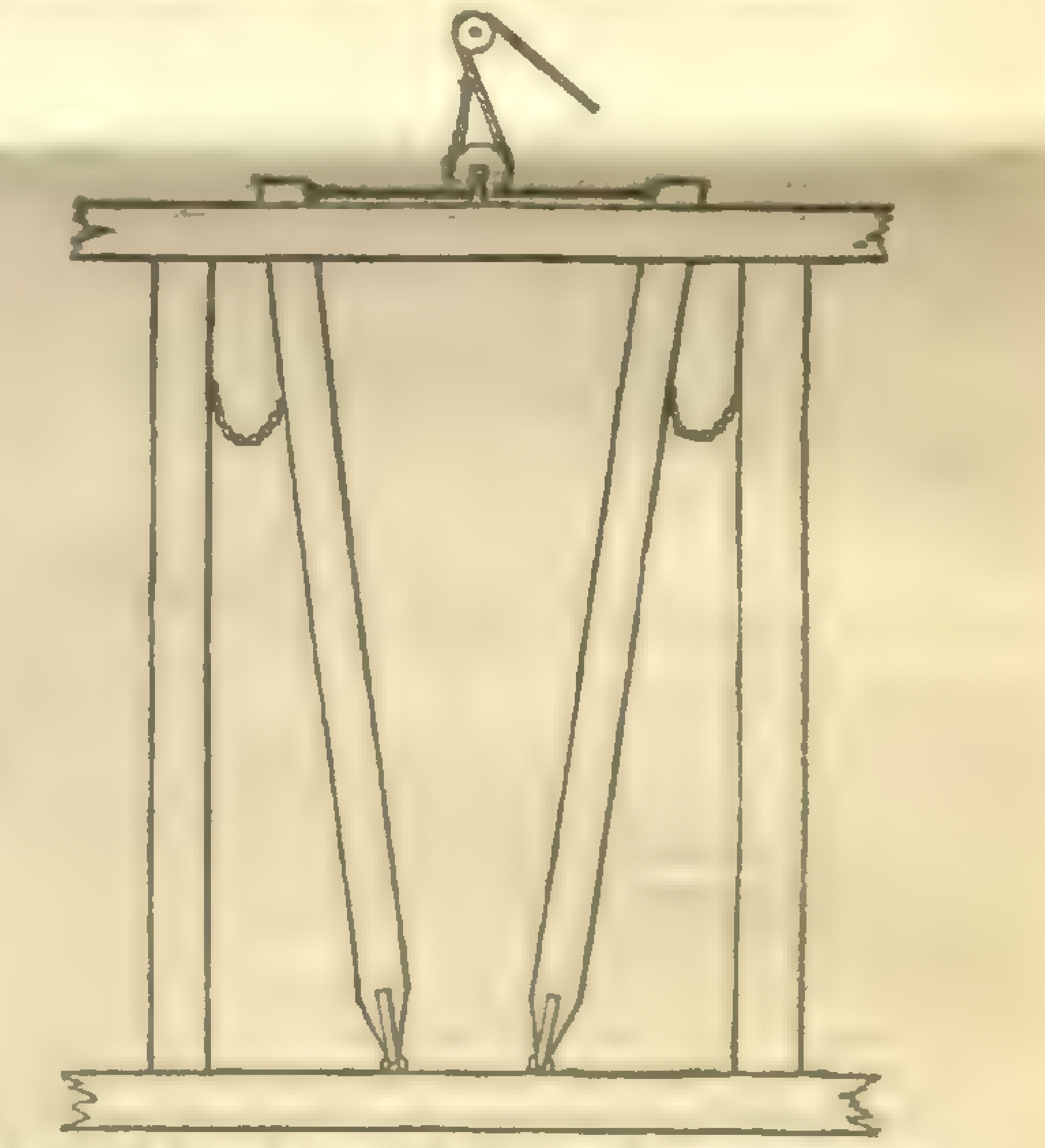
Some difference of opinion appearing as to whether it were better to grind the Beans or to crush them, the vote was taken, when the majority declared themselves in favour of fine grinding. A decided opinion was also expressed in favour of cutting the stover in preference to giving it whole.

The Chairman, in conclusion, said he hoped each of them had learned something in the course of the discussion, upon a subject which very much concerned them all. But they were all anxious for the introduction, as far as possible, of steam power, feeling that if a horse costs 25*l.* per year machinery would be a decided saving.—*Abridged from East Suffolk Mercury.*

Farm Memoranda.

New Park Farm, Hants, lies to the left of the high road leading from Brockenhurst to Lyndhurst. The dwelling house which stands in its centre was at one time occupied by the deputy-surveyor of the forest. The land, which was in bad condition and brought little return to the Crown, has been let for some years past to Mr. Dickinson, whose name is associated by agriculturists with the introduction of a superior and very productive species of Italian Rye-grass. The farm consists of 270 acres, of which 100 are in permanent Grass, the remainder under the plough. Since Mr. Dickinson's occupation the whole has been thoroughly drained 4 feet, at intervals suited to the requirements of the soil, which varies; mainly due to the presence or absence of beds of gravel, resting on the argillaceous sand which forms the subsoil.

To begin with a slight description of the newly erected farm buildings, which are the key to the management, as the growth of Rye-grass is the staple in the cultivation of the farm. First, two sheds for horned cattle about 100 feet in length, separated by a roofed space, which is divided between a cart and railway for the conveyance of the food by small waggons. This is served to the cattle from the outside, through sliding doors in front of the mangers. In one of the sheds appropriated to the beasts permanently tied up, the manger is divided for corn, cake, or roots, and hay and straw. To prevent the waste of fodder the latter division is fitted with an iron grating attached to the transverse side of the manger by a hinge. Through the bars of this the hay or straw is drawn; as the bulk of the fodder diminishes the pressure is maintained by the hinge allowing the grating to fall. The drainage of this and all the other feeding sheds, stables, &c., is conducted to a manure tank of which we shall speak hereafter. Behind the beasts is a space sufficient to allow the introduction of a cart which every morning removes the manure and part of the soiled litter, which is immediately conveyed to and spread upon the land. Having remained on the land some time, when dry this litter is collected by a horse-rake, is stacked, and returned as litter to the sheds. Mr. Dickinson states that the cattle will often prefer the straw so treated to untainted hay or straw. The second shed is devoted to milch cows or beasts who after their feeding may return to the pastures. The contrivance by which these are temporarily stalled is worth notice. Upright bars are fastened by hinges to a sill, and travelling easily through an elongated mortice in the lintil above fall either way, and allow room for the animal's head to find its place with ease on entering the shed; cords attached to the head of the bars pass through sheaves on the lintil to a pulley above, the fall of the cord is drawn from the outside and is easily secured. This has only to be cast off to free the animal's head; the attendant can perform either operation without entering the shed; as may be seen from the following representation.



A slight description of the machinery in operation will serve to indicate the food the cattle received, the quantities and time of feeding being necessarily a matter of judgment. The fatting beasts are not allowed the free use of water.

By the side of the cattle sheds is a sheep house, divided by a longitudinal passage fitted with a railway between the pens for the conveyance of the food. The pens, which are ten in number, accommodate 160 fatting sheep on sparred boards. Fast feeding is the object, though more experience is required to determine how far this is accomplished by this system. Lameness, one of the great drawbacks to the well-doing of sheep, has been here, as elsewhere, alleviated. The leading object is the collection of the manure, which is conveyed by drains and pipes to the tank. The pens are washed down every other day. It is stated that on one occasion the sheep were seized with giddiness, caused by the return of the vapours through the pipe which conveys the manure to the tank, though the tank is at a considerable distance. The evil was at once corrected by bending down the mouth of the pipe below the level of the liquid, a hint to those who in a like case may neglect this precaution.

The building in which the food is prepared consists of two stories, and is about 180 feet in length. The machinery, of which the shafts extend throughout the building, is driven by an 8-horse moveable engine by Tuxford. To notice a few of the arrangements of the building; first, next to the sheep and bullock house an

liarity in his seedlings of Primula sinensis. Some had three leaves in a ring, others two; most had the leaves standing one over the other as usual. These were divided into three sets, and when they flowered the first lot were all double, the second semi-double, the third single.

This curious observation, if confirmed by others, would seem to show that that tendency to alter the usual arrangement of organs, which results in the production of double flowers, is an inherent constitutional peculiarity pervading the system from the very first, and not a mere local disarrangement, as it may have seemed at first sight to be.

—— A WRITER in the *Revue Horticole* reports that, thinking Tobacco smoke too expensive a remedy for the green fly on his Peach trees, he had had recourse to that of rosin, which he found answer just as well, at a far smaller cost.

—— In the same periodical M. CARRIÈRE speaks of a HARDY BAMBOO named *Bambusa viridiglaucescens*, which seems to be a plant of much promise. From the figure that is given of it we judge it to have a very graceful drooping habit, producing numerous laterals covered with foliage, and having an appearance quite unlike that of *B. Metake*, which has now so fully established its claims to hardiness in this country. It is said to grow 4 yards high and more, with deep dull green canes, and fine broad taper-pointed leaves of a shining green colour on the upper side, but covered with a rich bloom beneath. The native country is unknown, but is believed to be the north of China. M. CARRIÈRE considers it by far the finest Bamboo yet known.

—— Two new and remarkable Cucurbits have also been made known in the *Revue* by M. NAUDIN. The first is THLADIANTHA DUBIA, a species from China, introduced by the Acclimatation Society, as hardy as our Bryony, as fast a grower, and like it clinging to anything in its way. Its leaves are heart-shaped, narrow, pointed and velvety; its flowers, which appear in profusion in July, August, and September, resemble elegant Campanulas of the brightest yellow. As an ornamental plant this may be compared to the Convolvulus, with which it will go well as an ornament of walls, trellises, &c. Its perfect hardiness is however such that M. NAUDIN recommends it as a hedge plant, *for which purpose its thick foliage* and thousands of flowers especially recommend it. Besides which it is strictly a perennial like Bryony and requires no more care. Some people have had a notion that the tubers might be eaten, and M. NAUDIN reports that in fact they are quickly cooked, when they become tender and mealy. But unluckily they are much too bitter for kitchen use, and are better suited to an apothecary's shop.

The second novelty among Cucurbits is CYCLANTHERA EXPLODENS, a plant from New Grenada. This is an annual with an irregular uneven prickly surface, which never changes colour, and is only known to be ripe when the gourdlets (*s. v. v.*) explode like a little bombshell, casting the seed in the face of the imprudent spectator who goes too near them. This is a grand recommendation to a sly amateur who has a mind to astonish his friends. Although from the tropics this plant is so hardy that it comes up self-sown in the climate of Paris, a circumstance doubtless owing to its being a native of the lofty mountains of its native country. At this moment, says M. NAUDIN (March 31), seedlings are coming up all over the border, although the seeds must have had to bear a temperature of 3° to 14° (Fahr.)

A PAMPHLET* has lately been published by M. DE SZEMERE, a Hungarian gentleman, upon the WINES OF HUNGARY, in which we find some matter extremely interesting to our own Grape-growers. The excellence of Hungarian wines is well, though not widely, known; that excellence is due not to peculiar skill in wine-making, but to the extraordinary excellence of the Grapes of the country; what secures that excellence we learn from the pamphlet before us.

"The Hungarian wines," writes M. DE SZEMERE, "are, generally, stronger than the French or the Rhine wines. The reason of this may be sought in the kind of Grape, in the properties of the soil, in the peculiar climate of the country, and finally, I think, in the fact, that in Hungary the Vineyards are commonly situated upon elevated hills, I dare even call them mountains. The Hungarians knowing the Latin old proverb: '*Bacchus colles amat*,' (Bacchus loves the hills), have followed the advice; they even now laugh at and despise the wines growing in the low plains, which is the case with most French wines.

"Nothing is grander or more beautiful than our mountains crowned either with shady woods, or with Vines of exuberant vegetation. Where you see a mountain, there you will find our Vineyards. The superb *Badacsony* mountains form a high semi-circle around the majestic Lake of Balaton, covering a surface of 125 English square miles. The arid mountains of *Ménes* or *Világos* overlook proudly the rich plains of the Bànat, the holy Kanaan of Hungary. The mountain called *Tokaj* rises in another large plain like a lofty pyramid; it has the form of Vesuvius, and indeed, its existing but silent crater, and its volcanic formation show evidently that it was once a fire spreading mountain. The cultivation of such a soil is very difficult and expensive, the produce obtained but little, but then the latent fire of this volcanic mountain is what we call Tokaj wine."

This Tokay gave rise to the ancient proverb *neque vinum nisi Hungaricum* (no wine for me unless Hungarian).

"Tokaj, it should be known, is not the name of a vineyard, but of a town at the confluence of the Tisza and the Bodrog, at the foot of an extinct pyramidical volcano left standing, as a landmark of chaos, on the border of a vast plain, and seemingly turning away the waters of heaven to satisfy the eternal thirst of its fireless crater. All that is produced on the southern flank of this mountain and of the neighbouring mountains of volcanic origin also, and similarly exposed to the ocean of heat and light that floats over the country before them, is called Tokaj wine. What has been said therefore, as an Austrian puff, about Tokaj wine being produced only in very small quantities on a patch of land belonging to the King of Hungary and two or three princes, is evidently a mere fable. The vineyards of Tokaj, called by the Hungarians Hegyalja, are more than 5 geographical miles in length, and cover upwards of 60,000 English acres, producing on an average about 100,000 ako (1,250,000 Imperial gallons) of ordinary wine; 30,000 ako (375,000 gallons) of superior or fair wine, and 4,000 ako (50,000 gallons) of superfine wine."

Nevertheless few can truly boast of having tasted it; "the great majority," says the author, "are in the same case as the countryman who was asked whether he had ever eaten pheasant:—'Not precisely,' said he, 'but my brother when in the army often saw his officers eating some.' The land is dug over three times; the Vines are planted half a yard apart, and from three to five buds are left on each stock. The Vine is allowed to grow to the height of 3 or 4 feet; it is supported with stakes as in France. The country has a plant of its own, and at most four or five varieties, among which the most important is the *formint* or *furmint*, corresponding (I think) to our pinot; its produce is small but of excellent quality. From the author's silence on the subject, I suppose the soil is never manured.

"The vintage in Hungary is later than anywhere else in Europe, as it generally takes place between the 28th October and the 20th November; when the weather is already cold, when snow even has fallen, in short at the very last moment, just before the frost sets in, and at the risk of losing all; for these primitive wine growers would rather lose all than not have the best; their maxim is that if Summer ripens the Grapes, 'it is the cold of Autumn that perfects the wine.' Summer, you must know, is hot at Tokaj, hotter certainly than at Beaune. On the 15th August the Grapes are ripe and we in France should gather them; but the superior Tokaj wine does not, like ours, come from the must; it cannot be the marvel it is, unless the Grapes that produce it have dried, not spread out on straw, but on the Vine itself, not with the stem twisted, as it has been supposed, but having the full flow of sap, without getting stained, blighted or mouldy by the alternate white frosts of night and the bright sunbeams of Autumn. If the Autumn proves damp the crop is lost. But in that country the Autumns are nearly always dry."

Observe now the great points in these statements. Tokay, the finest wine in the world, is produced under three conditions. 1. The soil is poor, and volcanic; 2. It is never manured; 3. It comes from Grapes ripened on the sides of mountains where the air is dry, in constant motion, and the sunbeams are never intercepted. *In these places the Vine disease is wholly unknown*; it has never appeared in Hungary, as we long ago stated. It is in reality the child of ammoniacal manure, of damp, and suffocation. In consequence of its freedom from this pest, Hungary was able to supply the deficiency of the French and Italian Vineyards when oïdium was at its worst in those countries. "Thus we were called upon to make up the great deficiency caused by the oïdium in all the other countries of Europe, not excepting France, which in 1854 produced only 10,000,000 hectolitres instead of from 35 to 45,000,000 as in the other years."

Surely these authentic statements are highly suggestive, and should be regarded by Grape-growers as the cardinal points of cultivation, to which it should be everybody's aim to approach as nearly as circumstances render possible. For ourselves we should like to see the produce of a vinery in which a good strong heat is maintained day and night, from the time when the berries begin to swell up to their complete maturity, but from which all side sashes should be wholly removed.

We also advise the lovers of generous wine, as contrasted with the small and spurious trash now coming into consumption, to read Mr. SZEMERE's pamphlet attentively, and perhaps they will thus become acquainted with the mysteries of the fraudulent part of the wine trade, which will not a little astonish them; for one example we must contrive to find room.

"The marvellous discoveries which are daily made in chymical science are continually and skilfully applied not only to improve but to adulterate the wines. In this manner do the Germans sweeten their wines; in this manner they saturate them with sulphur, with the view to neutralise their natural propensity to become acid, not only in casks, but even in bottles; in this manner they give them the artificial but to the connoisseurs disgusting flavour of Muscat. This trade of spurious wines is carried on in France to a still greater scale. All is false in the wines: the colour, the strength, flavour, the age, even the name under which they are sold. There are wines which do not contain a drop of grape juice. Even science is impotent to distinguish the true from the false, so complete is the imitation. You may every day see advertised in the French newspapers the "Séve de Médoc," of which a small flacon, costing 3 francs, is declared sufficient to give flavour to 600 litres. Paris and Cette are the principal seats of this fraudulent adulteration. It is practised in both places on the most colossal scale. *Certainly half of the Parisian population drink, under the name* of wine, a mixture in which there is not a drop of Grape juice. The police are unable to prevent this adulteration, but the laws punish it with great severity —every week do the newspapers publish judgments against wine merchants and grocers, in execution of which their wines, 20, 30, 80 hogsheads at once, are poured into gutters. But this dishonest art is now so perfect, that even clever chymists can with difficulty distinguish the true wine from the false. Such was the case in a very recent trial. The chymist, after reporting all the ingredients of which the wine was composed, observed that if one of them were in less quantity, he would have been unable to distinguish it from a natural wine. The prosecuted wine merchant, who was present, listened attentively to the chymist's report, and at last asked him which ingredient it was? The chymist very imprudently told it him, and the accused immediately answered: 'I am very much obliged, sir, and I don't regret now my 40 hogsheads of wine which will be destroyed, because now I am certain of my business.'"

WE have already alluded to the PHLOXES exhibited the other day at South Kensington, as affording promise that this noble herbaceous plant may become an object of exhibition, capable of holding its own in our flower shows, and of assisting to impart something like variety to these autumnal floral gatherings now mainly furnished by the formal and lumpish though highly coloured Dahlia. The exhibition of Phloxes as growing plants cultivated in pots being rather a novel feature, we are desirous of inviting attention to such remarks upon those produced on the occasion referred to, as their appearance suggested, while they remain fresh in the memory both of exhibitors and visitors.

We cannot suppose that either of the collections presented for competition on the 11th, though respectable in their aspect, were at all equal to what the Phlox is capable of being made under this mode of culture. Their defects, as it appeared to us, were that while one collection was allowed to become too tall, and was to this extent unsightly, the others had been so manipulated as to have lost the fine terminal flower-heads which are a characteristic of this family of plants, and consequently presented nothing but a few weak laterals, which were ineffective for display.

Now, in turning to account the experience to be gained in the actual condition of the plants exhibited, we must not lose sight of the natural habit of these herbaceous Phloxes, which is to produce several erect stems, each terminated by a large branched and in the finer sorts more or less compactly arranged panicle of flowers. The great beauty of the plant consists in the mass of colour, varied in each individual kind, presented in these

* Gorman & Co., 16, Mark Lane, and 31, Pall Mall.

cone-formed heads of flowers. This feature cannot be dispensed with in the Phlox, without greatly detracting from its beauty. Destroy it and the inflorescence becomes meagre and broken up into little sprays; such as indeed it was in several of the plants shown on the occasion referred to. Plants thus managed are not effective even though the varieties may be amongst the finest which are grown. It is equally to be borne in mind on the other hand, that for exhibition purposes the stems must be dwarfed. Health and vigour and profusion of bloom can readily be secured by liberal cultivation, but in addition to these we must have dwarfness, and we must have the terminal paniculate inflorescence, and not mere laterals. The problem for cultivators to solve, is how these results are to be combined. That the combination may be secured does not appear to admit of reasonable doubt.

Reverting then for a moment to the plants as they appeared at the show on the 11th, it seems to us perfectly clear that the collection No. 1, in which the stems had been allowed to grow unchecked to their natural height, was defective in this particular, notwithstanding its profuse display of flowers. We say nothing here as to the varieties exhibited in the several groups, as our object at this point is to invite attention especially to the treatment of the plants and not to the varieties. The best mode of treatment being ascertained, of course it will be as applicable to the finer sorts as to the older and inferior ones. No. 1, as we believe, received too little manipulation; Nos. 2 and 3 were, in our opinion, defective from having received too much; they had been topped at too late a stage of their growth, and at too great a distance from the root, and in this way, while the terminal inflorescence was altogether lost, the lateral growth had not had time or strength to replace it in an effective way. It is between these extremes that the happy medium is to be sought for, and although a little experimental practice may be requisite to fix the exact data, it will probably not be far wrong if the stems are topped when about six inches high, because the shoots then produced will have more of the character of the main or principal stem, and will produce the desired terminal mass of flowers. Whether or not at this stage a sufficient number of "breaks" can be secured to form a well-furnished plant, experience must determine; at any rate we can hardly suppose the result will be less satisfactory than that of topping the stems when from a foot to a foot and a half in height, and leaving nothing but weak lateral shoots to furnish the specimen. We notice in some of the sorts a disposition to throw up shorter blooming shoots, as a kind of second growth from the roots, and perhaps this peculiarity if not accidental may lead to a mode of treatment applicable to such varieties, namely to cut away the main stems nearly to the base, early in the summer, trusting to a second weaker and consequently less elongated growth for the formation of the specimen. We have been led to form so high an opinion of the capabilities of the plant, that we shall be glad to see the question of treatment discussed in our columns.

Whatever plan may ultimately be found best in regard to the details of cultivation, the inferior varieties ought to be altogether discarded, at least for the purposes of pot culture and exhibition, now that there exist so many fine varieties of sterling merit. Some of these are really exquisite in the masses of rich colouring they present. What for example can be more beautiful than the bright rosy crimson panicles of Lievallii, a dwarf habited variety and the brightest and richest coloured of all the sorts yet produced. Again, among deep rosy purples, or those unnamed tints between purple and crimson, Madame Lierval and Dr. Boisduval, the latter dwarf in habit, are remarkable for richness of effect, whilst a brighter and lighter shade of this class of colours is well represented in the glorious panicles of Mr. Rollisson and Souvenir d'un Ami, in Alphonse Robin, which is a very showy variety with a deep crimson eye, and in Le Gamin de Paris, which has a telling maroon eye. There are besides fine rose-coloured sorts in which the eye or centre is very conspicuously marked, among which Mr. Punch, a light rose of perfect form, a free bloomer and having a bright crimson eye, is perhaps the best; and President Payen, a deeper rose with an evident but less distinctly marked eye, is scarcely inferior to it. Triomphe de Twickel is a fine rose and white striped sort, very pleasing in its marking as well as showy in character, while Madame Vilmorin is a light pinkish rose; Rosea alba is a clear rosy-lilac, with a distinct white centre; and Boule de Neige is a good white of dwarfish habit; last, but not least, there is a whole bevy of fair ones, which are charmingly delicate in complexion, and have soft-hued and most expressive eyes. Among these, the most fastidious could but admire such a one as Mrs. Standish, whose white flowers have a rosy-crimson eye; or Madame Fontaine, whose eye is of a purplish-rosy hue: or Madame Marceau and Madame Moisson, both blushing whites with an eye of rosy-purple. Now, all these are varieties of fine quality, distinct in character, choice in colour, and in every way desirable; and such a collection would afford capital materials for an essay on the pot-cultivation of Phloxes.

It will be found that the kinds we have here indicated, and indeed all the finer sorts now in cultivation, belong to the group which has sprung from Phlox decussata, sturdy, vigorous-habited sorts, with broad foliage, and blooming late in summer onward till the autumn. Another race originated from P. suffruticosa and P. pyramidalis, and generally known as summer-flowering Phloxes, are not generally cultivable, at least in a satisfactory way, in the neighbourhood of London, though, as many of the fine Scotch varieties belong to this group, we suppose the more northerly latitude of Scotland is more congenial to them.

POMOLOGICAL KNOWLEDGE AMONG THE ANCIENTS.

Previous to the Christian era, and probably up to the fall of the Roman empire, the knowledge of Pomology was very limited. Nevertheless, on referring to Columella, Pliny, and Varro, it will be found that there were known about 50 kinds of fruit suitable for such tables as those of Lucullus, Sylla, Pompey, and Augustus. The above authors have mentioned 20 sorts, of which they did not even give the distinctive characters. It will be seen that they took little or no account of the fruit trees of which Armenia and Pontus afforded them fine examples. With the fall of the Empire and the barbarism of the middle ages, it may be said that fine gardens and fruit culture had disappeared. We know the zeal of Charlemagne, and at a later date the lively interest of Charles VI., for establishing fine gardens near their palaces. That of the son of Pepin at Frankfort was betwixt the court and the garden, *cohortile circumdatus*. Hence is derived the word *courtil*, used in Joinville instead of garden. But notwithstanding the intercourse of this king with Italy, and even with Persia, he does not appear to have known many fruits, for scarcely any are mentioned in the ordinary daily bills of fare for his table. His barbarous successors appear to have inherited still less of his knowledge and desire of natural history than his warlike virtues. We must pass over the time of the Crusades and go on to that of the Valois to find a revival of the taste for fine regal domains. Who has not heard of the immense gardens of the Rue St. Paul, where the rarest fruits and animals were objects on which Charles VI. bestowed especial care. For all this, we still find that they were only those fruits which had been brought at great expense from Italy; they were still the same kinds, or more correctly speaking, the same names, literally taken from Columella, served to distinguish them. The same thing will be found in Olivier de Serres, who speaks of the varieties of Pears called Dollabellianes, Pompeianes, Crassanes, and Tarentines, just as the elder Cato or the head of the gardens of Mecænus would have done.

With La Quintinie we find what great progress fruit-tree culture and vegetable physiology had made. The changes which had taken place in pomology and in nomenclature show that the language had also changed. Without any alteration, either in form or nature, the handsome kinds of fruits which adorned the triumphs of Pompey and Trajan had acquired new names; they became Bons-Chrétiens, Bergamottes, Doyennes, Blanquettes. We are not, however, certain, notwithstanding the increasing number of fruits mentioned in the catalogues of that time (about 60 in Olivier de Serres, and nearly double that number in La Quintinie) whether new varieties had been obtained by sowing the seeds or by importation from distant countries. Unquestionably many of them, or we may say nearly all, have been changed and improved by a better mode of culture; but in reality they are the same fruits under new names taken from all the dialects of France. For more than a century our ancestors continued the error of multiplying names. Much however is due to the Chartreuse, who followed La Quintinie, in purging the catalogues as well as in the intelligent culture which they adopted in their nurseries and orchards. Du Hamel du Monceau rendered great service to the cultivators of fruit trees by the descriptions of fruits, including more than a hundred varieties of Pears, of which, though he gives excellent figures, he does not state the origin.

The work of penetrating into that almost inextricable chaos, the nomenclature of fruits, has been reserved to our age to perform, favoured as it is by numerous and ready means of communication. Collecting all the fruit catalogues, and the common names in France alone, it may without exaggeration be stated that there are 1000 or 1200 Pears of all kinds that are said to be worthy of cultivation. *Extract from a Review of M. De Liron d'Airole's work on Pears, By M. Pigeaux.*

MANETTI ROSES AND ROSES ON THE BRIAR.

I have read Mr. Milne's article (see p. 773) on this subject, and I can confirm it in almost all particulars. The Manetti Roses have far exceeded the Briar Roses in endurance, in revival, and in the abundance and fineness of the blooms. The summer Briar Roses wintered well and have bloomed nobly. The Briars budded on the 3d and 10th of July, 1860, have also done very well. I only saved 67 out of 207 of them. Forty made wood close after budding (nearly all have done so this year) and wintered well and have bloomed well, and the same may be said of the 27 dormant buds. The chief mischief here has been among the "established" H. P's. I lost 67 of these, and many that will not die will never be of service again. A Briar Rose seriously wounded seldom recovers. They are more endangered than Manetti Roses, and are to be defended with more difficulty. They are vulnerable in the wood (when not ripe), at the point of union (the chief seat of damage this winter), in the rind and in the roots. It was the winter suddenly following 16 months of rain and sunless weather, with the sap rising, that destroyed so many. I lost none, however, among Briar or Manetti Roses that dropped their flowers. I did all that I could do to save my fine and well-selected stock, by bandaging the ground plants and stuffing hay and straw into the heads of standards close upon the point of union (the vulnerable place), the object being to keep off heavy dews which give the frost power. Before, however, this was done the snow thawed and subsided on the point of union and refroze, and this damaged the trees. The Manetti Roses were covered over the point of union by earth, and as far as the snow covered them they were safe. Those trees that ripened their wood, whether on Briars or on Manetti, were perfectly intact, while other trees of the same kind cut much for shows died by their sides. After the weather broke I commenced upon the rising of the sap to cut back from eye to eye, till I came close upon the first union, sealing the ends of both stocks with Robinson's glue, and also with a cerate made of bees' wax, oil, soap, and cobblers' wax. This is essential to the hard cutting of Manetti Roses in dry easterly winds. By so doing I saved a good many standards, which are as good and better than they ever were before. I lost some Manetti Roses also, and some were very sick, chiefly from deep planting; but some of the most hopeless of these recovered, and have bloomed well, as for instance the Duchesse d'Orleans and Paul's Victoria, now 6 feet 4 inches high, but bloomless. All the Peronnys died but one home-budded on Manetti. In place of this Rose I would recommend its type, and a hardier and fuller Rose, viz., Lælia. Let me here, lest I forget it, advise those who buy Briar Roses to cut them the first spring as hard as they can, and Manetti Roses as light as they can. They will not then throw up suckers. Manetti Roses should not be cut till full growth sets in, and Briar Roses should not be cut till the eyes freshen. If you cut hard fresh planted Briar Roses at the fall, the chances are you will kill them. With regard to covering Rose trees or plants, there is no doubt that if such another abnormal winter sets in, we must at once cover fresh budded Roses, and Roses on all stocks. As regards Roses old on their own roots, nothing but boiling water will kill. No root is so hard as a Rose root. If the plants are young of course you must protect them, and especially if their wood is not ripe.

I now revert to the Roses on Manetti recommended by Mr. Milne. His first 50 Roses I sent him as a present from Mr. Gill's nursery at Blandford, and these I see figuring in his article. They are also good here. Some of them have never done well on Manetti here, such as Rougemont, Evêque de Nîmes. Others I only know on Briars, viz., M. Lacconière, M. Phelip, Thérèse Appert, Mons. Ravel, Du Petit Thouars, Rebecca, H. Lecocq. Montijo, Reine Mathilde, I know not. 2, 3, 4, 5, 7, are good; 1, 6, 8 are bad growers. Paul Joseph and Proserpine do grandly on their own roots. Rougemont does respectably on Briars. All the other Manetti Roses I endorse. La Fontaine I have now proved, and commend it on Manetti in every respect. Dr. Berthet and Mons. Jard do well on Manetti, but do not always open freely. Georges Dupont is very good and better than either. All my Portemers are on Briars, but Mr. May of Blandford has a noble bush of it. Adelaide Fontaine is a fine Rose in the way of Peronny, but a hard opener. It should be placed against a south wall. One only of my six plants on Manetti died, the others though apparently dead recovered and are nice plants.

Manetti Roses will in due time supersede all but home budded Briars (I except summer Rose Briars), and Roses on their own roots. The great enemy of the Manetti stock has been the propagator. He buds it too high, and hence, as it must be covered over the point of union 2 inches, the roots being 10 inches below the surface, in long continued rains the stock rots unless it strikes higher up, or at the point of union. Bury a Briar Rose as you are instructed to bury the Manetti Rose, and you will get weak wood and bad flowers, then weak wood and no flowers, and then death. Bud the stock 4 inches above the radius of roots, and Manetti will yet astonish the world. It is the hardiest stock in the world, and suitable to all lands that have free drainage.

I owe chiefly to it this year four first prizes, and one fourth prize, having competed five times. In a day or two I shall be at Reading, and time will show whether my Manetti Roses can be depended upon.

Lest my friend Mr. Milne should burn his fingers with the new Roses, I recommend him in public, as I have done in private, to buy those Roses which are good; and, as far as I have tried Roses of late importation, they are the best, and worthy of a place in every garden, namely, Eugène Appert, Gloire de Santenay, Belle de Bourg la Reine, M. Louise Carique, M. Furtado, Triomphe d'Amiens, M. Charles Crapelet, Senateur Vaisse, M. Melanie, Parmentier, L'Elégante, Victor Verdier (stiffer and smoother in petal than Jules Margottin, but not so free a bloomer; the sepals are the same), and M. Bonnaire. Alexandrine de

Belfroy is a supply for Cynthia, but I have not proved its habit, which is as essential as the flower itself. *W. F. Radcliffe, Rushton Rectory, Aug.* 26.

Home Correspondence.

New Race of Nectarines.—I send one fruit of my new hybrid Nectarine between the Stanwick and Violette Hâtive, and I am vain enough to think it a great triumph. The Stanwick is the male parent, the Violette Hâtive the female. It is most interesting even physiologically to note the influence of a few grains of pollen. It is earlier by a month than the former, and later by a fortnight than the latter, ripening freely in a common orchard house, which the Stanwick will not. The male has given the long sickle-like leaves some of its oval shape, and *all* its fine and peculiar flavour. The female has given it precocity, a non-cracking tendency, and the valuable quality of not dropping off in stoning, great productiveness and small flowers. The little tree, only three years old, in a 9-inch pot bore 10 fruit. When allowed to develope itself it will, I think, be one-third or one-fourth larger. *Thos. Rivers.* [The fruit was of the highest quality, much like a Stanwick in appearance. We must congratulate our skilful friend in having broken into our old race of Nectarines, and of having founded a new one.]

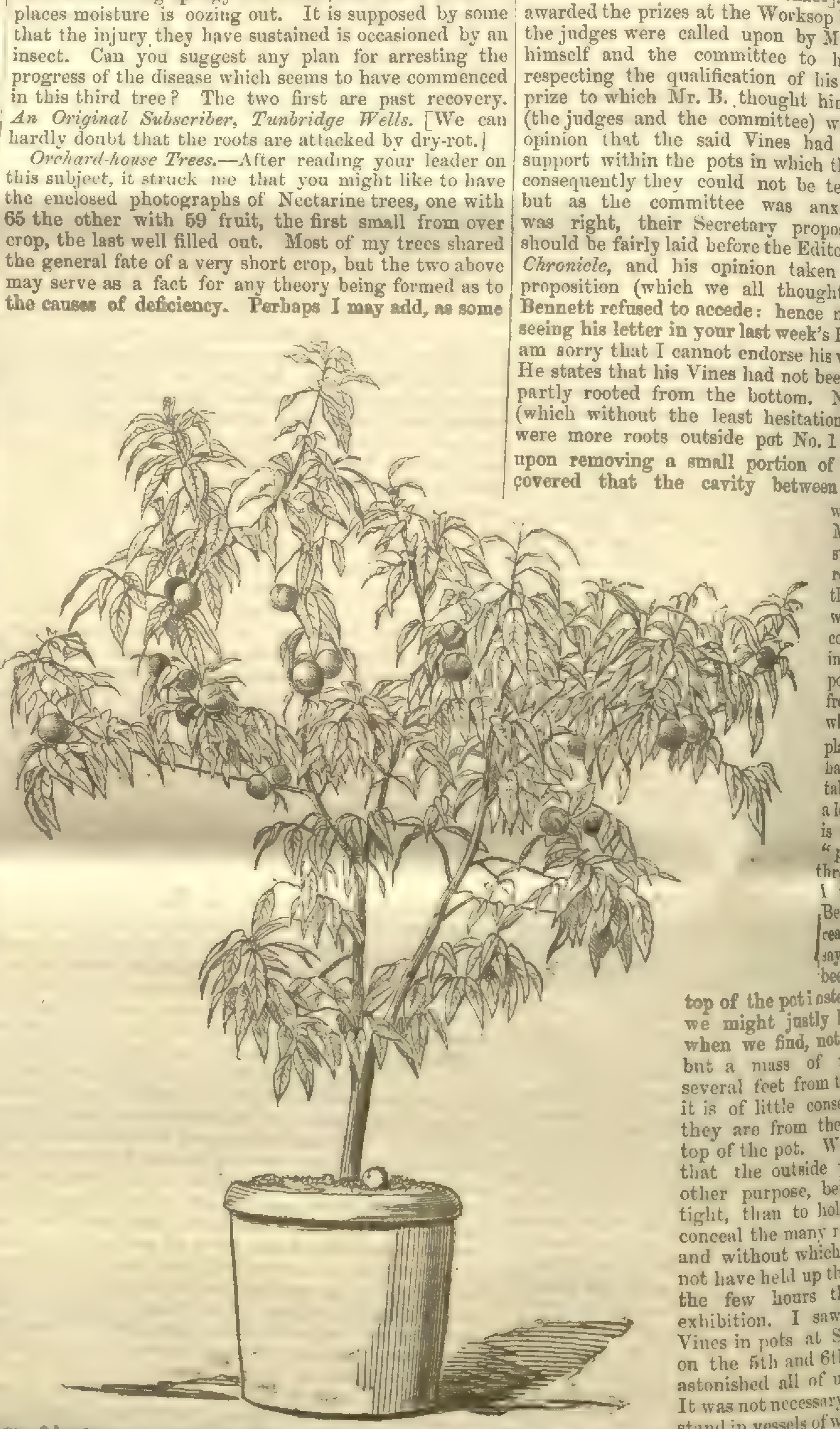
South Kensington Garden.—For the last six months I have been looking forward to this autumn, anxious to see the effect produced by flowers skilfully arranged in those beautifully-designed flower-beds which I admired so much in the spring. I hope I shall not be pronounced a "wretch" for not being enchanted with the arrangement of the colours, or for hoping that whoever planned them has seen the effect produced. Do you not think it a mistake to put bands of orange Nasturtiums next to brick red paths? no doubt the orange Nasturtiums and purple Verbenas by themselves are very pretty, but then they want relief, surrounded as they are by red paths. The impression left on my mind was that there was a blaze of colour, but a great want of harmony. A little further on I came to some dingy beds, I forget the centre colour, but it was some sombre flower edged with grey; there again, the path next it being grey spoilt the effect. I must say I came away disappointed, having imagined a much more beautiful effect produced than I found. There is another thing I should very much like to ask, if I may be allowed, and that is, in these days of improvement, can no way be found of exhibiting cut flowers for exhibition purposes, prettier than beheading them and sticking them on a flat surface, all in a row like so many buttons, and looking to my eye very ugly, instead of very pretty? Some were certainly stuck into ginger beer bottles—I do not know if that was intended for a pleasing variety. Perhaps the growers only care to produce beautiful specimens, which no doubt they succeed in doing, but then those who do not grow them, but set them up to be admired as a "grand show," might I should have thought find some way of making them look less stiff and formal. Everything exhibited at the Royal Horticultural Gardens is, I suppose, placed there to add to the beauty of the place, and not to disfigure it. I wonder if any one thought the table of thermometers, &c., an ornament to the conservatory. It might have been made to look well, I am sure, but as it was they seemed to have been shot out of a wheel-barrow on to the table, and there left all in a muddle. Grateful as we are to the growers of the plants, to whom we give full credit for the skill they show in producing such lovely flowers for our gardens, we should be still more obliged to them if they would make their notes either before or after the time they invite us to come and admire their productions, for I really assure you, Mr. Editor, we had frequently to give up all hope of seeing some of the best specimens, from the knots of men earnestly engaged in discussing their various merits or demerits, and most provokingly preventing us from examining that which seemed so well worth seeing. *A Lady Visitor.*

Thrips in Dahlias.—I have heard of and sometimes seen the ravages caused by this little monster, but have never known anything to equal the devastation caused by it this season in the Dahlia grounds of Mr. Turner at Slough. It is no exaggeration to say that acres of Dahlia blooms have been destroyed by it, and this while the plants were in the most vigorous health. I measured leaves one foot in length and nine inches broad, and yet the blooms on these same plants were completely destroyed; the young blooms were attacked before they opened, and in fact they never did open properly, the petals being gummed together. The plants were squeezed and mulched, the buds tied up in muslin, but all to no purpose, and the consequence is that Mr. T. is obliged to retire from exhibiting any more this season. This has no doubt been occasioned by the excessive drought. Can any of your Correspondents suggest a remedy? *D. Deal.*

Isabella Gray Rose.—About two years ago I forwarded you a bloom of this Rose, which was favourably noticed last season. Owing to the wet cold summer, it did not succeed so well; but this autumn from small dwarf plants turned out in the open borders in May, I have had abundance of large flowers of a most brilliant orange, quite equal to "Persian Yellow," and of good shape. The boisterous weather to-day has, I find, destroyed those blooms that were expanded, but as there are plenty of buds, should the weather prove favourable I hope to have a continuance of flower until late in autumn. Have any of your other Correspondents been equally successful? *H. J. Oldroyd, Nurseryman, Shrewsbury.*

Diseased Beech Trees.—On a common in this neighbourhood stand two very large and ornamental Beeches, which had previously appeared in good health, but about five years ago they exhibited symptoms of decay. They put out very few leaves, and the bark came off in large pieces. This year and last they had no leaves at all, and they are now quite dead. Another Beech standing a few hundred yards from them, but not so large, appears to be failing in a similar manner. The bark is becoming spongy and rotten, and in two or three places moisture is oozing out. It is supposed by some that the injury they have sustained is occasioned by an insect. Can you suggest any plan for arresting the progress of the disease which seems to have commenced in this third tree? The two first are past recovery. *An Original Subscriber, Tunbridge Wells.* [We can hardly doubt that the roots are attacked by dry-rot.]

Orchard-house Trees.—After reading your leader on this subject, it struck me that you might like to have the enclosed photographs of Nectarine trees, one with 65 the other with 59 fruit, the first small from over crop, the last well filled out. Most of my trees shared the general fate of a very short crop, but the two above may serve as a fact for any theory being formed as to the causes of deficiency. Perhaps I may add, as some



of my friends have doubted Gishurst Compound being the culprit, that both of the above trees were winter-washed with a strong solution of Gishurst, according to the directions in Mr. Rivers's later editions of the "Orchard House." I have put with 12 Nectarines a Golden Drop Plum, and a Winter Nelis Pear. *George Wilson, Gishurst Cottage, Weybridge.* [We give a copy of one of the photographs by way of encouraging the unfortunate.]

Vines in Pots.—Having seen the Vines in pots exhibited by Mr. Bennett at the Worksop fruit show, and read his account of their management in your columns of last week, I for one must dissent from your dictum that he is entitled to the prize. I opine that prizes given for Vines in pots should be for plants wholly grown in them, and not for those that although in pots are rooted through into tan or borders. All the practical gardeners present at the Worksop show could see at a glance that Mr. Bennett's Vines could not possibly by their style of growth and vigour be grown in the sized pots in which they were exhibited. I understand that the judges, suspicions were first aroused by the waterings repeatedly given them in the early part of the day to keep them from flagging, and that they at last began to think that they had some aquatic variety of the Grape to judge. A gentleman present told me that if such Vines as Mr. Bennett's were not disquali fied, he could bring in another year young Vines with 20 bunches on them grown precisely in the same manner. There is therefore no distinct line to draw to prevent fraudulent showing of Grapes in pots, except disqualifying all but those entirely so grown, which can be easily ascertained by the judges without poking in Moss for roots as thick as a man's finger. I have no doubt that some of the fruit judges at the Worksop show will set the matter in a clearer light in your columns than I have done, and justify their award of disqualification. *A Spectator.* [Our remark was founded on the supposition that Mr. Bennett's statement was exact].——After having awarded the prizes at the Worksop Horticultural Show, the judges were called upon by Mr. Bennett to meet himself and the committee to hear his complaint respecting the qualification of his pot Vines for the prize to which Mr. B. thought himself entitled. We (the judges and the committee) were unanimously of opinion that the said Vines had not received their support within the pots in which they were exhibited, consequently they could not be termed "pot Vines;" but as the committee was anxious to *do what was right*, their Secretary proposed *that the case* should be fairly laid before the Editor of *the Gardeners' Chronicle*, and his opinion taken thereon. To this proposition (which we all thought a fair one) Mr. Bennett refused to accede: hence my astonishment on seeing his letter in your last week's Paper, page 831. I am sorry that I cannot endorse his version of the case. He states that his Vines had not been plunged, but had partly rooted from the bottom. Now, when I assert (which without the least hesitation I do) that there were more roots outside pot No. 1 than inside, and, upon removing a small portion of Moss, it was discovered that the cavity between the two pots was not filled with Moss and water (as stated), but with roots coiled round the pot, and which when partly uncoiled and protruding from the top of pot No. 2 reached from the stage upon which they were placed down to and half way across the table below, I am at a loss to know what is meant by being "*partly rooted through.*" Nor can I understand Mr. Bennett's mode of reasoning when he says, "Had they been rooted from the top of the pot instead of the bottom we might justly have objected;" when we find, not a solitary root, but a mass of roots, extending several feet from the pot. Surely it is of little consequence whether they are from the bottom or the top of the pot. We were persuaded that the outside pot was for no other purpose, being made water-tight, than to hold water for, and conceal the many roots it contained, and without which the Vines would not have held up their vigour during the few hours they were under exhibition. I saw those beautiful Vines in pots at South Kensington on the 5th and 6th of June, which astonished all of us "Midlanders." It was not necessary that they should stand in vessels of water. Mr. George Masters, the scientific grower of those which took the second prize, told me that although it was their third time of fruiting in the same pots, they had never rooted through. I call that "showing Vines in pots." If you are still of opinion that we (the judges) were in error, I, as one of them, am ready to acknowledge, and am sure the committee, being actuated by no other than upright motives, will be most glad to give the prize to whom it is due. We shall in that case, at all events, have been taught a "dodge," and which may be of service to other exhibitors of "Vines in pots." *J. W. Parke, Grove Hall, Retford, Notts.* [We have other letters to the same effect. This puts Mr. Bennett's case in quite a new light; and we withdraw the opinion we formed upon his *ex parte* statement.]

Squirrels.—In one of his interesting essays Mr. Waterton writes, "If squirrels injure the shoots of my Spruce Firs, which they are known to frequent, trivial indeed must be the damage, and quick the reparation by old Dame Nature, for the trees bear no marks of aggression." I wish I could say the same of my trees; but you will be able to judge what the aggression has been, from the collection of bark which you will receive with this, the whole of which was gathered from the foot of a single tree, a small Larch about 12 inches in circumference. Hundreds of trees have been thus treated in a mixed plantation of Larch, Scotch, and Spruce, but

the Larches only have been attacked. In most instances the trees are barked quite round, and consequently killed. Mr. Bell says the squirrel "lives upon the bark of young trees, leaf buds, and tender shoots." Now taking Mr. Waterton's view of the matter I might forgive the depredators for the damage, as far as it went, to supply them with food; but really this wanton mischief, of which I send you the proof, is, as we say emphatically in the West, "beyond." And yet, to tell the truth, I have rather piqued myself on being a staunch Watertonian, and my orders to my gamekeeper have been to spare the squirrels. My agent on the other hand proposes to offer him 3*d*. apiece for them. Will Mr. Waterton decide between us? *H.* [This note was forwarded to our much esteemed friend Mr. Waterton, who being absent on the Continent has only just been able to favour us with the following reply:—"I scarcely know what remarks to make on the lamentation of your Correspondent who signs himself 'H.' I was very wishful in the 'Essays' to place in a clear point of view whatever might be of service to the reader. Hence I gave him an account of the habits and economy of squirrels just as I had carefully observed them in my own walled domain; and up to this very time I have observed nothing in the squirrels to cause me to alter my opinion of them. If I may judge by the evidence which you have sent me, I must conclude that squirrels are wholesale destroyers of bark. Not having been myself on the place of depredation I am at a loss to draw any safe conclusion why squirrels should be so wicked in one part of the country and so innocent in another. I never pay much attention to the assertions of gamekeepers. All our Fauna which does not come under the head of what is called game has little chance of justice at the hands of these merciless butchers. Were it not for my park wall we should not have a heron, hawk, crow, magpie, or jay left alive in this part of the country. Keepers have denounced them, and squires sign their death warrant. I am quite puzzled with the account which you have sent me. *Charles Waterton.*]

Thrips and Mildew.—In answer to "Coventry" (see p. 831), I beg to say that the best and the cheapest way to keep down thrips and mildew is to employ a little girl at 6*d*. a day to catch and kill the former, and rub off the spores of the latter as soon as it makes its appearance. I have had but few thrips (aphides, I suppose he means) this year, and I attribute it partly to the severe winter, and mainly to my having had the aphides killed by hand for the last three years. Syringing with water is also very destructive to them, as the eggs are washed off, and the young helpless broods pitching on the ground are starved. Last year my trees were covered with mildew, but this year, with the exception of pot Roses under walls, I have seen but little of it. High manuring in summer is conducive to it, by producing quick growth in the leaves, which, being soft and succulent, enable the spores to root more easily. Mildew chiefly, but not solely, affects the leaflets at the top of the branches. The reason why China Roses, and such as Solfaterre and Triomphe de Rennes, are not affected by mildew is, their leaves are glazed and hard. Whatever is conducive to the growth of Mushrooms is also conducive to the growth of mildew. I have dressed less this summer with horse-dung than usual, as it is particularly productive of mildew. My dressing for Roses intended for show has been refuse strong beer mixed with liquid manure, and six times the quantity of pump water. When I have added Peruvian guano I have added 12 times the quantity of water. This mixture has produced fine blooms, and enabled me in seven exhibitions to take eight first prizes and one fourth prize. *W. J. Radcliffe, Rushton, Sept.* 16.——The means I have used to get rid of these pests are as follows:—Stir well about the surface of the soil where the Roses are planted, then give them a thorough soaking of manure water; afterwards use either the syringe or garden engine—we use the latter with water well applied underneath the foliage, two or three times a week; by this method a vigorous and healthy growth will be promoted, and the insects destroyed. With mildew there is no remedy when it once gets ahead, except cutting off the worst of the shoots, but if on its first appearance a good dredging of sulphur is applied, and with occasional watering and syringing it may be kept down and a healthy and vigorous growth successfully maintained. *W. F., Hants.*

Begonias, Viviparous.—Since I forwarded for your inspection in April last leaves of Begonia Rex, showing how young plants may be produced upon the leaves while they remain on the plants, and without the aid of a particle of soil, I have found that others of the almost stemless class to which Rex belongs are quite as ready as the King to become viviparous; and in order that I may be rightly understood I enclose some specimens in different stages of growth, growing freely from the base of the leaves, and pushing shoots even stronger than could be expected from plants of the same age in soil. No. 1, Begonia argentea, shows the first stage, with more than a dozen shoots all ready to push forth; 2. B. Rex, the second; 3. B. Marshalli, the third; and No. 4, the most forward of them, shows clearly that these highly interesting objects, under proper cultivation, are in the strictest sense of the word viviparous. And my opinion is that they are so in their natural habitat. Those of your readers who are cultivators will, I have no doubt, be well able from this description to imagine what a singular effect is produced by a young progeny rising out of the leaves that are still attached to the plant. But should there be any who cannot without seeing these specimens or a wood engraving to represent them, they may, if they wish, in a very short time understand where, when, and how, these plants are produced, by starting with nice young plants and growing large leaves similar to No. 5, B. Queen Victoria, whose dimensions are as follows:—Stalk, 22 inches long; length of leaf, 2 feet 5 inches; breadth, 1 foot 8 inches, and 7 feet round the edge. I may add that these have been grown amongst and under the shade of exotic Ferns, with which they seem to be quite at home. *James Moon, Renfield, Canterbury.* [The leaves sent us were magnificent specimens of growth. Would Mr. Moon oblige us by saying how he contrives to avoid the "spot" which has ruined so many fine plants.]

Cyanophyllum magnificum.—I attribute the curling of the leaves of this to superfluous moisture at the root. My reason for this conclusion is that, having had a plant two months since in a similar state as your correspondent's, I was induced to examine the state of the root and found the soil very wet, and to this I attributed the origin of the mischief. This plant was in an 8 inch pot. My remedy was to break away a portion of the soil and repot in a 10-inch pot with good drainage in a mixture of fibry loam and peat in equal parts, with a little admixture of silver sand; this plant now has entirely recovered. I may mention that I have two others that are and have been quite perfect. From the experience which I have had in the growing of Cyanophyllum, I have decided that to insure success a well drained soil, composed of peat and loam in equal parts, with a little silver sand and a moist warm atmosphere, are indispensable. I may add that last year I exhibited at the June Show of the Royal Botanic Society, a plant of Cyanophyllum 6 feet high, with leaves perfect from bottom to top, the longest of which was 34 inches (including petiole) long, and 18 inches broad. This plant was planted out into a border of a warm stove, but it never prospered. *William Lakeman, Gardener to James Campbell, Esq., Grove House, Hendon.*

Holly Hedges.—Having cut some large Holly hedges in September of last year, we at one time in spring, and the early part of summer, had great doubts from the severity of the past winter whether they would recover or not, as although nothing was taken off the top yet the sides were much cut in, in consequence of being very wide, and a great deal of dead wood was cleared away, which had been produced we supposed from the want of air. No permanent damage has been done, however, as all the plants are alive, and have thrown out shoots; but while the greater proportion have them from the bottom to the top, some only have them at the top. It has occurred to me that it might be advisable to puncture the bare stems slightly with the point of a knife, so as to make the sap escape and be the means of forming a shoot. Will you please to inform me if the proposed method will be likely to answer, and at what season should it be done; but if not what other operation should be tried? *A. C. D.* [Your plan is quite original, but not in the least likely to answer. Cut the main stems further back *next March*, not sooner, and all will go right.]

Cottingham.—In your Number of the 7th inst., you are kind enough to notice "The History of Cottingham." I venture to make a remark or two upon your observations. Cottingham, near Hull, in the East Riding of Yorkshire, must not be confounded with Cotherstone, in the West Riding, and only a short distance from Barnard Castle. The latter has obtained almost a world-wide reputation for its excellent cheeses; but the former has nothing to do, and never had, with such productions. You have almost made the blood of our numerous gardeners and agriculturists to curdle by transforming them into cheesemakers and cheese-mongers. If you will favour us with a visit at our next Floral and Agricultural Show at Cottingham, I am sure after the profusion of herbs, and fruit, and flowers which you behold among us, you will never chronicle against us such a mistake as appears in your last. Your criticism upon the natural system not being founded by Professor Lindley deserves consideration. Perhaps "made popular in England" would be more strictly true. It was not intended that he was the first inventor of this system. Before the Professor is mentioned, you observe the natural system is said to "be now generally adopted on the continent, and year by year becoming more and more appreciated in England." I don't happen to have his book by me just now, but I am pretty certain that I have seen in Dr. Trench's "Study of Words," that the Dahlia was first cultivated by Dahl, the Swede. The Dean of Westminster is so skilful a philologist, that we country writers, when fortified behind his authority, feel as secure as a Roman army within their trenches. It is just possible that the "History of Cottingham" may shortly have to appear in a second edition. If so, as criticism is the royal road to accuracy, the writer will be most thankful for the freest remarks and suggestions either of yourself, or any of your correspondents. He would be especially thankful for any information respecting the Apple tree that bears fruit without apparent blossoms, mentioned page 92 in the note. So also, any remarks upon "the new water weed," would be carefully considered. *C. O., Cottingham Vicarage, Sept* 11. [The Dahlia was named after Andreas Dahl, a little known Swedish Botanist, who never saw a Dahlia. The following is the account of the flowerless Apple above referred to:—"An intelligent parishioner last spring was speaking of the scarcity of blossoms. The trite remark was made to him, 'There may be blossom without fruit; but there cannot be fruit without blossom.' To this he replied, 'There is no rule, however general, without its exception. In the garden of my brother-in-law, Mr. Walker, near Bawtry, there is an Apple tree which bears fruit without exhibiting any blossom whatever. The tree came originally from Cottingham; and when the Apples are produced, they are invariably destitute of pippins.' The Rev. G. H. Woodhouse, Rector of Finningley, assures me that this strange narration is an undoubted fact. But in this manner he accounts for the singular phenomenon:—'I suppose the case to be this—the petals of the flower never expand at all; but the stamen and anthers are there, and do their office without any expanded flower.' This supposition, I doubt not, is correct, though it does not account for the absence of seeds in the Apples that are borne."—Doubtless this is what has been called by different authors Malus dioica, Pyrus apetala, and Pyrus dioica, and of which some account is given in Linnæus' Amænitates Academicæ, ii. 288, under the name of *Pyrus pomifera absque floribus*; a work we have not at hand. We never saw the plant.]

Societies.

ENTOMOLOGICAL: *August* 5.—J. W. Douglas, Esq., President, in the chair. Mr. Bowring exhibited a box of extremely interesting Coleoptera recently received from Penang. Mr. Samuel Stevens exhibited a splendid series of Buprestidæ from Adelaide, comprising nearly 60 distinct species. Dr. MacLachlan, on behalf of Mr. Crewe, exhibited the larvæ of two British species of Eupithecia and two of Cazidrena. The President exhibited various rare British insects, including an apparently new Spilonota, Seraptia fusca abdera 4 fasciata, Myrmedonia coleoptrata, a rare Hemipterous insect, of which the two sexes had been referred to different genera, also Microphysa pselaphoides, taken by Dr. Power in ants' nests. Rare species of the genus Leucania were exhibited by Mr. Stainton and Dr. Knaggs, and a remarkable variety of Polyommatus alexis by Mr. Faraday. Professor Westwood exhibited specimens of the larvæ of Œstrus hominis, forwarded to him by Count Osten Sacken, Russian Minister at Washington, which had been obtained by Dr. Leconte from Honduras. These larvæ were found to differ from other known larvæ of Œstridæ. Mr. Smith exhibited a specimen of a splendid gilt Indian species of Cossida, which had lived 116 days without food in this country, during which period the golden hue had become slightly tarnished. Mr. F. Bond exhibited a new British species of Gelechia. A letter was read from Lord Dunsanny, accompanying specimens of the larvæ of a large species of Geometridæ, which had swarmed to so great a degree in Ireland that they had completely defoliated an Ash plantation half a mile in extent. Dr. Knaggs exhibited fine series of Nonagria Bondii and Acidalea strigillata reared from the larva state.

SINGAPORE HORTICULTURAL.—The first exhibition of this promising Society took place on the 27th July. The tent containing the plants was well filled, and was gaily decorated with bouquets of cut flowers from the Society's Garden and from exhibitors. Among the contributions of the latter were several very tastefully arranged vases, containing Orchids and other rare and showy varieties of flowering plants. There was a good display of plants in pots, a number of which were sent by natives. The Dahlias and Chrysanthemums were in full flower and very healthy. The vegetables exhibited were good, and consisted of Cabbages, Lettuce, Endive, Celery, Capsicums, Cucumbers, and Pumpkins. Two collections of English Green Peas were on the table and were quite equal to home grown. A pot of fine Parsley also testified to what can be done in the way of growing English vegetables in the tropics.

Notices of Books.

The *English Cyclopædia* of Mr. Charles Knight is just completed in four divisions, each division being perfect in itself, and sold as a separate work. The "Cyclopædia of Geography," in four volumes, embraces the physical features of every country, the statistics of its departments, and its cities and marts of commerce; as well as recording its history to the most recent period. The "Cyclopædia of Biography," in six volumes, may fairly be stated to be the most complete Biographical Dictionary extant,—universal in its range, full without being verbose, scrupulously accurate in its dates. It includes notices of living persons of contemporary celebrity, and of others recently deceased. The six volumes contain as much matter as forty octavo volumes, such as those of the "Biographie Universelle." The "Cyclopædia of Natural History," in four volumes, is edited by Dr. E. Lankester, who, in the revision of the articles of the "Penny Cyclopædia," has had the co-operation of several distinguished friends. The Division of The English Cyclopædia now brought out in eight volumes, and which completes the entire work, is "The Cyclopædia of Arts and Sciences," which alone includes sixty contributors in the original "Penny Cyclopædia," while thirty-six new Contributors and Revisers have assisted in the production of the present eight volumes.

It is not too much to say that this is one of the most useful works of the kind which have yet been published.

In a *Prodromus Systematis Cycadearum*, Prof. Miquel describes eight genera of the order, with the species referable to each. In a second part there is a critical catalogue of the Fossil species.

Garden Memoranda.

WOLVERSTONE PARK, NEAR IPSWICH, THE SEAT OF JOHN BERNERS, ESQ.—This lovely place is situated on the banks of the river Orwell, and its finely wooded and picturesque park, descending to the water's edge, adds greatly to the attractions of the pretty sail from Ipswich to Harwich. A new and handsome entrance has just been made near the well known Preston tower, from which the views of the river and the opposite shore are exceedingly striking. The park itself undulates in a most imposing manner, and the spotted fallow deer are celebrated for their beauty. On the left of the drive is a walk about half a mile long with frequent pretty openings to the water, and on each side of it is a most flourishing hardy Fernery carefully kept,

and the Ferns and other plants in it are in excellent condition. The house, a handsome square building with two extensive wings, stands on an eminence, and the park, full of fine old Oaks, descends to the Orwell, a noble expanse of water at high tide. One of the wings has been converted into a handsome conservatory, 70 feet in length by about 20 or more in height. It is furnished with Orange trees, very large Camellias, and abundance of fine creepers and other plants. The Oranges and Camellias are grown in extremely handsome vases, five feet in diameter, of artificial stone, and the quantity of flower buds on the latter, as well as their very healthy appearance, prove how well, they are managed by Mr. Shepherd the head gardener. The interior of this conservatory has an excellent effect, but before its windows, and indeed of those of the entire house fronting the same way, there is one of the most exquisite possible combinations of park, river, and flower garden. The last is in Nesfield's happiest style, and excellent taste has been displayed in bringing it into perfect harmony with all else around it. This exquisite garden is in the centre of a panel of about two acres, surrounded by a curved stone balustrade. There are two rectangular sides, entered by handsome gates of blue and gold, blending well with the colours of the numerous beds of flowers and vases filled with Geraniums, growing and blooming most luxuriantly. In the centre is a basin with gold and silver fish, out of which rises a statue of Diana. The glare of the numerous colours in the variously shaped beds, round which are walks in different coloured gravels, is much relieved by other beds of dwarf Portugal Laurels neatly clipped, and by Araucarias and Pinuses totally uninjured by the last winter's frost. A more fairy-like scene than this lovely garden in combination with the park, the water, and the obelisk on the hill before it, is not often to be enjoyed, and all is kept in the most complete order. The kitchen garden is at some distance from the house, and consists of about eight acres in several walled compartments, including nurseries. The entrance is through a pretty Rosery surrounding the gardener's house, the opposite wall is concealed by a fine mass of Rhododendrons, and before the gates are two bushy gold-striped Yews grafted on Irish Yews, having a very nice effect. This leads to the first compartment of about two acres, the walls of which are well covered with fruit trees, but with the exception of Plums bearing but little fruit, as is the case almost everywhere this season. Here the vegetables are grown, but they are shut out from view with great taste by a long Grass walk, on each side of which is a ribbon border of Lobelias, the Flower of the Day, Tom Thumbs, and dwarf Dahlias backed by a trellis for pillar Roses and Climbers. This renders the appearance that of a flower garden, and it has a most exemplary air of neatness. The crops appeared excellent, and the Onions enormous, especially the New Giant, some of which were 15 or 16 inches round. In the next compartment are too newly planted Vineries, bearing well, and the Vines making good wood. In the one on the right of this is a plant house, for feeding the great conservatory, in which there are some noble Fuchsias and other things in a flourishing condition. Not far from this house there is a double range of pits heated by hot-water, and near them a plant stove in three divisions well filled with numerous exotics. But the great attraction of this house is a noble plant of Bougainvillæa splendens in the best health and full of bloom. We counted upwards of 20 blossoms out, and many buds not expanded. It is grown in a 12-inch pot, and its success does much credit to Mr. Shepherd, who has managed it with great skill. Near it is a plant of Bougainvillæa speciosa promising well. Adjacent to this house on the north side is a new exotic Fernery, which will supply a very ornamental object about to be attached to the great conservatory. There are also some Orchids growing amongst the Ferns. Many of the Ferns are very fine specimens, and there is a large globe basket of mixed Ferns and variegated plants intended for suspension in the great conservatory, which has a novel and pleasing effect. In another slip in the opposite direction there is a Vinery with a fine crop of Black Hamburghs and Muscats, with Peach-house, Fig-house, and a house for winter stowage. This compartment is very prettily laid out with flower beds for cut flowers, and sets off the glass to great advantage, and is very useful for bouquets. The order prevailing in all these gardens could not be surpassed, and though there is not any great collection of rare and expensive plants, it would be difficult to find a series of gardens more admirably managed both for the beautiful and the useful, doing great credit to the taste of the owner, the genius of Mr. Nesfield, and the skill of the intelligent gardener under whose care they are kept in their present admirable condition.

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Be prepared with specimen plants in flower to supply the places of such as may be going out of bloom. If early Camellias are wanted let some of the most forward be placed in a rather close house, to induce them to open their buds, giving them a regular supply of manure water; and some of the earliest Epacrises may soon be placed in a close part of the greenhouse, where they will open their blossoms and be useful for early decoration; also Daphnes and many other plants, provided their flower buds are prominent. Aim at keeping the atmosphere of this house rather dry, using just enough fire-heat on damp cold nights to allow of giving sufficient air to keep the atmosphere in motion, so as to prevent damp being injurious. Twiners on the roof of stoves should now be more than ever kept within bounds, cutting back all shoots that have done flowering, and tying the others so as to obstruct light as little as possible. Place specimens ripening their wood in the coolest part of the house, and water sparingly at the root. Achimenes, Gloxinias, and Gesneras that are properly ripened off may be stored away in any dry place where they will be secure from frost, but take care to place them where they will be free from damp, and they should not be exposed to a lower temperature than about 45° or 50°; many valuable plants of this kind have been lost through storing them in dry sheds, &c. Hard-wooded shrubs, such as Ixoras, that have not made their wood after flowering, should be encouraged with a warm moist temperature, syringing them lightly overhead, and shutting up the house early in the afternoon. Get any growing plants that require more pot room shifted as soon as convenient, in order to get them well rooted into the fresh soil before winter.

FORCING DEPARTMENT.

Pineries.—Plants now showing fruit will require some attention. Let them be kept rather warm and dry until after blooming, when they will not be so readily injured by a damp or low temperature. Those who grow Pines in pots should gather all those showing fruit together, so as to be able to treat them more judiciously than can be done when they are scattered throughout the whole stock. Plants that have been kept cool and dry for some time past, in order to prepare them for fruiting, should now be placed in a brisk heat, taking care to thoroughly moisten the soil about their roots, so as to get the fruit fairly set and safe before November. Continue to afford young growing stock a warm moist temperature, with plenty of manure water at the root; but use fire heat sparingly, and avoid drawing the plants by a high night temperature. With proper management and convenience, 70° will be quite safe if the weather proves favourable. Successful growers in times gone by recommended a low temperature and dry atmosphere, in order to prevent growth after this season, and under their circumstances this was the most judicious practice, but tan beds and dung linings have given place to hot-water tanks and pipes, and small squares of glass, with wide black laps and heavy supports, have been replaced by roofs which hardly intercept a ray of light, and to adopt the practice of former days would only be a waste of means. It is hardly too much to say that with modern facilities we ought to produce two crops of fruit in the time that was necessary to produce one under the old style of houses and heating, but this cannot be done by those who are afraid to keep their plants growing after the decline of the season. Growers, however, who have still to contend with the disadvantages of dung pits, will do well to regulate the temperature so as to avoid weakly growth, and this must also be attended to under any circumstances.

Vineries.—Take advantage of the present dry weather to get the wood of young Vines well ripened; use moderate fires, with a free circulation of air, and where the object is to ripen the wood keep the atmosphere as dry as possible. Late Grapes not yet ripe should also be assisted with fire heat and a free circulation of air, in order to forward the ripening. Keep ripe fruit cool with plenty of air, to prevent injury from damp, and cut out any decaying berries directly they are perceived. Keep the outside borders covered with asphalte shutters or other material that will throw off wet. Houses in which the wood is thoroughly ripe can hardly be kept too cool, and the ventilators of these should be left open night and day in dry weather. This will prevent the continuance of growth, and is the best means of getting the Vines into a dormant state ready for pruning. The border of the early house should also be covered with something to protect it from wet; for although under ordinary circumstances there would be no immediate necessity for this, it will be better done now perhaps than later.

FLOWER GARDEN AND SHRUBBERIES.

Tender plants in borders must be taken up when there is the slightest appearance of frost. As has been often recommended, give careful attention to young stock, and recollect that sturdy, well-rooted plants are much easier to winter than large plants with long-jointed soft wood. Late-rooted cuttings may still be potted off; but unless they are very thick in the cutting pots we would prefer wintering them in these to shifting, for they occupy much less space in the cutting pots, and having more space for their roots, they are frequently more healthy and require less attention in winter than those that are potted singly. Square pans 12 inches wide and 5 inches deep are very suitable for wintering cuttings of Verbenas, Lobelias, and other plants which can be kept in a small state. One of these will hold some 20 good plants, and with care, to prevent their being injured by damp, they will winter quite as well treated in this way as if potted singly in 4-inch pots, and a vast quantity may be stored in a small space. Where things of this kind have to be kept in cold frames or pits, the plants should be potted singly, as they would be very liable to damp off, despite every care, if placed thickly together in pans, and put where it may be impossible to give air for weeks together. Let us, however, protest against the system of wintering bedding stock in such unsuitable places. This practice is generally adopted from some mistaken notion of economy; but if a fair calculation of the time required to attend to plants wintered in this way could be made, and all the losses, &c., taken into account, it would be found to greatly overbalance the trifling cost of putting up a proper heating apparatus and furnishing a few bushels of coke or coal annually. Where alterations are projected or in hand, these should be proceeded with in the most expeditious manner.

HARDY FRUIT AND KITCHEN GARDEN.

Gather fruit and store it as it ripens. Take advantage of the present comparatively dry state of the ground to get Celery earthed up. On heavy soils it is sometimes necessary to surround the plants with sand or sifted ashes to prevent their rotting off, which they are apt to do if surrounded with soil that holds much water. Thin young crops of Turnips, Spinach, &c., before they become weakly and drawn through standing too closely together. Stir the surface of the soil deeply among growing crops to admit air to the roots, and keep down weeds. Potatoes may be taken up as soon as the tops are dead; but the late sorts had better remain in the ground for a time, to get well ripened. The dry warm weather of late has been very favourable, and no doubt will be the means of arresting the progress of the disease. Cut Box edging, and make all clean and neat. Get spare ground manured and dug or trenched for another crop, whenever time can be spared for that kind of work.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending Sept. 19, 1861, as observed at the Horticultural Garden

Sept.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Temperature of the Air. Min.	Temperature of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind.	Rain.
Friday 13	9	30.049	29.776	66	47	56.5	61	59	S.W.	.05
Satur. 14	10	29.710	29.649	64	41	52.5	60	60	S.W.	.02
Sunday 15	11	29.721	29.697	65	46	55.5	59	60	W.	.05
Mon. 16	12	29.995	29.870	60	36	48.0	60	59½	N.W.	.00
Tues. 17	13	30.110	30.087	66	35	50.5	58¼	58½	N.W.	.00
Wed. 18	14	30.173	30.078	71	34	52.5	58	58½	W.	.00
Thurs. 19	○	30.152	29.950	72	44	56.5	60	58	S.W.	.02
Average		29.987	29.872	66.2	40.0	53.1	59.5	59.1		.13

Sept. 13—Densely overcast; rain, cloudy; rather boisterous.
— 14—Clear and windy; rain; very fine at night.
— 15—Light clouds and fine; showery.
— 16—Fine, low dusky clouds, fine.
— 17—Slight haze; cloudy and fine; densely overcast; cold at night.
— 18—Foggy; very fine throughout; nearly freezing at night.
— 19—Slight haze; very fine; partially overcast; slight rain.
Mean temperature of the week 3¼ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Sept. 28, 1861.

Sept.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 22	67.0	46.0	56.5	17	0.50 in.	–	3	9	1	6	9	5	2
Mon. 23	66.4	46.5	56.4	16	1.21	–	6	7	2	6	8	5	1
Tues. 24	65.8	45.2	55.5	15	0.75	2	8	2	1	5	10	6	1
Wed. 25	65.7	44.2	54.9	16	0.30	2	4	3	2	6	11	6	1
Thurs. 26	65.2	44.9	55.0	18	1.68	–	5	6	2	8	10	1	3
Friday 27	65.1	45.4	55.2	21	0.57	–	2	4	3	6	11	8	1
Satur. 28	64.6	44.4	54.5	18	0.80	1	4	4	1	10	8	4	1

The highest temperature during the above period occurred on the 25th, 1832—therm. 82 deg.; and the lowest on the 26th, 1855—therm. 26 deg.

Notices to Correspondents.

Bedding Plants: *Brentwood*. The Sage-like plant you saw in Hyde Park is Variegated Balm, which, when kept well cropped in, makes a good edging. The Verbena is apparently Robinson's Defiance, a strong growing brilliant kind suitable for large masses, such as are to be found on the Park Lane side of Hyde Park between Cumberland and Apsley Gates.

Books: Messrs. Virtue & Co. state that although their names are on the title page of Pearson on Orchard Houses, they had not received any copies of the work for sale. Men of business must think this strange management somewhere.

Bread: *A Subscriber*. We are unable to answer your enquiry, nor indeed has it any relation to either Gardening, Farming, or Natural History.

Fly Paper: *J C L*. We do not possess the secret of preparing Moure paper. But we conceive that any bibulous paper steeped in weak sugar and water, poisoned by a strong infusion of fresh White Hellebore, would answer the purpose, if laid in a plate where it can be kept just moist. Of course Veratria would answer the same purpose; or perhaps a strong infusion of Colchicum roots. But any vegetable infusion should be prepared with *cold* water.

Insects: *Sir T S P*. Your moth is a pale specimen of the Acronycta Psi, or common dagger-moth.—*Sir W C T*. Thanks for the rabbits' ears infested with Acaridæ. They are evidently distinct from the Ixodes 6-punctatus found on the ears of the fox. *W.*

Malacca Cane: *Winton*. The plant so called is a species of Calamus, a genus of Palms. We believe that various species pass under that name.

Names of Plants: *R D*. We know nothing of the Bean. As for the greenhouse plant it is no doubt some Eugenia or Myrtus, which, as it is not in flower, is all that can be said. —*A C*. Epidendrum fuscatum.—*E J*. Ajuga reptans.—*J E Frewer*. Swainsona Greyana, a beautiful thing. Red Deal is from Pinus sylvestris, Pine from Pinus Strobus, White Deal from Abies excelsa.—*V H*. The Lilac is superb. We will endeavour to give answers next week.

Oaks: *H A*. All the anomalous processes, such as Galls, Apples, Spangles, and your Hop Fungus, are alike produced by small Hymenopterous flies of or allied to the genus Diplolepis. We regret to say they are becoming more and more abundant every year, to the ruin of Oak trees. Why they thus increase is unknown; but this is certain, that the wet of last winter could have had nothing to do with it.

The Water Weed: *A Beginner* is much misinformed. This troublesome plant is a native of Canada, not Egypt; it was introduced with timber, and not by any Reverend Gentleman; and it has been repeatedly described in this and other works under its proper name of Anacharis Alsinastrum.

Misc.: *W S, Thirsk*. We do not appear to have received your box

THE LONDON MANURE COMPANY
(ESTABLISHED 1840,)
Are now prepared to send out the following MANURES:—
CORN MANURE FOR AUTUMN SOWING.
SUPERPHOSPHATE OF LIME.
DISSOLVED BONES FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN.
PERUVIAN GUANO, NITRATE OF SODA, SULPHATE OF AMMONIA, and every other Manure of value.
116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.
CONCENTRATED TURNIP MANURE, equal in value to the preceding.
Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861 are now ready for delivery at his Factories, at the following prices:—
LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME £6 6
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES . . 5 5
LAWES'S BARLEY, GRASS, AND MANGEL MANURES 8 0
These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
To LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c. IN ENGLAND AND WALES AND IN SCOTLAND.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.
Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.
For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

JOHN FOWLER, JUN., 28, Cornhill, London, E.C.— Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free.

JAMES AND FREDERICK HOWARD, BRITANNIA IRON WORKS, Bedford, Manufacturers of STEAM CULTIVATORS, STEAM PLOUGHS, CHAMPION PLOUGHS, HARROWS, HORSE RAKES, & HAYMAKERS.
Catalogues, with full particulars, sent free on application.

CARSON'S ORIGINAL ANTI-CORROSION PAINT is now used extensively for all kinds of OUT-DOOR WORK, such as IRON, WOOD, STONE, BRICK, COMPO, CEMENT, &c., and has been proved, after a practical test of 70 years, to surpass any other Paint.
For fuller particulars, see No. 35 of the *Gardeners' Chronicle*, Page 802, or apply to WALTER CARSON & SONS (Successors to the Inventors), 9, Great Winchester Street (near the Royal Exchange), London, E.C.
No Agents throughout the United Kingdom

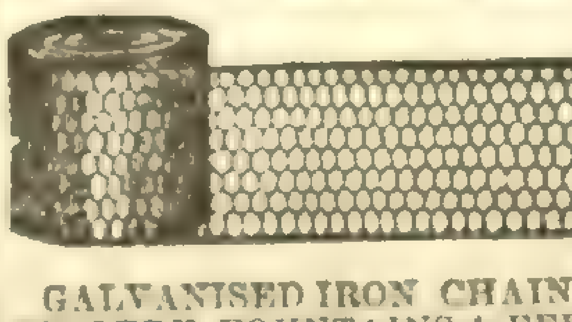
Oil Paint no longer Necessary.
HILL & SMITH'S PATENT BLACK VARNISH for preserving Iron Work, Wood, or Stone. This Varnish is an excellent substitute for oil paint on all out-door work, and is fully two-thirds cheaper. It may be applied by an ordinary labourer, requires no mixing or thinning, and is used cold. It is used in the grounds at Windsor Castle, Kew Gardens, and at the seats of many hundreds of the nobility and gentry, from whom the most flattering testimonials have been received, which HILL & SMITH will forward on application.
Sold in casks of about 30 gallons each, at 1s. 6d. per gallon, at the Manufactory, or 1s. 8d. per gallon paid to any station in the kingdom.
Apply to HILL & SMITH, Brierley Hill Iron Works, near Dudley, from whom only it can be obtained.

"FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.
PROTECTION FROM THE COLD WINDS & MORNING FROST.
"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.
Two yards wide . . . . 1s. 6d. per yard run.
Four yards wide . . . . 3s. per yard.
An improved make, 3 yards wide, 2s. 6d. per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d per yard run.
ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.
"It is much cheaper than mats as a covering."

£1000 upon the WOOLSTON SYSTEM against any other system of Steam Cultivation.
For price of apparatus and particulars apply to Mr. W. SMITH, Woolston, Bletchley Station.

Prices Reduced.
H. J. MORTON AND CO., Galvanised Iron Works, 2, Basinghall Buildings, Leeds.
GALVANISED IRON ROOFING
for Farm Buildings and other Roofs; the cheapest, most durable, and neatest Roofing in use; also Spouting at 10½d. per yard.
WIRE STRAND CABLE FENCING

(formed of Twisted Wires like a rope or cable), the strongest, cheapest, and neatest fence in use, will resist the largest cattle, and will not bend or get out of form by trespassing upon or over. Price, with five lines of the Galvanised Strand, iron main posts, and pronged Standards, from 1s. per yard.
This fence is far cheaper than posts and rails, or any kind of iron fencing; and possesses four times the strength of solid bars. Will not rust nor corrode. Upwards of 1200 miles of this Fencing supplied.
GALVANISED GAME AND POULTRY NETTING.



Galvanised, 24 ins. wide 2 inch mesh, 4d., 4½d., and 6½d. per yard.
Galvanised, 24 ins. wide, 3 inch mesh, 2¾d., 3¼d., and 5½d. per yard. The Netting made any width, and with openings of any size.
GALVANISED IRON CHAIN CAMP STOOLS & CHAIRS, POULTRY FOUNTAINS & FEEDERS, PRONGED DAHLIA RODS AND ROSE STAKES, &c.
Strong CATTLE HURDLES from 9s. per yard.
PATENT IMPROVED GAS WORKS
of all sizes, for the use of Private Houses, Mansions, Railway Stations, Mills, Collieries, Mines, Villages, &c. Works from 10 to 500 lights estimated for. The works can be entrusted to an ordinary labourer.—Apply to
HENRY J. MORTON & Co. 2, Basinghall Buildings, Leeds.

J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25s. 6d. each.
IRON YARD AND GARDEN PUMPS
3 feet 6 inches under spout
2½ 3 3½ inch
43s. 53s. 60s. each.
J. TYLOR and SONS manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.
PUMPS of J. TYLOR & SONS' manufacture to be obtained of Plumbers in all parts of the United Kingdom.
J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

JOHN WARNER AND SONS, BELL and BRASS FOUNDERS to HER MAJESTY, HYDRAULIC ENGINEERS, BRAZIERS, &c., 8, Crescent, Cripplegate, London, E.C.

No. 35.

WARNER'S PATENT CAST-IRON PUMP, for raising Water from Wells not exceeding 25 feet in depth.

Diameter of Barrel.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead, gutta percha or cast iron flanged pipe as required.	1 1 0
2½ ,, long	3 ,, 3 ,,		1 10 0
3 ,, ditto	3 ,, 6 ,,		2 4 0
3½ ,, ditto	3 ,, 6 ,,		2 9 0
4 ,, ditto	3 ,, 6 ,,		2 18 0

2½ ,, short, with 15 feet of Lead Pipe attached, ready for fixing 2 0 0
2½ ,, long ditto ditto ditto 2 14 0
This Pump is fitted with J. W. & SONS' Patent Vibrating Standard, Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.

WARNER'S IMPROVED LIQUID MANURE OR GENERAL PORTABLE PUMP.

No. 42.

This Pump is fitted with WARNER'S Patent Bucket and Valve, and cannot clog in action. The Barrel is made of Galvanised Iron, not likely to corrode, and can be raised or lowered at pleasure on the stand, the legs of which fold together, and it may be carried with ease by one man.

	£ s. d.
Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe	2 15 0
If fitted with Barrel of Planished Copper	3 4 0
Stand and Pump, with plain Tail Pipe, for tying on Suction Pipe	2 9 0
2-inch India Rubber and Canvas Flexible Suction Pipe, on wires, in either 10, 12, or 15 feet lengths . . per foot	0 2 5

No. 43 is a similar Pump to the above, without stand, but with strong wrought-iron straps, for fixing to water cart or plank, price 2l. 5s.
Every description of Machinery for Raising Water, by means of Wheels, Rams, Deep Well Pumps, &c.; also Fire and Garden Engines, &c.
J. W. & SONS Illustrated Catalogue forwarded post free on application.
The above may be obtained of any Ironmonger or Plumber in Town or Country, or of the Patentees and Manufacturers, JOHN WARNER & SONS, 8, Crescent, Cripplegate, London, E.C.

FREE STUDENTSHIP IN THE EDINBURGH NEW VETERINARY COLLEGE, Authorised under Royal Sign Manual. WINTER SESSION, 1861-62.—Gentlemen desirous of commencing a Course of Study to qualify as Veterinary Surgeons are informed that all who enter on the 6th November, 1861, and who have not attended a Veterinary College before, will be admitted to compete for a FREE STUDENTSHIP at the close of the Winter Session. The conditions of the competition, and any farther particulars, may be learned from Professor JOHN GAMGEE, New Veterinary College, Edinburgh.

HIGHLAND AND AGRICULTURAL SOCIETY.
AGRICULTURAL EDUCATION.
The Society's AGRICULTURAL DIPLOMA will be conferred on Candidates who shall have passed the Examination, and fulfilled the other conditions required by the Royal Charter and relative Bye-Laws.
Examinations are held annually towards the close of the Winter Session of the Edinburgh University.
Detailed information may be had by applying to Mr. HALL MAXWELL, No. 6, Albyn Place, Edinburgh.

HIGHLAND AND AGRICULTURAL SOCIETY.
EDINBURGH VETERINARY COLLEGE.
The Committee of the Highland and Agricultural Society of Scotland, appointed to superintend the Veterinary College, hereby intimate that SESSION 1861-62 will COMMENCE on WEDNESDAY, November 6, at 4 P.M.
The Course of Study embraces the following Classes:—

Class	Teacher
1. Zoiatrics, Veterinary Medicine, and Surgery	Professor DICK.
2. Zootomy—comprising Veterinary, Descriptive Anatomy, and Physiology	Mr. STRANGEWAYS, V.S.
3. Practical Anatomy, and Anatomical Demonstrations	Mr. STRANGEWAYS, V.S.
4. Chemistry, Theoretical and Descriptive, from commencement of Session till end of January . .	Dr. A. DALZELL.
5. Veterinary Materia Medica and Pharmacy, from beginning of February till end of Session . .	Dr. A. DALZELL.
6. Physiology and Histology, Physiological and Pathological	Dr. P. YOUNG
7. Practical Pharmacy and Clinical Instruction	Prof. DICK, assisted by Mr. WORTHINGTON, V.S.

Perpetual Fee for Attendance on all the Classes, 16l. 16s.
JN. HALL MAXWELL, Secretary.

THE BIRMINGHAM CATTLE AND POULTRY SHOW, 1861.
The THIRTEENTH GREAT ANNUAL EXHIBITION of ROOTS will be held in Bingley Hall on MONDAY, TUESDAY, WEDNESDAY, and THURSDAY, the 2d, 3d, 4th, and 5th of December next, when Prizes, Cups, or other articles of Silver Plate and Gold and Silver Medals to the amount of 1450l. will be awarded.
Prize Lists and Certificates of Entry may be obtained on application. The Entries close on November 1.
JOHN B. LYTHALL, Secretary.
Offices, 14, Temple Street, Birmingham, Sept. 21.

SMITHFIELD CLUB CATTLE SHOW, 1861.— The ANNUAL SHOW OF FAT CATTLE, SHEEP, AND PIGS, will take place on DECEMBER 10, 11, 12, and 13, at the Bazaar, King Street, Portman Square. The last day for Certificates of both Stock and Implements to be returned to the Hon. Secretary is Friday, November 1.
The following Forms of Certificates are now ready, and intending Exhibitors in applying for them need only quote the letters and state how many of each they require.

CATTLE.	SHEEP.
Form A—Ox or Steer	Form D—Pen of 3 Wethers
B—Cow or Heifer	E—One Sheep in Extra Stock
C—Beast in Extra Stock	

PIGS.
Form F—Pen of 3 Pigs.
G—One Pig in Extra Stock.
In addition to the Prizes usually offered, separate Classes have been established for the following Breeds of Sheep:—
Kentish or Romney Marsh — Shropshire Mountain
Prize Sheets with Rules and Regulations and Forms of Certificates as above may be obtained of
B. T. BRANDRETH GIBBS, Hon. Sec.,
Corner of Half-Moon Street, Piccadilly, London, W.
N.B. All communications on the Club's Business should have the words "Smithfield Club" outside, to distinguish them from private letters.

The Agricultural Gazette.

SATURDAY, SEPTEMBER 21, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

WEDNESDAY,	Sept. 25	Northamptonshire Agri. Society at Northampton.
THURSDAY,	— 26	
THURSDAY,	— 26	Gloucestershire Agri. Society at Cirencester.

THE Agricultural Benevolent Institution appeal to the agricultural community throughout the United Kingdom for an enlarged and universal support. The following is their case:—

At the first election of pensioners, in May last, three married pensioners were elected, at 40l. per annum each; nine male pensioners, at 26l. per annum each; and five widow pensioners, at 20l. per annum each. Thus twenty individuals have become annuitants, while cases of the most distressing and deserving nature presented themselves, which from want of funds to increase the number of annuities the Council was unable to provide for.

The want which this Institution sprang up to supply has hitherto been comparatively unknown, and many more cases of unmitigated distress and long suffering than were previously thought to exist have been brought to light. More money is therefore wanted, and a more general interest in the well-being of the Institution is desired. Those who subscribe are entreated to induce their neighbours to become subscribers, and every contributor is asked thus to constitute himself an honorary local secretary. At the

late annual festival the Chairman, the Right Hon. BENJAMIN DISRAELI, declared, "There is no class in the country which has such facilities for obtaining their objects as the farmers of the United Kingdom. They have no need of any expensive system of advertising; they have no necessity for any great staff of paid officials: everywhere there is a farmer, and wherever there is a farmer this Society ought to have an agent."

If they would indeed accept and undertake the office thus marked out for them, it is impossible to doubt that an enormous accession both to the reputation and the efficiency of the Institution must follow. In every locality there would be subscribers adding to the ability of the Society, and a resident agency, ensuring not only the discovery of distress, but the genuineness of those cases which are selected for relief. Any farmer of 20 years' standing and 60 years of age, or the widow of such a man if 55 years old, or the healthy orphan children of farmers of 10 years' standing, are eligible for such relief as the Institution can afford; and every subscriber of 10*s*. 6*d*. has a vote in the election of candidates for this relief.

The amount of money at present belonging to the Institution consists of 4000*l*. in the funds, and 118*l*. at the banker's, in the names of the trustees. A copy of the Annual Report may be obtained on application to the Secretary, CHARLES SHAW, Esq., at the Offices of the Institution, No. 55, Charing Cross, S.W. Let us hope that the present appeal may result in a large accession to the means at the disposal of the Institution.

WE have received from the Wirral Agricultural Improvement Society a copy of their plans for farm buildings, intended for a mixed farm of 400 acres, but considered adapted for enlargement or contraction according to circumstances. With it Mr. W. B. BURNHAM, the Secretary of the Society, has been good enough to furnish the following particulars:—

"The late Mr. VERELST, an architect of Liverpool, was a member of the 'Wirral Agricultural Improvement Society.' The subject of 'farm buildings' was several times under discussion before the Society, and the present plans were the joint labours of practical farmers with Mr. VERELST, who also wrote a voluminous essay to accompany and explain every particular, which had he lived he would have published. Some of the details of the plan are imperfect, but for general convenience of carrying on the business of the farm it would, we believe, work pretty well."

The plan thus referred to is in the usual form of a trident, of which the central limb includes a double row of cattle stalls, and the two sides are piggeries and open sheds on the one hand, and home stable, horse boxes, &c. on the other. The space between these three parallel rows of buildings are open yards for cattle and pigs. The cross building connecting all and facing the northern side of these yards is, in the middle of it, barn, engine-house, hay and chaff-house, &c.; on one side stabling for 10 horses, and on the other store rooms for Potatoes, Turnips, Clover, &c. And facing the north is an open cart-shed close to the stable on the one side, and sheep and lambing house on the other. The granary is a second floor over this cross row of building; and the straw house is a loft over the central row of cow and bullock stables. The whole is a compendious and well arranged set of offices, in which the connection in use of the different parts is observed by their being connected in position.

THE Rev. HENRY MOULE of Fordington, Dorsetshire, has issued a penny tract on "Manure for the Million," which ought to be read in every cottage, and can be purchased for distribution of Messrs. BRADBURY & EVANS for 6*s*. per 100. It states in a few simple paragraphs the deodorising ability of powdered earth, and the power which it thus possesses of rendering both harmless and of use every kind of waste about the house. The details of the author's plan are given clearly and completely, so that any one who understands the simplest English terms will be able to put it in successful operation. Let us add the opening and concluding sentences. MR. MOULE addresses his readers thus:—

"My Friends,—You want manure for your gardens. If you could get it, they would produce four or five fold more than they produce now. I have found out a way by which with little trouble, and hardly any expense, you can have as much manure as almost any of you can want. And by this same slight trouble and expense you will prevent many bad smells and much sickness."

And after giving full instructions he concludes:—

"Let me only add one thing. My heart's desire and prayer for my fellow-countrymen is, the salvation of their souls. But, next to that, my most earnest hope is to see a real improvement in the worldly condition of the labouring classes. Thankful shall I be if this little tract shall give any help towards that improvement."

THE sale of the late Lord BERWICK's magnificent herd of Herefords commenced on Tuesday the 17th, at Cronkhill, on which day the breeding cows and heifers were disposed of, together with the calves which were not weaned. There was a very large attendance of gentlemen from all parts of England and Ireland, and the competition was very spirited for many of the most important lots. The weather was as fine as could be wished for.

The first day's sale included 134 lots of cows, heifers, and calves, which were sold for 2824 guineas. Among them were "Silver," a 12-year-old cow and her calf, for 65 guineas, bought by Mr. ELSMERE, of Berrington; "Ada," a 5-year old cow and a calf 4 days old, bought for 66 guineas by the Rev. Mr. KITSON, of Huntley, Gloucester; "Adela," an 8-months' calf, bought for H.R.H. the PRINCE CONSORT for 57 guineas; and several others over 50*l*. apiece.

On Wednesday there was a more numerous company than on the previous day, and a very keen competition took place for several of the lots, especially the bull "Retribution" (No. 200), which as well as "Canning" (No. 197, 70 guineas), and "Marquess" (No. 201, 42 guineas), was purchased for 100 guineas by Mr. PETERS, of Stirling, it was understood for Australia. "Eva" (No. 152, 52 guineas), "Alberta" (No. 166, 53 guineas), and "Garibaldi" (No. 221, 66 guineas—an 8 months' calf), were purchased by Mr. DUCKHAM, Editor of the "Herd Book." In all 43 heifers and heifer calves sold for 975 guineas: and 34 bulls and bull calves realised 1294 guineas, or about 40*l*. apiece.

—— WE have the melancholy intelligence to announce of the death of Mr. JOHN GIRDWOOD, who has been long well-known in the agricultural world as a successful agricultural engineer, and an able agricultural writer. Mr. GIRDWOOD was, 15 or 20 years ago, in the occupation of a large farm in the Lothians. Since then he has acted as agent over large estates in Wales and elsewhere, and latterly he has employed, probably, the largest staff of assistants and labourers under the direction of any one man, in the drainage and improvement of estates in all parts of the country. A man of great ability and intelligence, and of a wonderful capacity for labour, he was at the same time an agreeable companion and a most warm hearted friend. But a week or two ago he was planning an agricultural tour through Staffordshire and Derbyshire, and proposed that we should attend with him several of the agricultural meetings held during September in the Midland Counties. He was last week seized at Sudbury, in Derbyshire, with an attack of diphtheria, and died after four days' illness.

STEAM CULTIVATION.

BUSCOTT, NEAR FARINGDON.—There is here probably as good an instance as any in the country of energetic land improvement. The Buscott Park estate includes about 4500 acres, for the most part pasture, but over a considerable extent woodland and waste. Formerly the property of a non-resident family it had fallen into great dilapidation: and the home farm, which when Mavor wrote his history of Berkshire agriculture was considered a model, might at the date of the purchase be considered a model of wretchedness and ruin, and though only half a mile from the public road it was in the winter season nearly inaccessible. Almost the whole of it is a stiff clay soil upon that bed of the oolitic series known as the Oxford clay; and where arable the land has hitherto been let at a very low rent, which in its undrained and neglected condition could with difficulty have been paid. Since its purchase by Robert Campbell, Esq., the present energetic owner, a large extent has been drained—roads have been made—many fences have been grubbed up and others formed, a great deal of waste land has been broken up, a considerable extent of Grass land has been brought into cultivation, and the remainder has been wonderfully improved by drainage, manuring, and sheep feeding.

The employment of the steam-plough upon that portion of the property retained in the hands of the proprieter is but a small item in the energetic work of improvement which has been going on. Probably the most striking of the many agricultural operations in which that work has consisted is the treatment of the Grass lands. These as well as the arable land have been drained 4 feet deep and then liberally manured, receiving a dressing of 2 cwt. of bone dust, 2 cwt. of superphosphate, 1 cwt. of guano, and 1 cwt. of salt per acre, and having also 12s. to 18*s*. worth of so-called "renovating" Grass seeds harrowed and brushed in wherever necessary. The ant-hills which were spread numerously over the Grass lands, especially in the park, have been dug up, carted into heaps, and made into a useful compost with lime. Drainage and manuring, as carried out at Buscott, have been most efficient, and these clay land pastures are likely to turn out some of the finest in the country. The immediate effect of the fertilising operations carried out upon them is being rendered permanent by sheep feeding. The pastures are being grazed by a large flock—3000—of the long-woolled heavy Lincolnshire sheep, which are fed on the lately sodden Grass, receiving ¼ to ½ lb. daily each of Linseed cake, with access to salt. They are scattered over the pasture early in the spring, at the rate of five per acre on the average, of course more thickly as the season of more rapid growth approached. For the Linseed cake, the Cotton seed cake was being substituted when I rode over the estate, the rock salt in covered troughs being everywhere scattered along with those containing the cake over the Grass fields.

The most interesting point in the history of this process of improvement has been the failure of the rigid rule of up and down drainage at an uniform depth and interval, without regard to the condition of the surface or the habits of movement which it has long imposed on the surface water falling on it. A large acreage had been drained in this unreasoning gridiron rule, which, however fitted to the uniformity of the rainfall over the land thus treated, was entirely without reference or fitness to the irregularity of distribution which that rain-water immediately assumed over the uneven surface on which it fell. Accordingly the drains had over a considerable extent of the high ridged land acted inefficiently, and a portion has since been re-drained.

The effect of this mending of the original work has been immediate: as would the original drainage have been had it included similar attention to the special circumstances of the case. This seems to be always necessary in order to a perfectly economical result; but it is especially necessary in the case of pasture land, where artificial treatment of the soil and subsoil is barely possible. But on arable land also, though these lateral slacks may be levelled and ditches may be filled up, and the subsoil plough, especially where drawn by steam-power, may bring at least 18 inches of soil and subsoil to a nearly uniform consistence—yet here too a good deal of supplemental work has been directed by Mr. Campbell, who prefers the achievement of immediate success and its immediate return to the slower, even though it should be ultimately certain increase of fertility, as tillage operations gradually gave effect to the deep set drains placed at intervals too wide to be immediately efficient.

The work of estate improvement has in the case of Buscott Park been carried on under most unfortunate circumstances as to weather. The wettest season of the century might be the best for indicating the need of drainage or for testing its success, but it was the very worst for the great quantity of haulage needed during not only drainage but the erection of farm buildings and road making, all of which have been conducted with great activity and energy in spite of difficulty. Without going into detail we may—to show the gigantic nature of the works carried on, the extraordinary amount of energy, vigour, and perseverance, as well as enormous outlay which they must entail on a private gentleman—mention that within two years over 2000 acres have been drained and partially re-drained, about three miles of roads have been made, 120 acres of waste have been grubbed up and brought into cultivation, a large tilery has been erected; four sets of farm buildings are in the course of erection, two of them entirely new, the others partially so; upwards of 1000 acres of Grass land have been manured and treated as described; miles of hedgerows have been grubbed; over 100 new gates and posts have been put down; thousands of timber trees have been felled and converted into all sorts of scantlings; a deer fence of wire, 6 feet high and nearly 3 miles long, has been erected; the mansion has had some additions, and various alterations and repairs; the stables have been renewed at a considerable cost: and add to these another little item in the shape of 1800 acres of farming all to set a-going and care for. And to show that the labour and outlay have not been in vain, but that the return is both speedy and liberal, we may mention that one of the farms of 340 acres, formerly let at 313*l*. per year, and on which about 14*l*. per acre in drainage, manure, fences, &c., was spent, could have been leased to a substantial and good tenant at a rent of 900*l*. a year. Of the 4500 acres, as has already been stated, 1800 acres are in Mr. Campbell's hands; the remainder, excepting woods—400 acres—is let in five or six farms.

On a portion of the arable land in hand, and formerly let at a very small rent, were last year grown the prize Swedes of the district. It was drained 4 feet

deep, steam-ploughed in April 9 inches deep, steam-scarified twice, receiving harrowings and rollings until in fine tilth, when it was ridged up at 26 inch intervals, and manured with 15 bushels of bonedust, 2 cwt. of superphosphate, 1 cwt. of guano, and 1 cwt. of salt per acre. On this field, however, the effect of imperfect drainage was visible enough, and the ridges near the drains grew much better roots than the ridges in the space near the drains.

Fowler's 12-horse-power engine and steam plough has been at work upon this farm since March, 1860; and, considering the exceedingly heavy work it had to do, the arable land being recently drained and the soil above the drains not being sufficiently consolidated to sustain the weight of the plough crossing, many removals and other difficulties had to be encountered, and this was done notwithstanding an exceedingly unfavourable season. It has accomplished a fair amount per annum. Taking the numbers on the plan of the estate, I learned that between March 1860 and March 1861 No. 246 (30 acres) had been ploughed once 8 inches deep; No. 270 (21 acres) had been ploughed more than 9 inches deep, and scarified across the ploughing; No. 17 (20 acres) had been ploughed 6 inches deep; No. 161 (48 acres) had been ploughed and cross-ploughed 8 inches deep; No. 140 (40 acres) had been ploughed 9 inches, and twice scarified by steam; No. 156 (12 acres) had been twice ploughed 9 inches; No. 270 (22 acres) had been twice scarified. This was before the harvest of 1860, and includes as much as 231 acres of ploughing and 145 acres of scarifying during what in ordinary circumstances is one half the season. But after harvest, 1860, and until the completion of the year in March, 1861, only 14 acres had been scarified and 12 acres ploughed, making the whole year's work but 243 acres of ploughing and 159 acres of scarifying. Had the weather of the autumn of 1860 been at all suitable, the spring and summer work of that year would have been doubled, and the annual cost of apparatus divided over such an extent would have made a much better show on behalf of steam cultivation than as the seasons were it did. The daily cost of labour and materials is described as follows:—Engineer, 3*s.*; ploughman, 3*s.*; two porter lads, 3*s.* 4*d.*; anchor man, 1*s.* 10*d.*; water-cart and boy, 3*s.* 10*d.*; oil, 1*s.*; coals, 12 to 15 cwt.—say 13*s.* daily. The total expenditure is thus 29*s.* The average performance on the heavy stiff clay land 9 inches deep is 4 acres; and the cost per acre for labour and materials only is thus rather more than 7*s.* per acre. The work accomplished is well worth 20*s.* to 24*s.* an acre by horse-labour, and it is not possible that the cost of maintenance of apparatus and interest of capital should, when divided over a reasonable extent of work per annum, at all approach the great difference between the two sums.

Perhaps Buscot Park Farm near Faringdon, and the Fawley Court Farm near Henley, are, so far as the arable land is concerned, as great an agricultural contrast as can be. The one a light dry shallow steep soil upon chalk, the other the heaviest clay soil on the stiffest clay subsoil, useless in wet weather, except it be well drained. In the former case the cost of materials and wages has been about 7*s.* or 7*s.* 6*d.* an acre, and the following table gives the similar cost in detail of the cultivation of certain fields during the past summer on the latter farm, of which Mr. Burniston, to whose management reference was made at page 511, has been good enough to keep a record for me.

PARTICULARS OF STEAM CULTIVATION BY FOWLER'S PLOUGH, ON THE FAWLEY COURT FARM, 1861.

Name of Field.	Acres ploughed.	Acres scarified.	No. of days working.	Date when finished.	Oil used. Pints.	Coals used. Cwt.	Value of Coal and Oil. £ s. d.	Wages of Men. £ s. d.	Total expenses per acre. s. d.
Farther West Field ..	..	14	2	April 24	1½	25	1 5 10½	1 10 0	4 0
Middle Nuddings ..	..	17	3	April 29	1½	28	1 8 10½	2 5 0	4 4
Middle West Field ..	11¼	..	2¼	May 13	1½	20	1 0 10½	1 18 9	3 3½
Sixteen Acres	16	..	2½	June 4	2	28	1 9 2	2 4 0	4 7
Middle West Field ..	..	ridged 11½	2¼	June 7	1½	20	1 0 10	1 13 9	3 3¼
Farther West Field ..	14	..	2¼	June 18	1	21	1 1 7	1 9 9	3 7
Farther West Field ..	..	ridged 14	2½	July 2	2	25	1 6 2	1 15 0	4 4½

The average cost of ploughing, probably 6 inches deep, has thus been less than 4*s.* an acre here, *i.e.*, in respect of wages and materials, leaving out the maintenance and cost of apparatus.

This is with a 10-horse engine and a three-furrow plough. On Buscott, where the ploughing is deeper and the work very much more difficult, the cost is nearly double, but yet in relation to what it would cost by horse-power, the advantage is, as it must always be, on the side of the heavier land and the more difficult work.

THE HARVEST OF 1861.

BEDFORDSHIRE: *Biddenham, Sept.* 12.—From my own experience in threshing, and of others in this neighbourhood who have done so, I must return the Wheat crop below an average; the Barley an average; Oats and Beans the same; the Potatoes better than could have been expected: the Turnip crop very bad; and the Wurzel not good. Therefore, with dried up pastures winter food must be scarce. *William Lavender.*

BERKSHIRE: *Clapton, near Hungerford, Sept.* 14.—I consider Wheat will be rather under an average, but the quality generally very fine, weighing from 12 st. 2 lbs. to 13 st. 2 lbs. the sack. A great many pieces of Wheat were very thin on the ground, which took off the yield. Barley over an average, the quality very variable. Oats a full average, and good quality. Beans excellent in quality, generally thin in plant, but must yield well (about an average). Peas never better. *Thos. Owen.*

EAST KENT: *Sept.* 14.—The harvest in this district has been finished about three weeks. The weather could not have been finer for the ingathering of the crops, and the yield will with but few exceptions prove satisfactory, though it is generally remarked by farmers that the corn has packed closer than was expected; the rick yards do not make that showy appearance they sometimes have done. Steam engines and threshing machines have been busily employed for the last five weeks, and the bushel, the best of all tests, confirms that the crop is good. Probably more Wheat of this year's growth has gone into consumption than was ever before known at so early a period, and a great deal has been sold at our local markets to go direct to France for seed. It would have been impossible to have threshed the same quantity without the aid of steam, and we must calculate that the probability is that our population will have mainly to depend on this year's crop for 13 months' food, and though the yield per acre will here be a good average, the acreage is less than usual, consequently the probability is that prices will range good throughout the year. The Wheat of this year's growth is almost without exception in excellent condition, of fine quality, weighing from 62 to 66 lbs. per bushel. Barley has not been so freely threshed as Wheat; the very warm weather has prevented maltsters from commencing, though desirous of doing so, as the stock of old malt on hand is in most instances very small; what has been threshed proves of excellent quality, dry, bright, and heavy, weighing from 54 to 57 lbs. per bushel, and the crop will prove a full average. Oats will yield well; those that have been sold at market are very bright and heavy—47 lbs. per bushel is not an uncommon weight this year. Beans are a very deficient crop generally; all sorts are much smaller than usual; they suffered so much from drought and "dolphin" that many will not much more than pay the expense of harvesting, threshing, &c. Common hog Peas yield well, are of excellent quality, dry, heavy, and above an average crop. Potatoes are less diseased here than for many years past; the quantity planted is more than usual. In consequence of the long drought the tubers in many places are small; they are selling about 4*s.* per sack cheaper than at this time last year, but probably paying the grower quite as well. All our green crops are suffering much for the want of rain; our pastures are dry and brown, with scarcely any face, but our sheep live and do well notwithstanding the apparent want of food; but horned cattle are in many instances suffering for the want of Grass and water. Mangel Wurzel in most places will not produce more than half the weight per acre that it has in other years. Swedes are generally a good plant, but very small, and are in many places seriously injured by aphides (locally termed dolphin); they are usually first seen on a single plant or in a small space, which daily extends; their ravages are such, if not speedily checked, will very seriously tell on our winter keep, which from present appearances must be scarce. Many farmers' horses and stock are already without green food, and consuming fast the provender that in other years is untouched till the middle of October; the effect of this will be seriously felt here next spring. Common Turnips are by no means good, and we have but very little Cole (Rape), scarcely any rowen (aftermath) or autumn keep of any kind to look forward to. Our Hops will finish off much better than was at one time anticipated; they are generally of fine quality. We have a few favoured grounds, but in most instances the weight is not what has been recently expected, and the duty has receded accordingly.

HEREFORDSHIRE: *Baysham Court, Ross, Sept.* 12.—Harvest is now nearly over, and with very few exceptions the bulk of Wheat straw is one-third less than the average of years; and as without straw there can be no corn, it is quite obvious there will be a great deficiency. It has been a magnificent season, one of the finest Corn harvests ever known, and the quality of our Wheats is therefore very superior; but I hear from those who have threshed that the yield is certainly not beyond an average in proportion to the straw. This is at variance with the anticipations of many who have in bygone years found the yield from a light crop of straw proportionately larger than from a heavy one. Yet the reverse is readily accounted for, and arises from the general blight with which the crops throughout the county were attacked during the wet which prevailed in July. The Peas, Oats, and Barley are good crops, but the Beans hardly equal our expectations. The ravages of the disease in our Potatoes appear to have stopped with the change of weather. Hops, which were a short time very unpromising, will prove a good crop on many grounds. *T. Duckham.*

EXPERIMENTS ON POTATOES.

THE subject of the Potato disease has lately occupied the attention of numerous experimenters, and among others I have been led to make a few experiments, the results of which may not be uninteresting to some of your readers.

The ground selected for the experiments was a heavy clay soil, which had been well dressed in autumn with farmyard dung, the previous crop having been Mangels.

The Potatoes were those known here as the Fluke Kidneys, and were planted on the 2d of April; the ground being divided into plots of 4 yards square.

Plot No. 1 was planted with whole Potatoes which had been previously kept in a moderately warm place for three weeks before planting, at the end of which time they were found to have made sprouts about an inch long.

Plot 2. Potatoes cut into halves and dried for three hours at about 212 Fahr. (temperature of boiling water), until they become quite tough.

Plot 3 were Potatoes in their natural state.

Plot 4. Potatoes sown with artificial guano applied at the rate of 5 cwt. per acre.

Plot 5. These were planted in the ordinary manner without manure.

The whole of the Potatoes in No. 1 were up and looking very well on the 5th May, but were cut down by frost on the 13th inst. They soon recovered, and were hoed up in ridges on the 4th June, after which they made very rapid growth.

In all the other plots the Potatoes were not up until 4th June, consequently they were uninjured by frost.

In Plot No. 3, the Potatoes when in full bloom were laid flat on the ground and some close hurdles thrown on them. The Potatoes in Plot No. 4 were sprinkled with flour sulphur at the first appearance of disease, and the Potatoes in No. 5 were cut down to within 6 inches of the top of the ridge and then earthed up, as soon as the disease had unmistakeably shown itself all over the crop.

All the plants showed the disease more or less, and were taken up and weighed on the 31st of August, the produce of each plot being as follows:—

		Produce of Sound Roots.	Remarks.
		lbs.	
Plot 1.	Partially dried for 3 weeks.	118	Very large roots, but a good many diseased.
Plot 2.	Dried at 212° Fah. for 3 hours.	78	Not so many diseased as in No. 1.
Plot 3.	Laid and covered with hurdles.	42	Very small roots but less diseased than any.
Plot 4.	Manured with artificial guano at the rate of 5 cwt. per acre, and afterwards sprinkled with sulphur.	62	Crop generally good but much diseased.
Plot 5	Cut down and earthed up.	Not weighed.	Very small roots, and miserable crop generally.

In looking at the above results it will be seen that the Potatoes which were kept dry and in a warm place gave by far the most satisfactory results, although the crop was not free from disease. 2nd, That those dried at 212° Fahr. were not benefited by the extra amount of heat; and 3rd, that both laying and cutting the stalks on the appearance of the disease gives very inferior crops, without preventing disease. The composition of the artificial guano used in the above experiments, and sold at 10*l.* 10*s.* per ton, was as follows:—

Water	4.70
Organic matter	32.29
Phosphates of Lime and Magnesia	25.74
Carbonate of Lime	11.66
Sulphate of Lime	10.73
Alkaline Salts	9.79
Sand	5.09
	100.00
Yielding Ammonia	9.52

The above was analysed by Dr. Anderson, of the University of Glasgow. *E. T. Kensington, F.C.S., F.R.A.S.*

Home Correspondence.

Samuelson's Self-acting Reaping Machine.—It is probably known to but few if to any of your readers that Mr. Samuelson has, within the last few weeks, patented a new reaping machine with self-acting

delivery in sheaves. I had an opportunity whilst in Oxfordshire this week of seeing it in operation, and I shall be much mistaken if it fails to take a very high rank amongst its fellows. It was working at Shutford, near Banbury, in a crop of spring Wheat very unequal in weight and bulk, full of Couch and other weeds, and on one side of the field inclined at a considerable angle from the machine. It had been raining all day, so that the reaper was not started till near sunset. It went four times round an oblong 7-acre field, cutting rather more than one acre and a quarter in the hour, without a stop of any kind, a man following and watching but never having occasion to touch it. It picked up the crop equally well when it was inclined from as when it leaned towards the machine, and there was no great difference between the length of the stubble in the one case and the other; no clogging occurred either in the cutting or in the separation of the cut from the standing corn, the delivery (self-acting) was in compact sheaves, laid square and ready for binding, without any straggling, except in those parts of the field where the crop was extremely poor; there the sheaves were not so well laid, but this was quite the exception. Two horses of moderate power, and in good working condition, drew it at a slow pace, and with ease. Having, as you know, used one of Cuthbert's light machines through two harvests, I am able to compare the draught of the two, and I have no hesitation in stating that of Samuelson's "self-actor" as certainly not greater than Cuthbert's. I should have liked to see the machine in a variety of crops, but the harvest being nearly ended, that was impossible. Mr. Samuelson informed me, however, that it has worked on the farms of Mr. Butler, of Croud Hill; of Mr. Askew, of Mr. Edwards, and of your occasional correspondent Mr. Page, all near Banbury, on crops of Wheat and Barley, varying from 5 to 7 qrs. per acre. Mr. Page, I understood, found but one fault with it, viz., that in a 6 quarter crop of Barley the sheaves were too large. Mr. Samuelson is remedying this in the machines which he is building for the next harvest. I will now attempt to describe the construction: Take a 5 feet Hussey reaper, but with the cutting apparatus behind the driving-wheel, the platform a quadrant, with a fence about 1 foot deep surrounding the quarter circle—then immediately behind the driving-wheel and in a line with the cutters place an upright shaft; connect this shaft by means of gearing with the driving-wheel, so that it shall revolve once only for about every three revolutions of the wheel. Then on this shaft mount four arms or flyers so as to be carried round with it, but attached to it by universal joints, and at liberty to rise and fall. A pulley attached to each arm and travelling upon a surface of a peculiar curve causes these arms to fall as they approach the platform, to sweep across it on a level, then to rise and *perform the rest of the revolution at a sufficient elevation* to be clear of all obstacles at the side. The arms carry rakes or reel boards, first bringing the uncut corn back to the cutters, and when severed clearing it from the platform so as to leave a track of 5 feet for the horses on their next round. It is certainly an "uncanny" looking tool with its thin straggling arms—but their movement is always in one direction and continuous—and the whole works so silently that when on the opposite side of the field I more than once thought there was a halt, but on looking up I saw its reels sawing slowly through the air. I should add that like most reapers it is of American parentage, but greatly changed since Mr. Samuelson has taken it in hand. I wish he had completed it in time for trial in other parts of England. *G. Chadwin, Tollard Royal, Salisbury, Sept. 7.*

Egyptian Vetches.—Some years since I was travelling towards Salisbury in the train, and I heard a farmer say he had just bought 50 qrs. of Vetches at Mark Lane, at 22*s.* 6*d.* a qr. On inquiry I found they were Egyptian Lentils. I do not know the difference, and he informed me he was on his way to Wilton Sheep Fair to buy broken mouthed ewes to fatten them on this corn. I should be obliged to any one of your readers to inform me of the comparative nutriment of good English Vetches and oil-cake. Oil-cake here, including carriage and crushing, is about 12*l.* a ton; Vetches say 7*s.* a bushel, so that 100 lbs. of each would be nearly of the same money value, as my Vetches weigh just 70 lbs. a bushel. Information wanted—is it safe to give sheep new Vetches? say at ½ lb. a day, and would 100 lbs. do the sheep as much good as the same weight of oil-cake? which, observe, is only the refuse of Linseed—like the pulp of the Apple, the cider being drawn off. *Amateur Farmer.* [Probably the decorticated Cotton seed cake is the cheapest food you can get.]

Potato Rot.—As there is a great interest taken by the public in the cause of blight in Potatoes, will you permit me to lay before your readers my opinion on the subject. The Potato blight, the blight in Hops, and in other vegetation, arises from overworking the land on one hand, thus depleting it; and on the other hand, over-stimulating it with unwholesome manures. The land should be allowed to rest more than it does. Land, like the human body, requires rest; food and stimulants will not supply the want thereof. When land or the human body are over-stimulated or over-worked, they become more easy subjects to diseased influences. All creation is governed by law, when broken it suffers; we require wisdom, and there ought to be a public teacher for the occasion to visit and lecture for the instruction of agriculturists, or some day our food will fall short. *W. Washington Evans, 12, Bernard Street, Primrose Hill.* [Self-interest is the best public teacher, and Mr. Evans should consult the gardener before he urges on the farmer his theory of 'rest.']

Farm Memoranda.

Hatch Warren Farm, near Basingstoke, consists of about 800 acres all under the plough. It presents for the most part a gently undulating surface, generally uniform in soil, a drift of loamy gravel resting upon the chalk, the surface of which in some places is brought up by the plough. Thin as the surface soil may be, the chalk is never known to burn. The home buildings are sufficient as in the ordinary farms hereabouts for the accommodation of the horses, young short-horned stock, pigs of the Berkshire breed, which run the yards, or are fatted and so supply a considerable quantity of manure. The sheep stock number 600 ewes and 240 ewe tegs. It is to maintain this flock and its produce that all the operations of the farm are directed. It is rather dangerous to venture to describe a rotation where the only rule is the judgment of the cultivator, but this is really the great distinguishing feature of this farming; the ordinary operations of tillage differ little on any light soil, but the cropping of the Hampshire sheep farm seems to have no exact parallel. Take the breadth of Saintoin as a starting point, which may occupy the eighth part of the whole farm, and is down from two to four years on the average, though the lesser period is considered the best farming. This when broken up is rafter-ploughed at the end or beginning of the year, a system which has superseded the over-laborious method of breast ploughing, which it would be difficult now to prevail on the labourers to undertake. Tasker's best plough, which keeps well in its work, performs this operation in a satisfactory manner; the surface so treated is ploughed across, dragged, the Couch and other Grass collected and stifle-burned at the cost of about 13*s.* per acre. This is preferred to ploughing and pressing for Oats; as with the assistance of the rooks it better rids the ground of that pest in the growth of Saintoin, the wire-worm. Turnips follow with or without superphosphate or bones; the application of farmyard dung must be taken for granted, when required. Then comes Wheat, and Clover is sown with the Wheat, which is followed by Barley or Oats; the power of ploughing the Clover lea at pleasure secures a good seed bed for the Barley, which comes well in this rotation. Next Swede or Turnip, drilled on the flat with superphosphate or bones, and horse-hoed, a practice not very general; then comes Rape or some green crop, Wheat or Barley, Saintoin sown with the Barley, and mixed sometimes with Trefoil to give a better first cut. Though this is given as a rotation it is at every stage subject to some variation as judgment, or discretion, or the wants of the flock suggest. Take for instance a shift devoted to a green crop, but divided into two parts, one part early Tares followed by Turnips the same season, followed by *summer* corn: the second part backward Tares followed by Rye or winter Barley sown in the autumn, fed and followed by Turnips, followed by summer corn: thus giving in the second portion two seasons of green crop before the *summer* corn. There is scarcely any variation to which this system is not subject, all having direct reference to the maintenance and wellbeing of the flock.

Though this system of sheep farming is artificial, it has so far a nomadic character that not only is the lair continually changed, but the dead or standing fold is shifted every year to the immediate vicinity of the winter food. Here too the Clover and other hay is stacked, a corn rick is so placed that it may furnish straw for the construction of the fold, and the protection necessary in the lambing season, which begins about Christmas; temporary lodging is provided in a small four-wheeled caravan fitted with a stove for the shepherd. The flock is not confined to this fold more than is absolutely necessary. When the lambing is over, the dung made in this temporary yard is thrown up or applied at once to the soil, and the flock have no other protection than the moveable fold of wattled hurdles, some of which are thatched as a protection from wind and driving rain; the lambs as soon as they can avail themselves of it are allowed a free forward run. At from 10 to 12 weeks old the selected rams and wether lambs are with their mothers divided from the ewe lambs, and become the object of especial attention. They receive in addition to hay and Turnips a due quantity of cake and Beans, in preference to Peas; if Mangel is given as the Swedes fail it is given with great caution, as it is thought sometimes to check the condition of the lambs at a critical time of their growth. In May the selected ram lambs are removed, and in July the wether lambs are disposed of at the fairs held for that purpose. One hundred lambs at about 13 months old sold from this flock with ordinary feeding were estimated to average 12 stone: later in the season the older ewes are drafted and disposed of and the flock replenished by the shearlings, which together with the ewe lambs form the stock for the coming year. This is but a very imperfect sketch of a system of sheep farming which reflects the greatest credit on the industry, judgment, and skill with which it is carried out. *J. C. C.*

Miscellaneous.

The Royal Agricultural Society.—Leeds Meeting.—The success which has attended this gathering is without a parallel in the history of the Society, as will be seen from the following comparative return:—

Place.	Year.	Sum given.	Show Yard Receipts.	Live Stock.	Implements.
Oxford	1839	Nothing	£2394	249	[illegible]
Cambridge ..	1840	Nothing	3416	[illegible]	[illegible]
Liverpool ..	1841	Nothing	4106	319	[illegible]
Bristol	1842	Nothing	4202	[illegible]	[illegible]
Derby	1843	Nothing	3390	[illegible]	[illegible]
Southampton ..	1844	£1000	4939	[illegible]	[illegible]
Shrewsbury ..	1845	1000	3662	[illegible]	[illegible]
Newcastle ..	1846	1000	2168	[illegible]	[illegible]
Northampton ..	1847	1000	2473	[illegible]	[illegible]
York	1848	1000	2664	[illegible]	[illegible]
Norwich ..	1849	1000	2404	[illegible]	[illegible]
Exeter	1850	1260	2576	[illegible]	[illegible]
Windsor ..	1851	500	3397	[illegible]	[illegible]
Lewes	1852	1500	1183	[illegible]	—
Gloucester ..	1853	1500	2734	[illegible]	[illegible]
Lincoln	1854	1500	3378	[illegible]	[illegible]
Carlisle	1855	1400	3260	[illegible]	[illegible]
Chelmsford ..	1856	1200	2988	[illegible]	[illegible]
Salisbury ..	1857	1500	3447	1462	[illegible]
Chester	1858	1800	[illegible]	1444	[illegible]
Warwick ..	1859	1500	5461	[illegible]	[illegible]
Canterbury ..	1860	1500	2689	891	[illegible]
Leeds	1861	1500	9915	[illegible]	[illegible]

[As regards the figures in the last column for 1841, 1842, and 1843, it should be explained that they represent the number of implements entered and not the number of exhibitors, and the show-yard receipts previous to 1846 include dinner receipts, &c. The result is equally gratifying if we take the number of persons paying for admission, the total at Leeds being 145,329, at Chester 61,774, and at Warwick 55,677, divided as under:—

	Leeds. Visitors.		Chester. Visitors.	Warwick. Visitors.
First day, at 5*s*.	2,027	Ditto, at 2*s*. 6*d*.	1,251	[illegible]
Second do., 2*s*. 6*d*.	10,287	Ditto, ditto	4,827	[illegible]
		Ditto, at 5*s*.	3,180	[illegible]
Third ditto, 2*s*. 6*d*.	18,823	Ditto, at 2*s*. 6*d*.	24,790	[illegible]
Fourth ditto, 1*s*.	73,824	Ditto, at 1*s*.	27,726	[illegible]
Fifth ditto, 1*s*.	40,368	—	—	—
Total	145,329		61,774	55,577

It will thus be seen that the number of visitors at Leeds on the fourth day alone considerably exceeded the total number either at Chester or Warwick. The new regulation entitling members to free admission came into operation for the first time at the present meeting. Moreover it has previously been the practice to open the implement yard on the Monday at 2*s.* 6*d.*, and to continue the admission to that part of the show at 2*s.* 6*d.* on the second day, but to open the cattle yard after the award of the Judges at 5*s.* It is difficult, therefore, to compare either the 5*s.* or 2*s.* 6*d.* days with the first, second, and third days at Chester and Warwick, without adding the three days together, when the result would stand as follows:—Leeds, 31,137; Chester, 34,048; Warwick, 30,131. But the Leeds number must be increased by the members, who have not before been admitted free, and, adding the repeated entries of members attending the Leeds meeting during these three days, it would not be a very exaggerated estimate to raise it to that at Chester. The amount of money taken at Leeds was 9915*l.* 17*s.* against 6033*l.* 16*s.* at Chester, and 5061*l.* 18*s.* 6*d.* at Warwick, and the following statement of daily receipts at these places will complete the statistical returns on this subject:—

	Leeds. £ s. d.	Chester. £ s. d.	Warwick. £ s. d.
First day	506 15 0	156 7 6	[illegible]
Second day ..	1285 17 6	1398 7 6	[illegible]
Third day	2352 17 6	3092 15 0	[illegible]
Fourth day ..	3691 4 0	1386 6 0	—
Fifth day	2018 8 0	—	—
Total ..	£9855 2 0	£6033 16 0	£5061 [illegible]

There were in addition 5000 implement and 7855 stock catalogues, sold at 1*s.* each, which would raise the gross receipts by 642*l.* 15*s.*, making them 10,497*l.* 17*s.* —*Midland Counties Herald.*

Holme Pierrepont Farm.—[We place on record here a fuller account of this ram sale, which was reported at the time in our columns.] There were 65 lots to be disposed of, viz., 28 shearlings, 17 two-shears, 14 three-shears, five four-shears, and one five-shear. With the exception of one three-shear, all the four and five-shears, the whole were taken, the biddings being spirited, and although the attendance was under an average, the general result was more satisfactory than on any previous occasion. Fifty-one sheep were altogether let for 1486*l.* 16*s.*, being an average of 25*l.* 4*s.* each. Last year there were 63 lots, 42 of which were disposed of, at a gross total of 1,037*l.* 16*s.*, and although this average is larger it must be observed this year 17 more lots found takers. On the present occasion 28 shearlings realised 670 guineas, varying from 71 to 10 guineas. Mr. Thunder, of Kingston Lodge, Navan, took the second Leeds prize sheep at 71 guineas, and Mr. J. Hall, of Scarbro', the third Leeds prize sheep at 26 guineas. Mr. Hall also took the first lot 65 guineas, a magnificent upstanding sheep. The 17 two-shears made 379 guineas, the highest price being taken by Mr. Thunder at 50 guineas. The second Leeds prize aged sheep (two-shear) was knocked down

to Mr. G. Turner, of Barton, at 48 guineas, and the first (three-shear) to Mr. W. Torr at 70 guineas. Mr. Dixon, of Brandesburton, obtained a three-shear at 40 guineas, and Mr. Meade, of Ballymart'e, Kinsale, one at 45 guineas. G. Mann, Esq., of Scawby Hall, took a two-shear and a three-shear, both very superior, and well adapted to maintain the high character of his flock. Mr. Langdale, of Leakonfield Park, obtained a beautiful shearling at 40 guineas, and Mr. Abrahams, of Barnetby, one at 37 guineas. Colonel Inge, of Thorpe Constantine, who had the best shearling prize at Leeds, took two sheep; and John Yorke, Esq., of Thrapstone, Northamptonshire, the great supporter for 30 years of the Barford flock, this year for the first time came for the Holme Pierrepont blood. James Hall, Esq., of Scarbro', took the same number of sheep as last year—six—for which he gave 206 guineas.—*Doncaster Gazette.*

Calendar of Operations.

SEPTEMBER.

WEST SUSSEX: *Sept.* 17.—We have got over harvest, and had the latter part of it all that could be wished for. Perhaps a little Wheat was carted too soon at the beginning, but the weather has been so dry since that it will come out well, and we shall have the condition very good and the quality generally fair, but the quantity is said not to be so good as was expected, much of it being so thin on the land, and perhaps we shall not be far out in putting it from 4 to 8 bushels below average, besides that which was ploughed up in the spring, which will make the crop quite 8 bushels short of average. Barley is a good crop, and has been put together rather too dry, which will make it brittle for malting; there is perhaps less inferior than usual. Oats are also a good crop. Peas are better than usual. Beans are not up to the mark, but have been got in well. Swedes and Turnips still do well, though very dry, and Mangels will be a fair crop. Potatoes have failed to a very great extent, but they have not been so bad where the seed was got from a distance. A great many were got into the neighbourhood from Scotland, and some were planted and very few of them are bad. And this no doubt will induce many to get their seed from a distance another year, but especially from some quarter where they have not been so diseased this year. The land being so hard and dry very little is yet done in preparing for Wheat sowing, but many have been occupied in clearing the stubbles by paring and burning, which will be reducing spring work. The pastures are now very bare, and as a consequence lean stock is a dull sale, and good fat beef and mutton is very scarce, and must be for some time, as it is impossible to make them out without roots, and they are hardly ready to begin upon. *G. S.*

STATE OF THE WEATHER—BERKSHIRE.

For the week the. ended September 19; observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air. Max. in Sun.	Max. in Shade.	Min.	Mean.	Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	13 ..	90.0	68.0	46.0	62.5	59.0	0.04	S.W.	29.89
Saturday	14 ..	62.0	60.0	48.0	54.5	58.7	0.06	S.W.	29.60
Sunday	15 ..	66.0	62.0	45.0	54.5	57.7	0.09	S.W.	29.60
Monday	16 ..	63.0	59.0	49.5	54.7	57.2	0.06	N.W.	29.80
Tuesday	17 ..	74.0	63.0	41.5	55.0	57.2	..	N.W.	30.00
Wednesday	18 ..	80.0	64.0	39.5	54.2	57.0	..	N.W.	30.05
Thursday	19 ..	90.0	68.0	35.0	57.0	57.0	..	N.W.	30.02

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

AMERICAN HORSE-POWER.—If "R. H. H." will write to the Rev. W. B. Hurnard, he will be glad to give him his experience respecting the American horse-power, as he has just put one up for a 330 acre farm to do all cutting, crushing, and root grating. Mr. H. ordered his machine of Messrs. Hughes & March, of Loughborough, Leicestershire, considering their plan the best, and it has succeeded particularly well on trial, although it is not yet been required for regular work. It is for one or two horses, but Mr. H. finds one large horse sufficient for doing any two things at once. *Gurney's Manor, Hingham, Norfolk.*

MEASURING CATTLE: *C. W.* You take the girth behind the shoulder; and the length from the front of the shoulder to the insertion of the tail, and there is a formula by the use of which these items give you the weight in stones and lbs. of the animal measured. Mr. Tree's sliding gauge, made to suit this formula (Charlotte Street, Blackfriars Road, S.), will give you the result at sight.

PEAT MACHINE: Will any of our readers inform us of a really efficient machine for the preparation and compression of peat for fuel purposes? The peat bog for which it is required cannot be, owing to local conditions, drained to any extent, and the peat must consequently be dug up in a very wet state.

POULTRY.—Our weekly returns just now will be tedious as a thrice told tale. There is little variety. Short supply, and bad trade. It is not, we think, so good a Partridge year as was expected. Fine young birds sell well, and there are not more of them than are wanted. Grouse remain as they have been; rather dearer than the average of the last few years, and old birds far more numerous than the young. It is difficult to form an opinion as to the probable price of Geese at Michaelmas. Every year the "goodlie practice" of eating them at this season appears to fall off, while clubs have caused them to be sold by thousands at Christmas. From the early harvest, we may expect a good supply of real stubblers, and none are better. The quotations of the three or four weeks preceding Michaelmas hardly afford a rule for guidance, as Geese are often kept back, and the market scantily supplied in consequence.

Large Fowls	Each	3s. 0d.	to	3s. 6d.
Smaller ditto	"	2 0	"	2 6
Chickens	"	1 6	"	1 9
Geese	"	5 6	"	6 0
Ducks	"	2 0	"	2 3
Partridges	"	1 0	"	1 6
Grouse	"	2 0	"	2 6
Rabbits	"	1 4	"	1 5
Wild ditto	"	0 8	"	0 9
Pigeons	"	0 7	"	0 8

TURNIP SEED.—The sample has been placed in the hands of Prof. J. Buckman, who will correspond with you,

Genuine Tobacco Paper for Fumigating.

H. APPLEBY (Foreman to Messrs IVERY & SON, Dorking, Surrey) takes this opportunity of informing his Patrons and the Public that he has now a good supply of the above on hand. In packets of 4 lbs. each, at 1s. 3d. per lb. A liberal discount allowed to the Trade

SHEET IRON POTS FOR FUMIGATING, 3s. 6d. each.

N.B.—All Orders to be accompanied with a Post Office Order payable to HENRY APPLEBY, Dorking, Surrey.

A New Discovery.

IMPORTANT TO THE GENTRY, NURSERYMEN, HOP GROWERS, GARDENERS, AND OTHERS.

BUNDY'S LIQUID BLIGHT COMPOSITION is the most effectual article yet invented for the destruction of Blight and all Insect Life upon Trees and Plants without injuring the Plant, as proved by Mr. Turner, Royal Nurseries, Slough, and other Nurserymen. It is also equally valuable as a Winter Dressing for Trees, and very effective for cleansing Hops.

Price 1s. per gallon, to be had in any quantity of WILLIAM LAMBERT, Manufacturer, Garden Pottery, Slough, Bucks.

TESTIMONIAL.

"The Royal Nurseries, Slough, July 22, 1861.

"Sir,—Your Composition for destroying Green and Black Fly, and every insect that injures plants and trees, I find very effective. Our young Cherries were cleared at one dressing, so also were the Dahlias; but for these and similar succulent Plants it should be diluted with water. I can strongly recommend it as safe and effectual, and can be used without trouble."

"Yours truly, CHARLES TURNER."

NEAL'S PATENT APHIS PASTILS.

Magnified Aphides.

The following is one of upwards of 70 Testimonials received by J. NEAL from gentlemen personally unknown to him.

"I beg to bear my testimony to the value of Neal's Pastils, and their efficacy in destroying, most effectually, the Green Fly without any trouble, and at a nominal expense, when compared with the use of Tobacco or even Tobacco Paper.

"JAMES SANDERS,

"Nursery Grounds, Abergavenny."

Sold by all principal Seedsmen.

Price 1s. and 2s. per packet.

Patentee, J. NEAL, Birmingham.

GISHURST COMPOUND, for preventing and destroying Red Spider, Mealy Bug, Mildew, Thrips, Scale, Green and Brown Fly, American Blight, Ants, &c., and Bed Bugs, contains no deleterious ingredient, is recommended in *Gardeners' Chronicle, Cottage Gardener, Field,* Mr. Rivers' *Orchard House,* 9th edition, and Dr. Hogg's *Gardeners' Year Book for* 1861.

RED SPIDER MAGNIFIED.

Full directions for use and particulars of the experience of many great Gardening authorities are enclosed with the boxes of Gishurst. These are supplied retail through any Nurseryman and Seedsman at 1s., 3s., and 10s. 6d. each, wholesale, by PRICE'S PATENT CANDLE CO., LIMITED.

If the smell be disliked, make the solution 48 hours before use.

Gutta Percha Tubing for Watering Gardens.

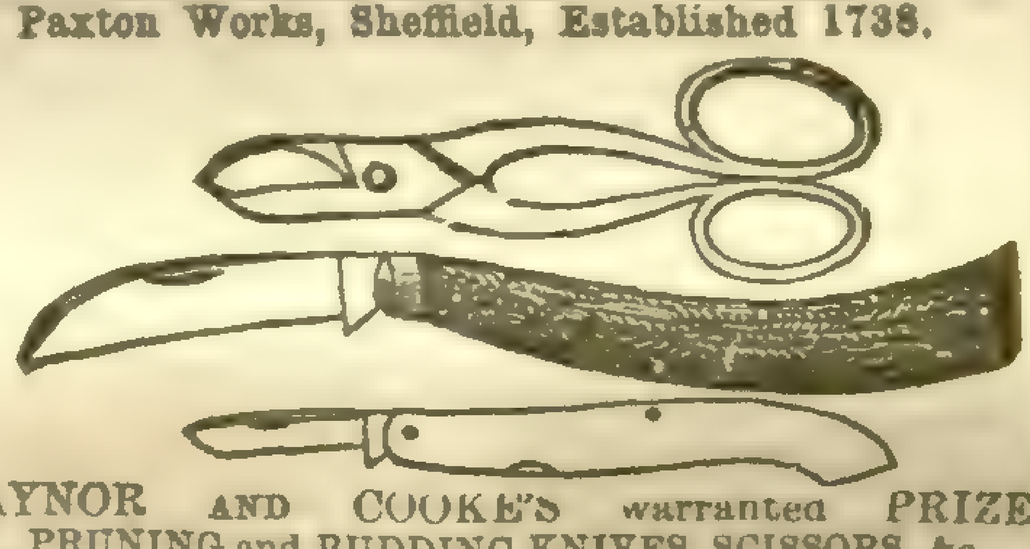
THE GUTTA PERCHA COMPANY have the pleasure to acknowledge the receipt of the following

Testimonial from Mr. J. FARRAH, *Gr. to* BOSWELL MIDDLETON JALLAND, Esq., *of Holderness House, near Hull.*

"I have had 400 feet of your Gutta Percha Tubing, in lengths of 100 feet each, with union joint, in use for the last 12 months for watering these gardens, and I find it to answer better than anything I have ever yet tried. The pressure of the water is very considerable, but this has not the slightest effect on the tubing. I consider this tubing to be a most valuable invention for Gardeners, inasmuch as it enables us to water our gardens in about one-half the time, and with one-half the labour required."

Manufactured by the GUTTA PERCHA COMPANY, Patentees, 18, Wharf Road, City Road, London, E.C., and sold by their Wholesale Dealers in town and country.

Paxton Works, Sheffield, Established 1738.



SAYNOR AND COOKE'S warranted PRIZE PRUNING and BUDDING KNIVES, SCISSORS, &c.

Sold by all respectable Nurserymen and Seed Merchants in the three Kingdoms.

Important to Gardeners.

WE beg respectfully to inform you that we are now supplying Nurserymen and Seed Merchants with an article superior in quality to anything we have hitherto been able to offer, in PRUNING, BUDDING, and GRAFTING KNIVES, VINE and PRUNING SCISSORS, GARDEN SHEARS, &c., owing to their being tempered under an entirely new process, which renders the blade tough and not liable to break, and also gives the edge a lasting keenness which we can warrant them to retain for at least double the time they would under the old method of tempering, thus facilitating the work and saving the time usually lost by having constantly to renew the edge by sharpening, consequently making them more durable in wear and better adapted for all kinds of work, every blade being guaranteed of the same temper.

CAUTION. None are genuine except marked SAYNOR, or SAYNOR, Maker. Other marks would cause the purchaser disappointment.

MINTON AND CO. have REMOVED from Albion Place, Blackfriars, to 50, Conduit Street, Regent Street, W. ENCAUSTIC and other PAVEMENTS, EARTHENWARE and PLAIN TILES. Designs and Estimates prepared.

Manufactory: Stoke-upon-Trent.—Sept. 21

Parkes' Steel Digging Forks.

BURGESS AND KEY, 95, Newgate St., E.C., London, being the Wholesale and Retail Agents for these celebrated Tools, have always a large Stock on hand from which their Customers may select what they may require.

ANTHONY'S PATENT AMERICAN CHURN.—The FIRST PRIZE was again awarded to this Churn in Competition with several others at the Chester Meeting of the Royal Agricultural Society; it has obtained the First Prize given by the Society at every Meeting since 1850.

Messrs. BURGESS & KEY, 95, Newgate Street, E.C., strongly recommend it as the most perfect Churn now in use. Full particulars sent on application

JOSEPH HAYWOOD AND CO.,

MANUFACTURERS OF

PRUNING AND BUDDING KNIVES,

SPORTSMAN'S, and all kinds of POCKET CUTLERY.

Dealers in Gambia Garden Shears, Scissors, Syringes, &c.

Glamorgan Works, Sheffield.

Horticultural Works and Hot-Water Apparatus Manufactory,

Kensal Green, Harrow Road, London, W.

JOHN TAYLOR AND SON beg to call the attention of the nobility and gentry to the very superior manner in which they Erect all kinds of Conservatories, Vineries, Greenhouses, &c., combining every improvement with elegance of design and durability of materials and workmanship.

Their VENTILATING APPARATUS for the Fronts and Roofs of Houses has given the highest satisfaction. Churches, Chapels, Schools, Entrance Halls, Public Buildings, &c., heated with Hot-Water Apparatus in a most economical and efficient manner.

J. T. & SON have great pleasure in referring to numbers of the nobility and gentry by whom they are extensively engaged.

T. M. LOBJOIT'S PATENT HOT-WATER BOILERS are acknowledged by all who have them in use to be the most powerful Boilers now known, and are the most economical requiring less fuel and attention than any other. They are made of various sizes, suitable for heating the smallest Greenhouse to the largest Conservatory, Churches, and Buildings of all descriptions.

Testimonials forwarded on application to THOS. M. LOBJOIT, Hot-Water Apparatus Manufacturer, General Smith, &c., Turnham Green, W., and at Acton, Middlesex, W.

MUSGRAVE'S PATENT SLOW COMBUSTION STOVE.—This Stove is the nearest approach to Warming by Hot Water, and an efficient aid in Ventilation.

It will burn in Churches from Saturday till Sunday evening, without attention during the hours of worship. In Halls will burn day and night for weeks, with little care. Capable of warming a large Apartment for 24 hours, at a cost of 3d.; and deserving of special attention, because of its safety, healthfulness, durability, and extreme simplicity.

It is also made for Small Conservatories, with a vapour chamber, which maintains a moist atmosphere for 12 hours with once filling.

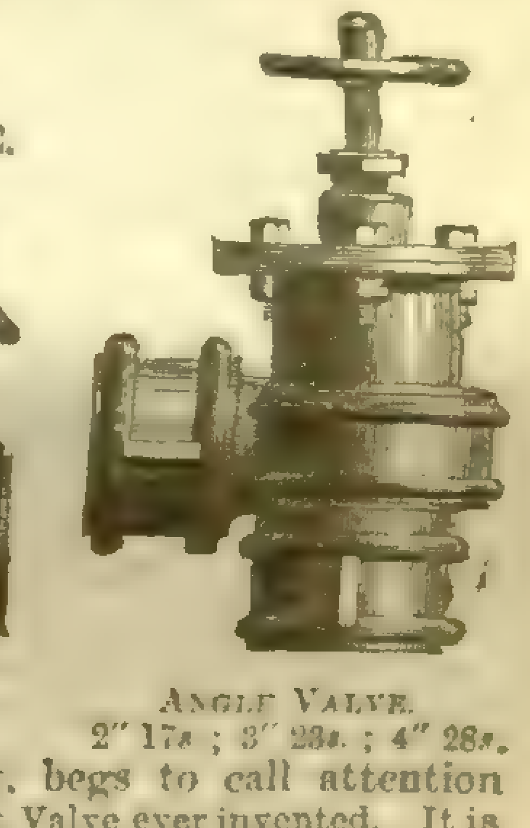
Particulars and prices post free on application to MUSGRAVE BROTHERS, Ann Street Iron Works, Belfast.

Horticultural Works, Danvers Street, Chelsea, S.W.

BECK'S PATENT

HOT WATER VALVE.

HORIZONTAL VALVE.
2" 18s. 6d.; 3" 25s.; 4" 30s.



ANGLE VALVE.
2" 17s.; 3" 23s.; 4" 28s.

JAMES GRAY, Sole Agent, begs to call attention to this most simple and perfect Valve ever invented. It is perfectly water tight, and is never liable to get out of order, or to get fixed by standing.

TO ARCHITECTS, ENGINEERS, GARDENERS, & OTHERS.—BECK'S Patent Valve has been submitted to several of the most scientific men of the day, and has invariably met with unqualified approval. A liberal Discount to the Trade

CONSERVATORIES, GREENHOUSES, VINERIES, and every description of HOTHOUSE erected on the most improved principles, and of best materials, at the lowest possible price consistent with good workmanship.

Heating by Hot Water in all its branches. Boilers of every approved description, Tubular, Saddle, Conical, &c.

JAMES GRAY, Horticultural Works, Danvers Street, Paulton's Square, King's Road, Chelsea, S.W.

ST. PANCRAS IRON WORKS,

OLD ST. PANCRAS ROAD, N.W.

IRON HURDLES, FENCING, AND GATES.

THE PROPRIETORS OF THE ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, WERE AWARDED THE SILVER MEDAL of the ROYAL AGRICULTURAL SOCIETY for their IRON HURDLES AND GATES, which, by their peculiar construction, are more than twice as strong and durable as those in ordinary use.

Lists per post on application. Gates from 30*s.* to 500*l.*

The Hurdles can be seen in process of Manufacture at the Works.

GAME WIRE NETTING.

PROFESSOR VARNELL'S ENAMELLED AND WROUGHT-IRON STABLE FITTINGS.

These Patent Mangers and Stable Fittings obtained the Commendation and the Silver Medal of the Royal Agricultural Society of England and the Royal Agricultural Society of Ireland, are adopted by the Royal Veterinary College, and Professor Spooner of that Institution states that they should be used by all who value the health and comfort of their horses. They can be had plain, galvanised, or enamelled.

A Show Room is devoted entirely to every description of Stable Furniture, and full-sized stalls and loose boxes are erected for inspection at St. Pancras Iron Works.

ADDRESS—THE MANAGERS,

ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, N.W.,

OPPOSITE OLD ST. PANCRAS CHURCH.

GLASS FOR GREENHOUSES.

SHEET GLASS, Stock Sizes, 16 oz.

Boxes included.

11 by 9,	12 by 9,	13 by 9,	14 by 9 ..	3rds.
12 ,, 10,	13 ,, 10,	14 ,, 10,	15 ,, 10 ..	14*s.* 6*d.*
13 ,, 11,	14 ,, 11,	15 ,, 11,	16 ,, 11 ..	
14 ,, 12,	15 ,, 12,	16 ,, 12,	17 ,, 12 ..	
18 ,, 12,	19 ,, 12,	20 ,, 12	.. ..	
16 ,, 13,	17 ,, 13,	18 ,, 13	.. ..	
19 ,, 13,	20 ,, 13,	21 ,, 13	.. ..	16*s.* 6*d.* per 100 feet
16 ,, 14,	17 ,, 14,	18 ,, 14	.. ..	
19 ,, 14,	20 ,, 14,	21 ,, 14	.. ..	

English Glass of the above sizes, 18*s.* per 100 feet.

SMALL SHEET SQUARES, IN 100 FEET BOXES.

6 by 4	6½ by 4½	7 by 5	7½ by 5½
8 ,, 6	8½ ,, 6⅜	9 ,, 7	[illegible]
		10 ,, 8	10 [illegible]

Boxes 2*s.* each, returnable at full price.

GLASS FOR ORCHARD HOUSES.

As supplied by us to Mr. Rivers.

20 in. by 12 in. / 20 in. by 13 in. / 20 in. by 14 in. / 20 in. by 15 in.		16 oz.	21 oz.
	Common	13*s.* 6*d.*	[illegible]
	Superior do. ..	16 0	1 [illegible]
	English Glass ..	18 0	1 [illegible]

The above prices include the Boxes.

Perforated Glass for Ventilation. Patent Plate and Palace Plate Glass. Ornamental and Coloured Glass.

London Agents for Hartley's Improved Patent Rough Plate.

Linseed Oil, Genuine White Lead, Carson's Paints, Paints of various colours ground ready for use.

Milk Pans, Propagating Glasses, and every description of Glass for Horticultural purposes.

JAMES PHILLIPS & Co., 180, Bishopsgate Street Without, London, E.C.

WEEKS'S UPRIGHT TUBULAR BOILER.

SUBJOINED IS THE REASON WHY

WEEKS'S ONE-BOILER SYSTEM

HAS BECOME THE ORDER OF THE DAY FOR HEATING BY HOT-WATER.

WEEKS'S No. 1. BOILERS are heating upwards of			200	feet of Pipe.
WEEKS'S No. 2. BOILERS	,,	,,	300	,,
WEEKS'S No. 3. BOILERS	,,	,,	600	,,
WEEKS'S No. 4. BOILERS	,,	,,	1500	,,
WEEKS'S No. 5. BOILERS	,,	,,	4000	,,
WEEKS'S No. 6. BOILERS	,,	,,	12,000	,,

The above statistics being accounts of hundreds of apparatus disseminated throughout EUROPE in practical operation, J. WEEKS & COMPANY publish them with the pleasing satisfaction that all who may honour them with their esteemed commands must effect enormous savings both in fuel and labour by the adoption of their ONE-BOILER SYSTEM.

JOHN WEEKS & COMPANY,

HORTICULTURAL BUILDERS AND HOT-WATER APPARATUS MANUFACTURERS,

KING'S ROAD, CHELSEA, S.W.

*** *Illustrated Catalogues, Designs, and Estimates forwarded free on application.*

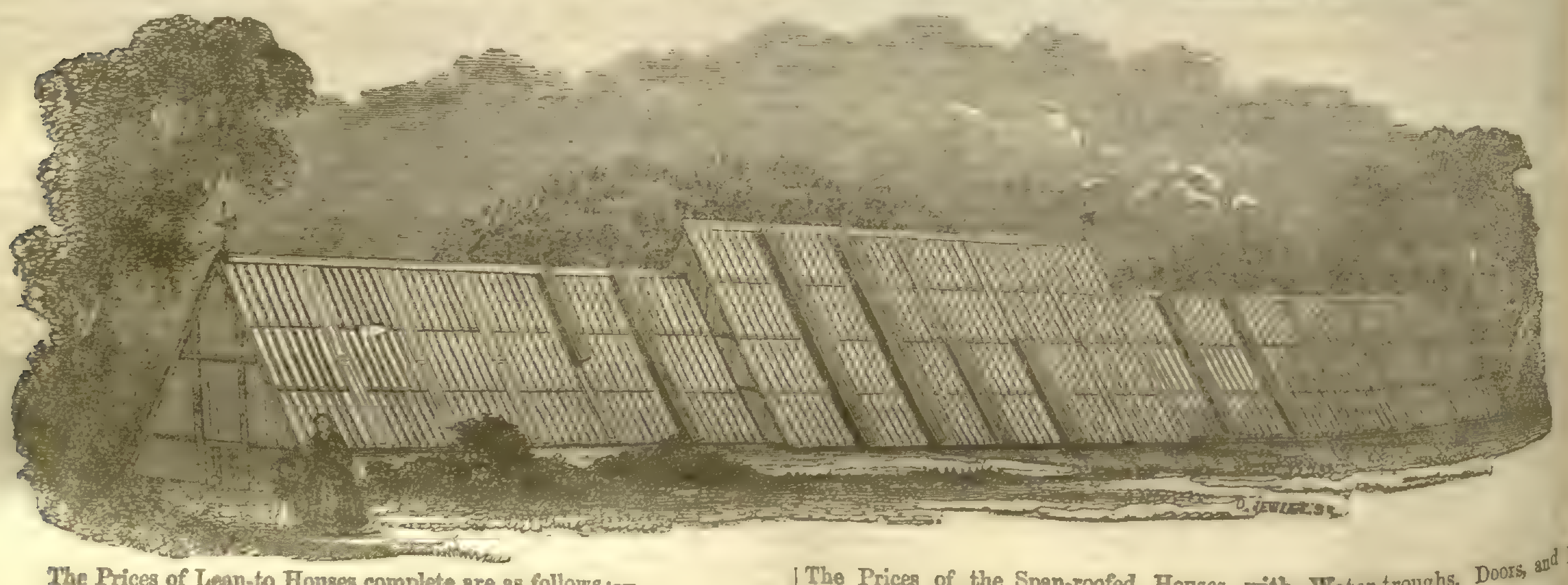
HOTHOUSES FOR THE MILLION,

ON THE PRINCIPLE INVENTED AND PATENTED BY

SIR JOSEPH PAXTON, M.P.

COMBINING SIMPLICITY, CHEAPNESS, EXCELLENCE, AND DURABILITY.

BEING CAPABLE OF FULFILLING IN THE MOST PERFECT MANNER ALL THE REQUIREMENTS OF HORTICULTURE.



The Prices of Lean-to Houses complete are as follows:—

Ft. In.	8 ft. Lights	10 ft. Lights	12 ft. Lights	14 ft. Lights	16 ft. Lights
20 7 in length	£12 0 0	£16 0 0	£21 0 0	£28 10 0	£34 5 0
31 3 in length	16 10 0	21 2 6	26 10 0	37 12 0	45 16 0
41 11 in length	20 18 0	26 18 6	33 7 6	46 14 0	57 7 0
52 7 in length	25 12 6	32 15 0	40 5 0	55 16 0	68 18 0
63 3 in length	30 6 0	38 10 0	47 2 6	64 18 0	80 10 0
73 11 in length	34 12 6	43 15 0	53 7 6	74 0 0	92 0 0
84 7 in length	39 6 0	49 11 6	60 5 0	83 2 0	103 11 0
95 3 in length	43 19 0	55 10 0	67 2 6	92 5 0	115 2 0
105 11 in length	48 17 6	60 12 6	73 10 0	101 10 0	126 13 0

The Prices of the Span-roofed Houses, with Water-troughs, Doors, and Ends complete, are as follows:—

Ft. In.	8 ft. Lights	10 ft. Lights	12 ft. Lights	14 ft. Lights	16 ft. Lights
20 7 in length	£24 0 0	£32 0 0	£42 0 0	£57 0 0	£68 12 [illegible]
31 3 in length	33 0 0	42 5 0	53 0 0	75 4 0	91 14 [illegible]
41 11 in length	41 16 0	53 17 0	66 15 0	93 8 0	114 16 [illegible]
52 7 in length	51 5 0	65 10 0	80 10 0	111 12 0	137 10 [illegible]
63 3 in length	60 12 0	77 0 0	94 5 0	129 16 0	161 0 [illegible]
73 11 in length	69 5 0	87 10 0	106 15 0	148 0 0	184 0 [illegible]
84 7 in length	78 12 0	99 3 0	120 10 0	166 4 0	207 2 [illegible]
95 3 in length	87 18 0	111 0 0	134 5 0	184 10 0	230 4 [illegible]
105 11 in length	97 15 0	121 5 0	147 0 0	203 0 0	253 6 [illegible]

If only one end is required a corresponding deduction will be made. The 14 and 16 feet lights are made stronger than those of less dimensions.

The above prices do not include package, railway freight, heating apparatus, or erection.

Illustrated Circulars with Lists of Prices and Cards to view houses in operation in the neighbourhood of London can be had on application to

SAMUEL HEREMAN, 7, PALL MALL EAST, LONDON, S.W.

Fruit Trees.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Fruiting Vines.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Roses.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Hyacinths.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Hollyhocks.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Geraniums, Herbaceous and Alpine Plants, Orchids, Chrysanthemums, Hardy Variegated Plants, &c.

B. S. WILLIAMS begs to inform his friends and patrons that a PRICED and DESCRIPTIVE CATALOGUE of the above, to which are added supplemental Lists of Fuchsias, Stove, Greenhouse, and Hardy Plants, Ferns, Ornamental Foliage and Variegated Plants, Fruit Trees, &c. (which include the best new plants of the season,) is now published, and will be forwarded post free on application.

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New Phalænopsis with Variegated Foliage.

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The Gardeners' Chronicle.

SATURDAY, SEPTEMBER 28, 1861.

A NEW method of raising Mushrooms has been invented by Monsieur LABOURDETTE, which promises great results, and is suggestive as to the possibility of raising artificially some other useful species of Fungi which at present defy the cultivator. M. LABOURDETTE, who has laid his method, together with specimens, before the Academy of Sciences at Paris, employs the spores of the Mushroom, which are treated with nitrate of potash, or in other words with common saltpetre, in such quantities as may not destroy the vegetative powers of the spores. A solution containing 1-30th part of saltpetre is injurious to vegetables, but it is possible that Cryptogams may be less susceptible of mischief from the salt. The soil is composed of sulphate of lime, and the spores when properly treated are covered with it to the depth of about 1-6th of an inch. The Mushrooms produced are of extraordinary size. We shall hope to give details on some future occasion. *M. J. B.*

ONCE upon a time there was a famous London Auctioneer unrivalled for his power of description. His imagination was something more than lively, and his announcements something less than true. It seemed as if the wizard MICHAEL SCOTT had lent him a goblin page to dazzle his eyes and surround with "glamour" all he proceeded to sell. To him a lawn seemed a park, a tumble down house a spacious mansion, a cockloft a noble granary; a pigstye, with stabling for a donkey and cart, formed spacious outbuildings, and half a dozen cankered Apple trees a noble and highly productive Orchard. It appears from a letter in another column that the spirit of the deceased Englishman now inhabits Belgium, and that announcements in this country of sales in that fertile land are drawn up under similar preternatural influences. Trees, very beautiful in the eyes of a Belgian auctioneer, prove when the glamour is removed to be scrubby, scraggy bushes, fit only for the fire, so that those who are incautious enough to forget the real meaning of such tradesmen's descriptions have their voyage and expenses for their consolation.

Another time we English shall know better how to value Belgian auction advertisements.

NOW that the DAHLIA season has come nearly to an end, we may look around to see what have been the acquirements of the present season in the shape of new flowers. A considerable number of seedlings have been brought under review at the various metropolitan meetings and exhibitions, but of that number very few have been pronounced to be real acquisitions. In some measure this paucity of first-class flowers may be the result of the uncongenial season, which, in consequence of the extreme heat and dryness which have prevailed during the greater part of the blooming season of this flower, has doubtless affected the development of seedlings as well as of established varieties. Whatever the cause, the fact remains that very few indeed of the novelties have taken high honours.

Undoubtedly the flower of the year, in the south, at least, is Pope's Lord Derby, a variety which was first exhibited late last season, and then gained commendation. During the present year it has been shown very fine; the "blooms"—flower-heads or capitules as one ought to say, have been large without coarseness, considerably above the average in size, deep and symmetrical, with even well-arranged florets, and a centre pretty well up to the mark as regards fulness. The colour is one of those dark purplish shades which are not easily named, something of a bright rosy purple. Altogether it is a very fine novelty. Mr. PERRY'S Model is another of the leading flowers of the year. This is of medium size, very compactly and prettily formed, the centre well filled and the colour an orange buff; it is likely to be a useful exhibition flower. Another of the first rank varieties will be TURNER'S Mrs. Bush, a lovely flower as to colour, of average size, and with all the properties of a first-class Dahlia: the colour is a bright rose, we might almost say a deep peach-blossom. These are the cream of the season, as far as our observations have gone.

Several varieties of useful character occupying a second rank, have, however, been produced. Of these one of the most pleasing, and if we mistake not one of the best in quality, is PERRY'S Delicata, a variety in which the flowers are of a rosy fawn colour, compact, symmetrical, and well developed. TURNER'S Cygnet is another which has always kept in pleasing character, though it is perhaps rather small; it is regularly and neatly built, of a deep flesh colour, whitish towards the centre. Others of Mr. TURNER'S flowers which fall in this category, are:—Una, a blush-white tipped with rosy-purple, the contour of the flower satisfactory, but scarcely so the eye, which is rather sunken; and Charlotte Dorling, a white, heavily tipped and shaded with bright light purple, very pleasing from its fine colouring. Another, called Bob Ridley, from the same source, a maroon-crimson, rather rough and flat, has somehow or other passed muster, but is hardly to our fancy. Early in the season we noticed Mr. DODDS'S Minnie Dodds, a shaded rosy lilac, showing whitish towards the base of the florets; it was pretty fair in outline and form, but nevertheless wanting in the eye and centre. Handforth Hero, from Mr. HENSHAW, was shown, passable in form, but not very telling in colour, being a pale orange red wanting in brightness. Of Mr. KEYNES'S productions we rather prefer Goldfinder, a large yellow slightly tipped with red at the back of the florets, albeit it has a tendency to coarseness. Black Prince is also likely to be a useful flower, one of the dark shaded class, and of average size. Maria Carter again is very pleasing from its bright colour, which is its strongest recommendation, the size, form, and general properties being about the average; the colour of this is white, heavily tipped with deep crimson. Maid of Bath, a white with purple tip, and Imperial, a full size deep amaranth or ruby purple, among Mr. KEYNES'S varieties have further been produced in a tolerably good state in the course of the season. Another called L'Etoile, white striped with purple, is decidedly coarse, but for all that its colour and marking will make it a useful decorative sort. RAWLINGS'S Reliance, a striped blush, may be regarded as a useful fancy; and the Countess of Portsmouth of the same grower, a creamy white tipped with rosy purple, has been pronounced a very promising flower. The foregoing have all obtained Commendations from the Floral Committee of the Royal Horticultural Society.

There are one or two other specially pretty varieties which we must mention. Thus, the Paragon of Mr. PERRY, a golden yellow edged with rosy scarlet, is remarkably attractive in colour, and Mr. COOK'S Mary Ann, which made its appearance at one of the South Kensington meetings, though small, is the most brilliant crimson scarlet we remember to have seen, and must be a very ornamental variety for the garden, if, as we understand, it is of good habit.

—— Beware of Daddy-long-legs. We have observed within the last few days swarms of these insects, collected, for the purpose of pairing, on the iron railings surrounding a London Grass enclosure. Wherever a similar occurrence may be observed it would be worth while to employ children to collect and destroy the insects without delay, before they have time to deposit their eggs about the roots of the Grass. The grubs of these Tipulæ are amongst the most destructive enemies of a green-sward turf, and no opportunity should be lost to prevent them from attacking it. A few years since the turf of some of the London parks was destroyed in a wholesale way by these destructive creatures, to whose increase and development the recent hot dry weather has probably been favourable. Certainly we never remember to have seen them so abundant in any season or locality as in the present, in the situation to which we have above referred.

—— The *Floral Magazine* has at length assumed the new dress to which we alluded at p. 435, and it is announced that in future, it is intended to comprise only such subjects as from the beauty of their appearance and the easiness of their culture deserve the appellation of popular garden flowers. The subjects are to be restricted to what are known as "florists' flowers;" the drawings are to be confided to Mr. ANDREWS; and the descriptions and editing to the Rev. H. H. DOMBRAIN, who is introduced as the well-known D. of the floral world. As regards the plates, the most important part of the work, suffice it to say that the change is from FITCH to ANDREWS, and that the new illustrations are according to the well known manner of the latter, evincing as compared with the former issues a certain extra amount of finish in the colouring. The subjects figured in the Number before us (17) are:—Rhododendron Climax, a fine hardy scarlet-crimson hybrid Catawbiense raised by Mr. STANDISH; SMITH'S Lycurgus Auricula, described as of Scotch origin, and one of the finest of the green-edged varieties, the truss very curiously drawn however; a lovely creamy-buff Tea Rose from Mr. CANT, which, long cultivated under a name which proves to be false, and supposed to be all but lost, is now re-introduced to the notice of Rose-growers as it well deserves to be, but under the affected foreign name of L'Enfant Trouvé, as if we had not already enough pretty Roses with ugly outlandish names. Why not, since it had to be baptised, have christened this in the vernacular? Lastly we have the double-flowered Petunia called Inimitabilis flore-pleno, the best picture in the present issue, and a good representation of a handsome decorative plant, albeit one which in this rapid age has been already surpassed by newer varieties.

—— We are glad to observe that Mr. DILKE'S idea of submitting the grouping of fruit and flowers for the dinner table to competition at our flower shows, where the designs form a very interesting and novel feature, is spreading through the country. We have noticed in the schedules of several provincial and rural shows, a class in which prizes have been offered for the best designs of this nature, and though in the instances we have seen but little has come of the invitation, yet it has at least brought the question before the minds of many persons, both exhibitors and spectators, who might otherwise have had no inducement to think at all on the subject, and hence cannot fail of working good in the end. Our illustrations at p. 647 of the design of Mr. MARSH, which gained the prize Mr. DILKE offered, will afford abundant material for studious reflection, and will be something like a standard of comparison to those who may have seen unsatisfactory designs and combinations exhibited. No doubt even this may be improved on, but it is at any rate of the right stamp. The more one thinks of this design, the more one finds satisfaction in it generally. While admitting this, however, we cannot but point out that a very obvious improvement would be to give it a little more semblance of solidity, and this is a feature which is hardly likely to escape the notice of its originator. We do not mean at all that it should be made to approach the clumsy ugliness of many of the designs with which it was put in competition, but that without altering its general appearance or character, it should have given to it just a little more strength, or, at least, the appearance of strength and solidity in the stem. A dish of fruit it must be recollected is a weighty affair, and necessitates this idea of firmness, strength, and stability in any contrivance for placing it on the table, more especially when, as in this case, the contrivance has some considerable elevation.

This idea of grouping the elegant or useful objects brought together to make up a modern horticultural exhibition need by no means be confined to the example of tastefully arranging a dessert. It might very advantageously be brought to bear upon the arrangement of flowering plants in ornamental stands for the decoration of the drawing-room or the parlour window. There is ample scope for improvement in the contrivances employed to receive the half-dozen or so of choice, yea, of common flowers, which suffice to give an air of elegance and grace to an in-door apartment otherwise cheerless and uninviting: and much advantage too would result to the many from familiarising them with the most tasteful and appropriate appliances from time to time devised for this and kindred objects. What if prizes were to be offered for the most useful, appropriate, and elegant stand for holding say a dozen of flowering plants of the ordinary market size? At the very least, if nothing new and superior in design were to be the result, the various forms now in use and available would be brought together; the best would become evident, and generally known and adopted, and the exhibition itself could hardly fail to be suggestive of improvements which would become manifest if the same class of articles were to be invited in succeeding years.

If then the eye is to be trained in the setting up of a dessert, and if this training is to be given by means of the lessons to be learned in a competitive display; or if, in fact, there is any good or useful object to be attained in the gratification of the visual organs, and through them of some of the more refined feelings of our nature by the combination of the beautiful with the useful when, after all, the palate has chiefly to be satisfied as in the case of a dessert, how much more would the principle apply to the grouping of flowers

for decorative purposes, where everything depends upon a just appreciation of those principles of true art of which the masses of even refined society have but a superficial experience. A public competition in the arrangement of a few simple and definite materials in the shape of flowers, such as Covent Garden would afford, would thus become, in the truest sense, a school of high art in which the beautiful would be taught to the observant eye. The matter is well deserving the attention of those who have the organisation of great public exhibitions, as it would not only be working out unostentatiously a real public benefit by educating and refining taste in what is thoroughly a home question, but would add a feature of no common interest to their programme.'

Much of the value in a general point of view of any such competitive display would, however, depend on the circumscription and the come-at-able-ness of the materials employed. The competitors should only be permitted to use such common flowers as are readily purchasable in the markets. The several groups should, as far as possible, consist of the same kind of materials. It is in this way only that the full advantage of an artistic arrangement over a promiscuous one would be made clearly and unmistakably evident. ——*

THE LATE EXHIBITION OF THE IMPERIAL HORTICULTURAL SOCIETY OF PARIS.

THE principle of encouraging and promoting the advancement of various branches of Art and Manufactures by periodical competitive exhibitions had long been recognised in France, but, until within the last few years, it had scarcely been acted upon in regard to horticulture. The great success of our own exhibitions of flowers and fruits, the steady and rapid progress they evinced since their first establishment in 1832, the great stimulus they gave to individual enterprise in the introduction or creation of new forms of useful or ornamental plants, and in the improvement of old ones, could not, indeed, fail of being duly appreciated by our neighbours, and, previous to 1855, attempts had already been made by a few individuals to get up Horticultural Societies and exhibitions in Paris, but without high patronage the results were too small to attract any general notice. By that time, however, the improvement and embellishment of the capital had begun to assume great importance in the eyes of Government, who saw also how useful the art of horticulture might be as one of the means of promoting this object. On the occasion, therefore, of the great Industrial Exhibition of 1855, which was preparing in imitation of the London one of 1851, it was determined to take that opportunity of holding a corresponding one of Horticultural produce, which it was hoped might prove the basis of an advance in the art corresponding to what had been witnessed in Britain. The two Horticultural Societies, which were dragging on a lingering existence, were consolidated into a single one, which was placed under imperial patronage. A considerable number of new members and "Ladies Patronesses" were induced to join it; a piece of ground opposite the main entrance of the Palais d'Industrie was temporarily allotted to it; and the exhibition which it there maintained for several months, although far below our own in the beauty and variety of floral specimens, was nevertheless very creditable as a first attempt, and was especially remarkable for the taste displayed in laying out the ground, and in the arrangement of the objects exhibited.

The "Société Impériale et Centrale d'Horticulture," being now firmly established and fairly supported, has done much towards the promotion of the art in France. Several societies, with periodical exhibitions, have been called into existence in departmental towns, either after the example of or in connection with the central one, which has usually sent delegates to attend their principal shows; and official reports, both of these shows and of the results of horticultural experiments in various parts of France, have been published in its monthly journal. By these means, and by the prizes awarded at the ordinary meetings of the Central Society, held usually twice in each month, considerable encouragement has been given, more especially to the improvement of hardy fruits and vegetables or to the introduction of new ones. In flowers however much less progress has been made; ornamental horticulture does not in France meet with that general support and encouragement on the part of the wealthy classes which is bestowed on it in our country, and where attention is given to it it takes a different direction. It is general effect and not individual beauty of specimens that they aim at. It is very seldom that a plant, however beautiful, can obtain a high price whilst it is new and rare, still less because it is new or rare. So also forced flowers and fruits, although prized under certain circumstances, would never meet with anything like that remunerative sale which has been the main cause of the great progress the art has made in Britain. There are a few individuals who may take the same pride that we do in the beauty of their collections, but the great majority of those who take interest in their châteaux and gardens, would be perfectly horrified at the sums expended in England on flower gardens, stoves, or forcing houses, by country gentlemen whose incomes were equal to or smaller than their own. It is no wonder then that the display of flowers at the Exhibitions of the Central Society at Paris should have improved but little, or even, judging from that which is now taking place, should in some respects have retrograded. The Society has indeed been labouring under some difficulties. It has no garden, which can alone set off floral exhibitions to advantage, and it has hitherto had no tolerable locality for any display. I am told that the spring show this year was miserable. It was held early with a view to Camellias, for which several prizes were offered, but probably from fear of injury from the insufficiency of the exhibition rooms, only 12 Camellias were sent to it. The Society is now better provided. It is established on the ground floor of a large hotel in the Faubourg St. Germain, with an interior court-yard of considerable size, which has been glazed over. The flowers might be shown to advantage in this and another smaller yard, and in the broad well-lighted passage leading to them, whilst the fruits and vegetables are laid out on tables in the rooms, the whole exhibition occupying an area of about 1300 square metres (of rather more than an English yard each). Still an indoor exhibition to be visited by large numbers of people is very unfavourable and even injurious to the specimens, independently of the limited space appended. The large glazed *cour*, handsome as it is, would be nearly filled by the Azaleas alone of one of our spring shows, and if, as they hope, these Parisian exhibitions are to acquire any extension, they will be obliged to transfer them to the Palais d'Industrie, and to limit those held in their own rooms to special classes, when it is hoped they may be more tastefully arranged than at the present Exhibition.

The main objects of this September Exhibition were the fruits, and in them it is a successful one; but also, from the large space occupied in the programme by Plantes d'Agrément, we might have expected a considerable display of flowers, and especially I had hoped we might have learned something from the "Bouquets montés, Coiffures de bal, et Garnitures de table en fleurs naturelles," for which prizes were offered, and in the arrangement of which Parisians are known to show so much elegant taste. But of the two last there is absolutely nothing, and the few bouquets exhibited are round heavy masses of ill-arranged flowers, such as are sold by the roadside in the outskirts of London, without any of the graceful lightness I had so often seen in the bouquets of French saloons. I missed also many other articles for which prizes were offered. Chrysanthemums, indeed, could not have been expected for some weeks to come, but there are no Verbenas, Fuchsias, Balsams, or Achimenes, and the greenhouse and hothouse plants are generally miserably poor. There is, however, a good set of variegated Begonias in great vigour of foliage, and amongst the miscellaneous variegated-leaved plants a young specimen labelled Sphærostema marmoratum from Borneo looked very promising; also a very rich coloured Coleus Verschaffelti. The Phloxes are good; also a few China Asters, and some fine varieties of Dianthus sinensis (Heddewigii laciniata, &c.); a considerable number of Lantanas had a prettier effect than I should have expected; and there are Dahlias, cut Roses, Gladioli, Petunias, &c., and several annuals, amongst which well-flowered pots of Nemesia compacta were pretty. But of the whole flower-show, the only really interesting object was a fine mass of M. Laurent's blanched Lilacs*—unfortunately placed in a corner in a plain tin pail. The variety is that known as Lilas de Marly, but the individual flowers are larger and not so close in the bunch, which has an elegant pyramidal form. They are of the purest white, and in this respect superior to the naturally white Lilac, and although they have now been four days gathered they retain their freshness and delicate odour as perfectly as when I saw them on Saturday. The foliage is rather too pale, but does not look sickly. In winter the flowers are said to be produced without leaves. I shall however before I leave Paris visit M. Laurent's establishment, where I am told he forces them on a very large scale. *B.*

(To be continued.)

* See *Gardeners' Chronicle*, p. 1060, vol. 1860.

PHLOXES IN POTS.

HAVING grown the collection No. 1 exhibited at the Royal Horticultural Society's Garden on the 11th inst. and referred to by you in a recent Number of your Paper, I have sent the following account of the treatment they received. Doubtless it can be improved upon; but it may enable others who may cultivate Phloxes in pots another season to produce dwarfer plants than I have done with as fine heads of bloom. The principal points to be observed in Phlox culture in my opinion are dwarfness, fine foliage, and large heads of flowers; the individual blossoms should not however be overlooked, as excellence of shape and decided colours are equally important.

This being the first year in which a prize was offered for Phloxes in pots at a metropolitan exhibition, I was unable to select wholly dwarf growing kinds; I had no reliable information as to the different heights the various varieties attained, consequently in selecting my plants I was guided more by the descriptions in the catalogues than anything else, at the same time endeavouring to get as much variety of colour as possible. About the first week in April I picked out all the young plants in 60-pots I could find, with three, four, five, or more shoots, and potted them at once into No. 16 pots (9-inch ones). The compost I used was 3 parts turfy loam, 1 part well decomposed manure, and a little river sand to keep it porous; the pots were well drained, and a little half-rotten manure was placed over the crocks to prevent the soil from running into the drainage. The pots were then placed in an airy open situation, where they remained until exhibited. They were not plunged at any time, as I dislike plunging anything that is required for exhibition, for when lifted from the plunging material the lower leaves usually drop off in a short time.

In July I found some difficulty in having 12 pots in flower at the same time, as some would be in bloom in a fortnight, and others, such as Triomphe de Twickle, Princess Alice, &c., were not showing symptoms of a truss. To obviate this I cut down all the most forward to within 2 or 3 inches of the surface of the soil, thinking that they would break vigorously, and throw up some fine shoots and spikes to come in with the later kinds. In this I was disappointed, as not one of them did any good at all; several of them died, and I lost about 12 pots by this treatment. Those next in earliness I stopped from 1 foot to 18 inches from the surface of the soil, most of these broke well and produced nice heads of bloom on the lateral branches, but not equal to those not stopped; some of each were exhibited in the collection, and the difference was very obvious. The late kinds were not stopped at all, and produced magnificent heads of bloom. Several of the plants exhibited were almost past their best: the weather being very hot forced the blooms out so quickly that I could not retard them, having no cool shady situation suitable. I placed several of the most forward close under a north wall, and found that it nearly spoilt them; they seem to have a decided antipathy to close quarters. About a month before the exhibition weak manure water was liberally supplied; the pots being completely filled with roots requiring additional support, perhaps this and the rich soil assisted in making some of the plants taller than they would otherwise have been, hence I conclude that stimulants should be cautiously supplied, especially in the earlier stages of growth. The Phlox naturally likes high feeding, but in pot culture it must be done judiciously.

They should never suffer from drought, as every time the plants get dry you lose some of the bottom leaves, a great loss, as you cannot replace them, and in consequence you have bare stems. The individual spikes were of course carefully staked, as the wind has great power over them when the blooms begin to expand. I think that there is nothing required in their culture that any amateur could not readily undertake; and as there are now so many fine new kinds of dwarf habit, the tall unsightly varieties need not be grown for pot culture. They should however, I think, be grown in pots, as the difference between Nos. 1, 2, and 3 was that No. 1 had been grown entirely in pots, and Nos. 2 and 3 had been lifted from the ground and potted some few weeks previously. The flowers in 2 and 3 were brighter than those of No. 1, the latter having no protection; the humble bees tore and scratched the flowers, giving them a pale appearance. A tiffany house or some light airy place where insects could be kept from them is necessary to produce them in good order.

Stopping, as is proposed at page 849, when about six inches high, is what I had intended to try on some next year, but you will only get lateral heads of bloom; your plants will be dwarfer, but at the expense of the terminal head, which I think the principal ornament, as the lateral spikes look poor by their side.

I fully concur in the high opinion of the decorative capabilities of the Phlox you have formed, and I believe that your remarks will assist in bringing this

fine flower into general cultivation, as already ladies and gentlemen in this neighbourhood, from reading the article at page 848, have begun to order plants and to look out a prominent situation for their culture next season. I feel confident that the hybridiser may annually make a great advance by a little attention to the habit of the plant and shape of the individual flowers, so that in a few years beds of Phloxes will be as common as Verbenas.

The varieties of P. decussata as you observe should alone be grown. P. suffruticosa and its varieties are nearly all too early for exhibition purposes, and they do not remain in flower one half the period that the varieties of P. decussata usually do; some of my plants have been in bloom more than 10 weeks, and they are not shabby yet. I would caution growers to protect the young plants from spring frosts, as mine were seriously damaged by it when a few inches high, and they show the effects of it even now, the stems a few inches from the soil having a swollen appearance, and the outside bark a rough scabby or cankery aspect. I lost one kind entirely from this cause, the frost bursting the sap vessels so that the shoots rotted off. *William H[illegible], gr. to Mr. [illegible], Westerham, Kent.*

VARIEGATED ASH-LEAVED MAPLE.

SOME five or six years ago M. Carrière made known through the "Revue Horticole" that M. Bonamy of Toulouse had sent out a new plant remarkable for its beautifully variegated foliage, and that it was a variety of the Negundo Maple (Acer Negundo, or Negundo fraxinifolium).

This Negundo, or Ash-leaved Maple, is well known as a handsome tree of rapid growth. Its branches, which are of a fine green in the young shoots, acquire a pleasing Ash-gray hue as it gets older. The leaves are imparipinnate (pinnate with an odd one), consisting of 5 or 7 oblong leaflets, of a bright green, and are produced later than the flowers, which hang in clusters of red and green. The keys seldom ripen; they are small, and borne on long pedicels. The species grows abundantly in many parts of North America, but chiefly in Pennsylvania, Carolina, and the Alleghany mountains, where it is called Box Elder.

The history of the subject of this article is as follows:—In June 1853, a grand horticultural exhibition was held at Toulouse, and MM. Barillet and Masson were invited from Paris to assist in awarding the prizes, the principal of which was a gold medal given by the Empress. After the judges had completed their labours, the two Paris judges were walking in the garden talking over the merits of the respective exhibitions, when one of them spied on a stage in an obscure corner a young tree, as they supposed, languishing in a pot filled with sand, and which had escaped the attention of the judges. It turned out to be a young shoot, cut, it is true, from a vigorous tree, but burnt up by the southern sun, withered and neglected; still it retained a fine appearance, its foliage being beautifully variegated with white, green, and rose-colour. The tree itself was soon discovered, and most of the judges were struck with equal admiration at so charming a tree, which nevertheless had existed at Toulouse for a long time. It was a chance sport in the nursery of M. Fromant upwards of 15 years ago. It is very handsome, with a round head, covered with foliage beautifully variegated as above described; and the wood is streaked with yellow. It was propagated, and the young plants were sold at half-a-franc each. After seeing the tree the judges were unanimous in awarding to M. Fromant the large gold medal, although it appears they had previously intended it for a collection of plants from another exhibitor. After this the variety was rapidly propagated, and the plants rose in price from almost nothing to 1*l.* each. It is now extensively employed, as it deserves to be, in ornamental gardening. A fine plantation of it forms one of the principal ornaments of the western slope of the Bois de Boulogne, near the Kiosk of the Empress.

Although the absence of green colouring matter in portions of the leaves of this and other variegated plants must be considered as a kind of disease, yet the Variegated Ash-leaved Maple is, notwithstanding, very vigorous, and at the same time remarkably constant in its variegations. Budded on the common Negundo it pushes vigorously. *Extract from the Revue Horticole, July*, 1861.

Home Correspondence.

Belgian Plant Sales.—You will remember a short time ago a circular was issued by M. Jean Verschaffelt, of Ghent, stating that a public sale of the finest collection of Orange trees known, consisting of 30 couple remarkable for their beauty and their extraordinary growth, would take place in Bois de Flines, near Tournay, on Monday the 16th of September. I, in company with many others, left Tournay on the morning of the 16th of September for the Bois de Flines, with the view of purchasing some of those so-called "beautiful" Orange trees. On arriving at the Château and inspecting the trees in question, I was disgusted at finding that we had been completely hoaxed—that there was not a good Orange tree in the collection, and that many were such as no person would accept as a gift if he had to pay for transport, even to Tournay. The tubs were very large and the trees very bad. Moreover, the auctioneer before commencing the sale stated that unless all the trees were sold there would be no sale. All the trees did not sell, consequently the sale was stopped, and the company returned much annoyed, and protesting against such proceedings. Let me strongly advise the people of England to have a proper understanding before they attend another sale of "beautiful" trees in Belgium. I was informed that it was a common thing at such times to stop the sale and declare it null unless all were sold. *Jean de Paris.*

Manure for Conifers.—I fancy that the numerous letters you have received on this subject will already have satisfied you that the notion that manure was injurious to these plants, has been the result of prejudice. My experiment was not original, the practice having been frequently adopted by a friend, who, having witnessed its successful application, recommended it to me. In answer to "Crostonian" I beg to state that the dung was from the stable, previously thrown into a covered pigs yard (a practice which I have found most effectual, improving the manure in a high degree); it was laid round the roots, mulching the surface, not dug in, which would probably damage the surface roots. While on this subject allow me to observe that manure may also be used with excellent effect on Rhododendrons. I have tried this with great success, improving both the growth and foliage in a surprising manner. This may not be needed in really good peat soil, but where there is a difficulty in obtaining this, or where the plants are starved by the roots of neighbouring trees (especially Ash) it will be found very useful. *V. T. Phillpotts, Porthgwidden, Cornwall.*

Rainfall, August 1861:—

Stations.	Height of Gauge. Above the Ground. Ft.	in.	Above the Sea Level. Feet.	Depth of Rain. Total for the Month. Inches.	Greatest fall in 24 Hours. Depth. Inches.	Date.	Rainy Days.
Little Bridy, Dorset	0	4	348	.93	.88	8	10
Barnstaple, Devon	0	6	31	3.10	.65	3	16
Castlefield, Wilts	0	11	336	.93	.27	8	19
Camden Town, London	0	4	100	.94	.24	8	10
Finchley Road, London	0	4	270	1.02	...	...	...
Ditto ditto	[illegible]	4	308	.44	...	...	...
Oundle, Northampton	[illegible]	0	124	.40	.11	22	17
Norwich	0	0	30	.18	.17	16	6
Derby	5	0	179	.92	.17	23	12
Manchester	3	0	104	2.10	.30	3	13
North Shields	1	0	124	1.67	.85	14	22
Dumfries	0	5	63	7.58	1.70	8	12
Nookton, Fife	0	6	80	5.46	1.10	11 & 12	23
Sandwick, Orkney	2	0	78	6.75	.68	18	25

Little Bridy.—Neither thunder nor lightning during the month.

Derby.—Average (14 years) 2.84 inches.

Manchester.—Dr. Dalton's average (47 years) 5.46 inches.

Dumfries.—Average (10 years) 4.38 inches. 1st to 21st excessive rain; 3d, thunderstorm and deluge of rain; fine from 22d to 28th. Barley cut on 1st; Oats on 5th; Potatoes much diseased. Worst hay harvest ever known. Swallows preparing for flight, 29th.

Nookton.—Wet throughout, with high winds from W. & S.W.

Sandwick.—Average (20 years) 2.95 inches; the greatest recorded (till the present) being 4.85 inches last year.

Kirkwall.—8.16 inches, more than ever recorded, 1.90 on 3d.

Orkney.—11.14 inches (believed to be the greatest on record.) A Loch in the neighbourhood, 23 miles long, has been 8 ft. 3 in. above its usual level.

G. J. Symons, Camden Road Villas.

American Blight.—Do you think that the severe frost of last winter has had anything to do with destroying American blight? I had it very bad on some Apple trees; in fact they were almost covered with it. I tried Gishurst Compound and other remedies, but without any great amount of success. This summer there is scarcely any to be found, and I cannot account for its absence unless it be that the frost of last winter destroyed it; none of the trees except one had any dressing last year. Probably some of your Correspondents may have been equally fortunate. *C. H.* [We have not.]

Squirrels.—These appear to be very capricious in their habits. I never discovered any injury to my plantations until this year, when, all at once, we found about 200 Larches injured, besides a great many Spruces and some choice Pines. They barked them about six feet from the top, killing the leader. We killed about 100 squirrels, and pulled down a great many dreys. *J. W. L., High Elms, Farnborough, Kent.*

New Fruit Protecting Material.—I beg to enclose a small piece of cotton wadding on purpose to ask your opinion as to the propriety of recommending its more general application. I have used it this year in its present imperfect state for covering individually all the Peaches on the walls here, and I find that it completely protects the fruit from the attacks of wasps and flies. I also find that it admits sufficient air and light to colour the fruit; and I believe that it improves the flavour of late fruit by maintaining a little warmth when cold nights set in, and in some degree keeping an unity of temperature with the roots. I do not know at what price this material could be produced, but I suppose that it would be cheap, taking up less time to make than nets, and being more effectual than any net I have tried. The smooth side is put next the fruit. *John Reid, Orton Hall, Peterbro.* [This is a very thin description of cotton wadding, and we should think, judging from its appearance, that it would answer the purpose perfectly, if it can be kept dry, and is not too dear.]

Autumn Shoots (see p. 850).—The Oaks and other forest trees in North Warwickshire have not put out any autumnal or second shoots, and their absence has been remarked by several persons. The only instance of second shoots I have seen is an Evergreen Oak, which was nearly killed by the last severe winter, and which has put forth a few by no means strong shoots on the south side of the tree. *Mary, Ryton-on-Dunsmore.*

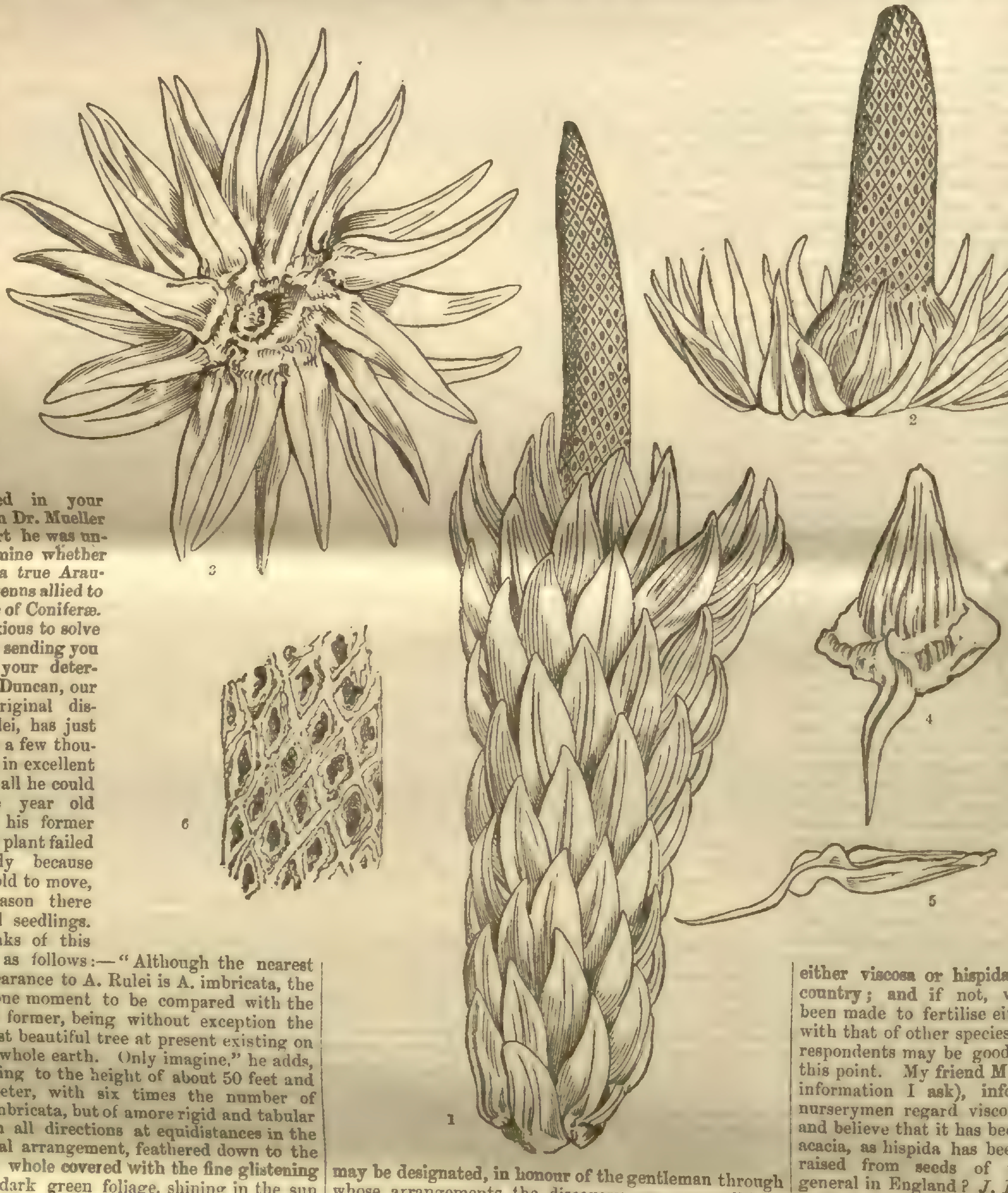
Chærophyllum bulbosum.—This plant is again announced by Vilmorin, Andrieux & Co. as a substitute for the Potato, with many encomiums. Can any of your readers give the results of trials with it in England? *G.* [We understand it is regarded by French gourmands as "a most delicious vegetable." Now is about the time for sowing the seed. Messrs. Vilmorin give the following directions for growing it. Sow in September or October in rows or broadcast, as Carrots, taking care to roll the ground afterwards. It prefers a good damp well manured soil, and *not* the light land of the Carrot. The crop ought to be ripe in July.]

A Conservatory moved Whole.—It may interest some of your readers to know that a conservatory of large dimensions may be moved entire with a little care. Our conservatory, built last year, is on the new principle of glazing upon light rafters 16 inches apart, and consequently the whole thing becomes a fixture and cannot be taken to pieces without the risk of breaking a great quantity of glass. Having to move it 66 feet in consequence of a railway company requiring the land on which it stood, we resolved to move the whole structure entire, as far as wood and glass were concerned. This was accomplished successfully in the space of one day by means of two common jacks acting horizontally against the ends of the baulks of timber on which the house was placed. The conservatory is 75 feet long, 30 feet wide, and 17 feet high, and span-roofed. Eight baulks of timber were placed at certain distances across the house, and were kept from spreading by braces or ties of quartering strutted diagonally. Near the end of each baulk strong legs were placed on each side, through which an axle was run, and thus 16 iron wheels running on 3-inch planks carried the structure safely to its destination. The greatest apparent difficulty was that in moving the house sideways one end had to be brought forward 6½ feet. This was easily accomplished by working one of the jacks a little faster than the other. Besides saving at least two-thirds of the expense that we should have incurred in pulling the house to pieces, we shall save the two months that it would have taken to rebuild it, and our Orange trees will no doubt be safely lodged in their winter quarters within a fortnight. The only casualty was one square of glass broken. This was caused by the deluge of rain that fell on Tuesday night, sinking considerably the newly-made ground on which the planks were placed. *J. & C. Lee, Vineyard Nursery, Hammersmith, Sept. 26.*

Orchard House Building.—As the builder of Mr. Pearson's orchard-houses, will you allow me to answer some of the remarks of Mr. Rivers in your Paper of last week. Some six or seven years ago Mr. Pearson requested me to go to Sawbridgeworth to see the houses there, as he intended to build some himself. Though impressed with many things I saw, the talent displayed in building was not amongst the number; in fact I was a little disappointed at being sent so far to see houses erected in so rough a manner. Mr. Rivers may be an authority in plant growing, but I deny his right to claim to be an authority in building. What does he mean by saying that a house paved with quarries is damp and dangerous? If the house were paved with half burnt bricks it would be damp, but with Staffordshire quarries, hard as flint, or Minton tiles grouted with cement, the thing is impossible. Mr. Rivers seems greatly to dislike pavements. He says no bricks should be used in an orchard house, and adds "How I hate them." How, I would ask, can three or four courses of brickwork above the surface of the ground on which to lay a plate of wood be heavy in appearance? Mr. Pearson tells me that Mr. Rivers has never seen his new houses. I will venture to say he will find them quite as light in appearance, and a good deal more worthy of being called houses than any he has built. Those who have seen the photograph of the last new house at Chilwell will perhaps, like myself, inquire what is meant by

"roof openings break the agreeable continuity of a large span roof." I know that Mr. Pearson is not alone in thinking them, if not necessary, at least very advantageous. All the gardeners I have met with require them to be put in, and as they neither take from the effect nor add materially to the cost of the house why should they not be provided? Mr. Rivers gives a list of kinds of Peaches which have failed with him this season; the trees at Chilwell were loaded with fine fruit. I saw this morning Salway full, and Walburton Admirable last week was magnificent. Mr. Pearson attributes his superior success to artificial fertilisation, and giving less air in cold weather, and says Mr. Rivers goes about threshing his trees with a stout stick and starves them in east winds—they may therefore well not fruit. But I have no doubt if Mr. R. would find in his heart to build good houses that would last, instead of placing his poor plants in a wooden shed built on Oak posts, they would in gratitude for his kindness never disappoint him again. *Robert Foster, Beeston, near Nottingham.*

Araucaria Rulei.—We have the honour of forwarding by the Great Britain steamer from this port directed to you in care of a friend to Liverpool, a small lateral shoot, having for its terminal point the remains of a fruiting cone, along with a few seeds of the celebrated new species of Araucaria named Rulei, a brief description of which, together with a specimen, was sent to Sir W. Hooker by Dr. Mueller, of the Melbourne Botanical Gardens, last November. Of this some account has already appeared in your columns. When Dr. Mueller made his report he was unable to determine whether the plant was a true Araucaria or a sub-genus allied to that noble tribe of Coniferæ. We are now anxious to solve this question by sending you the above for your determination. Mr. Duncan, our collector, the original discoverer of A. Rulei, has just forwarded to us a few thousand plants of it in excellent condition, being all he could collect of one year old seedlings. In his former expedition every plant failed to grow, chiefly because they were too old to move, and at that season there were no year old seedlings. Mr. Duncan speaks of this new acquisition as follows:—"Although the nearest approach in appearance to A. Rulei is A. imbricata, the latter is not for one moment to be compared with the grandeur of the former, being without exception the grandest and most beautiful tree at present existing on the face of the whole earth. Only imagine," he adds, "A. Rulei growing to the height of about 50 feet and 30 feet in diameter, with six times the number of branches of A. imbricata, but of a more rigid and tabular form, forking in all directions at equidistances in the most symmetrical arrangement, feathered down to the ground, and the whole covered with the fine glistening imbricated very dark green foliage, shining in the sun as so many polished mirrors, and the tree itself growing on the very summit of an extinct volcano, in debris as hard as adamant in summer, and deluged with rains in winter, accompanied with hurricanes of stormy cold winds, and where not a blade of Grass, or other sign of vegetation, exists for hundreds of feet below, and also that the whole group of trees is confined only to the limited radius of half-a-mile. The latitude is on a parallel with that of A. Bidwillii, but situate on double the elevation of the habitat of that tree." We have no doubt that you will justify us in stating that this species is out of the category of all ordinary plants, and will ultimately deserve its name of "Grand Plant" by universal consent. *Smith & Adamson, Collins Street, West Melbourne, May* 29, 1861. [The following account of two Araucarias, one of which is this plant, is given by Dr. Mueller in his report on Lieut. Fitzalan's expedition:—*Araucaria Cunninghami.*—Found on Cumberland Islands. Occurs southward to the vicinity of the Hastings River. The branches with immature fruit gathered during the Burdekin expedition accord fully with others from Moreton Bay, Rockhampton, and the Hastings River. It remains as yet unascertained whether more than one Araucaria belongs to the East Australian flora. Mr. Fitzalan offers on this Pine the following notes: 'Very abundant from Percy's Islands upwards. On Percy Islands it differs but little from the Moreton Bay Pine, except in the invariable regularity of its branches, these being in regular tiers opposite; the Moreton Bay Pine is seldom so; as we go further north this regularity increases and the foliage becomes more glaucous, until at Port Molle and on Whitsunday Island the tree assumes the habit of the New Caledonian species, the tree being conical, the tiers of branches perfectly regular and having a slight droop at their tips. We cut a spar of it on Magnetical Island to make a topmast, and the wood was hard and close-grained, paler than that of the Morton Bay Pine, and would not swim. It produces a white resin abundantly.' *A. Rulei.*—A new species of the magnificent genus Araucaria has very lately been discovered by Mr. Will. Duncan, botanical collector to John Rule, Esq., of Melbourne, having been found covering the summit of a lofty volcano on an island near New Caledonia. It may be designated, in honour of the gentleman through whose arrangements the discovery was accomplished, Araucaria Rulei—It attains, according to Mr. Duncan, a less gigantic height than any of its congeners. In habit it bears more readily comparison with the Chilian A. imbricata than with any of the Australian or Polynesian species, but differs already from the former in although acute yet not pungent leaves, which are not striolated, and from $\frac{1}{2}$-$\frac{3}{4}$ inch long. The closely and multifariously imbricated leaves distinguish it at once from A. Bidwillii." [We regret to say that the specimen referred to by Messrs. Smith & Adamson was not in the parcel manifest of the "Great Britain," and has never reached us. We, however, are able to publish a woodcut of the plant, from drawings for which we are indebted to Dr. Mueller. 1, a branch with the core of the cone from which the scales have dropped; 2, the same with the lower scales forced down; 3, the base of a cone; 4-5 scales of do.; 6, piece of core, showing the scars left by the fallen scales.]



Isabella Gray and other Yellow Roses.—I have had a nice plant of Isabella Gray for three years, and have never had the sign of a flower-bud With three tiles placed over its roots it wintered well. I have now replanted it where it will get sun earlier in the day against another south wall. In the spring I mean to pot it and try it in that way, as, by confining its roots it may run less to wood and more to flowers. My friend Mr. May, of the National Provincial Bank, Blandford, flowered it in a pot in his conservatory about three years ago, and told me that it was a "gem," but I have forgotten to ask him further about it. Probably, little bushy plants in 8-inch pots, placed in the garden on the ground where the sun comes with the greatest power, would be the likeliest way to succeed with it out of doors. It is a South Carolinian, and doubtless requires more sun than we have had for the last two years. My one tree of Solfaterre, 14 trees of Triomphe de Rennes, and 26 trees of Gloire de Dijon, are always in bloom, and are noble Roses. Triomphe de Rennes I consider to be the A 1 for quality of all yellow Roses, except you can grow Smithii and the Cloth of Gold "first-rate." For general accomplishments, Gloire de Dijon is the A 1. It has more good points even than Géant des Batailles. Celine Forestier is a strong growing peculiar-leaved nice yellow Rose with hardy constitution, but it has not hitherto been so efflorescent as the three kinds I depend upon, and which have never failed me for singles, trebles, or both at Exhibitions (7) beginning the 13th of June and ending September 11; and more, they are hung with noble flowers now, and will continue so till winter sets in. A hard and early one we shall have, as the robins began their plaintive notes this year in August. Relying on their augury I have put all my pot Roses into the frames, and banked up my strong Manetti Rose lines like Potatoes. As soon as I apprehend zero's approach everything will be tied up with straw. *W. F. Radclyffe, Rushton Rectory, Blandford.*

The Rose Acacia and others.—It has been stated that in many parts of America the Robinia hispida never produces pods, the flower falling away with the ovary soon after expansion. This has led to a suspicion of its being a hybrid between Pseudacacia and viscosa or some other species; I should be glad to know whether either viscosa or hispida have ripened fruit in this country; and if not, whether attempts have ever been made to fertilise either with its own pollen, or with that of other species. Perhaps some of your Correspondents may be good enough to enlighten me on this point. My friend M. Decaisne, of Paris (for whose information I ask), informs me that many French nurserymen regard viscosa as a form of Pseudacacia, and believe that it has been raised from seeds of Pseudacacia, as hispida has been so supposed to have been raised from seeds of viscosa. Is such an opinion general in England? *J. D. Hooker, Kew.*

Thrips in Dahlias.—In the old kitchen garden at this place I never could grow Dahlias in hot dry summers without the flowers being much injured by this destructive little pest; I can therefore sympathise with Mr. Turner for the loss he must have sustained in not being able to show his beautiful Dahlia blooms this autumn. The thrips generally attacked here the yellow and light coloured varieties the most; at least the effects of their ravages were the soonest seen on them. The fruit of the Peaches and Nectarines on the walls was likewise covered with them in September, and the walls being very old and full of crevices might have been the means of harbouring them. In the new kitchen garden lately made here I have seen no thrips on Dahlias or flowers out of doors this summer, although the weather in August and September has been hot and dry and similar to that near London. The best remedy I have found for keeping thrips from attacking Dahlia blooms was dusting some tobacco dust over the buds when about to open. This dust or snuff was made from the midribs of leaves of home-grown tobacco and dusted on the buds in the

evening or morning when the dew is on. If put on when the flowers were much opened it rendered them unsightly for showing. The midribs of the tobacco leaves must be thoroughly dried on a stove or flue, and afterwards bruised or pressed into a very fine powder, which will be found more pungent and strong than most kinds of foreign snuff. After a dose of this is given the thrips may be seen jumping and scampering off the flowers in multitudes, and the flowers remain deserted whilst the dust remains on. *W. Tillery.*

Aphides.—Last year in September legions of aphides attacked the half ripened watery shoots and leaves of Peaches and Nectarines on the walls here, and destroyed the last chance of the wood ripening well. Was this generally the case in other gardens? I find that when aphis tribes are unusually abundant on fruit trees in the open air one year it stops their productiveness the next—at least the Peach trees on the walls here have this year been quite free from them. *W. T.*

Societies.

ROYAL HORTICULTURAL: *Floral Committee, Sept. 24.*—On this occasion Mr. F. R. Kinghorn exhibited a plant of the very curious Anigozanthus Manglesii, which is remarkable for the bright green and red of its curious velvety flowers. It was nicely bloomed, and was awarded a Special Certificate for its rarity. Mr. Salter, of Hammersmith, sent several interesting variegated plants, the best of which was a neatly marked form of Vaccinium Vitis-Idæa, having the leaves edged and mottled with white. This received commendation. With it was a pretty variegated rock Alyssum, called procurrens; also Pelargonium tetragonum, Weigela rosea nana, Mentha heterophylla, and Fuchsia corymbiflora, all in a variegated state, and some seedling Antirrhinums. Mr. G. Macintosh, of Hammersmith, sent a deeply-coloured seedling Lophospermum called grandiflorum coccineum, the flowers of which were spotted and streaked with white. A bedding Dahlia of good habit, with dull claret-coloured flowers, came from Messrs. Chater & Co., Braintree. A First-class Certificate was given to a fine species of Echeveria from Mr. Wicks, gr. to W. Wilson Saunders, Esq., in which the broad fleshy glaucous leaves were obovate and apiculate, and of a purpurascent hue; it was not in flower. A similar award was made to a fine pinnated Fern called Cyrtomium caryotideum, sent from the Society's garden. J. Day, Esq., of Tottenham, sent a handsome Lælia with blush sepals and petals and a purple lip. A very handsome double Fuchsia called Universal, from Mr. G. Smith, of Hornsey Road, remarkable for its globose-like aspect, was Commended. Finally, from Mr. Turner, of Slough, was a beautiful light rose-coloured Dahlia called Mrs. Bush, which had received Commendation on a former occasion, and was now thought to merit a first-class award.

Notices of Books.

TRADE CATALOGUES RECEIVED.—Vilmorin & Co., Paris, Catalogue of Flower Seeds that may be sown in September.—*Id.* Catalogue of Bulbs and Strawberry Plants.——Louis Van Houtte, Ghent, Catalogue of Hothouse and Hardy Plants; Supplement to No. 87, containing all the new things. Among the latter is a very beautiful striped Cyperus, called C. alternifolius albo-variegatus, and a most prodigious Lilac called Dr. Lindley. We shall have something to say about these on an early occasion.——Ambr. Verschaffelt, Ghent, Catalogue for the Autumn of 1861, and Spring and Summer of 1862.——Barr & Sugden's (of 12, King Street, Covent Garden) Autumnal Catalogue of Choice Dutch and Cape Bulbs.

Garden Memoranda.

MESSRS. CARTER & CO.'S ANNUAL GROUNDS, DEDHAM AND ST. OSYTH, ESSEX.—Some account of what we saw on a recent visit to these interesting seed-producing establishments may perhaps not be unacceptable to our readers. Mr. Dunnett, one of the firm, who for many years has devoted the whole of his attention to the production and selection of flower and vegetable seeds on these grounds, showed us many of our most striking and favourite annuals, both old and new, not grown in small patches but by the acre; and seen in masses of that extent, the different colours, arranged as they were in parallel beds, separated by broad belts of vegetables, were most effective. First came beds of very fine double Stocks in separate colours; then a collection of Marigolds, which exhibited ample evidence of the improvement effected in this description of flower by means of years of careful selection; the dwarf and yellow miniature French varieties were very double, and so compact in growth that they made excellent beds; African kinds were also beautiful, and nearly as large and double as ordinary sized Dahlias. Attention was next directed to some charming beds of Senecio, among which the most striking was one of brilliant Magenta colour, literally one mass of bloom; others were bright crimson, rose, purple, copper, and white, and the profusion of flowers which each of them produced made them very effective, especially when viewed from a distance. Near these was a magnificent display of the various kinds of Coreopsis, the most striking among which were C. nigra speciosa, rich deep crimson; grandiflora, gold with crimson centre; and Burridgii, the finest of all the tall kinds, brilliant golden yellow with large centre of rich maroon crimson. The dwarf sorts were also remarkably beautiful. Than Mesembryanthemum tricolor and album nothing could be handsomer; of these we noticed large beds, which, when the sun shone on them, were most effective. Of Linum grandiflorum (rubrum) there was a quarter at least half an acre in extent, and thus seen *en masse* nothing could be more dazzling, its masses of rich crimson blossoms being most abundant. No difficulty is experienced here in getting it to grow; the seeds receive no artificial preparation previous to sowing, which takes place in the open ground, and every one of them vegetates. Tom Thumb Clarkia also made a good bed, rich in colour, dwarf and compact. Among dwarf Œnotheras, macrocarpa still stood in the first rank, and among tall kinds Œ. Lamarckii occupies a similar position; it blooms the first year most profusely from June to October; individually the blossoms are of large size, averaging 4 inches in diameter. On one plant alone of this variety we counted no fewer than 23 flowers, all open at one time. Saponaria calabrica, a plantation 2 acres in extent, was in full bloom, and literally covered the ground with a dense carpet of rich rosy flowers. The finest sight, however, of all was the magnificent masses of Tropæolum Tom Thumb, "scarlet," of which alone there was about an acre as red as a soldier's coat, and equally brilliant; next came one-third of an acre of "dark crimson," a fine kind of Tropæolum, rich and beautiful in colour; also "Beauty," a yellow variety streaked and blotched with scarlet. Then came "Crystal Palace Gem," a new bright sulphur Tropæolum, blotched with maroon; the habit of these is excellent, and the leaves much smaller than those of common Nasturtium, over which they have the advantage of throwing their blossoms well up above the foliage. Less striking perhaps, but not less interesting, was Convolvulus tricolor splendens, a great improvement, especially in point of colour, on the purplish blue Convolvulus minor. Of Tropæolum Lobbianum "Lillie Schmidt," a trailing variety resembling the Crystal Palace Scarlet, there was a fine mass profusely in bloom. For conservatory or greenhouse decoration, or for festooning over the sides of vases or hanging baskets, nothing could be more useful than this plant.

In the single Chrysanthemum Burridgeanum we have also a perfect gem; its large white blossoms, ornamented with concentric rings of various colours, are extremely handsome, and should secure it a place in every garden; the blooms also keep long in perfection placed in water in a cut state. Eschscholtzia tenuifolia, a charming miniature variety, with erect rush-like foliage, seemed admirably adapted for edgings; its colour is clear sulphur yellow and its height not more than 4 inches. Leptosiphon aureus is another admirable edging plant, covered as it is for many weeks in succession with small stellate golden blossoms. Associated with these was a large bed of Lobelia formosa, an upright growing variety with rich purplish blue blossoms, somewhat resembling those of L. speciosa but larger. Contiguous to this was a bed of Tropæolum "Brilliant," a fine trailing variety with showy scarlet blossoms and dark green leaves, very distinct from those of other kinds. Passing large breadths of the showy Delphinium formosum and other varieties Gilia achilleæfolia alba next attracted attention; it has large heads of pure white bloom, and is a very pretty addition to our hardy annuals. Among Lupines hybridus insignis, purplish rose; L. venustus, mazarine blue; L. tricolor elegans, purple, white and violet; and L. Dunnetti superbus, red, blue, and yellow, are all about the same height, viz. 2 feet, and have long and beautiful spikes of bloom. Among Statices plants of S. texana, a useful pink kind, measured from 1 to 2 feet in diameter. A large bed of Convolvulus tricolor monstrosus, with rich deep purplish blossoms 3 inches in diameter, was very conspicuous, as was also the double variety of Clarkia pulchella, a new and desirable plant for ornamental purposes of all kinds, the flowers being very double and the colour a rich Magenta; this received a First-class Certificate at a committee meeting of the Royal Horticultural Society. Among Malvaceous plants one of the most showy was the Red Lavatera, a well-known and showy annual. Petunias were remarkably showy, and among them were one or two fac-similes of Mrs. Ferguson, the beautiful purple striped white sort lately figured in the *Florist*. Other kinds were crimson, purple, rose, violet striped and white—all the best in their respective classes, and there was also a useful assortment of mixed varieties. Lobelia gracilis erecta, an extremely neat and pretty kind well suited for edging, pots or vases, was in fine condition; Nemesia versicolor, compacta, one of the most charming annuals in cultivation, formed compact little bushes about 1 foot high, profusely covered with variously coloured blossoms.

Some very large beds of Pæony Poppies in twelve distinct colours were very showy; their blossoms being large and brilliant in colour, produced a striking effect. A fine piece of purplish blue Convolvulus minor was likewise most beautiful, as was also a bed of Everlastings, consisting of Helichrysum compositum, maximum, macranthum nanum, bracteatum album, Acroclinium roseum and album. Associated with these was a mass of starry Scabious, the blooms of which form an admirable addition to winter bouquets. Venus's Navelwort, on account of its silvery foliage, bids fair to make a good white edging. Erysimum or Barbarea variegata, with golden striped foliage, likewise makes a useful ornamental edging and riband plant. Near Mr. Dunnett's residence were some fine beds of mixed Sweet William, Indian Pinks, and the variety of Dianthus called Dunnetti, the darkest coloured Sweet William known; also Alyssum saxatile compactum, a fine early blooming hardy perennial, which will form a good companion to the early white Arabis alpina and the pink Saponaria ocymoides. Among Nigellas or Love in a Mist, as they are some times called, was one pure white and another dark purple, both comparatively new kinds.

At St. Osyth, which is 13 miles from Dedham, were 10 large beds of the new Stock-flowered Larkspur, in distinct colours, which made an effective display, all of them being very double, resembling in that respect, as well as in the size and beauty of their spikes, Brompton Stocks. Dwarf Rocket Larkspurs were also very pretty, as were likewise the branching and other sorts. Antirrhinums are grown here in quantity, and among them were at least 20 or 30 distinct varieties—some charmingly spotted, and others beautifully striped. To the raising of Pansies attention is also directed, and there were likewise immense breadths of Virginian Stock. Of Dunnett's selected dwarf crimson Candytuft, a very handsome sort, there were at least 2 acres, also large beds of Lobelia speciosa, the fine blue variety so universally employed for bedding purposes. In addition to the above was a bed of Rhodanthe Manglesi, beautifully in bloom, and about an acre of the dwarf spotted Tom Thumb Nasturtium, golden yellow in colour, richly spotted with chocolate. Dianthus Heddewigii, a large bed of extra double Indian Pinks, a collection of eight varieties of Marvel of Peru, and a fine piece of mixed Phlox Drummondi in every shade of colour, were very attractive. We likewise noticed here a bed of Leptosiphon hybridus, a charming dwarf annual with a habit like that of L. aureus, but with colours more varied and beautiful; also a small bed of double Zinnia producing a fine display of flowers, some of which were remarkably handsome and as double as those of a miniature Dahlia, a description of plant now coming into fashion.

As has been already stated large breadths of the finer varieties of vegetables separated the different kinds of flowers from one another, and among these a few are worthy of notice, First may be named, Manchester Red, Ivery's Nonsuch, and Turner's Incomparable Celery; the last occupied about 4 acres, and is an excellent solid white variety, now generally grown, more especially for early crops. Not less than an acre was filled with Australian Cress, a good salad plant, and Veitch's Perfection Pea was also largely cultivated. This, as was remarked last week, endures drought better than most kinds. Of Oxheart Cabbage, an excellent sort, there were about 4 acres, and we also noticed a large quarter of Carter's Early Cabbage, a small, compact, and useful kind, which does not readily run to seed. Of Mammoth Late White Broccoli we observed about 2 acres, and of Lettuces there were some large and improved New Cos sorts, which when better known may become favourites. Of Beets Messrs. Carter have also an excellent medium-sized blood-red kind. Other vegetables are also grown extensively for seed, but these are among the most important. We may add that the utmost care appeared to be taken to keep everything true to name, and that neatness, order, and skilful management were everywhere observable.

Miscellaneous.

The Army Worms.—Considerable uneasiness is felt throughout the Northern States and Canada on account of the ravages of an insect known as the army worm. It was nearly, if not quite, unknown till last year, when it made its appearance in some districts of the Union. This year it has spread to Canada, and caused serious injury to the growing crop. I do not know who gave it its name, but if it does more harm than the real army which is eating into the vitals of the country it will be indeed a curse. *Morning Post.* [According to the late T. W. Harris, of Cambridge, Massachusetts (whose comprehensive work on the insects injurious to vegetation in the United States deserves to be more extensively known than it is in this country), the real army worms are green, doubly spotted with black on the back, and sprinkled with black dots. They are especially injurious to the Cotton fields in the southern states, being only found as far as the Cotton plant is cultivated, and consequently never occurring in New England. Although belonging to the Noctuidæ, the caterpillars crook their backs in crawling along, like the looper caterpillars (Geometridæ), in consequence of the small size of the first and second pairs of prolegs. The moth was described by Say, under the name of Noctua Xylina. It seems very probable, however, from the description given of the caterpillars now under notice, that they are not identical with the real army worm, and that that name has been misapplied to some other polyphagous species of Noctuidæ. *J. O. Westwood.*]

The Algerine Lettuce.—This Lettuce, the origin of which is unknown to me, appears not to be so much cultivated as it deserves, although it may be highly recommended for growing in frames. The following is the mode in which I cultivate it: I sow in the beginning of September, prick out in the end of the same month in a cold frame, and give air; and in November and

December I have Lettuces very well hearted, requiring no other care than covering the sashes in severe frost. I can also have Lettuce in January by pricking out in the middle of October. For wintering under bell-glasses, like the Laitue Gotte, it must be sown from the 15th to the 20th of October, and pricked out when it has made two leaves. This Lettuce is not so liable to injury from frost as the Laitue Gotte. After winter I plant it under bell-glasses, but not on beds, merely using vegetable mould. I place four plants under a bell-glass. When they begin to heart air must be given, and the bell-glasses should even be taken off if it does not freeze sharply. If the Algerine Lettuce is sown in January under glass in a cold frame and pricked out in a southern aspect as soon as the weather is favourable, good Lettuces may be had fit for use from the beginning to the middle of May. The good qualities of this Lettuce are so well appreciated by those who know it that they prefer it to the Laitue Gotte, and substitute it for that sort. I consider it an excellent variety, but it is too small for summer, and sufficiently I do not grow it at that season. *Dubois in Journ. de la Soc. Imp.*

Bees.—The lovers of bees and the amateurs of honey and its production who visit Paris will find an interesting agricultural exhibition in the Luxembourg gardens. Some curious details are given of the mode of management. It is found that, for the production of the whitest honey, the bees must be carried to places where wild plants are numerous; hives are purchased in Sologne, for instance, and conveyed into the Gâtenais, where Sainfoin is very abundant. Towards July, when the flowers are gone, the workers are driven out of their homes by means of the smoke of the maroute, a kind of Camomile, Anthemis cotula. The honey, which is then very white and granular, is collected, and the bees are allowed to re-enter the hives, which are carried off to the forest of Orleans or Fontainebleau, where the insects form new combs. Sometimes, instead of driving them off, they are put to sleep by the aid of chloroform, or by burning tow containing saltpetre; this is placed in a fumigator, and the vapour directed by bellows through a tube into the hive. When the operation commences they make a loud humming, and when this ceases they are all motionless at the bottom of the hive, where they remain in this state about half an hour. This operation has been repeated experimentally as many as twenty times a day on the same bees, without any apparent injury. The profit made by such a mode of treatment is said to be 46 per cent. on the capital employed, and the average yield is given at more than 50 lbs. of honey and three-quarters of a pound of wax per hive. This is only produced, however, by the system of *calottes*; that is, false hives placed over those which are nearly filled, a hole being made in the top of the latter, so that the bees, instead of emigrating, construct a second comb. *Daily Telegraph.*

The Margaret Strawberry (Fraise Marguerite (Lebreton). The fruit of this is very large, from ¾ oz. to 1¼ oz. in weight, of the form of an elongated cone, shining red, colouring well even to the point. Seeds small, numerous, set almost on the surface. Flesh bright orange near the outside, white at the centre, solid, juicy, sugary, perfumed; core none or soft. Scapes vigorous, with hairs spreading horizontally. Leaves long; leaflets oblong-obovate, widely and regularly crenated, bright green above, ash grey beneath. Plants vigorous, hardy, and productive. This variety, which is early and forces well, was raised from Sir Harry, fertilised with some sort unknown, at Châlons-sur-Marne, by M. Lebreton, and fruited for the first time in 1859. Compared with other sorts, according to the Comte de Lambertye, the Margaret Strawberry ripens at the same time as the Marquise de Latour-Maubourg [a variety better known in England under the name of Vicomtesse Hericart de Thury]; and in point of quality the Margaret has all the excellent properties of the Princesse Royale (Pelvilain) without its fault, viz., that of having a hard core. *Comte de Lambertye in Journ. de la Soc. Imp.* Abridged.

Hyacinths.—It is the nature of some sorts to have naturally large bulbs; others on the contrary have them as constantly small, and what is more these small bulbs are of the finest varieties. The size of a bulb has nothing to do with the fineness of the bloom, which is most commonly inversely as the size of the bulb. *Vilmorin's Catalogue.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c. — Summer flowering twiners, which usually become unsightly about this season, should be cut back rather freely, as also any others that will bear this treatment. Shade can now well be dispensed with; therefore not a spray that can be spared should be left to obstruct the light. Acacias, and other winter-flowering plants having been subjected to a period of comparatively dry treatment, to ensure their blooming profusely, should now be pretty liberally supplied with water at the root, in order to get them into flower during the dull season, when they will be much more esteemed than in spring, when flowers are plentiful. Manure water, if it can be used, should be given frequently to Chrysanthemums. Give air freely on favourable opportunities, avoiding cold draughts against plants that have been brought from a warm house, and guard against damp by using gentle fires with a little top air on wet days. Let pot specimens in bloom be frequently re-arranged, so as to make the most of these, for the finest specimens become too familiar to be interesting when allowed to remain too long in one place. Be careful not to over-water things brought from the stove, and also to use the water in a tepid state; as watering tender plants with cold water after this season injures the young roots, shortens the duration of the blossoms, and often ruins the plant. Use weak manure-water for Salvia splendens, so as to preserve the plants in a vigorous state, and keep them blooming as long as possible. Give attention to securing a plentiful succession of things for maintaining the gaiety of the house during winter.

FORCING DEPARTMENT.

PINERIES.—As has been frequently mentioned plants swelling their fruit should be assisted with a brisk temperature, say from 65° to 75° at night, regulating this according to the state of the external temperature, keeping the house rather close on sunny days and allowing the thermometer to rise to 80° or 85° before giving air freely. Also endeavour to proportion the moisture to the temperature, for a high dry temperature is not favourable to the swelling of the fruit, and there is no chance of getting well swelled heavy fruit without plenty of warmth and moisture. Maintain a steady bottom-heat of about 85°, and use every care to keep the soil in a healthy state as to moisture. When watering is necessary, use clear manure-water, and give sufficient to moisten the whole of the soil, and avoid frequent dribblings, for when this system of watering is practised it is nearly impossible to keep the under soil, where the principal roots should be, in a healthy state. Use the syringe very sparingly, and only to dew the plants, as heavy syringing after this season is apt to keep the surface soil so moist as to render it difficult to judge as to when water should be given. Any young plants growing in pots which may require re-potting should be seen to at once so as to allow of getting them established in their fresh pots, while they can be kept moderately warm. See that the balls are in a proper state as to moisture before repotting, as neglect of this is a frequent cause of young stock fruiting prematurely. Keep moist and rather warm for a time after shifting, so as to encourage the formation of fresh roots.

VINERIES.—Should wet weather continue we would again advise covering the borders of the early house with dry stable litter, Fern, or whatever can be obtained most conveniently that will answer the purpose of keeping the border dry. Nothing answers better for this purpose than clean straw, provided the border has a proper slope from the front of the house; in that case it is easily thatched so as to throw off the wet entirely. But the straw is too valuable in most parts of the country to be used for this purpose, and wooden shutters or tarpauling would be found cheaper in the end. It will also be advisable to cover the borders of houses in which it is intended to keep ripe Grapes for any length of time, so as to prevent the soil getting saturated about the roots. Look over ripe Grapes frequently, particularly in damp weather, cutting out any tainted berries immediately they are perceived, and keep the atmosphere as dry as possible, using gentle fires when necessary with a free circulation of air; but a warm temperature is nearly as injurious as damp, therefore use no more fire-heat than may be absolutely necessary. Let no pot plants requiring watering remain in houses where the Grapes are ripe and expected to hang for any length of time.

FLOWER GARDEN AND SHRUBBERIES.

Unless where alterations are in hand the principal work in this department for the present will be mowing and clearing up; and if anything like neatness is to be maintained, sweeping up of leaves will soon require daily attention; also see to getting gravel walks thoroughly cleared of weeds and Moss; roll them frequently when wet, to keep the surface hard and smooth. Continue to afford young stock in pits and frames the most careful attention, and endeavour to get it well rooted and strong without keeping so close or warm as to render it soft and liable to fog off on the first approach of winterly weather, as is the case with stock got up in heat late in autumn and then stored away in cold pits for the winter. Therefore admit air freely to all plants that are sufficiently rooted to bear it without flagging. Newly potted-off things should, however, be placed on a gentle bottom heat, which will impart a little warmth to the soil and encourage the formation of roots, but sufficient air should be given to prevent anything like weakly growth. Cuttings of Calceolarias, Scarlet Geraniums, &c., may still be put in where the stock is deficient. Scarlet Geraniums will root almost anywhere, but Calceolarias are not quite so accommodating, as cuttings taken from plants in the open ground are very liable to damp off in heat; these will be found to do very well, however, in a close pit or frame where there is the means of applying a little warmth when necessary to dispel damp. See to securing as many cuttings as possible of any scarce plants which it may be desirable to increase while there is a fair chance of rooting them, and also be prepared to protect Scarlet Geraniums and other things which it may be intended to take up and winter, for we may expect frost any time after this season, and if such things can be protected so as to prevent the foliage and young wood from being much injured they are much more easily wintered.

HARDY FRUIT AND KITCHEN GARDEN.

As formerly recommended, look over fruit remaining out of doors frequently, and gather it as it becomes fit. Also examine that stored in the fruit room, as there will occasionally be found a few decaying for a few weeks after housing, and these should be removed as soon as perceived. Keep the fruit room cool and airy, in order to allow of the escape of moisture given off by the fruit, which is considerable for a few weeks at first. Where it is intended to make fresh plantations of fruit trees this season, the ground should be prepared at the earliest convenience, and any fresh soil to be used for planting should be thoroughly exposed to the action of the weather so as to have it in a mellow state when wanted for use. If not already done clean and dress Strawberry plantations, clearing away all useless runners, giving a good dressing of manure when necessary, but be careful to select that which is thoroughly decayed, and which can be covered without the necessity of digging deep or injuring the roots. The principal crop of Celery should now be kept rather closely earthed up, using quick lime and soot freely to destroy slugs.

COTTAGERS' GARDEN.

Follow up cleanly cultivation, and stir the soil among all growing crops. Employ leisure time in collecting materials for manure; remember that all decaying vegetable refuse is valuable in this respect, especially after having been well watered with the contents of the cesspool.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending Sept. 26, 1861, as observed at the Horticultural Garden.

Sept.		Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep	Of the Earth 2 feet deep	Wind	Rain
Friday	20	16	29.793	29.781	67	34	50.5	60½	58	S.W.	.00
Satur	21	17	29.778	29.510	63	46	54.5	59	57	S.W.	.18
Sunday	22	18	29.514	29.424	64	50	57.0	58	57	S.W.	.25
Mon.	23	19	29.386	29.310	67	43	55.0	59	57	S.W.	.03
Tues.	24	20	29.421	29.299	66	35	50.5	59	57	S.W.	.40
Wed.	25	21	29.269	29.190	61	39	50.0	58	57	S.E.	.10
Thurs	26	22	29.792	29.568	63	32	47.5	57	57	W.	.00
Average			29.564	29.440	64.4	39.8	52.1	58.6	57.1		1.12

Sept. 20—Densely overcast, cloudy and fine; cold at night.
— 21—Slight fog; overcast; fine; rain.
— 22—Densely clouded; rain; heavy showers; rather boisterous.
— 23—Light flying clouds; fine; windy.
— 24—Fine; heavy showers; boisterous with heavy rain at night; cold.
— 25—Rain, showery, fine, rain at night.
— 26—Cloudy; fine, clear and cold at night.
Mean temperature of the week 3¼ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Oct. 5, 1861.

Sept. and Oct.		Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained	Greatest Quantity of Rain	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday	29	65.0	44.8	54.9	23	0.46 in.	2	3	3	3	7	12	3	3
Mon.	30..	64.3	43.6	54.0	21	0.58	3	2	3	3	5	9	9	1
Tues.	1..	63.2	45.0	54.1	17	0.53	[illegible]	2	2	2	7	14	4	2
Wed.	2..	64.2	43.8	54.0	17	0.48	[illegible]	3	1	—	9	10	7	3
Thurs.	3..	63.5	44.1	53.8	16	1.01	2	3	1	1	11	10	4	3
Friday	4	63.9	43.8	53.9	18	1.06	—	6	—	1	7	16	3	1
Satur.	5..	62.9	41.2	52.0	17	0.82	4	3	2	[illegible]	8	12	6	1

The highest temperature during the above period occurred on the 4th, 1859—therm. 80 deg.; and the lowest on the 2d, 1853—therm. 27 deg.

Notices to Correspondents.

DIANTHUS HEDDEWIGII: *An Exhibitor* will find it necessary to appeal to custom. The plant is not an annual, but is treated as such. If it is the custom to regard it as one we think it cannot be rejected as such, any more than Mignonette, which is in reality an undershrub.

INSECTS: *G R S.* The grubs are those of the Common Cockchafer. The only plan for their destruction is turning up the turf and picking out the grubs, now full grown. They will soon descend lower into the earth to become pupæ. Possibly strong gas tar water would annoy them, but we doubt if it would kill them. The perfect insect should have been caught and killed in the summer. *W.*

NAMES OF FRUITS: *F Kelly.* 2, Keswick Codlin; 3, Rymer.—*Anon.* The Grape is the Mill Hill Hamburgh. The berries are very large and of excellent quality, but not so well coloured as they ought to be. You can only prevent such defect in future by growing more leaves or fewer bunches. The Pear is the Passe Colmar.||

NAMES OF PLANTS: *Y.* Solanum lanceolatum.—*T F C.* 1, Lycopsis arvensis; 2, Erodium cicutarium.—*L V H.* The Hedysarée is Uraria picta; the others are under examination; where are they from?—*Carter & Co.* Lychnis pulchra, a fine thing.—*Ignoramus.* Impatiens Noli tangere.—*A S W.* Erythræa Centaurium.—*G.* Silene Tragacantha, very curious, very rare, very ugly.—*R H.* Phytolacca icosandra.—*L P H.* The little stalked egg-like bodies on the Hop leaf are the eggs of the insect Hemerobius.—*J S.* Euonymus latifolius.—*O H., Coggeshall.* Pyrus Aria—the Beam Tree.—*H M.* Some Cassia; perhaps C. lævigata, not worth much care.

TRANSPLANTING: *N Wales.* All evergreens move best in September; but those which you mention are so difficult to transplant at any time that you will probably be disappointed. Prune Pyracanthas in March, and transplant Violets when you like. When you have done so let them alone; they will take better care of themselves than you can take.

VINES IN POTS.—We have received another long letter upon this matter from Mr. Bennett, who reiterates his statement that his Vines were honestly and truly grown in pots, and as a proof of it he says that since they have been home they have "never flagged for one single day, though fully exposed to the sun." The conflict of assertions is evidently one that we have no means of reconciling, and therefore we must not let the discussion be carried further in our columns: it has now become personal and can only be settled privately. We may, however, add that we see no reason to suppose that Mr. Bennett intended to take any unfair advantage.

YUCCAS: *C E F.* Your Yucca, which flowered in August last, and which, after its flower stem had been cut down, sent up three shoots from the centre, ought not to have any of them removed. They will form a nice bush, and all of them may in time produce flowers!

ERRATUM.—In p. 850, "Thrips in Dahlias," for *squeezed* read *syringed.*

CAUTION.—THE BRIGHTON WHEAT NOW FOR SALE HAS BEEN SELECTED **FOR ONE GENERATION MORE** THAN THAT GROWN FROM WHEAT PURCHASED LAST YEAR, AND CAN BE OBTAINED OF MR. HALLETT ALONE.

IF PLANTED AS DIRECTED, THIS WHEAT COSTS LESS PER ACRE FOR SEED THAN COMMON WHEAT.

HOW OUR WHEAT CROPS MAY BE DOUBLED.—THIS WHEAT HAS BEEN, SO TO SPEAK, "BRED" ON THE SAME PRINCIPLE OF REPEATED SELECTION WHICH HAS PRODUCED OUR PURE RACES OF ANIMALS.

It produced last year 108 Bushels per Acre, and from its fine quality commands from the Miller 4s. a quarter more than ordinary Wheat.

HALLETT'S PEDIGREE NURSERY WHEAT.

For full history of this Wheat see Advertisement on page 15 of *Mark Lane Express* of August 26, 1861.

RAISED FROM A SINGLE GRAIN BY REPEATED ANNUAL SELECTION.

See Leading Articles in the *Mark Lane Express* of Monday, September 2, 1861; and the *Gardeners' Chronicle and Agricultural Gazette* of August 24, 1861.

" * * We have much pleasure in speaking to Mr. HALLETT'S statements, they being fully borne out by the specimens he presented to our notice. Referring to his advertisement in this journal, we can affirm that the engraving of the 'Pedigree Wheat' is in no respect apocryphal or exaggerated."—Leading Article of *Mark Lane Express*.

1861, ACTUAL SIZE, AFTER FOUR YEARS' REPEATED SELECTION, STARTING FROM A SINGLE GRAIN IN EACH YEAR.

ORIGINAL EAR, TAKEN IN 1857 FROM A FIELD OF RED NURSERY WHEAT THE FINEST QUALITY OF RED WHEAT GROWN IN ENGLAND.

FOR SALE, PRICE TWO GUINEAS A BUSHEL.

Delivered at the Brighton Railway Station, with Printed Directions for Planting, ON RECEIPT OF CHEQUE OR POST-OFFICE ORDER, *which must in all cases accompany the order.* ***Less than One Bushel will not be supplied.***

APPLY TO FREDERIC F. HALLETT, ESQ., THE MANOR HOUSE, BRIGHTON, SUSSEX.

PLANT EARLY. ONE BUSHEL SUFFICIENT FOR FOUR ACRES IF PLANTED AS DIRECTED IN SEPTEMBER.

A PRINTED PAPER, "HOW OUR WHEAT CROPS MAY BE DOUBLED," FORWARDED UPON APPLICATION, ENCLOSING STAMP.

To Farmers.

SEED WHEAT.—Giant Red Wheat, at 10s. per bushel. Delivered on the Great Northern or Eastern Counties Railways.
Address, WILLIAM COOPER, Fen Drayton, St. Ives.

Seed Wheat from the Chalk.

SELECTED SAMPLES OF ALL THE BEST VARIETIES SUPPLIED BY MESSRS. RAYNBIRD, CALDECOTT, & BAWTREE, SEED GROWERS and MERCHANTS.
Address: Basingstoke and Andover; or 89, Seed Market, Mark Lane, London, E C.

RAYNBIRD, CALDECOTT, AND BAWTREE, SEED MERCHANTS and GROWERS, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E C.
Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.
Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

GENUINE ITALIAN RYE-GRASS, produced from the second cut of Foreign Italian, thoroughly cleaned, and weighing from 17 lbs. to 21 lbs. per bushel, can be supplied to the Trade direct from the grower, and purchasers may either take delivery now, or at their convenience up to March 1, 1862.
For samples and prices apply to SIMON A. DAINTREE, of Fendrayton, by St. Ives, Hunts.

MINTON AND CO. have REMOVED from Albion Place, Blackfriars, to 50, Conduit Street, Regent Street, W. ENCAUSTIC and other PAVEMENTS, EARTHENWARE and PLAIN TILES. Designs and Estimates prepared.
Manufactory: Stoke-upon-Trent.—Sept. 28.

THE BIRMINGHAM CATTLE AND POULTRY SHOW, 1861.
The THIRTEENTH GREAT ANNUAL EXHIBITION of ROOTS will be held in Bingley Hall on MONDAY, TUESDAY, WEDNESDAY, and THURSDAY, the 2d, 3d, 4th, and 5th of December next, when Prizes, Cups, or other articles of Silver Plate and Gold and Silver Medals to the amount of 1450*l.* will be awarded.
Prize Lists and Certificates of Entry may be obtained on application. The Entries close on November 1.
JOHN B. LYTHALL, Secretary.
Offices, 14, Temple Street, Birmingham, Sept. 28.

SMITHFIELD CLUB CATTLE SHOW, 1861.—The ANNUAL SHOW of FAT CATTLE, SHEEP, AND PIGS, will take place on DECEMBER 10, 11, 12, and 13, at the Bazaar, King Street, Portman Square. The last day for Certificates of both Stock and Implements to be returned to the Hon. Secretary is Friday, November 1.
The following Forms of Certificates are now ready, and intending Exhibitors in applying for them need only quote the letters and state how many of each they require.

CATTLE.
Form A—Ox or Steer
B—Cow or Heifer
C—Beast in Extra Stock

SHEEP.
Form D—Pen of 3 Wethers
E—One Sheep in Extra Stock

PIGS.
Form F—Pen of 3 Pigs.
G—One Pig in Extra Stock.

In addition to the Prizes usually offered, separate Classes have been established for the following Breeds of Sheep:—
Kentish or Romney Marsh
Shropshire Mountain

Prize Sheets with Rules and Regulations and Forms of Certificates as above may be obtained of
B. T. BRANDRETH GIBBS, Hon. Sec.,
Corner of Half-Moon Street, Piccadilly, London, W.
N.B. All communications on the Club's Business should have the words "Smithfield Club" outside, to distinguish them from private letters.

The Agricultural Gazette.

SATURDAY, SEPTEMBER 28, 1861.

MEETING FOR THE FOLLOWING WEEK.
FRIDAY, October 4—Bedford Agricultural Society.

EVERY year is marked by its distinctive features, and leaves on the pathway of Time impressions peculiarly its own. In no respect is this more strikingly manifested than by those endemical diseases whose ravages are experienced both amongst the human and the brute creation.

At one time maladies of the digestive organs are particularly manifested, and assume the form of an epidemic; at others febrile or typhoid complaints prevail, or the respiratory organs are the seats of severe and destructive derangements. Or, under the influence of atmospheric causes, diseases are engendered from the presence of entozoa. Such are the rot, bane, or cothe as it is locally termed, which destroyed its thousands of sheep during the last two years, and the less fatal though troublesome pest which has latterly prevailed so much amongst lambs—the hoose as we may justly term it, which though long and well known amongst calves, is, if not a new disease amongst lambs, at any rate by no means common.

Although the *post mortem* examination of its victims sufficiently attests its character by the presence of an immense number of small worms in the windpipe and bronchial tubes of the lungs, we cannot wonder at the gradual pining away which denotes or the fatal result which so often follows this affection it allowed to go on unchecked. Not only is the body deprived of its nourishment by these innumerable parasites, but the proper changes of the blood are retarded or prevented from being accomplished in the lungs. The disease then is similar in its character to the gapes in chickens, and the hoose in calves, and as in them should be treated by adopting means for the destruction of the entozoa, whose presence may perhaps be

indirectly ascribed to the wet seasons which prevailed up to the present summer, and the unwholesome provender thereby produced. In chickens we know these thread-like worms can be removed mechanically by means of a feather or fine wire inserted into the windpipe, twisted round so that the worms adhere to the wire. This however is impossible in quadrupeds, from the length of the air tubes, the angle formed at the back of the mouth, and the special manner in which it is guarded from external injury both by its structure and sensibility. There is a prevalent notion that it is essential in calves to administer any medicine that may be given by means of the nostrils, with the idea that it enters the windpipe and then destroys the worms; and it is thought that it is useless to treat lambs, because the nostrils are too small to afford a channel for the conveyance of the remedy. Such was the reply made to the writer a short time since by a farmer, on being asked why he allowed so many lambs to die without trying any of the remedies often successfully employed with calves. A similar idea prevails in some remote and ignorant districts as to this being a more effective method of administering medicine to a horse. This is not only a very foolish and absurd notion, but a very dangerous practice, and has caused the death of many horses; and the reason why it is not always or generally fatal is, because the liquid does not really pass where it is ignorantly supposed to go, that is down the windpipe, but in fact into the pharynx or food bag and passes by the œsophagus to the stomach, in the same course as if the medicine were administered by the mouth. Thus Nature kindly protects the animal from the evil which many blockheads in their ignorance endeavour to produce. Should, however, the animal breathe during the passage of the liquid, the valve of the windpipe being raised, a portion may enter the air passage and produce dangerous and fatal inflammation. Indeed, this effect is sometimes produced in administering medicine by the mouth, and care should always be taken that the moment the animal coughs, which of course is an act of expiration, the head should be released and lowered so that any intruding substance should be instantly ejected. Having pointed out and condemned this ignorant supposition, we have to remark that any medicine given to destroy worms in the air passages acts by being absorbed into the system. In the case of worms in the windpipe two objects should be sought for—one to destroy the enemy, and the other to strengthen and support the system which is being subjected to such debilitating and exhausting influences. In the case of chickens some speak of the good effects of tobacco smoke introduced so as to almost produce suffocation, albeit the creatures sometimes die of the remedy. In calves a cure has been effected by administering lime water, and probably it would be equally effectual for lambs. The dose for a lamb would be about two ounces daily, and about two drachms of salt should be given at another portion of the day. This treatment should be followed for some days. Better still is the plan of administering oil of turpentine, which being taken into the stomach is soon absorbed throughout the system. The dose for a lamb is two drachms, which should be given with an ounce of linseed oil, a scruple of ginger and five drops of oil of caraways, mixed up with two or three tablespoonfuls of linseed gruel. This dose may be repeated if required several times, with intervals of some days. The lambs should be allowed half a pound of linseed cake per diem, and should be otherwise carefully tended and liberally fed. By such a course of treatment many valuable animals may be saved. *W. C. S.*

——On Thursday the 3d of October Mr. Strafford will dispose by auction of the herd of Shorthorns belonging to Mr. Sanday, of Holme Pierrepont, near Nottingham. The herd includes 52 cows, heifers, and heifer calves, and 14 bulls and bull calves. There are no fewer than 12 separate families, of which the most numerous are those descended from "Garland," a cow bought at Sir C. Knightley's sale; "Lavender," bought at Sir C. Tempest's sale; "Lady Augusta," descended from the herd of Messrs. Watson; and "Water Nymph." But besides these, which include 46 head, there are several, such as "Crusty," "Annie Laurie," &c., related to families which distinguished the Panton herd sold last year; and others, such as "Faith," "Fairy," "Fathom," "Faithful," descended from the celebrated cow "Fame," bred by Mr. R. Booth, whose daughter "Fanchette" was bought by Mr. Sanday of Mr. Saunders of Nunwich Hall, at the Carlisle meeting. These four will probably fetch among the highest prices of next Thursday. The bulls used of late years, with the exception of the Second Duke of Bolton (12739), a son of Grand Duke (10284), and Vatican (12260), winner of the Royal Society's first prize at Lincoln, have been for several years from the famed Warlaby herd, such as Harbinger (10297), The Corsair (15378), Highthorn (13028), General Havelock (16110). The young stock are principally by Sir James (16980) and the cows and heifers are in calf to him. The sale will no doubt rank among the most important of the year.

THE LATE JOHN GIRDWOOD.

It was last week our melancholy duty to record the death of Mr. John Girdwood, a gentleman who has long occupied such a prominent position in the agricultural world, that we feel bound to record his death by something more than a passing remark. We therefore subjoin a short memoir of his most active and useful career.

Educated at the High School and University of Edinburgh, he at an early age evinced a decided taste for philosophical pursuits and scientific research, and when only 18 years of age became associated with Dr. D. B. Reid, Mr. Scott Russell, and other gentlemen distinguished in science, in organising and carrying to a most successful issue, an Exposition of Arts and Manufactures, which we believe was the first exhibition of the kind that ever took place in this country. It was held at Edinburgh in 1839. Immediately after this Mr. Girdwood's health becoming delicate from overstudy, he was advised by his physicians to travel abroad; and proceeded on a lengthened continental tour, carefully observing as he went along, and bringing home with him many objects of natural curiosity, and a most interesting collection of insects, illustrating the entomology of the various countries through which he had passed. On his return it was necessary that he should embrace some pursuit favourable to his delicate constitution, he therefore embarked in agriculture, becoming both practically and scientifically one of the most prominent and useful members of the Highland and Agricultural Society, and contributing many valuable papers to this Journal and others, both in this country and America. At the same time, being a proficient in chemistry, he formed an intimate friendship with the late lamented Professor Johnston; and gave that gentleman his assistance in establishing the laboratory in connection with the above Society, which is now ably presided over by Professor Anderson, of Glasgow, and has done such good service to agriculture, and produced many pupils of distinction, amongst others the present able chemist to the Royal Agricultural Society of England. Desiring a more extended field for his energies, he accepted an invitation to Wales, and became agent for several proprietors in that district, the great improvements on whose estates bear witness to his practical and business talents. He was also appointed one of her Majesty's Inspectors under the Drainage Act, and in that capacity was enabled to give most excellent advice to proprietors seeking to improve their estates, being from the first an earnest advocate of the present system of deep drainage and other liberal improvements. His great intelligence and practical soundness bringing him an extensive business, he resigned his agencies, and established head-quarters in London, where in conjunction with his brother and partner, who had for many years been associated with him, he has carried on a most extensive practice in the general improvement of landed property, the firm employing throughout England and Wales an immense staff of assistants and workmen.

Besides numerous papers, written for agricultural and scientific journals, Mr. Girdwood was one of the contributors to the Encyclopædia Britannica, and the writer of the article "Drainage" in Morton's Cyclopædia of Agriculture. He will however be longest remembered by the many works of improvement effected under him. Of these we shall mention only one—the home farm buildings at Patshall, for the Earl of Dartmouth—one of the finest sets of farm buildings in England. Handsome in design, and perfect in arrangement for carrying on the business of the farm, they bear evidence of great practical skill and ability. He is cut off in the prime of manhood and intellect, and the only consolation left to an extensive circle of acquaintance and friends is the fact that his life has been one of successful labour and of eminent usefulness to society.

STOCK-FEEDING AT TIPTREE.

Agriculture has yet many lessons to learn, so we may as well communicate to each other the results of our practical experience. I will, therefore, detail my present mode of stock feeding.

On my farm of 170 acres I have only 5 acres of permanent pasture, some Italian Rye-grass and 13 acres second growth of Red Clover, the first cut both of that and the Grass having been made into hay. I harvested as usual about 90 acres of Wheat, Beans, Oats, and Barley, and 10 acres of White Clover for seed. I have kept through the summer, and have now, 56 Short-horn bullocks, cows, and calves, and 100 fattening sheep. The sheep are folded on the second growth of Red Clover, now dry and somewhat seeded, and [illegible] 2 lbs. each per day of Rape-cake. They must [illegible] much water as they like to drink, or they [illegible] consume food enough to fatten them: [illegible] rapidly. When folded near a brook, where they help themselves to running water, they consume [illegible] cake than when they have the water in [illegible] sheep emptied over half a pail, say 1 gallon [illegible] draught when the weather was hot, and they [illegible] about 5 pints a-day. We have scarcely had [illegible] here for seven weeks.

I invariably give to all my animals as much cake as they choose to eat, however abundant roots or green food may be. It pays in many [illegible] and not to do this is a great pecuniary mistake. [illegible] when fed on green Rape they will eat Rape-cake [illegible] dantly. My cattle are now under cover, eating steamed chaff, Rape-cake, malt combs and bran, mixed together in strict accordance with the proportions named by Mr. Horsfall in the Royal Agricultural Society's Journal, vol. xviii., p. 150, which I find [illegible] the most profitable mode of feeding bullocks [illegible]

My quantity of stock in proportion to my [illegible] would rather astonish those who farm on the old principle, but by pulping, steaming, and artificial [illegible] are almost independent of roots and green [illegible] although, of course, I advocate an abundant [illegible] both. In addition to the hot steamed mess [illegible] bullocks a few pulled Swedes with tops. These [illegible] thrown with their tops, &c., into Bentall's pulper [illegible] fall, when thus pulped, into cut straw chaff, with [illegible] they are mixed, and it is only justice to Mr. Bentall [illegible] say that for pulping roots, Cabbages, or any green [illegible] no more perfect implement could be produced, so [illegible] simple, and durable; of course it is worked by steam power.

Now for the benefits of waste steam. After the steam has passed through the cylinder it encircles a close [illegible] tank which is self-filled with cold water; the waste steam keeps this water at a boiling point, and the [illegible] boy draws off some 24 pails of it as he mixes his [illegible] cake, malt-comb, and bran. Layer by layer these [illegible] are put into the great coppers, and a pail of hot water at a time thrown over each layer, so that, in fact, [illegible] mass is moistened by the hot water and not by [illegible] steam of the engine; the latter passes round outside the coppers and keeps them hot. This is a more simple plan than applying the steam through a closed vessel. I must again maintain the great importance of consuming nearly all your Bean, Pea, and grain straw, instead of wasting it in sopping up the rain in open yards.

I have availed myself of this fine weather to burn many hundred loads of clay ashes or *brick dust*. My covered yards will be *littered with these a foot or* 18 inches deep. These dry ashes will absorb all the urine and render a slight coating of straw [illegible] my great object being to spare the straw for food. 12 bullocks will be put in pairs in my six boxes, with sparred floors. I reckon that 5 lbs. of straw per head for each bullock will be ample bedding on the [illegible] clay ashes, which will make splendid manure for [illegible] crops. I pay *7d.* per load, or cubic yard, for raising and burning the clay into ashes. We know that [illegible] our newly burned red bricks will absorb nearly a [illegible] of water, and this ought to teach us to paint, or [illegible] cement, our labourers' brick cottages, and thus prevent those numerous diseases that follow upon the occupation of a damp unwholesome room, for the water is [illegible] attracted by the warmer internal atmosphere.

I think that I shall this year sell my Clover [illegible] Grass hay to my bullocks and sheep instead of [illegible] hay-dealer. I know they will pay me, probably [illegible] two-thirds of its market value, but I shall [illegible] manure, and it will enable me to consume a [illegible] larger quantity of Rape-cake, malt-combs, and [illegible] which do pay. How strange it is that we will not [illegible] duce our own food (when we might do so with [illegible] profit), and are thereby rendered so dependent on [illegible] nations to our national injury.

Our meat and manure might be profitably [illegible] on most farms by the process I have described, and [illegible] corn crops would, as a consequence, be largely increased. It is estimated that in open yards each bullock [illegible] 40 lbs. of straw daily for bedding. On my [illegible] ashes, under cover, I shall save 35 lbs. per head [illegible] Under covered yards 20 lbs. of straw per bullock [illegible] sidered sufficient. It should never be forgotten [illegible] straw is worth four times as much for food [illegible] manure. Very few farmers are aware that the [illegible] Bean-stalks, when steamed or moistened with hot water make capital stock feed; we use all ours in that way.

As the modern process throws much work upon [illegible] cutters and cake-breakers, let me point out to [illegible] plement makers the necessity for giving more [illegible] and bearing to these machines. The rigger shaft [illegible] have good solid bearings at each end. Now, we [illegible] them frequently outside the frame, and unsupported [illegible] one end. Powerful steam soon makes a wreck of [illegible] implements; farmers must expect to pay a higher [illegible] for stronger implements. *J. J. Mechi, Sept. 21.*

Home Correspondence.

Piper's thickset Wheat.—Allow me to remark for [illegible] information of your inquiring Correspondents, [illegible] Piper's selected thickset red Wheat was nothing [illegible] nor less than that variety commonly called "Smoothy," or "Smoothy's Improved" as the late Mr. Piper [illegible]

to designate it. The reason why the ears are so much larger now than when Mr. Piper introduced it, is because it has since been brought back again as it were to its original habit or growth by superior cultivation, and more rational seeding. In short it was "Smoothy's Improved" (if it really was an improvement) by the late Mr. Piper himself, viz., it was made to grow less in ear, and shorter in straw, by the selection of a root which promiscuously grew by a freak of nature, and which had produced some remarkably short straws, and small prolific ears, in a thick and poorly cropped field of the "Smoothy" variety. By improved cultivation however, after a few years it went back to its original size, or in other words it did not prove constant, hence Piper's diminutive size eared Wheat (as was acknowledged by Mr. Piper himself before his decease), soon became extinct. Notwithstanding that, it still exists in its original form and habit, and proves to be one of the most short strawed, prolific, small round berried, and weighty kind of red Wheat now in cultivation. About 12 years ago I received direct from Mr. Piper some of his diminutive thickly setted Wheat to sow on some rich land, with a view of improving it by more rational sowing, and at an unusual early season of the year, namely September. The result was, that on Mr. Piper's visit to me the next summer, purposely to view it, he declared it not to be his (Piper's) Wheat at all, but Smoothy's, which he acknowledged to me, as strictly confidential, was the parent stock from which he raised his own. We grew this year (1861) nearly 20 acres of it, a full average crop, so healthy as to defy any person to distinguish a black ear amongst it. The late Mr. Piper of Earl's Colne, in Essex, was a miller, and though an eccentric man and living in humble circumstances, was a person of honest intentions and of no mean attainments and respectability, gained by dint of experimenting and observing the growth of corn, and his name I shall always revere, having learned from him some very useful lessons. His hobby, it is well known, was to grow a full crop of Wheat successfully and advantageously, by sowing it rationally and separately as near as he could do, at about one bushel per acre on the same ground for successive years without redigging or reploughing after it had once been perfectly subsoiled and comminuted; and that without reducing it to barrenness or sterility. His piece of land of several acres was, I admit, favourably situated by a stream or river abutting upon his mill-dam, and the soil was no doubt of superior alluvial quality and depth; but it was disadvantageously situated in another respect, being surrounded by an immense number of large timber trees. I always entertained a fond hope that to carry Mr. Piper's principle out advantageously was quite practicable, and to effect it, we should have simply but to make a good beginning, viz., to drain 4 feet deep, and trench one yard below the surface, although it remains an open question with me, if the former operation would then be absolutely necessary, except on certain dropsical soils, for be it observed Mr. Piper's under stratum had very much to do with water, and be it remembered also, that the surplus top-water, which is often drained off some soils, and considered as superfluous in winter, is as often really wanted on such dry soils, and could be well dispensed with to advantage in summer had it been retained there. Thus, keeping the subsoil still below, and the upper soil at top (two essential points), and giving free course for the percolation of rain water through the thoroughly comminuted soil, in nine cases out of ten our object would in my humble opinion be attained. The addition, however, on retentive soils, of about 80 bushels of soot or other artificial manure would be needed; and on light or stony lands of as many loads of clay or rich loam, the first year as a beginning, and about 40 bushels of soot every year afterwards. Mr. Piper always used soot, scuffling it in directly at end of harvest after burning the stubble and weeds and scattering the ashes, which went a long way in self supporting the land. But allow me to observe, and to repeat, that ill success too often follows, if sowing early, uniformly, singly, and moreover rationally, and on clean land, say at about 1 bushel of seed per acre, is not strictly adhered to. I have tried Mr. Piper's plan repeatedly on a small scale on common land in the fields, with even much more success than our late friend, myself, and others have done in the garden, being there too much plagued and defeated by the sparrows and the rankness of the straw, and it is only want of capital to begin operations with, and the restricted leases of my farms, requiring me to grow only one white straw crop in succession (an item which ought, I consider, to be erased and expunged from the leases of every good farmer who is seeking improvement in agriculture), that prevent my carrying out the principle on a larger scale. I am no bigot, nor was our friend Mr. Piper; we both scorned the idea of doing what others could not; but he adhered, as I do now, to the doctrine, that what can be accomplished by one can be done by others, similar means being devised to effect it: and if it pays on a small scale, why will not farmers who have greater means and facilities for carrying it out than myself, follow the same steps, on larger breadths, till they are convinced of the usefulness or fallacy of the project? The only answer that I could ever get to this question was, "Because we will not trouble ourselves with it," and "Why don't you do it yourself on a large scale?" To the latter interrogation I would simply reply, "Because the trammels or clauses of my leases are so contrived and worded so as to prevent my growing other than such and such crops, and only on a certain four-course system, which admits of no improvement, though ever so necessarily or wisely contrived, or is of any encouragement for the go-ahead farmer to exercise his own judgment freely, be it ever so sound and perfect. *A. Hardy, Maldon, Essex, Sept. 3*, 1861.

Stove Drying Potatoes.—I now give you my experience on stove drying some Potatoes for seed before planting. I had the contents of 12 bags placed upon flues, the diseased ones manifested themselves very quickly, emitting a very disagreeable odour. They were looked over daily for a fortnight; the bad ones being removed reduced the quantity to 10 bags. These being strongly spurted were carefully removed and planted. They were soon up in perfect rows—not a single blank. They went on well till about the 1st of August, when a little disease appeared in the foliage, but the haulm was not affected. I considered the crop safe, as they had nearly attained their full growth. I have had the crop taken up, and the produce is 100 bags, 80 of which are large and fit for the table, and 20 are part for seed, the small ones and the few diseased. The old sorts, the blue and white Farmers, had the most diseased ones, the Flukes very few and Spencer's seedling none. This last in my opinion surpasses the Fluke in quality and is a better cropper. *Geo. H. Perry, Wolverhampton.*

Samuelson's Improved Reaper was tried here last Friday week on 5 acres of spring sown corn; it did its work admirably notwithstanding a very unfavourable day. It is drawn by two horses, and by a simple piece of mechanism deposits the grain in sheaves ready for binding, and out of the way of the horses in the next round, thereby not requiring a staff of binders in immediate attendance. The 5 acres were cut in less than four hours. I am certain that this machine will be found a great boon to farmers, an opinion which was shared by many practical agriculturists who were upon the ground, and who all pronounced it to be infinitely superior to anything of the kind they had ever seen. *Charles Dayns, Longnor, Salop.*

Societies.

Buckingham: *Relation of Landlord and Tenant.*—At the late meeting of this Society, Sir H. Verney, Bart., said:—He regarded meetings like the present as valuable, inasmuch as they afforded an opportunity for mutual interchange of opinion on agricultural subjects between men who had spent their lives in practical agriculture, and those who, without the same active experience, had perhaps devoted considerable attention to agriculture as a science and considered it in its social and political aspects. It had been well said that that man was a benefactor to his country who caused two blades of Grass to grow where only one had grown before. It was his conviction that a landlord could not do better for himself and for the country at large than endeavour to make the land produce as much as possible. It was invariably found that in districts where produce most abounded the wages of the working agriculturist were highest and the farmer himself was best off. When the labourer was well employed he lived in a better house than when he was badly off. In fact, well-employed labourers refused to live in poor uncomfortable cottages such as those in which agricultural labourers lived formerly. This showed that their moral condition was improved, and such a result must be beneficial to landlords. It was, however, to be remembered that for the promotion of agriculture capital was necessary. It was necessary in any other line of business or pursuit; why not in that of agriculture? He, for one, hoped to live to see the day when they should have the capitalists of the country coming forward and go hand in hand with the agriculturists in making the land produce as much as possible. On its doing this the well-being of the whole community depended, for if the land produced sufficient for its population the money of the country remained at home; but if there was a scarcity of food that money went abroad to purchase corn. He believed, therefore, that investments made for agricultural purposes would be found to be the safest and most successful; but on this question of investments for such a purpose a very important consideration arose. He knew that there were many landlords between whom and their tenants an entire confidence prevailed. There were landlords and tenants between whom there was as much mutual faith and confidence as it was possible for men to entertain; but the system which he wished to see prevalent in this country—that of capitalists putting money into land to make it productive—required something more. Of course the capitalist could not be expected to invest his money in the cultivation of land unless those who cultivated it were men of intelligence, rectitude, and principle, and that, in addition to these moral qualities, they had a certain tenure in the land. He knew that this was a point on which there would be a difference of opinion, and if any gentleman thought there was a fallacy in what he stated he should be glad to hear him expose it; but he did hold that there was nothing which could be of greater benefit to all classes of the community than that the capitalist should be induced to invest his money in the cultivation of land. It was clear that he would not do so unless the agriculturist had a certain permanency of tenure. Now, how such a permanency was to be given except by lease he could not discover. Therefore he should be happy to see a system of long leases come into greater prevalence than they had yet seen in this country. Not that he thought such a system would lead to tenants being longer on estates; for he believed that there were many estates in this country on which there were no leases, and on which the tenants and landlords went on together for—he was going to say—hundreds of years. On these estates the tenants felt as secure and felt as much confidence in their landlord and as great a security that no unfair advantage would ever be taken of them, and that they would retain their land, as if they had leases. He was not, therefore, suggesting that the system of leases would increase the confidence between landlord and tenant; but, speaking rather in a political sense, when he said it was desirable that the capitalist should invest money in the cultivation of land, he hoped that the time might come when leases would be more prevalent than they were at present. If the landlord gave a lease, he, on his side, would expect an assurance that the terms of the written agreement would be observed; and consequently he must have his conditions as well as the tenant; but what he desired to see was that the tenant farmers of this country might have leases which would enable any of them to go to a capitalist and say, "I have got this farm for 21 years, will you trust to my intelligence, honesty, and skill as an agriculturist and lend me money to cultivate my land?" He believed that such a thing as that was practicable, that it would be for the advantage of the community at large; and for that reason he should be glad to see it in operation. He was desirous of for a moment adverting to the position of the labourer. Between that class of the agricultural community and the farmers he was happy to say that there was, in very many instances which had come under his own observation, the best feeling. The farmer's wife was often found to be the best and most tender friend of the labourer's family. Landlords were at present showing themselves to be much interested in the condition of the labourer, and he believed that the duty of the proprietor in this respect was of a very important character. A landlord ought always to bear in mind that every man on his estate should have a good house to live in. Unless the labourer had a good cottage, in which his family could live decently, it could not be expected that they would be brought up morally; and criminality and vice were expensive to society at large. If they put it on the low ground of pecuniary interest, nothing was more economical than steady living, and nothing more expensive than vice and criminality. A few years ago emigration was supposed to be the great panacea for distress among the working classes; but, though he had helped some labourers to emigrate, he had always been opposed to emigration as a system. He had always thought that the best thing we could do was to make our land produce all it could, and, instead of sending our labourers abroad, to maintain them at home. He believed he had shadowed out a plan by which sufficient capital could be secured for the cultivation of the land so as to enable all those in any way engaged in agriculture to live comfortably by that occupation. Speaking of himself and his brother landlords, he had to remark that they were wonderfully deficient in knowing their business. He confessed that he was astonished when he considered that while in all other professions a man went through a severe course of study, none whatever was generally considered necessary for that of a landed proprietor. A doctor, a lawyer, a sailor, or a soldier worked hard to fit himself for his calling, but it was supposed that every landlord was born fit to discharge the duties of his position. That he believed to be a great mistake. He was not brought up as a landlord. In his youth he had other pursuits, but he sincerely desired that those who came after him should learn the management of land. No good steward would object to seeing a great landlord thoroughly conversant with everything that belonged to the management of the land.

Farmers' Clubs.

Wokingham: *On Rewards to Labourers.*—At the annual meeting of this Society, Mr. Walter, M.P. who presided, said:—The object of agricultural associations is to promote success in agriculture—good husbandry. If people would only keep this in view, there could be no two opinions as to the beneficial effects of these associations; but sometimes it happens that after an association is well set on its legs, instead of its being regarded as a means, it comes to be looked on as an end in itself, and as surely as that happens, so surely the ends of the association are mixed up with all sorts of considerations which have no connection with its true objects. This association is a special means to an end, and not an end in itself, and unless it tends really to encourage good husbandry it has no business to show its face before the public. That is a plain fact, stated broadly, which I think few people will venture to contradict. The foundation of good husbandry is ploughing. I suppose the first agricultural prizes took the form of prizes for good ploughing, and nothing can be more honourable and more worthy of an Englishman than to gain one of these prizes in a public open ploughing match. A great majority of the prizes which I had to distribute to-day

were for skilful ploughing. I have tried my hand at the plough myself, and though I am afraid I made but a sorry figure at it, yet I know how difficult it is, and what skill it requires to drive a straight furrow. I concur, therefore, altogether in the prizes for ploughing, which form the main and the most commendable feature of this association. There are other prizes, also, of a similar though subordinate character. Particular counties, you know, have credit for superior skill in one or other of the branches of agriculture. This county, next to Middlesex, claims the superiority in mowing; it also turns out remarkably well shaped ricks. A rick is a thing which stands before the world for everybody to judge of, and if men like to compete in rick-making I see no reason why they should not do so, just as much as in rifle shooting, racing, or any other sport. Then you have also prizes for good thatching, which comes pretty much under the same category. You have also prizes for an operation of husbandry of the most delicate and conscientious character, which is not only a most meritorious thing in itself, but is a fair subject for competition. The successful rearing of the greatest number of lambs is a matter of fact which can be made the subject of competition without a man losing his self-respect or without any inquiries into private character or anything of that kind. But then come a class of prizes which are of a totally different character —the prizes of farm servants for length of service and so on, and which I don't consider as legitimate subjects of competition in husbandry any more than that people should give rewards to domestic servants for fidelity and long service. There are qualities which, however valuable to their masters, and however much they may show good conduct, are not capable of being judged by the world at large. You must depend solely on the certificate of the master,—and masters differ as well as servants. Some masters, as the Bible says, are kind and gentle, some are froward. Some are so fidgetty that no servant could live with them. You have no guarantee, and you can have no possibility of a guarantee, of the real value of a character given in that way. It would be no satisfaction to me to receive such a prize. I might be conscious that I did not deserve it, or I might feel that I deserved it a great deal more. Indeed, I have been told, by persons who have the best means of knowing, that great dissatisfaction and discontent is produced among men who do not get prizes and feel that they ought. I don't wonder at it. I think it is very natural that such a state of things should be produced by your attempting to do that which is entirely beyond your particular province. There are classes of prizes with which I can have, personally, nothing to do. I would not permit that the characters of my servants should be at the mercy of any committee or association whatever. It is my duty to reward them if they serve me well. If they are good servants, and I am a good master, they are fools to leave me, and I am a fool to part with them. A servant is not entitled to any particular credit for staying with a good master, it is a mere matter of good sense on his part. We saw to-day an old man come forward who had served 30 years with a lady whom we all know and esteem. There was no credit to him for staying. He would have been the greatest fool in the world if he could ever have been induced to leave so kind and good a mistress. The same remark is true of all servants. It is admitted that this system could not be applied to any other class of servants, and I do not see any reason why agricultural labourers should be considered as persons inferior in capacity to domestic servants. It has been urged as an excuse—for I never heard anything like a reason for the practice—that some farmers are too poor to reward their labourers as they deserve. My plan for meeting that difficulty is very simple. If a farmer is too poor, who is the right person to step in in that case? The landlord. I have no hesitation in saying to any poor tenant of mine, "If you have got a servant who has served you faithfully, and if you think he deserves some recognition of his merits, some good turn done to him—and you are not in a position to do it—I am the right person to do it, and I shall be happy to do it." Certainly if I am not, no one else is. The landlord may do it gracefully, because he does stand in a certain relation towards the servant of his tenant, and he is the right person to perform that which the poor farmer cannot perform for himself. It is said, too, that these prizes are looked upon as rewards of merit—as a kind of public testimonial of good conduct, like the riband of the Bath to the soldier. But there is no analogy between the cases. The soldier does not receive his reward from an independent association of private persons; no true soldier would receive such a prize; he receives his prize from his master, his mistress—the Queen—that is the fountain from which his honour is drawn. When people who ought to know better draw an analogy between the soldier who gets his riband and the farm labourer who receives his prize, it falls to the ground altogether. I make these remarks with the sincere desire that we may be enabled to co-operate together, and that you may be induced to consider some of your rules, and to see whether you cannot substitute others for them, which will really have the effect you desire, without being open to the objections which I have pointed out. Mr. Morres has suggested that prizes should be offered for the encouragement of good cottage gardening. That is a very fair subject for competition. A cottage stands in a place where every one can see it, and a well-kept cottage and tidy garden are as good tests of good conduct, love of home, and other domestic qualities as you could well have. I should propose to substitute rewards for labourers who have kept their cottages in a tidy and proper manner, in lieu of rewards for conduct, of which an association at large can be no judge, and in which in the care of my own farm labourers I would not allow the association to interfere. With respect to the prizes for Turnips, I look upon them merely as expedients, as valuable as far as they serve the purpose for which they are intended. It does not follow because they succeed once or twice that therefore they are to be retained. I don't look upon success in competing for this prize as a decisive proof of good farming. A man may gain this prize, and yet be a farmer whom I or any other landlord would not accept for a tenant. There appears in the present day to be a tendency to give prizes for almost everything—to run prize mad, in fact. I had an invitation the other day from a great sheep farming district to subscribe to a sheep fair. They sent me a paper with a list of the prizes to be given, which, after going through all the prizes of the ordinary kind, winds up with a prize of a silver cup to be given to the purchaser of the greatest number of sheep at the fair. I am very ignorant of these matters, but this is the first time in my life that I ever heard of a man having a prize for buying that which he wants to buy for his own purpose. As well might a brewer offer a prize to the man who drank the greatest number of cups of ale, or the chymist to the man who bought the greatest number of pills and black draughts. I hope that the remarks which I have made may tend to produce a union between us. I find that a great number of people are coming round to my way of thinking, and I hope before many years are over that some means may be devised which will remove the objections to which I have referred. As cautious clergymen sometimes conclude by invoking a Divine blessing on their discourse so far as it has not been inconsistent with the Holy Word, so I will now conclude by drinking "Success to the Wokingham Agricultural Association," so far as it tends to promote agriculture, and is consistent with the rules of common sense and propriety.

Notices of Books.

The Book of Farm Buildings. By Henry Stephens and R. Scott Burn. W. Blackwood, Edinburgh and London.

This is a companion volume to the work by the same authors on Farm Implements. A thousand woodcuts and about 30 plates descriptive of farm architecture generally, and of particular designs for farmeries and cottages, are here designed, collected, and discussed in detail. Some of the plans are those of farmeries already built, as for instance Plates XI. to XVI., including those of Sir W. G. Hayter, Bart., near Bracknell; Lord Wharncliffe, at Drumkilbo, Forfarshire; Barron Graham, Esq., Morphie, Kincardineshire; Lord Radnor's, at Coleshill, Berkshire; and others. The remaining specimens are, we presume, designed by the authors for the circumstances of pastoral, carse, dairy, "suburbial," common, and mixed husbandry farms respectively. This is the classification adopted. The distinction between the two last lies in the stock fattened on the latter of them being bred upon the farm. The "Carse" farming, on the other hand, is adapted to rich alluvial lands. "It implies a flat clay, rich soil capable of raising all sorts of grain, and is therefore eminently suited to arable culture, and for the same reason unsuited to pasture Grasses and live stock." The other kinds of farming, including the suburban, here called suburbial, are sufficiently indicated by their titles. We do not quite acquiesce in the classification here adopted. The carse farming, for instance, is as here described, as much a peculiarity of climate as of soil. There are large tracts of the richest grazing grounds under the same circumstances of soil which characterise the flat alluvial districts on the Forth and Tay, where carse lands and "carse" farming especially abound.

The following is the general picture of English agriculture which embraces the different styles thus named:—

"The causes which have operated so to diversify the systems of farming in this country, are perhaps the following: Sheep occupy the whole range of pasture from the mountain tops to the plains. Hence the highest mountain pastures are occupied solely by sheep, and there, in consequence, *pastoral* farms which breed sheep only are to be found. High sheep farms are much subjected to wind and rain; and were it not that the tops of mountains face different directions—one face affording comparative shelter and warmth, whilst the opposite is confronting the fiercest blasts of the elements—such farms would be unfit even for the most hardy breeds of sheep.

"Since sheep can occupy the whole range of mountain pasture, and cattle only the secondary hills to the plains, it follows that both sheep and cattle can be reared on the same pastoral farm. This constitutes our second description of *pastoral* farms. Few store masters, however, trouble themselves with breeding both cattle and sheep, where accommodation in steadings for stock of both kinds is very limited, and where variety of winter provender is not over-abun[illegible] where good haugh or holm land exists, an[illegible] on the adjacent slopes, a commodious stead[illegible] set down with advantage for both cattle [illegible] breeding. Cattle and sheep may be reared [illegible] tage on the same pasture, inasmuch as sheep [illegible] grass closer and distribute their manure [illegible] cattle, and the cropped Grass thereby springs [illegible] more readily.

"Upon the slopes and undulations of the [illegible] from the foot of the secondary mountains [illegible] plains, are found the sites of many kinds of [illegible] The soil generally in these slopes and undulations [illegible] on trap alone, or on sandstone alone, or on [illegible] limestone containing projecting eminences [illegible] Such formations are eminently suited for [illegible] Turnips, and, accordingly, we there find prevailing [illegible] *mixed*, the *dairy*, and the *common* farming.

"On the plains, towns and villages are found on [illegible] margins of rivers which are making their way to [illegible] sea or to an estuary. The soil is either [illegible] gravel, both travelled materials, and [illegible] diluvial clay. The farming here is determined by [illegible] immediate demands from these towns and villages, and hence arises the *suburbial* farming.

"Where the plain extends to the b[illegible] river or wide estuary, the soil is often [illegible] deposit of strong alluvial clay, upon which is [illegible] the *carse* farming.

"Such are the physical causes which have [illegible] rise to the different kinds of farming practised [illegible] country. It is obvious that no change can [illegible] duced into *pastoral* farming, except in the exten[illegible] arable culture, for the purpose of raising an [illegible] and sufficient supply of winter food for [illegible] *Carse* farming can only be materially altered by [illegible] Turnips where none were raised before, by [illegible] thorough drainage. *Suburbial* farms must [illegible] their peculiar characteristics until the demand [illegible] from the towns for the peculiar products wh[illegible] consume. As long as milk, and butter, and [illegible] are wanted, *dairy* farming must be pursued. The [illegible] material change that can be effected in the gen[illegible] farming of the country is the transference of [illegible] *common* farming at a distance from towns to that of [illegible] mixed husbandry. This change would involve [illegible] breeding and rearing of live stock upon the fa[illegible] instead of their being purchased at markets. W[illegible] then would become of the live stock reared in [illegible] pastoral districts, when there would be no purchase[illegible] in the low country? But purchasers would be fou[illegible] by increasing the culture of Turnips in the neighbour[illegible] hood of towns beyond the town demand, and also by increasing them on carse farms by means of thorough drainage, on which classes of farms live stock cannot be reared. Such a change might [illegible] accommodation for all the cast stock from the pastoral districts in every successive year. Any change th[illegible] could be effected on the *mixed* husbandry could [illegible] be by purchasing live stock instead of breeding the[illegible] and such a change would be a retrograde one for a farmer."

The authors then go on to discuss the proper po[illegible] tion of the farmstead and farmhouse, and they add:

"Having thus pointed out the best position for [illegible] steading to occupy on a farm, our next endeavour shall be to lay down the general principle which sh[illegible] guide the construction of steadings for every variety of arable husbandry.

"Straw being the most bulky article in the stea[illegible] and in great and daily use by all the stock, and [illegible] though heavy and unwieldy, to be distributed [illegible] apartment by manual labour, it should, of [illegible] be placed centrically, and at the shortest distance [illegible] the stock. Bearing the relations of these part[illegible] in mind, it is obvious that they constitute the [illegible] upon which the construction of steadings sho[illegible] based; and as the centre is the nearest point [illegible] circumference, it is also obvious that the original [illegible] tacle for the straw should occupy the central [illegible] the steading. There can be no exception to this [illegible] for every variety of farming where straw is [illegible] Every apartment occupied by stock should [illegible] circle the straw-barn. Different classes and ages [illegible] stock require different quantities and kinds of [illegible] so that those which require the most should be pla[illegible] nearest the straw-barn; and in all cases straw sho[illegible] be carried short distances, and not at all [illegible] other apartment than direct from the straw-barn.

"The threshing machine supplies the straw [illegible] to the straw barn; that machine should therefore [illegible] erected nearest to it. The stackyard supplies the [illegible] direct to the threshing-machine, and should also [illegible] contiguous to it; and as the corn and straw [illegible] threshed most easily and quickly in a straight line, [illegible] follows that the stackyard threshing machine [illegible] straw-barn should be in a straight line: and [illegible] follows that as the straw-barn should be in the centre of the steading, and as the threshing machine [illegible] venes between it and the stackyard, the stack[illegible] should be placed on the outside of the stea[illegible] Another important corollary, as regards the constr[illegible] tion of the steading, follows from these premises. T[illegible] sun is an important source of warmth, and, in con[illegible] quence, of comfort to the animals in a steading in [illegible] winter season. Every facility should therefore [illegible] allowed the sun to enter, and the removal of [illegible] obstruction to the greatest amount of sunshine [illegible]

placing the length of the central straw-barn north and south, and in settling this point, the straw-barn, threshing machine, and stackyard will, as a consequence, be in a line north and south. This being the case, the building required to accommodate the threshing machine, and its accompanying corn-barn, being always two-storeyed, a convenient position for the granaries will be to place them east and west, where they will form a good screen from the north wind. Here, then, we have fixed a principle in the construction of steadings which is indisputable, namely, that the straw-barn should occupy the centre: that the threshing machine should be nearest to it and in a line with it, that the stackyard should be near the threshing machine; and that all three should be in a line north and south. And as all steadings for arable culture have straw-barn, threshing machine, and stackyard, it follows that this principle is applicable to all steadings erected for that purpose."

The economy of labour and the need of a good aspect are the two considerations which have always guided intelligent farm architects; it is however a mistake to suppose that straw is the heaviest article carried about from day to day in farmsteads.

The food of a beast is heavier than its litter, and the place of the straw house is not necessarily the key to the arrangement of a farmery. It, however, and the food stores together are the central block, around which all the cattle for whose shelter the farming especially is provided are grouped. And this guiding rule it will be seen is observed in the plans published in this volume.

It is not only the provision of a farmery, but the erection of cottages and farm houses also, that is contemplated in the work before us. Plans and particulars of construction are given in great fulness and detail, and the whole is a very complete storehouse of guidance and information.

Miscellaneous.

Mr. Girdwood's Wool Sales: Edinburgh, Sept. 18.—At this sale the attendance of buyers was numerous, and the competition for Cheviot and half-bred wools very spirited. The choice in these kinds, however, was inferior to that of former sales, and prices consequently did not range so high; but taking quality and condition into consideration they were about equal to last sale's prices, and almost all, excepting a few lots limited above market value, were cleared out. In white and laid Highland a large quantity was sold at about last sale's rates, a few parcels fetching very high figures. In laid Cheviots, of which there was the finest display ever offered for public sale, the competition was dull, and a large portion of these were withdrawn, prices offered not being up to the ideas of the farmers. What were sold, however, were about last sale's rates. The following may be quoted as the prices of fair to good wools:—Half-bred hogs, 36*s.* to 38*s.*; ewes, 32*s.* to 34*s.* 6*d.*; cross hogs, 31*s.* to 33*s.*; Cheviot hogs, 32*s.* to 36*s.*; ewes, 30*s.* to 34*s.*; black-faced white unwashed, 14*s.* to 17*s.*; washed, 16*s.* 6*d.* to 23*s.*; laid Cheviot, 18*s.* to 21*s.*, unwashed; and 20*s.* to 27*s.* for washed wools.

New Self-raking Reaping Machine.—Mr. Samuelson, of Banbury, Oxfordshire, having applied to the Committee of the Westmeath Farmers' Club for a field upon which his new self-raking reaping machine might be tried, the machine was forwarded to Mullingar on Wednesday, and set to work on the farm of Mr. James Duffy, farmer, Galmoylestown, near Kilmaglash, who offered his field for the purpose. William Levinge, Esq., J.P., President of the Club, and several of the committee and other members of the Club, were present. Owing to the novel construction of the machine, which has only just been tried in England, there was a considerable attendance of tenant farmers and others from the surrounding districts. The crop operated upon was a piece of black Oats, partially laid; the land being hilly and light, and very stony, otherwise fairly tilled. At 2 o'clock the machine, which was attended by Mr. Thomas Cornes, from the Dublin Implement depot, commenced by cutting a breadth of 5 feet round the entire crop, a breadth having been cut with the hook the day before, outside that space again, so as to give room for the machine to work. After a slight mishap, owing to an injury to the machine on its transit from England, all went on right, and it soon became evident that the machine was a first-class one in every respect. As the crop was much laid in places, it was found advisable to cut one way only, against the lie of the corn, the machine returning idle, and nothing could exceed the evenness or perfection with which the sheaves were cut and laid. The self-rakers, of which there were two working alternately with two winged boards for delivering the sheaves, presented, in going, the appearance of a small locomotive windmill, and the sheaves being laid equidistant and equal in size, with the butt-ends evener than they could be laid by reaping (no stray heads left on the track), the whole work was finished at once, with an extraordinarily neat and finished appearance. The machine is easily drawn by a pair of stout cart horses, and all that arduous labour entailed on the workman by those machines when a man is employed to rake a heavy crop, is, by this machine, completely done away with, whilst the sheaves are delivered with a constant precision which no manual labour could secure, yet every turn of the wrist necessary to deliver the sheaf correctly seems to have been accurately copied in the construction of this wonderful machine. There can be no doubt that this is by far the most perfect reaping machine as yet invented. The quantity of work executed would vary according to the weight and position of the crop, from one-half to one and a-half statute acre per hour. The Committee of the Club agreed upon the following:—

"Report of the Committee of the Westmeath Farmers' Club on Mr. Samuelson's Self-raking Reaping Machine.

"We, the undersigned, have much pleasure in bearing testimony to the very efficient working of the new self-raking reaping machine sent over from Banbury by the maker, Mr. Samuelson, for our inspection and trial. We find it light for a pair of good farm horses, and that it is capable of cutting and raking into even and compact sheaves (one man only being required with it to ride one of the horses) all kinds of corn crops at an average rate of one statute acre per hour. But we recommend that in all cases where the crop is laid, or even partially so, the machine should be worked against the lie of the corn only. We consider that the chief advantages which this machine possesses over any other hitherto brought out is that it does away with the very great labour required in cutting heavy crops by the machines when the raking is performed by hand, whilst all those turns of the wrist which require so much skill in order to lay the sheaves correctly having been copied in constructing this machine, the work can be performed by it with a constant precision unattainable by manual labour. We are of opinion that this is by far the most perfect reaping machine as yet introduced into Ireland; but we consider that it would be an advantage if it could be made to mow meadows also. We desire, in conclusion, to express our gratitude to Mr. Samuelson for his kindness in sending this machine, at his own expense, from Oxfordshire, to be tried by this Club, as well as for the honour conferred, and wish him every success in his very praiseworthy efforts to improve the agricultural machinery of the United Kingdom. We are also much indebted to Mr. Thomas Cornes, of the Dublin Implement Depot, for his attention on the occasion; and to Mr. James Duffy, of Galmoylestown, for his kind courtesy and readiness in giving the use of his field to the Committee.—(Signed on behalf of the Committee of the Club) William Levinge, President; William Taylor, V.P.; Patrick Barden, V.P.; James Sherridan; William Flood. *Kilmaglash Farm, Mullingar, Sept. 18, 1861."—Irish Agricultural Review.*

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended September 26, observed by Mr. J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air. Max. in Sun.	Max. in Shade.	Min.	Mean.	Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
	Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday 20 ..	83.0	70.0	49.5	63.0	57.0	0.05	S.W.	29.70
Saturday 21 ..	76.0	66.0	41.0	56.0	57.0	..	S.	29.64
Sunday 22 ..	68.0	62.0	46.5	55.7	56.4	0.26	S.W.	29.40
Monday 23 ..	62.0	58.0	52.0	56.0	56.8	0.24	S.W.	29.26
Tuesday 24 ..	70.0	62.0	44.0	55.0	56.8	0.63	S.W.	29.38
Wednesday 25 ..	72.0	62.0	43.0	55.0	56.0	0.06	S.	29.18
Thursday 26 ..	72.0	59.0	43.0	54.2	55.8	0.09	N.W.	29.50

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Alderney Cow: *Old Subscriber.* An old Alderney cow is a wonderful animal to eat. If she is in full milk give her all that she will take, with plenty of water. She may consume 4 lbs. of oilcake and 30 lbs. of a chaff made of 20 lbs. of hay and 10 lbs. of good straw cut up together—daily.

Brassica: *Brassica.* The Swede seed which you used has been mixed with Rape.

Drying Corn: *An Inquirer* asks if any machine or apparatus has been contrived for drying hay or cut corn, when the weather is too wet to allow of its being dried in the usual manner by the sun and wind.

Fatting Cows: *A B.* They will eat as many Swedes up to 1 cwt. daily apiece as you choose to give them, along with probably 16 to 20 lbs. of hay. You had better give them some cotton seed cake, or steamed Rape cake mixed up with the hay cut into chaff. And if you pulped your roots and mixed it all together, gradually increased the Rape cake from 2 lbs. daily apiece, up to 6 lbs. or 8 lbs. towards spring, you would obtain the best result. But so far as money is concerned, you will do better to sell your cows and your food for them, and leave others to manage the feeding process.

Kohl Rabi: *C E F.* It will stand the winter very well. About one in six in a field near us were killed by last Christmas frost.

Potatoes on Clay: *A Correspondent* says any person interested in the growth of Potatoes may now see a fine crop, nearly free from disease, by taking a return ticket from Paddington to Hanwell station, fare 1*s.* 6*d.* They can now inspect them, and be convinced of the beneficial results of laying the tops down and earthing them over with the plough.

Poultry.—Michaelmas has brought little stir among either senders or buyers at Leadenhall. There is a slight improvement in trade, which, joined to cooler weather, has made the trade healthier, and given it a little appearance of mending, which is not without value. Geese are, as a rule, at Michaelmas valued according to weight. If of good quality, they are more or less valuable as they are larger or smaller. They were to be bought at all prices from 6*s.* to 9*s.* each:—

Large Fowls	Each	3*s.*	6*d.*	to	4*s.*	0*d.*
Smaller ditto	"	2	6	"	3	0
Chickens	"	1	9	"	2	0
Ducks	"	2	0	"	2	6
Grouse	"	2	0	"	2	6
Partridges	"	1	6	"	1	9
Rabbits	"	1	4	"	1	5
Wild ditto	"	0	8	"	0	9
Pigeons	"	0	7	"	0	8

Sample of Wheat: *A Correspondent* says—"You kindly offer to those who send a sample bag to send a small sample of Wheat, &c." We did nothing of the kind. We offered to send out what had been sent to us in any *addressed* sample bags which might reach us. And most of the large number of bags sent to us have been so directed. In other cases we have had offers of payment—addresses without bags—bags without addresses, &c., &c., &c. If *all* of those who desired these samples had simply done what they were asked to do, they would have saved themselves disappointment and us much trouble. Will a Correspondent from East Sutton be good enough to forward his address upon a label.

Flag of Truce.

New Double White Azalea indica.

F. and A. SMITH have much pleasure in offering the above splendid novelty, which is justly celebrated as the best double variety extant. It has obtained unprecedented testimonials of merit, and the general admission of all who have seen it to be the "finest" yet produced for its large double flowers, purity of colour, abundance of bloom, and neat compact habit of growth.

Plants will be sent out in June, 1862. Full description and price will be published early in spring.

Dulwich, Surrey, S.

NEW GLOXINIAS.—These are offered as a collection of unrivalled forms and colours, and which have attracted much attention and obtained Prizes at several of the London Shows. Plants in October next.

For descriptions, see GENERAL LIST, which may be had on application.

F. & A. Smith, Dulwich, Surrey, S.

New Cinerarias.

F. and A. SMITH beg to call attention to their Splendid Collection of New Cinerarias, which they particularly commend for their superiority of colour, form, and habit. These will be sent out in October next, according to priority of orders.

For description see GENERAL LIST, obtainable on application.

Dulwich, Surrey, S.

New Pelargoniums.

F. and A. SMITH are about to send out the undermentioned Early and Late New Pelargoniums:—

SNOWDROP (Smith).—Pure white with small purple blotch and feather, of good form, close and compact habit of plant, and a most abundant bloomer. This variety obtained a Certificate of Commendation from the Floral Committee of the Royal Horticultural Society, April 9, 1861, as an early forcing variety, and as such it has proved superior to all known sorts, being equally early with Alba multiflora and superior in every other respect. This addition to our forcing Pelargoniums will prove indispensable to those who desire a first-class white decorative plant in January or February. Plants in autumn, 7*s.* 6*d.* and 10*s.* 6*d.* each.

GENERAL HAVELOCK.—Upper petals dark crimson edged with rose, lower petals bright rose with large pure white centre, fine form, free bloomer, and dwarf habit; a distinct and fine exhibition variety. 7*s.* 6*d.* and 10*s.* 6*d.*

MR. FORSTER.—Upper petals dark crimson shaded off with bright carmine and edged with rose, lower petals rich lake, with large pure white centre, very fine form, free bloomer and dwarf habit; a good exhibition variety. 7*s.* 6*d.* and 10*s.* 6*d.*

RAJAH.—Upper petals crimson blotch with wide rose edge, lower petals light rose with crimson spots, fine form, free bloomer, and dwarf habit. 7*s.* 6*d.* and 10*s.* 6*d.*

Dulwich, Surrey, S.

Clapton Nursery, London, N.E.

HUGH LOW and CO. have to offer well-established Plants of the undernamed, for all or any of which they will be pleased to receive orders:—

	s.	*d.*
Arthrobotrya articulata, a very pretty creeping Fern from Borneo, was awarded a First-class Certificate by Royal Horticultural Society on August 27 ..	15	0
Alocasia metallica ..	42	0
Caladium argyrites 1*s.* 6*d.* to	2	6
" argyrospilum ..	2	6
" Belleymei 3*s.* 6*d.* to	7	6
" bicolor picturatum	1	6
" " splendens	1	6
" Brongniarti ..	2	6
" Chantini, 1*s.* 6*d.* to	3	6
" Houlleti or alba punctatissima 2*s.* to	3	6
" Neumani 1*s.* 6*d.* to	2	6
" pœcile, true 3*s.* 6*d.* to	7	6
" tricolor	1	6
" Schœlleri	5	0
" Wighti 2*s.* 6*d.* to	5	0
Campylobotrys pyrophylla	5	0
Campylobotrys regalis 3*s.* 6*d.* to	5	0
Cyanophyllum assamicum	5	0
" magnificum, 3*s.* 6*d.*, 5*s.* to	7	6
" speciosum ..	5	0
Pentstemon Lobbianus, an erect habited species, producing large bright yellow flowers in great profusion, was awarded a First-class Certificate by Royal Horticultural Society on August 27 ..	5	0
Pentstemon spectabilis, a fine species, producing spikes of flowers 2 feet in length. This and the preceding were sent from California by our collector Mr. William Lobb	5	0
Pteris tricolor .. 1*s.* to	2	6
Sphærostema marmorata	21	0

RARE ORCHIDS.

Amongst recent importations are the following species. Prices, which are reasonable, can be had on application:—

Aerides crispum
" Lindleyanum
" Lobbi; a large quantity of this rare and beautiful species
" maculosum
" rubrum
" suavissimum
" Warneri
Calanthe vestita
" " rosea
Cœlogyne Lowi
" pandurata
Dendrobium Farmeri
" formosum giganteum; this produced flowers during June 5½ inches in diameter
Dendrobium chrysotoxum
" tortile
" Dalhousianum
Limatodes rosea
Phalænopsis grandiflora, the Bornean variety, very superior in every respect to the Java variety commonly found in collections
" amabilis
Saccolabium Blumei major, var. Dayi; flowers unusually large and profusely spotted
" curvifolium
" violaceum

New and Beautiful Anæctochili.

HUGH LOW and CO. have much pleasure in offering to admirers of this lovely genus of plants the undermentioned species recently received direct from Borneo. The only one yet exhibited (Bulleni) was awarded a First class Certificate by the Floral Committee of the Royal Horticultural Society at the meeting on Aug. 27.

H. L. & Co. feel persuaded the species now offered will be as much admired as any of those previously introduced. The subjoined descriptions are taken from plants recently imported; when fully developed the plants are much finer in character, and all are of extremely free growth.

ANÆCTOCHILUS BULLENI.—A fine species, attaining a height of 6 to 9 inches, with leaves 2 to 2½ inches in length; ground colour bronzy green, marked through the entire length with three broad distinct coppery red, varying at times to golden, stripes. Price 63*s.*

ANÆCTOCHILUS NEVILLEANA.—A lovely species. Leaves marked with orange blotches on a dark velvety ground. In some of the specimens the markings are of a beautiful white, in the way of Sonerila margaritacea. Price 63*s.*

ANÆCTOCHILUS RUCKERI. Leaves broadly ovate; ground colour bronzy green, with six rows of distinct spots running the entire length of the leaves. Price 63*s.*

Plants will be ready for delivery the first week in October.

Clapton Nursery, London, N.E.

STRAWBERRIES.—Early Black Prince, 5s. per 100; selected, 7s. 6d.; Princess Royal of England, 7s. 6d. per 100; selected, 10s.; Prince of Wales, 7s. 6d. per 100; selected, 10s.; Highland Mary and Richard 2d, each per 100, 15s.; Newton Seedling, late, large and fine, 15s. per 100. The above were in bearing 61 days this year.

CUTHILL'S five PAMPHLETS; HAMILTON or the Author. Best MUSHROOM SPAWN, &c.

JAMES CUTHILL, F.R.H.S., Camberwell, London, S.

STRAWBERRY PLANTS by the 100 or 1000.—Admiral Dundas, Elton Pine, Eleanor, Keen's Seedling, and British Queen, by the 100; Black Prince, May Queen, Alice Maude, Eliza, Oscar, Sir C. Napier, Prince of Wales, and Wizard of the North.

Double White and Yellow NARCISSUS, DAFFODILS, Purple Martagon and Orange LILIES.

GEORGE CORNWELL, Seedsman, &c., Barnet, N.

Strawberry Plants.

JAMES KITLEY begs to announce that the plants of his unequalled Strawberry, Carolina Superba, are now remarkably fine, and which he can supply at 5s. per 100. Also extra strong plants of Goliath, British Queen, Elton Pine, Keen's Seedling, Sir C Napier, Eleanor, Duc de Malakoff, La Chalanaise, Gelineau, Madame E. Vilmorin, and Princess Alice Maud, at 3s. 6d. per 100.

The following varieties may be had in pots, at 1l. per 100, which would ensure a crop of fruit next season, viz., Carolina superba, Goliath, Sir C. Napier, Keen's Seedling, Trollop's Victoria, and Princess Alice Maud.

Lyncombe Vale Nursery, Bath.

Vines for Fruiting in Pots.

JAMES CARTER AND CO., SEED MERCHANTS and NURSERYMEN, 237, 238, High Holborn, London, W.C., and Crystal Palace Nursery, Forest Hill, Sydenham, have much pleasure in offering strong short-jointed well ripened Vines for Pot Culture, of all the most esteemed varieties, capable of bearing six to eight bunches each.

For list of names and prices see AUTUMN BULB CATALOGUE, post free on application.

PAMPAS GRASS.

J. C. & Co. have a splendid Stock of the above highly ornamental Grass, well established in Pots, from 5s. per dozen. Extra strong, 1s. to 1s. 6d. each.

Vines, Vines, Vines.

WILLIAM CUTBUSH, JUN., Barnet Nurseries, Herts, begs to invite an inspection of his fine Stock of Fruiting and other Vines in Pots, consisting of all the best varieties in cultivation. The following are remarkably strong and fine, from 8 to 12 feet in length, viz., Muscat Hamburgh, Muscat of Alexandria, Golden Hamburgh, Bowood Muscat, Lady Down's Seedling, Trentham Black, Buckland's Sweetwater, Black Hamburgh, &c. List and Prices on application. Also to his Stock of Specimen and Half-specimen New Holland Plants, Indian Azaleas, Stove Plants, &c.

W. C. Jun. would also especially call the attention of Mushroom Growers to his very superior MUSHROOM SPAWN, for which he has the highest testimonials from the most eminent Gardeners in the United Kingdom, and which he can with the greatest confidence recommend. References on application.

New Azaleas.

F. AND A. SMITH will send out in October next:—
• CLAPHAM BEAUTY.—The best rose pink yet known, 21s. to 31s. 6d.
PRINCESS ALICE.—The best single white, 10s. to 15s.
PRINCE OF ORANGE.—The best and brightest orange scarlet, 21s. to 31s. 6d.

Fuller descriptions, with CATALOGUE, may be had on application.

Dulwich, Surrey, S.

NEW AND CHOICE SHOW, FANCY, AND FRENCH GERANIUMS, in Strong Plants, are now ready at 30s. per doz., viz.:—(Foster's) Bertram, Bijou, Garibaldi, Rosa Bonheur, Perdita; (Hoyle's) Beauty of Reading, James Lodge, Lurline, Mrs. Benyon, Murillo, Norma, Rosa Bonheur, Bertie, Thirza, Volunteer; (Beck's) Modesty, Mulberry, the Gem of Roses, the Lady of Quality, Transcendent; (Turner's) Lady Taunton, King of Spots, Queen of Spots.

The newest and most choice French varieties are—Adanson, Archimède, Endymion, Fiorian, Garibaldi, Le Nègre, Madame Arthur Blacque, Madame Curcier, Madame Picouline, Madame Reiset, Magenta, Mer Polaire, Mirabeau, Moise Monsieur Guidon, Oscar, Octavie Malet, Princess Clotilde, Salvator Rosa, Télémaque, Tamberlik, Vicomtesse de Bellevue, Victor Emmanuel. Fancies (Turner's): Arabella Goddard, Delight, King of Roses, Madame Sainton-Dolby, Master Harry, The Champion.

G. S. has also a first-rate Collection of older kinds of the above in fine plants, and price moderate; with Variegated and Fancy Scarlet kinds; all the novelties out.

Fine strong Plants of Variegated Geraniums, the best yet sent out, 5s.; Calceolaria canariensis, small plants, [illegible] 6d.; Stock plants, from 5s. to 7s. 6d.; Fuchsia Mammoth, strong plants, 3s. 6d.

Tollington Nursery, Hornsey Road, Islington, London, N.

WHEELER'S ORANGE GLOBE MANGEL,
WHEELER'S IMPERIAL SWEDE,
GRASS SEEDS FOR PERMANENT PASTURE,
GRASS SEEDS FOR LAWNS,

And all other Seeds of the same excellent quality which has rendered our Farm Seeds so celebrated.

We offer our Seeds at the lowest price consistent with their being good and pure, at the same time deliver them carriage free by rail, and allow 5 per cent. discount for cash.

Our Book of FARM SEEDS sent free for 3 stamps.

J. C. WHEELER & SON, Seed Growers, Gloucestershire.

SEED WHEATS.—New and Improved Varieties from the Chiltern Hills.

	Per Quarter—s.	d.
The BURGHFIELD EARLY WHITE (New), a Lammas Wheat of superior quality, remarkable for early maturity, and length and stoutness of Straw, Ear, and Berry, raised by the advertiser from a single grain ..	76	0
ESSEX ROUGH CHAFF (Improved), one of the best white Wheats, straw stiff and short	76	0
BROWICK IMPERIAL RED (New), the best of the prolific red Wheats, straw medium length, very stiff ..	76	0
BENTALL'S RIVETT (improved), coarse, but very productive	66	0

All the above warranted TRUE to their kinds, CLEAN, and in first-rate condition by the Grower, Mr. R. C. M. YOUNG, Flint Hall, Hambleden, Henley-on-Thames.

A remittance required with order. New sacks included in prices quoted, with delivery to Henley Station.

REIGATE SILVER SAND, 16s. per ton, or 1s. 6d. per bushel, delivered to any London Wharf or Railway. Sacks 1s. 6d. each, or on hire 6d. each (5 hold a ton). Kentish and Hampshire Peats, Loam, and Leaf Mould.

JOHN KENNARD, Swan Place, Old Kent Road, London, S.E.

THE LONDON MANURE COMPANY
(ESTABLISHED 1840,)
Are now prepared to send out the following MANURES:—
CORN MANURE FOR AUTUMN SOWING.
SUPERPHOSPHATE OF LIME.
DISSOLVED BONES FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN.
PERUVIAN GUANO, NITRATE OF SODA, SULPHATE OF AMMONIA, and every other Manure of value.

116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.

CONCENTRATED TURNIP MANURE, equal in value to the preceding.

Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."

Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861 are now ready for delivery at his Factories, at the following prices:—

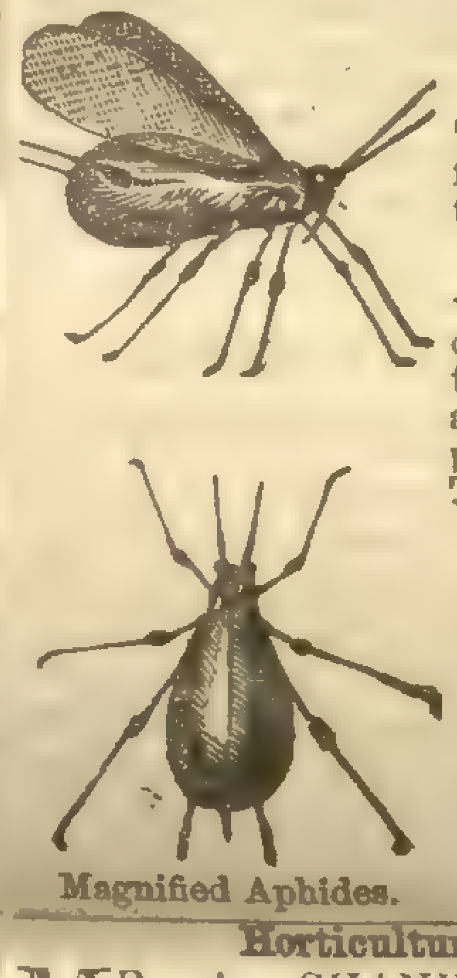
LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME	£6	6
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES ..	5	5
LAWES'S BARLEY, GRASS, AND MANGEL MANURES	8	0

These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.

Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.

American and other Cakes at market prices.

Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.



NEAL'S PATENT APHIS PASTILS.

The following is one of upwards of 70 Testimonials received by J. NEAL from gentlemen personally unknown to him.

"I beg to bear my testimony to the value of Neal's Pastils, and their efficacy in destroying, most effectually, the Green Fly without any trouble, and at a nominal expense, when compared with the use of Tobacco or even Tobacco Paper.

"JAMES SANDERS,
"Nursery Grounds, Abergavenny."

Sold by all principal Seedsmen.
Price 1s. and 2s. per packet.

Magnified Aphides. Patentee, J. NEAL, Birmingham.

Horticultural Agent and Valuer.

MR. A. CHANDLER (of the late Firm of CHANDLER & SONS), 28, Priory Road, Wandsworth Road, S., begs to offer his services as above. Sales of Plants and Nursery Stock arranged and Catalogues prepared.

GREEN'S PATENT LAWN MOWERS have proved to be the best, and have carried off every prize that has been given in all cases of competition. They are noiseless in working, self-sharpening, self-cleaning, simple in construction, and easier to work and less liable to get out of order than any other Lawn Mowers extant.

Illustrated Price Lists may be had of THOMAS GREEN, Smithfield Iron Works, Leeds; or 2, Victoria Street, Holborn Hill, London, E.C.

N.B. Old Machines repaired and made as good as new.

JAMES AND FREDERICK HOW[ARD],
BRITANNIA IRON WORKS, Bedford, Manufacturers of
STEAM CULTIVATORS, STEAM PLOUGHS, [...]
PLOUGHS, HARROWS, HORSE RAKES, & HAY [...]
Catalogues, with full particulars, sent free on application.

Parkes' Steel Digging Forks.

BURGESS AND KEY, 95, Newgate St., E.C., being the Wholesale and Retail Agents for [these cele]brated Tools, have always a large Stock on hand from [which] their Customers may select what they may require.

ANTHONY'S PATENT AMERICAN CHURN.—[The] PRIZE was again awarded to this Churn in Competition [with] several others at the Chester Meeting of the Royal Agricultural Society; it has obtained the First Prize given by [the Society] at every Meeting since 1850.

Messrs. BURGESS & KEY, 95, Newgate Street, strongly recommend it as the most perfect Churn [...]. Full particulars sent on application.

HENRY J. MORTON AND [...]
2, Basinghall Buildings, Leeds.

Galvanised Iron Water Cisterns
for Cottage Houses, &c., to contain 50 gallons [...]; 31s. each; and 140 gallons, 37s., and fitted with tap, keep the water perfectly sweet and clean; will not rust [...]. Cisterns of all sizes.

Galvanised Iron Pumps
for Liquid Manure or Domestic Use, 3 inches diameter, [...] and 32s. 6d. each; Tail Pipe for same at from 1½d. per foot.

Galvanised Iron Swing Water Barrows
for Garden or Farm use, containing about [...] formed of iron, 35s. 0d. each.

E. T. ARCHER'S "FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire [for Chis]wick Gardens, Professor Lindley for the Horticultural [Society], Sir Joseph Paxton for the Crystal Palace, Royal [Botanic] Society, late Mrs. Lawrence of Ealing Park, &c.

PROTECTION FROM THE COLD WINDS & MORNING [FROSTS].

"FRIGI DOMO," a Canvas made of patent prepared [Hair] and Wool, a perfect non-conductor of Heat and Cold, [keeping] wherever it is applied, a fixed temperature. It is [adapted for] all horticultural and floricultural purposes, for protecting Fruits and Flowers from the scorching rays of the sun, [from] wind, from attacks of insects, and from morning frosts. [May be] had in any required lengths.

Two yards wide	.. ..	1s. 6d. per yard [...]
Four yards wide	.. ..	3s. per yard.

An improved make, 3 yards wide, 2s. 6d. per yard [...]
Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard.

ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.

"It is much cheaper than mats as a covering."

CARSON'S ORIGINAL ANTI-CORROSION PAINT is now used extensively for all kinds of Out-door WORK, such as IRON, WOOD, STONE, BRICK, COMPO, [...] &c., and has been proved, after a practical test of 70 years, [to] surpass any other Paint.

For fuller particulars, see No. 35 of the *Gardeners' Chronicle*, Page 802, or apply to WALTER CARSON & SONS (Successors to the Inventors), 9, Great Winchester Street (near the Royal Exchange), London, E.C.

No Agents throughout the United Kingdom

Oil Paint no longer Necessary.

HILL & SMITH'S PATENT BLACK VARNISH for preserving Iron Work, Wood, &c. [...] This Varnish is an excellent substitute for oil paint on all out-door work, and is fully two-thirds cheaper. It may be applied by an ordinary labourer, requires no mixing or thinning, and is used cold. It is used in the grounds at Windsor Castle, Kew Gardens, and the seats of many hundreds of the nobility and gentry, by whom the most flattering testimonials have been received, which HILL & SMITH will forward on application.

Sold in casks of about 30 gallons each, at 1s. 6d. per gallon, [at] the Manufactory, or 1s. 8d. per gallon paid to any station [in] the kingdom.

Apply to HILL & SMITH, Brierley Hill Iron Works, Dudley, from whom only it can be obtained.

THOMAS MILLINGTON,
HORTICULTURAL GLASS WAREHOUSE,
87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.
ESTABLISHED 1750.

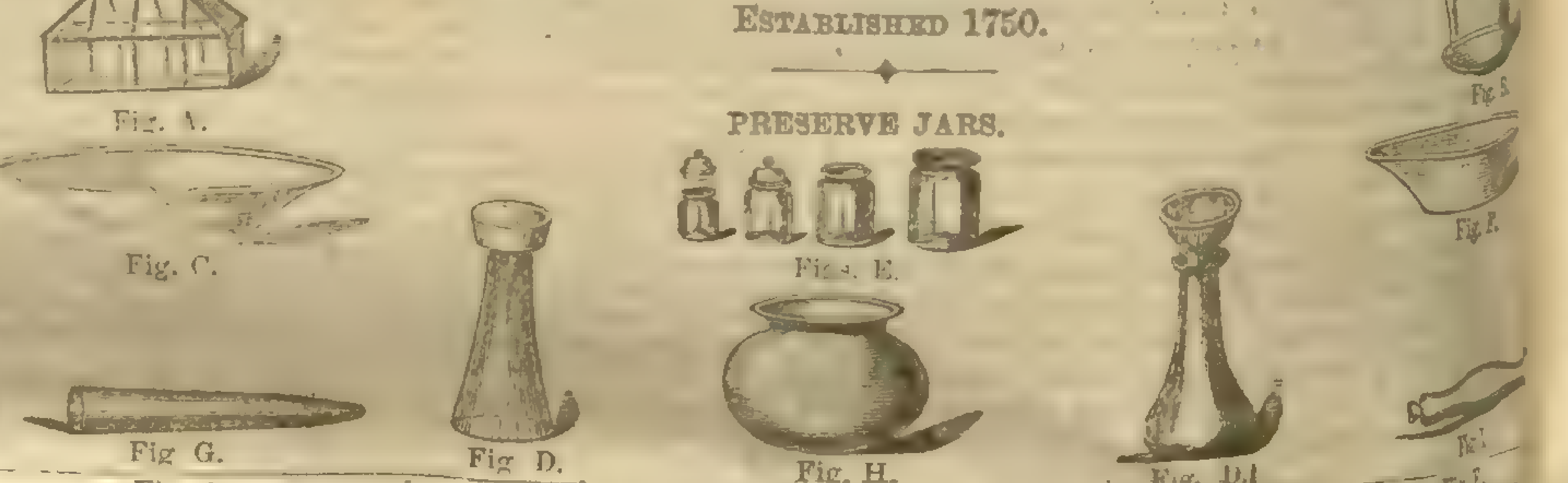


Fig. A.
HAND GLASSES.

12 inches	..	6s. 0d.	each
14 ,,	..	7 0	,,
16 ,,	..	8 0	,,
18 ,,	..	9 0	,,
20 ,,	..	10 0	,,
24 ,,	..	12 0	,,

If open top 1s. extra.

Fig. B.
PROPAGATING GLASSES.

2 inches	..	0s. 3½d.	each.
4 ,,	..	0 5½	,,
6 ,,	..	0 8	,,
10 ,,	..	1 4	,,
12 ,,	..	1 9	,,
16 ,,	..	3 6	,,
18 ,,	..	5 0	,,
20 ,,	..	7 0	,,

Fig. C.
MILK PANS.

6 inches	..	0s. 6d.	each.
10 ,,	..	1 0	,,
14 ,,	..	1 9	,,
18 ,,	..	2 9	,,
20 ,,	..	3 3	,,
22 ,,	..	3 9	,,
24 ,,	..	4 6	,,
26 ,,	..	5 6	,,

Fig. E.
PRESERVE JARS.
Without Lids. With [Lids.]

3 inches	0s. 4½d.	[illegible]
4 ,,	0 6	[illegible]
5 ,,	0 8	[illegible]
6 ,,	0 10	[illegible]
7 ,,	1 0	[illegible]
8 ,,	1 4	[illegible]
9 ,,	1 6	[illegible]
10 ,,	2 0	[illegible]

Fig. D.
HYACINTH GLASSES.
Common .. 3s. 0d. per dozen,
Improved .. 3 6 ,,

CROCUS GLASSES.
Common .. 2s. 0d. per dozen.
Improved .. 2 6 ,,

Fig. F.
HYACINTH DISHES.

6 inches	..	1s. 0d.	each.
9 ,,	..	1 6	,,
12 ,,	..	2 6	,,

Fig. G.
CUCUMBER TUBES.
1d. per running inch.

Fig. I.
ROLLING PINS.
1½d. per running inch.

OPAL DITTO.

14 inches	..	3s. 6d.	each.
16 ,,	..	4 0	,,
18 ,,	..	4 6	,,

Fig. H.
FISH GLOBES.
With Feet. Without [Feet.]

8 inches	1s. 9d.	3s. 6d. [sic]
10 ,,	2 3	4 6
12 ,,	3 0	6 6
14 ,,	4 0	9 0
16 ,,	5 0	

Intermediate Sizes in proportion.

Crystal Glass Shades, Ebony and Gilt Stands, Gas and Lamp Glasses, Chimneys and Globes, &c.

☞ *For Window and Orchard House Glass see Advertisement of July 30.*

NEW SEEDS FOR AUTUMN SOWING.

PETER LAWSON & SON,

SEEDSMEN TO THE QUEEN,

LONDON AND EDINBURGH,

CAN now supply New Seed of TRIFOLIUM INCARNATUM, ITALIAN RYE-GRASS, DWARF ESSEX RAPE, &c., of fine quality.

They are also prepared to supply all the NATURAL GRASSES, either separate or in mixtures, for laying down Permanent Pastures, Lawns, Public Parks, Cemeteries, &c., orders for which will be carefully and promptly attended to.

27, GREAT GEORGE STREET, WESTMINSTER, S.W.

Bulbs.—Choice Assorted Collections.

STEPHEN BROWN (late BASS & BROWN) offers the following, embracing a great variety. For particulars see CATALOGUE.

No. 1. For potting or forcing	.. .. ..	£3	0	0
No. 2. For potting or forcing	.. .. ..	2	0	0
No. 3. For potting or forcing	.. .. ..	1	0	0
No. 4. For out-door planting	.. .. ..	3	0	0
No. 5. For out-door planting	.. .. ..	2	0	0
No. 6. For out-door planting	.. .. ..	1	0	0
No. 7. For out-door planting	.. .. ..	0	10	0
No. 8. The No. 1 and 4 together for	.. ..	5	15	0
No. 9. The No. 2 and 5 together for	.. ..	3	15	0
No. 10. The No. 3 and 6 together for	.. ..	1	18	0
No. 11. The No. 3 and 7 together for	.. ..	1	0	0

The Collections free of package charges, and goods 20s. and upwards free to London and all parts of the two Norwich Lines. Remittances required from unknown correspondents.

CATALOGUES, Cultural and Descriptive, free on application.

The DUTCH BULBS have this year arrived very fine and sound.

Seed and Nursery Establishment, Sudbury, Suffolk.

Hyacinths and other Bulbs.

WM. CUTBUSH AND SONS' first importation of HYACINTHS, TULIPS, &c., has just been received direct from Haarlem. They are unusually fine. Early Orders are respectfully solicited.

ALL the FIRST PRIZES have been awarded our Collections wherever exhibited during the last seven years.

DESCRIPTIVE PRICED CATALOGUES post free.

Highgate Nurseries, London, N.

Cheap Dutch and other Bulbs.

HENRY BROWN begs to call attention to his Priced DESCRIPTIVE CATALOGUE (post free on application). The quality cannot be surpassed, and the prices will on comparison be found very moderate. Collections from 1s. 6d. upwards delivered, carriage free, to any principal steam port or railway station in England, Ireland, or Scotland.

FLUKE and other POTATOES off the Lancashire Moss and Sand. Price on application.

Seed Warehouse, 4, Commutation Row, Liverpool.

Hyacinths, Tulips, &c.

JAMES GARAWAY AND CO.
have just received from the
MOST CELEBRATED DUTCH GROWERS
their
FIRST IMPORTATION
Of the above and other Bulbs,
and are supplying the same, of
BEST QUALITY, AT THE LOWEST POSSIBLE PRICES.
CATALOGUES with full particulars on application.
JAMES GARAWAY & CO.,
Durdham Down Nurseries,
Bristol.

Orchard House Fruit Trees.

JAMES DICKSON AND SONS, Hanover Street, Edinburgh, have received instructions to sell about Fifty of the above, consisting of PEACHES, NECTARINES, and APRICOTS, well-established in pots, and in fine fruiting condition.

Any further information will be given, and a sample may be seen at their Warehouse, 32, Hanover Street.

Catalogue.

YOUELL AND CO.'S GENERAL AND DESCRIPTIVE PRICED CATALOGUE for this season is now ready, and will be sent free on application.

It contains detailed Lists of Greenhouse Plants, Conifers, Shrubs, Gladioli, as well as all the newest introductions in Soft-wooded Plants.

Royal Nursery, Great Yarmouth.

To Planters of Conifers.

YOUELL AND CO. can supply 50 species of RARE AND HARDY CONIFERS in good plants for 5l., package included, and carriage paid to Liverpool, Manchester, Newcastle-on-Tyne, Hull, London, Peterborough, or to any Railway Station within 150 miles of the Nursery.

A LIST of the above can be had on application.

Royal Nursery, Great Yarmouth.

Azalea indica (Half Specimens).

J. IVERY AND SON most respectfully invite their patrons to an inspection of their unrivalled collection of the above, which contains all the newest and best varieties; likewise a nice collection of Standards. The Plants are clean, healthy, and well set with bud.

Dorking Nursery.—Oct. 5.

Winter Blooming Plants.

HUGH LOW AND CO. respectfully invite inspection of their very extensive Stock of CAMELLIAS, AZALEAS, ERICAS, EPACRIS, CYTISUS, &c. These can be seen at the Nursery in thousands, and are well worth the attention of intending purchasers.

Fine OTAHEITE ORANGES in fruit. JASMINUM GRANDIFLORUM full of flower buds.

Clapton Nursery, London, N.E.

Superb Hollyhocks.

EIGHTEEN THOUSAND PLANTS OF NAMED VARIETIES, INCLUDING THE BEST IN CULTIVATION.

R. B. BIRCHAM in offering the above begs to observe that considerable advantage would accrue to purchasers by receiving their plants in autumn instead of spring. By shifting into larger pots, and placed where they are protected from the extremes of wet and cold, the plants will become extra strong for spring planting, when an *earlier* and *stronger* bloom will be obtained, ripen more seed, &c.

CATALOGUES forwarded upon application.

Hedenham Rosery, Bungay, Suffolk.

Can be Seen at Sunningdale Nursery, Sunningdale Station, South-Western Railway.

CHARLES NOBLE invites inspection, and would remind all interested, that his RHODODENDRONS have taken First Prizes at the opening Show of the Royal Horticultural Society, and every other show at which they have been exhibited during the last two years.

RHODODENDRONS for forcing; KALMIAS for forcing; and a magnificent stock of all the finest kinds of Rhododendrons in the world. CONIFERS and Hardy EVERGREENS by the 100 or 1000. ROSES and a General Nursery Stock well worthy the inspection of intending Planters or Nurserymen.

Hyacinths! Hyacinths!!

WM. CUTBUSH AND SON have the pleasure of announcing that the Council of the Royal Horticultural Society have accepted their offer of awarding prizes of Two Guineas and One Guinea to private growers, for the best and second best collection of 12 Hyacinths, distinct varieties, grown in pots, at their Spring Exhibition of 1862.

WM. C. & SON remind intending competitors that October is the best month for potting Hyacinths.

Highgate Nurseries, London, N.

CARTER'S FIRST-CLASS SEEDS OF
CALCEOLARIA, 2s. 6d. per packet.
,, new blotched, 2s. 6d. per packet.
CINERARIA, 2s. 6d. per packet.
PRIMULA, mixed fringed, 1s. per packet.
,, dark carmine fringed, 2s. 6d. per packet.
,, pure white fringed, 2s. 6d. per packet.

JAMES CARTER & Co., 237 & 238, High Holborn, London, W.C.

The Gardeners' Chronicle.

SATURDAY, OCTOBER 5, 1861.

MEETINGS FOR THE ENSUING WEEK.

TUESDAY, October 8 { Royal Horticultural (Floral and Fruit Committees) at S. Kensington .. Noon

IF the name of DE BARY were not so well known both in this country and the Continent, as that of a painstaking judicious observer far less given to theory or to merely transcendental views than the greater part of his compatriots, the pamphlet* which he has lately written on the Potato disease would have quietly died in the birth, if the author escaped ridicule for approaching again a subject which could scarcely end in anything after all his labour better than the production of a "ridiculus mus." The brochure, however, contains a great deal that will repay more than a cursory perusal. He has not only passed in review, without a particle of prejudice, all that he has met with at all worthy of notice, but he has instituted a careful series of experiments, which place the particular view of the subject which he embraces in the most clear and convincing light. He has moreover added greatly to our knowledge of the peculiar parasite which uniformly precedes, and as he, in common with most authorities at the present day, believes is the immediate cause of the malady, and especially as regards its mode of reproduction and the limits within which its reproductive organs germinate.

It is not our intention to go again over the ground which has been so often traversed in this Journal. All attentive readers of our pages are acquainted with the external characters and habit of the parasite as described by its earlier observers, and we have already given some account in the *Agricultural Gazette* of this year, at page 486, of the curious discovery of DE BARY relative to a third mode of propagation by means of zoospores, and that apparently the most frequent. The spores themselves under certain circumstances are undoubtedly capable of germination, but more frequently, when well supplied with water, instead of germinating they show at once signs of important changes in the granular matter which fills their cavity, which ends in the production of a number of reproductive bodies closely resembling many of the more minute Infusoria, and moving about for a time with the utmost activity by means of two long lash-like appendages, one of which appears to be the organ of motion, and the other to act as a rudder for its regulation and direction.

In consequence of this mode of increase, and of the extreme rapidity with which the zoospores run through their course from germination to the production of perfect spores, the quantity of bodies capable of propagating the disease which may arise in the course of one season from a single diseased plant is almost incredible. Passing over the stem, from which the perfect parasite more seldom makes its appearance, it is calculated that one square line of the under surface of the leaves is capable of producing 3270 spores, and as each of these yields at least six zoospores (the number being sometimes as high as 16), we have 19,620 reproductive bodies from that small space. The quantity therefore yielded by a single plant is enormous, and as the mycelium from the zoospores is capable of penetrating the cellular tissue in 12 hours, and when once it is established there and bursts through the breathing orifices or stomates of the leaves, it perfects its fruit in from 15 to 18 hours, and since the zoospores are perfected and ready to germinate in 24 hours from their being placed in water, it is scarcely possible to calculate the myriads of plants that may spread from a single centre. As continued moisture is absolutely necessary for the germination of the spores and the production of the zoospores, it will at once be understood how rapidly the disease is propagated in wet weather, especially it if be warm, and what a check to the disease a season like the present autumn must be. It will also be apparent under what circumstance the zoospores will have readiest access to the tubers, and that those which are nearest the surface have a less chance of escaping than those which penetrate deeper into the soil.

That the brown spots so characteristic of the disease are a consequence of the action of the spores or zoospores has been proved by direct experiment by Dr. DE BARY. By placing a quantity of spores in a drop of water on the leaves, stems, and tubers under a bell glass so air-tight below that evaporation cannot very readily take place, he has produced the brown spots, and has traced their progress from the first penetration of the spawn of the Fungus from without, when the discoloured specks are quite microscopic.

He has moreover shown that neither the spores nor sporangia can resist many weeks of continued drought; and inasmuch as the spores so rapidly produce zoospores when exposed to sufficient moisture, it is clear that the disease cannot be propagated from year to year by means of either. As regards another form of fruit which has been observed, though very rarely, amongst the creeping threads of the spawn, too little is known to speak with any probability, much less with certainty, of its powers of endurance.

As, however, it is a well known fact that Fungi may appear under very different forms, and that there are two Fungi, especially Fusisporium Solani, which form the white nodules on the decaying tubers, which are almost as constant attendants on the Potato murrain as the well known parasite of the leaves, it became necessary to follow out their growth, to see whether in any case the Fungus of the leaves or the brown spots could be produced from the white moulds of the tubers. Every experiment, however, under whatever form it was made and however varied, produced only like from like, and DE BARY was obliged to give up the notion as visionary. It appeared clear therefore that the disease was transferred from year to year by means of the tubers, which when impregnated with the mycelium, and not in too advanced a state of decomposition, always yield on experiment the true Fungus of the Potato murrain. The conclusion from the whole matter is clearly this, that it is quite useless to attempt to destroy by any external remedies, a parasite which so completely undermines the tissue of the plant, as in the case of the Vine mildew, where the threads of the parasite creep over the surface. Early planting, removal of the haulm when diseased, drying of the tubers and other remedies which have been recommended, must be considered rather as palliatives than preventives. DE BARY however suggests one mode which may in all probability prove useful in careful intelligent hands. A plot of ground of sufficient size only for the production of the seed tubers which may be requisite, and as distant as may be in the farm from the general Potato crop, is to be

* Die gegenwärtig herrschende Kartoffelkrankheit, ihre Ursache, und ihre Verhütung. Von Dr. A. DE BARY, Professor der Botanik zu Freiburg. Leipzig, 8vo, pp. 75, 1 tab. lith. 1861. On the Cause and Treatment of the Potato Disease, a Popular Essay, by Dr. A. DE BARY.

selected, and that perfectly well drained and as much adapted as possible for the growth of healthy tubers. This is to be planted with tubers which show no outward trace of disease. The crop is then to be watched carefully, and the moment a diseased leaf appears, it is to be removed and destroyed, the cultivator himself undertaking the task, and going carefully over the plot, which must of course be of manageable dimensions, two or three times a day. The stems are also to be watched, and, if necessary, they as well as the leaves must be removed. The zoospores under such circumstances, unless brought from a distance, cannot be washed down to the tubers, and a very few only will be diseased. A repetition of the process would in all probability banish the malady in great measure from the farm. It is obvious, however, that the cultivator must have a distinct knowledge of his enemy before he sets to work, and not mistake merely withered or curled leaves for the ravages of the mould.

We may speak highly from our own experience of the benefit of deep digging before the Potatoes are planted, though they themselves should not be sunk too far in the soil, and of a second hilling up to cover effectually the more superficial tubers. Those which are deep seated are seldom diseased except in very unpropitious years.

We may add a peculiar circumstance which has occurred to DE BARY in the course of his experiments. On dividing sound Potatoes, for the sake of observing the difference which takes place in those parts which have been left in their original condition and those to which he applied the zoospores, he found that after a time a new cuticle, consisting of several layers of table-shaped cells, was produced on the cut surface. This is precisely what takes place in the disease called scab, as will be found in a memoir on the subject in the third volume of the Journal of the Horticultural Society of London. *M. J. B.*

—— Is there any limit to the sportiveness of Ferns? Truly, if the forms of our own native species are to suggest a reply, we should say that, if it is anywhere to be found, the boundary line which defines the limit of a species and includes its varieties lies beyond the horizon of our view. Let us look at some of the strange phases under which the common Lady Fern appears. The feathery, plumy, familiar state which we are in the habit of regarding as her normal condition gives but little idea of her appearance when she puts on one or other of her masks. Sometimes the change is far in excess of the normal condition. Thus, in the variety called *plumosum*, together with ample development as to size, and the most elaborate development as to division, the parts become so much attenuated that the feathery character attributable to the species generally is increased in a most remarkable manner, and the most charming plumes imaginable are formed; the fronds in this case, while they measure 3 or 4 feet in height and a foot in breadth, being thrice divided into distinct parts, and the last of these very much narrowed, elongated, and deeply toothed. This is one extreme. Take now the opposite one, in which moreover perfect symmetry occurs. It is met with in the variety called *Frizelliæ*, which was found a few years since in Ireland by Mrs. Frizell, after whom it has been named, and has during the present season appeared occasionally at the metropolitan exhibitions. Here the fronds reach from a foot to a foot and a half in length, but are not more than about an inch in breadth, are once divided only instead of thrice, and have the pinnæ symmetrically reduced to fan-shaped more or less deeply lobed bodies, projecting scarcely half an inch from the main rib. It is almost impossible for a "species" to show greater differences than these two forms present; yet both are capable of conterminous propagation and indefinite extension by means of their spores.

Without referring to the now numerous and well marked variations of the crested or tasseled type which this species presents, or to the many permanent monstrosities of other forms—permanent, at least, in the sense of being reproducible to any extent from the spores, or to the many varieties, well marked and distinct, which bear more or less of the normal character, we may just mention one other very marked form which has been found in North Wales, and proves to be fixed in character. This variety has been called Fieldiæ by Mr. MOORE, after Miss FIELD, by whom it was found, and presents the remarkable peculiarity of a cruciate development. Here the greater proportion of the pinnæ, usually all except two or three at the lower part of the frond, are forked at their base, the pinnæ thus forming instead of one wing or branch two pinnæ-like parts only shorter than usual, one of them being obliquely directed backwards and the other forwards; so that the pinnæ being set on opposite each other, we have the parts in fours, more or less regularly disposed crosswise, and placed at short intervals along the rachis. The appearance resulting from this arrangement is very curious and remarkably different from the normal character.

Verging then, closely on the one hand towards that state of subdivision which is called supradecompound, or cut up into a multitude of minute parts—and on the other occurring simply pinnated—the fronds in the one case three or four times divided, and in the other only once; and yielding besides a host of intermediate gradations and all sorts of fantastic and grotesque monstrosities, there is scarcely remaining another phase under which the Lady Fern can masquerade, unless indeed she puts on the simple garb of the Hart's-tongue Fern, in which we should not be at all surprised one day to find her.

—— The appearance of the DOUBLE PARTI-COLOURED PETUNIA, called inimitabilis flore-pleno, at some of the earlier flower shows and meetings of the present year, was a surprise to many an *habitué* of these flowery gatherings. It came upon the scene so suddenly. And it came in a form so perfect that one really could scarcely imagine how it could be improved upon. In habit so unlike the sprawling lanky things Petunias generally are, in form of flower so full and complete, in marking so picturesque, it seemed at one bound to have sprung into life a perfect thing. Whence came it? Like many other productions of bizarre and fancy character, it appears to have found its way here from the land of the Gaul, some time during the preceding summer, and to have been then but little seen and noticed. Its merits however could not long be hidden, and so, when early in the year, some one "brought out" a specimen of its well-behaved progeny, and gave it an opportunity of showing its lively parti-coloured face—Mr. VEITCH happened to be the lucky man who thus presented it—the world of flower-lovers was delighted with it, and it was everywhere welcomed.

The present year has given us several varieties of similar character, some of which, almost as soon as our protegé of last spring, have become generally known, compete with it, and not without good credentials, for the post of honour. Our older friend, inimitabilis flore-pleno, is no doubt very beautiful and highly ornamental with its rich rosy-purple white blotched flowers, but in form and fulness it is even now already surpassed by a new claimant called Marie Rendatler, and both in quality and size it is entirely eclipsed by another fair one named Eliza Mathieu. The first of these corresponds generally with inimitabilis flore-pleno in the size of its flowers; but it is somewhat more regular in form, and more closely filled in the centre, as well as rather lighter coloured, the markings being of a deep rosy-lilac instead of a rosy-purple. The latter, Eliza Mathieu, is considerably larger, of more regular and even outline, as well filled out in the crown or centre, and not very different in colour, being of a light violet-rose, freely blotched or bordered with white. These are probably the two best varieties in cultivation. There is however another, which as far as our observations have gone, though hardly equal to either of the foregoing in its general features and qualities, is yet perhaps even superior to them in regard to form; we allude to Madame Lanzezeur. The flowers in this variety are more regular in form than those of any of the others; but they are rather deficient in size and fulness, and are perhaps not so finely marked as to colouring, though in their best state, the purplish-crimson flowers freely blotched and bordered with white, and remarkable for symmetry, are really very telling. Another of the same class, which should be freely grown for the sake of its distinctness, is that called inimitabilis superba; this is more delicate in colour, being of a mauve lilac, marked like the rest with white in a varying manner.

As pot plants for the ornamentation of greenhouses and conservatories during the summer months we have had recently no such valuable additions to our collections as the best of these double parti-coloured Petunias; and we can hardly imagine a more telling group at an exhibition of flowers than a well-cultivated set of half-a-dozen of the best of them, grown to a moderate size, and profusely bloomed. Such a group might be had any time between spring and early autumn.

—— We have lately witnessed the gay appearance presented by a cross-bred Pink, called DIANTHUS HYBRIDUS MULTIFLORUS, which was growing in the nursery of Messrs. E. G. HENDERSON & SON, at St. John's Wood. This variety, which we believe to be worthy of this special notice, is, we have been informed, of continental origin; and there can be no doubt that one of its parents has been the Carnation or Clove, some of whose fragrance it has retained. The form of the leaves is exactly that of the plants just mentioned, but without the well-known glaucous hue, the colour being a deep green. When planted in lines in an open border, as we saw it, this mule or hybrid Pink proved itself to be well adapted for flower garden purposes. It had evidently a remarkably robust constitution, which some other hybrids of similar character do not possess, and we have remarked at different periods of the year that this free healthy growth is constant to it. The variety is altogether one which we think, if known, would be a favourite in the flower garden.

In the instance above referred to, each of the plants formed a dense compact tuft of dark green herbage, attaining a general height of about 6 inches from the ground, and out of this, grew up from each to the height of a foot some half dozen of sturdy freely branching stems, bearing a profusion of gay rosy-crimson sweet-scented flowers, of varying shades, according to their degree of development. Besides its vigorous constitution and well-marked perennial habit, this hybrid Pink has the very desirable quality of being a perpetual bloomer, continuing in flower, as we are told, from June to November. This property of yielding a succession of flowering stems seems to indicate a probability that some form of the fine ornamental race of Perpetual or Tree Carnations may have been one of its parents.

Though scarcely perhaps adapted to the higher styles of geometrical gardening, we cannot but regard this plant as a very useful one where a less formal and artistic style than that just referred to is adopted, as well as for the mixed flower border. It is also a very pretty object when grown in pots, and brought into flower early in spring for indoor decoration. At all times, but especially in early spring, the flowers afford welcome materials for bouquets.

—— It appears from the following statement which has been made in the daily papers, that we are threatened with a cider famine, not from the failure of the Apples, although the crop is but partial, but because they are likely to be applied to a more profitable purpose, so far as the growers are concerned, than in making a household beverage. It seems that the Manchester calico dyers and printers have discovered that Apple-juice supplies a desideratum long wanted in making fast colours for their printed cottons, and numbers of them have been into Devonshire and the lower parts of Somersetshire buying up all the Apples they can get, and giving such a price for them as in the dearest years hitherto known has not been offered. It is stated that one farmer in Devonshire who has a large orchard, for the produce of which he never before received more than 250*l*., has this year sold the crop to a Manchester man for 360*l*. There can be no doubt, says the same authority, that the discovery will create quite a revolution in the Apple trade; and we may add that it will give an impetus to the cultivation of this valuable hardy fruit.

THE LATE EXHIBITION OF THE IMPERIAL HORTICULTURAL SOCIETY OF PARIS.

(*Continued from p. 866.*)

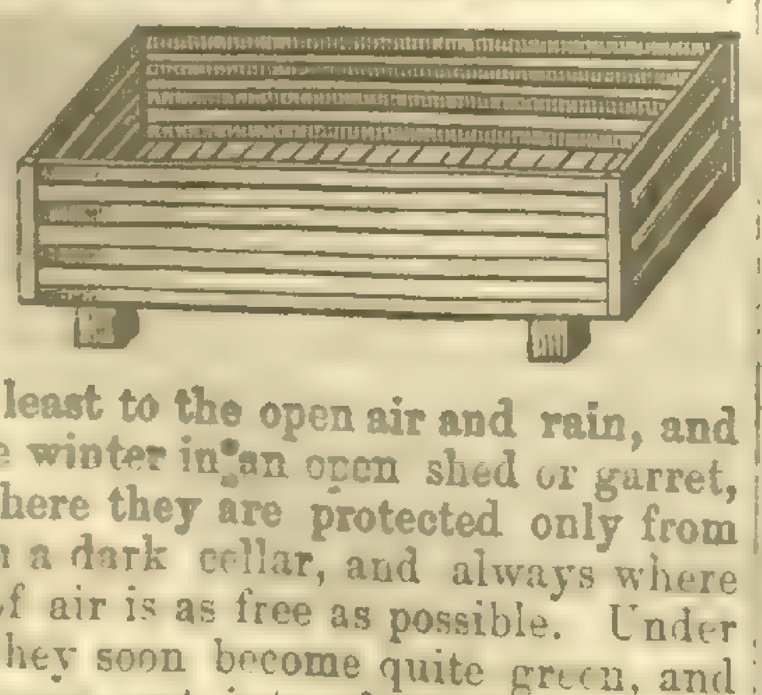
THE fruits "in season," which constituted by far the best part of the Exhibition, were displayed in several rooms, some of them scarcely sufficiently well lighted. They were mostly in white plates, arranged in rows on deal tables—one large table in the centre of each room, and others round the walls; the Pears and Apples generally six of one variety in a plate. There was no attempt at decoration to set them off, nor even foliage in the plates; but from the great extent of the collections, the neatness, symmetry, and regularity of their arrangements showing off to advantage the difference in the varieties, the general effect of the fruit room was rich. The Apples, reckoned good by the judges here, would not have attracted much notice in our shows; but the Pears appeared to me far to outshine ours in the number of varieties brought to a very large size and well and regularly ripened. As this fruit, different from many others, is generally found, in a given variety, to improve in flavour with increased bulk, size is a great object aimed at by the growers of the better sorts. Some among M. Cossonet's were particularly admired, especially a plate of Bergamotte Esperen, of a size more than double what that variety attains under ordinary treatment: his Duchesse d'Angoulême, his Beurrés, and others were also fine. Many collections were very extensive, in all of which Pears constituted the principal portion, including many specimens much larger than what we see at our shows. The central table of the largest room was entirely taken up by 3.. varieties from M. Dupuy-Jamin, of which 194 were Pears, 53 Apples, and the remainder made up by Plums, Peaches, Nectarines, and Grapes. Messrs. Deseine had 149 Pears and 68 Apples, and others had collections nearly as large. In Peaches, Nectarines, and Plums, I saw nothing remarkable. Among Grapes, three bunches exhibited by Mr. Thomson, of Dalkeith Gardens, excited general admiration, and certainly, in the best French collections, those of the two Charmeux of Thomery, the Muscats of Alexandria could not for a moment be brought into comparison with the Dalkeith ones; on the other hand, the boxes of Chasselas doré had a rich luscious look which it would be a hopeless attempt to give them in England without the Fontainebleau sun: and among the 55 varieties exhibited there were several which, although not large, were richly coloured. The finest bunches of Purple Grapes, some of the Frankenthals, had not near the beauty which the Black Hamburgh often attains with us. In Pine Apples there is much improvement since 185.

although they are still far from receiving the encouragement they do with us, and the high price of fuel will always be a great obstacle to their general cultivation for the Parisian market. Of those exhibited the best were two sets of Envilles of six each, weighing I was told about 5 lbs. to 6 lbs., well-grown specimens, but still with too much crown. Among fancy fruits I observed a large dish of the favourite French Dessert Apple, the Pomme d'Api, in which each one was marked with a letter, a crest, or other device, produced by placing a piece of paper or cloth of the required shape on the side next to the sun, causing a corresponding spot to remain uncoloured—two splendid Gourds, one very nearly a yard in diameter and said to weigh 200 lbs.; two heads or cones of Dion edule, and a box of Vanilla pods sent from Otaheite, where the late Mr. Morren's method of artificial fecundation has been introduced with much success.

In the general collections of vegetables "in season" there was nothing superior to our own, and Peas and some others were quite inferior. A few southern vegetables—sweet Potatoes (Batatas edulis), Aubergines (Solanum Melongena), Piment doux (large red Capsicums of the size of one's fist, without pungency), Abelmoschus, &c., could only be regarded as curiosities, for they are as little suited for general cultivation in the Parisian climate as with us. Dioscorea Batatas, of which some roots were exhibited, is said to be gaining ground and gradually introducing itself into French markets. But what interested me most in this department of the Exhibition were several lots of Chærophyllum bulbosum (fig. A). This, which, when first brought into cultivation five or six years ago was seldom so large as a Hazelnut, has now attained the size and shape of our little summer Carrots. It is considered here as a great delicacy, although not productive enough for profitable cultivation on a large scale. Each plant produces a single root like the Carrot, but it requires being sown the previous year at about the present season, so as to be well established before winter.

Fig. A.

M. Gauthier exhibited specimens in illustration of a method he has adopted for giving additional vigour and accelerating the maturity of Potatoes, so as in a great measure to save them from the disease. He is said to be successful and his practice seems plausible. Taking up his Potatoes the moment they are ripe, he selects for seed good healthy tubers among the large or at any rate middle-sized ones: he puts them into flat square crates about 28 inches long, 14 inches broad, and 5 or 6 inches deep, open at the top and between the bars, and with two thick crossbars underneath, so that when packed one upon the other there may be a free circulation of air between each. They are then exposed for a month at least to the open air and rain, and kept through the winter in an open shed or garret, or other place where they are protected only from frost; but not in a dark cellar, and always where the circulation of air is as free as possible. Under this treatment they soon become quite green, and the eyes will grow out into short thick green shoots which must be kept with the greatest care from being rubbed off or injured. With this view the roots are never disturbed in the crates, and are carried out in them to the planting ground.



And being thus planted very early, these hardened shoots are found to form stems much more healthy, vigorous, and productive, and much more capable of resisting the disease than those grown from eyes which have lain dormant through the winter until the moment of planting, besides that they may be taken up before the period when the disease most generally declares itself to any extent. M. Gauthier says that he plants in March, and that by the beginning of August his Potatoes are ripe. Those he exhibited were round Potatoes, of a large size. I could not ascertain the name of the varieties, for all he knew was that he had them under the names of Elies and Patraque jaune. He had, 1st, two dishes of this year's growth, as preserved in the dark for eating; 2nd, a crate of tubers of this year's growth, as laid aside for planting, these had already become very green, but did not yet show any growth in the eyes; and 3rdly, a crate of tubers laid aside last year for planting, all very green, apparently in good health, covered with shoots mostly of about half an inch. M. Gauthier also insists that when tubers are large and have to be cut for planting, it increases very much their vigour and productiveness if they are cut in autumn, three or four weeks after they are taken up, instead of performing the operation at the time of planting. *B.*

ORCHARD HOUSES.

It is an unfortunate circumstance that some of the finer kinds of fruit trees showed have failed to produce a crop of fruit in so fine a season as the present, but as the fact is admitted by Mr. Rivers, and the failing varieties are specified, I suppose there is no gainsaying it. It is however singular, that here in North Wales, at the foot of the sea boundary of the Snowdonian range of mountains, and within a few hundred yards of the sea, a standard Apricot in a soil anything but favourable has not only, unprotected, set and stoned, but at the present time is ripening fruit of fine size and quality. Now this tree, a young and luxuriant one, has been left entirely to itself, and though its proximity to the sea may influence and favour it as to temperature, Mr. Rivers would say, as he said twelve months ago, "mild climates are generally unfavourable for ripening." Admitting the fact, it still appears strange that trees in pots, under the management of such adepts as Mr. Rivers and Sigma, should have failed, for with glass to aid them and the power of checking growth at any time by withholding water, surely the growth might have been sufficiently matured to have insured a crop. But as Mr. Rivers states, in Sigma's border water was too liberally dealt in for the season, thus showing that orchard house trees, as well as Turnips, require brains for their successful management and to insure a crop of fruit. The truth is there is no royal road to fruit-tree management, and though it is easy to write, "common labourers with a few written directions" will be able to manage them, Mr. Rivers, by his admitted short-comings and frequent cautions, shows that he himself is not quite up to the exigencies of the situation. All persons who have studied the art of cultivation, and whose knowledge has a scientific foundation, know that there are scarcely two varieties of any given fruit, or even two trees of the same variety, which will, under the same treatment as to potting, water, &c., require precisely the same management in pruning and other particulars of culture, for without any very apparent cause one tree may produce a succession of "shoots like basket rods," while the other may be all spurs and blossom buds such as Mr. Rivers would delight in. To treat two such trees precisely alike, to use manure water as Mr. Pearson directs without calculating its influence, would be simply to ruin both, the robust one by increasing its plethoric habit, and the fruitful one by inducing over luxuriance. Manure water, like strong drink, is a dangerous thing in the hands of incautious people, and no doubt Mr. Rivers is quite right in recommending great care in its use. Many fine specimen plants have been ruined by its injudicious application.

It is now, I think, upwards of a quarter of a century since Mr. Rivers first promulgated his ideas of fruit-tree management in the "Gardeners' Magazine." He then said he should be able to send out trees full of blossom-buds, and his anticipations have been verified to a much greater extent than he, I dare say, ever expected. Still the subject of planting out in orchard houses need not be a "vexed question" to any but the uninitiated. With root-pruning, transplanting, proper borders, with the roots of the trees, if need be, restricted by brick partitions, the difficulties of over-luxuriance need not cause any uneasiness with the cultivator. Trees were tamed and made fruitful before orchard houses were thought of, and a few common sense rules, known to all intelligent gardeners, will make orchard-house fruit much more possible and profitable than it has been up to the present time. Indeed, I have never been able to look upon the pot system of cultivation as anything more than toy gardening; for though Mr. Pearson may point to Orange trees at Versailles and elsewhere as evidence of the longevity of pot plants, it would, I presume, be difficult for him to enumerate a single Orange fit to eat, while if the strictures of a French writer, a translation of which appeared in the *Gardeners' Chronicle* not many months back, are to be believed, the Versailles trees are in anything but an enviable or thriving state of luxuriance. The finest examples of Citrus fruit ever shown before the Horticultural Society even to the present time were not grown in pots or tubs, and if Mr. Pearson's father is still living, he can tell him of a garden not many miles from Chilwell, where they were grown for the regular supply of a gentleman's table nearly half a century ago, and with all our boasted progress I believe there is not a garden in Europe at the present time which could show a collection of trees similarly well cultivated. These trees, as I have before stated, were planted out in highly prepared borders, and some were trained as bushes, others to table trellises, and others fan-shaped, like a Peach tree, to the back wall of a lofty conservatory and Orange house. I have never seen Oranges of eatable quality grown in pots except the small Tangerine variety, and even those do not attain the size and quality they would attain under a more liberal system of management.

Given a fruit tree in good health, it is capable of bringing a certain quantity of fruit to maturity. Take this maturing power at say 5 dozen, 5 score, or 500 fruits. If you take double the quantity numerically, you will not have any additional weight, while the quality will be much deteriorated; but reduce the quantity one-fourth or one-fifth, and the chances are you will still have the same weight of fruit, while the quality, size, colour, and flavour, will be decidedly superior. This is the secret of fruit-tree management; it is a law of Nature which cannot be contravened without the due penalty being paid. You may take a double quantity of fruit, you may boast of your magnificent crops of fruit—Peaches and Nectarines hanging like ropes of Onions. But what are they? why, comparatively mere Plums or Damsons in size, and not to be compared with the rich and luscious fruit which grace our exhibition tables, and also the desserts of the leading families in the country. There is no greater fallacy than that of estimating a crop of fruit numerically, without at the same time considering its size and quality; and when I see such crops I look with pity upon the manager, and regret that Martin's Act for the Suppression of Cruelty to Animals does not extend to fruit trees, so that some of our would-be teachers might be taught by pains and penalties that which they appear determined not to learn by experience and inductive reasoning. Few men have the courage to thin fruit as it ought to be thinned, but if some of us were to thin the blossom buds before they are expanded, we should have less cause to complain of short crops, and fruit falling at the time of showing. For many years I have made it a rule to disbud Peaches and Nectarines directly the blossom buds begin to swell, taking away all ill-placed buds and such as, if they set, could not bring their fruit to maturity. The consequence has been the buds left have been much increased in strength, and generally far more of them have set than have been necessary for a crop. With weakly trees, or those recently transplanted, this thinning is specially necessary, but how few of them get such treatment? On the contrary we hear of a magnificent bloom and not unfrequently trees devoid of fruit. Plants of all kinds have two separate, and some say distinct functions to perform; the first is growth, an addition or increase to the stature or size of the individual—the second is maturation of the growth, by which, under the influence of light, heat and air, the sap and growth and so elaborated and matured as to render them capable of producing flowers, and also fruit and seed. When you want growth promote it by rich soil, manure and liquid applications to the root; but when you want maturation withhold all stimulants, but keep the foliage as clean and healthy and as much exposed to light as possible. Stimulating manures should not be given to plants during the maturing process except in the case of weak trees or those which have borne or are bearing a heavy crop of fruit; but after the blossom buds are formed, then late in the autumn stimulants may be used to increase the strength of the buds. These remarks may be some little guide to those who are anxious to learn and to be able to decide between fruitful buds or wood, and that which will only produce gross unfruitful growth, and this knowledge once acquired will increase by proper application until fruit buds and wood buds become as familiar to the eye as fruit and flowers. An experienced cultivator carries that in his eye which language, were he ever so well disposed, would fail to describe. This is practical experience, knowledge which can only be attained by long study and application, and which in fact forms his store-house of professional information.

To return, however, to orchard houses; there can be no question of the advantage of building them of good size, for, as was explained when glazed promenades were opposed to glass walls, the larger the volume of air confined, the greater the resistance to external changes, and hence a large house may produce a crop when a small one would be frozen through and through. The success of trees planted out in such a house need not be a vexed question, for there are too many examples of success in the country to need any specific exemplification. Neither need I enlarge upon the trouble of plants in pots. Every gardener knows that his

bedding plants in spring and Strawberries for forcing in summer and autumn, add materially to his labour, and it is absurd to think that fruit trees in pots will require less attention. On the contrary, look to Peach houses and Vineries, and we know that three or four good soakings, thorough moistening of the entire body of soil, are sufficient for an entire season. Compare this with the daily attention required by pot plants, and it will not be difficult to choose between them. Fruit trees in pots I can only regard as pretty toys for girls and boys, or table decoration; but, as I have remarked before, fruit trees planted out in Orchard houses constitute fruit-growing in earnest. When I see trees grown better in pots than they are in the open border; when I see fruit from pot plants larger than it is customary to grow it on the old plan; when I see Messrs. Rivers or Pearson or some of their disciples, or the whole of them combined, start up and wrest the prizes for collections of fruit from our Hendersons, and Tillyards, and Hills, and many more equally worthy, then I may reconsider my verdict; but until then, though quite willing to admit the sweetness of little fishes when large ones cannot be caught (though as I contend and have contended the large ones may be caught, both with less trouble and cost), I must continue in my heresy if such it be. *W. P. A.*

STRIKING CUTTINGS IN AUTUMN—AN EASY WAY OF PROPAGATING ROSES.

In a communication which appears in the *Journal de la Société Impériale et Centrale d'Horticulture* from M. Varangot, of Melun (Seine et Marne), the author gives, in the first place, an account of the usual mode of propagating Roses in France, and then reports in detail the plan which he himself successfully practises.

It is the custom, says M. Varangot, of those who propagate Roses to be grown on their own roots to form the cuttings before the plants make their spring growth, inserting them either under glass or out of doors, in a bed dug out to the depth of 8 or 9 inches and filled up with prepared soil, leaving only one eye of the cutting above ground. This mode of proceeding answers very well for Bengals, Teas, Noisettes, and Bourbons, but it is not so successful in the case of the Hybrid Perpetuals and other hard-wooded kinds.

Growers of Roses on their own roots generally make the cuttings whilst the shoots are in leaf, and as soon as the wood is well ripened, during the time of, or after flowering, especially in the case of new varieties. The cutting pots are plunged in a hotbed among tan or sawdust. The bed is made up as near the glass as possible, and the cuttings are covered with bell or hand-glasses. They are inspected daily; to prevent damping off the glasses are wiped, the air is renewed, water is given when necessary, and shading is afforded from strong sun, but otherwise light is freely admitted.

To save trouble the glass is sometimes white-washed; but this causes the plants to draw and occasionally to die off. Nevertheless under such circumstances many of the most easily propagated varieties are struck.

Others take the cuttings after flowering, and before the second flow of sap (which usually takes place in August), choosing the young shoots produced in spring and strike them, without the aid of bottom-heat, under *cloches* or frames in a shady situation on a bed of soil prepared for the purpose. They make the cuttings in the same way as in propagating in spring, retaining some portions of the leaves, usually the first pair of leaflets at the base of the leaf-stalk. This mode is partially successful as regards Bourbons, Noisettes, and Tea Roses; but it is unsatisfactory in its results when applied to Perpetuals, and other hybrids with hard wood.

In my autumn practice I have not only been successful with the varieties which are the most difficult to propagate, but I have even found that there is an advantage in striking cuttings in autumn; for kinds may be thus preserved which are liable to be killed down by frost, so that no cuttings could be obtained from them in spring; as, for instance, Teas and others with tender wood, which are often killed to the stock in severe winters. The mode of proceeding which I have adopted involves but little trouble. In September or October, when the young wood is well ripened, I take off my cuttings and cut them in the usual manner to two or three eyes, according to the distance which these are apart, taking care at the same time to retain a portion of the principal leaf-stalk and some of the stalks of the first leaflets. I then put them singly in small cutting pots or in pans, using plenty of drainage and filling up with peat, or with a compost of sand and leaf-mould. I plant with a small dibber, pressing the soil firmly to the base of the cutting. I then water, and plunge the pots to half their depth on a bed sloping about 6 inches, and well exposed to the sun; then I cover with hand-glasses. In a fortnight or three weeks the cuttings will have callused and emitted some rootlets. At this season they do not succeed well in the shade, especially if put in near evergreens. An old Melon bed is very suitable, as it does not afford too much moisture. Shading should be attended to for some time, as the autumn sun has still great power. At the end of a fortnight air must be given by raising the edges of the hand-glass on a small pot.

When frost sets in the glasses are kept perfectly close, and leaves put round almost as high as the tops of the hand-glasses. Shading is not required from November till March, during which period the cuttings are left to themselves; nevertheless it is well to give air in favourable weather, and to stir the soil occasionally. By April or May the pots will be filled with roots, even in the case of the most difficult varieties to strike. The young plants are now slightly shaded, and gradually inured more and more to air and sun. When this has been effected, all that is to be done is to take off the hand-glasses, remove the cuttings to another spot, cut off the points of the young shoots, and pinch off the flower buds, in order that the plants may gain strength and throw out branches. The pots are then plunged in a bed in the open air, advantage being taken of mild weather to repot. In June all those which have been struck in the same pan are separated, so as to preserve as far as possible a ball to each, potted singly and plunged to half the depth of the pots; they require to be shaded for a short time, but they soon begin to grow, and will come into flower in the end of the season. They will then be well established plants suitable for sale or for planting out.

This mode of proceeding requires less time and trouble, and is less expensive than where artificial heat is employed. ||

Home Correspondence.

Roof Openings to Orchard Houses.—Any gentleman about to build a span-roofed orchard house, 20 to 25 feet wide, and advised by his builder to have roof openings and pavements, should at once come to the conclusion that he, the builder, intended to make a bill as well as a house, and should wish him good morning. An orchard house of the above description should be of glass, wood, and iron only. I say this with great confidence, because I have just nearly completed one 100 feet by 24, which is the highest, strongest, and most agreeable place of the kind I ever saw. Each side has glass to the ground, the lower row 32 oz., to keep out any intrusive toe. I have laid out the interior of this house different to what I have heretofore recommended, and whether it is novelty that pleases me I can scarce say, but it certainly has a most agreeable look. Instead of a central border, two paths and two side borders, I have a gravel path in the centre with a border on each side; in these the trees, half standards and pyramids, are to be placed, so as to form a pretty avenue; then come two more gravel paths and two borders, one on each side of the house next the glass for dwarf trees. The end I wish to arrive at, and which coincides as I take it with good taste, is to make the house like an orchard of Peach trees under glass. To walk on brick or stone pavements after the trees have been syringed, as they must be, would be equivalent to walking in a paved kitchen after the kitchen-maid had soused it down with water. Bronchitis and all its attendant evils would probably assail the unfortunate amateur who in an evil hour had listened to the counsels of such a builder as Mr. Foster. Quarries, stone, Minton tiles, cement, bricks—in fact, the whole genus absorb moisture to a great extent and give it out slowly and constantly; this is a truism that every tyro in building must know. In reading Mr. Foster's letter which you have inserted in p. 867, I find that he cites my friend Pearson as an authority in favour of roof openings. I have known Mr. P. from boyhood, and have never ceased to esteem him; he is sound, warm-hearted, and impulsive, and, like all men with a sanguine temperament, liable to "run a muck" with an idea. It is 10 years since I built my first span-roofed 20 feet wide house with a fixed roof without roof ventilation. So diffident was I at this innovation, that I supported the roof with Larch poles, anticipating having either to pull it down or make some great change in it. That house still exists, and has never once failed to grow everything placed in it in great perfection. For several years it was filled with large bearing orchard-house trees; it is at this moment full of Hamburgh Vines, reaching up to the central part of the roof and trained along it; their state is perfect—not a trace of red spider to be seen. Since the above period I have built two of the same dimensions—viz., 70 feet long and 20 feet wide, and two more 100 feet long and 24 feet wide; these are all without roof openings, and every thing, whether they be Roses, orchard-house trees, or Vines, flourishes. Have I not therefore experience on my side when I say that roof openings are useless? Mr. Foster writes about "fertilisation." I trust he knows what it means in a horticultural sense. He should stick to his adze. I make it a point when my trees are in full bloom in April, and a cold dry wind is blowing, with a bright sun, to allow it to blow through the house from 9 A.M. till 4 P.M. The pollen then becomes dry, and with a slight shake a cloud of it arises from a tree in full bloom. To this free admission of air I impute my great success in growing Apricots under glass, which if "coddled" by being in a house shut up, almost invariably drop their blossoms. Just imagine a man of orchard-house culture, and also a man of business, going over 100 large orchard-house trees when in full bloom to fertilise them with a camel-hair pencil, or a Persian, Armenian, or Yankee Peach grower going into his Peach orchard with his pencil and looking up at his large trees in bloom with the idea of doing it—it is absurd; he trusts to the cold dry wind and bright sun, and we in our orchard-houses may do the same with safety. I am well aware how interesting it is to employ the camel's-hair pencil in hybridising, and with the man of leisure in [illegible] weather it may be used with advantage in setting [illegible] kinds of fruit, but its use is exceptional (see its [illegible] recommendation in Orchard House, sixth edition, [illegible] I never had so large and fine a crop of Peaches, Nectarines, and Apricots as I have had this season; the exceptions were some late Peaches, which grew too [illegible] last year, and which stood in a part of the house [illegible] fully exposed to sun and air, and therefore did not [illegible] their shoots. Mr. Foster, it seems, came here some six or seven years ago, and regretted coming so far [illegible] see such rough buildings. Since then, for we are [illegible] slow in the south, I have built some eight or 10 houses, each one an improvement on its predecessor. Mr. [illegible] has forgotten what he said when he was here about [illegible] new idea of fixed roofs; he has to a certain extent climbed up a ladder, and has forgotten the bottom rung. My only wish is to see orchard houses built well and cheaply, and without the introduction of any vagaries to add to the expense of building and retard the mode of culture which for 10 years I have so earnestly recommended. There is one improvement in building orchard houses which I shall hail with great satisfaction, viz., portable houses for tenants, which can be removed without a question from the landlord. My son in the course of last year brought out a plan in which he has blocks of stone fixed in the ground; these were [illegible] foot each of Kentish rag, and their cost, I think, [illegible] each, not too costly for the tenant to leave to the landlord, for being partially beneath the surface, the tenant would not be at liberty to remove them. In these blocks of stone the iron posts were to be fixed, with holes in them to receive the screws by which the framework for the glass at sides and ends would be fixed. Owing to some trifling difficulty about price with one of the large iron houses in the north, this plan was not carried out. A builder like Mr. Foster, living near the iron districts, would be able to build with facility these portable orchard houses with cast iron posts fitted into blocks of stone, and arrange for their transport over the whole empire, thus conferring a great benefit to that large body of intelligent people who rent houses because it is more convenient to do so than either to build or purchase them. *Thos. Rivers.*

M. Morren's Paper on Pollen affected by Insects.—The work by M. Ch. Morren alluded to by Mr. Darwin (see p. 831), appeared in 1834 or 1835 in the "Horticulteur Belge," with figures. It is entitled "On the Agency of Insects in causing Sterility in Flowers by the Removal of the Masculine Organs, observed among the Asclepiadeæ." The insects which were ascertained to be the operators in the cases observed by M. Morren were the common white butterflies, to the tarsi of which were found to be attached several of the pollen masses of these plants. An abstract of the paper will be found in the Transactions of the Entomological Society of London, v. 1., Proc. xliv. and xlix. *J. O. Westwood, Oxford.*

Lapageria rosea.—It is stated in your columns that the Duchess Dowager of Northumberland's gardener showed at the late exhibition at South Kensington, a plant of this beautiful climber in a pot with 36 expanded blossoms on it. Allow me to inform you that I have a plant here covering some 170 square feet, on which there is at present above 500 flowers. *Wm. [illegible], Chatsworth.*

The Unflowering Apple Tree.—Thank you very much for your apposite reference to the "Amœnitates Academicæ" of Linnæus. Upon turning, in the British Museum, to the book and page you mentioned, I find the following words:—"Malus pomifera absque floribus, descripta in dissertatione Marmorgi 172[illegible] Ill. Christ. Wolffio. Hæc fuere præcipua illa argumenta quæ in medium protulere Botanici, thesin illam, quæ nempe omnibus fructibus necessarium sit, [illegible] habuisse flores distruentia. Cum autem hæc omnia accurate ponderamus atque perpendimus, invenimus sane, quamvis corolla in plerisque deliquescat, [illegible] tamen in fundo floris antheras incorruptas, quæ [illegible] suo stigmata beant, et ea ratione fecundatur fructus. It is very pleasant thoroughly to sift a matter to the bottom. Before the Linnean, or sexual system, was generally accredited, it seems that the old botanists objected that it could not be true, for this reason, viz. some plants bear fruit without any blossoms at all, and others bear blossoms without producing any fruit. Among the plants that bear fruit without blossoms, [illegible] the Fig tree and the non-flowering Apple tree were mentioned as instances. The words quoted above are the reply of Linnæus to this objection, with reference to the *malus pomifera absque floribus*. It is substantially the reply given by Mr. Woodhouse. We may not say that a tree has no blossoms because none appear to the sight. Many plants we know blossom and fade and cast their pollen entirely in secret, and thus are fruitful, although the whole process of propagation was hidden from our sight. A parishioner has promised to send me shortly a specimen of the Apples from the tree in question. If he does this I shall have great pleasure in forwarding one of them to you. Has the "Amœnitates Academicæ" ever been published in English? Do you happen to know what Christ. Wolff, mentioned by Linnæus, has said about this tree? I asked for his work at the British Museum, but could not stay until it was found. May I trouble you to inform me where there is the [illegible]

description of the "new water weed;" or if you concur with the opinion of Mr. Marshall, given in the History of Cottingham, as to the manner in which this unwelcome immigrant was introduced into this country. *C. O., Hillfield, Hampstead.* [We are not aware of any English translation of the Amœnitates. We never saw Wolff's memoir. Mr. Marshall's is the best authority on the Anacharis. A good deal was also said about it in our columns when it was first observed.]

The "Floral Magazine."—I should feel extremely obliged by your having the kindness to correct a trifling inaccuracy in your critique on this work in your last week's Number. It is not our intention to confine the illustrations to florists' flowers, as there are many others (we may instance the figure of Disa grandiflora in the Oct. No.), which would come under the designation of popular flowers. Our main object is to avoid such subjects as would be more legitimately included in Curtis's Botanical Magazine, so admirably conducted by Sir W. J. Hooker. *The Editor, Deal.*

Manure for Conifers.—This is one of the most interesting questions recently opened for discussion, for Coniferous trees are being more and more used every year for decorative purposes, landscape effects, and the formation of collections for purposes of botanically illustrating the order to which they belong. I suppose we may consider it as a point settled, that wherever manures may be safely used, their use is desirable, as it adds to the numbers of facilities for quickening growth, and is a great help in producing large plants in comparatively small-sized pots. In the autumn of 1858 I carted into my garden a large quantity of the scrapings of macadamised roads, and among various jobs then in hand was the formation of a small bank in a rather shady place close under a large Robinia. That bank was made up almost entirely of the road drift, which consisted of comminuted dung, the debris of granite, and a small admixture of siliceous matter. I was not aware till it was too late to alter it that the macadam drift had been used, and I had a strong prescience that the trees that were planted on it would soon perish. They included Cedrus Deodara, Abies Menziesii and orientalis, Pinus Cembra, Biota compacta, Juniperus sabina, Taxus adpressa, and Picea pinsapo. They have prospered most satisfactorily; the only mishap occurred last winter in the death of the main branches on the north side of the Cedrus, which stands highest and most exposed on the bank. In lifting a tree of Abies Menziesii lately to make more room on the bank, I found its roots had run into the macadam as freely as in yellow loam, and instead of the stuff having run into an impervious paste, as I anticipated it would do, it appeared free and gritty and very well adapted to the purpose. *Shirley Hibberd, Stoke Newington.*

Variegated Ash-leaved Maple.—I see you have transferred to your columns the account given in our gardening Journal of this plant (see p. 867). Let me hope that no rash landscape gardener will introduce it into English scenery. I saw not long since that identical "fine plantation" mentioned as standing near the Imperial Kiosk in the Bois de Boulogne, and I give you my honour I thought it was a lot of linen hanging out to bleach. Anything more ugly cannot be conceived. Its villainous effect was doubtless the more striking in a place otherwise so beautiful, but it is inconceivable that it can be endurable under any circumstances whatever, unless in a "collection" of variegated plants shown in pots in some rural display of childish curiosities. No wonder that the Toulouse judges would not look at it; much wonder that the two Paris judges should have held it up to admiration. To be sure there is no accounting for taste; we all recognise the curious fact that in dogs and monkeys, and even among bipeds, the most frightful specimens are sometimes most petted; and to such strange instances of depraved fondness we must now add the Variegated Negundo of Paris. *V., Rue Castiglione.*

Vitality in a large Araucaria—A large Araucaria here was so much injured by the severe winter that it was stubbed up and pulled down by horses to make room for other trees to occupy its place. It has been lying in the sun with the remains of the roots quite exposed all through July, August, and September, yet on looking at the root end the other day I see that it has made three young shoots 3 or 4 inches long. They have protruded from the strong bark a little below the surface where it was planted, the earth no doubt preserving the bark from the frost. This tree was a very fine specimen, 23 feet high, and it girthed 2 feet 3 inches at the base. I had put it aside to make shafts of rustic baskets from its stem and branches. *William Tillery, Welbeck, Sept. 30.*

Societies.

Entomological: *Sept.* 2.—The President in the chair. Mr. S. Stevens exhibited both sexes of a new and very beautiful Goliath beetle, Dicranorhina Layardi, from Lake N'gami. Also a new species of Paussus from Rangoon. He also distributed specimens of Triplax russica which he had reared in considerable numbers from larvæ feeding upon a Fungus on Ash trees. Mr. Stainton exhibited Nonagria Elymi from Stettin; and the President a specimen of Orodesma apicina taken alive in the London Docks, imported in a ship from Porto Rico. Dr. Knaggs exhibited two species of Phryganeidæ new to this country; Agrypnia picta, from Skiddaw; and Leptoceras fulvus, from Ruislip, Middlesex. Mr. Scott exhibited four new British species of Hemiptera. The Rev. F. O. Morris exhibited a curious specimen of Lasiocampa Quercus, having the antennæ greatly diminished in size. Mr. Bond exhibited specimens of the two rare moths Lithosia caneola and Dianthæcia capsophila, and Dr. Knaggs a new species of Hadena taken in Ireland. Mr. Brettingham exhibited a fine series of insects taken at Dacca, in the East Indies. Mr. Edwin Shepherd read a further communication from Lord Dunsany, on the ravages caused by the larvæ of Biston hirtarius upon the Ash and Lime trees in Dunsany Park. Mr. F. Walker read some notes on the habits of various insects, including Chlorops tarsatus, and several species of parasitic Hymenoptera.

Notices of Books.

A Manual of the Sub-Kingdom Cœlenterata. By J. R. Greene. 12mo. Longmans, pp. 271.

In a volume forming part of Galbraith & Haughton's manuals, Mr. Greene gives a strictly scientific account of those invertebrate creatures, once included under the name of Zoophytes, but now named Cœlenterates. Hydrozoons are first taken and then Actinozoons. The morphology and physiology of each are discussed, and their classification explained; there are very good woodcuts, and a careful Index, as well as a useful list of writers on the subject. The work is well done, but is too technical for extract; it, however, richly deserves the study of those who are interested in the curious analogies between the reproductive apparatus of the lowest animals and lowest plants.

We have before us a new edition of *Consul Schiller's Catalogue* of his vast living collection *of Orchids* at Hamburg. In 1857 it included 1268 species; it now boasts of 1380, so that, unlike so many collections of the kind, it increases, not diminishes with time. Those who grow these favourite plants should procure the Catalogue for their own information; it gives correctly not only the native country of each species but all its modern synonymes, upon the high authority of Prof. Reichenbach, jun.

Van Houtte, Flore des Serres, Parts 44 and 45 contain some very interesting matter. There is first a pretty Lady-like Camellia called *Angela Cocchi*, variegated with white and red; then a fine yellow annual Lupin called *Menziesii*, which however must have a hotter summer than that of Ghent; next three Hyacinths, one an uncommonly handsome deep violet single, called *Prins Albert von Preussen*, the second a fine double Rose named *Lord Wellington*, and the third a white eyed deep violet single, the *Auricula's oog*, or eye. Then follow a tuberous Iris-like plant, the *Phalocallis plumbea*, also called Cypella plumbea, and Tigridia cœlestis, a silver-edged *Cobœa scandens*, and a most formidable looking Whitethorn called *Cratægus Oxyacantha, horrida*. This last has short stiff black spines clustering in the axil of every leaf, as if it had borrowed the defence of a Gleditschia. In a hedge it would stop every living thing except insects and other little fry. In addition to these are some better known plants, and a report upon the cultivation of Brazil, which we should translate if it were not too long for our columns. It is well written and full of information.

The last Number of *Henderson's Illustrated Bouquet* (12) contains an excellent figure of the pretty Convolvulus mauritanicus, which is a capital subject for a suspended basket in a cool conservatory or balcony or corridor, and makes a really pretty bed in the flower garden, its surface being for a lengthened period studded daily with a profusion of its grayish neutral tinted flowers. There is also a fine figure of Epigynium leucobotrys, a charming North Indian evergreen shrub, producing pendent racemes of snow-white berries, beautifully marked at the tip with a small black ring and five black dots; these fruits look like wax. A group of Lilliputian or Bouquet Dahlias, a new race about which we shall have something to say ere long. Erythrina Marie Belanger, a fine variety raised in the South of France, and remarkable for its dwarf habit, combined with large dense racemes of flowers. A group of seedling varieties of Tropæolum of the bedding-out class. With this part, which concludes the second volume, a title and index are given.

Trade Lists Received.—Croux, Valleé d'Aulnay à Sceaux (Seine), Trade List for the Autumn of 1861 and Spring of 1862. M. Croux offers Spruce Firs, 3 to 4 yards high; Larches, 3 to 5 yards; and Scotch Pines, 2 yards, deliverable in baskets.——Prudente Besson, Porta Susa, Turin, General Catalogue for the Autumn of 1861 and Spring of 1862. Oranges and Lemons of various kinds offered at from 3 to 8 francs each.——Narcisse Gaujard, Nurseryman, Ghent (Faubourg de Bruxelles), General List of Nursery Stock on the ground lately occupied by M. Papeleu.

Garden Memoranda.

Temple Newsum, near Leeds, the seat of H. C. Meynell Ingram, Esq., is a fine building, which for a considerable time was the seat of the noble families of Lennox, Irwine, and Hertford, and the room where the ill-fated Lord Darnley was born is shown to visitors. The park surrounding the mansion is very large, and beautifully wooded. In front of the house, and occupying the site of an old flower garden, which was in existence in March last, is now a spacious lawn with a great many well arranged flower beds, many of which are of considerable size—the centre being occupied by a very large and handsome fountain, which is admirably proportioned to the pleasure ground and house. Rows of handsome cast-iron vases filled with Scarlet Geraniums and other plants, tazzas, garden statuary, some superb examples of Humea elegans, and a few Irish Yews and Standard Bays, assist in forming a charming flower garden. On one side, sloping towards the east, is an extremely fine Laurel bank 100 yards long and 8 yards wide, the top running parallel with the flower garden, being planted with rows of white, scarlet, and yellow bedding Dahlias. The beds rise a few inches above the Grass, and are surrounded by a fire-clay edging manufactured by a firm in Leeds, around which is a 10-inch wide border of gravel. This arrangement gives the beds the appearance of being lifted from the Grass, and certainly adds to their beauty. Mr. Taylor, the gardener (and he and members of his family have been gardeners here for nearly a century), informed us that the whole of the garden had been formed and planted since the beginning of April, a surprising statement, for the appearance of the place indicated far greater age, so well has everything succeeded. Some of the most striking beds were planted thus:—Lee's Geranium Floribundum, resembling a light-coloured Fancy Geranium, edged with Tom Thumb Nasturtium. A large mass of Blue Bonnet Verbena, edged with a double row of Golden Chain Geranium. Queen of Rose Verbena, with a broad band of variegated Alyssum. Scarlet Geranium, edged with Silver-leaved Cineraria, a telling bed. Purple Senecio, edged with Lady Coventry Geranium, a pretty variegated Ivy-leaf variety with pale pink flowers. White Verbena, with a broad edging of blue Lobelia. Two handsome match beds of Cerise Unique Geranium, edged with Silver-leaf Cineraria. A charming bed of Purple King Verbena, edged with Golden Chain Geranium, the two colours contrasting well together; and Lord Raglan Verbena, edged with variegated Alyssum. Numerous other beds were also in full beauty, especially two large match beds of Calceolaria aurea floribunda, which is the best of all the bedding varieties for the north. Passing through the shrubberies and pleasure grounds, which are very extensive, and bore marked indications of the ill-effects of last severe winter, we came to the kitchen garden and framing grounds, occupying in all about 6 acres, 4 acres being within the garden walls. There are numerous Vineries, Pineries, and plant houses, in the whole of which was much to admire, everything being quite clean and healthy, and all well cared for. The stock of Pine plants is very extensive, especially of Smooth leaf Cayennes, which are grown largely here, also Montserrats, Black Prince, and a few Queens. Mr. Taylor was formerly a very successful exhibitor at the London shows, and judging from the examples we met with in the various houses, he would have little difficulty in taking a leading position again if he entered on the race. The back walls of the pits were covered with Dioscorea discolor in luxuriant growth, with large handsomely marked foliage; Passiflora edulis, full of fruit; P. quadrangularis, covered with blossoms and fruit; also the pretty P. laurifolia, Ipomœa Horsfallii, a really fine old climber; I. rubro-cœrulea, gay indeed; and the elegant Passiflora kermesina and Cissus discolor—all luxuriating in the temperature of a Pine stove. We also noticed a fine plant of Gardenia amœna in full flower, and a very fine specimen of Nepenthes distillatoria, with nearly 100 fully developed Pitchers on it, and a fine plant of Cordyline indivisa, a handsome Yucca-like plant, which, when well grown, is very effective.

The conservatories were gay with Geraniums, Fuchsias, Balsams, numerous plants of the beautiful Celosia aurea pyramidalis, with its handsome golden plumes; several varieties of the finer sorts of Scarlet Geraniums and other plants.

The kitchen garden occupies a sloping piece of ground at the foot of which are the Vineries and other houses. On the top is an Orangery 33 yards long heated with pipes at the back, in which is a row of large and handsome standard Oranges in full bearing. The rafters are occupied by Vines, amongst which were some plants of Lady Downes' Seedling, a fine late good cropping kind. On walls was a Plum tree well supplied with fine fruit; Mr. Taylor informed us that the variety was called St. Cloud, a large handsome new variety of good quality. Kirke's fine red Plum was also bearing a good crop; a patch of Sir Harry Strawberries, forced in the spring, was ripening fruit out of doors; Veitch's Perfection Pea was very fine, and the crop of Scarlet Runner Beans heavy. Mr. Taylor always uses two-year old seed for his Scarlet Runner crop, and with evident success. *D.*

Miscellaneous.

Incombustible Clothes.—It cannot be too generally known that any of the soda, or potash, or ammonia salts have the property of delaying or arresting the progress of flame. Of course I except the nitre salts, which promote flame. Dip a cambric handkerchief into common brine, and dry it, and you shall find the utmost difficulty in making it burn. But, as some salts answer

the purpose very much better than others, it is preferable to stick by these. A solution of the tungstate of soda answers very well; but the tungstate of soda is a rather expensive salt. The salt, then, that I would recommend, answers perfectly well. It is to be had everywhere. It is, further, very cheap. This salt is the sulphate of ammonia; it abounds in soot. When a little soot finds its way into the mouth, a peculiar acid flavour is perceptible. This arises from the contained sulphate of ammonia. Mix 2 lbs., or so, of soot, with a gallon of water; stir it up well; allow it to stand until it settles. The clear supernatant liquor is a solution of the sulphate of ammonia. Muslins, linen, paper, curtains, or other inflammable matters, when dipped into this mixture and dried, will remain sufficiently uninflammable to secure the wearers from the hideous risk of being burned alive. I would recommend its universal adoption. It should be insisted upon in education: I would have it rendered compulsory by law, by a special enactment in fine, that all washerwomen should employ a solution of the sulphate of ammonia in doing up clothes. Humanity calls loudly for some efficient intervention. A quantity of the solution might be prepared at once, by putting the produce of a chimney-sweeping into one barrel of water, and drawing it off, when clear, by means of a syphon, into another empty barrel. But, in the event of this anticombustible solution getting into general use, it will be found generally preferable to buy the sulphate of ammonia ready made. If the solid salt be employed, 1 lb. will be found sufficient for 2 gallons of water, imperial. Women will dress as they choose; but, for God's sake—for their sakes—let us avert from them a horrible death. More persons are probably burnt alive in England in a single year than in India were burnt in a generation by *suttee*. The sulphate of ammonia is the remedy for English suttee. *Henry M'Cormac, M.D., in the Builder.*

Propagating Strawberries.—Whenever I wish to make a new Strawberry bed, I allow the old bed to run into a mass. Then, at any time during the autumn or early spring, I line strips about 7 inches wide and 20 inches apart through the length of it, and cut them into squares. These squares I take up with a spade, about 3 inches deep, and set them 18 inches apart in furrows previously made 2 feet apart in a new bed. As the roots are not disturbed, they bear a full crop the first season, and this pays well for the heavy labour of removing so much earth. I make no account of the large number of roots required, since they spread so rapidly as to cover the ground in a single season, even when runners are kept back till after fruiting. The trenches made in the old bed are filled with rich earth and manure, and the bed is soon covered with plants again, when other trenches may be made and filled, thus renewing the whole bed by degrees, as occasion requires. *Hiram W. Bulkeley, New York.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Hyacinths and other Dutch bulbs, if not already got, should be procured and potted without delay. Orange trees meant for forcing in winter for the decoration of this house should also now be attended to. These and Daphnes are invaluable for winter blooming, and should be largely grown for that purpose. Also see to having plenty of Salvia splendens, which is useful for mixing among Chrysanthemums. It is a good practice to place the largest plants of Salvias in a shady situation out of doors for a few weeks in autumn; plants so treated will be found to bloom more strongly, and last longer in beauty than others run up in a warm house. Look carefully after the watering of large specimen hard-wooded plants in pots, especially Heaths, which are soon injured by being either over or under-watered. Examine the specimens often and carefully, and where they are found to be dry water thoroughly, so as to moisten the whole of the ball; also look sharply after mildew on soft-wooded Heaths, and dust the plant with sulphur directly the enemy is perceived. Get Azaleas tied into form as soon as can be done, in order to give them a neat appearance. Also attend to the staking and training of other things as leisure time can be found. Look carefully after red spider on Bossiæas, Chorozemas, and anything else found to be liable to that pest, and see that it is eradicated before the plants get disfigured. Red spider is easily got rid of by laying the affected plant on its side, and well washing the under sides of the leaves with the engine, applying the water with as much force as the foliage will bear. Repot strong growing Pelargoniums; plants that are fairly established after repotting can hardly be kept too cool. Also keep Cinerarias as cool and moist as is consistent with safety, and attend to repotting such as require it. Primulas must also be carefully attended to, in order to encourage them to make rapid growth, particularly double varieties. Keep Tree Violets clear of their great enemy, red spider, by a liberal use of the syringe, and give them plenty of manure water, which will assist in keeping them in vigorous health. Van Thol Tulips for forcing may be potted. Place them on coal ashes, and cover them as recommended for Hyacinths, and early in November remove them into heat.

FORCING DEPARTMENT.

Pineries.—Any of the stock which may appear to require repotting should be examined and shifted at once, if this is found necessary, in order that the roots may get hold of the fresh soil before dull weather sets in, when it will not be safe to encourage free growth. And any necessary re-arrangement of plants growing in the open bed should also be effected as soon as possible, as with a little care in shading and keeping the atmosphere moist, this can be carried out at present with very little risk of checking the plants, so as to throw them into fruit. Encourage plants expected to show fruit next January to make vigorous growth, for these should be sufficiently advanced by the beginning of next month to allow of keeping them rather cool and dry, so as to check and thoroughly ripen their growth, for unless this is attended to there will be considerable risk about getting them to show fruit at that season. Plants which have been prepared for fruiting, and which it is desired to get up at once, should be encouraged with a moist warm atmosphere, keeping the soil about their roots in a healthy state as to moisture. Some have a dread of applying water at the root in the case of plants that have been kept dry for a time to check growth, and withhold it until the fruit is perceptible; but this is a mistake, causing loss of time as well as injuring the plants, as unless root action is encouraged, plants cannot be expected to start freely. If artificial treatment must be resorted to in order to get the plants to fruit at the desired time, there is no method so certain or so little injurious as keeping them cool and dry for a month, and then affording them a moist warm temperature and a brisk bottom-heat, giving sufficient water at the root to properly moisten the soil. Take off and pot, or plant out suckers at short intervals as they can be obtained of sufficient strength, for having a regular succession of plants is the most likely way to secure a regular supply of fruit.

Vineries.—Take advantage of the present dry weather to give air freely in houses where the ripening of the wood is the object, and if a little fire-heat is used, with the air, this will be much more efficacious now than later. But except in the case of young Vines with a very gross habit it will hardly be necessary to use fire-heat while the weather continues dry. Keep the surface of the border in a free open state, so as to encourage evaporation, for keeping the roots too wet is the main cause generally of the wood being backward in ripening at the proper time.

Figs.—Where any are ripening keep the atmosphere as dry as can conveniently be done, and also let the trees be on the side of dryness at the root, but avoid such a degree of drought as would be likely to injure the foliage or the bearing wood for next crop. Keep the shoots thin and neatly tied in, so as to expose them fairly to light and air, but avoid stopping at this season. Keep the atmosphere moist where the fruit is swelling, giving the foliage a good washing with the syringe frequently to prevent red spider, and give plants in pots or tubs a liberal supply of manure water.

FLOWER GARDEN AND SHRUBBERIES.

Cuttings should be carefully looked over to see that nothing has been omitted, and that a sufficient quantity of everything is in a promising state for making nice plants before winter; it should be borne in mind that things which are at all difficult to winter rooted after this season may be considerably thinned before spring, and also that they will not be sufficiently strong to furnish many cuttings for spring propagation; consequently a larger quantity than would have been necessary had the cuttings been put in a month ago, should be provided. But if there is a reserve stock of strong plants in pots, which is a safe practice where there is a large quantity of bedding stuff required, and proper convenience for growing them and propagating in spring, these will furnish a large quantity of cuttings next March which, as has been formerly stated, will form equally good plants by turning out time as cuttings put in now. In the case of such things as Ageratums, Heliotropes, and dwarf Lobelias, it is useless wintering young stock, as these grow so freely in heat, and are so easily propagated from soft cuttings that a few good-sized old plants which require but little room or attention in winter will furnish a very large quantity of plants by bedding out time. Attend to the potting of cuttings sufficiently rooted, and give every after attention to these in order to get them well established. Persevere with leaf-sweeping and other routine work.

HARDY FRUIT AND KITCHEN GARDEN.

Pay every attention to getting the wood of Peaches and Apricots well ripened, by exposure, shortening, &c. Most kinds of Apples may be gathered during the present month. Late Pears should be left on the trees while the weather continues favourable to their ripening. Prepare for planting all kinds of fruit trees, by getting the ground in good order for the different kinds. On cold stiff soils it is advisable to plant on hillocks, 1 foot or 18 inches higher than the surrounding surface. The trees will not grow so fast in consequence, and will require more attention in summer in the way of mulching, but they will form short-jointed, well ripened, fruitful wood, which is the best preventive of canker, gum, &c., and will save the labour of resorting much to root-pruning. No opportunity should now be lost for getting Potatoes that are ripe out of the ground, and stored in a dry condition. Potatoes may either be kept in narrow pits, with a little dry earth sprinkled among them, or in airy dark sheds. Use Cauliflower before it gets too large, and prepare a shed or pit to place a quantity on the first approach of frost. French Beans may require a slight protection at night. Plant out Lettuces and Endive for spring use. If planted on the sloping sides of wide ridges they will stand better, damp being quite as destructive as frost. Take the precaution of securing a quantity of both in pits or frames, or have the means of protection in readiness. Remove the leaves from Rhubarb and Seakale, that you intend forcing very early, and keep a look-out for slugs and weeds.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON
For the Week ending Oct. 3, 1861, as observed at the Horticultural Garden.

Sept. and Oct.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Min.	Mean	Of the Earth 1 foot deep.	2 feet deep.	Wind.
Friday 27	☾	29.921	29.858	67	35	51.0	56	57	[illegible]
Satur. 28	24	29.840	29.764	62	49	55.5	57	58	[illegible]
Sunday 29	25	29.804	29.786	71	40	55.5	[illegible]	[illegible]	[illegible]
Mon. 30	26	29.882	29.731	78	45	61.5	[illegible]	[illegible]	[illegible]
Tues. 1	27	29.676	29.562	75	48	61.5	[illegible]	[illegible]	[illegible]
Wed. 2	28	29.987	29.834	73	40	56.5	60	[illegible]	[illegible]
Thurs. 3	29	30.107	30.067	71	49	60.0	60	57	[illegible]
Average		29.901	29.800	71.0	43.7	57.3	58.6	56.4	

Sept. 27—Foggy; fine, cold at night.
— 28—Densely overcast; fine, rain at night.
— 29—Cloudy, fine, foggy.
— 30—Foggy; exceedingly fine; slight fog at night.
Oct. 1—Fine, very mild; heavy showers.
— 2—Fine, exceedingly fine throughout.
— 3—Foggy, very fine; mild at night.
Mean temperature of the week 3 deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Oct. 12, 1861.

Oct.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds.
Sunday 6..	61.7	44.0	52.8	19	0.78 in.	[illegible]
Mon. 7..	62.4	44.1	53.3	17	0.58	[illegible]
Tues. 8..	60.8	41.5	51.2	18	0.63	[illegible]
Wed. 9..	59.7	42.8	51.2	19	0.52	[illegible]
Thurs. 10..	60.9	43.5	52.2	20	0.68	[illegible]
Friday 11..	61.4	42.6	52.0	18	0.34	[illegible]
Satur. 12..	60.0	42.0	51.0	20	1.00	[illegible]

The highest temperature during the above period occurred on the 6th, 1834—therm. 79 deg.; and the lowest on the 11th, 1860—therm. 25 deg.

Notices to Correspondents.

Anigozanthos: *D R.* A. Manglesii and Rhodanthe were introduced by Captain James Mangles, R.N., and not by Mr. Robert Mangles of Sunning Hill. We know no more.

Apricots: *E S.* Apricots generally succeed well in Oxfordshire, probably from being on the chalk formation. But they also do so elsewhere, in any good loamy garden soil, provided their blossoms are not injured by frost; and that the roots of the trees are not allowed to be chilled from want of drainage, where otherwise cold spring water would come in contact with their roots; nor, on the other hand, should the latter be allowed to suffer from want of a due supply of moisture, which is too often neglected to be given. These trees have a large aggregate surface of foliage, and in dry seasons are more apt than most people are aware to exhaust completely by evaporation the moisture in the soil in which their roots extend. Mildew then attacks the foliage, and renders the trees too weak and unhealthy to set their fruit. ‖

Figs: *An Old Subscriber.* You state that your Fig trees, 9 or 10 years planted, have grown well; but that the fruit when the size of a Gooseberry turns yellow, and drops off—a very common occurrence. When the trees are old and make less luxuriant but firmer wood than those that are young generally do, the fruit has a better chance of coming to maturity; but we have seen plants that were young and of small size bear well, their roots being confined in a pot. In your case we should remove the trees, root prune moderately, replant on a chalk formed subsoil, well rammed, top soil not too rich. Train from a *single stem*—on no account allow suckers; then you may expect abundance of fruit. ‖

Grapes: *An Old Subscriber.* The bunches all over the country are in much the same state. The roots have been killed or paralysed by the season of 1860. It will be all right next year—we hope. If not *ex hortulano.*—*Old Sub.* Your Grape is the Black Hamburgh; the berries are small and without seeds from the blossoms not having been set. Probably the Vine had been kept constantly too moist when in flower.—*G J, Winchester.* From your description we should suppose the Grape to be the Black Frontignan. ‖

Insects: *K.* The insects which infest your Pear leaves are the well-known Psylla (or Chermes) pyri; syringe the trees with gas-tar water and clear water alternately, and fumigate the orchard-house with Tobacco smoke. Does the same insect attack the Plum as well as the Pear?—*W H.* The beetles you have sent are Steropus madidus and Helobia brevicollis, two species of the carnivorous family Carabidæ, which frequent the Strawberries for the sake of the smaller insects which feed upon them. They ought, therefore, to be protected, and not destroyed. *W.*

Names of Plants: *W Brown.* We cannot undertake to name leaves.—*J W R.* Clavaria inæqualis.—*Jas Foster.* 1, Lastrea spinulosa; 2, Cyrtomium falcatum; 3, Pteris tremula; 4, Lastrea Sieboldi; 5, Pteris serrulata; *O P.* 1, Polystichum angulare, var. proliferum; 2, Platyloma rotundifolium.—*M R.* Salvia Grahami.

Oxalis corniculata: *J C.* This grows wild as far north as Stirling.

Vines: *W S D.* The Hungarian facts are suggestions for intelligence to profit by, not directions for the unintelligent. In Hungary they want the highest quality without caring for size. Here size is wanted combined with the highest quality. It is for gardeners to hit upon the method of combining these.

Misc: *An Irish Subscriber.* 1, cannot procure seeds or "roots" of Hernandia sonora on this side the West Indies; 2, he must ask for Lepidium ruderale at some Botanic Garden; 3, Colchicum autumnale is one thing, Autumnal Crocus another, namely Crocus nudiflorus or else Crocus sativus; 4, apply for Bridgesia spicata to a nurseryman; 5, Gingko biloba is a tree not a climber, and is usually called Salisburia adiantifolia; 6, get Jenyns' observations on Meteorology, and learn how to use instruments of the persons who sell them; 7, apply to the nurserymen for Climbers; 8, we never recommend dealers, he must consult advertisements; 9, get the last edition of Loudon's Hortus Britannicus; 10, there is no such book.—There! if everybody were to let slip such an avalanche of inquiries where would the Editor be? We would humbly suggest that one question at a time is better than 10, and that such inquiries as 2, 4, 7, could be answered by our Irish friend himself if he would *think* a little.

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HORSE AND CATTLE FOOD, 35s. per cwt.; Pig and Poultry Food, 16s.; Dog Biscuit, 15s.; Compressed Beef Greaves, 12s. and 16s.; Rice Meal, 7s. 6d. and 9s. 6d.; Indian Meal, 14s.; Locust Beans, 10s. 6d.; Locust Bean Meal, 13s.; Linseed Meal, 18s. 6d.; Screened Bengal Rice, 14s.; Chicken Rice, 10s. Sold for Cash only by
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Salperton Park, Andoversford, Gloucestershire, Sept. 26, 1861.
Dear Sir,—You wished me to try your Condiment, and I ordered a cask and gave it the severest test I should think it ever had—namely, upon some large old broken mouthed ewes that had been so neglected that we supposed nothing could bring them round. They were eating cake, but seemed almost too far gone for recovery. No patient ever recovered quicker with quinine from fever than these animals (30) did upon your Condiment. It seemed to renovate the whole constitution, so that when it was gone they continued to improve without it or the cake, and instead of fattening them I am going to breed again from them. I will gladly show my flock and point out these ewes to any person who may be curious or incredulous.
I am, dear Sir, yours very truly,
T. BEALE BROWNE.
To Mr. Joseph Thorley, 77, Newgate Street, London, E.C.

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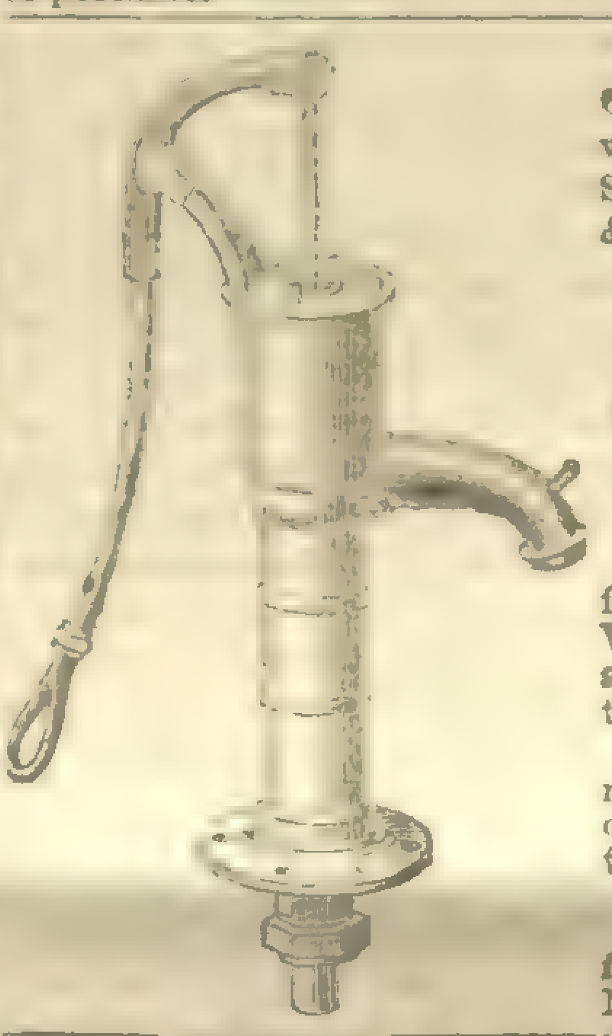
Full Particulars and Testimonials may be obtained of the Patentee, ISAAC JAMES, Tivoli Waggon Works, Cheltenham.
N.B.—Improved LIQUID MANURE PUMPS, either fixed or portable.



J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25s. 6d. each.
IRON YARD AND GARDEN PUMPS
3 feet 6 inches under spout
2½ 3 3½ inch
43s. 53s. 60s. each.
J. TYLOR and SONS manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.
PUMPS of J. TYLOR & SONS' manufacture to be obtained of Ironmongers in all parts of the United Kingdom.
J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

JOHN WARNER AND SONS, BELL and BRASS FOUNDERS to HER MAJESTY, HYDRAULIC ENGINEERS, BRAZIERS, &c., 8, Crescent, Cripplegate, London, E.C.

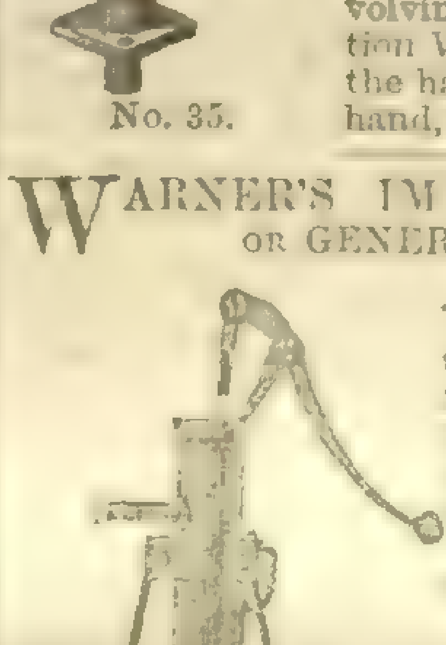
No. 35.

WARNER'S PATENT CAST-IRON PUMP, for raising Water from Wells not exceeding 25 feet in depth.

Diameter of Barrel.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead,	1 1 0
2½ ,, long	3 ,, 3 ,,	gutta percha	1 10 0
3 ,, ditto	3 ,, 6 ,,	or cast iron	2 4 0
3½ ,, ditto	3 ,, 6 ,,	flanged pipe	2 9 0
4 ,, ditto	3 ,, 6 ,,	as required.	2 15 6

2½ ,, short, with 15 feet of Lead Pipe attached, ready for fixing 2 0 0
2½ ,, long ditto ditto ditto 2 14 6
This Pump is fitted with J. W. & Sons' Patent Vibrating Standard, Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.

WARNER'S IMPROVED LIQUID MANURE OR GENERAL PORTABLE PUMP.


No. 42.

This Pump is fitted with WARNER'S Patent Bucket and Valve, and cannot clog in action. The Barrel is made of Galvanised Iron, not liable to corrode, and can be raised or lowered at pleasure on the stand to suit the depth of liquid fed together, and it may be carried with ease by one man.

	£ s. d.
Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe	2 15 0
If fitted with Barrel of Planished Copper	3 4 0
Stand and Pump, with plain Tail Pipe, for tying on Suction Pipe	2 9 0
2-inch India Rubber and Canvas Flexible Suction Pipe, on wires, in either 10, 12, or 15 feet lengths .. per foot	0 2 3

No. 43 is a similar Pump to the above, without stand, but with strong wrought-iron straps, for fixing to water cart or plank, price 2l. 5s.
Every description of Machinery for Raising Water, by means of Wheels, Rams, Deep Well Pumps, &c.; also Fire and Garden Engines, &c.
J. W. & SONS' Illustrated Catalogue forwarded post free on application.
The above may be obtained of any Ironmonger or Plumber in Town or Country, or of the Patentees and Manufacturers,
JOHN WARNER & SONS, 8, Crescent, Cripplegate, London, E.C.

JAMES AND FREDERICK HOWARD, BRITANNIA IRON WORKS, Bedford, Manufacturers of STEAM CULTIVATORS, STEAM PLOUGHS, CHAMPION PLOUGHS, HARROWS, HORSE RAKES, & HAYMAKERS.
Catalogues, with full particulars, sent free on application.

JOHN FOWLER, JUN., 28, Cornhill, London, E.C.— Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free.

£1000 upon the WOOLSTON SYSTEM against any other system of Steam Cultivation.
For price of apparatus and particulars apply to Mr. W. SMITH, Woolston, Bletchley Station.

QUEEN'S COLLEGE, GALWAY.— DEPARTMENT OF AGRICULTURE.
A Matriculation Examination will be held on OCTOBER 18. In the Department of Agriculture four Scholarships of the value of 15l. each are appropriated; two to Students of the first year, and two to Students of the second year. The College is also empowered to award at the same Examination one prize of 10l. to a Student of the first year, and one of 10l. to a Student of the second year.
In addition to the Scientific Education given in the Lecture Rooms of the College, the most ample means are now possessed for giving practical instruction to Students in Agriculture. The Professor will exhibit on his own Farm, as well as on a large property of which he has the management, the best examples of land improvement, and superior cropping on waste, worn out bog and mountain land, with specimens of the [illegible].
Further information may be had on application to the Registrar, from whom copies of the Prospectus may be obtained. By order of the President.
October [illegible] W. LUPTON, A.M., Registrar.

FREE STUDENTSHIP IN THE EDINBURGH NEW VETERINARY COLLEGE, Authorised under Royal Sign Manual. WINTER SESSION, 1861-62.—Gentlemen desirous of commencing a Course of Study to qualify as Veterinary Surgeons are informed that all who enter on the 6th November, 1861, and who have not attended a Veterinary College before, will be admitted to compete for a FREE STUDENTSHIP at the close of the Winter Session. The conditions of the competition, and any further particulars, may be learned from Professor JOHN GAMGEE, New Veterinary College, Edinburgh.

SMITHFIELD CLUB CATTLE SHOW, 1861.— The ANNUAL SHOW OF FAT CATTLE, SHEEP, AND PIGS, will take place on DECEMBER 10, 11, 12, and 13, at the Bazaar, King Street, Portman Square. The last day for Certificates of both Stock and Implements to be returned to the Hon. Secretary is Friday, November 1.
The following Forms of Certificates are now ready, and intending Exhibitors in applying for them need only quote the letters and state how many of each they require.

CATTLE.	SHEEP.
Form A—Ox or Steer	Form D—Pen of 3 Wethers
B—Cow or Heifer	E—One Sheep in Extra Stock
C—Beast in Extra Stock	

PIGS.
Form F—Pen of 3 Pigs.
G—One Pig in Extra Stock.
In addition to the Prizes usually offered, separate Classes have been established for the following Breeds of Sheep:—
Kentish or Romney Marsh — Shropshire Mountain
Prize Sheets with Rules and Regulations and Forms of Certificates as above may be obtained of
B. T. BRANDRETH GIBBS, Hon. Sec., Corner of Half-Moon Street, Piccadilly, London, W.
N.B. All communications on the Club's Business should have the words "Smithfield Club" outside, to distinguish them from private letters.

The Agricultural Gazette.

SATURDAY, OCTOBER 5, 1861.

MEETINGS FOR THE NEXT TWO WEEKS.
SATURDAY, October 12—Blandford.
TUESDAY, — 15—Herefordshire Agri. Society at Hereford.

THE cheese manufacture is one of the most important in the island. Our Potato growing has been good enough and bad enough of late years to make and almost mar a nation. But the growth of cheese is much more important to us than the growth of Potatoes—occupying more acres, and yielding a return of money's worth, if not so much per acre, at any rate much larger in the whole. There are probably 1½ million acres of Potatoes grown each year in the United Kingdom—not half a million in Great Britain only; but cheese is almost the sole produce of probably some millions of acres in Great Britain. In Somerset and Berks and Wilts—in Gloucester, Worcester, Stafford, Warwick, Derby, Leicester shires, in much of North Shropshire, all Cheshire, and some portions of South Lancashire, in Galloway and the South-western Scottish counties generally, cheese is the characteristic or most important produce of the farm. Over the greater part of the Grass lands of these counties it is cheese which pays the rent and is the principal source of the profit of the farmer. Cheese is thus, certainly, one of the most important products of English agriculture.

But it is the character of it as a manufacture that makes attention to it both needful and of use. It is, in some sort, a growth, for it depends on a skilful cultivation of the Grasses, and on a successful cultivation of particular breeds of cattle. In this respect it claims the same sort of regard as other branches of agriculture, only greater in proportion to the greater value of the produce. But it is a *manufacture*, and that is what makes

the attention which it claims especially useful. You are dependent on climate and soil, on the sensitiveness of vegetable and animal life to both, and on many a thing which is beyond your control in the growth of plants and animals, and that is what makes all attempts at agricultural instruction generally, uncertain and unsatisfactory. But once you have the milk—the maximum quantity and quality derived from the best cultivation of the land and the best breed of cattle, or any smaller quantity and inferior quality derived from inferior cultivation and inferior cattle :—given once the milk, and it is a question of mere chemistry and manipulation whether you make a profit or a loss. Cheddar cheese, Cheshire, Gloucester, Stilton, Dunlop, and other cheeses are the result not of Cheddar, Gloucester, Cheshire, Grass land management, but of Cheddar, Gloucester, Cheshire, &c., *dairy* management. The best of all these cheeses might be made everywhere to the exclusion of all inferior sorts.

It appears to us therefore that the cheese manufacture is one which especially deserves the attention both of societies and of public spirited agricultural improvers, as a subject on which their efforts are likely to be productive of great good. The English Agricultural Society, as one of the former, has at length through Dr. VOELCKER, its able chemical officer, directed its attention to the subject, and in the current number of its Journal there appears a most valuable report of investigations into the theory and practice of cheese making. And among the latter let us refer once more to Mr. CHANDOS POLE, whose dairy operations at Barton Fields, near Derby, were described at page 510. This gentleman has long urged upon the dairy farmers of his own and neighbouring counties the importance of adopting that particular mode of manufacture which results at Cheddar and elsewhere in the very best of cheese. He has introduced the practice of that district on his own farm, and induced others to adopt it also. And he has taken every possible opportunity of proving its superiority. This of course is mainly to be done by the price he obtains for his produce in the market, which is a test that is certain ultimately to have its influence. It is, however, also to be done by competing at the meetings of the provincial societies for the prizes which they offer for good cheese. The supporters of the Cheddar system in his neighbourhood offered this year to exhibit their Cheddar cheese at the meeting of the *Staffordshire Agricultural Society* which is just over at Wolverhampton, provided one of the three judges was a person accustomed to that particular quality of cheese. The result is that the leading prizes in this class have been awarded to Mr. CHANDOS POLE, who received the first prize for thick cheese, and the 10*l.* prize for the best cheese in the show—while five out of the seven prizes offered went to cheese made on the Cheddar plan. This is justly thought a victory for the Cheddar advocates.

No report of the cheese show at this Society has yet appeared in the agricultural journals, though unquestionably it is a department well worthy of attention. The interest of spectators is taken up by Short-horn, Hereford, and Devon cattle, by Leicester, Southdown, and Shropshire sheep, &c.; but it is certain that the neglected cheese department represents an agricultural interest of much greater national importance than any one of the live stock classes which now absorb attention.

We hope that Mr. CHANDOS POLE or some of his disciples and fellow workers in improved dairy management in the midland counties may be induced to give some account of their progress and success.

FARM BUILDINGS.

AGRICULTURE is, for the most part, done out of doors. The difference between the wilderness and the cultivated field is little more than one of guidance and degree. The same living seed, the same porous soil, the same vegetable refuse as manure, the same rain-water, air and sunshine, are the causes everywhere of vegetable growth. In the field, indeed, the seed is chosen, placed and covered; while on the waste it is scattered broadcast by the wind, and rests upon the surface; in the one the soil is broken, pulverized, manured; in the other, it is softened only by the rain and thaw, and receives its annual dressing only of fallen leaf. In both, however, the natural agents are the really efficient ones; the cultivator does but choose plants on which they shall be brought to bear, and so prepare the soil that their influence shall be most productive.

The buildings of the farm, to begin with, therefore, are merely houses for the farmer and his labourers, and shelter for his implements and working cattle. So long as only plants are cultivated, agriculture is just a series of operations—drainage, tillage, and manuring—which only give effect to the natural influences of rain, and air, and sun. Well-arranged plantations sheltering from wintry winds in spring,—deep drains enabling the descent of the first warm showers, and thus improving the under-ground climate at the season of most vigorous growth,—tillage, deep and perfect, multiplying that inner surface of the soil which represents at once the pasturage of the roots and the storeroom of their food,—all these do but intensify the operation of Nature's fertilizing agents; and the sowing-machine and hoe confine their influence to such plants as are worth cultivation. But so long as the farmer merely cultivates these plants he wants no shelter for them. No more buildings are needed on their account than are needed for the wild plants of waste places. And even when he gathers in their fruit, which Nature does not do, excepting shelter for himself, his labourers and tools, but little help of this kind is required. Barns are going out of fashion. The crops of Wheat and other corn are heaped up in stacks upon the stubble, and thatched against the rain; Carrots and Potatoes are pitted in the field. In the one case, the threshing-machine is drawn up beside the rick, and sacks up its grain ready at once for market; and in the other, the measure and the market cart carry off the roots immediately for sale. In neither need the produce once be housed.

It is not for the sake of plants, but for the sake of animals that we require the elaborate farmeries described in the volume before us. And the reason is plain. The air, which is the very feeding-ground and nurse of plants, is the solvent and destruction of the animal. It is as necessary, indeed, to animal life as it is to vegetable, but in a very different way. If growth in both cases be as the erection of a building, the air is in the one case the very material which the builder uses, while in the other it is useful chiefly as burning waste stuff out of his way; and it is liable at any time to extend its ravages and destroy both the raw material he employs and the result of his labour. A living plant upon the ground, exposed to air, and rain, and sunshine, increases and produces; a living animal similarly placed becomes emaciated, dies and disappears. It is but a moderate estimate of the rate of movement in the air from which we must conclude, that during its summer life there beat on the surface of every square inch of green leaf the particles of several hundred thousand cubic feet of air—enough to burn up hundred weights of wood,—but instead of being consumed, the plant is fed by all this air. Had so much passed by every inch of surface presented by the lungs of a sheep or of an ox, the animal must have been destroyed; the food it ate would have been as completely burnt as if passed through a furnace, and the "furnace" walls themselves would have yielded to the flame. Of course Nature provides that so much air shall not be allowed to act upon the animal; the quantity it breathes is regulated by the capacity of its lungs, and the quickness of its breathing by the coldness of the air; but it is upon our power of influencing this process, and of diminishing its destructive effect, that the economy of the meat manufacture in great measure depends. And it is thus a capital point in the theory of farm buildings that air, which is the food of the living plant, is the solvent of the living animal. Indeed, from the simple fence of thorns, whose shelter is explained in Sussex on the ground that a gust of wind once entering a bramble bush cannot find its way out, up to the most perfect covered yard planned and pictured by Messrs. Stephens and Scott Burn, this is the fact which throughout has, consciously or unconsciously, influenced farm architects. Farmeries, if we except the granary, the stable, and the shelter for implements and manures, are meat manufactories. Turn over all the plates of plans here bound up, and you will see every apartment labelled cowhouse, feeding-boxes, calf-houses, pig sty, sheep-sheds, cattle, cattle, cattle. The object is to conduct the feeding process in shelter, amidst warmer, dryer air than can be had outside. There is less waste in feeding,—a smaller portion of the food is used as fuel,—the air is less destructive.

A modern farmery, accordingly, is an establishment for the manufacture of mutton, beef and pork, enabling the feeding of live stock with less expense of labour and of food. Our authors say that the guiding principle of such erections has not till now been made known. In this, however, they are certainly mistaken. Such men as the late Prof. Low, of Edinburgh, the present borough engineer of Liverpool, and others, have long since pointed out the true principle which ought to guide the architect of such buildings. The connection *in fact* of all such buildings as are connected *in use* is the principle in question. This for the saving of labour —and such method, whether it be open yards and shed, or stalls, or boxes, or covered yards, as shall best combine warm air and ventilation with a certain degree of healthful exercise for the cattle, and thus save food from being made mere fuel—these are the two leading considerations which guide intelligent farm architects. *The Athenæum on the Book of Farm Buildings.*

THE REARING OF CALVES.

A GREAT deal has been said by writers on the subject about the season of the year when young calves should begin to arrive. No doubt it is better, as a general rule, to have the calves well forward and [illegible] for early Grass, by which means they are so [illegible] to require considerably less attention the following winter. But near a town, where a winter dairy is [illegible] object, or on the establishment of a nobleman or gentleman, where a supply of milk is as indispensable in winter as at any other time, the period of calving must, of course, be greatly modified; or, more [illegible] speaking, there will be a sort of duplicate calving [illegible] extending from October to June. And we know [illegible] reason why good calves should not come under the same law which the Cheshire farmer laid down for application of dung to the Grass land. "Put it [illegible] the year round," said he; and we would say, "[illegible] calves whenever you have them;" *i.e.*, if they are [illegible] rearing. If you do not consider them worth rearing, better to sell them at once at a nominal price; [illegible] such a one as we met with in Renfrewshire [illegible] where a contract was made by a dairyman to [illegible] 100 bull-calves, at 6*s.* 9*d.* per head, the buyer removing them on the day of their birth. Not that we think taking the calf so early from the cow is by any means a humane practice; nor yet that we should prefer cutlets from such veal, although retailed by local butchers and grocers at the low rate of 2*d.* per lb. From the circumstance named, an Ayrshire steer is unknown.

We do not intend collating the pros and cons as to whether suckling from the cow, or feeding from the pail, is most desirable in the generality of cases. After a pretty full trial both ways (although our predilections were in favour of the former as most natural and [illegible] manageable), we have been forced to the belief that the latter is the preferable course for the farmer, and for the country at large. In the first place, you can, by an ample allowance, make quite as precocious a development, if that is the object, as by allowing the calf to suck the best cow that can be met with. Then you have the satisfaction of knowing exactly what quantity of milk is consumed, when you give a stated allowance from the pail. You can also the sooner reduce the quality of the rations, by addition or substitution of other food, so as to increase the number of the stock; and, in a general way, the calf learns the sooner to shift for itself. It is certainly a matter of occasional convenience to let a pair of calves run with a cow which is intended for a barrener, and, after weaning, then to fatten the nurse. But, if done as a general practice, it so far retards the bullings of the cows as to defeat the annual arrangement for a certain number of calves at a particular season. Where suckling from the cow is the rule, five calves may be moderately well brought up by an average cow; two and two in succession, and a single calf to finish off with.

But, under any circumstances, we consider it desirable to allow the calf to *remain with its dam for the first three or four days after calving.** It is undoubtedly the most natural way, and there are several advantages connected with it. Youatt expresses himself very truthfully when he says, "It is a cruel thing to separate the mother from the young so soon; the cow will pine, and will be deprived of that medicine which nature designed for her, in that moisture which hangs about the calf, and even in the placenta itself; and the calf will lose that gentle friction and motion which helps to give it the immediate use of all its limbs, and which, in the language of Mr. Berry, 'increases the languid circulation of the blood, and produces a genial warmth in the half-exhausted and chilled little animal.'" He further says, and we are glad to quote from so high an authority, "In whatever manner the calf is afterwards to be reared, it should remain with the mother for a few days after it is dropped, and until the milk can be used in the dairy. The little animal will thus derive the benefit of the first milk, that [illegible] which nature has given an aperient property, in order that the black and glutinous fæces which had been accumulating in the intestines during the later months of the fœtal state might be carried off." Moreover, the cow's udder becomes more soft and pliant than it would otherwise be, by the calf being allowed to suck for a time. In the case of young cows especially—the udders of which are generally hard—it is often advisable to allow the calf to suck for a couple of weeks. The whole of the milk need not be consumed by the calf, but a portion drawn into the pail before it is allowed the teat. Thus a double purpose is served; the calf gets the richest (the last) of the milk, and the udder is softened the more by its efforts to obtain what it requires.

Not much trouble is generally experienced in getting the calf to take to the pail. We find it better to [illegible] the evening's meal, and next morning a very little attention induces the majority of them to partake of what is set before them. At most the guidance of the fingers may be wanted for the first meal or two.

As regards the quantity of milk which is needed to keep a moderately bred Short-horn calf in a thriving condition, we have found the following allowance to come pretty near the mark, although the appetite of calves varies, both in individuals and at different times with the same animal :—

1st week with the dam; or 4 quarts per day, at two meals.
2nd to 4th week, 5 to 6 quarts per day, at two meals.
4th to 6th week, 6 to 7 quarts ditto ditto.

And the quantity need not, during the ensuing si[illegible]

* This is questionable. See p. 147.—P. H. F.

weeks (after which it is weaned), exceed a couple of gallons per day. This implies that the calf is fed upon new milk only, and that no other feeding liquids are employed. But, in addition to the above, the calf will, towards the fourth week, begin to eat a little green hay; and, in a week or two later, some sliced roots, or meal, or finely crushed cake, mixed with hay-chaff; and, if really good, creditable beasts are wanted—such as will realize 25*l*. a-head from the butcher when turned two and a half years old—a little cake or meal in their early days will be found a desirable investment. In fact, we doubt not but 1 lb. of cake per day to the calf will make as much flesh as triple the quantity of cake at any period of after life. As regards meal, if that is given with the chaff, we prefer Oatmeal, or Barley-meal, or Wheaten flour, but not the meal of Beans or Peas. Others may see it differently, but we believe Beans to be too heating for any class of young stock. For roots, the best we know of is the Carrot, grated and mixed with the chaff, or sliced thin with a knife and given alone. It is also, of all roots, the one which we find them most fond of, and which they will most readily take to. As soon as they can eat them freely, an immediate reduction in the supply of milk may be made.

In most articles it holds good in the end that "the best is the cheapest." So with the rearing of calves; the best class of food, or that above referred to, is found to give the greatest ultimate satisfaction. But practically the question often is, how to rear good calves with comparatively little new milk, a condition which circumstances often render almost imperative; for where dairy produce, in any other form, is the chief object, the calves stand in a secondary position, and are treated accordingly. But let us ask whether you cannot rear good stock under such circumstances also? We believe that this may be, and often is done. We manage to turn out from 25 to 30 calves annually—such as will pass muster anywhere—and never use at any one time more than six gallons of new milk daily. For this purpose, as well as to obtain a regular supply of milk for other purposes, the calves are allowed to come at different periods, extending from October to May. Hence the calf-house previously described has generally a succession of occupants throughout the season; and as one lot are ready to be removed, and placed loose in a small hovel, with yard attached, others fill their places. We begin with new milk from the pail, which is continued for a fortnight after leaving the cow. Then skim-milk—boiled, and allowed to cool to the natural warmth—is substituted to the extent of one-third of the allowance. In another week the new milk is reduced to half, and at the same time, not before, boiled Linseed is added to the mess.* As soon as they take freely to this food, the new milk may be replaced with that from the dairy, and the calf is encouraged to indulge in a few sliced Carrots and the other dry foods named. Among the multitude of substitutes for milk that have at different times been recommended, we have found nothing better than those previously referred to.† It is true we have omitted any allusion to the "Irish Moss," which calves seem to relish well, though it does not prove of a fattening nature. For the lot of calves named, a couple of hundredweight of this article is found a desirable addition, and lasts throughout the season.

In rearing calves after this fashion, success greatly depends on attention to a few minute details. Not that a list of rations should be given for different sizes, ages, &c., but the attention, care, skill, and labour needed thus to make good calves are far greater than when either suckling from the cow or feeding with a liberal supply of new milk from the pail is the system adopted. For instance, even in the matter of giving their food, a wide difference will be seen in the appearance of two calves, the one fed by a careful painstaking hand, the other allowed to gulp down its milk without time for admixture with the saliva. This is a very important matter, and one on which success or failure very frequently depends. The nearer the process of feeding is approximated to the slow but beneficial act of sucking, the better. Those calves which are in the habit of drinking much too fast are generally detected by a glance at their "paunchy" condition. We have treated such customers successfully by putting on a small leather nose-bag at meal times, the bottom being perforated with a couple of holes, each 3-16ths of an inch in diameter.

(*To be continued.*)

Home Correspondence.

Harvest in Berkshire.—Since my last we have had such splendid weather, that all harvest operations have been finished in first-rate condition. With regard to the yield of Wheat, those that have threshed out known to me, state it variously. One said his Talavera only produced six sacks per acre. The grain was a beautiful sample, and sold on Thursday last at our market for 66*s*. per qr. This Wheat when growing showed numerous blind ears, more than I ever remember to have seen before. On questioning the bailiff as to the dressing of the seed, he stated that he used the usual quantity of vitriol, 1 lb. per sack, dissolved and mixed with the heap upon the barn floor. The plant showed a fine tillering, and up to blooming was thought to bid fair for a splendid crop. Another in this district whose Wheat I saw bids fair to be unusually fine—supposed by those who are competent to judge to be equal to a load to the acre. The land seeded over 30 acres; when beat out I will inform you the market yield; this was spring sown Talavera. There are some few who had unfortunately blight, so that taking the average of good and bad yield, it is undoubtedly under an average in this district. Barley is above an average, but not of the best malting quality, showing much white or steeled grain, the yield of many being very good; I have heard of 7 quarters to the acre, price 38*s*. to 42*s*. per qr. Oats very good—both Tartar and Canada, the latter a fine sample and promising over average. Beans in some places a thin crop, others very good, a fine sample. Peas very good, promising over an average. Mangels much improved but patchy. Swedes and Turnips excellent, not much blighted, and promise well to head. Carrots looking well and likely to be of great use, promising to lift well. Potatoes in some places greatly diseased, while on light sandy lands lift well, only a few faulty. Among the many lands growing Wheat this last season, those promising best as to yield and sample were sown early in October, while those planted in November or later either showed blight or thin and inferior grain. *Thomas Fordham, Snelsmore East, near Newbury.*

Harvest Dates.—I annex a decennial statement of the dates of the cereals on my farm coming into ear, flowering, and being harvested. The notable fact of 1861 is the extraordinary favourable weather in the actual harvest, which allowed of its being finished in a shorter time than we have on the record of any of the former years.

DECENNIAL STATEMENT OF CEREALS ON HOLBROOK GRANGE FARM, NEAR RUGBY.

Year.	When in ear. Wheat.	When in ear. Barley.	When in ear. Oats.	When in flower. Wheat.	Began Harvest. Wheat.	Began Harvest. Barley.	Began Harvest. Oats.	Finish Harvest.
1852	June 18	June 25	June 19	June 27	August 5	August 9	July 2?	August 28
1853	,, 16	,, 20	,, 21	,, 25	,, 13	,, 11	August 12	Sept. 7
1854	,, 20	,, 23	,, 20	,, 25	,, 21	,, 18	,, 10	,, 4
1855	,, 23	,, 30	,, 27	,, 30	,, 14	,, 29	,, 13	,, 8
1856	,, 22	,, 28	,, 28	,, 29	,, 14	,, 27	,, [illegible]	,, 6
1857	,, 10	,, 22	,, 22	,, 18	July 30	,, 20	July 29	August 25
1858	,, 10	,, 17	,, 17	,, 14	August 2	,, 9	,, 2?	,, 23
1859	,, 12	,, 12	,, 11	,, 19	,, 8	July 23	,, 27	,, 20
1860	,, 24	,, 24	,, 24	July 6	,, 28	Sept. 11	Sept. 1	October 3
1861	,, 14	,, 21	,, 20	June 21	,, 16	August 26	August 10	August 31

Charles M. Caldecott, Holbrook Grange, Sept. 23.

Buscot Park.—You have referred in your last Paper to this place as rapidly rising out of the ruins of its former condition; the contrast is certainly very great. The beautifully undulating park of 207 acres was totally overrun with Thistles, Rushes, and coarse Tussac Grass, and most liberally studded with anthills of ample dimensions. The deer fence, about three miles in length, had evidently seen the "mist of years," and was in such condition as to be in good keeping with all around it. Passing along from the mansion to the top of the deer park a prospect met the eye, beautiful perhaps to the adherents of Nimrod, but to the eye of the farmer or economist most saddening. About 120 acres of good soil overrun with Gorse, brushwood, &c., perfectly waste, and worse than useless, as adjoining farmers to their cost know. The arable portion was divided into fields ridiculously small, and belted with Elms whose ample size and vigorous growth betokened the intrinsic value of the soil and subsoil, and though perhaps they might not be "masters of all they surveyed," at least were pretty well masters of all within the measure of their roots, which with the broad wide-spreading hedges occupied many a broad acre of good land, and was evidently years behind the spirit of the age. The farming also gave unmistakable indications that the occupants were not disciples of Yester, or votaries of Jethro Tull—but who can farm undrained clay? In close proximity and marked contrast to this shone the green and well-tilled hills of Coleshill, looking, one might also fancy, as if in scorn on its less favoured and neglected neighbour. Such were a few of the stubborn facts with which Mr. Campbell bought the property in July, 1859. Now, on entering the Faringdon end of the estate you pass a homestead to the left, and near which are the first visible signs of the extensive drainage works which have been carried out. Crossing the highway in a large culvert is the drainage water discharged by one of the main arteries, an open cut. Into this the under drainage of nearly 200 acres empties by two outlets, the various mains being at great expense carried ahead, connected together by junction wells, and discharged at those outlets, which are built up in a neat and artistic manner, cast iron pipes inserted some little way from the outer extremity, containing a trap allowing free egress of the water, and effectually preventing the ingress of vermin likely to damage the drains. A little further on the Lechlade Road is the tilery, erected by Mr. Campbell for the supply of drainage and building materials. The principal drying sheds are large and well constructed, and internally lined with flues to facilitate the operations in frost and damp. The rolling, pugging, &c. is accomplished by steam, and the average weekly number of pipes turned out is about 60,000, with bricks in proportion. But hitherto the supply has fallen far short of the consumption, and not only neighbouring tileries, but also those at a great distance, as Evesham, Gloucester, &c., have been taxed to enable the extensive works to be carried on uninterruptedly. A little further on, to the left, and you enter a new road made to the Home Farm, crossing by a bridge a magnificent sheet of water 22 acres in extent, covered with wild fowl, and justly considered one of the gems of the estate. At the lower end of the lake a small overshot waterwheel has been erected by Mr. Campbell, and to which is attached two pumps to pump spring water, brought from a distance to the top of the mansion, an elevation of about 140 feet. Following the new road you come to the Home Farm, at which is being erected modern buildings adapted for the economical working of improved barn and other machinery; there also is a bone mill at which all the bones used as manure on the estate are crushed, and also manufactured with superphosphate. Upwards of 150 tons were crushed last season. Passing the Home Farm with a continuation of the new road, you encounter another of those main arteries or open cuts, and this, which must have cost a large item, runs through a large valley, halving it in two. Right and left of this cut lie about 400 acres arable land, including 120 acres of Gorse waste aforementioned. Miles of hedges have been grubbed here, and the whole of the Gorse land dug over by manual labour, and the roots extracted and burnt at an average cost of about 4*l*. per acre. Through this valley, and winding in the direction of the open cut, passes the new road made for general farm traffic, but more especially with one eye to the full development of steam cultivation. And when we mention that the contract price of haulage alone, for each yard of road-making stones, averages 3*s*., some idea may be formed of the cost of about 3 miles in length, averaging a width of 13 feet, and with 4 feet underdrains on each side the road. From the fact of 4-5ths of the estate being in Grass, it is clear that the growth of wool, mutton and beef, must be the staple articles of produce, yet the great expense incurred in making this road, and the laying out the fields in 50 acre pieces, shows that the growth of Wheat is not altogether ignored. And with the plough engine propelling itself without the aid of a headland rope, and having the command of the whole 400 acres, with about 400 yards of rope on each side of the road, the cost of cultivation must be reduced to a minimum, while the deep and more efficient tillage, larger and more certain crops, will eventually pay the proprietor for his spirited enterprise and large outlay. But, as you say, the employment of the steam plough upon that portion of the property retained in hand is but a small item in the energetic work of improvement which has been going on. *M. L.*

Hints about Steam Engines.—As a general rule farmers find themselves under powered as regards steam. Price being an object, we are all too apt to believe that such and such a boiler will be large enough; experience, however, proves the mistake, for wherever an engine is introduced, some additional unanticipated demand is usually made upon its powers. In my case this took place, so I had to contrive accordingly. Assuming that we take care that all the flues and chimney are perfectly free and clean, the only remedy is increased draught and ample fire-grate room. In my case the necessity was great, because I desired to burn the dust or screened coal, which is to be had at half the cost of large coals. I believe that at the pit's mouth enormous accumulations of this dust might be had for a nominal price. We now know that the river steamers could not get draught enough in their short funnels to burn the Welsh hard coal, but an accidental rupture in a boiler under the funnel caused such an increased draught, that now every steamer has a small jet of steam, brought direct from the boiler in a small pipe rising vertically in the base of the funnel. The opening is only about the one-eighth of an inch, but we are aware of its power when, passing under the

* Five pounds of Linseed will make about 7 gallons of gruel, and suffice for five good-sized calves; considerable allowance must, however, be made for differences of quality in the Linseed, that from India not being gelatinous enough, and therefore boiling hard, instead of "coming down kindly."

† A gentleman on the borders of Leicestershire, who has been in the habit of rearing largely, economically, and well, writes us that "he has tried many substitutes for milk, such as hay tea, oilcake gruel, Irish Moss, Oatmeal, &c., but has come to the conclusion, after considerable experience, that nothing is so suitable as milk." Another gentleman, who is one of the most successful managers we know of, gives it as his experience, that "the best substitute is Linseed and Wheat ground to meal (2 bushels of Linseed to 1 bushel of Wheat), boiled to gruel of a moderate thickness, and then mixed with an equal quantity of skimmed milk."

bridges, it strikes the arch, or the descending funnel. Supposing that there is steam in the boiler, which is generally the case with us on lighting our fire, we turn on the steam, and at once a roaring draught of air passes through the bars and through the mass of dust coal, and produces a quick bright fire much like a blacksmith's forge. In fact, the air being driven out of the chimney by the steam, we have the pressure of the atmosphere brought to bear through the fuel, on the vacuum so produced. By this extra supply of oxygen, you may make your power increase to any additional amount that your engine and machinery will safely carry. This powerful draught renders all sweeping unnecessary in the vertical shaft, but your horizontal flues must be well looked after. We always turn a part or the whole of our exhaust steam into the main shaft. The steam jet causes more perfect combustion and diminishes smoke. When the fire burns clear we turn it off, and only use it as occasion demands. *J. J. Mechi, Sept.* 23.

Foreign Correspondence.

STUTTGART, *August* 31.—*Crops in South Germany and its present state of Agriculture.*—Having read in No. 32 of the *Agricultural Gazette* an account of the crops and condition of North Germany, it affords me much pleasure to give you a sketch of those of South Germany, especially of the kingdom of Wurtemberg (or Suabia) a country which, besides Saxony, Mecklenberg, and Baden, appears to be one of the best cultivated districts of the German Confederation.

The white crops of the southern districts of Germany, especially of Wurtemberg, are now all secured by this time, with the exception of occasional patches of Oats. Harvest began in the lower parts of this country towards the latter end of July or the beginning of this month; some early crops, such as Rye, winter Barley, and Rape, some two or three weeks before that time. The general yield of the crops may be called good; Wheat, or what is mostly grown in this country, "dinkel" or "spelt Wheat," was rather under average, whilst spring Wheat, Barley, and especially Oats have yielded full crops. Peas and Beans, which partially are not quite reaped yet, are plentiful, and the latter having got well over the flowering season, have set many pods. Mangel Wurzel, Sugar Beets, Carrots, and Potatoes, which latter, however, are much diseased in some districts, are generally promising crops, the present warm season with occasional showers being very favourable to their growth. Indian Corn and Sweet Sorghum (Holcus saccharatus), which latter has been introduced into this country only some years ago, enjoy a luxuriant growth in the fertile plains of this district, and by means of ample manuring and a summer heat this year exceeding sometimes 26° and 27° of Reaumur in the shade (nearly 100 Fahr.), the latter may yield, in two cuttings, from 35 to 40 tons of excellent green fodder per acre. The cultivation of commercial plants, such as Hops, Tobacco, Oilseeds, &c., is carried on extensively in some districts of this country and the adjoining Grand Duchy of Baden.

The Hop plant, though attacked partially by blight or mildew, is in a general sense better off than what we have heard of English reports, and on the average a middling crop, say 4 to 5 cwt., may be expected per acre. Tobacco, which before the issue of the new American duty was grown to some extent here, and especially in Baden, is giving way now more and more to the cultivation of Hops, Hemp, Flax and other better paying crops. Rape, which is one of the principal crops in this country, yielded hardly an average crop, say from 18 to 20 bushels per acre. Wine, which is grown with some success in the warmer and lower parts of this country, promises to be good in quality, but not in quantity, the young Vines having suffered much by early frosts. The crops of orchard and fruit trees, which are very plentiful here, and to be met with on every roadside, are mostly very deficient this season, and whilst in other years the trees break often under their burden, they scarcely will furnish this year the necessary quantity of cider for the small farmer and the labouring class.

Having given you thus a rather hurried report on the crops of South Germany, I shall proceed with my sketch of the agricultural condition of this country, which I can illustrate best in giving you a description of some farms I was visiting during this season:—

The farm I am first going to speak of is called Berkheim Farm, at a distance of about five miles from Stuttgart, and lies on the foot of the "Solitude," a famous castle which has been built by one of the Regents of Wurtemberg, about 100 years ago. The soil of the farm is rather heavy and consists mostly of the diluvium or alluvium of the Keuper (or what is called in England saliferous and gypseous marls with beds of variegated sandstones and clays, &c.) Some good roads lead from the farm to the neighbouring residence and to some other market towns, but the roads on the farm itself, are, as generally in this country, most miserable. There is no want of hands at any time, one or two surrounding villages supplying amply the required number of labourers. A man gets there now 8*d*. and a female 6*d*., besides their full board, which consists of soup, bread, cider, and for dinner of a meal dish and meat twice a week. During harvest-time they earn from 2*d*. to 3*d*. more per head, besides plenty of cider. The ploughmen (here three in number) and cattlemen, mostly unmarried lads, are lodged and boarded on the farm, and get besides from 5*l*. to 7*l*. per annum. The proprietor of Berkheim Farm is a private gentleman, who being employed elsewhere, has given the farm in lease for nine years, and only comes out to spend some months during the summer. The rent of Berkheim Farm, which is about 200 acres imp. (30 of which are meadows and the rest arable land), makes 300*l*., or 30*s*. per acre, which is one of the highest rents in this country, others varying between 10*s*. and 25*s*. per acre, according to soil and position. About 200*l*. are paid in kind, whilst the rest varies according to the fairs or average prices which a certain fixed quantity of corn may strike at a neighbouring market town. Tithes, rates, and other duties, which tenant and landlord pay there half and half, amount to about 6*s*. per acre, and are included in the above sum.

Berkheim Farm does not form a whole area, the most of its fields being divided and intersected often very inconveniently by the adjoining fields of the villagers or peasants. By this bad division of the land, which unfortunately predominates through a great part of the kingdom, many inconveniences result; thus, for example, a farmer whose land is not laid together is obliged to follow the same course of cropping as his neighbours, and if he wants to make an improvement in draining, trenching, &c., he cannot do it if the latter do not choose to do the same, because there is a great want of farm roads. Much has been tried and written by intelligent farmers against this great drawback, but the most of the land being occupied by the peasantry, who do not wish for its consolidation, nothing essential has been done yet in this matter, and very likely we shall have to wait another 10 or 15 years, until our Chambers decide upon enforcing by law a better arrangement of our fields and field roads.

The premises of Berkheim Farm, especially the cattle and sheep stables, are insufficient and in no good condition. They form a square, and their arrangement is about the following:—In the front we find the landlord's house; to the right the farmer's house, garden, and rickyard; to the left cattle, sheep, and horse stables; and opposite the landlord's house, to the north, the barn, threshing machine, oxen stable, poultry house, &c. Almost all corn is housed here, as usual in South Germany, in large barns, and stacks are only used sometimes for hay or for corn if the space in the barns should be wanted. Thus we find there only two stacks, which however distinguish themselves by their easy form and great practicability. They consist only of a single post, round which a removable roof of thatch or tarred paper is adapted, which cover can be raised or lowered at leisure.

These stack covers have an umbrella-like form and cost about 9*l*. to 10*l*. a piece. Water is supplied in sufficient quantity by a well and two ponds, by means of which about 10 acres of the meadow-land can be irrigated artificially. The largest part of the arable land, about 145 acres, lying in the above-mentioned fertile valley, consists of a rather heavy loam, whilst the rest, of about 25 acres, has a very strong clay soil, which requires always two pairs of horses or steers for ploughing. The subsoil is mostly similar to the surface soil, and formerly wet spots have been removed by draining. The principal crops grown on this farm are, Spelt Wheat (a particular kind of Wheat, which has such a thick chaff that only about the half of the crop consists of corn, which, however, is said to be superior in quality to the common kinds of Wheat), Wheat (mostly Talavera and bearded kinds), Barley, Oats, Sugar Beets, Mangel Wurzel, Tares, Red Clover, Lucerne, Beans, and some Indian Corn (Maize), and Sorghum. The course of cropping is a free and independent one, in so far at least as the above-mentioned circumstances allow it. Generally a winter grain crop is followed by a spring grain crop, and that one by a fallow crop, such as roots, Beans, or Clover, &c. Of Sugar Beets, which are grown extensively here for a neighbouring Beetroot sugar manufactory, often two succeeding crops are taken, and in the third year Wheat is sown. The average crops and average prices from the year 1832 to 1856 are the following:—

(Dinkel or) Spelt Wheat ..	per acre imp.	60	bushels	at 2*s*.	6*d*.	per bushel.
(Common) Wheat	” ”	24	”	6	0	
Barley	” ”	35	”	3	8	”
Oats	” ”	40	”	2	0	”
Beans	” ”	30	”	4	6	”
Beet Roots ..	” ”	12	tons	16	8	per ton.
Potatoes ..	” ”	3½	”	48	0	”
Clover	” ”	2.4	” in 2 cuts			then from 2*s*. to 4*s*., now 3*s*. to 5*s*. per cwt.
Meadow Hay ..	” ”	2.1	”	”		
Vetches	” ”	1.5	”	”		

N.B. All corn is sold now by weight, and the cwt. of the Zoll-Verein taken as basis. The adjoining prices of cereals are now rather higher, and a hundred weight of Wheat was noted at the last market at 11*s*. 8*d*. to 12*s*., or about 56*s*. per quarter.

The ordinary dressings are for Sugar Beets, 15 tons; Winter Corn, 6 tons; Fallow crops, 6 tons 6 cwt.; Meadows, 5 tons of farm-yard manure per acre.

About 800 tons of farm-yard manure are produced on the farm, but no artificial dressing is used (which I think is a failure). The above results of the average yield of the different crops have increased in the latter years by means of a better management about 10 per cent. which (I am sure of it) could easily be doubled, if more artificials were used on this farm.

The live stock of Berkheim Farm consists of about 50 heads of cattle (including 26 dairy cows, 2 pairs of oxen, bull and some 15 heifers and calves), 6 horses, some pigs, and about 400 sheep, which latter however are pastured, and stall-fed during winter on the farm.

The cows, which as usual in South Germany are stall fed all the year round, get only green food in summer, and straw, hay, draff, and some Mangel in winter; they are mostly bred from a Lr... and German and Dutch cows, which have not a good appearance, but possess good milking qualities. Each of these cows gives on the average about 500 gallons milk per year, which is sold sweet every day at Stuttgart for about 6½*d*. per gallon. The young calves are mostly sold to the butcher when four or five weeks old, and only those are reared which are necessary for supplying the old stock. Most of the South German farmers think stall feeding a great improvement, and an advantage which they have before other countries, even before England, and in so far as much food and manure is saved by this way, they may be quite right; but where good pastures are more frequent, and good quality of meat and handsome forms are looked upon, this system of stall feeding cannot always be recommended, at least not for young stock. The sheep stock consists of about 400 heads of different age and sex, and are kept there, as generally in Germany, for their wool, and not, as in Great Britain, for the manufacture of meat; they are a cross of German and Spanish sheep, and clip on the average about 1½ lb. wool apiece, which varies in price from 2*s*. to 2*s*. 6*d*. per lb. The whole flock is pastured during summer on the adjoining hills, and folded every night on the arable land, where the poor beasts have to content themselves with sleeping until the next morning, when they are turned out again to their pastures, accompanied always by a shepherd and his dog. During our often very severe winters the sheep are housed and fed on straw and hay, on which of course they cannot grow very fat. The few farmers who fatten their sheep with oilcake and more send them to foreign markets, mostly to Paris, where better prices are paid than here; the same seems to be the case with fat bullocks, and thus it is not surprising at all why we have to go so far to get a good piece of beef or mutton. Pigs are bred and fattened on this farm, and on a visit last spring I saw a lot of four or five sows of a good cross of English and German pigs, which as I afterwards heard died all but one of an inflammation or swelling of the spleen, very likely in consequence of the great heat and their narrow and badly ventilated pigsties.

The horses, with the exception of two, which are from Belgium, are bred in the country, and are not so strong as the English and Scotch horses; they do almost all the ploughing here (oxen being used more for harrowing and lighter works), and plough on the average four-fifths of an English acre per day and per pair. The cultivation of the land is very good on this farm, at any rate far superior to what may be seen on the adjoining fields of the peasants, who neither drain, clean, nor plough their land deep enough.

Beet and other root crops get two furrows, or a deep ploughing, say eight inches, before winter, and a scarifying in spring; then the land is harrowed and cleaned from quick grass, and at last ridges are made with a peculiar kind of ridging plough, which has three double mould boards, and thus makes 3 ridges at the same time, each ridge being about 15 inches apart from each other; this machine is very simple (as all our implements are), and consists merely of an oblong frame on the lower part of which three double mould boards are adapted. The manure, which is carted out here or ploughed under as soon as possible, is always brought in before winter. As soon as the ridges are made, the Beet-root seed is dibbled in by hand on the top of the ridges, and then harrowed in or rolled along the ridges. The sugar Beets require a careful singling out and a repeated hoeing by hand, which latter, in a season like the past, had to be done three times at a cost of about 28*s*. per acre. All hoeings are done here by hand and mostly as day work, as piecework in a land where almost every weed requires to be pulled and cleaned from the surrounding earth, would only give a very incomplete and superficial result. Horse-hoeing with Garrett's horse-hoe would, without doubt, reduce the cost of hand-labour, but in a country where labour is so cheap, the introduction of foreign machinery is not going on very fast, and only of late years have some enlightened farmers commenced to use British machines and implements, which in most respects are superior to any in Europe.

Mr. L., the farmer of Berkheim Farm, has found the sugar Beet-root his best paying crop, though it costs him the most labour, and after deducting the expenses for oversight, labour, rent, and taxes, &c., he makes on the average a clear profit of 3*l*. per acre, especially in a season like the present, where fully 15 tons may be expected per acre. Wheat, as well as all corn crops, are sown broadcast by hand, as the above mentioned division of the land prevents Mr. L. from a more extensive use of machines. After Beet-root this is the best paying crop, and takes therefore also nearly one-fourth of the area. On the other crops I have not to say much. Barley and Oats are sown and treated in the ordinary way; Beans and Potatoes are sown or planted in the third furrow, and horse-hoed

repeatedly and at last ridged up. Clover and Lucerne, which latter I consider one of the best and cheapest forage plants, are growing first-rate on the calcareous soil of Berkheim and 3 to 4 cuts may be got in one season from the latter. Harvest began here on the 29th of July with Barley, and last week everything, except the green crops, has been cleared. The most of the corn was cut by the sickle, and in day labour at the above rates; on another farm which Mr. L. occupies in Bavaria, all is mown, and from 4s. to 5s. paid per acre without beer or cider. Only the mowing of meadow land was done here by piece-work: this year at the rate of 1s. 5d. per acre with some bread and cider, or in money at about 2s. per acre, which is very cheap. The day and piece-work on Berkheim Farm amounts to about 200*l*. a year, or 20s. per acre, which in comparison to the many hand works done on this farm, is rather low. Mr. L. takes always some three or four pupils in his house and family at a fee of from 30*l*. to 40*l*. per year, and for learning a good sound farming, as is the custom in this country, a young man could not find a better place. In a "radius" of four to five miles from the above farm, there are two other much larger farms, where all kinds of machinery and new modern systems of farming are used, but having already trespassed upon the space of your valuable Paper, I shall speak of them another time, and I beg your indulgence for my deficient style and composition. *J. R.* [Many thanks.]

Societies.

East Cumberland.—At the late successful annual meeting of this Society, presided over by P. H. Howard, Esq., of Corby Castle, who said, as an indication of the interest taken in this meeting, that the gross receipts five years ago were 30*l*., while on this occasion they had been 116*l*., Mr. Howard spoke of the harvest. He said: From what I can gather, though deficient in quantity, it is good in quality. The season perhaps has been too moist almost for everything, even for Turnips, and perhaps the only consolation we have is that we shall not, I trust, have to import that large quantity of Dutch hay which two or three years ago formed so advantageous an item of the receipts of the railway of which I am one of the directors. It is always interesting to the farmer and to the agriculturist to give what may be the future price of grain. So far as I can see there seems to be no reason to think that it will be very low. On the continent, in France, the quantity of the harvest has been decidedly deficient; in the United States, we all know that many hands that were devoted to agriculture have been directing their energies to military purposes. One wonderful invention has been applied to the purposes of agriculture, and that is the telegraph. It is now possible for the corn merchant to ascertain in a few hours the price of grain at Odessa, and to ascertain if that is such that it will justify him to give an order. On the show of live stock Mr. Howard said—

I think in some countries which can boast of a more genial climate and perhaps a richer soil than our own the stock is almost confined to the Short-horn, a breed of which we have seen some excellent specimens to-day; but, as Sir Jas. Graham remarked, for poorer soils and wilder districts the Galloway race of cattle has, and probably always will have, a certain hold in the public estimation. As regards sheep I may perhaps be a little over romantic in deploring the departure from the field of competition of the mountain sheep and the Herdwick; but you have all seen the excellent specimens of Leicester and I believe crosses with the Cheviot. It would be trespassing on your time to go through the different descriptions of stock which have been exhibited. I am sure the pigs were a credit to Cumberland, and though there may not have been as many shown as on some occasions I have seen at Wigton, they do credit to the exhibitors. If the farmer has severe competition the breeder of horses may congratulate himself that the foreign supply gives him an excellent market. And on the point of horses, I may say that the demand in the other countries and among our neighbours in France is perhaps enhanced by the fact that the Emperor of the French pays a practical tribute to the endurance, fleetness, and excellence of English horses by adding a great number to his stud, and purchasing a great number of English horses.

The Secretary, Mr. T. James, read the following report:—

"The Report of the Judges of Green Crops.

"We thought it desirable to delay the inspection to as late a period previous to the exhibition as we could, in order to allow time for the different crops to be as fully developed as possible. The entries, although only 7 in number—3 for farms above 150 acres, and 4 for farms under 150 acres—yet they were spread over a considerable extent of country, some of them being at a great distance from others. As to the crop of Potatoes, we regretted to find the general report of the extent and virulence of the disease and failure of the crop fully confirmed, and we need not repeat the observation that has so frequently been made that it would be extremely desirable (if it is possible) to find something like a substitute for that valuable esculent, and thus to wean in some degree the public habit and taste from an entire dependence upon so precarious and uncertain a crop; for there is too much reason to fear the prediction made immediately after the first appearance of this mysterious visitation, that a time might come when from adverse seasons—wet seasons like 1838, 39, and 40, an entire failure might ensue. We are sorry to say that what we observed in our survey was calculated to confirm the fear that such a catastrophe might some time occur. The land under Potatoes this year is of more than usual extent, and they in the early part of the season gave great promise of being an abundant crop, until symptoms of disease manifested themselves; and although the effect is evidently in some degree modified by the kind of Potatoes planted, and the nature and quality of the soil, yet the result will be a source of much disappointment to the grower, and also a loss to the public.

"The Turnip crop upon the whole was perhaps as good—as well cleaned and got up, as, from the unfavourable state of the weather during the greater part of the time since the seed was put into the ground, could be expected. It would scarcely be necessary at this time of day to remind Turnip growers, if they will have a good crop, that there are three points, proper attention to which is indispensable—1st, manure well; 2nd, clean well; 3rd, thin well. This applies to every variety of Turnip. There is yet another suggestion which it may not be out of place here to make, and that is to have as great a proportion of Swedes in proportion to the common varieties as soil and circumstances would admit. By this, perhaps, nearly as great bulk may be had, with a greater weight of crop, and which would be much more valuable either to consume upon the land or to draw off for use during winter. These points ought to be attended to by all Turnip growers, but are indispensable with those who expect to compete successfully for a prize. All the lots brought under our notice gave ample proof that the first point had been attended to; some of them showed that the second and third points had also not been neglected, but we would feel that we were wanting in our duty to the office we had undertaken, as well as to parties exhibiting, if we did not say that some (it might appear invidious to particularise) were deficient in the third point, while some were short in both the second and third, while others had, in our estimation, too much land under common Turnips in proportion to Swedes.

"After a careful inspection of the different lots we had to examine, we award the prize for the farms above 150 acres to Mr. Fergus Graham, Wetheral Abbey; and for the farms under 150 acres to Mr. Arthur Wannop, Geltside."

Farmers' Clubs.

Northamptonshire: At the annual meeting of this Society last week a ploughing match on a large scale took place. There were 73 competitors, six of the entries being for farmers' sons, and 15 being in the champion or open class. A mere lad of 15, named Purser, about five feet high, sent by Messrs. Howard, beat his older and more formidable rivals in this case as he did at Stratford-on-Avon in the preceding week. The following were the awards of the judges:—

Champion Class.—By the Society (open to All England)—To the ploughman who shall plough in the best manner, with two horses abreast, without a driver, half an acre of land, not less than 4½ inches deep, within four hours—5*l*. to F. Purser, ploughman to Messrs. James and Frederick Howard, Bedford. A piece of serviceable plate, value 10*l*., to Messrs. J. and F. Howard, Bedford, as the owner of the team winning the prize. Highly commended: Thomas Burdett, ploughman to Earl Spencer, Althorp Park. Commended: George Brown, ploughman to R. Hornsby and Sons, Grantham.

The contest between the three ploughmen who represented the Messrs. Howard, Hornsby and Sons, and Ransomes, was remarkably keen, and each man exhibited extraordinary skill in ploughing. The work done was the admiration of the visitors, and no contest was ever better sustained, or so equally continued. The palm of victory, however, justly fell to Messrs. Howard's man.

The steam ploughs attracted much attention, the fields being crowded with attentive and deeply interested observers of all classes. The only two steam ploughs exhibited were Mr. Fowler's and Mr. Smith's, the respective merits of which have been so much canvassed that it is unnecessary in this place to go into the question in detail. Mr. Butlin, of Northampton, was the exhibitor of Smith's, and Mr. Owen Wallis, of Overstone, was the exhibitor of Fowler's cultivator. he prize of 30*l*. was awarded to Mr. O. Wallis.

At the subsequent dinner Lord Henley, alluding to the application of capital to the cultivation of the soil, said:—

"It must not only be done with liberality, but with judgment, and the question to be asked was, how capital was to be brought to the land? It could not be done unless the land was divided into proper divisions, and that was a question into which the tenant could not enter, for it was the duty of the landlord so to regulate his farm that capital should come to the land. Capital would not come except to large farms, and he should therefore be glad to see *no farms laid out of less than* 300 *acres*. When they came to small farms, what a miserable thing it was, one year the occupier perhaps getting 100*l*., and the next year probably getting into debt. The noble lord dwelt upon this subject at considerable length, contending it was highly desirable, if not absolutely necessary, that small farms should be swallowed up by the large ones, and that long leases were absolutely indispensable for the proper cultivation of the land and the application of the necessary capital to it. It is impossible, however, to report the speech, in consequence of the confusion that prevailed when his lordship persisted in giving utterance to opinions that were evidently not shared in by the vast majority of his audience. Lord Henley's remarks were completely drowned by general cries from all parts of the room of 'Sit down,' 'No, no,' and other cries of a similar import, amidst which his lordship at last sat down."

The good temper of the meeting was partially restored by the pertinent remarks of Mr. John Beasley, of Thorpelands, who succeeded his lordship. "To carry out the suggestions of the noble lord," said Mr. Beasley, "would involve an entire revolution of the whole system of farming, and would lead to the destruction of a class of men whom they should be sorry to miss from their farms, their markets, and their annual gatherings. It was true that many evils resulted from farms being worked with an inadequate amount of capital, and also that there were many advantages in connection with large farms; but if they were wise they would hesitate a long time before they endeavoured to get rid of the class of men to whom reference had been made." Mr. John Beasley, of Brampton, followed up these remarks of his relative by saying, that so far from having none but large farms, if they would wish to be a happy and prosperous people, they must have holdings of every size—from a rood to a thousand acres. *Bell's Messenger*.

Notices of Books.

Practical Papers for Farmers' Clubs: No. 2. On Economising the Urine of Towns; addressed to the Worshipful the Mayor and Corporation of Nottingham. By William Wallace Fyfe, Author of "Agricultural Science applied in Practice." Pp. 36. Groombridge.

This is a useful little tract, and it is a good idea of the author to issue a series of good agricultural essays which may be discussed at the monthly meetings of Farmers' Clubs. The subject of the present one is certainly of great interest to agriculturists. And all the authorities are here marshalled and quoted and placed in a succession of paragraphs on a string of Mr. Fife's own spinning, by which the main facts of the question are well presented to the reader. We quote from the Appendix Mr. Austin's report on the sewage irrigation of land, which has proved so successful near Edinburgh.

"Of the application of sewage by open irrigation the Craigentinny meadows at Edinburgh certainly form the most striking and successful example.

"The area of land in question consists in all of about 260 Scotch acres, the Scotch acre being rather more than an acre and a quarter English. They are irrigated with the waters of the 'Foul Burn,' into which about half the city of Edinburgh is imperfectly drained.

"Over the 'Old Meadows,' which comprise about 180 acres, the sewage is said to have been so applied for these 60 years. This land lies somewhat on a gentle slope. It was partly drained some time ago. I was informed by the superintendent that these drains were, in his opinion, rather an injury than a benefit, as they carried the liquid too rapidly from the land. Mr. Oliver, however, under whom the drainage was carried out, believed that he derived great advantage from it, as it permitted the water to percolate the soil to a greater depth than it otherwise would have done. Another informant states, no doubt with much truth, that if, on the one hand, the sewer water is allowed to form pools on the land, the crop is destroyed, or the yield is small in quantity and bad in quality; but, on the other hand, in very dry seasons, the exits of the drains require to be plugged up in order to retain a sufficient degree of moisture in the land.

"The soil of another portion of the meadows which was laid out about 30 years ago consists of sea sand, which, before the irrigation was commenced, was very nearly barren and worthless. The whole of this land is irrigated by gravitation from the Foul Burn, but another portion, consisting of about 50 acres, lies above that level, and to this the sewage is raised by a steam engine of about 8-horse power.

"The sewage water is conducted to the Old Meadows by open channels or ditches, following the levels of the ground; but the level lands more recently irrigated are divided into panes of about half an acre each, over which the water is successively conducted.

"The irrigation goes on incessantly, except on Sundays, all the year round, winter and summer. Two men complete the irrigation of all the lands supplied by gravitation in about three weeks or a month, and then work through it again. The operation is conducted night and day, and a weekly return made of the work done.

"No other manure is ever applied to the irrigated lands.

"Each irrigation of the 50 acres of high level land is completed in about 10 days.

"The quantity of water discharged over the low-lying lands in the course of the year must be enormous. I had no opportunity myself of testing the ordinary flow of the Foul Burn, as there was incessant rain during the whole period of my visit; but it has been estimated at 220 cubic feet per minute. The superintendent informed me that it is never allowed to run to waste except in times of excessive floods. There are not many days in the year in which a greater amount of rain would fall than during my visit, and the irrigation was then proceeding as usual. If it be only assumed, however, that the quantity which comes down in dry weather is applied during nine months of the year, deducting the Sundays as well, there will, on the above calculation, be passed over the meadows annually a depth of water between 6 and 7 feet; and yet the superintendent states that the fertility is invariably in proportion to the quantity of sewage employed.

"'The more water each portion receives the larger is the crop raised on it, and the higher the price got for that crop in the market.'

"The higher level lands do not get nearly the same quantity, because of the expense of pumping, and the results are proportionally less.

"I could perceive no trace of effluvium from any part of the land under irrigation at the time: but although it was cold weather, sufficient smell arose from the ditches to indicate that in summer time they must become highly offensive. I agree in the conclusion arrived at by several previous observers, that the solid deposit in these channels has been the cause of all the complaints that have been made of these works of irrigation, and I believe that the evil, under a better system and with greater care, may certainly be obviated. I shall have to allude further to this point in another part of my report.

"The solid deposit is at times cleared out from the

d—itches at Edinburgh, and is used with other manure on other parts of the farm.

"The laying out of these meadows for irrigation is said to have cost 6*l.* to 30*l.* per acre; the chief portion of the work, that of the old meadows, having cost 15*l.* per acre."

Farm Memoranda.

AUSTRALIAN FARMING.—*The Farm of Mr. Barton,* "situated on the basaltic plains at the southern base of the Auzaghe Yowang Hills (commonly called the Anakies), about half way between Geelong and Bacchus Marsh, and distant about 12 miles from the Duck Ponds station on the Geelong and Melbourne Railway." After some description of the district, the writer states that Mr. Barton had been farming very successfully for some years in that neighbourhood, having previously had considerable experience as a farmer in the sister colony of South Australia, but he had no knowledge of farming till he arrived in Australia. It seems that much of late has been said in the province of Victoria "about farming not being a remunerative business," and the writer puts "the actual experience of a really practical man" against the truth of such an opinion. That Mr. Barton's neighbours have the advantages of a good soil and situation is evident, for we learn that "the soil on the ranges and on the slopes in the immediate vicinity is of the richest description, and consists of a thick black mould, such as we generally find near the site of volcanic eruptions. The natural grasses are very luxuriant, and support at the rate of about three sheep to the acre. One gentleman has 3000 acres fenced in and rendered sheep proof, which supports at the present moment 3000 sheep. The crops, too, have turned out excellent, and as much as 40 bushels of Wheat and upwards per acre have been attained on the slopes of the ranges." Mr. Barton's farm, however, is at some distance from the ranges, and the soil is "of a brownish stiff clay, hard on the surface, and here and there a plentiful outcrop of boulders. The natural grasses, too, are of the poorest kind." His farm "forms part of a stony plain, and as bleak, barren, and unpromising a plain as one could well imagine." Such land is usually considered in the colony as valueless except for sheep grazing. On such land then, profitable results have been achieved. The following are the operations of 1859:—The land having been previously broken up, it was ploughed and sown, the corn reaped and threshed, produced from 150 acres of Wheat land 20 bushels to the acre, equal, at 6*s.* per bushel, to 900*l.* The reaping and threshing being done by machinery, gave Mr. Barton an advantage over those of his brethren who adhere to hand reaping and threshing, and this really made up all his profit. A pair of horses will plough 5 acres a week, which cost "for wages 20*s.*, rations 6*s.*, horsefeed 10*s.*, and blacksmith work 4*s.* per week. Total for 5 acres, 40*s.*, or at the rate of 8*s.* per acre. In sowing, two teams of working bullocks (four bullocks to the team) and one man, for sowing, managed five acres per day; allowing wages and rations as before, and a little for tear and wear, the expense will be 12*s.* 2*d.* for five acres. Then there is the seed at the rate of 1¼ bushel to the acre, 12*s.* 6*d.*—for the five acres, 62*s.* 6*d.*; allow also for contingencies an additional sum, say 5*s.* 4*d.* This will make the whole five acres, 6*l.*, being at the rate of 1*l.* 4*s.* per acre. In harvesting, Mr. Barton employs one of Mellor's Adelaide stripping machines, along with one of Hornsby's spike roller winnowing machines, and so the reaping, winnowing, and bagging operations are carried on in the field at one and the same time. By using these machines he was able to reap, clean, and bag his Wheat at the rate of 7 to 8 acres per day, and at a cost of only 9*s.* per acre. Mr. Barton estimates that the whole of the plant and machinery requisite for farming, say 150 acres of Wheat, on land similar to his own, may be purchased for 200*l.*; and he believes that 50*l.* per annum, or 25 per cent., for tear and wear, depreciation of stock, &c., would be amply sufficient. On 150 acres, then, this would amount to 6*s.* 8*d.* per acre. The Wheat crop on this farm yielded from 20 bushels and upwards per acre; and the price obtained, on the farm, was 7*s.* 3*d.* per bushel on the average." Such land may be rented at 20*s.* per acre, and the following is the result:

	£	*s.*	*d.*
Ploughing, per acre	0	8	0
Sowing	0	2	6
Seed, at 1¼ bushel	0	12	6
Reaping, &c.	0	9	0
Tear and wear, and depreciation of stock ..	0	6	8
Rent	1	0	0
Cost per acre ..	£2	18	8
150 acres, 20 bushels, at 6*s.*	900	0	0
Cost of do., at 2*l.* 18*s.* 8*d.* per acre	435	0	0
	£465	0	0

A British farmer would say "But the farm can't be all Wheat," and that some allowance must be made for keeping up the fertility of the soil to a given Wheat-growing power. But perhaps our Victorian farmers have not yet exhausted the original fertility of the land and at all events we present the account as one which the editor deemed entitled to the heading of "The farm that paid the rent and something more." It strikes us that such land as is described must in Victoria be considered very highly rented at 20*s.* per acre. We should have supposed such land would scarcely bear any rent. In contrast with the cost of 9*s.* per acre for reaping and threshing according to Mr. Barton's practice, the cost of the ordinary system of hand reaping is thus stated:—

	£	*s.*	*d.*
Reaping, per acre	1	0	0
Rations and grog	0	2	2
Carting	0	5	0
Thrashing	0	11	8
Winnowing and bagging	0	5	0
Cost per acre	£2	3	10

The *Gazette* also deals with the same subject, and admits that "farming, as a rule, has not paid in Victoria," and attributes it to the excessive cost of labour, and the bad quality of much of that labour.—*Economist.*

Miscellaneous.

Disinfection of Sewage.—A very important experiment has lately been brought to a successful result at St. Thomas's, Exeter. Last year the Board of Health of that district were indicted for nuisance arising from their sewage outfall, annoying the servants and passengers of an adjoining railway, and were about to expend 1200*l.* to convey the sewage to a more distant point and discharge it into the River Exe. When just about to incur this heavy expense for so very unsatisfactory an object, the attention of the Board was called to the successful use of carbolic acid by Mr. McDougal, in disinfecting the sewage of Carlisle, and after long discussions they determined upon adopting the same plan. The result is most satisfactory; 1200*l.* has not been expended, but instead of it only 10½*d.* a day is spent for carbolic acid; the sewage is rendered inoffensive, and may be, and probably will be, employed usefully without annoying any one, and pollution of the river is avoided.

Calendar of Operations.

OCTOBER.

BERWICKSHIRE MERSE FARM: *Sept.* 30, 1861.—During the month now closing, about 3 inches of rain have fallen on 17 days. The weather has been throughout mild, with westerly winds, and scarce a touch of the customary frosts. On the 23d the barometer fell very low, but the wind and rain were nothing to speak of; so that we were in a great degree exempt from the storm so extensively prevalent on that day. The great bulk of the white crop was by that time secured, but there are still to be seen patches of Wheat and Barley in stook. Beans are getting a fair enough season, but they must be exposed for some time yet. The quality of grain is generally fine, but as threshing proceeds, it is apparent that Barley is decidedly short in quantity. Of Wheat nothing can be yet known from actual trial; for it is our latest cereal, and little will be threshed before Christmas, except for seed. One thing is certain, everybody finds a deficiency of bulk. Mangels are a poor affair. Turnips, on the contrary, are very promising, having all along received a sufficient supply of rain. Bean Stock consequently is in good demand. Draft Ewes sell readily at the fairs; and cattle in fresh condition are soon picked up. Feeding beasts can safely lie out yet, and get their Turnips in the field. Little has been done to the lifting of Potatoes, but it is plain that the disease is very bad, and there is an unusual quantity of small; the marketable produce may not be half of that of last year. *J. T.*

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended October 3; observed by Mr. J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air.				Temperature of Soil 1 foot below the Surface	Rain.	Wind	Barometer.
	Max. in Sun.	Max. in Shade.	Min.	Mean.				
	Degs	Degs.	Degs	Degs.	Degs.	Ins.		
Friday 27 ..	77.0	62.0	36.0	52.7	55.4	..	S.W.	29.79
Saturday 28 ..	73.0	63.0	49.0	58.5	55.0	0.01	S.	29.70
Sunday 29 ..	64.0	61.0	50.5	56.5	55.7	0.50	S.W.	29.70
Monday 30 ..	73.0	64.0	44.0	56.2	56.3	0.04	S.E.	29.72
Tuesday 1 ..	94.0	73.0	53.5	68.5	57.0	..	S.E.	29.60
Wednesday 2 ..	90.0	70.0	51.5	63.2	58.0	0.05	S.E.	29.73
Thursday 3 ..	88.0	66.0	43.0	60.0	57.8	..	S.E.	30.0

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

BOOKS: *N. Burgess.* Mr. W. C. Spooner's book on the Sheep (Cradock and Co.) is a capital work on the management and diseases of sheep. Of its special fitness to Cape experience we are no judge.

POULTRY: The return of warm weather has had the effect of depressing trade. Retailers buy from hand to mouth, and salesmen are obliged to effect speedy sales. The demand for Pheasants was very dull even on the first day. The sale of them is generally fluctuating and unsatisfactory till the beginning of November, or till the weather becomes cold enough to admit of speculation and export. But for the steady demand for the foreign, the Paris market in particular, there would hardly be sufficient demand for the Pheasants that come to London. The Michaelmas market may be considered to have been an average one. Geese were heavy at prices rather low than otherwise on Thursday and Friday, but, as is always the case when Michaelmas day falls on Saturday or Sunday, the Saturday market has an influence, and almost invariably causes a slight rise.

Large Fowls	Each	3*s.* 6*d.*	to	4*s.* 0*d.*
Smaller ditto	,,	2 6	,,	3 0
Chickens	,,	1 6	,,	1 9
Geese	,,	5 6	,,	8 0
Ducklings	,,	2 6	,,	2 9
Pheasants	,,	3 6	,,	4 0
Grouse..	,,	2 6	,,	3 0
Partridges	,,	1 3	,,	1 4
Rabbits	,,	1 4	,,	1 5
Wild ditto	,,	0 8	,,	0 9
Pigeons	,,	0 7	,,	0 8

THE CHAMPION PLOUGHMEN OF ENGLAND: The three ploughmen of the great rival plough makers, Ransomes, Howard, and Hornsby, have just met at two important matches, "Open to All England;" the latter of which came off yesterday at Northampton. A youth, hardly 5 ft. high, sent by Howard of Bedford, beat his older and formidable rivals in both contests. *Times.*

ORCHARD HOUSE TREES AND VI
Winter wash with Gishurst Compound, recom
by Mr. Rivers, see "Orchard House," ninth edition,
Mr. Pearson's recommendation in *Cottage Gardener,*
1861. Sold retail by Nurserymen and Seedsmen in
3*s.*, and 10*s.* 6*d.* each.
Wholesale by PRICE'S PATENT CANDLE CO., Limited.

A New Discovery.
IMPORTANT TO THE GENTRY, NURSERYMEN, HOP GR
GARDENERS, AND OTHERS.
BUNDY'S LIQUID BLIGHT COMPOSIT
the most effectual article yet invented for the
tion of Blight and all Insect Life upon Trees and P
out injuring the Plant, as proved by Mr. Turner,
series, Slough, and other Nurserymen. It is
valuable as a Winter Dressing for Trees, and very
cleansing Hops.
Price 1*s.* per gallon, to be had in any quantity
LAMBERT, Manufacturer, Garden Pottery, Slough,
TESTIMONIAL.
"The Royal Nurseries, Slough,
"Sir,—Your Composition for destroying
Fly, and every insect that injures plants and
effective. Our young Cherries were cleared
also were the Dahlias; but for these and
Plants it should be diluted with water. I
mend it as safe and effectual, and can be u
"Yours truly,

Magnified Aphides.

NEAL'S PATENT
PASTILS.
The following is one of
70 Testimonials received by J.
from gentlemen personally
to him.
"I beg to bear my testimony
value of Neal's Pastils, and
cacy in destroying, most
the Green Fly without any
and at a nominal expense, when
pared with the use of Tobacco
Tobacco Paper.
"JAMES SANDERS,
"Nursery Grounds, Abergav
Sold by all principal Seedsmen
Price 1*s.* and 2*s.* per packet.
Patentee, J. NEAL, Birmingham.

MINTON AND CO. have REMOVED from
Place, Blackfriars, to 50, Conduit Street, Regent Street,
ENCAUSTIC and other PAVEMENTS, EARTHENWARE
and PLAIN TILES. Designs and Estimates prepared.
Manufactory: Stoke-upon-Trent.—Oct. 5.

BENJAMIN EDGINGTON respectfully informs
the Public that in consequence of the Premises,
Charing Cross, being required, he has REMOVED that part
his business to his OLD ESTABLISHED Marquee, Tent,
Cloth, Sack, and Tarpaulin Manufactory,
2, DUKE STREET, LONDON BRIDGE, S.E.
The Stock from Charing Cross will be sold at reduced prices.
All orders to be addressed, 2, *Duke Street, London Bridge,*
S.E., having NO OTHER Establishment.

CARSON'S ORIGINAL ANTI-CORROSION
PAINT is now used extensively for all kinds of
WORK, such as IRON, WOOD, STONE, BRICK, COMPO,
&c., and has been proved, after a practical test of 70 years,
surpass any other Paint.
For fuller particulars, see No. 35 of the *Gardeners' Chronicle,*
Page 802, or apply to WALTER CARSON & SONS (Successors to the
Inventors), 9, Great Winchester Street (near the Royal Exchange), London, E.C.
No Agents throughout the United Kingdom

Oil Paint no longer Necessary.
HILL & SMITH'S PATENT BLACK VARNISH
for preserving Iron Work, Wood, or Stone. This Varnish
is an excellent substitute for oil paint on all out-door work,
is fully two-thirds cheaper. It may be applied by an ordinary
labourer, requires no mixing or thinning, and is used cold
is used in the grounds at Windsor Castle, Kew Gardens, and
the seats of many hundreds of the nobility and gentry,
whom the most flattering testimonials have been received
which HILL & SMITH will forward on application.
Sold in casks of about 30 gallons each, at 1*s.* 6*d.* per gallon
the Manufactory, or 1*s.* 8*d.* per gallon paid to any station
the kingdom.
Apply to HILL & SMITH, Brierley Hill Iron Works,
Dudley, and 76, Cannon Street, E.C., from whom only
be obtained.

JOHN SHEWEN, Sevenoaks, Kent, Manufacturer
of all kinds of HOTWATER APPARATUS for H
tural Purposes, Public Buildings, Dwelling Houses, and
on the most improved principles, and of Rogers's Conical
the Improved Corrugated Saddle Boiler.

HOT-WATER PIPES, at Wholesale prices, with
Elbows, Syphons, Tee Pipes, and every other connection
Wrought and Cast-iron Boilers, Saddle, Conical, Cylinder,
Eliptic, from 24*s.* each. Improved Boilers and Iron
to use without brickwork, 50*s.* each. Valves from 1*s.*
Beck's Patent Valves. Furnace Doors, Furnace Bars,
Cisterns, and Builders' Castings of every description in stock at
Mr. LYNCH WHITE'S Iron Wharf, Upper Ground Street,
Blackfriars Bridge, London, S.

FOR SALE, on very advantageous terms,
HOUSES, GREENHOUSES, and CONSERVATORIES
of all sizes and shapes.
Apply for further particulars to E. DENCH, King's Road,
Chelsea, S.W.

Horticultural Works and Hot-Water Apparatus
Manufactory,
Kensal Green, Harrow Road, London, W.
JOHN TAYLOR AND SON beg to call the attention
of the nobility and gentry to the very superior manner
which they Erect all kinds of Conservatories, Vineries, Green-
houses, &c., combining every improvement with elegance
design and durability of materials and workmanship.
Their VENTILATING APPARATUS for the Fronts and
Roofs of Houses has given the highest satisfaction. Churches,
Chapels, Schools, Entrance Halls, Public Buildings, &c., heated
with Hot-Water Apparatus in a most economical and efficient
manner.
J. T. & SON have great pleasure in referring to numbers of
the nobility and gentry by whom they are extensively engaged.

Splendid New Strawberry "Eclipse" (Reeve).

MESSRS. VEITCH AND SON beg to call attention to this really first-class Fruit, full particulars of which will be found in their advertisements which have appeared in this Paper during the months of August and September. 12s. per dozen; 80s. per 100. Price to the Trade on application.

Chelsea and Exeter.—Oct. 12.

STRAWBERRY PLANTS, of Sorts, from 2s. 6d. per 100. Double White Sweet-scented NARCISSUS, 2s. 6d.; Double Yellow do., and Double DAFFODILS, 1s. 6d. per 100; Purple MARTAGON, 2s., and Orange LILIES, 1s. 6d. per doz.

Wanted, EARLY FORTYFOLD and ASH-LEAVED KIDNEY POTATO SEED.

GEORGE CORNWELL, Seedsman, &c., Barnet, Herts, N.

Strawberry Plants for Forcing.

J. KEYNES has to offer Plants unusually fine of the following varieties, viz. :—

KEEN'S SEEDLING,
INGRAM'S PRINCE of WALES, and
CAROLINA SUPERBA.

The above are well matured in 8-inch Pots and invaluable for early work. Price on application.

Castle Street Nursery, Salisbury.

FORCING STRAWBERRIES, or for Orchard-house culture.—BRITISH QUEEN, OSCAR, SIR CHAS. NAPIER, and KEEN'S SEEDLING, well established in 32-sized pots in the far-famed Wimbledon loam, and cannot fail to produce a large crop.

Price per dozen or hundred on application.

Stout HAMBURGH and other VINES for planting.

FRANCIS R. KINGHORN, Sheen Nursery, Richmond, S.W.

Strawberry Plants.

JAMES KITLEY begs to announce that the plants of his unequalled STRAWBERRY, CAROLINA SUPERBA, are now remarkably fine, and which he can supply at 5s. per 100. Also extra strong plants of Goliath, British Queen, Elton Pine, Keen's Seedling, Sir C Napier, Eleanor, Duc de Malakoff, La Chalonnaise, Gelineau, Madame E. Vilmorin, and Princess Alice Maud, at 3s. 6d. per 100.

The following varieties may be had in pots, at 1l. per 100, which would ensure a crop of fruit next season, viz., Carolina superba, Goliath, Sir C. Napier, Keen's Seedling, Trollop's Victoria, and Princess Alice Maud.

Lyncombe Vale Nursery, Bath.

Orchard House Trees.

J. AND J. FRASER, Lea Bridge Road Nurseries, N.E., having a fine stock of—

PEACHES	APPLES
NECTARINES	PEARS
APRICOTS	PLUMS and CHERRIES

in Pots, well set with bloom buds, beg respectfully to offer them to the notice of intending Purchasers.

A CATALOGUE will be forwarded on application.

The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

Vines for Fruiting in Pots.

J. AND J. FRASER, Lea Bridge Road Nurseries, N.E., beg to offer strong VINES with well ripened wood of the best varieties.

A CATALOGUE will be forwarded on application.

The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

VINES in POTS; also PEACHES, NECTARINES, and APRICOTS in POTS, of the very best sorts, of a good size and in excellent fruiting condition, to be disposed of by a private gentleman who wishes to sell part of his stock solely because he has not room for them. The purchaser might see the whole and select for himself.

Apply by letter only, at first, to Mr. A. W., at Messrs. Sawyers, News Agents, No. 1, Castle Court, Birchin Lane, Cornhill, London, E.C.

Vines for Fruiting in Pots.

JAMES CARTER AND CO., SEED MERCHANTS and NURSERYMEN, 237, 238, High Holborn, London, W.C., and Crystal Palace Nursery, Forest Hill, Sydenham, have much pleasure in offering strong short-jointed well ripened VINES for Pot Culture, of all the most esteemed varieties, capable of bearing six to eight bunches each.

For list of names and prices see AUTUMN BULB CATALOGUE, post free on application.

PAMPAS GRASS.

J. C. & Co. have a splendid Stock of the above highly ornamental Grass, well established in Pots, from 5s. per dozen. Extra strong, 1s. to 1s. 6d. each.

Vines, Vines, Vines.

WILLIAM CUTBUSH, JUN., Barnet Nurseries, Herts, begs to invite an inspection of his fine Stock of FRUITING and other VINES in Pots, consisting of all the best varieties in cultivation. The following are remarkably strong and fine, from 8 to 12 feet in length, viz., Muscat Hamburgh, Muscat of Alexandria, Golden Hamburgh, Bowood Muscat, Lady Down's Seedling, Trentham Black, Buckland's Sweetwater, Black Hamburgh, &c. List and Prices on application. Also to his Stock of Specimen and Half-specimen New Holland Plants, Indian Azaleas, Stove Plants, &c.

W. C. Jun. would also especially call the attention of Mushroom Growers to his very superior MUSHROOM SPAWN, for which he has the highest testimonials from the most eminent Gardeners in the United Kingdom, and which he can with the greatest confidence recommend. References on application.

Seedling Thorn Quicks.

L. T. DAVIS begs to offer a very large and fine Stock of two and three years, at unusually low prices, which, with samples, may be had on application. Carriage free to Belfast

Ogle's Grove Nursery, Hillsborough, Co. Down, Ireland.

LAURELS.—A large quantity of fine healthy short-jointed Common LAURELS which escaped the severity of last winter, 2 to 3 and 3 to 4 feet, are offered to extensive Planters and the Trade.

Terms and CATALOGUES on application to A. GODWIN & SON, The Nurseries, Ashbourne, Derbyshire

Larches, Larches, Larches.

ALEXANDER PONTEY, of the Plymouth Nursery, begs to inform gentlemen intending to plant and the Trade in general that he can supply 200,000 extra-sized LARCHES, two and three times transplanted, from 2 to 4 feet high, suitable for New Plantations and filling up Old Plantations; also 100,000 PINUS AUSTRIACA, two and three times transplanted, from 6 to 9 and 18 inches high; and a large Stock of CONIFERÆ and FOREST TREES for general planting, at low prices, delivered Free to any Station on the South Devon, North Devon, or Cornwall line of rail. Prices on application.

Plymouth Nursery.—October 12.

New Rose Catalogue for 1861-62.

WOODLANDS NURSERY, MARESFIELD, NEAR UCKFIELD, SUSSEX.

WM. WOOD AND SON have the honour to announce that their CATALOGUES of ROSES and GENERAL NURSERY STOCK are now ready for distribution.

It is generally admitted that the county of Sussex has suffered less from the effects of last winter's frost than any other county in England, in consequence of which W. W. & Son have to offer a remarkably fine stock of Roses and Nursery Stock in general.

Rose Catalogue.

WM. PAUL (Successor to the late A. PAUL) respectfully announces that his NEW ROSE CATALOGUE is now ready for circulation.

Owing to the division of the Cheshunt Nurseries in the Autumn of last year, the greater part of his Roses were removed, and as a consequence escaped the devastating effects of the winter's frost. Standards, Half-Standards, and Dwarfs are alike vigorous and healthy, and he believes that his stock of Roses this autumn is the largest and finest in the country.

Cheshunt Nurseries, Waltham Cross, London, N.

Roses, Fruit Trees, &c.

WM. KNIGHT respectfully begs to offer to Amateurs both STANDARDS and DWARFS of the above, an immense Stock, which he has no hesitation in saying is one of the best grown in the kingdom.

DESCRIPTIVE PRICED CATALOGUES free.

Floral Nursery, Hailsham, Sussex.

Hardy Japanese Plants, New Roses, &c.

JOHN STANDISH has great pleasure in submitting the above to the consideration of his friends and the public in general, far exceeding in interest any that he has ever had the opportunity of sending out at any one time.

For a DESCRIPTIVE LIST of NEW FERNS, HARDY JAPANESE PLANTS, NEW ROSES, &c., see *Gardeners' Chronicle* for the first Saturday in every month.

Besides the above J. S. has a fine stock of CONIFEROUS PLANTS, HARDY SHRUBS and TREES, and a very large stock of VINES, which he can offer at reasonable prices, CATALOGUES of which will be shortly ready for distribution.

The Royal Nursery, Bagshot, Surrey.

Fruit Trees.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Fruiting Vines.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Roses.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Hyacinths.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Hollyhocks.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Azalea indica (Half Specimens).

J. IVERY AND SON most respectfully invite their patrons to an inspection of their unrivalled collection of the above, which contains all the newest and best varieties; likewise a nice collection of Standards. The Plants are clean, healthy, and well set with bud.

Dorking Nursery.—Oct. 12.

Azaleas, Camellias, &c.

FOR SALE, 20 good bushy Plants from 2 to 6 feet in height, fit for a Conservatory, consisting of 10 AZALEAS, 4 CAMELLIAS, and 6 others of various sorts, also 20 fine AMARYLLIS, at a moderate price.

Apply to Mr. A. CHANDLER, Horticultural Agent and Valuer, 28, Priory Road, Wandsworth Road, S.

New Cinerarias, Gloxinias, and Pelargoniums.

F. AND A. SMITH can still supply a few sets of their New GLOXINIAS, CINERARIAS, and PELARGONIUMS.

See *Gardeners' Chronicle* of Oct. 5, and CATALOGUE, which may be had gratis.

Dulwich, Surrey, S.

New Plants of 1861.

HENRY WALTON has now ready for Orders, at greatly reduced prices, nice plants of FUCHSIAS, PETUNIAS, VERBENAS, &c., of this season.

LIST of VARIETIES and Prices on application.

Edge End, Marsden, near Burnley, Lancashire.

Catalogue.

YOUELL AND CO.'S GENERAL and DESCRIPTIVE PRICED CATALOGUE for this season is now ready, and will be sent free on application.

It contains detailed Lists of Greenhouse Plants, Conifers, Shrubs, Gladioli, as well as all the newest introductions in Soft-wooded Plants.

Royal Nursery, Great Yarmouth.

Wholesale Catalogue.

GEORGE JACKMAN AND SON'S PRICED and DESCRIPTIVE CATALOGUE for 1861 and SPRING 1862, comprising Fruit Trees of all the leading kinds, new and selected Roses, fine varieties of American Plants, Choice and Rare Conifers, Evergreen and Deciduous Trees and Shrubs, and a fine Stock of Transplanted Forest Trees, &c., can be had free on application.

Woking Nursery, Surrey.

CHOICE CAMELLIAS and INDIAN AZALEAS.—The Undersigned is now sending out fine home-grown CAMELLIAS, of choice named varieties, full of flower buds, at 30s., 36s., and 42s. per dozen. Good plants, without flower buds, of fine named varieties, 18s. and 24s. per dozen

INDIAN AZALEAS, fine bushy plants of about 20 choice varieties, full of flower buds, at 15s., 18s., and 21s. per dozen.

Stout young plants, of about 36 choice named varieties, at 6s., 9s., and 12s. per dozen.

J. HENCHMAN, Edmonton, London, N

Winter Blooming Plants.

HUGH LOW AND CO. respectfully invite inspection of their very extensive Stock of CAMELLIAS, AZALEAS, ERICAS, EPACRIS, CYTISUS, &c. These can be seen at the Nursery in thousands, and are well worth the attention of intending purchasers.

Fine OTAHEITE ORANGES in fruit. JASMINUM GRANDIFLORUM full of flower buds.

Clapton Nursery, London, N.E.

CARTER'S FIRST-CLASS SEEDS of CALCEOLARIA, 2s. 6d. per packet.
" new blotched, 2s. 6d. per packet.
CINERARIA, 2s. 6d per packet.
PRIMULA, mixed fringed, 1s. per packet.
" dark carmine fringed, 2s. 6d. per packet.
" pure white fringed, 2s. 6d. per packet.

JAMES CARTER & CO., 237 & 238, High Holborn, London, W.C.

MINNIE BANKS and COMET. Coloured Plate, 1s. 6d. per post.

The above FUCHSIAS possess first-class properties, and show a striking advance on all others which have been sent out since the white corolla varieties were introduced.

E. G. HENDERSON & SON, Wellington Road Nursery, St. John's Wood, London, N.W.

CHÆROPHYLLUM BULBOSUM. Figured in *Gardeners' Chronicle*, Oct. 5, 1861.

New Seed, per packet, 6d. and 1s. each.

The BULB CATALOGUE free, and the BULB GUIDE on receipt of 18 postage stamps.

E. G. HENDERSON & SON, Wellington Road Nursery, St. John's Wood, London, N.W.

PHLOX and CYTISUS RACEMOSUS.—A choice assortment of the finest DWARF PHLOX, good plants in pots, 9s. to 12s. per dozen; old sorts, 4s. to 6s. per dozen; CYTISUS RACEMOSUS, nice plants with bloom, 6s. to 9s. per doz.

JOHN CRANSTON, Nurseries, King's Acre, near Hereford.

To Planters of Conifers.

YOUELL AND CO. can supply 50 species of RARE and HARDY CONIFERS in good plants for 5l., package included, and carriage paid to Liverpool, Manchester, Newcastle-on-Tyne, Hull, London, Peterborough, or to any Railway Station within 150 miles of the Nursery.

A LIST of the above can be had on application.

Royal Nursery, Great Yarmouth.

Can be Seen at Sunningdale Nursery, Sunningdale Station, South-Western Railway.

CHARLES NOBLE invites inspection, and would remind all interested, that his RHODODENDRONS have taken First Prizes at the opening Show of the Royal Horticultural Society, and every other show at which they have been exhibited during the last two years.

RHODODENDRONS for forcing; KALMIAS for forcing; and a magnificent stock of all the finest kinds of Rhododendrons in the world. CONIFERS and Hardy EVERGREENS by the 100 or 1000. ROSES and a General Nursery Stock well worthy the inspection of intending Planters or Nurserymen.

Hyacinths! Hyacinths!!

WM. CUTBUSH AND SON have the pleasure of announcing that the Council of the Royal Horticultural Society have accepted their offer of awarding PRIZES of Two Guineas and One Guinea to private growers, for the BEST and SECOND BEST COLLECTION of 12 HYACINTHS, distinct varieties, grown in pots, at their Spring Exhibition of 1862.

WM. C. & SON remind intending competitors that October is the best month for potting Hyacinths.

Highgate Nurseries, London, N.

The Gardeners' Chronicle.

SATURDAY, OCTOBER 12, 1861.

FEW persons comparatively in this country are aware of the enormous extent to which Fungi are consumed in some parts of the Continent. In our own islands even the most wholesome kinds are more or less distrusted; and in continental markets, according to the old principle of pardoning the crows, and proscribing the doves,* the rules of admission and exclusion are not always according to exact knowledge. In France, where the rule of admission is even more exclusive than English prejudice, in spite of Government stringency multitudes of Fungi are consumed, as may be seen from the more modern treatises of ROQUES, CORDIER, and others; and some, as the species allied to the true white-gilled St. George's Mushroom, which abounds in our pastures in May, as soon as the usual dry easterly winds give place to genial rains, are strung on threads and hung up in the kitchen or store-room like Artichoke bottoms for winter use. A few Champignons and Morels are occasionally so treated in this country, and some dried Mushrooms are imported, while a detestable production called Mushroom powder is sparingly sold by our oilmen. As we get further to the East Fungi are in much more frequent use. They form in their raw state, accompanied by the coarsest brown bread, a great part of the sustenance of the peasants in autumn, while many kinds are preserved for winter in vinegar, especially in Russia. For this purpose they seem to be gathered without much discrimination, and several acrid milky species, which would be eaten with fear and trembling amongst ourselves, are used with perfect security, the acid having probably neutralised the destructive properties of the peculiar poisonous alkali, on which the deleterious nature of many Fungi depends.

We have just received from Russia a portion of a string of Fungi, prepared like the Mousseron of the French, which consists of small specimens of Boletus edulis, whose true character is at once discoverable by the network on the dried stems. This species is often dried on sieves in Hungary,

* Dat veniam corvis, vexat censura columbas. Juv. Sat. 2.

and is much esteemed there. Like the fresh Fungus, however, it is too slimy when dressed to be acceptable to most palates. A few years since Dr. BADHAM called attention to this species at Tunbridge Wells, where it has ever since been eagerly sought for, but we have partaken of first-rate young specimens, in which condition alone they are fit for food, and though dressed under the immediate direction of our friend, they were to our taste a complete failure. The appearance of the Russian specimens is anything but inviting, and they have a disagreeable smell closely resembling that of Fenugreek. They are however, according to our informant, preserved in great quantities for the long fasts of the Greek Church, and are prepared by simply placing them in a stove in a saucepan of wat r, when they become soft, and the Russians make an entire meal of them.

Be the quality of Boletus edulis however when dry what it may, it is well for us to take a hint when offered. Is there no widely distributed Fungus which may be similarly treated, for as regards ourselves the Boletus is in most parts of England too rare to make it an object of general use? The question may be answered in the affirmative. We have a Fungus which grows wherever there are open pastures, and often in such quantities that it would not be difficult to collect several pecks in the course of the season, a Fungus far more rich in point of flavour than the Mushroom, and so delicate that it may be used where it is requisite that the sauce should not be coloured; a Fungus moreover which is almost as good when preserved as when eaten fresh. We mean the common Champignon, Marasmius oreades, which cannot easily be confounded with any unwholesome species, if the most ordinary discrimination be used. Strung on threads or dried on sieves, and preserved in paper bags in a closet where it cannot get damp, and in consequence become mouldy or mity, it is one of the most useful substances in the kitchen, so excellent indeed that no good cook who is aware of its qualities would willingly be without it. We are content to pay a high price for dried Morels and Truffles, and after all they are not to be compared with those preserved Champignons, which can be had for the trouble of gathering. *M. J. B.*

WE have to propose a new name for adoption *in the Kitchen Garden. For two successive weeks we have drawn attention to a little known root,* called by botanists CHÆROPHYLLUM BULBOSUM (see pp. 867 and 887), uncomm.nly good to eat, and as easy to grow as a Turnip. French lovers of good living call it *un végétal des plus délicieux*, in which we agree with them; for it is very like a boiled Spanish Chesnut without its crispness or hardness—at least such is its quality when plain boiled; probably it would be improved by the cookery employed for Salsafy or Scorzonera. But then the name! the hard Latin name! It is impossible to say what it would become among market gardeners. "Filly bulb" is the best shape it is likely to acquire. We, therefore, in order to avoid orthographical accidents, venture to recommend that it be called PARSNEP CHERVIL. It is like a Parsnep, but is in reality a sort of Chervil: and such a name may be considered pronounceable enough not to crack any ill-drilled honest British jaw.

We observe that a quantity of the seed is to be balloted for on Monday by the Royal Horticultural Society, which has bought up for the use of the members all the good seed that is procurable. We recommend those who succeed in drawing prizes to sow it *immediately* in good land, not light, either broadcast or in lines, but not buried more than by passing a roller over the soil.

THE daily papers announce that in the French markets the annual ceremony lately took place of promenading the KING OF THE PUMPKINS, that is to say the largest Pumpkin offered for sale. It weighed 242½ lbs., and was 10 ft. 4 in. in circumference. A market gardener at Orleans is said to have been the raiser. We have no record of anything like this in England. The heaviest Gourd that we remember was one raised by Lord RODNEY's gardener in 1834; but it only weighed 212 lbs., and measured only 8 feet round. French agricultural works, such at least as we have at hand, give no weights; but we believe a Gourd weighing 250 lbs. avoirdupois is mentioned somewhere.

Considering that these fruits can be grown in any cottage garden, the large quantity of food the really good varieties produce, and their very ornamental appearance in rough places, which suit them best, we should think it would be worth the while of the Royal Horticultural Society to consider whether they would not form a highly interesting feature in an Autumn Exhibition. A few prizes judiciously arranged would bring forth the merits of a much neglected branch of gardening in this country.

—— ONE of the most effective BEDDING DAHLIAS we have ever met with is a crimson variety, named Prince Arthur, raised by Mr. GAINES, of Battersea, and one which, though we believe distributed some few years since, is apparently not much known. It has been very extensively used during the present year in the grounds of the Royal Hospital at Chelsea, and also in Battersea Park, and in both places has been remarkably brilliant and attractive. This variety is one of those possessing a bushy, vigorous, sturdy habit, and grows about a couple of feet in height, the plants forming dense broad masses of foliage, above which the very numerous flowers are just elevated on stiff footstalks that seem to defy all injury from the weather, and overlay the foliage with a surface of rich bright colour. The flower-heads themselves—that is, the "flowers" of common parlance—are large for so dwarf a plant, with something of the Zelinda character about them, but they are elevated just above the foliage instead of being half hidden, and they are besides much better shaped, while the colour is of a rich crimson. For large beds, or for a front line in long shrubbery borders, this variety may be strongly recommended. It is indeed by no means rich in the properties of a florist's flower, although it may generally be found with a large proportion of tolerably perfect blooms, which are large and double without coarseness; but it is exceedingly rich in colour, which is its great recommendation. Those who can afford to dispense with the strict rules which guide the florist in his estimate of merit, and can admire a plant for its attractiveness, irrespective of any such "conventional" rules, cannot but favourably regard this variety for the object pointed out above. Another kind of similarly sturdy habit, with bold flower-heads forming a profuse mass just above the foliage, has been grown along with the foregoing under the name of L'Emancipe; in this the very pretty flowers are pale yellow tipped with cherry colour. As single plants to be dotted here and there about a garden, of which they form in autumn one of the chief attractions, there are to be found many somewhat taller kinds of more graceful habit than the foregoing, but the varieties above mentioned, and especially the first, are particularly suited for the special use to which we have referred.

—— We have received from Mrs. CARSTAIRS, of Edinburgh, flowers of a white TREE CARNATION, described as a sport out of a bed of white Cloves, and as being of very robust habit, an immense bloomer, and keeping quite true to the character it has assumed. Some of the plants, it is stated, are only now commencing to throw up flowering stems. The variety it is proposed to name The Bride. These Tree Carnations are extremely useful subjects for winter decoration; and that now before us appears to be an acquisition to the family, as far at least as can be judged from cut blooms, which did not reach us in the freshest state, and were consequently a little confused. The blossoms are large, bold, and full, and are remarkable for the large stout "pod" or calyx, which looks as if it could not split. The flowers had the strong delicious odour of the Clove.

—— While our own metropolis may boast of its extensive parks with verdant turf, and ample shade either present or prospective, all situated in its immediate vicinity, and accessible to all, the French metropolis has, it would appear, some advantage over us in respect to its squares and boulevards; and if we may credit the statements which have appeared in the *Constitutionnel*, it is there made a special object to provide these open spaces in situations where the population is the most densely crowded. Our French contemporary has recently made a comparison between the manner in which these things are carried out in France and in England in the following terms:—

"The municipal authorities of Paris have established squares in every place where large masses of people threatened to render the atmosphere heavy—in all the quarters too far distant from the Tuileries, Luxembourg, and Bois de Boulogne, for the inhabitants to be able to reach them easily. In London, on the contrary, with some few exceptions, there does not exist a square worthy of mention except in the rich and airy quarters. The finest and largest gardens are at the West End, in Belgravia, and Brompton—that is to say, at the gate of Hyde Park. With us, trees have been planted with a hygienic object; squares have been formed more particularly in quarters where the air stood most in need of being purified, and for that purpose trees of a special kind, and especially absorbent, have been chosen. Fountains also have been erected, which impart that salutary freshness to the air which is so necessary for the workman after he has been cooped up for the whole day in the heavy atmosphere of the workshop. In London the principal object thought of appears to be the health of the trees, and there has been chosen for them a mild and wholesome climate and a clear air in the neighbourhood of the parks, in order that they might not suffer too much from nostalgia. We do not mean to say that the city and other parts of London are completely void of squares, but only that they are so paltry that they might be said to have been blown there by the wind. But the general quarters of poverty — those masses of close and unhealthy houses, and the networks of dark and narrow alleys—in a word, every part which stands in need of pure air and of the light of day, have been forgotten, or rather neglected in this partition of life and health."

"In Paris the squares are open to every one; in London they are locked up, surrounded with high iron railings, and planted with shrubs, which prevent any one from seeing what is going on in the inside. On payment of a sum which generally amounts to 1l. sterling, each occupier of the houses which form the four sides of the square is entitled to a key by which admission is obtained to the garden. For a poor person, therefore, to have the power of taking his family into one of those enclosures he must in the first place inhabit one of the houses, of which the rent is exceedingly high, and then pay 25f. a year towards the expense of the garden. It will be, perhaps, said that this excites emulation, and is an encouragement to the endeavour to become rich. In London the squares are private property with which the State has no concern. In France, on the contrary, the initiative of these municipal improvements belongs to the Government, and it is to the city that we are indebted for their execution. The square of St. Jacques-de-la-Boucherie alone cost upwards of 2,000,000f. The Imperial conceptions have yet reached only the commencement of execution; we have already the Bois de Boulogne, the Bois de Vincennes, and the transformed Champs-Elysées, and we shall soon have public promenades in other parts. Before long Paris will be an immense garden. One need only walk in the middle of the day in the neighbourhood of the squares of the capital to see with what eagerness and delight the working classes avail themselves of them. To mention only one example, it is almost impossible to get into the square of the Arts et Métiers after 4 o'clock, so great is the crowd of persons assembled there."

"An objection was formerly made that the establishment of a public garden is an idea very practicable in London, but not feasible in Paris, where the turbulent and destructive people would soon break down the trees and tear up the flowers and shrubs. Experience has shown how ill-founded was that opinion. On the inauguration of the park at Monceaux all the gates were opened to the crowd, and no surveillance was exercised over the 50,000 persons who thronged the walks and alleys. At the end of the day the damage amounted to only 45fr. *for the turf trampled* [illegible] along the edges. This example appears to us to be conclusive. The squares have, moreover, been already for some time open to the public, and it has been found that the greatest decency and good order are observed. This is because the people comprehend that they are at home, and that the gardens have been formed for them. They feel that by breaking a flower they injure their own property, and they besides feel a respectful gratitude for the hand which has given it to them."

There is some force in these remarks about making the public gardens accessible to the masses by reason of their contiguity to their dwelling; and something has been done in this way even in slow-moving London by what we may call "gardenising" the parks; but there is room for much more to be effected, not only in the present available localities but in other and more numerous situations, so as to bring these humanising and health-recruiting flower-gardens to the very homes of the poorer population. We would much rather see this feature indefinitely extended around and within the metropolis, than find our botanic gardens, which should have other aims, yielding up their legitimate position in order to become merely or mainly, or even apparently, lures for pleasure-seekers.

—— The *Florist* figures one of Mr. STANDISH's new Gladioli, a charming variety with white flowers striped with red, and named in compliment to Mrs. REYNOLDS HOLE. We notice that the two groups into which the varieties of this flower are separable and to which we directed attention some time since, are here maintained. There is a continuation of a clever paper on Orchard House Culture, and notices of various exhibitions, besides a variety of gossip on other matters. It is announced that this publication has partly changed hands, and that with the new year its features are to be remodelled.

THE TREES OF PARIS.

THE transformation which Paris has undergone during the last ten years is not less conspicuous in her plantations and public gardens than in her streets and buildings. Watching their progress during the periodical visits I have paid to this capital, I have been enabled to observe many failures as well as successes, from both of which we might learn something that might induce us to rescue our London squares and parks from the dingy untidiness which characterises them.

In my early days, one of the beautiful features

of the French capital consisted in the trees which adorned the Champs Elysées, the Tuileries, Luxembourg, Jardin des Plantes, and the Boulevards. My recollections of them 45 years back are of fine healthy trees, chiefly Elms in the Boulevards and Champs Elysées, Horse Chesnuts and Limes in the Tuileries, retaining their leaves through the summer, and suffering comparatively little from the ill usage to which they are always exposed in crowded cities. The first great blow they received was the levelling of those of the Boulevards for the barricades of 1830, and although replanted very soon after, they are far from showing that approach to their former beauty which a 30 years' growth might have led one to expect. Some years later the larger Elms that remained began to show signs of rapid decay, the Limes were gradually observed to turn brown early each summer, and, as well as the Horse Chesnuts, to lose their leaves long before the regular period; and, whatever be the cause, whether an unusual multiplication of insects, the suffering from a worn-out soil, or, as the Parisians generally believe, the deterioration of the atmosphere by the increase of gas and coal smoke, Parisian trees, with but few exceptions, are now usually by the middle of September almost as bare of foliage as in the depth of winter. Experiments have been tried on a large scale with a view to remedying the evil, but without success. Paring off the bark of old worm-eaten Elms, and swathing their stems, if it had any effect, seems rather to have hastened their death. Swathing up the young ones and placing a funnel at the top for receiving water, by means of which the stems were kept constantly moist, although it did not much injure healthy trees, certainly did not benefit them; and all these processes, from which so much was expected a few years since, have now been abandoned. The dearly bought experience of the last few years has only confirmed what might have been predicted, that the success of trees planted in cities like Paris or London must depend in the first place on the selection of healthy individuals of the species best suited to resist the deleterious effects of a vitiated atmosphere, and the injuries to which they are exposed from a crowded population, and to accommodate themselves to a hard, compact, well-trodden soil; and secondly, on the care taken in their removal from their nurseries, in their planting, and in their subsequent treatment and protection. It is to be hoped that in the extensive plantations still going on the authorities may so far profit by the lessons they have received, that Paris may in some years be as much embellished by her trees as she already is by her public gardens.

Of the several trees which have been tried in the boulevards, quays, and public walks of Paris, the first in point of merit is undoubtedly the common Plane. It is of all the most healthy and rapid in growth, it is one of the earliest to come into leaf, and now in the end of September it still retains its rich green foliage in full vigour. It can easily be trained to a tall straight trunk, the head always assumes a handsome form, and, by the annual casting of its bark, the stem is not so blackened by soot as are other trees even in Paris. I have seen it thrive equally well in the climates of London and Paris and in those of Roussillon, Lower Languedoc, and Provence, in the hard dry compact soils of public roads and walks, and on the loose deep alluvial banks of rivers. The improved aspect it has given to some southern towns, such as Montpellier and Perpignan, replacing as it has done the Ailanthus, Broussonetia, &c., is very striking, and when once properly planted it requires very little after care. There are a few young ones indeed on some of the quays at Paris which look poor and sickly, but these, when I saw them fresh planted two or three years ago, were then long slender sticks which had evidently been left too long in crowded nurseries. All those that were healthy when planted show abundant signs of a rapid and vigorous growth. The species was long known on the Continent as well as in England, under the false name of the Occidental Plane, but has since been shown to be the Platanus acerifolia of Willdenow. It is believed to be a native of the Levant, and there is a tradition, which may be correct, that it is also a seedling race originally sprung from the same stock as the P. orientalis. The latter tree, the true Eastern Plane, with deeper cut leaves, is as hardy as the P. acerifolia, and when grown alone where it can spread freely is much more picturesquely beautiful, but on account of this spreading habit it is not so well suited for avenues and promenades. I have observed, however, a few trees with the erect habit of P. acerifolia, but with a somewhat deeper cut leaf, which would seem to support the opinion of a common origin of the two.

Ailanthus glandulosus has been much vaunted by some French planters, and used to be a great favourite in the South for avenues and roadsides, on account of its tall straight stem and compact head. It is quite hardy, it flourishes in the closest parts of Paris, and retains its foliage till autumn, but it is inferior in beauty to the Plane, and comes out later into leaf. When in flower it diffuses a powerfully disagreeable sickening scent, and in a rich soil its numerous suckers are often a nuisance.

The Sycamore, Acer pseudoplatanus, appears to retains its foliage in Paris as late and as perfectly as the Plane, and in shape it is equally well suited for avenues, but it is of much slower growth, and by the side of that tree its foliage looks dingy and heavy, for the surface of the leaves not being so smooth, it retains more readily the soot of the atmosphere.

The common Acacia, Robinia pseudacacia, has a light green elegant foliage, still in full vigour in the end of September, and it does not object to a hard close soil; but its stem is seldom straight and regular enough when old to be suitable for avenues, and when exposed to wind it proves very brittle.

The Horse Chesnut has long been much admired by Parisians, and, judging from the numbers recently planted on the new Boulevards, would still seem to be in high favour. Nothing can be more beautiful than an avenue of this erect well-formed tree when in full flower in spring, and it seems to grow well in the Parisian soil. The large ones planted four or five years ago in the Place de la Bourse have taken well, notwithstanding their size and the swathing and other tricks played with them. But when summer droughts come on the tree loses its leaves, so far as the influence of the vitiated atmosphere and dry hardened soil extends. In the Bois de Boulogne the foliage is still healthy and vigorous, but within the town, in the Tuileries, Champs Elysées, &c., not a green leaf is to be seen, excepting on three or four young trees which, owing probably to the season at which they were planted, are at this moment in full flower.

The Lime trees of the Tuileries, the Jardin des Plantes, and the Luxembourg, used to be as ornamental there as they still are in so many German towns, but from some cause which is not well explained, their foliage throughout Paris now turns every year of a rusty brown before the end of July, and, by September, the trees are nearly as bare as in winter.

The Elm is still frequently planted, and there remain a few good ones among the larger trees of the Champs Elysées, but, generally speaking, the old ones are dead or dying in spite of the scraping, swathing, and plastering they have undergone, and the younger ones do not look as if they would ever attain the beauty of their predecessors, such as I recollect them after the peace of 1815. They certainly dislike either the present atmosphere of Paris or the treatment they are subjected to. Oaks have been recently tried on some of the quays, but without success. Neither Conifers nor any evergreen trees have been attempted.

In the care bestowed on the selection of individual trees for planting, in the operation of planting itself, and in the subsequent treatment of planted trees, the French appear to be still so far behind ourselves that it is useless to enter into particulars. Neither the old practice still frequently adhered to, of cutting the roots short and cutting off the heads to counterbalance the loss of roots, nor the more recent one of swathing the stems, produce any results which might tempt us to introduce them, and from the aspect of the trees most recently planted it would seem that both processes are now being abandoned in Paris. *B.*

GRAPE GROWING.

If I may judge by observations made by my neighbours who honour me with their visits, I am certain that my ideas as regards Grape growing are not in harmony with popular practice. Nevertheless, I beg to make my views known, believing that your readers are prepared to give the subject due consideration. Whoever carefully observes the habit of the Vine under glass under favourable circumstances for its full development, may have noticed the several distinct changes which it passes through in one season; and the important relationship one change bears to another. The first is, the production of leaves, which form with the roots the two important pivots upon which the whole system turns, and it is remarkable how completely this first work is done by the Vine before it commences what constitutes the next stage of its work, viz., the formation of fruit; so that whoever retards the formation of leaves strike a serious blow against the natural, and what would be successful, ripening of the fruit, and does much to increase the possibility of the Grapes shanking. For what is shanking but an inability of the Vine to produce fruit in a perfect state? and wherever it exists it condemns the management—no matter how large the bunches or the berries may be—for its presence is no proof that there may not be either large bunches or berries. Nay, shanking is most frequently found accompanying size, but when it occurs it shows that the means to get the berries large do not favour the ripening process. Now, whoever has cut up into sections a firm well-ripened Grape must have admired its beautiful structure, and what a difference there is between it and a shanked berry, the latter being almost filled with water, a proof that the Vine had failed to fill it with organic matter; the evil must therefore be sought for elsewhere.

One fruitful source of mischief which I would especially notice, believing it to be the general one, is, the constant pinching of the laterals, thereby frustrating the plant's chief aim. Who can play with the pendulum of a clock without interfering with the timely movement of the hands, thereby upsetting its whole machinery; for if by trifling with it you cause it to indicate only one hour, while two have really passed, then it must fail to tell the true 12 hours by its movements round the dial. And so it is with the Vine; it has its times and its seasons to accomplish different processes of work in, and in a climate like ours it has no time to lose, more especially when its roots are in a rich damp border. Nothing could be easier than to show the fallacy of placing a Vine in such a situation, and then going and positively stopping the plant from making use of its energies. Can it not be seen at a glance that the Vine under such circumstances must either overcome the border, or the border will overcome it; and how can the former be when the provision in the soil is made to meet the heaviest demands possible; while those demands are confined within half the natural limits by the mistaken idea that pinching the laterals secures the perfect production of fruit.

But some one may be ready to deny that they do limit the demand, seeing that they always leave bunches equal to the capabilities of the Vine. Now a statement like this by one who limits the plant's growth by pinching, is like assuming that an effect can be produced without a cause—for such would be the case if we could get organic deposit without organs, that is, fruit without leaves. No; let all who are troubled with their Grapes shanking turn their attention to the getting of leaves and roots (which must be got together), and they will find in a few years that their Vines will yield crops to their satisfaction in weight, colour, and flavour.

The question—how can these roots and leaves be got? becomes therefore of the greatest importance, and requires of every Grape grower the most searching inquiry. For if we just turn to the claims of the roots—how they start up before us both in number and importance! Think of the necessity of their being preserved through a succession of years, while their position shuts us out comparatively from making direct observation upon their real condition! Then the nature of our climate must be considered; how adverse are our frequent cold heavy rains, which must be received by every exposed border. The construction of our borders is therefore of much importance. In making a new one two objects must ever be before our minds, viz., formation and preservation of roots. Therefore the gardener should be like a good packer of wine in bottles.

The question is—not how are they as they leave his hands, but how will they be at the end of the journey? Hereafter I will give a description of three borders made in accordance with these views. *Wm. Porter, Chirk.*

Home Correspondence.

Marguerite and the Marquise de Latour Maubourg Strawberries.—1st, Marguerite. Three plants were sent to me by my friend Monsieur Ferdinand Gloede, of Moret-sur-Loing, France, I think about November last. They were planted with half-inch bones, and stood the winter perfectly well. The description given by the Comte de Lambertye is correct. I disfruited the little plants down to one berry each, as cropping and then running young plants is ruin to them; the berries were very large indeed, quite as big as those of Eugenie, and I thought the flavour excellent. My friend, noticing an article of mine on Strawberries in the *Florist*, wrote and asked me why I did not speak of this variety. My answer amounted to this, that, although I thought highly of the Strawberry, as I could not tell whether it would be a cropper and a lasting plant, and as the summer was too wet and cold for a garden sloping from the rising sun, I preferred, for the sake of the public, whose interest I am bound to look to, no less than that of the raiser, to wait and see it another season. I have now got these plants strong, and in a better place, and after cropping I will give a faithful account of them. With regard to the form of the berry, mine were wedge-coned. 2d. The Marquise de Latour Maubourg. This Strawberry was tried some time back at the gardens at

Chiswick. The Fruit Committee determined that this, the Duchesse de Trevise, and Vicomtesse Hericart de Thury (all three, I believe, were raised by Jamin and Durand) were the same variety. I see by Mr. Gloede's Catalogue that he says there is an analogy between Vicomtesse Hericart de Thury and the Marquise, but that the former is a little earlier (*un peu plus hâtive*). In describing the Vicomtesse he says she is "peu fertile." If this be so, I cannot think that she is the same as the Marquise de Latour Maubourg, which, as managed here, is one of the finest bearers that I ever saw. I have only eight plants of it, and luckily when Mr. Stoveld, of Stedham Hall, Sussex, came to see my Strawberries I had one plant of it unpicked. I showed the crop to him, and he was much surprised. I also showed the plants, now in great vigour and beautiful new leaf, to "D." of Deal, when here on Sept. 10. My servant at the first pick this year took off the seven plants sufficient select fruit to pile three of the old willow-pattern dinner plates. The berry is of a fair size, of a fine scarlet crimson colour, and of pleasant flavour. The plant is one of the hardiest, healthiest, and handsomest that I ever saw. The leaves are perfectly resistant of frost, and look like the round leaved Laurustinus. As the summer was unfavourable to strict criticism I have not yet recommended it in print, beyond that of being a cropper; but I hope that we shall have a summer next year that will enable me to do strict justice to plants sent for trial, and also to the public. The best foreign Strawberries that I have yet tasted are La Reine and La Constante, both raised by De Jonghe of Brussels. *W. F. Radclyffe, Rushton.*

Rapid Growth of a Wellingtonia.—A tree of this Conifer was planted in April, 1856, in the grounds of C. Whiteman, Esq., The Grove, Epping, and was when planted about 6 inches high, and one year old. It now (Sept. 25, 1861) has attained the height of 14½ feet, and is still growing. The spread of its branches measures about 10 feet in diameter, and its shape is most symmetrical and beautiful. The growth of this tree seems so extraordinary, that I have been induced to mention it with the hope of hearing from some of your Correspondents some other case or cases of rapid growth, where the age of the tree and time of planting are accurately known. *T. R.*

Manuring Conifers.—In taking a general glance at the natural distribution of trees, the Conifers seem by special adaptation, as well as natural selection, to belong to positions on hills scantily covered with soil, or to sandy wastes inimical to other trees; and a natural disposition thus evinced by a tree for peculiar circumstances of soil, should not be forgotten when the tree is taken from its native forest and planted in a distant country. In the attempt to cultivate new tribes of plants, it is always the safe way to be guided by the lessons Nature hereby conveys; with a change of climate it is possible that certain modifications of particular soils may be necessary, but it is difficult to conceive the predilection of Coniferous trees for manuring, and as a general practice it would be best avoided. I have had opportunities of planting Conifers in several counties in England, and having studiously avoided the use of manures, I have had every reason to be satisfied with the growth, appearance, and continued vigour of the trees. If I am not mistaken, some of our best Pinetums are situated on light sandy soil. Dropmore was before its enclosure a comparatively barren heath. Bayfordbury near Hertford was a dry light soil, and the beauty and vigour of the Pines in these places are hardly to be surpassed. But although it appears that Nature has assigned to every geological formation a characteristic flora, and given to the otherwise barren hill, and desolate reaches of sand, the beautiful Fir tribe, it still seems that she has providently given to some Conifers powers of adaptation to various circumstances, and trees physiologically identical are yet enabled to derive support from circumstances of soil widely dissimilar. As falling within the scope of my own experience I may cite a few illustrative cases in which Coniferous trees have been stimulated to renewed growth, or improved by rich soil. I may first mention an Abies Douglasi which had attained a height of some 20 feet, and seeming to languish a cutting was made round the tree, and fresh soil put in, and a decided improvement was subsequently visible in the tree. The next instance which occurs to me is that of a Cedar of Lebanon, which was planted by an old friend of mine 50 years ago on deep rich soil, and this tree is double the size of some others in the locality, which were planted on a dry sandy hill upwards of a century ago. Examples of splendid development in Firs on rich soil occur to me in the instance of the common Silver. I by no means bring forward these examples in advocacy of the employment of rich soils, but merely as examples of the ability of certain trees to flourish under opposite circumstances. Rapidity of growth in Conifers may be desirable in gardens, but a moderate annual development, and mature wood, are more important considerations to a forester. A plantation of Larch on the rich prepared clay soil of this locality would make a more rapid growth in a few years than a similar plantation on the poor calcareous soil of the neighbouring hills, but in 10 years the result would be reversed, stout clean healthy timber would be found on the dry soil, and decrepid mossed halt rotten poles on the clay; and who can say that this unhappy result will not attend the forced and manured trees of some of our gardens? One instance has fallen in my way of the pernicious effects of strong manure applied to Cedrus Deodara. Recently in passing through a public garden* I noticed the dead stems of Cedars which had been planted on each side of a public promenade, and on inquiry I was told that the trees had been killed in consequence of manure having been mixed in the soil in which they were planted. *W. Ingram, Belvoir.*

Vine Borders.—I am erecting a Vinery, and finding great difference of opinion as to the depth of soil and bottoming requisite for the successful growth of Vines, I am desirous to get the benefit of your experience in the matter. I purpose having the Vines planted inside the house, having each compartment made up with a compost of soil and a proportion of lime 3 feet deep, laid on a bottoming of broken sandstone or concrete properly drained. The outside border sloping to the south was proposed to be 18 feet wide, having a depth of soil and bottoming similar to that inside, but I have been advised to make it only 12 feet wide, and not to have a greater depth of soil than 2 feet either inside or outside of the Vinery. I propose having the footpath inside the house of sandstone pavement a yard wide; but wood spars sunk into a beam of wood have been recommended as preferable, and to provide against damp the main hot-water pipes are to be led under the pathway. Will you kindly say which plan I should adopt? *Frontignan, Glasgow.* [For early forcing we should prefer having the Vines planted inside; for succession or general crop, outside. The width of the latter border should be about 15 feet; depth 2½ feet, with good bottoming as proposed, but instead of excavating we should raise the bottom to nearly the general level of the surface of the garden, and then form a terrace of the above width and depth, consisting of good turfy loam, and you may add some lime and broken bones, but not a mass of dung, which goes to a state of humus, and that saturated becomes of the nature of a morass, which, of all things, the roots of Vines dislike. The surface of the terrace should be almost level. It should slope from the wall but very little, in order that the summer rains may not be carried off. Prizes are offered for good crops of Grapes; one would suppose also for the greatest possible brood of red spider, when borders are seen with a sloping surface calculated to run off almost every drop of rain; for no more effective means could be adopted to produce such an effect than that of depriving the roots of the means of affording a supply of fluid to the foliage. Your climate is a moist one, we admit, but you have not more rain than falls in the native countries of the Vine during the growing season, if so much. With regard to a sandstone pavement inside the house, there is no objection to it. Some of the finest table Grapes in Portugal are grown on Vines having their roots closely paved over. Whatever you do, take care not to put timber into your border. *R. T.*]

Orchard Houses.—Many leaves on my orchard house trees die at their extremities, generally about the beginning of summer. I send a Nectarine leaf from a warm house where it never froze in spring, and a Plum and Apricot leaf from an unheated house. In the tropical department at the Crystal Palace the same thing takes place both with regard to plants in borders and to plants carefully potted in appropriate soil. The gardeners tell me that no one has been able to find out the cause. Even Sir J. Paxton seems nonplused. Speaking negatively, it is clear that it is not from bad soil, nor from drip from the roof, nor from want of circulation of air. One would naturally suggest that after syringing, a little damp might remain on the extremities of the leaves, and cause them to perish, but, if so, one would expect to see the same thing out of doors after rain, which I do not observe. Is it possible that the trees at some period want more water at their roots? As Editors are supposed capable of solving every difficulty and curing all disorders, I submit the case to you. *S. B.* [We should like to hear the opinions of others. We strongly suspect that our Correspondent has hit upon the cause; unless indeed the *air* is allowed to be too dry when the leaves are young and tender.]

Grape Growing and Heated Borders.—In January last I sent for your inspection a few bunches of Grapes that ripened in the previous December, and along with this communication I have forwarded a sample of Grapes from the same Vines which were pruned early in April and started in May, and which were fully coloured last week, although they have not yet wholly attained the flavour of complete ripeness. It may prove interesting to make a statement of the times at which these Vines have ripened crops since I began forcing early. In 1859 the crop was quite ripe in April. In 1860 it was ripe in February, and in December of the same year another crop was ready for table, and the fourth crop as stated above is now fully coloured, and in order to convey some idea of the weight I may state that the Vinery is 36 feet in length and that the length of rafter is 15 feet. In this space there are 19 rods which have an average crop of 20 bunches to a rod, and the average weight of each bunch will be about 1 lb., some considerably more, and some less. The border is supplied with bottom heat. *D. S. Mickleham, North Berwick, Haddingtonshire, N. B.* [These were thoroughly good specimens of Black Frontignan, Black Hamburgh and Muscat of Alexandria Grapes. They did Mr. Mickleham much credit, and we trust his example of using heated borders for his Vines will assist in bringing that important arrangement into use wherever the cost [illegible] be allowed.]

* Nottingham.

The Flowerless Apple Tree.—By this day's post [illegible] have the pleasure of sending you an Apple from [illegible] "Malus pomifera absque floribus" of Linnæus. [illegible] tree is in the garden of Mr. William Walker, [illegible] Owston Place, near Bawtry, Yorkshire. Four Apples were the whole of its produce this year. Three [illegible] these have been sent to me. From them I select [illegible] finest for you. Any further remarks that you have [illegible] make about the tree, or its fruit, will be interesting [illegible] many here. The *Gardeners' Chronicle* is well known [illegible] almost all the gardeners of Cottingham. *C. O., Cottingham, near Hull.* [We were very glad to see the [illegible] of this curious tree. It has the appearance of [illegible] ordinary Crab Apple, with four cells instead of five. There are no pips, but their rudiments remain in the form of minute black specks. It is clear that there has been no fertilisation; the tube of the calyx, and included carpels alone having grown.]

What is a Pistil?—A critic in the "Athenæum" [illegible] pronounces that "every tyro should know that no flower can have more than one pistil; the name designates the whole female apparatus. *Pistillum intra antheras commode collocatur*, is the definition of Linnæus, who called its [illegible] it consists of more parts than one, *germina*,—a [illegible] replaced by *carpella*. We must, however, add, in [illegible] the author (Mr. Johnson) that he does not stand alone in [illegible] misconception." Certainly the author criticised follows [illegible] næus, whom the critic appears to misunderstand, even [illegible] sentence he quotes as decisive against Mr. Johnson and [illegible] botanists. For, in the first place, the paragraph cited [illegible] "Phil. Bot." 111., is not Linnæus's *definition* of the pistil, [illegible] his statement as to its situation; in the very context [illegible] which phrase Linnæus moreover asserts the identical [illegible] which the critic imagines him to repudiate. "[illegible] singulare est, ubi elongato receptaculo in clavam, *Pistilla* [illegible] occupant, stamina vero superiorem partem; adeoque *Pist.* [illegible] extra stamina," &c. For uniform use in this sense, [illegible] par. 102, "*Pistilla* differunt quoad numerum," &c.; [illegible] "Hermaphrodita planta gerit . . . flores omnes staminibus pistillisque instructos," &c. Also "Term. Bot." Ordines [illegible] feminis seu *pistillis*, ut classes a maribus seu staminibus desumuntur." For the Linnean definition of *Pistillum*, and [illegible] the proof that the term *germen* does not answer to *carpellum* (but to *ovarium*), see "Phil. Bot.," 86, iv. 102. Partes tres pistilli; germen, stylus, stigma), &c. See also the characters in "Genera Plantarum" throughout. The Linnean use is, we believe, uniform and consistent, and may well be followed. To bear out his view, the critic should have appealed not to Linnæus but to Tournefort, who apparently introduced the word *pistillum* into botany, and who defines and describes it (Inst. p. 70) as a single body, as it most commonly is—and who named it accordingly (the *pistillum* in the flower being likened to the pestle in the mortar), but who nevertheless uses the term in the singular for the female organs collectively when more than one. The French botanists have naturally inclined to follow Tournefort, but as this usage could not be followed with perspicuity and consistency, they practically abandoned the word *pistillum*, and fell in consequence into the inconvenience of putting a part for the whole. Jussieu, for instance, describes the pistil as made up of germen, style, and stigma, while later authors substitute [illegible] for germen; and they [illegible] word ovarium or germen, sometimes in its strict and [illegible] sense, and sometimes for the whole body of which it forms an essential part, to which use, and when the synecdoche is understood, there is little objection. It is our opinion that Linnæus rightly corrected the ambiguity or looseness of Tournefort in the use of his own term *pistillum*; that there are no good grounds, etymological, historical, or practical, for using the term as synonymous with *gynæcium*; and that scientific accuracy and convenience, such as is now required, are best reconciled with classical authority by employing the terms—*Gynæcium* to denote the female apparatus of the flower, as a whole, whether simple, single, or multiple; *Pistillum*, to denote each *body* of the gynæcium, whether one or more, distinguishing the pistillum into *simple* or *compound*; and *Carpellum* (or *Carpidium*) for each foliar element of the gynæcium, whether combined or uncombined. Thus neither of the three terms is superfluous, and *pistillum* is kept in its primitive Tournefortian, and in its complete Linnean signification. *A. G., Cambridge, Massachusetts.* [We are glad to find that amidst the din of war science has still leisure to think in the United States, and discuss little points of critical interest. We, however, take part with the Athenæum. The real [illegible] of the word Pistillum in Philosophia Botanica is [illegible] neither in the Athenæum nor in our learned correspondent's note. It will be found at ⅔ 86, iv. *Pistillum*, *viscera* [illegible] *adhærens pro pollinis receptione*; which is really nothing more than the definition of Tournefort put into other words; as is the later one of Jussieu, *Pistillum*, *seu fœminea pars* [illegible] *centralis et receptaculo florali imposita* (Gen. Pl. p. xvi). [illegible] attach no importance to the word pistil being employed by Linnæus in the plural number, when used to express the common character of many different plants: he must then be understood to refer to the pistils of all those plants (500 pistils [illegible] and the singular number could not have been convenient [illegible] adopted. That he used it loosely in practice is true enough, [illegible] when he applied the term to an Arum, the structure of which he and his school misunderstood. When he said *pistilla differunt quoad numerum*, his meaning must be taken from the context, where he expressly declares (§ 102) that he judges of their number by the styles, if there be any, or by the stigmas. He surely cannot have meant that a Silene, for instance, has three separate pistils in each flower; all he meant was that the female apparatus has three stigmata. Smith, indeed, says in Rees' Cyclopædia, under Pistillum, that a flower may have one pistil or many; but the hazy understanding of that learned botanist, who was probably dozing over Arum, gives no authority to his definitions. One circumstance is to us conclusive. In defining a Strawberry, Linnæus wrote Pist. Germina numerosa, &c. Surely by all the rules of construction it would have been *Pistilla numerosa*, &c., had the separate parts of the female apparatus been intended to be called pistils. As the definition stands we can only translate it Pistil (consisting of numerous germens. We cannot say that we are admirers of the word Pistil, for which Gynœcium is better substituted; but we must contend that if used at all it ought to bear the meaning given it by Tournefort and Jussieu expressly, and as we think by Linnæus himself, if his words are rightly interpreted.]

Societies.

British Association, Manchester, Sept. 6, 1861. Section D., No. 1.—Dr. Daubeny communicated a paper "Upon the Influence exerted by Light upon the Functions of Plants." The author referred in the first instance to his own experiments, published in [illegible]

Philosophical Transactions for 1836, as proving amongst other facts that the decomposition of carbonic acid and the consequent disengagement of oxygen by the leaves was due, not to the calorific or actinic, but to the luminous portion of the spectrum. This position, which has been subsequently confirmed by the researches of Gardner, Draper, and others, (to whom the establishment of the fact in question has been attributed by a late French writer, M. Guillemin, who does not appear to have been aware of the antecedent researches of the author of this paper) seems best reconcileable with the idea, that light acts upon plants as a specific stimulus, rather than as a chemical agent, these rays which exert the greatest chemical influence affecting the functions of plants in the least degree. This inference was confirmed by an experiment which the author, in conjunction with Mr. Way, lately made with the light which the latter gentleman has invented, by causing a thin stream of mercury to become the medium of communication between the poles of a voltaic battery. This light, although exceedingly vivid, and capable of producing striking photographic effects, is chiefly composed of rays possessing the highest refrangibility, and contains but few derived from the central portion of the spectrum. It consequently appears to exert no influence upon plants, not causing any evolution of oxygen from leaves, although they were found to give out the same gas freely under the action of the diffused light of the sun on a moderately bright day.

No. 2.—Dr. Daubeny exhibited specimens of a Violet peculiar to the Calamine rocks of Aix la Chapelle. This Violet is stated by Professor Braun, on the authority of a local chemist, to contain zinc as one of its constituents; but without having verified this statement, Dr. Daubeny was able to testify to the fact of the dependence of the colour of the petals upon the presence of zinc in the soil, as when the plant was growing upon the calamine they were wholly yellow; when at the junction of the latter with the contiguous rock, they were partially blue, and when the soil was free of all admixture of zinc, wholly of the latter colour. The Violet, although designated by the specific name "calaminaris" by local botanists, seems to be only a variety of V. lutea.

No. 3.—Dr. Daubeny brought forward a paper "Upon the Functions discharged by the Roots of Plants."—In this communication the author attempted to show, that just as the leaves of plants appear to decompose carbonic acid, and to fulfil certain of their functions by virtue of some power inherent in them as living agents, so in like manner the roots must be supposed to exercise a power of selection over the substances submitted to them, which does not belong to dead membrane. In the case of the leaves, this faculty was inferred to exist, from the influence exerted upon them by the luminous and not by the actinic portion of the sun's rays. In the case of the roots, he was led to suspect its existence from two principal considerations:—1st, because abnormal bodies presented to their absorbing extremities do not appear to obtain admission into the vegetable tissue, except in cases where their poisonous influence upon the part is sufficiently strong to destroy its vitality, in which case they pass up by virtue of endosmose and capillarity, as they would do through a membrane devoid of vitality. 2d, that when normal substances are exhibited more profusely than usual, they do not appear to be assimilated in proportion to the quantity taken into the system, the latter not exceeding in any great degree that which the plant commonly contains. The former proposition was substantiated by the experiments he had himself made with arsenic, strontian, and barytes, none of which bodies when presented in small doses, appeared to be taken up by the plant. The latter he conceived to be borne out by another set of experiments, detailed in the Journal of the Chemical Society, in which he had watered plants of the same species with strong solutions, sometimes of salts of potass, sometimes of those of soda, without in either case influencing their chemical composition beyond a certain fixed limit. In the former instance he believed the abnormal substance to have been excluded from the vegetable organisation; but in the latter he would rather suppose that the normal constituent, after having been received into the system, had become eliminated, and hence he would account for the difference in composition brought about by adding an excess of some one constituent beyond the usual quantity, by supposing the latter to represent merely what was circulating through the sap at the period when the plant was cut down and the analysis made. Dr. Daubeny appealed to the authority of Baron Liebig in corroboration of these views, that philosopher having inferred from certain facts originally established by Mr. Way, that the roots of plants exert the power of detaching from the soil ingredients retained by too close an affinity to be separable from it by the unassisted action of water and carbonic acid. The difference existing in the chemical composition of plants which grow in the same soil also shows, that a certain power of selection must reside somewhere in the vegetable tissue, by which each species is enabled to take up the ingredients present in different proportions.

ROYAL HORTICULTURAL: (*Floral Committee,*) *Oct.* 8.—There were some very interesting subjects exhibited on this occasion, among which we may specially allude to some splendid wreaths of Bignonia venusta, from Mr. Rogers, gardener to S. Noble, Esq., Berry Hill, Taplow, the branches loaded with glorious bunches of the richest orange-coloured tubes. For this, which was a fine sample of one of the finest of hothouse climbers, a Special Certificate was awarded. Another special award was made to a lovely little plant of Bertolonia, or, as it is sometimes called, Eriocnema marmorata, from Messrs. Veitch & Son; the beautifully variegated leaves of this plant were exquisitely developed. The same award was made to Mr. Ivery, Dorking, for a very nice group of hardy Ferns; and to Messrs. E. G. Henderson & Son, St. John's Wood, for a collection of numerous varieties of the beautiful class of Pompon or Bouquet Dahlias, lilliputians in size, and exceedingly ornamental in character. Messrs. Osborn & Son, Fulham, produced a plant of the minute but beautifully marked Lepanthes calodictyon, a S. American Orchid, and a suitable companion for the Anæctochiles; also a species of Anæctochile from Guayaquil with ovate leaves dotted over with angular silvery spots. Both Messrs. Veitch & Son, and Mr. Bull, had plants of the graceful variegated Cyperus alternifolius variegatus, which is one of the prettiest of ornamental foliaged plants; and Messrs. Veitch had besides a fine example of the very handsomely marked and neat habited Alocasia macrorhiza variegata, and a pretty pinnated prickly slender stemmed Palm, called Calamus australis. And from Mr. Daniels, gardener to Rev. C. E. Ruck Keene, of Swyncombe House, came a second species of Bougainvillea named glabra, smaller and more slender than B. speciosa, and with smooth stems and leaves, and decidedly less ornamental than that glorious plant, but having, according to Mr. Daniels' statement, the very desirable properties of being less difficult to cultivate and to bloom, and of being much more hardy. The specimens which were shown had been obtained from a plant less than a year old, grown during most of the summer in a greenhouse, and now 5 feet high, well furnished with branches, each terminated by a panicle of flowers. All the foregoing, commencing with the Lepanthes, were awarded First-class Certificates. Of other subjects there was a Statice Frostii from Mr. Frost, Dropmore; a large fine-looking tree-like hybrid between Holfordii and imbricata, with very rich deep purple flowers, but rather too thinly disposed in the panicle; some double Zinnias, and a deep rose-coloured dwarf Lobelia from Messrs. Carter & Co.; a pretty, but hardly enough developed Anæctochile-like plant, called Ætheria javanica; another dwarf striped-leaved Orchid, Spiranthes Lindleyana; and also the fine greenhouse Palm, Areca sapida, all from Messrs. Veitch; some additional variegated Orchids from Messrs. Osborn & Son; one of the best of the beautiful dwarf golden Gymnogrammas, very highly coloured and robust in habit, together with Rhynchosia albo-nitens, two Caladiums, and a group of early-flowering Chrysanthemums, from Mr. W. Bull; double Fuchsias of no particular merit, from Mr. Chater and Mr. Wheeler; a couple of plants of Kinghorn's Purple Standard Lobelia, from the raiser, showing it to be a fine habited and useful border plant; and some well grown plants from Mr. Smith, Hornsey Road, of a Calceolaria called canariensis (!!) maintaining the character of dwarfness and profuseness of bloom for which it had been previously rewarded. Two or three Dahlias were shown, one of which, a creamy white named Miss Henshaw, from Mr. Henshaw of Handforth, was commended.

Notices of Books.

Glencreggan: or a Highland Home in Cantire. By Cuthbert Bede. Longman & Co.

"Who knows anything about Cantire? Is there one in a hundred who ever even heard of Cantire?" Such is the exclamation of Cuthbert Bede on arriving at his destination; and he is not far from the truth in supposing that he has stumbled on a region possessing the attraction of being, if not an unknown at least an undescribed country. Most of us, we suppose, could place our fingers correctly on its place in the map, but beyond this we must acknowledge the justness of his question—Who knows anything about Cantire?

The volumes before us owe their origin and name to an invitation to a friend's house, of which the author and his wife availed themselves in the autumn of 1859: where, finding himself out of the beaten track of tourists, Cuthbert Bede seems to have endeavoured to combine profit with pleasure, by giving to the world all that he could learn respecting the "Land's End" of Scotland. Inasmuch as he is the first to introduce this locality to our notice, he is fortunate in his subject: and he has been most conscientious in his examination of all available materials, condensing them with judgment, and presenting them to us in a readable and interesting form; consequently to those who meditate a trip to Cantire, or wish to know anything of the place, we would say, read Glencreggan. But at the same time we must add, that the author's determination to make a book is visible on every page: and finding that the little he really had to tell would not swell to sufficient dimensions, he has eked out his descriptions with quotations in prose and verse from every writer whom he could possibly press into his service. From Maculloch whole pages are thus taken, with due acknowledgment, it is true; but why must we be perpetually called upon to read *two* (and frequently more) descriptions of the same place? We do not care to compare the author's opinion of the scenery with that of his predecessor. Neither, when following a Highland tourist, do we wish to be suddenly called upon to transport ourselves to Italy or Asia, nor to listen to a disquisition on Holman Hunt's picture of the Saviour in the Temple. These, and similar passages, make us wish that the two volumes had been condensed into one: in that case, we could have praised without any reservation.

The author bestows unbounded admiration on the country he has selected; but, without denying its beauty to a certain extent, his own admissions incline us to doubt whether the tourist, familiar with Scottish scenery, would be entirely disposed to echo his raptures. Such a remark as the following is sufficiently apologetic in its tone to make us suspect that disappointment might follow if we placed too implicit reliance on the author's admiration. "It is true that when compared with certain other better-known districts, the scenery of the Land's End of Scotland must (in some particulars) take an inferior rank; but it only fails when put to the test of comparison; and after all this test is but a variable one, dependent upon the diversities of taste, and for all practical purposes next to worthless."

The chief interest and distinguishing beauty of the scenery of Cantire is the constant addition of the sea to the landscape: for the narrowness of the Peninsula causes this to be visible from all parts. Other attractions, peculiar to itself, belong to Cantire, and we do not doubt that Cuthbert Bede is right in saying that "to the historian, the antiquarian, the geologist, the botanist, the artist, the fisherman, the sportsman, and to the tourist in search of a healthy climate, sea breezes, and fine landscapes, Cantire will amply repay a visit."

"Cantire was the original seat of the Scottish monarchy, and its chief town was the capital of the Scottish kingdom centuries before Edinburgh existed. It was the first part of Western Scotland where Christianity took root; for in Cantire St. Columba's tutor, and then St. Columba himself, preached the Gospel before it had been heard at Iona, or in any other part of the Western Highlands and islands. From its nearness to Ireland it was subject to other invasions than those by the Danes; and from its being one of the chief territories of the Lords of the Isles, and having within its boundaries some of their most important strongholds, its soil was the scene of perpetual feuds and chronic wars." All these topics will be found described at large in the pages of Glencreggan: slightly jumbled up together, it is true; the author having chosen to hold forth on the different subjects as they were suggested by the localities in which he found himself, rather than arrange them in some sort of order, producing in some instances a curious alternation between ancient and modern times, which is a little bewildering.

The chief town in Cantire, and indeed the only one of note, is Campbelton; and we give Cuthbert Bede's description of it, omitting, however, that of Maculloch, which immediately follows:—

"The town was originally called in Gaelic Ceann Loch, 'the head of the loch,' and denotes its situation at the further end of the bay. The harbour widens after we have passed through its narrow neck; it is nearly 2 miles in length, with a depth of water varying from 5 to 13 fathoms. The largest vessel can enter it at any state of the tide, and approach close to the town. A sweep of lofty hills shuts in the harbour, and the town encircles the further end of the loch in a crescent-like form. It is a town of very respectable dimensions, containing its 7000 inhabitants, with its churches, and its outlying villas bordering the bay, its quays and harbours crowded with fishing-boats and vessels in picturesque confusion. As we neared Campbelton, whose white houses and villas were reflected in the blue waters of the quiet bay, the setting sun was sinking over the hills behind the town, and flooding the landscape with a golden splendour. It was a beautiful scene, and one that would amply repay the toil of a far more troublesome journey than that which we had been called upon to undertake: and its picture will form a pendant in my memory to that of Loch Ranza. They are rival beauties, but each deserving a crown of excellence." "Campbelton possesses tan works, woollen manufactories, a salt manufactory, bleach fields, and rope walks; but the chief trade of the place is now whiskey. There are about 39 large distilleries, paying not far from 100,000*l.* a year in duty; and probably there is not a vessel that leaves this harbour without its stock of whiskey on board. Glasgow is the principal market for it. In fact Campbelton has gradually drawn to itself the supply of Glasgow and other towns of the Clyde. Its vicinity to the principal Barley lands of Cantire renders its situation far preferable to that of Glasgow for the manufacture; and the easy and perpetual intercourse by steamboats has brought the market to its doors. The manufacture of spirits, and consequent trade, have influenced the import as well as the export; and although Barley and Bear, which is an inferior kind of Barley, have become the staple produce of Cantire, they are still insufficient for the supply of the distilleries."

The graver portions of the book are relieved by numerous legends and anecdotes, plentifully sprinkled throughout its pages; some old and well worn, others

comparatively fresh. The following probably belongs to the former class, but to those who have not seen it before, it will be interesting:—"And while the naked foot may be accepted as a national characteristic, we may remember that it was through a naked foot that Scotland was saved. If that bare-footed Dane, who, in the darkness of the night, trod upon the rough prickles of the Thistle (thenceforth to become the national emblem), and, yelling with the suddenness of the pain, aroused the garrison and put them on their defence; if he had worn boots, or even one of those pairs of rough skinned Scottish 'brogues' that were constructed with slits at the heel, so that the water might run out of them, then, who can tell the sequence of events that may have followed? As it is, there—to remind us of the great events accruing from the misplaced confidence of a naked foot—there is the Thistle for Scotland's badge, with its prickly Dane-and-enemy-defying motto, *Nemo me impune lacessit*, which, being interpreted into good broad Scotch, means (according to the song)—

"Wha daur meddle wi' me!"

Cuthbert Bede, though recommending botanists to visit Cantire, can scarcely be trusted on this subject; for, when passing the Isle of Arran, he pauses in his description to suggest the possibility of a visitor paying his expenses by taking home with him a sufficient quantity of the Maiden-hair Fern, which he says "grows in luxuriant beauty" in "dark Arran's dells." But alas for the tourist who shall take his advice! the Arran in which this pretty Fern abounds is not the island at the mouth of the Clyde, but one of a similar name off the west coast of Ireland!

The illustrations, from the author's pencil, are good, and a great addition to the book; but why must the tiny vignettes which commence the chapters be dignified with such high sounding titles? A couple of grouse, or the back of an old woman's cap, are hardly worthy of being recorded in the index. The book possesses so many merits that it can afford to have these small absurdities pointed out; they do not detract from its real interest, nor prevent our commending it to those who wish to become acquainted with the country in question, without wading through the somewhat ponderous pages of Macculloch in search of trustworthy information.

Miscellaneous.

Newspaper Science.—"A correspondent furnishes us with the following:—While residing near Malvern, a few weeks ago, I was one day admiring a fine Thorn bush in the orchard of a farmer, when the proprietor, seeing my attention attracted, walked up and informed me that the tree was called 'The Holy Thorn.' He then proceeded to enumerate its peculiarities, telling me that it only came into blossom at 12 o'clock on every Christmas-eve, and that the flower flourished but three or four minutes. Moreover, he stated that, were a branch cut off, instead of any ordinary white sap flowing from the incision made, the fluid that issued would be blood-red. Several people, he said, had come from great distances to see this curious specimen of the vegetable world." This stuff is served up to its readers by a learned morning Newspaper!

Horticultural Intellect.—The Baron D. of St. Quentin bought one day a magnificent Camellia covered with a thousand flower buds. Some time afterwards, passing through Picardy, we found the unlucky Camellia without a flower; it had cast them all, and the ground was paved with them. The Baron had no gardener, but having laid down his carriage and not liking to part with his coachman, he had given him the charge of the plant in question. An old family vehicle was made to answer for a greenhouse, and a rusty German stove was set to work to keep the place hot, and to destroy at the same time every particle of moisture in the air. "Ah!" said the Baron, "the climate of Picardy does not suit Camellias; you should have told me so." *Van Houtte's Flore des Serres.*

Dissecting Leaves.—Several correspondents having applied to us for information as to the best mode of dissecting leaves, &c., we subjoin the following particulars, which a correspondent has kindly forwarded to us:—Steep the leaves, seed-vessels, or other parts of the plant which are required to be dissected, in rain water; leave them exposed to its influence until the whole of the soft or pulpy matters are decomposed. The period required for this operation varies much in different leaves, &c., according to their texture; thus, some require but a few weeks, others as many months. When the pulpy parts are completely decomposed, the next operation consists in their removal from the fibro-vascular network with which they were originally connected. This requires much care and patience. There are two ways of accomplishing it; one, which consists in carefully exposing them to a stream of fresh water, using at the same time a brush; and the other by simply placing them in fresh water, and removing with care the decomposed portion, in like manner, with a brush. Some difficulty will be found at first in doing this without, at the same time, breaking the fibro-vascular network; but a little practice will soon render it easy of accomplishment. The adoption successively of simply fresh water, and a stream of the same, applied by means of a syringe, will be frequently found desirable. The pulpy portions having been removed, and the fibro-vascular network obtained, the latter must be then bleached. For this purpose, prepare a weak solution of chloride of lime, by adding about an ounce of a strong solution of that substance to a quart of distilled water; then soak the skeletons in this solution for some hours; generally three or four will suffice, but when they are very thick a longer period will be necessary. After this operation has been performed, wash the skeletons thoroughly in pure water, and lastly, dry them by freely exposing them to light and air. *Pharmaceutical Journal.*

Calendar of Operations.

(*For the ensuing week.*)

PLANT DEPARTMENT.

CONSERVATORY, &c.—As has been formerly stated, summer-flowering twiners, which usually get unsightly at this season, should be cut back freely, as should also any others that will submit to that kind of treatment. In the case of cold pits, the time has now arrived for getting straw shutters or whatever else it may be intended to use for coverings for them put in readiness for use without delay. Straw shutters if well made are expensive in the first instance, but are considered by many to be the most efficient of any kind of covering in use; and taking into account the time they last they are perhaps as cheap as any. Expose the stock in such pits freely to air on every favourable opportunity, so as to check growth and get the wood firm. Little water will be required at the root, but look over the plants every few days, withholding water until it is absolutely necessary, and then giving a moderate soaking. Heaths and other things subject to the attacks of mildew must be closely watched, and sulphur applied the moment the enemy is perceived.

FORCING DEPARTMENT.

PINERIES.—The trying period for those who have to winter their young stock in pits heated by fermenting materials may be expected soon to arrive, for with short days and cold nights it is a difficult matter to preserve Pines in a healthy state, where warmth must be accompanied by excessive moisture. Keep the linings sufficiently strong to maintain the temperature at about 65°, which will allow of giving air rather freely on fine days, and a little must also be given in all states of the weather, when doing so does not cause the thermometer to sink under 55°. There should be no attempt made at inducing growth, but the linings should be kept rather strong, so as to be prepared against the setting in of severe weather, and also to allow of giving sufficient air to prevent excess of moisture. See that efficient coverings are prepared, and endeavour to keep the bottom-heat steady at about 75°, and the soil in a rather dry state. This system of Pine growing is now, however, but little practised, and it would be economy on the part of those who adopt it to supersede it at once by means of a hot-water apparatus.

VINERIES.—The night temperature to begin forcing with should range about 50°, raising it to 60° by day, or a little more with the assistance of the sun. Also endeavour to secure a little warmth for the roots in the outside border, and if fermenting materials be used watch these narrowly, and endeavour by timely additions and frequent turnings to secure a regular gentle warmth of 60° or 65° at a foot below the surface of the soil. If fermenting materials are employed, there will be a great saving of labour, &c., by thatching them with a good coat of something to throw off wet, and preserve them from the weather.

FLOWER GARDEN AND SHRUBBERIES.

Chrysanthemums are now everywhere occupying attention; let them be tied out so as to display their blossoms to the best advantage. Protecting materials must soon be got ready for such plants as require to be covered up in winter; where dry Fern can be had it answers the purpose perfectly. Choice sorts of Hollyhocks may soon be taken up, potted, and wintered in a cool house; they will be exceedingly useful for furnishing cuttings, and these if got in early in spring will make excellent plants for next season. Be careful to secure transplanted things against wind, especially large plants, which should never be left until they are properly staked or otherwise made fast, for when this is put off it frequently happens that the roots get injured through the tops being rocked about. Get ground intended to be planted with Dahlias and Hollyhocks next season deeply trenched and ridged up so as to expose it as much as possible to the weather, putting in plenty of good rotten manure, especially where the Hollyhocks are to stand, for these require a deep rich soil.

HARDY FRUIT AND KITCHEN GARDEN.

The fine weather which we have lately experienced has been very favourable to the ripening of late fruits. Continue therefore gathering both Apples and Pears, most varieties of which will now be fit. Nonpareils should be amongst the last gathered, and the same may be said of Glou Morceau, Beurré Rance, and Easter Beurré Pears. If Coe's Golden Drop Plums be carefully gathered, wrapped singly in thin paper, after remaining some days in a dry airy room and then packed in shallow boxes, they will keep a long time, and so will the blue Imperatrice, and the Ickworth Imperatrice, the latter being the more preferable Plum of the two. It cannot be too often repeated that all choice fruit should be gathered when perfectly dry, and in storing, wherever an extensive surface of fruit is exposed, air must be admitted freely, for at this period exhalations are most abundantly given out, and more especially the early varieties on their becoming fit for use. These, in fact, ought not to be in the same apartment with the more valuable late-keeping sorts. Look frequently over the fruit room, and remove at once any fruit that appears to be unsound. Prepare ground for planting. Where there is room to spare in the Mushroom house a little Seakale if wanted may be forced. The roots should be placed on a slight bed of warm dung, filling up the spaces between them with old tan or with the soil and manure mixed from an old Mushroom bed, giving a good watering to wash it in amongst the roots. The bottom heat should not exceed 70°, as too much heat is not favourable to securing strong growth. Take advantage of wet days for making fresh Mushroom beds, and clearing out those that are spent; also collect and prepare droppings for forming fresh beds by spreading them in a shed and turning them every day until they are [illegible] to prevent excessive fermentation [illegible]. Carefully examine Onion stores, and remove [illegible] there are any symptoms of decay. The [illegible] is reported to be very troublesome this autumn; the best remedy is perhaps picking off the affected [illegible] and burning them.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending Oct. 10, 1861, as observed at the Horticultural [illegible]

October.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Temperature of the Air. Min.	Temperature of the Air. Mean	Of the Earth. 1 foot deep.	Of the Earth. 2 feet deep.
Friday 4	●	30.056	30.000	73	39	56.0	60	57
Satur. 5	1	30.007	29.968	73	48	60.5	61	[illegible]
Sunday 6	2	30.128	30.068	63	53	58.0	60	57
Mon. 7	3	30.031	29.930	72	50	61.0	60	[illegible]
Tues. 8	4	29.836	29.738	76	50	63.0	61	[illegible]
Wed. 9	5	29.888	29.829	77	41	59.0	60½	[illegible]
Thurs. 10	☽	[illegible]	[illegible]	72	55	63.5	60	[illegible]
Average		29.985	29.874	72.3	48.0	60.1	60.3	[illegible]

Oct. 4—Fine; very fine; slight rain.
— 5—Dense fog; exceedingly fine; overcast; rain.
— 6—Rain; drizzly; foggy; mild at night.
— 7—Foggy; very fine; foggy at night.
— 8—Foggy; very fine; hot; overcast; lightning in the [illegible]
— 9—Rain; exceedingly fine; slight fog.
— 10—Heavy dew; dense fog; very fine; slight fog; rain [illegible]
Mean temperature of the week 7[illegible] deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Oct. 19, [illegible]

Oct.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevalent Winds
Sunday 13	60.0	42.1	51.1	18	0.33 in.	[illegible]
Mon. 14	59.2	41.2	50.2	17	0.50	[illegible]
Tues. 15	57.9	[illegible]	[illegible]	17	1.64	[illegible]
Wed 16	58.4	[illegible]	[illegible]	16	0.56	[illegible]
Thurs. 17	58.1	41.2	49.6	15	0.31	[illegible]
Friday 18	58.0	[illegible]	49.9	17	0.85	[illegible]
Satur 19	[illegible]	[illegible]	49.6	17	0.31	[illegible]

The highest temperature during the above period occurred on the 14th, 1845—therm. 7[illegible] deg.; and the lowest on the 19th, 18[illegible]—2[illegible] deg.

Notices to Correspondents.

BOOKS: *A W N.* Hamilton on the Pine Apple, or [illegible] on the same subject, may possibly answer your purpose.

DISEASED PEARS: *J Fryer.* The whole of the leaves of a row of young standard Pear trees are affected like the enclosed. Alas! for your trees. They are attacked by Roestelia cancellatum, a terrible Fungus. The only thing you can do is to cut off all the young wood, sweep up all the leaves, and burn them along with 3 or 4 inches deep of the soil under the trees.—*J S.* It is so everywhere. They are in a very bad condition, owing no doubt to the effects of last year. You had better prune the trees rather severely, burn the cuttings or leaves, and mulch the roots.

HOTWATER PIPES: *S. W.* We are of opinion that your [illegible] will be injured by the proximity of the hotwater pipes [illegible] your greenhouse. You must try the effect of a double [illegible] We see no other remedy.

MONSTROUS PEARS: *D H.* Such cases of Pears growing [illegible] Pears are commoner than usual this year. Their history has been frequently explained, especially at p. 723 of our volume for 1851. See also Dr. Lindley's Elements of Botany, [illegible] or his Theory and Practice of Horticulture, p. 88.

NAMES OF FRUITS: *R W Poole.* 1, Wormsley Pippin; 2, Winter Nonsuch; 3, Old Nonsuch; 4, Duchesse d'An[illegible]; 5, Appears to be Jersey Gratioli—not this year's [illegible] [illegible].—*F*[illegible] Probably the White Costin; 2, [illegible] Margil; 3, Franklin's Golden Pippin; 4, Like [illegible]; 5, Boston Russet; 6, Coe's Golden Drop Plum.—*Subscriber.* Your Apple is not known. It is probably one of the seedling varieties which you state were [illegible] planted out in your neighbourhood.

NAMES OF PLANTS: *J M, Jr.* Gongora histrionica.—[illegible] The plant called Allamanda violacea is, we believe, [illegible] A. puberula. It is new to gardens, and we should like to see a good specimen. What you have sent is too small for positive identification. We cannot name [illegible] from so imperfect a bit.—*Lamellio.* Coleus [illegible]—*G.* [illegible] *marmus.* Boussingaultia baselloides.—[illegible] argenteum.

OAKS: *S W* asks some of our Correspondents [illegible] justified in believing that an Oak growing [illegible] Holme Lacy, Herefordshire, covers a greater [illegible] in England, viz., 1365 square yards; the circumference [illegible] boughs, he adds, is 131 yards.

ORCHIDS: *C D.* No, Dr. L. has not.

PITCH PINE: *O L.* It is the wood of Pinus resinosa, [illegible] from North America.

PLANT HOUSES: *Alpha.* If a house is built of brick it cannot be removed without consent of the landlord. But if it is made of wood or metal, and merely set upon the [illegible] like Hereman's, so often advertised in our columns, [illegible] moveable, not a fixture, and can be taken away.

RHODODENDRONS: *Thomas.* You may plant them [illegible] Roses in "basins" or hollows filled with peat. Manure [illegible] decomposed will do them good, not harm.

SWEET CHESNUT: *Hod.* We will enquire, if we can succeed in decyphering your note.

VINERIES; *Halesowen.* We prefer rough glass for [illegible] Vine border need not be bricked at the bottom, [illegible] having 1 foot of rubble of brick ends.

WORMS IN WALKS: *J K C.* A solution of caustic lime (made by pouring water over fresh burnt lime, stirring it, and allowing it to stand till clear), applied from a watering-pot with a coarse rose, will soon bring the worms to the surface, where they can be swept up and destroyed. Salt [illegible] during wet weather will also assist in freeing your walks from worms.‡

THE LONDON MANURE COMPANY
([illegible] 1840.)
Are [illegible] the following MANURES:—
CORN MANURE [illegible] AUTUMN SOWING.
SUPERPHOSPHATE of LIME.
DISSOLVED BONES for PASTURES.
CONCENTRATED URATE.
BLOOD MANURE for CORN.
PERUVIAN GUANO, NITRATE of SODA, SULPHATE of AMMONIA, and every other Manure of value.
[illegible], E.C. EDW. PURSER, Secretary.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE of LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.

CONCENTRATED TURNIP MANURE, equal in value to the preceding.

Of these Manures Dr. Voelcker says:—"These results must be [illegible], and are the best proof of the very [illegible] and commercial value which characterises your concentrated superphosphate."

Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

LAWES'S MANURES.
[illegible] J. B. LAWES for the [illegible] are now ready for delivery at his [illegible]:—
LAWES'S PATENT TURNIP MANURE, and BONE SUPERPHOSPHATE of LIME £6 6
LAWES'S SUPERPHOSPHATE of LIME from BURNT BONE or MINERAL PHOSPHATES .. 5 5
LAWES'S BARLEY, GRASS, and MANGEL MANURES 8 0
These Manures can be obtained of Mr. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

Pigs. Pigs. Pigs.
200 TONS of DAMAGED RICE, suitable for feeding Pigs, to be sold for Cash at 4l. per Ton.
At W. JUPP & Co.'s Cattle Food Depôt, 42, Great Tower Street, E.C.

HORSE and CATTLE FOOD, 35s. per cwt.; Pig and Poultry Food, 16s.; Dog Biscuit, 15s.; Compressed Beef Greaves, 12s. and 16s.; Rice Meal, 7s. 6d. and 9s. 6d.; Indian Meal, 11s.; Locust Beans, 1s. 6d.; Locust Bean Meal, 14s.; Linseed Meal, [illegible]; Screened Bengal Rice, 14s.; Chicken Rice, 1[illegible]. Sold for Cash only by W. JUPP & Co., Cattle Food Depôt, 42, Great Tower Street, E.C.

FIVE THREE-LIGHT BOXES for SALE in good order, and one handsome BERKSHIRE SOW, with 12 Pigs, the second litter. To save trouble the price of the Sow and 12 Pigs is [illegible]; the Pigs are three weeks old.
Apply at Mr. BELLS, Brentfield Lodge, South Lambeth, S.

Drainage Season.
MR. BAILEY DENTON undertakes the DRAINAGE of ESTATES by Commission or Contract.
52, Parliament Street, Westminster, S.W.

JAMES AND FREDERICK HOWARD, BRITANNIA IRON WORKS, Bedford, Manufacturers of STEAM CULTIVATORS, STEAM PLOUGHS, CHAMPION PLOUGHS, HARROWS, HORSE RAKES, & HAYMAKERS.
Catalogues, with full particulars, sent free on application.

JOHN FOWLER, JUN., 28, Cornhill, London, E.C.—Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free.

£1000 UPON the WOOLSTON SYSTEM against any other system of Steam Cultivation.
For price of apparatus and particulars apply to Mr. W. SMITH, Woolston, Bletchley Station.

Wind Power.
J. R. PEILL, 17, New Park Street, Southwark, S.E., begs to inform intending purchasers that he has now increased facilities for Manufacturing the Patent WIND ENGINES for Pumping, Grinding, Chaffcutting, Pulping, &c.
Prospectuses and all information may be obtained by enclosing one postage stamp, and a Wind Engine in full work may be inspected on the Premises daily.

Gutta Percha Tubing for Watering Gardens.
THE GUTTA PERCHA COMPANY have the pleasure to acknowledge the receipt of the following
Testimonial from Mr. J. FARRAH, Gr. to BOSWELL MIDDLETON JALLAND, Esq., of *Holderness House, near Hull.*
"I have had 100 feet of your Gutta Percha Tubing, in lengths of 100 feet each, with union joint, in use for the last 12 months for watering these gardens, and I find it to answer better than anything I have ever yet tried. The pressure of the water is very considerable, but this has not the slightest effect on the tubing. I consider this tubing to be a most valuable invention for Gardeners, inasmuch as it enables us to water our gardens in about one-half the time, and with one-half the labour required."
Manufactured by the GUTTA PERCHA COMPANY, Patentees, 18, Wharf Road, City Road, London, E.C., and sold by their Wholesale Dealers in Town and Country.

E. T. ARCHER'S "FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, &c.
PROTECTION from the COLD WINDS & MORNING FROST.
"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.
Two yards wide .. .. 1s. 6d. per yard run.
Four yards wide .. .. 3s. per yard.
An improved make, 2 yards wide, 2s. 6d. per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard run.
ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.
"It is much cheaper than Mats as a covering."

Parkes' Steel Digging Forks.
BURGESS AND KEY, 95, Newgate St., E.C., London, being the Wholesale and Retail Agents for these celebrated Tools, have always a large Stock on hand from which their Customers may select what they may require.
ANTHONY'S PATENT AMERICAN CHURN.—The FIRST PRIZE was again awarded to this Churn in Competition with several others at the Chester Meeting of the Royal Agricultural Society; it has obtained the First Prize given by the Society at every Meeting since 1850.
Messrs. BURGESS & KEY, 95, Newgate Street, E.C., strongly recommend it as the most perfect Churn now in use. Full particulars sent on application.

HENRY J. MORTON AND CO., 2, Basinghall Buildings, Leeds.
Galvanised Iron Water Cistern
for Cottage Houses, &c., to contain 50 gallons, 26s.; 80 gallons, 31s. each; and 140 gallons, 37s., and fitted with tap, keeping the water perfectly sweet and clean; will not rust or corrode. Cisterns of all sizes.
Galvanised Iron Pumps
for Liquid Manure or Domestic Use, 3 inches diameter, 30s. and 32s. 6d. each; Tail Pipe for same at from 10d. per foot.
Galvanised Iron Swing Water Barrows
for Garden or Farm use, containing about 20 gallons, entirely [illegible] of iron, [illegible] each.

MUSGRAVE'S PATENT STABLE FITTINGS and HARMLESS LOOSE BOXES, PATENT IRON COW-HOUSE FITTINGS, and IRON PIGGERIES.

These inventions are recommended as possessing numerous advantages not to be found in anything hitherto made. At the late Meeting of the Royal Agricultural Society at Leeds, MUSGRAVE BROTHERS received a Silver Medal, and two Awards of "Highly Commended," being the only Prizes conferred on any competitor in this class.
Particulars sent on application to the Inventors and Makers, MUSGRAVE BROTHERS, Ann Street Iron Works, Belfast.

J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25s. 6d. each.
IRON YARD and GARDEN PUMPS
3 feet 6 inches under spout
2¼ 3 3½ inch
43s. 53s. 60s. each.
J. TYLOR and SONS manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.
PUMPS of J. TYLOR & SONS' manufacture to be obtained of Plumbers in all parts of the United Kingdom.
J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

JOHN WARNER AND SONS, BELL and BRASS FOUNDERS to HER MAJESTY, HYDRAULIC ENGINEERS, BRAZIERS, &c., 8, Crescent, Cripplegate, London, E.C.

No. 35.

WARNER'S PATENT CAST-IRON PUMP, for raising Water from Wells not exceeding 25 feet in depth.

Diameter of Barrel.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead, gutta percha or cast iron flanged pipe as required.	1 1 0
2½ „ long	3 „ 3 „		1 10 0
3 „ ditto	3 „ 6 „		2 4 0
3½ „ ditto	3 „ 6 „		2 9 0
4 „ ditto	3 „ 6 „		2 18 0
2½ „ short, with 15 feet of Lead Pipe attached, ready for fixing			2 0 0
2½ „ long	ditto	ditto	ditto 2 14 0

This Pump is fitted with J. W. & SONS' Patent Vibrating Standard, Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.

WARNER'S IMPROVED LIQUID MANURE or GENERAL PORTABLE PUMP.

No. 42.

This Pump is fitted with WARNER'S Patent Bucket and Valve, and cannot clog in action. The Barrel is made of Galvanised Iron, not likely to corrode, and can be raised or lowered at pleasure on the stand, the legs of which fold together, and it may be carried with ease by one man.

	£ s. d.
Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe	2 15 0
If fitted with Barrel of Planished Copper	3 4 0
Stand and Pump, with plain Tail Pipe, for tying on Suction Pipe	2 9 0
2-inch India Rubber and Canvas Flexible Suction Pipe, on wires, in either 10, 12, or 15 feet lengths .. per foot	0 2 6

No. 42 is a similar Pump to the above, without stand, but with strong wrought-iron straps, for fixing to water cart or plank, price 2l. 5s.
Every description of Machinery for Raising Water, by means of Wheels, Rams, Deep Well Pumps, &c.; also Fire and Garden Engines, &c.
J. W. & SONS' Illustrated Catalogue forwarded post free on application.
The above may be obtained of any Ironmonger or Plumber in Town or Country, or of the Patentees and Manufacturers,
JOHN WARNER & SONS, 8, Crescent, Cripplegate, London, E.C.

THE LANDS IMPROVEMENT COMPANY.—Incorporated by Special Act of Parliament in 1853. 2, Old Palace Yard, Westminster, S.W.
TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c., IN ENGLAND AND WALES AND IN SCOTLAND.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.
Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Inclosure Commissioners.
For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

THE BIRMINGHAM CATTLE and POULTRY SHOW, 1861.
The THIRTEENTH GREAT ANNUAL EXHIBITION of CATTLE, SHEEP, PIGS, DOMESTIC POULTRY, and ROOTS will be held in Bingley Hall on MONDAY, TUESDAY, WEDNESDAY, and THURSDAY, the 2d, 3d, 4th, and 5th of December next, when Prizes, Cups, or other articles of Silver Plate and Gold and Silver Medals to the amount of 1450l. will be awarded.
Prize Lists and Certificates of Entry may be obtained on application. The Entries close on November 1.
JOHN B. LYTHALL, Secretary.
Offices, 11, Temple Street, Birmingham.

SMITHFIELD CLUB CATTLE SHOW, 1861.—The ANNUAL SHOW of FAT CATTLE, SHEEP, and PIGS, will take place on DECEMBER 10, 11, 12, and 13, at the Bazaar, King Street, Portman Square. The last day for Certificates of both Stock and Implements to be returned to the Hon. Secretary is Friday, November 1.
The following Forms of Certificates are now ready, and intending Exhibitors in applying for them need only quote the letters and state how many of each they require.

CATTLE.	SHEEP.
Form A—Ox or Steer	Form D—Pen of 3 Wethers
B—Cow or Heifer	E—One Sheep in Extra Stock
C—Beast in Extra Stock	

PIGS.
Form F—Pen of 3 Pigs.
G—One Pig in Extra Stock.
In addition to the Prizes usually offered, separate Classes have been established for the following Breeds of Sheep:—
Kentish or Romney Marsh — Shropshire Mountain
Prize Sheets with Rules and Regulations and Forms of Certificates as above may be obtained of
B. T. BRANDRETH GIBBS, Hon. Sec.,
Corner of Half-Moon Street, Piccadilly, London, W.
N.B. All communications on the Club's Business should have the words "Smithfield Club" outside, to distinguish them from private letters.

The Agricultural Gazette.

SATURDAY, OCTOBER 12, 1861.

MEETING FOR NEXT WEEK.

TUESDAY, October 15—Herefordshire Agri. Society at Hereford.

WE gave some weeks ago a full report of Mr. HALLETT'S Pedigree Wheat. Our readers will remember that three pieces were referred to:—a small experimental plot (No. 3, below) where seed had been dibbled, one to every square foot, at the rate of 4½ pints per acre; another (No. 2) an 8-acre field dibbled at the rate of 6 pecks per acre; and a third (No. 1) a 10-acre field planted at the rate of one peck per acre. Now, shortly after our visit, when the last of No. 1 was being cut, and all the rest was standing in sheaf in the field, we received the following statement of measures, numbers, and weights taken on a portion of Plots Nos. 1 and 2, and on the whole of No. 3.

	Area.	Sheaves. Total.	Sheaves. Per acre	Average weight of sheaf.	Weight per acre.
	A. R. P.			lbs.	lbs.
No. 1. Drilled 6 pecks per acre. Nov. 20, 1860.	1 1 32	869 "Bagged" or "Swapped."	600	15	9,000
No. 2 Planted 1 peck per acre in present season Oct. 20, 1860. *Too late.*	1 2 23	1122 "Swapped."	680	16½	11,220
No. 3 Planted 1 grain in a hole; holes a measured foot apart every way, equal to 4½ pints per acre. Oct. 4, 1860.	0 0 12 1/3	60 weighing 835 lbs.*	780	Nearly 14	10,855

* Reaped leaving a 14 inch stubble.

The produce of No. 1 was then estimated from the threshing of 40 sheaves at 56¼ bushels per

acre, and that of No. 2 was estimated at 64 bushels per acre.

The whole crop has since been threshed out, with the following results:—

No. 1. A 10-acre field—not planted until the end of October on account of the wet season (1860), which was fully six weeks too late for the quantity of seed employed: viz., 10 pecks on the 10 acres—produced 1861, 57 bushels of Wheat and 140 trusses (of 36 lbs.) of straw per acre. This example is, however, by no means recommended for imitation.

No. 2. An 8-acre field—drilled 20th November, 1860, with 6 pecks per acre—produced 1861, 54 bushels of Wheat and 112 trusses of straw per acre. Both these fields were occupied by root crops (manured in the usual way) in 1860, and the Wheat was put in without any further manure or special preparation whatever. It is, however, impossible to get the Wheat in in proper time after roots.

The soil is light and shallow, resting immediately upon the chalk, and the usual crop of Wheat is from 32 to 36 bushels per acre—40 bushels being considered a very good crop.

Mr. HALLETT has, in the beginning of this month, drilled about 30 acres with about 30 pecks, using the small Turnip-cups of the seed barrel of GARRETT's drill: this is now, Sept. 30, well up, and the plant as thick as could be wished.

His own statement is to the following effect:—"I never thought No. 1 a success, *i. e.*, what I call a success, but 57 bushels is a very great crop for any land. I can show you a field of 7 acres now up, the whole of which was *one grain* two years ago. One acre of it was in *one ear* this day one year ago."

It is plain that the whole subject of Wheat improvement is in the hands of a very observant, intelligent, and energetic man.

—— The sale of Mr. SANDAY's herd at Holmepierrepont, on Thursday of last week, proved, as we anticipated, one of the most remarkable of the season. We referred at p. 872 to several of the families of which the herd consisted—descendants from Garland, Lavender, Lady Augusta, Fanchette, Foggathorpe, &c.—and we referred to the value of the Fanchette family. This has been proved by the six members of that family averaging no less than 133*l.* apiece. The following *is the report*:—

Tribes.		£	s.	d.
8 Garlands	Average—58*l.* 5*s.* 6*d.*	466	4	0
18 Lavenders	Average 44*l.* 13*s.* 8*d.*	804	6	0
6 Fanchettes	Average—133*l.* 17*s.* 6*d.*	803	5	0
10 Augustas	Average—38*l.* 19*s.* 1*d.*	389	11	0
3 Foggathorpes	Average—73*l.* 10*s.*	220	10	0
9 Waterwitchs	Average—35*l.* 4*s.* 8*d.*	317	2	0
11 Other sorts	Average—42*l.* 17*s.* 2*d.*	471	9	0
50 Cows and heifers	Average—56*l.* 3*s.* 6*d.*	£2808	15	0
15 Bulls	Average—44*l.* 4*s.* 10*d.*	663	12	0
Total sale		£3472	7	0

The total average was 53*l.* 8*s.* 5*d.* Among the highest prizes reached were Lot 14, a four-year-old cow, purchased for 225 guineas by Mr. BARCLAY, of Keavil, Fifeshire; Lot 22, a four-year-old cow, bought by Mr. PAWLETT, of Beeston, for 165 guineas; Lot 30, a 2½-year-old heifer, bought by Mr. WALDO, of Edenbridge, for 180 guineas; Lot 46, a nine-months-old heifer calf, bought by Mr. PAWLETT for 105 guineas. These are the four cows, descendants of the cow "Fame" to which we referred a fortnight ago as being likely to fetch the highest prices at the sale.

THE REARING OF CALVES.

(Continued from p. 893).

[Let us supply the accidental omission last week of the name of the author of this paper. It is extracted from the Journal of the Royal Agricultural Society, and is the Essay written by Mr. Thomas Bowick, of Stoneleigh Abbey Farm, Kenilworth—to which the Society's prize was awarded.]

CARE must be taken to have the calf well bedded at least twice daily, Wheat straw, shortened, being the best litter for the purpose; attention to this point will tend, as much as anything, to keep the animal in good health. No vermin must be allowed to obtain a lodgment; how often is it the case that the entire well doing of a calf is retarded from the presence of lice on the head or neck, the top of the shoulder, or towards the rump! It in a continual state of irritation, its thriving can scarcely be looked for. We are not aware that the appearance of these parasites is attributable to any peculiarity in management; calves in good condition, calves in the highest condition, as well as those of a contrary character, are alike subject to them. A dressing of sour buttermilk, well brushed into the skin, is called for without delay, or the usual application of stavesacre, soda, and soft soap, if the former is ineffectual.

In the case of any other ailment that calfhood is liable to, we have found "Day's Gaseous Fluid" an amply sufficient resource. Since using it we have not lost a single calf, neither can we refer to a calf having had any attack of scouring which continued a couple of hours, nor to one instance of the succeeding meal being refused, however much may have been the loss of appetite previously.* *Probatum est.*

Castration is generally performed when the calf is from three to six weeks old. The former of [...] we consider preferable; it is at all times a [...] to fast them at the time for the preceding [...]

As spring advances, the supply of roots to [...] will necessarily be greater, according to their [...] age and ability to masticate. But it is not [...] able or economical to send them out to Grass [...] in the season. Last year we saw, on many [...] the line of the Central and North-eastern [...] Scotland, lots of puny, half-starved calves [...] the lee-side of the fence, while the Grampians [...] retained a full share of their wintry mantle [...] streams running seawards were flooded [...]ing snow. This was in the early part [...] and we cannot profess to have fallen [...] with the practice, though probably the [...] scarcity of food in the north had something [...] with it. Better far to spend a few pounds [...]ficial food, than to push the young [...] fields prematurely. And you will [...] giving them only a few hours afield [...] bringing them in again at night to their [...] with a bit of (hay) chaff for the older [...] mess of skim-milk and Linseed gruel for the younger.

If arrangements can be made for summer [...] calves in a park, such as is usually found about [...] man's place, they will do far better there than [...] else. What with shelter, food, and water—[...] alike from the biting blast, the scorching sun [...] tormenting flies; the latter not only to drink [...] splash about in the running stream—we [...] is more in these old-fashioned matters than [...] care to recognise. As Mr. Bowie, of Fortar [...] noted breeder of polled cattle, remarked when [...]pened to see his young stock last summer [...] said he, "is the life of them," pointing at the [...] time to the burn or brook which ran along the [...] of the field, and in which the calves were standing [...] swishing their tails, under a broiling sunshine. [...] calves reared in the manner we have named, [...] striking, or quarter-ill, is hardly known. We [...] only had one case out of 150 calves so treated, and [...] was attended by special circumstances, which [...] accounted for the illness as exceptional. Not that [...] should advocate putting them into a park which [...] filled with taken-in stock as to cause a risk of [...] starvation. Better in such a case to keep them [...] home, and graze them on a piece of old turf, or [...] year's "seeds," or something of the kind. But [...] are certainly many parks (or enclosures adjoining [...] them) where an arrangement of the kind c[...] readily made; and, even if not pretty close at hand, [...] facility of railway *communication partially* [...] distance of 20 or 30 miles.* *Many of the west* [...]land farmers send their young stock, for summ[...] across the Clyde, to the green topped hills [...] wisely reckoning that their own grazings *pay be*[...] the shape of milk, butter, or cheese, *for the town* [...] population near at hand. But, from a "penny w[...] and pound foolish" sort of policy, which forbids the[...] bestowing more than the smallest modicum of ca[...] attention, or expense upon their stock until they ar[...] an age to enter the dairy, the summer seems to d[...] little for them.† *Thomas Bowick in Royal Agri*[...]*tural Society's Journal.*

THE CHEESE SHOW AT WOLVERHAMPTON

IN your Journal of the 5th October I o[...] article on cheese making, in which you espe[...] the public attention to the great importance [...] branch of agriculture, and you state that in the [...] of the Staffordshire Agricultural Society's [...] Wolverhampton, no mention has been made [...] cheese exhibited there. This omission has stru[...] of the members of the Society and also many [...] who attended the late Show, the cheese departm[...] the Midland Counties being excessively attract[...] large portion of the visitors, especially those of [...] sex, who ordinarily take so prominent a par[...] manufacture.

Astonished at this neglect on the par[...] *Staffordshire Advertiser*, in the columns [...] Journal there was last year so much discuss[...]

* This complaint (diarrhœa) is one of the most troublesome with which the calf-breeder has to deal. Again and again inquiries are inserted in the agricultural papers asking information on the subject, and the replies are as varied as the queries are uniform. Take a recent case, from the columns of *Bell's Weekly Messenger*, where "An Old Subscriber" says—"I have adopted all the means veterinary skill can suggest, but with no good result. Some of my calves begin to scour when not more than 24 hours old, and some from a week to 10 days. They live wholly on new milk, always sucking from the cows. My cows have been living on hay cut into chaff, mixed with pulped Mangold, at the rate of half a bushel per cow per day, and 2 lbs. of oilcake and 2 lbs. of meal. The cows have had no Grass till this day. I lose about half my calves from this scouring. Any information will be thankfully received." One reply recommends the inquirer to "see that the cow be well milked before he allows the calf to suck, giving it a table-spoonful of castor oil, in new milk taken from a cow that has been calved some time. The first milk is too rich for the calf. I formerly lost several calves from the same complaint, but never one since I adopted this plan." Another says, "Try a teacupful of rennet for the scour in calves, given just before they begin to suck, or a strong infusion of bramble leaves. Dry the leaves in a cool oven, rub them down and infuse for 15 minutes." And again:—"If 'An Old Subscriber' will give his calves that scour (according to age and strength of the animal) from one-third to one-half of one of Cupiss's Constitution Horse and Cattle Balls, broken sufficiently fine to be given in cold gruel or water, he will find the medicine a remedy, and otherwise benefical. It may be repeated, if necessary. In hot weather it will be necessary to put the ball into cold water a few minutes, or it will not break for mixing." A fourth says:—"I should recommend him not to let his calves have more than three pints of milk per day for the first four days, and not more than four pints until they are a month old. I wean from 30 to 40 every year, and never lose one from scouring. If they show the least symptom of scouring I always give Day's Gaseous Fluid, which is a certain cure if taken in time." While the next says, "If 'An Old Subscriber' will discontinue feeding his cows on the Mangels, and give his calves one table-spoonful of bruised grains of Paradise and one tablespoonful of starch simmered in a quart of new milk, and repeat it two or three times if necessary, I have no doubt the effect will be satisfactory." Another gentleman recommends food rather than medicine to be looked to:—"I would advise to double the quantity of cake and meal given to the cows, and withhold the Mangel; on no occasion should this root be given to cows suckling young calves. "An Old Dairymaid," also, "who superintends the rearing of about 30 valuable calves yearly, seldom losing one of them, wishes to give 'An Old Subscriber' advice how to prevent scour in calves. As soon, then, as the calf is born she recommends about a pint or a pint and a half of beasting from the dam to be given to it, by means of a small horn, out of which the calf will usually suck it. All the remaining beastings which can be milked from the cow should be drawn from her, as she will naturally retain quite enough, and often more than sufficient, for the support of her offspring. As soon as the calf is strong enough to stand, it should be induced to suck, taking care that as small a quantity as possible be left in the bag. 'An Old Subscriber' should treat the animals the reverse of what he does, viz., the calves should not be allowed their fill of milk till they are at least a week old; but should scouring take place about the time named, which is not at all unusual even with this treatment, it will make them disinclined to move about and to seek for the teat, and they are, no doubt, often lost for the want of a little milk being given to them. If, however, the scouring continues, about three large tablespoonfuls of Linseed-oil should be administered, and, if this does not have the desired effect, give milk from another cow, but by no means use drugs of any kind, as 'An Old Dairymaid' considers the best remedy is good nursing, and that want of proper attention to them while so very young is often the cause of scour in calves."

We may be excused adding to the length of this note by giving the reply which we penned in answer to the same inquiry:—

"Remedies for the above ailment are often local and empirical; it is far better to treat it constitutionally. In short, 'remove the cause, and the effect will cease.' But unfortunately several details are wanting from which to form a judgment, or make a profitable suggestion. Diarrhœa in calves may, and often does, arise from very diverse and frequently what may be called trivial causes; these causes, as operating on the little animal, are either external or internal. If the former, we should be disposed closely to examine the feeding of the cows, and to put a few queries respecting the same. For instance—Are the Mangels carefully cleaned? Adhering soils tends to scour the cows in a moderate degree, and of course the action is much more serious on the calf. It so happens that the complaint from which 'An Old Subscriber' suffers has this season been particularly prevalent, from the very fact indicated. The small Mangel roots of 1860 have been much more difficult to clean, and have consequently carried more soil with them to the feeding troughs than in the average of seasons. Their use should cease entirely with those cows that are suckling, unless this has been already done.

"Again: Is the cake a genúine article? How has it affected the fatting beasts? Is there no irritant contained in it? And what kind of meal is referred to—that of Barley or Beans? We should very heartily urge the use of the latter in preference to the former for nursing cows.

"Again: Do the calves suck their own mothers? A mistake is often committed in putting a young calf to a cow which has been some months in milk. This should not be done before the calf is a fortnight old, and even then with much caution.

"As to external causes of diarrhœa, a close, ill-ventilated, dirty, or damp calf-house may be reckoned the chief. The owner would do well to have the house carefully examined—wash it out, and then try the floor with a pocket-level. If the fall is less than an inch to the yard, the bricklayer must be had to remedy the defect. Calves void a large quantity of urine in proportion to their size, and ample provision must be made for carrying it off freely. Let them also be well littered down twice a day with Wheat straw, the boltens cut through the middle, and the straw shaken up together. Encourage them to eat a little sweet green hay from a rack before them, and also a few sliced roots as soon as they will take to them.

But for immediate action, if the scourge still continues. Watch the premonitory symptoms, viz., feverishness and refusal of food. Remove the affected animal to [...] and tie a cloth over the body, which will tend [...] vital powers. Give a dose of 2 ozs. of castor oil [...] teaspoonful of ground ginger, and a whisked egg [...] remove the offending or irritating matter; and the[...] with the free use of 'Day's Gaseous Fluid,' acc[...] directions on the bottle. Or if castor oil is not at [...] about 3 ozs. of common salt, in a little Wheaten [...] And if the bowels still continue relaxed, and the [...] too watery, the calf must be drenched twice a day [...] boiled and thickened Wheaten gruel. But do not con[...] use longer than is needful. It is well that nature be [...] to help herself a little. Before returning the anima[...] calf house, let the house be well flushed out, and washed [...] with water containing an ounce to the gallon of ch[...] lime. This will remove any offensive taint or smell [...] caution very essential for the well-being of calves. [...] clusion, be not persuaded to employ strong [...] medicines; and do not rest satisfied with rearing [...] every calf which is in a sound healthy condition at [...]

'This resource would be valuable and obvious [...] danger of chill and contagion at present incurred; [...] delays before starting, perhaps in tainted pens, [...] passage through the raw night air, have to be encount[...] owners of well-bred stock will probably prefer driving [...] even 50 miles to railroad risks. *P.H.F.*

† The summer grazing (6 months) of a two-year-old [...] charged 32*s.* 6*d.*; one-year-old, 21*s.* 4*d.*; and calves [...] proportion.

particular subject, Mr. Lees, of Gorsty Hill near Crewe, writes to the Editor complaining of it, and it is to an Editorial note on this letter that I wish to call your attention.*

The Editor of the *Staffordshire Advertiser* excuses the want of attention to this point on account of the Exhibition taking place so near the time of their publication, and on account of its being one of the minor departments of the show. Now, I wish to know whether the Cheese Show is one of the "Minor departments" of the Exhibition of the Staffordshire Agricultural Society? The Society offered at the late show 45*l.* 17*s.* and a silver medal for cattle best adapted for Dairy purposes; 30*l.* and a Silver Medal to the exhibitors of Cheese, and 12*l.* to the makers of the same. Total value of prizes offered to dairy cows and their produce, 87*l.* 17*s.*, and two Silver Medals. The operations of the Society extend 16 miles beyond the limits of the county, thereby including large portions of Cheshire, Derbyshire, Leicestershire, Shropshire, Warwickshire, and Worcestershire. All these counties are largely interested in the manufacture of cheese. In Cheshire, Derbyshire, and a large portion of Staffordshire, the cheese pays the rent, and in fact, from the commencement of the cheese-making season to the end of it, there is nothing thought of but cheese, and everything is sacrificed to the dairy, rest and comfort included. In Leicestershire and Warwickshire the dairies are not generally so large, but they produce a splendid class of cheese, and one that is not to be met with in any other part of the country, and the manufacture of it is still of the greatest importance. In Salop and Worcestershire the importance increases or diminishes as the neighbourhood approaches or recedes from the larger dairy districts. At any agricultural show in the Midland counties, one finds the cheese stands surrounded by the dairy farmers accompanied by their wives and daughters, eagerly clustering around the fortunate possessor of a penknife or cheese borer, in order to taste the prize cheese, and loudly proclaiming its goodness or badness, and often with comments as to its "not being so good as what we have at home." I have no hesitation in saying that there is more excitement in that part of the show than in any other, and that its merits will be more widely discussed. And why? Because it is the one thought of the dairy farmer and his wife throughout the year, and the important means by which he pays his rent, and is enabled to get a living for himself and his family.

I feel sure that no person acquainted with the districts in question, will for an instant attempt to deny the correctness of these statements, and I do trust that another year the Editor of a Journal holding such a position as the *Staffordshire Advertiser*, will use his endeavours to give us a thoroughly good report of the County Society's proceedings in this department.

At a time like the present, when the best method of cheese making is so much under discussion, and our markets are flooded with so much inferior cheese, English as well as American, we confidently hope that the press will lend us its aid in helping our judgment, as to what is the best method of proceeding, by giving us full descriptions of the various classes of cheese brought before the public at agricultural shows, and publicly recording the success or non-success of the competitors. *A Dairy Farmer, Oct.* 9.

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* The following is the letter referred to:—

Cheddar Cheese.—I beg the insertion of a few lines in your *Advertiser* in reference to the Staffordshire Agricultural Society's Prize Essay on Cheesemaking. I did not anticipate so early and so complete a reversal of the award of the adjudicators at Burton in 1860 as that which has been made at Wolverhampton in 1861. Not one solitary lot of cheese made according to the prize essay system gained a prize or was commended when compared with that made on the Cheddar system, six exhibitors of which gained no less than five prizes and the Society's Silver Medal. With this very satisfactory result I should have been content to have been silent had you done equal justice in your report to the exhibitors and makers of cheese with the exhibitors of prize cattle and implements. The dairy department was of paramount importance to the farming interest, and it is evident the committee of the Society were of the same opinion, from their anxiety to have it properly represented. In your reports of preliminary meetings of the committee they exult that the writer of a popular essay on cheesemaking had consented to be an exhibitor, and that they had succeeded in obtaining gentlemen for judges who were in every way qualified for the task, and who would discriminate and appreciate the various classes of cheese in due proportion to merit. From such representations, what must be the expectation of your readers, and especially those interested in cheesemaking? Is it not marvellous that the reports of facts should be withheld or suppressed when a principle of public interest is involved? I did expect that your *Advertiser* of last week would supply the omission of the previous one, and had the secretary been equally zealous in supplying a full report as he was in obtaining exhibitors for a special object, I should not have troubled you with my remarks. My object is not to exult in the triumph of the system which I support. The advocates of the Cheddar system have full confidence that it will ultimately extend itself by proving its superiority, without the fostering encouragement of the secretary or the Society.

One essential detail of interest in the Society's show is entirely omitted in the reports—that of the names of the makers of the prize cheese, to whom 12*l.* is given by the Society. Full reports are given not only of the owners of prize cattle, but also the breeders. Upon what principle can they forbear publishing the names of those individuals who have honourably gained these prizes?

Gorsty Hill, near Crewe, Oct. 2, 1861. THOMAS LEES.

[We insert the above communication as forwarded by Mr. Lees. So far as his strictures on our report are concerned, the occurrence of the show so near our time of publication will be accepted by the majority of our readers as a sufficient explanation of the brevity with which we were compelled to notice those of the minor departments of the exhibition.—*Ed. S. A.*]

GRASS LAND FARMING IN IRELAND.

WITH mountain ranges in almost every maritime county attracting into rain-clouds the moisture from the great Atlantic—with a central plain kept humid by bogs occupying one-seventh of the whole surface, and by innumerable lakes feeding the Shannon and many fine rivers,—Ireland possesses a climate more favourable to the growth of Grass and green cropping than for ripening a harvest of Wheat. With only some districts in which the production of bread-Corn is not in too many harvests a precarious business, while Oats, green forage, roots, and other cattle-food everywhere flourish, and large tracts also yield the richest natural pasture—Ireland is not specially formed to be a granary; Nature makes it a meadow, a dairy, and a stall; and no other country in the world contains, in proportion to its acreage, so many cattle, or possesses such an extensive trade in beef, and bacon, and butter. The annual exports of live-stock to Great Britain amount to about 340,000 oxen—bulls, cows, and calves—440,000 sheep and lambs, and 170,000 swine. Within the last 20 years the numbers of animals in Ireland have so increased that, valued at a fixed sum per head, the national live-stock is worth 50 per cent. more money; but, as the weight and quality and early maturity of the animals have also increased, the total gain is far more than this. Everywhere a good description of beast is found in field and stall; the old Irish "middle-horn" breed, with size, symmetry, and good milking properties, and needing only to be refined in bone and offal, and made a more kindly feeder, has been most extensively improved by Short-horn blood, so that excepting in mountain districts or in some old-fashioned hands, Short-horns and Short-horn crosses, the best possible animals for the country, the climate, and the markets, universally prevail. Only as a rarity, now and then, in Mayo and Galway, can we meet with a specimen of the old Irish ox of the lowlands,—the true "long-horn," of substantial size, hardy constitution, a prime quality and flavour of flesh, but of exceedingly slow fattening property, and distinguished for immensely long horns curving outwards, downwards, and returning again towards the muzzle, almost enclosing the animal's face like a picture in a frame. At Ballinasloe October fair last year were shown about 18,000 head of horned cattle. In the year 1778, 12,000 beasts were shown there; but many great fairs have grown up in many parts of Ireland since then, leaving Ballinasloe still the supreme, but not the sole immense market where breeders and graziers buy and sell.

Ireland has a fine breed of native long-woolled sheep adapted to the luxuriant plains, as well as the short-woolled sorts on the Wicklow and the western mountains. In the year 1778, 76,000 sheep were shown at Ballinasloe fair; last year, 81,000. This fair (lasting five days, during which the railway takes over 4000*l.* for transit of sheep, cattle, horses, and passengers) has one great source of its sheep supply in the county of Galway, and the native sweet Grass clothing the calcareous plains and hills of Roscommon. From the town of Roscommon to Strokestown, and further northward to Boyle, a length of some 30 miles, a plain mostly of fine limestone soil, but with some heavy land needing under-drainage, is a tract of permanent pasture, comprising among it very little tillage indeed, pure grazing being so general that even farmers of 2000 or 3000 acres have sometimes to purchase Oats for their riding and draught horses. There are some large properties; the farms, in the hands of tenants, including a few Scotch and English settlers, ranging from 50 to 2000 acres, or even much more, 250 to 500 being more usual sizes. Those large Grass farms are commonly devoid of any buildings beyond the farmer's residence, nag stable, and offices, a herd's house, and perhaps a single shed for accommodating a sick animal. There are farms upon which whole villages used to be clustered, now desolate of inhabitants, browsed by sheep and cattle, and traversed by the shepherd and his dog; and considerable breadths of land have been lately laid down to Grass. But the chief portion of the district has been old pasture for time immemorial. Tillage is diminishing, Turnip-growing is not being extended, and English farmers who come expressly to till and sheep-farm have sown permanent Grasses for the less troublesome and more profitable grazing. Rent varies much—25*s.*, 30*s.*, and 35*s.* per statute acre being common, while 40*s.* is a high rent. Good Grass carries for the summer six months three hoggets, two and a-half ewes and lambs, or two and a-half fatting wethers per statute acre, which is nothing very remarkable. We heard of an unusually fine piece of pasture which grazes one 4-year-old bullock and one hogget to the Irish acre—that is, equivalent to eight bullocks and eight hoggets upon 13 statute acres. There are many lands in Ireland which we shall find more like our best English pasture than this. No manure of any kind whatever, no dressing or artificial treatment of any description, is given to the fields beyond weeding and keeping gates and fences in repair. Part of the land is hayed, the hay put in large cocks of about 4 tons each, and, in time of snow, given to sheep turned into these fields to eat it; but no cake or corn—and Turnips only by the few farmers who have a small portion of tillage in conjunction with their Grass—are given to animals.

Most farmers breed from a flock of ewes large enough to furnish the requisite fatting stock, 50 or 100 ewes being commonly found. Regular ram-breeders (of the old Irish breed improved by selection, sometimes Leicester crossing being adopted, in other cases objected to) let shearling rams by private contract, the best at about 5*l.* for the season, or sell off at 15*l.* to 20*l.* a sheep, and many farmers also save a likely lamb for a tup. The ram is put to the ewes about the middle of October. The ewes in lambing time have hay on their pasture, but very few get corn or roots. Out of 100 ewes, perhaps 60 produce twins; the lambs are weaned upon a reserved old pasture, and the washing and shearing of sheep, dipping of lambs, &c., is the main labour, beside the daily care, &c., of the shepherd. The hoggets may be disposed of by some farmers, but are generally kept and sold fat as "two-year-olds,"—that is, after the second clip of wool. These wethers, fattened on Grass alone, weigh 25 lbs. to 28 lbs. per quarter on an average, 30 lbs. a quarter being considered an exceedingly good sheep. The long, fine, lustrous wool, though possessing that straight staple and open fleece which the Lincoln long-wool grazier avoids, gives 7 lbs. to 9 lbs. average weight from a wether—ewes, of course, less, and hoggets more, except when shorn also as lambs, a ram sometimes yielding a 15 lbs. fleece. The price at present is about 1*s.* 6*d.* per lb. Most of the horned cattle are bought in, though many are bred, and sheep are grazed along with fatting heifers to pick out the finer Grasses.

The graziers live like gentlemen and are well-to-do, and there are always plenty of applications for any vacant holding. English farmers, however, are very generally preferred by landlords in this country of prosperous grazing.

Further, upon Irish Grass lands, before coming to the crowning pastures of Meath, we may add that in Roscommon it is reckoned one Irish acre (=1 5-13 the statute) of the best land fattens a big cow;—though poor and bony in May, having been milked, perhaps, all winter, she will be fat and beautiful beef in October. As a favourable case, we were told of 16½ statute acres which every summer fatten 70 big wethers, and six heifers graze among them; the wethers, worth 50*s.* in May and 65*s.* in October, will, with the improvement of the heifers, realise over 4*l.* per acre, from which rent and rates and interest of capital have to be deducted. Surely, this cannot be much to boast of by way of profit. In Westmeath the old calculation was that a large bullock required 1½ Irish acre; but a much less proportion of land is so misappropriated now a better character of animal bites the nutrient herbage, and stocking more thickly than at present would be practised if cattle were taken more care of in winter, as English stores are. Store cattle turned out of close, unventilated hovels, are found too tender to thrive at Grass during the inclemencies of early spring, as cattle will that have been out all winter; but shelter, warmth, and good food, with due attention to maintaining the hardiness and health of the animal, are a much-needed accessory of the grazing in Ireland. In Westmeath good Grass is considered to fatten one 70 or 80-stone ox and one wether to the Irish acre—that is, eight bullocks and eight wethers on 13 statute acres: the Grass, too, being good for a long time, as in parts of Wicklow, where it is forward enough to be stocked in March, and so growing in this genial climate as to continue a most luxuriant sward in autumn, when English Grass lands are bare and brown.

About Cashel, in Tipperary, the best Grass land feeds one bullock of 60 stone and one large wether per Irish acre, or eight beasts and eight sheep to 13 statute acres. An almost unique instance was told us of 23 statute acres of land near Tullow, county Carlow, on which 21 bullocks were fed all winter upon hay, and then grazed till the latter part of June, these animals costing nine guineas apiece in October, and being sold for 17 to 20 guineas each: then 11 heifers were grazed in the same piece during the autumn, with a profit of 6*l.* each, making the total proceeds about 11*l.* per acre. The rent is considered about 3*l.* per acre. A stripe of such land, of not very great extent, is said to lie in the same neighbourhood, a deep, rich, naturally-drained soil, which, from the influence of the limestone beneath, throws up white Clover in abundance, and, from the moistness and mild temperature of the atmosphere, supplies a rapid succession of the most valued Grasses. We expect to find the primest pastures, however, in Meath. But the inference from districts of superior and profitable grazing that Grass is everywhere to be encouraged, and tillage be considered less adapted to Ireland as a whole, would be very erroneous. We have already described tillage husbandry that is prosperous; we shall visit districts in which good feeding Grass land is not, and, from the nature of the soil, cannot be had, though tillage is found to answer extremely well. Everywhere, excepting in the few favoured localities of the finest natural meadows, we have found the opinion of intelligent farmers to be that a larger amount of animal produce can be raised from a holding of mixed arable and old pasture, with roots and Clover and artificial Grasses, than from one of pure and simple stocking of Grass land and mowing of hay. And, confirmatory of this view of the manner in which Ireland may be a vast breeding and meat-making kingdom, we

have the agricultural statistics enumerating the increased number of animals at 50 per cent. in 20 years, while the proportion of tillage to Grass has only diminished slightly of late years. Happily, the very nature of the soil forbids a universal or even a very great extension of profitable laying down to Grass, which would quickly depopulate the country; and, on all but the fine lands of parts of some counties, tillage in connection with pasture must be maintained as the most paying form of husbandry, while at the same time productive of employment for a people. *The Times.*

Societies.

GLOUCESTERSHIRE.—At the late annual meeting of this Society at Cirencester Mr. E. BOWLY said:—It was 25 years since he first dined with this Society, and at that time there was scarcely an acre of land in this county efficiently drained. Now undrained land was the exception. At that time Turnips were sown broadcast, but now drilled Turnips were the rule, and any man in a village having an acre of land borrowed a drill. With regard to threshing, they had formerly machines threshing 10 or 12 quarters a day; now, with steam, he could thresh 36 quarters of mown Wheat, equal to 50 of reaped. He could go into other details to show that farmers are as glad to avail themselves of any improvements to put money in their pockets as the manufacturers. With regard to the steam plough, that was working wonders. He saw it at work the other day at Braydon; but yet as he turned away from it a sort of cloud came over him, and he asked if that hunting country was only to be remembered in the reminiscences of former years, and if no place would be left in which to breathe the spirit of our forefathers. But philosophy came to his assistance, and he thought all things are possible to an Englishman. Meets like they had at Braydon were necessary to keep up the character of old John Bull. The country gentlemen must have their sports and athletic exercises, or they would not be what their forefathers were.

Mr. E. HOLLAND, M.P., said:—They must not consider the labourer as an individual who was to be improved in one manner alone, or acted on by one impression. Any change in society affected all its grades, and took place in the higher grades first. In the case of the labourer they would find that they could not prevent him from improving morally as well as physically, while the class above him was rising and becoming more useful members of society. The labourer, as he improved in position, acquired additional wants. What were once the luxuries of the higher class of society were now become the necessaries of a lower class, luxuries having become positive wants. And so the labouring classes were improving. They were not growing pale with thought, but at the same time they were thinking. It was absolutely necessary they should have improved labourers, and the labourers were improving; and why? Because the class above had improved, but some of the old ways connected with the old management between master and man still existed. One of the most debasing of these customs, and one which kept the labourers in a more degraded position than anything else, was the system of paying part of his wages in drink. He knew he was touching on a delicate subject, but he spoke from experience, for he was in the habit of giving his men money instead of drink. Ten years ago he had considerable trouble in introducing the system. He had steam up, was ready for work, but the men struck and would not work without drink. He was firm in the course he had adopted, and fortunately had assistance, and in the course of two years the labourers who most resisted the change were the last to wish to go back to the old custom. He sold men beer or cider, or bought for them in a better market, and the result was that at the end of the harvest season they had 1*l.* or 30*s.* saved which had previously gone in drink. He was, therefore, enabled to ask a higher rent for his cottages, and to improve them in such a manner as to give greater additional comforts, and impart to the labourer a higher degree of self respect. The moral result was immense, and he could get men of a higher physical stamp; and they might be sure that when they had made their men more moral, sober, and intelligent, they would not long remain dunces.——He was sorry with his friend Mr. Bowly, that a favourite fox covert was being destroyed by the introduction of a steam plough, but it was bound to be done. Those who had charge of the duty of providing food for the people had to contend with a population ever increasing, and an area that was continually decreasing. As land was withdrawn from cultivation by the railways and the erection of houses, agriculturists were obliged to exert themselves to the utmost to make the production keep pace with the wants of the country. They were doing their best, with the appliances of science, to keep up this production, and he believed that in Gloucestershire they were doing more than was the case with many other counties. But it was to the steam plough that he chiefly looked for assistance in this work. The steam plough had made such progress within the last three or four years that a very large amount had been added to the produce of the country. Farming was very different to trades or manufactures, because if a mistake was made, from the slow process of their operations, it was so long before it could be remedied. It was one of the advantages of meetings such as these, that they rendered mistakes much less likely to occur. The hon. gentleman then went into some statistics, tending to show the immense addition that would be made to the produce of the country, if only another bushel more per acre was grown than at present. The steam plough, whether it was Fowler's or Smith's, was doing a great deal of good in this direction, but its use would be considerably circumscribed unless the landlords would help the farmers in putting the land into steam plough order. They must sacrifice trees and hedgerows to make the steam plough available; and their recompense would be found in an enlarged area of land, and an increased rental. Judging from late and former improvements, the tenant had to pay much less in the form of increased rent than he gained by the additional profit accruing to him from them.

Farmers' Clubs.

SOUTH TYNE.—The annual exhibition of this flourishing Society was held on Thursday the 26th ult. in the pleasant little town of Haltwhistle. The *Carlisle Patriot*, after giving a sketch of the district embraced by the Society, thus writes of its agricultural features and the Exhibition:—

"The agricultural features of this mountain district may be sketched in a few lines, for with hills, bleak and shelterless, Heath and Fern-clad, pastures coarse and scanty, tillage limited, and the land to a considerable extent yet undrained, we have but poor ground to work upon. The valleys, though rich and cosy, are narrow, and the climate is, unfortunately, so humid and uncertain, that it is the exception and not the rule when the season ripens and brings the grain to proper maturity. Even in the early haugh-land the weather settles the question in favour of Grass. Its capabilities are limited almost to dairy-produce, chiefly butter, and the breeding and rearing of young cattle and sheep. Its undeveloped resources are dependent upon the judicious outlay of capital in fencing and planting on the hills, for division and shelter, and draining and liming to eradicate coarse plants and renovate and sweeten the herbage. In fact, we may say, without aspiring to agricultural seership, that keeping the land in pasture, draining and liming, with liberal manurings, to recuperate the land for the continual waste of bone-and-muscle producing elements, are the only high-roads to improvements, progress, and permanent prosperity. There are inexhaustible sources of wealth in rich butter-beef-and-mutton-producing pastures, but to keep such lands in tillage drains the resources and is a drawback upon improvement. The consequence is that grain crops, under such circumstances, never pay, whilst Turnips are but ameliorating and preparatory crops which cannot be expected to pay. As a farmer significantly remarked in discussing this matter with us—'A shepherd and his dog can manage Grass land at 2*s.* an acre; but it takes a man and a pair of horses, at an expense of a pound an acre, to manage tillage land.' Nevertheless we do wrong to disparage before-hand the results of the agricultural effort of the district as evidenced by the show which it is now our duty to describe. That some gentlemen have overcome all the obstacles we have referred to we had reason to believe from what we witnessed on the field, whilst a glance at the Catalogue convinced us that, with all the drawbacks incident to the district, the farmers are stimulated by a laudable spirit of emulation, developed by the annual action of the South Tyne Society, to rival each other in doing their best. It says much for the Society, and for the labour its [illegible] [illegible], that in the number of the entries, without exception, we believe, it is a-head of any agricultural exhibition in either Northumberland or Cumberland. The entries of stock comprised 150 head of cattle; horses, 56; sheep, 105; swine, 14; total, 325. Poultry, 46; dogs, 40; Turnips, 27; butter, 64; total, 502.

Capt. CAULSON, R.N., of Stone House, occupied the chair, and in proposing success to the Society, said:—

"We must not rest satisfied. We must go on, for there is still a wide margin left for improvement. Let landlords and tenants, for their interests are identical, let the landlord and tenant work together; they row in the same boat; and if they don't pull together they will stand a chance of being wrecked. We must have more food; we must grow more food; we must produce more manure; and we shall consequently pocket more profit. Our Turnip land, as you well know, is limited. It would be out of the question to pretend to lecture men so much better acquainted with the management of land than myself; still I know you will allow me to throw out a suggestion or two. As your Turnip crop is limited, would it not be advantageous considerably to increase the use of artificial food? By that means not only would you feed your stock but your land also. Artificial manures are another consideration of great importance; they are no doubt used extensively; but is there not a wide field for the increase of the use of these valuable fertilisers? There is one point which I do feel at home in, having had considerable experience, and that is, drainage. Thorough draining I have applied my attention to for many years, and can safely recommend it to all proprietors. Persevere in draining deep, not less than 4 feet where it is practicable; and don't do it by contract. After this follow it up with heavy liming, and you will soon find that instead of an over-abundant crop of rank and useless herbage, you will have an ample supply of White Clover and rich, nutritious food. This will pay you well. Talking of Grass lands, I cannot help saying that there is too much carelessness exhibited in the selection of Grass seeds for sowing down. It is repented of afterwards when too late, for a man who neglects this important matter finds in a year or two his Grass crop fails. In venturing to speak of stock, I don't pretend to be a judge, though I can tell a well shaped animal when I see it, and I must say that I think in Short-horns we have advanced considerably; and with strict attention to pedigree and selection I have no doubt we shall advance still further. But I would specially call attention to a species of stock in which we have gone a-head of most of our neighbours—the Galloway cattle. There is still plenty of room for improvement there, too. Mr. Clark, the Secretary, has suggested (and I perfectly coincide with him) that there should be a herd-book kept for Galloways, on the same plan now adopted for Short-horns, for if we possessed facilities for securing the best blood there would soon be a great improvement in the character of the stock exhibited, and infinitely more competition. I wish to call your attention to what I think very material, and what occupies the care of the Scotch farmers, and that is, the eradication and destruction of weeds. If you will go to the Lothians, or indeed to many farmers across the Border, you will find as much attention devoted to the destruction of weeds in the fields as there is here in the gardens; whilst in this district it is a matter almost entirely neglected. The only way to remedy the evil is for all to unite, and if you only agree to combine for the purpose of forcing, if necessary, the destruction of weeds, you will do a great and a good work. You must not confine yourselves to arable lands, but must be equally severe on the pastures and Grass lands. You must also give directions to your road surveyors to have all obnoxious weeds in the hedges and on the roadside destroyed. It is not only the slovenly and careless farmer that suffers [illegible] neglect, but the seeds of the weeds suffered to come [illegible] are carried by the wind for miles and are deposited [illegible] of the intelligent and industrious farmer, who [illegible] the neglect of his indolent neighbour. This is a [illegible] I hope the farmers will more seriously consider than [illegible] hitherto done. Again as to roads. I know we [illegible] mend our own ways, and we are beginning [illegible] which I am concerned; but the plan of carting large [illegible] of big stones from the fields and tumbling them [illegible] and then sprinkling metal on the top, is not the [illegible] a road. If you don't base your roads with small [illegible] but put in large stones at the bottom, they [illegible] again, and the carts will cut up a great deal of [illegible] land, as I have seen done where there are no fences [illegible] say one word upon a very valuable class—our farm [illegible] These men deserve every consideration. We should [illegible] upon them simply as men hired to do so much [illegible] certain price, or get as much out of them as we can [illegible] let them be forgotten and neglected; it is [illegible] our interest to take care of these men; to look [illegible] to cherish their good feelings, and to assist the [illegible] the intelligent child of the industrious labourer under your eye; if you see that he is fit for better things [illegible] school and qualified for a higher position [illegible] child up till he is a man, and see that [illegible] the station to which he has risen by your [illegible] upon it, the effort is not wasted, for the [illegible] cated man has feelings as deep as any of us. [illegible] direct the attention of proprietors to giving [illegible] to this class of men. Make their cottages comfortable, [illegible] what you can to teach them neatness and order, [illegible] houses as well as within. But this requires persuasion [illegible] teaching; don't force them; teach them; lead them [illegible] do more by leading than forcing in every situation [illegible]

Reviews.

The Journal of Agriculture and the Transactions [illegible] Highland and Agricultural Society of Scotland. No. 74. October, 1861. Blackwood.

The current Number of this periodical contains [illegible] ing and instructive articles on Poultry—Agricultural Chemistry—Novelties in Implements at Leeds—[illegible] Agriculture—Salmon—The Quarter's Agricultural [illegible] mary—the Perth Show—Experimental Agr[illegible] and Diseases of Sheep fed on Turnips. The article [illegible] Poultry makes us acquainted with French breeds, Gallinoculture, as Frenchmen call it, and practice generally. The forced breeding of fowls for the market is thus described. The birds are best adapted for [illegible] process at the age of seven or eight months:—

"From 50 to 100 are subjected to the process at [illegible] time, and it generally commences in October. In [illegible] apartment where it takes place, a series of box[illegible] frames, formed of rough timber, are placed [illegible] floor—one portion of the covering fixed, the [illegible] movable—for the purpose of putting in and taking [illegible] the fowls. The dimensions of these boxes vary [illegible] they should never contain more than six birds, and [illegible] space should be such as to accommodate each comfort[illegible] ably, without permitting it to move about. [illegible] is admitted from without, and very little [illegible] order to accustom the fowls gradually to the [illegible] regimen and seclusion to which they are to be [illegible] jected, for the first eight days they are enclosed [illegible] place only partially darkened, and fed on a some[illegible] thin paste, composed of meal, with a mixture of a [illegible] or a half of bran, and they are allowed to eat [illegible] drink at pleasure. The paste cakes, or pâtons [illegible] which they are to be fattened, are composed, the [illegible] half of Buckwheat meal, a third of Barleymeal, a [illegible] of Oatmeal, the coarse bran being removed. [illegible] day this substance is steeped in milk in the q[illegible] necessary for two meals. Some add to the p[illegible] little lard, particularly when the treatment is [illegible] to a close. Being neither too hard nor soft, it is [illegible] rolled in small cakes or *pâtons* nearly in the form [illegible] Olive, and of a size adapted to the throat of the [illegible]

"The times of feeding require to be strictly a[illegible] to, and the poultryman or feeder, aided by the [illegible] a lamp, takes three fowls at once, ties them all [illegible] by the feet, and rests them on his knees. [illegible] makes them swallow a spoonful of water or [illegible] (although this is occasionally dispensed with), in[illegible] *pâton* in the beak of each, and gently slips [illegible] wards by the pressure of his two forefingers and [illegible] rubbing his hand along the neck till the food [illegible] its destination; this prevents it being rejected, [illegible] time required for this in each case affords [illegible] leisure for deglutition in the others. During the [illegible] few days only a small number of *pâtons* are given, [illegible] they are gradually increased till each day [illegible] dozen or 15. They are dipped in water before [illegible] administered, in order that they may be [illegible] swallowed. By this process some fowls are [illegible] six weeks, others take two months; the time [illegible] on the constitution of the animal and its [illegible] strength. Some cannot be brought to the [illegible] plumpness without risk, and in such cases the [illegible] must be interrupted or modified as the occasion [illegible] to demand. It is calculated that some fowls [illegible] 20 litres of meal, others one-half more. [illegible] must be regularly given in the 24 hours, and the [illegible] indicated must never be altered in its composition. [illegible] curious feature in the process is, that the feeding [illegible] must never be cleaned, the fowls have no litter [illegible] them, and their dung is never removed. The [illegible] azotised emanations which prevail in the feeding [illegible] are considered necessary to assist the fattening [illegible] although they are disagreeable to the attendants, [illegible] not seldom injurious to their health. The fowls [illegible] never subjected to any mutilation, as is the case [illegible] capons, and often with fowls fattened in other [illegible] The finer specimens of poulardes attain a weight [illegible]

upwards of 8 lbs., the cocks 13 lbs., and these weights are sometimes exceeded."

Another method of forced feeding consists in causing the fowls to swallow, by means of a funnel inserted in the mouth, farinaceous substances in a liquid state.

"The filler or funnel, made of white iron, should be of sufficient size to hold one meal, having a ring below the rim externally for receiving the forefinger and thumb, and the orifice at the lower extremity cut aslant, the edges surrounded with a thin coating of india-rubber, to prevent injury to the walls of the throat. The beverage, which by this means is to be introduced, consists of Barleymeal (not bruised Barley) mixed up without knots in equal parts of milk and water. When all is ready, the fowl is seized by the wings near the shoulder, the head held forward between the knees, and grasped by the left hand, while the right holds the funnel, opens the beak, introduces the instrument into the gullet, and the proper quantity of the mixture is poured in. The quantity of the latter should be about an eighth part of a litre, but only half that quantity is given during the three first days. This dose must be given regularly three times in the 24 hours, at intervals of eight hours. The boxes or frames containing the fowls should be placed in a stable or other temperate place, protected from currents of air, and they should be littered with straw, the litter frequently renewed, and every impurity removed, unlike the practice followed with the La Flèche pullets. The duration of this treatment is from 15 to 20 days; if it fails to be successful within that time, the subjects should be withdrawn and otherwise disposed of."

The following are the statistics of French poultry:—

"The whole country rears 30,960,000 hens, yielding 3,715,200,000 eggs, of the value of 148,608,000 fr. (5,944,320*l.*) When to this we add the value of fowls as food, the number of cocks, pullets, and capons, we find that the entire produce of poultry in France may be valued at 182,880,000 fr. (7,315,200*l.*) But while this may be regarded as the actual produce of France at the present time, an immense increase is calculated upon. By an improved system of feeding, and by increasing the amount of laying eggs by means of artificial heat, the grand total is enlarged from the amount just named to 853,640,000 fr. (34,125,600*l.*). Eggs are consumed in Paris to the amount of 3,784,243 lbs. weight annually; and in many parts of the country they constitute, along with bacon, the principal food of the inhabitants. France, as already mentioned, exports to England, in eggs and poultry, to the value of 6,000,000 fr. annually (240,000*l.*); and also largely to Russia, Spain, and Switzerland."

The paper on agricultural chemistry describes certain experiments and conclusions of M. Boussingault, and published by him in a volume entitled "*Agronomie, Chimie Agricole, et Physiologie.*" Besides this paper the Journal of Agriculture contains a good record of the agricultural meetings in England and Scotland, and a report of Professor Anderson's lecture at Perth on Experimental Agriculture.

Farm Memoranda.

Strathfieldsaye.—In the greater portion of the woodlands to the north, and the corresponding district from Bishops Waltham to Havant in the south of Hampshire, the London clay either forms the surface, or is the subsoil covered with drift or gravel. In either case it requires thorough draining, as in its natural state it is either a stiff clay or rotten gravel. When drained, chalked, and liberally farmed it bears good crops of Wheat and Beans, is not fitted for carrying sheep, but will as Grass land when well treated yield good crops of hay, and afford pasture, though not of the best quality, as in no case would it probably fat a bullock. It is often surcharged with ill conditioned hedgerows, small inclosures, and superabundant timber. As the Strathfieldsaye property occupies so large a portion of this tract, a description of the system that has been successfully pursued there for many years will sufficiently explain the method of farming suited to these stubborn soils, on which the house and a considerable number of the farms are placed.

When the late Duke of Wellington received this property as the token of the nation's gratitude for his services, it was by all accounts in a miserable state of dilapidation, as to the condition of the land, farm premises, cottages, and everything that requires outlay on the part of the landlord. The Duke many years since applied his practical and systematic mind to the remedy of these evils, and the permanent improvement of his estates. The four footed game was reduced within reasonable bounds; the land was drained to a sufficient depth and at intervals fitted to the requirements of the variations of the soil. These operations were carried out entirely by the landlord with a charge of 5 per cent. to the tenant on the capital so invested, the tiles being supplied at cost price from kilns on the property: and with a view further to reduce the permanent charge, the haulage was done by the tenant. If the labour was in any case undertaken by the tenant, it was done under due supervision, and under strict regulations as to the depth and frequency of the drains. Chalking, the advantages of which cannot be over estimated on the clay sands or gravels, was either performed by the landlord or on terms of mutual agreement, and on conditions to secure improvement of a lasting character. The railway between Reading and Basingstoke, which either flanks or passes through the property, gives facilities for the carriage of chalk, which did not exist when the Duke first took this matter in hand. The farm steads and cottages were either extensively repaired, or where required new ones built.

The home farm establishment is on a considerable scale, and is conducted rather with reference to practice than experiments: the acreage in hand has varied from time to time, as it has been found expedient to hold more or less land, with a view to its permanent improvement.

The farming of landlords is proverbially a bad commercial speculation, but it enables them to take any farm in hand when thoroughly out of condition, with a view to its restoration: it gives them an advantage which will very often more than repay the cost to which they have been put, or any loss they may for a time sustain, and this without injuring the tenant farmers as a class, who may sometimes be moved to a narrow feeling of jealousy, but whose interests will never suffer by the practical knowledge of the profits of farming learned by the landlord while he has his own land in hand.

It is not necessary to describe the farm buildings in detail; they are not of very modern construction, yet sufficiently convenient to carry out all the operations needed for the feeding and management of the stock. The herd of horned stock number about 100, of which 14 are kept for the dairy, 36 are tied up to be made off at three years old, followed by two-year yearling and weaning stock, home bred, or bought in as circumstances may require. The blood from the herd of Mr. Stratton and others may be easily recognised in the quality and kindly appearance of the home-bred animals, whose produce do not suffice to keep up the numbers required. The want of good weaning stock is much felt throughout the county. The sheds in which the beasts are fed are so constructed that they may be thrown open behind them: they receive oil-cake, Beans, meal and roots, ground (pulped) and mixed with cut hay and straw; their water is supplied at the discretion of the feeder, and not as in some cases with questionable results laid on and filling troughs at which the cattle drink at pleasure, often to the waste, if not interference with the due assimilation of their food, ill-compensated by the saving of labour that may be effected.

These are manifestly not sheep farms, the root crops can seldom be consumed upon the land where they are grown, without injury to the stock and inconvenience to the tillage: a flock of Hampshire Down ewes are nevertheless kept with the assistance of the run of part of the park; but here a hardier race, the Exmoor, are found more fitted for the pasture afforded by land of a forest character.

The pigs are of a mixed breed, of which the Berkshire is the staple, the cross as in all such cases being regulated by the judgment of the breeder rather than by any defined rule, looking to the Berkshire for growth and aptness to fatten from the finer sorts, whether Chinese, Neapolitan, or the innumerable crosses carrying with them the names of those by whom they have been introduced.

The horses, which are for the most part bred on the estate, are of the useful sort found in this and the neighbouring counties; the young horses being worked with reference to their improvement rather than the maximum labour they are capable of performing, the reason that has been frequently given for working three horses in a plough, where the work might be done by two tried and seasoned animals. The threshing, chaff-cutting, grinding, &c., is performed by a six-horse movable engine. The implements require no especial notice. Waggons according to the custom of the county, and carts, are both used. As the land under tillage is partly on the out-cropping Bagshot beds of sand and gravel, a different system of rotation and husbandry is required. The London clay now specially under our notice is drained at intervals at 18 feet, 3 feet deep, a depth adopted in the first instance, and after many years' experience retained; the land is ploughed in 9 feet stetches, the drain usually occupying the alternate furrow, the drill when used commanding the interval of 9 feet with 9 coulters. The wheat is hand-hoed in the spring. Judging from the appearance of the land under the plough at the close of an unusually wet season, the mode of draining and husbandry seems fully to succeed; probably much of the kindly character of the tilth is due to the heavy chalking, 15 tons per acre, which the land has in past time received. It would be superfluous to try to trace all the acts of husbandry through the various courses and rotations; indeed it appears impossible to lay down any rule in the cultivation of any soil, because so much depends upon the practical eye and judgment of those who perform or superintend these operations; all must be done with reference to the peculiar circumstances of season, weather and condition of the soil; and perhaps there is no soil that requires the watchful and experienced eye to take it in its proper time more than the London clay. The rotation, if we can apply the term to the course of cropping which is ruled by the judgment of the cultivator, and not by any fixed or defined rule, will best show the impossibility of defining the husbandry it requires. We take the preparation and after cropping of the Wheat land, occupying say one-third of the arable land.

Partly	Clover ley ..	Wheat,	Beans,	Wheat.
,,	Clean Fallow ..	Do.	Do.	Do.
,,	Mangold	Do.	Do.	Do.
,,	Vetches	Do.	Oats or	Barley seeds.
,,	**Beans**	**Do.**	Do.	Do.
,,	Peas	Do.	Do.	Do.

The water supply at the home farm and also at the village, as is generally the case in the London clay districts, was deficient and bad in quality. Boring through the London clay into the chalk was resorted to with complete success; a plentiful and pure supply of water rose from over 100 feet, the point at which the chalk was touched, to about 20 feet from the surface of the ground. These wells might obviously be made a guide, if the same operation was needed in the immediate neighbourhood. *J. C. C.*

Miscellaneous.

English Agriculture in Turkey.—In the valley formed by one of the two streams which debouch into the Golden Horn through the larger valley called the Sweet Waters of Europe, and at a distance of 16 or 18 miles from Constantinople, there are two villages, Pyrgos and Patnahor. The latter of these is the scene of our story. Patnahor is a small village, numbering at most about 50 houses; the inhabitants are Turks, and they have a little mosque, which had been a Greek church before the conquest. The houses of the villagers are mostly of two stories, the under one of clay and the upper of wood, and roofed with tiles. Most of them have at least one cow, and several cultivate, after their own fashion, a patch of land. The staple commodity of the village is charcoal. The burning of charcoal seems to have been their occupation from time immemorial. * * * * An English farm lies down in the hollow. The stream winds along the one side of the broad meadows, backed by a precipitous and wooded range of hills. Looking down the valley, where you could almost imagine yourself at home, there is the little village, with its mud and wooden houses; and its minaret o'ertopping the clump of trees reminds you of the homely spire of a little parish church. In the evening you might meet a Highlander in tartan kilt returning homeward with his team, and fancy for a moment that if you had not been transported to Auld Scotland from Stamboul, Auld Scotland had surely been transported hither—when, lo! at the next turn you are suddenly confronted by a long string of camels, driven by a fierce looking fellow armed with a pair of large pistols and a long dagger. A peasantry armed to the teeth on all occasions is not a pleasant symptom; and the contrast between the loveliness of the scene and the unloveliness of the character of its living inhabitants is painful in the extreme. What that character is will be abundantly evident from a consideration of the following transactions. An English speculator, who had grown suddenly rich upon an hospital contract during the Russian war, had in some way or other become possessed of a farm at the head of the Valley of the Sweet Waters. A colony of Scotch ploughmen and their families, a Scotch manager, a supply of implements of Scotch manufacture such as had never been seen in Turkey before, seeds and other requisites, were imported, and with a grand flourish of trumpets in the *Times*, the enterprise of reforming Turkish agriculture was got fairly under weigh. Its subsequent history was one unbroken series of misfortunes. First of all the little colony located in the great old farm house—a block of buildings more like a wooden fortalice surrounded with clay ramparts than anything else—were stricken down by fever. They had landed in the midst of the hot weather; heaps of uncleaned sheep skins were stored in the enclosure; they were unprovided with proper food and the necessary means of comfort; they were a day's journey from supplies, with no language to inquire for what they wanted, and the consequences were pitiable. Not a man of them escaped the fever, and though all the adults ultimately recovered, the manager's whole family was swept away in the course of a week, and this was but the beginning of misfortunes. They were at first on friendly terms with their Moslem neighbours; but this did not last long, and they had to endure all the alarms and vicissitudes incident to living in a state of siege in an enemy's country. They and their native servants were waylaid by night, shot at in open day, some of them cruelly murdered, and not the least of their troubles was the constant dread of incendiarism. The knowledge that they were well armed, and knew how to use their weapons, perhaps kept the would-be incendiaries from attempting the main buildings, but the outlying ones were fired and consumed. It would take too much space to detail the history of this unhappy and unprofitable speculation. We shall only attempt a cursory sketch of the principal events. There are two customs of the country which require to be understood in order to bring out the motives for the crimes. All lands are public property for grazing purposes, unless when under crop or fenced in. Cattle found trespassing are retained by the owner of the property on which they are caught, or his servant appointed for the purpose, and only restored on payment of a fine regulated by custom also. The village cattle graze in the meadows on the English farm, and are looked after by a Bulgarian herd. The farm-servant whose duty it was to protect the farm crops from trespass, was a Mussulman, by name Osman.

The manager of the farm had been fired at from a corner of a house in the village, Osman disappeared, and the Bulgarian servant who took his place was shot. Complaint was made to the minister of police, but it was the Ramazan, and nothing could be done till that was over. The Ramazan lasts a month. The English ambassador was applied to, and about six weeks after the committal of the deed a Bey was sent out to make investigation into the disappearance of Osman the Mussulman. The other matters were never inquired into. The story came out during the investigation as follows:—Hadji Mehemet and Omar, the chief official of the village and his second, had felt themselves aggrieved in the matter of their cattle. They had resolved to get rid of Osman. They offered a baksheesh of 500 piastres to the herdsman of the village to put Osman out of the way. He refused to have anything to do with the business. They then looked about for fitter instruments, and found them in the persons of two loose young fellows, one a Turk and the other a Bosnian. The matter was agreed upon. * * * Such was the sad fate of poor Osman. A flood in the river floated the body some time afterwards, and it was found by some of the herds, to whom Hadji Mehemet gave a few piastres, and they buried it. * * * Having confessed their guilt the criminals were sentenced to death, and it was officially intimated that they were to be hung in the village. The execution never took place. Those who bribed them with the miserable sum of 125 piastres (about a pound sterling each) were to have been banished; but it seems there was a Turkish law in the way, and as they had property in the village they could not be sent out of it. And what of the measures taken for the security of the lives of the farm servants in future? Why, they were then well protected. There was a guard of four cavasses, men and horses, quartered, not on the villagers, but on the farm. It was a capital thing for the government, or whatever official had the doing of it, to get rid of four hungry followers and their horses. So the first part of the tragedy is finished, but the last act of retributive justice is still wanting to give it completeness. A few months had only gone by when one of the Scotch ploughmen was shot dead by a Turk in the court-yard of the farm. The murderer was never punished, beyond being detained in prison for a time. Before three years were out the colonists were all back in their native land, with a story of their life in Turkey to tell which they would not be likely to forget in a hurry. *John o' Groat Journal.*

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended October 10; observed by Mr. J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air. Max. in Sun.	Max. in Shade.	Min.	Mean.	Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
	Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday 4 ..	81.0	63.0	46.5	59.2	57.0	..	S.E.	29.99
Saturday 5 ..	88.0	70.0	47.5	63.2	57.3	..	S.E.	29.86
Sunday 6 ..	70.0	65.0	49 0	58.2	57.7	0.06	N.W.	30.02
Monday 7 ..	56 0	58.0	57.5	54.2	57.4	..	S.W.	29.92
Tuesday 8 ..	78.0	68.0	53.0	63.0	58.0	..	S.W.	29.73
Wednesday 9 ..	83.0	72 0	53.5	65 5	59.0	0.07	W.	29.77
Thursday 10 ..	90.0	67.0	43.0	60.7	58.6	..	S.E.	29.80

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Dibble: *Dibble.* We know Sigma's dibble very well. It is a very good tool indeed. It used to be advertised as made by Mr. Powell, near Tunbridge Wells.

Farm Buildings: *R Purvis.* You may apply to Mr. Burnham, Spital, near Chester. The report of the Yorkshire Agricultural Society on the recent competition in Plans of Buildings will probably soon be published.

Leaves: *Y Z.* You had better gather them together, and either use them as litter in cattle yards, or let them alone in a heap for a year until they rot, when they will be useful in either garden or farm.

Manure for Winter Beans: *J D.* The most recent experience on this subject is given in Mr. Dove's paper on Substitutes for Guano, published in the Highland Society's Transactions. He found guano to exceed all other fertilisers in its effect; 2 cwt. per acre applied towards the end of May, and scuffled in the same day, increased the produce about 7 bushels per acre—worth 8s. more than the manure that was used: 3 cwt. of superphosphate applied at the same time and at the same cost increased the produce 6 bushels per acre—worth about 5s. more than the manure. None of the other manures, sulphates of soda and potash, Rape-cake, and sulphate of ammonia, raised the crop enough to repay their cost. If you were to mix guano and superphosphate half and half, and apply broadcast about 4 cwt. per acre after the Beans are up, say early in April, and horse-hoe them in, you would probably find it answer; but it depends of course on the condition in which your land already is. We would not recommend applying guano before winter. Do it before the first horse-hoeing in early spring.

Poultry.—The unusually warm weather interferes much with any thing like regular quotations. Buyers are very cautious, and salesmen are obliged to realize. Pheasants are plentiful.

Large Fowls	Each	3s. 6d.	to	4s. 0d.
Smaller ditto	,,	2 0	,,	2 6
Chickens	,,	1 6	,,	1 9
Geese	,,	6 0	,,	7 6
Ducks	,,	2 3	,,	2 6
Pheasants	,,	2 0	,,	2 6
Grouse	,,	2 0	,,	2 6
Partridges	,,	1 3	,,	1 6
Rabbits	,,	1 3	,,	1 4
Wild ditto	,,	0 8	,,	0 9
Pigeons	,,	0 8	,,	0 9

GREEN'S PATENT LAWN MOWERS have proved to be the best, and have carried off every prize that has been given in all cases of competition. They are noiseless in working, self-sharpening, self-cleaning, simple in construction, and easier to work and less liable to get out of order than any other Lawn Mowers extant.

Illustrated Price Lists may be had of Thomas Green, Smithfield Iron Works, Leeds; or 2, Victoria Street, Holborn Hill, London, E.C.

N.B. Old Machines repaired and made as good as new.

TENTS, &c.—A quantity of Government BELL TENTS and MARQUEES, suitable for Rifle Companies, Cricket Clubs, &c.; also Rick and Hay Cloths, Ropes, &c. Prices on application to John Morison, 25, Norton Folgate, N.E.

JOSEPH HAYWOOD AND CO.,

Manufacturers of

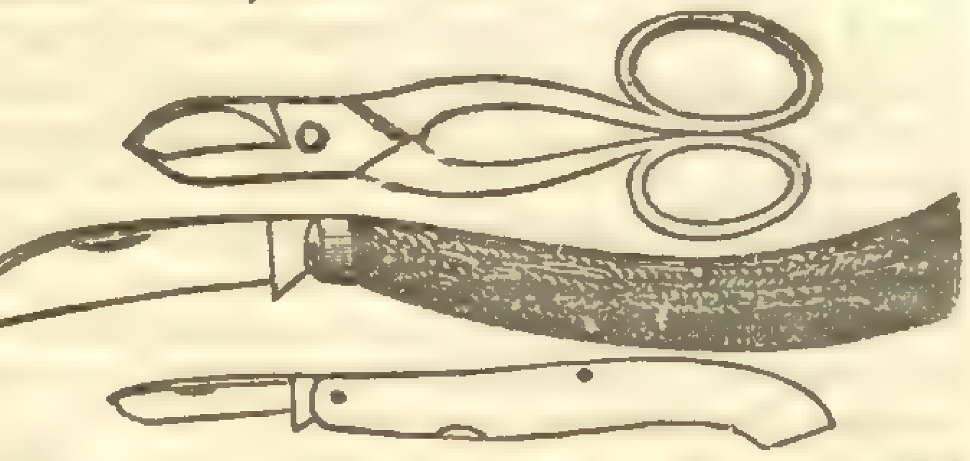
PRUNING and BUDDING KNIVES,

SPORTSMAN'S, and all kinds of POCKET CUTLERY.

Dealers in Gambia Garden Shears, Scissors, Syringes, &c.

Glamorgan Works, Sheffield.

Paxton Works, Sheffield, Established 1738.



SAYNOR AND COOKE'S warranted PRIZE PRUNING and BUDDING KNIVES, SCISSORS, &c.

Sold by all respectable Nurserymen and Seed Merchants in the three Kingdoms.

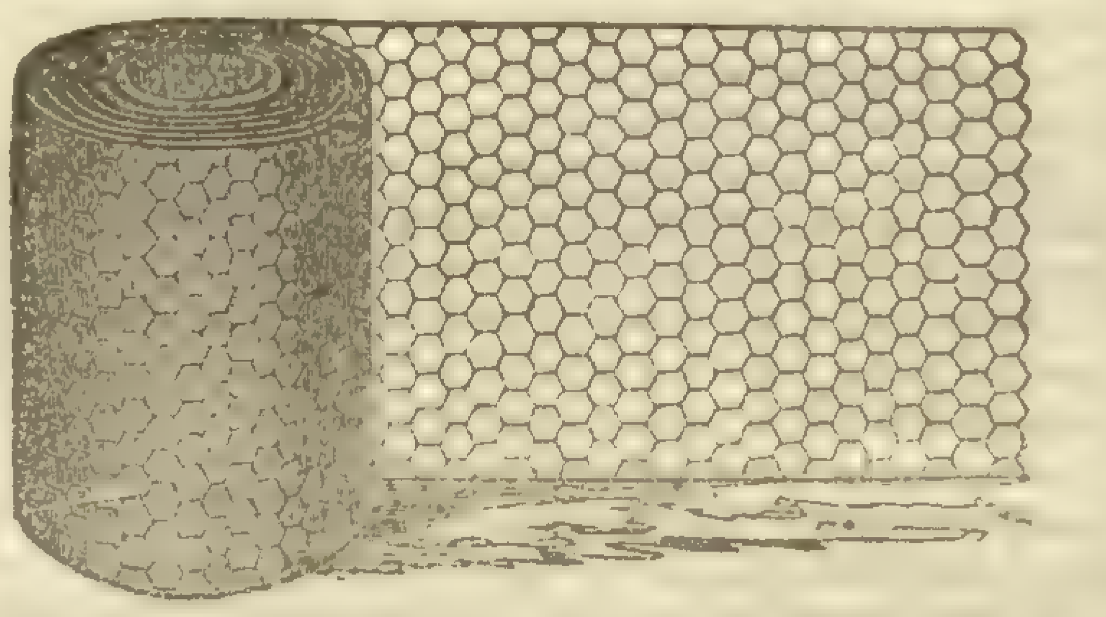
Important to Gardeners.

WE beg respectfully to inform you that we are now supplying Nurserymen and Seed Merchants with an article superior in quality to anything we have hitherto been able to offer, in PRUNING, BUDDING, and GRAFTING KNIVES, VINE and PRUNING SCISSORS, GARDEN SHEARS, &c., owing to their being tempered under an entirely new process, which renders the blade tough and not liable to break, and also gives the edge a lasting keenness which we can warrant them to retain for at least double the time they would under the old method of tempering, thus facilitating the work and saving the time usually lost by having constantly to renew the edge by sharpening, consequently making them more durable in wear and better adapted for all kinds of work, every blade being guaranteed of the same temper.

Caution. None are genuine except marked Saynor, or Saynor, Maker. Other marks would cause the purchaser disappointment.

BARNARD, BISHOP, AND BARNARDS, Norwich.

FURTHER REDUCTION in the PRICE of WIRE NETTING.—April, 1861.

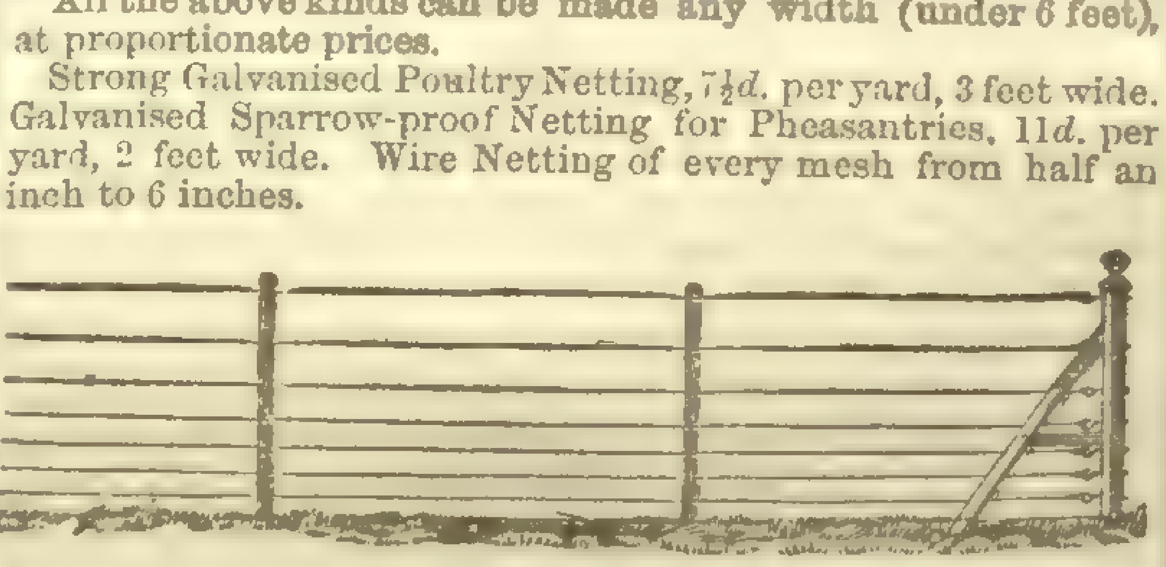


Barnard, Bishop, & Barnards beg to inform their friends and the public that they have made a further reduction in the prices of Machine made Wire Netting, and also that all their Nettings are now Galvanised after being made, which adds much to their appearance, strength, and durability.

	Gauge.		Galvanised. per yard.		Japanned Iron. per yard.
2-inch mesh, 24 inches wide ..	No. 19	..	4½d.	..	3½d.
2-inch ,, ,, ,, ..	,, 18	..	5	..	4
2-inch ,, ,, ,, ..	,, 17	..	6½	..	5
2-inch ,, ,, ,, ..	,, 16	..	8	..	6½
1⅝-inch ,, ,, ,, ..	,, 19	..	4¾	..	4
1⅝-inch ,, ,, ,, ..	,, 18	..	6	..	4¾
1⅝-inch ,, ,, ,, ..	,, 17	..	7	..	[illegible]
1⅝-inch ,, ,, ,, ..	,, 16	..	9	..	7

All the above kinds can be made any width (under 6 feet), at proportionate prices.

Strong Galvanised Poultry Netting, 7½d. per yard, 3 feet wide. Galvanised Sparrow-proof Netting for Pheasantries, 11d. per yard, 2 feet wide. Wire Netting of every mesh from half an inch to 6 inches.



Reduced Price of WIRE FENCING, and GALVANISED WIRE ROPE FENCING, suitable for the home trade or the colonies.

Five wires, 8 feet 6 inches high, pronged Standards, 8 feet apart, one wrought iron straining post and straining screws to each 100 yards of Fencing, 10d. per yard.

The same with Galvanised Wire Rope, 1s. per yard.

Illustrated Catalogues, with prices of every variety of Wire Fencing and Wire Netting, forwarded free on application.

*** Wire Fencing and Netting delivered Carriage Free at all the principal Railway Stations.

HOT-WATER APPARATUS.

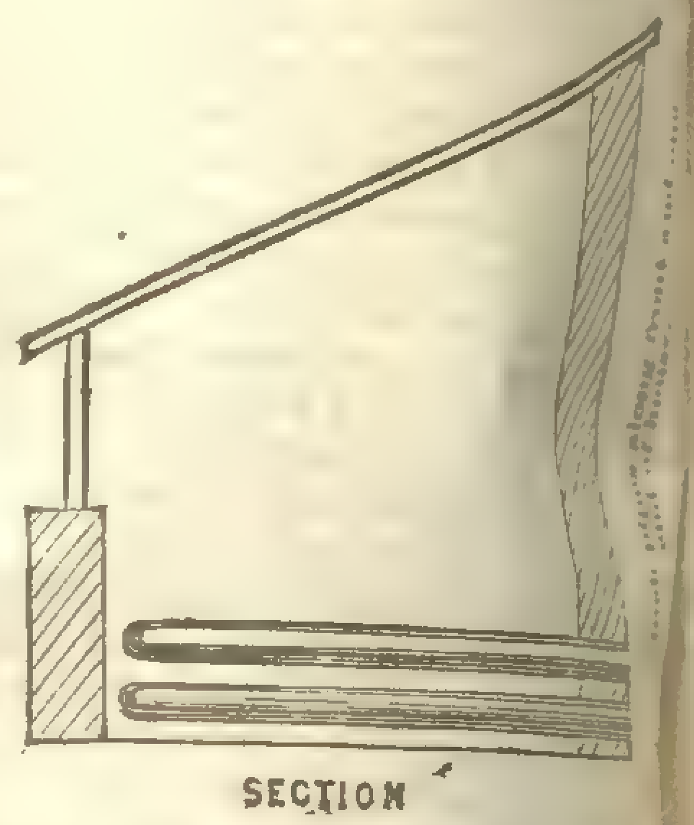
J. JONES

BEGS TO OFFER A COMPLETE

Hot-Water Apparatus for H…

according to the following Plans, delivered F… Railway Station in England.

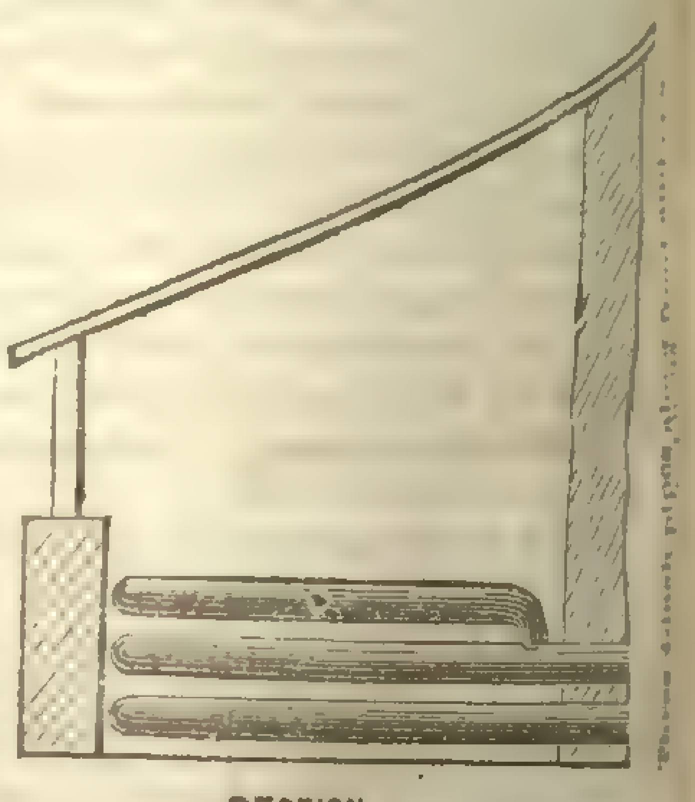
Plan No. 1.



SECTION

Size of House.		With Cylinder Boiler.
16 feet by 8 feet ..	Price	£8 0 0
20 feet by 10 feet ..	,,	8 10 0
25 feet by 12 feet ..	,,	10 0 0
30 feet by 12 feet ..	,,	11 10 0
40 feet by 15 feet ..	,,	16 10 0
50 feet by 15 feet ..	,,	18 10 0

Plan No. 2.



SECTION

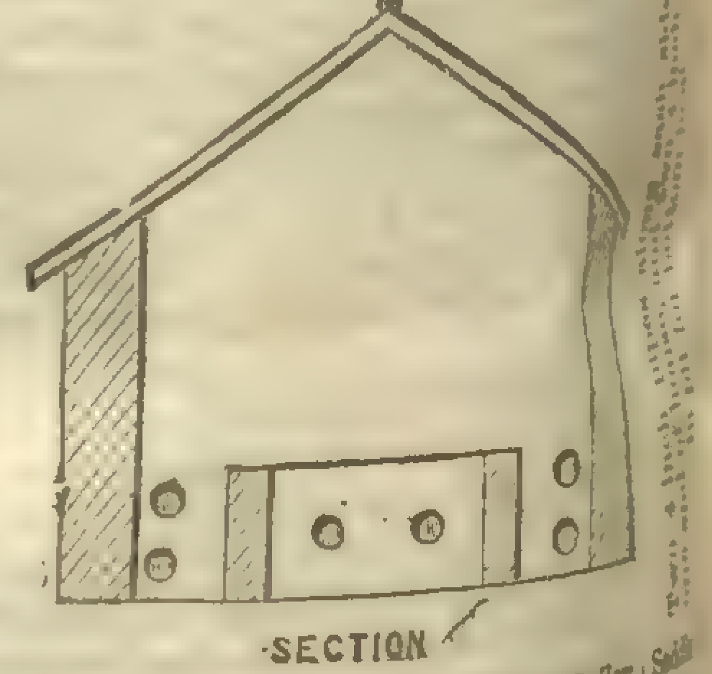
Size of House.		With Cylinder Boiler.
16 feet by 8 feet ..	Price	£11 10 0
20 feet by 10 feet ..	,,	12 10 0
25 feet by 12 feet ..	,,	14 10 0
30 feet by 12 feet ..	,,	16 10 0
40 feet by 15 feet ..	,,	22 0 0
50 feet by 15 feet ..	,,	24 10 0

Plan No. 3.

SECTION.

Size of House.		With Cylinder Boiler.
16 feet by 8 feet ..	Price	£12 10 0
20 feet by 10 feet ..	,,	13 10 0
25 feet by 12 feet ..	,,	16 10 0
30 feet by 12 feet ..	,,	19 0 0
40 feet by 15 feet ..	,,	24 10 0
50 feet by 15 feet ..	,,	27 0 0

Plan No. 4.



SECTION

Size of House.		With Cylinder Boiler.
16 feet by 8 feet ..	Price	£16 0 0
20 feet by 10 feet ..	,,	17 10 0
25 feet by 12 feet ..	,,	21 10 0
30 feet by 12 feet ..	,,	25 0 0
40 feet by 15 feet ..	,,	31 0 0
50 feet by 15 feet ..	,,	33 10 0

The above prices include Boiler, strong Furnace-doo… Plate, Soot-doors, Damper, and Supply Cistern-pipes… diameter, Elbows, &c.; all of the best quality.

Delivered free to any Railway Station in England… Nett Cash.

Estimates will be sent for the work fixed complete… ther particulars on application to

J. Jones, Hot-Water Apparatus Manufacturer, 6 … London, S.E.

Splendid New Strawberry "Eclipse" (Reeve).

MESSRS. VEITCH AND SON beg to call attention to this really first-class Fruit, full particulars of which will be found in their advertisements which have appeared in this Paper during the months of August and September. 12s. per dozen; 80s. per 100. Price to the Trade on application.

Chelsea and Exeter.—Oct. 19.

Strawberry Plants for Forcing.

J. KEYNES has to offer Plants unusually fine of the following varieties, viz. :—
KEEN'S SEEDLING,
INGRAM'S PRINCE of WALES, and
CAROLINA SUPERBA.

The above are well matured in 8-inch Pots and invaluable for early work. Price on application.

Castle Street Nursery, Salisbury.

FORCING STRAWBERRIES, or for Orchard-house culture.—BRITISH QUEEN, OSCAR, SIR CHAS. NAPIER, and KEEN'S SEEDLING, well established in 6-sized pots in the far-famed Wimbledon loam, as fine Plants as possible, and cannot fail to produce a large crop.

Price per dozen or hundred on application.

Stout HAMBURGH and other VINES for planting.

FRANCIS R. KINGHORN, Sheen Nursery, Richmond, S.W.

Strawberry Plants.

JAMES KITLEY begs to announce that the plants of his unequalled STRAWBERRY, CAROLINA SUPERBA, which he can supply at 5s. per 100, are now remarkably fine. Also extra strong plants of Goliath, British Queen, Elton Pine, Keen's Seedling, Sir C Napier, Eleanor, Duc de Malakoff, La Chalonaise, Gelineau, Madame E. Vilmorin, and Princess Alice Maud, at 3s. 6d. per 100.

The following varieties may be had in pots, at 1l. per 100, which would ensure a crop of fruit next season, viz., Carolina superba, Goliath, Sir C. Napier, Keen's Seedling, Trollop's Victoria, and Princess Alice Maud.

Lyncombe Vale Nursery, Bath.

Vines for Fruiting in Pots.

JAMES CARTER AND CO., SEED MERCHANTS and NURSERYMEN, 237, 238, High Holborn, London, W.C., and Crystal Palace Nursery, Forest Hill, Sydenham, have much pleasure in offering strong short-jointed well ripened VINES for Pot Culture, of all the most esteemed varieties, capable of bearing six to eight bunches each.

For list of names and prices see AUTUMN BULB CATALOGUE, post free on application.

PAMPAS GRASS.

J. C. & Co. have a splendid Stock of the above highly ornamental Grass, well established in Pots, from 5s. per dozen. Extra strong, 1s. to 1s. 6d. each.

Vines, Vines, Vines.

WILLIAM CUTBUSH, JUN., Barnet Nurseries, Herts, begs to invite an inspection of his fine Stock of FRUITING and other VINES in Pots, consisting of all the best varieties in cultivation. The following are remarkably strong and fine, from 8 to 12 feet in length, viz., Muscat Hamburgh, Muscat of Alexandria, Golden Hamburgh, Bowood Muscat, Lady Downe's Seedling, Trentham Black, Buckland's Sweetwater, Black Hamburgh, &c. List and Prices on application. Also to his Stock of Specimen and Half-specimen New Holland Plants, Indian Azaleas, Stove Plants, &c.

W. C. Jun. would also especially call the attention of Mushroom Growers to his very superior MUSHROOM SPAWN, for which he has the highest testimonials from the most eminent Gardeners in the United Kingdom, and which he can with the greatest confidence recommend. References on application.

Vines for Fruiting in Pots.

J. AND J. FRASER, Lea Bridge Road Nurseries, N.E., beg to offer strong VINES with well ripened wood of the best varieties.

A CATALOGUE will be forwarded on application.

The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

Orchard House Trees.

J. AND J. FRASER, Lea Bridge Road Nurseries, N.E., having a fine stock of—

PEACHES	APPLES
NECTARINES	PEARS
APRICOTS	PLUMS and CHERRIES

in Pots, well set with bloom buds, beg respectfully to offer them to the notice of intending Purchasers.

A CATALOGUE will be forwarded on application.

The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

Fruit Trees.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Fruiting Vines.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Roses.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Hyacinths.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Hollyhocks.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Catalogue.

YOUELL AND CO.'S GENERAL and DESCRIPTIVE PRICED CATALOGUE for this season is now ready, and will be sent free on application.

It contains detailed Lists of Greenhouse Plants, Conifers, Shrubs, Gladioli, as well as all the newest introductions in Soft-wooded Plants.

Royal Nursery, Great Yarmouth.

Hardy Scarlet Rhododendrons and other American Plants.

JOHN WATERER has the pleasure to announce that his ANNUAL CATALOGUE of the above popular plants, as exhibited in the Royal Botanic Gardens, Regent's Park, London, is now published, and will be forwarded on application. Intending planters and amateurs desirous of blending colours are invited to possess a copy, as faithful descriptions of all the RHODODENDRONS are given.

The Catalogue contains a selection of the best and really Hardy CONIFERS, with heights and prices, the whole of which having been removed the past spring are in a capital state for transplanting. Also EVERGREENS and ORNAMENTAL SHRUBS and TREES of the leading kinds.

The American Nursery, Bagshot, Surrey, near the Sunningdale Station, South Western Railway; also to be had of Mr. JOHN KERNAN, Seedsman, 4, Great Russell Street, Covent Garden.

Hyacinths and other Bulbs.

WM. CUTBUSH AND SONS' first importation of HYACINTHS, TULIPS, &c., has just been received direct from Haarlem. They are unusually fine. Early Orders are respectfully solicited.

ALL the FIRST PRIZES have been awarded our Collections wherever exhibited during the last seven years.

DESCRIPTIVE PRICED CATALOGUES post free.

Highgate Nurseries, London, N.

Cheap Dutch and other Bulbs.

HENRY BROWN begs to call attention to his Priced DESCRIPTIVE CATALOGUE (post free on application). The quality cannot be surpassed, and the prices will on comparison be found very moderate. Collections from 10s. 6d. upwards delivered, carriage free, to any principal steam port or railway station in England, Ireland, or Scotland.

FLUKE and other POTATOES off the Lancashire Moss and Sand. Price on application.

Seed Warehouse, 4, Commutation Row, Liverpool.

Hyacinths, Tulips, &c.

JAMES GARAWAY AND CO.
have just received from the
MOST CELEBRATED DUTCH GROWERS
their
FIRST IMPORTATION
Of the above and other Bulbs,
And are supplying the same, of
BEST QUALITY, AT THE LOWEST POSSIBLE PRICES.
CATALOGUES with full particulars on application.
JAMES GARAWAY & Co.,
Durdham Down Nurseries,
Bristol.

Dutch Flower Roots.

JAMES VEITCH, JUN., ROYAL EXOTIC NURSERY, Chelsea, S.W., begs to announce that he has received his annual supply of BULBOUS ROOTS from Holland, and is pleased to say that they are PARTICULARLY FINE and in EXCELLENT CONDITION. CATALOGUES are now ready and will be forwarded on application.

J. V., Jun., desires to impress upon those who patronise him the great advantage of giving him their ORDERS EARLY, as the successful cultivation of Bulbs depends in a great measure upon their BEING PLANTED EARLY IN THE SEASON.

The best Twelve Hyacinths.

SUTTON'S BEST TWELVE HYACINTHS Imported can be supplied for 12s.; Second best, 9s.; very good, 6s.

Also, fine mixed DOUBLE HYACINTHS (all fresh imported), 3s. per dozen, or 21s. per 100.

PRICED LISTS of BULBS and SEEDS may be had post free.

Royal Berkshire Seed Establishment, Reading.

Yorkshire and Lincolnshire Nursery and Seed Establishment.

MARTIN AND SONS respectfully inform their friends that their NURSERY CATALOGUES may be had on application, containing choice selections of Apples, Pears, Plums, Peaches, and Apricots; Standard Ornamental Trees, Evergreen and Deciduous Shrubs, Stove, Greenhouse, and Herbaceous Plants, Ferns, Conifers, and importations of Dutch Bulbous Flower Roots.

Cottingham Nursery and Seed Establishment (A.D. 1788). The "Park Nursery," Hull.

Hull Seed and Horticultural Tool Establishment, Junction St.

Violets.

ROBT. SHACKELL has fine healthy strong plants at the following prices :—

	Per dozen.—s. d.		Per dozen.—s. d.
Shackell's Russian Superb	12 0	Double White	4 0
Small do. do.	4 0	Double White Tree ..	4 0
Double purple Tree Violet	4 0	Neapolitan, for forcing ..	4 0
Double purple Spring blooming	4 0	Old Russian	2 0
		Hamper and package included.	

Address ROBT. SHACKELL, Florist, &c., 5, Broad Street, Bath.

New Rose Catalogue for 1861-62.

WOODLANDS NURSERY, MARESFIELD, NEAR UCKFIELD, SUSSEX.

WM. WOOD AND SON have the honour to announce that their CATALOGUES of ROSES and GENERAL NURSERY STOCK are now ready for distribution.

It is generally admitted that the county of Sussex has suffered less from the effects of last winter's frost than any other county in England, in consequence of which W. W. & Son have to offer a remarkably fine stock of Roses and Nursery Stock in general.

Rose Catalogue.

WM. PAUL (Successor to the late A. PAUL) respectfully announces that his NEW ROSE CATALOGUE is now ready for circulation.

Owing to the division of the Cheshunt Nurseries in the Autumn of last year, the greater part of his Roses were removed, and as a consequence escaped the devastating effects of the winter's frost. Standards, Half-Standards, and Dwarfs are alike vigorous and healthy, and he believes that his stock of Roses this autumn is the largest and finest in the country.

Cheshunt Nurseries, Waltham Cross, London, N.

Hardy Japanese Plants, New Roses, &c.

JOHN STANDISH has great pleasure in submitting the above to the consideration of his friends and the public in general, far exceeding in interest any that he has ever had the opportunity of sending out at any one time.

For a DESCRIPTIVE LIST of NEW FERNS, HARDY JAPANESE PLANTS, NEW ROSES, &c., see *Gardeners' Chronicle* for the first Saturday in every month.

Besides the above J. S. has a fine stock of CONIFEROUS PLANTS, HARDY SHRUBS and TREES, and a very large stock of VINES, which he can offer at reasonable prices, CATALOGUES of which will be shortly ready for distribution.

The Royal Nursery, Bagshot, Surrey.

CARTER'S FIRST-CLASS SEEDS of
CALCEOLARIA, 2s. 6d. per packet.
,, new blotched, 2s. 6d. per packet.
CINERARIA, 2s. 6d. per packet.
PRIMULA, mixed fringed, 1s. per packet.
,, dark carmine fringed, 2s. 6d. per packet.
,, pure white fringed, 2s. 6d. per packet.

JAMES CARTER & Co., 237 & 238, High Holborn, London, W.C.

MINNIE BANKS and COMET.
Coloured Plate, 1s. 6d. per post.

The above FUCHSIAS possess first-class properties, and show a striking advance on all others which have been sent out since the white corolla varieties were introduced.

E. G. HENDERSON & SON, Wellington Road Nursery, St. John's Wood, London, N.W.

CHÆROPHYLLUM BULBOSUM.
Figured in *Gardeners' Chronicle*, Oct. 5, 1861.
New Seed, per packet, 6d. and 1s. each.

The BULB CATALOGUE free, and the BULB GUIDE on receipt of 18 postage stamps.

E. G. HENDERSON & SON, Wellington Road Nursery, St. John's Wood, London, N.W.

New and Rare Plants.

MESSRS. E. G. HENDERSON AND SON respectfully call attention to the following :—

SEDUM CARNEUM VARIEGATUM, introduced by Mr. Von Siebold from Japan, of whom they have purchased the entire stock.
EPIGYNIUM LEUCOBOTRYS, figured in the "Illustrated Bouquet."
PENTAS ROSEA KERMESINA, very useful as a winter-flowering plant for Drawing-room Bouquets.
PETUNIA BRITISH LION, fine habit, rich crimson.
CAMELLIA ETOILE POLAIRE, carmine scarlet-striped.
COLEUS VERSCHAFFELTI, bright bronze crimson leaves.
LAPAGERIA ROSEA, newly gathered Seeds. Trade supplied.
CLOTH OF GOLD GERANIUM, 1s. 6d. and 2s. 6d.
GOLDEN FLEECE GERANIUM, 1s. 6d. and 2s. 6d.
GYNERIUM ARGENTEUM (PAMPAS GRASS), 3s. and 3s. 6d. per dozen. Strong at 1s. and 1s. 6d.

Wellington Road, St. John's Wood, London, N.W.

New Cinerarias, Gloxinias, and Pelargoniums.

F. AND A. SMITH can still supply a few sets of their New GLOXINIAS, CINERARIAS, and PELARGONIUMS.

See *Gardeners' Chronicle* of Oct. 5, and CATALOGUE, which may be had gratis.

Dulwich, Surrey, S.

New Plants of 1861.

HENRY WALTON has now ready for Orders, at greatly reduced prices, nice plants of FUCHSIAS, PETUNIAS, VERBENAS, &c., of this season.

LIST of VARIETIES and Prices on application.

Edge End, Marsden, near Burnley, Lancashire.

Wholesale Catalogue.

GEORGE JACKMAN AND SON'S PRICED and DESCRIPTIVE CATALOGUE for 1861 and SPRING 1862, comprising Fruit Trees of all the leading kinds, new and selected Roses, fine varieties of American Plants, Choice and Rare Conifers, Evergreen and Deciduous Trees and Shrubs, and a fine Stock of Transplanted Forest Trees, &c., can be had free on application.

Woking Nursery, Surrey.

Superb Double Hollyhocks.

SAFFRON WALDEN NURSERY.

WILLIAM CHATER'S 15th ANNUAL DESCRIPTIVE and NEWLY CLASSIFIED LIST is now ready, and will be forwarded to any address on receipt of one postage stamp.

WILLIAM CHATER, Nurseryman and Seedsman, Saffron Walden, Essex.

Can be Seen at Sunningdale Nursery, Sunningdale Station, South-Western Railway.

CHARLES NOBLE invites inspection, and would remind all interested, that his RHODODENDRONS have taken First Prizes at the opening Show of the Royal Horticultural Society, and every other show at which they have been exhibited during the last two years.

RHODODENDRONS for forcing; KALMIAS for forcing; and a magnificent stock of all the finest kinds of Rhododendrons in the world. CONIFERS and Hardy EVERGREENS by the 100 or 1000. ROSES and a General Nursery Stock well worthy the inspection of intending Planters or Nurserymen.

Hyacinths! Hyacinths!!

WM. CUTBUSH AND SON have the pleasure of announcing that the Council of the Royal Horticultural Society have accepted their offer of awarding PRIZES of Two Guineas and One Guinea to private growers, for the BEST and SECOND BEST COLLECTION of 12 HYACINTHS, distinct varieties, grown in pots, at their Spring Exhibition of 1862.

WM. C. & SON remind intending competitors that October is the best month for potting Hyacinths.

Highgate Nurseries, London, N.

The Gardeners' Chronicle.

SATURDAY, OCTOBER 19, 1861.

IF in their arboriculture the authorities of Paris have more to learn from than to teach us, it is different with respect to the PUBLIC GARDENS with which they have within the last few years adorned their city. In former days, when straight avenues of tall trees covering a bare dusty soil, constituted the finest promenades of the Parisians, our squares and parks were the objects of their wonder and admiration, but now the relative merits of the two are exactly reversed. Our Commission of Woods has indeed within the last two or three years laid out considerable sums of money in planting shrubberies and flower borders in the parks of the West End, and nothing could be more gay than some of those in Hyde Park during a portion of the summer. But turning our glance from the tasteful gardens of the Champs Elysées still luxuriating in the full richness of verdure and flowers, like the best

kept grounds of our country seats, without a weed or a plant out of place—to the so-called shrubbery of the Green Park, a confused expanse of shabby bushes scattered without design, and intermixed with the remains of broadcast annuals, rank weeds, bits of paper, and other rubbish, the comparison is one we have little reason to be proud of. A few notes, therefore, made on the subject during a short stay in Paris in the present month (September) may not be without interest, and to these we have added some details obligingly communicated to us by Monsieur Barillet-Deschamps, under whose direction are placed the public gardens of the city of Paris, including the Bois de Boulogne, and who, as "Jardinier Architecte," is also extensively employed in laying out the private grounds, which are now gradually coming more into fashion with wealthy Frenchmen who have country châteaux. The Tuileries, Louvre, and Luxembourg gardens are, however, not under his superintendence, the two former being at the charge of the Civil List, and the Sénat having a management of its own for the Luxembourg.

In general design, formal gardens, straight walks, terraces, steps, and parterres are gone quite out of fashion, and in Paris appear to be only maintained in the Tuileries and Luxembourg; curved lines, irregular lawns, with round, oval or irregular clumps, borders, or beds being everywhere substituted. In some places this irregularity may have been carried too far, or too much may have been attempted for the limited space; but, in general, the designs struck us as remarkably good for the style adopted. The dressed portion of the Bois de Boulogne surrounding the lake is the subject of universal admiration; the broad lawns which border the magnificent Avenue de l'Impératrice, broken only by a small number of clumps, add to the grandeur of a scene which, now that it is assuming a more finished aspect, is unrivalled in any public open promenade we are acquainted with; and, in the Champs Elysées, the arrangement of the raised clumps and slightly hollowed intervening lawns is such as to give both variety and an appearance of extent. Some persons object to the clumps as being too much raised, but in the Champs Elysées there was a reason for it, as it gave the means of shutting out in a great measure the *cafés chantans*, without the appearance of screens planted for the purpose. In the Parc de Monceaux it may be said that the rockery, cascade, raised bridge, &c., are overdone for so small a space; but the general effect is good, as here also the design is such as to make it appear much more extensive than it would have done if planted in the old way, with straight parallel rows of trees. In the smaller, more flowery gardens of St. Clotilde, St. Jacques, the Thermes, and several others, the curved walks and irregular borders within a straight-lined enclosure are well managed, although again in some instances rather overdone.

The shrubs and smaller trees in the clumps of the dressed gardens do not at all partake of the desolate look of the Limes and Horse-Chesnuts in the avenues. Benefited by the good soil and constant waterings given to the lawns and flowering plants, they are generally still in full vigour of leaf, and some in full flower. They are chiefly of the kinds common with us, a few additional ones perhaps too tender for the English climate; but there is one among the autumn flowering ones, the Kölreuteria paniculata, which we do not recollect having observed in our shrubberies, although we are told it never suffers in Paris in the severest winters. Its large terminal panicles of yellowish flowers appear in September, and, when healthy, its foliage is elegant. In the Luxembourg are some very handsome Tamarisks now covered with their pink flowers. The native ingredients necessary to its welfare, and which it finds in the Paris gypsum, may be easily given to it in any soil by the addition of a little common salt. The variegated ash-leaved Maple, so highly prized by M. Barillet, and much admired by most persons, does not please us so much. It is too white. A clump at a distance, or amongst green shrubs, has rather a singular than a handsome aspect, and, when seen near, it has more of a sickly look than almost any variegated-leaved plant. It does not appear to grow into a tree. The clump in the Bois de Boulogne, near the kiosk of the Empress, has made but little progress these last four years, and the Lichens on the stems betray the constitutional want of vigour.

Among the greatest improvements in the Paris gardens observable within the last two or three years, especially at this time of year, are the use made of Cannas, Caladiums, and other large leaved plants, either in distinct round or oval clumps, or in the tall centres of the flower borders, and the introduction of some autumnal flowering plants, under shrubs or perennials, either in raised beds or borders, or surrounding the clumps of shrubs. In the Cannas and Caladiums, considerable attention has been given to the ascertaining which species or varieties are the best adapted for planting out as the hardiest, the easiest to cultivate in large quantities, the handsomest and the least liable to tear with wind. With this view M. Barillet has tried above 80 Cannas, of which he showed us as many square patches in a long row in the reserve garden. Of this number he has selected about a dozen for general cultivation, and intends to reject the others. Those which have hitherto been found the best suited for clumps are among the larger kinds, C. annæi and C. Warczewiczioides with red flowers; C. liliiflora, rather tender, but the only one with white flowers; and C. zebrina, with dark-coloured foliage, far preferable to the more common C. discolor; C. indica is one of the best of the middle-sized ones, and C. Warczewiczii among the smaller ones. A very handsome clump in Lamartine's garden adjoining La Muette had C. annæi in the centre 9 to 10 feet high, surrounded by C. indica with C. Warczewiczii on the outside, but in general the clumps of a single kind, closely planted, with the most vigorous and tallest plants in the centre, and from 6 to 12 or 15 feet diameter, according to the height of the variety, appeared to us to have the best effect. They are also much improved by a ring of some dense short plant close round the base so as to hide the roots. Some flowering plant of 9 inches to a foot in height is generally selected, but it appeared to us that a ring of bright flowers round the base took off from the general effect as a bed of foliage, and when the Cannas are in flower made their flowers look poor. A very good result was produced in a clump in the Luxembourg garden by a close ring of the common striped Grass kept to the uniform height of rather less than a foot. The roots of these Cannas are taken up as soon as the first frosts attack their leaves, and stored for the winter in a perfectly dry cellar. Very early in spring they are started in frames or pits, and divided for propagation, and planted out in the clumps in May. There are a very few of the tenderer kinds which require being kept in vegetation during the winter, but these are on that account rejected from general cultivation.

A considerable number of Caladiums have been tried, but there are none to equal the C. esculentum, of which there are several large raised beds in the Champs Elysées, Monceaux, and Bois de Boulogne. The peltate leaves, of which we measured several more than a yard in length, and which M. Barillet tells us often attain a yard and a half, hang elegantly from their erect petioles, so as to wave in the wind without tearing. It is true that in some of the clumps in the Champs Elysées they are ragged on the outer side of the bed, but that is owing to their being too close to the walk and injured by the passers by; on the inner side, next to the lawn, although equally exposed to the wind, they are quite entire. C. violaceum is also a handsome one; but the species with erect leaves are generally inferior, either as showing too much stem, or as very liable to tear. All Caladiums require being kept indoors, and more or less in vegetation during the winter.

Several other green and hothouse plants have been tried for planting out as foliage-clumps. Those most successful hitherto have been Wigandia caracasana, of which there are several large handsome clumps with leaves near 2 feet long and $1\frac{1}{2}$ foot broad; Musa rosacea, the only Banana found not to tear; Ficus elastica, and Latania borbonica. The red variety of the Castor-oil plant (Ricinus) planted singly, or better when three together, in a lawn has a very fine effect, attaining a height of about 5 feet. The foliage is altogether deeply coloured, and the flower spike is of a rich crimson, but the variety is difficult to raise true from seed, and in this climate it can only be treated as an annual; the common green variety is apt to look weedy. The practice which embellishes so much the St. Petersburgh gardens during their short summer, of planting out green and hothouse flowering trees and shrubs in single specimens, is also beginning to be tried here with success. They are planted out in May without their pots, and two or three weeks before taking them in in autumn they are prepared for potting by cutting round their roots.

In flowering plants there was in Paris some years ago an attempt to compete with us in novelties and rarities, but this has now been quite given up, as producing little effect at great cost. Annuals are also generally avoided as being of short duration and more difficult to keep neat and free from weeds. Attention has chiefly been directed in the public gardens to showy perennials, which can be readily propagated in great numbers, planted out nearly ready for flowering, and, with a little care, kept in flower for a lengthened period. Low plants such as Verbenas, so highly prized by us for parterres, are but little encouraged, as being less suited for the landscape style adopted. Among the autumn plants now in flower the most brilliant are the Scarlet Pelargoniums, to be seen in all the gardens in great profusion, the Gladioli, and a few other showy perennials common with us. The Chrysanthemum frutescens, a very valuable summer plant from the length of time it remains in flower, is now (in September) nearly gone by. Phlox Drummondi, Tagetes patula, China Asters, and a few others, although annuals, are exceptionally favourites for beds, but they are always planted out, not sown broadcast. In addition to all these some green and hothouse flowering plants, especially Begonias, have been successfully planted out in beds. M. Barillet has tried all the Begonias which he could collect and propagate in sufficient quantities for the purpose. The majority are too tender or not showy enough for this mode of culture, but B. fuchsioides (the original variety, not the more common miniata, which is tender), and B. Prestoniensis, both scarlet, but contrasting with each other in habit and foliage, made beautiful beds, of which several are now in full flower in the Champs Elysées and Monceaux. A species recently received from Bolivia, to which the provisional name of B. boliviana has been given, seems to be equally hardy and has a handsome leaf, but the flower (now passed) is said to be inferior, and in foliage it is certainly very far from the Cannas or Caladiums. We are told that Hibiscus rosa sinensis trained dwarf makes a beautiful bed, but we did not see it so treated. Two species of yellow flowered Cassia, now in full flower, make a great show in the mixed clumps. Both have been received under the name of C. floribunda, but they differ from each other in the size of the flowers and in the number of leaflets, and apparently belong to distinct species, but they do not set their pods, and M. Decaisne had not had an opportunity yet of determining them botanically. Among lower plants we observed a very pretty bed of Vinca rosea with pink flowers; the white variety is too tender for bedding out.

For all these plants the Parisian climate affords some advantage over ours in the greater heat and duration of the summer sun, but the difference is not very great, and their winter frosts appear to be nearly as severe, as early and as late as ours. They are obliged to take in their plants in October, often early in that month, and cannot plant them out till May. Their summer of 1860 was like ours cold, dull, damp, and very bad for ripening wood, and last winter committed almost as much havoc in the Bois de Boulogne as at Kew. Pinus insignis was everywhere quite killed, and almost all the tender Conifers suffered very much. Cunninghamia however is an exception; two handsome young trees of 15 to 18 feet high in the Bois were only partially browned. On the other hand, Cotoneaster microphylla was in several places very severely injured.

For the maintenance of these gardens in a state of luxuriance throughout the summer, great care is taken in the original preparation of the soil, and constant attention is given to weeding and watering. The soil is all made, for the lawns as well as the beds. The lawns were all originally sown with Lolium perenne from seed gathered with care, and supposed to be perfectly pure and clean; but that does not last. After a twelvemonth it "gets converted into," as the gardeners tell you, that is to say, it is invaded and almost replaced by Festucas and some other Grasses (the species of which we could not ascertain, as they are not allowed to flower) of which probably a few seeds had been lurking amongst the others, and had produced so few plants as to be unperceived the first year. These few, however, luxuriate more than the Lolium in the rich soil and constant watering, tiller rapidly, and form a dense sward, which gradually smothers the weaker plant. At first the lawns so changed were resown the follow-

ing season; but as it is now found that the naturally substituted Grasses answer the purpose better than the Lolium sown, they are allowed to remain, the gardeners firmly believing that they are nothing but the Lolium transmuted. We saw no signs of the Poa annua, which is the bane of our London Parks, but which will always be stifled by perennials when well watered and dressed. In the flower beds there is none of the broadcast sowing which has been so untidily done in our St. James's and Green Parks. Everything is planted out from the reserve garden; and in the mixed borders, herbaceous plants, when out of flower, are periodically replaced by others in season; and the whole, shrubs, lawns, and flower-beds, are daily and copiously watered during the dry season by means of moveable hose. An abundant supply of water is generally distributed through underground pipes, with plugs at convenient intervals to attach the hose.

All this could not be accomplished without a reserve garden on a large scale, and, accordingly, the extensive grounds of La Muette, at Passy, at the end of the Avenue de St. Cloud, opposite the La Muette gate of the Bois de Boulogne, have been devoted to the purpose. The soil and exposure are good. Several ranges of light and airy stoves and propagating houses, with facilities for shading and ventilating, are already in use, and others are now in construction, besides long lines of low cool pits and frames, and there is abundant space for the preparation of soils and manures and other necessary operations. The houses are heated by an apparatus for steam and hot air, conveyed chiefly in pipes of about 2 inches, which M. Barillet says is much more economical than a hot-water circulation. The boiler, which is found sufficient for the whole, is heated by a powerful jet of gas, generated in an adjoining apparatus, with a small two-horse-power steam-engine for injecting air. There is also, under a portion of the garden, an extensive cavern cut in the soft Paris rock, with massive pillars left at intervals for the support of the flat roof. This, from its perfect dryness and equable temperature, is invaluable to them for the preservation of Canna and other roots during the winter. The whole is under the immediate charge of M. André, who appeared to us to be a very intelligent and well informed young man.

Adjoining La Muette is the new Artesian well, which has taken about five years in the boring. After sundry mishaps and difficulties having got down to some feet below the level of the Grenelle well, they were almost discouraged and ready to give it up, when, on the day before we saw it, there were some slight signs of water, and on that morning to their great joy it burst forth from the top of the tube in a body twice a man's thickness. Although, like the Grenelle water, it is slightly sulphurous and therefore scarcely fit for drinking, it is an immense advantage coming out at that elevation, as well for the watering of the Muette and the Bois de Boulogne as for the household purposes in the surrounding district.

The expenditure incurred in the Paris plantations and gardens has been the subject of much outcry, and has been urged as an invincible obstacle to the introduction of anything of the kind in the London Parks. No detailed authentic accounts on the subject are published, although we are told that a report entering into the minutest details with perfect accuracy is in existence; the data communicated to us by different persons are in some respects contradictory, but from the most reliable information we have been able to procure, this expenditure appears to have been considerably exaggerated. The outlay of capital by the city of Paris for the purchase and formation of the Bois de Boulogne, has been fully repaid by the sale of plots of building ground on its outskirts. The expense of laying out the gardens in the city is considered as a portion of the general cost of the Paris embellishments, and that also is believed to be nearly balanced by the increased value of the building ground let or sold. The city owns an abundant supply of water, and has only the expense of laying down the pipes. The plants for stocking the gardens are all raised at La Muette, the shrubs and trees in their own nurseries, so that they have no heavy contracts for the supply of stock. The number of hands employed is 70 in the Bois de Boulogne, 60 at La Muette, and 110 in the various gardens of the city, including the Champs Elysées, the Avenue de l'Impératrice, the Parc de Monceaux, and all the scattered smaller gardens. Besides that there are a few men in the nurseries for trees, for Conifers, and for American and other peat-earth shrubs, and some additional hands are taken on at the time of planting out in spring. The city, however, we are told, look closely into their accounts, and have always an eye to economy. The Civil List, in the management of the Tuileries and Louvre Gardens, is said to be much more profuse in its expenditure. *B.*

At St. Margaret's, South Elmham, in the county of Suffolk, stood a few days since one of the noblest Elms in England. It was above a hundred feet high, and many a troop of hunters has taken shelter beneath the spreading boughs of its majestic head. Whenever we have had to speak of Elms we have thought of this glorious piece of antiquity, and taken it as an example of what that sort of tree may remain even at its greatest age. It was a grand tree in the youth of the oldest inhabitant of the parish. No cottager remembered it, no tradition pointed to it except as "the great Elm." It may have been one of those which gave in days long passed the name of Elmham to the parish, nor did it require any great stretch of fancy to imagine it coeval with bold Bishop Almar, who held the see of Elmham, for the parish once gave its name to a Bishop's see, at the Conquest, although he was a married man.

Alas! this fine old English Elm has perished. On the 11th inst. a heavy gale from the South tore it up by the roots, and over it went with one tremendous crash. Like all Elms it had become decayed internally, and when the force of the storm was applied to it, snap went its huge roots, and it became a gigantic wreck. So sudden and violent was its fall that Mr. Freestone, on whose estate it stood, had scarcely time to escape from beneath its branches, his ear having providentially caught the sound of the beginning of the smash.

We mention this not merely for the sake of recording the fate of a remarkable tree, but as another warning to those who ride near the great and dying Elms in Hyde Park. It is not very long since we described the fall there of a pygmy compared with that at St. Margaret's, and pointed out the dangerous state of all the old Elms, its neighbours (see p. 502, 1860). It will now be seen that trees of the kind, even although appearing to retain their youthful strength, are not at all to be trusted.

It is probable that when Mr. Wentworth Dilke offered prizes last spring for table decorations composed of fruit and flowers, few expected to find so many competitors, for though persons of refined taste set great store on flowers for decoration, still there are many more who have either no notion how to arrange them, or care little about them at their table or in their houses.

It is not altogether improbable that one of the reasons why we so often see flowers unskilfully arranged is because in the first place the proper method of gathering them is not understood. It is not every gardener even that knows how to cut flowers for decoration, or how to select what is suitable for the stands in which they are to be set up. Gardeners, if they have not sufficient natural taste to guide their selection, should be taught by those who have, how to gather flowers fit to send in to a gentleman's house. Ladies, with whom the task of arranging them resides, do not want a great basket of clumsy flowers cut in bundles, as though they had been gathered with a reaping sickle; nor full blown roses each with a score of buds behind it: nor yet heads of Geraniums with two or three blossoms expanded on a large head of buds, that would have added to the brilliancy of the garden for a month to come. It is a grand mistake to think that flowers are flowers, and that nothing can be wrong if there be but plenty of them, or that flowers alone without any green to relieve them are all sufficient. The very first rule in flower gathering is that the choicest flowers unrelieved by green are infinitely surpassed by common gay blossoms set off with graceful foliage. Those who look back to Mr. Marsh's beautiful group at South Kensington last summer will remember that the loveliest of his three stands was composed of little or nothing more than Lilies of the Valley, Forget-me-not, and Maiden's Hair Fern: the broad sharp pointed leaves of the Lily of the Valley standing upright in the centre, and the graceful Adiantum hanging over the edges.

One of the chief things to consider in gathering flowers is to choose pieces where the flowers are neither in bud nor full blown, but just expanded. If a spike is tall and tapering, or a showy flower stands on a tall stalk, then each should be cut as long as the stem will allow without injuring or disfiguring the plant, for as so many flowers grow in a manner impossible to be cut otherwise than short, therefore any long stalked flowers that can be cut to different lengths are invaluable. All kinds of Fuchsia or pendent flowers mix well with others; trailing things should be also provided; from a Clematis or similar plant, it is best to gather a long spray, for these pieces can be broken off to please the fancy of the decorator.

There is far more difficulty in selecting green foliage, than in gathering flowers. When leaves are young and have grown fast, it is useless to take them, for they will not live in water. What are wanted are leaves of mature growth, with good firm foliage and with tolerably long stalks. The bright green of some Berberries, Fern leaves, Fumitory, small trailing plants, shoots of Ivy or Periwinkle, small Vine leaves, bits of Bamboo, or Deciduous Cypress, or Ribbon Grass, or any much divided leaves, such as Cissus stans, some of the Ferulas, &c., in fact any pretty leaves do extremely well.

In the autumn and winter, when flowers are scarce, plants bearing red leaves, or bright berries, such as Pyracantha, Pernettya, Snowberry, Thorns, &c., may all be made useful. The flowers of the Pampas Grass and Everlastings when carefully dried make a pretty good substitute for fresh flowers in winter, and would be much valued by ladies. Not however dyed flowers, such as are sold in some shops, which persons of good taste look upon with indescribable disfavour. *B. B.*

Some doubts having been lately thrown upon the usually accepted fact that the Mistletoe (*Viscum album*) grows on the Oak, a Correspondent has undertaken to have the point cleared up by *a direct personal appeal* to practical botanists; and in the interest of scientific truth he has issued a circular in which he begs to be favoured with replies to the question, "whether the writer has ever *seen* the Mistletoe in such a position?" If any of our readers should be able to answer in the affirmative we would venture to beg them to communicate with Wm. Marshall, Esq., Solicitor, Ely.

In his last Number of the *Flore des Serres*, Mr. Van Houtte has made the world acquainted with a most prodigious Lilac. According to the figure the huge and massive bunches are 11 inches long, of a most brilliant violet purple colour, and are still more remarkable for the firm texture and rounded form of the blossoms. It must throw a florist into extacies when he finds that those "properties of flowers" in which he so much delights, are assumed at last by the intractable Lilac.

The name conferred upon this wonder is Dr. Lindley. It was raised by a M. Darimont, and is benevolently offered to the public from this present autumn.

—— Do any of our readers happen to know the origin of the Pelargonium which is we believe generally called Rollisson's or the Purple Unique? The variety to which we refer is one which though of rather straggling habit has bold "Oak" leaves and deep purple flowers, and is a great favourite in flower gardens and for general decorative purposes. We presume it owes its origin, as many such varieties no doubt do, to a sporting branch, in which, however mysterious it may seem, the character into which it has sported became fixed. This opinion has been confirmed by a very curious sport which we have noticed during the past summer, and which deserves to be recorded. Among the plants grown at Chiswick was a group of Pelargoniums of the class to which this unique variety belongs, and in this group were plants of the Purple Unique, and of another, we believe the old Lilac Unique, differing only in having the flowers lilac instead of purple. On a plant of the latter we observed one truss of flowers in which half the number were of the purple colour to which reference has been made, and the other half were lilac. An examination of the fallen petals and of the buds showed that this peculiarity was carried through the whole development of this particular flower truss. The two colours, though in separate flowers, were not scattered promiscuously throughout the truss, but the blossoms and buds on the one side were purple, while those on the opposite side were lilac. The appearance of this flower bud was very singular. Cases like this, and the still more common ones of branches sporting wholly to an alien character, exemplify the wonderfully plastic nature which pervades the vegetable kingdom.

TABLE DECORATIONS.

At the autumn Show of the Brighton Horticultural Society, three prizes were given for groups suitable for table decoration. The rules laid down

were similar to those adopted by the Royal Horticultural Society when Mr. Dilke's prizes were awarded in June last. The display was extremely good and satisfactory, and we should have noted the fact before, but that we could not get the names of the competitors till this week.

1st prize, Mr. McKenzie, Bristol Nurseries, Kemp Town, Brighton.

2d, Messrs. Balchin & Nell, Florists, Western Road, Brighton.

3d, the Misses Orme, Broadwater, Worthing.

The other competitors were—

Mrs. Warde, Little Horsted Rectory, Uckfield.
Miss F. Sinnick, Hailsham.
Mr. E. Booty, Western Road, Brighton.
Mrs. E. Holland, Marine Parade, Brighton.
Miss M. Jordan, Lindore Villa, Brighton.

New Plants.

239. Physurus fimbrillaris.

P. fimbrillaris; omnibus P. picti nisi sepalis medio glandulosis, labellique brevioris ventricosi lobo medio fimbriato.

Very much like P. pictus, for which we at first took it; but the leaves, which are exquisitely veined with silver, are rather longer; the sepals are somewhat broader, and have a line of stalked pellucid glands along their middle outside, and the lip, which is more inflated, is yellow at the end, where it is also most delicately fringed. Flowered in the garden of the Horticultural Society, having been received from Mr. Weir, who met with it in the forests near Rio Janeiro, where "it is extremely variable, some plants having the leaves quite plain." Those at Chiswick are beautifully silver-veined.

240. Witheringia pogonandra.

This is a new ornamental plant with variegated foliage, introduced by M. A. Verschaffelt. It was raised from seeds received from his collector, M. Ghiesbreght, under the name of Solanum argyræum. It belongs to a genus allied to Solanum, like many species of which it is half-shrubby, and much branched. Its yellow flowers produce but little effect, and are even scarcely apparent on account of their being situated in the axils of the leaves. The plants which M. Heinemann, its describer, had seen, were not more than 2 feet high, but as they were all seedlings and still young, it is probable that it is a species of rapid and vigorous growth. Judging from its appearance, it is likely to become as large as a moderate-sized Datura. It produces a very fine effect. Its handsome leaves, which entirely hide the stem, are marbled with silvery white, and exhibit that remarkable metallic lustre which adds so materially to the beauty of different kinds of Begonias; the veins of the leaves of W. pogonandra are of a bright colour, and contrast well with the dark green ground colour of the leaves themselves, as does likewise this variegation of the leaves with the intense red of the petioles and young shoots. The close down which covers the leaves, especially towards their edges, renders their surface velvety.

The culture of this new variegated plant is very simple. It should be treated exactly like the Daturas, Uhdea pinnatifida, Solanum quitense, Cosmophyllum, and others of a similar nature. Herbaceous cuttings are taken off and struck early in spring, potted off when rooted, and shifted on as often as may be found necessary. In this way strong plants may be had by the month of May; and these on being turned out in the middle of a clump or bed in the lawn grow freely; but they will also attain a large size in pots if planted in rich soil and watered with liquid manure. Those planted out in the open ground may be taken up before frost sets in, potted, and kept in a greenhouse or in heated pits during winter. It is expected that in favourable seasons the Witheringia pogonandra will ripen its seeds. *Extract from Heinemann in the Hamburger Garten-und-Blumenzeitung*, 1861.

MYCOLOGY.—No. LVII.

Agaricus platyphyllus, *Fr.*, var. *repens*.—The sixth subgenus of *Agaricus*, Collybia, which derives its name from κολλυβος, a piece of money, contains many of our most interesting and best marked species, though with the exception of the vernal *A. esculentus*, so highly prized in Austria though neglected elsewhere, and *A. fusipes*, so conspicuous from its tufted spindle-shaped stems at the foot of old Oaks, it contains scarcely a culinary species. The distinguishing character of the subgenus as compared with the last consists in the external cartilaginous coat of the stem, and the gills being sinuated behind, free or only slightly attached, and not obtusely adnate much less running down the stem. The second character must be attended to in one or two doubtful cases, as for example in the species before us, in which the external coat of the stem is not strictly cartilaginous, or there will be danger of their being confounded with *Clytocybe*. From *Mycena*, which agrees as regards the stem, it is known by its involute margin when young, and from *Omphalia* by its gills not being decurrent.

Many of the species are of a tougher drier nature than most Agarics, and are easily preserved for the herbarium, like those of the nearly allied genus *Marasmius*. Their gills however are not tough, and they are more decidedly distinct from each other.

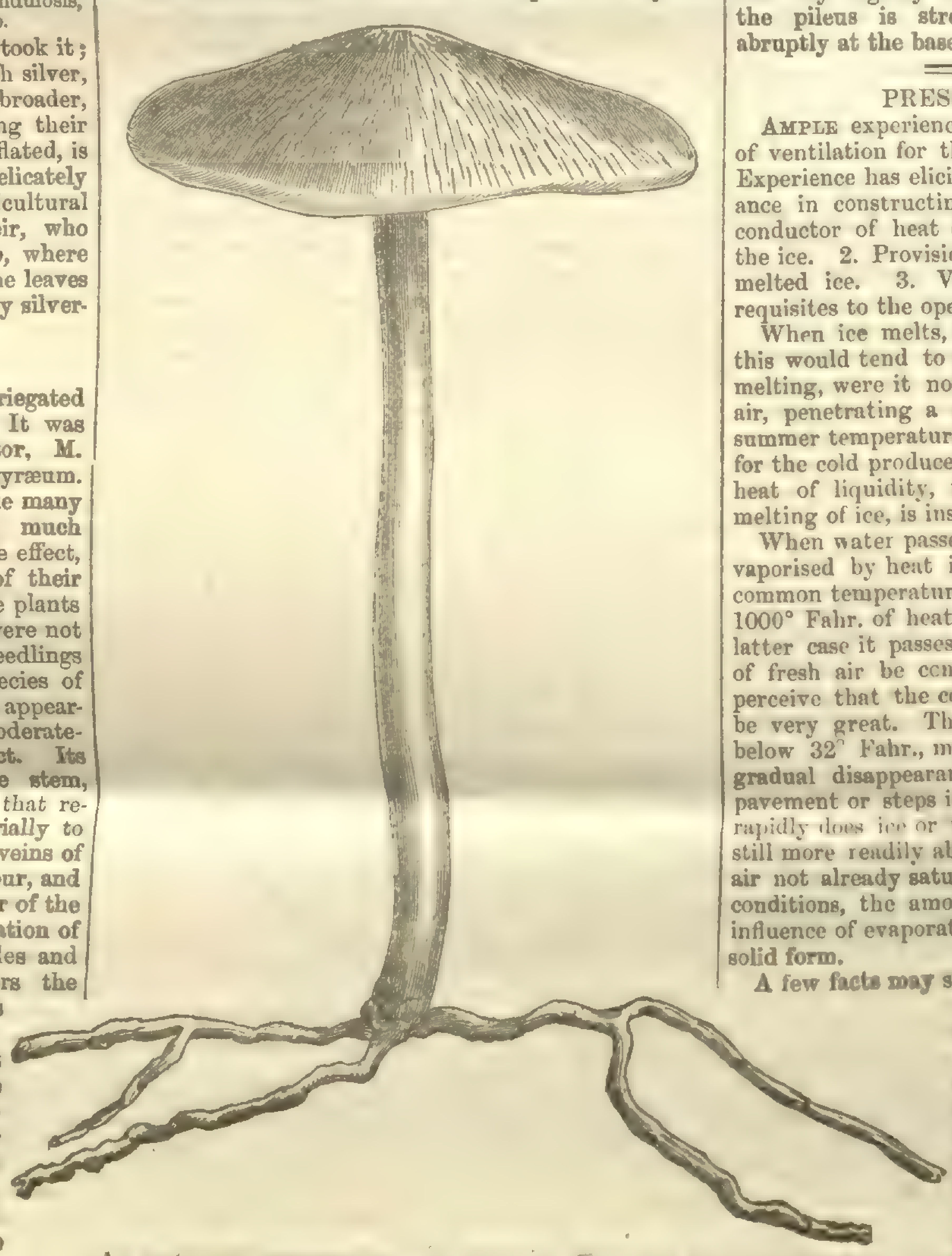
In his late work on Swedish Hymenomycetes, Fries divides the subgenus into four sections, which are characterised as follows:—

1. Stem rather stout, hollow or stuffed, furrowed or streaked with little fibres. *A. radicatus*, No. XI., *A. longipes*, No. XXVIII., the subject of our present notice, and *A. fusipes* mentioned above, are well known examples.

2. Stem slender, equal, tubular, velvety, floccose or pruinose. *A. velutipes*, which is so conspicuous for its bright colours and velvety stem on fallen trunks, lasting through the winter in spite of severe frost, is a familiar example. *A. tuberosus*, No. XVIII., also belongs to this section.

3. Stem slender, nearly equal, fistulose, smooth except at the base, naked and even. *A. dryophilus*, so common amongst dead Oak leaves in woods, and *A. tenacellus*, which is abundant everywhere on fallen cones of the Spruce and Scotch Fir, are easily recognised.

4. Gills brownish or cinereous. At present only two



Agaricus platyphyllus, *var.* repens. From an original sketch.

species of this section—*A. laceratus*, which is very rare, and *A. atratus*, which occurs not uncommonly on burnt soil, have been discovered in this country.

A. platyphyllus, especially the form with large creeping roots or runners, is one of the most remarkable of our Agarics. It occurs sometimes on old stumps, sending down rootlike processes between the bark and the wood, but more frequently amongst sticks and fallen leaves in woods and plantations, amongst which its runners, which are perfectly distinct from the stem, extend to a great length in every direction. It is very probable that these processes are injurious when they wrap round the roots of neighbouring trees. At least we are inclined to refer to this species the fungal strings which have proved so fatal to Rhododendrons in Ireland. We can see no difference in the two, and we fully expect that our conjecture will ultimately be confirmed.

These in common with other similar productions which are either cramped and compressed by growing beneath the bark, or which are developed more or less freely and are then cylindrical, are usually referred by authors to the genus *Rhizomorpha*. *Agaricus*, *Polyporus*, *Hypoxylon* and other genera however supply the supposed genus with species. Tropical forms are sometimes invested with a shining crust, and a most remarkable one has lately been forwarded to us by Dr. Seemann, which grows in the Fiji Islands, and of which some notice may not be uninteresting, as it is used to form a fringe, profusely ornamented with beads, to the waistband which constitutes the only dress of many of the natives. It forms long cylindrical simple or slightly branched bodies, from 1 to 2 or 3 feet in length, which are white inside and externally shining as if lackered. The cuticle has a tendency to crack transversely, and in consequence to show the white substance beneath the crust. The cracking is however much increased by the practice which the natives have of beating the cords between two stones, after which they are buried for two or three days in a muddy place that they may become plaint and fit for use. The threads are then attached to the edge of the waistband and plaited into a network, beads being from time to time inserted on the threads of the meshes, much after the fashion of our own beaded hair-nets. The ends of the threads are left free so as to form a broad fringe. This Rhizomorpha is of rare occurrence on decayed wood in swampy places, and the fringed waistbands are therefore much prized, and command a price equal to that of 20 fathoms of native cloth. They are peculiarly valued by the fishermen on the coast, as they bear immersion in water well, especially when greased with Cocoa nut oil.

A. platyphyllus, in the absence of the running roots, is distinguished by its thin broad obtuse convex pileus, streaked with prominent but innate fibres, tinged more or less with brown or cinereous; and its broad soft white distant gills, which are obliquely truncate behind, and only slightly connected with the stem, which like the pileus is streaked, though smooth, and enlarged abruptly at the base. *M. J. B.*

PRESERVATION OF ICE.

Ample experience has shown the absolute necessity of ventilation for the more perfect preservation of ice. Experience has elicited three points of the first importance in constructing an ice-house: 1. An imperfect conductor of heat of moderate thickness to surround the ice. 2. Provision for drawing off the water of the melted ice. 3. Ventilation. Can we refer these requisites to the operation of a single principle?

When ice melts, it absorbs 140° Fahr. of heat, and this would tend to preserve the surrounding ice from melting, were it not that the warmth of the summer air, penetrating a mass of ice, or even the average summer temperature of the soil, more than compensates for the cold produced, and the melting continues. The heat of liquidity, therefore, although retarding the melting of ice, is insufficient for its preservation.

When water passes into the form of vapour, whether vaporised by heat in the form of steam, or rising at a common temperature as an insensible vapour, it absorbs 1000° Fahr. of heat from surrounding bodies. In the latter case it passes off with the air, and if the supply of fresh air be constant or continuous, it is easy to perceive that the cooling influence of evaporation will be very great. That solid ice itself rises in vapour below 32° Fahr., may be observed in winter by the gradual disappearance of thin layers of ice on the pavement or steps in front of a dwelling. Moderately rapidly does ice or water evaporate at 32°, and water still more readily above 32° in a current of dry air, or air not already saturated with moisture. Under such conditions, the amount of heat-absorption, or cooling influence of evaporation, is sufficient to retain ice in the solid form.

A few facts may serve to illustrate the cooling effect of evaporation. At the temperature of 50°, carbonic acid can only be maintained in the liquid state, under a pressure of 520 lbs. per square inch, or $34\frac{3}{4}$ atmospheres; whereas, solid carbonic acid quietly fumes away in the open air, the heat carried off by the vapour sufficing to keep the remaining acid in its solid condition, even at summer temperatures. The alcarrazzas or porous earthen jars, employed in the tropics for cooling the water they contain act on the same principle; for the water transudes through the pores to the outer surface of the jar, and by its evaporation lowers the temperature of the remaining water by many degrees.

If a piece of ice be wrapped in a single thickness of flannel, and exposed to a current of air, not surcharged with moisture, the flannel will freeze fast to the ice, proving the surface to be below 32° Fahr., and little or no water will form. The flannel allows the little water that first forms to enter into its numberless pores, where it evaporates from an almost endless surface of woollen fibres. Cotton and linen do not answer the purpose as well, because capillary action fills the spaces between the fibres with water, and evaporation only takes place from the moderate surface of the water.

Let us apply the principle of evaporation to an ice-house, of which the lump of ice in flannel is a perfect type. Experience has shown the advantage of surrounding ice with an imperfect conductor of heat, such as shavings, sawdust, charcoal, and even Pine boards. It has likewise shown that only a moderate thickness of these is necessary, just as a single thickness will, in a favourable position, actually keep a lump of ice dry. Now, if they were used because of their non-conducting property, a considerable thickness would be required: in fact, many feet, and the greater the thickness, the more complete the preservation of ice. Since this condition of thickness is proved by fact to be unnecessary, the non-conducting property is not the cause of the preservation of ice, if, indeed, it be of any influence whatever. The same conclusion may be drawn from the depth in earth to which the outer temperatures gradually penetrate, whether winter or

summer, and yet earth is always considered a very poor conductor of heat.

All the substances employed around ice are porous, admitting the passage of air through them, or into their pores, and these pores present an indefinitely extended surface. A portion of water enters the pores without choking them, and thus an immense surface is offered for evaporation, which, be it remembered, only occurs from a surface. The entrance of dry air into the moist pores and its exit, charged with the vapour of water, carries off the 1000° Fahr. of latent vapour-heat; and by thus cooling the ice, prevents its rapid melting. Hence the advantage of ventilation for preserving ice; for when the door of an ice-house is kept closed, the confined air becomes saturated with moisture, and cannot escape, evaporation ceases, and the external warmth, entering by radiation and conduction, is expended in freely melting the ice, in spite, too, of the non-conducting coverings and surroundings. Hence, too, the excellent preservation of ice, alluded to in your last number, in a board shanty, which was open all around, and therefore admitted air all around; it was a lump of ice from Brobdignag, wrapped in Pine boards for flannel.

Experience has shown the necessity of draining off the water, which will be produced from the imperfections of the best ice-houses. Immerse our flanneled lump of ice in water, and it will soon melt, because evaporation only takes place from the small surface of the water; but put it on slats, so that dry air can pass around it, and the amount of evaporation from an endless surface keeps the lump almost dry. So, if the lower tier in an ice-house be in water, we have only the cooling effect of melting ice, 140° Fahr. and in addition evaporation from a surface of water, equal only to the area of the house, both which are far outweighed by the penetrating warmth from without. The ice, therefore, continues to melt towards the bottom of the house; but when the water is drained off, a circulation of air (supposing the house to be ventilated) evaporates water from the enormously extended porous surface of the moist shavings, &c. The whole cooling effect then becomes: 1. The very small amount of heat absorbed by the melting ice. 2. The large amount removed in the continuous escape of moist air. This heat being absorbed, rendered latent, is abstracted from the ice and its adjacents, and melting is greatly protracted.

We should, however, guard against the too free admission of air. If shavings, &c., were put very loosely into the sides of an ice-house, the free circulation of air would let in too much summer heat, and really present less surface, because less pores. On the other hand, if the sides were built of a non-porous substance, evaporation could not take place on them, and the exterior warmth not to be excluded would melt the ice freely. A porous, absorbent material, tolerably well packed, offers the most favourable condition for the sides of an ice-house, by offering the largest evaporating surface. The top covering cannot, of course, be packed; the bottom porous layers become so from the weight of superincumbent ice. If the house is constructed with stone walls, a layer of porous material must be put between them and the ice, and provision made for the air to pass to the bottom of the structure. *American Gardener's Monthly.*

ORCHARD HOUSE FRUIT.

THE cultivation of the land, whether it be by farmers or gardeners, seems almost invariably to bring on an affection of the mind, which our neighbours delicately call *l'idée fixe*; this affection, this fixed idea, we English in our blunt way call prejudice, and it rages to a great extent among us gardeners, although it is not confined to us, for it is often very prevalent even among men of science. It is a fixed idea with Dr. Gray that M. Du Chaillu has never killed or even seen a gorilla, and if he went with him to the Gaboon and saw him kill one, the chances are that he would turn away and say "my eyes have deceived me, I am sure he has not killed one." It is a fixed idea with your venerable and witty correspondent Mr. Waterton, that Norway rats are connected with a phase of our history. It is a fixed idea with my Tory neighbours that free trade must in time ruin the country. It is a fixed idea with my old friend, a market gardener, that standard trees are *the* trees for gardens, for as he says, "they bear a large quantity of fruit and they want no pruning;" and when I point out to him the quantity of ground they shade and make to a certain extent unproductive, he shakes his head and says—"Ah! I don't care: I have plenty." Our old friend, "W. P. A." has "l'idée fixe" well developed with regard to fruit produced from trees in pots. If you walked with him through an orchard-house in which were 50 trees, 45 of them full of Peaches well thinned and measuring from 7 to 8 inches in circumference (which is about the average size of my fruit), and fine trees not well thinned and full of small fruit, he would look grave on seeing the 45, and say, "Very good, very good;" till he came to the five trees, and then his face would relax into a broad smile of gratification, and you would hear him murmuring good naturedly—"Ah! Nutmegs, Nutmegs; how can you expect Peaches larger than Nutmegs from trees in pots?"

This is his fixed idea, and like Dr. Gray with the gorilla, he would not believe his own eyesight even if you placed a tree in a pot with large fruit on it before him. The finest Louise Bonne pears I have ever seen, or at least among the finest, were exhibited before the Fruit Committee at Kensington, Sept. 11th, by G. H. Wilson of Weybridge Heath, from a tree in a pot which was loaded with its beautiful fruit. The finest Northern Spy Apples (an American sort) ever seen, measuring 14 inches in circumference, were shown by the same gentleman at the same place, October 8th, and a Melon Apple was so large as not to be recognised by those who knew the sort well. These were from trees in pots, which, like the Pears were grown in an orchard house till the early part of June, and then placed out of doors and carefully attended to, having well prepared liquid manure given to them in abundance; with the porous loam of Weybridge Heath this has proved capital practice.

Bergen's yellow Peaches exhibited at Kensington, Sept. 11th, measured 9½ inches in circumference, and Crawford's Early, shown at the same time measured 9 inches in circumference (large "Nutmegs"), but the largest Peach I have ever seen I gathered this autumn (Sept. 25), from a tree in a pot—a French variety called Teissier's Peach: it measured 10¾ inches in circumference, and was rich and melting beyond any late Peach I have tasted. The truth is, we do not yet know the capabilities of fruit trees in pots. When I look at my trees, some of them 10 years old, which were repotted last November from 13-inch to 18-inch pots, I am surprised at their development, and can see a future for them which one or two years ago I could not have believed. With respect to trees, standards and half-standards, planted out in large orchard-houses 20 to 30 feet wide and 12 feet high, I am strongly impressed with the idea that in two or three years after planting their luxuriant growth would be arrested by their extraordinary fertility, the dryness of the soil about their roots for several months in the year (for in winter only a small quantity of water should be given to them), and the warmth of the climate would tend to this, so that in a very few years after planting they would assume the appearance of a healthy standard Hawthornden Apple tree growing in the open air. An Apple tree of this sort, as is well known, soon becomes a mass of blossom buds, with no over luxuriance of growth. This I repeat is my impression, and I hope to be able to prove that my calculation is correct. "W. P. A." facetiously calls potted trees "toy trees," and so they are, only they are Brobdignagian toys, and a tree in an 18-inch pot with a peck of large Peaches on it is just such a toy as Glumdalclitch would have given to Gulliver to play with while nursing him. I feel quite certain that our friend "W. P. A." had been looking into Swift just before he penned the article in No. 40, and thus by some obfuscation (I like a queer word) of intellect had thought of Gulliver's gigantic nurse, and then of large trees in pots as "toys"—in short his ideas were in Brobdignag.

When he has the opportunity of leaving his fixed idea, and turns his attention to growing trees in pots (which I believe he has not yet done, not having had the opportunity), he may rival his old friend Mr. Spivey, of The Gardens, Hallingbury Place, whose Peach trees in 13-inch pots, which he employs annually for forcing, are the most admirable objects of culture ever seen. One wonders how the vast mass of foliage and fruit can find support in about one cubic foot of earth, for the pots stand on bricks, and are not allowed to root into the border: such Grosse Mignonne Peaches as I saw early in last July under his care, just on the point of ripening, gave grand testimony as to what may be done with Peach trees in pots. For forcing their value is not nearly understood by the outside world, but it soon will be, at least by those who do not wear brain-cuffs.

I observe that "W. P. A." twits me with having failed this season. Wishing to support what had been stated in your columns as to the almost universal failure of the crop of fruit this season owing to the wood not being ripe, I adduced the fact of some of my late Peaches having failed even in the orchard-house. I did this because I like perfect candour and openness in all that is done here. Well, what did my admission amount to? That some 12 trees out of 100 had failed in giving me fruit. When "W. P. A." twitted me, he forgot this; he was again ideally with Gulliver—but this time in Laputa, without his flapper. I happen to know that "W. P. A." is well up in gardening, and is by no means an enemy to progress; he must therefore as promptly as possible get rid of "l'idée fixe" as regards potted trees, for I know no mode of fruit culture more interesting and more likely to lead to a full and perfect knowledge of pomology. The result of hybridising may be known in three or four years, whereas in the olden time 10 years or more were often taken from "life's short span" before a seedling fruit tree could be made to bear fruit. I do not say it from vanity, but I feel myself to be the centre of the orchard-house world, and if I could with propriety publish the letters I receive expressing the delight experienced by the writers in practising this mode of culture, they would form a volume. It is true I hear of some failures, but for the most part they are owing to *soi disant* gardeners, with the fixed idea that the only place for a Peach tree is against a lumbering ugly brick wall. Every intelligent young gardener should rid himself of this idea as quickly as possible. As for the old ones they must continue to think old thoughts, and be, like milestones, very useful, steady, and sturdy, but not bright or progressive.

I must not conclude this, I fear too long, article without another knock-down blow or two to my opponent's fixed idea, so as to leave it without even a bit of a leg to stand on. One most pleasurable advantage of growing Peach trees in pots is the facility with which the fruit may be retarded, so that Noblesse, Royal George, and other fine mid-season Peaches may be had in perfection in October, instead of at their usual season, early in September. This is done by placing the trees in the open air early in July, and returning them to the orchard-house early in September, they then ripen their fruit in October, and the piquancy of flavour in Peaches thus ripened would delight the most fastidious gourmet.

Another advantage to be derived from the culture of potted trees must not be lost sight of. I believe this is its first appearance in print. The country parson with a little too much leisure, or the retired rich middle-aged man of business, with a superabundance of the same commodity, may in the warm summer mornings take off his coat and give his trees daily a soaking of water; the exercise would bring on perspiration and its attendant health. He would see his trees promptly show their gratitude by pricking up their leaves after being watered, and if a nice rustling breeze happens to be blowing through the house he may, if he has a vivid fancy, imagine they are whispering "Thank you, thank you, how nice it is, how good you are!" *T. R.*

Home Correspondence.

Allamanda violacea.—A plant of this is now flowering here for the first time. As I have not seen any mention of its having flowered elsewhere in England, and as its name gives a very incorrect idea of its colour, perhaps a description of its appearance may be of some interest. In shape and size the flowers closely resemble those of A. Schottii. The colour is more lilac than violet, and is not unlike that of the pink variety of the common Primrose, but it deepens almost into a brown in the interior of the flower. It is a handsome flower, though somewhat wanting in brilliancy of colour, and is certainly not equal in beauty to A. Schottii; still as it presents a good contrast to the yellow flowers of the rest of the genus, and as it seems to possess with them the advantage of being easily and quickly grown into a specimen plant, I have no doubt that it will prove a favourite with plant growers. I think it seems to like rather more heat than the other Allamandas. My plant was grown in a very moist Orchid house during the summer, and was placed on a tan bed in a Pine pit in August. *Wentworth Buller, Strete Ralegh, Exeter.* [It has bloomed elsewhere in England, as you will see by referring to our last week's Number, p. 910. Its correct name is probably not A. violacea, but A. puberula.]

Oak Apples.—Having extensive plantations of English and Turkey Oaks, so intermixed that their branches interlace, I am anxious to learn why the English are covered with Oak Apples, whilst the Turkey Oaks are perfectly free from the least injury—is there any chemical difference in the sap? *Old Subscriber, London.* [We can only suppose that the gall insect does not find the Turkey Oak ready to receive its eggs, although the common Oak is.]

Blackbirds.—Is there any good trap for or means of poisoning blackbirds and thrushes? No "vermin" being allowed to live in these parts, we must either give up gardening, or abate the blackbird nuisance. When I was young they never eat any fruit but Cherries. Now, unless I net every kind of fruit, nothing is allowed to ripen. They rejoice in green Orleans and unripe Greengage Plums, eat up my Apricots and Peaches the instant they begin to colour, and as for Apples and Pears these are not allowed to attain their full growth before they are all pecked to pieces. Having finished everything in my garden, not netted, they are now busy eating up my Orange Turnips, and rooting up the Rye my cow hoped to feed on next March and April. Any plan of killing them except by gun, or making them take a dislike to my garden, and a preference for my neighbours', would be esteemed a great favour. *Eileanach, N.B.*

Vines at North Elswick.—A few weeks ago you were good enough to publish a communication of mine relating to Vines at this place (see p. 792). That notice, I am glad to find, has excited some attention; and many gardeners have come from a distance purposely to inspect the mode of Vine culture which I there described. There is, I believe, but one opinion as to its excellence; and I trust that it will be extensively followed. I have myself put up a Vinery precisely upon the same plan; my Vines were planted about the middle of June; they are now fine, strong, healthy canes, reaching the top of the House and half way down the back wall. There is a large reservoir sunk below the house, and supplied from the roof. A forcing pump is fitted upon the lid, with a pipe reaching nearly to the bottom of the reservoir; by working this the whole interior may be deluged with water. From the time of the Vines being planted I have been particular in maintaining a moist, warm, steaming atmosphere, giving air up to 1 o'clock, and to this I attribute the great progress of the Vines. It is only an act of justice to add, that both Mr. Milvain's and my Vine borders

were constructed and the Vines supplied and selected by Mr. Milthorpe, nurseryman, of North Elswick. *M. J., Newcastle-upon-Tyne.*

Twig-shedding in Oaks.—Under most of the Oak trees in this neighbourhood, the ground is at the present time thickly strewed with twigs of Oak of from one year to five years' growth, having, some leaves, some leaves and Acorns, and nearly all turgid, healthy-looking buds. The leaves are for the most part withered, as one would expect to find them at this season, and on being gently pulled, separate readily from the stalk, leaving a clean scar as if undergoing the regular healthy autumnal fall. There has been no high wind of late to produce this phenomenon, nor am I aware that in ordinary seasons a high wind breaks off the spurs of the Oak tree. Certainly there is one feature in the present shedding of twigs which is as new to my neighbours as it is to myself. Every twig, on examination, is found to have separated from the branch which bore it with a clean scar, as if the two had been articulated together. At the base of each is a convex disc like a seal, with a corresponding concavity in the branch. A twig of five years old will probably have two or three such concavities at its knots; and, if it be bent, it will separate into five pieces, the line of each year's growth being defined by a *quasi* articulation. The phenomenon appears to me to bear some analogy to the "fall of the leaf." Can it be that the twigs thus thrown off were damaged by the severe frost of last winter, but were retained to perform their functions for a year and then discarded? I enclose a portion of a twig for inspection. *C. A. Johns, Walford.*

Wellingtonias (see p. 908).—Your Correspondent "T. R." seems anxious to know whether the growth of his Wellingtonia is extraordinary. The first I planted here was on April 5, 1856. It was then $10\frac{1}{2}$ inches high; it is now 14 feet 6 inches high. The diameter of the branches is 10 ft. 8 inches; and the girth of the trunk, at 1 inch from the ground, 3 ft. $2\frac{1}{4}$ inches. The branches are so close that you cannot see the stem for 10 feet from the ground. *J. Ridgway, Fairlawn, Kent.*——I planted a Wellingtonia out of a pot in March, 1857. It is 9 feet high now, October 17, 1861. The stem 4 inches from the ground is $4\frac{3}{4}$ inches, and the branches about a foot from the ground are 19 feet 3 inches round. It is a beautiful specimen, but the frost last year rather hurt the leader, which is now recovering. Mr. Frost, gardener to E. L. Betts, Esq., was with my gardener when we measured it. I understand that there is a splendid specimen at Fairlawn, about 10 miles from me, but I have not seen it. *J. Hollingworth, Turkey Mill.*——I set a cutting of Wellingtonia in the autumn of 1859, which grew so rapidly and made such strong roots, that I planted it out in my garden in the spring of last year; it is now 4 feet and ½ an inch high, its growth this summer having been 2 feet $3\frac{1}{2}$ inches. It is a beautiful little tree, and so symmetrical that I do not think that the best judge could say that it was not a seedling. *G. T.*——My Wellingtonia was planted by Mr. Masters, of the Exotic Nursery, Canterbury, in January, 1854. Its height is now $13\frac{1}{2}$ feet. The diameter of its lowest branches, which are so close to the ground that it is difficult to get one's little finger under, is 12 feet; its greatest girth at the butt is 3 feet 6 inches. I may add that this is a well proportioned tree, of uniform growth, and never shows the least symptom of decay in its branches. *J. Moon, Gardener to R. E. Thomson, Esq., Kenfield Hall, near Canterbury.* [Ours in heavy clay measures 12 feet 9 inches in height; the girth of the stem at the ground level is 2 feet 8 inches, and at 3 feet up 1 foot 4 inches. This year's leading shoot is 2 feet 3 inches in length. The tree was planted in the first year of its introduction, and at that time was only a wee sprig.]

Manuring Conifers.—Your Correspondents seem to differ very much on this subject. As far as my experience goes, and I have tried a good many plants, the only Conifers to which you may safely give manure are Cryptomerias and Araucarias, and to them, especially in a liquid state, you may give as much as you like; the effect is a better colour, especially in winter, a better growth, and a better ripening of wood. I may add that last winter did less harm here than in most parts of England; nothing was lost except 8 or 10 Standard Roses, and one plant of Juniperus sinensis. Cupressus Uhdeana, Dacrydium Franklini, Benthamia fragifera, and Azalea indica alba were untouched. *J. Ridgway, Fairlawn, Kent.*

Orchard Houses.—"W. P. A." scarcely puts the subject of Orchard houses in a fair point of view. The trouble of watering, which occupies my man in a large Orchard house 20 minutes a day, will hardly be grudged in return for a good crop of fruit. I have grown 90 dozen good sized Peaches, Nectarines, and Apricots in a house 35 × 20. This year I measured some 9 inches in circumference. I therefore for one am quite content to be among the boys who play and partake of such toys. The great advantage to my mind of pots is that you can have a reserve of trees and put them in their places so as to fill your house after the fruit is set, and you see what they are likely to do. As to wresting the prizes from the hands of men who have acres of garden and miles of wall fruit, and who do not hesitate to sacrifice any room, time, or quantity of fruit for a prize, I should not attempt to do it. I know too many of the tricks by which such fruit is obtained to set any value upon the results. Let us know how many pounds of Grapes were cut for the family off the Vine which bore the prize bunches, and from how many trees the prize Peaches were picked, and we shall know better how to estimate the success of these great men. It is not so much with many of them what skill will do, as what wealth will do. They have an unlimited amount of money, time and labour at their disposal—what wonder if by such means they step over the heads of their more humble neighbours. *Rusticus.*——Why Mr. Rivers should wage such war against roof openings, paved pathways and brickwork, it is difficult to conceive. There is an old adage that "once well done is twice done," and on that principle alone Mr. Pearson's houses are free from objection. If extra expense is the main reason why Mr. R. dislikes roof openings, he must be frightened at little, for the simplicity of their construction and the small expense at which they can be inserted is so trifling that no one would charge the builder with attempting to make "a bill as well as a house" who wished to introduce them; and as there are end ventilators, which Mr. R. seems to think there are not, it only amounts to the extra benefit that the plants would derive by a more rapid escape for the heated air, and should the wind be strong at either gable, the roof ventilators would then be doubly useful, otherwise one end of the house would be considerably hotter than the other. Therefore if good can be done let it be done. There are also few people who would prefer gravel to paved pathways, and why Minton's tiles should absorb more water than gravel is a problem difficult to solve, especially when the tiles are grouted in Portland cement, and for cleanliness the tiles have the advantage, setting aside the improved appearance which a house has when paved compared with an unpaved one. The difference is striking in the houses at Chilwell. Few I think would be so inconsiderate as to use a house teeming with moisture for a promenade, especially at that period of the year when syringing would be requisite in an orchard-house. Therefore the risk of attacks of bronchitis has nothing to do with the question. Again, as to the use of brickwork on which to build an orchard house, surely the small extra expense of a few courses of bricks cannot be a very serious item in the cost. I differ from Mr. P. in reference to his mode of disseminating pollen, but I cannot disagree with the manner in which his houses are constructed, and where we have such a house as that at Chilwell, 90 feet long, 30 feet wide, well painted, glazed, paved with Minton's tiles, edged round the beds with earthenware edgings, built on five or six courses of brick work set in Portland cement, all done in a first-rate manner, for about 1*s.* 9*d.* per foot, there is nothing to condemn but much to admire. *J. Gadd, Willersley.*

Striking Cuttings of Roses.—I have been in the habit for some years of striking Roses in what appears to me such a much more simple way than is described in your Paper of the 5th inst., that I send you an account of the method. At any time of the year when they are to be procured, I take cuttings of any sorts of Roses I want to propagate (Moss included), and cut the half ripened wood into lengths of two eyes. I remove the bottom leaf, leaving the top one to rest on the surface of the bed, and nourish the cutting whilst it forms its roots. The hotbed (a very slight one) in which I plant the cuttings, is made in the following manner. On the top of a little dung, just enough to give a slight bottom-heat, I place 6 inches of earth, moistened to this consistency of mortar, then cover with 2 inches of silver sand. I have occasionally struck every cutting; but 90 out of 100 is an average result. *Rusticus.*

Galvanised Nails.—Being engaged in the erection of a stove and Vinery, I beg to ask you if the use of galvanised nails has been approved of or condemned for horticultural purposes. So far as I have gone I have used them, believing that I would to a certain extent be free from rust, so consequent on the use of common nails, but I have just been told that wherever damp can get at the galvanised nails it will very quickly decompose the zinc coating, and thereby make a vacuum for wet or damp to remain. Is this so? *D. P.*

Pampas Grass.—It may interest some of your readers in the North to know that there is an example of this in full flower here at the present time. We had four good sized plants, all of which suffered much the winter before last. They had recovered by the end of last season, and had thrown up several flower stems, but owing to the coldness of the weather none of them opened properly. The severe frosts of last winter killed one of the plants, and very much injured the others; but this season the three that escaped have to a great extent recovered; one of them, as has just been stated, is in flower. They have not had any protection whatever, being entirely exposed. The subsoil is of a dry gravelly nature, to which I attribute their standing the last two winters so well as they have. In many places in this neighbourhood they are all killed. Those who are about to plant should choose dry situations. If they do not grow quite so fast there they will stand the winter better. *M. Saul, Stourton, Yorks.*

Public Gardens.—Your journal of last week contained some notification of public gardens in or about Paris, and the absence of such in the suburbs of London. It has struck me that, as the scheme for a Finsbury Park has failed, and the ground for it fast filling up with buildings, whether some small portion of that which is still left may not be secured for an open public garden—say 15 or 20 acres. Now a part of the expense might, I presume, be obtained by building ground around it. This would preserve an open space for the people of Islington, Holloway, and Highbury to enjoy a little recreation. The walks should be wide, bordered with flower-beds, with trees and shrubs, and probably a few of the best forest trees, but no drives. I presume that a fine fountain might be obtained at a very small cost by opening one of the mains of the New River Company, and returning the water into the New River, or their filtering beds, so as to form upon the whole a beautiful addition to our suburban promenades. *T. H. S. N.*

The Trees of Paris.—A recent sojourn of ten days in Paris enables me to confirm all your Correspondent "B." says in reference to the trees in the parks, gardens, and boulevards of that city. Perhaps if I were to touch up the picture I would make it a little more gloomy than he has left it, but that is of little importance compared with a remedy for evils which any person having the slightest knowledge of arboriculture can at once detect in the present management of all the new plantations that are being made in the various quarters of that city where new boulevards are being planted. The chief, and most pernicious of the evils under which the poor trees pine [illegible] is that which has escaped the notice of "B.," but was pointed out some time ago in the *Gardeners' Chronicle* by "[illegible]" namely, too deep planting. Every one knows that in the stem of most trees there is a sudden contraction of the [illegible] from what it is at the proper ground line to any [illegible] 3 feet up the stem of the tree, but in no case that came under my observation could I see this in any recently planted tree in Paris. Take, for example, a square of trees that have been planted last spring—as far as I could judge—on the east side of the [illegible] near a new tower that has recently been built, and it will enable me to point out what I think are the causes of the very evident want of success that has attended all recent attempts of the sort in Paris. Any one acquainted with the proper method of transplanting trees of their heights, which vary from 20 to 30 feet, knows that unless the trees are planted greatly too deep, they for a year or two require some sort of support to keep them perpendicular. Those I refer to have none and are perfectly upright, notwithstanding that Paris is not exempt from gales of wind. Not satisfied with this evidence of their being too deeply planted, I endeavoured with the point of an umbrella to pierce the soft soil round their stems, till I could reach that peculiar swell in the trunk, which is the proper ground line of all trees, but in the case I attempted, a depth of 9 inches gave no indication of it, and I concluded that they were at least 1 foot too deep in the soil. The next absurdity I observed in their management was, that about 1 foot all round the stem of the tree was left without road metal being laid on it, and formed a sort of basin, into which quantities of water had been regularly poured, and which could be of little more service to the trees than putting a man's feet in brown paper could be to him. The fact is I consider that instead of doing them good, buried as deep as they are, it did them positive injury, in so far as that during the hot weather of a Paris summer the evaporation of the water round the stem of the tree would deprive it of its heat, and all but freeze the ascending sap in it. I also observed, as remarked by your Correspondent "B.," that the trees had all the appearance of having stood far too thick in their nursery beds previous to their being set out singly in a scorching drafty thoroughfare; an evil in itself almost sufficient to account for the [illegible] when I saw them three weeks ago. So much for the recently planted trees. And with regard to many of the old Elms, that look so miserable, and are rotting limb by limb in the Tuileries' Gardens, I observed that at some date they had received a considerable "earthing up," by way, probably, of levelling the ground, and which is fast levelling them. I see no cause either in the soil, climate, or atmosphere of Paris to prevent trees from thriving as well as they do either in Hyde Park or the Regent's Park. What is wanted is either a Brown or a Barron to conduct the operation of planting. The climate of Wiesbaden is not more favourable for the growth of trees than that of Paris, and where can more splendid trees of the Platanus orientalis be seen than the rows of them that are in the Kursaal there; [illegible] there is as much traffic over their roots, and the pavement out of which they may be said to spring is as hard and [illegible] in any part of Paris; but in their case there is evidence they are not too deeply planted. I could multiply instances: splendid rows of Elms, Limes, and Platanus, growing in the centres of such cities as Rotterdam, Amsterdam, The Hague, Antwerp, and Brussels, where all that can be said of Paris about exhausted soil, hard pavements, and smoke will apply. I may remark, that in reference to smoke, [illegible] these cities can put in a plea, for they are all alike [illegible] exempt from it. I made it my business on a recent [illegible] to visit the parks and public gardens of all the [illegible] have named, and I have come to the conclusion that in both horticulture and arboriculture, and I may [illegible] agriculture, they are half a century behind [illegible] The management of the public gardens of [illegible] including their poor tortured Orange trees, is [illegible] ridiculous; yet I am told that the manager of the [illegible] of the Luxembourg Palace is a well educated scientific botanist, who gives lectures on systematic botany to his men. It seems strange that such a person should stand so [illegible] still, as far as any improvement either in practical horticulture or the grouping and arrangement of flowers in the borders [illegible] concerned. In this latter respect nothing can be worse [illegible] the taste displayed in all the splendid public and private gardens of Paris—not an attempt made at a [illegible] or Mosaic border—all is one chaotic mixture; [illegible] over 10 yards of the borders, say of the Tuileries [illegible] have virtually seen the whole, for they are the same [illegible] jungle to the end, no matter how long they may [illegible]

Societies.

Royal Horticultural, *Oct.* 8 (*Fruit Committee*).—For prizes which were offered on this occasion for Pears and Plums, Mr. Whiting was the only competitor. Of Pears he showed specimens of Beurré d'Amanlis, Brown Beurré, and Gratioli; and of Plums, Ickworth Imperatrice, Coe's Late Red, and Golden [illegible] all excellent fruit of their respective kinds. A [illegible] prize was awarded for the Pears and a first one for Plums. From Stanstead Park, near Emsworth, [illegible] Thomson showed Grapes from an orchard-house to which no fire-heat had been given. The varieties were Bowood Muscat, Muscat Hamburgh, Golden [illegible] Esperione, Grove End Sweetwater, Royal Muscadine, Black Hamburgh. Among these the last was by far the best; Royal Muscadine and Grove End Sweetwater were tolerably good, as [illegible]

also the Esperione and Golden Hamburgh; but the Muscats clearly showed that even with the favourable summer we have experienced, artificial heat is required to have them in perfection. Examples of an unknown Black Grape of no particular merit were shown by Mr. Whiting, and Mr. Thomson, gr. at Archerfield, sent a bunch of White Grape, which was considered promising. The berries were of a pale amber colour, of good size, and the flavour excellent, somewhat resembling that of a Muscat. G. F. Wilson, Esq., sent from Gishurst Cottage, near Weybridge, three very fine specimens of Northern Spy Apple, measuring 14 inches in circumference, and weighing altogether 36 oz. They were from potted trees which had set their fruit in an orchard house and ripened it out of doors. From Mr. Newton, Enfield Chase, came excellent specimens of Ribston Pippin, King of the Pippins, and Margil Apples; and Mr. Spencer, of Bowood, sent an extremely interesting collection of Apples from the Valley of the Severn—principally cider kinds; but among them one or two very fine kitchen Apples. Mr. Ingram, of the Royal Gardens, Frogmore, received a first-class certificate for a seedling Pear named British Queen, supposed to have been obtained from Marie Louise. The fruit sent was above the middle size, Pear shaped, of a warm red colour next the sun, and possessing a sweet juicy melting flesh. This variety when better known cannot fail to be a favourite. Some unusually good examples of Salway Peach, a yellow fleshed useful late kind, were shown by Mr. Thomson, of Stanstead Park. Of vegetables, Mr. Cock, of Chiswick, sent Brussels Sprouts, raised from English saved seed; Mr. Edmonds, Chiswick, had a Madagascar Turnip Radish, nearly as large as an ordinary sized Swede—a new kind stated to have been obtained from Dr. Erasmus Wilson; and Mr. Turner, of Slough, sent specimens of the long Kidney Bean-like pods of Dolichos sinensis, some account of which will be found at p. 102 of our last year's Volume. Mr. Bailey, of Nuneham, furnished a report from the Oxfordshire local committee, which was read and approved of.

Notices of Books.

The serials for October contain some noticeable subjects, of which the following is a summary:—

Curtis's Botanical Magazine gives figures of *Hoya lacunosa* v. *pallidiflora*, a small truly stove plant, with small almost colourless flowers; *Mutisia decurrens*, a splendid hardy Chilian creeper, flowered during the past summer by Messrs. Veitch & Son, and already noticed by us as exhibited at one of the South Kensington meetings, the stems of this plant are winged with the decurrent bases of the simple tendrilled leaves, and the flowers are large and rich clear orange-coloured, resembling those of a Gazania; *Salvia cacaliæfolia*, a speces with angulate subbastate leaves, and blue flowers, of little use out-doors, if we may judge by its growth at Chiswick, and still less as a house plant; *Gonatanthus sarmentosus*, a stemless stove herb, producing stolones and heavy cordate-ovate leaves 6 to 10 inches long, and yellow subulate lanceolate spathes a foot long, and geniculate towards the base; *Impatiens flaccida*, very much resembling I. platypetala in its flowers, but having alternate leaves, and probably not distinct from I. latifolia; *Spiranthes cernua*, well figured from fresh Irish specimens of the plant known as S. gemmifera, which after a careful examination Sir W. Hooker pronounces to be identical with the North American species above named.

Gossip of the Garden, a little publication of which we have formerly spoken favourably, continues to hold on its course in a way deserving of commendation. Amongst a variety of notices and reports intended for small gardeners, we observe in course of publication some very practical hints on Wall-Fruit Culture, by a practised hand, who makes one remark we must transcribe:—"One of the most eminent fruit cultivators of the present day, Mr. RIVERS, has recently published his opinion that 'our culture of fruits up to the present day has been a mere scratching on the surface,' and that England 'will one day be more abundantly and more cheaply supplied than any nation on the face of the earth.' These remarks are of course made in allusion to the great facility which orchard house culture offers for the production of large quantities of choice fruits, with more certainty than can be attained by out-door culture in this uncertain climate. It is certainly a very pleasing vision to conjure up, and we can but hope for its speedy realisation. Still we cannot but reflect that fruits cultivated under glass to any extent must for many years remain the luxury of the well-to-do in the world, and that there are hundreds of thousands of fruit consumers to whom glass protected fruit must remain a perfect stranger, and whose supplies must be drawn from the old source of the wall trees and standards of open air culture. I would impress upon the minds of young gardeners, whom it will concern more than the generation now passing away, that they will act wisely to qualify themselves to manage orchard houses with success, and to remember at the same time that the bulk of their fruit for kitchen and common purposes must be derived from those old-fashioned sources."

The *Floral Magazine*, which it has been announced, as we have already stated, is to be henceforth restricted to the illustration of popular flowers—the announcement is "florist's flowers and such as will prove suitable for gardening decoration,"—opens its present month's number with a portrait of *Disa grandiflora*. Of this, the Editor tells us, among other remarkable things, that like "other bulbs" the "roots" have been from time to time received amongst importations from the Cape of Good Hope, and till lately with but little result, because of the practice of giving them like these "other bulbs" a season of rest; that he believes in course of time "it will be planted out in sheltered places in gentlemen's demesnes near streams or ponds, where it will readily grow during the summer months;" and that the "labellum" is marked with "rich crimson spotting"—which certainly is not the case, as the figure testifies. Does not this "well-known writer" know which is the labellum? and what the parts which *are* spotted with crimson? The *Gardeners' Chronicle* some time since directed attention to the very marked success of Mr. LEACH and Herr SCHILLER in the cultivation of this once intractable plant. The other figures consist of *Mimulus cupreus*, a dwarf hardy bright-coloured plant from Chili; some varieties of *Pansy* or Pansey as it is written, the drawing of which the Editor has some misgiving may be considered "too perfect;" and lastly one of the new fashioned salmon-coloured horse-shoe Pelargoniums, called *Prince of Hesse*, which we are told is a variety of Geranium zonale! by which we suppose we are to infer that such modern new-fangled notions as the recognition of a genus called Pelargonium, are held to be exploded! It would be preferable not to attempt to give the scientific nomenclature than thus to mangle it.

Garden Memoranda.

THE HERB GARDEN OF MR. W. HOLLAND, AT MARKET DEEPING.—All our first-rate druggists, and very many of our medical practitioners, are aware that no extracts are to be met with in the trade superior if equal to those which are prepared at Market Deeping. More than 30 years ago the late Mr. Holland turned his attention to the subject from a conviction that there was room in it for great improvement, and he very soon established a reputation both at home and on the continent, which has been more than fully kept up by his son.

From the first it was found quite impossible to get a supply sufficient for the demand of Belladonna, Henbane, and Hemlock, which abound in the calcareous woodland districts which lie on one side only of the establishment, within a radius of 20 miles, and it therefore became necessary to cultivate these herbs, with others, on an extensive scale, and as the business has daily increased, though supplies of wild plants are sought for in various parts of England, as in Sussex and Wiltshire, the ground under cultivation has been greatly extended, and now stretches out to the village of Langton, a mile and a half distant from Market Deeping.

The Gardens, or rather the Herb Farm, contain a large distillery, a steam-engine for grinding the herbs, drying rooms, a Bramah press for packing, apparatus for the production of extracts, and in short every appliance which practical science can suggest as likely to promote the main object of preparing everything in the best way possible. Large quantities of Sarsaparilla, Sassafras, and other drugs of foreign growth, together with such seeds as produce essential oils, are employed in the preparation of extracts and other substances for the druggist, and a large quantity of Colchicum, of English growth, is treated in various ways for the market. Our business however is rather with the produce of the garden itself.

The country immediately about Market Deeping is a plain bordering on the Fens, consisting of rich alluvial loam, entirely destitute of anything like peat. It is peculiarly adapted for Wheat, and produces some of the finest which comes into the neighbouring markets. Its native strength is however by no means trusted in the cultivation of herbs which alternates with common agricultural produce, but in addition to all the farm-yard manure which can be obtained, plentiful doses of artificial manure according to the exigencies of the particular crop are constantly administered.

Ninety acres alone of the gardens are devoted to the cultivation of Peppermint, which requires for five weeks the constant employment of four large stills. The greater part of the produce is consumed by foreign trade. The quality of the Peppermint varies greatly according to the season. A wet season like that of 1860, as may be supposed, diminishes the yield of oil considerably, but the growth of rust on the leaves in such a season as the present (Uredo Menthæ, and Puccinia Menthæ) is also to a certain extent injurious. We did not observe in the fields many traces of the *Æcidium* which is often so destructive to Mints in gardens, rendering the stems and roots gouty and ultimately destroying the plant. The great enemy seems to be a little woolly Aphis which attacks the roots, and whose presence is detected by the appearance of a white cottony substance on the surface of the soil, which at first sight looks exactly like the spawn of some Fungus. The attacks of insects and parasitic Fungi seldom allow the crop to stand more than three years before it is broken up.

Atropa belladonna is perhaps the next principal object of cultivation, though as much as possible is procured in a wild state *on account of its superior quality*. Two distinct varieties appear in the garden, one with a red, the other with a pale stem, of which the latter is more vigorous in growth, but not so good in quality. Monkshood is also largely cultivated for drying and its extract. As it is desirable to throw the work of the laboratory as much over the season of growth as possible, that there may not be too much stress upon it at once, two species are cultivated, the one the common *Aconitum Napellus*, which comes early into flower, the other apparently *A. paniculatum*, or some closely allied species of a taller and more robust growth, which is now in perfection. *A. paniculatum* is spoken of in the old Dublin and London Pharmacoporias as the source of the roots and leaves of commerce, and Störck, as reported in the *Flore Française*, where the species was at first confounded with *A. tauricum*, recommends its use to the exclusion even of the Common Wolfsbane. It seems indeed on several accounts to be far more deserving of cultivation.

Henbane also is grown on a large scale. Two principal varieties are cultivated, the one of which is annual, the other biennial. The former however, though so much quicker in growth is not more remunerative, as the dried herb fetches only half the price, and the extract is not so good. A practised eye and smell at once detect the difference.

The Squirting Cucumber occupies a large space in the grounds. The gathering of this at the right moment requires some judgment, as the elaterium is contained in the juice which surrounds the seeds. The fruit if left too long would discharge the liquor when touched, and if the seeds have not attained their brown tint, the fecula contained in the fluid is small in quantity.

Carraway seed was once largely grown, but the reduction of the duty on the importation has lowered the price so much that its cultivation in this country is very much diminished. Dill is still an object of cultivation.

Poppies for extract, and for their seed vessels, Lettuce, Dandelion for extract, Stramonium for drying, Thyme and Lavender for oil, the latter of which was very generally destroyed last winter, and many other officinal plants, are cultivated; and with these, as useful for rotation, agricultural seeds, as Turnips, Mangel Wurzel, &c., are grown on a considerable scale. Herbs also, especially Parsley, are dried for the market. Indeed, scarcely anything is omitted on the preparation of which for commerce the appliances of the laboratory can be brought to bear. Besides which, numerous experiments are made at the suggestion of customers, some of which prove mere works of supererogation. The whole establishment, which employs a great number of hands, is admirably conducted, and we have seldom been more gratified than in a morning spent in its examination.

It is well known that in such seasons as 1860, it is extremely difficult to prepare preserves from fruit which will keep well. The case is just the same with extracts. Though the water is driven off in the same way as in other years, and the extract reduced to the same consistence, there is something about the substance which encourages the growth of mould. This cannot depend, in the case of extracts, altogether on the quantity of the peculiar principle which the extract may contain, as even the strongest are liable to mould if not properly kept, and it is well known that the best Patna Opium is sometimes mouldy. The degree in which these minute Fungi resist the deleterious effects of some of the strongest mineral and vegetable poison, a small quantity of which is fatal to Phænogams, is most extraordinary. The whole subject deserves more attention than it has hitherto received. *M. J. B.*

Miscellaneous.

Poisoning by Solanum pseudo-capsicum.—The Solanum pseudo-capsicum is frequently cultivated as an ornamental plant, on account of the coralline colour of its fruits. Gardeners give it the name of Cerisette, probably because its berries resemble the Cherry improperly called "guigne" in our country. This resemblance and the common name do not fail to deceive children, generally very partial to fruits of a red colour, particularly Cherries, and cases of poisoning produced by this fruit are often registered. Some years since, a child five years old died at Moissac, after having eaten some berries of this species of Solanum. A similar case of poisoning occurred last week in a child of four years old. Three or four berries were sufficient to cause the most serious symptoms; nausea with drowsiness, very severe hypogastric pains, dilatation of the pupils, &c. Called in by the parents, it was easy for me to explain the state of the invalid, on hearing that he had just eaten some Cerisettes. I hastened to induce vomiting whilst waiting the arrival of the physician. After the invalid had vomited some portion of the berries mixed with food, poultices were applied to the legs by the doctor, who, at the same time, administered a strong infusion of coffee. The unpleasant symptoms ceased after three hours of the most assiduous attentions. As there is no mention made of the Solanum pseudo-capsicum in materia medica works, I think it will be useful to point out here its characteristics, and thus avoid researches often made with difficulty at the time of an accident. It is a shrub of from 60 centi-

metres to one metre in height, always green, branched, branches straight, and so disposed as to give the plant the form of an elongated ovoid; leaves lanceolate, petiolate; flowers of a dirty white colour, placed generally in umbels, each of which contains three or four flowers, sometimes single; berries resembling in shape and colour those of the Physalis alkekengi, slightly sweet in taste; seeds from three to four millimetres in length, irregularly oval, hollowed out, or almost reniform, slightly wrinkled at the borders, thicker, and of a deeper yellow at the circumference. *Montané of Moissac in the Pharmaceutical Journal.*

Raising the Chinese Yam from Seed.—Along with several of my colleagues I received a packet of seeds of the Chinese Yam (Dioscorea Batatas), sent from Algeria by M. Hardy, and distributed by the Horticultural Society of Paris. In the portion which fell to my lot were 52 seeds, which I sowed in April in pots filled with light soil and decomposed hotbed manure. The seeds germinated successively and produced 24 plants, which I pricked out as they appeared in well-dug ground, but no manure was applied, for the Yam does not like it. Although these plants rooted perfectly well I observed that they pushed slowly. I lost 13 of them by the mole cricket, with which the garden was infested; by this my plantation was reduced to 11 plants. My young Yams had larger, rounder leaves, and were more bushy than is the case of plants raised from cuttings of the roots and stems; but notwithstanding this luxurious growth I found that the roots (rhizomes) did not correspond in size with the strength of the plants, a circumstance which leads me to believe that the Yams raised from seeds require upwards of three years to arrive at their full size. The principal object to be kept in view in raising this plant from seed is to obtain roots not more than 6 or 8 inches long, with the same weight as those which are met with at exhibitions, and which weigh several pounds. It cannot be expected that this desideratum will be obtained all at once, but with perseverance there is every reason to suppose that it will some day be realised. Does not the Potato afford an encouraging example? Who on seeing the small tubercules of the wild Potato could have supposed that it would have yielded thousands of varieties, of which the worst would be superior to the original type? This first sowing afforded me a tuber which for three years has remained short and rounded; another very long and slender, which has no merit at all; the others have the long club-shaped form which is the characteristic of the Chinese Yam. Nevertheless, I hope to find amongst them both male and female plants, which will allow of seeds being obtained in the climate of Paris, and consequently of numerous sowings being made, the only means which can lead to the desired result. I do not say that my first attempt has been followed by complete success; were I to do so I should lay myself open to the charge of too great haste. Nature is not so prodigal of her favours as to yield at the first easy attempt a root combining every desirable property. Many years and much trouble will be necessary before obtaining this; but we may hope that it will be obtained at no very distant period. *Louesse in the Journal de la Société Impériale et Centrale d'Horticulture.*

Curious Zoological Discoveries.—When, some time ago, the telegraphic communication between Cagliari and Bona, in Algeria, was suddenly interrupted, after subsisting for the space of two years, measures were resorted to for the purpose of getting the cable up again, an operation which only succeeded partially. The portion of the cable recovered having lain in a submarine valley of the depth of from 6000 feet to 8000 feet, an excellent opportunity was thus offered for the study of the zoological species to be found at that depth. M. Alphonse Edwards, a French naturalist, who was on the spot at the time, has now published the results of his observations on that occasion. Among the extraneous bodies which adhered to the cable he mentions several mollusks, still living at the time they were brought up. One of them was the Ostrea cochlear, a kind of oyster which is frequent enough in the Mediterranean at a depth of from 300 to 400 feet, but which had never been found at any depth approaching to that of the valley above mentioned. It must have fixed itself to the cable when very young: for its lower valve, about six centimetres in breadth, had completely assumed the shape of the cable's surface like a plaster cast. There was also a Pecten opercularis, a sea-shell, one of the valves of which fits like a lid on the other, attached to the cable, and a much rarer one also, the Pecten testæ. To these were added two Gasteropods, the Monodonta limbata and the Fusus lamellosus, both extremely rare, and containing the animal alive within. Of corals there were 11 specimens belonging to three different species of the family of Turbinolides, two of which are new and one fossil—that is, hitherto only found in ancient geological strata, mixed with other paleontological fragments. *Daily Paper.*

Calendar of Operations.

(*For the ensuing week.*)

PLANT DEPARTMENT.

CONSERVATORY.—In most places Chrysanthemums will soon be the chief feature of attraction, and where these are largely grown, which they should be wherever there is a demand for flowers late in autumn, they make a fine display, and are worth every necessary attention to preserve them in beauty as long as possible. They are very impatient of a close, rather warm atmosphere, and if the house contains plants requiring this treatment, the Chrysanthemums should as far as practicable be placed in the coolest part, where air can be given freely on every favourable opportunity; for except they can be rather freely exposed to air their foliage soon gets attacked and disfigured by mildew, especially if the plants are bushy and well grown. See also that they are kept well watered at the root. Use fire-heat only when absolutely necessary either to prevent the temperature from falling too low or to dry the atmosphere. If such things as Geraniums, Cinerarias, and Calceolarias must be wintered in the same house with Heaths and other hard-wooded plants, they should be kept as much as possible by themselves, as they will require a somewhat closer temperature than hard-wooded plants, but where circumstances admit of it these should occupy a house or pit by themselves. Cinerarias and Geraniums intended for late flowering will do very well in a cold pit if the weather should not prove unfavourable, but those intended for flowering early should be placed where fire-heat can be used so as to be able to preserve the foliage from damp. Roses for early forcing must soon be pruned and placed where they will at least be safe from heavy rains. Where American and other shrubs are used for forcing, these should be taken up and potted without delay, placing them in a cold pit until they are wanted for forcing, or in a turf pit where they can be protected from severe weather by straw mats, shutters, or other covering.

FORCING DEPARTMENT.

PINERIES.—The plants expected to show fruit early next year will be greatly benefited by being kept in a comparatively dry state for a few weeks previous to subjecting them to a warm moist temperature. The atmosphere should be kept dry, also allowing the soil about the roots to become as dry as can be done with safety; do not, however, subject the plants to a very low temperature, but keep this at from 60° to 65° by means of fire-heat, for although the plants will bear a considerably lower temperature without any apparent injury, those not subjected to any unnecessary extremes will produce the finest fruit; and a short period of comparatively dry treatment will ripen the growth, and just as effectually induce a tendency to show fruit as checking the energies of the plant by an unnaturally low temperature, and without any of the ill effects of the latter method. Little dependence can be placed on the weather after this season, therefore see to plants in pits with insufficient means of heating being well protected by means of covering at night, and maintain the command of a rather high temperature by frequently renewing the linings, &c., so as to be prepared for any sudden decrease of the external temperature; avoid anything approaching excess of atmospheric moisture among young stock, whether in pits heated by linings, or in better arranged structures; it only tends to promote a too free rate of growth for the amount of light, and weakly blanched foliage is the result.

VINERIES.—Where early forcing is to be carried out attend to previous directions as to keeping the atmosphere moist, as there will be some difficulty in getting Vines to break freely except this is attended to. If circumstances allow of having a bed of fermenting manure inside the house, this will be found the best means of keeping the atmosphere regularly moist, but if this cannot be used the house must be sprinkled with the syringe frequently, and the evaporating troughs kept full. Also see that the roots are afforded a steady gentle warmth, until the buds are fairly swelled; keep the temperature about 50° by fire-heat at night, and 60° by day, letting it rise to 70° on sunny days.

FLOWER GARDEN AND SHRUBBERIES.

Alterations of grounds and planting of Evergreens should now be carried on with dispatch, but on no account attempt planting where the soil is not in good condition; the drier mould is when placed round the roots of newly planted shrubs (provided they are judiciously watered in) the sooner they will emit fresh roots. Mulching is, however, requisite to keep out frost, and earlier in the season to prevent evaporation. As tree leaves are always in request either as a fermenting material or for leaf soil, they should be carefully collected. If they are required only as manure they may be stowed away in any bye place and left to rot; but if, as is generally the case, they are in demand as a cheap mode of furnishing bottom-heat to Pines as well as for forcing different kinds of vegetables, some pains should be taken to keep them dry. For this purpose they should be stacked up in some back place or behind the garden walls, where access can be had to them at all times, and after allowing time for them to settle, put on a coat of thatch to effectually secure them from rain. By these means they will be found in a state fit for use for a twelvemonth to come.

HARDY FRUIT AND KITCHEN GARDEN.

Pruning and nailing may be proceeded with as soon as the leaves are off; it is most important to get such operations done while the weather is favourable. Look over fruit stores frequently to see that all is keeping well, and remove any fruit that may show symptoms of decay, so as to prevent the mischief from spreading; attend to gathering fruit as directed last week. A good stock of Lettuce fit for use should be put into cold frames or turf pits, where they can be protected during frost by means of straw mats or some other efficient covering; also take care to secure a good supply of Endive for winter use. Cauliflowers coming in now be frequently examined; those not wanted for use should be taken up and stored till wanted. Take advantage of the present favourable weather to get manure wheeled on quarters where it will be wanted, and get all ground trenched and ridged as soon as it gets cleared of summer crops.

COTTAGERS' GARDEN.

Employ leisure time in collecting leaves, decaying vegetable matter, and other materials for manure; remember that all such refuse is valuable in this respect, especially after having been well watered with the contents of the cesspool.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending Oct. 17, 1861, as observed at the Horticultural Gardens.

October.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind.
Friday 11	7	29.592	29.391	71	45	58.0	[illegible]	[illegible]	[illegible]
Satur. 12	8	29.965	29.876	70	50	60.0	[illegible]	[illegible]	[illegible]
Sunday 13	9	29.973	29.876	73	52	62.5	[illegible]	[illegible]	[illegible]
Mon. 14	10	30.006	29.984	80	40	60.0	[illegible]	[illegible]	[illegible]
Tues. 15	11	30.096	30.022	74	41	57.5	60	[illegible]	[illegible]
Wed. 16	12	30.217	30.171	63	29	46.0	59	57	N.E.
Thurs. 17	13	30.260	30.166	61	35	48.0	58	56	N.E.
Average		30.015	29.926	70.3	41.7	56.0	59.6	57.2	

Oct. 11—Densely clouded, boisterous; showery; clear and fine.
— 12—Uniformly overcast, cloudy, fine.
— 13—Fine, cloudy and rather boisterous; fine.
— 14—Exceedingly fine; skylark singing; hot, very fine throughout.
— 15—Dense fog, foggy, fine; slight fog at night.
— 16—Slight drizzle; overcast; very fine; slight frost.
— 17—Slight fog, fine throughout.
Mean temperature of the week 5½ deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Oct. 26, 1861.

October.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 20	59.4	40.2	49.8	15	0.34 in.	1	6	1	3	[illegible]	[illegible]	[illegible]	[illegible]
Mon. 21	58.2	39.6	48.9	14	0.64	3	6	3	3	[illegible]	[illegible]	[illegible]	[illegible]
Tues. 22	58.7	43.1	50.9	19	1.96	2	1	[illegible]	1	[illegible]	[illegible]	[illegible]	[illegible]
Wed. 23	57.9	40.6	49.2	18	0.56	3	1	1	[illegible]	4	[illegible]	[illegible]	[illegible]
Thurs. 24	56.0	39.5	47.7	16	0.88	1	3	4	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
Friday 25	55.7	38.4	47.0	17	0.80	4	[illegible]	5	3	4	[illegible]	[illegible]	[illegible]
Satur. 26	55.1	36.7	45.9	14	0.52	5	4	[illegible]	2	7	[illegible]	[illegible]	[illegible]

The highest temperature during the above period occurred on the 21st, 1830—therm. 73 deg.; and the lowest on the 22nd, 18[illegible]—therm. 20 deg.

Notices to Correspondents.

AVENUES: *C P.* There is not a tree in your list suitable for an avenue. They are all more or less tender, with the exception of the Oak, which is not majestic enough for the purpose.

BOOKS: *M.* Loudon's Self Instruction for Young Gardeners. Others are much too expensive. Besides which many other subjects are far more important to gardeners.—*Cher.* Dr. Lindley's School Botany and Descriptive Botany. All persons connected with the business of Nurserymen and Seedsmen should be acquainted with the rudiments of the subject, if they are to rise above the lowest level. As to wages we can give no reply.

CHESNUT COPPICE: *H W C.* We are informed that [illegible] acre is an *[illegible]* rent, under your circumstances. The question about Game Laws we are unable to answer.

DISEASED PINE APPLES, GRAPES, &c. All received too late for examination this week.

FUNGI: *Dss.* Next week.

GLADIOLI: *E R, Torquay.* All nurserymen in a large way can supply you. We cannot recommend one rather than another. Those which Mr. Standish showed some weeks since at South Kensington were extremely beautiful individually. For a grand effect nothing can excel the now common G. Brenchleyensis.

GLASS: *D P.* We always recommend rough plate. Fluted glass is much too costly, and not better so far as the plants are concerned.

INSECTS: *A Subscriber.* The eggs and young larvæ found in patches of gelatinous matter on Box trees, are those of a species of Phryganea, which thus departs from the ordinary habits of the Trichoptera.—*Mabel.* We believe the empty egg-cases from the fur of a cat are those of the flea. Is the cat infested with Pulices?—*K.* The Pear tree is the ordinary food plant of the Psylla Pyri. *W.*

NAMES OF FRUITS: *J H.* 4, Nonsuch; 8, Blenheim Pippin; 17, Pigeon; 23, Wormsley Pippin; 26, King of the Pippins; 19, Marie Louise; 27, Beurré Rance.—*J E G.* Appears to be the Wyken Pippin.—*F F J.* Not known; probably not in cultivation. It has no merit.

NAMES OF PLANTS: *W C T.* Melampyrum nemorosum.—*[illegible]* 1, Cratægus odoratissima; 2, Cr. tanacetifolia; 3, C. orientalis; 4, C. punctata.—*C W.* Your Fern is Pteris [illegible]mula, a New Holland species, common in greenhouses, [illegible] not a native of Britain; its presence in the "wild wood" must therefore be accidental.—*F D., Pershore.* The Fern marked Acrostichum is a seedling Lastrea dilatata; the Pteris is Onychium japonicum; the Polypodium may be a weak young growth of Paradiseæ, but is more like [illegible]tum; Lastrea decurrens is right; the Gazania is rigens; the Cystopteris is a variety of fragilis, and appears to be the so-called obtusa.—*G W.* Polypodium Dryopteris; [illegible] Phegopteris; 2, Polystichum angulare; 4, some form of Lastrea dilatata.—*S H.* Not numbered: Lastrea [illegible] Lastrea decurrens.

NASTURTIUMS: *Hy Barham.* Your Nasturtium is [illegible] bright orange scarlet, and of good form. Its merit as an ornamental plant would depend entirely on its habit, which of course we cannot judge from cut specimens. There are so many good sorts now, the parent of yours, Brilliant, among them, that except it has some decidedly good qualities in respect to habit it is not wanted. The very strong growth may be a recommendation for a shrubbery border and as a climber, but not for bedding purposes, for which the varieties of the Lobbianum breed are more suitable.

PARISIAN GARDENING: *Whitehall.* We must decline gratifying your curiosity.

ROYAL HORTICULTURAL SOCIETY: *Ocington.* The handsome Meeting Room, the graceful Conservatory, and what promises to be the noble water works are monuments of the skill and taste of Captain Fowke, R.E.; so are the band-houses; and when the new International Exhibition Building shall be completed you will have a proof that a British officer may be a great Architect as well as a military Engineer.

VINE BORDERS: *T B.* The width is ample, and if you bury your pipes in rubble as you propose you will run no risk of failure, provided you keep down red spider should it appear, attending carefully to watering.

WIREWORMS: *J H.* The larvæ to which this name properly belongs are not known to injure Vine roots.

CAUTION.—THE BRIGHTON WHEAT NOW FOR SALE HAS BEEN SELECTED FOR ONE GENERATION MORE THAN THAT GROWN FROM WHEAT PURCHASED LAST YEAR, AND CAN BE [illegible]
OF MR HALLETT ALONE.

CAUTION.—THE BRIGHTON WHEAT NOW FOR SALE HAS BEEN SELECTED **FOR ONE GENERATION MORE THAN THAT GROWN FROM WHEAT PURCHASED LAST YEAR, AND CAN** [illegible]
OF MR. HALLETT ALONE.

HOW OUR WHEAT CROPS MAY BE DOUBLED.—THIS WHEAT HAS BEEN, SO TO SPEAK, "BRED" ON THE SAME PRINCIPLE OF **REPEATED** SELECTION WHICH HAS PRODUCED OUR PURE RACES OF ANIMALS.

IF PLANTED AS DIRECTED, THIS WHEAT COSTS LESS PER ACRE FOR SEED THAN COMMON WHEAT.

It produced last year 108 Bushels per Acre, and from its *fine quality* commands from the Miller 4s. a quarter more than ordinary Wheat.

HALLETT'S PEDIGREE NURSERY WHEAT.

For full history of this Wheat see Advertisement on page 15 of *Mark Lane Express* of August 26, 1861.

RAISED FROM A SINGLE GRAIN BY **REPEATED** ANNUAL SELECTION.

See Leading Articles in the *Mark Lane Express* of Monday, September 2, 1861; the *Gardeners' Chronicle and Agricultural Gazette* of August 24, 1861; and *Bell's Weekly Messenger* of Sept. 16, 1861.

* * * We have much pleasure in speaking to MR. HALLETT's statements, they being fully borne out by the specimens he presented to our notice. Referring to his advertisement in this journal, we can affirm that the engraving of the 'Pedigree Wheat' is in no respect apocryphal or exaggerated." Leading Article of *Mark Lane Express*.

1861, ACTUAL SIZE, AFTER FOUR YEARS' REPEATED SELECTION, STARTING FROM A SINGLE GRAIN IN EACH YEAR.

A Case, containing among others the *Original Ear* from which the large engraving is taken, is now being exhibited, at the request of the Council of the Royal Horticultural Society, in their Council Room at South Kensington.

ORIGINAL EAR, TAKEN IN 1857 FROM A FIELD OF RED NURSERY WHEAT THE FINEST QUALITY OF RED WHEAT GROWN IN ENGLAND.

FOR SALE, PRICE TWO GUINEAS A BUSHEL.

Delivered at the Brighton Railway Station, with Printed Directions for Planting, ON RECEIPT OF CHEQUE OR POST-OFFICE ORDER, *which must in all cases accompany the order. Less than One Bushel will not be supplied.*

APPLY TO FREDERIC F. HALLETT, ESQ., THE MANOR HOUSE, BRIGHTON, SUSSEX.

PLANT EARLY. ONE BUSHEL SUFFICIENT FOR TWO ACRES IF PLANTED IMMEDIATELY AS DIRECTED.

A PRINTED PAPER, "HOW OUR WHEAT CROPS MAY BE DOUBLED," FORWARDED UPON APPLICATION, ENCLOSING STAMP.

To Farmers.

SEED WHEAT.—GIANT RED WHEAT, at 10s. per bushel. Delivered on the Great Northern or Eastern Counties Railways.
Address, WILLIAM COOPER, Fen Drayton, St. Ives, Hunts.

Seed Wheat from the Chalk.

SELECTED SAMPLES OF ALL THE BEST VARIETIES SUPPLIED BY MESSRS. RAYNBIRD, CALDECOTT, AND BAWTREE, SEED GROWERS and MERCHANTS.
Address: Basingstoke and Andover; or 89, Seed Market, Mark Lane, London, E.C.

RAYNBIRD, CALDECOTT, AND BAWTREE, SEED MERCHANTS and GROWERS, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E.C.
Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.
Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

WHEELER'S ORANGE GLOBE MANGEL,
WHEELER'S IMPERIAL SWEDE,
GRASS SEEDS for PERMANENT PASTURE,
GRASS SEEDS for LAWNS,
And all other Seeds of the same excellent quality which has rendered our Farm Seeds so celebrated.
We offer our **Seeds** at the lowest price consistent with their being good and pure, at the same time deliver them carriage-free by rail, and allow 5 per cent. discount for cash.
Our Book of FARM SEEDS sent free for 3 stamps.
J. C. WHEELER & SON, Seed Growers, Gloucestershire.

FREE STUDENTSHIP in the EDINBURGH NEW VETERINARY COLLEGE, Authorised under Royal Sign Manual. WINTER SESSION, 1861-62.—Gentlemen desirous of commencing a Course of Study to qualify as Veterinary Surgeons are informed that all who enter on the 6th November, 1861, and who have not attended a Veterinary College before, will be admitted to compete for a FREE STUDENTSHIP at the close of the Winter Session. The conditions of the competition, and any farther particulars, may be learned from Professor JOHN GAMGEE, New Veterinary College, Edinburgh.

THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c.
IN ENGLAND AND WALES AND IN SCOTLAND.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.
Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.
For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

THE BIRMINGHAM CATTLE and POULTRY SHOW, 1861.
The THIRTEENTH GREAT ANNUAL EXHIBITION of CATTLE, SHEEP, PIGS, DOMESTIC POULTRY, and ROOTS will be held in Bingley Hall on MONDAY, TUESDAY, WEDNESDAY, and THURSDAY, the 2d, 3d, 4th, and 5th of December next, when Prizes, Cups, or other articles of Silver Plate and Gold and Silver Medals to the amount of 1450*l*. will be awarded.
Prize Lists and Certificates of Entry may be obtained on application. The Entries close on November 1.
JOHN B. LYTHALL, Secretary.
Offices, 14, Temple Street, Birmingham.

SMITHFIELD CLUB CATTLE SHOW, 1861.—The ANNUAL SHOW of FAT CATTLE, SHEEP, and PIGS, will take place on DECEMBER 10, 11, 12, and 13, at the Bazaar, King Street, Portman Square. The last day for Certificates of both Stock and Implements to be returned to the Hon. Secretary is Friday, November 1.
The following Forms of Certificates are now ready, and intending Exhibitors in applying for them need only quote the letters and state how many of each they require.

CATTLE.	SHEEP.
Form A—Ox or Steer	Form D—Pen of 3 Wethers
B—Cow or Heifer	E—One Sheep in Extra Stock
C—Beast in Extra Stock	

PIGS.
Form F—Pen of 3 Pigs.
G—One Pig in Extra Stock.
In addition to the Prizes usually offered, separate Classes have been established for the following Breeds of Sheep:—
Kentish or Romney — Shropshire
Marsh — Mountain
Prize Sheets with Rules and Regulations and Forms of Certificates as above may be obtained of
B. T. BRANDRETH GIBBS, Hon. Sec.,
Corner of Half-Moon Street, Piccadilly, London, W.
N.B. All communications on the Club's Business should have the words "Smithfield Club" outside, to distinguish them from private letters.

The Agricultural Gazette.

SATURDAY, OCTOBER 19, 1861.

AGRICULTURAL wages during the past year have not been so high as they were two seasons ago. A rapid harvest in 1859 greatly aggravated the scarcity of hands which had been already created by the full and well-paid employment offered to them in so many other departments of industry; and probably higher prices were paid for mowing

and reaping during the harvest season of that year than were ever known before.

In 1860 a very difficult and tedious harvest time occurred, so that farmers did not get in their corn faster than their own "hands" could do it. To be sure, the short periods during which the weather was suitable made greater despatch the more necessary then, but where the reaping machine was in use this despatch was possible without the hire of extra hands.

During the past season, again, fine as the harvest time has been, we have not had that excessively hot weather which in 1859 ripened all our corn together. The weather on the whole has been cool, and this with occasional showers has ripened corn more gradually; and we know many farmers who have got their harvest in this year also without assistance, beyond that of their own yearly labourers. Good, therefore, as crops have been, and favourable as the season has proved to be, for all kinds of out-door labour, and great as has been the quantity of field and fallow work which the difficult season of 1860 left for 1861 to do, yet there has not been that excessive demand for agricultural labourers which existed two years ago. Doubtless, also, there has not been so much demand from without this year as was then made on them from other trades and occupations.

At any rate wages have not ruled so high during the past year, and especially during its agricultural emergencies, when alone, as a general rule, wages are the natural result of the relation between the supply of agricultural labour and the demand for it. No such picture could be given this year, therefore, as was given two years ago of those extraordinary difficulties which set all our agricultural societies a-thinking where labourers were to be obtained for the right cultivation of the land.

The advance of agricultural wages generally, *i.e.* comparing successive periods of at least 10 years each, is nevertheless a fact. And an interesting paper in the recent Number of the Statistical Society's Journal is worth studying for the information which it gives both on the gradual improvement which is thus observable in the condition of agricultural labourers, and for its account of the extraordinary variations in their earnings, which now, and each successive year, have long prevailed in different counties and even in different neighbouring localities. A difference to the amount of two or three shillings in the ordinary weekly wages of an able-bodied field labourer in adjoining parishes and even at the two ends of a single parish, of which instances are given, does certainly illustrate most strikingly the listless character of the man.

Were it not that by the law of settlement, by the encouragement of all our friendly societies, and by the general feeling among masters, he grows up under the impression that he is and ought to be tied to the same locality through life, he would certainly be more alive than he is to the advantages of moving from districts where population is dense, where agriculture is the sole employment, and where wages are low, to those where other employments compete for his services, and where accordingly they are better rewarded.

Wages are 50 per cent. higher in the north than in the south and south-west, and that is a fact which ought to induce a distribution of the employed in more even keeping with the wants of the employers. That it does not do so is to be attributed to the dependent listless character which almost all the influences, political and social, to which the rural labourer is exposed, tend to preserve in him, and which is so often confounded with Christian humility and contentment, and thus made the subject of misplaced eulogy and praise, when, more than any other thing, it is the very bane of English agriculture, and the dead weight which hinders both social and professional improvement.

Any one wishing to learn the principal facts relating to the condition of English agricultural labourers should study PURDY's paper on their earnings in last month's Number of the Statistical Society's Journal.

——THE Midland Counties Association have issued a very liberal Prize List for their next December Fat Cattle Show: the prizes offered amounting in value to not less than 1400*l.* in the whole. The Earl of SHREWSBURY, this year's President, gives a silver cup, worth 25*l.*, for the best ox or steer of any breed or age; the Hon. Colonel PENNANT, M.P., a similar cup for the best cow or heifer of any breed; the hotel and innkeepers of Birmingham, a silver cup, of the same value, for the best animal in the cattle classes; and the Society's premiums are 20*l.* in each case for the best Hereford, Short-horn, and Devon, and two gold medals, value 20*l.* each, for the best ox or steer, and the best cow or heifer, in the yard; the first prizes are still fixed at 10*l.* A class has been opened for Scotch cows or heifers, with one prize of 10*l.* In the sheep classes three silver cups, of the value of ten guineas each, are given by C. N. NEWDEGATE, Esq., M.P., ARTHUR RYLAND, Esq., Mayor, and Messrs. MAPPLEBECK and LOWE. Two extra prizes are offered by the Council, of 10*l.* each, for the best pen of long and short-woolled sheep, as well as a silver medal for the best pen of cross-bred sheep. Classes have been opened for long and short-woolled ewes. Three silver cups are added to the ordinary prizes this year in the pig classes. Three special prizes are given for roots: 10 guineas by Sir JOHN RATCLIFF, for the best six long Mangel Wurzel, Globe Mangel Wurzel, Swedes and Carrots; two others of 5 guineas each, by Messrs. PROCTOR & RYLAND, for the best six specimens of Swedes, and for the best six specimens of Yellow Globe Mangel Wurzel, from crops of not less than 2 acres. The Poultry Prize Lists have undergone revision. No silver cups are offered by the Society, but the prizes are increased in amount, and the total sum considerably exceeds that which has been given in any former year.

EARTH-SEWAGE, AND DAY-SCHOOLS.

[Read before the Southern Counties Adult Education Society at their Meeting at Dorchester, October 3, 1861, by the Rev. H. MOULE.]

IT was with great regret that I was unable to comply with the invitation given me last year, to read at the meeting of this Association at Warminster a paper on my discovery as to the application of earth for the inoffensive removal and utilisation of excrementitious and other offensive substances. Of the delay of this communication, which was then disappointing to me, I am now glad; for the information and experience which I have since gained, both on the value of sewage so saved and on the produce obtainable even by children, under high garden cultivation, enable me to bring the subject before you in more systematic connection with the Society's direct object. And in doing so, I trust some help may be afforded to the cause of day schools, at a time which must be regarded, from any point of view, as a great crisis in their history. For whatever may be the modification in store for the New Educational Code—and some modification there surely must be —the confidence of the friends of education in the further extension, if not the stability, of Government aid, has received an undoubted shock. And I, for one, feel that in return for 800,000*l.* a year something more should be looked for, even as the minimum, than the decent qualification of children of 11 years old in reading, writing, and arithmetic.

If then, in addition to some general information on my discovery, I can show that by its aid the children even of a day school may raise, from a few acres of land, enough to make that school independent of public grants, and, perhaps of charitable subscriptions, and may thus be commencing a course of industrial training—and if by it another branch of industry may be opened—I think I shall help to quiet some anxious minds, and render no little service to my country. This I trust I can do.

For the history and full description of my discovery it is better that I should refer you to my pamphlet, "National Health and Wealth," 2nd edit., published at 1*s.* by Messrs. Bradbury & Evans; and my tract "Manure for the Million," which may be had for 1*d.* I may add that both these works have received the cordial approbation of the Editor of the *Agricultural Gazette*, and of many other intelligent and thoroughly practical men. In the former of these pamphlets it will be seen that my discovery is not merely that common earth and soils deodorise, nor is it the mere capability of soils to retain manure. Both these properties were known before.

But my discovery is this,—that the deodorising power of soils, and their capability of the retention of manure are such, provided the substance to be deodorised be dealt with at once and in detail, and if the evil be not allowed to fester for months, days, or even for hours, that a very small quantity of earth is sufficient for the purpose. Further, I have discovered that, if dried by the sun or by moderate fire-heat, the earth thus mixed and deodorised retains the full value of the manure. And still further, that it can be dried and used again and again for the same purpose, in creasing each time of course the value of the manure.

Of the inoffensiveness of that which has been mixed seven times, you may judge yourselves; for I have been permitted to place some in the exhibition room. But the following facts may to some minds be more satisfactory. With 6 lbs. weight of substance mixed five times I planted in the summer, in the midst of growing Potatoes and Beans, 40 dozen of Brocoli and Savoys, and few I think can be finer than they now are. On 4 acres of land, 1 cwt. of earth mixed five times was applied last year to ¼ acre of Swedes, whilst equal quantities of superphosphate were applied to equal portions of land over 3¾ acres in the same field. The Swedes on this ¼ acre weighed ⅓ more in proportion than those in the rest of the field, themselves a fair crop. But, more than this, the Barley grown this year without any additional manure on that same ¼ acre stood out as far superior to the rest of the field. The bailiff reckoned it as four to three better. Lastly, by applying it to the plant as the Chinese do, and by wide and alternate cropping, I got from the greater part of my own garden three crops a-year.

Now, I would take advantage of this discovery, and of the capability of children for garden work, for the support not only of boarding schools, but of many day schools.

Mr. Baker, master of the Deaf and Dumb Asylum at Doncaster, is no mean authority on such matters. And, on the subject of my three letters on Self-supporting Boarding Schools, he has written in substance thus:—

"All Mr. Moule's statistics are correct, excepting those relating to produce, which are, even under adverse circumstances, too low. I know that the sewage of the institution, of 140 persons, is worth more than 100*l.* I cannot use it all. Yet from 2 acres of land I obtain a gross produce of 200*l.* My expenses are 60*l.* a year."

So that he clears 70*l.* an acre.

Mr. Baker owns, indeed, that the offensiveness of his manure is perceived in more ways than one. And here comes in the main point of interest and of value of my invention. Its adoption will entirely relieve our school-premises of what is generally an intolerable nuisance, and there shall be no offensiveness in the removal of the sewage, nor in the application of it to the ground, nor in its results on the crop. If, then, a valuable manure can be thus inoffensively provided with great advantage to the present condition of our school-premises, let us attempt to get a proximate idea of its value.

A combined education scheme for the five parishes of this borough might reckon on 500 children from two to 14 years of age. If, then, the sewage of 100 residents on Mr. Baker's premises may be reckoned at nearly 1*l.* a head, one-fifth of this is not too high an estimate for that of these 500 children. We may safely reckon then the value of the manure, if applied as I propose, at 100*l.* a year. And I feel confident, that the produce raised by it from 8 acres through such close and careful cultivation as, from the labour of some of these children, we might well command, should be equal to 1*l.* a head, or 500*l.* a year. Deduct 100*l.* for two good common gardeners and for other expenses, and 400*l.* would I think cover all Government grants and all our expenses.

But how cultivate 8 acres for these children? I refer in reply to the data in my paper on self-supporting boarding schools. If one boy under that system can be the chief instrument in the high cultivation of 3 acres a year, working seven hours a day, then under similar supervision and direction, and working 2½ hours a day, or 15 hours a week, he may cultivate 1 acre. What then can be more evident than that the labour of 20 boys, directed by two able gardeners, shall easily cultivate to the highest pitch 8 or 10 acres?

But, will you get them to work? Pay them on a graduated scale, and let them, from the time they begin to work, begin also to act as pupil teachers; and allot 100*l.* a year for this purpose. You will find that thus you may secure the attendance and labour of a sufficient number up to 12 and 14 years of age.

But, how will you dispose of your produce, especially if you apply this scheme to villages? In answer to this, I must expand a hint given in my tract "Manure for the Million." We are at present dependent on France and other countries, and still more on adulteration, for preserves. Open a new branch of industry. An acre of Red Currants, for instance, grown as espaliers 4 feet asunder, and well manured, shall in a year or two produce 50*l.* a year. Some of the pupils of your girls' school may pick this produce and, if necessary, preserve it. The space between the rows will afford room for Carrots, Turnips, or Onions that may give you a crop worth from 10*l.* to 30*l.* Let half of your land at least, then, be devoted to these common fruits. And I feel confident that my general estimate will prove far lower than it might fairly be made.

Let us apply the principle to a single school, and observe another advantage that would spring out of its adoption. Let the landowner of an agricultural parish, whom the educational grant will never reach, and whom, if I am right, it never ought to reach,—let him, I say, institute such a mode of relieving himself of expense and of increasing the benefits of education to the children of his labourers. He may by such payment as I have mentioned command the labour of 10 boys and girls; and 4 acres may thus be cultivated by them. Here will be a mode of keeping the boys and girls longer at school. And, since industrial training will be added to mental improvement, it will be to such purpose that the landlord may well demand it

of his tenants. My convictions on this subject have so strengthened, that, could I but get the land and the little capital to start it, I would not delay a month the adoption of the plan for my own boys' school.

I should like to speak one word more on this new branch of industry, or rather of this new application of children's labour. Suppose, for a moment, that the 10,000 schools of the country should adopt the plan, and have an average of 4 acres each thus cultivated; and that 50*l.* an acre of garden produce should be raised—2,000,000*l.* a year would be added to the produce of the country.

But, "it will require the trouble and care of increased supervision." So it will. And "our school committees must be much more business-like than they are at present." So they must. And so I think they would be, if, instead of having every month to go over a set of averages and other dry statements, the end of which may be merely that boys and girls up to 11 years of age have learned to read, write, and cypher, we could come to some direct influence on their manners and conduct.

And further I am sure that thus, and by means of the self-supporting boarding schools, a link of the strongest sympathy and affection may be formed between the classes to be educated and those who educate them. *Henry Moule.*

BREEDS OF SHEEP.

The members of the Parlington Tenants' Club have been requested to publish the results of an experiment instituted by them in the neighbourhood of Garforth for the purpose of ascertaining, with an equal quantity of food, the breed of sheep best adapted to that locality, and producing the greatest profit. Having brought the first stage of this experiment to a conclusion, viz., the summer grazing, they beg to offer the following tabular statement, and for the convenience of those gentlemen who visited the trial ground, in the same rotation as the folding of the sheep, commencing at the moor side of the field:—

Date of Weights.	1 Cross from the Teeswater with the Leicester.	2 Cross from the Cheviot or Banffshire with the Leicester.	3 Lincolns.	4 Southdowns.	5 Shropshires.	6 Odd Sheep.	7 Leicesters.	8 Cotswolds.
1861.	Weight of 10 hogs on June 8. sts. lbs. 106 13	Weight of 12 hogs on June 8 sts. lbs. 124 13	Weight of 10 hogs on June 8. sts. lbs. 125 9	Weight of 10 hogs on June 8. sts. lbs. 97 10	Weight of 10 hogs on June 8. sts. lbs. 101 6	Weight of 7 hogs on June 8. sts. lbs. 69 7	Weight of 12 hogs on June 8. sts. lbs. 116 3	Weight of 10 hogs on June 8. sts. lbs. 90 9
July 8	Increase .. 8 11	Increase .. 11 0	Increase .. 3 8	Increase .. 4 12	Increase .. 8 13	Increase .. 4 4	Increase .. 8 4	Increase .. 8 8
August 3	Ditto .. 5 2	Ditto .. 4 12	Ditto .. 3 9	Ditto .. 3 7	Ditto .. 5 10	Ditto .. 4 1	Ditto .. 7 8	Ditto .. 4 6
August 30	Ditto .. 0 11	Ditto .. 4 7	Ditto .. 0 2	Ditto .. 3 2	Ditto .. 2 13	Ditto .. 2 0	Ditto .. 4 4	Decrease 2 lbs.
October 4	Ditto .. 3 5	Decrease 1 st. 10 lbs.	Decrease 12 lbs.	Ditto .. 1 9	Ditto .. 3 0	Ditto .. 1 5	Ditto .. 4 5	Increase .. 6 8
	Total increase 18 1	20 5 Deduct decrease 1 10 18 9	7 5 Deduct decrease 0 12 6 7	13 2	20 8	11 10	24 7	19 8 Deduct decrease 0 2 19 6
Total weight on Oct. 4 ..	125 stns.	143 stns. 8 lbs.	132 stns. 2 lbs.	110 stns. 12 lbs.	122 stns.	81 stns. 3 lbs.	140 stns. 10 lbs.	110 stns. 1 lb.

ODD SHEEP, BEING ONE FROM EACH CLASS HAVING HAD NO CAKE, BEING THE DETAIL OF COL. No. 6.

	1	2	3	4	5	6	7	8
	Weight on June 8. sts. lbs. 10 6	Weight on June 8. sts. lbs. 9 8	Weight on June 8. sts. lbs. 11 8	Weight on June 8. sts. lbs. 9 13	Weight on June 8. sts. lbs. 9 6		Weight on June 8. sts. lbs. 9 7	Weight on June 8 sts. lbs. 9 1
July 8	Decrease 4 lbs.	Increase .. 1 8	Increase .. 0 5	Increase .. 0 5	Increase .. 0 13	.. ..	Increase .. 0 6	Increase .. 0 3
August 3	Increase .. 1 2	Ditto .. 0 11	Ditto .. 0 5	Ditto .. 0 1	Ditto .. 0 5	.. ..	Ditto .. 0 10	Ditto .. 0 9
August 30	Ditto .. 0 7	Ditto .. 0 2	Ditto .. 0 4	Ditto .. 0 2	Ditto .. 0 7	.. ..	Ditto .. 0 2	Ditto .. 0 4
October 4	Ditto .. 0 7	Ditto .. 0 7	Ditto .. 0 1	Decrease 1 lb.		.. ..	Ditto .. 0 6	Decrease 1 lb.
	2 2 Deduct decrease 0 4 Total increase 1 12	3 0	1 1	0 8 Deduct decrease 0 1 0 7	1 11		1 10	1 12 Deduct decrease 0 1 1 11
Weight on Oct. 4 ..	12 stns. 4 lbs.	12 stns. 8 lbs.	12 stns. 9 lbs.	10 stns. 6 lbs.	11 stns. 3 lbs.		11 stns. 3 lbs.	10 stns. 12 lbs.

The experiment has been made in a 16 acre seed field, divided into eight compartments of equal value, with ten hogs in each compartment, except Nos. 2 & 7, the Banffshires and the Leicesters, in which there were 12 each, and all turned in on May 23. 3 lbs. of Linseed cake per lot per day was commenced on June 17, and increased to 6 lbs. on August 1. The compartment No. 6 consisted of seven odd sheep, viz., one from each breed, and these had no cake.

In giving this statement the members are quite aware that it requires consideration, is open to criticism, and are also reminded by its imperfections that first trials are rarely satisfactory. In justice to the patrons of the several breeds, it is only due to say that we were not able to procure the whole of the sheep in the wool and in a proportionate condition; that Nos. 1 & 2, the cross from the Teeswater and Cheviot, came to fold in good grazing condition, having been wintered upon the estate, whilst Nos. 3 & 4, the Lincolns from Thomas Greetham, Esq., of Stainfield House, and the Southdowns from George Saville Foljamb, Esq., of Osberton, were fat and had received every indulgence. No. 5, the Shropshires, in fair holding condition, but from two flocks, Messrs. Crane and another, the former taking the lead. No. 7, the Leicester, from Henry Hill, Esq., of Stedmere Field (Sir Tatton Sykes'), were in good market condition, having been bought out of his lot in the Leeds fat market, and No. 8, the Cotswolds, from Edmund Ruck, Esq., were lean.

With respect to the state of the pasture on October 4, the Banffshires, No. 2, had so eaten up their pasture on August 30 that it could not recover; Nos. 3 & 5, the Lincolns and Shropshire Downs, have quite bared their ground, proving themselves, like the Banffshires, great consumers; whilst No. 4, the Southdowns, was so good as to have been able to have carried three, if not four more sheep. No. 7, the Leicesters, had eaten quite close, and No. 8, the Cotswolds, not quite so close.

The sheep are now having a month's run upon Turnip and Rape preparatory to their being again folded upon Turnip and cake, when in this part of the experiment each lot will be charged with the amount it can fairly consume. *Thos. J. Fox, President, Parlington, Oct.* 10.

Home Correspondence.

Agricultural Statistics.—You have doubtless seen the circular of the 6th May, addressed by Sir George Lewis to the chairmen of Quarter Sessions, as to the expediency of collecting agricultural statistics by means of the county constabulary. It has always appeared to me that the cry against such returns being made at all has been partly raised by a few farmers who imagine that their exhaustive cultivation will be thereby exposed; to such I can only say, that where I have had reason to suspect such a practice to exist I have never, as a landlord, found any difficulty in informing myself of it. But without discussing the expediency of the mode of collection now suggested, there are one or two points in the proposed form on which I should be glad to hear your opinion. 1st. Under what head should we class such crops as Flax, Teazle, Lupins, &c.? 2. What is the distinction between pasture and meadow? I do not find them defined in the books which I have consulted, and am informed by an intelligent farmer that pasture is land which has been laid down to Grass, after having been ploughed; meadow is land which has been always in Grass. If this is correct I ought to enter as meadow a rough piece of ground which has, time out of mind, been partly overgrown by Furze and short Grass, and is partly the site of an old pond; while the fields round my house, which are nearly of uniform quality, should figure under different heads, because some of them, being laid in lands, would appear at some period or other to have been ploughed. Perhaps you may consider these questions to be such as the nearest land surveyor might enlighten me on, but I believe many such will occur to persons in my position, and I would remark that agriculture differs at present from all other trades in being largely carried on by amateurs, who know, many of them, very little about it, but would be much annoyed by being called on for returns involving any considerable amount of trouble. On this account I am glad that no return of actual produce is demanded, but merely the number of acres under cultivation. When I kept a bailiff I once asked him what produce he had obtained from the different fields, and was told I might as well keep a clerk. Now that I manage or mismanage for myself, I believe that I could make a return as to this little fact, at least as to the different sorts of corn, but generally not until such a lapse of time as would render it quite useless for any public purpose. *Faunus.*

Farmers' Clubs.

Oxford: *Steam Cultivation, Oct.* 9.—Mr. W. Smith, of Woolston, read a paper, reported in the *Oxford Journal*, from which we make the following extracts:—

There are three modes of applying steam power to cultivation which stand out before all others, namely, the imitation spade or rotatory digging system, the ploughing or turn-over system, and that which is now termed the cultivating or Woolston system. Of either the first or the second of these you will not expect that I should say much, for I should be speaking of that of which I have had little or no experience.

1. *The Cultivating or Woolston System.*—The main argument which I use is, that since there are many of our most pernicious weeds which are not destroyed by being simply put under ground, but are, perhaps, the rather increased by being re-planted, I do not think that such damaging plagues ought to be turned under, but that they ought, on the contrary, to be kept as near the surface as possible. The root having been placed lower beneath the surface, has been with greater difficulty found and eradicated. If, with regard to all vegetable roots, burying and killing were the same thing, the matter would be very different; but we farmers find for certain that if we ever attempt to bury a root of Twitch, or of some other of our weeds, they will, as surely as the spring comes round, again raise up their heads in judgment against us.

2. To increase the cultivated inches of an island we must double the depth of its cultivation. My own attention, as well as that of many others, was directed to this point. I made an attempt to increase the depth of the seed-bed, but my attempts were made in a different way from that of most other people. My aim was to break into the subsoil and to move it, but to leave the greater portion near, but not in the exact position where it had been for ages, while only small portions were on each occasion to be brought up to the surface. By this process I obtained two very important and valuable results; my drainage was in a remarkable way improved, and substances were brought to the surface which, though in their original position and condition they were entirely unproductive, possessed in themselves elements of fertility and capacities of absorbing and releasing fertilising powers from the atmospheric agencies with which they were acted upon. I tried to get at this with horses, but I cannot say that the resulting advantages were equal to the cost expended. The toil and turmoil was something enormous; the horses, the ploughmen, the harness, and implements, were always at fault. The work was not done in time; the treading of the horses partly undid the very work they were intended to perform. The waste of their strength, too, in not regularly exerting their power together, was another source of loss. The indurated pan beneath our clay soils, which impedes the efficiency of their drainage, I succeeded in breaking; and by steam, the consolidation which attended the passage of our horses would be obviated, and the expedition which it would introduce would enable us to perform what we had to do at the very time when it ought to be done; thus we should obtain greater efficiency in our operations, greater expedition in the performance of them, and better and more frequent opportunities in their application.

3. Both efficiency and cost are in favour of steam. Neither in the question of expense is there any reason to complain. My own practice on this point, extending over a period of full four years, gives a result of an average amount, including the cost for the operations, where horses have been employed, for preparing a seed-bed, as 10*s.* 10*d.* per acre. I very seldom cross my land with steam; in fact, I confine my work to those different operations which cannot be efficiently performed by horses at all. For I find by experience that one efficient smashing up of it, if done at a seasonable time, is almost enough of itself to produce a proper seed-bed. Besides this, you will find that when land has been once or twice well cultivated by steam, its tenacity is considerably diminished, and it requires less power than it did at the first. However these things may be, there is the concurrent testimony of every person who has judiciously tried it, that the cost of steam cultivation is much less than that of horse cultivation; and in all the heavier processes I am convinced the latter will be found to be double that of the former. In confirmation of this, let me give you an example or

two. In the schedule of prizes offered by one of our Agricultural Societies, which accidentally fell in my hands a few days since, I read the following:—

"To the ploughman who, with three horses, shall plough in the best manner half an acre of land, not less than 4½ inches deep, within four hours."

Contrast my own quiet work with this. Within the last month I have been steaming on my own farm. I had only 53 acres to do, which I completed in 11 days, including the time from leaving till the return of the tackle to the homestead. The work was done thoroughly well, from 8 to 12 inches in depth.

Not to weary you with a long detail of results, I will instance one field upon my own farm. I select the one which is the worst and the furthest from home. From 1846 to 1856 it had ten crops in ten successive years, without a fallow. In the autumn of 1856, the last under horse cultivation, it was overrun with Twitch, Thistles, Coltsfoot, and other obnoxious weeds; you will probably say, and very likely, too. Here I began steam. The harvest of 1857 produced me 38 bushels of Beans; '58, 46 bushels of Barley; '59, 36 bushels of Beans; '60 (the wet year), 38 bushels of Wheat. The whole of these crops cost me, for horse and steam labour, 43*s.* 2*d.* per acre, and it has become very clean indeed. The wet autumn had its effect upon me as well as other people, and it cost me 22*s.* per acre in horse and steam labour to prepare for Turnips. I have, however, on this cold clay land now, at the autumn of 1861, as clean as a garden, without Twitch or other weeds, a crop of Swedes, estimated, at least, at 18 tons per acre. This is steam cultivation.

4. I cannot but think that nothing has stood more in the way of the spread of steam cultivation, than the extravagant notions that were three or four years since prevalent as to the extraordinary advantages which were expected to result immediately from its introduction. It was anticipated that every operation on our farms was to be the instant result of this application of steam power. We had heard of the marvellous effects that have been produced in our manufactories, and we began to hope that like results would follow in our tillage; farms were fitted up with stationary engines and machinery of a most extensive character; the totally different conditions between manufacture and tillage being entirely put out of the consideration. The raw material to which we have to apply the power is spread over the length and breadth of the land; there is not the possibility of bringing one single yard of the soil nearer to the place where the moving power is to be found. We have, therefore, to devise the means of bringing our moving power and our machinery to each individual spot. Even when we reach a single enclosure, we must have the means of sending our machine, whatever the nature of the machine may be, *to visit the original position of the raw material on* which we are to operate; no matter how rough, hilly, or irregular the surface, our machine must be brought to the very spot. Now, under these enormous difficulties, I infer that the wonder is not that we have done so little, but that we have done so much.

5. Draining is the most essential point of all good farming. The mode and depth must vary according to the nature of the soil. Within reasonable limits, it cannot be well too deep, so that all the rain fall may pass right through the land, and not leave a single water-gutter. This is, if possible, more indispensable for steam cultivation. For in passing a steam cultivator over undrained or half drained land in dry weather, it brings it up in lump-like clods without life or work in it; subsequent operations must be considerable to get a seed bed at all, and whatever is planted on it will, in the wettest or brick-hardest places, dwindle or perish; if in wet weather, or the land in a wet state, the cultivator cuts through it like mud, and the more we do to it the more like a pudding it makes it. A good seed bed on land in such a state it is impossible to procure. But, on the other hand, if worked over well-drained land, either in wet or dry weather, it is safe to break up in such a nice friable condition that the after-operations are certain to produce a good seed-bed, and we well know that a good seed-bed and good planting are the best things we can do to make certain of a good crop.

6. *Heavy land.*—Here is a farm of heavy land, containing, say 200 acres of arable land. It has been worked with ten horses; it is clean, well drained, with good and conveniently situated buildings, and well made roads over it. The useless hedges have all been cleared away. Now this being so, we may suppose the tenant or occupier to say to me—"I have heard that, if I should adopt your plan, and get help from the steam engine, I should be able to reduce my horses to the number with which I can cart my corn, and with those buildings placed as they are, I shall be able to cart it with six horses. The farm is divided into four fifty-acre divisions, my cropping, 75 acres of Wheat, 25 of Barley, 50 acres of Beans, 12½ acres of Clover, 12½ acres of Vetches, and 25 acres of roots, when I can get them. Now, show me how steam would affect me." I would answer: You can easily dispense with your four horses in the way you propose. We will begin when your land is in full crop. As soon as your Vetches are fed off smash up the 12½ acres. Do it deep, and steadily, the whole of the ground will be thoroughly and completely shaken, and the sun will be shining round the clods and down into the earth, where he has never shone before. Let it lay thus exposed for some days, and then cross cultivate it with horses. For two reasons — the first, because the horses would have nothing else to do; and the second, because the rubbing the ropes over rough hard clods files them away very much faster than when over a smooth or soft surface. You may repeat the cross cultivating when convenient up to seed time, but be sure you never attempt to plough; the scuffler going before the drill is far better; your 50 acres of Bean stubble must come up next, and be smashed, not too deep, by steam, while the horses are ploughing the 12½ acres of Clover ley. Your Bean stubble may be crossed with horses, unless time presses, in which case you may use steam, for expedition is at this time of more value than the rope, which will not now suffer so much, from the softer state of the soil. After this, and when the 25 acres intended for roots have been manured, the tackle should be shifted to that, which, while the horses are drilling the 75 acres of Wheat, should be smashed up, and left to lie till your horses have done the Wheat seeding, and have time to attend to it; then let four of them put it up into ridges for the winter; and if your horses have nothing else to do, as you will find to be the case, they may be employed in subsoiling in the trenches, between the ridges. It will now be quite ready for planting in the spring. You will do well, however early in the spring, to let a careful man walk along every ridge, and remove every obnoxious weed that is showing its head. Your 50 acres for Beans may be manured, and then smashed up by steam, and ridged, or ploughed in the ordinary way, just as you please; if your horses have nothing else to do, plough it in the ordinary way. In the spring, after your roots are off, smash up by steam the 25 acres that were roots. If the weather is dry, I find it answer exceedingly well to sow the Barley before the steam cultivator is set to work. Steam it up about four inches deep, and cross cultivate with horses the same day if you can. You will succeed in obtaining a nice tilth, a cool seed-bed, and be safe to get a good crop of Barley. You may work your land and reduce it to a fine tilth, and then drill it; but in dry weather you will not be so certain of your plant. Your other 12½ acres will be in Clover. With these operations, and good management, your farm will be kept as clean as a garden, and your six horses will not get any thing like full employment. Thus you see the advantages to the heavy land farmer, on the lowest calculation, will be the saving of the provender for four horses, which is, therefore, convertible into beef and mutton; the steam engine will relieve the horses of the fearfully hard work of July; the value of this on the constitution and stamina of the horses it is impossible to estimate; the land will be prepared for the next root and Bean crop before the sharp frosty winter months set in, and the Barley land in the spring can be worked without a chance of its becoming brick-hard, and losing moisture before the seed bed is completely prepared, and thus the vegetation of this crop is never checked.

7. When I arrive at this point, I generally find that the heavy land farmer will stop me with three such questions as the following:—As I have no manure, how am I to get it to prepare my fallows at Michaelmas? What are the advantages of putting up the land into ridges during the winter, and what good is there in that yellow clay which you advise me to fetch up and mix with my top soil? (*a*) My own practice has been to have a year's manure at this season of the year. It has been carted from the yards at convenient seasons, and deposited close to the spot where it is to be used, ready immediately after harvest to be put on the fields that are intended for Beans and roots. Thus I can get it on quickly when the land is in a good state for carting over. It may be said that there is a loss in letting manure lie so long before putting it upon the land. I can only say that I have not found it so. But even if there is, it is nothing in comparison with the advantage it gives by expediting the autumn culture and preparing our fallows before Christmas. The difficulty of obtaining the manure at first may be obviated by the use of a little artificial manure; and by keeping back a portion of the farm-yard manure for three or four years, the whole thing may be readily effected.

(*b*) The advantage of putting land into ridges for the winter to act upon it, is immense; the elements perform the work of tillage for more effectively than any system of machinery can; the soil acquires a flaky snow-like appearance, thus saving clod-crushing, rolling, and other mere brute force operations. None but those who have seen it, or tried it, can conceive the enormous advantages obtained by this plan of operation. On my lighter lands I have produced in this way 30, 40, 50, and more than 50 tons of roots to the acre, without the application of a single grain of artificial manure. On my heavy clays, on land which it was said would not grow roots at all, I have produced 18 tons of Swedes to the acre, and have used only ten loads of good farm-yard manure, made without oil-cake.

(*c*) The advantage of bringing up the subsoil in small quantities, and mixing it with the upper soil, I cannot explain to you better than by telling you that in November, 1859, I employed Dr. Voelcker to view and take soils and subsoils from my farm, and to analyse and report upon them, and here are one or two extracts:—"By deep cultivation, exposure to frost in ridges, avoiding the treading of horses, by exposing the subsoil as much as possible to the ameliorating influence of the atmosphere, without bringing it to the surface, and by accumulating the fine soil as near as possible in the top layers of the land, not only much of the unavailable mineral food in the soil is rendered fit to be taken up by the growing plants, but land thus treated also acquires the marvellous property of holding better moisture, and of absorbing more readily organic food from the atmosphere."

8. The occupier ought to remain as unfettered as possible by conditions as to the mode in which he shall crop his land. The agreements which should subsist between landlord and tenant, ought to be as liberal towards the tenant as possible. It is much to be wished that they could be reduced to these two—that the tenant should pay his rent and keep the land clean. But for the landlord to dictate to his tenant what he shall plant upon the land this year or that year, this season or that season, is worse than child's play. Practice has taught me that what is right cropping in one field is not so in another. Here is one instance among many. I have a field which will produce neither Beans nor Peas, but will produce heavy crops of [illegible] Wheat, and Oats, as long as I please. The last three crops upon it produced, per acre, Wheat, 49; Oats, [illegible]; and Oats, 85 bushels last year; and now it is as clean as a garden, in first-rate condition, and planted with Swedes, and they are undoubtedly a splendid plant. It is gratifiing to know that the great majority of landlords are of the sound class, who are proud of seeing a happy thriving tenantry, and the sooner they are all such the sooner will steam cultivation enable us to produce 50 per cent. more food for the nation than we do at the present time.

Mr. Bignold, of Loughton, said:—Last year he took a farm of a very heavy clay soil, and very much out of condition, and put upon it 10 horses, which cost him about 40*l.* each, and the next summer they were not worth more than half that money. That fact led him to turn his thoughts to steam cultivation, although his friends, whom he consulted, advised him to wait till it was brought to a more mature state, but he had so far pinned his faith to the system that he was determined to try it, especially after seeing what Mr. Smith, of Woolston, was doing. Accordingly he had done so, and he was bound to say that he was better satisfied every day with the course he had taken. Instead of employing 10 horses, he had been able to dispense with three, and now used only seven. Before then he was obliged to buy the best horses, but now he had introduced colts, which answered every purpose. He believed that steam cultivation would pay its own way, for it enabled them not only to increase the bulk of their crops, but to get and to keep the land in a far better state of cultivation. He could do from 5 to 6 acres a day with 7 cwt. of coal, and found he could grow good crops without using a bit of artificial manure. He had cross cultivated with steam, but generally preferred doing so with horses, for breaking up with steam made it very much easier for horses; it made the land loose and more friable. He did not profess to teach, but having found the great advantage of steam, he was very pleased to bear his testimony to its value. He would, however, impress upon them this fact—that steam cultivation required good after management, and he knew of one instance, where a farmer broke up his stubble last year with steam, and then so neglected it that it was now in a disgraceful state, and would lead some people to believe that steam cultivation was a failure.

Mr. Williams, of Northcourt, said there was no question that steam power was as much cheaper than horse power, as horse power was cheaper than manual labour, and it was for them to consider how far they could bring steam to bear, especially in the cultivation of the soil. He had seen Mr. Pullen's application of steam, and the last time he saw it he was cultivating about 12 acres; it went over it three times, first breaking it up, then crossing it, and the third time going over it in the same line as it did at first, and the third time it tore up the weeds by the roots. He ascertained from Mr. Pullen that he was enabled to do with 12 horses less ever since he had adopted steam cultivation, and that he was obliged to give up pig feeding, for he had 200 tons of pig manure by him, and had no use for it, because, since he had employed steam, he could grow as much corn as would stand without manure, whereas before he was obliged to manure to a great extent. Manure pulverised the soil, but if they could do the same by mechanical influence, they brought the virgin soil to the surface, where it derived everything it required. In dry weather the land was apt to burn, but if they stirred it up with the steam plough or cultivator it would not do so, and the land would produce more than before. Another question was, what could they do with their present steam engines which they used for threshing, pulping, &c.? for although one of 5 or 6-horse power would answer their present purpose, it would not do to cultivate the soil, and therefore he should be glad if Mr. Smith would enlighten them on that point. They wanted to avoid the loss which would attend the exchanging of their present steam engines for others, and they did not want anything expensive. He understood from Mr. Pullen that up to last year he employed an engine of only 7-horse power.

Mr. Smith replied that 8-horse power was the best, but there was no reason why 6-horse or even 5 or 4 might not be employed; they must be content with less work, use a smaller pulley on the engine, and work slower.

Mr. John Price differed from Mr. Smith, who condemned ploughing by steam, and maintained that it could be done with advantage, for he had used one of Fowler's machines with which they could plough, cultivate, and dig to great advantage. He would not employ horse-power where he could use steam, and he believed that Mr. Smith's tackle would do its work better than Fowler's. He was of opinion that stirring the land was better than turning it over; and he believed that when people saw how very much the land was improved by steam cultivation it would be generally adopted. In last April he crossed a piece of land belonging to Mr. Walker, it was then in a very foul state, but it has yielded a most luxuriant crop, and the texture of the soil was so improved that the men said they would hoe it for 2*s.* an acre less.

Mr. Smith said he did not recommend ploughing by steam, although he knew it could be done, and had done it himself. In 1856 he began working steam with a turn-over plough, but there was great draught, and it necessitated a large rope, which increased the weight as well as the wear and tear. As the turn-over work was not so valuable, he left it and adopted the cultivator, and recommended horses for ploughing.

Mr. Henley, M.P., said he had great pleasure in seconding the vote of thanks to Mr. Smith, and was glad that he had the opportunity of attending this meeting, and hearing his very interesting and valuable lecture, and the lucid manner in which he had pointed out the advantages of steam cultivation.

Miscellaneous.

Ballinasloe Fair.—The total number of sheep in the fair of Ballinasloe was 73,248, of which 69,811 were

and leaving 3437 unsold. The total is less than the number in 1860 by 6840, and less than in 1859 by 18,671, showing a falling off in the supply of nearly 20 per cent. in two years. This seems strange when we consider that the lands of Connaught are more extensively devoted to sheep-breeding than formerly. Disease among the flocks, occasioned by the prevalence of wet weather, accounts, in some measure, for the diminution. The other causes assigned are lamb-feeding for the Dublin market and for export, which brings a quick return of money to the farmer, and the facilities afforded by the railways to send up the sheep to Smithfield whenever the market is favourable, which was done to a considerable extent during the past year. If we had the statistics which the railways could give relating to the traffic, we should find a large increase probably, instead of a diminution, in the business of sheep-breeding beyond the Shannon.

Calendar of Operations.

OCTOBER.

ISLE OF ELY, *Oct.* 8.—We are now enjoying all the genial warmth and sunshine of a second summer. On the 5th inst. the thermometer in the shade was standing at 72°, nearly at summer heat. The only drawback to the full enjoyment of this beautiful weather is the want of rain, so sensibly felt by farmers who are anxiously awaiting the fruitful showers to enable them to sow their Wheat. We trust rain is not now far distant. To-day we have heard thunder, and the clouds have portended teeming showers. May they soon come! The return of Michaelmas week reminds us very forcibly that the time for sowing Wheat on Fen lands has arrived, although happily not a single acre is yet in a fit state to receive the seed. The long continued drought, with the great heat and consequent evaporation, have abstracted all the moisture from the Fen lands, and they are now as dry and hard, and as unsuitable for the reception of seed as in the height of summer. This considerably retards operations and increases the farmer's anxieties. This is more especially the case, as much of our light weak land requires to be sown early to get a strong and vigorous plant ere the approach of winter, or it is liable to serious injury. Ploughing is forward, and on many farms will soon be completed. The few showers we have had have exerted a very favourable influence upon the Grasses and also upon the Coleseeds and Mangels. These are now growing rapidly under the influence of the summer temperature we are enjoying. Coleseed, where a fair plant, has improved greatly, and is a much better crop than could have been expected a month ago, especially upon the cool black lands. We have a brisk demand for Coleseed just now, for feeding from now till February, and from 50*s.* to 70*s.* per acre are being realised. The corn trade has been dull the last two weeks, but greater firmness and slightly improved prices have been reported the last day or two. The quality of the new Wheat is generally good and in fine condition, but the quantity is sadly deficient. We still retain the opinion that it is one-third below an average crop. *Your Fen Reporter.*

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended October 17; observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
		Max. in Sun.	Max. in Shade.	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	11 ..	87.0	65.0	56.5	66.2	58.0	0.23	S.W.	29.28
Saturday	12 ..	69.0	66.0	45.0	56.2	58.0	0.08	S.W.	29.75
Sunday	13 ..	68.0	62.0	52.0	58.5	57.0	..	S.	29.81
Monday	14 ..	82.0	68.0	56.5	65.7	57.5	..	S.	29.87
Tuesday	15 ..	87.0	70.0	45.5	62.0	58.0	..	S.	29.97
Wednesday	16 ..	94.0	67.0	47.5	64.0	57.5	..	N.E.	30.08
Thursday	17 ..	54.0	54.0	34.0	44.0	56.5	..	N.W.	30.15

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

BITTER BUTTER: *J S.* It is probably caused just now by the fall of the leaf. The best remedy is to put a bit of saltpetre about the size of a nut to every quart of cream as soon as it is taken off the milk, and then the day before you cheese put the whole crock to stand in a furnace of boiling water for half an hour, stirring it frequently while it is in the hot water, and afterwards till it is cold.

CATTLE FOODS: *Subscriber.* We do not know their composition, and are not likely to be told. It is on the preservation of the mystery that our principal condiment manufacturers depend for the preservation of their custom. No doubt the food is made as good as it can be—our only quarrel with the system is on the ground that it depends on a mystery being maintained, and that the food, good as it may be, cannot be worth what they ask for it.

DISEASE IN YOUNG CATTLE: *Anxious Reader.* It is quite impossible to give any useful advice on the subject unless a correct account is given of the *post mortem* appearances of the parts affected, and a more detailed account of the symptoms. F. C. S.

POULTRY.—We are satisfied that but for the unusually warm weather and bad trade we should have to report poultry dearer than usual at this season of the year. The supply is small, and the old proverb that if you eat the calf you will never have a cow has been well exemplified in the poultry market this year. Fowls and chickens of all sizes were so dear in the spring they were killed as fast as they could be fattened, and the calculation was a sound one. They made at three months old in May, as much as they would have made at five in July, and so on; for this reason there has never been any stock in hand, and we think we might venture to say there hardly ever was a time when poultry was as scarce in England as it is now.

Large Fowls	.. .. ..	Each	3*s.* 6*d.*	to	4*s.* 0*d.*
Smaller ditto	.. ..	„	2 6	„	3 0
Chickens	.. .. ..	„	1 6	„	1 9
Geese ..	.. .. ..	„	6 0	„	6 6
Ducks	.. .. ..	„	2 0	„	2 6
Pheasants	.. .. ..	„	2 6	„	3 0
Partridges	.. .. ..	„	1 3	„	1 6
Grouse ..	.. .. ..	„	2 6	„	3 0
Hares ..	.. .. ..	„	2 6	„	3 0
Rabbits	.. .. ..	„	1 4	„	1 5
Wild ditto	.. .. ..	„	0 8	„	0 9
Pigeons	.. .. ..	„	0 8	„	0 9

VOLUNTEER FIRE BRIGADE. *A Correspondent* wishes to be put in communication with the manager of a Volunteer Fire Brigade in a rural district, either in Worcestershire or Herefordshire, of which he has heard, as the matter had been mooted at the Great Budworth Agricultural Society.

W. VIRGO AND SON beg to offer a very large and fine stock of 2 years BEDDED QUICK, 2 years SEEDLING QUICK, EVERGREEN PRIVET, STANDARD and ESPALIER APPLES, at an unusually low price, which with samples may be had on application at the Nursery, Wonersh, near Guildford, Surrey.

First-class New Pelargoniums, &c., now Ready.

J. DOBSON AND SONS have very great pleasure in offering the following very distinct and superior new varieties:—

NEW SHOW PELARGONIUMS.

Queen of England	31*s.* 6*d.*	Mr. Sowerby ..	31*s.* 6*d.*
Volunteer	31 6	Lady of the Lake ..	21 0
Thormanby	21 0	Review	21 0
Captivation	21 0	Butterfly	21 0
Claude	21 0	Macbeth	15 0
Favonius	21 0	Lord Elcho	10 6

For full description see our CATALOGUE, gratis.

NEW SPOTTED PELARGONIUMS.

The Comet	21*s.* 0*d.*	Dictator	15*s.* 0*d.*
Rupee	15 0	Telegraph	10 6

NEW FANCY PELARGONIUMS.

Mademoiselle Patti	21*s.* 0*d.*	Fairy	10*s.* 6*d.*
Hebe	15 0	Venus	10 6
Exquisite	15 0	Painter	10 6

NEW CINERARIAS.

Admiration	7*s.* 6*d.*	Luna	5*s.* 0*d.*

NEW PANSIES.

Antagonist	5*s.* 0*d.*	Conqueror	3*s.* 6*d.*
Angelina	5 0	Splendens	3 6
Attraction	5 0	Amazon	2 6

Early orders are necessary to secure complete sets.

For full descriptions of the above see our NEW CATALOGUE, gratis and post free. The Trade supplied on liberal terms.

12 SPLENDID GERANIUMS, including packing. Purchaser's selection, 42*s.*; our selection, 36*s.*

Amy	Fire Queen
Autocrat	Mulberry
Bacchus	Mrs. Benyon
Bridesmaid	Portia
Bertram	Perdita
Distinction	Rosalind
Garibaldi	Rosa Bonheur
General Garibaldi	Ruby
General	The Lady of Quality
Lord Clyde	Transcendant

12 CHOICE GERANIUMS for 21*s.*, purchaser's selection.

Aurelia	Lord Clyde
Blink Bonny	Prince of Wales
Candidate	Peacock
Eclipse	Rosalie
Etna	Rose Celestial
Fairest of the Fair	Rose Leaf
Fire Queen	Symmetry
King of Purples	Sir Colin Campbell
Leviathan	The Bride

CINERARIAS.—Our stock is very large, and comprises all the leading varieties, which we can supply at very moderate prices. The plants are now ready for potting into 48-size pots, and are unusually strong.

For full Lists of these, also PELARGONIUMS, Show, Spotted, and Fancy; VERBENAS, FUCHSIAS, PANSIES, &c., see our GENERAL DESCRIPTIVE LIST, sent post free to any address.

JOHN DOBSON & SONS, Woodlands Nursery, Isleworth.

S. STAFFORD, NURSERYMAN, Hyde, near Manchester, begs to offer—

GERANIUMS.—Show and Spotted, 30 sorts, of autumn 1860, good strong clean plants, 30*s.* per dozen; older, 9*s.* to 12*s.* per dozen.

CINERARIAS of 1860-61, 30 sorts of Turner's and Smith's, nice clean plants, 12*s.* per dozen.

Each—	*s. d.* *s. d.*	Each—	*s. d.* *s. d.*
Cyanophyllum magnificum ..	3 6 to 10 6	Pteris tricolor ..	1 6 to 2 6
„ assamicum	3 6 to 10 6	„ argyraea ..	1 6 to 2 6
„ speciosum ..	5 0 to 10 6	„ c. albo lineata ..	2 6 to 3 6
Caladium Belleymei	3 6 to 7 6	Begonias, Linden's and Van Houtte's, 24 sorts, small ..	2 0
„ Wightii ..	3 6 to 7 6	Do. do., per doz.	18 0
„ argyrites ..	1 6 to 2 6	Cissus porphyrophyllus, small ..	2 6
„ Chantinii ..	1 6 to 3 6	Pandanus javanicus variegatus ..	2 6
„ Houlettii ..	2 6 to 3 6	Dieffenbachia maculata	1 6 to 3 6
Campylobotrys smaragdina	5 0		
„ pyrophylla ..	5 0		
„ regalis ..	3 6 to 5 0		
„ refulgens ..	7 6 to 10 6		

STAFFORD'S GEM DAHLIA, crimson, tipped yellow, pot roots, 2*s.* 6*d.*; ground roots, 5*s.* each.

This has at eight exhibitions round Manchester taken first prize for best Fancy, against all other Fancies.

The usual allowance to the Trade on the above.

WANTED IMMEDIATELY,
6,000 SPRUCE FIRS, 3 ft. transplanted.
6,000 LARCH „ 4 ft. ditto.
3,000 SCOTCH „ 2 ft. to 4 ft. ditto.
12,000 3-year old QUICK.
1,000 BERBERIS AQUIFOLIA (bushy plants).
100 STANDARD APPLES. (No orchard, but sorts and names given).
20 CEDARS OF LEBANON, 4 ft. transplanted.
4 WEEPING ASH.
20 WALNUTS.
20 SCARLET CHESNUTS, good Standard Trees transplanted.
20 HORSE ditto.
20 SPANISH ditto.
20 ALICANTHUS.
20 STANDARD COPPICE BIRCH.

State lowest price Cash. Delivered free at Railway Station, Stratford-on-Avon.

Address, Mr. WARDE, Clopton House, Stratford-on-Avon.

Gutta Percha Tubing for Watering Gardens.

THE GUTTA PERCHA COMPANY have the pleasure to acknowledge the receipt of the following *Testimonial from* MR. J. FARRAH, *Gr. to* BOSWELL MIDDLETON JALLAND, Esq., *of Holderness House, near Hull.*

"I have had 400 feet of your Gutta Percha Tubing, in lengths of 100 feet each, with union joint, in use for the last 12 months for watering these gardens, and I find it to answer better than anything I have ever yet tried. The pressure of the water is very considerable, but this has not the slightest effect on the tubing. I consider this tubing to be a most valuable invention for Gardeners, inasmuch as it enables us to water our gardens in about one-half the time, and with one-half the labour required."

Manufactured by the GUTTA PERCHA COMPANY, Patentees, 18, Wharf Road, City Road, London, E.C., and sold by their Wholesale Dealers in Town and Country.

THE LONDON MANURE COMPANY (ESTABLISHED 1840,) Are now prepared to send out the following MANURES:—
CORN MANURE for AUTUMN SOWING.
SUPERPHOSPHATE of LIME.
DISSOLVED BONES for PASTURES.
CONCENTRATED URATE.
BLOOD MANURE for CORN.
PERUVIAN GUANO, NITRATE of SODA, SULPHATE of AMMONIA, and every other Manure of value
116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE of LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.

CONCENTRATED TURNIP MANURE, equal in value to the preceding.

Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."

Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861 are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, and BONE SUPERPHOSPHATE of LIME	£6 6
LAWES'S SUPERPHOSPHATE of LIME from BURNT BONE or MINERAL PHOSPHATES ..	5 5
LAWES'S BARLEY, GRASS, and MANGEL MANURES	8 0

These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.

Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.

American and other Cakes at market prices.

Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

Pigs. Pigs. Pigs.

200 TONS of DAMAGED RICE, suitable for feeding Pigs, to be sold for Cash at 4*l.* per Ton. At W. JUPP & Co.'s Cattle Food Depôt, 42, Great Tower Street, E.C.

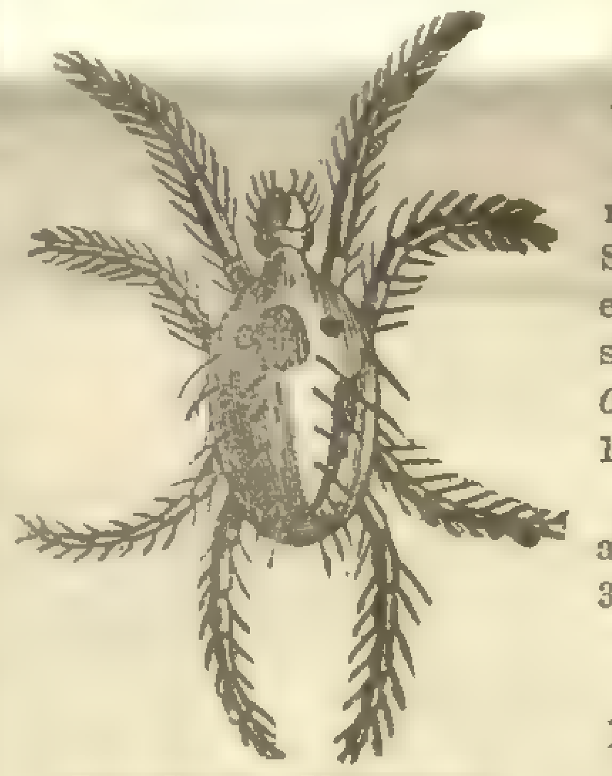
HORSE and CATTLE FOOD, 35*s.* per cwt.; Pig and Poultry Food, 16*s.*; Dog Biscuit, 15*s.*; Compressed Beef Greaves, 12*s.* and 16*s.*; Rice Meal, 7*s.* 6*d.* and 9*s.* 6*d.*; Indian Meal, 14*s.*; Locust Beans, 10*s.* 6*d.*; Locust Bean Meal, 14*s.*; Linseed Meal, 16*s.* 6*d.*; Screened Bengal Rice, 14*s.*; Chicken Rice, 10*s.* Sold for Cash only by W. JUPP & Co., Cattle Food Depôt, 42, Great Tower Street, E.C.

Genuine Tobacco Paper for Fumigating.

H. APPLEBY (Foreman to Messrs. IVERY & SON, Dorking, Surrey) takes this opportunity of informing his patrons and the public that he has now a good supply of the above on hand. In packets of 4 lbs. each, at 1*s.* 3*d.* per lb. A liberal discount allowed to the Trade.

SHEET IRON POTS for FUMIGATING, 3*s.* 6*d.* each.

N.B.—All Orders to be accompanied with a Post Office Order payable to HENRY APPLEBY, Dorking, Surrey.



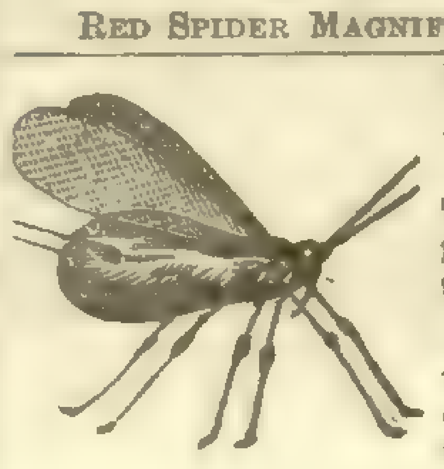
RED SPIDER MAGNIFIED.

ORCHARD HOUSE TREES and VINES.—Winter wash with GISHURST COMPOUND, recommended by Mr. Rivers. See "Orchard House," ninth edition; and see Mr. Pearson's recommendation in *Cottage Gardener*, 10th Sept., 1861.

Sold retail by Nurserymen and Seedsmen in boxes 1*s.*, 3*s.*, and 10*s.* 6*d.* each.

Wholesale by PRICE'S PATENT CANDLE CO., Limited.

NEAL'S PATENT APHIS PASTILS.



The following is one of upwards of 70 Testimonials received by J. NEAL from gentlemen personally unknown to him.

"I beg to bear my testimony to the value of Neal's Pastils, and their efficacy in destroying, most effectually, the Green Fly without any trouble, and at a nominal expense, when compared with the use of Tobacco or even Tobacco Paper.

"JAMES SANDERS, "Nursery Grounds, Abergavenny."

Sold by all principal Seedsmen. Price 1*s.* and 2*s.* per packet.

Magnified Aphides. Patentee, J. NEAL, Birmingham.

E. T. ARCHER'S "FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, &c

PROTECTION from the COLD WINDS & MORNING FROST.

"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.

Two yards wide	.. ..	1*s.* 6*d.* per yard run.
Four yards wide	.. ..	3*s.* per yard.

An improved make, 3 yards wide, 2*s.* 6*d.* per yard run.

Also "Frigi Domo" Netting, 2 yards wide, 1*s.* 4*d.* per yard run.

ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.

"It is much cheaper than Mats as a covering."

ST. PANCRAS IRON WORKS,

OLD ST. PANCRAS ROAD, N.W.

IRON HURDLES, FENCING, AND GATES.

THE PROPRIETORS OF THE ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON,

WERE AWARDED THE

SILVER MEDAL of the ROYAL AGRICULTURAL SOCIETY for their IRON HURDLES and GATES,

which, by their peculiar construction, are more than twice as strong and durable as those in ordinary use. Lists per post on application. Gates from 30s. to 500l.

The Hurdles can be seen in process of Manufacture at the Works.

GAME WIRE NETTING.

PROFESSOR VARNELL'S ENAMELLED AND WROUGHT-IRON STABLE FITTINGS.

These Patent Mangers and Stable Fittings obtained the Commendation and the Silver Medal of the Royal Agricultural Society of England and the Royal Agricultural Society of Ireland, are adopted by the Royal Veterinary College, and Professor Spooner of that Institution states that they should be used by all who value the health and comfort of their horses. They can be had plain, galvanised, or enamelled.

A Show Room is devoted entirely to every description of Stable Furniture, and full-sized stalls and loose boxes are erected for inspection at St. Pancras Iron Works.

ADDRESS—THE MANAGERS,

ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, N.W.,

Opposite Old St. Pancras Church.

JOHN VOKINS, 2, York Place, Chelsea, London, S.W., Horticultural Builder and Hot-water Apparatus Manufacturer. Tubular Boilers from 3l.

Greenhouses, Orchard Houses, &c.

H. FREEMAN'S Horticultural Works, Triangle, Hackney, N.E. Established 20 years. Substantially made GREENHOUSES, glazed, ready for fixing. 42 ft. by 13 [illegible] 50l.; 21 feet by 13 feet, 28l.; 12½ ft. by 10 ft., 15l. ORCHARD HOUSES 10 per cent. cheaper. A large assortment kept. Estimates given for Heating, or any branch in iron or [illegible]

HOT-WATER PIPES, at Wholesale Prices, with Elbows, Syphons, Tee Pipes, and every other conn[illegible] Wrought and Cast-iron Boilers, Saddle, Conical, Cylinder, [illegible] Elliptic, from 24s. each. Improved Boilers and Iron Sta[illegible] to use without brickwork, 50s. each. Valves from 12s. 6d. [illegible] Beck's Patent Valves. Furnace Doors, Furnace Bars, S[illegible] Cisterns, and Builders' Castings of every description in st[illegible]

Mr. Lynch White's Iron Wharf, Upper Ground Str[illegible] Blackfriars Bridge, London, S.

Horticultural Works and Hot-Water Apparatus Manufactory,

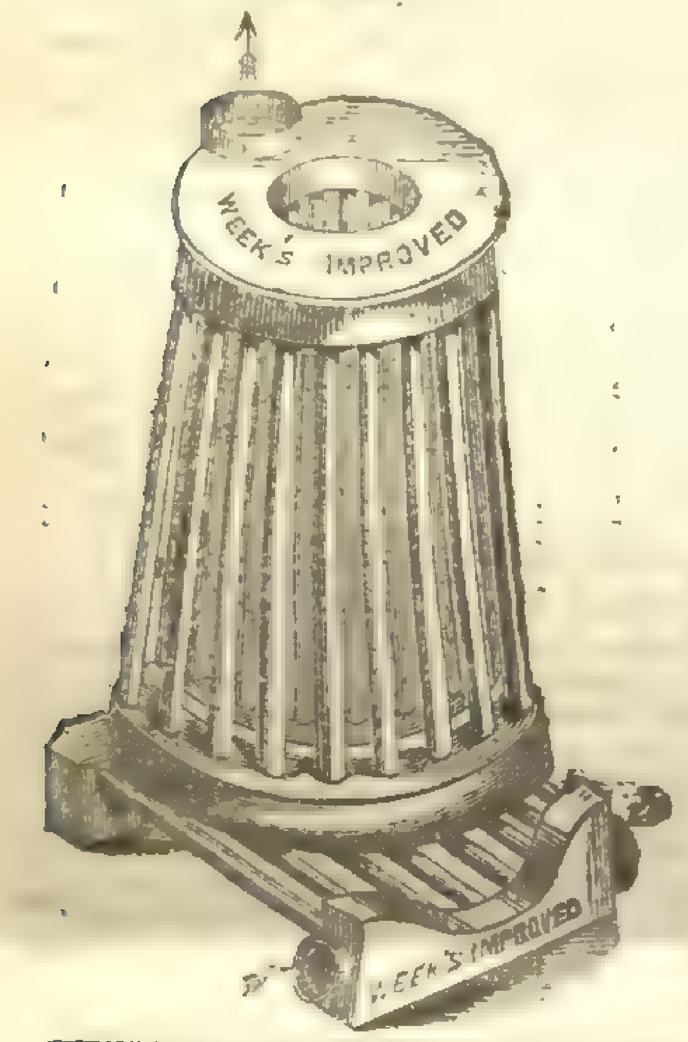
Kensal Green, Harrow Road, London, W.

JOHN TAYLOR and SON beg to call the attention of the nobility and gentry to the very superior manner in which they ERECT all kinds of CONSERVATORIES, VINERIES, GREENHOUSES, &c., combining every improvement with elegance of design and durability of materials and workmanship.

Their VENTILATING APPARATUS for the Fronts and Roofs of Houses has given the highest satisfaction. Churches, Chapels, Schools, Entrance Halls, Public Buildings, &c., heated with Hot-Water Apparatus in a most economical and efficient manner.

J. T. & Son have great pleasure in referring to numbers of the nobility and gentry by whom they are extensively engaged.

WEEKS'S UPRIGHT TUBULAR BOILER.



SUBJOINED IS THE REASON WHY

WEEKS'S ONE-BOILER SYSTEM

HAS BECOME THE ORDER OF THE DAY FOR HEATING BY HOT-WATER.

WEEKS'S No. 1 BOILERS	are heating upwards of		200	feet of Pipe.
WEEKS'S No. 2 BOILERS	"	"	300	"
WEEKS'S No. 3 BOILERS	"	"	600	"
WEEKS'S No. 4 BOILERS	"	"	1500	"
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WEEKS'S No. 6 BOILERS	"	"	12,000	"

The above statistics being accounts of hundreds of apparatus disseminated throughout Europe in practical operation, J. Weeks & Company publish them with the pleasing satisfaction that all who may honour them with their esteemed commands must effect enormous savings both in fuel and labour by the adoption of their ONE-BOILER SYSTEM.

JOHN WEEKS & COMPANY,

Horticultural Builders and Hot-Water Apparatus Manufacturers,

KING'S ROAD, CHELSEA, S.W.

*** *Illustrated Catalogues, Designs, and Estimates forwarded free on application.*

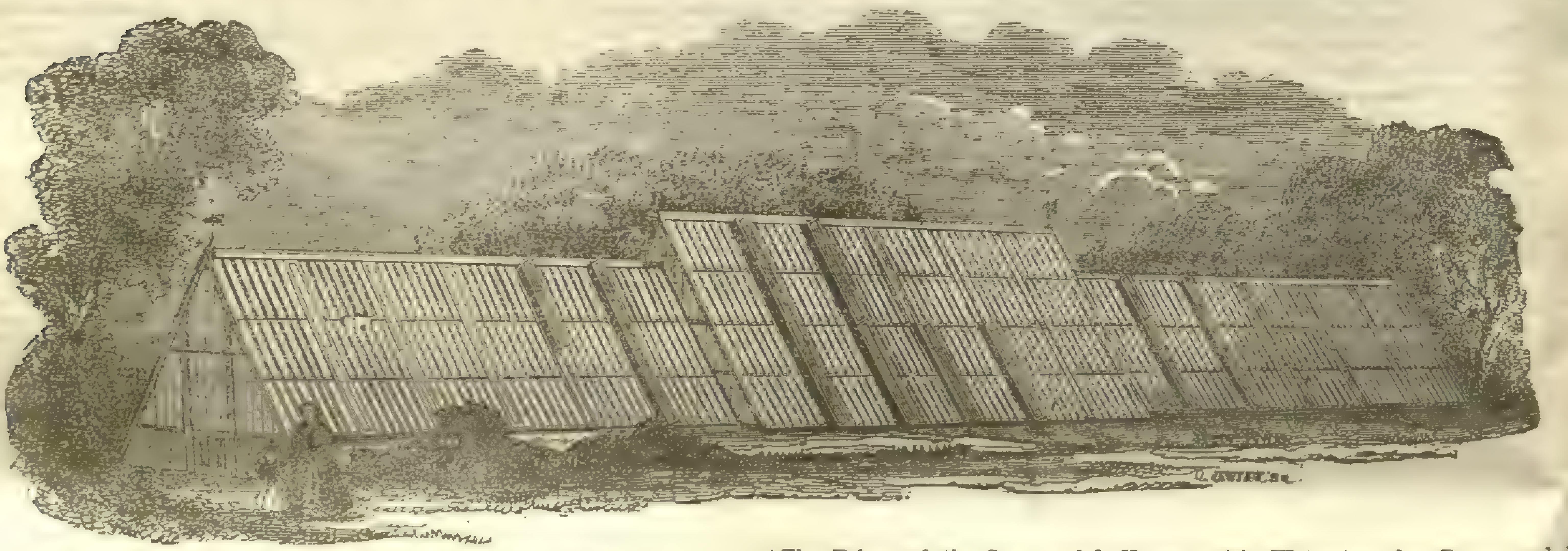
HOTHOUSES FOR THE MILLION,

ON THE PRINCIPLE INVENTED AND PATENTED BY

SIR JOSEPH PAXTON, M.P.

COMBINING SIMPLICITY, CHEAPNESS, EXCELLENCE, AND DURABILITY.

BEING CAPABLE OF FULFILLING IN THE MOST PERFECT MANNER ALL THE REQUIREMENTS OF HORTICULTURE.



The Prices of Lean-to Houses complete are as follows:—

Ft. In.	8 ft. Lights			10 ft. Lights			12 ft. Lights			14 ft. Lights			16 ft. Lights		
20 7 in length	£12	0	0	£16	0	0	£21	0	0	£28	10	0	£34	5	0
31 3 in length	16	10	0	21	2	6	26	10	0	37	12	0	45	16	0
41 11 in length	20	18	0	26	18	6	33	7	6	46	14	0	57	7	0
52 7 in length	25	12	6	32	15	0	40	5	0	55	16	0	68	18	0
63 3 in length	30	6	0	38	10	0	47	2	6	64	18	0	80	10	0
73 11 in length	34	12	6	43	15	0	53	7	6	74	0	0	92	0	0
84 7 in length	39	6	0	49	11	6	60	5	0	83	2	0	103	11	0
95 3 in length	43	19	0	55	10	0	67	2	6	92	5	0	115	2	0
105 11 in length	48	17	6	60	12	6	73	10	0	101	10	0	126	13	0

The Prices of the Span-roofed Houses, with Water-troughs, Doors, and Ends complete, are as follows:—

Ft. In.	8 ft. Lights			10 ft. Lights			12 ft. Lights			14 ft. Lights			16 ft. Lights		
20 7 in length	£24	0	0	£32	0	0	£42	0	0	£57	0	0	£68	12	[illegible]
31 3 in length	33	0	0	42	5	0	53	0	0	75	4	0	91	14	[illegible]
41 11 in length	41	16	0	53	17	0	66	15	0	93	8	0	114	16	[illegible]
52 7 in length	51	5	0	65	10	0	80	10	0	111	12	0	137	10	[illegible]
63 3 in length	60	12	0	77	0	0	94	5	0	129	16	0	161	0	[illegible]
73 11 in length	69	5	0	87	10	0	106	15	0	148	0	0	184	0	[illegible]
84 7 in length	78	12	0	99	3	0	120	10	0	166	4	0	207	2	[illegible]
95 3 in length	87	18	0	111	0	0	134	5	0	184	10	0	230	4	[illegible]
105 11 in length	97	15	0	121	5	0	147	0	0	203	0	0	253	6	[illegible]

If only one end is required a corresponding deduction will be made. The 14 and 16 feet lights are made stronger than those of less dimensions.

The above prices do not include package, railway freight, heating apparatus, or erection.

Illustrated Circulars with Lists of Prices and Cards to view houses in operation in the neighbourhood of London can be had on application to

SAMUEL HEREMAN, 7, PALL MALL EAST, LONDON, S.W.

JOHN SHEWEN, Sevenoaks, Kent, Manufacturer of all kinds of HOTWATER APPARATUS for Horticultural Purposes, Public Buildings, Dwelling Houses, and Offices, on the most improved principles, and of Rogers's Conical and the Improved Corrugated Saddle Boiler.

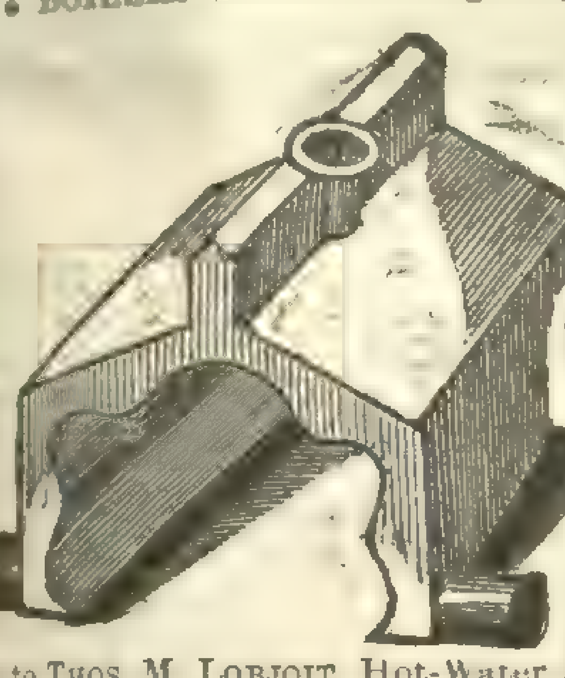
MUSGRAVE'S PATENT SLOW COMBUSTION STOVE.—This Stove is the nearest approach to Warming by Hot Water, and an efficient aid in Ventilation.

It will burn in Churches from Saturday till Sunday evening, without attention during the hours of worship. In Halls will burn day and night for weeks, with little care. Capable of warming a large Apartment for 24 hours, at a cost of 3d.; and deserving of special attention, because of its safety, healthfulness, durability, and extreme simplicity.

It is also made for Small Conservatories, with a vapour chamber, which maintains a moist atmosphere for 12 hours with once filling.

Particulars and prices post free on application to MUSGRAVE BROTHERS, Ann Street Iron Works, Belfast.

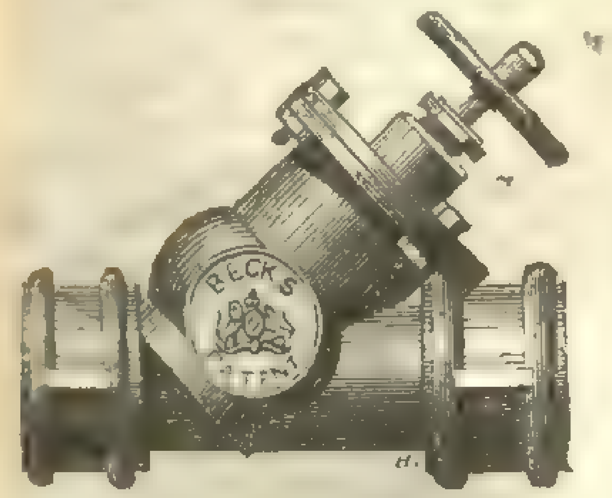
T. M. LOBJOIT'S PATENT HOT-WATER BOILERS are acknowledged by all who have them in use to be the most powerful Boilers now known, and are the most economical requiring less fuel and attention than any other. They are made of various sizes, suitable for heating the smallest Greenhouse to the largest Conservatory, Churches, and Buildings of all descriptions.



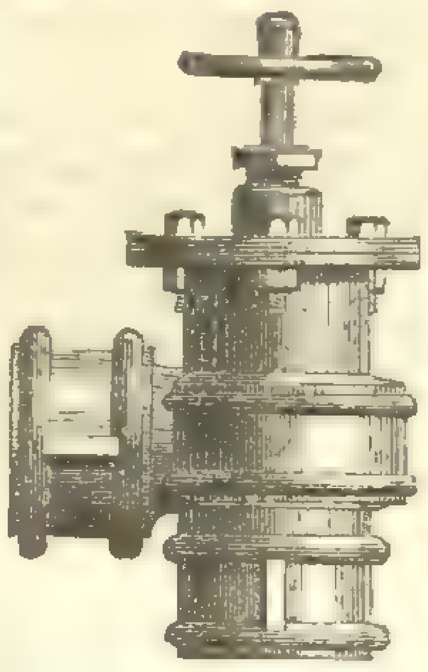
Testimonials forwarded on application to THOS. M. LOBJOIT, Hot-Water Apparatus Manufacturer, General Smith, &c., Turnham Green, W., and at Acton, Middlesex, W.

Horticultural Works, Danvers Street, Chelsea, S.W.

BECK'S PATENT HOT WATER VALVE.



HORIZONTAL VALVE. 2" 18s. 6d.; 3" 25s.; 4" 30s.



ANGLE VALVE. 2" 17s.; 3" 23s.; 4" 28s.

JAMES GRAY, Sole Agent, begs to call attention to this most simple and perfect Valve ever invented. It is perfectly water tight, and is never liable to get out of order, or to get fixed by standing.

TO ARCHITECTS, ENGINEERS, GARDENERS, & OTHERS.—BECK'S Patent Valve has been submitted to several of the most scientific men of the day, and has invariably met with unqualified approval. A liberal Discount to the Trade.

CONSERVATORIES, GREENHOUSES, VINERIES, and every description of HOTHOUSE erected on the most improved principles, and of best materials, at the lowest possible price consistent with good workmanship.

Heating by Hot Water in all its branches. Boilers of every approved description, Tubular, Saddle, Conical, &c.

JAMES GRAY, Horticultural Works, Danvers Street, Paulton's Square, King's Road, Chelsea, S.W.

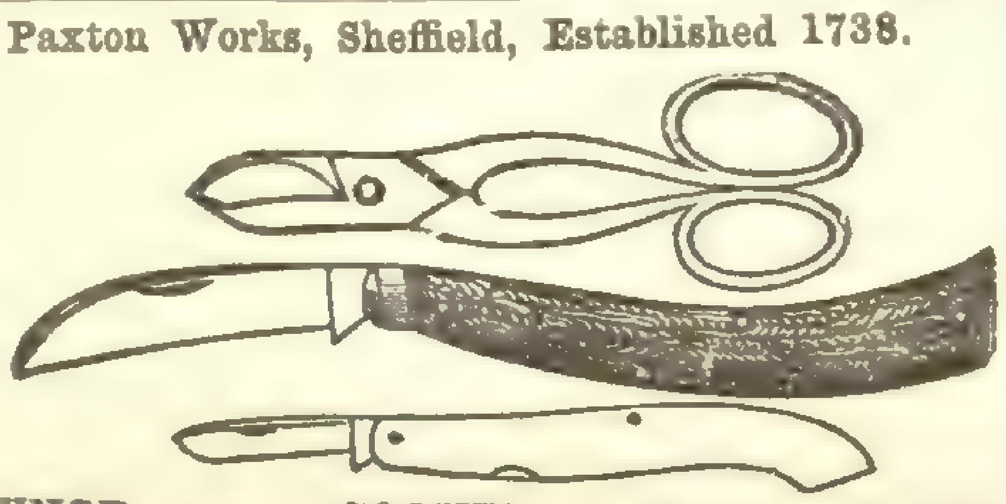
FOR SALE, on very advantageous terms, 7 HOT-HOUSES, GREENHOUSES, and CONSERVATORIES, of all sizes and shapes.

Apply for further particulars to E. DENCH, King's Road, Chelsea, S.W.

WANTED to PURCHASE, one or more SPAN ROOF HOUSES, with 10 or 12 feet Lights, glazed with best Horticultural Glass.

Apply, R. S. BAILEY, Builder, Acton, Middlesex, W.

Paxton Works, Sheffield, Established 1738.



SAYNOR AND COOKE'S warranted PRIZE PRUNING and BUDDING KNIVES, SCISSORS, &c. Sold by all respectable Nurserymen and Seed Merchants in the three Kingdoms.

Important to Gardeners.

WE beg respectfully to inform you that we are now supplying Nurserymen and Seed Merchants with an article superior in quality to anything we have hitherto been able to offer, in PRUNING, BUDDING, and GRAFTING KNIVES, VINE and PRUNING SCISSORS, GARDEN SHEARS, &c., owing to their being tempered under an entirely new process, which renders the blade tough and not liable to break, and also gives the edge a lasting keenness which we can warrant them to retain for at least double the time they would under the old method of tempering, thus facilitating the work and saving the time usually lost by having constantly to renew the edge by sharpening, consequently making them more durable in wear and better adapted for all kinds of work, every blade being guaranteed of the same temper.

CAUTION. None are genuine except marked SAYNOR, or SAYNOR, Maker. Other marks would cause the purchaser disappointment.

GLASS for GREENHOUSES.—SHEET GLASS, Stock Sizes, 16 oz.

Boxes included.	3rds.	4ths.
11 by 9, 12 by 9, 13 by 9, 14 by 9 .. / 12 ,, 10, 13 ,, 10, 14 ,, 10, 15 ,, 10 ..	14s. 0d.	12s. 6d.
13 ,, 11, 14 ,, 11, 15 ,, 11, 16 ,, 11 .. / 14 ,, 12, 15 ,, 12, 16 ,, 12, 17 ,, 12 .. / 18 ,, 12, 19 ,, 12, 20 ,, 12 .. .. / 16 ,, 13, 17 ,, 13, 18 ,, 13 .. .. / 19 ,, 13, 20 ,, 13, 21 ,, 13 .. .. / 16 ,, 14, 17 ,, 14, 18 ,, 14 .. .. / 19 ,, 14, 20 ,, 14, 21 ,, 14	16s. 0d. per 100 feet.	13s. 6d.

English Glass of the above sizes, 18s. per 100 feet.

SMALL SHEET SQUARES, IN 100 FEET BOXES.

6 by 4	6½ by 4½	7 by 5	7½ by 5½	11s. 6d.
8 ,, 6	8½ ,, 6⅝	9 ,, 7	9½ ,, 7½	
		10 ,, 8	10½ ,, 8½	12 6

Boxes 2s. each, returnable at full price.

GLASS FOR ORCHARD HOUSES, As supplied by us to Mr. Rivers.

Sizes		16 oz.	21 oz.
20 in. by 12 in.			
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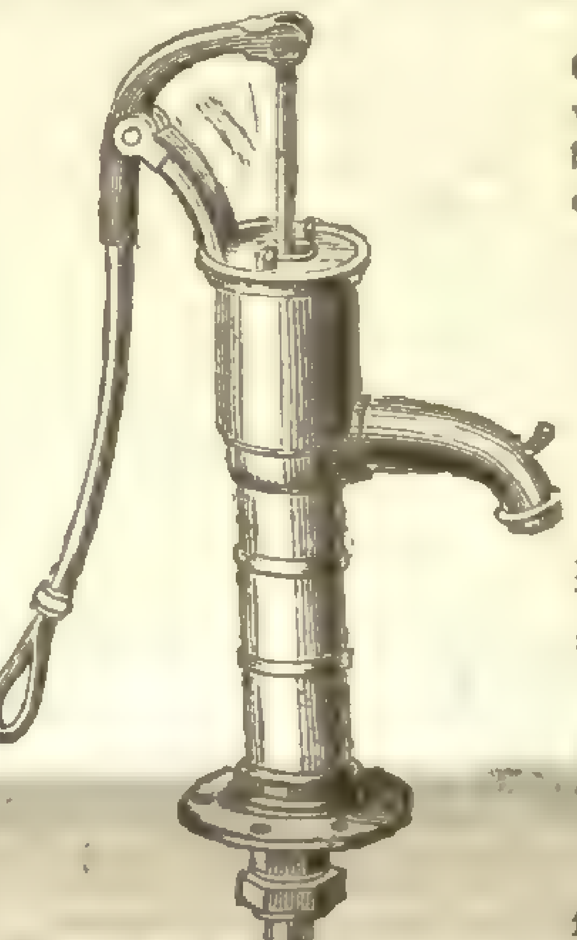

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Diameter of Barrel.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead, gutta percha or cast iron flanged pipe as required.	1 1 0
2½ ,, long	3 ,, 3 ,,		1 10 0
3 ,, ditto	3 ,, 6 ,,		2 4 0
3½ ,, ditto	3 ,, 6 ,,		2 9 0
4 ,, ditto	3 ,, 6 ,,		2 18 0
2½ ,, short, with 15 feet of Lead Pipe attached, ready for fixing			2 0 0
2½ ,, long ditto ditto ditto			2 14 0

This Pump is fitted with J. W. & SONS' Patent Vibrating Standard, Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.

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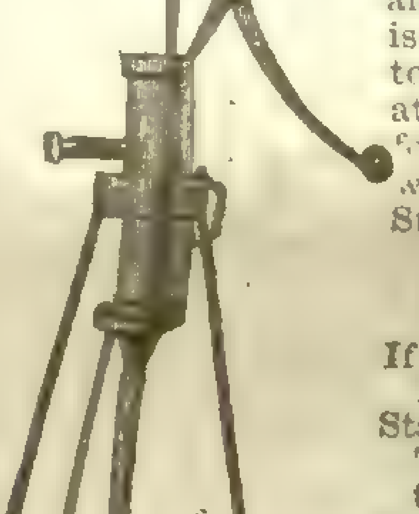

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Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe	2 15 0
If fitted with Barrel of Planished Copper	3 4 0
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2-inch India Rubber and Canvas Flexible Suction Pipe, on wires, in either 10, 12, or 15 feet lengths .. per foot	0 2 5

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Fig. A.

Fig. B.

PRESERVE JARS.

Figs. E.

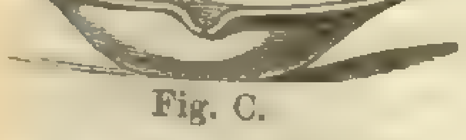

Fig. C.

Fig. D.

Fig. H.

Fig. D.

Fig. F.

Fig G.

Fig. I.

Fig. A. HAND GLASSES.

12 inches ..	6s. 0d.	each
14 ,, ..	7 0	,,
16 ,, ..	8 0	,,
18 ,, ..	9 0	,,
20 ,, ..	10 0	,,
24 ,, ..	12 0	,,

If open top 1s. extra.

Fig. B. PROPAGATING GLASSES.

2 inches ..	0s. 3½d.	each.
4 ,, ..	0 5½	,,
6 ,, ..	0 8	,,
10 ,, ..	1 4	,,
12 ,, ..	1 9	,,
16 ,, ..	3 6	,,
18 ,, ..	5 0	,,
20 ,, ..	7 0	,,

Fig. C. MILK PANS.

6 inches ..	0s. 6d.	each.
10 ,, ..	1 0	,,
14 ,, ..	1 9	,,
18 ,, ..	2 9	,,
20 ,, ..	3 3	,,
22 ,, ..	3 9	,,
24 ,, ..	4 6	,,
26 ,, ..	5 6	,,

Fig. E. PRESERVE JARS.

	Without Lids.	With Lids.
3 inches	0s. 4½d.	0s. 6½d. ea.
4 ,,	0 6	0 9 ,,
5 ,,	0 8	0 11 ,,
6 ,,	0 10	1 2 ,,
7 ,,	1 0	1 4 ,,
8 ,,	1 4	1 8 ,,
9 ,,	1 8	2 2 ,,
10 ,,	2 0	2 8 ,,

Fig. D. HYACINTH GLASSES.

Common .. 3s. 0d. per dozen.
Improved .. 3 6 ,,

CROCUS GLASSES.

Common .. 2s. 0d. per dozen.
Improved .. 2 6 ,,

Fig. F. HYACINTH DISHES.

6 inches ..	1s. 0d.	each.
9 ,, ..	1 6	,,
12 ,, ..	2 6	,,

Fig. G. CUCUMBER TUBES. 1d. per running inch.

Fig. I. ROLLING PINS. 1½d. per running inch.

OPAL DITTO.

14 inches ..	3s. 6d.	each.
16 ,, ..	4 0	,,
18 ,, ..	4 6	,,

Fig. H. FISH GLOBES.

	With Feet.	Without Feet.
8 inches	1s. 9d.	3s. 6d. each.
10 ,,	2 3	4 0 ,,
12 ,,	3 0	4 6 ,,
14 ,,	4 0	6 6 ,,
16 ,,	5 0	9 0 ,,

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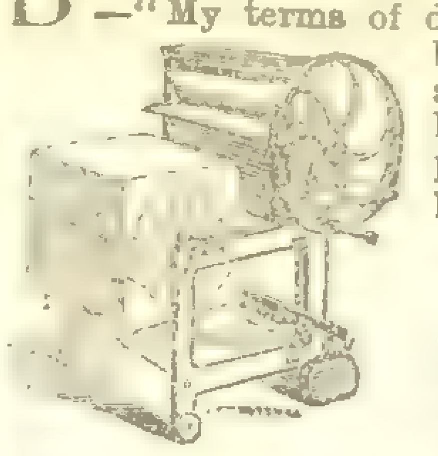

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My original Machine has now been before the public four years, during which time and experience have fairly tested it, and while proving its excellence, have also suggested improvements, both in construction and mechanical detail; the result is, the labour of working is reduced to the smallest possible minimum, while the efficiency is increased, and a compactness and convenience of detail in the arrangements for both Washing, Wringing, and Mangling attained, that at once wins over prejudice, and secures the congratulation of my customers in a manner to cause me regret that the Machines of my original customers (to whom I am so much indebted) do not possess the same advantages.

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NURSERY TO LET, extending over 4 Acres Clay and Loam, in consequence of the Proprietor discontinuing the growing of Nursery Stock. The Stock is light, and more than three-fourths fit for Sale directly. It fronts the main thoroughfare of the town of East Retford, and is within 100 yards of the Railway Station.

For further particulars apply to Messrs. TOMLINSON & SON, Auctioneers, East Retford.

Lang Hedge Nursery, Edmonton, N.

MR. A. RICHARDS has received instructions from Mr. C. WOLVEN to prepare for SALE, the 4th and 5th of NOVEMBER, a large quantity of superior EVERGREENS and SHRUBS, FRUIT and FOREST TREES, &c.

Further particulars will appear next week.

Tottenham, October 19.

The Valuable and Extensive Collection of Established Orchids,

THE PROPERTY OF G. W. SCHILLER, ESQ., OF HAMBURGH.

MR. J. C. STEVENS has received instructions to Dispose of by Private Contract, the Valuable Collection of ORCHIDS belonging to G. W. SCHILLER, Esq., comprising 1380 well grown, and many of them fine Specimen Plants fit for Exhibiting.

The Plants may be seen at Mr. SCHILLER'S, Hamburgh, but Catalogues and particulars can be obtained of Mr. J. C. STEVENS, 38, King Street, Covent Garden, W.C.

Sales by Auction.

Fruit Trees, Evergreens, Ferns, and other Plants.

MR. J. C. STEVENS will SELL by AUCTION, at his Great Room, 38, King Street, Covent Garden, W.C., on SATURDAY, October 26, at half-past 12 o'Clock precisely, 3000 good Plants of DELPHINIUM FORMOSUM, some fine specimen Plants of rare FERNS, a quantity of Dwarf, Standard and Trained FRUIT TREES, Ornamental EVERGREENS, and DECIDUOUS TREES and SHRUBS, &c.

May be viewed on the Morning of Sale and Catalogues had.

Extensive Sale of Nursery Stock, Brenchley.

TO GENTLEMEN PLANTING AND NURSERYMEN.

MR. W. TOMPSETT has been favoured with instructions from the Executors of the late Mr. Henry Austen, to SELL by AUCTION, on MONDAY and Three following Days, October the 28th, 29th, 30th, and 31st, commencing each day at 11 for 12 o'clock, without reserve, on the Premises, the ENTIRE STOCK on the Nursery Grounds, Brenchley, containing 12 acres, which have for many years been successfully carried on by the late proprietor, consisting of rare and choice SHRUBS, EVERGREENS, &c., comprising a variety of Cedars, Pinus excelsa, Smithiana; Juniper, Aucuba Japonica, Cupressus macrocarpa, American, Siberian, and Chinese Arbor-vitæ, Arbutus Taxodium, Althæa frutex, Yews, Hollies, &c., of various heights, Araucaria imbricata, Cedrus Deodara, Berberis, Cotoneaster, Kalmia latifolia, Euonymus, Silver Spruce, Scotch and other Fir, handsomely grown, and Seedling Plants of various kinds; upwards of 300,000 strong Chesnut, Ash, Larch, Fir, Alder, and Willow Plants.

A choice selection of well trained FRUIT TREES, consisting of Peaches, Nectarines, Apricots, Plum, Apple, Pear, Cherry, Figs, Nuts, &c., of the choicest description.

Catalogues may be obtained six days before the Sale by sending six postage stamps to JAMES COLLINS, at the Nursery Grounds; Mr. W. R. TOMPSETT, the Hall, Higham, near Rochester; or to Mr. TOMPSETT, Auctioneer and Valuer, Brenchley, Kent.

Brenchley is $2\frac{1}{2}$ miles from the Paddock Wood Station, South-Eastern Railway.

To Nurserymen, Florists, Market Gardeners, &c.

MR. G. T. CLARKE is favoured with instructions from Mr. George Barley, of Percy Cross, Fulham (in consequence of the Land being required for Building purposes) to SELL by AUCTION, on TUESDAY, October 22, at 12 o'Clock, on the Premises, Walham Green, Fulham, several Lots of young MOSS ROSE STOOLS, of superior growth; also a quantity of very fine 3-year old VICTORIA RHUBARB, fit for forcing or other purposes; two pieces of CAPE BROCCOLI; two strong MARKET WAGGONS, DUNG CARTS, and several other useful effects.

May be viewed the Morning of Sale, and Catalogues had on the Premises; the principal Inns in the London Markets; or of the Auctioneer, 4, Pomona Place, Fulham, S.W.

To Gentlemen, Nurserymen, Florists, and Others.

MESSRS. PROTHEROE AND MORRIS will SELL by AUCTION, at the Mart, Bartholomew Lane, E.C., on FRIDAY, October 25, at 12 o'Clock, a First-class Collection of DUTCH BULBS, consisting of the finest Double and Single Hyacinths, Narcissus, Crocus, Tulips, Ranunculus, Anemones, Gladiolus, Snowdrops, &c. Also a fine assortment of 300 STANDARD and DWARF ROSES, comprising all the newest and most approved kinds. Selected AMERICAN PLANTS, including Ghent and other Azaleas, Hybrid Rhododendrons, Kalmias, Andromedas (beautifully set with bloom buds), &c.

May be viewed the Morning of Sale. Catalogues may be had at the Mart, and of the Auctioneers, American Nursery, Leytonstone, N.E.

Stoke Newington.

MESSRS. PROTHEROE AND MORRIS have received instructions from Mr. C. Grimbly to SELL by AUCTION, on the Premises, Albion Nursery, Albion Road, Stoke Newington, on MONDAY, October 21, at 11 o'Clock, without reserve, the ground being required for immediate alterations, a large portion of the NURSERY STOCK, consisting of several thousand Ornamental, Fruit and Forest Trees, fine Evergreens and Deciduous Shrubs; with an assortment of choice Double Camellias and Azalea indica, from 6 to 10 feet, beautifully set with bloom-buds, Evergreens in pots, 500 Strawberry plants in pots ready for forcing; a handsome Grey Horse, 8 years old, a light Spring Cart, &c.

May be viewed three days prior to the Sale. Catalogues may be had on the Premises; of the principal Seedsmen in London; and of the Auctioneers, American Nursery, Leytonstone, Essex, N.E.

Brixton.

TO GENTLEMEN, NURSERYMEN, FLORISTS, AND OTHERS.

MESSRS. PROTHEROE AND MORRIS are instructed by Messrs. Conolly to SELL by AUCTION, on the Premises, Bedford Nursery, Acre Lane, Brixton, S., on WEDNESDAY, October 23, at 11 o'Clock, without reserve, the NURSERY STOCK, comprising Fine Evergreens and Deciduous Shrubs, handsome Standard and Dwarf Roses, Selected Fruit Trees and American Plants, a quantity of Ivies and Clematis in Pots, &c.; also Greenhouse Plants, including Choice Azalea indica, and Double Camellias, beautifully set with bloom buds; Ericas, 500 Primula fimbriata, Genista, Cinerarias, Pelargoniums, &c.

May be viewed three days prior to Sale. Catalogues may be had on the Premises; of the principal Seedsmen in London; and of the Auctioneers, American Nursery, Leytonstone, Essex, N.E.

Consignment from Ghent for Absolute Sale.

MESSRS. PROTHEROE AND MORRIS will submit to PUBLIC COMPETITION by AUCTION, at the Mart, Bartholomew Lane, E.C., on THURSDAY, October 24, at 12 o'Clock, 800 Double CAMELLIAS and 200 AZALEA INDICA, consisting of all the best varieties, beautifully furnished with bloom buds; 600 strong Bulbs LILIUM LANCIFOLIUM; 200 fine STANDARD ROSES; choice HARDY AMERICAN PLANTS, including Ghent and other Azaleas, Hybrid Rhododendrons, Kalmias, Andromeda floribunda, &c.

May be viewed the Morning of Sale. Catalogues may be had at the Mart; of the principal Seedsmen in London; and of the Auctioneers, American Nursery, Leytonstone, Essex, N.E.

Consignment from Ghent for Absolute Sale.

TO GENTLEMEN, NURSERYMEN, FLORISTS, AND OTHERS.

MESSRS. PROTHEROE AND MORRIS are instructed to SELL by AUCTION at the Mart, Bartholomew Lane, on TUESDAY, October 29, at 12 for 1 o'Clock, 400 choice Double CAMELLIAS, and 300 AZALEA INDICA, beautifully furnished with bloom buds; 200 hardy named RHODODENDRONS, 200 ASCLEPIAS TUBEROSA, 200 strong Bulbs LILIUM LANCIFOLIUM RUBRUM, 200 DELPHINIUM FORMOSUM, 100 PÆONIA CHINENSIS; with 200 handsome STANDARD ROSES of the most approved kinds, including Hybrids, Perpetuals, Bourbons, Noisettes, and Chinas.

May be viewed the Morning of Sale. Catalogues may be had at the Mart; and of the Auctioneers, American Nursery, Leytonstone, N.E.

To Tulip Growers.

MR. J. WILLMER begs to announce that he is instructed by H. Goldham, Esq., to SELL by AUCTION, at the Auction Mart, Bartholomew Lane, on TUESDAY, October 22, at 12 o'Clock, 200 Lots of his costly TULIPS, comprising most of the gems in cultivation, with many new varieties.

On view the Morning of Sale. Catalogues are now ready, and may be had by post on application to Mr. J. WILLMER, Auctioneer, Sunbury, Middlesex, S.W.

Lower Clapton Nursery.

TO GENTLEMEN, NURSERYMEN, AND OTHERS.

MR. A. RICHARDS will SELL by AUCTION, on the Premises, Lower Clapton Nursery, on WEDNESDAY, October 23, at 12 o'Clock, by order of Mr. J. B. Shaw, who is under notice to quit, the ground being required for Building purposes, the whole of the NURSERY STOCK, composed of about 3000 Plants in Pots, including Azalea indica, Acacia armata, Deutzia, Geraniums, Hydrangeas, Clematis, Variegated Ivies, Fuchsias, Calceolarias, and a variety of Herbaceous Plants. Shrubs, Variegated and Green Hollies, Chinese Privets, Arborvitæs, Aucubas, Climbing and Perpetual Roses, and about 70 Lights and Frames, Brick Pits, Foot Tiles, Counter and Seed Drawers, &c.

May be viewed the day previous and Morning of Sale. Catalogues had on the Premises and of the Auctioneer, Tottenham, N.

Nursery Stock. Final Sale. Expiration of Lease.

TO THE NOBILITY, GENTRY, NURSERYMEN, FLORISTS, BUILDERS, AND OTHERS.

MR. KIRKE will SELL by AUCTION on the Premises, Rose Cottage, Fulham Road, W., near the Queen's Elm, on THURSDAY, October 31, and following day, at 11 o'Clock each day, by order of Mr Shearman, the term having expired, the ground being required for Building, the NURSERY STOCK, comprising 10,000 Evergreen Privets, 2 to 4 feet; 3000 fine Young Laurels, 1000 Irish Ivies in Pots, 300 Yews, 2 to 3 feet; 2000 Ribes, 2000 Virginian Creepers, 2000 Persian and other Lilacs, 3000 Euonymus, 10,000 Arbor Vitæ, 1 to 3 feet; Aucuba japonica, Cedrus Deodara, Hollies, Tree Box, Balsam and other Poplars, &c. A Cottage, Green houses, Show and Fitting Sheds, a 3-feet Saddle Boiler, with T piece and Furnace (nearly new); Barrows, 150 Cast of Garden Pots, Foot Tiles, Bricks, Drain Pipes, Water Pipes, Boxes, Benches, a quantity of Gold Fish, Horse, Van, Carts, Harness, Furnaces, Fire Wood, 30 loads of good Potting Mould, Clinkers, &c. Also three Wrought Iron Saddle Boilers, nearly new, with Flow Connections, two 3 feet and one 3 feet 6 inches long.

May be viewed two days prior to the Sale. Catalogues had on the Premises, and at the Offices of Mr. KIRKE, Auctioneer 19, Brompton Row, Brompton, S.W.

NEW SEEDS FOR AUTUMN SOWING.

PETER LAWSON & SON,

SEEDSMEN TO THE QUEEN,

LONDON AND EDINBURGH,

CAN now supply New Seed of TRIFOLIUM INCARNATUM, ITALIAN RYE-GRASS, DWARF ESSEX RAPE, &c., of fine quality.

They are also prepared to supply all the NATURAL GRASSES, either separate or in mixtures, for laying down Permanent Pastures, Lawns, Public Parks, Cemeteries, &c., orders for which will be carefully and promptly attended to.

27, GREAT GEORGE STREET, WESTMINSTER, S.W.

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DESCRIPTIVE BULB CATALOGUE and AMATEURS' GUIDE

TO WINTER AND SPRING GARDENING.

Now Ready, forwarded Free and Post Paid upon application.

THE numerous Species and choice Varieties contained in the above CATALOGUE, combined with the Descriptive Notes, Plain Cultural Directions, and Hints on the Distribution and Arrangement of Bulbs, renders it a valuable assistant, either to the Amateur or practical Gardener.

All Orders of 21s. and upwards sent Carriage paid.

£2 2s. COLLECTION of BULBS, for CONSERVATORY.

24 HYACINTHS, in 12 choice sorts
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25 Sweet-scented JONQUILS
150 NEW SEEDLING CROCUS, 20 sorts
12 DUC VAN THOL, red and yellow Single Tulips
12 ,, rose Single Tulips
12 ,, scarlet Single Tulips
12 DUC VAN THOL, yellow Single Tulips
12 LA CANDEUR, white Double Tulips
12 REX RUBRORUM, scarlet Double Tulips
12 TOURNESOL, scarlet and yellow Double Tulips
12 YELLOW ROSE, yellow Double Tulips
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£2 2s. COLLECTION of BULBS, for the FLOWER GARDEN.

36 HYACINTHS, finest mixed
100 Sweet-scented Double WHITE NARCISSUS
200 YELLOW CROCUS
200 PURPLE CROCUS
200 WHITE CROCUS
200 SNOWDROPS
50 Splendid mixed DOUBLE TULIPS
12 REX RUBRORUM, Double Tulips
12 TOURNESOL, Double Tulips
25 Finest mixed DOUBLE ANEMONES
25 Finest mixed SINGLE ANEMONES
50 Finest mixed SPANISH IRIS
50 SCARLET TURBAN RANUNCULUS
24 LILIES, in four fine varieties
6 Mixed CROWN IMPERIALIS
12 GLADIOLUS BRENCHLEYENSIS
Half the above, 1*l.* 1*s.*

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UNRIVALLED COLLECTIONS OF

BULBOUS FLOWER ROOTS,

FOR BLOOMING DURING THE WINTER AND SPRING.

SEEDSMEN BY APPOINTMENT. Sutton and Sons

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Early Orders are requested before the more scarce kinds are all sold.

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All Goods sent Carriage Free.

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HOLLAND AND BAYLEY'S DESCRIPTIVE CATALOGUE of FLORISTS' FLOWERS, FRUITS, &c., containing carefully selected lists of Carnations, Picotees, Pinks, Pansies, Auriculas, Phloxes, Roses, &c.; also Angelas, Lancashire Show Gooseberries, Currants, &c., is now ready, and may be had on application.

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CAMELLIAS, ERICAS, EPACRIS, ACACIA, JASMINUM GRANDIFLORUM, OTAHEITE ORANGES, &c., of fine healthy quality.

VINES, well ripened, strong for planting out, and extra strong for fruiting in pots, of all the leading varieties.

MUSHROOM SPAWN in fine condition.

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L. T. DAVIS begs to offer a very large and fine Stock of two and three years, at unusually low prices, which, with samples, may be had on application. Carriage free to Belfast.

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Terms and CATALOGUES on application to A. GODWIN & SON, The Nurseries, Ashbourne, Derbyshire.

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ANDREW G. DALY, Newry, Ireland, offers to the Trade:—

5,000,000 Two years SEEDLING THORNS.

500,000 Three years transplanted, Four years old, suited for Railway Fences.

10,000 Upright IRISH YEWS, from 1 to 6 feet high, well furnished, often removed, grown in a very exposed situation, finely rooted.

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Plymouth Nursery.—October 19.

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357 SPRUCE FIR, 3 to 5 feet high
129 LARCH, 4 to 8 feet do.
266 SCOTCH FIR, 3 to 5 feet do.
156 WEYMOUTH PINE, 3 to 5 feet do.

908

The above are all well grown, and in fine order for transplanting.

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WM. WOOD AND SON have much pleasure in offering the following, all healthy and finely grown Plants:—

CONIFERÆ,

Uninjured by the frost and in the most robust health.

Araucaria imbricata, from 1 to 2, 3, up to 8 feet.
Cedrus Deodara, very handsome, 2, 3, 4, 5, up to 6 feet.
Cryptomeria japonica, 1, 2, to 3 feet.
Cupressus Lawsoniana, 1, 2, 3, to 4 feet.
Pinus insignis, very fine, 1 to 2 feet.
Thuja aurea, fine plants, 1 to 1½ foot.
Thujopsis borealis, 1 to 2½ feet.

And all other Conifers equally fine and uninjured by frost.

STANDARD ORNAMENTAL and WEEPING TREES.

American Weeping Willows, extra fine heads, 6 to 10 ft. stems.
Weeping Ash, 8 to 10 feet.
Standard Cotoneasters, 5 feet.
Standard Purple-leaved Sycamores.

FRUIT TREES.

Standard Apples, with clean stems and fine heads.
Dwarf-trained Fruit Trees, particularly fine.
Apples, Pears, Plums, Cherries, Peaches, Nectarines, and Apricots.

N.B. A large quantity of Transplanted SPRUCE FIRS.

CATALOGUES may be had on application.

BOG EARTH.—Some very fine BOG EARTH admirably adapted for Flowers and American Plants. Also WHITE SAND for Walks and Borders.

Apply to Mr. ALLSOP, 3, Union Court, Old Broad Street, E.C.

Printed by WILLIAM BRADBURY, of 13, Upper Woburn Place, and FREDERICK MULLETT EVANS, of No. 19, Queen's Road West, both in the Parish of St. Pancras, in the Co. of Middlesex, Printers, at their Office, Lombard St., Precinct of Whitefriars, City of London, and Published by them at the Office, No. 41, Wellington St., Parish of St. Paul's, Covent Garden, in the said Co.—SATURDAY, October 19, 1861.

THE GARDENERS' CHRONICLE

AND

AGRICULTURAL GAZETTE.

A Newspaper of Rural Economy and General News.—The Horticultural Part Edited by Professor Lindley.

No. 43.—1861.] SATURDAY, OCTOBER 26. {Price Fivepence. STAMPED EDITION, 6*d*.

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ROYAL HORTICULTURAL SOCIETY.—The FRUIT and CHRYSANTHEMUM SHOW at South Kensington, on WEDNESDAY, November 6, and THURSDAY, November 7. Open at 1 o'Clock. Tickets, if purchased before November 6, HALF-A-CROWN; on that day, 3*s*. 6*d*.; November 7, ONE SHILLING. To be had at the Gardens, and of the principal Librarians and Musicsellers.
Next Election of Fellows, November 4.
Head Gardeners by PREPAYMENT before November 2 may obtain Tickets at half-price.
Apply to Mr. GEORGE EYLES, Garden-Superintendent.

CRYSTAL PALACE—CHRYSANTHEMUM SHOW.—The ANNUAL SHOW of CHRYSANTHEMUMS and POMPONES will be held on THURSDAY and FRIDAY, November 14 and 15.
The Entries close Thursday, Nov. 7.
Apply to Mr. W. HOUGHTON, Secretary to the Show.

WM. PAUL'S NURSERIES open to the Platform, Waltham Station (Eastern Counties Railway), half an hour's ride from London. The stock having been recently removed, is in the finest possible condition for transplanting. Inspection respectfully invited.
Cheshunt Nurseries, Waltham Cross, N.

Rose Nurseries, Hertford.
EDWD. P. FRANCIS'S NEW and DESCRIPTIVE CATALOGUE of ROSES, containing all the new varieties in cultivation, is now ready for delivery, and will be forwarded gratis on application.

Roses.
PAUL AND SON'S splendid collection is now in full condition for planting out, as Dwarfs on own roots or worked low on the Manetti. Also a fine selection of Standards for Autumn planting.
A fine stock of Strong VINES from Eyes of all the best varieties for fruiting in pots or planting out.
Address PAUL & SON, "Old" Nurseries, Cheshunt, Herts.

Roses in Pots,
ON THEIR OWN ROOTS, NOW READY FOR SENDING OUT.
WM. WOOD AND SON refer with pleasure to their immense Stock of the above, "the largest in the Kingdom." If the plants are planted out now a season will be gained. Prices on application.
Woodlands Nursery, Maresfield, near Uckfield, Sussex.

Superb Dwarf Roses in Pots,
ADAPTED FOR FORCING OR FOR EXHIBITION.
WM. WOOD AND SON beg leave to offer a very first-rate Collection of TEA, SCENTED and BOURBON ROSES, grown in 6-inch pots, fine half specimen Plants, at 30*s*. to 36*s*. per dozen.
Early orders are solicited to insure the best Plants.
Woodlands Nursery, Maresfield, near Uckfield, Sussex.

New Rose Catalogue.
JOHN CRANSTON'S DESCRIPTIVE CATALOGUE of ROSES for the present season is now ready, and will be forwarded on application. All the finest New Roses of the season will be found fully and faithfully described.
Nurseries, King's Acre, near Hereford.

Roses.
JOHN KEYNE'S NEW CATALOGUE, select and compressed, containing all the best varieties in cultivation, is now ready, and will be forwarded on application.
Salisbury.—October 26.

Roses in Pots on their own Roots.
B. WHITHAM has a large well-rooted Stock of the above from 9*s*. to 18*s*. per dozen.
CATALOGUES free on application.
Clough Nurseries, Mottram, near Manchester.

Roses, Fruit Trees, &c.
WM. KNIGHT respectfully begs to offer to Amateurs both STANDARDS and DWARFS of the above, an immense Stock, which he has no hesitation in saying is one of the best grown in the kingdom.
DESCRIPTIVE PRICED CATALOGUES free.
Floral Nursery, Hailsham, Sussex.

CAMELLIAS.—Handsome Plants full of Flower-buds 18*s*., 21*s*., and 24*s*. per dozen; AZALEAS, well set, 12*s*., 15*s*., 18*s*., and 21*s*. per dozen; ORANGE TREES full of Fruit, 2*s*. 6*d*. to 15*s*. each. The largest Stock in the Trade of British and Foreign FERNS, 3*s*. to 12*s*. per dozen.
R. GREEN, 154, Kingsland Road, N., 55 doors from Shoreditch Church.

Good Seeds, Carriage Free.
SUTTON AND SONS, SEED GROWERS AND MERCHANTS, Royal Berkshire Seed Establishment, Reading.

JAMES CARTER AND CO., SEED MERCHANTS and NURSERYMEN, 237 and 238, High Holborn, London, W.C.

CARTER'S New BULB CATALOGUE is now ready, and will be sent post free on application to 237 and 238, High Holborn, W.C.

Dutch and Cape Bulbs.
BUTLER AND McCULLOCH'S DESCRIPTIVE CATALOGUE of the above, with ample Cultural Directions, sent free and post paid upon application.
Covent Garden Market, W.C.

BARR AND SUGDEN'S CATALOGUE of DUTCH, CAPE BULBS, &c., with a Series of Original Articles on their Culture, may be had free and post paid. See large Advertisement.
12, King Street, Covent Garden, W.C.

Dutch and other Bulbs.
ROBERT PARKER begs to inform his friends and patrons that his PRICED and DESCRIPTIVE CATALOGUE of the above, containing selections of the finest varieties in cultivation, is now ready, and will be forwarded post free on application.
Exotic Nursery, Tooting, Surrey, S.

Dutch and other Bulbs.
B. S. WILLIAMS begs to inform his friends and patrons that his CATALOGUE of the above is now ready, and will be forwarded post free on application. Early orders are solicited, as their successful cultivation depends in a great measure on early planting.
Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway.

Dutch Bulb Catalogue for 1861.
GEORGE S. DODS begs to inform his friends and patrons that his PRICED CATALOGUE of the above is now ready, and will be forwarded free on application.
Epsom Nursery, Surrey.

Dutch Bulbs.
GEORGE CLARKE will upon application send his CATALOGUE of the above, which contains a selection of the best and most serviceable only. The quality never was finer than in the present season, and prices are extremely moderate.
Nursery, Streatham Place, Brixton Hill, near London, S.

New Bulb Catalogue.
SUTTON'S LIST of CHOICE HYACINTHS, CROCUSES, JONQUILS, TULIPS, and other fresh imported Bulbs is now ready, and will be forwarded gratis and post free. The prices are lower this season.
Royal Berkshire Seed Establishment, Reading.

GEO. BAKER'S CATALOGUE of AMERICAN PLANTS and GENERAL NURSERY STOCK is now ready, and may be had on application.
American Nursery, Bagshot, Surrey.

AZALEAS, CAMELLIAS, EPACRIS, and ERICAS.—We respectfully invite an inspection of our stock of the above, which is large, in the finest health, and full of flower buds.
THOMAS JACKSON & SON, Nursery, Kingston, S.W.

Purchasers of Cinerarias should send for
J. DOBSON AND SONS' DESCRIPTIVE LIST of all the leading kinds, at reduced prices. Post Free.
Woodlands Nursery, Isleworth, W.

Purchasers of Geraniums should send for
J. DOBSON AND SONS' DESCRIPTIVE LIST of all the leading varieties, Show, Spotted, and Fancy, at reduced prices, post free to any address.
J. DOBSON & SONS, Woodlands Nursery, Isleworth, W.

First Class New Prize Geraniums.
J. DOBSON AND SONS' Superb New Show, Fancy and Spotted GERANIUMS are now being sent out. See Advertisement in this Paper of Saturday, Oct. 19, page 935. DESCRIPTIVE CATALOGUES gratis.
Woodlands Nursery, Isleworth, W.

Catalogue.
YOUELL AND CO.'S GENERAL and DESCRIPTIVE PRICED CATALOGUE for this season is now ready, and will be sent free on application.
It contains detailed Lists of Greenhouse Plants, Conifers, Shrubs, Gladioli, as well as all the newest introductions in Soft-wooded Plants.
Royal Nursery, Great Yarmouth.

To Noblemen and Gentlemen Planting.
JOHN MOORE AND SON having made large purchases in HARDY SHRUBS, EVERGREENS, &c., beg to invite an early inspection of the same at their
Old Established Nursery, Perry Barr, near Birmingham.

WELLINGTONIA GIGANTEA.—The Undersigned has to offer a large stock of fine healthy Seedling Plants, in single pots, of this magnificent hardy evergreen tree, at 20*s*. per dozen. Price to the Trade on application.
J. HENCHMAN, Edmonton, London.

RICHARD SMITH'S LIST of all the EVERGREEN FIR TRIBE suitable for Britain, giving size, price, popular and botanical names, derivations, description, form, colour, foliage, growth, timber, use in arts, native country and size there, situation, soil, and other information, with copious index of all their synonymes. Free by post for 12 postage stamps.
RICHARD SMITH, Nurseryman, Worcester.

Agricultural Seeds.
GEORGE GIBBS AND CO., SEEDSMEN, 26, Down Street, Piccadilly, London, W.

CHARLES NOBLE'S NURSERY is Ten Minutes' walk from Sunningdale Station, South-Western Railway.

PAMPAS GRASS, in Pots, from 20*s*. to 50*s*. per 100.
RICHARD SMITH, Nurseryman, Worcester.

PAMPAS GRASS. Strong, in pots, 25*s*. and 35*s*. per 100.
JAMES CARTER & CO., 237 and 238, High Holborn, W.C.

TRITOMA UVARIA. For strong plants of this splendid flower apply to
JAMES CARTER & CO., 237 and 238, High Holborn, W.C.

TRITOMA UVARIA var. GRANDIFLORA.—The most beautiful of all. 6*s*., 9*s*., 12*s*., and 18*s*. per doz.
BARR & SUGDEN, King Street, Covent Garden, W.C.

TRITOMA UVARIA GLAUCA, the handsomest variety of this showy herbaceous plant. 9*s*., 12*s*., and 18*s*. per dozen.
BUTLER & McCULLOCH, Seedsmen, Covent Garden Market, W.C.

STRAWBERRIES, STRAWBERRIES, STRAWBERRIES.—All the best varieties. Prices on application.
GEORGE S. DODS, Epsom Nursery, Surrey.

STRONG FRUITING VINES, 7*s*. 6*d*. and 10*s*. 6*d*.
LIST gratis and post free.
JAMES CARTER & CO., 237 and 238, High Holborn, W.C.

Strong Vines from Eyes.
GEORGE S. DODS can supply Strong VINES of all the leading kinds for immediate Planting. A PRICE LIST forwarded on application.
Epsom Nursery, Surrey.

Strong Vines from Eyes.
J. IVERY AND SON beg most respectfully to inform their patrons that they have now ready for planting out, strong Plants of all the best varieties.
A PRICED LIST will be forwarded on application.
Dorking Nursery.—Oct. 26.

Strong Vines in Pots.
JOHN CRANSTON offers strong VINES from Eyes having well ripened Canes.
A LIST of Sorts with prices sent on application.
Nurseries, King's Acre, near Hereford.

FRUITING STRONG VINES, 7*s*. 6*d*. and 10*s*. 6*d*. each.
Extra extra strong, 15*s*. each.
Strong Canes for planting, 3*s*. 6*d*. and 5*s*. each.
E. G. HENDERSON & SON, Wellington Road, St. John's Wood, London, N.W.

PINES.—TO BE SOLD, 90 strong Pine Suckers; 70 strong Successions, principally Queens; all perfectly clean and free from insects.
Apply to Mr. BUNDY, Count de Morella's, Wentworth, Staines. Station Virginia Water, S.W.R.

FOR SALE, a Stock of PINE PLANTS, Fruiting and Succession, strong plants.
Apply to Mr. WAKEFIELD, Hadlow Road Nursery, Tonbridge, Kent.

New Vegetable.
PARSNIP CHERVIL. See *Gardeners' Chronicle* of October 5 and 12.
Fresh new Seed, 6*d*. and 1*s*. per packet.
JAMES CARTER & CO., 237 and 238, High Holborn, W.C.

WANTED, FLUKE POTATOES.—From 20 to 100 Sacks wanted. Large bakers, averaging ½ lb. each. Ill-shaped unobjectionable—provided sample large and true: Cash Terms (exclusive of Sacks) to be enclosed to Mr. JOHN PRINCE, Mr. Jones's Railway Coffee House, facing the North Western Railway Station, Oxford.

Milltrack Mushroom Spawn.
WM. CUTBUSH AND SON are now able to supply the above at 7*s*. 6*d*. per bushel.
N.B. None is genuine unless a pamphlet with our signature attached is enclosed in each packet.
Highgate Nurseries, London, N.

New Plants of 1861.
HENRY WALTON has now ready for Orders, at greatly reduced prices, nice plants of FUCHSIAS, PETUNIAS, VERBENAS, &c., of this season.
LIST of VARIETIES and Prices on application.
Edge End, Marsden, near Burnley, Lancashire.

LARGE DOUBLE SNOWDROPS and YELLOW CROCUS on offer in quantity. Prices on application.
GENERAL BULB CATALOGUE may be had gratis.
JAMES FAIRHEAD & SON, Seed Growers and Merchants, 7, Borough Market, London, S.E.

SUPERB RANUNCULUS.—100 superfine English of various sorts and colours, selected with great care, and unsurpassed by any of the newest named varieties, sent FREE for 10*s*., or 50 for 5*s*. 6*d*.
E. P. DIXON, Yorkshire Seed Establishment, Hull.

PHLOX and CYTISUS RACEMOSUS.—A choice assortment of the finest DWARF PHLOX, good plants in pots, 9*s*. to 12*s*. per dozen; old sorts, 4*s*. to 6*s*. per dozen. CYTISUS RACEMOSUS, nice plants with blooms, 6*s*. to 9*s*. per doz.
JOHN CRANSTON, Nurseries, King's Acre, near Hereford.

New Rose Catalogue for 1861-62.

WOODLANDS NURSERY, MARESFIELD, NEAR UCKFIELD, SUSSEX.

WM. WOOD AND SON have the honour to announce that their CATALOGUES of ROSES and GENERAL NURSERY STOCK are now ready for distribution.

It is generally admitted that the county of Sussex has suffered less from the effects of last winter's frost than any other county in England, in consequence of which W. W. & Son have to offer a remarkably fine stock of Roses and Nursery Stock in general.

Rose Catalogue.

WM. PAUL (Successor to the late A. PAUL) respectfully announces that his NEW ROSE CATALOGUE is now ready for circulation.

Owing to the division of the Cheshunt Nurseries in the Autumn of last year, the greater part of his Roses were removed, and as a consequence escaped the devastating effects of the winter's frost. Standards, Half-Standards, and Dwarfs are alike vigorous and healthy, and he believes that his stock of Roses this autumn is the largest and finest in the country.

Cheshunt Nurseries, Waltham Cross, London, N.

Hardy Japanese Plants, New Roses, &c.

JOHN STANDISH has great pleasure in submitting the above to the consideration of his friends and the public in general, far exceeding in interest any that he has ever had the opportunity of sending out at any one time.

For a DESCRIPTIVE LIST of NEW FERNS, HARDY JAPANESE PLANTS, NEW ROSES, &c., see *Gardeners' Chronicle* for the first Saturday in every month.

Besides the above J. S. has a fine stock of CONIFEROUS PLANTS, HARDY SHRUBS and TREES, and a very large stock of VINES, which he can offer at reasonable prices, CATALOGUES of which will be shortly ready for distribution.

The Royal Nursery, Bagshot, Surrey.

New Azalea indica.

J. IVERY AND SON feel much pleasure in offering their two beautiful Seedlings, CARNATION and TRICOLOR, small plants at 10*s*. 6*d*., and larger at 21*s*. each.

They are fully described in our CATALOGUE, with all other Novelties of the Season, which will be forwarded post free upon application.

A fine lot of half Specimens and Standards for Sale.

Dorking Nursery, October 26.

New Roses, on Sale 1st November, 1861.

DUCHER, HORTICULTEUR, Rue de la Mouche, No 4, A la Guillotière, Lyon, France.

ROBERT FORTUNE.—Hybrid Perpetual; branches vigorous, long, straight; flower very large, full, cup formed, perfect, very bright red, very sweet smell; flowers abundantly, One of the finest varieties hitherto known. Strong plants, price 25 francs.

NOTRE-DAME DE FOURVIERES.—Hybrid Perpetual; branches very vigorous, long, very few thorns; flower very large, full; colour, tender rose, like satin, well shaped; very sweet smell. This variety somewhat resembles the old hybrid Jeanne d'Arc, but its flower is larger and fuller. Average plants, price 20 francs.

The above are on dwarf stocks.

New and Rare Plants.

MESSRS. E. G. HENDERSON AND SON respectfully call attention to the following:—

SEDUM CARNEUM VARIEGATUM, introduced by Mr. Von Siebold from Japan, of whom they have purchased the entire stock.

EPIGYNIUM LEUCOBOTRYS, figured in the "Illustrated Bouquet."

PENTAS ROSEA KERMESINA, very useful as a winter-flowering plant for Drawing-room Bouquets.

PETUNIA BRITISH LION, fine habit, rich crimson.

CAMELLIA ETOILE POLAIRE, carmine scarlet-striped.

COLEUS VERSCHAFFELTI, bright bronze crimson leaves.

LAPAGERIA ROSEA, newly gathered Seeds. Trade supplied.

CLOTH OF GOLD GERANIUM, 1*s*. 6*d*. and 2*s*. 6*d*.

GOLDEN FLEECE GERANIUM, 1*s*. 6*d*. and 2*s*. 6*d*.

GYNERIUM ARGENTEUM (PAMPAS GRASS), 3*s*. and 3*s*. 6*d*. per dozen. Strong at 1*s*. and 1*s*. 6*d*.

Wellington Road, St. John's Wood, London, N.W.

Ericas, Epacris, and Chrysanthemums.

YOUELL AND CO. having a large stock of the above for winter flowering, beg to offer them at the following prices:—

	Per dozen.—*s*.	*d*.
ERICAS, fine large bushy flowering plants, best kinds for winter and early spring bloom	15	0
EPACRIS, do. do. do. do.	15	0
CHRYSANTHEMUMS, the newest and very best kinds of Large Flowering and Pompone varieties, bushy plants well set with bloom	9	0

Royal Nursery, Great Yarmouth.

Carnations, Picotees, and Pinks.

YOUELL AND CO. have now ready for sending out fine strong well-rooted plants of the above at the following prices:—

CARNATIONS, finest first-class varieties by name, 18*s*. and 24*s*. per dozen pairs.

PICOTEES, finest first-class varieties, by name, 18*s*. and 24*s*. per dozen pairs.

Ditto, on yellow grounds, 20*s*. and 30*s*. per dozen pairs.

Finest mixed BORDER CARNATIONS and PICOTEES, 9*s*. per dozen pairs.

True old CLOVE CARNATIONS, 12*s*. per dozen pairs.

Scarlet ditto ditto 18*s*. ditto

White ditto ditto 24*s*. ditto

PERPETUAL FLOWERING or TREE CARNATIONS, 12*s*. to 18*s* per doz.

PINKS.—Our extensive collection of these enable us to offer the finest first-class varieties by name at 6*s*. and 9*s*. per dozen pairs; or 40*s*. per 100 pairs.

Fine mixed for Borders, 4*s*. per dozen pairs; or 30*s*. per 100 pairs.

Royal Nursery, Great Yarmouth.

Gladiolus Brenchleyensis (True).

YOUELL AND CO. beg to announce they are in a position to offer this season large Flowering Bulbs of the above magnificent GLADIOLUS, unequalled by any other for its brilliancy of colour, which is vermilion scarlet, and allowed to be the best and brightest variety known.

They have much pleasure in submitting the following report from the Editor of the *Gardeners' Chronicle*:—

"GLADIOLUS BRENCHLEYENSIS. — We have received from Messrs. YOUELL & Co., of Great Yarmouth, some specimens of this plant, the gorgeous appearance of which cannot be spoken of in terms of exaggeration. The tall robust habit and intensely bright scarlet flowers place it at the head of all the hardy flowers of the autumn."

It was also exhibited by them at the Crystal Palace Show, and was awarded an Extra Prize. Price 4*s*. per doz. or 30*s*. per 100. Trade price on application.

CATALOGUES of their extensive collection of GLADIOLI are now ready.

Royal Nursery, Great Yarmouth, Norfolk.

NEW SEEDS FOR AUTUMN SOWING.

PETER LAWSON & SON,

SEEDSMEN TO THE QUEEN,

LONDON AND EDINBURGH,

CAN now supply New Seed of TRIFOLIUM INCARNATUM, ITALIAN RYE-GRASS, DWARF ESSEX RAPE, &c., of fine quality.

They are also prepared to supply all the NATURAL GRASSES, either separate or in mixtures, for laying down Permanent Pastures, Lawns, Public Parks, Cemeteries, &c., orders for which will be carefully and promptly attended to.

27, GREAT GEORGE STREET, WESTMINSTER, S.W.

BARR & SUGDEN, SEEDSMEN,

12, KING STREET, COVENT GARDEN, W.C. (OPPOSITE the GARRICK CLUB).

Orders amounting to 21s. sent Carriage Paid to any Railway Station in the Kingdom.

BARR & SUGDEN'S *Emporium for imported DUTCH FLOWER ROOTS, and the most elegant and ornamental style of HYACINTH GLASSES.*

The beautiful SCILLA SIBIRICA, for edgings, 12*s*. 6*d*. per 100.

PAXTONIAN COLLECTIONS of IMPORTED DUTCH FLOWERING BULBS

OF PRIME QUALITY, SUITABLE FOR THE DECORATION OF THE FLOWER GARDEN.

The Columns G, H, I, J, K, L, show the number of Bulbs sent for the amount named at the top.

	G. 5*l*. 5*s*.	H. 3*l*. 3*s*.	I. 2*l*. 2*s*.	J. 1*l*. 1*s*.	K. 15*s*. 6*d*.	L. 10*s*. 6*d*.
HYACINTHS, various	100	70	50	30	20	15
POLYANTHUS NARCISSUS, various	50	30	30	20	10	10
TULIPS	300	200	150	100	75	50
CROCUS	500	300	200	100	100	100
ANEMONES	300	200	100	50	25	
RANUNCULUS	300	250	200	100	100	50
SNOWDROPS	300	200	100	50	50	50
IRIS, splendid English, mixed	100	70	50	20	15	10
GARDEN NARCISSUS, various	100	80	50	25	20	20
CROWN IMPERIALS, mixed	12	6	6	3		
IXIAS	50	30	20			
SCILLA SIBIRICA	18	12	9	6		

BARR & SUGDEN, London Agents for TYE'S REGISTERED HYACINTH GLASSES and DRAWING-ROOM FLOWER VASES, ILLUSTRATED BELOW. These Glasses vary in price from 10*s*. 6*d*. per dozen to 21*s*. per pair. PRICED LIST on application. A large assortment always in stock.

The failures and annoyances too frequently experienced in growing Hyacinths in Glasses may be entirely avoided by using Tye's Hyacinth Glasses and Supports, and attending to the Cultural Hints in B. & S.'s *Catalogue.*

No. 1. No. 2. No. 3.

The VICTORIA, EUGENIE, and IMPERIAL Sets of the above form the most unique Drawing-room Ornaments for the Culture of Hyacinths in winter, and for Cut Flowers in summer, ever offered for sale.

BARR & SUGDEN'S COLLECTIONS of IMPORTED DUTCH FLOWERING BULBS

FOR THE DECORATION OF THE CONSERVATORY AND FLOWER GARDEN.

The Columns A, B, C, D, E, F, show the number of Bulbs sent for the amount named at top.

	A. 5*l*. 5*s*.	B. 3*l*. 3*s*.	C. 2*l*. 2*s*.	D. 1*l*. 1*s*.	E. 15*s*. 6*d*.	F. 10*s*. 6*d*.
HYACINTHS, splendid varieties, for in-door decoration	60	40	25	20	15	12
,, for out-door decoration	30	25	15	10	6	
POLYANTHUS NARCISSUS, for in-door decoration..	25	18	12	3	3	
TULIPS, for in or out-door decoration	200	150	100	40	20	20
JONQUILS, for in-door decoration	25	12	12	3	3	
IXIAS and SPARAXIS, for out or in-door decoration..	25	20	12	6		
CROCUS, for out-door decoration	400	300	200	100	100	100
ANEMONES ,, ...	200	100	75	20	12	10
RANUNCULUS ,, ...	200	150	100	50	25	20
SNOWDROPS ,, ...	200	100	100	50	50	50
GARDEN NARCISSUS ,, ...	100	80	50	25	20	20
CROWN IMPERIALIS ,, ...	6	6	6			
IRIS, splendid English ,, ...	25	18	12	6	6	6
SCILLA SIBIRICA, for in or out-door decoration	18	12	9			

BARR AND SUGDEN,

12, KING STREET, COVENT GARDEN, W.C. (OPPOSITE the GARRICK CLUB).

MINNIE BANKS and COMET.
Coloured Plate, 1s. 6d. per post.

The above FUCHSIAS possess first-class properties, and show a striking advance on all others which have been sent out since the white corolla varieties were introduced.

E. G. HENDERSON & SON, Wellington Road Nursery, St. John's Wood, London, N.W.

CHÆROPHYLLUM BULBOSUM.
Figured in *Gardeners' Chronicle*, Oct. 5, 1861.
New Seed, per packet, 6d. and 1s. each.

The BULB CATALOGUE free, and the BULB GUIDE on receipt of 18 postage stamps.

E. G. HENDERSON & SON, Wellington Road Nursery, St. John's Wood, London, N.W.

New Cinerarias, Gloxinias, and Pelargoniums.

F. AND A. SMITH can still supply a few sets of their New GLOXINIAS, CINERARIAS, and PELARGONIUMS.

See *Gardeners' Chronicle* of Oct. 5, and CATALOGUE, which may be had gratis.

Dulwich, Surrey, S.

Prize Hollyhock Seed.

DOWNIE, LAIRD, AND LAING are now sending out in sealed packets, 12 of the finest varieties of HOLLYHOCKS, saved from their unrivalled collection, price 5s ; and same sorts, mixed, 1s. and 2s. 6d. Free by post.

17, South Frederick Street, Edinburgh ; and Stanstead Park, Forest Hill, London, S.E.

Prize Hollyhocks.

DOWNIE, LAIRD, AND LAING have an immense Stock of fine healthy Plants of the above, price 18s., 24s., 30s., and 42s. per dozen. CATALOGUES free on application.

D., L. & L. were awarded the First Prize for 11 Spikes of Hollyhocks this season at the Crystal Palace, Royal Horticultural Society of London, Brighton and Edinburgh Horticultural Societies Exhibitions.

17, South Frederick Street, Edinburgh ; and Stanstead Park, Forest Hill, London, S.E.

Superb Double Hollyhocks.
SAFFRON WALDEN NURSERY.

WILLIAM CHATER'S 15th ANNUAL DESCRIPTIVE and NEWLY CLASSIFIED LIST is now ready, and will be forwarded to any address on receipt of one postage stamp.

WILLIAM CHATER, Nurseryman and Seedsman, Saffron Walden, Essex.

Superb Hollyhocks.
EIGHTEEN THOUSAND PLANTS OF NAMED VARIETIES, INCLUDING THE BEST IN CULTIVATION.

R. B. BIRCHAM in offering the above begs to observe that considerable advantage would accrue to purchasers by receiving their plants in autumn instead of spring. By shifting into larger pots, and placed where they are protected from the *extremes* of wet and cold, the plants will become extra strong for spring planting, when an *earlier* and *stronger* bloom will be obtained, ripen more seed, &c.

CATALOGUES forwarded upon application.

Hedenham Rosery, Bungay, Suffolk.

Can be Seen at Sunningdale Nursery, Sunningdale Station, South-Western Railway.

CHARLES NOBLE invites inspection, and would remind all interested, that his RHODODENDRONS have taken First Prizes at the opening Show of the Royal Horticultural Society, and every other show at which they have been exhibited during the last two years.

RHODODENDRONS for forcing; KALMIAS for forcing; and a magnificent stock of all the finest kinds of Rhododendrons in the world. CONIFERS and Hardy EVERGREENS by the 100 or 1000. ROSES and a General Nursery Stock well worthy the inspection of intending Planters or Nurserymen.

Chrysanthemums, Chrysanthemums.

J. H. BIRD, F.R.H.S., NURSERYMAN, Stoke Newington, N., begs to inform his friends and the public that his beautiful collection of the above flower is now in bloom, and also some very beautiful new Seedlings.

N.B. This collection of Chrysanthemums cannot be equalled at any nursery in England.

To be seen gratis every day between 10 and 4. Sunday excepted.

New Garden Seeds, Growth of 1861.

ROYAL BERKSHIRE SEED ESTABLISHMENT.

SUTTON AND SONS, are now prepared to execute orders for all kinds of GARDEN SEEDS. The prices will be lower and the quality finer than usual owing to the very favourable harvest.

Royal Berkshire Seed Establishment, Reading.

The Gardeners' Chronicle.

SATURDAY, OCTOBER 26, 1861.

OUR Correspondent "W. T.", in remarking on our observations on THE TREES OF PARIS, states that the evils of deep planting had escaped our notice. We were however perfectly aware of the prevalence of this practice, agreeing with him as to its pernicious results, and he will find in the article he refers to that "In the care bestowed on the selection of individual trees for planting, *in the operation of planting itself*, and in the subsequent treatment of planted trees, the French appear to be still so far behind ourselves that it is useless to enter into particulars." If we afterwards specially mentioned the cutting off the heads and swathing the stems, it was because these are peculiarly French practices from which good results had been expected, but which have failed. Deep planting is one of the numerous faults which intelligent French planters deprecate as much as we do, but which is still frequently practised by ignorant workmen, even with us. Forty years ago we saw a great deal of French avenue planting, especially in the South, the country of OLIVIER DE SERRES. A square hole was usually dug in the hard soil—say a yard across, and 18 inches or 2 feet deep. On the flat bottom of this hole was placed a young tree drawn up in a nursery, so as to have a straight stem of 6 to 8 feet, with the whole head clean cut off, the roots so cut in taking up that they seldom extended to a foot from the trunk, the ragged ones never pruned, and often much dried up from exposure to the air for days, or even weeks, after being taken up. When thus duly trimmed, according to the saying we often heard, "Quand un jardinier planterait son père, il lui couperait la tête et les pieds,"* it was held upright in the centre of the hole by one man (or woman), often rammed down on the bottom to make it stand steadier, whilst another shovelled in the soil, quite regardless as to whether it was fine enough to get in amongst the fibres, or how high it reached up the stem, and, when all was in, it was well trodden down to make all steady. A planted tree was treated in short like a large cutting. This might do very well for Willows, Poplars, and others, which readily produce adventitious roots, but was the cause of many a failure when the introduction of variety in plantations first came into fashion; and, when once planted, the tree was generally left to itself. If the soil was tenacious, the hole acted as a water-tight tub in which the rain that fell became stagnant. If any better soil were put round the stem, rank weeds were allowed to exhaust it, and any future pruning was solely directed to prevent any branches from being developed except at the top of the stem or pole. These views have ere this been frequently pointed out and are avoided by careful planters, but traditions of them must remain in the routine practice of ordinary workmen, and none are perhaps more obstinately adhered to than the deep planting pointed out by "W. T.," the neglect of the roots, and the want of drainage for the stagnant water which might collect in the holes.

We cannot agree however with "W. T.'s" idea of bad taste displayed in the public gardens of Paris. There are no "ribbon-panelled or Mosaic borders" it is true, but that is a matter of fashion. More or less of taste may be shown in either of the two principal styles, the architectural and landscape gardening. Forty years back all was architectural in France and landscape with us. Now the fashions are being reversed. Terraces, stone steps, statues and vases, straight walks, formal basins and fountains, and geometrical parterres were the characteristics of the finest appendages to their grand châteaux, or if ever there was an attempt at a "Jardin Anglais," it was either a patch of shrubs in a square enclosure with labyrinth like walks meandering through them, or perhaps two rows of Horse Chesnuts, with a meadow between them and a serpentine walk down the centre. Now, architectural gardens (of which the beautiful ribbon-panels and Mosaic borders now the rage in England are a new ingredient), are quite scouted in France as antiquated, like the *ancien régime*. If they again come into fashion, which is not unlikely, there is little doubt that their patterns will be fully as tasteful as ours. Their splendid new gardens are all in the landscape style, and we certainly cannot admit any want of taste or any chaotic mixture either in the Champs Elysées or the Bois de Boulogne.

With regard to the Luxembourg gardens, like the Sénat, representative of the defunct peerage to which they belong, they certainly have somewhat of an odour of senility about them, but even here the display of flowers is by no means contemptible, and in the Tuileries there is, we think, much to admire, if some peculiar circumstances affecting them be taken into consideration. The original design, one of the finest specimens of the style of Le Notre, is we think judiciously kept up, as being well adapted for the purposes of a public promenade and resort of the bourgeoisie within a large city at all times of the year. It is now, however, so far modified that the upper portion has for the last few years been divided off as a private garden where the young PRINCE IMPERIAL might take air and exercise unmolested by public importunity, for the Tuileries Palace had not a single square yard of private ground attached to it. This portion may therefore be compared with the gardens of Buckingham Palace, with this difference, however, that while the public are allowed to circulate freely in the Tuileries' reserve when the Court is absent, they are at all times strictly excluded from our Palace Gardens. Very few of that public have ever seen these gardens to compare them, but those who have will certainly admit that they cannot show the taste and elegance of the Tuileries reserve. In the latter the broad terrace, the basins and geometrical parterre of the original design are preserved, but they are surrounded by green lawns and shrubberies so planted as to keep off in a great measure the public gaze, without having the appearance of formal screens, and in September the whole was as richly green and as gaily decked out with a profusion of flowers, as tastefully arranged as to size and colour as any we have seen in that style. In the next or central portion of the Tuileries the original design is strictly adhered to in the form and arrangement of the beds, walks, basins, terraces, &c., but the whole is very much better kept than it used to be, the flower beds are relieved by green lawns within the parterre, and to our eyes the flowers in the beds are well planted. The object to be attained is, throughout a great length of border, to keep up an uninterrupted succession in as full flower as possible from early spring till autumn frosts, and this is much more readily accomplished in mixed borders, provided the mixture is judiciously made, than by large masses of single kinds, for the latter, when past flower, must be replaced *in toto*, leaving the border for a time flowerless, whereas in a mixed border the plants next in succession are coming on whilst those actually in flower keep up the gay general effect of the bed. A "confused jungle" would indeed have had a very bad effect in so formal a pattern, but of these we have of late years seen no signs. The arrangement of the plants with a view to colour, height, and a gradual succession has appeared to us to have steadily improved during the last 10 years, and, if one bed is nearly a repetition of each corresponding one, that is a necessary consequence of the pattern. At the time of our recent visit to Paris the plants were all removed, the soil was undergoing a thorough renovation, the drainage was being improved, the statues and ornaments gone to be cleaned and repaired, &c., and it is possible that in replanting them some new plan may be adopted. Fashion has now in England substituted ribbon for mixed borders, it may do the same in the Tuileries, and, if so, we have no doubt that it will be well done; yet we can hardly think it will have so good an effect in that situation, as the maintenance of those mixed borders which have been so gay for so many years.

The lower or third portion of the Tuileries is the well known grove crossed by a broad alley. In this there is no attempt at horticultural embellishment, yet we doubt much whether Parisians would willingly forego the dense shade it affords during the intense heats of June and July. The anxious wish of the authorities is now to devise some means of preventing the early decay of its foliage which we have before alluded to. This may not be so entirely the effect of the deteriorated atmosphere, as the Parisians, including the highly intelligent, experienced, and scientific heads of the Jardin des Plantes, believe; yet that the increased consumption of coal is gradually producing results similar to those we suffer from in London, is clearly evidenced by the increased blackness of the tree stems, and by the rapidity with which the new buildings assume a dingy hue.

One word more as to "W. T.'s" observation on the "ridiculous management" of their "poor tortured Orange trees." The Orange tree, in a square box, with a round formal head, is an essential part of the old-fashioned architectural garden, and the readiness with which a symmetrical shape can be given to a number of individuals, the beautiful contrast its rich green foliage affords with the statues and similar decorations, render it peculiarly adapted for the embellishment of terraces and broad walks, independently of the delicious scent it exhales during a great part of the year. It must, however, be housed in winter, and its branches cannot be allowed their natural growth, which after all would produce a compact round head, not unlike that given to it in tubs, but on a larger scale; it is not, therefore, well suited for M. BARILLET's landscape gardens, and he has not taken it in hand. The long celebrated Orangeries of Versailles, the Tuileries, and the Luxembourg, are thus perhaps considered somewhat in the light of things gone by, and left much to old routine management. Those of the Tuileries have also perhaps suffered from bad air, but at Versailles there are still some magnificent specimens; not, it must be admitted, showing the healthy vigour of the Orange trees of Herren-

* "If a gardener had to plant his father he would cut off his head and feet."

hausen at Hanover for instance, nor most certainly such as we in England, at least, ought to speak of with disrespect. *B.*

—— It has been stated that the common well-known BEDDING SCARLET PELARGONIUMS, the varieties called Tom Thumb, Trentham Scarlet, and Punch, are undoubtedly the three best for general bedding purposes. Tom Thumb in the month of July entirely beats the Trentham Scarlet or Crystal Palace, and the Frogmore, which are hardly distinguishable; while in September they beat him as completely. Punch, if not quite so robust in constitution, would beat both, and in any case is the best of all for large beds.

—— Our Correspondent, the Rev. W. F. RADCLYFFE, writing in the *Florist*, thus sums up his experience about NEW ROSES:—Gloire de Santhenay and Chabrillan are the two most perfect Roses that have come out since M. Regnier appeared; Triomphe d'Amiens is the most distinct of any; and for its colour Madame Bonnaire is the greatest acquisition.

—— Another Correspondent of the same work, who signs himself "S. T. C. C.," strongly recommends AYRES' BLACK SPINE CUCUMBER. He says, "I know of no variety equal to it for a supply the whole year. It is one of the finest bearing varieties I know, showing two or three fruit at every joint, and I generally leave on all the fruit that shows. I do not want fruit the enormous length some people like Cucumbers—from 12 to 15 inches answer our purpose far better than 18 inches or 2 feet, especially as we can always cut from the short growers, and only now and then from the long ones. This variety cuts up quite back to the stem, and carries a beautiful bloom, equal in winter to its appearance in summer."

—— Some remarkably fine samples of the SALWAY PEACH from Mr. THOMPSON, of Stanstead Park, recently exhibited at South Kensington, show this to be a very valuable variety for the dessert, if only for its appearance. They were large and fine, of a rich orange yellow blotched with crimson, and had a really beautiful appearance. The flavour proved to be good for late fruit, which is the character in which this Peach has always promised to be most useful.

—— A statement having been made by Mr. "D" that the AURICULA GEORGE LIGHTBODY was weakly in constitution, deficient in ground colour, and not equal to Lancashire Hero, we find the raiser Mr. HEADLY, who is well known and much respected in the floral world, makes rejoinder, that there is not an Auricula in his collection of more robust habit, two plants which bloomed this season having produced the one 15 the other 11 pips, and both having perfected seed; and that these blooms were as near perfection as possible, being circular in the tube, as well as in the paste and ground colour, the edge being perfection itself, and the paste more dense than in any other variety Mr. HEADLY cultivates.

—— The *Moniteur Vinicole* states that the vintage throughout France has been favoured by magnificent weather, and exceeds the expectations which had been formed respecting it; the accounts received from the departments being unanimous in describing the quality of the wine as very superior, and the quantity greater than was expected. Thus, at Sancerre, while the quantity is said to considerably exceed the expectations formed, the quality may be compared with the best vintage experienced within the last quarter of a century. The accounts from Lyons state that the wine there is excellent in quality; and those from the Drôme speak of the vintage as surpassing the hopes of the growers, the crop being abundant, and the wine of very superior quality. Similar information has been received from the Hérault. The ravages of the Oïdium seem therefore to be checked, temporarily at least, and, let us hope, permanently.

—— Writing of GLADIOLI, a correspondent of *Gossip of the Garden* states that some years' experience has taught him, that they like manure not only in a substantial but also in a liquid state. The Editor quite agrees with his correspondent, having found, he says, from experience how well they do with it, especially those grown in pots. It is however recommended to be used in moderation.

—— The hardy herbaceous DIPLOTAXIS TENUIFOLIA VARIEGATA has been recommended for ribbon-rows and edgings in flower beds. It forms a mass about 9 inches high, is very hardy, and is easily propagated in spring. The flowers are insignificant, but the plant is kept in better order by cutting them off. This variety seems worth attention for the objects above alluded to, and it is even hinted that it equals the Golden Chain Pelargonium; but it may be very useful without doing that. Its fault is the disagreeable smell of the leaves when touched.

ANOTHER BOUGAINVILLEA.

ANOTHER of the Bougainvilleas may now be regarded as having been brought under the dominion of cultivators. We allude to one sometimes known as B. splendens, but which proves to be in reality the B. glabra of botanists. It has not, indeed, the gorgeous character of B. speciosa—that magnificent species, the successful blooming of which at Swyncombe House recalled the attention of gardeners to materials which they had long had close at hand, but had turned to little account; but it has nevertheless some good qualities of its own, as we hope to show.

This B. glabra is the plant about which Mr. Duncan wrote in our columns last year (*Gardeners' Chronicle*, 1860, p. 833). He states that it had been received by him from South America between two and three years previously under the name of B. splendens, and describes it as a plant of slender habit, with small glabrous leaves, and appearing to flower throughout the whole year. In illustration of its free flowering habit, Mr. DUNCAN mentions having had a plant in a 48-pot, which plant had bloomed without any particular care. He also tells us that the mother plant, which had made but little progress in the first year after it had been received, owing to its being in a sickly state, had subsequently covered a considerable space of trellis, and had commenced flowering about 12 months previously to his writing, continuing up to that time in flower. "It has been," he writes, "the admiration of every person who has seen it, and has consequently become the favourite species here; and I think there can be no question it would be the best for growing in hothouses in England." Another Correspondent, writing from Holkham (see p. 875, 1860), records having bloomed the same species during the autumn of last year; and now Mr. DANIELS, who made us acquainted with the glories of B. speciosa, has succeeded with this also, as recorded the other day in our report of the proceedings of the Royal Horticultural Society's Floral Committee, at whose meeting some very fine specimens were shown, and properly rewarded.

We have in the foregoing facts an intimation that the subject of these remarks will be an autumn or winter blooming plant, and therefore available at a season when its more gorgeous relative can hardly be expected to flower. This is one of its merits. The experience of Mr. Duncan indeed points to the possibility of its blossoming season, once fairly commenced, being nearly or quite continuous, which if really the case will add still more to its usefulness. But we learn from Mr. Daniels another point which tells immensely in its favour. He says, "it is much less difficult to bloom and cultivate than B. speciosa." So that with facility of cultivation, and a distinct season of blooming in its favour, with a smaller and more neat habit of growth, this B. glabra may fairly claim a position by the side at least of that which with our present information we must admit to be the more brilliant species.

Mr. Daniels describes the plant in his possession as being less than a year old, and as having been grown in a greenhouse, with "nothing more than greenhouse treatment" through the summer. It is now 5 feet in height and well furnished with branches, at the point of every one of which a panicle of flowers has been borne. "I have not the least doubt," he writes, "that it will do well in a warm conservatory, being much hardier than B. speciosa, and being so easily managed I think it will be much sought after when it becomes known."

The plant itself is very distinct in appearance from B. speciosa, being much more slender in its growth, and having smaller and narrower leaves, and being also almost smooth, and quite destitute of the shaggy hairs found on the other plant, its only clothing being a fine short down. The inflorescence is less dense, in this respect more like the Paris plant, the true B. spectabilis, to which we referred in the *Gardeners' Chronicle* of April 20 in the present year. In the specimens now produced the bracts were both smaller and more pointed, as well as paler in colour than in speciosa; but as Mr. Duncan describes them as "nearly of the same colour as those of spectabilis, but larger," it is probable that the want of size may be attributable to pot-culture, and the more pallid colour may be the consequence of their being produced under the influence of an autumnal atmosphere, and if so these are defects which are remediable. The colour of the bracts was a soft delicate rosy tinted mauve, some shades paler than in speciosa; and the flowers themselves, which are nearly as long as the bracts, open of a delicate primrose and change to buff.——*

A VISIT TO THE PHILIPPINES.

ALTHOUGH colonised since 1570, it is only within a somewhat recent period that much has been known respecting the immense riches of this Archipelago.

Consisting of nearly 1000 islands, mostly mountainous, yet interspersed with rich plains and vallies, watered by numerous rivers and mountain streams, teeming with the richest vegetation to the summits of the highest peaks, and possessing immense mineral wealth; there are few unexplored countries more promising to the scientific world, or which offer greater advantages to men of commercial enterprise.

Botanically but little is known of what these islands produce. Cuming, Fortune, and Lobb have all visited them. The former spent some three years here, gathering together one of the finest collections of plants, shells, and insects ever taken to Europe. The two latter made but passing visits, and had not therefore the opportunity of adding much information to that previously known.

The Philippines have long been known to contain a great variety of Orchidaceæ. The few species hitherto introduced from thence, consisting principally of those found in the vicinity of Manila, have been looked upon as the rarest and most beautiful of their class.

The extreme moisture of the atmosphere appears peculiarly suited to their growth, as also to that of Ferns, Lycopodiums and Mosses, of which a great variety are found, more particularly on mountains of medium elevation.

Manila, the capital of the Philippines, usually forms the starting point of all travellers, being the port most easily reached from China.

The country in the immediate vicinity of the town is flat. The forests have been entirely cleared, and Rice and Sugar are extensively cultivated. Manila is situated on the banks of the river Pasig, which communicates with the large lake or Laguna, and the mountainous districts surrounding it, and forms at once a direct and easy mode of proceeding into the interior. The usual means of travelling is by canoes, which are constructed sufficiently large to allow persons to sleep very comfortably.

But little variety presents itself until arriving at the lake. Several species of Bamboos overhang the banks of the river, and the surface of the water is partially covered with the floating aquatic Pistia Stratiotes.

The Laguna is nearly 20 miles in length, with an average width of 10 to 12 miles, and is almost entirely surrounded with mountains of considerable elevation. The principal of these are Jajahala, San Cristobal, Calawang, San Pablo, Maquilin and Mahaihay. The last named peak attains a height of 7500 feet, clothed to the summit with rich vegetation.

These are the districts where the beautiful Phalænopsis amabilis and rosea were first found, but being of late years so much sought after, these species are becoming exceedingly rare. Aerides, Dendrobiums, Phalænopsis, Saccolabiums, and Vandas, are the leading genera of Orchidaceæ met with in these localities.

Ferns are plentiful in most ravines, but more particularly on ascending Mount Mahaihay. On this mount at an elevation of 1000 feet, near the village of the same name, the vegetation is very luxuriant. Several species of Palms and tree Ferns abound. Angiopteris evecta is very common; and the genera Davallia and Pteris are the most plentiful of the smaller growing kinds. One hour's walk from the village is a beautiful cascade; the Niagara of the Philippines. A considerable stream rushes over a precipice of 300 to 400 feet, and flows through a narrow channel into the Laguna. This locality is peculiarly rich in all kinds of vegetation, but more particularly in Ferns and Mosses. Scarcely a day passes without a shower of rain, and this, combined with the heavy dews at night, keeps up a continuation of excessive moisture, and causes everything to grow with great luxuriance, and the whole country to assume a freshness seldom seen elsewhere.

The rhizomes of several species of Ferns are eaten by the natives in the interior. The fronds are carefully gathered for the manufacture of hats. When nicely plaited the latter are very pretty, and afford capital protection from the sun.

The principal Palms met with are Areca, Calamus, and Livistona. The foliage of all, but more particularly of the first, is used by the natives for roofing their houses, canoes, &c. Several layers of these leaves form a very cool and waterproof covering.

It would be useless my attempting to give any description of the beautiful and varied scenery of these districts. One becomes bewildered amongst such richness. Every spot appears more beautiful than that seen before. The greatest difficulty the traveller experiences is to know in what direction to proceed amongst such vast unexplored fields.

To the northward of Manila are the districts of San Mateo, Bosoboso, and Antipolo. These localities, although well worthy of a visit, scarcely contain the same variety as is found in the vicinity of the lake. The country is flatter and more cultivated. The atmosphere is also much drier, and the vegetation consequently less luxuriant.

The natives pay little or no attention to a garden. The generality of native houses are built on piles from 3 to 4 feet from the ground. This is a most necessary precaution against the vapour which is continually arising. Bamboo and leaves of the Areca Palm are the only materials required. A small plot of ground is enclosed round the house, which is generally hedged in with a row of some kind of variegated plant, such as Croton variegatum, Dracæna terminalis, Graptophyllum pictum, &c. Within the enclosure a few specimens of the Betel Nut Palm (Areca catechu); the Chocolate (Theobroma Cacao), and Plantain form the only plantations.

The islands to the south of Luzon are scarcely so well known as the vicinity of Manila. Mr. Cuming succeeded, I believe, in getting to Mindanao, calling at Panay and some of the intermediate islands on the way. During this trip Vanda Batemanni and many other fine plants were discovered.

The larger islands are all gradually becoming opened for the purposes of trade. Spaniards have settled at all the principal ports, and other Europeans are increasing every day.

The whole of the islands, with scarcely an exception, are mountainous. There are several volcanoes, which still continue to emit smoke. The same luxuriant vegetation exists everywhere, the branches literally hanging so low that the sea washes them.

Mindoro is considered the richest island as regards

minerals. Gold, silver, copper, and lead, are found there. The inhabitants of this island are only partially civilised, and hitherto but little commercial progress has been made.

Guimara produces the finest Sappan wood, which is largely exported from Manila to Europe.

Panay is one of the islands longest under Spanish rule, and consequently more advanced in civilisation and trade. The island is divided into three provinces, viz. Antigué, Capis, and Iloilo. Spanish officials are attached to each province, and every facility is afforded for the purpose of commerce. Large quantities of sugar are sent direct from Panay to Australia. Tobacco is also very largely grown for the Government cigar manufactory of Manila.

Cebu, Negros, Leyte, and Mindanao are the principal remaining islands where an extensive trade is carried on. Cocoa, Coffee, Cotton, Hemp, Indigo, Rice, Sugar, Tobacco, and Wheat form the chief products of these islands. The communication is kept up amongst the several ports by means of a very numerous fleet of coasting vessels, varying in size from a small canoe to schooners of 200 tons burden.

These islands produce a great variety of fruit. Europeans however consume only a very few, the chief of which are Mango, Orange, Lime, Pummelo, Guava, Pomegranate, Pine Apples, Plantains, and Chico. The latter is a small fruit about the size of an Apple, containing a soft pulpy matter with a strong flavour of Coffee. The famous Mangosteen does not exist. The natives consume the fruit of great numbers of other trees, but scarcely any of which are approved of by Europeans.

A cloth or muslin of peculiarly fine texture is made from the fibre of a species of Ananassa. It is usually made by the women of the southern islands, but more particularly on the island of Panay. Ladies' dresses, scarfs, handkerchiefs, &c., are made of this "Pina," and realise very high prices.

The timber trees of the Philippines are peculiarly abundant and fine. Some kinds have been found well adapted for ship building. Vessels of considerable size are annually being constructed. One has only to enter the forests to find timber suitable for every purpose. The trees are generally of a great height, and remarkable for their straightness. Great care, however, is necessary in selecting trees for building purposes. The wood of a great number is soft, and of comparatively little value. The great rapidity of growth is probably the cause of this in a great measure.

No one can fail to be pleased with a trip to these islands, nor avoid being struck with their natural riches. The climate is doubtless somewhat trying to Europeans. From January to March the temperature averaged 78° Fahrenheit. From April to June the average was 80° in the shade.

June, July, and August form the rainy season, and are consequently to be avoided by persons visiting these islands. Rain pours down for days and days, incessantly, and renders every road impassable.

Provided with the customary Spanish passport, granted to all Europeans, one may travel a very considerable distance into the interior of almost all the islands without the slightest fear of being molested. No wild animals exist which are at all dangerous. Indeed, the wild boar, deer, and monkey may almost be said to be the only animals met with. Snakes are more plentiful and dangerous. Some of them are of an immense size. The natives are exceedingly afraid of snakes, and very quick in seeing them.

The inhabitants are invariably most civil and polite, and with encouragement willing to work for you.

The aborigines (of the negro race, with short woolly hair) have been gradually driven into the interior as the Malays and Europeans have advanced. None of them have ever been civilised by the Spaniards. They live in their mountain haunts, and but seldom come in contact with the other inhabitants. Although uncivilised, they never injure a white man, unless previously provoked or attacked.

The Malays, who may be said at the present time to form the principal population of the Philippines, are exceedingly easy people to deal with. The whole of them have become Roman Catholics. The smallest village has a priest attached to it.

These people are somewhat averse to hard work. Their chief hobby is dress, on which they expend large sums. Gambling and cock-fighting are their principal amusements. The latter is looked upon as necessary to every man's life. Enormous sums of money are staked on a single bird, and the winner of many battles is often sold for sums equivalent to 40*l*. or 50*l*.

In travelling I have invariably found these people to be proud to give a white man a lodging and the best of everything they possessed. *Manila, June 25th.*

SPORTING PELARGONIUMS—ROLLISSON'S UNIQUE, &c.

The facts stated at p. 925, relative to the sporting of Rollisson's Unique, are by no means exceptional. I have had in years past several similar examples, not only in sporting branches but also in the flowers on the same truss, being part lilac and part crimson; and five or six years back I had an example of the Scarlet Unique—a sport I suspect from Rollisson's—which produced several trusses, in which there were both scarlet and lilac flowers.

The Lilac Unique was first sent out by Mr. Wm. Ivery, of Peckham, and originated in the shape of a sporting branch obtained by a gardener on Peckham Rye from a plant of Rollisson's Unique. It is pretty and useful, but not so handsome as the parent.

Rollisson's Unique no doubt originated with the father of the present proprietors of the Tooting Nursery, but whether from seed or by a sport it is impossible to say. Whatever may be its origin no doubt Davyanum was one of its parents, and from the close identity if not positive sameness of the foliage and habit of the plant I strongly suspect it to be a sport from that variety, and my impressions are intensified by the fact that it is exceedingly difficult if not impossible to get Davyanum to set seed; indeed I tried my utmost some years back but failed. The downy foliage, the style of truss (though much larger than that of Davyanum), the colour of the flower and straggling habit, all point to Davyanum as one of the parents, and cross-bred perhaps P. concolor, which Sweet describes as a strong grower, suitable for training to trellis work, was the other parent. The truss of P. concolor is more like Unique than any other of the old Geraniums, not excepting Hussyanum, Wellsianum, Broughtonianum, and ignescens, which is, perhaps, the parent of the whole of this section. Rollisson's Unique is also a very shy seeding plant, but a strong pot-bound plant placed under a south wall may sometimes be induced to produce a seed or two. It is, however, a difficult matter, and I never succeeded but once, and then only to the extent of three perfect seeds. These produced plants identical in appearance to the parent and to each other; the flowers were also identical in colour, but the truss being inferior, the plants were destroyed. This I have frequently regretted, for had they been tried as breeders and found fruitful, they might have produced a useful race of plants. The ground, however, is worth opening up again, and those who have strong root-bound plants may another season make the experiment, crossing, if they can, with some of the Oak-leaved species or varieties; but it will be useless to attempt to cross with either the show or fancy kinds.

There are in the trade two varieties of Rollisson's Unique, one a stronger grower and much superior kind to the other. There are also two varieties of the Scarlet Unique, one an old Oak-leaved kind called Defiance, and the other, though a much stronger grower, I still suspect to be a sport from Rollisson's, for in the sporting flowers of both varieties the identity of colour of the lilac flowers was complete.

This Scarlet Unique, as far as I could ever ascertain, is of Continental origin, having come to this country either from France or Belgium. It is a strong constitutioned, small trussed, loose growing kind, but does not make such an effective specimen as the best variety of Rollisson's Unique, which is really, in a decorative point of view, a most excellent plant, so good that perhaps a few hints on its management may not be out of place.

HOW TO MANAGE THEM.

Few persons succeed thoroughly in striking the more delicate of the Oak-leaved, such as Unique, Moore's Victory, Quercifolium and Q. superbum, or even Lady Mary Fox, and yet they are not more difficult to strike than the ordinary varieties so long as the work is set about at the right season, and the wood is in a thoroughly ripened state. In that condition every leaf-bud and many flowering shoots will make a plant, but to put in soft succulent cuttings at any season is just time and space thrown away; nor is it wise to take cuttings from plants in the open border, unless the soil is very poor and the wood is better ripened than is usually the case. All the Oak-leaved varieties strike freely from roots; or rather, perhaps, I had better say root-cuttings, if properly treated, soon make plants.

To begin, however, at the beginning, if you want a stock of young plants procure one or two old specimens of each variety, and place them for a summer month or two in the full sun, at the same time gradually decreasing the supply of water until the plants are brought into a state of rest—or at least have ceased to make active growth. This being attained take the plants and cut them down, leaving just sufficient buds at the base to form a few shoots. Put the old stool aside, and water it cautiously until it begins to make fresh shoots. In the meantime take the branches, and commencing at the point of each divide them into cuttings, retaining a leaf bud and leaf if possible to each, and from 2 to 3 inches of wood below the bud. Clean the cuttings properly, being careful to remove the stipules, especially from ill-ripened cuttings. Wood of two or three years growth if cut with a bud will strike and make plants quite as well as the younger growth. The cuttings may be put in pots in turfy loam, leaf-mould, and rough sand, being careful to make them firm, and to use water with great caution, especially until the cuttings show signs of growth. If propagation is commenced in August, the best time, the cutting pots may be placed in a frame facing the north, but later in the season a south aspect will be the best, for the advantage of drying the cuttings should the weather be dull and damp. If the weather is bright, syringe lightly every afternoon, and shut down close, but before leaving the garden for the night tilt the lights a few inches back and front, so as to allow a free circulation of night air; or if the night is not rainy, the sashes may occasionally be drawn off with advantage, and may be left off the next morning until the cuttings are free from superfluous moisture. Now you must not expect the Oak-leaved varieties to strike in a few days like some of the Scarlets (I have known Tom Thumb produce roots within 48 hours); they will require several weeks to form roots, and be sufficiently established to pot off.

In the mean time, and while they are getting established, prior to potting singly let us have a look at the old plant. It has now produced shoots, and is in a fit state to be what is technically called "shook out," that is the soil is shaken from the roots, and the latter are so reduced in quantity as to fit the plant to be placed in a very small pot. If the plant was much pot bound, some of the roots possibly may be 2 or 3 feet long, and ranging in thickness from the size of a Cedar pencil to the fineness of a hair at the point. Now take these roots, and cut them into lengths of an inch to an inch and a half, leaving the top of the cuttings or rootlings horizontal, but sloping the bottom, so as know one end from the other. Prepare the cutting pots in the usual way, coating them with sand, and then proceed to put in the rootlings, placing them about an inch apart, leaving half an inch above the sand, and making the soil firm and neat; give sufficient water to settle the soil, and the work is done.

Root cuttings differ from branch cuttings in the treatment they require; the latter must have shade to prevent the too rapid loss of their juices, but the former require light to organise the sap and enable it to form buds and shoots; therefore only shade rootlets from the most scorching sun, and to prevent the tissue being dried up. Under a hand-glass or in a small frame is the best place; give them air both day and night, sprinkle and shut up every afternoon for a few hours, but you may expose the cuttings before leaving for the night. With proper attention small callosities will begin to form in about a fortnight or three weeks, and in a short time afterwards incipient buds and green leaves will be perceptible. Continue the same treatment, guarding specially against a dry, parched atmosphere, and also with equal jealousy against an over moist one, which will cause the cuttings to damp. Rootlings, of course, are not so strong as cutting plants, and hence they must be allowed to gather considerable strength before they are potted off, and be carefully attended afterwards. The rootlings will be much strengthened if the surface of the pots is lightened up and the plants receive an occasional soaking of weak manure-water.

Presuming the plants both from cuttings and roots are sufficiently established and rooted to be fit to pot off, prepare the necessary quantity of pots of the requisite sizes, and drain them properly, placing over the drainage a little rough turfy loam mixed with half-decayed leaf-mould, and if to be had a little charred cow-dung. I am no advocate for bone-dust over the drainage as used by some, as in dull damp seasons, and in varieties predisposed to "spot," all strong stimulating manures have a tendency to increase the evil.

The best soil for soft-wooded plants not requiring peat is good turfy loam intermixed with rotten horse-dung, a small quantity of cow-dung, and plenty of gritty sand. Such a compost, varying the proportions according to the constitution of the plant, taking care to be on the side of not using too much manure, will grow Pelargoniums as well as they need be grown. Having prepared a compost of this kind run it through a half inch sieve, taking care to make the whole pass through; add an extra handful of sand for the first potting, and you are ready to commence operations. In thinning the cuttings out of the pots, as a general rule it is best to have the soil comparatively dry, so that it will fall freely from the roots without breaking them. As the plants are potted remove them to a close frame or pit, and sprinkle them lightly. Keep the frame close and shaded if necessary, syringing lightly in the afternoon, but allow a free circulation of air through the night. This is the secret of the production of dwarf stubby plants: a cool moist atmosphere through the day, and plenty of air by night. As soon as the plants are established, and the roots begin to run round the sides of the pots, increase the air by day until you get the plants hardy, and the leaves feel firm and crisp. This is the time to lay the foundation of your future specimens. Let the plants become rather dry, and then off with their heads or "stop" them as it is technically called, leaving four or six buds to form the plant, but taking off the leader above them. Keep the plants rather dry at the root until the buds begin to swell, but sprinkle daily, and increase the supply of moisture at the root as the shoots begin to elongate. We have now brought the propagation to a successful issue. In another fortnight the young plants will be fit to pot, and then we will return to the subject. *P. A. W.*

GRAPES AND OTHER FRUIT

(LATELY EXAMINED BY THE FRUIT COMMITTEE OF THE ROYAL HORTICULTURAL SOCIETY).

Early White Malvasia and *Burchardt's Amber Cluster Grape.*—These proved to be synonymous. When the latter fruited in the Garden during the past two seasons, the Early White Malvasia was not in the collection, and as it could not be identified, it was supposed to be a distinct sort. After a close comparison this season there can be no doubt that the two are perfectly identical. There is every appearance that *Early Kienzheim* will also prove synonymous with Early White Malvasia.

Smith's Sweetwater.—This is not exactly a Sweetwater, but a form of Royal Muscadine, to which it bears a considerable resemblance. It seemed, however, to differ from Royal Muscadine grown along with it, and was particularly rich in flavour, while the latter was comparatively deficient in that respect.

Stillward's Sweetwater is a true Sweetwater, with a good-sized cylindrical, well-set bunch, with large transparent-skinned berries. This was compared with Chasselas Vibert, which is so like it as not to be known apart; the latter, however, is firmer and more crackling in the flesh than Stillward's Sweetwater, but decidedly inferior to it in flavour.

Foster's White Seedling is a fine Grape, with a large showy bunch, well set with rather large roundish-oval berries, and is quite distinct in character from either the Royal Muscadine or the Sweetwater. As an early Grape it ripens with the Royal Muscadine, and is of first-rate quality.

A *White Grape* from a Vine presented by Mr. Whiting, of the Deepdene, and named Syrian, proved to be very different from that variety, and had more the appearance of the White Lisbon imported from Portugal during the winter months. The fruit is large and white, with a transparent skin, showing the texture of the flesh below. The flesh is firm and crackling, watery, and sweet.

Morisca preta.—A small round black Grape, and a small bunch. The flavour is sweet, but the Grape possesses no merit.

Muscat St. Laurent and *Muscat Ottonel* are two very small-bunched and small-berried Muscat Grapes. They have the full Muscat flavour, but the flesh becomes mealy, and neither of them has any merit besides earliness. They ripen before either the Royal Muscadine or the Sweetwater, and in the opinion of the Committee are not worthy of cultivation, except as objects of curiosity. Being so early, might they not ripen out of doors against a wall as freely as Black Cluster or the Sweetwater?

Muscat Hamburgh.—There was a very good bunch of this variety, and the berries were both well developed and well coloured. The great fault that has been found with it as grown in the Garden in pots is, that a large proportion of the berries are undeveloped. In this case, however, they were not so, and were of good size, rich in flavour, and with a very marked Muscat aroma.

A *Seedling Grape* was received from Mr. Thomson, gr. to his Grace the Duke of Buccleugh, Dalkeith Palace, accompanied by the following communication from Mr. Thomson:—"The Vine sent is a seedling raised from the berry of the Muscat of Alexandria, crossed with the pollen of Chasselas Musqué in the year 1859; in March, 1860, the seed was sown, consequently the Vine was only 18 months old when the bunch was cut. Last year the Vine had all the appearance of being a pure Muscat, and when it broke into leaf this season, it was obvious the cross had not taken effect, and when the berries were set I did not feel certain that it was far removed from the Muscat, and thinned the bunches more than they ought to have been, which gives the bunch a less

compact appearance than it otherwise would have presented. The bunch sent is one of two on the same branch. The Vine—though not stronger in spring than a straw—has borne six bunches; they are ripe, while in the same house—which has only had an occasional fire during cold weather—the Golden Hamburgh will not be ripe for a month, the Black Prince just beginning to change colour, and both Bowood and Common Muscats are quite green. Many gardeners who have tasted the Grape here this month think it combines the Muscat and Chasselas Musqué flavours, but of this your Committee will be the proper judges." The bunch sent by Mr. Thomson was 9 inches long, of a long tapering shape, well set, and not shouldered. The berries were quite small, round, of a pale greenish colour, and covered with a thin bloom. The flesh tender, juicy, rich, and sugary, with a fine piquancy, and with a distinct trace of the Muscat aroma, but not so strong as in Chasselas Musqué, or the Frontignans. The Committee were of opinion that the flavour of the Grape was excellent, but that the berries were too small, evidently arising from the young and feeble state of the Vine, and from so small a plant having borne so many bunches. They recommend Mr. Thomson to exhibit the fruit again next year, after the plant has attained more vigour, and has been grown under more advantageous circumstances.

Two bunches of a *new White Grape* were sent by Mr. Constantine, gardener to C. Mills, Esq., Hillingdon Court, with the following communication:—"A cutting of this Vine was given to me in 1857 by Mrs. Mills, under the name of Chavoush. It had been sent from Bithynia, Asia Minor—and was said to be the best Grape that the Sultan had at his table. It is a strong grower, and very free bearer, bearing well under pot culture. It requires about a fortnight longer than the Black Hamburgh to ripen; but does not require the heat which the Muscat does to ripen it." The large bunch exhibited was 9 inches and a half long, tapering, very well set, and with one large shoulder. The berries are large long-oval; the skin is of a fine light-amber colour, thin, and adhering close to the flesh, which is rather firm, juicy, rich, and highly flavoured. The bunch is very showy, and will prove a valuable addition to our collections of large-bunched white Grapes. It was unanimously awarded a First-class Certificate.

A *Seedling Peach* called Early Victoria was received from Mr. Rivers, of Sawbridgeworth, along with the following communication:—"I send you four fruit of a seedling Peach, which I have this moment gathered from the parent tree raised from a stone of the Early York Peach in 1854. It has hitherto proved the earliest of all, except the Red Nutmeg, which it promptly succeeds. This season it commenced to ripen on the 5th inst., or about a week earlier than its parent, the Early York, and this has for four years (namely, from 1858, when it first gave me fruit, to the present time) been its tendency, with the exception of 1858, when in common with very young seedling Peach trees (as I find from experience), it ripened its fruit very early, and quite 10 days before its parent. "It has large flowers, serrated leaves, and a habit robust and vigorous in the extreme, being with the Early York the only sort that was not killed last winter in the open quarters where the frost was most severe—from 4° to 6° below zero. If thought worthy of a name, I propose the Early Victoria. Enclosed with the seedling are fruit of Early York Peach, Petite Mignonne Peach, Early Ann Peach, all growing in the same house, and alongside of the seedling." he fruit was about medium-size, pale yellow on the shaded side, and dark dull maroon on the side next the sun. The flavour was most delicious, and the fruit was highly approved by the Committee as a variety for orchard house cultivation, but they suspended judgment upon it as an out-door variety, until it had been grown against a wall in the open air. It was much superior to the three varieties that accompanied it.

Mr. Rivers also exhibited a *seedling Nectarine*, raised from Fairchild's, which proved to be exactly like its parent, but apparently not so early, as it was unripe.

Mr. Meyers, of Boston Road, Brentford, exhibited specimens of *Bemposta Apple*, a Spanish variety, of which large quantities are now exposed for sale in the markets, imported from the Peninsula. (*Society's Proceedings, somewhat abridged.*) [This Apple is from Portugal. Cuttings were first imported by E. Brande, Esq., and worked in the Garden of the Horticultural Society. It is either the Reinette du Canada, or very like it.]

TRADE MEMORANDA.

Who is George Wimple of Warrington?

Home Correspondence.

Cotton Cultivation in India.—A rather animated controversy is now being carried on in the *Times*—on the subject of Cotton culture, and the expected extension of the Cotton trade in India—between the Committee of the "Cotton Supply Association of Manchester" on the one side, and Mr. James Petrie, late engineer of the Coimbatore Cotton Farms on the other. The matter in dispute being essentially agricultural in its nature, though mixed with a considerable dash of the commercial element, I should like to see it discussed in your columns, and, with your permission will endeavour to place before your readers a general view of the subject, by whom I feel sure the debatable points will be skilfully investigated and have new light thrown upon them. The object of this appeal to your contributors is to request their assistance towards the solution of two questions which, it seems to me, gardeners and farmers only are competent properly to investigate and decide. These are, can the staple of Cotton be permanently altered and improved by superior cultivation of the plant; and can the productiveness of the plant be materially increased by high farming? Of course, reasoning from analogy and with the figure of that latest agricultural prodigy, Pedigree Wheat, lying before me, it seems impossible to doubt the possibility of greatly changing for the better both the productiveness of the plant and the quality of the staple by judicious culture; but still, as I will by and by show, the task is not a very easy one, nor one to be entered upon now for the first time. Reports on reports of Parliamentary Committees have for the last 40 or 50 years been published on the subject of improving, both in quantity and quality, Indian Cotton, and attempts to attain this much-desired object, almost without number, have been made in almost every part of India, but hitherto with only partial success. About 20 years ago the Court of Directors of the East India Company, at the suggestion, I believe, of the Manchester Cotton interest, entered systematically on the task on a great scale. Their first step was to engage the services of 10 experienced Mississippi Cotton planters (the best Cotton being brought from that state), and send them to India for the purpose of introducing the American Cotton plant and with it the most perfect form of American Cotton farming, it being at that time supposed that the inferiority of the Indian staple was mainly attributable to the imperfect culture. Their instructions were primarily to introduce the American Cotton plant, and with it American Cotton farming into India (of course expecting that under American culture it would be as productive as in Mississippi), and next, to try to improve the indigenous one by their superior husbandry, in the expectation that its staple might be thereby improved and lengthened, so as to admit of its being used as a substitute for "New Orleans" by English spinners. With these objects in view the planters arrived, well provided with American agricultural implements and a good supply of excellent fresh seed. Still further to ensure success and prevent jarring between them and existing authorities, superintendents were appointed in each of the Presidencies to correspond for them direct with Government, but having no control over their agricultural operations. It fell to my lot to be appointed Superintendent of the Madras branch of the experiment, with which I continued connected from 1840 until 1853, when I left India. The first half of our instructions, that of introducing the American plant, was easily effected, 13 years of invariable success having proved to us that it could be perfectly naturalised in India: moreover, that it could be as easily, and much more profitably cultivated than the indigenous one: that whatever soils suited the one were adapted to the other; that the staple fetched in England prices very nearly, if not fully, as high as that grown in America; and lastly, that after 13 years' cultivation neither the plant nor staple had deteriorated, though the seed had not been changed. The staple, indeed, had been pronounced by dealers superior to that raised from fresh seed imported on purpose to test that point. Such was the answer returned to the main question on one essential point, derived from native, not American or European information, that point being the profitableness of its culture as compared with native cotton. About four or five years before I left—the exact year I cannot now recall, having no notes or memoranda to refer to, but I think it was 1848 or 1849, a most unfavourable season occurred, no rain fell for many weeks after sowing, and the native Cotton crops all round Coimbatore almost completely failed; the plants either died altogether, or were injured beyond recovery when copious rains did afterwards fall. With the exotic the case was far otherwise; the plants continued to live, and at once, on the advent of rain, began to push vigorously and finally matured a crop. Several natives whom I had induced to cultivate that year, assured me that they had actually received more from their land that bad year, than they would have done from an average crop of native Cotton in a medium one. From this time the "new Cotton" became a very decided favourite, the quantity offered for sale doubling every year after till I left, and the year I did leave I distributed about 20,000 lbs. of seed among intended growers. Such in brief is the result of 13 years' cultivation of American Cotton by Americans, Europeans and natives in India, under my own supervision, leaving not the least doubt on my mind, whatever others may think, that the American Cotton plant can be readily naturalized and profitably cultivated in India.——While thus engaged in working out the answer to the then supposed major proposition, the minor, that of improving the productiveness and staple of the native plant, was not for a moment overlooked. On the contrary, even more, if possible, care was bestowed on its cultivation than on the other, but to little purpose. It is true we often succeeded in raising larger plants and finer crops than our neighbours, and seed taken from these were, through a succession of 10 or 12 years, grown on all kinds of soils, but during all that time the pods neither increased in size nor the staple in length. The relative proportion of wool to seed also remained nearly the same; that is, fluctuating between 20 and 22 per cent., but averaging 21. In the American we found it between 28 and 30, about 29½, as well as I can recollect, being the average. But though all our attempts in this direction unhappily failed, I cannot believe the difficulty insurmountable, and think the design ought not to be relinquished. English farmers have for generations been trying to improve their Wheat, with but indifferent success until Mr. Hallett took it in hand, and, going the right way to work, has, in the course of about 10 years, succeeded in producing his "Pedigree Wheat," a variety which if it only proves permanent promises in a few years to supplant all others in cultivation. Such is a very brief summary of our 13 years' labours in Coimbatore. In Darwar, a district somewhat more favourably situated, the success, in the case of the exotic, was even greater, and, fortunately for them still continues, as I hear that upwards of 60,000 bales are expected this year from that quarter. Had the same encouragement been extended to Coimbatore, at least as much more might have been obtained from it by this time, there being upwards of 2 million acres of ground suitable for its cultivation in that district, and the ryots were most favourably disposed to embark in the business. With these facts before me, full details of which are to be found in the several Cotton and Indian Territories Blue Books published between 1847 and 1853, I read with much surprise and regret, considering the source whence it came, the following paragraph, which I quote from a letter from the "Committee of the Cotton Supply Association," authenticated by the signature of the Secretary and published in the *Times* of the 8th inst. "Before resigning all hope it may be well to have some further evidence than is afforded by the results of these experiments. It is pretty well known that the Government farms did not succeed because they were not intended to succeed. The Court of Directors did not want 'interlopers' in India, and the facts of the case show that either they had predetermined that these experiments, thrust upon them by the representatives of the Cotton interest in and out of Parliament, should be failures, or that they (the Government) were grossly imposed upon by the American planters in their employ." On this most extraordinary passage I can only trust myself to venture one remark, namely, that if the Cotton interest had done their duty but half as well as the Court of Directors did theirs, they might now have been receiving from India little short of half a million bales of American Cotton, and with all the means and appliances in perfect working order to double the quantity at short notice. Next week I shall briefly compare American and Indian Cotton agriculture, preparatory to entering on the consideration of the questions—can the staple of the several varieties be altered by cultivation, and can productiveness be increased by high farming? *Robert Wight, Grazeley Lodge, October 21.*

Vine Growing (see p. 907).—After having read Mr. Porter's article on this subject, I am tempted to ask if his "ideas" and "views" have been practically realised. From somewhat extensive observation with respect to the Grape Vine, I cannot believe that Mr. Porter's metaphorical illustration of its nature is a very happy one. Granted, that if the pendulum of a clock which is kept in motion by a uniform force for 12 consecutive hours is stopped for one hour, the indicator will be so much behind when the 12 hours are expired. But allow me to assure Mr. Porter that there is no analogy betwixt the interrupted mechanical force just mentioned and that of the vegetable kingdom, as may be shown by placing in juxtaposition two Vines, in pots, of equal strength. When they have attained the height of say 15 inches, pinch the top off one and allow the other to grow unmolested. Although the one is "stopped," vegetable force is not arrested. The soft parts of the stem already made, continue to lengthen for a time, and the energies of the roots are directed more forcibly to the elaboration and completion of the leaves already upon the stem. So that when elongation again commences, the interior, so to speak, of the plant has acquired such strength and increased power of digestion that a greatly increased rate and vigour of growth is the result, thus showing that although elongation had been checked for a time, vegetable force had continued in full activity. The lateral shoots of a fruitful Vine are under the same law. What I conceive to be the "popular system" of Vine growing, which Mr. Porter calls a "mistaken idea" in practice, is that of making the first stoppage one joint above the "show." Allow me to inform Mr. Porter that "constant pinching" is the practice of men who are neither slow of observation, nor dunces in interpreting lessons laid before them in the book of Nature. Could Mr. Porter look upon the wonderful exhibitions of black and white Grapes staged by Mr. Hill at the Royal Horticultural Society's Show on the 5th of June; upon those magnificent Golden Hamburghs (which missed the prize in the class that they were placed in, owing to not being sufficiently ripe) shown by Mr. Frost at the July show of Regent's Park, or upon those splendid specimens of Black Hamburgh (the best that have been exhibited in London this year) furnished by Messrs. Meredith and Harrison at the last fruit show at the Crystal Palace, and quietly assert that they had been grown under the disadvantage of "mistaken practice?" It has been my privilege to see many of the houses of Grapes from which the above and other prize bunches of this year have been cut, and I can positively assert that such a thing as a shanked berry was not to be seen, although both bunch and berry were of the largest size. Perhaps no man ever grew better Grapes or preserved them from shanking more successfully than Mr. Fleming. And by what means was his success attained?—By constant pinching of the lateral shoots, and almost a parental feeling and care for the comfort and health of the roots. His Vine borders having been properly constructed, observe him about the latter end of September laying upon them a substantial coat of clean dry Fern or brake, and upon this wooden shutters, to carry off the wet that may fall upon them. This covering not only resists effectually the severest cold, but, by keeping in the border, to a great extent, the accumulated heat of summer, preserves the roots in a uniformly warm and dry medium, so that they are enabled to nourish the fruit long after the leaves have ceased to perform their functions. Due regard having been paid to the preserving of a fresh atmosphere, you might step into this house about Christmas time, and you would see hanging a splendid crop of Grapes, to all appearance as fresh and plump as they were three months previous. Surely, such successful cultivation as this cannot be attained under the practical execution of "mistaken ideas." The Royal Horticultural Society now affords Mr. Porter an excellent opportunity of proving to the world the truth of his assertion. *Z. Stevens, Royal Exotic Nursery, Chelsea.*

Birds.—In answer to "Eileanach's" inquiries concerning blackbirds, I beg to state that if he will get about a dozen snipe traps, or very small rat traps, he may either catch or frighten all the birds in his garden in the course of a week. At the fruit season I can catch from 20 to 40 per day, but the remainder soon know the lay and will not trouble him. I never bait my traps, but set them between the rows of vegetables and cover carefully the traps with dead leaves, or anything that lays near the place; this is the secret. If the space is too wide to admit the bird to pass by the trap, put two sticks each side of the trap, so that they cannot pass without going over it. The traps cost about 8*d.* each. Any ironmonger can supply them. *D. R.*

Orchard Houses.—Mr. Rivers's impression about the fertility of orchard house trees, planted in the border, arresting luxuriant growth, is, as far as my experience of the last three years goes, a correct one. I have observed that those trees which have borne good crops during this time have had well ripened wood, the shoots being very compact and full of bloom buds. This has been particularly the case with the Stanwick Nectarine,

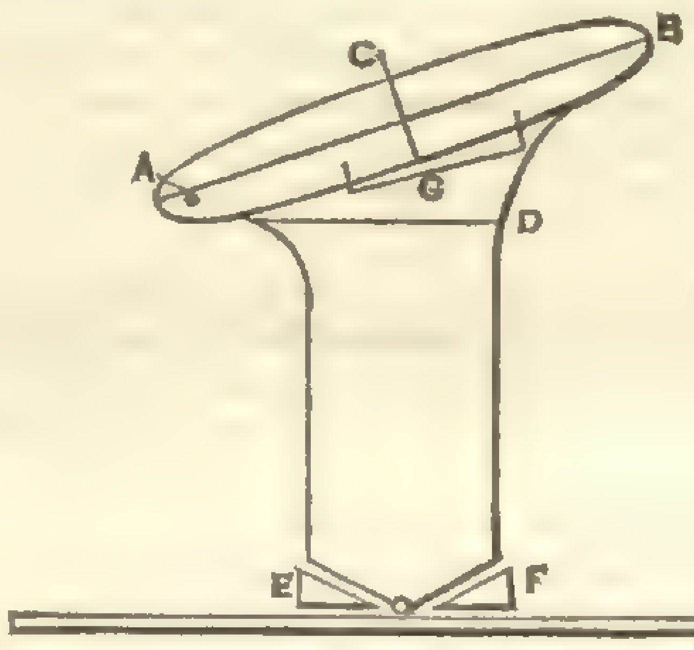
which does not crack, gets thoroughly ripe, and many of the fruit have measured this season 9 inches round. I have from 70 to 80 trees planted out in this house, the Standards being about 12 feet high; thereare no luxuriant shoots, every tree being loaded with bloom buds. In addition to the trees in the border I have about 90 others in pots, which are allowed to stand between the others till the end of May, when they are turned out of doors and placed in an old stone quarry, where the fruit becomes ripe, and almost as soon as those in the house, the flavour being most exquisite. Many of the Peaches, Nectarines, Plums and Pears have now lost all their leaves; the shoots are perfectly red, and are set as thick as they can well stand with well developed bloom buds. In the orchard house a few only have as yet lost their leaves, owing I suppose to their not being in pots. I have a great opinion of Rape dust as manure, the decay is very gradual. I also use shoddy. I intend mixing a small quantity of refuse sugar next season with the above, which I place on the surface of the earth. The gradual decay affords a sufficient meal as the plant requires it. The sugar, by its decomposition, rather increases the carbonic acid which the water carries down direct to the roots. Since it is the light and sun which fixes the carbonic acid and prevents it flowing over and oozing out through the leaves, I think that early in the morning is the best time for watering. I don't call potted trees "toy trees." I have grown as many as 7 dozen Nectarines in one pot; if 4 dozen be grown, after the plant has become established, we may be well satisfied. *Scrutator.* [As this is the experience of one of the earliest, most skilful, and certainly most successful managers of orchard houses, we are sure it will command the attention it has a right to claim.]——In my remarks at page 928, I said the houses at Chilwell cost 1*s.* 9*d.* per foot. I meant to have said for ground covered, as 30 × 90 = 2700 feet, at 1*s.* 9*d.*, 237*l.* 9*s.*; thus leaving the ends and sides out of the calculation. *J. Gadd, Willersley.*

What 'll ye have?—For many years past the nature of my calling has brought me in contact with almost every grade of gardener—the Royal down to the jobber and labourer of all work. Taking a retrospective view of their condition, placing the well-to-do on the one hand and the poor and pennyless on the other, one cannot help feeling that there must be a something wrong somewhere, and that something in many cases is brought about through the answer given to the plain question—What 'll ye have? Not that I believe gardeners ever were, or ever will be, all on an equality; yet every sane man has to a certain degree the power to pave his own way, or in other words to raise or lower himself in the scale of society. We are apt to wonder at the mysterious effect of our own conduct. When the mind becomes too weak to manage its own affairs, so to speak, fancy is never at a loss to find a substitute, Fortune is called in, and to this invisible something every trust is committed, in the vain hope that all will come right in the end! There never was a greater delusion. Take an instance. You do not require to travel far before you find a man who in youth received a liberal education, served a regular apprenticeship, and had the fairest prospect before him, dragging out a miserable existence in the evening tide of life. He consoles himself with the idea that he "couldn't help it," as if reason and instinct were one and the same. In his own neighbourhood, when he has to pass a public-house, it may be the "Barley Mow," "The Prince of Wales," or the "Red Lion," it is 10 to one if he does not contrive to see some one there he knows, and 20 to one if the first words spoken are not—"What 'll ye have?" Is it, then, a marvel how such men do not succeed in getting good situations and reasonable employers? Some do succeed for a time, till their love for society, as it is called, becomes master—then down falls the curtain. I have heard of both master and men having been taken home together from a horticultural exhibition in such a state of helplessness as more to resemble the contents of a butcher's cart than anything else, and thus turning to a curse what might otherwise have been the greatest benefit, in a practical point of view. Whatever a man's qualifications are they reckon nothing so long as he yields to the plain question What 'll ye have? Education is nothing without self-denial; and this virtue is the secret of the success of those men who have dared difficulties and come out in bold relief, ornaments to their professions:—

> "Lives of great men all remind us
> We can make our lives sublime,
> *And, departing, leave behind us*
> *Foot-prints on the sands of time.*
> Foot-prints that perhaps another,
> Sailing o'er life's solemn main,
> A forlorn and shipwreck'd brother,
> Seeing, shall take heart again."

The world at present seems all in commotion; as if a whirlwind were sweeping from Pole to Pole, and to gardeners who are now halting at the bar, I would say with all earnestness, listen—consider the answer to the question—What 'll ye have? *An Old Showman.*

How to prevent "Spot" in Begonias.—You were pleased to add an Editorial note to my letter at p. 851 to the effect that the large viviparous Begonias which I forwarded were magnificent specimens of growth, and at the same time you expressed a wish that I would say how I avoided the "spot" which has ruined so many fine plants. I am happy to say that no difficulty exists in the matter, provided the leaves are grown as large and solid as those forwarded for your inspection, which were evidently well able to endure without injury what would be to others of a thin soft texture a severe punishment. Symptoms of decay are seldom if ever seen until the foliage has reached a great age, and leaves remain long after they have produced a plant on their surface and flowered. In case of accident the leaves may often be sewed together, provided they are not broken quite to the centre, and by so doing their beauty may be preserved for many months afterwards. From what I have stated it will be seen that all that is necessary for the preservation of the beauty of these charming objects, or in other words to avoid spot, is the maintenance of a healthy and vigorous constitution, which I have secured by adopting the following simple method of cultivating the almost stemless class. A pot of the following shape is filled with a mixture of equal parts of peat and loam, with a third or so of broken bricks about the size of hen eggs well incorporated with it. A plant raised from a leaf is inserted in the soil at A, with its shoots pointing to B, in which direction it will continue to grow and emit a great number of roots, which must be encouraged by weekly additions of soil. If grown freely no side shoots will appear, but the least check will be the means of bringing out a great number, which must immediately be removed in order that the original shoot alone may occupy the whole space until fully developed. In all stages of growth liberal supplies of liquid manure are given from the cow-yard, and the result will be leaves of an enormous size, compared with those of ordinary growth in old-fashioned pots. This is not all, for by planting at the dot A, the first leaves are, by their own



weight, brought over the side of the pot, which is, consequently, hid. And as the plant grows towards B, plenty of room will be found between G and B for soil to be added, and the wedges E and F must be moved accordingly to keep the soil level for the reception of water. Grown in this way the leaves scarcely touch each other, and each one that is made rises higher and is much larger than its predecessor. The sizes to which some leaves may be grown are as follows. Begonia Marshallii, from 3 to 4 feet round; B. Rex from 4 to 5, and B. Queen Victoria from 6 to 7. As regards the representation, E and F are two wedges to keep the pot upright or level. The line D shows how full the pot should be with soil, &c. The dot at A where the plant is to be inserted. The line A B the direction in which it is to grow, and G the cavity to receive the soil, to be added as may be required. The curved line passing round A B C is the oval top; the line A B, being the transverse diameter, is 20 inches long; C, the conjugate, 1 foot. *J. Moon, Gardener to R. E. Thomson, Esq., Kenfield Hall, near Canterbury.* [The specimens formerly sent us by Mr. Moon were wonderful examples of growth and health; some of the leaves were as firm as a saddle-flap.]

Squirrels.—I am much obliged to Mr. Waterton for his notice of my communication to you on the subject of the depredations of squirrels. I was not less puzzled than Mr. Waterton, and for some time could scarcely bring myself to the belief that squirrels were the real aggressors. The only way of satisfying Mr. Waterton more completely will be to send him one of the Larch poles, or at least the damaged sections of one; and this, if he wish it, I will willingly do. I heartily endorse all he says about gamekeepers. *H.*

Orchard-house Fruit in the Channel Islands.—Our Peach season in the Channel Islands has, like that of England, been a failure, owing to the low temperature of the preceding autumn. And what has made this deficiency still more conspicuous is the want of orchard-houses which at present exists in both islands. These structures, so admirably calculated to develop the capabilities of the insular climate, are as yet almost unknown here. Add to this the ridiculously low prices at which fine Peaches are sold (1*d.* or 2*d.* for splendid fruit), and it is no wonder that the whole crop should have been so scanty. When, however, some enterprising dealer shall know how to profit by the supply, and a few orchard houses spring up, all this will be changed. Meanwhile my chief object in writing is to state the periods at which Apricots and Peaches are capable of being ripened in this favoured climate. In my own orchard house, a lean-to, 125 feet long, which was blown down and rebuilt since January, the first full sized Apricot ripe was gathered on Midsummer day, and the first Peach on the 9th of July. Since that period the supply has been constant. As to size, many Peaches averaged 6 ounces, and one weighed 8 ounces. On the open wall the crop was much below the average; but there is a promise of an abundance for the ensuing year. My trees, trained on the "Cordon system," have short spurs on all the leading branches, and these spurs have generally two or three natural fruit shoots (called by the French *bouquets*), formed by closely pinching, during the summer, the successive growths. The first growth was reduced to three leaves, the second to two, and the third to one leaf. After the beginning of September no further pruning was required out of doors, except, at this time, to cut short back some of the numerous shoots to ensure a succession, and develop leaves at each extremity. In watering my orchard-house, always the most apt to be neglected, I found that a large central gutter running between two rows of potted trees, and raised somewhat above the level of the pots, having at intervals corresponding with the trees lateral pipes or gutters leading into the pots, was sufficient to water 60 or 80 trees by merely turning on the water into the central gutter. This I have about 4 inches in depth, and as many wide, and small cuts are made of about an inch in depth into which lead is nailed. The side gutters are moveable for convenience in shifting the potted trees, and the central gutter is laid at a dead level. The house is thus easily watered, while the garden-engine syringes the trees. The water is contained in a large open tank, which is itself capable of being filled from the gutter of the upper orchard-house. *T. C. B., Richmond House, Guernsey.*

Rainfall, September, 1861:—

Stations.	Height of Gauge. Above the Ground. Ft.	In.	Above Sea Level. Feet.	Depth of Rain. Total for the Month. Inches.	Greatest fall in 24 Hours. Depth. Inches.	Date.	Rainy Days.
Little Bridy, Dorset	0	4	348	3.51	.71	29	21
Barnstaple, Devon	0	6	91	4.00	.78	22	19
Castle House, Calne, Wilts	0	11	330	2.75	.61	28	16
Camden Town, London	0	4	100	2.15	.49	24	16
Finchley Road, London	0	4	270	1.77	..	..	..
Ditto ditto	36	4	306	1.29	..	..	..
Oundle, Northampton	20	0	124	1.21	.23	22	13
Norwich	9	0	30	2.31	.27	28	12
Llanelltyd, Dolgelly	..		..	7.76	1.09	22	19
Derby	5	0	179	2.16	.28	23	20
Manchester	8	0	106	4.06	.87	13	20
North Shields	1	0	124	2.72	.63	5	26
Dumfries	0	5	68	4.00	.65	28	24
Nookton, Fifeshire	0	6	80	4.73	1.21	23	17
Sandwick, Orkney	2	0	78	2.96	.41	30	21

Remarks:—

Oundle.—Fog on the 11th, 12th, 19th, and 25th; thunder on 25th at 4.25 P.M.

Llanelltyd, near Dolgelly, North Wales.—The height of this gauge shall be given next month; on 21st the rainfall was 1.02 inch.

Derby.—Average (14 years) 2 24 inches.

Manchester.—Average (47 years) 3.19 inches.

Dumfries.—Average (10 years) 2.8 inches; frost on Grass on 8th and 27th; Potato disease greatly increased, loss from one-third to two-thirds, generally one-half.

Nookton.—To 13th (inclusive) 1.13 inch of rain fell; from 20th to 30th, 2.95 inches; from morning of 23d to 10 A.M. of 24th, 1 65 inch.

Sandwick.—Average (20 years) 2.72 inches. Most of the grain is now cut, and a considerable portion built.

G. J. Symons, Camden Road Villas.

Rhododendron dahuricum.—In the garden of the Misses Mercer, Bushy Villa, Teddington, there is now in full bloom a large plant of Rhododendron dahuricum. The gardener, Mr. Martin, who has been there for many years, told me on the 19th inst. that he had never seen it in bloom at this season before. In the gardens at Hampton Court a plant of the same species will also be in flower in a few days. *J. D., Hampton Court, Oct.* 21.

Foreign Correspondence.

Sydney: *July* 15.—I have been employed several weeks in the collection of specimens of indigenous woods for transmission with our other products to your great Exhibition of 1862. It is a troublesome, though somewhat exciting job; much of the work being in rough mountain country where the trees are so lofty and crowded together, their foliage so dense and so interlaced with ligneous climbers, and the species so numerous and varying, that we frequently do not know until afterwards what we are cutting down, nor how many other trees tied to the particular one by the "bush ropes" we may have to "throw" to get at what we want to ascertain.

We rarely find specimens in a state of fructification, and shall have difficulty in furnishing the means of

absolute identification; and we frequently can only vaguely speculate whether or not they have ever been described. We have trees of all heights up to 200 feet to deal with, besides not a few most respectable giants, whose altitude must reach far into the third hundred feet, with which we do not venture to meddle. We are endeavouring to obtain large photographs of some of the most remarkable, but there are many difficulties to be surmounted, the want of sufficient light even under the brightest sunshine being the chief one.

Mr. Moore is absent in the northern districts, where he also has a fine field for making a similar collection, and I have no doubt will procure a very rich one. It will perhaps surprise you that we sometimes find 30 to 40 distinct species, all attaining the stature of trees, upon as many acres, and belonging probably to half as many different natural orders.

I wish I could make you a present as an appendage to the new garden at Kensington Gore, of a tract of say 50 acres, a sort of rough natural terrace, high up a mountain side, about 4 or 5 miles from the open sea which it overlooks. It has been but little defaced by the hands of man as yet, but its sylvan beauties and magnificence are destined soon to pass away. It has never been my lot in Ceylon or the Brazils to see such magnificent vegetation. Some of the individuals seem as if they must have belonged to the primeval forest, yet wear the appearance of freshness and vigour not likely soon to pass away except under the rude advance of settlers. The Mosses, Orchids, and huge masses of epiphytical Ferns, with which they are clothed, but add to their stately grandeur. In this 50 acres you should have 60 or 70 species of trees, including two of Palms and three of arborescent Ferns. You should have a huge wall of rocks covered with rich masses of climbers to back it in on one side, two rocky ravines each with its limpid streams of the purest water opening upon lovely sea views a thousand feet below upon the other, a climate where the temperature seems to be always the same, and can scarcely range above 10° or 12° between the extremes of summer and winter, and where the blasts of wind are heard but scarcely ever felt. "Master," said an aboriginal once to me, "this place is just like cellar in the summer time;" and to mend all, the most delicious aromatic fragrance always pervading it (chiefly I think produced by the Doryphora sassafras), but never in excess. This spot has long been the *beau idéal* in my estimation of woodland scenery. The axe of the small settlers has lately reached its verge, and will soon annihilate its beauties. Would that it could be transferred complete to a region where they would be appreciated and preserved.

There were innumerable such spots in the district of Illawarra. Many of the more inaccessible still remain. One wonders how it can pay to clear them, but it seems to do so, to be converted into rough pasture for keeping dairy cows. *W. M.*

Notices of Books.

The Bombay Flora; or, Short Descriptions of all the Indigenous Plants hitherto discovered in or near the Bombay Presidency; together with a Supplement of introduced and naturalised Species. By N. A. Dalzell, M.A., and A. Gibson, F.L.S. Bombay: Education Society's Press, Byculla, 1861.

A Flora of any considerable portion of our Indian possessions, if only tolerably well done, would in the present state of science be an inestimable boon, both to working botanists, and to the professors and students of the medical colleges of all the Indian presidencies; it was, therefore with no small pleasure that we looked forward to the appearance of a "Bombay Flora," which we were given to understand was in preparation by a very competent author. This work is now published; and it is with infinite regret that we have to record our opinion of it as in every way very different from what it ought to be, and from what the previous labours of one of its authors had led us to hope it would be. In brief, it is in many respects scarcely above the level of those botanical productions of the Indian press, Griffith's posthumous papers; whilst it wants their profound scientific value, and their excuse of being edited from obscure manuscripts by one who was not a botanist.

At the outset the authors express a hope that "in presenting to the public the accompanying 'Flora' of the Bombay Presidency, it will be found to supply a want much felt by the increasing number of young botanists, as well as others of an inquiring turn of mind." Will it be credited that this passage refers to a work in which upwards of 2000 species of tropical plants are included, but throughout which there is not a single ordinal, divisional, sectional, nor generic character; nor substitute for these, of any kind whatsoever! The book seems intended to defy and embarrass the student; for no one can use it but an accomplished botanist; and such is the nature of the specific descriptions, that by him it will most assuredly be ignored, for they are not only inaccurate but insufficient, and very badly put together. We need go no further than the second line for proof of this, where the leaflets of one of the commonest plant in India, the Naravelia Zeylanica, are called leaves, and said to be surmounted by tendrils!

We are next informed that the introduced, cultivated, and naturalised species are treated of apart, an arrangement to which we do not object; but when it is added that this portion "has been framed partly on the basis of the Linnean system," as a means "of affording the students and alumni of our colleges every facility for the identification of plants and trees," we are led to look at the list in question, when we find the whole arranged according to the natural method, exactly as the indigenous plants are; the only difference between the two being, that we here find given the Linnean class and order as quasi generic characters, under each generic name. And occasionally the derivation of the generic name is appended, whilst the specific characters are shorter and worse than those in the body of the work.

It is painful to proceed, but we have no choice; the book professes to contain *all* the indigenous plants hitherto discovered *in or near* the Bombay Presidency; but while on the one hand no geographical limits are assigned by the authors, on the other all Scinde and Guzerat, which we believed to be in that Presidency, appear to be omitted; nor can we believe that the whole Bombay Presidency and its vicinity possess an indigenous Flora but little exceeding that of Great Britain, and considerably smaller than that of France or Germany.

Throughout the work errors of the gravest description abound. At the beginning of the first page (as we have already observed), leaflets are described as leaves; a little further on the fruit of Clematis is called a seed, and at the top of the second page the same blunder occurs under Thalictrum; and in the two following species as many more errors occur. Up to page 7 the descriptions seem to consist of little more (errors excepted) than translations from Hooker and Thomson's "Flora Indica." Beyond that page we have no comparative guide, but we observe that of the very next plant, Cardamine hirsuta, the flowers are said to be yellow! and soon after the siliqua of Cleome monophylla is described as *round* instead of cylindrical, as is that of Polanisia icosandra, which succeeds it.

The typographical execution of the work is on a par with its scientific character; it abounds in misspellings, bad grammar, and errors of the press; the names of the described species commence indiscriminately with a capital letter, whilst in their synonymes, capitals and small letters are used without method, and as often wrongly as rightly.

In conclusion, we should recommend the suppression of this work, as the wisest course left open to its authors; for it contains much that will mislead the amateur or tyro; whilst, to the Botanist it is valueless.

Le Jardin Fruitier du Muséum, ou Iconographie de toutes les Espèces et Variétés d'Arbres Fruitiers; avec leur Description, leur Histoire, leur Synonymie, &c.; par J. Decaisne. 4to. Paris, Firmin Didot.

Since our last notice of this splendid work (see p. 978, 1860), 12 more Parts in continuation have reached us, and they still maintain the high character which has been ascribed to the previous ones. We proceed to give some extracts, with occasional remarks as to the suitableness of the varieties for cultivation in this country.

Poire Gilot.—Fruit large, roundish, Apple-shaped [a very large Gansel's Bergamot will give a good idea of the form and general appearance of the fruit]. Stalk straight, fleshy, sunk at its insertion, fawn-coloured; eye in a large depression, segments of the calyx erect or reclining; skin somewhat rough, pale yellow or olive where shaded, brownish red next the sun, dotted and marbled with fawn-coloured russet, a large patch of which generally surrounds the insertion of the stalk. Flesh white, breaking, sweet without astringency, but not high flavoured. Only fit for kitchen purposes, for which it may be used from the end of autumn and during the winter.

The tree is a very abundant bearer; shoots strong, of an olive brown, hoary at the extremities, sprinkled with oblong specks; eyes very prominent; buds large, short, dark coloured; leaves [pubescent] ovate, occasionally sub-cordate at the base, and curved backwards; petioles tinged with red.

This variety is very much cultivated in the environs of Noisy-le-Roi (Seine-et-Oise), under the name of *Poire Gille.* The fruit is sold in Paris for making compôtes of a very agreeable perfume, superior to that which can be obtained from any other kind of Pear.

[The Poire Gilot or Gilogil, is a very abundant bearer, and succeeds as a standard in the climate of London; but it is apt to overbear itself, and in order to prevent its doing so, the spurs should be thinned and the branches shortened at the winter pruning, so as to induce a sprinkling of young shoots all over the tree. By so doing the balance between the weight of fruit and amount of foliage will be maintained, and the tree will continue to bear enormous crops.]

Orange d'Hiver Pear.—Fruit middle-sized, round, depressed or turbinate. Stalk straight, thickened at its insertion, which is in a small cavity; eye in a slight depression; skin greenish brown, becoming yellow as the fruit approaches maturity, sprinkled with a few brown specks near the eye. Flesh firm or half-melting, sweet, perfumed, more or less musky. Season, February to April. Tree pyramidal, and an abundant bearer.

According to M. Gagnaire, nurseryman at Bergerac, the Orange d'Hiver grown in his locality is only good for stewing; whilst at Champsegret, distant only about six miles from the former place, it is a good table fruit, and as such it is esteemed generally throughout Languedoc. This variety, Prof. Decaisne observes, is well represented in the Transactions of the Horticultural Society of London, vol. v., p. 139. It is a very old variety, for it is mentioned in French works on gardening as far back as 1658.

[The Orange d'Hiver grown in the climate of England is only fit for stewing, but for this purpose it is reckoned very good; therefore, and as it is also a very long keeper, a tree of it might be afforded space in large collections.]

Catillac Pear.—Syn. Cadillac, Piquigny, de Citrouille, de Tout-Temps. [Bell Pear, Grand Monarque, Groote Mogul, Katzenkopf, Pound Pear, and Poire de Livre of some.] Fruit very large, irregularly round, obtuse at the stalk, flattened at the eye, which is large, placed in an evenly-formed shallow depression; stalk inserted in a small cavity, frequently placed to one side of the axis of the fruit. [The fruit invariably projects more on one side of the axis than on the other.] Skin thick, yellow, tinged with red or brownish red next the sun, sprinkled with brown dots and patches of russet. Flesh white, breaking, coarse, astringent. Only fit for kitchen use, for which it is much employed, as it takes a fine red colour when stewed. Season, November till April.

Tree very vigorous and productive. Leaves very large, roundish on the young shoots, abruptly acuminate, downy. Flowers very large, petals roundish or obovate. [The Catillac is well known as one of the most commonly cultivated stewing Pears. Its pulp when stewed is not so fine and smooth as that of some others; nevertheless its good colour and flavour are greatly in its favour.] It was mentioned by French authors nearly 200 years ago.

Ambrette d'Hiver Pear.—Fruit middle-sized, roundish. Stalk about an inch in length, thickened at its insertion; eye in a shallow depression, with the segments of the calyx reflexed. Skin roughish, olive-yellow, speckled with russet. Flesh firm, or half-melting, juicy, slightly acidulated, but not astringent, the flavour resembling that of the St. Germain. Season, December till February.

Tree an abundant bearer; branches spreading irregularly, not thorny, although both Merlet and La Quintinye, 1675 and 1690, describe them as being very much so, resembling the wildings seen in the hedges; but Decaisne remarks that, like all varieties which have been long propagated by grafting, it has lost the spines with which it was furnished in the first instance. [Many of Mr. Knight's Seedling Pears, which were very thorny at first, are not so now. The Ambrette d'Hiver is only considered second rate as compared with many new kinds better suited for the climate of England.]

Poire Bergamotte.—Syn. Bergamotte d'Automne. Fruit middle-sized, round. Stalk short, inserted in a shallow depression; eye placed in a confined cavity; skin smooth and fine, pale green, becoming yellowish as the fruit approaches maturity, sprinkled with small dark brown dots. Flesh very melting and juicy, with a perfume resembling that of the Lilac or Hyacinth. Season, October, November, or occasionally later. Tree pyramidal. Leaves oval or elliptic, acuminate, their edges almost entire.

[This, it must be observed, is decidedly different from the Autumn Bergamot so commonly cultivated in England. The author of the "Orchard and Kitchen Garden," in treating of the Autumn Bergamot says:—"I have not quoted Duhamel, as he has given two figures of his Bergamotte d'Automne, neither of which appears to correspond with our Autumn Bergamot." The latter has a rough skin and is more flattened at the eye and stalk than the sort here described; the leaves also differ in being cordate at the base. The Autumn Bergamot of this country had most probably been obtained from Holland, for it is the same as the Bergamotte d'Automne, Herfst, of laate Bergamot, Hollandse Bergamot, Sappige Groentje, Maatjes Peer, Heere Peer of Knoop, p. 81, tab. 2. His figure, though rather small and rudely executed, compared with the exceedingly beautiful drawings in the work before us, is, nevertheless, so characteristic of our Autumn Bergamot that there can be no doubt as to its representing the same. The Bergamotte d'Automne of the French does not succeed well in this country; but it has been fruited, and it proved very different from the common Autumn Bergamot, agreeing however with the French descriptions of that sort.]

A Manual of Chemistry, Descriptive and Theoretical. By W. Odling, M.B., F.R.S. Part I., pp. 380. Longmans. 9s.

This is an elaborate introduction to pure Chemistry, and may be regarded as an exponent of the views of the subject now taken by the most eminent English men of science. The author states that it was undertaken "more especially at the request of Professor Brodie, who wished to have, for the use of his class at Oxford, a chemical text-book arranged in accordance with his own method of teaching. It is characterised by the following features, in most of which it will be

found to differ from other chemical manuals of similar scope:—As a rule, the atomic weights selected for volatile elements represent single volumes, and those for volatile compounds double volumes, of their respective gases or vapours. The great majority of compound bodies are expressed, as unitary molecules, by unitary formulæ, instead of by additive, or, as they are commonly called, rational formulæ. Throughout, the algebraic sign of addition is never used to express combination. The equivalent notation, by means of dashes, introduced by the author some years ago, and now constantly used in the original papers of most European chemists, is here employed for the purposes of elementary teaching. The arrangement of the book is more than ordinarily systematic. The mutual relations of the elements and of their analogous compounds are largely dwelt upon, as are also the mutual relations of the various heterologous compounds of the same element. The properties of classes of bodies, chlorides, oxides, sulphates, &c., are described with greater fulness than is customary in text-books. The compounds of mineral and organic chemistry are not considered apart in separate sections. Moreover, the doctrines of series, types, and substitutions, are applied indiscriminately to both branches of chemical science. The technological applications of chemistry are but very briefly referred to, and the physics of chemistry only incidentally discussed; so that a more than usual proportion of space is devoted to chemistry proper, and especially to the description of chemical reactions."

Two or at the most three Parts of the present extent will complete the work, which will doubtless be found a very important and valuable addition to the Elementary works used by advanced students.

Walper's Annales Botanices Systematicæ.—The first part of the sixth volume has reached us. It continues the enumeration of "new" plants published from 1851 to 1855, beginning with miscellaneous orders of Endogens. The succeeding Parts are promised soon, and are to contain Orchids by Reichenbach junr., Grasses by Andersson; Cyperaceæ by the latter stand over for the present. It is greatly to be regretted that in compiling such a work as this the industry of the learned Editor should be so much more conspicuous than his skill.

Official Guide to the Kew Museums (Smith & Son).—In this valuable little volume (price 6*d.*) Professor Oliver gives a very good business-like scientific account of the riches amassed in the two noble Museums in the Royal Botanic Garden, Kew. With its aid the visitor may form an extensive acquaintance with the vegetable products of the world, and the Botanical student lay a more solid foundation for sound practical knowledge than by studying mere books, however diligent he may be.

Trade Lists Received.—Cavène Père et fils—Cavene & Son, Bagnols-sur-Cèze (Gard), Catalogue No. 20, September 1861; a very extensive list of Nursery stock, especially of new kinds of Fruit Trees and French bedding plants. Among Conifers are several names that are new to us.

Garden Memoranda.

The Priory, Stanmore, Middlesex. — This charming place, which at one time belonged to the Marquis of Abercorn, has now for some years past been the property of J. Kelk, Esq., the eminent builder. The house stands near the centre of a finely undulated and beautifully wooded park; the latter indeed had been permitted to get overloaded with timber, and therefore it was found necessary to cut down many of the fine trees with which it was so copiously furnished, in order not only to bring its own natural beauties more prominently into view but also those of the circumjacent country, comprising Harrow on the Hill, and Hampstead Heath; even in a clear day the Surrey hills and the Crystal Palace at Sydenham can be distinctly seen from the elevated covered platform or terrace in front of the drawing-room windows. From this point the visitor looks down upon a neat geometrical flower garden with beds skilfully filled with choice plants, and cut off from the park by a low terrace wall surmounted with vases, which are also placed at regular distances on dwarf terrace walls along the upper side of a broad straight walk, which passes more immediately in front of the house. The latter, with the exception of such portions as have been altered or newly built by Mr. Kelk, has been delightfully mantled with Ivy, which being kept closely trimmed in has a neat and cheerful appearance. A large portion, however, of this leafy covering has lately fallen into decay. Down in a hollow in the park, not very far from the south front of the house, and still half hid among trees, is a piece of water covering an area of some 9 acres; and now that such objects as were thought most striking and interesting have been brought within sight of the windows and principal walks, this forms a feature of no mean importance.

Old walks have also been renewed, and new ones made, and wherever the drainage was insufficient fresh drains have been put down. A new conservatory, 125 feet in length, forms a delightful promenade in connection with the house; it is tastefully ornamented inside with plants, among which tree Ferns and six large Orange trees with clean straight stems and magnificent heads are conspicuous; from the roof hang Climbers in graceful festoons, and a fountain constantly playing in the centre gives the whole a cool and refreshing appearance.

The forcing ground is walled in, and lies near the stables on the west side of the house. We found here a long range of Peach houses and Vineries, in all of which there have been full crops. Grapes especially have been excellent; from one of these houses was cut the splendid bunch of Muscats which was the admiration of all who visited the last exhibition at the Crystal Palace where it was shown; in addition to large size this bunch possessed that beautiful golden yellow colour which is the distinguishing characteristic of this fine variety when in perfection. Nectarines have also been a fine crop.

In two houses, long, narrow steep ones, Peaches and Nectarines are trained in front, 14 inches from the glass, and in other houses in the same range are Vines, all of which have borne excellent crops. Another range of five houses, all span-roofed, contained Figs, Plums, and Grapes. Pine Apples are also grown extensively, and with great success, most of the Queens weighing from 4 to 5½ lbs.; the young stock is also clean and healthy. Melons and Cucumbers are likewise largely grown, there being two long pits devoted to their culture. Among the different sorts were Beechwood, with large fine fruit; Strathfieldsaye, Bromham Hall, and Scarlet Gem. One house was filled with Fuchsias and Balsams, and others contained some good specimens of stove and greenhouse plants. We likewise noticed some well-grown Cockscombs. Cherries on open walls have been a good crop, and so have been Peaches, Plums, and Pears. The only partial failures have been Apples, Apricots, and Figs; the presence of the latter Mr. Tillyard attributes to having the trees well wrapped up during the winter and keeping the covering on late in spring, by which all the autumn-formed fruits are saved. A walk covered for some distance with Hornbeam in the shape of a Gothic arch, and passing through masses of Rhododendrons leads from the forcing ground to the park, on the other side of which, about a mile from the mansion, lie the kitchen gardens, old-fashioned walled-in places, but very productive. Strawberries have been very plentiful, and so have bush fruits of all kinds, and on a west wall is such a crop of Plums as is rarely to be seen. The trees are literally loaded with fruit, which is netted up to keep it from birds. The sorts consist of Greengages, Coe's Golden Drop, Coe's Late Red, Orleans, Impératrice, &c.

On the north-east side of the house is an old-fashioned flower-garden, oval-shaped, with a broad gravel walk running its whole length and ending in a rustic summer house, while another broad walk crosses it and terminates in an Orangery which has lately been put in good repair, and furnished with improved means of ventilation. The more remarkable features of this garden are its fine Cedars of Lebanon, Hemlock Spruces, and Rose-covered walks. A raised mound, covered with Periwinkle and overarched with strong iron rods for training Roses on, formed a good back for a series of seats which had been fixed all round it, the arms of the seats forming pedestals for setting specimen pot plants on, and the intervals between the seats being filled up with rustic pieces of wood skilfully and tastefully disposed. From this resting place views of the whole garden can be obtained. Over a portion of one of the entrance walks has been thrown an arch of Lime trees, which form a shady and cool retreat on a warm sunny day; and near this is being formed a tasteful piece of artificial rockwork, which when finished will form one of the most important features of this part of the grounds.

The whole place is in first-rate order, as might have been expected from a gardener of Mr. Tillyard's reputation.

Miscellaneous.

The Woods employed in the Navy.—At the late meeting of the British Association, Dr. Crace Calvert, F.R.S., stated that he had examined different woods; and the superiority of foreign woods over English Oak could not be too strongly expressed. If English Oak has hitherto stood so high it must have been owing to our ignorance of the valuable properties of some of those grown in tropical climates, in which the soluble and highly decomposable tannin of Oak is replaced in some instances by resins, and in others by substances similar to caoutchouc. This is the case with Moulmein Teak, Santa Maria Mora wood, and Honduras Mahogany, which gives to them a great advantage over Oak for iron ship building. Thus he has found that, in the same time and under similar circumstances, Oak will attack iron twice and three times as rapidly as the woods above mentioned. He has also remarked that cubes of wood left in contact with water for five months lose respectively the following per centages of their weight:—Unseasoned Oak, 24; seasoned Oak, 12; African Teak, 3¼; Mora wood, 4; Honduras Mahogany, 3; Santa Maria, 1·6; Greenheart, 5·6; Moulmein Teak, 1·7. The facility of mildewing or decaying is as follow:—Unseasoned Oak, rapid; seasoned Oak, much less; African Teak and Honduras Mahogany, limited; Mora wood, Santa Maria, and Moulmein Teak, none. He had found a great difference between Oak felled in summer and that felled in winter. The Oak felled in winter was rich in tannin, while that felled in summer contained little or no tannin, but a large quantity of gallic acid; and *in examining some specimens of wood from the unsound gunboats furnished to him by some of her Majesty's officials, he found that the chemical composition of the unsound gunboats was identical with that of unseasoned summer felled Oak. Daily Paper.*

To Calculate the Age of Trees.—If you will make an incision on the two opposite sides of your tree, say to the depth of 2 inches, and count the number of annular rings in each; then add the number of rings found in the two together; the half of the product will be the mean of the number of rings in the trunk. Then ascertain the diameter of the tree by the common rule, deducting the thickness of the bark: multiply half the remaining diameter by the mean obtained as above: the result will be a close approximation to the age of the tree. Plug up the two incisions to exclude wet, and the tree will sustain no injury. *Scottish Farmer.* [We print this for the sake of showing how utterly fallacious is the common mode of calculation here recommended. Take a case, and try it by what we suppose to be the rule here given. A tree is 30 inches in diameter within the bark. Its rate of forming rings per inch was as follows, beginning at the centre:—

2, 3, 4, 4, 4, 4, 5, 5, 5, 6, 7, 7, 8, 10, 12, on the north side.
2, 4, 5, 5, 5, 6, 6, 6, 6, 7, 7, 6, 7, 7, 7, on the south side.

Therefore, assuming that each ring represents one year's growth, the tree was 86 years old. To find its age by the above rule add together the number of rings in the two last inches north, to the number in the two last inches south, viz. 10 + 12 = 22
7 + 7 = 14
36 ÷ 2 = 18

According to this 9 rings per inch have been formed on an average; and, if so, 15 (inches) × 9 (average per ring) = 135 years, the age of the tree by calculation; its true age being only 86!!]

The Emeu.—In captivity, the Emeu soon accommodates itself to circumstances, and even in England breeds freely, and seems as much at ease as if it were in its proper climate. It is a most inquisitive bird, inspecting every novelty with great attention. "I once," writes Dr. Bennett, "saw a fine pair of full-grown specimens in a paddock near Sydney. Stopping to observe one which was at a short distance from the fence, he immediately came down to have a look at me. The second bird was some distance off, but, with their usual keenness of vision, on perceiving me viewing his companion, he came stalking down rapidly, and they both stared at me most attentively, stretching out their necks for the sake of making a nearer acquaintance, when, finding no result from our interview, and their curiosity being satisfied, they quietly stalked away. In the Domain, near the Government House, some tame Emeus may be seen walking about, and often, near the Grand House, marching with measured pace, as if keeping guard with the soldiers on duty. One day, during the levée, when the Domain was crowded with people to see the arrivals and listen to the band, the Emeus mingled with the crowd, apparently enjoying the gay scene around them, when some strangers, who were afraid of these birds, ran away. On seeing this, the Emeus, enjoying a chase, pursued, and overtaking one of the gentlemen, took off his hat, to his great surprise. The above circumstance demonstrates their fearless nature, and how readily these noble birds might be domesticated. *Dr. Bennett, in Routledge's Illustrated Natural History.*

The King of the Forest.—On the coach-road from Aberystwith to Hereford, within a few yards of Ty-ricket Mill, near a little village called Erwood, 8 miles below Builth, there is an Oak, lately bought for 20*l.*, and felled by D. Williams, Garth Mill, near Builth, consisting of an enormous trunk and three monstrous branches, each having smaller branches as large as an ordinary tree, and measuring as follows:—

	Solid Ft.	In.
The trunk	321	5
First branch and its branches	407	0
Second „ „	230	0
Third „ „	172	0
Total	1132	5

The trunk, when standing, measured near the ground, 50 feet 9 inches in circumference. It is perfectly sound in every part, and the quality is first-rate. As will be seen from the number of solid feet, it is equal to from 10 to 12 of the largest Oaks found now-a-days. *From the Builder.*

Dangerous Food.—Dr. Dupuy relates the following curious case in the *Union Médicale de la Gironde*:—Some time ago he was pressingly summoned to attend a family of five grown-up persons and two children who had all been taken ill; the servant who brought the message was himself seized with retching in the doctor's house. Upon examination it was found that they had all partaken of a soup made of Pumpkin and Rice, and of some codfish done with Potatoes, and that soon after they had all been seized with vomiting, more or less, according to the quantity of soup they had taken; for it was soon ascertained that the other dish could not have been the cause of the accident, since one of the patients had not partaken of it at all. Moreover, two grayhounds had smelt at the soup and refused to touch it; and the master of the house, who had only taken a spoonful of it, because he found it bad, had had a milder attack of sickness than the rest; there could not therefore be any doubt that the soup was the real culprit. The Pumpkin was therefore examined and found to be quite spoilt; and with the aid of a microscope the Fungus mycelium was found to have penetrated with

its filaments into all the cells of the parenchyma, so as to form an inextricable network. Hence the symptoms alluded to seem chiefly ascribable to this Fungus, which, like so many others, is known to be poisonous. Another case is related of a large farm at Bordeaux, where a strange epidemic had suddenly declared itself among some valuable breeds of pigs, and had caused the death of several of them. It was discovered upon investigation that they had been feeding freely on a quantity of leaves of the Beetroot plant, which were in a state of putrefaction. *Times.*

Bonpland in Paraguay.—The fall of the Emperor and the re-establishment of the Bourbon dynasty in France were events most galling to Bonpland, and he resolved to seek an abode in one of the republican States of South America. Accordingly he reached Buenos Ayres in 1817, with a nominal appointment of Professor of Natural History in that capital. About the same time, a considerable number of his countrymen, from similar causes, settled themselves in the Argentine Provinces, at which period the internecine wars before alluded to were raging furiously. Many of these Frenchmen became active partisans in these quarrels, and either by their direct or indirect interference, soon came under the ban of the several opposing chiefs. When I passed through Buenos Ayres, in 1819, I saw Bonpland; he was then under great excitement in consequence of the execution of two of his companions, who, having been detected in assisting the military chief Carrera, were accordingly sentenced to be shot. It was in the same year that Bonpland established himself near Candelaria, one of the old Jesuit Missions on the left bank of the Parana, contiguous to Paraguay, where he formed a considerable establishment, chiefly, as I understood, with a view to the production of and trade in Yerba, under the special auspices and protection of the Governor-General Artigas, who, as I have before mentioned, intended ultimately to carry out his designs against Paraguay. In the following year, General Ramirez, who commanded Artigas's forces, being bought over by the rival Presidents of Buenos Ayres and Santa Fé, revolted against his chief. Artigas, being hard pressed and deserted by his supporters, knowing also that if he fell into his enemies' hands he would be immediately sacrificed, resolved to beg an asylum in Paraguay; and he obtained this permission, in 1820, from Doctor Francia, for himself and 1000 of his faithful followers, who were distributed in different parts of the country, and to whom portions of land were assigned, upon condition of cultivating them. The Dictator generously gave his rival a monthly pension, together with a house and lands in the village of Caragaty, 85 leagues N.E. of Assuncion, where he resigned himself to peaceful agricultural pursuits, and lived in much enjoyment till the period of his death, 10 years afterwards. In 1821, Ramirez, being then at peace with the other Argentine provinces, turned his attention to the invasion of Paraguay, with which view he collected a considerable body of troops, in order to force that country to adopt his policy. While these preparations were going forward, political considerations of greater moment induced Ramirez to suspend his project: he now marched his forces to the southward, to wage war against the Governors of Buenos Ayres and Santa Fé; and after a severe campaign, he was at last defeated, taken prisoner, and executed. Francia, thus relieved of his fears for a while, proceeded to adopt such precautionary measures as he conceived would place his country for the future in greater security; and in these measures Bonpland became deeply concerned. This celebrated botanist Doctor Francia suspected of being in concert with General Ramirez, knowing also that he had previously been the friend of General Artigas. Francia was well informed of all the combinations making against him; and his conviction that Bonpland was implicated in these measures appears to have been heightened by the formal application which the latter made to him, about this period, to be allowed to enter into commercial relations with Itapuan, on the opposite coast of Paraguay, presenting at the same time, in earnest of his intentions, a contract he had formed with an Indian cacique for the purpose in view. Had Bonpland abstained from meddling with political questions, it is probable he would never have been disturbed; but after Ramirez had given up his intended invasion, Francia availed himself of the opportunity by sending a force of 400 men across the Parana to Candelaria, near the place of Bonpland's residence, to destroy that post, which he considered to be the nucleus whence hostile demonstrations might at any future period be formed against his country: he likewise ordered them to make prisoners of certain persons, among whom was the former companion of Humboldt. These instructions were implicitly carried into effect, and Bonpland was conveyed a prisoner to Assuncion. The Dictator received him with every demonstration of respect and kindness, explaining the motives which justified him in the course he had taken, and offered him any place he might select in the interior, as he had previously done to Artigas. Bonpland chose to fix himself at Santa Maria, to the S.E. of Assuncion, where he enjoyed full liberty, and was subject to no other restraint than the obligation of remaining peaceably in its neighbourhood. Here he settled upon the farm assigned to him, and practised also as a physician. He appears to have lived there in great contentment for 10 years, at the end of which time he received from Francia full liberty to depart whenever he pleased. The best proof that Bonpland was satisfied with the treatment he received, is that he never protested against his captivity, and that he refused (I believe, for a period of two years) to avail himself of the liberty given to him; and it is certain that he then declined the many pressing invitations from Buenos Ayres, sent to him by the foreign ambassadors and other distinguished persons, who had greatly interested themselves in his welfare. At length he made a visit to the River Plate, but remained there only a very short time, for he soon returned to the Missions, and finally established himself on his former estate of S. Anna de la Restauracion, not far from Candelaria in Corrientes, bordering upon Paraguay, where he lived, much respected by all, till his death in 1858. *Annals of Natural History.*

Calendar of Operations.

(*For the ensuing week.*)

PLANT DEPARTMENT.

Conservatory, &c.—Plants getting past their best should be replaced at once by something of a more showy character. When the principal collection of Chrysanthemums comes into bloom a selection should be made of the best and most useful sorts, for there are many worthless varieties in cultivation, and it is better to grow duplicates of really good kinds than to retain such as are but indifferent, merely for the sake of having a long list of names. Give timely attention to providing a succession of bloom with which to keep this house gay, and avoid as far as possible the expense of forcing, which is injurious to most plants. Be careful not to let things in bloom suffer for want of water, giving weak clear manure water to Chrysanthemums, Salvias, Camellias, &c., and use every means to preserve the beauty of specimens in bloom as long as possible. Damp and mildew are the great enemies to be guarded against at present in conservatories and greenhouses, and these must be sharply looked after, especially in the case of plants that have not ripened their growth well, and are in a rather soft state. If damp is troublesome it must be got rid of by means of free ventilation on mild days, using a little fire-heat at the same time, and for mildew a dry airy atmosphere is the best preventive, but the plants should be frequently examined, applying sulphur on the first appearance of the evil. Very little water will be required here at present, but the plants should be carefully looked over about twice a week, so as to make sure that nothing is allowed to feel the want of it. If not already done, get plants tied into proper form with the least possible delay, for it is difficult to tie a plant so that it will not look somewhat stiff and unnatural, and the sooner all this kind of work is done the better the specimens will look when in bloom. If Mignonette to stand the winter has not yet been sown, that operation had better now be deferred till spring, when a little put in early will bloom nearly as soon as that sown now, and the difficulty of wintering it will thus be obviated.

FORCING DEPARTMENT.

Pineries.—Plants in bloom will require very careful management to prevent their being injured by damp, and the atmosphere must be kept dry, with a rather brisk temperature, admitting a little fresh air on every favourable opportunity; and if there is, as there should be, a proper ventilating apparatus or the means of admitting air over the pipes, so that it may get warmed before coming in contact with the plants, a little should be admitted constantly. Plants in bloom should also be near the glass, and where they will catch every ray of sunshine. It is nearly impossible to get fruit to swell anything like properly at this season, therefore unless a succession of ripe fruit is indispensable, and cannot be secured except by driving plants that bloomed, late these had better be kept rather quiet until spring. Where an attempt must be made at present to get fruit to swell, a moist warm temperature of about 70° at night and 75° by day must be maintained, allowing it to rise to 80° with the assistance of sunshine, and the bottom-heat must be kept regular at about 85°, taking care to keep the soil in a healthy state as to moisture. But it is difficult to get the fruit to make much progress at present, and a little time lost now will be easily overtaken in spring, when the plants will enjoy a high moist temperature, and the fruit will increase more in weight in one month then than in two at present.

Vineries.—As soon as the early house is closed for forcing, be careful to secure a thoroughly moist state of the atmosphere by frequently sprinkling the floors and every available surface, but as observed previously, a regular moist state of the atmosphere is most effectually secured by means of a slight bed of fermenting materials in the house, which will also afford a little warmth, and the moisture from this is much more congenial to vegetation than anything that can be effected by the most careful use of the syringe or evaporating pans.

FLOWER GARDEN AND SHRUBBERIES.

The weather is still unusually favourable for executing alterations; and where these are in hand they should be prosecuted with the greatest possible despatch. Planting, or the removal of large evergreens, cannot be finished too soon; for it is of the utmost importance that the plants should be afforded some chance of making fresh roots before the trying winds of March. See to even small plants being secured against wind; for these are often greatly injured by being blown about after planting, which a small stake and a few minutes' work would prevent. Get in a stock of Briars for budding upon next season. Let the roots be well trimmed, cutting back closely the strong ones; for these, if left, will be of little use except to furnish an endless supply of suckers. Choice things in the parterre can no longer be depended on as to display; it is therefore desirable at this period to look over the masses and beds and see if there be any choice article of a tender character which it is desirable to secure for next year; such may be potted with balls and wintered in a cold pit.

HARDY FRUIT AND KITCHEN GARDEN.

If any transplanting or root pruning of fruit trees has to be done let this be attended to as soon as the leaves are off, and see that those exposed to wind are securely staked before leaving them. Also get the ground prepared for fresh plantations. Take an early opportunity of pushing forward pruning and nailing. Give air freely to Lettuce and Cauliflower plants under glass; indeed, the sashes should merely be used to throw off rains, for the plants will do all the better for being kept hard. A sowing of Peas and Beans on well sheltered dry ground may soon be made, and do not spare the seed of the former, for it will be some time exposed to the depredations of mice. Take advantage of the first sunny day that may occur with the ground in a dry state to earth up Celery.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending Oct. 24, 1861, as observed at the Horticultural Garden

October.	Moon's Age.	Barometer.		Temperature					Wind	Rain.
				Of the Air.			Of the Earth			
		Max.	Min.	Max.	Min.	Mean	1 foot deep	2 feet deep		
Friday 18	○	30.140	29.997	62	31	46.5	56	56	E.	.00
Satur. 19	15	29.970	29.801	66	34	50.0	56	55½	E.	.00
Sunday 20	16	29.838	29.775	58	39	48.5	55½	55	S.	.00
Mon. 21	17	29.767	29.647	62	38	50.0	55½	54½	S.E.	.06
Tues. 22	18	29.758	29.750	62	42	52.0	56	54½	S.	.28
Wed. 23	19	29.967	29.952	61	42	51.5	56	54½	S.W.	.02
Thurs. 24	20	29.993	29.969	62	54	58.0	56½	54½	S.	.00
Average		29.919	29.841	61.8	45.4	50.9	55.9	54.9		[illegible]

Oct. 18 Foggy; fine; slight frost at night.
— 19—Dense fog; fine; very fine; overcast.
— 20—Foggy; cloudy; overcast; fine at night.
— 21—Slight fog; overcast; showery at night.
— 22—Foggy; very fine; rain.
— 23—Overcast; cloudy; fine; slight rain.
— 24—Densely overcast; cloudy; fine, overcast.

Mean temperature of the week 1 deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Nov. 2, 1861.

October and November.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds.							
						N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 27..	51.9	38.8	46.8	22	0.92 in.	2	5	3	1	7	5	7	5
Mon. 28..	51.6	38.6	45.6	21	1.06	1	5	3	—	7	12	3	4
Tues. 29..	52.7	35.0	44.8	16	0.63	3	5	4	1	5	13	1	3
Wed. 30..	55.1	38.3	46.7	17	0.98	3	7	2	3	4	13	2	1
Thurs. 31..	53.8	38.2	46.0	18	0.88	1	4	3	2	2	12	7	4
Friday 1..	54.5	38.3	46.4	19	0.38	3	2	4	4	4	7	8	3
Satur. 2..	51.4	38.1	46.2	15	0.61	1	3	6	3	2	15	[illegible]	4

The highest temperature during the above period occurred on the 28th, 1830, 29th and 30th, 1833, and 31st, 1851—therm. 67 deg: and the lowest on the 2d, 1850—therm. 22 deg.

Notices to Correspondents.

Blue Dahlias: *D R.* asks us to state why and what is the cause we never have a Blue Dahlia or Yellow Salvia? We confess our inability to explain the inexplicable. But as for Yellow Salvia, does he not know that it exists?

Books: *R Jonson.* It is of no use merely to read books. One honestly and carefully studied will do more than a thousand scrambled over. Study, study, study. So shall you prosper and not otherwise.—*Puzzled* will no longer be puzzled if she will procure Loudon's Hortus Britannicus, or his Encyclopædia of Plants.

Ground Nuts: *T J.* These are the tubers of a little Umbelliferous plant called Bunium Bulbocastanum, common in dry pastures. We used in childhood to think them nice: but now! we greatly doubt.

Icehouses: *C G.* We much prefer thatch for covering these buildings. The recommendation to ventilate them is from North America; but we are not aware how it is effected, or that the plan has been tried in this country.

Lupine Roots: *C M.* The tubercles are natural to the roots of this and other Leguminous genera. They do no harm. Probably they are subterranean galls. We regret to say that your question has been overlooked, and we must apologise for the delay.

Mushrooms: *Kingstown.* Agaricus oreades and Marasmius oreades are two names for the same plant. You will find it figured and described in our last year's Volume, p. 190.

Names of Plants: *Sigma.* It is probably Potamogeton perfoliatum.

Orchard Houses: *A H.* would be obliged by "L. B." stating what water he uses—whether rain, pond, river, or from a deep well? Some one would, perhaps, also oblige by informing him how the supply of water for the Crystal Palace is obtained? A H. strongly suspects the water is at the root of the evil. He was long puzzled about the tips of leaves dying, but at last found that it arose from using water from a deep well.

Park Trees: *Jas. Hamilton.* Your trees ought not to require protection. Cattle can only damage them by biting the lower twigs, or by rubbing against the bark: and yours appear to be much too old for this to happen. If you cannot stop it tie thorns round the stems; but we should, in the first instance, watch till the cause of the mischief was discovered. As to breath! No. No.

Royal Horticultural Society: *D.* The privileges of Guinea Fellows of the Society, namely practical gardeners, are the same as formerly, and as those of Two-guinea Fellows now. Both they and Corresponding Members have a right to personal admission at all meetings and to the gardens at all times when open to the public.

Wellingtonia: *D C.* There are, doubtless, a great many English, especially S. English cases of this tree lengthening 2 feet annually. But it cannot be expected to do so so far north as Stirling, especially in a N.E. exposure. Nothing is done here to promote its growth beyond planting it in good land. It evidently likes a stiff soil.

THE LONDON MANURE COMPANY
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Are now prepared to send out the following MANURES:—
CORN MANURE for AUTUMN SOWING.
SUPERPHOSPHATE of LIME.
DISSOLVED BONES for PASTURES.
CONCENTRATED URATE.
BLOOD MANURE for CORN.
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The Manures manufactured by J. B. Lawes for the present season of 1861 are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, and BONE SUPERPHOSPHATE of LIME	£6 6
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Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
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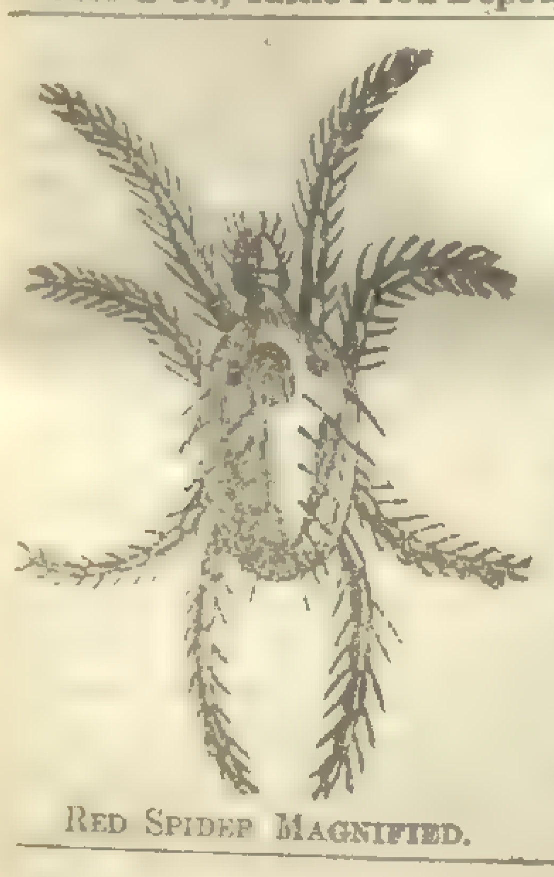
Agents Wanted.
Factory: 28, Clapham Road Place, S.

Pigs. Pigs. Pigs.
200 TONS of DAMAGED RICE, suitable for feeding Pigs, to be sold for Cash at 4l. per Ton.
At W. Jupp & Co.'s Cattle Food Depôt, 42, Great Tower Street, E.C.

HORSE and CATTLE FOOD, 35s. per cwt.; Pig and Poultry Food, 16s.; Dog Biscuit, 15s.; Compressed Beef Greaves, 12s. and 16s.; Rice Meal, 7s. 6d. and 9s. 6d.; Indian Meal, 14s.; Locust Beans, 10s. 6d.; Locust Bean Meal, 15s.; Linseed Meal, 16s. 6d.; Screened Bengal Rice, 14s.; Chicken Rice, 10s. Sold for Cash only by
W. Jupp & Co., Cattle Food Depôt, 42, Great Tower Street, E.C.


Red Spider Magnified.

ORCHARD HOUSE TREES and VINES.—
Winter wash with
GISHURST COMPOUND,
recommended by Mr. Rivers. See "Orchard House," ninth edition; and see Mr. Pearson's recommendation in *Cottage Gardener*, 10th Sept., 1861.
Sold retail by Nurserymen and Seedsmen in boxes 1s., 3s., and 10s. 6d. each.
Wholesale by
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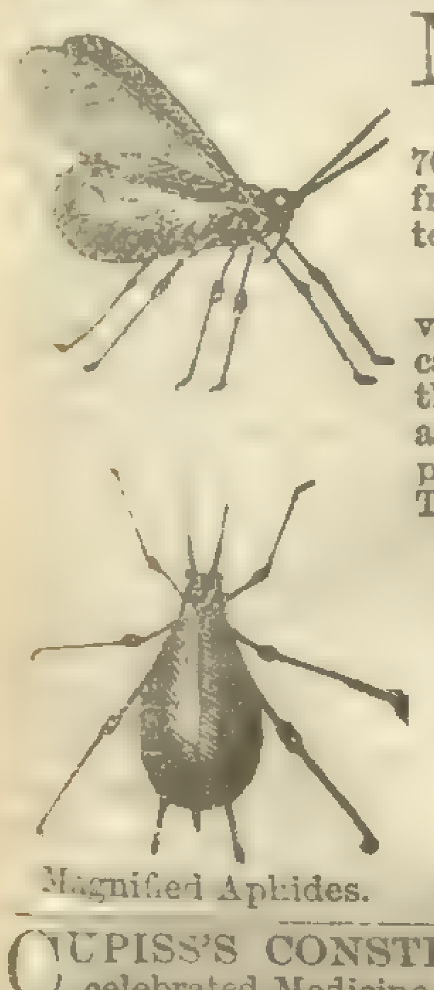
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"I beg to bear my testimony to the value of Neal's Pastils, and their efficacy in destroying, most effectually, the Green Fly without any trouble, and at a nominal expense, when compared with the use of Tobacco or even Tobacco Paper.
"James Sanders,
"Nursery Grounds, Abergavenny."
Sold by all principal Seedsmen.
Price 1s. and 2s. per packet.
Patentee, J. Neal, Birmingham.

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The Balls will be found admirable for Coughs, Colds, Strangles, Influenza, Inflammation of the Eyes, Swelled Legs, and other diseases incident to Horses and Neat Cattle, as may be seen by the directions and Testimonials with each packet.
The Balls are prepared by Francis Cupiss, Diss, Norfolk, Author of the Prize Essay on the Diseases of the Liver of the Horse. And may be had of all Patent Medicine Vendors, in Packets (6 balls each), 3s. 6d. per packet, or 7 Packets for 21s. with full directions.
Persons using the Balls may consult the Proprietor gratuitously by enclosing a Stamp in a prepaid letter.

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MESSRS. RAYNBIRD, CALDECOTT, and BAWTREE, Seed Growers and Merchants.
Address: Basingstoke and Andover; or 89, Seed Market, Mark Lane, London, E C.

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GRASS SEEDS for LAWNS,
And all other Seeds of the same excellent quality which has rendered our Farm Seeds so celebrated.
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Our Book of FARM SEEDS sent free for 3 stamps.
J. C. Wheeler & Son, Seed Growers, Gloucestershire.

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Hydraulic Engineers, Braziers, &c.,
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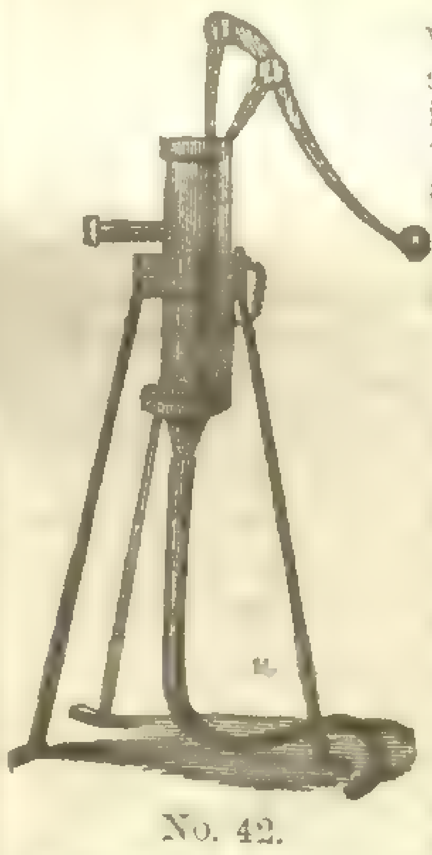
WARNER'S PATENT CAST-IRON PUMP, for raising Water from Wells not exceeding 25 feet in depth.

Diameter of Barrel.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead, gutta percha, or cast iron flanged pipe as required.	1 1 0
2½ ,, long	3 ,, 3 ,,		1 10 0
3 ,, ditto	3 ,, 6 ,,		2 4 0
3½ ,, ditto	3 ,, 6 ,,		2 9 0
4 ,, ditto	3 ,, 6 ,,		2 18 0
2½ ,, short, with 15 feet of Lead Pipe attached, ready for fixing			2 0 0
2½ ,, long ditto ditto ditto			2 14 0

This Pump is fitted with J. W. & Sons' Patent Vibrating Standard, Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.

WARNER'S IMPROVED LIQUID MANURE or GENERAL PORTABLE PUMP.


No. 42.

This Pump is fitted with Warner's Patent Bucket and Valve, and cannot clog in action. The Barrel is made of Galvanised Iron, not likely to corrode, and can be raised or lowered at pleasure on the stand, the legs of which fold together, and it may be carried with ease by one man.

	£ s. d.
Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe	2 15 0
If fitted with Barrel of Planished Copper	3 4 0
Stand and Pump, with plain Tail Pipe, for tying on Suction Pipe	2 9 0
2-inch India Rubber and Canvas Flexible Suction Pipe, on wires, in either 10, 12, or 15 feet lengths .. per foot	0 2 5

No. 43 is a similar Pump to the above, without stand, but with strong wrought-iron straps, for fixing to water cart or plank, price 2l. 5s.
Every description of Machinery for Raising Water, by means of Wheels, Rams, Deep Well Pumps, &c.; also Fire and Garden Engines, &c.
J. W. & Sons' Illustrated Catalogue forwarded post free on application.
The above may be obtained of any Ironmonger or Plumber in Town or Country, or of the Patentees and Manufacturers,
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Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
To Landowners, the Clergy, Estate Agents, Surveyors, &c. in England and Wales and in Scotland.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
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Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.
For further information, and for forms of application, apply to the Honourable William Napier, Managing Director, 2, Old Palace Yard, Westminster, S.W.

THE BIRMINGHAM CATTLE and POULTRY SHOW, 1861.
The THIRTEENTH GREAT ANNUAL EXHIBITION of CATTLE, SHEEP, PIGS, DOMESTIC POULTRY, and ROOTS will be held in Bingley Hall on MONDAY, TUESDAY, WEDNESDAY, and THURSDAY, the 2d, 3d, 4th, and 5th of December next, when Prizes, Cups, or other articles of Silver Plate and Gold and Silver Medals to the amount of 1450l. will be awarded.
Prize Lists and Certificates of Entry may be obtained on application. The Entries close on November 1.
John B. Lythall, Secretary.
Offices, 14, Temple Street, Birmingham.

SMITHFIELD CLUB CATTLE SHOW, 1861.—The ANNUAL SHOW of FAT CATTLE, SHEEP, and PIGS, will take place on DECEMBER 10, 11, 12, and 13, at the Bazaar, King Street, Portman Square. The last day for Certificates of both Stock and Implements to be returned to the Hon. Secretary is Friday, November 1.
The following Forms of Certificates are now ready, and intending Exhibitors in applying for them need only quote the letters and state how many of each they require.

Cattle.	Sheep.
Form A—Ox or Steer	Form D—Pen of 3 Wethers
B—Cow or Heifer	E—One Sheep in Extra Stock
C—Beast in Extra Stock	

Pigs.
Form F—Pen of 3 Pigs.
G—One Pig in Extra Stock.
In addition to the Prizes usually offered, separate Classes have been established for the following Breeds of Sheep:—

Kentish or Romney Marsh	Shropshire Mountain

Prize Sheets with Rules and Regulations and Forms of Certificates as above may be obtained of
B. T. Brandreth Gibbs, Hon. Sec.,
Corner of Half-Moon Street, Piccadilly, London, W.
N.B. All communications on the Club's Business should have the words "Smithfield Club" outside, to distinguish them from private letters.

CRYSTAL PALACE.—WINTER SHOW of POULTRY, PIGEONS, RABBITS, ORNAMENTAL WATER FOWL, GOLD, SILVER, and other PHEASANTS.—A SPECIAL SWEEPSTAKES for ONE HUNDRED GAME COCKS, and a SHOW of AGRICULTURAL ROOTS and other produce, on WEDNESDAY, THURSDAY, FRIDAY, and SATURDAY, December, 11, 12, 13, and 14.
Entries close Saturday, November 9.
All communications to be addressed to Mr. W. Houghton, Secretary to the Show.
The London, Brighton, and South Coast Railway Company have kindly consented to convey the Poultry, Agricultural Roots, &c., from any Station on their line FREE OF CHARGE.

The Agricultural Gazette.

SATURDAY, OCTOBER 26, 1861.

FORTHCOMING MEETINGS.

Monday,	Nov. 4	London .. .. (Mr. Denton on Land Drainage.)	6 p.m.
Wednesday,	— 6	Agri. Society of England.. ..	Noon

—— On last Thursday, another far-famed herd of Hereford cattle was distributed by auction. Mr. W. G. Preece, of Shrewsbury, then sold the stock of Mr. John Hewer, of Vern Farm, Marden. Thirty two cows and heifers fetched about 1000 guineas, averaging nearly 35l. Among them Nell Gwynne, a 3-year old heifer, fetched 71 guineas, and the calves of other two—Dinah and Gipsy Lass—viz., a heifer calf of the former, and a bull calf of the latter, fetched 61 and 90 guineas respectively. Mr. Walker, the purchaser of Nell Gwynne, bought the former; Mr. Morris, of Dlerw, the latter. Fifteen bulls and bull calves were sold for 810 guineas, or 52 guineas each. "Abd-el Kader, a 3-year old bull, bought by Mr. Sparkman, realising 136 guineas.

Although it is unquestionably true that the general adoption of steam-power in cultivation will be ensured by the superiority of the work thus done rather than by the annual saving of expense which on large farms will be thus effected, yet it is well to direct attention to everything calculated to diminish expense or increase the quantity of work done in proportion to the fuel and wages spent.

1. Among the great number of important points which affect the labour to be accomplished by the steam engine engaged in cultivation, whether by FOWLER'S apparatus or by HOWARD'S, is the dragging of the draught rope. Where this is well carried off the ground, there is not only less draught but there is less wear; and we believe that Mr. FOWLER'S arrangement for keeping the rope of a given tightness is thus a most economical thing. During the past summer we made a number of experiments on draught by the aid of BENTALL'S dynamometer at Burderop, Fawley Court, Sarsden, and Castle Hill farms—all described in past pages.

At Burderop, the plough being pulled from the anchor to the engine, which were 220 yards apart, the draught of the rope behind the plough was $2\frac{1}{2}$ cwt. at starting; it increased to 3 cwt. in the middle of the course, *i. e.*, when 330 yards of rope were being dragged. This was when carried on 3 porter wheels. When the porters were withdrawn, the draught immediately became $4\frac{1}{4}$ cwt., and increased at the end of the furrow, when 440 yards were thus being dragged upon the ground, to $5\frac{3}{4}$ cwt.

At Sarsden again, the anchor and engine being 320 yards apart, and the rope proper for a 10-horse engine being rather lighter, the draught, when 320 yards were dragged behind the plough, was $2\frac{1}{4}$ cwt., carried on 4 porters. It was $3\frac{1}{4}$ cwt. uncarried. At 380 yards it was $2\frac{1}{2}$ cwt. carried and 4 cwt. dragged. At 500 yards it was $2\frac{3}{4}$ cwt. carried, 6 cwt. dragged, and when the plough was close to the engine, pulling thus more than 600 yards of rope after it, the draught behind it was $3\frac{1}{4}$ cwt. when the rope was fairly carried, and $6\frac{1}{2}$ cwt. when wholly dragged.

At Mr. RUCK'S, at Castle Hill Farm, the plough drawn from anchor to engine, 360 yards apart, pulling 360 yards of rope uncarried, was kept back by a drag of $5\frac{1}{4}$ cwt.; when approaching the middle of the furrow with 540 yards of rope behind it, it was carried on porters and the draught fell to $3\frac{3}{4}$ cwt.; in the third quarter of the course, with 630 yards of rope out all dragged, the draught was $7\frac{1}{2}$ cwt., and near the end, with 700 yards out all carried, the draught was $4\frac{3}{4}$ cwt.

In these cases it is plain that an immense saving, equal to nearly the force of a pair of horses in some parts of the course, is capable of being effected by any contrivance which shall effectually convey the rope off the ground. It is also plain that a good deal of the economical management of the steam plough depends on the lads in charge of the porter wheels being kept diligently to their work of placing these porter wheels at proper intervals underneath both the draught and the slack rope.

2. The relation of speed to draught is also a very interesting matter to any one who wishes to accomplish his steam ploughing economically. On this point we quote the following figures observed at Burderop.

The four-furrow plough was engaged in $5\frac{1}{2}$-inch ploughing. The distance accomplished and the time employed in going through it at that depth were observed several times—the engineer being directed to drive first as slow as possible and then as fast as he could, and after each experiment the dynamometer was observed. The draught in every case was considerably increased by the increase of speed, but nothing in proportion to the quantity of work accomplished. To compare, for instance, Nos. 4 and 3 in the following table—the draught, when going $6\frac{1}{3}$ miles per hour, was only 16 cwt.; while, when going only $\frac{2}{3}$ of a mile per hour, it was 11 cwt. But then in the former case nearly 9 times the quantity of work must have been done in a given time.

DRAUGHT AT VARIOUS SPEEDS.

No.	Distance, yards	Time, seconds	Miles, per hour	Draught, cwt.
1	154	240	$1\frac{1}{3}$	$11\frac{3}{4}$
2	116	41	6	$16\frac{1}{2}$
3	24	75	$\frac{2}{3}$	11
4	50	16	$6\frac{1}{3}$	16
5	19	8	$4\frac{3}{4}$	17

In the case of No. 5 more slack rope was out, and thus the draught increased on that of No. 4, notwithstanding that the speed was less.

At Sarsden, again, the following results when scarifying 5 inches deep, were read:—

No.	Distance, yards.	Time, seconds.	Miles per hour.	Draught, cwt.
1	20	27	$1\frac{1}{2}$	15
2	40	26	$3\frac{1}{7}$	$19\frac{1}{2}$
3	20	27	$1\frac{1}{2}$	15
4	40	26	$3\frac{1}{7}$	17

Here double the work must have been done in a given time, at an increase, on the average, of $\frac{1}{5}$ of the draught. Of course there will always be the increased risk of accident attendant on excessive speed to forbid it. But these figures indicate that it is well to avoid sluggishness in steam culture as it is in horse or manual labour.

3. Now for the effect of depth on draught. We have four sets of experiments to record on the four farms already named. We give their results in the following Table:—

Depth, inches.	Draught in Cwts.				
	1	2		3	4
		a	*b*		
5	..	..		..	..
$5\frac{1}{2}$	$11\frac{3}{4}$	15 17	$9\frac{1}{2}$ $6\frac{1}{2}$	..	..
6	..	..	..	12	..
$6\frac{1}{2}$	16	17	..	..	..
7	..	..	..	14	..
$7\frac{1}{2}$	15	19	13	..	$12\frac{1}{2}$
8	..	..	..	16	..
$8\frac{1}{2}$	22	23	14	..	$16\frac{1}{2}$
9	..	..	..	16	..
$9\frac{1}{2}$	27	..	..	..	$24\frac{1}{2}$
10	..	..	..	..	..

The columns 1, 2, 3, 4 relate to the four farms. Each column is complete in itself, and does not admit of comparison with the others, as the soils are altogether different. In the case of No. 2, *a* was the draught when going up hill, a slope of 1 in 10, and *b* when coming down hill, also a slope of 1 in 10. The slope was in the case of one reading (the second at $5\frac{1}{2}$ inches deep) so steep as 1 in 5; and it will be seen how great the difference in consequence was the draught up hill and down. It will be also seen that some of the readings remained the same, though at the greater depth, as in the case of No. 3, when they were taken at different parts of the field, and therefore in varying circumstances as to soil. It will be also seen that the draught increases faster than the depth—a double depth takes more than double force, as was to have been expected when it is considered that the deeper ploughing stirs soil that has not been moved before. It is the especial advantage of steam-power that it is not stopped even by work which requires a draught of 27 cwt. to accomplish it.

These figures must be taken as but a small contribution to a complete investigation of the labour of steam cultivation, which we hope hereafter to accomplish.

—— The paper given below, descriptive of the experimental plots in the Botanical Garden at the Royal Agricultural College, Cirencester, was sent by Professor BUCKMAN to be read before the British Association at its late annual meeting—but unfortunately, from some delay of the post, it arrived too late. We now give it just as it was prepared for reading before the Botanical Section at Manchester.

ON THE EXPERIMENTAL PLOTS IN THE BOTANICAL GARDEN OF THE ROYAL AGRICULTURAL COLLEGE.

BY JAMES BUCKMAN.

MY plots, amounting to about 200, have been kept in full operation during the present season. Most of the common British Grasses, however, have become so mixed that it is contemplated to renew the plots of them in another year.

It should, however, be noted that the plots of Poa aquatica and P. fluitans, which were formerly reported upon as presenting some curious transformations, are at the present moment perfectly free from interlopers on the one hand, whilst on the other, though they always seed so enormously, the original rows are not interfered with by a sporadic growth. The whole of the rows of both plots present the altered Grass without admixture, thus affording a clear answer to the question of the change having taken place in only a few individuals (as has been suggested) by hybridism. The "Section" should now be told that fresh specimens from the two plots in question were sent by me to Professor Lindley, by whom it seems they were forwarded to M. Decaisne, and no doubt most of the members of the Section are aware that this gentleman has pronounced both specimens to be Poa (not Glyceria) sudetica, upon which he remarks that—"This brings down the whole scaffolding with which his (my) theory was constructed." Seeing, however, that I had no theory, and if I had built one up it was time to remove the scaffolding, I cannot quite see the meaning of the remark. My object in these experiments has been to arrive at simple facts, and I confess that as yet I have not sufficient materials to warrant me even in constructing a scaffolding to commence work from. Now, I would remind you that these plants have always been described by me as Poas, and my opinion has ever been that they could not possibly be referred to the genus Glyceria.

That M. Decaisne can refer them to a known species is then no more than I should expect, and though I confess that I am unacquainted with the so-called Poa sudetica, yet as I never pretended to create a new Grass, I at present accept the specific determination, and in doing so must conclude that from the cultivation of the seeds of Poa aquatica at least a wholly English Water Grass, there has been brought about the foreign species of Poa sudetica.

At the time when these experiments were first described to the Association, my friend Dr. Voelcker exhibited the remainders of the two packets of seeds whence my specimens were grown, and if returned to me, which I think they were, I shall yet hope to find them. In the mean time I would now revert to some experiments previously described in reference to this curious subject. I stated in the Report for 1859 that I had collected roots of the Poa aquatica and P. fluitans from a neighbouring canal, and planted them in two of my garden plots.

At the present moment the plot with P. aquatica grows about half the size of water examples, and its flowers are altogether smaller; it does not ripen its seed, or I should expect some very curious results from sowing it. It is true that it has rhizomes as described by M. Decaisne, and perhaps if it had not it would grow its seed better.

Poa fluitans has died with me. The distinguished French naturalist makes it grow on land as swimmingly as in the water, for he says, "Each plant forms a close tuft, from which arise many flowering branches which spread over the ground just as they do in water." —*Gardeners' Chronicle*, August 17, 1861.

But perhaps after all, these differences may arise from treatment. In the Garden of Plants in Paris these Grasses were probably treated in accordance with their habits, which is good gardening, and which we have no doubt is there practised. With me however the process is reversed, as I usually operate on the assumption that if I treat a plant differently from its nature and habits, it may not unreasonably be expected to produce some strange anomalies on cultivation.

I have this year specially to report upon what I consider some curious experiments on the following plants, the nature of which I can only indicate now, as their growth is not matured, but I hope to be allowed to send in the details to the Secretary before winter. They are as follows:—

Plot A. Daucus maritima.
B. The Ennobled or Student Parsnip from well shaped roots.
C. A Parsnip of the ugliest possible form had been seeded and some of the seed sown by the side of Plot B.
D. Swede seed from a malformed root.
E. Turnip from a badly grown sample of seed.
F. Plot of Beta maritima from the wild plants of a green colour as they grow at Bognor.
G. Another plot of seed of Beta maritima from the same place, of the red form.
H. Wild Cabbage, from the perpendicular cliffs at Llandudno.
I. Ægilops ovata.

Plot A., Daucus maritima: M. Decaisne tells us that he has tried to ennoble the Wild Carrot and has not succeeded. I did the same, as stated in one of my earlier reports; but I do not therefore conclude that an esculent Carrot, whether red, orange, yellow, white, short, or long horned, was the object of Adam's gardening labour. M. Decaisne's trials and my own were made with the Daucus carota. Now it has occurred to me that change of air and scene will do more for the D. maritima, and though my seed was sown late I have already some nice straight succulent roots intermixed with many crooked ones, and I would remark that I this day (Sept. 7) introduced some of my young roots of Daucus maritima at table, and can report that they boiled remarkably tender and were pronounced by our party of four to be excellent. If then M. Decaisne will try experiments upon a plant almost from a different element, grown on tertiary beds on the lowest land in England, and make the change of a distance of nearly 200 miles, and a great elevation like our oolite hills, he cannot help making an impression on the subject of his experiments.

Plots B, C, D, and E have been arranged to show how easy it is to grow degenerate plants by choosing seed from diseased or mal-formed examples. Now with respect to the Swede and Parsnip I may say that before planting them for seed I took the portraits of the seeded roots. I cannot now decide upon these cases, as the crops are not fully grown, but they already establish the important fact that seed from malformed roots do not grow more than half the crop of that from good shaped examples.

There is, then, as much breed in a Parsnip as in a pig, and experiments to show the law of advance or retardation can hardly be other than interesting.

F. and G., Wild Beet.—I confess the at present forked roots look but unpromising, but when I go to the kitchen garden and examine the roots of the white Beet, which is only grown for its leaves, which are used as a garden vegetable, I see that they are no better. It is only in growing for roots that you get them of the right form, but the whole of these cases shall be carefully drawn up when this report is completed, which cannot now be done as the crops are just in full growth.

This remark applies to the next Plot H., Wild Cabbage. Of this I got some seed from a single root, growing on the perpendicular cliffs of the Great Orme's Head at Llandudno in North Wales. Now upon this point a writer in the *Gardeners' Chronicle* seems to have supposed that Llandudno was a Cornish name,

and immediately he constructs a theory upon this assumption as follows:—

"As to a Broccoli wild in Cornwall, we can easily conceive such a stranger to appear without tracing his pedigree up to the ancient stock of Brassica oleracea, whose lineage may still be pure. For may it not have been a poor runaway from Penzance, where acres of Broccoli are cultivated for the London market?"

Here, however, if a Broccoli seed can travel from Cornwall through the Menai Straits, and there seed in the chinks of the mountain limestone of the Great Orme's Head, and seed from this grow Broccoli in my garden, the whole matter would be more strange than anything I ask credence for.

Now as regards this Cabbage seed from Llandudno, the simple statement is that I sowed it in a hot bed last year (1860); it came up freely, and some of the plants were transplanted to the College garden, and two plots in distant parts of my own private garden. Now this spring one of these in my garden "turned in" in a Broccoli form; the rest at this moment manifest no disposition to turn in or seed; they continue growing, and it is curious that we must in this case wait for the third year to know the result. It is also curious that Broccoli in the kitchen garden of the Royal Agricultural College intended for the spring crop of this year (1861) has not yet turned in but still continues growing, and if the next winter does not destroy it and it turns in large Broccoli, it will be an instance of this crop taking part of three years for its growth. What my Llandudno Cabbages will come to I cannot say, but I shall watch the experiments with great interest, and should any member of the Association be disposed to grow the seed which I have saved from my "poor runaway" Broccoli, I will send some, and shall be glad to know the result of the cultivation.

The next plot (I), Ægilops ovata, again leaves no doubt on my mind of the identity of this plant, with Wheat, as its seed is not only of the same shape but fully as large as a middling-sized Wheat grain whilst the alteration in the pales and awns has progressed towards the Wheat ever since I commenced experimenting with it.

In presenting this abstract to the Association I would now only remark—in so far as my experiments upon what has been termed the ennobling of wild plants are concerned, I had not the slightest notion that I was combating a theory that cultivated forms were created specially for the use of man, as in truth I was not aware that it was so held by a single naturalist. It is quite true, as stated by a Correspondent of the *Gardeners' Chronicle*, who signs his paper "G. B.," that I believe in the ready derivation of cultivated forms from wild species often apparently very different, and upon this subject I hope some time to lay before you enough evidence to support my views. *Cirencester, Sept.* 1861.

SELF-SUPPORTING BOARDING SCHOOLS FOR THE SONS OF THE WORKING CLASSES.

[Paper read at the Anniversary Meeting of the Southern Counties (Hants, Wilts, and Dorset) Adult Education Society, by the Rev. Henry Moule, Vicar of Fordington.]

An education for the working classes, which shall be truly and largely beneficial to them and to their country, ought to consist not merely in the imparting of a certain amount of instruction in secular or even religious subjects, but in a system of teaching and of training, which shall be at once intellectual, religious, and industrial. Such a system cannot exist in our day schools. Useful as they are to a certain extent, and high as their standard of intellectual training occasionally rises, they altogether fall short of a system of education. For the very early removal of the children, a difficulty which no educational rate nor capitation grant nor any scheme of compulsory attendance will ever obviate, renders even the intellectual training generally afforded very imperfect; whilst, partly from the children being so small a portion of the day under the teacher's influence, and so large a portion of it under counteracting influences, and partly from the want of opportunity, religious training and industrial training are altogether impracticable.

In my boarding schools there would be on the contrary full scope and opportunity for the most complete system of intellectual, religious, and industrial training, and, if adopted even to a very partial extent, these schools would hold in relation to our primary schools much the same position of influence which our Universities hold in relation to public and private schools for the upper and middle classes. On the bare hope and probability of all this, I venture to claim the most serious attention on behalf of my scheme for the institution and maintenance of such schools.

I will first show from whence the funds are to be derived for the maintenance of these schools. These will necessarily be large. For in order to induce either the mechanic or labourer to part with his child, as the higher classes do, for the greater portion of the year—in order to induce him from 12 to 15 years, or from 12 to 17 years of his age, to give up the child's earnings, you must give to the parent a good ground to expect such an education as shall improve the child's condition in life. This will involve the necessity of a highly qualified, and therefore highly paid, staff of masters; and in the next place you must lodge, feed, and clothe the child free of all expense to the parents.

Now this, if looked for from the pecuniary aid of the richer classes in the way of gifts, would be the absurdity of extravagance. But if, with no more aid from the rich than a temporary loan, which should be a fair investment, it can be brought about by the working classes themselves, or rather by the children themselves, then we shall have in these schools a system which shall not only be worthy the name of education, but which for economy shall be so vastly superior to any system hitherto devised as to be independent both of charitable subscription and of Government grants.

And this, I assert, can be effected. The well-directed labour of 100 boys bestowed on a sufficient extent of land suitable to the purpose, shall, with God's blessing, raise an income sufficient to repay with interest, in 20 years, the necessary capital to be borrowed; to pay rent, rates, and taxes; to provide food, clothing, and a savings fund for the children in the way of encouragement, and to furnish good salaries for the best masters, directors of work, and servants.

Such an assertion will doubtless appear to many perfectly visionary. But both it, and what follows in support of it, rest upon facts and experiments, and on the opinions of men of the first intelligence and the most practical knowledge.

A healthy boy, only 10 years old, working 7 hours a day with a steel fork on a light soil, can dig an acre in six weeks. If so, then under proper direction he may cultivate 3 acres, digging them twice in the course of the year. And a school of 100 boys, averaging from 10 to 17 years of age, and working in companies of 20, with a director over each company, may thus keep 300 acres constantly under the fork or spade, and may produce by wide and alternate cropping, and by the application of manure to the plant instead of to the ground, certainly two crops a-year.

From land thus under garden cultivation, a much larger produce may obviously be expected than from an ordinary farm, and 20*l.* per acre per annum is the lowest estimate of gross produce, which, provided there be a due supply of manure, has been allowed me by men of great experience; whilst some of them have set their estimate so much higher than this that I consider myself quite safe in reckoning the value of gross produce of 300 acres so cultivated at 6000*l.* annually.

Supposing, then, that a farm of 360 acres of improvable land should be taken, and that for buildings, furniture, stock, and implements, the salaries of officers and the maintenance of these and of the children for the first year, a capital of 10,000*l.* should be required. I set down the expenditure for the year in round numbers thus:—

	£	s.	d.
Repayment of principal at 5 per cent.	£500	0	0
Average interest for 20 years at 5 per cent. ..	262	10	0
Rates and taxes	200	0	0
Seeds, implements, &c.	150	0	0
Food, clothing, washing, and medicine of 100 boys, at 15*l.* each	1500	0	0
Coals and candles	75	0	0
Payments to boys	300	0	0
Books, maps, and stationery	150	0	0
Incidental expenses	165	0	0
Salaries (and maintenance of a portion) of masters, directors of work, and servants .. *	1200	0	0
	4502	10	0
This will leave a surplus of ..	1497	10	0
	£6000	0	0

Or take another scheme, somewhat more definite and in many respects preferable. Some landowner desirous of breaking up improvable land might set apart for such purpose 360 acres of fair average quality and in a suitable situation; and he might spend 7000*l.* on breaking up, draining, fencing such a farm, and on the buildings, which need not exceed, if they need equal, in cost, some modern farm buildings. Now, on money thus invested, partly in land and partly in buildings, 5 per cent. would be a fair return. Then let 6000*l.* be borrowed by the school-tenants as capital, and the account would stand thus:—

Rent	£350
6000*l.* to be paid off at 5 per cent. principal and 5 per cent. interest in 20 years would be nearly 8 per cent. on the original sum, say	450
Rates and taxes	200
Seeds and manure	150
Books, maps, and stationery	150
Coals and candles	75
Food, clothing, washing, and medicine for 100 boys ..	1500
Incidental expenses	165
Money payments to boys	300
Salaries and wages .. .. †	1230
	4540
Surplus balance	1460
	£6000

Now granting for a moment a disappointment as to this surplus, the margin I have allowed myself is so wide that even on this reduction of 25 per cent. on my estimate of produce, yet by reducing a little the large allowance for maintenance of boys and salaries of masters, there would still be a surplus which would render the scheme not only feasible but safe.

My confidence in my estimate, however, has been so increased by 5 years of delay and consequent reflective inquiry, that I now propose from this surplus of about 1500*l.* to make a most important addition to the scheme of education to be carried out by these funds. For the first two years, perhaps, this sum should be invested as a reserve fund. But after that, while still investing one-third of it for that same purpose, I would apply 1000*l.* a-year to the higher instruction of those youths in the institution, who, having at the age of 17 years shown by their good conduct, ability, and attainments that they were likely to be qualified for such offices, might wish to be trained as schoolmasters, catechists, or missionaries.

With this object their hours of work would be reduced and their hours of study increased. Either in the field or in the study, during their hours of work they would act as pupil teachers, and for this they would receive a salary.

But now as to the system of education, and as to the important division of time for this double purpose of study and of labour. For a course of study to be pursued under such discipline and training as I propose, for a period lasting from 10 to 15 years of age, or from 12 to 17, 3 hours a-day will be an ample allowance for regular lessons. To the systematic teaching given during these hours add the general information which might be imparted during the hours of field labour and acquired by voluntary reading, and I should confidently expect that at the age of 17 a lad of fair abilities, who had passed through such a course, would hold a very fair place in our middle class examination lists. And if the masters and directors of work be well chosen (and without this I own the system cannot work), then no opportunity could be more complete than that which such a school would afford for religious and moral training. At family worship, and during the sacred rest of the Sabbath, there would be the fullest scope for easy and cheerful religious instruction; and at meals, during the field and farm-work, and even in the play-hours, evil habits could be restrained and the opportunity continually afforded for the inculcation of habits of morality, of obedience, of industry, and of courteous propriety.

The division of the 24 hours of each day might be generally stated thus:—

Field and farm work	7	hours
Lessons in school	3	„
Dressing and undressing	½	„
Meals and worship	1½	„
Sleep	8	„
Play	4	„
	24	

Time will not allow of my dwelling on the many collateral advantages likely to attend the large institution of such schools. I will only say that the same principle may safely be adopted with some modification in establishing schools in which girls might be trained to be domestic servants, nurses, schoolmistresses, and still more to be intelligent, industrious, and useful mothers of families and members of society, and that if 40 or 50 such establishments for both sexes should be instituted and properly conducted, we might in a very few years dispense with our prize schemes, and even with our immense Government grant for Training Colleges.

To the objection which has often been urged against this scheme on the score of doing so much for the working classes, I have commonly replied that if in our Reformatories we provide a comfortable Boarding School for criminals, we cannot well do less, nor, as I think, can we safely do less, than afford such help as I propose to enable those who have not committed crime to provide themselves with such a school. The Government gave (I know not whether it still gives) a subsidy of 5000*l.* a-year to the Redhill Reformatory. This subsidy and the annual subscriptions to that Institution at one time amounted together to 9000*l.* If I could obtain as a loan, to be repaid in the manner I propose, either two years' subsidy, or a little more than one year's subsidy and subscription together, or on the adoption of my second scheme, one year's subsidy and no subscription, there might soon be a first experiment made of a system which amongst its many other collateral advantages might reckon this, that it would with God's blessing tend to raise greatly among the working classes the standard of industry, religion, and intelligence, and thus and in other ways prove a vast means for the prevention of crime. *Henry Moule, September* 27.

* Here I omit rent, but I omit also all account of 60 acres, which may be pasture.

† Here also I omit all that may be easily made of 60 acres which may be pasture.

AGRICULTURAL STATISTICS, IRELAND, 1861.

[The following is the report of the Registrar just presented to the Lord Lieutenant.]

As regards the crops, the totals exhibit an increase in the areas under Oats, Barley, and Beans and Peas; and a decrease in those under Wheat, Bere, and Rye, resulting in a total diminution in the acreage under cereals of 15,701 acres. The areas under these crops, and the changes in their extent between 1860 and 1861, are given in the following statement:—

Abstract of Cereal Crops.

	1860	1861	Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.
Wheat	466,415	406,261	..	60,154
Oats	1,966,304	1,992,931	26,627	..
Barley	181,099	198,878	17,779	..
Bere and Rye ..	12,734	11,609	..	1,125
Beans and Peas ..	12,832	14,004	1,172	.
Total	2,639,384	2,623,083	45,578	61,279
Decrease in Cereal Crops in 1861			15,701 acres.	

In "Green Crops" there was an increase in the acreage under Turnips and Cabbage, and a decrease in that under Potatoes, Mangel, Beet, Carrots, and other green

crops, resulting in a net diminution in the extent under this division of 36,974 acres.

The total acreage in 1860 and 1861 under each of these crops, and the increase or decrease in their extent, in 1861, were as under:—

ABSTRACT OF GREEN CROPS.

	1860	1861	Increase.	Decrease.
	Acres.	Acres.	Acres.	Acres.
Potatoes	1,172,079	1,183,201	..	38,878
Turnips	318,540	333,829	15,289	..
Mangel Wurzel & Beet-root ..	32,124	22,949	..	9,175
Cabbage	22,785	29,920	7,135	..
Carrots, Parsnips, and other Green Crops..	21,633	19,548	..	2,085
Vetches and Rape	40,481	31,221	..	9,260
Total	1,607,642	1,570,668	22,424	59,398

Decrease on Green Crops in 1861 .. .. 36,974 acres.

The following is a general summary of the variations in the acreage under Cereals, Green Crops, Meadow, and Flax:—

GENERAL SUMMARY.		Acres.
Decrease in Cereal Crops	15,701	100,644
Do. Green Crops	36,974	
Do. Meadow and Clover ..	47,969	
Increase in Flax		19,271
Total Decrease in the extent of Land under Crops in 1861		81,373

The extent under each crop for the last five years—1857 to 1861, is shown in the following Table:—

TOTAL EXTENT IN STATUTE ACRES, OF CEREAL AND GREEN CROPS, FROM 1857 TO 1861, INCLUSIVE.

CROPS.	1857	1858	1859	1860	1861
	Acres.	Acres.	Acres.	Acres.	Acres.
Wheat	559,646	546,964	464,175	466,415	406,261
Oats	1,980,934	1,981,241	1,982,662	1,966,304	1,992,931
Barley	211,288	190,768	177,894	181,099	198,878
Bere and Rye ..	21,374	16,472	13,198	12,734	11,609
Beans and Peas ..	13,686	12,935	14,851	12,832	14,004
Potatoes	1,146,647	1,159,707	1,200,347	1,172,079	1,183,201
Turnips	350,047	338,202	322,137	318,540	333,829
Mangel and Beet-root ..	21,629	29,731	27,054	32,124	22,949
Cabbage	30,011	33,132	31,680	22,785	29,920
Carrots, Parsnips, and other Green Crops ..	21,602	23,309	21,971	21,633	19,548
Vetches and Rape ..	34,740	33,360	38,243	40,481	31,221
Flax	97,721	91,646	136,282	128,595	147,866
Meadow and Clover ..	1,369,892	1,424,495	1,487,111	1,594,518	1,546,549

As regards the different descriptions of Live Stock the following summaries exhibit the changes which have taken place in their number and value between 1855 and 1861, and between 1860 and 1861:—

TOTAL NUMBER OF LIVE STOCK IN IRELAND, IN EACH YEAR, FROM 1855 TO 1861 INCLUSIVE.

YEARS.	Number of Horses.	Number of Cattle.	Number of Sheep.	Number of Pigs.
1855	556,287	3,564,400	3,602,342	1,177,605
1856	573,408	3,587,858	3,694,294	918,525
1857	599,782	3,620,954	3,452,252	1,255,186
1858	611,321	3,667,304	3,494,993	1,409,883
1859	629,075	3,815,598	3,592,804	1,265,751
1860	619,811	3,606,374	3,542,080	1,271,073
1861	613,818	3,468,058	3,543,919	1,097,976
Difference in Numbers between 1855'61	Increase. 57,531	Decrease. 96,342	Decrease. 58,423	Decrease. 79,629
Do. do. between 1860 and 1861	Decrease. 5,993	Decrease. 138,316	Increase. 1,839	Decrease. 173,096

LARGE WHEAT EARS.

HAVING alluded in a communication dated Sept. 2d last, to some remarkable Wheat ears in my possession, and having since removed the grains from the chaff preparatory to sowing for crop 1862, I am now enabled to speak with more certainty regarding them.

It was formerly stated that several of the ears had eight and nine grains on a notch, but on dissecting the ears 10 grains were found on several notches, and also provisional chaff scales for two more, early establishing the possibility of 12 grains growing on one notch. These ears were like common Wheat ears, and had no resemblance whatever to Egyptian Wheat, Triticum compositum. The natural arrangement of the grains on the notch did not appear to differ from the ordinary arrangement, but where eight, nine, or 10 existed, the grains had been pressed out of their natural positions, and then assumed something like the appearance of double teeth in the human mouth, and gave the cluster of grains a circular form. There is little probability of the grains from those ears producing anything different from common Wheat, but this can only be set at rest by examining the produce of next year's crop.

It was also formerly stated that the extraordinary size of the ears was attributed to the thinning out of the crop by wireworm, and not in any degree to the management of the soil or to the variety of Wheat. I regard these fine ears as a beautiful illustration of the power which Wheats possess of adapting themselves to the circumstances in which they are placed, and how necessary ample space is to large vegetable development. Had the plants which produced these ears been crowded amongst others, in all probability the ears and notches would have presented nothing remarkable in their appearance. But besides crowded Wheat plants producing ears with few grains on a notch, many of the notches on the lower part of the ear are altogether infertile. In the course of the past harvest I selected six average sized ears from a thickly planted Wheat crop on rich land, and also six ears of average size from a thinly planted crop on poor soil, and the following results were obtained:—

Six ears from thick Wheat measured 16 inches.	
Fertile notches numbered	71
Infertile notches	31
Grains	148
Six ears from thin Wheat measured 25 inches.	
Fertile notches	117
Infertile notches	5
Grains	326

The size and fruitfulness of Wheat ears depend in a great degree on the circumstances in which the plants are placed, and without going into the question of thick and thin sowing, it may be laid down as a general rule that when the plants greatly exceed or fall short of the number necessary for the proper development of the plants, the productiveness of the crop is lessened.

My failure in altering the character of varieties was also stated. In illustrating this object it may be mentioned that a few seeds of the Fern or April Wheat, which is a summer variety, and a few seeds of two of my new bearded autumnal varieties, were put into the ground on March 15th, April 15th, and May 15. The March seeding put forth ears and ripened in the usual way. In the case of seeding in April the summer variety eared well, while only two puny ears came forth from the autumn Wheats, the remainder being a tuft of leaves. With the May seeding the summer Wheat eared with rapidity, while the autumn varieties contained a cluster of Grass and did not ear until the following season. The non-earing of autumn varieties when sown late in spring may be held to be the chief distinction between spring and autumn Wheats, and I have witnessed the non-earing alluded to in different parts of the world, and witnessed the loss of crops by the one kind of Wheat having been sown instead of the other. These two Wheats are so distinct in their natures that I believe human power cannot impart the earing habit to an autumn variety, and *vice versâ*. But while advocating the stability of the varieties of the Wheat plant, I have lately had satisfactory evidence of more than two kinds arising from the seeds of one ear. Such a result is to me both new and unexpected, and while announcing the fact no remark shall be hazarded without further experience. New varieties do most certainly arise from time to time, and are known as sports which have baffled investigation. The appearing of a new kind does not however materially affect the question of the stability of well defined varieties, because both the old and new remain distinct, and it is only the addition of another sort without the old one being altered.

The ear of the Wheat plant is presented in endless colours, textures, and forms. The chaff is the cradle and the clothing of the grain. The red and the white, the thick and the thin, the rough and the smooth, and the bearded and the bald chaffs may all have admirers. But this diversity forms no guide whatever to the quantity and quality of the seeds. The notches on the ear also differ materially, and there is a popular and perhaps mistaken dislike to the notches being far apart. Viewing the process of evaporation, the lodging of the crop, and the beating or threshing of it by wind, a cross set or club-shaped ear is manifestly disadvantageous. Provided the ear has a sufficient number of notches, perhaps the wider they are apart the better.

The beard or awn which characterises some varieties of Wheat has also been the subject of popular and mistaken dislike, which doubtless arose from the Rivet Wheats having long been the only cultivated varieties with beards. But the Rivets are peculiar, having pith in the straw, a pendulous ear, and flour so coarse as to be chiefly used for dusting purposes. The beards also often disappear on the crop reaching maturity, in consequence of the pendulous ear swinging and rubbing on the elastic stalk. With other Wheats the case is different, the ears being upright and the beards projecting at an angle, form a strong spring, which is a considerable protection against wind, and is also the means of admitting air into the sheaf. In several places during the present season the effect of the beard lessening injury by wind was witnessed, and last year its drying property by admitting air made a difference of 9s. a quarter on the first day of new Wheat being exposed in the market of this place. While I am aware that the chaff and beards have no relation to the grain, it may be mentioned as a singular coincidence that on examining the grain of the present crop of a collection numbering above 150 kinds of British Wheat, excluding Rivets and curiosities, in every class the bearded varieties were found to have the finest quality of grain. *Patrick Shirreff, Haddington, October 15, 1861.*

Home Correspondence.

Dry Sewage.—I am glad to find by a leading article in your Journal that you patronise the Rev. Mr. Moule's dry sewage system. I can testify to its complete success from several years' experience, although I have some doubts of the advantage of having any pan in the closet, which complicates the matter; a simple mechanism to throw clay or ashes on the basement of the closet would be less liable to get out of order, and more effective. The frequent use of the same clay, too, appears to me unnecessary, unless in cases where concentrated manure is required. But how vain it seems to try to introduce the most simple plan that is at variance with common practice, and the notions that prevail about this subject. That learned body, the British Association, seem to have passed by in silence a paper of Dr. Lloyd's on dry closets, although in importance there was not one subject discussed at Manchester that could compare with it, affecting as it does the health of the whole population, and in its economical relations in providing native guano for use, which is now poisoning our rivers and our towns, but really designed to restore the wear of our hard cropping. I hope your powerful advocacy will be continued until the vulgar errors about it are removed. *Thos. C. Brown, Further Barton, Cirencester.*

Societies.

ANNUAL INSPECTION OF THE STOKE EDITH ESTATE.—After the annual field day, during which Mr. Matthews, of Edgbaston, inspects the farm on Lady E. Foley's estate, that he may award the two prizes which are each year offered for the best cultivated farm, the party proceeded to the mansion at Stoke Edith, where they sat down to a sumptuous dinner, served in the Audit-room. After dinner Lady Emily Foley entered and took her seat at the head of the table. Her ladyship was accompanied by her brother, Lord M. W. Graham, M.P., Colonel Challoner, and other guests. In the course of the evening Lord W. GRAHAM said:—The great advances which has taken place of late years in agriculture have necessitated the proprietors of land to lay out large sums in various improvements—in drainage, in farm buildings, in cottages, and in other respects; and when that has been done, it is the part of the tenant to come forward and do his duty, and by good tillage, good manuring, and good green crops, to draw forth all the capabilities of the soil, and to obtain a beneficial and profitable investment.

Mr. MATTHEWS announced the award of the leading prize to Mr. Moore (of Monkbury Court), and the prize in the second class to Miss Mary Matthews (of the Old House farm).

Mr. MOORE said:—In many parts of the country there is still a great quantity of wet and undrained land, and if the proprietors of this land would but do their duty and render the land fit to grow crops, they would have no difficulty in finding tenants who would do their duty towards their landlords. What tenants want is security for the money they might invest in the improvement of their land, and not to be eaten up by game and to be victims of short tenures. On the Stoke Edith estate, I am happy to say that when the tenantry have grown good crops they can gather them in, keep what stock on the farm they think best suited to it, and have no fear of their produce being eaten up by game.

Colonel CHALLONER spoke of the admirable condition of the estate of Lady Emily Foley. He said: "The last two years have been extremely difficult years for farmers to clean their lands, and, therefore, in the best cultivated districts there is a larger amount of 'Scutch' Grass than in ordinary times; but at Stoke Edith I found a total absence of 'Scutch' Grass, for the simple reason that the farms were clean last year, and therefore, notwithstanding the unfavourable weather, the tenants have been able to keep them clean this year." He referred to the meeting of the Royal Agricultural Society in 1862, saying, "The object of the Society is to go into districts where the cultivation is bad, and where it is difficult to determine whether the 'Scutch' Grass or the crop is the most abundant of the two. If, therefore, the whole county of Hereford is like the estate of Lady Emily Foley, I shall certainly, upon the principle which has always guided me, consider twice before I vote for the Royal Society visiting Hereford, because I think the farmers of Herefordshire, at least those on the Stoke Edith estate, do not require such a visit, and can do better without it." He described the method on which a decision between several towns in a district is made. "If there are three competing towns, one offering 1000*l*. and the other two 1800*l*. each, we should select the town offering the smaller sum, if it contained the best accommodation for the wants of the Society." Col. Challoner then referred to the subject of road making, "Some years ago I found the roads in my neighbourhood in a very bad state, and all coaches had six horses to pull them, inasmuch as the sand was over the felloes of the wheels. I proposed to the commissioners that they should change the principle of making and repairing the roads. I saw at once that

they put more material and less labour upon the roads than was necessary. They perhaps said to themselves, 'This man is just come from abroad and knows very little about it. We will let him have a mile.' I took it, and I soon reduced the material by the one half. I brought the road into a right form, without which the best material in the world is of little avail. Unless the proper form is preserved you can never keep your turnpike or parish roads in a fit state. Form is everything. If you get the road in such form that the water runs straight along it you will always be having bad roads, but if you get them so that the water will run off the crown direct into the ditches then a good thoroughfare may be assured, and the material used is a matter for secondary consideration. This is a matter easily accomplished, for any gentleman may give the roadmaker the proper form in a minute by describing with a pair of compasses or two radawls the small segment of a large circle, which is the form in which the crown of a road should be. In that form the water that falls upon the crown of the road runs down to the sides, but if you have a road—which in many instances you have—with two deep water tables and a couple of shoulders, the water cannot get off the centre of the road." The gallant Colonel proceeded to show that this resolved itself into a question of horse power employed to perform a certain amount of work, and to demonstrate that with good roads two horses would do more work than three on bad roads, and he asked his hearers to consider the saving that would be thus effected, allowing for 150 miles of carting during the year.

Mr. Duckham, the Editor of the "Hereford Herd Book," alluded to the high state of cultivation in which he had found the Stoke Edith estate, remarking that so great was the change since he had last ridden over that part of the country—20 years ago—that two or three times during the day he found it almost impossible to realise the conviction that it was the same property. A great deal was said about the Midlothian and Norfolk farming; and recently in Shropshire, the Bedfordshire farming was held up as a great example; but he thought that if that Bedfordshire gentleman were to visit the Stoke Edith estate, he would see very much from which he might take a useful lesson. Colonel Challoner had alluded to the contemplated visit of the Royal Agricultural Society to this district in 1863, and pointed out some of their requirements, and he (Mr. D.) would take the liberty of remarking that Hereford had the advantage of possessing one of the finest sites in the kingdom for the show, admirably adapted for the construction of a siding from the railway station, and well supplied with water. As to railway facilities, Hereford was now tolerably well supplied, and he had no doubt that by the year 1863 the accommodation would be so extended as to obviate all grounds of objection on that head. The Shrewsbury and Hereford line was now being converted into a double one, and it was expected that by Christmas the work would be completed as far as Ludlow; so that there would be no difficulty in the extension of a double line to Hereford by 1863, and with the other double and single lines, he was induced to hope the railway accommodation would be adequate to the requirements. With regard to the geographical position of Herefordshire, it was more central than any other competing county; and much nearer than Worcester to South Wales, where a great deal was required to be done for the improvement of agriculture.

Farmers' Clubs.

Peterborough: *Oct.* 9.—The annual ploughing match, show of stock, and dinner, took place; there were nearly 40 entries for ploughing, and a larger number of people was attracted to the field of operations than usual; but the work upon the whole was not first-rate. The show of stock was large, and every class well filled. Earl Spencer walked over the course with two excellent beasts exhibited in the fat cattle class; eight bulls were entered, and the 1st prize of 10*l.* was awarded to Mr. Robert Wyche, of Crowland; and the 2d prize of 5*l.* to Mr. Sisman, of Buckworth. The classes for cows were strongly competed for, as well as those for heifers, in which Mr. Searson and Mr. Sisman are among the successful names; but the new class of hunters attracted the most attention, for which there were 9 entries—Mr. Earl of Maborne obtaining the 1st prize of 10*l.*, and the Hon. G. W. Fitzwilliam taking the 2d prize of 5*l.* The display of sheep was good, in which classes as usual Mr. Samuel Vergette figured first. In pigs the chief prizes were taken by Mr. Hanson for moderate size but very fat, so that the merit of the male animal for breeding purposes was called into question.

At the dinner, which was well attended, the Hon. G. W. Fitzwilliam presided.

After the usual loyal toasts were disposed of, the Rev. Mr. Blacker and others alluded to the attempt which had been made at the close of the last harvest in three parishes, viz., Marholm, Thorney, and Eye, to have a general holiday as a harvest supper, preceded by divine service at the parish church, and participated in as a social gathering by all classes; the only drawback being the circumstance of its attracting a large concourse of people, not connected with the parish, to whom might be traced any little irregularity that arose, and who by their number made the management of the feast onerous and inconvenient by usurping places that ought to be occupied by the residents of the parish. These remarks were received very quietly by the company, but perhaps a more careful arrangement in future will better recommend it to general adoption.—Another subject was discussed, viz., the necessity of providing better habitations for the labourers, but as the fact was overlooked of a deliberate avoidance by landlords for a long course of years to provide any house accommodation for labourers, with a view of maintaining in at least two villages the system of "close parishes" to escape incidental poor law charges, sufficient credit was not perhaps given to those praiseworthy efforts which have now for some years been at work to remedy the bad consequences of this selfish and suicidal system. One good result of the discussion on this occasion was the admission on all sides that it was desirable, useful and humane to provide commodious houses for labourers, nay that it was profitable by diminishing the expenses consequent upon small and crowded dwellings, by the more healthy and moral condition of the inhabitants of comfortable cottages, well drained, and having a small garden attached. The difficulty of accomplishing this good work appeared to be the cost; tenant farmers could not do it, the Government could not do it, some landlords could not do it, others would not, and where the whole parish belonged to one man no opening was afforded for private enterprise even on so small a scale as a builder's job. Another matter noticed was the uncertainty of the farmer's profits and the certainty as compared with other classes of his being assessed to the income tax, even when clear proof could be adduced of a serious loss on the year's transactions. The produce of corn for the present year was also mentioned by Mr. Watson, and the company seemed to concur in his view of there being a deficient yield of Wheat, and a full average of other corn. Altogether the meeting was the best the Society has had, and a general disposition was evinced to use every effort to make that of the next year at least equally successful. *J. W., Peterborough.*

Wickham Market: *On Labour.*—A discussion on this subject at the last meeting of this Club was opened by reading the following short paper:—Labour is the allotted state of man—some with the hand, others with the head—a few with both; and although the emanations of the brain are more thought of, and stand higher in the world's estimation than the works of the hand, still we must acknowledge that the latter are as necessary and as conducive to the public good as the former: indeed, far more so, for whilst admiring the wondrous discoveries of a Newton, the engineering genius of a Stephenson, or holding instantaneous communication with those far distant by means of the electric wire, we should starve and perish in the midst of all these wonders but for the strong arm and daily toil of the husbandman to procure us food, and the busy industry of the artizan to provide us clothing. I say, therefore, honor and thanks to the honest, hard-working, labouring man. Labour has its blessings as well as its penalties. Sweet is the sleep of the labouring man—what class enjoy better or more robust health? whilst how often do we see those who try to shun this universal doom, wasting their days in idleness and sensuality, reaping the bitter fruits in disease and sickness. I say, therefore, again, honour to honest industry. The aspect and position of labour has always varied with the changing habits and manners of the employer; you have it from a remote period when even the free born Englishman (as he calls himself) was little more than a slave to his imperious task master, living in wretched mud hovels on condition of doing so many days' work in the year, and fighting for his liege lord when required and in whatever cause; the least remonstrance being silenced by the lash or brand. As society became enlightened, as religion and law began to curb the barbarous tyranny of the "old barons," "the possessors of the soil," the rights of labour began to be recognised, as also the moral, social, and political standing of the working man. Hence arose the duty and necessity of training, educating, and improving him, and influencing for good so large a proportion of the population. The great aim and study of philanthropists and statesmen has of late been to accomplish this without destroying the balance of intelligence, power, and influence possessed by master and man.

One of the great evils of our present system is that all labourers whether good or bad are paid alike. It is true the better hand will sometimes earn most at task work, but as a general rule industry and intelligence go for nothing. In what other class of business does such a state of things exist? I confess this difficulty, but what is the remedy? The greatest stimulus I know to industry and efficiency is task or piece-work. This should be the rule, and day-work the exception. The latter or do-little system will spoil the best labourers, and is generally a sign of a careless, indolent, and perhaps ignorant master, who does not know the value of work, and is therefore afraid of exposing himself, or shirks the trouble for trouble's sake. In task-work the best men should be put by themselves, or their progress will be hampered, and their earnings lessened by the inefficient one. Negligent or imperfect work should never be passed over, but at the same time that faults should be noticed and reproved firmly, there is no occasion for violence or anger. If we cannot govern our own tempers, can we wonder if our dependents lose theirs? How many a good servant or labourer has been lost for a hasty word on one side or both. A master can influence his workmen for good in many ways; by sympathising with his difficulties, by showing an interest in his plans, by a little kindness, and help in trouble and in sickness, and by allowing him where possible a fair sized garden or allotment, the good cultivation of which should be noticed and encouraged. Swearing and drunkenness should be strictly prohibited, and smoking forbidden in working hours. Honesty, faithfulness, industry, forethought, and intelligence always rewarded. To allow these things their full power for good other helps are wanted, over which in many cases the master has no control. The cottagers' dwellings should as a rule have more accommodation, especially as to bed rooms, so as to promote decency, propriety, and comfort. A moderate education should be within reach of the cottager's children; and if we would do them the greatest possible kindness, let us and our wives take the trouble to instruct a labourer's boy or girl in the work of a farm-house or yard. The expense would be little, say 1*s.* 6*d.* per week. Teach the boy to milk and tend the pony, clean knives, shoes, and help in the garden; the girl teach all house work, from cleaning candlesticks to keeping up the best furniture and waiting at table, and where practicable teach to cook and milk. You would thus be rearing a supply of steady useful servants. You would be finding employment for your workmen's children, keeping them from that most demoralising of all employments—gang work. Thus identifying them with the family of their master so early in life would surely have a lasting and beneficial influence on them. By this means a benefit would accrue to the employer in the long run, by rearing a supply of useful domestic servants from which to supply the wants of his establishment. Truthfulness, honesty, cleanliness, and attendance at some place of religious worship should be inculcated in all employed, and as far as may be enforced both by precept and example. The following resolutions closed the discussion:—That the system of gang labour should be abolished; that the employing of boys and girls in the farm house should be recommended and encouraged; that whenever practicable work should be done by the task or piece.

Reviews.

Edinburgh Veterinary Review, October, 1861. T. C. Jack, 92, Princes Street, Edinburgh.

The current Number contains articles on shoeing, on a skin disease of the horse, on Tetanus and various communications on the feet of the horse, on heart disease, vomiting, &c. Useful reprints of professional and agricultural reports already published elsewhere, and leading articles illustrative of the intelligence, energy and common sense of the Editor. We quote from its pages the following article on Cattle "Condiments" taken from the columns of the *Scottish Farmer*:—

"Without danger of being too dogmatic, we can assert, on the subject of foods and feeding cattle, that the value of the richest materials our fertile fields will yield being known, as it well is, to the intelligent farmer, there are no means to be suggested of mixing or medicating which can increase their nutritive value much. Beyond the farm process of crushing, cutting, boiling, pulping, &c., no admixture of mysterious drugs or spices can enhance the meat-producing virtues of food. When we see a host of material advertised, at a cost of thousands annually, which enrich their 'discoverers' and prove heavy sources of profit to numerous agents—the price of the article being five or 10 times higher than that of the best and soundest food grown by a British farmer—the advertisements and caterers for orders should be disregarded, and home produce be relied on.

"If material cheaper than all other yet known can be produced, and which proves far more fattening than any the farmer has at hand, he may then put his hands in his pocket, but he must be satisfied that the cheapest is the best. When, however, a very large price is asked, and a price beyond that which could be procured for an undisguised substance, the presumption is, and indeed it is matter of certainty, that there is not a corresponding advantage in proportion to outlay.

"It is the mystery of the mixture, and not its unequalled richness, that the honest farmer is made to pay for. A renowned quack in the veterinary line began to advertise a certain 'British Remedy' for the cure and total removal of ringbones, of splints, spavins, and all other deformities regarded as permanent eyesores and manifest unsoundness. He had simply changed the name for the violent 'black oils' of the old farriers; and the old mixture, under the cloak of a new name, realised at the rate of a thousand per cent. But the blemishes which resulted from its application interfered with its unlimited success. All quack products should have at least the recommendation of not killing, if they can't cure.

"In the cattle foods advertised there is mystery as to the ingredients, but none as to their essential nature. We can go the length of admitting that they contain a large proportion of flesh and fat forming elements, and we are led to understand that they contain spices,

sweet savory principles—in fact drugs which stimulate digestion and ensure that the large quantity of nutritive material is thoroughly assimilated. It is this spice which many have paid 20*l*. or 30*l*. the half hundred-weight for, because that quantity would be large in a ton of any mixture to be used as food. We allow from 10 to 15 pounds for the nutritive material itself, which, we need scarcely say would realise much profit. Fœnugreek at the rate of 10*s*. a pound !

"It is marvellous how easily many are deceived. Some of our able agricultural chemists have proved the absence of any extraordinary, or even fair nutritive value in the foods; but we wish to point to the absolute injury of the condiments employed.

"When a young and robust man acquires a dangerous taste for much cayenne or certain sauces, he cannot indulge his artificial appetite without becoming dyspeptic. He must increase the quantity of stimulating principles in order that the stomach may act. It has lost that delicate sensibility which once caused an ample flow of a digesting fluid whenever food was swallowed. It is the same with animals. If they are in health, no medicine can be needed, and the simplest drug may prove a deadly poison.

"Common salt affords us an instance of one of the simplest medicaments which, even in moderate doses, may prove injurious. Professor Delafond has shown this. If cattle are thriving fast on rich food, and the latter is sprinkled abundantly with salt, digestion is increased in activity at once, and a fatal plethora is not unfrequently the result. The aromatics employed can only produce an artificial activity of the stomach, and the latter, being accustomed to the stimulus, is soon unaffected by it, the animal at best being not much the worse for the useless material, which some would have us believe increases the nutritive properties of food.

"Not to be too severe, we may repeat Professor Voelcker's advice—we 'recommend all parties to use only such articles as they really know the value of, or what will bear the test of examination; for while such preparations as those to which we refer do possess a certain amount of value, it has not hitherto been at all equivalent to the cost.'"

A Lecture on the Rise and Progress of Steam Cultivation. By C. Clay, Esq., of Walton. W. T. Lamb, Wakefield.

This pamphlet contains a lecture delivered before the Wakefield Farmers' Club. It traces the history of steam-power itself as well as of its application to agricultural purposes, and enumerates a great number of patents, describing some of them, which have been granted of late years in connection with steam cultivation.

It describes the public trials of steam cultivators at Chester, Warwick, and Canterbury, and concludes thus:

"The future prospect of steam culture is, in my humble opinion, a very bright one. Astounding progress has been made within the last four years. Some hundreds of various sets of apparatus have been set to work, the cost of the machinery is much reduced, men are daily becoming more familiar with the management of such mechanism, the old and deep-rooted antipathy to new inventions is fast giving way before the brightening and invigorating influence exercised by agricultural exhibitions now held in almost every county annually; in fact, steam cultivation is only waiting the stimulus of better times to 'take root downwards and bear fruit upwards.' The amount of extra produce to be expected by our being able to cultivate the land twice or thrice the depth hitherto attainable is not to be calculated. Perhaps, in our grandchildren's days, this country may not only grow sufficient to provide for her own wants, but may even become an exporter of home-grown corn. But, not to expect too much, let us be satisfied if, by means of steam cultivation, the farmers of England can but supply our present wants, and make us a little more independent of foreign countries for our' daily bread.'"

In the course of the subsequent discussion, Mr. Clay said:—

"With regard to breaking up the subsoil: recently he had been in Shropshire, and he there saw soil broken up to the depth of from 10 to 12 inches, which since Adam was a boy had never been broken up more than to the depth of 3 or 4 inches, and four horses could not plough more than that depth. No rock was found at the depth he was speaking of, it being a tenacious clay of a very bad description; and he doubted not but that the result of the operation would be good. As to the expense of these machines, it was not so great as at first sight appeared; for when once they got over the great first cost of the steam engine (which was 400*l*. to 450*l*.), the whole of the rest could be purchased for say 200*l*. to 250*l*.; the latter sum is therefore the real cost of the ploughing apparatus; and, as it will displace at least one-third of the horses used, the whole of the cost will be saved in the horses. As to forming companies for the supply of implements to let out on hire, that was all very well, and it was to some extent successful in the neighbourhood he had previously spoken of. But he thought that to any farmer who could employ a steam engine at all on his farm, it would be a considerable advantage, as well as saving, to invest 200*l*. in the ploughing and cultivating apparatus; and, as engines are now made self-transporting, a large amount of horse-keep would be entirely saved, and the land much better cultivated. This was what he recommended, and he believed it was a plan that would soon be generally adopted on moderate-sized farms."

Miscellaneous.

The Harvest in France.—It is now ascertained that the panic caused by the deficiency in the late Wheat crop is at least premature if not greatly exaggerated, and that the present high price is in some measure caused by the manœuvres of interested parties. Taking the most unfavourable view of the question there can be no want of Wheat felt until May next. The following is the position of the country:—The French people consume, on an average, from one harvest to the other, 80,000,000 hectolitres of Wheat. Now, the most unfavourable calculations set down the produce of the late harvest at 60,000,000 hectolitres, which is sufficient for the consumption of the country for eight months. There remain 20,000,000 hectolitres to be supplied by foreign countries, which may, without difficulty, be imported at an average of 2,000,000 hectolitres a month, and at a cost of 20f. the hectolitre, exclusive of the carriage. *Times.*

Six Farmsteads Burnt.—Great Gidding is an extensive parish in Huntingdonshire, and lies five miles to the south of Stilton, on the Great North Road. It was towards the northern end of the village that a fire broke out at the rear of some farm buildings about half-past 1 o'clock in the afternoon of Wednesday, the 16th inst., and, assisted by a strong north wind, raged with a fury that threatened the destruction of the entire village. As it is, six farmsteads and three cottages have been totally destroyed, and the flames were scarcely subdued on Thursday afternoon. As the fire broke out in the middle of the day plenty of help was easily obtained, and the live stock, with few exceptions, escaped injury; but the flames advanced with too great a rapidity to allow much grain to be saved. Only two fire-engines reached the spot, and, as there were four or five fires simultaneously raging in different directions, their aid was well nigh ineffectual in arresting the progress of the flames. Many houses have been injured, and as, for the most part, they are reed-thatched, their escape from total destruction was a very narrow one. It is more remarkable still that a farmstead in the very midst of the fire also escaped burning, owing to the very active exertions of its owner: but the flames caught the stacks and thatch many times. The season of the year and the plentiful harvest caused the stackyards to be unusually full, and during Wednesday night they blazed with a brightness that made itself apparent at a long distance, even in the light of a brilliant moon. During the night the people were busied in removing their furniture and goods to places of safety, but the wind veering round to another quarter, drove the flames away from the village street. Nevertheless, although the greater danger was averted, a line of blackened ruins, extending for several hundred yards on the west side of the street, marks out the devastating track of the fire. The property destroyed belonged to the Hon. G. Fitzwilliam, Mr. Mills, and others. The greater part was insured, and, as is commonly the case, the loss of the uninsured portion falls on those who are quite unable to bear so heavy a calamity. The fire is supposed to have originated from some lucifer matches lighted in sport by children in the rear of the buildings.

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended October 24; observed by Mr J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air.				Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
	Max. in Sun.	Max. in Shade.	Min.	Mean.				
	Degs.	Degs.	Degs	Degs.	Degs.	Ins.		
Friday 18 ..	91.0	62.0	37.5	57.0	55.0	..	N E.	30.00
Saturday 19 ..	66.0	57.0	38.5	50.0	54.0	..	E	29.82
Sunday 20 ..	76.0	60.0	42.0	55.0	53.5	..	S E	29.74
Monday 21 ..	60.0	60.0	49.5	54.7	54.5	..	S E	29.62
Tuesday 22 ..	72.0	62.0	49.5	58.2	55.0	0.08	S E.	29.61
Wednesday 23 ..	60.0	60.0	44.5	52.2	55.0	0.27	S.W.	29.80
Thursday 24 ..	71.0	59.0	48.0	57.2	55.0	..	S.	29.86

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Poultry.—We know that many of our readers are much interested in poultry matters. We wish the taste were more general. There are, however, enough to justify us in reminding them that the entries for the Great Birmingham Poultry Show close on Nov. 1. It is an undeniable fact that while in many counties poultry keeping as a business is being given up by agriculturists, the supply of it to the London market by foreigners is assuming the proportions of a very large trade. It is not by them thought beneath the attention of men of capital, station, enterprise, and education. We hope shortly to be able to publish some facts connected with this trade. The approach of colder weather, the return of small families and professional people to town, the influx of the various birds that mark the seasons of the year, all tend to enliven if they do not improve trade. There will be no rise in prices till colder weather sets in

Smithfield Club: *To Correspondents.* We are reminded just as we go to press that the first day of November is the latest for receiving entries for the coming show. Of this we therefore beg to remind those of our readers who intend exhibiting.

Vetches: *Cor.* A perfect sample of Vetches has reached us; but no note or question relating to it.

Weevils v. Beans: *Hardy & Son.* Your Beans are bored probably by "Bruchus granarius," the Bean grain beetle. The female lays her eggs when the Beans are in flower, the maggots hatch and eat into the grain, generally forming an oval cell. The maggots are yellowish white, and when full fed they change to pupæ, and the beetle when it hatches eats its way through the skin of the Bean.

H. and R. STIRZAKER announce that their WHOLESALE LIST of NURSERY STOCK is now ready. It comprises about 400,000 LARCH, untouched by frost; 50,000 LAUREL, Portugal, Common, &c.; with a most extensive stock of EVERGREEN and ORNAMENTAL TREES, FRUIT TREES, &c., the whole of which was not in any way injured by the late winter and spring frosts.
The Nurseries, near Lancaster.

Forest Trees and Shrubs.
West Norfolk Nurseries, Downham Market.
JOHN BROWN has to offer about 500,000 healthy SCOTCH, LARCH, and SPRUCE, from 2 to 4 feet and upwards in height. Also an extensive Stock of magnificent HARDY EVERGREEN and FLOWERING SHRUBS, which he confidently recommends.
PRICE LISTS on application. Address as above.

LAURELS.—A large quantity of fine healthy short-jointed Common LAURELS which escaped the severe frost of last winter, 2 to 3 and 3 to 4 feet, are offered to extensive Planters and the Trade.
Terms and CATALOGUES on application to A. G[illegible] & Son, The Nurseries, Ashbourne, Derbyshire

Larches, Larches, Larches.
ALEXANDER PONTEY, of the Plymouth Nursery, begs to inform gentlemen intending to plant and the Trade in general that he can supply 200,000 extra-[illegible] LARCHES, two and three times transplanted, from 2 to 4 feet high, suitable for New Plantations and filling up Old Plantations; also 100,000 PINUS AUSTRIACA, two and three times transplanted, from 6 to 9 and 18 inches high; and a large Stock of CONIFERÆ and FOREST TREES for general planting, at low prices, delivered Free to any Station on the South Devon, North Devon, or Cornwall line of rail. Prices on application.
Plymouth Nursery.—October 26.

General Nursery Stock.
S. PONSFORD begs to announce that his Stock of the above is in excellent condition for transplanting, comprising everything in general demand, especially STANDARD and DWARF ROSES, which have made fine growth and are clean and healthy; FRUIT and FOREST TREES of every description; STANDARD MULBERRIES, very fine; AUCUBAS, from 1 to 5 feet high, bushy; and all other Evergreen and Deciduous Shrubs and Plants; CAMELLIAS and AZALEAS well set with bloom buds.
PRICED and DESCRIPTIVE CATALOGUES on application to
Loughborough Park Nurseries, Brixton, Surrey, S.

The Planting Season.
Woodlands Nursery, Maresfield, near Uckfield, Sussex.
WM. WOOD and SON have much pleasure in offering the following, all healthy and finely grown Plants:—
CONIFERÆ,
Uninjured by the frost and in the most robust health.
Araucaria imbricata, from 1 to 2, 3, up to 8 feet.
Cedrus Deodara, very handsome, 2, 3, 4, 5, up to 6 feet.
Cryptomeria japonica, 1, 2, to 3 feet.
Cupressus Lawsoniana, 1, 2, 3, to 4 feet.
Pinus insignis, very fine, 1 to 2 feet.
Thuja aurea, fine plants, 1 to 1½ foot.
Thujopsis borealis, 1 to 2½ feet.
And all other Conifers equally fine and uninjured by frost.
STANDARD ORNAMENTAL and WEEPING TREES.
American Weeping Willows, extra fine heads, 6 to 10 ft. stems.
Weeping Ash, 8 to 10 feet.
Standard Cotoneasters, 5 feet.
Standard Purple-leaved Sycamores.
FRUIT TREES.
Standard Apples, with clean stems and fine heads.
Dwarf-trained Fruit Trees, particularly fine.
Apples, Pears, Plums, Cherries, Peaches, Nectarines, and Apricots.
N.B. A large quantity of Transplanted SPRUCE FIRS.
CATALOGUES may be had on application.

ANDROMEDA FORMOSA.—A most beautiful Plant for the Lawn or Shrubbery, producing immense corymbs of blossom, and evergreen foliage like Arbutus.
Strong bushy Plants, 12*s*. per dozen, or extra fine selected specimens, 2*s*. 6*d*. each.
A CATALOGUE of GENERAL NURSERY STOCK, extending over 60 acres, may be had on application.
W. H. Rogers, Red Lodge Nursery, Southampton.

Quick and Trees.
WANTED, 10,000 QUICK, two years transplanted, and 1000 STANDARD TREES, 5 to 7 feet high, in equal numbers, of the following kinds:—Lime, Ash, [illegible] Ash, Elm, Oak (various), Horse Chesnut, Spanish Chesnut, Beech, Maple, Thorn (worked), Ailanthus glandulosa, [illegible] syringæfolia.
Apply, stating price and particulars, to Z., Post [illegible] Sutton, Surrey.

FOR SALE, very cheap, large quantities of SPRUCE
9 inches to 18 inches, per 1000, 12*s*. 6*d*.
1 foot to 2 feet .. ,, 17*s*. 6*d*.
1½ foot to 2 feet .. ,, 25*s*., spring transplanted
2 feet to 3 feet .. ,, 40*s*., bushy plants, [illegible]
3 feet to 4 feet, per 100, 20*s*., fine bushes.
THORNS .. per 1000, 3*s*., 2-year seedlings
,, .. ,, .. 9*s*., for railway planting
,, .. ,, .. 14*s*., do. strong.
,, .. ,, .. 17*s*. 6*d*., do., very [illegible]
Samples on application to Wm. Treseder, Nurseryman, Cardiff.

Specimen Stove and Greenhouse Plants.
TO BE SOLD, A BARGAIN, in consequence of the owner declining to grow for Exhibition, some magnificent SPECIMENS, suitable for immediate effect, or competition at the Metropolitan or any great Flower Show next season, amongst which are 18 splendid ERICAS, including elegans, retorta major, vestita coccinea, ampullacea, [illegible] &c.; 6 extra fine AZALEAS, viz, Prince Albert, Duke of Devonshire, Apollo, Fielder's White, Colerii, and carminata; SHOW and FANCY GERANIUMS; 18 very fine FERNS, amongst which are Asplenium nidus, Cheilanthus [illegible] Davallias, &c.; and 25 STOVE and GREENHOUSE PLANTS, including Acrophyllum venosum, Dracophyllums, Tetratheca, Eriostemons, Aphelexis, Polygalas, Correas, Leschenaultias, Pleroma elegans, Boronias, Statices, Hoya bell[illegible], Rondeletia, Ixora, Rhynchospermum, Chorozema, Araucaria excelsa, &c.
The above are fine handsome well grown plants, feathered to the pots, 2 to 4 feet high and 2 to 3 feet through.
Further particulars, with List of Names and individual [illegible] can be had of Wm. B. Jeffries, Arboretum Nurseries, Ipswich, Suffolk.
N.B.—W. B. J. has to offer strong flowering Bulbs of [illegible] amazonica, and Primula sinensis flore-pleno, alba, and [illegible] at 12*s*. to 18*s*. per dozen; and Daphne Cneorum, [illegible] per dozen.

New Plants of Spring 1861.

HENRY WALTON is now sending out nice young Plants of FUCHSIAS of this season, purchaser's selection, 9s per dozen, or two dozen for 15s., securely packed, free by post.
PETUNIAS of this season 9s. per dozen, free by post.
VERBENAS of this season 6s. per dozen, free by post.
GERANIUMS, choice varieties, from 6s. to 30s. per dozen.
PANSIES, select, 6s. to 18s. per dozen.
CINERARIAS, select, 6s. to 18s. per dozen.
AZALEA INDICA, choice varieties, good plants, 12s. to ... per dozen.
DESCRIPTIVE CATALOGUES on application.
Post Office Orders payable at Nelson-in-Marsden. Remittance or reference from unknown correspondents.
Edge End, Marsden, near Burnley, Lancashire.

FIRST-CLASS PELARGONIUMS, CINERARIAS, HOLLYHOCKS.
12 New PELARGONIUMS (Purchaser's selection), 24s.—Argo, Beauty of Reading, Cherub, Garibaldi, Gem of Roses, King of Spots, Mulberry, Modesty, Mrs. Benyon, Norma, Perdita, Roseum, Rosa Bonheur, Satanella, Sir H. Davy, The Lady of Quality, Thirza, Transcendant.
12 choice PELARGONIUMS (Purchaser's selection), 12s.—such sorts as Lord Clyde, Leviathan, Euphemia, Peacock, Rose Celestial, Symmetry, The Bride, Prince of Wales, Etna, Candidate, King of Purples, Autocrat, Bacchus, Czar, Douglas, Emperor, Mammoth, Mars, The Belle, Sanspareil, Beadsman, &c.
12 choice CINERARIAS (Purchaser's selection), 12s.—Adam Bede, Constancy, Commander-in-Chief, Cramoise supérieure, Duke of Cambridge, Excelsior, Goliah, Lady Paxton (new), Mr Marnock Smith, Mr. Marnock Dobson, Miss Marnock, Miss Smith, Magenta, Magnificent, Magnet, Othello, Perfecta, Queen Victoria, Refulgens, Semi Duplex, Solferino, Triumphans; older sorts, 6s. per dozen.
Finest exhibition HOLLYHOCKS in fine plants.
LISTS of all the above on application to HENRY MAY, The Hope Nurseries, near Bedale, Yorkshire.

Winter and Spring Flowering Plants.

F. AND A. SMITH are now supplying fine plants at moderate prices of the following:—
*Acacias, *Azaleas, Cinerarias, *Camellias, *Chrysanthemums, Cyclamen, Cytisus, Clianthus, Carnation (Tree), *Echeveria, *Epacris, *Ericas, Eutaxias, *Gardenias, *Heterocentrum, *Kennedyas, *Lechenautia, *Jasminum grandiflorum, *Monochætum, Pelargoniums, *Passifloras, *Primula double and single; *Solanum, *Oranges, &c. [Those marked thus * are either in bud or fruit at the present time.]
GENERAL CATALOGUE gratis.
Dulwich, Surrey, S.

Flag of Truce.
NEW DOUBLE WHITE AZALEA INDICA.

F. AND A. SMITH have much pleasure in offering the above splendid novelty, which is justly celebrated as the best double variety extant. It has obtained unprecedented testimonials of merit, and the general admission of all who have seen it that it is the "finest" yet produced for its large double flowers, purity of colour, abundance of bloom, and neat compact habit of growth.
Plants will be sent out in June, 1862. Full description and price will be published early in spring.
In consequence of an accident, the new varieties Clapham Beauty, Prince of Orange, and Princess Royal will not be sent out till further notice.—Dulwich, Surrey, S.

Ex Fine New Tulips.

GEO. LIGHTBODY, Falkirk, is authorised by the raiser, RICHARD HEADLY, Esq., to offer strong BULBS of the following first-class SHOW TULIPS:—Adonis, 3d row feathered Byblœmen, at 42s.; Demosthenes, 4th row feathered Bizarre, 21s.; Pactolus, 3d row feathered Bizarre, 31s. 6d.; Mary Headly, 3d row flamed Rose, 21s.
These varieties are indispensable as pan flowers, all of them being steady markers. Bulbs of any of these will be sent by Post on receipt of a Post-office Order for the amount.
N.B. A CATALOGUE of AURICULAS is now ready.

Hollyhocks and Cinerarias.

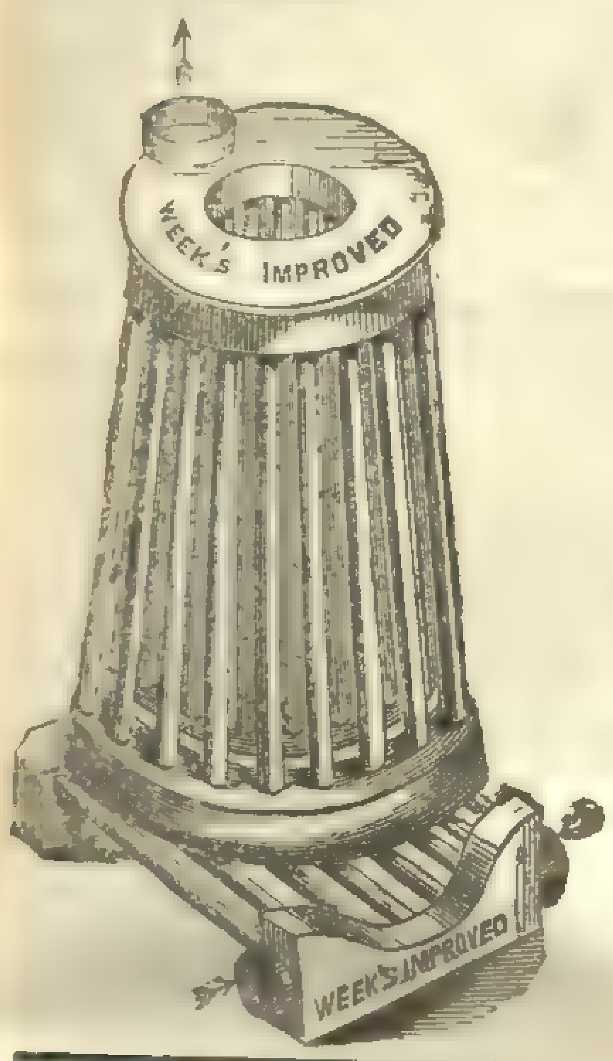
CHATER AND CO. will forward to any address the following HOLLYHOCKS, strong plants, in pots, for 12s., hamper included:—Ceres, Eva, Memnon, Black Prince, Lady Middleton, Royal Standard, Rival Saffrauot, Royal Purple, Miss Ashley, Queen of Buffs, Jenny Lind, Magnus, Fearless, Triumphant, General Havelock, Saturn.
Also the following CINERARIAS for 20s., or half, 10s. 6d.:—Commander-in-Chief (Smith's), Hebe (S.), Grandiflora (S.), Magnet (S.), Magnificent (S.), Perfecta (S.), Perfection (S.), Miss Smith (S.), Purple Prince (S), Precursor (S.), Refulgent (S), Semiduplex (S.), Speciosa (S.), Surprise (S.), Lady Paxton (S.), Magnum Bonum, Incomparable, Brilliant, Mrs. Dix, Mrs. Coleman, Slough Rival, Triumphans, Lady Camoys, Lord Stamford.
Choice HOLLYHOCK SEED, 1s. 6d. to 2s. 6d. per packet.
Post Office Orders payable at Braintree.
C. & Co.'s LIST of BULBS for the present season is now ready, and may be had gratis on application.
The Nurseries, Braintree, Essex.

CAMELLIAS, ERICAS, EPACRIS, ACACIA, JASMINUM GRANDIFLORUM, OTAHEITE ORANGES, &c., of fine healthy quality.
VINES, well ripened, strong for planting out, and extra strong for fruiting in pots, of all the leading varieties.
MUSHROOM SPAWN in fine condition.
Prices upon application; also prices to the Trade.
JAMES DICKSON & SONS, "Newton" Nurseries, Chester.

Wholesale Catalogue.

GEORGE JACKMAN AND SON'S PRICED and DESCRIPTIVE CATALOGUE for 1861 and SPRING 1862, comprising Fruit Trees of all the leading kinds, new and selected Roses, fine varieties of American Plants, Choice and Rare Conifers, Evergreen and Deciduous Trees and Shrubs, and a fine Stock of Transplanted Forest Trees, &c., can be had free on application.
Woking Nursery, Surrey.

WEEKS'S UPRIGHT TUBULAR BOILER.



SUBJOINED IS THE REASON WHY

WEEKS'S ONE-BOILER SYSTEM

HAS BECOME THE ORDER OF THE DAY FOR HEATING BY HOT-WATER.

WEEKS'S No. 1 BOILERS are heating upwards of 200 feet of Pipe.
WEEKS'S No. 2 BOILERS „ „ 300 „
WEEKS'S No. 3 BOILERS „ „ 600 „
WEEKS'S No. 4 BOILERS „ „ 1500 „
WEEKS'S No. 5 BOILERS „ „ 4000 „
WEEKS'S No. 6 BOILERS „ „ 12,000 „

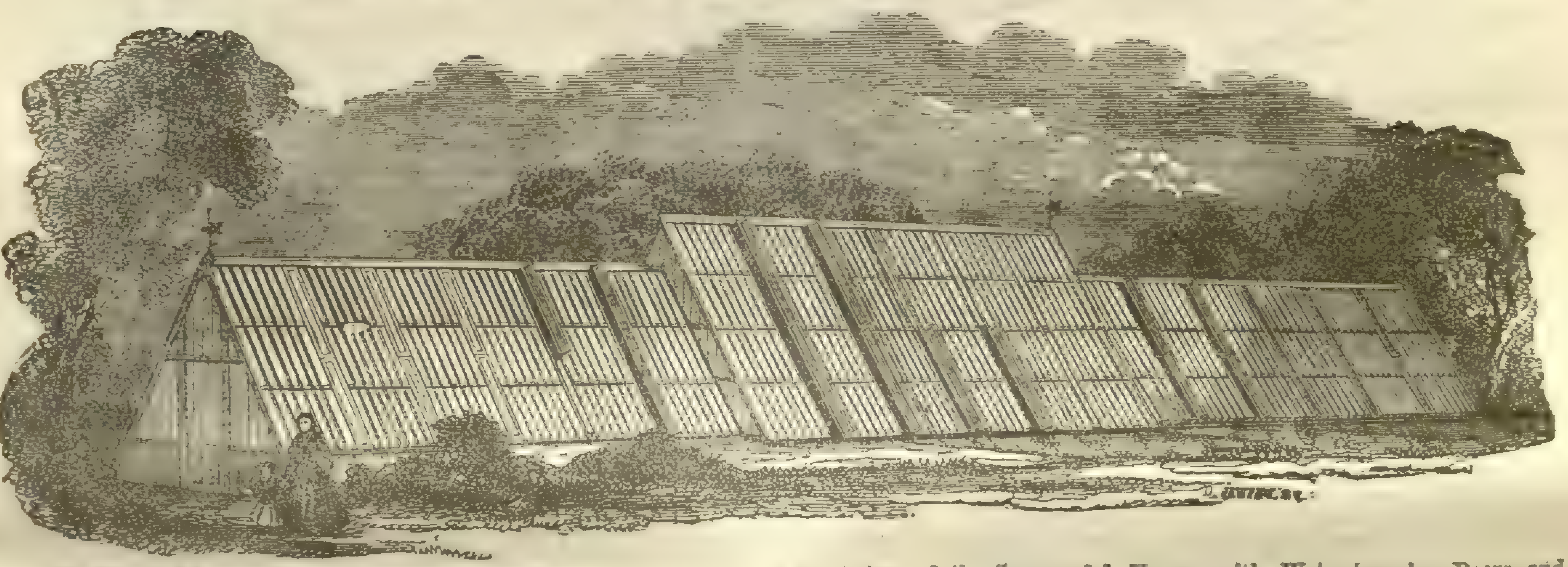
The above statistics being accounts of hundreds of apparatus disseminated throughout EUROPE in practical operation, J. WEEKS & COMPANY publish them with the pleasing satisfaction that all who may honour them with their esteemed commands must effect enormous savings both in fuel and labour by the adoption of their ONE-BOILER SYSTEM.

JOHN WEEKS & COMPANY,
HORTICULTURAL BUILDERS AND HOT-WATER APPARATUS MANUFACTURERS,
KING'S ROAD, CHELSEA, S.W.

*** Illustrated Catalogues, Designs, and Estimates forwarded free on application.*

HOTHOUSES FOR THE MILLION,

ON THE PRINCIPLE INVENTED AND PATENTED BY
SIR JOSEPH PAXTON, M.P.
COMBINING SIMPLICITY, CHEAPNESS, EXCELLENCE, AND DURABILITY.
BEING CAPABLE OF FULFILLING IN THE MOST PERFECT MANNER ALL THE REQUIREMENTS OF HORTICULTURE.



The Prices of Lean-to Houses complete are as follows:—

Ft. In.	8 ft. Lights			10 ft. Lights			12 ft. Lights			14 ft. Lights			16 ft. Lights		
20 7 in length	£12	0	0	£16	0	0	£21	0	0	£28	10	0	£34	5	0
31 3 in length	16	10	0	21	2	6	26	10	0	37	12	0	45	16	0
41 11 in length	20	18	0	26	18	6	33	7	6	46	14	0	57	7	0
52 7 in length	25	12	6	32	15	0	40	5	0	55	16	0	68	18	0
63 3 in length	30	6	0	38	10	0	47	2	6	64	18	0	80	10	0
73 11 in length	34	12	6	43	15	0	53	7	6	74	0	0	92	0	0
84 7 in length	39	6	0	49	11	6	60	5	0	83	2	0	103	11	0
95 3 in length	43	19	0	55	10	0	67	2	6	92	5	0	115	2	0
105 11 in length	48	17	6	60	12	6	73	10	0	101	10	0	126	13	0

The Prices of the Span-roofed Houses, with Water-troughs, Doors, and Ends complete, are as follows:—

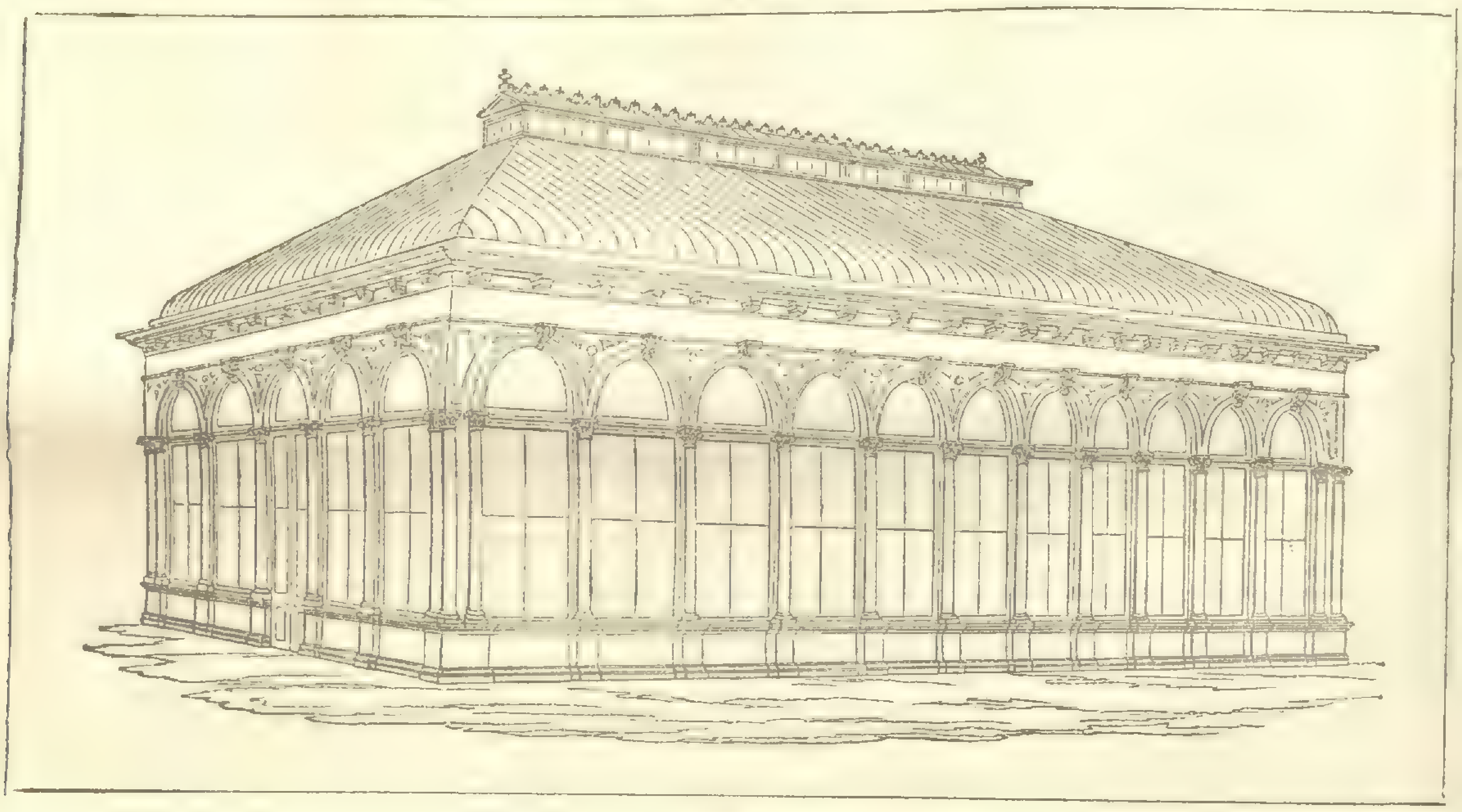
Ft. In.	8 ft. Lights			10 ft. Lights			12 ft. Lights			14 ft. Lights			16 ft. Lights		
20 7 in length	£24	0	0	£32	0	0	£42	0	0	£57	0	0	£68	12	0
31 3 in length	33	0	0	42	5	0	53	0	0	75	4	0	91	14	0
41 11 in length	41	16	0	53	17	0	66	15	0	93	8	0	114	16	0
52 7 in length	51	5	0	65	10	0	80	10	0	111	12	0	137	10	0
63 3 in length	60	12	0	77	0	0	94	5	0	129	16	0	161	0	0
73 11 in length	69	5	0	87	10	0	106	15	0	148	0	0	184	0	0
84 7 in length	78	12	0	99	3	0	120	10	0	166	4	0	207	2	0
95 3 in length	87	18	0	111	0	0	134	5	0	184	10	0	230	4	0
105 11 in length	97	15	0	121	5	0	147	0	0	203	0	0	253	6	0

If only one end is required a corresponding deduction will be made. The 14 and 16 feet lights are made strouger than those of less dimensions.

The above prices do not include package, railway freight, heating apparatus, or erection.

Illustrated Circulars with Lists of Prices and Cards to view houses in operation in the neighbourhood of London can be had on application to
SAMUEL HEREMAN, 7, PALL MALL EAST, LONDON, S.W.

HORTICULTURAL BUILDER TO HER MAJESTY,



AND

HOT-WATER APPARATUS MANUFACTURER

TO THE COMMISSIONERS OF

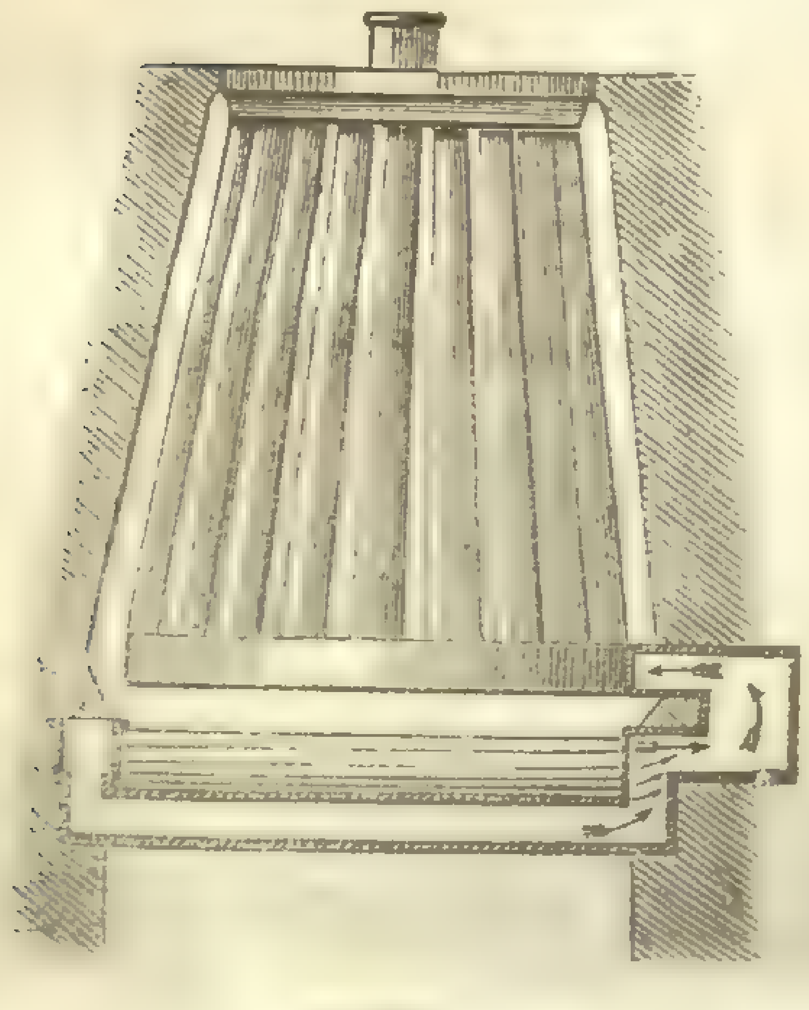
HER MAJESTY'S ROYAL PALACES AND PUBLIC BUILDINGS,

AND TO

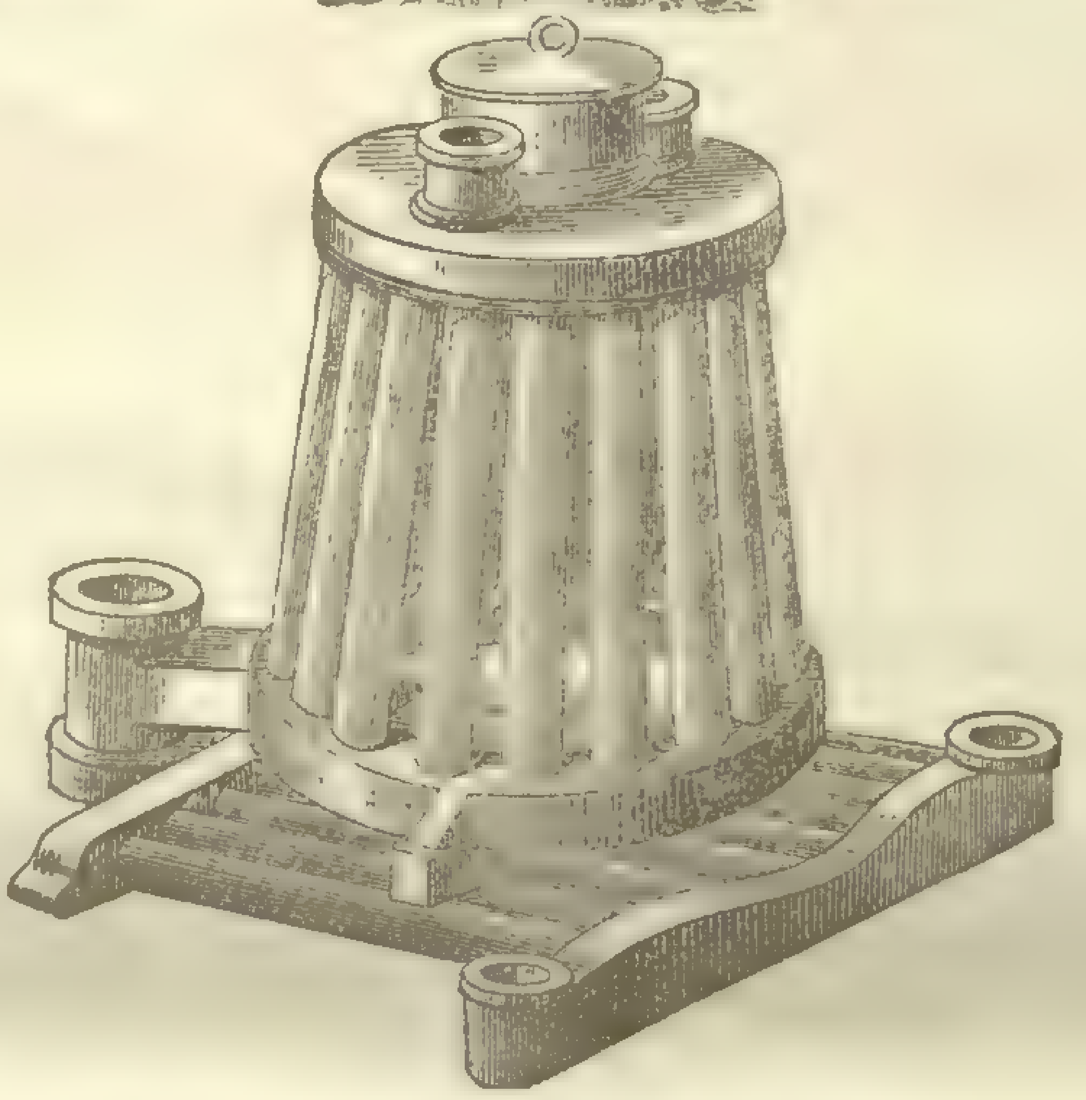
THE ROYAL HORTICULTURAL SOCIETY OF LONDON.

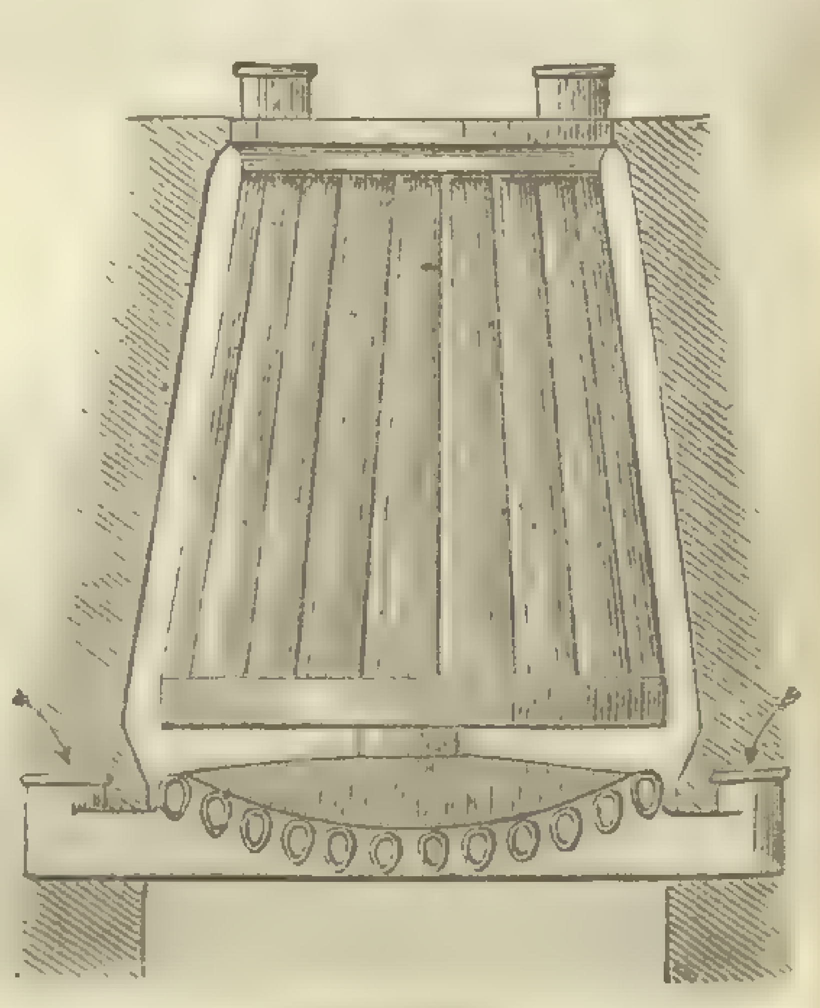
HENRY ORMSON, Horticultural Builder and Hot-Water Apparatus Manufacturer,
STANLEY BRIDGE, KING'S ROAD, CHELSEA, LONDON, S.W.

BY HER MAJESTY'S ROYAL LETTERS PATENT.



SECTION.





SECTION.

ORMSON'S PATENT JOINTLESS TUBULAR BOILER

Is now from Practical Tests allowed to be the best ever invented for Efficiency, Power, and Economy, and from the following Facts it will be manifest to every person's understanding that it must be infinitely more safe for carrying out the One-Boiler System than any other Upright Tubular Boiler. For instance, the ordinary old-fashioned Jointed Upright Tubular Boilers made by all other manufacturers, having 20 tubes for the Boiler, and 12 tubes for the Waterway Furnace bars, would have 64 joints made of cement and rope yarn all exposed to the direct Action of the Fire, whereas in Ormson's Patent there is not One Joint upon which the Fire can act hence the great advantage and security of this Patent.

These Boilers are made of various sizes so as to suit the Amateur, or for heating the Largest Establishments on the One-Boiler System.

Horticultural Buildings of every Description Manufactured by Steam-Power Machinery. Lowest Prices and best Materials.

PLANS, SPECIFICATIONS, AND ESTIMATES FREE ON APPLICATION.

HENRY ORMSON, Horticultural Builder and Hot-Water Apparatus Manufacturer,
STANLEY BRIDGE, KING'S ROAD, CHELSEA, LONDON, S.W.

HOT-WATER APPARATUS.

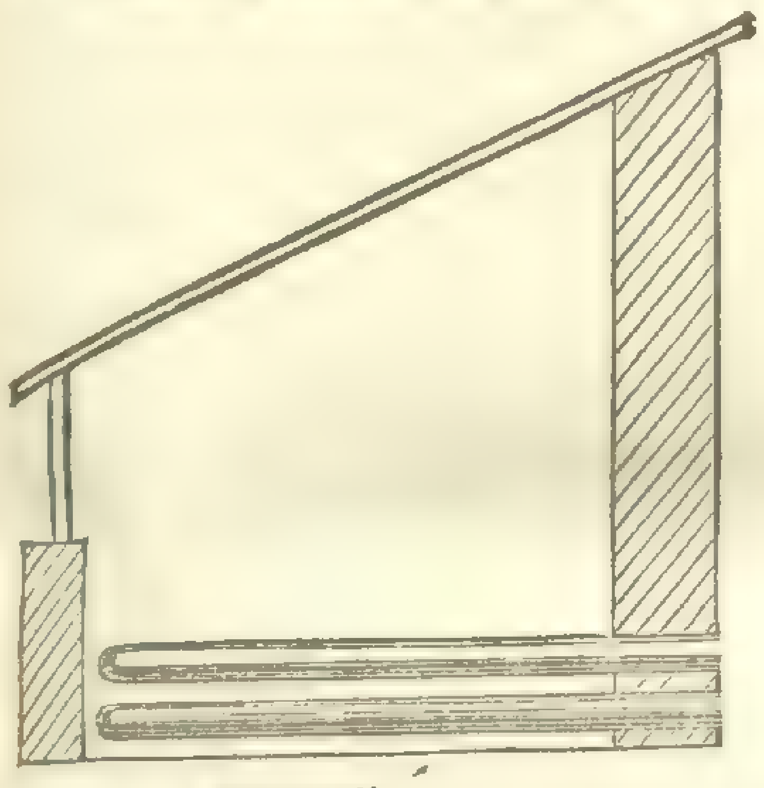
J. JONES

BEGS TO OFFER A COMPLETE

Hot-Water Apparatus for Houses

according to the following Plans, delivered Free to any Railway Station in England.

PLAN No. 1.

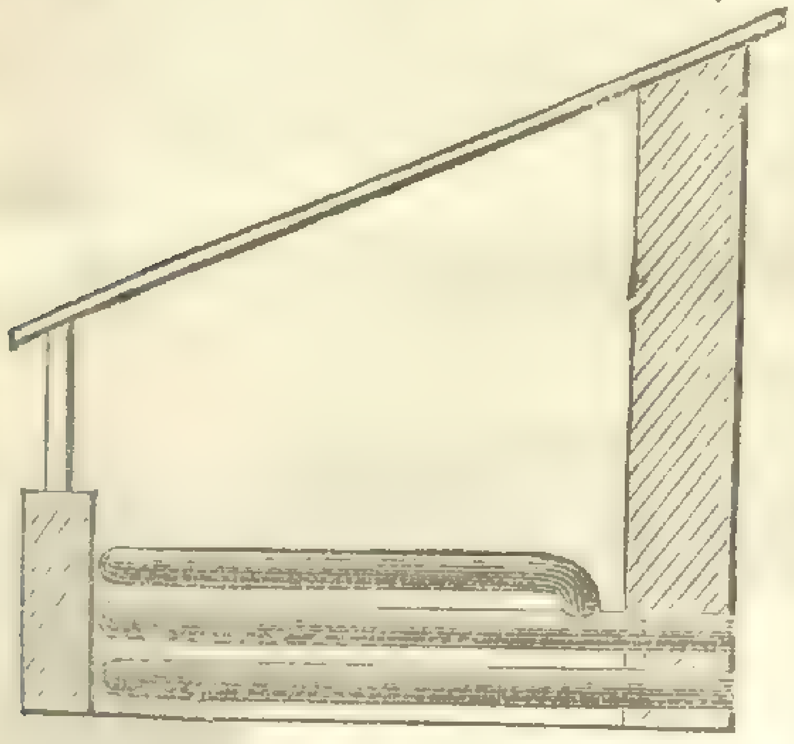


SECTION

Two 4-inch pipes along front and one end of house.

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£8 0 0	£8 12 6
20 feet by 10 feet ..	,,	8 10 0	9 0 0
25 feet by 12 feet ..	,,	10 0 0	10 10 0
30 feet by 12 feet ..	,,	11 10 0	12 0 0
40 feet by 15 feet ..	,,	16 10 0	17 0 0
50 feet by 15 feet ..	,,	18 10 0	20 0 0

PLAN No. 2.

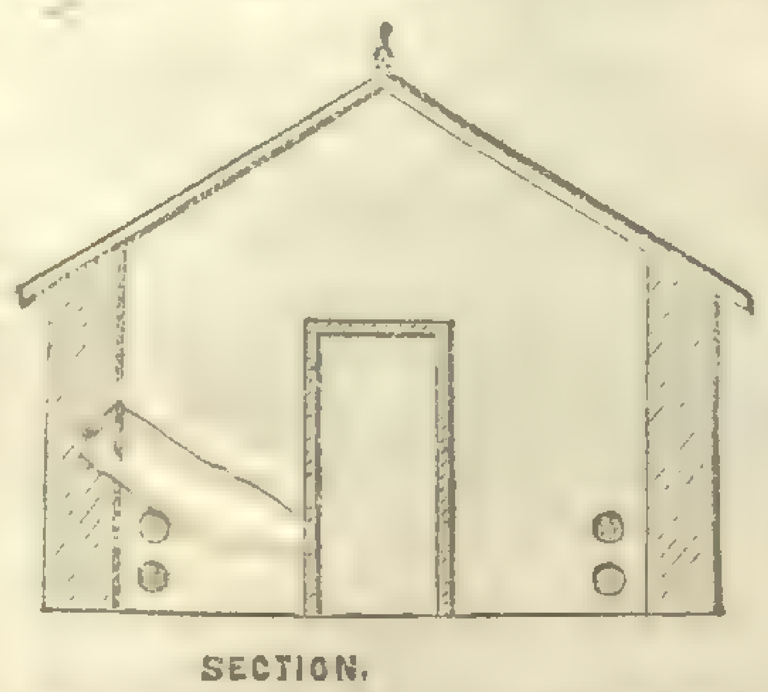


SECTION

Three 4-inch pipes along front and one end of house.

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£11 10 0	£12 0 0
20 feet by 10 feet ..	,,	12 10 0	13 0 0
25 feet by 12 feet ..	,,	14 10 0	15 0 0
30 feet by 12 feet ..	,,	16 10 0	17 0 0
40 feet by 15 feet ..	,,	22 0 0	23 0 0
50 feet by 15 feet ..	,,	24 10 0	26 0 0

PLAN No. 3.

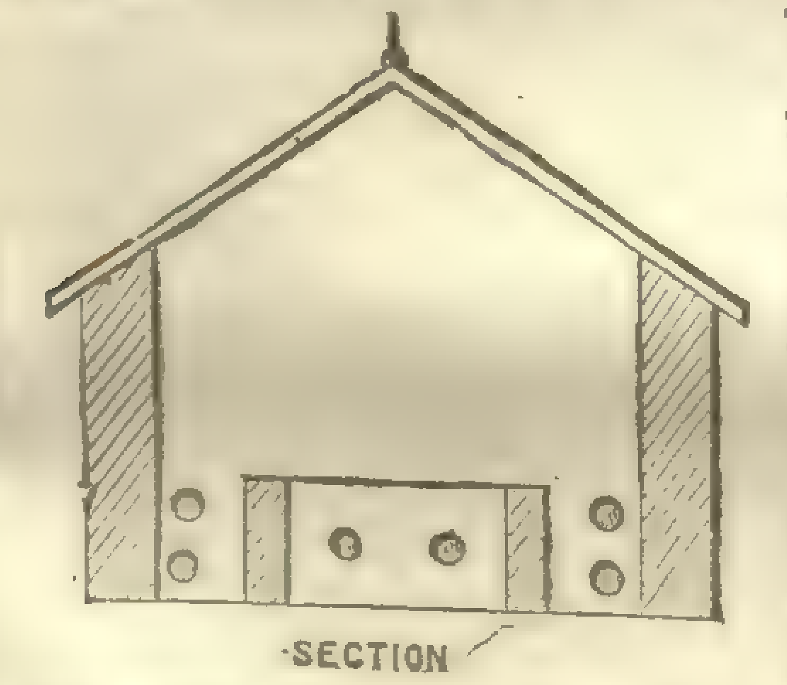


SECTION.

Two 4-inch pipes along each side and one end of house.

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£12 10 0	£13 0 0
20 feet by 10 feet ..	,,	13 10 0	14 0 0
25 feet by 12 feet ..	,,	16 10 0	17 0 0
30 feet by 12 feet ..	,,	19 0 0	20 0 0
40 feet by 15 feet ..	,,	24 10 0	25 10 0
50 feet by 15 feet ..	,,	27 0 0	28 10 0

PLAN No. 4.



SECTION

Two 4-inch pipes along each side and one end of house, and two 4-inch pipes in pit for bottom heat.

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£16 0 0	£17 0 0
20 feet by 10 feet ..	,,	17 10 0	18 10 0
25 feet by 12 feet ..	,,	21 10 0	22 10 0
30 feet by 12 feet ..	,,	25 0 0	26 0 0
40 feet by 15 feet ..	,,	31 0 0	32 0 0
50 feet by 15 feet ..	,,	33 10 0	35 0 0

The above prices include Boiler, strong Furnace-doors, Bars, Plate, Soot-doors, Damper, and Supply Cistern-pipes of 4-inch diameter, Elbows, &c.; all of the best quality.

Delivered free to any Railway Station in England. Terms Nett Cash.

Estimates will be sent for the work fixed complete, or further particulars on application to

J. JONES, Hot-Water Apparatus Manufacturer, 6, Bankside, London, S.E.

JOHN SHEWEN, Sevenoaks, Kent, Manufacture of all kinds of HOTWATER APPARATUS for Horticultural Purposes, Public Buildings, Dwelling Houses, and Offices, on the most improved principles, and of Rogers's Conical and the Improved Corrugated Saddle Boiler.

JOHN VOKINS, 2, York Place, Chelsea, London, S.W., HORTICULTURAL BUILDER and HOT-WATER APPARATUS MANUFACTURER. Tubular Boilers from 3*l*.

Greenhouses, Orchard Houses, &c.

H. FREEMAN'S Horticultural Works, Triangle, Hackney, N.E. Established 20 years. Substantially made GREENHOUSES, glazed, ready for fixing, 42 ft. by 13 ft., 50*l*.; 21 feet by 13 feet, 28*l*.; 12½ ft. by 10 ft., 15*l*. ORCHARD HOUSES 10 per cent cheaper. A large assortment kept.

Estimates given for Heating, or any branch in iron or wood.

HOT-WATER PIPES, at Wholesale Prices, with Elbows, Syphons, Tee Pipes, and every other connection. Wrought and Cast-iron Boilers, Saddle, Conical, Cylinder, and Elliptic, from 24*s*. each. Improved Boilers and Iron Stands to use without brickwork, 50*s*. each. Valves from 12*s*. 6*d*. each. Beck's Patent Valves. Furnace Doors, Furnace Bars, Supply Cisterns, and Builders' Castings of every description in stock, at Mr. LYNCH WHITE'S Iron Wharf, Upper Ground Street, Blackfriars Bridge, London, S.

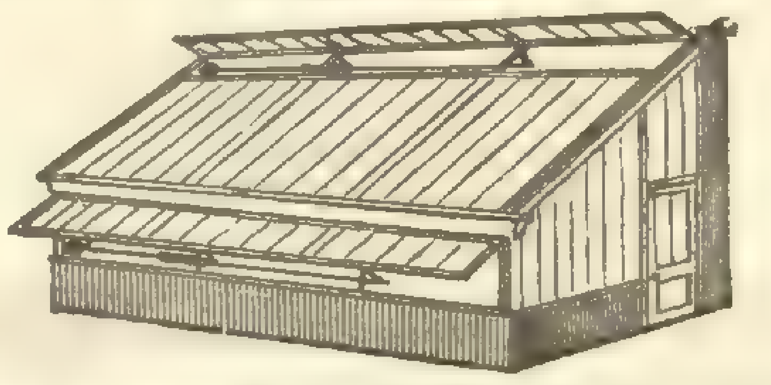
West of England, Ireland, and Wales.

VINCENT SKINNER (*late Partner with* J. WEEKS & Co.), erects CONSERVATORIES, HOTHOUSES, and HOT-WATER APPARATUS.

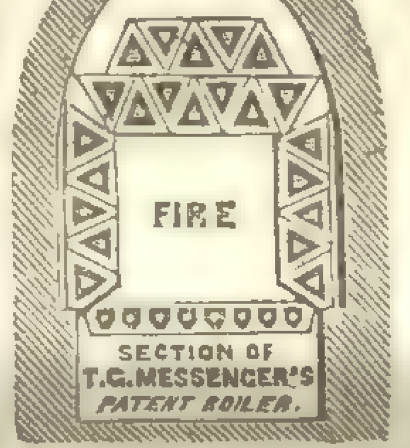
His improved Pipe Boilers, which give such universal satisfaction for Warming Churches and Hothouses, will heat from 100 to 2000 feet of Pipe.

Plans and Estimates on application to V. SKINNER, Bridewell Street, Bristol.

T. G. MESSENGER, HORTICULTURAL BUILDER AND HOT-WATER APPARATUS MANUFACTURER, Loughborough.



T. G. M.'s Patented DIVISIONLESS HORTICULTURAL BUILDINGS are cheaper, more durable, and lighter in appearance than any other made. The Ventilation is effected by a simple and much admired mechanical arrangement.



T. G. M.'s Patented TRIANGULAR TUBULAR BOILER for Heating Buildings with Hot Water has been extensively adopted by gentlemen who are willing to testify to its great efficiency and economy of fuel. Plans, Estimates, Testimonials, and every information sent free upon application.

Horticultural Works and Hot-Water Apparatus Manufactory,

Kensal Green, Harrow Road, London, W.

JOHN TAYLOR AND SON beg to call the attention of the nobility and gentry to the very superior manner in which they ERECT all kinds of CONSERVATORIES, VINERIES, GREENHOUSES, &c., combining every improvement with elegance of design and durability of materials and workmanship.

Their VENTILATING APPARATUS for the Fronts and Roofs of Houses has given the highest satisfaction. Churches, Chapels, Schools, Entrance Halls, Public Buildings, &c., heated with Hot-Water Apparatus in a most economical and efficient manner.

J. T. & SON have great pleasure in referring to numbers of the nobility and gentry by whom they are extensively engaged.

TO BE SOLD or LET, the BOWER NURSERY, Maidstone, with immediate possession.

Apply to Mr. J. H. WOOD, No. 10, Cornhill, London, E.C., or at the Nursery.

Established 75 Years.

NURSERY TO LET, extending over 4 Acres Clay and Loam, in consequence of the Proprietor discontinuing the growing of Nursery Stock. The Stock is light, and more than three-fourths fit for Sale directly. It fronts the main thoroughfare of the town of East Retford, and is within 100 yards of the Railway Station.

For further particulars apply to Messrs. TOMLINSON & SON, Auctioneers, East Retford.

Sales by Auction.

Consignment from Ghent for Absolute Sale.

TO GENTLEMEN, NURSERYMEN, FLORISTS, AND OTHERS.

MESSRS. PROTHEROE AND MORRIS are instructed to SELL by AUCTION at the Mart, Bartholomew Lane, on TUESDAY, October 29, at 12 for 1 o'Clock, 400 choice Double CAMELLIAS, and 300 AZALEA INDICA, beautifully furnished with bloom buds; 200 hardy named RHODODENDRONS, 200 ASCLEPIAS TUBEROSA, 200 strong Bulbs LILIUM LANCIFOLIUM RUBRUM, 200 DELPHINIUM FORMOSUM, 100 PÆONIA CHINENSIS; with 200 handsome STANDARD ROSES of the most approved kinds, including Hybrids, Perpetuals, Bourbons, Noisettes, and Chinas.

May be viewed the Morning of Sale. Catalogues may be had at the Mart; and of the Auctioneers, American Nursery, Leytonstone, N.E.

To Gentlemen, Nurseymen, Florists, and Others.

MESSRS. PROTHEROE AND MORRIS will SELL by AUCTION, at the Mart, Bartholomew Lane, E.C., on FRIDAY, November 1, at 12 o'Clock, a First-class Collection of DUTCH BULBS, consisting of the finest Double and Single Hyacinths, Narcissus, Crocus, Tulips, Ranunculus, Anemones, Gladiolus, Snowdrops, &c. Also a fine assortment of 300 STANDARD and DWARF ROSES, comprising all the newest and most approved kinds. Selected AMERICAN PLANTS, including Ghent and other Azaleas, Hybrid Rhododendrons, Kalmias, Andromedas (beautifully set with bloom buds), &c.

May be viewed the Morning of Sale. Catalogues may be had at the Mart, and of the Auctioneers, American Nursery, Leytonstone, N E.

SALE THIS DAY.

Fruit Trees, Evergreens, Ferns, and other Plants.

MR. J. C. STEVENS will SELL by AUCTION, at his Great Room, 38, King Street, Covent Garden, W.C., on SATURDAY, October 26, at half-past 12 o'Clock precisely, 3000 good Plants of DELPHINIUM FORMOSUM, some fine specimen Plants of rare FERNS, a quantity of Dwarf, Standard and Trained FRUIT TREES, Ornamental EVERGREENS, and DECIDUOUS TREES and SHRUBS, &c.

May be viewed on the Morning of Sale and Catalogues had.

Periodical Sale of Poultry and Pigeons.

MR. J. C. STEVENS will SELL by AUCTION at his Great Room, 38, King Street, Covent Garden, W.C., on TUESDAY, October 29, at 12 o'Clock precisely, 250 Lots of very choice POULTRY and PIGEONS, comprising all the known varieties, from well-known Breeders and Exhibitors.

May be viewed on the Morning of Sale and Catalogues had.

Araucaria Seed from Chili.

MR. J. C. STEVENS begs to announce that he will include in his Sale at his Great Room, 38, King Street, Covent Garden, W.C., on FRIDAY, November 1, at half-past 12 o'Clock precisely, about 10 Bushels of SEED of ARAUCARIA IMBRICATA from Chili.

May be viewed on the day prior and Morning of Sale, and Catalogues had.

Extensive Sale of Nursery Stock, Brenchley.

TO GENTLEMEN PLANTING AND NURSERYMEN.

MR. W. TOMPSETT has been favoured with instructions from the Executors of the late Mr. Henry Austen, to SELL by AUCTION, on MONDAY and Three following Days, October the 28th, 29th, 30th, and 31st, commencing each day at 11 for 12 o'Clock, without reserve, on the Premises, the ENTIRE STOCK on the Nursery Grounds, Brenchley, containing 12 acres, which have for many years been successfully carried on by the late proprietor, consisting of rare and choice SHRUBS, EVERGREENS, &c., comprising a variety of Cedars, Pinus excelsa, Smithiana; Juniper, Aucuba Japonica, Cupressus macrocarpa, American, Siberian, and Chinese Arbor-vitæ, Arbutus Taxodium, Althæa frutex, Yews, Hollies, &c., of various heights, Araucaria imbricata, Cedrus Deodara, Berberis, Cotoneaster, Kalmia latifolia, Euonymus, Silver Spruce, Scotch and other Fir, handsomely grown, and Seedling Plants of various kinds; upwards of 300,000 strong Chesnut, Ash, Larch, Fir, Alder, and Willow Plants.

A choice selection of well-trained FRUIT TREES, consisting of Peaches, Nectarines, Apricots, Plum, Apple, Pear, Cherry, Figs, Nuts, &c., of the choicest description.

Catalogues may be obtained six days before the Sale by sending six postage stamps to JAMES COLLINS, at the Nursery Grounds; Mr. W. R. TOMPSETT, the Hall, Higham, near Rochester; or to Mr. TOMPSETT, Auctioneer and Valuer, Brenchley, Kent.

Brenchley is 2½ miles from the Paddock Wood Station, South-Eastern Railway.

Nursery Stock. Final Sale. Expiration of Lease.

TO THE NOBILITY, GENTRY, NURSERYMEN, FLORISTS, BUILDERS, AND OTHERS.

MR. KIRKE will SELL by AUCTION on the Premises, Rose Cottage, Fulham Road, W., near the Queen's Elm, on THURSDAY, October 31, and following day, at 11 o'Clock each day, by order of Mr. Shearman, the term having expired, the ground being required for Building, the NURSERY STOCK, comprising 10,000 Evergreen Privets, 2 to 4 feet; 3000 fine Young Laurels, 1000 Irish Ivies in Pots, 300 Yews, 2 to 3 feet; 2000 Ribes, 2000 Virginian Creepers, 2000 Persian and other Lilacs, 3000 Euonymus, 10,000 Arbor Vitæ, 1 to 3 feet; Aucuba japonica, Cedrus Deodara, Hollies, Tree Box, Balsam and other Poplars, &c. A Cottage, Greenhouses, Show and Fitting Sheds, a 3-feet Saddle Boiler, with T piece and Furnace (nearly new); Barrows, 100 Cast of Garden Pots, Foot Tiles, Bricks, Drain Pipes, Water Pipes, Boxes, Benches, a quantity of Gold Fish, Horse, Van, Carts, Harness, Furnaces, Fire Wood, 30 loads of good Potting Mould, Clinkers, &c. Also three Wrought Iron Saddle Boilers, nearly new, with Flow Connections, two 3 feet and one 3 ft. 6 ins. long.

May be viewed two days prior to the Sale. Catalogues had on the Premises, and at the Offices of Mr. KIRKE, Auctioneer 19, Brompton Row, Brompton, S.W.

Langhedge Nursery, Edmonton.—Valuable Nursery Stock.

MR. A. RICHARDS will SELL by AUCTION, on the Premises, Upper Edmonton, on MONDAY and TUESDAY, November 4 and 5, at 11 o'Clock, by order of Mr. C. Woolven, who requires the ground for other purposes, the STOCK of fine EVERGREENS, consisting of large Portugal and Common Laurels, Aucubas, Hollies, Irish and Fan Yews, Cedrus Deodara, Siberian, China, and Lignum Arbor-vitæ, Phillyreas, Thorns, Flowering Shrubs; Choice Fruit Trees, including Standard and Dwarf-trained Apples, Pears, Plums, Cherries, Peaches, Nectarines, Apricots, Quinces, Gooseberries, Currants, &c. A collection of Standard and Dwarf Roses to name, quantity of Hardy Climbers, 1000 fine Weeping Ash, Forest Trees, Quick, &c.

May be viewed the Saturday previous and Morning of Sale. Catalogues obtained on the Premises, and of the Auctioneer, Tottenham, N.

Sale of Quick at Melbourne, Derbyshire.

MESSRS. MOODY AND NEWBOLD have received instructions from Mr. Robinson, of Melbourne, to SELL by AUCTION, at the Melbourne Arms Inn, on WEDNESDAY, November 6, at 3 o'Clock P.M., from 600,000 to 700,000 2-year old QUICK, suitable for Railway or Enclosure Planting, in Lots.

The Lots may be viewed on application to Mr. ROBINSON, on the Premises; or to Mr. G. EARLE, Melbourne Arms Inn, Melbourne, Derbyshire.

Donnington Nurseries, Speenhamland, Newbury, Berks.

Extensive Sale of Nursery Stock, comprising 30,000 Standard and Dwarf Roses, Coniferous Plants, Evergreens, Deciduous and Flowering Shrubs; about 1000 Dwarf-trained and Standard Fruit Trees; about 10,000 Laurels, Gooseberry and Currant Trees; 20,000 Manetti Stocks, Cucumber Frames and Lights, Potting Sheds, &c.

MESSRS. ALEXANDER DAVIS AND THOMAS PALMER are favoured with instructions from the Trustees of Mr. W. H. Davis, under a Deed of Assignment for the benefit of his creditors, to SELL by AUCTION on the Premises, on MONDAY, TUESDAY, and WEDNESDAY, November 4, 5, and 6, at 11 o'Clock in the forenoon of each day, the above very valuable and choice Collection of Trees and Shrubs of every description.

☞ The Auctioneers beg to call the attention of gentlemen about to plant; also Nurserymen desirous of increasing their Stock, no expense having been spared in the selection of the above Stock.

May be viewed on Friday and Saturday prior to the Sale from 10 till 4 in the afternoon, and Catalogues may be obtained one week previous to the Sale, of the Auctioneers, Valuers, and Estate Agents, Market Place, Newbury, Berks.

SPLENDID NEW STRAWBERRY, "ECLIPSE" (Reeve).

The present being a favourable time for the removal and planting of Strawberries, Messrs. Veitch & Son beg again to call attention to the above new and really fine variety.

It is an early variety, coming in at the same time as Keens' Seedling, and is a most abundant bearer. It forces remarkably well, producing large and handsome fruit with a rich pine flavour, which is a character rarely met with in any other forced Strawberry. In form it is large, conical, inclining to a cock's-comb shape, of a beautifully uniform light crimson colour, with firm and juicy flesh.

It was exhibited before the Fruit Committee of the Royal Horticultural Society on May 8, 1860, when it was highly spoken of, and requested to be shown again. It was accordingly a second time submitted to the Committee on the 14th of May last, and was then awarded a First-Class Certificate for its superior merit, and has also received prizes at the Crystal Palace and Romford Exhibitions, and has been highly approved of by the most competent judges.

It has been grown out of doors in the gardens of the Royal Horticultural Society during the past season, and has proved one of the most prolific and richest flavoured varieties in the Collection. The Fruit Committee highly recommend it as a valuable variety for a general crop as well as one of the best forcing Strawberries.

Strong Plants are now ready for delivery at the undermentioned prices:—Per dozen, 12s.; per hundred, 4l.

Price to the Trade on application.

Royal Exotic Nurseries, Exeter and Chelsea.—Oct. 26.

FORCING STRAWBERRIES, or for Orchard-house Culture.—BRITISH QUEEN, OSCAR, SIR CHAS. NAPIER, and KEEN'S SEEDLING, well established in 32-sized pots in the far-famed Wimbledon loam, as fine Plants as possible, and cannot fail to produce a large crop.

Price per dozen or hundred on application.

Stout HAMBURGH and other VINES for planting.

Francis R. Kinghorn, Sheen Nursery, Richmond, S.W.

Hardy Scarlet Rhododendrons and other American Plants.

JOHN WATERER has the pleasure to announce that his ANNUAL CATALOGUE of the above popular plants, as exhibited in the Royal Botanic Gardens, Regent's Park, London, is now published, and will be forwarded on application. Intending planters and amateurs desirous of blending colours are invited to possess a copy, as faithful descriptions of all the RHODODENDRONS are given.

The Catalogue contains a selection of the best and really Hardy CONIFERS, with heights and prices, the whole of which having been removed the past spring are in a capital state for transplanting. Also EVERGREENS and ORNAMENTAL SHRUBS and TREES of the leading kinds.

The American Nursery, Bagshot, Surrey, near the Sunningdale Station, South Western Railway; also to be had of Mr. John Kernan, Seedsman, 4, Great Russell Street, Covent Garden.

To Planters of Conifers.

YOUELL and CO. can supply 50 species of RARE and HARDY CONIFERS in good plants for 5l., package included, and carriage paid to Liverpool, Manchester, Newcastle-on-Tyne, Hull, London, Peterborough, or to any Railway Station within 150 miles of the Nursery.

A LIST of the above can be had on application.

Royal Nursery, Great Yarmouth.

CHOICE CAMELLIAS and INDIAN AZALEAS.—The Undersigned is now sending out fine home-grown CAMELLIAS, of choice named varieties, full of flower buds, at 30s., 36s., and 42s. per dozen. Good plants, without flower buds, of fine named varieties, 18s. and 24s. per dozen.

INDIAN AZALEAS, fine bushy plants of about 20 choice varieties, full of flower buds, at 15s., 18s., and 21s. per dozen.

Stout young plants, of about 36 choice named varieties, at 6s., 9s., and 12s. per dozen.

J. Henchman, Edmonton, London, N.

Cheap Dutch and other Bulbs.

HENRY BROWN begs to call attention to his PRICED DESCRIPTIVE CATALOGUE (post free on application). The quality cannot be surpassed, and the prices will on comparison be found very moderate. Collections from 10s. 6d. upwards delivered, carriage free, to any principal steam port or railway station in England, Ireland, or Scotland.

FLUKE and other POTATOES off the Lancashire Moss and Sand. Price on application.

Seed Warehouse, 4, Commutation Row, Liverpool.

Hyacinths and other Bulbs.

WM. CUTBUSH and SONS' first importation of HYACINTHS, TULIPS, &c., has just been received direct from Haarlem. They are unusually fine. Early Orders are respectfully solicited.

All the First Prizes have been awarded our Collections wherever exhibited during the last seven years.

DESCRIPTIVE PRICED CATALOGUES post free.

Highgate Nurseries, London, N.

The best Twelve Hyacinths.

SUTTON'S BEST TWELVE HYACINTHS Imported can be supplied for 12s.; Second best, 9s.; very good, 6s.

Also, fine mixed DOUBLE HYACINTHS (all fresh imported), 3s. per dozen, or 21s. per 100.

PRICED LISTS of BULBS and SEEDS may be had post free.

Royal Berkshire Seed Establishment, Reading.

Dutch Flower Roots.

JAMES VEITCH, Jun., Royal Exotic Nursery, Chelsea, S.W., begs to announce that he has received his annual supply of BULBOUS ROOTS from Holland, and is pleased to say that they are particularly fine and in excellent condition. CATALOGUES are now ready and will be forwarded on application.

J. V., Jun., desires to impress upon those who patronise him the great advantage of giving him their orders early, as the successful cultivation of Bulbs depends in a great measure upon their being planted early in the season.

Fuchsia "Her Majesty."

WILLIAM BULL, F.R.H.S., F.R.B.S., begs to announce that he has purchased the entire stock of this, the Queen of white-sepalled Fuchsias, which in style is somewhat after the well-known Duchess of Lancaster, but totally eclipses that variety; its ponderous flowers, which are produced in great profusion, being individually twice the size and substance of that favourite kind.

This unprecedented Fuchsia will be sent out next Spring, with the following magnificent new kinds, which for distinctness and merit are the best collection ever offered at any one time:—

Bravo	Gem of the Season	Sensation
Brightness	International	The Best
	Turban	

Descriptions of each will be duly announced.

Establishment for New and Rare Plants, King's Road, Chelsea, London, S.W.

Yorkshire and Lincolnshire Nursery and Seed Establishment.

MARTIN and SONS respectfully inform their friends that their NURSERY CATALOGUES may be had on application, containing choice selections of Apples, Pears, Plums, Peaches, and Apricots; Standard Ornamental Trees, Evergreen and Deciduous Shrubs, Stove, Greenhouse, and Herbaceous Plants, Ferns, Conifers, and importations of Dutch Bulbous Flower Roots.

Cottingham Nursery and Seed Establishment (A.D. 1788). The "Park Nursery," Hull.

Hull Seed and Horticultural Tool Establishment, Junction St.

Vines, Vines, Vines.

WILLIAM CUTBUSH, Jun., Barnet Nurseries, Herts, begs to invite an inspection of his fine S... FRUITING and other VINES in Pots, consisting of all the best varieties in cultivation. The following are remarkably ... and fine, from 8 to 12 feet in length, viz., Muscat Ham..., Muscat of Alexandria, Golden Hamburgh, Bowood M..., Lady Down's Seedling, Trentham Black, Buckland's ... water, Black Hamburgh, &c. List and Prices on application. Also to his Stock of Specimen and Half-specimen New H... Plants, Indian Azaleas, Stove Plants, &c.

W. C. Jun. would also especially call the attention of M... room Growers to his very superior MUSHROOM SPAWN, ... which he has the highest testimonials from the most em... Gardeners in the United Kingdom, and which he can w... the greatest confidence recommend. References on app...

Vines for Fruiting in Pots.

J. and J. FRASER, Lea Bridge Road Nurseries, N.E., beg to offer strong VINES with well ripened ... of the best varieties.

A CATALOGUE will be forwarded on application.

The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

Orchard House Trees.

J. and J. FRASER, Lea Bridge Road Nurseries, N.E., having a fine stock of—

PEACHES	APPLES
NECTARINES	PEARS
APRICOTS	PLUMS and CHERRIES

in Pots, well set with bloom buds, beg respectfully to ... them to the notice of intending Purchasers.

A CATALOGUE will be forwarded on application.

The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

Fruit Trees.

WM. PAUL (Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, London, N.

Fruiting Vines.

WM. PAUL (Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, London, N.

Roses.

WM. PAUL (Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, London, N.

Ornamental Trees and Shrubs.

WM. PAUL (Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, London, N.

Hollyhocks.

WM. PAUL (Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, London, N.

Fruit Trees.

B. WHITHAM begs to call attention to his superior Stock of APPLES, including upwards of 2000; Lord Suffield, Ringer, Grenadier, Pott's Seedling Golden Spine, and the best sorts in cultivation, at 9s. per dozen. Also a very large stock of Lancashire Show GOOSEBERRIES, 160 of the best kinds at 4s. per dozen; common sorts, 2s. per dozen; RED, WHITE, and BLACK CURRANTS, 2s. per dozen, 14s. per 1...

CATALOGUES free on application.

Clough Nurseries, Mottram, near Manchester.

Fruit Trees.

JAMES GARAWAY and CO. call attention to their stock of the above, comprising

APRICOTS NECTARINES PEACHES	Standard and Dwarf-trained	APPLES CHERRIES PEARS PLUMS	Dwarf-trained, Standard, and Dwarf-quarter.

All of first-rate quality and in good condition.

The STANDARD PEARS are unusually fine, and will be sold at a very low rate to purchasers of quantities.

CATALOGUES and prices free by post.

Prices to the Trade on application.

James Garaway & Co., Durdham Down Nurseries, Bristol.

Orchard-house Trees.

THOS. RIVERS has to offer this season a very large stock of FRUIT TREES in Pots, including

PEACHES and NECTARINES, Standards, 4 to 5 years old.
Ditto Half Standards, ditto.
Ditto Dwarf Bushes, 3 years old.
Ditto Pyramids, 2 to 3 years old.
APRICOTS, Dwarf Bushes, 2 to 3 years old.
Ditto Pyramids, 2 years old.
FIGS, Bushes, 2 to 3 years old.

All the above have been grown in Orchard-houses, are full of blossom buds, and fit for Forcing as well as Orchard-house culture.

APPLES on the Paradise Stock, Pyramids and Bushes.
CHERRIES, Pyramids.
PEARS, Pyramids and Bushes.
PLUMS, Pyramids and Bushes.

These are all well furnished with blossom buds.

STRAWBERRIES in 6-inch Pots.

A CATALOGUE of ORCHARD HOUSE TREES sent free per post on application; carriage of all packages paid to Lo...

Nurseries, Sawbridgeworth.

Pine Plants and Vines from Eyes.

M. ROCHFORD, Market Gardener, Pa... Green, Tottenham, N., has about 200 Succession PINE PLANTS to dispose of, principally Queens.

Also a large quantity of finely-rooted and ripened VINES for planting out.

The Pines and Vines are from the celebrated clean and heal... stock at Oak Hill, East Barnet, and can be warranted.

Application to the above address will meet prompt attention.

HANDSOME STANDARD APPLES of best kinds, straight clean stems.

Fine ESPALIER APPLES, Ditto PEARS, Ditto PLUMS, of best kinds. MOUNTAIN ASH, 6 to 7 feet; BEECH, 2 to 3 feet; SPRUCE FIRS, 1½ to 2 feet; ELMS, CHICHESTER, 7 to 8 feet; ELMS, ENGLISH, 6 to 7 feet, all good. SIBERIAN ARBOR VITÆ, 5 to 6 feet, fine and bushy; BOX-LEAVED EVERGREEN PRIVET, 3 feet, fine and bushy; ENGLISH YEWS, 3 to 4 feet; ditto, 4 to 5 feet; IRISH YEWS, 4 to 5 feet. BOX EDGING of excellent quality.

Robert F. Darby having a quantity of the above for Sale will be happy to supply prices on application.

Nurseries, Cirencester.—October 26.

TO BE SOLD, a variety of GREENHOUSE and other PLANTS, the property of a gentleman who is re... moving and has not convenience for them.

Can be seen on application at Rhod's Villa, New Road, Hammersmith.

ESTABLISHED UPWARDS OF A CENTURY.

COVENT GARDEN MARKET, LONDON, W.C.

BUTLER & McCULLOCH'S

DESCRIPTIVE BULB CATALOGUE and AMATEURS' GUIDE

TO WINTER AND SPRING GARDENING.

Now Ready, forwarded Free and Post Paid upon application.

THE numerous Species and choice Varieties contained in the above CATALOGUE, combined with the Descriptive Notes, Plain Cultural Directions, and Hints on the Distribution and Arrangement of Bulbs, render it a valuable assistant, either to the Amateur or practical Gardener.

All Orders of 21s. and upwards sent Carriage paid.

£2 2s. COLLECTION of BULBS, for CONSERVATORY.

24 HYACINTHS, in 12 choice sorts
24 POLYANTHUS NARCISSUS, in 12 sorts
25 Sweet-scented JONQUILS
150 NEW SEEDLING CROCUS, 20 sorts
12 DUC VAN THOL, red and yellow Single Tulips
12 " rose Single Tulips
12 " scarlet Single Tulips
12 DUC VAN THOL, yellow Single Tulips
12 LA CANDEUR, white Double Tulips
12 REX RUBRORUM, scarlet Double Tulips
12 TOURNESOL, scarlet and yellow Double Tulips
12 YELLOW ROSE, yellow Double Tulips
1 each, LILIUM LANCIFOLIUM ALBUM, ROSEUM, and RUBRUM [Half the above, 1l. 1s.]

£2 2s. COLLECTION of BULBS, for the FLOWER GARDEN.

36 HYACINTHS, finest mixed
100 Sweet-scented Double WHITE NARCISSUS
200 YELLOW CROCUS
200 PURPLE CROCUS
200 WHITE CROCUS
200 SNOWDROPS
50 Splendid mixed DOUBLE TULIPS
12 REX RUBRORUM, Double Tulips
12 TOURNESOL, Double Tulips
25 Finest mixed DOUBLE ANEMONES
25 Finest mixed SINGLE ANEMONES
50 Finest mixed SPANISH IRIS
50 SCARLET TURBAN RANUNCULUS
24 LILIES, in four fine varieties
6 Mixed CROWN IMPERIALIS
12 GLADIOLUS BRENCHLEYENSIS

Half the above, 1l. 1s.

BUTLER and McCULLOCH, SEEDSMEN, COVENT GARDEN MARKET, W.C.

Printed by William Bradbury, of 13, Upper Woburn Place, and Frederick Mullett Evans, of No. 19, Queen's Road West, both in the Parish of St. Pancras, in the Co. of Middlesex, Printers, at their Office, Lombard St., Precinct of Whitefriars, City of London, and Published by them at the Office, No. 41, Wellington St., Parish of St. Paul's, Covent Garden, in the said Co.—Saturday, October 26, 1861.]

THE GARDENERS' CHRONICLE

AND

AGRICULTURAL GAZETTE.

A Newspaper of Rural Economy and General News.—The Horticultural Part Edited by Professor Lindley.

No. 44.—1861.] SATURDAY, NOVEMBER 2. {Price Fivepence. Stamped Edition, 6*d*.

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ROYAL HORTICULTURAL SOCIETY'S SHOW, WEDNESDAY and THURSDAY next, November 6 and 7. Open at 1 o'Clock. Band of First Life Guards at 2 o'Clock. Tickets on November 6, 3*s*. 6*d*.; if purchased before that day, HALF-A-CROWN; November 7, ONE SHILLING. At the Gardens and of the principal Librarians and Music Sellers.
Next Election of Fellows, Monday, Nov. 4.

ROYAL HORTICULTURAL SOCIETY. FLORAL COMMITTEE.
The next ORDINARY MEETING will be held on TUESDAY, November 12, at South Kensington. All subjects must be at the Society's Meeting Room, for entry, by 11 A.M.
Seedlings and New Plants will also be received for examination by a Sub-committee of this Committee, at the Fruit and Chrysanthemum Show, on November 6, subject to the regulations of the Exhibition. They must on this occasion be entered at the Garden by HALF-PAST EIGHT A.M.
THOMAS MOORE, Secretary to the Committee.

Open to all England.

THE STOKE NEWINGTON CHRYSANTHEMUM SOCIETY.—A Magnificent Collection of PLANTS and BLOOMS will be Exhibited on TUESDAY and WEDNESDAY, November 12 and 13, at the Assembly Rooms, Hackney. Admission: First Day, 1*s*.; Second Day, 6*d*.
W. T. HOME, Hon. Sec.
Rochester Castle, Stoke Newington, N.

CRYSTAL PALACE—CHRYSANTHEMUM SHOW.—The ANNUAL SHOW of CHRYSANTHEMUMS and POMPONES will be held on THURSDAY and FRIDAY, November 14 and 15.
The Entries close Thursday, Nov. 7.
Apply to Mr W. HOUGHTON, Secretary to the Show.

WM. PAUL'S NURSERIES open to the Platform, Waltham Station (Eastern Counties Railway), half an hour's ride from London. The stock having been recently removed, is in the finest possible condition for transplanting. Inspection respectfully invited.
Cheshunt Nurseries, Waltham Cross, N.

Rose Nurseries, Hertford.

EDWD. P. FRANCIS'S NEW and DESCRIPTIVE CATALOGUE of ROSES, containing all the new varieties in cultivation, is now ready for delivery, and will be forwarded gratis on application.

Roses.

PAUL AND SON'S splendid collection is now in full condition for planting out, as Dwarfs on own roots or worked low on the Manetti. Also a fine selection of Standards for Autumn planting.
A fine stock of Strong V ES from Eyes of all the best varieties for fruiting in pots lanting out.
Address PAUL & SON, Nurseries, Cheshunt, Herts.

Superb Dw. Roses in Pots,

ADAPTED FOR FORCING OR FOR EXHIBITION.

WM. WOOD AND SON beg leave to offer a very first-rate Collection of TEA, SCENTED and BOURBON ROSES, grown in 6-inch pots, fine half specimen Plants, at 30*s*. to 36*s*. per dozen.
Early orders are solicited to insure the best Plants.
Woodlands Nursery, Maresfield, near Uckfield, Sussex.

New Rose Catalogue.

JOHN CRANSTON'S DESCRIPTIVE CATALOGUE of ROSES for the present season is now ready, and will be forwarded on application. All the finest New Roses of the season will be found fully and faithfully described.
Nurseries, King's Acre, near Hereford.

Roses.

JOHN KEYNES' NEW CATALOGUE, select and compressed, containing all the best varieties in cultivation, is now ready, and will be forwarded on application.
Salisbury.—Nov. 2.

Roses in Pots on their own Roots.

B. WHITHAM has a large well-rooted Stock of the above from 9*s*. to 18*s*. per dozen.
CATALOGUES free on application.
Clough Nurseries, Mottram, near Manchester.

Roses, Fruit Trees, &c.

WM. KNIGHT respectfully begs to offer to Amateurs both STANDARDS and DWARFS of the above, an immense Stock, which he has no hesitation in saying is one of the best grown in the kingdom.
DESCRIPTIVE PRICED CATALOGUES free.
Floral Nursery, Hailsham, Sussex.

JAMES CARTER AND CO., SEED MERCHANTS and NURSERYMEN, 237 and 238, High Holborn, London, W.C.

CARTER'S New BULB CATALOGUE is now ready, and will be sent post free on application to 237 and 238, High Holborn, W.C.

Dutch and Cape Bulbs.

BUTLER AND McCULLOCH'S DESCRIPTIVE CATALOGUE of the above, with ample Cultural Directions, sent free and post paid upon application.
Covent Garden Market, W.C.

BARR AND SUGDEN'S CATALOGUE of DUTCH, CAPE BULBS, &c., with a Series of Original Articles on their Culture, may be had free and post paid. See large Advertisement.
12, King Street, Covent Garden, W.C.

Dutch and other Bulbs.

ROBERT PARKER begs to inform his friends and patrons that his PRICED and DESCRIPTIVE CATALOGUE of the above, containing selections of the finest varieties in cultivation, is now ready, and will be forwarded post free on application.
Exotic Nursery, Tooting, Surrey, S.

Dutch and other Bulbs.

B. S. WILLIAMS begs to inform his friends and patrons that his CATALOGUE of the above is now ready, and will be forwarded post free on application. Early orders are solicited, as their successful cultivation depends in a great measure on early planting.
Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway.

New Cinerarias, Gloxinias, and Pelargoniums.

F. AND A. SMITH can still supply a few sets of their New GLOXINIAS, CINERARIAS, and PELARGONIUMS.
See *Gardeners' Chronicle* of Oct. 5, and CATALOGUE, which may be had gratis.
Dulwich, Surrey, S.

Royal Nursery, Great Yarmouth.

YOUELL AND CO.'S New CATALOGUE of GREENHOUSE PLANTS, Rare and Hardy CONIFERÆ, SHRUBS, GLADIOLI, &c., is ready, and will be forwarded on application.

GEO. BAKER'S CATALOGUE of AMERICAN PLANTS and GENERAL NURSERY STOCK is now ready, and may be had on application.
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Purchasers of Cinerarias should send for

J. DOBSON AND SONS' DESCRIPTIVE LIST of all the leading kinds, at reduced prices. Post Free.
Woodlands Nursery, Isleworth, W.

Purchasers of Geraniums should send for

J. DOBSON AND SONS' DESCRIPTIVE LIST of all the leading varieties, Show, Spotted, and Fancy, at reduced prices, post free to any address.
J. DOBSON & SONS, Woodlands Nursery, Isleworth, W.

SUPERB RANUNCULUS.—100 superfine English, of various sorts and colours, selected with great care, and unsurpassed by any of the newest named varieties, sent FREE for 10*s*., or 50 for 5*s*. 6*d*.
E. P. DIXON, Yorkshire Seed Establishment, Hull.

To the Trade.

HOLLYHOCKS, First-class competition varieties, Three to Five Guineas per 100, or 9*s*. to 18*s*. per dozen. Fine strong Plants.
CARSTAIRS' Warriston Nursery, Edinburgh.

RHODODENDRONS. — An immense Stock of Hybrid and Common RHODODENDRONS, 9 inches to 3 feet, is offered at a low price, by W. H. ROGERS, Red Lodge Nursery, Southampton; also a fine collection of SCARLET and other beautiful varieties, under name.
A CATALOGUE of General NURSERY STOCK, extending over 60 acres, may be had on application.

To Noblemen and Gentlemen Planting.

JOHN MOORE AND SON having made large purchases in HARDY SHRUBS, EVERGREENS, &c., beg to invite an early inspection of the same at their
Old Established Nursery, Perry Barr, near Birmingham.

WELLINGTONIA GIGANTEA.—The Undersigned has to offer a large stock of fine healthy Seedling Plants, in single pots, of this magnificent hardy evergreen tree, at 20*s*. per dozen. Price to the Trade on application.
J. HENCHMAN, Edmonton, London.

W. VIRGO AND SON beg to offer a very large and fine stock of 2 years BEDDED QUICK, 2 years SEEDLING QUICK, EVERGREEN PRIVET, STANDARD and ESPALIER APPLES, at an unusually low price, which with samples may be had on application at
The Nursery, Wonersh, near Guildford, Surrey.

RICHARD SMITH'S LIST of all the EVERGREEN FIR TRIBE suitable for Britain, giving size, price, popular and botanical names, derivations, description, form, colour, foliage, growth, timber, use in arts, native country and size there, situation, soil, and other information, with copious index of all their synonymes. Free by post for 12 postage stamps.
RICHARD SMITH, Nurseryman, Worcester.

WANTED, 100,000 good Transplanted LARCH Plants, 18 inches high. To be delivered in London at the Bricklayers Arms Station, S. E. R., free.
Samples to be sent addressed to Mr. JAMES BACON, Surrenden Dering, Pluckley, near Charing, Kent, to be left at Pluckley Station, S. E. R.

Good Seeds, Carriage Free.

SUTTON AND SONS, SEED GROWERS and MERCHANTS, Royal Berkshire Seed Establishment, Reading.

Agricultural Seeds.

GEORGE GIBBS AND CO., SEEDSMEN, 26, Down Street, Piccadilly, London, W.

CHARLES NOBLE'S NURSERY is Ten Minutes' walk from Sunningdale Station, South-Western Railway.

THOMAS BROWN, late of Paradise Nursery, Holloway, begs to request his friends to address all future communications T. BROWN, Exotic Nursery, Tooting, Surrey, S.

PAMPAS GRASS, in Pots, from 20*s*. to 50*s*. per 100.
RICHARD SMITH, Nurseryman, Worcester.

PAMPAS GRASS.
Strong, in pots, 25*s*. and 35*s*. per 100.
JAMES CARTER & Co., 237 and 238, High Holborn, W.C.

TRITOMA UVARIA.
For strong plants of this splendid flower apply to
JAMES CARTER & Co., 237 and 238, High Holborn, W.C.

TRITOMA UVARIA var. GRANDIFLORA.—The most beautiful of all. 6*s*., 9*s*., 12*s*., and 18*s*. per doz.
BARR & SUGDEN, King Street, Covent Garden, W.C.

TRITOMA UVARIA GLAUCA, the handsomest variety of this showy herbaceous plant. 9*s*., 12*s*., and 18*s*. per dozen.
BUTLER & McCULLOCH, Seedsmen, Covent Garden Market, W.C.

ARAUCARIA IMBRICATA. — Sound Seed, just imported 10*s*. per 100.
J. HENCHMAN, Edmonton, London, N.

STRONG FRUITING VINES, 7*s*. 6*d*. and 10*s*. 6*d*.
LIST gratis and post free.
JAMES CARTER & Co., 237 and 238, High Holborn, W.C.

Strong Vines from Eyes.

GEORGE S. DODS can supply Strong VINES of all the leading kinds for immediate Planting.
A PRICE LIST forwarded on application.
Epsom Nursery, Surrey.

Strong Vines from Eyes.

J. IVERY AND SON beg most respectfully to inform their patrons that they have now ready for planting out, strong Plants of all the best varieties.
A PRICED LIST will be forwarded on application.
Dorking Nursery.—Nov. 2.

Strong Vines in Pots.

JOHN CRANSTON offers strong VINES from Eyes, having well ripened Canes.
A LIST of Sorts with prices sent on application.
Nurseries, King's Acre, near Hereford.

FRUITING STRONG VINES, 7*s*. 6*d*. and 10*s*. 6*d*. each.
Extra extra strong, 15*s*. each.
Strong Canes for planting, 3*s*. 6*d*. and 5*s*. each.
E. G. HENDERSON & SON, Wellington Road, St. John's Wood, N.E.

Peach Trees Wanted.

WANTED IMMEDIATELY, 6 Extra large PEACH and 2 NECTARINE TREES. Some that have been permanently trained three or four years would be preferred, as they are required for immediately furnishing a Peach-house.
Address, stating size, price, varieties, and full particulars, to Mr. JAS. VEITCH, Jun., Royal Exotic Nursery, Chelsea, S.W.

AZALEAS, CAMELLIAS, EPACRIS, and ERICAS.—We respectfully invite an inspection of our Stock of the above, which is large, in the finest health, and full of flower buds.
THOMAS JACKSON & SON, Nursery, Kingston, S.W.

WINTER CUCUMBER PLANTS.—Lord Kenyon's FAVOURITE, and Cuthill's BLACK SPINE. Strong plants, 2 feet high, in 48-sized pots, healthy, and fit to put out, 1*s*. 9*d*. each, or 18*s*. per dozen. Cash to accompany all orders.
HENRY BROWN, Bounds Green, Colney Hatch, N.

New Vegetable.

PARSNIP CHERVIL.
See *Gardeners' Chronicle* of October 5 and 12.
Fresh new Seed, 6*d*. and 1*s*. per packet.
JAMES CARTER & Co., 237 and 238, High Holborn, W.C.

CEPHALOTUS FOLLICULARIS, or New Holland Kitchen Plant, 600 just arrived in good condition; the lot for sale at 75*s*. per 100, or 85*s*. per single 100.
W. CUTTER, Naturalists' Agent, Crystal Palace, Sydenham, S.

Milltrack Mushroom Spawn.

WM. CUTBUSH AND SON are now able to supply the above at 7*s*. 6*d*. per bushel.
N.B. None is genuine unless a pamphlet with our signature attached is enclosed in each packet.
Highgate Nurseries, London, N.

New Plants of 1861.

HENRY WALTON has now ready for Orders, at greatly reduced prices, nice plants of FUCHSIAS, PETUNIAS, VERBENAS, &c., of this season.
LIST of VARIETIES and Prices on application.
Edge End, Marsden, near Burnley, Lancashire.

PHLOX and CYTISUS RACEMOSUS.—A choice assortment of the finest DWARF PHLOX, good plants in pots, 9*s*. to 12*s*. per dozen; old sorts, 4*s*. to 6*s*. per dozen. CYTISUS RACEMOSUS, nice plants with bloom, 6*s*. to 9*s*. per doz.
JOHN CRANSTON, Nurseries, King's Acre, near Hereford.

New Rose Catalogue for 1861-62.

WOODLANDS NURSERY, MARESFIELD, NEAR UCKFIELD, SUSSEX.

WM. WOOD AND SON have the honour to announce that their CATALOGUES of ROSES and GENERAL NURSERY STOCK are now ready for distribution.

It is generally admitted that the county of Sussex has suffered less from the effects of last winter's frost than any other county in England, in consequence of which W. W. & Son have to offer a remarkably fine stock of Roses and Nursery Stock in general.

Rose Catalogue.

WM. PAUL (Successor to the late A. PAUL) respectfully announces that his NEW ROSE CATALOGUE is now ready for circulation.

Owing to the division of the Cheshunt Nurseries in the Autumn of last year, the greater part of his Roses were removed, and as a consequence escaped the devastating effects of the winter's frost. Standards, Half-Standards, and Dwarfs are alike vigorous and healthy, and he believes that his stock of Roses this autumn is the largest and finest in the country.

Cheshunt Nurseries, Waltham Cross, London, N.

New Roses on Sale 1st November, 1861,

LIABAUD, HORTICULTEUR, Montée de la Boucle, 4, à la Croix-Rousse, Lyon, France.

SIMON SAINT-JEAN.—Hybrid perpetual; branches very vigorous, tall; foliage abundant, light green, whitish on upper surface; flowers detached, or by twos or threes, very large, Pæony-shaped; colour red purple shading to velvety black, with white stains in centre. Splendid for bedding or lofty standards. Price 20 francs.

MADAME CLÉMENCE JOIGNEAUX.—Hybrid perpetual; branches straight, very vigorous; foliage very abundant and handsome; flower cup-shaped, the longest hitherto known; colour brilliant red. Very remarkable variety. Price 20 francs.

Mitchell's Unrivalled Collection of Roses.

THE LARGEST STOCK AND THE BEST PLANTS IN ENGLAND, JUSTLY PRONOUNCED BOTH BY ENGLISH AND FOREIGN GROWERS.

JAMES MITCHELL has the honour of informing his kind patrons that he has succeeded in obtaining the FIRST PRIZES at the principal Shows throughout the season, viz.:—

July 10.—The Grand National Rose Show, Royal Horticultural Society's Garden, Kensington Gore, 96 varieties, 3 trusses of each, First Prize.

September 11.—Forty-eight varieties, 3 trusses of each, First Prize.

July 3.—The Royal Botanic Society, Regent's Park, London, 50 varieties, 3 trusses of each, First Prize.

July 6.—The Great Rose Show, Crystal Palace, 96 varieties, 1 truss of each, First Prize.

June 19.—Brighton Horticultural Society, 50 varieties, 3 trusses of each, First Prize.

September 18.—Fifty varieties, 3 trusses of each, First Prize.

August 28.—Lewes Horticultural Society, 36 varieties, 3 trusses of each, First Prize.

J. M. respectfully informs the Nobility and Gentry he can supply the best perpetual BLOOMING ROSES in Standards, Half Standards, and Dwarfs, healthy good rooted plants.

Standards, 30s. per dozen.
Half ditto, from 24s. to 30s. per dozen.
Dwarfs, from 18s., 24s., to 30s. per dozen.
New Varieties of 1861, 42s. per dozen.

Pilt Down Nurseries, Maresfield, Sussex.

N.B. These Nurseries are 2½ miles from the Uckfield Station, on the London, Brighton, and South Coast Railway.

Hollyhock Seed—Sow at once.

PAUL AND SON'S unrivalled Collections of the above are now ready in 12 fine distinct named varieties, in sealed packets, 5s.; 6 varieties do., do., 2s. 6d.; packets of fine mixed, 1s.; also a large Stock of fine healthy plants (see CATALOGUE now ready, post free on application).

Old Nurseries, Cheshunt, Herts.

Superb Double Hollyhocks.

SAFFRON WALDEN NURSERY.

WILLIAM CHATER'S 15th ANNUAL DESCRIPTIVE and NEWLY CLASSIFIED LIST is now ready, and will be forwarded to any address on receipt of one postage stamp.

WILLIAM CHATER, Nurseryman and Seedsman, Saffron Walden, Essex.

Superb Hollyhocks.

EIGHTEEN THOUSAND PLANTS OF NAMED VARIETIES, INCLUDING THE BEST IN CULTIVATION.

R. B. BIRCHAM in offering the above begs to observe that considerable advantage would accrue to purchasers by receiving their plants in autumn instead of spring. By shifting into larger pots, and placed where they are protected from the *extremes* of wet and cold, the plants will become extra strong for spring planting, when an *earlier* and *stronger* bloom will be obtained, ripen more seed, &c.

CATALOGUES forwarded upon application.

Hedenham Rosery, Bungay, Suffolk.

Prize Hollyhock Seed.

DOWNIE, LAIRD, AND LAING are now sending out in sealed packets, 12 of the finest varieties of HOLLYHOCKS, saved from their unrivalled collection, price 5s; and same sorts, mixed, 1s. and 2s. 6d. Free by post.

17, South Frederick Street, Edinburgh; and Stanstead Park, Forest Hill, London, S.E.

Prize Hollyhocks.

DOWNIE, LAIRD, AND LAING have an immense Stock of fine healthy Plants of the above, price 18s., 24s., 30s., and 42s. per dozen. CATALOGUES free on application.

D., L. & L. were awarded the First Prize for 11 Spikes of Hollyhocks this season at the Crystal Palace, Royal Horticultural Society of London, Brighton and Edinburgh Horticultural Societies Exhibitions.

17, South Frederick Street, Edinburgh; and Stanstead Park, Forest Hill, London, S.E.

FIRST-CLASS PELARGONIUMS, CINERARIAS, HOLLYHOCKS.

12 New PELARGONIUMS (Purchaser's selection), 24s.—Argo, Beauty of Reading, Cherub, Garibaldi, Gem of Roses, King of Spots, Mulberry, Modesty, Mrs. Benyon, Norma, Perdita, Roseum, Rosa Bonheur, Satanella, Sir H. Davy, The Lady of Quality, Thirza, Transcendant.

12 choice PELARGONIUMS (Purchaser's selection), 12s.—Such sorts as Lord Clyde, Leviathan, Euphemia, Peacock, Rose Celestial, Symmetry, The Bride, Prince of Wales, Etna, Candidate, King of Purples, Autocrat, Bacchus, Czar, Douglas, Emperor, Mammoth, Mars, The Belle, Sanspareil, Beadsman, &c.

12 choice CINERARIAS (Purchaser's selection), 12s.—Adam Bede, Constancy, Commander-in-Chief, Cramoise supérieure, Duke of Cambridge, Excelsior, Goliah, Lady Paxton (new), Mr. Marnock Smith, Mr. Marnock Dobson, Miss Marnock, Miss Smith, Magenta, Magnificent, Magnet, Othello, Perfecta, Queen Victoria, Refulgens, Semi Duplex, Solferino, Triumphans; older sorts, 6s. per dozen.

Finest exhibition HOLLYHOCKS in fine plants.

LISTS of all the above on application to HENRY MAY, The Hope Nurseries, near Bedale, Yorkshire.

PARADISE NURSERY, HOLLOWAY, LONDON, N.

BENJAMIN S. WILLIAMS

Invites inspection of his large and well-assorted Collections of

EXOTIC ORCHIDS, FERNS AND LYCOPODS, MISCELLANEOUS, STOVE, AND GREENHOUSE PLANTS, VARIEGATED AND ORNAMENTAL FOLIAGED PLANTS.

Amongst which are some of the finest Specimens in the Trade.

Also a fine Stock of

ROSES, FUCHSIAS, GERANIUMS, HARDY VARIEGATED PLANTS, HERBACEOUS AND ALPINE PLANTS, CONIFERS, FRUIT TREES, SHRUBS, &c.

Just published, Post Free on application,

NEW GENERAL CATALOGUE FOR 1861-62,

WITH A DESCRIPTIVE LIST OF

NEW, BEAUTIFUL, AND RARE PLANTS

OF RECENT INTRODUCTION.

The "FAVOURITE" OMNIBUSES, from the London Bridge Railway Station, by the Bank and Post Office; and from Charing Cross, through the Strand and Holborn, pass the Nursery every 10 minutes.

PARADISE NURSERY, SEVEN SISTERS AND HORNSEY ROADS, HOLLOWAY, N.

HARDY JAPANESE PLANTS, NEW ROSES, &c.

JOHN STANDISH

HAS great pleasure in submitting to the consideration of his friends and the public in general the following List of NEW PLANTS, ROSES, &c., far exceeding in interest any that he has ever before had the opportunity of sending out at any one time; he would particularly direct attention to the Variegated and other JAPANESE PLANTS, which he believes will effect quite a revolution in Gardening, as their complete hardiness has in many instances been quite established. Obtained by that indefatigable and successful collector, Mr. Robert Fortune, they were sent home in such excellent condition as to excite the wonder of all who saw them at the opening fête of the Royal Horticultural Society, and were universally acknowledged to be the most remarkable collection ever imported into England.

The NEW ROSES have been exhibited in the winning stands both at the Crystal Palace and Royal Horticultural Society, and the entire stock is in the hands of J. S.

Amongst the NEW FERNS will be found many of great interest and novelty.

HARDY JAPANESE PLANTS.

THUJOPSIS DOLABRATA VARIEGATA.—It is impossible to speak in too high terms of this variegated plant. Those who know T. dolabrata can form some idea of it when J. S. states that every shoot is terminated by beautiful silvery leaves; its hardiness is established from the fact that it stood all last winter at Elvaston, when the Common Holly and Portugal Laurels were killed to the ground. Plants 63s. each in the spring.

RETINOSPORA OBTUSA.—An evergreen shrub of the Arborvitæ race, growing from 60 to 80 feet high, stiffer in its foliage than anything known, having the character of Cedar of Lebanon with Cypress leaves. The wood is used by the Japanese in various ways, shines beautifully without any polish when worked up. Plants now ready, 21s. each.

RETINOSPORA OBTUSA VARIEGATA.—Same species, with beautifully white variegation regularly occurring all over the plant. 31s. 6d. in April.

RETINOSPORA PISIFERA.—A very beautiful slender looking tree with sharp pinnated leaves. 21s. each.

RETINOSPORA PISIFERA AUREA.—Same species, but instead of the white variegation the terminal shoots are of a beautiful golden hue. Nothing can be more exquisite than this plant. 31s. 6d. in April.

RETINOSPORA PISIFERA VARIEGATA.—The same species with beautifully white variegated foliage. 31s. 6d. in April.

SCIADOPITYS VERTICILLATA.—This, the Umbrella Pine, as it is sometimes called, is one of the most remarkable of all the Coniferæ, described (by Siebold) as a very singular shrub or small tree, but in reality growing to the height of 100 to 150 feet, with its whorls arranged in the form of an extended parasol. As J. S. has several imported plants, the character of it can be well seen by any of his friends who may favour him with a visit. Seedling plants in the seed leaf, 42s. each; or a few imported plants, about 1 foot high, 10 guineas each.

EURYA LATIFOLIA.—A most exquisitely variegated shrub, the young shoots being of a brilliant rose colour, changing to white; when this becomes large and well established it will be one of the most beautiful plants known. 31s. 6d. each in April.

OSMANTHUS VARIEGATUS NANUS.—A dwarf Holly-like looking plant, perfectly hardy, and from the freeness of its growth likely to supersede many of the variegated species of Ilex now in our gardens. 31s. 6d. each, in April.

AUCUBA JAPONICA (true).—The shrub hitherto known under this name is merely a variegated variety of the one now introduced; it is covered with beautiful red berries about the size of the common Sorbus. 21s. each.

TAXUS FORTUNII.—An erect-growing species, somewhat similar in habit to the Irish Yew, but with very long leaves. Plants in spring. 21s. each in April.

BAMBUSA VARIEGATA.—A very beautiful dwarf growing plant, perfectly hardy. 21s. each, in April.

CAMPANUMŒA LANCEOLATA.—From N. China, probably hardy, but at any rate most useful as a greenhouse creeper. Peculiar bell-shaped flower, green and black, produced very freely all over the plant. Plants in Spring, 10s. 6d.

NEW FERNS.

LOMARIA FLUVIATILIS.—A very distinct species from New Zealand. Fronds nearly 1 foot long. 42s. each.

LOMARIA ELONGATA.—New Zealand. Pinnate leaves, 2 feet long, stouter than other Lomarias; very striking and beautiful. 42s. each.

NEW FERNS.

LOMARIA MAGELLANICA.—Perfectly hardy; stood all last winter, even in Yorkshire. 3s. 6d. to 10s. 6d. each.

CYATHEA DEALBATA.—Nice seedling plants, with fronds from 15 to 18 inches long, in 32-pots. 7s. 6d. each.

CYATHEA SMITHII.—Seedling plants. From 2 to 5 guineas.

CYATHEA CUNNINGHAMII.—A beautiful tree Fern, of not very large growth, suitable for small greenhouse. 2 to 5 guineas.

LASTREA ATRATA.—North China, very hardy, dark green foliage. 10s. 6d. each.

WOODWARDIA JAPONICA.—Hardy. From Japan and North China. 21s. each.

WOODWARDIA ORIENTALE.—Hardy. From North China, one of the finest of all hardy Ferns. 21s. to 31s. 6d. each.

TODEA PELLUCIDA.—A very beautiful tree Fern. 5s. to 10 guineas each.

CAMELLIA RETICULATA FLORE PLENO.—The largest and finest of all Camellias for effect. 31s. 6d. to 3 guineas each.

NEW ROSES.

COMTE DE FALLOUX, H. P.—A most free blooming variety of the Géant race, admirably adapted for a pot Rose or for bedding, as it never at any time of the year throws up a shoot without a bloom. Colour, bright scarlet crimson. 10s. 6d. each.

REYNOLDS HOLE, H. P.—A very strong and free blooming variety, throwing its blooms up well and very erect. Colour very lively pink, increasing in brilliancy as the flower gets age. For effect in gardens unrivalled; figured in the *Floral Magazine* for November, 1861. 10s. 6d. each.

GREGOIRE BOURDILLON, H. P.—A seedling from the Géant, very vigorous habit, larger and brighter than its parent; colour scarlet crimson. 10s. 6d.

MARGUERITE APPERT, H. P.—Large blush, shading off to white, beautifully cupped shape, vigorous habit. 10s. 6d. each.

ANDRE DESPORTES, H. P.—A seedling from Lord Raglan, very vigorous in habit, large rose-coloured flower. Admirably adapted for a pillar Rose. 10s. 6d. each.

JOHN STANDISH, H. P.—Deep violet crimson, very dark, perfectly imbricated, and blooming in clusters, vigorous habit, first-rate Rose. 10s. 6d. each.

Plants of Comte de Falloux now ready. Strong plants of the others will be ready the first week of May.

Besides the above J. S. can supply all the New Roses of this and last year, fine strong plants on their own roots, or grafted from 2s. to 3s. 6d. each, or by the hundred at a considerable reduction.

VINES.

MUSCAT TROVERON.—One of the finest of all the White Grapes; as such it received a First-class Certificate at the July Show of the Royal Botanic Society. As large as a Black Hamburgh, bunches 15 to 20 inches long, with a fine rich acid and slight Frontignan flavour; one of the finest Grapes for Exhibition purposes. 10s. 6d. to 31s. 6d.

INGRAM'S HARDY PROLIFIC MUSCAT.—This Grape has fully sustained the character given to it by John Standish, as it has obtained the 5l. Prize given by Mr. Saunders for the finest Seedling Grape of last year; a First-class Certificate from the Fruit Committee of the Royal Horticultural Society, and an extra Prize from the Royal Horticultural Opening Show. 21s. to 63s. each.

In addition to the above a fine collection of all the leading kinds either as Fruiting Canes or small plants for planting out.

J. S. begs to intimate that he has a fine stock of all the leading HYBRID RHODODENDRONS, from 12l. to 20l. per hundred; a fine collection of HARDY ORNAMENTAL SHRUBS and TREES, and the finest GLADIOLI in the world. Also all the new PHLOXES of 1860 and 1861, raised by Lierval and others, from 1s. 6d. to 3s. 6d. each, and assures his friends and the public in general that everything sent out by him will be in the best possible condition, and will not fail to give satisfaction.

JOHN STANDISH, THE ROYAL NURSERY, BAGSHOT, SURREY.

ESTABLISHED UPWARDS OF A CENTURY.

COVENT GARDEN MARKET, LONDON, W.C.

BUTLER & McCULLOCH'S

DESCRIPTIVE BULB CATALOGUE and AMATEURS' GUIDE

TO WINTER AND SPRING GARDENING.

Now Ready, forwarded Free and Post Paid upon application.

THE numerous Species and choice Varieties contained in the above CATALOGUE, combined with the Descriptive Notes, Plain Cultural Directions, and Hints on the Distribution and Arrangement of Bulbs, render it a valuable assistant, either to the Amateur or practical Gardener.

All Orders of 21s. and upwards sent Carriage paid.

£2 2s. COLLECTION of BULBS, for CONSERVATORY.

24 HYACINTHS, in 12 choice sorts
24 POLYANTHUS NARCISSUS, in 12 sorts
25 Sweet-scented JONQUILS
150 NEW SEEDLING CROCUS, 20 sorts
12 DUC VAN THOL, red and yellow Single Tulips
36 Early Single TULIPS, in 12 choicest sorts
12 LA CANDEUR, white Double Tulips
12 REX RUBRORUM, scarlet Double Tulips
12 TOURNESOL, scarlet and yellow Double Tulips
12 YELLOW ROSE, yellow Double Tulips
1 each, LILIUM LANCIFOLIUM ALBUM, ROSEUM, and RUBRUM [Half the above, 1l. 1s.]

£2 2s. COLLECTION of BULBS, for the FLOWER GARDEN.

36 HYACINTHS, finest mixed
100 Sweet-scented Double WHITE NARCISSUS
200 YELLOW CROCUS
200 PURPLE CROCUS
200 WHITE CROCUS
200 SNOWDROPS
50 Splendid mixed DOUBLE TULIPS
12 REX RUBRORUM, Double Tulips
12 TOURNESOL, Double Tulips
25 Finest mixed DOUBLE ANEMONES
25 Finest mixed SINGLE ANEMONES
50 Finest mixed SPANISH IRIS
50 SCARLET TURBAN RANUNCULUS
24 LILIES, in four fine varieties
6 Mixed CROWN IMPERIALS
12 GLADIOLUS BRENCHLEYENSIS
Half the above, 1l. 1s.

GLADIOLUS, SEEDLINGS of RAMOSUS.

50 in 50 Extra Choice Varieties	2l. 0s. 0	50 in 50 Choice Varieties	1l. 4s. 0
25 in 25 ,,	1 0 0	25 in 25 ,,	0 12 0
12 in 12 ,,	0 12 0	12 in 12 ,,	0 6 0

BUTLER AND McCULLOCH, SEEDSMEN, COVENT GARDEN MARKET, W.C.

BARR & SUGDEN, SEEDSMEN,

12, KING STREET, COVENT GARDEN, W.C. (OPPOSITE the GARRICK CLUB).

Orders amounting to 21s. sent Carriage Paid to any Railway Station in the Kingdom.

BARR & SUGDEN'S *Emporium for imported DUTCH FLOWER ROOTS, and the most elegant and ornamental style of HYACINTH GLASSES.*

BARR & SUGDEN, London Agents for TYE'S REGISTERED HYACINTH GLASSES and DRAWING-ROOM FLOWER VASES, ILLUSTRATED in last week's Advertisement. These Glasses vary in price from 10s. 6d. per dozen to 21s. per pair, and are the only really artistical shaped and Ornamental Hyacinth Glasses yet introduced. PRICED LIST on application. A large assortment always in stock.

PAXTONIAN COLLECTIONS of IMPORTED DUTCH FLOWERING BULBS

OF PRIME QUALITY, SUITABLE FOR THE DECORATION OF THE FLOWER GARDEN.

The Columns G, H, I, J, K, L, show the number of Bulbs sent for the amount named at the top.

	G. 5l. 5s.	H. 3l. 3s.	I. 2l. 2s.	J. 1l. 1s.	K. 15s. 6d.	L. 10s. 6d.
HYACINTHS, various	100	70	50	30	20	15
POLYANTHUS NARCISSUS, various	50	30	30	20	10	10
TULIPS	300	200	150	100	75	50
CROCUS	500	300	200	100	100	100
ANEMONES	300	200	100	50	25	
RANUNCULUS	300	250	200	100	100	50
SNOWDROPS	300	200	100	50	50	50
IRIS, splendid English, mixed	100	70	50	20	15	10
GARDEN NARCISSUS, various	100	80	50	25	20	20
CROWN IMPERIALS, mixed	12	6	6	3		
IXIAS	50	30	20			
SCILLA SIBIRICA	18	12	9	6		

BARR & SUGDEN'S COLLECTIONS of IMPORTED DUTCH FLOWERING BULBS

FOR THE DECORATION OF THE CONSERVATORY AND FLOWER GARDEN.

The Columns A, B, C, D, E, F, show the number of Bulbs sent for the amount named at top.

	A. 5l. 5s.	B. 3l. 3s.	C. 2l. 2s.	D. 1l. 1s.	E. 15s. 6d.	F. 10s. 6d.
HYACINTHS, splendid varieties, for in-door decoration	60	40	25	20	15	12
,, ,, for out-door decoration	30	25	15	10	6	
POLYANTHUS NARCISSUS, for in-door decoration	25	18	12	3	3	
TULIPS, for in or out-door decoration	200	150	100	40	20	20
JONQUILS, for in-door decoration	25	12	12	3	3	
IXIAS and SPARAXIS, for out or in-door decoration	25	20	12	6		
CROCUS, for out-door decoration	400	300	200	100	100	100
ANEMONES ,,	200	100	75	20	12	10
RANUNCULUS ,,	200	150	100	50	25	20
SNOWDROPS ,,	200	100	100	50	50	50
GARDEN NARCISSUS ,,	100	80	50	25	20	20
CROWN IMPERIALS ,,	6	6	6			
IRIS, splendid English ,,	25	18	12	6	6	6
SCILLA SIBIRICA, for in or out-door decoration	18	12	9			

Sent Post paid.

For Greenhouse or Sitting-room Decoration, TROPÆOLUM TRICOLORUM GRANDIFLORUM, scarlet, yellow, and black, 1s., 1s. 6d., and 2s. 6d. per root.

LACHENALIA TRICOLOR, green, yellow, and red flower, and foliage equally ornamental, 4s. per dozen, or 6d. each.

BARR & SUGDEN'S BULB CATALOGUE AND FLORAL GUIDE

(Third Edition), now ready and sent free by post on application.

BARR AND SUGDEN, SEEDSMEN AND FLORISTS,
12, KING STREET, COVENT GARDEN, W.C. (OPPOSITE the GARRICK CLUB).

MINNIE BANKS and COMET.
Coloured Plate, 1s. 6d. per post.

The above FUCHSIAS possess first-class properties, and show a striking advance on all others which have been sent out since the white corolla varieties were introduced.

E. G. HENDERSON & SON, Wellington Road Nursery, St. John's Wood, London, N.W.

CHÆROPHYLLUM BULBOSUM.
Figured in *Gardeners' Chronicle*, Oct. 5, 1861.
New Seed, per packet, 6d. and 1s. each.

The BULB CATALOGUE free, and the BULB GUIDE on receipt of 18 postage stamps.

E. G. HENDERSON & SON, Wellington Road Nursery, St. John's Wood, London, N.W.

New and Rare Plants.

MESSRS. E. G. HENDERSON AND SON respectfully call attention to the following :—

SEDUM CARNEUM VARIEGATUM, introduced by Mr. Von Siebold from Japan, of whom they have purchased the entire stock.
EPIGYNIUM LEUCOBOTRYS, figured in the "Illustrated Bouquet."
PENTAS ROSEA KERMESINA, very useful as a winter-flowering plant for Drawing-room Bouquets.
PETUNIA BRITISH LION, fine habit, rich crimson.
CAMELLIA ETOILE POLAIRE, carmine scarlet-striped.
COLEUS VERSCHAFFELTI, bright bronze crimson leaves.
LAPAGERIA ROSEA, newly gathered Seeds. Trade supplied.
CLOTH OF GOLD GERANIUM, 1s. 6d. and 2s. 6d.
GOLDEN FLEECE GERANIUM, 1s. 6d. and 2s. 6d.
GYNERIUM ARGENTEUM (PAMPAS GRASS), 3s. and 3s. 6d. per dozen. Strong at 1s. and 1s. 6d.

Wellington Road, St. John's Wood, London, N.W.

Hardy Scarlet Rhododendrons and other American Plants.

JOHN WATERER has the pleasure to announce that his ANNUAL CATALOGUE of the above popular plants, as exhibited in the Royal Botanic Gardens, Regent's Park, London, is now published, and will be forwarded on application. Intending planters and amateurs desirous of blending colours are invited to possess a copy, as faithful descriptions of all the RHODODENDRONS are given.

The Catalogue contains a selection of the best and really Hardy CONIFERS, with heights and prices, the whole of which having been removed the past spring are in a capital state for transplanting. Also EVERGREENS and ORNAMENTAL SHRUBS and TREES of the leading kinds.

The American Nursery, Bagshot, Surrey, near the Sunningdale Station, South Western Railway; also to be had of Mr. JOHN KERNAN, Seedsman, 4, Great Russell Street, Covent Garden.

New Azalea indica.

J. IVERY AND SON feel much pleasure in offering their two beautiful Seedlings, CARNATION and TRICOLOR, small plants at 10s. 6d., and larger at 21s. each.

They are fully described in our CATALOGUE, with all other Novelties of the Season, which will be forwarded post free upon application.

A fine lot of half Specimens and Standards for Sale.

Dorking Nursery.—Nov. 2.

CAMELLIAS, ERICAS, EPACRIS, ACACIA, JASMINUM GRANDIFLORUM, OTAHEITE ORANGES, &c., of fine healthy quality.

VINES, well ripened, strong for planting out, and extra strong for fruiting in pots, of all the leading varieties.

MUSHROOM SPAWN in fine condition.

Prices upon application; also prices to the Trade.

JAMES DICKSON & SONS, "Newton" Nurseries, Chester.

Winter and Spring Flowering Plants.

F. AND A. SMITH are now supplying fine plants at moderate prices of the following :—

*Acacias, *Azaleas, Cinerarias, *Camellias, *Chrysanthemums, Cyclamen, Cytisus, Clianthus, Carnation (Tree), *Echeveria, *Epacris, *Ericas, Eutaxias, *Gardenias, *Heterocentrum, *Kennedyas, *Lechenautia, *Jasminum grandiflorum, *Monochætum, Pelargoniums, *Passifloras, *Primula, double and single; *Solanum, *Oranges, &c. [Those marked thus * are either in bud or fruit at the present time.]

GENERAL CATALOGUE gratis.

Dulwich, Surrey, S.

Flag of Truce.

NEW DOUBLE WHITE AZALEA INDICA.

F. AND A. SMITH have much pleasure in offering the above splendid novelty, which is justly celebrated as the best double variety extant. It has obtained unprecedented testimonials of merit, and the general admission of all who have seen it that it is the "finest" yet produced for its large double flowers, purity of colour, abundance of bloom, and neat compact habit of growth.

Plants will be sent out in June, 1862. Full description and price will be published early in spring.

In consequence of an accident, the new varieties Clapham Beauty, Prince of Orange, and Princess Royal will not be sent out till further notice.

Dulwich, Surrey, S.

Choice Camellias, Indian Azaleas, and Rhododendrons, with Flower Buds.

AUGUST VAN GEERT, NURSERYMAN, Ghent, begs to offer :—

CAMELLIAS, with numerous flower buds, best varieties, 1 to 1½ foot high, 6l. per 100.
INDIAN AZALEAS.—Small plants, very choice varieties, 3l. 10s. per 100.
HARDY RHODODENDRONS.—Named, and choice varieties, with one and two flower buds, 18s. per doz.
DELPHINIUM FORMOSUM.—Strong plants, 10s. 6d. per 100.
ASCLEPIAS TUBEROSA.—Strong roots, 15s. per 100.

DAVID BROWNE, having DISPOSED of the PLANT DEPARTMENT at his SPROWSTON NURSERY to Mr. R. ELPHINSTONE, begs to thank his patrons and friends for their liberal support, and with confidence recommends his Successor for their future patronage.

RODERICK ELPHINSTONE, having succeeded to the FLORIST DEPARTMENT lately carried on by Mr. D. Browne, trusts, by strict and personal attention to business, to merit a continuance of that support so liberally bestowed upon his predecessor.

R. E. having for upwards of 25 years held most responsible positions as Head Gardener, begs to offer his services to the Nobility, Gentry, and Clergy of the Eastern Counties as Architectural and Landscape Gardener, assuring them that he has had a great amount of experience in that capacity, as testified by the numerous testimonials which can be produced.

Plans and Estimates prepared for Laying Out and Planting Grounds.

CATALOGUES of GREENHOUSE and BEDDING PLANTS, including the newest and best varieties, will be ready shortly and can be had on application at the

Nursery, Sprowston, Norwich.

Fruit Trees.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Fruiting Vines.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Roses.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Ornamental Trees and Shrubs.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Hollyhocks.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Fruit Trees.

B. WHITHAM begs to call attention to his superior Stock of APPLES, including upwards of 2000; Lord Suffield, Ringer, Grenadier, Pott's Seedling Golden Spine, and the best sorts in cultivation, at 9s. per dozen. Also a very large stock of Lancashire Show GOOSEBERRIES, 160 of the best kinds at 4s. per dozen; common sorts, 2s. per dozen; RED, WHITE, and BLACK CURRANTS, 2s. per dozen, 14s. per 100. CATALOGUES free on application.

Clough Nurseries, Mottram, near Manchester.

Fruit Trees.

JAMES GARAWAY AND CO. call attention to their stock of the above, comprising

APRICOTS NECTARINES PEACHES	Standard and Dwarf-trained	APPLES CHERRIES PEARS PLUMS	Dwarf-trained, Standard, and Dwarf-quarter.

All of first-rate quality and in good condition.

The STANDARD PEARS are unusually fine, and will be sold at a very low rate to purchasers of quantities.

CATALOGUES and prices free by post.

Prices to the Trade on application.

JAMES GARAWAY & Co., Durdham Down Nurseries, Bristol.

Orchard-house Trees.

THOS. RIVERS has to offer this season a very large stock of FRUIT TREES in Pots, including

PEACHES and NECTARINES, Standards, 4 to 5 years old.
Ditto Half Standards, ditto.
Ditto Dwarf Bushes, 3 years old.
Ditto Pyramids, 2 to 3 years old.
APRICOTS, Dwarf Bushes, 2 to 3 years old.
Ditto Pyramids, 2 years old.
FIGS, Bushes, 2 to 3 years old.

All the above have been grown in Orchard-houses, are full of blossom buds, and fit for Forcing as well as Orchard-house culture.

APPLES on the Paradise Stock, Pyramids and Bushes.
CHERRIES, Pyramids.
PEARS, Pyramids and Bushes.
PLUMS, Pyramids and Bushes.

These are all well furnished with blossom buds.

STRAWBERRIES in 6-inch Pots.

A CATALOGUE of ORCHARD HOUSE TREES sent free per post on application; carriage of all packages paid to London.

Nurseries, Sawbridgeworth.

Orchard House Trees.

HUGH LOW AND CO. have to offer—

APRICOTS		
APPLES	NECTARINES	PEARS
CHERRIES	PEACHES	PLUMS

In pots. Wood thoroughly well ripened and well set with bloom buds. Prices moderate.

Clapton Nursery, London, N.E.

Orchard House Trees.

J. AND J. FRASER, Lea Bridge Road Nurseries, N.E., having a fine stock of—

PEACHES	APPLES
NECTARINES	PEARS
APRICOTS	PLUMS and CHERRIES

in Pots, well set with bloom buds, beg respectfully to offer them to the notice of intending Purchasers.

A CATALOGUE will be forwarded on application.

The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

Vines for Fruiting in Pots.

J. AND J. FRASER, Lea Bridge Road Nurseries, N.E., beg to offer strong VINES with well ripened wood of the best varieties.

A CATALOGUE will be forwarded on application.

The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

Vines, Vines, Vines.

WILLIAM CUTBUSH, JUN., Barnet Nurseries, Herts, begs to invite an inspection of his fine Stock of FRUITING and other VINES in Pots, consisting of all the best varieties in cultivation. The following are remarkably strong and fine, from 8 to 12 feet in length, viz., Muscat Hamburgh, Muscat of Alexandria, Golden Hamburgh, Bowood Muscat, Lady Down's Seedling, Trentham Black, Buckland's Sweetwater, Black Hamburgh, &c. List and Prices on application. Also to his Stock of Specimen and Half-specimen New Holland Plants, Indian Azaleas, Stove Plants, &c.

W. C. Jun. would also especially call the attention of Mushroom Growers to his very superior MUSHROOM SPAWN, for which he has the highest testimonials from the most eminent Gardeners in the United Kingdom, and which he can with the greatest confidence recommend. References on application.

General Nursery Stock.

S. PONSFORD begs to announce that his Stock of the above is in excellent condition for transplanting, comprising everything in general demand, especially STANDARD and DWARF ROSES, which have made fine growth and are clean and healthy; FRUIT and FOREST TREES of every description; STANDARD MULBERRIES, very fine; AUCUBAS, from 1 to 5 feet high, bushy; and all other Evergreen and Deciduous Shrubs and Plants; CAMELLIAS and AZALEAS well set with bloom buds.

PRICED and DESCRIPTIVE CATALOGUES on application to

Loughborough Park Nurseries, Brixton, Surrey, S.

CHARLES DALY AND SON offer 200,000 four years' transplanted SPRUCE FIR at 10s. per 1000; two year's Seedling THORN QUICKS, 2s. per 1000; one year transplanted ditto, 5s. per 1000; IRISH YEWS, 1 to 1½ feet, 10s. per 100; COMMON LAUREL, 1 to 1½ feet, 15s. per 1000; PORTUGAL ditto, 3s. per 100; AUCUBA JAPONICA, 1 foot, 25s. per 100; TREE BOX, 20s. per 1000. Terms, Cash only. Prices of General Nursery Stock free by post.

Coleraine, Ireland.—Nov. 2.

FOR SALE, very Cheap, large quantities of SPRUCE.

9 inches to 18 inches, per 1000,	12s. 6d.	
1 foot to 2 feet .. ,,	17s. 6d.	
1½ foot to 2 feet .. ,,	25s., spring transplanted.	
2 feet to 3 feet .. ,,	40s., bushy plants, fine roots.	
3 feet to 4 feet, per 100,	20s., fine bushes.	
THORNS .. per 1000,	3s., 2-year seedlings.	
,, .. ,, ..	9s., for railway planting.	
,, .. ,, ..	14s., do. strong.	
,, .. ,, ..	17s. 6d., do., very strong.	

Samples on application to WM. TRESEDER, Nurseryman, Cardiff.

The Planting Season.

WOODLANDS NURSERY, MARESFIELD, NEAR UCKFIELD, SUSSEX.

WM. WOOD AND SON have much pleasure in offering the following, all healthy and finely grown Plants:—

CONIFERÆ,

Uninjured by the frost and in the most robust health.

Araucaria imbricata, from 1 to 2, 3, up to 8 feet.
Cedrus Deodara, very handsome, 2, 3, 4, 5, up to 6 feet.
Cryptomeria japonica, 1, 2, to 3 feet.
Cupressus Lawsoniana, 1, 2, 3, to 4 feet.
Pinus insignis, very fine, 1 to 2 feet.
Thuja aurea, fine plants, 1 to 1½ foot.
Thujopsis borealis, 1 to 2½ feet.

And all other Conifers equally fine and uninjured by frost.

STANDARD ORNAMENTAL and WEEPING TREES.

American Weeping Willows, extra fine heads, 6 to 10 ft. stems.
Weeping Ash, 8 to 10 feet.
Standard Cotoneasters, 5 feet.
Standard Purple-leaved Sycamores.

FRUIT TREES.

Standard Apples, with clean stems and fine heads.
Dwarf-trained Fruit Trees, particularly fine.
Apples, Pears, Plums, Cherries, Peaches, Nectarines, and Apricots.

N.B. A large quantity of Transplanted SPRUCE FIRS.

CATALOGUES may be had on application.

Kingsthorpe Nurseries, near Northampton.

MARSH AND PERKINS have great pleasure in offering the following, which are very fine, well rooted, and such that cannot fail to give satisfaction:—

FOREST TREES, SHRUBS, &c.

Acacia, 4 to 5 feet	Oak, Turkey, 3 to 4 feet
Alder, 2 to 3 feet	Sycamore, 1½ to 2 feet
,, 5 to 6 feet	Poplar, Lombardy and Italian,
,, fine standards, 6 to 7 feet	fine standards, 6 to 10 feet
Ash, 1½ to 2 feet	White Thorn or Quick, 2 years
,, 2 to 3 feet	drills, fine
,, 3 to 4 feet	White Thorn or Quick, 2 years
,, 4 to 5 feet	transplanted, fine
,, 5 to 6 feet	White Thorn or Quick, 3 years
Beech, 1 to 1½ feet	transplanted, fine
,, 2 to 3 feet	Arbor-vitæ, American, 12 to
Chesnut, Spanish, 2 to 3 feet	18 in.
Elm, Wych or Scotch, 2 to 3 ft.	,, Siberian, 12 to 18 in.
,, ,, ,, 3 to 4 feet	,, ,, 18 to 24 in., fine
,, ,, ,, 4 to 5 feet	Berberis dulcis, 18 to 24 in.
,, ,, ,, 6 to 8 feet	,, ,, fine bushy plants,
Fir, Austrian, 1 to 1½ feet	2 to 3 feet
,, Scotch, fine, 1½ to 2 feet	Box, Green, 12 to 15 in.
,, ,, ,, 2 to 3 feet	Cedar, Red, fine, 2 to 3 feet
,, ,, ,, 3 to 4 feet	Cedrus Deodara, fine, 2 to 3 ft.
,, Spruce, 1 to 1½ foot	,, ,, ,, 3 to 3½ ft.
,, ,, 1½ to 2 feet	Holly, Common, 12 to 18 in.
,, ,, white, 1½ to 2 ft.	Laurel, ,, 12 to 18 in.
,, Larch, 12 to 15 in.	,, Portugal, 12 to 18 in.
,, ,, 18 to 24 in.	Laburnum, 4 to 5 feet
Hornbeam, 2 to 3 feet	Pinus excelsa, 6 to 9 in.
,, 3 to 4 feet	Privet, Evergreen, 12 to 18 in.
Limes, Standards, fine	Yew, English, 12 to 18 in.
Oak, English, 1½ to 2 feet	,, ,, 2 to 3 feet
,, ,, 2 to 3 feet	,, Irish, 1½ to 2 feet
,, ,, 3 to 4 feet	,, ,, 3 to 4 feet
,, Turkey, 1½ to 2 feet	,, ,, 5 to 6 feet

Sweet Briar, Syringa, Tamarix germanica, Vinca elegantissima, Standard American Bird Cherry, Virginian Creeper, Spiræa ariæfolia, argentea, and Douglasi.

FRUIT TREES.

Apples, Standards | Pears, Dwarf-trained
Plums, Dwarf-trained.

Prices on application to 42, Drapery, Northampton.

N.B.—A reference required from unknown correspondents.

Quick.

H. AND F. SHARPE are prepared to offer of the finest quality,

Strong 2-years' Transplanted QUICK, 3 feet high,
Strong 2-years' Seedling do., 2 feet high,

at very moderate prices, which may be had, with samples, on application.

Seed Growing Establishment, Wisbech.

H. AND R. STIRZAKER announce that their WHOLESALE LIST of NURSERY STOCK is now ready. It comprises about 400,000 LARCH, untouched by frost; 50,000 LAUREL, Portugal, Common, &c.; YEWS, with a most extensive stock of EVERGREEN and ORNAMENTAL TREES, FRUIT TREES, &c., the whole of which was not in any way injured by the late winter and spring frosts.

The Nurseries, near Lancaster.

The Newry Nurseries.

GEO. R. DAVIDSON begs to call the attention of the public and the Trade generally to his very extensive stock of FOREST TREES, a very large collection, transplanted in rows 14 inches apart, from 3 to 5 years old. THORN QUICKS, 2 million 2-year old in beds, very fine; 1 million 2 and 3-year old, transplanted. HARDY ORNAMENTAL EVERGREEN and DECIDUOUS SHRUBS and TREES, &c. Conveyance per Rail or Steam to all parts of the United Kingdom.

Nursery and Seed Establishment, Newry, Ireland.

Larches, Larches, Larches.

ALEXANDER PONTEY, of the Plymouth Nursery, begs to inform gentlemen intending to plant and the Trade in general that he can supply 200,000 extra-sized LARCHES, two and three times transplanted, from 2 to 4 feet high, suitable for New Plantations and filling up Old Plantations; also 100,000 PINUS AUSTRIACA, two and three times transplanted, from 6 to 9 and 18 inches high; and a large Stock of CONIFERÆ and FOREST TREES for general planting, at low prices, delivered Free to any Station on the South Devon, North Devon, or Cornwall line of rail. Prices on application.

Plymouth Nursery.—Nov. 2.

250 FINE Double Flowering Pink THORNS.—Such plants as are seldom met with in the Trade, being strong, with compact heads, from 4 to 6 feet.

5000 very fine Green HOLLIES (thrice transplanted), from 1 to 2 feet, bushy plants; all will move with balls of soil
1000 fine Silver-striped HOLLIES, from 15 to 24 inches, bushy plants
1000 strong Purple LILACS, 2½ to 3 feet
2000 ONTARIO POPLARS.—Stout plants, from 8 to 12 feet
1000 LOMBARDY POPLARS.—Strong, from 7 to 10 feet
MOUNTAIN ASH.—Strong, from 5 to 8 feet
WYCH or SCOTCH ELMS.—Stout, 5 to 7 feet
WEEPING BIRCH.—Fine and strong, 6 to 9 feet
BEECH, Common.—Strong, 5 to 6 feet
TURKEY OAKS.—Stout, 4 to 5 feet
WHITE CEDARS.—Well furnished plants, 4 to 5 feet.

Prices will be forwarded upon application to MOWBRAY & LOWE, Nurserymen and Seedsmen, Wolverhampton.

Choice Hardy Coniferæ.

AUGUST VAN GEERT, of Ghent, begs to offer the undernamed CONIFEROUS PLANTS, at very moderate prices:—

THUJA VERVAENEANA, a new beautiful golden-striped Arbor Vitæ, fine plants 2 years' grafted, 40s. per doz
THUJA AUREA, 6 inches, 42s. per 100.
PICEA NORDMANNIANA, 2 years' seedlings, 18s. per doz.
PICEA PINSAPO, 1 year's seedling, 7s. 6d. per 100.
ABIES MORINDA, 6 inches, 15s. per 100.
PINUS EXCELSA, 3 years' seedlings, 20s. per 100.
PINUS DON PEDRO, fine plants, 3s. 6d.
PINUS VEITCHII, fine plants, 3s. 6d.

His New GENERAL CATALOGUE may be had on application of Messrs. R. SILBERRAD & SON, 5, Harp Lane, Tower Street, London, E.C.

FLUKE and other POTATOES, off the Lancashire Moss and Sand, personally selected.—Having given my numerous customers so much satisfaction last season, I have made arrangements to supply the same in quantity. Early orders are therefore solicited. Price on application.

H. BROWN, Seedsman, &c., 4, Commutation Row, Liverpool.

NEW SEEDS FOR AUTUMN SOWING.

PETER LAWSON & SON,

SEEDSMEN TO THE QUEEN,

LONDON AND EDINBURGH,

CAN now supply New Seed of TRIFOLIUM INCARNATUM, ITALIAN RYE-GRASS, DWARF ESSEX RAPE, &c., of fine quality.

They are also prepared to supply all the NATURAL GRASSES, either separate or in mixtures, for laying down Permanent Pastures, Lawns, Public Parks, Cemeteries, &c., orders for which will be carefully and promptly attended to.

27, GREAT GEORGE STREET, WESTMINSTER, S.W.

TO THE SEED TRADE.

NEMOPHILA ATOMARIA OCULATA.

W. THOMPSON, SEEDSMAN,

TAVERN STREET, IPSWICH,

BEGS respectfully to offer to the Seed Trade a limited Stock of the above interesting novelty, originally raised by Mr. F. K. Burridge, Colchester, of whom the stock was purchased by W. T. last autumn. It differs from the blue variety of Nemophila atomaria (the N. cramboides of some Lists), in having a blackish-purple blotch, with a jagged outline, at the base of each lobe of the corolla, the five blotches forming unitedly a conspicuous eye to the flower, the ground tint of which is a delicate porcelain blue.

The plant having been grown with the most scrupulous care this season by W. T., it is confidently believed to be well fixed in its character, and is offered with the conviction that it will be found a really desirable addition to the list of hardy annuals hitherto grown.

A Coloured Figure of this interesting acquisition was published in the "Floral Magazine" for January, 1861, then edited by Mr. T. Moore, Secretary to the Floral Committee of the Royal Horticultural Society.

A Coloured Plate may be had for 6 stamps, which will be allowed for purchasers of Seeds. Prices on application

Wholesale Catalogue.

GEORGE JACKMAN AND SON'S PRICED and DESCRIPTIVE CATALOGUE for 1861 and SPRING 1862, comprising Fruit Trees of all the leading kinds, new and selected Roses, fine varieties of American Plants, Choice and Rare Conifers, Evergreen and Deciduous Trees and Shrubs, and a fine Stock of Transplanted Forest Trees, &c., can be had free on application.

Woking Nursery, Surrey.

Winter Blooming Plants.

HUGH LOW AND CO. respectfully invite inspection of their very extensive Stock of CAMELLIAS, AZALEAS, ERICAS, EPACRIS, CYTISUS, &c. These can be seen at the Nursery in thousands, and are well worth the attention of intending purchasers.

Fine ORANGES in fruit. JASMINUM GRANDIFLORUM full of flower buds.

Clapton Nursery, London, N.E.

Nursery Stock.

WOOD AND INGRAM'S PRICED and DESCRIPTIVE CATALOGUE is now ready, including Seedling and Transplanted Forest Trees, Ornamental Trees and Shrubs, Evergreens, Roses, Hardy Climbers and Fruit Trees, and will be sent free on application.

Nurseries, Huntingdon.

Planting Season.

WM. URQUHART AND SONS, Dundee, beg to announce that their PRICED LIST for this season of Forest Trees, Ornamental Trees, Shrubs, Border Flowers, Roses, Ferns, and Auriculas, may now be had on application.

Dundee.—November 2.

TO the TRADE and OTHERS. — Still thousands on hand of good Plants of PAMPAS GRASS, 20s. per 100.

Double Lilac PRIMROSES, 3s. per dozen.

Double White ditto, 5s. per dozen.

Double White Major ROCKETS, 3s. per dozen. Cheaper by the 100.

Double Yellow ditto, 4s. per dozen.

Double Red HEPATICAS, 4s. per dozen. Cheaper by the 100.

Border AURICULAS, 3s. per dozen. Cheaper by the 100.

POLYANTHUS, warranted from finest seed, 3s. per dozen. Cheaper by the 100.

Double Purple and Russian VIOLETS, 2s. per dozen. Cheaper by the 100.

HOLLYHOCKS by dozen or hundred, reasonable.

HARDY CLIMBERS, including the best of Honeysuckles, Clematis, and Roses, 6s., 9s., and 12s. per dozen.

DILLISTONE & Co., Nurseries, Sturmer, Halstead, Essex.

HANDSOME STANDARD APPLES of best kinds, straight clean stems.

Fine ESPALIER APPLES, Ditto PEARS, Ditto PLUMS, of best kinds. MOUNTAIN ASH, 6 to 7 feet; BEECH, 2 to 3 feet; SPRUCE FIRS, 1½ to 2 feet; ELMS, CHICHESTER, 7 to 8 feet; ELMS, ENGLISH, 6 to 7 feet, all good. SIBERIAN ARBOR VITÆ, 5 to 6 feet, fine and bushy; BOX-LEAVED EVERGREEN PRIVET, 3 feet, fine and bushy; ENGLISH YEWS, 3 to 4 feet; ditto, 4 to 5 feet; IRISH YEWS, 4 to 5 feet. BOX EDGING of excellent quality.

ROBERT F. DARBY having a quantity of the above for Sale, will be happy to supply prices on application.

Nurseries, Cirencester.—November 2.

MELBOURNE RED GOOSEBERRY, 2s. 6d. per dozen. This variety has again proved itself to be the most profitable Gooseberry grown, for while the frosts of last Spring almost wholly destroyed the fruit of many sorts standing near, there was a fair crop on this. It is a large rough bright red, the wood growing well up in the form of Champagne. Also on sale, Crown Bob, Warrington, Whitesmith, Companion, Lancashire Lad, and most of the Lancashire and Cheshire Prize Sorts grown.

A large Stock of Seedling and Transplanted QUICK, and about 10,000 first-class Transplanted HOLLIES, from 12 to 18 inches high. About 20,000 LARCH, 3 to 4 feet. The above are all of first rate quality, and will be offered to buyers at very low trade prices.

Apply to EDMUND SALSBURY, Melbourne, near Derby.

STRAWBERRY PLANTS, of sorts, from 2s. 6d.; Double White Sweet-scented NARCISSUS, 2s. 6d.; Double Yellow Do. and Double DAFFODILS, 1s. 6d. per 100; Purple Martagon, 2s., and Orange LILIES, 1s. 6d. per dozen. GOOSEBERRIES: Strong Crown Bobs, Whitesmith and Waringtons. CURRANTS and RASPBERRIES.

Wanted, FORTYFOLD and ASH-LEAVED KIDNEY POTATOES.

GEORGE CORNWELL, Seedsman, &c., Barnet, Herts, N.

SPLENDID NEW STRAWBERRY, "ECLIPSE" (REEVE).

The present being a favourable time for the removal and planting of Strawberries, Messrs. VEITCH & SON beg again to call attention to the above new and really fine variety.

It is an early variety, coming in at the same time as Keens' Seedling, and is a most abundant bearer. It forces remarkably well, producing large and handsome fruit with a rich pine flavour, which is a character rarely met with in any other forced Strawberry. In form it is large, conical, inclining to a cock's-comb shape, of a beautifully uniform light crimson colour, with firm and juicy flesh.

It was exhibited before the Fruit Committee of the Royal Horticultural Society on May 8, 1860, when it was highly spoken of, and requested to be shown again. It was accordingly a second time submitted to the Committee on the 14th of May last, and was then awarded a FIRST-CLASS CERTIFICATE for its superior merit, and has also received prizes at the Crystal Palace and Romford Exhibitions, and has been highly approved of by the most competent judges.

It has been grown out of doors in the gardens of the Royal Horticultural Society during the past season, and has proved one of the most prolific and richest flavoured varieties in the Collection. The Fruit Committee highly recommend it as a valuable variety for a general crop as well as one of the best forcing Strawberries.

Strong Plants are now ready for delivery at the undermentioned prices:—Per dozen, 12s.; per hundred, 4l.

Price to the Trade on application.

Royal Exotic Nurseries, Exeter and Chelsea.—Nov. 2.

GLENNY'S UNRIVALLED BALSAM.—20 vars., mixed, 13 stamps; 6 classes, 37; any one variety, 7. PINK, HOLLYHOCK, CHRYSANTHEMUM, CINERARIA, CALCEOLARIA, and PRIMULA, equally fine, from Show flowers only, 13 each.

G. GLENNY, Horticultural Agent, Fulham, S.W.

CAMELLIAS, full of Flower Buds, 18s., 21s., and 24s. per dozen; AZALEAS, 12s., 15s., and 18s. per dozen; ORANGE TREES full of Fruit, 2s. 6d. to 15s. each. British and Foreign FERNS, an immense quantity, 3s. to 12s. per dozen. DUTCH BULBS, try R. G.'s Guinea box. German Canaries 6s. each, 6 for 33s., 12 for 60s., Cages included. Superior quality, 7s. 6d. and 10s. each.

R. GREEN, 154, Kingsland Road, N., 55 doors from Shoreditch Church.

Hyacinths and other Bulbs.

WM. CUTBUSH AND SONS' first importation of HYACINTHS, TULIPS, &c., has just been received direct from Haarlem. They are unusually fine. Early Orders are respectfully solicited.

ALL the FIRST PRIZES have been awarded our Collections wherever exhibited during the last seven years.

DESCRIPTIVE PRICED CATALOGUES post free.

Highgate Nurseries, London, N.

CHOICE NAMED HYACINTHS, for GROWING in GLASSES, POTS, or MOSS, or for EXHIBITION. Quality not to be excelled.

6s., 7s. 6d., and 10s. per dozen.

50 SUPERB SHOW VARIETIES named, carriage and package free, 35s.

HYACINTHS for BEDDING, colours separate, 3s. per dozen; 21s. per 100.

DESCRIPTIVE CATALOGUES, with Treatises on the Culture of the respective sorts of Bulbs, post free on application to B. J. EDWARDS, 222, Strand, London, W.C.

The best Twelve Hyacinths.

SUTTON'S BEST TWELVE HYACINTHS Imported can be supplied for 12s.; Second best, 9s.; very good, 6s.

Also, fine mixed DOUBLE HYACINTHS, for Beds and Borders (all fresh imported), 3s. per dozen, or 21s. per 100.

PRICED LISTS of BULBS and SEEDS may be had post free.

Royal Berkshire Seed Establishment, Reading.

Exhibition of Chrysanthemums.

JOHN SALTER, F.R.H.S., invites the PUBLIC to VISIT his unrivalled Collection of these beautiful flowers, which are now in FULL BLOOM. His WINTER GARDEN alone contains several thousands of plants, and presents a *coup d'œil* unique in this or any other country. Free admission every day except Sunday.

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RHODODENDRONS for forcing; KALMIAS for forcing; and a magnificent stock of all the finest kinds of Rhododendrons in the world. CONIFERS and Hardy EVERGREENS by the 100 or 1000. ROSES and a General Nursery Stock well worthy the inspection of intending Planters or Nurserymen.

The Gardeners' Chronicle.

SATURDAY, NOVEMBER 2, 1861.

MEETINGS FOR THE ENSUING WEEK.

MONDAY,	Nov. 4	Royal Horticultural (Election of Fellows) at S. Kensington ..	Noon
WEDNESDAY, THURSDAY,	— 6, — 7	Royal Horticultural (Grand Fruit and Chrysanthemum Show) at South Kensington	1 P.M.
THURSDAY,	— 7	—Linnean	8 P.M.

THE post has just brought us a very remarkable CATALOGUE OF PLANTS now cultivated as we are informed in the Garden of SIEBOLD & Co., of Leyden. It is called *Catalogue Prodrome des Plantes du Japon, introduites en Hollande dans les années* 1859, 1860, and 1861—or Preliminary List of Japanese Plants introduced into Holland in the years 1859-60-61. From the introductory remarks we learn that Dr. v. SIEBOLD returned to Japan in the beginning of 1859, since which time he has been frequently sending home collections to his sale-nursery in Holland. "We now possess," says the Catalogue, "more than 300 new species and varieties, most of which have been cultivated for centuries in Japan, the ancient seat (*siège*) of the Flora of Eastern Asia." We cannot pretend to explain the meaning of this last sentence; suffice it to say that according to the list before us a very large collection of plants, many of which are really new, or said to be so, has been brought together, and cannot fail to add important features to European gardens, provided those who have the charge of their propagation and sale shall supply their customers with sound healthy specimens.

It must not, however, be supposed that all the plants in the Catalogue are worth cultivating for ornament; some are valuable only for their useful qualities; others are mere Botanical curiosities. Let us endeavour to point out those which promise best. In doing this we follow the arrangement of the Catalogue itself.

TREES AND SHRUBS. — Under this head are placed indiscriminately about a couple of hundred names of hardy and greenhouse plants, many of which are anything rather than new. Such are *Citrus japonica*, *Mahonia japonica*, *Diospyros Kaki*, *Illicium anisatum*, &c. On the other hand there are several new varieties of the beautiful Japanese *Acers*; double flowered *Peaches*, which may or may not be the same as FORTUNE'S; several *Aucubas*, two Bamboos, a *Walnut*, *Magnolia hypoleuca* and *nymphæoides*, *Rhododendron Metternichii*, no doubt a fine thing, and others. Moreover in this part of the Catalogue we find "Eight sorts of Pears, some of which bear enormous fruit that keep in Japan from autumn to the month of July;" it is to be hoped they are not like Chinese Pears, as hard as sandstone. We are also informed that the Acorns of *Quercus cuspidata*, called *Si*, are as eatable as Spanish Chesnuts, and have the same taste.

CONIFERS.—Here we find mention made of three Cryptomerias called *araucarioides*, *senilis*, and *gracilis*, a *Juniperus lutea*, a *Pinus* called *Gojomats* (what a name!), and some new *Retinisporas*.

PALMS include two only, viz. *Cycas prolifera*, which is not a Palm, and *Chamærops excelsa*, which we take to be FORTUNE'S Chusan kind.

HERBACEOUS PLANTS.—Those which strike us as most worth enquiring for are *Erianthus japonicus*, a Grass not unlike the Pampas, *Lychnis Senno*, a couple of *Primulas*: *japonica* and *pyramidalis*, and *Trichosanthes japonica*.

Of YAMS four are mentioned, with the following note from Dr. SIEBOLD). "These are the sorts cultivated in Japan. I have examined them, and can recommend them as excellent substitutes for the Potato." The Royal Horticultural Society should look after these immediately.

Of LILIES above a hundred Japanese varieties are known, the flowers of many of which have however not yet been seen. All that have been ascertained seem to be in the Leyden nursery.

Of ORCHIDS a few are mentioned, but until we ourselves see their flowers we can say nothing about them. Some names are in a Botanical sense almost mediæval. For instance, *Epidendrum moniliforme* is a Dendrobium, *Limodorum ensatum* is a Cymbidium; there is, however, the singular *Cypripedium japonicum*, worth the attention of the curious, and three other Orchids rejoicing in the names Kauran, Nagiran, and Nagoran; but whether terrestrial or epiphytal the Catalogue does not say.

In conclusion, a good many FERNS have reached Europe, but they are not named.

Let us add that no prices are given in this Catalogue. Those who wish to be purchasers are requested to write to Messrs. SIEBOLD & Co. themselves, at Leyden.

MUCH has been said lately about THE EFFECT OF HIGH MANURING on Conifers, and as usual there has been a degree of truth on either side of the argument. High manuring will undoubtedly produce vigorous growth in these plants in many instances for a time, but sooner or later it will be sure for the most part to end in a vitiated constitution. It is indeed as a general rule effective only where an immediate or at any rate no distant result is wanted, and even then an injudicious administration may be fatal.

It is well known that large doses of guano, though productive of quantity, are almost sure to impair the keeping qualities of the crop to which they are administered. The produce of the Potato and Turnip field under such treatment may be immense, but the rapidity of decay makes it almost worthless where there is not a ready sale or quick consumption. A most striking case however has lately come before us, which is on more than one account highly deserving of record, and shall be stated in the words of our Correspondent.

"Within the last three weeks I have cut 34 nice looking Pines out of a 3-light pit attached to several others for cultivating Ferns. To my great mortification these Pines are nearly all black in the core. They were grown in *pots*, in soil consisting of three parts loam to one part peat with a little charcoal. The peat is fibry and full of Fern roots. The plants are all Queens—the heat supplied by hot-water pipes; the bottom heat has been kept at 90° to 95°, and the top heat by day 80° to 95°, and by night 65° to 70°. Every attention has been given to ventilation. Watering and syringing with water were withheld altogether when the fruit began to colour. These Pines when swelling and colouring were the admiration of all who saw them, but alas! when cut how great the disappointment!"

So far there is nothing to account for their diseased condition. One little point however remains to be stated, which is undoubtedly the key to the solution of the difficulty. "They had a little guano water once a week when the fruit was swelling." The immediate absorption into the system of the forcing solution at a time when the tissues were already gorged with nutritive matter doubtless brought on an unhealthy condition of the walls of the cells, which ended as soon as the fruit was ripe in decay, and that at the very part

of the plant where the raw material was more immediately conveyed.

In plants moreover cultivated in pots it is frequently a dangerous matter to supply forcing liquids. Evaporation is always going on rapidly from the part of the pot which is exposed, and the spongy tips of the roots greedily absorb whatever liquid is supplied. Liquid manure might even in this case have been possibly comparatively harmless, had the roots possessed free scope to run where they please in search of nutriment, for high manuring is not necessarily fatal to Pines, though in the present instance the time chosen for the administration of guano was not in our opinion judicious. One of our most successful Pine growers is in the habit of using large quantities of well rotted pig manure, one of the richest of the products of the farm-yard, in the cultivation of his Pines. But then the Pines are at once planted in the rich soil, and the nutriment is therefore received by small but constant supplies into their system. A vigorous growth therefore is insured from the time of planting, but there is no sudden access of fermentative matter when the tissues are least able to resist its action. How far the general health of a succeeding crop may be affected by high manuring we are unable to say, but there can be little or no doubt, if good results are obtainable in the first instance from the method stated above, that bad consequences will almost certainly ensue from the use of liquid manure to plants pent up in pots at a time when they have already assimilated sufficient nutritive matter to supply the swelling fruit, and when nothing more is requisite than proper heat and moisture to enable them to work up to the best effect the store deposited in their cells. *M. J. B.*

—— AT a recent sitting of the French Academy, M. CHEVREUL produced a magnificent bunch of ESCULENT MUSHROOMS from the grounds of Dr. LABORDETTE. His method of cultivation is thus described:—He first developes the Mushrooms by sowing spores on a pane of glass covered with wet sand. Then he selects the most vigorous individuals from among them, and sows [or plants] their mycelium in a cellar in a damp soil, consisting of gardener's mould, covered with a layer of sand and gravel 2 inches thick, and another layer of rubbish from demolitions, about an inch deep. The bed thus prepared is watered with a diluted solution of two grammes [1 gramme = 15.44 grains Troy] of nitrate of potash per square metre [= 1.1960 sq. yard], and in about six days the Mushrooms grow to an enormous size.

—— Of the varieties of GRAPE which at Chiswick have this season proved themselves to be of good quality and desirable for cultivation, is one received some years since by the Royal Horticultural Society, without name, from M. BURCHARDT. This Grape, from its having some resemblance in its bunches to the Black Prince, was named Burchardt's Prince in one of the early reports of the Fruit Committee, in which it was highly spoken of. This year the variety has been ripened for the first time under pot culture, and proves in every way excellent. The established Vines in the large conservatory have produced large and very handsome bunches, but in that situation, where they receive little artificial aid, the berries scarcely ripen; it therefore evidently requires something beyond a greenhouse temperature. The bunches are long and tapering, well set with large handsome berries, which are quite black. The flavour is excellent, resembling that of the Black Hamburgh combined with something of the briskness of the Black Prince. It may be considered as an acquisition.

—— Some of our horticultural writers, and some at least, we know, who do not often write, regard the PELARGONIUM as very much to be preferred before the Verbena for bedding purposes, on the ground that it is more manageable, and more permanent in character, at least in the case of small beds, and in small gardens. The main reason assigned for this preference, is that under the circumstances just indicated, the soil is necessarily kept poor to prevent rampant growth in many free-growing subjects—indeed, to prevent rampant growth in any, and thus treated Verbenas become very soon exhausted. If they can have a large surface over which to spread, and the soil is tolerably good, so that the plants can be kept in a free growing state, and the branches are continually pegged down, so as to assist them to strike fresh roots, Verbenas succeed well enough and make a splendid show for a period of about a month, say during August, but neither before nor after this is their appearance very satisfactory. Good sorts of Pelargoniums, with soil adjusted in fertility to their several constitutions, are undoubtedly more regular and durable in bloom, but then they are not so dwarf as Verbenas, neither does the former family afford the variety of colours to be found in the latter, so that after all both seem at present necessary elements of flower-gardening.

—— It has been remarked that ORCHARD HOUSES have been gradually growing in size and importance, and consequently in cost, since they have been before the public. At first they were very small and simple affairs, consisting of a glass roof with the ends boarded, and the sides planted with evergreen hedges. Then they grew in size, and the hedges not sufficiently shutting out the cold winds of early spring, louvre boarding was substituted in their place. Now, it appears that houses larger and still larger are adopted, so that they have become in reality ample greenhouses with simple fixed roofs, ventilated by openings at the gable ends. As their usefulness becomes still more evident and established, we cannot expect them to stop at this point; and thus the question seems to be rapidly tending towards the erection of crystal fruiteries or large glass-covered fruit gardens.

—— The further accounts received from the FRENCH WINE DISTRICTS show a varying result as to the crop. In the cantons of Surgeres and Aigrefeuille, the vintage has been concluded under most favourable circumstances, but the crop is not abundant, having been nearly destroyed in 11 out of the 23 communes of which these cantons are composed. The quality of both red and white wine is however stated to be "magnificent." In the Narbonnais the vintage is not finished. In the district of Chateauneuf-du-Pape it commenced with splendid weather on September 30, and was concluded on October 19, the Grapes being perfectly ripe and dry and yielding excellent wine. The *Revue de Beaune* states that the vintage in Burgundy has never been favoured by more delightful weather. The Grapes are generally ripe and in excellent condition, and the crop will this year be an unexceptionable one for quality, though the quantity is deficient. Accounts from Turin, dated a few days since, state that the vintage is in full tide all over Italy, and turns out a glorious one both as to quantity and quality. The Grape disease has made its appearance here and there, but it has done but trifling havoc, and its virulence is everywhere on the wane.

TREE WOUNDS AND MEANS OF HEALING THEM.

By M. EUGÈNE FORNEY.

IN endeavouring to heal a wound on the stem of a tree, the first proceeding is to make the wound smooth, clean, and level with the rest of the stem. Whatever tends to prevent the bark from closing over the wound is injurious. When a wound, no matter what its length may be, does not exceed in breadth one-fourth of the circumference of the stem, it will, if the tree is healthy and has not reached its limit of growth, be healed over as soon as the bark joins together, and before there is time for the wood to be injured by moisture and heat. If the wound is wider and extends to a third or more of the circumference, the edges of the bark take a considerable time before they can join, and the wood from long exposure begins to decay forming a hollow which can only be imperfectly covered by the edges of the bark rolling inwards upon each other.

Naturally enough it has been considered a desirable object to heal the wounds of trees, and thus to preserve the wood which has been laid bare from decay. It is well known that there is no natural means of hastening the healing of the wound; all that can be done is to remove such causes as are calculated to impede the natural process. There is no way with which I am acquainted for preserving the wood from rotting when the wound is too large to heal over; and all means that may be resorted to for the prevention of decay will do more harm than good. Let us examine the effects of some compositions for wounds.

1. Moderate sized wounds made perfectly smooth with a sharp cutting instrument, Nature herself will heal over. Under favourable conditions the new bark glides over the smooth wood, which gradually becomes covered. It would not be so if the wound were irregular, or if it were made with a saw, the teeth of which would tear and bruise the fibres of the bark and wood so as to prevent healing.

2. Moderate sized wounds covered with *Onguent de Saint-Fiacre*. [This is a grafting clay, consisting of a mixture of clay and cow-dung.] It is well known that the drying effects of air and more especially of the sun's rays are detrimental to the healing of a wound; nevertheless, from an experiment made by me, it appears that the above application is attended with but little advantage. From a vigorous Sycamore, with smooth bark, two slips of the latter, about 2 inches in breadth, were removed, and one of the wounds was covered with a sufficient thickness of the above-mentioned grafting clay. The first year the wound covered with that composition had closed up 7-10ths of an inch, whilst the other wound not so protected was reduced rather more than 6-10ths. In the second year the former wound, which was still kept covered with grafting composition, was again diminished 8-10ths; and the wound left bare had decreased from 6 to 9-10ths, the mean diminution being nearly 8-10ths. Thus the application of the grafting clay caused little difference in the healing. Perhaps it might have produced a better result in an older and less vigorous tree.

3. Wounds protected with a coating of tar.—Two branches of an Elm, of equal diameter, were cut back in 1851. One was tarred, the other was not. The section was 4 inches in diameter. The one which was not tarred was about five years before it healed over completely; whilst the one which was tarred was seven years in doing so, and even then the cicatrice was much less regular. During the first two years in particular, the untarred wound healed twice as fast as that tarred; but afterwards there was very little difference in the rate of growth. Coal tar applied to wounds must be very deleterious; the kind used in the experiment was vegetable [such as Stockholm tar]; and I attribute the injurious effect of this to its black colour, which by absorbing the rays of heat occasioned an extremely high temperature, so that the sap [or young tissue] which tends to grow over the tar is to some extent baked and dried up.

These experiments, incomplete as they are, induce me to regard every application that obstructs the perfect closing over of the bark as more hurtful than beneficial; grafting clay, however, is an exception, because it cannot hinder the bark from closing over the wound, but salves, balsams, cements, and plasters, which soon scale and crack, permitting moisture to reach the wound, are bad.

I am only acquainted with one case in which a coating of tar proves beneficial, and that is when a tree has been transplanted, for the wounds do not then heal over, and the sap evaporates. This evaporation may be prevented by the use of a composition. I never plant a tree without applying grafting-wax to the wounds.

Now, let me ask, does a coating of tar prevent rotting in wood which is laid bare? I am persuaded that the tar, instead of preventing the decay of wood which is moist and full of sap has quite a contrary effect; being black, it acquires a high temperature when exposed to the sun; the sap becomes heated and ferments, it cannot evaporate, and the wood decays. I have cut off with a budding knife a piece of wood from a wound which had been healed over without being covered with tar. The wood beneath the covering of new tissue was healthy and white beyond the depth of 3-tenths, or little more than a quarter of an inch; whereas the wood lying underneath a coating of tar was yellow, and looked as if it had been burned to the depth of fully three-quarters of an inch, and in some places this discoloration extended to a much greater depth.

As regards large wounds on old trees, the vigour of which has so far declined that they cannot effectually heal, nature may be assisted by adopting the following mode of proceeding, which I have only practised in one instance on an old Lime tree, whose wound (a large one) I was enabled to completely cover over in three years. The bark at the edges was raised both at top and bottom to a good distance, and the ends of young branches or grafts cut sloping [as is done in rind grafting] were inserted beneath the raised bark at the upper and lower edges of the wound. The branches employed as scions were clean healthy ends of branches. They were placed side by side, but not too close together, and thus formed a sort of grating over the wound. The upper and lower edges of the wound were then coated over with grafting wax, and the whole was covered with grafting clay; the branches grow and unite so as to cover the wound. In this way I intend next spring to repair the breaches made by time in a fine avenue of trees. *Journal de la Société Impériale et Centrale d' Horticulture.*

HOLLYHOCKS.

THE receipt of Mr. W. Chater's descriptive list of Hollyhocks reminds us that some very fine new varieties of this effective autumnal flower have made their appearance during the present season. There has not indeed appeared any very striking or absolute novelty, but varieties have been presented in which improvement of a decided character has been marked by increased size, and greater fulness and symmetry of form—qualities which are especially telling in a bold-habited plant like the Hollyhock. Our remarks refer especially to those new varieties which have been exhibited in London, they having come under our own observation; and confining our attention to the jurisdiction of the most severe tribunal to which novelties of this nature are brought up for judgment, namely, the Royal Horticultural Society's Floral Committee, we find that eight First-class Certificates and four Commendations have been distributed amongst the varieties which, along with many others, have passed under review.

In the very first rank amongst these approved sorts we should be inclined to place the Stanstead Rival, one of Messrs. Downie, Laird, & Laing's seedlings; and with it the Countess Russell, Invincible, and Ne Plus Ultra, raised by Mr. W. Chater. The former of these has the flowers large, and very closely filled out in a symmetrical semi-globular form with crowded smooth-edged petals, which do not present any of the hollows or "pockets" seen in all inferior sorts; the colour is a clear and very pleasing salmony rose. The variety named Countess Russell is large and well proportioned in its several parts, the colour being that of a deep peach blossom. Ne Plus Ultra is of a distinct colour, a light rosy purple, or perhaps we should rather describe it as a deep rosy lilac, the petals silvery at the edges and the flower well proportioned. Invincible has bold flowers of a delicate salmon colour, of good outline, full and even, having perhaps rather large

guard petals, but in every way a fine flower. These all gained First-class Certificates, the last having also previously won a Commendation when shown in a younger and less-developed state.

Scarcely inferior in quality to these are four others, namely, George Keith, a large full light rose-crimson; Lady Dacre, a pale flesh-colour, heavily suffused with salmon-pink: both from the collection of Messrs. Downie, Laird, & Laing, and both awarded First-class Certificates; Joshua Clark, a fine light cherry crimson, of excellent properties; and Lady King, a showy, full, deep ruby crimson, yielding a majestic spike, the two latter being from Mr. W. Chater's collection, and also rewarded by First-class Certificate, Lady King having previously won a Commendation.

A grade lower, but still possessing qualities which render them desirable additions to the varieties already known, and distinguished from the common herd of seedlings by the award of a secondary certificate, two other varieties claim notice. Of these probably Prince Imperial, from Mr. Bircham, takes the first place on account of its colour, which is a dark claret; in this the chief quality is the intensity of colouring, the flower being a little wanting in smoothness. The other certificated variety above referred to was Lady H. St. Clair, a fine large blush, produced by Messrs. Downie, Laird, and Laing.

In the foregoing, then, we have the choicer flowers of the present season so far as the South is concerned. They have been selected mainly with a view to their merits in a florist's point of view, those obtaining the higher award being in every instance remarkable for the high qualities of form, fulness, proportion, substance, size, and closeness of spike. We have noticed a very few other very pleasing varieties, shown by Mr. Chater, which though perhaps deficient in some one or more points, and thus failing to pass the censorship, have yet other desirable qualities, which recommend them to notice. Among these were Agenora, a light purplish rose, something in the way of Ne plus Ultra, a fine and desirable colour; Queen Victoria, a brilliant rosy carmine, a flower which has appeared to us to possess very fine properties, though unrewarded; Garibaldi, a light crimson, showy, well formed, and well proportioned; and Mrs. Fyson, a distinct mauve-tinted lilac, remarkable for its colour.

Reverting to the Catalogue of Mr. Chater we find a few cultural hints to which we may usefully give wider circulation. To produce fine flowers it is recommended to cut off lateral shoots, to take off the top of the spike, and to thin the buds when they are crowded, the habit of most kinds being to produce duplicate buds, of which the inferior or smaller ones are to be removed as they appear, so that more space may be given for the development of the remainder. Another important step towards the production of fine flowers is to give them good deep (2 feet) well-trenched soil with plenty of decomposed manure, such as old Cucumber beds or night soil intermixed. Then again young vigorous plants are recommended to be employed every year, as with Dahlias. In summer these plants like a rather damp subsoil, but in winter wet is very injurious to them.

Propagation is to be effected by single eyes in July and August, or by cuttings in spring, the cuttings being placed on a slight bottom-heat. The summer raised plants are best wintered in pots, repotting them in October into large-sized pots in light rich sandy earth, and keeping them in a cold well-aired frame or house. In March or April, they are to be turned into the open ground, and they will bloom as finely and as early as if planted in autumn. In dry summer weather they should be watered with a solution of guano, or other liquid manure poured carefully round about them, but not on or too near the stems.

The points of merit insisted on, refer 1st, to the nature of the individual flowers; 2d, to their arrangement on the spike; and 3d, to their colour. As to the first, perfection consists in the petals being thick or firm with smooth even edges, the central ones forming a full compact closely arranged even mass rising to a half-globular form with smooth stiff guard petals protruding all round about half an inch from the base of this central mass, more or less in proportion to the size of the whole. As to the second, the flowers should be set on regularly, not crowded together in confused masses, nor hanging loosely so as to leave blank unfurnished spaces, but they should be so disposed that the shape of each may be distinctly seen. A few small green leaves between the flowers are a great improvement to the appearance of the spike. As to the third point, the brightest, strongest, and most distinct colours are preferable, but it is held to be desirable to obtain also a variety of shades. For our own parts, as a general rule, we infinitely prefer the distinct whole coloured sorts, there being a strong tendency towards dulness in the mixed and variegated colours found amongst the varieties of the Hollyhock.—*

ROSE MILDEW.

I HAVE had several letters sent to me lately on the subject of mildew, of which there are three kinds that affect the Rose—white, orange, and black. I presume they all related to the first. One Correspondent asks me, who is the best authority on the subject Another inquires if sulphur is a sure remedy! A third asks, what is the best remedy?

Last year my plants in both gardens suffered much: they looked as if they had been daubed with a bill-sticker's brush, and probably to this, no less than to the severity of the winter, the deaths of some of them may be attributed. This year, till lately, I have seen but little of it (white mildew); but in the earlier part of the season the pot Roses in a hot yard suffered much from it. Some half standards, a little in advance of them, suffered still more, while some high standards wholly escaped it. I sulphured them all, after wetting the foliage, but the remedy was not effectual. I cut the half standards back hard, to see if that would avail, but, alas! the next shoots and leaves became as white as a miller. I again sulphured them, but with no greater success. In process of time, but after the wood was tolerably ripe, it broke out fiercely in a line of Géant des Batailles, and in several plants of Baronne Hallez (a Rose subject also to black mildew), but as the Géants had done their duty well and had ripened their wood at the base of the plants, I did not trouble my head about them. Earlier in the year I kept down aphides and this curse by sending my servant's little girl to kill the one and rub off the other with her hands, which signally succeeded. On receiving the queries above, I surveyed the Géants, and remembering that when I farmed, solution of vitriol was a sure remedy for smutty Wheat seed, I was determined to renew my Oxford days and treat myself to the following syllogism.

1. Major premise. Vitriol will cure the smut Fungus.

2. Minor premise. White mildew on Rose plants is a Fungus.

3. Conclusion. Therefore the vitriol which will cure the former will also cure the latter.

The mildew had been on some days, and was rooted into the skin of the leaves, even into the hard leaves. Under such circumstances sulphur I am persuaded would have had no chance. I sent, therefore, to Blandford for 1 lb. of powdered blue vitriol in 2 ounce packets. I took one packet, dissolved it in hot water, and added a stable bucket of cold water to it, and poured it from a watering pot with a fine spout all over the trees, leaves, and stems. The recipe signally succeeded, and the Géants are perfectly cleaned of the mildew, and the leaves are able to perform their functions of breathing, and, I suppose, of perspiration. Next year, if permitted, I shall wash my plants with a weaker solution of this, as soon as the leaves are able to bear it, as a preventive. I think that this will also destroy, or greatly baffle the decorticating aphis, and the nibbling bud worm. Probably 1 ounce to a bucket of water would be sufficient. Great caution is of course necessary in using such a salamander. Experience will apportion the quantity of vitriol and water. I need hardly say that it will be better to begin too weak than too strong.

With regard to sulphur caution is also necessary, for, if it is put on too thickly, or allowed to stay on more than two days in hot sultry weather, where plants are fully exposed to the scorching of the sun, without being washed off, the remedy will be as bad as the disease.

White mildew affects the wood of different Roses variously. If it is very bad and not stopped, it will turn the wood of Mesdames Laffay and Knorr, and of Duchesse de Cambacérès as yellow as a kite's foot; and it will turn the wood of Jules Margottin blood red, or as if it had been stained with red ink. The mischief arises from strangulation, or garotting. The sap rises, the pores of the leaves or lungs are stopped up, and the tree sickens, and will do no more the same year. If all the leaves are affected it will destroy, if very bad and not stopped, small delicate pot plants.

I have thought that when trees from oversight, or wilful neglect, are mildewed all over, and the tissue of the leaves destroyed, or much damaged, that, as sap rising, which can find no vent, does the mischief, it would be a good plan to take them up, and replant them. This would check the rising sap. Manetti Roses may be moved at all times of the year.

One thing is certain, that whenever aphides and mildews of any kind appear, the sooner you set to work to defeat them, the less will be your loss. Their powers of and quickness of reproduction are both wonderful and mysterious. I do not pronounce the above receipt to be a panacea for any of them, but I think it worth a cautious trial next year. I recommended it to "Coventry" a few days ago.

One word about orange and also black mildew. The latter affects the trees permanently less than either of the other two. It is probably "Erineum griseum." It will, however, if the leaves are extensively affected, stop your Roses for the year. This is called a mildew, but I confess that I never with my glasses could discover a "Fungus." The orange mildew is plain enough. It is like Cayenne Pepper. It is in early spring, when the leaves are of no great age, visible on the under side of the leaves, in the form of a nucleus, fast gummed on to the leaf. In due time it will burst and spread its spores all over the tree. This will assuredly stop the bloom for the year, and delicate sorts will put forth next year leaves as yellow as a cock canary bird. Remember then the motto of every healthy Rosery, "Venienti occurrite morbo," and pull off the leaf with the nucleus, indexed on the upper side of the leaf by a slight discoloration. *W. F. Radclyffe, Rushton Rectory, Oct.* 12.

Home Correspondence.

Cotton Cultivation in India (see p. 946).—I last week showed that the East Indian experimental Cotton farmers had perfectly succeeded in naturalising the American Cotton plant in India; and that the Ryots had ascertained that American Cotton was a less precarious and more profitable article of culture than their indigenous staple. I propose now to consider the relative merits of American and Indian Cotton Agriculture. In a letter from the Committee of the "Cotton Supply Association of Manchester," addressed through their Calcutta agents to the Governor General of India, the following passage occurs: "By thus introducing Europeans into the country, with greater intelligence, energy, and enterprise, than that of the natives, superior methods of agriculture will be adopted, and greater care will be taken in the preparation of the produce for the market." To this his Excellency directs his Secretary to reply:—"The Governor General in council desires to remind the Association that the general testimony of well qualified observers, American as well as English, goes to prove that in the details of cultivation the natives of India have little or nothing to learn from the agriculturists of other quarters of the globe, and that it is only in the gathering, cleaning, and transport of Cotton, and not in its cultivation, that much improvement can be expected." I would observe here that in picking and cleaning they are not excelled by Americans: better picked Cotton could not be than thousands of pounds of seed Cotton I bought on Government account direct from the Ryots, and the Churka is superior to the saw gin in everything, except speed, for separating the Cotton from the seed. The Association are not quite pleased with this reply, which they say "they have read with considerable surprise. They thought it was universally admitted that the agriculture of Hindostan was essentially rude and primitive; that the implements by which it is conducted are most inefficient; that as to the use of machinery, the proper rotation of crops, the application of manures, the choice of seed, and, in fact, the entire round of culture, the natives are deficient, if not in knowledge at least in practice. This view the committee formed on the testimony of travellers of repute and of innumerable witnesses now or formerly resident in India who have spoken or written upon the subject." In support of the above thoughts, "they would also respectfully submit that as in America 600 lbs. of clean Cotton per acre is considered an average crop, while in India the average crop does not amount to 100 lbs. per acre, they believe there is full scope for improved culture, and a better development of the industry of the country; and that satisfactory evidence of the result of cultivation is seen in the few thousand bales of a highly improved and excellent class of staple, already received thence." Mr. Petrie, adverting to these passages, replies to the effect that, when the natives were furnished with New Orleans seed, they cultivated it after their own fashion with these rude and primitive implements, and succeeded in turning out nearly as large crops of quite as good Cotton as the American planters could do, with all their costly implements and agricultural skill and science, and at less than half the cost. He thence, coinciding with the planters themselves, concludes that if ever India is to become a great Cotton exporting country, the natives must be the cultivators, Europeans providing the inducement by simply opening depots or markets with fair prices, in the several Cotton growing districts; establishing in them trained buyers ready to purchase all good Cotton offered for sale, and preparing it for transmission to the distant market, wherever that may be. Europeans he considers can never become Cotton planters in India; the profits there accruing from Cotton culture being insufficient adequately to remunerate him, while those of an agent or buyer, if carried out on a considerable scale, are ample. In these opinions he does not stand alone. The Association, however, not approving of them, somewhat grandiloquently answers, "It is an established axiom all the world over, that there must be good farming if you are to have a continuance of good crops, and Cotton offers no exception to the rule." Does Mr. Petrie entertain any doubt as to the miserably backward state of Indian agriculture? Can he fail to perceive the cogency of the following queries by the Editor of the *Bengal Hurkaru*? "Does his lordship (the Governor General) mean to say that the ground scratched with a crooked stick drawn by Bengalee bullocks, and ignorant of manure and drainage, is unsusceptible of improvement by the application of European mechanical skill and European science?" The Governor General, as I understand the passage, does not say that Indian Cotton agriculture is unsusceptible of improvement, but simply states a present fact, resting upon American and European testimony, which I apprehend those who can reason back from results to the means by which they are accomplished will endorse; without at the same time denying that, like our own, Hindoo agriculture is still susceptible of great improvement. The above extracts seem to embody two distinct propositions, namely—1st. That owing to his "rude and primitive" implements and farming, the Hindoo can only obtain 100 lbs. of clean Cotton per acre, while owing to his more advanced and scientific farming and appliances the American planter is able to realise, as an average crop, 600 lbs. from the same area. 2d. That until Europeans take the business in hand and bring their superior energy, intelligence, mechanical skill, and science to bear on the Cotton culture of India, India never can replace America in supplying Europe with Cotton. If these propositions as they now stand correctly embody the views of the writers, then I feel constrained, as regards the first, at once to dispute the soundness of both the premises and conclusions. The average crop of clean Cotton on the best land of the Mississippi State, as I was often told by the planters, does not average 400 lbs. per acre; though that quantity was often obtained, the general average was supposed to range between 300 and 350 pounds, in other words that average land well cultivated returned about 1000 lbs. of seed Cotton per acre, equal to about 330 lbs. of clean. The correctness of these statements is confirmed by Dr. Mallet, who in his elaborate paper read before the Royal Society, June 4, 1861), on the "Chemical and Physical Conditions of the Culture of Cotton," says that in Alabama on their best Prairie lands, "a bale of 400 or 500 lbs. to the acre is sometimes obtained under favourable circumstances, but this is much above the average for upland Cotton." The same author further remarks:—"Although much virgin soil remains in the Southern States untouched by the Cotton planter, it needs but a slight knowledge of the country to discover the vast extent of 'worn out' Cotton fields already existing even in the most recently settled States, not to predict a time when the growing demands for the staple must compel," &c. This confirms a further statement of our planters, that in Georgia 600 lbs. of seed Cotton was considered a good crop, which is about what we obtained off our medium lands in India, but much below what the best produced. The premises, namely that the American planter is indebted to his superior husbandry and appliances for his larger crops, being found wanting, the conclusion that the transfer of his scientific farming and better implements to India would raise the Indian crop to the American standard, must of necessity fall to the ground. But I am able to adduce direct evidence to prove, that neither American farming nor American implements raise large crops from exhausted land. The above short

extract from Dr. Mallet's paper shows at once, that American farming is radically bad, otherwise "the vast extent of 'worn out' Cotton fields already existing even in the most recently settled states" could hardly yet be found, under even an approximation to good farming: indeed their Cotton agriculture does not merit the name of farming. But leaving that out of the question for the present, our American planters after five years Indian experience, honestly admitted that they had nothing to teach the natives of India in the business of Cotton growing, but had learned something from them. Our system, they remarked, of sowing on the top or raised ridges, (anglice lands), with water furrows between, to keep the plants dry at bottom, is injurious in this dry climate; our turnfurrow ploughs therefore, which do not cultivate the ground better or more deeply than the native one, are not required; the only difference between them being, that the one inverts the surface soil, the other loosens and stirs from below, but the seed bed is equally good in either case. I shall consider the second proposition, which I deem a more important one, next week. *Robert Wight.*

Cucumbers.—Ayres' Black Spine is reported in your columns to be a good winter kind. Have any of your Correspondents had experience of it?—if so I shall be glad of any information they will kindly afford me on the subject. I grow many Cucumber plants (?) for sale throughout the year, but I find Lord Kenyon's Favourite and Cuthill's Black Spine the only two saleable as winter Cucumbers; the other sorts, such as Victory of Bath, Improved Sion House, and others being early spring kinds. Any communications, either addressed to me personally or through your columns, will be much valued; as I believe all Cucumber growers feel the want of a good free bearing kind, equal to Lord Kenyon for winter work, and only differing from that sort in being a Black Spine, with a good bloom, instead of a White Spine (as that is) and carrying no bloom whatever. *Henry Brown, Bounds Green, Colney Hatch.*

Vanda cœrulea.—A plant in the collection at Newton Park, Bath, with a single stem 2 feet 7 inches in height, furnished with healthy leaves from the base upwards, has four flower spikes now on it with from 16 to 20 flowers on each, all large and perfect, and they have been in flower four weeks. In the same collection is also a Peristeria elata, with 10 fine spikes of flowers; it has been in bloom two months. I may add that Echites splendens very finely coloured has likewise large trusses, six on each plant. Ixora odorata too has eight fine trusses of flowers on it, all open at once; and there are many other plants in equally fine condition. *W. Keele, Oct. 23.*

Pelargonium Purple Unique.—I have always understood that this was a cross obtained by Mr. Rollisson from Quercifolium and another Cape variety; as to its sportive character I can bear ample testimony, and mention still stranger instances than that at the Horticultural Society's Garden at Chiswick. There are to my own knowledge four distinct sports from Rollisson's Unique: 1st, Lilac; 2d, Conspicuum, rose crimson; 3d, Coccineum, red; 4th, Rose d'Amour, rose; this last is a sport in the second degree from Coccineum. All these may now be considered fixed varieties, although they will occasionally produce flowers of the original colour. This year Coccineum has pushed three different colours, red, rose, and lilac upon the same truss, and upon other trusses are flowers half red and half lilac; other Geraniums are also subject to variation, not only as regards colour and foliage, but also in habit of growth and dimension of leaves; the diminutive variety called "Variegated Dandy" is, singular as it may appear, nothing but a sport from one of the old large-leaved Scarlets. Accident made me acquainted with the fact. When it was first sent out I planted it in the open ground; towards the end of the summer I perceived by its side a strong shoot of a large green-leaved Geranium; supposing it to have been from an old root which might have been accidentally dug in, I pulled it up, and to my surprise I found it to be a sucker from Little Dandy. Upon mentioning this to Mr. Thompson, he told me that I was quite correct in my supposition, and informed me of the way in which he had obtained it. The Variegated Dandy is subject to other changes, very frequently it loses its variegation, but retains its Lilliputian habit. Dahlias, Chrysanthemums, and many other plants present the same plastic tendency to variation, both in leaves and flowers. In 1848 I raised a Chrysanthemum (Queen of England) which has produced six distinct sports, four in colour, blush, rose, yellow and white, and two in foliage, all of which have now become fixed. Having for several years past been engaged in forming a collection of hardy variegated plants, both wild and cultivated, experience has made me acquainted with many facts in their history, and teaches me that sports are more frequent in hot dry seasons than at other times; that local sports (variegated branches) are very liable to run back unless care is taken in propagation, and even then they cannot be considered constant until the third generation; that seedlings raised from local sports almost invariably return to the original type, without any appearance of variegation. I have year after year proved this from various kinds of plants; but it is very different with variegated plants, which were originally so from seed, the fixture is inherent, and as far as my observations go, is never subject to change. The seeds will also generally come true, producing a large proportion variegated more or less like the parent. I might mention many which I know were first found as seedlings. That variegated herbaceous plants which can be propagated either by division or small cut joints of roots are governed by the same law. I have proved by repeated experiments; cut joints of roots from herbaceous plants where part only was found originally variegated, invariably produce green leaves, while cut joints from roots of plants originally found as variegated seedlings, most generally retain the variegation. If I had time I could adduce some curious instances of plants which I know have become variegated from being planted in certain localities, but whether owing to chemical or sympathetic affinity I cannot say; it is an interesting subject, worthy of being taken up by others more able than I am to do justice to it. *John Salter, Versailles Nursery, Hammersmith.* —— Your Correspondent "P. A. W." is right in assuming one of the Scarlet Unique Geraniums to be of Continental origin. Many years ago (I forget how many) when travelling in France I saw this Geranium growing among a lot of seedlings in the nursery of M. Boucharlat, at Lyons. I bought it and sent it home, naming it Scarlet Unique. About the same time Mr. Gaines, of Battersea, raised or obtained a similar one, but not the same, and named it Scarlet Unique, neither he nor I knowing of the existence of the other. There is a fine plant of my Scarlet Unique in the conservatory at Camfield Place in this county, the seat of the Hon. Baron Dimsdale. The pillar against which it is planted is covered with its massive foliage and resplendent with flowers for several months in the year. I know of no plant more beautiful or more suitable for a pillar in the Conservatory. *Wm. Paul, Nurseries, Waltham Cross, Herts.*

Do Rats eat Grapes?—Having repeatedly noticed the decrease of Grapes from my Vinery, and having called the attention of my head gardener to it, with evidence of the fact, he replied that he also had seen them diminish, but supposed I had taken them. On being assured that such was not the case he expressed an opinion that it was the result of theft. Subsequently he informed me that he had discovered the miscreant—a large rat—which he says has done all the mischief by climbing up the stocks and eating the Grapes as they hang from the roof of the Vinery. The whole story, with the clumsy evidence adduced, appeared to me so improbable that I confess I felt quite indignant at what appeared to me an ignorant effort to cover his own delinquency. However, he has so pertinaciously reiterated the statement, and has really caught a rat, which he says is the rat, that I determined to ask your opinion on the subject. Will you oblige by informing me if there is any probability of his statement being true, for I can more willingly submit to the loss of my Grapes than to barefaced imposture. *R. H., Manchester.*

Paris Gardens: Large Leaves.—I am informed by a friend now in Paris that in the public gardens of that city there are a great many plants with gigantic leaves, all of the same kind, and growing very luxuriantly. My friend omitted to mention the name of these plants. Can you or any of your Correspondents enlighten me? I have an idea that they must be Gunnera scabra. *C. M. F.*

Ferns.—In a recent paper of yours an account is given of the magnificent form which the variety plumosum of the Lady Fern (Athyrium Filix-fœmina) assumes. It was mentioned that the frond is sometimes a foot wide. Permit me to observe, that near the hedgebank of a field of mine in the parish of Stockland, Devon, a single pinna of one of this variety measures 10 inches and a half, so that the frond at the widest part is 1 foot 9 inches. I gave a frond to a lady of the adjoining parish, Dalwood, who transmitted it, I afterwards learned, to Mr. Moore, and he considered it to approximate to his Athyrium Fil.-fœm. var. plumosum. *Z. J. Edwards, Axminster.*

Wellingtonias.—A specimen of Wellingtonia in Mr. John Waterer's nursery at Bagshot, planted out in August, 1856, now measures 15 feet 6 inches in height; the girth 6 inches from the ground is 2 feet 4 inches; circumference of branches 30 feet; and in every respect it is a most perfect specimen. There is also another plant of this kind growing in the grounds of James Hodges, Esq., Penny Hill, Bagshot. When planted in November, 1857, it was 1 foot 6 inches high, it is now 11 feet 6 inches high, being an average growth for each year of 2 feet 6 inches. *J. W.*

Vine Growing.—I have a few Vines raised from eyes planted in March last, that have grown away surprisingly. I stopped them in July, and to my satisfaction I have no fewer than seven bunches of Grapes now in their second stage of swelling. The canes measure from 10 to 12 feet long, and some of them are an inch and three quarters in circumference; in short they are quite equal to two-year-old Vines, and are likely to bear a good crop next season. I may state that one Vine has three bunches on three different shoots. One bunch is 8 inches through and 10 inches long. *E. Dean, Gardener to J. Whitham, Esq., Gledhan, Leeds.*

The Elmhams.—Allow me to correct an error in a recent Number of your Paper (Oct. 19, p. 925). The Elmham which was once a bishop's see was not the parish of that name in Suffolk, but North Elmham, a village near East Dereham in Norfolk. *F. N.* [But the belief in S. Elmham is that the see of Dunwich was first transferred to that place, and afterwards to N. Elmham; and that the house at S. Elmham now occupied by Mr. Durrant, Sir Shafto Adair's steward, whose massive stone walls attest its antiquity, is a part of what was once the episcopal palace.]

Ringall, or Himalayan Bamboo.—I should be glad to learn whether there is a plant to be found in botanic gardens called the "Ringall." It is a native of the Himalayas, and a species of Bamboo. It is said to be remarkable for growing well under the shade of trees, and is well adapted for all the purposes for which the Willow is used in this country. *G. W.*

Transplanting large Trees.—As our lively and ingenious neighbours the French do not seem to get on well in transplanting large trees, I have been induced to send you a short account of what has been done here this year in that way. We have four machines for the purpose of transplanting—two of them capable of lifting trees of a large size (say from 40 to 50 feet high), and they have all been employed during the months of June, July, August, and part of September. The following is a list of the different kinds of trees transplanted. Beginning with Yews, they numbered 135 in all, and some of them were of very large dimensions, one tree being 8 feet in girth 4 feet from the ground and 35 feet in height. Another fine spreading tree brought from a plantation 3 miles off is 5 feet 6 inches round at 2 feet from the ground; and the circumference of the branches is 123 feet. A large Pseud-Acacia was brought from a distance of between two and three miles, and is of the following dimensions, viz., girth of bole at the ground 7 feet 6 inches, and at 10 feet high 5 feet 10 inches, the height being 41 feet. The number of Cedars of Lebanon transplanted was 40, most of them being brought from plantations at a distance, and growing on light sandy soil. The largest girths are 5 feet at the ground, and at 14 feet high 3 feet 7 inches, and height 42 feet. Six of the largest of the Cedars were planted to screen some buildings, and they had to be drawn with their balls of earth from the machines on rollers, which made the process of planting more tedious and difficult, but with all these drawbacks they were planted at the rate of one a day. All have done well with the exception of one which had large tap roots, that had to be cut to get it on the machine. Some large Thorns, 33 in number, were likewise transplanted; but the Thorn is the most difficult of all trees to shift when in leaf, and ought never to be attempted except on some special occasion, which was the case here. The roots are so long and straggling that a good ball of earth is difficult to get with them, and the only way is to trace and save all the small fibres at the ends of the long roots. In a hot dry time the foliage is soon affected, from the pores being so fine, and a copious supply of water is wanted to keep the shoots from flagging. The greater part of the trees transplanted here are, however, likely to do well; they have their buds and wood still full of sap, and have thrown their leaves off well. One of the largest Thorns transplanted girths 5 feet at the ground, and the circumference of the branches is 80 feet. An avenue of 40 Arbor-Vitæs have also been transplanted, the trees averaging about 20 feet in height; of all Evergreens they are the easiest managed and the safest to grow, from the fibrous nature of their roots. Some red Cedars of the same height in another avenue were shifted at the same time, but they are altogether as difficult to manage, for without the greatest care good balls of earth can seldom be got with them unless on stiff soils, the roots and fibres being so few. The other trees transplanted comprised a large Tulip tree, scarlet Horse Chesnuts, and deciduous Cypress. The month of June and part of July was very favourable for tree shifting, owing to the weather being [illegible] and there being plenty of moisture, but it was [illegible] the reverse in August and September, hot dry weather prevailing in these months. Having an unlimited supply of water by gravitation in pipes, a number of hydrants were fixed in places where wanted, and by means of hose every tree could be watered at the roots, and overhead in dull days and in the evening. Some of the large Yews and Cedars were well watered at the roots with manure water, made from the steepings of sheep and deer's dung, and it had an excellent effect on their growth and vigour. As the benefits derived from using manure water for Coniferous plants have lately been noticed in your columns, perhaps the above hint may be of use to those who have sickly specimens of "Conifers" from transplanting, or where they are growing on bad soils. *William Tillery, Welbeck.*

Societies.

SUDBURY COTTAGERS' VEGETABLE EXHIBITION.—This very interesting exhibition took place in the Corn Exchange, Sudbury, Suffolk, on Tuesday, October 22nd, and in point of merit has never been surpassed. It is in connection with an association for rewarding the industrious poor, of which N. C. Barnardiston, Esq., is President, and the Rev. Edwin Sidney, Honorary Secretary. Early in the morning of this Anniversary 54 ploughs were seen contending for prizes in a large field near the town, and at mid-day the Cottagers' Vegetable Show was thrown open to visitors. At three o'clock the various prizes amounting to about 100l. were distributed by the President in the presence of the High Sheriff of the County, Major Parker, M.P., and many other gentlemen, and the clergy and farmers of the vicinity, besides a numerous company of ladies. Each recipient was presented to the President and company by the Rev. Edwin Sidney, who explained the merits of the case. By the stimulus given to the

cottagers through these rewards, not only has their agricultural skill become much improved, but great attention has been given to the cultivation of their gardens and allotments. The Corn Exchange presented a most attractive sight. One side was devoted to the exhibition of roots, and the other to the produce of the horticulture of the poor. Some of the roots were of fine size and quality, and looked bright and firm. A set of roots of Globe Mangel Wurzel shown by Mr. J. Garrad, weighed upon the average about 14 lbs. each. Mr. Brown, of the Sudbury Nursery, sent some Lincolnshire Red Globe Turnips of equal weight with the Mangel Wurzel, and a lot of Skirving's Swedes averaged 16 lbs. each. There were others, but our notice has in view principally the produce of Cottage Gardens. There was a basket of Esperione Grapes as they were called, grown in the open air at Shimpling, of extraordinary beauty, perfectly coloured, and covered with the finest bloom, looking as if they were the produce of a Vinery well managed. They won a handsome wheelbarrow, the gift of the Misses Halifax. The poor woman who had looked after them was questioned respecting them, but her answers were quite satisfactory. The Cos Lettuces were excellent, just such as are seen in the best gardens, and of great size. Several baskets containing mixed vegetables and flowers were rewarded by prizes, and were objects of great attention. They were arranged prettily, if not with artistic skill, and their contents did great credit to their industrious owners. The most defective portions of the Show were Carrots and Parsnips, which were by no means equal to those of former years. The specimens of Savoys were very superior, as were also the sticks of Celery, which formerly no cottager thought of trying to grow. Numerous baskets of Onions were of the very first quality, and they were brought in excellent order. Some Apples also of superior kinds added greatly to the appearance of the tables, but the marvel of the day was the show of Potatoes. It may be questioned if anything more meritorious was ever seen; there were Kidneys of nearly twice the common size with the skins thin and clear, for which good prices were eagerly given for seed. York Regents, Flukes, Shaw's, Red Potatoes were as good as it is possible to conceive. Indeed this portion of the show was perfection and surprised every one. Mingled with the esculent vegetables were some good Dahlias and other flowers of which the cottagers seemed very proud. The extent of the prizes, and the kind encouragement of their richer neighbours, have excited in this district a great emulation amongst the humble gardeners occupying the cottages. It was most amusing to see the glee with which they carried off spades, forks, and watering pots given for prizes in addition to the money rewards; the moral effects likewise are found to be great and valuable. A poor man with a comfortable cottage and a nice piece of garden, thus encouraged, stays at home with pleasure, and many such may be now seen working in the long days, after the usual hours of labour, at their well tilled plots of land, and at this time trenching them up by moonlight. Religious education, a comfortable abode, a piece of land attached to it not too large, and the prospect of receiving a prize in the presence of the first persons of his neighbourhood, works well upon the best feelings of the honest poor man. This is visible in the management of cottage families, in the respectful demeanour of their inmates, and in the happy diminution of rural offences. Major Parker stated at the dinner, that he had just come from the Quarter Sessions, where there were only four cases for trial. In our Garden Memoranda we are accustomed to describe the horticultural progress of the day where the means are largely at hand, and to point out the great skill of our best gardeners, but it is equally pleasant to record the advance in cottage cultivation, and to show how great a comfort and credit a poor man's humble garden may become to him, and its reflex action on society at large. Such specimens as were shown at Sudbury are most creditable to the peasantry and those who encourage them, and we sincerely trust that the love of their little gardens may be found constantly on the increase amongst the country poor, and have reason to believe that efforts are now being largely made to make them a real boon to the skilful and diligent occupants of improved dwellings, with the well managed pieces of ground attached to them.

Notices of Books.

The Forests and Gardens of South India. By Hugh Cleghorn, M.D., F.L.S., Conservator of Forests in the Madras Presidency. London: Allen & Co.

The subject of Dr. Cleghorn's work, though of vast importance both in a commercial and political point of view, has but very recently attracted the full attention of the Indian Government; and but for the strenuous exertions of such enlightened officers as Wallich, Cotton, Falconer, Stocks, Dalzell, Cleghorn, and a few others, it may very reasonably be doubted whether to this day any steps would have been taken to rescue from utter destruction what will eventually prove perhaps the most lucrative of the vegetable resources of India. Those who live in glass houses should not, however, throw stones, and we who remember the condition of our New Forest and Forest of Dean, &c., some 10 years ago, are not in a position to blame the Indian government for a similar neglect of far less easily managed sources of wealth. Now, fortunately for both countries, a very different state of things exists; and we are well content to let bygones be bygones, feeling assured that the "Pagoda tree," at length re-discovered in the East, will never more languish for want of fencing, watering, and tilling.

The table of contents of Dr. Cleghorn's book, consisting as it does of reports and letters to the Madras Government, does not give promise of the work being very attractive or readable; but a very slight inspection of these letters agreeably surprises us, for owing to the variety and importance of the subjects discussed, the excellent arrangement of the matter, the simplicity of the language and accuracy of the descriptions, and the fulness without diffuseness with which each topic is treated, we not only at once gain a clear insight into many most interesting matters connected with the physical geography and vegetable products of Southern India, and the manners and customs of its native tribes, but are most favourably impressed with Dr. Cleghorn's powers both as an administrator and reporter. In the latter capacity, indeed, we are inclined to award him the highest praise, for we have never read reports more explicit, perspicuous, and thoroughly to the purpose than these, though devoid of all pretension to literary merit.

Such a work as this demands more than a passing notice, and we need not therefore apologise to our readers for giving a short *resumé* of some of its contents. The opening 23 pages consist of Dr. Cleghorn's first report to Government, dated May, 1858; it contains 47 heads, under which are discussed various subjects relating to forests generally; and from it we glean the following information:—That but 50 years ago an unbroken forest covered the western Ghats; whereas now, owing to "indiscriminate felling," "devastation," "wanton havoc," "waste," and "burning by vagabond tribes," good timber has become positively rare, and is generally inaccessible. The Canara district is, however, in advance of the others; owing to judicious forest rules. The chief demands to be supplied fall under the heads of the Indian army, engineer department, navy, the railways, and the telegraphs; they are described as very heavy, and the officers, men, and cattle necessary for supplying them are deficient, owing to the exigencies of the military service during the mutiny. On the lines of the various railways marvellous changes have been effected; and no tree now meets the eye on hills and plains where the old sign-post still stands, inscribed "Dense jungle—Beware of elephants." In the Pulney hills the forests have been ruthlessly felled to clear a space for Plantain gardens, and once green hills entirely stripped of their woods. Slovenly felling has further been generally practised, the trunks of trees being hacked over a large surface a yard above the ground; and a further loss has been experienced from wasteful trimming, whereby the logs were reduced by one-half, in making drag-holes for ropes.

For the future it is proposed to divide the trees into four classes, of the following girths respectively:—6 ft., $4\frac{1}{2}$ ft., 3 ft., and under 3 ft.; and that only 1-24th of the first class trees should be felled annually. To facilitate operations, the range of each "Forest Assistant" is to be divided into six geographical divisions, of which one only is to be worked at a time. Fragments, such as tops, butts, branches, &c., which have hitherto been wasted, are in future to be preserved, and the use of Teak forbidden for many common purposes, such as camp furniture, &c. Auction sales have been established for the timber unsuited for naval purposes, and have been very successful, realising 300*l.* at the first sale, which is on an average 2*s.* per cubic foot.

Teak wood, of course, holds a prominent place in Dr. Cleghorn's reports; and he states that it had engrossed two-thirds of his time in the previous year. Such has been the destruction of this noble tree that throughout the Malabar coast, from Goa to Cochin (upwards of 1000 miles!), there is scarcely an available tree on Government land below the Ghats, and above them there are but three localities where it is to be had in abundance and of good size. The importance of the Anamalai Teak forest seems not to have been recognised until it was urged on the attention of Government in 1848, by the distinguished Colonel Cotton. It is now superintended by Lieut. Beddowe, a young officer of great ability and energy, and who promises also to become an able botanist. This is the only forest in which long planks suited for building frigates can be procured, and the prospective supply will apparently not exceed 15 years! Hereupon a scheme is propounded for forming a forest that shall be a reserve in perpetuity for the Indian navy.

The Wainad and Heggadevincotta forests, bordering on Malabar, rank next in importance. They are 40 miles long by 30 broad, and supply 10,000 cubic feet of Teak annually. As the population is scanty it is proposed to make of these also a reserve; and as they occupy eastern slopes, to apply their timber to military purposes at Bangalore, &c. Much of it would be valuable for naval purposes, but the distance from the sea and the nature of the roads prevent its being so applied. Robbery and spoliation are here again so rife that the appointment of a European magistrate is urged, as well as that of an energetic conservator.

The Gund forest in Canara seems, on account of its proximity to the sea and the dimensions of its timber, to be very valuable; but the district is very rarely visited. The country is rocky and difficult of access, and the trees confined to impracticable positions, and much threatened by fire, under which circumstances the co-operation of an engineer officer is desired, and a rough survey, with proposed roads, &c., is given.

Of Teak plantations the first three mentioned in the report seem to have originated in gross blunders. "Worse localities could scarcely have been chosen," and it is naively added that "the only possible excuse for so grave a blunder was ignorance!" In another spot, out of 7000 trees put into the ground only 2000 remain! The only other plantation mentioned is called after its originator, the Conolly plantation, on the banks of the Nellambur; and this is considered so successful as to be worthy of a separate report, and to be regarded as an "Historical record of what can be effected by artificial means."

(To be continued.)

Garden Memoranda.

MR. BIRD'S CHRYSANTHEMUMS.—The display of fine blooms now on view at Mr. Bird's place, Green Lane, Stoke Newington, is this season quite equal to what it has been in former years, and that without the use of the contents of the "black ditch" which was wont to pass his nursery; but which is now covered in. His largest house, especially, is well worth inspection. It is span-roofed, 90 feet in length and 30 feet in width, and is filled with plants, each of which is loaded with blooms remarkable for their fine colour, size, and beauty. Dupont de l'Eure and Cassandra are numerous and particularly fine—the former as compact and round as a cricket ball, and the latter equally fine in shape, white, with beautiful broad petals delicately tinged with rose. Of the latter, multitudes of blooms may now be seen in perfection, not only here, but in other houses. Among Yellows, Jardin des Plantes stands first as regards richness and brightness of colour; though not new it is comparatively little cultivated, but whoever sees it in the perfection in which it is to be seen here will we think speedily add it to their collections. Among whites, is a Seedling of Mr. Bird's, called Guelder Rose or Snowball, a name which it well deserves; for it is round, compact, and very white. Of Novelty we observed some magnificent blooms; it is a large and showy variety in the way of Queen of England, from which we believe it is a seedling. Alma, rosy purple, incurved, a fine compact sort, was conspicuous, and among others may be mentioned Fabius, rich bright orange; Alfred Salter, large and showy; Yellow and White Formosum, both useful kinds; Princess Marie, rosy lilac; Vesta, still one of the best of whites, and a variety which is largely grown here for cut blooms. We also noticed some fine specimens of Gluck, in a forward state; it is a large yellow Anemone-flowered kind, and one of the best of its class. Others, including the finest of the leading kinds, were also in fine condition, and will well repay inspection. They are intermixed with large Camellias and Azaleas, which are planted out and grown expressly for the purpose of furnishing cut flowers for market. Pompones, with the exception of Ida, a beautiful clustered yellow, are not yet in flower, so that with these and large kinds yet unopened a grand display may be expected for many weeks to come. Three large Vineries, from which excellent crops of Grapes have been cut, are also full of Chrysanthemums for supplying vacancies as they occur in the show house.

CHRYSANTHEMUMS IN THE TEMPLE GARDENS.—These have succeeded most satisfactorily this season. Some of the blossoms, indeed, such as may now be found on Queen of England and its yellow variety, Dupont de l'Eure, Fabius, Cassandra, Aimée Ferrière, Rifleman, Little Harry, Lady Hardinge, Novelty, Nonpareil, and Alfred Salter have never hitherto been surpassed even in those gardens either for size or beauty, and being produced in great numbers on a long border facing the south, where they are seen to excellent advantage, the effect is admirable, and well worth attention. A row of Pompones too along the front, in which are General Canrobert, Florence, Mustapha, Julia Lagrave, Argentine, Model, and Madame Foul also adds considerably to the beauty of this border. These are under a canvas covering, but even in open-belts many varieties have done well this season which have not been seen in perfection for years.

As regards cultivation little can be added to what has been stated in former reports. As soon as the plants have done blooming they are cut down, and when they have pushed suckers an inch high or so, they are taken up with as much soil adhering to their roots as will stick to them, and the plants are placed tolerably close together in a sheltered piece of ground previously prepared for their reception. During severe frosts they receive some slight protection, and in this position they are permitted to remain until the beginning of March or April, when they are taken up, divided, and replanted where they are intended to flower. Too great attention in Mr. Broome's opinion cannot be paid to the proper division of the plants; to the unskilful performance of this operation he attributes the production of small sized sickly flowers; the ball, he asserts, should never be replanted whole, but should be thoroughly divided, and in no case should more than three suckers be put in one place, and each should be set as free from the other as possible. With regard to

kinds which break late, however, and whose suckers are comparatively small, great care should be taken; such sorts should not be disturbed until say the beginning of May.

When the young plants have reached the height of 8 or 10 inches, they should be pegged down, which not only prevents them from growing too tall and overrunning the other flowers which bloom during the summer and early autumn, but preserves the foliage around the lower portion of the flower stem, and saves a good deal of labour in tying up; of course, this treatment need not be applied to those plants which are intended to form back rows, or to bloom against walls or palings. When, after this, they again reach the height of 1 foot or 18 inches, commence tying them up to slender sticks, which can be procured in bundles for the purpose, and continue doing so until they have reached their extreme height and show their flower buds.

In the heat of summer, when the plants begin to flag and the fibres to show themselves on the surface of the ground, a top-dressing of dung or mould should be given them, and great attention paid to their watering; the plant being of a succulent nature requires a great quantity of fluid nourishment, which should be given to it regularly twice a day, in the evening and at early morning, before the sun has got any great power. Manure water, without copious doses of which fine flowers cannot be insured, and which can be made by adding water to horse, cow, or sheep dung (about a pound by guess of the first, and half that quantity of either of the other two, to a 2-gallon watering-pot), should be used at least twice a week, but oftener if possible, until the flower-buds begin to show their respective colours, when it should be discontinued, and plain water only be given until the autumnal rains render even this unnecessary.

Should it be desired to show large flowers in the borders, the laterals or side shoots, together with all but one flower bud on each stem, should be thinned out. In thinning out, if great care be not taken, the crown buds are apt to snap off; this operation should be performed therefore with a very light steady hand, and with sharp and fine pointed scissors. It is, perhaps, superfluous to say that the beauty of flower borders is mainly dependent on the arrangement of the plants in them, with respect to their habit of growth as regards their height, and with respect to their harmony of colour. To these points great attention is paid by Mr. Broome, and the result is in every way encouraging; a finer bank of flowers than his best border is could not well be found.

In the Middle Temple Mr. Dale has also a fine display, especially of large kinds on a wall under the protection of mats. Pompones bedded out are also brilliant, as they always are in warm and sunny autumns like the present, and they serve to show how useful a plant the Pompone Chrysanthemum is for this kind of decoration, and how well it is calculated to render our out-door gardens attractive, even long after the beauty of their ordinary summer occupants have fled. This portion, therefore, of the gardens is also well worth inspection.

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Next to Camellias, Azaleas are perhaps the most showy plants that can be had in bloom early in the season, and where there is a good stock to select from some of the most forward plants should be placed in heat soon, moistening them overhead two or three times a day. Unless, however, plants can be had which made their growth and set their buds early, they need hardly be expected to flower so finely as under more natural circumstances in spring, and unless the buds are plump there will be some danger of the plants starting into growth instead of flowering. Dutch bulbs should be largely cultivated where a fine display is required, and where hardy shrubs are forced for the decoration of this house, these should be got ready for the purpose. Do not forget to introduce into gentle heat at the proper time a good batch of Roses, choosing the most promising plants of Teas, Bourbons, and Hybrid Perpetuals, which are the best kinds for winter flowering; a gentle bottom-heat will be of service to these as also to most other plants subjected to heat in order to get them into flower early, and a moist state of the atmosphere must be secured, admitting a little air freely on every favourable opportunity. In greenhouses damp or insects soon do irreparable injury to soft-wooded plants at this season, and these must be attended to if the plants are to be wintered in first-rate condition. Pelargoniums should be kept rather cool and dry, giving whatever water may be necessary on the mornings of fine days, so that the superfluous moisture may be dried up before the evening, avoiding the use of fire-heat except when necessary to prevent the temperature falling below 40°, or to dispel damp when this cannot safely be done by giving air. Calceolarias require very similar treatment, except that they are very subject to the attacks of thrips, unless afforded a moist atmosphere; they must therefore be narrowly watched, and fumigated lightly two or three evenings successively if this pest makes its appearance, keeping the atmosphere moist and giving air on every favourable opportunity to prevent the foliage from flagging. Cinerarias for late blooming must also be kept cool and airy, and should not be allowed to suffer for want of pot room. These must not be trusted in cold pits after this season, for they cannot endure much frost. Plants intended to flower early should be encouraged with a gentle heat, keeping them near the glass and admitting air whenever it can be done.

FORCING DEPARTMENT.

Pineries.—If circumstances should render it necessary to subject a portion of the stock intended for fruiting to a brisk temperature at once to induce it to start, the most promising plants should be very carefully selected, and placed in a small house or pit by themselves; and, where anything like a regular supply of ripe fruit is required, several houses, or separately heated compartments, should be at command; and without this convenience no gardener can reasonably be blamed for having too many ripe at one time and none at others. It is not by any means desirable to start more plants into fruit at this early season than may be absolutely necessary, for they will produce finer fruit later in the season than can possibly be obtained from them now; and where a separate house cannot be commanded for those which must be subjected to a high temperature, we would advise that the plants selected for fruiting should be placed in the warmest part of the house at command, filling the rest of the compartment with young stock. The former should be afforded a bottom-heat of about 85°, and the latter about 10° or 15° lower; the atmosphere should range from 68° to 75° by fire-heat, allowing it to rise 5° with the assistance of sunshine, keeping the young plants near the glass, and properly supplied with water at the root. This temperature will be considerably too high for young stock, but we have seen this system practised with considerable success; and although the young plants may get somewhat drawn, they will gain strength as light increases, and the evil will be less than running the risk of starting at this early period the greater portion of the plants required for keeping up the supply throughout the summer.

Vineries. — Where very early forcing is contemplated, until the buds are fairly broken the points of the shoots should be kept nearly on a level with the lowest part of the Vine; and if this should not be found sufficient to induce the buds to start equally throughout the length of the Vine, the rods should be bent so as to bring the most forward buds to the lowest level, elevating those that are backward. Maintain a thoroughly moist atmosphere by frequently sprinkling the floor and passages, &c.; and syringe the Vines lightly at least twice a day until the leaves begin to appear, when the amount of moisture must be moderated. Give every attention towards securing a gentle warmth for the roots: turning the litter, and adding fresh as may be requisite, and keeping all well protected from the effects of heavy rains and severe weather. Be satisfied with a moderate night temperature until the buds begin to push, when it may gradually be raised to 60° by the time that the leaves fairly begin to open.

FLOWER GARDEN AND SHRUBBERIES.

Chrysanthemums will now be in perfection in most places; therefore take every means to preserve their beauty as long as possible. For some of the very tenderest kinds of Roses some protection will soon be necessary. Also get in, as recommended last week, the stock of Briars for budding upon next year, for unless these are planted before spring they seldom furnish strong shoots for early budding. With weather like the present all new work should be pushed forward with vigour, and if the soil has been properly prepared by draining, where necessary, as should always be done before planting, there will be much fewer failures from planting now than if the work is delayed until March. Where, however, the ground to be planted is of a harsh clayey nature, and in an unkind state at present, it will undoubtedly be better to defer planting until spring; soils of this nature should always be dug or trenched some considerable time before planting, as neither draining nor anything but exposure to the action of frost will bring them into a fit state for planting. Roll walks and lawns occasionally, to keep them firm and smooth. There will be comparatively little to be done in the flower garden at present, except sweeping and cleaning, and any spare time will be well spent in going over the stock of plants in pits for next season's use, removing every decaying leaf, and where the surface soil has got green, removing this and top-dressing with sandy loam. There is nothing so unfavourable to these plants at this season as damp, therefore take every opportunity you can of admitting fresh air.

HARDY FRUIT AND KITCHEN GARDEN.

Look over fruit and other stores frequently in order to see that all is safe and sound. Standard trees which have been root-pruned must be firmly secured against injury from winds, also get any root-pruning or transplanting to be done this season executed as soon as possible. Endeavour as far as circumstances will permit to have a good supply of Parsley under safe protection; for there is generally a large demand for this, and in the event of a severe winter like the last it is difficult to save it by the ordinary protection of hoops and mats. Lettuces and Cauliflowers in frames should be freely exposed on all favourable occasions. Be careful also of any Broccoli that may be fit for use or turning in.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,

For the Week ending Oct. 31, 1861, as observed at the Horticultural Gardens.

October.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep	Of the Earth 2 feet deep	Wind	Rain.
Friday 25	21	30.080	30.040	63	46	54.5	57	55	S.W.	.46
Satur. 26	☾	30.131	30.032	62	35	48.5	58	55	N.E.	.00
Sunday 27	23	30.075	30.008	61	42	51.5	56½	55	N.E.	.00
Mon. 28	24	30.065	30.032	57	36	46.5	55	54	N.E.	.00
Tues. 29	25	30.003	29.929	56	40	48.0	54½	54	N.E.	.00
Wed. 30	26	29.920	29.887	61	37	49.0	54	53½	N.E.	.00
Thurs. 31	27	29.830	29.508	58	39	48.5	54	53	S.W.	.12
Average		30.014	29.919	59.7	39.3	49.5	55.6	54.2		[illegible]

Oct. 25—Uniformly overcast; cloudy and fine; densely overcast.
— 26—Cloudy; fine; clear and cold at night.
— 27—Very fine throughout; densely overcast.
— 28—Overcast; fine but cold; clear at night.
— 29—Overcast; fine; dry air, overcast.
— 30—Fine; cloudy; densely overcast.
— 31—Fine; dry air; densely overcast; rain at night.
Mean temperature of the week 3 1-3d deg. above the average.

RECORD OF THE WEATHER AT CHISWICK

During the last 35 years, for the ensuing Week, ending Nov. 9, 1861.

November.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 3	53.2	36.8	45.0	17	0.82 in.	2	2	10	—	6	7	8	—
Mon. 4	51.3	36.8	44.0	18	0.44	2	4	8	1	6	7	5	3
Tues. 5	53.0	38.6	45.8	16	0.62	4	2	4	4	5	10	3	3
Wed. 6	53.2	38.8	46.0	17	0.76	2	4	2	3	5	13	4	2
Thurs. 7	52.5	37.9	45.2	17	1.02	1	6	2	3	4	11	5	3
Friday 8	51.0	35.2	43.1	16	0.58	2	5	1	2	2	13	6	4
Satur. 9	50.6	34.9	42.7	14	0.28	3	4	3	3	5	9	3	5

The highest temperature during the above period occurred on the 3d and 6th, 1834, and 5th, 1852—therm. 63 deg.: and the lowest on the 9th, 1854—therm. 18 deg.

Notices to Correspondents.

Books: *W B S.* Study Carrière's Guide pratique du Jardinier multiplicateur, a really capital book. Kill the mildew *immediately*. The variegated Koniga is only K. maritima. No leaf of Gazania was enclosed.

Drainage of Gardens: *Constant Reader.* The chalk rubble—used as draining material in ditches at least 4 feet deep and 6 or 8 inches wide at bottom—filled in at least 12 inches deep, and covered over with turf or straw before the earth is returned, will be preferable to small pipe tiles, liable as these would be to choking by the entrance of the roots of garden shrubs and plants. The ditches or drains must not be further apart than 7 yards for the efficient drainage of a "cold tenacious clay."

Grapes: *H M.* Your case is under consideration. Nothing can be done at present, and possibly the condition of your Muscats has arisen from circumstances beyond your control. *M. J. B.*

Heating: *X Y Z.* You cannot carry your pipes 60 feet through the open without losing *some* heat; much however need not be lost if the pipes are laid in a flue deeply covered with charcoal dust.

Ice Houses: *C G.* We see no advantage in cementing the inside. The great point is to have the walls thick enough to exclude summer heat.

Insects: *E. O.* Your insect is Mormolyce phyllodes. Its relationship with any of the Brachinides is doubtful. It has been arranged in the Harpalides, near Pristonychus. Hugel's "Cachmire," Donovan's "Insects of India," and Westwood's "Cabinet of Oriental Entomology" will help you, especially the first named.—*J K.* Your Mushrooms are infested by myriads of an Acarus new to us, allied to the cheese mite. We are afraid that any remedies, such as lime water or gas-tar water, might affect the powers of the spawn. *W.*

Names of Fruits: *W R F.* 1, Alfriston; 2, Wormsley Pippin; 3, Nonsuch; 4, not known, of no merit; 5, Golden Reinette. —*Hereford.* 2, Chaumontel; 3, a fine specimen of Van Mons Léon le Clerc; 5, King of the Pippins.—*F. Kelly.* 1, Golden Reinette; 2, Blenheim Pippin.—*T T H.* 3, Passe Colmar; 4, Wyken Pippin; 5, Franklin's Golden Pippin.—*T C P.* 1, Dumestone's Seedling; 2, Devonshire Buckland; 3, Kentish Codlin; 5, Redstreak.

Names of Plants: *Diss.* Your plant is not a Fungus but an Alga. It is Oscillatoria Friesii, and is not uncommon on damp or shaded lawns. The only probable way of preventing its increase is to make the parts of the lawn on which it grows less damp or shady. *M. J. B.*—*H W C.* 1, Populus canescens; 2, Populus tremula.—*M S M.* 1, Athyrium Filix-fœmina; 2, Lastrea Filix-mas; 3, Too imperfect; 4, Lastrea dilatata—perhaps a small form, perhaps the tip of a large frond; we cannot tell which from the scrap sent.—*H.* Pinus serotina.

Orchard House: *X Y Z.* Any deciduous plants may be introduced in winter, without injuring the fruit trees. But they can only be there for shelter. If heat is required by them then they should be excluded. We should trust for decoration to hardy bulbs.

Paris Gardens: *W. T.* We do not think it desirable to continue this subject at present. A very fair account of Paris gardening has been given by our Correspondent and yourself, and we do not see that any advantage is likely to arise from ungraciously persevering in the criticism of matters which do not affect ourselves any further than has been already pointed out. Let us add that French Gardeners have difficulties to contend with of which people in this country know nothing.

Peaches: *Sussex.* When we tasted Rivers' Early Albert we thought it excellent. His seedling from the Stanwick Nectarine was also uncommonly good.

Spanish Questions: *W W F.* The Aloe in Spain is Agave americana; any mucilage it may have could be removed by very simple means. We know nothing about Swinburne's Mimosa. The dwarf Palm is the common Chamærops humilis. Eatable Acorns are Sancho Panza's Bellotes, the produce of Quercus Ballota. Barilla is yielded by any salt plants, but principally by the Salsolas sativa, Kali, Soda and Tragus. Salicornia is less employed, but it yields the Salicor or Soude de Narbonne. All these things are perfectly well known. Pray do not ask us to write a Commentary on Swinburne, whose Natural History is beneath notice.

Subterranean Irrigation: *S S.* Carry the pipes 12 or 18 inches under ground, and lay them like drain pipes. The first is deep enough for kitchen garden crops. All you have to do further is to place the holes about a yard apart. The sewage will soak for that distance.

The Golden Pippin. *An Old Subscriber* will be much obliged for a little information about the "Real Old Golden Pippin." This favour is asked after much unsuccessful inquiry, and different attempts to procure the same by grafts. Where can fruit be bought?

Vines: *J A.* The roots are rotten or rotting. How can it be otherwise with earth almost sodden with water

Misc: *T H.* Much obliged for the suggestion, but there are difficulties in the way.

Erratum. The name of the author of the interesting account of the Philippines, published last week (p. 944) was accidentally omitted. We were indebted for the article to Mr. J. G. Veitch.

WHEELER'S ORANGE GLOBE MANGEL,
WHEELER'S IMPERIAL SWEDE,
GRASS SEEDS for PERMANENT PASTURE,
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GENUINE ITALIAN RYE-GRASS, produced from the second cut of Foreign Italian, thoroughly cleaned, and weighing from 17 lbs. to 21 lbs. per bushel, can be supplied to the Trade direct from the grower, and purchasers may either take delivery now, or at their convenience up to March 1, 1862. For samples and prices apply to SIMON A. DAINTREE, of Fenstanton, by St. Ives, Hunts.

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SEED WHEATS.—New and Improved Varieties from the Chiltern Hills.

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The BURGHFIELD EARLY WHITE (New), a Lammas Wheat of superior quality, remarkable for early maturity, and length and stoutness of Straw, Ear, and Berry, raised by the advertiser from a single grain ..	76	0
ESSEX ROUGH CHAFF (Improved), one of the best white Wheats, straw stiff and short	76	0
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All the above warranted TRUE to their kinds, CLEAN, and in first-rate condition by the Grower, Mr. R. C. M. YOUNG, Flint Hall, Hambleden, Henley-on-Thames.

A remittance required with order. New sacks included in prices quoted, with delivery to Henley Station.

TO THE SEED TRADE.—The Subscribers have for Sale several quarters of PEAS of the following varieties:—Early Emperor, Bellamy's Green, Marrow, Prizetaker, and Ne Plus Ultra; also Sutton's Champion Swede, and a few cwt. of Long Yellow Wurzel Seed, all the growth of 1861.

Samples and prices on application to MARSH & PERKINS, 42, Drapery, Northampton.

N.B. A reference required from unknown correspondents.

Gladiolus.

TO BE SOLD, a Bargain, a first-rate Collection of about 200 fine flowering Bulbs of the beautiful GANDAVENSIS HYBRIDS in about 100 varieties, containing the newest and best.

For price, &c., apply to R. CHRISTIAN, Gardener, Stamford.

JEAN VERSCHAFFELT'S Nursery, Ghent, Belgium.—The undersigned begs respectfully to announce he has still for Sale a few hundreds of the following Plants, at the following moderate prices, viz.:—

AZALEA INDICA.—Very nice clean plants, first-rate varieties, 4*l*. per 100.

JASMINUM GRANDIFLORUM.—6*l*. per 100.

LILIUM LANCIFOLUM (SPECIOSUM) RUBRUM.—Extra strong bulbs, 3*l*. per 100.

Ditto, do. do. ALBUM, 2*l*. 10*s*. per 100.

J. V. has much pleasure in stating that he is still able to supply the following first-rate New Plants, sent out by him this autumn:—

CAMELLIA LEOPOLD I., 21*s*., 31*s*. 6*d*., and 42*s*. each.

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RED-FLOWERED ROSE SOUVENIR DE LA MALMAISON, as figured in the *Illustration Horticole* (October, 1861), 8*s*. each.

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In offering the above plants, J. V. begs to solicit early orders to be directed to

JEAN VERSCHAFFELT, 43, Rue de la Caverne, Gand, Belgique.

A reference required from unknown Correspondents.

THE LONDON MANURE COMPANY
(ESTABLISHED 1840,)
Are now prepared to send out the following MANURES:—
CORN MANURE for AUTUMN SOWING.
SUPERPHOSPHATE of LIME.
DISSOLVED BONES for PASTURES.
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BLOOD MANURE for CORN.
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CONCENTRATED TURNIP MANURE, equal in value to the preceding.

Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."

Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

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The Manures manufactured by J. B. LAWES for the present season of 1861 are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, and BONE SUPERPHOSPHATE of LIME	£6	6
LAWES'S SUPERPHOSPHATE of LIME from BURNT BONE or MINERAL PHOSPHATES ..	5	5
LAWES'S BARLEY, GRASS, and MANGEL MANURES	8	0

These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.

Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.

American and other Cakes at market prices.

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TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c. IN ENGLAND AND WALES AND IN SCOTLAND.

The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.

For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

RUGBY and DUNCHURCH CATTLE SHOW, NOVEMBER 28.

A Prize of 15*l*. is open to All England for the best FAT BEAST of any description, the property of the Exhibitor for six months prior to the Show.

Entrance 10*s*., to close on November 12.

For form of Certificate, &c., apply to Messrs. W. & E. HARRIS, Rugby.

N.B.—Covered Sheds will be provided for the Beasts shown for the above Prize.

CRYSTAL PALACE. — WINTER SHOW of POULTRY, PIGEONS, RABBITS, ORNAMENTAL WATER FOWL, GOLD, SILVER, and other PHEASANTS.—A SPECIAL SWEEPSTAKES for ONE HUNDRED GAME COCKS, and a SHOW of AGRICULTURAL ROOTS and other produce, on WEDNESDAY, THURSDAY, FRIDAY, and SATURDAY, December, 11, 12, 13, and 14.

Entries close Saturday, November 9.

All communications to be addressed to Mr. W. HOUGHTON, Secretary to the Show.

The London, Brighton, and South Coast Railway Company have kindly consented to convey the Poultry, Agricultural Roots, &c., from any Station on their line FREE OF CHARGE.

The Agricultural Gazette.

SATURDAY, NOVEMBER 2, 1861.

MEETINGS NEXT WEEK.

MONDAY,	Nov. 4	London .. .. (Mr. Bailey Denton on Outfall Drainage.)	8 P.M.
WEDNESDAY,	— 6	—Agri. Society of England	Noon

A FINE autumn well used is worth another guano island to the country. The operations of the last two months upon our stubbles have been as good a guarantee of next year's crop as if the contents of such an island had been spread upon their surface. It is no mere alteration of character or "quality," by which a thorough fallow of the land in dry autumn weather fertilises the soil. It is as much by an actual addition of particles in the one case as in the other that tillage* is the equivalent of dung. Guano, superphosphate, lime, however, act not only as direct additions of the food of plants, but also as reagents in the soil by which useless matters there, or even mischievous matters there, are converted into food. And so does tillage. The enormous inner surface of the land — that by which every particle of the soil is wrapped about — is multiplied by tillage, and so not only are the particles which it covers laid more open to the agency of external influences, but they do themselves exert a prodigiously increased activity in their influence upon the air which thus is made to interpenetrate the whole. That air contains the substance of plants. Every process of putrefaction or combustion fills the air with the substance of once living plants. And it only needs that by tillage the soil shall be brought throughout its substance into contact with fresh surfaces of air to enable it to extract and treasure up for living vegetables once more the very atoms which have constituted its fertility before.

Tillage no doubt results in an actual addition of those very particles to the soil, which in guano, superphosphate, farm-yard dung, are called manure. And it was most appropriate that the chapter on "Fallows" in Mr. HOSKYNS' charming "Chronicles of a Clay Farm" should finish, as the best exponent of their influence and effect, with a picture of the guano island.

But like guano, superphosphate, farm-yard dung, tillage also acts, as we have said, by tending to the rearrangement in some useful form of particles already there, but mischievous or useless.—"The protoxide into the peroxide! Ha! a beautiful change that!"—to quote again that chapter of the "Chronicles."

And such changes are effected by contact with the air; mischievous soluble matters are made insoluble and harmless—useless insoluble matters are dissolved and rendered useful.

The fallows of the past two months are but the commencement of a long process tending to fertility, which now that the soil has been broken up while dry, will be continued all the winter to the benefit of the green crops and the grain crops of next year. We learn that the prevalence of the finger and toe disease among the Turnips in some of the Scottish counties this year, is attributed to the quantity of wet ploughing done last autumn. There can be little doubt that to stir the ground while wet tends as completely to exclude the air, as stirring the land while dry tends to introduce it. By the same rule, therefore, the one operation is as great a check to fertility as the other is a stimulant and addition to it. And it is under circumstances of stunted growth due to checked fertility that this and many other vegetable diseases flourish.

We may hope, therefore, that next year wherever full advantage has been taken of the opportunity we have had for efficient autumn cultivation, Finger and toe will have disappeared. Certainly there has been but little wet-land ploughing since the spring. The difficulty under which we suffer now is, that land is not wet enough, and that our best seed time for Wheat is passing by without the soil being in good order for it.

* The word tillage is used in Yorkshire as signifying manure: in its ordinary meaning, as we use it here, it includes all those operations which tend to the production of tilth.

THERE is, we believe, no one in the actual practice of steam cultivation who has for so long a time believed in it, and held so firmly to his faith in it amid all manner of discouragements—no one moreover who can point to so long a course of unvarying successful experience in it — as Mr. WILLIAM SMITH of Woolston. And among enthusiasts and leaders—the class to which he undoubtedly belongs — we can hardly name another who holds so reasonable and so modest a confidence in the "hobby" which he rides.

For it is not steam cultivation so much or so exclusively on which he insists as the keystone of his plan of clay land tillage. Not steam cultivation so *much*, for the great improvement as he believes which has been effected in the management of his land was devised and carried out successfully before he had thought of yoking the steam engine to his implements:—nor steam cultivation so *exclusively*, for he more than any other of the advocates of steam culture continually insists on the folly of looking to steam power for doing everything upon a farm. He believes in steam for locomotion, but he does not therefore expect the railway train to take every man to his own house-door. He looks to either horse-power or "manual" labour to convey the passengers from the stations here and there at which steam-power drops them. And so upon the farm Mr. SMITH is satisfied to leave more work to be done by horses and by hands than the visitor of the oldest steam-cultivated fields in England expects to find upon them.

Right or wrong it is the stirring as against the "turnover" plan—not steam against horses —which is the characteristic feature of Woolston management. Accordingly when Mr. SMITH visits farmers' clubs, as he has lately done, to give a lecture on steam cultivation, his discourse is less on steam-power than on cultivation; he has comparatively little to say on FOWLER's anchorage and HOWARD's windlass — on special engines as against those for ordinary threshing purposes—it is to the grubber as a fallow implement and fertiliser of the soil as against the plough that the interest of his audience is directed; and they leave him with the impression that it has been no personal object but a great agricultural principle that has been engaging their attention. And notwithstanding all the clamour that has been raised by Mr. SMITH whenever he has thought himself the subject of injustice, *that* we are bound to say is the impression which we have always received after a visit to his farm. He has still a larger body of clients than any other person interested in steam culture; but if any one refuses his plans he has heard without annoyance of their preference of Mr. FOWLER's apparatus:—"Let them take just which they like—What care I for money? Those that shall follow me require it not. I have never spent my income since I was a boy!" The argument is maintained as pertinaciously, whether with an intending purchaser or a mere spectator;

and the object evidently is the justification either of his mere claims as an inventor, or of the superiority in the public interest of his plans of clay land cultivation.

This personal reference to Mr. Smith of Woolston is justified both by his own constant appeals to public opinion and by the personal injustice from which, as we believe, owing to a somewhat eccentric pertinacity and combativeness of character, he has suffered. It is fit too that our description of the Woolston Farm should be prefaced by this short reference to its cultivator.

Little Woolston Farm, the property of Mr. William Smith, lies about four miles on the Bedford side of the Bletchley Station on the London and North-Western Railway. It is about 170 acres in extent, of which upwards of 50 are rich grazing ground. Of its 112 arable acres 40 are of a stiff clay hill-side soil; and the remainder are a rich loam and level. The farm lies in detached pieces, and in its original condition was as unlikely ever to be cultivated by steam-power as any in the country. Even now, when many of the interior fences have been removed and outer fences have been straightened, its comparatively small extent, uneven surface, and mixed arable and pasture, mark it out as fit for horse and manual labour rather than steam cultivation. Formerly this land was ill cultivated by eight horses. Four and six-horse ploughs broke up the surface soil, and hardened the subsoil floor on which it lay, burying, as Mr. Smith insists, instead of extirpating perennial roots of weeds. For these ploughs grubbers were substituted without any diminution of the horse-power needed, but with marked advantage to the cleanness and fertility of the land. And at length (Dec. 1855) these grubbers were dragged to and fro by an ordinary 7-horse-power threshing engine, for which Mr. Fowler, commissioned by Mr. Smith at the Carlisle meeting that year, had provided windlass and wire rope. The eight horses were reduced to six, and are now reduced to three.

Seventy acres are cultivated on a six-field course—Roots, Barley, Clover, Wheat, Beans, Wheat. Forty acres, or thereabouts, are cultivated in four fields, without much regard to rotation. Thus, of the whole four fields into which this part of the farm is divided, in seven years, amounting in all, therefore, to 280 acres of cropping, only 10 acres have been Clover, 80 have been Wheat, 50 have been Barley, 20 have been Oats, 80 have been Beans, 30 have been Turnips and Swedes, 10 acres have been Peas. It is not for lessons on systematic cultivation that we go to Woolston, nevertheless this stiff land which we walked over the other day was clean and in good order. But little stock is kept upon the farm, and the dung is little else than rotten straw; nevertheless deep and thorough cultivation maintains and augments fertility, and neither the landlord nor his tenant in this case has had any reason hitherto to condemn "cross cropping."

As we walked over the stubbles they were being grubbed 9 or 10 inches deep by an 8-horse engine driving a double windlass by strap from its fly wheel. From one or other side of the double windlass about 800 or 900 yards of wire rope were being drawn to and fro on the Barley stubble, already covered with a dressing of manure, which lying on the surface acted under the rope as a series of friction rollers along its whole course. The land had grown roots the previous year. The subsoil plough had penetrated deeply once in every place the yard-wide intervals between the rows of Swedes then grown—and now the grubber crossing this cultivation of the previous year was jerking through the previously cultivated lines of deep tillage and crossing slowly and with greater difficulty the unmoved subsoil of the rows between them. No illustration could be apter of the ultimate effect of deep culture in altering the texture of the land and diminishing the labour of its tillage. The land was thus being thrown about in great clods—"smashed up," as Mr. Smith calls it. The 20-acre field had been begun at about 4 P.M. on the previous Friday, and bid fair to be completed before dusk on the Tuesday of our visit. About 8 cwt. of coals were being burned a day, and 13*s.* 6*d.* are paid in wages daily to engineer, windlass-man, and ploughman, two anchor men, and a boy to shift the rollers. The average work accomplished is set at 6 acres daily. In ordinary work the fuel, oil, and wages would thus cost probably 4*s.* 6*d.* an acre.

No good purpose would be served by any attempt to charge on Mr. Smith's farm the cost of rope, repairs, and interest of capital, because the apparatus is employed on only 14 days per annum, and although five horses have been displaced by it, yet the profit of its adoption at Woolston is no doubt indirect. It is the efficiency and not the actual cheapness of the cultivation done by it on a little farm like that which guides the judgment of visitors with larger farms who are thinking of following Mr. Smith's example. Of this the cleanness of the land, the productiveness of the crops, and the actual work in operation before us were ample evidence.

The steam-cultivated stubbles previously manured were being cross scarified by horses who would otherwise have been idle. It would then be ridged up in yard-wide ridgelets by horses, and afterwards subsoil-ploughed in the intervals by four horses in a row. In this, in the ploughing of Clover lea for Wheat, in cross cultivating Bean stubble for Wheat, and in working the root land for Barley, besides the work of carriage on the farm, there is ample work for three horses. Steam power is employed, as we have said, only on 14 days in the year in cultivating some 70 or 80 acres of stubbles the first time; and this is all that Mr. Smith expects of it per annum.

On a farm of 20 horses there would be work for it on probably 10 times as many days, and the charge of interest and maintenance of value would then fall lighter on each acre of work accomplished by it. The steam-engine must be used at least 100 days per annum to be made economical by the actual displacement of horse labour. That it will be often profitable, however, by the superior tillage of the greater power, even though its annual cost should be greater than that of horses displaced by it, we do not doubt. This will be especially the case on stiff clay land farms, which must be worked when dry or not at all, and which are generally injured by the trampling of draught animals.

That the plough is likely ever to be finally abandoned on such soils even the practice of Mr. Smith does not declare—for he uses it in the preparation of Clover lea for Wheat. Meanwhile, it is plain from the Woolston experience that the grubber and so-called cultivator are sufficient unassisted for cleanly fertilising tillage.

—— On the 5th of October, page 895, we gave some account of the proceedings of the "East Cumberland Agricultural Society." The subjoined letter, addressed to the Chairman by that eminent agriculturist, the late Sir James Graham, is now not without a painful interest for the admirers and friends of a great and good man—one of the founders, it will be remembered, of the Royal Agricultural Society.

"Netherby, September 16, 1861.

"My dear Howard,

"As you are to preside at the Agricultural Meeting at Carlisle on Wednesday next, I am particularly sorry that I shall be unable to attend. Every mark of kindness and respect is due to you from me: but neither my health nor spirits qualify me for a public dinner, and I must request you to make my apologies to the company assembled, and to assure them that the improved agriculture of East Cumberland is an object in which at the close of life I take as deep an interest as I have done from my earliest youth.

"Pray remember me kindly to Mrs. Howard; and believe me always

"Sincerely yours,

"J. R. G. Graham.

"Philip H. Howard, Esq., Corby Castle."

THE FOOD OF LONDON, 1861.

During the first six months of the present year the Metropolitan Cattle Market has been well supplied with beasts, which, with very few exceptions, were in excellent condition; indeed, as regards quality, the arrivals from Norfolk, Suffolk, Essex, and Scotland have never been excelled in any former corresponding period. Considering the inferior condition in which the hay crop was secured last year, and the moderate growth of other cattle-food, this is a highly important result. It shows that our graziers have shown great energy and skill in the production of food, even under the most disadvantageous circumstances; and that, whatever predictions may gain currency to the contrary, prices cannot range above a certain level for any lengthened period whilst capital can be found to meet the demands of the consumers of any kind of food. And here we may remark that much misapprehension has from time to time prevailed in reference to the number of fat and store animals in this country. In 1860, owing to the falling off in the condition of the beasts disposed of, and the unusually high rates demanded by the breeders, it was apprehended that our deficiency was such that it would be found necessary to import large numbers of stock from the Continent, whatever might be their condition, to meet our future consumption. The apprehended deficiency, however, has not had the effect of increasing our importations to any extent; and we believe that very few graziers are to be met with who, from past experience, would run the risk of endeavouring to fatten foreign stock upon any description of food. A few ventures have been made by large agriculturists, but they have nearly all resulted in a heavy loss. It may appear somewhat surprising that foreign stock generally will not fatten in this country; but so it is. Some of our best foreign beasts—those imported from Holland—are peculiarly liable to disease; and, moreover, during the three months prior to their shipment are principally fed upon grains and distillers' wash. The stock derived from abroad since the commencement of the year has not improved either in weight or condition, but has mostly carried a large quantity of internal fat, and consequently met with a ready sale at apparently remunerative prices to the owners. Some remarkably fine-looking beasts have come to hand from Spain, and been disposed of at an average of 21*l.* each. One extraordinary animal, 135 stone in weight, realised 30*l.* This, we believe, is the highest sum ever obtained for a Spanish bullock. This description of stock, however, is still described by the butchers as weighing "as light as cork;" hence none but good judges are inclined to purchase it. There has been an importation of beasts from the northern departments of France. Most of the animals were eleven years old, and had evidently been worked for several years, as they were without a particle of good or consumable food on their backs. Astonishment was expressed here that their owners should have endeavoured to find a market for them in this country. The stock had the largest barrel we ever saw; and two of the oldest beasts were 5 feet 11½ inches in height. If the French graziers desire to find a profitable market in London, they must send us something superior to this stock, which appeared to have been most injudiciously fed.

The wonderful success which has this year attended the fattening of beasts in Norfolk and Scotland has had the effect of keeping down prices to a comparatively fair level. Those recently realised, even allowing for the high currencies paid for store animals during the greater portion of 1860, must have proved a source of profit. Some of the best Scots and crosses have sold at 5*s.* 4*d.* per 8 lbs., and some prime Herefords and Devons at 5*s.* per 8 lbs. The cross-breds received from Norfolk and Scotland have come to hand in admirable condition—a proof, we conceive, that where the system has not been carried too far, it is an improved mode of production. The future price of beef will much depend on the power of the Lincolnshire graziers to furnish London with a supply. The "season" has opened extremely well, with about 1500 bullocks in very prime condition. Not a few of them show signs of crossing with the Hereford and Devon breeds, and in all such instances comparatively high rates have been obtained. Our impression is that the Lincolnshire supply, &c., is seasonably large; and that as the weight of stock is likely to increase rapidly with an abundant pasturage, the quotations have seen their highest range for some time.

The arrivals of sheep in the period under notice have been tolerably good; but really prime stock has continued to be scarce; hence there has been a wide difference between the highest and lowest prices, and a dull trade, except for prime and well-made-up Downs, Half-breds, and Leicesters. It is somewhat remarkable that sheep should not have done as well as beasts during the past season. In consequence, however, of the immense quantity of rain which fell last year, the foot-rot has made somewhat severe ravages in some of our leading districts. During the first four months of this year large numbers of rotten sheep made their appearance in the metropolis; but since then rot appears to have almost wholly disappeared; still, the sheep have not fattened so rapidly as could be desired, especially by the public, who complain loudly of the high prices charged by the butchers. Foot-rot has, no doubt, greatly interfered with the production of mutton, and some time must elapse ere the quotations will show much reduction from those now current. The Dutch sheep have not reached us in such good condition as in several previous years; and have consequently met a slow sale. The arrivals from Germany *viâ* Hamburg have continued large, some of them showing signs of a cross with our Down breeds. The prices paid, however, have been very low, viz. from 12*s.* to 27*s.* each. Several thousands have been bought for grazing near London, but they have invariably been sent into the market again after a month's run, without gain to the purchasers. The fall in the price of rough fat to 2*s.* 8*d.* per 8 lbs. (the quotation last year having been 3*s.* 2½*d.*) has tended to keep down the value of live stock, more especially as the gigantic monopoly in the tallow trade has nearly broken down; but even this decline, combined with the present high value of money, can scarcely reduce general quotations. The export trade of the country is improving; consequently, additional employment will be found for our artizans and others, the great mass of consumers in the country; and the demand for meat is likely to continue as extensive as ever, even with an average crop of Wheat and a large growth of Potatoes.

The lambing season has turned out a most productive one. At the commencement of the consuming period prices ruled somewhat high, but have since then continued to give way, until really prime lambs have so-

as low as 6s. per 8 lbs. For the most part the lambs are strong and healthy, and they come to the scale extremely well. The following return shows the total supplies of stock disposed of in the great Metropolitan market in the first six months of the present and five previous years :—

Numbers of each kind of Stock Exhibited and Sold during the first Six Months of the following Years :—

	1856	1857	1858	1859	1860	1861
Beasts ..	115,115	112,309	111,592	113,373	114,702	109,812
Cows ..	2977	2682	2917	2977	2904	3005
Sheep and Lambs	636,030	536,790	588,758	668,702	662,030	604,650
Calves ..	6125	8420	8878	7272	9515	6560
Pigs ..	15,344	13,240	13,096	14,869	14,201	15,952

The foregoing comparison shows that the aggregate supplies of beasts have fallen short of the five previous seasons; but the deficiency in the number has been more than compensated by the prime and heavy condition in which the stock has made its appearance. In the first six months of the present year the district and Irish and Scotch arrivals have been as under, compared with five corresponding periods :—

"District" Bullock Supplies.

	1856	1857	1858	1859	1860	1861
Northern Districts ..	900	..	4000	4000	4000	4700
Eastern Districts ..	51,700	60,500	66,890	7460	68,520	64,060
Other parts England	13,850	14,490	14,560	19,020	21,420	17,700
Scotland	10,008	8860	8456	10,030	5033	8712
Ireland	3400	2700	4820	2217	1477	256
Foreign	7830	9238	5649	7580	9058	12,422

The above statement exhibits a decrease of about 4000 beasts from the eastern districts, and about the same falling off in the arrivals from other parts of England. The receipts from Scotland are about 3500 head in excess of those of 1860. The show of foreign stock has considerably exceeded the five previous years. Ireland figures for a very poor number, viz. only 256 head, against 1477 in 1860, 2217 in 1859, 4820 in 1858, 2700 in 1857, and 3400 in 1856. The total importations of all kinds of stock from Ireland this year have been on a very moderate scale both as regards number and quality, and the bulk of them have been disposed of at the Liverpool, Manchester, and Birmingham markets. The average prices of beef and mutton have been as under :—

Average Prices of Beef and Mutton.

	1856	1857	1858	1859	1860	1861
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
BEEF :—						
Inferior	3 0	3 2	3 0	3 2	3 6	3 4
Middling	3 10	4 0	3 10	4 0	4 6	4 4
Prime	4 8	5 0	4 6	5 0	5 6	5 0
MUTTON :—						
Inferior	3 0	3 10	3 2	3 4	3 10	3 8
Middling	4 0	5 0	4 2	4 8	5 2	5 0
Prime	5 2	6 0	5 2	5 10	6 2	5 10

Although there has been an important decline in prices in this as compared with last season, the quotations have, we imagine, been remunerative. In some quarters, however, losses may have been sustained, owing to the unusually high rates which prevailed for fat and lean stock in the early part of last year.

Great fluctuations have taken place in the value of meat both in Newgate and Leadenhall markets, which, on the whole, have been well though not heavily supplied. At one period the primest beef sold at 4s. 8d., and the primest mutton at 5s. per 8 lbs. by the carcase. The quotations now, however, are comparatively moderate.

As the grazing community in this country are deeply interested in the progress of agriculture abroad, we may call attention to some official statistics recently issued in reference to the numbers of beasts and sheep in Holland. From them we learn that in 1860 the total number of the former was 1,213,381, and of the latter only 768,373 head. The supply of beasts here given may be accurate enough, but there is evidently a great inaccuracy in the number of sheep returned. Further, we learn that in 1860 over 200,000 sheep were exported, chiefly to England. If we take the lowest possible estimate of the supplies required for home consumption, it seems impossible that Holland could spare more than a fourth of its whole stock for export: for if exports are to be continued at that rate, on a stock of considerably less than a million of sheep, the whole race must die out. We call attention to these figures with a view to their verification and correction by the proper authorities. *Mr. Robert Herbert in the Royal Agricultural Society's Journal.*

ON CHARLOCK.

By Professor J. Buckman.

There are perhaps no species in the whole list of our wild plants to which the term weed would more emphatically apply than to Sinapis arvensis and its congeners, for, as we shall presently see, these plants are not only objectionable as occupying the space and appropriating the food destined for our crops, but they are besides the breeding places of some of the most destructive among the insect pests of the farm. The genus Sinapis, merged by Bentham into that of Brassica, may be said to offer the following agricultural species :—

Sinapis arvensis, Charlock, Kerlock, Ketlock.
" nigra......Black Mustard.
" alba ......White Mustard.

Of these the first is the general Charlock all over England, but the other two species, as also Brassica napa, Wild Rape, and Raphanus Raphanistrum, locally obtain the same names as the more common species, so that in a district where all may occur, the farmer calls them "Kerlock stuff," and when either of the plants named abound, as they do sometimes, in separate localities, they are indifferently called a "sort of Charlock or Kerlock."

This want of discrimination has arisen from a general similarity, not only in the structure, but in the colour of the flowers, as the Mustards and their weed allies are Cruciferous plants, with more or less conspicuous yellow flowers. With this amount of likeness, however, the most casual observer may yet make out a decided difference by an examination of the siliqua or seed pod of different species; to aid in which we append engravings of these parts in the three commoner Mustards, of their actual size, which will be understood by the following woodcut.

The three species will be best understood by a short description of them, thus :—

Sinapis arvensis (Fig. 1). Pod more or less spreading, roundish; beak prominent (Fig. 1, *a*), with a single seed at its base. Pods and whole plant more or less rough with short bristles. Seeds the size of those of a Turnip and much the same in colour.

Sinapis nigra (Fig. 2). Pod nearly upright, appressed to the stem, small, with a minute beak (Fig. 2, *a*), more or less quadrangular in shape. Seeds small, dark brown.

Sinapis alba (Fig. 3). Pod spreading on long footstalks (pedicels), bulging with seeds; beak broad and flat. Whole pod covered with long bristly hairs.

1. The *Sinapis arvensis* is essentially an agrarian weed, tracking the arable farmer almost everywhere,

SEED PODS (SILIQUÆ) OF SINAPIS.
Fig. 1.—Sinapis arvensis. Fig. 2.—Sinapis nigra. Fig. 3.—Sinapis alba. Natural size.
a. The beak. *b.* The seed.

and it would seem that no difference of climate in our own islands, no geological condition, and scarcely any kind of crop is entirely free from it, though as a matter of course some situations, soils, and crops, will present it in greater quantities than others. Uncleaned root and Barley crops seem to offer the pest to the largest extent, so much so, that we once heard a would-be farmer exclaim "What a pity those Turnips are gone to seed," when it was one mass of Charlock. Whilst as regards Barley the fields on a bright spring morning sometimes present a complete sheet of yellow. In reference to this subject it may not be out of place to quote some verses that have been put in our hands by a Gloucestershire farmer, as if not highly polished in the matter of measure and rhyme, they contain a large measure of reason, which is much to the point.

"A Glostershire Zong on the Kerlock.

"The Kerlock plant is a zite to zee,
As it zhines in the vields like gowld;
But all yent gowld that glitters free,
I was once by my veather towld.

"Zo I'll take a heow and cut un all up,
All out of the Barley ground;
And arter that I'd like to kneow,
Where a bit of Nast* can be vound.

"But a zays, zays he, it aint no use
For to go to a girt expence;
For twull come again whatever thee doos,
For a year or two vrom hence.

"But Passon zays as every weed,
Like the Turmits and Whate we seows,
Must all come up vrom a sort o' zeed,
Zo I wunt let un zeed if I kneows.

"But I'll take a heow and heow'n all clanc,
All out of the Barley ground;
Vor if I doant let un zeed tis planc,
Not a bit ov Nast* will be vound."

This digression may not be considered as out of place, for truly if Charlock be not allowed to seed, it will soon become all but extinct, a consideration which acquires all the more force when we are told that the following estimate of seeds has been made from single plants of the tribe under review :—

Sinapis arvensis	6000
" nigra	8000
" alba	3600
Raphanus Raphanistrum	6000
Brassica napa	5100

From these figures we need not wonder at such a large outbreak of Charlock as one occasionally finds, for a few plants allowed to seed will be enough to stock a wide space, and it should not be forgotten that as the Mustard seeds are so very pungent neither bird nor beast assist in their destruction. But farmers not only let Charlock seed on their soil, but they sow the seed of this plant in a variety of ways. We once saw in the neighbourhood of Caernarvon a drilled patch of what it appears was meant to be Swedes, but on examination it proved to be 95 per cent. of Charlock, which had grown so fast as to be in flower by the time the Swedes were large enough to regulate. We could only account for this on the fact that in Wales drilling of Turnips is a rare practice, and hence the adulterating mixtures are not cared to be killed; but as in England all Turnips are drilled, Charlock seeds, of which we believe nearly as much as 30 per cent. will be found as an average of mixture in Turnip seeds, are carefully prepared for the purpose of mixing, to which end the Charlock seeds grown by the farmer are usually saved, as it finds a ready market at from 2s. 6d. to 3s. 6d. per bushel; and though we have known one farmer to sell as much as 30 bushels as one year's produce, this source of supply of "Nast" is not sufficient for the seed market, but large quantities are annually imported. Of rubbish of this sort seedsmen can always procure any quantity duly killed, so that it can tell no tales, under the market designation of 000 seed (for which see comments in the *Agricultural Gazette*).

In country districts a great deal of Charlock seed finds its way to the local crushing mills, in which case after the oil has been expressed the refuse enters into the composition of Rape-cake, which sometimes contains so much as to make it absolutely poisonous.

2. *Sinapis nigra* is found more or less upon most farms, sometimes however it is the prevailing Charlock weed. Some few years since it was very scarce on the farm of the Royal Agricultural College, which was always much subject to the Sinapis arvensis, but it appears to have been sown in some not over clean foreign Flax seed; from that crop we have traced its spread in different ways over the farm, until at the present moment the S. nigra is even more general than the S. arvensis. This is a result that we incline to think is not uncommon, as a weed new to a soil sometimes flourishes in a most extraordinary way, not only itself doing all the better for change of air and scene, but as it were waging a war of extermination among the native species. This we have particularly observed in the States where the agrarian weeds that our forefathers took over with their seeds have become as much the law about the American farm and homestead as with ourselves, all these being clear examples of how farmers have weeds after all because they sow them, and let them grow and seed.

3. *Sinapis alba.*—This is so frequently employed as a crop-plant, that probably its introduction here as a weed will surprise some of our readers; but it is, doubtless, from this source, and from this cause that it has become to be a weed. Judging from the position in which our wildest specimens are found, viz., about waste places and cultivated fields, we are inclined to consider it scarcely as a true native, but as an introduced plant; but be that as it may, we have repeatedly noticed it on the Wiltshire Downs, occurring in all kinds of crops as abundantly and as mischievous in its operations as the common Charlock itself, for which indeed it is often mistaken, and with which it is usually confounded.

During the past spring we saw two fields on the Cotteswolds, where it had quite taken possession, to the almost entire exclusion of the commoner sorts, and we incline to think that it is making rapid progress as a weed plant. In these cases, then, it has doubtless got over the farms from its cultivation as a sheep-feed; perhaps aided in its spread by the fashion of throwing

* Nast is a generic term for weeds. Picking Nast, or burning Nast, will mean picking of Couch, &c., and burning weeds.

neglected garden weeds and seeds of every kind into the ash-hole, the contents of which is usually carted on to the farm. In shortly reviewing the natural history of the three Mustards described we are compelled to consider them as almost purely agrarian weeds inhabiting our fields in a greater or less proportion according as by our agricultural processes they are encouraged or otherwise. To these plants then, even more particularly than any others, we may say—

a. NEVER SOW THEM IN ANY PARCELS OF SEEDS.

b. IF ANY COME UP NEVER LET THEM SEED ON THE LAND.

DEEP CULTIVATION BY MANUAL LABOUR.

FIFTEEN years ago I commenced double forking a portion of my land, and I have continued the system every autumn up to this time, from 4 to 6 acres every year. The depth accomplished by this process is 17 ins., and I have invariably had the lower forking or spit thrown uppermost, inverting the soil. In some cases I previously have had the land ploughed with a deep furrow to facilitate the work, but not in all. The price I give for this work is 6*d*. per rod, and half the cost of the forks, never allowing a fork to be used that is worn below 11 inches in the tines. The implement I use is five-pronged, and when new the tines are 13 ins. long, manufactured by Parkes and other makers.

I have the work done if possible before Christmas last year I was stopped by frost; before the work was completed. My men earn from 12*s*. to 16*s*. per week in favourable weather.

The result in all cases has been highly satisfactory, whatever have been the crops. I can best illustrate this by the history of one field of 5 acres for the last 7 years. In 1854 this field was cropped with Wheat. In the month of November in that year I commenced the double forking upon the Wheat stubble; the work was finished by five men before Christmas, the land left in a rough cloddy state.

	COST PER ACRE.	£	s.	d.
In 1855 This field was planted with Potatoes.	Double forking	£4	0	0
	28 bushels, Sets, at 2*s*. ..	2	16	0
	Drawing drills and planting	0	16	2
	Manure, guano, and salt ..	1	0	0
	Taking up 416 bushels* at 1*d*.	1	14	8
	Rent 2*l*.; tithe and rates, 12*s*.	2	12	0
	Hoeing and moulding up ..	0	12	0
		£13	10	10
	* 56 lbs to the bushel.			
1856 Swede Turnip Seed. After Turnip seed was carried put on 10 loads of muck, ploughed in for Rape, fed with sheep and ploughed for Wheat.	Planting the Turnips (small plants) by fork, at 3*d*. per rod	£2	0	0
	Guano and salt	1	0	0
	Hoeing twice	0	10	0
	Cutting and harvesting ..	1	15	0
	Rent, tithe, and rates ..	2	12	0
		£7	17	0
1857 Wheat, rough chaffed white.	One ploughing for Rape ..	£0	8	0
	One ditto for Wheat	0	8	0
	Hoeing	0	5	0
	Threshing Wheat, 6 qrs. ..	0	18	0
	Harrowing and rolling ..	0	5	0
	10 loads of muck for Rape ..	2	0	0
	Rent, tithe, and rates ..	2	12	0
	Harvesting Wheat.... ..	0	15	0
		£7	11	0
1858 Clover put in with the Wheat, a very full crop, cut once for hay, and afterwards fed. Manured in autumn with 10 loads of muck.				
1859 Wheat, Red.	Ploughing once	£0	8	0
	Seed, 2 bushels	0	12	0
	Hoeing and weeding	0	6	0
	Harvesting	0	15	0
	Threshing	0	15	0
	Rent, &c., as above	2	12	0
		£5	8	0
1860 Barley.—No manure.	One ploughing in autumn ..	£0	8	0
	One ditto in the spring ..	0	8	0
	Harrowing and rolling ..	0	5	0
	Seed, 2 bushels	0	10	0
	Hoeing and weeding	0	6	0
	Harvesting and threshing ..	1	5	0
	Rent as above	2	12	0
		£5	14	0
1861 Potatoes.	Double forking	£4	0	0
	Sets, 24 bushels at 3*s*. ..	3	12	0
	Drawing drills and planting at 1*d*.	0	16	2
	Hoeing and moulding up ..	0	12	0
	Taking up 266 bushels at 1*d*. per bushel	1	2	2
	Guano and salt	1	3	0
	Rent, &c.	2	12	0
		£13	17	4

The field was cleared of the Potatoes last month (September), the Potato ridges levelled by Bentall's scarifier (or plough more properly called), harrowed and rolled, ploughed once, and on the 1st of this month (October) planted with Wheat without manure; 2 acres with Hallett's Pedigree Wheat, 1 peck to the acre, 3 acres with Hunter's White Wheat, 1 bushel to the acre, the drills 10 inches apart. The latter is now up in full plant (October 16). The former may be all right, but it looks questionable. It is probable that I shall in the spring hoe in guano or some other food for the Wheat; the previous severe course of cropping may render this necessary. In the summary which follows I have taken no credit for the Clover crop, the tail Wheat, the straw, nor for the refuse Potatoes which were cooked for pigs. These items will abundantly cover any incidental expenses which I may have omitted. I see that I have not debited myself for the 6 pecks of seed Wheat in the crop of 1857; nor for the burnt earth or ashes which were mixed with guano and salt for the Potato crops, probably amounting to 200 cubic yards, costing 6*d*. per yard of 21 bushels. On two occasions only has farmyard manure been applied, ten loads each time. Guano and salt and ashes have been applied on three occasions. I have on a former occasion detailed my method of planting and cultivating the Potato, which has been with me successful; last year the deficiency from disease was made up by the price. This year the dry warm weather of August in this part of the kingdom was highly favourable to this crop.

SUMMARY OF CROPS.	£	s.	d.	EXPENSES, including Rent, Tithe & Rates. £ s. d.
1855. Potatoes.—371 bushels (56 lbs.) marketable at 2*s*.	£37	2	0	13 10 10
1856. Turnip seed.—17 bushels at 25*s*.	21	5	0	7 7 0
1857. Wheat.—48 bushels at 6*s*. 6*d*.	15	12	0	7 16 6
1858. Clover.				
1859. Wheat, red.—44 bushels at 5*s*. 6*d*.	12	2	0	5 8 0
1860. Barley.—41 bushels at 5*s*. ..	10	5	0	5 13 0
1861. Potatoes.—248 bushels at 2*s*.	24	16	0	13 17 4
	121	2	0	£53 12 8
	53	12	8	
Tenants' profit for 7 years ..	67	9	4	
,, ,, per annum ..	9	12	9	

Henry Dixon, Dorward's Hall, Witham, Oct. 16.

GRASS LAND FARMING IN IRELAND.

SOME parts of Meath were always in old Grass; other lands have been laid down with permanent seeds; but at present pasture is not rapidly extending. Neither is the largest proportion of the Grass of first-class character. The best feeding lands are found south of Trim, by Summerhill, to the border of Kildare county, a belt also stretching east of Kells, along the old coach road toward Drogheda, while there is another good tract on the coast near Malahide. These first-class grazing lands are geologically on the mountain limestone, but possess a deep strong soil or clayey loam, and probably overspread much less than a fourth of the whole county. Now, an English farmer expecting to see in these finest lands of Ireland superb pasture splendidly grazed, like England's best meadows during the summer months, would be very much disappointed. He would look for herbage carefully cropped to its proper length or shortness for bullocks or sheep respectively, and eaten close off once a-year; he would look for watchful spreading of the dung dropped by the stock, so as to prevent a tufty, coarse growth, for spudding of every destructive and encumbering Thistle, for pulling or mowing of Nettles, and bunchy overtopping Ragwort; he would look for the top-dressing of manure, brush harrowed at the very least, where second-rate Grass was to be mown for hay, and he would, of course, expect well planted hedges, neatly and tastefully trimmed, gates kept strong and in good opening and shutting order, and every pains observed in curbing watercourses, freeing the surface of low spots from excessive wetness, and generally the evidences of the high estimation in which every available rod of the Grass was held by the fortunate occupiers. But only in rare instances would these anticipations be gratified. The enclosures vary from some cosy paddocks to fields of large area; but the fences are tolerable only in some localities, generally consisting of high bushy hedge-rows—thorn half-and-halfed with Ash and other hedge-row trees, each trunk making a wide gap, sometimes growing in a ragged style upon earth and stone banks. Not very much land stands greatly in need of drainage, but what really does remains for the most part in a state of nature. The bullock pasture is long, rough, and tufty; and the prevalent natural Cocksfoot is intermixed with Plantain and an abundance of broad-leaved, spreading succulent weeds. Indeed, as only a small proportion of the graziers adopt any means of culture, dressing, or attention whatever, weeds ruin much beautiful herbage; and we see field after field of which an English midland or eastern-counties grazier would be ashamed. The better managers spread cattle-droppings—cart the dung over the field from sheltered spots and warm corners where animals have congregated in winter—and oilcake is becoming more generally used. Weeding is done, also, to some extent; though some graziers think the all-prevalent yellow ragwort does no harm, others that it draws up the Grass; yet it might be easily subdued, and sheep will eat and keep it down when young.

The neighbourhood of Kells, with its gentlemen's residences and domains,—including the Marquis of Headfort's hall and finely weeded grounds, Mr. Chaloner's, Mr. O'Farrell's, and other mansions, their surrounding parks and large farms,—is a country for foxes, woods, plantations, avenues, [illegible] row timber, keeping the country warm in [illegible] though choking it too much during the [illegible] summer, checking a free current of air over the [illegible] and insuring a torment of flies for poor cattle in [illegible] season. There are great breeders of Short-horns; [illegible] Chaloner, of Kingsfort, Moynalty; Mr. K[illegible] Cabra, Kells; Mr. Barnes, of Westland, Moyna[illegible] Booth of Ireland," who shows you a herd with [illegible] a bull as "Dr. M'Hale," cows of Booth and [illegible] blood, of Bates' "Waterloo" tribe, and [illegible] But cattle are chiefly purchased as stores. [illegible] buy at Ballinasloe and other autumnal fairs [illegible] a fourth of the next summer's stock, and [illegible] them thinly (perhaps one bullock to five or six [illegible] acres) with hay. At the spring fairs in Lo[illegible] ford, King's County, and Westmeath, they [illegible] bullocks and heifers; stock the Grass fully in April [illegible] the beginning of May, and from July to October [illegible] cattle keep going off fat from the best lands, or from the majority of bullock pastures, as three parts beef, [illegible] be topped up by the stall feeders of other distr[illegible] Cattle that have not been housed in winter are always preferred to such as have been thus made tender, the beast that has been out and exposed feeling and responding to every change towards warmer spring weather, while the house cattle shiver in every cutting wind. A beast is considered to improve in value in the 12 months (winter and summer grazing) 12*l*. or even 15*l*. on the very best land; ordinarily 7*l*. or 8*l*. is a fair average, allowing for losses and occasional dear markets for stores, and latterly the distemper has been a serious drawback upon the profits of grazing. Of course, the number of head of stock land will carry depends upon many and various circumstances, few farmers, indeed, being able to say at once what their average experience may be. But the best cases are somewhat as follows:—Prime pasture (the exception, not the rule, in Meath) fattens the largest store ox per Irish acre between May and the latter end of autumn, or else a couple of "$4\frac{1}{2}$ cwt.," or 36 stone heifers. This is at the rate of eight big bullocks or 16 small heifers to 13 statute acres—not at all comparable to what some of the finest English grazing lands do. For summer grazing no land in Meath, and consequently nowhere at all in Ireland, can compare with the fine fattening grounds of Northamptonshire, Leicestershire, and of Lincolnshire, including the north marshes along the Humber [illegible] the shore down to Boston, and those towards Wisbeach and Lynn. Grass is permitted to [illegible] away rather than eaten close as in England, [illegible] waste should be incurred by excessive trampling [illegible] this rainy climate. But Irish differs from Eng[illegible] Grass in this—that it is earlier in spring, less [illegible] to parch and burn up in a fervid summer, [illegible] more abundant late in autumn, and continuing good bine through most of the winter. The climate also favours the winter exposure of stock; and Mr. Barnes (for instance) leaves his incalvers out [illegible] winter till within a short time of calving. The trees and tall hedges greatly add to the winter warmth of the enclosures; might not the thoroughly-stocked fields of the Lincoln marshes, all summer white with sheep and gay with horned cattle, copy a leaf out of the Meath book, and plant beside their reedy ditches, and clothe the bare shelterless green plains with Quicks and timber, only preserving, as they would, more neatness and moderation in the case?

The rent of Grass land in Meath is from 30*s*. to 50*s*. and even 60*s*. per statute acre. Most of the large farms, not demesne lands, farmed by the proprietor, are under lease; small farms were very commonly leased, but as the leases expire tenancy at will [illegible] becoming more extended. There is no chance of [illegible] stranger getting hold of a grazing farm here, [illegible] selling and reletting are both rare occurrences. [illegible] customary, however, to a very considerable extent [illegible] single fields by auction or by private bargain for [illegible] season—say, from the 1st of April to the 1st of Janu[illegible] a grazier often getting a piece over and over again, [illegible] sometimes dealers hire, proving very careless man[illegible] One agent this year let a thousand acres in this [illegible] meal method. The buildings on a large grass farm [illegible] not extensive, often comprising only the residence, perhaps not that, a herd's house, and a shed or two [illegible] sickly animals. The "herd" is generally well off; [illegible] paid a sum of money, allowed to graze a certain number of cows, and so on, and himself hires, lodges, and [illegible] the few hands required.

From this brief notice of the crack grazing county [illegible] is clear that Grass lands naturally so luxuriant [illegible] only a high style of management, like the best English practice, to raise them to a wonderful pitch of [illegible] ductiveness. As it is, the Meath graziers should consider whether their pastures are not actually deteriorating, for the improved animals, being more thrifty [illegible] food than the oxen and sheep of a generation back, ought to be found in greater number in each field if the herbage be really no less rich and abundant. *The Correspondent.*

Home Correspondence.

Morecombe Bay—Jersey Cow Cabbage.—A few plants of the Jersey Cow Cabbage were brought from Jersey last November, and are now growing in a shelt[illegible]

position at Blawith, near Grange, Morecombe Bay, with great luxuriance; the Cabbages are from 4 to 6 feet high and fully equal to those seen in Jersey. Would any advantage be gained by a large growth of these Cabbages, and would you advise an extended cultivation being tried? *A Subscriber.* [The account our Correspondent gives is the best possible encouragement he could have to the extended cultivation of the plant. There is, however, no advantage in growing unless they can be consumed while the crop is good; for it cannot, like Turnips and Mangel Wurzels and even the Drumhead Cabbage, be stored away for use.]

Breeding of Cattle, &c.—Can you, or any of your readers inform me whether it ever occurs that a cow, mare, ewe, sow, &c., may be put repeatedly to a particular male (known to be potent) and yet not conceive; but when taken to another male at once proves fertile. I have a physiological reason for wishing to know whether this be the case, and should be grateful for information. *C. D.*

Earth Sewage.—Allow me through your columns to thank Mr. T. C. Brown for his public approval of my system. At the same time let me observe, 1st, that in his experience up to the time he wrote to me, about a twelvemonth since, he seemed not to care, so far as I can recollect, that the earth used should be sifted or even dried. Now, both sifting and drying are not only needful for the ready use of the earth, but they add greatly to its deodorising efficacy. 2d, Mr. Brown writes, I think, without having seen one of my closets. If he had seen one I think he would scarcely say that any mechanism for throwing the earth could be either more simple or so effective as that which I have adopted. 3d, the repeated use of the same clay or earth is, of course, intended only where either it is difficult to procure earth or to obtain a concentrated manure. But I must say that to myself it is a great convenience; first, that one cart-load of earth will suffice me with a family of seven persons for a twelvemonth, and next that when I want to apply manure to my garden I may do it by handfuls instead of barrow-loads; and if ever this manure is to become (as surely it must) an article of commerce, what more important than this concentration of power through repeated action? *Henry Moule, Fordington Rectory, Dorchester.*

Societies.

Worcestershire.—At the annual meeting of this Society, under the presidency of the Earl of Dudley, Sir J. Pakington, M.P., said that he had seen no reason to change the opinion which he had expressed a year ago in that room, to the effect that when agricultural skill had been acquired, agricultural science exercised, and capital in proportion to that science brought to bear on the cultivation of the soil, the tenant was entitled to some better security than a mere yearly holding. He had recently let a large and excellent farm to a new tenant, and on going over it the other day he found that the tenant had started in a way which gave him the greatest satisfaction. It was clear to him that his new tenant was a man of skill—a man of enterprise—and that he possessed, and was expending capital upon the land. Accordingly he inquired of his agent whether the new tenant had not asked for a lease. The reply was that the tenant was aware that he never wished to part with a tenant without good reasons, and that he was quite willing to remain a yearly tenant. Now, he would say that the tenant here made a great mistake. He would not enter into the question whether he was right or wrong with regard to the views which he entertained on the matter; but it must be remembered that life was uncertain, that circumstances might change, and that the tenant ought to think of his own interests and the interests of his family, and to take some security for his investment. He (Sir John Pakington) had another tenant who had lived with great respect and credit on his estates, and who a few years ago had expressed a great dislike to the leasing system. In fact, he had shared in that panic—if he might so speak—which had followed the repeal of the corn laws; but latterly he had expressed a wish to have a lease of the farm for 21 years. He would draw an inference from these two facts—first, with regard to the case first cited, that the opinion was gaining ground that farming to be successful must be made a science, and that if a man was to live by farming he must conduct his business on the same principle as other commercial pursuits. The inference which he would draw from the second case was that we were growing wise by experience, that to do well in farming capital must be invested in the land, and that when once it was thrown into the land the tenant ought to have some security that he should get it out again. He believed the solution of the great agricultural problem was to be found in three conditions. First, that no man should undertake a farm until he had made himself acquainted with his business; secondly, that no man should undertake a farm that was larger than the capital which he had to expend upon it; and, thirdly, that when he threw his skill and capital into the cultivation of the land, he should take care to stay there as long as his interests required.

The Earl of Dudley spoke on the subject of farm leases, which had been mooted by Sir J. Pakington, and asked whether the refusal of leases had come from the owners of land, or whether it arose from the indisposition of the tenants to accept them. (A Voice: "From the owners of land, my lord."). He held not that the landlord refused to grant leases, but that the English tenant was disinclined to accept them. ("No, no.") Did they mean to say that, as a rule, the owners of land had refused to grant leases? (A Voice: "As a rule certainly, my lord."). If that was the case, then his argument went for little; but he was bound to say, that in the proportion that they found the landlords refused leases there were more willing to grant them. He would speak for himself, that if he could get a tenant who could and would do his duty to the land, he would only be too happy to grant a lease to him, which even his death should not make void. (Loud cheers, and a Voice: "That's the sort of landlord to have!") He would remind them that they were not talking mere popular sentiment there, but that they were uttering sentiments by which they would, as men, be bound out of that room, and he maintained that if English tenants—he did not say Scotchmen—if they asked for leases it was because they were pressed to get more out of the land than had been got before. Alluding next to the progress of agriculture in Scotland, he said they found there permanent steam-engines at work on farms in the extreme north that had been reclaimed from the moor side. He did not know any farmer in Worcestershire who had got such an engine. (A Voice: "I have.") Then it did him honour, but it was not the common lot of farmers in that county.

Farmers' Clubs.

Vale of Evesham: *Fattening Cattle: Food-producing Capabilities of England.*—Mr. Henry Hudson said, the extreme fattening of store animals very much deteriorated the value of a good deal of the stock of this country for breeding purposes. What he himself held was, that store animals ought to be fed with store food, and fattening animals on fattening food. He would take one animal, for instance, a hilt. He had seen some of them shown which were so fat as to be utterly useless, and had known instances where they had died from over-feeding on the road to the place of exhibition. Others of excellent stock he had seen taken to the slaughter-house immediately after being shown, because although such fine animals, they were quite worthless for any breeding purposes. Therefore, he said, unless they dispensed with corn feeding, they would never achieve the amount of good for breeding purposes which was at first contemplated when these societies were established. Mr. Hudson then alluded to a restriction placed on the premium to be given by the Duc d'Aumale for Mangel Wurzel, for which no one was able to compete unless the land had been in tillage for a number of years. Why was that restriction? If they were forbidden to grow Mangels in superior soil, he thought they ought not to allow corn to be introduced in the feeding of animals when they were to be used for store purposes.

Mr. E. Holland, M.P., thought the fewer restrictions there were the better with regard to any kind of animals. It would be all very well if they bred animals for the sake of showing them at their annual exhibition. But they did not do that—their great object was to benefit themselves by breeding for profit. His experience was that whatever the kind of animal was to which they were paying attention, for the first year they ought to feed it as well as they could. As farmers they had to consider the best possible way of producing the amount of additional food that was required for an additional and growing population. England was but a small island, with a rapidly increasing number of inhabitants, and the extra space required for their habitations detracted from the food-growing area of the land. The area thus taken from the food-growing land of England amounted every year to a large space. Many years ago it was calculated that the habitations for the increased population took up an area as large as the whole of Birmingham. Then, again, the railways occupied a great deal of the soil, the line between Birmingham and London alone covering upwards of 6000 acres in its course. Now, all this land took from the food-growing area of the country, and they had no means of making up the deficiency. There were a certain number of millions of acres under cultivation, and with that space they had to deal. So that the thing before them was this, that in consequence of the increase in the population there was a very great demand for additional food, with a decreased area for growing it. Then came in the demand for science, and the expenditure of capital upon improvement, in order that it might be tried whether, by science and skill, the supply might be made equal to the demand. That was what had to be done, and he could only say that through the existence of this and other societies, and through the facilities afforded by the railways, and from the increased intelligence of the agriculturist, much had been done towards a satisfactory solution of the problem. In the year 1840, when the Royal Agricultural Society was first established, a paper was prepared by Mr. Pusey, and if his (the chairman's) recollection served him right, the amount of land under cultivation, of some kind or other, in this country, was in that year 48,000,000 acres; the value of the Wheat grown was 21,000,000*l.* and of Beans, Peas, &c., 17,000,000*l.* and of Grass 6,000,000*l.* He mentioned these facts to show the immense demand upon the resources of the farmer to meet the increased supply. Since 1840 the progress of the country had been so great, that we might be now said to cram 50 years into every one. With the progress that has been made there was a greater demand for what were now the necessaries of life, but which were formerly, to the poor, almost luxuries. In former days meat was almost a luxury, and now the consumption was very great, for when once a community commenced eating meat, it never left it off, and consequently there was a largely increased demand in that respect. And how was it being met? Of course the increased grain crop enabled them to do something in the matter, but then that was but an element in the affair. Then also there was the advantage of having crops off land which formerly was allowed to lay fallow, and which took two years to produce one crop of grain. Under the present system, instead of leaving the land fallow, a root crop was raised on it, which of course produced food for much of the additional cattle. Turning to the treatment of the soil, Mr. Holland remarked that in that part of the country the great object was to try and get rid of some of the clay by burning the heaviest portion of it. Now if they burned clay which had gravel under it, they would be doing their best to ruin the land, because the nature of burned clay was to allow everything in the shape of manure to run through it and become lost. This had been proved very satisfactorily in the course of some experiments that were made a few years ago. Professor Way, who made the experiment, had two large boxes made: one of them was filled with burnt, and the other with unburnt clay. In these a strong solution of salt and water was poured, holes being left at the lower part of the boxes for the solution, after percolating through the clay, to escape by. It was found that that which ran through the unburnt clay came out almost tasteless, whilst the burnt clay allowed the solution to come away almost as strongly impregnated with salt as when it was first poured into it. The advantage of burning clay was, that in doing so a very large portion of the ground was laid open to the action of the atmosphere, which was of great service, for a large amount of nitric acid and ammonia came down from the sky and strengthened the soil, if the earth was only open to receive it. And that there was some value in that, was seen from the fact that every bushel of Wheat was known to contain six pounds of ammonia. That was one of the advantages of deep tillage and of burning the soil upon very heavy land. In allowing heavy clay lands to be kept open under the influence of the steam plough, they were able to work with so much success, that in the end they would be able to make the whole of the clay lands an enormous kitchen garden. The result of what they had been doing in this matter was shown in the fact that some of the best roots exhibited that day were grown on the heaviest clays in the Evesham district, in which, in days gone by, it would have been deemed madness to attempt to plant a root crop. In speaking of the advantages of the steam plough, and the impetus it gave to agriculture, the speaker observed that it was an expensive machine, and too dear to be within the reach of those who ordinarily farmed clay land. In Gloucestershire the farmers had been given the advantages of the steam plough by means of a company which was formed, and he was happy to say that so much was it appreciated, that in the first year the expenses of the company were nothing like so heavy as was anticipated. There would be this difficulty first of all with the steam plough, that their fields would be too small for cultivation properly, so that they would have to be made larger by displacing hedge-rows and trees, and in this the landlord must co-operate with and take his place with the farmer. It would be to the benefit of the landlord, because the acreage would be larger, and he would then receive additional rent. In conclusion, Mr. Holland spoke of the advantages of these societies to all agricultural men, and said that by their influence numbers had been brought together, fresh ideas had been disseminated amongst them, and they had been enabled to take their stand to a certain extent as successful agriculturists, in consequence of having, with a decreased acreage, provided food for an increased population.

Reviews.

General and Descriptive Anatomy of the Domestic Animals. By John Gamgee, Principal of the New Veterinary College, and James Law, Professor, &c. J. C. Jack, Edinburgh.

This is hardly a work for the general agricultural reader. It is a text book for the student. A work of this kind has long been wanting as a manual for the veterinary student; and at the close of last winter's session Professor Gamgee and his colleague resolved that before another winter some such guide should be provided.

The profession have, we think, good reason to be proud of the energy and activity which competition has called forth at Edinburgh. The present volume is the fourth or fifth from Professor Gamgee's pen which has been published during the past few months. The two Colleges in vigorous and prosperous operation there, sending forth books and students and proficients in such numbers, stand in striking contrast to the state of things at Dublin, where no veterinary college at all

exists, and where a meeting for the establishment of one the other day, otherwise unanimous, was addressed by the oldest veterinary surgeon of the city in opposition to the project, on the ground that the veterinary profession was already over stocked and ill paid. The efforts of those who endeavour to remove the opprobrium from it of being also ill educated, will no doubt tend to its being better worth entering. And Professor Gamgee and other enegetic men of equal intelligence are doing more for the veterinarian, and through him for agriculture, than those who oppose the extension of veterinary education on the score of its being already an overstocked profession.

The work before us, relating to the animal tissues and to the skeleton, is extremely fully illustrated, and is all that the student needs for that particular branch of his education to which it relates.

Miscellaneous.

Guano Analysis.—M. Malaguti, Professor of Chymistry at Rennes, has sent an interesting communication to the Academy of Sciences on certain fertilising substances known under the generic name of guano of Patagonia. Shag guano, so called from a kind of cormorant which sailors at Cape Horn call Shags, somewhat resembles the guano of Peru; it is not very homogeneous, being mixed up with feathers, fragments of bone, and a few crystals of carbonate of ammonia. It has an ammoniacal smell, contains small quantities of oxalates, nitrates, chlorides, acid phosphates, about a third of its weight of triassic phosphate of lime, and about half its weight of organic nitrogenised substances. The quantity of nitrogen, the most important item in fertilising matter, varies in this guano between 8 and 12 per cent. Lion guano, so called from the kind of seal called sea lion, found in the cavities of the rocks on the sea-shore, which those creatures frequent, is a mixture of the remains of amphibious animals, and bones, fur, scales, and balls of a humic or earthy appearance, containing a large number of small crystals in the form of needles; also fragments of a yellowish rock, resembling sulphate of lime, crystals of struvite, and certain prismatic crystals of a brown colour, which M. Malaguti has found nowhere described. The yellowish rock has the structure of an aggregate, far from compact, of small crystals. When calcined it turns to a brilliant white; its density is 2.174, but is not uniform, the organic matter it contains, amounting to 23 per cent., not being equally distributed throughout the mass. It contains, moreover, 57 per cent. of triassic phosphate of lime, 10 per cent. of acid phosphate of lime, and the rest consists of sand, sulphate of lime, and traces of fluoride of calcium. As for the brown prismatic crystals, they are not perfectly transparent on account of the earthy particles they contain. Their true crystalline form is difficult to ascertain on account of the manner in which they are grouped, sometimes in the shape of a cross, at others of a fan, a spheroid covered with prickles, &c. Their mean density is 2.267; they are partly soluble in water, imparting to it a certain degree of acidity. They contain 23 per cent. of organic matter, 51 of triassic phosphate of lime, 22 of acid phosphate of lime, and traces of silica, fluoride of calcium and alkalies. Penguin guano does not display such a heterogeneous composition as the preceding kinds, yet it contains some feathers, bones of birds, a multitude of little white globules which pressure easily reduces to powder, and crystals of struvite. The smell of the mass is somewhat ammoniacal. When moistened it becomes acid; if brought into contact with acids it produces a slight effervescence; it contains less than 2 per cent. of acid phosphate of lime, then certain soluble salts, including nitrates, then a certain quantity of triassic phosphate of lime, aluminium, and iron; but no oxalates, or uric acid. It contains from 4 to 4·35 per cent. of nitrogen; all the phosphates it contains barely amount to 35 per cent., and they are chiefly phosphate of alumina, which renders this guano more soluble in acids before calcination than after. The white globules above alluded to are composed of this phosphate, containing 32 per cent. of phosphoric acid. The last kind of guano mentioned by our author is that quarried, so to say, from beds lying under a layer of sand sometimes three feet deep. When cut out, it is in the state of a plastic paste, which must be left to dry in the open air for three months before it is shipped to Europe. This kind also contains globules of phosphate of alumina; and though it does not contain crystals of struvite, it on the other hand has large rectangular pyramids of ammoniaco-magnesian phosphate. It contains from one to three per cent. of nitrogen, and from 16 to 39 per cent. of phosphates, but no remains of animals, such as bones, feathers, or hair. M. Malaguti believes it to be Penguin guano modified by the action of ages.

Calendar of Operations.

OCTOBER.

WESTER ROSS: *Oct.* 21.—The harvest is now completed in excellent condition on farms early and late, on hill and dale, and the latest districts have fared best. On this farm we commenced cutting with nine scythes on the 29th August, and finished carting home on 30th September. Had the weather been unbroken the work would have been completed in 17 days, as the cutting occupied only 12, and the leading six days additional, but the work was so interrupted that it was necessarily spread over from four to five weeks. On Saturday evening, Sept. 21, there remained in the field no more stooks than could have been carted home in one day, but on the morning of Monday rain began to fall and poured in such torrents that not until that day week was the remainder in-gathered. Although we had much rain no permanent injury was done, as the weather was cool and breezy. About 150 acres of Wheat, Barley, and Oats were cut in 12 days, and so soon as the cutting was completed the hands not needed for leading were allowed off. Taking no note of the wages of half year servants, all of whom were engaged in harvest work, the whole outlay for cutting, binding, stooking, leading, and thatching, was 37*l.*, or a trifle more than 4*s.* per acre. The whole hands employed were nine scythemen, nine women for gathering, nine binders, and three rakers. The bulk is less than last year, although it may be about an average, whilst the quality of the different kinds of grain is greatly superior to that of last year. The complaint of a deficient yield of Wheat is general, and we anticipate a shortcoming in Barley, also Potatoes have not been so much diseased for years, and in many places are scarcely worth lifting. With the fine weather we now have Turnips are making considerable progress, but must still fall short of an average. We have now prepared 30 acres of lea for Wheat, which, weather permitting, will be immediately sown. Never have we seen the new Grass closer or more promising than this autumn, and it now affords the stock a good bite.

WEST SUSSEX: *Oct.* 28.—We have now got into the middle of Wheat sowing, and have one of the most favourable seasons that we have had for many years; the land could not work better; perhaps, if there is any difference, it is too light, and most prefer to have it rather heavy for Wheat sowing. But this is not our case on heavy lands which will be sure to get close enough before the winter is over. There is a good deal already up and looking strong. The seed has more vigour in it than it had last year, and does not require to be so thick. We have now begun to take up the Mangel, which owing to the fine autumn has turned out a much better crop than we expected, and the late Turnips are doing well. But there may be a doubt whether the early Swedes and Turnips may not be too forward, and may not keep so well, but at present they are all right. As there is a prospect of plenty of roots, lean sheep have gone up considerably in price, perhaps from 6*s.* to 8*s.* a head for full mouthed ewes in lamb within two mouths. There are various reports respecting the yield of the corn corps, but I think it will be fair in proportion to the straw but not up to the average per acre, and some say the quality is very indifferent in some places, but what has hitherto appeared in our market is very good, whether Wheat, Barley, Oats, or Peas, the last especially so. A good deal has been done in cleaning the Wheat stubbles, and in many cases it was much wanted, as the past wet season and thin crop induced the growth of all kinds of rubbish. *G. S.*

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended October 31; observed by Mr. J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air.				Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
	Max. in Sun.	Max. in Shade	Min.	Mean.				
	Degs.	Degs.	Degs	Degs.	Degs.	Ins		
Friday 25 ..	70.0	63.0	56.5	61.5	55.5	0.27	S.W.	29.92
Saturday 26 ..	69.0	62.0	50.0	57.7	56.5	..	N E.	30.02
Sunday 27 ..	71.0	57.0	36.0	50.0	56.0	..	E.	29.97
Monday 28 ..	76 0	57.0	40.9	53.2	51.0	0 01	E	29.98
Tuesday 29 ..	65.0	51.0	34.0	46.0	53.0	0.02	N.E.	29.90
Wednesday 30 ..	67.0	51.0	39.0	49 0	52.0	..	N.E.	29.82
Thursday 31 ..	79.0	55.0	39.0	53.0	51.5	..	S.W.	29.70

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

FARM-YARM MANURE AND SALT: *H M* says, "This year I used farm-yard dung that had been salted, and my Mangels proved excellent; but Carrots and Swedes are very inferior. Is the result from the salt, or must I account for it some other way? The manure was well covered. I harrowed in a light dressing of lime previously. [It is probable that the Mangels benefited by the salt. It is not probable that the other crops were injured by it. Crude and ill-rotted dung is not good for Carrots and other roots which are injured by growing forked.]

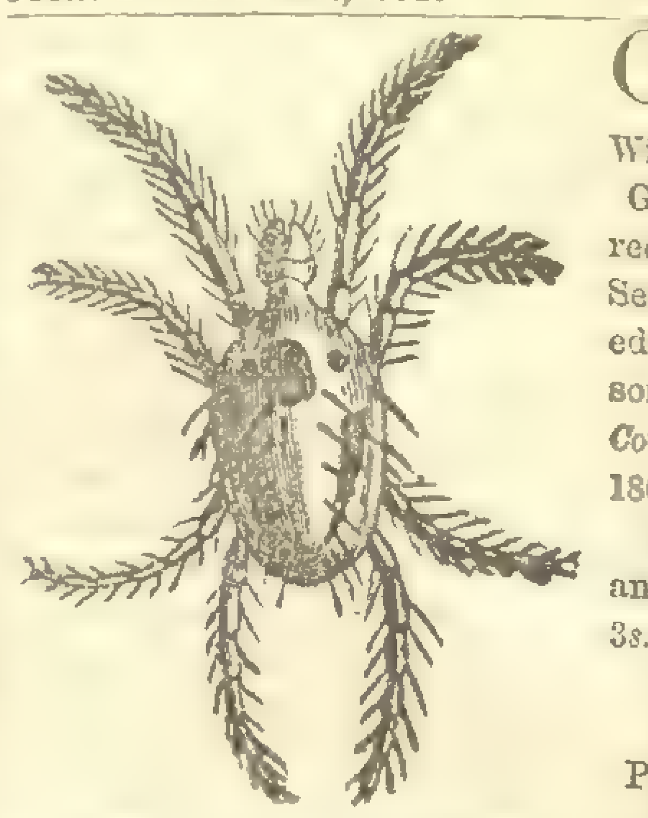
FOOTROT: *J P.* All that can be said on its treatment has been said over and over again in our columns. Mr Spooner, than whom there is no better authority, was again quoted last week. You may consult his book, "History, Structure, and Diseases of the Sheep," or his papers in Morton's Cyclopædia of Agriculture. The following is the best treatment:—"Remove sufficient horn to allow any confined matter to escape and to apply a styptic or caustic to the part, so as to prevent proud flesh growing, and to stimulate the vascular parts to secrete healthy horn. A number of medicines have been recommended and with success; muriate of antimony applied with a feather is a very convenient caustic, and so are likewise equal parts of hydrochloric acid and tincture of myrrh; a strong solution of sulphate of copper is a milder dressing, and tincture of aloes or friar's balsam is milder still. All these are useful if applied with discretion, according to the severity of the case. Another useful application, as well as a preventive, is coal tar, particularly if a little creosote is left in or added to it, and some powdered plaster of Paris over the tar will assist its drying effect. A change to a dry pasture or soil is necessary. Sulphate of lime powdered, 1 oz; sulphate of zinc powdered, 1 oz.; creosote, 1 scruple; Stockholm tar, 4 ozs.; lard, 4 ozs.; to be made into an ointment, and applied occasionally to the feet of the sheep and between the claws, first paring the overlapping horn away, and clearing everything away without drawing blood"—is a good recipe.

KOHL RABI: *Didymus.* They need not be pulled and stored. They are hardy enough for all ordinary frosts; the severe frost of 1860 1 did not destroy one in ten of a crop near us. They are especially good for sheep, growing entirely out of the ground, and being thus easily and wholly consumed. They are also good for milch cows, and may be pulled as they are wanted, and either steamed or pulped and mixed with chaff of hay.

POULTRY: There is so little variation in the quotations of the market that it is merely a repetition. We therefore offer a few remarks on the subject of supply. There is a prejudice against late chickens, and if they are intended for exhibition we can understand why, but speaking of them as food, they should be regarded with complacency. The change in the seasons that has been noted for some time, is not without its influence on poultry, and November and December are not half so trying for chickens as March and April. The long nights may cause a little trouble; cold weather may necessitate some extra food, but the chickens hatched now will make a return in March. Those who have been careful to save early pullets may do well with eggs, which will be dear for some time, and in large towns and their immediate neighbourhood should make from 2*d.* to 4*d.* each. We were much struck a short time since, when the wife of a large and opulent farmer was unable to give a sick child an egg, although it was the only thing it could fancy. A gentleman in the neighbourhood who attends to poultry was able to supply the want. We are glad to find that competent men are about to take up the question of poultry and eggs. It deserves attention as part of the food of a country.

Pigs, Pigs, Pigs.

DAMAGED RICE from 4*l.* per Ton. All other descriptions of Feeds for Pigs, Poultry, and Cattle, for Cash by W. JUPP & Co., Cattle Food Manufacturers, Great Tower Street, E.C.



RED SPIDER MAGNIFIED.

ORCHARD HOUSE TREES and VINES.—Winter wash with GISHURST COMPOUND, recommended by Mr. Rivers. See "Orchard House," edition; and see Mr. Pearson's recommendation in *Cottage Gardener*, 10th Sept. 1861.

Sold retail by Nurserymen and Seedsmen in boxes 1s., 3s., and 10s. 6d. each.

Wholesale by PRICE'S PATENT CANDLE Co. Limited.

NEAL'S PATENT APHIS PASTILS.

The following is one of upwards of 70 Testimonials received by J. NEAL from gentlemen personally unknown to him.

"I beg to bear my testimony to the value of Neal's Pastils, and their efficacy in destroying, most effectually, the Green Fly without any trouble and at a nominal expense, when compared with the use of Tobacco or even Tobacco Paper.

"JAMES SANDERS,
"Nursery Grounds, Abergavenny."

Sold by all principal Seedsmen.
Price 1*s.* and 2*s.* per packet.

Magnified Aphides.

Patentee, J. NEAL, Birmingham.

MINTON AND CO. have REMOVED from Albion Place, Blackfriars, to 50, Conduit Street, Regent Street, W. ENCAUSTIC and other PAVEMENTS, EARTHENWARE and PLAIN TILES. Designs and Estimates prepared.
Manufactory: Stoke-upon-Trent.—Nov. 2

VASES and BALUSTRADING for GARDENS executed in AUSTIN'S ARTIFICIAL STONE, which has been extensively used in Scotland for more than 20 years.
AUSTIN, SEELEY, & Co., 371—375, Euston Road (formerly New Road), Regent's Park, N.W.

Garden Border Edging Tiles.

F. AND G. ROSHER, CEMENT, BRICK, and TILE MERCHANTS, beg to invite attention to their varied Stock of Ornamental GARDEN BORDER-EDGING TILES in Terra Cotta, Terro-Metallic ware, and [illegible] ware. They present advantages over Box or Grass-edging in that they afford no harbour for slugs, &c., take up less room, and once laid require no further attention.

They may be had of various patterns at F. & G. R.'s Premises, Ward's Wharf, Upper Ground Street, Blackfriars, S.; and Kingsland Road Wharf, near the Canal Bridge, London, N.E.

N.B. Sketches of Patterns sent by post on application. Garden Vases and Ornamental Flower Boxes for Windows and Balconies in stock.

ORNAMENTAL PAVING TILES for Conservatories, Halls, Corridors, Balconies, &c., as cheap and durable as Stone, in blue, red, and buff colours, and capable of forming a variety of designs.

Also WHITE GLAZED TILES, for Lining Walls of Baths, Dairies, Larders, Kitchen-ranges, &c. Grooved Terro-metallic and other Stable Paving Bricks of great durability, Clinkers, Red and White Wall-Copings, Glazed Drain Pipes, &c.
To be obtained of F. & G. ROSHER, at their Premises as above.

PROTECTION COVERS for PLANTS.—Any size of CANVAS TARPAULINS, 9*d.* per square yard; size of a large Russia mat, 8 feet by 4 feet, 2*s.* 8*d.*; sample sent. Large Waterproof GARDENERS' CAPES, 3*s.*; do., lined with woollen, 5*s.*; do., with sleeves, lined, 7*s.*; without lining, 5*s.* POLICE CAPES, 18*s.* to 24*s.* per dozen.
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E. T. ARCHER'S "FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, &c.
PROTECTION from the COLD WINDS & MORNING FROSTS.
"FRIGI DOMO," a Canvas made of patent prepared flax and Wool, a perfect non-conductor of Heat and Cold, keeping wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. It is had in any required lengths.

Two yards wide .. .. 1*s.* 6*d.* per yard run.
Four yards wide .. .. 3*s.* per yard.
An improved make, 3 yards wide, 2*s.* 6*d.* per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1*s.* 4*d.* per yard run.

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Sold in casks of about 30 gallons each, at 1*s.* 6*d.* per gallon, at the Manufactory, or 1*s.* 8*d.* per gallon paid to any station in the kingdom.

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Amongst which are some of the finest Specimens in the Trade.

Also a fine Stock of

ROSES, FUCHSIAS, GERANIUMS, HARDY VARIEGATED PLANTS, HERBACEOUS AND ALPINE PLANTS, CONIFERS, FRUIT TREES, SHRUBS, &c.

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NEW, BEAUTIFUL, AND RARE PLANTS

OF RECENT INTRODUCTION.

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TO NOBLEMEN, GENTLEMEN, AND OTHERS ENGAGED IN PLANTING.

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As we are determined to treat on the most liberal terms, we would respectfully entreat Intending Planters to pay a visit of inspection. The Nursery is easily reached by South-Western Railway to Sunning Dale Station.

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AZALEAS.—Pink, yellow, scarlet, white, &c., for extensive planting, at a cheap rate. Good plants, 2*l.* 10*s.* to 3*l.* 15*s.* per 100.

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DWARF RHODODENDRONS.—Dense growing varieties, in about 10 kinds; some are delightfully scented; they are very suitable for edging to clumps of the larger growing kinds, or for filling winter beds. 12 to 15 inches, 5*l.* per 100.

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PINUS NORDMANNIANA.—Of this fine species we hold the largest stock of really handsome specimens in the Trade.
1 to 1½ ft., very bushy, 21*s.* each | 2 to 3 ft., very bushy, 42*s.* each
1½ to 2 feet do. 31*s.* 6*d.* ,, | 3 to 4 feet do. 63*s.* ,,
4 to 5 feet, very bushy, 105*s.* each.

PINUS JEFFERYANA.—The most beautiful of the Californian long-leaved Pines.
2 to 3 feet, 7*s.* 6*d.* each | 3 to 4 feet, 10*s.* 6*d.* each

PINUS BENTHAMIANA—
2 to 3 feet, 5*s.* each | 3 to 4 feet, 7*s.* 6*d.* each

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1 to 1½ feet, 30*s.* per dozen | 2 to 3 feet, 5*s.* each
1½ to 2 feet, 3*s.* 6*d.* each | 3 to 4 feet, 7*s.* ,,

PINUS LASIOCARPA, or PARSONIANA—
Small plants, 6 to 9 in., 10*s.* 6*d.* | 1½ to 2 feet, 63*s.* each
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PINUS INSIGNIS—
2 to 3 feet, 30*s.* per dozen
3 to 4 feet, 42*s.* per dozen, or 15*l.* per 100
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5 to 6 and 7 feet, 7*s.* 6*d.* each, 4*l.* 4*s.* per dozen

PINUS PINSAPO—
2 to 3 feet, 10*s.* 6*d.* to 21*s.* each
3 to 4 feet, very handsome, 31*s.* 6*d* each

PINUS GRANDIS } true, about 6 to 9 inches, 5*s.* each
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2 to 3 feet, 30*s.* per dozen | 3 to 4 feet, 42*s.* per dozen
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PINUS MENZIESIA—
3 to 4 feet, 36*s.* per dozen, or 12*l.* 10*s.* per 100

THUJOPSIS BOREALIS—
1½ to 2 ft., 3*s.* 6*d.* each | [illegible]

THUJA AUREA—
1½ to 2 feet, 5*s.* each, 42*s.* per dozen, or 15*l.* per 100
2 to 2½ feet, 7*s.* 6*d.* each, or 84*s.* per dozen
2½ to 3 feet, 10*s.* 6*d.*, and 21*s.* to 31*s.* 6*d.* each
larger, 42*s.* to 63*s.* each
This is a plant of which we are large growers, and would strongly recommend our larger sizes as being in every respect most perfect specimens.

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2 to 3 feet, 7*s.* 6*d.* each | 4 to 5 feet, 31*s.* 6*d.* each
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A very beautiful gold-striped variety of the preceding species, raised by us from imported seed.

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2 to 3 feet, 3*s.* 6*d.* each | 3 to 4 feet, 5*s.* to 7*s.* 6*d.* each

JUNIPERUS HIBERNICA—
3 to 4 feet, 30*s.* per dozen, or 10*l.* per 100
4 to 5 feet, 42*s.* ,, or 15*l.* ,,
5 to 6 feet, 5*s.* to 7*s.* 6*d.* each
6 to 8 feet, perfect columns, 10*s.* 6*d.* to 21*s.* each.

TAXUS HIBERNICA (Irish Yew)—
4 to 5 feet, 42*s.* per dozen | 5 to 6 feet, 7*s.* 6*d.* each
larger, 10*s.* 6*d.* to 21*s.* each.

TAXUS ELEGANTISSIMA—
Silver-striped variety, fine specimens grafted on the leading shoots of the Irish Yew, 4 to 5 and 6 ft., 10*s.* 6*d.* to 21*s.* each

ARAUCARIA IMBRICATA—
3 to 4 feet, 21*s.* each | 5 to 6 feet, 63*s.* each
4 to 5 ft., 31*s.* 6*d.* to 42*s.* each | 6 to 8 and 10 ft., 84*s.* to 147*s.* do.

RETINISPORA ERICOIDES—
2 to 3 feet, 3*s.* 6*d.* each | 3 to 4 feet, 5*s.* each

CEDRUS DEODARA—
3 to 4 feet, 42*s.* per dozen | 5 to 6 feet, 7*s.* 6*d.* to 10*s.* 6*d.* each
4 to 5 feet, 5*s.* each | 6 to 8 & 10 to 12 ft., 21*s.* to 63*s.* ,,

CEDRUS LIBANI—4 to 5 feet, 42*s.* per dozen.

WELLINGTONIA GIGANTEA—
15 to 18 inches, 5*s.* each, 42*s.* per dozen, or 15*l.* per 100
1½ to 2 feet, 7*s.* 6*d.* each, or 84*s.* per dozen
2 to 3 ft., 10*s.* 6*d.* to 21*s.* each | 3 to 4 & 5 ft., 31*s.* 6*d.* to 63*s.* each

STANDARD BAYS, very handsome—
4 to 5 feet stems, 42*s.* to 84*s.* each

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STANDARD WEEPING HOLLIES, beautifully formed plants:
6 to 7 ft. stems, 31*s.* 6*d.* each | 8 to 10 ft. stems, 42*s.* to 105*s.* do.

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in handsome plants, 2 to 3 and 4 to 5 feet

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The best Twelve Hyacinths.

SEEDSMEN BY APPOINTMENT. Sutton and Sons

SUTTON'S BEST TWELVE HYACINTHS Imported can be supplied for 12*s.*; Second best, 9*s.*; very good, 6*s.*

Also, fine mixed DOUBLE HYACINTHS, for Beds and Borders (all fresh imported), 3*s.* per dozen, or 21*s.* per 100.

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RHODODENDRONS for forcing; KALMIAS for forcing; and a magnificent stock of all the finest kinds of Rhododendrons in the world. CONIFERS and Hardy EVERGREENS by the 100 or 1000. ROSES and a General Nursery Stock well worthy the inspection of intending Planters or Nurserymen.

The Gardeners' Chronicle.

SATURDAY, NOVEMBER 9, 1861.

MEETING FOR THE ENSUING WEEK.

THURSDAY, Nov 14	} Crystal Palace Chrysanthemum	.	Noon
FRIDAY, — 15			

To the report in another column upon the great November meeting of the Royal Horticultural Society we have little to add, except unqualified praise of the exhibitors. The Chrysanthemums were superb as a whole, and suited the fine Conservatory in which they were shown. We must, indeed, except some specimens trained and pruned to imitate trees, for which the plant is quite unsuitable; this, however, was an example of bad taste, not of bad gardening. Some pyramids were cleverly managed; but the hero of the day was an

enormous bush of the lilac Christine, exhibited by Mr. South, Gardener to G. Tyson, Esq., of Upton; from top to bottom it was of faultless beauty.

Of the Fruit we shall only say that it did honour to English skill, especially the Grapes, which for colour, size, and thoroughly good management were in general unsurpassable. If the French, under their brighter sun and warmer soil, could beat us with Chasselas de Fontainebleau, we might claim the victory with Muscats and Black Hamburghs. In other words in Grapes we do with skill alone what our clever neighbours achieve with climate and skill combined. What their climate does for them was unmistakeably shown by a most remarkable exhibition of French Apples and Pears. Under no conceivable circumstances can England produce such White Calville Apples or Uvedale's St. Germain Pears as appeared in Mr. Lewis Solomon's collection. They were the amazement of most visitors, and the admiration of all. It would, however, have added greatly to the value of this exhibition if the fruit had been correctly named, instead of bearing the erroneous names of fruit stalls in a market. To this we have alluded more particularly in another place.

In conclusion, we may observe that nothing could prove more unmistakeably the mighty progress that gardening is making here, than such an exhibition as that of Wednesday and Thursday last; and we trust that when people from all the regions of the earth shall next year flock to the grand Exhibitions at Kensington, they may find our English power still more worthily represented.

We add the following from a Correspondent more learned than ourselves in Chrysanthemums:—

And first of the novelties then and there produced, undoubtedly the finest new variety shown, and this a very decided acquisition to the class of white flowers, was the Lady H. St. Clair from Messrs. Downie, Laird, and Laing. This flower was in every way first class, and is decidedly the best white Chrysanthemum yet produced. Three cut blooms were shown, the finest of which measured about 4 inches in diameter, and 3½ inches in depth, the centre being very high and full and well incurved; the colour white with a very slight mellow creamy tint. This variety had scarcely come into bloom, only one of the flowers shown being fully developed, so that we may expect to see more of it in the course of the season. *Another flower equally in advance of the rest of its class* was Smith's General Slade, shown by Mr. Salter. This was a flower of the colour and character of the good old Two-coloured Incurved, upon which it was, however, a very decided improvement, the flowers being large and compactly built up of short incurved florets, which when rather more developed, must form a close convex surface; the colour here was one of those coppery reds so common among Chrysanthemums, brightened up by the golden tips brought into view from the incurved position of the yellow-backed florets. This is no doubt a first-class variety.

Perhaps, however, the most novel in character was after all a canvas-striped sport called Striped Queen, obtained by Messrs. Downie & Co. This, as we learn, is sport No. 2 from a white sport of the old Queen; and what is very remarkable, part of the stock grown at Edinburgh is still white, while another part grown in London is striped; two plants in one pot producing flowers uniformly and constantly flaked with purple on a blush white ground. The stripes are not very bold, but they are abundant and unmistakable, so that here, as far as we know, is an entirely new character into which this grand autumnal flower has "broken." It now rests with the fortunate possessors to "fix" so desirable a feature.

A flower very similar in style to the grand white variety from Downie, was that named Carissima from Mr. Salter. We expect by-and-by to see this in first rate condition, but on the present occasion the only open bloom on the plant was hardly enough developed. It had, like Lady St. Clair, which it seems to resemble closely, broad incurved florets, but the colour is rather of a sulphury than a creamy white.

In the Pompone class a very curious and rather striking-looking variety named Bessie was sent from the Royal Gardens by Mr. Ingram. It is a free blooming dwarfish sort, with Ranunculus-shaped flowers, of which the ground colour is a coppery red, mottled, and shaded towards the centre with yellow, and towards the circumference with rose colour, which variety of tints give to it a singular bizarre appearance.

Of the foregoing, as will be seen from our advertising columns, the Sub-committee of Censors awarded First-class Certificates to General Slade and Lady H. St. Clair, and Commendations to Carissima, Striped Queen, and Bessie, a decision from which we should only dissent by giving Carissima a higher award, which it may however yet obtain on some subsequent occasion.

Of the remainder we can speak less favourably. The best of them, we think, were the following, all from Mr. Salter:—Smith's Sparkler, a neat-looking variety, falling into an intermediate class, neither large-flowered nor pompon, a comparatively small flower therefore, the colour a rich deep brownish red, relieved by the slightly evident yellowish backs of the incurved florets; Salter's Julie Grisi, a pale lilacy rose, lighter coloured at the back, with broad, moderately incurved florets, but not yet assuming a form which is quite satisfactory; and Smith's Ion, a very fine medium-sized white, high, and neatly incurved, but not full enough. Probably these may yet appear in better condition. Beside them, Mr. Salter showed Smith's La Belle Blonde, a large white with rosy tint at the circumference, but inferior to Vesta; Clark's Lord of the Isles, a moderate-sized yellow, reddish towards the outsides; Dido, a moderate-sized white with sulphury tips; Smith's Dr. Brock, a coarse dull variety, with long incurved florets, pale purplish red inside, and yellowish outside; Smith's Her Majesty, a blush white; and the following Pompons:—Sagitta, blush; Acis, straw-colour; Sienna, pale coppery orange; Turban, yellow; and Belle Sauvage, dull red; none of them having any striking properties.

Next, as to peculiar older varieties. The most beautiful flower in the whole exhibition was Jardin des Plantes, a large well formed half Ranunculus-like, but slightly incurved yellow, of the richest and most brilliant golden hue. Another of remarkable beauty was Wonderful, a rich bright purple crimson. Another gem, again, was Vesta, white, with a faint roseate tinge at the circumference, a charmingly delicate flower. And still another was Novelty, a blush white, round as a cricket ball. Remarkably fine samples of all these came from Mr. Bird, and they were freely dispersed through the collections of cut flowers.

Amongst the Anemone-flowered varieties we noticed one, Louis Bonamy, in which the smaller central florets seem constantly to assume the two-lipped gaping character mentioned some time since as characteristic of some large-flowered Japanese varieties, *to which the name of Dragon Chrysanthemums* was then given. The same feature was more or less evident in some of the flowers of Gluck and of Marguerette de York.

A word or two as to the various forms in which the plants were produced. There was first and best the roundish or bush-formed specimens. Then there were the flat-headed or table formed, some quite flat, some slightly convex, and some more decidedly convex, like dumpy hillocks; the pyramidal or extinguisher formed; the depressed cone formed; and the standard or tree like. All these were represented by well managed and well bloomed specimens. It was well for once to see these various modes of manipulating the plants brought into juxtaposition, in order to judge of the effect produced by each, but the comparison once made the less that is seen of the majority of them in future the better. The bush-formed plants were undoubtedly far—very far preferable to any of the rest. It was the most natural, being a mere dwarfing and guiding into a gently rounded outline of the proper upright growth of the Chrysanthemum. It was the most effective and beautiful, as giving an idea of completeness and freedom from restraint, while at the same time the flowers were really shown off to advantage, and a true test was applied to skill in cultivation. Next to these in effectiveness stood the tree-like plants—at least such of them as were well-managed, but we cannot profess any strong admiration for their moppish heads, even at the best, and they are execrable at the worst. As for the rest, if societies continue to offer prizes in such form as to admit of the plants being tortured into monuments of misdirected skill, as ugly as they are deficient in taste, we suppose the growers will reproduce the flattened and extinguisher specimens which were so conspicuous by their deformity on the present occasion; but we really hope for better things.

We have scarcely left ourselves space to mention a very nicely arranged plant case, sent for exhibition by Miss Maling, the authoress of a clever little book on in-door gardening noticed some time since in our columns. The case was a glazed parallelogram, measuring about 46 inches by 20, and of proportionate height; and contained only small plants of Caladium Chantinii and Belleymei, a small double white Camellia with two blossoms, Dracæna terminalis, Erica hiemalis, and Pteris argyræa—these being the larger and more conspicuous objects. Then there was a Myrtle, the small-leaved Begonia Dregei, Adiantum formosum, and Davallia dissecta, officiating as evergreens; and Pteris tricolor, Begonia Griffithii, and a dwarfed Gesnera cinnabarina, dwarfs with richly coloured foliage. Of flowers there were, one red and three white Chinese Primroses, two Persian Cyclamens, a small Crowea saligna, and Epiphyllum truncatum, the latter the only ineffective object in the case. All the intervening spaces were filled up with dwarf green Lycopods. The Caladiums were distributed towards each end; the Dracæna was placed about the centre, the Myrtle, Camellia and taller Begonia were in one back corner, forming a thicket with some of the Cyclamens and Primulas peeping out from beneath them; the dwarf coloured-leaved plants were placed in front, and the larger Pteris argyræa was set as a match to the Myrtle, leaving its corner of the case less crowded and shady than the opposite one. The effect of the whole arrangement was very pleasing. The plants of the larger growing species were of course small, to suit the size of the case. The flowery element in this tasteful group was, it will be seen, very limited, but every flower was telling, except the Epiphyllum, which did not appear to us to look happily placed.

Some time since we took an opportunity of directing the attention of Colonial Governments to the importance of having good local Floras prepared for public information concerning their Vegetable products. It is now our pleasant duty to announce that Queensland, N. S. Wales, S. Australia, Victoria, and W. Australia, have resolved to cause such a work to be produced, and that it is entrusted to the skilful and experienced hands of Mr. Bentham.

The publication of this great undertaking will require, we understand, 6 or 7 volumes 8vo., of about 500 pages each, of which one volume may be expected annually.

ON SOME CHARACTERISTICS OF THE WEATHER OF OCTOBER.

The meteorology of October presents some points of a most unusual character, and therefore *merits some* passing comment. The operations on the farm during the month of October render it very important that the weather should be both warm and dry; the advantage of a good month for the sowing operations cannot be over-rated in its effect upon the next season's crops. The past month has been most remarkably favourable for all the requirements of the country. In vain the eye seeks, in the meteorological records of past years, for an October similar to the one just passed in point of high temperatures. Whether we take the 1st day of the month, the 8th, the 14th, or the 25th, the mean temperatures of which days were 11°, 10°, 12°, and 11°, respectively, they stand out from amongst all other corresponding days of past years as something very remarkable. The year 1843 is the only one which presents us with a temperature for the 1st of October anything like that of the past month; in that year, 1843, the mean temperature was 63° on the 1st, whilst this year it was a degree higher; and these are the only instances in which the mean temperature of the 1st of October was above 60 degrees during the past 50 years! The high temperature of the 8th, 14th, and 25th are also almost without precedent. But this was, perhaps, not the most remarkable feature in the month, at least it was not the only one; when we have examples of extraordinary temperatures they are usually isolated cases; and are compensated for by a number of lower readings; this has not been the case in the present instance though.

All the days of October were higher than the average, with the exception of the 28th and 29th only, which were the same as the average. If we take the first fifteen days of the month, which was the warmest period, and divide the excess equally over them all, it will give a mean daily departure from the average, in excess, of nearly 7°. This is most unusual, indeed almost without parallel. The temperature of vegetation, as shown by a self-registering thermometer placed on the Grass at night, showing the minimum, was but in very few instances below 40° during the month. The barometer was very steady, and the readings higher than is the average of the month of October; the mean reading for the month was 29.84 inches. As there was a great deal of sunshine, the thermometer registering the maximum temperature in the direct rays of the sun read very high on some days; on the 4th, it read 118°, on the 8th and 15th, 115°; and on the 9th, 13th, and 14th, it was 110°. On five nights in the month the minimum on the Grass did not descend below 50°.

The highest temperature of the air occurred on the 8th, and was 76°. The lowest occurred on the 29th and was 39°. The greatest daily range was on the 8th, the day of highest maximum reading, and giving a difference between the highest and lowest readings of 25°.

The lowest reading recorded on the Grass was 31°; it was registered during the night of the 29th. The greatest variation in the height of the mercurial column during the month was only 9-10ths of an inch; the highest and lowest readings occurred within five days of each other, the lowest being reached on the 11th, and the highest by the 16th; at other times the column was wonderfully steady.

Another feature very favourable to the country was the extreme dryness of the past month; the entire fall of rain for the month did not exceed 1 inch, being more than 150 per cent. in defect. The two days on which the most fell were the 11th and 22d, when 0.4 inch and 0.2 inch were the respective amounts. Nor was this fine weather at all partial, nearly the same degree of warmth, and, with but few exceptions, the same absence of rain, was enjoyed throughout the country. The wind was mostly from the S.W., with occasionally brisk motion; on the 17th it veered round to the N. and N.E., causing the lowest mean temperature of the month; by the 21st, however, it got back again to its former quarter, and the temperatures were again very high. In and about London fog was prevalent on a great many days in October, sometimes being very dense and wetting; they mostly cleared off towards the middle of the day. Although there was a great lack of rain the atmosphere was by no means devoid of moisture; the dews were also heavy. *C., Greenwich.*

THE GARDENS OF THE CAMP AT CHÂLONS.

It is a new experiment to permit soldiers of the armies in Europe to cultivate small pieces of ground as gardens; but this it appears the Emperor of the French is now trying at the Camp of Châlons. What the results may be we can only conjecture. In the mean time it may be interesting to know the opinions of French writers with regard to the movement, which are highly favourable, if we may judge from the following remarks by M. Victor Chatel (de Vire).

He considers the establishment by the Emperor of gardens for the soldiers at the Camp of Châlons as a step of the utmost importance. As a means of improving the food and health of the troops the measure has already proved highly satisfactory, whilst it also affords the men an agreeable and harmless amusement. But above all the stimulus which will thus be given to cottage gardening, and consequently to the production of food, is the point of view in which this innovation presents the greatest interest.

"I stated in 1850," continues M. Chatel, in an Essay on the importance of giving elementary instruction in farming and gardening in the country schools, on the foundation of parish libraries, and the formation, in connection with these schools, of gardens for agricultural and horticultural experiments, "that a taste for horticulture is essentially useful, both as regard economy and morality. It is a taste which when once acquired is never lost—which clings to home, to family, and to property, which it increases in value, and whilst it softens the manners it improves the mind; in short the cultivation of this taste has become a necessity at the present day in consequence of the continual subdivision of land and increase of population, and I may now add, of the higher wages of the working classes, who are thus enabled to live better and to consume a larger quantity of fruit and vegetables.

"Is it not from gardens that all our agricultural plants have passed to field culture? And as I said, in 1857, at a meeting of the committee organised at Valcongrain principally for the benefit of small farmers and agricultural labourers, and as I again asked at the *Société Impériale d'Acclimatation*, would not the introduction, at a small expense, into each parish in France of a kind of Wheat yielding only 4½ bushels per acre more than the sorts usually grown, save us from all danger of famine?

"An acquaintance with the nature and culture of the most useful kitchen garden plants will, in future, be gained by our soldiers in their camps; and this knowledge will certainly exercise a great influence on the progress of the most useful branches of horticulture and in improving the diet of our rural population as well as that of the inhabitants of towns.

"This great measure will doubtless be carried out, and it is to be hoped that an experimental garden for the culture of the most useful agricultural and industrial plants will be added to the vegetable garden. Each regiment might then correspond with the *Société Impériale d'Acclimatation*, and assist in bringing new and useful plants into cultivation, and it might also take part in our exhibitions of agricultural and horticultural produce.

"A good way of disseminating throughout the rural districts a knowledge of the culture of new and useful plants, for example the Ailanthus, and at the same time the management of the silkworm which feeds on its leaves, would be to practise it before the sons of our labourers, who are soldiers to-day, and to-morrow are themselves tillers of the soil. The same observation is applicable to many useful plants which are either quite unknown in our country districts, or are more productive than those at present grown. The artificial modes of breeding fish might also be shown to our soldiers where circumstances are favourable for that process being attempted.

"An exhibition of horticultural products this season, and in another year a show of agricultural produce, got up by the different regiments at the camp at Châlons, would be very interesting; and the medal obtained by a regiment at these peaceful gatherings would add to the honour of the flag to which it might be suspended [The French give the flag a medal or cross as well as the men.]

"The soldiers, presuming they had an orchard for the purpose, might also be instructed in the culture and management of the best kinds of fruit trees, especially such as are most suitable for general culture as standards, and which might be planted in the hedge of the vegetable garden or the small field on the produce of which the cow and the family live. Such instruction would add materially to the utility of these agricultural and horticultural gardens, which doubtless will be established at every garrison town. And how happy will every soldier be on quitting the service to carry with him to his family and village one or more young trees of the kinds which he formerly cultivated." [The same idea has occurred to Dr. Cleghorn in India, who has a chapter on the subject in his new work on the *Forests and Gardens of S. India.*]

HYBRID SPIRÆAS.

By M. C. Koch (Wochenschrift für Gærtnerei und Pflanzenkunde).

Spiræas are now worthy of being ranked among our most ornamental shrubs; for unquestionably they have an excellent effect, whether planted in shrubberies or in masses, forming of themselves charming groups, in which by a careful selection of species and varieties an uninterrupted succession of flowers may be obtained from early spring till the middle of summer. The following details may be of assistance in making a choice.

Spiræa acutifolia, usually called S. sibirica in gardens, comes first into flower; and it is followed by S. cana, crenata, hypericifolia; which are themselves succeeded by S. oblongifolia, chamædrifolia (confusa, Meg.), cantoniensis (Reevesii, Lindl.), ulmifolia, triloba and thalictroides. After these come the Chinese and Himalayan species with white and red flowers, as the S. bella, expansa, vacciniifolia, canescens, &c.; then the plants belonging to the same groups as S. salicifolia, which are succeeded by S. Douglasii, callosa, &c. Lastly comes the charming S. ariæfolia, which on account of its larger size should be planted in the centre of groups, as well as the S. sorbifolia and Lindleyana with pinnate leaves.

Most Spiræas have white flowers, but in some they are rose-coloured. Among such in particular is S. callosa, a native of China and Japan, and which, though long in herbariums, was only introduced into gardens a few years ago by Mr. Fortune. M. Planchon has called it S. Fortunei, because he found it differed from the true S. callosa of Thunberg. At first this shrub was carefully protected in winter, but it was afterwards found to be hardy, and that even if all its stems were killed down, it would push from the root in spring and flower very well. This Spiræa is ornamental even before coming into flower, on account of the greenish-brown tint of the extremities of the shoots; besides it is of peculiar value for hybridizing with other species. Thus S. Sanssouciana, made known about three years ago by M. C. Koch, was an accidental hybrid between this species and S. Douglasi, obtained at Sans Souci, near Potsdam. More recently a similar mule was raised by Mr. Noble at Bagshot, which was named S. Nobleana by Sir William Hooker. Another hybrid between the same species has received the name of S. pachystachys, and it is perhaps the handsomest of all. It bears considerable resemblance to S. Sanssouciana, but its flowers are in compound umbels, forming a short cone, and not in close panicles as in that hybrid. At the ends of its branches are from five to eight shoots, which are almost without leaves, and each of these terminating in a flower-spike, the whole constitutes a mass of blossoms 6 or 7 inches across. The leaves do not appear to differ from those of S. Sanssouciana. There are, besides, other hybrids of S. Fortunei, Planc. which have been obtained by crossing with S. expansa, Wall., and S. latifolia, Borkh. (carpinifolia, Willd.), which are also very interesting. One raised from the latter species by M. Billard, of Fontenay-aux-Roses, and called S. Billardi, is intermediate between its two parents, but in habit it partakes most of S. latifolia. Under the name of S. eximia, Mr. Booth of Hamburg has sent out a plant known also as S. californica, and which is very similar to, if not the same as S. Billardi. Of the rest of these hybrids some resemble S. Fortunei, and others S. latifolia. Amongst the latter is S. Bethlehemensis rubra of gardens. The Spiræa Bethlehemensis, according to M. C. Koch, is merely a form of S. latifolia, in which the toothing of the leaves is sharper; the origin of the specific name is unknown, but it may probably be derived from Bethlehem, a town in British America. The S. Bethlehemensis rubra closely resembles S. latifolia, only the flowers are like those of S. Fortunei in colour, and the under side of the leaves is grayish, as in that species. The form which approaches the closest to S. Fortunei or callosa of gardens (not of Thunberg), which resembles it most in the colour of the flowers and mode of inflorescence, is a hybrid which appears to have arisen accidentally in the Royal Nursery at Berlin, and to which M. C. Koch has given the name of S. callosa latifolia. To the same category belongs another hybrid called S. Megeliana.

A third series of forms has arisen from hybridizing S. Fortunei (callosa of gardens) with S. expansa, Wall. Two of these hybrids are more especially cultivated, namely S. expansa rubra and S. expansa hybrida; the former is very near to S. eximia, from its inflorescence being in dense panicles and not in compound umbels. M. Koch is inclined to believe that it is a hybrid of one or other of the two latter species with S. latifolia; and he entertains a similar opinion with regard to the origin of S. expansa rubra. In conclusion M. C. Koch remarks that in the *Revue Horticole* are published under new names two Spiræas which have been long known; the one called in that publication S. speciosa, he states to be S. hypericifolia, the other, named S. flagelliformis, he adds is neither more nor less than S. canescens, Don (cuneifolia, Wall.). *Journal de la Société Impériale et Centrale d'Horticulture.*

Home Correspondence.

Indian Cotton Cultivation (see pp. 946 and 967).—I last week directed attention to the fact that in America they were not indebted for their large crops to either the skill of their farming or the superiority of their agricultural appliances, but mainly to the excellence of their soils: in like manner, that the lighter crops of India were neither due to the unskilfulness of the grower nor to the rudeness of his implements, but principally to the poverty and exhaustion of the soil from long continued cultivation. The inference I wish to draw from these statements is that the originators of the Indian Cotton experiments fell into a great, but at the time, pardonable error in supposing that the large crops obtained in America resulted not from the excellence of the soil on which they were grown, but from the very skilful farming and superior implements used by the planter: while the lighter crops of India were in like manner attributed to the Ryot's ignorance of farming and the rudeness and imperfection of his appliances, in place of to the poverty and exhaustion of his soil by centuries of cultivation. Subsequent experience and comparison of results have demonstrated the fallacy of both these deductions by showing that the American planter when sent to compete on equal terms with the Ryot had no chance; the latter turning out by much the more scientific farmer of the two, raising on fields side by side, with the planter, as heavy crops and of as good staple, at half the cost; maintaining meanwhile the fertility of his land by judicious culture and rotation of other crops. The American on the contrary at once exhausted what little fertility his land retained by successive cropping, as if it were fresh prairie land till then untouched by the plough. This proceeding, coupled with the remark of Dr. Mallet as to the vast extent of "worn out" Cotton fields to be met with all over the Southern States, but too well proves that the men who grew the great crops of Mississippi were after all but tillers of the ground, not farmers; being unacquainted with the very first principle of sound farming, that of husbanding to the utmost the fertility of the land they cultivate; in place of which they, like reckless spendthrifts, lived on their capital as long as it lasted, and when all gone looked out for fresh fields to be similarly exhausted. I have deemed it advisable before entering on the consideration of our second proposition to call attention to these striking differences between Indian and American Cotton farming and farmers in the hope of guarding any of our enterprising countrymen who may think of engaging in the occupation in India against the prevalent error of supposing that the "agriculture of Hindostan is essentially rude and primitive; that their implements are most inefficient; that as to the use of machinery, the proper rotation of crops, the application of manure, the choice of seed, and, in fact, the entire round of culture, the natives are deficient." None of all this is really the case. They know their climate and the qualities of their land; their implements as I shall by and by show are not inefficient; their machinery is simple, but so far as it goes effective; rotation of crops they practise, as to its propriety or otherwise I venture no opinion, as I do not know it, but hope the writer who impugns its fitness will explains its peculiarities and point out its defects. In the application of manure they are perhaps not so liberal as they ought to be, but that they understand its application and value is well shown in their Tobacco culture, but more on this point bye and by: in their choice of seed, I had opportunities of learning that no English gardener even is more fastidious. I became acquainted with these things during the 13 years I was engaged in growing Cotton among them. I hesitate calling it farming, and think I am in a position to warn any young English farmer who may think of testing his knowledge by competing with them, that he will soon find them much better farmers than we, judging from appearances only, are disposed to give them credit for, an assertion annually verified by the large crops they contrive to raise from their impoverished land, with the humblest means and most stinted outlay. I would further add, before quitting the subject, let no Englishman attempt to compete in native products, for he will be sure to be undersold. The better plan is to take the Ryot into a sort of partnership—induce him to grow and buy the produce. You will find it a more profitable plan than to cultivate for yourself. If you can teach him a better method of procedure within his means, I always found him an apt scholar. Our second proposition is to the effect, that the writers quoted last week are of opinion, that without European energy, intelligence, mechanical skill and science, India never can replace America in supplying Europe with Cotton. To this conclusion, taken in the sense I believe the words are meant to convey, and which most people will attach to them, I am not a convert. On the contrary I feel quite convinced that, so far as providing the raw material, apart from ginning, baling, and transport, is concerned, India is quite competent to supply the wants of Europe, were they even much greater than they are, provided the consumers, that is, the "Cotton interest," will only establish and maintain a steady demand for the article. India can supply any quantity, and I think I may almost add any quality, but it must be sought for and bought on her own fields from year to year, not stored to wait a chance demand like the present. Let the demand be steady, and the supply will be ample, regular and cheap. In place of the high sounding words, "European energy, intelligence, mechanical skill and science," let us substitute European capital in the hands of judicious kindly tempered buyers, who know how to practise the virtue of doing as they would be done by, in their intercourse with the timid retiring Ryot, and India will give you Cotton enough, very nearly if not absolutely as good as America supplies. The *Times* of the 24th October oracularly informs us that "with Anglo-Saxon skill, enterprise, and money, Indian soil will yield the desired fruit." I do not very well understand the meaning of this high sounding sentence, but fancy that it is intended to inform us that if we will only transport high farming to India, then Indian soils will yield us abundance of excellent Cotton. If this be its meaning, I think it may at once be accepted as a truth, but when may we look

for the fruit? Energetic, skilful, and scientific farming will doubtless restore fertility to the most exhausted soils, but it requires time—several years at least; whereas the call for Cotton is immediate and most pressing, and we can't wait for the slow operations of scientific farming, so must, for the present, take what we can get, asking no questions. But let us suppose that European high farming has been introduced, and wherever tried has done its work of so perfectly restoring fertility, that each acre, as on the virgin prairie land, produces its 400 lbs. bale of Cotton; then a farm of 1000 acres, on a four-course rotation, gives only 251 bales, requiring 16,000 such farms, each of course under the direction of a first-class farmer, to provide the 4,000 000 bales needed for the present European consumption. England might find difficulty in providing so many first-class farms to grow cotton, but could easily spare two or three thousand commercial travellers to purchase the raw material produced by probably 16,000,000 growers, and afterwards resell part of it to them in the shape of manufactured fabrics. This I presume will be found the more feasible mode of proceeding, and if diligently followed out England need never again feel the want of Cotton so long as India remains a British dependency. Let it not be for a moment supposed that I wish to discourage the most assiduous endeavours, by every conceivable means, to improve both the productiveness of the plant and the quality of the staple. On the contrary I would suggest, as one means of helping on the inquiry, that our commercial travellers should, as much as possible, be taken from the agricultural classes. Young men qualified by taste, habit, and education, to devote their leisure to the culture of a small farm and garden, the former to be cultivated according to the most scientific and approved course of rotation and manuring, the latter being always at hand for experiments on irrigation, hybridization, &c., and for improving and confirming, by separate careful cultivation, any promising varieties or sports chance might throw in his way, either in his own fields or in those of his neighbours. Next week I shall consider the implements and style of cultivation of the two peoples. *Robert Wight.* [In the last article on this subject an error of the press requires to be corrected by striking out the inverted commas *before* Does Mr. P.; and *before* Does his Lordship.]

Rats and Grapes.—"Do rats eat Grapes?" Yes. I have a beautiful Sweetwater Grape Vine growing at the stables. It is trained above the doors and windows, in order to prevent access from below. Before I renewed these buildings, which were very old, the Hanoverian rats (always on the road to plunder) found their way to this Vine. Myself and others frequently saw them eating the Grapes. I stopped their runs effectually at the top of the wall to the slates. But who is clever enough to thwart these thieves when stomach eggs them on? Baffled at their usual runs, these hungry rovers passed over the roof; and by a dexterity almost incredible, they descended over the eaves of the building, and recommenced their devastation. It was not until I had paved every part of the buildings that I considered Walton Hall quite secure from fresh hordes of Hanoverian rats. When the fields are cleared of corn, an individual rat will at times attempt a settlement, but without success. "Maester, maester," said a lad to me some months ago, "I've nabbed a Hanoverian." "Brave fellow!" said I, and putting my fingers into my waistcoat pocket, "Here's sixpence for thee." *Chas. Waterton, Walton Hall, near Wakefield, Nov. 4.*——I have never seen rats eat Grapes, but I have caught mice in the very act. *T.*——Twelve months ago a neighbour of mine lost a great quantity of Grapes through a rat finding its way into his Vinery; it was caught however in a trap, and his Grapes were left alone. When rats or mice attack Grapes they climb up the Vine and eat the berries, leaving the bunch hanging (in many instances) a mere skeleton. *J. M., Aigburth, Liverpool.*——Rats not only eat Grapes, but Greengage Plums on walls. I one day saw the offender coming down the stem of the tree with a fruit in his mouth. *A. I.*——Rats do eat Grapes, and mice are also very fond of them. *Mc D., Tooting.*——Rats will eat Grapes, and so will mice. *G. H. Cadland, Southampton.*——Rats do eat Grapes. I once took from a rat hole a bunch of Black Hamburgh and a bunch of Royal Muscadine which they had stolen. *Thos. Brodie, Gardener, Stockeld Park, Yorkshire.*——Rats will eat Grapes. Two years ago some rats located themselves in the furnace house of one of my Vineries, and partially destroyed 12 to 14 bunches of Grapes in one night, besides entirely clearing 20 pots of Strawberry plants, using the leaves, as was discovered afterwards, to make a nest for their young. *John Bell.* [Several other letters to the same effect have reached us.]

Paris Bedding Plants.—I have no doubt that the large foliaged plant alluded to by your Correspondent is Wigandia caracasana, which is now extensively used in the Paris gardens, as are also Ferdinanda elegans, and many of the larger foliaged varieties of Canna. The first named plant is very striking, and although we could not hope to grow it as they do, yet it might be used advantageously in sheltered positions in England, I think. *D. Deal.*——The plant your Correspondent alludes to is doubtless Wigandia caracasana, which has been extensively planted, and has grown well about Paris during this warm season. *A. Z.*

Transplanting Large Trees (see p. 507).—During the month of May last I gave you a description of the removal of a large Yew tree here; your very brief, but expressive remark, was that you should be glad to hear of this tree again in the autumn. This had a very ominous sound, particularly as the weather was so very unfavourable for such an undertaking. Nevertheless, I have much pleasure in being able to inform you that the tree is perfectly healthy, and has made considerable growth. *James Harland, Bedwell, Nov. 6.*

Orchard Houses (*see p.* 927).—With such an athlete as Mr. Rivers in the field, who, as Burns would say—

> ' Has na thought but how to kill
> Twa at a blow,'

and who moreover has proclaimed himself King of the Orchard House world, it is hardly to be expected that a humble individual like myself should contend successfully; but still, as I require no triumph except the triumph of truth, I must beg of you to bear with me while I say a few more words anent the subject at issue. Permit me, therefore, to congratulate Mr. Rivers upon the great change which has "come o'er the spirit of his dream," for at page 927 we find it thus written:—"With respect to trees, standards and half standards, planted out in large orchard houses 20 to 30 feet wide and 12 feet high, I am strongly impressed with the idea [it will become "fixed"] that in two or three years after planting their luxuriant growth would be arrested by their extraordinary fertility; the dryness of the soil about their roots for several months in the year (for in winter only a small quantity of water should be given to them), and the warmth of the climate would tend to this, so that in a very few years after planting they would assume the appearance of a healthy standard Hawthornden Apple tree growing in the open air. An Apple tree of this sort, as is well known, soon becomes a mass of blossom buds, with no over luxuriance of growth. This I repeat is my impression, and I hope to be able to prove in a year or two that my calculation is correct." "Bravo, T. R." I knew you were impressible, and I am glad I have persisted in opposing your pet idea until I have disturbed its fixity, and squeezed from you an admission which will do more towards inculcating a proper system of orchard house management among your immediate disciples (and I am aware their name is legion) than anything I may write for years to come. Most sincerely do I congratulate you on this admission. Write it up in the council-room at Chiswick, tell it to the Fruit Committee at South Kensington, that the great centre of Orchard House management is no longer pot-bound, but is about to ramify on the free open soil, and "in a year or two" show us a grey old age of mature growth, with buds and blossoms or luscious fruit. But why wait for your own experiments, my good friend? Are there no illustrations of your theory in the country? Could not Basing Park, or Stanstead, or Chiswick, or Arundel, or Trentham, or Dr. Newington's, or a thousand other places in the country afford you the evidence you require; in fact would not any well managed Peach-house any day for the last half century have afforded you the information you are "impressed" with. But Mr. Rivers was not born a gardener. He was educated as a nurseryman, and hence the multiplication of plants rather than the growth of fruit was his forte. And though we may admire him as an intelligent man and an acute pomologist, we cannot, practically speaking, regard him as a perfect gardener. Mr. Rivers seems annoyed because I have not appreciated his pet idea; and described what I did not see at Sawbridgeworth, or indeed elsewhere, in pot fruit tree management. But he must blame the shortcomings of the system and not myself, for if, as was explained at the time, Mr. Rivers was so unfortunate to his own cause as to show the best Peaches upon his premises on a tree planted out, would he not have set me down for a simpleton if I had gone away without making note, and "printing it," of such a fact. Mr. Rivers' trees realised most fully what I have always contended for, the best fruit was upon a tree planted out. In pots, where there was quality the quantity was deficient, and where there was quantity there was no quality at all, or at the most only such quality as a gentleman's gardener would be obliged to consign to the cook or confectioner. All the world knows that very good Grapes are grown in pots, but the same audience also knows that much better ones are obtained from plants in the open soil. The late Mr. S. Stafford, of Willersley, used to boast 30 years ago that he could grow as great a weight of Grapes upon a pot Vine as the weight of soil the Vine was growing in; but at the same time Mr. Stafford was content to look upon pot Vines as useful auxiliaries to a supply of fruit, and not as a plan likely to supersede Nature's way of growing it. Mr. Rivers speaks of the success of my old friend and neighbour Mr. Spivey at Hallingbury. I have heard of it before, and in relation to it I would remark Mr. Spivey is not a man to keep his best productions under a bushel, but shows anything he has fit to show, and as the pot-Peaches, &c. have not been among the number, I presume we may safely assume they were not fit to show. This is the test of real merit. Let them be staged at South Kensington or the Regent's Park, and pass that ordeal successfully; then those at a distance may have more confidence in representations. For my own part I have, as an old showman, heard so much of the fine plants and fruits left at home by unsuccessful exhibitors, and it is such a common thing for cultivators to say the best fruit has been gathered, that I place but little faith in such statements. When many years ago Mr. Mills showed his 15¼ lbs. Providence Pine in Regent Street, a very learned authority in such matters was asked if somebody somewhere in Wales had not grown a larger Pine. The reply was curt and characteristic. "I did not see the Pine, and in fruit growing I make it a rule not to believe what I do not see." That is my creed. I have seen upon orchard-house trees planted out fruit as fine as any person need wish to see or taste, but I have never in pots, either at Sawbridgeworth or elsewhere, in public exhibitions or private collections, seen fruit such as I should be proud to grow myself or put upon the table of an employer. This may be prejudice, at least Mr. R. may think so; but at any rate it is prejudice on the side of progress, and not of standstill or retrogression. But we are all at times the slaves of prejudice, and Mr. R. is no exception. It is prejudice on his part to object to roof openings for ventilation as recommended by Mr. Pearson. Were it not for the expense I should like the roof of a house for Peaches and Nectarines to take entirely off; for forced or glass grown specimens never attain such entire finish, such complete perfection of growth and colouring as they do when fully exposed daily for several hours to full action of the sun and air. Thus exposed Elruge Nectarines become almost black, whilst Noblesse and some of the pale Peaches attain the colour of the Royal George; and I cannot understand why he should object to a few courses of bricks to form a base for the house to rest upon, or to a tiled pathway, if persons like to go to the expense of it. The bugbear of "bronchitis" which he has raised is mere "bosh" (Rivers again). The fact is whether gravel or tiles are used, the same quantity of water will be required by the plants, and it is the quantity of impure miasmatic moisture in the atmosphere which generates bronchitis, and not the fact, as Mr. Rivers would make it appear, of moisture being thrown on Minton or Maw's tiles, instead of on Hertfordshire gravel. If Mr. Rivers wants a bronchital atmosphere, he has only to let Moss, filth, conferva, and slime accumulate on the pots and soil, and then on a sunny day, with a north-east wind and no top ventilation, work in it for a few hours, and he will find bronchital symptoms are not difficult to originate. But enough, for I am only

> "Dropping buckets into empty wells,
> A-growing old in getting nothing out."

W. P. A.

Rollisson's Unique Pelargonium.—I quite agree with "A. P. W." in his praise of this as a decorative plant. It is one of the best Conservatory bracket plants with which I am acquainted; it also makes a fine display when trained in the form of a pyramid, or a cylinder, and grown large. Do any of your readers recollect a variety called Donna Maria? Some 35 years ago a Pelargonium was cultivated under that name, which, if my memory does not deceive me, the Purple Unique much resembles. *J. B. W.*

Mistletoe on the Oak.—M. Laisné stated before the Botanical Society of France (25th June, 1858) that he had found near Avranches (Manche), an Oak almost entirely covered with Mistletoe. (*Bull Soc. Bot.*, v. 349). At a meeting of the same Society (11th May, 1855) M. Cosson stated that he had seen this parasite upon Acer campestre at Thurettes (*Loiret*), and upon an Oak in the Forest of Troyes (Aube). (*Bull. Soc Bot.*, 1855). M. Pitra in *Botanische Zeitung* (1861, 54) says:—"The Mistletoe occurs in the vicinity of Charkov not unfrequently. * * * It grows in this neighbourhood almost exclusively on the Linden. I have also met with it upon Willows, Poplars, Aspens, Birches, Maples, and Oaks." Prof. Zuccarini (*Regensburg Bot. Zeit.*, 1833, 149) enumerates various trees upon which the Mistletoe grows. The Oak on the authority of De Candolle, Gaudin, and Schlechtendal. *D. O.*

Spontaneous Combustion of Trees (*cf. Decayed Willows*, 2nd S. xii. 235).—With due deference to Mr. Loudon, and the venerable entomological firm of Messrs. Kirby and Spence, I submit the following from the *Cambridge Advertiser* of 1843:—

"This summer the banks of the Cam exhibit an unusual multitude of those singular phenomena, cases of spontaneous ignition and combustion in growing Willows. About a week ago we observed in one instance, at a point of the river not far from Granchester, the process rapidly goin on. It was really astonishing to look upon a fine Willow, in the full vigour of vegetable health, pouring forth clouds of smoke from its half-burnt stem, and doomed speedily to expire, itself its own funeral pile. The tree which we observed last week is now prostrate: its very foliage charred, a vegetable ruin, as if stripped, shattered, blasted, and half consumed by the electric fluid."

In the autumn of 1859 I myself witnessed what I believe was another case of spontaneous combustion in a different kind of tree, the Elm. Flanking one of the gates leading to the grounds of Manpadt House, there once stood a pair of family trees, two more than centenary Elms. One of these had thrown its principal branch over the road, and this, by taking root again, formed an arch, under which the highest waggons could conveniently pass. The other—in the time I am referring to—had lost its crown, and presented a stump of some 10 feet high. That stump, partly hollow, mostly consisted of decayed wood, such as is phosphorescent in the dark, and, once lighted, burns like tinder. From an unknown cause, after heavy rains, it suddenly took fire, and though our whole family tried to save it, what remained of our favourite of many years, alas! had to be laid even with the soil it had, in its glory, so long o'ershadowed. In my present neighbourhood, a Beech was also partly consumed without apparent cause. *John H. van Lennep, Zeyst, Sept. 30.*

Double Glazing.—Has any one ever tried the effects of double-glazing in plant houses? I mean placing glass beneath glass, so as to allow a stratum of motionless air between. I could conceive that the extra expense would be saved in fuel almost the same year; also that less pipe and a smaller boiler might be used; besides this I think that if it answered there would be

many other advantages to be derived. Possibly as radiation would be in great measure cut off by the non-conductor there would be little or no condensation on the glass, and then no drip, and no evaporation from the glass, also a moisture atmosphere when required; fresh air might also be admitted at night, and a larger quantity than usual during the day, and probably by underground ventilation. During very cold weather it might not be necessary to overheat the pipes and scorch the air, as is often the case. If used for orchard houses, not heated artificially, the spring frosts might be prevented cooling down the inclosed atmosphere and destroying the young tender foliage; a body of warm air, obtained during the day, might perhaps be in a great measure prevented from being cooled down by radiation during the night; the earth's heat, in addition to that absorbed during the day, might also materially assist; undulation would probably in a great measure be suspended, consequently the earth's heat would not pass off as rapidly as if the air were cooled by coming in contact with the outer glass. I have ordered some "motionless glass cases" to be made, which I intend to try against some single-glazed ones, and when I have completed the experiments I will make them known. If any one else has had any experience in the plan I have proposed, it would be useful to publish it. The extra expense for a house 30 feet by 20, with glass at 13*s.* 6*d.* per 100 feet, would not be much more than 5*l.* The glass might be fixed in grooved slips of wood nailed to the side of the rafter, the glass being afterwards slipped in. It would be necessary to well paint the grooved slips before fixing. I think the cheap glass would do, as there would be no burning (at least I should think not), and there would not be much fear of breakage. One pane might abut against another, for if there were no frost there would be no chipping, and if the glass matched well and fitted closely the damp atmosphere could not rise to the outer glass. These are only very crude ideas on this subject, practice will prove if they are worth anything. *Scrutator.*

Gishurst Compound.—As the season approaches when people begin to think of winter dressing their fruit trees and Vines, perhaps the following just received from Mr. Rivers of Sawbridgeworth may be deemed worthy of notice. I send a box of Gishurst on the chance of your wishing to experiment on any of your own trees. *George Wilson.*——"I must tell you what I heard to-day from a very hard-headed gentleman farmer, Anthony Bubb, of Witcombe Court, Gloucester. He has a wall to which Peach trees are trained. Well, last autumn they were in a wretched blighted state; as a desperate remedy he unnailed them all last February and gave all but one a thorough painting with Gishurst compound, 1 lb. to the gallon of water. His trees all but the one commenced to grow favourably in spring, and are now pictures of health. The tree not painted is in a half dead blighted state. He used the same dressing to his Apple trees; it killed the woolly aphis entirely, and has made his trees clear and vigorous in their growth. He intends to paint his wall trees annually and tells all his friends to do the same. I shall certainly serve all my young Peach trees against my walls in the same manner. The compound is, I believe, more efficacious than the usual offensive mixtures of clay, soot, sulphur, &c., and it does not blacken the shoots on the walls."

Societies.

ROYAL HORTICULTURAL (*Election of Fellows*), Nov. 4.—The following New Members were elected on this occasion, viz:—

A. S. Bicknell, Esq.; L. Birnstingl, Esq.; Lieut.-Colonel W. H. F. Cavendish, H. Cole, Esq.; T. J. Croggon, Esq., J. Dawson, Esq.; Mrs. F. Drummond, Mrs. G. Elliot, Dowager Lady Dalrymple Elphinstone, The Marchioness of Ely, W. F. Foster, Esq.; Captain E. Fox, Mrs. Fry, Mrs Glyn, St. L. Glyn, Esq.; Mrs. St. L. Glyn, J. D. Gordon, Esq.; Mrs. Graham, Hon. Mrs. C. Grey, J. K Haworth, Esq.; E. Haynes, Esq.; S Herapath, Esq., F.G.S.; the Rev. J. P. Higgins, J Kindon, Esq.; The Lady Mary Legge, T. C. Leslie, Esq; R Longwood, Esq.; M. P Lozano, Esq.; S. H. C. Maddock, Esq.; Major-Gen. Matthie, H D. Mertens, Esq.; J Parker, Esq.; The Lord W. Blayney, W. Preston, Esq., E. Ralli, Esq.; Mrs. J. N. Raphael, Mrs. B. Ridge, H. C. Robarts, Esq.; Dr. Rutledge, T. Scot, Esq; Miss M. Simpson, J. Sloane, Esq.; S. Smith, Esq.; W. Smith, Esq.; Mrs. Leon Solomon, H. T. Stanton, Esq.; Mrs. Lyne Stephens, J. Steveld, Esq.; The Earl of Strathmore, The Duchess of Wellington, G. H Westerman, Esq., G. R. Cox, Esq.; Mrs. Gilchrist, and H B. Mildmay, Esq.

R. HORTICULTURAL: *Nov.* 6 *and* 7.—(*Fruit and Chrysanthemum Show.*)—A magnificent exhibition of Fruit and Chrysanthemums, the latter both cut and in pots, was held on Wednesday and Thursday last in the Conservatory in the Society's New Garden at South Kensington. On the top of a raised circular table in the centre of the building stood a noble Orange tree loaded with ripe fruit, and arranged around it were the miscellaneous collections of fruit, among which one consisting of foreign produce from Mr. Lewis Solomon, of Covent Garden, attracted unusual attention, chiefly on account of the great size of the Apples and Pears which it contained. Right and left of this centre piece were flat tables running the whole length of the building, loaded with fruit, both hardy and tender, such as can only be produced in English gardens in warm autumns like that which we have just experienced. Along the front, facing the centre tables, were the Chrysanthemums in pots backed up by noble specimens of Orange trees, and just below the corridor at the back of the building were the cut blooms of Chrysanthemums and the smaller and Standard specimens of the same in pots, while on shelves at the ends were fruit and groups of Japanese and other plants—an arrangement which gave the utmost satisfaction. Designs for table decoration in white China, by Minton, liberally introduced among the fruit, also added to the effect, which was in every respect excellent. H.R.H. the Prince Consort, President of the Society, inspected the show at 9 A.M.

Among Miscellaneous Collections of fruit by far the most remarkable was that above alluded to from Mr. Lewis Solomon. It contained Uvedale's St. Germain Pears, 12 of which weighed 39lbs. and upwards; St. Germain; Beurré Diel, each 2lbs.; Catillac, 2¼lbs.; Vicar of Winkfield, and noble fruit of Crassane and Glou Morceau; Reinette du Canada, White Calville, Pomme Rose and Pomme d'Api Apples; Cayenne Pine Apples, in pots; Melons, magnificent Pomegranates, each of which measured a foot in circumference; and some imported Peaches and Grapes, altogether a wonderful collection, to which a first prize was justly awarded. It is, however, absolutely necessary to correct the names under which some of this fruit was shown. The Beurré Doiel Pear was Beurré Diel; the Beurré Magnifique was the same; the Cathillard was the Catillac; the Belle Angevine was our well known Uvedale's St. Germain; the Bon Cœure was the Poire de Clion, Curé, or Vicar of Winkfield: and the scarlet Cuisse Madame quite another sort, namely, the Spanish Bon Chrétien. A second group, consisting of both English and foreign fruit came from Messrs. Webber of Covent Garden. It was tastefully set up in China dishes, some elevated on miniature statuary, and others of a less conspicuous description. It comprised very good examples of Uvedale's St. Germain, Catillac, Glou Morceau, Chaumontel, Vicar of Winkfield, Easter Beurré, Marie Louise, and Winter Bon Chrétien Pears; Reinette du Canada, King of the Pippins, and Rose Apples; one or two Pine Apples, Grapes, Pomegranates, and Oranges, all excellent of their respective kinds. For fruit of wholly English growth, the best collection came from Mr. Henderson, gr. to the Duke of Sutherland at Trentham. It contained a Black Jamaica Pine Apple, Lady Downes' Seedling, Black Hamburgh, Frankenthal, Muscat, and White Tokay Grapes; very fine highly coloured King of the Pippins and Blenheim Orange Apples; Beurré Vert, Brown Beurré, Beurré Diel, Beurré Clairgeau, Bergamotte d'Esperen, Jersey Gratioli, and Trout Pears; Scarlet Gem and other Melons, one or two Citrons, fruit of Eugenia Ugni, Plums, and Figs. To these a first prize was also awarded. From Mr. Tillyard, gr. to J. Kelk, Esq., who also showed in this class, came various Queen Pine Apples, all well grown; excellent Muscat and other Grapes, Ribston, Fearn's Pippin, Blenheim, Downton, Wellington, and Lamb Abbey Pearmain Apples; Glou Morceau, Chaumontel, Passe Colmar, Beurré de Capiaumont, Beurré d'Aremberg, and Napoleon Pears; Imperatrice and other Plums, Hybrid Cashmere and Heckfield Melons, two dishes of Raspberries, late, but well ripened; fruit of Eugenia Ugni, White Dutch Currants, still in a good state of preservation; Morello Cherries, and Coe's Late Red Plums. To these a second prize was awarded. Another collection was furnished by Mr. Kail, gr. to Lord Lovelace. It contained good fruit of King of the Pippins, Fearn's Pippin, a small Pine Apple, Black Hamburgh Grapes, Coe's Late Red Plum, a dish of Raspberries, and another of Medlars. To these a third prize was awarded.

Of Pine Apples there was a fair display, consisting of some 30 fruit, all well grown and ripened. The best, a smooth-leaved Cayenne, weighing 7 lbs. 14 oz., came from Mr. Floud, gr. to Crawshay Bailey, Esq., Glamorganshire; another well-grown fruit of the same variety was furnished by Mr. Ingram, gr. to her Majesty at Frogmore; and from the same establishment also came a Prickly Cayenne, equally good as that just alluded to. Mr. Bailey, Shardeloes, also contributed an excellent Prickly Cayenne, but unripe at top. Mr. Tillyard, gr. to J. Kelk, Esq., showed some good Queens, as did also Mr. Bray, gr. to E. Lousada, Esq., Sidmouth, Devon. One, a Ripley from the last-named exhibitor, weighed 5 lbs. 10 oz. Of Jamaicas a few good specimens were shown; but the bulk consisted of Queens and Cayennes.

Grapes were in several respects excellent. The best three bunches of Frankenthal came from Mr. Henderson, gr. to the Duke of Sutherland at Trentham. These were large both in bunch and berry, and well coloured. Nearly equally fine were bunches of the same variety from Mr. Meredith, of Garston, near Liverpool, who has furnished some of the best Grapes exhibited this year. Mr. Henderson also showed Black Hamburgh in excellent condition; and beautiful basketfuls of this variety were contributed by Mr. Kay, of Finchley, and Mr. Hill, gr. to R. Sneyd, Esq., Keele Hall, Staffordshire. Three bunches of Black Damascus were shown by Mr. Craik; Black Hamburgh by Mr. Page, of Streatham; and good examples of the last named variety from R. Crawshay, Esq., of Cyfarthfa Castle, Wales. Of Barbarossa good bunches came from Mr. Drummond, Tunbridge Wells; and of Grapes grown in an Orchard-house, Messrs. Lane, of Berkhampsted, showed an interesting collection. They consisted of Black Hamburgh, Esperione, and West's St. Peter's. The two first were large, but badly coloured, while the last was extremely well coloured, but small. Of Muscats, beautiful bunches well ripened, came from Mr. Tillyard, Mr. Hill, Mr. Meredith, Mr. Mead, Mr. Ingram, gr. to J. J. Blandy, Esq., Reading; and Mr. Tillery, gr. to the Duke of Portland, at Welbeck, also showed fair specimens of Muscat. Of Trebbiana Mr. Hill had three magnificent bunches, which collectively weighed 9¼ lbs. These were from rods grafted on Black Hamburgh, which is stated to make a good stock for this, or in fact any Grape. Beautiful examples of White Tokay came from Mr. Meredith, and Mr. Tillery. An interesting collection of Grapes, consisting of Marchioness of Hastings, West's St. Peter's, Muscats, Muscat Noir d'Angey, Sahibee, Lady Downes' Seedling, Bidnell's Seedling, Trentham Black, Barbarossa, Old Tokay, Black Prince, and Muscat Hamburgh, were shown by Mr. Hill, Keele Hall, Staffordshire.

Of Pears enormous quantities were exhibited, and generally speaking they were in good condition. The best collection came from Mr. Anderson, gr. to the Earl of Stair at Oxenford Castle, near Dalkeith, a locality somewhat bleak and not generally favourable for good Pear culture. It is true their unripe appearance contrasted unfavourably with the warm rich brown aspect of English grown fruit; but their size and quality was excellent. They consisted of Susette de Bavay, Flemish Beauty, Easter Beurré, Beurré d'Aremberg, Napoleon, Beurré de Capiaumont, Winter Nelis, Doyenné Gris, Poire Neill, Buchanan's new Spring Beurré, Duchesse d'Angoulême large and fine, Louise Bonne of Jersey, Beurré Diel, Marie Louise, Marechal de la Cour, Crassane, and King Edward, Colmar, Beurré Clairgeau, Marie Louise, and Glou Morceau. A second collection was exhibited by Mr. Ingram, gr. to her Majesty at Frogmore. It contained beautiful fruit of Vicar of Winkfield, Easter Beurré, Knight's Monarch, Prince Albert, Fladberg, Marie Louise, Beurré Diel, Van Mons Leon le Clerc, Chaumontel, Passe Colmar, Glou Morceau, Beurré Rance, Easter Beurré and Moccas. These were large in size and in all other respects excellent fruit. Mr. Dwerrihouse, gr. to Viscount Eversley, at Heckfield, who was placed third, showed good examples of Marie Louise, Winter Nelis, Beurré Diel, Josephine de Malines, Great St. Francis, Delices d'Hardenpont, Easter Beurré, Swan's Egg, Beurré Rance, Passe Colmar, Napoleon, St. Michael, Knight's Monarch, and Duchesse d'Angoulême. Mr. Cox, Redleaf, also showed good fruit in this class, which was well represented.

For collections of six dishes of Pears the first prize was awarded to Mr. Ingram, gr. to her Majesty at Frogmore, who furnished the following sorts, viz., Beurré Diel, Knight's Monarch, Van Mons Leon le Clerc, Glou Morceau, and Beurré Rance. Mr. Harrison, Weybridge, was second with large and excellent fruit of Duchesse d'Angoulême, Glou Morceau, Marie Louise, Ne Plus Meuris, Winter Nelis, and Passe Colmar. A third collection was shown by Mr. Spivey, gr. to A. Houblon, Esq., Hallingbury, Bishop's Stortford. It contained Josephine de Malines, Passe Colmar, Beurré Diel, Glou Morceau, Thompson's, and Marie Louise.

Mr. Cox showed good Beurré Clairgeau; Mr. Park, Retford, very fine specimens of Seckel and Brown Beurré; Mr. Snow, Wrest Park, Beurré d'Aremberg, Crassane, Josephine de Malines, Bezi d'Esperen, and Easter Beurré. Seckel, from a standard smaller than those mentioned above, was shown in good condition by Mr. Fowle, Hants. For three dishes of Pears the first prize was awarded to Mr. Harrison of Weybridge, who showed, as he always does, superb fruit of Duchesse d'Angoulême, Marie Louise, and Glou Morceau. The next best three dishes were furnished by Mr. Tranter, of Hemel Hempstead, who showed Beurré Diel, Brown Beurré and Marie Louise, the last large and fine. From Mr. Widdowson came Duchesse d'Angoulême, Passe Colmar, and Glou Morceau. Beautiful specimens of Beurré Diel came from Mr. Hope, of West Ham; Beurré Clairgeau, small but highly coloured from Mr. Cox, of Redleaf; and Mr. Mortimore, Carshalton, showed some well-ripened fruit.

Of Dessert Pears in single dishes the best came from Mr. Ingram, gr. to her Majesty at Frogmore, who had beautiful fruit of Glou Morceau; Mr. Tranter was second with Marie Louise; and Mr. Ralphs, Walton-on-Thames, third with Beurré Diel; an extra prize was awarded Mr. Westbrook, Berks, for good examples of Beurré d'Aremberg.

The best dish of Uvedale's St. Germains came from Mr. Snow, gr. Wrest Park, Beds.; the second from Mr. Park, and a third from Mr. Craik.

Of Catillac the best dish was contributed by Mr. Harrison, Weybridge; the next by Mr. Cunningham, gr. to the Bishop of London, and the third best by Mr. Barnet.

For single dishes of other varieties a first prize was awarded to Mr. Snow, for fine specimens of Warden, a useful kitchen Pear.

For the heaviest five Pears the first prize was awarded to Mr. Dwerrihouse, gr. to Viscount Eversley, at Heckfield.

For Stewed Pears prepared without sugar, spice, or colouring matter, and shown in white glass jars, the first prize was awarded to Miss Ingram, the Royal Gardens, Frogmore, with split fruit of Swan's Egg and Vicar of Winkfield in excellent condition. Mrs. Powell, Old Windsor, was second, with Chaumontel and

Beurré Rance; and Mrs. Smith, Upper Sydenham, third, with Chaumontel, uncut. Other exhibitions of this kind came from Mrs. Newton, Enfield Chase, and others; and we also noticed a jar full of baked and dried Swan's Egg Pear from Miss Ingram.

Exhibitions of Apples were furnished in great abundance and variety, and for size and beauty some of the specimens produced on this occasion have never been surpassed. True some of them were "spotty;" but that was the exception not the rule.

The best collection of Dessert varieties came from Mr. Newton, gr. to G. F. Graham, Esq., Enfield Chase. It consisted of Golden Reinette, Cornish Gilliflower, a fine kind with which Mr. Newton is generally very successful; Fearn's Pippin, high coloured and otherwise in excellent condition; Margil, Cockle Pippin, Hicks' Fancy, Beachamwell, Pearson's Plate, and Ribston Pippin, both small, but well ripened; medium-sized specimens of Court of Wick, Old Golden Pippin, apparently true; Downton, Nonpareil, beautiful fruit of King of the Pippins, good examples of Franklin's Golden Pippin, Green, Golden and other Nonpareils, Russet, and fine Herefordshire Pearmain, De Neige, Adam's Pearmain, Screveton Golden Pippin, Sam Young and Cluster Pippin. To these a first prize was awarded. Mr. Cox of Redleaf was second with a good collection, in which were beautiful fruit of Fearn's Pippin, Castle Major, a small flat yellow apple, Court of Wick, Golden Knob, Col. Vaughan, Brabant Bellefleur, Court Pendu Plat, General Wolfe, Golden Winter Pearmain, Franklin's Golden Pippin, Crackling Pearmain, Ribston, Farleigh Pippin, Hughes' Golden Pippin, Winter Queening, very high coloured; Maid of Taunton, Kirks' Golden Reinette, various Nonpareils, Scarlet Pearmain, Royal Russet, Lemon Pippin, Downton, Hollow-eyed Pippin, Christie's Pippin, and others, all good examples of their respective kinds. From Mr. Mortimore, who was third, came Ribstons, Prince's Pippins, a high coloured sort like Hoary Morning, Yellow Ingestre, Franklin's Golden Pippin, Bull's Golden Reinette, Newtown Pippin, Claygate Pearmain, good examples of Wormsley Pippin, Blenheim Orange, and King of the Pippins.

For collections of six dishes of Dessert Apples, the first prize was awarded to Mr. Ingram, gr. to her Majesty at Frogmore. It contained Rosemary Russet, Small's Golden Pippin, one of the best of its class; Cox's Orange Pippin, a variety equal to and sometimes better than the Ribston; Fearn's Pippin, Old Nonpareil, and Court Pendu Plat, altogether an excellent collection, clean skinned, and high coloured. From Mr. Snow, who was second, came Silver Aromatic, and Fearn's Pippin; Court Pendu Plat, Ribston, and Bull's Golden Reinette. Mr. Newton, who was placed third, sent *Cornish Gilliflower, Fearn's Pippin, Pearson's Plate*, Ribston, Cockle, and King of the Pippins. The last named variety was also shown in good condition by Mr. Betteridge. Mr. Widdowson also showed good fruit in this class, as did likewise Mr. Cox, whose varieties though not very large were remarkable for beauty of colour. Good fruit, moreover, came from Mr. Cunningham, gr. to the Bishop of London, and one or two others.

Of three dishes of Dessert Apples the best were furnished by Mr. Ford, gr. to W. E. Hubbard, Esq., Horsham, Sussex. They consisted of Ribston, Blenheim Orange, and King of the Pippins, all beautiful and deserving of the first prize which was awarded to them. From Mr. Rutland, Garnston Castle, Hereford, who was second, came Fearn's Pippin, Ribston, and King of the Pippins. Mr. Hall, of Ealing, had a third prize for Court Pendu Plat, beautiful in colour, Ribston, and King of the Pippins. Messrs. Snow, Young, and others, also showed well in this class.

The best single dish of Dessert Apple was one of Cox's Orange Pippin from Mr. Ingram, Frogmore, and the same excellent variety shown by Mr. Simpson, Stoke Farm, near Windsor; and Mr. Turner, of Slough, carried off both second and third prizes in the order in which the names stand.

Kitchen Apples were numerous, large, and made a fine display. The best collection came from Mr. Mortimore, Carshalton, who had large and fine fruit of Celine, Golden Noble, Beauty of Wilts, Ribston, Hawthorndens, and Blenheim Orange, the last somewhat small, as were also the Golden Nobles. The same collection also contained Hoary Morning, Kirk's Admirable, Wormsley Pippin, and Dumelow's Seedling, the last small, but finely ripened. From Mr. Newton, gr. to G. F. Graham, Esq., who was second, came Holland Pippin, Beauty of Kent, Brabant Bellefleur, Norfolk Beefing, and Kentish Fillbasket, all large and fine fruit.

In the class of six dishes of Kitchen Apples, the best came from Mr. Betteridge, Steventon, Berks; it contained Alfriston, Kentish Codlin, very fine Minchall Crab, Cat's Head, small; and very good examples of Blenheim Orange. Mr. Snow, who was second, sent Wellington, Blenheim Orange, Cumberlean, a kind a good deal like the last; Golden Noble, large and excellent; Celine, and Bedfordshire Foundling, all good. Among other varieties shown in this class were Northern Greening, American Pippin or Gloria Mundi, Farmers' Glory, Wadhurst, Cox's Pomona, and Mère de Menage, the last small but well coloured.

Of three dishes the best came from Mr. Smith, gr., Liscard, Cheshire. They were Mère de Menage, Alfriston, and Beauty of Kent, all good; but especially the first, which was large and finely coloured. The next best came from Mr. Holder, of Eton, and consisted of Celine, Blenheim, and Alfriston. A third collection also came from Mr. Rutland.

Of single dishes by far the most striking came from Mr. Lee, gr. to Viscount Combermere, Whitchurch, Salop. The sort was Mère de Menage, large highly-coloured handsome fruit. Mr. Young, gr. to R. Barclay, Esq., Highgate, also showed a good dish of Alfriston.

For the heaviest five fruit, the first prize was awarded to Mr. Green, gr. to Mrs. Honeywood, Kelvedon, Essex; the five, which were American Pippin, weighed together 5 lbs. 5 ozs.

Of Pommes Tapées, *i.e.* Apples dried in the same way as Normandy Pippins, of which an account was given in our Vol. for 1860, p. 932, only one dish was shown, and that came from Mr. Young, gr. to R. Barclay, Esq., of Highgate. The sort operated on was Blenheim Orange, which appeared to answer the purpose well, for the specimens shown were extremely well done. For these a first prize was awarded.

Melons were good considering the season. The best came from Mr. Dwerrihouse and Mr. Pryer; the sorts were Heckfield and Egyptian Green-fleshed. We also noticed a good example of Scarlet Gem.

Plums were furnished by Mr. Snow, Mr. Cox, and others. The sorts were Coe's Late Red, Blue Imperatrice, and Reine Claude de Bavay. Of these the last was quite plump and fresh; and so was Coe's, but the Imperatrice was a little shrivelled.

A single dish of Keens' seedling Strawberry, large, fresh, and finely coloured as in the end of June, came from Mr. Widdowson, Rickmansworth.

Raspberries were shown by Mr. Park and Mr. Kail; but though well coloured, they were small and apparently tasteless.

Of Chrysanthemums, some account, both as regards new sorts and modes of training, will be found in another column. The collection of cut blooms from Mr. Bird, of Stoke Newington, was the admiration of all who saw them, more especially his blooms of Novelty, which were large, round as balls, and in all respects perfect examples of skilful cultivation; Yellow Queen of England was wonderfully large, but it wanted the beauty and richness of colour of Jardin des Plantes, elsewhere described. Fine bouquets of Chrysanthemums at the back from Mr. Bird's establishment also served to set off his other flowers to good advantage. To Mr. Bird a first prize was justly awarded for his excellent collection. From Mr. Salter, of Hammersmith, also came a large display both of large flowered sorts and of Pompones. The best of these will be found described elsewhere.

Of 24 Cut Blooms (Nurserymen), the best came from Mr. Cattell, Westerham, Kent; the second best from *Mr. Wilkinson, Bow; the third from Mr. Forsyth*, Stoke Newington; and the fourth best from Mr. Merry, Stamford Hill. In these stands were good blooms of Dupont de l'Eure, Yellow Perfection, Aimée Ferrière, Arthur Wortley, Jardin des Plantes, Cassy, Miss Kate, Pandora, Hermione, Marshal Duroc, Vesta, Rifleman, Cassandra, Alarm, Annie Salter, Goliath, Yellow and White Formosum, Pio Nono, Aristée, Columbus, Novelty, Arigena, and Queen of England.

24 Cut Blooms (Amateurs) were contributed by Mr. Hope, West Ham; Mr. James, Stoke Newington; Mr. Couldry, Uxbridge; and Mr. George, Stamford Hill. In all these stands were large fine-looking blooms, the names of which differed but little from those just mentioned.

12 Cut Blooms (Amateurs) came from Mr. Slade, Kingsland; Mr. James, Mr. Ward, Tottenham; and Mr. George. Among these we observed the following sorts, different from those just mentioned, viz., Mrs. Holboro', White Globe, General Hardinge, Beauty, Golconda, Pictorium roseum, Themis, Madame André, Campestroni, Plutus, Trilby, and M. Miellez.

Stands of 6 Cut Blooms were exhibited by Mr. James, Mr. Couldry, Mr. Hope, and Mr. Ward. In these were good examples of Cyclops, Lucidum, Strafford, Polar Star, Duke, and Saccoi Nova.

Among Anemone-flowered sorts were some excellent blooms of Gluck, Louis Bonamy, Marguerite of York, Madame Godereau, Marguerite of Anjou, George Sands, Rose Marguerite, Perle, King of Anemones, and Triomphe du Nord.

Of plants in pots (Nurserymen) the best came from Mr. Turner of Slough, and Mr. Forsyth. The former had Prince Albert, dark red; Mount Etna, Julie Lagravere, a fine dark new sort; Golden Christine, Vesta and Hermione, all finely grown and well flowered. Mr. Forsyth sent Voltaire, Vesta, Defiance, Etna, Golden Christine and Anne Salter.

Of six plants (amateurs) the best came from Mr. Ward, Tottenham, in whose group were Pilot, Golden Christine, Defiance, Alma, Beauté du Nord, and General Havelock, all extremely well managed plants, compact, but yet not too much so and well bloomed. Mr. Harper was second, and Mr. George third. Among these were fine plants of M. Domage, Prince Albert, Christine, Anne Salter, and Voltaire.

Of collections of three plants each the best came from Mr. Ward, who contributed Chevalier Domage, Christine and Beauté du Nord. Other sets of three came from Messrs. Harper and George.

Pompones (Nurserymen) were contributed, in excellent condition, by Mr. Turner and Mr. Forsyth, prizes being awarded in the order in which the names stand. The sorts were Cedo Nulli, M. Pippin, Duruflet, La Vogue, Mustapha, Bijou d'Horticulture, and other well-known kinds.

Of Six Pompones (Amateurs), Mr. Hutt, Hackney, had by far the best. The sorts were Andromeda, Golden Cedo Nulli, Duruflet, Salamon, Cedo Nulli, and General Canrobert, all large finely bloomed plants. Messrs. Weston, Ward, Bolton, and others, also showed well-grown Pompones, some of the plants being bush-trained, others flat headed, some pyramidal, and some standards. For some account of the comparative merits of these different modes of training see another page.

Specimen Chrysanthemums came from Mr. South, Upton, Essex; Mr. Ward, Tottenham; and Mr. Turner, of Slough. Of these the first sent an enormous plant of Christine, and the same variety also came from Mr. Turner. Mr. Ward had Riquiqui.

Among Miscellaneous articles was a Ward's case from Miss Maling, noticed elsewhere; it is a patented one, provided with a hot-water tank, by the aid of which tender plants are easily kept in a room, even during winter, the heat being maintained by pouring heated water every 12 or 24 hours into a shallow tank. This, it is stated, is found to be less troublesome and annoying than lamps and other heating appliances used for a similar purpose; various Japanese and other plants came from Messrs. Veitch, Lee, and Ivery; two handsome Celosia aurea from Mr. Turner; some variegated Kail from Messrs. Downie & Laird; and several fine specimens of Chinese Yam, some of them weighing as much as 7 lbs., from Mr. Ivery of Dorking. From Mr. Lewis Solomon came a collection of foreign vegetables, consisting of small Asparagus called "Sprue," Green Peas, very fine Cardoons, Globe Artichokes, and beautiful specimens of Purple Aubergine. It is also only fair to mention that the handsome china dishes in which the fruit was set up were gratuitously furnished for the occasion by Mr. Goode, of South Audley Street.

ENTOMOLOGICAL: *Oct.* 7.—J. Lubbock, Esq., F.R.S., in the chair. Mr. Pascoe exhibited a very interesting series of Coleoptera lately collected by himself in the south of France, amongst which were two new species of blind beetles, Anophthalmus Raymondi, taken in the caverns of a monastery, and an Anillus taken under large blocks of stone deeply imbedded in the earth. Mr. Waring exhibited some rare moths taken in Inverness-shire during the past summer, and Mr. Miller a remarkable variety or new species of Ephyra, allied to E. undularia, reared from the larva state. Prof. Westwood exhibited a specimen of Myrmecolax Nietneri, a Strepsipterous insect from Ceylon, which had been extracted from the body of a worker ant forwarded to him by M. Nietner; also specimens of the larvæ of two Dipterous insects of the genera Volucella and Anthomyia, parasitic in the nests of wasps, also the eggs of the former insect deposited on the outside of the nest, which had been mistaken for cocoons of some minute insect; also specimens of the larvæ of the moth Ilithyia sociella, with a mass of its cocoons, parasitic in the nests of Bombus sylvestris, which had been communicated to him by Mr. S. Stone. He also read descriptions of some new exotic species of Lucanidæ. Dr. Wallace gave an account of the contents of an old collection of Lepidopterous insects belonging to Mr. Baker, of Suffolk. Amongst the butterflies were specimens of Apollo, Podalirius, Virgaureæ, Chryseis, and Acis, of which the localities were recorded; also various rare moths. Some of these insects were now struck out of the British lists, but Dr. Wallace thought it possible they had really been captured in this country.

Mr. Stainton read a paper on the synonymy of Laverna Langrella, and Mr. Waterhouse corrected the nomenclature of the species of Coleoptera belonging to the genera Homalota, Aploglossa and Ceutorhynchus. Dr. Knaggs exhibited various larvæ of Eupitheciæ infested by Ichneumonideous parasites.

Notices of Books.

The new Number of the *Journal of the Linnean Society* (Vol. VI., No. 21) is more than usually interesting. It contains a very valuable description by Dr. Hooker of the Vegetation of Clarence Peak, Fernando Po, from materials collected by Mr. Gustav Mann, and Mann's own account of his ascent to the summit of this remarkable mountain, 10,700 feet above the sea. We extract his graphic narrative of the difficulties he had to encounter :—

"On the 27th March I ascended to a height of 5000 feet: during this ascent I found the fine Cyathea. This species seems to form larger groups than other Cyatheas do, many averaging from 10 to 15 trunks, some of which rise to a height of 30 feet. The Onychium? of which I sent a specimen in the Wardian case, grows only as an epiphyte on this tree-fern. I also found on this ascent the fine Antrophyum? resembling the Platycerium of the tropical part of the island; and the Liliaceæ, of which I sent six bulbs; and the Calanthe like Veratrifolia. All the Trichomanes grew between 1000 and 5000 feet. At this height I stopped one day, and ascended on the 28th to a height of 6000 feet, and on the 29th to 8500 feet; up to which height I found very little difference in the vegetation. From this place I was obliged to send a Krooman down to fetch more provisions, which, together with daily rain, obliged me to remain here six days. During this time I was compelled to sleep on the wet ground, placing my blanket

and other things under an oil cloth when the rain commenced at night, and selecting for myself a dry place where the rain did not come through the small roof of Palm-leaves. This, under a temperature of 42° Fahr. at night, was a trial to my health; but one must learn everywhere, and I have learnt a great deal since I came here. The vegetation here consists mostly of herbaceous plants, as Gramineæ, Salvia, Rubus, &c. The largest trees here (50 feet high) are Araliaceæ and Compositæ. On the 3d April I reached the top, about 2 o'clock in the afternoon. Unfortunately a storm of rain and hail spoilt the enjoyment with which I should otherwise have seen the whole island spread out before me; but what was worse than this, I found the entire summit burnt, and no vegetation except Grass, which was just beginning to sprout. This is done by the Boobees, to drive the deer to the lower part of the island. I did not meet with a Boobee above 1000 feet elevation. The top is formed by the highest side of the largest crater, which is about 40 feet deep. There is good and deep soil up to the top, and only on the inside of the largest crater are a few rocks visible. Lower down there are more small craters. At this time the temperature was 54° Fahr., and the minimum at night 39° Fahr. Shrubs grow to between 400 and 500 feet of the top, and amongst them I found an Erica 8 to 10 feet high, which gave me much pleasure. I regret very much that I could not stop some days longer, but I ran the risk of making myself a cripple for life; I therefore commenced my descent on the 4th. Again it was too late in the season, for which reason very few plants were in blossom."

Mr. Carruthers describes some new Chinese Oaks, Mr. Masters some peculiarities in the germination of the Mango, Mr. Babington a Carex (*ericetorum*) new to Britain, and Colonel Munro, the most learned of Agrostologists, furnishes a critical examination of the Grasses in the Herbarium of Linnæus, a contribution to systematical botany of the highest importance.

Among the Zoological papers are three on Ants and other Hymenopterous insects, an account of the foot apparatus by which insects climb—a very curious subject, treated of by Mr. Tuffen West, and other entomological matters.

Le Jardin Fruitier du Muséum, ou Iconographie de toutes les Espèces et Variétés d'Arbres Fruitiers; avec leur Description, leur Histoire, leur Synonymie, &c.; par J. Decaisne. 4to. Paris, Firmin Didot.

(*Continued from* p. 948.)

Passe Colmar Pear.—Fruit middle-sized or rather large, pyriform, broad and flattened at the eye [with frequently slight longitudinal furrows]. Stalk of medium length and thickness, obliquely inserted; eye rather large in a slight depression, segments of the calyx lanceolate, erect. Skin smooth, brownish-green, becoming yellow at maturity, tinged with red next the sun. Flesh yellowish white, buttery, melting, very sugary, rich and delicious, with a slight citron perfume. Season December, January. Tree spreading; shoots long, clear olive yellow. Leaves oval acuminate; petals long, slender, pale coloured.

It is remarked by the Belgian pomologists that the Passe Colmar bears its fruit in clusters of from three to seven fruits; that its branches do not well support themselves, many of them taking a horizontal straggling direction, and are borne down by the weight of the fruit, thus giving the tree a confused appearance; therefore they do not advise the planting of it as a standard. [On the other hand, when grown on walls in the climate of England it is often watery and flavourless, unless it can be afforded a southerly aspect, whereas in the same garden it is delicious when grown as a standard or espalier. It is therefore desirable on account of flavour that this excellent variety should be grown in one or both of these ways. As a standard the tree can be kept symmetrical and vigorous enough by skilful pruning; and by judicious thinning of the fruit it can be prevented from overbearing its strength. In some seasons, the remark in the continental descriptions that it bears in clusters of from three to seven fruits is fully borne out in our climate, but in order to have fruit of fair size with perfection as regards flavour, three Pears from one corymb of blossoms are quite enough. We may rest assured that the three are of far more intrinsic value than the seven would be. Besides, the three of large size do not distress the tree so much as the seven comparatively small and worthless. This assertion we know from experience is correct; but it requires some explanation. In the seven small Pears as many cores have to be formed, and the seeds they contain have to be nourished. This the tree will make an effort to do, even at the expense of its future loss of vigour. The formation of core and seeds draws more on the vital energy of the tree than the formation of pulpy matter does. Therefore, it is evident a certain weight of pulp with only three cores to support, will be produced with less weakening effects than would be the case if seven cores for each corymb were left.]

Poire Double-Fleur.—[Syn. Double-blossomed, *Miller*, Arménie, *Noisette*, but with this Prof. Decaisne says it must not be confounded.] Fruit middle-sized, somewhat turbinate. Stalk long, straight; eye in a shallow depression, the segments of the calyx spreading, whitish and cottony. Flesh crisp, juicy, slightly perfumed, but not musky. Only fit for baking or stewing, by which processes, Poiteau states, it takes a good colour. In use from February till May or even June. The flowers are large; those in the centre of the corymb are double, consisting of from 10 to 15 petals, the others are semi-double or single. [It is remarked in the "Orchard and Kitchen Garden" that this is a very desirable tree to plant for ornament. Its large double flowers, which contain 12 or 15 petals, make a very handsome appearance in the spring. It sometimes produces variegated leaves; then the fruit is striped with green, yellow, and red.]

P. Amoselle.—Syn. Bergamotte d'Hollande, Bergamotte d'Alençon, [Bergamotte de Fougère, Lord Cheneys]. Fruit large, Bergamotte-shaped; stalk long, curved; eye small, deeply sunk; skin olive-green, bronzed next the sun. Flesh half-melting, juicy, tolerably rich, but rather gritty. Season, March till June. [In England it requires a wall. It is rather a shy bearer.]

Martin Sec.—Fruit small, pyriform; stalk long, slender. Skin smooth, brown, reddish-brown next the sun, and sprinkled with gray dots. Flesh breaking, yellowish, of a peculiar sweet flavour. Season, November till January. It is not fit for dessert; but is esteemed as one of the oldest and best varieties for compotes and drying, for which purposes large quantities of it are sold in the Paris markets.

Poire Lefèvre.—Syn. Beurré de Mortefontaine. Fruit large, roundish-obovate. Stalk short, thick, especially at its insertion, and still more so at its junction with the spur. Eye large, in a shallow depression; segments of the calyx long, straight, whitish, cottony, and spreading. Skin fine, of a bronze-olive colour, green near the stalk, tinged with red next the sun, sprinkled throughout with large grey specks, which give the fruit a remarkable appearance. Flesh green next the outside, melting, sugary, with slight acidity. Season, end of September and beginning of October; but when it arrives at maturity it soon decays, its flesh liquifying with scarcely any change of colour or other external indication. It ought to be gathered some days before it readily parts from the tree. It was raised by M. Lefèvre, nurseryman at Mortefontaine, near the Chapelle-en-Serval et d'Ermenonville, département de l'Oise.

[M. Liron d'Airoles says it first bore in 1804; but it is not much known in England. It is indeed objectionable on account of its going so rapidly to decay. It does not become mealy; but often, before one is aware, its flesh becomes a liquid, which its skin like a waterproof bag contains till cut. Very different from the Glou Morceau, and some other varieties that will decay on the outside, and still prove sound internally.]

Poire Hamden.—[Syn. Summer Bergamotte, *Miller*, Bergamotte d'Angleterre, Longueville, Scotch Bergamot, Fingal's Pears, Ellanrioch (Milan Blanc, *Noisette*, but Professor Decaisne says this is not correct). The description in the work before us is in accordance with that in the "Guide to the Orchard and Kitchen Garden," which description, very correctly translated, is given by Professor Decaisne, together with that of Miller. There are finer Pears than Hamden's Bergamot, ripening at the same period, September; nevertheless it is very good, if gathered a little before it readily parts from the tree, and then packed closely in well-dried hay or straw; moreover the variety is so hardy that it will succeed where some of the finest kinds will scarcely grow. Dalbret, *Ann. Flore et Pom.*, speaks of it in high terms, as being in France "exceedingly melting and sugary; it may be said without exaggeration that it is one of the best Pears, approaching in quality the Brown Beurré, to which on account of its hardness it is even to be preferred, as it will succeed in all soils and aspects." Between Paris and Ellanrioch in North Britain, where it is said to be the only kind that will ripen in that locality, there are certainly many indifferent situations where it might be cultivated with advantage, especially if gathered and stored till fit for use as above indicated.

A double number (Parts 8 and 9) of Mr. Howard's superb *Nueva Quinologia* has been published with plates of six species of Cinchona, examples of artistic skill still more striking if possible than those in former parts. Mr. Howard's minute and elaborate examination of the medicinal properties and physical peculiarities of the species, places this noble work in the first class of Materia Medica dissertations.

Under the title of a SECOND EDITION of *Pritzel's* useful *Iconum Botanicarum Index locupletissimus* (1861), a Berlin publishing house has put forth a volume which differs in no respect whatever from the edition issued by Pamplin and Williams & Norgate in 1855, except that the preface and title-page are in German instead of English—a strange sample of Prussian commercial honesty.

We also have before us the 4th Part of *Grisebach's Flora of the British West India Islands*, commencing the order of Dogbanes (Apocynaceæ); and the 1st Part of a *History of British Sessile eyed Crustacea*, by Mr. Bate and Professor Westwood (Van Voorst), the commencement of a new volume of this eminent publisher's Natural Histories, illustrated as usual with first-rate figures and tailpieces. This first Number contains the history of the Sandhopper (*Talitrus Locusta*), the Shorehopper (*Orchestia littorea*), and several other shrimplike creatures. We shall refer to this interesting serial on a future occasion.

TRADE LISTS RECEIVED.—Narcisse Gaujard, Ghent, Faubourg de Bruxelles, *Supplément au Catalogue général*—a list of fruit trees and hardy trees and shrubs. It includes several new Apricots, Cherries, Peaches, Pears, &c., and a considerable collection of Vines. We also observe eight new varieties of Pyrus japonica, varying in price from 1 franc to 6, and a new Yucca called Parmentieri.

Garden Memoranda.

MR. WILLIAM PAUL'S NURSERY, WALTHAM CROSS.—After half an hour's ride from London the platform of the Waltham Station on the Eastern Counties Railway close to this lately formed nursery is reached. The entrance walk joins the platform, and runs some 200 yards by the side of the railway. A rustic fence, erected on the railway side, is covered with climbing Roses, and a border opposite is planted with Hollyhocks. After crossing a little bridge the first feature that attracts attention is a Grass glade about a quarter of a mile long, running close to and parallel with the railway. Following this for some distance, amid fruit trees and evergreens, and glancing to the left, we discover another glade at right angles with the one we are traversing, the two forming the letter ⊤ (thus ⊣). The latter glade, which forms a prominent part of the Nursery, is one third of a mile in length, extending from the railway to the turnpike road, with gravelled walks on each side for use in wet weather. At the entrance on either side are large clumps of Ghent Azaleas and Rhododendrons, backed up by beds of Roses, Evergreens, Hollyhocks, Gladioli, Bouquet Dahlias, &c., interspersed with fine examples of choice Conifers, the whole on Grass; next in order come two banks of miscellaneous evergreens, thrown together in masses, the guiding principle seeming to have been to bring out by contrast the different shapes and tints of foliage. This is materially aided by the free use of Perilla nankinensis, a plant cheaply raised, and which might often be introduced with good effect in the spaces between evergreens in newly planted borders. Next are lines of beds filled with Roses and Rhododendrons, alternately backed with occasional specimens of large evergreens. These are again succeeded by banks of miscellaneous plants grouped with a view to contrast as before. Here the arrangement changes. The same lines of clumps are preserved, but this time they are filled with a different class of occupants, principally annuals, biennials, and perennials, as Zinnias, Asters, Phloxes, Pentstemons, Antirrhinums, grown for the purpose of obtaining choice seed.

The Hollyhocks here are not grown from forced cuttings, nor grafted, but struck from eyes taken from the plants growing out of doors in the months of July and August. These cuttings are placed on an old hot-bed, where a little bottom heat still exists, and are ready to pot off into single pots in about three weeks. Placed at first in 60-sized pots, the plants are shifted into larger sizes from time to time as required.

The different nursery quarters have been laid out in the form of plots of uniform size, four poles in width, divided by 3-feet walks. Evergreens and fruit trees grow here particularly clean and healthy. Roses, too, are plentiful, and although the greater part of these were removed in bud last year their vigour and firmness of wood is all that could be wished. Mr. Paul informed us that nearly all the autumnal Roses in Hertfordshire, not moved, were killed by the frost last winter, and pointed out a singular fact with regard to the Tea-scented and other tender kinds removed in bud. The principal buds were killed, but small ones existing at the bases of the main buds pushed with surprising vigour, and the trees are now large and flourishing, while all the Tea-scented Roses in the district (Gloire de Dijon excepted) were destroyed.

The ornamental tree and shrub department is extensive, especially those varieties which flower in early spring, and whose leaves change to yellow and scarlet in autumn. Of the latter, Rhus Cotinus, leaves flame-coloured; R. typhina, orange; and Liquidamber, with foliage in tufts of green, crimson, and yellow, are the most striking. Some of these are large specimens.

In the fruit department are rows of pyramidal bearing trees to obtain buds and grafts from. Trained Peaches and Apricots which were removed are uninjured, while those not removed were killed or injured past recovery. The Raspberry Belle de Fontenay is still covered with ripe fruit, handsome in appearance, and good in flavour.

In a vegetable garden were Broccoli, Cabbages, and winter Greens of various sorts, planted out with the view of testing their qualities and improving the races by cross breeding. Amongst them was a new Kale and a superior-looking sort of Brussels Sprouts, bred by Mr. Paul. Three sorts of Beet, at present growing side by side, are also worthy of mention, viz., Paul's Superb Crimson, which when true is excellent in colour; but there is said to be a spurious kind in circulation. Nutting's is a good sort, as is also the Pine Apple, the latter being excellent for early use. Seakale, both from seed and roots, was abundant.

When the glass-house department shall have been completed there will be 20 houses nearly all span-roofed, each 50 feet long. Sixteen are already built, and are at present principally occupied with Roses in pots, of all sorts and sizes; Hollyhocks, Grape Vines, the latter short jointed and otherwise in good condition. Of Azaleas and Camellias there is also a good collection, well set with bloom, and one house is filled with Scarlet

and fine foliaged Geraniums. Around the houses is the plunging and bulb ground, where a collection of Chrysanthemums is coming into bloom. Hyacinths are being potted, and Gladioli, which had apparently borne some splendid spikes, are being raised and stored for the winter. Here also is congregated a large stock of seedling Conifers and other hardy trees in pots.

The Roses in pots, whether on their own roots, or the Dog-rose, or on Manetti, are plunged in the open ground about June, the pots being covered afterwards with loose stable-dung, a plan by which comparatively little water is required.

The soil of this nursery rests on gravel, and is thoroughly drained. It varies considerably in character. The greater part is a tenacious loam, a soil in which trees succeed well, and ripen their wood early. Part, however, is a lighter loam, a soil in which Hollies and such evergreens as produce stout fibreless roots in a heavier soil do well.

Seeds are also considered an important item in this establishment, and the harvesting of them is attended to with great care. Among them we noticed fine examples of Turnips and Mangel; large quantities of seed Potatoes, of some 20 selected sorts, and fortunately free from disease. The latter occupy a house, and are stored in burnt earth. In the seed warehouse numberless jars and pans were stowed, containing home-saved sorts of vegetable and flower seeds.

In addition to the nursery just described Mr. Paul has another, consisting of peat, suitable for the growth of American plants, at Broxbourne, a station on the same line of railway, four miles from Waltham. He also retains one of the old nurseries, which is excellently stocked with fruit-trees, Roses, and other ornamental trees.

Miscellaneous.

How Men Travel in Canada West.—We began preparing for the trip, first with two hardy Indian ponies, which are the only horses fit for travel of this kind, a common Red River cart to carry our clothes, blankets, and provisions, a few cooking arrangements, four blankets, two buffalo robes, a gun, cart-cover, and provisions, which last consisted of 20 lbs. of pemmican, 30 lbs. biscuit, butter, sugar, and tea. These were packed in small parcels, for convenience in crossing rivers, as in some cases the rivers were too deep to ford, and we had to raft the baggage in a kind of rude boat, made by stretching the canvas cart-cover around the body of the cart, and drawing this over with lines. Before going on I may here describe the usual routine of travel on such trips. It is always a rule to start early in the morning, and we generally arose at about 5 o'clock, and while one caught the horses and saddled them, the other would have made a fire and cooked the breakfast, which consisted generally of a nondescript dish of Mr. Buckingham's (who was appointed cook to the expedition), made with pemmican, biscuit, and butter. This, with a kettleful of tea, as hot and strong as tea and water would make it, was eaten with a relish known only to those living in the open air and taking active exercise. Breakfast over, things were packed, and we started generally at sunrise, and travelled till about noon, when we would stop at some good pasturage and allow the horses to eat for a couple of hours, and cook dinner; then, starting again, travel till near night, or till we could find at one place the three essentials—water, wood, and Grass. These we would find sometimes at 5 or 6 o'clock, or sometimes have to push on till 8 or 9 o'clock. When a suitable place was found the horses were let go, a fire made, and supper cooked. After supper, wood was cut and a fire built to last all night. If possible the horses were then brought in close to the camp and hopped—that is, had their fore legs tied together to prevent them wandering far; the cart was then wheeled close to the fire, and, spreading the robes and blankets beneath it, we rolled ourselves in them, feet to the fire, and soon fell into a sleep, the soundness of which was in proportion to the fatigues of the day, the softness of the ground beneath, and the musical powers of the wolves, who occasionally gave us a serenade. *Annals of the Botanical Society of Canada.*

The Poison of the Toad.—The most deadly poison known to be used by the slaves in Brazil is that of the toad. The skin of this reptile contains glands which secrete in abundance a milky, glutinous fluid when the toad is put to pain or irritated. This is scraped off and dried. It produces incurable obstruction and enlargement of the liver, and a speedy death. Some beat the toad with rods to make it secrete the venom; others place the animal in an earthen vessel over a slow fire. *Pharmaceutical Journal.*

Calendar of Operations.

(*For the ensuing week.*)

PLANT DEPARTMENT.

CONSERVATORY, &c.—Attend carefully to specimen hard-wooded plants, which it may be necessary to winter in this house; most of these are impatient of fire-heat and a confined atmosphere. Use no more artificial warmth, therefore, than is absolutely necessary. Take advantage of mild days to give air freely to cold pits, and keep the plants very sparingly supplied with water at the roots so as to prevent the production of weak wood full of sap. Look frequently over anything subject to the attacks of mildew, and apply sulphur the moment this pest makes its appearance; see also that everything is perfectly free from insects. If there is any prospect of a scarcity of bloom next May, a portion of the Achimenes and Gloxinias should be repotted at once and placed in gentle heat, choosing such as have been the longest at rest; and a few Clerodendrons, Allamandas, a plant or two of Echites splendens and Dipladenia crassinoda, may also soon be started; but unless plants of these are at command with well-ripened wood, and that have been some time at rest, there will be nothing gained by attempting to start them into growth for some time yet, for in most cases it is difficult to maintain a sufficiently warm temperature to secure anything like free growth from these unless the plants have been well prepared for an early start. A gentle bottom-heat of about 80° or 85° will be of service to such things in inducing a healthy root action, and if this can be secured there will be little difficulty about obtaining free vigorous growth. Let Ixoras and all other hard-wooded plants that have made sufficient growth be kept rather dry at the root in order to check their growth, and induce a tendency to form bloom buds; but do not let the soil in the pots get so dry as to affect the foliage.

FORCING DEPARTMENT.

PINERIES.—The supply of ripe fruit from May until August being usually obtained from plants that start into fruit without making growth in spring, a fair proportion of the stock should therefore be in a forward state by or shortly after this season, and any sudden changes of temperature which might induce too many of them to show fruit at once should be carefully avoided. That portion of the stock expected to furnish the autumn supply of fruit should not be too much checked at present, indeed these may be kept growing slowly all the winter, which is perhaps the most certain method of preventing their fruiting too early in spring. Where the stock of plants likely to push without making farther growth is considered insufficient to meet the demand until August, the stronger plants of those for autumn fruiting should be encouraged to make growth as early as can be done without weakening the foliage, with the view of preparing them for showing fruit in April. Examine the soil occasionally about young stock growing in the open bed, and do not allow it to become unhealthily dry, for this would probably result in a great portion of the stock showing fruit prematurely, and it is also a work of some difficulty properly to moisten the bed if it is once allowed to get too much dried up. Use no more fire-heat for the present than will suffice to maintain the requisite temperature, which, for the general stock, need not be high for some time yet.

VINERIES.—Where very early forcing is carried on, as soon as the buds are fairly started the temperature should be increased to 60° at night and 65° by day, allowing it to rise 10° on bright days. Take every opportunity of admitting a little fresh air, but recollect that the foliage will not bear exposure to cold winds, therefore air should be admitted in contact with the heating apparatus, and when it may be necessary to give back air the sashes or ventilators must be opened but very little, and if pieces of netting could be nailed over the openings this would greatly assist in preventing cold currents blowing into the house. Where the border cannot be warmed, see that it is well protected from wet, &c., by a thick covering of dry litter, or whatever more efficient covering can be recommended. Look over ripe Grapes often, removing any decaying berries, and aim at securing a dry atmosphere with the least possible application of fire-heat.

FLOWER GARDEN AND SHRUBBERIES.

Dahlias killed down to the ground should be taken up and placed heels upwards under cover to dry, preparatory to being stored for the winter. Chrysanthemums, which are everywhere flowering finely this season, must receive careful attention, so as to preserve their beauty as long as possible. See that coarse growing plants which may be encroaching upon their weaker neighbours are reduced so as to occupy their proper places. Valuable plants, as variegated Hollies, Rhododendrons, &c., if not growing as freely as it is desirable that they should do, would be benefited by a liberal allowance of rotten manure or well-decayed leaf soil applied as a top-dressing, covering it with a little fine soil, and working it into the ground around the ball towards the extremities of the roots. But Rhododendrons, and what are generally termed American plants, bear removal so well that these where not growing satisfactorily should be taken up, the ground well prepared by a liberal addition of peat or leaf soil, and re-planted. Gladioli may now be planted. Choose a warm thoroughly-drained situation, work the soil well by deep digging, and add plenty of rotted manure, elevate the bed or patch a few inches above the general level, plant the bulbs 5 or 6 inches deep, and 6 inches apart, surrounding them with 1 inch of sand before covering with mould; protect during the winter, against excessive wet and frost, with a thick layer of sawdust, old tan, dry litter, an old carpet, thatched frame, or tarpaulin; the three latter coverings must be removed during favourable weather, and the former coverings entirely cleared off when the plants appear. Ranunculuses may also now be planted. The situation of the beds should be cool and somewhat moist; at the same time, there should be good drainage. The most suitable soil is a hazelly loam. If, therefore, the natural soil be unsuitable, remove it to the depth of about 2 feet, and 4 feet in width, replacing it with rich loam from an old pasture; this ought to be rather firmly trodden in, and should form the foundation and principal portion of the bed. On this should be laid a liberal dressing of well decayed manure, mixing it a little with the under soil; and over this, for the top of the bed, should be laid a layer of soil 6 inches deep, for planting the tubers in; this latter should be stiffish fibry loam mixed with well-decayed cow-dung and leaf-soil. Draw drills, 6 inches apart and 2 inches deep, with a small hoe, and plant the roots 4 inches apart, with the claws downwards, gently pressing them into the soil; the crown of the tubers should be at least $1\frac{1}{2}$ inch under the surface of the bed.

HARDY FRUIT AND KITCHEN GARDEN.

Do not let Pears get over-ripe before being used; also look over the whole stock as often as time can be spared, removing any fruit that exhibit symptoms of decay, and put them aside for immediate use. Any of the choicer varieties of Pears that do not ripen properly in the fruit room should be removed to a warm dry room for a few days, which will be found to greatly improve them. Keep all fruit as cool and dry as possible; if frost is excluded from the house, it can scarcely be too cool where the object is to preserve fruit plump and sound as long as possible. Get manure wheeled upon vacant ground when the weather is suitable and this can be done without injuring the walks, and get all spare ground turned up, so as to expose it to the action of the weather. For land that has been long cropped with vegetables a dressing of fresh loam would in many cases be preferable to manure, and where this is wanted and can be obtained it should be got to hand, in order that advantage may be taken of frosty days for wheeling it upon the ground. Where fresh soil cannot be obtained, charred vegetable refuse, such as prunings of shrubberies, edgings of walks, and many things which turn up in the course of the season, may be cheaply made to form an excellent substitute.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,

For the Week ending Nov. 7, 1861, as observed at the Horticultural Gardens.

November.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Temperature of the Air. Min.	Temperature of the Air. Mean	Temperature of the Earth 1 foot deep.	Temperature of the Earth 2 feet deep.	Wind.	Rain.
Friday 1	28	29.339	29.214	51	28	39.5	$53\frac{1}{2}$	53	W.	[illegible]
Satur. 2	●	29.445	29.238	48	29	38.5	52	52	N.W.	[illegible]
Sunday 3	1	29.886	29.671	51	19	35.0	50	51	N.W.	[illegible]
Mon. 4	2	29.964	29.925	52	31	41.5	48	50	S.W.	[illegible]
Tues. 5	3	29.659	29.515	56	31	43.5	48	50	S.W.	[illegible]
Wed. 6	4	29.497	29.343	50	25	37.5	$48\frac{1}{2}$	$49\frac{1}{2}$	S.W.	[illegible]
Thurs. 7	5	29.422	29.364	56	24	40.0	49	49	W.	[illegible]
Average		29.601	29.467	52.0	26.7	39.3	49.9	50.6		[illegible]

Nov. 1—Partially overcast; fine; densely overcast; rain.
— 2—Sleet falling thickly in broad flakes; cold wind, overcast; frosty.
— 3—Fine; slight rain; clear and frosty at night.
— 4—Hazy, with slight drizzle, heavy rain.
— 5—Densely overcast; very heavy rain; slight frost.
— 6—Overcast; showery; frosty at night.
— 7—Clear and frosty; fine; sharp frost.

Mean temperature of the week $6\frac{1}{4}$ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK

During the last 35 years, for the ensuing Week, ending Nov. 16, 1861.

November.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.	N.W.
Sunday 10	50.6	35.1	43.0	20	0.67 in.	3	5	3	2	6	9	2	3
Mon. 11	50.9	35.8	43.3	14	1.02	3	5	6	1	7	8	4	1
Tues. 12	50.7	34.7	42.7	15	0.50	3	4	7	3	3	6	7	2
Wed. 13	50.0	35.8	42.9	19	0.66	2	8	4	2	6	4	5	4
Thurs. 14	48.0	34.1	41.0	18	1.24	6	5	4	5	2	6	3	4
Friday 15	48.5	34.8	41.6	16	0.34	2	5	5	3	4	10	5	1
Satur. 16	48.6	33.0	40.8	13	0.34	4	3	4	3	5	9	4	2

The highest temperature during the above period occurred on the 12th, 1841—therm. 63 deg.; and the lowest on the 16th, 1841—therm. 15 deg.

Notices to Correspondents.

CHESNUT OR CHESTNUT: *J B W* asks which spelling is right, as both are in use. We conceive that the word comes from the old French Chesne, Chesne-nut, Nut of the Chesne. If so the first is right. If we are wrong we shall be happy to stand corrected.

GARDEN ARCHITECTURE: *W. A.* It is by no means necessary that a terrace should be wholly on the same level; what is indispensible is that it should be horizontal. Nothing is more common than to construct terraces on different levels connecting them by flights of steps.

HARDY BULBS: *J T.* We never take up our own, and they flower well for two or three years. After that it becomes necessary to replace all that are weak and worn out. It would be very late in the year to plant them now, even if necessary. You ought never to delay beyond the middle of October; and the beginning of the month is better.

NAMES OF FRUITS: *H R Seymour.* 1, Duchesse d'Angoulême; 2, St. Germain.—*C B W, Dublin.* Not the Northern Spy, but a very fine specimen of the Blenheim Pippin.—*W F.* 1, Syke House Russet; 3, Ne plus Meuris; 4, Thompson's; 5, Chaumontel; 6, Reinette du Canada.

NAMES OF PLANTS: *W B S.* A leaf does not enable us to inform you. — *Alfred Bye.* The old Amaryllis formosissima, now seldom seen, which is a pity.

VANCOUVER: *Emigrant.* We suppose the best evidence of what grows now in this rising Colony is indicated by the prizes offered at the Exhibition of the Agricultural and Horticultural Society, which was to take place last month. At that show competition is invited in Apples, Pears, Quinces, Cherries, Gooseberries, Tomatoes, Cabbages, Carrots, Beet, Parsneps, Celery, Aubergines, Cauliflowers, Melons, Water Melons, and Squashes, rather an inexperienced list we fear, but still an indication of what is going on. A good gardener there is worth a guinea a day.

WATER: *S B*, in reply to the question which "A. H." puts to him (see p. 950), begs to say that his orchard-house trees are watered from a rain water tank, so long as the supply lasts, and during dry weather the tank is replenished with water pumped from a well about 40 feet deep, and strongly charged with sulphate of lime. He adds that this might be neutralised by carbonate of soda, but that he has generally neglected doing so.

THE LONDON MANURE COMPANY
(ESTABLISHED 1840,)
Are now prepared to send out the following MANURES:—
CORN MANURE for AUTUMN SOWING.
SUPERPHOSPHATE of LIME.
DISSOLVED BONES for PASTURES.
CONCENTRATED URATE.
BLOOD MANURE for CORN.
PERUVIAN GUANO, NITRATE of SODA, SULPHATE of AMMONIA, and every other Manure of value.
116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE of LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.
CONCENTRATED TURNIP MANURE, equal in value to the preceding.
Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861 are now ready for delivery at his factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, and BONE SUPERPHOSPHATE of LIME	£6	6
LAWES'S SUPERPHOSPHATE of LIME from BURNT BONE or MINERAL PHOSPHATES ..	5	5
LAWES'S BARLEY, GRASS, and MANGEL MANURES	8	0

These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

POTTER'S GUANO.—Established Twenty Years.
Agents Wanted.
Factory: 28, Clapham Road Place, S.

Pigs, Pigs, Pigs.
DAMAGED RICE from 4*l*. per Ton. All other descriptions of Feeds for Pigs, Poultry, and Cattle sold for Cash by W. JUPP & Co., Cattle Food Manufacturers, 42, Great Tower Street, E.C.

Parkes' Steel Digging Forks.
BURGESS AND KEY, 95, Newgate St., E.C., London, being the Wholesale and Retail Agents for these celebrated Tools, have always a large Stock on hand from which their Customers may select what they may require.
ANTHONY'S PATENT AMERICAN CHURN.—The FIRST PRIZE was again awarded to this Churn in Competition with several others at the Chester Meeting of the Royal Agricultural Society; it has obtained the First Prize given by the Society at every Meeting since 1850.
Messrs. BURGESS & KEY, 95, Newgate Street, E.C., strongly recommend it as the most perfect Churn now in use. Full particulars sent on application.

HENRY J. MORTON AND CO.,
2, Basinghall Buildings, Leeds.
Galvanised Iron Water Cisterns
for Cottage Houses, &c., to contain 50 gallons, 26*s*.; 80 gallons, 31*s*. each; and 140 gallons, 37*s*., and fitted with tap, keeping the water perfectly sweet and clean; will not rust or corrode. Cisterns of all sizes.
Galvanised Iron Pumps
for Liquid Manure or Domestic Use, 3 inches diameter, 30*s*. and 32*s*. 6*d*. each; Tail Pipe for same at from 10*d*. per foot.
Galvanised Iron Swing Water Barrows
for Garden or Farm use, containing about 20 gallons, entirely formed of iron, 35*s*. 0*d*. each.

Gutta Percha Tubing for Watering Gardens.
THE GUTTA PERCHA COMPANY have the pleasure to acknowledge the receipt of the following *Testimonial from* MR. J. FARRAH, *Gr. to* BOSWELL MIDDLETON JALLAND, Esq., *of Holderness House, near Hull.*
"I have had 400 feet of your Gutta Percha Tubing, in lengths of 100 feet each, with union joint, in use for the last 12 months for watering these gardens, and I find it to answer better than anything I have ever yet tried. The pressure of the water is very considerable, but this has not the slightest effect on the tubing. I consider this tubing to be a most valuable invention for Gardeners, inasmuch as it enables us to water our gardens in about one-half the time, and with one-half the labour required."
Manufactured by the GUTTA PERCHA COMPANY, Patentees, 18, Wharf Road, City Road, London, E.C., and sold by their Wholesale Dealers in Town and Country.

E. T. ARCHER'S "FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, &c.
PROTECTION from the COLD WINDS & MORNING FROST.
"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.

Two yards wide	1*s*. 6*d*. per yard run.
Four yards wide	3*s*. per yard.

An improved make, 3 yards wide, 2*s*. 6*d*. per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1*s*. 4*d*. per yard run.
ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.
"It is much cheaper than Mats as a covering."

Oil Paint no longer Necessary.
HILL AND SMITH'S PATENT BLACK VARNISH for preserving Iron Work, Wood, or Stone. This Varnish is an excellent substitute for oil paint on all out-door work, and is fully two-thirds cheaper. It may be applied by an ordinary labourer, requires no mixing or thinning, and is used cold. It is used in the grounds at Windsor Castle, Kew Gardens, and at the seats of many hundreds of the nobility and gentry, from whom the most flattering testimonials have been received, which HILL & SMITH will forward on application.
Sold in casks of about 30 gallons each, at 1*s*. 6*d*. per gallon, at the Manufactory, or 1*s*. 8*d*. per gallon paid to any station in the kingdom.
Apply to HILL & SMITH, Brierley Hill Iron Works, near Dudley, and 76, Cannon Street, E.C., from whom only it can be obtained.

£1000 UPON the WOOLSTON SYSTEM against any other system of Steam Cultivation.
For price of apparatus and particulars apply to Mr. W. SMITH, Woolston, Bletchley Station.

JOHN FOWLER, JUN., 28, Cornhill, London, E.C.— Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free

JAMES AND FREDERICK HOWARD, BRITANNIA IRON WORKS, Bedford, Manufacturers of STEAM CULTIVATORS, STEAM PLOUGHS, CHAMPION PLOUGHS, HARROWS, HORSE RAKES, & HAYMAKERS.
Catalogues, with full particulars, sent free on application.

ALFRED SIBSON, F.C.S., for the last seven years Assistant Chemist in the Royal Agricultural College, Cirencester, author of "Agricultural Chemistry," "Everyday Chemistry," &c., is prepared to make arrangement with an Agricultural Society or Farmers' Club, for the engagement of his services as CONSULTING CHEMIST; or, with two or more Societies as NON-RESIDENT CHEMIST, to deliver occasional Lectures, perform Analyses at reduced rates, &c.— Address as above.

Drainage Season.
MR. BAILEY DENTON undertakes the DRAINAGE of ESTATES by Commission or Contract.
52, Parliament Street, Westminster, S.W.

THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c. IN ENGLAND AND WALES AND IN SCOTLAND.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.
For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

RUGBY and DUNCHURCH CATTLE SHOW, NOVEMBER 28.
A Prize of 15*l*. is open to All England for the best FAT BEAST of any description, the property of the Exhibitor for six months prior to the Show.
Entrance 10*s*., to close on November 12.
For form of Certificate, &c., apply to Messrs. W. & E. HARRIS, Rugby.
N.B.—Covered Sheds will be provided for the Beasts shown for the above Prize.

The Agricultural Gazette.

SATURDAY, NOVEMBER 9, 1861.

MEETING NEXT WEEK.

MONDAY, Nov. 11 { Thornbury .. .. 5 P.M. (Major Gaisford on Fertilisation of Land.)

—— THE Royal Agricultural Society of England resumed the monthly meetings of its Council on Wednesday last, under the chairmanship of its new President, H.R.H. the PRINCE CONSORT.

Last Wednesday's meeting is especially worthy of record in our columns for the resolution which was passed to allow the agricultural papers for the future to send reporters to the weekly meetings of the Society. Other resolutions and proceedings however also possessed great interest. Additional subjects for essays, on which prizes of 30*l*., 20*l*., and 10*l*. are offered, were named and adopted on the recommendation of the Journal Committee: the list will be found in another column. An interesting report from the Chemical Committee was given in; and the subjects to which Professor VOELCKER is to direct his attention were named. An interesting report from the Veterinary Committee was also read. Proceedings were directed to be taken with a view to maintain the international character of next year's meeting; and altogether the Presidency of H.R.H. the PRINCE CONSORT was inaugurated by the accomplishment of a great deal of most useful work.

THE tillage and drainage of the soil are very closely related to each other. So indeed, as we said last week, are the tillage and manuring of the soil. And these, not merely as cause and effect are related—though drainage does enable tillage, and tillage does alter composition—but as being operations of the same class and kind. And thus Mr. BAILEY DENTON, though engaged in a lecture upon land drainage last Monday, could not help referring to the steam plough—as the great tillage implement of the future. And we had from him too the striking fact bearing on the composition of a fertile soil, that in a state of perfect tilth one-quarter of its bulk is air.

Mr. SMITH of Lois-Weedon says that in all clay soils containing the mineral elements of grain, perfect tilth dispenses with the need of manuring; and there cannot be a doubt that deep and thorough tillage enables soil to draw immensely on the stores of vegetable food contained in air and rain.

Messrs. HARDY again say that perfect tilth dispenses with the need of drainage, and there can be but little doubt that deep and thorough tillage facilitates the operation of whatever drainage may exist, whether it be natural or artificial.

In both these cases the useful lesson is well taught, that it is true economy rather to put the cheap and copious storehouse of Nature's agencies to its fullest use, than by laborious and costly artificial means to imitate expensively their operation.

Such a lesson applies, indeed, beyond the *advantages* of tillage to the methods by which tillage is to be obtained. Among the earliest suggestions of cultivation by steam power was that of reducing by its means the soil to tilth at once. The land was to be torn down as the deal is torn down at the saw-mill: though before the machine it may have been as hard and firm as wood, behind the tool as it advanced at work it was to lie as light and fine as sawdust. But it has at length been found that it is better because cheaper, and more perfect, too, to leave this last refinement of the tillage process to the weather, which does it without cost. The land is now torn—smashed up—or moved and thrown about by plough or grubber in great clods and lumps. This is best done in dry autumn weather, and thus it lies till spring. Certainly no climate is better adapted for cheap tillage than the English—the rains and frosts of winter following a dry September and October must penetrate and thrust asunder the clung and hardened masses of the soil. No two particles shall remain adhering to each other, if you only give room and opportunity to the cheapest and most perfect natural disintegrator in the world. No rasp, or saw, or mill will reduce the indurated land to soft and wholesome tilth so perfectly as a winter's frost. And all that you need to attain its perfect operation is, first to provide an outlet for the water when it comes—by an efficient drainage of the subsoil, and then to move the land while dry and break it up into clods and fragments no matter how large they be, and leave them for alternate rain and drought and frost and thaw to do their utmost.

Given a clay soil once cleared of all perennial weeds and thoroughly drained, and its cultivation in the future will be a marvel of cheapness and efficiency when compared with its cultivation in the past. For, how many ploughings and harrowings, and rollings, and grubbings, have been needed hitherto as a preparation for Wheat on such soils? And if by any chance an attempt at growing roots on such a soil was made, what a business and a series of processes it was! A team of horses, such as we have in England for clay land tillage, will weigh, with men and plough, at least 2 tons, and over every 10-inch width, from end to end of every field, this 40 cwt. must tramp or slide in the effort to lift and *loosen* (!) each 10-inch strip of earth. What a contrast to the operation of FOWLER'S 4-furrow plough resting on two large wheels, and weighing altogether some 27 cwt., drawn once to every 40 inches width, by which a deeper and more thorough ploughing is effected. In the former case every operation created the need of another. The horses and the tool together hardened a floor, below which water could not penetrate; or if engaged in harrowing or in rolling they hardened the earth they were attempting to reduce to tilth, and so made another operation needed.

Examine any valuation of acts of husbandry to an incoming tenant in a clay land district, and if the subject is a new one you will be astonished at the multitude of operations, the crossings and re-crossings, the repeated ploughings and harrowings—*e.g.*, "four times ploughed, thrice dragged, eight times harrowed, twice rolled —not uncommon in an attempt to grow Turnips—the miles and miles of work per acre—the army of horses and tools and men engaged—and the weeks and months of work to which it all amounts. Talk of ROMAINE and his "cumbrous" apparatus, weighing perhaps 14 tons, and traversing a 7 feet width at once! We have in an old-fashioned clay-land fallow as much as 14 tons traversing every foot in width—we have a man and boy and team

of horses walking at least 60 miles per acre—we have work in September or October—in April, May or June, July, August, and September.

It is possible to simplify this work somewhat—we can save both horse-flesh and shoe-leather, and the temper of the farmer too—grow better crops, and save his pocket in the process.

Let this clay land be drained and there need be no fear of drains 4 feet deep not "drawing," if after drainage it be deeply cultivated while the soil is dry. Let us suppose it once cleaned, then after harvest cart on what manure or lime or both it is intended to apply; plough it in by steam power and leave it rough till spring. When dry in March or April put the steam cultivator through it, and it is possible at the same time to harrow it effectually by steam power, and it will at once be ready for any spring sown crop it is intended to grow, whether grain or green crops, Barley, Oats, Cabbages, or Mangel Wurzels.

There cannot be a doubt that on clay lands especially which have been laid open in fields of at least 30 acres with straight fences, and then well drained, the steam plough is destined to produce a marvellous change in the whole character and productiveness of English agriculture.

THE gentlemen who either by way of pastime or duty display themselves to their constituents when the evenings begin to grow long, and the russet vies with the green as to which shall predominate in the landscape, last year found an easy theme for their post-prandial eloquence. It is somewhat astonishing that nothing this year has been said about the same subject by men who have found it so impossible to be lively except on forbidden themes. Last year our country gentlemen were obliged to condole with the flooded farmer; this year they might have carried to their patient constituents the assurance that they need no longer fear the consequences of a deluge. The suggestion is perhaps not too late for some to benefit by it. From January to July last year more rain fell than had fallen during the whole of the year 1858. Extensive breadths of land had not been sown with Wheat, much of the seed which had been deposited had failed to germinate in the water-bed of the saturated clays; the hay crop rotted in the swathe and was fitter for manure than food; the harvest, at the period when constituents were condoled with, was a ruinous failure to hundreds: the pastures were sodden with water, and the bullocks fed upon them were falling by pleura, and the sheep in thousands by rot; great floods swept the lowlands, the health of towns was jeopardised, and the anti-drainers were glad to hide their heads from the bitter upbraidings of those who had been misled by their *laissez faire* advice. The reported speeches of last year were full of such calamities. The woes of the suffering were to be heard of on all hands.

When there is an abuse to be remedied, the more thorough the case the more likelihood is there of a prompt and efficient remedy. A good railway accident in which a bishop, or two or three railway directors, are sacrificed is deemed essential to the cause of railway reform. In like manner a brisk fever partakes rather of the character of a boon than not. It clarifies the entire man. If it is beaten and does not beat. it is like cleaning the chimney by setting it on fire—perilous but thorough. So therefore the floods of last year, and the terrific injury done to property, were by some wise men welcomed as the harbingers of river reform. In 1852 a prodigious rainfall of 32 inches if it did not force Lord CARLISLE to introduce his Drainage Bill, at all events it enabled him to do so, which measure and its comprehensive and compulsory powers would have proceeded had not the Administration, of which the noble lord was a member, retired. Would not the like cause produce like effect? Certainly. The anticipations then formed that out of the extreme distress of last year deliverance might arise to the sufferers in the shape of some General Drainage Act under which the country might be divided into drainage districts, such districts including within a single boundary any one main river with all its feeders, are justified by the fact that some such piece of legislation now has effect. The Farmers' Club spoke out, an arterial drainage meeting was convened in Hanover Square Rooms during the Smithfield Club week, a Committee was appointed to wait upon the Home Secretary. The Home Secretary listened to arguments set forth by the Committee in favour of immediate legislation, and promised that consideration should be given to the subject during the coming session, and at the very end of that session a Drainage Act did receive the Royal Assent, which, although not all we desired, is a great step in the right direction.

It does seem strange, therefore, we repeat, that the meetings of the County Agricultural Associations have passed off with scarcely a notice, so far as we remember, of an Act which is intended as a remedy to those evils which aroused so much eloquent sympathy last year. It is probable that many of the noble spokesmen slipped away from St. Stephen's to the Moors before the Drainage Act had become law, or that others were so pressed with heat and work in the later months of the sitting as to have neither time nor energy to examine it, but since the Government thought it of sufficient importance to gain distinct notice in the Speech from the Throne, it is rather wonderful that it has failed to secure the notice of those it is designed to advantage.

For this Act and the good it contains we are indebted to Mr. BAILEY DENTON and Mr. JOHN ALGERNON CLARKE, for although carried through by the Government it would not have been undertaken this year, had it not been for their strenuous and enlightened advocacy.

At the close of a paper read by Mr. DENTON before the Farmers' Club last Monday evening, upon the effects which have been and will be produced on the arterial channels and outfalls of the kingdom, and which may be read *in extenso* in another part of our columns, he makes reference to the provisions of the Act in question. As his summary is necessarily condensed, it perhaps may be well to dwell a little upon some portions respecting which information may be sought. If we cannot touch a little on this point there is nothing else to do, for Mr. DENTON has exhausted all the arguments which can be advanced in favour of drainage or the necessity of river reform.

One serious obstruction to sound underdrainage works was the interposition of a neighbour's land between the drained land and the desired outfall; and it has been urged again and again that where private property has not been allowed to stand in the way of public improvement, as is seen in the construction of railways, as great facilities should be given for the passage of drainage water as for the passage of trains, since free circulation in either case is equally for the good of society.

Now, Part III. of the Act before us is intended to deal with such an abuse as this, but it does so in such a manner as to render it very unlikely that any applicant will be willing to test its powers. In case the owner and occupier of the land through which an easement is to be made, both refuse, the affair is speedily settled by an appeal to two Justices in Petty Sessions, or by arbitration; and where the injury said to be sustained can be compensated by money, it is to be so; and where it cannot, the improvement desired is to drop. Should the owner assent and the occupier dissent, the applicant may as well give up the attempt to proceed. The expense of legally securing an "assent" from an owner under disability in cases where the occupier does not concur, will be very great indeed, even when no compensation is due. There will be 1st, the cost of preparing the plan or map with the details required, and drawing up a formal application in writing; 2d, the cost of the deed of assent under hand and seal; 3d, the costs of two surveyors viewing the *locus in quo*, making an award and annexing a declaration of approval; 4th, the costs and compensation of the lessee (who does not assent), which may be determined at his option by either jury or arbitration; 5th, the cost of lodging the deed of assent with the Clerk of the Peace. Everything is against the applicant—his jeopardy seems fearful, and we advise the enterprising landowner to wait until this part of the Act is so amended as to allow of his estimating what a simple easement will be likely to cost him, before he ventures to serve a notice, an act which, as Mr. DENTON says, commits him at once to the proceeding, and to the unknown expenses of opposing parties, though he has no surety that the Inclosure Commissioners will allow the cost and expenses to be charged on the estate to be benefited.

A second difficulty in the way of efficient drainage was found in the unsatisfactory state of the laws relating to ordinary ditches and water-courses—drains laid under the Public or Private Moneys Drainage Acts must be 4 feet deep. But when ditches into which these drains empty are not more than half that depth, what was to be done? If these ditches were the property of another nothing could be done without his consent. Lord LINCOLN's Outfall Act was intended to *enforce the cleansing of existing ditches*, but it was found less detrimental to let the outfall silt up than to use it. What we have said of the facilities given by the Act to persons desirous to cut new drains through another owner's property applies in this case also, as well as to the "straightening, widening, and cleansing, or otherwise improving existing drains," so that unless the adjoining owner is a consenting party the matter is impossible of adjustment, and the only hope which exists to the applicant is in making the owner and occupier both dissentients. It is somewhat surprising to find in this Act that the joint obligation of owners of party ditches or common watercourses to deepen and maintain them is quite ignored. We are also astonished to read that if a part owner of a ditch deepens it, he does so at his own cost, and is obliged ever more to keep it at his own expense cleansed and fully maintained. Part III. of the Act, indeed, is full of such absurdities, whose presence gives one the impression that it was hurried through in this form to prevent an opposition which might have been fatal to a more complete measure. We must regard the Third Part, therefore, as an unpleasant appendage, without which we could not have obtained Parts I. and II.

While we have long had a General Inclosure Act, under which two-thirds in value can bind the remaining one-third to inclose open fields and common lands, it did appear strange that no such facilities existed to enable landowners to unite to drain districts, under proper restrictions, so as to avoid the heavy costs of special legislation. For want of such facilities there has been no system. Some in the same district have been draining to one level, and some to another. There has been no organisation of the parts to the whole, and we have begun to drain our fields before we have provided ourselves with proper outfall for our waters. Now this difficulty is dealt with in the first and second parts of this Act. They enable a majority of landowners to effect improved drainage by means of a common outfall or combination of works, binding the minority to contribute to the cost thereof. In this respect the Act resembles Lord CARLISLE's Bill of 1852, and resembles it moreover in the fact that the Inclosure Commissioners are named as the Commissioners for carrying it into effect.

With reference to the formation of a new drainage area, the course of proceeding will be as follows. A petition shall be presented to the Inclosure Commissioners stating the proposed boundaries of the area, by reference to a map, and signed by the proprietors of one-tenth part of the land within such boundaries. As it will require one-tenth in extent of a district to start a measure, so it will require one-third to *express dissent* before the project, if approved by Inclosure Commissioners, can be rejected. The Commissioners so petitioned will send an inspector to survey the area and report, and should all be satisfactory a Commission of Sewers for the area will then be issued. Three gentlemen appointed by HER MAJESTY will form the commission, and they will, of course, be empowered to levy rates to defray the expenses of improving existing works or creating new ones. They will have to deal with vested rights in mills, and weirs, and dams, so long the bugbear of drainage. If the owner object, the right of the Commissioners to carry on their work will be determined by arbitration; and if it be decided to be not necessary, or of a nature not to be compensated for by money, it must not be made. The work being necessary, and money being an equitable compensation, the compensation for the removal or interference with mill dams, &c., is determined by the machinery of the Lands Clauses Consolidation Act, and must be paid before the commencement of the work. Amongst the saving clauses which secure to canal owners and wharfingers their rights is one which, unless liberally interpreted, will leave many of our surcharged districts quite unrelieved.

It is to this effect: "Nothing in this Act shall authorise the Commissioners to interfere with any river dock so as to injuriously affect navigation, or to interfere with any towing-path, &c., or with any supply of water to any town, &c., without the consent of the Corporation, &c., in writing." This is an important feature in the Act. The most frequent causes of injury are navigable rivers and canals; and unless this section can be liberally construed to allow of impervious culverts (pipes of iron or tunnels of brick laid in cement) to be laid under them so as not injuriously to affect the navigation or the traffic of the towing path, the abuse will continue. The formation of elective drainage districts. dealt with in Part II., by which it is seen that any persons being proprietors of not

less than one-tenth part in acreage of any bog, or other area of land that requires a combined system of drainage, banking, or irrigation may, with the consent of the Enclosure Commissioners, constitute such area; its affairs being managed by a drainage board, whose members elected in the district shall have the powers of the Commissioners of Sewers, subject to the Inclosure Commissioners.

But enough has been said to show the advantages of the Act. If we have not all we wanted, we have more than we expected, for while private rights are allowed to interfere so much with public interests, and continued so impregnable, it was well known that if we got an Act at all this year it must necessarily bean incomplete one. The decision of Vice-Chancellor STUART, in the case of ENNOR *v.* BARWELL, in which subterranean water rising to the surface and then gravitating towards a lower point in accordance with the inclination of the ground, and not in an accurately defined channel, was declared to be the property not of the landowner but of the miller below, whose mill it would reach were it not got rid of by drainage, is but recent. Some of the miller's objections are, however, in a fair way to be overruled if the conclusions founded upon various experiments are correct, for it will be seen by those who have read Mr. DENTON's admirable historical sketch of what has been done by drainage, that the tendency of drainage is to prevent evaporation, and thus add to the force which turns the water-wheels, the weight of that which now escapes from the surface to moisten our atmosphere, and accumulate in the billowy clouds.

—— To the remarks of Professor BUCKMAN on the Charlock last week we add one other of some importance, which must not be overlooked in estimating the mischief done by this weed. The earlier spring plants of it act as a *nidus* or nursery for some of the more destructive insects.

If we examine the young Charlocks in early spring we shall frequently see their leaves riddled in small holes as well as notched at their edges by the attentions of a small beetle which, if we watch it, we shall see jump much after the manner of a flea. There are two species, the Altica nemorum, the yellow striped *flea* beetle, and the A. concinna, the black flea beetle, neither of them much larger than fleas; they are the mischievous Turnip fly. Now, as it is on the Charlocks that the earlier broods are reared, and from which they migrate to the Turnips, there is reason to think if these weeds were eradicated something more than mere weed destruction would accrue, for to say the least we should not be encouraging the breeding of Altica, as we now undoubtedly do by the growing of Charlock.

—— The *North British Agriculturist* of last week reports as the result of numerous inquiries that in Scotland as in England the Potato crop of 1861 has been an unusual failure. Though later in its appearance, the disease has been at least as virulent; and even since the crop has been stored a great destruction of produce has taken place, so that there will not remain for consumption above one-third of an ordinary average crop. Scotland furnishes so large a share of our supplies that this shortcoming must affect the prices in the English market.

STEAM CULTIVATION.

ALMSHOEBURY, NEAR HITCHIN.—On this farm, the property of Mr. Roberts, whose son is also a steam cultivator at Berdon Hall, near Bishop's Stortford (see page 816), Fowler's 10-horse-power engine and four-furrow plough have been at work since May, 1860. Almshoebury Farm is upwards of 600 acres in extent; it lies rather high on the undulating country to the south-west of Hitchin. The soil is variable, according to the character of the diluvium with which the chalk is there overspread; and it is light or heavy according as the flinty gravel or red clay subsoil predominates.

The estate has been of late years considerably improved and extended by the removal of fences, coppice, and coverts to the extent of 140 acres. Formerly about 500 acres of arable land, there are now nearly 630 acres under the plough, besides about 30 acres of pasture. It is now in 15 or 16 fields, of which one is upwards of 100 acres in extent, and there are others of 40 and 60 acres each. Certainly in its original condition no farm seemed less adapted for steam cultivation; and its history is a striking illustration of the kind of influence which the steam plough and especially Fowler's apparatus is exerting all over the country. Wherever the intention exists to enlist steam power in cultivation—there coverts are being grubbed up and fences removed, and useless trees pulled down. And during the past year we know of many cases corresponding to Almshoebury by which hundreds of acres have been added to the available extent of the country, in order to the introduction of an agency which is at the same time to deepen and improve the cultivation.

The land, 500 acres arable, or thereabouts, was formerly worked by 16 or 17 horses in 3 and 4-horse teams. The labour of hauling connected with drainage, roads, and buildings, and the extra work of cultivation after breaking up so much woodland, and thus adding a quarter to the ploughland of the farm, has required the services of the same force of horses, notwithstanding the adoption of the steam plough. But even when all the extra work of improvement is completed, Mr. Roberts expects to employ at least 14 horses on his farm of 600 acres, in addition to the 10-horse engine with its cultivating apparatus. The rotation adopted on this farm is a five-years' course of crops: viz., 1, Fallow or Turnips; 2, Barley; 3, seeds; 4, Wheat; 5, Oats.

The cost of horse labour by which this cultivation has been effected, if 120*l.* per team of 3 horses be a fair estimate, must have been about 640*l.* formerly, and would have been 800*l.* or one quarter more had the cultivation of the farm (now one quarter larger) been still carried on in the same way. If we put the horse-power for the future at 14 horses, it will cost about 560*l.*, so that 240*l.* a year are saved by the use of the steam-engine.

The following may be taken as justifying the above estimate of cost. A horse consumes about 2 bushels of Oats, ½ a bushel of Beans, and 2 trusses of hay a week during 9 months of the year, and probably 5*s.* worth weekly of green food during the other 3 months of the year. This must cost at least 23*l.* a year. A team of three will thus cost 70*l.* worth of food. A man and a boy to work them will cost nearly 40*l.* a year in wages. The farrier and harness maker, and blacksmith, will together cost at least 7*l.* annually per team. To keep the horse good and meet accident, death, and depreciation by age, will be at least 10 per cent. upon its value, or 10*l.* per team of three, and all these items amount to 127*l.*, which exceeds the sum at which we have put it.*

The saving of 240*l.* does not, however, represent all that the steam-engine may be held to do for the economy of labour on the farm. It does the threshing of about 380 acres of corn land each year—work probably for 30 or 40 days of one of those travelling engines and machines, which cannot be had for less than at least a guinea a day. It also cuts the chaff required for about 30 cows, steers, and heifers—the horses and sheep, the latter generally numbering from 500 to 700. It is also intended to be put to grinding corn, which is at present done out at a considerable cost. At least [illegible] a year must therefore be the annual saving by the engine. To refer, however, to the cost of cultivation only—I find that the labour of the engine for the past year upon this farm is very much below the ordinary performance elsewhere. Slow work, taking only two furrows at a time, has often alone been possible. Risk of breakage by ungrubbed roots of trees, land-fast stones and flinty subsoils, and especially a soaking season, have here been exceedingly against the work. So that the extent ploughed from May 1860 up till the harvest of 1861 was only 350 acres, the depth being stated variously in different fields at from 7 to 11 inches; and the extent accomplished varying from 2 acres a-day in some difficult cases to 7 acres a-day where the 4-furrow plough could work without stoppage, as when ploughing Clover lea for Wheat. The cost is stated thus:—

Wages.—Engineer, 14*s.* per week; anchor-boy, 5*s.*; two porter lads, 5*s.* each; ploughman, 14*s.*; water-cart and boy, 24*s.*: in all, about 11*s.* a day.

Fuel.—13 or 14 cwt. of coal, costing 15*s.* a ton upon the ground, or 10*s.* a day.

Oil.—1*s.* a day—a gallon lasting over four or five days.

These items amount to 22*s.* a day, or probably at least 5*s.* per acre. Repairs have included, brasses for engine, a replaced glass tube upon the boiler, and large numbers of plough-breasts and plough-shares, which have been repeatedly broken against the land-fast flints in the hitherto unmoved subsoil.

The wire rope originally purchased amounted to 750 yards, besides headland rope; latterly an additional length of 400 yards had been purchased, but it was not used till after harvest.

The rope had been broken repeatedly by early mismanagement and accident, and the flinty soil adds greatly to the wear of it, wherever the old apparatus hitherto employed at Almshoebury is used. Now that the slack gear apparatus by which the rope is kept always tight is available, the wear by dragging on the surface of the land is hardly anything, and a very large item is deducted from the annual expense. Repairs and rope together can hardly however have less in the case before us than 50*l.* during the time when 350 acres were accomplished; and if that took 80 days to do, then to this 50*l.* there must be added 88*l.* for wages, fuel, and oil; besides 68*l.* our former excessive charge for maintenance of value, being 10 per cent. on 680*l.*, the original cost of engine and apparatus, and 39*l.* or 5*l.* per cent. interest on capital. All these items make up an annual sum of 245*l.*, or nearly the same as the amount we suppose to be saved in the stable. If however this sum be put against the work accomplished it makes the ploughing per acre very costly indeed — much higher than in any other instance we have described. It is of course right that a history should relate impartially whatever instances occur in it—but while describing a case which accidental circumstances have made unusually expensive, it is only fair to add that the apparatus used at Almshoebury is the original imperfect form of it; and that the improvements made have since economised both time and wear to a wonderful extent.

* 32*s.* are paid here at Almshoebury.

The following letter has since been received from Mr. Roberts:—

"Almshoebury, Hitchin, Nov. 7.

"I was sorry not to be at home when you called at Almshoebury for information respecting the working of my steam plough. But the information you thus obtained seems upon the whole correct. It ought however to be understood that in breaking up the fallows my object was not so much to get over a certain number of acres per day as to do the work deep and well, and beyond what can in the ordinary way be done by horse power. This object I may safely say has been accomplished; and as some proof of it several of my friends have offered me 20*s.* per acre to plough in the same way for them, though I was not able to attend to them. This will in some measure account for a less quantity being ploughed per day than in other cases.—E. ROBERTS."

Home Correspondence.

Breeds of Sheep: Parlington Tenants' Club.—I have seen in your *Agricultural Gazette* of the 19th October, 1861, an account given by the members of the Parlington Tenants' Club of their experiments in sheep feeding, and I must confess that I have (for one) been sadly disappointed, for what earthly use can such an experiment prove to the farmers of the country, or indeed to any one, for we are told that No. 1 and 2 came to fold in good grazing condition, having been wintered on the estate, whilst Nos. 3 and 4 were fat and had received every indulgence; No. 5 in fair folding condition, and No. 6 were bought out of a lot in the fat market, while No. 8 were lean. Now, Mr. Editor, in the name of all that's common sense, how can we compare the feeding capabilities of those various breeds from the absurd way they were chosen? Nos. 3 and 4, unless they received more than every indulgence, must of course progress less than Nos. 1 and 2 or No. 8. To me it appears that for such an experiment to be of any value the sheep should have been purchased, say as lambs, and all wintered together and on the same food, and then there would be some value in the feeding experiments through the summer, and would show which class paid most for their food, but as it now is, I for one cannot derive any information from the experiment. *A Sheep Farmer.*

Wheat, Barley, and Oats. Average Prices, Michaelmas, 1861.—At the present time there are two subjects of deep interest which occupy public attention—both highly important—the supply of Corn for food, and the supply of cotton for the mills. Although the present average price of Wheat in Europe has not yet advanced very much, we must not be surprised should a considerable rise take place. It is considered that the present monetary pressure in Paris arises, among other causes, from the demand for gold to pay for purchases of grain in Russia and elsewhere. In whatever way the present difficulty may be postponed, by temporary measures tending to stop the drain of gold, it must be evident that to the extent of the purchases made in foreign countries to supply the deficiency in the harvest, so much gold or silver must ultimately leave France, if the exports of the products of her soil or of her industry cannot be extended, and to a larger extent should the present condition of America unfortunately continue. Under these circumstances, the return of the weekly average prices of Wheat, Barley, and Oats for the year ending Michaelmas last, which I have usually presented to your readers, may prove interesting, not only to the agricultural but to other classes of society. The average prices for 52 weeks ending the 28th of September, 1861, are:—

Wheat	54*s.* 9*d.*	per imperial quarter.
Barley	36*s.* 10*d.*	,,
Oats	24*s.* 0*d.*	,,

During the last quarter the average prices have been advancing, but the average price of Wheat in October, 1861, is not so high as it was in October, 1860, caused, it may be remembered, by the deficient crop of 1680. During the farmer's year ending Michaelmas, 1861, the following shows the period of the highest and lowest prices:—

Highest prices.	*s.*	*d.*
Wheat, 19th of June, 1860	61	1
Barley, 23d of November, 1860	41	4
Oats, 2d of August, 1861	26	10
Lowest prices.		
Wheat, 19th of July, 1861	50	0
Barley, 23d of August, 1861	30	0
Oats, 28th of December, 1860	21	8

I remain, Sir, your obedient, humble Servant, *Charles M. Willich, Actuary University Life Assurance Society.—25, Suffolk Street, Pall Mall, S.W., Nov. 1.*

Poultry.—You lately spoke complainingly of English farmers having given up rearing poultry as part of their business, whilst foreigners give increased attention to it. Are they not giving it up for the same reason that they gave up growing Grapes? Has not "free trade" proved that the French can rear poultry cheaper than we can on account of their climate? Another reason is, I think, that few farmers now fling corn out of barns on to their dung heap to be shared between poultry and sparrows. I am looking forward to the promised articles on the subject, and shall be very glad if you will show how to make poultry pay

without a barn-yard. The consumption of rabbits seems to be enormous, and the importation very great. Would not the breeding of rabbits be more profitable to cottagers than poultry? A considerable portion of the food might be collected from the hedges by children. *Ab Initio.*

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

MONTHLY COUNCIL: *Wednesday, Nov.* 6.—Present: H. R. H. The PRINCE CONSORT, President, in the chair; The Earl of Powis, Lord Berners, Lord Feversham, Lord Tredegar, Lord Walsingham, The Hon. W. G. Cavendish, M.P.; The Hon. Col. Hood, Sir E. Hulse, Bart.; Sir Watkin Wynn, Bart., M.P.; Mr. Acland, Mr. Raymond Barker, Mr. Barnett, Mr. Bramston, M.P.; Mr. Cantrell, Colonel Challoner, Mr. J. D. Dent, M.P.; Mr. Druce, Mr. Exall, Mr. Frere, Mr. Brandreth Gibbs, Mr. Fisher Hobbs, Mr. Holland, M.P.; Mr. Wren Hoskyns, Mr. Jonas, Mr. Lawrence, Mr. Milward, Mr. Randell, Mr. Rigden, Mr. Thompson, M.P.; Mr. Torr, Mr. Turner, Dr. Voelcker, Mr. Owen Wallis, Mr. Webb, Mr. Wells, Mr. Burch Western, Mr. Henry Wilson, Professor Wilson.

The following New Members were elected:—

P. O. Papillon, M.P., Manor House, Lexden, Colchester.
John Robinson, Mark Lane, Leeds.
T. F. Lewis, Newport, Monmouthshire.
W. Graham, Jun., Newport, Monmouthshire.
William Pride, Lanvihangel, Chepstow.
The Hon. Greville R. Vernon, Cool House, Dingwall, N.B.
William Willis, West Moulsey, Surrey.
Bryan G. D. Cooke, Colomendy, Mold.
Ralph Pattison Nisbet, Row Wood, Chalfont St. Giles.
Sir W. Yardley, Hadlow Park, Tunbridge.
Edward Waddington, Wakefield.
Andrew Mitchell, Alloa, N.B.
H. Stephens Duggan, Hereford.
Walter Morris, Dewsale Court, Herefordshire.
R. Farthing Knight, Hereford.
William Ford, Newhouse, Brinsop, Herefordshire.
J. Bearcroft Downing, Holme Lacey, Herefordshire.
William Cook Morris, Whitewick, Herefordshire.
H. Chandos Pole, Barton Fields, Derby.
Professor Buckman, R. A. College, Cirencester.
The Rev. E. Lawson, Longhurst Hall, Morpeth.
Sir Charles Taylor, Bart., Forest Lodge, Liphook.
E. Clark, Lee, Blackheath.
John Brett, Burton Joyce, Nottingham.
T. Sumner Parker, Oxton, Southwell.
John Brett, Oxton Grange, Southwell.
Richard Fair, Hornsby Grange, Herefordshire.
George Pye, Cublington, Madley, Herefordshire.
George Jenner, Parsonage House, Udimore, Rye.
T. Greenwood Clayton, Wetherby.

The Hon. Colonel Cotton was elected a Member of Council in the room of the Right Hon. the Earl of Macclesfield, resigned.

FINANCES.—The Hon. Col. Hood, Chairman of the Committee, presented the Report, from which it appeared that the Secretary's receipts during the past three months had been examined by the Committee, and by Messrs. Quilter, Ball, and Co., the Society's accountants, and were found correct. The sum of 3000*l*. had been added to the Society's funded capital. The balance in the hands of the bankers on October 31 was 2785*l*. 19*s*. 2*d*. The balance sheet for the quarter ending September 30, and the statement of subscriptions and arrears, was laid on the table; the amount of arrears now due being 848*l*.

JOURNAL.—Mr. Thompson, M.P., chairman, presented the following Supplementary list of Prizes for Essays and Reports for 1862, which was adopted.

1. Thirty sovereigns will be given for the best Essay on the Parasites, including Entozoa, which infest cattle and sheep.
2. Twenty sovereigns will be given for the best Essay on Land Valuing.
The estimates which ought to form the basis of calculation in fixing the rental of land; the seasons most favourable for inspection; the practicability of reducing lands under different systems of culture to the same standard of calculation, should be discussed.
3. Ten sovereigns will be given for the best Essay on the Management of a Home Farm or Farm attached to the residence of a landed proprietor. The arrangements in the dairy and stable, the proper rates of charge for farm produce or services supplied; and the advantages and drawbacks of such a connection are to be discussed.
4. Ten sovereigns will be given for the best Essay on the Ravages of Grub and Slug on the Wheat plant.
The predisposing causes from weather, or situation, or cropping, and the best modes of prevention or cure are to be stated.

The Essays competing for these prizes must be sent to the Secretary of the Society at 12, Hanover Square, London, on or before the 1st of May, 1862.

Contributors of Papers are requested to retain copies of their communications, as the Society cannot be responsible for their return.

Allusion having been made to the non-appearance of the Reports of the Judges of Steam Ploughs and Implements at Leeds in the last Number of the Journal, it was resolved on the motion of Mr. Fisher Hobbs, seconded by Mr. Turner, that the Secretary be instructed to obtain them at the earliest possible period, and that they be immediately made public, under the direction of the Journal Committee.

AGRICULTURAL CHEMISTRY.—Mr. Wren Hoskyns informed the Council that Dr. Voelcker had proceeded with the experiments and analysis of the new cattle and sheep food made from the refuse of the Palm-nut, referred to in May last, and there stated to contain 29 per cent. of oil. Since that report the cattle food has been used at the Royal Agricultural College at Cirencester, and the results have been very satisfactory. A further report will be made of the comparative value of this cattle food. The subjects of analysis which the Professor has now in hand are:—1. Experiments on the Growth of Wheat; 2. On the Feeding qualities of Straw. A paper on each of these subjects will appear in the next Number of the Society's Journal. Since the last meeting of the Council Dr. Voelcker has made another tour through the dairy districts of Cheshire and Derbyshire. Another paper on cheese manufacture will appear in the Journal of next August.

The Committee have requested the Professor to make some experiments on the two following subjects:—

1. The different action of superphosphate on light and heavy, and on calcareous soils.
2. The chemical changes occurring during the process of the conversion of moorland, heath, and peat, into effective arable soil, with suggestions for the substances, inorganic and otherwise, best suitable for application.

The Professor has received through Dr. Daubeny, of Oxford, from Professor Luna, of Madrid, a variety of Spanish Apatite, the analysis of which shows 80 per cent. of pure phosphate of lime. The substance is called Moroxite.

A lecture will be given by Dr. Voelcker in March next on Milk.

REPORTING.—The report on this subject was brought forward by the Earl of Powis, and on the motion of his Lordship, seconded by Lord Berners, it was resolved that the three agricultural papers, viz., the *Mark Lane Express*, *Bell's Weekly Messenger*, and the *Agricultural Gazette*, be each allowed to send a reporter to the Weekly Councils; and that one reporter, representing the London daily papers, be allowed to attend.

MEETING OF 1862.—Mr. Fisher Hobbs, having brought forward the motion of which he had given notice, that the Society's Exhibition for 1862 be held in the week commencing the 23rd of June; and Mr. Thompson, M.P., having moved an amendment, it was resolved that it be referred to the Implement Committee to consider and report on the question and time of exhibition of implements to the December Council.

It was resolved that, in order to give the Society's Metropolitan Exhibition for 1862 an international character, it is desirable that there be separate Classes, and that Prizes be offered for Foreign Breeds of Cattle, Horses, Sheep, and Pigs.

His Royal Highness the President suggested that a Committee should be formed for the purpose of immediately communicating with foreign countries with a view to carrying out this resolution, and the following noblemen and gentlemen were requested to act on such Committee. The Earl of Powis, Lord Feversham, the Hon. Col. Hood, the Hon. W. Cavendish, M.P., Mr. Brandreth Gibbs, Mr. Fisher Hobbs, Mr. Milward, and Mr. Wells; and on the motion of Mr. Acland it was resolved that it be referred to this Committee to consider and to prepare a list of Prizes and report to the next Council. —Lord Feversham brought forward a motion that the Stock shall arrive on Monday and Tuesday, June 23 and 24: that the Judges award the prizes on Wednesday. The Show-yard to be open Thursday, Friday, and Saturday, and the following Monday, Tuesday, and Wednesday. It was urged that shepherds and others in charge of stock were, under the present system, kept away from home for two Sundays, and the motion was carried by a large majority.

VETERINARY.—A report was received from this Committee that the Stock of Mr. Harvey Jones' tenants in Montgomeryshire had been attacked by a disease which had proved fatal in numerous instances, and it was resolved that the Society's Veterinary Inspector should proceed to Trewythen and report the result of his investigation. Professor Simonds had visited the stock, and found that upwards of 50 animals of various ages had died in the immediate vicinity within the last few weeks, and that this number was being almost daily added to. At the time of the Professor's visit, one of the tenants had lost eight, one other was attacked while he was there, and since then a second, both of which had succumbed to the disease. The Professor was not without hope that the further progress of the disease will be arrested by the preventive means he had suggested, and which were being carried out. He considered it a disease centered in the blood. This fluid had undergone important pathological changes, which lead to its becoming stagnant in some part or other of the organism. Different animals were somewhat differently attacked, but essentially the malady was the same in all. The causes were the character of the food on which the animals had been living and the conditional circumstances under which they had been placed with regard to their general management. The state of the atmosphere and character of the soil had also played an important part in the production of the malady. It was resolved that the expenses of the Veterinary professor on this visit be borne by the Society as coming within Section I. of the Members' Veterinary privileges, a further report of the cases and their treatment being furnished by the Professor.

WOOL.—Professor Wilson reported that the arrangements for the exhibition by the Society of fleeces of the different breeds of native sheep and their crosses at the International Exhibition of 1862 were progressing satisfactorily; numerous promises of support having been already received from eminent breeders and merchants.

On the motion of Mr. Thompson, M.P., it was resolved, that with the exception of any payment recommended in the customary Report of the Finance Committee, no proposition involving the payment of money by the Society, if objected to, shall be entertained by the Council without a month's previous notice.

The General Meeting of the Society was fixed to take place on Wednesday the 11th December.

Farmers' Clubs.

CENTRAL.—At a meeting of the members of the Club, held at the York Hotel, New Bridge Street, Blackfriars, on the evening of Monday, Nov. 4 (Mr. Spencer Skelton, the Chairman, presiding), a very interesting paper on the effect of under-drainage on the arterial channels and outfalls of the kingdom was read by Mr. J. BAILEY DENTON, of Stevenage, Herts, from which we make the following extracts.

After some preliminary remarks by the Chairman on the deficiency of the past harvest, Mr. Denton said:—

The first great impetus given to under-drainage was the passing of the Public Moneys' Drainage Act, in 1846, which supplied the pecuniary means, and established the principle of charging entailed properties. The public money then placed at the disposal of the landed interest having been [illegible] for, monied companies have since stepped in, [illegible] private sources the means of continuing the work; and facilities have been afforded by the Legislature, under the Private Moneys' Drainage Act, to enable any landowner, dissatisfied with the terms of the companies, to obtain money from any available source, on the security of a first charge upon the inheritance of the improved lands. From information [illegible] by the Inclosure Commissioners, it appears that [illegible] been actually expended under the Public Moneys' Act, while 234,800*l*. has been spent under the Private Moneys' Act. Experience has already shown that from the present sources, companies being held in check by competition among themselves, and by the terms of the Private Moneys' Act, landowners can command money at a fair rate of interest, without recourse to the national purse. The results to the nation, however, in more ways than one, have [illegible] justified the act of Sir Robert Peel, in granting the public money in the first instance. One of the most conclusive, though not always the most desirable way of testing the economy of an outlay in improvements, is the application of borrowed capital to that object, with the obligation of repaying the capital money so borrowed with interest, in a given number of years; for, if an improvement will not carry with it a profit beyond the repayment of the capital with interest, it cannot be deemed an advantageous one by the borrower. The return from draining has not only shown a profit sufficient to warrant the obligations of a loan, and to satisfy the equitable claims of mortgagees, but it has induced landowners of wealth to apply their own money in large amounts, as the safest of investments; while the example of the Government, in advancing money repayable by instalments, has induced the insurance offices, with their great command of collective capital, to negotiate, with advantage to themselves, the rent-charges created by the drainage companies, which would otherwise have long ago absorbed the subscribed capital of those companies. Already the different Companies have negotiated advances to landowners amounting to 1,503,496*l*. for various kinds of agricultural improvement, and one of the largest capitalists in this country has recently, by a special Act of Parliament, placed at the disposal of improving agriculturists a large fund on terms similar to those which are adopted by the existing drainage companies; and with these accumulating proofs of the confidence of capitalists in the security afforded by agricultural improvements, it is evident we are not likely to stand still for [illegible] money. When quoting the amounts expended and charged on land, it should be observed that a large proportion of the 5,258,555*l*. expended has been already repaid, and that every addition to the general debt will be partly met by a deduction in the instalments annually paid off.

Extent of Land Under-drained.—The quantity of land drained up to this time under the several Acts, public and private, by means of borrowed capital charged on the inheritance, may be taken at 910,000 acres, assuming that the average cost has been 5*l*. 7*s*. per acre. From the best information I have been able to collect of the extent permanently drained by landowners using their own capital, I believe we may consider about 560,000 acres to be the quantity drained by such means up to the present time. But after all the lands permanently drained by one means and another are summed up, they do not amount to one-fifteenth of the extent yet remaining to be drained, which is estimated at above 21,000,000 of acres of cultivated land, and land capable of profitable cultivation after draining.

Progress and Public Estimation of Under Draining.—The leading nations of Europe have sent their emissaries to this country to see what has be done in farm drainage, and used the information gained to found laws for promoting the improvement at home similar to those which have existed here. Russia, France, Hanover, Belgium, and Italy have all made minute inquiries; and laws, I believe, have been promulgated, though, up to this time, but little progress has been actually made in the work itself. Judge French, an eminent American agriculturist, too, visited England a few years back, and having collected the necessary details published a full account of all that we have done as a guide for his own countrymen. The last three years, all different in character, exemplify, in the clearest light, that the advantages to be gained by underdraining are manifold. In 1859 we had a dry year—so dry, in fact, that many persons who had not investigated the subject upon which they spoke attributed the drought to the over-drainage of the country; whereas, it was found by those who compared drained with undrained land, that not only was evaporation lessened, but that the aeration of the soil by under-drainage admitted the moisture of the atmosphere into the earth, in a manner so invigorating to vegetation, that the practice which had been stigmatised as the cause of drought was recognised as its antidote. In 1860 we had a continued wet year. The effect of drainage was, of course, more sensibly felt and more generally appreciated in this wet year than in the previous dry one, and defects and deficiencies in the practice of draining were made apparent. It was clearly seen and acknowledged that the drained lands carried much larger and more even crops than the undrained, that the corn was of a better quality—a matter of much consequence in a year when corn was indifferent—and that the in gathering at the impending harvest which signalised this year was at least a fortnight earlier. The year 1860, more than any previous year since drainage has been accepted as a *sine qua non* in heavy land cultivation, has served to show the drainer that his work is not so simple as is often believed—to point out to the cultivator the treatment required of him to develope the intentions of under draining arable land—and to demonstrate to the grazier the limits to which he may go in the use of drains in tenacious clay pastures ere that use becomes an abuse. In the present year (1861) those farmers who had drained clay land to work upon, have discovered, by the wider breadth of their Wheat crop compared with the smaller crops of neighbouring undrained farms, the advantages they possessed; and it is acknowledged by those who have examined the matter care-

ally, that the actual yield from drained land, when compared with undrained land, is considerably in favour of the former, particularly in cases where the two processes of draining and deep cultivation have gone hand in hand. This superiority is owed to the effect of stirring the soil and the aëration of the subsoil, as much as to the removal of the surplus water. It will be remembered that just at the time when the corn was ceasing to grow and swell, and the stage of ripening commenced, the dry weather set in. It was from this period that the aëration of the soil began to tell. With the heat increasing, the air, loaded with floating moisture, and with the ammonia derived from all kinds of exhalations, travelled through the soil to the roots of the ripening corn, and maintained it in vigour to the period of complete fructification.

Deficiencies in Under-Draining.—When thus predicting progress it becomes me to refer to the deficiencies in the practice and effect of under-draining which have manifested themselves, and which, to a certain extent, have brought discredit on systematic operations. We must not forget that 15 years ago we knew little or nothing of under draining as a system. The clays and gravels were drained upon the same system, except that the distance between the drains was increased, and frequently the depth also. Little regard, however, was paid to the undulations and irregularities of the surface, and to the influence of higher and adjacent lands, so long as the parallelism adopted would enable the operator to state that the drains were a certain distance apart, and the depth was uniformly 4 feet. Experience has since shown, and is continuing to show, with increasing certainty, that uniformity of design can only be properly applied where the surface as well as the subsoil is even and uniform; that, in fact, irregularity of surface in all cases, whether the soil be "free" or "tenacious," must be considered equally with the variation of the soil itself; that whereas you can hardly put too many drains in the stiffest clays, which resist the theory of depth governing distance, a very few comparatively will suffice in a wet free soil, if these irregularities of surface and conditions of subsoil are specially dealt with, and the source and action of the underground water ascertained, and properly provided for. The question of depth is no longer open for discussion, though it is not now supported by the false promise of cheapness. The only point in the drainage of clay lands in reserve is the number of drains to be applied with a due regard to true economy. A minimum depth of 4 feet is justified on the simple ground of security, and the requirement of the Government (as guardians of reversionary interests), that all drainage, the cost of which is charged on the inheritance, shall be permanent, and, as far as practicable, out of reach of harm. We all know in practice that if a regular inclination is preserved, there must be places in the course of 4 feet drains which approach the surface as near as 3 feet and less, and for the same reason a 3 feet drain will be only 2 feet in places. Now as we judge of the strength of any structure by the weakest part, so we must regard the security of under-drainage by its shallowest places, for the steam-engine is no respecter of particular spots, and we are not looking very far forward in anticipating the time when the clay lands of this country will be penetrated by the steam subsoiler; and it is by no means chimerical to state that then we should find 3-feet under drains, in their shallowest places, as far from permanent as the abrogated 18-inch drains have been found to be in their shallowest places by ordinary deep ploughing. Upon this ground, if there were no sufficient reason in the fact that every additional inch of vertical depth places 100 tons of active soil at the disposal of vegetation, we may congratulate ourselves that the principle of depth has been maintained in spite of opposition, though it has brought about an inconsistency in our laws affecting waterways, which amounts almost to an absurdity, for while no under-drains can be executed under a prevailing depth of 4 feet, the common watercourses receiving the under-drainage water are, for the most part, less than that depth; and the Act of last session, with its many valuable powers, for district drainages, affords little additional facilities to private owners for the deepening of party ditches and common watercourses. These reflections will be found to cover every case of dissatisfaction, where good materials and good workmanship have been adopted, and where efforts have been made by the cultivator to facilitate, by deep stirring, the passage of the rain through the surface of the soil; by the grazier to encourage a healthy condition of herbage, by abstaining from treading with stock the surface of clay land pastures in wet seasons; and by the owner of the land to prevent the stoppage of the drains and outlets, by the growth of tree roots in the pipes, and by the silting up of the outfall ditches. The admission of these causes of dissatisfaction, however, does not get rid of them. The number of drains cannot be increased in the stiffer clays without an increase of outlay by the landlord, and the landlord cannot spend more money without expecting a higher interest from the tenant. No money is to be saved by reducing the depth for the Government, and good policy requires that the depth shall not be less than 4 feet, and thus the conflict ensues. The only remedy that can be suggested is to save as much money as possible in the drainage of the free soils by more appropriate treatment, and by a wider consideration of adjacent and higher lands, and with the saving to increase the number of drains in the clays. But we should not forget the fact that when fewer drains are adopted they are still doing good, and an amount of good more than equivalent to the outlay, though they are tardy in their action and require greater help by deep stirring above. It therefore becomes a simple Dr. and Cr. account how many drains will carry the greatest profit. It does not unfrequently happen, indeed, that although the drainer is often at fault, the defect is rather in the after-treatment of the land than in the drainage itself. It is natural, perhaps, with us all to magnify deficiencies, and pass over the benefits; but I think if we were to compare the insufficiently drained land with the same description of land not drained at all, we should often find less reason for complaint. A tenant of a noble earl in Kent recently consulted me as to a claim of compensation upon his landlord, for the loss he experienced by a small portion of land not being drained as satisfactorily as the rest, and stated that the difference between the land sufficiently drained and that imperfectly drained, was 8*l.* an acre in the Wheat crop he was then about to cut. It was only on my pointing out to him the injury he might do himself by drawing his landlord's attention to the fact that he got a profit of 8*l.* an acre without any extra effort on his part from the whole extent of the land, he admitted to be sufficiently drained, that induced him to withhold his claim. In another case, where the owner was occupying his own land, a complaint was made that the water was standing on the surface of his drained land. On going to the spot, in the month of February this year, cattle and sheep were seen in the fields, arable as well as pasture. The severe frost of the previous month had left the land in a state most susceptible of impression, and the surface was therefore stamped with little basins holding water, and frequently directly over the drains. This was in a county where the proverb rules that it "rains every day in the week, and twice on Sunday." Could the effect be otherwise than it was?

Extent of Wet Lands.—The total extent of wet lands drained or capable of improvement by draining in Great Britain is estimated at 22,390,000 acres, out of the total area of 56,352,000. The extent of land already permanently drained will not reach 1 million up to the present time, so that there remains undrained more than 21,000,000 of acres. The remaining 33½ millions of acres consist, for the most part, of free soils, naturally dry, which absorb and infiltrate to various depths beyond the reach of evaporation from 1-10th to ½ of the rain that falls on the surface, the remaining portion of the rainfall being taken up by vegetation or evaporation, or passing off the surface without entering it in times of heavy and sudden rainfalls. The remaining part of the 33½ millions consists of mountainous lands of rock formations, the surface of which having rapid slopes throw off the rainfall in very large proportions, viz., from ½ to 4-5ths of the rainfall. Within the bounds of these steep lands there are bogs and moors, which catch a large quantity of the water thrown from the mountain slopes, and give off by evaporation much more moisture than the rain that falls directly upon them. The extent of the surcharged free soils drained or requiring draining is about 12,000,000 out of 23,000,000 of wet lands, leaving of clays about 11,000,000. These figures are set forth to draw attention to the magnitude of the field to which under-drainage is gradually extending itself, and for which provision must be made sooner or later in the main arteries and outfalls.

Effects of draining the "Free and Mixed Soils."—The effect of underdraining on this description of soil (and in truth on most of the mixed soils), will be readily understood when it is observed that no water can run from the under-drains until the water bed has been raised by descending rains to the level of the drains, and that as the surface springs rose higher and higher before draining, so the lowest drains will begin to run first, and as soon as the water bed of the whole area drained, forming an inclined plane, has risen by degrees to the height of every drain, the whole system will be at work, and not till then. A portion of the infiltrated water, not an inconsiderable one in some cases, is claimed by the space in the subsoil intermediate between the level of the drains and the depth to which the water bed may have sunk after the drains ceased to run in the spring. This space will be found to be more or less, according to height and aspect, as influencing gravitation and evaporation, and the extent to which the disintegration of the subsoil by drainage may promote capillary attraction. The quantity discharged by the drains therefore does not represent the whole of the infiltrated water, which should be understood to include (1), the water discharged by the drains; (2), the water which sinks to the springs; and (3), the moisture which rises from the subsoil beneath the drains by attraction into the soil above them, to be dispersed by evaporation at the surface. In certain cases, where the surcharged lands approach the lowest outcrop of the stratum or bed, the drains partake of the nature of perennial springs, and continue to discharge the overflow of the subjacent water level. When free soils are effectively drained, the water in test holes between the under-drains will generally stand at an approximate level with the drains, after that level has been regained, though its height will fluctuate with the rainfall when any appreciable quantity descends. This being the action of underdraining the surcharged free soils, the results will be, first, to render the surface more capable of absorbing the rain that falls upon it; second, to lower the discharge of the upper surface springs in a slight degree; and third, to withdraw from the power of evaporation all the water which the under-drains discharge.

Under-draining diminishes Floods.—Upon the first result there can be no difference of opinion. That the voiding of water beneath by drainage gives the soil from which the water is taken an increased capacity for absorption is obvious, and if all the drained land was deeply cultivated there would be little or no overflow from the land surface, for the space occupied by air and water in a well-stirred soil is represented by Dr. Madden to be 1-4th of its depth, while that similarly occupied in a drained subsoil of a free character may be taken as 1-12th; so that supposing the land drained 4 feet deep, and the surface cultivated 10 inches deep, the clear capacity for the reception of rain would be 5¼ inches vertical depth. Fortunate would be the owners of land and the inhabitants of our valleys if this condition generally existed, for then we should hear but little of floods. But the configuration of the surface, and the use and cultivation of the land, all forbid this state of things being general. The slopes of the free soils are most frequently steeper than those of the clays. The major portion of the free soils is in pasturage, and the arable land for the most part maintains a ridge and furrow surface, which, added to natural hollows, unaffected by cultivation, must interfere with the complete absorption of which a drained soil is susceptible, and prevent any sensible reduction of floods. Still, as steam-cultivation and deeper ploughing gain ground, a greater proportion of the rain will be admitted, and though the drains will discharge an increased quantity of water per diem during a certain period of the year, floods will be gradually diminished.

"Free and mixed Soils" discharge by Underdrains from one-fifth to one-third the Rainfall.—It will be seen from the Hinxworth records, that the quantity of water discharged by the underdrains from the "free" soil was a very large proportion of the rain which fell during the period of discharge. The monthly rainfall and mean discharge per acre from the "free and mixed soils" at Hinxworth, reduced to an average daily quantity per acre, were as follows:—

	Rainfall.	Discharge.		Rainfall.	Discharge.
October	1.260	.221	February	.155	.745
November	1.229	.483	March	.598	.262
December	.901	.680	April	1.086	.293
January	1.702	1.337	May	.547	.188

Effect of Under-draining the "Free and mixed Soils" on the Arterial Channels and Outfalls.—Thus it may be seen that after the subterranean supply of the free soils had been replenished, any considerable fall of rain sensibly augmented the discharge, and that, as the winter passed on, the discharge from the drains became steadier and greater, though the moment that vegetation and evaporation became active, and took their share of the rain that fell on the surface, the discharge became gradually less. It may be seen too that the time when the "new water" from the free soils will find its way to the outfalls in the largest quantities will be in the months of December, January, and February. If we apply these deductions to the whole extent of wet free soils in Great Britain, the figures would be startling; but inasmuch as it will take a great many years to complete the underdrainage of the country, it would answer no good purpose to do so. I will be content to state, that supposing every acre of surcharged free soil to be drained, and the discharge on any particular day when the land is saturated to the extent of its capability to be the same as the free soils of Hinxworth showed on the 10th of January, 1857, (when there was only an ordinary fall of rain of half-an-inch), it would require only 80,000 acres to discharge its drainage into the catchment basement of any particular river to place 1000 acres under 10 inches of water, supposing the river itself to be full and the land saturated. The foregoing remarks have been confined to the "free" soils. We now approach the consideration of the discharge from the "clays," upon which the Hinxworth experiments afford some interesting particulars.

Condition of the "Clay Soils" before Draining.—Before underdraining the "clays," the effect of the autumn rains was to feed their absorbent properties until the soil was completely saturated to the surface, when the excess would either flow off by the land-furrows and by the slacks and hollows of the natural surface, or it would rest upon the ground until it was dissipated by evaporation.

Effect of Draining the "Clay Soils."—It has already been said that the discharge from the free soils will precede that of the clays by a considerable time; and in tracing the discharge of the drains from the clays at Hinxworth, after they had been drained, it is seen that they did not begin to discharge at all till the end of November. By that time the 3¼ inches of rain which had fallen in October and November had sufficed to fill the inner pores of the soil, and some of the more minute interstitial spaces. The records show that the drains then began to dribble, though the water had not risen to the height of the drains.

"Clay Soils" discharge rapidly a large Proportion of Heavy Rainfalls.—Although the water had been gradually rising, the soil was not filled up to its capability of retention till January 10th, when complete saturation was arrived at. On that day, a fall of 0.542 inch, or 12,262 gallons per acre, took place; and the most remarkable increase in the rate of discharge was the consequence. From a flow of 125 gallons per acre, on the 9th, the outlets discharged 5150 gallons on the 10th. It is desirable to draw attention to the fact, that it is only when the clays have absorbed their full *quantum* that they will disgorge the rainfall in so large a proportion. The total quantity of water discharged by clay soils annually is small, compared with that discharged by the free soils. The Hinxworth experiments showed it to be only 59,931 gallons, or about 2½ inches per acre in the whole year. If these 59,931 gallons were regularly dispersed over the discharging periods, it would not materially affect the arterial system of the country. But as so large a proportion of heavier rainfalls may be discharged when the free soils will be discharging at least 1000 gallons per acre per diem, and when the rivers may be pre-occupied by their present natural supply, and by the waters that pass off the surface without entering it, the fact adds another feature of importance to the question before us. The monthly rainfall and discharge per acre from the "Clays" at Hinxworth, reduced to an average daily quantity, were as follows:—

	Rainfall.	Discharge.
October	1.200	nil.
November	1.229	.11
December	.901	.182
January	1.702	1.026
February	.155	.311
March	.598	.107
April	1.086	.206
May	.547	.110

Effect of draining the Clay Soils on the Arterial Channels and Outfalls.—This will be appreciated when it is stated that the drainage water of 46,000 acres of clay lands will place 1000 acres of land already saturated under water 10 inches deep; and if the effect be tested by reference to the basin of the Trent and Derwent, and the clays of that basin, which I estimate at 550,000 acres, be assumed to be drained, we should find upon a repetition of the circumstances of the 10th January, 1857, that the one day's extra water thrown into the valleys from the under-drains of the clays alone would be 2,832,500,000 gallons, which would be sufficient to cover nearly 13,000 acres with water ten inches deep. I do not think it necessary to further enlarge upon this great question. I trust I have stated sufficient to show that, although the time may come when, under-draining being followed by deep cultivation and the levelling of ridge and furrow, floods may be diminished, the tendency of extending works of underdraining is to augment the daily flow of our rivers at that period of the year when the soil is saturated to the extent of its capability, and that the time is not far distant when the improvement of the main arteries and outfalls will become a positive necessity.

"*Land Drainage Act*, 1861."—I will now add a few words descriptive of the powers of the Act of last session, which was passed for the furtherance of this important object.

For the first time powers have been obtained to enable the proprietors of the lower lands to remove mills, dams, weirs, and other impediments which at present impede the upland waters in their passage to the main outfalls, upon payment of due compensation. Two-thirds in extent of any injured district may oblige the remaining one-third to join in the expense of getting rid of those obstructions; and where it is necessary to straighten and deepen old rivers or watercourses, and to make new cuts, compulsory powers of purchasing land are given. These are the main provisions of the Act; and they can be put in force in any district constituted under the Act, by the determination of two justices, or by arbitration, in the case of removal or interference with obstructions, and by provisional order of the Inclosure Commissioners in the case of the compulsory purchase of land, if confirmed by a sessional Act of Parliament similar to those annually passed to confirm the inclosure of commons. To possess legal facilities to remove and alter mill-dams and weirs does not involve the country in an actual reduction of millpower. On the contrary, I hope I have shown that the effect of under-draining is to rescue from the atmosphere a large share of the rainfall, which will be available to increase rather than diminish the water supply; and it will be found, when the time arrives for dealing with obstructed rivers, that in a vast majority of cases the point aimed at will not be the destruction of the mill, but the means of discharge into the mill tail, and that many of our valleys will be divided into a series of smaller areas, feeding each other with increased water supply by the very process of draining itself. Moreover, past experience would indicate that those impediments (when their owners become compliant under the powers of the important Act just obtained) will be frequently made of use to agriculture, by affording a ready means of irrigation. The Act is divided into three parts. Parts I. and II. refer to district drainages requiring combined works, and the extensive powers referred to are set forth in 71 clauses, among which are several provisions of a new and highly practical character. A comparatively small proportion—one-tenth in extent—of a district may start the measure; while it will require one-third to express dissent before that project, if approved by the Inclosure Commissioners, can be rejected. Part III. refers simply to outfall works to be carried out by private owners, such as easements for the passage of drainage-water through the lands of lower owners, and the deepening and straightening of water-courses. The means of obtaining these advantages, however, are attended with such heavy expense—greater, in fact, than attended the exercise of the same powers as they partially existed before—that this part of the Act is not likely to be much used until it is amended. The whole of the expense of proceeding under Part III. is to be paid by the applicant for the improved outfall, and any adjoining owner or occupier through whose land it is necessary to pass may support his objection by costly evidence and by the advocacy of counsel and solicitors. A simple easement, in the shape of an under drain, doing good to the land it passes through, or the deepening of an existing ditch, may be opposed before justices and before jury or arbitrator, in the most costly manner; for the Act declares that all "reasonable" expenses must be paid by the applicant, without determining who is to judge of the what is reasonable. It is not left to the decision of the justices or the jury or the umpire to say what shall be paid, as in the case of district drainages. When the owner and occupier (lessee or yearly tenant) both refuse, an appeal to justices may quickly dispose of their opposition. But, where the owner assents and the lessee dissents, the expense will entirely prevent proceeding. Daily experience shows that no landowner will venture upon so simple a matter as a mere easement, unless he knows beforehand what it will cost; and under the new Act, with an appeal to justices or arbitration by an owner, to a jury by a lessee, and to justices by a yearly tenant, this is not possible; for directly an applicant serves a Notice he becomes com

mitted to the proceeding, and to the "reasonable" expenses of opposing parties, though he has no surety that the Inclosure Commissioners will allow the cost and expenses to be charged on the estate to be benefited. Again, the joiut obligations of owners of party ditches or common water-courses to deepen and maintain them is altogether ignored. If one owner (A) in a party or common ditch is desirous of securing a sufficiently deep discharge for the under-drains he has been required by the Government to dig 4 feet deep, and seeks to deepen the outfall ditch in which he has but a part interest, he is required by the new Act not only to do the necessary work at his own single cost, but to keep it clear for the use of his neighbours (B. and C) afterwards; moreover, either of those neighbours may, if he neglects to do this, set to work and clear it, and recover the cost of doing so in a summary way from A, although they may be equally advantaged by the deepening. These inconsistencies, which have crept into the Act, will command amendment. One great advantage is already gained. The right of landowners to discharge injurious waters through the interposing lands of their neighbours to the natural outfalls, has become generally admitted and legalised. It did indeed appear contrary to common sense, for which Englishmen have credit, that. while we were holding up to the world the advantages of drainage, as the foundation of good cultivation, and while the Government were compelling landowners to adopt deep drainage within their estates, we should allow private rights to interpose their veto to the obtainment of an appropriate outfall. It has been the subject of some surprise, that the agricultural meetings of this autumn have passed by without any allusion by our leading men to the Land Drainage Act of 1861—one of the most important measures ever granted by the Legislature for the benefit of agriculture, and one which was considered worthy of mention in the speech from the Throne. If, by the discussion that will now ensue, we may be so fortunate as to draw the attention of the country to this Act, I shall feel additional pride in having—in association with several members of this Club—urged upon the Government its necessity.

During the subsequent discussion, Mr. Alderman MECHI said:—With regard to the drainage of land in the county of Essex, he knew that a large number of the owners and holders had the means of draining the stiff clay soils, but they unfortunately were under the impression that it would never be profitable to drain them. Mr. Denton had alluded to the improved productions from the under-drained lands, and he could confirm that gentleman from experience on his own farm, which showed that the quality irrespective of the quantity of crops produced was far superior where the land had been properly drained as suggested.

Lord BERNERS (who was very warmly called upon) said:—As a member of the House of Lords he felt the vast importance of the Land Drainage Act of 1861 which had been referred to. He had looked over the Act, and felt that it would materially increase the facilities for the proper outfall of the drainage. He congratulated them that the measure had passed. With regard to the subject more particularly under discussion, he could only remark that he had every reason to be satisfied with the system as he had adopted it on his estate in Leicestershire. It must, he felt, be the study of them all to look into the different strata and subsoils; they must look into the drains and test-holes, and see that the drains were a foot lower than the porous point where the water would enter. He was sure that by doing this a vast amount of land in this country might be drained at a very reasonable and profitable rate.

Mr. FISHER HOBBS expressed his concurrence with Mr. Denton in that gentleman's surprise that the Land Drainage Act should have been allowed to pass in such a quiet manner, considering the vast amount of good which it was calculated to confer on a large class of the community; and with regard to that measure, he (Mr. Hobbs) paid a high compliment to the Inclosure Commissioners and the Committee of the House of Commons, through whose instrumentality the Bill was framed and passed into law. The Act would not only benefit the landed proprietors, but the tenant farmers and the agricultural labourers also eventually, and the result would be that their valleys would be more fertile for the breeding of stock and increasing the produce of the country.

Mr. JAMES HOWARD (of Bedford) said that so far as the discussion had gone, very little notice had been taken of the subject of arterial drainage. He lived in a district where the system of under-drainge was thoroughly carried out. It was a flat district, and after the fall of a little rain, the river was full and the whole neighbourhood must be flooded. Such a state of things was not only injurious to the outlying districts, but to the health of the inhabitants of the town itself, therefore the system of arterial drainage was not only beneficial to the agricultural districts but to the townspeople. With regard to the depth of the drainage he thought that that was of no good unless the ground was deeply cultivated. He had proved this in fields of clay which had not been drained but deeply tilled, and the crops of Wheat were better than from those fields which had been drained.

Mr. OWEN WALLIS (of Northampton) then referred to the great expense which had been incurred in carrying on some experiments alluded to in the paper, but at the same time expressed a hope that that expense would not be allowed to stand in the way of carrying out the arterial system of drainage. He had a very confident hope that in a very short time that system of drainage, combined with steam culture, would be in general use throughout the country. After some slight conversation, in which Mr. Howard required some information as to the mode in which Mr. Denton had arrived at the result of his experiments,

Mr. DENTON replied:—In introducing the subject he felt that it was a difficult one; but he also felt that the sooner it was promulgated and discussed the better it must be for the country—as a system of things in drainage was being hurried on, which if not speedily dealt with it would be impossible to remedy. He must say he regretted that he had not heard more upon the subject during the short discussion which had taken place. In reply to Mr. Howard he begged to state that the gauging of the drains had been taken by buckets placed at the mouth, and the quantities ascertained by means of a seconds watch. He was assisted by several practical gentlemen, who could confirm his statement as to the results of his experiments. He then said that an allusion had been made to Essex in the course of the evening, and he begged to state that the progress of drainage in that county at the present time was greater than in any other part of England.

Mr. J. WILLIAMS then moved, and Mr. HOBBS seconded a cordial vote of thanks to Mr. Denton for his able paper, which having been agreed to, the usual compliment was paid to the Chairman, and the proceedings were brought to a termination.

Reviews.

Edinburgh Review. October, 1861.

In a notice of the Rural Economy of France by M. Leonce de Lavergne, the "Edinburgh Review" gives an interesting review of French Agriculture. On a level with England a century ago, although its progress has been slow it has latterly become remarkable; and that which in our own case is history, we see now in actual accomplishment amongst our neighbours. The following picture of French circumstances is interesting:—

"Since 1815, her foreign trade has quintupled, her manufactures have quadrupled, her agriculture has doubled its produce, under the influence of those three great principles of peace, justice, and freedom, which are the eternal counterpoise to the hateful effects of war, violence, and despotism. Eighty thousand miles of roads have been opened in the country; 10,000 miles of railway have been completed or are now in progress; canals have been made, rivers rendered navigable, ports and docks constructed. The progress of rural economy, especially from 1815 to 1847, kept pace with this great movement, and has not been sensibly thrown back by the unfavourable and extraordinary courses of the last few years, in spite of bad seasons, the Potato disease, the Vine disease, the mortality of the silkworm, and the disturbed state of the political world. The tenure of land has of course been modified to a considerable extent by the laws of succession established in France, but this change is less rapid and complete than is commonly imagined in England. Taking the area of France at 45,000,000 of hectares, M. de Lavergne computes that one-third of the soil is still held by 50,000 large proprietors, possessing an average of 750 acres; another third by 500,000 middling proprietors possessing an average of 75 acres; and the last third by 5,000,000 of small proprietors possessing an average of 7 acres. This calculation is obviously merely approximative; but it is certain that there are in France 16,000 landowners paying 40*l.* a-year and upwards in land tax to the state, and about 37,000 landowners paying from 20*l.* to 40*l.*

"In the allotment of the soil it seems that since 1789 about 5,000,000 of acres have been added to the productive area of the country; vineyards and orchards and meadows have considerably increased; woods have diminished. In tillage cultivation the fallows have decreased by one half; the growth of Wheat, Barley, and Oats has increased a third; that of Rye and the inferior kinds of grain has diminished. Water-meadows have tripled in extent, and the cultivation of roots, which was hardly known in 1789, now covers 5,000,000 of acres. But the quality of the crops has risen even more than their extent. The quantity of Wheat actually grown has nearly doubled; live stock has also doubled in number and value; the silk crop and the rape oil crop have quintupled. The production of home-grown sugar has come into existence, and the growth of wine has also doubled. From these facts M. de Lavergne concludes that the total value of the agricultural produce of the empire must now exceed 200,000,000*l.* sterling, or at the rate of about 6*l.* per head of the population. He also infers that rents have risen since 1789 in the proportion of 12 to 30; farmers' profits in the proportion of 5 to 10; outlay in that of 1 to 5; taxes on land and dues have diminished in the proportion of 7 to 5; and labourers' wages have doubled."

The 200,000,000*l.*, at which the annual value of French agricultural products is now estimated, is 75,000,000*l.*, or 60 per cent. over the estimated annual value of the same interest 50 years ago; and even our own agriculture, we presume, can hardly exceed so rapid a movement as that. We quote the following local pictures and particulars:—

"Large fortunes have at all times been made by agriculture in the neighbourhood of Paris, but more especially in the last half century. Some of the farmers have their million of francs, many more their 20,000*l.* or 30,000*l.* Farming is here an art, employing large capitals and returning large profits, especially in that district called France *par excellence*, because it formed part of the original domain of Hugh Capet. Large estates are here also less divided. More than 3000 of the rural assessments exceed 1000*l.*, and there are many landowners having from 2000*l.* to 4000*l.* a-year.

"The Duc de Luynes is said to have 40,000*l.* a-year in land, chiefly in this district. The estate of Ferrières near Ligny, now belonging to Baron Rothschild, contains 7500 acres, the park alone 1000. Estates of from 1250 to 3000 acres are tolerably numerous, especially in Seine et Marne, one of the departments of France in which land is least divided. The two aristocracies of birth and of fortune have, at all times, sought to acquire large possessions in the environs of Paris, and in spite of revolutions they have succeeded. Most of these estates have changed hands, without much subdivision.

"Since the Revolution of 1848, M. Guizot has resided almost continually in the old Augustine monastery of Val Richer in Normandy, which he purchased twenty-five years ago, and the adjacent farms, under the skilful management of his son-in-law, are a model of drainage and dairy farming to the whole country. To speak more generally, the revolutions which have made the most eminent men in France strangers to the contests of the capital and to the seats of ministerial or parliamentary power, have thrown their energies back on country life, and have powerfully contributed to the beneficial change we remark in the rural economy of the whole nation."

We conclude with the reviewer:—

"Whatever may be the opinions we entertain of the political institutions of the second Empire, on the ground of material improvements it is absurd to deny that the Emperor has rendered great services to France—services indeed so great, that one of the charges brought against him by his uncompromising opponents is, that these benefits have caused the nation to forget even that loss of freedom by which they have been purchased. However this may be, nothing is more certain than that the policy which has enriched the rural districts and rebuilt the towns of France—which is doubling her agricultural produce, and has more than doubled her foreign trade—is irreconcilably opposed to the policy of aggression and war. The two things cannot co-exist. And whilst we exult in all that contributes to the welfare, industry, and intelligence of a great nation, our satisfaction is enhanced by the reflection, that in the successful pursuit of these pacific and honourable objects, the French nation have in reality given pledges to peace, greater than they are perhaps themselves aware of; and that all the great permanent interests of the country would suffer from prolonged hostilities with foreign nations in exact proportion to the prosperity they have already attained, and the yet more brilliant promises of the future."

Miscellaneous.

New Agricultural Hall, Islington.—The laying of the foundation stone of the New Agricultural Hall, which is in future to take the place of the Baker Street Bazaar for the Christmas exhibition of the Smithfield Cattle Club, and for meetings and other purposes connected with the promotion of agricultural improvement, took place on Tuesday afternoon. The ceremony was performed by Lord Berners, to whom an address was presented by Mr. Jonas Webb, on behalf of the promoters of the undertaking. The edifice will be composed chiefly of brick, iron, and glass. The entire length will be 5[illegible] feet; breadth, 220 feet; and superficial area, 110,0[illegible] feet. The body of the building will be fitted up for the exhibition of cattle. A space of 384 feet in length and 217 feet in width will be covered by an arched roof of iron and glass, and will be surrounded by a gallery 36 feet in breadth, supported by iron columns 24 feet apart. The span of the roof will be no less than 13[illegible] feet. Behind the cattle show there will be a place for the exhibition of pigs. This division will be 100 feet square, and will have a ridge and furrow roof of wrought iron. Ample provision will be made for lighting and ventilation. The cost is estimated at 25,000*l.*, exclusive of the site.

Sparrows.—If, as is stated by a French naturalist, a sparrow's nest in the city of Paris was found to contain 700 pairs of the upper wings of cockchafers, we shall have but little reason to glorify ourselves upon our Sparrow Clubs; for here is a bird, whom most people supposed to have been guilty of unmitigated mischief, now shown to be of the greatest service, by those who inquire narrowly into its nature and habits. And yet in spite of what our neighbours have said upon the subject—in spite of their seeking legal enactments to preserve sparrows and other small birds—we find that in the county of Wilts a Sparrow Club meets to celebrate its victories in destroying 3491 head of sparrows in the year of 1860-1, and therefore they sing songs, and are "well satisfied with their entertainment." Truly, these gentlemen, if they take a good dinner for the service they do in killing birds, might, if they were only a little wiser, not grudge the small birds an occasional meal, though it were of corn, when it is known that they destroy so many noxious insects. Truly, they want a liberal education! We copy the following report of the doings of the Club, in the hope that it will one day be looked upon as a curiosity:—

ASHTON KEYNES SPARROW CLUB.—On Friday, September [illegible], 1861, about 20 gentlemen sat down to an excellent dinner at the Plough Inn, provided by the landlord and landlady, in connection with the Sparrow Club. Thomas Wheatley, Esq., presided, and Mr. Henry Ellison, of Church Farm, occupied the vice-chair. After the cloth was removed, the secretary, Mr. Edward Dowdeswell, read the accounts of the year, which proved satisfactory to all members, there being 3*l.* 7*s.* in hand towards defraying the expenses of the day, after paying the prizes to the persons who had produced the greatest number

heads in the year. The first prize of 10s. was awarded to Mr. J. Scutts, of Ashton Keynes, who produced 1195 heads; the second prize, 5s., to Mr. John Westmacott, of Minety, producing 1001 heads; the third prize, 2s. 6d., to Mr. Wm. ..., of Ashton, producing 344. The whole Club during the year had produced as many as 3491 heads; and calculating that each bird shall eat one quart of corn in the year, the quantity saved to the farmers will be 27 sacks 1 bushel 3 quarts. After some good songs, well sung, and the company had much enjoyed themselves, the party broke up, well satisfied with their entertainment. *Practical Farmers' Chronicle.*

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended November 7, observed by Mr. J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air.				Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
	Max. in Sun.	Max. in Shade.	Min.	Mean.				
	Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday 1 ..	63.0	54.0	36.0	47.2	51.0	0.13	W.	29.24
Saturday 2 ..	59.0	48.0	30.5	42.0	49.5	0.05	N.W.	29.19
Sunday 3 ..	57.0	45.0	28.5	39.7	48.0	..	N.W.	29.60
Monday 4 ..	65.0	46.0	25.0	40.2	46.5	0.01	S.W.	29.82
Tuesday 5 ..	49.0	51.0	30.0	44.5	46.0	0.24	S.W.	29.46
Wednesday 6 ..	61.0	52.0	35.0	43.7	47.0	0.22	S.	29.34
Thursday 7 ..	57.0	50.0	32.0	42.7	46.5	0.02	S.W.	29.33

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

ASPHALTE FLOOR.—The following is a recipe already published:—Dig sifted gravel, such as is used for topping walks, and use coal-gas tar; level the ground perfectly; mix gravel and tar, two quarts of the latter to each bushel of the former, till every particle of gravel is saturated with tar. This is best done on a boarded or stone floor; spread evenly, about 1 inch thick; roll till hard with a heavy garden roller. When dry, add from 2 to 5 inches more, according to the purpose for which the floor is required. Roll as soon as laid, and frequently, until it is quite solid. Cost, at 6 inches deep, 9d. per square yard, at the following high prices: gravel, 1d. per bushel; gas tar, 4½d. per gallon; labour, 1s. 6d. per day.

CARBOLIC ACID: *X Y Z.* It is an extract of coal tar, or rather of the coal oil or artificial naphtha which is obtained by distillation from coal tar. It is procured thus: 12 parts of the coal oil, 2 of hydrate of lime, and 50 of water are mixed and left. The aqueous solution thus obtained is decomposed by hydrochloric acid, and the separated oil is purified by cautious distillation, a third part only being collected. This is carbolic acid; it has a very penetrating odour and acrid taste, and destroys the skin (Fownes). It is a powerful disinfectant, and is probably one of the most powerful of the ingredients to which coal tar owes many of its uses; as for instance its use in various smearing mixtures employed on Highland sheep for their preservation from insects.

FARM BUILDINGS: *H D.* We may mention as of public interest that your case and that of many others who have merely general ideas as to the farm buildings about to be erected on their estates, which they would see carried out in detail by others—that Mr. Robert Scott Burn, of Castle Farm, Stockport, whose book on Farm Buildings was recently reviewed in these columns, is engaged just in this way. He receives rough sketches, works them out in detail, and draws up specifications and estimates; and a long past experience enables him to do this efficiently.

IMPORTS: *R.* The following are the accounts for the nine months ended September 30, 1860 and 1861, free of duty:—

Articles.		Quantities Imported 1860	Quantities Imported 1861
Oxen, &c.	No.	43,469	45,274
Calves	,,	17,500	17,393
Sheep and lambs	,,	186,782	150,172
Swine and hogs	,,	12,482	14,876
Bones, burnt or not, or as animal charcoal	tons	45,871	48,672
Flax	cwt.	1,023,489	852,707
Guano	tons	93,156	141,440
Hemp	cwt.	430,165	498,803
Jute	,,	586,123	634,067
Oil seed cakes	tons	72,566	83,604
Potatoes	cwt.	179,561	220,290
Provisions:—Bacon and hams ..	,,	259,840	435,697
Beef, salt	,,	234,722	118,524
Pork, salt	,,	138,461	106,846
Butter	,,	535,072	600,741
Cheese	,,	318,198	391,769
Eggs	No.	133,874,400	164,154,960
Lard	cwt.	169,784	282,831
Rice not in the husk	,,	812,347	2,122,783
Saltpetre	,,	228,926	182,720
Cubic Nitre	,,	647,145	314,523
Seeds—Clover	,,	194,930	149,660
Flaxseed and Linseed	qrs.	864,182	788,180
Rape	,,	153,115	170,120
Wool	lbs.	108,021,552	107,060,314
Wool, Alpaca, and the Llama tribe	,,	1,697,160	1,784,300
Woollen rags, torn up to be used as wool	,,	..	11,087,888
Yeast, dried	cwt.	58,667	66,225
Corn—Wheat (from Russia) ..	qrs.	684,871	671,651
Prussia	,,	881,157	717,642
Denmark	,,	207,356	166,799
Mecklenburg	,,	136,578	106,339
Hanse Towns	,,	103,059	171,740
France	,,	192,031	173,934
Turkey and Wallachia and Moldavia	,,	136,934	215,562
Egypt	,,	95,306	270,330
United States	,,	580,712	1,922,370
Other countries	,,	164,079	794,718
Total	,,	3,182,083	5,211,085
Barley	,,	1,560,860	1,165,998
Oats	,,	1,798,770	1,482,712
Peas	,,	193,526	358,684
Beans	,,	306,747	440,919
Indian Corn, or Maize	,,	1,410,898	2,193,567
Wheatmeal and Flour—From Hanse Towns	cwt.	195,372	187,094
France	,,	1,186,597	452,941
United States	,,	1,148,602	3,244,156
Other countries	,,	470,481	1,387,953
Total	,,	3,001,052	5,252,144
Indian Corn-meal	,,	3,360	6,443
Hops	,,	2,353	40,909

MANGEL WURZEL: *Ab Initio.* You may give cows or any other stock Mangel Wurzel or any other green food at once, provided you give dry food along with it in sufficient proportion to hinder the too laxative effect of succulent food alone.

Quick.

H. AND F. SHARPE are prepared to offer of the finest quality,
Strong 2-years' Transplanted QUICK, 3 feet high,
Strong 2-years' Seedling do., 2 feet high,
at very moderate prices, which may be had, with samples, on application.
Seed Growing Establishment, Wisbech.

CHARLES DALY AND SON offer 200,000 four years' transplanted SPRUCE FIR at 10s. per 1000; two year's Seedling THORN QUICKS, 2s. per 1000; one year transplanted ditto, 5s. per 1000; IRISH YEWS, 1 to 1½ feet, 10s. per 100; COMMON LAUREL, 1 to 1½ feet, 15s. per 1000; PORTUGAL ditto, 3s. per 100; AUCUBA JAPONICA, 1 foot, 25s. per 100; TREE BOX, 20s. per 1000. Terms, Cash only. Prices of General Nursery Stock free by post.
Coleraine, Ireland—Nov. 9.

The Newry Nurseries.

GEO. R. DAVIDSON begs to call the attention of the public and the Trade generally to his very extensive stock of FOREST TREES, a very large collection, transplanted in rows 14 inches apart, from 3 to 5 years old. THORN QUICKS, 2 million 2-year old in beds, very fine; 1 million 2 and 3-year old, transplanted. HARDY ORNAMENTAL EVERGREEN and DECIDUOUS SHRUBS and TREES, &c.
Conveyance per Rail or Steam to all parts of the United Kingdom.
Nursery and Seed Establishment, Newry, Ireland.

Choice Hardy Coniferæ.

AUGUST VAN GEERT, of Ghent, begs to offer the undernamed CONIFEROUS PLANTS, at very moderate prices:—
THUJA VERVAENEANA, a new beautiful golden-striped Arbor Vitæ, fine plants 2 years' grafted, 40s. per doz.
THUJA AUREA, 6 inches, 42s. per 100.
PICEA NORDMANNIANA, 2 years' seedlings, 18s. per doz.
PICEA PINSAPO, 1 year's seedling, 7s. 6d. per 100.
ABIES MORINDA, 6 inches, 15s. per 100.
PINUS EXCELSA, 3 years' seedlings, 20s. per 100.
PINUS DON PEDRO, fine plants, 3s. 6d.
PINUS VEITCHII, fine plants, 3s. 6d.
His New GENERAL CATALOGUE may be had on application of Messrs. R. SILBERRAD & SON, 5, Harp Lane, Tower Street, London, E.C.

General Nursery Stock.

S. PONSFORD begs to announce that his Stock of the above is in excellent condition for transplanting, comprising everything in general demand, especially STANDARD and DWARF ROSES, which have made fine growth and are clean and healthy; FRUIT and FOREST TREES of every description; STANDARD MULBERRIES, very fine; AUCUBAS, from 1 to 5 feet high, bushy; and all other Evergreen and Deciduous Shrubs and Plants; CAMELLIAS and AZALEAS well set with bloom buds.
PRICED and DESCRIPTIVE CATALOGUES on application to
Loughborough Park Nurseries, Brixton, Surrey, S.

Taff Vale Railway.

To NURSERYMEN AND OTHERS.

NOTICE.—The DIRECTORS of this COMPANY are desirous to receive TENDERS for the supply of 150,000 THORN QUICKS, 3 years old and 2 years transplanted, delivered on the Company's Premises at Cardiff Terminus.
Tenders addressed to the Board of Directors and endorsed "Tenders for Thorn Quicks," to be sent to this Office on or before Monday the 18th inst.
By Order, GEORGE FISHER, General Superintendent.
General Offices: Crockherbtown, Cardiff, Nov. 9.

Kingsthorpe Nurseries, near Northampton.

MARSH AND PERKINS have great pleasure in offering the following, which are very fine, well rooted, and such that cannot fail to give satisfaction:—

FOREST TREES, SHRUBS, &c.

Acacia, 4 to 5 feet	Oak, Turkey, 3 to 4 feet
Alder, 2 to 3 feet	Sycamore, 1½ to 2 feet
,, 5 to 6 feet	Poplar, Lombardy and Italian, fine standards, 6 to 10 feet
,, fine standards, 6 to 7 feet	White Thorn or Quick, 2 years drills, fine
Ash, 1½ to 2 feet	White Thorn or Quick, 2 years transplanted, fine
,, 2 to 3 feet	White Thorn or Quick, 3 years transplanted, fine
,, 3 to 4 feet	Arbor-vitæ, American, 12 to 18 in.
,, 4 to 5 feet	,, Siberian, 12 to 18 in.
,, 5 to 6 feet	,, ,, 18 to 24 in., fine
Beech, 1 to 1½ feet	Berberis dulcis, 18 to 24 in.
,, 2 to 3 feet	,, ,, fine bushy plants, 2 to 3 feet
Chesnut, Spanish, 2 to 3 feet	Box, Green, 12 to 15 in.
Elm, Wych or Scotch, 2 to 3 ft.	Cedar, Red, fine, 2 to 3 feet
,, ,, ,, 3 to 4 feet	Cedrus Deodara, fine, 2 to 3 ft.
,, ,, ,, 4 to 5 feet	,, ,, ,, 3 to 3½ ft.
,, ,, ,, 6 to 8 feet	Holly, Common, 12 to 18 in.
Fir, Austrian, 1 to 1½ feet	Laurel, ,, 12 to 18 in.
,, Scotch, fine, 1½ to 2 feet	,, Portugal, 12 to 18 in.
,, ,, ,, 2 to 3 feet	Laburnum, 4 to 5 feet
,, ,, ,, 3 to 4 feet	Pinus excelsa, 6 to 9 in.
,, Spruce, 1 to 1½ foot	Privet, Evergreen, 12 to 18 in.
,, ,, 1½ to 2 feet	Yew, English, 12 to 18 in.
,, ,, white, 1½ to 2 ft.	,, ,, 2 to 3 feet
,, Larch, 12 to 15 in.	,, Irish, 1½ to 2 feet
,, ,, 18 to 24 in.	,, ,, 3 to 4 feet
Hornbeam, 2 to 3 feet	,, ,, 5 to 6 feet
,, 3 to 4 feet	
Limes, Standards, fine	
Oak, English, 1½ to 2 feet	
,, ,, 2 to 3 feet	
,, ,, 3 to 4 feet	
,, Turkey, 1½ to 2 feet	

Sweet Briar, Syringa, Tamarix germanica, Vinca elegantissima, Standard American Bird Cherry, Virginian Creeper, Spiræa ariæfolia, argentea, and Douglasi.

FRUIT TREES.
Apples, Standards | Pears, Dwarf-trained
Plums, Dwarf-trained.
Prices on application to 42, Drapery, Northampton.
N.B.—A reference required from unknown correspondents.

TO the TRADE and OTHERS.—Still thousands on hand of good Plants of PAMPAS GRASS, 20s. per 100.
Double Lilac PRIMROSES, 3s. per dozen.
Double White ditto, 5s. per dozen.
Double White Major ROCKETS, 3s. per dozen. Cheaper by the 100.
Double Yellow ditto, 4s. per dozen.
Double Red HEPATICAS, 4s. per dozen. Cheaper by the 100.
Border AURICULAS, 3s. per dozen. Cheaper by the 100.
POLYANTHUS, warranted from finest seed, 3s. per dozen. Cheaper by the 100.
Double Purple and Russian VIOLETS, 2s. per dozen. Cheaper by the 100.
HOLLYHOCKS by dozen or hundred, reasonable.
HARDY CLIMBERS, including the best of Honeysuckles, Clematis, and Roses, 6s., 9s., and 12s. per dozen.
DILLISTONE & Co., Nurseries, Sturmer, Halstead, Essex.

GENUINE ITALIAN RYE-GRASS, produced from the second cut of Foreign Italian, thoroughly cleaned, and weighing from 17 lbs. to 21 lbs. per bushel, can be supplied to the Trade direct from the grower, and purchasers may either take delivery now, or at their convenience up to March 1, 1862.
For samples and prices apply to SIMON A. DAINTREE, of Fendrayton, by St. Ives, Hunts.

RAYNBIRD, CALDECOTT, AND BAWTREE, SEED MERCHANTS and GROWERS, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E.C.
Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.
Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

A LEAF PEAT of excellent quality delivered at the Bricklayers' Arms Station at 6s. per cubic yard, in quantities not less than 18 yards.
GEO. HAVELOCK, Abbey Wood, Kent, S. E.

TO THE SEED TRADE.—The Subscribers have for Sale several quarters of PEAS of the following varieties:—Early Emperor, Bellamy's Green, Marrow, Prizetaker, and Ne Plus Ultra; also Sutton's Champion Swede, and a few cwt. of Long Yellow Wurzel Seed, all the growth of 1861.
Samples and prices on application to MARSH & PERKINS, 42, Drapery, Northampton.
N.B. A reference required from unknown correspondents.

Seed Potatoes.

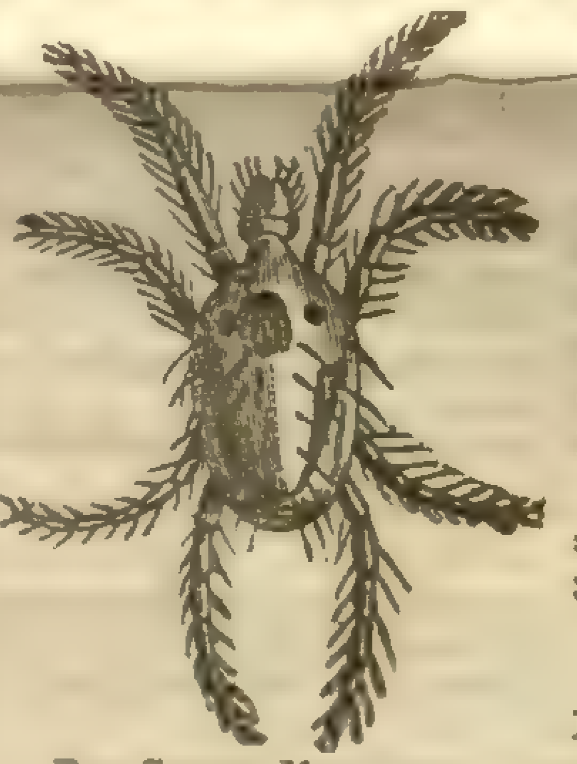
H. AND F. SHARPE are now prepared to take orders at very moderate prices for all the leading sorts of POTATOES, including MYATT'S prolific ASH-LEAVED KIDNEY, the finest and most prolific in cultivation.
Prices may be had on application.
Seed Growing Establishment, Wisbech.

FLUKE and other POTATOES, off the Lancashire Moss and Sand, personally selected.—Having given my numerous customers so much satisfaction last season, I have made arrangements to supply the same in quantity. Early orders are therefore solicited. Price on application.
H. BROWN, Seedsman, &c., 4, Commutation Row, Liverpool.

ROUGH SKIN ROUND POTATO.—We have pleasure in offering the above; they are with us nearly as early as the Ash-leafs, three times the produce, and most delicious flavour, and they have been with us nearly free from disease. Sample No. 1 is a fine Potato, fit for Table or Seed, 5s. per bushel; No. 2 is small and fit only for Seed, being green from exposure to the sun, 3s. 6d. per bushel.
ASH-LEAF KIDNEYS, from our usual fine Stock, 12s.; FLUKES, 4s. per bushel.
Strong LARCH, 15s. to 25s.; strong THORN QUICKS, 8s. to 12s.; strong CRABS for Stocks, &c., 20s. to 30s.
JOSEPH TREMBLE & SON, Nurserymen, Penrith, Cumberland.

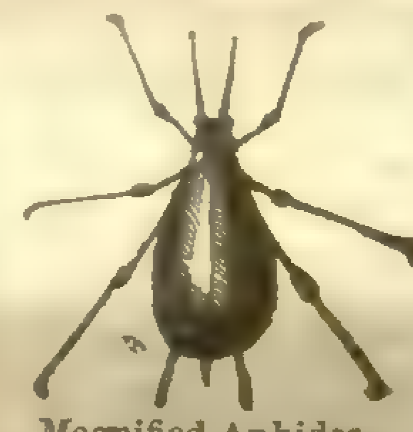
To the Trade—Continental Seeds.

GEO. MACINTOSH, Agent for Mr. F. W. Wendel, begs to announce that CATALOGUES of the above are now ready, and will be forwarded free on application. Early orders solicited.
All Communications to be addressed, Nursery, High Road, Hammersmith, W.



RED SPIDER MAGNIFIED.

ORCHARD HOUSE TREES and VINES.—Winter wash with GISHURST COMPOUND, recommended by Mr. Rivers. See "Orchard House," ninth edition; and see Mr. Pearson's recommendation in *Cottage Gardener*, 10th Sept., 1861.
Sold retail by Nurserymen and Seedsmen in boxes 1s., 3s., and 10s. 6d. each.
Wholesale by
PRICE'S PATENT CANDLE CO., Limited.



NEAL'S PATENT APHIS PASTILS.
The following is one of upwards of 70 Testimonials received by J. NEAL from gentlemen personally unknown to him.
"I beg to bear my testimony to the value of Neal's Pastils, and their efficacy in destroying, most effectually, the Green Fly without any trouble, and at a nominal expense, when compared with the use of Tobacco or even Tobacco Paper.
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PATENT INDOOR PLANT CASES.—These easily-managed Cases are for the growth and protection of Exotic Plants in blossom. Without the use of lamps or heating appliances of any kind, they proved effectual in preserving during the last severe winter some of our most tender Stove Plants, giving warmth throughout the night, and a moist air at all times. Price, Two to Four Guineas, in varnished wood, with self-contained heating apparatus.
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GREEN'S PATENT LAWN MOWERS have proved to be the best, and have carried off every prize that has been given in all cases of competition. They are noiseless in working, self-sharpening, self-cleaning, simple in construction, and easier to work and less liable to get out of order than any other Lawn Mowers extant.
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N.B. Old Machines repaired and made as good as new.

ROYAL HORTICULTURAL SOCIETY.

GRAND FRUIT AND CHRYSANTHEMUM SHOW,

NOVEMBER 6 and 7, 1861.

AWARDS OF THE JUDGES.

FRUITS.

Class A.—COLLECTION of FRUITS (Fruiterers only).
1st Prize, Mr. L. Solomon, Covent Garden Market, 4*l*.
2d ditto, Messrs. Webber & Co., Covent Garden Market, 3*l*.

Class B.—COLLECTION of FRUITS (Private growers).
1st Prize, Mr. A. Henderson, Trentham Hall Gardens, Staffordshire, 6*l*.
Equal 1st ditto, Mr. G. Tillyard, Gr. to J. Kelk, Esq., The Priory, Stanmore, 6*l*.
3d ditto, Mr. William Kaile, East Horsley Towers, Ripley, Surrey, 3*l*.

Class C.—PINE APPLES, Collection of, 3 distinct kinds.
1st Prize, Mr. Thos. Page, Gr. to W. Leaf, Esq., Streatham, 4*l*.
2d ditto, Mr. H. Muggleton, Gr. to W. Cubit, Esq., Andover, Hants, 3*l*.
3d ditto, Mr. A. Bodger, Gr. to J. Gott, Esq., Armley House, Leeds, 2*l*.

Class D.—PINE APPLES. Single Fruit, any variety.
1st Prize, Mr. J. Floud, Gr. to R. Fothergill, Esq., Aberdare, Glamorganshire, 2*l*. 10*s*.
2d ditto, Mr. Thos. Ingram, Royal Gardens, Windsor, 2*l*.
3d ditto, Mr. G. Tillyard, Gr. to J. Kelk, Esq., The Priory, Stanmore, 1*l*.

Class E.—GRAPES, WHITE MUSCAT. Basket of 10 lbs. weight.
1st Prize, Mr. G. Tillyard, Gr. to J. Kelk, Esq., The Priory, Stanmore, 4*l*.
2d ditto, Mr. Wm. Hill, Gr. to R. Sneyd, Esq., Keele Hall, Staffordshire, 3*l*.
3d ditto, Mr. Joseph Meredith, Garston, near Liverpool, 2*l*.

Class F.—GRAPES, WHITE MUSCAT. Single Dish.
1st Prize, Mr. G. Tillyard, Gr. to J. Kelk, Esq., The Priory, Stanmore, 2*l*. 10*s*.
2d ditto, Mr. Wm. Hill, Gr. to R. Sneyd, Esq., Keele Hall, Staffordshire, 2*l*.
3d ditto, Mr. Wm. Meads, Minley, Blackwater, Hants, 1*l*.

Class G.—GRAPES, WHITE. Any other variety, single Dish.
1st Prize, Mr. Wm. Hill, Gr. to R. Sneyd, Esq., Keele Hall, Staffordshire, 2*l*. 10*s*.
2d ditto, Mr. J. Meredith, Vine Cottage, Garston, near Liverpool, 2*l*.
3d ditto, Mr. Wm. Tillery, Welbeck, Worksop, Notts, 1*l*.

Class H.—GRAPES, BLACK HAMBRO'. Basket of 10 lbs. weight.
1st Prize, Mr. P. Kay, Market Gardener, Finchley, 4*l*.
2d ditto, Mr. Wm. Hill, Gr. to R. Sneyd, Esq., Keele Hall, Staffordshire, 3*l*.
3d ditto, Mr. A. Henderson, Trentham Hall Gardens, Staffordshire, 2*l*.

Class I.—GRAPES, BLACK HAMBRO'. Single Dish.
1st Prize, Mr. A. Henderson, Trentham Hall, Staffordshire, 2*l*. 10*s*.
2d ditto, Mr. Peter Kay, Market Gardener, Finchley, 2*l*.
3d ditto, Mr. Wm. Hill, Gr. to R. Sneyd, Esq., Keele Hall, Staffordshire, 1*l*.

Class J.—GRAPES, FRANKENTHAL or DUTCH HAMBRO'. Single Dish.
1st Prize, Mr. A. Henderson, Trentham Hall Gardens, Staffordshire, 2*l*. 10*s*.
2d ditto, Mr. J. Meredith, Vine Cottage, Garston, near Liverpool, 2*l*.

Class K.—GRAPES, BLACK. Any other Variety. Single Dish.
1st Prize, Mr. Thos. Page, Gr. to W. Leaf, Esq., Streatham, 2*l*. 10*s*.
2d ditto, Mr. W. Hill, Gr. to R. Sneyd, Esq., Keele Hall, Staffordshire, 2*l*.

Class L.—PEARS, DESSERT. Collection of 1 Dish of each.
1st Prize, Mr. A. Anderson, Gr., Oxenford Castle, Dalkeith, 4*l*.
2d ditto, Mr. Thos. Ingram, Royal Gardens, Windsor, 3*l*.
3d ditto, Mr. J. C. Dwerrihouse, Gr. to Viscount Eversley, Winchfield, 2*l*.

Class M.—PEARS, DESSERT. Collection of 6 Dishes, distinct.
1st Prize, Mr. Thos. Ingram, Royal Gardens, Windsor, 3*l*.
2d ditto, Mr. C. F. Harrison, Oatlands Palace Gardens, Weybridge, 2*l*.
3d ditto, Mr. E. Spivey, Gr. to J. A. Houblon, Esq., Hallingbury Park, near Bishops Stortford, 1*l*.

Class N.—PEARS, DESSERT. Collection of 3 Dishes, distinct.
1st Prize, Mr. C. F. Harrison, Oatlands Palace Gardens, Weybridge, 1*l*. 10*s*.
2d ditto, Mr. Geo. Tranter, Gr. to the Hon. G. D. Ryder, Westbrook, Hemel Hempstead, 1*l*.
3d ditto, Mr. J. Widdowson, Gr. to C. A. Barnes, Esq., Chorleywood, Herts, 10*s*.

Class O.—PEARS, DESSERT. Single Dish, any variety.
1st Prize, Mr. T. Ingram, Royal Gardens, Windsor, 1*l*.
2d ditto, Mr. G. Tranter, Gr. to the Hon. G. D. Ryder, Westbrook, Hemel Hempstead, 15*s*.
3d ditto, S. Ralphs, Gr. to R. Sturges, Esq., Mount Felix, Walton-on-Thames, 10*s*.
Extra ditto, Mr. F. Westbrook, Abingdon, Berks, 7*s*. 6*d*.

Class P.—PEARS, KITCHEN. Uvedale's St. Germain. Single Dish.
1st Prize, Mr. S. Snow, Gr. to the Countess Cowper, Wrest Park, Silsoe, Beds, 1*l*.
2d ditto, Mr. F. W. Park, Gr. to G. H. Vernon, Esq., Retford, Notts, 15*s*.
3d ditto, Mr. R. W. Craik, Gr. to F. F. Rufford, Esq., Stourbridge, 10*s*.

Class Q.—PEARS, KITCHEN. Catillac. Single Dish.
1st Prize, Mr. C. F. Harrison, Oatlands Palace Gardens, Weybridge, 1*l*.
2d ditto, Mr. D. Cunningham, Gr. to the Bishop of London, Fulham, 15*s*.
3d ditto, Mr. John Barnett, Decker Hill, Shiffnall, 10*s*.

Class R.—PEARS, KITCHEN. Single Dish, any variety.
1st Prize, Mr. S. Snow, Gr. to the Countess Cowper, Wrest Park, Silsoe, Beds, 1*l*.
2d ditto, Mr. J. Barnett, Decker Hill, Shiffnail, 15*s*.

Class S.—PEARS. Heaviest 5 Fruits, Dessert.
1st Prize, Mr. Geo. Tranter, Gr. to the Hon. G. D. Ryder, Westbrook Park, Hemel Hempstead, 1*l*.
2d ditto, Mr. E. Spivey, Gr. to J. A. Houblon, Esq., Hallingbury Park, near Bishop Stortford, 15*s*.
3d ditto, J. C. Dwerrihouse, Gr. to Viscount Eversley, Winchfield, 10*s*.

Class T.—PEARS, STEWED, jar of.
1st Prize, Miss Ingram, Royal Gardens, Windsor, 2*l*.
2d ditto, Mrs. J. Powell, Cedars Cottage, Old Windsor, 1*l*. 10*s*.
3d ditto, Mrs. Smith, Upper Sydenham, Kent, 1*l*.

Class U.—APPLES, DESSERT. Collection of 1 dish of each.
1st Prize, Mr. J. Newton, Gr. to G. F. Graham, Esq., East Lodge, Enfield Chase, 4*l*.
2d ditto, Mr. J. Cox, Gr. to Wm. Wells, Esq., Redleaf, Penshurst, Kent, 3*l*.
3d ditto, Mr. J. Mortimer, Gr. to the late Miss Brown, Carshalton, 2*l*.

Class V.—APPLES, DESSERT. Collection of 6 Dishes, distinct.
1st Prize, Mr. Thos. Ingram, Royal Gardens, Windsor, 3*l*.
2d ditto, Mr. S. Snow, Gr. to the Countess Cowper, Silsoe, Beds., 2*l*.
3d ditto, Mr. J. Newton, Gr. to G. F. Graham, Esq., East Lodge, Enfield Chase, 1*l*.

Class W.—APPLES, DESSERT. Collection of 3 Dishes, distinct.
1st Prize, Mr. J. Ford, Gr. to W. E. Hubbard, Esq., St. Leonard's Lodge, near Horsham, 1*l*. 10*s*.
2d ditto, Mr. F. Rutland, Garnstone Castle, Hereford, 1*l*.
3d ditto, Mr. Wm. Hall, Gr. to Captain F. Fordhook, Ealing Common, 10*s*.

Class X.—APPLES, DESSERT. Single Dish, any variety,
1st Prize, Mr. Thos. Ingram, Royal Gardens, Windsor, 1*l*.
2d ditto, Mr. Simpson, Gr. to Lady Molyneux, Stoke Farm, Slough, 15*s*.
3d ditto, Mr. Charles Turner, Royal Nursery, Slough, 10*s*.

Class Y.—APPLES, KITCHEN. Collection of 1 dish of each,
1st Prize, Mr. J. Mortimore, Gr. to the late Miss Brown, Carshalton, 4*l*.
2d ditto, Mr. J. Newton, Gr. to G. F. Graham, Esq., East Lodge, Enfield Chase, 3*l*.
3d ditto, Mr. J. Cox, Gr. to W. Wells, Esq., Penshurst, Kent, 2*l*.

Class Z.—APPLES, KITCHEN. Collection of 6 dishes, distinct.
1st Prize, Mr. R. H. Betteridge, Milton Hill, near Steventon, Berks, 3*l*.
2d ditto, Mr. S. Snow, Gr. to the Countess Cowper, Wrest Park, Silsoe, Beds, 2*l*.
3d ditto, Mr. J. Cox, Gr. to W. Wells, Esq., Penshurst, Kent, 1*l*.

Class AA.—APPLES, KITCHEN. Collection of 3 dishes, distinct.
1st Prize, Mr. G. Smith, Gr. to H. Littledale, Esq., Liscard Hall, Cheshire, 1*l*. 10*s*.
2d ditto, Mr. William Holden, gr. to the Rev. W. B. Marriott, Eton College, 1*l*.
3d ditto, Mr. F. Rutland, Garnstone Castle, Hereford, 10*s*.

Class BB.—APPLES, KITCHEN. Single dish.
1st Prize, Mr. William Lee, Gr. to F. M. Viscount Combermere, Whitechurch, Salop, 1*l*.
2d ditto, Mr. W. Young, Gr. to R. Barclay, Esq., West Hill House, Highgate, 15*s*.
3d ditto, Mr. P. Nichols, 13, New Road, Hammersmith, 10*s*.
Extra, Mr. William Green, Gr. to Mrs. Honywood, Marks Hall, Kelvedon, Essex, 10*s*.

Class CC.—APPLES, KITCHEN. Heaviest 5 fruits.
1st Prize, Mr. W. Green, Gr. to Mrs. Honywood, Marks Hall, Kelvedon, Essex, 1*l*.
2d ditto, Mr. W. Lee, Gr. to F. M. Viscount Combermere, Whitechurch, Salop, 15*s*.
3d ditto, Mr. W. Young, Gr. to R. Barclay, Esq., West Hill House, Highgate, 10*s*.

Class DD.—POMMES TAPEES.
1st Prize, Mr Wm. Young, Gr. to R. Barclay, Esq., West Hill House, Highgate, 3*l*.

Class EE.—ORANGES, LEMONS, &c., Collection of 1 dish each.
3d Prize, Mr. W. Lakeman, Gr. to J. Campbell. Esq., Hendon, N.W., 1*l*.

Class FF.—ORANGES, bearing Fruit. 4 Plants.
No competition.

Class GG.—ORANGES, best specimen of Tangerine, in pot.
No competition.

Class HH.—MELONS. Single fruit, any variety.
1st Prize, Mr. J. C. Dwerrihouse, Gr. to Viscount Eversley, Winchfield, 1*l*.
2d ditto, Mr. J. Pryer, Gr. to G. Perkins, Esq., Seven Oaks, Kent, 15*s*.
3d ditto, Mr. J. Barnett, Decker Hill, Shifnall, 10*s*.

Class II.—PLUMS. Single dish, any variety.
1st Prize, Mr. S. Snow, Gr. to the Countess Cowper, Silsoe Beds, 2*l*.
2d ditto, Mr. John Cox, Gr. to W. Wells, Esq., Penshurst, Kent, 1*l*. 10*s*.
3d ditto, Mr. J. Mortimore, Gr. to the late Miss Brown, Carshalton, 1*l*.

Class JJ.—STRAWBERRIES. Single dish.
1st Prize, Mr. J. Widdowson, Gr. to C. A. Barnes, Esq., Chorleywood, Herts, 1*l*.

Class KK.—CURRANTS. Single dish.
No competition.

Class LL.—RASPBERRIES. Single dish.
1st Prize, Mr. F. W. Park, Gr. to G. H. Vernon, Esq., Grove Hall, Retford, 10*s*.
2d ditto, Mr. W. Kaile, East Horsley Towers, Ripley, Surrey, 7*s*.

Class MM.—MISCELLANEOUS.
1st Prize, Mr. W. Hill, Gr. to R. Sneyd, Esq., Keele H[illegible] fordshire, for Collection of Grapes, 3*l*.
5th ditto, Mr. Thomas Ingram, Royal Gardens, Windsor, small basket of Salway Peaches.

CHRYSANTHEMUMS.

Class 1.—6 PLANTS. Distinct Varieties (Nurserymen).
1st Prize, Mr. Charles Turner, Slough, 4*l*.
2d ditto, Mr. A. Forsyth, Rectory Road, Stoke Newington,

Class 2—6 PLANTS. Distinct Varieties (Amateurs).
1st Prize, Mr. Ward, Gr. to W. Fowlers, Esq., Tottenham Green, 6*l*.
2d ditto, Mr. J. George, Gr. to J. Nicholson, Esq., Stam[illegible] Hill, 4*l*.
Mr. J. Glover, Gr. to R. C. Lepage, Esq., Tulse Hi[illegible]

Class 3.—3 PLANTS. Distinct Varieties (Amateurs)
1st Prize, Mr. Ward, Gr. to W. Fowlers, Esq, Totten[illegible] Green, 2*l*. 10*s*.
2d ditto, Mr. E. Harper, Gr. to J. F. Bennett, Esq., T[illegible] Hill, 2*l*.
3d ditto, Mr. J. George, Gr. to J. Nicholson, Esq., Sta[illegible] Hill, 1*l*.

Class 4.—6 PLANTS, POMPONS. Distinct Varie[illegible] (Nurserymen).
1st Prize, Mr. Charles Turner, Slough, 4*l*
2nd ditto, Mr. A. Forsyth, Rectory Road, Stoke Newington

Class 5.—6 Plants, POMPONS, Distinct varieties. (Amateurs)
1st Prize, Mr. D. Hutt, Margaret Place, Hackney Fields, [illegible]
2d ditto, Mr. J. Weston, Gr. to D. Martineau, Esq., [illegible] Park, 4*l*.
3d ditto, Mr. Ward, Gr. to W. Fowlers, Esq., Totten[illegible] Green, 2*l*.
4th ditto, Mr. Charles Bolton, 8, Edwin Terrace, London F[illegible] Hackney, 1*l*.
Special Prize, Mr. E. Harper, Gr. to J. F. Bennett, Esq., [illegible] Hill, 10*s*.
Special Prize, Mr. J. Glover, Gr. to R. C. Lepage, Esq., [illegible] Hill, 10*s*.

Class 6.—6 STANDARD PLANTS, Large-flowered or Pompons. (Open.)
1st Prize, Mr. A. Forsyth, the Nursery, Rectory Road, S[illegible] Newington, 4*l*.
2d ditto, Mr. G. Smith, Tollington Nursery, Hornsey R[illegible]
3d ditto, Mr. Thos. Parsons, Gr. to R. Attenborough, Esq. Lawn House, Acton Green, 1*l*.

Class 7.—6 New Varieties of the Current Year
2d Prize, Mr. A. Forsyth, the Nursery, Rectory Road Newington, 1*l*.

Class 8.—SINGLE SPECIMEN, LARGE-FLOWERED [illegible] POMPON (Open).
1st Prize, Mr. R. South, Gr. to G. D. Tyson, Esq., Upton Essex, 1*l*.
2d ditto, Mr. Ward, Gr. to W. Fowlers, Esq., Tottenham Green, 15*s*.
3d ditto, Mr. Charles Turner, Royal Nursery, Slough, 10*s*

Class 9.—24 CUT BLOOMS. Distinct (Nurserymen).
1st Prize, Mr. John Cattell, Westerham, Kent, 2*l*.
2d ditto, Mr. Wilkinson, Old Ford, Bow, 1*l*.
3d ditto, Mr. A. Forsyth, Rectory Road, Stoke Newington, 1[illegible]
4th ditto, Mr. E. Merry, Stamford Hill, 10*s*.

Class 10.—24 CUT BLOOMS. Distinct (Amateurs).
1st Prize, Mr. J. Hope, Gr. to Lady Buxton, Upton P[illegible] West Ham, 3*l*.
2d ditto, Mr. R. James, Rochester Castle, Stoke Newington
3d ditto, Mr. Thomas Couldrey, Gr. to G. Miller, Esq., [illegible] Grange, Hillingdon, 1*l*.
4th ditto, Mr. J. George, Gr. to J. Nicholson, Esq. Stam[illegible] Hill, 15*s*.

Class 11.—12 CUT BLOOMS. Distinct (Amateurs)
1st Prize, Mr. Slade, 4, Rose Cottages, Hulford Road, [illegible] land, 1*l*. 10*s*.
2d ditto, Mr. R. James, Rochester Castle, Stoke Newin[illegible]
3d ditto, Mr. Ward, Gr. to W. Fowlers, Esq., Tott[illegible] Green, 10*s*.
4th ditto, Mr J. George, Gr. to J. Nicholson, Esq., Sta[illegible] Hill, 7*s*.

Class 12.—6 CUT BLOOMS. Distinct (Amateurs)
1st Prize, Mr. R. James, Rochester Castle, Stoke Newington
2d ditto, Mr. Thos. Couldrey, Gr. to H. G. Miller, Esq. Grange, Hillingdon, 10*s*.
3d ditto, Mr. John Hope, Gr. to Lady Buxton, West H[illegible]
4th ditto, Mr. Ward, Gr. to W. Fowler, Esq., T[illegible] Green, 5*s*.

Class 13.—6 CUT BLOOMS. Anemone-flowered, distinct
1st Prize, Mr. John Hope, Gr. to Lady Buxton, West Ha[illegible]
2d ditto, Mr. J. Butt, Milton Road, Stoke Newington, [illegible]
3d ditto, Mr. R. James, Rochester Castle, Stoke Newin[illegible]
4th ditto, Mr T. Edwards, Gr. to P. A. Taylor, Esq., H[illegible] House, Notting Hill, 5*s*.

Class 14.—BEST GROUP OF CUT BLOOMS (Open)
1st Prize, Mr. Charles Turner, Royal Nursery, Slough, [illegible]

MISCELLANEOUS.
1st Prize, Mr. J. H. Bird, Stoke Newington, for Collection Chrysanthemums, 1*l*. 10*s*.
2d ditto, Mr. John Salter, Hammersmith, for Collection Chrysanthemums, 1*l*.
2d ditto, Miss Maling, Whitehead's Grove, Chelsea, [illegible] Wardian case filled with plants, 1*l*.
3d ditto, Messrs. J. Ivery & Son, Dorking, Collection Ferns, 10*s*.
Commendation, Mrs. J. Stodart [illegible]alington, for 12 Art[illegible] Dahlias.

RAYNBIRD, CALDECOTT, AND BAWTREE, SEED MERCHANTS and GROWERS, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E.C.

Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.

Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

WHEELER'S ORANGE GLOBE MANGEL,
WHEELER'S IMPERIAL SWEDE,
GRASS SEEDS for PERMANENT PASTURE,
GRASS SEEDS for LAWNS,

And all other Seeds of the same excellent quality which has rendered our Farm Seeds so celebrated.

We offer our Seeds at the lowest price consistent with their being good and pure, at the same time deliver them carriage free by rail, and allow 5 per cent. discount for cash.

Our Book of FARM SEEDS sent free for 3 stamps.

J. C. WHEELER & SON, Seed Growers, Gloucestershire.

GENUINE ITALIAN RYE-GRASS, produced from the second cut of Foreign Italian, thoroughly cleaned, and weighing from 17 lbs. to 21 lbs. per bushel, can be supplied to the Trade direct from the grower, and purchasers may either take delivery now, or at their convenience up to March 1, 1862.

For samples and prices apply to SIMON A. DAINTREE, of Fendrayton, by St. Ives, Hunts.

TO THE SEED TRADE.—The Subscribers have for Sale several quarters of PEAS of the following varieties:—Early Emperor, Bellamy's Green, Marrow, Prizetaker, and Ne Plus Ultra; also Sutton's Champion Swede, and a few cwt. of Long Yellow Wurzel Seed, all the growth of 1861.

Samples and prices on application to MARSH & PERKINS, 42, Drapery, Northampton.

N.B. A reference required from unknown correspondents.

TO the TRADE and OTHERS. — Still thousands on hand of good Plants of PAMPAS GRASS, 20s. per 100.

Double Lilac PRIMROSES, 3s. per dozen.

Double White ditto, 5s. per dozen.

Double White Major ROCKETS, 3s. per dozen. Cheaper by the 100.

Double Yellow ditto, 4s. per dozen.

Double Red HEPATICAS, 4s. per dozen. Cheaper by the 100.

Border AURICULAS, 3s. per dozen. Cheaper by the 100.

POLYANTHUS, warranted from finest seed, 3s. per dozen. Cheaper by the 100.

Double Purple and Russian VIOLETS, 2s. per dozen. Cheaper by the 100.

HOLLYHOCKS by dozen or hundred, reasonable.

HARDY CLIMBERS, including the best of Honeysuckles, Clematis, and Roses, 6s., 9s., and 12s. per dozen.

DILLISTONE & Co., Nurseries, Sturmer, Halstead, Essex.

"DAINTREE'S EARLIEST" SEEDLING POTATO.—This Potato, raised by the Advertiser, and now for the first time offered to the Public after being thoroughly tested by competent judges, has proved itself to be a new and distinct variety, and to mature earlier than any Potato (Ash-leaved Kidney included) yet known; it is adapted for the earliest and latest planting, is in colour beautifully white, has a very thin skin, and retains its fine cooking qualities until June. See *Gardeners' Chronicle* of May 25 last.

To effect therefore a thorough distribution, and to enable growers to test for themselves, a sample bag containing 1 quart will be forwarded on receipt of an Order enclosing 12 postage stamps; and the [illegible] supply for sale this season will be delivered on the Eastern Counties or Great Northern Railways in quantities of not more than 1 bushel (in the order they are booked), at 21s. per bushel, or 5s. 6d. per peck, on receipt of an order enclosing a Post Office Order for the amount, payable at the Post Office, St. Ives, Hunts, addressed to Mr. SIMON A. DAINTREE, of Fendrayton, St. Ives, Hunts.

Specimens will be exhibited at the Root Show at the Crystal Palace, Sydenham, and Testimonials will be forwarded on application.

---

250 FINE Double Flowering Pink THORNS.—Such plants as are seldom met with in the Trade, being strong, with compact heads, from 4 to 6 feet.

5000 very fine Green HOLLIES (thrice transplanted), from 1 to 2 feet, bushy plants; all will move with balls of soil

1000 fine Silver-striped HOLLIES, from 15 to 24 inches, bushy plants

1000 strong Purple LILACS, 2½ to 3 feet

2000 ONTARIO POPLARS.—Stout plants, from 8 to 12 feet

1000 LOMBARDY POPLARS.—Strong, from 7 to 10 feet

MOUNTAIN ASH.—Strong, from 5 to 8 feet

WYCH or SCOTCH ELMS.—Stout, 5 to 7 feet

WEEPING BIRCH —Fine and strong, 6 to 9 feet

BEECH, Common.—Strong, 5 to 6 feet

TURKEY OAKS.—Stout, 4 to 5 feet

WHITE CEDARS.—Well furnished plants, 4 to 5 feet

Prices will be forwarded upon application to MOWBRAY & LOWE, Nurserymen and Seedsmen, Wolverhampton.

COB FILBERTS. — What yields most Sovereigns per acre?—COB FILBERTS, now selling on the market at 3s. per lb. and upwards. For Trees apply to GEO. MACE, Calcot Gardens, near Reading.

Also may be had RED SKIN and WHITE SKIN FILBERTS, with other varieties of Cob Nuts.

The Northampton Nurseries.

JOHN PERKINS respectfully calls the attention of noblemen, gentlemen, and others engaged in Planting to the following ORNAMENTAL TREES and SHRUBS &c., all of which are in the best possible condition for removal. Having been frequently transplanted, they can be confidently recommended to remove with the most certain success. From 4000 to 5000 Cedrus Deodara, perfect specimens, averaging from 1½ to 8 feet, and all the intermediate sizes; also a large stock of Wellingtonea gigantea, from 1 to 4 feet; Thujopsis borealis, 1 to 3 feet; Cupressus Lawsoniana, 1 to 3 feet; Picea Pinsapo, 1 to 4 feet; Picea Nordmanniana, 1 to 4 feet; Araucaria imbricata, 1 to 4 feet; Pinus Cembra, 1 to 5 feet; Thuja aurea, 1 to 3 feet; Cedar of Lebanon, 2 to 6 feet. Also every other variety of Ornamental Trees and Shrubs worthy of cultivation may be had.

TRANSPLANTED FOREST TREES.

Ash, 2 to 3, 3 to 4 feet.	Fir, Balm of Gilead, 1 to 2, 2 to 3 feet.
Beech, 2 to 3, 3 to 4, 4 to 5 ft.	,, Larch, 1 to 1½, 1½ to 2, 2 to 3 feet.
Chesnut, Spanish, 1 to 2, 2 to 3, 3 to 4 feet.	Sycamore, 2 to 3, 3 to 4 feet.
,, Horse, 1 to 2, 2 to 3, 3 to 4 feet.	Hazel, 1½ to 2, 2 to 3 feet.
Elms, grafted English, 2 to 3, 3 to 4, 4 to 5, 5 to 6 feet.	Maple, Norway, 2 to 3, 3 to 4 feet.
,, Cornish, 2 to 4, 3 to 4, 4 to 5, 5 to 6 feet.	Oaks, English, 1 to 2, 2 to 3, 3 to 4 feet.
,, Scotch or Wych, 2 to 3, 3 to 4, 4 to 5, 5 to 6 feet.	,, Turkey, 2 to 3, 3 to 4 feet.
Fir, Spruce Norway, 1 to 1½, 1½ to 2, 2 to 3 feet.	Poplar, Black, Italian, Lombardy, Ontario, White Abele, 2 to 3, 3 to 4, 4 to 5, 5 to 6, 6 to 8 feet.
,, Scotch, 1 to 2, 2 to 3, 3 to 4 feet.	Privets, from 400 to 500,000, Strong, 1 to 2, 2 to 3 feet.
,, Silver, 1 to 2, 2 to 3 feet.	

From 2 to 3 million of Quick or White Thorn.
From 2 to 3 million of Gorse or Furze.

FRUIT TREES.

Standard and Dwarf-trained Peaches, Nectarines, Apricots, Plums, Pears, Apples, and Cherries. From 15 to 20,000 extra strong Gooseberries and Currants.

Extra strong SEAKALE and ASPARAGUS for Forcing.

Prices of the above upon application to JOHN PERKINS, 52, Market Place, Northampton.

Kingsthorpe Nurseries, near Northampton.

MARSH AND PERKINS have great pleasure in offering the following, which are very fine, well rooted, and such that cannot fail to give satisfaction:—

FOREST TREES, SHRUBS, &c.

Acacia, 4 to 5 feet	Oak, Turkey, 3 to 4 feet
Alder, 2 to 3 feet	Sycamore, 1½ to 2 feet
,, 5 to 6 feet	Poplar, Lombardy and Italian, fine standards, 6 to 10 feet
,, fine standards, 6 to 7 feet	White Thorn or Quick, 2 years drills, fine
Ash, 1½ to 2 feet	White Thorn or Quick, 2 years transplanted, fine
,, 2 to 3 feet	White Thorn or Quick, 3 years transplanted, fine
,, 3 to 4 feet	Arbor-vitæ, American, 12 to 18 in.
,, 4 to 5 feet	,, Siberian, 12 to 18 in.
,, 5 to 6 feet	,, ,, 18 to 24 in., fine
Beech, 1 to 1½ feet	Berberis dulcis, 18 to 24 in.
,, 2 to 3 feet	,, ,, fine bushy plants, 2 to 3 feet
Chesnut, Spanish, 2 to 3 feet	Box, Green, 12 to 15 in.
Elm, Wych or Scotch, 2 to 3 ft.	Cedar, Red, fine, 2 to 3 feet
,, ,, ,, 3 to 4 feet	Cedrus Deodara, fine, 2 to 3 ft.
,, ,, ,, 4 to 5 feet	,, ,, ,, 3 to 3½ ft.
,, ,, ,, 6 to 8 feet	Holly, Common, 12 to 18 in.
Fir, Austrian, 1 to 1½ feet	Laurel, ,, 12 to 18 in.
,, Scotch, fine, 1½ to 2 feet	,, Portugal, 12 to 18 in.
,, ,, ,, 2 to 3 feet	Laburnum, 4 to 5 feet
,, ,, ,, 3 to 4 feet	Pinus excelsa, 6 to 9 in.
,, Spruce, 1 to 1½ foot	Privet, Evergreen, 12 to 18 in.
,, ,, 1½ to 2 feet	Yew, English, 12 to 18 in.
,, ,, white, 1½ to 2 ft.	,, ,, 2 to 3 feet
,, Larch, 12 to 15 in.	,, Irish, 1½ to 2 feet
,, ,, 18 to 24 in.	,, ,, 3 to 4 feet
Hornbeam, 2 to 3 feet	,, ,, 5 to 6 feet
,, 3 to 4 feet	
Limes, Standards, fine	
Oak, English, 1½ to 2 feet	
,, ,, 2 to 3 feet	
,, ,, 3 to 4 feet	
,, Turkey, 1½ to 2 feet	

Sweet Briar, Syringa, Tamarix germanica, Vinca elegantissima, Standard American Bird Cherry, Virginian Creeper, Spiræa ariæfolia, argentea, and Douglasi.

FRUIT TREES.

Apples, Standards | Pears, Dwarf-trained
Plums, Dwarf-trained.

Prices on application to 42, Drapery, Northampton.

N.B.—A reference required from unknown correspondents.

Quick.

H. AND F. SHARPE are prepared to offer of the finest quality,
Strong 2-years' Transplanted QUICK, 3 feet high,
Strong 2-years' Seedling do., 2 feet high,
at very moderate prices, which may be had, with samples, on application.

Seed Growing Establishment, Wisbech.

CHARLES DALY AND SON offer 200,000 four years' transplanted SPRUCE FIR at 10s. per 1000; two year's Seedling THORN QUICKS, 2s. per 1000; one year transplanted ditto, 5s. per 1000; IRISH YEWS, 1 to 1½ feet, 10s. per 100; COMMON LAUREL, 1 to 1½ feet, 15s. per 1000; PORTUGAL ditto, 3s. per 100; AUCUBA JAPONICA, 1 foot, 25s. per 100; TREE BOX, 20s. per 1000. Terms, Cash only. Prices of General Nursery Stock free by post.

Coleraine, Ireland.—Nov. 16.

General Nursery Stock.

S. PONSFORD begs to announce that his Stock of the above is in excellent condition for transplanting, comprising everything in general demand, especially STANDARD and DWARF ROSES, which have made fine growth and are clean and healthy; FRUIT and FOREST TREES of every description; STANDARD MULBERRIES, very fine; AUCUBAS, from 1 to 5 feet high, bushy; and all other Evergreen and Deciduous Shrubs and Plants; CAMELLIAS and AZALEAS well set with bloom buds.

PRICED and DESCRIPTIVE CATALOGUES on application to

Loughborough Park Nurseries, Brixton, Surrey, S.

Winter Blooming Plants.

HUGH LOW AND CO. respectfully invite inspection of their very extensive Stock of CAMELLIAS, AZALEAS, ERICAS, EPACRIS, CYTISUS, &c. These can be seen at the Nursery in thousands, and are well worth the attention of intending purchasers.

Fine ORANGES in fruit. JASMINUM GRANDIFLORUM full of flower buds.

Clapton Nursery, London, N.E.

WILLIAM BARRON, Elvaston Castle, can supply strong and remarkably well rooted Plants as under:—

BERBERIS DARWENI.—The most beautiful of the tribe, fit either for the Flower Garden or Game cover. Pheasants are very fond of the berries, which are produced in profusion.

Strong Plants, 3 years old, 20s. per 100.
Strong Plants, 1 year old, 12s. 6d. per 100.

ABIES DOUGLASI.—A highly ornamental and valuable timber tree, the same as the tall flag pole at Kew; excellent plants 3 years old, once transplanted, 25s. per 100.

PINUS LARICIO.—A valuable timber tree, 18 to 24 inches, 70s. per 1000.

If taken in quantity, a reduction will be made.

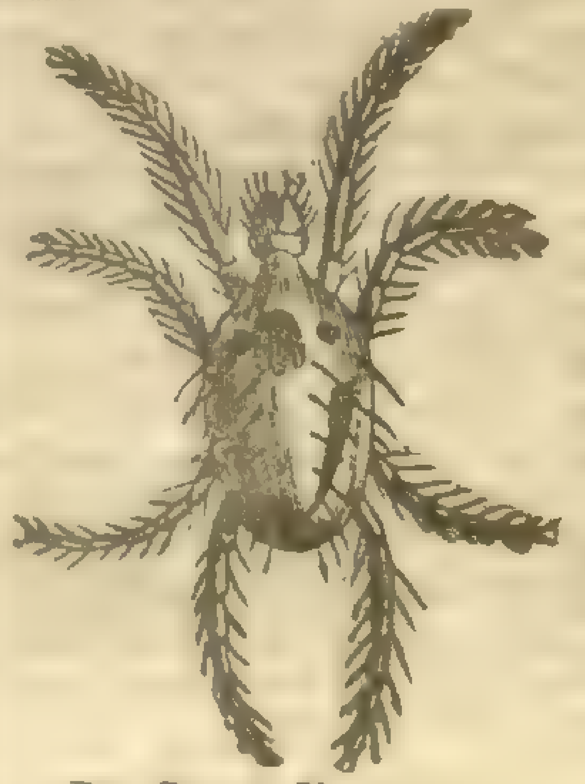
Remittances to accompany Orders from unknown correspondents. Post Office Orders payable at Derby.

CAMELLIAS, full of Flower Buds, 15s., 18s., 21s., 24s., per dozen. AZALEAS, 12s., 15s., and 18s. per dozen. ORANGE TREES, full of fruit, 2s. 6d. to 15s. each. An immense quantity of British and Foreign FERNS, 3s. to 12s. per dozen. HYACINTHS, best named sorts, 6s per dozen; mixed do., for pots or borders, 20s. per 100; and all other Bulbs equally cheap.

R. GREEN, 154, Kingsland Road, N.E., 55 doors from Shoreditch Church.

FREDERICK ADOLPHUS HAAGE, JUN., NURSERY and SEEDSMAN, Erfurt, Prussia, has the pleasure to announce that his new TRADE SEED LIST for 1862, containing choice selections of all the best Annuals, Perennials, Stove and Greenhouse Plants, and Tree and Garden Seeds, is now ready, and will be forwarded free on application.—Nov. 10.

London Agents: Messrs. BETHAM & BLACKITH, Cox's Quay, Lower Thames Street, E.C.



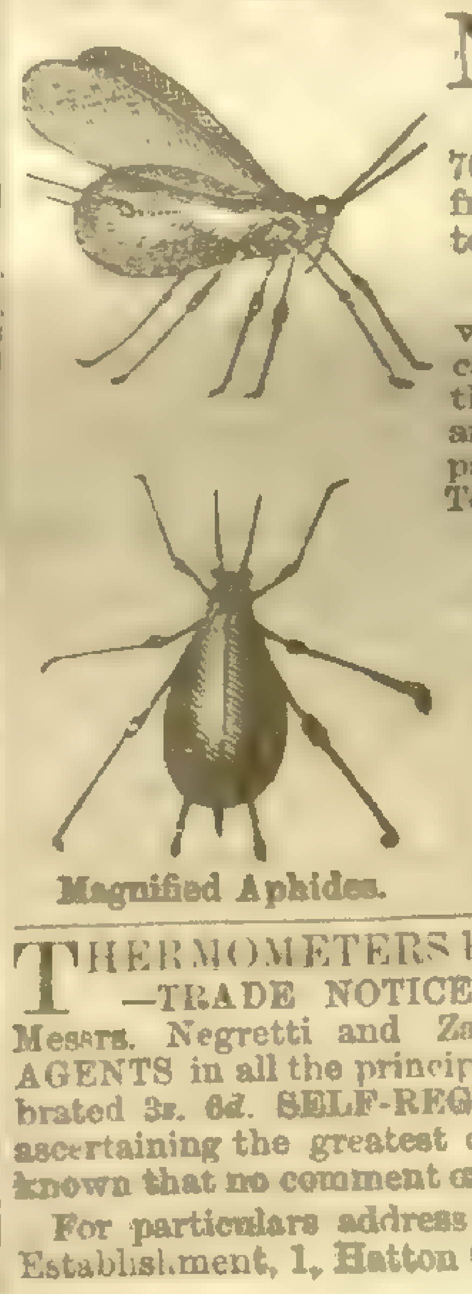
RED SPIDER MAGNIFIED.

ORCHARD HOUSE TREES and VINES.

Winter wash with GISHURST COMPOUND, recommended by Mr. Rivers. See "Orchard House," ninth edition; and see Mr. Pearson's recommendation in *Cottage Gardener*, 10th Sept., 1861.

Sold retail by Nurserymen and Seedsmen in boxes 1s., 3s., and 10s. 6d. each.

Wholesale by PRICE'S PATENT CANDLE CO., Limited.



NEAL'S PATENT APHIS PASTILS.

The following is one of upwards of 70 Testimonials received by J. NEAL from gentlemen personally unknown to him.

"I beg to bear my testimony to the value of Neal's Pastils, and their efficacy in destroying, most effectually, the Green Fly without any trouble, and at a nominal expense, when compared with the use of Tobacco or even Tobacco Paper.

"JAMES SANDERS.
"Nursery Grounds, Abergavenny."

Sold by all principal Seedsmen.
Price 1s. and 2s. per packet.

Magnified Aphides. Patentee, J. NEAL, Birmingham.

THERMOMETERS by NEGRETTI AND ZAMBRA. —TRADE NOTICE.—As the cold season approaches Messrs. Negretti and Zambra are desirous of appointing AGENTS in all the principal towns for the SALE of their celebrated 3s. 6d. SELF-REGISTERING THERMOMETERS, for ascertaining the greatest cold. These instruments are so well known that no comment on their excellence is necessary.

For particulars address to NEGRETTI and ZAMBRA'S, Central Establishment, 1, Hatton Garden, E.C.

PARADISE NURSERY, HOLLOWAY, LONDON, N.

BENJAMIN S. WILLIAMS

Invites inspection of his large and well-assorted Collections of

EXOTIC ORCHIDS, FERNS AND LYCOPODS, MISCELLANEOUS, STOVE, AND GREENHOUSE PLANTS, VARIEGATED AND ORNAMENTAL FOLIAGED PLANTS.

Amongst which are some of the finest Specimens in the Trade.

Also a fine Stock of

ROSES, FUCHSIAS, GERANIUMS, HARDY VARIEGATED PLANTS, HERBACEOUS AND ALPINE PLANTS, CONIFERS, FRUIT TREES, SHRUBS, &c.

Just published, Post Free on application,

NEW GENERAL CATALOGUE FOR 1861–62,

WITH A DESCRIPTIVE LIST OF

NEW, BEAUTIFUL, AND RARE PLANTS

OF RECENT INTRODUCTION.

The "FAVOURITE" OMNIBUSES, from the London Bridge Railway Station, by the Bank and Post Office; and from Charing Cross, through the Strand and Holborn, pass the Nursery every 10 minutes.

PARADISE NURSERY, SEVEN SISTERS AND HORNSEY ROADS, HOLLOWAY, N.

Splendid New Strawberry "Eclipse" (Reeve).

MESSRS. VEITCH AND SON beg to call attention to this really first-class Fruit, full particulars of which will be found in their Advertisements which have appeared in this Paper during the months of August and September. 12*s.* per dozen; 80*s.* per 100. Price to the Trade on application.
Chelsea and Exeter.—November 16.

RASPBERRIES.—SEEDLING (Cornwell's), PROLIFIC (Carter's), FILLBASKET, AUTUMN-FRUITED, and YELLOW ANTWERP. GOOSEBERRIES, fine bushes: Crown Bob, Whitesmith, Warrington: and CURRANTS, 2*s.* to 3*s.* per doz. NARCISSUS, &c.
GEO. CORNWELL, Seedsman, &c., Barnet, Herts. N.

Fine Vines from Eyes in Pots.

WM. CUTBUSH, JUN., Barnet Nurseries, Barnet, Herts, begs to invite an inspection of his fine STOCK of FRUITING and other VINES, consisting of all the best varieties in cultivation. Also to his fine stock of Specimen, Half-specimen, and young Plants of NEW HOLLAND PLANTS, INDIAN AZALEAS, and STOVE PLANTS.
CATALOGUES on application.

Vines for Fruiting in Pots.

J. AND J. FRASER, Lea Bridge Road Nurseries, N.E., beg to offer strong VINES with well ripened wood of the best varieties.
A CATALOGUE will be forwarded on application.
The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

Orchard House Trees.

J. AND J. FRASER, Lea Bridge Road Nurseries, N.E., having a fine stock of—

PEACHES	APPLES
NECTARINES	PEARS
APRICOTS	PLUMS and CHERRIES

in Pots, well set with bloom buds, beg respectfully to offer them to the notice of intending Purchasers.
A CATALOGUE will be forwarded on application.
The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

Orchard House Trees.

HUGH LOW AND CO. have to offer—

	APRICOTS	
APPLES	NECTARINES	PEARS
CHERRIES	PEACHES	PLUMS

In pots. Wood thoroughly well ripened and well set with bloom buds. Prices moderate.
Clapton Nursery, London, N.E.

Orchard House Trees in Pots.

THOMAS JACKSON and SON have a fine Stock of the above, well established in Pots, large and full of Flower Buds, many of them having this season borne 40 to 50 fruits; they consist of

CHERRIES	PEARS	NECTARINES
PEACHES	GRAPES	PLUMS

3*s.* 6*d.* to 7*s.* 6*d.* each.
Nurseries, Kingston, S.W.

Wall-Trained Fruit Trees.

THOMAS JACKSON AND SON having a great extent of walls devoted to FRUIT TREES, respectfully invite an inspection of their large stock of very superior Dwarf and Standard-trained Trees. Many of them having borne fruit this season are specially suited for planting in houses for fruiting the first year.
Nurseries, Kingston, S.W.

Fruit Trees.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Fruiting Vines.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Roses.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Ornamental Trees and Shrubs.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Hollyhocks.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Fruit Trees.

B. WHITHAM begs to call attention to his superior Stock of APPLES, including upwards of 2000; Lord Suffield, Ringer, Grenadier, Pott's Seedling Golden Spine, and the best sorts in cultivation, at 9*s.* per dozen. Also a very large stock of Lancashire Show GOOSEBERRIES, 160 of the best kinds at 4*s.* per dozen; common sorts, 2*s.* per dozen; RED, WHITE, and BLACK CURRANTS, 2*s.* per dozen, 14*s.* per 100.
CATALOGUES free on application.
Clough Nurseries, Mottram, near Manchester.

Fruit Trees.

JAMES GARAWAY AND CO. call attention to their stock of the above, comprising

APRICOTS NECTARINES PEACHES	Standard and Dwarf-trained	APPLES CHERRIES PEARS PLUMS	Dwarf-trained, Standard, and Dwarf-quarter.

All of first-rate quality and in good condition.
The STANDARD PEARS are unusually fine, and will be sold at a very low rate to purchasers of quantities.
CATALOGUES and prices free by post.
Prices to the Trade on application.
JAMES GARAWAY & Co., Durdham Down Nurseries, Bristol.

Orchard-house Trees.

THOS. RIVERS has to offer this season a very large stock of FRUIT TREES in Pots, including
PEACHES and NECTARINES, Standards, 4 to 5 years old.
Ditto Half Standards, ditto.
Ditto Dwarf Bushes, 3 years old.
Ditto Pyramids, 2 to 3 years old.
APRICOTS, Dwarf Bushes, 2 to 3 years old.
Ditto Pyramids, 2 years old.
FIGS, Bushes, 2 to 3 years old.
All the above have been grown in Orchard-houses, are full of blossom buds, and fit for Forcing as well as Orchard-house culture.
APPLES on the Paradise Stock, Pyramids and Bushes.
CHERRIES, Pyramids.
PEARS, Pyramids and Bushes.
PLUMS, Pyramids and Bushes.
These are all well furnished with blossom buds.
STRAWBERRIES in 6-inch Pots.
A CATALOGUE of ORCHARD HOUSE TREES sent free per post on application; carriage of all packages paid to London.
Nurseries, Sawbridgeworth.

Dutch and other Bulbs.

ROBERT PARKER begs to inform his friends and patrons that his PRICED and DESCRIPTIVE CATALOGUE of the above, containing selections of the finest varieties in cultivation, is now ready, and will be forwarded post free on application.
Exotic Nursery, Tooting, Surrey, S.

Hyacinths and other Bulbs.

WM. CUTBUSH AND SONS' first importation of HYACINTHS, TULIPS, &c., has just been received direct from Haarlem. They are unusually fine. Early Orders are respectfully solicited.
ALL the FIRST PRIZES have been awarded our Collections wherever exhibited during the last seven years.
DESCRIPTIVE PRICED CATALOGUES post free.
Highgate Nurseries, London, N.

The best Twelve Hyacinths.

SUTTON'S BEST TWELVE HYACINTHS Imported can be supplied for 12*s.*; Second best, 9*s.*; very good, 6*s.*

PRICED LISTS of BULBS and SEEDS may be had post free.

Royal Berkshire Seed Establishment, Reading.

A COLLECTION of BULBS for CONSERVATORY or WINDOW and OUT-DOOR DECORATION. Sent to any address, carriage paid, for 21*s.* Containing 20 choice named Hyacinths; 12 mixed ditto, colours separate; 4 Polyanthus Narcissus; 40 Tulips, various, for pots and border; 6 Jonquils; 6 Ixias, very choice; 100 Crocus, four colours, separate; 20 Anemones, mixed; 50 Ranunculus, mixed; 50 Snowdrops; 20 border Narcissus; 6 English Iris; 6 Spanish Iris.
Half the above for 10*s.* 6*d.*
☞ The Collection may be modified to suit the taste or convenience of Purchasers.
B. J. EDWARDS, 222, Strand, London, W.C.

Hollyhock Seed—Sow at once.

PAUL AND SON'S unrivalled Collections of the above are now ready in 12 fine distinct named varieties, in sealed packets. 5*s.*; 6 varieties do., do., 2*s.* 6*d.*; packets of fine mixed, 1*s.*; also a large Stock of fine healthy plants (see CATALOGUE now ready, post free on application).
Old Nurseries, Cheshunt, Herts.

Superb Double Hollyhocks.

SAFFRON WALDEN NURSERY.

WILLIAM CHATER'S 15th ANNUAL DESCRIPTIVE and NEWLY CLASSIFIED LIST is now ready, and will be forwarded to any address on receipt of one postage stamp.
WILLIAM CHATER, Nurseryman and Seedsman, Saffron Walden, Essex.

Prize Hollyhock Seed.

DOWNIE, LAIRD, AND LAING are now sending out in sealed packets, 12 of the finest varieties of HOLLYHOCKS, saved from their unrivalled collection, price 5*s.*; and same sorts, mixed, 1*s.* and 2*s.* 6*d.* Free by post.
17, South Frederick Street, Edinburgh; and Stanstead Park, Forest Hill, London, S.E.

Prize Hollyhocks.

DOWNIE, LAIRD, AND LAING have an immense Stock of fine healthy Plants of the above, price 18*s.*, 24*s.*, 30*s.*, awd 42*s.* per dozen. CATALOGUES free on application.
D., L. & L. were awarded the First Prize for 11 Spikes of Hollyhocks this season at the Crystal Palace, Royal Horticultural Society of London, Brighton and Edinburgh Horticultural Societies Exhibitions.
17, South Frederick Street, Edinburgh; and Stanstead Park, Forest Hill, London, S.

Superb Hollyhocks.

EIGHTEEN THOUSAND PLANTS OF NAMED VARIETIES, INCLUDING THE BEST IN CULTIVATION.

R. B. BIRCHAM, in offering the above begs to observe that considerable advantage would accrue to purchasers by receiving their plants in autumn instead of spring. By shifting into larger pots, and placed where they are protected from the *extremes* of wet and cold, the plants will become extra strong for spring planting, when an *earlier* and *stronger* bloom will be obtained, ripen more seed, &c.
CATALOGUES forwarded upon application.
Hedenham Rosery, Bungay, Suffolk.

SAPONARIA CALABRICA ALBA, Pure White.—This beautiful New Annual is of very dwarf habit, and being pure white, contrasts most admirably with the Saponaria calabrica rosea. It produces blossoms in great profusion, and remains in flower during the whole summer and late in autumn. It is invaluable for beds, or as edgings for borders.
Price to the Trade on application to
JOHN GEORGE WAITE, Seed Merchant, 181, High Holborn, London, W.C.

Select and Valuable Hardy Nursery Stock.

WM. JACKSON AND CO., Bedale, Yorkshire, beg to offer the following at annexed moderate prices. Having been exposed during last winter to frost 15° below zero, they must be considered hardy in any part of the country.

	£	s.	d.
100 RHODODENDRON CAMPANULATUM, $1\frac{1}{2}$ to 2 ft., large bushy plants, from seed	6	0	0
100 RHODODENDRONS, in variety, splendid hybrids, of dwarf compact growth, with 3 to 6 flower buds each, strong bushy plants, $1\frac{1}{2}$ to $2\frac{1}{2}$ feet	7	10	0
Selected plants, per dozen	1	10	0
100 RHODODENDRON NOBLEANUM, JACKSONII, and varieties, including scarlet, crimson, blush, and shaded salmon, strong bushy plants, $1\frac{1}{2}$ to $2\frac{1}{2}$ feet (per dozen, 1*l.*)	5	0	0
100 RHODODENDRON MYRTIFOLIUM, strong plants	5	0	0
100 ANDROMEDA FLORIBUNDA, 1 to 2 feet, with flower buds (per dozen, 1*l.*)	6	0	0
100 GHENT AZALEAS, 2 to $2\frac{1}{2}$ feet, with flower buds, the best vars., including scarlets (per doz., 1*l.* 10*s.*)	7	10	0
100 DWARF ROSES, strong fine plants, two of a sort	2	10	0
100 PYRACANTHA, $1\frac{1}{2}$ to 2 feet, bushy plants	1	0	0
100 HOLLIES, Transplanted, 1 to $1\frac{1}{2}$ feet (per 1000, 5*l.*)	0	15	0
COMMON LAURELS, Transplanted, per 1000 ..	5	0	0

A large stock of the following, prices on application:—
The best SCOTCH FIR, transplanted over last spring, 2 ft., and 2 to $2\frac{1}{2}$ feet; SPRUCE FIR, 2 to $2\frac{1}{2}$ feet, and 2 to 3 feet; CURRANTS, GOOSEBERRIES, APPLE, PEAR, and PLUM TREES.
A reference or remittance is respectfully solicited from unknown correspondents. The Trade supplied.

MINNIE BANKS and COMET. Coloured Plate, 1*s.* 6*d.* per post.
The above FUCHSIAS possess first-class properties, and are a striking advance on all others which have been sent out since the white corolla varieties were introduced.
E. G. HENDERSON & SON, Wellington Road Nursery, St. John's Wood, London, N.W.

CHÆROPHYLLUM BULBOSUM. Figured in *Gardeners' Chronicle*, Oct. 5, 1861.
New Seed, per packet, 6*d.* and 1*s.* each.
The BULB CATALOGUE free, and the BULB GUIDE on receipt of 18 postage stamps.
E. G. HENDERSON & SON, Wellington Road Nursery, St. John's Wood, London, N.W.

New and Rare Plants.

MESSRS. E. G. HENDERSON AND SON respectfully call attention to the following:—
SEDUM CARNEUM VARIEGATUM, introduced by Mr. Von Siebold from Japan, of whom they have purchased the entire stock.
EPIGYNIUM LEUCOBOTRYS, figured in the "Illustrated Bouquet."
PENTAS ROSEA KERMESINA, very useful as a winter-flowering plant for Drawing-room Bouquets.
PETUNIA BRITISH LION, fine habit, rich crimson.
CAMELLIA ETOILE POLAIRE, carmine, scarlet-striped.
COLEUS VERSCHAFFELTI, bright bronze crimson leaves.
LAPAGERIA ROSEA, newly gathered Seeds. Trade supplied.
CLOTH OF GOLD GERANIUM, 1*s.* 6*d.* and 2*s.* 6*d.*
GOLDEN FLEECE GERANIUM, 1*s.* 6*d.* and 2*s.* 6*d.*
GYNERIUM ARGENTEUM (PAMPAS GRASS), 3*s.* and 3*s.* 6*d.* per dozen. Strong at 1*s.* and 1*s.* 6*d.*
Wellington Road, St. John's Wood, London, N.W.

To the Trade—Continental Seeds.

GEO. MACINTOSH, Agent for Mr. F. W. Wendel, begs to announce that CATALOGUES of the above are now ready, and will be forwarded free on application. Early orders solicited.
All Communications to be addressed, Nursery, High Road, Hammersmith, W.

COX'S ORANGE PIPPIN. — This magnificent variety obtained all the Prizes for Dessert Apples of "the best flavour" at the Great Fruit Exhibition at Kensington Gore, on the 6th inst. See report in *Gardeners' Chronicle* of Saturday last, *passim.*
Very fine strong Trees having well-ripened wood are supplied at the following prices:—Dwarf Bush, 2*s.*; Dwarf-trained, 3*s.* 6*d.*; Pyramids, 2*s.* 6*d.*; Standards, 2*s.* 6*d.*
CHARLES TURNER, The Royal Nurseries, Slough.

Large Yellow Dutch Crocus.

TIMOTHY BRIGDEN begs to offer Fine Roots of the above in splendid condition at 10*s.* per 1000; also Single DUC VAN THOL TULIPS, 3*s.* per 100, Imported Bulbs.
Address, Railway Arcade, London Bridge, E.C., or 52, King William Street, City, E.C.
Post Office Orders payable at the Borough Branch.

Wholesale Catalogue.

GEORGE JACKMAN AND SON'S PRICED and DESCRIPTIVE CATALOGUE for 1861 and SPRING 1862, comprising Fruit Trees of all the leading kinds, new and selected Roses, fine varieties of American Plants, Choice and Rare Conifers, Evergreen and Deciduous Trees and Shrubs, and a fine Stock of Transplanted Forest Trees, &c., can be had free on application.
Woking Nursery, Surrey.

New Azalea indica.

J. IVERY AND SON feel much pleasure in offering their two beautiful Seedlings, CARNATION and TRICOLOR, small plants at 10*s.* 6*d.*, and larger at 21*s.* each.
They are fully described in our CATALOGUE, with all other Novelties of the Season, which will be forwarded post free upon application.
A fine lot of half Specimens and Standards for Sale.
Dorking Nursery.—Nov. 16.

Hollyhocks.

W. BRAGG has now ready for sending out the following NEW HOLLYHOCKS:—Hon. Mrs. Gerald Wellesley, Mrs. Hull Tyrrell, Mr. Braardwater, and Royal Standard; also a large stock of the best named varieties in cultivation. The Trade can be supplied.

Yellow Picotees.

W. BRAGG is now sending out his NEW YELLOW PICOTEES, which are very superior both in form and colour to any ever offered before: Admirable, Favourite, Garibaldi, Mrs. Hull Tyrrell, Prince Consort, Queen of England.
W. B. begs to intimate he has now ready a large and healthy Stock of older varieties. The Trade supplied liberally.

Pinks.

W. BRAGG begs to offer the following new varieties:—RIFLEMAN, ROYAL PURPLE, MISS LOUISA GUEST, and JESSIE. A large stock of older varieties.
Price on application.

Pansies, Pansies, Pansies.

W. BRAGG having a large Stock of healthy Plants of all the best named varieties in cultivation, begs to offer them by the 100 or 1000.

PANSIES, PANSIES, PANSIES, Bedding varieties—Clevedon Blue, Clevedon Yellow, and Clevedon Purple, so much admired at Clevedon. For the winter garden. In large quantities. Likewise the new White bedder, King of Whites.
PRICES and CATALOGUES on application to
WM. BRAGG, Star Nursery, Slough.

Hardy Scarlet Rhododendrons and other American Plants.

JOHN WATERER has the pleasure to announce that his ANNUAL CATALOGUE of the above popular plants, as exhibited in the Royal Botanic Gardens, Regent's Park, London, is now published, and will be forwarded on application. Intending planters and amateurs desirous of blending colours are invited to possess a copy, as faithful descriptions of all the RHODODENDRONS are given.
The Catalogue contains a selection of the best and really Hardy CONIFERS, with heights and prices, the whole of which having been removed the past spring are in a capital state for transplanting. Also EVERGREENS and ORNAMENTAL SHRUBS and TREES of the leading kinds.
The American Nursery, Bagshot, Surrey, near the Sunningdale Station, South Western Railway; also to be had of Mr. JOHN KERNAN, Seedsman, 4, Great Russell Street, Covent Garden.

Chrysanthemums, Chrysanthemums.

J. H. BIRD, F.R.H.S., NURSERYMAN, Stoke Newington, N., begs to inform his friends and the public that his beautiful collection of the above flower is NOW IN BLOOM, and also some very beautiful New Seedlings.

N.B. This collection of Chrysanthemums cannot be equalled at any nursery in England.

To be seen gratis every day between 10 and 4. Sunday excepted.

Exhibition of Chrysanthemums.

JOHN SALTER, F.R.H.S., invites the PUBLIC to VISIT his unrivalled Collection of these beautiful flowers, which are now in FULL BLOOM. His WINTER GARDEN alone contains several thousands of plants, and presents a *coup d'œil* unique in this or any other country. Free admission every day except Sunday.

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Apply GEORGE MACE, Calcot Gardens, near Reading.

New Plants of 1861.

HENRY WALTON has now ready for Orders, at greatly reduced prices, nice plants of FUCHSIAS, PETUNIAS, VERBENAS, &c., of this season.

LIST of VARIETIES and Prices on application.

Edge End, Marsden, near Burnley, Lancashire.

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WOOD AND INGRAM'S PRICED and DESCRIPTIVE CATALOGUE is now ready, including Seedling and Transplanted Forest Trees, Ornamental Trees and Shrubs, Evergreens, Roses, Hardy Climbers and Fruit Trees, and will be sent free on application.

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RHODODENDRONS.—An immense Stock of Hybrid and Common RHODODENDRONS, 9 inches to 3 feet, is offered at a low price, by W. H. ROGERS, Red Lodge Nursery, Southampton; also a fine collection of SCARLET and other beautiful varieties, under name.

A CATALOGUE of General NURSERY STOCK, extending over 60 acres, may be had on application.

Can be Seen at Sunningdale Nursery, Sunningdale Station, South-Western Railway.

CHARLES NOBLE invites inspection, and would remind all interested, that his RHODODENDRONS have taken First Prizes at the opening Show of the Royal Horticultural Society, and every other show at which they have been exhibited during the last two years.

RHODODENDRONS for forcing; KALMIAS for forcing; and a magnificent stock of all the finest kinds of Rhododendrons in the world. CONIFERS and Hardy EVERGREENS by the 100 or 1000. ROSES and a General Nursery Stock well worthy the inspection of intending Planters or Nurserymen.

The Gardeners' Chronicle.

SATURDAY, NOVEMBER 16, 1861.

THE various articles lately published in the *Gardeners' Chronicle* have served to express the views of Englishmen upon PARISIAN GARDENING and tree management. Our readers will now be glad to know what Parisians think of us and our Horticultural doings. This is very completely shown in a report upon the Spring Exhibition of the Royal Horticultural Society published in the last number of the Journal of the *Société impériale et centrale d'Horticulture*, of Paris. The writer, Mons. MOREL, is a distinguished member of that Society, and perfectly conversant with the Gardening of his own country.

He commences by stating that until his visit on this occasion he had not the least idea what our Exhibitions are like, especially as no French journal has ever, so far as he knew, given any report of them. He then notices the various classes in words to the following effect:—

Large Collections of Stove and Greenhouse Plants.—He found most of the plants in these classes more than a yard (*mètre*) in diameter, and high in proportion. The effect was grand and charming.

Collections of Variegated Stove and Greenhouse Plants. "This class was magnificently represented by beautiful strong specimens, every one of which should in justice be mentioned." He however only noted down the names of some of them, and left them with regret, such was their beauty, vigour, and really luxuriant vegetation.

Orchids.—"This brilliant exhibition was above all praise." M. MOREL was particularly struck with admiration of the specimens of Lælia purpurata, Phalænopsis grandiflora, Vanda suavis, and Cypripedium barbatum, the first of which had more than 40 flowers on 11 stems.

Chinese Azaleas.—It was impossible to weary in examining these beautiful plants. Extremely strong specimens were covered with the most beauteous blossoms. They were all brought to a pyramidal form above a yard through at the base and nearly 2 yards high. "I did not notice any one in particular, and should have found it very difficult to place one above another in point of merit."

Rhododendrons.—Nothing particular.

Roses in Pots.—"I thought," says M. MOREL, "that France was the land of Roses, and I little expected to find in London Rose trees whose cultivation and exquisite forms surpassed all that I had ever imagined. Nevertheless what I saw there, exhibited in pots about 18 inches in diameter, were at least a yard through at the base, and were from a yard and half to 2 yards high. These plants were clothed with flowers evenly distributed all over. In this class I could not but admire the skill of English gardeners; their productions were beyond all praise."

Cactuses in Flower.—This class consisted of very strong plants of extraordinary size and covered with very effective flowers.

Cape Heaths.—Plants of very large size, and pretty well flowered. "The form of several specimens was unsatisfactory."

Pelargoniums.—There was a great number of exhibitors, and the class was splendidly represented. (Among others 9 plants filled 4 yards square.) They formed one mass (*bouquet*) of flowers, among which leaves could scarcely be perceived. M. MOREL was quite dazzled by the spectacle.

Begonias.—Impossible to see finer and stronger specimens; but there was little novelty among them.

Tree Ferns.—Fine specimens, well grown and very strong.

Other Ferns.—These were in no way inferior to other classes, either in the number of exhibitors or the strength and beauty of the plants, some of which were of extraordinary size.

Anæctochils, or Variegated Orchids.—Nothing to be seen through the dew formed inside the bell-glasses.

New or extremely rare Plants.—A great many novelties, but generally poor specimens.

Ward's Cases.—M. MOREL could not see what they contained because of the crowd.

Of *Cut Roses*, he remarks that they were badly shown, Moss not suiting them.

Fruit was very brilliant in many respects. *Peaches* he thought most of, some being equal to those of Montreuil in the autumn, especially some Grosse Mignonnes. *Nectarines* were equally fine. *Strawberries* were really splendid; especially the British Queen; the whole class was beyond praise. *White Grapes* were remarkable for the size of the bunches and berries; Muscats were, however, too green. *Black Grapes* were admirable, especially the Black Hamburghs possessed the greatest beauty. *Pot Vines* also arrested M. MOREL's attention. *Figs and Cherries* were not remarkable. *Pine Apples* were very well shown. "Upon the whole the Fruit show proved beyond question the superiority of English forcing gardeners, who have no such assistance as our climate gives us."

In conclusion, M. MOREL expresses his opinion that those who get up these floral meetings in England in so brilliant and truly superior a manner perfectly understand what to do. The Royal Horticultural Society, he says, "considers the quality of plants more than their quantity, and reserves encouragement and reward for those to whom belongs the merit of bringing plants to the highest possible state of cultivation. That being so, it is no wonder that so many amateurs take part in the exhibitions, for the English know that fine plants produce amateurs, and that on amateurs are founded the prosperity and fortune of gardeners."

We cannot but be flattered at so highly complimentary a report as that of M. MOREL, which we trust will have the effect of securing the presence of many of his countrymen at the Grand Meetings in 1862.

IN an exceptional season like the present it is not surprising that even the best GRAPE GROWERS should occasionally be disappointed. We have seen in excellent condition this year houses in which the produce is almost uniformly bad, while on the contrary others do not exhibit that show of perfectly coloured or sound Grapes by which they are usually characterised. Excessive wet till the middle or end of July, and almost continued drought for 10 weeks afterwards, are quite sufficient to account for agreeable surprises or mortifying disappointments. The intelligent gardener will note the peculiar appearances presented by his crop, and the causes to which they can fairly be attributed, and will obtain some instructive hints as regards future treatment.

Amongst other matters which have come under our notice, are the sudden decay of Muscats and West's St. Peter's, the appearances presented by the two, though in the same house, being totally different. In the latter the Grapes cracked, and the common white Penicillium was developed very suddenly both on the bunches in the house, and on others during the course of their transmission to London, though perfectly free from mould when gathered. We have little doubt that an accurate search at an earlier period of growth would have shown traces of the Grape Mildew, though the sudden accession of mould was probably due to some change of temperature or moisture, which it is useless to conjecture in the absence of exact information.

As regards the Muscats, the formation of brown specks ending sooner or later in decay is far from uncommon, though seldom in such a virulent degree as in the case before us. We have ourselves witnessed a similar affection a few days since. According to the report before us the bunches were perfectly healthy one day, the next morning minute brown specks appeared, and in two days more the berries were rapidly decaying.

Such a condition might take place in a season like the present without a fault on the part of the cultivator, but it is more likely to happen where the roots are badly situated, and the border composed as reported of at least a third of rich dung, a circumstance very likely some day to impair the healthiness of the plants, and there is evidently something to mend in our Correspondent's case, as he complains much of want of colour and shanking in other years, circumstances which depend principally on the condition of the roots. Manure is scarcely ever used in the best French Vineyards, except where brandy is distilled from the Grapes, as it increases the quantity at the expense of the quality of the produce, though in Germany a contrary practice is adopted.

We have one more remark to make respecting the present season, viz., that in those cases where we have had an opportunity of ocular inspection, there has been generally very heavy cropping where there has been a bad condition of the fruit. There was so little prospect of other fruit, when the Grapes were setting, that a more abundant crop than usual has been allowed to remain on the Vines, a practice which is almost sure to lead to mischief in some direction. A most intelligent and scientific cultivator has pointed this out to us especially, at the same time feeling rather conscious himself of having encouraged as heavy a crop as he safely could, and we do not doubt that some cases of unexpected mischief have arisen from this cause as well as from anomalous weather. *M. J. B.*

WHEN should the NATIONAL ROSE SHOW take place? The question has been opened by our contemporary, the *Florist*, and is well worth discussing if the Exhibition is to be, as it is hoped, a permanent as well as a national institution. It is plain, argues Mr. RADCLYFFE, in the publication just referred to, that if the Rose Show is to be really National, as it professes to be, the nation of Rosarians must give expression to its views respecting the period at which the annual gathering should be held. The details of the exhibition itself have, by consent, been committed to the care of the Royal Horticultural Society, and under its auspices any expression of opinion on the question of date, by experienced growers residing in different parts of the country and knowing the capabilities of their several districts, would be certain to lead to a wise and unbiassed decision on that point. The weight of evidence might show that it would be found possible to fix on a day which would suit all parts of the country equally, or sufficiently so for all practical purposes. If so, the day thus indicated would undoubtedly be the best. On the other hand, it might be found that any one day must necessarily give an undue advantage either to the earlier or later districts of the country, and if so the justice of the case would be met by adopting an earlier or later day in alternate years, so that in the one the growers in the northern and eastern districts, and in the other those in the south and west, might be suited.

It has been suggested that, in order to infuse a truly national spirit into this annual levee of the queen of flowers, there should be selected each year from the northern, eastern, southern, western, and midland counties certain masters of the ceremonies, in the shape of five nurserymen and five amateurs (to be annually changed), who should meet not later than January to settle the time for the gathering in the ensuing summer; or else that the levee day should be permanently fixed so as to suit the north and east one year, and the south and west the next. We shall be glad to afford opportunity for the expression of the views of Rose-growers generally on the points herein involved. Our own opinion is that the latter suggestion of fixing permanently, in general terms of course, a certain period in alternate years to suit the earlier and later districts of the country is the most satisfactory that can be adopted; and

we conceive the constituency which has most claim to speak on this point is the body of exhibitors on the last occasion, conjointly with the officials. There can be no doubt that any positive declaration of opinion by such a constituency would have its full weight.

In the remarks to which we have referred, Mr. Radclyffe intimates that, taking an average of seven years, the 30th of June would be found to suit the northern and eastern districts, and the 20th of June the southern and western. This year the show was held too late, but a few days indeed before the second bloom in his district, and in consequence there was an absence of choice summer Roses. If the day were to be permanently fixed for all parties, the 25th of June is suggested as about the time. "All persons worthy the name of Rosarians could manage to get their Roses ready by that time; or if they cannot be got ready to show in June, let us no longer talk (poetical absurdity!) of the rosy month of June. If the Roses of England (H.P.'s and autumnals) cannot be produced either by the 20th, 25th, or 30th of June, then I naturally ask when are they going to give us two other series, which as perpetuals they ought to give." Mr. Radclyffe goes on to say it would be as easy to provide for a Rose show in July, August, or September, as in June, if the day was permanently fixed, so that the trees might be transplanted or pruned as might be advisable in accordance therewith, but this could not be done if the time was not fixed till late. Only fix the day at the fall, say in November, and double the number of Roses ever yet produced may be obtained. When the day named is too early for the north, the sun must be let in by means of Parkes's forks, and when too late for the south the trees must be moved and cut back later. It would be difficult to fix any day to suit small Roseries, but it is held to be ridiculous to say that large Roseries could not find Roses either on the 20th of June, the 25th, or the 30th. Such is the substance of what our reverend Correspondent urges on this question, and to us there seems to be much truth and force in his observations. That he is one of the trusty knights of Flora's Queen is evident, for he heralds his discourse with this proclamation:—"When a periodical comes out without a word about Roses, how quickly does the disappointed reader put it down again." We shall be glad to hear what other of her champions have to say on this exhibition question.

—— There is a little group of greenhouse bulbous plants, which is worthy of far more extended cultivation than it receives, we mean that of the Lachenalias—plants which one now very seldom meets with in ordinary collections, though they are amongst the most pleasing of spring flowers and of very easy management.

In general terms they consist of two or three lance-shaped leaves of greater or lesser breadth, either green, or spotted like those of some of our common Orchids, to which in foliage they bear a considerable resemblance. From the centre of these leaves grows a simple upright scape or flower stem, reaching in the more ornamental species from 6 or 8 inches to a foot or rather more in height, and decorated in its upper part by the numerous dependent cylindrical tube-like flowers forming a narrow pyramidal inflorescence. One of the commonest, and certainly a very lively-looking little plant of small stature is the species called L. luteola, in which the leaves are spotted, and the flowers, which are yellow slightly tipped with green, are abundant on the scape. A 5-inch pot planted with five or six of its bulbs, each of which yields a flower-spike, has a very pretty effect. Not very dissimilar to this is the species called L. tricolor, but it differs in having a narrow ring of deep red around the edge of the cylindrical flowers. L. aurea is another beautiful kind, with the flowers of a rich orange colour. Of rather more vigorous growth is L. pendula, in which the flowers are of a deepish red, and tipped with dark green. There are many other kinds found at the Cape of Good Hope, which is the home of the genus, and a goodly number have been introduced to our gardens, but for the most part they have been suffered to pass away to make room for novelties of less merit. No doubt they are, many of them, procurable without much difficulty, and the collection of the Royal Horticultural Society may perhaps do something towards reintroducing them. Those we have named may be met with here and there in cultivation now, and might readily be increased if they came into favour.

The ordinary treatment of hardy greenhouse bulbs is all that these pretty little plants require. They bloom in spring, after which they should be suffered to mature and ripen their leaves, and should then be allowed a dry rest. About August they should be repotted, in light well-drained earth, planting about three of the stronger bulbs of the larger growing sorts, or half a dozen of those of the smaller sorts, in a 5-inch pot; or a single bulb of the larger ones, and about three of the smaller ones, in a 3-inch pot, which size is sometimes more convenient for arranging in *jardinières* and in-door flower stands. We have advantageously used sandy and not very fibrous peat soil. They may be placed in a cool frame after potting, and treated as newly potted bulbs usually are, moderate supplies only of water being given until they begin to grow up. In autumn they can be removed to a greenhouse shelf, where they are best placed near the glass. Here they continue to grow through the winter months, and come into bloom during those of early spring, the spikes of brightly-coloured pendent tube-like perianths imparting a pleasing variety to the decorative materials obtainable at that season of the year. Along with the gay many-coloured Hyacinth, the Narcissus, the Tulip, the Crocus, and the little azurean Scillas, the species of Lachenalia are quite worthy to hold a place. We hope to see them yet become as fashionable as they are interesting and beautiful.

HORTICULTURE IN AUSTRALIA.

One of the incidental benefits resulting from the International Exhibition of 1862 is the stimulus that has been given in the colonies to horticultural progress and various other matters which can scarcely be brought forward in the Exhibition building, especially floricultural and horticultural specimens. Societies exist in most of the principal colonies, but their progress and results have not been always apparent. Now, in connection with the several local Exhibitions of products intended for transmission to London, they have risen into new life and vigorous exertion, and valuable future results may be fairly expected therefrom. We have received the reports of the Industrial Shows held in Adelaide, Perth, Sydney, Melbourne, Hobart Town, Natal, New Brunswick, Prince Edward's Island, British Guiana, and other colonies, and these are most interesting in their details, both for the progress they indicate and the large attendance they have attracted.

Our principal colonies have each their botanic garden, and the Government botanists in Jamaica, Trinidad, Ceylon, Mauritius, the Cape Colony, Natal, Melbourne, Hobart Town, Sydney, Brisbane, and other places, have entered warmly into the subject of promoting the interests of the International Exhibition, by sending forward whatever in the shape of economic plants and products may be novel and useful. We shall thus have the indigenous vegetable wealth of the British colonies well represented — the woods and fibrous Grasses and perfume plants correctly named. A representation of the indigenous fruits of the colonies will be novel if carried out on a comprehensive scale; and many of the commissions appointed, where they cannot send the fruit in its natural state, dried, preserved, or in spirits, intend illustrating them by coloured photographs, or wax, or plaster models. There are many tropical and other fruits which have either never been seen, or are but little known, in this country. These will be looked upon with some interest by many; such for instance as the Kei Apple and Amatangalo Plum of Natal, the Durian, the Jack fruit, Neesberry, and Custard Apples of the West Indies.

A few notes on the horticultural resources of Australia may not be out of place, as indicative of the present condition and future prospects of those rapidly increasing colonies.

It had been a source of complaint that although there was a nominally existent horticultural society in Sydney, it had not for many months promoted horticulture, either by instruction, by invitation to competition in the offer of prizes to superior merit, or by popular exhibitions. Despite the want of opportunity of display, the nurserymen and more artistic gardeners have by no means relaxed in their efforts, but have endeavoured to make the horticulture of the colony more important and interesting than it was. Garden and orchard production was never excelled, if ever equalled in New South Wales. For orchard growth the colony is much indebted to late visitors to England for select contributions. Mr. T. S. Mort, so well known in New South Wales floricultural annals, has embellished his beautiful grounds, parterres, and greenhouses with stores of the richest beauties of Europe. Mr. T. W. Smart has also evinced his love of horticulture, which he so long and liberally patronised in the colony, by introducing many beautiful and new plants and fruit trees, particularly Apple trees, which justify by their produce every anticipation of excellence. Mr. W. C. Wentworth has, too, with his characteristic nationality, been frequently sending out from England valuable contributions to the horticulture of the colony. Of flowers, the displays of Roses, Dahlias, Camellias, the Dianthus tribe, and others, have been numerous and brilliant. The Hunter River Agricultural and Horticultural Association has been holding a show; we perceive that Mr. C. Moore, the Director of the Sydney Botanic Gardens, had been lecturing on the apparent capabilities of Clarence and Richmond for growing plants of economic value, and an association has been formed for developing the economic resources of those districts.

The Olive has been found to flourish in Western Australia more luxuriantly than in any other country, for whereas in Spain, a long celebrated "land of Olives," the planting of the young tree, and the ultimate fruiting, are proverbially the work of three generations; in Western Australia the trees bear fruit plentifully with but little attention after six or seven years' growth. The oil is stated to be of first-rate quality, and equal to the best Italian. The Zante Currant or seedless Grape is another promising article of export, and well adapted to the soil and climate of the colony. Peaches are permitted to rot on the ground, or are given to the pigs; and yet dried Peaches from the Cape or from America always meet a ready market.

Dr. Müller, the Government botanist, tells us that perhaps there is not a more favoured land upon earth than Victoria for producing in abundance and perfection a variety of the finest fruits, whether these are considered as a mere article of luxury or as constituting one of the necessaries of life adapted to the wants of man in that hot climate, or as likely to become one of the staple articles of commercial export at no distant period. But horticulture has to contend here with the long parching drought of the summer months, experienced particularly in low, open districts, and occasionally with fierce burning winds, which in some years have had the effect of destroying the crops of fruit on the trees. The reason why, comparatively speaking, but little land is as yet devoted in Victoria to this lucrative and pleasant branch of industry, may be sought in the slow return for the capital expended, as long as the price of labour and the outlay for garden land continue so unusually high.

None of the small English fruits, such as the Gooseberry, Currant, Raspberry or Strawberry, succeed well in Victoria, except in cool valleys or mountainous elevations. The Loquat, Quince, Peach, Cherry, and Plum grow vigorously and produce heavy crops of beautifully flavoured fruit. The Apple trees succeed well. Six of the "custard" variety grown on the banks of the river Plenty last year weighed 7 lbs. American blight is very destructive in many orchards, chiefly after they have been established eight or ten years. Pears attain to perfection both in point of flavour and amount of produce. Some varieties are not unfrequently found to weigh from 1½ lb. each up to 2½ lbs. Figs succeed remarkably well, some varieties bearing their two crops in the year freely. The leading varieties are green and white Provence, green and brown Ischia, and Smyrna. It may be expected that dried colonial Figs will eventually supersede those imported. Although there are some few Orangeries in favourite spots around the vicinity of Melbourne, the cultivation of Oranges for sale has not hitherto been remunerative in this colony, for they are largely and cheaply imported from New South Wales.

The island of Tasmania has long been famous throughout Australia for the production of magnificent specimens of nearly all the fruits and vegetables of Europe, which have been introduced there. Thus, in one of the latest Hobart Town papers we see mention made of six Pears shown, of the aggregate weight of 15 lbs. 11 oz., of the Uvedale St. Germain sort, grown by John Walker, Esq., Wattle Hill, Pitt Water. The largest Pear weighed 3 lbs. 5 oz., and thus far surpassed the largest Pears grown in France. Apple trees commence bearing at two years old, and there are some fine old trees in the colony which have continued to bear ever since they were planted by Col. Patterson in 1812. This fruit is largely exported to Melbourne, where the price is from 12*s.* to 20*s.* per bushel. Pears, Quinces, Peaches, Cherries, Plums, Apricots, and the smaller fruits bear luxuriantly. Plums and Gooseberries are exported to Victoria while very green, usually from October to Christmas—1000 baskets at a time being often sent by a steamer. The value of green fruit thus shipped averages from 70,000*l.* to 80,000*l.* per annum. Its export constitutes a leading branch of the summer trade. Nor is it likely to decline, in consequence of the extension of orchards in the other colonies, especially in Victoria and South Australia, where large tracts of land are being brought under good culture. The extreme changes of the season and temperature to which the colonies on the main are subject, and the destructive effects of a hot wind on all vegetation, and especially on growing fruit, will always render the prospects of a crop in the highest degree precarious. Besides which, this greater heat forces the fruit, and ripens it at a much earlier date, so that the garden produce of Victoria would be exhausted before Tasmania would be ready to pour its supply into the market. Jam from the smaller fruits is made in large quantities for the Victoria market. It is not unusual to see an advertisement calling for 10 tons of Raspberries for jam. Mulberries are very fine. Almonds, Oranges, Lemons, Pomegranates, and Loquats bear and ripen well on the walls in the open air. At Sandy Bay Pine Apples are grown under glass, which sell from 2*s.* each, while in all parts of the colony Grapes are grown in the open air. There is every reason, therefore, to look forward to fruit and vegetables as constituting one of the chief exports of Tasmania.

The illustrations of the fruit-growing capabilities of the colonies which will be sent to the Exhibition may serve two purposes. In the first place they will show the gardener what a field there is for enterprise. In the second place, they will prove how much of the luxuries of the land the colonies have to offer to the immigrant at a most moderate cost. And lastly, some of these may open up new fields of export enterprise. *P. L. S.*

ROSE INFORMATION.

New Roses for 1862.—No sooner have the new Roses of the season acquitted themselves than Rosarians look with great expectancy for the new ones of the next year. Monsieur Eugène Verdier has honoured me with a list of the stars that are to shine in our country. There are in his list 66 novelties, viz., 2 summer Moss Roses, 3 autumnal Moss Roses, 3 Bourbons, 5 Teas, and 53 Hybrid Perpetuals. Here then is quantity; let us see the description given of

what I think are the best, supposing the descriptions to be faithful. I will attach the names of the raisers, because upon them rests the responsibility. I have received no private recommendation of any of them, and I shall only mention them with a view to call attention to them for further enquiry. I do not propose to speak of any of the medium sized Roses, but of those which are described as large, full, vigorous, of good form, and of decided colours. These are the kinds of Roses that we want for home and exhibition purposes.

1. *Autumnal Moss.*—Hortense Vernet (Robert et Moreau), vigorous, large, full, flat, rosette formed, white, washed with pale rose.

2. *Bourbons.*—Beauté Séduisante (Touvais), very vigorous, large, full, good form, erect habit, poppy red.

3. *Teas.*—All the five seem to be very good. The "tea-tallers" will be delighted. The two issues of Gloire de Dijon are marked with notes of admiration. Belle Chartrounaise (Lartay), very vigorous, very large, full, imbricated, good form, vivid red changing to velvety Poppy crimson, the issue of Gloire de Dijon!! Comtesse Ouvaroff (Margottin), very vigorous, large, full, good form, erect habit, beautiful clear rose, tinted with vivid rose. Gloire de Bordeaux (Lartay), very vigorous, very large, imbricated, good form, silvery white, the reverse of the petals vivid rose, the issue of Gloire de Dijon! Mademoiselle Amanda (Lartay), vigorous, large, full, cherry red, changing to vivid red, perfectly spotted with brown (parfois moucheté de brun). Triomphe de Guillot fils (Guillot fils), very vigorous, very large, very full, opens well, "blanc fortement nuancé de rose chair et ombré de jaune saumoné, très odorante, superbe." Permit me, readers, to observe, that the issues of Gloire de Dijon put me in mind of the following anecdote. A clergyman, formerly in the army, and an undergraduate at Oxford in my time, went to the Visitation in "white ducks" and "black neckcloth." The bishop's eye caught these uncanonical articles, and after the visitation he called the clergyman aside and asked him how he came to the visitation in "white ducks?" "Why, my lord," said he, "they were black, but the washerwoman has washed them white." "Well," said the bishop, "then how do you account for black neckcloth?"—"Why, my lord," said the clergyman, "it was white, but the washerwoman washed it black!" So went the story some years ago. Now, I think Gloire de Dijon must have employed the same washerwoman!

4. *Hybrid Perpetuals.*—Madame Charles Wood (Eugène Verdier fils), very vigorous, very large, very full, with large petals, erect habit, beautiful vivid dazzling red, changing to dark vivid rose, the reverse of the petals whitish, superb; Robert Fortune (Ducher), vigorous, very large, cupped, erect habit, very vivid red, very scented, one of the most beautiful varieties; Gloire de Chatillon (Fontaine), vigorous, large, full, "rouge vif eclairé de violet." This variety resembles Madame Masson!! Notre Dame de Fourvières (Ducher), very vigorous, very large, full, good form, pale satin rose, very scented. This variety is like the H.P. Jeanne d'Arc, but fuller. These four I shall buy, and the issues of Gloire de Dijon, in honour of the white "ducks" and black neckcloth, or rather in honour of Lartay's washerwoman. As regards description, Robert Fortune has the greatest number of good points.

The following Roses seem to be good:—Madame Clemence Joigneaux (Liabaud), very large, very vigorous, full cupped, brilliant vivid red; Alexandre Dumas (Margottin), vigorous, large, full, good form, dark velvety crimson, striped with poppy, very dark; Pourpre d'Orléans (Dauvesse), vigorous, large, full, good form, velvety purple, scented. These appear to be the two best of the dark Roses. There is, however, a fancy medium-sized dark Rose, Bicolor Incomparable (Touvais), which might suit the aforesaid Bishop; Listere, vigorous, medium size, full, good form, erect habit, centre *black*, the extremity of the petals pale rose, colour very deep, and the effect very original!! However, I propose only to speak of vigorous growers, of large size, full, and of good form. The following seem to read well:—Duc de Rohan (Leveque), very vigorous, very large, very full, globulous, vivid red, shaded with vermilion!

Couronne des Parterres (Touvais), very vigorous, very large, full, good form, velvety, vivid scarlet crimson; L'Eblouissante, very vigorous, very large, full, good form, clear dazzling red; Madame Boutin (Jamain), vigorous, very large, full, good form, erect habit, beautiful rose cerise, très belle; Maurice Bernardin (Granger), very vigorous, large, full, blooming in corymbs, clear vermilion red; Souvenir du Comte de Cavour (Margottin), vigorous, large, full, good form, erect habit, velvety vivid red crimson; Souvenir du Comte de Cavour (Robert et Moreau), vigorous, large, full, flat, good form, vivid blood red! According to my judgment the cynosure of next year will come out of these 22 Roses. Let us all buy something; it may enable us next year to sing of fresh victories.

"See what lots of game I have got,
By using this Cisalpine shot!"

There are also some good medium sized Roses, and also some full sized ones; but I have left out the former because medium sized Roses, especially in the line of rose colour, will not obtain here, unless they are very thick in petal, circular, and somewhat distinct; and I have omitted the latter because they are not so decided in colour as the ones I have noticed. "Passant" is not a good word, and "strié," "nuancé," and "ombré de" may not be good. Let me not conclude without saying that our French neighbours deserve great credit and our thanks for some of the Roses of the last two years, and that I hope that in 1863 we shall be able to pay them a further compliment. *W. F. Radclyffe, Rushton Rectory, Oct. 29.*

Home Correspondence.

Cotton Cultivation in India.—I last week directed attention to the general character of Hindoo farming, and by comparing the continued productiveness of Indian soils, after centuries of constant cropping, with the vast tracts of Cotton fields in the Southern American States "worn out" within little more than 50 years, arrived at the conclusion that it is a great mistake to condemn Indian agriculture as being in a "miserably backward state," and showed by the comparison that whatever may be the shortcomings of the Ryot as an agriculturist, that he, rather than the planter, demonstrates the truth of the axiom "that there must be good farming if you are to have a continuance of good crops, Cotton offering no exception to the rule." We have now to consider their implements and mode of using them. Those the planters brought to India as the essentials of their cultivation were a plough, a small harrow for covering the seed, and a hoe. Gins and presses for cleaning and baling have nothing to do with cultivation. The plough was the usual turn-furrow in use in this country, cutting a furrow of from 4 to 5 inches deep; the hoe is also much the same as ours, but larger and heavier, and made of better material, being cast steel in place of iron. The harrow was a small triangular machine, just enough to cover one drill at a time. Whatever we may think of American farming, viewed in the higher sense in which I have throughout used that term, their tillage is unquestionably excellent. With the plough the field is divided off into narrow lands well raised in the centre, and with a deepish water furrow on each side, the object being in their humid climate to keep the roots sufficiently dry. The lands vary from 4 to 6 feet in width, according to probable size of the plant to be grown on them. If they have a slope—the side of a hill or a circular rising ground—to cultivate, the ridges are conducted across the slope or round the rise to prevent the water running off too fast, the plant requiring a rather moist soil. When the ploughing is finished and the field ready for sowing, it certainly has a most finished appearance. In our practice a native plough, drawn by a single bullock, was run along the crown of the ridge to form a drill for the seed, which when sown were covered in the usual way. In due course the seeds germinated and made their appearance in eight or 10 days. When two or three proper leaves were developed, the hoe came into use, and the crop was "set out"—that is, superfluous plants were thinned out and weeds destroyed, just as we do in this country with our root crops. These operations are repeated as required until the desired "stand" or plant has been attained. This done, the plants being now 6 or 8 inches are bedded up, that is, ridges which had been flattened by hoeing and treading down, are renewed by the plough. After this nothing beyond an occasional touch with the hoe to remove weeds is required for that crop. The picking or harvesting the crop is the same in both countries, and is done equally well in both, the Hindoo having nothing to learn from the planter. The Hindoo implement of culture, for they have but one, is the much despised and, I must admit, despicable looking "crooked stick," but which, measured by its efficiency as an agricultural tool, not by its appearance placed side by side with a Ransome or Howard, still less with a Smith's steam cultivator, is by no means the despicable implement it seems. It is made of the hardest wood, usually an Acacia, strengthened and pointed with a bar of iron 18 or 20 inches long and about half an inch thick, let into the sole. The beam is so set, that by shortening or lengthening the point of attachment to the bullocks, they can vary the depth of the furrow from 1 to 8 inches or even more in light land. If we designate our implement a plough, then the native one is more properly a cultivator, for the point enters the soil and, as it were, works from below up, stirring and loosening it to the depth it goes, bringing all weeds and Couch to the surface, and covering none by inverting the soil; in one word, it is simply a one-tined grubber, and as such an instrument of great power. This simplest and most ancient of agricultural implements becomes in the hands of the patient and industrious Ryot, long accustomed to its use, one of marvellous efficacy in loosening and pulverising the soil and destroying weeds by leaving all that it displaces to wither on the surface, burying none. In his skilful hands it performs the functions of a plough, a grubber, and even a harrow for covering his seed. The Hindoo practice is, as much as possible, to fallow his lands after every crop. This he accomplishes by ploughing after every considerable fall of rain. His crops are usually harvested during the dry season, when the land is baked as hard as a brickbat. To plough then is impossible, but should a thunderstorm or chance fall of rain happen, so as to soften the soil but a couple of inches deep, it is immediately stirred to that depth, and these stirrings are repeated as often as opportunities offer until the proper sowing season. In this way it is often well pulverized to the depth of 6 or 8 inches long before the time for sowing arrives. Should he be prevented by the want of rain or other cause thoroughly fallowing in that way, a less perfect one becomes almost indispensable, which he calls "cooling" the land, that is, after ploughing as well as he can he lets it remain in its loosened state exposed to the free action of the sun and atmospheric influences for a month or longer. The fertilising effect of this "cooling" is so well understood by the Ryot that he never willingly sows his field without that preparation. Thus prepared and the proper sowing season having arrived, he takes advantage of the first showers to give his land a final turn and sows his seed. When small he covers it by dragging a bush over it, but larger ones like Cotton are more frequently covered by running the plough very lightly through the ground. In due time the plants make their appearance, and when three or four inches high the field gets its last ploughing to thin out superfluities, and break any caking or hardening of the surface which exposure to alternate rain and hot sun may have caused since sowing, thereby giving the air and dew free access to the roots of the growing plants. This ploughing completes the agricultural operations, with the exception of some partial hoeings. In about 6 or 7 months the harvest begins, and as well as I can recollect, in the case of the native plant, is finished in about three weeks. The American one continues much longer. That done, flocks of sheep are usually turned into the field, to eat the leaves and green tops, and manure it for the next crop. If the crop has been badly grown and the plants small, they are left on the ground when ploughed; but if large they are gathered and stacked for fuel in place of, as they ought, being burned on the ground. The fallowing begins with the first rains. *Robert Wight, Grazeley Lodge, Nov. 9.*

Chesnut or Chestnut.—One of your Correspondents inquires whether we should write Chesnut or Chestnut. In reply you suggest that the word may be derived from Chesne nut, and that it therefore should be written without the t. This I think very improbable. Our names of trees are mostly derived from the Saxon and not from the Norman, and never have, I believe, any of our long-established words been formed by the combination of a Norman and a Saxon syllable, as would be that of chesne and nut. Besides that, the Oak and the Chestnut were never confounded in popular language either as trees or in their fruit, whatever may have been the case with their timber. The more probable derivation is a corruption of the German Kastanie and Nuss, for we find in old German dictionaries (*e.g.*, Adelung's) that Kästea is an obsolete form of Kastanie. And from Kästen (pronounced Kesten) and Nuss, with the very usual substitution in the north of Ch for K, we have Chesten-nut or Chestnut. All these, like the French Châtaigne, have of course come from the Latin Castanea, and before that from the Greek *κασταvα*, but they have reached us through the Saxons and not through the Normans. *B.* —— May not Chestnut be from the French Châtaigne, rather than from Chêne? Old French, Chastaigne; Italian, Castagna; Latin, Castanea. In this case Chestnut, the ordinary spelling, is the more correct of the two. *W.* —— In Richardson's Dictionary we find "Chestnut, *n.* } Fr., Chastaigne; It., Castagna; Sp.,
Chestnut, *adj.* } Castana; Lat., Castanea. 'It is,' says Vossius, 'from Castana, or Castanea, a city of Thessaly, where there is great abundance of them:' but Pliny says, 'the first Chestnuts were known to grow about Sardis, and from thence were brought, and therefore the Greeks call them Sardinian Nuts,' (l. xv., c. 23.) It is frequently, but not so properly, written Chesnut: in 'Golden Boke' the tree is called Chestain." I beg to send the above quotation on the word "Chestnut"—and to add that one of our most profound philologists, the present Dean Trench, in his lecture "On the Study of Words," speaks thus of the work from which it is extracted:—In most cases Richardson's Dictionary, the only one from which I can promise you effectual help, for it is the only English one in which etymology assumes the dignity of a science, will put you in the right position for judging why the word has been suggested to you. *H. W. C.*

Camp Gardens.—I read with great interest the article you recently published on the employment of soldiers at the camp of Châlons, and I do not wonder to find that the systematic instruction of soldiers while in camp in the useful art of cultivating the land, is encouraged by the wise ruler of France. It is, or rather has been rare, but by no means a new thing in history, to see the typical implements of peace and war handled with alternate dexterity by men at once warriors and husbandmen, but whether we regard the system of training soldiers to habits of profitable industry, or look upon it in an economic, or moral, or rational point of view, we shall find the scheme equally deserving consideration and encouragement. In camp, although doubtless military duties are sufficiently engrossing, still a soldier's time is not exclusively taken up, and to the idle hours which fall to his share may be traced many of his follies and his crimes. If only as a resource for leisure hours the establishment of garden ground would be a great boon, but I would go beyond, and advocate an allotment to each regiment adequate to produce vegetables sufficient for the requirements of the men while in camp; and I would provide opportunities for the development of any special qualifications which the men might exhibit, and let individual skill have a chance of displaying itself. With great physical vigour comes often the desire for action, and inactivity is abhorrent to the powerful but often unreflecting men who seek their home in a camp. To such men there is no greater satisfaction than to be placed to oppose and overcome obstacles which physical strength can move. Trenching, felling timber, draining, digging, are suitable occupations where physical vigour wants exercise, and aptitude in these works ensures a man work wherever he may be. If the dignity which useful labour gives to a man were explained, and its practice encouraged, many a man otherwise a scapegrace whose super-abundant energy would lead to overstep the limit prescribed by discipline, would be saved from mischief and disgrace. Regarding soldiers as men who have undertaken the duties of military life for a limited period, and who on the expiration of their term of service will return to civil life, how important it is that such men should carry back into the social community that skill and knowledge which would enable them to apply themselves at once to labour in which they had acquired a proficiency. Such men would be valuable in our farms and gardens; trained to habits of order, discipline, and obedience, and with the skill of garden practice superadded, there would be no lack of applicants for their services. At present what can a discharged soldier do—mind a gate! or carry a hod! But the other day I heard of one of the heroes of the Balaclava charge, applying for a footman's place! I venture to advocate the establishment of camp Gardens at Aldershot. What a grand opportunity for a campaign against the true enemy, unfertile earth, that exists in the neighbourhood of that camp—miles upon miles of land covered with the profitless growth of Heath and Fern, which labour would convert into food-producing farms. *W. Ingram, Belvoir.*

The Tumboa of West Africa.—In your volume of this year, p. 74, extracts are given from a letter addressed by Dr. Welwitsch, then travelling in West Tropical Africa, to Sir W. Hooker, containing an

account of a most wonderful plant, of unknown affinities, which Dr. W. had discovered, and proposed to call Tumboa. Of this, or a very closely allied species, Sir W. Hooker has lately received a drawing, and specimens in a very decayed state, from Mr. Baines, an accomplished artist now travelling in the Dammara country. The specimens contain ripe seeds, which have been analysed by Dr. Hooker, who unhesitatingly pronounces Tumboa to be a new genus of Gnetaceæ, and proposes to call this species, if new, T. Bainesii. According to the drawing, T. Bainesii differs from Dr. Welwitsch's plant in having a shorter stem, hardly rising above the ground, and four enormous leaves spreading for 5 or 8 feet along the surface of the earth. The cones, whose scales are quadrifarious, are arranged in trichotomous panicles, and each is as large as a small Spruce cone. An account of this singular plant, together with the drawings of Mr. Baines, and dissections by Dr. Hooker, will be laid before the Linnean Society very shortly. *J. D. H.*

Double Glazing.—I have had a small hothouse, double-glazed, for some years, and at this time I possess a small propagating house about nine feet square, which is covered with double glass, at least it was last winter, and will be again shortly. The mode of fixing the glass is just as your Correspondent speaks of. However, he is mistaken about the drip; I find this in my house is increased. On the whole I approve of the plan. There are some drawbacks which I did not foresee, but which a little mechanical contrivance might greatly ameliorate. One was, I found that the dust collected between the glasses; another, more serious, I remember one year, was the weight of snow that collected, and lay unmelted on the double glass, threatening to break it in, and obscuring the light. My house was at that period very low and flat; the part double-glazed was a small hothouse and continuous with a greenhouse single glazed; and the melting of the snow from the single glass as fast as it fell, and its accumulation on the double glass, proved that the heat was well retained by the double glass, while it was escaping fast at the single glass. I feel assured that the subject is well worthy of more attention, especially for that part of glazed surfaces having a northern aspect; for it must be remembered that in this climate, especially during winter, when the double glazing would be the most applicable, we cannot afford to lose light, and the double glass, especially with a little dust between them, is some obstruction to light. *W. H. O.*

Rose Mildew.—I trust that you will caution your readers against the cure for mildew proposed by your Correspondent in p. 967, November 2. Blue vitriol or sulphate of copper is one of the most deadly foes to vegetable growth. Applied to dead wood to kill dry rot it may be very useful, but I should be sorry to let it find its way to the roots of my Roses. *S. B.*

Potash from a Sedum.—Can you give me any information as to the "potash plant"—a native of the Punjaub, and said to be a kind of Sedum or Mesembryanthemum? 2. And where I could find a good description of the process of manufacturing Potash from this? 3. What salts are obtained from it? *W. F. P.* [We can find no statement confirming the assertion that potash is thus obtained in the Punjaub. Dr. T. Thomson, in the valuable work he published in 1852, on the Western Himalaya, says nothing about it; or if he does we cannot find the place. Royle however mentions that *soda* is yielded by species of Mesembryanthemum; but that it is not known what plants are burnt for the purpose of obtaining the soda called *Sujjee Muttee*, exported from the shores of the lakes of Western India.]

Monsters.—I venture to call the attention of such of your readers as may be curious in such matters to the desirability of paying more attention than is done at present to the cultivation of monstrosities of different kinds. I am of course aware that a large proportion of cultivated plants are in so far monstrous that they differ from the ordinary wild condition of the species, and often to a very considerable extent; but these are to be considered as varieties rather than malformations. In truth these conditions merge so gradually one into the other that it is impossible to draw any line of demarcation between them, and they are no more anomalous or monstrous than the forms which according to our present knowledge we consider to be regular and obedient to law and order. Hence it would be an unnecessary refinement if I attempted in this place to define accurately what is meant by a monstrosity, and I hope to be able to make myself intelligible without encamping on such very debatable ground. If variations in size, colour, and minor differences in form be excluded, and also such cases as those afforded by variegation in leaves and the various instances of so-called double flowers, there will remain but few instances of acknowledged malformations that are in general cultivation. I will mention a few of those more commonly met with, and which will also serve to illustrate more clearly than any clumsily framed explanation would do the sense in which the terms monstrosity, variety, &c. are used. Of malformations of the stem there is the Cockscomb, Celosia cristata, the Sedum cristatum, both exemplifying the condition called fasciation; the spirally twisted Rush, &c. The inflorescence is materially changed, so far as its appearance is concerned, in the old fashioned Hen-and-chicken Daisy, yet more so in the Rose Plantain, where the flowers are actually absent, and in their place a tuft of enlarged and closely packed bracteal leaves. The white Lily is now and then to be met with, with its floral leaves much increased in number, widely separated from each other, thus simulating a branch with a number of white leaves attached to it. These changes are accompanied by the total absence of the stamens and pistil. Not to speak of double flowers we have Wheat-ear Carnations, green Roses, funnel-like Poppies, erect Gloxinias, five spurred Linarias, but even if the list were rendered complete it would be but a scanty one in comparison with what it might be. I might almost say with what it has been, for one treatise at least exists on the culture of proliferous flowers, that of Dr. Hill, published in 1759. That such developments were the subject of cultivation in Dutch gardens is shown by the fact that representations of them may be seen in old stained glass windows, the work of Dutch artists. One such instance may be found in one of the oriel windows of the Bodleian Picture Gallery at Oxford. The fact of more attention having at one time been paid by cultivators to these developments may perhaps be cited as an argument that they have been tried and found wanting, an argument which derives some support from the rather inconspicuous nature of the few that still remain in old-fashioned gardens. On the other hand I shall endeavour to show that the interests of the cultivator, the botanist, and the public in general may be served by a more extended culture of some of these unusual forms. At present much of the interest and variety of a garden is sacrificed to produce striking effects of colour and form; and these effects are produced, but it is a case of *toujours perdrix*. Why not a little change to break the endless monotony of Verbenas, Geraniums, and the like? The materials for such changes are not far off; I will cite a few instances that occur to me when writing. Peloria—we are familiar with this as occurring in the common Linaria, another instance of it is afforded by the erect Gloxinias, and similar changes occur in other plants year after year, that might surely be turned to account with advantage. Calceolarias affected with this singular deviation from their usual form have been figured in your pages, and if I may judge from the number of specimens that have come under my own observation have been more than usually abundant this year; many of these have been of great beauty. Even more singular and not less taking in appearance have been some specimens, wherein two or three conical spurs have projected from the lower lip of the flower in a very symmetrical manner. Such spurs are not uncommon in the flowers of the Foxglove. The Rose Plantain to which I have alluded is by no means the most striking looking condition that the plant assumes; varieties with much branched and leafy inflorescence are not uncommon, but we never see them in gardens; so too some of our common Grasses when affected with an increased degree of branching of the inflorescence form really handsome plants quite worthy a place in the border. Some weeks ago, in allusion to the Dragon Chrysanthemum figured in your pages, I drew attention to the frequency with which the germs of such developments might be met with in semi-double flowers; but it is unnecessary to give further illustration of the æsthetic uses that would be served by a more general culture of these unusual forms. The botanist would be much interested in the results of the cultivation of these aberrant developments; he would be the better able to judge of the value of specific and generic characters; he would be better enabled to ascertain what deviations might be looked on as fleeting, what more permanent; he could form a better estimate of the amount of variation that could be induced in different plants, and whether such modifications could be extended indefinitely or not. I need only refer to the numerous interesting cases that have from time to time been recorded or commented on in your pages, to show the interest that such malformations have for the botanist or amateur; take as one out of many the Begonia frigida, with hermaphrodite flowers, and a detached or inferior perianth. While treating of these matters I may refer to an announcement recently made in your columns that an Italian botanist had remarked the existence of three cotyledons in Pinks, whose flowers were in due time produced double, and this so constantly that whenever he saw a seedling Pink with three cotyledons he was enabled to pick it out for the sake of its flowers. This statement seems to require confirmation, and is certainly opposed to the little experience I have had in such matters. The presence of three cotyledons is not uncommon, especially in the Indian Pink of the gardens, and I can confidently assert that in this plant at least double flowers are not always produced on plants that have originally three seed leaves instead of two. The directly practical value of the culture of monstrosities needs very little comment, as so many of our cultivated fruits and vegetables owe their utility to a strictly "monstrous" condition of some one or more of their organs, combined for the most part with degeneration or suppression of some other part. *Maxwell T. Masters.*

R. Horticultural Society's Show.—At the Fruit exhibition on the 6th inst. the judges must have misunderstood the plain meaning of the words "any variety," as set forth in the Schedule, Class R. Had the wording in Class R. been the same as in Class G., "any OTHER variety," there could not have been any mistake in deciding, as happened, by excluding the Uvedale's St. Germain, of which there were several dishes, and a splendid d[illegible] the famous kitchen Pear, Catillac, on the ground [illegible] there was a special class for these varieties. I maint[ain] that, taken in the common sense meaning of the w[ords] "any variety," the Catillac and St. Germain Pe[ars] ought not to have been excluded from Class R., [and] the 1st prize awarded to a small, hard, gritty, and [illegible] known variety named Warden, the second prize t[o a] first-rate dessert Pear, Beurré Diel, no third [prize] being awarded. There certainly were blunders [com]mitted in the judging of kitchen Pears in Class R. [and] the sooner the question is settled which are the [true] kitchen Pears, the better it will be for the public; [for] according to the decision in Class R. last Wednes[day] week, any variety of dessert Pear will be though[t] equal, if not superior to the well-known Catillac and Uvedale's St. Germain as kitchen Pears. *A Member [of] the Fruit Committee.*

Societies.

Royal Horticultural: *Nov.* 12 (*Floral Committee*).—Though late in the season and an ungenial day, there was a good display of interesting subjects, amongst which the Chrysanthemum was of course conspicuous. Of this autumnal ornament of our gardens there were 15 seedling varieties exhibited by Mr. Salter of Hammersmith, and two or three by Mr. Bull, [of] Chelsea. Among those from Mr. Salter were some very fine things, especially General Slade, which had obtained a first-class award on the 6th and was now in even [a] better and more fully developed state; and Duchess [of] Wellington, a fine incurved flower of a light rose or rosy lilac, with the backs of the florets silvery, a variety which worthily received a First-class Certificate. Both these are of great excellence. Another scarcely inferior, and now produced in a much better state than at the exhibition a few days since, was Carissima, also fr[om] Mr. Salter, now awarded a First-class Certificate. The flowers as shown on this occasion were sulphury white, faintly tinted with rose, the outermost florets being a[lso] somewhat streaked with rose-colour; the flower heads were of moderate size, formed of broad incurved florets sufficiently numerous to form a full close crown. Sparkler, another of Mr. Salter's flowers, was Commended; this is one of the deep rich Indian reds, golden at the back of the florets, and the flower heads though small (it is one of an intermediate class between the large-flowered and Pompons) were very full, compact and finely incurved. A commendation was given [to] Madame Heine, a white large-flowered Pompon Chrysanthemum from Mr. Bull, a variety of free flower[ing] habit, with full flower heads of remarkable p[illegible] Among Mr. Salter's flowers, Lord Ranelagh and Sy[illegible] among the larger sorts were promising but hardly [up] to the mark in properties as shown; the first was [a] deep fawn or pale coppery red, the latter a creamy white with rosy margins. Citronella, a fine bright yellow but too flat, and Apollo, a coppery red with yellow backs, deep and incurved but not quite closed up, were two promising sorts of the intermediate class; and among the Pompons we were rather pleased with Acis, a neatly-formed flower of the Andromeda class, straw yellow, deeper at the centre, and with reddish-backed florets. Medora, a loose rose-coloured sort, with buff anemone centre developed in a varying degree, seemed likely to be a good decorative sort, as it branches freely and blooms abundantly, the colour at the same time being attractive. Mr. S[alter] had a few other plants, amongst which was a remarkable Begonia from Sante Martha, which bore verita[ble] "elephants' ears," the leaves measuring 24½ inches by 19 inches. He had also the prettily variegated Galeobdolon luteum albo-maculatum, in which the leaves were marked very much as in the Ruellia ma[cu]lata met with not unfrequently a few years since [in] our plant stoves. Mr. Bull had a beautifully w[hite] and grey-green variegated Agave americana ca[illegible] elegantissima; and a large green-leaved Arad, Xanthosoma maculatum, in which the petioles were purple covered with a glaucous bloom, and edged with w[hite] on the sheathing portion. From Messrs. Low & C[o.] of Clapton, was a Dendrobium exhibited under [the] name of Lowii; this was from Borneo, and bore [its] beautiful nankin yellow flowers, marked on the lip [with] several bold crimson lines, which lines are fringed [with] long red hairs. A rosy lilac sport of the Cedo N[ulli] Chrysanthemum, obtained by Dr. Neligan, was sent [by] Messrs. Dickson, Hogg, & Co. of Dublin. Mrs. A[illegible] Redgrave sent a group of well managed plants of Solanum pseudo-capsicum, the red berries of which altho[ugh] poisonous render it a pretty plant for table decorat[ion.] Several interesting plants came from Messrs. Veitch [&] Son. Amongst them an Alsophila from Manilla, a [illegible] tree Fern which seemed to be A. glauca, the Poly[po]dium contaminans of Wallich; Wigandia caracasana the plant mentioned in our columns as used so exte[n]sively in the Paris gardens; Graptophyllum versicolor a caricature plant with the leaves suffused with red; the lovely little Stenogaster concinnum, to which a First-class Certificate was given; and three admirably grown plants of Sonerila margaritacea, of the varieties known under the names of splendens, alba, and superba. [A] finely bloomed small plant of Eucharis amazonica, [one] of the best of stove herbaceous plants, and now pretty well known, was sent by E. Rosher, Esq., of St. John's Wood. Finally Mr. Standish, of Bagshot, sent [illegible] admirable hardy or almost hardy Ferns, to which Firs[t]

class Certificates were assigned. They were Woodwardia orientalis recently introduced from Japan by Mr. Fortune, a more slender plant than W. radicans, and remarkable for bearing little bulbils over the upper surface of its coriaceous bipinnatifid fronds; and Lomaria elongata, a fine bold-looking New Zealand species, in which both the broad lobed sterile and contracted fertile fronds are remarkable for having the lobes very much decurrent down the rachis.

Nov. 12 (*Fruit Committee*).—Examples of Bowood Muscat, Tynningham Muscat, a long tapering bunch —and Muscat Hamburgh Grapes were shown on this occasion, as were also two or three dishes of Apples and Pears, the latter chiefly for the purpose of ascertaining their correct names. From Mr. William Paul came a collection of vegetables consisting of Brussels Sprouts, Onions, Vegetable Marrow, an improved kind of blood red Beet, variegated Kail and a dwarf compact variety of German Green. The same collection also contained examples of Chærophyllum bulbosum, or Parsnep Chervil, the new vegetable, of which an account and illustration was given at p. 887 of our present year's volume.

Nov. 6 *and* 7 (*Great Exhibition of Fruit and Chrysanthemums*).—In our report of this meeting last week we omitted to mention that specimens of Vine training on the chandelier or Montangon plan were shown under the arcades at the east end of the conservatory. These were kindly procured for the inspection of English cultivators through the agency of Messrs. Vilmorin of Paris and though dead and dried up they nevertheless fully answered the purpose for which they were exhibited. Of this kind of training some account together with a woodcut illustration was given in our columns of last year, p. 1103. On reference to the page in question it will be seen that this mode of training the Vine does not differ from that usually followed in this country in regard to Gooseberry and Currant bushes, and that Vines will readily submit to such treatment gardeners will easily understand. The specimens exhibited had short thick stems, open cup-like centres, and heads pruned hard in so as to occupy little room, and thus managed they are stated to bear abundantly. The plan may therefore be worth a trial in orchard-houses, in which such standard Vines, if they did well, would have a pretty appearance. Among other miscellaneous matters was also left unnoticed a collection of 72 different kinds of woods from Mr. Rust, gr. to the Rt. Hon. Lawrence Sulivan, Broom House, Fulham. These were all of uniform size, polished, nicely fitted together, and framed and glazed. Under this arrangement the grains of the different trees were well brought out and contrasted, and altogether the exhibition was one of considerable interest. We may likewise take this opportunity of mentioning that in collections of fruit that from Mr. Tillyard was placed equal first—not second, as is stated in our report at p. 987. It was considered in all respects equal to the fine collection from Mr. Henderson; therefore it deservedly received an equally high reward.

Crystal Palace Chrysanthemums.—An excellent exhibition of Chrysanthemums took place here on Thursday and Friday last, and the weather being favourable it was tolerably well attended. Plants in pots were plentiful, well grown, and finely flowered; they therefore made a good display, as did likewise the collections of cut blooms, though the latter were not as a matter of course so effective as the former. The cut flowers were placed in straight lines on benches in the centre transept, surrounded by a frame-work of plants in pots, an arrangement perfectly satisfactory as regards effect, while at the same time it afforded ample opportunity of critically examining the flowers individually. An elevated group of pot plants in the centre, together with others of a similar description at the corners where the nave crosses the transept, added considerably to the beauty of the exhibition, which was in all respects an improvement on that of former years. Among both plants and cut blooms were many wonderful examples of skilful management; but of these and other matters of detail a full report will be given next week.

Notices of Books.

A Manual of British and Foreign Plants. By L. H. Grindon (Pamplin).

We scarcely understand the purpose of this little volume. The author states that it is intended to facilitate the progress of the Botanical student, and to serve various other useful purposes. How it is to achieve the first we are unable to discover. As to the various other purposes, we hope that in so sweeping a verbal net something may be included of value. For ourselves we take it to be a Latin and English Catalogue of accented names, and to have no particular merit in that direction. The accentuation is pretty well done, which is as much as we can say. That the volume contains the name "of every curious, favourite and useful flower, fern, tree, and culinary vegetable ordinarily cultivated in our country," is a great deal more than we can guarantee, and is a promise that ought to be withdrawn. In short, beyond neat printing, good paper, and smart binding, we find little to praise. The volume may, however, be useful to that class of amateurs which is satisfied with such a modicum of information as where plants come from, and what are the Latin equivalents of common English names.

The Forests and Gardens of South India. By Hugh Cleghorn, M.D., F.L.S., Conservator of Forests in the Madras Presidency. London: Allen & Co.

(*Continued from* p. 969.)

Next in value to Teak comes the *Poon;* a little known tree which Dr. Cleghorn refers to *Calophyllum angustifolium*, Roxb., but which Lieut. Beddome assures us is a very different and undescribed species of that genus. This is becoming very scarce, and the spars are perhaps even more valuable than Teak. Here again previous waste is the topic most dwelt on; as an instance of which it is mentioned that several valuable spars of this wood were used in the construction of a bridge (for which it is not at all suitable), the total estimate for which was 25*l.*!

Black wood, *Dalbergia latifolia*, L., has risen much in price, owing to the Government indents of Madras and Bombay for 5000 cubic feet each, for gun carriages. The trees were formerly sold at 6*s.* each, but this practice is to be in future discontinued.

Sappan wood, *Cæsalpinia Sappan*, L., is a valuable dye-wood, and is extensively cultivated in South Malabar by the Moplahs, who plant a number of seeds at the birth of a daughter, and these arriving at maturity at 15 years of age become her dowry. A better system of cultivation and cutting is desirable, and the practice of immersion of the wood in salt water should be avoided, as it is thereby injured.

Sandal wood, *Santalum album*, L.—This tree has in certain districts received much attention, and it has spontaneously increased to a considerable extent. It was formerly systematically plundered by bands of robbers; and so extensively were their depredations carried on, that 78 men, each with a load of wood on his back, were once captured in a single night!

Gutta Percha, Bassia elliptica, L., has been found at intervals from Coorg to Trevandrum, but its produce is not favourably spoken of.

Catechu, Acacia Catechu.—The increasing value of Cutt has led to an universal destruction of this tree, and the felling of it is consequently now restricted to certain districts.

Kino, Pterocarpus Marsupium.—This tree is greatly prized both for its gum and for its timber, which is extensively used in the manufacture of cotton gins. The gum is collected by making V-shaped incisions in the bark, and is taken to the coast for the Bombay market. A more economical method of incising is recommended.

Bamboos (species not mentioned).—Those of 60 feet long and 5 inches diameter are amongst the richest produce of the provinces of the west coast. They are purchased standing, at 10*s.* and 7*s.* per 1000, according to size. Millions are annually cut and floated down the rivers as rafts, or used as floats to timber. We refer our readers to the book for an interesting account of the method of floating them.

Saw Machinery.—Owing to the deteriorating effects of the humid climate of the forests, there are great obstacles to the introduction of circular saws; besides that from the unhealthy condition of the forests during a considerable portion of the year they must either be transported back at great expense or else left unprotected, and exposed to injury from wild elephants!

Charcoal Forges.—The supply of charcoal for iron-smelting is one of the most difficult to keep up. In the method now employed the waste is prodigious and the material bad, the blacksmiths insisting on the use of one of two woods, both of them unsuited to the purpose.

Noxious Insects.—On this subject the expediency of adopting Boucherie's process of impregnating wood with poison is discussed, to prevent the ravages especially of a large bee, Xylocopa latipes, which bores into rafters.

Provision for the Wants of the Native Peasants (*Ryots*) is ensured by an allowance to each of an enclosure of 1200 yards, which is strictly preserved, the Ryot being entitled to wood for his plough, &c.

Coffee.—Owing to the rapidly increasing demand for coffee, the applications for grants of forest land pour in upon the revenue authorities. It is recommended that these applications be liberally responded to, but that special care be taken to preserve the high-wooded mountain tops intact, as the best means of insuring the continued supply of rain. Half the slopes are therefore recommended to be kept clothed, and the lower half and all the valleys given up to cultivation. Immense tracts of virgin forest in the Kundahs district are described as eminently suited for Coffee, and clearings should be confined to the most productive elevations, viz., 2500 to 4500 feet.

Tea.—A thriving plantation is described near Kunur, belonging to M. Mann, Esq., where 2000 vigorous plants are under cultivation, raised from seeds brought by Mr. Fortune from China.

Difficulty of procuring Assistance.—The want in India of a class of persons who know anything of forestry is deeply felt; of 200 applicants for employment, but three could be considered as intelligent foresters. There is equally a want of intelligent contractors, a multitude of rogues being the chief applicants for contracts, and for advances, which they appropriate! Of two sub-contractors in North Canara, one had to be removed for incapacity, and the second suspended for receiving bribes. Extensive contracts have however lately been taken by Europeans for railway purposes. Depôts on the western coast are urgently recommended, where the timber may be classified, and sold by European pensioners of known integrity. Additional overseers are required, who should have robust health, an elementary knowledge of forestry, an acquaintance with accounts, integrity of character, and a knowledge of native tongues,—all these qualifications also command a high market value in other departments of the public service.

A Depôt of Books and Tools is proposed, with a supply of copies of James Brown's excellent "Forester's Guide." The Conservator himself instructs his overseers, and directs his assistants to do the same; he further adopts a system of examinations. A "Manual of Accounts" is recommended for the use of the employés, and a consultable Herbarium is in process of formation at the Presidency for their use; for which a set of the named "East Indian Herbarium" of Drs. Hooker and Thomson has been supplied from the Royal Gardens, Kew.

The last head is that of *Expenditure* on account of the department; which amounts to the incredibly small sum of 2,800*l.*, *including all salaries.*

From the preceding commentaries on its first chapter, some idea may be formed of the nature and contents of Dr. Cleghorn's book; it is followed by a copy of the answer from Government, which enters minutely into its several heads, and in almost every case acts on its suggestions:—then follow other annual reports, fuller for the most part than the above, and containing information on many additional vegetable products. Other chapters are devoted to furniture, engraving woods, experiments on the strength of timbers, hedges, avenues for towns, forest rules of Sind and Pegu, and public and soldiers' gardens, &c., and in conclusion we have a list of botanical and pharmaceutical inquiries, a copious Bibliography and good Index. The work is further supplied with an excellent map of the peninsula, showing the distribution of Teak, Sandal wood and Sal; it also contains some capital illustrative woodcuts, and some highly characteristic lithographs of scenes in the mountains and forests.

The result of our perusal of Dr. Cleghorn's book has certainly in one respect surprised us; for though we had always entertained a very high idea of the extent and richness of the vegetable resources of India, we were quite unprepared for the evidence Dr. Cleghorn adduces of their rapid recent development, and of the apparently exhaustless stores of future wealth that will accrue to India if these resources are husbanded with moderate care and attention. It may be suggested that much of this may be in appearance only, and due to the ability or enthusiasm of the reporter, and so we might have supposed had his book been of a different character, or contained only his own statements and opinions. But here on the contrary we have no loose statements, no speculations and assumptions, all is fact, supported by cash balances, and vouched for by copies of correspondence with the Government.

In conclusion we most strongly recommend this book to the attention of the mercantile community of Madras, as beyond comparison the best that has appeared on the vegetable products of any part of India, while in its author the Government possesses a very able public officer, and a capital reporter, who can be both brief, explicit, and interesting.

Garden Memoranda.

Mr. Salter's Nursery, Hammersmith.—The Chrysanthemums for which this establishment has always been celebrated are now in full bloom, and lovers of this useful autumnal flower will do well to inspect them at once. Although out of doors the flowers have suffered somewhat from the late stormy weather, those in borders along the sides of the principal walk, which is about 500 feet long, have a gay and dressy appearance. Under glass, in what is called the Winter Garden (a lean-to building some 85 feet long in the form of a T), the plants are in clumps, surrounded by winding paths neatly edged with Box, an arrangement which is far more pleasing than unbroken masses of gaudy colours. With a view to heighten the effect, fine plants, remarkable for the size and beauty of their leaves, such as Canna zebrina and discolor, Caladium esculentum, Wigandia caracasana, Yucca variegata, Centaurea candidissima and gymnocarpa, Orange trees, Camellias, and Araucarias, have been stationed among the Chrysanthemums at points where they have the best appearance. In the principal bank of large flowers (running the entire length of the house) are some thousands of expanded blooms, and the brilliancy and variety of colours are charming.

Of new varieties for 1862, the following are among the best, viz., General Slade, Carissima, and Sparkler, all of which are Smith's seedlings and are noticed in another column; Miss Slade (also Smith's), pale sulphur; Cherub (Smith), golden amber, incurved; Draco (Smith), fiery red; Dido (Smith), sulphur white, incurved, dwarf, and fine in habit; Lord of the Isles (Clark), incurved rosy orange, very high centre; Saint George (Clark), golden yellow; Duchess of Wellington (Salter), Lord Ranelagh (Salter), noticed elsewhere at p. 1008; Mr. Broome (Salter), large rose and lilac, incurved; White Christine (Simmons), a sport from Christine, and valuable as a specimen plant; White Themis, a

sport from that variety; White Queen of England, also a sport.

Among new Pompones we noticed Acis (Salter), Capella (Salter) dark chesnut; Citronella (Smith), Lucinda (Salter), rose and lilac; Orange Boven (Salter), bright orange. These are in the shape of dwarf bushy plants covered with well-formed flowers.

Other groups contained all the best varieties in general cultivation, among which the most conspicuous were Queen of England, Lady Harding, Boadicea, Little Harry, Golden Queen, Prince Consort, Alfred Salter, Jardin des Plantes, Pandora, Ariadne, Cassandra, Rifleman, Yellow Perfection, General Harding, Novelty, Leon Leguay, Aimée Ferrière, Golden Hermione, Bouquet des Fleurs, Gluck, Progne, Etoile Polaire, Garibaldi (Clark), Caractacus, Yellow King, Alma, Nancy de Sermet, Le Prophète, Dr. Rozas, Wonderful, Christine, Madame Sentir, Calliope, Florence, Mirandum, Andromeda, Mrs. Turner, Miss Julia, Diana, Fanny, Ida, Mrs. Dix, Mr. Astie, Madame Chalonge, and Julie Lagravère. Of these there were numbers of beautiful examples, and being neatly arranged they had an excellent effect.

Miscellaneous.

North American Bee Culture profitable.—I take the liberty to send you a copy of my account with my bees for the current season. The profits foot up, as you will see, to something over 100 per cent. above every expense. I can make no other stock pay half as well. I have charged them no ground rents, as they hang on cleats, and I get a full crop of Grass under them. Experience is continually improving my skill in their management. I have just learned that much may be gained in amount of honey in boxes by changing boxes partly filled from industrious swarms to more idle ones, even without emptying the boxes of the bees, as I find they do not quarrel. Another improvement is to put empty comb into each box before inserting it in the chamber. Some stragglers finding empty cells will put a little honey into them, and a beginning being thus made, the process of filling is soon undertaken in earnest. I shall sell a few more swarms, as I find that from 25 to 30 is about the right number for me to winter.

1859. DR.		dols.	
June 1. To 29 swarms wintered, worth 7 dols. each		203	00
To 30 hives for new swarms, 1.50 dols.		45	00
To 100 honey boxes, 18c.		18	00
To 13 frames on which hives are suspended, 50c.		6	50
To labour bestowed, estimated at ..		10	00
Expense of marketing		3	46
[illegible]		$285	96
By sales of 520½ lbs. Clover honey, including boxes, 25c.		130	12
By sales of 489 lbs. Buckwheat honey, including boxes, 14c.		68	46
Seven swarms taken up:	dols.		
By honey estimated at 3.00 dols. each ..	21 00		
By seven hives for use again, 1.50 dol. ..	10 00		
		31	50
By honey on hand and used in family, estimated		30	00
By 35 swarms on hand, 6.00 dols.		210	00
By 17 swarms sold after honey season		100	00
By first premium at State Fair		5	00
" " Saratoga Co. Fair		1	00
		$576	08
Deduct debits		285	96
Profits		$290	12

Hiram Bulkeley, New York.

Poisoning Noxious Animals.—On account of the numerous accidents which have occurred from using arsenic and phosphorus for this purpose, M. Sevérin Caussé, at the request of the French Government, has been pursuing a series of investigations with the object of devising some means of poisoning which should be as efficacious and more safe than those in use. As general principles he lays down these rules:—1. That we must not risk mistakes by employing the poison in the form of biscuits, pills, or powder; 2. An excipient must be used which is repugnant in taste to man but not to animals; 3. Emetic substances should be added, so as, in case of the poison being swallowed accidentally, vomiting may be produced, which is not with gnawing animals like rats and mice; 4. The substance should be easily detectable by chemical analysis; 5. The composition he finally recommended as the best suited as a destructive agent, consists of tallow 786 grammes, tartar emetic 153 grammes, and euphorbium 51 grammes. These, mixed with a pinch of aventurine (added for facility of detection in case of human poisoning), by the aid of 10 grammes of Cotton, are made into 32 candles, each of which would suffice to poison several rats or mice. *Pharmaceutical Journal.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c.—In changeable weather like the present, this structure will require very careful management. The best plan is to keep as low and dry a temperature as can possibly be permitted, say from 40° to 45° at night, allowing it to rise a little in the daytime. In mixed greenhouses see that the young stock of Heliotropes, Pelargoniums, Cyclamens, and other flowers, grown especially for winter, have nice light situations and regular attention as regards watering. The forcing-pit must provide at the proper season such things as Rhododendrons, Azaleas, Persian Lilacs, Sweet Briars, Moss and other Roses, Sedums, Kalmias, Daphnes, Anne Boleyn Pinks, Dutch Bulbs, &c. If the heat is furnished by means of fermenting materials, keep down accumulating damp and mouldiness by an almost constant ventilation, increasing the linings in order to raise the necessary temperature. Those who are fortunate enough to possess pits warmed by hot water will of course pursue a somewhat different course. Look well to pits and frames containing stores for next summer, and have efficient protecting material always in readiness, with which to cover them whenever the weather is unfavourable. Bedding plants, however, must have attention, for in all likelihood many things are suffering from damp, and such plants as appear to suffer most should be removed to other quarters where a drier temperature is kept. Keep store stock well ventilated and the surface soil of the pots frequently stirred. Dust with sulphur Verbenas and similar plants attacked with mildew. Be particular in keeping the interior of pits containing plants of the above description as dry as circumstances will permit.

FORCING DEPARTMENT.

PINERY.—Water plants in pots as little as possible at this season; where the general stock is grown in this manner it is a good plan to cover the pots over 2 or 3 inches with the plunging material; where the bottom-heat will permit that to be done it obviates the necessity of watering so frequently.

VINERIES.—Use fire-heat sparingly in houses where the fruit is ripe, but sufficient must be used if the weather should became frosty to prevent the moisture of the atmosphere being frozen to the glass inside the house, for if this is allowed to happen the moisture on thawing is liable to drop upon the bunches, injuring the bloom and causing the berries to decay. Admit air on every favourable opportunity, and examine the bunches often and carefully, so as to make sure of removing decaying berries the moment it can be perceived they are affected. Where forcing is commenced be careful to maintain a properly moist state of the atmosphere, and this must be especially attended to in the event of severe weather, particularly when the buds are bursting. The evaporating troughs must be kept constantly supplied with water, and the paths, bed, &c., should be frequently syringed. If fermenting material is used for warming the border, this must be well covered with dry litter, and turned occasionally, adding some fresh as may be necessary to keep the heat in the border regular. It will be advisable, however, to have some dung and leaves thrown up to heat, as there would be some danger of chilling the bed by turning it in the event of frosty weather, and mixing it with the dung or leaves which had not commenced fermenting. Houses which it is intended to commence forcing the beginning of next month should also have some fermenting materials placed on the borders so as to encourage the roots a little before the Vines are excited, which will be of great service towards getting the buds to push strongly and without loss of time.

FLOWER GARDEN AND SHRUBBERIES.

Examine pillar and trellis Roses, and if the weather is favourable see if the soil wants renewing or the kinds changing. For choice sorts roomy holes should be made capable of containing three or four barrow-loads of well prepared soil. Turfy loam of good quality is the chief thing; to this add a portion of rich rotten manure, and, if at hand, a little sandy peat or leaf-mould. Crocuses may be planted whenever the weather is favourable; they like a deep, light, rich sandy soil; but will thrive in any ordinary soil or situation. In planting, the bulbs should be covered from 2 to 3 inches with fine mould; and if an effective display during the first season is desired, plant thickly —not more than 2 inches apart. For edging borders and beds, the Crocus is also exceedingly useful; and, where planted in lines along the margin of walks, or in clumps of 3, 6, 12, or more bulbs each, and allowed to remain in the ground for several years, the effect of the masses of flower which they produce is all that can be desired. We have seen a very effective display in a flower garden in March, produced by each bed having a broad edging of Crocus, the colours being nicely arranged and contrasted. This may be secured without interfering with either the spring or summer occupants; for the bulbs may be planted close to the outside of the bed, where they will scarcely be in the way, either in digging or in planting. Unless the bulbs become too numerous, and the leaves spread over more space than it may be desirable to have covered with them, they should not be disturbed, as they bloom more profusely when well established. Care must be exercised, however, to protect them from mice, as they are exceedingly partial to Crocuses, especially in winter. For blooming in-doors, either in pots or in any of the various contrivances that are used instead of pots, strong bulbs should be selected, planting them in succession, and keeping the crowns of the bulbs slightly under the surface of the soil; place them in any dark, cool situation, for three or four weeks, to allow of their making roots, before exciting them into growth. If pots are used—and these are doubtless the best, if not the most ornamental—use good rich, sandy soil, and secure perfect drainage; for a liberal supply of water is required during the blooming period, and if the drainage is defective, the soil is very apt to become sodden by injudicious watering. While the bulbs are kept in a dark place, very little water need be given, merely sufficient to keep the soil, Moss, or sand from becoming too dry. When the roots have made some progress, the crowns will soon make their appearance; and as soon as these are observed, remove to the greenhouse; or where this is not convenient, a cold frame or pit will answer perfectly; they will also do exceedingly well in a sitting-room window. All that is requisite is to allow them all the light and air possible on mild days, giving water as may be necessary, to keep the mould, &c., in a moist state.

HARDY FRUIT AND KITCHEN GARDEN.

Trench, dig, and ridge every spare inch of ground whenever the weather will permit these operations to be advantageously performed. This is particularly to be observed in gardens the soil of which is of a clayey nature. If frost sets in let the manure necessary be wheeled out for the whole of the spring cropping, laying it in heaps either on the spot where it is to be used, or as near as possible to it. What is not required for immediate digging should be piled in small mounds and soiled over to prevent loss from evaporation. Never uncover tender vegetables after the breaking up of frost until they have become completely thawed, and even then do not uncover suddenly; leave a very light protection on them for a day or two in order to inure them gradually to light.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending Nov. 14, 1861, as observed at the Horticultural Garden.

November.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind.	[illegible]
Friday 8	6	29.314	29.290	55	22	38.5	49½	49	S.W.	[illegible]
Satur. 9	☽	29.534	29.416	53	28	40.5	46½	48	N.W.	[illegible]
Sunday 10	8	29.326	29.102	51	35	43.0	46½	47½	N.E.	[illegible]
Mon. 11	9	29.681	29.545	54	24	39.0	47	47½	W.	[illegible]
Tues. 12	10	29.730	29.677	46	28	37.0	47½	47	S.W.	[illegible]
Wed. 13	11	29.687	28.912	43	34	38.5	47	47	N.E.	[illegible]
Thurs. 14	12	29.280	29.276	48	32	40.0	46½	47	W.	[illegible]
Average		29.507	29.317	50.0	29.0	39.5	47.2	47.7		[illegible]

Nov. 8—Frosty and foggy, very fine; rather hazy, slight frost.
— 9—Foggy; very fine; foggy; lightning at night.
— 10—Boisterous with heavy rain; heavy showers, thunder 10 a.m. fine.
— 11—Clear, with cold wind; fine, sharp frost.
— 12—Foggy with rain; boisterous, with rain at night.
— 13—Foggy; sudden fall of barometer, constant rain throughout; very boisterous, with heavy rain at night.
— 14—Clear, low dusky white clouds; fine; showers.
Mean temperature of the week 2 1-5th deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Nov. 23, 1861.

November.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained	Greatest Quantity of Rain.	Prevailing Winds							
Sunday 17 ..	47.8	34.5	41.1	17	0.40 in	7	5	3	1	7	7	2	[illegible]
Mon. 18 ..	48.0	33.8	40.9	20	0.56	3	6	5	2	3	11	1	[illegible]
Tues. 19 ..	48.5	34.0	41.2	16	0.87	1	4	4	4	3	11	2	[illegible]
Wed. 20 ..	48.6	35.2	41.9	13	0.35	1	7	2	—	6	7	6	[illegible]
Thurs. 21 ..	49.2	36.6	42.9	21	0.11	5	5	4	3	4	10	4	[illegible]
Friday 22 ..	48.9	34.7	41.8	19	0.62	3	4	6	3	4	6	8	[illegible]
Satur. 23 ..	47.1	34.8	40.9	15	0.36	1	6	3	2	5	11	5	[illegible]

The highest temperature during the above period occurred on the 20th, 1844, and 21st, 1833—therm. 59 deg.; and the lowest on the 22d, 1858—therm. 9 deg.

Notices to Correspondents.

ANTS: *S 2.* Dip rags in spirits of turpentine, and push them into the holes and runs of the ants. If the first dose is not effectual, repeat it.

BOOKS: *South Stafford.* For your purpose we strongly recommend Thompson's Gardener's Assistant.

DO RATS EAT GRAPES? We have received several more letters, all answering in the affirmative. That point may therefore be regarded as settled.

NAMES OF PLANTS: *S H.* Eupatorium glandulosum.—*Droitwich.* Diosma serratifolia.—*R T. Launceston.* No doubt a leaf of Acer palmatum.—*C G.* Poterium spinosum, a curious Greek plant (shrub), not hardy.—*Emily R.* The flat objects from Naples are the fruit of Paliurus aculeatus, a "horrid" thorny bush, believed to have been that with which our Saviour was crowned.—*G D.* An interesting variety of Lady Fern, which appears new. Send a piece with any information you may have respecting it to Mr. Moore, Botanic Garden, Chelsea.

NECTARINE TREES: *An Old Reader.* From the description you give of your Nectarine, we presume it is either the Old Newington or the Early Newington, both of which are clingstones, and are not perfectly ripe till somewhat shrivelled; then their flavour, as you find to be the case with that of yours, is rich and good; the flesh, however, never becomes melting under any circumstances, in this climate at least. If the roots of your tree have got into a cold damp subsoil, which may be the case, as there is a running stream near, the fruit will be harder than from trees in well drained ground; and draining, or raising the tree and replanting higher, are the remedies. But it would be advisable to try whether some of the best melting varieties will succeed; elevate the border, yet let its surface be nearly level, and doubtless they will. ‖

ROYAL HORTICULTURAL SOCIETY: *G H.* Apply to the Secretary, South Kensington, W. The practice is we believe discontinued.

STEPHANOTIS: *J D.* It is not an unusual thing for this to bear fruit; on the contrary it frequently does so in fine seasons like that which we have just experienced.‡

VINES: *A Subscriber.* If your Vines are inside your hothouse you cannot avoid starting them. You should draw them out of the house, and wrap them with straw. You can then start them whenever you like to re-introduce them.—*W.* You have no idea of the size to which this plant attains. Lieut. Lowther saw one in Cashmere with a stem 3 or 4 feet in circumference at the root.

VINE WALL: *Hesperus.* Let it be grouted, *when dry*, with good Portland cement. You can blacken that if you please, but you will derive very little if any advantage from the operation.

ERRATA. At p. 987, under Pine Apples, for Mr. Floud, gr. to C. Bailey, Esq., read gr. to R. Fothergill, Esq.; at p. 988, under Miscellaneous Articles, for Messrs. Downie & Laird, read Mr. Cattell; at p. 998, Class W., for Capt. F. Fordhook, read Capt. Tyrrell of Fordhook.

THE LONDON MANURE COMPANY
(ESTABLISHED 1840,)
Are now prepared to send out the following MANURES:—
CORN MANURE for AUTUMN SOWING.
SUPERPHOSPHATE of LIME.
DISSOLVED BONES for PASTURES.
CONCENTRATED URATE.
BLOOD MANURE for CORN.
PERUVIAN GUANO, NITRATE of SODA, SULPHATE of AMMONIA, and every other Manure of value.
116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE of LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.
CONCENTRATED TURNIP MANURE, equal in value to the preceding.
Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
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LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861 are now ready for delivery at his factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, and BONE SUPERPHOSPHATE of LIME	£6 6
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These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
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Agents Wanted.
Factory: 28, Clapham Road Place, S.

Pigs, Pigs, Pigs.
DAMAGED RICE from 4*l.* per Ton. All other descriptions of Feeds for Pigs, Poultry, and Cattle sold for Cash by W. JUPP & Co., Cattle Food Manufacturers, 42, Great Tower Street, E.C.

CUPISS'S CONSTITUTION BALLS.—This justly celebrated Medicine, after 25 years' experience, is proved to be the best and cheapest for HORSES and NEAT CATTLE, cheaper because required to be given only once a week, preserving health, vigour, and condition. Their cost too is saved by the food turning to a better account, for it is an acknowledged fact Horses will keep up their condition better upon three feeds of Oats daily when a Ball is occasionally given, than with four feeds without the Balls. Neat Cattle will also fatten much faster with the occasional use of them, and arrive at a greater state of perfection than they can be got to without the Balls. Any one doubting this statement should try the use of them and prove for himself, for the more they are used the better they are appreciated.
The Balls will be found admirable for Coughs, Colds, Strangles, Influenza, Inflammation of the Eyes, Swelled Legs, and other diseases incident to Horses and Neat Cattle, as may be seen by the directions and Testimonials with each packet.
The Balls are prepared by FRANCIS CUPISS, Diss, Norfolk, Author of the Prize Essay on the Diseases of the Liver of the Horse. And may be had of all Patent Medicine Vendors, in Packets (6 balls each), 3*s.* 6*d.* per packet, or 7 Packets for 21*s.* with full directions.
Persons using the Balls may consult the Proprietor gratuitously by enclosing a Stamp in a prepaid letter.

Gutta Percha Tubing for Watering Gardens.
THE GUTTA PERCHA COMPANY have the pleasure to acknowledge the receipt of the following *Testimonial from* MR. J. FARRAH, *Gr. to* BOSWELL MIDDLETON JALLAND, Esq., *of Holderness House, near Hull.*
"I have had 400 feet of your Gutta Percha Tubing, in lengths of 100 feet each, with union joint, in use for the last 12 months for watering these gardens, and I find it to answer better than anything I have ever yet tried. The pressure of the water is very considerable, but this has not the slightest effect on the tubing. I consider this tubing to be a most valuable invention for Gardeners, inasmuch as it enables us to water our gardens in about one-half the time, and with one-half the labour required."
Manufactured by the GUTTA PERCHA COMPANY, Patentees, 18, Wharf Road, City Road, London, E.C., and sold by their Wholesale Dealers in Town and Country.

E. T. ARCHER'S "FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, &c.
PROTECTION from the COLD WINDS & MORNING FROST.
"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.

Two yards wide	1*s.* 6*d.* per yard run.
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An improved make, 3 yards wide, 2*s.* 6*d.* per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1*s.* 4*d.* per yard run.
ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.
"It is much cheaper than Mats as a covering."

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HILL AND SMITH'S PATENT BLACK VARNISH for preserving Iron Work, Wood, or Stone. This Varnish is an excellent substitute for oil paint on all out-door work, and is fully two-thirds cheaper. It may be applied by an ordinary labourer, requires no mixing or thinning, and is used cold. It is used in the grounds at Windsor Castle, Kew Gardens, and at the seats of many hundreds of the nobility and gentry, from whom the most flattering testimonials have been received, which HILL & SMITH will forward on application.
Sold in casks of about 30 gallons each, at 1*s.* 6*d.* per gallon, at the Manufactory, or 1*s.* 8*d.* per gallon paid to any station in the kingdom.
Apply to HILL & SMITH, Brierley Hill Iron Works, near Dudley, and 76, Cannon Street, E.C., from whom only it can be obtained.

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MR. BAILEY DENTON undertakes the DRAINAGE of ESTATES by Commission or Contract.
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ALFRED SIBSON, F.C.S., for the last seven years Assistant Chemist in the Royal Agricultural College, Cirencester, author of "Agricultural Chemistry," "Everyday Chemistry," &c., is prepared to make arrangement with an Agricultural Society or Farmers' Club, for the engagement of his services as CONSULTING CHEMIST; or, with two or more Societies as NON-RESIDENT CHEMIST, to deliver occasional Lectures, perform Analyses at reduced rates, &c.—Address as above.

DRAINAGE OUTFALLS.—The most simple, expeditious, and inexpensive powers for obtaining the right of making Outfall Drains, Cuttings, &c., through the Lands of adjoining Proprietors, are under the WEST of ENGLAND DRAINAGE and INCLOSURE COMPANY'S ACT, and there is no necessity for separate proceedings such as Petitions, Special Act of Parliament, Commissions of Sewers, or Drainage Boards, &c.
Draining, Inclosing, Irrigating, Warping, Road Making, and all kind of Land Improvements executed on Entailed, Mortgaged, or other Properties; the whole cost can be a Charge on the Lands permanently, or it might be made redeemable at any fixed time in one or more sums or by half-yearly instalments over any term of years, at the option of Proprietors.
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THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c. IN ENGLAND AND WALES AND IN SCOTLAND.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
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4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.
Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.
For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

NATIONAL EXHIBITION of DOGS.—The SECOND GREAT ANNUAL EXHIBITION of SPORTING and other DOGS will be held in extensive Premises in Tennant Street, Broad Street, near Bingley Hall, Birmingham, on MONDAY, TUESDAY, and WEDNESDAY, December 2, 3, and 4, the first three days of the Cattle and Poultry Show.
The PRIVATE VIEW on Monday, December 2. Admission: Monday, 5*s.*; Tuesday and Wednesday, 1*s.*
For Special Railway Arrangements, see the Advertisements and Bills of the several Companies, and of the Cattle and Poultry Show.

THE BIRMINGHAM CATTLE and POULTRY SHOW, 1861.
The THIRTEENTH GREAT ANNUAL EXHIBITION of CATTLE, SHEEP, PIGS, DOMESTIC POULTRY, and ROOTS will be held in Bingley Hall on MONDAY, TUESDAY, WEDNESDAY, and THURSDAY, December 2, 3, 4, and 5.
The PRIVATE VIEW on Monday, December 2. Admission; Monday, 5*s.*; Tuesday, Wednesday, and Thursday, 1*s.* The Doors will be opened at 9 o'clock each morning.
For Special Railway Arrangements, see the Advertisements and Bills of the several Companies.

The Agricultural Gazette.

SATURDAY, NOVEMBER 16, 1861.

IT is quite true as a Correspondent puts it, that it is but a "bald comparison" which we often see instituted between horse cultivation and steam tillage, on the score merely of the cost of work, for they are totally unequal in quality. And again, this mode of estimating the two processes omits the great element of time. "How shall I estimate the money value of machinery which would have enabled me this past spring to have planted my Mangels in the second or third week of April instead of the first week in June, the date which the wet weather in autumn and in spring compelled me to use on my heavy land." All this is no doubt obvious to all reflecting persons; but it is hardly possible yet to do more than offer this poor comparison of costs, and try to influence a judgment of the subject by this. The subject is not yet old enough, except in a very few cases, to enable any other comparison. When the fertility which is to be the result of deep and thorough tillage in the dry shall in instances enough have been actually achieved, we shall see a rush to the steam-plough makers far exceeding even the rapid movement thither which already is. And the advantage, when proved in instances enough, of a machinery which shall enable all the tillage work of the year to be done in the short periods of it when the soil is in the best condition, will be another great spur in the same direction.

While both of these considerations are still held by faith rather than by sight, it is hardly to be expected that steam ploughing can be rapidly engaged in. Nevertheless we can already quote an immense extension of the work in all parts of the country. There are in Great Britain already upwards of 200 steam cultivated farms, and at least 30,000 acres have this autumn been ploughed and cultivated by steam power. We have before us returns from upwards of 100 owners of steam ploughs and steam cultivating apparatus, in which about 15,000 acres of cultivation are actually enumerated as having been accomplished, and we hope in a week or two to collate these reports and present them to our readers so as to illustrate the question of cost again. For this, as we have said, is almost the only side of the question which is as yet fully open to us. Meanwhile let us quote a few of them:—

(1) *As to Fowler's apparatus:*—(*a.*) Mr. BREBNER on the Flemish Farm under H.R.H. the President of the Royal Agricultural Society of England, has already since harvest ploughed 158 acres, 8 to 10 inches deep, in 39½ days, paying 25*l.* 13*s.* 6*d.* in wages, 20*l.* 7*s.* 6*d.* in coals, and 4*l.* 10*s.* in repairs. All these outgoings thus amount to rather more than 50*l.*, or about 6*s.* 6*d.* per acre. And he adds:—

"The greater part of the work done since harvest has been on tenacious clay land, only admitting of three furrows being turned at once; repairs also have been more than usually expensive, owing to the skifes and shares continally breaking against the roots of trees that were in the field: the cost of removal from field to field is not included, nor has any charge been made for wear and tear of machinery. When working on *light* land and with *four* turnfurrows, 7 acres per day have been effected."

(*b.*) Mr. REDMAN, of Overton, near Swindon, one of the oldest steam cultivators in the country, has ploughed with a 12-horse-power engine and 3-furrow plough 100 acres of Wheat and 70 acres of fallow since harvest. It has taken 43 days (including as many as 11 shifts). The Wheat land was ploughed 4 or 5 inches deep, and the fallows 8 or 9 inches. The work has thus been about 4 acres a day, at a cost of 11*s.* 2*d.* for wages and 12*s.* for coals and oil, hardly anything for repairs—or about 6*s.* an acre in all.

(*c.*) Mr. RUCK, of Castle Hill, Cricklade, has accomplished since harvest no less than 332 acres at an average depth of 7 inches in 42 days, or nearly 8 acres a day—and at a cost of not more than 25*s.* daily for wages and fuel, or about 3*s.* to 3*s.* 6*d.* per acre. And he adds:—

"My set of steam tackle was one of the first made by FOWLER, yet with it I can plough the average soils in good-sized fields at 6*s.* per acre, and the new sets now sent out having the clip drum and the gear for taking up the slack rope will reduce the cost to 4*s.* per acre."

(*d.*) Mr. PLUMMER of Peasemore with a 12-horse engine has ploughed 301 acres and cultivated 83 acres at an average depth of 7 inches* in 50 days since harvest, having paid 30*l.* for wages, and 31*l.* 18*s.* 9*d.* for coals and oil—besides however a large sum for repairs. Excluding repairs this amounts to about 3*s.* 6*d.* an acre for wages and fuel.

(*e.*) Mr. READ, of Elkstone, near Cheltenham, has ploughed 67 acres in 11½ days, from 5 to 8 inches deep, at a cost of 6*l.* for wages, and 8*l.* 12*s.* for fuel and oil (repairs nominal). This amounts to 14*l.* 12*s.* in all, or about 4*s.* an acre. And Mr. READ adds:—

"This set of tackle was set to work in the latter part of January of the present year, and since that time it has done nearly 1000 acres, about 700 having been ploughed and about 300 having been dragged by a set of drags manufactured by the Messrs. HOWARD, of Bedford. The farm it has been working upon is one offering the greatest difficulties to the successful application of steam power to land, inasmuch as many of the fields are very steep clay banks in which huge stones frequently occur, and the fences are the most ill contrived that can be imagined."

2. Let us now turn to the Woolston apparatus:—

(*a.*) On the Royal farm near Osborne, 96 acres have been cultivated once 6 to 9 inches deep in 20 days, at a cost of 15*l.* for wages, 7*l.* 10*s.* for fuel, and 1*l.* for repairs, or about 4*s.* 6*d.* per acre. Mr. TOWARD adds:—

"The subsoil on the Royal farm is a strong tenacious clay in many places mixed with gravel. When very dry no implement will penetrate it. On this farm we have found the cultivator more serviceable in spring than autumn. There are very few perennial weeds (no Twitch Grass). By ploughing up the stubbles intended for the future root crops in the early part of winter, the land is in excellent condition for the cultivator in spring. This year we did 250 acres in a most satisfactory manner, at less cost and greater depth than stated above."

(*b.*) Among the earliest of Mr. SMITH'S clients and customers was MR. PULLEN, of Abingdon. He has cultivated 123½ acres twice over in 35 days, including all hindrances, for 24*l.* 10*s.* in wages and 14*l.* in fuel and oil, and 3*l.* in repairs. The outgoings amount to 41*l.* 10*s.*, or about 6*s.* 9*d.* an acre for the double work, half that for the single.

(*c.*) Mr. BATTCOCK, of St. Ives, has with a

* 100 acres were for Wheat at a depth of 4 inches.

10-horse engine *once* cultivated 379 acres since Aug. 28 in 58 days, about 6½ acres a day, the wages being 14*s.* 6*d.* a day; the fuel not reported.

(*d.*) Mr. MARK PHILIPS, of Stratford-on-Avon, has *once* cultivated 158 acres, 6 to 10 inches deep, in 32½ days, including removals, for 22*l.* 7*s.* 4*d.* in wages, 9*l.* 12*s.* 2*d.* in fuel and oil, and 11*s.* in repairs; or about 32*l.* in all, or 4*s.* an acre.

(*e.*) Mr. INSKIP, of St. Ives, has cultivated 200 acres twice over, 6 to 8 inches deep, in 67 days, or 3 acres a day for the double cultivation, at 17*s.* 6*d.* a day for wages, and 3 cwt. of coal per acre, and 2*l.* 10*s.* during the period for repairs—probably 7*s.* an acre for the double work.

(*d.*) Mr. LENEY, of Yotes Court, Mereworth, Kent, unable to resist the merits and attractions of the old Kentish turn rise, has used SMITH's engine and traction apparatus in ploughing the land by the county tool. He has ploughed 100 acres since harvest in 50 days, 10 to 12 inches deep; paying as wages 9*s.*, and burning 4 cwt. of coal per acre. And here we have an illustration of the merit of steam cultivation, on the score especially of quality of performance. Mr. LENEY adds:—

"This year I have ploughed my land with a common Kentish turn rise plough. This may appear a very slow process; but the work is really done in such a manner that far exceeds any work I have yet seen, and after two years' experience I would not abandon it on any account. Last year I cultivated many acres, and was well pleased."

(3) Again, the following are a few reports of HOWARD's recently issued cultivator, new windlass, and steam "tackle" generally.

(*a.*) Mr. COLLINS, of Castleton, near Cardiff, has smashed up and cross cultivated 160 acres in 54 days, at a cost of about 1*l.* a day in wages and fuel (coal being cheap). This is at the rate of between 6*s.* and 7*s.* an acre for the double work. Mr. COLLINS adds:—

"Howard's steam-cultivating apparatus has been working daily on my farm (consisting of about 800 acres, half tillage) commencing the second week in August. Much of my Clover sward has been converted into clean fallow, and thus I hope to get rid of that scourge to lea Wheat, the slug, from whose ravages the Wheat in this neighbourhood suffers extensively; my Wheat stubbles are all smashed up, and crossed to a depth varying from 6 to 10 inches, and are now ready to receive the frosts of the coming winter. As compared with last year the farm work was never so forward as now. Notwithstanding that I have turned to feed 12 oxen, which I have regularly worked for years past, I believe the animal labour will be further reduced in a few months."

(*b.*) Mr. PIKE, of Stevington, has cultivated 190 acres once, and 60 acres twice, from 6 to 10 inches deep in 40 days, including removes, for 23*l.* 16*s.* 8*d.* as wages, 4*l.* 13*s.* 4*d.* for beer, 20*l.* in coal, 50*s.* for oil, 6*l.* for horse labour, 1*l.* 6*s.* 10*d.* smith's work, 3*l.* 10*s.* repairs of engine, and 2*l.* 5*s.* for new shares, &c. This very explicit account results in a total expenditure of about 64*l.* on 310 acres once cultivated, being about 4*s.* an acre for single work—8*s.* an acre for the double work.

(*c.*) Mr. HENDERSON, of Sandwich, has cultivated 178 acres once from 5 to 7 inches deep in 27 days, the wages paid being 27*l.* 12*s.* 6*d.*, and the fuel and oil costing 16*l.* 10*s.*—44*l.* in all, or about 5*s.* an acre for the single work.

(*d.*) Mr. T. HOWARD, of Brigg, has cultivated 135 acres from 4 to 8 inches deep in 22 days; the wages, coals, and oil amounting to 28*l.* 10*s.*, or about 4*s.* 6*d.* an acre, and Mr. HOWARD says:—

"Sixty-five acres of what we have done with our cultivator is the most stubborn soil in our parish. It was ploughed last autumn with Mr. FOWLER's steam plough; and it could not under any circumstances have been ploughed with horses this autumn. I am very well satisfied with the quality and quantity of the work done."

(*e.*) Lastly, Mr. TURNEY, of Sharnbrook, near Bedford, informs us that he has cultivated 50 acres twice over, 8 inches deep, in 10 days, with a 10-horse engine; paying 6*l.* 5*s.* for wages, and 7*l.* 8*s.* for fuel, &c., and 2*l.* for repairs, or 15*l.* 13*s.* in all, being little more than 3*s.* an acre for single, 6*s.* an acre for the double work.

These particulars relate, it will be seen, almost exclusively to the subject of cost. They are a few of the large number of reports we have received, indicative of the fact that, whether by FOWLER, SMITH, or HOWARD, steam cultivation is at length largely, almost generally, in actual operation. In the absence of particulars as to character of soil, which is not always described, it is impossible to use these short histories for the purpose of determining the relative cost of the several systems; and both the relative quality of horse cultivation and that by any of these steam cultivators, as well as the more delicate and difficult question of relative quality of performance among the several rival machines, must be left for more detailed investigation, and longer experience to determine.

WE have matter for great thankfulness in the fact that there now does exist for all who desire to make use of it, a Public General Drainage Act. The landed proprietors of this country, desirous of improving their estates, the enterprising inhabitants of a district, anxious to provide for the reception and passage through the soil of the rains which fall but to fertilise, are no longer shut up to special legislation. Had it not been for the Inclosure Act it is probable that our common and waste lands would have remained pretty much as they were, and that agriculture would have continued circumscribed to the limits which bounded it at the commencement of the century, while manufactures would never have arisen to anything approaching their present importance. There are few districts that would have been hardy enough to venture upon the unknown *terrain* of special legislation. Our men of business, in building or otherwise planning for the purpose of increasing their worldly possessions, are in the habit of first sitting down to count the cost. In undertaking a new work, it is natural for the projector to calculate the probable expense, and upon this estimate he determines as to whether he shall invite tenders or not. The estimate may be merely approximate, but still it is a basis beyond which he knows he may allow a tolerable margin. In the case of drainage projectors who have commenced their work under a special Act, there was till now no possible way by which they could tell what the work would cost them before it was complete. Disagreements might arise between the applicants as to the execution of the Act. These disagreements may not have been commenced, but they were generally fostered by the lawyers interested in bringing business to their own offices. Subsequent Acts were rendered necessary to amend previous Acts, and thus the legal expenses grew to an enormous aggregate, and threw such a heavy burden upon the land in many cases that the proprietors intending to benefit themselves had better have left the floods to do their worst.

It was thus with the undertaking for "the Improvement of the river Nene, and the more effectual Drainage of certain lands in the counties of Northampton, Huntingdon, and Cambridge." The cost of legislation, three Acts having been necessary to bring this work to its present state, has been 30,000*l.* "This," as Mr. Bailey Denton says, "upon the 16,000 acres of land proposed to be benefited, shows nearly 2*l.* per acre expended upon parliamentary proceedings alone." At the rate of 5*l.* per acre 6000 acres of the 16,000 might have been completely underdrained with the money thus wasted. Such preliminary expenses under such a measure as the General Inclosure Act would not have exceeded 2*s.* per acre.

We are sorry to find from a letter of one of the Commissioners of the Nene Valley Works that that worshipful body is not likely to finish better than it began, and we now mention the matter in the hope that they may be shamed from injuring the interests of those they are in honour bound to protect. The Act of 1852, under which the improvements of the Nene River were to commence (it would be anomalous to say did commence), has been followed by other Acts, but its principle remained unchanged. That principle is expressed in the preamble of the Act of 1852. "Whereas by reason of defective drainage or liability to long continued floods, the value of certain lands adjoining and near to the River Nene, in the counties of Northampton, Huntingdon, and Cambridge, is greatly diminished; and the health of the inhabitants of the adjacent towns and districts is prejudicially affected," &c., the course of the river shall be straightened, its depth increased, and where impediments exist they shall be removed with a view to afford improved facilities for drainage and navigation. In the Admiralty Report recommending to Parliament the Bill of 1852, we find, too, the clear enunciation of the same object, and great stress laid upon it. "For while the river Nene was in its worst state, the land drainage had to be conveyed to the sea by new cuts and outlets, and it may be safely assumed that the present channel of the Nene, on acquiring its full depth [particularly prescribed in the Act], may be again resorted to as the best outlet for drainage; so that what with an improved tidal flow and more land drainage, it may be anticipated that the navigation from Wisbech to Peterborough may be improved." It therefore seems passing strange that these Commissioners instead of cleansing the Nene should actually propose to place a sluice in its bed between Peterborough and Wisbech. The promoters of the work possessed the one object of promoting the discharge of waters that were checking all their efforts to increase the produce of their lands, the county consented to be taxed to procure a free and unimpeded waterway to the sea, and it does appear surprising that a course should be proposed so entirely nugatory of the object of the Act of 1852, or the subsequent one of 1854. A sluice in such a river as the Nene, so liable to silt up, would be but an insignificant part of the inconvenience as a first consequence. It is the secondary consequences that are most to be feared, since the sectional area above the sluice would be diminished, and the effect upon the river below and on its outfall would be speedily felt.

The proposition is contained in a report issued by the engineer of the Commission, wherein it appears that the Commissioners, sensible that they have made a mess of it, are anxious to get permission from Parliament to close the whole affair, and to shake themselves free, if not of all actual liabilities, which are heavy, of any possibility of contracting fresh ones. We do not affirm that it really is so; and from the tone of that report an impression is conveyed that those liabilities have more weight than they should have; so that the proposal of a dam across the river calls very vividly to our mind the story of the man who, engaging to protect his friend's child through the forest, threw that child to the wolves that beset the sledge in the hope that he might himself escape a mauling. Should there not be the pledge of a dam, the opposition from one side of the river, which desires a means by which the fresh water may be held up in summer as a field fence to prevent the stock from wandering, and to supply them with drink, may be too powerful to allow of the Commissioners obtaining this final measure. There may be, and appearances would almost lead us to conclude that there is, such an arrangement, though it is difficult to believe that the Commissioners would sacrifice to their own interests the drainage committed to their care. We do not wonder that they are anxious to get free from their responsibility, and rid of the difficulties of enforcing the spirit of the Act so as to please those who wish the water kept *down* for drainage, and those who wish it kept *up* for navigation, or for the supply of fresh water as a field division; but there is a better and more honourable way out of the scrape than the one they seem inclined to listen to, and we can but hope they may find it out. To terminate their labours by placing an impediment in the bed of river in the face of this new Act of 1860, which inaugurates the freedom of our waterways from such obstructions, must be regarded as a piece of the most egregious folly, not to call it by any worse name.

Notwithstanding this and other cases of failure there are encouraging cases of success, even though the works have been designed and executed under a special Act. The facts connected with the Rye and Derwent drainage scheme, undertaken by the Earls Carlisle and Fitzwilliam, come the most readily to mind. Two streams which should have drained an extensive valley were obstructed by some locks and six mills of only 70-horse power collectively, "the chief stoppage being at a point where the united rivers once discharged themselves through a ravine which seemed placed for the purpose." The Act obtained in 1852 enabled the proprietors to buy up these mills. Steam as a motive power took the place of water, the dams and weirs were destroyed, the waters from the valley were carried off as they came down, fields that stood under water all winter were laid dry, and the health and productiveness of the entire district is increased to a surprising extent.

If this change could be wrought without the powers of a general Act, let us now behold what can be done with one. It is this uniting for the drainage of the entire river basins that we require, the works being commenced at the very *embouchure* of the river and every tiny underdrain cut with a due relation to that lowest point. The ability of a great general is seen more in the use he makes of a victory, than in the mere gaining of it. This Drainage Act is, to a certain extent, a victory over vested right. Having got it, it now remains to be seen what we shall do with it. A good and prompt use of this acquisition will certainly enable us to obtain more, for as this Act does not supply us with all the powers we desire, it must be employed as a stand point from whence to obtain the whole that is contended for, namely the full and ready means by which the majority of any district may combine to effect the enfranchisement of their water ways.

—— THE subject of washes, baths, and smears for sheep has been occupying the attention of the

Galashiels Farmers' Club, as it does that of every flock master in the kingdom many times every year. From the discussion introduced by Mr. Scott at the meeting we refer to, it will be seen that there is yet room for improvement, and we give here a remark of one of the speakers, calling the attention, as it does, of both agricultural societies and scientific men to a subject which has not yet adequately received it. Mr. Scott says:—

"I humbly think this question has been strangely overlooked. I do not think a more important one could possibly receive the attention of our national societies. I can hardly think the right materials should be far to seek. What we want is some sort of vegetable extract fatal to insect life; and surely, within the wide boundaries of vegetable poisons, there must be abundance were proper encouragement given by our societies to experiment and inquire into the subject. Spirit of tar and Tobacco liquor are both of them vegetable extracts. There is something in Tobacco very fatal to most insects, and were we permitted to cultivate the plant, I do not know if we would require almost anything else. As it is, with the high duty, and used in the quantities required, it would be very expensive indeed; but I just mention these to show that it is far more than likely that there are abundant other things that would answer the purpose equally well if we knew where to find them."

ON WINTERING STOCK.

[The following instructive paper was last week read to the Blandford Farmers' Club by Mr. John Ford, jun. of Rushton, near Blandford, Dorset—Steward of the Smithfield Club.]

The subject proposed for discussion has no doubt claimed the attention of farmers in all parts of the kingdom, especially at this season of the year. We all know that the land is cultivated in a very different way from what it was in the time of our forefathers, and, I may add, in our time also. It is well known that there is a much larger quantity of stock of all kinds kept, especially on arable farms, than was kept in olden times; and it is equally acknowledged by all practical men that it is advantageous to keep as much stock as we can possibly accommodate. In this immediate neighbourhood it behoves farmers to adopt the best and most economical system of wintering their flocks of sheep, as they are one of the mainstays of farms, especially of very poor farms.

I winter my sheep on Turnip land (in favourable weather) and let them lie as regularly over the land as I can, for the benefit of the succeeding Barley or Oat crop, giving them straw with a liberal allowance of roots, and hay once a day, until my ewes begin to lamb. I then give them hay twice a day, and roots as before; but in very bad weather I take them off the land at night, and put them in some sheltered situation near, knowing that the health of all animals depends much on protection from the inclemency of the weather. Indeed, by attention to this, we prevent many diseases and losses.

I believe that lambing well much depends on the regularity of feeding through the winter. To my ewes that breed twins I give a small quantity of cake or corn; and I find that by so doing my twins are nearly as good as the single lambs at weaning time.

I am inclined to think, that cake or corn given to ewes whilst suckling their lambs would amply remunerate us. On many occasions I have remarked how much food is wasted by ill-bred animals of every kind, especially by those that have bad constitutions, and by those also that have an inaptitude to fatten, whilst at the same time I have also observed, that a well bred animal with good constitution has been greatly damaged, or totally ruined for want of proper food and general good management. How necessary, then, is it, that the farmer should attend to his matters and keep his eye daily on his flock, and also upon his shepherd and upon his herdsmen.

Frequently has it occurred to me that we suffer great injury by neglecting our flocks, even for the shortest period; a day or two's neglect may require weeks of reparation. Providence or foresight are essential to successful sheep rearing, so that I may truly say, "Providence (or Prudence) is greater than Fate," or, as our shepherds would translate it, "luck,"

It is assuredly most desirable that we should encourage the rearing and fattening of sheep as much as we can. Our interests and the public benefit equally demand it.

I say with emphasis our interests, because a well managed sheep flock is one of the best investments of our capital and the basis of cereal success. Thus far with regard to sheep.

I will now call your attention to cow stock, and as the same principles apply I shall not occupy your attention at any great length. With regard to cow stock it is necessary that they should have a yard and a comfortable well strawed shed to lie in, and it is very essential that the shed should lie open to the south. You will find that in good and well littered lodging places the stock will thrive much faster than they will do even with a greater quantity of food consumed in discomfort and in undue exposure to the weather. I have often seen stock in winter "stuck" up under a hedge with unhealthy coats, especially in damp situations, with food apparently plenteous; but owing to exposure to the rigours of winter they have been so poor in the spring as to be worth less money than they were worth in the preceding autumn.

I am fully persuaded that there is more profit arising from good feeding and nursing stock well, than there is from keeping them in the open fields the greater part of the winter, or in wintering them with straw alone (a most cruel way) in the straw yard. I feed a quantity of stock with straw, to which is added a small quantity of roots and cake. The winter months being the proper time for threshing Barley especially, and also a good portion of other crops, we can always afford to give the stock plenty of straw for food, and for bedding, to make them comfortable.

You will find that by giving store stock in the straw-yard 1 bushel of pulped roots (which is inexpensive) mixed with straw chaff or husks of corn, and $2\frac{1}{2}$ lbs. of Linseed cake per day, or with 4 lbs. of green German Rape-cake, the cost would be for cake about 3*d*. per day, per head. There are different opinions respecting the most economical cake. I am inclined to give the preference to Linseed cake; but there is one thing that we must bear in mind, viz., that if the manure from the Rape-cake is equal to the manure from the Linseed-cake, the Rape-cake may possibly be the more economical cake of the two, as its cost is less.

Chemistry is a science, of which I profess myself to be somewhat ignorant; and therefore I will not (knowing "that a little learning is a dangerous thing") enter upon chemical subjects, to which I feel I could not do justice; but I will advert to a chemical fact, which others as well as myself may have found out without the aid of chemical science, viz., that it is highly necessary that we should be very particular as to what stuffs we purchase for feeding purposes, as there are so many advertised as being something extraordinary, Thorley's food for instance. He says no man should be without it who keeps a horse, cow, sheep, or pig; I keep all these animals without the aid of his food.

I was once persuaded to try a cask of it, but I shall not try another, unless some one can satisfy me of its good effect. I followed the directions given by the vendor, but I could not induce my cattle to eat the food sauced by it.

I have therefore discontinued it; since that discontinuance I see it is lowered in price 20*l*. per ton. He ought to be careful to purchase such things only as will return at least from 6*d*. to 8*d*. per lb. for beef and mutton. A judicious outlay of money and a proper application of the food purchased will always well repay us. One thing is certain, that an animal starved in winter will require half a summer to get it into store order; but an animal well wintered is half summered, the converse also being true, viz., that a well summered animal is half wintered. This then shows us the necessity of proper feeding, and also of general good management, regularity of feeding being one of its chief features.

The time was when corn growers looked "only" for a direct profit from corn, and thought but little about their stock. That time I trust has altogether passed away.

As an arable land farmer I look for indirect as well as for direct profit from my corn. Indeed I rely more for continued remunerating prices from corn and cake fed stock than I do from corn alone. I feel, moreover, also, that the higher I feed my cattle the more corn I shall be enabled to send to market.

I believe that the Dorsetshire farmers have the character of rearing and keeping more cattle and sheep per acre than the farmers of many other counties. One thing is certain, that if an animal will not pay for good keep it will not pay for bad. I firmly believe that cake given to cattle judiciously in winter, whether stores, fattening beasts, or dairy cows, would answer well. I am also convinced that dairy farmers would find it profitable to give their cows after calving 2 lbs. of Linseed-cake per day with their hay until Grass time; it would assist in keeping the cows in condition, whilst it would increase the quantity and quality of their milk.

The intentional drift of my paper, however inefficiently I may have prepared it, is to impress upon my hearers, whose interests are identical with my own, that to keep stock of all kinds as well as we can is real economy and for our welfare.

STEAM CULTIVATION.

Heath Farms, Mucking, near Stanford-le-Hope.—These farms, in the neighbourhood of the Stanford-le-Hope Station, were previously to this year in the occupation of a gentleman who, a sportsman rather than an agriculturist, suffered them to run to waste and ultimately to ruin. Two of them on either side of the Heath have been taken by Messrs. Blyth & Squier, of Stanford-le-Hope, since the failure of the former occupant; and during the past year, by steam-power and horse-power combined, they have been endeavouring to bring them into cultivation. How much there was to do may be inferred from the fact that on entering shortly after Michaelmas last year they found the fallow half of the farm had been wholly neglected, while the stubbles of the other half were as foul as corresponding management for a number of previous seasons could make them. Since that time they have grubbed up 10 acres of hedge-rows, they have whole-fallowed a large proportion of the land, they have cleared and cultivated a large extent of Swedes, Mangels, and Potatoes, and there was nothing in the condition of the farm when I walked over it last week to indicate that it had so lately been in such a miserable plight.

Of what assistance the steam plough and steam cultivator have been in the fallow process is plain on comparison of these farms with another portion of the same estate leased to other hands, where horse power only has been employed, and where the tenant himself admits that another year will be required before his farm will have reached the stage of improvement which the first year of steam cultivation has achieved.

Messrs. Blyth & Squier farm largely independently of this new taking, and what is more to the purpose of the present sketch they have had long experience of steam power in agriculture as the owners of several locomotive engines let out on hire for threshing purposes. And it was, I am told, rather as a field in which the necessary experience in steam ploughing might be easily and cheaply acquired, than as an investment of additional capital in farming that these farms were last year taken. And I presume that ere long, as the result of successful experience here, opportunities of steam ploughing, to be done by contract, will be offered to the farmers of that neighbourhood.

The Heath Farms, in the occupation of Messrs. Blyth & Squier, extend over 375 acres, wholly arable, on either side of the heath. They are over the whole extent extremely light land, and over two-thirds of it a poor gravelly soil. In the hollows it is deeper, and approaches in places a good sandy loam, but elsewhere, and for the most part, it is hungry shallow gravel, lying on the sandy gravelly detritus which here deeply covers the London clay. There is no clay near enough the surface to be used as a dressing of these poor sands. Chalk is brought a distance of some miles, but otherwise it is only by sheep-feeding that there is any chance of rendering these poor light sands capable of yielding good crops of Wheat. Certainly, if steam power is to beat horse power as the agent in such light land cultivation, it will beat it anywhere.

In addition to Fowler's and Howard's cultivating apparatus, both of which are at work on the farms, the new management differs from the old in a large use of artificial manures, and in the provision of feeding yards and houses in which farm-yard dung is to be largely manufactured. Two separate farmeries, both of them extended and improved, will provide barn and granary, yards for horses and for cattle, and stalls and boxes where pulped roots, chaffed hay and straw, and ground cake and corn will be converted into beef.

The rotation adopted will include of green crops as much as possible of spring and autumn growth. Trifolium and Rye-grass, Rye, and Vetches sown in early autumn, yielding food for sheep and cattle in April, May, and June, followed by Rape and Mustard—Mangel Wurzel, Turnips, Potatoes—one or other of these crops liberally manured and consumed on the ground or in yards will follow or precede Wheat, Barley, Peas or other grain crops. The double cropping of so large a portion of the land will give occasion for a great deal of cultivation, and in fact the work to be done will amount to a fallow annually of one-half the farm. Mr. Fowler's 10-horse engine and four-furrow apparatus, convertible at pleasure into plough or cultivator, has been at work more or less upon the Heath Farms since they came into the occupation of Messrs. Blyth & Squier; but last year was so wet that little could be done with it. Since March of the present year, however, 672 acres have been ploughed or cultivated at a cost of 380*l*., or about 11*s*. an acre. This includes wages, coals, tear and wear of rope, and estimated average expenditure in repairs and maintenance of engine. And it is in fact, the charge which Messrs. Blyth & Squier make against their farm, as they would against a customer, for the time and working of their engine and apparatus.

Fowler's 4-furrow apparatus, with the cultivating breasts, was set to work immediately following the harvest cart, and in fact often overtook the harvest cart, so that the engine had to stop until the horse-rake should clear the ground for it. The work was thus commenced in the midst of harvest, when the men worked long harvest days, and received high harvest wages. It has been energetically prosecuted since, and up till last week 24 acres had been ploughed, and 255 acres cultivated by Fowler's apparatus; and 275 acres had been cultivated by Howard's apparatus. Some of the land has been cultivated by Fowler and cross cultivated by Fowler, and then again grubbed by Howard's grubber. This acreage, therefore, refers to acres of work done, not in every case to fresh acres of land. The combined operation of these steam-drawn tools has been equivalent to a fallow. The autumn has been extremely favourable to the work, and some of the land walked over last week, though as foul as it could be after harvest, was clean—with enough of dead filth amongst it to show the condition in which it lately lay. The soil had been deeply stirred, and was in great lumps which smashed before a kick into perfect tilth. This was the result of a double operation with Fowler's cultivator and a single one with Howard's. Of course the exceptional condition of the land was the cause of so much work being needed. Where the land is clean, either a single smashing up with Fowler's cultivator, which at one operation moves the whole mass of the soil down to the depth at which it works, at the same time breaking it up without a regular inversion—or a single ploughing by which it is inverted as well as

wholly moved—is all that the land requires to lay it open to the great natural tiller—frost.

When it is foul of course the operation must be repeated as often as it is seen that the weeds retain their living hold of the earth; and in this case light land needs more frequent stirring than clays. In the case of a clayey soil and subsoil, the difference between the natural condition and that to which a single ploughing brings the land is much greater than that which is produced in a sandy soil by a similar operation; and if the weather be dry a single smashing up of a clay soil will thus kill a multitude of weeds. But in dry sands and gravels full of the Couch Grass which is natural in such fields, it is not enough to turn over or smash up the land; the filth needs to be combed out of it and laid upon its surface before the drought will kill it. A single operation with the mere cultivator or grubber on the stubbles is on such sandy soil of little avail; the tines of the implement do little more than leave a pathway moved behind each without displacing the whole body of the soil. The work needs to be crossed before the whole mass can be said to be moved. On such land, therefore, the superiority of Mr. Fowler's apparatus furnished with shares and cultivating breasts by which the whole of the earth is moved as well as broken up is especially apparent. And Messrs. Blyth & Squier put the single operation of Fowler's cultivator done by a 10-horse engine at the average rate of 4½ acres a day as equal to the double operation of Howard's cultivator done at the rate of 3½ acres daily, with an 8-horse-power engine. In general, however, Howard's grubber was used to cross Fowler's work, for which, the land having been once thoroughly moved, an 8 horse engine was sufficient; and in such a case the tool got over 6½ acres once daily on the average, 275 acres having been accomplished in 43 days. The first ploughing and cultivating at a depth varying from 8 to 12 inches of 280 acres by Fowler's apparatus has taken 60 days, during which 49*l.* 6*s.* have been paid as wages, equal to 3*s.* 6*d.* per acre. In addition to this, 1*s.* 6*d.* an acre is put down for labour of carting coals and water, which seems an excessive charge; 2*s.* 6*d.* an acre is put down for coals and oil, and 3*s.* 6*d.* an acre for repairs, maintenance of apparatus and wear of rope. Thus, in all, 11*s.* an acre are charged against the work. The expense of the work by Howard's apparatus has not been estimated, because the cost of repairs, though known and very great, is believed to have been to a great extent accidental and exceptional.

The cost of horses which the steam-plough in this case is to displace has on this farm been ascertained exactly, because everything—hay and corn—has been bought for them. There was nothing in the shape of food for horses or cattle on the land when entered. They have consumed 2 bushels of Oats and 3 trusses of hay weekly each, costing at least 15*s.* a week for the greater part of the year, and the cost of horse cultivation has thus been excessive. Such deep work as has been done for 11*s.* an acre by steam must have cost 14*s.* or 16*s.* done by horses. The difference in the quality of the work by steam-power and by horse-power respectively is less on light land farms like these of Messrs. Blyth & Squier than on any other—but the advantage of fully using the season and the weather is as great here as anywhere—and it would have been impossible by horse-power to have fallowed and cleaned the farm in a single year as steam-power has done it. It is expected hereafter that from 6 to 8 horses will suffice, along with the hired use of the steam plough at all available times, for the cultivation of the farm, which with its high-pressure management in repeated cropping, artificial manuring, high feeding of sheep and cattle, will, when in full trim and operation, well deserve another visit and report.

Home Correspondence.

Coppice Wood.—A large tract of land, both in the woodlands and the chalk districts of Hampton, is in coppice, the value of which varies with the quality of the underwood, as its quantity depends very much on the amount of timber and the character of the soil. In the woodland the growth is quicker, and with a greater variety than on the chalk. The older, or natural coppice consists chiefly of Oak, Ash, Birch, and Hazel, in the recent plantations Oak, Ash, Beech, and Spanish Chesnut. In the chalk district Hazel predominates, except in the recent plantations, in which we find the above-named varieties. In both districts great care has evidently been bestowed by the proprietors on this portion of their property, generally in their own occupation. We noticed some very well ordered Spanish Chesnut coppice in the parish of Hickfield, and the care taken to fill up the gaps in a Birch wood of some years' growth by planting Spanish Chesnut of some size, headed back to the height of the growing wood. Cutting coppice or plantation wood ranges from eight to ten or twelve years in the woodland, and from ten to fourteen in the chalk district, though extended sometimes in either case to longer periods than these. The value is said to reach 25*l.*, with an average of from 8*l.* to 14*l.* The coppice is usually held by the proprietors, who dispose of the fall by public auction. As the condition of the stools in their succeeding growth and permanent well-being depends very much on the skill and care bestowed on the cutting, this is generally performed by the woodman of the estate, and charged to the "coppice men" or purchaser as a separate payment; the remainder of the work is under his own management. This begins with throwing out, or the selection and trimming the wood for the various purposes, such as hoops, wattled hurdles, cow racks, sheep cages, and shares or fold stakes. The first of these needs some little notice. It is an old established trade, which has received such an impulse of late in some localities from the facility of carriage afforded by the railways, as in some cases to have encroached on the supply of hazel, the material used in making wattled hurdles, indispensable to the sheep farming of this country; a rise of from 1*s.* 6*d.* to 2*s.* per dozen is spoken of. This may tend to check the grubbing of coppice and hedgerows. The wood when thrown out, is rent, and shaved with an ordinary drawing knife, bound in bundles, of which we give the lengths and contents below with the names attached to each; sometimes the hoops are turned in the wood.

Names.	Lengths.		No. in Bundle.	No. of Withes with which bound.
	ft.	in.		
Middling ..	13	0	60	4 withes
Long Pipe ..	12	0	60	4 „
Short Pipe ..	11	0	60	„
Kilderkin ..	7	0	9 score	3 „
Firkin ..	6	6	12 „	2 „
Long Pink ..	5	6	14 „	2 „
Short Pink ..	4	6	16 „	2 „
Short Pink ..	3	0	20 „	2 „
Tumbril ..	—		—	—

The labour is paid by the bundle, the throwing out by the number of bundles of hoops, bavins, and any other things made from the wood thrown out. The remainder is made up into Birch broom bavins, ordinary bavins, the trimmings and shavings into faggots. As the labour connected with wood work is paid by the piece, and must be performed in a skilful and careful manner, it affords employment of a superior and healthy character during the winter months, and thus exercises a certain influence for good over those who might lack employment at the most trying season of the year; though it in no wise interferes with their return to field labour in the summer months. It also gives the proprietors an interest in a part of his property which is associated with the recreations which help to attract and attach the gentry of England to residence on their estates. *J. C. C.*

Culture of the Potato.—In the first and second week in April I planted 4 tons of Dunbar Regents on 7 acres of strong cold land, manured with 4 cwt. of Peruvian guano per acre, sown by hand in the drills, which were 2½ feet apart. I covered the seed with a single-breasted wheel plough, drawn by three horses, going once round each ridge; when finished the soil was left in great clods, it being very wet. The Potatoes being well up they were hoed twice and well hand-weeded; they were not soiled up until the haulm was well spread out, taking the opportunity after rain. The third week in July I perceived the fatal disease spot; eight boys were immediately set to turn the haulm on one side by hand turning it from west to east all one way; the single-breasted wheel-plough with three horses went up the row towards the south, stirring the soil about three inches deep, returning towards the north, lifting six inches of soil into the top of the ridge, covering the haulm half over. Although I had great faith in the plan, I did not like the look of the Potatoes the first day, but the next day I was delighted to see the haulm turning their heads nicely up between the rows. One acre was not soiled up. The Potatoes all looked well until lifting time, second week in October. The result is, those soiled over in July were of middle size, producing 405 lbs. each row, with about 4 lbs. diseased; those unsoiled producing very large Potatoes, 450 lbs. each row, with 50 or 60 lbs. of diseased ones to each row. Since they have been stored away those soiled keep well, with 1 to 2 lbs. diseased to the sack; those unsoiled keep badly, and I find from 20 to 30 lbs. each sack diseased. I consider turning over the haulm and stirring the soil has a great effect in stopping the disease, giving air and exposing the haulm to the sun's influence. There were a quantity of young Potatoes formed on the haulm covered over with soil, large enough for seed; the produce of the 7 acres average 400 lb. each row—280 rows = 50 tons. *Francis Lamb, Bailiff, Industrial School Farm, Hanwell, Middlesex.*

Societies.

East-Lothian: *Dr. Begg on the Bothy System.*—The following are extracts from a very interesting lecture on this subject reported in the *North British Agriculturist*:—

I do not hold that enlarged farms and improved agriculture necessarily result in evil to the working classes.

This may seem an unnecessary remark; but you must be aware that the contrary is a doctrine held by some, and that it receives some apparent countenance from the fact that the greatest degradation of the ploughmen is found in some of the most highly cultivated districts. But there cannot be any necessary connection. Indeed, the opposite result should take place. Progress ought to be the universal law, and I cannot doubt that if a good arrangement were made for ploughmen in connection with large farms, their position would be much better—in some parts of this county it is much better—than that of the "poor tenant bodies scant of cash" described by Burns.

Neither do I hold, as some have supposed, that the rural population of Scotland is more degraded or immoral than the population in some parts of our cities.

But it is startling to find that it is not uniformly more better, and that the relative immorality of our city and rural populations differs in some districts so widely from that of other lands. This point is fully illustrated in the last detailed report of the Registrar-General for Scotland. The rural districts of France give 4 per cent. of the births as illegitimate, whereas the proportion in Scotland is double, or upwards of 8 per cent.—the average being brought up by particular districts. This result is by no means universal in our land; for some of the rural districts of Scotland present a lower average than France. The comparison is, therefore, not so much between the country and city population as between the towns and country districts of Scotland and the corresponding districts of other lands.

Again I am very far from holding the opinion, as has been alleged, that better cottages or any mere physical arrangements will cure all the evils of the body politic.

Much more than this is necessary, and especially the Divine power of Christianity, but we are bound to level down all obstacles in the way of Christian progress, and one of the most formidable of these is a social system which sometimes bids defiance to decency and makes it next to impossible that Christianity can have free course in the homes and hearts of men.

It is no part of my creed that there is any necessary antagonism between the interests of servants and masters.

On the contrary, I believe that the interests of all classes of the population are identical, and that the permanent triumph of selfishness is impossible. Whilst masters are bound to give unto their servants that which is just and equal, there is no greater blessing to a master than an intelligent and trusty servant who regards his master's interests as his own. All classes must benefit by the reform which we advocate.

Having thus cleared away some misapprehensions which exist, allow me to state the principles which I do hold in regard to the cottages of rural labourers. It seems to me, in the first place, that as matters go in this country, the landlords are bound to supply, as part of the apparatus of a farm, not only a house for the farmer and houses for the cattle, but suitable dwellings for all the labourers regularly employed upon the farm.

This, moreover, must be done irrespective of the idea of getting separate rents for these rural cottages. No separate calculation is made for the rent of the farmer's house or of the stables and cowhouses; and neither should the landlord make the erection of ploughmen's cottages depend upon his obtaining a separate rent for them. No doubt under an existing lease the matter may be one of arrangement with the farmer whilst that lease lasts; but otherwise the rent of the farm must be held, as Lord Palmerston has said, to cover all, and all should be provided by the landlord in the first instance. We hear on every side of the great increase of rents in Scotland. We seldom open a paper without seeing some evidence of great agricultural progress, and of rents rising 30, 40, and 50 per cent. We see an account, for example of an estate in Dumfriesshire bought for 1000*l.* and now let for 800*l.*, and worth 20 000*l.* We see an account in the north of another bought for 9000*l.* and now let at 4000*l.* a year, and worth 115,000*l.* We see, from a report just published, that Mid-Lothian has increased in value last year by 10,000*l.*, or, at least, 200,000*l.* of capital; that West-Lothian has increased by 5000*l.*, or 100,000*l.* of capital; that Perthshire has increased during the last five years by about 34,000*l.* a-year, or nearly 1,000,000*l.* of capital. In these circumstances, it does not seem unreasonable to ask that, whilst all are making progress, the ploughmen and other labourers, who have been instrumental, to a considerable extent, in producing this wealth, should have their social position elevated.

Again, I hold as another principle that the employers of labour ought to take a deep interest in the social and moral welfare of those under their control.

A friend of mine lately heard a large farmer in the north express this sentiment in regard to the immoralities of his servants:—"If they do my work, I care not what else they do." This idea I have never heard expressed, and you will all repudiate it. It embodies a thoroughly false view of duty. We are responsible, at least, for doing what we can to promote the welfare of those under our charge, to remove temptations out of the way of those who act as our servants, and for giving our best influence towards elevating them in the social scale. I can imagine nothing finer than for a large farmer to act as a patriarch—like Abraham or Boaz—amongst his people, loving and being loved. The people are most susceptible of kindness and attention, and the willing and cheerful service rendered in return will be found an ample compensation.

Another principle I hold to be most important—namely, that the family system is the true basis of social morality. All experience proves that the Divine ordinance of marriage is the true remedy for many social evils, and the grand foundation of social progress. Wherever compulsory celibacy is established great mischiefs are sure to follow. Now, keeping these principles in view, what do we complain of in regard to Scotland? We complain, in general, that, whilst great progress has recently been made in many districts, all these principles have been violated, and that the arrangements in regard to farm labourers have by no means kept pace with other agricultural improvements.

This has sprung, in some instances, partly from the poverty or non-residence of landlords, but partly, also, from an erroneous idea that improved farming does not require the same amount of labour as a number of small farms. On this ground, when a number of small farms have been thrown into one, all the old steadings have often been pulled down, instead of being turned—as they might in many instances have been—into cottages. When this mistake was discovered, the price of new cottages has been grudged, and men have been huddled into bothies. Besides, out of terror of poor rates, men have sometimes extirpated the old population, and done the very thing which will ultimately be a fruitful source of pauperism. The old Malthusian bugbear was also very operative; and men cried out about over-population in the rural districts until awakened by finding that many of the best of the ploughmen had gone to the colonies, and that the wages of those that remained were rapidly increasing. The evil of which we complain—and which is an evil to all classes of the community—may be divided into two heads—first, an insufficient supply of cottages where cottages exist; and, second, the spread of the bothy and farm-kitchen systems, with all their evil results. In regard to the insufficient supply of cottages, I am delighted with several things in East-Lothian. You have no such thing as ploughmen living in bothies. All the farmers, moreover, that I have seen have been anxious for the improvement and

[illegible] of their cottages where that is necessary. A number of [illegible] admirable cottages have been erected in different districts, and you have here to some extent what is the very [illegible] of the system of ploughmen's accommodation—viz., a [illegible] for every ploughman. This must be a vast advantage to the men and their families, and I have no doubt [illegible] to the master only. Still, here as elsewhere, I find the two evils partly prevalent in regard to cottages—viz., a number of bad ones, and where new ones are erected the want still in some districts of a sufficient number. The main evil in the old class of cottages is that they have only one apartment. It is impossible that the decencies of life can be maintained in such circumstances, and hence a multitude of social evils. I never had my attention called to the mischiefs of these houses with one apartment—indeed I scarcely ever saw such houses—till I came to Liberton. Apart from decency, if infectious disease gets into the family the case is very sad—when death ensues there are no means of separating the dead from the living. You drag the body of a dead horse from the stable, but I have seen the humble family sitting at meals with one of the only two beds in the house occupied by a dead body. The natural feelings must be lacerated and gradually get blunted under such a process. I lately witnessed a striking contrast to all this in one of the new Liberton cottages of three apartments. Two persons were ill, the father and a daughter. They had rooms apiece and yet there was a large kitchen, in which the ordinary arrangements of the family could be carried on. The people themselves were remarking upon the difference with great thankfulness. But a good cottage not only prevents evils, but promotes a great amount of good. A man proceeds to acquire furniture, and to have something at stake. He is not so ready to flit at every term, and therefore he takes care to make himself more useful and agreeable. Farmers will very soon discover that whoever has the best cottages will get the pick of the market in choosing servants. But good cottages are no more necessary than plenty of them. Here another form of the evil is discovered. In some districts a few superior cottages have been erected, but the accommodation of many of the people has been left as defective as ever. Our talented Chairman (Mr. Hope, Fentonbarns) at the late meeting at Edinburgh, laid down a principle which, if adopted, would go far to meet the existing evil—viz., that there ought to be two good cottages for every plough required upon a farm. If this rule were carried out it would go far to cure many of our evils in the rural distict. A great obstacle has no doubt lately been removed in the way of cottage building; entailed estates may now be burdened with a large proportion of the expense of erecting them. Let us hope that large advantage will be taken of this Act. No doubt due economy should be observed in erecting cottages, and mischief often arises from the employment of the higher class of architects instead of intelligent country tradesmen. I have already referred to the enormous increase in the value of land, but if we examine what has been going on in England we shall see some admirable examples of enlarged liberality on the part of landlords. I could mention some excellent samples in Scotland also, but it may be less invidious to speak of England. I find that on the Crown lands of England no fewer than a hundred new cottages have recently been erected. The Duke of Northumberland has built 210 new cottages, and made 250 old ones equal to new, at a cost of 38,950*l.* Earl Spencer has built [illegible] new cottages, and repaired 143 others, at an outlay of 15,220*l.* But perhaps the most striking instance in England is that of the late Duke of Bedford, who has built 566 new cottages, all with two, and some with three bed-rooms, at a cost of 62,980*l.* besides erecting 30 other buildings in the form of new schools and teachers' houses.

What I complain of in Scotland is that of late years a vast proportion of our sympathies has taken an exclusive direction. The sympathy of the nation has been very largely expended upon paupers and criminals, and an enormous outlay has been incurred in erecting magnificent jails and poor houses. The poor's rates, during the last 20 years, have increased by nearly 500,000*l.*; whereas comparatively little has been expended, till recently, in promoting the comfort of decent working men, so as to keep them from becoming paupers and criminals.

The evils which prevail in regard to cottages, however, are as nothing in comparison of those which prevail in district where cottages were banished to make way for bothies. We sometimes hear of a model bothy—and such things no doubt exist as a rare exception—but the ordinary class of bothies for ploughmen which I have seen in the midland and northern counties of Scotland are all alike. A rough outhouse, with little or no furniture, except a bed, a form, some wood for fire, a chest for meal, and perhaps another for the ploughman's clothes. They generally contain from two to six or eight men each. These men, when they come in from their work, must light their own fires, and make their own everlasting brose. They have none of the real comforts of domestic life, and it is no wonder if they feel like a kind of outlaws from society. The case comes to be far worse when some of these men, as occasionally happens, are married—their wives and families sometimes living at a considerable distance, and only being visited occasionally by them. The very mention of such an arrangement is sufficient to condemn it. Now, we are sometimes challenged to prove that this is a system productive of pernicious consequences. We might answer that on the face of it it is unfair, and cannot bear good fruit. All the facts which can be established therefore, in my opinion, go to condemn the idea of lodging ploughmen in bothies, or carrying a system of compulsory celibacy; and I am confident that, as time advances, it will become more clear that pecuniary considerations, as well as every principle of Christian and social economy, require that cottages should be everywhere provided for ploughmen and labourers as part of the necessary apparatus of a farm, and the present bothy system of the north abolished.

No doubt a difficult question, in which you are interested, still remains—viz., what are you to do with extra labourers, not always required in the work of a farm, and yet at certain seasons indispensably necessary? I am not sure that this difficulty would be very formidable if you had the two good cottages for every plough for which Mr. Hope stipulates; but I have lately seen a system which might be introduced in rural districts of Scotland, and would go far to meet all the difficulties—I mean the crofting system of Annandale.

This system is totally different from the mere system of [illegible] from large farms. In some parts of Scotland even the system works very well, and the abolition of it has, I think, been a great mistake. But the crofts of Annandale have been introduced for the very purpose of meeting the demand for extra labour. They are, therefore, mixed with the large farms, so as to be convenient for this purpose. It has occurred to me that perhaps the [illegible] system of crofts, which I saw yesterday at Athelstaneford, was originally intended to accomplish the same result. But, at all events, I lately went down to Annandale, and spent a day with my friend Mr. Hope, and with Mr. Charles Stewart, the factor of Mr. Hope Johnstone—a man of great intelligence and experience—with whom I inspected about a score of the crofters houses, the whole number being 114. Nothing can exceed the apparent comfort of these people. They have each from three to five acres of land. They get leases of 19 years, but practically if they behave, they are not removed. They consist of all kinds of craftsmen, and others. They expend about 40*l.* or 50*l.* in the erection of their houses in addition to the wood and slates supplied by the proprietor. They give as much for the land as the farmers do; and, besides working up all the odd and waste places of the estate, they are always at hand to supply labour to the farmers. I ascertained that none of them owe a shilling of rent; that scarcely any of them ever become burdens upon the poor's fund; and that they not only give their children a good education, but are anxious that they should be taught Latin and the higher branches, that they may get on in the would. I was greatly delighted with these people, and still more to find that there were many more ready to advance the 40*l.* or 50*l.* as soon as crofts were laid off or become vacant.

Mr. SMITH, factor for Mr. Balfour, of Whittinghame, said—I will confine myself wholly to my own personal experience and observation, agreeing as I do with the sentiment, that facts should always be the main feature in such discussions as the present; and we all know well that what may be theoretically correct is not always practicable.

My experience has been a little varied. I resided several years both in the county of Inverness and in Ross-shire. Bothies are there, but they do not exist in full force. The cottage accommodation is abundant—particularly crofters' cottages. The accommodation of this description for farm servants is not perhaps what it should be, or what we could wish to see it, but then, as we are all glad to know, throughout the country generally there have been, and still are, vigorous efforts made for their improvement. But, however bad these cottages for the accommodation of farm servants may be, the cottages of the crofters cannot be said to be any better. Neither is the crofter himself in his position more comfortable than the ordinary farm servant. The one gets his house built for him and has no rent to pay: the other has to build his house, which—at least in the counties which I have mentioned—he is rarely or never able to finish; and a hard task it is for the crofter to make out his rent, while the servant has a certain engagement at fixed wages, stated hours, and other comforts provided. If the crofter ekes out the small income from his crop he must look for labour elsewhere; and we are led to understand that this labour, on the part of the crofter, comes in to supply the farmer. But I must observe that the farmers' necessities were at these precious seasons of the year—in spring and harvest time—and by taking the crofter for the purpose of supplying his wants, caused the crofter to neglect his own croft. I am aware, gentlemen, from what the crofters themselves have told me over and over again, that they do not feel their position all they wish, for they have frequently made the remark—"We often wish we had not given up our stated labour, because the croft is not of itself sufficient to support ourselves and families, and yet we always require to be about it. If anything goes wrong—if we or the children become unable to do our work—everything comes to a standstill; the crop also goes wrong and the season is lost." I take this to be the state of matters in the district of which I have spoken, the system of crofts is not to be trusted to for the supply of extra work required on the farm. It is not for the benefit of the crofters themselves. I say it is not for the benefit of the community in which crofts are anything like numerous—because in these very districts the poor-rates are double or treble what they are in districts where crofters are not known; and that, I hope, shows that the crofts themselves must be poor, and that they are a burden to the community where there are. Let us, then, get increased cottage accommodation on the farms in the meantime, and while that is getting, let us have the bothies improved where they at present are.

Mr. HUME, of Lawfield, said:—With all due deference, he did not entirely agree with the rev. Doctor in regard to the immoralities of the bothies, because he had had a little experience, and while he had opportunities of observing the results, he had not seen them as had been represented.

He himself had for many years had single men and young women in the kitchen, and as far as he knew nothing wrong had ever been the result. I was (continued Mr. Hume) asked the other day to attend a wedding—I confess I wish it had been my own)—which took place in a family of four daughters and three sons; the sons amiable and the lads an honour to their parents. That family lived in a cottage of two apartments. But near them lived a family in the same position and circumstances—the same number of young women and men—with whom the case was very different. I attribute this to the good counsel which the one family had received from their parents rather than to any other difference. He thought, with all deference to Dr. Begg, an endeavour should be made to incalculate sound moral principles, as the best means of preventing the evil to which reference had so often been made. To take from a party of cardplayers their pack of cards, and throw them in the fire, might not cause them to leave off that practice; or in the same manner, a drunkard, if the whisky were taken from him, could go and get more. But if each of them were warned against these vices, as calculated to ruin both their soul and body, it might have the effect of causing them to desist. It appeared to him that pride had a good deal to do with the position of many of the female servants; and the fact should be impressed upon them that a straw bonnet with plain trimming, which had been earned by virtue, was better than a crinoline-hoop and a veil earned at the expense of virtue.

Mr. DURIE, of Standingstane, said:—Dr. Begg and I are at one about one means of improving the social condition of the agricultural classes—viz., the increase of cottage accommodation; and, as I have said, I think we are in the fair way of carrying out this means in this county.

But the question comes closer home to Dr. Begg and others who take a religious view of it,—what is to be done to improve their moral position? Now, certainly, a good cottage does tend to improve their moral position, but it is after all one very small item in that direction. It has been held, for instance, that bothies are great obstacles to the moral well-being of the community, while it does not appear, even from the Registrar's returns referred to by Dr. Begg, that the bothy system has any direct influence whatever on the social evil he referred to. Aberdeen, which is unfortunately prominent for this evil, has no bothies, and Dumfries, which is nearly equal to Aberdeen in that respect, has no bothies; but is, on the contrary, the very hotbed from which we draw our ministers. Aberdeenshire has a large town within its limits, which might swell these unpleasant figures in the Registrar's return; but Selkirk, which has no bothies, and no large town, stands even worse in that respect: so that the bothy system has no influence on illegitimacy, so far as can be shown by these statistics.

After addresses from other speakers, Dr. BEGG replied. He said:—

The facts which have come out in the report of the Registrar, when properly grouped, demonstrate that compulsory celibacy—no matter whether it be under the bothy or farm-kitchen system—is productive of those evils which have led to so many remarks with regard to the state of our country. Reference has been made to the subject of crofters more than once. I wish to explain that there are districts in Scotland, I believe, in which nothing but the crofters' system can exist, that is to say, a number of poor districts in the Highlands, scraps of land under Grass and otherwise, which never can be converted into large farms. Whether the people succeed in making themselves comfortable or not is one thing, but whether they could work that land in any other way is a different question. I am confident from what I have learned from Mr Smith that crofts in certain districts are just the only way of meeting the circumstances of some parts of the country. But I do not advocate this system to any great extent, for I am all for progress—large farms wherever they can be had. I believe large farms with capital are generally much better than small farms, and that hinds are far better off than the little paltry crofters, scraping together their rents with great difficulty, and, in fact, having comparatively a miserable lot. I am, therefore, no advocate of that kind of crofts where you can farm better. But I am confident that in some places you can get nothing else. The crofts I referred to were those created for the very purpose of supplying the extra labour which is supplied here and elsewhere by different parties. I did not absolutely urge the farmers of East Lothian to adopt the system: for though I saw the system in Annandale and admired it, it remains to be seen whether it is applicable here. In one thing stated I most cordially concur. I do not believe that mere cottage building or machinery of any kind will elevate the population; and however much ministers may differ, I hold that they are bound to put themselves in contact with the people, and labour to the utmost for the purpose of their elevation.

Farmers' Clubs.

GALASHIELS: *Bathing of Sheep.*—Mr. SCOTT, of Mossilee, said:—Some here to-day will recollect when what is now one of the greatest lamb markets in Scotland was a very different affair—when, at what is now the great Lammas Fair, were to be seen only a few lots of pally lambs, and those mostly Cheviots. No better situation for a great market could easily be found. The place is central and the market stance first-rate—plenty of space for a hundred thousand. St. Boswells had long been the principal market for the top lots of Leicesters and Cheviots, but by and by things began to change. The Cheviot lambs began to be supplanted on the low-lying grassy farms by the cross betwixt the Leicester tup and Cheviot ewe. It was soon found that the half-bred lambs brought more money, and as the combing system expanded the demand increased for the long wool; and then, to keep this wool at its highest value, the old system of smearing with tar and butter (then nearly universal over this district) required to be discontinued. And this has been more especially the case since upon many farms where, in the first instance, the first cross was only ventured upon, half-bred ewes are now kept served with Leicester tups, and the lambs three-parts-bred. Hence the fine show of lambs now annually at St. Boswells and Lammas. As the long wool seems to be in as much demand, if not more than ever, it has become of all the more importance to have the wool preserved in fine order, and the sheep kept in as healthy and thriving a state as possible. Laid wool being now in but limited demand (being only required for some particular kinds of goods), the plan of keeping the wool white has long been introduced all over the border counties, as in most low districts. In the Highlands and some of the most exposed situations of Scotland smearing is still kept up as the best protection for the sheep in stormy weather, and from scab, while, at the same time, it destroys most of the vermin—such as cades and lice, if any. Other materials akin to smearing, but with the view of keeping the wool as white as possible, have been tried, and used rather extensively, such as a mixture of rough turpentine with grease, oil, &c., but the evil is that with these arsenic or some other poisonous ingredient must be applied, else the cades will not be destroyed, and there are none of them but to a less or more extent deteriorate the wool. These things are therefore not extensively applied to the more valuable qualities of wool. Hence the very great importance of a right bath—one that, while it has at least no injurious effect on the sheep, will effectually destroy the cades and lice; but it is very rare that lice are found on sheep (though I have known instances of it where the herbage was of a heating nature), but that which will kill the cade will easily destroy them. As for the tick, it must be placed in a different category altogether, and I may perhaps just as well say a word or two about it before leaving it. Bathing and the tick have little relation to each other. Cades and lice, if any, are bred on the sheep; ticks are bred on the ground. Dipping or bathing does almost nothing to protect sheep from its annoyance. Cades and lice live among the wool. Ticks do not enter among the wool at all. It only attacks the sheep on the places bare of wool, such as below the chin and the inside of the spalds, and these places can only be protected by being rubbed with a mixture of tar and train-oil, or something of that sort, of the proper consistency, that will not easily rub off, and this can easily be done without interfering with the fleece at all. It only exists in some limited localities to any extent. Its season of vitality seems to be April, May, and June, coming on the sheep sooner or later as the season is genial or otherwise. When it comes on the sheep it is generally about the

size of a pin's head. They eat their way in till they bury their heads in the skin, and there they will remain fixed in great numbers for weeks, sucking the very life-blood of the animal, till they grow and swell out often to about the size of a large Pea, when at last they fall off. What becomes of them after I am not naturalist enough to say. It is well known that there is a tract of hard land in this district infested with that nasty insect. Formerly when I had a regular stock throughout the year on the hill ground, the sheep were much annoyed with it, and I tried the plan I recommend with good effect; but now since so much of the out-field land has been broken in, and the sheep mostly all on the arable land in that part of the season, they are never annoyed with it at all. Cultivation seems to be fatal to its existence, there being none on the arable land. It will thus be seen that bathing is of little avail at all for preventing its attack on the sheep. Not one of the baths that have come out but pretends to be effectual for freeing the sheep of ticks, as well as everything else. This is simply ignorance, or quackery, or both. When smearing began to be laid aside, pouring was the next process. The materials most generally used were spirit of tar, tobacco liquor, and various other things according to fancy, but then the evil was again that most of these things affected the colour of the wool, besides the plan was attended with some other disadvantages. Though much quicker done than smearing, it was still a comparatively slow process, and, by opening up the wool, it exposed the sheep much more to the winter cold, while, unlike smearing, it added little or nothing to protect them from its severity; and then, by and by, too, when these articles came to be so extensively made use of, they began to be often so very much adulterated—just like some sorts of manures and other things now-a-days—that many people gave it up in hopeless disgust, when they found their labour and expense in vain, and even worse, for both the sheep and their wool would have been better let alone. Then came the dipping system. The best plan certainly, whenever we can discover the proper thing to dip with. It is much the easiest plan—a day or two and it is done. This is an advantage. At first many dipped with arsenic nearly alone, dissolved by an alkali; and, so far as I have been able to judge, arsenic, with the addition of soap, flour of sulphur, &c., is just about as good as any in use. We had soon a variety of these coming from all directions, all alike effectual—and all of them best, alike certified by a long catalogue of names linked tandem fashion. Startling losses have occurred with some of them, rather alarming as you know. Even with arsenic, and other of those mineral poisons, I think it has been sufficiently shown, from their extensive use, that with proper precautions there is really not very much danger. That is not so much the reason why I repudiate all those mineral poisons as a bath for sheep. If any one has reason to be pleased with them it is the manufacturers; for most of them have the effect of rendering the wool whiter if anything. But even this is a doubtful matter, for they will not render it either sounder or softer, but the reverse. But that is the least of the matter. They injure the whole system, they dry up and harden the skin, and they seriously injure the teeth. It is within my knowledge where in some instances they were nearly totally destroyed; and when not totally destroyed they are in some cases, far oftener than we think of, loosened, and the sheep hindered from feeding. In almost all cases it is 10 to 14 days before they recover into a right thriving condition. That alone is nearly 14 days keep lost. I can only say that I shall be glad to hear from those who have experience that these are not facts attendant uniformly on the application of these poisons. I would discard every one of them. A new bath has been sent out this season that pretends to be free of them. I have tried it at different strengths, but it is not effectual, besides it stains the wool. In short, it won't do. I cannot help thinking that this question is one of the very greatest importance to the farmer, so that while trying to do his sheep good in one way, he may not be doing them serious injury in another. It is of importance to the manufacturer that nothing should be applied that will in any way injure the wool, and it cannot be unimportant to any class that nothing should be applied that has the effect of lessening the supply of mutton; and if through their means something like a fortnight's supply of keep is thrown away over all the stock to which they are applied in Britain, the matter assumes serious proportions in this view of it alone. A word, then, regarding this great want which I humbly think we require yet to have supplied.

The Chairman, Mr. W. Paterson, said he had always found Biggs' dipping composition very good, which had one good quality, that it did not put back the sheep in condition. For pouring he preferred a mixture of turpentine, spirits of tar, and black soap, a mixture which was locally known as the Holylee composition. In his experience nothing was better than these two well known standards.

Mr. J. Hobkirk had always used what was called here Andrew Douglas's bath, which he believed to be ingrediently the same as the Holylee bath. In this there was about a wine glass-full of spirits of tar to each sheep, along with black soap and an infusion of Broom. With this mixture applied there was scarcely an insect left, and few would be seen even in the spring. He did not think that the opening of the wool in pouring is so injurious in its effects as Mr. Scott supposes. It keeps the beast warm in winter and defends it from the cold, besides preserving the quality of the wool. The objection to mineral poisons as dips was that it did not keep out the wet as in the other case. He believed that if they could be procured, vegetable poisons, such as the infusion of Broom, would take the place of minerals for pouring. With the composition he referred to, a man could manage three score of sheep a day, with a boy to pour. Upon the whole he did not see any advantage in dipping over pouring, and would rather prefer the latter method.

Mr. Scott said he would from his experience condemn all mineral baths whatever, and he would just ask those farmers present to compare the wool of their sheep that had been thus dipped, with others that had been otherwise treated. They would observe the wool falling off and loose, while in the other case it was close, well matted, and adhering to the sides. Instead of making a direct motion he would be inclined to recommend that the Club suggest to the Highland Society the propriety of offering a premium for the best dip or bath. He had tried all baths and was satisfied with none. *Abridged from Border Advertiser.*

Farm Memoranda.

Hampshire on the Chalk.—The farms may be divided into several classes. Those with down land and water meadow, those with either one or the other, and those with neither of the two. At one time it was deemed an essential requisite to a first-rate Hampshire sheep farm that it should have a down at one end and a water meadow at the other. Now, the farms that stand first, are rather those which have neither to rely upon. The use made of down or water meadow in a sheep farm are obvious, both give a facility in maintaining a breeding flock through the summer months, both are means of fertilising the arable land by supplying manure through the sheep-fold, but modern improvements, artificial manures, the general outlay of capital, and the enterprise of the flock-masters have enabled them to dispense with any such additions to the produce of their arable farms, and even on these farms to maintain a heavier stock than where these apparent advantages exist. Great as have been the improvements in agriculture of late years, there is perhaps no system which has found within itself more decided elements of improvement than the sheep farming of Hampshire, in which, step by step, the fertility and improved condition of the soil, and the head of stock on the farm, have by a mutual action and reaction advanced in sure progression.

With scarcely any exception, the agriculture of the western limb of the chalk district may be included under the head of sheep farming. The management has reference to the largest number of sheep that can be bred and reared during the year. To do this, by maintaining a breeding flock, very much forethought, management, and judgment is required. The growth of corn is apparently the ultimate object in farming, yet this is made subservient to the growth of food to be consumed by the flock at all seasons, no break must be allowed. In the best managed farms all rules of rotation have been discarded: to tie down a tenant farmer in this matter would be to cramp his energies, and cripple his power for real improvement. The great staple of winter and spring consumption, the Turnip crop, must be secured; if the land is low in condition, superphospate, guano, bone-dust, or some such addition to the usual supply of manure must be applied, this is sometimes followed in the case of the Swede fed off late by Vetches, followed by Rape or early Turnips: the land is then considered to be sufficiently "stout" to carry a crop of Wheat—nursery Wheat if late is found to answer best on so tilled ground. This prepares the way for Barley or seeds; if Clover is sown with the Wheat it postpones the Oat or Barley crop. It has been known that Wheat, Barley, and Oats have been followed by Swedes to which a competitive prize have been awarded though sown without the addition of artificial manure, an exceptional case, and only to be done on land of good quality and in first-rate condition, but supplying a fact which justifies the method of cropping, notwithstanding the condemnation that might be passed upon it by the old-fashioned leases of the county.

If the rotation of crops is the key to the farming of any soil or district, it would be impossible to supply it here. As the staple of the winter food is found in the Swede and Turnip assisted by a small breadth of Mangel, the latter often devoted by preference to the pigs, so the staple of the summer food and hay crop is in Sainfoin, varying from one-sixth of the whole farm to a much smaller proportion. This, which is allowed to stand sometimes only two years but generally much longer, is ploughed up and brought into cultivation generally by pressing, sowing with Oats, two fallows with green crops, and then corn; then there must be the arrangement by which Rye, Winter Barley, or Oats, Trefoil mixed with other Grasses, as Italian Rye, Rape, &c., secure an unbroken succession of food, and it is in securing these crops that the old four or five course has been broken through.

The introduction of Peas as an occasional crop also tends to disturb the regularity of succession; the practical effect of this is a higher character of farming and a greater produce in green crops, root crops, and corn. There are many Norfolk, Lincolnshire, and other immigrant farmers who have brought with them their prepossessions in favour of a more rigid adherence to the four-course system, the ridging the Swede, Turnip, or Mangel instead of the general custom of drilling on the flat, drilling all corn instead of pressing and sowing broadcast, and the two-horse team and one-horse harvest cart instead of the waggon and three-horse team.

And on some farms the latest adaptations of machinery are found. Such is that at Red Rice, between Andover and Stockbridge. This property is divided into several important farms, one held by an intelligent Norfolk farmer, who leans to the system which is followed in that county. In some parts there is a considerable portion of coppice: though many superfluous hedge rows have been removed, their positions are to be distinguished by the isolated Oak trees still standing; the public roads which intersect the property are bounded by well ordered quickset hedges, a very pleasing feature. The land of the home farm consists of arable and Grass, the latter mostly in the Park, and naturally of an inferior quality, though much improved by the care bestowed upon it. The arable land is farmed on the four-course system, in the Norfolk style, roots ridged, and the corn all drilled. It is remarked that Clover is little affected by a rapid succession. The farm buildings occupy a rectangular space 180 feet by 114 feet, inclosing two open yards. The liquid manure from the stables, to which there is access without passing into the yard, from the fatting stalls for eight bullocks, cow stalls for six cows, and the piggeries, is drained into a tank, whence it is carted to the land. In the north east corner an 8-horse fixed steam engine drives the threshing machinery, grinding and saw mills, and pumps the water from a well which, about 100 feet deep, sunk into the chalk, for distribution throughout the buildings, supplies the cottages, of which there are several on a model plan, and a tank at a higher elevation to supply the mansion. This tank is placed over a brick building, which forms an excellent store for Potatoes or anything requiring protection from frost. This unfailing supply of water in a district where water lies so far below the surface gives a great value to the machinery by which it is commanded. The comfort and moral well being of the labourers in well ordered cottages is here specially cared for. *J. C. C.*

Reviews.

The Farmer's Almanac and Calendar for 1862. By Cuthbert W. Johnson. Ridgway.

The New Farm Almanac and Year Book of Progress for 1862. By John C. Morton. Blackie.

Thorley's Illustrated Farmers' Almanac for 1862. Thorley.

They are all necessarily compilations, packing as closely as possible pictures of the present, histories of the past, and anticipations of the future which have been already scattered about in agricultural publications. As to the last of these divisions, the first and last upon our list still give in detail monthly memoranda for the guidance of operations on the farm. In the second, this is curtailed to the very smallest dimensions, in the belief that readers have past numbers to refer to, and that they have experience—which is the best guide of all. Room is thus given for a more than usually full report under the first of the sections named above, of what has been doing in the agricultural world during the past year. And steam cultivation, in particular, has occupied the attention of the compiler.

As to anticipations, we have those only which are either invariably found in almanacs—reports of events in the astronomical world, or if in the agricultural world, which come round with astronomical regularity: the usual fair lists, for example, given in all the almanacs. Agricultural Societies are enumerated more fully in Johnson's Almanac than either in Morton's or Thorley's. In the first too we have that poetical garnishing and characteristic kindly gossip in which substantial agricultural information and advice have always in its pages been set. In the third, garnishing is attempted in accordance with the profession of the title page, but the illustrations are entirely valueless—prints of poultry completely unrecognizable, and cattle, horse, sheep, and pigs, perfectly worthless—illustrated headings to the monthly calendar, and a picture of a crowd at Bingley Hall or Baker Street, where all the cards of prizes won by cattle fed on Thorley's food are gathered together on the wall.

We are glad to find that among predictions for 1862 none of the Almanacs pretend to foretel the weather. The only prediction of any unusual character in an almanac—occupying 13 of his pages—is a prediction of the winner of the Derby, given by a sporting prophet who writes for Mr. Thorley.

Miscellaneous.

The Annual Cattle Show of the Smithfield Club will once again be held at the West-end of London. It is now 22 years since it was moved from Goswell Street to the Baker Street Bazaar, during which period it has continuously improved. The show this year exceeds in entries any of the preceding, and the lists comprise the names not only of the well-known exhibitors of the

best prize specimens in Devons, Herefords, Shorthorns, Southdowns, &c., but also those of his Royal Highness the Prince Consort, his Royal Highness the Prince of Wales, and many noblemen who take a lead in agriculture. The days appointed for the admission of the public are the 10th, 11th, 12th, and 13th December, and it is confidently expected that the show this year (the last at the Baker Street Bazaar) will fully sustain its national reputation.

Steam Cultivation.—There is a story told of a gentlemen who wrote a treatise upon Chinese Metaphysics by looking out "China" and "Metaphysics" in the Cyclopædia, and uniting them together in (what the chemist would call) a "mechanical combination." Something similar to this would be his task, and his reward, too, who should venture to enunciate his struggling thoughts upon the bifold topic of "steam" and "agriculture;" who should dare to expose the twin-embryo, by premature delivery, to the wintry atmosphere of that respectable planet in the solar system (lying somewhere in the embraces of Mars and Venus) which, if it has one permanent mark or character stamped upon it in the eyes of heaven, has that of martyring its pioneers and stoning its prophets. *Hoskyns.*

Calendar of Operations.

NOVEMBER.

Berwickshire Merse Farm, *Nov.* 4.—During the past month the rainfall of 16 days amounts to only nine-tenths of an inch. The weather continued unusually mild until last week, when we experienced a touch of winter; for this month opened with a sharp frost followed by a storm of rain and sleet. The ordinary work of the farm is well advanced, and some few have ventured to do some broad-sharing with a fair measure of success. A considerable portion of Wheat seed has been recently committed to the ground in good order, and if open weather continued the breadth sown will exceed what we are accustomed to. The Turnip crop cuts up well, and a good supply is now in store. If the storing of Swedes is not far advanced it is chiefly owing to the continued growth of the bulbs. The Potato crop affords quite a contrast to this. In some places the Regents have not yielded a ton and a half to the acre; and if bargains had not been made previous to sorting, many would rather have given the tubers, good and bad, to the cattle. Reds are not nearly so bad, but after the experience of last year the acreage is limited. In the prospect of a full crop horned cattle have been in good demand, and sheep bring extreme prices. It will depend on the state of trade whether the farmer is to clear any profit between buying and selling. The tups being at present among the ewes, they get some extra meat, but they will find the pastures very fresh after the close of the season. Continued threshing points to Oats as being the only full crop; the quality however of the cereals is in general good. *J. T.*

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended November 14; observed by Mr. J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air.				Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
	Max. in Sun.	Max. in Shade.	Min.	Mean.				
	Degs.	Degs.	Degs	Degs.	Degs.	Ins.		
Friday 8 ..	64.0	54.0	27.5	43.2	45.5	..	S.E.	29.22
Saturday 9 ..	70.0	45 0	29 5	43 5	43.5	..	N.W.	29 34
Sunday 10 ..	[illegible]	45.0	27 5	43 5	43.5	0.20	S.	29.00
Monday 11 ..	59 0	46.0	33.5	42.8	44.0	0.12	S.W.	29.45
Tuesday 12 ..	53.0	49.0	29.0	40 0	44.0	0 04	S.	29 60
Wednesday 13 ..	42 0	44.0	28.0	35 5	44 0	0 03	S.	29.56
Thursday 14 ..	42.0	40.0	33.0	37.0	42.5	1.05	W.	29.21

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Book on Agriculture: *Chemicus, J B.* Morton's Cyclopedia of Agriculture (Blackie) for a systematic work on agriculture—or the new edition just about completed of Arthur Young's Farm Calendar (Routledge), which is much cheaper, may serve your purpose.

Carbolic Acid: *G Fenn.* It is the active principle in MacDougall's disinfectant which will answer your purpose—but where it is offered for sale we do not know.

Carob Beans: *Young Farmer.* They are an article of general sale, to be had in any quantity; and they are a useful cattle food. Any one in Mark Lane will get them for you. They are called Locust Beans, and cost about six guineas a ton just now.

Cheese.—Can any of our readers inform a Correspondent who inquires of the large cheese presented to her Majesty by some parish in Somersetshire, some few years since; the weight of it and its history?

Kohl Rabi: *Agricola.* We have to apologise for delay owing to a mislaid letter. Kohl Rabi need not be stored. Mangels should have been stored by this time. Kohl Rabi may be stored along with them—but they may also be left standing on the ground, and may be consumed there by sheep any time during winter or before the season when it will sprout again.

Lime: *Holywell.* It is best put whether on field or garden in compost with vegetable mould. Lay up lime shells and old turf, ditch scourings, &c., together in a heap for a month, then turn the whole over and cart or wheel it on to the land either in autumn or spring when the land is dry; do not bury it deeply. Soot may be put broadcast on the land in early spring and left for the rain to wash it in. A mossy Grass field should be harrowed roughly now and receive a dressing of ammoniacal manure, or guano, or sulphate of ammonia in spring.

Poultry: There is still but a very moderate supply of poultry, and much of that is of inferior quality. Were it not for the quantities of different kinds that come in from abroad, the market and the business transacted in it would often be on the smallest possible scale. We believe public attention is now being aroused in the right quarter, and we hope we may shortly chronicle a great improvement. Trade is dull.

Threshing Machines: *R.* Machine-threshed Barley has till lately been much injured for malting, but now our best machines are harmless. Mr. Garrett's machine was lately tested and reported on at Leicester as accomplishing its purpose without the slightest injury to the grain.

Wind Power.

J. R. PEILL, 17, New Park Street, Southwark, S.E., begs to inform intending purchasers that he has now increased facilities for Manufacturing the Patent WIND ENGINES for Pumping, Grinding, Chaffcutting, Pulping, &c.

Prospectuses and all information may be obtained by enclosing one postage stamp, and a Wind Engine in full work may be inspected on the Premises daily.

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SHEET GLASS, Stock Sizes, 16 oz.

Boxes included.	3rds.	4ths.
11 by 9, 12 by 9, 13 by 9, 14 by 9 .. / 12 „ 10, 13 „ 10, 14 „ 10, 15 „ 10 ..	14s. 0d.	12s. 6d.
13 „ 11, 14 „ 11, 15 „ 11, 16 „ 11 .. / 14 „ 12, 15 „ 12, 16 „ 12, 17 „ 12 .. / 18 „ 12, 19 „ 12, 20 „ 12 .. / 16 „ 13, 17 „ 13, 18 „ 13 .. / 19 „ 13, 20 „ 13, 21 „ 13 .. / 16 „ 14, 17 „ 14, 18 „ 14 .. / 19 „ 14, 20 „ 14, 21 „ 14 ..	16s. 0d. per 100 feet.	13s. 6d.

English Glass of the above sizes, 18s. per 100 feet.

SMALL SHEET SQUARES, in 100 feet Boxes.

6 by 4	6½ by 4½	7 by 5	7½ by 5½	11s. 6d.
8 „ 6	8½ „ 6⅝	9 „ 7	9½ „ 7½	
		10 „ 8	10½ „ 8½	12 6

Boxes 2s. each, returnable at full price.

GLASS FOR ORCHARD HOUSES,

As supplied by us to Mr. Rivers.

20 in. by 12 in. / 20 in. by 13 in. / 20 in. by 14 in. / 20 in. by 15 in.	16 oz.	21 oz.
Common ..	13s. 6d.	£0 18s.
Superior do. ..	16 0	1 3
English Glass ..	18 0	1 9

The above prices include the Boxes.

Perforated Glass for Ventilation. Patent Plate and Polished Plate Glass. Ornamental and Coloured Glass.

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Linseed Oil, Genuine White Lead, Carson's Paints, Paints of various colours ground ready for use.

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Established 1750.

Fig. A.

Fig. B.

PRESERVE JARS.

Figs. E.

Fig. C.

Fig. F.

Fig G.

Fig D.

Fig. H.

Fig. D.

Fig. I.

Fig. A. HAND GLASSES.

12 inches ..	6s. 0d. each
14 „ ..	7 0 „
16 „ ..	8 0 „
18 „ ..	9 0 „
20 „ ..	10 0 „
24 „ ..	12 0 „

If open top 1s. extra.

Fig. B. PROPAGATING GLASSES.

2 inches ..	0s. 3½d. each.
4 „ ..	0 5½ „
6 „ ..	0 8 „
10 „ ..	1 4 „
12 „ ..	1 9 „
16 „ ..	3 6 „
18 „ ..	5 0 „
20 „ ..	7 0 „

Fig. C. MILK PANS.

6 inches ..	0s. 6d. each.
10 „ ..	1 0 „
14 „ ..	1 9 „
18 „ ..	2 9 „
20 „ ..	3 3 „
22 „ ..	3 9 „
24 „ ..	4 6 „
26 „ ..	5 6 „

Fig. E. PRESERVE JARS.

	Without Lids.	With Lids.
3 inches	0s. 4½d.	0s. 6½d. ea.
4 „	0 6	0 9 „
5 „	0 8	0 11 „
6 „	0 10	1 2 „
7 „	1 0	1 4 „
8 „	1 4	1 8 „
9 „	1 8	2 2 „
10 „	2 0	2 8 „

Fig. D. HYACINTH GLASSES.

Common .. 3s. 0d. per dozen,
Improved .. 3 6 „

CROCUS GLASSES.

Common .. 2s. 0d. per dozen.
Improved .. 2 6 „

Fig. F. HYACINTH DISHES.

6 inches ..	1s. 0d. each.
9 „ ..	1 6 „
12 „ ..	2 6 „

Fig. G. CUCUMBER TUBES.

1d. per running inch.

Fig. I. ROLLING PINS.

1½d. per running inch.

Opal Ditto.

14 inches ..	3s. 6d. each.
16 „ ..	4 0 „
18 „ ..	4 6 „

Fig. H. FISH GLOBES.

	With Feet.	Without Feet.
8 inches	1s. 9d.	3s. 6d. each.
10 „	2 3	4 0 „
12 „	3 0	4 6 „
14 „	4 0	6 6 „
16 „	5 0	9 6 „

Intermediate Sizes in proportion.

Crystal Glass Shades, Ebony and Gilt Stands, Gas and Lamp Glasses, Chimneys and Globes, &c.

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Bile
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Drainage water
Draining
Dunder
Dung
Dutch rushes
Dyeing
Earth
Earth nut
Earths
Earths, alkaline
Earthy matter in the air
Earthy silicates
Earthy substances in plants
Effervescence
Egg, white of
Elaine
Electricity, influence on plants
Elements
Embryo
Epsom salts
Equivalent
Excrement
Excrements of sea-fowl
Exhaustion of soils
Expansion
Explosion of fire-damp
Faints, distiller's
Fallowing
Farm-yard dung
Fat
Fat of animals
Feathers
Feeding off with sheep
Ferment
Fermentation
Fertility
Fibre, woody
Fibrin, animal
Fibrin, vegetable
Finings
Fir-ashes
Fire
Fire-damp
Fish refuse
Fixed oil
Fixing ammonia
Flame
Flax
Flesh
Flint
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Flour
Flour, damaged
Flowers
Flowers, their effect on the air
Fluorides
Fluorine
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Food, chemical use of
Food of plants
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WM. CUTBUSH, Jun., Barnet Nurseries, Barnet, Herts, begs to invite an inspection of his fine STOCK of FRUITING and other VINES, consisting of all the best varieties in cultivation. Also to his fine stock of Specimen, Half-specimen, and young Plants of NEW HOLLAND PLANTS, INDIAN AZALEAS, and STOVE PLANTS.
CATALOGUES on application.

Cæsarean Nurseries, Island of Jersey.

STRONG FRUITING VINES (of best sorts) 2s. 6d. each, or 25s. per dozen.
PYRAMIDAL FRUITING PEAR TREES (of best sorts), 1s. 8d. each, or 20s. per dozen.
EVERGREEN OAKS (in pots), 30s., 40s., 50s., 75s., and 100s. per 100.
CHINESE ARBOR-VITÆS, (in pots) 30s., 40s., 50s., and 75s. per 100.
SILVER STRIPED EUONYMUS, 20s., 30s., 40s., 50s., and 75s. per 100.
ULMUS SAMIENSIS, or UPRIGHT GUERNSEY ELMS, 30s., 50s., and 75s. per 100.
A large GENERAL STOCK of FRUIT TREES and SHRUBS at equally low prices. CATALOGUES on application.
Charles B. Saunders, Nurseryman—Nov. 23.

Vines for Fruiting in Pots.

J. AND J. FRASER, Lea Bridge Road Nurseries, N.E., beg to offer strong VINES with well ripened wood of the best varieties.
A CATALOGUE will be forwarded on application.
The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

Orchard House Trees.

J. AND J. FRASER, Lea Bridge Road Nurseries, N.E., having a fine stock of—

PEACHES	APPLES
NECTARINES	PEARS
APRICOTS	PLUMS and CHERRIES

in Pots, well set with bloom buds, beg respectfully to offer them to the notice of intending Purchasers.
A CATALOGUE will be forwarded on application.
The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

Orchard House Trees.

HUGH LOW AND CO. have to offer—
APRICOTS

APPLES	NECTARINES	PEARS
CHERRIES	PEACHES	PLUMS

In pots. Wood thoroughly well ripened and well set with bloom buds. Prices moderate.
Clapton Nursery, London, N.E.

Fruit Trees.

WM. PAUL (Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, London, N.

Fruiting Vines.

WM. PAUL (Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, London, N.

Roses.

WM. PAUL (Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, London, N.

Ornamental Trees and Shrubs.

WM. PAUL (Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, London, N.

Hollyhocks.

WM. PAUL (Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, London, N.

Orchard House Trees in Pots.

THOMAS JACKSON and SON have a fine Stock of the above, well established in Pots, large and full of Flower Buds, many of them having this season borne 40 to 50 fruits; they consist of

CHERRIES	PEARS	NECTARINES
PEACHES	GRAPES	PLUMS

3s. 6d. to 7s. 6d. each.
Nurseries, Kingston, S.W.

Wall-Trained Fruit Trees.

THOMAS JACKSON AND SON having a great extent of walls devoted to FRUIT TREES, respectfully invite an inspection of their large stock of very superior Dwarf and Standard-trained Trees. Many of them having borne fruit this season are specially suited for planting in houses for fruiting the first year.
Nurseries, Kingston, S.W.

Fruit Trees.

JAMES GARAWAY AND CO. call attention to their stock of the above, comprising

APRICOTS, NECTARINES, PEACHES	Standard and Dwarf-trained	APPLES, CHERRIES, PEARS, PLUMS	Dwarf-trained, Standard, and Dwarf-quarter.

All of first-rate quality and in good condition.
The STANDARD PEARS are unusually fine, and will be sold at a very low rate to purchasers of quantities.
CATALOGUES and prices free by post.
Prices to the Trade on application.
James Garaway & Co., Durdham Down Nurseries, Bristol.

M. A. LAKE begs respectfully to invite attention to a large stock of well-grown FRUIT TREES of the choicest kinds, consisting of dwarf-trained Peaches, Nectarines, Apricots, Pears, Plums, Cherries, and Apples; Standard Pears and Plums, Gooseberries and Currants, an immense stock of the best varieties. Vines of sorts, Rhubarb Roots, &c., English and Turkey Oak, Spanish and Horse Chestnut, Poplars of sorts, Sycamore, Birch, Weeping Ash, Standard Double Blossom Pinks, and Scarlet Thorns, very fine for immediate effect; Red Cedars, Arbor-vitæs, English Yews, Common Laurels, and transplanted Hollies. Prices on application.
The Nursery, Bridgwater.

COX'S ORANGE PIPPIN. — This magnificent variety obtained all the Prizes for Dessert Apples of "the best flavour" at the Great Fruit Exhibition at Kensington Gore, on the 6th inst. See report in *Gardeners' Chronicle* of Saturday last, *passim*.
Very fine strong Trees having well-ripened wood are supplied at the following prices:—Dwarf Bush, 2s.; Dwarf-trained, 3s. 6d.; Pyramids, 2s. 6d.; Standards, 2s. 6d.
Charles Turner, The Royal Nurseries, Slough.

MINNIE BANKS and COMET.
Coloured Plate, 1s. 6d. per post.
The above FUCHSIAS possess first-class properties, and show a striking advance on all others which have been sent out since the white corolla varieties were introduced.
E. G. Henderson & Son, Wellington Road Nursery, St. John's Wood, London, N.W.

CHÆROPHYLLUM BULBOSUM.
Figured in *Gardeners' Chronicle*, Oct. 5, 1861.
New Seed, per packet, 6d. and 1s. each.
The BULB CATALOGUE free, and the BULB GUIDE on receipt of 18 postage stamps.
E. G. Henderson & Son, Wellington Road Nursery, St. John's Wood, London, N.W.

New and Rare Plants.

MESSRS. E. G. HENDERSON AND SON respectfully call attention to the following:—
SEDUM CARNEUM VARIEGATUM, introduced by Mr. Von Siebold from Japan, of whom they have purchased the entire stock.
EPIGYNIUM LEUCOBOTRYS, figured in the "Illustrated Bouquet."
PENTAS ROSEA KERMESINA, very useful as a winter-flowering plant for Drawing-room Bouquets.
PETUNIA BRITISH LION, fine habit, rich crimson.
CAMELLIA ETOILE POLAIRE, carmine, scarlet-striped.
COLEUS VERSCHAFFELTI, bright bronze crimson leaves.
LAPAGERIA ROSEA, newly gathered Seeds. Trade supplied.
CLOTH OF GOLD GERANIUM, 1s. 6d. and 2s. 6d.
GOLDEN FLEECE GERANIUM, 1s. 6d. and 2s. 6d.
GYNERIUM ARGENTEUM (PAMPAS GRASS), 3s. and 3s. 6d. per dozen. Strong at 1s. and 1s. 6d.
Wellington Road, St. John's Wood, London, N.W.

American Plants, &c.

MESSRS. WATERER AND GODFREY'S CATALOGUE for the present season is now ready, and may be had on application. It describes fully all RHODODENDRONS worth growing, and contains a List of AZALEAS, HARDY HEATHS, and other American Plants, as well as a summary of the General Stock of the most extensive Nurseries in England.
The Catalogue may also be had at Mr. May's, 1, Wellington Street, Strand, W.C.
Knap Hill Nursery, near Working, Surrey.

To the Trade and Others engaged in Planting.

MESSRS. WOOD AND SONS, Old Kent Road, beg to inform the above that in consequence of a portion of their Nursery being required for Building purposes, they are induced to offer the undermentioned Trees and Shrubs at very low prices:—Lombardy, Canadian and Black Poplars, English Elm, Acacias, Limes, Birch, Alder, Sycamore, Laburnums, Weeping Willows, Standard Thorns and Almonds, 10 large Weeping Ash, Standard Pears, Plums and Cherries, a few large handsome bearing Mulberries, and other Fruit Trees; Lilacs of sorts, bushy, 3½ to 8 feet; Evergreen Privet, 2 to 4 feet; Guelder Roses, Ribes, Filberts, Euonymus, Viburnums, Bladder Sena, &c., besides other Nursery Stock.

Heriotfield Nursery, Leith Walk, Edinburgh.
Established Upwards of a Century.

THE SUBSCRIBER begs respectfully to intimate that Messrs. David Reid & Son having retired from the Nursery Trade in Edinburgh, he has acquired the Lease and purchased the whole extensive STOCK of FOREST, FRUIT, ORNAMENTAL TREES and SHRUBS in the above old-established Nursery, the business of which will be carried on by the Subscriber as hitherto.
The Subscriber begs respectfully to thank his friends and patrons for the liberal support he has received since commencing business in Edinburgh; and in making this extension of his Nursery Trade, he respectfully solicits a continuance of their kind patronage. To clear part of the Ground, the Subscriber can offer several Lots of the following HARDY ORNAMENTAL DECIDUOUS PLANTS and SHRUBS, all recently transplanted and well rooted, including fine specimen Weeping Elms, 10 to 15 feet in height; also, fine plants of the following:—Cedrus Deodara, Araucaria imbricata, Aucuba japonica, Portugal and Common Laurels, Variegated Hollies, Lilacs, Walnuts, Poplars, Arbor-vitæ, Pinus Cembra, &c., all of which will be disposed of at very moderate prices.
Robert T. Mackintosh, Nurseryman and Seedsman, 12, Melbourne Place, George IV. Bridge, Edinburgh.
N.B.—Noblemen and Gentlemen in want of Gardeners, Land-Stewards, and Foresters for the present Term.—The Subscriber has on his Register the names of a select few whose character and qualifications may be relied upon.

The Northampton Nurseries.

JOHN PERKINS respectfully calls the attention of noblemen, gentlemen, and others engaged in Planting to the following ORNAMENTAL TREES and SHRUBS &c., all of which are in the best possible condition for removal. Having been frequently transplanted, they can be confidently recommended to remove with the most certain success. From 4000 to 5000 Cedrus Deodara, perfect specimens, averaging from 1½ to 8 feet, and all the intermediate sizes; also a large stock of Wellingtonea gigantea, from 1 to 4 feet; Thujopsis borealis, 1 to 3 feet; Cupressus Lawsoniana, 1 to 3 feet; Picea Pinsapo, 1 to 4 feet; Picea Nordmanniana, 1 to 4 feet; Araucaria imbricata, 1 to 4 feet; Pinus Cembra, 1 to 5 feet; Thuja aurea, 1 to 3 feet; Cedar of Lebanon, 2 to 6 feet. Also every other variety of Ornamental Trees and Shrubs worthy of cultivation may be had.

TRANSPLANTED FOREST TREES.

Ash, 2 to 3, 3 to 4 feet.
Beech, 2 to 3, 3 to 4, 4 to 5 ft.
Chesnut, Spanish, 1 to 2, 2 to 3, 3 to 4 feet.
,, Horse, 1 to 2, 2 to 3, 3 to 4 feet.
Elms, grafted English, 2 to 3, 3 to 4, 4 to 5, 5 to 6 feet.
,, Cornish, 2 to 4, 3 to 4, 4 to 5, 5 to 6 feet.
,, Scotch or Wych, 2 to 3, 3 to 4, 4 to 5, 5 to 6 feet.
Fir, Spruce Norway, 1 to 1½, 1½ to 2, 2 to 3 feet.
,, Scotch, 1 to 2, 2 to 3, 3 to 4 feet.
,, Silver, 1 to 2, 2 to 3 feet.
Fir, Balm of Gilead, 1 to 2, 2 to 3 feet.
,, Larch, 1 to 1½, 1½ to 2, 2 to 3 feet.
Sycamore, 2 to 3, 3 to 4 feet.
Hazel, 1½ to 2, 2 to 3 feet.
Maple, Norway, 2 to 3, 3 to 4 feet.
Oaks, English, 1 to 2, 2 to 3, 3 to 4 feet.
,, Turkey, 2 to 3, 3 to 4 feet.
Poplar, Black, Italian, Lombardy, Ontario, White Abele, 2 to 3, 3 to 4, 4 to 5, 5 to 6, 6 to 8 feet.
Privets, from 400 to 500,000, Strong, 1 to 2, 2 to 3 feet.

From 2 to 3 million of Quick or White Thorn.
From 2 to 3 million of Gorse or Furze.

FRUIT TREES.

Standard and Dwarf-trained Peaches, Nectarines, Apricots, Plums, Pears, Apples, and Cherries. From 15 to 20,000 extra strong Gooseberries and Currants.
Extra strong SEAKALE and ASPARAGUS for Forcing.
Prices of the above upon application to John Perkins, 52, Market Place, Northampton.

Dutch and other Bulbs.

ROBERT PARKER begs to inform his friends and patrons that his PRICED and DESCRIPTIVE CATALOGUE of the above, containing selections of the finest varieties in cultivation, is now ready, and will be forwarded post free on application.
Exotic Nursery, Tooting, Surrey, S.

Hyacinths and other Bulbs.

WM. CUTBUSH AND SONS' first importation of HYACINTHS, TULIPS, &c, has just been received direct from Haarlem. They are unusually fine. Early Orders are respectfully solicited.
All the First Prizes have been awarded our Collections wherever exhibited during the last seven years.
DESCRIPTIVE PRICED CATALOGUES post free.
Highgate Nurseries, London, N.

A COLLECTION of BULBS for CONSERVATORY or WINDOW and OUT-DOOR DECORATION. Sent to any address, carriage paid, for 21s. Containing 20 choice named Hyacinths; 12 mixed ditto, colours separate; 4 Polyanthus Narcissus; 40 Tulips, various, for pots and border; 6 Jonquils, 6 Ixias, very choice; 100 Crocus, four colours, separate; 20 Anemones, mixed; 50 Ranunculus, mixed; 50 Snowdrops; 20 border Narcissus; 6 English Iris; 6 Spanish Iris.
Half the above for 11s. 6d.
☞ The Collection may be modified to suit the taste or convenience of Purchasers.
B. J. Edwards, 222, Strand, London, W.C.

Hollyhock Seed—Sow at once.

PAUL AND SON'S unrivalled Collections of the above are now ready in 12 fine distinct named varieties, in sealed packets. 5s.; 6 varieties do., do., 2s. 6d.; packets of fine mixed, 1s.; also a large Stock of fine healthy plants (see CATALOGUE now ready, post free on application).
Old Nurseries, Cheshunt, Herts.

Superb Double Hollyhocks.
Saffron Walden Nursery.

WILLIAM CHATER'S 15th ANNUAL DESCRIPTIVE and NEWLY CLASSIFIED LIST is now ready, and will be forwarded to any address on receipt of one postage stamp.
William Chater, Nurseryman and Seedsman, Saffron Walden, Essex.

Superb Hollyhocks.
Eighteen Thousand Plants of Named Varieties, including the best in Cultivation.

R. B. BIRCHAM, in offering the above begs to observe that considerable advantage would accrue to purchasers by receiving their plants in autumn instead of spring. By shifting into larger pots, and placed where they are protected from the *extremes* of wet and cold, the plants will become extra strong for spring planting, when an *earlier* and *stronger* bloom will be obtained, ripen more seed, &c.
CATALOGUES forwarded upon application.
Hedenham Rosery, Bungay, Suffolk.

Hardy Japanese Plants, New Roses, &c.

JOHN STANDISH has great pleasure in submitting the above to the consideration of his friends and the public in general, far exceeding in interest any that he has ever had the opportunity of sending out at any one time.
For a DESCRIPTIVE LIST of NEW FERNS, HARDY JAPANESE PLANTS, NEW ROSES, &c., see *Gardeners' Chronicle* for the first Saturday in every month.
Besides the above J. S. has a fine stock of CONIFEROUS PLANTS, HARDY SHRUBS and TREES, and a very large stock of VINES, which he can offer at reasonable prices, CATALOGUES of which will be shortly ready for distribution.
The Royal Nursery, Bagshot, Surrey.

Hardy Scarlet Rhododendrons and other American Plants.

JOHN WATERER has the pleasure to announce that his ANNUAL CATALOGUE of the above popular plants, as exhibited in the Royal Botanic Gardens, Regent's Park, London, is now published, and will be forwarded on application. Intending planters and amateurs desirous of blending colours are invited to possess a copy, as faithful descriptions of all the RHODODENDRONS are given.
The Catalogue contains a selection of the best and really Hardy CONIFERS, with heights and prices, the whole of which having been removed the past spring are in a capital state for transplanting. Also EVERGREENS and ORNAMENTAL SHRUBS and TREES of the leading kinds.
The American Nursery, Bagshot, Surrey, near the Sunningdale Station, South Western Railway; also to be had of Mr. John Kernan, Seedsman, 4, Great Russell Street, Covent Garden.

Winter and Spring Flowering Plants.

F. AND A. SMITH are now supplying fine plants at moderate prices of the following:—
*Acacias, *Azaleas, Cinerarias, *Camellias, *Chrysanthemums, Cyclamen, Cytisus, Clianthus, Carnation (Tree), *Echeveria, *Epacris, *Ericas, Eutaxias, *Gardenias, *Heterocentrum, *Kennedyas, *Lechenautia, *Jasminum grandiflorum, *Monochætum, Pelargoniums, *Passifloras, *Primula, double and single; *Solanum, *Oranges, &c. [Those marked thus * are either in bud or fruit at the present time.]
GENERAL CATALOGUE gratis.
Dulwich, Surrey, S.

Flag of Truce.
New Double White Azalea indica.

F. AND A. SMITH have much pleasure in offering the above splendid novelty, which is justly celebrated as the best double variety extant. It has obtained unprecedented testimonials of merit, and the general admission of all who have seen it that it is the "finest" yet produced for its large double flowers, purity of colour, abundance of bloom, and neat compact habit of growth.
Plants will be sent out in June, 1862. Full description and price will be published early in spring.
In consequence of an accident, the new varieties Clapham Beauty, Prince of Orange, and Princess Royal will not be sent out till further notice.
Dulwich, Surrey, S.

WILLIAM BARRON, Elvaston Castle, can supply strong and remarkably well rooted Plants as under:—
BERBERIS DARWENI.—The most beautiful of the tribe, fit either for the Flower Garden or Game cover. Pheasants are very fond of the berries, which are produced in profusion.
Strong Plants, 3 years old, 20s. per 100.
Strong Plants, 1 year old, 12s. 6d. per 100
ABIES DOUGLASI.—A highly ornamental and valuable timber tree, the same as the tall flag pole at Kew; excellent plants 3 years old, once transplanted, 25s. per 100
PINUS LARICIO.—A valuable timber tree, 18 to 24 inches, 70s. per 1000.
If taken in quantity, a reduction will be made.
Remittances to accompany Orders from unknown correspondents. Post Office Orders payable at Derby.

Exhibition of Chrysanthemums.

JOHN SALTER, F.R.H.S., invites the PUBLIC to VISIT his unrivalled Collection of these beautiful flowers, which are now in FULL BLOOM. His WINTER GARDEN alone contains several thousands of plants, and presents a coup d'œil unique in this or any other country. Free admission every day except Sunday.

Versailles Nursery, William Street, near Hammersmith Turnpike, W.

Can be Seen at Sunningdale Nursery, Sunningdale Station, South-Western Railway.

CHARLES NOBLE invites inspection, and would remind all interested, that his RHODODENDRONS have taken First Prizes at the opening Show of the Royal Horticultural Society, and every other show at which they have been exhibited during the last two years.

RHODODENDRONS for forcing; KALMIAS for forcing; and a magnificent stock of all the finest kinds of Rhododendrons in the world. CONIFERS and Hardy EVERGREENS by the 100 or 1000. ROSES and a General Nursery Stock well worthy the inspection of intending Planters or Nurserymen.

SCOTTISH ARBORICULTURAL SOCIETY.— The Annual General Meeting of this Society was held on the 6th inst., when the following Office Bearers were elected.

OFFICE BEARERS FOR 1861.

President—John J. Chalmers, Esq., of Aldbar.

Vice-Presidents.

Professor Wilson, University.
The Right Hon. the Earl of Airlie, Cortachy Castle, Forfarshire.
Mr. J. Balden, Lennoxlove.
Mr. Robert Philip, Auchlunkhart, Keith.
Mr. John Maclaren, Hopetoun.

Secretary—Mr. John Sadler, Edinburgh.
Treasurer—Mr. John Anderson, Nurseries, Perth.
Auditor—Mr. Thomas Methven, Stanwell Nursery, Edinburgh.

General Committee.

Mr. Ballantyne, Jun., Dalkeith.
Mr. Gilchrist, Castlemilk.
Mr. McCorquodale, Scone.
Mr. P. S. Robertson, Nurseryman, Trinity.
Mr. Gardiner, Forester, Eglinton Castle.
Mr. John Lamont, Inverleith Nursery.
Mr. R. Foulis, Fordel, Inverkeithing.
Mr. J. Thomson, Forester, Abernethy.
Mr. J. Tweedie, Forester, Champfleurie.
Mr. D. Campbell, Forester, Wemyss Castle.
Mr. Menzies, Forester (late) Cortachy.
Mr. Lindsay, Forester, W. Shandon, Helensburgh.
Mr. P. Gorrie, Forester, Dalkeith Park.
Mr. M'Gregor, Forester, Dunkeld.
Mr. Maclaren, Forester, Darnhall, Peebles.

PRIZE ESSAYS for 1862.

An Award of 5*l.* will be given for each of these deemed worthy by the Judges.

I. Introduction and Cultivation of the newer Coniferæ and other Forest Trees, with special reference to the Climate of Great Britain and Ireland.

II. On the Successful Raising of Two Crops of Scotch Fir in succession on Moorland. The crop reported on to be not less than two years old.

III. The Best Method of Rearing and Maintaining Live Fences; with an Account of the Plants best fitted for filling up Gaps in old Hedges.

IV. The Results of Mixed and Unmixed Plantation.

V. The Species of Timber Trees suitable to the various Soils, Elevations, and Exposures, and the effects produced on the different varieties.

To be lodged with the Secretary on or before Sept. 1, 1862.

The Gardeners' Chronicle.

SATURDAY, NOVEMBER 23, 1861.

THE death of the late Prof. ISIDORE ST. HILAIRE brings to our recollection his SOCIETY OF AC-CLI-MA-TI-SA-TI-ON (what an awful heptasyllable!), and the consequences that have or should have flowed from its institution. This is a subject, not wholly indifferent to us, for have not we also a Society with this resounding name? What then, let us ask, has been done in Paris in the way of acclimating either animals or plants? The answer to this will probably be a key to the future reply of our own institution.

It would be so impossible for a stranger to report satisfactorily upon this subject, that we should have feared to touch upon it had not Mons. CARRIÈRE, a very competent authority, relieved us from the difficulty. In his work, *Les Hommes et les Choses*, published four years ago, we find all that is required to form a safe judgment upon French acclimating. What, he enquires, is meant by this word? Its true signification is "to change or modify the nature (*essence*) of a species, so as to enable it to bear the temperature and influences of a new climate." What evidence have we that such a result has ever been obtained? "I dont require," says M. CARRIÈRE, "many cases; give me one, in either the animal or vegetable kingdom. It is impossible to do so—for no proof exists. No one can deny that the *Société zoologique d'acclimatation* was a still-born child, the very name of which announced its inutility. Poor acclimating Society! powerless to acclimate anything, not even the smallest worm, or the lowest insect. What has it done? except make a prodigious noise. Not that I blame it for that; it has done all that it was possible to do, and so when it became aware of its impotence among animals, it altered its line of march and fell back upon Vegetation, where it hoped to be more successful. Vain hope! It here found the same obstacles as before; plants were discovered to be just as intractable as animals. —— And hence the association, established with the best intentions for the purpose of *acclimating* animals, became reduced to spend its means in *introducing* plants. It ought therefore to have been called the Zoological Society for acclimating plants; but in that case, to say nothing of so ridiculous a name, it would have avowed itself the rival of the societies of horticulture and agriculture. Were we to judge of the future by the past, its career is pretty nearly closed, for the fruit it has hitherto borne displays unmistakeably its utter impotence. Did it think to display its utility by the meeting on the 17th Feb., 1857, when it gave prizes for the introduction at second hand of high priced tropical plants, such as Orchids for instance, and distributed its medals to gardeners because there was nobody else to receive them. We confess that at this meeting on the 17th February the Zoological Society of Acclimatation resembled nothing so much as a dying person listening to prayers for the dead; it announced its approaching dissolution by exhibiting the state of debility to which it had fallen, without having been able to bring forth *anything*; when it shall have finally perished it will have left no other trace of its existence than *a senseless name.*"

These are sharp words and merited; but they are not ours. It must however be confessed that the proceedings of the French Society were unworthy the men who founded it, and who ought to have known better. They set out in pursuit of a Chimæra, and have never been able even to sight the thing. If the Society has not wholly perished as Mons. CARRIÈRE anticipated, and still occupies a fine position at the gates of the Belgravia of Paris, it still remains in the same state of paralysis, unable to do any one part of what it undertook to do, for the very simple reason that there is nothing to be done. A man may accustom himself to eat horseflesh, because his stomach is an organ with wonderful powers of adaptation; but he will not therefore acclimatize himself in Nova Zembla or the crater of Etna.

We wholly agree with M. CARRIÈRE that no one instance of acclimatation is known; such cases as have been referred to by its advocates are mere blunders if they have any existence whatever. The truth is the term is misapplied, and beings are said to be acclimated when they have only been introduced. Infusorial plants will grow in a solution of arsenic or corrosive sublimate; but they have the same power when first generated there as after having existed in such infusions for years. This power of resisting poisons is not acquired but inherent. It is frequently said that the Araucaria was once a greenhouse plant, but has now become hardy; the reason for the opinion being that it formerly was sheltered carefully at Kew from frost. But there is not a *scintilla* of evidence to show that this tree was ever tender; gardeners thought so—that was all.

Let us trust that the failure of the Paris Society to accomplish the purpose it announced will be taken as a warning here; and that well-meaning but ignorant zeal will not waste English money upon such a scheme. If gentlemen and ladies choose to subscribe money for the purpose of introducing foreign plants and animals, they engage in an intelligible and practicable adventure, but if they try to acclimate them they may be certain that the issue will be the same in London as in Paris.

—— MR. JAMES LOTHIAN, writing in the present month's *Phytologist*, mentions a curious instance of NATURAL GRAFTING to be seen at Limecraigs, an ancient residence of the Argyll family, near Campbelltown in Argyleshire. The mansion, a square building, is approached by an avenue of fine old trees, while surrounding the house, and scattered through the park, are other fine specimens, whose huge trunks and beautifully formed heads are objects of picturesque beauty. At the end of a small bridge near the house, stands one—of what kind is not stated—which exhibits a remarkable instance of the natural union of two branches. This tree in its early stages had evidently become forked, that is, it formed two leading top branches. After growing in this manner for a series of years, one branch appears to have started ahead of its companion, and the other as if seeing it was to be left behind, turned inwards and engrafted itself with its neighbour. So complete is the union, that no mark or scar appears to give the least indication how it was effected. There it stands, forming a complete ellipse of some two yards long, with the union as perfect above as at the fork below.

—— The EARLY VICTORIA PEACH is a most desirable new variety, raised by MR. RIVERS, and exhibited during the past fruiting season. In an orchard house it commenced to ripen on August 5, about a week earlier than its parent the Early York. The fruit is about medium size, pale yellow where shaded, dark dull maroon where exposed. The flesh is melting and juicy, and the flavour most delicious. When exhibited it proved to be highly meritorious as a variety for orchard house culture, being decidedly superior to the Early York, which is perhaps the best flavoured of all the very early sorts previously known.

—— The EARLY ALBERT PEACH is another new variety, raised by MR. RIVERS. The fruit it bears are round, of medium size, and coloured of a pale or creamy tint on the shaded side, and of a lively light crimson where exposed. The flesh, which is of excellent flavour and very tender and melting, is quite pale at the stone, from which it separates freely. This promises to be a very desirable early Peach.

—— The VICTORIA NECTARINE, to which we have already alluded (p. 850), deserves to be thus more prominently mentioned. It was raised by MR. RIVERS, as stated at the page above referred to, from the Violette Hâtive fertilised by the Stanwick, and has all the merits of the latter variety without its defects. The flowers and leaves are those of the Stanwick, but the kernel is bitter like Violette Hâtive, thus proving it to be a true cross. The fruit has all the appearance of the Stanwick, and retains its peculiar richness of flavour, but the flesh has a deep stain of red around the stone as in its mother. The fruit does not crack in the ripening process, which takes place a fortnight later than in Violette Hâtive, and a month earlier than in Stanwick. The Fruit Committee of the Royal Horticultural Society have given it a First-class Certificate.

—— The early ripening of the foliage of the PARISIAN TREES is attributed to drought by "G. F." a correspondent of the *Florist*, who writes moreover from personal observation. The soil in which the trees grow, from being constantly walked over, becomes consolidated, so that rain is prevented from penetrating to the roots, but runs off by the water channels. This is very much the same opinion as that we have already expressed in reference to the causes of the languid condition of many of the trees to be seen in our own metropolis, where between paving stones and macadamised thoroughfares, the roots are as it were fortified against the moisture which is a main element of their nutriment. "G. F." suggests as a remedy the laying just beneath the surface a series of 2-inch pipes, with outlets at short intervals, these being connected with the water mains, and frequently charged in dry weather so as to saturate the soil. We have no doubt whatever that drought is the greatest of the evils with which trees so circumstanced have to contend, and this seems to afford a good remedy. This underground mode of conveying water would moreover be less incommodious to pedestrians than that of surface watering.

——We learn through the *American Medical Times* that Dr. TORREY has presented his very extensive herbarium, the fruit of 40 years' assiduous labour, together with his valuable botanical library, to the trustees of Columbia College, who have provided accommodation for them, together with a residence in the college for Dr. TORREY. The herbarium is said to embrace examples of nearly all the collections of the Government expeditions, from that of 1819 under Major LONG, to the present time; and also to include abundant illustrations of the Floras of Europe, Asia, South Africa, and Australia. Dr. TORREY does not, it appears, intend abandoning his botanical pursuits, but hopes under the auspices of the College, to prosecute them under more favourable circumstances.

FRUIT TREES UNDER GLASS.

I READ in No. 41 some observations on orchard-house culture by a Correspondent whose signature is "W. P. A.;" these were noticed and commented on by "T. R." in No. 42.

In your last Number "W. P. A." with remarkable ignorance of the etiquette of public correspondence, introduces the name of Mr. Rivers when noticing the remarks of "T. R." I happen to know the proper name of "W. P. A.," but while he shelters himself under that signature, I cannot address him publicly by it, indeed I think it would not be good policy, for there is more freedom in writing (where a gentlemanly tone is not deviated from) under some nom de plume than under one's proper name. If "W. P. A." had selected any other three letters for his signature, I should have held it sacred to him, and not have lifted the veil.

There is something very entertaining in watching the effects of time on any new practice in gardening. It is nearly 30 years since Mr. Rivers introduced the Manetti Rose stock from Italy in the shape of one small rooted cutting sent in a "bookseller's parcel," through Messrs. Longman & Co. For nearly 20 years after its introduction it was the "best abused" thing in existence. Nearly all the writing gardeners had something to say inimical to it. It is now acknowledged by all the principal Rose growers to be "the staff of Rose culture," and is now propagated by millions, not only in Great Britain but in all the United States of America where gardening is practised. The almost universal popularity of this stock for Roses is

owing to its nature being understood, and the advice given years ago by Mr. R. to bud it close to the surface and to keep the stock below the bud always covered with earth, being followed.

I mention the history of this remarkable Rose stock merely to illustrate the tendency in the minds of English nurserymen and gardeners to doubt the merits of anything new in culture, but they are not alone in this, for all European cultivators, except the Russians, who are quick and imitative, are equally slow.

Orchard houses have been brought into notice 10 years; they have made and are making rapid progress in spite of opposition from carping writers, who only declaim against them without trying their hands and heads at their simple management.

If such people could only know the pleasure to be derived from orchard-house culture, opposition as in the case of the Manetti stock would at once cease, and even "W. P. A." would handle the pruning knife rather than the pen.

"Truth is the child of Time." The orchard-house idea expands every year, and experience is gathered slowly but soundly. When the culture of fruit in cheap houses was first recommended it was imagined that the method was only adapted for small gardens and small gardeners, and was at once gone into by hundreds of amateurs who saw the simplicity of the system and the pleasure to be derived from it. What a change has now taken place! Large orchard-houses, health-giving as well as fruit-giving, are rising up over the whole face of the country, and many a "fair lady" who can breathe the dry air of an orchard-house in autumn and spring, not only with impunity but with pleasure, has reason to be thankful for the invention.

It is on account of the elastic, healthy feeling (perhaps apparently) given to the air by dry gravel paths that makes them more eligible than paved paths for the exercise of the aged or the delicate invalid, requiring the climate of Italy. A house 100 or 150 feet long and 24 feet wide, with a broad and well-kept gravel walk down its centre and an avenue of Peach trees formed by planting standard trees 10 feet apart on each side of the path, and placing among them and on the side borders (there are three paths) trees in pots, is about the most complete method of laying out a large orchard-house that can be imagined.

As to trees in pots, they are always of the highest interest. My trees have very recently been top-dressed. A look into their roots as they were exposed, and the taking away the superfluous masses of fibres, was a look into the book of Nature most valuable to a reflective mind. One seemed to unveil the anatomy of the tree. With what apparent sagacity the rootlets seem to have made their way above the surface of the mould in the pot to feed on the surface manure given to them so abundantly last summer. And then a tree covered with its blossom-buds, as mine are at this moment, thus closely seen into, is more interesting than the gayest parterres, because it leads the mind to the future, and to reason on the marvellous works of Nature.

I am not surprised that men of science and good and clever gardeners feel pleasure in the culture of fruit trees in pots, for it is only the man with natural refinement (one of "Nature's gentlemen") or the educated that can thus look through nature to its Author. Nothing can be more perfect than a first-rate English garden, and when one sees Peacheries, Vineries, and Pineries, and walls covered with healthy well-trained trees, one cannot feel surprised at gardeners who pass their lives in such places thinking that fruit cannot be grown without such accessories. Still there are many clever good gardeners, and I have much pleasure in calling some of them my friends, who, instead of carping at the attempts of humble amateurs, assist them with their advice. I know of no class of men more intelligent and courteous than our first-rate gardeners —men who often inherit their situations, and pass a long life with but few of the usual "changes and chances" of life. Such a life has, I fear, been denied to "W. P. A.," but it should not make him, now he is in the "sere and yellow leaf," ungracious, or tempt him to write against a mode of culture which he has never practised and does not understand.

The originator of the orchard house system, well aware of the difficulty often experienced by the proprietors of small gardens in growing what are called choice fruits, such as Peaches, Nectarines, and Apricots, opened up a new path, not then thinking of the extent to which it would in a few years be carried; it is, therefore, most gratifying to him to know that thousands of educated men now find fruit culture a never-failing source of intellectual amusement, besides the great delight of being, as far as that description of culture goes, their own gardeners. I am aware that this has opened a little door of envy and jealousy (for is not the management and pruning of wall trees a great mystery?) but not with good and clever gardeners.

As to what "W. P. A." says about his visit to Sawbridgeworth, and the flavour of Peaches and Nectarines from trees in pots, I can only think that instead of one flapper from Laputa he should send for two; or better, he should have visited Sawbridgeworth last August, and have examined those fine trees 10 years old growing so luxuriantly in 18-inch pots and covered with fine fruit. The Fruit Committee of the Royal Horticultural Society, of which "W. P. A." has not the honour of being a member, at their meetings in August and September gave testimony to the exquisite flavour of some Peaches and Nectarines from trees in pots grown at Sawbridgeworth, and I need not remind your readers of its value when compared with the unsupported opinion of "W. P. A." As to exhibiting such trees in pots, as he insinuates Mr. Spivey would do if he could, nothing but the most gross ignorance of the culture of potted trees could prompt "W. P. A." to utter such an opinion. No Peach tree covered with full grown fruit just commencing to ripen (the only period of their growth when they ought to be exhibited) could be conveyed a mile without half its fruit falling.

He has shown by the articles he has lately written that his knowledge of fruit-tree culture under glass is very thin and genteel, and he is not likely to have the opportunity of increasing it. Allow me to paraphrase the quotation given by "W. P. A." at the end of his article in No. 45. His remarks on fruit-tree culture are like "empty buckets" from an empty well. *T. R.*

DISEASE OF THE VINE AND ITS REMEDY.

By P. Lazaris, of Athens.

Any substance, dried and pulverized, which does not injure the foliage or fruit of the Vine, cures the disease of "oïdium," with which it is affected. It is because of the same qualities that pulverized sulphur produces the same effect, and not as a specific, as is generally believed. Those who have thus far applied themselves to research, to discover a remedy for the disease called "oïdium," have wished to find a specific, which would as surely cause it to disappear as does quinine break the intermittent fever. Consequently they have considered that sulphur possessed such specific properties, but no one discovered that any material reduced to very fine powder, and which would not injure the plant or its fruit, would equally well cure the disease. When it is spread abundantly on the Grape, where it attaches itself easily, it acts, as I believe, by its drying the parasitic Fungus, absorbing its juices, and thus cutting off its nourishment. In some microscopic observations I have made, I think I have seen this effect produced just at the point where the peduncle of the parasitic grains is attached to the Grape, and possibly, on the grains themselves. Having observed that those Grapes which lay upon the earth were not attacked by the disease, I concluded very naturally that the most efficacious means to cure it was by powdering the plant with earth.

The following experiments led me to consider my discovery as an infallible remedy. I powdered my Vines with European sulphur, save one corner of my vineyard apart from the rest, which was saved for experiment. This was divided into two portions; one was treated with the sulphurous earth of Kalamaki, called "antirusty" (antigaleuse), the other simply with clay, leaving, at the same time, a few Vines in their natural state, to see if the disease might not cease spontaneously. In due time, the three portions, treated with European sulphur, earth of Kalamaki, and with clay, alike showed the cure desired, while the Vines not treated at all were entirely destroyed by the disease. Therefore I concluded that pulverised earth merited equal confidence with sulphur. As some persons suppose that sulphur exercises an influence at some considerable distance, I repeated the experiment the following year in a part of my vineyard distant from where sulphur was used, and not forgetting to leave some Vines without any treatment. Three months later, the Vines not powdered were destroyed, while those treated with argillaceous earth were saved, convincing me fully that such argillaceous earth radically cured the disease. Yet I resolved to continue the experiments during 1858, and test the following matters:

1st. If, in order to save expense and labour, two powderings would not suffice instead of three?

2d. What is the best time to make the applications?

3d. If, having omitted the first application, it would be possible to effect it by a later application?

In order to settle these three questions, I performed the following experiments: I powdered a number of Vines before flowering, and twice later, at the times when sulphur is usually applied. The cure was complete. Fifteen days after I commenced the preceding experiments, I commenced another series in the same way. Nine days had not passed before signs of the disease appeared, when I immediately repeated the application of pulverized earth, and had the satisfaction to see the disease arrested. I repeated the experiment the third and fourth time with the same results. Another series was powdered at the time of the setting or formation of the young Grapes, but without success, although the earth was used abundantly. A fourth lot was left untouched in the midst of the rest, which was like the last attacked.

From these experiments I have drawn the following conclusions: 1st. The earth should be freed from sand and gravel, dried in the sun a few hours, pulverised very finely, and then sifted or bolted like sulphur. 2d. That as common clay is easily prepared as above, and adheres well to the Vines, it is preferable to other kinds of soil. 3d. That the instruments generally used to apply the sulphur, will serve for this also, at least for the first and second operation, but the third time, as the Grapes have then some size, it is desirable to have them more abundantly powdered, yet it is possible here too to use the same instrument used for sulphur. 4th. The powdering succeeds best when applied after sunrise, but while the Grapes are still somewhat moist with dew. The following times are the best for the application: *a.* When the young shoots have scarcely attained the length of a span, before the Grape is in flower. *b.* As soon as the flower has fallen and the young Grape entirely set. *c.* When these are of the same size as is thought sufficient in sulphuration. 5th. Independently of these, even when performed with care, it is necessary sometimes to make extra applications, as, for example, each time after a heavy rain, after waiting a day. 6th. The removal of a part of the leaves, as is usual, is advisable, if practised with moderation, otherwise, the Vines deprived of leaves, the Grapes may be scorched by the heat of the sun. 7th. If from any cause the first regular powdering has been omitted or neglected, it will be necessary to supply it by two others, with an interval between of eight or ten days. But it is indispensably necessary that it be done before the time of the second regular application. 8th. It is necessary always to perform the operation with the greatest care. It is well to have the workman followed by another, who again carefully examines the Vines and powders any that may have escaped. If after this disease reappears it is proof that the operation has not been well done, and it is necessary to immediately repeat it with all the care that is bestowed when sulphur is used.

I have also used other substances besides earth, which, when not injurious to the Vine, will cure the disease with the same success.

Such is my discovery, which long experience and the most satisfactory results have proved infallible. If any one is found who doubts it, only let him try it, apply the remedy according to the rules given, beginning before the shoots are the length of a span, and then if he will have the best results, apply at the times when sulphur is now applied. In this way may the expense of the sulphur be saved, and, I repeat, the results are equally successful. I myself will use only clay the present year on my vineyard at Corinth. *Report of New York State Agricultural Society.*

SEA-SIDE PLANTING.

The difficulty of sea-side planting may be considered under two heads. First, the injury the trees sustain from the salt spray off the sea; and secondly, as a matter of course, the usually exposed situations along and adjoining the sea coast. As regards the first, viz., the salt spray, there is no doubt that this to some extent injures certain varieties of trees, but it will be found that the different kinds of Poplars are very slightly affected by it; the same may be said of the varieties of Elms, Willows, and Alders. These as a shelter and foreground for the more inland plantations may be planted with perfect safety up to high-water mark. I would then recommend the plantation or forest to be continued in the following order, viz., Elms of different sorts, Pinus austriaca and maritima, Oaks, Poplars, Alders, Ash, Spruce Firs, Beech, and Larch on the drier parts, introducing a few Cupressus macrocarpa, which, by the bye, is a famous thing to stand the sea breezes, and grows rapidly.

The point generally overlooked is the open exposed situations, and here is the marrow of the subject. Trees to do any good must be planted so thickly that they almost touch each other, the smaller the plantation the greater the density required, and in this way almost any kind of tree may be planted with certainty of success. I am constantly hearing gentlemen complaining about the climate. "Oh!" say they, "it is of no use planting; we have tried it over and over again—the climate don't suit. We are so exposed, &c." "See how many acres we have planted, and all to no purpose," &c.; and such is truly the case, many acres are planted with perhaps a few hundred trees on the poor cold soil, and yards apart!

I can picture places of this description where beautiful mansions have been erected at vast expense, and there they stand cold and isolated in the midst of a desert, and the unhappy trees about the grounds are truly pitiable objects to behold; I could almost wish with my friend "W. P. A." that a bye-law was introduced for the suppression of such cruelty.

Take my lady's young horse from the stable and lead him to the open common; there let him be tied and fed with the best hay and Oats. Keep him there, and what can you expect? "Oh!" exclaims my lady, "but the idea is ridiculous, to take a young horse to an exposed common!—a horse is not a tree." I answer "No; but I could wish your generous nature would have some feeling for a tree as well as a horse." But take a fine young Oak—the hardy Oak—from our rich nursery grounds to an open common, give it the best soil and attention, keep it there by itself, and what will it accomplish? Nothing. So it is with the majority of plantations where trees in exposed situations are planted wide apart—the force of the wind sweeping off the sea and over a bare country for miles is enough to chill if not to kill the hardiest trees. Therefore to be successful we must plant very thickly, and I know of no better nurses near the sea

than the varieties of Poplar thickly intermixed throughout the plantation; the only thing is to see by timely attention that the nurses do not injure the permanent trees.

In the Swansea Bay, now swept by the tide, are the remains of a vast forest extending over many hundreds of acres, and here some stools or roots of gigantic proportions are occasionally to be seen. I have also met with stools in various other parts along the coast, so that in former times our Welsh coasts as well as the more inland parts must have been well clad with almost more than our proportion of woodlands, but for the past century, or perhaps say from the time of Oliver Cromwell in 1646, the total neglect and constant destruction have almost led to the extirpation of the ancient forests of Wales. I mention these facts in order to show that our forefathers in times gone by must not only have given great attention to planting, but the results still to be seen prove their knowledge of general principles; and it is to be regretted that in the present age our great land-owners give so little consideration to this important subject. The hundreds of acres of barren steeps and great commons where in former ages those mighty forests stood, but where now the mountain sheep can only find a bare existence, should again be planted and carefully attended to, and not only will the landlord be repaid, but his tenants and the country at large will be benefited by the shelter thus afforded, and hence the increased fertility and value of land in an agricultural point of view, while, after a certain number of years, a constant revenue will be reaped, which will not be exhausted for ages to come. *William Barron, Sketty, Swansea.*

Home Correspondence.

Cotton Cultivation in India.—In my last (see p. 1007) is a summary of Eastern and Western Cotton farming, so far as I know it, doubtless very imperfect, but I believe, as far as it goes, pretty correct. What I have told of the American plan I learned partly from the practice, partly the conversation of the planters who were with us, and may differ somewhat from their home practice, but not much, as it accords with Dr. Mallet's account. My acquaintance with the Indian one is derived from personal observation, I dare say often imperfect and limited, and now written from memory. When first brought in contact with it my belief of its "miserably backward state" was about as confirmed as that of the "Committee of the Cotton Supply Association," until taught my error by finding our "mechanical skill and science" beat by the practice of the Ryots. A good deal of subsequent reflection, especially since I have become sufficiently acquainted with the practice of English farming to be able to compare it with the other two, has satisfied me that the Hindoo system, so far from being so defective and backward as we are told, is, in practice, still ahead of our middle class farming. I had no idea that their rude and primitive plough acts on precisely the same principle as the English grubber, or Mr. Smith of Woolston's steam cultivator, until I saw these implements at work and could compare their operations with what I had seen the Indian plough effect in breaking up waste lands preparatory to using the American one to finish the cultivation. The Black Cotton soils in some districts of India are infested with a most intractable kind of Couch, to remove which an implement of proportionate power is required. For this purpose the same form of plough is used, only much larger and stronger, drawn by 12 strong bullocks; by which the ground, to the depth of 15 or 20 inches, is torn up, in great masses, by main force, or as Mr. Smith would perhaps call it "smashed up," and left to dry and bake in the sun until pulverised, like quicklime, by rain, when the Couch is easily picked out. I almost doubt whether his machine could do the work more effectually. Mr. Smith, who maintains that cultivator-stirring is far superior to the "turn-over" slice of the plough, in cleansing, pulverising, and fertilising the land, by the free access it gives to the air, is probably not aware of the facts here stated, which seem so conclusively to support his views by the persistent fertility which this mode of tillage appears to have imparted to the old much-enduring soil of India. In like manner the Rev. S. Smith, of Lois-Weedon, if he reads these papers, can scarcely fail to perceive how much his views of the practicability of indefinitely preserving the fertility of land by frequent deep stirring and free admission of the air, are strengthened by Indian practical experience. By that means the Ryots have, for thousands of years, enabled their lands to extract from the atmosphere the greater part of the food required to support such incessant cropping and still bear such bountiful crops. Chemistry explains the mystery by unfolding the principles by which the particles of the air and soil act and react on each other when brought in contact by good tillage. The following very brief summary of these principles I abridge from the leading article of the *Agricultural Gazette* for Nov. 2. Tillage like guano acts by the actual addition of particles to the soil, and in the one case as much as in the other is the equivalent of dung. Guano, superphosphate, lime, however, act not only as direct additions of the food of plants, but also as re-agents in the soil, by which useless or even mischievous matters there are converted into food: so does tillage. The air contains the substance of plants; every process of putrefaction or combustion fills the air with the substance of once living plants; and it only needs that by tillage the soil should be brought, throughout its substance, into contact with fresh surfaces of air, to enable it to extract and treasure up, for living vegetables once more the very atoms which have constituted its fertility before. *Tillage no doubt results in an actual addition of those very particles to the soil, which in guano, superphosphate, and farm-yard dung are called manure.* In England the practice is very different; true the farmer trusts more to manure bodily added and less to tillage and consequent abstraction of carbonic acid and ammonia from the atmosphere. I have often stopped on the road to look at, and wonder in my own mind what would be the thoughts of an intelligent Ryot, could he only be brought there, on seeing a man, a boy, and four strong horses, yoked—all an end, tandem fashion—to a plough creeping along at the rate of two miles an hour laboriously turning over a furrow slice some 3 or 4 inches thick, the horses, meanwhile, as if afraid the admission of fresh air to a lower stratum would do harm—treading the ground over which they walked as hard nearly as the adjoining turnpike. It is not easy to imagine what his reflections would be, but I dare say something to the effect that "these English are very curious people! they must needs use the most costly and powerful machinery, and even steam-engines to do every thing, even common work; they can do nothing in a simple easy way. If I had only my small simple plough, which I could carry to the field on my shoulder, and bullocks here, I think I could cultivate that field deeper and better, and even quicker, though my bullocks, plough and all, if placed in the opposite scale, would hardly balance one of these great horses!" If such were his musings he would be pretty nearly right, the tilth produced by our best and most costly mechanical contrivances being seldom either better or deeper than he can, and generally does, produce with his iron pointed "crooked stick" and small bullocks. If these papers are ever read in India, I hope they may have the effect of inducing Europeans, engaged in agricultural pursuits, to examine with scientific impartiality the mechanical powers and agricultural qualities of that implement. I may be wrong in my estimate, but I can't help thinking it is despised because of its simplicity as compared with our European implements, though perhaps the better tool of the two. We have now obtained a convenient standpoint from which to take a very brief retrospect of the ground over which we have travelled, before entering on the final and most important branch of the subject—the improvement, namely, of the productiveness of the plant, and the staple for which it is cultivated. We have seen that though America yields the largest crops of the best Cotton, she is certainly not indebted for this pre-eminence to the excellence of her agriculture, as it failed to maintain its credit when tried in India. Further we found her agriculture defective, inasmuch as the agriculturist, so to speak, lives on his capital in place of his interest, speedily exhausting the fertility of his land. The Hindoo we have seen, to carry on the simile, lives entirely on his interest, but seems to have but an imperfect idea of adding to his capital by combining systematic and liberal manuring with his laborious and careful tillage. The English agricultural system, so far as the most passing glance enables us to judge, differs considerably from both, from the former in minute attention to rotation; and from the latter in constantly adding capital—manuring abundantly—but owing, apparently, to less perfect tillage, draining almost as fast as it invests, receiving little interest from its banker. The problem therefore to be solved is how to combine the Hindoo and English systems in Cotton culture. This question I shall endeavour to solve in my next letter. *Robert Wight, Grazeley Lodge, Nov. 9.*

Rainfall, October, 1861:—

Stations.	Height of Gauge. Above the Ground. Ft. in.	Height of Gauge. Above Sea Level. Feet.	Depth of Rain. Total for the Month. Inches.	Depth of Rain. Greatest fall in 24 Hours. Depth. Inches.	Depth of Rain. Greatest fall in 24 Hours. Date.	Rainy Days.
Little Bridy, Dorset	0 4	318	2.38	.71	22	16
Barnstaple, Devon	0 6	31	2.94	.63	31	17
Castle House, Calne, Wilts	0 11	330	1.60	.29	24	10
Camden Town, London	0 4	100	1.05	.39	22	10
Finchley Road, London	0 4	270	1.04	..	..	..
Ditto ditto	36 4	306	.74	..	..	..
Oundle, Northampton	20 0	124	.93	.24	1	15
Norwich	0 0	30	.49	.11	29	4
Llanelltyd, Dolgelly	0 2	20	1.09	.50	11	17
Derby	5 0	179	1.28	.28	26	16
Manchester	3 0	106	1.41	.32	24	16
North Shields	1 5	124	1.10	.34	4	19
Dumfries	0 6	63	8.75	.75	11	18
Nookton, Leven, Fife	0 0	80	3.05	.52	23	12
Sandwick, Orkney	2 0	78	6.01	1.21	24	20

Remarks:—

Camden Town.—Thunderstorm at 2 P.M. on the 11th.

Norwich.—The least of all recorded in October for 25 years till the present, is that of 1.73 inch in 1860.

Derby.—Average (14 years) 2.62 inches.

Manchester.—Average (40 years) 3 75 inches. This has been the driest October since 1817, when the fall was only .60 inch.

Dumfries.—Fine; thunderstorm on the 11th.

Nookton.—Generally fine.

Sandwick.—Average (20 years) 4.85 inches. October usually is our wettest month, but large as the fall has been this year, it was exceeded by that of August. The grain has been reaped and the Potatoes taken up in favourable weather.

G. J. Symons, Camden Road Villas.

Lachenalias.—I see in your columns some mention of Lachenalias. Having cultivated them for more than 40 years, I believe I can give your readers some useful hints. No bulbs afford gayer decoration to a greenhouse in the early spring, during which season they flower without forcing, as a temperature of 45° will bring them into flower, and any attempt to force injures them. Lachenalia pendula comes first in season in January, with its red and green flowers, which last from a month to six weeks. L. luteola follows, and L. tricolor is a little later, though between these in season there is little difference. These all may be depended upon for blooming freely every year, and increase so rapidly that in two or three years any body may have as many as they can want, as each bulb produces two to four offsets which will flower the next year. Lachenalia aurea or flava and L. quadricolor are much more capricious, and of the first I doubt whether any one ever got a good stock in Europe. It has moreover a trick of not growing at all sometimes for two or three years in succession, though the bulbs remain perfectly healthy. It is a full golden yellow, almost yolk of egg colour, and very beautiful when it flowers. L. quadricolor is less uncertain in flowering, but is always a ticklish bulb to grow, and is not as pretty as either of the three first named. Its leaves are long and narrow, and its flower stem tall and slender, and does not bear anything like so many flowers as the hardier species. Lachenalias fragrans, orchioides, and violacea are only curiosities, and the second, orchioides, difficult to grow. I have had them all, but only retain fragrans, a small white inconspicuous flower like a Squill. Plenty of light, air, and protection from frost is all they require. L. pendula seems to like more peat than the other two, which flourish in sandy loam and leaf-mould, whereas one-third sandy peat suits L. pendula. After they have flowered continue to water till they begin to die down, but always give plenty of light. *J. R., Nov. 18.*

Double Glazing.—Having built two span-roofed houses in America, and having had the management of them for about 12 months, I am happy to inform your Correspondent that the extra outlay in double glazing was more than returned the first year. The winter was a very severe one, the thermometer being frequently 20°, and sometimes from 27° to 30° below zero. I usually made up my fires about 10 o'clock at night, and could leave them safely till 6 o'clock the next morning, whilst a neighbour of mine, who had a single glazed lean-to house 50 by 18 feet, and a shed the entire length at the back, had to be up several times during the night, and it was with difficulty he kept the frost from entering his house, whilst my houses were scarcely ever below 45°. These houses were, however, only double glazed along the sides and ends. I believe that double glazing the sides and ends of span-roofed houses is a great improvement on single glazing, and the extra expense is a small item compared with the saving of fuel and labour, but I think double glazing the roof would obstruct too much light in winter; nor do I think we need have houses double glazed to stop the drip. We cannot possibly make a greater mistake in erecting plant-houses than using small pipes and small boilers, as the heating surface of two small pipes would be too small for a house of any pretensions, and if we had four 4-inch pipes the expense would be more than if we used two 6-inch pipes (run all round the house) which would be sufficient for any ordinary plant house. All the advantage that I know of to be reaped by double glazing is what I have already named, viz., the saving of fuel and labour, and, I may add, a little anxiety on the part of the gardener, the last not a small item in the matter. Damp atmospheres and moisture can easily be regulated by ventilation if we have plenty of heat at command. *W. Y. M.*

Large Hornet's Nest.—A specimen of hornet's nest has been recently taken in this neighbourhood (the west of Gloucestershire), and being of an unusually large size may perhaps interest some of your readers. It was hung from the centre beam inside the roof of a cottage, and being left undisturbed until the hornets were torpid was taken without difficulty, and with scarcely any damage to the paper of the nest, excepting at the top where it was fastened to the beam, and a small part of the higher comb is consequently laid open. The nest exceeds 20 inches in depth, and 14 inches in breadth, and measures 4 feet in its largest circumference. May I also suggest to such of your readers as take an interest in the study of wasps, that the present is an excellent time to secure specimens of the nests of the underground kinds without danger or annoyance from the attacks of the insects. The cold weather will have rendered them harmless, and if a small portion of the lower part of the nest is cut away carefully, the decaying comb with its unpleasant inhabitants of many kinds, may be removed as far as necessary and the specimen preserved safely. *G. O., Chepstow.*

Temperature.—The following account of cold in the week ending Nov. 20, as indicated by a minimum register thermometer of Murray and Heath, fixed to a wall six feet from the ground in a western aspect at Lichfield, may perhaps interest some of your readers:—

Nov. 14.	Thursday morning	26 deg.
15.	Friday	25
16.	Saturday (Snow)	22
17.	Sunday	21
18.	Monday	15
19.	Tuesday	24
20.	Wednesday	37

H., St. Chad's, Lichfield, Nov. 20.

Camp Gardens.—We are happy to endorse the recommendation of Mr. Ingram, who so ably points out the advantages which must inevitably arise from the formation of camp gardens, and we trust that no other illustration will be necessary to induce military authorities to take early steps towards attaining such desirable results. It might be remembered that Admiral Sir Harry Keppel felt the importance of the subject when he ordered us to forward a suitable consignment of vegetable and flower seeds for the Naval Hospital gardens in the Crimea, the establishment of which by him in the midst of active warfare must have presented far greater difficulties than can possibly exist in our home camps, where gardens would unquestionably be highly appreciated by the men, and be a source of pleasing recreation to them, in place of far less innocent amusements always to be found in such localities.—*Page & Toogood, Southampton.*

Messenger's Glass-houses.—I saw an illustrated advertisement in your Paper the other day from Mr. T. G. Messenger, of Loughborough, about his Patented Divisionless Horticultural Buildings, which he says are cheaper, more durable, and lighter in appearance than any other made, and that the ventilation is effected by a simple and much admired mechanical arrangement, every word of which may be true. But I would

respectfully ask Mr. Messenger, what part of the building is patented, and when the patent was sealed? If he cannot tell me that, I shall be disposed to think that it never has been done; and further, if Nelson's motto, "Let him that earns the Laurels wear them," was acted up to, I am strongly inclined to think that they would never encircle the brow of Mr. Messenger, for he can see five houses built and ventilated exactly on the same plan without going a dozen miles from Leicester. *John Pannall, Park Lane, Leeds, Nov.* 20.

Cucumber Growing.—I wish your Correspondent Mr. Monro would favour the horticultural world with the details of his system of growing Cucumbers and Melons. Mr. M. is well known as a scientific and practical horticulturist, and Rabley (his residence) is a place many hear of, but lying far off a railway station few get to see it. The results he arrives at are extraordinary, and from a glimpse I have caught of his practice I fancy something original will be found in it. From the inventor of the Cannon Boiler, and the raiser of some of our best Cucumbers and Melons, we have, I think, good reason to expect this. *Wm. Paul, Waltham Cross, N.*

Societies.

Linnean: *Nov.* 7.—G. Bentham, Esq., President, in the chair. S. Ainsworth, Esq., was elected a Fellow. A marble bust of the late Robert Brown was presented on the part of 50 subscribers thereto. S. Stevens, Esq., exhibited a collection of bird skins, made by Mr. A. R. Wallace in Waigiou and Mysol. A letter was read from R. B. Cooke, Esq., dated Scarborough, June 20th, 1861, and which had arrived on the morning after the last meeting of the Society, announcing the discovery of Maianthemum bifolium on the range of hills opposite Harkness, about 4½ miles from Scarborough, where it grows in the woods amongst luxuriant specimens of Trientalis europæa. The following papers were read:—1. "On West African Tropical Orchids," by Dr. Lindley. The plants which formed the subject of this paper were collected by the late Mr. C. Barter, and by Mr. Gustaf Mann, in the country extending from Lagos to the Cameroons River, including several from Fernando Po. The Orchids of the West African region previously described amounted to 19 only, whilst the present collections afforded 67, of which 48 were previously undescribed. Comparing these with other portions of the African Flora, the author remarked that of those in which a well-marked resemblance was to be traced, the principal part was found to resemble Cape species: these being Polystachya alpina, near P. Ottoniana; Penthea Pumilio, a striking addition to a small Cape genus; Angræcum arcuatum, identical with the plant from Albany; and Cymbidium adenoglossum, which resembles the C. tabulare of Table Mountain. Others were found to be comparable with species of Eastern Africa: thus there were Amphorchis occidentalis, the second species of a genus inhabiting the Mascaren Islands; Corymbis disticha, identical with the plant from the same islands; Calanthe corymbosa, very near C. sylvatica of the Mauritius; Habenaria prælta, undistinguishable from the Bourbon species; Bolbophyllum lupulinum, having all the appearance of the Mascaren B. occultum, although the structure of the flowers is widely different; and Notiophrys glandulosa, near N. occulta of the same islands. There was traceable besides a generic similarity among many species of Bolbophyllum, Polystachya, and Angræcum in Eastern and Western Africa, the collections containing 14 species of the first genus, 9 of the second, and 14 of the third. The most striking geographical fact, however, was stated to be the presence of the Asiatic Epipogium nutans at Ambas Bay, a place a little to the north of the embouchure of the Cameroons River. There was found to be little resemblance between the species examined, and those of Abyssinia; no Satyrium, no Peristylus, no Pterygodium, and the species of Habenaria quite dissimilar; while the only case in which identity of species has been remarked is that of Eulophia guineensis, the Saccolabium abyssinicum of Achille Richard. The rest of the paper consisted of technical descriptions and remarks. 2. "Note on the Structure of the Anther," by Prof. Oliver. The observations now made were founded on the anthers of a Geranium, supposed to be G. pratense, growing in Prof. Oliver's garden. During the past autumn the plant was observed to bear numerous abnormal flowers, exhibiting the stamens in various degrees of retrogression from a tolerably perfect pollen-bearing to a petaloid anantherous form. These imperfect anthers, it was thought, afforded some interesting suggestions in reference to the morphology of the staminal leaf. The author observed that he was not aware that any clear view had been generally accepted as to the morphological import of the sutures or lines of dehiscence of anthers; at any rate the explanation of anther structure given in works on morphology appeared unsatisfactory. He went on to describe the views commonly held on this subject. Thus, Dr. Asa Gray describes a transverse section of a young anther as showing four places or points at which the transformation of the parenchym into pollen commences, these answering to the centre of the four divisions of the parenchym of a leaf, namely the two sides of the blade, each with its upper and lower stratum; so that according to this view of the structure the anther is primarily and typically four-celled, each of the two lobes answering to the two sides of the blade being divided by a portion of untransformed tissue which stretches from the connective to the opposite side; the margin of the theoretical leaf thus corresponds with the line of dehiscence. He further describes the filament as answering to the petiole of a leaf, and the anther to the blade, while the connective represents the midrib, and the lobes or cells of the anther the two symmetrical halves of the blade, the line of dehiscence being normally along the margin of the transformed leaf. According to another view, that of Bischoff, the suture of the anther does not correspond to the leaf margin, but pollen cells are developed upon its superior surface within the margin, two on each side of the median nerve. Professor Oliver regarded the evidence afforded by his abnormal Geranium stamens (which showed a transition from a petaloid lamina slightly thickened at its upper edge only, to tolerably perfect stamens, through a series which besides this marginal thickening showed the gradual development of a pair of oblong more or less thickened masses of parenchym on each side of the midvein and considerably within the margin), as confirmatory of the theory of Bischoff, viz., that the sutural line of the anther does not coincide morphologically with the margin of the leaf; and his own view of the subject he expressed thus: "Examination of these intermediate forms clearly shows that the sutures of the anther answer to the lines of junction of the outer and inner thickened portion of the lamina on either side of the midrib, and that the septa of "untransformed tissue" may be regarded morphologically, as resulting, in part at least, from the inflected epidermis of the adjacent anther cells." And again, "I think it probable that on further examination it may be found that some anthers originate from the thickening of the inner or of the outer pair of lobes only of the staminal leaf-anthers, thus *ab origine* two-celled. The circumstance that the anterior pollen cells of anthers are so frequently, perhaps generally, slightly lower than the posterior ones, and that anthers are commonly 'introrse,' conforms entirely to the view that anther-cells morphologically correspond to thickenings of the parenchym of the metamorphosed leaf, in a manner essentially the same as we find indicated in the abnormal Geranium—thickenings not of an anterior and posterior portion answering to upper and lower layers of leaf parenchym, but of nearly the entire substance of the lamina at the four distinct points where they take place." The President made some extended observations on the subject of this paper. 3. "Notes on Coutoubea volubilis of Martius, and some other Gentianaceæ of Tropical America," by Dr. Grisebach. Among Wright's later Cuban plants, Dr. Grisebach finds a twining herbaceous Gentianaceous plant, which agrees sufficiently with Martius's Coutoubea volubilis, but which having a 5-partite calyx, and a peculiar stigma combined with a singular habit, is evidently no true Coutoubea, but a new genus to which he proposes to transfer the name Goeppertia, the Laurineous genus so called proving to be identical with Aydendron. A technical character of the genus was given. Another plant of Wright's from Eastern Cuba was proposed as a new genus—Zonanthus, which may be regarded as "a link between Lisianthus of which it has the anthers, and Leianthus umbellatus, which it approaches by its axillary peduncles, and its somewhat prominent leaf sheaths." The paper further consisted of criticisms and corrections of the published statements of Mr. Bentham and of the writer, on plants of the Gentianaceous order.

Crystal Palace Chrysanthemum Show.—Of the leading features of this exhibition some account was given in our last week's Number. The Company's own plants, grouped in the form of circles and diamonds along the middle of the nave, added considerably to the beauty of the show.

The first collection of six plants (amateurs) came from Mr. Ward, gr. to W. Fowler, Esq., of Tottenham, who furnished admirable specimens of Golden Christine, Defiance, Pilot, Beauté du Nord, Salamon, and General Havelock. Messrs. George, Pratt and Glover also showed good plants, amongst which were finely bloomed examples of Alma, Christine, Auguste Mie, Vesta, Insigne, Chevalier Domage, Dr. McLean, Sulphureum superbum, Mount Etna, and Aregina. Other collections in this class contained nearly the same varieties as those just named.

In the Nurserymen's division, Mr. Turner and Mr. Forsyth contributed well grown examples of Julie Lagravere, Hermione, Madame Camerson, and others, whose names have often been recorded in our columns.

Single specimens well flowered and extremely well grown came from Mr. Harper, gr. to J. F. Bennett, Esq., of Tulse Hill; Mr. George, gr. to J. Nicholson, Esq., of Stamford Hill; Mr. Turner, Royal Nursery, Slough; and Mr. Reid, gr. to J. Hunt, Esq., of Sydenham. The varieties were Christine, Vesta, Alma, and Aregina.

Of Pompones in pots the best six plants came from Mr. Hutt, Hackney Fields, who produced nearly the same varieties as were shown the other day at South Kensington, and in equal perfection, the blooms being still abundant, fresh, and beautiful. In other groups from Messrs. Ward, Weston, and Glover, were good examples of General Canrobert, Golden and old Cedo Nulli, Andromeda, and Miss Julia Salamon.

In the Nurserymen's class Mr. Forsyth and Mr. Turner were the chief competitors; among the varieties were well grown plants of Durufiet, He[illegible] Salamon, Thais, Golden Cedo Nulli, General Canro[illegible] Bob (a fine dark kind, as is also Brilliant, a [illegible] specimen of which was in Mr. Turner's collection).

Single specimens of Pompones came from Messrs. Hutt, Cook, Ward, and Weston, and consisted of admirable examples of Golden Cedo Nulli, Ninon, and old Cedo Nulli.

Various groups of trained pyramidal Pompones were contributed by Mr. Fiveash, gr. to Mrs. Sillem, of Clapham Common; Mr. Harper, Mr. Glover, and Mr. Monk. These consisted of nearly the same plants as were shown at the Royal Horticultural Society's meeting at South Kensington, and had they been a little less tightly trained they would have looked very well. As shown they were, in our opinion, somewhat too stiff and formal in appearance.

Among new varieties Mr. Turner had two pretty sorts called Mrs. Turner and Jessie, both of which when better known will doubtless be favourites. Lady St. Clare (Downie, &c.), Little Pet, Queen of Lilacs, Nil Desperandum, Lady Russell, Model, and Hybrid Queen of Anemones, all from Mr. Bird, were awarded Certificates of Merit, as were also Jessie, alluded to above, from Mr. Turner, and Lady St. Clare, of which we have previously spoken in favourable terms.

Cut blooms were plentiful and altogether in excellent condition. Collections of 24 came from Messrs. James, Hope, Tomlin, and George, and of 12 blooms from Messrs. James, Tomlin, Potts, George, Cornwell, and Monk. Among these we did not observe anything different from what appeared at South Kensington on the 6th and 7th inst.

In the Nurserymen's Class the best 24 were furnished by Mr. Cattell, Westerham, Kent; and Messrs. Wilkinson and Forsyth also showed well in that class. Messrs. Potts, Cattell, James, and Wilkinson, each showed good sets of 6 blooms. Among *Purples* in these collections, the best were Wonderful (a fine kind), Alarm, and Progne. Of *Lilac shades*, the best were Stellaris globosa, Defiance, Alma, and Aregina. *Red:* Triomphe du Nord (a large coarse sort, but showy), Prince Albert, M. Poggi, General Harding, C. Columbus, and Picturatum roseum. *Mottled Buff and Red:* Dupont de l'Eure, Quintus Curtius, [illegible] Wortley, Cassy, Fabius, Lysias, and Auguste Mie. *Yellows:* Jardin des Plantes (a fine kind), Annie Salter, Yellow Perfection, and Formosum. *Blushes:* Queen of England, Novelty, Vesta, Cassandra, Mrs. W. Holborn, and Pearl. *Whites:* white sport from Queen of England, White Formosum, Lucidum, Goliath, and White Globe.

Mr. Bird had, as he always has, magnificent blooms of Novelty, which both for size and beauty were matchless; also large bouquets of Jardin des Plantes, Hermione, Gluck, Sulphureum superbum, Trilby, Alfred Salter, Admirable, Yellow Perfection, Triomphe du Nord (immense blooms), old and Golden Christine, Beauty, Themis, Queen of England, Golden ditto; two nosegays of Vesta; likewise Progne, Princesse Marie, Alma, Queen of Yellows, Madame Poggi, Etoile Polaire, Julie Lagravere, Marguerite de York (very large yellow Anemone like Gluck), Aimée Ferrière, Dupont de l'Eure, Madame Miellez, Annie Salter, Miss Kate, M. Deschamps, Madame Lebois, Stellaris globosa, and Wonderful. These and others from this eminent grower excited, as they well deserved, general admiration.

Among Anemone-flowered sorts there was nothing new. The best groups came from Messrs. George, James, and Williams.

Among Miscellaneous articles were three rather pretty models of flower gardens from Mr. Cranwell, Mr. Lavey, and Mr. Varney, to whom prizes were awarded in the order in which the names stand. Messrs. Lane again showed examples of Grapes from their Orchard house, and Messrs. Downie, Laird, & Laing some remarkably large Leeks.

Notices of Books.

Le Jardin Fruitier du Muséum, ou Iconographie de toutes les Espèces et Variétés d'Arbres Fruitiers avec leur Description, leur Histoire, leur Synonymie, &c.; par J. Decaisne. 4to. Paris, Firmin Didot.

(*Continued from* p. 959.)

Poire d'Hacon.—Syn. Hacon's Incomparable, Downham Seedling, Celestus; and Prof. Decaisne states that this excellent variety, which was exhibited at a meeting of the Horticultural Society in Norwich on the 17th November, 1830, when it obtained the Silver Medal as a prize, has been described by M. Bivort as a new fruit (*Alb. Pomol.*, vol. 3, p. 79), under the name of Bergamotte d'Heimbourg. Fruit middle-sized, roundish or somewhat turbinate, stalk thick, about an inch in length, inserted in a slight depression; eye open, placed in a regularly-formed shallow depression. Skin smooth [from a wall, roughish from standards], yellowish green, sprinkled with small brown dots and russet spots. Flesh white, fine, slightly gritty, but very melting, juicy, and slightly perfumed. Season, Nov. Dec. [The tree is an abundant bearer, with spreading or pendulous branches, hardy, well adapted for standards, espaliers,

nenouilles; but the fruit often proves of inferior quality when grown on walls. This variety was raised by Mr. James Gent Hacon, of Downham Market, in Norfolk, about 45 years ago].

Poire Louise-Bonne d'Avranches.—Syn. Louise Bonne (of Jersey), Bonne Louise, Prince Germain Beurré ou Bonne Louise d'Arandore], Bonne de Longueval [William the Fourth], also Poire de Jersey, but this, Prof. Decaisne remarks, must not be confounded with the Poire Belle de Jersey, which he states is the same as the Poire Tonneau. Fruit large, oblong pyriform, obtuse at the insertion of the stalk, at which the fruit often projects on one side. Eye open, in a shallow evenly rounded depression. Skin smooth, citron yellow where shaded, glossy, washed with red next the sun, sprinkled with pale brown ocellated dots. Flesh white, fine, buttery, very juicy, melting and sugary. An excellent fruit. Season, October. Tree vigorous and an abundant bearer, of a pyramidal habit of growth, the central shoot taking a strong upright growth, in consequence of which in pyramidal training care is necessary to stop it, otherwise the sap would flow towards it with too great determination, leaving the side branches weak.

The Louise Bonne d'Avranches is very distinct from the Louise Bonne described by Merlet, and by Duhamel. The former is larger, ripens earlier, and it is also brilliantly coloured, whereas the latter is pale.

M. A. M. Laisné, president of the *Cercle Horticole d'Avranches*, has had the kindness, says Prof. Decaisne, to favour me with the following note on the origin of this fruit:—

The Louise Bonne d'Avranches originated in a garden belonging to M. de Longueval, in our town. The parent tree still exists; it is nearly 4 feet in circumference at the height of a man, and about 44 feet high. It is evidently very old. The discoverer of this excellent Pear was our eminent countryman, l'Abbé Le Berryais, fellow labourer in the *Traité des Arbres Fruitiers* of Duhamel. I have consulted many of the oldest inhabitants of the place respecting the circumstances connected with the discovery. Those who were best informed on the subject assured me that they had the following from the mouth of the Abbé Le Berryais himself, who died at this place (Avranches) in 1807. Their statements very nearly coincided with what I heard from my father, who, as a neighbour, was well acquainted with the family of Longueval:—

M. de Longueval had a nursery of seedling Pears, amongst which the Abbé Le Berryais observed one remarkable for the fine appearance of its wood, leaves, and flowers. He recommended the owner to preserve the tree in the hopes of seeing it produce fine fruit. The Pears were watched, and when they appeared to be at maturity, Le Berryais, who often dined with the family, was invited to taste them. The new Pear was found to be not only handsome but of exquisite flavour, and Le Berryais said to Madame de Longueval, "There is an excellent Pear, it is a valuable acquisition to our fruits, and is worthy of a name. This Pear is, Madame, like you, good, you are called Louise, and I will call it *Louise-Bonne.*" (*Cette Poire est bonne comme vous, Madame, vous vous nommez Louise, je l'appellerai Louise Bonne*). Prof. Decaisne says, I am far from contesting this gracious dedication, yet I can scarcely comprehend how Le Berryais could give to this new fruit a name already applied by Merlet to a much older and very different Pear, which he himself had described a short time previously in his works (Le Berryais, *Traité des Jardins*, Part I., p. 337, 1789); nor how this excellent Pear could remain unknown for half a century.

[Some 20 years ago the name of Louise Bonne applied to the sort in question, and likewise to a much older variety, occasioned some confusion. It was introduced into this country from Jersey; and to distinguish it from the older and much inferior sort, it was called the Louise Bonne (of Jersey). It has, however, so completely superseded the other variety, that the complimentary name of Louise Bonne, given by Le Berryais, may be considered sufficient without any affix. According to Liron d'Airoles, it fruited for the first time in 1788; and as to its remaining so long unknown, it is not so much to be wondered at, when we call to mind that the Passe Colmar first bore in 1758, yet it was only introduced into this country after the peace in 1815; and about the same period or soon after the war were introduced the Glou Morceau and Beurré Rance, the first fruitings of which in Belgium are recorded to have occurred respectively in the years 1759 and 1762. It therefore appears that in former times before Horticulture received an immense impetus from our Horticultural Society, excellent varieties long existed unknown, except on the spot where they originated.]

Poire Épine du Mas.—Syn. Belle Épine du Mas. [This variety is described as being very like the Louise Bonne d'Avranches; but according to Decaisne, and likewise M. Bivort, its quality is not first-rate. Season October and November. It is of French origin. According to M. H. Dumas, Juge de Paix at Limoges, the original wilding still exists in the forest of Rochechouart, and the variety takes its name from a town called Le Mas, in the neighbourhood of that forest.]

Poire de Fontenay-Vendée.—Syn. Belle d'Esquermes, Jalousie de Fontenay-Vendée [Norris's Pear]. Fruit middle-sized, obovate or short pyriform. Stalk fleshy, very thick and short, inserted somewhat obliquely. Eye small, open, in a shallow depression. Skin green, or olive-green, sprinkled with dots, and more or less covered with russet spots. Flesh melting, very juicy, sugary, sometimes slightly acidulated, with a peculiar flavour resembling that of certain Grapes possessing a slight Muscat quality. Season, Sept. and beginning of October. Tree vigorous, and an abundant bearer; shoots strong, olive green. Leaves oval, of thick substance, midribs tinged with red. I am indebted to the kindness of M. Boncenne, judge at Fontenay, for the following account of the origin of this fruit:—"La Poire de Fontenay was obtained in the second half of the last century on the small domaine of Bouchereau, belonging to the Curé Gusteaud, who died in 1828. At this period the property passed into the hands of M. Lévêque, an old architect. It was covered with Pear trees, which the curé had raised from seeds. Finding amongst them one of excellent quality, M. Lévêque liberally distributed grafts of it among his friends, under the designation simply of *Poire de Fontenay*. It was afterwards sent out by M. Leroy, of Angers, under the name of Jalousie de Fontenay-Vendée; and latterly another nurseryman has given it the name of Belle d'Esquermes.

[For this excellent Pear we think the name of Fontenay-Vendée adopted by Prof. Decaisne is very proper; and doubtless in the markets it will be shortened to simply *Fontenay*. At all events it is better not to associate it with *Jalousie*, the name of an old French Pear of very inferior quality, which ripened about the same time; but from the day it was gathered, and although apparently sound, no one who knew its tendency could look upon it without being jealous of its internal decay.]

The *Botanical Magazine* for November contain figures of the following subjects, namely:—*Stanhopea Bucephalus*, a fragrant species from Equatorial America, one of the richest coloured in the genus, being of a rich tawny orange marked with deep blood-coloured spots, and remarkable for the bull-horn like processes of the lip. *Vaccinium Imrayi*, an evergreen shrub from Dominica, producing dense corymbs of flowers, which are "large for the genus, and remarkable for their uniform yellow-green colour, unusual in this family, as well as for the thick fleshy-coriaceous texture of their corollas. *Higginsia regalis*, the plant commonly called Campylobotrys regalis, which latter genus Sir W. Hooker, following Planchon, seems inclined to merge in Higginsia of Persoon; the plant now figured has very richly coloured foliage, and is rather free in habit, the small yellow flowers seated close to the stem in the axils of the leaves being quite lost amongst the foliage. Campylobotrys discolor, which quite accords in habit with the more recent C. refulgens, argyroneura, and smaragdina, is referred to the genus Higginsia. *Echinacea angustifolia*, a herbaceous perennial of the Southern United States, first gathered in Texas, and now introduced from Iowa, is a Rudbeckia-like plant, growing 2 to 3 feet high, with linear-lanceolate leaves, the flower-heads large, having numerous long narrowish deep rosy-pink ray florets. The size and colour of these heads will render it desirable for mixed borders of herbaceous plants. *Phyllagathis rotundifolia* is a sub-shrubby plant of dwarf habit, from the Indian Archipelago; its flowers, which are small, rose-coloured, in small crowded terminal heads nestled among the leaves, are comparatively insignificant, but its foliage, which is roundish cordate-ovate and ribbed as in other Melastomaceæ, is strongly plaited and of a rich glossy reddish-tinted metallic green above, and of a deep red beneath, so that the plant is very ornamental for the stove, and requires much less space than many other fine-leaved plants of the same order.

The *Florist* has for its illustration a couple of *Verbenas*, one of which, called *Foxhunter*, is said to be the largest and most brilliant scarlet variety yet obtained. It was exhibited at South Kensington on the 9th of July, and "on that occasion its large size, and brilliancy and attractiveness of colour secured for it the award of a First-class Certificate, to which it was well entitled." The flowers are more than an inch across, well formed and of firm texture, and of the richest and brightest scarlet colour; the plant very robust in habit. Along with this is introduced *Smith's Fairest of the Fair*, a pure white with a small bright rosy ring around the eye, and one of the most chaste-looking sorts in cultivation. Among the literary contents of the present issue we find a well-reasoned paper on the spur-pruning of fruit trees; an account of a successful plan for blooming the Isabella Gray Rose; a notice of the gardens at Corsham Court, near Chippenham; more Orchard House culture; more relating to Roses and Rose shows; and besides a lengthened account of forthcoming new French Roses, of which some 57 are noticed from the establishments of Verdier, Margottin, Touvais, Jamin, Lartez, Pradel, Levêque, and Troullard.

Gossip of the Garden opens with an article on "the 'disappointing' Gladiolus and the 'lumpish' Dahlia," a subject that just now seems to be affording some amusement—which in this dreary month of November is no bad thing. We have also further hints on the theory and practice of wall-fruit culture; an apologetic rejoinder concerning the attacked and defended George Lightbody Auricula; a word in favour of Lilliputian Dahlias, which are called "lovely little pets," whose flower heads are about the size of a Ranunculus, and almost if not quite as symmetrical in form; a recommendation of Roses on their own roots; together with various reports and brief memoranda. There are also some regretful remarks on the Gardeners' Mutual Instruction Societies, which some 15 or 20 years ago were flourishing in various parts of the country, especially near London, but which now seem to be numbered amongst the things that were.

The Floral Magazine illustrates the following new flowers:—A Hybrid Perpetual *Rose* named *Reynolds Hole*, a desirable new rose-coloured variety which has been exhibited by Mr. Standish at the Rose shows of the past summer, and which we think promises to deserve the name it bears: that of a gentleman who has done much to increase—if that be possible—the popularity of the Rose. In this variety, though a Perpetual, we have as lively and bright a pink as is to be found in the whole range of summer Roses. Referring to the *new* Roses of the year, it is stated that Madame Furtado, General Washington, Duc de Cazes, Triomphe d'Amiens, and L'Enfant Trouvé, are likely to prove valuable additions to the Rose garden; the latter, L'Enfant Trouvé, which was figured in a previous Number of the same work, was however then stated to have been nearly 11 years in cultivation. Two *Pinks*, called *Dr. Maclean* and *Delicata*, which look to us just a "wee bit" flattered, not only in dressing, as is admitted, but also in size; however this may be, they make pretty pictures, and they are moreover exceedingly fine varieties, indispensible to florists, though we presume (according to the phraseology of the Editor) they would be considered "mops" by northern growers. Both were exhibited before the Floral Committee of the Royal Horticultural Society, and Delicata, which was much the "smoother" of the two, obtained a first-class award. We must, however, dissent *in toto* from the Editor's dictum when he asserts that "notwithstanding the great difference in appearance between the Pink, Carnation, and Picotee, most botanists are agreed in regarding them as merely varieties of the Clove Pink;" by which he means Dianthus Caryophyllus. A group of hybrid greenhouse Geraniums (*Pelargoniums*) consisting of *Mira* and *Sylph*, two of the late Mr. Beck's flowers, the latter a good white with deep spot on the upper petals. Two hybrid shrubby *Calceolarias* from the stock of Mr. Burley, of Limpsfield, who has paid considerable attention to this race. They are: *angustifolia superba*, apparently a fine-flowered yellow, but in which the characters of *angustifolia* seem to be obliterated, the flowers being large with very unequal lips, and the leaves nearly ovate; and *Duchess of Wellington*, described as a rich dark crimson, but figured of a dull purplish-red. Here is a problem in Calceolaria culture:—"It is well known that the Calceolaria suffers much from green-fly; but if this is attended to (fumigating so as to keep it down whenever it appears), and shading during the midday sun, there are no plants of easier culture in the greenhouse than these."

In a *Handbook for Southport* (Churchill), a watering place on the Lancashire coast, Dr. McNicoll gives ample information about the Geology and Natural History of the district, in addition to the usual medical information to be expected from a "Physician to the Southport Seabathing Infirmary." The Mammals, Birds, Reptiles, Crustaceans, Arachnids, Shells, Zoophytes, and plants have all received attention and are amply catalogued. The volume has already reached a second edition, an honour which it deserves.

Garden Memoranda.

Messrs. Parsons & Co's. Nursery, Flushing.—Taking the boat from Fulton Street Wharf, a few minutes brings us to Hunter's Point, from whence less than half an hour's ride carries us to Flushing, a quiet village, bearing the aspect of retired respectability. Five minutes' walk found me on the higher ground of the village, by which the nurseries are situated. I have no note of the extent of the grounds, but judge they comprise about 70 acres. The offices are considerably in from the entrance, and the approach lined by many fine specimens of rare shrubs and trees, which in themselves repaid a visit to Flushing. Near the gateway there is a very large specimen of an upright Sugar Maple, as perfectly fastigiate as the Lombardy Poplar, and well worthy of extensive introduction into landscape scenery. I had no knowledge before that such a variety of the Sugar Maple was in existence. A very large Weeping Sophora is very striking through a marked strength of beauty which it adds to the usual elegance of "Weeping" trees. A large Kentucky Coffee (Pinckneya pubens?) grew near by, reminding me how unfortunate for planters it was that its great beauty, when of middle age, was not more generally known. Its stiffness while young, no doubt, is the cause why it is not better appreciated. Amongst other good things near, the following were particularly noted: Abies orientalis, one of the best specimens I have ever seen; about 12 feet high. Its reputation as a slow grower is, no doubt, gratuitous. It certainly was not earned by this specimen. A fine Pinus monspeliensis, one of the allied group of Austrians, and of P. pyrenaica, of the same group, and one of the most valuable for hardiness of beauty we have not seen excelled. Pinus nivea was also very fine, and more nearly approaching the White Pine in appearance than I had before supposed, having

hitherto seen but much smaller specimens. Pinus horizontalis, a fine specimen. This is not a distinct species, but a spreading form of the Scotch Fir. Picea Frazeri was by far the best looking specimen I ever saw, and evidently suits our latitude much better than its next brother the Balsam Fir. The Douglas Spruce is quite hardy here. The finest specimen is about 20 feet high and very beautiful. Some fine specimens of Picea cephalonica are here—some few losing their leaders through birds resting their weight on them, and Mr. Parsons suggests that where there is such risk, the leader should be protected by a small stick tied as a stiffener while young. Probably the finest Magnolia Soulangeana in the world is here; the branches sweep the ground, and occupy over 800 square feet of surface. A very large and fine Magnolia macrophylla stands near this, the parent no doubt of many a score throughout the Union. The Weeping Beech is one of the finest I know of. I inquired of Mr. Treumpy, the foreman, how he succeeded in obtaining so large a stock of young ones in face of the generally supposed difficulty of propagating without the aid of two year old wood? But he says that with good, healthy and strong one year old wood he finds no difficulty. All these were grafted about an inch or so from the ground. I noticed a great many dwarf trees that had originated on the establishment, that well deserve the attention of the proprietors; particularly a Dwarf White Pine and a Dwarf Hemlock. Such plants are just the thing for small city gardens, and peculiar positions in larger ones. The firm seems to have been fortunate in raising such new varieties, for I also saw a very curious form of Norway Spruce, superior, in my opinion, to the foreign variety monstrosa, as also an erect and compact growing variety of White Pine. Much might be done for landscape gardening by attending to the selection and separate propagation of these marked varieties, which are often much more distinct in habit and striking characters than genuine botanical species are, and produce a decided effect in the laying out a place tastefully. The Taxus erecta thrives well here; it is decidedly hardier than any other variety of the English Yew, and the only one that has stood out here entirely uninjured by heat or cold. Of the newer evergreens and plants that have proved here quite hardy, but of which I saw no very large specimens so as to judge of the final effect their mature growth would give, I notice Picea lasiocarpa var. Parsonsiana, which, if it retain as it grows its present appearance, will be a most beautiful Pine. Picea Nordmanniana, though not new now, yet one of the scarcest and highest in price. Picea pectinata pendula, or Weeping Silver Fir. Picea amabilis, P. nobilis, and P. Hudsonica. Amongst other hardy and very desirable things we noted Torreya myristica; Picea silistrica, a golden variegated American Arborvitæ; Juniperus glauca, a very grey and striking variety of the Red Cedar; and Thujopsis borealis. In the deciduous shrub line, Cercis japonica, the new Japan Judas Tree, has proved very hardy, and very beautiful in flower. Andromeda arborea, a rare and beautiful small tree, and an ill used native at that, I was pleased to see in considerable quantity. Also, a curious dwarf Snowball, called Viburnum nanum. The Siberian Arborvitæ seems the hardiest of all, and is surpassed by none of the newer kinds in beauty. The Rhododendron thrives here in perfection, and has no cause to join in the universal charge that Americans neglect their own most beautiful of plants. *American Gardener's Monthly.*

Miscellaneous.

Turnip Enamel.—At the Glen Urquhart annual cattle and farm produce show, Mrs. Endall, of Kilmichael, exhibited a work-box enamelled with a preparation, it was alleged, got from Turnip, the polish of which was equal to that of any *papier maché. Builder.*

The Silkworm Disease.—The Council-General of the Isère, in accordance with a proposal made by the prefect of that department, has voted a sum of 40,000fr. as a premium to any person who shall discover an effectual remedy for the disease which has of late proved so fatal to Silkworms. *Galignani.*

Calendar of Operations.

(*For the ensuing week.*)

PLANT DEPARTMENT.

CONSERVATORY, &c.—Where plants in flower are required in quantity recourse must now be had to forcing pits, which should be liberally furnished with bulbs and the usual shrubs and other plants employed for winter decoration. Where there is a good stock of Azaleas to select from, some of the most forward plants may soon be placed in heat in order to get them into bloom early; moisten them overhead two or three times a day. Unless, however, plants can be had which made their growth and set their buds early in the season they need hardly be expected to flower so finely as under more natural circumstances, and unless the buds are plump there will be some danger of the plants starting into growth instead of flowering. Do not forget to introduce a good batch of Roses, choosing the most promising plants for the purpose. A gentle bottom heat will be of great service to these, as also to most other plants subjected to heat, in order to get them into flower as fully as possible, and a moist state of the atmosphere must be secured, admitting a little air freely on every favourable opportunity. Pelargoniums should be kept rather cool and dry, giving whatever water may be necessary on the morning of fine days, so that the superfluous moisture may be removed before the evening, avoiding the use of fire-heat except when necessary to prevent the temperature falling below 40°, or to dispel damp, when this cannot safely be done by giving air. Fancy kinds like the warmth of an intermediate house. Calceolarias require very similar treatment, except that they are subject to attacks of thrips unless afforded a moist atmosphere; they must, therefore, be narrowly watched and smoked lightly two or three evenings successively if this pest makes its appearance, keeping the atmosphere moist, and giving air on every favourable opportunity to prevent the foliage from flagging. Cinerarias for late blooming must also be kept cool and airy, and should not be allowed to suffer from want of pot room. Plants intended to flower early should be encouraged with a gentle heat, keeping them as near the glass as possible.

FORCING DEPARTMENT.

PINERIES.—If any portion of the stock is intended for fruiting early, a brisk temperature must be maintained to induce it to start; the most promising plants should be selected for the purpose and placed in a small house or pit by themselves; and, where anything like a regular supply of ripe fruit is required, several houses, or separately heated compartments, should be at command. It is not by any means desirable to start more plants into fruit at this early season than may be absolutely necessary, for they will produce finer fruit later than can possibly be obtained from them now; and where a separate house cannot be commanded for those which must be subjected to a higher temperature, we would advise that the plants selected for fruiting should be placed in the warmest part of the house at command, filling the rest of the house with young stock. The former should be afforded a bottom-heat of about 85°, and the latter about 10° or 15° lower; the atmosphere should range from 68° to 75° by fire heat, allowing it to rise 5° with the assistance of sunshine, keeping the young plants near the glass, and properly supplied with water at the root. This temperature will be considerably too high for young stock at this season, but we have seen this system practised with considerable success; and although the young plants may get somewhat drawn, they will gain strength as light increases, and the evil will be less than running the risk of starting at this early period of the season the greater portion of the plants that are at command for keeping up the supply throughout the summer.

VINERIES.—In very early houses, until the buds are fairly broken, the points of the shoots should be kept nearly on a level with the lowest part of the Vine; and if this should not be found sufficient to induce the buds to start equally throughout the length of the Vine, the rod should be bent so as to bring the most forward buds to the lowest level, elevating those that are backward. Maintain a thoroughly moist atmosphere by frequently sprinkling the floor and passages, &c.; and syringe the Vines lightly at least twice a day until the leaves begin to appear, when the amount of moisture must be moderated. Give every attention towards securing a gentle warmth for the roots; turning the litter and adding fresh as may be requisite, and keeping it well protected from the effects of heavy rain and severe weather. Be satisfied with a moderate night temperature until the buds begin to push, when it may gradually be raised to 60° by the time that the leaves fairly begin to open.

PEACHES AND NECTARINES.—Prune and otherwise prepare the trees in the early house for forcing, which, however, except under particular circumstances, should not be commenced for a few weeks yet; but let it be remembered that these fruits will not admit of rapid forcing in the early stages of the process, therefore fire heat should be applied with caution, so that the night temperature does not exceed 50°, otherwise the blossoms will be weak and liable to drop; during the day the temperature may rise to 60°, with plenty of air on every favourable opportunity. Cover the outside border with leaves or litter, for the purpose of excluding frost and heavy rains. Tie in the trees in the next house, and get all ready for starting when required.

CHERRIES.—Top-dress with fresh loam and dung, and when placed in heat keep a moist atmosphere, with a night temperature of 45° to begin with.

STRAWBERRIES.—Protect the pots from frost and wet. Do not water except they are very dry.

FLOWER GARDEN AND SHRUBBERIES.

If any of the tenderer kinds of Roses are yet unprotected, some covering material should be applied at once. There will be comparatively little to do in the flower garden at present, and any spare time will be well spent in going over the stock of plants in pits for next season's use, removing every decaying leaf, and where the surface soil has got green, removing this and top dressing with sandy loam. There is nothing so unfavourable to these plants at this season as damp, therefore take every favourable opportunity of admitting fresh air.

HARDY FRUIT AND KITCHEN GARDEN.

See that standard trees which have been recently moved or root-pruned are firmly secured against winds; and also get any root-pruning or transplanting remaining to be done this season executed as soon as frost breaks up. Endeavour, as has been previously pointed out, to have a good supply of Parsley under safe protection, for there is generally a large demand for this; and in the event of a severe winter it is difficult to save it by the ordinary protection of hoops and mats. Lettuces, Cauliflowers, &c., in frames should be freely exposed on all favourable occasions. Protect Artichokes with leaves and long dung. Cucumbers require every attention at this time of year to keep them in health; still maintain the temperature previously advised, and give air every day when the weather permits. Stop and train the plants as they progress, and do not allow the leaves to crowd one another, otherwise they will soon get yellow; water occasionally with liquid manure; this should be done when the soil is dry. Keep up a moist temperature of from 55° to 60° in the Mushroom house. Collect fresh horse-droppings, and put them together in a dry place to heat.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending Nov. 21, 1861, as observed at the Horticultural Gardens.

November.	Moon's Age.	Barometer.		Temperature. Of the Air.			Of the Earth.		Wind.
		Max.	Min.	Max.	Min.	Mean	1 foot deep.	2 feet deep.	
Friday 15	13	29.489	29.421	47	17	32.0	47	47	N.W.
Satur. 16	14	29.582	29.552	43	21	33.5	46	46½	W.
Sunday 17	○	30.047	29.837	34	14	24.0	44	45¼	N.
Mon. 18	16	30.415	30.253	33	13	23.0	43	44	N.W.
Tues. 19	17	30.495	30.330	47	28	37.5	42	42½	S.W.
Wed. 20	18	30.253	30.040	51	31	41.0	42	43	S.W.
Thurs. 21	19	29.916	29.574	53	43	48.0	42	43	S.W.
Average		30.028	29.858	44.0	24.3	34.1	43.7	[illegible]	

Nov. 15—Lightly overcast; fine; clear; sharp frost.
— 16—Frosty; clear; overcast; frosty at night.
— 17—Clear and frosty; fine; clear; sharp frost.
— 18—Severe frost; fine; clear; frost unusually severe for the period of the season.
— 19—Sharp frost; clear; bright sunshine; clear; slight frost.
— 20—Fine throughout; clear at night.
— 21—Overcast; densely clouded; boisterous with slight rain at night.

Mean temperature of the week 7½ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Nov. 30, 1861.

November.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds. N.	N.E.	E.	S.E.	S.	S.W.	W.
Sunday 24 ..	47.2	32.6	39.9	11	0.50 in.	4	7	3	2	4	8	[illegible]
Mon. 25 ..	45.9	33.3	39.6	18	0.34	3	3	6	3	7	7	3
Tues. 26 ..	46.8	33.3	40.0	19	0.70	1	6	6	1	4	12	1
Wed. 27 ..	46.6	34.8	40.7	16	0.88	1	5	5	1	6	8	5
Thurs. 28 ..	47.8	35.4	41.6	17	1.21	2	4	3	2	7	6	[illegible]
Friday 29 ..	47.6	34.5	41.0	18	0.56	4	1	6	3	5	10	4
Satur. 30 ..	47.8	35.0	41.4	19	0.30	4	5	3	3	3	9	[illegible]

The highest temperature during the above period occurred on the 28th, 1828—therm. 60 deg.: and the lowest on the 30th, 1856—therm. 14 deg.

Notices to Correspondents.

ALTITUDES: *A. Saul.* The Ordnance Maps will probably afford you the most trustworthy information respecting the elevation of the place above the level of the sea. If you possess an average of, say, a twelvemonths' observations of a good barometer corrected for temperature, &c., we might be able to point out how a tolerably close approximation to the correct height may be obtained.

BARBE DE CAPUCIN: *A Salad Eater.* This, which is frequently now to be seen in the windows of green-grocers for sale, brought from France, is nothing but Chicory grown in the dark with a little warmth. That of a cellar is sufficient.

BOOKS: *Egnarg.* James's Gardening, a quarto full of excellent plates, published in 1712; a translation from the French.

CAPE BULBS: *W P L.* Probably either of Carter in Holborn, or of Van Houtte of Ghent.

EMIGRATION: *A Gardener and H. Norris.* You can't do better. A ship called the Vicar of Bray sails for Vancouver early in December; apply to Seymour & Co., 116, Fenchurch Street. Another ship called the Thames is also loading for Vancouver; apply to Chas. Oswald, 12, George Yard, Lombard Street.

GOLDEN PIPPIN: *An Old Subscriber,* we are informed, may hear of and get the Old Golden Pippin by applying to Mr. T. P. Heale, 19, Cumberland Street, Devonport, near Plymouth.

HEATING: *R S* There is a small Arnott Stove, of which a description and plan has been given in our columns. But no really good apparatus has been yet contrived. The second or specific names of plants only begin with a capital letter when they are proper names. Thus we write Abies Frazeri (the Fir of Frazer); and Primula fimbriata (the fringed Primrose).

HEATING MELON PITS. *R C.* For bottom heat a flow and return 3-inch pipe will be sufficient. They may be laid among coarse sand or gravel screenings. For top heat, pipes of the same size should be laid about an inch from the front wall, with a board an inch from them on the opposite side, so that the pipes can be covered with moss, that may be kept moist when necessary, and dry, or removed when the fruit is ripening.

INSECTS: *R T.* The seeds of the Banisteria are infested with the larvæ of some small species of Weevil. We fear the latter are all dead, not from the cold but for want of a fit situation to undergo their transformation. *W.*

LAURELS: *Hesperus.* We know of no means of destroying their roots except by stubbing them up. If they could be killed in the ground the evil would be that they would be sure to breed dry rot, which will kill the neighbouring plants.

NAMES OF FRUITS: *H B.* 1, Blenheim Pippin; 3, Mère de Ménage; 4, Hall Door; 5, Pigeon; 6, Hollandbury.—*A M B.* 1, Minchall Crab; 2, Devonshire Buckland.—*W T H.* 1, Van Plus Meuris; 2, Bellissime d'Hiver (a stewing Pear).—*G I.* Duchesse d'Angoulême.

NAMES OF PLANTS. *F.* The leaf belongs to Cineraria (now called Senecio) maritima. It is a capital plant for bearing sea influences.—*R H, Hereford.* It is impossible to name such a bit.—*Devonian.* Saxifraga Aizoon. The "nut" is that called Sapucaia, and is the seed of Lecythis ollaria.—*F C P.* Your giant Boletus luridus is probably B. Satanas, a most dangerous Fungus, to which the mycologist Lenz nearly fell a sacrifice. *M. J. B.*

PARISIAN GARDENING. The large leaved plants which are so much admired in the public places in Paris are for the most part Cannas with very fine foliage, raised by M Année. They are all in Van Houtte's Catalogue. The small Musas among them don't answer, on account of their leaves being torn by wind.

PEACH WALL: *S W.* A coping ought to have a groove along the front and should project enough to prevent drip. It is not however very important.

RABBITS: *W L.* The following is said to be a good mixture to keep them from barking trees. To 1 gallon stale urine add 1 quart powdered lime, and 1 pint foreign tar; warm the tar to mix with the above, then add as much cow dung as will bring it to the consistency of moderately thick paint, and apply it to your Hollies with a painter's brush.

THE LONDON MANURE COMPANY (Established 1840,) Are now prepared to send out the following MANURES:—
CORN MANURE for AUTUMN SOWING.
SUPERPHOSPHATE of LIME.
DISSOLVED BONES for PASTURES.
CONCENTRATED URATE.
BLOOD MANURE for CORN.
PERUVIAN GUANO, NITRATE of SODA, SULPHATE of AMMONIA, and every other Manure of value.
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Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to Burnard, Lack, & Co., Sutton Road, Plymouth.

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LAWES'S PATENT TURNIP MANURE, and BONE SUPERPHOSPHATE of LIME	.. .. ..	£6 6
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Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
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DRAINAGE OUTFALLS.—The most simple expeditious, and inexpensive powers for obtaining the right of making Outfall Drains, Cuttings, &c., through the lands of adjoining Proprietors, are under the WEST of ENGLAND DRAINAGE and INCLOSURE COMPANY'S ACT, and there is no necessity for separate proceedings such as Petitions, Special Act of Parliament, Commissions of Sewers, or Drainage Boards, &c.
Draining, Inclosing, Irrigating, Warping, Road Making, and all kind of Land Improvements executed on Entailed, Mortgaged, or other Properties; the whole cost can be a Charge on the Lands permanently, or it might be made redeemable at any fixed time in one or more sums or by half yearly instalments over any term of years, at the option of Proprietors.
Frederick Brodie, Secretary.
Offices—Exeter, and 30, Parliament Street, London, S.W.

Land Drainage.
WORKS of DRAINAGE of any extent are EXECUTED by the GENERAL LAND DRAINAGE and IMPROVEMENT COMPANY on all descriptions of property, whether freehold, entailed, mortgaged, trust, ecclesiastical, corporate, or collegiate.
Repayment may be made by the Landowner as successive portions of the works are completed; or the actual expenditure, with a commission thereon, may be charged on the property improved, by way of rentcharge on the estate created for various terms of years so as to adapt the rate percent. of annual charge to the circumstances of the tenants.
No investigation of title being required, or notices given to Reversioners or Mortgagees, no legal expenses are incurred.
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Landowners desirous to execute any of the Improvements by their own Agents, and charge the outlay and expenses on the Estate, may obtain Loans for the purpose.
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To Landowners, the Clergy, Estate Agents, Surveyors, &c. in England and Wales and in Scotland.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
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4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.
Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.
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HILL and SMITH'S PATENT BLACK VARNISH for preserving Iron Work, Wood, or Stone. This Varnish is an excellent substitute for oil paint on all out-door work, and is fully two-thirds cheaper. It may be applied by an ordinary labourer, requires no mixing or thinning, and is used cold. It is used in the grounds at Windsor Castle, Kew Gardens, and at the seats of many hundreds of the nobility and gentry, from whom the most flattering testimonials have been received, which Hill & Smith will forward on application.
Sold in casks of about 30 gallons each, at 1s. 6d. per gallon, at the Manufactory, or 1s. 8d. per gallon paid to any station in the kingdom.
Apply to Hill & Smith, Brierley Hill Iron Works, near Dudley, and 76, Cannon Street, E.C., from whom only it can be obtained.

To Nurserymen and Florists.
H. PERKINS having a large stock of TOBACCO PAPER, of very superior quality, offers the same at 10d. per lb., and genuine ROLL PAPER at 1s.
TOBACCO CLOTHS 10d. per lb., warranted genuine.
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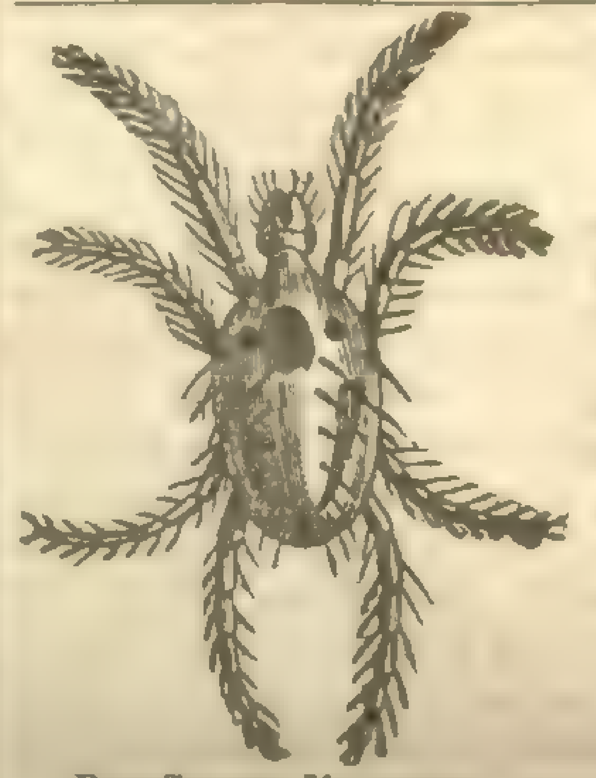
Red Spider Magnified.

ORCHARD HOUSE TREES and VINES.
Winter wash with GISHURST COMPOUND, recommended by Mr. Rivers. See "Orchard House," ninth edition; and see Mr. Pearson's recommendation in *Cottage Gardener*, 10th Sept., 1861.
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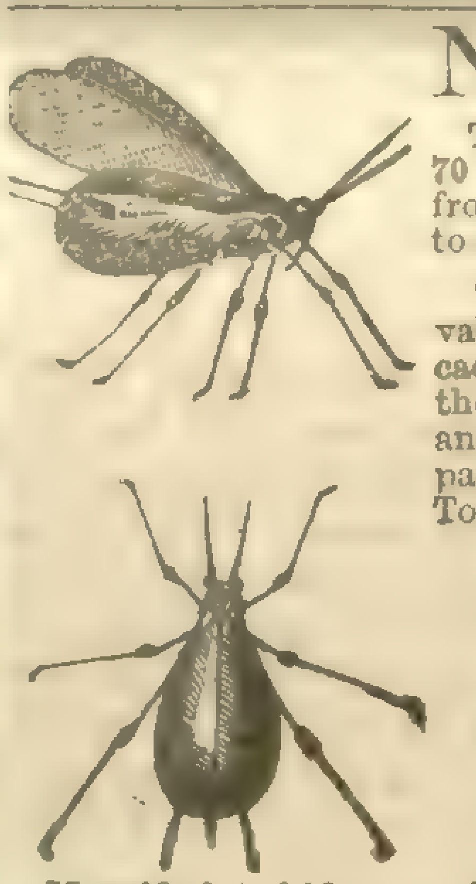

NEAL'S PATENT APHIS PASTILS.
The following is one of upwards of 70 Testimonials received by J. Neal from gentlemen personally unknown to him.
"I beg to bear my testimony to the value of Neal's Pastils, and their efficacy in destroying, most effectually, the Green Fly without any trouble, and at a nominal expense, when compared with the use of Tobacco or even Tobacco Paper.
"James Sanders,
"Nursery Grounds, Abergavenny."
Sold by all principal Seedsmen. Price 1s. and 2s. per packet.
Magnified Aphides. Patentee, J. Neal, Birmingham.

E. T. ARCHER'S "FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, &c.
PROTECTION from the COLD WINDS & MORNING FROST.
"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.
Two yards wide .. .. 1s. 6d. per yard run.
Four yards wide .. .. 3s. per yard.
An improved make, 3 yards wide, 2s. 6d. per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard run.
Elisha Thomas Archer, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.
"It is much cheaper than Mats as a covering."

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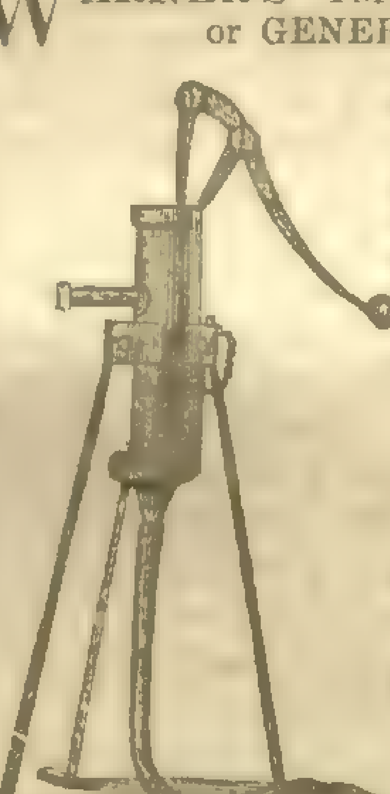
No. 35.

WARNER'S PATENT CAST-IRON PUMP, for raising Water from Wells not exceeding 25 feet in depth.

Diameter of Barrel.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead, gutta percha or cast iron flanged pipe as required.	1 1 0
2½ " long	3 " 3 "		1 10 0
3 " ditto	3 " 6 "		2 4 0
3½ " ditto	3 " 6 "		2 9 0
4 " ditto	3 " 6 "		2 18 0
2½ " short, with 15 feet of Lead Pipe attached, ready for fixing		....	2 0 0
2½ " long	ditto	ditto ditto	2 14 0

This Pump is fitted with J. W. & Sons' Patent Vibrating Standard, Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.

WARNER'S IMPROVED LIQUID MANURE or GENERAL PORTABLE PUMP.


No. 42.

This Pump is fitted with Warner's Patent Bucket and Valve, and cannot clog in action. The Barrel is made of Galvanised Iron, not likely to corrode, and can be raised or lowered at pleasure on the stand, the legs of which fold together, and it may be carried with ease by one man.

	£ s. d.
Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe	2 15 0
If fitted with Barrel of Planished Copper	3 4 0
Stand and Pump, with plain Tail Pipe, for tying on Suction Pipe	2 9 0
2-inch India Rubber and Canvas Flexible Suction Pipe, on wires, in either 10, 12, or 15 feet lengths .. per foot	0 2 5

No. 43 is a similar Pump to the above, without stand, but with strong wrought-iron straps, for fixing to water cart or plank, price 2l. 5s.
Every description of Machinery for Raising Water, by means of Wheels, Rams, Deep Well Pumps, &c.; also Fire and Garden Engines, &c.
J. W. & Sons' Illustrated Catalogue forwarded post free on application.
The above may be obtained of any Ironmonger or Plumber in Town or Country, or of the Patentees and Manufacturers, John Warner & Sons, 8, Crescent, Cripplegate, London, E.C.

JOHN FOWLER, Jun., 28, Cornhill, London, E.C.—Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free.

JAMES and FREDERICK HOWARD, Britannia Iron Works, Bedford, Manufacturers of STEAM CULTIVATORS, STEAM PLOUGHS, CHAMPION PLOUGHS, HARROWS, HORSE RAKES, & HAYMAKERS.
Catalogues, with full particulars, sent free on application.

Agricultural Machinery.
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Burgess & Key, Manufacturers, 95, Newgate Street, London, E.C. Price Lists free per post.

£1000 UPON the WOOLSTON SYSTEM against any other system of Steam Cultivation.
For price of apparatus and particulars apply to Mr. W. Smith, Woolston, Bletchley Station.

The Woolston System.
MR. SMITH will ATTEND at the SMITHFIELD CATTLE CLUB SHOW from 11.30 a.m. to 2.30 p.m. each day, at STAND 640, where Drawings of his new Patent Combined Machine for Cultivating, Drilling, and Harrowing Land by Steam Power will be exhibited.

Drainage Season.
MR. BAILEY DENTON undertakes the DRAINAGE of ESTATES by Commission or Contract.
52, Parliament Street, Westminster, S.W.

LAND DRAINAGE UNDERTAKEN, or PLANS SUPPLIED, by Mr. Thomas Scott, 18, Parliament Street, Westminster, S.W. Mr. S. has now a large Staff employed, and recommends an early application.

NATIONAL EXHIBITION of DOGS.—The SECOND GREAT ANNUAL EXHIBITION of SPORTING and other DOGS will be held in extensive Premises in Tennant Street, Broad Street, near Bingley Hall, Birmingham, on MONDAY, TUESDAY, and WEDNESDAY, December 2, 3, and 4, the first three days of the Cattle and Poultry Show.
The PRIVATE VIEW on Monday, December 2. Admission: Monday, 5s.; Tuesday and Wednesday, 1s.
For Special Railway Arrangements, see the Advertisements and Bills of the several Companies, and of the Cattle and Poultry Show.

THE BIRMINGHAM CATTLE and POULTRY SHOW, 1861.
The THIRTEENTH GREAT ANNUAL EXHIBITION of CATTLE, SHEEP, PIGS, DOMESTIC POULTRY, and ROOTS will be held in Bingley Hall on MONDAY, TUESDAY, WEDNESDAY, and THURSDAY, December 2, 3, 4, and 5.
The PRIVATE VIEW on Monday, December 2. Admission; Monday, 5s.; Tuesday, Wednesday, and Thursday, 1s. The Doors will be opened at 9 o'clock each morning.
For Special Railway Arrangements, see the Advertisements and Bills of the several Companies.

The Agricultural Gazette.

SATURDAY, NOVEMBER 23, 1861.

MEETINGS FOR THE NEXT TWO WEEKS.

Monday, Dec. 2		Exhibition of Fat Stock and Poultry at Bingley Hall, Birmingham.
Tuesday, — 3		
Wednesday, — 4		
Thursday, — 5		
Wednesday, — 4	—Agri. Society of England	Noon

Nothing is more noteworthy in the short and recent history of success in steam cultivation than the way in which it is interspersed with recitals of failures, losses, and disasters, almost as great as the successes, profits, and advantages to which they are a contrast.

We must confess that the two sides of the picture have not been given with equal minuteness in these columns. It would be possible to quote one Correspondent, who says: "Our engine and apparatus have been hard and fast in the corner of the field a wasted month this autumn because of a broken piece which we have unaccountably been unable to replace." Another says, "Owing to a mistaken estimate as to the tenacity of the soil on a portion of my farm, the engine supplied to me was of insufficient power, and the plough too weak in some of its working parts: we have consequently been working at a low speed, and have had breakages and hindrances which have told seriously upon the extent and cost of the work done." A third says:—"I have an exact account kept of the work done each day and the quantity of coals consumed, but it is so unsatisfactory that I do not like to refer to it. Since I have been the unfortunate possessor of one of these implements it appears to me that I have been trying a series of experiments for the benefit of the maker. Before I had the engine I was always in advance with my work, since then I am always behind." This last is certainly a very discouraging report, which probably can hardly anywhere be paralleled.

It may be thought that the dark side of the picture should be given in as much detail as the lighter side of it, and that a full history of this unfortunate case would be at the least as instructive as that of the successful instance which we have described. Our reply is this: The history even of successes, in so far as it influences the progress of steam culture, is a drag upon that progress. The immediately past, at any particular moment in the history of a great change which is

so entirely to revolutionise our agriculture, is always, if not unduly discouraging, at least and even in its best instances, not so encouraging as the real merits of the affair can claim for it. Next year's experience will be better than this year's leads us to expect; and the year which follows must be better still. It is thus that the history of the "cultivator," which is perhaps three years old, has generally fewer disasters recorded in it than the history of the plough, which may be said to be little more than one year old. And above all this, the history of disaster hitherto is that of inefficient generalship or insufficient superintendence. One of the greatest successes we have recorded is that of the man who could say that "for the first month of its use upon his farm he had never left the engine while the fire was lighted." Another great success which we have yet to record has been achieved notwithstanding one of these monthly wastes of time owing to a breakage which could not "unaccountably" sooner be repaired. The tenant here could say: "The fact is I take a great interest in the success of the machine, and give more time to it than perhaps is good for the rest of my business."

A partnership management, where three or four farmers unite in the purchase of the apparatus, is almost sure to fail. A company employing a staff of hands, idle except when the apparatus is actually at work, can hardly expect to succeed. Inconstant superintendence, without *determination* to achieve success, will be sure to meet with accident and loss. And under one or other of these classes almost every case of failure and disaster may be placed. Instead of reproducing in these columns the history of such cases, and so giving a wide and lasting influence to that which the general experience proves to be exceptional and accidental, we prefer selecting fair instances, or if biassed either way, successful instances of steam plough experience for record here; assured of this, that the best of the instances we can choose will fall below the experience of the next few years in the advantages of steam cultivation to the clay land farmer.

As a good illustration however, because a carefully recorded one, of the accident and hindrance unavoidably attending a new apparatus, or a new form of any apparatus, we may fairly quote in full the report with which Lord Berners has been good enough to favour us, of the work actually accomplished this autumn on his lordship's farm at Keythorpe, between the 30th of August and the 14th of November, including 76 days; or deducting Sundays, 60 working days. Of these, 15½ days have been lost by stoppages from material breakages, and 16 days by removals and minor breakages. The time actually at work thus amounted to 34½ working days of 10 hours each. During that time 74 acres have been ploughed, and 59 acres have been cultivated from 5 to 6 inches, 6 to 9 inches, and 6 to 10 inches deep, according to the quality of the soil. The engine employed is one of 10-horse power made by Clayton & Shuttleworth, described as a "capital engine with plenty of power," and the apparatus is the smaller machine with which Mr. Fowler won the prize at Leeds, offered for the best form of steam cultivator adapted to the ordinary farm engine. The wages paid chargeable on the engine during the time already named, have amounted to 83*l.* 11*s.* 10½*d.*—this excludes two gallons of beer daily; it includes two horses employed at 3*s.* a day; it also includes wages paid to engineers from Leeds, as referred to below. The coals and oil consumed by the engine during the time have cost, at 18*s.* a ton, 13*l.* 7*s.* 3*d.* The whole cost thus is 96*l.* 19*s.* 2*d.*, or about 15*s.* an acre on the work accomplished; while in ordinary experience one-half that amount is a maximum.

Lord Berners has been good enough to accompany these figures with the following report:—

"The cost of labour is increased by the two Leeds engineers being retained the whole time, in consequence of the frequency of breakages of various parts of the windlass, anchors, &c. The charge for them is 1*l.* per week, and 14*s.* board and lodging each. The men employed the first month were:—

1 to assist Engineman and work windlass, 3*s.* 2*d.*
1 Ploughman to clear weeds or stubble from plough or diggers
1 Anchorman .. ..
1 Porterman, occasionally required for signals
1 with water-cart .. ..
} 2*s.* 2*d.*
2 Boys at 9*d.*

Afterwards—

2 Boys were substituted for Anchor and Portermen.

The work done by the diggers was excellent, and could not, in the then hard state of the ground, have been done by horses; but then the stoppages from breakages, and consequent loss of time, were too great to render it profitable. The ploughing was also very good, laying the furrows in the best possible state to be acted upon by atmospheric influences. This was done upon ground comparatively free to work, more friable, and previously subsoiled, on which a pair of horses could plough with ease. Here the breakages were far less, showing that the strength of the various working parts of the windlass and anchors has only to be adjusted to the work required to render steam cultivation the most valuable addition to British agriculture."

These figures will reappear among the others descriptive of other experience, which we hope shortly to give in a tabular form; meanwhile, as illustrating the experience of another well known leading name in the agricultural world, who has had a longer practice in the work of steam cultivation than Lord Berners, we quote the following figures from a statement by Mr. Holland, M.P., of Evesham. Since harvest on Mr. Holland's farm, his 12-horse engine has been at work in all 36 days, which include wet days and removals. He says: "When we commenced, the ground was unusually hard and prevented the accomplishment of much in a day. We have only used three ploughs. All being heavy clay land, nothing but steam power could have enabled us to do the work." During these 36 days, 66 acres have been ploughed, and 150 acres have been "cultivated," *i.e.* 50 acres have been worked three times over. The work has been accomplished 10 inches deep. The wages paid have been 34*l.* 8*s.* 3*d.*, or putting the ploughing and cultivating together, but little more than 3*s.* an acre. The coals consumed, at 12*s.* a ton, 12 to 13 cwt. daily, have cost, with oil, about 16*l.* 4*s.*, or 1*s.* 6*d.* an acre. The repairs have been—by carpenter, 13*s.* 6*d.*; by blacksmith, 3*l.* 9*s.* 9*d.*, or 4*l.* 3*s.* 3*d.* in all. And this is by no means an extraordinary success. Many other instances could be quoted even more remarkable.

EXPERIMENTS ON MANURES.

A short time ago some experiments were published in one of the April or May Numbers of the *Gardeners' Chronicle* in reference to the beneficial action of coprolites (ground to an impalpable powder) on Swedes, in comparison with other manures. The results have, contrary to the opinions of myself and others, induced me to try similar experiments on Swedes, the results of which I now lay before your readers. I quite agree with Dr. Voelcker in saying that very little good can be obtained from the result of a single experiment, but often a great deal of harm; and with this view of the case, I intend pursuing the same experiments for several years to come, as I think it is the duty of every one who holds a similar position to myself to do all in their power to connect science with agriculture, and I shall be very glad to join any person in making agricultural experiments who is situated in a different part of England, so as to be able to arrive at more satisfactory conclusions.

The ground experimented on was lately a very old and badly drained piece of pasture, to which, after being well drained, salt was applied at the rate of 25 bushels per acre. The field was then ploughed and harrowed in the usual manner, and divided into two parts of 4½ acres each. On the one half Oats were sown, and on the other Mangels and Swedes drilled in with superphosphate of lime, leaving the width of one drill across the field unmanured. Out of this one drill was divided six plots, side by side, measuring 4 by 3 yards, each containing eight drills. The plots were manured and sown on the 13th May, 1861, as follows:—

	Cwt. per acre.		per Ton.				
No. 1. Bonedust, at the rate of	2½	at	£8 0	equal to	£1	0	0
2. Ground coprolites ..	5	,,	4 0	,,	1	0	0
3. Unmanured							
4. Ground bone-ash ..	4	,,	5 0	,,	1	0	0
5. Superphosphate (E. T K's)	3	,,	6 10	,,	0	19	6
6. Dissolved coprolites ..	3	,,	6 10	,,	0	19	6

The soil was in a fine state of division, the weather dry, and the manures in a finely powdered state, and well mixed with ground ashes before being drilled in with the seed. On the 18th inst. the seeds had all appeared above ground and very regular. On June 3d the plants in each plot were looking well, but those in No. 2 were decidedly the most forward, and those in No. 3 the most backward. Plots 5 and 6 appeared equal throughout the season, and all were treated in the ordinary manner. The amount of phosphate of lime per cent. in the manures used was as follows:—

In No. 1. Bone-dust, 55·35 per cent. phosphate of lime.
,, 2. Coprolites, from 60 to 61 per cent. do.
,, 3.
,, 4. Bone-ash, 67 per cent. do.
,, 5. Superphosphate, 18·59 soluble, and 2·49 insoluble, } 21·08 total.
,, 6. Dissolved coprolites, 21·75 soluble, and 10·35 insoluble, } 32·10 total.

On looking at the above we find that

cwt.		lbs	
2½	of bone dust per acre is equal to	165	of phosphate of lime.
5	of ground coprolites	336	
4	of bone ash	300	,, ,,
3	of superphosphate	70½	mostly soluble. ,,
3	of dissolved coprolites	77½	,, ,,

Thus showing the preponderance of insoluble phosphates in Nos. 1, 2, and 3, or the natural manures. All the plants ear a great deal too green, and were attacked by mildew just before being pulled and cleaned on the 12th of October. The number and weight of the roots in each plot, with the weight per acre, was as follows:—

Plots.	Manure used.	Rate per acre.	Weight of roots in plot.	Number of roots in plot.	Average per acre.	
		Cwt.	lbs.		Tons.	cwt.
1	Bone dust	2½	114	60	20	[illegible]
2	Coprolites ground to an impalpable powder	5	112	54	20	[illegible]
3	Unmanured	..	102	51	18	[illegible]
4	Bone-ash	4	123	52	22	[illegible]
5	Superphosphate	3	124	58	22	[illegible]
6	Dissolved coprolites ..	3	132	56	23	15
	Average	..	118	55		

From the above statement it will be plainly seen that the Swedes were most benefited by the manure which contained the largest amount of phosphate of lime rendered soluble by means of sulphuric acid, altho[ugh] the total amount of bone earth (insoluble phosphate) was less in Nos. 5 and 6 than in Nos. 1, 2, and 3, more especially in No. 2. The whole of these experiments were superintended by myself with every possible care, so as to avoid any error. The greatest objection to the above experiment was the small quantity of ground experimented on; therefore next season I intend al[lot]ting one-eighth of an acre to each experiment. In conclusion, I may mention that the season was generally fine, not much rain having fallen until after the roots were about two-thirds grown. *E. T. Kensington, F.C.S., Agricultural Chemist, Mooltram, Ilminster, Oct.* 13.

AMERICAN CHEESE.

[The following reports are quoted in the report of the New York Agricultural Society.]

Mr. A. B. Mack, of Westport, Essex Co., thus answers questions put by the Society:—

The cheese exhibited was made the 15th day of June last, and weighs now 116 pounds.

1. I warm only a part of the milk, and mix it with the rest till I bring it up to 85°, adding the rennet at that temperature.

3. I vary the heat at setting, heating a little more in cool weather, because it cools off faster.

4. I use calves' rennets, prepared as follows: Salted very much when taken from the calf, with the curd if any, and dried on plates. I put four of these to four gallons of water, some sage, and sufficient salt to keep it sweet, say one quart. After five or six days strain off and keep in a cool place; use one pint of this liquor to 100 pounds curd; more, if necessary.

5. I cut the curd each way with a long wooden knife, and then break it fine with the hands; let the curd settle, and dip off most of the whey.

8. I apply heat by heating whey in a long tin pail set in boiling water until it comes up to 100°; about one hour in doing it.

11. I dip out all the whey, and some curd with it, into a basket, covered with a strainer set in a sink, from which the whey is carried by a spout into the hog pen; stir the curd all together, let it cool before putting in the salt.

12. I use Ashton salt, 2½ lbs. to 100 lbs. curd; mix thoroughly with the hands till cool.

13. Put to press as soon as cool enough; if too warm the cheese is more likely to be strong.

14. I use two presses; one the self-pressure, the other the old-fashioned lever press; usually divide the curd, as small cheeses cure quicker.

15. The principal cause of the pressing cloth adhering to the cheese, is the curd being put in too hot; my remedy is to keep everything sweet and clean, and great care as to the state of the curd.

16. I give colouring to the cheese by colouring the bandage cloth before using it, and a little otter in the grease.

17. I produce a rind by greasing and rubbing every day, using butter and clean grease, applied with the hands.

19. Hot weather and insufficient scalding and salting are the causes of swelling. Remedy, cook and salt a little more in hot weather.

Mr. Hiram Mills, of Lewis County, thus reports of his cheese:—

The three cheeses offered for inspection were made about the middle of June, from 31 cows and heifers; as I estimated them in my report to the committee on farms, at 29 cows.

1. My mode of making cheese is as follows:—

Milk strained in a tin vat set within a wooden vat, with a space of an inch on both sides and bottom, which is filled with cold well water when we begin to milk at night, which water will become as warm as the milk by the time we are through milking.

This water is then drawn off and the space again filled with cold water, and in the warmest weather put a cake of ice into the milk at night, using great care to have the animal heat all extracted, believing it to be impossible to make a good article of cheese from milk that is changed, and hence the precaution taken to keep it perfectly sweet.

2. This water is drawn off in the morning, and steam admitted in its place to bring the milk to the temperature of 85° before applying the rennet. Use some heat

at all seasons, as I find the milk will be below this temperature even in the warmest weather, and I find that I get the best curd and the best yield at about that temperature.

4. I use calves' and hogs' rennets mixed. I save rennets by stretching them well on a bow, salted freely, taking care to have them dry well so as to keep perfectly sweet, as I think it a thing impossible to make a good cheese from rennet tainted in the least.

Prepare them for use by soaking in water a number of days and then throwing the skins away, and then salt freely. Use enough rennet to bring the curd in about 40 minutes sufficiently hard to work, which I can tell by passing my finger through the curd, and if sufficiently hard there will be a little space left in the curd behind the finger.

5. I use a steel knife with four blades to make the curd fine, as I find I can do this work much quicker and better than to do it all with the hands. I think this knife far better than the old fashioned tin cutters. I make my curd very fine; this causes it to scald more evenly, and I think it makes better cheese.

6. I dip off a part of the whey before this operation is completed, as I can work it to better advantage, and it requires less heat to scald the curd.

7. I then commence to raise the heat by the addition of steam into the space under the tub, by means of one of Brayton's Dairy Steamers, which I consider a decided improvement over any other steamer that I have seen, as it is a great saving of wood as well as labour, as there is no dipping of whey or water back and forth, and I think it scalds the curd more evenly than when warm water is used, and the waste steam is used when not wanted for this purpose to warm water for washing up the dairy utensils.

8. The space of about an hour is generally taken to complete this operation, raising the heat by degrees, and stirring quite a portion of the time, to keep the curd from adhering together, and to get it evenly cooked.

9. I aim to bring the heat about the same temperature, viz., 102 deg. at all seasons, using, of course, more heat to effect this in cold than in warm weather.

10. Consider it cooked enough when it will adhere together by squeezing it in the hand and the whey runs clear.

11. The curd and whey are then dipped together into a strainer over a rack in a sink, care being taken to stir it sufficiently to keep it from adhering together, and as soon as the whey is sufficiently drained off, apply about a teacup of salt to 18 lbs. of curd.

12. Commonly use Salina salt, which should be thoroughly mixed in, stirring it well until it becomes cool.

13. Should never be put to press too warm, because that will cause it to adhere to the cloth, and I think injures very much the flavour of the cheese.

14. Press with lever or beam press. The lever being in a room above, and a large post, 14 inches square, framed into this lever or beam, and passing down through the floor between two upright planks, which forms the frame for the press.

This post being large, presses the follower down square, and thus pressing the cheese true, which is very desirable. This beam being 16 feet long, with a short purchase, is a powerful press. I think it important to press the cheese well. Press 24 hours, turn at night and bandage.

15. There are other causes for pressing cloth adhering to the cheese, one of which is the cloth or the hoop follower or pressing board getting sour, which they are very liable to do; hence the necessity of scalding them every day. And I would here remark that I deem it of great importance to see that everything connected with the dairy is kept perfectly sweet; and to assist in this direction, I give all my cheese fixtures a coat of paint every year.

16. To give colouring to the cheese, I add annatto (prepared in lye) to the milk to give it an orange colour inside, and on the outside, colour with the same, mixed with whey butter, which should be mixed with the butter when boiling hot, or it will settle to the bottom of the vessel in which it is prepared, after allowed to cool.

17. To form a rind impervious to flies, I put a cloth on the top and bottom of the cheese, at the time I turn in press, and allow them to remain on the cheese for six or seven days, then take them off and apply a coat of grease as warm as I can bear with the hand. In this way I get a better rind, at an age of seven days, than you can get in a month in the more common way of applying the grease when taken from the press. And this gives the whey a good chance to pass off if there is any left in the cheese, and it is in a better state to hold the colouring applied.

19. The cause of swelling in cheese is a deficiency both in scalding and salting; and if the curd is not well worked, the cheese will have the same tendency.

Remarks.—Cheese is made from two milkings, no addition of cream. I always make butter from the cream taken from the tub in the morning, thinking it difficult to get the cream again into a state to get its full value in cheese; for after it is once separated from the milk, it will rise again to the surface before the rennet takes effect sufficiently to turn it to curd—hence a portion of its value passes off in the whey. I therefore think it more profitable to make it into butter, except in the warmest weather.

IRELAND'S AGRICULTURAL PROGRESS.

In Kildare we found a fine tillage country of Wheat and Barley, Turnips on a large scale, and Clovers; the farms often large, and combining a minor share of pasture with arable; and the excellent husbandry there, introduced by Scotch farmers, is extending under the system of medium-sized holdings and leases of moderate length. Waterford presented a tract of wretched small-farm husbandry, with half-starved Oat-crops and lazy-bed Potatoes; yet with localities exhibiting great advance, where good landlords and considerate agents are assisting in building and draining, and generally instructing the tenantry in better modes of farming. Cork showed us a well-managed profitable dairy husbandry, favoured by several circumstances,—as the valuable distillery products for feeding cows and enriching the land manured; the native capability of the soil for clothing itself, when "laid down," with a sward of superior quality; and again, the proximity of a port for shipping the well-made butter and heavy bacon hogs. Kerry has fine instances of the rural improvement of a poor country, particularly in the consolidation of tesselated little farms (as on the estates of the Marquis of Lansdowne); and both in Cork and Kerry immense tracts of upland might be changed by cheap drains, by liming, &c., into fine sheepwalks. Limerick showed a lack of better farming on small occupations; but a gradually spreading culture of Turnips and Clover, and many larger farms very well managed,—the cause of backwardness in the husbandry of diminutive holdings being there mainly attributed to the unenterprising character of the occupiers. In Tipperary were seen grazing lands of high quality, supporting a well-to-do class of dairymen and graziers, and much small farming of light soil by men who have been driven some steps in the path of progress, owing to the Potato failure, and who would at once recur to the worst system of farming if these tubers would cease to rot. In Galway, partly a county of sheep and cattle, we saw how Mr. Pollok has supplanted the miserable cotter system by immense farming and grazing of great fields—now being gradually let in large farms to men who will continue to practise the best culture and employ a large amount of labour. In Mayo the Earl of Lucan has another grand example of reclamation, improvement, and augmented production, consequent upon superseding the wretched plot-culture of the county by first-class large farming. The small farming there exhibits the same sloth, waste, and poverty that characterised it generations ago, and a people subjecting themselves to privations while possessing the means of decency and comfort cannot but be slow in their adoption of laborious high farm-management. Roscommon has the natural herbage which constitutes it a great producing centre of sheep and horned stock; the extensive breeders and graziers thriving under favour of good markets, low expenses, little trouble, and very superior breeds of cattle and sheep—able to withstand the severities of winter treatment to which they are unnecessarily subjected, and to grow and feed rapidly on the good Grass and hay. A great improvement has been effected of late years in the flocks of Ireland, the sheep now coming much earlier to maturity; but there is still room for some advance both in the symmetry and quality of the animal, as well as in the weight of the fleece. Westmeath has fine grazing, as well as some good tillage husbandry, on farms not excessively small. Tyrone and Derry displayed to us the minute farming of good corn land, unadapted for permanent pasture, by an industrious, thrifty population, mainly dependent upon Flax, Oats, and Potatoes, and prospering and improving under the security of tenure very expensively obtained by the peculiar Ulster tenant-right. Mountain districts in Donegal and Connemara and the wild western islands are being developed into hill pastures and small tillage-plots by the timely aid of improving landowners, but need the facilities of railway communication, which can be but slowly accorded to a thinly peopled territory. Antrim and Down are fine tillage counties, growing Beans, Wheat, and Flax as well as Oats and Potatoes; but, in spite of numerous examples, and, indeed, entire neighbourhoods of exceedingly good husbandry, an inferior description of small farming prevails, little better than it existed many years ago. Lastly, in Meath large Grass farms abound, graziers are making money, and not likely to break up even third-rate pastures to the plough, and in some localities there are little cultivators and conacre Potato-growers who have not yet yielded up their land to the advance of machinery and skilful farming.

Compared with a few years back, the agriculture of Ireland, as a whole, is greatly advanced; examples of good management have been most extensively multiplied in all districts: in some localities (indicated in the above summary) the farming shows universal improvement—in the adoption of alternate husbandry and stall-feeding, in draining and building, and the management of manure and of tillage processes; while in other parts of the country no perceptible progress has been made, saving that a fearful amount of depopulation has left fewer families to share among them a larger stock of floating and moveable wealth. If one fact more than another can embody the altered aspect of the Irish husbandman's affairs, it is the extraordinary increase in the numbers of live stock. It has been already stated that animals, altogether, are 50 per cent. more numerous than they were 20 years ago; but cattle and sheep have multiplied far more quickly than this. Horses have scarcely increased since 1841; and pigs, owing to the emigration of cottage-feeders of bacon and pork, are actually much fewer; but the number of sheep is 3,538,000 in 1860, against 2,106,000 in 1841; and the number of horned cattle is 3,600,000 in 1860, against 1,864,000 in 1841;—that is, sheep have increased more than 50 per cent., and cattle about 100 per cent., within 20 years. Now, this amazing increase of stock has not arisen from any very great addition to the area of ground in cultivation—which has reached about 15,400,000 acres out of the 20,800,000 acres total surface of the island; much less has it been a consequence of a vast swallowing up of tillage land by laying down to permanent Grass, the area under crops having slightly enlarged, as well as the proportion under Grass. The enormous increase in the number of sheep and cattle must have been occasioned by better husbandry, more particularly the greater production of cattle-feed crops and the extension of stall-feeding.

Ireland presents a contrast in her rural condition of 1860 and of 10 years before. Mr. Caird then found, as at present, good roads in all directions, but of the railways which now intersect most counties only one or two had been opened. An immense number of properties were waiting for the deliverance of the Encumbered Estates Court, which has now sold lands to the value of 23,000,000*l.* and established a Parliamentary title over more than 3,200,000 acres, nearly one-sixth of the superficies of Ireland. The advance in rents had been very great, principally from the competition for land caused by a rapid growth of population, and the general prevalence of the vicious con-acre Potato system. This had enabled men without capital to compete with each other for land, and to earn an easy subsistence by an indolent cultivation; but the murrain having destroyed the mealy tubers on which almost the whole social system was based, con-acre almost disappeared; tenants deprived of con-acre or truck labour had no money to pay wages in cash, and their land became unproductive; landlords found their rents vanishing, and rates became an enormous burden. But a more wholesome system of tenancy has now been introduced; cultivators are compelled to rely upon improved tillage of green crops, and in few districts have the present series of letters recorded excessively high rents or rates. The immense sums expended in "relief works,"—some reproductive, others merely providing temporary employment for a starving population—in hospitals, infirmaries, dispensaries, prisons, and so on, had swelled the grand-jury cess in many cases nearly 100 per cent. The poor-rate had progressed in a more frightful ratio; in some counties the famine had multiplied the rate 500 per cent. in four years. Tenants were consequently abandoning farms; landlords were called upon for the rates, with no rent coming in: and this diminution of cultivation was aggravating the distress by throwing hands out of employment, still more increasing the poor-rates, and simultaneously decreasing the produce of the land out of which rates can alone be paid. At present the poor-rate is by no means a heavy burden; and the grand-jury cess is not generally exorbitant, though much complained of in some counties on the ground that proprietors lay the tax which the tenants have to pay. In 1849 the labouring population were in a worse condition than when Arthur Young described their cows and pigs, Potato grounds, and household furniture in 1779. In 1849 their mud hovels were worse, their wages nominally a little more, but taken away from them again in the high price charged for con-acre, and this was their condition before the Potato failure completed their ruin. Wages were then commonly 6*d.* to 10*d.* a-day for a man; but now 1*s.* and 1*s.* 2*d.* or 1*s.* 3*d.* are the usual rates of payment all the year round; and while there may exist a lower scale of wages in some few localities, and some extent of destitution may be found in the winter months, there are cases of 8*s.* or 9*s.* a-week being paid the year through, and very generally the farmers complain of a lack of hands. Cottages, too, exhibit an improvement, though the Irish labourer is still miserably lodged. *Times Reporter.*

Home Correspondence.

The Water Meadows of Hampshire.—If we follow the rivers to their sources we find their spring heads profitably cultivated as beds of Water Cresses; then supplying water to irrigate the water meadows, failing in such seasons as 1859, but returning to their office in 1861. Nearly all the valleys in which these streams and their tributaries run are occupied by water meadows, mostly of ancient construction. This will account for the somewhat rude form in which some of them are laid out, probably by persons ignorant of scientific engineering, who have trusted to practical knowledge and to the eye. Thus the surfaces often present great inequalities, and the water is distributed over the meadows by the most tortuous courses. They have adjusted the flow of water with as little labour and expense as possible to the natural surface of the soil. A perfect system of

water meadow requires the entire command of the stream independent of mill dams, which pen back the water unduly in some places, and necessarily sometimes interfere with the supply. Immediately above mill-heads the water is so penned back as to interfere with the free discharge of the tail water, which is quite as necessary to the well-being of water-meadows as the first requisite, the height at which the water is received. The water usually passes from the main feeder, the river, where it is dammed by weirs, by subordinate feeders running either at right angles with or sometimes in the same direction as the stream. The latter arrangement may be seen on the Itchen, where the navigable branch of that river, unlike an ordinary canal, though fitted with a series of locks, is a permanent carrier to a portion of the stream. As the water here runs at a commanding level above the meadows, it is discharged by hatches in the canal bank into a collateral feeder, whence it flows into the carriers at right angles with the stream. This may also be seen at Houghton below Stockbridge, where, as in some other places, a mill-head runs immediately under the side of the valley, and here supplies power to a wheel which drives the agricultural machinery of a large farm, an application of water power which might be made with advantage in other places. It sometimes so happens that the stream is so situated with reference to the adjoining land that there might be a feeder at right angles on one side and collateral on the other. The great object is the rapid and even distribution of the water over the surface, and its rapid removal. The perfection of this arrangement is represented by a series of low pitched roofs, hipped at the end furthest from the feeder against the sides of which they abut, as against a wall even with the ridge; these roofs have gutters on the ridge and at the eaves. The water flows down from the feeder which stands at right angles with the run of the roof, passes down the gutter on the ridge, from the sides of which it overflows the roof, is received into the gutter at the eave called "the drawings," and passes off into a lower carrier in the same direction as the feeder whence the water originally came; or more properly at right angles with the run of the roof. There is every modification of this; sometimes a feeder is carried by a trough over a stream, sometimes it is a wide spread shallow cutting on which the Grass grows as well as on the other watered portions of the surface. If from the great inclination of the ground the water would pass too rapidly by a carrier with an evenly cut floor or bottom, small steps or stops are cut to such a depth and in such numbers as to offer such resistance to the passage of the water as will regulate its flow; to assist this operation small pieces of turf are used, and with the assistance of a dung-fork the tender of the meadows makes small supplemental dams as circumstances may require. The meadows are watered at the judgment and discretion of those who look to them; no fixed rule can be laid down; the watering is carried on in the winter, when the warmth of the water as well as its chemical properties benefit the soil. The meadows below towns necessarily benefit by their position. As the watering is a matter of judgment, so the produce of the meadows is at the discretion of the farmer, consumed either for early feed for couples, cut for hay, or fed again. *J. C. C.*

Drainage Outfalls.—As a leading article appeared in your last week's publication advocating powers for taking outfall drains through the lands of adjoining proprietors, and as your observations alluded to the complicated and expensive powers granted in the last session of Parliament by "The Land Drainage Act, 1861," I presume that you are desirous of laying before your numerous readers any further information on the subject, and therefore I trust that you will kindly insert this letter, and allow me to refer them to an advertisement appearing in your present Number announcing that the West of England Land Draining Company have the most simple, expeditious and inexpensive powers under their Act of Parliament for making outfall drains, cuttings, &c., through the lands of adjoining proprietors, and which have been practically tested in different parts of the country. *Fredk. Brodie, Secretary.*

Farmers' Clubs.

Oxford: *The Management of Agricultural Labour.*—The Rev. J. C. Clutterbuck, vicar of Long Wittenham, read the following Paper:—

Labour has justly been called "the very best capital when rightly used." Its management is chiefly ruled by the judgment and knowledge of the individual employer; though it is greatly influenced by the general consent and custom of various districts, as it varies with, and is affected by, the character of the farming, the difference of soils, and innumerable other causes, which it would be impossible to specify.

The Ordinary History of the Farm Labourer is very much the same. It begins, as we know, at a very early period, fixed rather by the bodily strength than age in years.

The parents either crave for the employment of mere children as a boon, or the employers seek them out and give them such work as they may be able to undertake. Here we are brought face to face with a manifest evil; the too early removal of these children from the schools in which they have scarcely attained the first rudiments of reading and writing. The labour of such children can be of little value. Nearly all parents readily acknowledge that the pittance earned by the child seldom repays the cost of the increased quantity of food which he requires, and the wear and tear of shoes and other clothing; nevertheless, the employment of children is the rule rather than the exception. The Sunday and evening school, however well conducted, cannot supply the place of the daily instruction from which they have been so early removed, besides which, Sunday teaching is often prevented by the work of the boys extending to a part at least of that day. In proof of the early removal of children from school, I will read to you a statement extracted from the tabulated results of the last inspection of schools (1860) in the counties of Oxford, Berks, and Buckingham. Of the 612 parishes, there are only 68 which refuse inspection, 49 omitted for special reasons, and 125 with no school for inspection:—

	Inspected.	Present at Examination.	Average Age of first-class.
Oxfordshire	138	8690	10.7
Berkshire	121	10,634	10.6
Buckinghamshire..	108	7891	10.5
Total ..	370	27,215	10.6

As this includes both sexes and the residents in towns, the average age of boys in agricultural districts cannot be set above 9½. I observe that the average is put as low as this in parts of Buckingham, probably from the elder girls being employed in lace making, or straw plaiting. I submit these facts, which stand on unquestionable evidence, to the serious consideration of the employers of agricultural labour. Mr. Mein, in a paper read two years ago before this Club, remarked that "all farms ought to be training schools for the young agricultural labourer." The very nature of the work usually assigned to these children is seldom fitted to carry out this principle. Bird-keeping, or, as it is sometimes called, "crow-starving," pig-keeping, cow-keeping, are usually idle employments; if performed alone, wearying and irksome in the extreme; if in company, fulfilling the old saying "one boy is a boy, two boys half a boy; three boys, no boy at all." Younger children are often tempted to play truant, or are taken from school to accompany their brothers to the field; these may seem trivial matters, but early habits never lose their force, and, after all, the boy is the stuff of which the future labourer is to be made. Sheep are seldom entrusted to the care of very young children alone, and they are of little use as shepherds' assistants. The same may be said of horses and stable work, and, generally speaking, all work to which very young children are put would be better performed by those older than themselves. This is not so, I believe, in some manufactures. Before leaving the subject, I may remark, as I did on a former occasion, that I have not heard of any system of industrial training which can practically take the place of that followed in most of our parishes.

I have been favoured with a statement from which I will put before you a suggestion on the progress of farm labour; 13 or 14 years seems to be the age at which a boy should begin to contract for his labour by hiring for the year, or by agreement with a month's notice to leave. He begins as ploughboy or shepherd's assistant, or under the comprehensive title of odd boy: the wages vary with the ages, capabilities, and employments of the lads; after two years' service, or thereabouts, they rise to under-carters, under-shepherds, and all, in these days of machinery, may be advanced according to their intelligence, skill, and good conduct, as drill men, engine drivers, feeders of the threshing machine, managers of the reaping machine, or such situations as will lead them higher still, with an advance of wages. The great question is, how shall the services of such useful labourers be best secured to the employer? Shall it be as servants hired by the year, or for an indefinite period, with a month's notice before leaving, or by weekly contract?

As to the Old Custom of Hiring at Fairs or "Mops."—This subject has been much discussed of late; all seem to admit the immoral tendencies of these gatherings.

Their advocates take their stand on the right the labourer has to make the best market of his labour, and they think that the public fair best secures this object. The objectors see in these fairs evils which no contingent good can counterbalance. They assert that servants so hired seldom renew their engagement at the expiration of the year; whereas servants hired by private agreement generally remain several years in the same situation. As to putting down these fairs, they suggest the simple remedy of employers refusing to go to them. As to hiring female servants at fairs, it is utterly indefensible. I do not see the force of the assertion that fairs give a better market to the labourer. The absence of any definite character, as one of the grounds of hiring, detracts from the value of the service offered; it is the employer's own fault if he deliberately hires a servant by private contract, without a good character. The moral evils are too notorious to need comment here. Ending the period of service with the term of hiring from year to year, and the constant change of service as its consequence, seems to strike at the very root of the relationship that is so desirable between the labourer and his employer; it weakens the tie we should try to strengthen, and, as appears to me, hinders the social advancement of the labourer by depreciating the value attached to tried service. Long periods of service are rewarded in most Agricultural Societies: I do not concur in the objections raised against this practice. No one denies the value of lengthened service, and surely no discouragement to it should be given by any system generally adopted in the management of agricultural labour. If the old practice of hiring by the year has so taken the form of an Institution that it cannot easily be set aside, then it should be so done as to secure lengthened service if possible. In the case to which allusion has been made, the system is to engage the labourer on the condition that he may leave at any time by giving a month's notice, two-thirds of those so engaged being strangers, who show no disposition to change their service. I have ascertained that there are many persons competent to the task, who would willingly keep a register and receive the names and qualifications of servants of both sexes, and the requirements of the employers, with a view to facilitate engagements from year to year, or at a month's notice, as the case might be, and this at a small charge sufficient to cover expenses. The accommodation provided for strangers, now that boarding in farm-houses is discontinued with the altered habits of the times, is often a subject of difficulty, and very often a source of great evil. The barrack system does not obtain in this neighbourhood; in one instance which has fallen under my own notice it was open to moral objections from imperfect supervision; and I have been told by persons well competent to judge that most serious immoralities are engendered where the sleeping arrangements of youths are ill-regulated and not placed under proper control.

Wages by the Day or Piece.—Hiring by the year or otherwise seldom is extended beyond a certain period in a labourer's life, scarcely ever after marriage, and so he becomes a weekly servant.

All weekly or rather daily labour divides itself into piece or task work, or day labour. The difficulties of regulating these are incident to all human affairs. If all conduct between man and man was ruled by the highest motives, day-work would never come short in quantity, nor would piece-work fail in quality. In piece-work there should be a good understanding at starting. In some of the most important and best paid acts of husbandry, as reaping and mowing, the settlement of price is left to after adjustment; something I know may be said for this; it is, I believe, [illegible] to promote neighbourly feeling among employers, though it seems to be open to much objection. Whether it be in fixing the price for such labour, or the judgment as to its being properly performed, it requires the knowledge which can only be gained by experience, and the upright sense of justice which marks the character of the yeomen and tenant farmers of this district. If this is necessary in the management of piece-work, it is the very essence of the management of day labour. None but a thoroughly practical man is a judge of the work of others. The soldier obeys the strictest commander, and the sailor encounters the greatest perils and the hardest work cheerfully, if he knows that the order proceeds from one who knows what ought and can be done; so the good agricultural labourer will never murmur against the requirements of his employer, who knows his business thoroughly. The custom of general fixed standing wages is manifestly a check to emulation, and its consequent improvement, and a desire to retain the best situations. It is difficult to regulate a scale of wages which varies with the value of the labourer's services, or in proportion to his capabilities; but this should be done, if possible, especially with carters, shepherds, managers of machinery, and all who have valuable property under their charge. That fixed scales find favour with many workmen may be seen in the strikes of mechanics, the object of which seems to be to reduce all to the same standard, without reference to the skill of individuals; this feeling makes it very difficult to break through a custom which, in the management of agricultural labour, is looked on with favour by many labourers themselves.

The State of the Labourer's Cottage does not, strictly speaking, belong to this subject, but it is so directly connected with his moral and social well being and comfort that I will say a few words on the aspect of the question, which I think bears on the management of labour.

The cottages in very many villages are in a miserable condition, especially those belonging to corporate, collegiate, and ecclesiastical bodies, when leased with the land; many of them with only one sleeping room, and otherwise unfitted for the accommodation of families. For this it may be said there is no valid excuse. But all cottage property, as a rule, is of the same character, and one of the reasons is that the labourer's wages will not allow him to pay such a rent as will be a fair interest on the capital the cottages represent. All tenements built as an investment have reference to the rent they will bring; where, as in this neighbourhood, cottages are let at 1*s.* per week, it is vain to expect that the labourer can be well lodged, except in houses built on estates without reference to the interest on the capital so invested; therefore, if we look this question fairly in the face, we must conclude that low wages and bad cottages go together. Where wages are higher cottage rents are, as I know, higher also. I do not say that there is always a corresponding improvement in the cottage homes, but there is less excuse for bad cottages. This point is not, I think, generally urged when cottages are spoken of. It is too true that land owners and others have allowed this evil to exist, but it must at the same time be admitted that low wages have perpetuated an evil most ruinous to the moral and social condition of the agricultural labourer.

Beer as Wages.—There is a point to which attention was called in the discussion on Mr. Mein's paper, which belongs to the subject before us. Nay, it appeared under the head of "Management of Labour" in the *Agricultural Gazette*, as an extract from the late Mr. Wratislaw's Prize Essay on "Farm Capital," in the last number of the *Royal Agricultural Journal*. I mean the payment of wages partly in beer.

It appears to me that employers have no right to complain of the drinking habits so common in agricultural labourers until they have done their best to check all that may foster and lead to a vice which is the fertile and acknowledged source of negligence, pauperism, misery, and crime, and of all others most surely endangers the well being of the stock and property of the farmer. A part, at least, of the remedy is in your own hands. Beer is given either at stated periods and during the performance of certain labour; sometimes it is given at the goodwill and discretion of the employer as an incentive to exertion by the stimulant it supplies; it may be given in one or both of these ways; both, I think, are open to objection. Though generally given in the field, I have heard of a modification of this custom. Tickets are given to the men every morning, during hay time or harvest, for a certain quantity of beer delivered on application at the farm house; if all the tickets are not used, they stand good beyond the period for which they were issued. This modifies but does not remove the evil. Take the usual method of dealing out certain quantities of beer at certain periods: this I deem a manifest injustice. One man may take all that he can get, a second may not require his share, a third may abstain entirely, either on principle or from choice. There can be no doubt that many men drink their share because it is their due, and is a part of their wages, not because they require it. I stated my conviction that more work was not got from the labourer by this means in the long run; if so, it is forcing him to sell his labour at a miserable price. Mr. Wratislaw has put his experience in this matter on record; he gives a calculation of the bargain he made, which was rather in his own favour. After some slight difficulty, he found that the entire substitution of money for beer worked well, and to the satisfaction of both parties, and that, so far from the work of the men falling short, the remark of his neighbours was, "I can't think what you do with your men; as soon as my back is turned I have little work done; come by your farm when I will your men are always at work." A friend of mine, a thoroughly practical man, said to me a few days since, "I am now leaving my farm; if, as is probable, I should take another I will never give any more beer; it is an evil to all, and the very ruin of the farming lads." This is one of the many testimonies against this practice. I have given it up, with the best results, for the last two years, and those the only years in which I have had no disagreement in the field. I will quote Mr. Reid's words in his Prize Essay on the Farming of Oxfordshire. "Perhaps in no county of England is the love of beer among the labouring poor so general or so extravagant as in Oxfordshire. If anything out of the common routine on a farm is to be done, a drop of beer is wanted to make it go off pleasantly. At harvest cart the beer is handed round every two hours. Some excellent farmers give their men 1*s.* per day instead of beer; this is a good plan, but it shows the inordinate quantity that is commonly allowed. Most unfortunately the rage for beer when at work is only second to the love of it at the alehouse. This miserable infatuation produces wretchedness, poverty, and crime." This does not touch the question, on which I have a strong and growing conviction, as to the necessity or benefit of beer as a beverage. That is a question to be decided by the labourer himself. Not for the labourer, by his employer paying a part of his wages in beer.

On the subjects on which I have imperfectly touched—the employment of boys at too early an age; hiring at fairs; hiring by the year, or with a month's notice to

leave; due supervision of strangers, and the manner in which they are lodged; the regulation of piece and day labour; paying wages in proportion to the capabilities of the labourer; cottage homes; and the baneful practice of paying wages partly in beer—I invite full and free discussion. I have not ventured to touch on the use and management of machinery; it might, I think, form a good subject for another meeting. One of the great obstacles to the freer introduction of machinery is the prejudice of the labourer, which can only be removed by the proof that he is a gainer by it. This is acknowledged in threshing by steam. I am not aware that there is any objection to the steam plough, though the reaper is looked on with disfavour. The working of threshing machines for hire sometimes fosters irregular habits by offering casual and rather highly paid employment to those not attached to farms; this should be discouraged. The future of British agriculture must be greatly influenced by the increased application of steam in various ways, whether in the development of the resources of the soil, the investment of capital, or new and improved inventions. The success of the employer and the well-being of the labourer, and the happiness of all, must hereafter, as now, greatly depend on the harmony with which they work together, and this will always find its best security in the judicious management of agricultural labour.

The discussion on the subject of the paper was deferred until the next meeting of the Club. *Oxford Journal.*

BERKELEY AND THORNBURY: *Nov.* 11.—Major GAISFORD contrasted the agricultural views of former days with those of our own. All man's creations were subject to decay and change. It was not with the land as it was with them. The soil was not, as had been erroneously imagined, susceptible of exhaustion; judiciously managed, and with its outlay handsomely reimbursed, time and use only enhanced its powers of productiveness. He adverted to the various manures applied to the soil, and described their qualities. He showed how much nature, without the aid of man, effected for the soil by its agents, the sun, the rain, the air, the earth-worm itself. He observed that the natural process of fertilisation was a slow one. In ancient husbandry long fallows were thought necessary. Witness the seven years' ordination of the Jews: "Six years shalt thou sow thy field, and six years shalt thou prune thy Vineyard, and gather in the fruit thereof; but in the seventh year shall be a Sabbath of rest unto the land, a Sabbath for the Lord; thou shalt neither sow thy field nor prune thy Vineyard." The lecturer then glanced at the system of the Romans. The ancients, he said, were continually deploring their failing agriculture. We know that from every cultivated crop the land sustains a loss; the ancients failed because their expectations were to get eternal supplies of corn and meat without returning to the land anything in the shape of sustenance and reparation. Just as to keep up your fire you must not be sparing of fuel, so to sustain the fertility of the soil you must be judicious and generous in supplying manure. The sandier and shallower the soil the hungrier it was, and the more manuring it required. Sixty years ago Turnip growing was greatly encouraged, and farmers used to believe they could get large crops without returning its dues to the land. They were grown wiser now. He dwelt on the advantages attending deep draining, which were now well understood, especially in clay lands; without such draining the heat of day could not reach the clayey depths. He alluded to the old fashion of ridging up furrows, by which rain-water, flowing away, carried away also fertilising qualities. Rain is a valuable fertiliser, and should be admitted to the roots of plants. From the experience of the effects of air and rain, one sees how useful it is as soon as one crop is off to be preparing for another. But to secure the full benefit of air and rain, deep ploughing is necessary. With this and plenty of manure the farmer need fear no exhaustion of the soil. In the better sorts of clay, much of good was locked up which might be drawn out by the means he had suggested. He again reverted to the good effected by drainage, and dwelt forcibly on the evils it prevents. Deep cultivation, he said, secured moisture in clayey soils. His notes, he said, presented nothing new to those who had access to the agricultural literature of the day, but might be beneficial to others. The benefits of steam cultivation were universally admitted, and the facilities afforded by the Steam-ploughing Company, established in the county, were fully acknowledged. Some arguments ensued as to the expediency of burning the soil, upon which there was much diversity of opinion consequent on the tenacity or adhesiveness of the land the dissentient parties might happen to cultivate, though one of the speakers expressed his conviction that he had derived as much benefit from burning some light sandy land, of which part of his farm is composed, as he had done from burning the strongest clay.

ROSS: *Herefordshire.*—At the late annual meeting Mr. CADLE spoke thus of Hereford for the Agricultural Meeting of 1863:—They were all aware that Herefordshire was trying to get the meeting of the Royal Agricultural Society held in the county town in 1863. His own opinion—and it was one entertained by many other persons—was that they ought to get the show at Hereford. The subject has been pretty well discussed, but there was one point which he had not seen touched upon, viz., that Worcester had been brought into close proximity to the Royal Society's shows by the meetings at Warwick on one side and Gloucester on the other, while Hereford, owing to its want of railway communication, had been shut out altogether. Again, he saw by the Royal Agricultural Society's Journal, there were only 43 subscribers to the Society and two governors in Worcestershire, while in Herefordshire there were 96 subscribers and three governors—a fact which he thought spoke volumes for this county in whatever light it might be taken. He conceived that any man who felt for the honour and interest of agriculture ought to subscribe to the Royal Agricultural Society; and viewed in that light Herefordshire had more than double the number of patriotic men than was to be found in the much larger and more populous county of Worcester. Again, with regard to breeders of cattle, there was more than double and treble the number in Herefordshire as compared with Worcestershire; besides which Herefordshire was a county possessing one of the three great breeds of cattle—a breed which it claimed the merit of originating, although now, he was happy to say, it was to be found all over the world. Again, in a monetary sense, Herefordshire was a better customer to the Royal Society than Worcestershire by something like 70*l.* a-year; and, as he had already observed, whatever view was taken of the subject, he could come to no other conclusion than that the meeting of 1863 ought to be at Hereford. As regarded the district of Ross, he thought they had every reason to be proud of the way in which it was farmed, notwithstanding all the slurs and backbiting of people. He had the pleasure the other day of riding over the Stoke Edith Estate, and he could assure them that a very great pleasure it was. To be on horseback from 9 o'clock in the morning until 6 in the evening, and during all that time to see nothing but good farming, was, he did not hesitate to say, a state of things which reflected great credit upon the county, and upon Lady Emily Foley and her tenantry in particular, for it showed that good feeling and entire confidence must have subsisted between her ladyship and her agent and tenantry before such a satisfactory position could have been attained. Colonel Challoner, a distinguished member of the Council of the Agricultural Society, was also present, and pronounced it to be the best-farmed estate he had ever seen in his life. Conceiving, therefore, that Herefordshire men had reason to be proud of their present position, he would exhort them, in the event of the meeting of the Royal Society being held in Hereford in 1863, to make an effort, every man, to send something fit to be seen, from his own farm, and not to leave one man in a parish or a district to exert himself to sustain the honour of the county.

HUNGERFORD: *Usefulness of Farmers' Clubs.*—At the last meeting of this Club a paper on this subject was read by Mr. CHANDLER, of Aldbourne, from which we make the following extracts:—

A Farmers' Club is not to be mistaken for an Agricultural Society. He thought he might venture to say that there was scarcely a county in the United Kingdom without its Agricultural Society. But of Farmers' Clubs—how few there were, and how weakly supported? There must be some cause for this coldness, which it may be well to inquire into, either in the existing management or in the apathetic indifference of the agricultural body in general. Having had a tolerably lengthened experience in observing the working of two or three of these societies it may not be out of place to take a retrospective view of them, which may assist in forming some resolution as a reply to the questions under discussion. The first observation he would make was, that such clubs were usually got up without a due consideration of the principles which should govern them, to render them effective not only to the wants of the immediate district in which they are to operate, but also for the wider sphere of usefulness, extending throughout the whole community. They were too often started by a few over-zealous and enthusiastic men, who enter most warmly on their new hobby for the first season or so, by discussing such subjects as come under their notice in the regular routine of farm operations, which soon become "flat, stale, and unprofitable," and in a short time result in a failure. He would recommend that in the formation of new clubs, and in the revision of the present ones, there should be no rule to prohibit discussing politics in reference to agriculture, as he would rely on the good taste of the members to prevent acrimonious controversy, when taken up by men who look practically into the different bearings of the case deeply affecting their own interest.

To the question—"Are they of any use?" he observed that if they were not they would be, if properly carried out. To suppose that this or that club would individually do any great amount of good, was more than its most sanguine supporters dare expect. The most deficient element amongst farmers is organisation, without which all their declamations at the market tables against various evils supposed or otherwise, such for instance, as the great increase in the county expenditure, the imperfect corn returns, &c., &c., amount to idle words only. The time is long since past when it was imagined that we must trust to others to aid us out of our difficulties. That state of things vanished with the Corn Laws. It is expected of us as English farmers to act as independent men, using every legitimate means in our power to do so, asking only what every Englishman may fairly claim, "a clear stage and no favour."

PEMBROKESHIRE.—At the last meeting of this Society Mr. BONAR read a paper on "The best method of laying down Grass lands, or permanent pastures, the kinds and quantities of seed required." He said:—We may have a failure in our crop of Oats or Barley, by grub, or wire-worm, or a poor return of Wheat, as too many have done this year, or the fly may take our Turnips, or the disease destroy our Potatoes. To have any of these crops a failure, would be, of course, a great loss to the farmer, but still, it is but one year's loss, another crop next year might redeem his loss. But, should we, through carelessness in cultivation or manuring, or what is quite as important, should we err in the selection of sound seeds properly suited to our soils, and thus lose a crop of Grass, it is not only one year's loss but a loss for many years to come. It is then no mean object for us to make ourselves better acquainted with the most approved method of laying down this, the largest portion of land we now occupy, to the best advantage. A very respectable farmer in my neighbourhood told me, when discussing the different systems of farming and cropping, that the old system was the best that ever was, or would be. The old system of laying down Grass lands is to go on with white crop after white crop in succession until the land is completely exhausted, and then nature is left to provide the crop of Grass. Now, what is the result? Is it a crop of luxuriant, healthy, permanent pasture? No, it is only a mass of coarse herbage, with neither nourishment nor feeding properties in it. It would take a good deal of time, trouble, and expense to extirpate such a mass, and in doing so we make the land so light, that in a dry season we shall run a great risk in losing our next crop. There are many of my neighbouring farmers who would, at this season of the year, be very reluctant to change a stubble field with me, as they say they have got plenty of Grass in them for their cattle, while mine would starve a goat. But this only shows the two different systems of farming, and I shall leave every one to adopt the one that pays him best. But my first object is to clean the land (which I consider the best principle of farming), and everything I do not sow I consider to be a weed; and I think there is no other way of doing that properly without a fallow or a green crop. We may, in some seasons, under very favourable circumstances, be able to clean our stubble fields in some measure for another white crop, and may cart or burn no end of Couch from it; but in such a wet season as the past we too often find it a failure. I am a great advocate for deep ploughing, and more especially for stubble lands before green crops. This I do in the autumn and the early part of winter, instead of allowing my stock to make the land into mortar; and I invariably find that when this is done, and the surface completely buried, that a great portion of the weeds disappear before spring, and as I make it a rule not to grow two white crops in succession, it is seldom that I have any trouble of cleaning in spring, further than one ploughing and harrowing. If anything more is wanted, as the land has been properly stirred to its depth, I consider the grubber or scarifier to be a more efficient implement than any other, more especially in a dry spring, as there is often an error committed in exposing the soil too much to the elements. The Turnip crop will then be put down and kept clean during the summer in the ordinary way. We must not allow the spring to be too far advanced before ploughing, as the effect of the atmosphere will go further in pulverising the soil than the Cambridge roller. It is absolutely necessary that we should have our land converted into a firm mould or seed-bed before sowing Grass seeds, and if that cannot be obtained after harrowing in the Barley, we ought to roll before sowing the Grass seeds, then cover them slightly, and then roll again. There are many different opinions as to the best depth of cover at which certain Grasses and Clover should be sown, but my opinion and experience is that the slighter the covering the better. There is a work published by Lawson, on the cultivated Grasses, which I would highly recommend to all who are connected with farming. It not only gives a full description of the various natural and artificial Grasses, but embraces all that is useful and interesting regarding their nature and habit, the particular soils for which they are adapted, and the peculiar circumstances under which their culture is necessary or desirable. I would recommend the seed barrow, now in use, for sowing the seed, and more especially the Clover, as by using it we not only save a quantity of seed per acre, but distribute them more equally on the surface than can be done by the hand. But, before taking leave of this part of the subject, we must not overlook the use of lime. For my own part, I consider it to be one of the first and most essential manures applicable at this stage, as it has that powerful effect of acting upon all inert and irony substances, which abound in some soils, and which prove detrimental to healthy vegetation, and it dissolves all vegetable matters, and renders them available in the shape of easily assimilated food for plants.—Mr. Bonar proceeded to give tables of the mixture of seeds recom-

mended by Lawson in various circumstances, and to recommend the purchasing of good seed at fair prices instead of seeking cheap seed and getting rubbish. *Abridged from the Pembrokeshire Herald.*

REIGATE: *Sparrow Clubs.*—The following is an extract from a paper by Mr. MARTIN, sen., read before the Reigate Natural History Club, reported in the *Surrey Standard*:—

The Supreme Maker and Governor of all things does not require the aid of Sparrow Clubs, or any other of our ingenious devices to diminish the quantity of sparrows.

Although the sparrows levy a small contribution on the farmer's grain, yet the far greater portion of their food is from injurious insects, and the whole of the food they give their young is from the tribes of insects. At the beginning of the world man would have succumbed in the unequal struggle if God had not given him in the bird a powerful auxiliary, a faithful ally, who wonderfully accomplishes the task which man is incapable of performing—in fact, against his enemies of the insect world, man would be powerless without the bird.

If the sparrows and the rooks make us pay very moderately for their services, all other birds, the pigeon excepted, are devourers of insects, and render us gratuitous services. Among them are nocturnal birds, as the barn owl, bats, and others, which ignorance foolishly persecutes. The wood pecker, the various species of the swallow, the charming songsters of the fields, the nightingales, black caps, red breasts, red starts, wagtails, larks, wrens, and other small birds, render most invaluable service. As an example of the proceedings of these useful creatures, 10 swallows were killed, and in their stomachs were found the remains of 5482 insects, giving to each bird 543 insects destroyed; analogous results attend the hedge sparrows. With respect to our formidable enemies, the cockchaffer and a host of others, the cockchaffer deposits from 70 to 100 eggs at a time, which are soon transformed into white grubs, which for two or three years live on the roots of our most valuable vegetables. The weevil produces from 70 to 90 eggs, which, laid in so many grains of corn, become larvæ that eat them all up.

"Thus the bird can live without man, but man cannot live without the bird." Common sense and right-mindedness would come to the conclusion that man, grateful for the invaluable services of these friends and faithful allies, the small birds, would take them under his special protection; yet man, by a strange blindness and ignorance, is often the greatest enemy of these gentle and beautiful creatures, and as if it was not enough, that we should, from sheer ignorance, carry on this war of extermination, parents allow their boys in their birdnesting sports to rob the nests of the eggs, and frequently of the young birds, a senseless and useless sport, as usually pursued, and, without spurious or sentimental feeling, we may fairly suppose some pain to the little parents in the bereavement.

We see in domesticated birds the anxious assiduity with which the hens particularly care for and foster their young—how much and with what sedulous care the common hen bird shelters her chickens under her wings. With a similar instinctive affection we may fairly suppose the birds in the hedges feel and cherish their young, and we ought to feel the cruelty inflicted on the poor little creatures by the thoughtless and wilful boy who robs the nest, generally from mere wantonness, or to very little purpose. Bird nesting ought not, therefore, to be tolerated, and the clergy, with the schoolmasters, shoutd be enabled to impart useful and humane knowledge on these and other subjects of natural history to their pupils.

That these defenceless little creatures have been enabled to survive this grievous warfare is one of the mysteries only to be explained by the wonderful goodness of God, who incessantly redeems and corrects the errors and faults of that fallible creature, Man.

In a recent Number of "All the Year Round," a popular periodical, is a facetious version of the French report on bird destruction in the form of a Congress of Birds—Sir Robert Redbreast, K.G., *i.e.* Knight of the Garden, in the chair, by acclamation of wings.

The version of the French document is pleasantly written, and is agreeable in perusal for the general reader, as stating the ravages as respects all vegetable productions by myriads of insects, all endowed with prodigious fecundity, and living exclusively on valuable vegetable productions; among them Wheat and other corn plants are destroyed at the root by the grub of the cockchaffer, and by other vermin in the grain by the weevil.

The cruciferous plants, as the Turnips, by other insects; others take up their abode in the pod of Beans, Peas, and Lentils.

At bottom the vital sap is intercepted by underground and burrowing insects. After these, mice and rats expect their share, so that nearly half a crop may be lost but for our friends, the small birds.

Those who have travelled through France, even merely to Paris, must have observed almost all the land in open fields with few living hedges, and therefore, affording but little shelter for small birds.

Those who travel at home observe the continual grubbing of hedgerows, and laying small fields together to make large ones, to have more land under the plough; which, considering that we are large importers of grain, can hardly be disapproved, although we must lament the diminution of shelter and protection for our little and invaluable friends, the birds.

In all probability the French government will have stringent measures to restrain the wholesale destruction of small birds. In this country we shall rely on gentle moral reason and suasion to effect the same objects, and in the hope of the entire discontinuance of the Sparrow Clubs, the patrons and promoters of which will be assured that they are making a great mistake in the destruction of little creatures who, living partly on grain, repay the gardener and the farmer tenfold by feeding much more on those minute animals, many of them too small to be visible to the human eye without the aid of the microscope, but visible to those quick sighted birds, as well as the grubs, caterpillars, and all other animalcules which prey on and destroy the products of horticulture and agriculture.

Farm Memoranda.

THE ROYAL FARM AT OSBORNE, ISLE OF WIGHT.—The Windsor farms have been reported on by Mr. Spearing in his Essay on Berkshire farming; though differing in many details they are managed on much the same principle as those at Alverstone and Barton. These lie on rather low ground, to the south of Osborne, on a very tenacious clay soil, as witnessed by the difficulty with which four stout horses may be seen dragging one of Howard's ploughs along a furrow on a Wheat stubble. The buildings, to which a good house is attached, are of a moderate size, though the stable room is sufficient for 28 horses in two compartments, flanked by cartsheds and divided by a hay store and tool house. The mangers and racks are on one level, the former being formed with upright bars rising from the floor to the side of the manger. The angles of the buildings here are fitted with rounded bricks, an arrangement which gives a neat appearance, and saves damage and dissight from broken corners. The doors are hung on rotating sheaves, by which they are disengaged from too great a bearing on the sill, and slide with great ease. The ordinary Scotch carts are made to allow the removal of the bed, so that the wheels may receive the framework of the East Lothian harvest cart. The minor arrangements of the buildings will apply equally to those at Barton, the home farm of Osborne. The yards are connected with the fatting stalls; 35 Galloway polled Scots with pigs not bred on the farm were the stock to be seen. The soil immediately round these buildings is clay, therefore entailing the inconvenience of a deficiency of water supply. Ascending the hill towards Barton, the character of the soil changes to a sand covered with gravel, which when, as here, thorough drained to the depth of 4 feet, at distances varying with the requirement of the soil, gives the advantage of a lighter surface soil; this is at once visible by the improved appearance of the crops, especially of the young Clovers, and the way in which it carries a dry flock of West Country Downs, which appear to be the stock best fitted for the soil. The maintenance of sheep, especially a breeding flock, on such land, taken as a whole, must be a questionable policy.

On passing the lodge at the entrance to Barton Farm, the well kept carriage drive is bounded on either side by a hedge of one row of Quickset, protected most effectually from sheep and other cattle by a remarkably neatly made wattled fence, which has nearly seen some of the Quicksets out of harm's way, and is a great improvement in appearance on the ordinary post and rail. In the frequent undulations of the soil, the variations are to be seen as the beds of sand or clay come to the surface: in the hollow near the farm are ponds of water communicating with each other, and revealing the springy nature of the land and the necessity for deep drainage to keep any flowing water well beneath the surface of the cultivated soil. Though the aspect is not attractive its appearance gives sufficient evidence that such a soil under effective drainage and good husbandry may be brought into such a state as to encourage outlay and improvement, sadly needed in many neighbouring localities. The ample hay-stacks show that a large portion of the land is in Grass under the scythe; the levelling of some of this land to fit it for the operation of the mowing machine shows the system in progress, and that no expense is spared to insure permanent improvement. Not to enter into the details of the arrangements, all the barn work, cutting food for the cattle, with a sawing table is performed by an 8-horse standing steam engine, by Easton and Amos. We find 22 black polled Galloway Scots, bought in, feeding in boxes in which the manure is allowed to accumulate under them till it rises to the level of the doors, which are 2 feet above the floor; a railway which runs throughout the centre of the buildings is about 3 feet above the floor of the boxes. The water is laid on, and is allowed to stand by the beasts; an arrangement condemned by many experienced feeders as tending to a waste of food, and risking injury to the condition of the beast. The pride of the establishment is a herd of 14 Channel Island dairy cows more or less bred upon the farm, the animal no doubt best suited to the locality and very pleasing to the eye: they occupy an extended compartment of the same building as that in which the oxen are fed. There are other Galloway Scots in the yards. The pigs form no peculiar feature in the establishment, and are either pure ... or Sussex, or a cross between the two, a favourite cross in this and other parts of the county. There are yards used in the lambing season for a flock of South Down ewes, with sheds with sparred boards on which sheep may be fed, an arrangement little ... by feeders of sheep. The collection of implements shows the encouragement given in the highest quarters to the improvement of agricultural mechanism. Burgess & Key's reaper is well spoken of on dry ground, though on the clays when wet the wheels become clogged; thus, too, ... cultivator, though it works well in the dry, is ... adapted, as we mentioned in another case, to the ... It is quite impossible in so short a space to do justice to this establishment. The results here produced ... in all lands highly farmed, in districts where improvements are, generally speaking, in arrear, cannot fail to show the development of which the soil is capable under the indispensible conditions of thorough drainage, deep and clean cultivation, the application of guano, superphosphate, and other artificial manures, in addition to the farmyard dung made on the premises, ... the rotation suited to the varied requirements of the soil, and the economical application of mechanical power to economise labour in the operations of agricultural science. *J. C. C.*

Miscellaneous.

Flavouring Hay.—Two such seasons as 1860 and 1861 have occasioned an increased breadth of ... qualities being stored in our midland districts; I have therefore been led to try how to make the most ... The formula given by me in the *Messenger* is—

Fenugreek (powdered)	112 lbs.
Pimento	4 ,,
Aniseed	4 ,,
Carraways	4 ,,
Cumine	2 ,,

(Mixed and strewed over the rick in building)

I do not offer this as by any means the best that can be made, but I give it with full confidence, as being a safe, reliable, and valuable compound for the purpose indicated. For a greater outlay you can get a better combination; and I have still some observations in hand extending over more than two years, which I think will lead to important results. Still, the preceding should neither be despised nor forgotten. Take our own case last year as an illustration: our local rainfall in June, the best hay-making month, was no less than ... inches, falling in 27 days. It is evident, therefore, that on a breadth of 200 acres of hay, there must have been spoiled lots somewhere; yet out of a winter's consumption of between 300 and 400 tons, not above ... at most, could be said to have been wasted. We do not cut any great amount into chaff, nor do we practise steaming the provender; and I assign the above practical fact to the free use of the flavouring mixture named. "You may ask how it affected the health of the stock. I can only reply that our beasts, numbering 170 head, came out with more than average bloom in spring; and the cow doctor's bill, from November to April inclusive (the hay-consuming season), has not run over 3*d.* per head." *Mr. Bowick, Farmers' Chronicle.*

Penny Banks.—The Penny Bank is designed as the first and temporary reserve fund, the preliminary treasure house of the industrious poor, the stepping-stone to the savings bank. The penny bank receives deposits of smaller amount, and encourages them by no allowance of interest. It is intended to catch, not such regular periodical payments as are made to "benefit clubs" in reference to health or clothing, but occasional contributions, chance pennies, gratuities, earnings for over-work; the overplus of any kind, which might otherwise soon vanish at the ale-house, or elsewhere, in worse than unprofitable results. It presents facilities for laying up little sums, from a penny minimum, which might otherwise go astray, and for withdrawing any amount at the shortest notice. It secures a little fund for a fixed purpose against a rainy day. It befriends the young by forming a nucleus of treasure which they gladly see increase, or by intercepting their waste through thoughtlessness or novelty spending. It befriends the honest and industrious labourer by taking care of his spare pence; domestic servants by protecting their savings and perquisites. The widow and orphan resort to it to withdraw what had been deposited beforehand for their temporary ... in need. By it the punctual payment of rent is promoted, and the cultivator of allotments is aided in meeting his expectant landlord. The grown up sons of a family, awaiting in uncertainty the exact time of leaving home for distant work, have cherished in the penny bank their little accumulations, and found them serviceable at the right moment. There are more than 200 penny banks established chiefly within the last ... years, and nearly all under gratuitous management. Our own penny bank had its origin partly in examples shown by other towns (particularly Southampton), and partly in the warning which grew out of a disgraceful abuse in this town of a casual distribution of about ... as fire-suppression-money; when a portion of the reward, bestowed upon 330 men, women, and children, who had been engaged in rescuing their neighbours' property, was dissipated in drunkenness and riot, which did ... terminate without manslaughter in our streets. Almost ever since our bank has been steadily in progress ...

...ey recently distributed in the same manner has ...en deposited there. Since the 27th December, 1858, ...convenient room has been devoted to this business in ...situation central, but not in the main thoroughfare, ...d we have received nearly 300*l.* from 507 depositors, ...n 5800 deposits. Of this sum, upwards of 160*l.* has ...en lodged, in the names of our treasurers, at the ...vings Bank, and, though we have paid out in with-...rawals more than 130*l.*, in 357 payments, we have ...ver diminished the Savings Bank investments. ...epositors include a few residents in five adjoining ...arishes, and we have received an application to form ...branch in one more distant. In every town and ...llage support to these useful establishments may be ...rged upon the parishioners on the plea of economy in ...d taxation. For we promote among the working-...lasses, and all persons occupying a sphere of ...ependency, the habit of thrift and frugality, and, if we ...an induce the commencement of the habit, and it be ...lowed to acquire its legitimate strength, and to yield ...s appropriate fruits (viz., moral independence and freedom from want), we benefit not only the depositors, but every person subject to the payment of poor rates. *Mr. Cruse, of Warminster.*

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended November 21; observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
		Max. in Sun.	Max. in Shade.	Min.	Mean.				
		Degs.	Degs.	Degs	Degs.	Degs.	Ins.		
Friday	15 ..	53.0	46.0	34.0	41.7	42.5	0.03	W.	29.85
Saturday	16 ..	51.0	44.0	21.0	34.2	42.0	..	N.W.	29.48
Sunday	17 ..	59.0	38.0	24.0	36.2	41.0	0.01*	W.	29.77
Monday	18 ..	54.0	37.0	18.0	31.7	40.0	..	N.W.	30.15
Tuesday	19 ..	73.0	38.0	19.0	37.2	39.5	..	S.E.	30.37
Wednesday	20 ..	70.0	43.0	29.5	43.0	39.0	..	S.W.	30.13
Thursday	21 ..	63.0	46.0	32.0	43.2	38.5	..	S.W.	29.77

* Snow.

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Calendar of Operations.

NOVEMBER.

Isle of Ely, *Nov.* 12.—We have at length had rain enough to enable us to 'sow our Wheat, although the land even yet remains in many instances very dry and dusty, and in others very hard and rough. There is nevertheless sufficient moisture, we conceive, to vegetate the seed except in a few special cases. Wheat seeding is necessarily late, and should we get an early and severe winter, that sown upon fen lands will be in great danger of losing its plant. We heard a fen farmer say the other day, that he had sown 356 acres, and had not a single acre up. A mild and genial winter would probably make the late sown crops better than if they had been put in earlier. Unquestionably much depends upon the character of the winter and spring as to the prospects of another harvest. Threshing is going on at a rapid rate, and the bulk of the present year's crops will soon have gone into consumption. The railway authorities have been taxed to the uttermost to find adequate means of transit for the heavy deliveries of the last two months. Sacks and trucks could by no possibility be supplied in sufficient numbers for the removal of the grain, and farmers have been compelled frequently to hold for some time after sales have been made before they could deliver the corn. Stations have been crammed with sacks of grain piled up until it seemed impossible to hold another. We fear the spring will have a different report to present. Deliveries must then be as short as they are heavy now. Prices have been satisfactory and money needed. Our report of the yield of the Wheat crop is not more favourable. Experience only confirms our previously formed opinion, viz., that in the fens the crop is only about two-thirds of an average one. The weather has been favourable for taking up and carting off Mangels, and the most has been made of it. The bulk of this crop is now up and stored in capital condition, and the quality is fine, and the bulbs generally a good size. The cattle and sheep continue to realize high prices. Meat also maintains its value. The corn trade is firm, and prices tend upwards. *Your Fen Reporter.*

Notices to Correspondents.

Poultry.—There has been an over supply of all sorts of poultry during the week, and prices have suffered in consequence:—

Large Fowls	Each	3*s.* 6*d.*	to	4*s.* 0*d.*
Smaller ditto	,,	2 6	,,	3 0
Chickens	,,	1 9	,,	2 0
Geese	,,	6 0	,,	7 0
Ducks	,,	2 0	,,	2 6
Pheasants	,,	2 0	,,	2 6
Partridges	,,	1 6	,,	1 9
Grouse..	,,	2 0	,,	2 6
Hares	,,	2 0	,,	2 6
Rabbits	,,	1 4	,,	1 5
Wild ditto	,,	0 8	,,	0 9
Pigeons	,,	0 7	,,	0 8

The Royal Cheese: *A Somersetshire Man* is good enough thus to reply to our inquiry last week:—I hasten with much pleasure, and as a sort of thank-offering for your answers to my various queries from time to time, to tell you all I know about the "Cheese presented to her Majesty" by the Somerset folk. The inhabitants of West Pennard, a village near Glastonbury, Somerset, in order to evidence their loyalty resolved that a cheese should be made from the milk of *all the cows* in the parish, and when ripe should be presented. In order to carry out this resolution an immense vat was constructed with the Royal arms and many other rich embellishments carved upon it. On the anniversary of the Queen's coronation about 50 of the wives and daughters of the subscribers assembled at the house of Mr. G. Nash, with *one meal's milk* from 737 cows which were kept in the parish. This amounted to upwards of 20 hogsheads, and occupied the contributors from morning till night to turn into curd. When finished it measured 9 feet in circumference, 3 feet 1 inch in diameter, and 1 foot 10 inches deep. It was presented to the Queen at Buckingham Palace, Feb. 19, 1841. *Teignmouth, Devon, Nov.* 19.

Wintering Stock: Mr. J. Ford, jun., writes to correct a reference to Thorley's food in his paper last week on this subject. He spoke of its having been reduced 20*l.* a ton in price; he ought to have said 10*l.* a ton.

HOT-WATER APPARATUS.

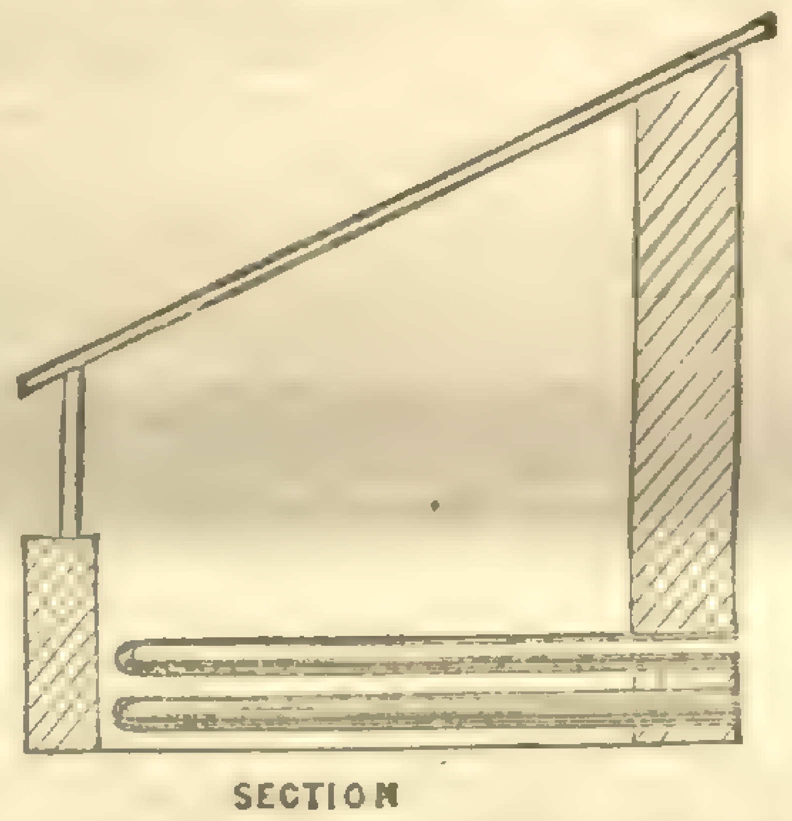
J. JONES

BEGS TO OFFER A COMPLETE

Hot-Water Apparatus for Houses

according to the following Plans, delivered Free to any Railway Station in England.

Plan No. 1.

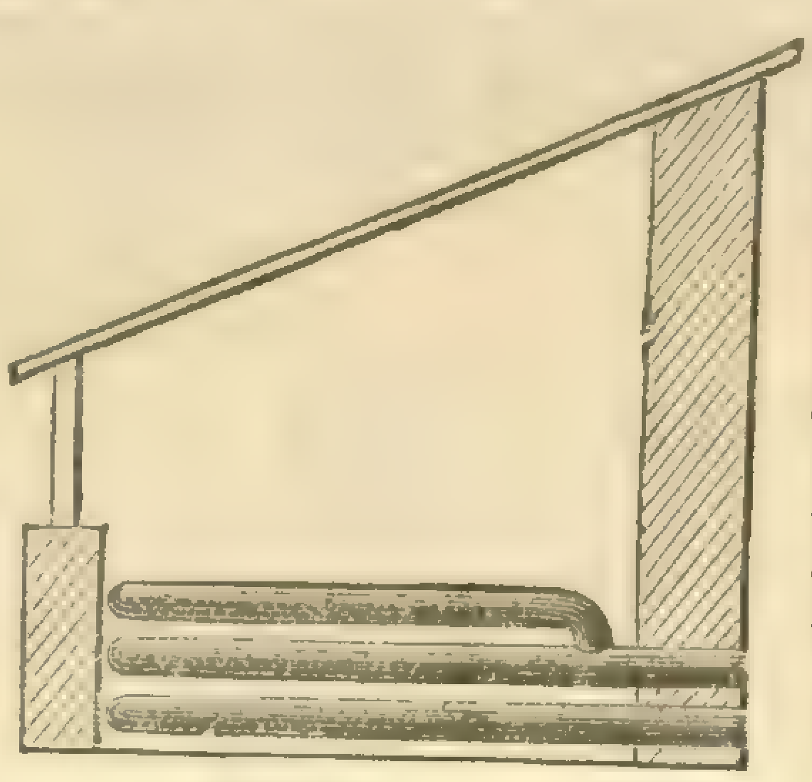


Two 4-inch pipes along front and one end of house.

SECTION

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£8 0 0	£8 12 6
20 feet by 10 feet ..	,,	8 10 0	9 0 0
25 feet by 12 feet ..	,,	10 0 0	10 10 0
30 feet by 12 feet ..	,,	11 10 0	12 0 0
40 feet by 15 feet ..	,,	16 10 0	17 0 0
50 feet by 15 feet ..	,,	18 10 0	20 0 0

Plan No. 2.

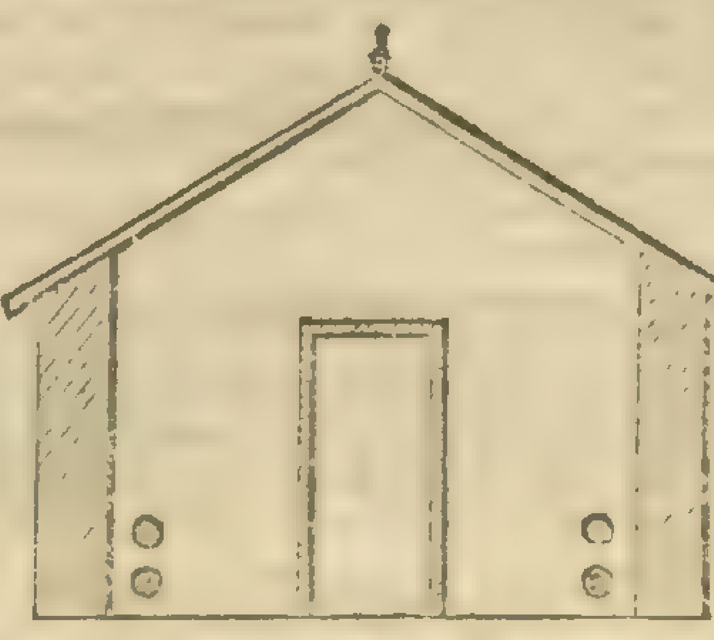


Three 4-inch pipes along front and one end of house.

SECTION

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£11 10 0	£12 0 0
20 feet by 10 feet ..	,,	12 10 0	13 0 0
25 feet by 12 feet ..	,,	14 10 0	15 0 0
30 feet by 12 feet ..	,,	16 10 0	17 0 0
40 feet by 15 feet ..	,,	22 0 0	23 0 0
50 feet by 15 feet ..	,,	24 10 0	26 0 0

Plan No. 3.

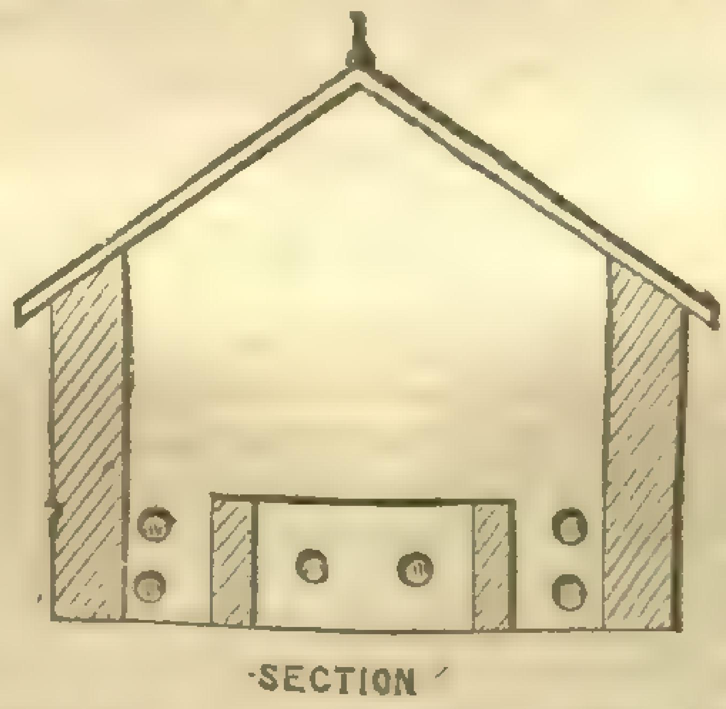


Two 4-inch pipes along each side and one end of house.

SECTION.

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£12 10 0	£13 0 0
20 feet by 10 feet ..	,,	13 10 0	14 0 0
25 feet by 12 feet ..	,,	16 10 0	17 0 0
30 feet by 12 feet ..	,,	19 0 0	20 0 0
40 feet by 15 feet ..	,,	24 10 0	25 10 0
50 feet by 15 feet ..	,,	27 0 0	28 10 0

Plan No. 4.



Two 4-inch pipes along each side and one end of house, and two 4-inch pipes in pit for bottom heat.

SECTION

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£16 0 0	£17 0 0
20 feet by 10 feet ..	,,	17 10 0	18 10 0
25 feet by 12 feet ..	,,	21 10 0	22 10 0
30 feet by 12 feet ..	,,	25 0 0	26 0 0
40 feet by 15 feet ..	,,	31 0 0	32 0 0
50 feet by 15 feet ..	,,	33 10 0	35 0 0

The above prices include Boiler, strong Furnace-doors, Bars, Plate, Soot-doors, Damper, and Supply Cistern-pipes of 4-inch diameter, Elbows, &c.; all of the best quality.

Delivered free to any Railway Station in England. Terms: Nett Cash.

Estimates will be sent for the work fixed complete, or further particulars on application to

J. Jones, Hot-Water Apparatus Manufacturer, 6, Bankside, London, S.E.

GREEN'S PATENT LAWN MOWERS have proved to be the best, and have carried off every prize that has been given in all cases of competition. They are noiseless in working, self-sharpening, self-cleaning, simple in construction, and easier to work and less liable to get out of order than any other Lawn Mowers extant.

Illustrated Price Lists may be had of Thomas Green, Smithfield Iron Works, Leeds; or 2, Victoria Street, Holborn Hill, London, E.C.

N.B. Old Machines repaired and made as good as new.

JOHN SHEWEN, Sevenoaks, Kent, Manufacturer of all kinds of HOTWATER APPARATUS for Horticultural Purposes, Public Buildings, Dwelling Houses, and Offices, on the most improved principles, and of Rogers's Conical and the Improved Corrugated Saddle Boiler.

JOSEPH SMITH, Horticultural Builder, New Road, Hammersmith, W., makes of good materials LEAN-TO and SPAN-ROOF HOUSES, at 8*d.* per foot; if glazed and painted, 1*s.* PIT LIGHTS, painted, complete, 8*d.*; if unglazed, 4½*d.*

THREE ready-made HOUSES for SALE, viz.:—

24 by 12 feet 6 inches Lean-to	£34 0 0
23 by 12 feet ,, ...	32 10 0
27 by 16 feet 6 inches Span	47 10 0

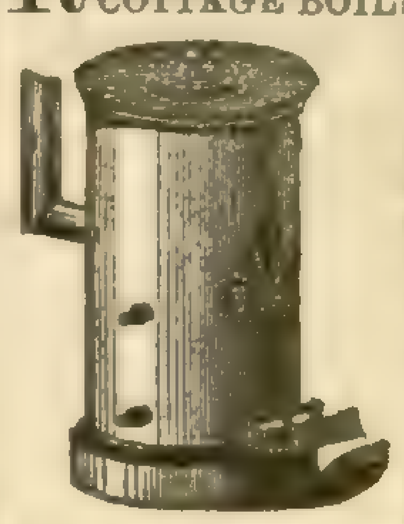
Also Fifteen 6 by 4 feet LIGHTS, glazed with 15 oz. glass, 16*s.* each: and Fifteen with 21 oz., 17*s.* 6*d.* each; Eight 7 feet 6 inches by 4 feet, 19*s.* 6*d.*, all well painted.

HOT-WATER PIPES, at Wholesale Prices, with Elbows, Syphons, Tee Pipes, and every other connection. Wrought and Cast-iron Boilers, Saddle, Conical, Cylinder, and Elliptic, from 24*s.* each. Improved Boilers and Iron Stands to use without brickwork, 50*s.* each. Valves from 12*s.* 6*d.* each. Beck's Patent Valves. Furnace Doors, Furnace Bars, Supply Cisterns, and Builders' Castings of every description in stock, at Mr. Lynch White's Iron Wharf, Upper Ground Street, Blackfriars Bridge, London, S.

VENTILATING STOVES! SUSPENSION STOVES!—Approved by thousands of Purchasers, and recommended as the two Best, Cheapest, most Healthy and Economical for Churches, Chapels, Halls, Schools, Warehouses, Shops, Greenhouses, Bedrooms, Libraries, &c. Prospectuses with Prices sent post free.

Deane & Co., Stove Range, Ironmongery and Furnishing Warehouse, London Bridge. Established A.D. 1700.

RIDDELL'S PATENT SLOW-COMBUSTION COTTAGE BOILER for HEATING CONSERVATORIES, ENTRANCE HALLS, BATHS, &c., by the Circulation of Hot Water.



Requires no brickwork setting; will keep in action from 12 to 18 hours without attention, at an expense of about 3*d.* per day. Is perfectly safe, requires no additional building, and may be seen in operation daily at the

Patentee's Warehouse, 155, Cheapside, London, E.C.

Price complete from 3*l.* 10*s.*

Illustrated Prospectus free, and Estimates prepared for Erecting Hot-Water Apparatus of any magnitude.

West of England, Ireland, and Wales.

VINCENT SKINNER (late Partner with J. Weeks & Co.), erects CONSERVATORIES, HOTHOUSES, and HOT-WATER APPARATUS.

His improved Pipe Boilers, which give such universal satisfaction for Warming Churches and Hothouses, will heat from 100 to 2000 feet of Pipe.

Plans and Estimates on application to V. Skinner, Bridewell Street, Bristol.

Hothouses for the Million.

HOTHOUSES for the MILLION.—On the principle invented and patented by Sir Joseph Paxton, M.P., combining simplicity, cheapness, excellence, and durability, being capable of fulfilling, in the most perfect manner, all the requirements of Horticulture. Lean-to Houses, 30 feet in length, can be had for less than 17*l.* Span Roofs, 30 feet in length, for 33*l.*; and all other dimensions at equally low prices. Delivered free to any Railway Station round London.

Illustrated Circulars, with Lists of Prices, can be had on prepaid application to Samuel Hereman, 7, Pall Mall East, London.

Patent Horticultural Works, 152, King's Road, Chelsea, S.W.

E. DENCH, Inventor, Patentee, and Sole Manufacturer of Horticultural Buildings with Wood Framework and Hollow Galvanised Iron Sashes instead of Wood. Complete at 1*s.* 3*d.* per foot superficial, and never require any more painting after first erection.

Five hundred references can be given. See *Gardeners' Chronicle*, April 27th, 1861, page 387; Edward L. Betts, Esq., Preston Hall, near Maidstone; Mr. Thomas Frost has proved them for both Plant Houses and Vineries for above 11 years.

E. D. has just erected one in the Royal Horticultural Gardens, Kensington.

Also Manufacturer of all kinds of Horticultural Buildings in Wood and Iron of the ordinary kind, at the lowest price and best materials.

Heating every description of building by Hot Water or Gas. Several Second-hand Houses for Sale.

MUSGRAVE'S PATENT STABLE FITTINGS and HARMLESS LOOSE BOXES, PATENT IRON COW-HOUSE FITTINGS, and IRON PIGGERIES.

These inventions are recommended as possessing numerous advantages not to be found in anything hitherto made. At the late Meeting of the Royal Agricultural Society at Leeds, Musgrave Brothers received a Silver Medal, and two Awards of "Highly Commended," being the only Prizes conferred on any competitor in this class.

Particulars sent on application to the Inventors and Makers, Musgrave Brothers, Ann Street Iron Works, Belfast.

J. TYLOR and SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25s. 6d. each.

IRON YARD and GARDEN PUMPS
3 feet 6 inches under spout

2½	3	3½ inch
48s.	58s.	69s. each.

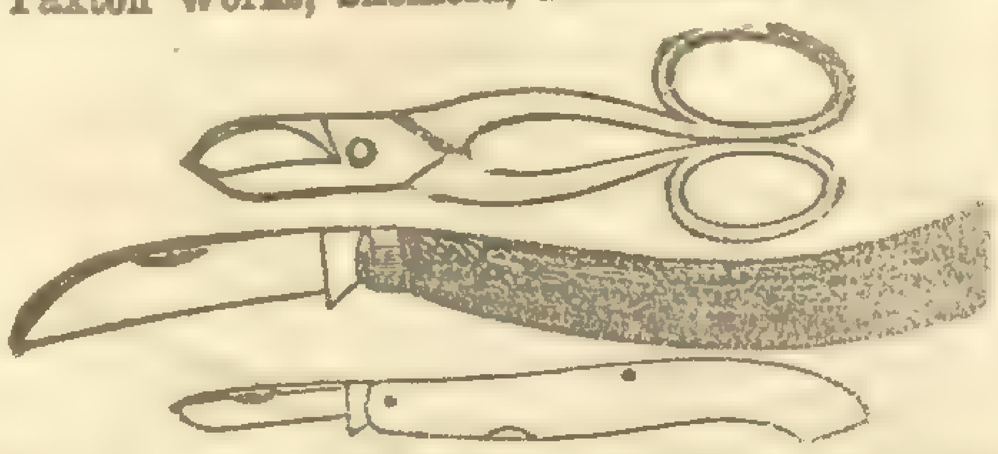
J. Tylor and Sons manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.

PUMPS of J. Tylor & Sons' manufacture to be obtained of Plumbers in all parts of the United Kingdom.

J. Tylor & Sons, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

NETTING for SHEEPFOLDS, made of Cocoa Nut Fibre. Price 4d. per yard. COCOA NUT CORD for THATCHING.—Wildey and Co., Manufacturer of Cocoa Nut Matting and Mats, Holland Street, Blackfriars Road, S.E.

Paxton Works, Sheffield, Established 1738.



SAYNOR AND COOKE'S warranted PRIZE PRUNING and BUDDING KNIVES, SCISSORS, &c.

Sold by all respectable Nurserymen and Seed Merchants in the three Kingdoms.

Important to Gardeners.

WE beg respectfully to inform you that we are now supplying Nurserymen and Seed Merchants with an article superior in quality to anything we have hitherto been able to offer, in PRUNING, BUDDING, and GRAFTING KNIVES, VINE and PRUNING SCISSORS, GARDEN SHEARS, &c., owing to their being tempered under an entirely new process, which renders the blade tough and not liable to break, and also gives the edge a lasting keenness which we can warrant them to retain for at least double the time they would under the old method of tempering, thus facilitating the work and saving the time usually lost by having constantly to renew the edge by sharpening, consequently making them more durable in wear and better adapted for all kinds of work, every blade being guaranteed of the same temper.

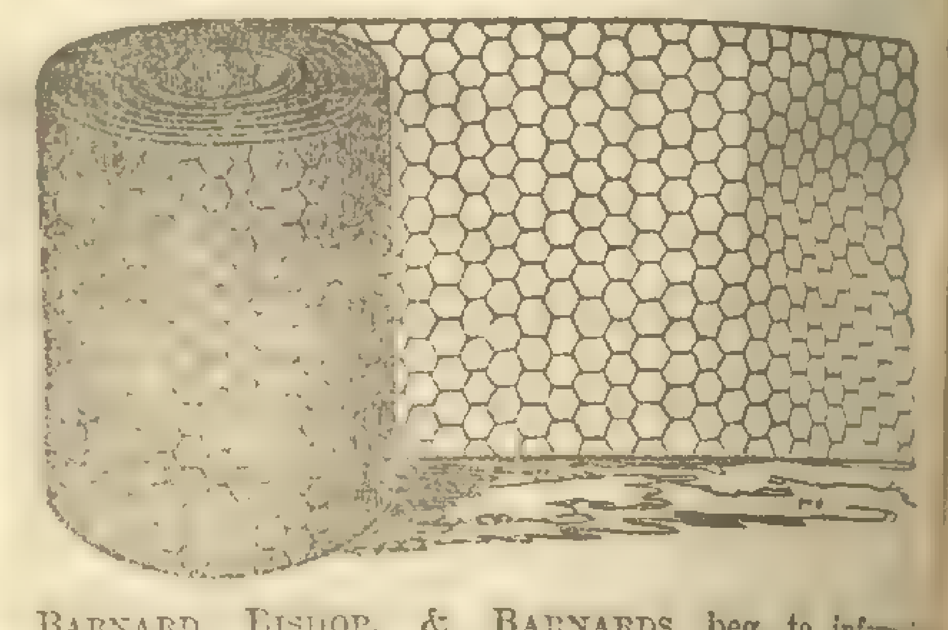
Caution. None are genuine except marked Saynor, or Saynor, Maker. Other marks would cause the purchaser disappointment.

JOSEPH HAYW[...] AND CO., Manufacturers of PRUNING and BUDD[ING] KNIVES, SPORTSMAN'S, and al[l] of POCKET CUTLERY.

Dealers in Gambia [...] Shears, Scissors, Syringes, &c.

Glamorgan Works, Sheffi[eld].

BARNARD, BISHOP, AND BARNARDS, Norwich.
FURTHER REDUCTION in the PRICE of WIRE NETTING.—April, 1861.



Barnard, Bishop, & Barnards beg to inform [their] friends and the public that they have made a further reduction in the prices of Machine made Wire Netting, and also that their Nettings are now Galvanised after being made, which adds much to their appearance, strength, and durability.

	Gauge.	Galvanised. per yard.	Japanned Iron. per yard.
2-inch mesh, 24 inches wide ..	No. 19	.. 4½d.	.. 3½
2-inch ,, ,, ,, ..	,, 18	.. 5	.. 4
2-inch ,, ,, ,, ..	,, 17	.. 6½	.. 5
2-inch ,, ,, ,, ..	,, 16	.. 8	.. 6½
1⅝-inch ,, ,, ,, ..	,, 19	.. 4¾	.. 4
1⅝-inch ,, ,, ,, ..	,, 18	.. 6	.. 4¾
1⅝-inch ,, ,, ,, ..	,, 17	.. 7	.. 5½
1⅝-inch ,, ,, ,, ..	,, 16	.. 9	.. 7

All the above kinds can be made any width (under 6 feet) at proportionate prices.

Strong Galvanised Poultry Netting, 7½d. per yard, 3 feet wide. Galvanised Sparrow-proof Netting for Pheasantries, 11d. per yard, 2 feet wide. Wire Netting of every mesh from half inch to 6 inches.

Reduced Price of WIRE FENCING, and GALVANISED WIRE ROPE FENCING, suitable for the home trade or the colonies.

Five wires, 3 feet 6 inches high, pronged Standards, 3 feet apart, one wrought iron straining post and straining screw to each 100 yards of Fencing, 10d. per yard.

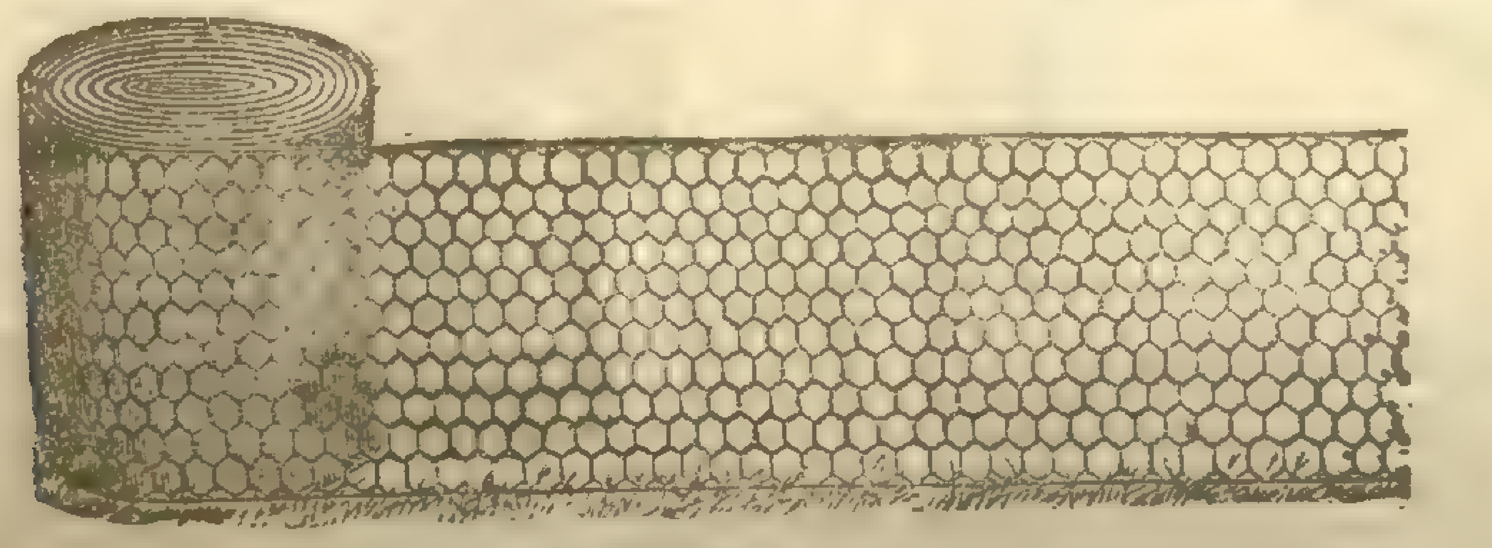
The same with Galvanised Wire Rope, 1s. per yard.

Illustrated Catalogues, with prices of every variety of Wire Fencing and Wire Netting, forwarded free on application.

, Wire Fencing and Netting delivered Carriage Free at all the principal Railway Stations.

NEW IMPROVED PREMIUM WIRE NETTING.

GREAT IMPROVEMENT WITH REDUCED PRICE.



PRICES per Lineal Yard, 24 inches high:—

Size of mesh.	Mostly used for	Light.		Medium.		Strong.		Extra Strong.	
		Japanned.	Galvanized.	Japanned.	Galvanized.	Japanned.	Galvanized.	Japanned.	Galvanized.
2¼ inch	Hares, Dogs, Poultry	3d.	4d.	3¾d.	5d.	4½d.	6d.	5½d.	7d.
2 inch	Game or Poultry Netting	3½d.	4¼d.	4d.	5d.	5d.	6½d.	6½d.	8d.
1⅝ inch	Small Rabbits, Hares, &c.	4d.	4¾d.	4¾d.	6d.	5½d.	7d.	7d.	9d.
1½ inch	Smallest Rabbits................	5d.	6d.	5¾d.	7d.	7d.	9d.	9d.	11d.

Quantities of 100 yards or upwards delivered free at nearly all the principal Railway Stations and Shipping Ports in England; and 200 yards or upwards delivered free to most parts of Scotland and Ireland.

J. B. BROWN & CO., 18, CANNON STREET, CITY, LONDON, E.C.

MR. SAMUELSON

WILL EXHIBIT HIS

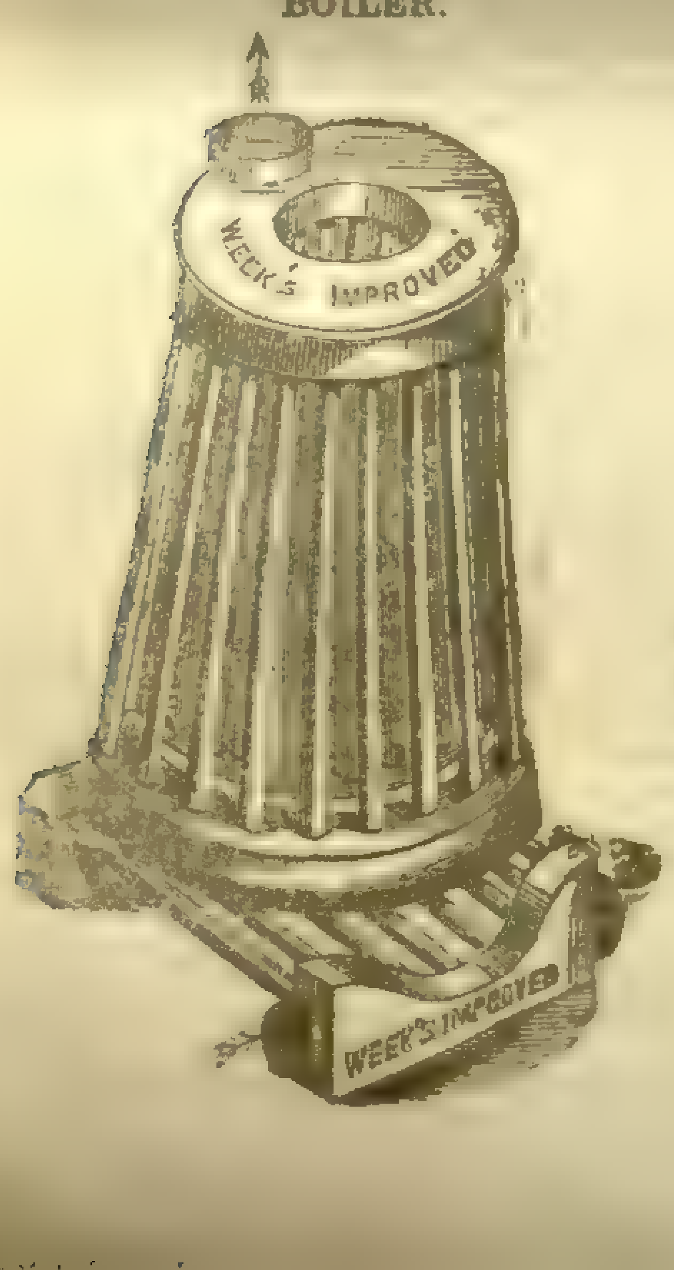
NEW SELF-ACTING REAPING MACHINE, with Side Delivery in Sheaves,

AND OTHER IMPLEMENTS,

AT THE

BIRMINGHAM CATTLE SHOW, DECEMBER 2, 3, 4, & 5.

WEEKS'S UPRIGHT TUBULAR BOILER.



SUBJOINED IS THE REASON WHY

WEEKS'S ONE-BOILER SYSTEM

HAS BECOME THE ORDER OF THE DAY FOR HEATING BY HOT-WATER.

WEEKS'S No. 1 BOILERS are heating upwards of	200	feet of Pipe.
WEEKS'S No. 2 BOILERS ,, ,,	300	,,
WEEKS'S No. 3 BOILERS ,, ,,	600	,,
WEEKS'S No. 4 BOILERS ,, ,,	1500	,,
WEEKS'S No. 5 BOILERS ,, ,,	4000	,,
WEEKS'S No. 6 BOILERS ,, ,,	12,000	,,

The above statistics being accounts of hundreds of apparatus disseminated throughout Europe in practical operation, J. Weeks & Company publish them with the pleasing satisfaction that all who may honour them with their esteemed commands most effect enormous savings both in fuel and labour by the adoption of their ONE-BOILER SYSTEM.

JOHN WEEKS & COMPANY,

Horticultural Builders and Hot-Water Apparatus Manufacturers,

KING'S ROAD, CHELSEA, S.W.

, *Illustrated Catalogues, Designs, and Estimates forwarded free on application.*

ESTABLISHED UPWARDS OF A CENTURY.

COVENT GARDEN MARKET, LONDON, W.C.

BUTLER & McCULLOCH'S

DESCRIPTIVE BULB CATALOGUE and AMATEURS' GUIDE

TO WINTER AND SPRING GARDENING.

Now Ready, forwarded Free and Post Paid upon application.

THE numerous Species and Choice Varieties contained in the above CATALOGUE, combined with the Descriptive Notes, Plain Cultural Directions, and Hints on the Distribution and Arrangement of Bulbs, render it a valuable assistant, either to the Amateur or Practical Gardener.

All Orders of 21s. and upwards sent Carriage paid.

£2 2s. COLLECTION of BULBS, for CONSERVATORY.

- 24 HYACINTHS, in 12 choice sorts
- 24 POLYANTHUS NARCISSUS, in 12 sorts
- 150 NEW SEEDLING CROCUS, 20 sorts
- 12 DUC VAN THOL, red and yellow Single Tulips
- 36 Early SINGLE TULIPS, in 12 choicest sorts
- 12 LA CANDEUR, white Double Tulips
- 12 REX RUBRORUM, scarlet Double Tulips
- 12 TOURNESOL, scarlet and yellow Double Tulips
- 12 YELLOW ROSE, yellow Double Tulips
- 1 each, LILIUM LANCIFOLIUM ALBUM, ROSEUM, and RUBRUM
- 12 IXIAS
- 12 SPARAXIS

£2 2s. COLLECTION of BULBS, for the FLOWER GARDEN.

- 36 HYACINTHS, finest mixed
- 100 Sweet-scented Double WHITE NARCISSUS
- 200 YELLOW CROCUS
- 200 PURPLE CROCUS
- 200 WHITE CROCUS
- 200 SNOWDROPS
- 50 Splendid mixed SINGLE TULIPS
- 12 REX RUBRORUM, Scarlet Double Tulips
- 12 TOURNESOL, Scarlet and Yellow Double Tulips
- 12 YELLOW ROSE, Yellow Double Tulips
- 25 Finest mixed DOUBLE ANEMONES
- 25 Finest mixed SINGLE ANEMONES
- 50 Finest mixed SPANISH IRIS
- 50 SCARLET TURBAN RANUNCULUS
- 24 LILIES, in four fine varieties
- 12 GLADIOLUS BRENCHLEYENSIS
- 12 Mixed CHINESE PÆONIES

GLADIOLUS, SEEDLINGS of RAMOSUS.

50 in 50 Extra Choice Varieties	.. 2l. 0s. 0	50 in 50 Choice Varieties	.. .. 1l. 4s. 0
25 in 25 ,,	.. .. .. 1 0 0	25 in 25 ,,	.. .. 0 12 0
12 in 12 ,,	.. .. .. 0 12 0	12 in 12 ,,	.. .. 0 6 0

Mixed, 21s. per 100; 3s. per dozen.

Wanted to Purchase, SHALLOTS.

BUTLER AND McCULLOCH, SEEDSMEN, COVENT GARDEN MARKET, W.C.

SEEDSMEN AND FLORISTS,

OPPOSITE THE GARRICK CLUB.

FLORAL GUIDE and DESCRIPTIVE BULB CATALOGUE

SENT FREE AND POST PAID ON APPLICATION.

Orders amounting to 21s. sent Carriage Paid to any Railway Station in the Kingdom.

Paxtonian Collection "O" of Imported Dutch Flowering Bulbs, &c. for the Ornamentation of the Spring Garden, &c., £2 2s.; Half Collection, 21s.

- 40 HYACINTHS Assorted.
- 4 JAPAN LILIES Assorted.
- 5 GLADIOLI Assorted.
- 6 LILIUM LONGIFLORUM.
- 150 TULIPS in Colours
- 400 CROCUS Assorted.
- 100 RANUNCULUS Assorted.
- 200 SNOWDROPS.
- 100 NARCISSUS Assorted.
- 50 ANEMONES Assorted.
- 25 SPANISH IRIS Assorted.
- 20 IXIAS and SPARAXIS.

Collection "P" for Conservatory Decoration, £2 2s.; Half Collection, 21s.

- 30 SPLENDID HYACINTHS in 30 varieties.
- 100 ,, TULIPS in 30 varieties.
- 18 ,, POLYANTHUS NARCISSUS in 18 vars.
- 4 ,, JAPAN LILIES, in 4 varieties.
- 1 ,, LILIUM EXCELSIUM.
- 5 ,, ,, LONGIFLORUM.
- 12 SPLENDID ACHIMENES, in 12 varieties.
- 20 ,, IXIAS.
- 20 ,, SPARAXIS.
- 20 ANOMATHECA CRUENTA.
- 12 LACHENALIA TRICOLOR.
- 8 TROPÆOLUM JARATTI.

LACHENALIA TRICOLOR (for description, culture, and adaptation, see *Gardeners' Chronicle* for Nov. 16, page 1006), 4s. 6d. per dozen.

ANOMATHECA CRUENTA, a charming flower, 10s. per 100; 2s. per dozen.

TROPÆOLUM JARATTI, beautiful, 1s., 1s. 6d., and 2s. 6d. each.

Gladioli, Seedlings of Gandavensis.

100 in 100 splendid named varieties	.. .. .. £4 4 0	50 in 25 splendid named varieties	.. .. .. £1 10 0
100 in 50 splendid named varieties	.. .. .. 3 3 0	25 in 25 splendid named varieties	.. .. 15s. to 1 1 0
50 in 50 splendid named varieties	.. .. .. 2 2 0	12 in 12 splendid named varieties, 6s., 9s., 12s., 18s., & 1 4 0	

TYE'S REGISTERED HYACINTH GLASSES and DRAWING-ROOM FLOWER VASES. BARR & SUGDEN, London Agents. These Glasses are ornamented in the highest style of Art, ancient and modern, such as Egyptian, Tuscan, Alhambra, Grecian, also with Architectural and Floral Designs.

The sets "Eugenie," "Victoria," "Imperial," "Empress," and "Nonpareil," form splendid Drawing-room Ornaments, either for growing Hyacinths or for Cut Flowers.

"Eugenie," "Victoria," and "Imperial" sets complete, with Bulbs and Supports, 21s.; "Empress" and "Nonpareil" are 25s. per set.

A PRICED DESCRIPTIVE ILLUSTRATED LIST of the above Glasses sent free on application.

BARR AND SUGDEN, SEEDSMEN, 12, KING STREET, COVENT GARDEN, W.C.

Imported Bulbs.

GODWIN AND PADMAN offer fine Bulbs (which they have imported) at the undermentioned prices to effect an early clearance:—

	s.	d.
12 HYACINTHS (including Lord Wellington, double pink), finest varieties of double and single red, white and blue .. .. 8s.; 2 doz.	15	0
CROCUSES, blue, white and yellow Dutch, per 100	2	0
100 ,, in 8 largest varieties	3	6
25 TULIPS, Early, in 8 finest varieties	3	6
25 ,, double ,, ,, ...	3	0
100 ,, late, finest mixtures	10	0
25 ANEMONES, in 8 fine double varieties	3	0
100 RANUNCULUS, in 4 varieties	3	0
25 GLADIOLI, in 8 varieties	4	0
12 ,, finest hybrids (in 12 varieties) ..	12	0

DESCRIPTIVE CATALOGUES of the above on application to GODWIN & PADMAN, Broadfield Nursery, Sheffield; or J. C. PADMAN, Boston Spa, Tadcaster.

Variegated-Leaved Geraniums.

GODWIN AND PADMAN, having a free healthy Stock of VARIEGATED GERANIUMS, offer as under.

	Per doz.—s.	d.		Per doz.—s.	d.
Alma	6	0	Golden Edge	6	0
Argus .. .. each	2	6	Hendersoni .. each	1	0
Bijou	9	0	Jane	9	0
Brilliant	4	0	Julia .. .. each	1	0
Cloth of Gold .. each	2	6	Manglesi	6	0
Comtesse de Morello ,,	1	0	Mountain of Light ..	6	0
Countess of Warwick ..	6	0	Mrs. Lennox	5	0
Culford Beauty .. each	1	0	Perfection	6	0
Dandy	6	0	Reine d'Or .. each	2	6
Fairy Nymph	5	0	Silver King .. ,,	1	0
Favourite .. each	1	0	St. Clair	5	0
Flower of the Day ..	4	0	The Bridal Wreath, each	1	0
Fontainebleau .. each	1	0	Variegated Tom Thumb each	1	0
Golden Vase .. each	2	0			

The 25 varieties for 20s.

Address GODWIN & PADMAN, Broadfield Nursery, Sheffield; or J. C. PADMAN, Boston Spa, Tadcaster.

Cheap Plants.

GODWIN AND PADMAN respectfully invite attention to the undermentioned, all of which are in well established plants.

	Each—s.	d.		Each—s.	d.
Æschynanthus Lobbianus	1	6	Dipteracanthus affinis ..	2	6
,, pulchra major ..	1	6	Dracæna ferrea	1	0
Allamanda neriifolia ..	1	6	,, ,, versicolor ..	1	6
Ardisia crenulata 6d. to	1	0	Epiphyllum truncatum (with flower buds) ..	1	6
,, ,, alba ..	1	0	Eucharis amazonica 1s. 6d. to	2	6
Aspidistra lurida variegata .. .. 1s. to	1	6	Euphorbia Jacquiniflora	1	6
Begonia semperflorens Ingrami	1	0	Franciscea confertifolia	1	6
Begonia argentea guttata			Gardenia Fortuni ..	1	6
,, ,, punctata			,, florida	1	0
,, blanda			Hoya bella	1	0
,, Duchesse de Brabant			,, carnosa	1	0
,, grandis			,, ,, picta	2	6
,, Griffithi			,, ,, variegata ..	2	6
,, Lord Clyde			,, Paxtoni	1	0
,, Lowi			Imatophyllum miniatum	7	6
,, Marshalli			Rhopala corcovadense ..	7	6
,, nebulosa			,, Skinneri	3	6
,, President van Vanden Hecke			Rhynchospermum Jasminoides	1	0
,, splendida argentea			Stephanotis floribunda	1	0
The above 12 Begonias 1s. each, or 10s. for the lot.			Thunbergia grandiflora	1	0
			Selaginella apoda ..	1	0
Bougainvillea speciosa (true) 2s. 6d. to	3	6	,, circinale (9s. doz.)	1	0
			,, cæsia (,, ,,)	1	0
Catesbæa spinosa ..	1	6	,, formosa	1	0
Camnopteris fœniculacea	1	0	,, Galleotti	1	0
Cissus discolor	1	0	,, Wildenovi	1	6

AZALEA INDICA in variety, well set with flower-buds, 12s. to 30s. per dozen.

CAMELLIAS of sorts, in bud, 24s. and 30s. per doz.

	Each—s.	d.		Each—s.	d.
Acacia Drummondi ..	2	6	Gnidia lævigata	1	0
Aphelexis, 4 sorts ..	1	0	Kennedya monophylla variegata	1	6
Boronia serrulata ..	1	0	Linum trigynum ..	0	6
Bossiæa Hendersoni ..	1	6	Monochætum ensiferum	1	0
Brachysema Acumita ..	1	6	Oxylobium Pulteneæ ..	1	6
Burtonia violacea ..	1	6	Pimelea decussata . 1s.—	1	6
Chorozema cordata elegans .. .	1	0	Polygala Dalmaisiana ..	1	6
,, flava	1	6	,, oppositifolia ..	1	0
,, varia Chandleri ..	1	6	Swainsonia Greyana ..	1	0
Coleonema rubra ..	1	0	Tropæolum tricolorum ..	1	0
Eugenia Ugni .. 6d.—	1	0	Vaccinium erythrina ..	1	0
Euonymus japonicus variegatus	1	0	Vallota purpurea ..	1	0
			Witsenia corymbosa ..	1	0
Farfugium grande, p. doz	6	0	Yucca aloifolia variegata	3	6
Gardoquia Hookeri ..	1	6	Zieria microphylla ..	1	6

PELARGONIUMS of 1861.—Bertram, Butterfly, Columbus, Count Cavour, Garibaldi, Lurline, Marvellous, Raphael, Rembrandt, Romulus, Rosa Bonheur (Foster), Rosa Bonheur (Hoyle), Rosa pulchella, Scintilla, Thirza, Vesuvius, Volunteer. 30s. per doz., or the 17 varieties for 40s.

PELARGONIUMS.—Arabella Goddard, Carlos, Clara, Cynthia, Duchess of Wellington, Etna, Euphemia, Flora, King of Scarlets, Leviathan, Lord Clyde, Lucy, Marie, Midnight, Miss Foster, Monarch, Mrs. Dennis, Polly, Prince of Prussia (Story), Prince of Prussia (Hoyle), Queen Victoria, Rose Raglan, Selim, Serena, Triumphant, Star, The Belle, Topsy, Unique, Wonderful. 8s. per doz., 50s. per 100.

PELARGONIUMS, FRENCH.—Boule d'Hortensia, Eugénie Duval, Eunice, Fanty, Fredericke Meunen, Grande Duchesse, Stephanie, Guillaume Severyns, Juna, La Belle Alliance, Lampetia, Le Nègre, Le Titien, Louise Michez, Madame Domage, Mazeppa, Mo, Meneitho, Metis, Minerve, Napoleon III, Parthenope, Paul et Virginie, Peacock, Perugino, Reine Hortense, Roi des Pourpres, Salacia, Sisera, Tethys, Virginie Mieller.

CINERARIAS.—Adam Bede, Duke of Cambridge, Magenta, Miss Marnock, Queen Victoria, 1s. each; the 5 varieties 4s.

CINERARIAS.—Admiral Dundas, Bellissima, Cleopatra, Lady Jane Peel, Lady Paxton, Lorenzo, Magnum bonum, Midshipman, Minnie, Mrs. Coleman, Limon, Octavie, Othello, Perfection, Pretty Polly, Purpurea, Queen of Lilacs, Regalia, Rose of England, Sir C. Napier, Viola. 6s. per doz.

CHRYSANTHEMUMS.—Large and Pompo[illegible] varieties, in 60's, 3s. doz.

A few strong, well-ripened, MUS[illegible] 5s. and 7s. 6d. each.

The usual discount to the Trade. [illegible] unknown Correspondents must accom[illegible]

Address, GODWIN & PADMAN, Broad[field Nursery, Sheffield;] or J. C. PADMAN, Boston Spa, Tadcaste[r.]

Hollyhock Seed—Sow at once.

PAUL AND SON'S unrivalled Collections of the above are now ready in 12 fine distinct named varieties, in sealed packets. 5s.; 6 varieties do., do., 2s. 6d.; packets of fine mixed, 1s.; also a large Stock of fine healthy plants (see CATALOGUE now ready, post free on application).

Old Nurseries, Cheshunt, Herts.

Superb Double Hollyhocks.

SAFFRON WALDEN NURSERY.

WILLIAM CHATER'S 15th ANNUAL DESCRIPTIVE and NEWLY CLASSIFIED LIST is now ready, and will be forwarded to any address on receipt of one postage stamp.

WILLIAM CHATER, Nurseryman and Seedsman, Saffron Walden, Essex.

Hardy Scarlet Rhododendrons and other American Plants.

JOHN WATERER has the pleasure to announce that his ANNUAL CATALOGUE of the above popular plants, as exhibited in the Royal Botanic Gardens, Regent's Park, London, is now published, and will be forwarded on application. Intending planters and amateurs desirous of blending colours are invited to possess a copy, as faithful descriptions of all the RHODODENDRONS are given.

The Catalogue contains a selection of the best and really Hardy CONIFERS, with heights and prices, the whole of which having been removed the past spring are in a capital state for transplanting. Also EVERGREENS and ORNAMENTAL SHRUBS and TREES of the leading kinds.

The American Nursery, Bagshot, Surrey, near the Sunningdale Station, South Western Railway; also to be had of Mr. JOHN KERNAN, Seedsman, 4, Great Russell Street, Covent Garden.

Winter and Spring Flowering Plants.

F. AND A. SMITH are now supplying fine plants at moderate prices of the following:—

*Acacias, *Azaleas, Cinerarias, *Camellias, *Chrysanthemums, Cyclamen, Cytisus, Clianthus, Carnation (Tree), *Echeveria, *Epacris, *Ericas, Eutaxias, *Gardenias, *Heterocentrum, *Kennedyas, *Lechenautia, *Jasminum grandiflorum, *Monochætum, Pelargoniums, *Passifloras, *Primula, double and single; *Solanum, *Oranges, &c. [Those marked thus * are either in bud or fruit at the present time.]

GENERAL CATALOGUE gratis.

Dulwich, Surrey, S.

Flag of Truce.

NEW DOUBLE WHITE AZALEA INDICA.

F. AND A. SMITH have much pleasure in offering the above splendid novelty, which is justly celebrated as the best double variety extant. It has obtained unprecedented testimonials of merit, and the general admission of all who have seen it that it is the "finest" yet produced for its large double flowers, purity of colour, abundance of bloom, and neat compact habit of growth.

Plants will be sent out in June, 1862. Full description and price will be published early in spring.

In consequence of an accident, the new varieties Clapham Beauty, Prince of Orange, and Princess Royal will not be sent out till further notice.

Dulwich, Surrey, S.

New Azalea indica.

J. IVERY AND SON feel much pleasure in offering their two beautiful Seedlings, CARNATION and TRICOLOR, small plants at 10s. 6d., and larger at 21s. each.

They are fully described in our CATALOGUE, with all other Novelties of the Season, which will be forwarded post free upon application.

A fine lot of half Specimens and Standards for Sale.

Dorking Nursery.—Nov. 30.

Wholesale Catalogue.

GEORGE JACKMAN AND SON'S PRICED and DESCRIPTIVE CATALOGUE for 1861 and SPRING 1862, comprising Fruit Trees of all the leading kinds, new and selected Roses, fine varieties of American Plants, Choice and Rare Conifers, Evergreen and Deciduous Trees and Shrubs, and a fine Stock of Transplanted Forest Trees, &c., can be had free on application.

Woking Nursery, Surrey.

Winter Blooming Plants.

HUGH LOW AND CO. respectfully invite inspection of their very extensive Stock of CAMELLIAS, AZALEAS, ERICAS, EPACRIS, CYTISUS, &c. These can be seen at the Nursery in thousands, and are well worth the attention of intending purchasers.

Fine ORANGES in fruit.

Clapton Nursery, London, N.E.

American Plants, &c.

MESSRS. WATERER AND GODFREY'S CATALOGUE for the present season is now ready, and may be had on application. It describes fully all RHODODENDRONS worth growing, and contains a List of AZALEAS, HARDY HEATHS, and other American Plants, as well as a summary of the General Stock of the most extensive Nurseries in England.

The Catalogue may also be had at Mr. MAY'S, 1, Wellington Street, Strand, W.C.

Knap Hill Nursery, near Working, Surrey.

Unrivalled Collection of Ranunculuses.

CAREY TYSO, FLORIST, &c., Wallingford, Berks, is now sending out such as are marked * Post Free to any part of the kingdom, for Cash with the order.

CHOICE RANUNCULUSES.

* 1st Assortment, 50 varieties		£2	0	0
* 2d do. 50 do.		1	0	0
* 3d do. 50 do.		0	13	6
100 Mixtures .. .. .. 5s., 8s., 15s., and	*	1	0	0
DOUBLE ANEMONES, 50 sorts		0	10	6

Imported Dutch and other BULBS for present planting.

CARNATIONS, PICOTEES, PINKS, &c., in variety.

Treatise on Successful Culture of the Ranunculus, for seven labels. Ditto Anemone, four labels.

PRICED CATALOGUES gratis.

WILLIAM BARRON, Elvaston Castle, can supply strong and remarkably well rooted Plants as under:—

BERBERIS DARWENI.—The most beautiful of the tribe, fit either for the Flower Garden or Game cover. Pheasants are very fond of the berries, which are produced in profusion.

Strong Plants, 3 years old, 20s. per 100.

Strong Plants, 1 year old, 12s. 6d. per 100.

ABIES DOUGLASI.—A highly ornamental and valuable timber tree, the same as the tall flag pole at Kew; excellent plants 3 years old, once transplanted, 25s. per 100.

PINUS LARICIO.—A valuable timber tree, 18 to 24 inches, 70s. per 1000.

If taken in quantity, a reduction will be made.

Remittances to accompany Orders from unknown correspondents. Post Office Orders payable at Derby.

To Nurserymen.

FOR SALE, the ENTIRE STOCK of Captain GOULDNEY'S Seedling Strawberry, EARLY KILBERT PINE, which obtained a Certificate at the last July Show at Regent's Park.

Apply to Captain GOULDNEY, Buckingham House, Slough, Bucks.

TO BE DISPOSED OF, at Melbourne, near Derby' QUICK and FOREST TREES.—From One to Two Millions of 2 year and 3 year old BEDDING QUICK, suitable for Railway and Enclosure planting, from 5s. to 10s. per thousand. 2 year Transplanted, from 8s. to 12s. per thousand. 3 year do., from 12s. to 16s. per thousand.

Also several Thousands of SPRUCE and SCOTCH FIRS, 2 to 3 feet, standing thin, and very bushy. LARCH, 3 to 4 feet. OAKS, 2 to 3 feet.

Parties wanting the above articles may apply to Mr. S. ROBINSON, Shaw House, Melbourne, Derbyshire.

FOR SALE.—Large FOREST TREES, EVERGREEN PRIVET, COTONEASTER, and HAMBURGH VINES, comprising Beech, Hornbeam, English and Turkey Oaks, Sycamore, Spruce, Larch, Firs, &c., 12 to 16 feet. They have been grown in a light sandy soil at about 5 feet apart, move with excellent fibrous roots, and most of them are remarkably fine healthy trees. 2000 Evergreen Privet, 500 Cotoneaster microphylla, very good stuffs; 76 Hamburgh Grape Vines raised from eyes, and which have been trained in a vinery two seasons.

Prices moderate. Apply to Mr. J. WOODWARD, Monson Nursery, Warwick Road, Red Hill, Reigate, Surrey, S.

N.B. The Stock offered is within 10 minutes walk of the Reigate Junction Railway.

SEEDLINGS, SEEDLINGS.

	Per 1000, s.	d.		Per 1000, s.	d.
1 year Larch	1	6	1 year Pinus Laricio ..	10	0
1 year Scotch Fir ..	1	3	1 year ditto maritima ..	5	0
2 year ditto	2	0	2 year ditto ditto ..	8	0
4 year do. Transplanted	20	0	2 year ditto montana ..	6	0
2 year Norway Spruce	1	6	1 year Birch	2	0
3 year ditto ..	2	6	1 year Alder	2	0
2 & 3 year Transplanted ditto	8	0	1 year Beech	2	0
2 year White ditto ..	6	0	1 year Sycamore ..	2	6
3 year ditto ditto ..	8	0	2 year Ash	4	0
3 year Silver Fir ..	8	0	2 year Quick	5	0
1 year Balm of Gilead ..	5	0	1 year Laurel	20	0
2 year ditto ditto ..	8	0	3 year Evergreen Privet	30	0
1 year Pinus austriaca ..	6	0	2 year Laburnum ..	8	0
2 year ditto ditto ..	10	0	2 year Crab Stock ..	5	0

The Subscriber begs to call the attention of the nobility and gentry to his large Stock of the above Seedlings, &c. Any order large or small will be punctually attended to. The Trade supplied on liberal terms.

Application to be made to MICHAEL BURKE, Drumlargan Nurseries, Summerhill, Co. Meath.

A reference required from unknown correspondents. Post Office Orders to be made payable at Dublin.

The Northampton Nurseries.

JOHN PERKINS respectfully calls the attention of noblemen, gentlemen, and others engaged in Planting to the following ORNAMENTAL TREES and SHRUBS &c., all of which are in the best possible condition for removal. Having been frequently transplanted, they can be confidently recommended to remove with the most certain success. From 4000 to 5000 Cedrus Deodara, perfect specimens, averaging from 1½ to 8 feet, and all the intermediate sizes; also a large stock of Wellingtonea gigantea, from 1 to 4 feet; Thujopsis borealis, 1 to 3 feet; Cupressus Lawsoniana, 1 to 3 feet; Picea Pinsapo, 1 to 4 feet; Picea Nordmanniana, 1 to 4 feet; Araucaria imbricata, 1 to 4 feet; Pinus Cembra, 1 to 5 feet; Thuja aurea, 1 to 3 feet; Cedar of Lebanon, 2 to 6 feet. Also every other variety of Ornamental Trees and Shrubs worthy of cultivation may be had.

TRANSPLANTED FOREST TREES.

Ash, 2 to 3, 3 to 4 feet.
Beech, 2 to 3, 3 to 4, 4 to 5 ft.
Chesnut, Spanish, 1 to 2, 2 to 3, 3 to 4 feet.
,, Horse, 1 to 2, 2 to 3, 3 to 4 feet.
Elms, grafted English, 2 to 3, 3 to 4, 4 to 5, 5 to 6 feet.
,, Cornish, 2 to 4, 3 to 4, 4 to 5, 5 to 6 feet.
,, Scotch or Wych, 2 to 3, 3 to 4, 4 to 5, 5 to 6 feet.
Fir, Spruce Norway, 1 to 1½, 1½ to 2, 2 to 3 feet.
,, Scotch, 1 to 2, 2 to 3, 3 to 4 feet.
,, Silver, 1 to 2, 2 to 3 feet.
Fir, Balm of Gilead, 1 to 2 2 to 3 feet.
,, Larch, 1 to 1½, 1½ to 2, 2 to 3 feet.
Sycamore, 2 to 3, 3 to 4 feet.
Hazel, 1½ to 2, 2 to 3 feet.
Maple, Norway, 2 to 3, 3 to 4 feet.
Oaks, English, 1 to 2, 2 to 3, 3 to 4 feet.
,, Turkey, 2 to 3, 3 to 4 feet.
Poplar, Black, Italian, Lombardy, Ontario, White Abele, 2 to 3, 3 to 4, 4 to 5, 5 to 6, 6 to 8 feet.
Privets, from 400 to 500,000, Strong. 1 to 2, 2 to 3 feet.

From 2 to 3 million of Quick or White Thorn.
From 2 to 3 million of Gorse or Furze.

FRUIT TREES.

Standard and Dwarf-trained Peaches, Nectarines, Apricots, Plums, Pears, Apples, and Cherries. From 15 to 20,000 extra strong Gooseberries and Currants.

Extra strong SEAKALE and ASPARAGUS for Forcing.

Prices of the above upon application to JOHN PERKINS, 52, Market Place, Northampton.

Heriotfield Nursery, Leith Walk, Edinburgh.

ESTABLISHED UPWARDS OF A CENTURY.

THE SUBSCRIBER begs respectfully to intimate that Messrs. DAVID REID & SON having retired from the Nursery Trade in Edinburgh, he has acquired the Lease and purchased the whole extensive STOCK of FOREST, FRUIT, ORNAMENTAL TREES and SHRUBS in the above old-established Nursery, the business of which will be carried on by the Subscriber as hitherto.

The Subscriber begs respectfully to thank his friends and patrons for the liberal support he has received since commencing business in Edinburgh; and in making this extension of his Nursery Trade, he respectfully solicits a continuance of their kind patronage. To clear part of the Ground, the Subscriber can offer several Lots of the following HARDY ORNAMENTAL DECIDUOUS PLANTS and SHRUBS, all recently transplanted and well rooted, including fine specimen Weeping Elms, 10 to 15 feet in height; also, fine plants of the following:—Cedrus Deodara, Araucaria imbricata, Aucuba japonica, Portugal and Common Laurels, Variageted Hollies, Lilacs, Walnuts, Poplars, Arbor-vitæ, Pinus Cembra, &c., all of which will be disposed of at very moderate prices.

ROBERT T. MACKINTOSH, Nurseryman and Seedsman, 12, Melbourne Place, George IV. Bridge, Edinburgh.

N.B.—Noblemen and Gentlemen in want of Gardeners, Land-Stewards, and Foresters for the present Term.—The Subscriber has on his Register the names of a select few whose character and qualifications may be relied upon.

Fruit Trees.

WM. PAUL (Successor to the late A. Paul), CHESHUNT NURSERIES, Waltham Cross, London, N.

Sea Kail, Forcing and Other.

WM. PAUL (Successor to the late A. Paul), CHESHUNT NURSERIES, Waltham Cross, London, N.

Roses.

WM. PAUL (Successor to the late A. Paul), CHESHUNT NURSERIES, Waltham Cross, London, N.

Ornamental Trees and Shrubs.

WM. PAUL (Successor to the late A. Paul), CHESHUNT NURSERIES, Waltham Cross, London, N.

Hollyhocks.

WM. PAUL (Successor to the late A. Paul), CHESHUNT NURSERIES, Waltham Cross, London, N.

Orchard House Trees in Pots.

THOMAS JACKSON and SON have a fine Stock of the above, well established in Pots, large and full of Flower Buds, many of them having this season borne [illegible] fruits; they consist of

CHERRIES	PEARS	NECTARINES
PEACHES	GRAPES	PLUMS

3s. 6d. to 7s. 6d. each.

Nurseries, Kingston, S.W.

Wall-Trained Fruit Trees.

THOMAS JACKSON AND SON having a great extent of walls devoted to FRUIT TREES, respectfully invite an inspection of their large stock of very superior Dwarf and Standard-trained Trees. Many of them having borne fruit this season are specially suited for planting in houses for fruiting the first year

Nurseries, Kingston, S.W.

Fruit Trees.

JAMES GARAWAY AND CO. call attention to their stock of the above, comprising

APRICOTS, NECTARINES, PEACHES	Standard and Dwarf-trained	APPLES, CHERRIES, PEARS, PLUMS	Dwarf-trained, Standard, and Dwarf-quarter

All of first-rate quality and in good condition.

The STANDARD PEARS are unusually fine, and will be sold at a very low rate to purchasers of quantities.

CATALOGUES and prices free by post.

JAMES GARAWAY & Co., Durdham Down Nurseries, Bristol.

Orchard House Trees.

HUGH LOW AND CO. have to offer—

	APRICOTS	
APPLES	NECTARINES	PEARS
CHERRIES	PEACHES	PLUMS

In pots. Wood thoroughly well ripened and well set with bloom buds. Prices moderate,

Clapton Nursery, London, N.E.

Orchard House Trees.

J. AND J. FRASER, Lea Bridge Road Nurseries, N.E., having a fine stock of—

PEACHES	APPLES
NECTARINES	PEARS
APRICOTS	PLUMS and CHERRIES

in Pots, well set with bloom buds, beg respectfully to offer them to the notice of intending Purchasers.

A CATALOGUE will be forwarded on application.

The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

Vines for Fruiting in Pots.

J. AND J. FRASER, Lea Bridge Road Nurseries, N.E., beg to offer strong VINES with well ripened wood of the best varieties.

A CATALOGUE will be forwarded on application.

The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

High Beech, Essex.

JAMES CRAWFORD begs to offer extra strong VINES for Fruiting in Pots, early matured, from 10 to 12 feet long, 7s. 6d. to 10s. 6d. each. Also a Large Stock of Strong Plants, including all the best sorts for planting out, 3s. 6d. to 5s. each. A remittance expected from unknown Correspondents.

Fine Vines from Eyes in Pots.

WM. CUTBUSH, JUN., Barnet Nurseries, Barnet, Herts, begs to invite an inspection of his fine STOCK of FRUITING and other VINES, consisting of all the best varieties in cultivation. Also to his fine stock of Specimen, Half-specimen, and young Plants of NEW HOLLAND PLANTS, INDIAN AZALEAS, and STOVE PLANTS.

CATALOGUES on application.

Cæsarean Nurseries, Island of Jersey.

STRONG FRUITING VINES (of best sorts) 2s. 6d. each, or 25s. per dozen. PYRAMIDAL FRUITING PEAR TREES (of best sorts), 1s. 8d. each, or 20s. per dozen; EVERGREEN OAKS (in pots), 30s., 40s., 50s., 75s., and 100s. per 100; CHINESE ARBOR-VITÆS (in pots) 30s., 40s., 50s., and 75s. per 100; SILVER STRIPED EUONYMUS, 20s., 30s., 40s., 50s., and 75s. per 100; ULMUS SAMIENSIS, or UPRIGHT GUERNSEY ELMS, 30s., 50s., and 75s. per 100.

A large GENERAL STOCK of FRUIT TREES and SHRUBS at equally low prices. CATALOGUES on application.

CHARLES B. SAUNDERS, Nurseryman—Nov. 30.

Splendid New Strawberry "Eclipse" (Reeve).

MESSRS. VEITCH AND SON beg to call attention to this really first-class Fruit, full particulars of which will be found in their Advertisements which have appeared in this Paper during the months of August and September. 12s. per dozen; 80s. per 100. Price to the Trade on application.

Chelsea and Exeter.—November 30.

COX'S ORANGE PIPPIN. — This magnificent variety obtained all the Prizes for Dessert Apples of "the best flavour" at the Great Fruit Exhibition at Kensington Gore, on the 6th inst. See report in *Gardeners' Chronicle* of Saturday last, *passim*.

Very fine strong Trees having well-ripened wood are supplied at the following prices:—Dwarf Bush, 2s.; Dwarf-trained, 2s. 6d.; Pyramids, 2s. 6d.; Standards, 2s. 6d.

CHARLES TURNER, The Royal Nurseries, Slough.

RHODODENDRONS. — An immense Stock of Hybrid and Common RHODODENDRONS, 9 inches to 3 feet, is offered at a low price, by W. H. ROGERS, Red Lodge Nursery, Southampton; also a fine collection of SCARLET and other beautiful varieties, under name.

A CATALOGUE of General NURSERY STOCK, extending over 60 acres, may be had on application.

Grape Vines from Eyes in Pots.

LUCOMBE, PINCE, and CO. have now a very fine healthy stock of strong VINES of all the choicest sorts, with well-ripened canes 6 to 8 feet high, propagated from eyes taken from their own experimental Vinery.

LISTS of SORTS and prices may be had on application to them.

Exeter Nursery, Exeter.

New Cinerarias, Gloxinias, and Pelargoniums.

F. AND A. SMITH can still supply a few sets of their New GLOXINIAS, CINERARIAS, and PELARGONIUMS.

See *Gardeners' Chronicle* of Oct. 5, and CATALOGUE, which may be had gratis.

Dulwich, Surrey, S.

WEBB'S GIANT POLYANTHUS and GIANT COWSLIP.—These beautiful early spring flowers, very large, and in all varieties of colour, in seed or roots; also FLORIST FLOWERS, POLYANTHUS in roots, and DOUBLE WHITE PRIMROSE.

Apply George Mace, Calcot Gardens, near Reading.

Dutch and other Bulbs.

ROBERT PARKER begs to inform his friends and patrons that his PRICED and DESCRIPTIVE CATALOGUE of the above, containing selections of the finest varieties in cultivation, is now ready, and will be forwarded post free on application.

Exotic Nursery, Tooting, Surrey, S.

CAMELLIAS and AZALEAS, well set with flower-buds, to be Sold Cheap, for want of space, 12*s.* to 21*s.* per dozen; ORANGE TREES with Fruit, 2*s.* 6*d.* each; ditto ditto, to 3 feet high, 5*s.* each; British and Foreign FERNS, 3*s.* to 12*s.* per dozen, and all kinds of Greenhouse and Stove Plants.

R. Green, 154, Kingsland Road, N.E., 55 doors from Shoreditch Church.

MINNIE BANKS and COMET

Coloured Plate, 1*s.* 6*d.* per post.

The above FUCHSIAS possess first-class properties, and show a striking advance on all others which have been sent out since the white corolla varieties were introduced.

E. G. Henderson & Son, Wellington Road Nursery, St. John's Wood, London, N.W.

CHÆROPHYLLUM BULBOSUM.

Figured in *Gardeners' Chronicle*, Oct. 5, 1861.

New Seed, per packet, 6*d.* and 1*s.* each.

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The Gardeners' Chronicle.

SATURDAY, NOVEMBER 30, 1861.

The highly important young Colony of Vancouver, our only naval station in the East Pacific, to which we have often alluded as one of the best fields for agricultural and horticultural emigrants, has just held its first show of produce. Had we no other evidence of the excellence of its soil and climate the report of the proceedings on the occasion would have afforded it. We gather from *The British Colonist*, a newspaper published at Victoria, the capital of Vancouver, the following particulars concerning the horticultural proceedings; what relates to agriculture will be found in the columns of the *Agricultural Gazette*.

In the vegetable department, says the Editor, we may boast that such Turnips, Cabbages, Pumpkins, Potatoes, Onions, &c., cannot be surpassed. Were Vancouver Island their native soil they could not grow larger, nor be of a better quality. But what surprised every one was the display of fruit. No one imagined that such progress had been made in fruit-growing. There were varieties of Pears, Apples, Plums, and even Peaches. The show was a very creditable affair indeed, for which we are indebted to a few public-spirited gentlemen, who, in the face of many obstacles, organised an Agricultural and Horticultural Society.

The vegetable and fruit stalls, continues the Editor, groaned beneath the weight of mammoth Pumpkins, Cabbages, Parsnips, Potatoes, Turnips, Apples, Pears, &c. Mr. Work displayed a general assortment of garden and field esculents, among which were several Cabbages weighing, leaves and all, at least 30 pounds each. The red and white Shaw Potatoes, by the same gentleman, were equal to those produced in any part of the world. Some nice, clean-grown Carrots, Savoy and Ox-head Cabbages, and Pumpkins, from His Excellency Governor Douglas's garden, obtained prizes. Dr. Tolmie, of Cloverdale Farm, was awarded the first prize for Pumpkins, Squashes, Vegetable Marrows, and Beet. Geo. Deanes took prizes for Purple-top Turnips, weighing 8 pounds each, and was also equal to any with his Swedish Turnips. Mr. Lenevu exhibited fine garden vegetables. Mr. Henly, of Clover Point Gardens, had solid-headed Cabbages, and six other varieties, for which he took the first prize; also the first for Parsnips and garden seeds. Thos. Harris's Aberdeen Turnips, of gigantic proportions, obtained a prize.

At 7 o'clock, A.M., the judges commenced their duties, which were completed by 10 o'clock, and the prizes awarded. Visitors were admitted on the payment of one dollar each, from 10 o'clock until 2, when the gates were opened and the public were admitted free of charge. An auction of animals and other produce, which was advertised for half-past two o'clock, did not take place, owing to very few persons who had articles on exhibition desiring to part with them.

The official award was as follows:—

FIELD GROWTH.

A. Copland—2d prize for Potatoes.

Dr. Tolmie—1st prizes for Potatoes, Parsnips, Carrots, and Mangel Wurzel.

John Work—1st prize for Parsnips.

GARDEN PRODUCE.

Governor Douglas, per D. Thomas—1st prize for Pears.

Mr. Lester—1st prize for Cherries.

Mr. Henley—1st prizes for the best variety of Cabbages, do. Parsnips, do. variety of garden seeds.

Mr. Work—1st prize for the best 2 Cabbages, do. for Celery, do. for fresh butter, do. for fresh eggs.

Mr. Wood—1st prize for Melons.

Dr. Tolmie—1st prizes for Squashes, Beets, eggs, and Carrots.

D. Lenevu—1st prize for Tomatoes.

Mr. Wood, per C. Decheat—1st prize for bouquet flowers.

Dr. Helmeken—2d prize for bouquet flowers.

T. J. Skinner—1st prize for geese.

Gov. Douglas—1st prize for ducks.

Mr. Deans—2d do. do.

We do not ourselves see what some of these awards had to do with garden produce; but let that pass. The conclusion of the meeting seems to have been as satisfactory as its commencement. "The day's proceedings closed with a dinner at Ringo's Hotel, to which about 60 guests sat down. Dr. Tolmie presided, and the festivities were kept up until a late hour."

Bravo! Vancouver.

Very little is known in a meteorological sense of the Climate of Vancouver. We have never seen returns of its temperature: atmospheric, or, which is more important, terrestrial. We are ignorant of the rainfall. Maximum and minimum readings of the thermometer are unrecorded in this country. Mr. Pemberton says nothing about them. Fortunately the Horticultural Show supplies their want. We see that Pumpkins and Tomatoes gain prizes, and that Indian Corn becomes ripe. We are assured that Apples are far better than in California or Oregon. A gardener wants no further information. He knows well enough that a climate that ripens Indian Corn is better than that of any English or Irish district; and upon that datum he can securely infer the capabilities of the land. Grapes will certainly ripen there; so will Peaches and Nectarines, and where these will thrive all other English produce merely demands skill in order to appear in perfection. The winter is not severe like that of the United States, but resembles our own Cornish season; and labour is very highly paid, say at the rate of 16*s.* to 20*s.* a day. Active intelligent young men may therefore draw their own conclusion as to whether emigration to Vancouver is worth their attention; especially when they learn that their wives can earn pretty nearly as much as themselves.

Our attention has more than once been called by correspondents to the ravages committed by Fungi on Wine Corks, inducing decay and ultimately either a great diminution or the entire destruction for all useful purposes of the liquor which they were intended to preserve. A most aggravated instance of this evil has lately been pointed out to us in one of the most noble establishments in this country, in which, from the choice character of the stock, it is difficult to estimate the real amount of damage. In one particular instance of sherry bottled in 1840 the loss has amounted to nearly one-tenth of the stock, and in other instances has been more considerable. We had not an opportunity of examining the cellar itself, but two bottles were submitted to us, one of Madeira bottled in 1848, the other of St. Peray received in 1836, and in these cases more than four fifths of the wine had oozed out, though the quality of what remained was not impaired. One case, that of the Madeira, was precisely like one on which we have before given a report, in which the damage was evidently attributable to some Fungus like dry rot with a white mycelium which had penetrated to the bottom of the cork, though the bottle was smothered with the common black Mouse-skin Byssus (Zasmidium cellare). Some insect had also burrowed down half way between the cork and the neck of the bottle, but it did not appear that the oozing out of the wine had taken place in that direction.

In the other case the part of the cork above the bottle was black, showing in its texture traces of the dark threads of the Mouse-skin, accompanied by delicate white threads, to which in all probability the decay of the cork was due. The part however within the neck was very slender and short, and some attempt at sealing had been made, though with very indifferent material. The white Fungus was certainly not so abundant in this case as the other, but the peculiar contraction of the substance of the cork in both when dry was precisely alike, and there can be little if any doubt as to the identity of the cause of evil.

Whatever may be the true explanation of this second case, the mischief arising from the presence of Fungi in wine-cellars is beyond all doubt, and cannot be too generally known, as the loss in large establishments from this cause alone is considerable. The remedy we believe is certain if proper care be taken. At the same time that we examined the wine in question we had an opportunity of tasting some Madeira, which was bottled in 1800, and which was in admirable condition, though the cork was somewhat decomposed, mainly we believe because when the wine was bottled, the necks of the bottles were immersed for about an inch in a carefully prepared mixture of wax and rosin, which had effectually prevented the access of mycelium though the whole surface was covered with spawn. Attention must, however, be paid to the quality of the mixture, as if it is too brittle portions will chip off from various causes, and spawn will be liable to penetrate. Where these precautions are not taken, and either sawdust or laths are used in packing wine, mischief is almost sure to arise. Sawdust, except indeed it is first steeped in a solution of blue vitriol or some other metallic salt, has long since been banished from all well-managed cellars, but laths are still used, and are a fruitful source of mischief. We have lately had an opportunity of examining a cellar in which every lath had been destroyed by dry rot, the threads of its mycelium running widely from bottle to bottle, and of course finding a new nidus on the corks. The laths moreover were covered with other Fungi, Licea fragiformis (*Gard. Chron.*, 1860, p. 145) amongst others being more abundant than we ever saw it before. Laths should indeed be excluded as carefully from cellars as sawdust, unless previously kyanized. We would however suggest the adoption of very thick felt cut into strips as a substitute, which would probably resist the attacks of Fungi, and last as long as the wine. No wine however should be stacked, if it is intended to lie for a considerable number of years, without effectual sealing, and if the wax is sufficiently tough and hard, there will be little risk either from Fungi or insects, especially where the corks have been previously immersed in boiling water. *M. J. B.*

—— We have already mentioned such of the Novel Chrysanthemums of the season as have appeared at the meetings and exhibitions of the Royal Horticultural Society. Another collection of seedling flowers exhibited by Mr. Bird at the Crystal Palace show furnish further materials for annotation. One of the most distinct varieties in this group was called Lady Russell; this was a bold full incurved sort, with broad florets, the flower-heads bright looking, and distinct in colour, white, with the backs of the florets flushed with a pale but bright rosy tint; being very nicely incurved this rosy colour was brought well into view. We do not remember to have previously noticed this feature of high colouring in the backs of the florets: certainly it is not the usual condition of the Chrysanthemum, as is evident from the pallid colour generally brought into view by the incurving of the florets, as may be seen in so many of our best sorts, which are really highly coloured on the face. Another attractive variety was the Little Pet, to our mind a little gem; it seemed to be one of the varieties of intermediate class in respect to size, but was evenly globular and compact, white tinted with rose, somewhat as in Vesta, and a charming sample both of colour and formation. Queen of Lilacs was another full

flower of large size, well incurved, and in every way good, the colour a rosy lilac. These appeared to us to be the best of the batch, and all of them desirable novelties. Others were: Nil Desperandum, a dull light purplish-tinted red with coppery backs and tips, rather too dull in colour, incurved but not over full; Model, also dull-looking, a light purplish-tinted red, incurved but rather rough; Rising Sun, a variety in size and colour resembling one of Mr. SALTER'S new ones called Sparkler, an intermediate-sized Indian red, with golden backs to the full stiff florets. A grade lower stood imbricata alba, with heads of medium size, white with a sulphury centre, and of average quality; and Globe, a high good flower Vesta-like in character, but wanting in distinctness. An Anemone-flowered sort, with a ray of rose-coloured florets and a disk of golden brown, was rather promising, but not very striking in character; it was called Queen of Anemones. This Anemone-flowered group is not however very effective. We also noticed Mr. INGRAM'S Pompon Bessie (mis-named Jessie) shown by Mr. TURNER; it had the rosy-tint of the border more distinct than when shown at Kensington, and was rather improved in general effect. The fine white variety Lady H. St. Clair from Messrs. DOWNIE & Co., a white sport from Queen of England, was again shown in good condition, but hardly so large as when formerly noticed by us.

—— Few persons have an adequate idea of the extent to which the POTATO ministers to our necessities, and even to our luxuries; but some notion may be formed from a short statement of the annual amount of imports which we find in a recent number of the *Technologist.* From this statement it appears that in 1859 we imported from the Continent 40,185 cwt. of Potato flour; 593 cwt. of Potato arrowroot; 7832 cwt. of Potato starch; 1524 cwt. of semolina (chiefly Potato); and 270 cwt. of Potato-starch gum; making with 588,910 cwt. of Potatoes imported, an aggregate value for foreign Potato products of 138,500*l.*, exclusive of what is produced at home. The imports of Potatoes of course vary very much according to the condition of our own crop; thus in 1855, no less than $1\frac{3}{4}$ million cwt. of Potatoes were imported. While on this subject we may mention that the French mode of cooking Potatoes affords a most agreeable dish. The tubers after being peeled are cut into thin slices, and then thrown into a frying-pan containing an abundance of hot lard. As soon as they become browned and crisp they are turned into a colander to drain, then sprinkled with salt, and served up as hot as possible.

New Plants.

241. DENDROBIUM LOWII.

D. (§ Eudendrobia, nigro-hirsuta) *Lowii*; caule erecto nigro-hirsuto, foliis ovato-oblongis apice obliquis subtus nigro-pubescentibus, racemis densis multifloris (floribus aureis), petalis oblongis obtusis undulatis dorsali duplò latioribus, labello 3-lobo; lobis lateralibus brevibus lineari-lanceolatis incurvis paulò super basin insertis intermedii longè unguiculati limbo subrotundo convexo decurvo barbato; mento infundibulari sepalo dorsali longiore, columnâ semicylindricâ 3-dentatâ.

A most attractive species, imported from Borneo by Messrs. Low, and exhibited by them on the 12th inst. at a meeting of the Floral Committee of the Horticultural Society. By whom the name has been given we do not know. Fragments of what seems to be the same plant occur among Motley's Orchids (No. 201) gathered at Baugarmassing. The flowers are admirably beautiful, produced in dense racemes as many as seven together, and are fully 2 inches in diameter, of a charming yellow colour, set off in a striking manner by six red lines on the lip bearing long crimson fringes. The stem is upright, about a foot long, covered with black hairs, which also occur on the under side of the leaves in the shape of fine down.

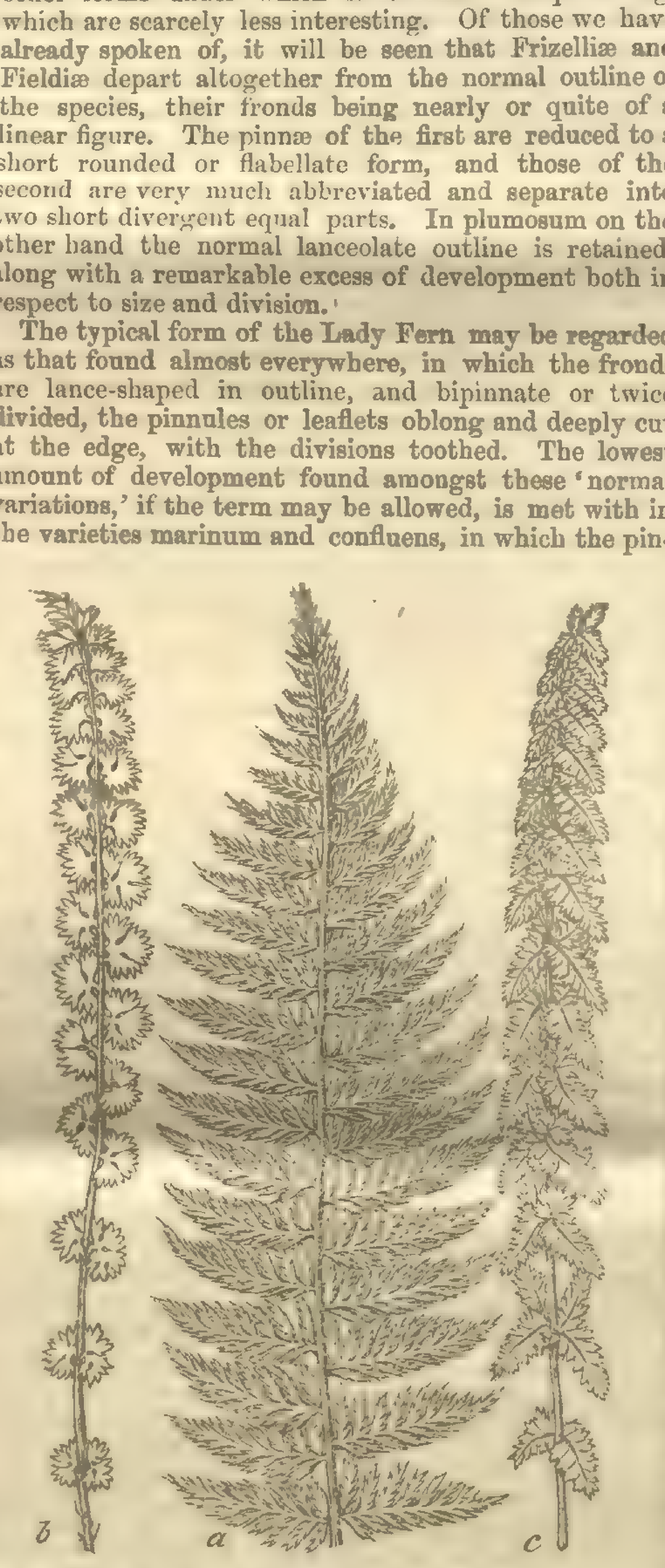
The species is evidently an ally of *D. formosum*, of which it has the habit, but is slenderer, and has an entirely different flower in structure as well as colour. Probably it will eventually be stationed next the rare *Dendrobium Infundibulum* found in Moulmein by Thomas Lobb, the colour of whose flowers is unknown.

FERNS AND THEIR EXTRAORDINARY VARIATIONS.

A FEW weeks since, we took occasion to allude to the very sportive character of some of our Ferns, and in doing so, instanced two or three remarkable British forms of the Lady Fern, respecting which some enquiries have subsequently reached us. The best reply we can furnish will be afforded by the accompanying figures of the plants then specially referred to. In comparing these sketches of three very dissimilar forms undoubtedly of one species, it is to be borne in mind that the central figure of the group, which represents the plumose variety of Lady Fern (Athyrium Filix-fœmina v. plumosum), is somewhat less than the natural size of a small pinna of that very beautiful and highly developed variety, while the outer figures respectively represent entire fronds of Mrs. Frizell's and Miss Field's varieties. Fig. *a* is therefore to be compared with one of the numerous little fan-shaped parts shown in figure *b*, or one of the corresponding forked parts in figure *c*. The diversity which thus becomes evident, is little short of marvellous as occurring in one and the same species, when moreover it is remembered that there is in neither of these plants any of that curious depauperization which gives rise to so many odd-looking forms among Ferns, but that on the contrary they are symmetrically developed, and without any apparent feature inconsistent with the impression (which indeed might well be formed) that they were the perfect conditions of three totally distinct species. That they are mere forms of one species, and that species a plant which affords besides them many other remarkable variations, there can be no question.

Taking the varieties now before us as the extreme forms into which while preserving with tolerable constancy its symmetry of development the Lady Fern is found to vary in our own country, there are many other forms under which it is found masquerading, which are scarcely less interesting. Of those we have already spoken of, it will be seen that Frizelliæ and Fieldiæ depart altogether from the normal outline of the species, their fronds being nearly or quite of a linear figure. The pinnæ of the first are reduced to a short rounded or flabellate form, and those of the second are very much abbreviated and separate into two short divergent equal parts. In plumosum on the other hand the normal lanceolate outline is retained, along with a remarkable excess of development both in respect to size and division.

The typical form of the Lady Fern may be regarded as that found almost everywhere, in which the fronds are lance-shaped in outline, and bipinnate or twice divided, the pinnules or leaflets oblong and deeply cut at the edge, with the divisions toothed. The lowest amount of development found amongst these 'normal variations,' if the term may be allowed, is met with in the varieties marinum and confluens, in which the pin-



a. Upper part of small pinna of Athyrium Filix-fœmina v. plumosum; *b.* Frond of A. Filix-fœmina v. Frizelliæ; *c.* Frond of A. Filix-fœmina v. Fieldiæ. Both *b* and *c* reduced in size.

nules are so far connected together at the base as to render the fronds scarcely bipinnate (technically pinnato-pinnatifid), and the toothing of the leaflets is shallow and almost simple. From this we advance in Grantiæ to a form dwarf indeed and simply toothed and pinnato-pinnatifid still, but with the margins of the leaflets undulated, so as to produce a prettily crimped appearance. In another group, consisting of latifolium, conioides, and Vernoniæ, we have forms in which the pinnules are short, broad, and crowded, and at the same time deeply cut into narrowish parts, which gives a frilled character to the divisions of the fronds. The foregoing are comparatively rare; but at this point in the series may be introduced the larger common feathery forms of the species called incisum, in which the fronds are nearly or quite tripinnate, the linear lance-shaped pinnules being almost or quite separated into distinct lobes; and with it may be grouped decompositum, which is always quite tripinnate, together with laxum and pyramidale. In the neighbourhood of these comes plumosum already referred to, the most plumy and feather-like certainly of all the varieties yet known, in which the ovate-acuminate pinnules are separated into distinct sometimes distant secondary pinnules, which are themselves linear and inciso-pinnatifid, with narrow linear segments or teeth, the latter not unfrequently curved towards the sori. A very remarkable feature in the original form of this variety is the constantly imperfect condition of the sori, which consist of but few spore-cases, and are almost, if not quite, without the characteristic indusia. This abnormal condition of the fructiferous organs is no doubt, as in other well known cases, to be referred to the excessive development of the leafy parts. The spores, however, are not abortive, for numberless plants have been raised from them by Messrs. Stansfield, the first possessors of the plant. A splendid form of this variety has been found by Mr. C. E. Johns, at Honiton. In a specimen now before us the frond is 54 inches long, the pinnæ 9 inches, some of the larger pinnules an inch and a half, and the segments of the pinnules half an inch long. The variety rhæticum, with its erect growth and narrow pinnules, is comparatively common; but another called flexuosum which resembles it in several points, has the remarkable peculiarity of a strongly-marked flexuose stipes and rachis, these being so much curved indeed as to become perfectly grotesque. Besides these, the varieties diffisum and uncum present rather striking features. The first is remarkable for having deeply laciniated narrowish pinnules, very irregular in size and acute in outline, in consequence of the varying character of the toothing, but without sensibly affecting the symmetry of the whole frond. The last is a very elegant form lately found, in which the fronds are slender and bipinnate, the pinnules which are distant appearing as if formed of a linear central portion, with stout distant marginal hook-like teeth, between which occur broad open sinuses.

Normally the fronds of the Lady Fern are smooth, having no hairs or other covering except the scales which are rather sparingly borne on the stipes; but in some few varieties which are known, of which pruinosum may be taken as an example, the whole surface is covered with glands so thickly as to produce a mealy appearance.

Usually too, the fronds of the Lady Fern are monomorphous, that is to say either alike symmetrical, or alike in the character if not the details of their irregularity, but even in this respect the plant is variable, for two or three varieties are known in which the fronds are as distinctly dimorphous as are those of Blechnum or Allosorus. One of these is diversifrons, in which a portion of the fronds are like the normal form of incisum, and another portion of them are depauperately laciniated in a very singular manner, both however soriferous. Another called Parsonsiæ has some of its fronds with the pinnules crowded, oblong toothed and about a quarter of an inch long, these being sterile, and others with pinnules small, narrow and distant, averaging about one-eighth of an inch in length, the apical ones becoming confluent into a narrow linear toothed point, these being fertile.

The amount of variation thus indicated is but a small portion of what has been observed in our own country in the one species to which these remarks have been confined. There are many other varieties of the normal group, and also a whole group of abnormal depauperated and tasseled forms, on which we shall some day have a few remarks to offer. There are, besides, other species, *e. g.*, the Hart's-tongue, in which the amount of variation is even much greater. The Male Fern and the Soft Prickly Shield Fern afford each a long series of both normal and abnormal variations, many of them of striking distinctness from the type forms; and even Blechnum has at length been found to be multiform. Truly this land of ours, so favoured in many ways, must be regarded as remarkably and specially favourable to the production of varieties in the Fern family, for we seldom hear of their occurrence in other countries. It is a remarkable fact too, that so many of them are constant and permanent in character; that is to say, when placed in the cultivator's hands they continue to develope their peculiar features just as the normal forms of the species develope theirs. There is, moreover, no reason apparent why they should not do this in perpetuity. Certainly the greater part of them may be multiplied *ad infinitum* by means of their spores. Often, indeed, they are known to have sprung from a single wild parent, which, judging from numerous instances in which the fact has been observed, would, if suffered to remain, have gradually spread around itself a colony of descendants. How long these would have been in occupying or disseminating themselves over a considerable area it is difficult to guess, but there seems to be no obstacle in the way of their eventually doing so—many of them, at least—since they possess evident vigour of constitution, sufficient, we may believe, to enable them to bear a successful part in the struggle for life, which it is now becoming fashionable to regard as the prime agent in the perpetuation of organised forms. May not some of our so-called species, phanerogamic as well as cryptogamous, have had such an origin?

Though such curious varieties are not often heard of in the case of exotic Ferns, yet they sometimes do occur, and it may be that our hearing of them so seldom is rather to be attributed to the less exhausting search after them than to the fact of their infrequent existence. As illustrations, and confining ourselves to examples of multifid forms, we may mention a few that just now come to our recollection. Thus some of Cuming's Philippine specimens of Lastrea tenericaulis, frequently called Polypodium trichodes, are in this multifid state; specimens of Nephrodium unitum from the Pacific Isles, given us by Mr. C. F. Chanter, are also multifid; the Nephrodium molle corymbiferum now plentiful in cultivation, was we believe a wild multifid form met with by the late Mr. Barter in his West African travels; and lately we have received from Capt. Beddome, specimens of the Indian Ponilopteris prolifera in a similar multifid condition. These

are all well marked examples of a tasseled development similar to that which occurs in our British Lastrea Filix-mas cristata. *M.*

DEATH OF MR. BILLINGTON, THE WELL KNOWN ARBORICULTURIST.

The deceased William Billington, of Roy Towers, Belmullet, Mayo, Ireland, the subject of this notice, was born at Hadnal, a village near Shrewsbury, on the 27th of July, 1776. His father having become reduced in circumstances, the education of William, the youngest son, was consequently much neglected, and at the age of 13 he was sent to Birmingham to learn the trade of buckle-making; but he disliked town life, and in his own expression, "being unable to obtain the sight of a green field for a whole fortnight he got completely sick of buckle-making, and ran home again," a distance of nearly 50 miles. Being now thrown on his own resources, he shortly afterwards apprenticed himself to a Mr. Bray, gardener to [illegible], Esq., the celebrated foxhunter, of Sundern Castle, near Shrewsbury.

Experiencing the disadvantages of neglected education, and having retiring habits, and a studious turn of mind, he applied himself vigorously to self improvement; and, to show the peculiar bent of his mind, the first book which he purchased was "Locke on the Understanding." Although for several years his path was beset with almost insurmountable difficulties, yet by steady application to reading such works as those of Milton, Addison, Evelyn, Darwin, and others of that kind, he acquired a reputation for ability; and on account of his good conduct, he gained a character for integrity amongst those to whom he was known; and his subsequent career and success in life adds another remarkable instance to those already on record of the rise of self taught men.

Dr. Darwin's Phytologia was a favourite work with him, and from that he obtained his ideas of the true principles of vegetable growth, and the functions of the leaves of plants. During his earlier years he occupied much of his time in making extracts from various writers, seldom rising later than 3 or 4 o'clock in the morning. He became successively Head Gardener to the Earl of Yarborough and the Earl of Haddington, and his friend Mr. Nicol recommended him to Lord Glenbervie, by whom he was appointed in 1810 to superintend for the Crown, the planting and inclosing of 11,000 acres of the Forest of Dean. Lord Glenbervie had a high opinion of his ability, and on the completion of Messrs. Driver's contract in the Forest of Dean, appointed him Deputy-Surveyor of Chopwell Woods, in the county of Durham, where he shortly afterwards experienced great trials and difficulties, owing to his courage in putting a stop to the malpractices which he found to be going on. In consequence of his uncompromising stand against mismanagement in the Crown woods, his ability and reputation as an arboriculturist were disparaged, and he was charged with destroying the young plantation under his care. This induced him to institute an elaborate series of experiments, which so completely proved the correctness of his practice, that he wrote in 1825 his well-known Treatise on Plantations, entitled "Facts, Hints, and Experiments," &c., on raising, pruning, and training young trees in plantations, for naval and other purposes. This brought him into notice with many writers on the subject, and his mode of pruning became styled the "Billingtonian system."

Sir Walter Scott, Mr. Cobbet, Mr. Withers, Dr. Thackeray, and other eminent writers animadverted upon his system, and his book was severely criticised by Sir Henry Steuart, but his experiments and facts were incontrovertible. He, however, deemed it necessary, on account of the many attacks on his work and character, to publish in 1836 a pamphlet in justification of his system.

In 1826 his difficulties with his superiors arrived at a climax; the Commissioners of the Royal Forests determined to get rid of him by compulsory superannuation in the prime of life. Notwithstanding this he constantly for many years solicited every change of administration for re-appointment. The Duke of Wellington, who was the only man who ever took the trouble to investigate his grievances, commanded his re-instatement in office, his character having been fully and completely exonerated from all the charges which had been made against it. But the Duke's tenure of office proving of very short duration, there was no further call for the services of one whom people derisively called "Honest William Billington." Subsequently his energies were chiefly devoted to advancing his favourite science of arboriculture. He corresponded on the subject in most of the publications devoted to the furtherance of that science, amongst which may be enumerated Loudon's *Gardeners' Magazine* and the *Gardeners' Chronicle and Agricultural Gazette.* He also published a letter to Alexander Milne, Esq., one of her Majesty's Commissioners, on "How the Royal Forests had been ruined;" this was about the time of the parliamentary inquiry into that department.

For the last eight or nine years he resided with his sons in the West of Ireland, where there is scarcely a tree to be found in a wide wild district. He was almost constantly occupied with his favourite art, and at the patriarchal age of 85 the ruling passion remained so strong that on the 16th ultimo, which was a fine mild day, he was engaged from morning until night attending to the planting of trees and shrubs; but having in his enthusiasm over-exerted his strength, he aggravated a disease with which he had long been afflicted. On the morning of the 31st ultimo he departed this life, with his faculties perfectly unimpaired. In addition to his other sterling qualities, it is worthy of remark that he was a sincere and devoted Christian, exhibiting in his life the practical truths of the Christian religion, and frequently reminding his family and friends that it was owing to the Divine support and comfort which he derived from the constant perusal of his Bible that he was enabled to surmount and overcome all the trials and difficulties that had beset his path. *From a Correspondent.*

NOTES ON THE PLANTS OF PERU. No. II.

(Continued from p. 735.)

In my last letter I mentioned that I had looked about on the cairn-like hills near Guayaquil for Orchids, without success: but that I had seen them growing plentifully on the banks of the Guayaquil River, during my upward course. I had, however, not yet left Guayaquil. On the 28th of June I took fever. On the following day Mr. Mocatta received a letter from Mr. Spruce, which stated that Dr. Taylor, an English surgeon who had accompanied Mr. Spruce from Rio Bamba to the forest, had gone to Ventanas, where he would await my arrival: and that I should proceed thither immediately. The fever left me in a couple of days, but I was so weak that I had scarcely strength to crawl to the druggists for medicine. The republic of Ecuador was at this time, and had been for 12 months previous to my arrival, in a state of revolution. The contending parties were those of Guayaquil, including the towns and villages which are situated on or near the different branches of the Guayaquil river, in opposition to the Quito faction, which occupied the capital and other towns and villages in the Sierra or hilly country. The Guayaquilians wished, it was stated, to reform and remodel the Government of the country, with a view to the establishment of sound "liberal principles," and the better development of the various sciences. What important benefits the "liberal principles" would ultimately confer on the community I cannot say, but certainly there was great necessity for the advancement of at least some of the sciences. As a proof of this I may state that during the past year, Dr. Jameson, who was then professor of botany in the University of Quito, had only three pupils.

By the 11th of July I had so far recovered from the effects of fever that I applied to Mr. Mocatta for funds to enable me to proceed up the Guayaquil River, to a place called Ventanas, where Dr. Taylor as I have stated was to meet me. Mr. Mocatta objected to my going up the river until an action should take place between the contending forces, which would, he believed, put an end to all disturbances. The troops of the Sierra had by this time descended into the great Guayaquilian plain, and taken possession of Ventanas and several adjacent villages. Mr. Mocatta was therefore of opinion that it would be extremely hazardous, under the existing circumstances, to attempt to reach Ventanas. But I was determined to stay in Guayaquil no longer. The climate is hot and very unhealthy. Mr. Mocatta informed me that the mean annual temperature is 80° Fahr., but I am inclined to think that it must be a little more. During my stay there, from May 13th to July 12th, my thermometer (and it was a good one with polished tube) never fell below 82° Fahr. It is however but right to mention that June and July are considered the hottest months in the year.

On the 12th of July I embarked my Wardian cases, 15 in number, on board a small United States steamer, which was commissioned by General Franco to carry troops and munitions of war to Bodejas, a small town on the river bank, about 40 miles above Guayaquil. There were on board his Excellency General Franco, commander-in-chief of the troops of Guayaquil, a number of general officers, and about 200 soldiers.

The steamer left Guayaquil about 10 A.M., amid the dissonant cries of the soldiers and populace, and proceeded slowly up the river. That large tract of low lying country which runs along the sea coast from the southern parts of New Grenada to the rainless deserts of Peru, although not exactly barren, is in most instances sparsely covered by a shrubby or herbaceous vegetation of Leguminous plants. However, on passing up the river the vegetation gradually improves, and so continues, until it ultimately swells into a magnificent evergreen forest. The banks of the river for about 20 miles above Guayaquil are one mass of soft mud, on which, however, may be seen assembled great numbers of hideous-looking alligators. In some places I have counted as many as 52 of the full-grown brutes grouped together, and presenting the appearance of so many logs of wood which had been left by the ebb tide on the muddy banks of the river. During this year great numbers of alligators had died of some disease, and the stench arising from their carcases—which were lying about here and there in pools of mud, exposed to the full rays of the sun—was almost intolerable.

The steamer reached Bodegas about 5 P.M., and I immediately set about getting my cases transferred to a house, or rather shed, which had been hastily erected over a raft in the bed of the river. This place was called a Fonda or Hotel, but it certainly did not deserve that title. On entering I was compelled to get down almost on my knees, and when once inside, I was obliged to move about with the greatest caution; for although the logs over which the shed was erected had been lashed together, yet many of the trunks were bent and twisted, so that there were several openings large enough to allow one to drop into the river. When the revolution broke out in the country, Bodegas was one of the first places seized and garrisoned by the Guayaquil party; and as it was necessary that the soldiers should be placed under cover, the inhabitants were immediately turned out of their dwellings, and left to find shelter where they best could.

On the following day after my arrival I examined the ground for some distance around the town, and found growing in damp places, and in great profusion, the sensitive plant, Mimosa pudica. I also noticed species of Oxalis, Cissus, Bignonias, and plenty of Ipomœas and Solanums. On my return I saw growing plentifully on the river bank a splendid species of Mucuna (not in cultivation) with large waxen yellow coloured flowers. In the afternoon of the same day I crossed the river and found, growing amidst a clump of trees, a fine specimen of Artocarpus incisa, the Bread-fruit of the South Pacific Islands. The tree in question must have been 50 or 60 feet in height, and its wide spreading branches and monstrous leaves made me conclude that I was the lucky finder of some remarkable unknown tree. I was at the time perfectly well aware that the Bread-fruit was not indigenous to any part of America or West India Islands; and knowing the great apathy and indolence of the people, I thought no one would be likely to go to the trouble of procuring seeds from any place in the Pacific or West Indies, to which place it was taken by Capt. Bligh. At first sight I really thought that the leaves were none other than those of Artocarpus incisa, but the great difference in the size of the leaf from those I had seen on plants in cultivation, together with its great height and wide-spreading branches, completely dispelled the idea. While I was contemplating my new discovery a party of soldiers—who had been out collecting firewood—came along and halted under the tree, in order to rest and refresh themselves. From one of them I learned that the tree was called the Arbol de pan, tree of bread, so that it turned out to be the veritable Bread-fruit after all. Certainly, the miserable specimens of this tree seen in cultivation in England, and which are not in general more than 3 or 4 feet in height, with two or three tattered leaves at top, convey no correct idea of the tree whatever; and had it not been for the little thread of information derived from the soldiers—for then I remembered I had seen wax models of the fruit in museums in England—I might have remained ignorant of its identity for some time longer.

On my return, I found growing amid the desultory vegetation, Adiantums, Gymnograms, Lygodiums, and here and there several plants of Asclepias Curassavica, growing as a shrub. Around the town are several clumps of Mango trees, Oranges, and Plantains. But the Mangos of Guayaquil, although famed along the western coast of South America, would not find a market in India. The Mangos which I saw exhibited for sale at several places in India, when on my way to the Nilgherries, far exceeded, both in size and flavour, the renowned Daule Mangos, which are daily brought to Guayaquil for sale and exportation.

Bodegas, like Guayaquil, is exceedingly hot, and most unhealthy. If there were in such a place an efficient sanitary committee vested with full power to act as they might consider necessary, the mortality might not be half so great as it is. But such a thing as a sanitary committee is not, as far as I am aware, ever thought of. In the town of Bodegas, as at Guayaquil and Panama, one sees the remains of Plantains, refuse of fish, entrails of animals, and all sorts of filth, around every dwelling; and these are allowed to accumulate and to be soaked by the rains, and dried to dust by the fierce heat of the sun, without a sentence ever being breathed by any one as to their injurious effects on the community in general. *Robert Cross.*

Home Correspondence.

Cotton Cultivation in India.—The conclusions to which our examination of the Indian Cotton cultivating experiments, as carried on at Coimbatore, lead are few and simple. First we learn that the American method, however perfect as regards tillage and agricultural art, is wanting in science, and although applicable, at least for some time, to the virgin soils of America, is altogether unsuited to those of Southern India. This inference seems fully established by a trial continued through 13 years, in the course of which we learned that the Ryots of India with the simplest of simple means raised as good crops and of as good Cotton as the American planters could do with their much more costly and laborious procedure. Secondly, we learn that Indian tillage, though executed with the most unassuming and primitive of implements, is far from being so defective as, judging from the appearance of the tool, we should at first sight suppose. This is owing to the full effect being produced not by going once or twice over the ground as we do, but often five or six times, increasing the depth each time; and never, as in English practice, consolidating the subsoil by the pressure of a heavy plough, and the treading of three or four large horses employed to drag it, walking leisurely along the furrow just made. The effect of these repeated stirrings is to produce a very perfect tilth, allowing the freest access of the air to every particle of the soil. Thirdly, we learn that the Ryot, by following a systematic course of rotation, combined with slight manuring and his excellent tillage, has preserved through many centuries the fertility of his land, while the planter by disregarding that most essential practice has, in a few years, exhausted the exuberant fertility of his—at least so far as Cotton culture is concerned. We have now to enter on a new branch of the subject, which, I think, may be most conveniently considered in endeavouring to answer two questions, namely—Is it possible within a few years so far to restore fertility to the "worn out" Cotton fields of America as to render their renewed culture profitable? And, secondly—Can the fertility of the Indian "Cotton soils" be increased by the use of manurial appliances, aided, perhaps, by modified rotations, more in accordance with ascertained scientific principles than those now practised? I limit this question to the properly so called "black Cotton soils," which are peculiar. All others I know can be so improved. Dr. Mallet remarks, "As to the extent to which they (the mineral constituents) are withdrawn from the soil by cultivation, it may be remarked generally, that Cotton is by no means an exhausting crop under proper management,"—referring of course to the small quantity removed, yet in India we found it a very exhausting crop; but why it should be so, under the circumstances stated by Dr. Mallet, I am unable to say. He informs us, "The great mass of the plant—root, stem, branches, leaves and empty bolls, remains on the field, and is ploughed into the soil, which is enriched by the rapid decay of the organic matter. Nothing is removed except the fibre and seed, and a large proportion, if not the whole of the latter, is by judicious planters returned to the land: Cotton seed is in fact almost the only material used as manure in the Cotton region of America. * * * The Cotton fibre, which constitutes the saleable product, and is absolutely carried off the land, must be looked upon as a very light crop; a bale of 400 or 500 lbs. to the acre is sometimes obtained under favourable circumstances, but this is much above the average for upland Cotton. The fibre yields 1 or $1\frac{1}{2}$ per cent. of ash, so that at the most $7\frac{1}{2}$ lbs of mineral matter per acre will be removed from the soil annually. According to Johnston (Lectures on Agricultural Chemistry, p. 216), a crop of Wheat of 25 bushels to the acre removes from the soil, in the grain alone, about 17·65 lbs. of mineral matter; a crop of Barley of 38 bushels, carries off in the grain, 46·98 lbs. A crop of Oats of 50 bushels, 58·05 lbs. According to Liebig,

(Letters on Modern Agriculture), an average crop of Potatoes removes from each acre about 163 lbs. of mineral matter; and one of Beet about 458 lbs., leaves included." The fact, therefore, of Cotton removing so small an amount of mineral matter, as compared with these, is to me an interesting one (for such I presume we may consider it), as going far to prove that, in the case of Cotton and possibly all other crops, the sterility caused by consecutive cropping with the same plant is not simply attributable to the amount of mineral matter removed from the soil. In India our crops were occasionally so luxuriant that the planters assured us they were quite equal to Mississippi ones, but the falling off the second year was most conspicuous, and the third was scarcely worth picking. This occurred repeatedly during the first 4 or 5 years of our pupilage under American tuition, and of course led to the discontinuance of that mode of procedure. The point which claims attention is, that while Dr. Mallet on, I presume, theoretical grounds—or because nearly the whole of the vegetable matter of the crop is returned to the soil—considers cotton by no means an exhausting crop, he yet informs us that the vast extent of worn-out Cotton fields already existing in even the most recently settled Cotton States is such as "must compel, there and elsewhere, the attention of the economist to the scientific aspects of the problem of Cotton cultivation." The discrepancy between these two passages seems to indicate that, at least in this instance, theory and practice are at variance; the Cotton plant as shown by both American and Indian experience being in truth a very exhausting one when cultivated according to the American system. But, on the other hand, when managed according to the Indian one, that is, as one of a rotation, its exhausting tendency appears to be so far counteracted that it ceases to be more injurious to the soil than other crops, and has in consequence retained its place in their agricultural system for centuries; seemingly without causing any material deterioration of fertility. After what I have so repeatedly witnessed when engaged in Cotton culture, combined with Dr. Mallet's previous statement as to the vast extent of worn out Cotton fields, I cannot but hesitate accepting his deduction as to the non-exhausting character of this crop on the grounds stated. It is on record that the fertile soils of Virginia bore for a century continued cropping with Wheat and Tobacco, without manure, before they ceased to produce remunerating crops, whereas scarcely half that time has elapsed since the Southern States of North America became the great Cotton field of the world, and already half their extent consists of "worn-out" Cotton fields, and that, too, notwithstanding 9-10ths or more of each crop is annually returned to the soil which produced it. Whether other crops similarly cultivated, and year after year returned to the soil in the same proportion, would equally induce sterility, is more than I can say, or perhaps than is known, or likely to be known, except experimentally on a small scale; but it is a question meriting careful consideration before fully adopting, as proved, the chemical theory of exhaustion of the soil. Should the experiment be made, and the result be at all in accordance with what is known regarding Cotton culture, it will, I think, go far to prove that that theory requires revision, and that the more or less exploded one of poisonous excretions may, to some extent at least, be again taken into favour. I lay stress on these matters now in the hope that Dr. Mallet, should he chance to see these lines, may be induced to take them into his consideration when examining "the special mineral food required by the Cotton plant, and the amount of this food, both of which remain to be examined by analysis of the ash, and will form another part of his investigation." Of all our agricultural chemists, fortunately now both numerous and skilful, he seems by far the most favourably situated to investigate this interesting question, and if he does so with the untiring patience and skill he has already bestowed on the soil *per se*, we may, I think, expect it will be definitively ascertained on unquestionable evidence that part at least of the benefits derived from rotation is due, not simply to one set of plants living on food left by those which preceded them, while fresh supplies are being generated by agencies at work in the soil, but is in part attributable to their feeding on the excretions of their predecessors. The excretions of Beans are supposed to nourish the Cereal crop which follows them in rotation, while those of the Oak are so injurious that most other trees, planted on the site whence it has been removed, will not thrive though food suitable for their nourishment abounds. The excretions of the Poppy, too, are said to contaminate the ground for many other plants. May not the Cotton plant in like manner poison the ground for itself, long before it has exhausted the inorganic constituents on which it lives, while like Beans actually enriching it for other crops, which in the course of a few years, by consuming the deposit, reprepare it for fresh Cotton crops, as happens in the Indian plan of culture? May not our Clover and Turnip sickness, the causes of which are still a mystery, be referable to a similar origin, differing only in requiring a longer interval and more varied rotation to effect its removal from the soil through the agency of other crops? A careful analysis and comparison of "worn-out" with fresh virgin soils may perhaps enable so skilful an analyst as Dr. Mallet to throw some useful light on this obscure but most interesting and important subject of inquiry, and also enable him to aid the investigations of our chemists in their hitherto nearly fruitless endeavours to discover the cause of our Clover and Turnip sickness. Lastly, let us hope that his researches may result in suggesting such a course of cropping as will not only preserve fertility in new lands, but restore it, by a speedier process than that followed by unaided nature, to the already "worn out Cotton fields" of the Southern States of North America. *Robert Wight, Grazeley Lodge.*

Erratum.—Fifth line from the end of my last letter, page 1027, for "draining" read drawing out.

Ancient Cork Tree at the Bishop of London's, Fulham.—As it may interest some of your readers who are curious about the history of old and remarkable trees, I beg to send you some account of a Quercus suber, or Cork tree, growing here, and said to have been planted by Bishop Compton in 1688. Mr. A. W. Blomfield, son of the late Bishop of London, in a work published by him four or five years ago, asserts that this same Cork tree was the first of the sort planted in England. This appears, however, to be doubtful, inasmuch as Paxton's "Botanical Dictionary" states that the Cork tree was first introduced into this country in the year 1581—107 years previous to the planting of our tree at Fulham. As, however, there may be Cork trees still in good health in some of the southern counties of England older than the one here, perhaps some of your Correspondents will enlighten us as to the ages of the oldest specimens in their respective localities; the height of the trees and girths at 3 feet from the ground will also doubtless be read with interest. According to Sir W. Watson's report to the Royal Society in 1793, our tree here was then 45 feet high, and its girth at three feet from the ground 8 feet 4 inches. The same tree is now 50 feet in height, and girths at three feet from the ground 9 feet 9 inches. Other rare old trees still exist here, which are reported to have been planted about the same time as the Cork tree; of these I may mention Juglans nigra, or Black Walnut, and a very fine old Cercis Siliquastrum, or Judas tree. *D. Cunningham, Gardener, Fulham Palace.*

Cinchona succirubra.—Early in November, 1860, a packet of the seed of the Red Bark tree, which had been collected within sight of the snowy peak of Chimborazo by Mr. Spruce and the gardener, the second part of whose narrative appears in another page, was received at the Botanic Gardens Kew. These seeds were sown at several successive times, but the first of them were sown on the 9th of that month. They germinated somewhat irregularly; the first started in about three weeks or a month, while others took several weeks longer. The seedlings as soon as they could be handled were pricked into shallow pans, the larger ones being placed in the middle, the smaller in concentric circles around them. One of these seedlings, which had from the very commencement exhibited great vigour in its growth, and consequently had been placed in the centre of one of the pans, now began to grow very rapidly. At the suggestion of the respected Curator the other seedlings were taken out of the pan and potted separately. By these means the giant was not disturbed, but left in entire possession of the pan. Its progress was now more rapid than ever, it had soon outstripped all its contemporaries, and by June of the present year it was more than double the size of any of the others. It was not drawn up, for it had the same amount of light and air as the others; this could also be seen by the thickness of the stem and the shortness of the internodes. I measured the plant when it was about 11 months old, and found its dimensions to be as follows. The stem was 4 feet high, a few of the lower leaves had dropped off, but there were still 11 pairs of leaves upon the main stem, and 5 pairs upon a side shoot; these leaves were many of them a foot in length and 9 inches broad. The stem at first appeared to be soft and spongy, it is now putting on a more woody character; it is $2\frac{1}{4}$ inches in circumference near the base. There are several hundreds of plants which were raised at the same time as the one above described; only a few of them are more than 9 inches high, while the average may be about 6 inches. We must therefore look upon this specimen as a very remarkable plant, and a giant of his race. *C. W. C.*

Vines.—I have a Vinery filled with Muscats which were planted in February last; they have grown very strongly, and average not less than 2 inches in girth. By some gardeners I am advised to cut them back to half-rafter length, while others would have me leave them full length. Some only would allow one or two bunches of fruit to the rod next season, while others recommend me to leave seven or eight bunches. A few hints therefore on these points would oblige *A Constant Reader.*

Cucumber Growing.—I was glad to see in your last impression Mr. William Paul's notice of the success of Mr. John Monro in the cultivation of Cucumbers and Melons; and I hope that what Mr. Paul says may be the means of inducing Mr. M. to lay before the horticultural world a pamphlet describing in detail his practice in the management of these favourite Cucurbitaceous plants. From what I have seen of his productions as exhibited at the London shows, I think that no man can be better qualified to instruct his younger brethren in that particular branch, more especially as applicable to their culture in the Melon and Cucumber house, heated by means of hot water, &c. *John Coleman.*

Grapes eaten by Polecats.—As there has been so much written lately in your columns respecting the destruction of Grapes by rats, I think it may not be uninteresting to relate a circumstance that occurred to me some years ago. For some days I had noticed that my Grapes were eaten from an out-door Vine, as I supposed by rats. I accordingly set a trap, and next morning found therein not a rat but a young polecat, alive. I destroyed him and missed no more Grapes from that time. *F.R.C.S.*

Chrysanthemum Sports.—In reference to the remarks at p. 984 respecting fixing sports of Chrysanthemums, I beg to state that I have a plant of Golden Queen of England on a single stem, one portion of the flowers of which are yellow, and the rest ordinary Queen of England. The remainder of the stock is all yellow, although the whole of the plants have been treated alike throughout the season. *R. W. C., Stourbridge.*

Orchard Houses.—I have watched with interest the correspondence in your columns respecting orchard houses and the growth of fruit trees in pots. I find men of known ability giving very contradictory opinions as to the utility and value of this mode of fruit culture. I do not pretend to know so much of the science and art of gardening generally as those who figure so frequently in your columns; but as a fruiterer I am able to add my matured opinion in favour of all that has been advanced of late by your correspondent "T. R." During the last two seasons I have had a large quantity of fruit from the Channel Islands, and from orchard houses and other sources in this and neighbouring counties; and I am led to believe that only from trees grown in orchard houses can you make sure of a crop, and that trees in pots under the same treatment are not only as fruitful in proportion, but that their produce is equally good in flavour. If they are "toy trees," as some designate them, it is on the same principle as that of Grapes being sour to those who cannot get them. During the last season I have had Peach and Apricot trees in pots, standing on the shop counter, exhibiting beautiful fruit. The interest manifested by visitors towards these tiny trees has been far greater than expected, and it was a matter of amusement to listen to the ludicrous opinions broached as to the fruit being wax imitations, &c. One market gardener believed that the fruit was genuine, but that it was "stuck" on; the majority of observers however imagined that they were "wired." But the fruit did grow on trees in pots, and fetched a far higher price as it dropped than it would have done if grown for sale in the usual way. The finest and most extensive crop of Peaches I have ever yet seen was produced in a lean-to-house, similar to "Weeks' No. 33," sometimes figured in your columns. A great number of the fruit measured 12 inches in circumference, and the smaller sizes generally produced me from 30 to 50 per cent. higher prices than I could get for fruit grown in the ordinary way. Indeed there is no comparison in point of flavour; out-door fruit would not sell half so readily as that grown under glass. I went a few miles last season to see a house of Plums, all the trees were in eight, ten, or twelve inch pots, and literally loaded with magnificent fruit. I have never seen such a sight before. One almost imagined it positive cruelty to take such a crop from pot trees. The colours too, such as only Plums can exhibit, were truly gorgeous, and the flavour better than anything I had before met with. This house was managed by a gardener of the most humble pretensions, he had no crotchets, he had read little and seen less; but his skill in regard to fruit houses is excellent. The great secret in pot tree culture seems to be judicious watering and top-dressing. *R. T. H., Weymouth.*

Societies.

LINNEAN: *Nov.* 21.—G. Bentham, Esq., President, in the chair. E. Clapton, M.D., was elected a Fellow. Dr. Cobbold made some observations, illustrated by sketches, on the mode of reproduction of Gyrodactylus elegans, a parasite on the common Stickleback. The following papers were read:—1. "On the two Forms or Dimorphic condition in the Species of Primula, and on their remarkable Sexual Relations;" by C. Darwin, Esq. When a large number of Primroses and Cowslips are gathered, they are found to consist in about equal numbers of two forms obviously differing in the length of their stamens and pistils. Florists who cultivate the Polyanthus and Auricula are well aware of this difference, and call those which display the globular stigma at the mouth of the corolla tube "pin-eyed," and those which display the stamens "thrum-eyed." Mr. Darwin designated these two sets long-styled and short-styled plants. The long-styled plants have a much longer style, with a globular and much rougher stigma standing high above the anthers; the stamens are short, the grains of pollen smaller and oblong in shape, the upper half of the corolla tube is more expanded, and the number of seeds produced is smaller. The short-styled plants have a short style half the length of the corolla tube, with a smooth depressed stigma standing beneath the anthers; the stamens are long; the grains of pollen spherical and larger; the tube of the corolla is of the same diameter till close to its upper end; the number of seeds produced is larger. Though large numbers of plants had been examined, no transitional grades had been found; there was never experienced the slightest doubt under which form to class any plant, and the two forms were never found on the same plant. Many plants were marked, and found to retain the same character the following year. Collecting from several different localities, and taking every plant which grew on each spot, Mr. Darwin gathered 522 umbels, of which 241 were long-styled, and 281 short-styled. The Auricula presents the same two forms, but amongst the improved fancy kinds the long-styled ones are rare, as they are less valued by florists; there is in these a much greater relative inequality in the length of the pistils and stamens than in the Cowslip. In the two forms of Primula sinensis the pistil is about twice as long in the one as in the other. There is one remarkable difference in the two forms of this species, namely, that the short-styled plants, if insects be excluded, and there be no artificial fertilisation, are quite sterile, whereas the long-styled produce a moderate quantity of seed; but when properly fertilised, the short-styled as with Cowslips yield more seed than the long-styled. Several other Primulas were mentioned, in which the difference of long and short styles had been observed. "We thus see," observed Mr. Darwin, "that the existence of two forms is very general, if not universal, in Primula. The simple fact of the pollen grains differing in size and outline, and the stigma in shape and roughness in two sets of individuals of the same species is curious, but what does it mean?" The use or meaning of dimorphism in plants, it was observed, had never been explained. Mr. Darwin's first idea was, that the species were tending towards a diœcious condition; that the long-styled plants with their rougher stigmas were more feminine in nature, and would produce more seed; and that the short-styled plants with their longer stamens and larger pollen grains were more masculine. Various experiments were tried, the details of which were minutely stated, but the result showed the short-

styled plants to be much the more productive. The result of various observations and experiments led to the opinion that insects are absolutely necessary to the fertilisation of Cowslips, and by inference of other if not of all Primulas; but what insects visit the plants to effect this end the author did not know, although he had been led to suppose it was effected by moths. In all the species of Primula the pollen readily adheres to any object, so that if the proboscis of a dead humble bee, or thick bristle, or rough needle be pushed down the corolla, first of one form and then of the other, it will be found that the pollen from the long stamened forms will adhere round the base of the proboscis, and will be left with certainty on the stigma of the long-styled form, while pollen from the shorter stamens of the long-styled form will adhere a little above the tip of the proboscis, and some will generally be left on the stigma of the other form. This pollen will be carried reciprocally from one form to the other. In withdrawing the proboscis from the long-styled form with pollen adhering near the tip there will be a good chance of some being left on the flower's own stigma, in which case there will be self fertilisation, but this by no means always occurs. In the short-styled forms on the other hand, and it is important to remember this, the insertion of the proboscis between the anthers almost invariably carries down pollen to the flower's own stigma. These observations led Mr. Darwin to test the potency of the two pollens with respect to the two stigmas. In each species four crosses can be tried, namely, the stigma of the long-styled, by its own-form pollen, and by that of the short styled, and the stigma of the short-styled by its own-form pollen and by that of the other form. When the stigmas are fertilised by their own-form pollen, the union was said to be "Homomorphic," and when by the pollen of the dissimilar form "Heteromorphic." Experiments were tried in this way with the P. sinensis P. veris, and P. auricula, and it was found that in each case the heteromorphic was much more fertile than the homomorphic union. "We have here, as far as I know," observed Mr. Darwin, "a case new in the animal and vegetable kingdoms. We see the species of Primula divided into two sets or bodies which cannot be called distinct sexes, for both are hermaphrodites, yet they are to a certain extent sexually distinct, for they require for perfect fertility reciprocal union. They might perhaps be called subdiœcious hermaphrodites. The meaning or use of the existence in Primula of the two forms in about equal numbers with this pollen adapted for reciprocal union, is tolerably plain, namely to favour the intercrossing of distinct individuals. With plants there are innumerable contrivances for this end, and no one will understand the final cause of the structure of many flowers without attending to this point." The question whether the Primrose and Cowslip are distinct species or varieties has been more disputed and experimented on than any similar question in respect to any other plant. But as we now know that the visits of insects are indispensable to the fertilisation of these plants, and that in all probability the heteromorphic pollen of a Primrose would be prepotent on the stigma of a Cowslip over the homomorphic pollen of a Cowslip, the numerous experiments which have been made showing that Oxlips appear among the seedlings of Cowslips cannot be trusted, as the parent plants do not appear to have been carefully protected from insects. The simple fact of two individuals of the same undoubted species when homomorphically united being as sterile as are many distinct species when crossed, will surprise those who look at sterility as a special endowment to keep created species distinct. "Whether or not," continued the author, "the dimorphic condition of the Primula has any bearing on other points in natural history, it is valuable as showing how Nature strives, if I may so express myself, to favour the sexual union of distinct individuals of the same species." Cases of dimorphism like that of the Primula seem to be far from rare in the vegetable kingdom, though little observed. Mr. Darwin instanced those of several American genera and one Indian genus of Rubiaceous plants, in which some have exserted stamens and some exserted pistils; several dimorphic species of the North American Plantago; Rhamnus lanceolatus as to its female organs, and also the genus Linum; so that already we know of species having distinct dimorphic individuals in five well separated natural orders. With respect to Linum, further experiments were thought desirable, but the author incidentally mentioned having several years ago observed in Linum flavum two forms, with both pistils and stamens differing in length; whilst in Linum grandiflorum there are two forms which present no difference in their male organs, but have the pistils and stigmatic surface much larger in one than in the other. The short-styled form, Mr. Darwin believed to be highly fertile with its own pollen, while the long-styled was found to be quite sterile with its own pollen. Several plants growing remote from short-styled forms had their stigmas coloured blue with their own pollen, without yielding a single capsule; but when a little pollen from the short-styled plants was put on the stigmas of 12 flowers of the long-styled plants, already blue with their own pollen, eight fine capsules were obtained. Mr. Darwin regarded the existence of plants in full health and capable of bearing seed, on which their own pollen produced no more effect than the pollen of a plant of a different order or than so much inorganic dust, as one of the most surprising facts he had ever observed."—2. "Contributions to an Insect Fauna of the Amazon valley: Lepidoptera—Heliconidæ," by H. W. Bates, Esq. The author, in the course of this paper, particularly alluded to what he called the mimetic analogies or resemblances found among the Heliconidæ. The insects of this group seem to be objects mimicked by members of other groups; thus a number of Bombycide moths wear to deception the livery of different Heliconideous species, the mimicking species always inhabiting the same country as the species mimicked. Again, Leptales Lysinoe puts on the appearance of one species of Ithomia where Ithomiæ are few, and of three or four species where they are numerous. "The same species, however, in a third district is very vacillating in its colouration, and mimics not a Heliconian at all, but one or two species of the equally prolific and dominant Erycinide genus Stalachtis." A similar series of mimetic analogies occur in Tropical Asia. The instances are not, however, confined to the Lepidoptera, but in both hemispheres are very numerous in all orders. Perhaps the most striking of all, and those most familiar to European entomologists, are those between a group of the moths, and wasps, bees, and other insects of the most diverse orders. Mr. Bates stated that in all cases he believed the analogous forms are found to inhabit the same countries; in S. America they are often confined to the same very limited districts. In very many cases the objects of imitation are prolific, dominant, and flourishing forms, whilst the imitators are species of great rarity. Besides being thus the objects of imitation by various families, the Heliconidæ mimic each other respectively to a great extent. The purpose of mimetic analogies, the author thought, would be tolerably evident on examination of the facts, but the processes by which they were brought about was a more abstruse question, upon which he offered some suggestions.

Notices of Books.

(Continued from p. 1029).

Le Jardin Fruitier du Muséum, ou Iconographie de toutes les Espèces et Variétés d'Arbres Fruitiers: avec leur Description, leur Histoire, leur Synonymie, &c.; par J. Decaisne. 4to. Paris, Firmin Didot.

Poire Pomme.—Syn. Beurré de Rackencheim or Rackenghem, Beurré d'Hardenpont, and Délices d'Hardenpont (of some), Pomoise. Fruit small or middle-sized, Apple-shaped, being roundish, hollow at the eye and stalk; the latter is of variable length, generally short, deeply sunk at its insertion. Eye likewise deeply sunk in a regularly formed hollow. Skin rough, greenish yellow, but for the most part covered with russet brown. Flesh white, melting, very juicy and sugary, with slight astringency. [This it is apt to acquire in very dry summers.] Season Oct., Nov. It is however inferior to many others which ripen at the same period. We find an exact description of this Pear in the *Pomologie de la Seine-Inférieure*, under the name of *Délices d'Hardenpont*; and it is figured in the same work under that of *Beurré d'Hardenpont.* I have already remarked this double error in speaking of the Pear *Délices d'Angers*, which M. Willermoz has confounded with the P. Pomme, and which has as synonym the Beurré de Rackencheim.

Poire Graslin. — Syn. Beurré Superfin, Beurré Dathis, Dathis du Printemps, Laure de Glymes? Fruit large, pyriform, or turbinate, flattened at the eye. Stalk thick, a little bent, very thick at its junction, so that the fruit and stalk taper into each other. Eye open, in a wide depression, the segments of the calyx erect or slightly reclined. Skin smooth, of a uniform yellow, or but slightly worked with red next the sun. Flesh very melting, somewhat granular, with abundance of sugary, somewhat acidulated, perfumed, but not musky juice. An excellent fruit, which however presents the variations of flavour which we meet with in the Duchesse d'Angoulême. Season, middle of October. Tree vigorous; shoots olive. Leaves large, oval, acuminate, with the margin almost entire. The original tree is supposed to be from 80 to 100 years old. It is growing at Malitourne, commune de Flée canton de Château-du-Loir (Sarthe), on an estate belonging to the family of Graslin, after which it was named in compliment when tasted by Dr. Bretonneau of Tours some 20 or 25 years ago.

Poire Bretonneau.—Syn. Beurré Bretonneau, Docteur Bretonneau, Calebasse d'Hiver. Fruit large, obtuse-pyriform, or like a Doyenné. Stalk very short, thick; fleshy, bent. Eye in a shallow depression, segments of the calyx erect or spreading. Skin thick, rough, ground colour ochre-yellow, speckled with russet, brownish red next the sun. Flesh yellowish white, half melting, rather coarse-grained, gritty near the core, sweet and somewhat perfumed. Season—March, April, or later. Although contrary to the opinion of the Congrès pomologique de Lyon, Prof. Decaisne says he must class this among stewing Pears.

Poire Napoléon.—Syn. Bon Crétien Napoléon, Bon Chrétien Doré, Bon Chrétien Bonaparte, Captif de Sainte Hélène, Belle Canaise (of some), Beurré d'Autien, Charles d'Autriche, Charles X., Gloire de l'Empéreur, Liart, Mabille, Mailänderin, grosse grüne, Médaille, Melon Napoléon d'Hiver, Napoléon vrai, Sucrée Dorée, Poire de Wurtemberg. [This Pear has been for many years so well known in this country that we need not give the description, which is very correct in the work before us, except as regards quality. This, Professor Decaisne does not speak so highly of as we should of fruit grown in this country, especially on a standard in a good season. "The fruit," he says, "as variable in flavour as in form, is rarely of first-rate quality." Now in the neighbourhood of London, when the tree and its fruit are well exposed to sun and air, for its very broad foliage requires plenty of both, there is no Pear so exceedingly juicy, and the flavour is rich and refreshing. The original tree, we are informed, was raised about 1808 by M. Liart, a gardener at Mons, and was purchased when very young by the Abbé Duquesne for 33 francs; he gave the variety the name of Napoléon. Prof. Decaisne has doubtless described the fruit, as regards flavour, truly as he found it; but perhaps the tree producing the specimens had been growing in soil too highly enriched. The Napoleon Pear is one of those sorts that will not bear to be grown to a large size in very rich soil without great deterioration of flavour, or perhaps a dry continental summer may not suit it.]

Garden Memoranda.

Mr. Macintosh's Nursery, King Street, Hammersmith.—Of Solanum capsicastrum Mr. Macintosh has this year a fine stock of plants, the fruit on which is now ripe and bright orange scarlet in colour. His plants appear dwarfer and more prolific than is usual with this kind of Solanum. His treatment of it has been given in former Numbers, but a recapitulation if it may not be out of place here; it is as follows:—If good sized specimens are wanted in a comparatively short time, let the young plants be introduced into the warmth of an intermediate house early in spring, and as soon as they have started freely into growth shift them into larger sized pots; at the same time examine the roots, and if they are found to be cramped, or the soil in bad condition, partly reduce the size of the ball so as to set the little rootlets at liberty. When potted place them again in heat, giving little water for a time; but syringe overhead occasionally in order to keep the atmosphere moist. This should be continued for a week or two until the roots have fairly taken hold of the fresh soil. After that water with water of the same temperature as that of the house in which they are growing. They will now succeed perfectly well under the kind of treatment usually given to plants in a growing state, paying attention to stopping all straggling shoots so as to induce a compact pyramidal habit. The pieces removed strike freely, and may therefore be employed to increase the stock. For ordinary purposes 6-inch pots are large enough for them; but if good-sized specimens are required they may easily be obtained with little trouble and of almost any shape that may be desired. About the end of June they should be placed out of doors in as hot and sunny a situation as possible, when they will keep flowering and set fruit better than they would indoors. In September let them be moved under glass, where, when covered with brilliant orange-scarlet berries, they are extremely ornamental. Indeed few plants can be compared with this for winter decoration, and what is important the berries are so permanent that the bushes bearing them retain their vivid colouring for several months at a time. The soil most suitable for this Solanum is a light fibry loam intermixed with a little peat and sand. Associated with Capsicastrum were S. Pseudo-capsicum; the last has beautiful deep crimson fruit and darker foliage than the first. The berries of both are no doubt poisonous, and therefore must be kept from children. In the form of standards when laden with fruit both varieties are extremely pretty.

Among Chrysanthemums now in bloom in the show house the following are worthy of especial notice, viz. Solfaterre, a very pretty yellow Pompone, bearing from 6 to 8 flowers in a cluster on the end of each shoot, and one of the hardiest Chrysanthemums in cultivation; Hélène, a lilac sort, also useful for out-door decoration, as are likewise both White and Golden Cedo Nulli, two of the best small flowered kinds in cultivation, the rich brown eye which both of them possesses setting off their other colours to excellent advantage. For indoors Brilliant is a useful Pompone, superseding Bob, which often flowers badly. Hendersoni is still one of the best early yellow Pompones; Madame Rouselon is a good lilac and white; but perhaps one of the best in this way is Madame Fould, which is full flowered and finely formed, and altogether one of the most beautiful of Pompones. General Canrobert is a finely formed yellow and a free bloomer, and the same may be said of Duruflet, purplish lilac. Madame Jacquin is a good white with a yellow eye. Surprise is perhaps too like Madame Rousselon to be grown along with that kind in small collections; but for purposes of decoration on a large scale it will be found worth attention.

Of large varieties one of the best is undoubtedly Vesta. For pot culture this is exceedingly well adapted. Progne and Aimée Ferrière are also two excellent kinds, the former a bright crimson. Among other sorts were Auguste Mie, Vulcan, a late red, Sydenham, Plutus, Pio Nono, Phidias, Ne Plus Ultra, Madame Clos, Golden Cluster, Mount Etna, Cassy, and Prince Albert, the last a large showy dark red variety.

Veronicas are largely grown here for autumn decora-

ion. Among the sorts were Andersoni, meldensis, and Lindleyana, the last a white kind. Of these we noticed beautiful bushes. We also observed a variegated variety of Andersoni, which, independent of blossoms, has a pretty effect intermixed with ordinary green leaved plants. Skimmia japonica was finely covered with handsome red fruit, and we also observed a double flowered Feverfew with blossoms as white as snow and as large as those of a Pompone Chrysanthemum, to which they bear considerable resemblance. This will be found a useful plant for winter decoration under glass and also for beds out of doors in summer. Chinese Primulas and winter Heaths, with which the show-house is furnished, serve to keep up a considerable amount of gaiety at this time of the year when few things are in bloom.

Miscellaneous.

The Scotch Thistle.—A Correspondent wishes for information as to which of the Thistle tribe is the true Scotch Thistle. This is really a puzzler. If we are to place any reliance on the figures which profusely ornament many of our old Scotch books, or take as true representatives of any natural plant those vile excrescences which the older Scotch architects have stuck up in every possible shape and form, as finales to doors and windows, gable heads and door-ways—a taste which some of the modern professors of the art seem so very anxious to copy—or if we trust to the taste of sculptors in stone or engravings in metals, we must conclude that the species from which one and all of these Thistles have been taken are either now lost to the flora of Scotland, or else that the representations are as great a piece of imaginative caricature as the animal with one horn that forms one of the supporters of the Scotch Crown. Many different species have been dignified with the name of Scotch Thistle. It is probable, say some authorities, that a common species such as Carduus lanceolatus is most deserving the name. Some have fixed on doubtful native species, such as Silybum Marianum and Onopordon acanthium. Neither of these are, however, reconcilable with history. S. Marianum is appropriated by the Roman Catholic Church, who say the white marking on the foliage is commemorative of milk of the Virgin Mary. O. acanthium is not only, like the last, a doubtful original species to Scotland, but like C. lanceolatus, of much too great a height. For one historian says, that after the landing of Queen Scota, she reviewed her troops, and being fatigued retired, and on sitting down was pricked by a Thistle, from which circumstance she adopted it as the arms of her new country, with the motto, Nemo me impune lacessit. Another says, on the eve of an attack by the Danes, one of the enemy having trod on a Thistle, cried out with pain, which gave intimation to the Scots of their near presence, and hence the Thistle became dignified as the arms of the country. With these two exceptions, we meet with no other reference to a matter of equal importance, in a historical point of view, with that of the legends in connection with the Coronation Stone, which all historians have treated on with great minuteness. However, if any reliance may be placed on the authorities above given, it is quite clear that it must have been a low growing species like Cnicus acaule; for, whether we take into consideration the accident to the Queen, or the bare-footed Dane, or the configuration of the flower head itself, it more closely resembles the representations we find on many of the sculptured stones than either of the others. Some have supposed it to be Carduus acanthoides; but this, as well as all the rest, is less formidably furnished with those strong spiny scales with which the receptacle of Silybum Marianum is so amply provided. This circumstance, while it agrees better with those sculptured representations found on the oldest parts of Stirling Castle, Linlithgow Palace, or Holyrood House, especially with one on the top of a garden doorway opposite the new fountain in front of the entrance to the latter, which is more like the head of Cynara Scolymus, the Globe Artichoke, a native of the south of Europe, than any Thistle in the world. Uncertain as we are regarding the species of our national emblem, or even of its being a native, we are no more so than the English are regarding the species of Rose they have adopted. No double Roses existed in Britain at the period it was introduced into the national escutcheon; therefore, it must have been borrowed from the French, who even, in their turn, cannot now tell what species of Iris their Fleur de lis is meant to represent. Nor are the Irish agreed as to whether their Shamrock is derived from a series of Trifolium, or from Oxalis acetosella. The ancient Britons, as the Welsh call themselves, have adopted the Leek, Allium porum, a native of Switzerland. *Scottish Farmer.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—At this season every effort should be employed to keep up a good display of bloom here, for this house will now be used much more than when the weather is favourable for out-door exercise; its inmates, if attractive, will therefore now be much more valued than they would be at any other period, and on that account every possible care and forethought should be exercised, so as to secure a good supply of plants in bloom during winter and early spring. Azaleas which set their buds early will readily push into flower, if placed in a warm moist temperature, and some of the early-blooming Rhododendrons require very little forcing to bring them into blossom at any time after this season; therefore where there is a good stock of these, and Ghent and other hardy Azaleas, well set for bloom, a portion of the plants should be placed in heat at intervals of about three weeks, and as they are very showy and last long in bloom they will be invaluable. These, together with Camellias, Heaths, Epacrises, Acacias, Daphnes, Gesneras, Cyclamens, Cytisuses, Chinese Primulas, Cinerarias, Mignonette, Tree Violets, and other things which bloom naturally in winter, will afford a good display. Monochætum ensiferum is also an invaluable plant for winter decoration, but it requires a temperature of from 45° to 50°. If not already done, trim twiners, cutting back freely such things as Passion-flowers, and reducing the dimensions of all as far as can consistently be done, so as to admit as much light as possible. Winter blooming plants in borders, such as Acacias, Luculias, &c., must be well supplied with water at the roots, but things which are at rest, especially deciduous plants, and such as are scarcely hardy in the temperature of this house, cannot be kept too dry at the root at present. Keep everything perfectly clean. Remove decaying leaves daily, and rearrange the plants in bloom frequently. Maintain a temperature of from 40° to 50°, and give air on the sheltered side of the house on every favourable opportunity, but avoid cold currents. Cold frames afford the best possible accommodation for the culture of all greenhouse plants in summer, but unless they are furnished with pipes, so that a little heat can be had to dry the atmosphere occasionally, and also to exclude frost, they are not fit quarters for many things in winter, for plants which are impatient of damp will not bear being covered and shut up, as, in severe weather, must be done to exclude frost; and although in mild winters most greenhouse plants may with care be wintered in cold frames, such things as Boronias, Leschenaultias, Gompholobiums, &c., if not already done should be removed to safer quarters at once. Water cautiously, keeping all rather on the dry side, but not to excess. Be prepared with efficient covering against frost, and give air freely whenever the weather will permit, especially to hard-wooded plants, as Heaths, &c., which it may be necessary to winter here.

FORCING DEPARTMENT.

Pineries.—The supply of ripe fruit from May until August being usually obtained from plants that start without making growth in spring, a fair proportion of the stock, as has previously been recommended, should therefore be in a well matured state by or shortly after this season, and any sudden changes of temperature which might induce too many of them to show fruit at once should be carefully avoided. That portion of the stock expected to furnish the autumn supply should not be too much checked at present, indeed these may be kept growing slowly all the winter, which is perhaps the most certain method of preventing their starting too early in spring. Where the stock of plants likely to fruit without making farther growth is considered insufficient to meet the demand until August, the stronger plants of those for autumn fruiting should be encouraged to make growth as early as can be done without weakening the foliage, with the view of preparing them for starting in April. Examine the soil occasionally about young stock growing in the open bed, and do not allow it to become unhealthily dry, for this would probably result in a great portion of the stock showing fruit prematurely, and it is also a work of some difficulty properly to moisten the bed if it is once allowed to get too much dried up. Use no more fire-heat for the present than will suffice to maintain the requisite temperature, which, for the general stock, need not be high for some time yet.

Vineries.—Attend to houses just started, and, as soon as the buds have fairly begun to push, the temperature should be increased to 60° at night and 65° by day, allowing it to rise 10° on bright days. Take every opportunity of admitting a little fresh air, but recollect that the foliage will not bear exposure to cold drying winds, therefore air should be admitted in contact with the heating apparatus, and when it may be necessary to give back air the sashes or ventilators must be opened but very little, and if pieces of netting could be nailed over the openings this would greatly assist in preventing cold currents blowing into the house. Where the border cannot be warmed, see that it is well protected from wet, &c., by a thick covering of dry litter, or whatever more efficient covering can be recommended. Look over ripe Grapes often, removing any decaying berries, and aim at securing a dry atmosphere with the least possible application of fire heat.

Peaches.—Syringe frequently the trees in the early house, when started and secure a moist atmosphere. Also see that the inside border is in a moist healthy state, and if this is not the case, two or three applications of tepid water should be given.

FLOWER GARDEN AND SHRUBBERIES.

Valuable plants, as Variegated Hollies, some of the higher coloured finer varieties of Rhododendron, &c., if not growing as freely as it is desirable that they should do, would be benefited by a liberal allowance of decayed leaf-mould being applied as a t[illegible] covering it with a little fine soil and working [illegible] the ground around the ball towards the extremities of the roots. Rose borders should be well dressed with manure, which should be forked in lightly so as [illegible] injure the roots. Keep Grass free from dead [illegible] from trees, well rolled, neat, and trim. Now while weather is open give careful attention to [illegible] plants in cold frames, taking advantage of [illegible] favourable opportunity to expose them freely [illegible] cautiously to air. Anything of which there is [illegible] spare supply of plants to propagate from should [be] placed in growing quarters at once, taking care [to] keep them near the glass and free from insects, mildew, &c.; for soft-wooded plants in heat at this season are very subject to the attacks of insects. Trap mice which attack Crocus beds.

HARDY FRUIT AND KITCHEN GARDEN.

Any of the more choice varieties of Pears that do not ripen properly should be removed to a warm dry room for a few days, which will be found to greatly improve them. Keep all fruit as cool and dry as possible. If frost is excluded from the house it can scarcely be too cool, where the object is to preserve fruit plump and sound as long as possible. Get manure wheeled upon vacant ground when this can be done without injuring the walks, and get all spare ground turned up as soon as possible, so as to expose it to the action of frost. For land that has been long cropped with vegetables a dressing of fresh loam would in many cases be preferable to manure, and where this is wanted and can be obtained, it should, as previously observed, be got to hand in order that advantage may be taken of frosty days for wheeling it upon the ground. Where fresh soil cannot be obtained, charred vegetable matter such as prunings of shrubberies, edgings of walks, &c., many things which turn up in course of the season may be cheaply made to form an excellent substitute.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending Nov. 28, 1861, as observed at the Horticultural [illegible]

November.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep	Of the Earth 2 feet deep	[illegible]
Friday 22	19	29.614	29.292	49	30	39.5	45	43½	[illegible]
Satur. 23	20	29.510	29.376	47	23	35.0	45½	44	[illegible]
Sunday 24	21	30.029	29.868	45	16	30.5	45	44	[illegible]
Mon. 25	(	29.907	29.577	51	42	46.5	44½	44	[illegible]
Tues. 26	23	29.669	29.551	58	30	44.0	44	44	[illegible]
Wed. 27	24	29.793	29.788	51	24	37.5	44	44½	[illegible]
Thurs. 28	25	29.918	29.884	53	30	41.5	45½	44½	[illegible]
Average		29.777	29.618	50.6	27.8	39.2	44.8	44.1	

Nov. 22—Rain, constant heavy rain throughout.
— 23—Clear, sunshine, but cold wind; frosty at night.
— 24—Clear and frosty; cold dry air: clear; sharp frost.
— 25—Cloudy; overcast; very boisterous, with rain [illegible]
— 26—Densely clouded and boisterous; overcast.
— 27—Fine throughout; frosty at night.
— 28—Foggy; hazy clouds; fine; rain at night.

Mean temperature of the week 1½ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Dec. 7, 1861.

December	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain	Prevailing Winds
Sunday 1	48.4	35.6	42.0	17	0.25 in	[illegible]
Mon. 2..	47.2	34.4	40.8	16	0.51	[illegible]
Tues. 3..	46.7	35.6	41.2	19	0.25	[illegible]
Wed 4..	47.4	36.0	41.7	16	0.31	[illegible]
Thurs. 5..	48.2	34.6	41.4	21	0.25	[illegible]
Friday 6..	47.3	35.8	41.5	20	0.30	[illegible]
Satur. 7..	47.5	36.0	41.7	19	0.52	[illegible]

The highest temperature during the above period occurred on the 1st, 1857—therm. 62 deg.: and the lowest on the 5th and [illegible] therm. 14 deg.

Notices to Correspondents.

Books: *J B* Williams on Orchids is the best work we [illegible] present. We should like to see a new edition, [illegible] work upon the subject.

Coffee Trees: *R P.* Rich black old forest land in high [illegible] situations, not gravelly nor in any way stiff. G[illegible] down; grow it in well manured loam; remember [illegible] a stove plant.

Conduct: *R G.* Since you ask for our opinion of what [you] have been doing, we must say that your conduct has [been] most reprehensible, and that you have been treated [with] leniency that you do not deserve. Insubordination, [that is] to say, a determined disobedience to the orders of those [who] employ you, is not only disgraceful, but fatal to [your] prospects. Some foolish people call it independence; [it] is a sort of independence that is very likely to lead [to the] workhouse. Read your Bible, and pray to be made [content] with that state of life to which it has pleased God to [call you]. What comes of insubordination you may learn from [what] has happened to the Federal troops of the Northern [illegible] States. There is no difference between military and [civil] service in this respect. It is ultimate destruction [in every] case.

Emigration: *W. Wood.* We must refer you to our [illegible] articles of this week.

Gladiolus psittacinus: *J C.* It is a very curious thing [illegible] which you will hear next week.

Orchard Houses: *J R.'s* letter cannot be inserted unless [he] sends his name and address for our private information.

Orchid Growing: *Crept.* The plan of growing these [illegible] well and then resting them by withholding water is [illegible] right. Only you must take care not to over dry them [illegible] almost bake them as some do. That suits some, but not [the] majority. Remember that Dendrobium speciosum, [illegible] Australian plants, lives in a country where the summer occurs at the season when we have winter.

Passion Flowers: *W C E.* If not P. edulis, perhaps P. [qua]drangularis; but we cannot suppose that either fruit [illegible] iced. It is only the pulp that is so employed. We [see no] reason why Sir Joseph Paxton's houses should not [illegible] for Peaches.

The Sapucaja Nut: *T. B. and many others.* This is not [a nut] but a seed. It is produced by what are called Monkey [pots], that is to say the great woody urn-like seed vessels of a [tree] in tropical America called by Botanists Lecythis, [and] probably the species named L. ollaria. But there [may] possibly be more species than one which yield the "[illegible]

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LAWES'S SUPERPHOSPHATE of LIME from BURNT BONE or MINERAL PHOSPHATES ..	5	5
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These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

POTTER'S GUANO.—Established Twenty Years.
Agents Wanted.
Factory: 28, Clapham Road Place, S.

HORSE and CATTLE FOOD, 35s. per cwt.; Pig and Poultry Food, 18s.; Dog Biscuit, 15s.; Compressed Beef Greaves, 12s. and 14s.; Rice Meal, 7s. 6d. and 9s. 6d.; Indian Meal, 14s.; Locust Beans, 10s. 6d.; Locust Bean Meal, 15s.; Linseed Meal, 16s. 6d.; Screened Bengal Rice, 14s.; Chicken Rice, 10s. Sold for Cash only by
JUPP & Co., Cattle Food Depôt, 42, Great Tower Street, E.C.

Grains, Carriage Free.
MESSRS. SAMUEL ALLSOPP AND SONS, of Burton-on-Trent, beg to inform Farmers and Keepers of Stock in general that they have made arrangements with the various Railway Companies communicating with Burton for the free delivery of Grains at different Stations upon those Railways. The great value of Burton Grains either for Fattening Cattle or Feeding Milch Cows has long been an established fact in the neighbourhood of Burton. The butchers give preference to Beasts fed with Grains, and some farmers have given up the growth of Turnips and feed their Stock upon Grains and Chopped Hay exclusively with the most satisfactory results. The usual quantity given is about a bushel a day for each Beast. Grains well trod into tubs or brick cisterns, and covered over with soil, will keep good for months, in fact, they are improved by being so kept for eight or ten weeks.
MESSRS. SAMUEL ALLSOPP & SONS are prepared to enter into engagements for the delivery of Grains, by Railway Carriage Free, during the ensuing season, in quantities of not less than 3 tons or 150 bushels, and they hope that the low price at which they can be offered will induce many persons to give them a trial.—Brewery, Burton-on-Trent, Nov. 30.

Drainage Season.
MR. BAILEY DENTON undertakes the DRAINAGE of ESTATES by Commission or Contract.
52, Parliament Street, Westminster, S.W.

LAND DRAINAGE UNDERTAKEN, or PLANS SUPPLIED, by MR. THOMAS SCOTT, 18, Parliament Street, Westminster, S.W. Mr. S. has now a large Staff employed, and recommends an early application.

DRAINAGE OUTFALLS.—The most simple expeditious, and inexpensive powers for obtaining the right of making Outfall Drains, Cuttings, &c., through the Lands of adjoining Proprietors, are under the WEST of ENGLAND DRAINAGE and INCLOSURE COMPANY'S ACT, and there is no necessity for separate proceedings such as Petitions, Special Act of Parliament, Commissions of Sewers, or Drainage Boards, &c.
Draining, Inclosing, Irrigating, Warping, Road Making, and all kind of Land Improvements executed on Entailed, Mortgaged, or other Properties; the whole cost can be a Charge on the Lands permanently, or it might be made redeemable at any fixed time in one or more sums or by half-yearly instalments over any term of years, at the option of Proprietors.
FREDERICK BRODIE, Secretary.
Offices—Exeter, and 30, Parliament Street, London, S.W.

THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c. IN ENGLAND AND WALES AND IN SCOTLAND.
The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.
1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.
Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.
No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.
For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

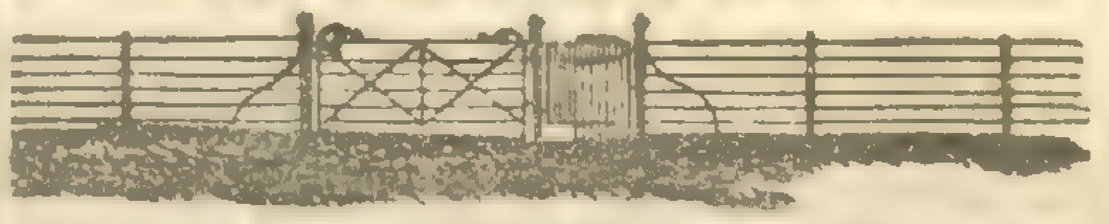
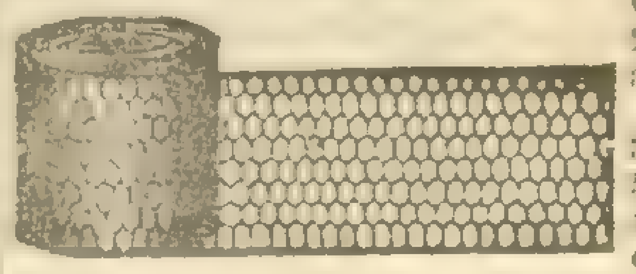
The Woolston System.
MR. SMITH will ATTEND at the SMITHFIELD CATTLE CLUB SHOW from 11.30 A.M. to 2.30 P.M. each day, at STAND 640, where Drawings of his new Patent Combined Machine for Cultivating, Drilling, and Harrowing Land by Steam Power will be exhibited.

£1000 UPON the WOOLSTON SYSTEM against any other system of Steam Cultivation.
For price of apparatus and particulars apply to Mr. W. SMITH, Woolston, Bletchley Station.

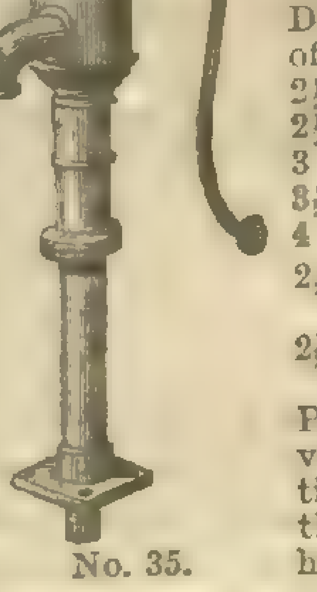
JOHN FOWLER, JUN., 28, Cornhill, London, E.C.—Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free.

JAMES AND FREDERICK HOWARD, BRITANNIA IRON WORKS, Bedford, Manufacturers of STEAM CULTIVATORS, STEAM PLOUGHS, CHAMPION PLOUGHS, HARROWS, HORSE RAKES, & HAYMAKERS.
Catalogues, with full particulars, sent free on application.

Agricultural Machinery.
CHAFF-CUTTERS, TURNIP-CUTTERS, PULPERS, MILLS, PLOUGHS, HARROWS, CARTS, &c., delivered carriage free.
BURGESS & KEY, Manufacturers, 95, Newgate Street, London, E.C. Price Lists free per post.

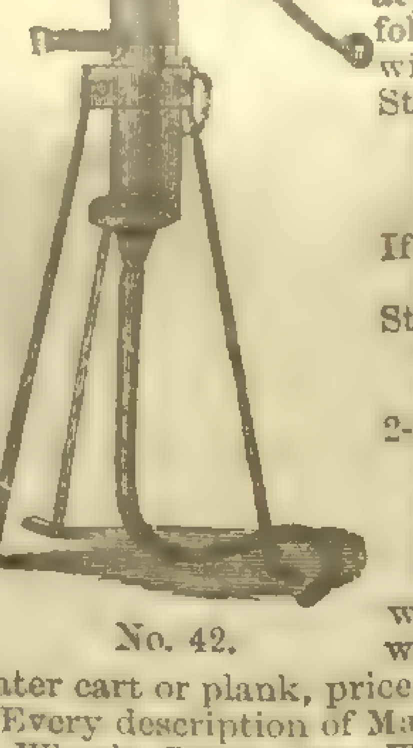
Prices Reduced.
H. J. MORTON AND CO., Galvanised Iron Works, 2, Basinghall Buildings, Leeds.
GALVANISED IRON ROOFING
for Farm Buildings and other Roofs; the cheapest, most durable, and neatest Roofing in use; also Spouting at 10½d. per yard.
WIRE STRAND CABLE FENCING

(formed of Twisted Wires like a rope or cable), the strongest, cheapest, and neatest fence in use, will resist the largest cattle, and will not bend or get out of form by trespassing upon or over. Price, with five lines of the Galvanised Strand, iron main posts, and pronged Standards, from 1s. per yard.
This fence is far cheaper than posts and rails, or any kind of iron fencing; and possesses four times the strength of solid bars. Will not rust nor corrode. Upwards of 1200 miles of this Fencing supplied.
GALVANISED GAME AND POULTRY NETTING.

Galvanised, 24 ins. wide 2-inch mesh, 4d., 4½d., and 6¾d. per yard.
Galvanised, 24 ins. wide, 3 inch mesh, 2¾d., 3¾d., and 5½d. per yard. The Netting made any width, and with openings of any size.
GALVANISED IRON CHAIN CAMP STOOLS & CHAIRS, POULTRY FOUNTAINS & FEEDERS, PRONGED DAHLIA RODS and ROSE STAKES, &c.
Strong CATTLE HURDLES from 2s. per yard.

PATENT IMPROVED GAS WORKS
of all sizes, for the use of Private Houses, Mansions, Railway Stations, Mills, Collieries, Mines, Villages, &c. Works from 10 to 500 lights estimated for. The works can be entrusted to an ordinary labourer.—Apply to
HENRY J. MORTON & Co. 2, Basinghall Buildings, Leeds.

JOHN WARNER AND SONS, BELL and BRASS FOUNDERS to HER MAJESTY, HYDRAULIC ENGINEERS, BRAZIERS, &c., 8, Crescent, Cripplegate, London, E.C.

No. 35.
WARNER'S PATENT CAST-IRON PUMP, for raising Water from Wells not exceeding 25 feet in depth.

Diameter of Barrel.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead, gutta percha or cast iron flanged pipe as required.	1 1 0
2½ ,, long	3 ,, 3 ,,		1 10 0
3 ,, ditto	3 ,, 6 ,,		2 4 0
3½ ,, ditto	3 ,, 6 ,,		2 9 0
4 ,, ditto	3 ,, 6 ,,		2 18 0
2½ ,, short, with 15 feet of Lead Pipe attached, ready for fixing			2 0 0
2½ ,, long ditto ditto ditto			2 14 0

This Pump is fitted with J. W. & SONS' Patent Vibrating Standard, Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.

WARNER'S IMPROVED LIQUID MANURE or GENERAL PORTABLE PUMP.

No. 42.
This Pump is fitted with WARNER'S Patent Bucket and Valve, and cannot clog in action. The Barrel is made of Galvanised Iron, not likely to corrode, and can be raised or lowered at pleasure on the stand, the legs of which fold together, and it may be carried with case by one man.

	£ s. d.
Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe	2 15 0
If fitted with Barrel of Planished Copper	3 4 0
Stand and Pump, with plain Tail Pipe, for tying on Suction Pipe	2 9 0
2-inch India Rubber and Canvas Flexible Suction Pipe, on wires, in either 10, 12, or 15 feet lengths .. per foot	0 2 5

No. 43 is a similar Pump to the above, without stand, but with strong wrought-iron straps, for fixing to water cart or plank, price 2l. 5s.
Every description of Machinery for Raising Water, by means of Wheels, Rams, Deep Well Pumps, &c.; also Fire and Garden Engines, &c.
J. W. & SONS' Illustrated Catalogue forwarded post free on application.
The above may be obtained of any Ironmonger or Plumber in Town or Country, or of the Patentees and Manufacturers,
JOHN WARNER & SONS, 8, Crescent, Cripplegate, London, E.C.

NATIONAL EXHIBITION of DOGS.—The SECOND GREAT ANNUAL EXHIBITION of SPORTING and other DOGS will be held in extensive Premises in Tennant Street, Broad Street, near Bingley Hall, Birmingham, on MONDAY, TUESDAY, and WEDNESDAY, December 2, 3, and 4, the first three days of the Cattle and Poultry Show.
The PRIVATE VIEW on Monday, December 2. Admission: Monday, 5s.; Tuesday and Wednesday, 1s.
For Special Railway Arrangements, see the Advertisements and Bills of the several Companies, and of the Cattle and Poultry Show.

THE BIRMINGHAM CATTLE and POULTRY SHOW, 1861.
The THIRTEENTH GREAT ANNUAL EXHIBITION of CATTLE, SHEEP, PIGS, DOMESTIC POULTRY, and ROOTS will be held in Bingley Hall on MONDAY, TUESDAY, WEDNESDAY, and THURSDAY, December 2, 3, 4, and 5.
The PRIVATE VIEW on Monday, December 2. Admission; Monday, 5s.; Tuesday, Wednesday, and Thursday, 1s. The Doors will be opened at 9 o'clock each morning.
For Special Railway Arrangements, see the Advertisements and Bills of the several Companies.

PRIZE CATTLE SHOW of the SMITHFIELD CLUB.—The ANNUAL EXHIBITION of PRIZE CATTLE, SEEDS, ROOTS, IMPLEMENTS, &c., commences on TUESDAY Morning and closes on FRIDAY Evening, 10th, 11th, 12th, and 13th December.
Bazaar, King Street and Baker Street. Open from daylight till 9 in the Evening. Admittance One Shilling. Last year at the Bazaar.

The Agricultural Gazette.

SATURDAY, NOVEMBER 30, 1861.

MEETINGS FOR THE NEXT TWO WEEKS.

MONDAY, Dec. 2 / TUESDAY, — 3 / WEDNESDAY, — 4 / THURSDAY, — 5	Exhibition of Fat Stock and Poultry at Bingley Hall, Birmingham.	
TUESDAY, — 3	Wirral Farmers' Club (Mr Hope Jones on Local Agriculture).	
WEDNESDAY, — 4	Agri. Society of England	Noon
MONDAY, — 9	London Farmers' Club (Mr Trethewy on Parochial and Union Settlements)	6 P.M.
	Smithfield Cattle Show (Open to Members at 8 P.M.)	
TUESDAY, — 10 / WEDNESDAY, — 11 / THURSDAY, — 12 / FRIDAY, — 13	Smithfield Club Cattle Show, Baker Street Bazaar.	
WEDNESDAY, — 11	Agri. Society of England	Noon

IT is to be hoped that our readers are not yet tired of STEAM CULTIVATION. It really is the leading subject of the year; and it would be a failure of duty on our part if we did not endeavour to represent it fully in these columns. Accordingly to-day we have arranged in a tabular form the experience since harvest time of 67 gentlemen who have adopted the Woolston apparatus—of 27 who have adopted FOWLER'S apparatus, and of 22 who have adopted HOWARD'S windlass and grubber. And besides these we have in other columns given longer reports of HOWARD'S and of SMITH'S apparatus in particular instances. We have also given a report of the farm at Hazelbury, in Somersetshire, where FOWLER'S plough has been some time at work. And we propose here to give the experience of another farm cultivated by FOWLER'S plough, where very difficult circumstances have been very successfully dealt with in Gloucestershire.

As to the tabulated figures, we leave them to be studied in detail by those who shall read them. Every sort of experience or "luck" will be found recorded in them. Some of the instances are those of men who have had no experience up till now, others are those of men who paid for their experience two or three years ago; some are instances, of course, of personal superintendence and resolution, others are cases of deputed or no superintendence, and carelessness. One or two are instances not only of newness to his work on the part of the employer, but also of newness to its work on the part of the machine. And the differences between novelty and accustomedness, between care and almost neglect, not to speak of those amongst clay and rock and sand, have ended in making these tables a very piebald affair.

In most of the instances recorded an attempt has been made to calculate the cost of actual out-goings during the period of the performance per acre—these however do not include tear and wear of the rope or machine nor interest of capital. It is impossible to represent by words the nature of the work that has been accomplished, or to compare on paper the different systems adopted except by a description of the soil, and the depth to which it has been stirred. This has been given as fully as possible.

It must be added that many of the returns have been given in such general terms that we could not use them; nevertheless they, too, are conclusive in their way, and perhaps present the truth of the matter in the best manner after all. Impressed with the quality of the performance, which is what words cannot adequately convey, some have kept no record of the cost, which is the point which words can best describe; and accordingly we have such statements

as the following of both SMITH'S and HOWARD'S apparatus:—

"I cannot say the quantity of work I have done, or of the oil or fuel consumed, but I must say the apparatus is giving good satisfaction. There is nothing out that can at all do the work like these cultivators, and I think they must come into very general use. I have done a deal of work, but cannot say how much, as I have kept no account of it, but they are first rate implements."

We turn now to the case of a steam-cultivated farm where FOWLER'S apparatus has been for some time in very successful use; and we refer to it here because it is remarkable for the extreme detail in which a record has been kept of the work, its progress, and its cost.

At Elkstone, a village on the Cotteswolds, between Cheltenham and Cirencester, on a farm of upwards of 1000 acres in the occupation of Mr. J. M. READ, the 10-horse-power apparatus has been at work since January, 1860. The land includes 800 acres under the plough, and lies along the upper part of one of those vallies of denudation which run into or out of the Cotteswold highland, along the edge of the vale of Gloucester. Some of the soil is upon the Great or Upper Oolite, and is fine brown free loamy land, but shallow upon the rock. The greater part of it, however, lies below this upon the surface of the clay of the Fuller's earth, one of the most difficult soils to drain and cultivate that exists in the island. It is a yellow clay subsoil, full of masses of the Upper Oolite which have found their way down to it from the bed of rock above it. Naturally, as in commons and wastes, it is a rough hummocky surface covered with brambles—but when cultivated, as here, it yields a stiff blackish soil, which sticks to everything, and is a perfect "boot-jack" clay. The farm thus lies around the upper edge of a Cotteswold valley, a free, open, even brashy level above, a stiff heavy soil upon a gradually sloping and converging surface lower down, and at length a lighter brashy soil on the steep valley side below, where it covers the Bath stone or Lower Oolite.

So various a soil requires as various management. Hitherto the lighter land has been cultivated on the five years' course, the land lying two years in Grass—and the clay lands have been farmed "as you could," Fallow, Oats, Wheat, and Vetches being the principal crops.

Since the drainage of these clays, 3 or $3\frac{1}{2}$ feet deep, and now that the steam plough is employed upon them, a much more certain systematic agriculture is possible there.

On the lighter soils, again, the 4-field course has lately been adopted, giving, of course, a great deal more work to do, of which the steam plough greatly helps the accomplishment; and yielding also a more valuable produce. The land in respect of the stony shallow character of the lighter soil, and in respect of the great number of land-fast stones in the heavier soil and subsoil, is by no means especially adapted to the work of the steam plough; nevertheless the apparatus has been very successful as an auxiliary in the hands of Mr. READ. Altogether upon 800 acres, the extent of the arable land, there are 60 or 70 fields, which thus on an average are small, yet three or four are very large—one being of 63 acres, and two others of 50 and 60 acres each, so that in that respect considerable facilities for steam cultivation exist.

It is not, however, so much in the nature of the circumstances which have affected Mr. READ'S experience, of steam culture, as in the fact that a detailed account has been kept by him of these circumstances, and of that experience ever since he commenced work in January 1860, that makes Elkstone Farm especially interesting in the history of steam-cultivation. We have before us the book in which the engineer has entered, ever since Jan. 26, 1860, the number of hours each day his engine has been at work, the quantity of each field ploughed, and the quantity left unploughed in each; the coals and oil consumed, the kind of work done, and the breakages and accidents which have arisen. Let us give here an epitome of its contents:—

Between Jan. 26 and Feb. 18, 1860, in $13\frac{1}{2}$ days, the apparatus ploughed and smashed up 63 acres, consuming 140 cwt. of coal and 7 quarts of oil. Between Feb. 19 and March 8 it worked 12 whole days, consuming 114 cwt. of coals and 10 quarts of oil in ploughing 115 acres of land. During this time one day was lost in shifting, and 5 "skifes" (shares) were broken; 24 lbs. of cotton waste were served out.

On March 9, 2 cwt. of coals were burned in shifting to "Mr. HOWELL'S," where the plough worked for hire up till March 21, nine whole days ploughing 37 acres—consuming 4 quarts of oil and breaking 3 shares.

On March 22 the plough returned to Elkstone and worked there almost continuously, ploughing successively—$12\frac{1}{4}$ acres out of a field of 14—38 acres out of a field of 42—12 acres out of 14—23 acres out of 27—ploughing and *dragging* 38 acres out of a field of 42—22 acres out of a field of 25—ploughing 24 acres and dragging 22 acres out of a field of 26—ploughing $14\frac{1}{2}$ acres out of a field of $15\frac{1}{2}$—ploughing and dragging 14 acres a second time out of the same field—ploughing 26 acres out of a field of 30—26 acres out of 30—ploughing and dragging 25 acres out of 26—ploughing $5\frac{1}{2}$ acres out of $15\frac{1}{2}$—56 acres out of 62—40 acres out of 45—$29\frac{1}{2}$ acres out of 32—36 acres out of 39—again 36 acres out of another 39—5 acres out of $5\frac{1}{2}$—35 acres out of 39—$14\frac{1}{2}$ acres out of $15\frac{1}{2}$—again 35 acres out of 39. In all, up to Nov. 14, it had ploughed $746\frac{1}{2}$ acres, and dragged two or three times 125 acres.

Of the dragging a word must be said. The drags—the heaviest that Messrs. HOWARD ever turned out—were worked in the same way as the plough, and they were intended to go twice to a place, only the anchor could not be made to go fast enough, so that they really went three times to a place, and it is a fair estimate of the labour of the work that the 125 acres three times dragged, stirred as they were to the bottom of the furrow slice, may be put down as equal to 250 acres once ploughed or scarified. We add, therefore, 250 acres to $746\frac{1}{2}$ acres, and we get 1000 acres of work accomplished. This has been done in $34\frac{1}{2}$ whole days, besides 1602 hours of actual work. Deduct the 9 days employed for hire, of which we have no account as to the coals and oil consumed, and the result upon the whole is that the work, equal as we have put it to 964 acres ploughed, has been accomplished in 151 days of 10 hours each, or as the earlier months have shorter days, we may say 156 days in all, by the consumption of 1711 cwt. of coal (including what was burned during shifting) costing 1*s.* a cwt. on the ground, and of 22 gallons of oil worth 5*l.*

During this time the plough was shifted 39 times, which took up 138 hours or 14 days. In calculating wages these 14 days must be added to the 156 already named. Many short days, and half days in some cases, owing to the need of other work (and occasionally to accidents) occur, so that although 170 days of full length (1650 hours in all) were actually spent in work, yet we find in the record that 192 days (so many successive dates) are named as having during them had the engine for a longer or shorter time at work. Thus there is one case of its being at work only two hours, two cases of three hours, a great many of 8, 9, and 10 hours—only three of 11 hours. There is record in the book of only 16 shares broken during the time, and there are only three more ominous announcements in the course of the record, as thus, in the handwriting of the engineer, "Plow Became Broake"—"Plow roap Broaken"—"Drum chain Brook." Considerable loss of time was, however, experienced at one time, owing to a breakage which had to be replaced from Leeds, so that several weeks were thereby lost at a valuable time of the year.

The wages paid are for driver, 3*s.*; ploughman, 2*s.* 6*d.*; anchor man, 1*s.* 6*d.*; two porter boys together, 2*s.* 1*d.* Add for water boy and horses 3*s.* 11*d.*, and we have a total of 13*s.* daily. This over 170 days amounts to 110*l.* 10*s.*; add coals, 85*l.* 11*s.*; oil, 5*l.*; and we have 201*l.* 1*s.* spent in the work of 960 acres, or rather more than 4*s.* an acre. Add cost of breakage during this period, say 40*l.* —tear and wear of rope, including the purchase of a new one since the commencement, say 40*l.* —interest on 703*l.* for two years at 5 per cent., 70*l.*—and maintenance of value at 10 per cent. for the same time (the excessive charge already given in these columns), or 140*l.*—and we have a total of 491*l.* 1*s.*, being about 250*l.* per annum, and about 6*s.* per acre accomplished during the period.

But the engine is available for threshing purposes, and it is worth probably 30*s.* or 32*s.* a day for this purpose, and there are at least 30 days' work for it in this way on a farm of this extent—so that about 50*l.* per acre must be deducted from this amount, or nearly 2*s.* an acre, leaving the annual cost of the ploughing apparatus to Mr. READ less than 200*l.*, for which he has hitherto accomplished about 500 acres of ploughing in the year at about 8*s.* per acre.

It is worth while noting what Mr. READ'S detailed record enables us to do, how extremely various is the rapidity of work and consumption of coal according to the quality of the soil. In one instance a field of 40 acres took 126 hours or $12\frac{1}{2}$ days, and 165 cwt. of coals (more than 4 cwt. an acre) to plough it; and in another 35 acres took only 39 hours, barely four days, and 53 cwt. (not $1\frac{1}{2}$ cwt. of coal per acre) to plough it. It is on the extremely heavy land, when dry and therefore hardest, that the especial advantage of the steam plough will nevertheless be best seen, and this only proves that the chief aspect of the subject—the quality of the work altogether irrespectively of its cost—is most imperfectly represented in these histories.

The cost nevertheless is the point which we can best describe—and let us therefore pursue it one step farther.

Mr. READ formerly employed 16 horses and 30 oxen in working his land upon the 5-field system (2 years being in Clover). Had he then adopted the 4-field system he must have employed at least 20 horses and 30 bullocks. He now employs 16 horses only—his bullocks have been fed off and sold. We may claim therefore as saved by the steam-plough, 4 horses and 30 bullocks annually. The 4 horses are put down as costing, with carter and boy, at least 120*l.* a-year; and for the 30 bullocks we charge 280*l.*, as the probable return from the additional stock which may be kept in their place. This assumes that the bullocks only retain their value during the year's labour, which perhaps is putting the thing rather unfairly against them; but it also assumes that the herding or the shepherding of the flock or herd kept in their place costs as much as is spent on wages in working these bullocks during so many months, and in tending them during the rest of the year, which is certainly much more against the stock substituted for them. We therefore estimate Mr. READ'S saving and advantage together, by getting rid of his teams, at 400*l.* a year. This advantage he obtains, together with the immense advantage of being able to push the work of tillage at suitable times, as well as the advantage of a tillage of such superior quality, by an annual expenditure and cost which we have estimated at about 200*l.*

We have not space at present to do more than refer to the information which Mr. READ'S experience has thus given us on the subject of steam ploughing. And it must suffice therefore to conclude by referring once more to the tables in other columns, where the merits of SMITH'S and HOWARD'S apparatus, as well as those of FOWLER'S, are given on a larger scale.

—— ON Monday the Birmingham Cattle and Poultry Show opens at Bingley Hall—and the show of Sporting and other Dogs near the same building opens at the same time. The *Midland Counties Herald* gives the following table of entries in this and the three following years:—

	1858.	1859.	1860.	1861.
Cattle	131	109	110	104
Sheep	65	44	42	66
Pigs	89	81	75	73
Roots	124	87	118	186
Poultry	1337	1342	1134	1396
Pigeons	222	214	168	227
Total entries	1968	1877	1637	2055

"The entries of cattle remain nearly stationary, as might be expected from the great demand which has arisen for young breeding stock of a high class in all parts of the United Kingdom, and for exportation. The entries of sheep show a considerable increase, caused partly by the addition of classes for ewes, but the ordinary classes will be well filled. The exhibition of roots will be by far the largest which has ever been held, and we expect to see some extraordinary specimens. In many districts the season has proved unfavourable for Mangel Wurzel, but still heavy crops have been raised in other localities, while we have already published some great weights of Swedes, and the acreage of this root has been extraordinary in well-farmed districts. The entries of poultry and pigeons, it will be noticed, exceed those of last year by 315, so that the changes made in the classification and prize list have proved satisfactory to exhibitors generally.

"The entries of Dogs last year numbered 267; this year they exceed 500. From the liberal character of this year's prize list, a large entry might have been fairly anticipated, but we do not think that even the most sanguine member of the Council could have expected so great an increase in numbers. In the first division, Sporting Dogs, the classes for Pointers and Setters will be numerically the strongest. The entries of Pointers exceed 150; of English Setters, about 40; the new class for Black and Tan Setters, from 20 to 30; and the Irish Setters, upwards of 20. The Retrievers will exceed 40 in number; while the classes for Bloodhounds, Greyhounds, Deer Hounds, Clumber Spaniels, and other Spaniels used in field sports, will all be well filled; in fact, it may be safely asserted that this will be the finest collection of Sporting Dogs ever brought together. In the second division, for Dogs not used in field sports, the entries will reach to nearly 120; while last year they were 61 only."

THE Agricultural Society and Show—an English institution—is part of English life wherever Englishmen are found. And accordingly at the very time when our own autumnal

meetings and provincial exhibitions were gathering their respective counties for the inspection of live stock and implements and for the discussion of the agricultural topics of the day, we learn from the *British Colonist* that an agricultural society was celebrating its inauguration after a similar fashion so far away as Victoria, the capital of Vancouver.

On the 3d of October a first Agricultural Show was held at Victoria:—"The first annual exhibition of the Society held in the Victoria market place met with a brilliant success."—The Hudson's Bay Company exhibited sheep and swine —Mr. Skinner, of Constance Farm, exhibited yearling ewes and rams of the pure Southdown breed. Mr. MacKenzie, of Craigflower, also had a number of pure Southdown ewes on exhibition, which carried off the first prize.—Milch cows (breed not stated) from Mr. Tuite and Master George Little "called forth flattering encomiums."—A bull of the Sussex breed, exhibited by Dr. Tolmie, took the prize. Another of the same breed, also the property of Dr. Tolmie, "was sold during the day to an appreciative farmer from Oregon for 300 dollars—dirt cheap, judges say." Working oxen seem to be in demand, and hence probably the high estimation in which the Sussex breed is held.—Specimens of Wheat, Barley, Oats, Peas, Common and Swedish Turnips, Timothy seed, &c., formed an interesting part of the Show. And the whole report proves satisfactorily that not only do Englishmen carry with them their agricultural tendencies, activities, and tastes wherever they go, but that on arriving at Vancouver they find admirable scope for them all in the soil and climate of that colony.

It is no part of our duty to urge agricultural emigration from our shores. We have scope enough for the labour and the skill of all in fields at home. But it is clearly right that those who have made up their minds to go should have all the information here that can be obtained on the agricultural advantages and resources to be met elsewhere. And it is plain, by all that reaches us from Vancouver, that there is no better field anywhere for farm labourers or active hardy young agriculturists, whether labourers or employers.

STEAM CULTIVATION.

Hazelbury, near Crewkerne.—Mr. Henry Parsons who here farms 1400 or 1500 acres of land, about 600 being arable, has had one of Mr. Fowler's steam ploughs since January 1860. He has a 12-horse-power engine of the old style, (*i.e.* without the new clip drum), and a four-furrow plough, also a new 3-furrow plough with the new slack gear arrangement attached.

During the time it has been in his hands he has ploughed with it 741 acres—and this, including all stoppages and hindrances, has been done in 185 days. This must be considered as nearly two years' work. The wages, excluding water cart and horse, amount to 8*s.* a day, viz., engineer 2*s.* 6*d.*, ploughman 2*s.*, three or four porter lads at 1*s.* a day: add for water cart and horse 6*s.* a day (which seems more than enough to charge).

The fuel is charged at 10 cwt. a day, and costs 1*l.* a ton on the ground. Fuel and wages, water, and oil together, at 25*s.* a day, have thus cost 231*l.* 5*s.* during the two years, of 185 working days. To this must be added 10*l.* a year for repairs, or 20*l.* in all. One new rope, 500 yards, has been purchased at the end of two years, costing 52*l.* 10*s.*, or 26*l.* 5*s.* per annum; interest of capital at 5 per cent. on 780*l.* is 39*l.*, and maintenance of value at 10 per cent. (the excessive charge already adopted in the other instances of this history) amounts to 78*l.* These sums are in the whole 537*l.* 15*s.*, which divided over the work accomplished amounts to no less than 14*s.* 6*d.* per acre; viz., 2*s.* for wages; 4*s.* 3*d.* for fuel, water, and oil; 1*s.* 5*d.* for rope; 6½*d.* for repairs; 6*s.* 4*d.* for interest and maintenance of value, including the new rope.

In explanation of this high cost it must be remembered that this farm is over a great part of it on some of the stiffest clay land in the country. Lying over several of the upper oolitic beds, it stretches on one side of it across the free, loamy, brashy soil upon the oolitic rock, and on the other side of it over to a yellow clay bed carrying a dark stiff soil containing water-worn flints. The free soil is adapted for sheep farming, and is cultivated on the 4-course system. A flock of about 400 horned ewes is lambed down each winter and spring; and from 1600 to 2000 head of sheep are summered every year. These and a dairy of about 80 cows, half of them Devons and the other half cross breds, with one, two, and three year old heifers and steers about 25 of each, 30 fatting steers, and 20 fatting heifers, are the live stock of the farm. On the stiff clay land again, no system of farming is possible; you farm it as you can. Standing on the higher part of this clay land end of the farm, and looking across at the oolitic highlands beyond, you see lying before you fields of bluish scanty Grass, with stunted hedgerow Oaks, and here and there a field of scrub and Gorse and Bramble. In its present condition it is worth from 10*l.* to 20*l.* per acre. But the climate is not against it; and give a sample of the soil to the chemist and he will tell you it is full of the food of plants. What the farmer wants is a key which shall open this locked storehouse and enable him to turn its contents to account. Such a key Mr. Parsons is fitting to the lock, by drainage and steam ploughing. He has a staff of 30 men engaged in draining these clay soils 3½ and 4 feet deep. After this is done he puts the steam plough in, and turns the soil and a portion of the subsoil up.

It is an explanation of the comparatively small quantity of work accomplished on an average daily—that this soil on its first tillage by steam power is so stiff that but two furrows can be worked at a time. On last Saturday, when I saw the apparatus at work, only two of the ploughs in the frame were in use—the engine travelling on a road made along the ridge of one of the great waves of land in which the surface lies, and able thus to plough the ground on either side of it, was burning 10 cwt. of coal in the work of turning over, probably not more than 3 or 4 acres a-day, with only two mould-boards of the ploughing apparatus at work.

This was nothing like a specimen of smooth and trim cultivation: the land was being thrown about as roughly as possible. It was a piece of very rough foul land, which in the season of last year had been perfectly unmanageable, as indeed a great deal more of the stiff clay soil of the country last year was. It would probably have been better had the ploughing given now been accomplished earlier in the season, when the land was drier; but Mr. Parsons had parted with his engine-driver during some of the best weeks of the autumn to start another steam-plough elsewhere, and thus allowed himself to suffer for his good nature.

The autumn work done upon this farm has thus not been so much as it otherwise would have been. The following is his statement of what has been accomplished since harvest. Only 180 acres have been ploughed and cultivated from 5 to 9 inches deep in 40 days, which include moving the tackle from field to field. The wages paid have amounted to 16*l.*, and fuel, water, and oil consumed have cost 34*l.* The quarter's bill for repairs has been 3*l.* 6*s.* 9*d.* Some of the land was remarkably hard and stiff, and could not have been ploughed by horses. These figures amount to about 2*s.*, an acre for wages, about 3*s.* 8*d.* an acre for fuel, water, and oil, and about 4*d.* an acre for repairs. Of course this is marvellously cheap for such work compared with what it would have cost by horses. And slow as the work may sometimes be, no wonder that the tenant should keep the apparatus going, even though but two furrows can be accomplished at a time.

The steam ploughing on this farm, although comparatively few acres have been accomplished, will prove not only an advantage but a saving to the tenant. Hitherto the land has been managed by 25 or 26 horses worked in 3 and 4-horse teams and 4 or 5 teams of oxen. Now it is managed by 16 horses and two teams of oxen. Nine or 10 horses and about 12 or 14 oxen have thus been dispensed with. Receiving only 1 bushel of Oats and half a bushel of Beans weekly, along with hay and hay chaff during 8 or 9 months, and at Grass during the remainder of the year, I imagine the cost of horse keep is rather below the instances at which I have already more than once estimated it, and probably in wages, food, interest, and extras, it may be fair to charge 100*l.* for a team of three.

A sum of 300*l.* is thus saved in horse labour alone. The 3 teams of oxen dispensed with leave maintenance for additional profitable stock. Twelve oxen will eat as much as 120 sheep, and the wages of the ploughmen and lads employed with them during the few months when ox labour was available, together with the profit on a flock of 120 sheep which may be kept in place of these oxen, can hardly be put at less than 150*l.*

A sum of 450*l.* is thus saved upon the farm by the expenditure of 200*l.* per annum in such steam ploughing as has been accomplished. But there cannot be a doubt that more work will hereafter be done per annum. And thus not only will the more expensive draught animals be dispensed with, but the additional advantage — immense on such stiff clay land—of superior tillage be derived.

Besides the steam cultivation to be witnessed here, the farm is interesting for its dairy of Somersetshire cheese, which is a principal feature in its management. Mr. Parsons employs Cockey's apparatus for washing the milk and the curd during the process of cheese-making, which is in all essential particulars the same as that already described in these columns as the plan used in making Cheddar cheese.

FARM CAPITAL.

Money is needed by the farmer in the prosecution of his business—(1) for payment of rent and taxes for the land he hires; (2) for the purchase and maintenance of implements, of draught animals, and of steam power for the cultivation of the land, and for the conversion of its produce; (3) for the purchase of seed and manure; (4) for payment of labour during the year; (5) for the purchase of live stock by which to consume the green produce of the farm, and by which to provide the home supply of manure on which its fertility must depend.

It is plain that the amount which is made up of these items will vary exceedingly with the circumstances of the farm—(1) Rent may not be asked for out of capital at all; the landlord may give twelve months' credit and ask for it directly (as he necessarily always does essentially) out of the produce of the land, not out of the capital which the tenant brings on it.—Rent moreover, whether long credit be given for it or not, varies between wide limits according to the quality of the land. It may be 15*s.* or 20*s.* an acre, or it may be 40*s*, 50*s.*, and it may vary even from 5*s.* to 5*l.* per acre, according to the fertility of the land and its neighbourhood to good markets.

(2.) The amount needed for the purchase of farm implements and draught animals necessarily varies with the quantity of work needing to be done. Stiff clay arable land cultivated highly needs more costly equipment in this way than lighter, poorer soils more easily cultivated and laid down probably two years out of every five in Grass; and both need larger outlay on implements and power than pasture land. The implements of arable land will cost from 15*s.* to 25*s.* an acre, and the horse power perhaps from 15*s.* to 30*s.* an acre. This supposes steam power to be *hired* for threshing purposes. If it be provided for steam cultivation, a 12-horse engine and apparatus displacing 12 or 14 horses and their implements and somewhat more, must be added to the capital thus required.

(3.) The amount needed for seed and manure is also extremely variable. From 10*s.* to 20*s.* for Clover and grain crops, and from 2*s.* 6*d.* to 10*s.* for root crops, probably from 10*s.* to 15*s.* on the whole arable farm, will be needed for the former; while for the latter the sum required varies from nothing up to as much as another rent, according to the spirit of the farmer and the proved experience of the locality. There are many farmers who pay 1*l.* per acre annually for artificial manure.

(4). Labour varies from 4*s.* or 5*s.* an acre on Grass up to 50*s.* per acre on our arable land. In the *Handbook of Farm Labour* * the particulars of farms amounting to 7824 acres of arable land, and 1690 acres of pasture, are given—the wages paid on these farms were 14,323*l.* per annum, or deducting 423*l.* for the pasture, 33*s.* an acre for the arable land.

(5.) The capital needed for the purchase of live-stock and for extra food for them is the last item on the list, and this obviously will differ with the fertility of the land, the activity of its cultivator, and the rotation of crops adopted; and even in the case of pasture lands where the natural fertility of the soil is the leading point, it varies from 2*l.* or 3*l.* an acre to 12*l.* or 14*l.*—the Grass in the former cases fit for little more than a sheep or two per acre, and the latter feeding annually a heavy bullock. On plough land the influence of various rotations comes into play, and the quantity of meat made annually per acre has been shown to vary from 30 lbs. or less up to one cwt. or more. In the former case it is plain that the stock will not need to be more than a sheep to every acre or to every 1½ acre; in the latter it may be as much as three sheep or more per acre. But these calculations do not proceed upon the more economical processes of feeding now adopted, in which roots are pulped or steamed, and straw is cut into chaff, and much purchased food is used, so that the estimate of capital under this head may vary from 1*l.* or less per acre, up to 5*l.* or more, or when heavy crops of roots or straw are grown and double crops of Vetches and Rape, &c., are taken and consumed upon the ground.

Adding these items together, it will be found that the capital required on arable land varies from 7*l.* to 15*l.* per acre. Of these sums a varying portion will be payable on entering the farm on valuation to the outgoing tenant, who will have spent for his successor certain amounts under most of these headings.

He may have paid for labour and for seed and for manure upon certain portions of the farm, and he may hand over by valuation certain portions of the implements and live stock which he has used upon the farm. Of the remainder a varying portion under most of these heads will not need to be paid until after harvest, when means may be provided for the purchase of live stock, and for the payment of rent by the sale of grain. In this way the burden of these demands upon the purse of the farmer is considerably reduced.

Nothing has been said of works for the permanent improvement of the land, which are properly a landlord's operation, but which if the tenant be secured for long enough in his occupation may be profitably undertaken by the latter. Almost unlimited scope for the profitable application of capital to land is thus provided over a great extent of the island; and the influence of the lease in leading thus to the higher cultivation of the land has been already referred to.

As a last word upon the capital of the farm it may be well to remind the farmer of his interest in insuring his capital, however it may be invested, against the risks of fire, disease, and death, which will be accepted for him by the various insurance companies on payment of an annual premium. *From the 21st Edition (just completed) of Arthur Young's Farm Calendar.*

* Longmans.

STEAM CULTIVATION SINCE HARVEST TIME.

THE following particulars have been given to us in return to a circular of inquiries asking (1) for the horse power of the engine; (2) for the number of acres respectively ploughed and cultivated since harvest; (3) for the depth of the work; (4) for the number of days during which the engine was there occupied; (5) for the wages paid; (6) for the value of coals and oil consumed; (7) for the amount and cost of repairs during the time. The circular was sent to 40 gentlemen using Fowler's Steam Plough, about 140 using Smith's Cultivator, and nearly 40 using Howard's New Windlass and Apparatus. We have replies from 27 of the first, 67 of the second, and 22 of the third. They are arranged below in the order of these numbers. It is to be added in explanation of the comparatively few returns received that the majority object to publicity, and that while among so many who have been spirited enough thus to engage in what must at first have been the costly speculation of Steam Cultivation, there are many who are also public spirited enough to give their experience of it for the general good, yet it is not in itself a pleasant thing to any one to hear his experience, perhaps his carelessness and blunders, or even his successes, criticised in public. We have, therefore, to return our best thanks to those who have been good enough thus to come forward for the guidance of public opinion on the subject. The calculated cost one way per acre includes merely wages and fuel and repairs.

I.—SMITH'S CULTIVATOR.

	ENGINES.	ACRES ONCE CULTIVATED.	DEPTH.	DAYS AT WORK.	WAGES PAID.	COALS AND OIL.	REPAIRS.
No.	Horse Power.	No.	Inches.	No.	£ s. d.	£ s. d.	£ s. d.
1	8	96	6 to 9	20	15 0 0	7 10 0	1 0 0
2	7	122 (? 244)	8	35	38 1 3 7 0 0	17 10 0	
3	10	54	8	10	6 10 0	2 14 7	?
4	8	144	8 to 12	25	20 0 0	..	2 10 0
5	10	43	7	11	7 12 2	3 11 0	..
6	8	104	8	17	..	..	0 5 6
7	8	100*	10 to 12	50	45 0 0	?	3 0 0
8	9	68* 60	8	29	18 17 0	10 3 0	..
9	8	173	8	33	24 4 0 8 5 0	17 8 0	?
10	7	160	8	24	20 0 0	9 0 0	1 0 0
11	8	218	6	42	25 18 0	16 16 0	0 17 0
12	10	186	6 to 8	20	20 0 0	6 15 0	..
13	8	119	5 & 6	20	..	..	0 16 8
14	10	120	5	18	17 18 0	5 12 0	..
15	9	85	10	22½	15 5 0	5 5 0	..
16	8	178	6	28	16 16 0	?	..
17	10	62	9	16	6 16 0	8 2 8	?
18	10	100	8	17½	17 10 0	11 5 0	4 3 0
19	10	60	7	10	5 10 0	3 0 0	1 5 0
20	10	100	10 & 11	13	6 10 0	4 15 0	?
21	8	10 163	4	39½	34 11 3	9 7 3	None.
22	10	110	6	14	12 1 6	4 4 0	?
23	8	300	7 to 8	42½	46 16 0	16 0 0	?
24	8	60	7 to 10	12	7 8 0 2 8 0	6 0 0	Trifling.
25	10	67	6 to 8	..	..	..	?
26	12	155	6 to 7	..	..	..	..
27	8	52	6 to 7	11½	6 18 0	4 14 0	3 10 0
28	8	180	6 to 9	..	..	..	..
29	10	165	8 to 10	25½	25 5 0	10 6 3	..
30	8	84	5 to 8	12½	10 12 6	6 5 0	Nominal.
31	8	60	10	12	9 6 0	?	..
32	8	80	7 to 8	14	10 0 0	..	?
33	8	304	4 to 7	58	45 3 6	25 18 0	..
34	8	116 70	8 to 9 4	..			?
35	8	334	7 to 8	48	..	..	..
36	8	50	7	7	..	..	6 0 0
37	8	272	4 to 8	44	..	..	..
38	8	176	5 to 9	30	..	..	..
39	8	116	6 to 10	19	37 16 0	22 0 0	17 0 0
40	8	92	7 to 8	16½	20 18 0	9 5 0	..
41	8	257	6 to 9	44	..	..	..
42	8	134	8	27 3	24 4 0 25 10 0 3 0 0	6 10 0 6 10 0 2 0 0	0 5 0
43	8	57* 317	5 to 8	54	..	..	..
44	8	102	6	17	14 9 0	6 1 6	..
45	8	87	8	24	17 8 0	7 16 0	1 10 0
46	10	124	6	22	14 17 0	?	?
47	8	186	4½ to 9	28½	17 14 0 4 5 6	11 2 6	0 12 0
48	10	115	4 to 14	14½	8 10 10	1 8 0 ? 1 18 0	0 5 0
49	10	84	7 to 12	15	9 9 0	7 5 0	..
50	8	111	8	14	11 11 8	5 10 0	0 0 8
51	7	73	6 to 10	16	14 8 0	6 13 4	2 15 0
52	10	150* 300	9 to 11	27 (?)	67 10 0	..	4 15 6
53	8	100	6	18	11 14 0	7 10 0	5 0 0
54	8	247	6	35	24 10 0	14 0 0	3 0 0
55	10	379	6 to 7	58	42 1 0	?	..
56	8	158	6 to 10	32½	22 7 4	9 12 2	0 11 0
57	8	400	6 to 8	67	58 12 6	?	2 10 0
58	8	238	4 to 8	47	39 0 0	14 2 0	1 10 6
59	10	400	6 to 7	Over 70	..	..	..
60	8	120	6	16½	14 17 0	5 0 0	..
61	8	96	4 to 6	22	11 16 6	4 16 0	?
62	10	56	8 to 9	19	..	..	..
63	9	152	6 to 8	19	12 7 0	?	..
64	8	260	4 to 8	..	..	..	..
65	8	446	6 to 9	..	..	..	..
66	10	19 × 3 16 × 2 11* 10 × 2	6 to 15 12 9 8	11 5 2 4	9 8 0 3 14 2 1 10 0 3 8 4	5 15 6 2 12 6 1 1 0 2 2 0	.. ..
67	10	385	4 to 9	50	45 0 0 9 12 6	27 17 0	..
TOTAL ..	.. .. ..	122	8 to 15	22	18 0 6	11 11 0	..

SMITH'S CULTIVATOR.

1. The farm of H. R. H. the Prince Consort, Barton, Isle of Wight. Mr. Toward says—The subsoil is a strong tenacious clay in many places mixed with gravel; when dry no implement will penetrate it. Cost one way per acre, 4s. 11d.

2. The farm of the Duke of Manchester, Kimbolton. The 7l. under the head of wages are for horse labour. Mr. Hill says the only repairs are for shares and anchors, and these, owing to the hardness of the ground, are heavier than usual. During 17 days out of the 35, double or harvest wages was paid for the labour. Cost one way per acre, 10s. (or ? 5s.)

3. The Tott farm of the Duke of Sutherland. Mr. Fleming has been good enough to send a full report, which will be found elsewhere. Coals cost 8s. a ton. Cost one way, 4s. 4d. per acre.

4. Lord Hatherton's farm, Teddesley. Mr. Wotton, the farm-manager, says of the coal consumed: it was 6 to 8 cwt. a day. They started with a new rope and everything in thorough order, and there were no repairs.

5. Lord Dillon's farm at Charlbury; Mr. Wells (steward), Dytchly Park. Cost one way, 5s. 2d. per acre.

6. Mr. E. Goodman, Pewsey, pays 1s. 6d. (wages) an acre with the 5-tine cultivator, and 2s. an acre with the 3-tine cultivator, his men earning their 13s. a week. He pays in addition engine driver and supply water; the coals are 6½ cwt. a day.

7. Mr. Leney, of Yotes Court, Mereworth, Kent, *ploughs** his land with Smith's engine and windlass, 2 acres a day, paying 9s. an acre for wages, and burning 4 cwt. of coal per acre.

8. On a Wiltshire farm 68 acres have been *ploughed,** and 60 acres cultivated as here stated. Repairs not yet known, but "considerable."

9. Farm of Mr. Ackroyd, at Kimbolton—Mr. Milligan puts the cost of water cart at 8l. 5s., in addition to wages; coals 13½ tons. Cost one way, 6s. 11d. per acre.

10. —— a farm in Bedfordshire—The wages are 16l. 10s. a day, including water carriage and beer. Cost per acre once over, 3s. 8d.

11. Mr. Davis, Bickmarsh Hall, Alcester, says his engine is not of sufficient power—hence deficient depth. Cost per acre once over, 3s. 11d.

12. Mr. Selfe, of Kington, Broad Chalk, Salisbury—Wages include water cart. Cost per acre once over, 3s.

13. Mr. G. Sidford, of Broad Chalk, Salisbury—"Very heavy land—Men receiving 2s. a day, and engineer and windlass men rather more;" 5 or 6 cwt. of coal burned daily.

14. Mr. Walker, Gedney Marsh, Long Sutton, Lincolnshire—cost per acre once over, 4s.

15. Mr. P. Stevenson, Rainton, Thirsk—Soil except 8 acres very strong, above 50 acres were White Clover lands eaten by sheep and smashed up for Wheat; cost per acre once over, 4s. 10d.

16. Mr. Robinson, Stevington, near Bedford—"Began on 9th Sept. on the strongest land I have, and mine is perhaps as heavy land as any steam has been applied to." No calculations as to fuel and oil; put it at 9s. a day, or 12l. 12s. in all; and the cost per acre once over will have been 3s. 4d.

17. J. S. Crawley, Esq., near Luton—Mr. Taylor says these figures allow nothing for tear and wear of engine and rope, &c.; cost per acre once over, 6s. 1d.

18. G. Young, Esq., West Ashby farm, Ryde, Isle of Wight—"clay-soil;" cost once over per acre, 6s.

19. Mr. Hurman, Ford Farm, Banderies, Bridgwater—comparatively little has been done, as the land is in the course of draining. Repairs not stated.

20. Mr. Morris, East Lydeard, Taunton—"13 days includes the fixing of tackle." Cost per acre once over, 2s. 3d. (!)

21. Mr. Surman, Swindon Hall, Cheltenham, considers that the whole apparatus costs, including fuel and oil and wages of seven men, together with horse and cart, 3l. a day, for which he gets on the average 4 acres of clay cultivated, which comes to 15s. an acre. The 10 acres specified were ploughed. Cost once over per acre, 5s. 1d.

22. Mr. Walkinton, of North Ormsby, Louth, says he finds his experience with steam will be a great saving; that which cost 80l. 10s. with horses will cost 51l. 9s. 6d. with steam. Cost per acre once over, 3s.

23. Mr. F. Sowerby, Aylesby, Great Grimsby, says—"After three seasons' work, going over about 1300 acres, we have had very few repairs needed. A few of the snatch blocks somewhat worn. Windlass and implements appear as good as ever. 1400 yards of rope just worn out. Cost once over per acre, 4s. 6d."

24. Mr. Dowdeswell, Lechlade—Cost once over per acre, 5s. 3d.

25. Mr. Taylor, East Quantoxhead, Bridgwater.

26. Mr. C. Chapman, near Hitchin, Herts—"Stiff clay;" wages 3s. 6d. per acre, including everything; fuel and oil, ½ ton of coal and 1 pint of oil.

27. Mr. T. Bennett, Daventry—Cost once over per acre, 4s 5d.

28. Mr. J. B. Dring, Claxby, Spilsby—"To come to a certain quality of cultivation steam costs about one-third less than horses;" wages 3s. a day, engine 1s. more; fuel, 1 cwt. per acre, on strong clay.

29. Mr. T. W. Dring, Long Sutton, Lincolnshire—"Cost of cultivation a fair depth will be from 8s. to 9s. per acre;" cost once over per acre, 4s. 4d.

30. —— "Rough and strong land;" cost of wages includes water carriage and removals; "once" crossed 10 acres in a day.

31. ——, near Salisbury—"Could not commence early, hence the small quantity done."

32. Mr. J. Chapman, near Hertford—"Burns partly wood as fuel; if all coals it would cost 1s. an acre."

33. Mr. Armstrong, Graffham, St. Neot's, has cultivated "304 acres and 121 of the same twice over since August 15." If this means 304 acres, of which 121 were the second time, then the cost per acre has been 4s. 8d. If it means that 304 acres have been done once and 121 of them repeated, then the total is 425 acres, at a cost of 3s 4d. per acre once over—"Three weeks were in harvest time, and wages high."

34. Mr. W. Cranfield, Buckden, Huntingdon—"Would not be without one if there was one to be had for money."

35. Mr. Patrick Kerr, North Cheam, Surrey,—Wages 2s. 9d. an acre except water carriage; coals 23¼ tons and 8 gallons of oil—117 acres of heavy land done twice and 100 acres of light land done once.

36. Mr. W. Looker, Wilton, Huntingdon—"Land very tenacious and hard; rope costs nearly 2s. an acre. I should think the whole cost of breaking up my land and cross cultivating it was about 20s. an acre."

37. Mr. Marshall, Hanley Croft, Boston—"Cost of working, including everything, 45s. a day."

38. Mr. Thomason, Hanslope, near Stony Stratford—Repairs probably include estimated wear and tear: excluding this, therefore cost once over per acre, 6s, 9d.

39. Mr. J. Whiting, Stoke Goldington, Newport Pagnell—"Besides doing my own work I have done by contract since harvest 285 acres;" cost once over per acre, 5s. 3d.

40. Mr. F. W. Bignell, Stony Stratford—Wages 2s. 6d. each for engineer and ploughman and windlass men; 2s. each for anchorman and porterman, and three pints of beer each; coals 8 cwt. a day, 15s. a ton.

41. Mr. John Toone, Highcross, Lutterworth. Repairs are "independent of shares." Cost per acre once over, 2s. 5d. (!)

42. —— Farm in Shropshire.—Shifting three days; water cart, 3l.; carting coals 2l. Cost per acre once over 4s. 7d. "I fear the publication of figures by young beginners will only lead to mischief, as I am quite sure that I can save a good deal next season if all is well."

43. Mr. J. F. Edwards, Tanholt, near Peterborough—Coals, 1 cwt. per acre; wages, 3s. 9d. a day in harvest, 1s. 10d. afterwards; 57 acres *ploughed.** Horses reduced from 14 to 8. Average 8 acres a day, including stoppages—Soil (?)

44. —— Farm in Wiltshire. Cost once over per acre, 4s.

45. Mr. C. Randall, Chadbury, Evesham. "All stiff clay. All was afterwards scuffled by horses, for which it was in as good a state as two ordinary ploughings would have left it, 1l. 10s. for new shares. Cost one way per acre, 6s. 2d.

46. —— Farm in Worcestershire. Coals about half a ton daily; repairs not much.

47. Mr. W. B. Battams, Ledlington, Woburn.—"Intend digging wells to save the water carriage. Cost one way, 3s. 7d."

48 Mr. John Cattle, Lealand, Chester. Fuel was 8 tons of slack, at 3s. 6d. a ton; Oil, 3 gallons. Cost one way, 2s. p. acre.

49. Mr. Robert Faux, The Lodge, Yaxley, Peterborough. Cost one way per acre, 2s. 9d.

50. Mr. Henry Keep, Carlton near Bedford—"My autumn cultivation has been most satisfactory. Cost one way per acre, 2s. 2d. (!)

51. Mr. James Riley, Chicheley, Newport Pagnell—Very strong and hard clay till lately in high backed lands. Cost one way per acre, 6s. 6d.

52. Mr. Baker, near Wansford.—Wages 3s. an acre, coals 1½ cwt. an acre; if that cost 1s. 6d. then one way per acre will be 4s. 6d. 150 acres *ploughed.**

53. Mr. J. W. Tubb, Melcomb, Banbury—Cost one way per acre, 4s. 10d.

54. Mr. E. Pullen, Sutton Courtney, Abingdon—Soil various; no repairs of engine. Cost one way per acre, 3s. 4d.

55. Mr. F. Battcock, St. Ives.

56. Mr. Mark Philips, Suiterfield, Stratford-on-Avon—No account of oil; land sticky clay needing four horses. Days include removals. Add 45s. for removal of implements. Cost one way per acre, 4s. 4d. Commenced work on Sep. 20.

57. Mr. Thos. Inskip, St. Ives—Coals "3 cwt. per acre" (!)

58. Mr. T. A. Bromwich, Coventry—"Done for hire." Cost one way per acre, 4s. 8d.

59. Mr. G. Hawkes, Alsay, Baldock—Wages 3s. an acre, coal 8 cwt., and oil 1s. a day.

60. Mr. Henry Snaith, Trower, Stony Stratford—Shifted 5 times, time included. Cost one way per acre, 3s. 4d.

61. Mr. Forbes Robertson, Howden, Yorkshire—"Except 15 acres of a very strong clay soil." Cost one way per acre, 2s. 5d. (!)

62. **Mr. G. Baker, Stony Stratford, says—"The cost of cultivation**, repairs and all, amounts to 10*s.* per acre, the ground being very dry."

63. Mr. T. Battams, Woburn—"Coals 9 cwt. a day."

64. Mr. Byers, Slapton, Leighton Buzzard—"Heavy gault clay."

65. Mr. Thomas Brightman, Stangton, St. Neots.

66. Mr. P. S. Punnett, Chart Sutton, Staplehurst, Kent—Soil very stiff and tenacious, weald clay. The 19 acres were Bean stubble—"**We made as good work as a year's entire fallow by horse-power; it was moved to a depth of 15 inches.** The 11 acres were *harrowed.*" Wages very high. Coals very dear. Cost one way per acre, 4*s.* 11*d.*

67. Mr. Lavender, of Biddenham. See Home Correspondence.

HOWARD'S APPARATUS.

1. The Duke of **Marlborough, Blenheim—Cost one way** per acre, 2*s.* 9*d.*

2. Mr. Howard, Winterton, Brigg—65 acres is the most stubborn soil in the parish; cost one way, 4*s.* 3*d.*

3. Messrs. Blyth & Squier, Stanford le Hope—Very light land; generally crossing Fowler's ploughing; labour 2*s.* 6*d.* an acre, carting 1*s.* 6*d.*; coals, 2*s.* 6*d.* per acre.

4. Mr. C. Street, Bedford—Began after harvest on Pea stubble, then Bean stubble, then did the fallows; "perfectly satisfied."

5. **Mr. J. Lancashire, Micheldever—Cost one way per acre, 3*s.* 8*d.***

6. **Mr. T. Hatfield, near Stamford—"Strong land, very dry and hard**: work very satisfactorily done." Cost one way, 4*s.* 8*d.*

7. Mr. W. Holder, Tenbury—"Work well done: not a fair trial, men all strange to the work." Cost one way per acre, 4*s.* 10*d.*

8. **Mr. W. Bott, Jun., Chelmsford**—"Cost will very little exceed horse power;" much accomplished which could not have been done by horses.

9. Mr. Bomford, Evesham.

10. **Mr. W. Impey, Broomfield Hill, Chelmsford—"The apparatus has worked very well, and the land is now in** beautiful condition."

11. Mr. W. Pate, Ely—8-horse power not enough; "now working 35 horses—hope by steam culture to reduce them one-third."

12. **Mr. E. Turney, Shambrook, Bedford—"very stiff soil."** Cost one way, 3*s.* 1*d.*

13. **Mr. J. W. Pell, Stanion, Manor Farm, Thrapston—"Very hard and stiff land. Cost one way, 4*s.* 9*d.* per acre.**

14. Mr. Henry Collins, Castletown, near Cardiff—"the farm work was never so forward as now, notwithstanding that I have turned off 12 oxen to feed:" cost one way per acre, 3*s.* 4*d.*

15. Mr. W. W. Gascoigne, Milton, Sittingbourne, Kent—heavy soil; coal 8 cwt. a day. The engine is *hired* at 20*s.* a day, including driver and oil. "I have now dismissed the engine, **sold off four horses, and put away the apparatus, hoping for a dry spring." See Home Correspondence.**

16. **Mr. W. Pike, Stevington—190 acres once cultivated and 60 acres twice cultivated. The 40 days include removals,** 4*l.* 13*s.* 4*d.* for beer, 2*l.* 10*s.* for oil. Under repairs, there are 3*l.* 10*s.* **for repairs of engine used for threshing also. One way** per acre **costs 3*s.* 5*d.***

17. Mr. Henderson, Sandwich. Cost one way, 4*s.* 11*d.* per acre.

18. Mr. Sargeant, Northampton—182 done since harvest, 267 acres done before harvest.

19. Mr. R. Pullen, Shackerley, Wolverhampton. Cost one way, 1*s.* 6½*d.* (!!)

20. **Mr. John L. King, Newmarket, done since harvest;** labour 2*s.* 6*d.* an acre for four men and two boys, besides 20*s.* **a week to engineer; coals, 8 cwt. per day; oil, 1 quart.**

21. **Mr. W. Egerton Hubbard, Horsham**—100 acres have been done by Howard's apparatus, and 136 by Smith's; repairs very trifling. Cost one way, 2*s.* an acre (!).

22. Mr. R. Barton, St. Ives—wages include water carriage; worked all harvest time, paying high wages; a very stiff stony heavy clay; should prefer a 10-horse engine; cost one way per **acre, 4*s.* 9*d.***

HOWARD'S APPARATUS.

	Engines.	Acres once Cultivated.	Depth.	Days at Work.	Wages.	Fuel and Oil.	Repairs.
No.	Horse Power.	No.	Inches.	No.	£ s. d.	£ s. d.	£ s. d.
1	10	156	6 to 7	22	15 8 0	6 1 0	..
2	8	185	4 to 8	22	21 4 0	6 15 6	0 10 0
3	10	275	..	43	..	..	..
4	10	240	8 to 10	..	..	..	..
5	8	130	6	16	14 8 0	6 18 0	..
6	10	141	5 to 9	24	18 10 0	14 8 0	0 7 0
7	8	20	6	4	2 8 0	1 12 0	0 17 0
8	10	274	6 to 7	..	..	..	..
9	10	50	5 to 8	..	..	..	..
10	10	275	..	..	..	..	..
11	8	70	5	13	8 17 0	..	..
12	10	100	8	10	6 5 0	7 8 0	2 0 0
13	8	130	7	19	15 4 0	10 3 9	5 10 0
14	8	320	4 to 6	54	43 10 0	9 18 0	..
15	8	102	5 to 6	21½	17 0 0	?	0 4 0
16	8	310	6 to 10	40	{23 16 8 / 4 13 4}	20 0 0 / 2 10 0	1 6 10 / 2 5 0
17	8	178	3½ to 7	27	27 12 6	16 10 0	..
18	10	449	..	..	..	..	..
19	8	52	8	4	2 12 0	1 9 4	..
20	10	400	8	..	..	..	..
21	10	100	6 to 9	8½	6 7 6	3 12 0	..
22	8	364	6	73	60 15 0	21 10 0	5 0 0

FOWLER'S STEAM PLOUGH.

	Steam Engines.	Acres.		Depth of Work.	Days at Work.	Wages Paid.	Coals and Oil.	Repairs.
		Ploughed.	Cultivated.					
No.	Horse Power.	No.	No.	Inches.	No.	£ s. d.	£ s. d.	£ s. d.
1	12	158	..	8 to 10	39½	25 13 6	20 7 6	4 10 0
2	10	74	59	5 to 10	{34½ / 31½}	83 11 10	18 7 8	?
3	10	171	86	5 to 6	..	..	..	..
4	10	318	390	6 to 8	181½	{23 8 5 / 19 14 6}	52 12 0	9 0 0
5	12	332	..	7	42	30 16 0	20 15 0	..
6	10	67	..	5 to 8	11½	5 19 9	8 12 0	..
7	12	300	..	4 to 8	145	?..	..	..
8	12	104	83	9	..	..	..	..
9	10	97	57	6	31½	17 9 8	19 16 4	..
10	12	13	100	7 to 14	41	43 15 6	14 12 6	..
11	10	184	..	7 to 11	30	16 10 0	16 10 0	..
12	12	152	..	6 to 8	25	..	..	..
13	10	170	..	..	..	..	..	..
14	14	80	70	7 to 8	33	28 5 0	?	..
15	12	346	..	7 to 9	..	..	..	..
16	12	..	165	6 to 10	..	..	..	..
17	10	88	{.. / 7}	6 to 10 / 15	29 / 4	18 0 0	?	..
18	10	110	..	6 to 9	24	..	..	..
19	12	66	150	10	36	34 8 3	16 4 0	4 8 0
20	12	170	..	5 to 9	43	24 0 0	26 0 0	..
21	12	301	80	7	50	30 0 0	31 18 9	27 0 0 ?
22	10	76	..	6	12½	11 9 8	5 9 1	0 5 0
23	12	180	..	5 to 9	40	17 12 2	20 2 6	8 6 9
24	10	25	255	8 to 12	60	49 6 0	30 0 0	..
25	10	68	125	5 to 10	40	27 0 0	10 6 0	..
26	12	..	225	4 to 9	..	..	..	..
27	12	41	17	6 to 9	14	..	..	..

FOWLER'S STEAM PLOUGH.

1. Mr. Brebner, at H.R.H. the Prince Consort's farm (Flemish farm, Windsor)—Most of the work on tenacious clay soil. **Removals not included in tear and wear. Cost of ploughing per acre, 6*s.* 1*d.***

2. Lord Berners' farm at Keythorpe—At work 34 days; stoppage for breakages, 31½ days; wages, including engineer, [illegible] See remarks at page 1032

3. Mr. Pocock, Marlborough—No **account kept of wages** [illegible]

4. Mr. G. Pocock, Bourton and Stratton **Farms, Shrivenham.** —The work done between **February and October. The time** includes all removals; the 19*l.* **14*s.* 6*d.* is water carriage at 8*s.*** a day. The repairs do not **include interest or tear and wear.** Cost ploughing per acre, 4*s.* **4*d.*** !

5. Mr. E. Ruck, Castle Hill, Cricklade—Can plough average soils at 6*s.* an acre, and the new apparatus will reduce cost to 4*s.* Cost of ploughing, 5*s.* 2*d.*

6. Mr. J. M. Read, Elkstone, **Cheltenham—(See leading** article) Cost ploughing, 4*s.* **4*d.* per acre.**

7. Mr. T. Pearce Brown, Burderop, **Swindon—This is the** whole year's work from April **3 to Nov. 13. Cost 1*l.* 17*s.* 6*d.*** a day in doing 5 to 6 acres.

8. Mr. R. Campbell, Buscott **Park, Lechlade—Stiff clay.**

9. Mr. Frampton, **Benson, Wallingford—The time of 6** removals included **in these days, 4*l.* 14*s.* 6*d.* should be added** for water cart, "**extreme hardness of the land." Cost ploughing** per acre, 4*s.* 10*d.*

10. **Rev. T. Stevens, Bradfield, near Reading, speaks of the "exceptional difficulties," which make his experience an unfair illustration of Mr. Fowler's plough.** Cost of ploughing, 11*s.* 8*d.*

11. Mr. E. Roberts, Almshoebury, Hitchin—See p. 993.

12. Messrs. Neames, Faversham—"Very hard soil;" 429 acres **done** in the year.

13. Mr. J. King, Chadshunt Farm, Kineton, Warwick—See Home Correspondence.

14. Mr. J. R. Hall, Uxbridge—"Delayed by the total inexperience of our men."

15. Mr. Stratton, of Broad Hinton—Wages 13*s.* 6*d.* a day.

16. Mr. Savidge, Lodge Farm, Sarsden, Ch. Norton—Broken 6 plough heads and 36 shares.

17. Mr. J. Webb and Mr. C. W. Lyon, Uttoxeter—"The 7 acres are subsoiled 15 inches deep."

18. ——, Yorkshire, "let on hire."

19. Mr. E. Holland, M.P., Evesham—"The days include wet days and removals—ground very hard at first—all heavy clay land." Cost ploughing, 5*s.* 2*d.*

20. Mr. T. H. Redman, Overtown, Swindon. Cost of ploughing, 5*s.* 10*d.*

21. Mr. S. M. Plummer, Peasemore, Newbury—"100 acres are done for Wheat 4 **inches deep." Cost of ploughing, 4*s.* 8*d.***

22. Mr. Burneston, for E. Marjoribanks, Esq., Healy—no stubble ploughing yet done, otherwise engaged. Cost of ploughing, 4*s.* 6*d.*

23. Mr. Parsons, Hazelbury, Crewkerne—"Much of it very hard and dry and foul." Cost per acre, 4*s.* 4*d.*

24. Messrs. Blyth & Squier, Stanford-le-Hope, Essex—very light land. Cost per acre, 6*s.* 11*d.*

25. Mr. Saltmarshe, near York—no serious repairs. Cost per acre, 6*s.*

26. Mr. E. Roberts, Jun., Berden Hall, Bishops Stortford—"The deep work was on heavy land, coals 15 cwt. a day, engine been at work threshing.

27. Mr. Dudfield of Spetchley, says—Having so recently received the tackle I am not in a position to give further information. The ploughing is done in such a superior manner as to exceed our expectation.

Home Correspondence.

Steam Cultivation.—I am now ridging and subsoiling my land for the next year's roots. The operations and cost per acre are one steam smashing, 7*s.*; one cross cultivating with horses, 2*s.*; one ridging with horses, 4*s.*; and one subsoiling with horses, 4*s.* These operations shatter the land to a depth of from 16 to 18 inches, at a total cost of 17*s.* per acre. Gentlemen interested are welcome to see how I thus deeply and cheaply work my root fallows. I shall be working on regularly for the next fortnight. *William Smith, Woolston, Bletchley Station, Nov. 22.*

Steam Cultivation on the Toft Farm, Trentham, (specified at No. 3, in the tabular account of Smith's steam cultivation).—The quantity of land is in five fields, but as three of them adjoin, and they are all square, the engine and tackle had to be moved only four times for the above quantity of work. The land was exceedingly foul, and immediately after it was broken up by the steam cultivator, the weather being favourable, active measures were taken with men and horses to clear the land of Couch and other weeds. As soon as all the weeds had been got off that could be until the land was regrubbed, the steam cultivator was run through the land again to bring what weeds were left to the surface, and the same process of harrowing, rolling, &c., was gone through as before, and the land was by these measures got pretty clean. We are now going over it a third time with the five-tined cultivator to a depth of from 10 to 12 inches, after which the land will be left in the best possible state for being ameliorated by the winter season. We have not given the cost of the two last operations upon the land by means of steam cultivation, but each costs about the same amount; for although the ground becomes more easily worked, the cultivators are made to go deeper every time. The shifting of the anchors is objectionable, inasmuch as it takes two men to attend to them, and the space they occupy prevents the cultivators being brought to the edges of the field. We intend in the course of this winter to insert strong Larch or Oak posts in the centre of the hedge-rows on the sides of every arable field on this farm, the posts to be from 3 to 4 feet in the ground and 1 foot out. They will be placed at a distance of 30 feet apart, and a movable chain will be provided with rings at each end large enough to slip easily upon these posts. In this chain the pulley blocks can readily be hooked by the ploughman on his arriving at the end of each bout, thus dispensing with the anchors and the two men who attend to them, and enabling us to cultivate more land, and save much time. I think that this improvement, when carried out, will effect a saving of about 1*s.* 6*d.* per acre. I quite agree with Mr. Smith in his remark that the steam cultivator is the proper implement for breaking up the land, either for exposure to the atmosphere or cleaning it, and also for loosening the subsoil, as there is no compression of the land as by the plough. It is our intention when time permits to adapt harrows and rollers, &c., to steam power, so that when a field wants cleaning every operation may be performed by it, and the whole completed at one placing of the engine and tackle. *George Fleming, Trentham, Nov. 8.*

Steam Culture at The Lawn, Sittingbourne.—Such facts as have come under my own observation, in the interest of agriculture you are quite at liberty to make use of. I am in the position of a person farming his own land, and buy only such machinery as I believe will pay me best. I have no prejudice in favour of any machine-maker; I purchased Messrs. Howard's tackle because I thought I could decide for the sum of 200*l.* whether land could be cultivated or not with advantage by steam-power. **As far as I have gone I am well satisfied.** *My* **workmen take to it very well, and make no trouble of it; its simplicity is its great merit.** To receive the greatest advantage from steam-cultivation I think the fields should be large and level, and the soil heavy, all which I have in mine. Of course the cultivation should begin the day after the last sheaf is housed, and not cease until the whole farm has been moved. I cannot see why, on strong soil, the fertility of the farm should not be maintained by this autumn cultivation as thoroughly as by the constant turning over and over of the soil, the same amount of manure being used of course in both cases. If it is possible, the saving on some farms will be 50 per cent. as compared with horse power. On a field of 12 acres last November (1860), 4 strong horses did not average much over half an acre a day in ploughing 7 inches deep (Bean grattan) for Wheat. By steam cultivation I think the same **would have been done 6 weeks earlier, at 12*s.* per acre; the horse labour costs 30*s.*** However, I intend as little

as possible giving my opinion. I am only a young farmer, but such facts as come out in my experience are quite at the service of any one. *William Whitehead Gascoigne.*

Steam Cultivation at Chadshunt Farm, near Kineton, Warwick.—In reply to your inquiries respecting the work done by the steam plough purchased of Mr. Fowler at the Warwick Show by Mr. Righton, of Thornton House, and myself, allow me to say that since harvest it has ploughed and smashed up about 170 acres, of which 100 acres have been stiff tenacious clay. The work in each field has been done in a manner highly creditable to Fowler's steam plough, and at a considerably less expense than either of the former years, which I attribute partly to the experience the men and boys have had in the management of the apparatus, but chiefly to the superior strength and excellence of the 10-horse engine Mr. Fowler supplied us with in exchange for the 8-horse. This engine was manufactured by Messrs. Kitson & Hewitson, of Leeds, and a better one no firm could turn out. I cannot speak too highly of this engine. Mr. Righton and myself are farming nearly 1000 acres of the true Warwickshire clay, at least the greater part is such; still we can, after doing the work upon each separate farm (which are situated six miles apart), help some of our neighbours, which is done by charging so much per acre, viz., 12*s.* to 18*s.*, according to the nature of the soils and the size of the fields. It is almost impossible for me to fill up the form you sent me, not employing it wholly myself upon the farm I occupy. I have therefore thought it better to send you a brief but general statement. *J. King.*

Steam Cultivation at Biddenham.—In answer to your letter of November 2d, I commenced cultivating on the 30th of August, and continued without any intermission for 50 days; during that time I cultivated 385 acres upon my farm, reckoning one acre two where cultivated twice, my men working by the piece at an average cost of 2*s.* 4*d.* an acre for labour, 1*s.* 6*d.* an acre for coals and oil, 6*d.* an acre for a horse to carry water, and other horses to remove the apparatus, and 1*s.* an acre for wear and repairs; the depth I fix myself. My staff consists of five men, two porter lads, and one boy to fetch the water. My engine is a 10-horse double cylinder by Ruston & Co., of Lincoln. I consider 4 to 5 inches the proper depth for Wheat, and from 6 to 8 and 9 inches for Barley, Beans, and fallow. Any further information you may require, if I am able I shall be most happy to give you. *William Lavender, Nov. 9.*

Steam Cultivation at Baynard's Park, Rudgwick, near Horsham.—In answer to your inquiries respecting Mr. Howard's Steam Cultivator, I have much pleasure in giving you what information I can, though from having received the steam cultivator late in the autumn I regret to be able to give only the results of small experiments on my father's farms at Lineacre, Longhurst Hill, and Collins for Wheat. At Lineacre about 10 acres of heavy land, which had been once ploughed by the common plough, was scarified once by Mr. Howard's Steam Cultivator. This operation brought the weeds to the surface, so as to allow of its being picked and cleaned. At Longhurst Hill farm about 15 acres after Peas were scarified, and then cross scarified by Mr. Howard's Steam Cultivator. This ground was thus rendered a good fallow. At Collins' farm about 9 acres of light land, which have been twice ploughed with the common plough for Wheat, were scarified and then cross scarified by Mr. Howard's Steam Cultivator. This land was then picked and rendered a very good fallow. As far as I can judge of Mr. Howard's Steam Cultivator it is one of the most valuable inventions of modern times, and in answer to your questions I think that if ground is well and deeply ploughed in winter (to rot the Grass) the steam cultivator would in the spring, at small expense, in comparison with the old system of ploughing, render ground (by twice scarifying) a good season for Mangel or Turnips. Mr. Howard's new invention to work the windlass direct from the engine by means of an iron coupling-joint in the place of strap-gearing is a very great improvement, for it enables the cultivator to be easily worked in wet or windy weather, while under the old plan it was difficult to prevent the strap from running off. *Thomas Lyon Thurlow.*

Steam Cultivation at Mount Farm, Cookham Dean.—As Messrs. Howard's apparatus arrived here only in May last, you will be prepared to receive my remarks with caution. The only work done on my own farm before harvest was on naked fallow intended for Wheat. One field belongs to the plastic clay formation, and I do not think a stiffer piece could be found in the country. This was thoroughly cleaned and pulverised, and now lies as well as I could wish to see it, both as regards the land and the crop. It was smashed to a depth of 8 or 9 inches, then crossed and left till the end of July, when it was again smashed to a depth of 8 inches, at the rate of 7 acres per day. Lastly it was thrown into 4-bout lands by horses, and drilled with Wheat. Since harvest I cultivated 113 acres of my own stubbles, as soon as the corn was off; part of this I crossed with a Bentall drawn by horses, and the rest by a steam-cultivator. In addition to this work I have smashed land of all descriptions for neighbouring farmers. The soil on my own farm varies greatly, part being stiff clay and other portions the sharpest gravel. The fields vary in size from 6 to 60 acres, and it is far from being level so that it cannot be classed among those specially adapted for steam-cultivation, which will account for my calculations of cost being higher than many others I put the items as follows:—

COST PER DAY.

	s.	d.
Driver	4	0
Windlass man	2	6
Ploughman	2	6
2 Anchor men	5	0
2 Porter men	5	0
1 Water cart man	2	6
Horse and water cart	3	0
10 cwt. of coals	10	0
5 per cent. interest on 500*l.* = 1*s.* 4½*d.* × 2	2	9
20 per cent. wear and tear on 500*l.*	5	6
Oil	1	0
Removes	6	0
	£2 9	9

I consider two porter men a saving in all cases, as one can do the whole work temporarily if the other is required to help either of the anchor men for a short time, and there will also be one at each end to assist whenever the snatch block requires moving. A man at 2*s.* 6*d.* for water cart may seem a good deal, but if the water is near he will be able to attend to the oiling, and walk round occasionally to see that all is right at the fixed snatch blocks, &c. The amount for interest is not, I think, overcharged, as interest goes on, whether the apparatus is at work or standing still. The cultivating apparatus will be at work but a small portion of the year, but the engine may be employed much more frequently; for these reasons instead of charging interest on 500*l.* (the cost of engine and cultivating apparatus) for one day, I have doubled that amount. Twenty per cent. for wear and tear may seem too much, but I am a great advocate for allowing liberally for this in all machinery; should it come to less, so much the better. The daily charge for removes must depend greatly on the nature and size of the farm; in my own case I have allowed a full amount, and am confident that 50*s.* per day will fully cover all working expenses and all risks. The number of acres I have cultivated has varied from 3 to 10 per day, nearly all being heavy autumn work; the depth has varied from 5 to 10 inches. The engine I employ is one by Clayton and Shuttleworth, 10 H. P. double cylinder, which I much prefer to a single cylinder; the pressure has ranged from 54 to 64 lbs. I have not attempted any ploughing at present, as I consider smashing decidedly preferable on the stubbles and for cleaning the land, nor do I think ploughing by steam is, as yet, sufficiently advanced. The wear of the rope is the most important matter, especially on gravelly land, but a system of anchorage, as simple and portable as the present without its liability to drag along in soft ground would remedy this to a great extent. My reason for preferring Howard's system is that an ordinary farmer can take the entire management with the aid of his own men, every part is so simple and so portable. It is also adapted for fields of any size or shape, though it is very injudicious to hinder time with gores and corners which can be worked off more economically by horses. Much, no doubt, remains to be done in diminishing the labour required, and improving many of the details; but even in its present form I consider it a tenant farmer's implement of very great value. We must not expect it the first year of its operation to work so economically, or manifest such advantages as in subsequent years, when the pan has been shattered, the subsoil aërated, and the Couch destroyed. You are at liberty to make any use you please of this, as my wish is that an invention I believe to be of great public importance may become general, and that landlords may be induced to consult their own interest, and that of their tenants by giving them every encouragement to adopt it. *W Bulstrode.* [We do not think the charges made above for interest and tear and wear are excessive, but the cost of removes is too much, and the cost of labour also seems excessive].

Almanack Misrepresentations.—Spanish Fowl and Berkshire Pigs.—I have before me an almanack which has, for advertisement and other purposes, been circulated by tens of thousands throughout the country. In form and colour it closely resembles "Morton's New Farmers' Almanack," and many of the particulars, especially the "Produce Tables," appear to be copied directly from that most useful publication. Here, however, the resemblance ceases. "Thorley's Illustrated Almanack," is the title of the almanack to which I refer, and its alleged price is fourpence. It was given to me—and as I had one also given to me last year by a dealer in "Thorley's Cattle Food," I presume that that is the mode in which many are disposed of. "Of the last issue for 1861 upwards of one hundred thousand have been disposed of" is the triumphant boast of the proprietor. "Encouraged by the eminent success which has attended his former efforts, he has resolved," he writes, "that neither pains nor expense should be spared to render the present issue superior in every respect to its predecessors." How far this object has been realised I must leave my readers to determine. As one of these readers I have to state that the book is unworthy of its title, as far as the word "Illustrated" is concerned. Its illustrations are burlesques. The backs of the pigs, as drawn in this illustrated work, are a series of crescentic curves. The drawings of the fowls are so inaccurate that it could not even be guessed for what the sketches were intended were it not for the printing underneath. The written description of the fowls and animals correspond with the drawings, in the cases which I read, namely the description of the Spanish fowl and of the Berkshire pig.

Spanish Fowl as described by Thorley.	*Spanish Fowl as it is, and as described by Ba[illegible]*
"Resembles the dunghill bird in shape, but is *characterised* by having a *small* comb, and a densely *tufted crest*, which always *differs in colour* from the plumage of the body. A *white* fowl always bears a *black* crest, and a black a *white* crest!"	"There is less difficulty in describing the Spanish [illegible] than any other, because [illegible] qualities are well defined [illegible] admitted. It is of *one uniform colour*, black richly [illegible] with green. The head is [illegible] and thin, and in the cock [illegible] comb should extend along the nostril; a peculiarity [illegible] the hen is a *large pendent* comb."

The italics are my own. The Spanish fowl has no "black crest," no "white crest"—no "tufted crest"—and no "small comb"—but perhaps the largest comb of all our domestic fowl. A "white" Spanish fowl would be as great a curiosity as a white blackbird. Of the Berkshire pig, the following is stated in the various pages of the same illustrated almanac. "Colour reddish (!!) with brown or *black* spots, ... ears large and *pendent over the eyes*," page 87. I opine that Mr. Hewer of Sevenhampton, Mr. Sadler of Calcott, or any other distinguished breeder of Berkshire pigs, would be horrified at seeing such a creature in his pig-sty. "Reddish, and with long large ears pendent over the eyes," surely belongs rather to the Irish pigs of the last century than to the Berkshire pigs of the present day. Mr. Sidney in his recent book on "The Pig" thus describes the Berkshire pig—"They should be well covered with long *black* silky hair, so soft that the problem of making a silk purse out of a sow's ear might be solved with a prize Berkshire. The *white* should be confined to four *white* feet, a white spot between the eyes, and a few white hairs behind the shoulder." At Mr. Sadler's the Ayrshire Agricultural Association saw *three hundred*, every one of which was marked in this manner. They saw none "reddish," or with "large ears pendent over the eyes." The above facts prove that a so-called *cheap* book may be very dear, because inaccurate and untrustworthy; but it is as a breeder of Spanish fowls and of Berkshire pigs, to refute the misrepresentations of "Thorley's Illustrated Almanack" that I now address you. The description of the Spanish fowl in that much advertised book does not apply to the bird in any period of its history; and that of the Pig could have approximated to truth only when he ran wild centuries ago in the forests of Wargrave and Windsor. *John Hitchman.*

Farmers' Clubs.

FAVERSHAM: *School Unions.*—We place under this heading a passage from a speech by Mr. E. CHADWICK, C.B., at a recent meeting of the Faversham Agricultural Association:—

The national schools of a district of 11 parishes of the town of Faversham and the suburbs have been inspected by Lord Harris, who, whilst Governor of Madras and previously of Trinidad, had been a promoter of education. His lordship was accompanied by Mr. Edwin Chadwick, who had reported specially on these schools in a paper communicated to the Education Commissioners, and laid before parliament. The case is stated to be one of the most complete voluntary combinations of the educational means of any formed, or yet known in England, as the great bulk, perhaps three-fourths of the children of each parish of the school age, about 900 in all, are brought under one management, there being for all the parishes one common infant school, one national school for elementary instruction—chiefly in reading, writing, and arithmetic, which, it is reported, are fairly completed between the 10th and 11th year; and one commercial or middle class school into which the most promising children from the national school are drafted, and the children of middle class persons receive a commercial education, to their 13th or 14th year, and receive a higher than the common amount of instruction, including book-keeping, drawing, mensuration, geometry, French, and Latin. The whole of these schools or classes are under the direction of one principal.

In the evening Lord Harris and Mr. Chadwick, with most of the gentlemen who had attended the inspection of the district schools in the morning, dined with the Faversham Agricultural Association, where Lord Sondes presided.

Mr. CHADWICK, during a speech in the course of the evening, called to the recollection of the meeting the present improvement in the administration of relief of the destitute with the reduction of its burdens.

Now, how was that improvement and reduction effected but by the principle of local administrative combination, the substitution for the unpaid, changing, and practically almost irresponsible overseers a staff of permanent, paid, responsible executive officers, union clerks, union medical officers, union relieving officers, and others. These officers, when properly directed and aided by elected representatives, the guardians of the union board, are, their salaries included, proved means of economy and improvement. But how could you get such executive means to efficiency and economy except by union? In the separate single parishes the expense of the like quality of service would have been so disproportionately and enormously expensive as to be pronounced to be impossible of attainment. Now you have in this town of Faversham, by an union for the common educational means, achieved for yourselves and for the country the important example of what can only be effected by union, and by a division of educational labour for the improved education of children of the middle classes, as well as for the independent poor. By this educational division of labour

... time is saved by productive industry. Heretofore in teaching in the small separate schools it took seven years to teach the three "R's:" now by the aggregation of numbers in larger classes these accomplishments are better imparted in one half the time; that is to say, that instead of keeping a labourer's child in school until the thirteenth year, it is impressed indelibly on them soon after the tenth, or before the eleventh year, when he is required to contribute to the earnings of the family, and he is left to supplement them by other acquisitions in the evening school as he advances in service. But what is the result of the improved instruction? My test as an administrator is what I call the service test. How many acquire and retain respectable service? From the relieving officer we have the evidence, that where five were paupers formerly less than one remains chargeable now. From the schoolmistress we get an account of all her pupils of the poorer class in service, where they are well spoken of and others sought. But the benefit of your school union is extended to other classes. It is a general evil attendant upon the present system of governmental inspection, being confined to the elementary instruction, that it tends to produce a deal level, the instruction necessary for the labourer's child being as proved of a quality that the shopkeeper cannot obtain at all in private adventure schools. Your combination of the local educational means presents an example of the attainment of the required gradation of schools, in which the farmer's son obtains in the middle class or commercial school a quality of instruction not to be got in the village or the parish school, and not to be get in the time or at the price, or in the time at boarding schools or other schools now available to them, and you have shown the agricultural population of each class need not to be left, as it now is, behind the town population in education. I offer my congratulations that physical training, by means of the military drill, is to be comprehended in your model. I have not time to advert to the evidence as to its public importance in a military point of view, or to describe the evidence of large employers of labour, showing that if we were a nation of Quakers, if there were assured and universal peace, the improved drill is well worth while, as imparting increased efficiency and value to labour for civil service, four drilled youths being for ordinary labour as efficient as that of five undrilled youths. They are taught to act in concert; to lift together, to pull together, to move together and in order. The drill imparts by visible act and deed all that is comprehended in the term discipline: attention, self-restraint, patience, prompt obedience, and smart execution of orders.

Calendar of Operations.

NOVEMBER.

Wester Ross, *November* 18.—The weather up till the end of October was unusually favourable for the advancement of outdoor labour, and a great deal of work was accomplished. Our Wheat, a breadth of about 50 acres after lea, has been laid down in excellent condition, and a large proportion of our next year's green crop lot has received its winter furrows November however, so far as it has gone, has been excessively wet and boisterous, and now all is covered with snow. Wheat sowing has been quite impracticable for a fortnight; indeed the ground has been so thoroughly soaked that any field labour in these days must have been executed in the worst condition. A continuation of fine weather for some time would be very desirable, as a considerable breadth of Wheat in this neighbourhood remains to be sown. With the fine weather last month our Turnips materially improved, although they still fall short of a full crop. The whole stock of sheep and cattle are now upon them, and are consuming them at a rate which will very certainly overtake them all ere we again have abundant Grass. Turnips have been in great demand for sheep eating, and have been fetching from 5*l.* to 7*l.* per acre, and never, perhaps, have we seen a larger number of sheep come from the hills for wintering than this year. After coming from the hills and before going on Turnips, the hoggs generally have a run upon the pasture for ten days, or a fortnight, upon which they thrive amazingly. In our later markets store cattle were scarce, and so very dear that the probability is that in spring small remuneration may be had, for winter keep. We have now abundant reason to conclude that the return of our cereal crops will be greatly deficient, although the quality is much superior to that of last year. Our wheat weighs from 62 lbs. to 63lbs. per bushel, and fetched from 56*s.* to 57*s.* per quarter. Barley weighs from 54lbs. to 56lbs., and fetches from 30*s.* to 32*s.* per quarter. Our labourers have been fully employed at high wages, at railway and other works, and where attention and sobriety have obtained, something has been saved for coming adversity.

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended November 28; observed by Mr. J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air.				Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
	Max. in Sun.	Max. in Shade.	Min.	Mean.				
	Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday 22 ..	50.0	51.0	43.0	46.7	39.5	0.02	S.W.	29.50
Saturday 23 ..	45.0	45.0	33 5	39.2	41.0	0.45	W.	29.29
Sunday 24 ..	54.0	45.0	23 5	36.5	40.5	..	W.	29.80
Monday 25 ..	63 0	42 0	22.0	37.2	39 5	0.02	S.W.	29.77
Tuesday 26 ..	61.0	54.0	38.0	45 2	40.0	0.16	S.W.	29.37
Wednesday 27 ..	56.0	56.0	35 5	45 7	42.5	0.05	S.W.	29.68
Thursday 28 ..	58.0	46.0	29 0	40 5	42.5	..	S.W.	29.80

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Poisoning by Yew: *Ashley*. Our Correspondent has lost a valuable heifer which had partaken of the leaves of two Yew trees. The idea that the berry-bearing Yew is wholesome and the other poisonous is mistaken; both Yews have the same properties. Mr. Spooner will report on the case shortly.

Poultry: Trade has seldom been worse than it is now, and the supply has been larger than usual. The number of pheasants is remarkable; hares are also abundant, and as, when unusual quantities come into the market an equal number has been distributed as presents, the demand is thereby diminished, and the sale becomes very bad. There is always this same glut of game in November.

Turkeys	Each	6*s.* 0*d.*	to	7*s.* 0*d.*
Large Fowls	,,	3 0	,,	3 6
Middling ditto	,,	2 0	,,	2 6
Chickens	,,	1 6	,,	1 9
Geese	,,	6 0	,,	6 6
Pheasants	,,	2 0	,,	2 6
Partridges	,,	1 6	,,	1 9
Grouse..	,,	2 0	,,	2 3
Hares	,,	2 0	,,	2 3
Rabbits	,,	1 3	,,	1 4
Wild ditto	,,	0 8	,,	0 9
Pigeons	,,	0 8	,,	0 9

Red Spider Magnified.

ORCHARD HOUSE TREES and VINES.

Winter wash with GISHURST COMPOUND, recommended by Mr. Rivers. See "Orchard House," ninth edition; and see Mr. Pearson's recommendation in *Cottage Gardener*, 10th Sept., 1861.

Sold retail by Nurserymen and Seedsmen in boxes 1*s.*, 3*s.*, and 10*s.* 6*d.* each.

Wholesale by Price's Patent Candle Co., Limited.

Magnified Aphides.

NEAL'S PATENT APHIS PASTILS.

The following is one of upwards of 70 Testimonials received by J. Neal from gentlemen personally unknown to him.

"I beg to bear my testimony to the value of Neal's Pastils, and their efficacy in destroying, most effectually, the Green Fly without any trouble, and at a nominal expense, when compared with the use of Tobacco or even Tobacco Paper.

"James Sanders,
"Nursery Grounds, Abergavenny."

Sold by all principal Seedsmen. Price 1*s.* and 2*s.* per packet.

Patentee, J. Neal, Birmingham.

To Nurserymen and Florists.

H. PERKINS having a large stock of TOBACCO PAPER, of very superior quality, offers the same at 10*d.* per lb., and genuine ROLL PAPER at 1*s.*

TOBACCO CLOTHS 10*d.* per lb., warranted genuine.

H. Perkins, 16, Cambridge Circus, Hackney Road, N.E.

MINTON and CO. have REMOVED from Albion Place, Blackfriars, to 50, Conduit Street, Regent Street, W. ENCAUSTIC and other PAVEMENTS, EARTHENWARE and PLAIN TILES. Designs and Estimates prepared.

Manufactory: Stoke-upon-Trent.—Nov. 30.

GLASS for GREENHOUSES.—SHEET GLASS, Stock Sizes, 16 oz.

Boxes included.					3rds.	4ths.
11 by 9,	12 by 9,	13 by 9,	14 by 9 ..		14*s.* 0*d.*	12*s.* 6*d.*
12 ,, 10,	13 ,, 10,	14 ,, 10,	15 ,, 10 ..			
13 ,, 11,	14 ,, 11,	15 ,, 11,	16 ,, 11 ..		16*s.* 0*d.*	13*s.* 6*d.* per 100 feet.
14 ,, 12,	15 ,, 12,	16 ,, 12,	17 ,, 12 ..			
18 ,, 12,	19 ,, 12,	20 ,, 12	..	..		
16 ,, 13,	17 ,, 13,	18 ,, 13	..	..		
19 ,, 13,	20 ,, 13,	21 ,, 13	..	..		
16 ,, 14,	17 ,, 14,	18 ,, 14	..	..		
19 ,, 14,	20 ,, 14,	21 ,, 14	..	..		

English Glass of the above sizes, 18*s.* per 100 feet.

SMALL SHEET SQUARES, in 100 feet Boxes.

6 by 4	6½ by 4½	7 by 5	7½ by 5½	11*s.* 6*d.*
8 ,, 6	8½ ,, 6½	9 ,, 7	9½ ,, 7½	
		10 ,, 8	10½ ,, 8½	12 6

Boxes 2*s.* each, returnable at full price.

GLASS FOR ORCHARD HOUSES,
As supplied by us to Mr. Rivers.

		16 oz.	21 oz.
20 in. by 12 in.			
20 in. by 13 in.	Common	13*s.* 6*d.* ..	£0 18*s.*
20 in. by 14 in.	Superior do.	16 0 ..	1 3
20 in. by 15 in.	English Glass	18 0 ..	1 9

The above prices include the Boxes.

Perforated Glass for Ventilation. Patent Plate and Polished Plate Glass. Ornamental and Coloured Glass.

London Agents for Hartley's Improved Patent Rough Plate.

Linseed Oil, Genuine White Lead, Carson's Paints, Paints of various colours ground ready for use.

Milk Pans, Propagating Glasses, and every description of Glass for Horticultural purposes.

James Phillips & Co., 180, Bishopsgate Street Without, London, E.C.

THOMAS MILLINGTON,
HORTICULTURAL GLASS WAREHOUSE,
87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.

Established 1750.

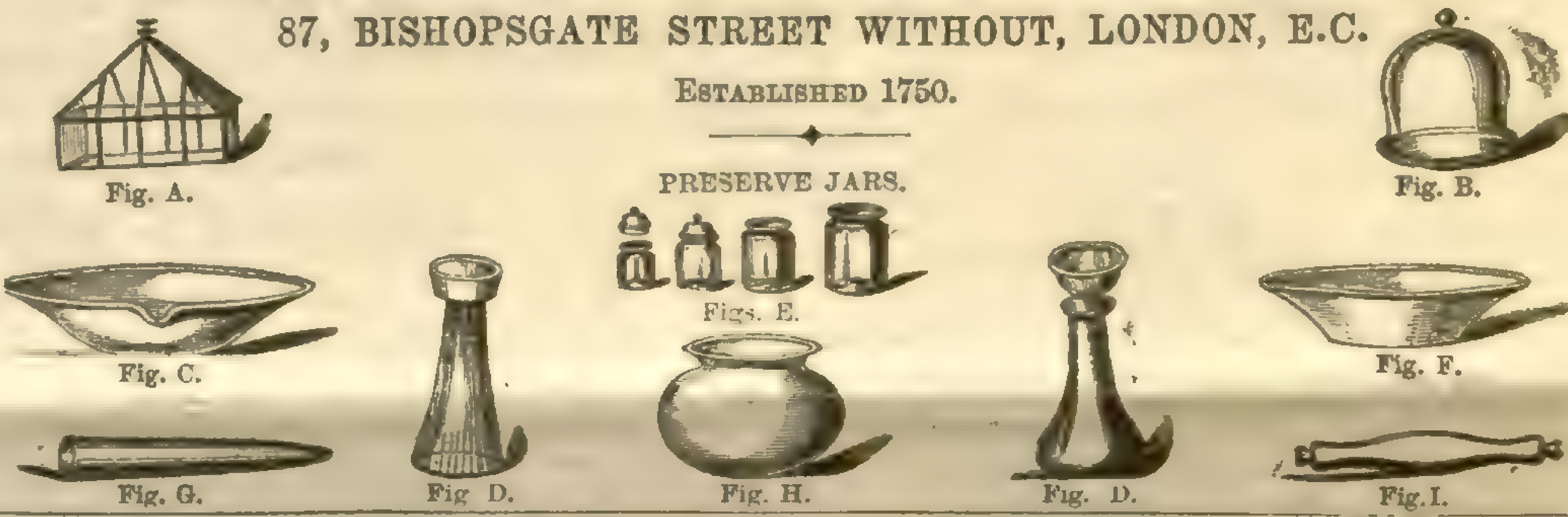


Fig. A. HAND GLASSES.

12 inches	..	6*s.* 0*d.*	each
14 ,,	..	7 0	,,
16 ,,	..	8 0	,,
18 ,,	..	9 0	,,
20 ,,	..	10 0	,,
24 ,,	..	12 0	,,

If open top 1*s.* extra.

Fig. B. PROPAGATING GLASSES.

2 inches	..	0*s.* 3½*d.*	each.
4 ,,	..	0 5½	,,
6 ,,	..	0 8	,,
10 ,,	..	1 4	,,
12 ,,	..	1 9	,,
16 ,,	..	3 6	,,
18 ,,	..	5 0	,,
20 ,,	..	7 0	,,

Fig. C. MILK PANS.

6 inches	..	0*s.* 6*d.*	each.
10 ,,	..	1 0	,,
14 ,,	..	1 9	,,
18 ,,	..	2 9	,,
20 ,,	..	3 3	,,
22 ,,	..	3 9	,,
24 ,,	..	4 6	,,
26 ,,	..	5 6	,,

Fig. E. PRESERVE JARS.

	Without Lids.	With Lids.	
3 inches	0*s.* 4½*d.*	0*s.* 6½*d.*	ea.
4 ,,	0 6	0 9	,,
5 ,,	0 8	0 11	,,
6 ,,	0 10	1 2	,,
7 ,,	1 0	1 4	,,
8 ,,	1 4	1 8	,,
9 ,,	1 8	2 2	,,
10 ,,	2 0	2 8	,,

Fig. D. HYACINTH GLASSES.
Common .. 3*s.* 0*d.* per dozen,
Improved.. 3 6 ,,

CROCUS GLASSES.
Common .. 2*s.* 0*d.* per dozen.
Improved.. 2 6 ,,

Fig. F. HYACINTH DISHES.

6 inches	..	1*s.* 0*d.*	each.
9 ,,	..	1 6	,,
12 ,,	..	2 6	,,

Fig. G. CUCUMBER TUBES.
1*d.* per running inch.

Fig. I. ROLLING PINS.
1½*d.* per running inch.

Opal Ditto.

14 inches	..	3*s.* 6*d.*	each.
16 ,,	..	4 0	,,
18 ,,	..	4 6	,,

Fig. H. FISH GLOBES.

	With Feet.	Without Feet.	
8 inches	1*s.* 9*d.*	3*s.* 6*d.*	each.
10 ,,	2 3	4 0	,,
12 ,,	3 0	4 6	,,
14 ,,	4 0	6 6	,,
16 ,,	5 0	9 6	,,

Intermediate Sizes in proportion.

Crystal Glass Shades, Ebony and Gilt Stands, Gas and Lamp Glasses, Chimneys and Globes, &c.

☞ *For Window and Orchard House Glass see Advertisement of Sept.* 21.

ST. PANCRAS IRON WORKS,
OLD ST. PANCRAS ROAD, N.W.

IRON HURDLES, FENCING, AND GATES.

THE PROPRIETORS OF THE ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, WERE AWARDED THE SILVER MEDAL of the ROYAL AGRICULTURAL SOCIETY for their IRON HURDLES and GATES, which, by their peculiar construction, are more than twice as strong and durable as those in ordinary use.

Lists per post on application. Gates from 30*s.* to 500*l.*

The Hurdles can be seen in process of Manufacture at the Works.

GAME WIRE NETTING.

PROFESSOR VARNELL'S ENAMELLED AND WROUGHT-IRON STABLE FITTINGS.

These Patent Mangers and Stable Fittings obtained the Commendation and the Silver Medal of the Royal Agricultural Society of England and the Royal Agricultural Society of Ireland, are adopted by the Royal Veterinary College, and Professor Spooner of that Institution states that they should be used by all who value the health and comfort of their horses. They can be had plain, galvanised, or enamelled.

A Show Room is devoted entirely to every description of Stable Furniture, and full-sized stalls and loose boxes are erected for inspection at St. Pancras Iron Works.

ADDRESS—THE MANAGERS,
ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, N.W.,
Opposite Old St. Pancras Church.

MR. SAMUELSON

WILL EXHIBIT HIS

NEW SELF-ACTING REAPING MACHINE, with Side Delivery in Sheaves,

AND OTHER IMPLEMENTS,

AT THE

BIRMINGHAM CATTLE SHOW, DECEMBER 2, 3, 4, & 5.

WEEKS'S UPRIGHT TUBULAR BOILER.

SUBJOINED IS THE REASON WHY

WEEKS'S ONE-BOILER SYSTEM

HAS BECOME THE ORDER OF THE DAY FOR HEATING BY HOT-WATER.

WEEKS'S No. 1 BOILERS	are heating upwards of		200	feet of Pipe.
WEEKS'S No. 2 BOILERS	,,	,,	300	,,
WEEKS'S No. 3 BOILERS	,,	,,	600	,,
WEEKS'S No. 4 BOILERS	,,	,,	1500	,,
WEEKS'S No. 5 BOILERS	,,	,,	4000	,,
WEEKS'S No. 6 BOILERS	,,	,,	12,000	,,

The above statistics being accounts of hundreds of apparatus disseminated throughout Europe in practical operation, J. W & Company publish them with the pleasing satisfaction that all who may honour them with their esteemed commands must e enormous savings both in fuel and labour by the adoption of their ONE-BOILER SYSTEM.

JOHN WEEKS & COMPANY,

Horticultural Builders and Hot-Water Apparatus Manufacturers,

KING'S ROAD, CHELSEA, S.W.

*** *Illustrated Catalogues, Designs, and Estimates forwarded free on application.*

THE FOLLOWING IS THE REASON WHY

ORMSON'S ONE-BOILER SYSTEM

AND PATENT JOINTLESS TUBULAR BOILERS

have become so universally adopted on account of their superior power, great safety, and economy.

ORMSON'S No. 1 BOILERS	are heating upwards of		250	feet of Pipe.
ORMSON'S No. 2 BOILERS	,,	,,	600	,,
ORMSON'S No. 3 BOILERS	,,	,,	1300	,,
ORMSON'S No. 4 BOILERS	,,	,,	3000	,,
ORMSON'S No. 5 BOILERS	,,	,,	5000	,,

Boilers of larger sizes if required to heat 12,000 or 15,000 feet of Pipe.

H. Ormson having a most complete Set of Steam-power Machinery, is in a position to execute orders w the greatest despatch, and at considerably reduced prices.

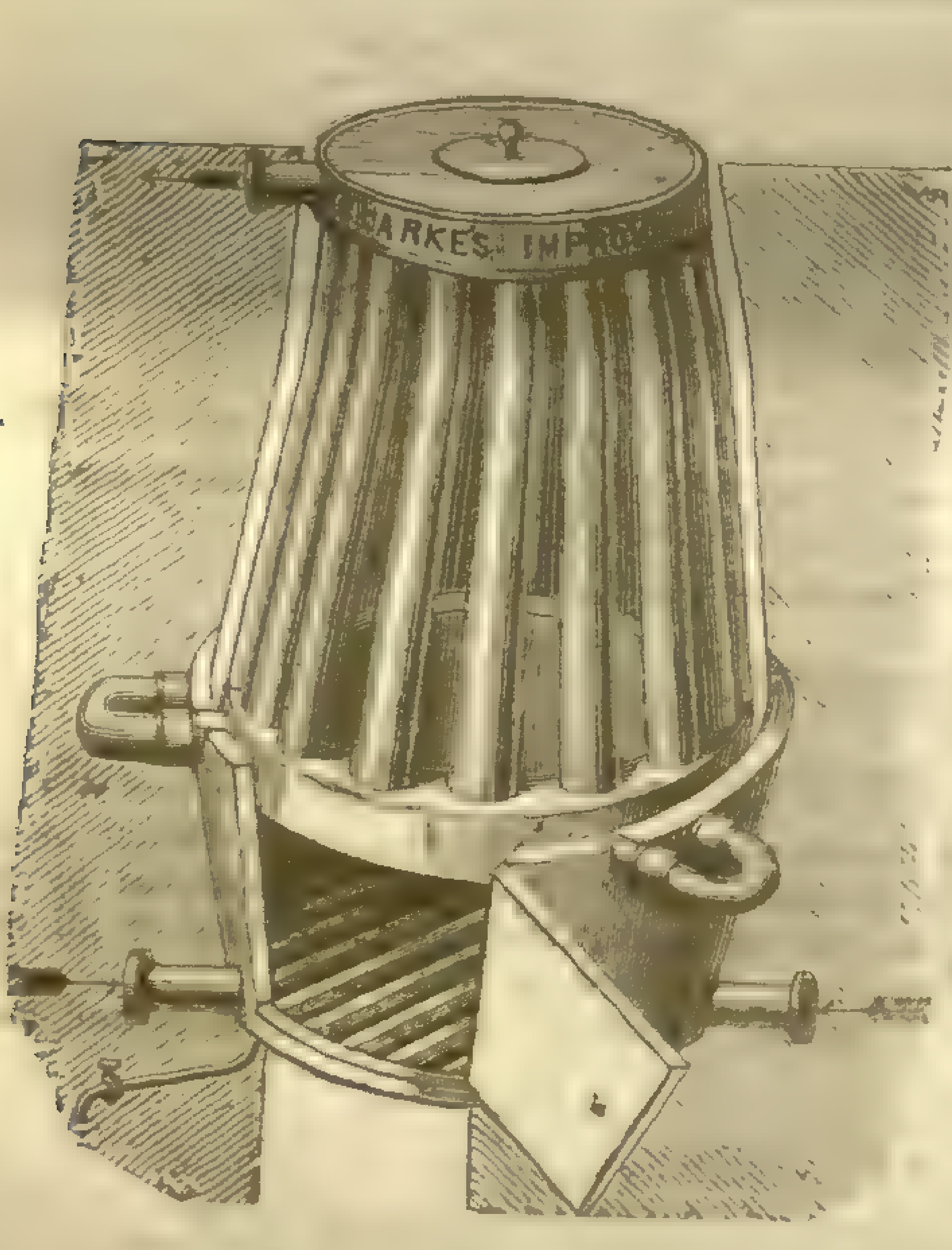
IRON and WOOD CONSERVATORIES of the most chaste and elaborate design; VINERIE PINERIES, PEACH HOUSES, FORCING HOUSES, GLASS CASES for WALL TREES, PITS, &c. design and built, combining all the latest improvements, so as to answer their intended purposes without ris disappointment.

Plans, Specifications, and Estimates on application.

HENRY ORMSON, Horticultural Builder to Her Majesty,

AND HOT-WATER APPARATUS MANUFACTURER TO THE COMMISSIONERS OF HER MAJESTY'S ROYAL PALACES AND PUBLIC BUILDINGS, AND TO THE ROYAL HORTICULTURAL SOCI

STANLEY BRIDGE, KING'S ROAD, CHELSEA, LONDON, S.W.



CLARKE'S NEW PATENT CYLINDRICAL, TUBULAR CAST-IRON BOILER.

Mr. Clarke begs most respectfully to solicit the attention and patronage of Noblemen, Florists, Nursery and others, to his new and invaluable HEATING APPARATUS, which for economy, efficiency, durability, and effect, sur all submitted to the public.

The bottom of this Boiler has tubular fire-bars, with a tap to draw off any sediment. The cylindrical side forming the Furna a water space of about 1¾ inch all round, communicating with the upper or tubular part. Those furnace sides in other constru are generally brickwork, hence a great amount of heating surface is obtained; a cast-iron plate, commonly called a hollow is provided for the top of the Boiler to prevent the heat escaping too rapidly. The metal in these Boilers is half an inch thick, perf sound, and has no joints exposed to the action of the fire.

A Boiler of this construction 2 feet 6 inches high by 1 foot 6 inches diameter, only contains about 10 gallons of water, and will effectually 2000 feet of 4-inch piping with three-fourths less fuel usually consumed by the old hot-air flue system. It will do, the work of four ordinary furnaces, having a larger heating surface than any other construction. This Boiler is much esteemed highly recommended by Messrs. Thos. Davies & Co., Nurserymen, Wavertree, Liverpool.

Mr. C. also begs to draw the attention of the Nobility to his NEW GAS HOT-WATER APPARATUS, admirably adapted for Greenhouses, Offices, and Shops. This Apparatus acts as a Stove, and a circulating Heating Apparatus as well. It may be placed room or Greenhouse with the greatest safety, and without the slightest smell. It requires but little Gas, as it only holds three of water, and will heat 300 feet of inch bore piping, and may be had at a small cost.

N.B. Churches, Chapels, Greenhouses, and all Public Buildings heated on the most reasonable terms, and upon the most scien principles. Hot-Water Apparatuses out of order put into first-class working condition.

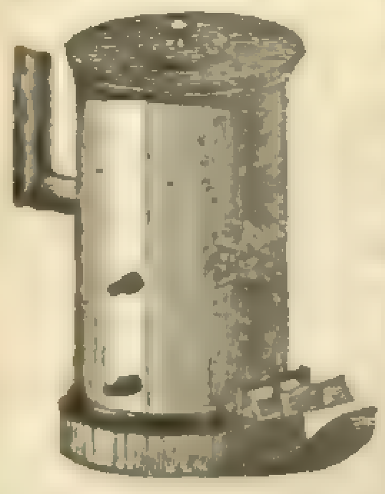
☞ *Estimates and Prices sent Post Free by applying to the Eagle Iron Foundry, 25, Seel Street, Liverpool.*

T. C. CLARKE, Civil and Hydraulic Engineer, Proprietor

(Late J. A. HASWELL).

JOHN SHEWEN, Sevenoaks, Kent, Manufacturer of all kinds of HOTWATER APPARATUS for Horticultural Purposes, Public Buildings, Dwelling Houses, and Offices, on the most improved principles, and of Rogers's Conical and the Improved Corrugated Saddle Boiler.

RIDDELL'S PATENT SLOW-COMBUSTION COTTAGE BOILER for HEATING CONSERVATORIES, ENTRANCE HALLS, BATHS, &c., by the Circulation of Hot Water.



Requires no brickwork setting; will keep in action from 12 to 18 hours without attention, at an expense of about 3*d*. per day. Is perfectly safe, requires no additional building, and may be seen in operation daily at the

Patentee's Warehouse, 155, Cheapside, London, E.C.

Price complete from 3*l*. 10*s*.

Illustrated Prospectus free, and Estimates prepared for Erecting Hot-Water Apparatus of any magnitude.

West of England, Ireland, and Wales.

VINCENT SKINNER (*late Partner with* J. WEEKS & Co.), erects CONSERVATORIES, HOTHOUSES, and HOT-WATER APPARATUS.

His improved Pipe Boilers, which give such universal satisfaction for Warming **Churches and Hothouses**, will heat from 100 to 2000 feet of Pipe.

Plans and Estimates on application to V. SKINNER, Bridewell Street, Bristol.

Greenhouses, Orchard Houses, &c.

H. FREEMAN'S Horticultural Works, Triangle, Hackney, N.E. Established 20 years. Substantially made GREENHOUSES, glazed, ready for fixing, 42 ft. by 13 ft., 50*l*.; 21 feet by 13 feet, 28*l*.; 12½ ft. by 10 ft., 15*l*. ORCHARD HOUSES 10 per cent. cheaper. A large assortment kept. Estimates given for Heating, or any branch in iron or wood.

HOT-WATER PIPES, at Wholesale Prices, with Elbows, Syphons, Tee Pipes, and every other connection. Wrought and Cast-iron Boilers, Saddle, Conical, Cylinder, and Eliptic, from 24*s*. each. Improved Boilers and Iron Stands to use without brickwork, 50*s*. each. Valves from 12*s*. 6*d*. each. Beck's Patent Valves. Furnace Doors, Furnace Bars, Supply Cisterns, and Builders' Castings of every description in stock, at Mr. LYNCH WHITE's Iron Wharf, Upper Ground Street, Blackfriars Bridge, London, S.

JOSEPH SMITH, HORTICULTURAL BUILDER, New Road, Hammersmith, W., makes of good materials LEAN-TO and SPAN-ROOF HOUSES, at 8*d*. per foot; if glazed and painted, 1*s*. PIT LIGHTS, painted, complete, 8*d*.; if unglazed, 4½*d*.

THREE ready-made HOUSES for SALE, viz.:—

	£	s.	d.
24 by 12 feet 6 inches Lean-to	£34	0	0
23 by 12 feet ,, ...	32	10	0
27 by 16 feet 6 inches Span	47	10	0

Also Fifteen 6 by 4 feet LIGHTS, glazed with 15 oz. glass, 16*s*. each: and Fifteen with 21 oz., 17*s*. 6*d*. each; Eight 7 feet 6 inches by 4 feet, 19*s*. 6*d*., all well painted.

WEEKS'S UPRIGHT TUBULAR BOILER.

SUBJOINED IS THE REASON WHY

WEEKS'S ONE-BOILER SYSTEM

HAS BECOME THE ORDER OF THE DAY FOR HEATING BY HOT-WATER.

WEEKS'S No. 1 BOILERS	are heating upwards of	200	feet of Pipe.
WEEKS'S No. 2 BOILERS	,, ,,	300	,,
WEEKS'S No. 3 BOILERS	,, ,,	600	,,
WEEKS'S No. 4 BOILERS	,, ,,	1500	,,
WEEKS'S No. 5 BOILERS	,, ,,	4000	,,
WEEKS'S No. 6 BOILERS	,, ,,	12,000	,,

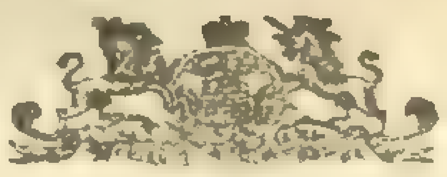
The above statistics being accounts of hundreds of apparatus disseminated throughout EUROPE in practical operation, J. WEEKS & COMPANY publish them with the pleasing satisfaction that all who may honour them with their esteemed commands must effect enormous savings both in fuel and labour by the adoption of their ONE-BOILER SYSTEM.

JOHN WEEKS & COMPANY,

HORTICULTURAL BUILDERS AND HOT-WATER APPARATUS MANUFACTURERS,

KING'S ROAD, CHELSEA, S.W.

*** *Illustrated Catalogues, Designs, and Estimates forwarded free on application.*

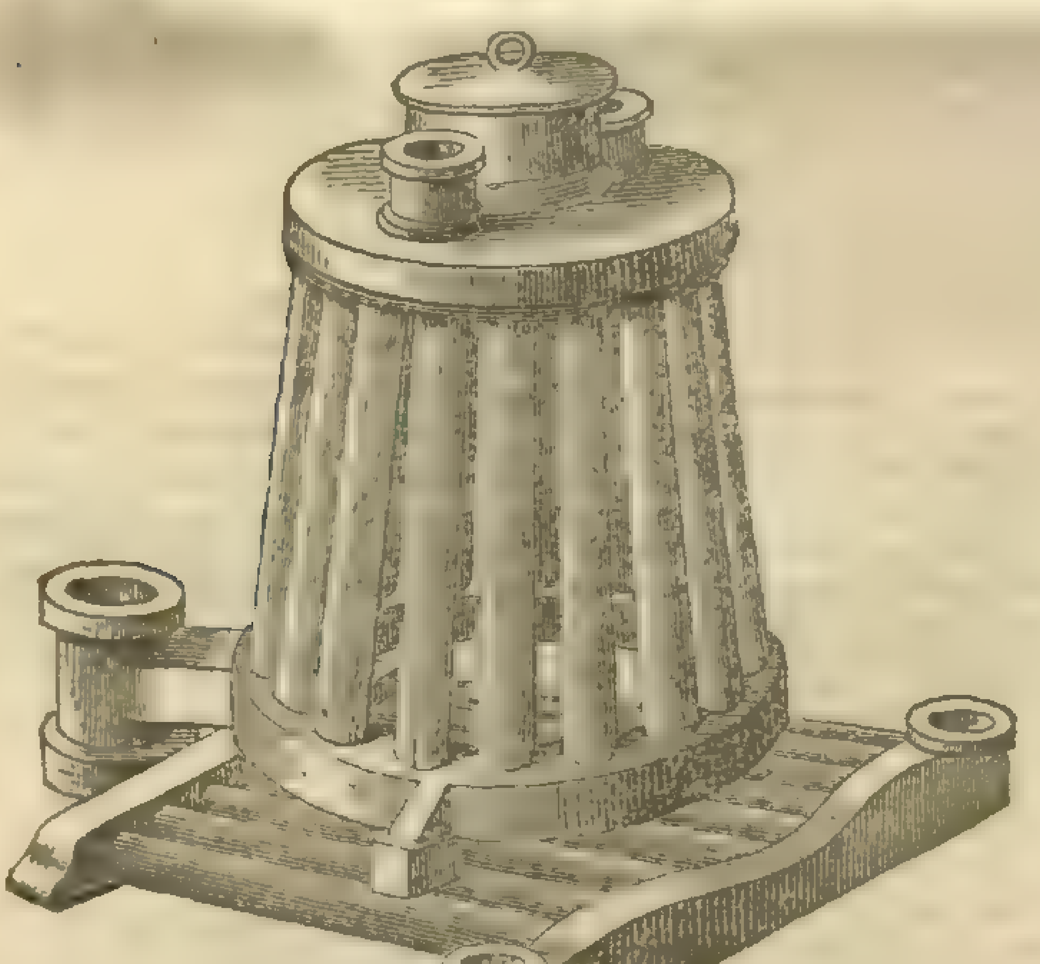


THE FOLLOWING IS THE REASON WHY

ORMSON'S ONE-BOILER SYSTEM

AND PATENT JOINTLESS TUBULAR BOILERS

have become so universally adopted on account of their superior power, great safety, and economy,



ORMSON'S No. 1 BOILERS	are heating upwards of	250	feet of Pipe.
ORMSON'S No. 2 BOILERS	,, ,,	600	,,
ORMSON'S No. 3 BOILERS	,, ,,	1300	,,
ORMSON'S No. 4 BOILERS	,, ,,	3000	,,
ORMSON'S No. 5 BOILERS	,, ,,	5000	,,

Boilers of larger sizes if required to heat 12,000 or 15,000 feet of Pipe.

H. ORMSON having a most complete Set of Steam-power Machinery, is in a position to execute orders with the greatest despatch, and at considerably reduced prices.

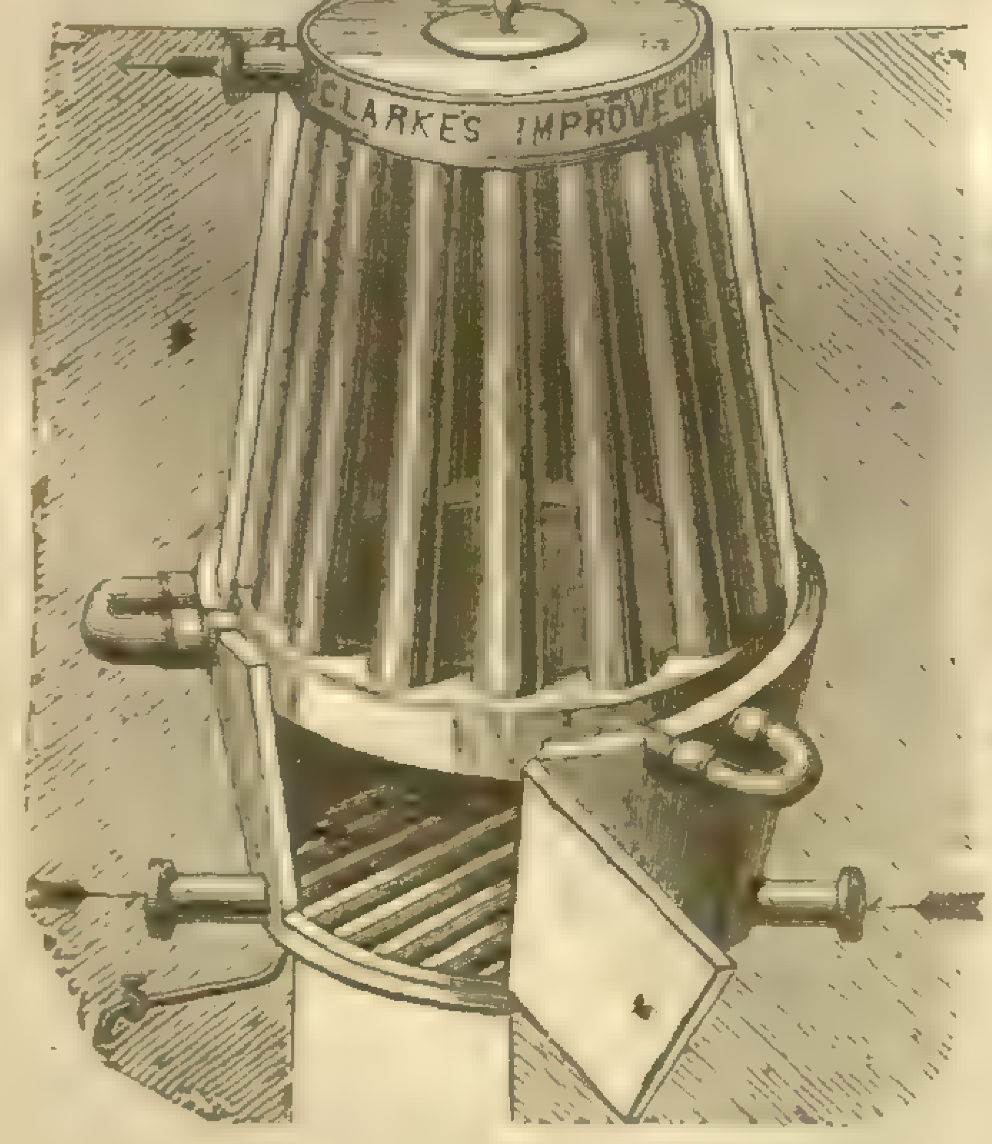
IRON and WOOD CONSERVATORIES of the most chaste and elaborate design; VINERIES, PINERIES, PEACH HOUSES, FORCING HOUSES, GLASS CASES for WALL TREES, PITS, &c. designed and built, combining all the latest improvements, so as to answer their intended purposes without risk of disappointment.

Plans, Specifications, and Estimates on application.

HENRY ORMSON, HORTICULTURAL BUILDER TO HER MAJESTY,

AND HOT-WATER APPARATUS MANUFACTURER TO THE COMMISSIONERS OF HER MAJESTYS ROYAL PALACES AND PUBLIC BUILDINGS, AND TO THE ROYAL HORTICULTURAL SOCIETY

STANLEY BRIDGE, KING'S ROAD, CHELSEA, LONDON, S.W.



CLARKE'S NEW PATENT CYLINDRICAL, TUBULAR, CAST-IRON BOILER.

MR. CLARKE begs most respectfully to solicit the attention and patronage of Noblemen, Florists, Nurserymen, **and others, to his new and invaluable HEATING APPARATUS, which for economy, efficiency, durability, and effect, surpasses all submitted to the public.**

The bottom of this Boiler has tubular fire bars, with a tap to draw off any sediment. The cylindrical side forming the Furnace has **a water space of about 1¾ inch all round, communicating** with the upper or tubular part. Those furnace sides in other constructions **are generally brickwork, hence a great amount of heating** surface is obtained; a cast-iron plate, commonly called a hollow top, is **provided for the top of the Boiler to prevent** the heat escaping *too* rapidly. The metal in these Boilers is half an inch thick, perfectly **sound, and has no joints exposed** to the action of the fire.

A Boiler of this construction 2 feet 6 inches high by 1 foot 6 inches diameter, only contains about 10 gallons of water, and will heat **effectually 2000 feet of 4-inch piping with** three-fourths less fuel usually consumed by the old hot-air flue system. It will do, in fact, **the work of four ordinary furnaces, having** a larger heating surface than any other construction. This Boiler is much esteemed and **highly recommended by Messrs. Thos. Davies & Co.**, Nurserymen, Wavertree, Liverpool.

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N.B. Churches, Chapels, Greenhouses, and all Public Buildings heated on the most reasonable terms, and upon the most scientific principles. Hot-Water Apparatuses out of order put into first-class working condition.

☞ ***Estimates and Prices sent Post Free by applying to the Eagle Iron Foundry, 25, Seel Street, Liverpool.***

T. C. CLARKE, CIVIL and HYDRAULIC ENGINEER, PROPRIETOR

(LATE J. A. HASWELL).

Fruit Trees.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Sea Kail, Forcing and Other.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Roses.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Ornamental Trees and Shrubs.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Hollyhocks.

WM. PAUL (Successor to the late A. PAUL), CHESHUNT NURSERIES, Waltham Cross, London, N.

Orchard House Trees in Pots.

THOMAS JACKSON and SON have a fine Stock of the above, well established in Pots, large and full of Flower Buds, many of them having this season borne 40 to 50 fruits; they consist of

CHERRIES	PEARS	NECTARINES
PEACHES	GRAPES	PLUMS

3s. 6d. to 7s. 6d. each.

Nurseries, Kingston, S.W.

Wall-Trained Fruit Trees.

THOMAS JACKSON AND SON having a great extent of walls devoted to FRUIT TREES, respectfully invite an inspection of their large stock of very superior Dwarf and Standard-trained Trees. Many of them having borne fruit this season are specially suited for planting in houses for fruiting the first year

Nurseries, Kingston, S.W.

Fruit Trees.

JAMES GARAWAY AND CO. call attention to their stock of the above, comprising

APRICOTS NECTARINES PEACHES	Standard and Dwarf-trained	APPLES CHERRIES PEARS PLUMS	Dwarf-trained, Standard, and Dwarf-quarter.

All of first-rate quality and in good condition.

The STANDARD PEARS are unusually fine, and will be sold at a very low rate to purchasers of quantities.

CATALOGUES and prices free by post.

JAMES GARAWAY & Co., Durdham Down Nurseries, Bristol.

Orchard House Trees.

J. AND J. FRASER, Lea Bridge Road Nurseries, N.E., having a fine stock of—

PEACHES	APPLES
NECTARINES	PEARS
APRICOTS	PLUMS and CHERRIES

in Pots, well set with bloom buds, beg respectfully to offer them to the notice of intending Purchasers.

A CATALOGUE will be forwarded on application.

The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

Vines for Fruiting in Pots.

J. AND J. FRASER, Lea Bridge Road Nurseries, N.E., beg to offer strong VINES with well ripened wood of the best varieties.

A CATALOGUE will be forwarded on application.

The Nurseries are easily reached by Eastern Counties Railway to Lea Bridge Station.

Grape Vines from Eyes in Pots.

LUCOMBE, PINCE, AND CO. have now a very fine healthy stock of strong VINES of all the choicest sorts, with well ripened canes 6 to 8 feet high, propagated from eyes taken from their own experimental Vinery.

LISTS of SORTS and prices may be had on application to them.

Exeter Nursery, Exeter.

Fine Vines from Eyes in Pots.

WM. CUTBUSH, JUN., Barnet Nurseries, Barnet, Herts, begs to invite an inspection of his fine STOCK of FRUITING and other VINES, consisting of all the best varieties in cultivation. Also to his fine stock of Specimen, Half-specimen, and young Plants of NEW HOLLAND PLANTS, INDIAN AZALEAS, and STOVE PLANTS.

CATALOGUES on application.

Cæsarean Nurseries, Island of Jersey.

STRONG FRUITING VINES (of best sorts) 2s. 6d. each, or 25s. per dozen. PYRAMIDAL FRUITING PEAR TREES (of best sorts), 1s. 8d. each, or 20s. per dozen; EVERGREEN OAKS (in pots), 30s., 40s., 50s., 75s., and 100s. per 100; CHINESE ARBOR-VITÆS (in pots) 30s., 40s., 50s., and 75s. per 100; SILVER STRIPED EUONYMUS, 20s., 30s., 40s., 50s., and 75s. per 100; ULMUS SAMIENSIS, or UPRIGHT GUERNSEY ELMS, 30s., 50s., and 75s. per 100.

A large GENERAL STOCK of FRUIT TREES and SHRUBS at equally low prices. CATALOGUES on application.

CHARLES B. SAUNDERS, Nurseryman—Dec. 7.

PINE PLANTS and VINES in POTS.—The Pines are principally QUEENS, very strong, healthy, and clean, in all sizes up to those fit for Fruiting. The VINES are principally BLACK HAMBURGH, fit for planting, with well ripened canes, and their pots full of healthy roots. Both can be warranted.

Apply to M. ROCHFORD, Market Gardener, Page Green, Tottenham, N.

Pine Plants on Sale, by Private Treaty.

MESSRS. WALKER AND ACKERLEY have received instructions to OFFER for SALE, by Private Treaty, 200 PINE PLANTS, comprising Jamaicas, Queens, and Envilles, of various ages, some in fruit, the whole perfectly free from bug.

Apply to Messrs. WALKER & ACKERLEY, Auctioneers, 55, Church Street, Liverpool.

M. A. LAKE begs respectfully to invite attention to a large stock of well-grown FRUIT TREES of the choicest kinds, consisting of dwarf-trained Peaches, Nectarines, Apricots, Pears, Plums, Cherries, and Apples; Standard Pears and Plums, Gooseberries and Currants, an immense stock of the best varieties. Vines of sorts, Rhubarb Roots, &c., English and Turkey Oak, Spanish and Horse Chestnut, Poplars of sorts, Sycamore, Birch, Weeping Ash, Standard Double Blossom Pinks, and Scarlet Thorns, very fine for immediate effect; Red Cedars, Arbor-vitæs, English Yews, Common Laurels, and transplanted Hollies. Prices on application.

The Nursery, Bridgwater.

New Seeds, Growth of 1861.

ROYAL BERKSHIRE SEED ESTABLISHMENT.

SUTTON AND SONS are now prepared to execute orders for all kinds of SEEDS. The prices will be lower and the quality finer than usual owing to the very favourable harvest.

Royal Berkshire Seed Establishment, Reading.

The best Show Hyacinths.

SUTTON'S SELECTION.

HYACINTHS, choice sorts, by name, 9s. to 12s. per dozen. Ditto ditto, good, 6s. per dozen.

Also, all other kinds of BULBS, good and cheap, as see SUTTON'S PRICED CATALOGUE, now ready, post free.

Royal Berks Seed Establishment, Reading.

The "Student" Parsnip.

MESSRS. SUTTON AND SONS have the honour of offering to the public the Stock of SEED of this delicious and finely formed Parsnip, which was ennobled from the wild Parsnip by Professor Buckman, F.L.S., &c., of the Royal Agricultural College, Cirencester, who kindly entrusted to them the Seed, originally produced by himself, from which the present stock has been raised by Messrs. SUTTON & SONS.

This is exclusively in their possession; and may be had in Packets of 1s. each, containing 1000 Seeds (post free), direct from SUTTON & SONS, or through the undermentioned Firms who have ordered a supply. Additional names will be published in future Advertisements:—

Messrs. Hurst & M'Mullen, Leadenhall Street, London.
Messrs. Beck, Henderson, & Co., Adelphi, London.
" Noble, Cooper, & Co., Fleet Street, London.
" James Carter & Co., High Holborn, London.
" Wheeler & Son, Gloucester.

Royal Berkshire Seed Establishment, Reading.

BUCKLEY'S NEW CRIMSON RHUBARB.—It is very early, rich rose red quite through, fine flavour and very productive. Market Gardeners and private growers will find it the very best sort for forcing.

Plants, 1s. 6d. each or 16s. per dozen, may be had of Messrs. HURST & M'MULLEN, 6, Leadenhall Street, London, E.C.; or JOHN BUCKLEY, Saltisford, Warwick.

See opinion of Dr. Lindley in *Gardeners' Chronicle*.

Large Rhubarb Roots for Forcing.

J. G. WAITE has for Sale several Thousands of large strong 3 years old ROOTS of the following sorts of RHUBARB.

MYATT'S LINNÆUS }
MITCHELL'S ALBERT } 30s. per 100.

Such fine large Roots are seldom to be had.

J. G. WAITE, Seed Merchant, 181, High Holborn, London, W.C

MONRO'S RABLEY CUCUMBER is the best flavour, the greatest bearer, the handsomest and hardiest of all Frame Cucumbers. Average length 15 to 18 inches, with short handle; skin intense dark green, spines small and black. 3500 handsome fruit were cut from a house 40 feet by 20 feet from the 1st April to the end of August, 1861, without bottom heat.

Packet of Eight Seeds, free by post for 2s. 6d., to be had only of WILLIAM PAUL, Nurseries and Seed Warehouse, Waltham Cross, N.

To the Trade and Others.

INGERSOLL'S SUPERIOR NEW TALL-BRANCHING WRINKLED MARROW PEA.

F. CLARK, NURSERYMAN and SEEDSMAN, Lewisham, Kent, S.E. (Successor to CHAUNDY & Co.), having the whole Stock of the above superior PEA consigned to him, raised by Mr. F. H. Ingersoll, begs to announce that he intends sending out this season. It surpasses all other Wrinkled varieties in cultivation, both for superior flavour and abundant cropper. Early orders will oblige.

Price to the Trade on application.

Superb Balsams.

F. AND A. SMITH are now sending out Seed of fine Superior BALSAMS in collections of

9 Colours, separate	2s. 6d. each.
The same, mixed	2 0 "
Half the quantity	1 0 "

The above are in 18 distinct and bright colours, of selected Seed, from the most double varieties.

Dulwich, Surrey.

Dutch and other Bulbs.

ROBERT PARKER begs to inform his friends and patrons that his PRICED and DESCRIPTIVE CATALOGUE of the above, containing selections of the finest varieties in cultivation, is now ready, and will be forwarded post free on application.

Exotic Nursery, Tooting, Surrey, S.

Quick.

H. AND F. SHARPE are prepared to offer of the finest quality,

Strong 2-years' Transplanted QUICK, 3 feet high,
Strong 2-years' Seedling do., 2 feet high,

at very moderate prices, which may be had, with samples, on application.

Seed Growing Establishment, Wisbeach.

TO THE TRADE.

8,000,000 1 year LARCH,	1,000,000 2 year SCOTCH FIR
2,000,000 2 year NORWAY SPRUCE FIR	2,000,000 2 " QUICK
	1,000,000 1 " BEECH

Prices and Samples to be had on application to MICHAEL BURKE, Drumlargan Nurseries, Summerhill, Co. Meath, Ireland.

A reference required from unknown correspondents.

Seedling Thorn Quicks.

L. T. DAVIS begs to offer Five Millions of 2-year at extremely low prices, which, with Samples, can be had on application. Being grown in light gravelly soil they are well furnished with healthy roots, and would answer well or transplanting.

Ogle's Grove Nursery, Hillsborough, near Belfast.

500,000 QUICKS, 2 years' seedling, 18 to 24 inches, and 24 to 30 inches, and 2 years transplanted, 2½ to 3 feet.

GOOSEBERRIES and CURRANTS, leading kinds, 70s. to 80s. per 1000.

EVERGREEN PRIVET, from 2 to 5 feet, 20s. to 30s. per 1000.

The above are all strong and well rooted.

For prices and samples apply to J. & W. COCKS, Deeping Nurseries, near Spalding.—Dec. 7.

Forest Trees and Coniferæ.

ALEXANDER PONTEY, of the Plymouth Nursery and Seed Establishment, begs to inform gentlemen intending to Plant and the Trade generally that his Nursery abounds with several hundred thousand TREES, which have been frequently transplanted to insure their growth.

A. P. also offers an immense stock of the finest and most useful CONIFERÆ for ornament and shelter, delivered free at any of the North Devon, South Devon, or Cornish Lines of Rail.

CATALOGUES with prices to be had on application.

SEEDLINGS, SEEDLINGS.

Per 1000,	s.	d.
1 year Larch	1	6
1 year Scotch Fir ..	1	3
2 year ditto	2	0
4 year do. Transplanted	20	0
2 year Norway Spruce	1	6
3 year ditto ..	2	6
2 & 3 year Transplanted ditto	8	0
2 year White ditto ..	6	0
3 year ditto ditto ..	8	0
3 year Silver Fir ..	8	0
1 year Balm of Gilead ..	5	0
2 year ditto ditto ..	8	0
1 year Pinus austriaca ..	6	0
2 year ditto ditto ..	10	0

Per 1000,	s.	d.
1 year Pinus Laricio ..	[illegible]	[illegible]
1 year ditto maritima ..	[illegible]	[illegible]
2 year ditto ditto ..	[illegible]	[illegible]
2 year ditto montana ..	[illegible]	[illegible]
1 year Birch	[illegible]	[illegible]
1 year Alder	[illegible]	[illegible]
1 year Beech	2	[illegible]
1 year Sycamore ..	2	[illegible]
2 year Ash	4	[illegible]
2 year Quick	5	[illegible]
1 year Laurel	20	[illegible]
3 year Evergreen Privet	30	[illegible]
2 year Laburnum ..	[illegible]	[illegible]
2 year Crab Stock ..	5	[illegible]

The Subscriber begs to call the attention of the nobility and gentry to his large Stock of the above Seedlings, &c. Any order large or small will be punctually attended to. The Trade supplied on liberal terms.

Application to be made to MICHAEL BURKE, Drumlargan Nurseries, Summerhill, Co. Meath.

A reference required from unknown correspondents. Post Office Orders to be made payable at Dublin.

FOR SALE, EIGHT very handsome DEODARS, 7 to 8 feet high, also a pair of ARAUCARIAS, nearly feet, well formed and robust, 10l. the whole; a deduction to the Trade.

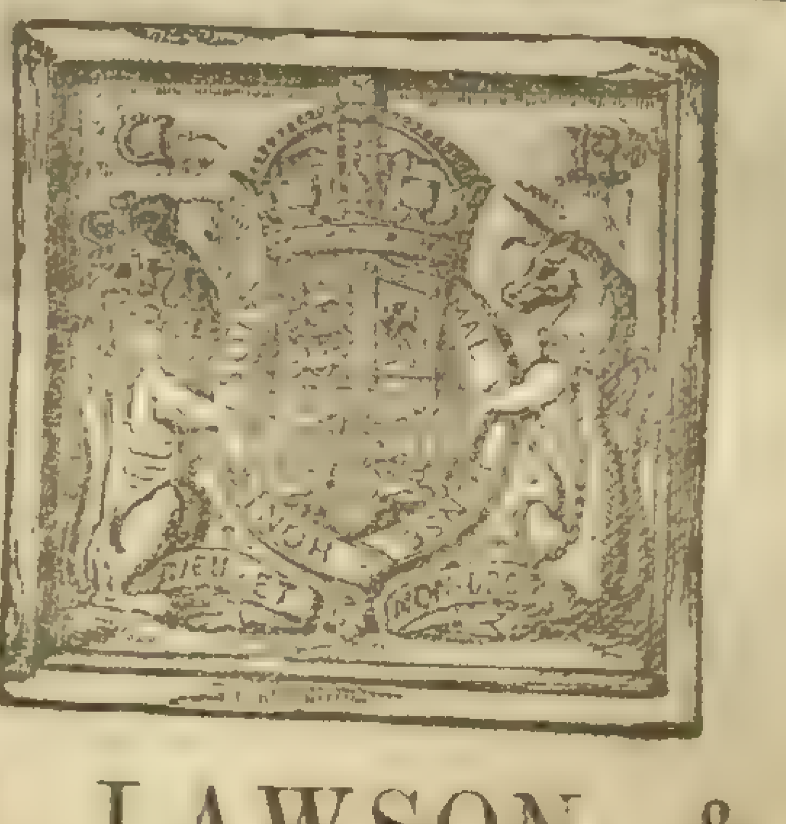
Fine bushy LAURELS, 2 to 3 feet, 15s. to 20s. per 100.

ENGLISH ELM and WALNUT TREES, very cheap.

EPPS' Nursery and Seed Establishment, Maidstone.

SMITHFIELD CLUB SHOW.

STANDS



Nos. 705 to 729.

PETER LAWSON & SON,

THE QUEEN'S SEEDSMEN,

EDINBURGH AND LONDON, AND HULL,

Exhibit Collections of GRAIN in the Straw, and SEED; MANGEL WURZEL, SWEDE, and other ROOTS grown in various parts of the Kingdom.

27, GREAT GEORGE STREET, WESTMINSTER, S.W.

Exhibition of Chrysanthemums.

JOHN SALTER, F.R.H.S., invites the PUBLIC to VISIT his [illegible] Collection of these beautiful flowers, [illegible] now in FULL BLOOM.

[illegible] WINTER GARDEN alone contains several thousands of [illegible], and presents a coup d'œil unique in this or any other [illegible]. Free admission every day except Sunday.

[illegible] Nursery, William Street, near Hammersmith [illegible], W.

New Cinerarias, Gloxinias, and Pelargoniums.

F. AND A. SMITH can still supply a few sets of their New GLOXINIAS, CINERARIAS, and PELARGONIUMS.

See *Gardeners' Chronicle* of Oct. 5, and CATALOGUE, which may be had gratis.

Dulwich, Surrey S.

WEBB'S GIANT POLYANTHUS and GIANT COWSLIP.—These beautiful early spring flowers, very [illegible], and in all varieties of colour, in seed or roots; also FLORIST FLOWERS, POLYANTHUS in roots, and DOUBLE WHITE PRIMROSE.

Apply GEORGE MACE, Calcot Gardens, near Reading.

Hollyhock Seed—Sow at once.

PAUL AND SON'S unrivalled Collections of the above are now ready in 12 fine distinct named varieties, [illegible] packets, [illegible]; [illegible] varieties do., do., 2s. 6d.; packets of [illegible] mixed, 1s.; also a large stock of fine healthy plants (see CATALOGUE now ready, post free on application).

Old Nurseries, Cheshunt, Herts.

Superb Double Hollyhocks.

SAFFRON WALDEN NURSERY.

WILLIAM CHATER'S 15th ANNUAL DESCRIPTIVE and NEWLY CLASSIFIED LIST is now ready, and will be forwarded to any address on receipt of one **postage stamp.**

WILLIAM CHATER, Nurseryman and Seedsman, Saffron Walden, Essex.

Can be Seen at Sunningdale Nursery, Sunningdale Station, South-Western Railway.

CHARLES NOBLE invites inspection, and would remind all interested, that his RHODODENDRONS have taken First Prizes at the opening Show of the Royal Horticultural Society, and every other show at which they have been exhibited during the last two years.

RHODODENDRONS for forcing; KALMIAS for forcing; and a magnificent stock of all the finest kinds of Rhododendrons in the world. CONIFERS and Hardy EVERGREENS by the 100 or 1000. ROSES and a General Nursery Stock well worthy the inspection of intending Planters or Nurserymen.

Wholesale Catalogue.

GEORGE JACKMAN AND SON'S PRICED and DESCRIPTIVE CATALOGUE for 1861 and SPRING 1862, comprising Fruit Trees of all the leading kinds, new and selected Roses, fine varieties of American Plants, Choice and Rare Conifers, Evergreen and Deciduous Trees and Shrubs, and a fine Stock of Transplanted Forest Trees, &c., can be had free on application.

Woking Nursery, Surrey.

The Gardeners' Chronicle.

SATURDAY, DECEMBER 7, 1861.

MEETINGS FOR THE ENSUING WEEK.

TUESDAY, Dec. 10 { Royal Horticultural (Fruit and Floral Committees, at S. Kensington .. Noon

IN an excellent work on FRUIT FORCING* which has reached us lately, there occur some remarks to which it is desirable to draw attention at this season of the year. The author, M. PYNAERT, now a Garden Architect, but formerly Head Gardener to the Prince DE LIGNE at the Chateau de Belœil, makes the following observations on the roots of plants. We merely condense them. "The absorbing power of roots is singularly stimulated by the influence of heat, and ceases completely when the material in which they are placed sinks below freezing. It is only when they are frozen that the action of roots stops. Even in the middle of winter, when trees are leafless, and appear as if plunged in utter torpor, they continue to take up nutritive matter, the accumulation of which in their interior goes on incessantly until the time when heat excites vegetation; it then serves to feed the young shoots as they grow. This makes it evident that the vigour of plants in an artificial climate will always be in proportion to the length of time during which they have been allowed to prepare themselves for a new period of action. For instance the shoots of a Vine, whether out of doors or in a Vinery, will be all the sounder, and the clusters they produce will be all the larger and finer, according to the quantity of nutritive matter provided by the roots while the Vine is at rest. We also find in this same fact a plain explanation of the reason why it is so difficult if not impossible to force stone fruits when they are forced shortly after they have commenced their annual repose by the loss of their **leaves.**

"In this winter vegetation of roots and accumulation of food for future use, on which wholly depends the power of maintaining the vitality of flowers, will also be found an explanation of the badness of the practice of arousing vegetation too suddenly; that is of exposing trees from the first moment of forcing them to too high a temperature, as some gardeners treat the Vine. Buds are constrained to push, and the buds to expand rapidly; but there being no sufficient accumulation of nutritive juices on which they can feed, as there always is in the open air under ordinary circumstances, the buds can only give birth to weakly shoots and imperfect flowers.

"There is another point to which the greater part of gardeners pay little attention, namely, *the period at which young fibres begin to form.* **In the Peach and other stone fruits they first** appear immediately after the fall of the leaf at the end of October. But is it the same with all other fruit trees? I think not. Nevertheless Dr. LINDLEY, in his *Theory of Horticulture*, lays down the principle that this autumnal production of young fibres is general among all plants (where does he say so?), for which reason he recommends that in all cases trees be transplanted before winter. Notwithstanding my respect for this learned writer, I must say that the rule appears to me far from absolute. I think that if it is true for plants that push early, such as the Peach, it is more than doubtful as regards those which start later. Thus, confining myself to fruit trees, all Currants (*Groseillers*), plants that push and flower early, form their fibres before winter; but the Vine, on the contrary, in which I have never remarked the formation of new fibres before winter, does not begin to grow before the end of April or beginning of May."

"I am convinced," adds M. PYNAERT, "that an exact observation of this circumstance in the life of plants would lead to capital results; it would explain the differences of opinion so common among the most experienced gardeners as to some very important gardening operations, as for instance as to the best season for transplanting Conifers. I wish to direct attention to this point. The result of their observations, if published in Gardening periodicals, must necessarily produce a good effect on cultivation. There could be no difficulty in doing this with potted plants. Gardeners who have the management of stove and greenhouse plants are well aware that the best time for re-potting is when the fibres first show. It is just the same with all plants."

Although there is not much novelty in the greater part of these remarks by M. PYNAERT, they have the merit of endorsing by a practical hand some very important truths that are far from being generally understood. Now that forcing is being prepared for, it is the more necessary that they should be called to mind, especially when we consider the terrible failures in forcing fruits experienced last winter by all classes of Gardeners. It is, however, more particularly to the observations on the formation of young roots, or fibrils, that we would direct attention, for, although we doubt whether Dr. LINDLEY has said what is attributed to him, there can be no doubt that it is a point of Horticulture that will be much illuminated by the results of an intelligent and general investigation.

* *Manuel Théorique et Pratique de la Culture forcée des Arbres fruitiers, comprenant tout ce qui concerne l'art de faire murir leurs fruits hors de saison et les moyens de faire de cette culture une speculation lucrative.* Par ED. PYNAERT. Brussels. Small 8vo.

SOME time since attention was drawn by the continental press to the value of what has been called FLEA POWDER, and the substance of the foreign statements was duly transferred to the columns of the *Gardeners' Chronicle* (see p. 312, 1857).

The public on this side the Channel do not seem however to have appreciated the discovery. Whether it is that the British skin is impenetrable to fleas, or that the titillation of these nimble visitors is agreeable, or that we have no fleas, certain it is that nobody here seems to have taken interest in the virtues of the plant. And yet it is a very **pretty plant, hardy enough to grow in any cottage garden, and undoubtedly possesses remarkable** energy. To gardeners too it now seems to offer a point of much interest, whether they are troubled with fleas or not, according to a report by M. BELHOMME, director of the Botanic Garden at Metz, the substance of which is as follows.

He begins by stating that in the powder in question the insect-killing power really resides, but only in a certain part of the plant, which by the way he calls the Pyrethrum cinerarifolium of Dalmatia, not the roseum or carneum of the Caucasus. Both are very nearly allied if not the same. In this as in other Composite plants the flowers grow in heads surrounded by scales. The flowers in the centre of each head are called florets of the disk, and are yellow and tubular; those on the edge of the head, having the form of a strap, are called florets of the ray. Thus a Pyrethrum resembles a Daisy, its heads having 1, scales; 2, florets of the disk; and 3, florets of the ray (commonly called petals). If you reduce to powder and keep separate portions of the stem, or florets of the disk or florets of the ray, you will find that the first has the usual smell of the plant, the second a slight odour of some essential oil, and the third a similar odour but more penetrating. When these three powders are applied to insects it is found that they act very differently, the third being by far the most energetic. This by way of preface.

Now, all gardeners are aware that the Oleander is afflicted with an insect which lives on its leaves, and completely stops up the breathing pores, so that a leaf may be so completely encased among such vermin as to perish under their attacks. Now, says M. BELHOMME, if you blow the powder of the florets of the ray upon these leaves the insects detach themselves, and may all be brushed off by a camel's hair pencil. But the two other powders hardly answer the same purpose. The difference in the action of these three powders may be expressed by numbers as follows. The stems yield 20 per cent. of essential oil, the florets of the disk 40, and the florets of the ray 60. To have the powder in the best possible state the flowers must be gathered full blown, and carefully dried in the shade in the open air; and the powder must be kept in well stoppered bottles. Thus treated it will keep for two years without losing its energy.

Surely this is worth a trial. Any of the great seedsmen can obtain the seed from their continental correspondents; any spare corner in a garden will do to raise the plants; and the labour of drying and powdering the flowers is not worth mention. Mons. BELHOMME speaks only of the insects that infest Oleanders, but if the powder in question will kill the Oleander scale, it will probably destroy all other sorts of scale and aphis; and it is quite possible that it may put an end to that greatest of all pests, the mealy bug.

—— WE find in a recent number of the *Gossip of the Garden* some interesting extracts from letters written from South Australia by Mr. J. F. WOOD, of the Evandale Nurseries, and addressed to Mr. HEXTALL, of Ashby de la Zouch, in which he mentions a remarkable NEW GRAPE, which it would seem fruit growers would do well to be on the look-out for. This Grape is alluded to in the following terms:—"I do not know whether it will interest my friends in England to know the Grapes I am planting my vineyard with, but amongst them are Frontignans, Muscat of Alexandria, the Port-wine Grape, and the Zante Grape for making currants for plum puddings. I think I told you that I had a colonial seedling called BLACK MAMMOTH, which was raised at Port Elliott, from Black Prince, and the same sowing gave me a dozen varieties, but this was the finest. I have four or five eyes which were struck late last season; but they will, I hope, make shoots a foot long during the summer, and then I must send them to you. It has something of the Muscat of Alexandria flavour; the berries are intensely black, and of the size of a medium-sized Orleans Plum. It is not a wine Grape, but I think it would be a grand thing for the English Vineries. If this Grape, when transported to our English climate and placed under circumstances favourable to the development of its real qualities, should bear out the promise which the above description shadows forth, and should moreover prove a manageable variety of good constitution, it will indeed be a grand acquisition to our dessert fruits. It is not unreasonable to expect this, since the writer, who, when living in England, was a contributor to our early volumes, is well known as a man of strict integrity, and must know something of what our English Vineries already contain.

Mr. WOOD also mentions as interesting garden plants, a scarlet and white wild variety of KENNEDYA RUBICUNDA, which he had discovered and transplanted into his nursery; and further, a new Crotolaria, which one of their explorers had brought from the interior, and which was said to eclipse the magnificent Clianthus Dampieri. The Crotolaria, however, he had not seen.

The growth of the VINE for purposes of profit, which has for some time engaged the attention of Australian cultivators, seems to be largely on the increase, as we learn from some statistics now before us, showing the gross produce of the various crops cultivated in Victoria in the years 1860 and 1861. As regards the Grape crop, we find it stated that whilst in 1860 the total number of Vines was 1,896,939, the number in 1861 had increased to 2,838,558. The weight of fruit sold is set down for 1860 at 1473 cwt., and for 1861 at 8096 cwt. The quantity of wine produced shows an average of about 12,000 gallons annually, the actual amounts being 13,966 gallons in 1860, and 11,642½ gallons in 1861, in addition to the manufacture of 150 gallons of brandy in the former year, and 260 gallons in the latter. The colony would seem therefore to be progressing in this branch of the cultivation of the soil, as it is in that of most other

important crops, the increase in the grain crops for the present year being set down in the tables referred to at 1,240,321¼ bushels, of which increase 1,159,915¾ bushels consist of Wheat; while the increase of the green crops, including of Potatoes 28,360½ tons, shows a total of 41,754¼ tons, and that of the hay crop a total of 7982 tons. In respect to Sorghum and Millet, our authority, the *Victorian Agricultural and Horticultural Gazette*, remarks that they are without exception the two best plants grown in the colony, the Sorghum being especially valuable, as every animal will eat it voraciously, and every beast that eats it fattens on it, that is to say in its green state; whilst the seeds are equally fattening as food for horses, pigs, and poultry, and make excellent bread.

In the same publication we get a glimpse of an Australian vineyard belonging to Messrs. CASTELLA and ANDERSON at Yering, a homestead on an estate of above 20,000 acres on the banks of the upper Yarra, about 40 miles from Melbourne. Here, besides an established vineyard of several acres, which produces abundant crops yielding excellent wine, and a nursery of young Vines, there is a new vineyard formed on a gently undulating elevated piece of land, comprising rather over 50 acres. The soil, which is well adapted for Vines, has been mostly broken up with the subsoil plough to a depth of 18 inches, a portion only having been hand trenched. The drainage, naturally good, has been supplemented by drains to carry off the superfluous surface water. The Vines have for the most part been planted within the last two years; they stand regularly in rows 4 feet apart, and great care has been taken to keep the sorts together, which is pointed out as an essential yet too often neglected requirement in the planting of a vineyard. The manufacture of wine alone being aimed at, table Grapes have been excluded, and such sorts only as are known to yield superior wines have been planted. Amongst them are, Black Cluster, Hermitage, La Gloire, Tokay, Reissling, Chasselas, and some Gouais, together with a small number of the Tinto, the best Grape known for adding to the brilliancy of the colour of red wines. Captain Anderson has besides obtained cuttings of many of the best varieties grown in the famous wine and brandy producing districts of France and Spain, which are now being reared in the nursery.

At the same place a Mulberry plantation has been formed, with the view of increasing the production of Victorian silk.

CHRYSANTHEMUMS.

As these keep the love of floriculture alive among the masses, when it would otherwise become dormant, and enliven district shows and gardens with an autumnal nosegay, I propose, for the information of all who could not afford time or expense to come to London to witness the productions exhibited this autumn, to give a list of the best varieties, classified under their different colours for their guidance next season.

LARGE VARIETIES.

White.—Vesta, Defiance, Novelty, Formosum, Lucidum, Goliath, Elise Peel, Globe White, Mrs. W. Holborn, Pearl, Queen of Whites, Leda, Duke.

Yellow.—Yellow Perfection, Plutus, Etoile Polaire, Jardin des Plantes, Luteum formosum, Golden Hermione, Raymond, Golden Trilby, Yellow King, Golden Queen of England, Little Harry and Golden Clustered Yellow.

Blush tipped with Purple.—Hermione, Aimée Ferrière, Cassandra.

Rose and Lilac.—Alfred Salter, Baron Scalebert, Campestroni, Favourite, Hindostan, Léon Legnay, Lord Elgin, Miss Kate, Marechal Duroc, Versailles Defiance, Saccoi Vera, Stellaris globosa, Nonpareil, Princesse Marie, Caractacus, Lady Hardinge, Themis, Madame Lebois, Beauty.

Ruby red and Amber.—Rifleman, Sydenham, Pio Nono, Arthur Wortley, Lysias, Garibaldi, Araxo, Quintus Curtius.

Orange and Carmine and Orange.—Dupont de l'Eure, Warden.

Two-coloured Incurved.—Cyclops, L'Emir, General Harding, Negro Boy, Wonderful (crimson), Arigena (amaranth), Queen of England (blush).

A FEW VARIETIES FOR SHOWING IN 12-INCH POTS: *Yellow.*—Annie Salter, Chevalier Domage, Jardin des Plantes, Plutus, Golden Hermione, Golden Christine.

White and Blush tipped.—Vesta, Defiance, Luridum, Globe, Queen of England, Hermione.

Dark Crimson.—Madame Poggi, Julie Lagravère.

Rosy Blush and Lilac.—Christine, Alma, Princesse Marie, Baron Scalebert, Phidias, Pilot, Prince Albert (crimson).

POMPONES.

White.—Cedo Nulli, Argentine, Modèle, Bijou d'Horticulture, Miss Talford, Diana.

Red and Chesnut.—Bob, Dr. Bois Duval, St. Thais, Mustapha, Miss Julia, Brilliant.

Yellow and Canary.—Drin Drin, General Canrobert, Gerbe d'Or, Solfaterre, Christiana, Canary Bird.

Rose and Carmine.—Hélène, Salamon, Fleurette, Jane Amelia, Riquiqui, Florence, Duruflet, Adonis.

Orange and Chesnut.—Aurore Boréale, Polycarp, Autumnum, Andromeda (cream and brown), Francis the First (red and orange), Alexander Peel (salmon bronze), Graziella (blush lilac), La Vogue (gold), Madame Fould (cream).

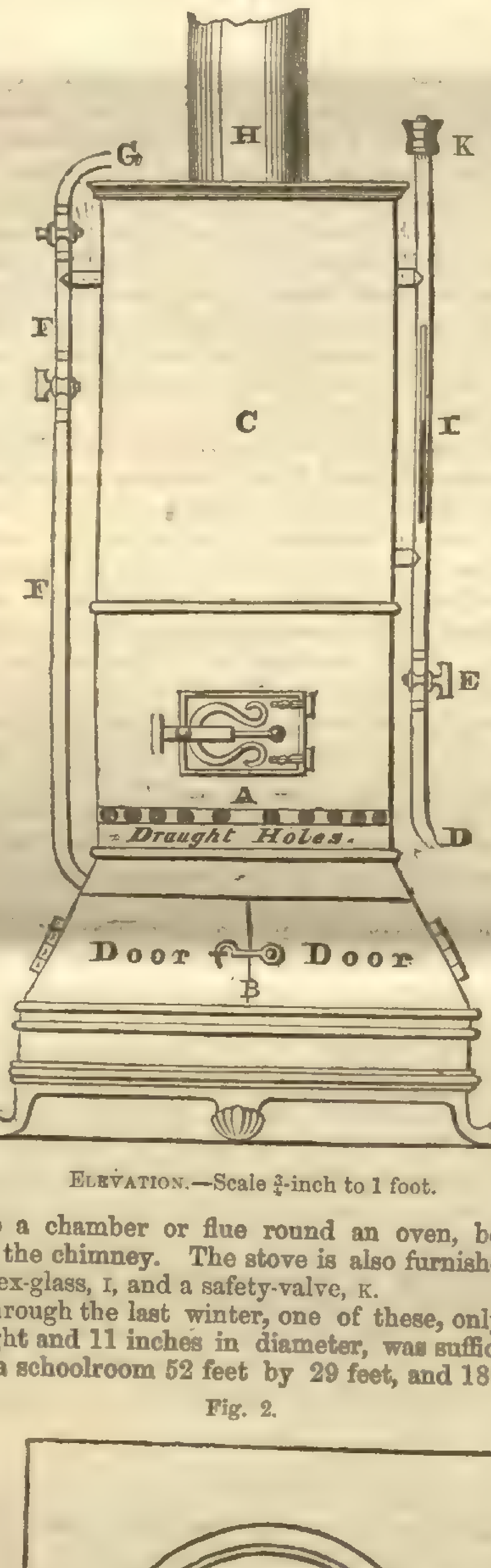
Samuel Broome, Temple Gardens.

NEW VAPOUR-FED STOVE AND GRATE.

"THE very great advantages of this invention, in its several applications, depend mainly on two principles, the former of which was partially known previously to the time when (November, 1857) they were both accidentally discovered by the inventor. The first is, that steam at a certain temperature will, in contact with ignited wood, coal, or coke, decompose and burn; the second, that whatever amount of steam a given fire will generate, any portion of that steam, or the whole of it, may be passed into and through that same fire with increase of heat and saving of fuel. The inventor has passed half a gallon of water per minute through the furnace, which evaporated it, with the expenditure of only 2 cwt. of gas coke, in 24 hours.

"The stove (Fig. 1) may be either cylindrical or oblong. It consists of a furnace, A, with an ash-pit and steam chamber, B, beneath, and a boiler, C, either annular or tubular, above it. The water is supplied to the boiler at the lower part of it by a pipe, D, connected with a self-supplying cistern, and furnished with a cock, E. Another pipe, F, G, conveys by its lower branch, F, any portion or the whole of the steam into the chamber, B, beneath the furnace, and so into the furnace, and by its upper branch, G, it conveys what portion may be required into a vessel or chamber, which may be connected with the stove for the purpose either of cooking or drying. The smoke and any steam which may escape may be conveyed by the flue,

Fig. 1.



ELEVATION.—Scale ¾-inch to 1 foot.

H, into a chamber or flue round an oven, before it enters the chimney. The stove is also furnished with an index-glass, I, and a safety-valve, K.

"Through the last winter, one of these, only 3 feet in height and 11 inches in diameter, was sufficient to warm a schoolroom 52 feet by 29 feet, and 18 feet in

Fig. 2.

height, with less than 14 lbs. of gas coke for eight hours. The schoolmaster steamed his dinner by it, and occasionally steam was let off with great advantage for the freshening of the air.

"Careful experiments have given the following results. If no steam were passed through the fire, the evaporation was 5 quarts an hour, with the consumption of 5 lbs. of gas coke. When all the steam ge-rated was passed through, the evaporation was 5 ... in the same time with consumption of only 4 lbs. coke.

"With 28 lbs. of coke for 14 hours, this same stove warmed the same room, during 13 hours of which a portion of the steam was used for cooking, and during hours an oven was kept at a temperature of 240°. oven might be placed on one side of the stove, steaming apparatus on the other, and a hot plate formed by the top of the stove and the connec- flues.* The stoves as here figured would be admi- adapted to waiting rooms at railway stations, entrances and passages in large hotels. If used steaming food for cattle, it would save at least ... cent. on the ordinary mode.

"The invention, as applied to a grate (Fig. 2, whether for parlour, kitchen, or cottage, or to kitchen ranges or to furnaces, consists of an iron water-tight drawer, A, fitted so closely beneath the fire as that the wa- poured into it may have the fullest advantage of radiation and conduction of heat from the fire raising the steam, and so as to exclude all draught atmospheric air except such as, by a door or valve, may in some cases be wished to admit. By this mean also, any offensive smells which might arise when ... or greasy water may be used, are prevented fro escaping.

"When rightly applied and used, this drawer sav full 50 per cent. of fuel. It renders the fire brighte greater heat is emitted; no dust escapes into the room; and it has hitherto proved a perfect cure for smoky chimney.

"N.B.—Foul water burns better than fresh: the best for the purpose is the dish-water from the back kitchen. In all other cases the application of the invention is exactly similar to this (Fig. 2), the drawer not necessarily resting on the ground ... may, of course, be made more ornamental." *Nation Health and Wealth, &c. By the Rev. Henry Mou*

NOTES ON SOME KINDS OF FRUITS CUL- VATED IN THE SOUTH AND SOUTH-WE OF FRANCE.

WE learn from the "Revue Horticole" for Augu 1861, that in the valley of the Ariége, according to D'Ounous, numerous varieties of Cherry are cultivat amongst the earliest of which is the Cerise ... Sabarat. It begins to ripen in the beginning of Jun and lasts throughout the month. There are seve varieties of it. They are succeeded by the Guigne Noir, the large and excellent Bigarreau Cœur ... and Monstrueuse de Mezel [a variety which ... been recently introduced into England]. According these, up to the end of July, the English Cherries May Duke and Cherry Duke are in gathering. These excellent varieties are of long duration, ripening in succession for a period of about two months. They equal in quality our Montmorency Cherries, Gros Gobet, Cerise de Villènes, and the new kinds of recent introduction. [We may here observe that the Montmorency and Gros Gobet Cherries correspond with our Kentish and Flemish varieties, and the Cerise de Villènes is the same as the Carnation Cherry, all of which have been long cultivated in this country. What the sorts designated May Duke and Cherry Duke might be referred to we cannot positively say: the latter is probably the Anglaise Tardive or Late Duke and as birds are said to be scarce in France, the fr of this sort may there hang till the end of August. ... appears that in the Ariége the Cherry season lasts three months; and that some individual sorts ... continue for two months from the time they begin ripen; but none of these known varieties will do ... our climate.]

In the valley of the Ariége the small Amber Ge (Guine Ambrée) is the only one known; a larger ... better variety is common in Saintonge. The Gu and Guindouls likewise ripen in June. They are pr cipally employed in confectionary, and preserving brandy. Nothing is better than those fruits bot in genuine Cognac, in which way they will keep in ex cellent condition for three or four years.

Some varieties, perhaps less esteemed, are called ... our country, says M. D'Ounous, Cerises Albanes, ... account of their white or yellow colour. A new ... better variety of these has lately been introduced fro Revel (Haute Garonne); it is a fruit of the larges size and of excellent quality. The leaves are da green, and the tree appears to be a good bearer.

Here must be particularly mentioned the Belle ... Rochelle, which is remarkable for its size; the abu dance of its juice and rich flavour render it one of the best fruits of the season. The fruit has a long stalk which facilitates the gathering. The Reine Hortense is likewise a first-rate variety of recent introduction. When grown against a wall it acquires an extraordinary size. Its flesh, a bright rose colour, is sweet, per fumed, and of exquisite flavour.

In the orchards, vineyards, and gardens, there are quantities of Cherries known as Cerises de pied. Their varieties are too numerous to mention. These are abundant bearers, and a great resource for our labourers during the summer heats.

The Alpine Strawberry is generally cultivated in

* Ranges on this principle are now manufactured by Taylor & Sons, High East Street, Dorchester.

the south-west of France, on account of its bearing abundantly and in long succession. It ought to be sown every two or three years to have the fruit of fine size, and the runners should be kept cut off. There is a very nice sort which does not require this trouble, as it does not produce runners, namely the White Bush Alpine (Fraise blanche à buisson et sans coulants). By neat gardeners it is employed as edging, taking care to divide the plants frequently, otherwise the centre becomes weak.

The old sorts of Strawberries known under the names of Hautbois and Chili Pines (Caprons, Fraises Ananas du Chili) are cultivated in many gardens, but their fruits often prove abortive, and the plants make numerous strong runners, which must be carefully cut off. Numbers of the best English and French new varieties have been introduced; but owing either to the high temperature, or the want of skill in the cultivators, they are far from attaining the size and flavour which cause them to be so highly prized elsewhere.

LORD BACON ON OLD LONDON GARDENING.

Great as is the reputation of Lord Bacon, his works are but little read. His notes connected with gardening have a particular interest, inasmuch as they show the productions of the gardens of the Londoners in the reign of Queen Elizabeth and of James I.

About the year 1507 a large portion of the great blocks of houses in Gray's Inn were built, and that which was partly occupied by Bacon still remains. It would, however, be vain (unless they have been very recently better informed) to inquire of any of the porters or other functionaries of this ancient inn for information. The curious in these matters will be told that they do not know the name in that neighbourhood; nevertheless, it was here that the future Baron of Verulam, Viscount St. Alban, and, in the reign of James I., Lord High Chancellor of England, delighted in the garden and in the grounds, which had been in part newly laid out and much improved, in all probability by Bacon's suggestions. Some of the trees which still remain may have been planted by the hands of the philosopher. There is a view, of the date of the reign of Charles II., in the British Museum, which shows that the prospect from the grounds to the north must have been very beautiful. There was then nothing to impede the view, which was bounded by the heights of Hampstead and Highgate.

In the reign of Queen Elizabeth, and for some time afterwards, large gardens surrounded York House, and most of the residences of the nobility which stood along the Strand; and some idea of the luxuriance and beauty of these may be learnt from the following account, which it will be observed was "*particulars for the climate of London.*" Bacon says, "God Almighty first planted a garden; and, indeed, it is the purest of human pleasures. It is the greatest refreshment to the spirits of man, without which buildings and palaces are but gross handyworks; and a man shall ever see that when ages grow to civility and elegancy, men come to build stately sooner than to garden finely, as if gardening were the greater perfection. I do hold it, in the royal ordering of gardens, there ought to be gardens for all the months of the year, in which, severally, things of beauty may be then in season. For December and January, and the latter part of November, you must take such things as are green all winter; Holly, Ivy, Bays, Juniper, Cypress trees, Yew, Pines, Fir trees, Rosemary, Lavender; Periwinkle, the white, the purple, and the blue; Germander, Flag, Orange trees, Lemon trees, and Myrtles if they be stoved, and Sweet Marjoram, warm set. There followeth, for the latter part of January and February, the Mezereon tree, which then blossoms; Crocus vernus, both the yellow and the grey; Primroses, Anemones, the early Tulip, Hyacinthus orientalis, Chamairis, Fritillaria. For March there come Violets, especially the single blue, which are the earliest; the early Daffodil, the Daisy, the Almond tree in blossom, the Peach tree in blossom, the Cornelian tree in blossom, Sweet Briar. In April follow the double white Violet, the Wallflower, the Stock gilliflower, the Cowslip, Flower-de-luces, and Lilies of all natures; Rosemary flowers, the Tulip, the double Peony, the pale Daffodil, the French Honeysuckle, the Cherry tree in blossom, the Damascene and Plum trees in blossom, the White Thorn in leaf, the Lilac tree. In May and June come Pinks of all sorts, especially the blush Pink; Roses of all kinds except the Musk, which comes later; Honeysuckles, Strawberries, Bugloss, Columbine, the French Marigold, Flos Africanus, Cherry tree in fruit, Ribes, Figs* in fruit, Rasps, Vine flowers, Lavender in flower, the sweet Satyrion, with the white flower; Herba Muscaria, Lilium Convallium, the Apple tree in blossom. In July come Gilliflowers of all varieties, Musk Roses, the Lime tree in blossom, early Pears and Plums in fruit, Gennitings, Codlins. In August come Plums of all sorts in fruit, Pears, Apricots, Berberries, Filberts, Musk Melons, Monkshoods of all colours. In September come Grapes, Apples, Poppies of all colours, Peaches, Melocotones, Nectarines, Cornelians, Wardens, Quinces. In October and the beginning of November come Services, Medlars, Bullaces, Roses, cut or removed to come late; Hollyhocks, and such like. These particulars are for the climate of London; but my meaning is perceived, that you may have 'ver perpetuum,' as the place affords."

After noticing, that "because the breath of flowers is far sweeter in the air (when it comes and goes like the warbling of music) than in the hand," the essayist remarks, that it is important to know those which do best to perfume the air; he therefore mentions some of the flowers and plants which have the sweetest smells. He then gives his ideas of a prince-like garden, which "ought not well to be under 30 acres of ground, and to be divided into three parts; a green in the entrance, a heath or desert in the going forth, and the main garden in the midst, besides alleys on both sides; and I like well that four acres of ground be assigned to the green, six to the heath, four and four to either side, and 12 to the main garden.

"The green hath two pleasures. The one, because there is nothing more pleasant to the eye than green Grass, kept finely shorn; the other, because it will give you a fair alley in the midst, by which you may go in front upon a stately hedge, which is to enclose the garden; but because the alley will be long, and, in great heat of the year or day, you ought not to buy the shade in the garden by going in the sun through the green. Therefore, you are, on either side of the green, to plant a covert alley, upon carpenter's work about 12 feet in height, by which you may go in shade into the garden." The author considers the use of different coloured earths as but toys, and we are informed that "The garden is best to be a square encompassed on all the four sides with a stately arched hedge; the arches to be upon pillars of carpenter's work of some 10 feet high and six feet broad, and the spaces between of the same dimensions with the breadth of the arch. Over the arches let there be an entire hedge, of some four feet high, framed also upon carpenter's work; and upon the upper hedge, over every arch, a little turret, with a belly enough to receive a cage of birds; and over every space between the arches some other little figure; with broad plates of round coloured glass, gilt, for the sun to play upon: but this hedge I intend to be raised upon a bank, not steep, but gently slope, of some six feet, set all with flowers. Also, I understand that this square of the garden should not be the whole breadth of the ground, but to leave on either side ground enough for diversity of side alleys," &c. The ground within the great hedge is to be laid out in a varied design; but whatsoever form it is first cast in, it must not be too heavy or full of work, "wherein I, for my part, do not like images cut out in Juniper or other garden stuff: they be for children. Little low hedges, round like welts, with some pretty pyramids, I like well." After referring to geometrical forms without any bulwarks or embossments, and a mount to be 30 feet high, and some fine banqueting-house, with chimneys neatly cast, and without too much glass, we are told that fountains have a great and refreshing beauty, but pools mar all, and make the garden unwholesome and full of flies and frogs. "Fountains I intend to be of two natures,—the one that sprinkleth or spouteth water, the other a fair receipt of water of some 30 or 40 feet square, but without fish, slime, or mud. For the first the ornaments of images, gilt, or of marble, which are in use, do well: but the main matter is so to convey the water, as it never stay either in the bowls or in the cistern; that the water be never by rest discoloured, green, or red, or the like, or gather any mossiness or putrefaction. Besides that, it is to be cleansed every day by the hand; also some steps up to it, and some fine pavement about it, do well. As for the other kind of fountain, which we may call a bathing pool, it may admit much curiosity and beauty, wherewith we will not trouble ourselves;—as that the bottom be finely paved, and with images; the sides likewise; and withal embellished with coloured glass, and such things of lustre, encompassed also with fine rails of low statues; but the main point is the same which we mentioned in the former kind of fountain, which is that the water be in perpetual motion, fed by a water higher than the pool, and delivered into it by fair spouts, and then discharged away underground by some equality of bores, that it stay little; and for fine devices of arching water without spilling, and making it rise in several forms (of feathers, drinking-glasses, canopies, and the like), they be pretty things to look on, but nothing to health and sweetness."

For the heath, or third part of the plot, it is desirable that this be framed as much as possible to be a natural wilderness. It is, says our author, desirable to have trees in it, but some thickets made only of Sweet Briar and Honeysuckle, and some wild Vine amongst; and the ground set with Violets, Strawberries, and other plants suitable for such a situation. The side grounds should be full of alleys, to give a full shade—some of them wheresoever the sun may be: some should be so framed that they may afford shelter from the sharp wind, and in some of those alleys there might be planted fruit trees, and set with flowers, "but thin and sparingly, lest they deceive the trees." There might also be some mounts, of a height leaving the wall of the enclosure breast high, to look abroad into the fields.

For aviaries Bacon does not care, except they be of that largeness which may be turfed, and have living plants and bushes set in them, that the birds may have more scope and natural nestling, and that no foulness appear on the floors of the aviaries; and "so," says the essayist, "I have made a platform of a princely garden, partly by precept, partly by drawing; not a model, but some general lines of it; and in this I have spared for no cost; but it is nothing for great princes, that, for the most part, taking advice with workmen, with no less cost set their things together; and sometimes add statues and such things for state and magnificence, but nothing to the true pleasure of a garden." *From the Builder.*

* There are still Fig trees in Gray's and Lincoln's Inn, and the tradition of such trees is preserved in Fig Tree Court, in the Temple.

TRADE MEMORANDA.

Who and what is E. J. Middlehurst of Manchester?

Home Correspondence.

Effects of last Winter in the Botanic Garden, Oxford. I refrained from communicating to you a list of the casualties in our Garden occasioned by the late winter at the time when so many of your other Correspondents gave in their reports, as if I had done so I should have had to enumerate amongst the victims of that severe season almost everything of value which our collection contained, belonging to the class of outdoor exotic trees and shrubs. Happily many have since recovered under the favourable influences of the genial summer which followed, and accordingly those that have actually perished deserve the more to be registered, as indicating those species which, although capable of flourishing under the ordinary conditions which the climate of this country presents, cannot be reckoned upon as permanent additions to our Flora, inasmuch as they are liable to be cut off whenever, in the cycle of years, another winter as vigorous as the last shall come round. On comparing the list I have made out with the report presented in your columns of the losses sustained at Helston, in Cornwall, and near Tamworth, in Staffordshire, the former place situated in one of the mildest districts of England, the latter probably representing pretty fairly the climate of the midland counties, it will be seen, that whilst, as might be expected, Oxford stands very far below the former, it accords in most respects with the latter, except that a few plants stated to have been killed at Tamworth appear to have recovered in our Botanic Garden to a certain extent, although for the most part shorn of much of their beauty. Perhaps, indeed, if the Tamworth list had been made out at the same time as my own, the agreement between the two might have been even greater, for during the spring I should have set down several as dead which are now seen to be living. As might be expected, the greatest destruction occurred amongst the Conifers. All the Cypresses in the garden, namely sempervirens, torulosa, macrocarpa, Tournefortii, funebris, and Goveniana, were destroyed, whilst at Helston they escaped with only some injury done to their foliage. The Deodars, too, must be struck off the list of trees capable of being generally naturalised; for of three very fine specimens of which we could boast, not one escaped, being worse off in this respect, not only than Helston, where the leaves appear to have been only browned, but even than Tamworth, where they are only stated to have been damaged. On the other hand, the two allied species, viz., the Cedar of Lebanon and of Mt. Atlas, though both injured are recovering. The Junipers in general perished, the only exotic species which stood the winter being chinensis, virginiana, and squamata. Taxodium sempervirens appeared to be killed, but it is now pushing up. Out of our collection of Pinuses, P. excelsa and Nordmanniana proved perfectly hardy here as well as at Tamworth, but Cryptomeria japonica, which was killed with us, appears to have survived the winter at the latter place. Others, viz., Llaveana, insignis, macrocarpa, and pinea were killed, or at least so far injured as to require removal. At Helston it would appear that most of the above stood the winter little, if at all, injured, but at Tamworth they were killed. Wellingtonia gigantea appears to be hardy in all localities in this country. Of the Oak tribe, suber was killed, ilex severely injured, but now recovering. Even the Lucombe variety of the Q. Cerris suffered severely, as if it had inherited some of the tenderness belonging to the Q. suber, by the pollen of which it is thought to have been produced. It has however since recovered and is doing well. The Juglans nigra, or American Walnut, was also very seriously damaged. Knightia japonica and variabilis proved hardy both here and at Tamworth. The common Laurel (Prunus laurocerasus) was in some places cut to the ground; the Portugal Laural injured seriously; the Laurustinus equally so, and the Bay Laurel, Laurus nobilis, most of any. All these however are sprouting from their roots and seem likely to recover. Great havoc was made amongst our standard Roses, of which at least one-half were killed. The Banksian Rose seems to have been nearly destroyed here as well as at Tamworth. Most of the Phillyreas appeared dead, although a few are now putting out again, as is the Cerasus ilicifolius. The Photinias, however, seemed to be gone irretrievably; Arbutus unedo was killed here as at Tamworth, whereas at Helston it was only injured at the extremities. Of the Arbutus Andrachne we possessed an interesting specimen, but I fear it will not recover the effects of the last winter, although it has made some feeble efforts to throw out leaves. As it was a tree of old standing, the exceptional character of the past winter is

evinced by the effect produced upon it, and the same is shown by the influence exerted upon a fine and vigorous Fig tree, probably nearly a century old, which was killed down to the roots. Of the Magnolia grandiflora, both our specimens appeared to be dead, but they are putting out from the old wood; and the same statement applies to the Paliurus aculeatus and the Cercis siliquastrum, of both of which we possessed fine and old specimens. Many of our early flowering Rhododendrons and our Yuccas suffered severely, but are now recovering. Of the Berberises, Fortuni and japonica, reported to have been killed at Tamworth, are faring better with us, and B. Darwinii escaped uninjured. Ribes Menziesii, Aucuba japonica, Aristotelia Macqui, Arundinaria falcata, Rhamnus alaternus, Hydrangea quercifolia, Leycesteria formosa, plants which are reported as killed at Tamworth, and which would have been reckoned amongst the casualties, had we given in our report in the spring, have shown since signs of recovery; but I fear that not only Ligustrum japonicum and Pittosporum Tobira, which have perished even at Helston, but Euonymus japonicus, Garrya elliptica, Bupleurum fruticosum, Ceanothus azureus, pallidus, papillaris, and rigidus; Buxus balearica, Ribes echinata, Morus rubra, multicaulis, and Escallonia micrantha are gone irretrievably. Most of the above, indeed, are mentioned as having been killed at Tamworth, but as being merely injured or touched by the frost at Helston. The lowest temperature observed at the Botanic Garden was 2°, on Christmas Eve. At the Observatory, however, I am told the thermometer fell to zero; and at the Museum 2° lower on the same night. The severity of the cold however does not appear of itself to explain all the effects produced upon vegetation, for in 1816 the thermometer sunk as low, in 1841 I find it stood only 2° higher, and in the winter of 1837-8 it was noticed even lower, for on January 20, 1838, it fell to 1° above zero. Of the effects of this latter a detailed and careful report is given in the *Gardeners' Magazine*, vol. 5, by Mr. W. Baxter, our present gardener, from which it will appear, that although the effects produced were similar in the two cases, yet that the Deodara, the Ilex, Arbutu ses, and others recovered better than they appear likely to do on the last occasion. *Charles Daubeny.*

Snail Shells in the Trunk of an Elm.—On cutting down a large Elm last week, the saw passed through a decayed place near the centre of the tree, crushing in its passage a number of shells of the common garden snail. There must have been about a dozen shells, two or three of which were taken out entire. The hole was about 2 inches across, and extended some 3 inches each side of the saw cut. The wood was perfectly solid on every side between it and the exterior bark. I counted 170 "rings" (and at least 30 more escaped detection), between the decayed spot and the outside of the tree. These snails must (I presume) have sought shelter in a fissure in the tree when it was young, and (being from some cause unable to extricate themselves in the spring), must have found there a living tomb. *W. W. Spicer, Itchen Abbas.*

Ranunculus Ficaria.—Does this, the earliest of our brightly coloured wild flowers, ever produce seed in this country? I am inclined to think it does not. I carefully examined the pollen, under a strong microscopic power, last spring, and although the separate grains appeared very transparent, yet they seemed quite perfect and good. Later in the season I sought diligently for the seed, but could find none; in one or two cases I found a few achenes which appeared to be full grown and ripe, but upon a close inspection they proved to be hollow and quite unfit to germinate. Although the Pilewort, it would seem, seldom or never produces seed, yet Nature has plentifully provided the means whereby the species is perpetuated. If the plant be examined about the time it is going out of flower, little tubers will be found in the axil of almost every leaf. As the plant decays, which it does by midsummer, these tubers are scattered over the surface of the soil; I have counted as many as a hundred within the area of a square foot. Most of these lie dormant until the spring (Feb. or March). A few of them establish themselves, and in the second year flower three weeks or a month earlier than the plants produced from the tubers formed during the preceding season. But what becomes of the others? What is it that in the struggle for life kills so many of these young plants? No bird or beast, no insect or mollusk seems to feed upon them, so far as I can observe; and yet they are destroyed wholesale, for there are scores and hundreds of young plants springing into growth every year for every single specimen of an old established plant. There are many other wildlings which experience a similar fate; we might, for example, ask the same question with regard to the young seedling Galiums. On every hedge-bank, at this season of the year, hundreds of little plants of the Goose-grass may be seen, usually about two or three inches high; but look next spring, and you will find that only a very small proportion have survived the dangers of their youth. Still we may ask the question—What has killed them? *C. W. C.*

Glass Houses for Fruit Trees.—I am sure that all gardeners must bear testimony to the great stimulus which "T. R." has given this particular branch of horticulture, and to the indomitable perseverance with which he has continued to fight for a number of years for his "orchard houses," and for his Peaches and Nectarines "in pots." "A look into their roots," he says, "is like a look into the book of Nature, most valuable to a reflective mind." I accept the cultivation of fruit trees in pots exactly in this sense. But as a matter of £ *s. d.* and of supply, I must leave my potted pets to keep company with my Geraniums and Orange trees, where as objects of beauty they shall have my attention still. That fruits of all kinds can be grown in pots there can be no doubt; but where a constant and substantial supply is required for table or for market, of the finest quality and in the greatest quantity, then there is no question that you must decidedly plant out. In 1853 I designed and built a Peach-house for the late J. H. Vivian, Esq., M.P., Singleton, novel in its structure, yet light and simple in all its parts. Although perhaps it ill becomes any one to introduce new ideas at the expense of any gentleman, yet when those ideas are based upon sound principles of theory, aided by years of experience, I think it becomes every intelligent gardener to step out of the beaten track and strike out a path for himself. I, however, grant that this ought to be the exception, not the rule; but the gardener, always so proud of the word "practical," should bring theory to his aid. A look into "Lindley's Theory of Horticulture" is like a look into the book of Nature, difficult to understand. I contend, nevertheless, that every gardener should apply himself to understand it, whether he may be a qualified "practical" or not. I need not, I presume, enter further on this point. See, ye gardeners, what "Lindley's Theory of Horticulture" does say on any subject, but especially on that of light, heat, and air. Thus much I write in my own defence as a justification for a deviation from the usual style of Peach-house building. Impressed with the importance of light, heat, and air to vegetation of every kind, but if possible in a tenfold degree to all tropical fruits grown in our sunless climate, I object to back walls, or indeed walls anywhere. I desire to see nothing but glass, giving light from every point, and with this conviction I built my new structure, which is 80 feet long by 17½ wide, divided in the centre; it is half-span, which I prefer because you get the direct rays of the sun to every part; it is glazed within 6 inches of the ground all round, back and front; it has 5 feet wide upright lights hung on pivots, all moveable, for the admittance of air; the top lights are also all moveable. The trees are planted out inside, and are trained on trellises. Single trees with clean upright stems are attached to each rafter and trained up, 8 inches from the glass, similar to Vines; these trees are planted inside, but their roots occupy the outside border; the whole is well heated by hot water pipes. I do not hesitate to state that this little house and its produce is unsurpassed by anything of the kind in the kingdom; it produces immense quantities of fruit of the highest quality, the wonder and admiration of everybody, and it reflects the highest credit on Mr. Westicott the gardener, for the way in which he manages it; but like most of us, as I pointed out, he is inclined to keep his wood too thick for the proper development of the trees. Somehow in most cases gardeners have not the heart or nerve enough to thin sufficiently, whether it be wood or fruit. The same may be said of Grapes, and in nine cases out of 10 too many are left. But to the subject: Peach trees, &c., and their cultivation. If my opinion is worth anything, I recommend glass-houses of the lightest possible construction, and trees planted out for supply. In this way there will be no disappointment, and if you wish to grow in pots let it be understood that it is for the pleasure which such a fancy conveys, not for profit. *William Barron, Sketty, Swansea, Nov. 26.*

Vines.—I should recommend your Correspondent (see p. 1086) to leave his Vines the whole length of the rafters, if the wood is well ripened the whole length; if not he had better cut them back to 6 or 8 inches below the rafter in preference to cutting half way back, as I find that where they are cut half way back the first three or four buds in the next year's growth are weak, bear a stunted appearance, and do not yield such fine bunches as the buds below or above them. Let me add that I consider three bunches to each Vine ample for next year. *W. B. S., Barton, St. Mary's Church.* ——Young wood if left long breaks unevenly, unless carefully attended to; but with canes 2 inches in girth I should leave 6 feet of rod, and allow five bunches to each Vine. The 6 feet will perhaps have 12 eyes, which should be reduced to six, by cutting out every alternate eye at pruning time; and when starting, bind down the rods until the lower eyes have broken; also remove the fruit which the terminal bud shows. The following plan I find answers on the long rod system. During growth I cut out with a sharp knife, bud and lateral, leaving buds as nearly as I can 14 inches apart; and where I leave a bud I allow a lateral to act as a safety valve to the bud; where I remove bud and lateral I leave the leaf. I also apply it to the spur system, but somewhat differently. I am of opinion that by removing buds during growth, those which are left are better supplied with organised matter, and consequently produce finer and better Grapes than they otherwise would do. *T.*

New Zealand.—From the interest you take in the cultivation of plants, flowers, and trees, in all lands, I send you the following extract from a letter I have received from a friend who with his wife and family have lately gone to New Zealand. *W. Y. B., Cold Overton, near Oakham, Dec. 2*:—"We have been living in Auckland since we landed in New Zealand and are all very well, and much better for the voyage. We landed here in the winter season, and since that time the weather has been very wet. The people here call it an unusually severe winter, but it seems mild to us. The gardens are gay with Roses, and those large Arums we grow at home in pots flower all winter. and Mrs. Nutt would enjoy this climate, there is no cutting cold weather. Fuchsias and Geraniums stand through the winter. New Zealand reminds me very much of England; there are some fine pastures which are fenced with Hawthorn. The best soil is volcanic, and is rich enough to grow anything. The trees in New Zealand are evergreen, but they do not present so beautiful a green appearance as the trees in England in June. The forest is magnificent, some hundreds of kinds of trees and Creepers innumerable. In low situations the trees are infested with Parasites. A New Zealand forest is an impenetrable jungle, nearly excludes the light. The numbers and beauty of the Ferns in the forest delight a Botanist. The tree Fern grows 20 feet high, and at the top throws off leaves like an inverted umbrella, and covers from ... to 100 square feet. Some of the trees have a singular growth. The Rata, one of the largest trees, grows ... 6 feet in diameter; it is a Creeper at first, 5 or 6 ... Rata rims as thick as your finger run up the Fern trees, these rims kill the tree to which they attach themselves, and all unite into one stem, which ... the original tree, which is completely lost; the Rata then attains one thick stem, and the wood is ... like Rosewood. Within the last fortnight I ... purchased a farm near Auckland. It is partly ... and part Fern land. I am going to build a house ... it immediately, and get the land into cultivation. The natives are a fine athletic race, many have adopted our costume and habits. The tribes in the immediate neighbourhood are very friendly; they bring ... quantities of pigs, corn, and fruits to market, and ... supply the town with fish. This is a fine country ... a labourer; a man may save more in one year than he could in England in ten years. Very great prices are ... for plants. Ornamental shrubs and fruit trees are ... most certain to sell. Every one is planting fruit trees. Nothing would pay better than planting a vineyard and cultivating it and making wine; the climate ... suits. The Grapes and Peaches are very abundant in the season. We get tropical fruits from the Feejees and Society Islands, Pine-Apples, Cocoa-nuts, Oranges, Lemons, &c."

Natural Grafting.—In the garden of Mr. ..., Grays, Essex, may be seen a specimen of natural grafting far surpassing in completeness and ... that referred to in your paper of Nov. 23. This garden lies high above the chalk, and the soil is a fine, deep, red sand strongly impregnated with iron, technically known as "foundry loam," though destitute of a particle of the material known among gardeners as loam. In the centre of the garden is an aged Medlar said, to be the finest in the county of Essex. Two main boughs of this tree cross and unite somewhat like the letter X, their diameters where the junction takes place being about 12 inches. *Shirley Hibberd.*

Poire d'Hacon.—With reference to the observation (see p. 1028) that this Pear is an abundant bearer, allow me to remark that though it was so on its first introduction, it is so no longer. Loudon praised it highly, and Errington called it "everybody's Pear." But Mr. Rivers can testify to the fact that it bears badly ... I have observed this in counties 100 miles apart. The fact is singular, as the variety is a recent one, and therefore no one can suspect it of wearing out. I see ... you give "Norris" as a synonyme of Fontenay Vendée. Hogg states that it is identical with Jersey Gratioli. Is it possible that Fontenay and Gratioli are the same? Certainly the French description of the former ... "sugary but sometimes slightly acidulated" agrees with the taste of Gratioli. *S. B.*

Increased Demand for Apples.—The Apples in Devon are purchased in large quantities at prices 30 per cent. higher than what would pay for making cider. Can any of your readers state whither they are sent, and for what purpose? It has been stated that they are bought up to be used in calico printing; but that statement is contradicted by the trade. *Wilcele.*

Gazania splendens.—I have purchased large quantities of the seed of this useful bedding plant from several seedsmen; but I have hitherto failed in raising a single plant. I would therefore consider it a favour if some of your Correspondents can inform me whether it will grow from seed or not. *Y.*

Sowle Bread.—Any information about a kind of bread known in East Anglia under the name of ... will be gratefully received by the Editor for *B. T.*

Trees in Orchard Houses.—Some advocate pot culture, others are against it; and as there has been much good sense evinced on both sides, it becomes a question which of the two is to be adopted. Looking at the matter in a remunerative point of view, Nature says plant the trees in the ground. I have however seen very good fruit grown in pots, but I have seen better grown out of them. We had, I think, during the summer an opportunity of judging of the merits of pot culture; I mean at the opening show of the Royal Horticultural Society at Kensington. Who for instance could look upon the beautiful specimens of Pot Vines

staged there and say they were not masterpieces of good cultivation. There was no want of skill on the part of the cultivator in bringing them out; but then when we came to compare them with the magnificent productions exhibited by Messrs. Hill, Henderson, and others, it made us almost pity the poor Vines in pots. No fault could be found with the plant or its cultivation—the evil consisted in the system; as "W. P. A." justly remarks, it was fishing for little fish when large ones were to be obtained; if, then, as in this instance, the system shows itself to be unmistakably at fault in regard to Grapes, why not in respect to other fruit? Let us suppose a gardener to be let a house by his employer, who said: "Here is a house to grow Peaches and Nectarines in, and I want you to make it pay some return for the money expended on it; plant it as you like, but let it return me an equivalent for the capital invested." What, I would ask, would the gardener do? Would he go to Sawbridgeworth and get trees in pots to accomplish his end? No, nine gardeners out of 10 would shrug up their shoulders and take a survey of the garden walls, and see if there was anything there which would answer the purpose. It and he might then go to Sawbridgeworth or elsewhere, but not to get trees in pots, or I fear he would find at the end of half-a-dozen years that he would still have a great balance on the wrong side. The opinion of "R. T. H." (see p. 1048) I must partly endorse, when he says that fruit grown on open walls is not to be compared with that grown in Orchard Houses; but the comparison is unjust. Let "R. T. H." go into some well managed Peach house, of which there are plenty in the country, about the month of August; he will if I am not mistaken come out with another opinion and say: "Ah, pot trees are all very well on my shop counter to set off my shop, but they will never do to grow fruit for the million on; quality there may be, but where is the quantity?" I have however nothing to say against Orchard Houses; I think they are a step in the right direction; but let the trees be planted in the ground. *A. J.*

Societies.

Entomological: *Nov.* 4. 1861. J. W. Douglas, Esq., President, in the chair.—Mr. Kirby exhibited a large box of North American Lepidoptera. Mr. Stevens exhibited a collection of insects sent from Japan by Mr. Fortune, including many species of great rarity, amongst which were several examples of a new species of the singular genus Damaster, two new species of the genus Papilio, &c. Mr. White exhibited some interesting insects of various orders, collected by Mr. Rayner, surgeon of H.M.'s ship Herald, during its voyage to the South Sea Islands. Mr. White also exhibited a fine Bombyx brought from India by Sir John Hearsey, for which, being undescribed, he proposed the specific title of Hearseyi. Mr. Reading exhibited fine examples of Leucania putrescens from Torquay, and other Lepidoptera from the south of Devonshire. Dr. Knaggs exhibited the cocoon of a Psyche of very singular form from Australia. Mr. Miller exhibited some living larvæ of a species of Incurvaria found feeding on fallen leaves. Mr. Desvignes communicated descriptions of two new species of Ichneumonitæ of the genus Ephialtes. Mr. McLachlan read a paper on the British species of Phryganeidæ contained in the genus Stenophylax of Kolenati. Mr. White made some observations on the injury caused to Ginger brought to this country from the East Indies by a small beetle, the Lasioderma testaceum of Stephens; and to Maccaroni by Sitophilus Oryzæ, also a small Coleopterous insect; the injury to the Ginger is computed at some thousands of pounds annually. Mr. Tegetmeier called attention to a statement respecting the development of queen bees lately published by Professor Leitch, who asserts that the production of the perfect queen is due, not as has been supposed to the larva being fed on a peculiar food, but to increased temperature, and that the isolated position of the royal cell enables the worker bees to cluster around it, and by their rapid and increased respiration to produce the degree of heat necessary. Mr. Tegetmeier considered his own observations fully supported this theory. Mr. Waterhouse read descriptions of two curious Curculios from Tasmania and Adelaide, in which the claw joints of the tarsi are wanting. Mr. Janson read some observations on Homalota subterranea, and Haptoglossa pulla. Part X. of the fifth volume of the Society's Transactions was announced as published.

Notices of Books.

Sketches of the Natural History of Ceylon: with Narratives and Anecdotes illustrative of the Habits and Instincts of the Mammalia, Birds, Reptiles, Fishes, Insects, &c., including a Monograph of the Elephant, and a Description of the Modes of Capturing and Taming it. By Sir J. Emerson Tennent, K.C.S., LL.D., &c. Pp. 524; with 82 Illustrations engraved on Wood from Original Drawings.

The readers of the *Gardeners' Chronicle* will not have forgotten Sir E. Tennent's admirable account of Ceylon, of which a pretty full notice was given some months since (see p. 1039, 1859). That work was a model of its kind; its defect consisted in the inevitable curtailment of much matter relating to the Natural History of the island, for illustrating which the learned author was understood to possess ample materials. That defect, if defect it was, is now remedied by the appearance of a new volume, which for interesting anecdote, excellent woodcuts, and true scientific treatment has not been surpassed. It appears too at the happy period when friends are selecting Christmas presents, so that it may soon be universally known through all the land.

The work commences with an account of Mammalian animals, Monkeys, Loris, Bats, Bears, Leopards, Dogs, Jackals, Rats, Oxen, and Elephants. That this last creature is illustrated in the degree of its importance, will be seen from its occupying above 160 pages and 18 wood engravings. In fact Sir Emerson may be said to have exhausted Elephantine history. Next follow Birds—Eagles and Sparrows, Pigeons and Parroquets, Devilbirds, Cotton thieves, and Sunbirds. Reptiles, that is to say Lizards, Crocodiles, Tortoises, Snakes, Frogs, &c., fill 50 pages with capital matter. Fishes occupy nearly as many pages, and very queer fish some of them are, as for instance the Cheironectes which struts about on the mud, and the Salarias which runs up stones and climbs rocks to catch flies, to say nothing of the Pteroids which look like flying hedgehogs. Besides these there are the fishes that, like our transatlantic cousins, are admirers of hot water, and find a temperature of only two degrees below boiling quite delightful. Then come Shells, some of which are illustrated by capital figures from the skilful hand of G. B. Sowerby; and here we have a most interesting account of the Pearl fishery, for which Ceylon has been famous beyond the memory of man; there is also Sir Emerson Tennent's own evidence as to the musical shells of the island. Last of all come insects, and insect like creatures such as spiders, millipedes, crabs, leeches, and indestructible rotifers. Of these there are some remarkably truthful engravings; and a singularly graphic account from which we extract some paragraphs:—

"Insects.—Owing to the favourable combination of heat, moisture, and vegetation, the myriads of insects in Ceylon form one of the characteristic features of the island. In the solitude of the forests there is a perpetual music from their soothing and melodious hum, which frequently swells to a startling sound as the cicada trills his sonorous drum on the sunny bark of some tall tree. At morning the dew hangs in diamond drops on the threads and gossamer which the spiders suspend across every pathway; and above the pool dragon-flies, of more than metallic lustre, flash in the early sunbeams. The earth teems with countless ants, which emerge from beneath its surface, or make their devious highways to ascend to their nests in the trees. Lustrous beetles, with their golden elytra, bask on the leaves, whilst minuter species dash through the air in circles, which the ear can follow by the booming of their tiny wings. Butterflies of large size and gorgeous colouring flutter over the endless expanse of flowers, and at times the extraordinary sight presents itself of flights of these delicate creatures, generally of a white or pale yellow hue, apparently miles in breadth, and of such prodigious extension as to occupy hours, and even days, uninterruptedly in their passage—whence coming no one knows; whither going no one can tell. As day declines, the moths issue from their retreats, the crickets add their shrill voices to swell the din; and when darkness descends, the eye is charmed with the millions of emerald lamps lighted up by the fire-flies amidst the surrounding gloom."

"Coleoptera.—*Buprestidæ; Golden Beetles.*—In the morning the herbaceous plants, especially on the eastern side of the island, are studded with these gorgeous beetles, whose golden wing-cases are used to enrich the embroidery of the Indian zenana, whilst the lustrous joints of the legs are strung on silken threads, and form necklaces and bracelets of singular brilliancy. These exquisite colours are not confined to one order, and some of the Elateridæ and Lamellicorns exhibit hues of green and blue, that rival the deepest tints of the emerald and sapphire.

"Orthoptera. *Leaf-insects.*—But in relation to the insects of Ceylon the admiration of their colours is still less exciting than the astonishment created by the forms in which some of the families present themselves; especially the 'soothsayers' (Mantidæ) and 'walking leaves.' The latter, exhibiting the most cunning of all Nature's devices for the preservation of her creatures, are found in the jungle in all varieties of hues, from the pale yellow of an opening bud to the rich green of the full-blown leaf, and the withered tint of decay. So perfect is the imitation of a leaf in structure and articulation, that this amazing insect when at rest is almost undistinguishable from the foliage around: not only are the wings modelled to resemble ribbed and fibrous follicles, but every joint of the legs is expanded into a broad plait like a half-opened leaflet. It rests on its abdomen, the legs serving to drag it slowly along, and thus the flatness of its attitude serves still further to add to the appearance of a leaf. One of the most marvellous incidents connected with its organisation was exhibited by one which I kept under a glass shade on my table; it laid a quantity of eggs, that, in colour and shape, were not to be distinguished from *seeds*. They were brown and pentangular, with a short stem, and slightly punctured at the intersections."

It is needless to say more. Sir Emerson's work is one alike indispensible in the drawing-room and the naturalist's cabinet.

The Garden Oracle and Economic Year Book for 1862 (Groombridge) is in fact a garden almanack, and contains beside the calendarial and other usual information, some special articles on gardening matters, consisting of (1) what is called a list of new plants of the year, for which we perceive the *Proceedings of the Royal Horticultural Society* have been placed under heavy contribution without acknowledgment; (2) Selections of the best flowers, fruit, and vegetables, including what are designated "the best of 1861," among which we find evidences of very careless compilation; (3) a few short miscellaneous papers, including a report on annuals new and old; and (4) the ever-recurring garden calendar. We cannot say much for the execution of these several departments, the list of new plants being especially deficient. The Oracle nevertheless puts forth here and there some hints which may be useful to the small cultivators for whose benefit we presume it has spoken.

Mr. Broome's *Culture of the Chrysanthemum as practised in the Temple Gardens* (Walker), which has reached a fifth "revised, corrected, and enlarged" edition, now extends to 82 pages of plain useful practical information on the best methods of managing a flower which really fills up a void in the floral calendar, and which, making for itself a home every where, enlivens in the dreary autumn months the gardens of the many. This present degree of popularity, so far as regards the metropolis, is no doubt in part at least to be attributed to the grand display of Chrysanthemums for which the gardens of the Hon. Societies of the Inner and Middle Temple (the former under Mr. Broome's care), have now become famous, and to which the public, through the liberality of the Templars, have free access. The thousands who have thus annually witnessed the admirably grown collections of Mr. Dale and Mr. Broome, have, we cannot doubt, carried away with them a taste for the flower, and the object of the little book before us is to afford information to those who, without experience to guide them, have been inclined to try their hand in its cultivation. For this purpose it is exceedingly well adapted, as it not only contains general cultural directions, but also special instructions for carrying out the various objects in view in growing Chrysanthemums, such as decorating the open borders, ornamenting the greenhouse or the balcony, or producing the large show flowers, which take the uninitiated so much by surprise at our exhibitions. There are in addition to these features, various useful lists of varieties, alphabetical, classical and descriptive, and these contain some useful hints to growers. Mr. Broome has besides appended a short account of the flowers which, from his own experience by the side of the Thames in the heart of London, he is able to recommend as growing well in such confined situations; and we doubt not that to many town gardeners they will prove to be not the least interesting portion of the work.

The following works have reached us since our last, some of which we hope to notice specially hereafter.—*Sowerby's Grasses of Great Britain*, complete in a handsome large 8vo. volume of 192 pages and 144 plates (Sowerby, and Kent & Co.)—*Flowers and Foliage in In-door Plant Cases.* By E. A. Maling, 12mo. (Smith & Elder).—*Moore's Index Filicum*; Parts 14 and 15, as far as Dicksonia (Pamplin).—*Sowerby's British Wild Flowers*; Part 8 of the re-issue (Van Voorst).—*Thwaites' Enumeratio Plantarum Zeylaniæ*, Part 4. Verbenaceæ to Marantaceæ (Pamplin). Part 5, which is nearly ready, completes this valuable work.—*Mémoires et Souvenirs de Aug. Pyr. De Candolle.* By his Son. 8vo. pp. 599 (Geneva and Paris, Cherbuliez).

Trade Lists Received.—Berthault & Co., St. Maur des Fosses, near Paris; Catalogue of Roses, Hothouse Plants, Greenhouse Plants, and General Stock. ——Baltet Frères, Croncel, Troyes; Catalogue of plants of various kinds; a large collection, especially of Pears.——Smith & Adamson, Melbourne; Catalogue of Ornamental Plants, Trees, Shrubs, Fruit trees, &c.; a very remarkable colonial assortment. But we do not find in it the Araucaria Rulei, a noble species described at p. 868, from Dr. Müller's information, and of which Messrs., S. & A. have been kind enough to send us a dried specimen.

Miscellaneous.

Sticta pulmonaria, the Oak Lung Lichen.—First, then, in regard to its use as an article of food. There is a marked resemblance in properties between Sticta pulmonaria and Cetraria Islandica, the well-known "Iceland Moss." Like that Lichen, Sticta pulmonaria contains gum, starch, bitter and astringent principles, and a brownish colouring matter. Its nutritive and demulcent properties depend upon the presence of the former two, viz., the gum and starch. The starch however contained in it is of too small an amount to be of itself of much practical use. An article of diet, which is said to be very light and pleasant, is, with little difficulty, obtainable from this plant in the following way:—After having thoroughly disengaged from it all extraneous substances, let it be steeped in a weak solution of some alkali, as of carbonate of soda, or potash, in order to neutralise the effect of the bitter principle already mentioned as existing in it, which would otherwise impart a disagreeable taste to the article to be

prepared. Then let it be taken out and floated in cold water for a minute or two, that any of the solution adhering to it may be removed. On being boiled for a short time in water, sugar having been added during the process, and then allowed to cool, it will be found to yield a jelly of a brownish hue, which is due to the presence of colouring matter extracted by the boiling water. To give the jelly an additional flavour, wine or spices may be added. It was at one time, in Britain, a favourite article of diet for invalids.——In Sweden it was no unusual circumstance for the peasantry to give it to their cattle, but more particularly the sheep, in epidemic catarrh; whilst in Germany it was mixed with salt, and given to the cattle for similar purposes. The virtues of the plant are, however, generally believed to have been more imaginary than real, writers on the subject generally ascribing their origin to the already alluded to fancied resemblance between its thallus and the lungs.——Sticta pulmonaria, although not, at the present time, ranked among those Lichens which are thus important as furnishing some particular product, yet has properties that, in many respects, attach to it considerable interest. For instance, the bitter principle contained in it has, in Sweden and Siberia, been applied to the purposes of the brewer as a substitute for Hops. The monks of a certain monastery in the latter country acquired quite a reputation for the beer which they brewed, they having been accustomed to flavour it with the bitter principle of this species of Sticta.——The most valuable property of this Sticta, and which has been the most largely applied in the arts, is its capability of yielding a brownish colouring matter. There are several ways in which this dye may be obtained. The Lichen may be macerated in milk of lime, and its colorific principles precipitated by the addition of hydrochloric or acetic acid. Or, it may be steeped in a solution of carbonate of soda for several days. But the most simple method, and which most fully developes the colouring matter, is by ammoniacal maceration. Previous to being macerated in the solution, the plant should be carefully cleansed from earthy and other extraneous substances which are generally found adhering to it, and then pulverised. The liquid, after the Lichen has been placed in it, should be frequently stirred in order that every part may be well exposed to the action of the oxygen of the atmosphere. If submitted to the above process for a period of about 10 days, Sticta pulmonaria yields a very good brown dye, which has been, and is still, to a great extent, applied to the dyeing of various woollen goods by the peasantry of Norway and Sweden, and other countries. In England, Ireland, and Scotland, where this Lichen is one of the "Crotals," it was also used by the same class of persons for similar purposes, but from the increased facilities now afforded for travelling and transit, the adoption by manufacturers of recent inventions, the application of new discoveries in science to the improving of the quality of textile fabrics, and the cheapness of the article produced, all consequent on the progress of civilisation, the employment of this, as well as other dyes formerly used by the lower classes, has been for the most part discontinued. I say for the most part, because in the collection of the vegetable products of Scotland at the Great Exhibition of 1851, yarns dyed by this and other "Crotals" were exhibited. In the collection of dye-lichens and lichen-dyes at the same Exhibition, specimens of this Lichen were shown, and its dye was stated by some manufacturers to be used by them, whilst others remarked that it might be employed with advantage to the orchil maker. The crotals are still commonly used in Inverness-shire. *Drummond, in Annals of the Botanical Society of Canada.*

Uninflammable Muslins, &c.—The frequent destruction of life arising from the combustibility of ladies' dresses, more especially in this crinolinian era, has become a matter of very serious import. The climax of the evil was the recent burning of a whole bevy of ballet girls in America. The manager, it was said, was in no way to blame. But so long as he did not compel them to wear uninflammable dresses, we think he was to blame. We have at various times noted methods of rendering muslins, &c., incombustible, or at least uninflammable; and our purpose at present is simply to note, without making ourselves responsible for the efficacy of the proposed method, that a French chemist is said to have just discovered a mode of rendering muslin, lace, and all kinds of light stuffs, incombustible. It is merely necessary to mix with the starch used in making them up the half of its weight of carbonate of lime, commonly called Spanish chalk or Spanish white. The muslin or other stuff is then ironed as usual. The chalk thus added, it is said, in no respect injures either the appearance, the quality, or the whiteness of the stuff. *The Builder.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c. — In pruning and training climbers in this and other houses some regard must be paid to the time when it is desirable the plants should bloom. Thus, with stove climbers not required to flower before autumn, pruning may be deferred for some time yet, but for earlier display it should be done at once. Passion flowers, Bignonias, and similar plants which make long annual shoots, should only have their branches thinned and slightly shortened, while others, as Combretums, for instance, may be spurred in. Kennedyas will soon be showing bloom, and what training they require should be done at once, but the pruning of these should not take place till after they have done flowering. Where Orange trees are grown to decorate the flower garden in summer care should be taken to prevent their pushing in winter, and this more especially if the trees are in a dark-roofed house. Where such happens the young leaves have always a thin flabby appearance, and soon turn brown after the plants have been set out of doors, whereas if growth is prevented till the trees are in the open air the foliage will bear any amount of sunshine.

FORCING DEPARTMENT.

PINERIES.—The present changeable weather will necessitate the use of a considerable amount of fire-heat, particularly where a high temperature is being maintained with the view of inducing the plants to show fruit, and in the case of swelling fruit see that a proportionate amount of atmospheric moisture is secured, for accommodating as the Pine must be admitted to be, it is by no means benefited by a warm parched state of the atmosphere; see that none of the stock is allowed to suffer for want of water at the root. For succession plants a temperature of from 50° to 55° by means of fire-heat will be sufficiently high, but it should not be allowed to fall below 50°.

VINERIES.—Early houses at work will now require careful attention. Maintain a healthy growing atmosphere by sprinkling the floors, &c., as may be necessary, and admit fresh air whenever this can be safely done. Also attend carefully to the border, and if fermenting material is used do not allow the heat to decline, and where this is not used see that whatever covering is employed is efficient.

PEACH HOUSE.—Maintain a steady night temperature where trees are started; take every favourable opportunity of admitting fresh air, and where the external atmosphere can be made to pass over the heating apparatus, which it should do so as to get warm before coming in contact with the plants, a gentle circulation should be constantly kept up. Avoid the admission of currents of cold air, however, which would be most injurious to the trees, more especially when they come into bloom.

CUCUMBERS.—These require every attention at this time of year to keep them in health; still maintain the temperature previously advised, and give air every day when the weather permits. Stop and train the plants as they progress, and do not allow the leaves to crowd one another, otherwise they will soon get yellow; water occasionally with liquid manure; this should be done when the soil is dry.

STRAWBERRIES.—These will require air daily when the weather is at all favourable to prevent drawing; when early started ones show the truss of flower they should be removed to the Vineries and Peach-houses.

FLOWER GARDEN AND SHRUBBERIES.

Those who are fortunate enough to have the command of a gravel pit should get a good supply of this provided whenever the weather is suitable for that kind of work. See also to having plenty of soil prepared for striking cuttings in in spring, and have draining materials for pots prepared and sorted out in sizes. If any of the tenderer kinds of Roses are yet unprotected, some covering material should be applied at once. As there will be comparatively little to do at present, any spare time will be well spent in going over the stock of plants in pits for next season's use, removing every decaying leaf, and where the surface soil has got green, removing this and top dressing with sandy loam. There is nothing so unfavourable to these plants at this season as damp, therefore take every favourable opportunity of admitting fresh air.

HARDY FRUIT AND KITCHEN GARDEN.

Where orchard trees are infested with insects or Moss, as soon as time can be spared for the purpose, the bark should be well scraped with a blunt tool to remove as many of the larvæ of the insects as possible, after which the parts should receive a coat of the following composition; viz., hot lime and soot in equal quantities mixed with water from the cow-house until it attains the consistency of thick paint. This composition should be well rubbed into the crevices of the bark in order to make sure of its reaching every hiding place of the enemy; and if a little cow manure was worked up in the composition, it would be useful in causing it to adhere better. It is a tedious task to properly cover large old trees with this, but its effect in clearing them of insects will repay the trouble, and an occasional coat to young trees will be useful in keeping them clean. Gishurst Compound in the shape of a strong lather is also recommended for the same purpose. Make cuttings of choice Gooseberries and Currants, also Honeysuckles in the same manner, and Irish Ivy for covering naked fences. Look over fruit and other stores frequently in order to see that all is safe and sound. Standard trees which have been root-pruned must be firmly secured against injury from winds, also get any root-pruning or transplanting to be done this season executed as soon as possible. Also endeavour, as far as circumstances will permit, to have a good supply of Parsley under safe protection for use during severe weather.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending Dec 5, 1861, as observed at the Horticultural Gardens.

November and Dec.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Temperature of the Air. Min.	Temperature of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep	Wind
Friday 29	26	29.739	29.678	57	49	53.0	46½	45	S.W.
Satur. 30	27	29.780	29.748	56	40	48.0	47	45½	S.W.
Sunday 1	28	30.245	29.808	51	23	37 0	46	46	W.
Mon. 2	●	30.674	30.295	50	20	35.0	44½	45	N.E.
Tues. 3	1	30 214	30.105	53	16	34.5	44	44½	S.E.
Wed. 4	2	30.114	29.821	52	23	37.5	43½	44	S.
Thurs. 5	3	29.744	29 693	49	22	35.5	43	43½	W.
Average .		30.073	29.878	52.5	27.5	40.0	44.9	44.8	

Nov. 29—Rain; boisterous; fine; rather boisterous.
— 30—Rain; fine; cloudy; fine.
Dec. 1—Fine throughout; clear and frosty at night.
— 2—Foggy, fine; frosty at night.
— 3—Foggy; fine with bright sun; foggy at night, sharp frost.
— 4—Exceedingly dense fog; clear; slight haze; frosty, at night.
— 5—Fine throughout; clear; frosty at night.
Mean temperature of the week 1⅓ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Dec. 14, 1861.

December.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds N.	N.E.	E.	S.E.	S.	S.W.	
Sunday 8 .	46.2	33.8	40.0	20	0.36 in.	2	5	3	2	1	11	[illegible]
Mon. 9..	46.0	35.7	40.8	15	0.31	3	7	4	1	3	11	[illegible]
Tues. 10..	46.1	33.5	39 8	11	0.20	2	4	4	1	[illegible]	6	[illegible]
Wed. 11..	45.1	32 3	38.7	8	0.62	2	3	3	4	5	12	[illegible]
Thurs. 12..	45.3	33.6	39.4	15	0.44	3	2	2	1	6	12	[illegible]
Friday 13..	46.2	32.7	39.4	11	0.16	2	3	4	1	9	11	[illegible]
Satur. 14..	45.5	33.8	39.7	13	0.32	3	4	2	2	6	9	[illegible]

The highest temperature during the above period occurred on the 13th, 1842—therm. 61 deg.: and the lowest on the 13th, 1846—therm. 11 deg.

Notices to Correspondents.

BOOKS: *Philander.* We have no idea what the work is worth. For the other matter apply to A. Murray, Esq., Royal Horticultural Society, South Kensington, London, who will give you full particulars for which we cannot find room.—*W B.* Carrières book is in French, as its name shows, and has not been translated. You can obtain it through the principal booksellers. There is no good English work.—*A C W.* There is no such book.

CHRYSANTHEMUMS.—Mr. Salter asks us whether his Juno and Dragon's-tooth, and another do not belong to the race of "Dragons," so named by us some time ago We reply that his Dragon's-tooth is a poor representation of the Japanese varieties, and that the two others do not belong to the race.

CINERARIAS: *G F.* Your note was accidentally mislaid, for which pray excuse us. It is clear that the plants are growing too fast; they have perhaps had too much heat.

COUCH GRASS: *R C B.* You cannot kill Couch Grass by burying it under a new flower bed that you are making. There may be 2 feet of soil above it, but it will soon suffocate the flowers. It must be burnt or charred.

GARDENERS' PLACES: *Effingham.* Mr. Eyles, the Superintendent of the Royal Horticultural Society's Garden at South Kensington, has the power of officially recommending Gardeners to places. You may also hear of good men through any of the great nurserymen.

INSECTS: *J T.* The maggots in the hearts of your Celery plants are the larvæ of Piophila Apii, Westw. (See *Gard. Chron.* 1848, p. 332.) They are we believe confined to the Celery. Your Peas were doubtless attacked by a different insect, showing your ground is foul. It might be worth while burning the surface soil, or repeated drenchings with gas tar water would be useful. *W.*

LETTUCES: *Dorset.* According to Vilmorin's Annuaire Ivery's Nonsuch is the same as the black seeded White Cos de Brunoy, the Alma is the brown Cos, Cashiobury is a trifling variety of the last, of no merit; as for Spink's Bath they report it to be a *mixture* of Brown Cos and the French Romaine de la Madeleine.

LINNÆUS'S CLOCK: *E P.* Linnæus studied at Upsal the hour when 69 (not 46) plants opened and closed their flowers; and out of those observations he formed what he called the *Horologium Floræ.* Other observers have followed him; but it is obvious that every place must have a clock of its own. You will find a very good account of one of these enquiries in the *Journal of the Horticultural Society*, vol. viii., page 1, where it fills 21 pages; and you can make a clock for yourself in the course of a year. It was found by the writer that the following were the times of opening and closing at the place in Germany where his observations were made:—

	Open.	Close.
Evening Primrose	6 P.M. ..	6 A.M.
Lychnis vespertina	7 P.M. ..	7 A.M.
Pyrethrum corymbosum.. ..	2 P.M. ..	2 A.M.
Passiflora cœrulea	12 A.M. ..	10 P.M.

This may serve as a specimen of a Floral Clock.

NAMES OF FRUITS: *M R.* Kentish Fill-basket—*C A H.* Probably the Beauty of Kent.||

NAMES OF PLANTS: *J B.* 1, Pteris serrulata; 2, Woodwardia (Doodya) caudata; 3, Asplenium Fabianum; 4, Selaginella Galeottii.

PYRUS JAPONICA: *Fulford.* There are many new varieties, said to be beautiful. Their names are given in the Catalogue of M. Van Houtte, of Ghent, who has them on sale; as we believe also has M. Verschaffelt.

RABBITS: *A C B.* If your Beech and other trees which have been barked by rabbits in the shape of small holes on one side are young and vigorous, the holes will soon close up. The urine used in the receipt for keeping rabbits from barking Hollies, at p. 1039, is doubtless that which drains from the cow-house.‡

THERMOMETERS; *H F.* The difference between Reaumur's and Fahrenheit's Thermometers is as follows:—In REAUMUR's scale the zero is fixed at the freezing point of water; and between that and the boiling point there are 80 degrees. In FAHRENHEIT's scale the zero is 32 degrees below the freezing point of water; and between the freezing and the boiling point the scale is divided into 180 degrees. Consequently 80° Reaumur is equal to 180° Fahr.; 8° R. = 18° F.; and 1° Reaumur is equal to 2¼° Fahrenheit. Degrees below freezing according to Reaumur's scale should be marked (—); thus 23° Fah. or 9° below the freezing point would be —4° Reaumur. Here we may add that degrees below freezing according to the Centigrade scale should be also similarly marked. The temperature in our climate seldom falls below the zero of Fahrenheit's scale; but when it does the degrees should likewise have the minus sign (—) prefixed. We hope it will not be required this season, but in last December want of attention to this particular occasioned considerable doubt and trouble.

TIMBER: *H W C.* The smallest girth at which an Oak timber tree is considered naval timber is when it will square 3 inches.

MISC.: *Crocus.* They are very fond of your namesake. If you have a meadow close by which in one part is full of mice holes, you must either trap the creatures wholesale or strew poisoned corn in their way. Wheat steeped in nux vomica and afterwards dried has been recommended.

THE LONDON MANURE COMPANY
(ESTABLISHED 1840,)
Are now prepared to send out the following MANURES:—
CORN MANURE for AUTUMN SOWING.
SUPERPHOSPHATE of LIME.
DISSOLVED BONES for PASTURES.
CONCENTRATED URATE.
BLOOD MANURE for CORN.
PERUVIAN GUANO, NITRATE of SODA, SULPHATE of AMMONIA, and every other Manure of value.
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BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE of LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.
CONCENTRATED TURNIP MANURE, equal in value to the preceding.
Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861 are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, and BONE SUPERPHOSPHATE of LIME	£6 6
LAWES'S SUPERPHOSPHATE of LIME from BURNT BONE or MINERAL PHOSPHATES ..	5 5
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These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.
American and other Cakes at market prices.
Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

POTTER'S GUANO.—Established Twenty Years.
Agents Wanted.
Factory: 28, Clapham Road Place, S.

Agricultural Machinery.

CHAFF-CUTTERS, TURNIP-CUTTERS, PULPERS, MILLS, PLOUGHS, HARROWS, CARTS, &c., delivered carriage free.
BURGESS & KEY, Manufacturers, 95, Newgate Street, London, E.C. Price Lists free per post.

The Woolston System.

MR. SMITH will ATTEND at the SMITHFIELD CATTLE CLUB SHOW from 11.30 A.M. to 2.30 P.M. each day, at STAND 640, where Drawings of his new Patent Combined Machine for Cultivating, Drilling, and Harrowing Land by Steam Power will be exhibited.

£1000 UPON the WOOLSTON SYSTEM against any other system of Steam Cultivation.
For price of apparatus and particulars apply to Mr. W. SMITH, Woolston, Bletchley Station.

Smithfield Club Cattle Show.—Stands 518 to 537.

BURGESS AND KEY, 95, Newgate Street, E.C.

BURGESS AND KEY invite particular attention to their NEW REAPING MACHINE, which combines every point necessary to adapt it for General Purposes.

BURGESS AND KEY, 95, Newgate Street, E.C., beg also to invite particular attention to their COMBINED MOWER and REAPER, which is unsurpassed.

BURGESS AND KEY also request attention to their MOWING MACHINES, of a cheaper character, adapted to the requirements of Small Farms.

BURGESS AND KEY also request particular attention to their CHAFF CUTTERS, TURNIP CUTTERS, CHURNS, and GENERAL AGRICULTURAL MACHINERY.
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AGRICULTURAL IMPLEMENTS.—The most complete and most reliable LIST of IMPLEMENTS in England. Every one fully guaranteed. Catalogues on application.
J. B. BROWN & Co., 18, Cannon Street, City, London, E.C.; and Stands 240 to 247, Smithfield Club Show, Dec. 10 to 13.

CHAFF CUTTERS, CORN CRUSHERS, ROOT PULPERS, TURNIP CUTTERS, OILCAKE BREAKERS.
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STATIONARY ENGINES, PORTABLE STEAM CRANES, and CONTRACTORS' LOCOMOTIVES, in use in and around London by leading Engineers and Contractors.
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PORTABLE and FIXED AGRICULTURAL STEAM-ENGINES, THRESHING MACHINES, DRESSING MACHINES, CORN and MALT SCREENS, and every description of the best Implements and Machines.
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Smithfield Cattle Show.—Stands 501 to 503.

CATTLE INSTRUMENTS, PROBANGS, ETC.

READ'S PATENT VETERINARY INJECTING SYRINGES; Improved HOLLOW PROBANGS, for relieving Hoven or Choked Bullocks, Calves, Sheep, &c.; READ'S New Patent GARDEN WATERING ENGINES, MACHINES, & SYRINGES, with all the latest improvements,
Manufactured only by the Patentee, RICHARD READ, Instrument Maker, by Special Appointment, to Her Majesty. 35, Regent Circus, Piccadilly, London, W.
*** Descriptions sent Post Free.

Cattle Show. Stands 941 to 950.

COTTAM'S STABLE FITTINGS.—Visitors are referred to the above, and also invited to inspect COTTAM & Co.'s WAREROOMS, only a short distance from the Show (Winsley Street being near to Regent Circus, Oxford Street, and is the street opposite the Pantheon), where an extensive range of full-sized STALLS, LOOSE BOXES, HARNESS ROOMS, &c., are fitted up, showing the arrangement of all Cottam's Patent Improvements, &c.
COTTAM & Co.'s only address in London is 2, Winsley Street, Oxford Street, W. (N.B. Winsley Street is the street opposite the Pantheon.)

Smithfield Club Cattle Show.

MESSRS. SUTTON AND SONS respectfully invite their customers and the public to inspect the specimens of ROOTS, &c., on their STANDS, Nos. 116 to 135, in the First Gallery of the Bazaar, Baker Street.

Cattle Show.

WM. SKIRVING begs to announce to his friends and the Public that he will attend, as usual, at the Cattle Show, Baker Street, to exhibit ROOTS and take orders for AGRICULTURAL SEEDS of the most approved kinds.
The variety of Swede which W. S. will exhibit this Show has, in his experiments for two years past, proved to be superior to all other Swedes now in cultivation.
STANDS in Bazaar, Nos. 171 to 177.
Liverpool, Dec. 7.

TO THE SEED TRADE.—The Subscribers have for Sale several quarters of PEAS of the following varieties:—Early Emperor, Bellamy's Green, Marrow, and Ne Plus Ultra; also Sutton's Champion Swede, and a few cwt. of Long Yellow Wurzel Seed, all the growth of 1861.
Samples and prices on application to MARSH & PERKINS, 42, Drapery, Northampton.
N.B. A reference required from unknown correspondents.

GENUINE ITALIAN RYE-GRASS, produced from the second cut of Foreign Italian, thoroughly cleaned, and weighing from 17 lbs. to 21 lbs. per bushel, can be supplied to the Trade direct from the grower, and purchasers may either take delivery now, or at their convenience up to March 1, 1862.
For samples and prices apply to SIMON A. DAINTREE, of Fendrayton, by St. Ives, Hunts.

CRYSTAL PALACE. — Great POULTRY SHOW and EXHIBITION of AGRICULTURAL ROOTS.—The Annual WINTER SHOW of POULTRY, PIGEONS, RABBITS, PHEASANTS, and Ornamental WATER FOWL, and the Exhibition of AGRICULTURAL ROOTS, will take place on WEDNESDAY, THURSDAY, FRIDAY, and SATURDAY, December, 11 to 14.
Open at 10. Admission (as usual) Saturday, HALF-A-CROWN; other days ONE SHILLING; Children half-price.
NOTICE.—Blondin's marvellous performances on the Tight Rope each day at Three.

PRIZE CATTLE SHOW of the SMITHFIELD CLUB. — The ANNUAL EXHIBITION of PRIZE CATTLE, SEEDS, ROOTS, IMPLEMENTS, &c., commences on TUESDAY Morning and closes on FRIDAY Evening, 10th, 11th, 12th, and 13th December.
Bazaar, King Street and Baker Street. Open from daylight till 9 in the Evening. Admittance One Shilling. Last year at the Bazaar.

ROYAL AGRICULTURAL SOCIETY of ENGLAND.
The GENERAL MEETING of Members will be held at the Society's House, No. 12, Hanover Square, London, W., on WEDNESDAY, December 11, at 1 o'Clock.
By Order of the Council.
London, Dec. 7. H. HALL DARE, Secretary.

The Agricultural Gazette.

SATURDAY, DECEMBER 7, 1861.

MEETINGS FOR THE FOLLOWING WEEK.

MONDAY, Dec. 9	London Farmers' Club .. .. 6 P.M. (Mr Trethewy on Parochial and Union Settlements). Smithfield Club Cattle Show — Private view at 8 P.M.
TUESDAY, — 10; WEDNESDAY, — 11; THURSDAY, — 12; FRIDAY, — 13	Smithfield Club Cattle Show in the Baker Street Bazaar.
WEDNESDAY, — 11	Agri. Soc. of England (Gen. Meeting) 1 P.M

THE only University Professorship of Practical Agriculture in the country is that of Edinburgh, at present occupied by Professor JOHN WILSON, the successor of the late Professor DAVID LOW. How perfectly the sciences, by which farm practice and experience are explained, are taught in other Universities, everybody knows: and our columns prove this day, as they have often proved before, with what ability these sciences are applied to the elucidation of agricultural questions by the present distinguished Professor of Botany and of Rural Economy in the University of Oxford. We believe, however, we are right in saying that no where but at Edinburgh is there a Professorship established for the teaching of Farm Practice. This Edinburgh Professorship is endowed with the munificent annual sum of 33*l*. 6*s*. 8*d*., derived from moneys many years ago bequeathed by Sir WILLIAM PULTENEY. And in an ordinance published last week in the *Gazette* the University Commissioners, in whom all the patronage of the Scottish Universities is vested, have just declared an additional endowment of 12*l*. 10*s*. per annum, being that share of the University income which they consider fairly represents its claims as compared with those of the other Professorships. Now this income includes about 5000*l*. annually granted by Parliament, upwards of 2000*l*. payable from the revenues of the harbour and docks of Leith, besides many hundreds of pounds which, under the name of the General University Fund, include matriculation, examination, graduation, and registration fees.

These considerable sums of money are distributed among Principal and 31 Professors in the faculties of Arts, Divinity, Law, and Medicine—the sums granted varying according to the need that there exists of supplementing the respective annual salaries derived from students' fees. The chair of Agriculture is estimated in an accompanying schedule as receiving only 150*l*. a year in emoluments from all sources; and yet the University Commissioners have awarded in satisfaction of its claim the additional sum of just 12*l*. 10*s*. a year! We can imagine that had the matter been within their power they would rather have decreed the abolition of the Professorship altogether. This would have been preferable to its maintenance in the paltry manner in which the funds available seem to alone permit. And it would besides have had this important advantage, that it would have roused to some action those whose interests are served, or whose honour is concerned in the due maintenance of the Professorship.

We can scarcely pretend to protest against the decision of the Commissioners, who had only to deal with so much money and so many claimants—though even here something might be said on the strange valuation which they seem to place respectively on food and medicine. The art of administering medicine is fully taught, and its teachers seem to be sufficiently rewarded: the art of producing food is also taught; one chair is devoted to it, but a pittance seems to be thought sufficient for its occupant.

One would suppose the Parliamentary endowment of so many other chairs to be a sufficient precedent for a grant in aid of the agricultural Professorship. It is almost startling to find upon the list a sum paid through the office of the Woods and Forests to the chair of Divinity and Church History. Certainly a contribution from such a source towards the endowment of the Agricultural Chair would seem more appropriate. But let the means available be what they may, it is too bad that while other Professorships are now fairly subsidised, an important chair, with a mere pittance for an endowment, should have that pittance extended (as if to the full measure which it deserved) by the addition of 12*l*. 10*s*.

Failing the Commissioners, however, why should not the National Agricultural Society of Scotland undertake the payment of the Professor? They would but imitate the Society of Writers to the Signet, who provide an annual sum in aid of the Professorship of Conveyancing. They have enormous funded property at their disposal, and to set apart a portion thus would be perfectly consistent with the objects of their establishment. They have instituted of late years an annual examination for a diploma in agriculture, and yet have provided no means of agricultural education—why should they not pay their Professor of agriculture? Their own practice will furnish them with precedents:—they pay 300*l*. a year to their Professor of Chemistry in the University of Glasgow, and Dr. ANDERSON gives in return his services as chemist on certain terms to the members of the Society. Why should they not similarly endow the Professorship of Agriculture in the University of Edinburgh, and claim from Professor WILSON his services similarly on certain specified terms applicable to members or their sons?

Let us hope that the leading men of the Highland Society may be induced to take up this subject, and see whether it does not fall within the province and duty of the Society to take some charge of a Professorship which falls so immediately within the field of their own operations.

—— THE engagements of the ensuing week, full of agricultural interest, are specified in our list of meetings. To the details there announced there must be added the Poultry and Root Show in the Crystal Palace. The Baker Street Bazaar will be interesting from the closely packed collection of implements it will exhibit, as well as for the well filled classes of cattle, sheep, and swine, with in many cases the reviewed decision they will exhibit of questions which have already been once decided at Bingley Hall.

—— The calculation given last week of the cost of Mr. READ's steam cultivation at Elkstone, erred on the side of an over-estimated expensiveness through an oversight which most readers will have readily detected. Two years' interest was charged, whereas the implement has only been in use since January, 1861. The following therefore is the expense of the work it has accomplished:—

	£	s.	d.
Labour, 170 days, at 13s.	£110	10	0
Coals—85 tons 11 cwt.	85	11	0
Breakages	40	0	0
Rope	40	0	0
Interest for one year on 700*l*.	35	0	0
Maintenance of value at 10 per cent. ..	70	0	0
The total cost is	£381	1	0

per annum as against 400*l*. or thereabouts

spent upon the horses and working cattle displaced. The sum of 381*l*. 1*s*. being spread over 964 acres ploughed and worked is at the rate of nearly 8*s*. an acre—but if the receipts (50*l*. a year) for the engine as a threshing engine be deducted, then the price will be reduced to 6*s*. an acre.——Let us add while on steam cultivation that the letter of Messrs. Howard in another column on steam ploughing ought to be read in justice to themselves.

—— The Midland Counties Cattle Show of the past week is reported in another page. It has attracted unusual numbers of spectators, 5473 on Monday, 8600 on Tuesday, 7500 on Wednesday; and besides these 30,000 workmen's tickets have been issued and used.—The Dog Show too has attracted large numbers, 2000, 6460, 7200 on three successive days.

DR. DAUBENY ON AGRICULTURAL CHEMISTRY.

Lecture I.—Physical Forces.—"Colloid Bodies."

Rural Economy, if considered in connexion with its various practical bearings, embraces so great a variety of topics, that the lecturer who devotes himself to it as a profession, can never want subjects on which to engage the interest and attention of his hearers.

Independently of the established system of farming operations, of which he will have to expound the principles and make known the details, the improvements which are every year brought forwards in this country and on the continent, will furnish him, in some branch or other of rural economy, with never-failing sources of novel inquiry.

It can, however, rarely happen, that an individual holding the position occupied by myself in one of our Universities, either feels himself competent to supply the practical instruction which is requisite for the education of a farmer, or can hope to collect around him a class of pupils willing to enter upon such a course of study.

For the former purpose a large experimental farm ought to be at the disposal of the teacher, and a concentration of his energies upon this one pursuit would be demanded, such as is hardly compatible with his other avocations; whilst for the latter to collect themselves around him, and to become the recipients of the information, practical as well as theoretical, which he may have to impart, a devotion of time to rural pursuits, wholly at variance with the ordinary routine of an academical education, would be a requisite condition.

I do not, therefore, imagine, that the lectures delivered in Oxford on this subject will ever be of a nature to supersede, or take the place of, the system of instruction which is afforded by our agricultural colleges, where Husbandry is the one aim to which all the efforts of the teacher are directed, and all interfering amusements and occupations are, as much as possible, excluded.

Nevertheless as so large a portion of the youth here educated are likely to be located hereafter in the country, either as clergymen or landed proprietors, I cannot but think that much advantage may be derived from that acquaintance with the first principles of husbandry, which may be acquired through the medium either of chemistry or physiology, sciences which, although they cannot turn an ignoramus into a successful cultivator, may, nevertheless, pave the way to that knowledge, which will enable him hereafter to become one.

Bounded, therefore, as the scope of my instruction necessarily is, by the avoidance of practical details, and deriving, as I believe them to do, whatever interest they possess from the knowledge of the fundamental points of agricultural science which they purpose to impart, the discussion of any new discoveries which may have a possible bearing upon the operations of field culture, or tend, however indirectly, to elucidate the laws upon which the growth of our cultivated plants depends, will appear to fall within the legitimate province of the lectures which it is my office to deliver.

I propose then, on the present occasion, to explain the machinery by which fluids are transmitted upwards through the tissues of plants, and the means by which their several secretions are separated one from the other, and deposited in appropriate receptacles, especially so far as these two functions admit of explanation by the aid of certain recent discoveries.

And first with respect to the transmission of fluids through the vegetable organism. In order to account for this process, at least to the extent to which it is capable of being referred to the laws of physics, we must, in the first place, appeal to the researches of the French physiologist, Dutrochet.

It was he, at least, who first drew attention to the fact, that two dissimilar liquids separated by a membrane, such as a bladder or a sheet of caoutchouc, intermix, in consequence of a double movement, setting in from both surfaces of the dividing membrane, and thus causing an interchange of the two substances betwixt which it was interposed. Dutrochet also showed, that this transfer of fluids did not proceed with the same rapidity from both sides of the membrane, but that every body possesses a different rate of diffusion, so that a larger portion of the more diffusible liquid found its way into the less diffusible one, then *vice versâ*, and the two became unequally mixed in consequence.

If we call, with most physiologists, this tendency to diffusion belonging to liquids in general the *osmotic force*, we may speak of the current which sets in from the more diffusible fluid, as due to exosmose, and the contrary one by which the less diffusible one becomes augmented in quantity, as arising from endosmose.

In consequence of this difference in point of diffusibility, if a bladder filled with milk or other liquid less diffusible than water be immersed in a vessel containing the latter, although some slight quantity of the milk may be expected to pass through the membrane, yet this will be more than compensated by the amount of water which penetrates inwards, and the bladder therefore will become gradually distended.

Liquids possessing the greatest density are in general the least diffusible, but to this there are apparently some exceptions; for water passes through a membrane more rapidly than alcohol, so that a mixture of the two, such as common spirits of wine, may be freed from the greater part of its water by simple exposure to the air, in a bladder or other membrane.

These laws of *osmotic force* have since been found referable to two causes, in appearance at least distinct, although, perhaps, ultimately traceable to the same general principle.

The first of these is the relative force of diffusion belonging to the liquid itself, which has been made the subject of a separate investigation by the present Master of the Mint.

He found, that in solutions of the same salt the rate of diffusion increased with the amount of it present; four different solutions, for instance, of common salt, containing respectively 1, 2, 3, and 4 parts of the salt to 100 of water, diffusing themselves through a liquid in the direct ratio of their respective quantities.

He also ascertained, that when equal weights of different substances were taken, the difference in the rate of their several diffusibilities was such, as to admit of their being arranged under seven different heads, in each of which the quantity diffused bore a certain fixed ratio to the next member of the series. Thus, if the rate of diffusion in hydrochloric acid is represented as 2; that of hydrate of potass will be as 3; that of nitrate of potass as 6; of nitrate of soda as 9; of sulphate of potass as 12; of sulphate of soda as 18; of sulphate of magnesia as 48; so that the above named bodies may be regarded as the representatives of seven distinct types. To the first of them, the most diffusible of the whole, several other acids also belong; to the second, ammonia; to the third, nitrate of ammonia, chloride of potassium, and sal ammoniac; to the fourth, chloride of sodium; and to the remaining four groups other saline bodies, specified by the author of the paper, are severally referred.

Even those bodies, however, which rank in the lowest grade, greatly exceed in diffusibility solutions of gum arabic, of albumen, and of caramel. The three latter, indeed, are so much less diffusible than chloride of sodium, that if its power in this respect be reckoned at 9, that of gum will be 88, of albumen 174, and of caramel 672. One cause, therefore, of the unequal transmission of liquids through a membrance is the relative rate of their diffusibility, the more diffusible losing by *exosmose*, the less so gaining by *endosmose*.

But another cause of this phenomenon, in cases where the two liquids are kept apart by a membrane, is the affinity which the latter possesses for different substances, it being evident that the greater the amount of the solution may be which is sucked up through the pores of the intervening body, the greater quantity *cæteris paribus* will in a given time be transmitted to the liquid placed on the opposite side.

The transmissibility of different fluids through membrane has been exhibited in a very simple manner by Baron Liebig in his "Researches on the Motion of the Juices in the Animal Body," namely, by the weight of mercury required to force each liquid through the pores of a membrane.

The affinity of bladder for different liquids may be stated numerically as follows:

100 parts of bladder	will	take up	268	vol. of	pure water.
,,	,,	,,	133	,,	of brine.
,,	,,	,,	38	,,	of alcohol.
,,	,,	,,	17	,,	oil of marrow.

Hence, as Liebig has shown, we may explain, why dry salt placed upon the outer surface of a bladder filled with water, or in contact with a vessel containing it, speedily becomes moist, for no sooner does a particle of salt combine with the water with which the bladder is saturated, than it compels the latter to expel twice its volume of water, because the affinity of brine for bladder is only half that of the latter. This expelled water dissolves a fresh portion of salt, and so the process continues until the whole is converted into brine.

Thus a phenomenon, which Dutrochet would explain by electricity or some other occult power, resolves itself, according to Liebig, into the law of chemical affinity subsisting between animal membrane and the liquids in question. For the same reason, when a piece of bladder in its ordinary state of distension, from having its pores occupied by water, is immersed in alcohol, it shrinks, because it cannot contain the same quantity of alcohol and water mixed, as it had done of water alone.

But if a bladder be interposed between water and alcohol, exosmose will take place from the former to the latter, because the affinity of membrane for water being greatest, its pores will contain most of this fluid. On the surface, therefore, in contact with the alcohol there will be more water to mix with it, than there will be of alcohol to mix with the water on the other side. Hence the alcohol will gradually get weaker and its volume increase. On the contrary, if a bladder filled with diluted alcohol be exposed for some time to the air, the experiments of Soemmering show, that it will become more and more concentrated until at length it rids itself of its water altogether. For in proportion as the moisture which fills the pores of the membrane evaporates, its loss will be supplied by the fluid from within; but as the affinity of bladder is so much greater for water than for alcohol, a much larger proportion of the former will enter the pores than of the latter, and hence, as the experiment proceeds, the alcohol will become gradually more and more deprived of water.

In the spring of this year the Master of the Mint still further extended our knowledge of this subject in the paper he communicated to the Royal Society, on "Liquid Diffusion as applied to Analysis."

He divides liquids into two classes according to their relative diffusibility, viz., into solutions of crystallisable bodies, all of which seem capable of traversing membrane with greater or less facility, and viscid liquids, which he distinguishes by the name of *colloids*, incapable of crystallising, and scarcely able to pass by diffusion through a membrane at all.

These two classes, like all others recognised in artificial systems, graduate one into the other, so that the colloid, which stands highest in the scale of diffusibility, is not very far removed from the crystalloid which occupies the lowest place; but the difference between the extremes in this respect is immense, for, as we have seen, it takes 87 days for a given quantity of albumen to percolate a membrane, whilst the same amount of sulphate of magnesia penetrates in 20 days, and of hydrochloric acid in one.

Amongst colloids we may place hydrated silicic acid, hydrated alumina, and certain soluble metallic oxides isomorphous with the latter body; the greater number of vegetable substances also, such as starch, gum, caramel, tannin, albumen, gelatine, and extractive matter, rank under the same category.

These are distinguished by the gelatinous character of their hydrates, being, even when transparent, watery and adhesive to the touch. Now, colloids, although themselves but little diffusible, allow the passage of crystalloids through their substance without diffusion, and hence serve as media through which diffusion may take place.

Thus, if some jelly dissolved in water be poured into a tall jar, and a solution of chromate or bichromate of potass be introduced underneath by means of a long funnel, the salt will gradually diffuse itself upwards, and communicate its characteristic colour to the colloid body above.

Let us next consider the consequences of this law of diffusibility, first, upon crystalline, and, secondly, upon colloid bodies.

By virtue of the different rate at which certain salts diffuse themselves than others, it is often possible to effect a partial, if not an entire, separation of one from the other, by introducing the mixture into the bottom of a jar, and pouring water gently upon it, so as to allow it to remain for some days with several inches of fluid above it, into which it can diffuse.

In this manner sulphate of magnesia may be made to separate from albumen or from caramel, the upper stratum of the liquid containing the salt without a trace of the accompanying colloid, as the diffusibility of sulphate of magnesia is to that of caramel such, that in seven days as much was transmitted of it, as in 117 days of the latter.

We may therefore avail ourselves of this principle as a method of separating certain salts from others when mixed together.

Thus, 5 per cent. of chloride of sodium, and of anhydrous sulphate of soda, being each dissolved in water, had such unequal rates of diffusion, that in seven days the upper stratum of the fluid contained none of the latter, although a portion of the former salt was detectable through every part of it. But this principle may be rendered still more available for the purpose of separating colloid bodies from crystalloids, owing to the extreme difference in the degree of diffusibility belonging to these two classes of bodies.

And this may be effected either by placing the mixture at the bottom of a tall jar, and introducing water above it; or, still better, by interposing a membrane or dialyser between it and water.

The most convenient membrane to employ is Mr. Delarue's parchment paper, prepared by treating common paper with strong nitric acid, which communicates to it much of the toughness and compactness of vellum.

Supposing, for instance, any colloid body, such as silicic acid, gum, gelatine, &c., to be mixed with an acid or a salt, by placing the mixture upon such a membrane, the colloid will, after some days, remain

whilst the crystalloid will have passed through into the water beneath.

In this way silica, peroxide of iron, and alumina, bodies which can be held in solution by a crystallisable salt, and in that way exist as colloids, may be obtained in an isolated form, and remain dissolved in water on the filter, so that we are thus enabled to obtain soluble silica, soluble alumina, and soluble peroxide of iron with the greatest facility.

They are unstable bodies however, and separate from their aqueous solvent after some days' exposure to the air, or, upon the addition of many salts, acids, and alkalies.

We may also employ this method with advantage in the separation of arsenic from organic bodies, as from the contents of the stomach, the former passing through the dialyser, purified from the foreign ingredients which had masked its presence.

Let me now endeavour to apply the principles above explained to the elucidation of some of the phenomena presented by the living plant.

The tissue of all vegetables consists essentially of an assemblage of cells, occupied by the peculiar secretions of the plant, and approaching more or less to a spheroidal form. The internal structure of the cell has been explained to us by Schleiden, Mohl, and others, who, although differing in some respects one from the other, agree in representing it, as a bladder containing a number of nuclei or cytoblasts, which seem to be the living portions, as from them new cells originate, whilst the investing membrane serves merely to protect the parts within.

The latest account of its structure, however, is that given by Dr. Beale in the Archives of Medicine for the present year.

He represents it as consisting of an assemblage of spherical particles, so small as to have the appearance of grains, each of which he considers to be endowed with vitality, and to be the seat of all the actions which occur in the living plant. He therefore denominates these particles collectively as "GERMINAL MATTER."

The granules are inclosed within a membrane, transparent, firm, permanent in its properties, and permeable to fluids, but destitute itself of vitality, although being derived from *germinal* matter, it must once have possessed it. He distinguishes it therefore by the name of "FORMED MATTER." It encloses, not only the granules already noticed as possessing life, but also many secondary deposits which are destitute of it, such as starch, wax, chlorophyll, &c.

Now, as these cells, much they vary in form and dimensions, as may be seen in the works of Mohl and others, all have a tendency or approach to a spheroidal figure, bulging out about the centre, and contracting at the extremities, it is evident, that they must leave void spaces between them, which will be filled by capillary attraction with the fluid present in the soil with which their roots are in contact. This fluid consists of water, not perfectly pure, but containing minute quantities of certain saline ingredients. These, however, as we have seen, possess a diffusibility exceeding that belonging to the fluids contained within the vegetable cell. Hence the latter will be rendered turgid by endosmose from the matter introduced, and the latter, owing to its great diffusibility, will pass freely from cell to cell.

Those, however, which occupy the superficial portions of the plant, and especially the leaves, will impart to the atmosphere a portion of their aqueous contents, in proportion to the temperature to which they are exposed, and hence a partial vacuum will be occasioned in them, which will be directly supplied by the fluids existing in the lower and more deeply seated cells. Liebig has illustrated this by a simple and elegant apparatus, consisting of a bent tube filled with water, and closed at both ends with bladder, having its longer limb in contact with brine. The brine passes through the membrane by endosmose, to supply the vacuum caused by the evaporation of water from the extremity of the upper limb. The fact may be rendered obvious to the eye by colouring the brine blue, by which its ascent will be rendered apparent.

Thus, even upon physical principles a rise of fluid would take place in a structure corresponding to that of a plant, even though it were destitute of vitality; but the rapid rise of the sap at the commencement of spring, and under the direct influence of light, seems to require some further explanation. May we not conclude, that at such times the exhalation of moisture from the leaves is due in part to some vital process stimulated by the action of light?

Just as in the animal, heat, by stimulating the exhalent vessels, renders more profuse the cutaneous perspiration, and thereby increases the evaporation from the surface of the body; so light, by exciting the vital pores of the superficial cells, may be supposed to cause a more abundant emission of moisture from the stomata, than would take place from the surface of a dead membrane.

Hence at these times a greater degree of rarefaction will occur within the superficial cells, and a more rapid rise of fluid to supply the vacuum occasioned will consequently ensue.

As these Lectures ought to have an agricultural bearing, let me proceed to point out how completely the laws regulating the *osmotic force* militate against the reception of that *humus* theory, which at a time not far back was regarded with approval by so many scientific agriculturists.

Undoubtedly when we observe that the liquids which find their way most readily into the interior of plants are those saline solutions which possess the greatest diffusibility, and that colloids are in a manner excluded by the membrane which affords admission to the others, the conclusion is inevitable, that *humus* ought to be one of the last bodies which should find its way into the tissue of a plant, so as to contribute, as those writers believe, to its nutrition.

But will not, it may be said, the same remark apply to silica, peroxide of iron, and alumina, of which the two former are present in plants generally, the latter in pretty large quantities, in one tribe at least, the Lycopodiaceæ? These too are colloids in the state in which they present themselves artificially, and therefore ought to be excluded from the tissue of plants.

Now it may be upheld in the first place, that there are various grades of colloids differing in the degree of their diffusibility, and the bodies alluded to, though inferior in this respect to crystalloids, may nevertheless be more capable of entering membrane than gum or humus.

Secondly, we do not know what change in their diffusibility may result from their combination with other bodies, from which they may separate after they have entered the tissues of the plant.

Thirdly, we must recollect that the quantity of these bodies which becomes assimilated is infinitely small, compared to the amount of organic ingredients of which the plant is principally composed.

I do not, therefore, consider, that the admission of small quantities of such matters into the system furnishes any valid objection to the general principle, that the substances which find their way into the spongioles of the roots are for the most part crystallisable salts, whilst the existence of such bodies in a soluble form, as shown by Graham, removes in great measure the difficulty which before presented itself, as to the manner in which they were able to become incorporated in the vegetable organism.

Let us now endeavour to apply these principles to the explanation of certain other phenomena of vegetation.

We have accounted for the admission of nutritious matter from without, namely into the root-cells by endosmose, and into the intercellular spaces by capillarity; and have pointed out the manner in which the sap is propelled upwards into the leaves with greater or lesser rapidity by atmospheric pressure, in proportion to the evaporation which takes place from the surface, and the partial vacuum thereby occasioned.

But this exhalation of moisture is accompanied by other changes more decidedly chemical.

Through some mysterious agency, which, if not vital, is at least only manifested where vitality exists, plants under the influence of solar light are capable of separating oxygen from carbonic acid, and thus of acting as reducing agents, antagonistic to those which have been in continual operation ever since animal life commenced, and which have obtained a still more extended sphere of action, since Man came into being, and contributed, by the various processes due to his agency, in which combustion is concerned, to swell the amount of carbonic acid previously due only to respiration.

But the counteracting process by which carbon becomes fixed and oxygen eliminated, is not quite so simple as was at first apprehended.

Before the whole of the oxygen is set at liberty, various intermediate products are formed within the cells of the plant, all containing less oxygen than is present in the original carbonic acid, but constituting together a number of intermediate links connecting the composition of the original raw material (so to speak) with the resins and oils, in which latter the oxygen is entirely dissipated, and hydrogen has taken its place.

		C	O	
Thus in	Carbonic acid	C 100	O 200	are present
„	Oxalic „	100	150	„
„	Tartaric „	100	125	„
„	Grape sugar	100	100	„
„	Starch	100	83	„
„	Butyric acid	100	50	„
„	Oil of Anise	100	25	„
„	Camphor	100	0	„

So that the processes which take place in the vegetable organism follow just the opposite course to that which prevails in the world of inorganic matter; for whilst in the former we recognise a power of reduction operating, by which carbon is gradually deprived of the whole of its oxygen, which is in its turn replaced by hydrogen; we reverse the order in the arts of life, in converting starch into sugar, sugar into tartaric and oxalic acids, and by combustion any one of the above products into the carbonic acid, which constitutes the last link in the chain.

Liebig has also pointed out a curious relation between the tartaric and oxalic acids, by showing, that the composition of the former is exactly intermediate between that of the latter body and of the sugar from which they both originate, a rapid process of oxygenation converting sugar into oxalic, and a slower one into tartaric acid; whilst 6 atoms of hydrated oxalic acid and 1 of sugar are exactly equivalent to 3 atoms of hydrated tartaric acid.

This, and the other facts above stated are expressed in the two following Tables.

1. Plants produce sugar from carbonic acid, thus :—

		by losing of
Carbonic acid C_1 O_2		O
12 of ditto C_{18} O_{24} produce		
6 of Anhydrous oxalic acid	C_{12} O_{18}	6
6 of Hydrated do. +	O_6 H_6	
	C_{12} O_{24} H_6	
3 of Tartaric acid	C_{12} O_9 + O_6 H	15
3 of Malic acid	C_{12} O_6 + O_6 H_6	18
1 of Grape sugar	C_{12} O + O_{12} H_{12}	24
or		
12 Carbonic acid	C_{12} O_{24}	
12 of Carbonic acid being	C_{12} O_{24}	
losing	12	
	C_{12} O_{12}	
gaining	H_{12}	
	C_{12} O_{12} H_{12}	

which represents the composition of cane sugar.

Art produces carbonic acid from sugar (C O H), thus :—

		by adding of
Sugar with NO_5 the action (being violent) produces		O
6 of Oxalic acid and	C_{12} O_{18}	18
12 of water	O_{12} H_{12}	
Being slow 2 of Sugar produce	= C_{24} O_{24} H_{24}	
3 of hydrated Tartaric acid and	C_{24} O_{36} H_{18}	18
6 of water	O_6 H_6	
	C_{24} O_{42} H_{24}	
viz.		
6 Hydrated Oxalic acid	C_{12} O_{24} H_6	
1 Sugar	C_{12} O_{12} H_{12}	
3 Hydrated Tartaric acid	C_{24} O_{36} H_{18}	

There is also this curious relation between the bodies we have been considering, namely, that their respective diffusibility seems to bear an inverse proportion to the abstraction of oxygen, or that they pass gradually from the condition of a crystalloid to that of a colloid, as the oxygen is eliminated.

Thus acids are more diffusible than sugar—sugar than gum—gum than the oils.

It would also seem as if the colloid bodies of vegetable origin, produced during the processes that take place in the plant are capable of existing in two isomeric conditions, just as silica, alumina, and peroxide of iron, colloid bodies derived from the mineral kingdom, are capable of doing; for gum is isomeric with cane sugar; and differs from starch only in the presence of 1 atom of water. Each of the essential oils, too, appear to have a species of camphor or solid body, called a *stearopten*, associated with itself, differing from it only in the presence of one or more atoms of water.

And as the substances above mentioned are produced by the elimination of oxygen from carbonic acid, so there is reason to suspect that the vegetable alkalies may originate in the substitution of various hydrocarbons for one or more of the atoms of hydrogen present in ammonia.

The analogy which these natural productions bear to the compounds made known to us by Professor Hofmann in his remarkable papers on the Organic Bases (Ph. Tr. 1850), seems to lend colour to this supposition.

Thus, according to the distinguished chemist just mentioned, as ammonia consists of

$$N \begin{cases} H \\ H \\ H \end{cases}$$

and as we obtain an *amide* by the substitution of an atom of some hydrocarbon for one of its atoms of hydrogen, as in the instance of oxamide ? ?

$$N \begin{cases} H \\ H \\ C_2 \ H_3 \end{cases}$$

so likewise we get the curious body obtained from coal-tar, now so much used in dyeing, called aniline, by the substitution of the base phenamine for one atom of hydrogen. Thus

$$N \begin{cases} H \\ H \\ C_{12} \ H_5 \end{cases}$$

is equivalent to $C_{12}H_7N$, which represents the composition of aniline.

In like manner by the replacement of two atoms of hydrogen, by an atom of each of two compound radicles, as below,

$$N \begin{cases} H \\ C_{14} \ H_{15} \ O_4 & \text{Cumyl,} \\ C_{30} \ H_{14} \ O_2 & = \text{Salicyl.} \end{cases}$$

we get an *imide*.

And lastly, by the replacement of all the three atoms, we get a *nitrile*, thus—

$$N \begin{cases} C_{14} \ H_5 \ O_2 & \text{Benzoyl.} \\ C_{14} \ H_5 \ O_2 & \text{Ditto} \\ C_{12} \ H_{14} \ SO_2 & \text{Sulpho-phenamine.} \end{cases}$$

Now having shown, that alkaline bodies may thus be produced artificially by the substitution of *known*

organic radicals, or compounds of radicals, for the hydrogen atoms present in ammonia, we are led to suspect, that the natural vegetable alkaloids, into which nitrogen enters as an essential ingredient, have been formed in a similar manner; although the hydrocarbons which we assume to enter into their composition are not yet ascertained to have a real existence, and although we are in many instances obliged to assume, that one atom of each of them has the power of replacing, not one only, but two, and even three atoms of hydrogen.

In representing according to this view the composition of a few of the best known of these alkaloids, the number of atoms of H (when more than one) which the body substituted has replaced, is indicated by a corresponding number of marks annexed.

This will be seen by the following Table.

Conia, the alkaloid contained in Hemlock, having the composition of $C_{16}\,H_{15}\,N$, may be represented thus,—

$$N \begin{cases} H_1 \\ C_8\ H_7 \\ C_8\ H_7 \end{cases}$$

Nicotine, the poisonous principle of the tobacco, consisting of $C_{10}H_7\,N$, may be a nitrile, in which the three atoms of hydrogen are disengaged owing to the substitution of the tribasic radical $C_{10}H_7'''$.

Quinine, the medicinal principle present in Peruvian bark, seems less easily reducible to this formula, as its composition is

$$C_{40}\ H_{24}\ O_4\ N_2\ + 6\ Aq.$$

It is however conceived that its constitution may be represented thus:

$$\left.\begin{matrix} N \left\{ C_{20}\ H_{12}\ O''' \right. \\ N \left\{ C_{20}\ H_{12}\ O''' \right. \end{matrix}\right\} \text{Quinine.}$$

Two atoms of ammonia having their hydrogen atoms replaced by the organic compound thus represented.

Morphia, the narcotic principle in opium, may be also regarded as a nitrile, its composition being $C_{34}H_{19}O_6N + 2$ Aq., and its formula.

$$N \left\{ C_{24}\ H_{19}\ O_6\ ''' + 2\ Aq. \right.$$

Now, it is to be remarked that these various bodies, whether they be acid or alkaline, are not mingled one with the other in the vegetable fibre, but are each contained in its own appropriate receptacle.

Thus in the Potato, we find the cells containing starch to be distinct from those in which the other juices are deposited.

The latter being acrid and unwholesome would otherwise render the Potato unfit for food, and hence it is, that if by frost the vessels become ruptured, the Potato becomes good for nothing, in consequence of the intermixture of the acrid juices with the nutritious starch.

In the same manner the narcotic principle in the Poppy, the tonic one in the Cinchona tribe, the purgative one in the Rhubarb, are all lodged in appropriate cells, situated in particular parts of the vegetable which affords them.

Again it is remarkable that the cells of the leaves, in which those chemical reactions, which give birth to so great a variety of products, would seem to originate, are filled w th a material equally destitute of acid and alkaline properties, and essentially of a waxy nature.

Owing indeed to the green colour which ordinarily belongs to it, the substance of which the leaves are composed goes by the name of chlorophyll; but the matter, which alone deserves that appellation, constitutes in fact but a small portion of the leaf; for just as the body which imparts its hue to a dye-stuff is present in quantity infinitely small as compared with the substance over which it is diffused, so this colouring principle bears but a small proportion to the waxy or fatty matter which represents the staple of the leaf.

But the real chlorophyll itself is not a simple substance, but according to the researches of Fremy consists of a blue and a yellow principle, which by their commixture produce green, but which may be isolated one from the other by chemical means.

Alcohol equally dissolves both, but the two may be separated by first precipitating the colouring matter from the alcoholic solution by means of hydrate of alumina, and afterwards redissolving it in ether.

Moreover, if chlorophyll be first treated with hydrochloric acid, and a piece of marble be then suspended in the solution, the blue colouring matter is thrown down, and the yellow floats on the top.

Now as etiolated leaves, as well as those which have assumed the autumnal tints, become green under the operation of an acid, Fremy concludes, that the green colour belonging to them is caused by the generation of a blue principle through a similar agency. And as this acid principle is generated less freely in the autumn than in the spring or summer, the blue colouring matter of the leaf becomes diminished in quantity at those times, and the yellow predominates. Hence the various brown and yellow tints of the foliage during fall of the year.

But although the blueness of the chlorophyll may be caused by the presence of an acid, yet it would appear that the latter must be got rid of as fast as it is produced, for no sensible indications of acidity present themselves in ordinary leaves when fresh gathered.

Now this I apprehend to arise from the immediate separation of the acid from the chlorophyll by exosmose, for acids in general belonging to the class of crystalloids, and chlorophyll, or rather the starchy and waxy matter which accompany it, to that of colloids, the former will pass readily from cell to cell, whilst the latter remains behind.

Even if we reject this view of the coloration of the leaf by means of an acid, we shall not be the less obliged to admit, that in its cells acids are produced which are immediately got rid of by exosmose.

Thus in direct proximity to the sepals, which are usually green, and partake in the same functions which are discharged by the leaves, we find the variously coloured petals of the flower, which often, although not always, derive their characteristic tints from the acid or alkaline juices which they receive from the neighbouring parts.

They probably combine in the cells of the flower with other principles which impart to them a colloid condition, but their expulsion from the leaf itself must be due to the diffusibility which they possessed at the time when they were first elaborated, and had not yet lost that property by combination with other matters. For it is to be remarked, that the juices which exist in the state of greatest purity in the plant cells, are those which from their colloid nature are least diffusible.

In the starch-cells of the Potato all the other matters secreted by the plant seem to have been separated by dialysis through the walls of the containing membrane; the same is also the case with the turpentine vessels in the Fir; and the oil in the seeds of the Poppy has become by this process so freed from the narcotic principle which exists in its capsules, as to be considered perfectly innocuous.

So little diffusible indeed is the colloid matter which constitutes the leaf, that we often observe white, gray, or yellow spots interspersed through the green matter, not blending with, but standing perfectly distinct from, the general mass.

We may thus understand, why it is, that those juices which are present in plants most commonly and in the largest quantity, belong in general to the class of colloids.

The oxalic, the tartaric, the malic, and other vegetable acids which exist in plants are indeed crystalloids, and therefore permeate membrane freely, but they are only temporary constituents, or steps in the series of changes which are intended to convert carbonic acid into sugar and starch, and they are consequently got rid of, either by exosmose, or else by some chemical process by which they are converted into glucose or fruit sugar.

This latter belongs to the class of colloids, and is only slowly diffusible. Hence it remains permanently in the cells in which it has been produced, until perhaps by a further separation of oxygen from it, it is converted into pectine or into gum.

Pectine is the principle which imparts to the juices of many succulent fruits their tendency to gelatinise.

Gum, although for the purposes of the arts principally derived from certain species of Acacia, is found in the juices of most plants.

Both being colloids, are retained within the cells in which they are generated; but it is probable that they finally are converted into starch, from which pectine differs only in the addition of 4 atoms of carbonic oxide.

Starch being	$C_{12}\ H_{10}\ O_{10}$
4C O =	$4 \qquad 4$
	$C_{16}\ H_{10}\ O_{14}$
	4
We obtain Pectine =	$C_{64}\ H_{10}\ O_{56}$

Whilst gum is even still more closely allied, as may be seen below:

Gum	$C_{12}\ H_{11}\ O_{11}$	
Starch	$C_{12}\ H_{10}\ O_{10}$	
Difference	$H_1\ O_1$	or 1 atom of water.

All these principles, however, require a certain, although an infinitesimal quantity of particular mineral matters, to adapt them for the purposes of the plant.

Phosphate of lime, for instance, is essential to the existence of the seed, in which it exists, either combined with, or intimately diffused through, the substance of the gluten and starch, which are its principal proximate principles.

The same is the case with the alkalies, earths, and metals, which are detected in every ash analysis.

These, being crystalloids, easily enter the membrane of the cells, and pass by endosmose from one to the other. In their passage a portion of each is arrested, owing, probably to some chemical action exerted by the colloid body present in the cells, but the greater part is eliminated by diffusion.

At length what is in excess after supplying the demands of the system, finds its way to the surface, and especially to the cells composing the spongioles of the roots, from which they are excreted, affording, as I conceive, a beautiful example of the subordination of physical laws to the economy of the vegetable creation.

It may be remarked that the roots of plants very generally contain an acid juice, as was lately pointed out to me by Baron Liebig, which is easily detectable by simply submitting them to pressure upon ... paper, which becomes reddened in consequence.

Now, acids, as we have seen, are in general ... diffusible, and therefore pass through the membrane ... the cells with the greatest facility.

I have thus endeavoured, by availing myself of the researches of Graham and Liebig, to explain ... physical principles some of the leading phenomena which present themselves in the vegetable kingdom.

But having pointed out certain applications of ... laws laid down by the former distinguished ch... which struck me on the perusal of his memoir, I ... not to omit to lay before you the remarks which ... has himself made, as to certain circumstances which, as he believes, eminently fit "colloids" for serving ... purposes of life.

"One characteristic quality belonging to them is their mutability. Their existence is a continued meta-stasis. A colloid may be compared in this respect to water while existing liquid at a temperature under its usual freezing point, or to a supersaturated ... solution.

"Fluid colloids appear to have always a pe... modification, or, in other words, a capacity to exist in a gelatinous state, and they often pass under ... slightest influences from the first to the second condition. The solution of hydrated silicic acid ... instance, is easily obtained in a state of purity ... cannot be preserved. It may remain fluid for ... weeks in a sealed tube, but is sure to gelatinise ... become insoluble at last. Nor does the change of ... colloid appear to stop at this point. For the ... forms of silicic acid deposited from water, such as ... are often found to have passed, during the geological ages of their existence, from the vitreous or colloid into the crystalline condition.

"The colloidal is, in fact, a *dynamical* state of matter; the crystalloidal being the *statical* condition. The colloid possesses *energia*. It may be looked on as the probable primary source of the forces appearing in the phenomena of vitality.

"To the gradual manner in which colloidal changes take place (for they always demand time as an element) may the characteristic protraction of chemico-organic changes be referred."

Thus far then, Mr. Graham himself has aided me in my attempt to apply his principles of "Liquid Diffusion" to the facts of Physiology, but even with the new light which these discoveries appear to have shed upon the processes of vegetation, I do not pretend that all the phenomena which it presents, can be referred to chemical or physical forces.

Some of these excepted cases will form the subject of my next Lecture, in which allusion will be made to facts which appear at present only to admit of explanation by calling in the aid of the vital principle; but it is at least satisfactory, if we have been able to show on this occasion, that whilst the general circulation of the fluids through the organs of a plant are, to a certain extent at least, due to endosmose, aided by capillarity, and by atmospheric pressure, the particular compounds secreted from this common fluid in different parts of the organism are maintained in their state of isolation by physical laws, connected with their own respective constitution, and by the nature of the membrane of which the walls of the containing vessels are composed.

Home Correspondence.

Drainage Outfalls.—As Mr. Brodie's object in referring to the powers of the West of England Land Drainage Company, besides advertising that company, must be to advance the cause of truth, he will be doing considerable service by stating in what particulars the powers of his company are different from those of the other companies; and 2dly how he avoids the requirements of the Lands Clauses Consolidation Act in cases where the owner of the adjoining land is a tenant for life; and 3dly how he avoids the expenses, delays, and doubtful verdicts of juries in cases where either the owner or the lessee of the adjoining land dissent to the desired easement? I have no doubt that Mr. Brodie's company, and all the companies, have often secured the permission of adjoining proprietors to the perfection of their works by the carrying of certain drains through their lands; but this does not prove that if those proprietors said "No," that in a simple case of an under-drain outfall they could enforce their powers in the face of opposition, at a cost commensurate with the simple benefit sought. I see by the papers that Mr. Hobbs stated that the Inclosure Commissioners prepared a Bill for securing these minor advantages to the public generally. Perhaps they thought differently from Mr. Brodie as to the nature of his company's power, or that the companies ought not to have a monopoly! Under any circumstances let us have the facts. *A Reader.*

Coprolites.—The experiments detailed by Mr. E. T. Kensington, F.C.S., in the *Agricultural Gazette* of the 23d November, 1861, confirm many of the opinions propounded in the paper which led Mr. Kensington to carry out those experiments. It may be well to remind the reader that in the Number of this Journal for May 11, 1861, reference was made to an experiment conducted on the school farm, Glasnevin, in which it

was found that finely ground coprolites acted beneficially on the Turnip crop. This experiment was instituted not under the belief that ground coprolites would equal or exceed in efficacy dissolved coprolites, but for the purpose of testing an opinion pretty generally entertained as to the non-manurial value of ground coprolites. In introducing the Glasnevin experiment to the notice of the public it was observed in the *Agricultural Gazette*:—"The notion is pretty generally entertained that ground coprolites exercise little or no fertilising influence on the grain crop to which they may be applied, the supposition being that their phosphates are so locked up as not to be available for nourishing the crop. It has occurred to Mr. Baldwin of Glasnevin, that it was by no means impossible that when coprolites are finely ground, and evenly distributed over the land, their phosphates might be dissolved by rain water which is charged with carbonic acid. The (Glasnevin) experiment seems to establish that under certain circumstances, the insoluble phosphates of coprolites can be assimilated by plants. Whether the result would prove as satisfactory on all soils as on the Glasnevin trial field, and in all seasons as in 1859, may however be well doubted." That Mr. Kensington's experiment confirms the main facts elicited at Glasnevin is clearly seen on examining his table. Thus Plot 3, unmanured, gave of Swedes, 18 tons per statute acre; Plot 2, manured with 5 cwt. of ground coprolites, 20 tons per statute acre. In other words 5 cwt. of coprolites ground to an impalpable powder increased the produce by 2 tons per statute acre. These two experiments seem to establish a fact in the science of manuring; for there can scarcely remain any doubt that finely ground coprolites exercise a beneficial effect on the growth of Turnips. The practical value of the scientific facts thus established is the point that now remains for elucidation. Mr. Kensington assures us that he will follow up the subject. We can promise him fellow labourers. And if he and others would interchange ideas on the question so as to lay down a uniform plan of action, the true manurial value of ground coprolites might in a few seasons be ascertained. In the present state of our knowledge it would be unsafe to offer any opinion on the subject. But even Mr. Kensington's experiment appears to us to afford ground for hoping that "under certain circumstances" ground coprolites may rival well made superphosphate. Plot 2, manured with finely ground coprolites, produced of Swedes 20 tons per acre. Plot 5, manured with superphosphate (about the same money's worth), 22 tons 6 cwt. But Mr. Kensington informs us that the number of plants in the latter exceeded those in the former in the ratio of 58 to 54. Now supposing the number of plants on both plots the same, and suppose further (what is most probable) that the increase in the number of plants on Plot 2 would not interfere with the weight of each bulb, then the produce by the finely ground coprolites would have been 21 tons 10 cwt. We know not if the experiment appeared to Mr. Kensington in this light. We have no desire to put any construction on the experiment which it does not fairly bear. Whether it does bear this construction no person but Mr. Kensington can say, as it depends on the circumstance or circumstances whence arose the ratio between the numbers of plants in the plots. *T. B. G.*

Steam Cultivation.—Mr. Thomas Lyon, Thurlow, in his letter published in your last week's paper, would make us believe that it is a great improvement in steam culture to connect the windlass direct from the engine with a coupling joint in the place of strap gearing, which said to be improvement he places to the credit of Howard. Now, as this is incorrect and a repetition, the *Times* having started it first at Leeds, I think it nothing but justice to myself to set the public right upon the point. Now, the fact is, some of my customers have used this direct coupling for years, long before Howard brought his drop drum and cultivator out, and it is the identical mode of connection that I showed in my patent dated April 22, 1855. Howard's tackle is all mine except the drop drum grinding itself away round a costly eccentric and cultivator. The direct coupling may appear to have its advantage, but practice proves to me that there is nothing so good as a good heavy strap to drive with. *William Smith, Woolston, Dec. 2.*

A Protest against Steam Cultivation.—From the 30th July began harvest, consisting of 6 acres of Peas, 160 acres of Wheat, 18 acres of Oats, 100 acres of Beans; ploughed 691 acres of land, and carted 200 loads of lime (to the barns or yards and not on to fields near) and earth, and 660 loads of dung.—Two days' cleaning out dung from yard and carting in stones and chalk, carting three loads of lime, fetching furniture of four horse-keepers, and coals for same and house, taking corn to wharf and fetching horse corn back, besides jobbing.—Number of horses kept, 21—light Suffolk horses, all my own breed with the exception of three, (one bought in 1851 for 12*l.*, another 16*l.*, and the other in 1852, 10*l.*)—Land heavy, not drained: and out of 272 acres ploughed since harvest, only 215 fallowed for 19 years.—Have grown 2113 acres of Wheat in 19 years, and have 32 acres of Turnips and Mange's. The Wheat straw is nearly all sold off the farm. Commenced November 7th, finished November 28th the work of drilling. 193 acres with Wheat, harrowed, water furrowed, with the exception of 22 acres—on account of want of rain. *From a known Correspondent.*

The Steam Plough.—In your article of the week before last on steam cultivation you allude to "recitals of failures, losses, and disasters" which have been communicated to you by persons who have embarked in steam cultivation. One of your Correspondents writes: "I have an exact account kept of the work done each day and the quantity of coals consumed, but it is so unsatisfactory that I do not like to refer to it. Since I have been the unfortunate possessor of one of these implements it appears to me that I have been trying a series of experiments for the benefit of the maker. Before I had the engine I was always in advance with my work, since then I am always behind." As no maker's name is given, your readers may infer that the "failures, losses, and disasters" have occurred with some of the apparatus we have made, particularly as we have sent out a larger number of sets than any other makers. Having lately communicated directly with every person who has purchased our apparatus, we are enabled to say positively that no such "failures, losses, or disasters" have happened with any of the apparatus we have supplied. On the contrary, from nearly every purchaser, we have received the most gratifying accounts of the success they have met with. *James and Frederick Howard Britannia Iron Works, Bedford.*

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

MONTHLY COUNCIL, *Wednesday, Dec.* 4.—Present: Colonel Challoner, Trustee, in the chair; Lord Feversham, Hon. W. G. Cavendish, M.P.; Hon. Colonel Hood, Mr. Amos, Mr. T. Raymond Barker, Mr. Barthrop, Mr. Cantrell, Mr. Druce, Mr. Exall, Mr. Frere, Mr. Brandreth Gibbs, Mr. Harcourt, Mr. Fisher Hobbs, Mr. Holland, M.P.; Mr. Wren Hoskyns, Mr. Hudson, Mr. Hutton, Mr. Jonas, Mr. Lawes, Mr. Lawrence, Mr. Milward, Mr. Pain, Mr. C. Randell, Mr. Rigden, Professor Simonds, Mr. Thompson, M.P.; Mr. Torr, Professor Voelcker, Mr. Jonas Webb, Mr. Wells, and Mr. Burch Western.

The following Members were elected:—

John Hockenhull, Royals Wood, Aston, Nantwich
Edward Alexander, Leominster
James Withington, Rose Dale, Tenbury
Sir George Chetwynd, Bart., Grendon Hall, Atherstone
Lieut.-Col. Bathurst, M P., Clarendon Park, Salisbury
Major-General Sir Travell Phillips, C. B. S., United Service Club, S.W.
Stephen Duke, Blakehurst, Arundel
Wm. Anthony Bowler, 9, Whitehall Place, S.W.
Charles D. Beauchamp, 9, Whitehall Place, S.W.
Jonathan Richardson, Glenmore, Lisburne, Co. Antrim
E. G. Hodgson, Charsfield, Wickham Market
E. Hunt Davies, Hampton Bishop, Hereford
Sir George Jenkinson, Bart., Eastwood, Berkeley
Henry H. Gibbs, St. Dunstan's, Regent's Park, N.W.
Henry Codd, Ashwarren Farm, Overton
Charles Andrews, Harewood, Ross
T. Forrest Fisher, Ince Blundell, Liverpool
Wm. Lawson, Brayton Hall, Carlisle
James Gibb, Crown Villa, Southport
J. Lovegrove Waldron, Marridge Hill, Ramsbury, Hungerford
E. W. Johnson, Chichester
J. Hesletine Smith, Perrott's Brook, Cirencester
George Bond, Earl-Soham, Wickham Market
Henry Hall Dixon, 10, St. George's Terrace, Kensington, W.
T. Powell Symonds, Jun., Pengethley, Ross

The Right Hon. the Earl of Powis was unanimously elected a Trustee of the Society in the room of the late Right Hon. Sir James Graham, Bart., deceased.

FINANCES.—The Hon. Col. Hood, Chairman of this Committee presented the report, from which it appeared that the Secretary's receipts during the past month had been examined by the committee and by Messrs. Quilter, Ball, & Co., the Society's accountants, and were found correct. The balance in the hands of the bankers on the 30th Nov. was 2785*l.* 19*s.* 2*d.*

JOURNAL.—The report of this Committee was presented by Mr. Thompson, M.P., the Chairman. They had not been able to furnish the members of the Society with copies of the Judges' reports of the Trials of Implements at Leeds in consequence of the Reports of the Judges of Steam Cultivators, and of the Miscellaneous implements, not having been yet received. Professor Simonds has again stated his inability from illness and domestic affliction to complete his paper on Rot in Sheep.

IMPLEMENTS.—Colonel Challoner, Chairman of this committee, announced that they recommended that there be an exhibition of Implements next year in Battersea Park, but that there be no trials, consequently the prizes for Implements comprised in the last year of the Quadrennial system will be postponed until 1863. The exhibition of Implements would commence on Monday, June 23, and close on Wednesday, July 2. The certificates of entry of Implements and also the specifications of the same to be delivered in to the Society's Office, 12, Hanover Square, by the last day of March. Instead of each exhibitor being allowed, as heretofore whatever space he chooses to pay for, they recommended that a committee be appointed to consider the demands as soon as lodged with the Secretary, and to determine what quality of shedding shall be allotted to each exhibitor, and that they be empowered to reject any articles which do not appear suitable for exhibition in an agricultural show. Locomotive and traction engines shall not be allowed to move about any portion of the show yard, except such space as the stewards may select under their written authority. The rule of the Society's Prize Sheet regulating the amount of pressure at which steam engines might be worked in the show yard had been altered from 30 to 45 lbs. per square inch. This report was adopted.

LIVE STOCK PRIZES.—A Schedule of Prizes for Scottish Stock, amounting to 557*l.* offered by the Highland and Agricultural Society of Scotland for competition at the show in Battersea Park, was brought forward by Mr. Milward, chairman of the committee, and cordially accepted.

FOREIGN STOCK.—Mr. Fisher Hobbs presented the report, recommending that prizes in medals to the amount of 750*l.* be offered by the Society for various descriptions of Stock of Foreign breeds. He related the interviews which he had had with Mons. Mornay de Mornay, the Inspector of the Imperial farms, and with General Fleury, Governor of the Imperial stud, who had informed him that the French Minister of Agriculture would heartily co-operate with the Society, to whom he expressed himself grateful for having conceived the idea of an International Exhibition of Stock. The report was adopted, and the Secretary was instructed to place himself in communication through the Foreign Office with the Foreign Ministers and Consuls who could give the necessary publicity to the Society's Prize Sheets.

The annual Reports of all the Standing Committees were presented by the respective Chairmen.

The Standing Committees for 1862; viz.:—Finance Committee, Journal Committee, Chemical Committee, House Committee, Implement Committee, Veterinary Committee, Stock Prizes' Committee, London Show Committee, were appointed, and it was resolved that the Journal Committee should select from the papers or communications sent in to the Society those which it is desirable to read at length at the Weekly Councils.

Mr. Holland, M.P., having brought forward his motion that Inspectors of Sheep be appointed to examine the animals on their admission into the Showyard, with instructions to reject all sheep that have not been fairly and entirely close shorn, for reconsideration, it was negatived by a large majority.

Mr. Fisher Hobbs' motion that the grant to the Royal Veterinary College be discontinued was not carried, an amendment having been moved by the Hon. Col. Hood, and carried unanimously, that no further grant shall be made until a Special Committee shall have conferred with the Governors of the Royal Veterinary College, and reported to this Council on the subject generally.

Mr. Torr having moved "That Members of the Society shall be admitted to the Showyard" on the Wednesday on which the Judges are in the yard, the motion was seconded by Mr. Milward and carried unanimously.

The Bye Law 69, requiring "That the Special Council for settling the Prize-sheets for the Country Meeting be held on the Thursday in the Smithfield Club Show week," was altered on the motion of Mr. Fisher Hobbs, seconded by Mr. Torr, and the Wednesday in that week substituted.

The further consideration of Mr. Fisher Hobbs' motion that Special Prizes be offered for Steam Cultivators at the Society's Exhibition in 1862 was deferred.

The Council having fixed the hour of the General Meeting of the Society for 1 o'clock on Wednesday next, the 11th inst., adjourned to 3 P.M. on Monday, the 9th inst.

MIDLAND COUNTIES ASSOCIATION:—BIRMINGHAM.

The annual exhibition of poultry, fat cattle, sheep and swine, and roots—this year supplemented by a very interesting collection of agricultural implements, took place on Monday last and several following days, at Bingley Hall, Birmingham; and attracted the usual crowds of spectators, for which such ample room is afforded in the large square there covered in.

The classes of Hereford cattle were not well filled; those of Short-horns were unusually well represented; a few Devons, one or two Long-horns, and a fair number of Welsh and Scotch cattle made up the cattle show. Certainly it must have struck spectators generally that the Midland Counties do *not* send to the exhibition of their own Association anything like an adequate representation of their own particular breeds of stock. Herefordshire and Shropshire are two of the counties thus included, but the Hereford herd of cattle "at home" in those two counties are not fairly illustrated certainly in respect of number, and even in respect of quality they do not come up to the standard of previous years. On leaving the Hereford classes, exhibiting great variety of size and quality, and reaching the Short-horn oxen, one immediately felt that though going from uniformity of colour to variety of colour, yet the animals before him exhibited greater uniformity of substance and quality than those he had just passed by.

The older Hereford oxen included 4 animals; the first, receiving the first prize in the class, was exhibited by Mr. Heath, of Ludham Hall, Norwich. It was very thickly covered with rather loose flesh, very deep in front, inferior in its hind quarters, drooping in the line of its back towards the tail, not very square as you looked at it from behind. It girthed 9 ft. 2 in. and was 5 ft. 7 in. long, and will probably yield between 124 and 130 imperial stones of beef.

The second prize went to No. 3, exhibited by Mr. Aldworth, Frilford, Abingdon, truer along the back than No. 1, squarer behind, firmer in the flesh, but an altogether smaller animal, girthing 8 ft. 3 in. and 5 ft. 4 in. long, and weighing probably about 100

imperial stones. It was only one month younger than its successful rival.

In the second class—Hereford Steers—the first prize deservedly went to No. 7. Mr. R. Shirley, of Munslow, Salop, who took the first prize two years ago with an extraordinary Hereford Steer, has again been victorious in a similar manner. The animal exhibited in 1859 was slaughtered when 2 years 6 months and 27 days old, and weighed 87 st. 6 lbs. imperial. The Steer exhibited this year is distinguished from its neighbours by its remarkably straight back and symmetrical body, very evenly covered with rather loose flesh. Two straight lines parallel to one another, and about 20 inches apart, as two rods tied together by strings of that length, if laid along the animal on either side of the backbone, would almost everywhere touch its surface. It girths 7 feet 11 inches, and 5 feet 2½ inches long, and will yield probably 90 stones, probably exceeding its predecessor. It is remarkably square, looking at it from behind, and marvellously even and symmetrical everywhere.

The second prize goes to Mr. Phillips, of Addington, Berks, for a larger looking beast, because higher and longer; less evenly symmetrical, the back drooping at the tail, very thickly covered over the ribs with very firm flesh; not so full behind the shoulder, and rather bare on the shoulder points. Nothing like so good as No. 7; girthing 7 feet 8 inches, and 5 feet 3½ inches long, weighing probably 86 imperial stones.

The cows among Herefords were not a good class: they included 7 animals. The first prize goes to Mr. Roberts, of Ivington, near Leominster, for a red roan cow, very wide and thick of flesh, rather coarse shouldered. The second prize goes to Lord Shrewsbury. But two Hereford heifers are shown. Mr. Taylor, of Thingehill Court, near Hereford, takes the first prize with a very fine, true, large, heavy beast for her age, which is but 3 years and 2 months.

The Short-horn Classes are fuller and more even in the size and quality of the animals exhibited. The first prize in Short-horn oxen goes to Lord Spencer for a very fine white ox 3½ years old, girthing 8 feet 6 inches and 5 feet 7 inches long, weighing probably 110 stones. The second prize is also taken by Lord Spencer, with a larger beast, but 15 months older, girthing 9 ft. 2 inches, and 5 feet 10 inches long, weighing probably upwards of 130 stones. This class is a remarkably fine one, and graced by some fine specimens of the Short-horn breed. Among them by a roan ox of great length and fine symmetry, exhibited by Mr. Baker, of Cottesmore; another fine deeper bodied animal, shown by Lord Aylesford; a highly commended red and white ox shown by Mr. Hewer, of Sevenhampton, &c.

The class of younger oxen included one of the finest animals of the Short-horn breed that was ever seen. Mr. Taylor, of Sewerby Cottage, Bridlington, exhibits a Short-horn ox, 2 years, 11 months, and 7 days old, of extraordinary quality and evenness—perfectly even and level behind the shoulder—as straight as possible vertically and horizontally—with a fine prominent bosom—a long rectangle in elevation, and as nearly as possible everywhere a circle in section. It receives the Gold Medal as the best ox; and the award of a prize to the best animal in the yard lay between it and a Galloway cow. The latter received it, and the very difficult point thus decided will come up for revision probably at the Smithfield Show of the following week, unless indeed both of them be beaten by another competitor. This ox girths 8 feet 11 inches and is 5 feet 8 inches long—weighing at least 124 stones.

Large classes of very fine Short-horn cows and heifers were exhibited; the awards of prizes will be found below. The heifer exhibited by Mr. Shaw, of Fan Coton—a red cow, has a fine and small head and immense body, remarkably fine bosom and thick over flank and rib and loin.

The Devons are not well represented, the cows being the best class of the breed. The 1st prize Devon ox is shown by Lord Howe, and girths 7 feet 8 inches, and is about 4 feet 11 long, weighing probably 78 stones. Only six oxen and steers and six cows and heifers represented the herd.

The Scotch Breeds, Galloways and Angus, are pretty well represented, the former by a very fine Galloway cow, four years and 10 months old, girthing 8 feet 7 and 5 feet 8 inches long, very straight, true and symmetrical—not straight vertically in its outline behind, nor so perfectly free from fault behind the shoulder as Mr. Taylor's Short-horn ox, but with very fine bosom and splendid quality of flesh, so far as handling enables us to judge.

Among the extra cows or heifers (Class 23), is a remarkably thick, wide, heavy animal—a Short-horn cow—exhibited by Lord Feversham.

The following are the awards in the Cattle classes—the judges being Mr. Barnett, of Stratton Park; Mr. Williams, of St. Mary's, Kingsland; Mr. Trethewy, of Grampound:—

FAT CATTLE.

Herefords.

Class 1. Hereford Oxen.—10*l*., and Silver Medal to the breeder, Mr. William Heath, Ludham Hall, Norwich; age, 4 years and 2 months. 5*l*., Mr. William Aldworth, Frilford, Abingdon; age, 4 years and 1 month. Commended: H. R. H. the Prince Consort; age, 3 years, 3 months, and 3 days.

Class 2. Hereford Steers.—10*l*., Extra Prize of 20*l*. as the best Hereford, President's Prize of 25*l*. as the best Ox or Steer bred and fed by the exhibitor, and Silver Medal as breeder, Mr. Richard Shirley, Bawcott, Munslow, Shrewsbury; age, 2 years, 6 months, and 26 days. 5*l*., Mr. Joseph Phillips, Ardington, Berks; age 2 years and 10 months. Commended, Mr. Thomas Garrett, Compton Scorpion, Warwickshire; age, 3 years and 2 months.

Class 3. Hereford Cows.—10*l*., Silver Cup, value 21*l*., offered by the Honourable Colonel Pennant, M.P., for the best Cow or Heifer, and Silver Medal as breeder, Mr. Thomas Roberts, Ivington, Leominster; age 5 years and 4 months. 5*l*., The Right Hon. the Earl of Shrewsbury and Talbot; age 4 years 11 months. Commended: Mr. John Vaughan Ashwood, Longdon Hall, Wellington; age 7 years.

Class 4. Hereford Heifers.—10*l*., and Silver Medal as breeder, Mr. William Taylor, Thingehill Court, Hereford; age, 3 years and 2 months. 5*l*., Mr. William Vaughan, Cholstrey, Leominster; age 3 years and 4 months.

Short-horns.

Class 5. Short-horn Oxen.—10*l*., and Silver Medal as breeder, Earl Spencer, Althorp Park; age, 3 years and 6 months. 5*l*., Earl Spencer; age 4 years and 9 months. Highly Commended: Mr. Robert Swinnerton, Weddington, Nuneaton; age, 4 years and 1 month. Commended: Pickering Phipps, Esq., Collingtree Grange, Northampton; age, 4 years and 1 week.

Class 6. Shorn-horn Steers.—10*l*., Extra Prize of 20*l*. as the best Short-horn, Society's Gold Medal for the best Ox or Steer, and Silver Medal to the breeder: exhibitor, Mr. George Taylor, Sewerby Cottage, Bridlington, Yorkshire; breeder, Mr. Christopher Clark, Hunmanby, Yorkshire; age, 2 years, 11 months, and 7 days. 5*l*., Mr. Samuel Wiley, Brandsby, Yorkshire; age 3 years, 2 months, and 1 week. Commended: Edward Holland, Esq., M.P., Dumbleton Hall; age, 2 years, 8 months, and 20 days; James Haughton Langston, Esq., M.P., Sarsden; age, 2 years and 4 months; his Grace the Duke of Beaufort; age, 2 years, 8 months, and 2 weeks; Mr. Henry Sanders, Chapel Brampton, Northampton; age, 2 years, 9 months, and 2 weeks.

Class 7. Short-horn Cows.—10*l*., and Silver Medal to the breeder, Mr. John Faulkner, Bretby Farm, Burton-on-Trent; age, 5 years and 10 months. 5*l*., the Right Hon. Lord Viscount Hill, Hawkestone, Shrewsbury; age, 6 years and 8 months. Commended: the Right Hon. Lord Leigh; age, 5 years and a month; Mr. John Armstrong, Palterton, Chesterfield; age, 5 years and 5 months.

Class 8. Short-Horn Heifers.—10*l*., and Silver Medal to the breeder, Mr William Shaw, Far Coton, Northampton; age, 3 years, 8 months, and 1 week. 5*l*., The Right Honourable the Earl of Radnor, Coleshill, Highworth; age, 3 years and 6 months.

Devons.

Class 9. Devon Oxen.—10*l*., and Silver Medal to the breeder, The Right Honourable the Earl Howe, Gopsall Hall; age, 3 years and 10 months. 5*l*., Mr. William Heath, Ludham Hall, Norwich; age, 3 years and 10 months.

Class 10. Devon Steers.—10*l*., Extra Prize of 20*l*. as the best Devon, and Silver Medal as breeder, His Royal Highness the Prince Consort; age, 2 years and 10 months. 5*l*., His Royal Highness the Prince Consort; age, 2 years and 8 months. Commended: Mr. John Overman, Burnham Sutton, Burnham Market; age, 3 years, 2 months, and 2 weeks.

Class 11. Devon Cows.—10*l*., and Silver Medal as breeder, His Royal Highness the Prince Consort; age, 5 years and 1 months. 5*l*., Mr. William Heath, Ludham Hall; age, 6 years and 10 months. Commended: Mr. George Turner, Beacon Downes, Exeter; age, 12 years and 9 months. Has had nine calves born alive.

Class 12. Devon Heifers.—10*l*., and Silver Medal to the breeder, Charles Hambro, Esq., Milton Abbey, Blandford; age, 3 years and 8 months.

Long-Horns.

Class 13. Long-Horn Oxen.—[No Entry.]

Class 14. Long-Horn Cows or Heifers.—10*l*., and Silver Medal as breeder, W. T. Cox, Esq.; age, 5 years and 5 months. 5*l*., Mr. J. H. Burbery, Kenilworth; age, 7 years and 8 months.

Cross-bred Animals.

Class 15. Fat Oxen or Steers.—[No merit.]

Class 16. Fat Cows.—10*l*., and Silver Medal as breeder, Mr. Aaron Pike, Mitton, Tewkesbury; age, 4 years and 7 months. 5*l*., Mr. John Armstrong, Palterton, Chesterfield; age, 5 years and 2 months.

Class 17. Fat Heifers.—10*l*., and Silver Medal as breeder, Mr. William Fletcher, Radmanthwaite, Mansfield; age, 3 years and 3 months. 5*l*., Mr. Edmund Herbert, Powick, Worcester; age, 2 years and 9 months.

Scotch Breeds.

Class 18. Scotch Oxen or Steers.—10*l*., and Silver Medal to the breeder, Mr. William McCombie, Tillyfour, Aberdeen; age, 4 years and 8 months. 5*l*., His Grace the Duke of Beaufort, Badminton; age, 4 years and 6 months. Commended: Mr. Andrew Longmore, Rattie, Banffshire; age, 3 years and 4 months.

Class 19. Scotch Cows or Heifers.—10*l*., also the Hotel and Innkeepers' Prize of 25 guineas, as the best Beast in the yard, Society's Gold Medal for the best Cow or Heifer, and Silver Medal to the breeder: exhibitor, Mr. William McCombie, Tillyfour, Aberdeen; breeder, His Grace the Duke of Buccleuch and Queensbury (Galloway); age, 4 years and 10 months.

Welsh Breeds.

Class 20. Welsh Oxen or Steers.—10*l*., and Silver Medal to the breeder, Mr. William Spencer, Congerstone, Atherstone; age, 5 years and 2 months. 5*l*., Mr. Henry Brown Wayte, Peatling Magna, Lutterworth; age, 4 years and 8 months.

Class 21. Oxen or Steers.—[No entry.]

Class 22. Cows or Heifers.—7*l*., and Silver Medal as breeder, Mr. William Fletcher, Radmanthwaite; age, 5 years and 1 month. Commended: the Right Hon. Lord Feversham, Duncombe Park, Yorkshire; age, 6 years and 6 months.

SHEEP.

The sheep exhibited include 10 pens of Leicesters, 15 of Southdowns, 21 of Shropshires, 6 cross breeds, 9 of long-woolled ewes, and 6 of short-woolled ewes.

The prizes in both short and long-wools have been given to quality rather than to weight. Mr. Foljambe's Leicester wethers, and Lord Radnor's Southdowns carrying the prizes from sheep of greater weight, coarser wool, and larger frames. Lord Walsingham and the Duke of Richmond are also successful in the Southdown classes.

The Shropshires attracted as usual great numbers of spectators, and a very fine row of pens they were. Considerable differences are to be seen in the character of the sheep exhibited, though all of one breed—variations especially in the fineness and closeness of the wool; not however greater than can also be seen in the classes all Leicester or the classes all Southdown.

Leicesters.

Class 23. Fat Wethers under 22 months old.—10*l*., with the Silver Cup, value 10*l*. 10*s*., offered by C. N. Newdegate, Esq., M.P., for the best pen of Long-woolled Sheep, Extra Prize of 10*l*. and Silver Medal as breeder, G. S. Foljambe, Esq., Osberton Hall, Worksop; 5*l*., Mr. George Walmsley, ... Bridlington.

Long-Woolled Sheep, not being Leicesters.

Class 24. Fat Wethers, not exceeding 22 months old.— Mr. Thomas West, Bletchington; 5*l*., Mr. Jonathan ... Webton Court, Madley, Hereford.

South and Other Down Sheep.

Class 25. Fat Wethers, not exceeding 22 months old.— the Right Hon. the Earl of Radnor, Coleshill; 5*l*., ... the Duke of Richmond, Goodwood.

Class 26. Fat Wethers, exceeding 22, but not exceeding 34 months old—10*l*., with the Silver Cup, value 10*l*. 10*s*., offered by Arthur Ryland, Esq., Mayor of Birmingham, for the best pen of Short-woolled Sheep, Extra Prize of 10*l*. and Silver Medal as breeder, the Right Hon. Lord Walsingham, Merton Hall ... Mr. John Overman, Burnham Sutton, Burnham Market ... Commended: the Right Honourable Lord Walsingham ... Right Honourable the Earl of Radnor.

Shropshire Sheep.

Class 27. Fat Wethers, not exceeding 22 months old.— with Silver Cup, value 10*l*. 10*s*., offered by Messrs Mapplebeck & Lowe, for the best pen of Shropshire Sheep, and Silver Medal as breeder, William Orme Foster, Esq., M.P., Kinver Hill Farm, Stourbridge; 5*l*., Edward Holland, Esq., M.P.

Class 28. Fat Wethers, exceeding 22, but ... 34 months old.—10*l*., William Orme Foster, Esq., M.P. ... Mr. Henry Smith, Sutton Maddock, Shiffnall.

Cross-bred Sheep.

Class 29. Fat Wethers, not exceeding 22 months old.— with Silver Medal, as best pen of cross-bred sheep, and Silver Medal as breeder, Mr. John Overman, Burnham Sutton ... Mr. John Overman.

Class 30. Older Fat Wethers.—[No entry.]

Classes for Ewes.

Class 31. Long-Woolled Ewes, of any age.—5*l*., Mr W... Lovel, Nafferton Grange, Driffield. Highly commended ... Foljambe, Esq., Osberton Hall, Worksop; Mr. William ... Bibury, Fairford. Commended: Mr. Thomas West, Bletchington.

Class 32. Short-Woolled Ewes of any age.—5*l*., the Right Honourable Lord Walsingham; age, 80 months (Southdown). Highly commended: Pryce William Bowen, Esq., Shrawardine Castle, Salop (Full-mouthed—Shropshire).

PIGS.

There is a good show of fat and breeding ... The long well-bred Berkshire, heavy white Yorkshire, small white Suffolk and Cumberland are all well ... trated. The first prizes and second prizes in the two first classes go to H.R.H. the Prince Consort and Mr. Morland, of Harwell, Berks, respectively. In ... former small, white, almost sausage-like in the ... stuffed shortish cylinder they exhibit,—the latter ... rectangular, higher, wider, squarer over the shoulder and black and white, with comparatively little and ... hair. In the first class a pen of pigs, exhibited by Mr. Crisp, of Butley Abbey, is disqualified as being older than the stated age. We hope it may chance some day that the disqualification may be announced in some case where there is absolutely unimpeachable recorded evidence of age with which to meet it. Several instances have occurred within our knowledge in which our belief in the exhibitor is much stronger than our belief in the animal itself as interpreted by the veterinary inspector. The latter, who has an extremely invidious office to perform, ought to let his decision be ... the fact that precocity is every day becoming more precocious, so that marks indicative of 12 months age do not now indicate more than eight or nine. We are bound to say that a disqualification by the veterinary authority carries with it no absolute proof of the inaccuracy which it alleges, and certainly can hardly ever prove dishonesty on the part of the exhibitor.

A very fine class of fat pigs over 15 months ... exhibited, and the breeding pigs, too, are a capital class, in which our best breeds are all shown in perfection. The following is the award of prizes in the sheep and swine class, the Judges being Mr. Moss ... Plymouth; Mr. Spearing, of Wallingford, and ... Cureton of Shrewsbury.

FAT PIGS.

Class 33. Three Fat Pigs of one litter, not exceeding ... months old.—10*l*., Silver Cup, for the best pen of Fat Pigs, and Silver Medal as breeder, his Royal Highness the Prince Consort; 5*l*., George B. Morland, Esq., Chilton, Harwell, Berks.

Class 34. Three Fat Pigs of one litter, not exceeding ... months old.—10*l*., and Silver Medal as breeder, his Royal Highness the Prince Consort; 5*l*., George B. Morland, Esq., Chilton, Harwell, Berks.

Class 35. Fat Pigs, exceeding 15 months old.—6*l*., and Silver Medal as breeder, Mr. George Mangles, Givendale, ... Yorkshire; 3*l*., Mr. W. J. Sadler, Bentham, Cricklade. ... Commended: George B. Morland, Esq.; W. B. Wainman, Esq., Carhead, Crosshills, Yorkshire; Mr. George Beale, Frolesworth, Lutterworth; Mr. Edward Sheppard, Roundway Park Farm, Devizes; Mr. Henry Hicks, Kenilworth. Class generally Commended.

BREEDING PIGS.

Pigs of the Berkshire Breed

Class 36. Five Pigs of one litter, exceeding 3, and not exceeding 6 months old.—10*l*., and Silver Cup, given by Messrs. Wright and T. B. Wiggin, and Silver Medal as breeder, Sir F. L. H. Goodricke, Bart., Studley Castle, Bromsgrove. ... Mr. Joseph Smith, Henley-in-Arden. Highly Commended: Mr. T. B. Wright, The Quarry House, Great Barr: exhibitor, and breeder, Mr. John Lowe, Whitmore House, Birmingham. ... Mr. William Cooper, Impsley Farm, Henley-in-Arden, ... John Spencer, Viller's Hill, Kenilworth. Commended: ... John King Tombs, Langford, Lechlade.

Pigs of Other Large Breeds.

Class 37. Five Pigs of one litter, exceeding 3, and not exceeding 6 months old.—10*l*., and Silver Medal as breeder, Mr. Andrew Guy, Eaton, Leicestershire; 5*l*., W. B. Wainman, Esq., Carhead, Crosshills.

Pigs of a Small Breed.

Class 38. Five Pigs of one litter, exceeding 3, and not exceeding 6 months old,—10*l*., Silver Cup, and Silver Medal as breeder, Mr. Thomas Crisp, Butley Abbey, Wickham Market, Suffolk; 5*l*., Mr. George Mangles, Givendale, Ripon. Commended: Sir George Wombwell, Bart., Newburgh Park; Mr. Walter Coleman, Kingsbury Hall, Tamworth.

Implements.—The space saved by a rearrangement of the poultry is allotted for implements—and among the

exhibitors are Messrs. Ransome of Ipswich, Sawney of Beverley, Maplebeck and Son, Crosskill of Beverley, Amies and Barford, Ashby of Stamford, Samuelson, Page & Co., &c. Grain cleaners, reaping machines, root pulpers, &c., are among the articles exhibited. In a yard near the Dog Show, Messrs. Ransome exhibited engines at work driving a shaft from which, by gear, turnip cutters, cake and corn crushers, chaff cutters, &c. are worked. Within Bingley Hall they exhibit among other things Mr. Stearn's models and pig troughs, Mr. Stearn himself being present to explain them. We have more than once reported in these columns his lecture on Pig management, and had the pleasure of hearing him at Bingley Hall explain his extremely well contrived and cheap pig sty and the merits of his cellular pig trough.

Mr. Crosskill's original Bell's reaper, once more successful at the leading shows this year, and Mr. Samuelson's new self-acting sheaf delivering reaper, with its 4 rotating arms, with the high reputation which it has achieved during the last month of the harvest, were both exhibited.

The Roots have this year attracted unusual attention, owing especially to the remarkable excellence of the Swedish Turnips shown. Up till 1860 for several years we had had dry hot summers, during which the Turnip crop did not come to anything like a fair yield. It was taken off by fly and grub, and the few roots that escaped did not reach a fair size. Explanations founded on alteration of constitution and faults of manuring were accepted, and the obvious reason pointed out by Mr. Spooner in the hot and droughty seasons was not allowed. Now, however, that we have had a summer with sufficient rainfall, we have good crops of Swede and Turnip; and magnificent specimens in large numbers are seen at Bingley Hall.

Thirteen lots, each of 4 varieties of roots, competed for the Ten Guinea Cup offered by Sir J. Ratcliff, and a very fine exhibition they were. Messrs. Proctor's Five Guinea Cup offered for Swedes and Mangel Wurzel brought out 33 competitors. The association prizes for Swedes, Kohl Rabi, Long and Globe Mangels, and Turnips, Cabbages, Carrots, and Potatoes, brought out nearly 150 competitors. The Mangels were of good quality, but not so large as those of 1859, and several preceding warmer years. The Swedes, varying greatly in size, were nevertheless on the whole a remarkably fine show. Mr. Matthews, who adjudged the prizes, properly regarded the quality as well as weight of the roots exhibited, and many heavy coarse and fanged roots were passed, while roots less heavy but neat with small heads and a small tap root received a prize. As an illustration No. 140, first in its Class (Common Turnip), included a set of good sized and very neat and well shaped roots, though hardly Tankards as they were called—while 141, a much coarser set of roots (the Greystone)—one of them being the largest root of any kind in the show, was passed by.

The awards will be found below—the judge being Mr. Matthews of Edgebaston.

ROOTS.

Class 1. Collection of the four following varieties, namely; Long Mangel Wurzel, Globe Mangel Wurzel, Swedes, and Carrots. Six Roots of each to be shown.—10*l.* 10*s.*, Sir William Heathcote, Bart., M.P., Hursley Park, Winchester.

Class 2. Best 6 Specimens of Swedes, to be selected from crops of not less than 5 acres.—Silver Cup, of the value of 5*l.* 5*s.*, the Most Noble the Marquis of Breadalbane, Isle of Luing, Scotland.

Class 3. Best Six Specimens of Yellow Globe Mangel Wurzel, from crops of not less than 2 acres.—Colonel J. S. North, M.P., Wroxton Abbey, Banbury.

Class 4. Kohl Rabi.—2*l.* 2*s.*, Colonel J. S. North, M.P.; 1*l.* 1*s.*, Colonel J. S. North, M.P. Commended: Mr. Joseph H. Clark, Altwood House, near Maidenhead; Mr. Simon A. Daintree, Fen Drayton, St. Ives.

Class 5. Long Mangel Wurzel. 2*l.* 2*s.*, Mr. Samuel Robinson, Shaw House, Melbourne; 1*l.* 1*s.*, Sir William Heathcote, Bart., M.P., Hursley Park, Winchester.

Class 6. Globe Mangel Wurzel.—2*l.* 2*s.*, Colonel J. S. North, M.P.; 1*l.* 1*s.*, Colonel J. S. North, M.P. Commended: Mr. Daniel Long, Whaddon; Mr. Daniel Long.

Class 7. Swedes of any Variety.—2*l.* 2*s.*, the Earl of Lichfield, Ranton Abbey, Stafford; 1*l.* 1*s.*, William Cox, Esq., Brailsford Hall, Derby. Highly Commended: Sir William Heathcote, Bart., M.P., Hursley Park; Mr. Ambrose Robotham, Fazeley, Tamworth: Mr John Armstrong, Palterton, Chesterfield. Commended: William Cox, Esq., Brailsford Hall, Derby; Mr. Ambrose Robotham; Mr. John Lathbury, [illegible] Hall, Burton-on-Trent; Mr. John Perkins, 52, Market [illegible], Northampton; Mr. John Mytton Skrymsher, Polmere, Shrewsbury.

Class 8. Common Turnips.—2*l.* 2*s.*, His Grace the Duke of Sutherland, Trentham, Staffordshire; 1*l.* 1*s.*, Mr. William Joshua, Perrott's Brook, Cirencester. Highly Commended: Professor J. B. Simmonds, Oakington Park Farm, Middlesex; Mr. Charles Holland, Chapel Chorlton, Newcastle, Staffordshire; Mr. Charles Holland. Commended: Mr. William Joshua, Perrott's Brook, Cirencester; Mr. George Mangles, Givendale, Ripon; Mr. William Fletcher, Badmanthwaite.

Class 9. Carrots of any Variety.—2*l.* 2*s.*, His Grace the Duke of Portland, Clipstone Park, Mansfield; 1*l.* 1*s.*, G. S. Foljambe, Esq., Osberton Hall, Worksop. Highly Commended: Mr. J. K. Fowler, Prebendal Farm, Aylesbury; Mr. John Sidney, Wobaston, Wolverhampton; Mr. John Moore, Warwick.

Class 10. Ox Cabbage.—2*l.* 2*s.*, Mr. Samuel Robinson, Shaw House, Melbourne, Derbyshire; 1*l.* 1*s.*, Colonel J. S. North, M.P. Commended: Mr. William Woodward, Northway House, near Tewkesbury; Mr. William Woodward.

Class 11. Potatoes.—2*l.* 2*s.*, Mr. John Shackel, Blenheim House, Small Heath, Birmingham; 1*l.* 1*s.*, Mr. Joseph Jennens, 61, Green Lanes, Birmingham. Highly Commended: Mr. John Shackel, Blenheim House; Mr. Samuel Robinson, Shaw House, Melbourne, Derbyshire. Commended: Edward Holland, Esq., M.P., Dumbleton Hall; Mr. John Shackel, Blenheim House, Mr. Thomas Halford, Newbold-upon-Stour, Shipston-upon-Stour; Mr. Henry Baker, Grendon, Atherstone.

THE DOG SHOW.

To this, which is no part of the Midland County Society's programme, a very short reference must here be given. The collection exhibited in premises in Tennant Street included animals of all the classes in both divisions of the prize list.

A magnificent class of bloodhounds—a small number, (as at this season of the year was to be expected) of foxhounds and harriers and beagles—a couple of otter hounds—a very good class of deer hounds—a fair show of greyhounds—no fewer than 154 pointers—a large and excellent class of setters, English and Irish—capital classes of retrievers and spaniels, made up the division of English sporting dogs. The second division, of dogs not used in field sports, included a very fine class of mastiffs and a noble class of Newfoundland dogs—a hideous collection of bull dogs, two or three sheep dogs, comparatively unfilled classes of terriers of various kinds, and a collection of toy terriers. The extra class for any known breeds of foreign dogs included some very fine large animals, especially the Pyrenean wolf dog and Cuban bloodhound. The exhibition was especially good in the sporting division of the Show, and a better set of pointers, setters, and retrievers was probably never exhibited together.

POULTRY.

He would be but a superficial observer who would look at this great annual gathering as a mere assemblage of cocks, hens, turkeys, &c., and he would be far from appreciating the importance of it who thought its object was accomplished, and its purpose answered, when the prizes were awarded in the different classes. Amateurship only is then satisfied. Every pursuit under the sun has either a good or bad tendency, and as Dr. Paris proved, "Philosophy in sport might be science in earnest," so we think we should have little or no difficulty in proving that many a professional man, or kind-hearted young lady, while they are tending their pets are assisting in the solution of the great problem of increasing the food of a people. A perusal of the names of exhibitors will show how the pursuit of poultry keeping is followed by those whose avocations confine them to towns. Any one can imagine the relief it must be to the over-taxed medical man, solicitor, schoolmaster, tradesman, or editor, to leave his daily task, and spend half an hour with animated nature in the shape of poultry. It is relaxation in the fullest sense of the word, and it would be difficult often to recognise in the smooth placid face that has been looking at the fowls for half an hour, the careworn and wrinkled face that left the office so lately. Many people have wondered why that which was mis-called a mania arose when Cochin Chinas were first introduced, but an easy solution is at hand—they supplied a want. Every one is fond of animals of some kind, and they are fond of rearing the young. But the opportunities were few in London, there was not space, and many who had tried ineffectually for a long time gave it up. For animals to be pleasing they must be cheerful, and to be cheerful, they must be in health. The knowledge of poultry was a general one, and all fowls were alike declared to require range of hill and dale, because some sorts languished in confinement. Yet there were found people who determined to try, and it was not till they had essayed again and again, that they relinquished the pursuit. The truth was, they had not the proper breed for their purpose; they tried with Dorkings, Hambros, and Polands, when they should have had Cochins, Brahmas, and Spanish. This was not discovered till afterwards. When, then, it was announced that a breed was introduced which would thrive any where and under any circumstances, the natural desire sprung up again, all the failures were forgotten, and every one tried for some Cochin Chinas. They were all they were represented to be; they not only flourished in confined places, but they did as well there as where they had acres to roam, and birds bred thus took prizes and realised large sums. Encouraged by this other breeds were tried; and, thanks to exhibitions such as we have now to comment upon, an accurate line was drawn, and it was decided on grounds that could be depended upon, and that would bear a general test, which were the breeds that would suit the back-yard of a London house if necessary. The ignorance that prevailed respecting Poultry till within the last few years was incredible. Undoubted facts were treated as idle tales, and ignorance or knavery ran little risk of detection when they invented that which answered their purpose. Nature seems to have ordered the attributes of these birds, so as to point out to man the two ways in which they are to supply food for mankind, eggs and meat. Thus, we have certain breeds that are non-sitters; these lay a prodigious number of eggs; while others that produce only a smaller number are famous for their qualities as sitters and mothers. Thus, through the instrumentality of poultry shows, profitable knowledge was acquired on the subject, and disappointment was prevented.

When a man now wishes to keep poultry he can, after ascertaining the soil of his place, and the requirements of the nearest market, buy the breed that will suit both. We hope that this will be borne in mind by those who have the opportunity.

The Dorkings at the Birmingham show were not perhaps larger than they have been, but all the classes were remarkable for the entire absence of indifferent or even middling birds. More care must be taken in the selection of the Silver Greys. These classes are made exclusively for colour, and any deviation is fatal. To this must be attributed the fact that there were few, if any commendations. Even a few white spots on the black breast disqualify.

Mrs. F. Blair headed the first Dorking class, a fitting reward for the enterprise that sent from Scotland. Captain Hornby, Mr. Potts, and Mr. Cargey all headed classes, and Mr. Wakefield was successful as usual. There were 290 pens of Dorkings. There were more cocks weighing 10 lbs. each than we have ever before seen.

Spanish were excellent, and the prizes were scattered about; but we did not see the pens of startling merit we used to have formerly. Messrs. Martin, Hyde, Fowler, and Rodbard had the first prizes.

Cochin Chinas were beautiful. The adult classes were remarkably meritorious. These classes were remarkable for the success of the known strains of Messrs. Tomlinson & Thetch, Miss Musgrove, and Mr. Statham.

The Grouse and Partridge Cochin classes are worthy of remark, inasmuch as Mr. Peploe Cartwright took all the prizes in the adult classes, and Mr. Tudman again was first in chickens. Mr. Chase took all the prizes in White Cochins. The Brahma Poutras made a goodly array both in numbers and quality, bringing honours to those already gained by Mr. Teebay and Lady Louise Hyme. Malays were weak. The Golden Pencilled Hambros were of high merit, especially the chickens. In these as in many other breeds it is remarkable how the prizes for adults and chickens went to the same yards. The Silver Pencilled were not as good as we have seen. Nothing could exceed the beauty of the Golden and Silver Spangled Hamburghs, and they were not only beautiful in plumage but they had all the requisite points for perfection. The Polish were very good, but they are not sufficiently numerous. Mrs. Pettat and Mr. Dixon almost monopolize the prizes. The game were perfect as usual. The cock classes were very good. The length of our report and the necessity of speaking of the weights of some of the classes where they are of first importance compel us to withhold names, and to be content with a short mention of some of them.

The Bantams were very good in every class. The three heaviest Aylesbury Ducks weighed 24½ lbs., and 21 weighed 152 lbs. There were 43 pens of Rouens, most excellent birds, with very rare exceptions. The heaviest weighed 21½ lbs. The Buenos Ayrean were very good, and are now being reduced in size. This class is a decided success. The other varieties brought Muscovite and the beautiful brown and white Call ducks. The new class for ornamental water fowl showed Mandarin and Carolina, White-eyed ducks, Bahama Teals, Swans, and curious Sebastopol Geese.

We cannot give a better idea of the vast increase that has taken place in geese than by stating that 15 pens, each containing three birds, weighed 837 lbs., nearly 19 lbs. each. Thirty-nine Turkeys weighed 628 lbs. These were the birds named in the prize list, and the weights will be appreciated when it is recollected that each pen consists of a cock and two hens, the difference in the weights of these birds varying more with sex than any others.

We are happy to say this was one of the most successful shows Bingley Hall has witnessed. It is always a pleasure to record this fact, the more so that it is richly deserved by the enterprising and able men who devote so much of their energies to this great undertaking.

The judges were the Rev. R. Pulleine, G. J. Andrews, Esq., and Mr. Baily.

Reading, *Nov.* 39.—On the premises of the Messrs. Sutton, Seedsmen, a very fine display of roots grown by their customers was exhibited in competition for prizes liberally offered by the firm. The collection was especially good in the Swedish Turnip and Kohl Rabi exhibited. The Mangels did not come up to the standard of previous shows.

We have not room for the long prize list, and must merely name the collection of roots exhibited by Mr. Boxall, of Strathfieldsaye, as first on the list, for remarkably fine specimens of Lincoln Red, Imperial Green Globe, and Greystone Turnips, Sutton's Champion Swede, and Mr. Boxall's own White Globe, all of remarkably good quality, good size, and true of their respective sorts.

Mr. Benyon, M.P., carried off the prizes for Long Red and Yellow Mangels; and Mr. Boxall took the first prize for Red Globe Mangels. A wonderfully fine collection of Kohl Rabi grown by Mr. Benyon, Mr. Clark, Mr. Druce, Mr. Shackel, and others, was also exhibited. And the large square of ground covered by specimens of Turnips and Swedes in competition for some 20 prizes offered, was a very interesting illustration of the varieties of the plant itself—of the true character and quality of the seed from which they were grown, and of the skill of the cultivators.

Messrs. Sutton exhibited very fine collections of Kohl Rabi, Mangels, Swedes, &c., of their own growth, not for competition.

Farmers' Clubs.

Linlithgow.—At the quarterly meeting of the West-Lothian Agricultural Society held last week Mr. Walker, Kilpunt, read a paper *"On the Growing and Storing of the Turnip Crop."* Of all the crops that have a place in the rotation of a farm of mixed husbandry, there is no crop of so much importance to the farmer as the Turnip crop.

No doubt Turnips can be grown more profitably on some farms than on others, light soils generally are suitable for growing Turnips, while heavy clays are considered unsuitable. Be this as it may, on many farms where there is only strong clay to grow Turnips has become a necessity, especially since summer farming has been discarded. Assuming it to be admitted then, that on all fertile soils, whether light or heavy, the Turnip crop cannot be dispensed with, the question at once arises, how are we best to grow this crop? It is understood that the land is either drained or naturally dry, the next thing is to see that it is clean. Clean land requires little labour, only sufficient work to reduce it to a fine tilth to secure a rapid and evenly braird, and upon this greatly depends the success of this crop; for, while the farmer is often able thoroughly to clean foul land for a Turnip braird, it makes success depend upon fewer contingencies when the land is clean at the first; and upon all well managed farms, where a good rotation is practised, Couch Grass and other noxious weeds are now almost unknown. On both light and heavy soils, I think the less spring labour the better. On the latter kind of soils — viz., heavy soils — frequent ploughings and harrowings do positive harm, so far as the prospect of the Turnip crop is concerned; and where absolutely necessary for killing weeds, the more labour required the more risk of a bad unevenly braird, and an indifferent crop of Turnips. But some farmers of this county—most intelligent, active men—have tried to show us that a good crop of Turnips can be grown upon very foul land, and that same foul land cleaned by a luxuriant crop of Turnips, at least where the Turnips are ate off by sheep, trying to prove that it is not necessary to spend time and money in cleaning land by the laborious process of ploughing and harrowing. If this is true, many of us have lost a deal of money, and truly spent our labour in vain. But, if I may be allowed to criticise this method of preparing the soil, I would say that I believe it quite possible to grow a good crop of Turnips on land overrun with weeds, but I do not believe it possible that the land will be clean after the Turnips are removed, and, if I am correct in this, the benefit of Turnips as a fallow crop is consequently lost, and I am borne out in this opinion, for upon examining the Turnip breaks of some of my neighbours who had tried this system, I found the Turnips and Couch Grass all intermixed, and waving side by side in most luxuriant rivalry. And after the Turnips were removed, the Couch was living and holding its place still. I would therefore say, clean the land at first, farm high, keep a good rotation, and no weeds will ever trouble you—still, I will add, high farming is of more importance than sticking to a fixed rotation.

I now pass to the very important part of this subject, viz., on Manuring the Land, and important though it seems, I believe that in no department of agriculture has more progress been made than in the knowledge of how and where to apply the different manures.

As an acknowledged fact, among all the manures now in use, farmyard dung still stands at the top of the list, and were it a more plentiful commodity our farms would yield more profitable returns. We thankfully fall back, however, upon portable manures, and must give them credit after drainage, as revolutionising our whole system of farming, not to speak of the portable manures applied to almost every crop of the rotation. They have been applied to grow Turnips with complete success, and without entering into lengthened details, I may state that it has been satisfactorily proved that a mixture of the ammoniacal and phosphatic are proved to be the best, increasing the proportion of the former where the soil is heavy, and the latter where the soil is light. Say on land of medium texture 4 cwt. of phosphatic guano mixed with 4 cwt. of bones, applied to an imperial acre, would be a good application, and with a good tid and ordinary season should produce a fair crop of Turnips. My mixture last year generally was 4 cwt. of Fraser's bones, and 4 cwt. of Peruvian guano. If farmyard dung is applied, of course the portables should be diminished, and wherever both dung and light manure are given, the crop is grown in greatest perfection. Very interesting experiments are being tried this season by a number of the members of the Western District of Mid-Lothian Agricultural Society, as to what mixtures of portable manures are best and cheapest for the growth of Turnips. I am one of those who are trying this, but I believe none of us who have so experimented are as yet prepared to give the results till we have weighed the different lots of Turnips; these trials will be duly published. They cannot fail to be useful, as the trials are undertaken by farmers whose soils differ much in texture, and also whose climates are both high and low.

I need not advert to singling Turnips, nor to their culture during the period of growth, as it would only tire your patience, but would in conclusion say a little about storing this crop.

If possible, common and yellow Turnips should be stored the first week of November, and Swedish about the middle, or at latest about the end of the same month. The softer varieties for early use should be put into square heaps, say 10 to 14 feet wide, and 2½ feet thick, covered carefully and pretty thickly with short damp straw, which may be held on by cast off straw ropes, or a few spadefuls of earth here and there. The tender varieties of yellow that may not be required till January and February should be put into pits like Potatoes —say width of pit at the base 6 to 8 feet, tapered to sharp tops, covered first with straw and then a slight close covering of earth. These pits should never stand over, however, after February, as the Turnips are apt to grow, then to heat, and, of course, the rotting process follows; neither is it advisable, if Turnips have got much frost before being stored, to store them after this fashion. And for all Turnips required for use after the beginning of March, whether Yellows or Swedes, by far the best way of storing is to bury them in the soil where they grow, and this is done by a very fast and efficient process—viz., start a plough to open a deep furrow parallel with the first drill where you begin to store. Divide the length of your drills into seven stents, put a woman on each stent; each woman pulls up three rows of Turnips without topping or tailing them, and places them side by side on this open furrow, all the tops up and roots down. The time the women are filling this first furrow, the plough is opening another, say 36 feet apart from the first. By the time the first furrow has received its three rows of Turnips, the new furrow is opened and ready for the women to fill, the plough again comes along, covering up, by a heavy furrow, the Turnips that were first set in, and this process just goes on from one side of the field to another, a plough and seven women doing about four imperial acres each day.

Mr. Cadell, of Grange, said he had used the farmyard manure to the greatest extent, endeavouring to husband it and to make it go as far as possible on his land; and he had done so partly on account of his holding a pretty strong opinion that of many cases where the light manures were employed, it was found that they produced disease in the Turnip crop. In connection with this he might mention that this year he had made a number of experiments in Potato rearing, with the various descriptions of manures: and his object had been not so much to have a large crop as one as free as possible from disease. He found that when a crop was heavily manured, it was much more subject to, or likely to be affected by disease, especially if the Potatoes were grown with light instead of farmyard manure; and it appeared that the byre manure has less tendency to produce disease than some of the light manures in common use. The result of his experiments had been as follows:—

Potatoes planted on lazy beds, of the same size, with

Byre manure produced	81½ lbs.
Lime and soot ,,	62 ,,
Blood manure ,,	63 ,,
Common salt ,,	60 ,,
Soot ,,	58 ,,
Without any manure	47 ,,

Of this produce the percentage of Potatoes free from disease was as follows:—

Without manure ..	74½ per cent.
With common salt ..	70 ,,
,, byre manure ..	67½ ,,
,, soot	57¾ ,,
,, blood manure ..	57½ ,,
,, lime and soot ..	55 ,,

Mr. Cadell then expressed his intention of repeating his experiments next year on a more extended scale, and in reply to Mr. Walker he stated that, while the results he had given applied to the Potato crop, and that while the disease to which he had referred was the common Potato disease, he believed that the same results would be found in similar experiments with Turnips.

Calendar of Operations.

DECEMBER.

Berwickshire Merse Farm, *Dec.* 2.—In last report, a month ago, we expressed a hope that good weather would continue and permit an extensive sowing of Wheat and storing of Turnips, for which operations appearances were unusually promising. But after a month of wind and rain, alternating with sharp frosts, we find matters in a less hopeful position. During November there were only six dry days, the rain amounted to 6 inches nearly, and on the mornings of the 10th, 18th, and 24th, the protected thermometer marked 10° below the freezing point. Fortunately there was but little wind, and no damage is yet apparent in the Turnip crop. Very little progress has been made with the Wheat seed. On some of our best soils it is all to do yet, and the best season is gone by. The first opening, however, will be largely made use of. Owing to the wet state of the land, the Turnip store (where there was one), has been more frequently applied to than the field; but many have we seen pulling the necessary supply day by day, and often half frozen. Lean cattle have latterly got much cheaper under those unfavourable circumstances, not to mention the difficulties of the operatives who consumed our beef. Hoggs have been doing pretty well, but there is some mortality, owing apparently to the unripe Turnips of October. One would imagine that the frost would soon mend that fault. Mangels seem likely to go out of cultivation here, after but a short trial; although manured liberally, they are quite an inferior crop, while Swedes under poorer treatment are first-rate. It appears that our climate is too cold and sunless for their proper growth. An acre or two will be grown here and there, for the sake of their keeping qualities, but it needs cake and meal to prevent scouring. Barley has turned out a small crop, and the price has receded till it is now 10*s.* a quarter below last year. Wheat is in very little bulk, but yields fairly, of good quality and saleable. Beans are not yet in condition. Autumn cultivation received its quietus sooner than desired, and will be no more heard of till spring. *J. T.*

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended December 5; observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
		Max. in Sun.	Max. in Shade.	Min.	Mean.				
		Degs.	Degs.	Degs	Degs.	Degs.	Ins.		
Friday	29 ..	69.0	54.0	33.5	47.5	42.0	0.10	S.W.	29 61
Saturday	30 ..	53.0	55.0	51.0	52.5	44.0	0.10	S.W.	29 65
Sunday	1 ..	51.0	53.0	40.0	46.0	45.0	0.01	W.	29 79
Monday	2 ..	59.0	48.0	25.0	39.2	44.5	..	S.W.	30 25
Tuesday	3 ..	56.0	39.0	25.0	36.2	42.0	..	S.W.	30 08
Wednesday	4 ..	69.0	43.0	21.0	38.5	40.5	..	S.	29 98
Thursday	5 ..	48.0	41.0	28.0	36.2	40.0	0.37	W.	29.60

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Butter: *C B* The only chance of removing a disagreeable taste depends on your keeping the milk hot for some time after it is drawn, and letting whatever aroma it contains steam away from it. Adopt the same treatment with the cream before churning. All that is known on the subject is given in a cheap Handbook of Dairy Husbandry (Longmans).

Carbolic Acid: *Cor.* Apply to Mr. Crabtree, of Manchester, Dyer.

Flavouring Hay. We have several requests for a fuller account of the processes of flavouring hay adopted by Mr. Bowick, and described in a paragraph quoted from him some weeks ago. Will he be good enough to state not only the materials employed, but also how much of each for a given quantity of hay.

Poultry.—There is but a poor supply, and there is no trade at all. We can hardly fancy what the result would be if the supply were greater:—

Large Fowls	.. ..	Each	3*s.* 0*d.*	to	3*s.* 6*d.*
Smaller ditto..	.. ..	,,	2 0	,,	2 6
Chickens	.. .. ..	,,	1 6	,,	1 9
Geese ..	.. .. ..	,,	5 6	,,	6 0
Ducks	.. .. ..	,,	2 0	,,	2 8
Pheasants	.. .. ..	,,	2 0	,,	2 8
Partridges	.. .. ..	,,	1 6	,,	1 9
Grouse..	.. .. ..	,,	1 6	,,	1 9
Hares ..	.. .. ..	,,	1 9	,,	2 0
Rabbits	.. .. ..	,,	1 3	,,	1 4
Wild ditto	.. .. ..	,,	0 8	,,	0 9
Pigeons	.. .. ..	,,	0 8	,,	0 9

Turnips: *A B* We consider it, what it certainly ought to be, a tap-rooted plant.

Vetches: *Game.* We imagine that if the outgoing tenant treats the land, as to sowing it with Wheat, or in any other particular, just as he would have done had he been about to remain, that you cannot object. If he has a right to damages done by game, that right will be yours. The question is however one of law, in which we do not profess to be learned. You must consult your solicitor.

HENRY J. MORTON AND
2, Basinghall Buildings, Leeds.

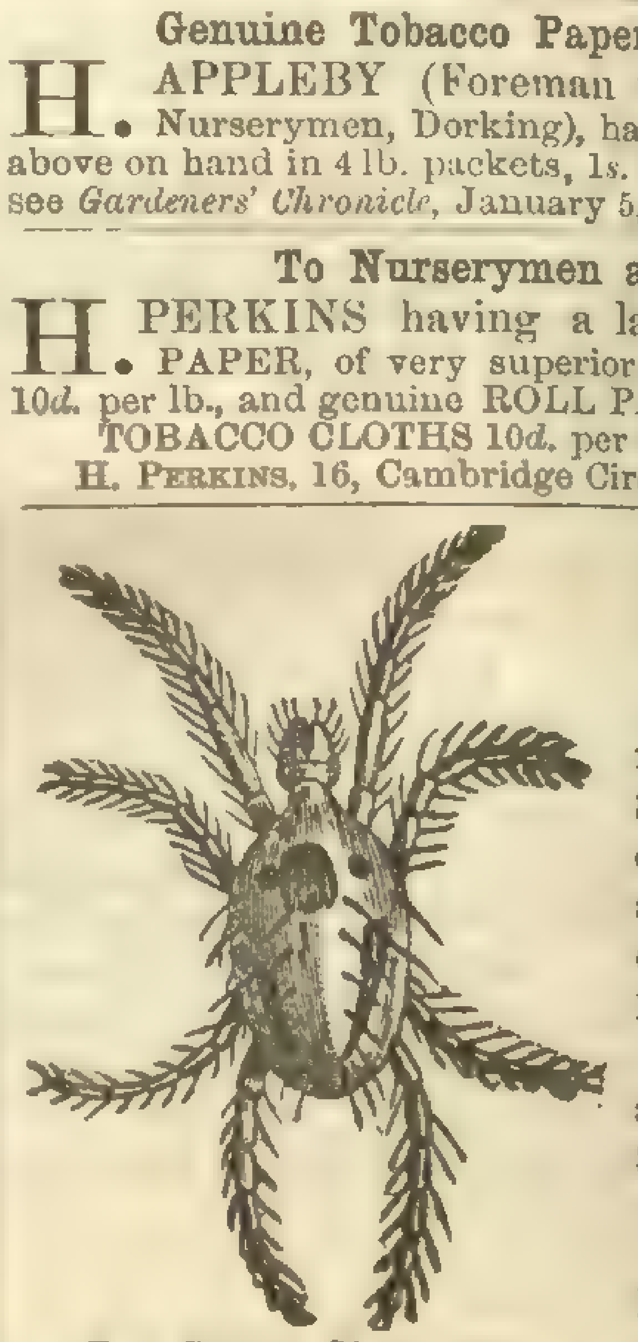
Galvanised Iron Water Cistern
for Cottage Houses, &c., to contain 50 gallons, 26*s.*; ... 31*s.* each; and 140 gallons, 37*s.*, and fitted with tap, ... the water perfectly sweet and clean; will not rust ... Cisterns of all sizes.

Galvanised Iron Pumps
for Liquid Manure or Domestic Use, 3 inches diameter ... and 32*s.* 6*d.* each; Tail Pipe for same at from 10*d.* per ...

Galvanised Iron Swing Water Barrows
for Garden or Farm use, containing about 20 gallons, ... formed of iron, 35*s.* 0*d.* each.

Genuine Tobacco Paper for Fumigating
H. APPLEBY (Foreman to Messrs. Ivery & ... Nurserymen, Dorking), has now a good supply ... above on hand in 4 lb. packets, 1*s.* 3*d.* per lb. For testimonials see *Gardeners' Chronicle*, January 5, 1861, page 14.

To Nurserymen and Florists
H. PERKINS having a large stock of TOBACCO PAPER, of very superior quality, offers the same at 10*d.* per lb., and genuine ROLL PAPER at 1*s.*
TOBACCO CLOTHS 10*d.* per lb., warranted genuine.
H. Perkins, 16, Cambridge Circus, Hackney Road, ...


Red Spider Magnified.

ORCHARD H... TREES and V...
Winter wash with GISHURST COMPO... recommended by Mr ... See "Orchard House ... edition; and see Mr ... son's recommendation ... *Cottage Gardener,* ... 1861.
Sold retail by Nurserymen and Seedsmen in boxes ... 3*s.*, and 10*s.* 6*d.* each.
Wholesale by PRICE'S PATENT CANDLE ... Limited.

NEAL'S PATENT ... PASTILS.
The following is one of upwards of 70 Testimonials received by ... from gentlemen personally ... to him.
"I beg to bear my testimony ... value of Neal's Pastils, and their ... cacy in destroying, most effectually ... the Green Fly without any ... and at a nominal expense, when compared with the use of Tobacco or ... Tobacco Paper.
"James ...
"Nursery Ground, ...
Sold by all principal Seedsmen.
Price 1*s.* and 2*s.* per packet.
Patentee, J. Neal, Birmingham.

Magnified Aphides.

528 PRIZES, amounting in value to upwards of 3000*l.*, have been awarded during the present year 1861, to CATTLE fed on Food seasoned with THORLEY'S CONDIMENT. See Reports and Testimonials from Noblemen and most of our first-class Agriculturists throughout the world (sent Post Free on application). A Barrel, containing 448 Feeds, Carriage Paid to any Railway Station in the United Kingdom on receipt of Post Office Order for 40*s.*, made payable to the Inventor, Joseph Thorley, Newgate Street, City ... Address Steam Mills, Caledonian Road, King's Cross, L...

Grains, Carriage Free.
MESSRS. SAMUEL ALLSOPP AND SONS, Burton-on-Trent, beg to inform Farmers and ... Stock in general that they have made arrangements ... various Railway Companies communicating with Burton ... the free delivery of Grains at different Stations ... Railways. The great value of Burton Grains either for ... ing Cattle or Feeding Milch Cows has long been an established fact in the neighbourhood of Burton. The butchers ... ference to Beasts fed with Grains, and some farmers ... given up the growth of Turnips and feed their Stock ... Grains and Chopped Hay exclusively with the most ... tory results. The usual quantity given is about a bushel ... for each Beast. Grains well trod into tubs or bricks ... and covered over with soil, will keep good for months ... they are improved by being so kept for eight or ten ...
Messrs. Samuel Allsopp & Sons are prepared to ... engagements for the delivery of Grains, by Railway ... Free, during the ensuing season, in quantities of not ... 3 tons or 150 bushels, and they hope that the low ... which they can be offered will induce many persons ... them a trial.
Brewery, Burton-on-Trent, Dec. 7.

CUPISS'S CONSTITUTION BALLS.—This celebrated Medicine, after 25 years' experience, ... to be the best and cheapest for HORSES and NEAT ... cheaper because required to be given only once ... Their ... preserving health, vigour, and condition. ... is saved by the food turning to a better account ... acknowledged fact Horses will keep up their condition ... upon three feeds of Oats daily when a Ball is occasionally ... than with four feeds without the Balls. Neat Cattle also fatten much faster with the occasional use of them ... arrive at a greater state of perfection than they can ... without the Balls. Any one doubting this statement ... try the use of them and prove for himself, for the more ... are used the better they are appreciated.
The Balls will be found admirable for Coughs, ... Strangles, Influenza, Inflammation of the Eyes, Swelled ... and other diseases incident to Horses and Neat ... as may be seen by the directions and Testimonials ... each packet.
The Balls are prepared by Francis Cupiss, Diss, ... Author of the Prize Essay on the Diseases of the Liver ... Horse. And may be had of all Patent Medicine Vendors ... Packets (6 balls each), 3*s.* 6*d.* per packet, or 7 Packets ... with full directions.
Persons using the Balls may consult the Proprietor gratuitously by enclosing a Stamp in a prepaid letter.

HOTHOUSES for the MILLION.—On the principle invented and patented by Sir Joseph Paxton, M.P., combining simplicity, cheapness, excellence, and durability, being capable of fulfilling, in the most perfect manner, all the requirements of Horticulture. LEAN-TO-HOUSES, 30 feet in length, can be had for less than 17*l.* SPAN ROOF, feet in length, for 33*l.*; and all other dimensions at equally low prices. Delivered free to any Railway Station round London.

Illustrated Circulars, with Lists of Prices, can be had on prepaid application to SAMUEL HEREMAN, 7, Pall Mall East, London.

JOHN SHEWEN, Sevenoaks, Kent, Manufacturer of all kinds of HOTWATER APPARATUS for Horticultural Purposes, Public Buildings, Dwelling Houses, and Offices, on the most improved principles, and of Rogers's Conical and the Improved Corrugated Saddle Boiler.

HOT-WATER PIPES, at Wholesale Prices, with Elbows, Syphons, Tee Pipes, and every other connection. Wrought and Cast-iron Boilers, Saddle, Conical, Cylinder, and Eliptic, from 24*s.* each. Improved Boilers and Iron Stands to use without brickwork, 50*s.* each. Valves from 12*s.* 6*d.* each. Beck's Patent Valves. Furnace Doors, Furnace Bars, Supply Cisterns, and Builders' Castings of every description in stock, at

Mr. LYNCH WHITE's Iron Wharf, Upper Ground Street, Blackfriars Bridge, London, S.

JOSEPH SMITH, HORTICULTURAL BUILDER, New Road, Hammersmith, W., makes of good materials LEAN-TO and SPAN-ROOF HOUSES, at 8*d.* per foot; if glazed and painted, 1*s.* PIT LIGHTS, painted, complete, 8*d.*; if unglazed, 4½*d.*

THREE ready-made HOUSES for SALE, viz.:—

24 by 12 feet 6 inches Lean-to	£34 0 0
23 by 12 feet ,, ...	32 10 0
27 by 16 feet 6 inches Span	47 10 0

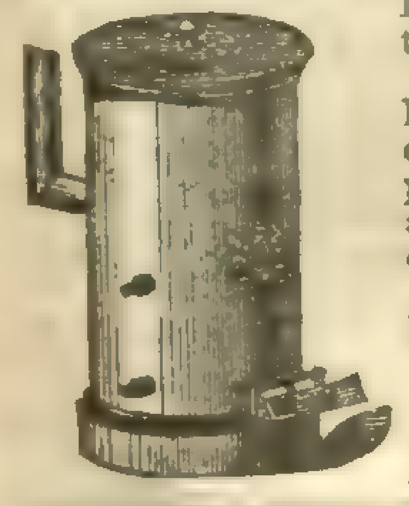
Also Fifteen 6 by 4 feet LIGHTS, glazed with 15 oz. glass, 16*s.* each: and Fifteen with 21 oz., 17*s.* 6*d.* each; Eight 7 feet 6 inches by 4 feet, 19*s.* 6*d.*, all well painted.

Greenhouses, Orchard Houses, &c.

H. FREEMAN'S Horticultural Works, Triangle, Hackney, N.E. Established 20 years. Substantially made GREENHOUSES, glazed, ready for fixing, 42 ft. by 13 ft., 50*l.*; 21 feet by 13 feet, 28*l.*; 12½ ft. by 10 ft., 15*l.* ORCHARD HOUSES 10 per cent. cheaper. A large assortment kept.

Estimates given for Heating, or any branch in iron or wood.

RIDDELL'S PATENT SLOW-COMBUSTION COTTAGE BOILER for HEATING CONSERVATORIES, ENTRANCE HALLS, BATHS, &c., by the Circulation of Hot Water.



Requires no brickwork setting; will keep in action from 12 to 18 hours without attention, at an expense of about 3*d.* per day. Is perfectly safe, requires no additional building, and may be seen in operation daily at the

Patentee's Warehouse, 155, Cheapside, London, E.C.

Price complete from 3*l.* 10*s.*

Illustrated Prospectus free, and Estimates prepared for Erecting Hot-Water Apparatus of any magnitude.

Patent Horticultural Works, 152, King's Road, Chelsea, S.W.

E. DENCH, INVENTOR, PATENTEE, and SOLE MANUFACTURER of HORTICULTURAL BUILDINGS with Wood Framework and Hollow Galvanised Iron Sashes instead of Wood. Complete at 1*s.* 3*d.* per foot superficial, and never require any more painting after first erection.

Five hundred references can be given. See *Gardeners' Chronicle*, April 27th, 1861, page 387; Edward L. Betts, Esq., Preston Hall, near Maidstone; Mr. Thomas Frost has proved them for both Plant Houses and Vineries for above 11 years.

E. D. has just erected one in the Royal Horticultural Gardens, Kensington.

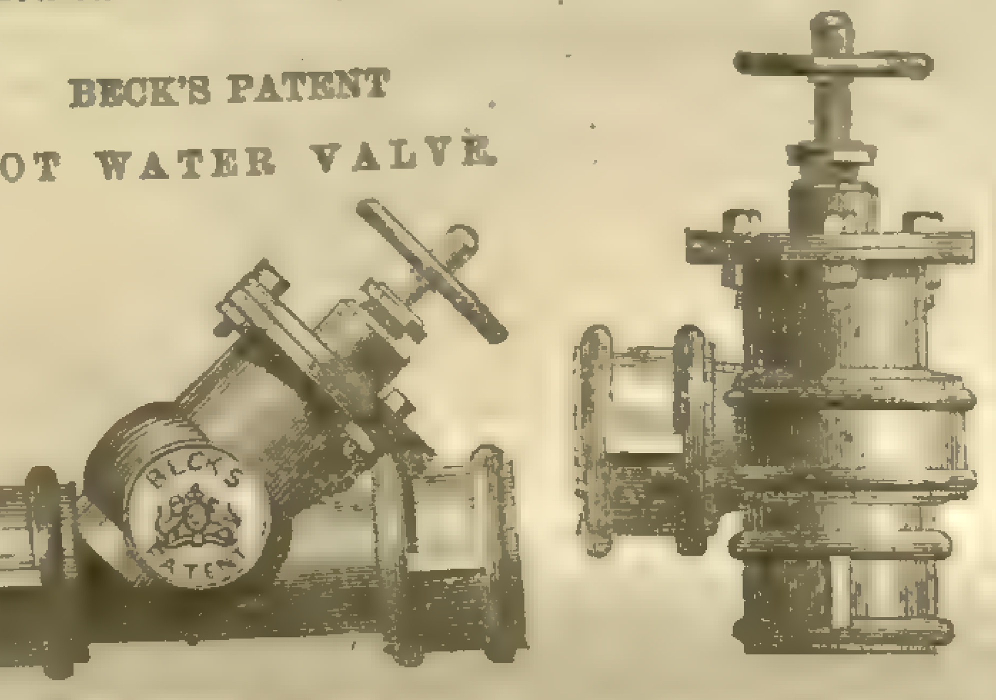
Also Manufacturer of all kinds of Horticultural Buildings in Wood and Iron of the ordinary kind, at the lowest price and best materials.

Heating every description of building by Hot Water or Gas.
Several Second-hand Houses for Sale.

Horticultural Works, Danvers Street, Chelsea, S.W.

BECK'S PATENT

HOT WATER VALVE.



HORIZONTAL VALVE. 2" 18*s.* 6*d.*; 3" 25*s.*; 4" 30*s.* ANGLE VALVE. 2" 17*s.*; 3" 23*s.*; 4" 28*s.*

JAMES GRAY, Sole Agent, begs to call attention to this most simple and perfect Valve ever invented. It is perfectly water tight, and is never liable to get out of order, or to get fixed by standing.

TO ARCHITECTS, ENGINEERS, GARDENERS, & OTHERS.—BECK'S Patent Valve has been submitted to several of the most scientific men of the day, and has invariably met with unqualified approval. A liberal Discount to the Trade

CONSERVATORIES, GREENHOUSES, VINERIES, and every description of HOTHOUSE erected on the most improved principles, and of best materials, at the lowest possible price consistent with good workmanship.

Heating by Hot Water in all its branches. Boilers of every approved description, Tubular, Saddle, Conical, &c.

JAMES GRAY, Horticultural Works, Danvers Street, Paulton's Square, King's Road, Chelsea, S.W.

"HOW COLD IT HAS BEEN."—NEGRETTI & ZAMBRA's celebrated THERMOMETERS will correctly Register the lowest Temperature. Price 3*s.* 6*d.*

1, Hatton Garden, E.C.; 59, Cornhill, E.C.; and 122, Regent Street, W. *** AGENTS WANTED. For terms apply at the Manufactory, 1, Hatton Garden, E.C.

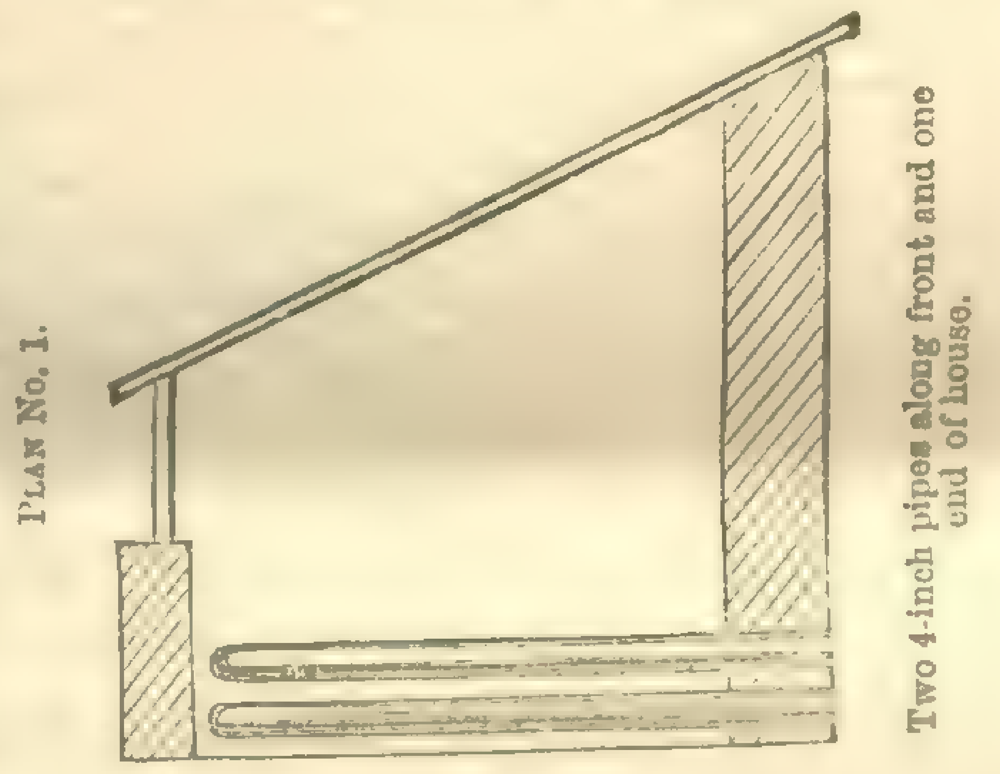
HOT-WATER APPARATUS.

J. JONES

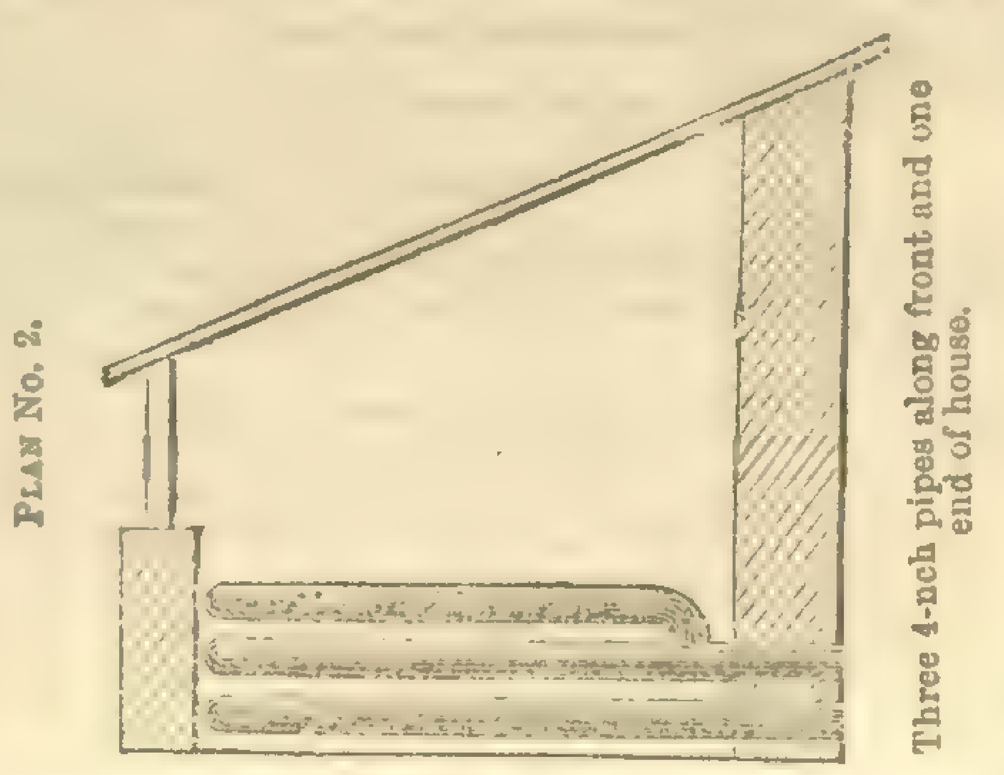
BEGS TO OFFER A COMPLETE

Hot-Water Apparatus for Houses

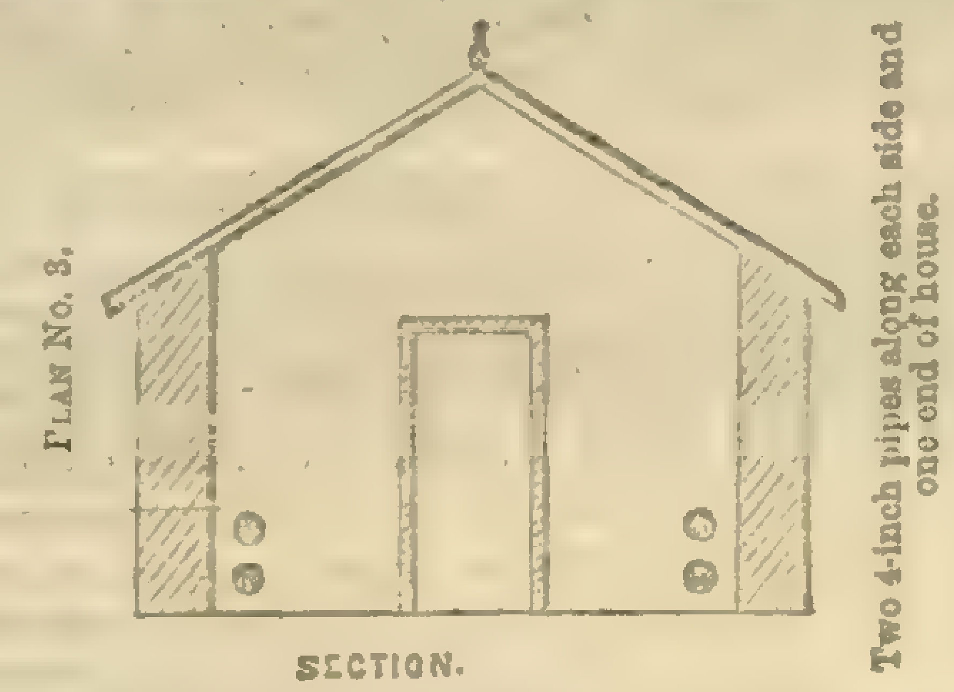
according to the following Plans, delivered Free to any Railway Station in England.



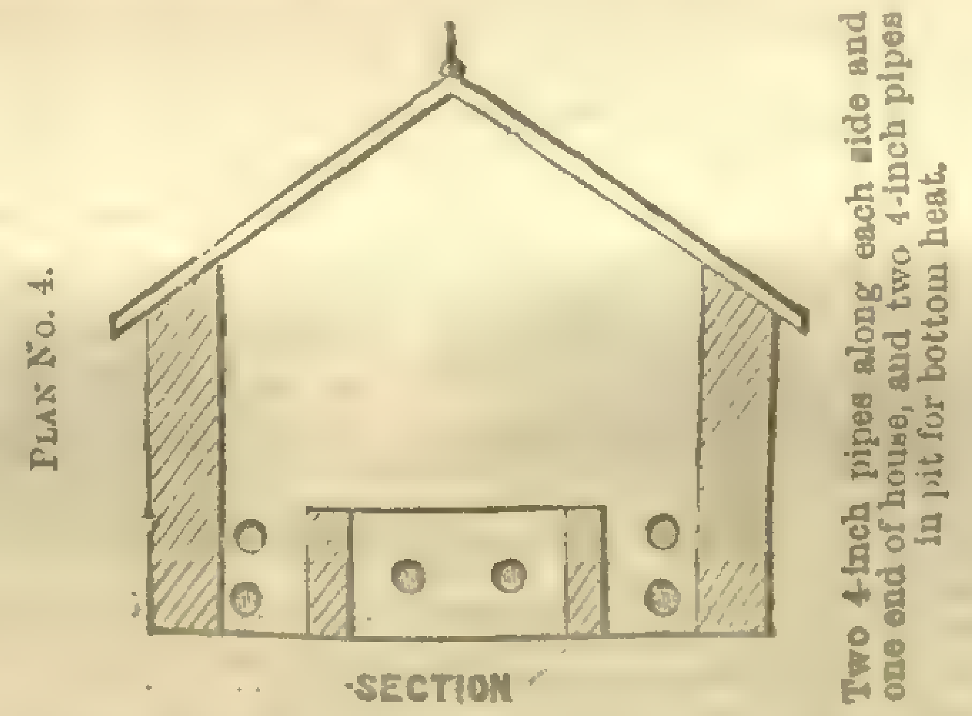
Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£8 0 0	£8 12 6
20 feet by 10 feet ..	,,	8 10 0	9 0 0
25 feet by 12 feet ..	,,	10 0 0	10 10 0
30 feet by 12 feet ..	,,	11 10 0	12 0 0
40 feet by 15 feet ..	,,	16 10 0	17 0 0
50 feet by 15 feet ..	,,	18 10 0	20 0 0



Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£11 10 0	£12 0 0
20 feet by 10 feet ..	,,	12 10 0	13 0 0
25 feet by 12 feet ..	,,	14 10 0	15 0 0
30 feet by 12 feet ..	,,	16 10 0	17 0 0
40 feet by 15 feet ..	,,	22 0 0	23 0 0
50 feet by 15 feet ..	,,	24 10 0	26 0 0



Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£12 10 0	£13 0 0
20 feet by 10 feet ..	,,	13 10 0	14 0 0
25 feet by 12 feet ..	,,	16 10 0	17 0 0
30 feet by 12 feet ..	,,	19 0 0	20 0 0
40 feet by 15 feet ..	,,	24 10 0	25 10 0
50 feet by 15 feet ..	,,	27 0 0	28 10 0



Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£16 0 0	£17 0 0
20 feet by 10 feet ..	,,	17 10 0	18 10 0
25 feet by 12 feet ..	,,	21 10 0	22 10 0
30 feet by 12 feet ..	,,	25 0 0	26 0 0
40 feet by 15 feet ..	,,	31 0 0	32 0 0
50 feet by 15 feet ..	,,	33 10 0	35 0 0

The above prices include Boiler, strong Furnace-doors, Bars, Plate, Soot-doors, Damper, and Supply Cistern-pipes of 4-inch diameter, Elbows, &c.; all of the best quality.

Delivered free to any Railway Station in England. Terms: Nett Cash.

Estimates will be sent for the work fixed complete, or further particulars on application to

J. JONES, Hot-Water Apparatus Manufacturer, 6, Bankside, London, S.E.

WOODEN FENCING. — The cheapest lasting— TALLOW STAVES, 5*s.* per 100, at PRICE'S PATENT CANDLE COMPANY, LIMITED, Belmont, Vauxhall, London, S.

Wind Power.

J. R. PEILL, 17, New Park Street, Southwark, S.E., begs to inform intending purchasers that he has now increased facilities for Manufacturing the Patent WIND ENGINES for Pumping, Grinding, Chaffcutting, Pulping, &c.

Prospectuses and all information may be obtained by enclosing one postage stamp, and a Wind Engine in full work may be inspected on the Premises daily.

JOSEPH HAYWOOD AND CO.,

MANUFACTURERS OF

PRUNING and BUDDING KNIVES,

SPORTSMAN'S, and all kinds of POCKET CUTLERY.

Dealers in Gambia Garden Shears, Scissors, Syringes, &c.

Glamorgan Works, Sheffield.

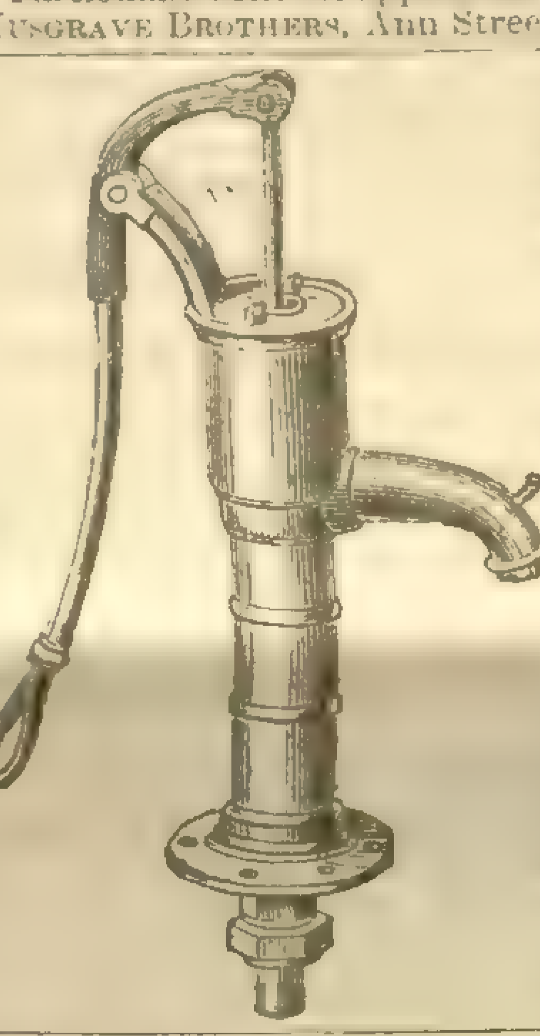
PROTECTED BY THE CUTLERS' COMPANY. CORPORATE MARK.

MUSGRAVE'S PATENT STABLE FITTINGS and HARMLESS LOOSE BOXES, PATENT IRON COW-HOUSE FITTINGS, and IRON PIGGERIES.

These inventions are recommended as possessing numerous advantages not to be found in anything hitherto made. At the late Meeting of the Royal Agricultural Society at Leeds, MUSGRAVE BROTHERS received a Silver Medal, and two Awards of "Highly Commended," being the only Prizes conferred on any competitor in this class.

Particulars sent on application to the Inventors and Makers, MUSGRAVE BROTHERS, Ann Street Iron Works, Belfast.

J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25*s.* 6*d.* each.



IRON YARD and GARDEN PUMPS

3 feet 6 inches under spout

2½	3	3½ inch
43*s.*	53*s.*	60*s.* each.

J. TYLOR and SONS manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.

PUMPS of J. TYLOR & SONS manufacture to be obtained of Plumbers in all parts of the United Kingdom.

J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

JOHN WARNER AND SONS, BELL and BRASS FOUNDERS to HER MAJESTY, HYDRAULIC ENGINEERS, BRAZIERS, &c., 8, Crescent, Cripplegate, London, E.C.

No. 35.

WARNER'S PATENT CAST-IRON PUMP, for raising Water from Wells not exceeding 25 feet in depth.

Diameter of Barrel.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead, gutta percha or cast iron flanged pipe as required.	1 1 0
2½ ,, long	3 ,, 3 ,,		1 10 0
3 ,, ditto	3 ,, 6 ,,		2 4 0
3½ ,, ditto	3 ,, 6 ,,		2 9 0
4 ,, ditto	3 ,, 6 ,,		2 18 0

2½ ,, short, with 15 feet of Lead Pipe attached, ready for fixing 2 0 0

2½ ,, long ditto ditto ditto 2 14 0

This Pump is fitted with J. W. & SONS' Patent Vibrating Standard, Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.

WARNER'S IMPROVED LIQUID MANURE or GENERAL PORTABLE PUMP.

No. 42.

This Pump is fitted with WARNER's Patent Bucket and Valve, and cannot clog in action. The Barrel is made of Galvanised Iron, not likely to corrode, and can be raised or lowered at pleasure on the stand, the legs of which fold together, and it may be carried with ease by one man.

	£ s. d.
Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe	2 15 0
If fitted with Barrel of Planished Copper	3 4 0
Stand and Pump, with plain Tail Pipe, for tying on Suction Pipe	2 9 0
2-inch India Rubber and Canvas Flexible Suction Pipe, on wires, in either 10, 12, or 15 feet lengths .. per foot	0 2 5

No. 43 is a similar Pump to the above, without stand, but with strong wrought-iron straps, for fixing to water cart or plank, price 2*l.* 5*s.*

Every description of Machinery for Raising Water, by means of Wheels, Rams, Deep Well Pumps, &c.; also Fire and Garden Engines, &c.

J. W. & SONS' Illustrated Catalogue forwarded post free on application.

The above may be obtained of any Ironmonger or Plumber in Town or Country, or of the Patentees and Manufacturers, JOHN WARNER & SONS, 8, Crescent, Cripplegate, London, E.C.

Can be Seen at Sunningdale Nursery, Sunningdale Station, South-Western Railway.

CHARLES NOBLE invites inspection, and would remind all interested, that his RHODODENDRONS have taken First Prizes at the opening Show of the Royal Horticultural Society, and every other show at which they have been exhibited during the last two years.

RHODODENDRONS for forcing; KALMIAS for forcing; and a magnificent stock of all the finest kinds of Rhododendrons in the world. CONIFERS and Hardy EVERGREENS by the 100 or 1000. ROSES and a General Nursery Stock well worthy the inspection of intending Planters or Nurserymen.

Hardy Scarlet Rhododendrons and other American Plants.

JOHN WATERER has the pleasure to announce that his ANNUAL CATALOGUE of the above popular plants, as exhibited in the Royal Botanic Gardens, Regent's Park, London, is now published, and will be forwarded on application. Intending planters and amateurs desirous of blending colours are invited to possess a copy, as faithful descriptions of all the RHODODENDRONS are given.

The Catalogue contains a selection of the best and really Hardy CONIFERS, with heights and prices, the whole of which having been removed the past spring are in a capital state for transplanting. Also EVERGREENS and ORNAMENTAL SHRUBS and TREES of the leading kinds.

The American Nursery, Bagshot, Surrey, near the Sunningdale Station, South Western Railway: also to be had of Mr. John Kernan, Seedsman, 4, Great Russell Street, Covent Garden.

New General Catalogue for 1861–1862.

B. S. WILLIAMS begs to inform his friends, patrons, and the public in general, that his NEW PRICED and DESCRIPTIVE CATALOGUE of Exotic Orchids, Ferns, Lycopods, Miscellaneous Stove and Greenhouse Plants, Variegated and Ornamental Foliaged Plants, Azaleas, Rhododendrons, Roses, Fuchsias, Geraniums, Hardy Variegated Plants, Herbaceous and Alpine Plants, Conifers, Fruit Trees, Shrubs, &c., is now published and will be forwarded post free on application.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, London, N.

Gladiolus Gandavensis and Varieties.

B. S. WILLIAMS begs to invite attention to his choice collection of this beautiful class of BULBS, which is beyond doubt the handsomest autumnal ornament to the garden. Having flowered many thousands this past season, great attention has been bestowed on the selection, and none but those of the best quality are offered for sale.

Collection of 24 Splendid Varieties, one root of each, for 21*s.*

Collection of choice Named Varieties, 6*s.*, 8*s.*, and 10*s.* per doz.

A PRICED and DESCRIPTIVE LIST on application.

A Fine Assortment of HYACINTHS, NARCISSUS, TULIPS, and other Bulbous Roots.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, London, N.

SAPONARIA CALABRICA ALBA, Pure White. —This beautiful New Annual is of very dwarf habit, and being pure white, contrasts most admirably with the Saponaria calabrica rosea. It produces blossoms in great profusion, and remains in flower during the whole summer and late in autumn. It is invaluable for beds, or as edgings for borders.

Price to the Trade on application to

John George Waite, Seed Merchant, 181, High Holborn, London, W.C.

Hardy Ferns.

JAMES SMITH can supply the following for 30*s.* cash, or half the number for 15*s.*

12 Asplenium Adiantum nigrum	6 Osmunda regalis
12 Asplenium Trichomanes	12 Ceterach officinarum
12 „ Ruta-muraria	6 Polypodium calcareum
6 „ lanceolata	12 Scolopendrium vulgare
6 Allosorus crispus	12 „ ramosum
	12 Lastrea recurva

Package included.

Darley Dale Nurseries, near Matlock.

J. H. WOOD, Bower Nurseries, Maidstone, offers to the Trade in 60-sized pots, really fine healthy stuff, at 50*s.* per 100 for cash, the following AZALEAS:—

Iveryana	Rosalie
Zotteriana	Roi Leopold
Grand Monarch	Standard of Perfection
Colorans	Sir Charles Napier
Queen of Perfection	Brilliant
Souvenir de l'Exposition	Baronne de Ferrière
Petuniæflora	General Havelock
Napoleon III.	

Princess Royal, 9*d.* each.

Several specimens of the above are now well set with flower-buds, and will be offered at reasonable prices.

Specimen DRACÆNA TERMINALIS, 3*s.* 6*d.* to 5*s.* each.

GLADIOLUS BRENCHLEYENSIS, 20*s.* per 100.

My NURSERY STOCK in general is healthy and fine, and well worthy of inspection.

WHEELER'S ORANGE GLOBE MANGEL,
WHEELER'S IMPERIAL SWEDE,
GRASS SEEDS for PERMANENT PASTURE,
GRASS SEEDS for LAWNS,

And all other Seeds of the same excellent quality which has rendered our Farm Seeds so celebrated.

We offer our Seeds at the lowest price consistent with their being good and pure, at the same time deliver them carriage free by rail, and allow 5 per cent. discount for cash.

Our Book of FARM SEEDS sent free for 3 stamps.

J. C. Wheeler & Son, Seed Growers, Gloucestershire.

Gladiolus Brenchleyensis (True).

YOUELL and CO. beg to announce they are in a position to offer this season strong Flowering Bulbs of the above magnificent GLADIOLUS, unequalled by any other for its brilliancy of colour, which is vermilion scarlet, and allowed to be the best and brightest variety known.

They have much pleasure in submitting the following report from the Editor of the *Gardeners' Chronicle*:—

"Gladiolus Brenchleyensis. — We have received from Messrs. Youell & Co., of Great Yarmouth, some specimens of this plant, the gorgeous appearance of which cannot be spoken of in terms of exaggeration. The tall robust habit and intensely bright scarlet flowers place it at the head of all the hardy flowers of the autumn."

It was also exhibited by them at the Crystal Palace Show, and was awarded an Extra Prize. Price 4*s.* per doz. or 30*s.* per 100. Trade price on application.

Choicest named varieties, 6*s.*, 9*s.*, 12*s.*, 18*s.*, 24*s.*, and 30*s.* per dozen.

CATALOGUES of their extensive collection of GLADIOLI are now ready.

Royal Nursery, Great Yarmouth, Norfolk.

Dutch and other Bulbs.

ROBERT PARKER begs to inform his friends and patrons that his PRICED and DESCRIPTIVE CATALOGUE of the above, containing selections of the finest varieties in cultivation, is now ready, and will be forwarded post free on application.

Exotic Nursery, Tooting, Surrey, S.

Superb Balsams.

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OVERWINNAAR, violet and white	15 0
PÆONY GOLD yellow and crimson	10 0
PURPLE CROWN, velvety crimson	7 0
REX RUBRORUM, scarlet	5 0
TOURNESOL, scarlet and yellow	5 6

	per 100.—
YELLOW ROSE, yellow	[illegible]
12 of each of the above, 16*s.* 8*d.*	
Splendid Mixed	[illegible]
POLYANTHUS NARCISSUS, finest mixed	[illegible]
BORDER NARCISSUS, in varieties	[illegible]
CROCUS, large yellow	[illegible]
„ extraordinary large yellow	[illegible]
„ splendid mixed Seedlings, 25*s.* per 1000	[illegible]
CHINESE PÆONIES, mixed, 6*s.* per doz.	[illegible]
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100 in 100 splendid named varieties	£4 4 0
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"Eugenie," "Victoria," and "Imperial" sets complete, with Bulbs and Supports, 21*s.*; "Empress" and "Nonpareil" are 25*s.* per set.

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J. IVERY AND SON feel much pleasure in offering their two beautiful Seedlings, CARNATION and TRICOLOR, small plants at 10s. 6d., and larger at 21s. each.

They are fully described in our CATALOGUE, with all other Novelties of the Season, which will be forwarded post free on application.

A fine lot of half Specimens and Standards for Sale.

Dorking Nursery.—Dec. 14.

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F. AND A. SMITH are now supplying fine plants at moderate prices of the following:—

*Acacias, *Azaleas, Cinerarias, *Camellias, *Chrysanthemums Cyclamen, Cytisus, Clianthus, Carnation (Tree), *Echeveria, Epacris, *Ericas, Eutaxias, *Gardenias, *Heterocentrum, *Kennedyas, *Leschenaultias, *Jasminum grandiflorum, *Monochaetum, Pelargoniums, *Passifloras, *Primula, double and single; *Solanum, *Oranges, &c. [Those marked thus * are either in bud or fruit at the present time.]

GENERAL CATALOGUE gratis.

Dulwich, Surrey, S.

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F. AND A. SMITH can still supply a few sets of their New GLOXINIAS, CINERARIAS, and PELARGONIUMS.

See *Gardeners' Chronicle* of Oct. 5, and CATALOGUE, which may be had gratis.

Dulwich, Surrey, S.

To the Trade.

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GEO. MACINTOSH, Agent for Mr. F. W. Wendel, begs to announce that CATALOGUES of the above are now ready, and will be forwarded free on application. Early orders solicited.

All Communications to be addressed, Nursery, High Road, Hammersmith, W.

SCOTTISH GARDENERS, FORESTERS, and LAND STEWARDS ASSOCIATION.

RESULT OF ELECTION.

At a GENERAL MEETING for the ELECTION of PENSIONERS, held at the Royal Botanic Gardens, Edinburgh, on Friday, November 29, Professor Balfour in the Chair, the following was the state of the Poll at the close of the Ballot:—

JANET CRERAR	163	
Polled last year..	397	
		560
MARY HENDERSON	68	
Polled last year..	170	
		238
THOMAS DINGWALL		124

JANET CRERAR and MARY HENDERSON having the greatest number of Votes were thereupon declared duly elected.

J. H. BALFOUR, Chairman.

JAMES M'NAB, PETER S. ROBERTSON, } Scrutineers.

Edinburgh, Dec. 14.

The Gardeners' Chronicle.

SATURDAY, DECEMBER 14, 1861.

IN the profound and admirable work which has just been published by TULASNE on the nature and propagation of Fungi, to which we hope soon to introduce our readers more fully, though every source from which information could be obtained has been almost exhausted, there is very little respecting the production of the more noble Fungi from the spores themselves. Infusions of different kinds have been used in the Department of the Landes for their reproduction, and PERSOON speaks of experiments supposed to be successful of a similar kind, but as the infusions were made with boiling water, which, except in rare instances, destroys the power of germination, though the spores will bear a considerable dry temperature, there is great reason to believe that there was some fallacy in the presumed success.

It appears however that experiments have been carried on in France for some years past by M. CHEVREUL, with a view to show the practicability of raising Mushrooms from spores, which have resulted in complete success, and which bid fair to lead to a great increase in the productiveness of Mushroom beds. At present we have but meagre accounts of the process. Such as they are, they have already been given in this Journal (1861, p. 966). There seems however to be some confusion in the account between young Mushrooms and the spawn. It is said that young Mushrooms are raised on glass covered with moist sand, and that the most promising of these are selected for transplanting into the beds, which are watered with a solution of saltpetre. It is however expressly said that the new crop springs from the spawn, and that within the incredibly short space of six days magnificent tufts of Mushrooms are produced.

But whether this time really applies to the full development of the Mushrooms from the deposition of the spawn, or whether it merely means that the fine group exhibited to the French Academy was from the spawn after it had run through the bed and had knotted for fruit, does not exactly appear; or again, whether the spawn had really knotted on the glass, the several terms being used apparently with some latitude in the report given in the *Comptes Rendus* of Oct. 14.* We trust therefore, that we shall soon have a more detailed account of the process, giving actual dates as to the time of sowing the spores, the making of the beds, and the first appearance of Mushrooms on their surface fit for use.

We are happy to say that Mr. W. INGRAM, who is such a successful cultivator of Mushrooms, and observes everything connected with gardening in such a practical and philosophic spirit at the same time, has promised to submit the process to experiment. Whether his efforts are successful or not, or whether the matter may be practicable in the hands of cultivators in general, we have no doubt that they will derive much benefit from its ventilation. Mr. INGRAM has for some time found that watering Mushroom beds with a weak solution of common salt contributes much to their fertility, and to the quality of the Mushrooms. We have ourselves lately seen a bed in the open air treated in this way, producing abundance of Mushrooms, and those of the very finest quality in respect of colour, texture, and flavour. Care however must be taken not to use too strong a dose, as it might prove fatal. The method of M. CHEVREUL, so far as watering with saltpetre is concerned, is practicable by every one, and we are sanguine as to the good results to which it will lead.

While on the subject of Mushrooms, we take the opportunity of borrowing a leaf or two from Mr. INGRAM'S observations. It may be interesting to some of our readers to hear that the pretty white Fungus figured at p. 312 of this year's volume was produced in profusion on one of his open air beds, which had been made almost entirely of comminuted straw highly impregnated with horse-droppings. A matter however of more importance is the failure of certain attempts made by ourselves and Mr. INGRAM to raise different varieties of Mushroom or allied species from spawn obtained in the fields. The spawn, however healthy, would not run when placed in beds where artificial spawn would to a certainty have produced a crop, and results with spawn from Australia and the Southern United States have been equally disappointing. Mr. INGRAM, however, suggests that in attempts to cultivate these plants, instead of at once inserting the raw spawn, measures should be taken to increase it in the same way in which Mushroom spawn is prepared for the market. We are inclined to think that there is much wisdom in this suggestion, and if verified by experiment it may lead to very useful results. Our knowledge of Fungi is daily becoming more profound, and they are no longer so generally neglected as was once the case, as the offscourings of the earth. We do not despair, therefore, now that Mosses and other minute Cryptogams are objects of cultivation, that these curious productions will receive the attention they deserve. *M. J. B.*

CARNATIONS in winter? Does not the very name of Clove Gillyflower or Julyflower, which belongs to the plant, negative such a notion? To such questions we can only reply that Carnations in winter, and Carnations of very good quality too, are amongst the (comparatively) modern improvements in floriculture, which like the recently introduced Bouquet Dahlias, and many other favourites now within our reach, we owe to the intelligent skill of far-seeing florists, who having detected in their seed-beds some novel though perhaps but slightly varied form, bearing indications of a new and desirable feature, have followed up the hint until they have been able to bring out some old favourite with a new face.

And yet in respect to the TREE CARNATIONS, which are those that yield winter flowers, the hint was given many years ago, so that we can only speak of the result as "comparatively modern." The race however seems to have died out amongst us for many years, and to have been only again revived at a very recent period. Some 40 years ago, it seems, the first variety of Tree Carnation, one with crimson flowers, made its way into our gardens. A few years later this was supplemented by some distinct forms obtained by the Belgian florists, and then comes a pause; for the varieties thus obtained seem to have been either lost, or lost sight of here, and nothing came of their introduction. On the Continent, however, in the south of France and in Belgium, they appear to have been kept in view by at least some few cultivators, who have of late years given special attention to their increase and improvement; and the result is that we have now in cultivation from these sources a considerable number of varieties—upwards of 80 are named in Messrs. E. G. HENDERSON & SON'S last published list of them—most of which are flowers of considerable beauty, and some of the more recent approach very nearly in merit to the choice summer-flowering varieties so much prized by our own florists. About this time last year the growers named above exhibited a collection of these winter-flowering Tree Carnations at one of the meetings of the Royal Horticultural Society, and the merit of the varieties, as well as the utility of the group, was at that time marked by the award of a Special Certificate.

This race of Tree Carnations, which includes Tree Picotees, may indeed be said to be invaluable for pot culture for decorative purposes and for winter bouquets of the higher class, the flowers being in winter as fresh and sweet as those of the summer season. And herein lies their chief value, for they supplement the comparatively limited materials available for the forcing house in winter with representatives of one of the most favourite of the flowers of our mid-summertide.

Those who are not familiar with this race of varieties —"perpetual-flowered" as it is sometimes called, from its habit of producing its flower stems at varying successional periods—may be informed that the short stocky leaf-shoots, which in the usual forms of Carnation and Picotee remain in a dwarfed and as it were dormant condition during a considerable portion of the year, are wanting in the varieties to which we now refer, the habit of which differs in this respect, that the young leafy shoots once formed go on continuously to grow and lengthen out until they develope their flower buds. It is this habit which adapts them so perfectly for the production of autumnal and winter blossoms. Hence, too, one leading feature in their management, when winter flowers are the object, consists in shortening back in the spring and early summer months all the taller and more elongated of the shoots then formed, so that a fresh growth may at that season be induced; the branches which are thus developed throughout the summer and autumn being those that furnish the required winter blossoms. The elongated shoots present on the plants in spring would, if left to grow on, develope blossoms in the course of the summer. On the other hand, the vigorous young shoots made during the months of summer continue to grow on through the autumn, and furnish winter flowers. This renders it necessary, if a succession of flowers at different seasons is required, that there should be a succession of plants under treatment — forwarded or retarded according to the period at which the flowers are required.

Some of the principal features of treatment with the view to the production of the flowers during the winter may be here briefly sketched out. Commencing with the time when the blossoms of one season are just past, which will be very early in the year, the first thing to be done is to cut away the old flowering stems, which are to be removed quite back to the leaf growth at the base of the plant, however low down this may be. The object is to ensure a crop of dwarf vigorous young shoots from as near the base of the stem as possible. The plants are to be put into a dry cool pit, well ventilated, and freely exposed to light, protecting them from severe frost, as occasion may require, and repotting or top-dressing them as they may need, after growth has recommenced. So they may go on for a while. By and by, when the severe spring frosts are past, they are to be planted out in prepared beds in the open garden. The chief requisites to their successful growth in this situation are, a dry subsoil, say to the depth of at least a foot and a half; a well-pulverised and porous fertile soil, enriched by the plentiful incorporation of rich leaf-mould or decayed cow-manure; and a situation where the plants will be fully exposed to sun and air. If the beds are so arranged and planted as to admit of being covered by a portable frame to furnish shelter from heavy rains, so much the better; if not, the evils of excess of moisture on the soil must be avoided by some other means, amongst which the frequent stirring of the surface, especially after rain, is one of the most important. The growth thus obtained by planting out in open beds, is ordinarily much more vigorous than that which can be obtained under pot culture.

By the middle or end of September those plant which have acquired sufficient strength and vigour to produce flowers, should be carefully lifted with the earth about their roots, and potted into pots of conve-

* It may save our readers some trouble to give an exact translation of all that is said on the subject in the place just indicated.

"M. Chevreul presents a magnificent group of Mushrooms produced under the cultivation of Dr. LA BORDETTE. The Doctor first raised the Mushrooms from spores placed on a slip of glass sprinkled with sand and irrigated with water. The most vigorous individuals are then chosen, and it is from the spawn of these that he obtains the Mushrooms, a specimen of which is before the Academy. The following is the method which he uses in preparing the beds. A moist compost of vegetable mould and garden soil is placed in a cellar and covered, 1. with a bed of sand and river silt 0m 25 (rather less than 10 inches) deep, 2. with a coat of lime rubbish 0m 15 (rather less than 6 inches) in thickness. The bed is then watered with an aqueous solution of azotate of potash (saltpetre), containing 2 grammes (about 31 grains) to the square metre (about a square yard and a fifth) after the spawn has been inserted. The group of Mushrooms placed before the Academy was developed in six days. The effect of the azotate of potash lasts for six years." It will be seen that there is a great difference between the thickness of soil as here stated, and that given at p. 966. Experience will soon show what is the proper depth.

nient size; after which they are to be sheltered for two or three weeks in a close greenhouse or pit, where they will be kept rather close, occasional sprinklings of water and moderate ventilation, together when requisite with a slight shade from strong sun for a few hours about mid-day, being given them. In a short time it will be seen by the plump and fresh appearance of the stems, leaves, and buds that root growth has been re-established, and after this the further object of protecting the plants under glass is solely that of preserving and assisting in the maturation and expansion of the flower buds. The forwardest of the plants may from time to time be removed to a warm house with a genial temperature of from 50° to 60°, where they will gradually perfect their blossoms.

It is to be borne in mind that these plants for blooming are not to be lifted from the beds in which their growth has been made until the flower buds are formed and begin to swell, which should be the case by the time we have indicated or shortly thereafter. If by that time there is no indication of flower buds, the growth has not been sufficiently vigorous for their development, and nothing remains but to leave the plants under conditions favourable to their health until the following spring, when the same cultural process must be renewed. In favourable soils and situations—that is in airy situations, where the soil is porous and without excess of moisture—they may be left in the beds where they have grown through the summer, but if there is risk of injury from excessive or confined moisture, it is better to pot them and store them in dry ventilated pits till the return of spring.

The varieties of this tree form of the Carnation now include self-coloured flowers of various hues, such as crimson, scarlet, white, and yellow, and others with white grounds flaked with crimson, scarlet, or purple, some having markings of more than one colour, like the "bizarres" of the florists; whilst of the Picotee race, those in which the colour is disposed around the edge of the petals, there are primrose, yellow, orange-yellow, fawn-coloured, and pale slate-coloured grounds, margined with lilac rose or scarlet. There are too (we must confess it) varieties which in their own individual forms blend the markings proper to the Picotee and the Carnation; but we may in charity hope, since all such flowers as these are regarded as mere "decorative" objects, that such double-faced behaviour, reprehensible though it may be, will yet be judged leniently by the floral critics in consideration of other good qualities they possess.

BEGONIAS.

It is to be feared that the present passion for plants with coloured foliage will drive some of our old favourites out of cultivation—some of those plants which we have formerly valued highly, cultivated with care, and which have well repaid us for the trouble we bestowed upon them. Already has the sentence been passed upon some of the older Begonias; even their names have been banished from the pages of the newly published nursery catalogues; the plants themselves are everywhere doomed to unnecessary neglect, and are daily becoming more and more scarce. Before they are entirely gone let us at least give them a good character for the services they have rendered us; and if some horticulturist with more gratitude, and less of that tendency to bow to fashion, which Bloomfield says "rules us all," may be induced to continue the growth of a few of the best kinds, he will be a benefactor to future generations, and I shall not have written in vain.

Let us see how matters stand with old Begonias. There is B. octopetala, the largest flowered species in all the family; it has already been lost, I fear. Should any gardener in the country still possess it he would do well to grow and exhibit a good plant of it at one of the meetings at South Kensington; it would produce quite a sensation. B. nitida was one of the most useful plants I ever cultivated for the sake of cut flowers during winter; one plant of it I recollect was never out of bloom for more than two years, and it might have continued longer for anything I know, for it was grown in a nursery and was sold in full flower at the end of that time. B. fuchsioides furnishes us with one of the most gracefully habited stove plants we have, and yet one seldom sees it well grown. It would make a much better exhibition plant than many of those which find a place among stove and greenhouse specimens at a late show. It would evince the skill of the cultivator too, much better than a Vinca or an Allamanda. B. Evansiana (or as it is often called B. discolor) is used on the continent as an edging for beds of Canna, and with fine effect; why should it in this country be banished from the gardens of the wealthy, and find a home only in the cottager's window? It is a herbaceous kind, and the roots should be stored in some dry place during winter; it is so hardy that it certainly deserves a trial in those gardens where the purple Orache has proved a failure, and where the Perilla is thought too sombre to be used extensively. For the autumn decoration of the conservatory there are few plants which can vie with B. diversifolia (called B. Martiana in some gardens); the rich crimson flowers of this plant are very fine when the plants are well grown. It should be treated as a biennial, and grown in a hotbed; but the tubers—for it is a herbaceous species—may be kept longer than two years if properly attended to in the winter. The roots should not be kept dry too long, or they will rot away like those of old Gloxinias. One great peculiarity about this plant is the great length of time the seed will lay in the ground without germinating; although so very minute, and there are few seeds which are so small, they will often remain dormant for a year. A few seeds will start within a week or two after they are sown, and occasional stragglers will follow them from time to time, but if the gardener has sufficient patience he will find that the main crop will come up about a twelvemonth after the seed was sown. This is so very different to what takes place among the generality of Begonias that I should not have believed it possible had I not seen it occur more than once under my own hands, and fortunately I had noted the date of sowing upon the labels. The pretty habit, the neat, silky-looking foliage, crimson on the under side, and the freely-blooming properties of B. Fischeri, are qualities which I should hope would save this kind from extinction. B. cinnabarina is getting scarce, too, but it will not, I trust, be entirely lost, for it is a good and useful species. The delicious fragrance of the pure white flowers of B. odorata should make it worth preserving; and so should the pretty habit of the small and neat growing kinds—B. Dregii, B. natalensis, and B. microphylla.

All these, and others that I could name, are well deserving of cultivation; I could, if space permitted, easily lengthen the list by referring to B. sanguinea, remarkable for the crimson colour of the under surface of its large and fleshy leaves, to B. urophylla and B. manicata, which produce such a profusion of flowers in early spring, and to other species which in their way are quite as valuable; but I trust that the good taste of my fellow gardeners will not allow them to sacrifice such useful plants to make room for the more showy hybrids. If we must have plants remarkable for the colouring of their foliage, there are still a few of the older kinds which have never been surpassed, if, indeed, they have been equalled. There is, for example, the rich crimson velvety leaves of B. splendida; this is a somewhat difficult plant to manage well, but when in a young and vigorously growing state, there is nothing to rival it. The delicate manner in which the zones of colour are shaded off into each other on the leaves of B. Griffithii (formerly called B. picta) is quite unique.

All the new hybrids partake of the characters of the Xanthina group of the genus; indeed, I think they may all be traced to some half a dozen species, and in almost every instance one of the parents has been a variety of Xanthina. Those kinds in which B. splendida, or the dwarf-growing B. Thwaitesii, has been one of the parents, are easily distinguishable from the others. But there is too much monotony among the hybrids, so many of them have been raised, and they are so difficult to distinguish from each other on account of their very minute differences, that many purchasers are already becoming disgusted with them. Our nurserymen should look to this and ascertain whether entirely new strains may not be brought out. Would the coloured species hybridize with the strong growing upright kinds of the longipes or zebrina groups? Or, still better, would these breed with the small leaved kinds, of which B. natalensis may be taken as the type? Before laying down my pen I may just observe that the curious peculiarity in the flowers of B. frigida, noticed in these pages about a year ago, is inherited by the young seedlings raised from the original plant. The same proportion of the flowers is still hermaphrodite, and the female organs superior. I have repeatedly tried to raise seed from these anomalous flowers fertilised by their own pollen, to see if the plant could be induced to make some further progress in this direction, but always without success. The seed from which the young plants were raised was produced by the normal flowers of this Begonia. *C. W. C.*

ROYAL BOTANIC GARDEN, CEYLON.

(Extracts from the report of the Director, Sept. 28, 1861.)

CINCHONA.—It gives me great pleasure to be able to report very satisfactorily upon the progress of the important experiment now being made in the Island, in the cultivation of species of the valuable Quinine-producing Cinchonas. An experienced gardener has, as requested by the Government at my suggestion, been sent out by Sir William Hooker, from the establishment at Kew, and I have much reason to be satisfied with the zeal and intelligence shown by Mr. MacNicoll in his charge of the plants now under his care at the Hakgalle Garden near Newera Ellia

The plants of Cinchona which, in my last report, I mentioned as being expected from Bombay, arrived at the latter place in so unpromising a condition that it was thought best to have them all dispatched at once to the Neilgherries, instead of sending a portion, as was at first intended, for trial on our hills. Nearly all of these plants subsequently died. Another consignment of Cinchona plants, collected by Mr. Spruce in South America, arrived some months afterwards at Bombay, in very good condition: but these were also all conveyed to Ootacamund, not any being reserved for Ceylon, as I was given to understand would be the case. As far, therefore, as regards Mr. Markham's mission to South America, we have received here no growing plants of Cinchonas; but a parcel containing seeds of Cinchona micrantha and Cinchona nitida, collected by Mr. Pritchett, was sent to me in February last, from Mr. MacIvor, through the Chief Secretary to Government, Fort St. George; and a parcel was received by me shortly afterwards from the Secretary of State's Office, which contained seeds of Cinchona succirubra, collected by Mr. Spruce. From these seeds more than 800 plants have been raised. (C. succirubra, 530; C. micrantha, 180; C. peruviana, 25; C. nitida, 45; uncertain, 60; which, although at present necessarily of small size, are nevertheless progressing very satisfactorily in the locality which has been selected for them.

To Sir William Hooker we have been indebted for the transmission to us, at different times, from the collection at Kew, of six plants of the very valuable Cinchona calisaya. The greater number of these, however, suffered so much in transit, that two only of those kindly taken charge of by Dr. Anderson of the Calcutta Botanic Gardens, arrived here in a healthy state. They are now planted out in Hakgalle Garden, and are growing vigorously. Mr. MacNicoll has, without risk of delaying the period of flowering, succeeded in obtaining from one of them eight cuttings, of which have produced roots, and he has every reason to anticipate success with the remainder.

During the present month I have received from Dr. Anderson a portion of a supply of Cinchona seeds, communicated by the Government of Java to that of India, but from what species they were collected has not been stated. These have been sown at the Hakgalle Garden, and a very few of them here; they have, however, not yet been in the ground a sufficiently long a time to germinate.

From the experience we have had of the species of Cinchona now growing in the Island, I think it may be considered certain that C. calisaya would not be likely to succeed at an elevation much below that of Hakgalle, and that it should be planted above 5000 feet. C. succirubra grows extremely well at Hakgalle; but as it also grows tolerably well at Peradenia, with the appearance only of being a little too much affected by the heat, I think it might succeed probably at any elevation above 3500 or 4000 feet. C. micrantha, judging from one small plant we have retained at Peradenia, appears to thrive quite as well here as at Hakgalle: it will, however, have to be ascertained by and by at what elevations respectively this and the other species will produce the largest relative quantity of Quinine.

As I have reason to believe that many gentlemen engaged in Coffee planting would be glad to co-operate in trying experiments in the cultivation of the Cinchonas at different elevations upon their estates, it may possibly be considered advisable to distribute, some short time hence, under conditions to be determined upon, a few plants of those raised at Hakgalle. This course of action might probably lead to a more extensive cultivation of Cinchona in the Island, than the Government would feel disposed itself to undertake, though it would no doubt desirable for the present experiment to be carried on with every possible activity and carefulness, until the culture should be well understood, and it could be fairly given over to private speculation.

VANILLA.—Much attention is being given to the culture of this valuable plant, and different modes of growing it are being tried here. The system of training the plants up strong trellises, to which it firmly attaches itself by means of its aërial roots, appears, so far as our experiments have gone, to be the best; as the plant is much more manageable under this treatment, and it thrives quite as well upon the trellises as when it is growing upon the trunks of living trees. A great deal of care has been bestowed upon the curing of the Vanilla pods, so as to prepare them in the style required for the European markets, and as adopted in the Island of Bourbon. As regards their appearance, the samples we have produced this year show a great improvement upon any we had previously prepared. A small box of Vanilla grown and prepared in these gardens, is being sent to Colombo, for transmission to the International Exhibition of next year.

COTTON.—In this immediate locality, the climate of which, owing to its uncertainty, is quite unsuitable for the successful cultivation of Cotton, all that can be done in the matter is to keep up as good a supply as possible of fresh seeds of the best descriptions, to meet any demands that may be made for them by those wishing to make experiments in the cultivation of this plant, in the more favourable districts of the island. The Assistant Government Agent of Ratnapoora recommends the Buttenne Division of the Saffragam District, as eminently adapted for the successful growth of Cotton; and there are, no doubt, many other districts in the island where its cultivation might be successful. But while the difficulties as regards the supply of labour are so great, and therefore the prospects of the first pioneers in the matter so otherwise than promising, it is to be feared that Ceylon, unless by some very happy contingency, will not partake with India of the great advantages that would arise from the cultivation of an article in such immense and unfailing demand as that of Cotton.

TEA.—We are in a position to be able to furnish, from the numerous plants now in this garden, a considerable quantity of Tea seeds, should they be required for experiments in the cultivation of this plant in the island.

MANILLA PLANTAIN OR HEMP-PLANT.—This grows so freely in these gardens, that we have it in sufficient quantity for distribution. From trials made by Mr. W. H. Wright it would seem, that the fibre of this plant is very easily separated in a sufficiently clean state for the manufacture of mats and cordage of excellent quality and great strength. I have sent, during the past year, ripe seeds from our plants to England, India, and Australia.

In my last report I urged the desirableness of having a museum building of a convenient, rather than of a very ornamental, character, erected near the Director's residence, for containing specimens of the vegetable products of the island, the inspection of which would be of very great interest and importance to those wishing to become acquainted with the resources of Ceylon as regards its vegetation. In reference to what was then stated, I may add, that such a collection of specimens would have assisted very materially in giving direction and stimulus to the efforts recently made in the Central Province to procure, for sending to the International Exhibition, what would best illustrate the vegetable productions of this part of the island; and it would no doubt have derived a reciprocal advantage in the contribution of many valuable additions to it.

From specimens intended for transmission to the International Exhibition, which have passed through my hands for the purpose of having their correct scientific names appended to them, I have derived much useful information with reference to the value attached to certain plants by the Singhalese, either for food or for medicinal purposes, as well as in ascertaining the native names under which they are respectively known.

The third part of "Enumeratio Plantarum Zeylaniæ" has been out for some time, the fourth part may be looked for shortly, and I hope to complete the work in a few months. I should then have more leisure to direct my attention to the preparation of a popular Flora of the Island, on the plan recommended by Sir William Hooker for Colonial Floras, and as carried out by Mr. Bentham in his "Flora Hongkongiensis;" and it would afford me great satisfaction to be able thus to render accessible to every enquirer the result of the researches of my predecessors in this appointment, and of myself; and by so doing to supply a want which is much felt. It is hardly necessary for me to remark how desirable it would be that the work should contain everything of any importance that is known with reference to the vegetation of the island; not only that all the species which have been discovered should be described in it, but the districts in which these respectively occur, or are most abundant, should be indicated; the native names, when known, given; and the uses mentioned, to which the several plants, or many of them, are applied. Upon these points, notwithstanding the labour and attention which have for so long a time been given to the subject, a good deal still remains to be done. Residents in different parts of the

...t have it in their power to contribute valuable information upon some of them: and, if any should feel disposed to do so, I should be glad to enter into correspondence with them, and point out in what way their assistance would be most useful. During the past year several plants new to the Flora of the island, and some of these quite new to science, have been brought from the jungles, and added to the collection here. To the Rev S. O. Glenie and Mr. Wm. Ferguson, I have again to express my acknowledgments, for interesting communications respecting the plants of their respective neighbourhoods.

THE GOLDEN PIPPIN.

FROM an inquiry made recently in your columns respecting this old favourite dessert Apple my attention has been drawn to it, and I am tempted to give my experience as to its culture, which may probably interest some of your readers. I have one tree, now from 80 to 90 years old, which I have always looked upon with increased interest whenever I have heard the late Mr. A. Knight's doctrine of the sort having become worn out agitated, which it has been occasionally in your columns. I have repeatedly taken grafts from this tree, and although it is now full of dead and cankered shoots, the grafts when placed on healthy vigorous stocks have made a fine growth, and the trees, if not suffered to remain too long in one place, so as to root deeply in the soil, have remained healthy and free from canker, but if left to grow uncared for or unremoved, no matter how favourable the soil for Apple trees, the trees have commenced to canker the third or fourth year, depending upon the nature of the season, soon becoming deeply infected with that fatal disease.

I have closely watched my old tree, and have remarked the effect of temperature upon its health, which fluctuates with the seasons. Thus, in the hot summer of 1857 it made healthy shoots, which did not canker and die back the following winter. In 1858, a dry warm summer, it bore a fine crop of real old-fashioned Golden Pippins, rich, and full of that aroma peculiar to this Apple. In 1859, a dry warm summer, it again bore a crop of nice fruit, and its shoots remained healthy; then came 1860, our sunless summerless summer. Alas! for my poor old tree; not only the shoots of the current year died, but those of the two or three preceding seasons, so that last spring it looked a mass of dead and dying shoots; the past summer, although warm and favourable, has not restored it to its usual health, and it seems as if it would require two or three warm dry summers to restore it to even its usual state, *i. e.*, a few healthy shoots among clusters of those that are cankered and half dead. I suspect that for these 50 years past this tree has thus been battling with a climate too cool for its well-doing, making in two or three consecutive warm seasons an attempt at progress which has been nearly neutralised by one cold wet season, so that the tree although nearly a century old is still comparatively small, measuring only 3 feet in circumference at 2 feet from the ground; yet it is growing in a deep tenacious loam very favourable to the growth of Apple trees, and in which its neighbours if hardy varieties make an annual healthy growth without canker.

I remember hearing when quite a boy my father's old servant, who was a great Apple connoisseur, talk of the old Golden Pippin trees in the farmer's orchards in the parish, and I also remember two of them very well; they used to bear fruit nearly covered with russet, and their flavour was exquisite.

These trees are all long since dead, and younger trees planted about 40 years ago languished and died after a few years, even in fresh soils, in which Apple trees of other kinds grew healthily and well, just as if there was a lack of force in our summer climate to warm the earth sufficiently for their roots when striking deeply into it. This idea is strengthened by the fact that young trees of the Golden Pippin, the scions of which were cut from the old tree I have described, can be kept from canker if the trees are taken up and replanted biennially, and in a warm season they bear very good fruit; trees also against walls with a southern aspect do very well in some soils, and bear fine and well-flavoured fruit.

I have convincing proof, however, that with the Golden Pippin and the old Nonpareil, which is equally subject to canker, it is not the sort in which there is any inherent weakness or proneness to decay, but the climate which is in fault. To test this I have potted a tree of the Golden Pippin propagated from my old tree, and had the pleasure last October of seeing its bright and truly golden fruit hanging on it nearly all through the month; they were full sized, and of the old racy flavour. The tree has no symptoms of canker, and I intend to let it remain under glass all the winter, so that its roots are not saturated with our cold winter rains.

Observing that such a fruit as the Golden Pippin, thought by some theorists to be worn out, can thus be renovated by giving it a genial climate, one is almost tempted to advance the opinion that for the last 150 years there has been a change and a lowering of temperature in our climate, too slight to be correctly ascertained by meteorologists, because the mean temperature of the year may not differ to any great extent, yet enough to affect vegetation to some extent, although our summers may be cooler.

According to Langley, who wrote in 1727, the Nutmeg Peaches, sorts which are still well known, ripened the last week in June (allowance being made for old style, in which he gives his dates) against a south wall, and, the Noblesse Peach, which he correctly describes, August the 2d. In an orchard house in a sheltered situation, I have never known the Nutmeg Peaches to ripen till the third week in July, nor the Noblesse till Sept. 2. The season of many other kinds of fruits was then (130 years since) much in advance of what it now is, so that to the gradual lowering of our temperature we probably owe the tendencies to disease in many of our old kinds of fruits, for if the trees are suffered to grow unchecked and to root deeply into the soil, canker in Apple and Pear trees makes its appearance, and the trees can only be kept in health when planted away from the influence of walls, by keeping their roots to the surface, so as to be influenced by sun-heat, now apparently less powerful in summer than it used to be in our climate a century or so since. I fear I have been trotting too long on my hobby, and must conclude by telling your readers what I feel I ought to have done in half a dozen lines—that they may grow Golden Pippins and Nonpareils in as high perfection as in the olden time, if they place some trees in 13-inch pots and cultivate them in orchard houses, placing them out of doors, if the summer and the climate be warm, in July and August, but keeping them under glass the remainder of the year. *T. R.*

Home Correspondence.

Cotton Cultivation in India.—Can the fertility of the "Indian Black Cotton Soil" (Regar of the natives) be increased by the use of manurial appliances; aided, perhaps, by rotations more in accordance with scientific principles than those now in use? I say, perhaps, because I am uncertain whether science would not confirm those now in use as the best that could be devised. This is the second question proposed in my last letter, only somewhat differently stated. I purposely limit it to the Regar or Black Cotton soils, which though little variable in appearance and properties, yet do vary enough to justify the use of the plural number in regard to them. These soils have at different times engaged the attention of geologists, chemists, and agriculturists, but more especially of travellers having to traverse them during wet weather. The Geologist is disposed to consider them disintegrated trap rocks, but is somewhat startled at the thought of their vast extent, extending as they do over many thousands of square miles of surface. To this difficulty I will venture to add the fact of their being often penetrated by bluff, almost perpendicular masses of syenitic rock, rising like islands out of the sea, sometimes to the height of several hundred feet, and wide enough to become, in former days, sites of strongholds of troublesome and mischievous marauders; the disintegration of which forms a soil totally different from the surrounding Regar. The Chemist in like manner is perplexed by finding, on analysing several specimens from different parts of the country, considerable differences of composition, though usually agreeing pretty well in a few prominent points; such as the small quantity of vegetable matter, and the large proportions of carbonate of lime and silex it contains. The Agriculturist wonders at while heartily rejoicing in their perennial fertility, bearing as they do, without manure or other appliance, beyond what his plough and hoe supplies, annually one or two crops, due attention being paid to rotation. That (rotation) the Ryot in the case of Cotton declares quite indispensable, but is, so far as I know, the simplest kind, namely Cotton, then two successive crops of Sorghum (Jowarie or Cholum of the natives), and Cotton again. The first *Sorghum* crop after the Cotton is usually very abundant, and is looked forward to with particular regard; hence the floating tradition that exists in some parts of the country, of a Ryot, who feeling himself dying, bitterly upbraided Fate for its injustice in depriving him of what he had been looking forward to for three years, namely his large crop of Sorghum. Lastly, the Traveller, overtaken by wet weather in the midst of one of these Regar districts, I can readily suppose wishing the black mud at the bottom of the Red Sea, or anywhere else than where it is, for being intensely hygrometric in its properties, it becomes so adhesive when wet, that it sticks to everything that comes in contact with it, and is so soft that every weighty body, man and beast, sinks into and sticks in it. This deposit, which one geologist deems of diluvial origin, but which must be of much older date, varies greatly in depth, seldom less than 2 feet, but sometimes as much as 10 or 20, resting on a calcareous marly stratum, which by the way is in some places largely dug for road making, being the only metal for miles together available for the purpose, and where the traffic is not very heavy makes very passable roads. In dry hot weather the substance condenses and contracts apparently to little more than half its bulk, and forms cracks in all directions, many of them several inches wide, and from 12 to 18 inches deep, so as to make it dangerous to ride over the ground even at a slow pace. To this property they to some extent owe their fertility by the free admission the cracks afford to the air, it being an observation sometimes made, that when the dry season has not been broken by unseasonable rains, causing the ground to crack freely, the following crops are generally good, owing I presume to the double effect of first aërating the soil and then saturating it with water, by the cracks getting filled by the first heavy rain before the swelling and puddling of the surface prevents further admission. These soils are naturally so fertile that all kinds of crops thrive upon them, and have done so for ages without manure or rest, but when subjected to the American plan of consecutive cropping with Cotton they became "exhausted" in three years, in spite of the most assiduous cultivation. To these soils my question refers, and it is asked rather with the intention of directing attention to their peculiarities than for the purpose of suggesting an answer, which I admit I cannot give to my own satisfaction. I know that so far as I had an opportunity of observing, the Ryots never applied manure, beyond allowing sheep to browse the leaves and tender tops of the Cotton plants for a day or two before clearing off the shrubs, and equally that they did not manure their Cotton fields, but it never occurred to me to enquire whether it was purposely withheld, on the supposition of its being injurious. Subsequent reflection on this point of their practice, strengthened by the analogy of other crops, goes far to convince me that, however well the Cotton soils may do without manure, that they would do better if cultivated on principles of higher and more scientific farming: that is, good tillage, systematic though moderate manuring, and carefully adjusted rotations. The rotations might be easily enlarged, and I think with advantage, as nothing in the shape of annuals seems to come amiss to them. If in place of the three course one given above, a four or five course was adopted, consuming at least one on the ground by sheep, or ploughing in a green one, the others would, I expect, considerably benefit by the change. Our trials however extended to all kinds of soil within our reach, and as a general rule we found that land which had not been under Cotton for some years generally yielded fair returns, in average seasons, for at least one crop; the second when attempted always disappointed us. The plan of trying Cotton on all kinds of soil, and with upon the whole, very uniform success, proves that the plant is by no means fastidious in the matter of soil. In the climate we were not so fortunate, that of Coimbatore being on the average too dry to do justice to the American plant, even though we found it bore heat and drought fully as well, and on one occasion better than the indigenous one. These points being well ascertained, I consider the essential object for which the experiments were undertaken, the introduction of the American Cotton plant into India, was fully accomplished. I am aware that now the experiment is generally looked upon as a failure, because we did not realise in India average crops of 200 or 300 lbs. of clean Cotton per acre, the same as they do in America. But that is a mistake; it is trying it by a wrong standard. We ascertained that these large crops are not to be had off such lands as we had to cultivate under any system of farming, but especially under that of America, which is only applicable to its own rich soils and favourable climate, but quite unsuited to India; and the planters had not the skill and knowledge requisite to enable them to modify their practice to suit the new circumstances in which they were placed. But for 10 years we raised crops of American Cotton from the original batch of seed, the last equal to the first. We failed to accomplish impossibilities, for it was quite impossible to obtain such crops by the mode of culture we were taught to believe the perfection of Cotton agriculture. The failure then, if any, rested with the originators and planners of the experiment, not with the artists who worked out their plan; they having done what they were told to do, namely, to introduce the American Cotton plant into India. More was desired and expected it is true, but the necessary agency—scientific and practical farmers, was not provided. The planters honestly and zealously did their best; to charge them therefore with grossly imposing on the Government, is as gross and unmitigated a libel as it is to say that "the Government farms did not succeed because they were not intended to succeed." For myself I know that I did all I could to make my farms succeed to the utmost, and I can testify to the care and assiduity of the planters under me in the performance of their agricultural duties. In so far as they failed it was from want of knowledge, not want of will. When they were engaged, it was not understood that America owed her prodigious crops to the soil and climate, not to the skill and science of her farmers. Neither were the planters themselves aware that such was the case; hence their extreme disappointment when at the end of the first season, not one of the whole ten had realised what he could call even a *moderately* fair crop. This disappointment was increased as they went on, by finding that the natives, whose agricultural attainments they had been taught before leaving home to despise, very soon became more successful cultivators of their own plant than themselves. Dr Mallet supplies the explanation. In the abstract of his paper, read before the Royal Society, we read: "He shows the immediate cause of this neglect of the science of Cotton culture has been the facility with which the vast and growing demand of the world for Cotton has been met by the vast surface of fertile and virgin soil, and other favourable conditions of the Southern States of North America, yielding wealth to the planter too readily to incite him to inquire much as to the conditions of his success." I dwell earnestly on this part of the subject, not for the purpose of casting reflections on the past, but to expose the falseness of the wicked imputation cast on the Court of Directors of the late E I Company and American Planters, by the "Committee of the Cotton Supply Association;" and in the hope of guarding hundreds of persons, now preparing to engage in the culture of Cotton in India, against giving too ready acceptance to the teachings of those who are themselves ignorant of the subject they profess to teach. I am further anxious to direct attention to the fact that, cultivated on sound principles, though with but moderately skilful farming, Cotton may be produced in India as easily as any other crop, and that, had the experiments been in the first instance undertaken on these principles, the result would now have been hailed as a great success in place of being stigmatised, by those who should know better, as a premeditated and disgraceful failure. *Robert Wight, Grazeley Lodge, Dec 2.*

Novelties in Provincial Nurseries.—It has been remarked that the lists of the London nurserymen for the current year contain less than the average number of new plants. Happily, however, this is not the case with their brethren in the provinces, as the catalogue that I have just received, and which I have the honour to forward to you, will abundantly testify. It contains a multitude of plants that, to me at least, are entirely new; and as the prices, for such great rarities, are extremely moderate, I felt tempted at once to send Mr. M. an order, but on second thoughts I determined to write to you, in the hope that you would kindly communicate to me and to your readers any information on the subject that is within your reach. The list, as you will perceive, contains not only a long array of new species of old *genera*, but many of the *genera* themselves are, I believe, quite unknown to our gardens. I might instance "Gilders," "Syringers," "Andromedarys," "Pœnies," "Ribas," "Mazareens," "Laurentinas," of not one of which have I ever heard till now. Then there are a large number of "Necidious" trees, *i.e.*, trees, I presume, suited for cemeteries; among which I find the following (to me) entirely new kinds:—"Odger's Holly," the "Led Boari Honeysuckle," the "Dulcass Berberry," the "Citissis Broom," the "Strung Arbutus," the Sampevinian Yew," the "Bleeder Sentor Colutea," with a host of others! But the greatest amount of novelty occurs among "the North American and other Bog plants," the list of which adds the following to those previously in cultivation:—"Andromeda Calycuta," "A. mytitafolia," "A. tymafolia," "Kalmia glaca," "Ledam palustara," "Rhododendron ibreals," "R. adoricum atrovirum," "R. scarlet iboriai;"—then there are the "Ibead Orange Azaliers," &c., and I know not what besides! Pray throw all the light you can upon Mr. M.'s truly marvellous Catalogue, and so oblige *A poor Ignoramus in the Midland Counties.*

Increased demand for Apples.—A Correspondent in last Number asks where the Apples go that have been bought up so much of late in our orchard counties. I have recently been in Herefordshire, Devonshire, and Somersetshire; and in all of these counties I have made inquiries about this demand, for I am interested in the growth and sale of Apples, as grown on a farm. All my questions have been answered in the same way—"They go to Manchester for dyeing purposes." "To fix the colours." "They make one of the new colours." "We got 10s. a bag from the Manchester men." "They will pick them and take them away themselves

if you like that best." Well! given that all this is a mistake, and that they are used to make champagne, as it certainly appears that to sell to these buyers is the best mode of disposing of the crop, so far as money is concerned, I should like to add a question to your Correspondent's, and ask if any one can tell us if the demand is likely to last, and what are the sorts most liked? *The Author of "Farm Life."*

Oxlips.—It is pleasing to see by a late article on semi diœcious Primulæ, that the Oxlip is at last acknowledged to be a hybrid or hybrids (for they are not all alike) between P. acaulis and officinalis, instead of being confounded with P. elatior, a distinct and unvarying species. *S.*

Sowle Bread.—In the autumn of last year I was in South Wales, and in Swansea I noticed a dark gelatinous substance which was formed into balls for sale. I was informed it was called sowle bread (or, as I understood, soul bread), and that it was prepared from a seaweed obtainable in that locality, and although it did not appear to be very palatable to the eye, yet my inquisitiveness was such that I was induced to purchase some, and I found it when cooked to be a very agreeable esculent, and very similar in flavour to the most delicious of the Brassica tribe; in the market it appeared much like a semi-soluble glue; when cooked its former form as a vegetable was clearly observable. I find, in Scotland, that the word sowle is a kitchen term. *W. Summerby, Grantham.*

Orchard Houses—Pots or no Pots.—It is certainly amusing, and perhaps in some degree instructive, to read in your columns week by week the contentions between the advocates of the pot and no pot system for orchard houses. I venture to join the lists because I can affirm that I have in some measure tried, and in much larger measure carefully watched both systems, with the view of coming to a sound and practical conclusion. I say practical, because my object has been not to refute the recriminations of "W. P. A.," or damp the poetical ardour of "T. R.", but simply to discover the truth for my own ends and objects, which are—1st. To produce as great an abundance of fruit of the finest quality for my table as I possibly can. 2. To afford myself as much pleasure in the culture of these trees as can be had. 3. To add grace and ornament to my garden. Now I will not say that my experience has brought me to a positive conclusion, or that I am ready to pronounce a decisive verdict for or against "the pots," but the bent of my opinion will be pretty plainly shown by my stating that I have added largely to my "glass" this year, have potted several trees that up to this time have been trained, and intend to cultivate almost entirely on the pot system. Allow me to give shortly some of the reasons why. I have not found my trained trees surpass in abundance or quality my pot trees, neither have I seen this to be the case with my neighbours who continue the pot system. I have grown in an 11-inch pot three dozen first-rate Nectarines; in another, six dozen Plums (Jefferson's); in another, 1½ dozen Peaches of remarkable size and quality; in another, three to four dozen Peaches of ordinary size and excellent flavour. In larger pots I have grown much larger crops, *e. g.*, in an 18-inch pot I had about five dozen Wilburton Admirable Peaches; this was too many, and some in consequence were deficient in size, but not so the general crop. Those who so unhesitatingly condemn the pots, forget, I think, the different area occupied by the pot tree and the trained tree. If this were fairly calculated I think the pots even on the ground of quantity would not be so readily put aside as useless or even inferior. But is nothing to be said on other grounds? What, for instance, as to pleasure? The pot tree to a lover of gardening is a delight, the trained tree almost a torment. Again, as to variety. With a moderate-sized house under pot culture you may try almost every good variety of Peach, Nectarine, or Plum, and have fruit from the beginning of August to end of October. Not so with the trained trees—you must make up your mind for a few sorts, and a glut for a short season. One word more as to "planting out," which Mr. Barron says is so decidedly the right course. I visited a few months ago one of the finest establishments in this part of the kingdom, one much lauded in your columns, and which was evidently under the care of a first-rate gardener. The trees in the orchard-house had been planted out, and had been a failure, owing, as the gardener said, to the wood not ripening the season previous. How was it that my trees in pots had ripened their wood perfectly, and borne excellent crops? Because, I believe, of the command which the pot system gave me over their roots, both in drying and pruning them. *H. M.*

Wellingtonia.—I saw last week, at the Marquis of Huntley's, a Wellingtonia of four years' growth from seed, which in the third year made 40 inches. Two of the three year seedlings bore each a cone. *B.*

Tilia microphylla.—The enclosed twig of Lime tree, which I had mislaid, was taken from Schwalbach, Germany, in the end of August, 1860; it occurs to me that it is the Tilia microphylla, but as it is not known in the north of Scotland, and having never observed it before anywhere, I shall be obliged by your telling me its name. In appearance it is a dwarf growing tree, and I observed it in no instance above 20 feet high, with a round, compact head, displaying a mass of blossoms twice more abundant than any of the varieties of the common or European Lime; and notwithstanding the excessive wet and cold of July and August, 1860, the fragrance of the tree and the continuance of the flowers were very remarkable, while the weather was fatal to the display of the Stocks and Asters in the adjoining pleasure grounds. The enclosed specimen is not well preserved, but I trust will be recognisable. At first sight the leaves had very much the appearance of that of the Populus tremula; it is the prevailing tree along the promenades in the valley of Schwalbach, and altogether extends to not less than one mile, where in spite of the weather it created one continued hum of bees. The trees are of great uniformity, with clean stems for the height of seven or eight feet; they are evidently thoroughly hardy, easily kept in an elegant figure, and no tree could be better adapted for the purpose to which they are applied. *J. G., Forres.* [It is Tilia microphylla; we should ascribe its profuse flowering to the heat of an Austrian summer.]

Chesnut.—This is an instance of double derivation: 1st, from the Latin name, which doubtless accompanied the nut in its distribution from Italy in the north, whether in ancient or modern times. 2dly from the apposite English words, chest, a nut, so applicable to the fruit. *S.*

Rainfall, November 1861:—

Stations.	Height of Gauge. Above the Ground. Ft. in.	Height of Gauge. Above Sea Level. Feet.	Depth of Rain. Total for the Month. Inches.	Depth of Rain. Greatest fall in 24 Hours. Depth. Inches.	Depth of Rain. Greatest fall in 24 Hours. Date.	Depth of Rain. Rainy Days.
Little Bridy, Dorset	0 4	848	5.56	1.10	10	22
Barnstaple, Devon	0 6	31	7.47	1.00	1	22
Castle House, Calne, Wilts	0 11	830	3.40	.80	13	18
Camden Town, London	0 4	100	4.65	1.42	13	18
Finchley Road, London	0 4	270	3.46	....	..	..
Ditto ditto	36 4	806	2.38	....	..	..
Oundle, Northampton	20 0	124	2.64	1.86	13	15
Norwich	0 0	30	5.01	1.14	3	13
Llanelltyd, near Dolgelly	0 2	20	11.14	2.20	25	20
Derby	5 0	179	2.15	.36	26	19
Manchester	3 0	106	3.77	.93	25	20
North Shields	1 0	124	4.36	.86	10	28
Dumfries	0 5	63	6.50	2.35	25	17
Nookton, Fife	0 6	80	5.03	.71	10	23
Sandwick, Orkney	2 0	78	7.29	1.01	6	28

REMARKS:—

Barnstaple.—Frequent heavy hail showers on the 1st, 2d, & 3d.

Camden Town.—Heavy snow on the 2d; thunderstorm with heavy rain at noon on the 10th; snow on the 16th; mean temperature (19th) 21°.8.

Oundle.—Snow on the 2d and 16th; fog on the 7th and 13th.

Llanelltyd.—Thunderstorm on 7th, 2.07 inches of rain on 20th; 2.20 between 4 P.M. on 25th and 8 A.M. on 26th.

Derby.—Average (14 years) 1.98 inch.

Manchester.—Average (47 years) 3.71 inches; owing to heavy rain on 25th many of the rivers overflowed early on the morning of the 26th.

North Shields.—Snow on 4 days; hail on 8, and lightning on 4.

Dumfries.—In the last 11 days, 5 inches rain fell; snow on the 2d, 10th, and 19th; minimum temperature on the 24th, 18°.5.

Nookton.—Snow on the 15th and 22d.

Sandwick.—Average (20 years) 3.86. Barometer on 21st at midnight 28.364 in. at 32° and reduced to sea level.

G. J. Symons, Camden Road Villas, N.W.

What is a Pistil?—Since you "are glad to find" that we of New England, while pressed with graver duties, can still "discuss little points of critical interest," perhaps you will not be displeased nor surprised if I offer a brief rejoinder to your acute and ingenious comments on my late communication (see *Gardeners' Chronicle* for Oct. 12, p. 908), and try to show that I have not misunderstood Linnæus' meaning and use of the term *Pistil*; that when he writes "*Pistilla differunt quoad numerum*," &c. he refers to the pistils of a single flower, not to the pistil of different plants. Pray imagine Linnæus gravely announcing the latter proposition,—that one plant has more pistils than another, because it has more flowers! It is true that Linnæus falls into some confusion of language when his pistils are partially united; but, on the whole, he steers clear of ambiguity and trouble with wonderful success, considering the imperfect knowledge of floral structure then possessed. I must also think that the Linnæan definition; "*Pistillum viscus fructui adhærens, pro pollinis receptione*," no more denies the occasional plurality of pistils in a flower, than the proposition just preceding, "*Stamen, viscus pro pollinis præparatione*," denies the usual plurality of stamens in a flower. Since far most commonly the female apparatus of a flower consists of only one body, and the male of more than one, of course it is natural to speak of the latter in the plural number and of the former in the singular. But to settle the question at issue, viz., whether by pistillum Linnæus meant what we now call *gynœcium*, or each body of that gynæcium (be they one or more), we have only to refer to those cases where he has occasion to notice the plurality of these organs and to designate them as such. Turn we therefore to the "Flora Lapponica," and read of a Sedum (or Tillæa), "*pistillis gaudet hæc quatuor*" (p. 160); of Sibbaldia, that it differs from its near allies only "*numero staminum et pistillorum*" (p. 82); and of a species of Ranunculus that it has "*pistilla 6 usque* 18" (p. 195). I quote from the edition edited by Smith, whose "hazy understanding" may have dozed over these paragraphs, as well as over the Arum in the Phil. Bot.,—a case, by the way, equally in point, since Linnæus took the whole apparatus for one flower, and attributed to it a plurality of pistils accordingly. Let us consult also the [illegible] "Hortus Cliffortianus" of 1737, to see what Linnæus meant [illegible] teach in his "Philosophia Botanica" of 1751. Here he [illegible] that Staphylea has 2 or 3 pistils, according to the species (these really appearing as if quite separate in the [illegible]), although the fruit is 2-3-celled (p. 112); of an Alisma: "*pistilla 6 modo in hac specie, in reliquis* 12, *plura*" (p. 141); of [illegible]don: "*pistilla et capsulæ* 4" (p. 175); of Sempervivum "[illegible]*tilla tot quot petala*" (p. 180); of a Spiræa that it is furnished with "*tribus pistillis, non raro tamen et quinque profert*," (p. [illegible]) and so of Filipendula (p. 191), Rhodiola (p. 470), &c. &c. [illegible] the circumstance, held to be conclusive on the other [illegible] "that, in defining a Strawberry Linnæus writes PIST. [illegible] *numerosa*, &c., whereas it would have been *pistilla* [illegible] had the separate parts of the female apparatus been intended to be called pistils," why not suppose that the abbreviation PIST. in the formula used throughout the "Genera Plantarum" was adopted partly because it answers equally for the plural and singular number? And could it be safely argued from the exactly analogous preceding sentence of the character of Fragaria, "STAM. *Filamenta* 20, *subulata*," &c., that the separate parts of the male apparatus of the Strawberry were not intended to be called stamens, but stamen? Moreover, that Linnæus, if occasion required, would have directly called the carpels of a Strawberry *pistils*, seems evident enough from his actually calling them so in so closely related a flower as [illegible] a Rubus (see Fl. Lapp. p. 172). So much for Linnæan authority and usage, and for the discrimination and good sense with which, as far as he went, he endeavoured (as I think) to restrict the Tournefortian term *pistillum* to its primitive and natural signification and most convenient use. New terms—not always the happiest or best defined—have had to be introduced with our advancing knowledge of floral structure. But, that we still need the word *pistil*, and in [illegible], with great deference, I still consider as the Linnæan sense of the term, will appear if we consider how we [illegible] to name and describe the female apparatus of Larkspur, for instance. To call it *pistil* in the sense of gynæcium [illegible] not help far; and to say that *Delphinium grandiflorum* has a *pistil* in the sense in which *D. consolida* has, is confusing: one's notions of unity and plurality, the more so as the [illegible] has always been regarded as the counterpart of the stamen. [illegible] say that the one is *trigynous*, and the other *monogynous* [illegible] not suffice; for the former term does not necessarily imply [illegible] the ovaries are separate, nor the latter that the ovary is single. To say that D. grandiflorum is tricarpellary does not imply [illegible] the carpels are separate. To call each separate body of the gynæcium an *ovarium* is to give the name of a part to the whole, as much so as to call a stamen an anther; for [illegible]rity is uniform from the first that ovarium (or germen, [illegible]) one of the three parts of a pistil. To name the separate bodies pistils when precision is required, best accords, I believe (though well aware that much may be said on the other side), with scientific accuracy, practical convenience, etymology, and Linnean authority. *A. Gray, Cambridge, Mass.* *Nov.* 5. [We cannot say that our learned friend's arguments [illegible] convincing to our mind. They seem to show nothing more than that Linnæus used his word pistillum loosely; and by no means on all occasions in conformity to his own definitions.]

Societies.

BOTANICAL OF EDINBURGH: *Nov.* 14.—Dr. W. H. Lowe in the Chair. The President delivered his opening address, from which we select a few topics:— There are many who, like myself, have been [illegible] botanist like a poet must be born, not made, with a natural instinct for observing and admiring plants, [illegible] who yet have never possessed the opportunity of following out in any systematic manner the science which has won their admiration; and I well believe, with grave Jacques Rousseau, that there may exist many a genuine botanist who never knew the scientific name of a single plant. To make my position—that botanists must be born, not made—doubly sure, I will only appeal to the Professor (Balfour) if, in his large experience, he has not often met with individuals willing enough to study this department of science, but who possess not the natural aptitude and gift for the things of nature, without which I maintain no amount of study will make, in its genuine sense, a true botanist. It is vain in such cases to point to beauties you discover at every step, or to enlarge upon the ingenuity and design manifested at each evolution of a plant's development. Your enthusiasm kindles no reciprocal fire, strikes no responsive chord, and it is like expatiating on hues, and shades, and tints to persons whose reds are greens, and whose blues are browns. It may be imagined that the peculiar branch of the medical profession to which I have devoted myself has no cares—that it is the easiest way of making money. But I may suggest that the man who is daily and hourly engaged in soothing the distracted, cheering the desponding, and reasoning with the rhapsodist, may be pardoned if he confess that there are moments when he himself feels jaded in his turn by the variety and incongruity of the mental conditions of the persons by whom he is surrounded; and then I know of no possible resource so sure and so delightful as to steal from the cares and common-places of daily life into the retirement of your own garden, surrounded by your own pet plants, or, if time will allow, to wander into the larger garden of the hills and woods, there to shake off your cares, and to find imparted to your mind a serenity and a joy which, if it be not identical with those which are eternal, is at least congenial with them—nay more, often paves the way for their reception. Never shall I forget my delight when, after passing Lyons, I first saw in the Valley of the Rhone standard Fig trees, and presently, still more south, came upon the Olive trees. How it banished fatigue and exhaustion when I first caught a glimpse of the Aloes flowering 20 feet high. How tantalised I was to see the Caper plant, with its purple stamens and large white flowers, high above my reach on the fortifications of the various towns through which I passed; and what were my sensations when I saw the Cactus dangling down the walls, 30 or 40 feet long, like a group of huge boa constrictors! and how I stared at our own Jack-tars swaggering (and, I am sorry, to say too often

staggering) along the streets of Naples, with large bunches of Oleander and Plumbago twisted in the knots of their neckerchiefs! I am satisfied that these sights did me more good than all the previous advice and physic of Dr. Christison; and I half suspect that that gentleman had these restoratives in prospective when he enjoined on me the necessity of of going from home, and if possible beyond the benefits of the Post Office—a condition I found I had most unintentially fulfilled in reaching Rome; for in consequence of one of my letters being addressed "Dr. Lowe," and another "W. H. Lowe, M.D.," my identity was disputed, and I was not allowed by Papal wisdom to receive either!! I shall, since I have wandered so far as Rome, dwell for a moment on one plant which never ceased to excite my admiration, and which was nearly as frequent as the Grass we walked upon. In the densest part of the Jews' quarters in Rome, on the daily frequented promenade of the Pincio, peeping from every fountain, covering the Colosseum or lining the celebrated Cloaca, which still does uninterrupted duty for the moderns as it did for the ancient Romans, is the Adiantum Capillus-veneris in every stage of growth, and even varying according to its situation in its form and colour, but always beautiful: at times so close, small, and compact in its growth as to resemble at a little distance the Marchantia of this country: at others hanging in graceful plumes. Every one who has been in the South, whatever his religious persuasion — whether Roman Catholic or Protestant—must often be shocked with the taste, or rather the want of it, displayed in the ornamentations of the niches by the wayside, usually containing the crucifix, or rather generally the Madonna and Child, beads, coloured glass, and tinsel, hallowed no doubt as the votive offerings of the simple peasant—but presenting, nevertheless, an effect inferior in point of intrinsic merit to the dolls' houses we buy to amuse the youngsters in the nursery. I was leaving Genoa, when the shades of evening had begun to heighten the beauty of most exquisite scenery. Suddenly we came upon a niche in a retired spot built into the bank which overhung the road, and in it was the Madonna and Child in time-stained marble, standing in clear relief from the pure green of the Adiantum Capillus-veneris, which, from the surrounding moisture, had closely and entirely lined the gap; and for once I could admire the sacred object which hitherto, flaunting in tawdry ribbons, tinsel, and gold, had well nigh excited my disgust. On another, but very different, occasion this plant attracted my attention. It was at Rome, a fiercely hot day, and I was creeping along the shady sides of the street, under an umbrella, when I came upon a large monastery, on the open space in front of which two or three thoroughly dried old women, apparently insensible to any degree of heat, were tossing over, by the aid of long sticks, large heaps of some dry vegetable of a peculiar rusty colour. I hesitated for some time to venture into the sun; but at last saying to myself what can that stuff be, I sallied forward, fully expecting a *coup de soleil*, and found, on reaching the strange looking hay, that it was my old romantic friend the Adiantum, with which the beds of the monks were about to be stuffed. The following papers were then read:—I. "Extracts from letters written during a voyage to Alexandria, by Dr. Cleghorn." II. "Measurements of Trees at Dryburgh and Caver's Carre, by Dr. John Alex. Smith." Dr. Andrew Inglis exhibited a specimen of the male leaf insect (Phyllium Cythe—Gray) from Assam. Mr. P. S. Robertson, Trinity Nursery, exhibited a branch of Aralia japonica in full flower, grown in the open air. Professor Macdonald exhibited specimens of balls formed apparently of woody tissue, which had been found in the stomach of a carpenter who had died of dyspepsia.

Notices of Books.

On the Site of the Cuticle in the Aërial Roots of Orchids, by C. A. I. A. Oudemans, Professor of Botany at Amsterdam. 4to, pp. 32, tab. lith. 3.*

Few vegetable substances afford more beautiful objects for the microscope than the aërial roots of Orchids and some Arads, from the extraordinary development of spiral threads or reticulated membrane within the superficial cells. They seem indeed to promise beforehand something interesting from the striking difference which they present from ordinary roots, a difference which is obvious enough while they are in a growing state and are green towards the tip, but which becomes still more notable when the outer cells have lost their moisture, and are filled with air, possessing then no green tint in themselves, but merely refracting faintly the green light proceeding from the chlorophyll of the inner cells.

Often however as these organs have been observed, authors have by no means been in unison either as to their structure or the significance of the several parts, and it is to put this matter in its true light that the present treatise has been brought out by Prof. Oudemans.

The aërial roots of Orchids may be considered as consisting of two parts, a central cylinder of wood, and a thick covering of bark. This latter is divided again into two distinct parts, by a single layer of cells, to which the name of Endoderm has been given; some of these cells are much longer than the others, the shorter alone have delicate walls, while those of the longer are for the most part thick, are always, indeed, thicker than the others, and often have their walls distinctly and regularly plicate, containing a cytoblast and nucleus, but without any radiating streams of grumous matter connecting the cytoblast with the walls. The inner portion of the bark consists chiefly of ordinary parenchymatous cells rich for the most part in chlorophyll, but presenting nothing remarkable in their walls, and without in general any trace of spiral threads.

Beyond the endoderms, except in a few solitary instances, as for example in Vanilla planifolia, one or more layers of cells occur, the greater part of which contain either a distinct spiral thread, or present a net work with coarse meshes, some of which perforate the walls themselves. Between them are no intercellular passages, but over each shorter cell of the endoderm is either a colourless cell or air cavity, without any evident secondary membrane. Beyond the second division of the bark is a single layer of table-shaped cells, mostly containing spirals, and in many cases elongated into papillæ or delicate absorbent hairs. These cells often differ in size, form, and structure from the subjacent bark cells, and originate, as is apparent in a vertical section of the tip of the roots carried precisely through the axis, exactly in the same manner as the cuticle in other roots.

The fact that its component cells give rise to papillæ or hairs, that they differ from the subjacent bark cells in form and frequently in structure, while these occasionally are altogether wanting, seems to indicate decisively that it is a true cuticle. Some authorities, however, and amongst them Schleiden, and more recently Chatin, consider what Oudemans calls the endoderm as the true cuticle, all the external cells being considered as mere appendages. The supposed occurrence of stomates in this layer, which has doubtless arisen from the singular difference which exists in its component cells, and the colourless cell above each shorter thin walled cell, has been one of the causes that have sanctioned this strange notion, which on the very face of it wears anything save an appearance of truth.

Professor Oudemans deserves great praise for the pains with which he has worked out the subject both amongst Orchids and the similar roots in Arads, as for example, in Pothos crassinervis, *Hook.* We wish however that he had entered a little into the physiological character of these air roots, and the peculiar functions for which they are destined. Both the cells of the cuticle and the subjacent spiral or reticulated tissue are at first similar, being simple parenchymatous cells, each of which contains a cytoblast. In their early condition they are doubtless most actively employed in promoting growth and nutriment, but their vital powers are apparently soon exhausted, and the cells contain ultimately nothing more than air, and are probably useful principally in protecting the active tissues beneath from external agents, the green tips alone being actively employed in absorption, unless indeed they have the faculty of immediately absorbing air, and so conveying the moisture contained in it to the underlying tissues.

We shall conclude our notice of this interesting pamphlet, which is accompanied by good figures clearly and neatly explained, with the more interesting portion of the conclusions to which the author has arrived, all of which seem to us to be well borne out by his observations.

1. The aërial roots of Orchids have a true cuticle.

2. This cuticle is always superficial, consists of one layer of cells only, and is never concealed by other tissue. Its cells however are sometimes elongated into papillæ or hairs.

3. The layer of cells which is called epidermis by Schleiden, Unger, Chatin, Fockens, and others, is not a true cuticle, but an organ by which the primary bark is divided into an inner and an outer part.

4. In respect of the history of its development, and its very peculiar structure, it deserves an especial name, and is therefore called *Endoderm*.

5. Schleiden and Fockens are wrong in supposing that it has stomates.

6. The endoderm in Orchids and Pothos crassinervis never consists of more than one layer of cells. This is composed of alternately longer and shorter cells, but in such a way that the homologous cells of one row almost without exception alternate with those of the next row. The shorter cells approach a globular form, are always thin walled, and contain a cytoblast, which is never the case with the longer when fully developed, and are sometimes thick walled sometimes thin walled. The walls of the cells of the endoderm are often undulated or plaited.

7. Between the epiderm and endoderm there is generally an intermediate tissue, composed of one or more layers of cells, which when fully grown contain air. This tissue is by Schleiden called "velamen." In respect of its mode of development it must be considered as the outer portion of the primary bark, and by no means as an appendicular organ of the cuticle, as is imagined by Schleiden and Chatin. The cells of this tissue always contain a secondary layer consisting of spiral threads which approach each other more or less closely, or anastomose so as to form a net, and are often pierced with true apertures. Though in some cases they resemble those of the cuticle, they differ not only in their form and size, but also in the course of their spiral threads and the direction of their major axis. In rare cases, as in Vanilla and Bolbophyllum, they are altogether wanting, and the epiderm rests immediately on the endoderm, in whose cells there is no trace of a secondary membrane.

8. The tissue of the inner part of the primary bark consists entirely or in great measure of juicy parenchym containing chlorophyll, between which are intercellular spaces. In many Orchids (as in Arachnanthe moschifera, Aerides suaveolens, Cattleya Forbesii, &c.), this tissue contains highly beautiful spiral cells, differing however from those of the velamen. In Vanilla planifolia and some others there are channels filled with mucus. Occasionally there is also pointed and elongated thick walled prosenchym, without any secondary membrane.

* Ueber den Sitz der Oberhaut bei den Luftwurzeln der Orchideen, von C. A. I. A. Oudemans, Amsterdam, 1861. Extracted from the Transactions of the Academy of Science at Amsterdam.

TRADE LISTS RECEIVED.—L'Evèque et fils, 134, Boulevard de l'Hôpital, Paris; Supplementary Catalogue, Autumn 1861. This consists of Roses and showy plants such as Gladioli, Chinese Azaleas, Tree Pæonies. For the new Rose Duc de Rohan, 25 francs are asked or 100 francs for five plants.——Auguste van Geert, Ghent; Catalogue No. 50, for 1861-2. A very considerable collection of plants of every description, among which will be found many old-fashioned and now rare herbaceous plants.

Garden Memoranda.

THE GLASNEVIN GARDEN.—At a late meeting of the Royal Dublin Society a report from the Council was read, of which the following are extracts. The Council beg to inform the Society that they have received the following report from the Curator of the Botanic Garden, relative to the opening of the garden to the public on Sundays, which had been forwarded to them by the Committee of Botany:—Gentlemen—In compliance with your instructions to furnish a report of the number of persons who have visited the Botanical Gardens, Glasnevin, on Sundays, since they were opened to the public [on the 18th August last, up to the present time, and the results, I beg to report as follows:—On Sunday, 18th August, 700; 25th August, 1560; 1st September, 12,165; 8th September, 180; 15th September, 14,760; 22d September, 2340; 29th September, 14,300; 6th October, 15,000; 13th October, 2970; 20th October, 7,590; 27th October, 5300; 3d November, 1167. Total number on twelve Sundays, 78,132. Respecting the results, it affords me great pleasure to report that they are of a very satisfactory nature. The police and other persons employed have, no doubt, been active in preserving order among such large multitudes as have congregated together; but, independent of them, the people themselves have behaved in the most orderly and decorous manner. With the exception of boys occasionally running through the plants, and leaping over the beds, no further wanton mischief has been done. So far as your directions go, I might conclude, but which I cannot well do before noticing some injury done by the people they cannot avoid. Owing to narrowness of the 'wing' parts of the new range of conservatories, the passages are necessarily in proportion narrow; the consequence is, that numbers of pots are knocked down off the stages, and valuable plants broken. To remedy this, both houses and passages will require to be widened.—I have the honour to be, gentlemen, your obedient servant, *D. Moore, Botanic Gardens, Nov. 9.*"

Miscellaneous.

The pinnated Grouse.—The most extraordinary phenomenon produced by the necessities of the climate, and as a protection against the terrible winds which sweep over that apparently illimitable beach at the approach of winter, consists in the assembling of these birds, from a distance of many miles around, to roost upon the same spot, something after the manner of the wild pigeon. This fact seems also to have escaped M. Audubon's notice. At the opening of winter a spot is selected on the open prairies, in the upper part of the Missouri country, which is more sheltered than the surrounding regions, by the character of the ground, from the biting force of the north-east winds. Here the prairie hens begin to assemble early in the evening; and by the time dusk comes on, an immense number are collected. They approach the scene in small flocks, in a leisurely manner, by short flights. They approach the place of gathering silently, with nothing of that whirr of wings for which they are noted when they are suddenly put up, but they make ample amends when they arrive; as in the pigeon-roost, there is a continued roar, caused by the restless shifting of the birds and sounds of impatient struggle emitted by them, which can be heard distinctly for several miles. The numbers collected are incalculably immense, since the space covered sometimes extends for over a mile in length with a breadth determined by the character of the ground. This is a most astonishing scene when approached in the early part of the night on horseback; the hubbub is strangely discordant and overwhelmingly deafening. They will permit themselves to be killed in great numbers, with sticks or any convenient weapon, without the necessity of using guns. They, however,

when frequently disturbed in the first of the season, will easily change their roosting-place; and when the heavy snows have fallen, by melting which by the heat of their bodies, and by trampling it down, they have formed a sort of sheltered yard, the outside walls of which defend them against the winds, they are not easily driven away by any degree of persecution. Indeed, at this time they became so emaciated as to afford but little inducement to any human persecutors, by whom they are seldom troubled, indeed, on account of the remoteness of these locations; from foxes, wolves, hawks, and owls, &c., their natural enemies, they have, of course, to expect no mercy at any time. The noise of their restless cluckings, flutterings, and shiftings, begins to subside a few hours after dark. The birds have now arranged themselves for the night, nestled as close as they can be wedged, every bird with his breast turned to the quarter in which the wind may be prevailing. This scene is one of the most curious that can be imagined, especially when they have the moonlight on the snow to contrast with their dark backs. At this time they may be killed by cartloads, as only those in the immediate neighbourhood of the aggressors are disturbed apparently. They rise to the height of a few feet with a stupified and aimless fluttering, and plunge into the snow within a short distance, where they are easily taken by the hand. In these helpless conditions such immense numbers are destroyed, that the family would be in danger of rapid extermination but that the fecundity of the survivors nearly keeps pace with the many fatalities to which they are liable. These birds are distributed over an immense northern territory; and though they are everywhere in the more sheltered regions found to exhibit the propensity to collect in numbers greater or smaller, during the extreme cold weather, in low spots where they will have some shelter from the accidental peculiarities of the locality, yet nowhere else except just upon these wide plains are they to be found in such astonishing congregations as we have here described. The universal habit of all this family of Gallinaceæ is rather to run and roost in little squads or flocks. Whence this difference in the habits of the same bird, who knows? Ah, whence the difference? That is the question."—*Webber, in Routledge's Illustrated Natural History.*

The White Ant.—But of the insects of this order the most noted are the white ants or termites (which are ants only by a misnomer). They are, unfortunately, at once ubiquitous and innumerable in every spot where the climate is not too chilly, or the soil too sandy, for them to construct their domed edifices. These they raise from a considerable depth under ground, excavating the clay with their mandibles, and moistening it with tenacious saliva until it assumes the appearance, and almost the consistency, of sandstone. So delicate is the trituration to which they subject this material, that the goldsmiths of Ceylon employ the powdered clay of the ant hills in preference to all other substances in the preparation of crucibles and moulds for their finer castings; and Knox says, 'the people use this finer clay to make their earthen gods of, it is so pure and fine.' These structures the termites erect with such perseverance and durability that they frequently rise to the height of 10 or 12 feet from the ground, with a corresponding diameter. They are so firm in their texture that the weight of a horse makes no apparent indentation on their solidity; and even the intense rains of the monsoon, which no cement or mortar can long resist, fail to penetrate the surface or substance of an ant hill. In their earlier stages the termites proceed with such energetic rapidity, that I have seen a pinnacle of moist clay, 6 inches in height and twice as large in diameter, constructed underneath a table between sitting down to dinner and the removal of the cloth. As these lofty mounds of earth have all been carried up from beneath the surface, a cave of corresponding dimensions is necessarily scooped out below, and here, under the multitude of miniature cupolas and pinnacles which canopy it above, the termites hollow out the royal chamber for their queen, with spacious nurseries surrounding it on all sides; and all are connected by arched galleries, long passages, and doorways of the most intricate and elaborate construction. In the centre and underneath the spacious dome is the recess for the queen—a hideous creature, with the head and thorax of an ordinary termite, but a body swollen to a hundred times its usual and proportionate bulk and presenting the appearance of a mass of shapeless pulp. From this great progenitrix proceed the myriads that people the subterranean hive, consisting, like the communities of the genuine ants, of labourers and soldiers, which are destined never to acquire a fuller development than that of larvæ, and the perfect insects, which in due time become invested with wings and take their departing flight from the cave. But their new equipment seems only destined to facilitate their dispersion from the parent nest, which takes place at dusk; and almost as quickly as they leave it they divest themselves of their ineffectual wings, waving them impatiently and twisting them in every direction till they become detached and drop off, and the swarm, within a few hours of their emancipation, become a prey to the night-jars and bats, which are instantly attracted to them as they issue in a cloud from the ground. I am not prepared to say that the other insectivorous birds would not gladly make a meal of the termites, but, seeing that in Ceylon their numbers are chiefly kept in check by the crepuscular birds, it is observable, at least as a coincidence, that the dispersion of the swarm generally takes place at twilight. Those that escape the caprimulgi fall a prey to the crows, on the morning succeeding their flight. *Sir J. E. Tennent's Natural History of Ceylon.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

Conservatory, &c.—Take advantage of mild days to give air freely and keep the plants sparingly supplied with water at the roots. Look frequently over anything subject to the attacks of mildew, and apply sulphur the moment that pest makes its appearance; see also that everything is perfectly free from insects. If there is any prospect of a scarcity of bloom next May, a portion of the Achimenes and Gloxinias should be repotted at once and placed in gentle heat, choosing such as have been the longest at rest; and a few Allamandas, a plant or two of Dipladenia crassinoda, may also soon be started; but unless plants of these are at command with well-ripened wood, and that have been some time at rest, there will be nothing gained by attempting to start them into growth for some time yet, for in most cases it is difficult to maintain a sufficiently warm temperature to secure anything like free growth from these unless the plants have been well prepared for an early start. A gentle bottom-heat of about 80° or 85° will be of service to such things in inducing a healthy root action, and if this can be secured there will be little difficulty about obtaining free vigorous growth. Let Ixoras and all other hard-wooded plants that have made sufficient growth be kept rather dry at the root in order to check their growth, and induce a tendency to form bloom buds; but do not let the soil in the pots get so dry as to affect the foliage.

FORCING DEPARTMENT.

Pineries.—That portion of the stock expected to furnish the spring supply of fruit should not be too much checked at present, indeed the plants may be kept growing slowly all the winter, which is perhaps the most certain method of preventing their fruiting too early in spring. Where the stock of plants likely to push without making farther growth is considered insufficient to meet the demand until August, the stronger plants of those for autumn fruiting should be encouraged to make growth as early as can be done without weakening the foliage, with the view of preparing them for showing fruit in April. Examine the soil occasionally about young plants growing in the open bed, and do not allow it to become unhealthily dry, for this would probably result in a great portion of the stock showing fruit prematurely, and it is also a work of some difficulty properly to moisten the bed if it is once allowed to get too much dried up. Use no more fire-heat for the present than will suffice to maintain the requisite temperature, which, for the general stock, need not be high.

Vineries.—Where very early forcing is carried on, as soon as the buds are fairly started the temperature should be increased to 60° at night and 65° by day, allowing it to rise 10° on bright days. Take every opportunity of admitting a little fresh air, but recollect that the foliage will not bear exposure to cold winds, therefore air should be admitted in contact with the heating apparatus. Where the border cannot be warmed, see that it is well protected from wet, &c., by a thick covering of dry litter.

Peaches and Nectarines.—Prune and otherwise prepare the trees in the earlier houses for forcing, which, however, except under particular circumstances, should not be commenced for a few weeks yet; but let it be remembered that these fruits will not admit of rapid forcing in the early stages of the process, therefore fire heat should be applied with caution, so that the night temperature does not exceed 50°, otherwise the blossoms will be weak and liable to drop; during the day the temperature may rise to 60°, with plenty of air on every favourable opportunity. Cover the outside border with leaves or litter, for the purpose of excluding frost and heavy rains. Tie in the trees in the later houses, and get all ready for starting when required.

FLOWER GARDEN AND SHRUBBERIES.

Dahlias temporarily placed heels upwards under cover to dry, should now be carefully stored away for the winter. See that coarse growing plants which may be encroaching upon their weaker neighbours are reduced so as to occupy their proper places. Gladioli may still be planted, but most kinds of bulbs are better now to be in the ground than out of it. For Gladioli choose a warm thoroughly-drained situation, work the soil well by deep digging, and add plenty of rotted manure, elevate the bed or patch a few inches above the general level, plant the bulbs 5 or 6 inches deep, and 6 inches apart, surrounding them with 1 inch of sand before covering with mould; protect during the winter, against excessive wet and frost, with a thick layer of sawdust, old tan, dry litter, an old carpet, thatched frame, or tarpaulin; the three latter coverings must be removed during favourable weather, and the former coverings entirely cleared off when the plants appear. Ranunculuses may also still be planted. The situation of the beds should be cool and somewhat moist; at the same time, there should be good drainage. The most suitable soil is a hazelly loam. If, therefore, the natural soil be unsuitable, remove it to the depth of about 2 feet, and 4 feet in width, replacing it with rich loam from an old pasture; this ought to be rather firmly trodden in, and should form the foundation and principal portion of the bed. On this should be laid a liberal dressing of well decayed manure, mixing it a little with the under soil; and over this, for the top of the bed, should be laid a layer of soil 6 inches deep, for planting the tubers in; this latter should be stiffish fine loam, mixed with well-decayed cow-dung and leaf-soil. Draw drills, 6 inches apart and 2 inches deep, with a small hoe, and plant the roots 4 inches apart, with the claws downwards, gently pressing them into the soil; the crown of the tubers should be at least 1½ inch under the surface of the bed.

HARDY FRUIT AND KITCHEN GARDEN.

Do not let Pears get over-ripe before being used; also look over the whole stock as often as time can be spared, removing any fruit that exhibit symptoms of decay, and put them aside for immediate use. Any of the choicer varieties of Pears that do not ripen properly in the fruit room should be removed to a warm room for a few days, which will be found to greatly improve them. Keep all fruit as cool and dry as possible, if frost is excluded from the house, it can scarcely be too cool where the object is to preserve fruit plump and sound as long as possible. Get manure wheeled upon vacant ground when the weather is suitable, and this can be done without injuring the walks, and get all spare ground turned up, so as to expose it to the action of the weather.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON,
For the Week ending Dec 12, 1861, as observed at the Horticultural Garden.

December.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Temperature of the Air. Min.	Temperature of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep	Wind
Friday 6	4	29.671	29.271	51	40	45.5	43	43½	S.
Satur. 7	5	29.384	29.195	60	34	47.0	44	43	W.
Sunday 8	6	29.674	29.414	55	39	47.0	45	43	S.W.
Mon. 9	☽	29.832	29.788	59	36	47.5	46	44	S.
Tues. 10	8	29.783	29.737	57	32	44.5	45½	44½	S.
Wed. 11	9	30.040	29.988	56	37	46.5	46	45	S.W.
Thurs. 12	10	29.876	29.659	54	44	49.0	46½	45	S.W.
Average		29.751	29.579	56.0	37.4	46.7	45.3	44.0	

Dec. 6—Fine; rain; densely overcast; heavy rain.
— 7—Clear; dusky white clouds; overcast.
— 8—Fine; cloudy; showery.
— 9—Fine throughout; mild for the season.
— 10—Overcast; fine; clear and fine at night.
— 11—Dense fog; exceedingly fine, with bright sun, rain at night.
— 12—Rain; densely overcast; cloudy; rain at night, rather boisterous.

Mean temperature of the week 6½ deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Dec. 21, 1861.

December.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds.
Sunday 15	46.1	34.5	40.3	20	0.50 in.	[illegible]
Mon. 16	45.5	34.0	39.8	16	0.68	[illegible]
Tues. 17	45.7	33.7	39.7	17	0.37	[illegible]
Wed. 18	44.7	32.6	38.6	19	0.62	[illegible]
Thurs. 19	44.5	33.6	39.0	17	0.38	[illegible]
Friday 20	44.1	33.7	38.9	13	0.76	[illegible]
Satur. 21	43.5	33.7	38.6	13	0.20	[illegible]

The highest temperature during the above period occurred on the 16th, 1849—therm. 58 deg.: and the lowest on the 16th, 1853, and 19th, 1859—therm. 7 deg..

Notices to Correspondents.

Beets: *Elliot.* Messrs. Vilmorin report as follows upon the sorts tried by them last year:—Of Perkins' Fine Black the greater part proved to be the same as Whyte's Deep Red; the rest was a mixture of various kinds of red.—Bailey's Fine Red was the same as the Dwarf Red.—Castelnaudary Red was forked, rooty, somewhat resembling the Rouge de Castelnaudary, but degenerated.—Of the Selected Dwarf Red some had completely degenerated, others were like the Castelnaudary, but rooty.—Whyte's Black was the same as Whyte's Deep Red.—The Betterave Rouge de Dioniers, and Betterave petite Négresse de Rennes were the same as the Betterave Crapandine, or Rough-skinned Beet.

Conifers: *Henry.* Your seedlings should have been potted as soon as they began to form their second kind of leaf. As they are in a greenhouse you may do it between now and March.

Crystal Palace Gardeners: *Maidstoniensis.* The statement is a gross libel, and punishable accordingly.

Monstrous Gladiolus: *J Churchfield.* Your very curious specimen exhibits a complete break up of the cellular matter of a Gladiolus corm (root) and its conversion into myriads of young bulbs. We have had the corm planted in the hope of converting the bulbs into young plants. Hereafter you shall know the result.

Names of Plants: *Faber marinus.* Hakea acicularis.—*H.* Seems to be a fragment, with young flower-buds, of Anisomeles ovata.—*Cork.* Rivina lævis.

Plunging Materials: *Henry.* Any of the following will answer your purpose, viz.: sifted cinder ashes, breeze, spent tan, or the refuse of the Coir manufacture.

Potato Disease: *M D.* Consult Martius, Die Kartoffel Epidemie; Decaisne, Histoire de la Maladie des Pommes de terre; Payen, Enquête sur la Maladie des Pommes de terre en France; the volumes of the *Gardeners' Chronicle* since the autumn of 1845, and the Journal of the Horticultural Society after 1845.

Royal Horticultural Gardens: *Brompton.* The botanical devices in shields on the arcades here are the execution of the Department of Science and Art. The Horticultural Society has nothing to do with their merits or demerits. You should address your enquiry to the officers of the Department.

Trees *v.* Walls: *D R.* We never knew an instance of trees nailed to a wall having a tendency to draw the wall to one side, but we all know that trees will push walls over, for a very obvious reason. It does not matter with what colour a wall for fruit trees is faced.

Vines: *A Constant Reader.* It may be done, but with difficulty. And where is the use of it.—*M D.* The history of this tree is to be found in many books. Consult Alph. De Candolle, Géographie Botanique; Odart, Ampélographie; Henderson, History of Ancient and Modern Wines; Metzger, Der Rheinische Weinbau; Soutaine, Histoire des Vins de Champagne; and the old Geoponic writers.

Misc.: *W M Ashburton.* You can have the Numbers. Send your address with postage stamps.

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The Agricultural Gazette.

SATURDAY, DECEMBER 14, 1861.

At the half-yearly general meeting of the English Agricultural Society on Wednesday there was a large attendance of members. The Earl of Powis, late President of the Society, took the chair. His lordship expressed the regret of the meeting at the absence of H.R.H. the Prince Consort, who had been unable, owing to indisposition, to attend this first general meeting of the Society during the year of his Presidency. He referred also to several of the points on which the decisions of the Council had been announced in their Report. He congratulated the Society on its large and successful meeting at Leeds; and anticipated equal success for the meeting and the show next year in Battersea Park.

The Report of the Council, which will be found in another column, was then read, and after its adoption had been duly moved and seconded, Mr. Samuel Sidney addressed the meeting, and congratulated it on the improvement manifest in the management of its affairs. The Report was written obviously with the view of giving information; recent vacancies in the Council had been filled up by the nomination of practical men well known in the agricultural world for their judgment, experience, and skill—the adoption of a resolution to admit reporters from the agricultural papers at the weekly meetings of the Council; all these were indications of the determination of those in the direction of the Society to excite the interest of members in its proceedings, and to render it as widely useful as possible. The last point especially was of importance, but its value to the agricultural interest depended on efforts being made to induce practical men to come forward with short papers on points of practical interest at the weekly meetings thus thrown open, and on the frankness with which the Journal Committee should accept the rule thus laid down, so that immediate publication should at once be given to matters of immediate interest. All publication of any importance is thus conducted in a two-fold manner. An author issues his works in a cheap form for a large publicity, and in a more elaborate and perfect manner for permanent record. The Journal Committee should avoid the monopolising tendency which, instead of making the Journal the permanent record of the Society's proceedings for reference and consultation, attempted to make it what it could never be—the exclusive channel for the current information of its readers. Mr. Sidney also referred to the announcements for the meeting next year. He expressed the satisfaction of members at the decision which had been arrived at, to open the show-yard during the time when the judges are making their award; and he recommended the erection of a room within the yard, where members could meet their friends.

On the question of judgments and awards in the Implement competition he asked why the report of the judges of steam ploughs was not forthcoming. The fact was that men who could make up their minds and arrive at an accurate judgment with facility, were not necessarily capable as easily or as satisfactorily of putting their minds or that judgment on paper. His recommendation was that a short-hand writer should accompany judges during trials of implements, and commit to writing "hot and hot" all that was said during the process of adjudication. Such a record, with the decision at its close, would be admirable material from which a satisfactory report of that decision could be easily prepared. Mr. Sidney then referred to the contract for the enclosing and equipment of the Battersea grounds, prefacing his remarks by saying that every point connected with which disparaging rumour was busy ought to be fully and fairly discussed in a public meeting of the members. The rumour was that a mere sub-committee of Council had decided that Mr. Manning, the late contractor, should again have the contract for the coming year, notwithstanding that a protest had been made on that committee that competition for the contract ought to be thrown open; and notwithstanding that in the neighbourhood of London especially such a competition could not interfere with the quality of the work, while it would greatly diminish its cost.

Colonel Challoner at once offered an explanation on the point. Nothing had been done that was not entirely within the power, as defined by the charter and the bye-laws of the Society, of those who had done it. Every matter coming before a Council meeting could be then and there decided, unless one-third of those present desired that it should be postponed. In this case the arrangements for the ensuing meeting, and the question whether Mr. Manning should again be appointed, came before, not a sub-committee, but a Council meeting. Mr. Manning was in possession of the experience and of the material ready to his hand, and was thus prepared at once to undertake the work without need of elaborate specification of the work required, or of guarantees as to the locality of the show, which in the case of an open competition would be necessary; and with one dissentient that meeting of the Council had resolved at once to close with the offer of Mr. Manning's services on the same terms as had for many years ruled the arrangement between them.

To this, at a subsequent period of the meeting, Mr. Sidney objected that the decision of the Council had been of a most unbusiness-like description, and that he concluded such a mode of transacting the business of the Society would not be repeated in the future.

Lastly, we had an assurance from Mr. Holland, M.P., as one of the Journal Committee, that it is not intended to reserve any of the papers at the weekly meetings of the Society, but that they are to be turned to as wide and immediate usefulness as possible through the weekly agricultural press.

Other matters connected with the finances of the Society, to which reference will be made elsewhere, were then discussed, and with the usual complimentary resolutions a very interesting meeting came to a close.

Large numbers of the members were present, simply as a cordially rendered duty to H.R.H. the Prince Consort, the President for the current year. Unfortunately illness had prevented His Royal Highness from presiding on this occasion, but though the hope of meeting our President was thus disappointed, none of us could regret being present at a meeting where such abundant evidence was forthcoming of the activity and prosperity of the Society, and of the cordial relations which subsist between the Council and the body of the members to whom they this day rendered their report.

The monthly meetings of the Central Farmers' Club, with many other matters of agricultural interest, culminate during the week of the Cattle Show. A subject of especial importance is placed in the ablest hands for introduction to the largest audience that is likely to be gathered in the club room during the year.

All three conditions have obtained this year. The law of settlement, and the alternative of a large or narrow area within which a pauper acquires his right of relief, was the subject—one of immense importance as influencing not only the value of land, but in a very powerful way the character of its inhabitants; and Mr. Trethewy, whose large and long experience as a land agent in many different counties, fitted him particularly well for the office, had undertaken to introduce it. It is impossible to speak too highly of his paper. It included the history of the Poor Laws, and so much of the history of the poor as sufficed to illustrate the tendency of legislation—it quoted the best authorities on social questions, and referred boldly to previous changes affecting the agricultural interest,—and it ably discussed the results and the tendency of recent legislation connected with pauperism.

It would be too much to say that it convinced every body who heard it that the union settlement is better than the parochial—that the larger the area within which the labouring man if overtaken by misfortune can claim relief the better—that the days of special settlement anywhere are numbered, and that a national rate for the support of the poor is at hand. We do not know that this was directly advocated by Mr. Trethewy himself, though the tendency of his remarks lay that way. But there can be little doubt that his paper on the subject, read as it will be by agriculturists in all parts of the country, will contribute very materially to the extension of legislation in that direction, and thus to that improvement in the character of the labouring man, and in the relations between him and his master, which was kept in view throughout by the introducer of the subject.

Notwithstanding that the Farmers' Club is, one would imagine, of all others the best fitted for the discussion of such a subject—the discussion which followed Mr. Trethewy's paper did not equal it in ability. Probably no association in the country so perfectly represents the agricultural interest as the Central Farmers' Club. There is enough of extra professional membership to give it the ability and freedom to discuss questions of social and extra professional interest. We have clergymen amongst us to whom such questions are especially familiar. Landlords are present, not only personally but by their agents, who represent more perfectly the commercial relations in which they stand than they could do themselves—and a large numbers of farmers assemble at most monthly meetings, and especially at the December meeting—men perfectly able and ready to give expression to opinions generally firmly held, which have been formed during long experience on the topics which come under debate.

The debate last Wednesday nevertheless was not equal to the occasion. Mons. de la Trehonnais opened it with congratulations on the substitution of a social question for one of mere practical detail—and proceeded with great humour and ability, though beside the question, to show from his own experience in an instance of well-judged benevolence how great is the room for personal and private charity whatever mode of public relief may be adopted.

Mr. Alderman Mechi contended that it was an undisputed maxim that capital should be free for application when and where its owner pleased—that labour was the poor man's capital and the creator of other men's capital—that anything such as a law of settlement which restricted labouring men, whether directly or by its tendency, from offering their labour when and where they pleased, was in direct contravention of this acknowledged maxim. The mischievous influence of the law of settlement on the mental and moral character of the labourer was also named.

Mr. Edmonds, of Rugby, recommended the maintenance of the parochial system, and condemned that tendency to centralisation which, as he believed, Mr. Trethewy was recommending—hoped he should never see all England one parish managed from a centre, with the certain consequence of reckless expenditure and ignorant management.

Mr. Smythies, knowing cases where a mere

hedge separated land charged with poor rate to the amount of 10s. an acre from land entirely free of any charge, notwithstanding that the latter, equally with the former, benefited from the labourers thus relieved—knowing instances where the greatest contrasts in charges for the poor prevail, notwithstanding that every other thing is uniform—the same labouring population at hand for the same wages, and the same markets and prices of produce—recommended strongly the adoption of a union rating and a union settlement for the removal of these anomalies, and condemned strongly the existence of extra parochial districts which benefit by neighbouring labour, and escape all charge in relief of neighbouring distress.

The case of the country parishes around a manufacturing town, all in one union, was put by another speaker, who contended that to establish a uniform union rating in such a case would create greater injustice than that of which Mr. SMYTHIES had complained. The labourer used up in the town would then be supported in his old age and inability by the country parishes which had not benefited by his services.

Lord BERNERS advocated strongly union rating, bringing more especially the experience of London parishes to bear on the injustice and inequality of the present system. His lordship, though looking forwards to the entire abolition of the law of settlement, yet had no desire to establish any central administration of relief—the parochial system should there be maintained; and a number of facts were adduced to show that even greater care is taken by a body of guardians in administering the common fund of a union than in administering the special relief of each parish. Lord BERNERS commended the course of recent legislation, which he expected to progress in the same direction—towards the extension of the area of rating and of settlement.

None of the speakers put the case more strongly or more fairly than Mr. TRETHEWY. His introductory statement we are reluctantly forced to postpone for a week. Probably in no case was the tendency of the parochial system to keep the labourer in a personally dependent position and condition sufficiently stated. The poor shall never cease out of the land: but it is not necessary, we think, to speak of the old age of a labourer as necessarily one of pauperism, or to think of him at any period of his life as an incumbrance to his neighbour. The fact that such a sentiment prevails, and has arisen out of the existing mode of treating pauperism, is the greatest possible condemnation of the mode in question. Let a labourer feel from the beginning that his future depends upon himself, let him cease to grow up in the idea that he is in any sense tied to any particular locality which is bound to support him when he fails, and the feeling of personal independence and self reliance which will ensue will be his own best security, and lead to the best possible solution of the whole question of Pauperism.

DR. DAUBENY ON AGRICULTURAL CHEMISTRY.

LECTURE II.—THE VITAL PRINCIPLE.—POWER OF SELECTION BY ROOTLETS.—(*Continued from p. 1076.*)

IN my former Lecture we considered those functions of plants which seem to be dependent chiefly upon physical agencies, such as the transmission of the sap, the production of the various secretions, the segregation of the acid and alkaline products from the colloid matter contained in the cells, and the maintenance of the peculiar juices of a plant unmixed with others in their own appropriate receptacles.

But whilst it would be unphilosophical to resort to any occult causes, until we have exhausted all our efforts to account for the phenomena by the laws common to all matter, it would be equally so to shut our eyes to those facts relating to vegetation, which at present at least do not appear capable of being brought under the same category.

Thus in the case of the rise of the sap: assuming the emission of moisture from the leaves to be as large as is represented, the other phenomena connected with this process follow in natural sequence.

But if the exhalation be greater in a living plant than what would take place from a dead membrane, can we be justified in asserting that even this function is wholly ascribable to physical causes?

Again the production of the various acids secreted by the plant, together with the formation of sugar, and finally of gum and oils, from the carbonic acid absorbed, are doubtless chemical processes; but they seem nevertheless to be such as cannot be imitated by artificial means, since nothing short of the most powerful affinities, such as those possessed by the alkaline metals for oxygen, are sufficient to overpower the attraction which that body exerts for carbon.

We must not therefore allow the prejudice which is felt in certain quarters against calling in the aid of the living principle, to blind us as to the fact, that there are various functions performed by vegetables as well as by animals whilst living, which cannot be wholly referred to chemical or physical agencies, although these latter forces are constantly present, and therefore must always be more or less concerned in their production.

I do not indeed believe with the late Dr. Alison, that the living principle ever brings about a direct union between atmospheric nitrogen and carbon, so as to produce albumen from non-nitrogenous ingredients; but I much doubt whether it would be possible by any artificial contrivances, to place the fluids of an organism deprived of life in such relations to each other, as should occasion oxygen to be eliminated from carbon in the vegetable, and serum, mucus, or gelatine to be generated from the blood in the animal.

I propose therefore, in my present Lecture, to consider those phenomena of plants which seem, for the present at least, so inexplicable upon physical or chemical principles, that we are compelled to attribute them to vitality, meaning thereby only that they originate in forces which exist only where life is present, and which therefore cannot be imitated by artificial methods.

Let us take, for instance, the case of the evolution of oxygen from the leaves during sunshine, which bears more resemblance to a chemical process than any other, because we know that sunlight effects the separation of oxygen from metals in various artificial processes; as, for instance, in those connected with photography. How loose, however, this analogy turns out to be, may be seen from the fact which I distinctly pointed out in the year 1835,* and which has since been confirmed by Draper and others, namely, that those rays which produce the greatest photographic effect, namely, the most refrangible ones, are precisely the ones least efficient in causing a plant to disengage oxygen.

I have even found in some late experiments conducted in concert with Prof. Way, of London, with that most powerful artificial light of which he is the inventor, where a fine stream of mercury is made the medium of communication between the two extremities of a galvanic battery, and becomes intensely luminous during the passage of the electricity through it, that not a particle of oxygen was emitted from the leaves when this light was directed upon them.

And yet the intensity of this light is such as to produce a very distinct and beautiful photographic impression upon prepared paper, a specimen of which presented to me by Mr. Way I have now the pleasure of exhibiting. Now, if the influence exerted by light upon plants bore any proportion to its actinic or chemical agency, we ought to possess in this invention a means of imitating in some degree the effects of solar radiation, or of causing an evolution of oxygen to take place from the leaves under the circumstances mentioned.

But if the most refrangible portion of the sunbeam, as I have shown, be without influence upon plants, the inertness of Mr. Way's mercurial light is explained, as it consists almost entirely of rays derived from the violet extremity of the spectrum.

Here, then, we seem to have a distinct case of a chemical effect attributable to the stimulus of light upon a living agent, analogous in its nature to that profuse exhalation which takes place from the leaves under the same influence, which is far greater than what the mere action of heat upon a moist membrane devoid of vitality would be capable of bringing about.†

In both instances the *primum mobile* would seem to be the vital principle, or to speak more cautiously perhaps some principle independent of, and as it were, superadded to dead matter, which comes in aid of, but does not supersede, physical and chemical laws; for just as the free exhalation of moisture from the leaves, by occasioning a partial vacuum in the superficial cells, causes the pressure of the atmosphere to come in aid of exosmose and capillarity, and thus to propel the fluids upwards in a more rapid manner, so likewise the stimulating influence of light acts in some mysterious manner upon the vegetable organism, so as to cause it to reverse the ordinary laws of chemical affinity, and to bring about a separation by successive stages of the whole of the oxygen which had entered the plant in combination with carbon.

It has been lately stated indeed, on the authority of some foreign chemist, that the ordinary electric light, not the one invented by Professor Way, imparts a green colour to an etiolated leaf, but it is not added that this is accompanied by an evolution of oxygen, a phenomenon coincident, indeed, in point of time with a coloration of the leaves, but apparently not connected with it in the relation of cause and effect, because it has been shown, that the greenness of the part is produced by the absorption of oxygen, and not by its emission.‡ I am also not aware of the nature of the rays which the electric light emits, and may therefore suggest the possibility of their containing more of the central portion of the spectrum than belongs to the mercurial light of Mr. Way.

There is however, as has been recently pointed out by a French physiologist, M. Guillemin, one [illegible] menon which is due to the actinic rays especially, that is the species of attraction which light appears to exercise upon the stems and branches of a tree, [illegible] ing them to diverge from their erect position [illegible] towards it.

Here, according to the writer quoted, the [illegible] rays appear to exert no influence at all, whilst [illegible] enough, the most efficacious in this respect [illegible] invisible rays beyond the violet, the next in [illegible] invisible rays of least refrangibility, and [illegible] following in a ratio diminishing as they approach the central or most luminous portion of the spectrum.

Here then the anomaly appears to [illegible] chemical agent producing effects which bear [illegible] blance of vitality, and even of volition; whilst, [illegible] other hand, a purely chemical phenomenon is [illegible] about by the operation of these rays which exert [illegible] smallest influence upon common chemical reactions.

If persuaded that there are certain functions performed by the leaves which transcend the [illegible] known physical causes, we shall feel less [illegible] extending the same inference, if necessary, to [illegible] the rootlets also.

The principal office which these organs fulfil [illegible] vegetable economy is the introduction of [illegible] matter from without, and probably also the [illegible] of redundant or useless matter from within.

For this purpose the spongioles are made up [illegible] aggregate of cells, the walls of which consist [illegible] brane, possessing, as we have seen, the property [illegible] allowing ingress and egress to crystalloid bodies [illegible] solution, whilst they prevent or greatly impede [illegible] escape of colloid ones.

So far physical forces alone will serve to explain [illegible] phenomena, and accordingly there have not been [illegible] ing physiologists of eminence, who have referred [illegible] whole to the above causes. By these writers [illegible] posed that the roots are capable, by virtue of [illegible] mose, of absorbing any fluid that happens to [illegible] contact with their external surfaces, and by the [illegible] of capillarity of transmitting the same afterwards [illegible] the parts above. They appeal, for instance, [illegible] experiments of Saussure, who found, that when [illegible] roots of a water-plant, such as the Polygonum [illegible] were immersed in water containing equal quantities of various saline and other soluble bodies, the [illegible] were absorbed, not in the ratio of their respective fitness for supplying the wants of the system, [illegible] proportion to the facility with which the solutions [illegible] capable of entering the spongioles, and of [illegible] through the tissues of the plant.

Gum and humus, for instance, being [illegible] the spongioles in much smaller quantity [illegible] saline bodies did, which might be regarded as less needed by the plant which absorbed them.

This, however, is no more than we might expect from the experiments of Graham on colloid bodies, for it is hardly to be supposed, that the vegetable [illegible] take up such substances in contravention [illegible] common laws of matter, which prevent colloids [illegible] passing through membranes except in very [illegible] quantities. The vital force would seem to operate [illegible] bringing the constituents of the organism [illegible] conditions, not by suspending the physical and chemical laws which govern matter in general.

But even the saline solutions presented to the [illegible] did not appear to be absorbed in the ratios of [illegible] respective diffusibilities; for of all those tried [illegible] taken up in the largest quantity was sulphate of [illegible] Now this salt is not more readily transmissible [illegible] membrane than many others, but it is very [illegible] that by reason of its corrosive quality it should [illegible] troy the texture of the cell walls, and thus [illegible] force its way into their substance more readily [illegible] those solutions did, which had to find admission [illegible] ordinary method of endosmose.

These experiments of Saussure were confirmed [illegible] Sir Humphry Davy, who, in his "Agricultural Chemistry," pointed out, that saline solutions [illegible] absorbed more readily when in a diluted state [illegible] when concentrated.

Later experimentalists have even gone so far [illegible] contend that, with the exception of such salts [illegible] of copper, which destroy the texture of the [illegible] solutions are absorbed with equal readiness. [illegible] the conclusion arrived at by Dr. Lindley [illegible] researches of his own, which are detailed in [illegible] of the "Annals of Natural History."

Certain experiments made by the French [illegible] gist, Boncherie, have also been appealed to, as [illegible] an argument from analogy in support of the [illegible] doctrine.

In these cases openings were made in the [illegible] parts of the trunks of various trees by sawing [illegible] portion of the wood, and a waterproof bag was [illegible] round the several portions, so that a saline [illegible] might be introduced, which was rapidly absorbed [illegible] the tree, of whatever nature it might be.

Through this device, wood became impregnated with various metallic salts by which its hardness [illegible] durability were augmented in a remarkable degree; nor did there appear any exception to the power [illegible] saline solutions possessed of thus penetrating [illegible] woody fibre.

Similar experiments have been instituted by [illegible] Hyett, of Painswick House, near Gloucester, [illegible]

* Phil. Trans, vol. 126, "On the Action of Light upon Plants and of Plants upon the Atmosphere."

† Thus, Hales showed that a Sunflower, 3½ feet high, weighing 3 lbs., with a surface of leaves equal to 5616 square inches, exhaled 20 ounces of liquid in the course of a day.

‡ See Mulder's Researches on Chlorophyll.

results of which are given in the 8th vol. of the Transactions of the Highland Society, published in 1848.

The same inference, as to the spongioles being passive recipients of any substances which happen to be brought into contact with them, has been deduced from observations made as to the influence exerted upon the constitution of a plant, by the quality of the soil, or by the nature of the ingredients present in it which are submitted to its roots.

This influence was shown to exist by the experiments of Saussure, from which it appeared, that a Fir that had grown on Mount Breven in a dolomitic rock proved, when burnt, to contain in its ashes a certain percentage of magnesia, whilst the same species of timber from Mont La Salle, a granite rock, was destitute of this earth, but possessed an equivalent increase in the lime and potass belonging to it; and likewise from those of the French chemist Berthier, showing that the ashes of a Fir which had grown in Norway, yielded only 16·8 per cent. of alkalies, 29·6 of lime, and 3·8 of magnesia; whereas the same kind of wood from Allevard, in France, afforded 34·7 of alkali, 13·6 of lime, and 4·35 of magnesia.

Such then are the principal facts appealed to in support of the hypothesis, that roots are merely passive instruments, which take up whatever is presented to them without selection or preference.

They appear to me however only to prove thus much, namely, that the laws of endosmose, capillarity, and atmospheric pressure, operate upon living tissues as well as upon dead ones, and that plants are therefore subject to such influences, whenever other forces more immediately connected with vitality do not interfere to counteract them.

It is just the same indeed in the animal kingdom. No one doubts that the living organism of animals is amenable to the common laws of matter, however much the latter may be controlled, and masked, as it were, by the forces of life.

Now in the case of the spongioles, although with regard to those ingredients which enter as constituents into the vegetable tissue, the quantity taken up by them and introduced into the system does appear, from the experiments above cited, to be regulated to a certain extent by the relative proportion in which they are usually exhibited, and so far favours the above conclusion, yet on the other hand the power residing in a plant of substituting one normal ingredient for another seems not to extend beyond certain limits. The most trustworthy experiments at least hitherto made tend to show,—

1st. That we are only able to replace any of the normal constituents of a plant by another to a very limited extent indeed, even though the body which is substituted is not only isomorphous with it, but one of those which actually enter as ingredients into the vegetable organisation; so that, do what we may, the amount of potass in a plant will never sink below a certain standard as compared with its other constituents; and in like manner a deficiency of phosphates in the soil is marked, not so much by the falling off of that ingredient in the grain obtained from it, as by the smaller amount of the produce itself.

2d. That it is impossible to replace any of the acids or bases which usually enter into the composition of the vegetable by any member of the same series which is not normally present in it.

I shall proceed to adduce some proofs of both the above propositions, and 1st, with regard to the former, will allude to some experiments of my own and of others in its support.

That the usual proportions of the respective ingredients present in a plant, may be made to vary, by supplying the roots more plentifully with one ingredient than with the rest, may be inferred from the following considerations.

Will and Fresenius state, that Wheat cultivated near the sea contains more soda and less potass than it does in more inland situations; and although certain analyses made in my laboratory by Professor Way, some years ago, would point to the opposite conclusion, yet the facts which I brought forward in a memoir read before the Chemical Society in 1853 lend support to the view taken by the German chemists, in showing that the relative proportion of potass and soda present in Barley oscillates within certain limits, according as the soil is more or less impregnated with one or other of these alkalies.

By reference to the report of these experiments contained in the "Chemical Journal" it will be seen, that in this manner the proportion of soda to potass was made to vary from 23.5 to 15.5 per cent. in the grain, and from 27.5 to 20.0 in the straw, thus appearing to show, that to a certain extent one alkali might replace the other in the vegetable organisation.

But the latest and most extensive series of investigations bearing upon this subject are those by Malaguti and Durocher, recorded in the Annales de Chimie for December, 1858.

The primary object of these chemists appears to have been to determine, whether any relation subsisted between the mineral constitution of a plant, and its organic structure as evidenced by the place it occupies as a member of one of the natural families into which the vegetable kingdom is divided.

For this purpose they examined the ashes of 150 plants, selected from 25 natural families, and growing spontaneously in the soil of France, analysing at least three species of each family, in order to estimate the range of variation occurring in them, and distinguishing the arborescent from the herbaceous, as containing a different amount of ligneous fibre.

In the course of these inquiries, two facts were elicited, both of which accord with the results obtained by myself in the experiments already alluded to; the first, that plants must possess a power of selection, inasmuch as several species growing upon the same soil abstract from it different amounts of the normal constituents presented to them; the second, that the same species, raised upon different soils, vary to a certain extent in their mineral constitution.

Thus, in argillaceous soils, the proportion of chlorine in the plant is in general less than it is in calcareous ones, the range of variation being from 4 to 20 per cent. On the other hand, the amount of sulphuric acid will be greater in argillaceous than in calcareous soils; and the same remark applies, although in a lesser degree, to the phosphoric acid also.

In like manner, plants grown on calcareous rocks contain, in general, more soda and less potass than on argillaceous ones. Thus in Brassica napus, there was present—of soda 5.50, and of potassa 12.34, when grown on a limestone; and of soda 3.00, potass 25.00, when cultivated upon clay.

Similar differences are pointed out as existing in the case of Trifolium pratense and T. incarnatum, showing the dependence of the alkaline ingredients upon the chemical constitution of the soil in which these plants were reared.

But after all this power of substitution is circumscribed within certain definite limits.

In the first place Liebig has shown, that in these cases the absolute amount of bases present must be exactly equivalent to that of the acids which the plant contains, or in other words that the sum of the oxygen in them is invariable.

Thus, according to Saussure's analysis already referred to, where 100 parts of a Fir from Mt. Breven contained of

Carbonate of potassa	3.60		
,, lime	46.34		
,, magnesia	6.77,	the oxygen would be	0.415
		,, ,,	7.327
		,, ,,	1.215
		Total	9.007

Whilst 100 parts of a tree of the same species from Mt. La Salle, which contained of

Carbonate of potassa	7.36		
,, lime	61.19		
,, magnesia	0.00,	the oxygen would be	0.850
		,, ,,	8.100
			8.950
		Difference	0.057
			9.007

And in like manner, where the ashes of a Fir from Allevard, according to Berthier, contained—

Of potassa and soda together	16.6		
,, lime ,, ,,	29.6		
,, magnesia ,, ,,	3.3,	the oxygen would be	3.57
		,, ,,	8.36
		,, ,,	1.26
			13.10

Whilst those from one from Norway, which contained of—

Potassa	14.10		
Soda	20.70		
Lime	13.60		
Magnesia	4.35,	the oxygen would be	2.40
		,, ,,	5.30
		,, ,,	3.82
		,, ,,	1.69
			13.21
		Difference	.11
			13.10

These remarkable approximations equally attest the accuracy of the analysts, and the acuteness of the reasoner who first pointed out the relations between the two—they prove, that the amount of bases is determined by the quantities of acids contained in certain tissues of the plant, and that this amount, however much the nature of the acid may vary, is in each case definite.

But whilst the collective amount of bases is necessarily determined by that of the acids present, it does by no means follow, that any one of those bases which happens to offer itself in the largest quantity can take the place of all the others.

If this were true, the organs of plants would have no definite or fixed composition, the only condition being that their elements should be isomorphous, as in the different varieties of augite, garnet, &c., which occur in the mineral kingdom.

But the contrary of this might be inferred from the experiments performed by myself, to which allusion has already been made, from which it would appear, that the utmost difference in the proportion of potass and soda which could be brought about in Barley, never exceeded 8 per cent.

Moreover, if we examine chemically any of the marine Algæ, we shall find that, although containing a considerable proportion of soda, yet that in many of them there is present an almost equal amount of potassa. Thus, in the 4th edition of Liebig's "Chemistry of Agriculture," 1847, is given the analysis of four species of Fucus, two of Laminaria, and twelve of other kinds of Algæ. Four of these analyses were made in the laboratory of Giessen, and for the remainder we have the respectable authority of Forchhammer; they present, it is true, many discrepancies, but concur upon the whole in establishing, that potass as often exceeds soda in the constitution of an Alga as the reverse. Now, the quantity of potassa which is presented in sea-water to the absorbing surfaces of a sea weed is so very minute, as compared to the amount of soda, that if ever the substitution of one isomorphous body for another in the organism of a plant could take place indefinitely, we should here have an instance of its occurrence.

Perhaps, indeed, the case is even stronger with regard to the iodine which sea plants extract from the waters of the ocean, since the proportion of that ingredient which is known to exist in the latter, can, from its minuteness, be hardly detected, even by the most delicate tests. Hence we should be led to infer that in the organism of marine plants neither iodine can be replaced by chlorine, nor potass by soda, although both the one and the other are isomorphous bodies.

Liebig, in his "Letters on Modern Agriculture," has shown, that a similar law extends to other plants not belonging to the class of Algæ, as in the case of the common Duckweed, the Lemna trisulca, grown in a bog, the water of which contained the following salts in such proportions, compared with those present in the plant, as would imply a power of selection residing in the latter.

Thus there were found, on comparing the composition of the soil and of the plants grown in it, the following differences in the proportion of the ingredients present:—

	In the Soil.	In the Duckweed.
Lime	35.000	16.820
Magnesia	12.264	5.020
Chloride of sodium	10.100	5.897
Potass	3.970	13.160
Soda	0.471	....
Oxide of iron and traces of alumina	0.721	7.360
Phosphoric acid	2.619	8.730
Sulphuric acid	8.271	6.090
Silica	3.240	12.250
Chloride of potassium ..	....	1.450
	76.656	76.837

So that whilst the water contained, in 76 parts, of lime about 35 parts, and of magnesia 12, the plant had abstracted only 16.8 of the former, and 5 of the latter element; and whereas the proportion of potass in the water was less than 4, that in the plant was 13; of phosphoric acid in the water 2.6, in the plant 8.7; of silica in the water 3.2, in the plant 12.2.

But, in point of fact, we need not go so far for proofs of this familiar principle; for, as every plant possesses a different mineral constitution, it is evident, that of several species grown in the same soil, each one must exercise a kind of selection, in order to extract from the same material the several ingredients which it requires for its separate organisation.

The incapacity of a plant to dispense with any one of its normal ingredients by the substitution of another may also be illustrated by the necessity of phosphoric acid in husbandry, a principle upon which the whole theory of scientific agriculture, as expounded by Liebig and others, would seem to be based.

Were this not the case, a deficiency of mineral phosphates in the land, after it had been drawn upon by a number of successive crops, might be supplied by other expedients.

Some elegant experiments, though performed on too minute a scale, bearing upon this subject, are reported in the "Annales de Chimie" for 1850, on the authority of the Prince of Salm Horstmar.

The Prince moulded some little wax vessels, in height about 2¼ inches, and in diameter 1 inch, and filled each of them either with pure sand or with powdered rock-crystal, which had been previously washed.

Into these vessels were introduced a few grains of Oats, and along with them a minute quantity of one or more of the ingredients which by analysis this plant has been found to contain.

The following were the results arrived at:—

1. When neither any inorganic nor nitrogenised materials had been added, the Oats sprouted, but came up weak, and were reduced to two flowers and a single fruit.

2. When nitrogenised substances were added, the plant shot up higher, but was too feeble to maintain itself in an erect position.

3. When denied access to nitrogenised materials, but supplied with all the inorganic principles normally present in it, namely, with silica, potassa, lime, magnesia, and oxide of iron, together with the phosphoric and sulphuric acids, the plant was small and languid; and whilst the formation of flowers took place to a more limited extent than in the former case, that of grain was altogether wanting.

4. When both the mineral substances above mentioned and the nitrogenised matters were present, there was an increase both in the vigour of the plant and in the number of its flowers; but still something

appeared to be wanting in the pulverised quartz which existed in the river sand; for although lateral shoots were produced, showing some power of development to reside in the plant, still the regular formation of grain did not take place.

5. But when any one of the above seven inorganic substances were wanting, its development became in some way or other arrested. Thus, when magnesia was not supplied, the growth of the plant was feeble; when potassa, it was stunted, and only a single stem produced: when soluble silica, the growth of the stem was arrested; when phosphoric acid, only one flower was obtained, and this did not produce grain; when sulphuric acid was not supplied, there was no stem, and the plant died before the third leaf had been produced; and when iron was wanting, the plant was deficient in its natural green colour.

The experimental results above obtained are decidedly adverse to the idea, that even normal substances can replace each other in the structure of a plant, showing, as they do, that the constituents are all of them indispensable to their healthy growth.

The fourth conclusion, indeed, arrived at, namely, as to the imperfect development of a plant grown in powdered quartz, even where all the bodies known to be essential to it are provided, although it arrives at complete maturity in all respects when grown in river sand, seems to indicate, that we are still unacquainted with all the ingredients of the soil and of the plants which it rears.

From a late communication of the Prince it would appear, that even lithia is a necessary ingredient in plants, as he found, that although Barley did not come to maturity in coarsely powdered and washed rock-crystal, even when supplied with carbonate of lime, magnesia, sulphates, phosphates, and fluoride of potassium, yet that the addition of 100th of a millegramme* of nitrate of lithia caused it to flower, and to yield perfectly ripe grain.

Indeed it has been ascertained by that delicate method of examination carried on by the aid of Kirchhoff and Bunsen's spectrum apparatus, that lithia is a constituent of tobacco, the ashes of a cigar yielding always a spectrum containing the peculiar lines so characteristic of that alkali.

How then are we to reconcile this conflicting evidence, namely the power of replacing one ingredient by another within certain limits, with the necessity which exists for every one of the mineral bodies which normally enters into the constitution of a plant, being supplied to it?

In the first place it must be recollected, that much of the difference of composition which has been remarked as existing between plants of the same species, growing in different soils, or manured in various ways, may be accounted for by the predominance of one or other of its proximate principles in the several samples submitted to examination.

Thus, Wheat cultivated in one soil may contain more gluten and less starch than in another, and hence the chemical constitution of the grain must in each instance necessarily vary.

But independently of this, there must always be a variation in the composition of different samples of the same plant, in consequence of the variable amount of acids and bases which are circulating through its tissue, and which, though not assimilated and therefore making no part of the actual constitution of the plant, are nevertheless necessarily included in the analysis.

Thus in the memoir on certain experiments made by myself on Barley grown in plots of ground artificially impregnated either with soda or potass, I have attempted to account for the differences in the proportion of the two alkalies in different crops in the following manner.

Let us suppose the normal quantity of potass to be 74.0 and of soda 9.0 per cent., and that in the unmanured crop there would be circulating through the organism of the plant 8.5 per cent. of potass and an equal amount of soda.

In this case then analysis would give

Of potass	74 0+8.5=82.5
Of soda	9.0+8.5=17.5

Whereas in the plot manured with carbonate of soda, the normal quantity of the two alkalies actually entering into the tissue of the plant being the same, there may have been 10 5 per cent. of potass and 6.57 of soda circulating through it. Hence analysis would give of

Potass	74 0+10 5=84 5
Soda	9.0+ 6.5=15 5

And lastly, in the crops manured with carbonate of soda and with chloride of sodium, there would be circulating through the crop, potass 2.5 and soda 14.5, so that analysis would give

Potass	74+ 2.5=76.8
Soda	9.0+14 5=23.5

Thus, even without supposing any discrepancy in the composition of the proximate principles present in a plant, we may account for a certain variation in the results of analysis, from the difference in the quantity of the two alkalies circulating through it at the time when it was cut down; and if, as Liebig supposes, one principal function of the alkalies is to aid in the fixation of carbonic acid, it may be readily understood, that this latter duty may be discharged by soda as well as by potass, and hence that these principles, or even lime and magnesia, the alkaline earths most nearly allied to them, may, as in the experiments recorded by Berthier and Saussure, replace one another in a plant, so far as respects the fluids which are circulating through the vegetable tissues.

Dr. Gilbert has rather confirmed the views which I have put forth, in having remarked, that whilst he finds a constant variation in the composition of the crop according to the condition of the soil, that variation becomes less the nearer we approach to the maturity of any one organ. Thus if we compare Wheat ripened in good and in bad seasons, we shall find a very much larger proportion of soda in the latter, and more starch as well as more nitrogenous substances in the former.*

Upon the whole, then, I should be tempted to infer, that the spongioles of the roots take up from the soil those ingredients which are normal in any proportions in which they may chance to present themselves, the redundant portion however, left after the necessities of the organism have been provided for, being again excreted by them.

The possibility of the roots being excreting as well as absorbing agents, has been already pointed out, from the nature of the cell walls, and the great diffusibility of all saline or crystallisable fluids; nor are there wanting direct proofs of this power, derived from their exudations, which are generally of an acid character, as has been already shown by the experiment in which they were submitted to pressure upon a sheet of litmus paper.

In the above cases the roots appear to be but passive instruments for the reception of any nutriment that may be offered, and the selection of the ingredients adapted for the development of the plant takes place in the parts above.

But when substances abnormal or poisonous are presented, the case is different, for then one of two consequences will ensue.

If the substance is calculated to exert a deleterious influence upon the plant, its first effect, if it be exhibited in sufficiently large quantities, is to destroy the vitality of the part, and then it is absorbed and carried into the system, as would happen if the membrane were dead.

This seems to be the reason, why sulphate of copper finds its way into plants, in quantity so much exceeding that of other salts which are nutritious or at least innocuous.

But where the substance is innocuous, or where, though poisonous, it is exhibited in such a state of dilution as not to exert any deleterious influence upon the health of the plant, the statements made on the subject of its absorption are of a very conflicting character. On the one hand, Dr. Edmund Davy, Professor of Agriculture and Agricultural Chemistry in the Dublin Society, is quoted in the *Gardeners' Chronicle* for September 10th, 1859, as having satisfied himself by a series of experiments, that Peas watered with a saturated solution of arsenious acid for more than a week continued to the last uninjured, although arsenic was readily detected by appropriate tests in the plants submitted to this treatment.

He is also reported in the same Journal to have stated, that a solution of superphosphate of lime, which, if impure sulphuric acid has been employed in its preparation, always contains more or less arsenic, was applied to a Cabbage, and that the plant grew and flourished, although arsenic was detected in it afterwards. A similar experiment was tried also upon Turnips with the same result.

Mr. Horsley of Cheltenham has also published a letter addressed to Dr. Edmund Davy, in which he confidently affirms the same fact, and assures us, that it holds good in the case of all the various plants upon which he had experimented.

On the other hand Jäger, Humboldt, and Link, could not induce plants to grow when sprinkled with arsenicated water, and Mr. Ogsden, in the *Gardeners' Chronicle* for March 11, 1860, states, that on repeating Davy's experiments, he found Cabbage plants, and also Seakale, to droop and die within a week after the application to them of an arsenical solution.

In neither of these cases was any arsenic detected in the leaves, or higher up in the stem than about 5 inches from the ground. Marcet also states, that when he plunged the shoot of a Kidney Bean plant into a solution containing 2 grains of arsenious acid to 2 ounces of water, the plant perished.

This, however, it may be alleged, ought not to be cited as contradictory to the facts on the opposite side, because there would be no real analogy between the cut portions of the stem and the spongioles of the roots.

The immunity, however, which the Potato crop in the neighbourhood of Swansea appears to enjoy from the influence of the arsenical fumes with which the atmosphere is thereabouts so infected, and likewise the fact, that in certain parts of Cornwall, where arsenical pyrites from the mines is thrown upon the soil in large quantities, the crops do not appear to suffer, and contract in consequence no injurious properties, may perhaps be fairly adduced in support of the same conclusion.

I will now lay before you a few experiments bearing upon the same subject, which have been carried [illegible] myself.

With respect to the absorbability by the organs [illegible] a growing plant, of strontian, an earth which a[illegible] not poisonous, is never normally present [illegible] tissues, I may appeal to some experiments [illegible] my own, reported in a memoir published [illegible] Transactions of the Linnean Society so long ago [illegible] year 1835. In this memoir I showed, that p[illegible] watered with a solution of nitrate of strontian, [illegible] likewise seeds sown in soils containing the s[illegible] the same earth, never appeared to absorb any p[illegible] of this base; for it could not be detected [illegible] stems, leaves, or flowers, and only in the m[illegible] quantity in, or attached, to their roots.

In relating these experiments, I took the opport[illegible] of alluding also to an analogous result obtained by [illegible] self with reference to the animal kingdom, where he[illegible] allowed access during the breeding season to sulphate of strontian, but to no other earth, laid eggs with [illegible] shells.

With respect to the absorbability of bodies [illegible] of a poisonous character, I possess, in the first pla[illegible] some notes of an experiment made so long ago as [illegible] in which plants were watered with a solution [illegible] arsenious acid, in the proportion of one grain [illegible] mineral to three pints of water, and where no tra[illegible] arsenic could be detected in them after the applica[illegible]

Passing over these trials, which appear want[illegible] the requisite precision, I will state what I have [illegible] during the past and present year, with a view of [illegible] mining the power of the roots to absorb poisonous [illegible] abnormal substances when presented to them in a [illegible] of great dilution.

In 1860, having first made a few tentative [illegible] periments on a small scale, with the view of as[illegible] taining what amount of arsenious acid m[illegible] applied to a growing plant with impunity, I wa[illegible] a plot of ground, 25 feet long by 4 feet wide, [illegible] taining a crop of young Barley, with a solution [illegible] arsenious acid, in the proportion of 2 ounces [illegible] 10 gallons of water.

Finding, six days afterwards, that the Bar[illegible] appeared to be blighted, I applied to a second pl[illegible] the same dimensions, a solution of just half [illegible] strength of the preceding one, containing 1 ounce [illegible] arsenious acid to 10 gallons of water.

After two applications with an interval of 12 [illegible] between, this crop also appears to be slight[illegible] damaged; but nevertheless the application w[illegible] renewed on three other days, so that, [illegible] the solution was applied five times without preventing the crop from arriving at maturity.

A similar plot of ground, sown with Turnips, was watered on the 3d, 10th, 17th, and 2[illegible]th of September, with a solution containing 1 ounce of acid to [illegible] gallons of water; so that, on the whole, 4 ounces of arsenious acid diluted with 40 gallons of water had been added. Now in the first place, with regard to the influence [illegible] the poison upon the crop, it was observed, that [illegible] case of the Turnips the bulbs appeared as large [illegible] the tops as luxuriant, as in the rest of the bed wh[illegible] had not been so treated, although the yield pro[illegible] to be somewhat inferior to the rest in amount.

In the case of the Barley, the same diminution [illegible] the produce appeared to result, although not to any g[illegible] extent; curiously enough, however, the crop in [illegible] portion of the field so watered appeared to have [illegible] the start of the rest by a fortnight in point of grow[illegible]

In the present year the experiments were repea[illegible] with the following modifications, namely, that a sol[illegible] of arsenic acid, instead of one of arsenious, was app[illegible] and that the liquid, instead of being sprinkled over [illegible] crop when already above ground, was introduced [illegible] the soil previously to sowing the seed.

The proportion of arsenic acid added to the first 100 square feet of the plots amounted to..	[illegible]
To the second	[illegible]
To the third	[illegible]
To the fourth	[illegible]

The Barley so treated seemed to afford a better re[illegible] than was obtained from the rest of the plot not [illegible] nicated; the grain in 100 square feet averaging [illegible] in the former case, and 5 lbs. in the latter; the s[illegible] 8½ lbs. in the former and 6 lbs in the latter.

The Turnips however yielded so nearly the s[illegible] produce in the one case as in the other, that no[illegible] I think, can be inferred as to the influence of [illegible] arsenical compound either in damaging or impr[illegible] the crop grown in it.

Secondly, with regard to the presence of arsen[illegible] either of the two instances, the following means w[illegible] adopted for ascertaining it:—

In the first case a portion of the Barley [illegible] burnt in an earthen crucible with plenty of nitrate [illegible] potass, and the ashes were treated with hydroch[illegible] acid. Sulphuretted hydrogen was then passed thro[illegible] the solution, but no precipitate was occasioned by [illegible] addition.

Fearing however lest the arsenic might have be[illegible] driven off by the heat, notwithstanding the presence [illegible] nitre, by which it was intended to fix it, a sec[illegible] portion of the grain was heated in a glass retort [illegible] nished with a Liebig's condenser, for five hou[illegible] together with some nitro-hydrochloric acid.

The liquor was maintained throughout at a boil[illegible] temperature, and the vapour that came over collect[illegible] and tested with sulphuretted hydrogen as before.

* = 0·0001543 of an Engl. gr.

* See the report of the discussion, which followed the reading of my Paper, in the *Chemical News*.

In this latter instance a slight precipitate was obtained, which afforded indications of arsenic by Marsh's test, but this I attribute to a portion of the arsenical solution applied having adhered superficially to the husk of the grain, for when the experiment was repeated, after carefully washing the Barley, the indications were much less decisive, the precipitate obtained on the addition of sulphuretted hydrogen yielding a very slight stain on the subliming tube, and this of a reddish colour, and less distinctly arsenical in its appearance than the former. At any rate I can state, distinctly, that the Barley, grown this year in soil impregnated with arsenic acid, yielded no traces of the metal whatsoever under the treatment above detailed.

The analysis of the Turnips which had been submitted to the action of arsenic in the above two ways, spoke still more decidedly against the absorption of the poison. The bulbs were in both cases sliced into thin pieces, and dried, so far as was possible, without consuming them. They were then introduced into a retort, and submitted to the same treatment as the Barley, but in neither instance did indications of arsenic show themselves.

In one of these cases, I may add, the result arrived at was confirmed by Prof. Brodie, in an examination made of a specimen in his laboratory.

A similar set of experiments was instituted by myself in other plots of the same ground, both in 1860 and in the present year, relative to the absorbability of strontian and of barytes, both abnormal substances, and the latter one, I believe, poisonous to plants as it is to animals.

In these cases it may be stated generally, that no marked difference in the amount of the crop was observed. If, however, there was any advantage, it seemed to be on the side of those portions of the field which had been treated with the solutions of these earths, which were both applied in combination with nitric acid. Perhaps the acid may in these cases have acted beneficially upon the crop.

In order to determine the presence of either earth the same mode of proceeding, up to a certain point, was resorted to, in the case both of the strontian and the barytes; namely the Barley and Turnip roots were first burnt, and their ashes digested in muriatic acid.

After removing the undissolved portion by filtration, the solution was evaporated to dryness, and exposed to a red heat, in order to render the silicates insoluble. Hydrochloric acid was again added to the residuum, and after a second filtration the liquid was considered to have been brought into a fit state for examination.

In the case of the crops which had been in contact with barytic salts, the absence of that earth was inferred, by the liquor remaining perfectly clear after the addition of a solution of sulphate of lime.

In the other case, where a slight precipitate was obtained by the addition of the same solution, the absence of strontian was inferred, not only by its not colouring flame, but also by its failing to produce the lines in the spectrum so characteristic of that earth.

It follows from these experiments, that no indications of the presence of any of these abnormal substances were afforded, either by any marked difference in the quantity and character of the crops, or by such chemical tests as appeared to me most appropriate for detecting each.

The only alternative therefore that seems to present itself is, either that, as in the case of those normal ingredients which we first considered, they were absorbed and afterwards excreted, or that some power resides in the roots, by which they are in the first instance excluded from the vegetable organism.

The former of these suppositions seems to harmonise best with our preconceived notions, and to be most agreeable to analogy; but it is met by the obvious objection, that these substances, if absorbed, ought, like the normal ones not assimilated, to be detected *in transitu* in different parts of the organism.

I have already stated my inability to discover any one of the three bodies which I had introduced into the soil in the plants grown in it; but it is possible that others may be more successful, as a Belgian chemist is said to have found zinc in a variety of Viola lutea which springs up in soil impregnated with calamine, near Aix-la-Chapelle, and which exhibits evident marks of the influence upon it of some foreign ingredient in the colour of its petals, which are uniformly yellow under such circumstances; whilst on the confines of the zinc rock, where it touches both this and the neighbouring limestone rock, they are only partially so, and became altogether purple at a little distance beyond.

Dr. Odling too has substantiated the existence of copper, in flour, in grain, in the straw of Wheat and Barley, in Swedish Turnips, and in a variety of animal substances.

But if we are inclined to disbelieve in the existence of a selecting power in the roots, we are bound at least to admit it in the case of the secreting organs of a plant, which must in that case have the property of rejecting these bodies, whilst they assimilate others.

At any rate the office performed by the spongioles of the roots can hardly be one of so purely passive a character as is believed by some, judging only from the property which has been assigned to them by the observations of Huxtable and Thomson, and was established by the valuable researches of Professor Way; for it would seem from the investigations of these gentlemen, that whilst the carbonate of ammonia present in rain water and in manures is so firmly fixed in the soil, that, under ordinary circumstances, water containing carbonic acid is unable to withdraw it, the same is nevertheless commonly absorbed and conveyed into the tissue of plants by means of their roots.

Hence, as Liebig observes, vegetables must obtain their nourishment by virtue of some specific attraction exerted by the rootlets upon the ingredients locked up within the earth, a property, wonderful indeed, but perhaps not more so, than that possessed by the leaves of converting carbonic acid into other organic principles by the elimination of oxygen.

Liebig, indeed, contends, that the mineral matters presented to the spongioles are not in a liquid form, for if they were, he suggests, that water, either alone or in conjunction with carbonic acid, would be capable of abstracting them from the ground.

He therefore imagines, that being distributed over the general body of the soil in a finely divided condition, they are taken up by the rootlets, owing to a kind of specific attraction.

We can thus the more readily understand, how it is that certain ingredients appear to be absorbed in larger quantities than others, and why some should be absolutely rejected, as we have seen in the case of the common Duckweed.

As, however, we are promised shortly a distinct treatise by this eminent man on the very subject just adverted to, I shall not enlarge further upon what may be shortly corrected, and certainly will be greatly extended, by the investigations he has undertaken.

It is remarkable, that although alumina is not usually present in the ashes of plants, yet that one tribe, namely the Lycopodiaceæ, contains it in large quantities.

Its absorption is rendered more intelligible by the late researches of Crum and of Graham, which show, that the earth may exist in a state of solution in water; but its absence from the greater number of plants would seem to indicate, that the spongioles are not merely passive instruments for the absorption and transmission of any bodies which might be presented to their external surfaces.

Indeed, the whole efficacy of geothermal culture, now so much insisted upon by horticulturists, seems to pre-suppose, that the roots are vital agents, capable of being acted upon by stimuli.

Why else should the application of heat to the roots impart greater vigour to the upper parts of the tree, and cause, as in the case of the Bougainvillea, the copious development of flowers where none before were produced; and, on the other hand, why, as happened in so many cases during the late severe winter, should a plant be destroyed in consequence of the frost penetrating into the ground, whilst it resisted the influence of the cold so long as its roots were protected?

If the spongioles acted upon the surrounding matter simply by virtue of endosmose, as a dead membrane would do, the process of absorption, although it might be arrested by frost, would be renewed when the mild weather returned, and the plant would sustain no further damage than what was due to a temporary suspension of its functions; whereas the consequence of the late extreme cold appears to have been, that the roots became unfitted for discharging their appropriate office, and that the stem and branches suffered, not only *negatively*, by the deprivation of proper nourishment, but *positively*, by receiving noxious matter from the ground.

In short, the spongioles may be supposed to have been reduced to the same condition by the cold, as that to which they were brought by the application of a strong poisonous solution, such as the sulphate of copper alluded to, and in both cases the same consequences would ensue.

Thus in exploring the recesses of the vegetable no less than of the animal kingdom, we are met at every step with phenomena, which seem to imply something beyond, if indeed not at variance with*, the forces which operate upon inert matter.

These phenomena it is our business to note and to record, eagerly availing ourselves of every new discovery in physics which may seem calculated to explain them, but at the same time religiously abstaining from any crude hypotheses, which, however they may captivate the imagination, do not carry with them the convictions of the understanding.

I do not consider that we are violating this sage injunction, when we refer these unexplained facts to the vital principle, for such an expression is only meant to imply, that the causes, whatever they may be, which bring about the effects in question, are only found to operate, so long as life continues.

I should indeed be far from wishing to prejudge the question, as to whether some or even all of the phenomena alluded to may not hereafter admit of being referred to physical laws, remembering, as I do, that even within my own time it was a ruled point, that no organic compound could be generated except under the influence of the living principle, whereas it is now known (thanks to Wöhler and others), that several of these can be produced by ordinary chemical manipulations.

At the same time it seems to me, that we are bound, if we wish to maintain our character as philosophers, to discountenance any of those vague analogies* derived from the contemplation of inorganic bodies, which have been forced into the science of physiology, with a view of elucidating the facts of vegetation, by men who, in their zeal to explain everything on purely materialistic principles, choose to ignore the mysteries which still shroud the approaches to the shrine of the Rhodian Genius.†

Home Correspondence.

The Lost Sheep Found.—In the spring it was widely blazoned about that Mr. Pike, of Stevington, had sold his "Smith's set of Steam Cultivating Tackle," but neither he nor the Messrs. Howard, my then agents, and through whom it now appears the set of tackle was sold, were gentlemanly enough (although asked) to let me know to whom it had been sold; and it was not until December the 3d inst. that I was able to learn where the poor sheep had strayed to. The letter and abstract below, kindly sent and since allowed to be made public, will show, as well as give a satisfactory account of it both to myself and the public:—

"Manthorpe Lodge, Grantham, 2d Dec., 1861.

"Sir,—I have not the pleasure of your acquaintance in any way, but as I have been working a second-hand Steam Cultivator of your invention, purchased of Messrs. Howard in the spring of this year, in connection with a first-rate 10-horse power double cylinder engine, built by Messrs. Hornsby, I think it my duty to inform you that I am entirely satisfied with its performances in every particular. I enclose an abstract of its operations on strong land at Dunton Lodge, near Biggleswade, belonging to the Earl Brownlow, now in hand, between the 1st of June and the 22d of November last. I may say I have given your cultivator a fair trial, for I question if more than 751 acres has been previously cultivated by steam on one farm in the same time—or may be in one season. When the days were long, on several occasions 7 acres per day were cultivated 7 inches deep the first time over, and 9 inches deep all subsequent operations; and although the land was very foul at the commencement, I do not believe a barrow load of live Twitch Grass altogether can now be found, either on the land sown with Wheat or on the fallows left ready for spring corn. I am glad also to speak distinctly to your apparatus cultivating the furrows or hollows, quite as well as the ridges of the land.—Yours obediently, SIMON HUTCHINSON.

"Wm. Smith, Esq., Woolston, Bletchley Station, Bucks.

"Commencing 1st of June, 1861.

No	A	R	P		Cultivated	A.	R.	P.
72	34	2	9	Wheat Stubble	Twice	69	0	18
71	20	0	22	Ditto	Ditto	40	1	4
68	20	0	18	Bean Stubble	Thrice	60	0	39
74	37	0	38	Wheat Stubble	Fourtimes	148	3	32
80	40	3	5	Barley and Oat Stubble	Ditto	163	0	20
85	51	0	23	Fallow	Twice	102	1	6
69	16	3	20	Tares, &c.	Ditto	33	3	0
73	36	0	19	Seeds	Ditto	72	0	38
87	18	0	30	Barley Stubble	Ditto	36	1	20
88	25	0	2	Seeds	Once	25	0	2
	300	0	21			751	1	19

"Ending 22d of November, 1861;

25 weeks, or 175 days; allowing for 25 Sundays and 17 days idle, the working days are reduced to 133, averaging (including hedges and ditches, and time moving from field to field and fixing) 5a. 2r. 23p. per day, long and short. Five men, two strong boys, a horse and cart, and from 7 to 9 cwt. of coals per day, were employed, the cost not exceeding 4*s.* 6*d.* per acre, exclusive of wear and tear."

"Manthorpe Lodge, Grantham, 8th Dec., 1861.

"Dear Sir,—Since I wrote to you yesterday, it has occurred to me that it might be well to add to that part of my testimonial letter where I state that the furrows are as well cultivated as the ridge,—'It is turned at the ends with as much facility as a pair-horse plough, and the whole thing is as superior to horse power as is the rail to the road, or as thrashing corn by steam is to performing it by hand.'

"Wm. Smith, Esq., Woolston." "Yours truly, SIMON HUTCHINSON."

Now, in laying this letter and tabular statement of Mr. Hutchinson's before the public, let me ask that they be compared with my Lord Berners' report on the working of a set of the (Fowler's) Leeds prize-winning tackle, published in the *Gardeners' Chronicle* of November 23, and with the report on the working of a set of Howard's, worked by Messrs. Blyth and Squier, published in the same paper of November 16th inst. My Lord Berners says that, with the assistance of two engineers from Mr. Fowler during the whole of the time, he has had 15½ days' loss by stoppage from material breakage, and 16 days' loss by removal and minor breakage, in ploughing 74 acres and cultivating 59 acres; and Messrs. Blyth and Squier say that the breakages are known to be great, although not reported. Surely after this we may rejoice that the lost sheep is not only found, but is sound and as industrious as ever, even when folded on Mr. Pike's clay hill. In

* If I am asked how I reconcile this opinion with the principle laid down that chemical and physical laws are never suspended, I must simply plead my ignorance. If gravitation pervades all nature, if a chemical reagent acts upon living as well as upon dead matter, I cannot bring myself to believe that the osmotic force is ever absent from the membrane of a cell. In suggesting therefore that the roots may have some power of excluding useless or noxious ingredients, I only mean, that such is the inference which the experiments would seem to warrant, and am far from pretending to dictate the mode in which this effect is brought about.

* Such, for instance, as that of illustrating the assimilation of normal substances by a plant, with the gradual growth of a crystal by the clustering of similar molecules round an existing nucleus.

† See Humboldt's little allegory "On the Vital Force, or the Rhodian Genius."

conclusion, I beg to thank, not the Messrs. Howard and Pike for turning the poor thing adrift, but Mr. Hutchinson for his free-will offering. *William Smith, Woolston, Bletchley Station, Dec.* 9, 1861.—P.S. Let your Correspondent who protests against steam cultivation reflect a little over Mr. Hutchinson's free-will offering, and give us a little more clearly the extent of his farm, the number of horses per team he ploughs with, and above all the weight of his crops by the number of bushels after selling nearly all his Wheat straw off his undrained land, and the quantity of artificial or other manure (if any) he uses in its stead. Mr. Hutchinson's 4*s*. 6*d*. per acre, with 1*s*. 6*d*. per acre allowed for wear and tear, which is a liberal allowance, giving 56*l*. 7*s*. 6*d*. on the 751 acres, and showing clearly how the ropes and this second-hand tackle can be kept in order, are rather close figures to rub against. How long will the Messrs. Howard require the aid of my tackle? Here is an extract from their letter in your Paper of Dec. 7th inst:—"We have sent out a larger number of sets than any other maker." Now if they do not count mine it is not true—besides, what is the good of my old substantial four-wheeled windlass as a bolster by way of commendation to their drop drum grinding itself away round a costly eccentric?

Societies.

ROYAL AGRICULTURAL OF ENGLAND.

Dec. 11.—Earl of Powis in the chair. Reference is made elsewhere to the proceedings at this, the half-yearly meeting of the Society. The following report was read by the Secretary:—

REPORT OF THE COUNCIL.

Since the last General Meeting in May, 3 governors and 28 members have died; the names of 53 members have been removed from the list on retirement or otherwise, and 163 new members have been elected; so that the Society now consists of—

84 Life Governors,
95 Annual „
1124 Life Members,
3399 Annual „ and
17 Honorary,

making a total of 4719 names on the list of the Society at the present time; being an increase of 86 since the date of the last Report.

The Council have appointed the Right Hon. the Earl of Powis a Trustee of the Society in the place of the late Right Hon. Sir James Graham, Bart., and have elected Mr. W. William Wells, of Redleaf, Mr. Charles Randell, of Evesham, and the Hon. Colonel W. Cotton, of Malpas, general Members of the Council, to supply the vacancies created by the resignation of the Earls of Romney and Macclesfield, and the Hon. Colonel Douglas Pennant, M.P.

The half-yearly statement of accounts to the 30th June, 1861, has been examined and approved by the Auditors and Accountants of the Society. The finances were never in a more satisfactory condition than at present; the sum of 3000*l*. having been lately added to the funded capital of the Society, which now amounts to 17,488*l*. 17*s*. 10*d*. stock in the New Three per Cents; a sum now fully representing the amount of compositions which have been received from governors and members in lieu of their annual subscriptions.

The collection of the arrears of subscription has been steadily progressing under the Finance Committee; the amount now due, inclusive of those in arrear for the current year, being 580*l*., and the Council hope that the new privileges accorded to the members will have the effect of inducing a more punctual payment in future.

A Special Committee has been appointed to consider the question of the admission of short-hand writers or reporters from the press to the Weekly Meetings of the Council, and it has been determined that one reporter from each of the three Agricultural Papers, viz., the *Mark Lane Express*, *Bell's Weekly Messenger*, and the *Agricultural Gazette*, and one from the London daily papers, shall be allowed to attend. Additional publicity will thus be given to papers read before the Council.

The sanguine expectations entertained by the Council as to the success of the Leeds Meeting were fully realised. On no former occasion had the Society's Show Yard presented such a thronged appearance as on the two days of entrance at 1*s*., when 73,824 and 40,368 persons respectively paid for admission. The total number of visitors, exclusive of many members of the Society who for the first time exercised the privilege of free admission, was 145,320; amongst whom must be reckoned many of the mechanics of the town and neighbourhood, who viewed with intelligent interest the enormous collection of newly invented implements and magnificent stock submitted for their inspection. The interest of the Show Yard was greatly increased by the enclosure of a space for exercising the horses, which were thus seen to the greatest advantage. The Mayor, assisted by a local Committee, carried out all the arrangements in a very liberal spirit, and entertained the members of the Society at a conversazione in the magnificent Town Hall of Leeds.

The Council regret their inability to lay before the General Meeting a report upon the Steam Ploughing at Leeds, a complete report from the Judges in that department not having been received.

The First Commissioner of Works has granted the free use of a portion of Battersea Park for the purposes of the Metropolitan Meeting, and it is confidently anticipated that the large number of visitors to London during the ensuing year will ensure a numerous attendance in the Society's Show Yard. The Council have fixed that the Meeting shall take place in the week commencing Monday, the 23d of June next, and have determined that there shall be an Exhibition of Implements, but that the trials for fixed and portable Steam Engines, fixed and portable Finishing Machines, Hand-dressing Machines, and Barley Hummellers, being the last of the Quadrennial Series, shall be postponed till the following year.

It has been determined to add to the Prize Sheet classes for Longhorned, Norfolk and Suffolk Polled, North and South Wales, Kerry, and Alderney and Channel Islands Cattle; and in Horses, classes for Suffolk, Carriage, and Roadster Horses; in Sheep, classes for Lincolns, Cotswolds, Hampshire Downs, and West Country, Dorset, Oxfordshire Downs, Romney Marsh, and Mountain and Irish Longwoolled; and in Pigs a class for the Berkshire breed; amounting in the whole, to [illegible]. The Highland and Agricultural Society of Scotland have offered prizes for Scottish Stock amounting to [illegible]. A list of prizes for Foreign Stock, amounting to [illegible], will be transmitted to Foreign Countries through her Majesty's Secretary of State for Foreign Affairs.

A Special Committee has been appointed to confer with the Governors of the Royal Veterinary College, in order that the Veterinary privileges of Members of this Society may be placed on a more satisfactory footing.

In accordance with the Charter of the Society, it is necessary to hold a Country Meeting of the Members in every year. The Council have, therefore, determined that the same shall be held for 1862 (*pro formâ*) in the town of Windsor. The district for the Society's Country Meeting for 1863 will be that comprising South Wales and Herefordshire, Monmouthshire, and Worcestershire.

An interesting paper on British Wool has been read to the Society by Mr. Caird, M.P., and, in order to give to the numerous foreigners who may be expected to visit the Metropolis during the ensuing year an opportunity of inspecting samples of the Wool of our native breeds and crosses, the Council have resolved to exhibit this product in the International Exhibition of 1862; for which purpose space has been granted by the Royal Commissioners, and numerous promises of support have already been received from Members of the Society and others, engaged in this branch of animal products, towards carrying out its due representation.

Mr. Chadwick, C.B., has also read a paper on the Half time Principle of Instruction to Children engaged in Agriculture.

The schedule of prizes offered for Essays and Reports, to be sent in to the Secretary by the 1st of March next, is as follows:—

I. AGRICULTURE OF STAFFORDSHIRE.

Fifty Sovereigns will be given for the best Report on the Agriculture of Staffordshire.

The principal geological and physical features of the county should be described; the nature of the Soil and character of the Farming in its different districts or natural divisions; its Live Stock; Implements; recent changes of Farm Management; Improvements lately introduced and still required; remarkable or characteristic farms; the influence exercised by neighbouring mines and factories on the cropping of the soil, the value of land, the rates of prices and wages, and on the demand for timber, and consequently on the profitable management of woods and plantations.

II. SUBSOILING *versus* DOUBLE-PLOUGHING.

Twenty Sovereigns will be given for the best Essay on the comparative merits of Subsoiling, Trenching, and Double-ploughing.

The comparative cost of these several modes of cultivation; their influence on different crops, on the germination of seed-weeds, and the destruction of root-weeds; the supplies of manure required in each case are to be contrasted, and the most seasonable manner of conducting the work described.

III. STEAM POWER AND THRESHING MACHINES.

Twenty Sovereigns will be given for the best Essay on the comparative advantages of Fixed or Moveable Steam Power, and of the Single and Double Dressing Threshing Machine.

The cost of repairs and allowance required for depreciation in each case are to be carefully examined; the labour and waste incidental to threshing in the field and in the barn; and the applicability of the steam power to other purposes should be contrasted: in the case of the threshing-machines, the weight of the machine and the requirements of the market in respect of samples should be considered.

IV. HAYMAKING.

Ten Sovereigns will be given for the best Essay on Recent Improvements in Haymaking.

V.

Ten Sovereigns will be given for the best Essay on any other Agricultural Subject;

And an additional list has been approved, papers for which competition are to be sent in by the 1st of May.

Thirty Sovereigns will be given for the best Essay on the Parasites, including Entozoa, which infest cattle and sheep.

Twenty Sovereigns will be given for the best Essay on Land Valuing.

The estimates which ought to form the basis of calculation in fixing the rental of land; the seasons most favourable for inspection; the practicability of reducing lands under different systems of culture to the same standard of calculation, should be discussed.

3. Ten Sovereigns will be given for the best Essay on the Management of a Home Farm or Farm attached to the residence of a landed proprietor. The arrangements in the dairy and stable, the proper rates of charge for farm produce or services supplied, and the advantages and drawbacks of such a connection are to be discussed.

4. Ten Sovereigns will be given for the best Essay on the Ravages of Grub and Slug on the Wheat plant.

The predisposing causes from weather, or situation, or cropping, and the best modes of prevention or cure are to be stated.

Contributors of Papers are requested to retain copies of their communications, as the Society cannot be responsible for their return.

The successful competitor for the Prize of 50*l*., offered by the Right Hon. the Earl of Powis, for the best Essay on the Improvement in the Farming of Yorkshire, since the date of last reports in the Journal, was Mr. W. Wright, of Sigglesthorne Hall, Holderness.

The Society's Prizes have been awarded as follows:

CLASS II. To the Rev. J. Wilkinson, Broughton Gifford Rectory, for the best report on the Agriculture of Hampshire £50

CLASS VI. To Mr. Thos. Bowick, Stoneleigh Abbey Farm, Warwickshire, for the best Essay on the Rearing of Calves £10

CLASS VII. To Mr. Peter Love, of Northampton, for the best Essay on Harvesting Corn £10

CLASS VIII. To the late Mr. Charles Wratislaw, of Woolscott, Rugby, for the best Essay on Farm Capital .. £10

By order of the Council,

H. HALL DARE, Secretary.

This report was adopted after a discussion in which Mr. Sidney, Col. Challoner, and Mr. Holland, M.P., took part. A report is given elsewhere. A statement was then read on the part of the Finance Committee, from which the passage in the above report to the effect that the finances of the Society were never in a more prosperous condition was fully justified.

Thanks were voted to the auditors who had passed these accounts, and they were re-appointed. Mr. Corbet acknowledged the compliment. Their duties consisted chiefly in seeing that two and two did not make five. They had, however, submitted certain methods or alterations to the Finance Committee, which had done them the honour of adopting them. He was sure no society of the age and extent of the Royal Agricultural Society of England had so small a sum of subscriptions from members in arrear. The finances of the Society were in a very prosperous condition. Thanks were then voted to the Chairman, and the meeting separated. [The balance sheet of the Society, and the report of the Finance Committee must be postponed till our next number.]

SMITHFIELD CLUB CATTLE SHOW.

Several circumstances have united to make the [illegible] of the present year particularly interesting. [illegible] last year of the exhibition in the quarters where [illegible] annually for so long been held. Next year the [illegible] cultural Hall Company will have their ample [illegible] ready to receive the show; and while it is to [illegible] that we shall long have the same enormous [illegible] which has during the past week crowded the [illegible] passages of the Baker Street Bazaar, it is certain [illegible] they will be accommodated without inconvenience [illegible] that as spectators they will be much more [illegible] agreeably satisfied.

Another point of interest attaching to the [illegible] meeting is the fact that many of the Birmingham awards have been reviewed and, in some cases, reversed, at Baker Street. In but few instances, however, [illegible] this last been done. The same animals, indeed, have reappeared, but they have most of them been [illegible] again. In particular the 1st and 2d prize [illegible] oxen at Birmingham are again 1st and 2d [illegible] Street—the commended ox in the same [illegible] exhibited by H.R.H. the Prince Consort at Birmingham being 3d at Baker Street. The 1st [illegible] Hereford steer at Bingley Hall, shown by [illegible] Shirley of Bawcott, is again 1st at the Bazaar [illegible] Taylor's wonderful 1st prize Shorthorn steer [illegible] previous week is again 1st in its class now. [illegible] than seven of the animals in that class at Birmingham reappear at Baker Street, but the 2d and 3d prizes go to fresh names for cattle not shown before.

In the class of older Short-horn oxen the 1st [illegible] animal bred by Lord Spencer is the same which [illegible] first last week. The first of the Short-horn cows [illegible] Birmingham is also first at Baker Street. Connected [illegible] her, however, we have also a notable instance [illegible] reversal of a Birmingham award. The gold medal [illegible] the best animal in the yard at Birmingham [illegible] awarded to a Galloway cow. Here on the other [illegible] the gold medal for the best cow in the yard [illegible] to the 1st prize Short-horn cow, Mr. Fa[illegible] which was also present at Birmingham, and [illegible] we believe, third in the estimation of the judges.

In Devons again some of the prize animals at Bingley Hall re-appear at the Bazaar. The Devon ox bred [illegible] Mr. Turner, of Barton, and exhibited by Earl H[illegible] won the 1st prize at both shows, and so did the [illegible] prize Devon heifer. The two shows however differ more in the Devon than in any other classes, and [illegible] good many fresh names will be seen in the list of the Smithfield Club when compared with that of the Midland Counties Association. That the young [illegible] of the long established institution may however be congratulated on having attracted so nearly all the best animals of the country is proved by the number [illegible] instances in which the 1st prizes are awarded to the same animals at both the exhibitions.

The Devon Classes at the Bazaar are well filled by [illegible] better show of stock than has for some years been exhibited. Seven steers under 3 years old, models [illegible] symmetry and of beauty, are exhibited in the first class—no fewer than 12 oxen, a remarkable class for [illegible] and quality, are exhibited in the older class—No. [illegible] instance, a 4 year and 10 months old ox, exhibited by Mr. Ball, of West Monckton, girths no [illegible] than 9 feet. The 1st prize goes however to [illegible] though of smaller size, of much superior [illegible] already described as shown at Birmingham. [illegible] cows and heifers competed in the female classes. [illegible] of the older cows shown at Birmingham reappear here, but none of them received prizes. [illegible] Devon classes are much fuller and much better [illegible] Baker Street than at Bingley Hall.

The Hereford Classes are again inferior in [illegible] and in quality to those we have seen on previous [illegible] sions. Mr. Shirley's well made steer redeems its [illegible] the 2d prize is awarded to Mr. Loyd, of Add[illegible] for a beast that is hardly sufficiently ripe for exhibition. The older class of oxen contains five [illegible] four of which appeared at Birmingham, and the [illegible] in the two cases are identical. The class does [illegible] sufficiently (certainly in point of number) represent the importance of the breed. The lack of exhibitors [illegible] both the annual shows this year is attributed [illegible] death or resignation of several noble patrons of the breed—so that the costly task of preparing specimens for exhibition falls into the hands of men less [illegible] incur the necessary expenditure.

The Short-horn Classes are here, as at Birmingham, the great feature of the show—the best and many [illegible] the inferior animals appear, as we have already said [illegible] both places. Half a hundred of the best fat stock [illegible] the country are here collected. No fewer than 10 [illegible] bred heifers and 14 cows having had one, two, [illegible] three (in only one instance *seven*) calves, are [illegible] brought to the shambles. And in the extra stock [illegible] are instances where, whatever be the cause, valuable breeding stock have not bred. In particular [illegible] Marmaduke heifer shown at the Canterbury meeting [illegible] here shown fat, the preparation of it for exhibition [illegible] breeding purposes having probably destroyed what capability of breeding it may have ever had.

Among the young cattle Mr. Taylor's "faultless" steer is again exhibited, and received the 1st prize and gold medal as the best steer or ox in any of the classes—another testimony to the merit of Bates's

[illegible]ing, for his great granddam was sold at Kirkleavington.

Mr. Faulkner's cow, with her marvellously thickly covered loin and back and ribs, is similarly distinguished among the cow classes—the defects of the [illegible] cow which carried these honours from her [illegible] being just those points where the Short-horn excels, being held to exceed those in which the [illegible] is inferior to the other.

The Galloway is remarkably long and has an extraordinary round of beef; the Short-horn is greatly her superior in the shoulder, rib and sirloin.

The Sussex Classes are very numerously filled—and by animals of great and growing merit—15 oxen and [illegible] are shown of these large Devon-like cattle. Very [illegible] of the Norfolk and Suffolk polled, the Long horned and the Scotch breeds are exhibited—these however contain many animals of great merit. The awards [illegible] be found below. The cross bred classes are well filled with evidence of how great and useful is the influence of the Short horn upon the other breeds in the improvement of the meat manufacture. No finer specimens and probably no more profitable specimens of well fattened oxen exist than the cross and the Short-horn and Angus, of which several fine specimens were exhibited in this class.

The following is the judges' award in all the cattle classes:—

CATTLE.

Class 1. Devon Steers, not exceeding 3 years old.—1st, 25*l.*, to Mr. W. Heath, Ludham Hall, Norfolk; 2d, 15*l.*, to the Earl of Leicester, Holkham Hall, Norfolk; 3d, 10*l.*, to His Royal Highness the Prince Consort.

Class 2. Devon Steers or Oxen, above 3 years old.—1st, 25*l.*, to Earl Howe, Gopsall Hall, Leicester; 2d, 15*l.*, to Mr. J. W. Buller, Downes, Crediton, Devon; 3d, 10*l.*, to Mr. W. Heath, Ludham Hall, Norfolk.

Class 3. Devon Heifers, not exceeding 4 years old.—1st, 20*l.*, to Mr. C. Hambro, Milton Abbey, Dorset; 2d, 10*l.*, to Mr. R. [illegible], North Petherton, Somerset; 3d, 5*l.*, to Mr. H. H. [illegible], [illegible] Farm, Taunton.

Class 4. Devon Cows, above 4 years old.—1st, 20*l.*, to Mr. W. Heath, Ludham Hall, Norfolk; 2d, 10*l.*, to Mr. J. W. Buller, Downes, Crediton, Devon; 3d, 5*l.*, to Mr. E. Pope, Great Toller, Dorset.

Class 5. Hereford Steers, not exceeding 3 years old.—1st, 25*l.*, to Mr. R. Shirley, Bancott, Munslow, Shropshire; 2d, 15*l.*, to Mr. L. Loyd, Monk's Orchard, Surrey.

Class 6. Hereford Steers or Oxen, above 3 years old.—1st, 25*l.*, to Mr. W. Heath, Ludham Hall, Norfolk; 2d, 15*l.*, to Mr. W. [illegible], Fritford, Berkshire; 3d, 10*l.*, to his Royal Highness the Prince Consort.

Class 7. Hereford Heifers, not exceeding 4 years old.—1st, 20*l.*, to Mr. W. Taylor, Thingehill Court, Hereford; 2d, 10*l.*, to Mr. H. Higgins, Woolaston Grange, Gloucester.

Class 8. Hereford Cows, above 4 years old.—1st, 20*l.*, to Mr. T. Roberts, Ivington, Leominster; 2d, 10*l.*, to the Earl of Shrewsbury and Talbot, Ingestre, Stafford; 3d, 5*l.*, to Mr. J. Vaughan, [illegible] Hall, Shropshire.

Class 9. Short-horned Steers, not exceeding 3 years old.—1st, 25*l.*, to Mr. G. Taylor, Sewerby Cottage, Bridlington, Yorkshire; 2d, 15*l.*, to Mr. R. Wortley, Puffield Hall, Norfolk; 3d, 10*l.*, to Mr. J. Shaw, Hunsbury Hill, Northampton.

Class 10. Short-horned Steers or Oxen, above 3 years old.—1st, [illegible], to Earl Spencer, Althorp, Northampton; 2d, 15*l.*, to Messrs. A. and A. Mitchell, Alloa, Clackmannan; 3d, 10*l.*, to Mr. R. Summerton, Weddington, Warwick.

Class 11. Short-horned Heifers, not exceeding 4 years old.—1st, 20*l.*, to Mr. T. G. Tuck, Strumpshaw Hall, Norfolk; 2d, 10*l.*, to Mr. W. Shaw, Far Coton, Northampton; 3d, 5*l.*, to the Earl of Radnor, Coleshill, Highworth.

Class 12. Short-horned Cows, above 4 years old.—1st, 20*l.*, to Mr. J. Faulkner, Bretby Farm, Burton-on-Trent; 2d, 10*l.*, to Mr. C. Duffield, Marcham Park, Berks; 3d, 5*l.*, to his Royal Highness the Prince Consort.

Class 13. Sussex Steers or Oxen, of any age.—1st, 20*l.*, to Mr. J. Shoosmith, Berwick, Sussex; 2d, 15*l.*, to Mr. J. M. Montefiore, Worth Park, Sussex; 3d, 10*l.*, to Lord Leconfield, Petworth, Sussex.

Class 14. Sussex Heifers or Cows of any age.—1st, 15*l.*, to Mr. G. C. Coote, Tortington, Sussex; 2d, 10*l.* to Mr. G. Penfold, Wiggonholt, Sussex; 3d, 5*l.* to Mr. P. Gorringe, Pebsham, Sussex.

Class 15. Norfolk or Suffolk Polled Steers or Oxen, of any Age. 1st, 10*l.*, to Mr. J. Sewell, North Pickenham, Norfolk; 2d, [illegible], to Mr. E. Beare, Paston, Norfolk.

Class 16. Norfolk or Suffolk Polled Heifers or Cows of any age. 1st, 10*l.*, to Lord Sondes, Elmhall Hall, Norfolk.

Class 18. Long-horned Heifers or Cows of any age. 1st, 10*l.*, to Mr. J. H. Burbery, The Chase, Kenilworth, Warwick; 2d, [illegible], to Mr. W. Senior, Hinton-St.-Mary, Dorset.

Class 19. Scotch-horned Steers or Oxen, of any age.—1st, 20*l.*, to Mr. O. Wallis, Overstone Grange, Northampton; 2d, 10*l.*, to the Duke of Beaufort, Badminton, Wilts.

Class 20. Scotch-horned Heifers or Cows, of any age.—1st, 10*l.* to Mr. J. Stewart, Newmarket, Aberdeen; 2d, 5*l.*, to the Duke of Beaufort, Badminton, Wilts.

Class 21. Scotch Polled Steers or Oxen, of any age.—1st, 20*l.*, to Mr. W. M'Combie, Tillyfour, Aberdeen; 2d, 10*l.*, to Mr. W. Postle, Smallburgh Hall, Norfolk.

Class 22. Scotch Polled Heifers or Cows, of any age.—1st, 10*l.*, to Mr. W. M'Combie, Tillyfour, Aberdeen; 2d, 5*l.*, to Mr. J. Stewart, New Market, Aberdeen.

Class 24. Irish Heifers or Cows, of any age.—1st, 10*l.*, to Lord Berners, Keythorpe Hall, Leicester.

Class 25. Welsh Steers or Oxen (Runts), of any age.—1st, [illegible], to Mr. W. Spencer, Congerston, Warwick; 2d, 5*l.*, to Mr. F. Neale, Pagham, Sussex.

Class 26. Welsh Heifers or Cows, of any age.—The prize of 10*l.* to Mr. J. White, Parsonage Farm, Rickmansworth, Herts.

Class 27. Cross or Mixed-bred Steers, not exceeding 3 years old.—1st, 15*l.*, to Mr. J. Stewart, New Market, Aberdeen; 2d, 10*l.*, to Messrs. J. and W. Martin, Aberdeen.

Class 28. Cross or Mixed-bred Steers or Oxen, above 3 years old.—1st, 15*l.*, to Mr. J. Stewart, New Market, Aberdeen; 2d, 10*l.* to Messrs. J. and W. Martin, Aberdeen.

Class 29. Cross or Mixed-bred Heifers, not exceeding 4 years old.—1st, 10*l.*, to Mr. J. Stewart, New Market, Aberdeen; 2d, [illegible], to Mr. E. Herbert, Powick, Worcester.

SHEEP AND PIGS.—Of these we add but a few descriptive remarks below to the following list of prizes:—

SHEEP.

Class 30. Fat Wether Sheep of any long-woolled breed, 1 year old (under 22 months).—1st, 20*l.*, to Mr. G. S. Foljambe, Osberton Hall, Worksop, Nottingham; 2d, 15*l.*, to Mr. G. Walmesley, Rudston, York; 3d, 5*l.*, to the Hon. Colonel Lowther, Barleythorpe Hall, Rutland.

Class 31. Fat Wether Sheep of any long-woolled breed, 1 year old (under 22 months), each Sheep not to exceed 220 lbs live weight.—20*l.*, to T. Willmore, the Newarke, Leicester; 2d, 15*l.*, to Mr. R. Newman, Harrowden, Bedford; 3d, [illegible], to the Marquis of Exeter, K.G., Burghley House, Stamford.

Class 32. Fat Wether Sheep of any long-woolled breed (not Leicesters), 1 year old (under 22 months).—1st, 15*l.*, to Mr. T. West, Greenhill Farm, Oxford; 2d, 10*l.*, to Mr. J. K. Tombs, Langford, Gloucester; 3d, 5*l.*, to Mr. J. Davis, Wilton Court, Hereford.

Class 33. Fat Wether Sheep of the Kentish or Romney Marsh breed, of any age.—1st, 10*l.*, to Mr. F. Murton, Smeeth, Kent; 2d, 5*l.*, to Mr. J. Newport, Elmsted Court, Kent.

Class 34. Fat Wether Sheep, of any Short-woolled Breed, 1 year old (under 22 months).—1st, 20*l.* to the Duke of Richmond, Goodwood, Sussex; 2d, 10*l.* to Lord Walsingham, Merton Hall, Norfolk; 3d, 5*l.* to Mr. W. Rigden, Hove, Brighton.

Class 35. Fat Wether Sheep, of any Short-woolled Breed, 1 year old (under 22 months), each Sheep not to exceed 200 lb. Live Weight.—1st, 15*l.*, Mr. W. Rigden, Hove, Brighton; 2d, 10*l.*, to the Duke of Richmond, Goodwood, Sussex; 3d, 5*l.*, to Lord Walsingham, Merton Hall, Norfolk.

Class 36. Fat Wether Sheep, of any Short-woolled Breed, 2 years old (above 22 and under 34 months).—1st, 20*l.*, to Mr. J. J. Farquharson, Langton House, Dorset; 2d, 10*l.*, to Mr. J. Kent, Goodwood, Sussex; 3d, 5*l.*, to the Duke of Richmond, Goodwood, Sussex.

Class 37. Fat Wether Sheep, of any Short-woolled Breed (not South Downs), 1 year old (under 22 months).—1st, 20*l.*, to Mr. W. King, New Hayward Farm, Hungerford, Berks; 2d, 10*l.*, to Mr. W. B. Canning, Chiseldon, Wilts; 3d, 5*l.*, to Mr. J. Walter, M.P., Bearwood, Berks.

Class 38. Fat Wether Sheep, of the Shropshire Breed, 1 year old (under 22 months).—1st, 15*l.*, to Mr. E. Holland, Dumbleton Hall, Worcester; 2d, 5*l.*, to Mr. W. O. Foster, Kinver Hill Farm, Stourbridge, Worcester.

Class 39. Fat Wether Sheep, of the Shropshire Breed, 2 year old (above 22 and under 34 months).—1st, 15*l.*, to Mr. W. O. Foster, Kinver Hill Farm, Stourbridge, Worcester.

Class 40. Fat Wether Sheep, of any Mountain Breed, of any age.—1st, 15*l.*, to Mr. J. Quartly, Molland House, South Molton, Devon; 2d, 10*l.*, to Mr. Tapp, Burch Twitcham, Devon; 3d, 5*l.*, to Mr. J. Hole, Knowle House, Dunster, Somerset.

Class 41. Long and Short-woolled Cross-bred Fat Wether Sheep, 1 year old (under 22 months).—1st, 20*l.*, to Mr. J. Overman, Burnham Sutton, Norfolk; 2d, 10*l.*, to Mr. G. Hine, jun., Oakley, Bedford; 3d, 5*l.*, to Mr. S. Druce, Abbey Farm, Oxford.

Class 42. Long and Short-woolled Cross-bred Fat Wether Sheep, 1 year old (under 22 months), each Sheep not to exceed 220 lbs. weight.—1st, 10*l.*, to Mr. J. Overman, Burnham Sutton, Norfolk; 2d, 5*l.*, to Mr. G. Hine, jun., Oakley, Bedford.

PIGS.

Class 43. Pigs, of any breed, not exceeding 4 months old.—1st, 10*l.*, to Mr. J. Lynn, Church Farm, Stroxton, Lincoln; 2d, 7*l.*, to Mr. W. Barber, Sunninghill, Berks; 3d, 5*l.*, to Mr. B. Morland, Chilton Farm, Harwell, Berks.

Class 44. Pigs, of any breed, above 4 and not exceeding 8 months old.—1st, 10*l.*, to the Hon. Colonel Pennant, M.P., Penrhyn Castle, Bangor; 2d, 7*l.*, to Mr. W. Baker, Purewell House, Hants; 3d, 5*l.*, to Mr. E. L. Betts, Preston Hall, Kent.

Class 45. Pigs, of any breed, above 8 and not exceeding 12 months old.—1st, 10*l.*, to Mr. G. Beale, Frolesworth, Leicester; 2d, 7*l.*, to Mr. G. B. Morland, Chilton Farm, Berks; 3d, 5*l.*, to Mr. W. Baker, Purewell House, Hants.

Class 46. Pigs, of any breed, above 12 and under 18 months old.—1st, 10*l.*, to Mr. J. Coate, Hammoon, Dorset; 2d, 7*l.*, to Mr. T. Crisp, Butley Abbey, Suffolk; 3d, 5*l.*, to Mr. S. Druce, Abbey Farm, Oxford.

GOLD MEDALS.

Gold Medal to the exhibitor, for the best steer or ox in any of the classes, to Mr. G. Taylor, Sewerby Cottage, Bridlington Quay, York; Gold Medal to the exhibitor, for the best heifer or cow in any of the classes, to Mr. J. Faulkner, Bretly Farm, Burton-on-Trent; Gold Medal to the exhibitor, for the best pen of long-woolled sheep in any of the classes, to Mr. G. S. Foljambe, Osberton Hall, Nottingham; Gold Medal to the exhibitor, for the best pen of 1-year old short-woolled sheep in the 34th, 35th, or 37th classes, to the Duke of Richmond, Goodwood, Sussex; and Gold Medal to the exhibitor, for the best pen of pigs in any of the classes, to Mr. J. Coate, Hammoon, Dorset.

EXTRA STOCK.

Silver Medal to the exhibitor, for the best steer or ox in extra stock, to Earl Spencer, Althorp, Northampton; Silver Medal to the exhibitor, for the best heifer or cow in extra stock, to Mr. W. Wells, Redleaf, Kent; Silver Medal to the exhibitor for the best long-woolled wether in extra stock, to Mr. G. S. Foljambe, Osberton Hall, Nottingham; Silver Medal to the exhibitor, for the best long-woolled ewe in extra stock, to Mr. W. Lovel, Nafferton Grange, Driffield, York; Silver Medal to the exhibitor, for the best long-woolled Sheep (not Leicester) in extra stock, to Mr. J. Lynn, Church Farm, Stroxton, Lincoln; Silver Medal to the exhibitor, for the best short-woolled wether sheep in extra Stock, to the Duke of Richmond, Goodwood, Sussex; Silver Medal to the exhibitor, for the best short-woolled ewe in extra stock, to Lord Walsingham, Merton Hall, Norfolk; Silver Medal to the exhibitor, for the best short-woolled sheep (not Southdown) in extra stock, to Mr. W. B. Canning, Chisledon, Wilts; Silver Medal to the exhibitor, for the best cross-bred sheep in extra stock, to the executors of the late Mr. S. Treadwell, Westcott Field, Waddesdon, Bucks; and Silver Medal to the exhibitor, for the best pig in extra stock, to Mr. W. Baker, Purewell House, Hants.

Judges of Cattle.—Edward L. Franklin, Philip Halse, William Torr.

Judges of Long-woolled Sheep and Pigs.—James Douglas, Francis Spencer, James Tremain.

Judges of Short-woolled and Cross-bred Sheep.—Henry Fookes, James Rawlence, J. S. Turner.

Hon. Secretary.—B. T. Brandreth Gibbs.

The best account that can be given of the sheep and indeed of the whole show in a few words was given by Mr. Torr, when acknowledging the toast of the Judges. He observed that, take it altogether, the show was one of the best that had ever been held. The Devonshires proudly kept their place; the Herefords were not up to the mark, and the Short-horns exhibited many shortcomings. It was impossible that the Leicesters could have ever been better. The cross-breeds were the best he ever saw, and, as to the Southdowns, they were so good that it was no use talking of them.—We have room for little more than this—a good show of Leicesters both as to number and quality—a short show of Longwools not Leicesters—a marvellous show of Southdowns, in which Mr. Rigden, the Duke of Richmond, and Lord Walsingham are first, second, third—third, first and second in two classes; while Mr. Farquharson is 1st in the older sheep, and the Duke of Richmond, as breeder, and as feeder as well as breeder, is 2d and 3d—the exhibitor of the 2d prize pen being Mr. King, of Goodwood: and enormous animals they were. The Gold Medal pen of shearling wethers exhibited by his Grace are marvels of symmetry, condition, and quality.

A small show of Shropshire sheep, in which Mr. Holland and Mr. Forster, who had been 2d and 1st respectively at Birmingham, are 1st and 2d respectively here. A small show also of Mountain sheep, a very fine show of cross-breeds, chiefly Oxfordshire and Cotswold.

THE PIGS, a smaller show than that at Birmingham, excel it in some of the classes; Mr. Lynn's, Mr. Barker's, Mr. Morland's young pigs (pens of 3); Colonel Pennant's, Mr. Baker's, Mr. Betts's older pigs (pens of 3); Mr. Beale's and Mr. Morland's still older pigs (pens of 3): Mr. Coates', Mr. Crisp's, Mr. Druce's pigs under 18 months (pens of 3) took the prizes. The last class is certainly a wonderful illustration of precocity and good feeding. The prizes are announced above.

THE IMPLEMENT GALLERIES.

These are this year a miracle of close packing; about 1000 lineal yards are distributed among about 100 exhibitors, many of whom show steam engines, reaping machines, carts, ploughs, harrows, rollers, and in fact all the bulkiest implements of the farm. We did not notice any novelty of any consequence, if we except a new grain elevator, by which corn is lifted from one floor to another, or it may be from one part of a threshing machine to another, as when it is passed a second time through the winnowing machine. It acts by a blast—the corn is blown upward. Mr. Fowler's new arrangement of turning ordinary threshing machines to account for tillage purposes was also exhibited, as referred to farther on.

Following the numbers the following is a list of exhibitors and their wares:—Mr. Gibbs, seedsman to the Agricultural Society of England, exhibit a large and interesting array of specimens of root crops and Grasses and their seeds—very large Mangel Wurzels, capital Turnips of good quality, a fair show of Swedes, and magnificent Kohl Rabi.

Barnard & Bishop, of Norwich, show their disc root pulper. Howard of Bedford, ploughs, rakes, haymakers, harrows, drawings of steam cultivator. Clayton & Shuttleworth, of Leeds, steam-engines. Nicholson, haymakers, cake crushers, and Bruckshaw's corn elevator, referred to above. Crosskill, of Beverley, carts, liquid manure cart, clod crusher, Potato washer.

Mr. G. Gibbs, seedsman, showed very large common Turnips, very fine Swedes, not very large Mangels, remarkably fine Carrots. Priest and Woolnough, of Kingston-on-Thames, exhibited horse hoes and drills. Sutton, of Reading, a remarkably fine set of specimens of root crops, large Mangels, Carrots, Green Globe, Lincoln red, and other common Turnips—their Champion Swedes, very fine Kohl Rabi—in fact the choice of the specimens exhibited for premiums at Reading in the previous week, as referred to in our last Number. Smyth & Son, of Peasenhall, showed drills with fore-steerage. Edgington, rich cloths and tents. Skirving, of Liverpool, a stand of his very large Swedish Turnips with the tops left on—thus honestly exhibiting, in full development, that feature of his Swede which is generally considered its weakest point. The roots were not only of remarkable size but of good quality. Lloyd & Son, of Old Street Road, show a number of steel mills. Busby, of Bedale, ploughs, drill hoes, carts, Cuthbert's reaper, drills. Taplin, of Lincoln, moveable engine with arrangement for lifting or depressing one end of boiler, and thus preserving its horizontality.

The Trustees of Mr. Crosskill, of Beverley, exhibit their prize reaper (Bell's), water carts, &c. Mr. Dodge, of Dowgate Hill, a number of India-rubber appliances. Messrs. J. B. Brown & Co., of Cannon Street, exhibit wire netting, chaffcutters, lawn mowers, &c. And in a very well edited catalogue drawings and descriptions of the well selected implements of all manufacturers. At this stand too were drawings and plans of Farm Buildings exhibited, and the catalogue informs us that Mr. Scott Burn, to whose aptitude for such engagements the recent work on Farm Buildings is good testimony, is in partnership with Messrs. Brown in this department of their business, as we stated some weeks ago in answer to a correspondent. They provide designs for buildings adapted to the circumstances of farms, or they receive the incomplete plans of proprietors, work them out in detail, provide specifications and estimates, and contract for their erection.—Snowdon's paring ploughs and a useful chaff cutter are exhibited near this stand. Cambridge, of Bristol, show rollers, chain harrows, &c. Turner, of Ipswich, grinding and crushing cylinders. Messrs. Carter and Downing, successors to the Agricultural Engineers Company, show a number of agricultural implements. Barrett and Exall, of Reading, chaff cutters, fixed engines, their safety horse powers, threshing machines, &c. Page and Toogood, of Southampton, show magnificent Swedes and Mangels. Smith, of Kettering, horse-hoes, fire-engines, winnowers, &c. Ewart's cattle guage shown by Mr. Tree, of Blackfriars Road. Iron tanks, costing 2*d.* to 5*d.* per gallon, are exhibited near this stand.

Messrs. Holmes, of Norwich, show drills, winnow-

ing machines, chaff cutters, steam engines. Messrs. Carson and Toomer, of Warminster, Moody's conical Turnip cutter with horizontal axis, delivering its produce on the wide or open end. Mr. Cranstoun exhibits Woods mower and reaper. Bradford, Fleet Street, washing machines. Smith, of Thrapstone, haymakers, chaff cutters, cake crushers. Bentall, of Maldon, root pulpers, chaff cutters, &c. Hornsby, Grantham, drills, winnowing machine, ploughs. St. Pancras Iron Works, stable fittings, gates, iron hurdles, &c. Hughes, of Dover Road, mill work.

Messrs. Ransome, of Ipswich, show ploughs, cellular troughs on Mr. Stearn's patent, chaff cutters, &c. Gardiner & Phillips' Turnip cutters, and their new and clever cylindrical corn screen, also corn crushers, &c. Woods and Cocksedge, root pulpers and corn crushers. Burgess and Key, reaper and mower, chaff cutters, and Turnip cutters. Hill & Smith, of Dudley, iron hurdles, hay crib, gates, &c. Samuelson, of Banbury, Turnip cutters, chaff cutters, mowing machine, cake crushers. Walker and Haslam, of Andover, harrows, horse powers, chain harrows, threshing machines. Maggs & Hindley, their thatch weaving machine. Page & Co., of Bedford, a well arranged display of chaff cutters, ploughs, harrows, &c. Hancock, of Gloucester, shows his pulveriser plough and various dairy implements. Ball, of Rothwell, ploughs, Turnip pulper, carts, poultry feeder, &c.

Messrs. Lawson, of London and Edinburgh, exhibit a series of specimens illustrative of the whole range of agricultural produce — Wheats and other grain, Grasses, roots, single bulbs of a great many distinct sorts of Turnips — specimens illustrative of good natural growth and of gross and excessive growth, very fine Kohl Rabi, several specimens of Swedish Turnip, remarkable both for size and quality. Ashby & Co., of Northampton, chaff cutters, steam engine power chaff cutter, haymakers. Messrs. Wright, seedsmen, Cabbages, Swedes, and Mangels of good size. Messrs. S. E. Ransome, chains and pullies. Lyons, sausage machine. Sawney, of Beverley, harrows, &c. Picksley & Co., of Leigh, their prize-reaper, chaff-cutters, drills, &c. Mr. Smith, of Woolston, drawings of his combined cultivator, drill, and harrow. Weir drainers level on the pendulum principle. Clay, of Wakefield, cultivators, &c. Isaac Spight, of Brigg, his clever Corn horse hoe. Boby & Co., of Bury St. Edmonds, their well-known corn screen, haymakers, &c.—Childs & Owen, churns, &c. Coleman, of Chelmsford, Potato diggers, cultivators, &c. Hunt, of Earls Colne, simple and efficient single row hand drill, winnowing machine, &c.

Messrs. Carter, seedsmen, exhibit Mangels, Swedes, Carrots, all very fine of their kind; Richmond & Chandler, of Salford, chaff-cutters; Fowler, pumps; Chubb & Smith, Fenchurch Street (late Wedlake) fixed engine, corn-crushers, drills, chaff-cutters, &c.; Ferrabee, of Stroud, lawn-mowers, chaff-cutters; Hensman, of Woburn, drills, ploughs, &c.; James, of Cheltenham, liquid manure cart; Patterson, of Beverley, grinding-mill; Amies & Barford, of Peterborough, steaming apparatus, cake-crushers, &c.; Brown, of Uxbridge, rick cloths; Dray, Taylor & Co., a stand containing implements of nearly every description connected with the feeding of animals; Winter, of Paddington, rick-cloths; Warner, of Cripplegate, pumps and syringes; Cockey, of Frome, chaff-cutters, cheese press, vat for warming milk and curd; Dell, of Mark Lane, rick-cloths; Greening & Co., wire netting, chaff-cutters; Cottam & Co., stable fittings.

It is plain that the above, which is little better than a catalogue, and a list from which we have very probably omitted many articles and names, contains all the implements which any farmer is ever likely to use in any department of his business. Power to work them—implements of tillage, of plant cultivation, of carriage, of harvest work, of barn work, of preparation for market and for food, are all present. And they are present in very even proportions. The manufacturer who is at the expense of hiring space and transporting his goods to so admirable a "frontage" as the Baker Street galleries, thronged with a multitude of the agricultural world who have come especially to see the cattle, do not bring merely such implements as are needed at this particular season, they take the opportunity of exhibiting their whole manufacture, and so besides the tools which are used directly in preparing food for the cattle exhibited below, the pulpers, crushers, cutters, steamers for grain and roots and straw, we have a full display of implements of tillage and of harvest work. And on the ground floor such an array of power—8 and 10 and 12-horse engines, as England alone can show.

The following is a list of exhibitors of engines and threshing machines:—

On the ground floor are steam engines exhibited by Messrs. Allchin of Northampton, Smith and Ashby, Brown and May of Devizes, Smith of Thrapstone, Ransome and Sims, Foster of Lincoln, Clayton and Shuttleworth, Aveling of Canterbury, Cowan of Greenwich, Kirby and Barrow of Banbury, Tuxford, Turner, Gardener and McIntosh of New Cross, Barrett and Exall of Reading, Taplin of Lincoln, Roby & Co. of Lincoln, Hornsby of Grantham, Hayes of Stony Stratford, Ruston, Proctor, & Co., Marshall & Son of Gainsborough, and Mr. John Fowler. There were also threshing machines by Nalder of Wantage, Tasker of Andover, Humphreys of Worcester, Hunt of Earls Colne, Garrett & Son, Holmes of Norwich, Gibbons of Wantage, and Clayton & Shuttleworth. The threshing machine of Clayton & Shuttleworth is furnished with the grain elevator of Bruckshaw referred to above.

Mr. Fowler's 12-horse locomotive with clip drum is one of the engines exhibited.

Both the powerful engine and an ordinary threshing engine have been employed on a field near Ealing during the week in ploughing, the one with a four-furrow and the other with a three-furrow plough. The one moving along its headland, and actuating a moving anchorage upon the opposite headland while drawing the plough-frame to and fro between the two—the other stationed outside the field, actuating a double windlass, from both the drums of which rope proceed in parallel lines to snatch blocks just within the hedge, diverging thence to moving anchorages, one at each end of the furrow, and so to the front and hinder drums on the plough in the furrow between the two. The two drums on the stationary windlass are so connected with one another that each in turn pulls upon the other, and the reluctance of the paying out drum is no dead weight to be overcome by the engine, but is a help to the in-draught of its neighbour; the evolution of the one drum thus helps the involution of the other, and the power which keeps the rope tight is not altogether lost. Mr. Fowler's other arrangement for turning the ordinary threshing engine to account in cultivation has also been in town during the week, but has not been exhibited in Baker Street. It consists of a low platform on wheels, carrying a clip drum below it, on which the small 7 or 8-horse power engine mounts, and the clip drum being worked by a strap from this engine—the combination is at once equipped for work in just the style of the combined engine and clip drum which is made at Leeds, of 10 and 12, and 14-horse power.

The Annual Dinner of the Smithfield Club was held on Wednesday at the Freemasons' Tavern. Lord Berners, the present President of the Club, occupied the chair, and was supported by the President elect, Lord Feversham, the Earl of Powis, Lord Tredegar, Mr. Fisher Hobbs, Mr. H. Wilson (formerly member for West Suffolk), Mr. Jonas Webb, Mr. Rigden, Mr. Bennett, Mr. Baker, Mr. Shelton, and other agriculturists.

The Central Farmers' Club met on Monday and discussed the subject of the Law of Settlement. Mr. Trethewy's paper is referred to elsewhere, and will be reported fully next week.

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended December 12; observed by Mr. J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air.				Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
	Max. in Sun.	Max. in Shade.	Min.	Mean.				
	Degs.	Degs.	Degs	Degs.	Degs.	Ins.		
Friday 6 ..	59.0	43 0	28.0	39.5	39.0	..	S.W.	29 53
Saturday 7 ..	49.0	51.0	35.0	42.5	40.0	0.43	W.	29.12
Sunday 8 ..	61.0	50.0	39 0	47.2	42.0	0.07	S.W.	29 37
Monday 9 ..	60 0	50.0	40.0	47.5	42.5	0.27	S.	29.65
Tuesday 10 ..	61.0	52.0	41.5	49 0	43 0	0.16	S.	29.62
Wednesday 11 ..	48.0	50.0	32.0	40 5	44.0	0.08	S.W.	29.90
Thursday 12 ..	67.0	50.0	31.5	46.5	43.5	0.06	S.W.	29.77

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Berkshire Pigs: *Cochon.* We do not know of two varieties of the "Berkshire pig." Most breeders have recognisable herds; but there is not, that we are aware, a recognised small and large variety.

Butter Coming: *Dairy Maid.* If the cream be scalded 24 hours before churning by standing in a tin in boiling water for half an hour, and frequently stirred, and then be made to stand in a temperature of 60°, or thereabouts, till churned butter may be expected to come within the hour. It is however a common complaint that cream from cows which have been long in milk does not readily yield its butter; and that if some cream can be used with it from cows more recently calved the difficulty disappears.

"Flavouring Weathered Hay." *Mr Bowick's* reply to sundry enquiries on this subject will appear in our next.

Poultry: We are in the full lull that always precedes the Christmas market. Small supply and less trade: our next quotations will tell of mammoth Turkeys, good Capons, and those mountains of flesh of marvellous quality that appear only at that time.

Roots in Drain Pipes: *Syrgenstein* writes as follows:—As one of your constant readers, I take the liberty of requesting your advice with regard to an enemy, meeting me in the shape of a weed which has taken possession of a portion of the draining tiles laid down in my land, thereby rendering utterly useless a line of tiles which for two previous years has done excellent service, but through which no water can now find its way. I enclose a specimen of the weed, and should be greatly indebted to you, if, through the medium of your columns, you could suggest any means of preventing this accumulation, and if you would inform me whether it is a disaster of common occurrence. A neighbour of mine talks of giving up draining with tiles in consequence of this nuisance! [The specimen sent appears to us to be a section of a mass of tree rootlets which have entered and filled up the pipes. The only remedy appears to be to avoid going within 40 or 50 feet of a tree. Nothing is commoner than such occurrences in this country. We aim at escaping the annoyance by draining 4 feet deep, and by avoiding the neighbourhood of trees.]

Scientific Terms: *A very Old Subscriber.* Thanks for your memorandum. Surely "coprolite" however is not a case in point—so many years a word in familiar use, everybody now must know its meaning.

Drainage Season.

MR. BAILEY DENTON undertakes the [DR]AINAGE of ESTATES by Commission or Contract. 52, Parliament Street, Westminster, S.W.

DRAINAGE OUTFALLS.—The most expeditious, and inexpensive powers for ... right of making Outfall Drains, Cuttings, &c., ... Lands of adjoining Proprietors, are under the ... ENGLAND DRAINAGE and INCLOSURE ... ACT, and there is no necessity for separate proceedings, as Petitions, Special Act of Parliament, Commissioners ... or Drainage Boards, &c.

Draining, Inclosing, Irrigating, Warping, Road Making, all kind of Land Improvements executed ... Mortgaged, or other Properties; the whole cost ... on the Lands permanently, or it might be made ... any fixed time in one or more sums or by half-yearly ... ments over any term of years, at the option of Proprietors.

Frederick Bacon ...

Offices—Exeter, and 30, Parliament Street, London, S.W.

THE LANDS IMPROVEMENT COMPANY. Incorporated by Special Act of Parliament ... 2, Old Palace Yard, Westminster, S.W.

To Landowners, the Clergy, Estate Agents, ... in England and Wales and in Scotland.

The Directors beg leave to announce that the ... Amendment Bill, 1859, has received the sanction of the ... lature. The Company now advance money, ... amount, for the following works of Agricultural ... the whole outlay and expenses in all cases being ... a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Clearing, Reclamation, Planting, for any ... pose, Engines or Machinery for Drainage or ...
2. Farm Roads, Tramways and Railroads for ... farming purposes.
3. Jetties or Landing places on the sea coast or ... of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, ... other Buildings required for Farm purposes, ... provement of and additions to Farm houses ... buildings for farm purposes.

Landowners assessed under the provisions of ... Parliament, Royal Charter, or Commission, in re... public or general works of drainage or other ... may borrow their proportionate share of the cost ... the same with the expenses on the lands improved.

No investigation of title is required, and the Com... of a strictly financial character do not interfere with ... and execution of the Works, which are controlled ... Government Enclosure Commissioners.

For further information, and for forms of application, to the Honourable William Napier, Manager, 2, Old Palace Yard, Westminster, S.W.

Grains, Carriage Free.

MESSRS. SAMUEL ALLSOPP AND SONS, Burton-on-Trent, beg to inform Farmers ... Stock in general that they have made arrangements ... various Railway Companies communicating with ... the free delivery of Grains at different Stations ... Railways. The great value of Burton Grains ... ing Cattle or Feeding Milch Cows has long ... fact in the neighbourhood of Burton. The ... ference to Beasts fed with Grains, and ... given up the growth of Turnips and feed ... Grains and Chopped Hay exclusively with ... tory results. The usual quantity given is about ... for each Beast. Grains well trod into tubs or ... and covered over with soil, will keep good for ... they are improved by being so kept for eight or ten ...

Messrs. Samuel Allsopp & Sons are prepared to ... engagements for the delivery of Grains, by Railway, Free, during the ensuing season, in quantities of not ... 3 tons or 150 bushels, and they hope that the ... which they can be offered will induce many persons ... them a trial.

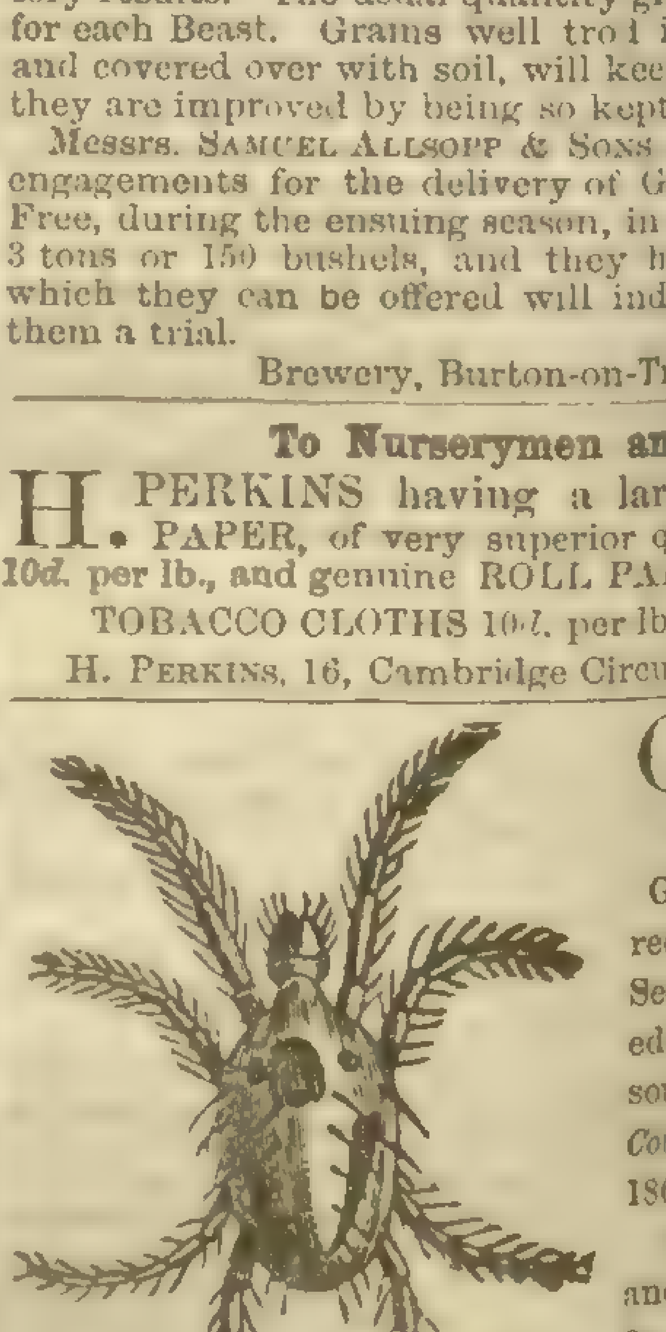
Brewery, Burton-on-Trent.—Dec. 14.

To Nurserymen and Florists.

H. PERKINS having a large stock of T... PAPER, of very superior quality, offers ... 10*d.* per lb., and genuine ROLL PAPER at 1*s.*

TOBACCO CLOTHS 10*d.* per lb., warranted ...

H. Perkins, 16, Cambridge Circus, Hackney Road.



Red Spider Magnified.

ORCHARD TREES ... Winter wash ... GISHURST COMPOUND ... recommended by ... See "Orchard ... edition; and ... son's recommend... *Cottage Gardener* ... 1861.

Sold retail by ... and Seedsmen ... 3*s.*, and 10*s.* 6*d.* ...

Wholesale ... Price's Patent ... Limited.

Magnified Aphides.

NEAL'S PATENT PASTILS.

The following is one of ... 70 Testimonials received ... from gentlemen personally ... to him.

"I beg to bear my testimony ... value of Neal's Pastils, ... cacy in destroying, most ... the Green Fly without ... and at a nominal expense, ... pared with the use of Tobacco ... Tobacco Paper.

"James Sander...

"Nursery Grounds, ..."

Sold by all principal S... Price 1*s.* and 2*s.* per ...

Patentee, J. Neal, ...

THE LONDON MANURE COMPANY
(ESTABLISHED 1840,)
Are now prepared to send out the following MANURES:—
CORN MANURE for AUTUMN SOWING.
SUPERPHOSPHATE of LIME.
DISSOLVED BONES for PASTURES.
CONCENTRATED URATE.
BLOOD MANURE for CORN.
PERUVIAN GUANO, NITRATE of SODA, SULPHATE of AMMONIA, and every other Manure of value.
116, Fenchurch Street, E.C. EDW PURSER, Secretary.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE of LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.
CONCENTRATED TURNIP MANURE, equal in value to the preceding.
Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."
Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

POTTER'S GUANO.—Established Twenty Years. Agents Wanted.
Factory: 28, Clapham Road Place, S.

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861 are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, and BONE SUPERPHOSPHATE of LIME	£6 6
LAWES'S SUPERPHOSPHATE of LIME from BURNT BONE or MINERAL PHOSPHATES ..	5 5
LAWES'S BARLEY, GRASS, and MANGEL MANURES	8 0

These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.
Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures. American and other Cakes at market prices.
Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

RED SPIDER MAGNIFIED.

ORCHARD HOUSE TREES and VINES.
Winter wash with GISHURST COMPOUND, recommended by Mr. Rivers. See "Orchard House," ninth edition; and see Mr. Pearson's recommendation in *Cottage Gardener*, 10th Sept., 1861.
Sold retail by Nurserymen and Seedsmen in boxes 1s., 3s., and 10s. 6d. each.
Wholesale by PRICE'S PATENT CANDLE CO., Limited.

NEAL'S PATENT APHIS PASTILS.

The following is one of upwards of 70 Testimonials received by J. NEAL from gentlemen personally unknown to him.
"I beg to bear my testimony to the value of Neal's Pastils, and their efficacy in destroying most effectually the Green Fly without any trouble, and at a nominal expense, when compared with the use of Tobacco or even Tobacco Paper.
"JAMES SANDERS,
"Nursery Grounds, Abergavenny."

Magnified Aphides.
Sold by all principal Seedsmen.
Price 1s. and 2s. per packet.
Patentee, J. NEAL, Birmingham.

BARR & SUGDEN, 12 KING ST. COVENT GARDEN
SEEDSMEN AND FLORISTS,
OPPOSITE THE GARRICK CLUB.
Will be published shortly, and sent free and post paid (early applications respectfully requested),
BARR & SUGDEN'S GUIDE to the KITCHEN GARDEN,
Showing How, When, and What things should be done to secure a regular supply of the best Vegetables from January to December, with a DESCRIPTIVE LIST of SELECT VEGETABLE SEEDS.
BARR & SUGDEN'S GUIDE to the FLOWER GARDEN,
Showing how a rich display of floral beauty may be maintained from April to November, with a SELECT DESCRIPTIVE LIST of all the best varieties of FLOWER SEEDS in cultivation.
All Orders amounting to 21s. sent Carriage Paid.

GLADIOLI, SEEDLINGS of GANDAVENSIS.

100 in 100 splendid named varieties	£4 4 0	50 in 25 splendid named varieties	£1 10 0
100 in 50 splendid named varieties	3 3 0	25 in 25 splendid named varieties	15s. to 1 1 0
50 in 50 splendid named varieties	2 2 0	12 in 12 splendid named varieties, 6s., 9s., 12s., 18s., &	1 4 0

SURPLUS STOCK of BULBS.
The following quantities, 42s.; Half, 21s.; Quarter, 10s. 6d., *all sound Roots.*

300 DOUBLE and SINGLE TULIPS, in 40 varieties	30 LILIUMS, in varieties
200 BORDER NARCISSUS, in varieties	200 CROCUS, in varieties
50 HYACINTHS, in varieties	100 SCILLAS and HYACINTHS, in varieties
	40 Mixed IRIS

CHRISTMAS PRESENTS.
TYE'S REGISTERED HYACINTH GLASSES and DRAWING-ROOM FLOWER VASES. BARR & SUGDEN, London Agents. These Glasses are ornamented in the highest style of Art, ancient and modern, such as Egyptian, Tuscan, Alhambra, Grecian, also with Architectural and Floral Designs.
The sets "Eugenie," "Victoria," "Imperial," "Empress," and "Nonpareil," form splendid Drawing-room Ornaments, either for growing Hyacinths or for Cut Flowers.
"Eugenie," "Victoria," and "Imperial" sets complete, with Bulbs and Supports, 21s.; "Empress" and "Nonpareil" are 25s. per set.
A PRICED DESCRIPTIVE ILLUSTRATED LIST of the above Glasses sent free on application.
BARR AND SUGDEN, SEEDSMEN, 12, KING STREET, COVENT GARDEN, W.C.

GOOD SEEDS, CARRIAGE FREE.
SUTTON'S
COMPLETE COLLECTIONS OF
KITCHEN GARDEN SEEDS
FOR ONE YEAR'S SUPPLY.
SUTTON'S COMPLETE COLLECTIONS are so assorted as to contain the proper quantities of the best kinds to supply a family for the whole year.
The entire charge for the largest Collection (No. 1) is £3 } for Cash only.
Ditto Ditto Collection (No. 2) is £2 }
And COMPLETE COLLECTIONS for SMALLER GARDENS may be had at 20s. & 10s. 6d.
From Mr. WILLIAM MOOR, Gardener, The Rectory, Stoke.
"I never had (previous to yours last year), a lot of Seeds which have all turned out so satisfactory."
From the Rev. G. E. WALKER, Shareshill, Wolverhampton.
"Mr. Walker cannot but compliment Messrs. SUTTON & SONS on the quality of the Seeds sent last year, as they were by far the best he ever purchased."
From the Rev. JOHN KIRWAN, Withycombe Rectory, Taunton.
"I was so much pleased with the selection of Seeds sent by you, that I recommended two of my friends to take parcels from you."
SUTTON'S CHAMPION SWEDE, 1s. per lb.
Choice MANGEL WURZEL, 8d. per lb. if ordered immediately.
NATURAL GRASS SEEDS for PERMANENT PASTURE, 24s. to 32s. per acre.
SUTTON & SONS, SEED GROWERS AND MERCHANTS, READING, BERKS.

GREEN'S PATENT LAWN MOWERS have proved to be the best, and have carried off every prize that has been given in all cases of competition. They are noiseless in working, self-sharpening, self-cleaning, simple in construction, and easier to work and less liable to get out of order than any other Lawn Mowers extant.
Illustrated Price Lists may be had of THOMAS GREEN, Smithfield Iron Works, Leeds; or 2, Victoria Street, Holborn Hill, London, E.C.
N.B. Old Machines repaired and made as good as new.

HENRY J. MORTON AND CO.,
2, Basinghall Buildings, Leeds.
Galvanised Iron Water Cistern
for Cottage Houses, &c., to contain 50 gallons, 26s.; 80 gallons, 31s. each; and 140 gallons, 37s., and fitted with tap, keeping the water perfectly sweet and clean; will not rust or corrode. Cisterns of all sizes.
Galvanised Iron Pumps
for Liquid Manure or Domestic Use, 3 inches diameter, 6 and 32s. 6d. each; Tail Pipe for same at from 10d. per foot.
Galvanised Iron Swing Water Barrows
for Garden or Farm use, containing about 20 gallons, entire formed of iron, 35s. 0d. each.

Wind Power.
J. R. PEILL, 17, New Park Street, Southwark, S.E., begs to inform intending purchasers that he has now increased facilities for Manufacturing the Patent WIND ENGINES for Pumping, Grinding, Chaffcutting, Pulping, &c.
Prospectuses and all information may be obtained by enclosing one postage stamp, and a Wind Engine in full work may be inspected on the Premises daily.

Garden Border Edging Tiles.
F. AND G. ROSHER, CEMENT, BRICK, and TILE MERCHANTS, beg to invite attention to their varied Stock of Ornamental GARDEN BORDER-EDGING TILES in Terra Cotta, Terro-Metallic ware, and Red ware. They present advantages over Box or Grass-edging, in that they afford no harbour for slugs, &c., take up less room, and once laid require no further attention.
They may be had of various patterns at F. & G. R.'s Premises, Ward's Wharf, Upper Ground Street, Blackfriars, S.; and Kingsland Road Wharf, near the Canal Bridge, London, N.E.
N.B. Sketches of Patterns sent by post on application. Garden Vases and Ornamental Flower Boxes for Windows and Balconies in stock.

ORNAMENTAL PAVING TILES for Conservatories, Halls, Corridors, Balconies, &c., as cheap and durable as Stone, in blue, red, and buff colours, and capable of forming a variety of designs.
Also WHITE GLAZED TILES, for Lining Walls of Baths, Dairies, Larders, Kitchen-ranges, &c. Grooved Terro-metallic and other Stable Paving Bricks of great durability, Clinkers, Red and White Wall-Copings, Glazed Drain Pipes, &c. To be obtained of F. & G. ROSHER, at their Premises as above.

E. T. ARCHER'S "FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, &c.
PROTECTION from the COLD WINDS & MORNING FROST.
"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.
Two yards wide .. .. 1s. 6d. per yard run.
Four yards wide .. .. 3s. per yard.
An improved make, 3 yards wide, 2s. 6d. per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard run.
ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.
"It is much cheaper than Mats as a covering."

Hardy Japanese Plants, New Roses, &c.

JOHN STANDISH has great pleasure in submitting the above to the consideration of his friends and the public in general, far exceeding in interest any that he has ever had the opportunity of sending out at any one time.

For a DESCRIPTIVE LIST of NEW FERNS, HARDY JAPANESE PLANTS, NEW ROSES, &c., see *Gardeners' Chronicle* for the first Saturday in every month.

Besides the above J. S. has a fine stock of CONIFEROUS PLANTS, HARDY SHRUBS and TREES, and a very large stock of VINES, which he can offer at reasonable prices, CATALOGUES of which will be shortly ready for distribution.

The Royal Nursery, Bagshot, Surrey.

Superb Dwarf Roses in Pots,

Adapted for Forcing or for Exhibition.

WM. WOOD and SON beg leave to offer a very first-rate Collection of TEA, SCENTED and BOURBON ROSES, grown in 6-inch pots, fine half-specimen Plants, at 30*s.* to 36*s.* per dozen.

Early orders are solicited to insure the best Plants.

Woodlands Nursery, Maresfield, near Uckfield, Sussex.

New Rose Catalogue for 1861-62.

Woodlands Nursery, Maresfield, near Uckfield, Sussex.

WM. WOOD and SON have the honour to announce that their CATALOGUES of ROSES and GENERAL NURSERY STOCK are now ready for distribution.

It is generally admitted that the county of Sussex has suffered less from the effects of last winter's frost than any other county in England, in consequence of which W. W. & Son have to offer a remarkably fine stock of Roses and Nursery Stock in general.

Standard and Dwarf Roses.

JOHN CRANSTON has no hesitation in stating that he holds the largest stock of STANDARD ROSES in the kingdom, and plants of the finest growth possible. These he is now offering at the following prices:—

STANDARDS, finest Hybrid Perpetual and Bourbon, 30*s.* per dozen.

HALF STANDARDS, do., 24*s.* to 30*s.* do.

STANDARD TEA SCENTED, the best and most hardy sorts, 36*s.* to 42*s.* do.

DWARF HYBRID PERPETUAL, strong on Manetti Stock, 15*s.* to 24*s.* do.

DWARF HYBRID PERPETUAL, own roots, 12*s.* to 18*s.* do.

DWARF TEA SCENTED, 18*s.* to 24*s.* do.

PILLAR ROSES, extra strong on Manetti Stock, 18*s.* to 24*s.* do.

NEW ROSES of 1860 and 1861, 3*s* 6*d.* to 5*s.* each.

A DESCRIPTIVE LIST will be forwarded free on application.

Nurseries, King's Acre, near Hereford.

Mitchell's Unrivalled Collection of Roses.

The largest Stock and the best Plants in England, justly pronounced both by English and Foreign Growers.

JAMES MITCHELL has the honour of informing his kind patrons that he has succeeded in obtaining the FIRST PRIZES at the principal Shows throughout the season, viz.:—

July 10.—The Grand National Rose Show, Royal Horticultural Society's Garden, Kensington Gore, 96 varieties, 3 trusses of each, First Prize.

September 11.—Forty-eight varieties, 3 trusses of each, First Prize.

July 3.—The Royal Botanic Society, Regent's Park, London, 50 varieties, 3 trusses of each, First Prize.

July 6.—The Great Rose Show, Crystal Palace, 96 varieties, 1 truss of each, First Prize.

June 19.—Brighton Horticultural Society, 50 varieties, 3 trusses of each, First Prize.

September 18.—Fifty varieties, 3 trusses of each, First Prize.

August 28.—Lewes Horticultural Society, 36 varieties, 3 trusses of each, First Prize.

J. M. respectfully informs the Nobility and Gentry he can supply the best perpetual BLOOMING ROSES in Standards, Half-Standards, and Dwarfs, healthy good rooted plants.

Standards, 30*s.* per dozen.
Half ditto, from 24*s.* to 30*s.* per dozen.
Dwarfs, from 18*s.*, 24*s.*, to 30*s.* per dozen.
New Varieties of 1861, 42*s.* per dozen.

Pilt Down Nurseries, Maresfield, Sussex.

N.B. These Nurseries are 2½ miles from the Uckfield Station, on the London, Brighton, and South Coast Railway.

American Plants, &c.

MESSRS. WATERER and GODFREY'S CATALOGUE for the present season is now ready, and may be had on application. It describes fully all RHODODENDRONS worth growing, and contains a List of AZALEAS, HARDY HEATHS, and other American Plants, as well as a summary of the General Stock of the most extensive Nurseries in England.

The Catalogue may also be had at Mr. May's, 1, Wellington Street, Strand, W.C.

Knap Hill Nursery, near Working, Surrey.

Russell's Pyramidal Primulas.

GEO. CLARKE has much pleasure in calling attention to the above magnificent strain, new Seed of which is now ready in packets, price 2*s.* 6*d.*

Those who are desirous of satisfying themselves of the peculiar excellence of these PRIMULAS, are invited to see them here in bloom now or any time during the winter months.

Fine young plants for spring blooming, 12*s.* per dozen.

Nursery, Streatham Place, Brixton Hill, near London, S.

Can be Seen at Sunningdale Nursery, Sunningdale Station, South-Western Railway.

CHARLES NOBLE invites inspection, and would remind all interested, that his RHODODENDRONS have taken First Prizes at the opening Show of the Royal Horticultural Society, and every other show at which they have been exhibited during the last two years.

RHODODENDRONS for forcing; KALMIAS for forcing; and a magnificent stock of all the finest kinds of Rhododendrons in the world. CONIFERS and Hardy EVERGREENS by the 100 or 1000. ROSES and a General Nursery Stock well worthy the inspection of intending Planters or Nurserymen.

Hardy Scarlet Rhododendrons and other American Plants.

JOHN WATERER has the pleasure to announce that his ANNUAL CATALOGUE of the above popular plants, as exhibited in the Royal Botanic Gardens, Regent's Park, London, is now published, and will be forwarded on application. Intending planters and amateurs desirous of blending colours are invited to possess a copy, as faithful descriptions of all the RHODODENDRONS are given.

The Catalogue contains a selection of the best and really Hardy CONIFERS, with heights and prices, the whole of which having been removed the past spring are in a capital state for transplanting. Also EVERGREENS and ORNAMENTAL SHRUBS and TREES of the leading kinds.

The American Nursery, Bagshot, Surrey, near the Sunningdale Station, South Western Railway; also to be had of Mr. John Kernan, Seedsman, 4, Great Russell Street, Covent Garden.

Fruit Trees.

WM. PAUL (Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, London, N.

Sea Kail, Forcing and Other.

WM. PAUL (Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, London, N.

Roses.

WM. PAUL (Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, London, N.

Ornamental Trees and Shrubs.

WM. PAUL (Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, London, N.

Hollyhocks.

WM. PAUL (Successor to the late A. Paul), Cheshunt Nurseries, Waltham Cross, London, N.

Fruit Trees.

JAMES GARAWAY and CO. call attention to their stock of the above, comprising

APRICOTS NECTARINES PEACHES	Standard and Dwarf-trained	APPLES CHERRIES PEARS PLUMS	Dwarf-trained, Standard, and Dwarf-quarter.

All of first-rate quality and in good condition.

The STANDARD PEARS are unusually fine, and will be sold at a very low rate to purchasers of quantities.

CATALOGUES and prices free by post.

James Garaway & Co., Durdham Down Nurseries, Bristol.

Seedling Thorn Quicks.

L. T. DAVIS begs to offer Five Millions of 2-years at extremely low prices, which, with Samples, can be had on application. Being grown in light gravelly soil they are well furnished with healthy roots, and would answer well for transplanting.

Ogle's Grove Nursery, Hillsborough, near Belfast.

Quick.

H. and F. SHARPE are prepared to offer of the finest quality,

Strong 2-years' Transplanted QUICK, 3 feet high,
Strong 2-years' Seedling do., 2 feet high,

at very moderate prices, which may be had, with samples, on application.

Seed Growing Establishment, Wisbeach.

500,000 QUICKS, 2 years' Seedling, 18 to 24 inches, and 24 to 30 inches, and 2 years' transplanted, 2½ to 3 feet.

GOOSEBERRIES and CURRANTS, leading kinds, 70*s.* to 80*s.* per 1000.

EVERGREEN PRIVET, from 2 to 5 feet, 20*s.* to 30*s.* per 1000.

The above are all strong and well rooted.

For prices and samples apply to J. & W. Cocks, Donington Nurseries, near Spalding.—Dec. 21.

Four Millions of Transplanted Quicks.

GEORGE CHIVAS offers the above, Two Millions of which are suitable for Railways, and Two Millions varying from strong to exceeding strong—a portion having been twice Transplanted. A bale containing 100 of each, five sizes, forwarded on receipt of 15*s.*; orders for 10,000 delivered free at any railway station.

Also Half a Million of Transplanted SPRUCE, and one of the largest general Nursery Stocks in the North-Western counties.

Chester, Dec. 21.

WANTED IMMEDIATELY—

1000 Mahonia aquifolia	150 7 or 8 ft. Standard strong Horse Chesnuts
300 Mountain Ash, 3 to 4 ft.	12 Aucuba japonica
100 English Elm, 6 or 7 ft.	4 Cedar Lebanon, 5 to 6 ft.
200 Hornbeam, 3 to 4 ft.	12 Savins
500 Larch, 3 to 4 ft.	12 Phillyreas
500 Spruce, 3 ft.	1000 Sweet Briars
4 6 ft. Standard Almonds	50 White Broom
24 Ribes sanguinea	2000 Hazel, 1½ to 2 ft. high

Apply, with price, to M. Warde, Clopton House, Stratford-on-Avon.

Important to Planters.

LARGE TREES for SALE, cheap, of bushy Yews, Laurels, Scotch Firs, Spruce Do. for Christmas Trees, handsome; Portugal Laurels, Phillyreas, Lilacs, Hornbeam, and Beech for hedges; large green Alders, Oaks, Sumachs, Standard and Trained Fruit Trees, Deciduous Flowering Shrubs, 50 sorts; fine large Ivies, Standard Damsons, and Clarke's new Seedling Bullace, highly recommended for size and flavour; large Austriaca Firs, &c.

Apply to Chas. Clarke, Nurseryman, 179, Windmill Street, Gravesend, or Nursery Grounds, Windmill Hill.

Forest Trees and Coniferæ.

ALEXANDER PONTEY, of the Plymouth Nursery and Seed Establishment, begs to inform gentlemen intending to Plant and the Trade generally that his Nursery abounds with several hundred thousand TREES, which have been frequently transplanted to insure their growth.

A. P. also offers an immense stock of the finest and most useful CONIFERÆ for ornament and shelter, delivered free on any of the North Devon, South Devon, or Cornish Lines of Rail.

CATALOGUES with prices to be had on application.

ALEXANDER LAING begs most respectfully to submit to Gentlemen, Nurserymen, and Planters the following, all in excellent condition:—

500,000 OAKS, transplanted, varying from 1½ to 4 feet.
100,000 SPRUCE, 1½, 2½, to 3 feet.
100,000 LARCH, ditto, ditto.

Prices on application. Large buyers liberally dealt with.

A. Laing would also respectfully call attention to the undermentioned:—

THUJA GIGANTEA, in pots, cuttings, 9*s.*, 12*s.*, and 18*s.* per dozen.

LIGUSTRUM JAPONICUM, in pots, 6*s.* per doz.

THUJOPSIS BOREALIS, in pots, 6*s.*, 18*s.*, and 24*s.* per doz.

TEA and BOURBON ROSES; of Teas, 40 of the choicest varieties. 12*s.*, 18*s.*, and 24*s.* per doz.

SWEET BAYS, 1½ to 2 feet, in pots, 9*s.* per doz.

All the leading varieties of VARIEGATED GERANIUMS for Ribbon planting. Own selection, 4*s.* to 6*s.* per doz.

Fancy Show and French ditto, 6*s.* and 9*s.* per dozen.

A. Laing can also supply 12 of the newest CINERARIAS for 9*s.*, package included:—

PHILLYREA ANGUSTIFOLIA, in pots, 9*s.* per dozen, bushy stuff.

With a choice collection of Stove and Greenhouse Plants.

Reference or remittance from unknown correspondents. The above are all guaranteed to be first rate healthy plants, well furnished.

East Riding Nursery and Seed Establishment, Beverley, Yorkshire.—Dec. 21.

Old Cheshunt Nurseries, Herts.

Gladiolus.

PAUL and SON'S fine Collection of this super[b] Flower, of which the Bulbs are now ready.

Hollyhocks.

PAUL and SON'S fine Collection of this noble Flower; fine Plants of which are now ready. Also SEED in packets of 12 fine distinct sorts at 5*s.* each, and mixed seed in 2*s.* 6*d.* and 1*s.* packets.

Roses.

PAUL and SON'S splendid Collection of Dwarf Plants in Pots, of all the finest new kinds, with extra size plants for Forcing.

Vines.

FINE PLANTS for Fruiting in Pots or planting out.

CATALOGUES of each may be had on application by post.

THE TRADE will be provided with special prices for the following, on application to Messrs. E. G. Henderson & Son:—

BUSH VEGETABLE MARROW.
CALENDULA OFFICINALIS SUPERBA.
HENDERSON'S PERFECTION SWEET WILLIAM.

See descriptions of the above in the *Gardeners' Chronicle*, page 1087, December 14.

COBŒA SCANDENS. SPERGULA PILIFERA.
TROPÆOLUM PEREGRINUM. T. PENTAPHYLLUM.
STOCK, Giant Cape Scarlet.
,, large biennial Scarlet Brompton.
,, Scarlet Intermediate.
SWEET WILLIAM, double flowered.
,, Auricula-eyed.
LISIANTHUS RUSSELLIANUS.
LILIUM GIGANTEUM. CLIANTHUS DAMPIERI.
CYCLAMEN PERSICUM. C. ATKINSI.
,, COUM CARNEUM.
HUMEA ELEGANS.
CELOSIA PYRAMIDALIS (crimson).

Wellington Road, St. John's Wood, N.

Superb Double Hollyhocks.

Saffron Walden Nursery.

WILLIAM CHATER'S 15th ANNUAL DESCRIPTIVE and NEWLY CLASSIFIED LIST is now ready, and will be forwarded to any address on receipt of one postage stamp.

William Chater, Nurseryman and Seedsman, Saffron Walden, Essex.

Wholesale Catalogue.

GEORGE JACKMAN and SON'S PRICED and DESCRIPTIVE CATALOGUE for 1861 and SPRING 1862, comprising Fruit Trees of all the leading kinds, new and selected Roses, fine varieties of American Plants, Choice and Rare Conifers, Evergreen and Deciduous Trees and Shrubs, and a fine Stock of Transplanted Forest Trees, &c., can be had free on application.

Woking Nursery, Surrey.

Dutch and other Bulbs.

ROBERT PARKER begs to inform his friends and patrons that his PRICED and DESCRIPTIVE CATALOGUE of the above, containing selections of the finest varieties in cultivation, is now ready, and will be forwarded post free on application.

Exotic Nursery, Tooting, Surrey, S.

Superb Balsams.

F. and A. SMITH are now sending out Seed of their Superior BALSAMS in collections of

9 Colours, separate	2*s.* 6*d.* each.
The same, mixed	2 0 ,,
Half the quantity	1 0 ,,

The above are in 18 distinct and bright colours, of carefully selected Seed, from the most double varieties.

Dulwich, Surrey.

New Hybrid Greenflesh Melon—Archer's Favorite.

T. KEMPSTER has succeeded in raising a first-class NEW GREENFLESH MELON, for which he has been awarded a Certificate in July 1860, and a Silver Medal in July 1861, both at the Royal Botanic Gardens, Regent's Park. It is highly commended by all who have seen it, being very thick in flesh, thin in skin, and rich flavour. The plant is also a free setter and good grower.

T. K. now offers the Seed in sealed packets at 2*s.* 6*d.* per packet of six seeds. When three are ordered four will be sent. Stamps or Post Office Orders must accompany the Order, payable at Lee. The quantity being limited, early orders will secure seed.

Apply to Thomas Kempster, 14, Dacre Place, Lee, Kent, S.E.

Hurst House Seedling Pine (Fairrie's Queen).

B. S. WILLIAMS begs to announce that he has to offer a large stock of this new SEEDLING PINE. Habit dwarf and compact; fruit large, handsome shape, very juicy, and well flavoured. Price 15*s.*, 21*s.*, and 42*s.* each.

Also some fine plants of SMOOTH CAYENNE PINES in Stock.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, London, N.

New General Catalogue for 1861–1862.

B. S. WILLIAMS begs to inform his friends, patrons, and the public in general, that his NEW PRICED and DESCRIPTIVE CATALOGUE of Exotic Orchids, Ferns, Lycopods, Miscellaneous Stove and Greenhouse Plants, Variegated and Ornamental Foliaged Plants, Azaleas, Rhododendrons, Roses, Fuchsias, Geraniums, Hardy Variegated Plants, Herbaceous and Alpine Plants, Conifers, Fruit Trees, Shrubs, &c., is now published and will be forwarded post free on application.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, London, N.

Gladiolus Gandavensis and Varieties.

B. S. WILLIAMS begs to invite attention to his choice collection of this beautiful class of BULBS, which is beyond doubt the handsomest autumnal ornament to the garden. Having flowered many thousands this past season, great attention has been bestowed on the selection, and none but those of the best quality are offered for sale.

Collection of 24 Splendid Varieties, one root of each, for 21*s.*

Collection of choice Named Varieties, 6*s.*, 8*s.*, and 10*s.* per doz.

A PRICED and DESCRIPTIVE LIST on application.

A Fine Assortment of HYACINTHS, NARCISSUS, TULIPS, and other Bulbous Roots.

Paradise Nursery, Seven Sisters and Hornsey Roads, Holloway, London, N.

Royal Exotic Nursery, Chelsea, S.W.

JAMES VEITCH, JUN., respectfully announces that HIS CATALOGUE of KITCHEN GARDEN and FLOWER SEEDS for 1861, with a List of Implements and other Garden requisites, is now published, and will be forwarded post free on application.

J. V., Jun., devoting his personal attention to this department of his business, can warrant his SEEDS TRUE TO NAME, and of the MOST GENUINE description.—Dec. 21.

The "Student" Parsnip.

MESSRS. SUTTON AND SONS have the honour of offering to the public the Stock of SEED of this delicious and finely formed Parsnip, which was ennobled from the wild Parsnip by Professor Buckman, F.L.S., &c., of the Royal Agricultural College, Cirencester, who kindly entrusted to them the Seed, originally produced by himself, from which the present stock has been raised by Messrs. SUTTON & SONS, and who having sown it in their Trial Grounds have found it to be superior to any of the other sorts sown by the side of it.

This is exclusively in their possession; and may be had in Packets of 1s. each, containing 1000 Seeds (post free), direct from SUTTON & SONS, or through the undermentioned Firms who have ordered a supply. Additional names will be published in future Advertisements:—

Messrs. Hurst & M'Mullen, Leadenhall Street, London.
" Beck, Henderson, & Co., Adelphi, London.
" Noble, Cooper, & Co., Fleet Street, London.
" James Carter & Co., High Holborn, London.
" Wheeler & Son, Gloucester.
" Barr & Sugden, King Street, London, W.C.
" Butler & McCulloch, Covent Garden, London, W.C.
Mr. John Bell, Exchange Street, Norwich.
" Charles Turner, Royal Nursery, Slough.
" H. Brown, 4, Commutation Row, Liverpool.
" Jno. Perkins, 52, Market Square, Northampton.
Royal Berkshire Seed Establishment, Reading.

The Gardeners' Chronicle.

SATURDAY, DECEMBER 21, 1861.

IT is not a "mockery of woe" that overspreads the nation; it is no pretended sorrow that the last few days have manifested; the grief for the loss of the PRINCE CONSORT is as deep and sincere as it is universal. And the more the sad event is thought upon the stronger grows the conviction that England has experienced no similar bereavement. Prince ALBERT was not indeed a mighty warrior; nor did he enter the political arena; it was only in the cultivation of peaceful arts that his refined taste and gentle nature found a congenial field.

To Horticulture the illustrious PRINCE was the same zealous friend that he was to all that constitutes the grace of civilised life. The part which HIS ROYAL HIGHNESS has taken for some years in the progress of the Royal Horticultural Society is well known. It is no secret that the revival of the Society was essentially His work, and that the acquisition of the new Garden at South Kensington, a matter of vital importance, would never have been effected in the absence of His powerful support. What is not so well known is the large personal share that He took in its formation. With Prince ALBERT the Presidency was far from being a name and nothing more. He was frequently present at the meetings of Councils and Committees, guiding their deliberations, taking part in their discussions, and giving them the benefit of his acute understanding and admirable business habits. Nor was the attention of HIS ROYAL HIGHNESS confined to general subjects; on the contrary, the PRINCE felt that the progress of great things is essentially controlled by minute and almost inappreciable arrangements, and to those He would devote his thoughts with that patient and sagacious industry which was among the distinguishing features of his character.

It is no exaggeration to say that the Garden at South Kensington was itself the conception of this great PRINCE, for, although aided by the counsels of such men as FOWKE, SIDNEY SMIRKE, and NESFIELD, not a line was drawn nor a point determined on until it had received His approbation. So late as the sixth of the present month, HIS ROYAL HIGHNESS had proposed to take the chair at a meeting of the Council of the Royal Horticultural Society,[*] and was only prevented coming from Windsor for the purpose by the approach of that fatal disorder which in a few hours deprived our Gracious SOVEREIGN of an affectionate Consort and enlightened adviser, and ourselves of one of the wisest Princes that have watched over the interests of the British Empire.

The Great International Exhibition of next year will seriously feel the loss of so earnest a protector; and had it been possible to foresee the decree of Providence it would doubtless have been postponed. That, however, is now impossible. Great engagements have been entered into all over the world, and ships are already bearing hither their precious freights. The work must therefore go forward. This would certainly have been the command of the lamented PRINCE; such indeed was his decision on a similar melancholy occasion. His was too noble a nature to permit the interests of HER MAJESTY's affectionate subjects to be sacrificed to any personal considerations whatsoever.

A GREAT deal is frequently said about what is called ACCLIMATISATION, or in plain words accustoming plants to new conditions of moisture and temperature or other outward conditions which affect their growth; but comparatively little has been accomplished. A peculiarly hardy seedling may now and then be picked out from a multitude, and from this a race may proceed which is better able to resist the change of circumstances than the original stock; and in some cases, as for example in the Vine, though plants introduced into the West Indian Islands immediately from France do not succeed, those from Madeira or the Canaries bring their fruit to perfection; but the tendency in general is rather in the direction of deterioration than of improvement. It is quite certain that where plants bear seed in their new home, their original properties are not always preserved. We had some time since a large collection of different varieties of Kidney Bean, both dwarfs and climbers, from Hungary, many of which were remarkable for the beauty of their seeds. In scarcely a single instance has this beauty been preserved, and in some the colour is very much changed, though there is no reason to suspect any crossing.[†] The effect the first year was visible enough, and the deterioration of colour has been increasing with each successive year. Phygelius capensis when first introduced into this country was a pretty bedding plant, but the home-grown seedlings have mostly a washy tint, with but small pretensions to beauty. In some cases a weak constitution or susceptibility of disease is perceptible in seedlings raised from seed ripened in an ungenial climate. A few years since a quantity of seeds of the common Pyracantha were received by the Horticultural Society from Russia, and every plant raised from them without exception was attacked by the little dark discoloured Cladosporium which has of late years been so destructive to Pears, though not another plant in the neighbourhood showed the slightest symptoms of the parasite.

A most extraordinary case of bad constitution in home-produced seedlings of Abies nobilis has lately been sent to us by Mr. MURRAY from the same institution. A considerable portion of plants raised from home-ripened seed are affected by a peculiar chlorosis, at first confined to the tips of the leaves, but gradually increasing downwards and ultimately causing death, when they are attacked by a minute species of Phoma, which is, however, an aftergrowth, and not the primary cause of evil. The condition of the buds indeed apparently resembles that which occurs in the common Silver Fir, when affected by the Fungus that causes the Witches' Besoms (Hexen-besen) which are so common in the German forests, and which occasionally make their appearance in this country. But there is no identity of cause, nor, as in that case, does the chlorosis extend when the buds expand through the whole length of the leaf.

"This disease," says Mr. MURRAY, "is clearly congenital, for it is found only in plants produced from home-grown seeds, although placed under exactly the same conditions as plants raised from seed of foreign growth. It is not confined to one nursery or district, Elvaston, Woking, Exeter, &c., all suffer in the same way when home-grown seed is used. My information is that two in every five plants are attacked, but from a plant which has been sent to me as an example of one not attacked, showing on careful examination decided symptoms of the same ailment, I should say that the proportion must be greater. The plant does not appear to me to be a hybrid, as some have suggested—a cross, for example, between the common Silver (pectinata) and nobilis."

The case appears to us decidedly to be one of constitutional weakness arising from propagation in a climate, where the conditions are such as are not favourable to perfect development, and it is probable that seedlings from these diseased plants, should they ever have vigour enough to bear fruit, will have the evil in an aggravated form. We have ourselves proved in the case of annuals that where the parent plant is chlorotic, the produce is liable to a similar condition year after year, and there is no reason why the same condition should not hold good in plants of longer duration. It is evident that in such a case there is no remedy. Original weakness of constitution may admit under scientific treatment of palliation, but a sound and healthy stock will scarcely ever be derived, except possibly by crossing, from one which is originally weak or deficient in the conditions essential to health. *M. J. B.*

—— WE have received from the gardens at Dynevor Castle a very curious FERN SPORT belonging to the sportive family of Gymnogramma. This sport was we learn raised amongst a batch of *Gymnogramma lanata*, in the course of last year, and proves to be a plant of very graceful habit, and constant to the features it has assumed. It may be distinguished by the name of G. LANATA MONSTROSA, since it has a very abnormal aspect. The specimen before us is about 2 feet long, and a foot or more across, with the rachis forked towards the end, and having the pinnæ rather distant and slender. The pinnules widely separated along the base of the pinnæ, irregular in size and form, some being three-fourths, others only one-fourth of an inch long, unequally oblong, with irregular lobes and teeth; some of the pinnules being also evidently depauperated. The pinnules towards the end of the pinnæ become more crowded, and at length confluent into a bluntish oblong toothed apex. The stipes is chestnut-coloured, sparingly furnished with cobwebby wool, and whilst the upper surface of the fronds is smooth, the under surface is much more sparingly clothed with woolly hairs than in the normal form of the species.

Here is some evidence, at least, how the many varieties of our British Ferns are made; for here we have produced under cultivation a sport from the spore of an exotic species, bearing an exact analogy to many of the sports observed in a wild state amongst our native species. Many such cases are indeed known, but here is a fresh illustration of the fact. The inference is plain, that the legion of native varieties, sports, forms, or monsters, call them what we may, has originally existed in the form of single sported plants which have sprung direct from the parent spore, and have subsequently multiplied themselves—for though some sports are met with as solitary plants, yet in other cases colonies more or less extensive are found. The most curious circumstance is that these "monsters," as some will call them, are so many of them capable of multiplication from their own spores to an extent which seems altogether incredible.

—— The discussions which now and then take place as to the distinctness of certain varieties of the white MUSCAT GRAPE, have made it evident that there are in this question some points to be settled by pomologists when the materials are forthcoming. The question has not been overlooked, and we may hope in due time to see the evidence necessary to its settlement brought forward in an available form, a Vinery having been set apart at Chiswick for the purpose of growing all the obtainable reputed varieties known in cultivation. In the mean time other evidence bearing on the question will no doubt be accumulating, and we are glad to be able to refer to that furnished by Mr. D. THOMSON, of Archerfield, at some of the late fruit meetings at South Kensington. In October last Mr. THOMSON sent an *Early Muscat*, grown along with other varieties of this class of Grapes planted in 1859, which early sort was stated to ripen fully six weeks before the ordinary Muscat of Alexandria, and three weeks before the Bowood Muscat and others. A month later four of these varieties, grown together, and therefore fairly comparable, were shown together, the four sorts produce being the *Early Muscat*, the *Bowood Muscat*, the *Tynningham Muscat*, and the *Muscat of Alexandria*.

In respect to earliness it was found that the so-called

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[*] The following letter from Sir CHARLES PHIPPS to the Assistant Secretary of the Society will now be read with a melancholy interest:—

"Windsor Castle, Dec. 2, 1861.

"I am sorry to say that HIS ROYAL HIGHNESS is very unwell, and I do not foresee much probability of his being able to go to London by Friday next; indeed, my own impression is that his medical advisers would consider it very imprudent in him to attempt it. I know that HIS ROYAL HIGHNESS will be very sorry to give up his intention of being present but I think it only right to tell you that my own impression is that it is out of the question."

[†] It is sometimes said that the colour of Kidney Bean seed is affected the *first* year by impregnation with strange pollen, but we believe that Mr. DARWIN has not succeeded in producing any notable effect from the current year's crossing.

Early Muscat was much the most advanced in ripeness at the time it was shown, and had every appearance of having been ripe, as stated by Mr. Thomson, six weeks before the Muscat of Alexandria, the berries having at the later date become quite brown and shrivelled, while those of the other sorts were plump and full-coloured. Next to this in respect to earliness stood the Bowood Muscat, and then following it, the Tynningham Muscat, and last of all the Muscat of Alexandria.

As to their appearance, Mr. Thomson's Early Muscat had a long tapering bunch, as in the Muscat of Alexandria, with large oval berries of a fine amber colour, with firm flesh, and a rich piquant flavour marked by a delicate Muscat aroma. It was so highly approved that it was pronounced to be a very valuable early Muscat Grape, quite distinct from every other variety. Then the Bowood Muscat was found quite different from the rest, having a short, broad-shouldered, thickly-set, compact bunch. The Tynningham Muscat had a long loose tapering bunch, and appeared to be distinct from the others; while the bunches of the Muscat of Alexandria were long and tapered, but closely set.

Such was the evidence afforded by this exhibition from Archerfield, and it seems to point to the real distinctness of some of the kinds which are reputed to be different. How many of these distinct sorts there may be, and what names are synonymous, are questions which the Fruit Committee of the Royal Horticultural Society will no doubt solve for us at the earliest moment possible.

—— Amongst the Annuals collected together last summer in the garden of the Royal Horticultural Society, at Chiswick, we noticed a new and distinct species of Zinnia, which may be called Zinnia aurea. It was said to be a Mexican plant, and had been received as a Sanvitalia from that country. Its distinguishing features were its dwarf bushy habit of growth, its hairy branches, its sessile ovate-lanceolate leaves, and its orange-yellow flower-heads measuring about an inch and a half across. It has certainly the merit of distinctness, and if it will bloom in sufficient abundance, its dwarf branching habit will recommend it as a border annual. We mention the plant in order to direct towards it the attention of the growers of annuals. The Chiswick plants did not come into flower till late in the season, and were not very favourably placed, so that the true character of the plant was hardly developed. The plants formed individually spreading tufted masses of about a foot in height, with the stems branching freely in a dichotomous manner, and the branchlets all terminated by one of the bright-coloured flower-heads, in which the ray florets were crowded, broadly obovate, and of a rich orange yellow, the disk with its dark-tipped pointed scales being of a deeper orange, and somewhat prominent.

—— The Champion Hamburgh Muscat Grape, a seedling variety obtained by Mr. Melville, gardener to the Earl of Rosebery, at Dalmeney Park, Linlithgowshire, is a new Grape raised from what Mr. Melville calls the Champion Hamburgh (but which, it seems probable, may be Mill Hill Hamburgh), fertilised by the Cannon Hall Muscat. When first presented to the notice of the Fruit Committee of the Royal Horticultural Society, in the course of last summer, it was found to be a richly flavoured Grape, with firm, sweet, juicy flesh, and having a marked Muscat aroma. The clusters were large and well set, resembling those of Mill Hill Hamburgh; the berries were of the rounded oblate hammered form seen in several of the varieties of the Hamburgh class, and were of large size, with a grizzly red colour. When subsequently shown the berries had acquired throughout an uniform dull red colour, the flesh being still firm, rich, and juicy, with a distinct Muscat aroma. The impression produced on the first appearance of this novelty, that it was likely to prove a desirable Grape, was fully confirmed when it was again brought forward. It is moreover perfectly new and distinct in character, and may therefore be considered an acquisition.

New Plants.

242. Pinus Koraiensis, *Siebold, Fl. Japon.* t. 116. This new Pine is a relative of Pinus Cembra, from which it differs in having shorter glaucous leaves, and large oblong cones with wrinkled leathery scales, the points of which are turned back. The seeds are large, wingless, and somewhat like those of the Stone Pine. It has been sent home by Mr. John Veitch, and is now growing in the nursery at Exeter.

Siebold, who alone had previously seen it, says that it was probably brought from the neighbouring Corea, and that it is only seen in Japan near temples, and occasionally grown in gardens. He received from the Corean mariners cones with fresh seeds which are eaten as those of Pinus Cembra are in Siberia, and perhaps it is a strong variety of that species. What seems to be the same species was found at St. Peter and St. Paul's in Kamtchatka in Lütke's expedition. It must therefore necessarily be able to brave the utmost rigour of an English winter.

MYCOLOGY.

Agaricus alcalinus, *Fr.*—The subgenus *Mycena* to which this Agaric belongs is one of the largest in the whole group, but its species are remarkable for elegance, beauty of colouring, and other attractive characters, rather than for any culinary or other useful properties. To facilitate their study, it has been divided into several sections, which are however for the most part of such a technical character that they are not calculated for a place in these notices.

The subgenus is distinguished from *Collybia* by the margin being never involute, but straight from the first and pressed close to or parallel with the stem; from *Omphalia* by the pileus not being from the first dimpled in the centre, and by the gills not running down the stem and ending acutely.

The species occur in great abundance on decaying leaves and twigs, or on mouldering stumps in woods or under damp hedges, more rarely on the naked soil, and exhibit the greatest variety of colour. Almost all of them are delicate, and some are almost as fugacious as the dung Mushrooms. The stem is hollow, and more or less cartilaginous, though delicate, and sometimes is filled with variously coloured milk or moisture. Sometimes it is viscid, or drips with a limpid slimy fluid. In one curious division the base of the stem is dilated so as to form a circular disc, which is very striking when it occurs on a dark ground like that of a decaying Fern stem. The gills are often elegantly shaded, and in some the margin is of a totally distinct colour from the fruit-bearing surfaces, which adds greatly to their beauty. Most of them are essentially autumnal, while some linger through our milder winters. The greater part are inodorous, but some, like the subject of our present notice, have a strong alkaline or radish-like scent. We are not aware that a single esculent species occurs in the whole group.

One of the most common kinds is *A. galericulatus*, which occurs scattered or in dense groups at the base of decaying gate posts, on old stumps or fallen timber, the base of the stem being frequently garnished with radiating hairs, so as to make it resemble a little bottle brush. In outward characters this species approaches closely *Agaricus alcalinus*, and like that varies greatly in colour and in the shading of the gills. It is however always inodorous, having nothing of the strong alkaline smell which is characteristic of the species before us. This smell varies indeed in intensity, and sometimes exactly resembles that of a putrifying mass of Walnuts.

Agaricus alcalinus, *Fr.* From an Original Drawing.

We have already, under *A. tuberosus*, given an account of an Agaric which in the first instance forms a distinct tuber, from which after a period of rest the stem and pileus are developed. M. Tulasne has lately paid great attention to similar tubers, and finds that most of them are easy of cultivation, and if placed on the surface of moist sand, or slightly covered with it under a bell-glass, after a few weeks they develope their proper fruit. Fungi of various kinds have been raised in this way by himself and others, as various species of Sphæria from Ergot, Agarics, Pezizæ, Clavariæ from so-called species of *Sclerotium*, and even in one case a little white filmy Fungus, delicate as a spider's web, which occurs not unfrequently in woods on fallen sticks, whether deprived of their bark, or covered still with Lichens and Mosses, which it soon destroys. These experiments are easily tried, and afford a ready means of cultivating some of the more curious Fungi. One, indeed, as ascertained many years since by Micheli, *Peziza Tuba*, affords a crop for several successive years, while one of the best esculent Fungi, *Polyporus Tuberaster*, is commonly raised in Italy, and, indeed, has been successfully grown from a Truffle-like mass, consisting of earth and spawn, even in this country. Those of our readers who are interested in the matter may at this season obtain specimens of tubers by examining the black decaying Fungi which remain in our woods through the winter, or amongst Moss where Agarics have grown at the base of trees, and in collecting these they may chance to meet as Tulasne did with *Agaricus racemosus*, one of the most curious of our Fungi, which produces a quantity of fructifying heads all along the stem after the fashion of a bunch of Currants, of a totally different construction from the terminal pileus. Much information on these matters will be found in Tulasne's Carpologia just published, one of the most learned and interesting productions of the present century. *M. J. B.*

THE WINDS THAT BLOW.

Hitherto the absence of anything like a continuous record of the movements of the wind, with regard to the point of the compass from which it blows, has been a great bar to the development of practical meteorology. To those interested in a foreknowledge of the weather, as agriculturists, a thorough knowledge of the directions from which our wind blows through different seasons, and an acquaintance with the periods which each has in point of duration, must be of the highest value. A difficulty has always been felt in fixing any laws for an element so changeable as that of the wind—a difficulty far greater in the case of the wind than in any other process of meteorology; arising from the fact of the many causes which deflect and alter the courses of the great atmospheric waves when they get amongst the islands and broken coast lines of our latitudes. Isolated observations, although taken two, three, or even four times a day, could do but little towards solving the problem. It is evident that from such scanty information we could only approximate to a "prevailing direction;" the changes in direction which, as the records of the self-registering anemometer have shown, might have veered round through all the points of the compass during the night, and other times when the vane has not been watched, intervening between one observation and the other, have consequently gone unnoticed. In regions where the wind blows from definite quarters for a long period together, and where its changes occur abruptly, it is sufficient to observe its direction occasionally, and from thence to lay down an accurate statement of its phenomena, as observed in connexion with certain astronomical periods. But when we leave the confines in which the trades and other periodic currents are bound, the distinctive character of the currents of air is, as it were, lost amidst the vast number of disturbing causes which they encounter when entering more temperate latitudes, and when travelling over a portion of the globe more diversified as to its physical features.

A change in direction—let us say from north to south—will with us frequently take a period of several days, and during that time will have blown from all points between north and south, but probably not equally. Now it obviously would be a very erroneous mode of proceeding to put down east, supposing the vane to have passed that way, as a "prevailing direction" for those days; we must give to each direction (and the circle must be divided into many points, however short might have been its duration) its due weight. Where we get currents of air from each and every shade of direction through the entire circle, making several entire revolutions during the year, the only method of arriving at anything like a true estimate of the wind's direction, from which we might infer causes for the occurrence of many of the changes in the weather of our island which at present defy our explanation, is to determine the *mean* direction. This can only be done from the sheets of the self-registering anemometer, on which we have every movement traced out by the vane itself, forming a continuous record from year's end to year's end, night and day.

Since the air forms the chief circulating medium of moisture and heat, data of a sound nature respecting the movements of the aërial waves and currents must be of the very highest importance. We believe that in a knowledge of the winds lies the very foundation of weather prediction—that is, as far as predictions may be depended upon, in the face of the many difficulties we have had occasion to point out in former numbers of this paper. The subject should excite the interest and engage the attention of all who are, by the nature of their professions, dependent upon the weather. The facts that have been deduced from the results of the anemometer throw much light upon this subject; substituting certainty in the place of conjecture, and, in some instances, showing the fallacies that have been for years mistaken for truth.

Meteorologists have always had a vague notion that the wind had a decided tendency to turn round the compass with the sun, that is, to pass round from North

through N.E., E., S.E., to South, and so on in the same direction. And they believed that it never went round, by a whole revolution, in the contrary, or retrograde, direction; although they knew that it sometimes made several revolutions of direct motion in the course of the year. This idea was prevalent as long back as the year 1600, and is mentioned by Bacon in his dissertation *de Ventis*; but it was only an idea, as nothing certain was known on the subject. One of the most interesting facts, which the introduction of better contrivances for the recording of the direction of the wind has exhibited, is to be found in the circumstance of the discovery of a period in the rotation of the wind. It has not yet been ascertained, but doubtless will be, that any other broad meteorological feature has the same period of recurrence. We have just glanced at its connection with the yearly rainfall, and can perceive an evident relationship between the two elements, but we have not yet had an opportunity of tracing out its connection more closely. We give the years together with the number of times the vane has completed a revolution in either direction, with the motion, retrograde or direct, indicated for each year; and we have no doubt that our agricultural and horticultural readers will be able to trace a very close connection between the periods of maxima and minima of direct motion and good and bad years for crops. It is a very old saying that when the wind goes *against* the sun, or in other words, has a retrograde motion, the weather will be wet and stormy, and otherwise prejudicial to the crops; the saying seems to have been founded in truth, and what was applied to the moment appears to be equally true of the whole year. It will, we believe, be found that almost without an exception when the number of revolutions in the retrograde direction have counterbalanced or exceeded the number of the direct revolutions, that those years have been characterised by stormy and bad seasons; and that the opposite effect is observed when there has been a great preponderance of direct over retrograde motion. And, farther, that the shades between the two extremes follow the wind most exactly. Following is a table exhibiting the numbers :—

In 1841	the vane made	5.4	revolutions	of direct motion
1842	,,	13.1	,,	,,
1843	,,	20.7	,,	,,
1844	,,	21.7	,,	,,
1845	,,	14.9	,,	,,
1846	,,	1.8	,,	,,
1847	,,	11.0	,,	,,
1848	,,	12.1	,,	,,
1849	,,	23.3	,,	,,
1850	,,	15.9	,,	,,
1851	,,	19.1	,,	,,
1852	,,	8.8	,,	,,
1853	,,	1.9	,,	of retrograde motion
1854	,,	6.8	,,	of direct motion
1855	,,	10.8	,,	,,
1856	,,	16.1	,,	,,
1857	,,	14.7	,,	,,
1858	,,	24.1	,,	,,
1859	,,	14.0	,,	,,
1860	,,	2.1	,,	of retrograde motion

From an inspection of this table, it appears that the minimum of direct motion is reached at every seventh year; and that the maximum direct motion occurs at a period equidistant from those periods, or at $3\frac{1}{2}$ years after each minimum. There are occasional exceptions—as indeed we find in every investigation of a like nature—but it strikes the eye at once, upon the first glance at the numbers, that the small amounts are given for years which have been noted as unseasonable, and injurious to vegetation. As we have remarked, there is, no doubt, much more to learn with regard to the connection between the wind's rotation and other meteorological processes; but we trust that we have said enough to interest our readers—if not to stimulate them to further inquiry. *C.*

EFFECTS OF THE BAD SUMMER AND WINTER OF 1860 AT CAMBRIDGE.

THE appearance of Dr. Daubeny's account of the injury caused to the Oxford Botanic Garden by last winter's frost reminds me of my promise to state its effects at Cambridge. In some respects we have suffered more severely than any of the places from which accounts have been published. The cause of this is not clear; for the depression of temperature was quite as great in many other parts of the country. There is something in our climate which renders it very unfavourable to many plants which may generally be considered as hardy. Perhaps the most remarkable instance of this is afforded by the Wellingtonia, which has been much injured here, and here alone, as far as we know, in all Britain. A very fine young tree, of about 8 feet in height, and nearly as broad in the spread of its lower branches, which was so dense a mass of shoots as quite to hide its stem, has lost fully half its branches and by far the greater part of its smaller shoots. The terminal bud was killed, and the plant did not attempt to grow until late in the summer. It has gained nothing in height, having had to exert all its energies to recover from the severe injury received in the winter. In former years it often added $1\frac{1}{2}$ to 2 feet to its height. Another much younger plant of Wellingtonia, in the grounds of St. John's College, has not suffered quite so much, and has lengthened its main stem by a shoot of about 6 inches; but it has lost most of its smaller shoots and some of its main branches.

Pawlownia is another instance of a tree that has hardly escaped destruction. A fine plant of it appeared to be dead until the middle of the summer, but then succeeded in making a few moderately strong shoots. Much of the new wood of 1860 was killed, and the main stem and branches now show that only longitudinal bands of it and the inner bark retained sufficient life in 1861 to preserve the connection between the buds and root. From this cause the previously cylindrical stem has a singular appearance, being bulged and seamed according as portions retained life or were killed. Another fine tree of Pawlovnia, in the grounds of St. John's College, has lost more than half its height, and therewith much of the beauty which rendered it an object of admiration to numbers of the persons who frequent these grounds. It remains to be seen if the late summer has sufficed to restore the vigour of these trees so as to enable them to withstand the frosts of the present winter. We hope, almost against hope, that it may be so.

The lowest depression of the temperature was $3\frac{1}{4}°$ below zero of Fahrenheit by my registering thermometer, which was tolerably well sheltered from upward radiation, but at a great height above the ground. This happened at half-past 8 A.M., Dec. 25. It corresponds well with the registration at the Cambridge Observatory, but there the depression on that morning amounted to half a degree more. Persons here said that the temperature was much lower, but I doubt either the value of their instruments or the proper position of them. As a very large tree of Quercus Ilex on the site of the Old Botanic Garden is killed to the ground, it may perhaps be reasonably believed that a similarly unfavourable summer, succeeded by an equally severe winter, has not occurred for very many years.

For the following lists of the killed and wounded I am mainly indebted to our Curator, Mr. Stratton.

Those plants which were defended by snow, including most of the herbaceous species, wholly escaped injury. Indeed, many of the woody plants that have now produced new shoots from their roots, probably owe their life to the shelter thus afforded to them :—

KILLED.

Pinus Laricio	Garrya macrocarpa
,, Brutia	Daphne collina
,, Pithyusa	,, oleoides
,, carica	,, Laureola
,, Pinea	Buxus balearica
,, Sabiniana	Viburnum Tinus
Abies Smithiana	,, lævigatum
Araucaria imbricata	Spartium scoparium
Cedrus Deodara	Robinia hispida
Cupressus funebris	Genista ætnensis
Cratægus Crus-galli	Magnolia grandiflora
,, mexicana	Ligustrum japonicum
,, heterophylla	,, sinense
,, maroccana	,, ovalifolium
,, apiifolia	Quercus Suber
Cerasus pygmæa	,, coccifera
Amygdalus orientalis	

Plants much injured, mostly killed to the ground, but shooting from their roots.

Taxodium sempervirens	Buddlea Lindleyana
Cunninghamia sinensis	Pawlovnia imperialis
Viburnum cotinifolium	Garrya elliptica
Ulex europæus	Daphne pontica
Spartium junceum	Berberis asiatica
Cercis siliquastrum	,, aristata
Cotoneaster affinis	,, brachystachys
,, bacillaris	,, umbellata
,, nummularia	,, lycia
Cerasus Lauro-cerasus	,, Jamiesoni
,, lusitanica	Jasminum (all)
,, Pseudo-cerasus	Forsythia viridissima
Prunus ilicifolia	Phillyrea (all)
Buddlea globosa	Quercus Ilex

SLIGHTLY INJURED.

Cedrus Libani	Amorpha nana
Cryptomeria japonica	Juglans regia
Wellingtonia gigantea	Pavia rubra
Juniperus excelsa	,, humilis
,, virginiana	Ilex aquifolium
,, lycia	Cydonia vulgaris
Catalpa syringæfolia	Platanus cuneata
Cornus mexicana	Castanea vulgaris

It is probable that neither of these lists is so full as it might have been made: but every plant is mentioned in them the fate of which is likely to be of any interest to cultivators.

Much loss has befallen private collections in this neighbourhood. The fine young Pinetum of Mr. Parker Hamond at Pampisford Hall has been nearly ruined. At Saffron Walden the losses are stated to have been very great. *Charles C. Babington, Cambridge, Dec.* 16.

THE BOTANICAL GARDENS AT BRISBANE IN QUEENSLAND.

(Extracts from the Report of Mr. Walter Hill, the Director, dated May 6, 1861.)

When the Government of New South Wales made over these grounds for the use of the public, the whole contained an area of only six acres, and a great portion of that area consisted of low marshy ground. A road having been reserved along the river bank, the Gardens had no water-frontage, but were entirely shut out from the river, and hemmed in on either side by land marked out for sale. Trustees were shortly appointed; and these gentlemen, conceiving that the limited space allotted them afforded but little scope for improvement, and would frustrate all endeavours to make them of practical utility, at once made application for an extension of the grant. In this they were eminently successful, obtaining not only a large portion of the land designed for sale, but above all, securing the frontage to the river along the entire length of the ground. The Trustees now found themselves in possession of $27\frac{1}{2}$ acres of land, capable of the highest cultivation, and possessing features admirably adapting them for artistic embellishment. Voluntary contributions, aided by a Government grant, enabled them to enclose the entire area with a substantial fence, and to erect the brick cottage still standing in the south-east corner of the Gardens for the accommodation of the workmen. Submitting to the Trustees a general design for the laying out of the grounds, I commenced the Pinetum (a collection of Coniferæ or Pines not surpassed in any of the British Colonies,) and the present avenues from the entrance along the principal walks afford a very fair specimen of what may be done with this description of tree for the beautifying of lawns or parks.

The funds placed at my disposal were barely sufficient to maintain four labourers upon the grounds, and utterly precluded all possibility of adding to our stock by purchases. I consequently made frequent excursions into the country districts for the purpose of obtaining plants and seeds for our own immediate use, and for exchange with such public or private gardens as might be able to give us in return something we did not previously possess. In this manner, and at no cost to the Trustees, I was enabled to make valuable collections, not only of known products, but also of such as were new to the Botanist. Among these I may mention some very magnificent Cycadaceæ, Tree Ferns, &c.: I was, however, indebted to the Honorable R. R. Mackenzie for some of the most graceful trees now in the garden.

In my selection of plants I always kept in view the fact that these Gardens were designed to become not merely a pleasant and instructive resort, but a nursery for the propagation of such as were capable of being turned to profitable account upon more extended cultivation, if found to be readily acclimatized. The success of the experiment has been most gratifying, and in the Gardens may be seen flourishing in full vigour, trees and plants, ornamental and productive, of all countries. Among them may be mentioned :—

The Allspice, Clove, Nutmeg, Cinnamon, and Black Pepper; the Coffee plant, Paraguay and Chinese Tea; the Camphor, Tamarind, and Bread Fruit; the Caper plant, Tobacco, Rice, and American Sarsaparilla: the Cocoa-nut, Date, Doom, and Guinea Oil Palms; Six species of Guava; the Mango; the Rose, Malay, Custard, and Star Apples; Sour Sop and Sweet Sop; the Cherimoyer, Alligator Pear, Chinese Date, Plum and Sappadilla Plum; the Granadilla, Edible Hovenia, Areca-nut, and Jaca-fruit Tree; the Longan, Litchi, and Jujube; the Papaw Tree, Argan Tree, Lace bark Tree of Jamaica, Logwood, Teak Tree of India, and the Tallow Tree; the Rice paper Plant from Formosa, African Hemp, and the famous Grass cloth Plant, and many other of greater or less celebrity.

Plantations have been laid out, in which may be seen 20 varieties of the Vine, 12 varieties of Pine-apple, eight varieties of Banana, and ten varieties of Orange. These have all been planted with the view of determining which were best adapted to the climate and the general character of the soil.

Several varieties of the Cotton Plant have been tried, and the result of the experiment goes to prove that this valuable plant may be cultivated with ease, and that it needs only the introduction of an adequate supply of suitable labour to render its cultivation a profitable undertaking. Eight descriptions of this plant are now growing in the Gardens, viz.—Sea Island, Cluster, New Orleans, Honduras, Boy's Prolific, Dean's Upland, Patte's Gulf, and Peruvian. This latter, I fear, is not likely to be of much value, as it has shown no symptoms of flowering.

The Sugar cane (*Saccharum officinarum*) has been experimented upon during the past and previous seasons, and its thriving condition would seem to indicate that it might be cultivated with profit. The Ginger plant (*Zingiber officinale*) and two species of Arrowroot have likewise been most successfully cultivated.

The contributions of plants and seeds, though not equalling those made by ourselves to other Gardens, have been such as to testify to the active interest taken by many in the advancement of our work.

Great care has been taken in laying out the Grounds so as to place every object of interest, not only readily in view, but to secure to each the soil, shelter, and other requisites for a healthy growth. In this manner a very large portion of the Grounds has been worked, but ample room remains for future operations. In the formation of the walks I have had great difficulties to contend with, not alone from the character of the soil and general position of the Ground, but from the incessant growth of the Cyperus hydra (or Nut Grass), defying every exertion for its eradication. This has induced me hitherto to defer the gravelling of the paths, as even such a coating would be insufficient to suppress the noxious weed.

Having thus briefly brought under your notice past operations, I will now beg leave to submit my views for the further improvement of the Gardens to make them still more flourishing, and consequently still more attractive and useful.

The more complete drainage of the grounds is a matter of the greatest importance,—our operations in such respect having necessarily been of only temporary utility. For this purpose I would suggest that a main drain be constructed, so as to carry off the water flowing upon the lower ground, and there remaining after heavy rain. In this portion of the Garden are many of the most useful plants, which it is very necessary to protect from the injurious effects of excessive moisture.

The increasing demand made for exchanges of seeds and plants by persons resident in various parts of this as well as other Colonies, will entail a corresponding increase of labour in collection and preparation for transport. Our exchanges with other countries were for a long time materially impeded by the high rates charged for freight, the funds at my disposal having been barely sufficient to meet current expenses of the most economical character. The supplementary aid of the Legislature has, however, enabled me greatly to enrich our stock by such exchanges, while we protected as far as possible the interests of the horticulturist in our immediate neighbourhood. The system adopted is not to reproduce for barter any plants received from the Brisbane nurserymen,—leaving to themselves the full benefit of the results of their own industry. The plants introduced from other parts we sedulously cultivate and freely distribute.

The establishment of a Botanical Library is a subject of very great importance, and I am happy to state is likely soon to be effected. The Hon. Captain Hope has made a donation of many valuable books; and the considerate grant of the Legislature, in the Estimates for 1860-61, has enabled me to remit to George Macleay, Esq., 100*l*., to be placed in the hands of Sir William Hooker, of the Royal Gardens, at Kew, for the purchase of works of standard merit. A room in the Curator's dwelling will be set apart as a Library and Reading-room for those who may take an interest in works on Botany and Horticulture.

I would remark upon the necessity for affording a better supply of labour in the Gardens, to enable me to carry out to the fullest extent the primary objects of their establishment. Money expended in the rearing of products of utility and commercial value, cannot be looked upon as other than a profitable investment; and I think I may claim for the Queensland Gardens the merit of affording abundant evidence that our climate is of a character to render such rearing a pursuit of great general as well as individual benefit. To extend—and, indeed, even to sustain our operations, I cannot refrain from remarking—will be difficult, unless I am in a position to secure skilled labour, by being authorised to [illegible] such as may be [illegible] in this respect, I find it difficult to obtain the most ordinary description of labour. This is a matter I would commend to your best consideration; and I hope I may, by your assistance be soon enabled to show that, when the desire and opportunity are combined, the work in hand must progress to perfection.

The Honourable the Colonial Secretary. WALTER HILL.

Home Correspondence.

Cotton Cultivation in India.—My story is now nearly told, and as I intend this to be my last letter, I propose introducing it with a brief recapitulation of some of the leading points of the previous series. In these letters I have traced, so far as it came under my cognizance, the Indian Cotton experiment from the beginning to its termination, showing the successful introduction of the American Cotton plant and the cause of its failing to produce as heavy crops in India as in America. I have also shown that the native Indian Cotton plant when most carefully cultivated according to the American mode of culture, failed to improve either in productiveness or in the quality of the staple produced. On comparing the two systems of agriculture, Hindoo and American, I found that the former so far from being in "a miserably backward state," was actually in advance of the other, and that the partial failure of the experiment was to some extent attributable to bad farming, using the word in its scientific not mere artistical meaning, but mainly to the inferiority of our soil and less suitable climate. That the projectors of the experiment had fallen into a great error in supposing that the prodigious crops of America were more owing to the skill of the planter than the favourable conditions under which he planted, and that the disappointment of both the projectors and planters with the result was unreasonable, since a little reflection should have shown that it was impossible to be otherwise. But on this point misunderstanding still exists, as is clearly proved by the importation of intentional *mala fides*, ascribed to the parties engaged in working out the experiment, and its consequent predetermined failure. As this imputation comes from a highly respectable deliberative body, representing the great "Cotton interest" of Manchester, I have made it my endeavour to combat it by a variety of illustrations, scattered over the whole series of letters, rather than by hasty repudiation, or, what would have been worse, allowing my feelings, as a principal actor in the business, to get the better of my judgment, so far as to elicit undignified replies. As I think it must be clear to that body, if they read these papers, that they do us a great injustice, I still expect to see the offensive charge publicly withdrawn and apologised for. I have repeatedly referred to the fact of our having cultivated American Cotton on all kinds of soil and with wonderfully uniform success, the crops varying somewhat in quantity, but scarcely perceptibly in the quality of the staple. This I have done to show that the plant is far from being fastidious in the matter of soil, though it is quite clear it luxuriates in a rich one, as shown by the great difference of American and Indian crops under precisely the same culture. Finally I have dwelt much on the circumstance of our having found it a most exhausting crop, requiring careful rotation towards its successful culture, which rotation not being an American practice has led to the rapid exhaustion of their rich soils and their great extent of "worn-out" Cotton fields, while its regular adoption in India has preserved those of the Ryot comparatively uninjured—deducing from these facts the conclusion that by combining the English practice of judicious manuring with Hindoo tillage and rotations, the fertility of the Indian soils might be made to approach those of the Southern States of America, and to produce proportionate crops. We can scarcely hope to improve the staple of American Cotton in India, but I think it highly probable that by such a course of farming both the quantity and quality of that of the native plant may be improved. This brings us back to our original question—Can the productiveness of the Cotton plant and the quality of the staple for which it is grown be improved in India by "high farming?" To this question I believe only one answer can be given, and that in the affirmative. But we have, before going further, to settle the true import of the term "high farming," as applied to Cotton. I have already mentioned that the Ryots do not manure their Cotton, and that I did not know whether it was purposely withheld as being injurious, or from indolence and poverty. If the former, then high farming as applicable to Cotton must be very different from what we understand it to mean when we apply it to our root crops. But still it may mean the same thing as when we use it with reference to the whole rotation of the farm. Be that as it may, an application it must have, as Cotton though not particularly dainty likes a good soil, and surely can, through the combined operations of science and agricultural skill and experience, be discovered. Our experience on many occasions proved that the soil exerted greater influence than climate, different fields yielding very different crops the same season. Such being the case, skilful farming, by progressively improving the condition of the land, will go far, I expect, to place India on a par with America, and that is what is wanted. In agricultural circles it is no very uncommon occurrence in course of conversation, to hear of good farmers having taken farms spoken of as being "not worth 5s. the acre," and who contrived in the course of four or five years to make them worth 20s. or 30s. the acre. Without insisting on such commendations being true to the letter, I have no hesitation in accepting them as near enough the truth to show the high estimation in which the men spoken of are held for their skill and knowledge of farming. These then are the kind of men wanted to initiate the scientific culture of the Cotton plant in India: men able to teach, but still not too proud to take lessons themselves. And my conviction is, that even such men would learn something worth the trouble of the study required to learn it from even the despised Hindoo Ryot. Hitherto the nature of Indian land tenures has been adverse to Europeans locating themselves in the country, except as agents for purchasing from native growers; hence the recommendation of a former letter, to confine themselves to that occupation, merely renting small farms with a view to the introduction of European farming in its most perfect forms, to convince the natives that they were still behind us. Since the publication of that letter, our position in India is totally changed. Europeans can now acquire land in fee simple, with the untrammelled right of improving his property according to his own fancy. A capitalist can now locate where he pleases, farm his own land, set up machinery on it powerful enough to clean and bale all the cotton grown within 20 miles of him, enter into contracts with every grower within that range to purchase all the Cotton they can grow as it comes from the field, paying on delivery, he giving them the seed. On such terms I for some years purchased as much Cotton as I could gin, and never, during the whole time, had a difference with one of the many hundreds who dealt with us. In this way he could always be answerable for the quality of every bale that left him. A farm of 500 or 1000 acres might easily be managed along with such an agency, and very profitably if he found that he could make his rotation crops pay the cost of farming, having his Cotton for profit, and that I think he could easily accomplish. Indigo, Tobacco, Jute, oil seeds, are all exportable articles, while there is an endless list of cereals and pulses, of quick maturity, suitable for food for labourers, for fodder and litter for cattle, and for feeding off on the field by sheep, furnishing among them abundant material for manuring and enriching the ground. The well-fed stock would, besides, yield very profitable returns, good mutton being in great request in India, and difficult to be had. Under such management average land, I feel almost certain, could in the course of a few years be made to yield crops of Cotton nearly, if not quite as large as those grown in America, with this difference in favour of India, that the soil was yearly improving in place of wearing out. Cotton, like all other cultivated plants, is liable to variations, crosses, and sports; these if carefully sought for and subjected to separate cultivation, annually selecting forms promising special excellence, would likely reward the attentive observer with varieties as much excelling the general run as the very promising Pedigree Wheat excels the other varieties of that invaluable cereal now in general cultivation. Hitherto the very facility of growing Cotton—now become one of the most valuable of cultivated plants—has deprived it of the care and nurture bestowed on hundreds of other plants of comparatively little value. Those days are now, I believe, gone by; the temporary interruption of the supply and breaking up of the great American monopoly has opened the eyes of the "Cotton interest" to the injudiciousness of trusting to any one country for some 70 or 80 per cent. of our supplies of this indispensable article, and has taught them the necessity of securing steady and unfailing contributions from every available quarter. The world at large, so largely dependent on British looms for their clothing, now appeals to the Cotton zones to furnish the raw material whence the cloth is fabricated, and doubtless, for their own sake as well as for ours, the appeal will be heartily responded to, if only equal encouragement is accorded. No doubt many difficulties and impediments lie in the way at first starting, for though the Cotton plant is the easiest of plants to cultivate, yet the staple is a bulky and costly article to prepare and send to market. But that difficulty will doubtless soon give way before the great mechanical ingenuity of this country, especially under the stimulus of remunerating prices. I here close my remarks on the Cotton culture of India; the development of principles, drawn from personal experience, not details of practice, which must be adapted to each locality, being my object. I have not ventured to touch on irrigation as applicable to Cotton cultivation, for the simple reason that I have had no personal experience of its effects or management, and might mislead were I to attempt to teach that which I only know from others, or have learned from books accessible to all. My own impression is that it is unsuitable to the short stapled varieties, but that is a mere surmise on my part. Adieu! *Robert Wight, Grazeley Lodge, Dec. 9.*

Mexican Pines.—How is it we hear so little about the collection of New Mexican Pines, seeds of which were sent out in 1858 and 1859 by Messrs. Roezl & Co., of Mexico, or their agents? Out of the lot I had I have not 10 per cent. now alive; and as regards novelty, I hazard the opinion, that with few, if any exceptions, they are neither more nor less than old acquaintances with new names; not a few of them too appear in more characters than one. Perhaps some of your Correspondents who have been fortunate enough to keep them alive without protection will give us their experience respecting them. *Senilis.*

Phyllagathis rotundifolia.—This beautiful Melastomad, which was figured and described in a recent Number of the *Botanical Magazine*, was sent from the Botanic Garden at Buitenzorg, Java, to the Royal Gardens at Kew in December, 1859. The Wardian case in which it was forwarded contained also the lovely variegated Fern Pteris cretica albo lineata, which has so rapidly spread through the gardens of Europe; and, by an accident in the docks, both of these really good plants were very nearly being lost. The sailors in landing the case dropped it overboard into the river, and most of the plants had floated out; fortunately these two were among the number recovered, but more unpromising looking specimens could hardly be imagined. The Fern possessed only two or three broken and muddy fronds, and the stem of the Phyllagathis was broken through, and there was not a leaf but what was damaged. Misfortune often teaches us valuable lessons, and it was so in this case. As a forlorn hope I took one of these leaves and laid it upon a pan of very sandy peat, plunged it in a good bottom-heat, and covered with a bell-glass. As much to my surprise as pleasure, I soon saw that this plan was to succeed; I had doubted much whether the leaves of this plant possessed sufficient substance to allow of its being propagated in this way; but in the course of a month that leaf was studded with numerous little protuberances which were rapidly developed into little rosette-like plants. In a few weeks more the forwardest of these were potted off, and so this leaf was induced to produce a good crop, amounting, I believe, to more than a score. These minute plants are very miffy, and require a good deal of attention, so that a few of them died before we hit upon the right mode of treating. These young plants are covered on the upper side with long pink hairs; these are lost as the plant advances, and the adult leaves are either smooth from the first, or become so soon afterwards. The flowers of the Phyllagathis are small, and of a bright rose colour; there are so many new names for colours of this kind, that I am afraid to give it a name; perhaps *magenta* expresses the tint of these flowers. Pretty as they are, only a few of them open at a time, and therefore one might with the less reluctance cut away the terminal globular head of flowers. It is possible that if this were done as soon as it makes its appearance, the plant would produce a lateral shoot from one of the upper buds; so far as we have seen at present the plant seems to exhaust itself terribly by flowering, and, perhaps, seldom recovers the effects of it. I was in hopes, when the plant first came to this country, that it might prove a worthy rival for the first and best of the Cyanophyllums, C. magnificum; but the glorious habit of that plant is still a character by which it stands unique among foliage-plants. But so far as the colouring of the leaves is concerned the Phyllagathis ranks high; the upper side is of a rich olive-green with a decided metallic lustre, and the lower side is crimson. The only fault with which the Phyllagathis can be charged, to my knowledge, is that it is too dwarf; it does not make stem enough to show the leaves to advantage, for it seldom rises more than a foot or 18 inches above the surface of the soil. Perhaps by preventing the waste of strength consequent upon the flowering, as I have recommended, it may be induced to modify this habit to some extent. I have still great faith in the Phyllagathis, and believe it is destined to play no unimportant part at the exhibitions of the forthcoming year. I have reason too for my faith, for although some of the plants grown during the last season were very fine, yet the foliage of none of them equalled in size that first broken leaf; and who shall venture to say that even that leaf was the maximum that could be attained? Since this plant was first sent to our national garden it has been forwarded to some of the Dutch nurserymen, and it will no doubt soon spread through the country. It has already found a place in the catalogues of all our leading nurserymen. *C. W. C.*

Sea-side Planting.—There is a statement in your Number of November 23, by Mr. Barron, of Sketty, near Swansea, respecting the proper management of plantations in exposed situations, which I think ought not to go unanswered, because it may tend to mislead persons interested in planting. Your Correspondent says that they ought to be allowed to grow up close together. I have seen a good deal of plantations planted in exposed parts of the east coast of Yorkshire, and I am convinced of the error of trying to make a permanent shelter of trees in this manner. On this subject I cannot do better than quote the opinion of Mr. Darling, forester, St. Martin's, near Perth, published in vol. i. of the Transactions of the Scottish Arboricultural Society, p. 212. He says, that in belts or clumps planted for ornament or shelter, thinning requires to be conducted differently from that of ordinary plantations. Belts and clumps are very often mismanaged, a great number of trees being planted on a small area, and allowed to grow up a dense mass, under the impression that this is the only way to procure shelter, while, on the contrary, the result is a quantity of bare poles, with a few branches at the top, totally unfit to bear thinning, and if thinned generally attacked by mossiness or disease. * * * For shelter, thinning should commence early. So soon as the branches of one tree encroach in the least on the branches of another, this operation should be commenced and carried on progressively, two or three years intervening between each thinning. If treated thus the trees will accommodate themselves to their position, and produce the result required. For where the branches are allowed to extend themselves, the roots will spread to a like extent, and take a strong hold of the soil, thus enabling them to withstand the storms to which their position exposes them, while a tree feathered with branches to the ground gives shelter superior to any quantity of bare poles, however closely grown." In these views of Mr. Darling's I perfectly concur, having seen too many plantations in exposed places, starved to death, or completely blown down and destroyed, from no other cause than from having been left too thick upon the ground, and I believe that the only way to obtain durable shelter from trees in exposed places, is in the first place never to plant narrow belts. Mr. Brown says in "The Forester" that no plantation in an exposed place should be less than a hundred yards wide in the narrowest part, and he is not far wrong; and secondly, to keep the trees so far apart that their branches shall scarcely touch one another, as Mr. Darling advises. The practical difficulty in carrying out Mr. Darling's advice is, to do this when the trees are large without leaving very large gaps, and so injuring the shelter in another way. As far as I know the only way of avoiding this is, when the trees are 15 or 20 years old to mark such of the finest of the trees as will when full grown exactly occupy the whole space, and then to keep cutting in, and cutting down the intervening trees only just so much as that they shall not injuriously press upon the ultimate standards, whilst at the same time they give them all possible shelter. I have done this with success, and I know no other way of obtaining the desired end. *C. W. Strickland, Hildenley.*

Viscum album may not, perhaps, grow upon the Oak, but Loranthus Europæus does, and may have been plucked therefrom by the Druids of Gaul, who must have been better known to the Romans than those of Britain; while it was easy for their writers to transfer the account of the habits of one cognate race to the other. *S.*

Sowle Bread.—This is more usually called in Glamorganshire Laver Bread. It is the Ulva lactuca which is found in abundance on that coast, and is considered by some persons a great delicacy, boiled and flavoured with vinegar or Lemon juice, or fried in small flat cakes.

The Right of gathering Seaweed.—Can any of your Correspondents define the rights of the public in regard to seaweed? The value of this where obtainable within an easy distance is now so well recognised as to make it worth looking after. In many coast villages where allotments and gardens abound, the right to gather it is no small privilege; but there appears to be some doubt as to who have the right. For example, I succeeded to an allotment situated less than half a mile from the sea, and detached from the farm which extends down to the sea. In his lease the farmer has liberty to gather sea ware so far as the landlord himself has right. Acting on this he forbids any one gathering but those who treat with him. The popular view of the case is quite opposed to the farmer's. It is said that a landowner is bounded by high water mark, all beyond being claimed by the Crown, and that consequently all wrack deposited by the waves betwe n

high and low water, can be taken by all and sundry unchallenged except by the Crown. This seems borne out by a parallel decision of the Supreme Court of Scotland (*Hall* v. *Whillis*, 1852, see Shaw's Digest, vol. 3, p. 382), by which it was held that the owner of lands adjacent to the sea could not exclude the public from gathering shell-fish below high water mark, provided they could do so without trespass on the lands. It occurs to me that there are other decisions in point, and that one was lately alluded to in the papers in which, if I remember rightly, the Marquess of Lansdowne was concerned. *Scotus.*

Strawberries.—There ought to be no difficulty about raising Strawberries at Victoria, since they are grown in great perfection in many parts of Italy, with irrigation. *S.*

Apples.—I am of opinion that the increased price of Apples this season is owing to the crops both in England and on the Continent being slight, and I am assured by Apple merchants from Manchester, who come into this neighbourhood at intervals during the season, and frequently reside for two or three weeks, purposely to purchase fruit, that the report of Apples being used for "dyeing purposes" was neither more nor less than "a joke" to silence the importunate questions put to them. The same report is sometimes made with respect to the "Prune Damson Plum," of which there are in fruitful seasons great quantities grown in this neighbourhood. *W. C. E., near Gloucester.*

Oxalis.—The Oxalis with brown leaves now selling as a novelty under the name of atropurpurea, purpurata, &c., has been known as a weed in gardens and hot beds in the west of England any time these 40 years, and supposed a variety of O. stricta or corniculata. *S.*

Mushrooms.—Very few have been found in this neighbourhood this season; indeed I have observed only two species, viz., Agaricus comatus, and A. fusipes; not an edible variety has, so far as I can ascertain, been found, although in other seasons I am told that they are plentiful. What, therefore, can be the cause of their non-appearance this year? Could the wet season of 1860, and the low temperature of the earth last winter, be the means of killing the spawn? Perhaps some of your readers would kindly inform us whether or not a scarcity among the Fungus tribe has been general this year. *A. J., Tottenham Park, Wilts.*

Ranunculus Ficaria.—Your correspondent "C.W.C." asks "What is it that in the struggle for life kills so many young plants of Ranunculus Ficaria? No bird or beast, no insect or mollusk seems to feed upon them, so far as I can observe; and yet they are destroyed wholesale." I should think that it is the common wild wood pigeon that eats them, for about two weeks ago I shot one whose crop was nearly full of the "little tubers" of this Ranunculus, and numbers of them feed on them daily in the woods here now. Are not the little tubers poisonous? *R. B., Bantry, Ireland.* [They are acrid; but not poisonous to man unless taken largely.]

Oaks.—Is Quercus Fontanesii, distributed by the Horticultural Society, the Pseudo-suber of Desfontaines? His description does not at all agree with that of Santi, whose Pseudo-suber, from his own account, seems to be a rare and accidental hybrid, very like the cork-barked Lucombe oak, and evergreen, while that of Desf. Flora Atlantica is described as deciduous. *S.* [The only answer we can give is this. The plant distributed by the Horticultural Society was received from some French nursery under the name of Quercus pseudo-coccifera. When Gussone was in England he corrected the name to Q. Fontanesii, to which the late Barker Webb, who had specially studied the Western and Mediterranean Oaks, assented. As to Q. pseudo-suber, we have in our herbarium under that name a specimen gathered by Delile in the Jardin des Plantes, and another from the same botanist called "Chêne de Gibraltar, Trianon, très beau," which Barker Webb also determined to be Q. pseudo-suber. They are both of the Cerris breed, with narrow oblong leaves; but whether or not the plant of Desfontaines we possess no further means of ascertaining. The Oaks, important as they are, remain in a state of confusion little creditable to botanists; but we are unable to assist much in putting them in order.]

Societies.

Royal Horticultural: *Dec.* 10 (*Floral Committee*).—But few subjects were exhibited at this late period of the year. The most important was a finely bloomed plant of Angræcum sesquipedale, from Messrs. Veitch & Son, which was awarded a First-class Certificate. The large ivory-like flowers of this plant, with their long tail-like spurs, were very remarkable. Mr. Pottle, of Little Bealings, Woodbridge, exhibited a trailing herbaceous perennial with Clover-like foliage and large axillary light blue flowers, which may become a pretty basket plant, for which its habit is well adapted. It was from the Neilgherry Hills, and is called Parochetus communis. Mrs. Carstairs, of Edinburgh, sent some cut flowers of a fine white Tree Carnation, The Bride, already noticed by us; and Mr. Standish had a small weak plant of one of the Japanese Dragon Chrysanthemums with white flowers, the long toothed florets of which suggested the name laciniatum. The plant was too imperfectly developed to judge of its true character.

Dec. 10 (*Fruit Committee*).—Mr. Thomson, Dalkeith Palace, exhibited on this occasion a very large bunch of Calabrian Raisin Grape, the flavour of which was rich and good; it was awarded a first prize. Mr. Thomson also sent a bunch of Lady Downes' Seedling. Mr. Mackenzie, of Brighton, exhibited Marchioness of Hastings, and Mr. Craik, Prescot House, Stourbridge, fine bunches of Black Morocco, which took the first prize in the class of Black Grapes. Mr. Graham, of Cranford, again exhibited bunches of his Cranford Muscat, a small, highly-flavoured Grape, which has the property of not cracking, like the Chasselas Musqué. The bunches had been cut some time, and the berries had become somewhat shrivelled, and were very finely flavoured. These bunches had been ripened in a house without any fire heat. For Apples a first prize was awarded to Mr. Newton for Cornish Gilliflower, Sam Young, and Ribston Pippin. A second prize was awarded to Mr. Cunningham, Fulham Palace, for Blenheim Pippin, King of the Pippins, and the variety of Russet called Sykehouse. C. W. Strickland, Esq., sent specimens of Chapman's Ribston, a sort, as shown, not remarkable for fine flavour. G. W. Wilson, Esq., Gishurst Cottage, Weybridge, exhibited fruit of Chaumontel Pear, ripened in an orchard-house, and some Pears and Chestnuts came from Mr. Cunningham.

Linnean: *Dec.* 5. G. Bentham, Esq., President, in the chair.—F. Ablett Jesse, Esq., and C. J. Leaf, Esq., were elected Fellows. The following papers were read: 1. "On a new genus of Tunicata occurring on one of the Bellona reefs," by J. D. M'Donald, Esq., R.N. 2. "Note of the occurrence of the Crustacean Scyllarus Arctus in England," by Jonathan Couch, Esq. 3. "Note on the Formation of Pearls," by Robert Garner, Esq. Besides the really beautiful pearls occasionally procured from the fresh-water Alasmodonta, in the upper part of the Conway, as indeed in several other British rivers, Mr. Garner stated that an inferior kind was found in great plenty in the common edible Mytilus at the embouchure of the river above mentioned. Only the Mytili picked from the bar, however, and not those higher up or on the sea-shore, contain the pearls, which are found in the two membranous folds or mantle of the animal. Various opinions have been offered as to the immediate cause of the formation of these pearls. On breaking them there is found in their centre a nucleus of dark-coloured matter, hard and granular, and of an animal nature. A microscopical examination of the Mytili from the bar of the Conway had led the author to attribute the formation of pearls to the deposit, in the mantle, of the exuviæ or secretions of a small species of parasitical Distomus. Pearls are common in many mollusks, and even in some common univalves; and the Distomus appears to be the common irritant leading to their deposit, but Mr. Garner thinks it possible they may sometimes arise from other irritants or even spontaneously, *e. g.* from the retention of the calcareous matter which is usually thrown off from the so-called sac or renal organ, when not wanted for the formation of shell.

Notices of Books.

The Romance of Natural History; by P. H. Gosse, F.R.S. 8vo. Pp. 393. Nisbet. Second Series.

This new volume by Mr. Gosse will be welcome to Christmas; for it relates to subjects of popular interest, is agreeably written, and cleverly illustrated. Our readers do not require to be told that the ingenious and learned author has peculiar notions respecting Natural History; that he believes in sea serpents (an article of faith resolutely supported in the volume before us); that he is by no means satisfied that what are sometimes called preadamite creatures have not really inhabited the globe at a comparatively late period; and that he hesitates to regard the Mermaid as fictitious. With a mind thus free from prejudice (?) and well charged with real knowledge, it was to be expected that a book worth reading would be produced, and such is certainly the fact. It is as full of tales and traditions and good stories as an egg is of meat. If the reader ever ventures to think Mr. Gosse a little credulous, he is forced to admit that he supports his opinions (or suspicions) with the skill of a clever man; and although his facts may now and then be doubtful, and his inferences somewhat hasty, there is no denying that his pages are what it is now the fashion to call suggestive.

It is delightful to find a modern naturalist stoutly defending the truth of the legend of Sir Guy of Warwick and the famous Dun Cow. There was doubtless a veritable Dun Cow:—

"Cæsar, describing, under the name of Urus, certain wild oxen of the great Hercynian forest, says, 'These Uri are little inferior to elephants in size, but are bulls in their nature, colour and figure. Great is their strength, and great their swiftness, nor do they spare man or beast when once they have caught sight of him. These, when trapped in pit-falls, the hunters unsparingly kill. The youths, exercising themselves by this sort of hunting, are hardened by the toil, and those among them who have killed most, bringing with them the horns, as testimonials, acquire great praise. But these Uri cannot be habituated to man, nor made tractable, not even when taken young. The great size of the horns, as well as the form and quality of them, differs much from those of our oxen.'

"It is probable that this race extended widely over Europe, and even into Asia. Herodotus mentions Macedonian wild oxen, with exceedingly large (ὑπερμεγάθεα) horns; and Philip of Macedon killed a wild bull in Mount Orbela, which had made great havoc, and produced much terror among the inhabitants; its spoils he hung up in the Temple of Hercules. The Assyrian artists delighted to sculpture on the royal bas-reliefs of Nineveh the conquest of the wild bull by the prowess of their Nimrod monarchs, and the figures, in their minute anatomical characters, well agree with the descriptions and remains of the European Urus. The large forest that surrounded ancient London was infested with *boves sylvestres* among other wild beasts, and it is probable that these were Uri. The legendary exploit of Guy, Earl of Warwick, in freeing the neighbourhood from a terrible dun cow, whether historically true or not, shows the existence of formidable wild bovines in the heart of England, and the terror they inspired among the people. The family of Turnbull, in Scotland, are traditionally said to owe their patronymic to a hero who turned a wild bull from Robert the Bruce, when it had attacked him while hunting.

"What has become of the terrible Uri which lived in Europe at the commencement of the Christian era? Advancing civilisation has rooted them out, so that no living trace of them remains, unless the cream-white breed which is preseved in a semi-wild state in some of our northern parks by their representatives; or, as is not improbable, their blood may still circulate in our domestic oxen.

"Yet there is no doubt of the identity of a species found abundantly in Britain in the Tertiary deposits, and named by Owen Bos primigenius, with the Urus of Cæsar. This fossil bull was as certainly contemporary in this island with the elephant, and the hyena, and the baboon, and, strange to say, with the reindeer, and the musk ox, too—thus combining a tropical, a temperate, and an arctic fauna in our limited island at the same period! What a strange climate it must have been to suit them all!

"Professor Nilsson, who has paid great attention to fossil oxen, mentions a skull of this species which must have belonged to an animal more than 12 feet in length from the nape to the root of the tail, and 6½ feet in height. Again, the skull of a cow in the British Museum, figured by Professor Owen, measures 30 inches from the crown to the tips of the jaws! What a beast must this have been! Would not the slaughter of such a 'Dun Cow' as this in single combat have been an exploit worthy of a doughty earl?"

We think it would have been. And why should not a huge Urus have lived as lately as the gigantic Irish Elk, which was so certainly in the flesh not long ago that Mr. Gosse has actually been able to give a picture of the way in which it was killed. The picture indeed is a little *à la Chaillu*, but let that pass; it is at all events a clever sketch. The history of this Elk has been sketched with a firm hand, as the following passage may serve to show:—

"From all these testimonies combined, can we hesitate a moment in believing that the Giant Deer was an inhabitant of Ireland since its colonisation by man? It seems to me that its extinction cannot have taken place more than a thousand years ago. Perhaps at the very time that Cæsar invaded Britain the Celts in the sister isle were milking and slaughtering their female elks, domesticated in their cattle-pens of granite, and hunting the proud-antlered male with their flint arrows and lances. It would appear, that the mode of hunting him was to chase and terrify him into pools and swamps, such as the marl-pits then were; that, having thus disabled him in the yielding bogs, and slain him, the head was cut off, as of too little value to be worth the trouble of dragging home; that the under jaws and tongue were cut off; and that frequently the entire carcase was disjointed on the spot, the best parts only being removed. This would account for the so frequent occurrence of separate portions of the skeleton, and especially of skulls, in the bog-earth. No doubt so large an animal would not long survive in a state of freedom, after an island so limited in extent as Ireland became peopled throughout; and supposing the females to have been domesticated, it is quite conceivable that the difficulty or even danger of capturing or domesticating the males may have caused the species soon to become extinct in captivity, when it no longer continued to exist in a wild state. Thus we may perhaps account for the certainly remarkable fact that no native Irish name has been recognised as belonging to it; remarkable, because the Irish tongue is particularly rich in distinctive names for natural objects."

It is clear that our author was in at the death of one of these beasts.

We have long had a notion that Dragons did persecute our forefathers and foremothers, and that Schiller's *Fight with the Dragon* is a veracious poem. We are confirmed in that belief, for Mr. Gosse has found that the Red Indians were on such familiar terms with Mastodons that they affectionately named the monster *Père aux Bœufs*—the father of Oxen—quite a Mastodonian term of endearment. Moreover a Mammoth has been found in Mexico by the side of an ancient causeway now submerged. It had stuck fast in the blue clay at the edge of the causeway; in fact had been bogged. The worthy M. Latrobe hints that the huge sculptured stones and chiselled rocks of Mexico may

have been moved by the application of the gigantic force of mammoths. In this case we entertain the very same opinion as that so happily expressed in the page before us.

"Had the Mammoth of Chapingo been discovered with a ring in his nose, or a bit in his mouth, a yoke on his head, or a crupper under his tail, the question would have been set at rest. As it is, there is plenty of room for conjecture and dispute."

What we have said must certainly rouse the curiosity of the public. Mr. Gosse's faith in marvels is a very fair subject of criticism, and we doubt not will be the subject of many a discussion at the Christmas fireside. As he has given his readers about 400 pages of speculation there will be no lack of matter to talk about.

The *Botanical Magazine* for December contains figures of the following plants:—*Rhodanthe Manglesii* var. *sanguinea*, which is the same as that noticed some time since in our pages under Mr. Drummond's name of R. atrosanguinea, and which we think is sufficiently distinct from the species to which it is here referred. It is a very pretty new annual, remarkably differing from the well-known R. Manglesii in having the disk blood-red, instead of yellow. *Begonia Kunthiana*, a shrubby Venezuelan species with lanceolate oblong strongly serrated leaves, coloured bright red beneath, and large white flowers. *Dendrobium triadenium*, a supposed Malayan epiphyte, rare but not new, producing terminal panicled racemes of small white flowers. *Verticordia nitens*, a species of a glorious group of Myrtaceæ, scarcely known in cultivation. This is a West Australian plant, and has been flowered during the past summer by Messrs. Veitch & Son, and in Dr. Lindley's "Sketch of Swan River Botany" was described as "the magnificent Chrysorrhöe nitens, whose yellow flowers of metallic lustre form masses of golden stars some feet in diameter." It is a green-house shrub, with opposite terete-filiform leaves, the stems branching at every leaf axil, the whole plant thus becoming a condensed compound flowering panicle, the surface of which is literally clothed with the golden yellow flowers, of which the calyx with its lobes split into numerous linear plumosely-fringed segments is the most conspicuous part. *Vriesia xiphostachys*, a tropical American herb, with long narrow leaves and flattened flower-spikes, formed of closely overlapping two-ranked bracts, from between which issue long purple flowers. *Bolbophyllum barbigerum*, a small stove Epiphyte from Sierra Leone, introduced nearly 30 years since, but now seldom seen. This has very curious bearded flowers; "at the end of the lip is a brush, consisting of very long purple threads, so excessively delicate that the slightest disturbance of the air sets them in motion."

The *Florist* for the present month terminates the old series, with the close of its 14th volume. Henceforth it is to appear of enlarged size, with two illustrations monthly, and is to be called "The Florist and Pomologist." The Number now before us contains illustrations of two first-class new *Picotees*, called respectively *Flower of the Day* and *Rosy Circle*, the first a heavy-edged scarlet, the second a light-edged rose. There are articles on the root-pruning of fruit trees; on various matters "relating to Roses;" on watering plants; and on the revival of trees apparently killed by frost; with notices of the Fruit and Chrysanthemum show at South Kensington on November 6th, and of the proceedings of the Floral Committee, the latter including a brief account of the subjects rewarded during the present season, up to the end of July. The writer of the article on the revival of frost-damaged trees allowed all his to stand [after the damage of last winter] to see what power they possessed of regaining vitality, which, though destroyed in many instances, he thought might only be paralysed in others, and hence be susceptible of recovery. "I have," he writes, "a number of Italian Cypresses, which to all appearance were dead, and finding the bark quite black down to near the ground I gave them up for lost, but still allowed them to stand. To my great delight, in June I observed the bark of some of them was regaining its green appearance, and soon after a number of the trees produced several shoots from the mass of dead spray, and this living growth has spread itself so far upwards that the trees are green to within 2 feet of their tops. Others, worse injured, are now commencing a similar growth; and I see that with only one exception, the bark of the rest, dead so far as we could discern in the spring, is becoming green;" so that it is hoped they will yet revive, though they may not entirely recover themselves till next year. In the event of severe weather occurring, these reviving trees are to have a double tiffany screen. The progress upwards of this "new life," as it is called, is very gradual, which it is suggested may be owing to the necessity for the reorganisation of the cells through which the sap must pass upwards. The writer concludes, that "one thing is certain: vegetable tissues to all appearance dead and incapable of performing their functions revivify, and regain that power supposed to have been destroyed." We may at any rate learn that it is not always wise to be in a hurry to remove trees, though they may appear to be hopelessly damaged by severe cold.

BOOKS RECEIVED.—*Eric; or Little by Little.* By F. W. Farrar. 5th edition (Black), formerly noticed favourably at p. 863 of our volume for 1858.——WHISTLECRAFT'S *Weather Almanack for* 1862 (Simpkin).——CURWEN'S *Songs and Tunes for Education, the Harmonies by James Turle, Organist of Westminster Abbey* (Ward & Lock).

Miscellaneous.

Scavenger Beetles.—Scavenger beetles are to be seen wherever the presence of putrescent and offensive matter affords opportunity for the display of their repulsive but most curious instincts; fastening on it with eagerness, severing it into lumps proportionate to their strength, and rolling it along in search of some place sufficiently soft in which to bury it, after having deposited their eggs in the centre. I had frequent opportunities, especially in traversing the sandy jungles in the level plains to the north of the island, of observing the unfailing appearance of these creatures instantly on the dropping of horse dung, or any other substance suitable for their purpose; although not one was visible but a moment before. Their approach on the wing is announced by a loud and joyous booming sound, as they dash in rapid circles in search of the desired object, led by their sense of smell, and evidently little assisted by the eye in shaping their course towards it. In these excursions they exhibit a strength of wing and sustained power of flight, such as is possessed by no other class of beetles with which I am acquainted, but which is obviously indispensable for the due performance of the useful functions they discharge. *Sir J. E. Tennent's Natural History of Ceylon.*

Calendar of Operations.

(*For the ensuing week.*)

PLANT DEPARTMENT.

CONSERVATORY, &c.—The present dry cold weather may cause extra protecting materials to be employed; therefore some should be in readiness when required. If not already done, lose no time in getting under cover a supply of the various loams, peat, &c., required for spring potting. The principal work in plant houses will consist in keeping them and their inmates scrupulously clean. Fires and frequent washing of stove plants will be necessary. The conservatory and show-house should now be made as gay as possible with forced plants. Keep up a regular succession through the winter and spring, by bringing forward stock as wanted. Roses, both dwarf and standard, Honeysuckles, Scarlet Thorns, Hybrid Rhododendrons, and Azaleas, with a host of other things, will enable cultivators in addition to the usual occupants of the houses to make a good show. Hyacinths, Narcissus, Tulips, Lily of the Valley, and other plants of that class, must be duly forwarded as wanted. Hard-wooded plants will require a rather dry atmosphere in order to keep them free from mildew and damp.

FORCING DEPARTMENT.

PINERIES.—It is not by any means desirable to start more plants at this early season than may be absolutely necessary, for they will produce finer fruit later than can possibly be obtained from them now; and where a separate house cannot be commanded for those which must be subjected to a higher temperature, we would advise that the plants selected for fruiting should be placed in the warmest part of the house at command, filling the rest with young stock. The former should be afforded a bottom-heat of about 85°, and the latter about 10° or 15° lower; the atmosphere should range from 68° to 75° by fire heat, allowing it to rise 5° with the assistance of sunshine, keeping the young plants near the glass, and properly supplied with water at the root. This temperature will be considerably too high for young stock at this season, but we have seen this system practised with considerable success; and although the young plants may get somewhat drawn, they will gain strength as light increases, and the evil will be less than running the risk of starting at this early period of the season the greater portion of the plants that are at command for keeping up the supply throughout the summer.

VINERIES.—The early house will now require careful attention. Maintain a healthy growing atmosphere by sprinkling the floors, &c., as may be necessary, and admit fresh air whenever this can be safely done. Also attend carefully to the border, and if fermenting material is used do not allow the heat to decline, and where this is not used see that whatever covering is employed is efficient.

STRAWBERRIES.—Where ripe fruit is wanted early a portion of the most promising plants may now be selected and placed in a pit where they can be afforded a gentle bottom-heat; or if this cannot be commanded, a Peach-house or Vinery which has just been closed for forcing will do. They must, however, be kept close to the glass, for they require all the light that can possibly be afforded them at this season, and a free admission of air on mild days, with a low temperature until the fruit is fairly set, and if these conditions can be combined with bottom-heat, success will be more certain than under any other circumstances, and this will be more easily done in a small pit than in a house, the temperature of which must be regulated to suit other things.

FRUIT TREES IN POTS.—Where stock of these is prepared for forcing, the advantages of a deep pit with a bed of leaves will be apparent; the slight bottom heat thus afforded will be found beneficial in setting the roots in action. Cherries and Raspberries are the most impatient of heat and should be brought forward in a very low temperature, and unless they are required very early they will succeed better when started late. Peaches, &c., should be started with a top heat ranging between 40° and 60°, with a gentle syringing daily, and air according to the state of the weather. Here they may remain till they are nearly in bloom, when a drier atmosphere being necessary, they may be removed to vacant shelves or stages in any house at work where a moderate heat is kept up.

FLOWER GARDEN AND SHRUBBERIES.

Where any of the beds or borders require a dressing of fresh soil this should be provided, in order to have it in readiness to wheel on while this favourable weather lasts. Fresh soil is in most cases preferable as a dressing for flower beds to manure, which is apt to cause too luxuriant a growth for a first-rate display of flowers. On soils that are naturally poor, however, and where neither fresh mould nor decayed leaves can be had, a moderate dressing of well rotted farm-yard manure will be useful, but this should be well mixed with the mould the full depth of the bed, and not carelessly turned in and left in lumps near the surface, for in this case a gross habit of growth would be promoted early in the season, and as the principal part of the roots would be near the surface in the manure, the plants would soon feel the effects of dry weather; whereas if the manure is well incorporated with the soil to the depth of about 18 inches, no ordinary amount of dry weather will injure the plants after they once get fairly established.

HARDY FRUIT AND KITCHEN GARDEN.

If any transplanting of fruit trees has yet to be done this season, it should be seen to at once; also see to getting ground intended to be planted with young trees prepared, and spare no pains or expense to have this properly done. Make sure of thorough drainage, and where the subsoil is unkind this should be removed, replacing it with some good fresh loam. When a large breadth has to be planted in one season this expensive kind of preparation cannot be always afforded, but it is better to do such work only in such quantities as will allow of every precaution being used with the view of securing success.

STATE OF THE WEATHER AT CHISWICK NEAR LONDON
For the Week ending Dec. 19, 1861, as observed at the Horticultural Garden.

December.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Of the Air. Min.	Of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind.
Friday 13	11	29.460	29.384	54	34	44.0	47	45½	S.W.
Satur. 14	12	30.029	29.885	53	39	46.0	48	46	S.W.
Sunday 15	13	30.147	30.119	53	40	46.5	47	46	S.W.
Mon. 16	14	30.190	30.124	51	40	45.5	47	[illegible]	N.W.
Tues. 17	○	30.167	30.012	49	35	42.0	48	[illegible]	[illegible]
Wed. 18	16	29.911	29.899	46	36	41.0	47	[illegible]	N.W.
Thurs. 19	17	[illegible]	[illegible]	45	[illegible]	37.5	47	[illegible]	N.W.
Average		30.023	29.913	50.1	36.3	43.2	47.3	46	

Dec. 13—Rain, low dusky clouds, boisterous at night.
— 14—Clear, fine throughout.
— 15—Slightly overcast, fine, rain.
— 16—Hazy, uniformly overcast; fine.
— 17—Partially overcast, fine, cloudy.
— 18—Cloudy, fine, cloudy, overcast; cold wind.
— 19—Fine; dusky white clouds, light blue sky in intervals; at night.

Mean temperature of the week 3½ deg. above the average.

RECORD OF THE WEATHER AT CHISWICK
During the last 35 years, for the ensuing Week, ending Dec. 28, 1861.

December.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds
Sunday 22..	45.0	32.9	38.9	17	0.37 in.	[illegible]
Mon. 23..	44.1	31.9	38.0	19	1.13	[illegible]
Tues. 24..	43.8	31.1	37.5	15	0.30	[illegible]
Wed. 25..	43.2	28.8	36.0	9	0.45	[illegible]
Thurs. 26..	42.8	31.6	37.2	12	0.30	[illegible]
Friday 27..	42.5	29.5	36.0	14	0.40	[illegible]
Satur. 28..	41.7	28.0	34.8	11	0.21	[illegible]

The highest temperature during the above period occurred on the 25th, 1827, and 28th, 1855—therm. 58 deg.; and the lowest on the 28th, 1860—therm. 1 deg. below zero.

Notices to Correspondents.

BOOKS: *A Subscriber.* We should think Kemp's "How to lay out a Garden" would answer your purpose. The publication of plans so elaborate as those in the garden of the Royal Horticultural Society is too expensive an operation for ordinary works. We, however, shall probably publish them in the *Gardeners' Chronicle.*—*Barton.* You might as well consult a Beebook as that you name; for both are full of incomplete, contradictory, unintelligible, or inapplicable advice.

CUCUMBERS: *J.H.* Cuthill's Black Spine and Highland Mary are two of the best for early forcing and for a general crop; if you want a long kind merely for purposes of exhibition then take Empress Eugenie.

EMIGRATION: *R P W.* Wages, like all other articles, are dependent on two conditions, want and supply, and quality. Suppose 20 persons in a colony each want a gardener, and there is but one in the market—it is clear that his wages will be as high as the richest customer chooses to give. But suppose that 40 gardeners go out to supply the want of 20; it is clear that wages will then be as low as the neediest applicant can afford to take. Other information has been given already.

FRUIT TREES: *An Old and Constant Subscriber* must have been in very bad hands if he has purchased trees which are not the sorts they are sold for. It is entirely against our rule to recommend one nurseryman rather than another; and we are sure he will see that if we did we should be making an unfair use of our power, when all really great and respectable nurserymen refrain from so scandalous a practice. Mistakes must occasionally occur, but there can be no intention to deceive. To say nothing of the higher sense of right that exists now over what prevailed forty years ago, it does not pay to sell spurious trees; and that is as good a guarantee as the public can have against being defrauded. The *Gardeners' Chronicle* is the last paper to be silent in cases of proved fraud.

NAMES OF FRUITS: *J J.* 1, Uvedale's St. Germain; 2, Chaumontel.

TO CORRESPONDENTS. Answers to *Penrose, C V P,* two or three *Subscribers,* and others, are unavoidably postponed till next week.

JAMES AND FREDERICK HOWARD, BRITANNIA IRON WORKS, Bedford, Manufacturers of STEAM CULTIVATORS, STEAM PLOUGHS, CHAMPION PLOUGHS, HARROWS, HORSE RAKES, & HAYMAKERS. Catalogues, with full particulars, sent free on application.

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The Agricultural Gazette.

SATURDAY, DECEMBER 21, 1861.

NEVER was grief more general or sincere than that of the last few days. Sympathy with our widowed QUEEN, of itself enough to make a Nation mourn, is in this case deepened by a sense of the immense loss which we too have sustained. How large a share in the direction of every useful public movement was taken by the PRINCE—how much the energy of every philanthropic effort, of every organized benevolence, almost of every institution and society among us having useful aims—has been owing to His inspiriting example and encouragement, is plain from the stunning effect of the blow which his death inflicts upon them all.

Agriculturists suffer grievous loss, with every other class of the community. More, indeed, than any other class they feel the blow, for He was this year their leader. He had accepted the Presidency of the National Agricultural Society, and had already once presided at a meeting for business—one practically of the most useful which those in the direction of the Society had ever known. He would have presided at the general meeting of the Society last week, but for the illness whose fatal issue was so little then expected. And during the ensuing year we all looked forwards to the recruited membership, the cordial co-operation, and the redoubled spirit and activity which were certain to ensue under the influence of his Name—under the influence of that life-long example which had made His name so powerful for good. For the election of the PRINCE was no mere compliment to Rank—the Presidency was doubtless offered in the hope that we as so many other public bodies had already done might benefit by His leadership and guidance—but it was the fairly earned acknowledgment of a long and distinguished agricultural career. And the position was accepted doubtless as no mere formal distinction, but as enabling one addition more to that long list of useful and laborious patriotic efforts for which the PRINCE's memory will be always held in grateful reverence.

In Agriculture these efforts have been real, constant, and successful. Not only did the Royal farms always furnish admirable illustrations of every leading and important agricultural experience—of the best Farm Buildings, the best cultivation, the best live stock—of steam ploughing, dairy management, Grass land management—and not only were records of agricultural experience under these different heads frequently brought under the notice of the Royal Agricultural Society of England, but the PRINCE took especial interest as an agriculturist in the agricultural meetings of the year, and at Baker Street, and at Birmingham, and at the annual shows of the Agricultural Society He competed as with brother farmers for the distinctions awarded to successful exhibitors. It was in his thorough appreciation of the wholesome influence of competition, and in the cordial sanction given by him to the popular spirit and its methods of mutual improvement, that we looked for the most effective stimulant to agricultural progress during the coming year, when He would have been literally its leader.

Alas! it was little thought when the great International Exhibition at Kensington, and that other international gathering—the Exhibition of the Royal Agricultural Society of England at Battersea—were planned for 1862—it was little thought that in place of immediate leadership and guidance there would be but the memory of our Chief—but the remembrance of his wise counsels—the impulse of a Great Heart no longer beating here—to urge and guide to their conclusion plans which He had devised with such hopefulness, patriotism, and philanthropy.

—— No fewer than 8000 beasts were offered at the great Metropolitan market on Monday last. This is an unprecedented number. The number of the sheep in the market was also unprecedentedly large: 26,300 against only 19,550 on the similar day last year. The prices, 3*s.* 4*d.* to 5*s.* or 5*s.* 2*d.* for beef and 3*s.* 2*d.* to 5*s.* 6*d.* per 8lbs. for mutton, were lower than those of previous years. The whole show was characterized by first-rate quality, as well as by extraordinary quantity. The Shorthorns were in great force, the Herefords and Devons also maintaining their usual position. Some excellent Sussex cattle were exhibited, and the supplies from Scotand were unusually fine, Mr. M'COMBIE's stock as usual exciting great admiration. At least one quarter of the whole number on the ground were cross-bred cattle, which are more and more proving themselves the great stay both of the grazier and consumer.

The following Table gives the number sold and prices realised during the last 21 years:—

Years.	Beasts shown.	Prices. s. d. s. d.
1841	4509	3 8 to 5 0
1842	4541	3 4 to 4 8
1843	4510	2 8 to 4 4
1844	5713	4 0 to 4 6
1845	5326	3 6 to 4 8
1846	4570	4 0 to 5 8
1847	4280	3 4 to 4 8
1848	5942	3 4 to 4 8
1849	5765	3 4 to 4 6
1850	6341	3 0 to 3 10
1851	6108	2 8 to 4 2
1852	6271	2 8 to 4 0
1853	7037	3 2 to 4 10
1854	6181	3 6 to 5 4
1855	7000	3 8 to 4 2
1856	6748	3 4 to 5 0
1857	6856	3 4 to 4 8
1858	6424	3 4 to 5 0
1859	7560	3 6 to 5 4
1860	7860	3 4 to 5 4
1861	8040	3 4 to 5 0

SOME centuries ago when the Volunteers of England, if Volunteers they could be called, assembled near each village churchyard for the practice of archery, the strength of the bowman's wrist was scarcely a more important consideration than the toughness of the wood of which his weapon was made. And thus we cannot be surprised at the cultivation which the Yew tree then received; and probably it was due to this even more than to its sombre tint that it was so carefully cultivated in and around our burial grounds. No longer can this powerful argument be urged in favour of its preservation, and it is a question now in many localities whether it should not be destroyed. It has still the plea of beauty in its favour, and certainly the deepness of its tints contrasts so strongly with the Grass green of the turf around that it forms a very pleasant feature in the beauty of the landscape.

Whoever has ridden by the South-Western Railway from Bishopstoke to Salisbury, must have been struck by the beautiful appearance of Dean Hill (not far from Dean station), which, seen from the windows of the railway carriage on its south-west side, never fails to attract the attention of strangers. The spot referred to is a chalk hill or ridge of considerable height and nearly two miles in length, well clothed with green turf and dotted with many beautiful Yew trees, which in no situation could be displayed to greater advantage. It would be difficult to find a destroyer or an improver sufficiently ruthless to lay the axe at the foot of these venerable ornaments, which appear to have enjoyed for centuries a vested right in the soil. And although flocks of sheep have always been in the habit of grazing on these Downs and culling the leaves and branches which spring from the trunk within their reach, we are not aware of any evil result that has followed. And so many similar instances have come before us that we have been disposed to consider the leaves of the Yew tree harmless until they are cut and partially withered. This position may not perhaps be fully sustained, but we may be justified in mentioning some instances tending to its corroboration. Some five-and-twenty years ago we well remember witnessing a sad mortality amongst a fine flock of Hampshire sheep, more than decimated, as if by a destroying angel passing over them in the night or early morn. A few days previously some Yew trees had been cut, and with the dead branches a temporary hedge had been made to which the sheep had access. An examination of the stomachs of the victims revealed, by the presence of large quantities of the brown and dry leaves of the Yew, the true cause of the disaster. A few years afterwards, within a radius of ten miles from the same spot, some donkeys died, and this was speedily followed by other deaths. The dead branches of the Yew were discovered in the stomachs of these animals, and on inquiry it was found that some Yews had been trimmed, and the clippings omitted to be burnt or destroyed. In the same locality not many years since a lawsuit had almost occurred from a number of young Short-horn cattle, placed out to keep, being found dead or dying in the pasture ground. A fine old hedge of Yew had been ordered to be trimmed, and the labourers, knowing its poisonous properties, carefully collected the trimmings; but, removing them as it were "out of the frying pan into the fire," placed them in a ditch to which the cattle had access, and the beasts devoured the clippings eagerly, and were speedily destroyed. And now, passing over various other instances, a lady residing not many miles from the same locality writes that a valuable heifer, half an hour after eating the Yew, died, and the presence of the Yew leaves in the paunch points to the cause of death. She wishes to know whether the poisonous effect is confined to the male or non berry bearing tree, as is frequently supposed to be the case, and would like to know from analysis where the poison resides. It is the leaves that are devoured, and which prove poisonous, and there is no reason whatever for the idea that there is any difference between the two trees, or that the poisonous quality is confined to the one or the other. It no doubt resides in some essential oil common to both, and should teach the absolute necessity of treating the trimmings of Yew trees or hedges as poison itself. And as no chemist is permitted to sell poisonous drugs without proper labels, so no countryman should ever be allowed to leave the trimmings of the Yew exposed for a single hour in any spot to which cattle have access, but should be instructed to consign them to the flames as promptly and certainly as he would destroy the viper which crosses his path.

It may also be seriously recommended that when Yews are not required either for ornament or utility they should be removed and destroyed. *W. C. S.*

IMPORTANT SEED CASE (SEED WHEAT).

At the Salisbury County Court last week the case of "Lampard *v.* Holloway and others" was tried. The plaintiff was a farmer residing at Farley, and the defendants were corn and seed merchants carrying on business in Salisbury. The action was brought to recover the sum of 30*l.* 1*s.* 6*d.* for losses occasioned by the failure of a Wheat crop through the alleged worthlessness of the seed. Both parties were represented by professional gentlemen, and the case excited some interest.

The plaintiff's solicitor said his client purchased a quantity of seed Wheat of the defendants, which failed to vegetate after it was sown. He did not rely, he said, upon any express warranty, but there could be little doubt of there having been an implied warranty at the time of sale. The defendant's Wheat not only failed on the land of the plaintiff but also on the farms of Mr. Woodlands and Mr. Packer, and he believed he should be able to show that all came from the same rick.

The judge pointed out that no breach of warranty was alleged in the particulars, and referred to a case reported in the 28 Law Journal, Ex. 238, in which it was held by the judges that if a man sold seed Barley according to the best of his opinion and belief it was not held to be a warranty. He added that a person must not only express an opinion but must know that what he was stating was wrong in order for it to amount to a fraud.

Mr. Samuel Lampard, the plaintiff, then deposed that on the 1st of February last he was in the shop of Messrs. Holloway. While there Mr. Herbert Holloway said to him—"Do you want to buy any seed Wheat, or do you know any one else who does, as we have just threshed out a rick on purpose, and will sell any quantity down to a gallon." In reply to plaintiff's inquiries he was told it was White Lammas, and on some being taken out of a sample bag he asked, "Will it grow?" Defendant said "I am sure it will; it has not been heated, and is shot out on the floor of Mr. Maffey's store." Plaintiff bought two sacks at 30*s.* per sack, and on the following Tuesday he saw the Messrs. Holloway in the market square, and they said that they were quite sure the Wheat would grow, and that they could warrant it to grow. He then bought two sacks more at the same price, and sowed the four sacks of Wheat on 7 acres, 31 perches of land. Scarcely any plant came up from the Wheat, and he then bought two other sacks of Wheat from Mr. Sidford, and had it drilled in on the same land. On being threshed out the crop from 7 acres 31 perches produced 15 sacks of the best Wheat and 6 bushels of tailing; while 1 acre 3 roods 35 perches of land, sown with Wheat bought of a Mr. Bryant,

produced 10 sacks of the best Wheat and 2 bushels of tailing, being a difference of about 3 sacks an acre. Witness estimated his loss at 31*l.* 7*s.* 6*d.*, but did not wish to put his claim too high.

In cross examination, plaintiff said that a portion of the land sown with Messrs. Holloway's Wheat was wet land, and "would pull a horse's leg off." Part of the land previously had Clover ley, and another part had been summer tilled. He never saw signs of wire-worm in the ground. The other portion of Messrs. Holloway's Wheat was sown on the dry side of the farm, in as good land as any in the county of Wilts; there he had a much better crop. It was not usual to ask for a warranty when purchasing seed Wheat; he relied on the respectability of the parties. He should think that the Wheat sustained injury when in the rick.

John Fry, formerly head carter in the employ of the defendants, said he recollected a rick of White Lammas Wheat, the produce of 6¼ acres, being put up quite green, and he saw steam came out from the top of the rick. About a couple of months after the rick was made the Wheat was threshed, and the corn was taken to Salisbury and shot on the floor of Mr. Maffey's stores in order to dry. The horses would not eat the husks of this Wheat, and he had no doubt whatever that it was mow-burnt.

Mr. James Rawlence, who had gone over plaintiff's land, was called to depose to the amount of injury he had sustained. He added that Wheat ought not to be carried in the state described by Fry. The effect would be over-heating, and the corn would become mow-burnt. If a rick becomes too much heated and the corn is mow-burnt it will not vegetate. Certain portions of the outside of the rick may probably grow, but the inside would not. If however a double quantity were sown a crop might be got.

On cross examination this witness said that the summer of 1860 was no doubt a bad year for grain, but he did not think the vegetative power was affected. If Wheat from the same rick produced a good crop elsewhere it might have come from the outside. He did not find fault with carrying a little green, the error was in threshing too soon afterwards.

Charles Harm, bailiff to Mr. Woodlands at Milford, deposed that they had 10 bushels of defendant's Wheat for their farm. The seed vegetated and came up very thin on tolerably good land. It was ploughed up in May, as Mr. Woodlands thought that it was a bad crop. He took 27 grains of the Wheat and sowed them in a Cucumber bed, but only three blades came up; and he subsequently put in 32 more grains, and only four blades came up. He could not say positively that the Wheat was mow-burnt.

This being the plaintiff's case, it was stated for the defence that evidence would be given to show that not one word of Fry's statement respecting the Wheat was true, and that so confident were the defendants as to the value of the seed that they sowed 5¾ acres with some of it themselves, from which they obtained a good crop. The original was purchased of Mr. Rawlence, and was a good sample. It would also be shown that the defendants had no knowledge of the Wheat being mow-burnt, and that consequently the plaintiff was not entitled to recover.

Mr. Richard Holloway then deposed that when the Wheat was cut it was in a fit state and quite ripe, and was not threshed out for seed until January. It was sacked from the machine and taken to Mr. Maffey's, which was not a malt house, but simply a corn store. There was no symptom of the Wheat having been mow-burnt. Sowed some of the same Wheat this spring in 4 acres, 2 roods, 37 perches, and it came up very well and produced 26 sacks. He sold two sacks of the same Wheat to Mr. Andrews, and it came up well.

Cross examined—Would swear positively that the Wheat was not mow-burnt. Should account for the Wheat not vegetating on Mr. Lampard's farm because it was sown on damp heavy clay land. Could not say why the grain did not germinate in the Cucumber bed, and thought that in Mr. Woodland's case it was ploughed up too soon. Had half a mind to plough his own up but waited.

Mr. Herbert Holloway was next called and deposed that the Wheat he sold to plaintiff was sweet and apparently good. If it had been mow-burnt he should have known it. He never said it was Wheat that would grow, though he might have warranted that it was seed Wheat. He most positively stated that he did not warrant the seed beyond stating the sort of seed and by whom it was grown.

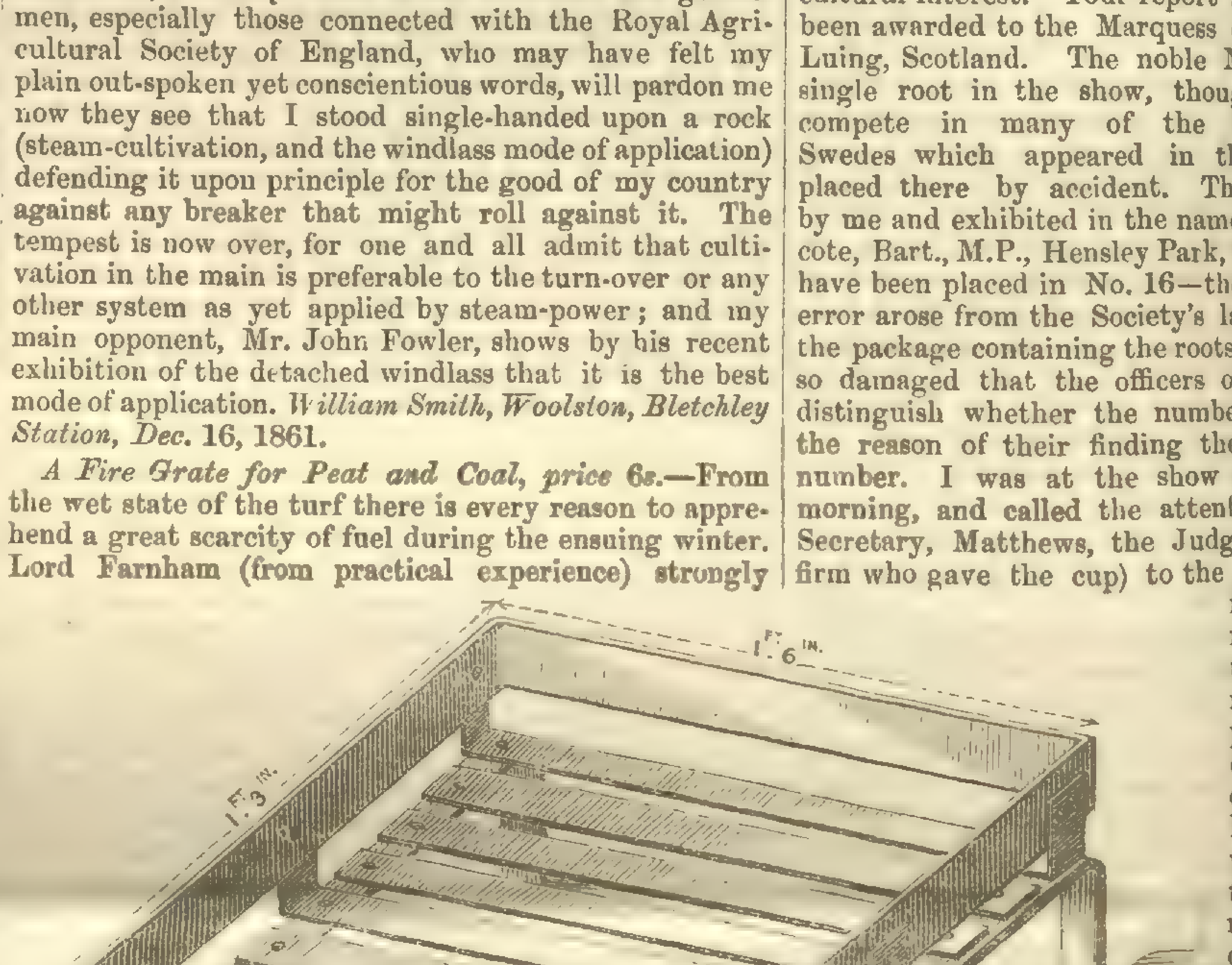
Mr. Henry Andrews deposed that he sowed 2 acres with 6 bushels of the seed in question, and never had a better crop from any seed. It yielded about 5 sacks an acre, and was not mow-burnt.

Other witnesses were called on the part of the defendant, and ultimately his Honour gave judgment for the defendants, as he considered they did not make any misrepresentations when the Wheat was sold. If the plaintiff however was not satisfied with his ruling he might have a case for the Court above.

Home Correspondence.

Steam Cultivation.—Your report on the implements at the Smithfield Club Show shows that Mr. John Fowler has come back to the working of a double detached windlass for ploughing by steam power, thereby proving the consistency of my firm determination to stand by it from the first, but there is one point in the report that I do not clearly understand, *i.e.* "the two drums on the stationary windlass are so connected with one another, that each in turn pulls upon the other, and the reluctance of the paying out drum is no dead weight to be overcome by the engine, but is a help to the indraught of its neighbour; the evolution of the one drum thus helps the involution of the other, and the power which keeps the rope tight is not altogether lost." Now by putting on a very heavy break upon my paying off drum I could keep my back rope tight if there were any advantage in it quite, as well as Mr. Fowler can, but if I do, I find it requires an increase of from 2 to over 10lbs. pressure per inch, according to the length of back rope out, on my 8-horse power engine—on some occasions full 2-horse power. Then it appears clear to me that he requires this and even more for the friction of his paying off drum against his working drum must increase the working drum's draught beyond that required to hold back the paying off drum. This also shows that the clip drum (now condemned in consequence of its frequent breakage and rope-cutting propensity), in keeping its back rope tight must be wasteful of the power. In conclusion, I do hope that those noblemen and gentlemen, especially those connected with the Royal Agricultural Society of England, who may have felt my plain out-spoken yet conscientious words, will pardon me now they see that I stood single-handed upon a rock (steam-cultivation, and the windlass mode of application) defending it upon principle for the good of my country against any breaker that might roll against it. The tempest is now over, for one and all admit that cultivation in the main is preferable to the turn-over or any other system as yet applied by steam-power; and my main opponent, Mr. John Fowler, shows by his recent exhibition of the detached windlass that it is the best mode of application. *William Smith, Woolston, Bletchley Station, Dec.* 16, 1861.

A Fire Grate for Peat and Coal, price 6*s.*—From the wet state of the turf there is every reason to apprehend a great scarcity of fuel during the ensuing winter. Lord Farnham (from practical experience) strongly recommends the accompanying grate as a cheap and serviceable mode of enabling his poorer neighbours to burn coal or wood with their wet turf. *Farnham, Cavan.*



Rape Cake.—It may not be generally known that the feeding properties of Rake cake are very nearly identical with those of Linseed cake, and therefore, although very reluctant to appear in public, I think it a duty we owe to each other to impart any information we think may be of value. Below I hand you the analyses of a considerable number of samples of each kind of cake, which I have obtained from a thoroughly practical chemist, and from which you will see there is the least possible difference in the feeding qualities of each. The great difficulty hitherto has been to get the cattle to eat it without waste. This object, I think, is fully attained by grinding the Rape cake as fine as pig-meal, and mixing with pulped Turnips and cut straw; the sweet juice of the Turnip takes off or moderates the bitterness of the Rape meal, and so divides it amongst the whole, that the cattle eat it as well as if Linseed cake were used. My plan is to pulp as much Turnip or Mangel Wurzel as is intended to be given to a certain number of beasts per day, and then mix as many lbs. of the meal, per beast, as is to be given; say 4 lbs. for store beasts, and 7 lbs. or 8 lbs. for cattle tied up for winter feeding. The Rape meal and Turnip pulp are next mixed with as much cut straw as will be sufficient for the day. We mix in the afternoon what will be required for the use of the following day; as the cattle prefer it, when it has been mixed 12 or 20 hours, to either fresh mixed or longer kept food. We have used this for a considerable number of both store and stall-fed cattle last winter, all of which have done well. The Rape cake used should be of the green kind. Sheep will eat this mixture in winter but not in summer; for then little or no chaff should be used. If we deduct the same amount from each kind of cake for value left as manure (and the value in each is precisely the ...) we shall find the cost of feeding on Rape ca... one-third of that on Linseed cake.

Average Composition of Rape and Linseed Cake, as Co... a Large Number of Analyses.

	Rape
Moisture	[illegible]
Oil	11.10
Nitrogenised or flesh-forming principles	29.50
Heat giving substances	40.90
Ash	7.79
	100.00
Containing—Nitrogen	4.65
Equal to Ammonia	5.64

E. T. Simpson, Calder Soap Works, Wakefield, ... *Wakefield Farmers' Club.*

The Bingley Hall Root Show—Sir W. Heathcote's Roots.—Permit me to call your attention to the ... of the prizes which recently took place at Bingley H... Birmingham. The error which appeared in the ... logue of the show respecting the award of the ... cup given by Messrs. Proctor and Ryland for the ... six Swedes seems to have been copied by you and ... other leading weekly journals connected with the ... cultural interest. Your report states the prize ... been awarded to the Marquess of Breadalbane, ... Luing, Scotland. The noble Marquess had ... single root in the show, though he had entered ... compete in many of the classes, and the ... Swedes which appeared in the stall No. ... placed there by accident. Those roots were ... by me and exhibited in the name of Sir William ... cote, Bart., M.P., Hensley Park, Winchester, and ... have been placed in No. 16—their proper place. ... error arose from the Society's label (which was ... the package containing the roots) having been ... so damaged that the officers of the show could ... distinguish whether the number was 15 or 16, ... the reason of their finding their way into the ... number. I was at the show early on the ... morning, and called the attention of Messrs. ... Secretary, Matthews, the Judge, and Ryland ... firm who gave the cup) to the fact, gave them ... factory proof that ... roots were mine, ... upon they were ... removed into their ... per number, 16. ... correcting this ... oblige *James Cl...* P.S. After those ... were removed from ... to 16 the former ... mained empty—... of itself that the ... quis did not compete ... this class.

Important to Purchasers of Seed.—... *& Webb v. Jen...*—... the Romsey ... Court, on the 6th ... before C. J. Gra... judge, two actions ... entered to assess ... of compensation ... Mr. King and ... Webb, who had ... chased seed ... to be Swede seed ... fendant's own growth. The plaintiffs are ... living at Lyburn Farm and at Romsey, ... defendant is a manure manufacturer living at ... ling, who has recently taken to sell Turnip ... Mr. Leigh appeared for the plaintiff (Mr. King), ... Mr. Harfield for the defendant. Plaintiff ... that he purchased in May last some seed of Mr. ... which purported to be "Yellow-flesh Swede ..." He sowed it on 4½ acres of land, having properly ... pared the land with manure in the usual way, ... to feed off with sheep, but to his great surprise the ... that came up was of the most worthless descri... He produced a specimen of the same. and he could ... pare the bulb, it bulb it may be called, to very ... and ill-grown Radish. Plaintiff calculated ... the land would have produced about 20 tons ... Swedes per acre. The crop that did come up ... very prolific and from that it was fair to ... sume the Swedes would have been equally ... The amount of compensation claimed was 24*l.* odd. ... Ayton, a valuer of agricultural crops, &c., deposed ... he went over the field in question on the ... October, and valued the tillage, &c., which ... 19*l.* 9*s.* 9*d.* The damage he adjudged at 6*l.* ... acre, and against this he allowed 20*s.* per acre for ... crop that was produced. He calculated the produce ... Swedes would have been about 15 tons per acre. ... previous crop was winter Oats, and the mode of ... pursued by the plaintiff was the regular course ... preparation for the succeeding crop. His Honour ... thought it would be better to have the opinion of ... practical person in the matter, and accordingly ... John Allsopp, whose name had been mentioned, and ... had amicably settled no less than eight cases for ... defendant in which parties were in a similar plight ... the plaintiff, was sworn, and deposed that he had been ... called in to arbitrate in eight different cases ...

…lar nature; however, there was no legal defence to the action and his Honour gave judgment for 20*l.* and costs. In Mr. Webb's case the defendent agreed to pay the demand without trial.

On Flavouring Weathered Hay.—This is a subject of much importance, especially at the present season of the year, and I have therefore pleasure in replying to the inquiries of "A Constant Reader." The formula which was quoted in a recent number of the *Gazette*, and to which these inquiries refer, appeared in another journal at midsummer. It specially applied then to improving the quality of any hay or Clover which might in the course of putting together in the stack, and which had become "vapid," or had lost its natural aroma, from weathering in a tedious or catching season. And I am glad to be able to report the fact that many who used this application (with the addition of a sprinkling of salt) have had great reason for satisfaction at having done so. "My waggoner tells me that the team never ate their Clover better," said a gentleman to me a few days since, whose Clover had fully three weeks bleaching, but who flavoured it in the manner recommended. However, similar treatment may with advantage be employed when the rick is cut and the fodder wanted. My plan with hay which had not been flavoured in the rick has been this:—Select the tops, bottoms, and inferior qualities, and shake them well up together. Damp the mass with salt and water, and dust it over lightly with the aromatic mixture. Have the whole nicely mixed together, so that each portion gets its own share—and let this be done some 24 hours before using. The quantity of flavouring material to be used depends upon the quality of the hay; the worse the sample, of course the more is required to improve it. But in the majority of cases, an outlay of 5*s.* should render a ton of inferior material palatable, and will repay the outlay many times over. If the hay is of the mustiest character it would stand knocking over with the flail, in order to take a part of the dust out of it. And, if possible, get the ingredients from a wholesale druggist, finely ground, and warranted true to name; for, as in many other matters, adulteration is not unknown. *T. Bowick.*

[The following was the prescription:—

Fenugreek (powdered)	112 lbs.
Pimento	4 „
Aniseed	4 „
Carraways	4 „
Cumine	2 „

(Mixed and strewed over the rick in building.)]

Mr. Smith and his "Lost Sheep."—Sir, I must put myself right about this lost sheep. Mr. Smith, of Woolston, comes before the public and tells them that I was not gentlemanly enough to tell him to whom I had sold my Smith's set of Steam Cultivating Tackle, but Mr. Smith is not straightforward enough to give the reason. The following, which is an exact copy of his letter to me, will, I think, be sufficient for your readers to judge how far Mr. Smith is justified in this statement:—

"Woolston, Bletchley Station, May 11, 1861.

"Dear Sir.—My man, who was at Bedford to-day, tells me that he saw you and you told him that you had sold your Smith's tackle. If so I ask from whom did you get a license to do so? You have not had my authority, and to sell that tackle without it is, to say the least of it, taking a great liberty. Be good enough to explain this matter.

"I am glad to find that you have an implement that you like better than mine. The windlass you know is mine except the drop drum, therefore what progress you fancy you are making in Bedfordshire belongs to me yet. And stop a bit, you tell my man, as well as sending your best respects to me, that I stood still too long, and that you wanted progress—now what progress have you got? Nothing; you are only cultivating with one of the worst constructed implements I ever saw, and everything that you are working except the hurdle and drop drum is mine; but let me ask how shall you work wide cultivators seven or nine tines that you used to be so pleased with? Why, then, you are rather digressing. Now you will find that I have yet to show you the road to progress, and my patent is now taken that will do it.

"I saw one of the hurdles at work at Beckring's park on Friday. It must do better than it did then before it will alarm me.

"And now, sir, permit me to send my very best respects to you, telling you that you must explain the matter in the first paragraph, or I shall take proceedings against you and the purchaser, whoever he may be, when I find him.

"Mr. Pike. Yours respectfully, W. SMITH.

"P.S.—I have written rather long, my man telling me that you appeared to express that you was so very friendly towards me, and should write to me, and that you should like to see me. I shall be pleased to see you, although you do work an hurdle."

I was one of the first to buy Mr. Smith's apparatus, and until I saw a better, I did what I could to recommend it. I leave your readers to judge whether Mr. Smith is justified in his attack on me. *William Pike, Sterington, Bedfordshire, Dec. 18, 1861.*

Drainage Outfalls.—I have seen the letter of "A Reader" in a recent *Agricultural Gazette*, and beg to observe that if he is not connected with another company I am at a loss to understand why he should imply that the object of my letter was to advertise the West of England Draining Company, or why he is so desirous of showing that the powers of their Act are not so good as represented. In January last a letter in the *Times* attacked the Company's outfall powers, and termed them "roundabout and expensive," upon which several letters afterwards appeared; but the correspondence terminated with the Company's secretary stating the result of the practical working, viz., the fact that, "as regards the expense, we can say that in no case has it amounted to 5*l.* for carrying into effect such right." A short statement of facts will also be my reply to the present attack, as I do not intend to be led into a personal controversy with a party who withholds his name, and whose object appears to be to depreciate the powers of our Act without mentioning any other Act the outfall powers of which have been practically worked at so small a cost. Until that is shown I maintain that we have "the most simple, expeditious, and inexpensive powers," as stated in the Company's advertisement now appearing in your paper. As the result of many years practical working, which is the best evidence, I beg to state the fact that the outfall powers of the West of England Company's Act have been exercised in different parts of the country, at a cost not exceeding 5*l.* in any case; and I beg to explain that before works are commenced the Act requires proof to be made, and also a certificate to be obtained that the forms of the Act have been complied with; that adjoining proprietors have in some cases said "No," but upon explanations, with a copy of the Act, being furnished to their solicitors no further objections were made; that works of the Company requiring outfall drains through the lands of adjoining proprietors are frequently sanctioned by the Inclosure Commissioners. *Frederick Brodie, Secretary Drainage and Inclosure Company, Exeter, Dec. 12, 1861.*

Societies.

ROYAL AGRICULTURAL.—We give in the following columns two interesting reports from the veterinary officer of the Society, Professor J. B. Simonds—and the following tabular statement from the Finance Committee:—

ACCOUNTS FROM THE FINANCE COMMITTEE.

DR. HALF-YEARLY CASH ACCOUNT, FROM 1ST JANUARY TO 30TH JUNE, 1861. CR.

Dr.	£ s. d.	£ s. d.	£ s. d.
To Balance in hand, Jan. 1, 1861:			
Bankers		1,236 19 2	
Secretary		41 13 4	1,278 12 6
To Income, viz.:—			
Dividend on Stock		172 10 0	
Subscriptions:—			
Governor's Life-Composition	50 0 0		
Governors' Annual ..	435 0 0		
Members' Life-Compositions	220 0 0		
Members' Annual .	3,006 8 0		
		3,711 8 0	
Journal:—		28 3 0	
Advertisements			3,912 1 0
To Country Meetings:—		9 5 0	
Canterbury		2,899 3 0	
Leeds			2,908 8 0
			£8,099 1 6

Cr.	£ s. d.	£ s. d.	£ s. d.
By Expenditure:—			
Establishment—			
Official Salaries and Wages ..	327 6 0		
House Expenses, Rent, Taxes, &c.	320 18 7		
		648 4 7	
Journal:—			
Printing ..	455 3 6		
Stitching ..	60 14 3		
Delivery, Advertising, &c. ..	117 11 0		
Prize Essay ..	10 0 0		
Other Contributions	26 15 0		
Editor's Salary ..	250 0 0		
		920 3 9	
Chemical:—			
Consulting Chemist's Salary (3 quarters) ..	225 0 0		
Grant for Investigations (1 year)	200 0 0		
Special Grant for Cheese Investigations ..	100 0 0		
		525 0 0	
Veterinary:—			
Grant to Royal Veterinary College	100 0 0		
Investigations & Experiments	33 4 6		
		133 4 6	
Postage and Carriage		30 4 11	
Advertisements		10 6 0	
Sundries		10 18 7	
Subscriptions returned (paid in error)		3 1 0	
			2,281 3 4
By Investment—			
Purchase of Stock, New 3 per Cents.		.. ..	2,001 1 6
By Country Meetings—			
Canterbury		35 11 0	
Leeds		1,542 8 10	
			1,577 19 10
Total Expenditure ..		.. ..	5,860 4 8
By Balance in hand—			
Bankers		2,229 13 8	
Secretary		9 3 2	
			2,238 16 10
			£8,099 1 6

(Signed) W. FISHER HOBBS, for Finance Committee.
QUILTER, BALL, JAY, & Co., Accountants.

Examined, audited, and found correct, this 6th day of Dec., 1861
(Signed) WILLIAM ASTBURY, HENRY CORBET, WILLIAM COHEN, Auditors on the part of the Society.

BALANCE-SHEET, 30TH JUNE, 1861.

LIABILITIES.	£. s. d.	£. s. d.	£. s. d.
To capital:—			
Surplus, 31st Dec., 1860 ..		15,043 18 2	
Surplus of income over the Expenditure during the Half-year, viz:—	£. s. d.		
Income ..	3,912 1 0		
Expenditure	2,281 3 4		
		1,630 17 8	
			16,674 15 10
To Balance at Credit of Leeds Meeting		.. ..	1,855 12 1
To Canterbury Meeting Balance outstanding		.. ..	6 5 0
			£18,036 12 11

ASSETS.	£ s. d.	£ s. d.
By Cash in hand	.. ..	2,238 16 10
By New 3 per Cent. Stock, 14,219*l.* 2*s.* 9*d.* cost	.. ..	13,797 16 1
By Books and Furniture, Society's House, Hanover Square	.. ..	2,000 0 0
		£18,036 12 11

REPORT OF PROFESSOR SIMONDS ON A CATTLE DISEASE IN MONTGOMERYSHIRE.

ROYAL VETERINARY COLLEGE.

In continuation of my former report on the outbreak of a destructive disease among the cattle belonging principally to Mr. Harvey Jones' tenants in the parish of Llandinam, Montgomeryshire, I have to speak more fully of the nature of the affection, and the causes which produced it; as also of the means which were adopted to arrest its progress, together with the result. In the previous report it was stated that upwards of fifty animals, of various ages, had died up to the time of my visit, and that others were being attacked almost daily. For the first few days after my investigation the disease continued to prevail with unabated fatality, but it then ceased, and no more cases have since occurred. This sudden disappearance of the affection I believe to be entirely due to the preventive measures which were adopted, and I am warranted in giving this opinion because all the local causes were still existing.

Causes.—Under this head we must class the kind of weather which prevailed during the existence of the disease, the nature of the soil, the character of the food, and the management pursued towards the animals.

The cases occurred principally during October—a month remarkable for its humidity and warmth. The state of atmosphere which then prevailed was accompanied with heavy fogs, and particularly in the district in question. The fogs often hung over the fields excepting for an hour or two throughout the entire day, and were so dense as frequently to hide the animals from observation, although but a few yards distant. Constant exposure to weather of this kind, would of itself prove detrimental to health, by impeding the process of respiration and also the decarbonisation of the blood; but besides this it would have an indirect effect on the animal œconomy no less injurious.

Speaking in general terms of the entire parish, it may be said to have a character of soil described as a clayey-loam overlying slate shale. The soil is necessarily very retentive of moisture, and as much more rain had fallen in the district than, as may be said by way of contrast, had done in the vicinity of London or elsewhere, so the land was more than ordinarily wet. I was particularly struck with this, for many of the roads leading to different farms were literally mid-leg deep in mud, and perfectly impassable except on horseback.

The warmth of the atmosphere necessarily induced under such circumstances an abundant growth of Grass, and it was stated, in answer to my inquiries, that more keep existed in the pastures than was often to be found in the month of June. The Grass, however, produced under these circumstances would of necessity be not only surcharged with moisture, but proportionally deficient both in albuminous and other proximate principles which are imperatively necessary for the making of pure and healthy blood. Hence we have another powerful cause in the food itself in inducing the disease.

The abundance of Grass likewise led the proprietors of the cattle to leave the animals out *night and day without any other provender*, with a view of saving their winter keep.

These several things being combined brought about a state of the blood by which it was unfitted for the purposes of life, and as an immediate consequence, local Hæmastasia resulted—in other words, the contaminated blood became partially stagnant in the vessels. Sometimes this stagnation took place in one part of the system and sometimes in another. The affected structures became swollen, hard and painful. The head and throat were the principal seat of the local symptoms, but occasionally the fore or the hind extremities would be attacked

Nor were the internal organs exempt, as the lungs were now and then primarily affected.

The duration of malady varied a little, but was rarely longer than 24 hours; while many of the animals apparently unaffected in the morning would be dead before night.

In several respects the local symptoms were closely allied to those seen in Hæmatosepsis, "black leg," but no gaseous matters were evolved into the cellular tissue, as is the case in that malady. Cattle also of all ages were its victims, and that without respect to their being milking or fattening animals, or store stock.

It was not to be expected that curative means would be of much avail in such a disease, and therefore I learned, without surprise, that little or no advantage had resulted from their application. A case occurring, while I was staying with Mr. Powell, Mr. Jones's agent, and the chief occupier in the parish, afforded me the opportunity of giving trial to curative measures, but without much relief, as the animal died in about 28 hours from the time of the attack.

Preventives.—It was self evident that benefit could only result from the application of prophylactics, and especially from removing the causes of the disease to as great extent as possible. With this view I ordered that the animals should no longer be kept in the pastures at night, but be brought into the yards and fed on hay, hay-chaff, and bran, and also crushed corn. It appeared to me to be a matter of minor importance what kind of corn was given, and therefore this varied in different instances according to the convenience of the occupier. The chief thing was to limit the amount of succulent diet, and to substitute food rich in the elements of blood. Instructions were also given for the animals to be kept entirely in the sheds and yards on foggy but especially on wet days.

Besides this alteration in the diet, location, and management of the animals, orders were given for each to take of nitrate of potash in powder in a bran mash every other night from two to four drachms, varying according to its age and condition. These doses to be given to the extent of about six or eight in number.

In a few instances, as in Mr. Powell's case, who had been the greatest sufferer, I directed that an aperient combined with a diffusible stimulant should be administered at the commencement of the preventive treatment, which was to consist of sulphate of Magnesia, half a pound; compound solution of Aloes, from two to three ounces; compound tincture of Gentian in the same quantities, and two drachms of powdered Ginger. The whole to be given in some well boiled gruel.

As previously stated these measures at once proved most effective for good, by entirely putting a stop to the further progress of the malady.

In concluding this report I may remark that these cases possess an especial interest to the pathologist as tending to prove the necessity of giving greater heed to the state of the fluids in many affections of the solids, than has hitherto been done, and also in showing that some of the most destructive maladies occurring among herbivorous animals depend immediately for their production on the quantity and quality of their food, the management which is pursued towards them, and the nature of the soil they inhabit.

They also prove to the practical agriculturist that very often the simplest means, when rightly directed and founded upon a scientific inquiry, will suffice to arrest the most fatal disease which may be raging among flocks or herds.

REPORT ON THE EMPLOYMENT OF A FRENCH REMEDY FOR THE CURE OF ROT IN SHEEP.—By THE SAME.

It will be remembered that in the early part of the year M. Trehonnais called the attention of the agricultural community to a remedy employed in some parts of France for the rot in sheep, which was much extolled for its curative properties, and that M. Trehonnais having also very liberally engaged to obtain a sufficient quantity of the agent for trial in this country, the Council, on the recommendation of the Veterinary Committee, resolved to purchase some sheep for the experiment, and voted a sum of 12*l.* for the purpose.

In accordance with this resolution, instructions were given me to procure such animals as I deemed fitting for the purpose, and to commence the experiment as early as circumstances would permit. In selecting the sheep, which were of the improved Dorset breed, I took care that they should be of the same age as near as possible, be also in a condition warranting the belief that they would survive long enough to give a fair trial to medicine, but be in different stages of the malady. I preferred one year-old sheep as offering most of these advantages, and for the further reason that an approximation could be made as to the time they had been the subjects of the malady. Everything being arranged, the experiment was commenced on April 22d, the first thing done being to divide the sheep into two parts, leaving one moiety at the Royal Veterinary College and sending the other to my farm, Oakington, in the parish of Harrow. This was deemed important, as each division would be placed under totally different circumstances, especially as to the kind of food which would be supplied to the animals, and the protection which would be afforded them.

The sheep left at the College were kept entirely on hay and Oats, housed every night in a shed, but allowed the use of a small enclosure during the day. Those sent to Oakington were placed in a meadow, with an abundant supply of Grass, had no corn, nor any protection of a night, save when the weather was wet.

I further determined to give the medicine to three sheep only of each lot, leaving the others entirely to their chance. In doing this I selected the apparently strongest sheep for taking the medicine.

The directions received from France for the use of the agent were that a tablespoonful should be given to each sheep every morning, half an hour before feeding time, and be continued from 15 to 20 days to animals in the early stages of the disease, and from 30 to 40 days to those in the advanced or latter stages, or even for a longer time in very severe cases. It was further ordered that as soon as the animals had gained their appetite and strength, whatever other indications of the disease might exist that no more medicine should be given, as these were signs of convalescence—proper care as to feeding and management sufficing to complete the cure. Under the influence of regimen, care and exhibition of the medicine it was also stated that a cure would be effected in a month or six weeks of the sheep in the early stages of the disease, and in about three months of those in the advanced stages. The recoveries were said to be *all* in the first, and *two-thirds* in the latter stages.

The exhibition of the medicine for the first fortnight appeared in neither lot to have any marked effect, the animals, with one exception, continuing in their original condition. In the case alluded to, and which was one of the sheep kept at the College, the disease was evidently fast gaining ground, foretelling a fatal result. This was also one of the animals to which the medicine was administered. On the 21st day from the commencement of the experiment it died, and on being examined *post mortem* it was found that numerous flukes existed in the liver, that the organ was pale in colour and had undergone structural changes, that effusion of serum had taken place into the abdominal cavity, and that the entire flesh was flaccid and paler in colour than natural from general anæmia,—thus proving the true nature of the malady. Under these circumstances I resolved to select one other of the three animals which up to now had had no medicine, as the trial did not appear quite satisfactory in the case alluded to; death having resulted so soon.

Continuing the report of the College sheep, it is next to be observed that the remedy was continued to the middle of June, and this, not only without any apparent benefit, but seemingly with some disadvantage, as each of the three sheep was more emaciated than either of the other two.

This untoward circumstance evidently depended on the nauseating effects of the medicine, as the animals would often refuse their food after its exhibition, and sometimes even to the latter part of the day.

It may be here remarked that the medicine contained some oleaginous material which had a very unpleasant smell, not unlike fetid animal-oil, and which had probably to do with its sickening effects.

On the 20th June, being two months from its first exhibition, the medicine was discontinued to the College Sheep. All the animals were kept however about six weeks longer, by which time they had become so emaciated that it was determined to destroy them, which was accordingly done. A *post mortem* examination was made of each, and it was found that no real differences existed in the lesions wrought by the disease in the sheep which had taken the medicine from those of the others which had not. Living flukes existed in large numbers in the livers of all the animals.

To return to the sheep at Oakington. It has been already stated that for the first fortnight, subsequently to April 22, no material alteration had taken place in this moiety of the animals. By the end of May however it was very evident that three of the sheep were gaining flesh, and presenting a far more healthy appearance than the other two. Two of these were sheep not taking medicine, and one which was. The others were wasting, and becoming day by day more debilitated, but nevertheless, when compared with the sheep at the College, they were in far better condition.

On June 6th, forty-five days after the commencement of the experiment, one of the animals died, and this, as in the instance at the College, was one which had taken the medicine. The lesions met with on examination of the body agreed with those already described, and need not, therefore, to be repeated. The medicine was continued with the other two, up to the 20th of the same month with one, and for a fortnight longer with the other; the latter being an emaciated and gradually declining animal. The three sheep spoken of as doing well were by this time so much improved that I had no apprehension of their death. The weather was dry and the herbage of the pasture good—circumstances most favourable for their recovery. All were kept throughout July, and until the 4th of August, when I determined, as it was evident two would ultimately sink, to kill three of the entire lot, viz., the two in question and one of those which had greatly improved in condition, and which had had no medicine throughout. My chief reason in taking the resolve with reference to the latter named animal, was to ascertain on what its improved state depended, or whether in fact it was the subject of the entozoic disease—rot. On making the *post mortem* examination of this animal it was found that only a few flukes were present in its liver, and that the structure of the gland was but little changed—facts which fully accounted for its well-doing.

With reference to the two remaining sheep, one of which took the medicine and the other not, I feel assured that their improvement is due entirely to the same cause. I have further to report however respecting these sheep, that being ewes, I placed them with my breeding flock at the time of putting the rams to the animals, and intend to keep them throughout the winter to mark the result, giving them no more attention as to feeding and management than the flock will receive.

On reviewing all the details of this experiment I fear we must conclude, that this supposed cure of rot in sheep has proved quite ineffective for good in our experience.

SMITHFIELD CLUB.—After the annual dinner of the Society, Lord BERNERS who presided, proposed the toast of the evening—"Success to the Smithfield Cattle Club." He said :—

"The Smithfield Club was established in 1798, and in 1800 it possessed about 50 members, but even out of that small body grew the Royal Agricultural Society of England in 1838. After the removal of the Smithfield Club from Goswell Street to the Baker Street Bazaar its progress had been most rapid and its patronage most gratifying. In 1846 and in 1850 their show was honoured by the presence of her Majesty the Queen, and by the Empress of the French in 1860, and his Royal Highness the Prince Consort became a member of the Club in 1841. It was found that the requirements of the Club outgrew the limits of the premises in Goswell Street, and it was in 1840 they removed to the place they now occupied in Baker Street. They all knew how the show had increased in extent, and the deep interest which the public took in it year after year. They must have witnessed the almost impossibility, in consequence of the crowded state of the building, of visiting and examining with any pleasure or practical utility the cattle exhibited, and especially of inspecting the articles displayed in the galleries. It was gratifying to see the increasing interest which had been taken in the show by the various classes of the country. They saw there rich and poor, peer and peasant, manufacturer and tradesman, and all alike anxious to examine the contents of their exhibition. They were now about to terminate the lease for the Baker Street Bazaar, and to remove to a new building now in course of erection by the Agricultural Hall Company, where he trusted they would have a much larger amount of space alloted for the various objects of their meeting, and where he hoped, and confidently believed, that still greater success would attend the Club. They this year distributed in money prizes 1343*l.*, and upwards of 160*l.* in medals. The finances of the Club were also, he was happy to say, in a most flourishing condition, and there was possibly scarcely any other society in the kingdom which could boast of the fact that, instead of paying for the accommodation for their annual cattle shows, they, the Smithfield Club, were to receive a sum of 1000*l.* for holding their show at the new Agricultural Hall next year. Last year it was determined to open several new classes, and, among others, one for mountain sheep, and he was happy to see in the yard that day four pairs of Exmoor sheep, which were well worth being shown. Mountain mutton was most valued in the metropolis, and he hoped that the prizes offered by the Club would produce more attention to the production of Exmoor and other breeds of mountain sheep. The object of the Club was to produce the greatest possible amount of meat, of the best quality, at the lowest price, and in doing that he trusted they would always prove successful.

Lord FEVERSHAM proposed "The Health of the Chairman," and said they all knew the very deep interest his noble friend Lord Berners had always taken in the welfare of agriculture. The Smithfield Club, under his guidance, had prospered in a very great degree; and he had shown his further zeal for the welfare of the Club in obtaining the removal of its annual meeting to one much more capable of accommodating its wants. He (Lord Feversham) had long been struck with surprise at the circumstance that a society of so much national importance as the Smithfield Club should so many years have held its meetings in a place so utterly inadequate to its requirements. He trusted that their meeting of next year would be held in that splendid ... his noble friend, the chairman, laid the foun... other day—the new Agricultural Hall. O... raised that if the cattle show of the Club we... the west-end of the metropolis it would ... support that it now received from the West-end ... (Lord Feversham) had a pretty good acquaintance ... end tradesmen and shopkeepers, and ... could not find one solitary instance where there ... dation for such a statement. He hoped that ... a place for their future exhibitions worthy of the metropolis.

CRYSTAL PALACE POULTRY SHOW.—Every... ing show proves the growing interest taken ... It is only a step from Birmingham to the ... Palace. The fowls go from one to the other ... flock to both, and purchasers surround the ... Many pens are bought at Birmingham to ... the Crystal Palace, and here again many that ... tinguished change owners and appear at the ... under other colours.

The exhibition was held where the ... took place, after the destruction of that ... had been appropriated to poultry. It has ... advantages of plenty of air without draught ... proper warmth without closeness. Mr. H... has the entire management of this department ... experienced in his work, and the consequence ... succeeding show is a new success. One thing ... deserves the thanks of exhibitors. It is ... wish is expressed by them for a change in ... to the prize list, it is sure to be well rece... adopted.

Four classes of Spanish headed the ... were full of good birds, but they were ... high condition as we have seen. We may ... hen and pullet classes here as we may ... this and other shows; these classes are ... merous as we expected them to be when they ... formed, nor are the birds as good. It is so ... two good Spanish hens, and they do so well ... necessary confinement of a show, that we ... expected this to be a most numerous class. The ... were quite perfect in every class; they had ... size, and condition. We think that an amalga... of classes, with an increase in the number of ... more advantageous to a show and to the breeder ... division into Grey and Silver Grey classes. The ... Dorkings are constantly improving in size; the ... show was no exception. The honours of these ... belong to Lady L. Thynne, Captain Hornby, ... Paxton, and Mrs. Beardmore. Cochin Chinas were ... fect, both young and old, Buff and Grouse. The ... petition was a hard one, and ended in placing Mess... Stretch, Musgrove, Tomlinson, and Tudman, at ... head of these beautiful classes. Mr. Chase took ... the first prizes for White, but with the ... his chicken pen none call for any ... notice. We thought very well of the ... Cocks, and of the Brahma Poutras. Mr. ... deserves his success in this latter class. ... speaking of the Game Fowls, if we ... point out those we considered the best, we ... choose Mr. Archer's Brown Red chickens, Mr. ... Cox's Black Reds and Mr. Langdale's Duck... There were very many good birds in every class ... usual, their condition left nothing to desire. ... Whites and Piles were better than common. Mr. ... and Mr. Mousey headed the two classes. The ... Pencilled classes were good and numerous. ... generally the case, the chickens were better ... adults. These classes are constantly improving ... cannot say as much for the Silver, they ... stationary; Mr. Martin shows the best birds ... latter. They are however not so good as ... three years ago. The Spangled Hamburghs were ... good in every class. The Golden especially ... the highest praise, while the Silver chickens ... show in themselves and furnished eight pens ... prize sheet. Messrs Lane, Hyde, Dixon, and ... deserve especial notice. Nothing can ex... beauty of the Poland Fowls, but they are sadly ... in numbers. The Malays were good, as they ... at this show, but they were not as numerous ... The novelties in the Various class were ... show of Black Hamburghs, also of Crev... and some Cuckoo Malays. Everywhere ... are becoming favourites. They were very ... and very good here. Forty-one pens of different ... are in the list of the distinguished. We must ... H. D. Bayly's gold-laced and white, Mr. Leno's ... laced, Mr. Postan's game, Mrs. Green's tufted, ... Forrest's duck-winged cock. We have next ... breeds where not only feather and symmetry are ... but stern justice must also be meted in the ... weights and scales. Mr. Manfield's 14 white ... weighed 116 lbs., Mr. Fowler's three grey ... The same gentleman showed 14 Aylesbury ducks ... ing 14 lbs., Mr. Pattisson's third prize weighed ... Rouens no longer content themselves with ... plumage, but enter the lists for weight. They are ... far beaten, the nine successful birds weighing ... an average of $6\frac{1}{2}$ lbs. for ducks, not to ... even in these days of mammoths. The black ... among the best we ever saw at any exhibition. ... pens of successful Turkeys, 18 birds, weighed 3...

It will thus be seen all the purposes that ... templated by these exhibitions were carried out ... Crystal Palace. May it long continue a great ...

The Judges were Messrs. Andrews, Hewitt, and ...

Farmers' Clubs.

CENTRAL: *Parish v. Union Settlements.*—The last monthly meeting of the year for discussion was held on Monday evening last, at the Club House, Blackfriars, and was numerously attended. The chair was taken by the chairman of the year, Mr. Skelton. The question for consideration, which was introduced by Mr. H. Trethewy, of Silsoe, was stated on the card in the following terms: "Would it be advisable to abolish parish and to substitute union settlements in the agricultural districts?" After a few opening remarks from the Chairman,

Mr. TRETHEWY said: Before I enter upon the subject selected for this evening's discussion, I feel I ought to say a few words by way of apology for my appearance before you in my present capacity. I cannot divest my mind of the feeling that a great degree of presumption may be attached to a person in my position, who undertakes to read a paper upon a subject which for centuries has occupied the minds of the ablest men of the day, but which, nevertheless, it must be admitted, is still in a most unsatisfactory state. As a proof of this, I may, thus early, observe that since the discussion card for this year was printed, the Legislature have actually taken the matter into their serious consideration, and have passed a measure intended to remove some of the objectionable clauses in the Poor-law code. How far this measure is likely to be found sufficient, will form matter for consideration this evening. This, however, is pretty clear proof that some alteration was absolutely called for, and that the committee of this club were fully justified in selecting this subject for discussion during the year. It is, nevertheless, a matter of regret to me that some one more competent to deal with it could not have been prevailed upon to introduce it. I trust I may be allowed to mention that it was proposed by Mr. Sidney, and I heartily wish he could have been induced to bring it forward. When the subject was first mentioned every member of the committee present seemed impressed with its importance, although no one would consent to take charge of it; and it was only at the urgent request of the committee generally, and with a feeling that the subject ought not to be allowed to drop for want of introduction, that I, at last, consented to address you. I would also observe that, having been concerned in the administration of the Poor Law, as a guardian, for the last 20 years, during seven of which I presided at the Board, I have had some little experience of the working of the law of settlement. I feel it due to myself to make these remarks in order that it may appear that I have not, in attempting to grapple with a subject of such dimensions, undertaken to dilate upon one that I have had little or no experience in. The more, however, I have thought of it, the more sensible have I become of its vast importance.

History of Settlement.—In order fully to comprehend the question, and to enable us to view the law in its present operations, it will be well slightly to glance at the history of settlement in this kingdom.

It may be traced to a very early period of our history, and it would seem that what was originally a social condition of mutual benefit, became by the lapse of time, and under a change of circumstances, a burden upon some for the maintenance of others. To trace its origin would be an extremely difficult process. Still, there is evidence in our Anglo-Saxon laws, of settlement as a bond of mutual protection. Every man was obliged to attach himself to some burgh or district, or be subject to the treatment of an outlaw or vagrant, against whom the laws were very severe. In the position of a burgher or freeman, he was safe in person and property, so far as it was in the power of his burgh or body corporate to protect him; but it does not appear that under this system he was provided for by his fellow-citizens when old age or sickness overtook him. In the reign of Richard II. an Act was passed preventing any labourer from leaving his town or hundred without a testimonial, and subsequent legislation for some years continued thus to interfere with his energy. Statutes were made, assigning certain districts to him; and men of particular counties were expressly permitted to sojourn in others till the time arrived for their profitable employment at home. But until the time of Henry VII. we do not learn that any compulsory measures were taken for their maintenance. The important statute of Elizabeth soon followed, and the reign of Charles II. witnessed the introduction of the system of settlement and removal, and effected a revolution in our Poor-Law history. This Act was intended to supply the deficiencies of the 43rd of Elizabeth; but it seems to have been prepared without due care and deliberation, and to have been passed without proper discussion. The Act of Elizabeth was humane in its character, but lacked the means of proper administration. It, however, repealed the general restrictions upon locomotion before referred to; while the statute of Charles II. restored them. By this statute also it was enacted, that any person likely to become chargeable to any parish might, within forty days of his coming to reside there, be removed by order of any two justices of the peace to the parish where he was last legally settled, either as a native householder, sojourner, apprentice, or servant, for the space of forty days at the least. The preamble states, "That by reason of some defects in the law, poor people are not restrained from going from one parish to another, and therefore do endeavour to settle themselves in those parishes where there is the best stock, the largest commons or wastes to build cottages, and the most woods for them to burn and destroy; and when they have consumed it, then to another parish, and at last become rogues and vagabonds, to the great discouragement of parishes to provide stocks where it is liable to be devoured by strangers." It was therefore enacted, 'That it shall and may be lawful, upon complaint made by the churchwardens and overseers of the poor of any parish to any justice of the peace, within 40 days after any such person or persons coming so to settle, as aforesaid, in any tenement under the yearly value of ten pounds, for any two justices of the peace, whereof one to be of the quorum of the division where any person or persons that are likely to be chargeable to the parish shall come to inhabit, by their warrant, to remove and convey such person or persons to such parish where he or they were last legally settled, either as a native householder, sojourner, apprentice, or servant, for the space of forty days at the least, unless he or they shall give sufficient security for the discharge of the said parish, to be allowed by the said justices." I give this preamble at length, as showing us the reasons which led to the introduction of this important measure, and for the purpose, too, of contrasting the habits of the poor of those days with those of our own. If their predatory habits and violent conduct rendered it necessary to establish settlements, it may be argued that the more orderly pursuits and industrious habits in the present day render such restraints unnecessary. The Act then goes on to provide, that persons going into a strange place with a certificate from a clergyman, &c., and not returning when their work was done, or falling sick while in the work, it shall not be accounted a settlement. Compared with the statute of Elizabeth, this was a very harsh measure; but it continued in operation for many years. The former, but for maladministration, might have been in existence at the present time, for all writers on the subject agree that its principle was good. The effect of the statute of Charles soon began to be felt. Litigation of the most expensive nature, and carried on with the most bitter feeling, prevailed to an alarming extent. The history of the Poor Law from this time may be traced in our public records; and almost every parish in the kingdom can bear witness to the injurious operation of this Act. The poor were continually harassed, and prevented from getting their living in an honest way; and from contributing, by their labour, to the general commonwealth. This state of things soon began to tell upon the rates, which were quadrupled in 36 years after the passing of this Act. In "Ruggle's History of the Poor" (page 266) we have a curious analysis of the disbursements of the Poor Law funds, taken, upon the average of the years 1783, 1784, 1785, from the return made under the 26th Geo. III., c. 56. I subjoin a portion of this analysis:—

	£	s.	d.
Medium expenses of overseers in journeys, attendance on magistrates, &c.:—			
England	23,545	0	10
Wales	948	17	8
	£24,493	18	6
Medium expenses of entertainments at meetings relative to the poor—			
England	11,829	15	11
Wales	883	4	10
	£11,713	0	9
Medium expenses of law, orders, examinations, and other proceedings relative to the poor—			
England	53,757	11	0
Wales	2,033	11	6
	£55,791	2	6
Medium of money expended in setting the poor to work—			
England	15,680	14	9
Wales	211	14	1
	£15,892	8	10

From this it appears, that while only 15,892*l.* were expended in setting the poor to work, 24,493*l.* were spent by overseers in journeys, attendance upon magistrates, &c., 11,713*l.* for entertainments at meetings, and 55,791*l.* in expenses of law orders, examinations, and other proceedings relative to the poor. We are surprised, in the present day, at such items of expenditure; but they only show the abuses that had then crept into the system. In the 35th Geo. III., 1795, an Act was passed which relieved the poor from some of the restrictions they had been suffering under. This statute repealed many of the objectionable clauses of Charles II. It is a startling fact to mention, at the present day, that up to 1795 a man could be removed from any parish where he happened to be staying when he had been there 40 days: the Act of this year provided that he should not be removable till he became chargeable. And this was thought at the time a most hazardous experiment. The result justified no such apprehension. The most careful search reveals nothing in the way of complaint. On the contrary, the change was approved of, and recommended as a subject for further consideration. Still the law of settlement clung to the labourer, although he might not be driven out of the parish within 40 days of his entry into it. But if misfortune, ill health, or declining strength rendered him unable to maintain himself and his family, he then became liable to removal, as has been witnessed in our day. "Suspended orders," so familiar to our ears a few years ago, came into operation, under the provisions of this Act. And the system introduced by these orders of giving relief to paupers away from their own parishes gave rise to abuses which it was found very difficult to correct. So long as the parish administering this relief did not provide it, little care was taken, and great frauds were frequently practised. Upon this subject the Poor law Commissioners, in their Ninth Annual Report, write thus: "If we have a law of settlement, that settlement must be adjudged in disputed cases according to fixed rules; and when it is so adjudged, either the relief must be brought to the man or the man taken to the spot which is to give him relief. A universal system of non resident pauperism, or a system of removals, is the necessary result of the condition of things already existing; unless, indeed, all settlement is abolished, and every one relieved at the expense of the parish in which he happens to be. The former of the two alternatives, that is to say, non resident relief, might at first sight seem the easiest; but, independently of the fact that it is contrary to the whole mass of principles on which the English poor laws have been and are administered, no one who has the slightest experience can hesitate to affirm that its prevalence would tend to more gross imposition on the part of recipients of relief, and more undetected fraud on the part of the agents who administer the funds, than the records even of the poor laws previous to 1834 can produce. The authorities in immediate contact with a non resident case have not their vigilance stimulated by any sense of self interest; they are spending other people's money; nay more, perhaps they are reaping the benefit of it, by employing the man at lower wages than he could otherwise subsist on. The authorities at a distance have no means of ascertaining the truth of a pauper's story, nor any means of verifying the punctuality and veracity of their own agents. But it is needless to condemn a system which, by common consent of all experienced persons, is vicious in principle and in practice, and at best can be considered but as barely tolerated by law, however deeply rooted it may be by long habit in particular districts. Our endeavours have been and will be constantly directed to its diminution and gradual extinction." It is curious to observe that in the foregoing extract the Commissioners slightly hint at the abolition of settlement as a thing just within the bounds of possibility—as a subject to be mentioned, but not discussed. They adduce good arguments in support of their views of relief to non residents, but they do not express an opinion upon the question of settlement.

The Act of 1834.—We now come to consider the Act of 1834, the introduction of which most of us remember, and under which, with few modifications, we are still living.

It would be too much to say that that Act has fully answered the purpose for which it was intended; at the same time it cannot be denied that it was a very beneficial measure. Some persons have remarked, "The old Act was well enough if it had been properly administered." This may be true; but we know it broke down through administration, and therefore some alteration was necessary. For my own part, I believe that this was a well-timed and well considered measure, and that it worked a great improvement. It would be out of place here, even if time would permit, to go fully into its provisions; but we must notice one point connected with the subject before us. It very much reduced the list of settlements by abolishing many means of obtaining them. I believe the following may now be considered the list of settlements, viz.: settlement by birth, settlement by marriage, settlement by parentage, settlement by apprenticeship, settlement by renting a tenement, settlement by estate, settlement by paying parochial taxes. I will not take up your time in enlarging upon these, nor in following any of them through their various ramifications, but it would not be well to pass them over altogether. To this Act we are indebted for the abolition of settlement by hiring. Till then, both masters and servants laboured under disadvantages which could scarcely be submitted to at the present day; and it may very fairly be urged, that the breaking of the link of service, causing the absence of the servant from the roof of the master, tended very much to the demoralisation of the former. To this may possibly be traced the institution of the mop fairs, against which there is such a strong feeling at present. These continual breaks must of necessity have tended very much to the weakening of that tie which ought to exist between the employer and the employed; and it is feared that its effects are yet visible. In 1846 the important Act relating to the removal of the poor, called "Sir James Graham's Act," was passed. This first established the principle of irremovability by reason of residence, sickness, and many other causes, and produced a most remarkable change in the law of settlement, and at one stroke abolished at least two-thirds of the removal cases. This statute, it must be admitted, has had a most beneficial effect upon the labourer: but in operation it was found to work so unjustly burthensome upon many open parishes, in some cases doubling their rates, that the legislature was compelled to modify its operation; and therefore in 1848 another Act of Parliament was passed, having more especially for its object the relief of the irremovable poor out of the common fund of the union, instead of by the parish wherein such poor happened then to be residing. Most of us remember the introduction of this measure into our respective unions, and I may add, in my own case, the difficulty in understanding its provisions. One effect has certainly been the making of the "common charges" as it is termed, the most expensive parish in the union. In practice, it is found that guardians are ever alive to the removal of such poor from their own parishes to the "common charges;" and the vigilance of the board generally is necessarily called to this subject.

Parish or Union Settlements.—Having thus taken a glance at some of the various enactments on the Law of Settlement, I will proceed to the consideration of the subject as it comes before us, viz., Would it be advisable to abolish parish, and to substitute union settlements in agricultural districts?

For many years there has been a growing feeling that the present system of parochial settlement is very unjust, both to the ratepayers and to the labourer. Its immediate tendency as regards the latter is, to limit his scope of operation, and indirectly he suffers in other respects. One of the natural consequences of the present state of things is, that some parishes draw their labour from the population of those adjoining, contributing nothing towards the relief in sickness or old age of those who fairly and honestly have the first claim upon them. In many parishes termed close parishes it is the policy of the owner, in order to save rates, not to build cottages for the labourers, necessary for the proper cultivation of the soil; while other parishes, termed open ones, have more labourers than their land enables them to employ. They seek work, therefore, in the close parishes, and probably have three or four miles to travel daily to and from the scene of their labours. So long as the close parishes can thus draw a supply of labour and enjoy immunity from poor-rates, they will be content to go on as they are. It is owing in a great measure to the operation of this law, that we have so many close parishes. If they were liable to the same changes as their neighbours, they would soon see it to their advantage to provide cottages for the convenience of their own labourers; and the latter would be so much benefited by living nearer, or close to their work. It is now felt to be a great hardship on the part of many parishes that they maintain the poor who labour in adjoining ones. I could name several instances, but one in particular occurs to me. In one place, with a population of about 700, and a small area of land, the rates are 11*s.* in the pound; while in the adjoining parish, drawing most of its labour from the first parish, the rates are not above 2*s.* Similar instances no doubt occur to many of us, but it is unnecessary to multiply them here. Union settlements would to a considerable extent remedy these evils, but they would not wholly eradicate them. The parochial feeling is strong, and there are many persons who fancy it is one to be encouraged. A little consideration, however, will show that even under the most favourable circumstances, in small densely-populated parishes, the state of the labourer is anything but satisfactory. Settlement in its most extended state operates as a bar to employment, and no doubt it has a tendency to prevent men from exerting themselves to obtain a livelihood away from their own homes. They have a feeling that their parish is their home, and if they cannot support themselves the parish must. This tie acts upon the labourer and re-acts upon the employer. The former, knowing his resource, will not strive to get a bare living; while the latter, impressed with the consciousness that if he does not employ him, he must at all events contribute to his maintenance, feels it his interest to give employment, although it may not be profitable. The labourer, in such a case, can only be looked upon as an incumbrance; and this feeling is not likely to improve the nature of the connection between employers and their men. It is not that either is in fault. The fault is in the system, in the law, which as it were binds the labourer to the soil of his settlement. The present inequality of wages may to some extent be traced to this law; for, like every other commodity, labour will be dear or cheap in proportion to supply and demand. If the former exceeds the latter, wages will be proportionately low. It may be urged that there is nothing now to prevent a labourer from going into any other district or county, where his exertions would meet better remuneration; and it may be said that he is not naturally of a migratory disposition. The answer to this would be, that hitherto no favourable opportunity has been afforded him. Taught from his youth to look upon his parish as his home, he seldom contemplates moving, or exerting himself to improve his position. Remove the cause of this feeling, and the man's energies will gradually be developed. The parish thraldom has so far depressed him that he has no idea of seeking a livelihood beyond his immediate neighbourhood; and if he were to attempt it, he might be told by the person to whom he made the first application for work, that there were several in that parish out of work, and that he could not employ strangers. Nothing can be more depressing to a man willing and anxious to work, than to receive such discouragement; and no wonder that in course of time he becomes utterly callous. That such cases often occur there can be no doubt, and for the truth of the statement I might appeal to many present. I repeat, this is not the fault of the master or man, but of the law under which each is compelled to live. In many cases, however, the alteration of the Law of Removal and Settlement would bring about a very different state of things. There would no longer be the fear of permanent incumbrance if cottages were built for the occupation of necessary labourers. Every poor man would then be free to go where he could best provide for himself and his family; and the idle or unskilful labourer would have to bestir himself, or he would find it very difficult to get employment, as the inducement that before existed to find him work in his parish had ceased. Some persons have objected to alteration in these laws, on the ground that it would upset the parochial system. That system was

severely dealt with by the Acts of 1846 and 1848, and even to some extent by the Act of 1834, and still further by the Act of last Session. And it must also be borne in mind, that since that system was introduced, great and important changes have taken place in our social condition, and that the present system no longer adapts itself to our times. Our labourers are now a very different class of men to what they were even 30 years ago, and that railways have had their effect upon them as well as upon other classes. In the first place these undertakings have opened a new field for their labour, and when constructed have been the means of conveying them to still further scenes. In fact, the voice of the country has been generally raised against the present system, and nine unions out of ten throughout the kingdom have recorded their approval of the measure passed last Session. Moreover the parochial system is the result of an ecclesiastical division, and by all means so let it remain; but that is no reason why the interests of the poor should be sacrificed to it. Enough has been said, I trust, to show that some alteration is necessary, and we will now give a few minutes to consider the Act of last Session. It cannot, at any rate, be said of this measure that it did not receive proper attention, either in its preparation or its discussion. It seems to have been dreaded by some of its opponents as the precursor of a union rating, or the abolition of settlement altogether. It seems to me to be a very mild measure, not at all calculated to alarm any one—a move in the right direction, and let us hope an instalment of something more effectual. The first clause simply substitutes three years for irremovability instead of five as provided in the 9 and 10 Vic., cap. 66; while the 9th enacts that the several parishes comprised in any union shall contribute to the common fund thereof in proportion to the annual rateable value of the lands instead of by averages as heretofore. These appear to me to be the chief features of the Act, and they certainly encourage the idea that it is a stepping-stone to something else. Would it be politic to have recourse to union rating at once? or is the time ripe for abolishing settlement altogether? The parish settlement I hold to be injurious, and there can be no question that its days are numbered.

Objection to a Union Rating.—Let us, therefore, see what would be the objection to a union rating, assuming for the purpose that it would not be advisable to abolish the Law of Settlement altogether.

The chief objection, I apprehend, arises from the inequality of the burdens of the several parishes comprising the union. There is some force in this objection it must be allowed, but can no plan be devised by which this objection may be removed? Would not the principle of averages assist us? Supposing that the proportion which each parish paid to the general fund of the union during the last seven years were ascertained, and the contribution for the next seven years grounded upon that. Those parishes which by good management, or by favourable circumstances, have kept their rates low, would, during this time at least, reap the advantage of their position; while those less favourably situated would continue to pay according to their previous expenditure. At the end of the first seven years, an average might be struck again, more nearly assimilating to the general expenditure; while at the end of the second seven years a further assimilation might be made, or the whole union made to contribute upon the same proportion. The easily-taxed parishes would, no doubt, exclaim against this arrangement, and think it very unjust. But is not the present system unjust towards other parishes? Can any great change be expected to take place, without injuriously affecting some interests? We all know how some towns and roadside inns suffered from the introduction of railways; but no one would dream of stopping the construction of these works for the sake of those interests so affected. It must be so with all great measures. No doubt there were individual cases of hardship upon many parishes when the law of 1834 came into operation; but I doubt if any man could be found bold enough to assert that the Act, on the whole, had not very much improved the general state of the population. Again, would not those close parishes derive benefit from improved machinery in the collecting of rates and administering to the poor relief? Another mode might be adopted—viz., that all those now on the list as receiving relief, or who were up to a certain period in receipt of relief, should continue as long as they lived, to receive it from their respective parishes, but that any new recipient should be charged to a common fund of the union. To some such arrangement we are drifting fast; and the only question is, Which is at once the safest, the easiest, the most just, and the least objectionable way of going to work? Whatever system be adopted, it must clearly be under the jurisdiction of the Poor-law Board. The guardians would be elected then as now; and the present machinery would be adopted, with few exceptions. It would perhaps be found advisable to have paid collectors throughout the union; and this would relieve the overseers from a very troublesome office. Paid collectors are now very generally employed in agricultural districts; and the only difference would be, that the work would be done by officers appointed by the union, instead of by those appointed by the respective parishes. It might be urged against this proposal, that the guardians would not have the same interest in the disbursement of the money, if it came out of the union fund, as they have at present, when they deal only, at the board, with the money supplied by their own parish. This objection, however, hardly seems a fair one, because, in the first place, they would still administer a fund to which they contributed; and in the next place, they cannot be said now to have any more control over the fund supplied by their own parish than any other guardian, of whom there may be over 20 at the board. Another argument in favour of union-rating is, that large parishes are invariably found less expensive in their management than small ones From the returns of 1831, it appears that the 100 largest parishes in England gave 6*s*. 7*d*. per head maintenance, the 100 intermediate parishes gave 15*s*., while the 100 smallest gave 1*l*. 11*s*. 11*d*. per head. The union would form one parish, and not then more populous than many poor parishes already. It may be considered a rash measure to abolish settlements altogether; but there can be no doubt that such a step is in contemplation; and the small end of the wedge was introduced by the Act of 1848, and has been driven further by that of last session. That this has been an improvement, there can be no doubt; but I am not one of those who think it is all that was called for. As I have before observed, when the Act making 40 days' residence a cause of settlement was repealed, it was thought a most hazardous step; but no ill consequences followed it. To repeal the law of settlement altogether, taking into consideration the state of the country in the present day, as compared with what it then was, would be a measure of less magnitude than the one referred to No less an authority than Adam Smith has given his decided opinion upon the subject: "To remove a man who has committed no misdemeanour from the parish where he chooses to reside, is an evident violation of natural liberty and justice. The common people of England, however, so jealous of their liberty, but, like the common people of other countries, never rightly understanding wherein it consists, have now for more than a century together suffered themselves to be exposed to this oppression, without a remedy. Though men of reflection, too, have sometimes complained of the law of settlement as a public grievance, yet it has never been the object of any general popular clamour, such as that against general warrants—an abusive practice undoubtedly, but such a one as was not likely to occasion any general oppression. There is scarce a poor man in England of 40 years of age, I will venture to say, who has not, in some part of his life, felt himself most cruelly oppressed by this ill-contrived law of settlement." Sir James Graham, too, during the debates upon the Act of this session, expressed his belief that the principle of irremovability, coupled with a union charge, would ultimately lead to the abolition of the law of settlement, as well as an enlargement of the area of rating; and he expressed his opinion that those changes were desirable. In 1847, the late Mr. Buller moved for a committee of inquiry, and it was admitted at the time that this committee thoroughly investigated the subject, and they came to a resolution declaring that the power of removing the poor ought to be abolished, and they added, as their opinion, that the narrowness of the area of rating was a source of great evil. These are great authorities, and I believe their views are pretty generally entertained by those persons who have given much attention to the subject. The tendency of recent legislation has unquestionably been towards this end, especially the Acts of 1848 and 1861. That of 1834, although it has not in every way succeeded, still worked so satisfactorily that it encouraged further measures, and these also have been improvements. The Act of 1834 had more especially for its object the reduction of expenses. Rates for the relief of the poor were becoming alarming—so much so, in some parishes, as nearly to be equal with the rent. Hence something was absolutely necessary. That Act may, therefore, be said to be an attempt to lessen pauperism. Those of 1846 and 1848 seem to have for their object the amelioration of the condition of the poor by enlarging the area of their labour and residence. Let us hope that future legislation, and that too at no very distant period, will remove the only obstacle to free labour, by repealing the law of settlement altogether. The country is in a different state now to what it was in 1834; but I believe to that measure we, in a great measure, owe our improved condition. Pauperism by its enactments has been effectually checked, and it only remains for the Legislature to give the poor man the opportunity of taking his labour to the best market without the fear, under any circumstances, of his being sent home to his parish without food or furniture. It may be a question how the abolition of settlement would affect agricultural parishes and manufacturing districts respectively. I cannot see that there is any fear of jealousy on this head, although it must be admitted that several Acts of Parliament have worked very differently to what their promoters intended, and have given rise to evils of greater magnitude than those which they were intended to remove. The history of the Poor Law gives repeated evidence of this. The Acts of 1846, 1848, and now that of 1861 would seem to have prepared the country in some measure for the final settlement of the question, and we have, at all events, the experience of the last fifteen years to guide us. The Act of 1846 we know was framed with the intention of relieving the agricultural districts from the maintenance, in their old age, of those persons who had spent the best of their time in manufacturing districts, but who, when overtaken by sickness or old age, were removed to their respective parishes The towns had the benefit of their labours so long as they were able to work, but as soon as they became burthensome the agricultural parishes had to support them. This Act, making five years' residence irremovable, in some measure corrected this evil. The abolition of the law of settlement would cure it. With the abolition of settlement must we not have national rating? And how is this to be brought out? It is no doubt a measure of great magnitude, and will require considerable deliberation in fixing its principle, and great care in arranging its details. It would be altogether out of place here to attempt to deal with this part of the subject. The Legislature, once impressed with the policy of the measure, would have no difficulty in devising and applying the necessary machinery for its progress. The Tithe Commutation Act and the Poor Law Act of 1834 afford instances of successful dealing with intricate subjects; and it cannot be supposed that there would be any insurmountable difficulty here. The Poor Law Board would, no doubt, be able to offer many valuable suggestions, having for their object the equitable working of the law, with as little immediate injury to favoured parishes as possible. Some, however, are favourable to a union rating, coupled with a repeal of removal by warrants, leaving the question of settlement unprovided for, as without the power of removal the law of settlement would be inoperative. Under any circumstances it would be desirable that the rate raised for the poor should be kept distinct, and not include rates for police and other county purposes. At present a fund is raised from every parish for which no body of men are responsible—a portion being disbursed by the union, and a portion by the magistrates. This is an anomaly which ought not to exist. There seems, therefore, to be two courses open to us, either to have a union rating as preparatory to the abolition of settlement altogether, or to proceed to the latter at once. To that we shall eventually arrive, no doubt, and although the change may be a great one, is there any advantage in a state of transition? We have seen very important measures carried lately, without its being thought necessary to pass through such an ordeal; and I hope I shall not be treading on slippery ground if I adduce as an instance the abolition of the Corn-laws, Lord John Russell's proposal of an 8*s*. duty being considered for such a purpose quite unnecessary. The Act of George III, to which I have before referred, providing that poor persons should not be removed from any parish in which they happened to be residing, till they became chargeable, although previously they were subject to removal after 40 days' residence, was a more hazardous experiment than would be the abolition of settlement altogether at the present day. The result of my argument, I submit, has gone to prove that the principle of irremovability, accompanied by chargeability to the common fund, has greatly modified the operations of the Poor Laws since 1846, and it is evident that the country requires an extension of that principle. I have only further to add, that I am fully impressed with the inadequacy of the present attempt to do justice to the important subject we are dealing with. I can only hope that the discussion that will ensue will elicit further information, and that, moreover, a feeling out of doors will be the result. If this Club can only succeed in drawing the attention of the public to the question, one great point will have been gained. What great measures have had small beginnings! The subject before us, however, may now be said to be fairly launched, Parliament having passed three Acts within fifteen years, having for their object the palliation of the present law. Let us hope that the next step will be the effacing of the law, as regards settlement, from the Poor Law statutes.

Farm Memoranda.

BRENDON FARM, SOMERSET: — *With characteristic Note by Mr. Pusey.*—At Lady-day, 1816, I began to farm 300 acres of land on Brendon Hill, the property of the Earl of Carnarvon, the elevation of which is 1000 feet above the sea; about 200 acres were then covered with Heath, 60 with Fern, and the remainder with peat and Moss. Not having hay to give my horses, I began to turn my attention to procure some [illegible] first course I took was to take the level from [illegible] springs, and then to ascertain how many acres [illegible] under that level that I could carry the water [illegible] and when I found how much land I could [illegible] began to cultivate my intended meadow, [illegible] done by paring and burning, and, after spreading [illegible] ashes, to break up and work the land to the [illegible] from 12 to 15 inches with Finlayson's harrow [illegible] stirring the subsoil, but not to bring it to the [illegible] after working many times over in this way [illegible] surface as even as I thought necessary; it [illegible] manured with 60 bushels of lime an acre, [illegible] with Turnips, which were fed off on the land [illegible] the Turnips the land was again worked [illegible] harrow, rolled and made fine, and in April was [illegible] with Grass seed, harrowed in and rolled. The [illegible] came up well, and was stocked on the 1st of [illegible] following with seven sheep to the acre, which it [illegible] in good condition until the 1st of November [illegible] was again rolled, and the water gutters made [illegible] the water that was drained from the springs [illegible] set out the watering gutters by the level, giving [illegible] 1 inch fall in every 10 feet. They were cut [illegible] wide and 3 inches deep. If the land has [illegible] slope, the gutters may be put 60 feet from each [illegible] but if it be very steep, and there is a good [illegible] water, they may be put 70 or 80 feet apart. [illegible] find the water sink too fast into the land, I [illegible] earth or road scrapings over the surface, in [illegible] fill it up, that the water may pass over to the [illegible] catch-gutter. In this way I made my first [illegible] which took five years to complete. In the [illegible] manner I have from time to time drained all [illegible] land on the farm, and I have now 30 acres of [illegible] which yield a crop of hay from a ton to a [illegible] half per acre annually.

Where it is possible to carry water over [illegible] is best to do so; but the bog itself can be con[illegible] into water meadow. I have lately drained a [illegible] bog by cutting drains in some parts of it to the [illegible] of 7 feet. This bog was 10 acres; one-half of [illegible] now watered. The way I manage to prevent [illegible] flooding water from getting down into the drains [illegible] follows:—I first fill the bottom with flat stones [illegible] their edge one foot; then a foot of stones [illegible] small; on them a 3-inch turf with the grass down[illegible] and well trodden in; on this turf I lay on [illegible] which I bring within 6 inches of the surface. [illegible] this is done, I pare and burn, manure, and manage [illegible] peat in the same manner as I do the other land.

The water gutters should be cut with the [illegible] edge sloping outwards, in order to let the water [illegible] more freely over the land, and be less liable to [illegible] trodden in by cattle or horses passing over them. [illegible] water should never be suffered to remain in one [illegible] over the grass, more than two or three days at a time without being changed, nor be turned upon the land [illegible] order to remain there during frost; but should [illegible] frost set in while the water is on, by no means [illegible] until the frost is gone; for, if the surface is [illegible] and the frost continues, it will most likely lift the [illegible] and kill the grass. After the hay is made [illegible] stock the after-grass with anything but sheep, or [illegible] under two years old, feeding it down as [illegible] possible by the 1st of November. I then [illegible] gutters and roll the land in order to begin [illegible] soon as the springs begin to break in the [illegible] November, February, and March are the best [illegible]

The sides of the mountains in the north of [illegible] and Wales might be converted to catch [illegible] the same way that I have done mine, provided [illegible] water is of good quality and the land can be [illegible] porous to let the water filter gently down. [illegible] never found turning water over old pasture [illegible] good, as the Grass that comes up is coarse [illegible] and the hay, if mown, is not of good qua[illegible] therefore, old pasture is intended for meadow [illegible] answer best to break it up first, work it clean, [illegible] it well, and seed it down with those Grass seeds [illegible] are most congenial for water meadows.

The First Year's Expense per Acre.

Paring and burning	£1 [illegible]
Spreading ashes	[illegible]
Working land with Finlayson's harrow, 4 horses	[illegible]
Harrowing and rolling	[illegible]
60 bushels of lime and carriage	[illegible]
Slaking and spreading lime	[illegible]
Turnip seed	[illegible]
Drill and harrowing in seed	[illegible]
Hoeing Turnips	[illegible]
	[illegible]
Value of Turnips	[illegible]
First year's outlay	[illegible]

Second Year.

Cultivating after Turnips	[illegible]
1 bushel of Rye-grass seed	[illegible]
12 lbs. Red and White Clover, 10*d*.	[illegible]
6 lbs Rib-grass seed, 4*d*.	[illegible]
Sowing and harrowing in Grass seeds	[illegible]
Making water gutters	[illegible]
2 years' rent of land	[illegible]
	£5 1 [illegible]
To keep of 7 sheep from 1st July to the 1st November, 16 weeks, at 8*s*. each	2 16 [illegible]
	[illegible]
After-Grass	[illegible]
Total expense of converting a waste mountain-side into water-meadow	2 0 [illegible]

The reason I did not plough the land after the ashes were spread, was that I wished to keep the vegetable matter that was on or near the surface from getting down to mix with the subsoil.

MR. PUSEY'S NOTE.

I have known Mr. Roals' farm for many years. It stands alone on the summit of the wild Exmoor range of mountain land. If any one asserted that, for a trifling outlay, he could enable Heath-covered steeps to rival in produce and value the old grazing grounds of Northamptonshire, he would be regarded as a dreamer. But if any owner of Moors will visit West Somerset or North Devon, he will ascertain the literal truth of the statement, as I did five years ago. All that is required is a streamlet trickling down the mountain side, or a torrent descending rapidly along the bottom of the glen. The profit of under-draining old arable land appears trifling, when compared with the profit of thus forming catch-meadows, which, according to Mr. Roals, is more than 1*l*. interest for 2*l*. invested. The two pages of this Prize Report, which state no more than Mr. Roals has himself done, contain a talisman by which a mantle of luxuriant verdure might be spread over the mountain moors of Wales and Scotland, of Kerry and Connemara. If the plain means of improvement and employment are still neglected, it will be impossible not to tax the owners of those needless deserts with supineness; and difficult to deny that they hold in their hands more of this country's surface than they are able to manage for their own good or for the good of the community. *From Journal of the English Agricultural Society.*

Miscellaneous.

On the Ability of Particular Crops of Grain to Cope with Wet Seasons.—Let it be supposed that the soil is in good manurial condition, and that the wetness extends throughout the entire period of growth, then the Oat will certainly sustain the least injury, and Wheat the most. Should an excess of wetness be confined to the period of harvesting, then Barley will be least injured, and Oats the most. These conclusions are unquestionably just when the crops are bound into sheaves and properly stooked, although the case may be otherwise when the crops are harvested like hay. The Oat being found congenial to high latitudes and ripening at a low temperature, accounts for the plant being found able to cope with wet seasons. And from the ears of Barley adhering closely and securely, and being entirely free from chaff, rain seldom penetrates far into the sheaves, and wet ears are easily dried, and hence this grain is seldom injured by sprouting in the field. In 1857 the Wheat and Oat crops of East Lothian were most extensively injured by sprout, while Barley was little affected. The power of Barley to cope with wet harvests is universally admitted by the farmers of this county. With Wheat and Oats the case is very different. Sheaves of these grains readily admit rain, and from their seeds being enveloped with chaff which long retains moisture, they are easily sprouted, and more especially Oats. In 1857, in a field of unripe Wheat standing upright in an exposed situation, I found 5 per cent. of the grains sprouted. As a general rule the riper and drier the grains are the sooner do they sprout in a wet harvest, and hence the advantage of a reaping machine in expediting the cutting down of crops before they have attained full maturity. *On the Relative Productiveness of Different Sorts in Ordinary Seasons:* On this important subject little seems to be known on this side of the Tweed, and no Agricultural Society has seriously entered upon its investigation. The Wheat plant has long occupied my attention, but I am not aware of any trustworthy evidence proving that one variety is better than another, and with farmers all is guesswork regarding the productiveness of sorts. Some individuals have their favourite kinds, but as a general rule one variety succeeds another in popularity like ladies' bonnets, for the reason that they are fashionable. I have made no distinction between productiveness and value. Some sorts are productive in grain of inferior quality, yet not so valuable as a less productive kind. *Mr. Patrick Shirreff, in the Bath and West of England Journal.*

Practice makes Perfect (?)—The truth cannot be denied, it is becoming more irresistibly evident every day, that "practice maketh perfect" only in reference to the individual; that so far from the oldest arts being the most advanced, they are, on the contrary, standing memorials of the backward state of the human mind at the time of their birth and early rearing. The mind of man has set its physical marks upon matter in a way that enables us to affix the commencing era of an art, as easily and as surely as an architect would give you the "century" of a church window, or a geologist date the "period" of a fossil. *Hoskyns.*

Prizes for Sheep.—May I request you to give me a very small corner in an early impression of *The Times* to explain the conditions upon which I have offered for competition, at the Birmingham Fat Cattle and Sheep Show of 1862, a silver cup of the value of 10*l*.? The cup in question I wish to be awarded "to the best pen of shearling wethers, which must have been shorn bare since May 1, 1862, and not touched subsequently by the shears, unless when used for trimming the heads and legs of the animals competing for this prize." I have heard—as, no doubt, have also many of your readers—of sheep being singed in order to render them sightly, and even in their wool, before they have been exhibited. I would beg leave to say that whether the above remark may happen to be well founded or not, I shall request that any sheep which may be entered for my prize, and may appear to the judges to have been subjected to any of the manœuvres of the dressing room, may, *ipso facto*, be disqualified. I would add that if you will lend your powerful aid to the discouragement of such practices—which are at least believed to be common among exhibitors of sheep at agricultural shows—you will, I am well assured, earn the gratitude of all those who wish to see the merits of competing animals fairly tested, and of none more than of *Dartmouth. Patshull, Dec.* 6.

Calendar of Operations.

DECEMBER.

WEST SUSSEX, *Dec.* 10.—Since our last report we have had the weather very unfavourable for sowing Wheat, and there is still a good deal to put in; for the past month it has been impossible to work the heavier lands, and even the lighter soils have not worked kindly, and there will be a larger proportion than usual put in with the spring kinds. We do not remember the weather going so rapidly from one extreme to the other; up to the 6th November we had it very favourable, and we thought ourselves very forward, but since then we have not been able to do a day's work properly. The same unpropitious change has been against the taking up of the Mangel crop with any degree of comfort, and severe white frosts occurring at intervals have injured many of them to some extent. As a general rule it is not safe to leave them in the ground after October. Swedes and Turnips are likely to stand the season very well, and as they are generally a good crop, feed will be plentiful. A very high price was spoken of for hay in the early part of the autumn; but the weather having continued so long open has had a depressing effect upon it. Our market is well supplied with every kind of corn; the Wheat is above average quality, Barley rather below, and very plentiful, prices being 6*s*. to 10*s*. lower than last year. Our Christmas show of fat stock, though not so large as last year, was better in quality; but the market was smaller and the quality inferior to that of any year that I have seen it, and as a consequence good beef brought as much as 5*s* 8*d*. to 6*s*. per stone. *G. S.*

ISLE OF ELY, *Dec.* 16.—The very sudden removal of the Prince Consort casts a deep gloom over the agricultural, as it does over the other interests of the country. To-day one can hardly realise the fact that his Royal Highness is no more. It was literally but the other day that the agricultural public was inspecting those beautiful symmetrical animals at the Baker Street Bazaar, which had been grazed by the Prince, and had been sent there for competition. The agricultural world, too, was anticipating with no ordinary feelings of pleasure the next year's Show of the Royal Agricultural Society at Battersea Park, under the presidency of his Royal Highness. How soon are our hopes blighted, and our joys withered! We have sustained a great national loss. But whilst we mourn and sorrow, we would bow with submission. May her Majesty and her bereaved family be divinely sustained! But we must leave this sorrowful event, much as the mind seems to linger upon it, and turn our thoughts to the object we more especially have before us. The weather during the last four weeks has been very variable—frost and storms alternating; but the last 10 days have been uniformly mild and growing. The late sown Wheats are now showing themselves, and generally present a very favourable appearance, and should this beautiful weather continue another week, but very little will remain underground, but nearly every field will present a green and promising hue. A few of the earlier sown Wheats on fen lands, where they were up in October or early in November are slightly injured by the severe frosts we have experienced. The frost has broken the stem in the ground, and has consequently, to some extent, thinned the plant. But taking the growing Wheats as a whole, and considering the fine condition of the ground, we should be disposed at the present moment to regard this crop and its prospects very favourably. The other work upon the farm is at this season generally of a routine character. We find deep cultivation is still in favour, and very properly so. Howard's H H H plough on the gravelly soils, and his crunch plough on the black lands we see daily at work. These are most efficient implements, and ought to be possessed and employed by every Fen farmer. The American question excites considerable attention and somewhat influences the price of corn. Markets have slightly advanced, but are again quiet, and rather lower. Store cattle and sheep realize high prices. Meat is not so high as is sometimes the case at Christmas.—*Your Fen Reporter.*

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended December 19; observed by Mr. J. B. Spearing, Moulsford, Wallingford.

	Temperature of Air. Max. in Sun.	Max. in Shade.	Min.	Mean.	Temperature of Soil 1 foot below the Surface.	Rain.	Wind	Barometer.
	Degs.	Degs.	Degs	Degs.	Degs.	Ins.		
Friday 13 ..	48.0	51.0	45.5	47.5	45.0	0.09	S.	29.32
Saturday 14 ..	56.0	51.0	37.5	45.5	45.5	0.04	S.W.	29.87
Sunday 15 ..	59.0	47.0	40 5	46.7	44.5	..	W.	30 12
Monday 16 ..	59 0	49.0	42.0	48.0	44.5	0.10	W.	30.15
Tuesday 17 ..	49.0	51.0	35.0	42.5	45.0	..	N.W.	30.09
Wednesday 18 ..	42.0	44.0	35.0	39 0	45.0	..	N.W.	29.89
Thursday 19 ..	61.0	47.0	34.0	44.0	44.5	0.02	N.E.	30.14

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

POULTRY.—We are, when going to press, in the beginning of the Christmas market. That renders quotation difficult. There is much excitement, but there is also constant change. It may be generally said and believed that being of first-rate quality and equal in that respect, Turkeys may be estimated by the lb. up to 10 lbs. for hens, and 15 for cocks, from 9*d*. to 10*d*. per lb. will be about the average.

Large Fowls	Each	4*s*. 6*d*.	to	5*s*. 0*d*.
Smaller ditto	"	3 0	"	3 6
Chickens	"	1 9	"	2 0
Geese	"	6 0	"	7 0
Ducks	"	2 0	"	2 3
Pheasants	"	3 0	"	3 3
Partridges	"	1 9	"	2 0
Pigeons	"	0 8	"	0 9
Hares	"	2 6	"	3 0
Rabbits	"	1 4	"	1 5

RAPE CAKE: *E J.* If you will steam it the disagreeable taste will leave it. Or you may boil it and throw it over mixed pulp and chaff. After a while they will take it readily.

Drainage Season.

MR. BAILEY DENTON undertakes the DRAINAGE of ESTATES by Commission or Contract.
52, Parliament Street, Westminster, S.W.

DRAINAGE OUTFALLS.—The most simple, expeditious, and inexpensive powers for obtaining the right of making Outfall Drains, Cuttings, &c., through the Lands of adjoining Proprietors, are under the WEST of ENGLAND DRAINAGE and INCLOSURE COMPANY'S ACT, and there is no necessity for separate proceedings such as Petitions, Special Act of Parliament, Commissions of Sewers, or Drainage Boards, &c.

Draining, Inclosing, Irrigating, Warping, Road Making, and all kind of Land Improvements executed on Entailed, Mortgaged, or other Properties; the whole cost can be a Charge on the Lands permanently, or it might be made redeemable at any fixed time in one or more sums or by half yearly instalments over any term of years, at the option of Proprietors.

FREDERICK BRODIE, Secretary.
Offices—Exeter, and 30, Parliament Street, London, S.W.

Land Drainage.

WORKS of DRAINAGE of any extent are EXECUTED by the GENERAL LAND DRAINAGE and IMPROVEMENT COMPANY on all descriptions of property, whether freehold, entailed, mortgaged, trust, ecclesiastical, corporate, or collegiate.

Repayment may be made by the Landowner as successive portions of the works are completed; or the actual expenditure, with a commission thereon, may be charged on the property improved, by way of rentcharge on the estate created for various terms of years so as to adapt the rate per cent. of annual charge to the circumstances of the tenants.

No investigation of title being required, or notices given to Reversioners or Mortgagees, no legal expenses are incurred.

Works of Irrigation, Enclosing, Wood Grubbing, Road Making, and Farm Buildings are executed in a similar manner.

Landowners desirous to execute any of the Improvements by their own Agents, and charge the outlay and expenses on the Estate, may obtain Loans for the purpose.

Applications to be made to WILLIAM CLIFFORD, the Secretary, at the Offices of the Company, 52, Parliament Street, S.W.

THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.

TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &C., IN ENGLAND AND WALES AND IN SCOTLAND.

The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or farming purposes.
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.

For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

Parkes' Steel Digging Forks.

BURGESS AND KEY, 95, Newgate Street, E.C., London, being the Wholesale and Retail Agents for these celebrated Tools, have always a large Stock on hand from which their Customers may select what they may require.

ANTHONY'S PATENT AMERICAN CHURN has obtained the FIRST PRIZE given by the Royal Agricultural Society at every Meeting since 1850. It is strongly recommended as the most perfect Churn now in use. Full particulars sent on application.

Agricultural Machinery.

CHAFF CUTTERS, TURNIP CUTTERS, PULPERS, MILLS, PLOUGHS, HARROWS, CARTS, &c., Delivered Carriage Free.
BURGESS & KEY, Manufacturers, 95, Newgate Street, London.
PRICE LISTS free per Post.

Oil Paint no longer Necessary.

HILL AND SMITH'S PATENT BLACK VARNISH for preserving Iron Work, Wood, or Stone. This Varnish is an excellent substitute for oil paint on all out-door work, and is fully two-thirds cheaper. It may be applied by an ordinary labourer, requires no mixing or thinning, and is used cold. It is used in the grounds at Windsor Castle, Kew Gardens, and at the seats of many hundreds of the nobility and gentry, from whom the most flattering testimonials have been received, which HILL & SMITH will forward on application.

Sold in casks of about 30 gallons each, at 1*s*. 6*d*. per gallon, at the Manufactory, or 1*s*. 8*d*. per gallon paid to any station in the kingdom.

Apply to HILL & SMITH, Brierley Hill Iron Works, near Dudley, and 76, Cannon Street, E.C., from whom only it can be obtained.

PATENT GUTTA PERCHA SOLES.—IMPORTANT TO GARDENERS.—The Gutta Percha Company have the pleasure to acknowledge the receipt of the following letter from G. GLENNY, Esq., the celebrated Florist:—

"Gentlemen,—I have worn Gutta Percha Soles and Heels these two years, and being so much in a garden as I necessarily am in all weathers, and with the ground in all states, I would on no account be without them. As a matter of economy I would recommend Gardeners to use them, for they may repair the worn part at all times by warming the material at the fire, and pressing it from the thick parts to the worn parts, as easily as if it were so much dough. I think it the duty of all persons who must occasionally wet their feet to adopt a material that completely defies damp. Many a gardener would escape colds and rheumatism by the use of Gutta Percha Soles. Your obedient servant, G GLENNY."

Every variety of Gutta Percha articles, such as Mill Bands, Tubing, Soles, Sheet, Pump Buckets, Fire Buckets, Bosses, Union Joints, Flasks, Bottles, Bowls, Chamber Vessels, Toilet Trays, Sponge Bags, Curtain Rings, Galvanic Batteries, Calbotype Trays, &c., manufactured by the Gutta Percha Company, and sold by their wholesale dealers in town or country.

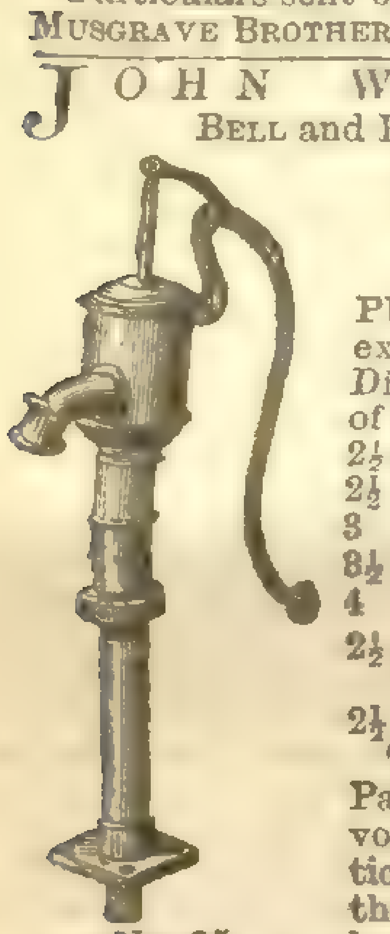
The GUTTA PERCHA COMPANY, Patentees, 18, Wharf Road, City Road, London, E.C.

MUSGRAVE'S PATENT STABLE FITTINGS and HARMLESS LOOSE BOXES, PATENT IRON COW HOUSE FITTINGS, and IRON PIGGERIES.

These inventions are recommended as possessing numerous advantages not to be found in anything hitherto made. At the late Meeting of the Royal Agricultural Society at Leeds, Musgrave Brothers received a Silver Medal, and two Awards of "Highly Commended," being the only Prizes conferred on any competitor in this class.

Particulars sent on application to the Inventors and Makers, Musgrave Brothers, Ann Street Iron Works, Belfast.

JOHN WARNER AND SONS,
Bell and Brass Founders to Her Majesty,
Hydraulic Engineers, Braziers, &c.,
8, Crescent, Cripplegate, London, E.C.



No. 35.

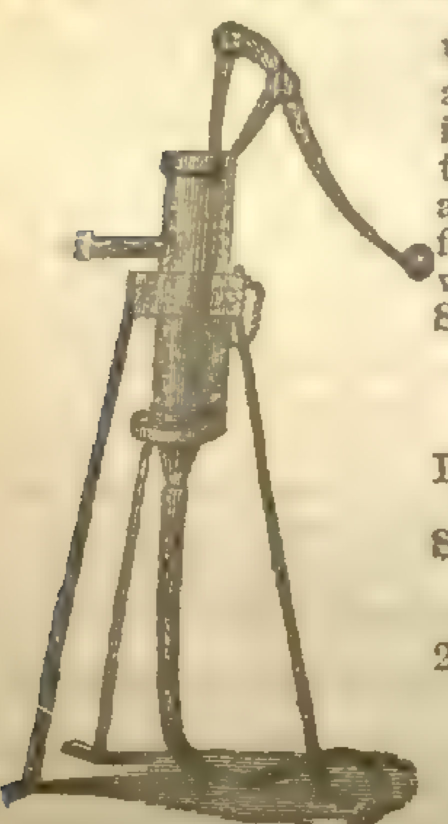
WARNER'S PATENT CAST-IRON PUMP, for raising Water from Wells not exceeding 25 feet in depth.

Diameter of Barrel.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead, gutta percha or cast iron flanged pipe as required.	1 1 0
2½ „ long	3 „ 3 „		1 10 0
3 „ ditto	3 „ 6 „		2 4 0
3½ „ ditto	3 „ 6 „		2 9 0
4 „ ditto	3 „ 6 „		2 18 0

2½ „ short, with 15 feet of Lead Pipe attached, ready for fixing 2 0 0
2½ „ long ditto ditto ditto 2 14 0

This Pump is fitted with J. W. & Sons' Patent Vibrating Standard, Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.

WARNER'S IMPROVED LIQUID MANURE or GENERAL PORTABLE PUMP.



No. 42.

This Pump is fitted with Warner's Patent Bucket and Valve, and cannot clog in action. The Barrel is made of Galvanised Iron, not likely to corrode, and can be raised or lowered at pleasure on the stand, the legs of which fold together, and it may be carried with ease by one man.

	£ s. d.
Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe	2 15 0
If fitted with Barrel of Planished Copper	3 4 0
Stand and Pump, with plain Tail Pipe, for tying on Suction Pipe	2 9 0
2-inch India Rubber and Canvas Flexible Suction Pipe, on wires, in either 10, 12, or 15 feet lengths .. per foot	0 2 5

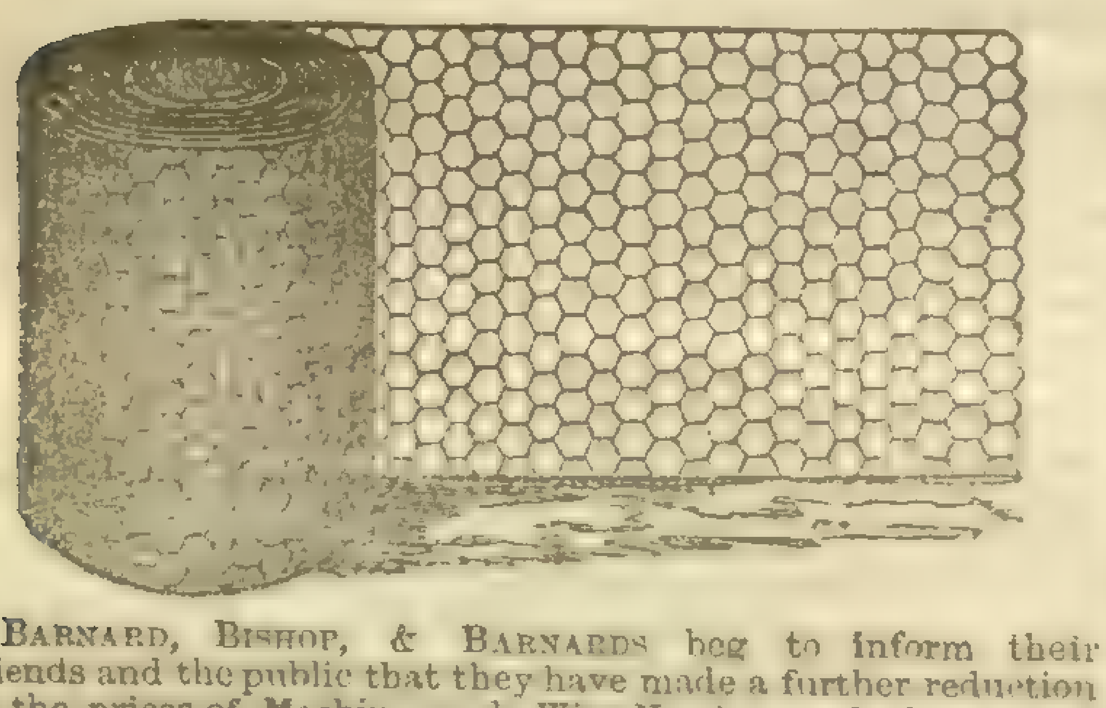
No. 43 is a similar Pump to the above, without stand, but with strong wrought-iron straps, for fixing to water cart or plank, price 2*l.* 5*s.*

Every description of Machinery for Raising Water, by means of Wheels, Rams, Deep Well Pumps, &c.; also Fire and Garden Engines, &c.

J. W. & Sons' Illustrated Catalogue forwarded post free on application.

The above may be obtained of any Ironmonger or Plumber in Town or Country, or of the Patentees and Manufacturers, John Warner & Sons, 8, Crescent, Cripplegate, London, E.C.

BARNARD, BISHOP, AND BARNARDS, Norwich.
FURTHER REDUCTION in the PRICE of WIRE NETTING.—April, 1861.



Barnard, Bishop, & Barnards beg to inform their friends and the public that they have made a further reduction in the prices of Machine made Wire Netting, and also that all their Nettings are now Galvanised after being made, which adds much to their appearance, strength, and durability.

	Gauge.	Galvanised. per yard.	Japanned Iron. per yard.
2-inch mesh, 24 inches wide ..	No. 19	.. 4½*d.*	.. 3½*d.*
2-inch „ „ „ ..	„ 18	.. 5	.. 4
2-inch „ „ „ ..	„ 17	.. 6½	.. 5
2-inch „ „ „ ..	„ 16	.. 8	.. 6½
1⅝-inch „ „ „ ..	„ 19	.. 4½	.. 4
1⅝-inch „ „ „ ..	„ 18	.. 6	.. 4½
1⅝-inch „ „ „ ..	„ 17	.. 7	.. 5½
1⅝-inch „ „ „ ..	„ 16	.. 9	.. 7

All the above kinds can be made any width (under 6 feet), at proportionate prices.

Strong Galvanised Poultry Netting, 7½*d.* per yard, 3 feet wide. Galvanised Sparrow-proof Netting for Pheasantries, 11*d.* per yard, 2 feet wide. Wire Netting of every mesh from half an inch to 6 inches.

Reduced Price of WIRE FENCING, and GALVANISED WIRE ROPE FENCING, suitable for [illegible]

Five wires, 3 feet 6 inches high, [illegible] Standards, 8 feet apart, one wrought iron straining post and straining screws to each 100 yards of Fencing, 10*d.* per yard.

The same with Galvanised Wire Rope, 1*s.* per yard.

Illustrated Catalogues, with prices of every variety of Wire Fencing and Wire Netting, forwarded free on application.

*** Wire Fencing and Netting delivered Carriage Free at all the principal Railway Stations.

HARTLEY'S PATENT ROUGH PLATE GLASS for Ridge and Furrow Roofs, Conservatories, Manufactories, Skylights, Workshops, Public Buildings, Railway Stations, Offices, Mills, Market Halls, Orchard Houses, &c.

Cut to the Sizes ordered.	Thickness. ⅛	3/16	¼
Under 8 by 6..	0*s.* 4*d*	0*s.* 5*d*	0*s.* 6*d*
8 by 6 and under 10 by 8..	0 5	0 6	0 7
10 by 8 „ 14 by 10..	0 6	0 7½	0 9
14 by 10 „ 1½ feet sup. if not above 20 in. long	0 6½	0 8	0 9½
1½ ft. sup. „ 3 ft. or *if* above 20 and not above 30 in. ..	0 7	0 8½	0 10
3 „ 4 „ 20 „ 30	0 7½	0 9	0 10½
4 „ 5 „ 30 „ 35	0 8	0 9½	0 11
5 „ 6 „ 35 „ 40	0 8½	0 10	0 11½
6 „ 8 „ 40 „ 45	0 9	0 10½	1 0
8 „ 10 „ 45 „ 55	0 9	0 10½	1 0
10 „ 12 „ 55 „ 65	0 9	0 10½	1 0
12 „ 15 „ 65 „ 75	0 10	0 11	1 0
15 „ 20 „ 75 „ 90	0 11	1 0	1 2
20 „ 25 „ 90 „ 100	1 1	1 2	1 3
QUARRIES	0 6	0 7	..
BENDING, ordinary curves	0 6	0 9	1 0

Packed in Boxes of 50 Feet each.

6 by 4 and 6½ by 4½ .. .. per Box	10*s.* 6*d.*
7 „ 5 „ 7½ „ 5½ .. .. .. „	12 0
8 „ 6 „ 8½ „ 6½ .. .. .. „	13 6
9 „ 7 „ 9½ „ 7½ and 10 by 8 .. „	15 0

Subject to discount in quantity.

London Agents: James Phillips & Co., 180, Bishopsgate Street Without, London, E.C.

PROTECTED BY THE CUTLERS COMPANY
CORPORATE
MARK.

JOSEPH HAYWOOD AND CO.,
Manufacturers of
PRUNING and BUDDING KNIVES,
SPORTSMAN'S, and all kinds of POCKET CUTLERY.

Dealers in Gambia Garden Shears, Scissors, Syringes, &c.

Glamorgan Works, Sheffield.

J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25*s.* 6*d.* each.

IRON YARD and GARDEN PUMPS
3 feet 6 inches under spout

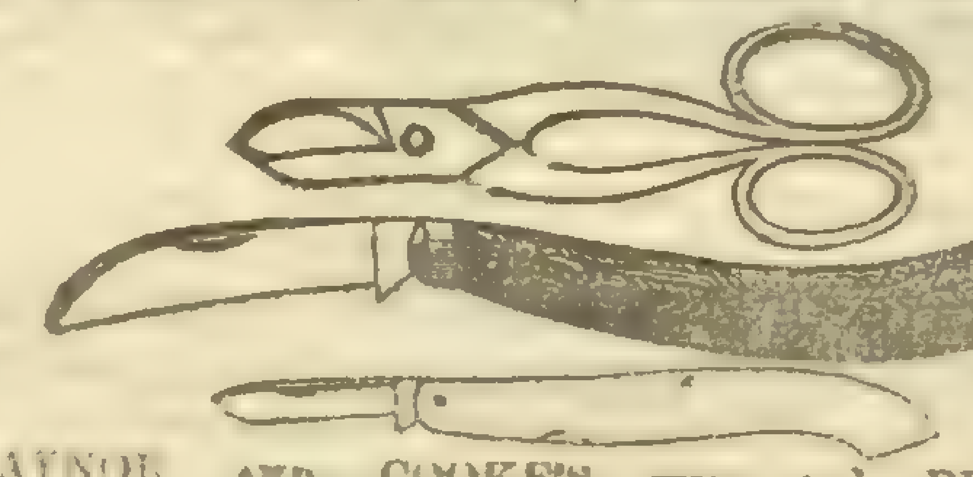
2½	3	3½ inch
43*s.*	53*s.*	60*s.* each.

J. Tylor and Sons manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.

PUMPS of J. Tylor & Sons' manufacture to be obtained of Plumbers in all parts of the United Kingdom.

J. Tylor & Sons, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

Paxton Works, Sheffield, Established 1738.



SAYNOR AND COOKE'S warranted PRIZE PRUNING and BUDDING KNIVES, SCISSORS, &c.

Sold by all respectable Nurserymen and Seed Merchants in the three Kingdoms.

Important to Gardeners.

WE beg respectfully to inform you that we are now supplying Nurserymen and Seed Merchants with an article superior in quality to anything we have hitherto been able to offer, in PRUNING, BUDDING, and GRAFTING KNIVES, VINE and PRUNING SCISSORS, GARDEN SHEARS, &c., owing to their being tempered under an entirely new process, which renders the blade tough and not liable to break, and also gives the edge a lasting keenness which we can warrant them to retain for at least double the time they would under the old method of tempering, thus facilitating the work and saving the time usually lost by having constantly to renew the edge by sharpening, consequently making them more durable in wear and better adapted for all kinds of work, every blade being guaranteed of the same temper.

Caution. None are genuine except marked Saynor, or Saynor, Maker. Other marks would cause the purchaser disappointment.

Prize Medal, Paris Exhibition 1855.

METCALFE, BINGLEY, AND CO.'S New Pattern and Penetrating Tooth Brushes, Penetrating unbleached Hair Brushes, Improved Flesh and Cloth Brushes, and genuine Smyrna Sponges; and every description of Brush, Comb, and Perfumery for the Toilet. The Tooth Brushes search thoroughly between the divisions of the Teeth and clean them most effectually—the hairs never come loose.

M., B., & Co.'s new and delicious Perfumes the Fairy Bouquet and the Oxford and Cambridge Bouquet, in bottles 2*s.*, 3*s.* 6*d.*, and 5*s.* Metcalfe's celebrated Alkaline Tooth Powder, 2*s.* per box.

Sole Establishment, 130B and 131, Oxford Street, 2d and 3d doors West from Holles Street, London, W.

DEANE'S TABLE CUTLERY, celebrated [for more] than 150 years, remains unrivalled for [quality and] cheapness. The Stock is most extensive and [complete,] affording a choice suited to the taste and means [of every] purchaser. The following are some of the p[rices of Ivory] Handled Knives—each blade being of the best s[teel, bearing] our name, and warranted.

	s. d.	s. d.	s. d.	s. d.
Table Knives, per doz. ..	14 0	16 0	19 0	2[illegible]
Dessert ditto „ ..	12 0	12 0	15 0	1[illegible]
Carvers, Joint, per pair ..	4 6	5 6	6 6	7 6

ELECTRO-PLATED SPOONS and FORKS [—] the above.—The best manufacture, well finished [and strongly] plated. Every article stamped with our mark, and gu[aranteed].

	Fiddle. Second quality.	Fiddle. Best.	Reeded. Second.	Reeded. Best.	King's. Second.	King's. Best.
	s. d.	s.	s.	s.	s.	s.
Table Spoons, per doz.	33 0	40	44	58	54	6[illegible]
Table Forks „	31 0	38	44	56	54	64
Dessert Forks „	23 0	29	32	40	[illegible]	[illegible]
Dessert Spoons „	24 0	30	32	42	[illegible]	[illegible]
Tea Spoons „	14 6	18	22	26	26	3[illegible]

Deane & Co.'s New Illustrated Catalogue and F[ur]nishing List may be had on application or post free. [It] embraces the leading articles from all the vari[ous depart]ments of their Establishment, and is arranged t[o facilitate] purchasers in the selection of goods. It compr[ises Table] Cutlery, Electro-plate, Lamps, Baths, Fenders, [Fire-irons,] Iron Bedsteads, Bedding, Britannia Metal, Co[pper, Tin,] and Brass Goods, Culinary Utensils, Turnery, [Brushes,] Mats, &c.

Deane & Co., London Bridge. Established A.D. [1700.]

FENDERS, STOVES, FIRE-IRON[S, AND] CHIMNEY PIECES.—Buyers of the above are [requested,] before finally deciding, to visit William S. B[URTON'S] SHOW-ROOMS. They contain such an assort[ment of] FENDERS, STOVES, RANGES, CHIMNEY-PIECES, [FIRE-]IRONS, and GENERAL IRONMONGERY as ca[nnot be] approached elsewhere, either for variety, novelty, [beauty of] design, or exquisiteness of workmanship. Bright [stoves, with] ormolu ornaments and two sets of bars, 3*l.* 15*s.* to [33*l.* 10*s.*;] Bronzed Fenders, with standards, 7*s.* to 5*l.* 12*s.*; Steel Fe[nders,] 3*l.* 3*s.* to 11*l.*; ditto, with rich ormolu ornaments, fr[om 3*l.* 3*s.*] to 18*l.*; Chimney-pieces, from 1*l.* 8*s.* to 80*l.*; Fire-iro[ns, from] 2*s.* 3*d.* the set to 4*l.* 4*s.* The BURTON and all other [PATENT] STOVES, with radiating hearth-plates.

BEDSTEADS, BATHS, and LAMPS.—W[ILLIAM] S. Burton has SIX LARGE SHOW ROOMS, [devoted] exclusively to the SEPARATE DISPLAY of LAMPS, B[ATHS,] and METALLIC BEDSTEADS. The stock of each is at [once the] largest, newest, and most varied ever submitted to the [public,] and marked at prices proportionate with those that have [tended] to make his establishment the most distinguished [in this] country.

Bedsteads, from ..	..	12*s.* 6*d.* to £20 0*s.* each.
Shower Baths, from	..	8 0 to 6 0 „
Lamps (Moderateur), from		6 0 to 7 7 „
(All other kinds at the same rate.)		
Pure Colza Oil		.. 4*s.* per gallon.

CUTLERY, WARRANTED.—The most varied assortment of TABLE CUTLERY in the world, all warranted, is on sale at William S. Burton's, at prices that are remunerative only because of the largeness of the sales. [3½-inch] and a half inch Ivory-handled Table Knives, with [high] shoulders, 12*s.* 6*d.* per dozen; Desserts to match, 1[0*s.*; if to] balance, 6*d.* per dozen extra; Carvers, 4*s.* 3*d.* per pair; [larger] sizes from 20*s.* to 27*s.* per dozen; extra fine Ivory [33*s.*; if] with Silver Ferrules, 40*s.* to 50*s.*; White-bone Table Kni[ves,] 6*s.* per dozen; Desserts, 5*s.*; Carvers, 2*s.* 3*d.* per pair; B[lack] horn Table Knives, 7*s.* 4*d.* per dozen; Desserts, 6*s.*; Carvers, 2*s.* 6*d.*; Black-wood handled Table Knives and Forks [6*s.* per] dozen; Table Steels from 1*s.* each. The largest stock [in exist]ence of Plated Dessert Knives and Forks in cases and [other]wise, and of the new plated Fish Carvers.

WILLIAM S. BURTON'S GENERAL F[UR]NISHING IRONMONGERY CATALOGUE [may be] had gratis, and free by post. It contains upwards [of 500] Illustrations of his illimited Stock of Sterling S[ilver and] Electro Plated, Nickel Silver, and Britannia Meta[l Goods,] Dish Covers, Hot Water Dishes, Stoves, Fenders, [Marble] Chimneypieces, Kitchen Ranges, Lamps, Gaseliers, [Tea] Urns, and Kettles, Clocks, Table Cutlery, Baths, [Toilet Ware,] Turnery, Iron and Brass Bedsteads, Bedding, Bed [Hangings,] Cabinet Furniture, &c., with Lists of Prices, and P[lans of the] 20 large Show Rooms, at 39, Oxford Street, W.; [1, 1a, 2, 3,] and 4, Newman Street; 4, 5, and 6, Perry's Place; [and 1,] Newman Mews, London.

Dr. de Jongh's
(Knight of the Order of Leopold of Belg[ium])
LIGHT BROWN COD LIVER [OIL,]
prescribed by the most eminent medical men [throughout] the world as the safest, speediest, and most effectua[l remedy for] Consumption, Chronic Bronchitis, Asthma, Co[ughs,] Rheumatism, Gout, General Debility, Diseases of [the Skin,] Rickets, Infantile Wasting, and all Scrofulous Af[fections,]
Is incomparably superior to every other variety.

Select Medical Opinions.

SIR JOSEPH OLLIFFE, M.D., Physician to the [British] Embassy at Paris.—"I have frequently prescribed [Dr. de] Jongh's Light Brown Cod Liver Oil, and I have every [reason] to be satisfied with its beneficial and salutary effects."

Sir HENRY MARSH, Bart., M.D., Physician in Ord[inary] to the Queen in Ireland.—"I consider Dr. de Jongh's [Light] Brown Cod Liver Oil to be a very pure Oil, not likely [to create] disgust, and a therapeutic agent of great value."

Dr. LAWRANCE, Physician to H.R.H. the Duke [of Saxe] Coburg and Gotha.—"I invariably prescribe Dr. de [Jongh's] Oil in preference to any other, feeling assured that I am [recom]mending a genuine article, and not a manufactured com[pound] in which the efficacy of this invaluable medicine is des[troyed."]

Dr. LANKESTER, F.R.S., Superintendent of the [Food] Collection, South Kensington Museum.—"I consider the [purity of the] Liver Oil sold under Dr. de Jongh's guarantee to be prefe[rable] to any other kind as regards genuineness and [medicinal] efficacy."

Dr. de Jongh's Light Brown Cod Liver Oil is sold [only in] imperial half-pints, 2*s.* 6*d.*; pints, 4*s.* 9*d.*; quarts, 9*s.*; cap[suled] and labelled with his stamp and signature, without [which] none can possibly be genuine, by respectable Chemists.

Sole Consignees:
Ansar, Harford, & Co., 77, Strand, London, W.C.

Caution.—Beware of Proposed Substitutions.

Novelties for 1862.

BARR AND SUGDEN, Seed Merchants and Florists, 12, King Street, Covent Garden, W.C.

In the Press, and will shortly be Published, for 1862, SPRING SEED CATALOGUE, or GUIDE to the KITCHEN and FLOWER GARDEN. Arranged and Classified on an entirely new principle.

Striking Novelties for 1862,

Which Barr & Sugden have received from their Special Sardinian Correspondent, who has for many years devoted his attention to improving the CARNATION, PICOTEE, and PELARGONIUM, and who has also been eminent for his success in saving seeds from rare and choice Plants, and thus secured for himself a European reputation.

LIST of NOVELTIES for 1862.

New Cinerarias, Gloxinias, and Pelargoniums.

F. AND A. SMITH can still supply a few sets of their New GLOXINIAS, CINERARIAS, and PELARGONIUMS.

See *Gardeners' Chronicle* of Oct. 5, and CATALOGUE, which may be had gratis.

Dulwich, Surrey. S.

New Azalea indica.

J. IVERY AND SON feel much pleasure in offering their two beautiful Seedlings, CARNATION and TRICOLOR, small plants at 10s. 6d., and larger at 21s. each.

They are fully described in our CATALOGUE, with all other Novelties of the Season, which will be forwarded post free upon application.

A fine lot of half Specimens and Standards for Sale.

Dorking Nursery.—Dec. 28.

RHODODENDRONS. — An immense Stock of Hybrid and Common RHODODENDRONS, 9 inches to 3 feet, is offered at a low price, by W. H. Rogers, Red Lodge Nursery, Southampton; also a fine collection of SCARLET and other beautiful varieties, under name.

A CATALOGUE of General NURSERY STOCK, extending over 60 acres, may be had on application.

HOLLAND AND BAYLEY can now supply from their unrivalled collection the heaviest and finest-flavoured LANCASHIRE SHOW GOOSEBERRIES, in strong 3 and 4 years old plants, at 6s. per dozen.

CATALOGUES, containing Priced Lists of Florists' Flowers, Fruits, &c., on application.

Bradshaw Gardens, Chadderton, near Manchester.

RAYNBIRD, CALDECOTT, AND BAWTREE, Seed Merchants and Growers, Basingstoke, Andover, and 89, Seed Market, Mark Lane, London, E.C.

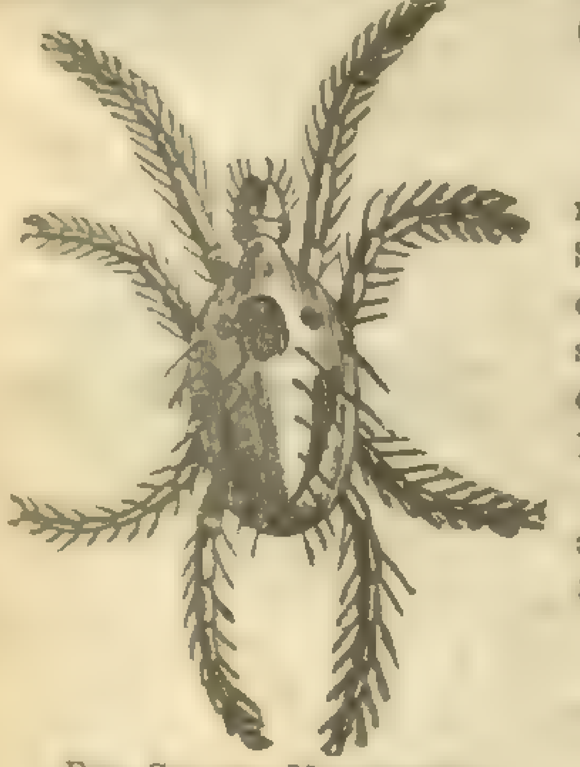
Samples and Quotations of all kinds of AGRICULTURAL SEEDS, and SEED CORN, sent post free on application.

Peruvian Guano, Lawes' Turnip Manures, Linseed Cakes, Cotton Seed Cakes, &c., of best quality at Market Prices.

Genuine Italian Rye-grass.

MR. S. A. DAINTREE, of Fendrayton, St. Ives, Hunts, has harvested a lot of this Seed, in fine condition (produced from the second cut of Foreign Italian), weighing 21 lbs. per bushel, and is delivering at the Great Northern or Eastern Counties Railway at 7s. per bushel, or 56s. per quarter. He invites the special attention of Growers to it, from the fact that, owing to its extraordinary weight and quality, one bushel is sufficient to sow an acre. Samples forwarded (free) on application.

Address as above, and please to apply early.



Red Spider Magnified.

ORCHARD HOUSE TREES and VINES.

Winter wash with GISHURST COMPOUND, recommended by Mr. Rivers. See "Orchard House," ninth edition; and see Mr. Pearson's recommendation in *Cottage Gardener*, 10th Sept., 1861.

Sold retail by Nurserymen and Seedsmen in boxes 1s., 3s., and 10s. 6d. each.

Wholesale by Price's Patent Candle Co., Limited.

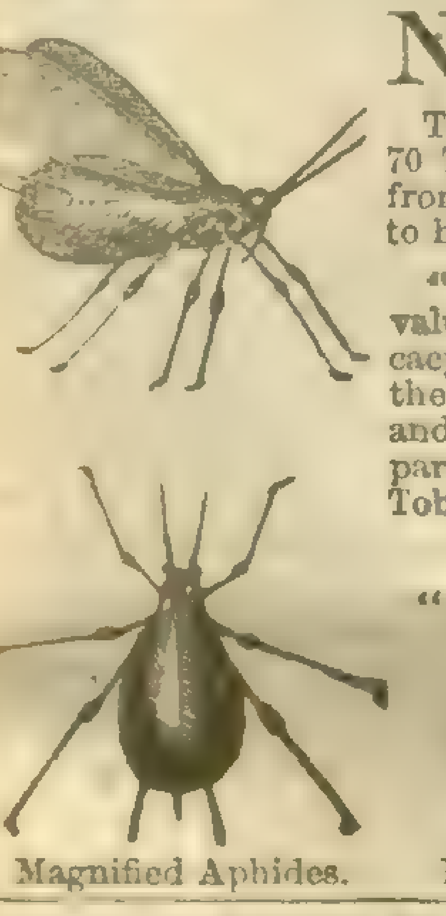
NEAL'S PATENT APHIS PASTILS.

The following is one of upwards of 70 Testimonials received by J. Neal from gentlemen personally unknown to him.

"I beg to bear my testimony to the value of Neal's Pastils, and their efficacy in destroying, most effectually, the Green Fly without any trouble, and at a nominal expense, when compared with the use of Tobacco or even Tobacco Paper.

"James Sanders,
"Nursery Grounds, Abergavenny."

Sold by all principal Seedsmen.
Price 1s. and 2s. per packet.



Magnified Aphides. Patentee, J. Neal, Birmingham.

Parkes' Steel Digging Forks.

BURGESS AND KEY, 95, Newgate Street, E.C., London, being the Wholesale and Retail Agents for these celebrated Tools, have always a large Stock on hand from which their Customers may select what they may require.

ANTHONY'S PATENT AMERICAN CHURN has obtained the FIRST PRIZE given by the Royal Agricultural Society at every Meeting since 1850. It is strongly recommended as the most perfect Churn now in use. Full particulars sent on application.

Agricultural Machinery.

CHAFF CUTTERS, TURNIP CUTTERS, PULPERS, MILLS, PLOUGHS, HARROWS, CARTS, &c., Delivered Carriage Free

Burgess & Key, Manufacturers, 95, Newgate Street, London. PRICE LISTS free per Post.

NETTING for SHEEPFOLDS, made of Cocoa Nut Fibre. Price 4d. per yard. COCOA NUT CORD for THATCHING.—Wildey and Co., Manufacturer of Cocoa Nut Matting and Mats, Holland Street, Blackfriars Road, S.E.

WOODEN FENCING. — The cheapest lasting—TALLOW STAVES, 5s. per 100, at

Price's Patent Candle Company, Limited, Belmont, Vauxhall, London, S.

MINTON AND CO. have REMOVED from Albion Place, Blackfriars, to 50, Conduit Street, Regent Street, W. ENCAUSTIC and other PAVEMENTS, EARTHENWARE and PLAIN TILES. Designs and Estimates prepared.

Manufactory: Stoke-upon-Trent.—Dec. 28.

VASES and BALUSTRADING for GARDENS executed in AUSTIN'S ARTIFICIAL STONE, which has been extensively used in Scotland for more than 20 years.

Austin, Seeley, & Co., 371—375, Euston Road (formerly New Road), Regent's Park, N.W.

Wind Power.

J. R. PEILL, 17, New Park Street, Southwark, S.E., begs to inform intending purchasers that he has now increased facilities for Manufacturing the Patent WIND ENGINES for Pumping, Grinding, Chaffcutting, Pulping, &c.

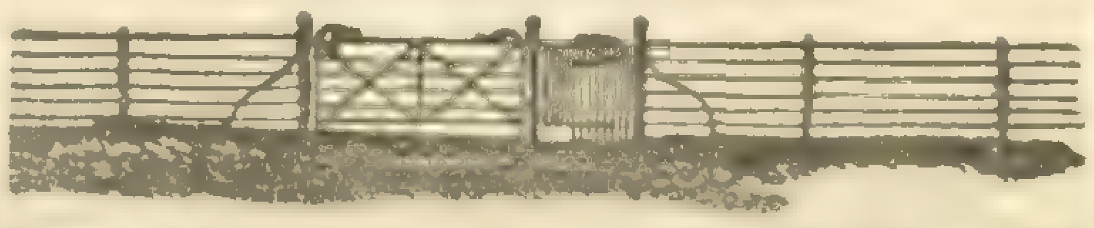
Prospectuses and all information may be obtained by enclosing one postage stamp, and a Wind Engine in full work may be inspected on the Premises daily.

Prices Reduced.

H. J. MORTON AND CO., Galvanised Iron Works, 2, Basinghall Buildings, Leeds.

GALVANISED IRON ROOFING for Farm Buildings and other Roofs; the cheapest, most durable, and neatest Roofing in use; also Spouting at 10½d. per yard.

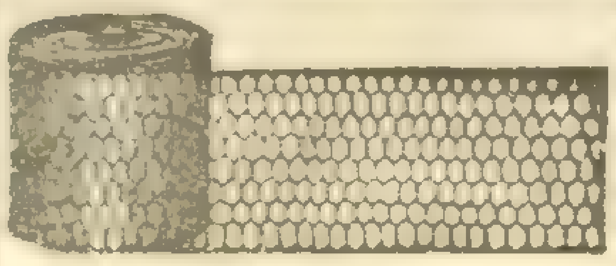
WIRE STRAND CABLE FENCING



(formed of Twisted Wires like a rope or cable), the strongest, cheapest, and neatest fence in use, will resist the largest cattle, and will not bend or get out of form by trespassing upon or over. Price, with five lines of the Galvanised Strand, iron main posts, and pronged Standards, from 1s. per yard.

This fence is far cheaper than posts and rails, or any kind of iron fencing; and possesses four times the strength of solid bars. Will not rust nor corrode. Upwards of 1200 miles of this Fencing supplied.

GALVANISED GAME AND POULTRY NETTING.



Galvanised, 24 ins. wide 2-inch mesh, 4d., 4½d., and 6¾d. per yard.

Galvanised, 24 ins. wide, 3-inch mesh, 2¾d., 3¾d., and 5¼d. per yard. The Netting made any width, and with openings of any size.

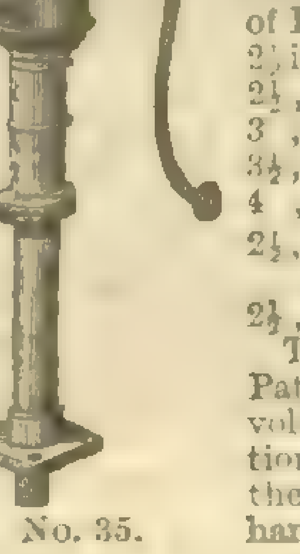
GALVANISED IRON CHAIN CAMP STOOLS & CHAIRS, POULTRY FOUNTAINS & FEEDERS, PRONGED DAHLIA RODS and ROSE STAKES, &c.

Strong CATTLE HURDLES from 2s. per yard.

PATENT IMPROVED GAS WORKS of all sizes, for the use of Private Houses, Mansions, Railway Stations, Mills, Collieries, Mines, Villages, &c. Works from 10 to 500 lights estimated for. The works can be entrusted to an ordinary labourer.—Apply to

Henry J. Morton & Co., 2, Basinghall Buildings, Leeds.

JOHN WARNER AND SONS, Bell and Brass Founders to Her Majesty, Hydraulic Engineers, Braziers, &c., 8, Crescent, Cripplegate, London, E.C.



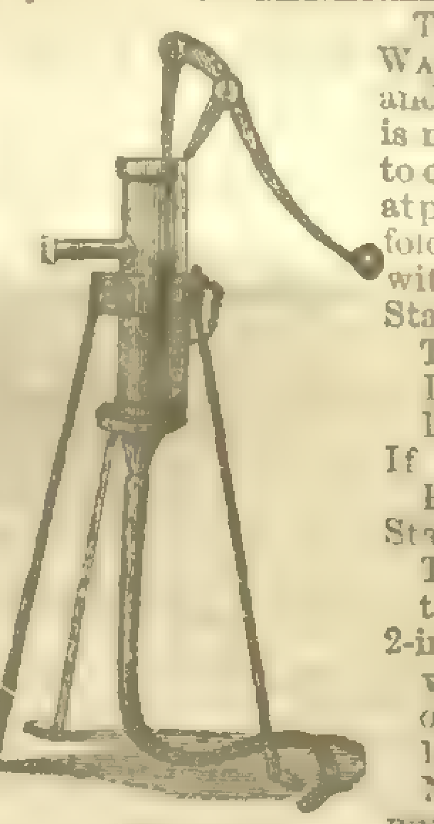
No. 35.

WARNER'S PATENT CAST-IRON PUMP, for raising Water from Wells not exceeding 25 feet in depth.

Diameter of Barrel.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead,	1 1 0
2½ ,, long	3 ,, 3 ,,	gutta percha	1 10 0
3 ,, ditto	3 ,, 6 ,,	or cast iron	2 4 0
3½ ,, ditto	3 ,, 6 ,,	flanged pipe	2 9 0
4 ,, ditto	3 ,, 6 ,,	as required.	2 18 0
2½ ,, short, with 15 feet of Lead Pipe attached, ready for fixing			2 0 0
2½ ,, long ditto ditto ditto			2 14 0

This Pump is fitted with J. W. & Sons' Patent Vibrating Standard. Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.

WARNER'S IMPROVED LIQUID MANURE or GENERAL PORTABLE PUMP.



No. 42.

This Pump is fitted with Warner's Patent Bucket and Valve, and cannot clog in action. The Barrel is made of Galvanised Iron, not likely to corrode, and can be raised or lowered at pleasure on the stand, the legs of which fold together, and it may be carried with ease by one man.

	£ s. d.
Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe	2 15 0
If fitted with Barrel of Planished Copper	3 4 0
Stand and Pump, with plain Tail Pipe, for tying on Suction Pipe	2 9 0
2-inch India Rubber and Canvas Flexible Suction Pipe, on wires, in either 10, 12, or 15 feet lengths .. per foot	0 2 5

No. 43 is a similar Pump to the above, without stand, but with strong wrought-iron straps, for fixing to water cart or plank, price 2l. 5s.

Every description of Machinery for Raising Water, by means of Wheels, Rams, Deep Well Pumps, &c.; also Fire and Garden Engines, &c.

J. W. & Sons' Illustrated Catalogue forwarded post free on application.

The above may be obtained of any Ironmonger or Plumber in Town or Country, or of the Patentees and Manufacturers, John Warner & Sons, 8, Crescent, Cripplegate, London, E.C.

Horticultural Glass Warehouse.

THOMAS MILLINGTON, 87, BISHOPSGATE STREET WITHOUT, E.C.
LISTS forwarded on application

GLASS for GREENHOUSES.—SHEET GLASS, Stock Sizes, 16 oz.

Boxes included.					3rds.	4ths.
11 by 9,	12 by 9,	13 by 9,	14 by 9 ..		14s. 0d.	12s. 6d
12 ,, 10,	13 ,, 10,	14 ,, 10,	15 ,, 10 ..			
13 ,, 11,	14 ,, 11,	15 ,, 11,	16 ,, 11 ..			
14 ,, 12,	15 ,, 12,	16 ,, 12,	17 ,, 12 ..			
18 ,, 12,	19 ,, 12,	20 ,, 12	..	..		
16 ,, 13,	17 ,, 13,	18 ,, 13	..	..	16s. 0d.	13s. 6d.
19 ,, 13,	20 ,, 13,	21 ,, 13	..	..	per 100 feet	
16 ,, 14,	17 ,, 14,	18 ,, 14	..	..		
19 ,, 14,	20 ,, 14,	21 ,, 14	..	..		

English Glass of the above sizes, 18s. per 100 feet.

SMALL SHEET SQUARES, in 100 feet Boxes.

6 by 4	6½ by 4½	7 by 5	7½ by 5½	11s. 6d.
8 ,, 6	8½ ,, 6½	9 ,, 7	9½ ,, 7½	
		10 ,, 8	10½ ,, 8½	12 6

Boxes 2s. each, returnable at full price.

GLASS FOR ORCHARD HOUSES, As supplied by us to Mr. Rivers.

		16 oz.	21 oz.
20 in. by 12 in.			
20 in. by 13 in.	Common	13s. 6d. ..	£0 18s.
20 in. by 14 in.	Superior do.	16 0 ..	1 3
20 in. by 15 in.	English Glass	18 0 ..	1 9

The above prices include the Boxes.

Perforated Glass for Ventilation. Patent Plate and Polished Plate Glass. Ornamental and Coloured Glass.

London Agents for Hartley's Improved Patent Rough Plate.

Linseed Oil, Genuine White Lead, Carson's Paints, Paints of various colours ground ready for use.

Milk Pans, Propagating Glasses, and every description of Glass for Horticultural purposes.

James Phillips & Co., 180, Bishopsgate Street Without, London, E.C.

GREEN'S PATENT LAWN MOWERS have proved to be the best, and have carried off every prize that has been given in all cases of competition. They are noiseless in working, self-sharpening, self-cleaning, simple in construction, and easier to work and less liable to get out of order than any other Lawn Mowers extant.

Illustrated Price Lists may be had of Thomas Green, Smithfield Iron Works, Leeds; or 2, Victoria Street, Holborn Hill, London, E.C.

N.B. Old Machines repaired and made as good as new.

JOSEPH HAYWOOD AND CO.,

Manufacturers of PRUNING and BUDDING KNIVES, SPORTSMAN'S, and all kinds of POCKET CUTLERY.

Dealers in Gambia Garden Shears, Scissors, Syringes, &c.

Glamorgan Works, Sheffield.

J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25s. 6d. each.

IRON YARD and GARDEN PUMPS

3 feet 6 inches under spout		
2½	3	3½ inch
43s.	53s.	60s. each.

J. Tylor and Sons manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.

Pumps of J. Tylor & Sons' manufacture to be obtained of Plumbers in all parts of the United Kingdom.

J. Tylor & Sons, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

Paxton Works, Sheffield, Established 1738.

SAYNOR AND COOKE'S warranted PRIZE PRUNING and BUDDING KNIVES, SCISSORS, &c.

Sold by all respectable Nurserymen and Seed Merchants in the three Kingdoms.

Important to Gardeners.

WE beg respectfully to inform you that we are now supplying Nurserymen and Seed Merchants with an article superior in quality to anything we have hitherto been able to offer, in PRUNING, BUDDING, and GRAFTING KNIVES, VINE and PRUNING SCISSORS, GARDEN SHEARS, &c., owing to their being tempered under an entirely new process, which renders the blade tough and not liable to break, and also gives the edge a lasting keenness which we can warrant them to retain for at least double the time they would under the old method of tempering, thus facilitating the work and saving the time usually lost by having constantly to renew the edge by sharpening, consequently making them more durable in wear and better adapted for all kinds of work, every blade being guaranteed of the same temper.

Caution. None are genuine except marked Saynor, or Saynor, Maker. Other marks would cause the purchaser disappointment.

Hardy Japanese Plants, New Roses, &c.

JOHN STANDISH has great pleasure in submitting the above to the consideration of his friends and the public in general, far exceeding in interest any that he has ever had the opportunity of sending out at any one time.

For a DESCRIPTIVE LIST of NEW FERNS, HARDY JAPANESE PLANTS, NEW ROSES, &c., see *Gardeners' Chronicle* for the first Saturday in every month.

Besides the above J. S. has a fine stock of CONIFEROUS PLANTS, HARDY SHRUBS and TREES, and a very large stock of VINES, which he can offer at reasonable prices, CATALOGUES of which will be shortly ready for distribution.

The Royal Nursery, Bagshot, Surrey.

Superb Dwarf Roses in Pots,

ADAPTED FOR FORCING OR FOR EXHIBITION.

WM. WOOD AND SON beg leave to offer a very first-rate Collection of TEA, SCENTED and BOURBON ROSES, grown in 6-inch pots, fine half-specimen Plants, at 30s. to 36s. per dozen.

Early orders are solicited to insure the best Plants.

Woodlands Nursery, Maresfield, near Uckfield, Sussex.

New Rose Catalogue for 1861-62.

WOODLANDS NURSERY, MARESFIELD, NEAR UCKFIELD, SUSSEX.

WM. WOOD AND SON have the honour to announce that their CATALOGUES of ROSES and GENERAL NURSERY STOCK are now ready for distribution.

It is generally admitted that the county of Sussex has suffered less from the effects of last winter's frost than any other county in England, in consequence of which W. W. & Son have to offer a remarkably fine stock of Roses and Nursery Stock in general.

Standard and Dwarf Roses.

JOHN CRANSTON has no hesitation in stating that he holds the largest stock of STANDARD ROSES in the kingdom, and plants of the finest growth possible. These he is now offering at the following prices:—

STANDARDS, finest Hybrid Perpetual and Bourbon, 30s. per dozen.
HALF-STANDARDS, do., 24s. to 30s. do.
STANDARD TEA SCENTED, the best and most hardy sorts, 36s. to 42s. do.
DWARF HYBRID PERPETUAL, strong on Manetti Stock, 15s. to 24s. do.
DWARF HYBRID PERPETUAL, own roots, 12s. to 18s. do.
DWARF TEA SCENTED, 18s. to 24s. do.
PILLAR ROSES, extra strong on Manetti Stock, 18s. to 24s. do.
NEW ROSES of 1860 and 1861, 3s. 6d. to 5s. each.

A DESCRIPTIVE LIST will be forwarded free on application.

Nurseries, King's Acre, near Hereford.

Mitchell's Unrivalled Collection of Roses.

THE LARGEST STOCK AND THE BEST PLANTS IN ENGLAND, JUSTLY PRONOUNCED BOTH BY ENGLISH AND FOREIGN GROWERS.

JAMES MITCHELL has the honour of informing his kind patrons that he has succeeded in obtaining the FIRST PRIZES at the principal Shows throughout the season, viz.:—

July 10.—The Grand National Rose Show, Royal Horticultural Society's Garden, Kensington Gore, 96 varieties, 3 trusses of each, First Prize.
September 11.—Forty-eight varieties, 3 trusses of each, First Prize.
July 3.—The Royal Botanic Society, Regent's Park, London, 50 varieties, 3 trusses of each, First Prize.
July 6.—The Great Rose Show, Crystal Palace, 96 varieties, 1 truss of each, First Prize.
June 19.—Brighton Horticultural Society, 50 varieties, 3 trusses of each, First Prize.
September 18.—Fifty varieties, 3 trusses of each, First Prize.
August 28.—Lewes Horticultural Society, 36 varieties, 3 trusses of each, First Prize.

J. M. respectfully informs the Nobility and Gentry he can supply the best perpetual BLOOMING ROSES in Standards, Half-Standards, and Dwarfs, healthy good rooted plants.

Standards, 30s. per dozen.
Half ditto, from 24s. to 30s. per dozen.
Dwarfs, from 18s., 24s., to 30s. per dozen.
New Varieties of 1861, 42s. per dozen.

Pilt Down Nurseries, Maresfield, Sussex.

N.B. These Nurseries are 2½ miles from the Uckfield Station, on the London, Brighton, and South Coast Railway.

New Tea Rose, L'Enfant Trouve.

BENJAMIN R. CANT desires to return his best thanks to his friends and the public in general for their very liberal patronage of the above valuable Rose. He is still prepared to receive orders, which will be executed in strict rotation.

In order to assure Rose growers of the value of this addition to the favourite class of Tea Roses, he begs to subjoin the opinion of a few authorities, whose judgment will hardly be questioned.

The *Journal of Horticulture and Cottage Gardener* of June 11, 1861, thus notices it:—

"The blooms sent are very beautiful, and the Rose is unknown to us; the colour a soft creamy yellow, very much that of the cream of rich milk, the shape good, and the foliage equal to that of Gloire de Dijon, and as the blooms sent are gathered from a plant in the open air, its hardiness would further enhance its value."

The Rev. H. Dombrain, Editor of the *Floral Magazine*, thus writes in that periodical, where it is figured in the September Number, 1861:—

"The guard or outer petals are large and of good substance, the shape quite globular, and the centre of the flower filled in with a large number of smaller petals, it is very free flowering. With these valuable characteristics it cannot fail to be a valuable acquisition to the Rose grower and the public in general."

On November the 2d, two blooms of it were sent to the Rev. W. F. Radclyffe, Vicar of Rushton, one of the first Rose Growers in the kingdom, at the time they were covered with snow. He says:—"I thank you very much for the blooms of L'Enfant Trouvé. They are indeed fine, and likely to give satisfaction, the blooms are quite wonderful for the time of year, and very good for any part of the Rose season; it is a genuine golden yellow, and if hardy (it stood last winter) and free flowering, as it appears to be from the specimens sent, it will be a great favourite. Instead of four plants send me six."

It has also been highly praised by the Floral Committee of the Royal Horticultural Society.

Fine Plants in pots will be ready for sale in April, 1862, at 5s. each.

The Trade supplied upon liberal terms.

BENJAMIN R CANT, St. John's Street Nursery, Colchester.

SAPONARIA CALABRICA ALBA, Pure White.—This beautiful New Annual is of very dwarf habit, and being pure white, contrasts most admirably with the Saponaria calabrica rosea. It produces blossoms in great profusion, and remains in flower during the whole summer and late in autumn. It is invaluable for beds, or as edgings for borders.

Price to the Trade on application to

JOHN GEORGE WAITE, Seed Merchant, 181, High Holborn, London, W.C.

NOVELTIES AND CHOICE SEEDS

OFFERED BY

BUTLER & McCULLOCH, SEEDSMEN,

COVENT GARDEN MARKET, W.C.

	Per Packet—s.	d.
ABUTILON, "DUC DE MALAKOFF," orange, richly veined, the finest of the Abutilons	1	0
ACACIA ACANTHOCARPA, splendid blossoms and very graceful foliage	1	0
ACACIA COCCINEA, the most novel of the Acacias, colour bright rose, with bunches of ball-shaped blossoms	1	0
ACACIA XYLOPHYLLOIDES, a magnificent showy species with rich clusters of golden blossoms	1	0
ALYSSUM SAXATILE COMPACTUM, profusely covered with rich golden blossoms, a suitable companion to Arabis alpina and Saponaria ocymoides	1	0
AQUILEGIA CARYOPHYLLOIDES, fine hardy perennial, blossoms richly striped	0	6
ARCTOTIS GRANDIFLORA, splendid bedding plant after the character of Gazanea splendens, but the blooms remaining always open	0	6
CANNA GIGANTEA, the finest foliage of all the Cannas, admirably adapted for centres of beds in warm situations	0	6
CELOSIA AUREA PYRAMIDALIS	1	0
,, KERMESINA PYRAMIDALIS. These plants are among the finest yet produced for conservatory, greenhouse, or drawing-room decoration, their compact habit and graceful feathery spikes of bloom have a most elegant appearance; colour, rich golden yellow and bright crimson	1	0
CLARKIA PULCHELLA FLORE PLENO, a new and desirable plant for ornamental purposes; colour a rich magenta	1	0
CLINTONIA PULCHELLA ATROCINEREA	0	6
,, ,, GRANDIFLORA	0	6

	Per packet
CLITORIA GESNATIA ATROCŒRULEA, splendid greenhouse or conservatory climber, rich cerulean blue	
HIBISCUS GIGANTEUS, splendid greenhouse plant, seed very scarce	
IPOMŒA LEARII, superb greenhouse variety, rich blue, shading to red	
IPOMŒA LIMBATA ELEGANTISSIMA, the finest outdoor variety; an intense purple centre, in the form of a star, with a broad pure white margin	
JACOBÆA, new double magenta	
LINUM FLAVUM, rich golden yellow, the best in habit of all the Linums, forms an admirable pot plant ..	
LINUM LUTEUM CORYMBIFLORUM, straw-coloured variety, more diffuse in habit than the preceding ..	
NEMESIA COMPACTA INSIGNIS, bright blue.. ..	
,, ,, LA SUPERBE, delicate rose-coloured	
ŒNOTHERA CAMPYLOCARPA GRANDIFLORA, crimson orange, very striking	
ŒNOTHERA LAMARCKIANA, bright golden yellow, a profuse bloomer, with extraordinary large flowers ..	
SOLANUM JASMINOIDES, splendid half-hardy climber, climber, producing large bunches of white Jessamine-like blossoms	
TROPÆOLUM CRYSTAL PALACE GEM	
ZINNIA ELEGANS FLORE PLENO, the finest novelty that has been introduced for many years, blooming from July until the frost. The seed we offer is saved from the finest double varieties only, and cannot fail to give satisfaction	6d. and 1s.
TRIFOLIUM ARVENSE, a beautiful miniature ornamental Arabian grass; the foliage is of a light grey colour, and the bloom consists of a multitude of small tufts like minute hares' tails	

BUTLER AND McCULLOCH, SEEDSMEN, COVENT GARDEN MARKET, W.C.

BARR & SUGDEN, 12 KING ST, COVENT GARDEN

SEED MERCHANTS AND FLORISTS,

OPPOSITE THE GARRICK CLUB.

For striking LIST of NOVELTIES, see last page of *Gardeners' Chronicle.*

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The Gardeners' Chronicle.

SATURDAY, DECEMBER 28, 1861.

We have just received a copy of the following most touching and important letter which has been addressed to one of the Vice-Presidents of the Royal Horticultural Society.

This, the first public act of Her Majesty after the closing scene of the last terrible ten days, will come home to the heart of every female in the Queen's dominions. The womanly feeling which dictated the sentiment is one that cannot be mistaken :—

Copy of Letter from Sir C. B. Phipps *to* Mr. Dilke.

"Osborne,
"*Dec.* 24, 1861.

"My dear Dilke,

"The Queen has directed me to inform you that it is Her Majesty's wish that the Horticultural Gardens should be considered as under her peculiar and personal patronage and protection.

"The only consolation that Her Majesty can hope to find for the rest of her life, under her bitter and hopeless bereavement, is to endeavour to carry out the wishes and intentions of her beloved husband.

"The Queen well knows the deep interest that he took in this undertaking, and would wish to have periodical reports sent to Her Majesty of the progress and proceedings of the Society.

"Sincerely yours,
"C. B. Phipps."

So many enquiries are addressed to us concerning the South American "nuts" called Sapucayas, now common in fruiterers' shops, that it seems desirable to give some account of their origin; as well as to explain why they are not nuts in the proper sense of the term.

The name appears for the first time in books of Natural History in Piso's account of the medicinal and other plants of Brazil, published at Leyden in 1648. The author states that the Zabucajo is a very tall tree with a hard rough grey bark like that of the Oak from which writing ink is made. The young leaves are brown, the old ones green, &c. This tree produces cups of great size and excessive hardness, with the mouth turned downwards, and closed by a lid, like that of a pyx or soap box. These cups contain nuts of a pleasant flavour, which, when ripe, fall out spontaneously if the cups are struck, and furnish a most grateful food to the natives as well as animals. They ripen once a year, in mid-winter; and in taste and excellence are equal to Pistachios. A very fat oil is pressed from them, hotter than Almond oil, for the kernels from which it is obtained are understood to be hot in the second degree and dry in the first. They are better eaten roasted than raw, because the latter are apt to affect the head. More than 30 seeds are found in each cup, adhering by a sticky substance to a triangular body. The cups themselves are so hard that the Aborigines (Tapuyeris) use them not only as goblets but as pots and dishes. Hence Linnæus called the plant *Lecythis ollaria*. The timber is extremely useful; it resists decay in a wonderful manner, and on account of its hardness is preferred to all other kinds for the axle trees of sugar-mills. The bark, when beaten, is used by boatmen as oakum. Piso adds that there is another tree called Zabucajo, a good deal like the first, but its cups are not so regularly shaped, and its nuts not so good; for, according to the natives, those who eat them in excess are apt to lose their hair. A rude woodcut accompanies the description, from which it appears that the cups of the first Zabucajo were nearly spherical or roundish-oblong.

This statement was echoed by George Marcgraaf de Liebstad, whose papers were edited by de Laet of Antwerp. Marcgraaf, using Piso's woodcut, speaks of the tree as being called Iapucaya; but it is doubtful whether he has not confounded some other sort with that of Piso; for he says that the cup contains four cells, in each of which is one chesnut as big as a Plum, a description that has no application to Sapucaya.

In 1775 the French botanist Aublet, in his *Histoire des Plantes de la Guiane Française*, describes and figures a tree called in Guiana Canari Macaque, which he also referred to the genus *Lecythis* of Linnæus, naming it *Lecythis grandiflora*. This tree was called in his day *Marmite de Singe*, or Monkey pot, for a reason to which we shall advert presently. The figure given by him of the cup of this species, and which we reproduce, represents a vessel tapering to the base, and described as being about 7 inches high, 2½ inches across the opening into the interior, and 4 inches or more in diameter. He states that the nuts are sweet and very good to eat, but adds nothing further.

As the figure given by Aublet of the seed of his *Lecythis grandiflora* agrees pretty well with the Sapucayas of our shops, it has been occasionally inferred that they are produced by that species. But Aublet has another *Lecythis*, to which he applies the name *Zabucajo*, which he says bears in Guiana that name, and is also called Quatelé, its fruit, like the other, having received from the colonists the appellation of Marmite de Singe or Monkey pot. The description given by him of the tree agrees very well with that of Piso. As for the cup, whose lid naturally falls off when ripe, it does not seem to be the same as that of Piso, as far as can be gathered from description. Portuguese turners make boxes and other small articles out of the cups. In other respects the statements are similar to those of Piso. For this reason Prof. Oliver, in the *Official Guide to the Kew Museums*, refers the Sapucayas to both *L. ollaria* and *L. Zabucajo*, apparently regarding the two species as the same. We are informed, however, by Messrs. Keeling & Hunt, the great importers, that the Sapucayas on sale in this country come exclusively from Para and not from Demerara; which raises a suspicion that there may be differences between the trees of the two countries. We are also informed on good authority that no Sapucayas come hither from Demerara, their quality being inferior to that of the Brazilian kind. This at all events is certain, that Sapucayas are produced in the interior of great hard goblet-shaped capsules, which open by a circular lid, in the same way, only on a grand scale, as the seed vessels of our own little Henbane and Anagallis. Hence Sapucayas are seeds, not nuts; for all nuts properly so called are seed-vessels forming seeds in their interior.

The name of Monkey pot is said to have arisen thus. When the cup of a Lecythis falls its lid drops off, the seeds roll out, and it then becomes a hard pot with a narrow mouth. These pots are used for catching monkeys. Filled with sugar they are placed on the ground which such animals frequent. The sugar attracts the latter, who pick it out leisurely till they are disturbed, when they insert the paw, grasp as much sugar as it will hold, and endeavour to escape with their prize. But their doubled fist being larger than the mouth of the pot cannot be withdrawn, and the monkeys tenaciously holding the sugar run off with a pot firmly enclosing one paw. This renders it impossible for them to escape from their pursuers by climbing, and they are easily run down.

We do not further advert to the Botanical question, which must be studied with reference to von Martius' Brazilian Flora, and the materials accumulated in Museums.

Our attention has been called by a Correspondent to a recent decision of the Court of Session in Scotland, relative to tenant's fixtures.* Proceedings were taken by a landlord against his tenant, a nurseryman, whose lease had expired, to prevent the removal of a greenhouse, propagating house, and hotbed frames. The Sheriff Substitute, before whom the question first came for decision, held that the tenant was entitled to remove the things in dispute. The Sheriff Principal, however, took an opposite view, and granted an interdict against their removal. From this decision the tenant appealed to the Court of Session, and that Court reversed the decision of the Sheriff Principal, and decided in favour of the tenant.

The right of a tenant to remove horticultural erections, such as conservatories, hothouses, greenhouses, propagating pits and the like, depends in the first place on the terms of his lease. If the tenant has agreed to deliver up all fixtures at the end of the lease, he must abide by his bargain, and if he finds that he is compellable to leave what, in the absence of such an agreement, he might have removed, he has only to blame himself for his own want of caution. If there is no special agreement about fixtures, the next thing to be considered is the purpose for which the lease was taken. If taken by a person in trade, for the purposes of his trade, he will be entitled to remove all fixtures which he may have erected, provided they are necessary for the purpose of enabling him to carry on his trade in a proper manner. This was the principle on which the Court of Session in the case above alluded to determined that the tenant had a right to remove the fixtures which were there in dispute.

* Harvey v. Syme, decided in the Court of Session on the 14th of Dec. 1861. See the *North British Daily Mail* of Dec. 16, 1861.

The tenant was a nurseryman, and the fixtures were indispensable to enable him to carry on his business. Had the tenant not been in trade, or had the fixtures not been necessary for carrying on his trade, he would have had no right to remove them.

We are not indeed told how the houses and frames were constructed, nor to what extent they were connected with the ground. If they were so constructed as to have been of no use when removed, if they could not have been set up on other premises, if their constituent parts could only have been sold as old materials, then the new decision goes further in favour of tenants than any prior decision with which we are acquainted. But if, as was probably the case, the houses and pits, when removed, were still capable of being used by the tenant for the purposes of his trade, then his right to remove them could hardly have been denied by a court of justice. The decision, however, deserves attention, for we are not ourselves aware that the right of a nurseryman to remove hothouses has ever been actually decided in the English courts. Should the question come before them there can, we conceive, be little doubt that they would agree with their Scotch brethren, and hold such things to be removable by a nurseryman if he had not agreed to leave them for the benefit of his landlord.

HOW TO MAKE DRIED FLOWERS KEEP THEIR COLOUR.

(Abridged from the Deutsches Magazin für Garten-und Blumenkunde.)

THE formation of bouquets, head dresses, and table ornaments composed of flowers dried so as to retain very nearly their natural appearance, has of late constituted at Erfurt and other continental towns quite a new branch of industry. The history of the matter is as follows: In 1770 the Spanish botanist, Quer, presented to the Academy of Bologna, a collection of dried plants beautifully prepared; but the process he adopted was only applicable to specimens for herbaria. Quer dried the leaves and flower spikes separately between sheets of paper placed in the sun or in a moderately warm oven. The flowers retained their forms and colours if rapidly dried and only slightly compressed. The leaves and spikes were then gummed on to the stem.

The most successful experiments in drying plants so as to preserve their natural colours were those of Monty, published in 1772. He tried drying in Millet seed, but found that the specimens were crumpled, and retained the marks of the seeds. He also tried Rice and Wheat, with similar ill success; and at last he had to give up the use of seeds and all other vegetable substances, as these had the effect of rendering the drying process tedious and imperfect. Monty next employed river sand for drying, but the sand stuck to the plants; at last he adopted white sand, from which he separated the grosser particles by sifting, and the finest by washing; and having dried the residue he surrounded the plants with the dried sand in boxes, which were exposed either to the sun or to the heat of an oven. This mode was attended with complete success. He also tried sea sand, but this did not answer.

About fifteen years ago M. Stanislas Martin made known, under the name of *embalming*, a process in which dried sand was also employed: but he did not mention all the precautions which were necessary to be taken in order to insure success.

At the Universal Exhibition in Paris in 1855, M. Kentz Swartz, a German, exhibited flowers admirably dried, but he, too, did not publish the details of his process. MM. Reveil and Berjot, after various unsuccessful attempts to obtain similar results, at last arrived at nearly the same plan as that indicated by Monty, of whose existence, however, they were ignorant. They took white sand and passed it through a hair sieve, and washed it till the water came off perfectly clear. The sand was then dried in the sun, or, better still, in an artificial temperature of 300° Fah.; every ½ cwt. of sand being sprinkled with ½ oz. of melted spermaceti, and rubbed between the hands, so as to grease the surface of each particle of sand. A layer of the sand thus prepared was put in a box about 5 inches deep. The bottom of the box was made to slide in grooves, so that it could be easily withdrawn; but a wire grating placed immediately above the moveable bottom remained fixed. The specimen to be dried was spread out and only just covered with the sand. The box was then covered with a sheet of paper, and placed in a stove or oven heated to about 110°. The drying was soon effected; the bottom being then slipped out, the sand falls through the wire grating, and the specimen rests on the latter. The colours of white, yellow, and blue flowers are very well preserved by this process; but those that are of a red or violet tint become somewhat dull.

The method now pursued in the drying of flowers in Germany, as described in the *Deutsches Magazin*, is as follows. Fine sand, say silver sand, is washed till the water passes off perfectly clear. It is then made quite dry and sifted to remove any fine dust which may have remained after the washing and drying. It is then passed through a sieve sufficiently fine to separate any coarse particles. The flowers to be operated on are cut in as perfect a state of development as possible, care being taken that they are not moist from rain or dew. If they cannot be had otherwise than in a damp state, the following means are adopted to dry them: only one or two pieces are placed in a glass, in the bottom of which there is just sufficient water to cover the lower extremity of the stalk. The flowers under such circumstances become dry without flagging. A box, or pot, or other vessel large enough to contain the flower or flowers, is then taken, the bottom is covered with a layer of the dried sand, in depth sufficient to maintain the specimen erect when its lower end is inserted. Then, by means of a funnel or small sieve, as much sand as will cover the whole is introduced. This must be done very carefully, so as not to derange the natural position of any part, not even the petals. The box must not be shaken, otherwise the flowers would be crumpled. It must be carried steadily and placed in a dry warm situation, in order that the moisture contained in the specimen may evaporate through the sand. The heat used, too, must not be too strong, otherwise the colour of the flowers would be tarnished; on the other hand, if the temperature is too low the moisture contained in the specimens would not be carried off quickly enough, and putrefaction would be the consequence. In no case, however, ought the heat to exceed 212°.

With a little experience it is easily known when the plants are perfectly dry, by tapping the box. The latter is then placed in a slanting position, and the sand poured out so as to admit of the specimen being very gently removed. It will then be very brittle, and must be handled with great care; but after some days' exposure to the air it will regain sufficient moisture to render it more pliable.

From the above it will be seen that this new process about which German, English, and even American periodicals are making so much fuss, is neither more nor less than that described by Monty as far back as 1772. Every day therefore brings us fresh proofs of the old saying, "There is nothing new under the sun."

THE MELON AND ITS VARIETIES.

THERE is certainly no species more difficult of definition as regards its limits than the Melon. After six years of study and experiment on hundreds, or rather thousands of plants, we still cannot speak decidedly on this subject; for not a year passes without the appearance of some new form. If we were to judge only by the habit of growth of the plants, and the size, form, colour, scent, and flavour of the fruit, and if such characters were considered as specific distinctions, there would be no limit to the number of species. Botanists who have preceded us enumerated 30, and they had not the slightest acquaintance with the multitude of new forms which have appeared since their time. We will however point out some well marked forms in order to give our readers an idea of the immensity of the variations exhibited by the Melon, and which more than ever we consider to be but a single species, notwithstanding the endless number of different aspects which it presents. Proceeding according to size we find—

1st. *The Melon of Cauvrestan*, the fruit of which weighs, it is said, as much as 66 lbs. This is doubtless the same as the Melon Turquin or Quintal, and probably not different from the Melon of Kirghis, recently introduced into Europe, two of which are said to be a load for a camel, but there may be some exaggeration in this. It was cultivated at the Museum in 1860, but came to nothing, owing to the coldness of that season, which was peculiarly unfavourable to the culture of Cucurbitaceous plants.

2d. *The Cantaloup Melons*, which every one knows, and of which there are many sub-varieties—Cantaloup Prescott, Noir d'Hollande, Noir des Carmes, Cantaloup du Mogul, Muscatelle, &c., differing in form, colour, size, and especially in flavour. The Prescott fond noir and fond blanc are unquestionably at the head of the group. These Melons are also of considerable size.

3d. *The Netted Melons*, a section the limits of which are not well defined, for it merges on the one hand into the Cantaloups, and on the other into the white-fleshed Melons. The type of this group is the common Maraicher of Paris, which is almost globular, without ribs, and closely netted. This fine race is sometimes of excellent flavour, but often insipid, and generally of medium quality. It degenerates into a multiplicity of spurious forms, which are round or ovate, with or without ribs, of a uniform colour, or marbled, netted or without reticulations, with red or white flesh, &c., which are desseminated throughout the world.

4th. *The White-fleshed Melons*—among which the Ananas and the Sucrins rank among the most highly esteemed. The Melons of this breed are usually of medium size, with a slight but penetrating perfume, and some of the varieties possess exquisite flavour. To this section may be referred the Melon Bariole de Perse, which is oblong, without ribs, marbled with dark green on an orange-yellow ground; and the Melon d'hiver from the South of Europe, having a firm thick flesh, and which keeps till January or February. In this group, as in the preceding one, several hundred sub-varieties might be found,

5th. *The Snake Melons*, which many persons consider Cucumbers, although they are quite as much Melons as the Cantaloups and Netted Melons. The fruit is sometimes a yard long, and not more than an inch in diameter, twisting in all directions like a serpent. This group exhibits many curious forms of interest to the botanist, but it is of no value to the gardener. By crossing, this long race may be made to assume a round or oval shape.

6th. *The Cucumber-shaped Melon of India* is so like a Cucumber, both externally and internally, that it is hardly possible to distinguish the one from the other except by the leaves. It is of no value in a horticultural point of view.

7th. *The Chito Melon.*—This of late years has been much talked of, especially in Belgium. It heads the series of small Melons which we are going to describe. It is about the size of a goose's egg, yellow with a white, almost insipid flesh. We have seen a sub-variety from New Granada no larger than a moderate-sized Apricot. This sort is edible as well as the following.

8th. *The Melon rouge de Perse.*—Extremely curious in consequence of its external colour being unusual among Melons. It is a uniform scarlet, like that of the fruit of the Bryony. It is about the size of the China, nearly round, perfectly smooth, without perfume, and white fleshed.

9th. *The Dudaims*, a vast group of which authors have contrived to make several species. One of the varieties is known as Queen Anne's Pocket Melon. We consider the type of this breed to be a variety having fruit of a globular form, or but slightly depressed, changing in ripening to a bright orange colour, its dark green streaks or speckles becoming red. Another characteristic of the fruits of this class is the strong scent which they give out; so powerful is it that some persons cannot remain in the same room with them. The fruit varies in size from that of a small Apricot to that of an Orange; but it sometimes becomes much larger, and we have seen it as big as a moderate-sized Netted Melon. The flesh is yellowish-white or somewhat rosy, sweetish, but leaving in the mouth a disagreeable after-taste which renders it unfit for eating; and unfortunately this unpleasant quality is transmitted to all the varieties obtained from this beautiful race by crossing with other Melons. The Dudaims cross so readily with other sorts that when cultivated in gardens they must be kept as far apart as possible from the Melon ground, as by hybridising the usually cultivated sorts their seeds can be no longer depended on. Keeping very true themselves to seed when not crossed, the Dudaims gradually lose their distinctive characters when grown for several years near Melons of another race. They are fancy fruits, very ornamental for decorative purposes, and may be employed with good effect in setting off the dessert; but as already stated they are not fit to eat. Their culture is easier than that of the edible Melons; and, being very early, they require but little heat.

10th. *The Wild Melon*, a group as yet imperfectly known, and which is dispersed over the greater part of the torrid zone, for it is found in India, the Isles of the Pacific, and even in America. It has given rise to an almost endless number of varieties, which are distinguished by the size, form, and colour of the fruit. We have no doubt that India is the native country of the Melon, for there its wild forms are the most diverse and the most widely dispersed. In some of this breed the fruit is as large as a goose's egg, in others scarcely so large as a small Plum; some are yellow all over, others are streaked or marked with green. The flesh is insipid or sweetish, with occasionally a slight degree of bitterness. When subjected to cultivation, these wild Melons gradually acquire the characters of the best known forms of Melon; the leaves become larger, the fruit larger and more juicy, and by crossing with other kinds give rise to new varieties that are always perfectly fruitful, which is another proof of their specific identity.

At first sight, on considering the vast geographical area over which the Melon tribe extends, it may appear doubtful whether it form only a single species; but when we call to mind the facility with which the Melon is disseminated, all doubts on the subject will be set at rest. The fruit of many varieties, when detached from the stalk, will remain long unchanged after the decay of the stem and leaves, and in this state is carried away by floods and washed ashore far from the spot where it was produced. The fruits which reach the sea are borne along by the currents; and there are always some which are drifted on land at a favourable spot, where the fleshy portion of the fruit decays, the seeds germinate, and a fresh colony is thus established. At other times the dissemination of varieties in very distant parts is effected by human agency. The small, wild, edible Melons of India have certainly been distributed by these means ages ago; and they are now found in all the warm parts of southern Asia, whence they have extended over the isles of the Pacific Ocean, Arabia, and Africa, though to the latter the Melon may perhaps be indigenous.

As additional proof of the correctness of the above

views it may not be out of place to give a few examples of the migrations of Cucurbits. The Colocynth (Cucumis Colocynthis) is not a native of France, yet it is occasionally found on the shores of Languedoc, Provence, and Roussillon, the fruits having been carried from Africa either by the sea or, what is equally likely, by travellers bringing them as curiosities. A few years ago a species of Cucumis was found near Marseilles by Dr. Grenier, and it proved to be the C. trigonus of India. More recently there was found near Montpellier another species quite new to us, and very remarkable for its small size. The plants raised from its seed had but little foliage, and the fruit was scarcely so big as a small nut. The variety was named C. Melo Cossonianus. It is most probably a native of India, and one of those which Indian botanists have described under the names of C. pubescens and C. madaraspatanus.

The extraordinary production of races and varieties by a single species, and their permanence when not interfered with by crossing, are phenomena well calculated to cause reflection. These races are like so many subsidiary species forming one, each one preserving its distinct individuality, but crossing with all the other members of the same family, and so producing new varieties partaking of the characters of the races from which they have sprung. What is the explanation of so remarkable a fact? We believe that there can only be one, namely the common origin of all these races; that they have all sprung from one primitive type, which has become subdivided in the course of ages into a number of secondary forms, the divergence of which is not so great as to prevent their being recognised as near relations, nor to prevent their cross fertilisation. As long as such alliances are possible, and that the progeny is not barren, but partakes of the characters of its parentage, we maintain the unity of the species. But if at any time these races will not cross, or only produce barren mules, we must then admit that we have before us a distinct species, which has nothing in common with the rest except its generic name. From thenceforth it would rank as a parent stock, from which, like the older species, new races and varieties might take their rise.

This is not the first occasion on which we have expressed similar views with regard to the common origin of races nearly allied to each other; for from 1852 we have explained our ideas on this subject in the *Revue Horticole* and other publications. Recently, the celebrated naturalist, Darwin, has brought forward an immense number of observations, and irrefragable arguments, with respect to the derivation of species. This theory is not yet generally admitted, but its day will come, and, if we are not mistaken, it will form the starting point for a great advance in science. *Naudin, in Flore des Serres, Oct.* 1861.

MELBOURNE BOTANIC AND ZOOLOGICAL GARDEN.

(Extracts from the Report of the Director, Jan. 10, 1861.)

I. HORTICULTURAL DEPARTMENT. — The reciprocal interchanges with kindred establishments have been maintained and extended. Contributions of plants, or more particularly of seeds, have been received from the Royal Gardens of Kew, from the Botanic Gardens of Adelaide, Algeria, Amsterdam, Berlin, Boston, Bremen, Breslau, Brisbane, Capetown, Christiania, Copenhagen, Darmstadt, Edinburgh, Geelong, Giessen, Hamburg, Hobarton, Launceston, Madras, Mauritius, Montpellier, Munich, Paris, Petersburgh, Portland, Strasburg, St. Jago, Saharunpoor (India), and Vienna. For effecting the interchanges with the continental gardens we are indebted mainly to Dr. W. Sonder of Hamburg. To a still larger number of botanic gardens abroad collections of seeds have been forwarded on reciprocal arrangement, whilst also extensive supplies were provided to the inland public institutions and to contributors towards this garden. The packages of seeds, irrespective of the vast quantity required for our own borders and nurseries, distributed during the year, amounted to [illegible]. Further, 31,435 plants, comprising many thousand seedlings of Pines, young Elms, Poplars, White Cedars, Gleditschias, Weeping Willows, and other useful or ornamental trees, and 56,474 cuttings, were supplied from these gardens, mainly to the public reserves and gardens of Victoria, whilst 22 Wardian cases filled with plants, were shipped to gardens beyond the colony. The distribution of plants from our open nurseries is chiefly confined to the month of May, in order to avail ourselves of the ground for early restocking our nurseries for next year's supply. The nursery branch of the establishment will readily be extended, as the first main labour of forming our garden and planting our reserves will ere long be completed. One hundred and ten public institutions have been supplied during the year with flowers and boughs for decorations, and flowers were further granted on many occasions for artistic or scientific objects. Most of the old roads and tracks in the reserve have been obliterated during the formation of new lawns or their restoration. Several thousand plants, rare or new to our establishment, have been transferred from the nurseries to the open flower borders, and thus by the annually augmented variety of plants in our shrubberies increased interest will be displayed in the floral treasures of our garden. South African and West Australian shrubs, the majority of which being exceedingly gay and ornamental, are found particularly desirable in resisting the drying effects of hot winds. But it is sincerely to be hoped that after this year we shall not be without the boon of a general system of irrigation, which by the expected approach of the Yan Yean pipes to South Yarra could be introduced to our ground at comparatively limited expense. The Chamomile edgings have been very extensively renewed. The New Zealand Flax has been planted to a considerable extent along the Yarra and lagoons, to be available for copious supplies over all districts of the colony. Probably no fibre-plant is entitled to great attention than the Phormium, which, whilst it recommends itself on account of its remarkable facility of growth, its plentiful yield and ornamental appearance, furnishes a fibre almost as strong as silk. The plant moreover may be grown in such swampy or inundated localities as are not suitable for any other culture. It has been my aim to establish gradually natural hedges in various parts of the garden, with a view of assisting to ascertain which species are best adapted for permanently enclosing farms and paddocks. The cultivation of various plants, Acacias and Hakeas, the Osage Orange, Hawthorn, Cape Broom (Genista [illegible]), South African Cotoneasters, White Prickly Box, have engaged our attention for this purpose. Perhaps also the White Mulberry might be advantageously used for forming hedges, and without occupying arable ground would at a later period furnish the material of a new branch of industry in the rearing of silkworms. A large quantity of young plants, cuttings and seeds of this promising tree, were distributed last season, by which means it may be to any extent multiplied throughout the country, as it has been remarked that nothing surpasses the facility with which it may be increased from cuttings. Many different trees, protected by iron guards or fencing have been planted in the northern zoological reserve, not merely to enhance the beauty of the park-like spot, but also to subject certain species cultivated on the southern ground in decomposed silurian rock to a trial in the basaltic soil of the northern enclosure. During this season it has been one of our objects to secure large quantities of seeds of some of our rapidly-growing trees, for introduction into timberless countries stretching through climatic zones similar to ours. Supplies were forwarded to Algeria, Port Natal, United States, and the Feejee Islands. Consignments of such seeds will be also made early this season on request to the Government of Hong Kong and to the British Consulate of Jerusalem. Attention has repeatedly been directed to the great resources we possess throughout many of our littoral mountain districts in our fine Blue Gum Eucalypti. Shipments of their wood have already taken place to ports of India, otherwise famous for their timber, where also the value of this tree on account of its dimensions and durability, both in a dry and wet state, is now fully recognised; and it is deserving of our deep consideration whether a much felt want of timber for ship-building in Great Britain cannot be supplied from this colony. A renewed display of our resources in timber, for which the forthcoming grand Exhibition in London will offer an appropriate occasion, cannot be otherwise than beneficial to the colony. We have been favoured with the importation of a large quantity of Tea seeds through the generosity of his Excellency Sir Hercules Robinson, Governor of Hong Kong. Notwithstanding the enormous discrepancy in the price of labour in the native country of the Tea plant and here, it may be presumed that the trial of the growth will finally prove advantageous for local supply, particularly to the Chinese population in remote inland districts. Anxious to afford in due course of time the greatest facility for information on the respective value of trees, either deciduous or evergreen, eligible for avenues, I selected and established as great a variety in our garden for this purpose of those likely to prosper in this climate and which were within my reach. Aleppo Pines, Illawarra Flame trees, Sycamore, Ailantus glandulosa, Paulownias, Blue Gums, Elms, White Cedars, Moreton Bay Figs, Silver Wattles, New Zealand and Gipps Land Pittosporums (P. undulatum and P. eugenioides), Black Poplars, Poplar Bottle trees, Laburnum, Grevillea robusta, and others. Sugar Maples, Corynocarpus, Chinese Locust trees, have already been planted. To these will be added Oriental Planes, Hymenosporum flavum, the Red Gum tree of Western Australia, Virgilia capensis, Mulberries, Parkinsonia aculeata, several species of Ash, Elm, Poplar, Glochidion australe, Cupania xylocarpa, North American Locust trees, Spanish Chesnut, Horse Chesnuts, Manna Ash, Walnuts, Olives, Bottle trees (Delabechea), and other hardy suitable trees, of many of which a supply is provided in our nurseries. The Oriental Plane, as pointed out by Mr. Edward Wilson, is probably in this climate one of the most suitable of all deciduous trees for planting along public promenades. I can, however, not suppress my opinion that some of the deciduous trees [illegible], in exposed localities, less adapted for our avenues than many of the evergreen trees from isothermal parallels corresponding with ours, and it appears desirable that whenever deciduous trees are chosen for long lines of public plantations (unless the lining of streets be excepted) they should alternate with such as bear evergreen foliage, to avoid the appearance of unbroken masses of leafless trees during that season when we enjoy the most lovely verdure in our vegetation. With a view of establishing in future a shady promenade between the City bridge and the southern division of the garden, a double line of Eucalyptus globulus has been planted; this tree has been chosen not only on account of its unparalleled rapidity of growth, but also as one of the few capable of resisting the drought to which that special locality is so strongly exposed. Interplantation of Elms is contemplated, and as the trees gradually advance to strength, their lasting iron enclosures will again be available to raise successively row after row of varied trees throughout our reserves. Some additional portions of the ground have been brought under cultivation. A line of [illegible] has been placed along the abrupt edge of the northern lagoon, the island in the latter has been raised beyond the height of ordinary Yarra floods and planted for shelter of breeding waterfowl; the depressions in the ground of the northern reserve have been filled up. The number of seats became augmented. Unimpeded access to the Yarra [illegible] time will be given in future by a lateral footpath leading from the bridge to the public road at the eastern side of the garden. The quick development and healthy appearance of the Cupressus macrocarpa, torulosa, [illegible], of the Cedar of Goa, the Deodar Cedar, the Araucarias from Moreton Bay, Norfolk Island and New Caledonia, of the White Bay Kauri, which endures the vicissitudes of our climate evidently better than its New Zealand congener, the Japanese Cryptomeria, which ripens its seed-vessels here already in the fifth year of its growth, of the New Zealand [illegible] Podocarpus [illegible], of the Cluster Pine, Aleppo Pine, [illegible] Pine, of Juniperus Bermudiana, of the native Cedars, of the East Australian Oreodaphnes, of Taxodium and Sequoia, [illegible], of the Cupressus Goveniana, will on inspection [illegible] or of the desirability of having these [illegible] Pines planted copiously throughout the country. [illegible] Bark, which might be so extensively gathered in many of our Fern tree gullies, specimens have been forwarded to Baron Liebig and Dr. Wittstein, who have readily consented to subject this valuable drug to a chemical analysis, whereby it is hoped that its powerful tonic properties will be more universally recognised and a remunerative article of export be added to our native resources. It may not be improper to state on this occasion that the principles to which I have adhered in my administration of this establishment [illegible] my operations so that the intrinsic property of the gardens and its institutions may increase in proportion to the outlay and support granted by the Government and Legislature, and that the sum invested may yield an ample return in the supplies provided by us, irrespective of our endeavour to render the establishment a source of recreation and information to the multitude of our fellow-colonists. The number of visitors counted on Sundays as entering the gardens at the main gate has been during 1860, in the southern ground, [illegible]; in the northern ground, 79,0[illegible].

II. ZOOLOGICAL DEPARTMENT. — In this branch of our establishment a steady progress has taken place during the year, and whilst most of the animals, soon recovered from the effects of transit, have enjoyed steady health, it has also been satisfactory to notice their increase and to [illegible] with the augmented value of our property. Thus 13 llamas, 5 angoras, 5 fallow deer, and 1 Sumatra deer, were born during the past year. The llamas, which when we received them, less than two years ago, numbered 19, are now advanced to 37. This number will, after the [illegible] ensuing lambing season, likely be augmented to [illegible]; moreover, the future offspring will show the desired improvement of breed effected by the supply of a pure male alpaca for the llama flock. Two other highly valuable alpacas, most generously granted by the Government of New South Wales, have been placed with our flock. A proposition of Charles Ledger, Esq., to secure, whilst revisiting South America, vicunas and pure female alpacas for this establishment, has received the recommendation of the committee and the favourable consideration of the Government. Samples of angora, llama, and alpaca wool, obtained from the animals of this garden, were forwarded for examination to Mr. Beazley, of London. Out of the sum of [illegible], sanctioned by Parliament for the introduction of useful animals, [illegible]*l.* have been devoted by the committee for obtaining Cashmere goats and Chinese sheep. Messrs. Grice, Sumner & Co., have kindly consented to secure the importation of the former, and W. Lyall, Esq., M.L.A., to arrange for the introduction of the Chinese sheep. Intimation has been received from the Honourable R. Rawson, Colonial Secretary at Capetown, that an officer of the Government at Natal has been entrusted with the selection of the South African game, which the committee is anxious to acclimatise in this country. For the transmission of these quadrupeds a remittance has been made. An ostrich, shipped for us from Capetown by Mr. Layard, died on the voyage. An application has been submitted to the Government of the United States to aid in the introduction of the North American beaver, judiciously pointed out as desirable by Dr. Embling. Gold pheasants, [illegible], ortolans, and many varieties of water-fowl kindly selected for this garden by Edward Wilson, Esq., are on their way to this establishment;* and, according to a notification from the burgomaster of Cologne, the administrators of the zoological garden of that city have arranged to furnish in reciprocation for some black swans and for some contributions yet to be forwarded, select varieties of fowls, doves, water birds, and some hares and remarkable kind of rabbits. A brick reservoir, supplied with river water by a small mill, has been constructed for the temporary reception of such foreign fish as may from time to time be introduced into the colony. At present it contains only 18 tenches, a few dace and minnows, forwarded by Mr. Wilson. By the Lincolnshire, which brought these fish, three species of Yarra fish were returned to the Zoological Society of London; and as the owners of this ship have permitted the erection of a permanent tank for further transmission, we will be able to forward the cod and other superior Murray fish at a future occasion. Whether we appreciate the vast practical benefit which would accrue to this country by transferring the salmon to Victoria, or dwell on the likelihood of our alpine streams being well suited for their propagation, it is evident that one of the most important labours next devolving on the Zoological Committee will consist in reiterating the trial of bringing salmon ova to this part of the globe. Resting on valuable experience gained by Mr. Alexander Black, the conductor of the first experiment instituted by Messrs. Wilson and Youl, under the aid of many other gentlemen in London, it is almost certain that in a favourable voyage the salmon eggs, irrigated on artificial gravel beds, may safely reach our shores, provided that a sufficiency of ice is available throughout the voyage for maintaining a constant supply of fresh, cold, and pure water. Special support having been sought for this purpose by the Zoological Committee from the Government, it will probably be possible to institute the next arrangements for salmon introduction during the northern winter, 1861-62. Considerable losses were sustained amongst the singing birds which successively during the year were transmitted as donations from Mr. Edward Wilson. The greater number [illegible], and many were, in the half featherless state in which they arrived, not even able to endure in the most sheltered part of our aviary our winter temperature, and had to be placed in the Palm-house until their plumage was restored. These birds having been sent principally with a view to endeavour that their naturalisation might be effected, 17 pairs of thrushes, eight pairs of blackbirds, three pairs of starlings, and 12 pairs of skylarks were liberated, some in our gardens, others near the Yarra Bend Asylum, on Phillip Island, Sandstone Island, and Churchill Island; and it is gratifying to record that at the Botanic Garden the liberated larks, thrushes, and starlings reared successively their broods. The same results have probably attended the experiment with the blackbirds, of which, however, we have no positive proof, and in all likelihood also the birds set free in the other above-mentioned and seemingly very secure spots may have increased. Under these circumstances it will decidedly be preferable to give on all occasions at once freedom to such birds as are intended for naturalisation, and not required as singing birds for aviaries. For although our large densely planted aviary was on purpose specially stocked with birds, and many pairs were removed to two other buildings fitted up during the breeding season for their reception, it appeared that the mutual hostility of the thrushes and blackbirds [illegible] their young in confinement. Ten pairs of blackbirds, three pairs of starlings, ten pairs of thrushes, two pairs of linnets, seven pairs of larks, two pairs of goldfinches, were distributed to gentlemen who had constructed aviaries sufficiently spacious and secure to render the prospect of an increase of these birds rather hopeful. But I am as yet not in possession of any reports on their experiments. Several pheasants were also provided for breeding purposes on private establishments. Some of the English pheasants, presented by the Duke of Newcastle, Lord Carnarvon, and Mr. F. Buxton were liberated by Mr. Rogers at Sandstone and Churchill Island, where some of them, after the lapse of many months, were still seen, and others were set free by Mr. McHaffie, on Phillip Island. From two pairs of English pheasants retained at the garden, and one pair of silver pheasants, we obtained [illegible] about 40 young birds, and a considerable number of eggs are still under incubation. It will, therefore, be within our means to add [illegible] to the feathered tribes of our ranges, where climate, comparative security, and abundant food, seem to augur well for their naturalization.

Home Correspondence.

Cereus giganteus.—Dr. Engelmann, in describing this plant in the official report of the United States Mexican Boundary expedition, says that the young plants never grow in exposed situations, but are usually found growing in the shade of some shrub, "especially [illegible] Floridanum, so characteristic of the barren desert." He says he found the seedlings grow very slowly for the first eight or ten years. These facts are worth keeping in mind by those who, like myself, have had the management of young plants, and, after trying them under all sorts of treatment, always felt dissatisfied with the result. *C. W. C.*

Mistletoe.—On this estate I find the Viscum album growing on the following trees:—Horse Chesnut,

* This valuable consignment arrived by the ship Prince of Wales, under the careful superintendence of F. Lacy, Esq., whilst these pages passed the press.

Lombardy Poplar, Aspen Poplar, Black Poplar, Lime, Acacia, Hornbeam, Ash, Thorn, and in great abundance on the Apple, but in no one instance have I seen it on the Oak. In the park here I have frequently met with it growing on the Lime and other trees in such close proximity to the Oak, that I sent a man up the tree to ascertain really whether it was growing on the Oak or the Lime. I counted as many as six tufts on the branches interlaced with those of the Oak, showing that it is doubtful if ever it was seen growing on the Oak. *H. K., France.*

Sea-side Planting.—The remarks of Mr. Strickland last week upon this subject will, I am sure, be not only endorsed by many of your readers, but by Mr. Barron himself. From experience of this much exposed sea-coast, which is completely open to south-westerly winds that frequently blow in terrific gales across bleak Beachy Head and the whole length of the adjoining Downs, I find that the operation of planting is not an ordinary one. Great care is required to plant sufficiently deep and thick, so that the plants may afford each other due protection, and all permanent plants must be surrounded by quick-growing underwood; for this purpose nothing seems to suit better than Ash, Beech, Larch, Chesnut, and for evergreens Holly and common Laurel, and these must be thinned away little or much every season either by cutting or drawing; the latter mode is the most economical when it can be done without injury to the permanent plants. If, previous to planting, the ground was well prepared by trenching, &c., the permanent plants will soon have made sufficient root to enable them to withstand the most severe coast storms without being uprooted, provided, as Mr. Strickland states, the belts and plantations are of sufficient width, and that of course must be regulated according to circumstances; however the wider the belts the better and sooner will the permanent plants be able to support themselves. This is verified here with plantations some few years old, especially of Beeches, the heads of the majority of which are all inclined away from the S.W. at an angle of from about 30° to 50°, owing to the effects of the continuous gales from such an exposed quarter, and yet out of many thousands of young timber-forming trees so exposed not one was uprooted during the severe stormy season of 1860. All the undergrowth was cleared away from these trees at an early stage of their growth, and judicious thinnings have been made from time to time as required. The result is that these trees, many of which are growing on elevated parts of the estate, in the immediate vicinity of the sea, are perfect specimens of vigour and robust health, clothed with foliage to their base, whereas at a short distance a group composed principally of Pinus pinaster and common Elm some 160 feet high—apparently remains of a plantation in days gone by, and which then stood uncared for and unthinned—is most unsightly, crooked, naked, gaunt, weak, and tottering, threatening with every storm to fall. This group being now requisite for shelter to an angle of the mansion is of great importance, and therefore demands all possible care. Many other exemplifications could be adduced in this immediate neighbourhood in support of thick planting and judicious thinning. A striking example of the value of Pinus pinaster as a seaside plant can be seen within three hundred yards of the beach, and upon a rocky eminence nearly level with that of the old castle at Hastings. A plantation of this Pinus was made a few years back, they were thickly planted, and from the time they started into growth careful thinning has been done almost annually; suffice it to say that they are at this moment individually fine healthy trees, bidding defiance to sea breezes and storms, and having a grand appearance. They are in short ornaments to the neighbourhood. *J. R. T., The Gardens, Crowhurst Park, near Hastings.*

Roses.—If any one wishes to purchase the best Roses of 1860 or 1861 and a year or so before, they may safely embark in the following:—Maroc, Eugène Appert, Chabrillant, Gloire de Santhenay (double, A 1), I have 25 plants of it; Senateur Vaisse, Princesse Mathilde, Duc Decazes, Mad. Charles Crapelet, Madame Louise Carique (robust as Cambacérès), Belle de Bourg la Reine, a very fine Rose of great substance; Parmentier, perfect but medium size; Mad. Mélanie, Victor Verdier, Triomphe d'Amiens; these are all nice Roses and of good habit. Triomphe de Lyons is a fine mulberry-coloured Rose, but not fixed in colour; it is good however in all other points. Nelson, neat and clear crimson; M. Furtado, A 1. This, Chabrillant and Santhenay, I fancy are the best that have been out for years since M. Regnier came out. Prairie de Terre Noir did not open well, and Reine des Violettes, a good grower, was a badly slated purple. *W. F. Radclyffe.*

Effects of last Winter in Cornwall.—Seeing that a notice of last winter's casualties here and at Tamworth, in your Number of April 6, p. 314, has fallen under the observation of the Curator of the Botanic Garden at Oxford, I have again examined this week the plants which I named, and I find the following corrections and additions to be necessary. KILLED:—Some plants of Benthamia fragifera (12 and 15 years old), many others recovering. Supposed KILLED in April, but since recovering from the roots, Arundo Donax, Acacia dealbata, Olive, Viburnum suspensum. UNINJURED:—Phygelia capensis, and Thuja nepalensis. All large pinus in exposure (even insignis, pinaster, and austriaca, which are usually the hardiest of all in our climate), are still showing signs of the severity of last winter, in stunted growth, scanty foliage, and almost entire absence of cones. Some austriaca, well established trees, are quite killed. Nursery beds of seedling Stone Pine, pinaster, and insignis, raised in 1860, are, however, unusually healthy and vigorous. *John J. Rogers, Penrose, near Helston.*

Neal's Pastils.—Of these favourable reports have appeared once or twice in your columns, and they are certainly better adapted for fumigating pits, frames, and such places than a common fumigating pot; but I find that their composition is of such a nature as to render their use unsafe; young foliage is destroyed by them, old leaves of many kinds curl and become brown, and they quite kill young Melons, even when moderately and judiciously employed. Nevertheless, the insects were preserved in life and vigour. Having a quantity by me I have lately been burning them, covered with tobacco, but the results are anything but satisfactory or economical. Others who have tried them will, perhaps, kindly record their experience with regard to them. *J. R. T., Crowhurst Park, Sussex.*

Ranunculus ficaria.—I can confirm the statement of your correspondent "R. R., Bantry, Ireland" as to the wood pigeon feeding upon the roots of this plant. Two or three years ago a wood pigeon was brought to me, shot upon my own grounds, whose crop was distended by these roots. The quantity consumed of them must be enormous, for I never saw a pigeon's crop which had had unlimited access to Peas so full as this was. I did not make a note of the season, but I think it was winter or very early spring, say February. *J. R. S. O., Kent, Dec. 21.*

Mignonette from Cuttings.—Having to grow Mignonette for winter bouquets, a thought struck me to try cuttings. Accordingly I went to work, got a quantity of cuttings, planted them in a 48-sized pot, and placed them in bottom heat. This was in September, and in a very short time all of them struck root. I then potted them singly in the same sized pots, and I flowered them in them. So satisfactory was this trial that I determined to strike another lot, and this time, however, I planted three cuttings in each pot of the size just named, so as not to disturb them by repotting, and now I have plenty of Mignonette to cut from. *W. Y. M.*

Muscat Hamburgh Grape.—There has been considerable controversy lately respecting this Grape, and the greater part of the writers seem agreed upon one point, viz., condemning it, while one who advocates its cultivation states that with him it has proved a prolific bearer, good setter, producing large finely-coloured berries, of a delicious flavour. As these qualities are all that need be required in a Grape, I venture to ask your opinion of the Muscat Hamburgh, being about to make a plantation of Vines in a small house. I had intended to put in two canes of this variety, but shall now await your answer. Is it a first-rate sort for general cultivation? And can you recommend it? *Vitis, Dec. 24.* [We are not enough acquainted with it to give an opinion, and leave the question to our correspondents.]

Societies.

BOTANICAL OF EDINBURGH: *Dec. 12.*—Professor Balfour, V. P., in the chair. The following communications were read:—"I. Notes of a visit to the North of Italy and Chamouni in August and September, 1861." By the Chairman.—"II. Notes on two Cyperaceæ: 1. Carex Grahami, Boott; 2, Scirpus (Eleocharis) uniglumis, H. C. Wats." By B. Carrington, M.D. In this paper the author considers Carex Grahami as a barren state of C. pulla, and Eleocharis Watsoni as a variety of E. uniglumis.—III. Mr. M'Nab laid before the meeting several sections of Scotch Fir beams, taken from the ruins left by the late catastrophe in the High Street. These beams had been originally prepared by a rough squaring with an axe, as the corners of each present a smooth appearance, showing where the bark had been removed, and several portions had the bark quite entire, unmistakeably proving them to be Scotch Fir. In most cases the timber is in excellent preservation, particularly the centre or hard wood. The beams are generally of small sizes, varying from 5 to 8 and 10 inches in diameter. The annual circles are very distinct, averaging about 57 in each, showing that the timber, when cut down, was under 60 years of age. He had examined most of the beams while lying for sale in the Green Market, and found that, where the annual rings could be counted, the trees appeared to be all about the same age. Judging from the long and thin nature of the stems, they must have grown very close together; but whether they are Boroughmuirhead or Aberdeenshire timber, it is difficult to say. If the beams were made of Boroughmuirhead Fir, one would suppose that they should have been of much larger size and considerably older. It is doubtful if timber sawn up for rough building purposes, as now used, will last as long as timber with all its heart-wood entire—such as has been emloyed in these old buildings. A few large sawn Fir beams 1 foot broad and 7 inches thick, with large annual rings, were likewise seen amongst the ruins; but their ages could not be ascertained, as they are only the centres of trees. Their freshness, their rarity, and being sawn into their present shape, would make one suppose them to have been of more recent date than the mass of axe-cut timber. A few beams of Oak were also got among the ruins—rough axe-squared, similar to the Scotch Fir—the outer or sap wood very much decayed, but the inner or heart wood was quite perfect and very dense. Their supposed age when cut would have been about 80 years. Mr. William R. M'Nab exhibited specimens of Coleoptera he had received from G. Patton, Esq., which had been destroying the Coniferæ in the Pinetum at the Cairnies, Perthshire. Hylobius abietis, Linn., the Pine weevil, and Gonioctena litura, Fab., seemed to be the insects that did the mischief; but the most remarkable fact was the occurrence of Mysia oblongoguttata, Linn., which, in company with a very large number of Anatis ocellata, Linn., had committed such havoc in search of the Aphides on which they feed that the value of lady bugs in destroying these aphides was doubted; and when they occurred in such numbers as they were found by Mr. Patton, they had become positively injurious.—The office-bearers for 1862 were elected on this occasion.

Notices of Books.

The Past and Present Life of the Globe. By Page, 12mo. Blackwoods, pp. 256.

In this volume Mr. Page explains his views of what Geology in its most extensive signification can be said to teach. It contains a sketch of the evidence, derived from rocks and the animal or vegetable bodies they contain, which has enabled the geologist to form his speculations and draw his inferences, and it considers the fairness of the inferences themselves. Among the topics more especially discussed are the nature of fossils, that is to say the petrified or other remains of plants and animals, the "medals and records of creation;" the "primal plan and patterns" of animal and vegetable life; coadaptation of plants and animals in the great life scheme; the chronology of geology; the characteristics and gradations of the "Ancient life period," of the Middle life period, and of the Recent life period; Man prehistoric and historic; Duration of species; "Life aspects" for the future; "Progression or succession? Onward and upward;" and finally the field in which we should inquire. The author states that as his pages consist of lectures delivered in part to popular audiences—"The style is, perhaps, somewhat more rhetorical than befits the exactitude of science; but even on this point the author could not well have done otherwise. His object was to excite rather than satisfy the curiosity of his hearers—to impress them with the universality and uniformity of natural law—believing there can be no true notion of Nature or of Nature's requirements while her facts are viewed through the medium of the miraculous."

And again, "In treating such a theme as Life—its apparent origin and progress—the writer has necessarily had occasion to allude to subjects on which there is much diversity of opinion; to some that are usually approached with uneasy tenderness, as coming into conflict with prevalent beliefs; and to others on which the united labours of geologists, during the last 50 years, have thrown but little reliable light or information. In either case he has expressed his opinions freely, but without dogmatism; firmly, but solely under the warrant of geology; and always with a frank admission of the many deficiencies and imperfections of the science. As there is nothing to be gained by offending a prejudice where we cannot establish a conviction, he has contented himself by stating what geology teaches, without alluding to what it appears to contradict; but as the establishment of truth does not always imply the overturning of error, the expounder of science may surely be permitted to attempt the one without hazarding an endeavour to accomplish the other."

We have no intention of criticising the work further than is sufficient to indicate its scope and to give examples of its style. More would be to enter upon arguments to which it is impossible to do justice in our limited space; moreover, we think it better to let the reader form his own conclusions as to the value of the opinions of a very able geologist. We shall therefore merely add that the volume contains a good many useful woodcuts, and embraces nearly all the points in which general readers are much interested, but in no degree supersedes those formal works on geology in which alone solid information is to be found.

The following description of the rocks in which coal is found, and of the coal formation generally, is as fair an example of the author's style as we can select.

"Succeeding the old red sandstone, and much more sharply defined—physically and vitally—comes the great Carboniferous Formation. We have now extensive alterations in the distribution of land and water—wide, shallower seas—larger rivers and estuaries—wide, new stretching swampy lands; and with these, new ocean currents, a more genial and equable climate, and as a concomitant, a more exuberant exhibition, and over wider areas, of vegetable and animal life. In certain regions, but by no means over the whole world, the transition from the one period to the other seems to have taken place through convulsive energy; and hence in these regions comparatively few of the forms of the old red sandstone survive, or pass into the Carboniferous era. As in every other period, the new forms come

slowly and gradually on the stage, attain their 'culminating point,' or period of greatest variety, size, and numbers, and then gradually or quickly decline, according to the continuity of the conditions by which they are surrounded. In the vegetable world we have now a most exuberant Flora—so exuberant that it is but faintly paralleled by the rankest growth of the tropical jungle. To account for this extraordinary development of plant life over such wide and diversely situated regions of the globe, various hypotheses have been offered, such as a larger per centage of carbonic acid gas in the atmosphere—the greater effect of the earth's central heat—change in the earth's axis of rotation, so as to bring the coal-bearing areas within the tropics—and greater eccentricity of the earth's orbit, so as to have brought the globe periodically nearer to the sun's influence; but as we have not in the meantime a shadow of proof for such abnormal causes, and much evidence to the contrary, we are bound by sound induction to seek for the explanation in the then peculiar distribution of sea and land, in the altitude of its shores, in the arrangement of warmer aërial and oceanic currents, and generally in a concentration of these conditions, such as would produce the necessary climate. And, after all—as in the case of the great tertiary elephants and rhinoceroses of Northern Europe, whose representatives are now found only in the tropics—we know too little of the nature of the plants to say under what conditions of climate they would attain the greatest exuberance, though we clearly perceive from their foliage and mode of growth that it was at once equable and continuous. Generally speaking, we find them resembling Equisetums, Marsh Grasses, Reeds, Club Mosses, Tree Ferns, and Coniferous trees; and these in existing nature attain their maximum development in warm-temperate and sub-tropical rather than in equatorial regions. The Wellingtonias of California and the Pines of Norfolk Island are more gigantic than the largest Coniferous tree yet discovered in the coal-measures; the Tree Ferns of New Zealand luxuriate in humid and shady spots; the Tussack of Falkland Island and the Phormium of New Zealand show leaves as broad and long as the *poacites* of the Carboniferous period; while accumulations of peat-growth are the products of coldly-temperate rather than of equatorial latitudes. Besides all this, we have coal-beds in other formations—the oolite, the Wealden, and tertiary; and if we are to go in search of abnormal conditions for the production of the one, we must admit the existence of similar causes for the production of the other—an admission, as we shall afterwards see, that would lead to irreconcilable absurdities. The fact is, coal is a necessary product of every period, and is merely the mineralised result of vegetable accumulation—pointing rather to immensity of time than to rapidity of growth as the cause of that accumulation. It is to time, therefore, and to genial equability of climate, rather than to excessive temperature, that we are to look for an explanation of the vegetable masses of the coal period; and he who would cut short the difficulty by appeals to abnormal conditions, instead of exhausting the possibilities within the scope of natural law, at once does violence to Nature and retards the progress of legitimate induction."

Mr. Page's method of meeting Darwinian facts and inferences is to the following effect:—

"No doubt plants and animals are endowed with a certain amount of elasticity so as to adapt themselves to minor changes of external conditions; and acting upon this elasticity, man has been enabled to produce all the varieties of cultivated fruits and grains, and domesticated animals. This limit of variation, however, is soon reached: the species is never affected, and the varieties can only be maintained by a continuation of the artificial stimulus. In this case man presents himself as a sub-creative centre, deputed with a power of prescient design otherwise unknown in creation; and to argue from his operations, as Mr. Darwin has done, to those occurring in mere physical nature, is altogether to misinterpret the functions that intellect and reason were destined to subserve. As we have no other power in nature akin to the human intellect, so we are not entitled, in the spirit of induction, to argue from the results produced by that intellect to the operations of the unreasoning material agencies of nature.

"To appeal, in the next place, to embryology—to state that, in their embryonic stage, the higher animals always pass through the successive phases of those that are lower, and then to maintain that the fish-embryo, for example, acted upon by extremely favourable conditions, might be developed beyond itself into a reptile, or the reptile into a bird, is assuming a doctrine of which we have no proof, and merely stating, in perverted terms, the grand physiological fact of animal gradation and affinity. Besides, it is an argument that cuts both ways. If an embryo, under favourably conditions, can be developed beyond its own parent species, it may also, under favourable conditions, be retarded and thrown back into the grade that lies beneath it; and as external conditions varied during the geological epochs—now genial and now obnoxious—we ought to have degradation as well as development. The great gradational progress taught by geology being always steadily from higher to higher, is, however, against this; and when a species or family is subjected to obnoxious conditions, it invariably dwarfs and dies out in its own proper character—a trilobite as a trilobite, an ammonite as an ammonite, an ichthyosaur as an ichthyosaurus—and never under the guise of a lower order. All, too, that we know of existing nature is against this doctrine of transmutation—species and genera remaining (under the restricted limits of variation) as fixed and permanent now as they were known to the Ninevites and Egyptians 4000 years ago.

"It is argued, no doubt, that the transmutational advances from species to species take place by slow and imperceptible stages, which cumulatively become apparent only after the lapse of ages. Admitting, however, this rate of progress, there ought still to be transitional forms in various stages of progress at every epoch—forms which we fail to perceive in the living world, just as geology has failed to detect them in that which has become extinct. Again, the modifications for which the developist contends are those of a beneficial kind; so that, in the great struggle for existence, and under the influence of altered conditions, every creature, advantageously modified, will have a chance of surviving, whilst those unaffected must go to the wall. He fails, however, to show how the operation of a purely physical law should not affect alike every member of a species, and to perceive that his doctrine of 'natural selection' is but a materialistic phraseology for an undefined law of progress, which forms part of a predestined plan, and must clearly obey an intelligent behest."

We shall soon hear Mr. Darwin's own reply to this and all similar criticisms; for we have reason to believe that his new volume is about to go to press.

Routledge's Illustrated Natural History. Parts 32 and 33 contain the completion of the series of Birds, and commence Reptiles, of which Tortoises, Crocodiles, Alligators, and Lizards are treated of. The wood engravings are better than ever, and the letterpress very interesting. We extract a portion of what is said about Crocodiles and Alligators.

"The head of CROCODILES is always rather elongated, and in some species is lengthened into a narrow and prolonged snout. Each jaw is furnished with a row of sharply pointed and rather conical teeth. These teeth are hollow, mostly grooved on the surface, and are replaced when they fall by new teeth that grow behind them, and in process of time push the old ones out of their sockets. The nostrils are placed at the very extremity of the skull and upon a slightly raised prominence, so that the animal is able to breathe by merely exposing an inch or so above the water, and thus can conceal itself from almost any foe, or make an unsuspected approach upon its prey. There is yet another more important use for the position of the nostrils. The Crocodiles feed on fishes and various water-loving creatures, but also are in the habit of lurking by the river bank, and suddenly seizing upon any unfortunate animal that may come to drink. Suppose, for example, that a calf or a dog is thus dragged into the water, the reptile grasps it across the body, and sinks below the surface so as to keep the head of the victim below water while itself can breathe by means of the elevated nostrils. But as during this process the mouth is held widely open, it might be rationally presumed that considerable inconvenience would be caused by the water running down the throat. Such would indeed be the case, were not this difficulty provided for by a simple yet very wonderful contrivance. At the back of the throat, a pair of thin cartilaginous plates are so arranged, that when the animal opens its mouth the pressure of the water rushing into the mouth immediately closes one upon the other, and effectually prevents the passage of a single drop, the closure being in exact proportion to the volume of water. The structure indeed is very like that of the valves of the heart. The channels which lead from the nostrils run very far back through the skull, and open behind the throat valves, so that respiration is in no way impeded. They cannot, however, swallow their prey while under water, but are obliged to bring it on shore for that purpose. The tongue is small, and fastened down to the lower jaw throughout its length, so that it was formerly thought that the Crocodiles were destitute of that organ."

"Though timid, as are most reptiles as long as their passions are not touched, the ALLIGATOR has within it a very mine of furious rage, which, when aroused, knows no fear. Urged by a blind instinct that sees no obstacles and hardly deserves so intellectual a name as anger, it flings itself upon the assailants, and only ceases its attack as its last breath is drawn. No easy matter is it to drive the breath out of an Alligator, for its life seems to take a separate hold of every fibre in the creature's body, and though pierced through and through with bullets, crushed by heavy blows, and its body converted into a very pin-cushion, spears taking the place of the pins, it writhes and twists, and struggles with wondrous strength, snapping direfully with its huge jaws, and lashing its muscular tail from side to side with such vigour that it takes a bold man to venture within range of that terrible weapon. It is fortunate for the assailant that its head is not gifted with mobility equal to that of the tail. The Alligator can only turn its head very slightly indeed, on account of two bony projections, one on each side of the head, which are efficient obstacles to any but the smallest lateral motion. The antagonist may therefore easily escape if on land, by springing aside before the reptile can turn. He must, however, beware of its tail, for the Alligator when angry, sweeps right and left with that powerful member, and deals the most destructive blows with wonderful rapidity. Still, the creature would rather avoid than seek a combat, and does not act in this fashion until driven to despair. In some parts of America they catch the Alligator in a very ingenious manner. An ordinary hook is said to be of little service against such a quarry, and the natives employ a kind of mixture between a hook and grapnel which very effectually answers their purpose. This so-called hook is made of four sticks of hard tough wood barbed at each end, slightly curving and bound together at one end so as to cause all the upper barbs to radiate from each other. This apparatus is baited with the flesh of some animal, and suspended just about a foot from the water, the other end of the rope being made fast to a tree or strong stake. As soon as the Alligator takes this bait and begins to pull at the cord, the barbs begin to make their way into its throat, and it is evident from the construction of the hook that the more the animal pulls, the firmer are the barbs struck into its throat. When thus hooked, its struggles are terrific, and Mr. Waterton, who succeeded in capturing a fine specimen more than 10 feet in length, had the greatest difficulty in securing it without damaging its appearance."

Gossip of the Garden closes its 6th volume with the present month's issue. The principal papers consist of what are called "reflexions" of an old florist about Tulip judging; an account of New Roses; the conclusion of a series of papers on Wall Fruit Trees; a recommendation of Fancy or Belgian Pansies; and a critique on the Verbenas of 1861; with various notices of meetings, exhibitions, &c.

Garden Memoranda.

ROYAL BOTANIC GARDENS, KEW.—At this dull season of the year, when plants in bloom are everywhere scarce, the following memoranda concerning some which we saw in flower the other day at Kew may not be without interest. Foremost among these was the glorious Lapageria rosea, which, although in a cold Fern house, with a north-east exposure, had a dozen or more fully expanded flowers on it. It was growing in a pot, and, under the treatment usually given to very cool greenhouse plants, appeared to be quite healthy, covering a considerable portion of the roof with vigorous branches and richly-coloured blossoms. Another good climber of slender growth is Manettia bicolor, an old plant which of late years has been too much overlooked; for when well flowered its numerous bright, yellow-tipped, scarlet, tubular flowers, though not of large size, have a highly interesting appearance. This, however, requires warmth to have it in perfection, as does also the charming orange blossomed Bignonia venusta, one of the very best of all winter-flowering climbers. A plant of the last is coming into bloom on the roof of the great Palm House.

Of other kinds of plants, Eucharis grandiflora was in blossom on a shelf in the small Victoria house, where its large snow-white flowers and ample deep green leaves had a fine effect. This is a plant which many fail to flower, owing probably to not sufficiently encouraging its growth during the summer months. When it has done flowering, it should be allowed a period of rest: then let it be repotted in good rich soil; when fairly started grow it freely, and no fears need be entertained that it will not blossom satisfactorily. This is the kind of treatment which at Kew has been found to answer perfectly, each spike producing from four to six blooms, every one of which is as large as a five shilling piece. Among Gesneras, none is superior, either for effect or usefulness, to G. cinnabarina, whose lateral shoots keep up a succession of gaiety even long after the main flower stems have faded. The rich crimson down with which the foliage is clothed, also adds considerably to the ornamental appearance of this sort. Among Begonias, a variety of Kunthiana, lately figured in the "Botanical Magazine," deserves mention. To a good habit and prettily divided leaves it adds large blossoms of snowy whiteness, interestingly relieved in the centre by a tuft of golden yellow stamens, the two colours producing a charming contrast. This is a kind which no collection, however small, should be without. Tufts of Cochlearia acaulis, in pots, occupied the shelves of a cool house. To the value of this little hardy plant for winter decoration we have directed attention on former occasions. In open borders, when once established, it re-sows itself, and is thickly in flower now, its tiny stems and little pale blue starry blossoms, scarcely rising higher than the surface of the soil in which the plants are growing. Pieces lifted and potted blossom freely for a long time, and that with scarcely any trouble or attention. Of more importance in a decorative point of view are Browallias and Bouvardias. Of the former viscosa was in full flower, and among the latter Oriana—the one deep blue, the other pink: nor can Pentas carnea or Centradenia floribunda be dispensed with; both are highly useful winter plants, as is also Plumbago rosea, of which we noticed a good example well covered with reddish-salmon blossoms. Heterocentrum mexicanum, a rosy lilac-flowered Melastomad, is likewise a good winter plant, as are also Didymocarpus primuloides, a rough, woolly-leaved plant, the blossoms of which are blush white; the scarlet Scutellaria Ventenati, the rosy

lilac Impatiens flaccida and Malvaviscus arboreus, Poinsettias, and Franciscea. These all serve to keep up a considerable amount of gaiety at this time of year.

In the Succulent house Agave glaucescens is now in blossom, a stately plant with a graceful flower-stem some five feet in length, and where furnished with fully expanded flowers about six inches in diameter. The blossoms, which are of a greenish yellow colour, are borne on a spike, which rises upright a certain height and then turns point downwards towards the ground —the spike, owing to its length, being apparently unable to carry erect the load of blossoms with which it is laden, and which are now open for about half its length. On the roof of this house Euphorbia Jacquiniflora was in flower, and as a covering for rafters, when its flowering shoots are not too closely tied in, it promises to be useful.

New Holland houses are just beginning to be gay with Acacias (among the earliest of which is sulcata), Chrysanthemums, Primulas, Veronicas of the Andersoni breed; Correas, of which one of the brightest is Brilliant; Daphnes, and Cape Heaths. Among the last the most conspicuous were hiemalis, Willmoreana, gracilis autumnalis, scabriuscula, melanthera, and Lamberti rosea. Others will, however, soon be in bloom, as will also Eriostemons, Boronias, and Epacris.

Among plants remarkable for the beauty of their foliage must be mentioned a vigorous young specimen of Cyanophyllum magnificum, whose leaves could not measure less than three feet in length and two feet in width, the whole plant presenting a truly noble appearance. Phyllagathis rotundifolia, alluded to in last week's Number, is also all that is there said in its praise, the leaves being finely shaped and beautifully striped. Maranta fasciata is likewise a handsome foliaged plant, as is also M. ornata; but the leaves of the last are much smaller than those of fasciata. Among curiosities in this way, may also be recorded what is called the Carrot tree (Monezia edulis), a Madeira plant, whose stem bears considerable resemblance to a Carrot set in a pot, thick end downwards, the branches clothed with Fern-like leaves, issuing from the point or small end. For the sake of variety alone, plants such as this, Tradescantia Warszewiczi, and others, are worth cultivation, contrasting well as they do with the more ordinary forms of glass house vegetation.

Among novelties was a Musa with green and white striped leaves—a real acquisition, and one which, when better known, cannot fail to be a favourite with lovers of variegated plants.

We may add, in conclusion, that Orchids seem greatly improved since they have come into the hands of the present cultivator; of kinds in flower, the best, perhaps, were Calanthe vestita and its red eyed variety; Lælia anceps will soon be in bloom, and this is stated to be the only month in the year in which Oncidium Papilio has not blossomed.

Miscellaneous.

The Coco-nut Beetle.—In the luxuriant forests of Ceylon the extensive family of Longicorns and Passalidæ live in destructive abundance. To the Coco-nut planters the ravages committed by beetles are painfully familiar. The larva of one species of Dynastidæ, the Oryctes rhinoceros, called by the Singhalese 'Gascooroominiya,' makes its way into the younger trees, descending from the top, and after perforating them in all directions, forms a cocoon of the gnawed wood and sawdust, in which it reposes during its sleep as a pupa, till the arrival of the period when it emerges as a perfect beetle. Notwithstanding the repulsive aspect of the large pulpy larvæ of these beetles, they are esteemed a luxury by the Malabar coolies, who so far avail themselves of the privilege accorded by the Levitical law, which permitted the Hebrews to eat 'the beetle after his kind.' Amongst the superstitions of the Singhalese arising out of their belief in demonology, one remarkable one is connected with the appearance of a beetle when observed on the floor of a dwelling-house after nightfall. The popular belief is that in obedience to a certain form of incantation (called cooroominiya-pilli) a demon in the shape of a beetle is sent to the house of some person or family whose destruction it is intended to compass, and who presently falls sick and dies. The only means of averting this catastrophe, is that some one, himself an adept in necromancy, should perform a counter-charm, the effect of which is to send back the disguised beetle to destroy his original employer; for in such a conjuncture the death of one or the other is essential to appease the demon whose intervention has been invoked. Hence the discomfort of a Singhalese on finding a beetle in his house after sunset, and his anxiety to expel but not to kill it. *Sir J. E. Tennent's Natural History of Ceylon.*

Singing Fish.—M. de Thoron has addressed a curious communication to the Academy of Sciences on the subject of certain singing fish that inhabit the seas as well as the rivers of South America. He specially mentions the Bay of Pailon, situated north of the province of Esmeraldas, in the Republic of Ecuador, where, being in a boat, he was suddenly startled by a deep humming noise, which he at first attributed to some large insect, but which upon inquiry turned out to be a kind of fish called musicos by the people of the country. On proceeding further the sounds became so strong as to remind him of the strains of a church-organ. These fish live both in salt and in fresh water, since they are also met with in the river Mataje. They are not more than ten inches long; their colour is white sprinkled with blue spots, and they will continue their music for hours without minding any interruption.—*Morning Post.*

Calendar of Operations.

(For the ensuing week.)

PLANT DEPARTMENT.

CONSERVATORY, &c.—While frosty weather continues be satisfied with as low a night temperature in all plant houses as it will be safe to keep, taking advantage of bright days to increase the temperature, and using a little fire heat, in order to be able to admit fresh air to dispel damp, &c. The proper night temperature for conservatories very much depends upon the kind of plants they may contain. Where Camellias, Epacrises, Heaths, and other winter blooming plants form the principal inmates, 40° will be sufficiently high, and with a dry atmosphere it may safely be allowed to sink a few degrees on hard nights; but in cases where the hardier kinds of winter flowering stove plants are brought in while in bloom, 45° should be considered the proper mean night temperature. Let whatever watering may be required be done early in the day, so as to allow advantage to be taken of sunshine, whenever such may occur, to give air for the purpose of drying the foliage, &c. Many persons appear to entertain an opinion that very little attention is needed to properly supply plants with water at this season; and they only look over their stock at intervals of several days. We would, however, caution young gardeners against this mistake, and advise them to examine every plant, at least every other day, deferring the application of water until it is really required, and then giving a liberal soaking. Attend daily to the removal of dead or decaying leaves, and directly any of the flowering specimens become shabby, remove them to some out-of-the-way place, taking care that they are put in proper circumstances as to temperature, &c., according to their wants, and supply their places with others in full beauty. Where necessary, the leaves of plants should be sponged over, and thoroughly cleaned, twiners pruned, trimmed, and put into proper order for the spring. Soils, crocks, and charcoal, and whatever else may be necessary for potting, should be got into readiness for use when wanted.

COLD PITS.—Where the stock of bedding plants has to be wintered in structures of this description, the present will be found a trying time, and the utmost vigilance and care will be required to preserve the plants from harm. Apply sufficient covering to the glass, and also to the walls of the pits or frames, to ward off the effects of the most severe frost, and embrace every possible chance of admitting fresh air, and removing decaying leaves, in order to prevent damp and mould. Too little water can hardly be given at present to plants in cold frames, and when it becomes necessary to give any, let it be done on the morning of a fine day, freely admitting air afterwards, in order to dry up all superfluous moisture before evening. Plants when covered up for several days should not be suddenly exposed to bright sunshine, but should be partially shaded for a few hours, admitting air in the meantime, if the state of the external atmosphere will admit of it; this will dispel damp, and greatly assist in preventing the injury which might otherwise result from sudden exposure to sunshine.

FORCING DEPARTMENT.

PINERY.—A night temperature of about 60° should be maintained in the fruiting pits, letting it rise to 70° or 75° by day; and, where fruit is swelling, it may be allowed to rise 10° higher with sunshine and air; aim at keeping up a steady bottom heat of about 80°, which for the present will be high enough. Maintain a moist atmosphere, and water such plants as may require it with tepid manure water, but guard against an accumulation of moisture in the heart of such plants as may be showing fruit. In the succession pit the night temperature need not exceed 55° while the present cold weather continues, and from 60° to 65° will be sufficiently high on sunless days. See that none of the young stock suffers through dryness at the root, which is apt to be the case where much fire heat is employed.

VINERIES.—Wash and dress the Vines in houses about to be started, and prepare materials for covering the outside border, if this is not already done; this, however, should always be effected before this season, so as to retain a portion of the warmth infused by the summer's sun; a substantial covering of dry leaves, fern, or some such material, should be applied before raising the inside temperature, and where it can be obtained these may be mixed with a portion of stable manure, to create a moderate fermentation and infuse a gentle warmth into the border, which will be of great service in promoting a vigorous root action. Care must be observed, however, if heat is once applied to the border, to replace the fermenting materials as they become exhausted, so as to maintain a regular temperature, and prevent the roots from sustaining any check. Commence with a night temperature of from 45° to 50°, allowing it to rise some 10° by day.

PEACHES.—Where these are being started, maintain a night temperature of about 45° or 50° according to the state of the external atmosphere, and see that the roots are properly protected from the effect of frost. For early forcing, it is greatly preferable to have a stock of plants in pots, which allow of keeping the roots in a favourable temperature.

STRAWBERRIES.—These may now be placed in a pit or frame where the temperature can be kept at about 45°, giving plenty of air whenever the weather will permit, and if the pots can be plunged in a gentle bottom heat, this will be advantageous in encouraging a healthy root action.

FLOWER GARDEN AND SHRUBBERIES.

Wheeling may now be more expeditiously and cheaply carried on than when the surface of the ground is soft; hence, where wanted, fresh soils or manures should be put upon the flower beds and borders. Shrubberies may also be thinned, where this involves only the cutting out of overgrown plants, or lopping deciduous trees, but where evergreens generally require pruning that is best done in March; for although, when the winter proves mild, such work may safely be performed at any time, it is never safe to depend upon this. When the hands cannot be profitably employed at out-door work, get a good stock of pegs, Dahlia stakes, tallies, brooms, and such like things prepared and stored away in an orderly manner, so as to be ready for use when wanted.

HARDY FRUIT AND KITCHEN GARDEN.

Take advantage of the present state of the weather to get manure wheeled upon the quarters for which it may be intended. Cover Celery with dry litter to protect it from frost, and Cauliflower plants under hand-lights, or in frames, should be guarded from damp by admitting air on every favourable opportunity, and a slight protection against frost will be useful, particularly where the plants may not have been properly hardened. Lettuce and Endive in cold pits will require protection from frost, and air to dispel damp whenever this can be given. Attend to keeping up a supply of Seakale, Rhubarb, and Asparagus, &c., according to the demand and convenience, by introducing quantities of the roots into heat at intervals of about a fortnight. Also attend to keeping up a supply of French Beans by making frequent sowings under favourable circumstances. These are generally grown in pots placed in Vineries or plant houses, but their liability to the attacks of red spider render them dangerous inmates of such structures, and where it can possibly be done they should be planted in lines in the bed of a pit devoted to their culture.

STATE OF THE WEATHER AT CHISWICK, NEAR LONDON,

For the Week ending Dec. 26, 1861, as observed at the Horticultural Gar[illegible]

December.	Moon's Age.	Barometer. Max.	Barometer. Min.	Temperature of the Air. Max.	Temperature of the Air. Min.	Temperature of the Air. Mean	Of the Earth 1 foot deep.	Of the Earth 2 feet deep.	Wind.
Friday 20	18	30.376	30.303	42	35	38.5	46	45	NE
Satur. 21	19	30.380	30.273	41	37	39.0	[illegible]	45	NE
Sunday 22	20	30.206	30.194	45	36	40.5	45½	45	NE
Mon. 23	21	30.270	30.250	45	33	39.0	44½	44½	NE
Tues. 24	☾	30.286	30.176	45	30	37.5	45	44½	E
Wed. 25	23	30.169	30.072	46	18	32.0	45	44	NE
Thurs. 26	24	30.300	30.200	35	20	27.5	42	45	NE
Average		30.284	30.207	42.7	29.8	36.2	45½	44½	

Dec. 20—Overcast; fine at night.
— 21—Overcast; cold and dry; fine.
— 22—Cloudy; overcast; brisk and cold N.E wind; overcast.
— 23—Hazy and cold; overcast.
— 24—Cold and dry; clear and cold at night; slight frost.
— 25—Foggy; fine but cold; foggy; sharp frost.
— 26—Frosty; foggy; densely overcast; foggy and frosty.
Mean temperature of the week 1¾ deg. below the average.

RECORD OF THE WEATHER AT CHISWICK

During the last 36 years, for the ensuing Week, ending Jan. 4, 1862.

December and January.	Average Highest Temp.	Average Lowest Temp.	Mean Temp.	No. of Years in which it Rained.	Greatest Quantity of Rain.	Prevailing Winds
Sunday 29	43.1	33.6	38.4	16	0.62 in.	[illegible]
Mon. 30	44.8	33.0	38.9	13	0.50	[illegible]
Tues. 31	44.3	33.6	38.9	11	0.44	[illegible]
Wed. 1	43.5	31.3	37.4	11	0.70	[illegible]
Thurs. 2	42.5	30.1	36.3	14	0.21	[illegible]
Friday 3	42.9	30.3	37.1	15	0.56	[illegible]
Satur. 4	42.3	31.5	36.9	16	0.86	[illegible]

The highest temperature during the above period occurred on the 3d, 1860—therm. 57 deg.; and the lowest on the 21, 18[illegible]—therm. 4 deg.

Notices to Correspondents.

BOOKS: *A Subscriber.* Hamilton on the Pine Apple and [illegible] on the Pine Apple; both to be procured through any bookseller. They describe two opposite modes of treatment, the first how to grow plants in the open border, the [illegible] in pots.

GLASS WALL: *Edeanach.* You will obtain by your plan [illegible] heat enough; and we see no objection to the other [illegible]. We should prefer pipes because it is so much more difficult to make air move than water. Nevertheless Polmaise, managed as at Polmaise, would tempt us to try it for such purposes as yours.

HEATING: *L. D.* We have seen no gas stove that is fit for gardening purpose. Can't you heat hot water pipes by gas, the latter being securely shut off from the conservatory, which would be easily managed if the gas acted on a small external boiler.

NAMES OF PLANTS: *A. C.* Dendrobium aqueum.—*R. J.* A new pretty Habrothamnus.—*Armiger.* Pinus occidentalis; quite tender.

VINES: *C V P.* The Golden and Black Hamburg may be grown in the same house; but place the former at the warmest end. So you may have Muscat of Alexandria and Muscat Hamburgh Vines in the same house, placing the former at the warmest end. Nothing is better than good loam, with a small quantity of well rotted dung in addition, some bone dust being also introduced into the border.

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METROPOLITAN SHOW, 1862.
STOCK PRIZE SHEETS, and particulars for EXHIBITION of IMPLEMENTS, are now ready, and will be forwarded on application to H. HALL DARE, Secretary.
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The Agricultural Gazette.

SATURDAY, DECEMBER 28, 1861.

THE past year has been interesting in an agricultural sense in many ways. Although commencing with weather of remarkable severity, its seasons have been characterised by the average and ordinary character of alternate rain and sunshine —heat and cold. Neither temperature on the one hand nor rainfall on the other has been excessive.

A somewhat difficult harvest time for the hay crop was succeeded by an easy corn harvest—at any rate in England—and since then by an unusually fine autumn. The season of growth was full of "feeding weather" for our green crops; and the fineness of the later months of summer, while it could not replace the lost plant of winter-sown grain, or make a half-planted field yield the full number of bushels, yet it insured the weight and excellence of what bushels it produced. Prices, too, of all kinds of agricultural produce have been fair both for corn and meat. The almost only extreme failure of the season has been in the Potato crop; and this has been a matter of serious importance both in Scotland and in Ireland.

The year has been characterised by very successful agricultural meetings, and especially by the great interest which attached to that of the **Royal Agricultural Society of England, at Leeds.** The excellence of the show and the number of the spectators it attracted, were both unparalleled in the history of the Society, and, indeed, in the history of the country. There never before had been so complete an illustration of either the breeds of English live stock or the machinery of English farms.

And as the power and importance of the "Agricultural interest" had never been so perfectly exemplified before, so never before had there been so great a multitude of people gathered from the manufacturing, commercial, and other non-agricultural classes to receive what impression it could make. There cannot be a doubt of the great value of these gatherings in a merely social sense, and altogether irrespectively of the professional services which they render.

Among the principal of these professional services, for which during several years, and especially during the past, we have to thank these annual gatherings, has been the rapid extension of the work of steam ploughing, and of the conviction that it is an economical success. Mr. SMITH, of Woolston, Messrs. HOWARD and Mr. FOWLER, have each of them now a large body of customers and clients, nearly all of whom agree in testifying to the great advantages they have reaped by the application of steam power to the tillage of the soil.

The very general use of the horse-drawn mowing machine and reaper is another of the distinctions of 1861 and of recent years, by which an altogether new feature has been introduced into our agriculture; and this, too, has been a good deal owing to the annual prominence given to the subject by the competition for the awards of judges appointed at the annual gatherings.

Improvements in the plants of the farm are less stimulated and urged at these meetings than those either of the animals or the implements of the farm. But for them we have many useful agencies, both in the literature of agriculture and in the monthly discussion meetings of local farmers' clubs: and under this head, too, the agricultural progress of 1861 has been considerable. We have had attention drawn to the cultivation of our pasture Grasses —to the quality of seeds—to the causes and the prevalence of various plant diseases—to the value of Kohl Rabi as a comparatively uncommon green crop, and to that of Mangel Wurzel as now a well established standard fallow crop. And one point, well illustrating an analogy between the animal and vegetable world—the effect of pedigree in plants on the value and character of the crop, has received unusual attention. Mr. HALLETT's so-called Pedigree Wheat, around which the discussion of this point has chiefly gathered, is but one illustration of a law which affects our plants as it does our animals, for evil as well as for good, according to the use that is made of it. And, doubtless, the remembrance of it will continue to exert increasing influence in the future.

The year was about to close amidst hopes and expectations, sanguine and well-founded, of an even greater stimulus to agricultural progress than ever it has yet received, through the activity of well-directed public competition at the great public gatherings of 1862. Let us hope that the disastrous loss by which these hopes have for the time been dashed, may be succeeded by efforts and resolutions more energetic than ever, to do whatever may be done in accordance with the will of the illustrious PRINCE whose loss we mourn—and for the end at which he aimed.

AT the late 22d annual meeting of the Coggeshall Agricultural Society, prizes were competed for and awarded in Ploughing, Bringing up Families, Digging two Rods, Drilling, Stacking, Broadcast Sowing, Land Ditching, Long Service, Benefit Clubs, Self Improvement, Placing Daughters in Service, Most Children at School under 12 years, Knitting Stockings, Ditto Socks, Destruction of Rats and Sparrows, Garden Produce. We give the list in the order in which the prizes are announced in the Papers.

GEORGE PERRY received 1*l.* as the best ploughman in the field. JOHN ROOT received 25*s.* as having out of seven competitors brought up most children without parish relief. JEREMIAH WOOD received 10*s.* for skill in digging two rods of land, and WILLIAM SUTTON, SAMUEL COWELL, and THOMAS HURRELL, received 1*l.*, 15*s.*, and 10*s.* respectively, for having lived respectively 48 years and 2 months, 48 years, and 46 years in the same service.

Does not this list of prizes strike the reader as remarkable incongruous and grotesque? What can be better than to get men together for a trial of skill before their employers? Proofs of skill thus publicly given would be most valuable to the skilful, who would be thus sufficiently rewarded, even were there no prizes announced for competition; and 20*s.*, 15*s.*, 10*s.* prizes will be considered by ploughmen a good reward for four or five hours' work. But to place moral character in the same class with mere dexterity and skill, is to degrade the former. To offer at the same time, and upon the same lists with the latter, a reward of 20*s.* for bringing up a family, for personal services of nearly half a century, and even for putting children to school, must surely offend the moral sense of most people. Such a system, if it be still adapted to the condition of the agricultural labourer, proves the very inferior condition in

which he still remains. Let us hope that the rewards offered for skill will induce competition, and urge young men on to be the very best in whatever class they belong to—and let us hope that the elevation of the moral character of the working man which these societies also most praiseworthily sympathise with—however mistakenly they seek it—may be brought about by the good, pure, and generous example of the class above them; infinitely more influential, we may be sure, as has indeed been amply proved by a late illustrious instance, than any direct intrusion of reward into a field or on a scene where offers of money are a mere impertinence and folly.

—— THE French Government have issued a most liberal programme of prizes to be competed for in fat stock at an International Show at Poissy on the 13th, 14th, 15th, and 16th of April, 1862. The list includes prizes of 40*l.*, 35*l.*, 30*l.* for Short-horn steers—35*l.*, 30*l.*, 20*l.*, for Short-horn oxen —30*l.*, 20*l.*, 10*l.*, for Short-horn heifers—20*l.*, 15*l.*, 10*l.* for Short-horn cows. The like sums, amounting to 295*l.* in all, are offered also in similar classes of Devons, Herefords, and polled breeds. And similar prizes are also offered for Highlanders, Ayrshires, and Irish, Dutch, and mixed breeds. In all nearly 2000*l.* are offered as prizes for cattle. Prizes of 30*l.*, 20*l.*, 10*l.*—in some cases of 20*l.*, 12*l.*, and 8*l.*, are also offered for pens of 5 wether sheep of various breeds not exceeding 1-year old; and 20*l.* and 10*l.* are offered in 4 classes of pigs. We see it announced that Mons. F. R. DE LA TREHONNAIS, Oak Villa, Norwood, S., will give information to all intending exhibitors. The specified age of the sheep classes is the only fault as it appears to us in the arrangements, which have been drawn up with great liberality. Declarations of entry must be made before the 15th of March, 1862, and lodged with the Minister of Agriculture and Commerce at Paris.

FAT CATTLE SHOWS.

THANKS to the change which the Turnip crop introduced into our agriculture, we now fatten cattle all the year round. In olden time, men lived on salted meat during winter and spring: grazing in the pasture and the meadow was the only meat manufacture known; and in autumn time a great salting down of fatted meat, enough to last till summer-time came round again, took place. No doubt some of the fattened beeves were kept on by hook or crook till Christmas-time; and if any man was resolute to have fresh meat all through the season, the hay crop was at hand to help him; but, as a general rule, fresh meat was the food of summer and of autumn, and salt meat the food of winter and of spring. Store cattle starved on straw till Grass came round again.

The introduction of the Turnip crop, and more recently of the Mangel crop—the use of various oil-cakes (the refuse of oil-bearing seeds), and the consumption of grain—the application of machinery to grind and crush and cut pulp, and mix and cook this food —have changed all that; and if there be any difference, probably more meat is now made in winter-time than in summer. It is made at greater cost, because summer-made "beef" feeds and grooms and tends itself, while that which grows in winter has to be fed by hand, and cleaned and kept warm artificially—because also that which grows in summer time is made when a summer's sun insures a minimum of waste in the process, while of that which grows in winter, a larger quantity must go as fuel in the lungs to maintain the temperature of the animal. The advantages, however, exceed the disadvantages, and the cost of winter feeding, when done with judgment, is repaid. The manure derived from it at that season is less liable to waste, and thus becomes more directly available for the growth of corn; and if animals are fed according to their condition, the meat, without considering the manure, need not of itself incur a loss. But whatever may be the experience of the winter grazier, it is the fact that since the introduction of fallow crops, and the disappearance of the bare fallow, as much meat is made in winter as in summer. The difficulty now is not to find food from November till March, or even April, on our arable lands, so much as to provide a summer's store as long as is required. And though Italian Rye-grass, when well manured, and Vetches and Cabbages do, to a great extent, meet that difficulty, yet it still, to some extent, exists, and the feeding stock has to be reduced before the summer comes, lest the mouths should be more than the maintenance for them.

While, therefore, all the year round fat meat is at hand for the supply of the market, yet the main harvest time of the meat manufacturer on arable land is in the winter. And the good cheer which we expect about Christmas time falls in well with the ability of the farmer to supply it.

Just before Christmas time, accordingly, we have our Fat Cattle Shows. At provincial meetings all over the country, but especially in Birmingham and London, exhibitions of the ripest and most shapely specimens of cattle, sheep, and swine, are shown in competition for the liberal prizes offered by prize associations. Those who would see our characteristic breeds (themselves and their differences the offspring of circumstances) with those differences fully developed, and each breed perfectly illustrated, will find them all at our great Cattle Shows—where age and size, and ripeness for the butcher, and form and colour together, prove the relative precocity, quality, and merits generally of Herefords, Devons, Short-horns, and Longwools, Downs, and Shropshire, of Berkshires, Suffolks, and Yorkshires, and other less important English, Scotch, and Irish varieties of cattle, sheep, and swine.

They have been bred up to a wonderful precocity and aptitude to fatten—they have been fed up to a wonderful thickness and weight of flesh—and they now come to be judged and sold. We do not pursue them farther, or discuss questions of cookery, the last process in the manufacture of food for man. But we may for awhile continue to discuss the means at our disposal for judging the animal when ripe and ready for the butcher. The judges at the show give their award according to the age of the animal—according to the symmetry of its form and the thickness and quality of its flesh. The age ought to influence them; for of two animals equally good to all appearance, the younger is certainly the more meritorious, as having attained its condition in the shorter time. The symmetrical proportions of the animal ought to influence them: the outlines should be straight, as seen from the side, a long rectangle in side elevation: the form generally should approach the cylinder—a circle everywhere through ribs and loin in section. It is thus that we insure that the meat shall be thickest where it is best.

Thick meat over ribs, and loin, and round—where it is worth 1*d.* and 2*d.* a lb. more than it is elsewhere—is certainly desirable; and the rules which have long guided judgment of symmetry do in the main tend to the encouragement of the growth of meat where it is best. Lastly, there is the question of quality. Now this is not an undisputed point:—Mr. Carr, of Settle, has during the past summer written at much length and with great ability on the relative merits of the Booth and Bates's strains of blood in the Shorthorn breed. He is an advocate of Booth's superiority, and he has to meet the well-known fact that Bates's animals possess wonderful "quality," as it is called. That is, they handle with extreme softness, and a little bit of skin can be taken easily between a finger and a thumb; whereas Booth's animals have greater firmness of touch, and cannot be laid hold of so easily by mere finger and thumb. He argues that this quality, which may be all very well as a guide in store beasts to their feeding qualities, is no guide at all to the butcher's judgment of how they will "die," as it is called.

In the case of well fattened animals, such as are exhibited among the breeding classes (!) at our great annual shows of breeding stock, a firm touch, not a loose one, should be the judge's guide. Even here, however, a distinction must be drawn between a firm elastic pressure to the touch and a hard-hided density which will not yield at all. And so where age and symmetry are equal, the award is given to the animal possessing finest quality so far as that can be determined by a certain combination of firmness and elasticity with which the hand is met when pressed upon the thick meat over the rib and back of a well-fattened beast. In this way, then, are the decisions at our Fat Cattle Shows arrived at. In this way did the magnificent ox of Mr. Taylor, of Sewerby Cottage, Bridlington, receive the first prize in its class, and the gold medal as the best ox in the yard, at Birmingham; and in this way did Mr. M'Combie's fat Galloway cow take from even it the distinction there of being the best animal in the yard. This last decision rests, however, upon considerations which have varying weight with different judges. For though age and weight, and symmetry and quality, determine the award, yet different men attach different degrees of importance to them relatively to one another; and so, though travelling by one common road to their decisions, they arrive at different results. And the comparison of this ox and cow may be adduced as a case in point, for they have come together under different eyes at the Smithfield Club Cattle Show just over, and though no prize is there given to the best animal in the yard, yet the Galloway is beaten among the cow classes at Baker Street by a Shorthorn cow which was also at Birmingham, but which was not spoken of there as deserving the high distinction awarded to its rival.

But besides the mere judgment which awards a prize, there is the judgment of a fattened animal which fixes price, and this as determining not the award of a silver cup or medal, but the profit or the loss of a year's proceedings all over the country, is a much more serious and important matter. To the helps which exist for rendering judgment here more easy and more accurate, we must refer another week. *From the Oxford Journal.*

AMERICAN BUTTER.

[By HIRAM OLMSTEAD.—Abridged from the "New York Agricultural Society's Journal."]

STATE OF NEW YORK.—The number engaged in the manufacture of butter has been increasing for years, until, in many parts of our country, it has become the principal business, engaging the attention of the farming community. The amount of butter manufactured annually, at the present time, as compared with former years, is largely on the increase; the demand for the article has increased in a proportional ratio. There are many essential, and many that might be called non-essential things, that combine to make a man successful in the dairy business. First and foremost among these the dairyman should have a farm naturally inclined to grass, an abundance of pure cold water, and an experienced dairyman. Combine with these industry, perseverance, and close application to the business, will ensure success. There is no business connected with farming, that requires closer attention than the manufacture of good butter; and, at the same time, it is among the most lucrative employments that can engage the attention of farmers.

Cows.—It is the practice of many dairymen to buy their cows. When this practice is pursued, to keep up the supply of cows, care should be exercised to buy only good ones. A dairyman is a poor person to refuse to buy good cows. If he has any poor ones, they are the ones that he will want to sell. Better pay 50 dols. for a good young cow, than take an inferior one at 30. The good one may make enough more butter the first year, to pay the difference.

If a man wishes to buy a dairy of cows, for beauty, with a handsome red colour, nice horns, and a smooth, snug, sprightly appearance, let him go to the Devons. If he wants to get those of large size and good consumers, and those that will make the most beef when he is done milking them, let him go to the Durhams and Herefords; but if he wishes to buy a prize cow for the dairy, he will quite as likely find it among the Ayrshires or the common native stock of the country, as anywhere. By this it is not claimed that good cows cannot be found among the breeds first named; but that he may be as successful in the last named breed as in any other. There are many external marks about a cow that will indicate her milking qualities.

A slim head, neck and horns, rather light in the shoulder, broad across the loin, heavy in the hind quarters, yellow skin, a hearty disposition to eat, and a good capacity for storing food, are points usually found in a good cow.

The observations of Guenon, as indicated by the escutcheon, will be of much service in selecting cows. The best way, after all, to find out the good and poor cows of the yard, is to see how much butter each cow will make in a given length of time. Such an experiment should be made in different seasons and at different times in the season. Experiments of this kind will cost time and trouble, but may be valuable to the dairyman. Cows are apt to vary in the amount of butter they will make in different seasons. This variation is more apparent in young cows than with those of mature age. The man whose business it is to sell milk, will, of course, look for such cows as will give the largest quantity. The quantity of milk that a cow may give, may deceive a man very much as to the true value of the cow for making butter; and cows may be retained in the dairy because they give a large quantity, and others may be disposed of because they give a small quantity, when the truth is, the poor cows are kept and the good ones are disposed of. Another and better way to keep up the supply of cows in the dairy is not to depend upon buying, but to raise them. Select such cows as are known to be of a good milking family. Have them come in early; and, of course, they should be dried early, and from such cows raise the calves. Cows that have been stripped late, and close, will have smaller and poorer calves than those that go dry longer. When a cow first comes in she should not be allowed to drink hearty of cold water in cold weather; but the slop, or water should be made about blood warm. The calf should be taken from the cow, and fed with a reasonable quantity of new milk twice a day for two or three weeks, and, by degrees, change from sweet to sour (? skim) milk, and then begin to add a little meal. The calf should have a run and good pasture, through the summer, and in the fall and winter fed on roots and rowen hay. At two years old the young cow should begin to give milk, and if she is raised as described above, with care she will be worth about as much, or perhaps more, than those more neglected will be at three years old. A calf that shows a dainty, shy disposition when young will be apt to retain it through life. Select those that will take hold of their mess with life, and drink it with a will. Heifers should be handled occasionally before they come in. This will help very much also about breaking them to milk. In learning them to be milked, take hold of the teats so as not to hurt them, and use mild, gentle means, and never get in a passion. Mild means will be more likely to make a heifer gentle to milk than harsh ones. The cows should be milked morning and evening, so as to divide the time equally between milkings, especially when they are in their greatest flow. Let each milker milk the same cows. The fingers should not be doubled up, so as to bring the ends of the nails against the teats. The fingers should be lapped around the teats so as not to hurt. Use both hands, and after the cow is begun milk right along, with persevering industry, until all is drawn. No after

stripping should be allowed. Scolding, thumping, and stoning of cows, is entirely uncalled for. Cows should never be dogged or run; everything of this kind will tend to lessen the quantity of milk that they will give. Old cows should be turned off at about 15 years old. In a dairy of 14 or 15 cows, raise a heifer calf, and have a two-year old to come in each spring, and dispose of the oldest cow in the fall. By adopting this practice, the dairy will be kept uniform, as good one year as another. If the dairy should number about 20 it would be necessary to raise two calves every other year, to keep up the supply. The male used from which calves are raised should be selected from a good milking family with as much care as the females. The cows should go dry from two to three months. After a cow is dried she should be milked once or twice a week for two or three weeks, to prevent the bag from injury. Full grown cows, with good care, should average 200 lbs. of butter during the season, or more. A cow that will not make 150 lbs. should be rejected as inferior.

Butter Making.—Butter is one of the necessary articles of the table. No table is complete without good butter. Much of it that has been well manufactured is spoiled before it reaches the table where it is consumed. It is a delicate article, and is easily affected by being exposed to the air, and especially to impure air, in warm weather. As soon as the milk is milked, it should be strained into tin pans, holding 8 or 10 quarts, filled less than half full in warm weather, up to nearly full in cool weather, and set in a cool airy milk room. The cream will commence to rise immediately, and will increase in quantity for a given length of time, when it will diminish in quantity and quality. It should be skimmed at the time when it is the best, which is about the time that the milk begins to thicken on the bottom of the pan. The cream should be allowed to stand from six to 12 hours, and stirred occasionally before churning, and strained through a wire sieve to prevent white specks in the butter. Every dairy maid should have a thermometer to regulate the temperature of the cream before churning. The temperature of the cream should vary from 60° in cold, to 66° in warm weather (Fahrenheit). Hot water should not be put into the cream to temper it; but the cream should be put in a tin pail, and then immersed in warm water. Ice is of great service in extreme warm weather. The churning will occupy a longer or shorter time in different parts of the season. If the cows are fresh in milk, the butter should come in about half an hour. Later in the season it will take about an hour. Butter is injured by churning too long, and should not come in too short a time. It is difficult to manage the cream late in the fall, so as not to have the churning occupy an unreasonable length of time.

The following are some of the causes that delay the butter from coming. The milk has been kept too cold, and prevented the cream from souring. Sour and sweet cream may have been mixed. The cream from farrow cows may have been mixed with cream from those that are not farrow. The cream may not have been sufficiently warmed, and the cows may have lacked salt while fed on dry food. The milk may have stood too long before it began to change. These should all be guarded against. After the butter has come take it out of the churn into a wooden bowl. The next important work to be done is to extract the buttermilk and salt it. How is it to be done? One will direct that the butter should be washed. Another will say that no water should be used to get out the buttermilk. If the butter has come solid and good, good butter can be made of it either by washing or not, if properly worked. If the butter has come soft, and looks light colour, cold water will improve it.

The true principle to work it is to cut and press out the buttermilk; not to sleek it over as you would to spread it on bread. If worked too much it will be dry, and the grain will be injured. If worked too little it will not keep good, in consequence of the milk it contains. The brine will always be clear when the milk is all out. It should be salted after the first working, when it comes from the churn, with 1 ounce of Ashton salt to a pound of butter. Allow it to stand from 15 to 20 hours, for the salt to dissolve, and work it until the brine is clear, then pack it.

Packages.—The best package for butter is a good white oak firkin, with hickory hoops, made in a workmanlike manner, without being scorched on the inside, and so that it will not crack. The size of the firkins should depend upon the market the butter is designed for. In some markets an 80 weight will bring 1 cent per lb. more than a hundred weight package. In other markets, no difference will be made if the firkins are large or small. The cost for packages made large is no more than small. The freight is usually the same. If the market will answer it is always best to use large firkins.

The firkins designed to be used should be procured in season, and should be uniform. Nothing lost in having good, handsome firkins. Before one is wanted for use, it should be weighed, the tare and number marked on the head, then opened and filled with brine for two reasons; one is to make sure that it does not leak, and another is to salt the wood. If the wood is not thus soaked, it will extract the salt from the butter that comes in contact with the wood, and be an injury to it. When the package is wanted, open the second and empty the brine from the first into it, and so continue. When a package is filled with butter, spread a cloth over the top, and put on salt. Add water to keep it covered with brine. Cover the whole with a thin flat stone, and set it in a cool place. The brine will exclude the air, and if the butter is well manufactured, it will keep good. When it is ready for market, take off the brine and cloth, cover the butter with a clean cloth, and sprinkle on a little salt, and head up the firkin. The object of the cloth on the top is to prevent the chats from falling on the butter in opening; and when the cloth is removed, it will present a much more inviting appearance. If the firkins have soaked through, so as to stain the outside, they should be wiped with a damp cloth, and they will then soon dry. The hoops should be well nailed, but not so as to have the nails go into the butter.

Every dairyman should endeavour to make butter that he is not ashamed of, and after it is made, he should have his name plainly marked upon each package.

Churns.—There is almost an endless variety of churns in use, and each variety has its advocates. Among them all, for simplicity, durability and efficiency combined, the common dash churn stands unrivalled, and is most generally used.

Power for Churning.—What is the cheapest, most durable, and most efficient power for churning? is a question that should claim the attention of every dairyman. The hand power, dog, sheep, and water powers, are those usually employed for churning. Which is to be preferred, is the question. The dearest of those named is the hand power. No one milking three cows can afford to churn by hand. The tax of time and patience to do up the churning at all times when it should be done, is sufficient to prevent many from entering into the business; and reasonable men will not require the women to do the churning. A water power answers a very good purpose for those situated so as to employ it, but is expensive to establish and keep in repair, owing to the liability to decay. One objection to this power is its expense, and a second is its inefficiency in dry seasons. Those relying on this power are obliged to consent to churn by hand about one-fourth of the time.

A dog power answers a good purpose, but the expense of keeping a great dog is about equal to keeping a hog the same length of time, and nine-tenths of the dogs of the country are a decided detriment to their owners, and a scourge to all of the neighbours living within range of their nightly perambulations. When used to save steps they are about as apt to make 10 as save one, besides the damage done to stock by being chased by them. Churning is about as good use as a dog can be put to. Unquestionably a power propelled by sheep is much the cheapest, and most efficient of any of those in use. A sheep will churn two or three times a day, even in warm weather, without inconvenience; is much less expensive to keep than a dog, as its food is mostly Grass; and it will produce more wool than the ordinary sheep of the flock. Select those of the coarse wool variety, as they will stand the heat well, and are inclined to be mild in disposition. They soon learn to drink buttermilk and grow large and fleshy. Procure a chain 15 or 20 feet long to fasten them; change their place to feed every day; and when the churning is over in the fall, let them go with the flock, and they are no more trouble until wanted in the spring.

A sheep will churn the butter from 20 cows. If more cows are milked it might be necessary to have two sheep. How long they will live I am not able to say, but was acquainted with one that was used in a dairy of from 12 to 15 cows until he was 18 years old, and then he was butchered; a second that was used until he was 17 years old; and a third that has churned from 2000 to 3000 lbs. of butter yearly, and is now 13 years old, and has every appearance of doing good service for years to come. The powers are usually made on the endless chain principle, or the circular wheel. If the endless chain is used, the slats or floor should be made on the same plan as the horse-power, not fastened to a belt as they are liable to get loose. I am acquainted with a circular machine that has been in use for 25 years, and the whole cost, including the machine and all repairs during the time, has not exceeded an average of 50 cents a year.

Marketing Butter.—Butter is disposed of in various ways. Some practise selling to speculators in the country for what they can get; others take it to the principal markets themselves; a third class send it to commission merchants in the markets; and still another class get several dairies together and send it by an individual in whom they have confidence, and he will sell it on commission. The latter is one of the best ways of marketing butter. Such an individual, by going year after year, will become acquainted with the market, and is thus prepared to realise the best prices. Butter made in the spring, on hay, should be packed in tubs or half firkins and sent to market as fast as made. There is a class of dairymen that continue to send in their butter fresh every week through the season, but this class is confined to those that are so situated as to have better facilities for marketing than the majority.

Cow Stables.—It is necessary for the cows that they should be provided with good, warm, well ventilated stables. These should be so made as to keep the cows dry and comfortable, and made convenient for feeding and milking the cows when in the stable.

Root Cellars.—Convenient to the feeding alley should be a good root store, where roots can be kept through the winter without freezing. Turnips, Swedes, Carrots, Beets, &c., can be successfully and profitably raised. Root crops are among the most profitable crops that the dairyman can raise.

Feeding Cows.—There is no stock on the farm that pays better to feed well than milch cows. After a cow comes in in the spring, she should not be allowed to shrink in her milk for want of sufficient quantity of good nutritious food. The time that they should come in depends upon how they are to be fed: but it is always best to have them come in while fed on hay, before they are turned to Grass. After they go to Grass they are more liable to caked bag, milk fever, and other diseases, and many cows are lost. Where they are supplied with good hay and roots, or grain, the 1st March is the time to have them begin to give milk. Spring butter then usually commands the highest price. Feed about 8 quarts of Ruta Bagas or Carrots per day to each cow after milking, with a liberal supply of the best hay on the farm. Feed regular at least three times a day. Roots are much more profitable to raise to feed cows than grain. From eight to 12, and even 1500 bushels of Ruta Bagas can be raised on an acre, at a cost of from 4 to 7 cents per bushel; and when butter is worth 25 cents per lb., they are worth about 20 cents per bushel to feed to cows. Nearly as many Carrots can be raised at a cost of from 7 to 10 cents per bushel, and are worth nearly 30 cents. Some object to feeding Ruta Bagas, and contend that good butter cannot be made when they are fed. If improperly fed, and in unreasonable quantities, this is the case. Feed 4 quarts at a time, after each milking, and salt the cows often, and better butter can be made than from hay without the root. Corn fodder should be raised and fed, when the pasture fails in the summer or fall. Cows are left many times to live on the pasture in the fall when they should have corn fodder or root tops. The tops of an acre of good Ruta Bagas are worth as much as the hay from the same amount of ground. A root slicer, made with a knife 1 foot 4 inches long, put in a gate made to play before a hopper, with the bottom inclining and sides diverging towards the knife, and a board put on the gate, below the knife, to gauge the thickness that the roots are to be cut, is found to be as efficient as many that are sold at agricultural warehouses.

Soured Milk.—The soured milk of the dairy is an article of some importance, and it should be disposed of so as to bring in the largest income. Under ordinary circumstances it is best to feed it to hogs. Feed the cows well through the winter, and they will feed the pigs. The pigs should have a warm bed, and when the milk fails, Carrots are much cheaper to winter them on than corn. Keep them growing through the winter, and have them in good thriving order in the spring—and give them what milk they want through the summer to drink—and they will answer to butcher in the fall when the milk begins to fail, without any other feed. Pork made from dairy slop is but little, if any, inferior to that made on corn, and is made at much less cost.

Home Correspondence.

The Agricultural Chair of Edinburgh.—I read in your paper of Dec. 7 your pertinent and truthful remarks regarding the miserable emoluments attached to the Chair of Agriculture in the College of Edinburgh, but in other statements you have erred—where you say "the only University Professor of Practical Agriculture in the country is that of Edinburgh." You must here allude to Scotland and England, but you further state "that nowhere but at Edinburgh is there a Professorship established for the teaching of farm practice." In this statement you have left Ireland out of the question altogether. You do not seem to know that in Ireland there is a University composed of the three Queen's Colleges of Belfast, Cork, and Galway; in each of which there is a Professorship for teaching the science and practice of agriculture. Connected with and in the immediate vicinity of the Galway College there is a farm attached, on which the students are taught the principles and practice of farm management, and the writer of this is the sole manager and conductor. As you and the readers of the *Gardeners' Chronicle* may be anxious to know something of our practical proceedings in the far west, even in Connaught, and the results, we shall give a brief outline up to the present. At the opening of the College in 1849, being fully impressed with the idea that it would be a futile attempt and a failure to teach the practice of agriculture within the walls of a College, we therefore without delay took and rented a farm in the neighbourhood for the purpose of giving practical instruction. This farm is naturally of very inferior quality, chiefly bog and mountain: the Ordnance valuation is 7*s.* 6*d.* per statute acre. When entered on it was in a wretched state in all respects; it had been unoccupied for several years, and notwithstanding the active competition for land in the locality, its aspect, quality, and condition deterred the neighbouring farmers. No other convenient farm could be obtained at the time to suit our purpose, besides, it was considered if it was judiciously managed and improved

it would be a good example in that part of the country. From the commencement to the present time improvement has gone on steadily—not suddenly or rashly by lavish expenditure of capital. The Professor is the occupier, and manages it entirely on his own account. The bog has been reclaimed, thoroughly drained, manured, and cropped with great success; the mountain part has been cleaned, cleared, deepened, and manured, producing also superior crops, green grain and Grass; the green crops have been extraordinary, particularly during the last two unfavourable years. We take particular pains, and in the presence of competent witnesses, to ascertain correctly the acreable quantity of these latter crops; in 1860 the Swedes averaged 64 tons to the Irish acre; this year even more—72 tons; on every square perch Irish there was 9 cwt. The other kinds of Turnips not so weighty but heavy crops; Carrots, White Belgian, 25 tons, and Red Altringham, 22 tons per acre. We have not succeeded well with Mangel during the past two seasons, the great wet and cold was most unfavourable for its growth, but the Potatoes of seven different kinds were excellent both as to quantity and quality, and almost free from blight; there were not 2 per cent. diseased among the whole. Our farm has become an example, a model for superior cropping, and it is thus we teach the pasture of agriculture in the Queen's College, Galway. *Thomas Skilling, Professor of Agriculture, Q. C., Galway.*

The Tithe Rent Charge is governed by the average price of corn (I presume every seven years). I should thank you to inform me the method used for charging the annual increase or decrease, as the case may be. I have given below, for the sake of example, in the first line supposing, after passing the Act of Parliament, the corn to have been at the prices quoted, and 100*l*. as the amount of tithe rent charge, being also the standard rate to work on, and in the following line supposing the corn to have been as also quoted. What decrease would there be on the 100*l*., and the principle of working it and the averages? as follows:—

	Price of Wheat per Bushel.	Price of Barley per Bushel.	Price of Oats per Bushel.	
Act of Parliament the 1st year ..	7*s*. 0¼*d*.	3*s*. 11½*d*.	2*s*. 9*d*.	Tithe rent charge on 100*l*.
Following year supposing the price ..	6*s*. 10*d*.	3*s*. 9*d*.	2*s*. 10*d*.	What amount, and the principle of working it?

I should also feel obliged by your informing me what portion of rent-charge is due to the rector of a parish on a farmer renting a farm at 100*l*. per annum; whether any deductions can or is usually made? Could you recommend me an instructive book on the matter? *X. Y. Z.*

Societies.

Royal Agricultural:—Standing Committees for 1862.

Finance Committee.

Hood, Hon. Col. Nelson	Bramston, T. W., M.P.
Vernon, Hon. A. H.	Hobbs, Wm. Fisher
Barnett, Charles	Torr, William

House Committee.

The President	Shelley, Sir J. V., Bt., M.P.
Chairman of Finance Committee	Brandreth, Humphrey
Cavendish, Hon. W. G., M.P.	Challoner, Colonel
Hood, Hon. Col. Nelson	Gibbs, B. T. Brandreth
	Hobbs, Wm. Fisher

Journal Committee.

Cathcart, Earl	Acland, T. Dyke
Portman, Lord	Holland, Ed., M.P.
Speaker, The Rt. Hon. The	Hoskyns, C. Wren
Shelley, Sir J. V. Bt., M.P.	Milward, Richard
Johnstone, Sir J. V., B., Bt., M.P.	Thompson, H.S., M.P.
	Wallis, Owen

Chemical Committee.

Vernon, Hon. A. H.	Hudson, John
Johnstone, Sir J. V. B., Bt., M.P.	Humberston, P. S., M.P.
Miles, Sir Wm., Bt., M.P.	Huxtable, Rev. A.
Acland, T. Dyke	Lawes, J. B.
Daubeny, Dr.	Holland, Ed., M.P.
Hoskyns, C. Wren	Dent, J. D., M.P.
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Veterinary Committee.

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Johnstone, Sir J. V. B, Bt., M.P.	Hobbs, Wm. Fisher
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Barker, Thos. Raymond	Simonds, Professor
Brandreth, Humphrey	Spooner, Professor
Challoner, Colonel	Thompson, H. S., M.P.
Gibbs, B. T. Brandreth	Wells, W.

Stock-Prizes Committee.

Walsingham, Lord	Milward, Richard
Shelley, Sir J. V., Bt, M.P.	Pain, Thomas
Hood, Hon. Col. Nelson	Pope, Edward
Barnett, Charles	Randell, Charles
Barthropp, Nathaniel G.	Rigden, Wm.
Druce, Joseph	Smith, Robert
Gibbs, B. T. Brandreth	Simonds, Professor
Hobbs, Wm. Fisher	Torr, William
Holland, Ed., M.P.	Towneley, Lieut.-Col.
Hudson, John	Turner, George
Jonas, Samuel	Webb, Jonas

Implement Committee.

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Hood, Hon. Col. Nelson	Gibbs, B. T. Brandreth
Vernon, Hon. A. H.	Hamond, Anthony
Shelley, Sir J. V., Bt. M.P.	Hobbs, Wm. Fisher
Miles, Sir Wm., Bt., M.P.	Hoskyns, C. Wren
Amos, C. E.	Shuttleworth, Joseph
Barnett, Charles	Thompson, H. S., M.P.
Brandreth, Humphrey	Torr, William
Caldwell, H. B.	Wallis, Owen
Cantrell, Chas.	Wilson, Professor
Challoner, Colonel	

London Show Committee.

Powis, Earl of (Chairman)	Shelley, Sir J.V., Bt., M.P.
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Feversham, Lord	Bramston, T. W., M.P.
Leigh, Lord	Brandreth, Humphrey
Portman, Lord	Caird, J., M.P.
Talbot de Malahide, Lord	Cantrell, Wm.
Walsingham, Lord	Challoner, Colonel
Speaker, The Rt. Hon. The	Gibbs, B. T. Brandreth
Hamilton, Rt. Hon. R.C. Nisbet, M.P.	Hobbs, Wm. Fisher
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Hood, Hon. Col. Nelson	Jonas, Samuel
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Dent, J. D., M.P.	Wells, Wm.

*** The President, Trustees, and Vice-Presidents are Members *ex officio* of all Committees.

Farmers' Clubs.

Coggeshall.—At the late annual meeting of this Society the following remarks were made by Mr. Alderman Mechi:—Agriculture was now no longer what it used to be—a matter somewhat of routine; for in these times of great change and great progress it was impossible that agriculture could have escaped the general influence of that change, and those engaged in it must move forward.

Steam Power.—He remembered the time when there were no railways, no steam engines, no electric telegraphs, no omnibuses or cabs, and no policemen—but all that was changed now. It was the same with agriculture. They would recollect that about 9 or 10 years ago he was rash enough to deliver a lecture in Coggeshall on the advantages of steam in agriculture; well, the predictions he then made were now being fulfilled; and pleased as he always was to hear of prizes being awarded for superior ploughing, he did not hesitate to say that the days of the horse plough were numbered; and that they should have to award prizes for the best steam-engine for ploughing purposes, or to the man who steered his steam plough the best. In fact he could see in prospective the ploughman become a gentleman—when he would ride 20 miles a day and plough double the quantity of land, instead of walking 10 miles and ploughing one acre. In applying steam as a motive force in agriculture they would only be doing what had been done in the manufacture or production of almost every article of wear or of ordinary use: the abstraction of coals and minerals from the earth, our manufactures of iron, cotton, linen, and numerous other articles, were indebted almost entirely to steam as a motive force for their abundance and cheapness; and if such results had been produced in all these branches of manufacture, surely something like it might be done in agriculture. He was not talking of mere theory, but was speaking from actual facts and experience. Some of them might have seen in the *Agricultural Gazette* of last Saturday the returns collected by the Editor from 115 gentlemen who were working steam-engines as steam ploughs: many of them using Mr. Smith's of Woolston, some Mr. Fowler's, and some Mr. Howard's; and these returns showed that the expense of ploughing or scarifying an acre of land twice as deep as it could be done by horses, charging every expense—the interest on the first cost of the machine, coals, manual labour, estimated wear and tear of rope and machinery; and, as far as could be judged from these returns, it appeared clearly that, after paying all these great expenses, ploughing or scarifying could be done twice the ordinary depth for about 6*s*. an acre. And there was this additional advantage—they could do it at the right time. A steam-engine would not be like horses, obliged to come home at 1 o'clock on a fine summer's day, and not fit for work again until 6 o'clock the next morning: a steam-plough could be worked till dusk, and during moonlight at busy times he should not be surprised to hear of some enterprising man paying extra wages and working half the night as well. Upon heavy soils some seasons were most unfavourable, and to be able to break up such soils during fine weather, and air deeply, would be to secure to a great degree their profit and crop for the next year. In these and other respects he looked upon the steam-plough as one great instrument of increasing the prosperity of the English farmer, and of increasing the food of the people.

Manure.—Then, again, there was another important subject—the application of town sewage to the land. At one time he was rather snubbed for talking about such a dirty subject—but it had began to force itself upon the consideration of thinking men who wished for well for their country. They all knew that the great want of British agriculture was more manure, the great want of the people was more food; they knew that the British farmer and landlord (for he looked upon them as one) had as yet been unable to feed the British people; and so short was their supply, that we were obliged to import enormously, even in average seasons. He saw the other day a statement that even in the simple matter of eggs we were obliged to import 170,0[illegible] year, and he believed that poultry bor[illegible] tion to them; 10,000 sheep were brough[illegible] country every week; and there were enorm[illegible] ties of Potatoes, American cheese and pork, [illegible] every other imaginable thing, simply bec[illegible] British farmer and landlord had not yet set [illegible] to work to develope this particular means of [illegible] the produce of the soil. If they determined, [illegible] able to put into the land increased capital and [illegible] intelligence, they could produce amply, and m[illegible] amply, enough to do away with the necessity [illegible] importations of food. That was a bold and [illegible] ment to make; but it was a statement which he [illegible] be happy at any time to verify by the infall[illegible] statistics. Hitherto, then, they had not d[illegible] duty. They knew that it could only be done [illegible] much larger investment of capital as well as of intel[illegible] gence; and he had yet to learn that there was a w[illegible] of capital in this country for any object wh[illegible] shown to be capable of returning a safe an[illegible] profit upon the investment. He was happ[illegible] with regard to sewage, that there was someth[illegible] The other day he spent five hours in the great L[illegible] sewers, and had some excellent champagn[illegible] under Woolwich—when those works were [illegible] pleted, at an expense of three or four [illegible] —and very fine works they were—all their home [illegible] beef and mutton, and all their foreign beef and [illegible] after it was done with in London, was to com[illegible] three immense tunnels and go into the Tha[illegible] Barking Creek; but a little bird had whispered [illegible] ear that certain people contemplated making a [illegible] from the main tunnel in Barking, and bringing [illegible] into Dengie Hundred—where 16,000 acres of [illegible] land would receive a supply of these good things, [illegible] would multiply the produce of those 16,000 acr[illegible] was going to say indefinitely, but probably [illegible] four times. This was a step in the right line, [illegible] because these great matters required an assoc[illegible] company, Acts of Parliament, and great means to [illegible] with them. But it must be done. Thirty years [illegible] as most of those present must know, there was no [illegible] thing as a sewer to carry away the food of the pe[illegible] when it was done with: everything went into [illegible] and the farmer received it back again; but within [illegible] period the system had been altered, and the sewage [illegible] merely of the towns of England, but of almost ev[illegible] parish, was thrown into the rivers instead of [illegible] returned to the land.

Farm Buildings.—These were two important points; but there was another he must mention, [illegible] covered farm-yards. There was no mistake about [illegible] that farmers were not making the best of their means under the present system. He was glad to [illegible] yards growing up rapidly, together with arr[illegible] to prevent the loss of liquid manure, for he [illegible] be spared seeing what he saw the other day [illegible] farm, though held by a very intelligent farmer, [illegible] drinking their own excrement from the [illegible] pond. The farmer said his horses were [illegible] ill; and he (Mr. Mechi) told him he would be [illegible] if he had the same kind of drink. His excuse [illegible] that the horses preferred it to pure water; [illegible] was contradicted by another farmer, who said he [illegible] thought the same, but since he had given them [illegible] water, and preserved his liquid manure instead of [illegible] ting it run into the pond, his horses had been in [illegible] health. He knew he had been looked upon as [illegible] fast coach in agriculture, and sometimes hardly [illegible] but time had gone on, and 20 years had softened [illegible] many hard points, and rounded off many sharp [illegible] but the longer he lived the more he saw and [illegible] that the great principles for which he and others [illegible] contending were now being practically realised [illegible] much to the advantage of the British farmer. He [illegible] it as a principle that anything in agriculture, as [illegible] other pursuit, that would not yield a profit, was [illegible] as a matter of business; but he asserted that it [illegible] pay to have steam engines; that it would pay to [illegible] covered yards (the landlord putting them up [illegible] tenant paying a proper interest); and that it would [illegible] to apply the sewage of towns to the land. The [illegible] day he was honoured, as he had been before, [illegible] invitation from the Earl of Essex, who had now [illegible] manuring machinery of his farm into good order [illegible] was within a mile of Watford, and took all the [illegible] of that town; and he (Mr. Mechi) was astonished [illegible] see in the course of two years such an enormous [illegible] increase and improvement in the produce; he [illegible] Swedes, although the season was far from a [illegible] one, averaging 27 tons per acre; Barley 8 quar[illegible] per acre; Italian Rye-grass 2 feet high in Novem[illegible] after the fourth cut; Cabbages they could not walk [illegible] and all from having the 4000 sheep of W[illegible] folded upon his fields every day without hav[illegible] pay for their feed. He had made a mistake upon [illegible] last point, for his lordship paid 10*l*. a year for the use [illegible] these Watford sheep. When the Earl began he [illegible] situated like many other people; the engineers did [illegible] understand the machinery required, the engine was [illegible] powerful enough, and he was involved in a good deal [illegible] expense for additions and alterations; but now ev[illegible] thing was in order, and he (Mr. Mechi) saw a steam-engi[illegible] of 10-horse power pumping 70,000 gallons of this g[illegible] stuff per day, very much to the fructification of the soil. To show what a quantity of stock that system would compel farmers to keep, he might mention this

saw 700 sheep and 100 bullocks upon a farm of ... acres, with the occasional addition of part of the park; and he could see such an enormous production of grass, roots, Cabbages, and other green crops, that only a great quantity of stock could possibly consume it. His lordship had done another useful thing; he had tried the difference between covered and open yards, both for the purpose of fatting stock and keeping the goodness in the manure. About 4000 square yards had been covered in very judiciously, and very economically; and he saw some very good and lasting work which had only cost 5s. per square yard, the interest upon which he thought any tenant would be glad to pay for the accommodation. He saw the difference between sheep fed in these yards and those which had wet beds and wet food; and he was satisfied that if they would produce the largest quantity of beef and mutton upon their farms, it must be by a very different kind of feeding from that which was now followed. He was afraid he must have tried their patience, but he loved farming, and he loved the yeomanry of this country. There was not a more honourable race in the world: they had their strong prejudices; and so would any class who had been pent up, as was formerly the case, with no roads, or very bad ones, and almost entirely isolated from each other. When they saw nobody but themselves they were apt to think they were the greatest men under the sun—and they could never get rid of that overweening pride without mixing with and rubbing against others who had had greater opportunities for observation than themselves.

Labourers.—There was another important subject—the condition of agricultural labourers. He looked upon them as upon any other class who had to work for their living. They were animated by the same passions; and he did not believe they were more immoral than any other class of men, more drunken, nor more evil disposed; but he knew they suffered from things in which they could not help themselves, viz., their cottage arrangements. He did not hold with large, expensive cottages for men whose average earnings, harvest included, did not amount to more than 12s. a-week; if they had large rooms they could not get firing enough to warm them, and he did not advocate large apartments for men of that class; but he did advocate dry, healthy dwellings and decent arrangement. Brick cottages he considered about the very worst dwellings they could have, unless there was something more done to the walls than the mere brickwork. Nine-inch work might be dry enough in summer, but in winter every brick would hold three quarters of a pint of water, and the heat of the rooms would draw the moisture through; so that, if not drained and the floors not concreted, they became so damp as often to produce very injurious consequences to the health of their inhabitants. Let the outside walls of every brick cottage be either painted, tarred, or cemented, and they would be vastly improved in comfort and healthiness. Of course there ought to be a decent separation of the sexes, which would prevent many of those evils which resulted almost necessarily from the intermingling which too often took place. Altogether he might say that very great good would result if, by an arrangement between landlord and tenant, each estate should be provided with cottages in proportion to its extent and demand for labour in the same way as they had stabling for horses sufficient for the demands of the land for motive power. He did not agree with some that bread and cheese was not the most nutritive food the labourer could eat; he was the best judge of that matter; if he could get meat so much the better, but bread and cheese, in a scientific point of view, contained the elements of nutrition for the human body in the cheapest possible form. He certainly should not object to their having beer, but they were told by Liebig that the man who ate 3½ quartern loaves in a year would have more real nourishment than the man who drank five quarts of beer every day in the year. Beer no doubt contained fattening qualities, but not the flesh-making properties of bread. He thought the character of the labourers was a good deal influenced by the example of their employers, for they were sufficiently keen to observe the conduct of those above them; and they were also influenced to a great extent by the kindness and forbearance shown towards them. He was much obliged to them for listening to this long story: but before he sat down he should feel that he had not satisfied either himself or them unless he proposed the health of their excellent President.

Mr. CATCHPOOL asked what proportion of water there was in the 70,000 gallons of Watford Sewage? because it would be more than 20 gallons to each inhabitant.

Mr. MECHI said that was about the daily supply: the rain fall upon an acre of land was very considerable.

Mr. CATCHPOOL thought the general opinion to be that the sewage of London contained 90 per cent. of water.

Mr. MECHI. More than that: your body contains 75 per cent. of water.

Mr. CATCHPOOL. I don't think it does just now.

The CHAIRMAN proposed "the health of Mr. Catchpool," with thanks to him for lending a field for the ploughing, and also for the magnificent entertainment which he had given them.

Mr. CATCHPOOL returned thanks, and said as long as the Society liked to make use of his farm he should be happy to ... and to find them a luncheon as well. He thought the ploughing that day was the best he had ever seen in his life, and although he should be happy to see the steam engine do the work of those 82 horses, he was afraid that would not be the case at present, though he had no doubt they should eventually find the steam engine of great use to them in ploughing their land when they could not get upon it with horses.

Mr. HILLS inquired of Mr. Mechi whether in his statements respecting steam ploughs he understood him correctly that the work only cost 6s. per acre.

Mr. MECHI said the returns were from 115 different people, and some of course had been much more successful than others. Some, for instance, had paid little or nothing for repairs. The case he particularly alluded to was that of a gentleman who had 1000 acres of land, who had used one of Fowler's machines. The cost of his scarifying which was as deep as ploughing, had not exceeded 6s. per acre after charging every possible expense, interest of money, wear and tear, and every item of outlay. That gentleman formerly kept 15 horses and 30 oxen, and with his steam plough he was able to dispense altogether with the oxen.

Mr. HILLS said if parties would come and plough their land by steam at 6s. per acre they would get plenty of employment.

Mr. MECHI had heard the same observation before; but the makers said it was not their business to find farmers with capital to carry on their business; and if the principle was good for anything as regarded steam engines, they might apply it to every other implement, and ask to be found with ploughs and harrows by merely paying interest for them.

Mr. CATCHPOOL did not think that a satisfactory answer, because they could hire steam threshing machines, and why not steam ploughs? If the work would only cost on an average 6s. per acre, they would make a good profit; he should be happy to pay 10s. an acre for his land.

Mr. MECHI believed that 1*l*. an acre was the price charged.

Mr. HANBURY said he had had a great wish to try the experiment upon one of his farms, and spoke to Mr. Fowler upon the subject. He offered to do it for a guinea per acre, but said it was not their custom to undertake ploughing.

Mr. MECHI said of course that charge included profit.

Mr. CATCHPOOL said it did not include coals.

Mr. MECHI said the inference was that it was more advantageous to buy a steam plough than to hire.

Mr. CATCHPOOL believed that the cost was nearly 1000*l*.

Mr. MECHI thought Fowler's machine would be about 800*l*.

FRAMLINGHAM: *Straw and its Uses.*—Mr. GOWER, of Badingham, said:—The subject of straw at first sight appeared somewhat unattractive, and certainly was not so important as many others connected with farming operations. Nevertheless it was not altogether unimportant, and he was sure they would all agree with him in one thing, that as farmers they could not afford to lose a shilling anywhere, the profits of farming being so very small. Before he entered further into the subject, he wished to point out what he thought was somewhat a waste with regard to straw. It was this, that after it came from the threshing machine they very frequently would see it thrown together on stacks, and consequently very badly taken care of. He did not profess to be altogether exempt from that carelessness himself, but it was very wasteful. The course always ought to be after threshing the corn, to put the stack right, and put the thatch on to keep it dry; for whether it was to be made into manure or used for feeding purposes, it ought to be kept dry. Coming now to what he considered to be the pith and marrow of the whole question, he would draw their attention to the question of the value of the straw, what it was worth to make into manure, and what it was worth to be consumed by sheep or cattle. He would read a letter he had received from Mr. Mechi on the subject.

"Dear Sir,—I consume a great deal of my straw cut up very fine, sifted, and mixed with pulped roots, or pulped green food. A great deal of it is also consumed mixed up in coppers with Rape or Cotton cake, malt combs and bran, and given to the animals warm and moist. I am always short of straw, although I grow a great deal.

"I consider it worth at least 30s. per ton as feeding stuff, and only 10s. a ton as mere manure.

"My horses consume a good deal, mixed with cut hay, and some roots and Bean or Oatmeal.

"I economise my straw as much as possible by putting my animals on boarded floors, or on burned clay ashes, all under cover. I consider the ordinary mode of open yards a most unprofitable waste of food, of straw, and money. The time will come when tenants will be happy to pay their landlords a fair interest for covered yards or boxes.

"My sheep consume a good deal of straw chaff in cold or wet weather. I don't think it pays to sell straw unless you can net 40s. per ton for it, and unless you can get back cheap manure from a town. "J. J. MECHI."

Now that coincided with his (Mr. Gower's) view of the value of straw to a certain extent, but not altogether. His experience of using straw was in an unent state. He kept a great many sheep, and he allowed them, to the 100, from 20 to 30 bushels of roots, and then he turned them back into the yard and fed them on straw, as much as they wanted, and so on alternately. The sheep picked over the straw and ate at least three-quarters of it. He considered Pea straw the most valuable of any for sheep. His estimate of the value of Pea straw was considerable; he thought it worth at least 50s. per ton for sheep, being quite equal to marsh hay. He formerly farmed a considerable quantity of marsh land, and he used then to feed his sheep with marsh hay and with Pea straw, and they liked the Pea straw quite as well, and would do as well with it. Barley straw came next, but it was not so good as Pea; still the sheep ate that very well indeed. He did not himself see the gain in cutting the straw—at all events for sheep, and certainly not for breeding sheep, because he did not want to consume the whole of his straw, only a portion of it, and the sheep would eat three-quarters of it without cutting. His system was, after clearing his barns at harvest time, to have his stacks set as near the barn as he could, and after threshing he had the straw carried direct into the barn—thus keeping it perfectly dry. He afterwards carried it into the yards, and put it into the sheds: he did not allow his sheep to go into the sheds. If the straw was for feeding bullocks, perhaps the system of cutting and mixing with the roots would be preferable, but he could not speak of it from experience. If the bullocks were forward, it would be the more advisable to cut the straw, but for lean stock he did not think there would be any advantage in going to the expense of cutting it. He would now proceed to a calculation of the value of straw to make into manure. Mr. Mechi said it was only worth 10s. per ton, but in that he did not agree. According to his experience a ton of straw would make about six loads of manure. Six loads of manure at 3s. per load would be 18s., and that was what he valued a ton of straw at for purposes of manure, and it would require about 3 tons of straw made into manure to manure an acre of land, that was 18 carts per acre. Well, supposing the straw to be worth 2*l*. per ton, which he felt certain it was for feeding purposes, it would require 6*l*. worth of straw to manure an acre of land, with 10s. more for carting, &c., making it 6*l*. 10s. to manure an acre of land with straw. Now as they were able to procure such a plentiful supply of artificial manure, which, if applied so as to cost 25s. or 30s. per acre, would produce a good crop of root, according to his experience, he thought it was very advisable to consume a great deal of their straw as food for cattle rather than to make it into manure. He had grown Beet himself this year with artificial manure at a cost of 30s. per acre, and very good Beet too; and he had grown good Swedes with nothing but three or four cwt. per acre of Prentice's manure. He therefore thought it was a considerable saving to consume a large quantity of straw as food; they could by that means keep a larger quantity of stock, keeping them as much as possible on Barley, Pea and Bean straw, but Wheat straw was not so good.

Mr. W. JEAFFRESON contended that straw was valuable in itself for purposes of manure independently of its being a vehicle for absorbing and embodying fluid manure. He quite dissented from Mr. Mechi's idea of the straw being worth only 10s. per ton as manure. He thought farmers had been too much accustomed to look upon Wheat straw, considered as manure, as a mere vehicle for absorbing and mixing up manure, for almost all straw, and more especially Wheat straw, which Mr. Gower had spoken of as the least valuable food for feeding purposes, contained silicate of potash and aluminum, and these elements were in the straw in a state to be at once absorbed and assimilated by the growing plant when the straw was used as manure.

Mr. CRACKNELL asked Mr. Gower if he really thought a ton of straw would make six loads of manure?

Mr. GOWER: I do.

Mr. CRACKNELL: I should have thought not much more than half that. Have you tried Bean stalks for sheep?

Mr. GOWER: Yes, but they won't eat so much of that.

Mr. CRACKNELL thought Bean stalks the best kind of straw the sheep could eat.

Mr. ASHFORD did not see how the straw could be worth 3*l*. per ton for feeding purposes. He quite agreed with Mr. Jeaffreson that straw contained the elements which gave good stalks to a corn crop, and it was highly important that they should have that kind of manure which gave them stiff straw. They might have good land and an excellent crop, but if the corn was laid because there were not the elements in the ground to produce a good stalk, the value of the crop would be very materially diminished. They might dress their lands with artificial manure, but by so doing they got too much of certain chemical properties, and not sufficient of others.

The CHAIRMAN quite agreed with Mr. Gower as to the necessity of taking a great deal more care of the straw as it came from the machine: but as to using a large proportion of straw for feeding sheep and cattle, he was not an advocate for doing that, and being consequently put to the necessity of buying artificial manure. He was strongly of opinion that there was no manure they could buy so good as that which came from the farmyard. Artificial manure was so difficult to deal with; it required a scientific knowledge to apply the right sort at the right time and place, and to apportion it properly—a degree of knowledge which he confessed he did not possess. He would rather buy something for his stock, in the shape of cake or other artificial food, than he would let the cattle eat his straw and buy artificial manure for his land. It depended very much upon the season whether many kinds of artificial manure paid for the outlay or not. Some of the artificial manures, especially guano, was in some seasons totally inoperative, and nearly all, except Rape cake, spent themselves the first year, and if the season was a bad one, they lost the manure altogether. The manure of their farmyards, however, did not spend itself the first year, nor anything like it. There was one view of the straw question to which Mr. Gower had not alluded. He thought Mr. Gower would have given them some insight into the treatment of their land, so as to produce a healthy kind of straw, for corn without healthy straw lost a large proportion of its value. They sometimes put a good coat of manure on the land, and yet did not get straw good enough to keep up a healthy head of corn. He quite agreed with Mr. Kent as to the difficulty of speaking to the value of straw for manure; he could not see how it could be said, that so much straw made so much manure, and that that manure was worth 3s. per load; for if that straw was considered to be worth 3s., they were saying nothing about the value of the manure from the farmyard that was mixed with the straw. The more money that was spent in food for the cattle the better was the manure, quite independently of the value of the straw; and good food was often given to cattle for that very purpose, with very little hope of being reimbursed for the extra outlay by the value of the cattle themselves. He had a very high opinion of Bean stalks for feeding; they were excellent for cows in producing good milk, and were in his opinion better than any hay that could be given.

Mr. BARNES: There's no hay like it, Sir.

The CHAIRMAN: I thought you would say so.

Mr. BARNES: Bean stalks I consider quite as good as hay, unless it be a real upland hay; but cows would do much better on Bean stalks than on any meadow or lowland hay.

Mr. JEAFFRESON: Do you cut them?

Mr. BARNES. No. I always make it a rule to let my cows have Bean stalks whilst they are milking, night and morning.

Mr. ASHFORD. I advocate cut straw, but I don't agree with letting the cattle eat it without a large quantity of corn or cake; otherwise your manure will not be good, and you will not grow much corn after a few years. As to the consumption of straw, the more straw is eaten the less manure you will have to carry from the farmyard, but the quality of what you carry will be somewhat better.

Mr. CHAMBERS said Bean stalks made good manure: in fact, he believed there was no straw in the world made manure so strong.

Mr. GOWER said with regard to Mr. Jeaffreson's remarks about Wheat straw containing those qualities that are best

adapted to be returned to the land, it would be remembered that he had not advocated feeding cattle upon Wheat straw. He objected to using Wheat straw for feeding purposes, and agreed with making it into manure—it was the best straw for that purpose. With regard to the value he had put upon the straw for feeding purposes, he might say he had no hay on his farm; he must give 3*l*. per ton for marsh hay, and therefore he thought he was fully justified in saying the straw was worth 2*l*. per ton for feeding purposes. Mr. Goodwyn had no great opinion of artificial manure, but his experience of the use of it had been very favourable to it. He did not say it would always pay, and it was certainly better for root than corn crops, but if they consumed a large quantity of straw for feeding purposes, and thereby lessened their quantity of manure, the deficiency could be abundantly made up by procuring artificial manure. ("No, no.") He would propose an alternate dressing of artificial and of farmyard manure. Farmyard manure lasted considerably longer than artificial, but they could supply artificial manure four times for the cost of one dressing of farm yard manure, and it ought therefore to be better. In answer to Mr. Kent, as to the value he put upon straw for manure, he thought they must look to the cattle themselves for a return for the food they consumed.

Mr. KENT thought his question was not answered. The quality of the farm yard manure they desired to get was a material consideration in the purchase of food for their cattle. They bought cake and corn, not so much for the return they should get in the bullock as for the return they should get in the manure.

Mr. ASHFORD could not see that the straw was worth 2*l*. per ton for feeding; at that rate he thought they should get but a poor return in their sheep. Barley straw was not, in his opinion, worth 2*l*. per ton.

Mr. CHAMBERS was of opinion that two tons of straw were worth 4*l*. in the market.

Mr. D. SMITH, jun., (the Honorary Secretary,) said his practice was to consume as little straw as possible in the way of food, for the reason that he farmed a heavy land farm, and he thought the more long manure he could put into it the better crops he got, for it made the land looser, giving the water a better opportunity of percolating into the drains, and thereby leaving his land in a better state. He, however, quite admitted that straw was of great value for cattle. He had three yards for bullocks; in two the animals were tied up, and in the other they were loose. With the latter he found the dung firmer and they grazed faster, which he attributed to the better opportunity they had of eating the straw than in the other yards. He was of opinion that Wheat straw was better than any other for growing beasts; his cattle always left other straw for Wheat straw, and seemed to relish it most. He was not accustomed to give them Pea or Bean straw; but he did give Pea straw to the sheep and Bean straw to the horses. He did not cut up his straw into chaff for feeding purposes. He did not advocate using too much straw for feeding purposes, as it was required for the manure.

The CHAIRMAN said he must confess he had not been a very large consumer of artificial manures, but he had used enough of it to bite his fingers. Last year was a bad year, and he did not think he gained one sixpence by the use of artificial manure. When they laid out a large sum of money they wanted to have, as far as in human concerns they could have, a reasonable certainty of a return. Of course there was an advantage in using them in wet seasons, when they could not get on the land with carts, but that was only in an extreme case, and 1860 was such a one as they hoped never to see again.

Mr. GOWER said he was a very large sheep keeper, and he kept very few bullocks, and rather than cart his Turnips he turned his sheep upon the field to eat them, and of course if their trampling on it did the ground a great harm, their presence did it much more good another way; and after all the sheep did less harm on the land than the carts.

Mr. GODDARD asked the Chairman if he would put clay and chalk upon the farm to stiffen the growth of the straw in the corn crop.

The CHAIRMAN said he had some stiff land and he covered it with rather a heavy coat of chalky clay, and it gave him a beautiful heavy crop. He supposed it was that there was sometimes a want of chalk on the surface of the land for the straw, but that was certainly the best piece of farming he ever had on that piece of land. He should have repeated the experiment, but he could not get the chalk cheap enough. The subject before them now seemed to resolve itself into a question of artificial manure or artificial food. Of course the whole question must be argued in reference to their own district, which was rather a heavy land district.

Mr. GOWER said if they were grazing bullocks for the sake of making good manure, and looked for their profit in the manure, they had still better keep a kind of stock that would pay more money; for if they lost by all the stock they kept they would certainly be losers, if their manure were ever so good.

Mr. ASHFORD remarked that, in his experience, sheep kept on cake from the time of dipping till the time of lambing would realize the highest prices and were the best.

Mr. GOWER said, the substance of his argument was this, that by consuming a considerable portion of straw for feeding purposes they were enabled to keep more stock, and if they did not make quite so much manure they could make up the deficiency with artificial manure.

The CHAIRMAN: My opinion is the reverse of that. I would rather buy artificial food for my stock, and not consume much straw for food, than I would buy artificial manure.

A desultory discussion then ensued, in the course of which three resolutions were framed, endeavouring to embody the views of different gentlemen present. It was found a somewhat difficult task to express in these resolutions the difference of opinion that existed, for all were agreed that some artificial food was necessary, and all were equally willing to admit that some artificial manure was indispensible, and the difference of opinion was only a question of degree.

The first resolution stood in Mr. Gower's name, and was as follows:—"That a large quantity of straw may be advantageously used as food, and the deficiency of farm-yard manure supplied by artificial manure."

Mr. ASHFORD proposed the following resolution:—"That a considerable quantity of straw may be profitably consumed for food, as it will enable the farmer to consume more cake and corn, and consequently keep more stock and avoid the purchase of so much artificial manure."

The CHAIRMAN proposed a resolution as follows:—"That artificial food should be purchased to enable the farmer to keep more stock; but the straw should be principally used for litter, to absorb and supply manure."

The resolution of Mr. Gower was afterwards amended to meet the views of Mr. D. Smith, when it stood as follows:—"That a larger quantity of straw than usual may be advantageously consumed as food, supplying the deficiency in the manure by giving the stock artificial food, and by supplying the remaining deficiency by the use of artificial manure."

After a short discussion, the motion of Mr. Ashford was carried by a small majority, and the meeting, which had lasted upwards of three hours, and was a very interesting and animated one, broke up. *Abridged from the Ipswich Journal.*

Reviews.

Notes on Fields and Cattle; by the Rev. W. Holt Beever. Chapman and Hall.

This is a gossiping book on Farming matters—the "Notes" of a jaunty, lively pen, generally taken in the field and fold and barn, often however at the fireside, and from the books of past generations as well as of the present. They are not so much the memoranda of a careful student and practical man, as the running commentary of an amusing but well informed companion, who, amidst all the substantial matters of fact of which he speaks, takes especial pains to throw in that which shall maintain the interest of his conversation even for those who care little about the information he is seeking to convey.

We take the following extracts from his chapters on the Cow, the Horse, and the Pig, as illustrative of the style which he adopts.

The Cow.—"However, whether we will it or no, we must believe that there exists a cousinly bond between the savage bull of Central Africa, lying sulkily in wait for the unwary traveller; the cunning bison of the American savannah, so deeply ensconced amidst the reeds of the sunken watercourse as to be distinguishable only by its hump—the hunter's prize; and yon meek-eyed dapple milch cow there, sheltering knee-deep in the brook beneath a verandah of ash branches, reflectively whisking off the flies from her flank with her tail—so utterly regardless, meanwhile, of the aged female above, gathering cresses for the hall, in the red cloak the young ladies have given her. A certain amount of relationship, such as Youatt suggests, one may imagine between the sharp-eyed black group there, the like of which Macgregor drove, that peer down so curiously from beneath the thick fringe upon their foreheads at the intrusive pedestrian, between the long, active bull—that is so apt to cut off or precipitate the salmon-fisher's retreat by the tempest-torn passage of the Awe—and the Urus of the Hercynian forest, mentioned by Cæsar—elephantine, untameable—whose horns, polished and tipped with silver, they were wont to use for the grace-cup at their solemn festivals, and whose direct lineal representative is probably the modern lichen-eating Lithuanian auroch; but how ever the connexion came between the yak of Thibet and the improved Durham cow, it is beyond us to conceive: the one there, fronting so complacently the ferocious gale, on his exalted lair among the pointed rocks—with back exposed to the pitiless storm, bare as the travelled household trunk of a bygone generation—being contented, apparently, with the rug wherewith nature has considerately enwrapped his nether limbs, in everlasting compensation, it would seem, for his obligatory existence on those icy Asian wastes, where litter must be scarce; the other, with such queenly calmness, scarce observant of your entrance—chewing quietly the cud across her recumbent calf, as the world-renowned bailiff of Towneley rolls back the door of her stall—on whose mellow cubic form you can detect no shade or hollow, and the elastic padding of whose meat-clad rib your finger dents in vain."

The Horse.—"Your young ones, you cannot keep too well. When weaned, which should be, both for their own and their mothers' sake, but especially the mothers', about September, give them plenty of new cow's milk, diluted somewhat with water, crushed corn and Bean-flour, with Swedes to make them bone, a few white Peas, and a lock of the sweetest upland hay. This, with gentle caresses, should daily be the lot of the young one in his paddock and shed. After all, what is it but so many pounds put out to interest? Starve a colt in his first year, and he is spoilt for ever. No subsequent treatment, however judicious or generous, can redeem the neglect of his early youth—the sinking loin, the worn look, the spindle shanks, too surely attest the treatment he received in infancy, whatever his original calibre may have been. In fact, whatever be the stock, 'tis keep and shelter that tells in the end. Look even at that draggle-tailed Elspeth upon the stack there, doling out their pittance of mouldy hay to a couple of depressed Hereford heifers. Two years since, by courtesy Maria, she was a stylish housemaid at the castle; to-day she is the desponding partner of a too adventurous young farmer. Better had she known when she was well off. In illustration again, only to-day I noticed a red-breasted flunkey fetch in a pair of grumbling, shiny, broad-backed porkers, which, only two months ago, I deemed too dearly bought for a pound apiece. While on the other side the road, with the last sole surviving item of her starved litter crawling after her, there cropped the scanty Grass a sow, the fac-simile on a giant scale in shape of a young mouse—flap-eared, hairless, lank—what a few months since was a farewell gift pig, bought out of a prize Yorkshire small-breed lot, and presented to an old man in our village by his son, an artizan, upon his leaving for Australia. What a various fate hath befallen them! The one of aristocratic lineage reduced to the poor-house; the other, born in a cot and advanced to aldermanic plenty. On large farms, where the fields are thirty to forty acres each, or upwards, in extent, a team of bullocks pays well, there not being the loss of time in turning on such ground, which is one chief reason of complaint against the practice of ploughing with oxen; but there must be in addition a sufficient number of horses to do the road work."

The Pig.—"'*Sus scrofa, cochon, verrat*, [illegible] character—snout elongated, &c.; specific character [illegible] back bristly, tail hairy, &c.' Shades of Morland [illegible] Fisher Hobbs! Whatever will ye exclaim [illegible] teaching on the part of Mr. Yarrell? How [illegible] have come to disagree hereupon! How diametrically dissimilar is the idiosyncrasy of those sleek [illegible] representatives of porcine civilisation which are [illegible] annually imported from the yards of the famous Crisp for crossing with the produce of Prussia [illegible] Russia, to the probable future damage of the [illegible] trade in bristles. To be practical, however [illegible] interesting native should be, as everything else [illegible] the farm, first-rate—broad, lengthy, deep, [illegible] snouted, of fine bone, with tail well set on; a [illegible] pricked ear, and skin gathering in folds even [illegible] hock to be plumped out before Christmas, and a breed that will fatten on Clover, Grass, or Vetches [illegible] summer, Mangel Wurzel in winter, sliced and [illegible] sprinkled with Barley-meal. Innumerable are [illegible] excellent varieties of breed now-a-days possessing [illegible] characteristics. Wherever he may hail from [illegible] he does lustily on occasion, as you may learn [illegible] self if you attend an embarkation of them at L[illegible] or Cork), whether from Berkshire, Essex, Y[illegible] Suffolk, Tamworth, Windsor, Hampshire, [illegible] each county and district almost having its [illegible] breed, all supremely indebted to a Chinese [illegible] litan forefather—you will have no great difficulty [illegible] obtaining what you want. To Herefordshire [illegible] the pork provision when the Duke was in the [illegible] sula. Grudge not a few extra shillings (which you may easily save by travelling third-class a journey [illegible] two by way of change) in the purchase of an extra [illegible] sow-in-pig to begin with. It is loss of time [illegible] second-rate stock, however excellent your [illegible] may be, with the purpose of improving it. [illegible] far as you can on the shoulders of others who [illegible] pioneered before you, and then take up the path [illegible] will be passed in turn, never fear, by some one [illegible] small boy munching at a crust. Start, however [illegible] forward as you can, and do your best while your [illegible] lasts."

Farm Memoranda.

AMERICAN BUTTER DAIRIES.—E. CROPOOT, Turin, [illegible] of butter exhibited:—

This butter is selected from my dairy of [illegible] 3,500 lbs., made from 25 cows. My method [illegible] manufacture is:—1. I strain the milk into [illegible] pans, about three inches deep, and set in a cool place, to stand till ready to skim, which is done as soon as it commences to curdle. Stir the cream after each skimming, and keep it in large coolers, which are set (in hot weather) in a tub of cold water over night before churning. In hot weather, we churn very early in the morning, setting the churn in a tub of very cold water. We have no trouble with the butter [illegible] soft. 2d. When the butter is well gathered, we take it out into a large bowl, and rinse it with cold water until the butter milk is all out; then salt, with [illegible] salt, to suit the taste; then set in a cool cellar 24 [illegible] then rework and pack. We use no other substance [illegible] salt to preserve the butter. My milk room is [illegible] north side of other buildings, and shaded by [illegible] use a dash churn, propelled by a dog. We churn [illegible] 30 lbs. at a time.

HIRAM OLMSTEAD, Walton, Delaware County [illegible]

The whole number of cows milked, from which [illegible] has been made the past season, has been twelve [illegible] five to 13 years old, and two three years old [illegible] two years old; making 15 in all, old and young [illegible] cows came in between the middle of March and first of June, and are of the native breed, except [illegible] grade Durham and three grade Devons. They [illegible] been wintered on hay and straw. No grain [illegible] fed, but each cow has had about eight quarts [illegible] during that part of the winter that they were [illegible]

Butter sold in New York, 2,728 lbs. ..	dols. [illegible]
Consumed in family, and remaining unsold, 517 lbs., at 21 cts., ...	" [illegible]
Value of milk fed to hogs, after deducting other feed	" [illegible]
Value of milk fed to calves	" [illegible]
Thirteen deacon skins, at 87½ cts.	" [illegible]
Total income	dols. [illegible]
Less packages, ...	dols. 24 35
salt, ...	" 2 06
freight, cartage and commissions,	" 33 16
	[illegible]
Net income from all sources	dols. [illegible]

Whole amount of butter made, 3,245 lbs. Average to each cow, after deducting for heifers, 229 lbs. [illegible] income from each cow, after deducting for heifers [illegible] 54·19 dols. The butter sold for a fraction over 22 [illegible] per lb., it being 2 cents less than the dairy has sold [illegible] in six or eight years. A deduction of one-third [illegible] 2-year-olds, and one-fourth for 3-year-olds, is made [illegible] the statement above.

EDWARD HOYT'S *Butter Dairy* consisted of six [illegible] cows; two of them were seven years old, one six, [illegible] five, and two 3-year-old heifers, and calved between the 10th and 26th of March. The said cows were wintered on hay, with a few roots; after they came in they received one pint of corn and Oatmeal each, per day

till Grass; during the summer their feed was Grass only. The whole amount of butter made from these six cows the past year was 1230 lbs.; being an average on each of the six cows, of 205 lbs. to each cow; or if one quarter be deducted for each of the two 3-year-old heifers, then the average quantity on five and a half cows would be 223 7-11 lbs. to each cow. Net proceeds of the dairy, an average on each of the six cows, 51·37 dols.; or if one-fourth be deducted for the two heifers, the average on five and a half cows would be 56·04 dols. to the cow. The butter, in the above statement, was manufactured: My cows are milked regularly each day, at a stated period; each cow is milked by the same hand, and the milk is drawn as quickly as is consistent with the quiet and comfort of the cow; the milk is strained into large pans, about two inches deep, and set in a cool buttery till it sours or begins to lopper; the cream is then taken off, and the churning is usually done each morning, with a dash churn, attached to a tread-wheel, propelled by sheep power; the cream is tempered by a thermometer, at about 62° to 64°; the butter is cleared of the buttermilk by washing in cold water, then salted, by judgment, with Ashton salt, to suit the market, probably at the rate of about one ounce to the pound, and well worked in; allowed to stand in a cool cellar till the next day; it is again worked and packed down solid in the firkin, and when full, covered with a clean cloth, and the chime filled with fine salt and brine, and kept full till ready for market; but care should be taken that no part of the cloth hangs over the edge of the firkin, to act as a siphon to conduct off the brine and soil the package; cover the firkin with a smooth and clean flat stone, and keep in a cool, dry cellar, where there is not too much air, and the work is done.

Zadock Pratt's Dairy Farm:—

	1857	1858	1859
Fifty cows realized.. ..	6500 lbs.	8050 lbs.	8300 lbs.
Average number of lbs. to each cow	130	161	166

My butter netted me this year	dols. 2070 00
Hogs' weight, 6455 lbs.	418 00
Total	dols. 2488 00
Deduct interest, labour, and repairs ..	1550 00
Making the net gain for the year ..	dols. 938 00

Abridged from Report of New York Agricultural Society.

STATE OF THE WEATHER—BERKSHIRE.

For the week that ended December 26; observed by Mr. J. B. Spearing, Moulsford, Wallingford.

		Temperature of Air.				Temperature of Soil 1 foot below the Surface.	Rain.	Wind.	Barometer.
		Max. in Sun.	Max. in Shade.	Min.	Mean.				
		Degs.	Degs.	Degs.	Degs.	Degs.	Ins.		
Friday	20 ..	50.0	42.0	31.5	38.7	41.0	..	N.E.	30.31
Saturday	21 ..	37.0	40.0	33.5	36.0	43.0	..	N.E.	30.28
Sunday	22 ..	34.0	38.0	34.6	35.5	42.5	—	N.E.	30.10
Monday	23 ..	37.0	40.0	35.0	36.7	42.0	..	N.E.	30.23
Tuesday	24 ..	43.0	43.0	32.0	37.5	42.0	..	N.E.	30.22
Wednesday	25 ..	53.0	41.0	28.0	37.5	41.0	..	S.E.	30.07
Thursday	26 ..	50.0	39.0	26.5	32.5	40.0	..	N.W.	30.13

The readings are taken at 9 A.M. on the days named, and the Maxima and Minima recorded relate, therefore, to the preceding 24 hours. The Thermometers are placed 4 feet from the ground. The Rain-gauge is 7 feet from the ground.

Notices to Correspondents.

Manure for Pasture: *A Londoner.* In the absence of farm yard or town dung, probably bone dust applied now will be most beneficial to the Grass. If you get some well broken and mix it with some damp mould to heat and rot before applying, it will be more immediately active: 16 bushels an acre are a good dressing.—The Thorn and hedges of it are to be grown just as any other plant is cultivated, by planting in land properly prepared, and taking care that no other plant is growing with it. Clean the hedge, stir the earth about the roots, and cover them up with good compost mould.

Poultry.—The Christmas market differs from all others. It lasts a week, and till Christmas morning itself there is a large sale for everything. Those who witness the vast arrivals of goods in the morning between six and ten o'clock would believe it impossible they could be sold while good; especially seeing all are very perishable, and must be disposed of within a given time. On one morning in this week the Great Western Railway delivered 104 tons of poultry. An unpractised eye would believe that one morning's arrivals would be more than enough for the metropolis for a week; but the mistake would be seen when, spite of continuous arrivals, it would be found the bulk on hand steadily diminished. The truth is, the supply is heaped wholesale on one small spot, while for the purposes of retail it is scattered in small lots all over this great metropolis. Arrivals generally cease on the morning of the 24th. Up to that time every hamper that is unpacked is replaced by a full one, but then the decrease is steady, and at 4 o'clock in the afternoon the market would not be known as the same that was so encumbered in the morning. There has been a good supply and a good trade. There were, as there always are, fluctuations; and, on the whole, we do not think Poultry was as dear as it has been for the last two years; it, however, fetched its value. A few very large Turkeys made large prices, but they would form no guide for general sales.

Cock Turkeys	Each	10s. 0d.	to 21s. 0d.
Hen ditto	,,	6 0	,, 8 0
Capons	,,	6 0	,, 6 6
Fowls	,,	3 6	,, 4 0
Chickens	,,	2 0	,, 2 8
Geese	,,	6 0	,, 7 6
Partridges	,,	1 9	,, 2 0
Hares	,,	2 6	,, 3 0
Rabbits	,,	1 4	,, 1 5
Wild ditto	,,	0 8	,, 0 9
Pigeons	,,	0 8	,, 0 9

HOT-WATER APPARATUS.

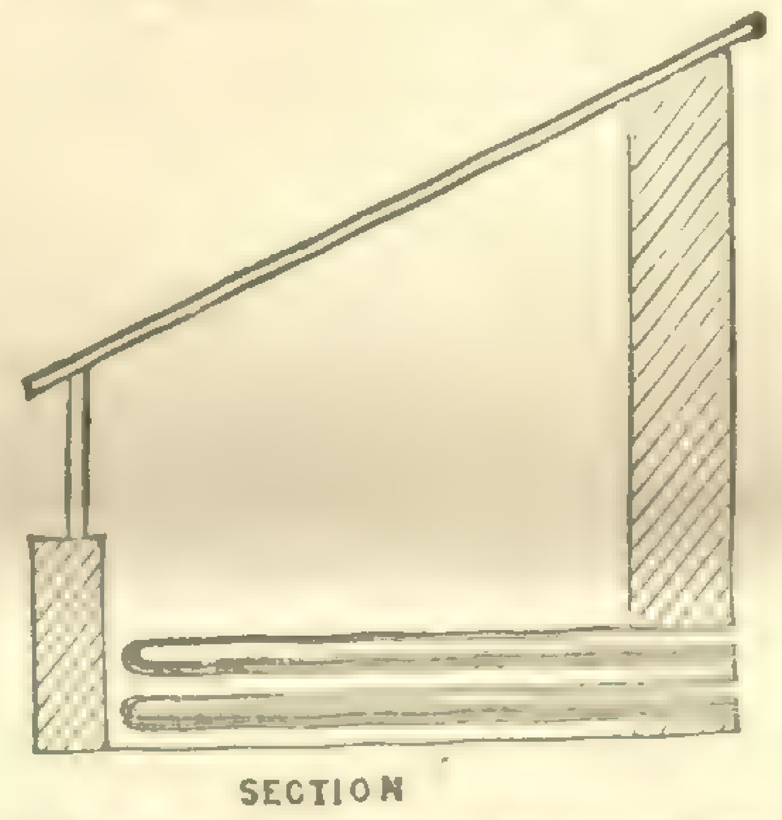
J. JONES

BEGS TO OFFER A COMPLETE

Hot-Water Apparatus for Houses

according to the following Plans, delivered Free to any Railway Station in England.

Plan No. 1.

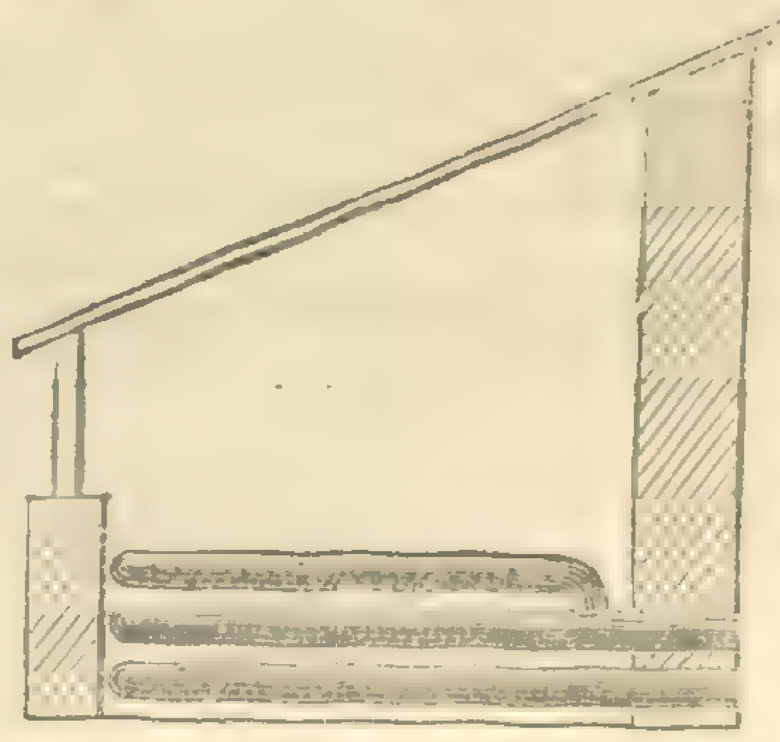


Two 4-inch pipes along front and one end of house.

SECTION

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£8 0 0	£8 12 6
20 feet by 10 feet ..	,,	8 10 0	9 0 0
25 feet by 12 feet ..	,,	10 0 0	10 10 0
30 feet by 12 feet ..	,,	11 10 0	12 0 0
40 feet by 15 feet ..	,,	16 10 0	17 0 0
50 feet by 15 feet ..		18 10 0	20 0 0

Plan No. 2.

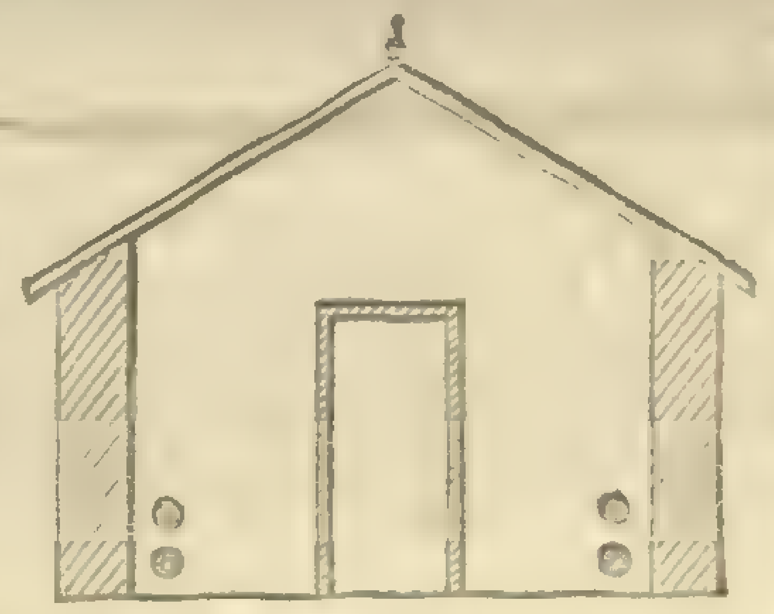


Three 4-inch pipes along front and one end of house.

SECTION

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£11 10 0	£12 0 0
20 feet by 10 feet ..	,,	12 10 0	13 0 0
25 feet by 12 feet ..	,,	14 10 0	15 0 0
30 feet by 12 feet ..	,,	16 10 0	17 0 0
40 feet by 15 feet ..	,,	22 0 0	23 0 0
50 feet by 15 feet ..	,,	24 10 0	26 0 0

Plan No. 3.

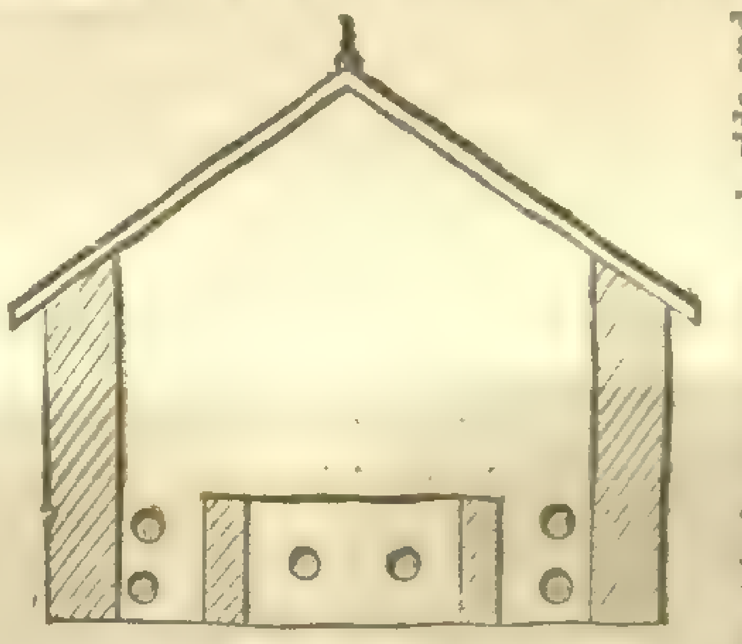


Two 4-inch pipes along each side and one end of house.

SECTION.

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£12 10 0	£13 0 0
20 feet by 10 feet ..	,,	13 10 0	14 0 0
25 feet by 12 feet ..	,,	16 10 0	17 0 0
30 feet by 12 feet ..	,,	19 0 0	20 0 0
40 feet by 15 feet ..	,,	24 10 0	25 10 0
50 feet by 15 feet ..	,,	27 0 0	28 10 0

Plan No. 4.



Two 4-inch pipes along each side and one end of house, and two 4-inch pipes in pit for bottom heat.

SECTION

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£16 0 0	£17 0 0
20 feet by 10 feet ..	,,	17 10 0	18 10 0
25 feet by 12 feet ..	,,	21 10 0	22 10 0
30 feet by 12 feet ..	,,	25 0 0	26 0 0
40 feet by 15 feet ..	,,	31 0 0	32 0 0
50 feet by 15 feet ..	,,	33 10 0	35 0 0

The above prices include Boiler, strong Furnace-doors, Bars, Plate, Soot-doors, Damper, and Supply Cistern-pipes of 4-inch diameter, Elbows, &c.; all of the best quality.

Delivered free to any Railway Station in England. Terms: Nett Cash.

Estimates will be sent for the work fixed complete, or further particulars on application to

J. Jones, Hot-Water Apparatus Manufacturer, 6, Bankside, London, S.E.

HOTHOUSES for the MILLION.—On the principle invented and patented by Sir Joseph Paxton, M.P., combining simplicity, cheapness, excellence, and durability, being capable of fulfilling, in the most perfect manner, all the requirements of Horticulture. LEAN-TO-HOUSES, 30 feet in length, can be had for less than 17*l*. SPAN ROOF, 30 feet in length, for 33*l*.; and all other dimensions at equally low prices. Delivered free to any Railway Station round London.

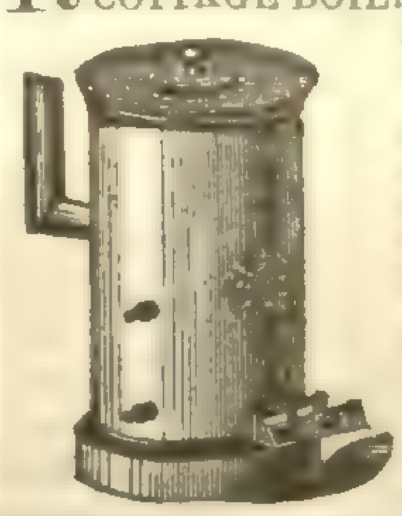
Illustrated Circulars, with Lists of Prices, can be had on prepaid application to Samuel Hereman, 7, Pall Mall East, London.

JOHN SHEWEN, Sevenoaks, Kent, Manufacturer of all kinds of HOTWATER APPARATUS for Horticultural Purposes, Public Buildings, Dwelling Houses, and Offices, on the most improved principles, and of Rogers's Conical and the Improved Corrugated Saddle Boiler.

HOT-WATER PIPES, at Wholesale Prices, with Elbows, Syphons, Tee Pipes, and every other connection. Wrought and Cast-iron Boilers, Saddle, Conical, Cylinder, and Elliptic, from 24*s*. each. Improved Boilers and Iron Stands to use without brickwork, 50*s*. each. Valves from 12*s*. 6*d*. each. Beck's Patent Valves. Furnace Doors, Furnace Bars, Supply Cisterns, and Builders' Castings of every description in stock, at

Mr. Lynch White's Iron Wharf, Upper Ground Street, Blackfriars Bridge, London, S.

RIDDELL'S PATENT SLOW-COMBUSTION COTTAGE BOILER for HEATING CONSERVATORIES, ENTRANCE HALLS, BATHS, &c., by the Circulation of Hot Water.



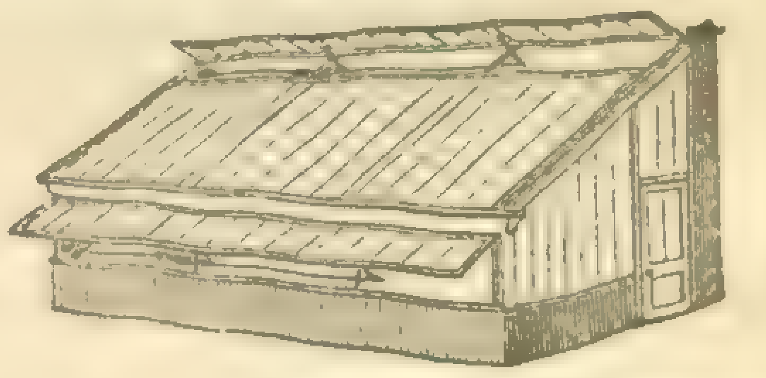
Requires no brickwork setting; will keep in action from 12 to 18 hours without attention, at an expense of about 3*d*. per day. Is perfectly safe, requires no additional building, and may be seen in operation daily at the

Patentee's Warehouse, 155, Cheapside, London, E.C.

Price complete from 3*l*. 10*s*.

Illustrated Prospectus free, and Estimates prepared for Erecting Hot-Water Apparatus of any magnitude.

T. G. MESSENGER, Horticultural Builder and Hot-Water Apparatus Manufacturer, Loughborough.



T. G. M.'s Patented DIVISIONLESS HORTICULTURAL BUILDINGS are cheaper, more durable, and lighter in appearance than any other made. The Ventilation is effected by a simple and much admired mechanical arrangement.

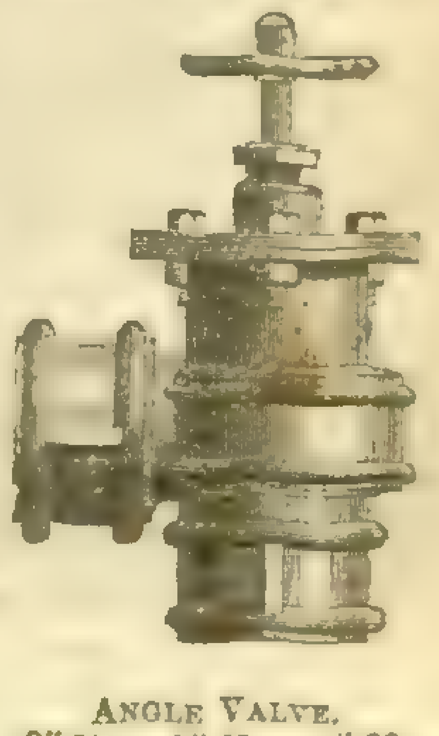
T. G. M.'s Patented TRIANGULAR TUBULAR BOILER for Heating Buildings with Hot Water has been extensively adopted by gentlemen who are willing to testify to its great efficiency and economy of fuel. Plans, Estimates, Testimonials, and every information sent free upon application.

Horticultural Works, Danvers Street, Chelsea, S.W

BECK'S PATENT

HOT WATER VALVE.

Horizontal Valve.
2" 18*s*. 6*d*.; 3" 25*s*.; 4" 30*s*.



Angle Valve.
2" 17*s*.; 3" 23*s*.; 4" 28*s*.

JAMES GRAY, Sole Agent, begs to call attention to this most simple and perfect Valve ever invented. It is perfectly water-tight, and is never liable to get out of order, or to get fixed by standing.

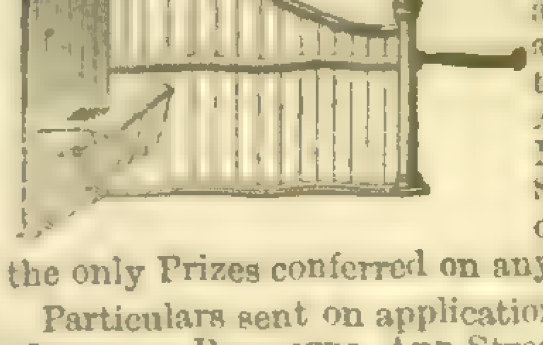
To Architects, Engineers, Gardeners, & Others.—Beck's Patent Valve has been submitted to several of the most scientific men of the day, and has invariably met with unqualified approval. A liberal Discount to the Trade.

Conservatories, Greenhouses, Vineries, and every description of Hothouse erected on the most improved principles, and of best materials, at the lowest possible price consistent with good workmanship.

Heating by Hot Water in all its branches. Boilers of every approved description, Tubular, Saddle, Conical, &c.

James Gray, Horticultural Works, Danvers Street, Paulton's Square, King's Road, Chelsea, S.W.

MUSGRAVE'S PATENT STABLE FITTINGS and HARMLESS LOOSE BOXES, PATENT IRON COW HOUSE FITTINGS, and IRON PIGGERIES.



These inventions are recommended as possessing numerous advantages not to be found in anything hitherto made. At the late Meeting of the Royal Agricultural Society at Leeds, Musgrave Brothers received a Silver Medal, and two Awards of "Highly Commended," being the only Prizes conferred on any competitor in this class.

Particulars sent on application to the Inventors and Makers, Musgrave Brothers, Ann Street Iron Works, Belfast.

FOWLER'S STEAM PLOUGHING AND CULTIVATING PATENTS.

RANSOMES & SIMS

HAVE the pleasure to announce that they have arranged with JNO. FOWLER for the use of the above PATENTS, and they will answer any inquiries respecting them, and execute any Orders promptly.

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	Number of Circles of Tubes.	Number of Tubes.	Surface of Boiler in feet exposed to the action of fire. Feet.
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WEEKS'S No. 3 BOILERS "	1	23	80
WEEKS'S No. 4 BOILERS "	2	40	152
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The Gardeners' Chronicle Newspaper.

SATURDAY, JANUARY 5, 1861.

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Full particulars as to the practical utility and universal approval of this invaluable machine free by post.

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THE FAIRY BOUQUET.—This delicious perfume was originally discovered by one of Titama's principal attendants. It is made from wild flowers, culled by fairy hands from "the bank whereon the wild Thyme grows." The authenticity of the recipe is vouched for with the same degree of certainty as is the existence of Titania herself. It is now prepared solely by METCALFE, BINGLEY, & Co., Perfumers, &c., 130 B and 131, Oxford Street, London, W.—In bottles, 2*s.*, 3*s.* 6*d.*, and 5*s.* each.

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THE EDINBURGH REVIEW, No. CCXXIX. ADVERTISEMENTS intended for insertion are requested to be forwarded to the Publishers immediately. ADVERTISEMENTS and BILLS cannot be received later than FRIDAY NEXT, the 11th inst.

London: LONGMAN & Co., 39, Paternoster Row, E C.

THE FLORIST, FRUITIST, AND GARDEN MISCELLANY. By CHARLES TURNER and J. SPENCER, Monthly. Coloured Plates and Woodcuts, Price 1*s.* First Number for 1861 was published on January 1st. Volumes for 1860 and previous years neatly bound now ready, each complete in itself, price 13*s.* 6*d.* For New Year's Gifts nothing could be more suitable.—May be had at the "Florist" Office, 30, Southampton Street, Strand, W C., and all Booksellers.

News of the Week.

THE EMPEROR OF THE FRENCH received the Diplomatic Corps at the Tuileries on New Year's Day, when Lord COWLEY, the British Ambassador, in the absence of the Papal Nuncio, offered the customary congratulations to HIS MAJESTY. The EMPEROR in reply thanked the Ambassadors for the good wishes they had expressed, and said that he regarded the future with confidence, "being convinced that the friendly understand-

ing between the Powers will maintain peace, which is the objectof all his desires."

The KING OF PRUSSIA died on Wednesday at Sans-Souci, after a lingering illness which had long incapacitated him for public affairs. His Majesty is succeeded by his brother the PRINCE REGENT, father of PRINCE FREDERICK WILLIAM, the husband of our PRINCESS ROYAL. The new KING ascends the throne by the title of WILLIAM V.

A despatch from Vienna informs us that Count TELEKI has been set at liberty by the EMPEROR OF AUSTRIA. HIS MAJESTY on Tuesday summoned the Count to his presence, and announced that he would grant him a full and complete pardon on condition of his conducting himself henceforth as a faithful subject. Count TELEKI promised to give up all his political connections abroad, to remain within the frontiers of the Austrian empire, and to abstain from all participation in public affairs. As a further concession to Hungary, the EMPEROR has issued an imperial decree unconditionally incorporating the Woiwodina and the Banat with the Hungarian kingdom. HIS MAJESTY has also ordered the immediate organisation of the Chancery and "Guberneum" of Transylvania, and the assembling of a conference of the most eminent persons from the various classes of the different nationalities and religious confessions to deliberate on the early organisation of the Transylvanian Diet. Accounts from Prague state that placards, in the Bohemian language, had been posted up in the streets of that city, advising the Czechs to remain quiet for the present, as the moment for decisive action has not arrived, to follow the example of the Hungarians, who have nearly attained their object, and, finally, to trust in the EMPEROR OF THE FRENCH. Imperial decrees have been issued ordering that the forced currency of paper money in Lombardo-Venetia shall be maintained, and that the dividends on the national loan, which are bound to be paid in silver, will be arbitrarily met in paper at the exchange of 140.

King VICTOR EMMANUEL arrived at Turin on Saturday evening from Naples, and was received with great enthusiasm. HIS MAJESTY has appointed Prince CARIGNAN to succeed Signor FARINI as his Lieutenant at Naples, with Commander NIGRA as Councillor and responsible Minister. The Sardinian Chamber of Deputies has been dissolved, and a royal decree has been issued appointing the 3rd of February for the elections for the new Italian Parliament, the sittings of which are to commence on the 18th of February. The siege of Gaeta continues day and night without intermission. The report that the French fleet had received orders to leave is not confirmed, and it is now said that the Admiral has been instructed to inform the KING that the EMPEROR NAPOLEON, in agreement with the Northern Powers, will continue to oppose the effective blockade of Gaeta. The report of the QUEEN's departure also appears to be unfounded.

The accounts from the United States are daily becoming of a graver character. General CASS has resigned the Secretaryship of State, in consequence of the President's refusal to send reinforcements to the federal garrison in South Carolina, and the Southern members of Congress have signed a manifesto declaring that the day of compromise has passed, and that nothing can avert secession. President BUCHANAN has issued a proclamation appointing the 4th inst. as a day of humiliation and prayer.

The Revenue returns for the year and quarter ended the 31st ult. were published on Tuesday. The total income for the year was 71,967,495*l.*, being an increase of 5,897,026*l.*, on the income of 1859. The increase on the quarter, as compared with the corresponding quarter of 1859, was 1,157,518*l.*

Home News.

THE COURT.—The Queen, Prince Consort, the Prince of Wales and the other members of the Royal family left Windsor on Wednesday for Osborne, where they still remain. On Friday morning the Queen and Prince Consort, with Princess Helena, went out sleighing in the park. Princess Alice, Princess Louisa, and Prince Louis of Hesse followed in a second sleigh. The Prince of Wales went out shooting. In the evening Prince Louis of Hesse took leave of her Majesty and the Royal family, and left the Castle for the continent. On Saturday morning, the Queen, with Princess Alice, went out in a sledge, driven by General Sir Edward Bowater. Prince Arthur and Prince Leopold followed in a second sledge. The Prince Consort, accompanied by the Prince of Wales and Prince of Leiningen, went out shooting. The Duke of Nemours with the Comte d'Eu, the Duc d'Alençon, and Princess Marguerite, and the Prince and Princess de Joinville, with Princess Frances of Orleans, visited the Queen and took luncheon. Mr. Henry Loch, private secretary to the Earl of Elgin, arrived on a visit. On Sunday morning the Queen and Prince Consort, the Prince of Wales, Prince Arthur, Princesses Alice and Helena, the Prince and Princess of Leiningen, attended Divine service in the private chapel. The Rev. W. R. Jolly preached the sermon. The Duchess of Kent and the Prince and Princess of Leiningen visited her Majesty and took luncheon. Mr. Loch left the Castle. On Monday morning the Queen accompanied by Princess Alice walked in the Home Park, and visited the Duchess of Kent at Frogmore. The Prince Consort went to Cambridge, and visited Madingley Hall, which has been engaged as a residence for the Prince of Wales, returning to the Castle in the afternoon. The Prince of Wales rode out on horseback. The Duke of Somerset, the Hon. Major Anson, and the Right Hon. C. P. Villiers arrived on a visit. On Tuesday, being New Year's Day, the Band of the Horse Guards played a selection of favourite airs on the East Terrace at 7 in the morning. The Band of the Scots Fusilier Guards played under the Duchess of Kent's window at Frogmore about the same time. The Queen's annual distribution of food and clothing to about 660 poor persons of the Windsor and Clewer parishes, took place in the course of the morning in the Riding House of the Castle, in the presence of her Majesty, the Prince Consort and the Royal Family. After the distribution the Queen and Prince Consort, with Prince Arthur, the Princesses Alice, Helena, Louisa and Beatrice, paid a visit to the Duchess of Kent at Frogmore. The Duchess of Kent and the Prince and Princess of Leiningen afterwards visited the Queen and took luncheon. The Duke of Somerset, the Hon. Major Anson, and the Right Hon. C. P. Villiers left the Castle. The Right Hon. Sir Charles Wood arrived on a visit. In the evening the Queen had a dinner party. On Wednesday morning the Queen and Prince Consort, accompanied by the Prince of Wales, Princes Arthur and Leopold, and the Princesses Alice, Helena, Louisa, and Beatrice, left Windsor for Osborne, travelling to Gosport by a special train of the South-Western Railway. Her Majesty and the Royal family arrived at Osborne at half-past 2 o'clock.

PRINCE LOUIS OF HESSE left Windsor Castle on Friday evening for Dover, where he embarked for Ostend on his way to Berlin.

PRINCE ALFRED, after spending some days with the Prince and Princess Frederick William at Berlin, left that capital on Monday for Coburg, on a visit to his uncle, the reigning Duke.

PARLIAMENTARY MOVEMENTS.—Mr. Sidney Herbert has issued an address to the electors of South Wilts, announcing his intention to resign his seat, the incessant attendance and late hours of the House of Commons, added to the labour of the War department, having proved too much for his strength. It is understood that the right hon. gentleman, who will succeed to the Earldom of Pembroke on the death of his half brother, the present Earl, is to be raised at once to the House of Peers. He will not however resign his office of Secretary for War, but, in consequence of the necessity of having a representative of the Department in the House of Commons, the public will lose the benefit of Earl de Grey's services as Under Secretary for War.

THE REVENUE.—The Revenue Returns for the year and quarter ended the 31st of December show an increase of 5,897,026*l.* on the year, and an increase of 1,157,518*l.* on the quarter. The year's account shows an increase in the Excise of 28,000*l.*; Stamps, 308,777*l.*; Property Tax, 6,824,710; Post Office, 195,000*l.*; Crown Lands 7489*l.*; Miscellaneous, 430,734*l.*; and a decrease in the Customs of 1,792,184; Taxes, 105,000. The quarter's account shows an increase in the Stamps of 18,000*l.*; Property Tax, 2,592,000*l.*; Post Office, 50,000*l.*; and a decrease in the Customs of 364,000*l.*; Excise, 1,001,000*l.*; Taxes, 131,000*l.*; Miscellaneous, 6182*l.* The total income for the year was 71,967,495*l.*, against 66,070,469*l.* for the year 1859, showing a net increase of 5,897,026*l.*

THE VOLUNTEER MOVEMENT.—A meeting of influential gentlemen connected with Cumberland and Westmoreland was held at Penrith on Friday, Sir George Musgrave in the chair, when it was resolved unanimously to form a Rifle Association for Cumberland and Westmoreland, to embrace the Militia, Yeomanry, Artillery, and Rifles, and a committee was appointed to carry out the resolution.—A county meeting convened by the Lord Lieutenant, was held on the 27th ult. at the Shire Hall, Stafford, Lord Hatherton in the chair, at which it was resolved to establish a Rifle Association for the county. The Earl of Shrewsbury and Talbot, Lord Hatherton, Lord Ingestre, M.P., and the Right Hon. C. B. Adderley, M.P., announced their intention of contributing 20*l.* a year for five years to the funds of the association, and the Earl of Harrowby moved and the Earl of Li... seconded a resolution recommending all persons w... have not been able to enter any of the corps to for... subscription for the purpose of offering yearly prizes competition among the best shots selected from ... company. During the meeting the chairman st... that the Rifle Corps of Staffordshire now compr... companies, besides one Artillery company, the ... of raising and equipping which have amounted ... least 30,000*l.*—A county meeting was held on Fr... at the Exchange Rooms, Preston, the Earl of Se..., Lord Lieutenant, in the chair, at which it was reso... to form a Rifle Association for Lancashire. The mee... was addressed by the Earl of Sefton, Marquis of ...tington, Lord Grey de Wilton, Lord Stanley, Ho... Egerton, the High Sheriff, General Sir J. Yorke Sc...lett, Sir T. Hesketh, Major Gray, M.P., the Mayors ... Manchester, Liverpool, and Preston, and other gentle... men, and a committee was appointed to carry the reso...lution into effect. The Lord-Lieutenant has since issued a circular to the Commanders of the Lancash... battalions impressing upon them the advisability ... assimilating the uniform.—The Cheshire Associa...tion, formed at the meeting at Chester on ... 1st December, the Lord-Lieutenant the Mar... of Westminster in the chair, is going on sa...factorily. Earl Grosvenor, M.P., has been appoin... chairman of the council, and Mr. John Laird, de... chairman. The first annual meeting is to ... place in August or September next, in the ne...bourhood of Stockport or Macclesfield. The ... have been adopted by the National Rifle As...ciation as the rules for all counties in England p...posing to become connected with the parent associa...

Foreign.

FRANCE.—On New Year's Day the Emperor rece... the Corps Diplomatique and the great public bodies ... the Tuileries. Lord Cowley, the British Ambassador, in the name of the Diplomatic Body offered th... customary congratulations to his Majesty in the follow...ing terms:—

"SIRE,—The members of the Diplomatic Body assem... here have the honour to offer to your Majesty, through m... the expression of their respectful homage on the occasion ... the New Year. The Diplomatic Body, Sire, is always hap... to have an opportunity of renewing its wishes for ... happiness of your Majesty, and of your august family."

The Emperor replied as follows:—

"I thank the Diplomatic Body for the kind wishes it ... just addressed to me. I look with confidence to the future, persuaded that the friendly understanding of the Great Powers will assure the maintenance of peace, which is the object of all my desires."

The Nuncio, who on all these occasions heads the foreign envoys, was absent in Italy; but the Pope was represented by a high ecclesiastic, to whom the Emperor said but a few words. His Majesty also addressed a few words to the Austrian Ambassador, in which he congratulated the Emperor Francis Joseph on the reforms which promised to reconcile the people of his country with the Crown. With the Spanish Ambassador the Emperor had a long conversation, which ... supposed to have been about Gaeta. His Majesty finally held a long discourse with Vefyk Effendi, ... Turkish Ambassador, which is said to have been friendly and conciliatory. To the President of the Corps Legislatif, the Emperor said, "I have always reckoned upon the concurrence of the Corps Legislatif."—The *Moniteur* contains a long list of names of civilians ... soldiers upon whom are conferred decorations ... the Legion of Honour, including those who particularly distinguished themselves during the late operations in China; the Grand Cross of the Order ... conferred on General Montauban, the Commander-in-Chief of the expedition, and on the Russian General Ignatieff, as an acknowledgment of the willing assistance which he gave to the French Ambassador during ... negotiation of the treaty. Count d'Escayrec de Lauture, one of the prisoners who narrowly escaped death ... hands of the Chinese, has been nominated a Commander of the Order. Among the civilians honoured with the decoration, is M. Michel Chevalier, Senator, who has been raised to the dignity of Grand Officer ... the Legion of Honour.—The *Moniteur* also publishes a circular which Count de Persigny has addressed to the Prefects for the purpose of removing doubts ... to the manner in which the nationality of British subjects is to be proved. Count de Persigny says the mere declaration on the part of British subjects will ... sufficient, and that if they wish to retain the advantage which the passport conferred for visiting public monuments, they have only to present their ordinary visiting cards to the officials at the Custom House, who will stamp them and thereby make them available during the residence of the owners ... France.—The *Moniteur* of Sunday published a resolution of the Minister of the Interior, authorizing the Directors General of his department to give decisions in affairs of minor importance. The Directors-General will also constitute a superior Council for deliberation on all important questions. This Council will assemble twice a week, under the presidency of the Minister ... the Interior.—The Emperor last week caused strong remonstrances to be made both to the Austrian and Saxon Ministers in Paris on the subject of Cra...

Teleki's arrest, and the conduct of the latter Government was commented upon in terms of special [illegible].—Accounts from Toulon state that orders arrived there on Monday from Paris to despatch provisions for one month to the squadron off Gaeta. The Duke of Malakoff embarked on the 30th ult. for Algiers. The marshal had paid a visit before his departure to the Prince of Wurtemberg, who has just returned from a tour in Algeria.—The Bank of France on Wednesday raised its rate of discount from 4½ to 5½ per cent. In its daily political review the *Moniteur* states that financial events in foreign countries have influenced the French money market in a manner to be regretted, but declares the report that the French Government is under the necessity of having recourse to a new loan to be without any foundation. The *Moniteur* also states that the amount of Treasury Bonds does not at the present moment exceed 75,000,000f. A letter from Messrs. Mirès & Co. has been published announcing the extension of the subscription to the Turkish loan, and stating that 120,620 bonds have already been subscribed for.—Mr. Cobden has arrived at Algiers, and has been visited by the Chamber of Commerce and the principal merchants, who expressed their gratitude to him, on behalf of the people of Algeria, for his exertions in the negotiation of the Treaty of Commerce with England. Mr. Cobden in returning thanks for the honour conferred upon him gave a rapid sketch of the principles of the Liberal school, during which he did due homage to the generous plans of Napoleon III., and spoke highly of the manner in which M. Rouher, the Minister of Commerce, had performed his part in the late negotiations.—Delegates from the working men in some parts of England have arrived in Paris with the view of organising a grand excursion to their fellow workmen in Paris. It is proposed that the visit shall take place about Easter or Whitsuntide, that the married men shall be accompanied by their wives, and that the time allowed shall be no more than will enable the strangers to see the curiosities of Paris. Measures are to be taken to provide beforehand every accommodation, and prevent the recurrence of the mistakes which signalised the visit of the Orpheonists to England. The proposed excursion is said to be popular with the Parisians.—M. de Saint-Ange, one of the writers in the *Débats* remarkable for his talent in treating military questions, died a few days since from an attack of apoplexy.

SPAIN.—The organ of the Liberal party expresses great satisfaction at the appointment of Sir J. Crampton as English Minister at Madrid. The Moors are making great efforts to collect the necessary funds for the payment of the second instalment of the indemnity. The *España* states that Messrs. Rothschild have refused to comply with a request addressed to them by the Emperor of Morocco to make him a loan sufficient to pay the indemnity. Extensive inundations have taken place in Spain, causing great devastation.

PRUSSIA.—King Frederick William IV. died on Wednesday at Sans-Souci, after a very long illness. His Majesty's state had become so alarming on Tuesday morning, that the Regent and the other princes resident in Berlin were summoned at 2 A.M. to Sans-Souci, and remained with his Majesty till he expired. A supplement to the *Prussian Gazette* announces the death of the late king, and at the same time states that the Prince Regent assumes the reins of government as King William V. By a decree of the Prince Regent, dated 29th December, both Houses of the Legislature have been summoned to meet on the 14th inst.

FRANKFORT.—Letters from Frankfort state that Austria and all the other States of the German Confederation have declared themselves ready to agree unconditionally to the proposals of Prussia in reference to Holstein, which are now expected to be formally brought forward by Prussia.

SAXONY.—The official Dresden journal, in an article on the arrest of Count Teleki, states that the Austrian Government had announced the approaching arrival of the Count to the Saxon Government, and on the day of his arrest had already demanded his extradition, a request which for some days Saxony delayed acceding to.

AUSTRIA.—The Emperor of Austria on Tuesday summoned Count Teleki to his presence, and announced that he would annul the pending proceedings against him and grant him a full and complete pardon, on condition of his conducting himself henceforth as a faithful subject. Count Teleki promised to give up all his political connections abroad, not to cross the frontiers of the Austrian Empire, and to abstain from all participation in political affairs.—The last accounts from Vienna express hopes that some real amendment in the political and financial system of Austria may be shortly brought about by the almost total change lately effected in the Ministry. Every State department, with the exception of that of Foreign Affairs, which is still retained by Count Rechberg, has passed into new hands. It was currently reported that Count Rechberg had tendered his resignation, but the official journals assert that the report is totally unfounded. In consequence of the death of the King of Prussia the Austrian Court has gone into mourning for four weeks. Both the Court theatres were closed on Thursday by Imperial order.—Don Fernando de Bourbon has just died at Vienna.

HUNGARY.—According to official information an Imperial resolution was taken on the 28th sanctioning the unconditional incorporation of the Woiwodina with Hungary. It was in consequence of the claims of the Hungarians that the Emperor decided on sanctioning the incorporation of the Woiwodina and the Banat with Hungary. The claims of the Servian nationality are to be brought forward by the Servian deputation, whose proposals will be submitted to the next Diet in the form of Royal propositions. The General Congregation of the city of Pesth, before the news of Count Teleki's release had arrived, had resolved upon making representations to the Court Chancellor to obtain the release of the Count, or, if this were not possible, to have him tried by the Hungarian tribunals. On the occasion of the assembling of the congregation of the Arad Comitat the city was splendidly illuminated. Public order was not disturbed. The number of members composing the committee of the Comitat has been increased to nearly 760, among whom are MM. Deak and Schögyenyi and several refugees.

TRANSYLVANIA.—An autograph letter of the Emperor dated the 21st inst., and addressed to the President of the Imperial Chancery Court for Transylvania, orders the immediate organisation of the Chancery, and also of the "Guberneum" for the same province. It also orders the assembling of a conference of the most eminent persons from the various classes of the different nationalities and religious confessions to deliberate on the early organisation of the Transylvanian Diet. The privileges of this Diet are to be determined according to the ancient public rights of the citizens, but within the limits prescribed by the Imperial diploma of the 20th of October. The conference will also make propositions in reference to the re-establishment of the former administrative divisions of Transylvania, and of the offices of Lord-Lieutenants and Chief Captains of the counties. It will also discuss the re-establishment of the offices of Superior Royal Judges, of the Szeckler, and of the Saxon legal and administrative authorities.

BOHEMIA.—Letters from Prague state that placards in the Bohemian language had been posted up at the corners of the streets of that city, earnestly advising the Czechs to remain quiet for the present, as the right moment for decisive action has not yet arrived. The placards further exhort the Czechs to observe the Hungarians, who have nearly attained their end, and, finally, to trust in the Emperor Napoleon.

VENETIA.—Two Imperial decrees have been issued ordering that in the present extraordinary state of things, the forced currency of bank-notes in Lombardo-Venetia shall be maintained, and that the payment of the interest of the National Loan shall be made in bank-notes with the corresponding agio. The decrees are preceded by two reports of the Minister of Finance, stating the motives for proposing these measures. It is said that Lord A. Loftus is to sound the Austrian Government on the Venetian question before leaving for Berlin.

COBURG.—Queen Victoria, in grateful remembrance of the escape of the Prince Consort from the dangerous accident which befel his royal highness during her Majesty's recent visit to Coburg, has forwarded a sum of money which is to be devoted towards the foundation of a charitable institution in that town.

ITALY.—King Victor Emmanuel arrived at Turin on Saturday evening, accompanied by Prince Carignan and the Ministers who went to meet him at Alexandria. His Majesty was received by the municipality and the National Guards under arms. An immense crowd cheered his Majesty as he passed through the streets. The city was illuminated. A Royal decree was issued on Sunday ordering the dissolution of the Sardinian Chamber of Deputies, and the official *Gazette* of Thursday published a Royal decree convoking the Electoral Colleges for the 27th inst., the voting to take place on the 3d of February, and the sittings of the Parliament to commence on the 18th of February. The official *Gazette* of Turin publishes the electoral law for all Italy, as promulgated by Royal decree at Naples on the 17th ult. It is but a modification of the electoral law of Piedmont, adapted to present circumstances. The number of deputies for the whole kingdom is fixed at 443. A Council of Ministers was held on Monday, after which the King received the different bodies of the State. Prince Carignan has been appointed to succeed Signor Farini as Lieutenant of the King at Naples, with Signor Nigra as Councillor and responsible Minister. Disturbances have taken place before the Palace of the Archbishop of Naples. An insignificant attempt at reaction was made on the night of the 30th, and was easily suppressed. Some Lazzaroni having shouted "Long live Francis II." were arrested. A personal enemy of the Duke of San Donato has made an attempt to assassinate him. The report in reference to the drowning of the naval officer in command of the Marquis of Downshire's yacht is without the slightest foundation. The Bourbon garrison of Civitella, on the Tronto, have burnt a Sardinian prisoner of war. The reactionary movements in the Abruzzi are on the increase, the bands of reactionists having been reinforced by large numbers of Neapolitan soldiers. Every province is ordered to take such measures as to be prepared to mobilise one battalion of the National Guards. Naples will organise several battalions. The French fleet is still at Gaeta, and it is now said that it will remain till the end of February, the French admiral having informed the King that the Emperor, in agreement with the Northern Powers, will continue to oppose an effective blockade. A vessel arrived at Gaeta a few days since with a cargo of powder as a present from Queen Isabella to Francis II. The bombardment of Gaeta continues day and night with great fury, notwithstanding the rain and snow, some of the shells reaching the most remote parts of the city. Several inhabitants have been killed. The officers of the Royal troops have presented an address to King Francis II., in which they promise to remain faithful to his Majesty. The announcement of the departure of the Queen, published in some Italian journals, is said to be entirely without foundation. Her Majesty had paid a visit to the hospitals.—An extensive robbery was committed on the night of the 17th ult. in the National Gallery of the Uffizi at Florence. The Sala del Gemme, or saloon of jewels, was broken into by thieves who effected an entry by the skylight and carried off a vast quantity of articles, all of considerable intrinsic value, but infinitely more valuable as objects of art. Among them were several rings, the work of Benvenuto Cellini; and a ring, valued at 250,000f., which had belonged to Cosmo dei Medici. Other articles, which were too large to be carried off, were wantonly spoilt or broken, including a vase of Oriental onyx, all of one piece, and one of the largest known. The total value of the articles lost is calculated at upwards of 1,000,000f.—The clerical party at Rome is very dissatisfied with the Emperor of Austria for granting liberal concessions to his subjects. The circulation of the last proclamation addressed by Francis II. to the Neapolitans has been prohibited at Rome, although it was printed there. Two officers of the Papal Zouaves have been arrested for theft. The general conviction at Rome is that the Papal Government will fall. A company is forming for the purpose of buying all the property which formerly belonged to the convents in the Marches and Umbria. The following is an abstract of the Allocution pronounced by the Pope in Secret Consistory on the 17th ult.:—

"We have to deplore the invasion of perverse doctrine which, sprung from the principles of the disastrous Reformation, has acquired almost the force of public law, on the one hand by the perversity of impious men, who proclaim themselves the sons of the Church, and whom we must call the sons of darkness. An edict has been published by the Grand Duke of Baden, in virtue of which the concordat has lost all its force, and a law has been substituted for it which is in the highest degree contrary to the liberty of the Church. This state of things, as we know, is the result of the false doctrine of Protestants, who think that the Church is a sort of corporation existing in civil society, enjoying no rights with the exception of those which are granted to it by the civil power. Another source of grief, produced by a most infamous pamphlet lately published in Paris, has come to add to our sadness. In that publication there are so many things so completely opposed to truth, so many absurdities and contradictions combined by the author, that it is more fitting to throw aside and despise it than to refute it. What is, however, intolerable is the audacity and impiety of this writer, who, not having feared to attack the civil and ecclesiastical principality of the Roman Church, has endeavoured to contrive a particular species of Church, to be founded in the French Empire, and organised so that it should be removed from the authority of the Sovereign Pontiff, and completely separated from it. In this condemnable pamphlet the author and those who partake of his opinion have dropped the mask, and unveiled the plan they are pursuing to overturn the civil authority of the Holy See; yet they have no another end but to sap the foundations of our holy religion. We groan to see these wicked men going to spread this doctrine through the provinces unjustly taken from our Government, as well as through the other countries of Italy. Behold the end of these translations of the sacred books, everywhere scattered to corrupt the faith—this host of most shameful books, made to poison the morals of youth—of this licence without rein, of this contempt for the Church, trampled under foot—of this violation of sacred immunities, of the removal from the authority of the bishops of the education of youth, and of the inspection of doctrine and morals. To the same end tend those men, superintendents of instruction, who hold opinions hostile to the Church: this decree, published in Umbria, ordering the expulsion of religious congregations from their convents, the annihilation of collegiate chapters, the abolition of benefices of every kind, the occupation, by a supreme injustice, of the property of pious associations, and the imprisonment of ecclesiastics and even bishops. The same tendencies also make them erect Protestant temples in many cities in Italy, and erect public schools, in which they teach doctrines the most pernicious and hostile to the Catholic religion. Finally, the same end is assigned to the decree promulgated in Umbria, by which the sacrament of marriage, declared great by the Apostle, is submitted to purely civil forms, which remove marriage from the ecclesiastical authority, and which are combined with the intention of making a civil institution, and, which is most displeasing to God, of transforming it to a legal concubinage, to the great injury of souls. Conformably, then, to the duties of our apostolic mission, we reprove and condemn, we declare null and void everything committed against the rights of the Church and its patrimony, against the persons of those consecrated to religion and against their property."

RUSSIA.—A new Russian loan amounting to 100,000,000 of silver roubles has been contracted and completely raised by subscription among the merchants and other classes of the inhabitants of Russia.

POLAND.—The Paris papers state as positive that the Emperor of Russia has resolved to grant a constitution to Poland, assuring to that country its "autonomy," and placing it on a footing analogous to that in which Hungary stands with regard to the Austrian empire. A deputation from Gallicia was received a few days since by Bacon Schmerling at Vienna, and presented an address demanding indivisibility of the province, convocation of a diet for provincial affairs, use of the Polish language in official affairs and in schools, and, finally, that Gallicia may send no members to the Council of the Empire.

TURKEY.—The Jeddah claims have been definitively settled. They are to be paid in full in Turkish Consols at 53. The Grand Vizier's report on the Roumelian mission has been published. The Vizier declares that the complaints were exaggerated. The Christians, he

ays, are not exceptionally oppressed, but the Greek clergy are much to blame. A commission of inquiry, under the presidency of Ethem Pasha, is to be named for Asia Minor.—It is reported, on the authority of private letters from Mostar, that the inhabitants of Piva, Drobpek, and Banjani have revolted against the Turks, and declared their intention of placing themselves under the Government of Montenegro.

CHINA.—A telegraph, dated St. Petersburgh the 30th ult., has been received from Sir John Crampton, stating that intelligence has been received by the Russian Government from Pekin up to the 18th of November, confirming previous accounts, but giving no new details. The *status quo*, which was considered to be satisfactory, had not been modified up to that date. A supplement to the *Gazette* of Friday contained the convention of Pekin, the despatches of Lord Elgin and Sir Hope Grant, Mr. Wade's translation of the Prince of Kung's letter to Lord Elgin, and the narrative of Mr. Parkes. Sir Hope Grant's despatch contains the following statement of the manner in which the prisoners were divided and driven off to four small hill fortresses at distances of from 20 to 40 miles from Pekin, and the names of those who died in captivity :—

"*First Party taken to Hill Fort.*—Lieut. R. B. Anderson, Fane's Horse, died on the 9th day of captivity, 27th September; Mr. De Norman, Attaché of her Majesty's Legation, died on 17th day of captivity, 5th October; 1 duffadar, Fane's Horse, returned to camp 12th October, 1860; 4 sowars, Fane's Horse, 1 died, 3 returned 12th Oct. Bodies of those who died brought in on 14th Oct., 1860.

"*Second Party taken to Hill Fort.*—1 French officer, died; 2 French soldiers, 1 died, 1 returned 12th October; 5 sowars, Fane's Horse, 1 died, 4 returned 12th October, 1860. Bodies of those who died brought in on 14th October, 1860.

"*Third Party taken to Hill Fort.*—1 French officer, died; Mr. Bowlby, correspondent of the *Times*, died on 7th day of captivity, 25th September; Private J. Phipps, King's Dragoon Guards, died on the 14th day of captivity, 2d Oct.; 1 sowar, 1st Sikh Irregular Cavalry, died on 9th day of captivity, 27th September; 1 duffadar, Fane's Horse, died 16th day of captivity, 4th October, 1860; 2 sowars, Fane's Horse, returned to camp 14th October, 1860. Bodies of those who died brought in on 16th October, 1860.

"*Fourth Party taken to Hill Fort.*—1 French officer, 2 French soldiers, 4 sowars, Fane's Horse. Died in captivity; bodies brought in on the 17th October, 1860.

"*Pekin Party.*—Mr. Parkes, Mr. Loch, 1 sowar, 1st Sikh Irregular Cavalry, 1 French officer, 4 French soldiers. Brought back to camp on 8th October.

"*Missing.*—Captain Brabazon, Abbé Duluc, French missionary. Believed to have been beheaded in the Tartar camp during the battle of Palichiau, on 21st September, 1860."

The following are extracts from Mr. Parkes's narrative which fills about seven columns of the daily papers :—

"After we had been kept waiting in a dense crowd for half an hour longer I was taken from the cart and carried before a tribunal composed of examiners of small rank, who made me kneel, and after treating me in a very tyrannical manner, and questioning me on a few unimportant points, they loaded me with chains, and gave me over to a number of ruffianly looking gaolers. These men conducted me through several long courts, and, happening to halt for some purpose, I knew by the clank of chains that another prisoner was approaching. It proved to be Mr. Loch, but they would not allow us to converse, and hastily sent us away in different directions. At last we stood before a building which I could see was a common prison, and as the massive door opened and closed on me I found myself in a throng of 70 or 80 wild-looking prisoners, most of them offensive in the extreme, as is usual in Chinese gaols, from disease and dirt, and who were naturally anxious to gaze on the new comer. I was again carefully examined and searched by the gaolers, who also saw that my chains were properly secured, and bound my arms with fresh cords, not so tightly, however, as to prevent circulation or to occasion serious inconvenience. At the same time, however, they removed, to my intense relief, the cords from my wrists, which being very tightly tied had caused my hands to swell to twice their proper size, and were now giving me great pain. They then laid me on the raised boarding on which the prisoners sleep and made me fast by another large chain to a beam overhead. The chains consisted of one long and heavy one, stretching from the neck to the feet, to which the hands were fastened by two cross chains and handcuffs, and the feet in a similar manner. Being exhausted with fatigue and want of food, which I had not tasted for upwards of 24 hours, I fell asleep, but was soon made sensible of my position by being called up and again carried before the same Board of Inquisitors. It was then about midnight, but the hour did not prevent the collection of a large crowd, composed, however, in this instance of police-runners, gaolers, lictors, and the other numerous myrmidons of Chinese law. The mandarins, as I was placed kneeling in my chains before them, warned me that they would force the truth from me if I did not give it willingly, and, in proof of their earnestness, they ordered four torturers to seize me, even before they began to put their questions, by the ears, and the hair of the head and face. They first asked me if I were a Chinese. I told them they had only to look at my face and hair to see that I was not. The next questions related to my age, length of residence in China, how and where I had been employed, &c. They then proceeded as follows:—Inquisitors: State the name of your head man.—Answer: Which one do you mean, the Ambassador, General, or Admiral?—Inquisitors (angrily): You have no such functionaries. Don't presume to use such titles. Here the torturers suited their action to the tone of the mandarins by pulling simultaneously at my hair, ears, &c.—Inquisitors: Now give the name of your head man.—Answer: Which one?—Inquisitors: The head of your soldiers.—Answer (in English): Lieut.-General Sir Hope Grant.—Inquisitors: What?—Answer (in English): Lieut.-General Sir Hope Grant.—Inquisitors: Say something that we can understand.—Answer: I am obliged to use the English terms as you will not let me give you these in Chinese. They attempted to write down, in Chinese sounds, 'Lieutenant-General Sir Hope Grant,' but not succeeding they asked me the name of another head man.—Answer (in English): Ambassador Extraordinary the Earl of Elgin.—Finding it equally impossible to write this down in Chinese or to get on with the examination, they told me I might revert to Chinese names and titles, and I then gave them those of the Ambassador and the Commander-in-Chief.—Inquisitors: How many soldiers have you?—Answer: Not less than 20,000 fighting men.—Inquisitors: That is false. [Torturers clutched me as before.] Repeat how many.—Answer: Not less than 20,000 fighting men in which I do not include followers, &c. I have stated that once to you, and I have no further answer to give. Here I was again threatened, both by mandarins and torturers, but, deeming it dangerous to swerve from any statement I had once made, I adhered to that which I had already given them, and it was taken down.—Inquisitors: How many soldiers have the French?—Answer: I am less acquainted with their force, but they cannot have less than 10,000 fighting men.—Inquisitors: You are lying again. The same question was repeated and enforced by the torturers; I returned the same answer, and it was noted down. I then explained that being myself a civilian I could not be expected to familiar with military matters, or to know all the particulars of so large an army as the present combined force.—Inquisitors: So large an army do you call it. What are 30,000 men? They are a mere nothing. They then proceeded to examine me in the same strain as to the number of our cavalry, artillery, ships, steamers, horses, Chinese coolies, &c., and, in particular, of the range of our field and siege guns, which I gave them at three miles and upwards, together with other particulars of their destructive properties. Hearing that the horses of the force came from India, they questioned me as to the resources of that country, and were much displeased with my statement that it was within 20 days' sail of China, and had an army of upwards of 300,000 men, and a population of more than 100,000,000. They also equally disapproved my estimate of the population of Great Britain, which I stated at about 30,000,000. But the remark which probably gave them most displeasure, and caused me some pain at the hands of the torturers, was the use, on my part, of a term for her Majesty denoting equality of rank with the Emperor. They had inquired after our 'Prince,' to which I had replied by stating that we had many princes, both in England and India, but that they were all under one Sovereign, as in the case of the Empire of China. 'What do you mean by using such language?' they said; 'you have yourself shown that you have been long in China, that you can speak our language and read our books, and you must know, therefore, that there is but one Emperor, who rules over all lands. It is your duty to communicate your superior knowledge on this subject to your countrymen, instead of encouraging them in their extravagant ideas.' They then insisted that I had often been in Pekin; that I had confederates here, and that they would force me to reveal their names. I denied all this, and told them I knew but three persons in Pekin. Inquisitors: Name them.—Answer: The two Imperial Commissioners—Prince of I and Muh-yin—and the Assistant Commissioner Hang-ki.—I made this reply in the hope of disarming their suspicions, which I could see were very strong on this point; and the idea that through our Chinese coolies, or in some other way, we had set treason at work within the walls of the capital was one which evidently gave them considerable apprehension. They were also particular in demanding information as to the number and names of our interpreters. I complied by giving them the Christian names and surnames of several of these gentlemen in full, knowing as the event proved, that they would be unable to take down intelligibly the long English words, and they soon relinquished the inquiry. They made pointed inquiries, however, about Mr. Lay, and when I told them that he was now engaged, by the invitation of the Chinese authorities, in managing their foreign revenue, which had nearly doubled since the collection of it had been placed in his hands, they reproved me for using such language, and called out that Lay was nothing else than a native (Chinese) traitor. Towards the close of the examination, throughout which I was compelled to remain kneeling on the stone floor, I obtained their permission to make a statement on my own account. I then told them why I and the other gentlemen of my party had come to Tung-chow; that we were all employed in the cause of peace, and not of war; but, although acting under a flag of truce, and admitted to interviews with the Imperial Commissioners, we had been seized and were now being treated, not even as prisoners of war, but as common felons, and as offenders against Chinese law. I was urging that this great and, to me, unaccountable mistake, should not be persisted in, when they interrupted me by saying, 'That is your account, but we have another story. Besides, if, as you state, you are a civilian, and have nothing to do with soldiers or their movements, why are you always seen with the advance?' To this I answered that we always kept an interpreter in the front to be ready to receive overtures or communications from the Chinese authorities, and to look after the interests of the people. The examination ended, I was ordered back to prison. I have thus given a full recital, my lord, of the occurrences of the 18th of September, the day on which we were seized; but I shall endeavour to avoid similar detail in the account I have now to add of our subsequent 20 days of imprisonment. On the 19th and 20th a great number of Mandarins visited the prison, and those whose official position entitled them to make the demand ordered me to be brought out that they might have the satisfaction of seeing me kneeling before them. Among these were the highest authorities of the Board of Punishments, including, as I now know, the President himself, who abused me in a very bitter tone, laughed at my statement, and appeared as ignorant of foreigners and as much prejudiced against them as his subordinates who had conducted the examination above described. Several censors and vice-presidents of the other five Boards of Government were also pointed out to me by the gaolers as being among the visitors. Whenever brought out before Mandarins of rank, I lost no opportunity of protesting against my treatment, and of pointing out that in wronging me they were injuring themselves, as it was impossible that peace could be made if they seized and imprisoned the instruments of negotiation. But it was only from the prisoners that I obtained sympathy or a hearing. Many of these unfortunate men were glad, when so permitted, to come round me to listen to my story, or any description that I would give them of foreign countries and usages. Instead of following the example set them by their authorities, and treating me with abuse or ridicule, they were seldom disrespectful, addressed me by my title, and often avoided putting me to inconvenience when it was in their power to do so. Most of them were men of the lowest class and the gravest orders of offenders, as murderers, burglars, &c. Those who had no means of their own were reduced by prison filth and prison diet to a shocking state of emaciation and disease; but those who could afford to fee the gaolers, and purchase such things as they wanted, lived in comparative fulness and comfort. They explained to me that their prison system cost the Government nothing more than the pay of the gaolers, and the supply of two bowls of boiled millet per day to each prisoner. All other expenses, such as water, lighting, fuel, tea, salt, vegetables for the prisoners, and good meals for the gaolers, &c., are defrayed by some one among the prisoners, who voluntarily undertakes the charge in redemption of a certain portion of his term of imprisonment. The Mandarins of the Board having ordered that I should be supplied with food that I could eat, my maintenance, which cost, as I was told, 1s. a day, was carried to the charge of the man who held this position; but instead of taking a dislike to me on account of the increased expense which I occasioned him, he was one of the foremost in showing me kindness and consideration."

UNITED STATES.—General Cass has resigned the Secretaryship of State, on account of the peremptory refusal of the President to send to Fort Moultre reinforcements, which the officer in command has declared to be necessary to its defence. Mr. Trescott, the Assistant-Secretary, has also resigned. Attorney-General Black had been appointed to succeeded Gen. Cass, and entered upon his duties on the 15th. It was rumoured that Mr. Edwin Stanton, of Washington, would succeed to the Attorney-General... Mr. Philip Frank Thomas, of Maryland, Commissioner of Patents, had been appointed Secretary of the Treasury, in place of Mr. Cobb. General Scott expressed his opinion that it was necessary to send reinforcements to Carolina, for the protection of ... property. The President, for prudential reasons, ... opposed to such a measure. It was rumoured that Senator Douglas would declare in the Senate that ... the duty of the President to resist secession by ... According to the Washington correspondent of the *New York Express*, the impeachment of the President for dereliction of duty in the present crisis was gravely recommended by the Republican leaders. The President had recommended the observance of the 4th January as a day of national humiliation, fasting, and prayer, in view of the present critical condition of the country, and in compliance with the suggestions of several associations and private citizens. A meeting of representatives from North Carolina, Alabama, Georgia, ... Arkansas, Mississippi, Louisiana, and Texas, ... held at Washington, at which a manifesto to their constituents was adopted, announcing that all hope of honourable adjustment was extinguished, and that the only refuge of the South was in prompt secession ... the Union. It was understood that Kansas would ... be admitted into the Union. A resolution had been passed in the Senate providing for the appointment of a Select Committee of 13 to report on the state of the Union. The members of the South Carolina Convention were received at Charleston on the 18th ult. with military honours. The Convention had appointed a committee to prepare an address to the people of the Northern States. The Senate of North Carolina had passed a Bill for arming the State. The Louisiana Legislature had passed a Bill for electing delegates to the Southern Convention.

CANADA.—A despatch from Toronto announces that the decision of the Court of Queen's Bench in the extradition case of a fugitive slave called Anderson who fled into Canada seven years ago after having killed an American who attempted to arrest him, was delivered on the 15th ult. The Chief Justice (Sir J. B. Robinson) and Mr. Justice Burns held that Anderson, under the provisions of the Ashburton treaty, ought to be surrendered. Mr. Justice M'Lean dissented from this decision, which in effect declares that the fugitive slave law of the Southern States is operative in Canada. The counsel of the prisoner gave notice of an appeal. The prisoner was strongly guarded. No attempt at rescue had been made, but great excitement prevailed.

PERU.—The Peruvian Congress had granted extraordinary powers to the President for carrying on the war against Bolivia. Castello was to raise 30,000 men.

Public Addresses.

THE EARL OF DERBY on the 26th ult. addressed the following letter on the management of Rifle Associations to the Earl of Sefton, as chairman of the meeting held on Friday last at Preston for the formation of a Rifle Association for Lancashire :—

"Such an institution, if I may use the term, as a County Rifle Association, appears to me exactly what is required to give at this moment a character of permanence and consistency to the great national movement which has reflected such credit on the public spirit of the country. I have hitherto ... from every proposal of the kind, because I feared, ... had been presented to me, the prevalence of local ... and local jealousies. But, if you will allow me to say so, ... have taken your proper place as Lord-Lieutenant of the county, in putting yourself at the head of a movement which I hope may tend to consolidate and unite the Volunteer ... which has already produced in this our county a larger ... than that which has just enforced terms of peace upon the capital of the Chinese empire; and you may depend upon ... co-operation in carrying out the object which you have in view. As my attendance at the meeting is impossible, I ... you will excuse me if I offer to you a few remarks as to what I conceive should be the object chiefly aimed at. We have had abundant evidence this year of the readiness of those who are not in a position to give their personal service to aid the movement by pecuniary contributions, and especially by offering prizes for proficiency in rifle shooting; and this has even been carried to an extent ... makes us think it necessary to guard against the ... danger of too much prominence being given to rifle practice ... against rifle drill. We must not forget that the national object is the formation of rifle corps and not rifle clubs, and this distinction ought not to be lost sight of. In laying down the rules for a County Rifle Association, the first practical ... must be to provide the 'sinews of war,' not for a temporary but for a permanent object; and, with this view, I should suggest that whatever contributions are made, should be in the form of annual subscriptions, or if given in a lump sum, the sum to be invested in the names of trustees, and the annual interest alone to be expended. Now, as to the application of the funds which may be raised, the amount of which need not be very large, provided they are certain, I think they should be limited to two objects; 1st, the providing an adequate number of ranges for practice at long distances, to accommodate the various districts of this large county; and 2d, the establishment of certain prizes to be annually and permanently given, subject to alterations from time to time by a committee, ... appointment of which, after the principles are settled, should be the very first step. It is needless to say that this should be a working committee composed of men willing to give to it their time and attention, and impartially selected from all parts of the county. As to the rifle ranges, they ought to be a charge on the permanent funds of the Association. I believe there is only one at present, at Hightown, which is more especially available for Liverpool and its neighbourhood, but which is at present at the responsibility and at the risk of Mr. Adam Gladstone, and

[illegible] individuals. I think at least two other ranges [illegible] and leased by the Association—one for the [illegible] for the Manchester divisions of the county. No [illegible] be adopted by the Association which does not [illegible] yards' range. I should think ground might [illegible] towards the eastern range of hills, near the Manchester [illegible] Leeds, or Manchester and Sheffield lines, which [illegible] very suitable for Manchester and its neighbourhood. In my opinion, these grounds when taken should be [illegible] practice of any corps from any part of the county, [illegible] individual members of such corps, except on payment of [illegible] as may be fixed by the committee. Spectators [illegible] to the ground should also be charged a moderate [illegible], which will materially diminish the cost to the [illegible]. Every county ground will require a permanent [illegible]. Every county ground will require three or four men to attend to each [illegible] attached to it of three or four men to attend to each [illegible]. The Association should have nothing to do with [illegible], the provision of which should be left, as at [illegible] ranges, the respective corps. Now, as to prizes, I would [illegible] to money or to pieces of plate, and I would absolutely [illegible] everything in the shape of medals to be worn, [illegible] allowed, would have a tendency rather to cast [illegible] distinction on the wearer. The prizes should be [illegible] and announced by the committee at the commencement [illegible] year. Their amount must of course depend on the [illegible] at their disposal; but I should lay great stress on the [illegible] that prizes given by the Association should be competed for only by members of some accepted Rifle Corps, or of [illegible] years' regular service. I would not discourage the [illegible] for shooting by individuals on other conditions; [illegible] make them subject to the sanction of the committee, and especially if intended to be shot for on days [illegible] to the Association's prizes. The practice grounds [illegible] be open on days not required for the regular Volunteer [illegible] moderate terms, but not gratuitously, to parties [illegible] of making use of them for shooting matches between [illegible], or even clubs, but no assistance in the way of [illegible] should be given to these latter. I have thus hastily [illegible] what appears to me to be considerations applicable [illegible] objects of your meeting, of which I will thank you to express my hearty approval."

LORD PALMERSTON on the 27th ult. attended a public dinner at Romsey, on the occasion of presenting colours to the 11th Hampshire Volunteers, and spoke as follows on the Volunteer movement:—

"It is impossible for any person who has any share in the responsibility of conducting the affairs of this great country [illegible] take the most lively interest in this Volunteer movement, which, although of recent origin, has attained so important a development, and it would be difficult for any person [illegible] sees how this movement has been progressing, and what [illegible] it has assumed in his own immediate neighbourhood, [illegible] feel proud, as I do, of the corps which has been raised [illegible] town of Romsey. We are perhaps, gentlemen, too apt [illegible] carried away by names, and to attach distinctions to [illegible] which do not exist in things. We have been accustomed to think of the Volunteer force of the country [illegible] differing too essentially from those other military [illegible] naval arrays by which the country is to be defended. But, although the force to which you belong has [illegible] peculiarly and emphatically called a volunteer [illegible], you must not forget that you are in that respect, in regard to the nature of your service, standing precisely on the [illegible] footing as the army, the navy, and the militia. You are [illegible] Volunteers, for in this country, fortunately, the loyalty and the public spirit of the people are such that we are not compelled to resort to a forced and conscribed service. Every man who serves his Sovereign and his country in this happy land is a Volunteer; and, therefore, although you may emphatically and by way of distinction be called the Volunteers of England, you must not assume to yourselves any [illegible] ment for your voluntary services as your share, [illegible] no doubt you would share the glories of the army, the [illegible], and the militia, if ever your country required your [illegible]. It would be presumption in any man who is merely [illegible] to give you any advice as to the manner in which [illegible] would perform your duties, or acquire the proper skill [illegible] necessary for the proper performance of those [illegible]. But I may be permitted to remind you that the [illegible] of the Rifle Corps to which you belong are greater, [illegible] require a larger degree of skill and science, than those [illegible] formed on a different principle; because you have not [illegible] learn the duties which peculiarly belong to light troops [illegible] on skirmishing service, but you have also to learn [illegible] more steady duties which more properly belong to what [illegible] battalion exercise, and you may be sure that, however [illegible] or recent events have led men to think that loose [illegible] troops are a match for those which are organized [illegible] skilled and steady principle, you will find that in [illegible] give effect to your determination to do good service to [illegible] country, you must acquire the steadiness of battalion [illegible] and something more than the mere activity of [illegible] parties. But if you need an encouragement, [illegible] that is necessary is that you should look to what your countrymen have done in different parts of the world. It [illegible] said in former times that we were not a military nation, [illegible] we were skilful and brave upon the ocean, but that [illegible] tastes and habits did not lead us to equal military [illegible]. But there are certain historical records of the [illegible] war and Waterloo that sufficiently refute any [illegible] of that sort. Let me call your mind—you who are essentially civilians—to the manner in which men equally [illegible], placed in the most difficult circumstances, have shown [illegible] they belonged to the same heroic race as yourselves. I refer to the events which took place in India during the Sepoy mutiny. You there saw civilians scattered in small [illegible] throughout different parts of an immense empire attacked suddenly in different parts of the country—attacked, [illegible] by a superior force—and you found them bravely and [illegible] defending themselves, resisting everywhere, and displaying in their conduct not only that bravery which belonged [illegible] them as Englishmen, but military skill which cou'd hardly be expected from men untrained to war. The result was that the exertions of the civilians, in concert with those of the [illegible] who happened to be there, were sufficient to quell the [illegible] before reinforcements could arrive from England. I [illegible] that is a great encouragement to civilian Volunteers of [illegible] country, and ought to induce them to pursue that course which they have so nobly begun. We may rest assured that if ever they are called into action in defence of the country they will not only display all the bravery which belongs to their race, but will not be found wanting in that knowledge of military skill and military tactics which is as essential as bravery to success in warlike operations."

City Intelligence.

BANK RATE OF DISCOUNT.—The Bank of England on Monday raised their rate of discount from 5 per cent., to which it was lowered on the 29th November, to 6 per cent.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 92 9-16 to ⅝ for the Account; Bank Stock 233; Reduced and New Three per Cents., 92¼ to ½; Thirty Years' Annuities, expiring in April, 1885, 16 3-16; India Five per Cent. Stock, for Acct., 101⅞, ex div.; Ditto Bonds, 10s. to 6s. dis.; Exchequer Bills, par, 3s. dis.—FOREIGN: Dutch Four per Cent. Certificates, 100¼ to 101; Mexican Three per Cents., for Acct., 21⅝; Portuguese Three per Cents., 1856, 1857, and 1859, 44 to ½ ex div.; Ditto for Acct., 44; Russian Four and a Half per Cents., 92⅞ to 93 ex div.; Spanish Three per Cents., 49⅜ to 48⅞; Turkish Six per Cents., 1854, for Acct., 70⅝; Ditto Six per Cents., 1858, for Acct., 57 to ⅛; Venezuela Three per Cents., for Acct., 20½.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£26,411,410	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	10,292,300
		Silver Bullion	1,644,110
	£26,411,410		£26,411,410

BANKING DEPARTMENT.

Proprietors Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£9,498,168
Rest	3,247,078	Other Securities	22,836,483
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	7,275,906	Notes	5,899,815
Other Deposits..	13,224,494	Gold and Silver Coin ..	716,429
Seven day and other bills	640,417		
	£38,940,895		£38,940,895

3d day of Jan., 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY — BANKRUPTS—T. BARTON, Liverpool, Tanner—W. BRENT, Blue Anchor Road, Bermondsey, Tanner—A. BROOKS, Ludgate Street, Optician—W. BRYANT, Oxford Street, Tailor and Outfitter—T. EDGE, Great Peter Street, Westminster, Gas Meter Manufacturer—T. FLOOD, Honiton, Devon, Hardwareman—W. GROVE, Kingsland Road, Licensed Victualler—C. HEWITT, Windsor, Baker — A. M. C. HODGMAN, Broadstairs, Kent, Miller—W. HUTCHINS, Neath, Glamorganshire, Butcher—G. W. KENRICK, Paragon Road, Church Street, Hackney, Livery Stable Keeper—L. LEVISON, Leamington, Merchant—H. SLATOR, Holbeach, Lincolnshire, Brewer.

BANKRUPTCY ANNULLED—G. ATKINSON, Bradford, Yorkshire, Joiner.

SCOTCH SEQUESTRATIONS — T. B. H. CHRISTIE, Glasgow, Accountant—J. HAMILTON, Melrose, Draper—J. PATERSON, Kilmarnock, Grocer—A. WILSON, Auchreddie, Farmer.

FRIDAY—BANKRUPTS — J. J. CLARK, Aldersgate Street, Leather Merchant—L. DETHIER, Carpenter Place, Berkeley Square, Confectioner—T. GRAY, Bread Street, City, Woollen Warehouseman—J. GIBBS, Hackney, Licensed Victualler—J. HARLAND, Leeds, Cloth Merchant—W. MILLWARD, Dudley, Grocer—H. PAINE, Strand, Tailor and Draper—R. G. PIKE, Maidstone, Grocer—J. REYNOLDS, Burslem, Staffordshire, Grocer—J. ROGERS, Brighton, Hotel Keeper—G. B. SAINSBURY, Church Lane, Whitechapel, Coal Merchant — P. WHITELOOK, Leeds, Grocer—J. WISEMAN, Luton, Bedfordshire, Printer.

BANKRUPTCIES ANNULLED — B. CHANDLER, Sherborne, Dorsetshire, Attorney—W. O. JENNINGS, Uggeshall, Suffolk, Horse Dealer.

SCOTCH SEQUESTRATIONS—T. CLARK, Ardrossan, Flesher — W. GLASGOW, Bowhouse Bog, Lanarkshire, Farmer—J MILLAR, Edinburgh, Ironmonger.

Metropolis and its Vicinity.

ELECTION OF AN ALDERMAN.—A wardmote for the Ward of Candlewick was held on Tuesday, the Lord Mayor in the chair, when Mr. Thomas Dakin, who has served the office of deputy for the last six years, was elected Alderman of the Ward without opposition in the room of the late Sir George Carroll.

LOSS OF HER MAJESTY'S SHIP CAMILLA.—It is stated that Her Majesty's brig Camilla, 16 guns (which has been missing for some considerable time), was posted on Lloyd's books on Saturday as having been totally lost, with all on board, in the China seas. The information appears to have been obtained from a private printed circular published in China. The Camilla had been placed on the China station about three years since. Her officers and crew numbered about 200 in all.

THE LATE GALE.—A heavy gale set in early on Monday evening from the south-west and north-west, with rain and sleet, and continued with unabated fury until Wednesday morning, occasioning serious destruction among the shipping in the Channel and on other parts of the coast. The French barque Dugay Trouin, from Bordeaux to Antwerp, and the Dutch ship Guttenburg, from Hamburg to New York, were totally lost on the Goodwin Sands; the crew of the former saved themselves in their boat, and took refuge in the North Land Head Lighthouse; but the master and several of the crew of the latter were lost. The Sourisquois, three masts, 911 tons, Captain Cuthbert Veux, from Bombay for London, with oil, coffee, tea, silk, cotton, &c, went ashore at Equihen, near Boulogne, on Monday night, but all hands were saved. The Arcville, three masts, 400 tons, Captain Barclay, from Macao to London with silk and tea, also went ashore at midnight at the Pointe aux Oies, Wimereux, near Boulogne. All hands were saved. On the north coast of Devon a Spanish and a French vessel were wrecked near Morte Point with great loss of life; and on the coast of Yorkshire several colliers and other vessels were lost with all on board. The American ship Golden Star, from Mobile for Liverpool, was totally lost on the 29th ult., on the coast near Wexford. The captain and his wife, the stewardess, and 18 hands were drowned. The mate and six hands were saved. The cargo consisted of upwards of 3700 bales of cotton.

SPECIAL SERVICES AT ST. PAUL'S.—Arrangements have been made for commencing the special Sunday evening services in St. Paul's Cathedral, on the 27th inst., when the Bishop of London will preach. Among the preachers whose services have been secured during the course are the Bishop of Durham, the Bishop of Ripon, Bishop Spencer, the Bishop of Oxford, and the Dean of Chichester. The new marble pulpit has been fixed in its place, and the new organ fills the upper part of the south transept. The Dean and Chapter have determined to inaugurate the opening of the organ, preparatory to the Evening Services, by a grand performance of sacred music, including the oratorio of "The Messiah," on Thursday, the 24th inst. The orchestra in the south transept will accommodate a full band and chorus of more than 500 voices.

LAUNCH OF THE WARRIOR.—This formidable iron-cased frigate, the largest man-of-war ever built, and more than 1500 tons larger than the largest vessel in the world after the Great Eastern, was safely launched at Blackwall on Saturday in the presence of many thousand persons, Sir John Pakington on the special invitation of the Lords of the Admiralty performing the ceremony of naming her. There was some difficulty at first in getting her off the slip, in consequence of the frozen state of the "ways," but with the aid of hydraulic presses and three powerful tugs she was at length started. At first she moved a little slowly, then stopped, then started again, and gaining momentum as she descended, slid rapidly down into the water, and was safely afloat just as the tide began to fall. The Warrior has been built by the Thames Iron Works and Ship Building Company from the Admiralty models. Her shell is composed entirely of wrought scrap iron. The keelson, or portion to which the ribs are bolted, is formed of immense slabs, 3 ft. 6 in. deep, and 1½ in. thick; the ribs which spring from this are wrought iron T-shaped beams, made in joints of 5 ft. in length by 2 ft. in depth. They are placed 3 ft. 8 in. apart, except for a distance of 10 ft. on each side of the keel, where they are bolted at half this distance apart. The main and upper decks are of iron, covered with timber, and the orlop deck is of timber. The decks are supported by rolled wrought iron girders of enormous strength. Along the entire length of the vessel, from stem to stern, there are solid wrought iron beams placed at intervals of 5 ft. inside the ribs, and these again are strengthened by cross girders. The bows and stern of the ship are divided into 27 water-tight compartments, and are shut off from the engine-room and fighting part of the ship by wrought iron transverse bulkheads. These compartments may be riddled by shot in every direction without affecting her safety—and even if the bows and stern were shot away, the centre would still remain a floating, though a somewhat unmanageable battery,' 210 ft. in length, 27 ft. in depth, and 53 ft. wide. The armour of the frigate is formed of a double casing of the hardest teak, 20 inches thick, with the beams laid at right angles to one another, covered with plates of iron, so as to case the sides of the vessel with 20 inches of solid teak and 5 inches of the finest wrought iron. Each armour-plate is formed of scrap iron carefully welded into a slab about 16 feet long by 4 broad, and 4½ inches thick, and weighing about 12 tons. All the plates are dovetailed at the edges into one another, and bolted through the teak and iron into the inner ribs of the ship. These bolts are counter-sunk outside, so as to have their heads level with the surface of the plate. The total weight of the plates on both sides will be 1000 tons. This tremendous coat of armour, however, does not case the whole vessel, as with such an entire covering the Warrior would scarcely float at all. Only the middle of the broadside, for a length of 213 feet, and extending from the upper to a depth of 5 feet under the water line, is thus protected. To compensate for the absence of this armour, both the stem and stern are crossed and re-crossed in every direction with the water-tight compartments already described, and the outer iron plates are 1½ inch thick and backed up by 24 inches of teak. Her principal dimensions are—Length over all, 420 feet, about two-thirds of the Great Eastern; extreme breadth, 58 feet; tonnage, 6177; and she will have screw engines of 1250 horse power, which, with her boilers and armaments, will give a total of more than 10,000 tons. Despite her gigantic proportions and enormous strength, her lines, both fore and aft, are extremely fine, the bows being sharp and slim, tapering to a graceful point, and terminating with a colossal figure-head of a warrior with upraised sword and projecting shield. When in seagoing trim her main deck portholes will be about 8½ feet from the water, and in this respect she will possess an immense advantage over her French rival La Gloire, whose ports are only 5 feet 9 inches from the water—much too near to make her guns of any use in a sea way. In point of speed, also, the Warrior is expected to be unrivalled even by those fast frigates the Ariadne and the Galatea. The work of fitting her with her plates and engines will go on as rapidly as possible in the Victoria Dock, whence she will start at the end of May or beginning of June, for Portsmouth, to be masted.

ST. GEORGE'S-IN-THE-EAST.—The Bishop of London has appointed the Rev. Alfred Cay, Theological Associate of King's College, London, and subsequently curate of Christ Church, Brixton, and St. John's, Deptford, to take the sole charge of this parish during the absence of the rector. Mr. Cay is evangelical in his views, and strongly opposed to the extreme ritualistic observances to which Mr. King was attached. It is apprehended, however, in the parish, that on the return of Mr. King in July next, he will return to his former system of conducting the service. He has recently addressed a second letter to the Bishop, designed as "a public and solemn protest" against his lordship's conduct towards him and his parishioners, in which he says, "Even you, my lord, can scarcely be

sanguine enough to imagine that I shall respect the acts of your late illegal aggression upon my return to my charge."

ROMAN CATHOLIC CHURCH.—The *Weekly Register* states the present number of Roman Catholic priests in England and Scotland to be 1342; churches and chapels, 993; communities of men, 47; convents, 158; colleges, 12. These numbers show an increase during the past year of 111 priests, 43 churches and chapels, 10 communities of men, and 32 convents.

NEW PUBLIC OFFICES.—Sir Richard Bromley, the Accountant-General of the Navy, has had an interview with the Chief Commissioner of Works respecting a plan which he has drawn up for building new public offices along the river, and connecting Somerset House with Whitehall and the Houses of Parliament. Sir Richard is said to have given much attention to the financial bearings of the scheme, on which, it is needless to say, his authority is eminent.

THE SYRIAN RELIEF FUND.—Her Majesty's Government has made a grant of 5000*l.* in aid of the subscription, which presents a total of nearly 23,000*l.* The latest accounts state that 27,000 persons are in receipt of alms, the largest proportion being women, 17,000 of whom were relieved in one day at Beyrout. A quantity of material for clothing has been sent out, and the women and children are employed in making it into garments.

THE RED SEA AND SINGAPORE TELEGRAPHS.—The fatality which has attended so many of the deep sea telegraphs has fallen upon both these lines, and even the cable which was intended for the latter now appears to be in jeopardy. Nearly all the staff of clerks of the Red Sea Telegraph Company have returned from Alexandria, from which it is inferred that the cable has been abandoned for the present. The Queen Victoria screw steamer, which sailed from Gravesend on the 4th ult. with a portion of the cable originally intended for Gibraltar, but afterwards destined to be laid between Singapore and Rangoon, returned to Plymouth some days ago, the heat generated in the hold having caused indications of injury to the insulation of the wire. On Wednesday last, as the vessel was going from the Sound to the basin in Keyham steamyard for examination and repair, she grounded on the beach under Mount Edgcumbe, and in spite of the powerful efforts made by the dockyard authorities to float her, she remained immovable, and on Thursday had 12 feet of water in her hold. It will now be necessary to remove the cable before any other attempt is made to get her off. It is understood that the cable which she has on board is to be laid from the island of Malta to Alexandria, by which a gain of 10 days is expected to be made in the transmission of intelligence between England and India.

THE STREET RAILWAYS IN THE CITY.—At the last meeting of the City Commission of Sewers, it was resolved on the recommendation of the Improvement Committee to accede to the application of Mr. Train, the projector of street railways, for permission to extend a line from the boundaries of the City to the Bank of England, in connection with the Hackney line, on the conditions that Mr. Train should defray the whole of the expense incurred in repaving the road, if required to do so; that he should indemnify the Commissioners from all legal proceedings that might be instituted against them in consequence of the proposed experiment; and that if the Commissioners should be dissatisfied with the project and desire to rescind their consent, they should be at liberty at any time to do so by giving Mr. Train notice to that effect, and require him to carry it out within one month. The whole subject was then referred back to the committee with a view to the experiment being carried into effect, subject to the advice and opinion of the City Solicitor.

THE PUBLIC HEALTH.—The Registrar-General's Return for the week ending Saturday, December 29, states that the late severe weather has not failed to produce its usual effect in an augmented rate of mortality, though the increase is not yet of formidable amount. The deaths in London, which were 1208 and 1269 respectively in the two previous weeks, rose in the last week of the year to 1407. The average number in the corresponding weeks of the last 10 years 1850–9, corrected for increase of population, was 1525. The return of last week was therefore 109 below the average. During the week the births of 734 boys and 754 girls, in all 1488 children, were registered in London. In the 10 corresponding weeks of the years 1850–9 the average number was 1655.

Provincial.

CAMBRIDGE.—On Monday morning the Prince Consort paid a visit to this town for the purpose of inspecting Madingley Hall, and the preparations making there for the reception of the Prince of Wales. The visit being a private one, all ceremony was dispensed with. His Royal Highness travelled by special train from London, attended by General Bruce, the Governor of the Prince of Wales, and Colonel Ponsonby, Equerry to his Royal Highness, and reached Cambridge about 12 o'clock. At the station one of the Royal carriages was in waiting with four post-horses, and the Prince at once proceeded straight to Madingley, and after inspecting the hall returned to Cambridge. His Royal Highness then visited the Master of Trinity College and the Sovereign's apartments in the Lodge, which, it is understood, will be made use of by the Prince of Wales during his residence at the university. Refreshments were served at Trinity Lodge, after which the Prince started for the railway station, and returned by the special train to London. The name of the Prince of Wales has been entered upon the boards of Trinity College. Madingley is the ancient seat of the Cotton family, distant nearly three miles from the College, which makes it somewhat inconvenient; but no adequate residence could be found nearer the University.

CHATHAM.—The Undaunted, 51, one of the improved class of large screw frigates now constructing for the navy, was launched from Chatham dockyard on Tuesday with complete success, making the fifth of the large vessels of war which have been built at that establishment during little more than 12 months. The Undaunted, though nominally classed as a frigate, is considerably larger than most of the line-of-battle ships now afloat, being of 3399 tons, 285 feet long and 51 feet broad, with engines of 600 horse power. Her armament will be exceedingly formidable, including one 68-pounder pivot gun, 20 32-pounders, and 30 8-inch guns. She is to be fitted with her engines immediately, and another vessel of large size is to be laid down on the same slip.

MANCHESTER.—The Manchester Field Naturalists Society held their December *soirée* on the 13th ult. in the library hall of the Athenæum, Mr. Sidebottom in the chair, when Mr. Holland delivered a lecture upon the grasses and cerealia, in reference chiefly to their botanical peculiarities, and their economic value. The room was quite full, the number of ladies, as upon all former occasions, being quite one half that of the entire company.

STROUD.—A crowded meeting was held in this town on Thursday night, for the purpose of enabling Mr. Horsman a second time to address his constituents. At the close of the right hon. gentleman's speech, a resolution was proposed to the effect, "That this meeting, having heard Mr. Horsman's explanation of his votes and speeches in the late session of Parliament, are decidedly of opinion that his views and conduct are so much at variance with the Liberal constituency of Stroud that he no longer represents them in Parliament." A warm discussion ensued, after which the resolution was carried by a very large majority. Mr. Horsman refused to resign.

WARWICK.—The Lord Chancellor has felt it his duty to order the name of Mr. Warde, of Clopton House, in this county, the defendant in the action of "Hooper *v.* Warde," recently tried in the Court of Queen's Bench, to be struck out of the commission of the peace. After receiving an answer to a letter addressed to Mr. Warde, calling upon him for his defence, the Lord Chancellor decided that, in his evidence given at the trial, Mr. Warde showed a recklessness of conduct, and an unconsciousness of the distinction between right and wrong, which proved him to be a person wholly unfit to be intrusted with the power of taking part in the administration of the criminal law.

WINCHESTER.—The execution of the soldier James Johnson, for the wilful murder of Sergeant Chipts and Corporal Coles, at Aldershott barracks, on the 29th of September last, took place on Tuesday in front of the county prison in this city, in the presence of about 3000 persons. He admitted to the chaplain on the previous day that the rifle was loaded only a few minutes before the shot was fired, but it was not done with intent to kill the sergeant, but only to disable him. His last words before reaching the drop, were to beg the chaplain to comfort his mother and sister in Ireland, and tell them he had died penitent.

Ireland.

ATTEMPTED MURDER AND ROBBERY.—The Dublin papers of Saturday contain accounts of an attempted murder and robbery, which, in all the circumstances, differs strangely from other outrages of a like character in Ireland. On Thursday a person in the dress of a gentleman called at the shop of Messrs. Hyam, tailors, in Dame Street, and ordered a large quantity of ready made clothing to be sent to his hotel. A porter named Mulholland was sent with the goods, and was met on his way by a young man who told him that the gentleman had left, and that he must bring the goods to Blackhall Parade. On arriving there the young man took the porter into a stable in the rear of one of the houses, and drawing a pistol fired it into the porter's face, the ball passing through the cartilage of his nose. A struggle ensued in which the porter got the murderer's finger in his mouth and bit it severely, making him cry "Murder," while the cries of the porter himself so alarmed the murderer, that he ran off, leaving behind him various articles which enabled the police to trace and identify him. It was then found that a grave had been dug in the stable ready to receive the body, if the shot had taken effect, the object of the murderer being evidently to obtain possession of the goods and get rid of the body by burying it, so that the porter would, in all probability, have been supposed to have absconded with the money paid to him for the goods. The police on Sunday evening, acting on the clue afforded them by a letter they found in the stable, apprehended a young man named Joseph Dwyer, in the back room of [illegible] Church Street. On being searched, his pockets [illegible] to contain a shilling piece, five keys, a [illegible] a Roman Catholic devotional book, entitled [illegible] Spiritual Combat." One of the fingers of [illegible] hand was marked near the top joint, and [illegible] finger was dressed, as if severely wounded. [illegible] a native of Dublin and the son of highly [illegible] table parents, who gave him a liberal education [illegible] placed him for two years as a student in the [illegible] Catholic University in Stephen Green. He has [illegible] led a wild and dissipated life, and has been [illegible] by his father as irreclaimable, but his mother [illegible] made another effort to induce him to abandon [illegible] ways by writing to him the letter which led [illegible] identification. He was taken before the magistrate [illegible] Monday, when his purchase of the pick-axe and [illegible] and of the pistol, powder, and caps, was proved; [illegible] he was also identified by Mulholland as his assailant, and by the salesman at Hyam's as the person [illegible] ordered the clothes. He was committed [illegible] solicitor who appeared on behalf of his family [illegible] mating that the defence would be that the prisoner was insane.

THE GLENVEAGH MURDER.—A man named [illegible] has been committed for trial on the charge of [illegible] been concerned in the murder of Murray, Mr. [illegible] steward, at Glenveagh, in the county Donegal.

Scotland.

THE MURDER BY DROWNING IN THE CLYDE.—[illegible] the Glasgow Circuit Court on Saturday, John M[illegible] was tried and found Guilty of the murder of [illegible] called Alexander Shields, on the 27th August [illegible] stripping it of its clothes in open day, and throwing [illegible] into the river, pushing the body into deep water [illegible] long stick, and holding it under the water till [illegible] extinct. This case was fully noticed in this paper [illegible] the time. The defence was that the prisoner was [illegible] The jury accompanied their verdict with a [illegible] recommendation to mercy. Lord Cowan sentenced him to Death at Glasgow, on the 19th inst., but [illegible] general expectation seems to be that the sentence [illegible] be remitted on the ground of imbecility.

THE ALEXANDRIA MURDER.—Patrick Lunnay [illegible] tried on the 27th ult. at Glasgow for the murder [illegible] James Cassidy, by stabbing. The parties had been [illegible] bad terms for some months, and on the day [illegible] murder there had been a good deal of taunting [illegible] jeering between them. The medical evidence pr[illegible] that deceased had been stabbed in 14 places with [illegible] knife, and that both the heart and bowels had been penetrated. The jury found the prisoner Guilty, but strongly recommended him to mercy, on the ground [illegible] his having received strong provocation from the deceased. The judge pronounced sentence of Death, [illegible] be carried into execution at Dumbarton on the 18th inst.

THE PENICUIK CASE.—Elizabeth Kerr was [illegible] Monday week again placed at the bar of the Edinburgh Court of Justiciary, charged on a new indictment [illegible] the murder of her infant child on the 25th July [illegible] either by suffocation, or by drowning it in a ditch [illegible] plantation, or by exposing and deserting it, so that [illegible] died from want of nourishment and exposure to [illegible] weather. After a long technical argument on [illegible] terms of the indictment, the judges decided that [illegible] were good and sufficient to sustain the charge. [illegible] prisoner then pleaded Guilty of culpable homicide [illegible] wilfully, wickedly, and feloniously deserting her [illegible] and leaving it exposed to the weather, without [illegible] nourishment, and wholly regardless of the consequences. The public prosecutor offering no opposition, the [illegible] was accepted by the Court, and the Lord Justice [illegible] sentenced the prisoner to 21 years' penal servitude. The prisoner, a prepossessing young woman, on hearing the sentence was completely overcome, and had to [illegible] assisted from the dock by the officers.

Railways.

GRAND TRUNK OF CANADA.—The Directors of the Company have given notice that in consequence [illegible] there not having been sufficient surplus over working expenses during the past half-year, the interest on the first preference bonds, due on the 1st. [illegible] remain in abeyance. A meeting of the shareholders was held on Wednesday, when it was resolved, after a long discussion, to appoint a committee of seven—[illegible] two first preference bondholders, one second bondholder, two ordinary bondholders, and two shareholders, to confer with the Board for the purpose of sending [illegible] committee to Canada, and to consider generally [illegible] affairs of the company.

COLLISION ON THE MIDLAND.—On Wednesday [illegible] week, while the Derby train was in the station at Nottingham, and the tickets were collecting [illegible] the passengers, the train from Leicester was seen [illegible] approaching on the same line. A signal was immediately made to stop the train, but owing to the slippery state of the rails, it was found impossible to do so, [illegible] it ran into the Derby train. The shock was considerable, the Derby carriages being carried more than [illegible] dozen yards by the force of the concussion, and one of the passengers, named William Lyle, has since died [illegible] concussion of the brain. The jury at the inquest returned a verdict of "Accidental Death," and found [illegible]

[illegible] blame rested with the company's servants, the [illegible] having been caused solely by the slippery state [illegible] rails.

COLLISION ON THE GREENWICH.—On Saturday [illegible] a collision took place on this line, which, [illegible] unattended by fatal consequences, severely in[illegible] several passengers. The accident happened to [illegible] first train from Greenwich to London, which was [illegible] at Deptford Creek by an engine proceeding [illegible]wards on the same line of rails. Much damage [illegible] to both engines, in addition to the personal [illegible] sustained.

TRIALS FOR RAILWAY ACCIDENTS.—In the Court [illegible] Queen's Bench last week the action brought by Mrs. [illegible] against the Eastern Counties Company for the [illegible] of her husband, Mr. Stokes, maltster at Stratford, [illegible]quence of injuries he sustained in the accident [illegible] Tottenham in February last, after lasting six entire [illegible] terminated in a verdict for the defendants, the [illegible] finding that the breaking of the tire of the wheel [illegible] not caused by any negligence on their part.—In the [illegible] of Common Pleas the action brought by Mr. Ayling, a commercial traveller, against the South-Eastern Company for injuries sustained in a collision on the Margate branch, terminated in a verdict for the plaintiff with 2000*l.* damages; and the action of Mr. Priestly, mining engineer, against the South Staffordshire Company for injuries sustained in the accident between Walsall and Perry Bar, terminated in a verdict for the plaintiff with 750*l.* damages.

Law.

THE ASSIZES.—NORTHERN CIRCUIT: YORK.—*The Pontefract Murder.—George Thorpe*, a farm labourer, aged 17, was indicted for the wilful murder of Elizabeth Mitchell, at Upton, near Pontefract, on the 2d December. The deceased and prisoner were fellow servants in the service of Mr. Spinks, farmer at [illegible], and were left alone in the house while the family paid a [illegible] a neighbouring village. A friend of deceased called during [illegible] afternoon when the prisoner began to tease both young [illegible], and endeavoured to get possession of a brooch the friend [illegible] wearing. The deceased pulled the prisoner backwards by [illegible] his head till he gave up his hold of her friend, after [illegible] he appeared moody and sulky. The young woman, deceased's friend, left soon afterwards, but returned in the [illegible], and found the front door bolted, and the body of [illegible] lying in the coal house quite dead, having been [illegible] in the back with a gun which must have been discharged quite close to her, as her clothes were burnt. The evidence was entirely circumstantial, the strongest [illegible] against the prisoner being that his master's gun [illegible] recently been discharged, that his smock frock was [illegible] spotted with fresh marks of blood, and that when apprehended on the charge he attempted to hang himself. It was also proved that he had frequently expressed dislike to deceased, because she was in the habit of telling her mistress [illegible]. For the defence it was argued that there was no proof [illegible] who discharged the gun, and that, if [illegible], it was entirely consistent with the facts of his romping and playing with deceased and her friend but a short time before that he should have tried in sport to frighten deceased by putting a cap on the gun to explode at her, being in ignorance that the gun was loaded. Mr. Justice Hill, in summing up the evidence, directed the jury that all homicide was murder, unless the surrounding circumstances reduced it to a minor offence or to death by misadventure, and it was for the jury to judge from the surrounding circumstances in this case as to the nature of the crime. The jury retired, and after an absence of half an hour returned with a verdict of *Not Guilty*. *Attempted Murder near Leeds.—John Kenworthy*, 25, was charged with cutting and wounding, with a hatchet and knife, [illegible] Lupton, with intent to murder him, at New Wortley, near Leeds, on the 8th of October last; there was a count in the indictment charging the prisoner with wounding the [illegible] with intent to do him some grievous bodily harm. The circumstances of this case were of a most atrocious and [illegible] character, and it was a matter of surprise that the prosecutor did not lose his life at the hands of the prisoner. The prosecutor is a grocer and provision dealer, carrying on business at his premises at the corner of Oldforth Street and Cross Street, New Wortley, near Leeds, where he lived alone. On the night of the 7th October the prisoner called him out of bed and said he wanted some castor oil and other articles. While the prosecutor was supplying him, the prisoner felled him to the ground by violent blows upon the head, causing a compound fracture of the skull and other wounds of such a severe character that it was evident some sharp weapon must have been used. The prisoner was identified by Mr. Lupton as well as by a neighbour, who was attracted by his cries, and went to the assistance of the prosecutor. The motive of the attack was supposed to be robbery. The jury returned a verdict of *Guilty*, and the prisoner was sentenced to 15 years' penal servitude. *The Sheffield Bank Robbery.—Mark Rawlins*, a bank clerk, was indicted for stealing three several sums of 150*l.*, 160*l.*, and 5*l.* from the Sheffield and Rotherham Joint-Stock Banking Company, his employers. The evidence showed that there had been great negligence on the part of the manager of the bank in regard to the prisoner's accounts, and the jury at the suggestion of the judge, returned a verdict of *Not Guilty*.

OXFORD CIRCUIT: STAFFORD.—*The Attempted Murder at Rowley Regis.*—[illegible], 27, wheelwright, was charged with cutting and wounding Warren Laister, on the 29th of September, 1859, at Rowley Regis, with intent to murder him. There was a second count which charged the intent to be to do some grievous bodily harm. The prosecuter was sitting quietly in a public house when the prisoner's brother came in and began [illegible] with the inmates. Prosecutor afterwards went out [illegible]. On his way home the prisoner way[laid him] and inflicted such fearful injuries on his head [illegible] that he was confined to his bed for several [illegible] erysipelas intervened and he was in such a [illegible] state that the magistrate attended at his [illegible] depositions. The jury, without hesita[tion, found the] prisoner *Guilty*. Mr. Baron Wilde, in passing sentence, said [illegible] ferocious attack, committed without any adequate provocation, and, so far as appeared, while the prisoner was quite sober, had never been committed in a civi[lised] country. A few years ago the prisoner's life would have [illegible] for such a crime. He should order judgment of death to be recorded. The sentence would not be carried out, [illegible] his duty if he did not recommend [illegible] Majesty to commute the sentence to the highest sen[tence known] to the law next to that of death,—viz., penal servitude for life. It is understood that the prisoner is the brother of William S[illegible] who on the 12th inst. was convicted of a similar offence at Worcester, having, without any provocation, nearly killed an old man who had given him a shilling in a public-house, and then poured his blood into the poor man's mouth. *Manslaughter of a Child by Starvation.—Thomas Lawley*, 40, carter, and *Mary Lawley*, 30, his wife, were charged with manslaughter, in causing the death of their little boy, Timothy Lawley, by ill-usage and not supplying him with necessary food, in August, 1860, at Kingswinford. The jury found the man *Guilty* and the woman *Not Guilty*. Mr. Baron Wilde said the prisoner had been convicted of the unnatural crime of starving his own child, and sentenced him to 15 years' penal servitude.

Obituary.

THE KING OF PRUSSIA died at Sans Souci on Tuesday night after a long illness. His Majesty Frederick William IV. was the eldest son of King Frederick William III., by Louisa, Princess of Mecklenburg Strelitz, and was born on the 15th of October, 1795, so that he was in his 66th year. He succeeded to the crown of Prussia on his father's death in June, 1840, and consequently had occupied the throne more than 20 years. His Majesty in early life was educated by some of the most distinguished scholars in Germany, and afterwards served for several years in the Prussian army. On the outbreak of the revolution in the early part of 1848, after some severe fighting between the troops and the citizens of Berlin, his Majesty issued a proclamation recommending the union of German princes and peoples under the head of Prussia, the fusing of the name of Prussia into that of Germany, and the abolition of the censorship of the press, placing its offences under the ordinary tribunals. The populace assembled in delight. An accidental quarrel arose with the soldiery; blood was spilt; but the King had the prisoners released, nominated a popular Ministry, and proclaimed a general amnesty. The step was successful, and tranquillity was re established. He next undertook the protection of Schleswig and Holstein against their Danish neighbours in the name of the Provisional Government of Germany. But no sooner had the Diet at Frankfort elected the Archduke John to be Lieut.-General of Germany than his ardour cooled, and he refused to give or consent to a constitution for his people. Since that time the chief events in his Majesty's political life have been his endeavours in the German Diet to oppose the superiority of Austria; his interference in the Neufchâtel question, which at one time threatened to involve Europe in a general war; and his refusal to co-operate with the Western Powers in the war with Russia, although he had expressed his opinion that Russia was wrong in her aggression upon Turkey. In spite of his political indecision his Majesty was greatly beloved in private life, and was the first of his line who united the scholar with the monarch, and combined in his own person the poetical and artistic with the religious temperament. He was an enthusiastic lover of the fine arts and of the higher branches of philosophy, and accordingly extended his patronage to philosophers, painters, chemists, mathematicians, scholars, and geologists, with no sparing hand. A connoisseur in painting, sculpture, and architecture, and enthusiastically fond of poetry and the drama, he caused several of the tragedies of Æschylus to be translated into German, and to be performed by the company of the Theatre Royal at Berlin. He was also a tower of strength to the Protestant cause upon the Continent, and was in the habit of frequently assembling together at Berlin the members of the Evangelical Alliance. His Majesty leaves behind him three brothers and three sisters—1st, Prince Frederick William Louis, who has succeeded to the throne, born in 1797, and married to a daughter of the Grand Duke of Saxe-Weimar, by whom he has a son, Prince Frederick William Nicholas Charles, the son-in-law of Queen Victoria, and a daughter, the Princess Louise, married to the reigning Grand Duke of Baden; 2d, Prince Frederick Charles Alexander, born in 1801, and married to a sister of his brother's wife; 3d, Prince Frederick Henry Albert, born in 1809, and married to a daughter of the late King of Holland, from whom however he was divorced in 1849. Of the sisters one was the Empress Dowager of Russia, lately deceased; another the Grand Duchess Dowager of Mecklenburg Schwerin; and the third the Princess Louisa Augusta Wilhelmina Amelia, married to William Frederick Charles, Prince of Holland.

THE COUNTESS OF EGLINTON died suddenly on Monday morning at Eglinton Castle, Ayrshire. She was to all appearance in perfect health on Sunday, and, with the Earl, was about to receive a large circle of distinguished visitors at the Castle. Her ladyship, Adela Caroline Harriet, was the only daughter of the Earl and Countess of Essex, and was born in 1828. She was married at Dublin in 1858 to the Earl of Eglinton, then Lord-Lieutenant of Ireland, being his lordship's second wife. She leaves issue an only child.

LIEUT.-COLONEL SIR MATTHEW E. TIERNEY, BART., died on the 28th ult., at 20, Chapel Street, Belgrave Square, in his 43d year. He was born in 1818, and succeeded his father, the second baronet, in 1856. The first baronet was Sir Matthew Tierney, a distinguished physician, who was for many years attached to the Court of George IV. The deceased baronet was appointed Captain, and afterwards Lieut.-Colonel in the Coldstream Guards in 1849, and retired in 1854, after having served with considerable distinction in the earlier portion of the Russian war. He married in 1855 a daughter of Mr. F. Grove Farrer, of Brafield House, Buckinghamshire.

LIEUT.-GENERAL HENRY RAINEY, C.B. and K.H., Colonel of the 23d Regiment (the Royal Welsh Fusiliers), died on the 26th ult. at Brighton. He had been nearly 60 years in the army. In 1807 he was with the 82d at the siege and capture of Copenhagen; with Sir Brent Spencer's expedition off the coast of Spain, and at Cadiz on the surrender of the French fleet; he then joined Sir Arthur Wellesley's army at Mondego Bay, and was afterwards present at the battles of Roleia, Vimiera, and Corunna, and at the retreat under Sir John Moore; he accompanied the regiment to Walcheren in 1809, and was present at the surrender at Middleburgh and siege and capture of Flushing. In 1812 he joined the army in the Peninsula, and served as aide-de-camp to General Sir Thomas Bradford during the siege of the forts of Salamanca, battle of Salamanca, capture of Madrid, siege and retreat of Burgos. He afterwards served in the Portuguese service—in advance through the Tras os Montes in 1813, at the battle of Vittoria, actions of Villa Franca and Toloso, storm of the fortified convent in front of San Sebastian, at both the sieges and storm of San Sebastian, passage of the Bidassoa, battle of the Nivelle, battles of the Nive on the 9th and 10th December. He was severely wounded at the Nive and at the siege of San Sebastian. He was afterwards with the army of occupation in France from the capitulation of Paris in 1815 to the end of 1818. For his services in the field he was made a Companion of the Bath and a Knight of the Royal Hanoverian Guelphic Order, and he had received the silver war medal and eight clasps for his services in the Peninsula.

MR. BOWLBY, the Correspondent of the *Times*, who was murdered with the other prisoners in China, was the son of Captain Thomas Bowlby, of the Royal Artillery, by a daughter of General Balfour. He was born at Gibraltar, and was the eldest of a numerous family. While he was very young his parents took up their residence in Sunderland, where his father entered upon the business of a timber merchant. After leaving school he was articled as a solicitor to his cousin, who at that time practised in the town. On the completion of his clerkship he went to London, and spent some years as a salaried clerk in the office of a large firm in the Temple. About the year 1846 he commenced practice in the city with Messrs. Laurence & Crowdy, and for some years enjoyed a fair practice. But the profession of the law was not adapted to his peculiar tastes, and much of his time was spent in literary studies and in the company of literary men. Shortly after he commenced practice he married Miss Meire, the sister of his father's second wife, and on the death of her father she became possessed of a considerable fortune. In 1848 Mr. Bowlby first became connected with the *Times*, and on the outbreak of the revolution in Germany he was dispatched to Berlin as its special correspondent. In that capacity he visited several parts of the Continent, and soon after his return to England contributed to the *Sunderland Herald* several articles on the condition of Hungary. During the railway mania he got into pecuniary difficulties, which caused him to leave England for a time, but he soon after made arrangements for the whole of his future earnings to be applied in liquidation of his debts. On his return to this country he was for some time associated with M. Jullien, and made arrangements in different continental towns for his musical performances. He next went to Smyrna, where he was engaged in one of the departments connected with the Smyrna and Aidin railway, but his labours were abruptly terminated by the failure of Mr. Jackson, the contractor. He then returned to England, and remained unemployed until he was engaged to proceed to China as the special correspondent of the *Times*. The terms of his agreement were 1500*l* a year, with liberty to draw upon the concern to any amount that might be required for the efficient discharge of his duties. Mr. Bowlby proceeded to China in the same steamer with Lord Elgin and Baron Gros, and was shipwrecked with them. He was about 43 years of age, and has left a widow and five children.

WILLS.—The will of the Duke of Richmond has been sworn under 120,000*l.*; Admiral Sir Charles Napier, 80,000*l.*; Sir Henry George Ward, G.C.M.G., Governor of Madras, 5000*l.*

BIRTHS.—On New Year's Day, at Albert Gate House, the Countess de PERSIGNY, of a daughter—29th ult, at Birdsall House, the Lady MIDDLETON, of a son—29th ult, the Lady AMELIUS WENTWORTH BEAUCLERK, of No. 3, Bryanstone Square, of a daughter—27th ult, at Castlecraig, Peebles-shire, Lady GIBSON-CARMICHAEL, of a son—30th ult, at 72, Harley Street, the Hon. Mrs. LEVESON RANDOLPH, of a daughter—29th ult, at Leamington, the wife of the Hon. F. A. FOLEY, Captain R.N., of a daughter—31st ult, at 51, Harley Street, the wife of WALTER SPENCER STANHOPE, Esq., of Cannon Hall, Yorkshire, of a son and heir.

MARRIAGES.—On the 27th ult., at St. James's, Piccadilly, the Right Hon. HUGH Lord DELAMERE, of Vale Royal, Cheshire, to AUGUSTA EMILY, daughter of the Right Hon. Sir GEORGE HAMILTON SEYMOUR, G.C.B., G.C.H., 10, Grosvenor Crescent—15th inst, at Rathfarnham Church, county Dublin, the Right Hon. MAZIERE BRADY, Lord Chancellor of Ireland, to MARY, second daughter of the Right Hon. JOHN HATCHELL, of Fortfield House, county Dublin—27th ult, at St. Peter's, Eaton Square, STUART, son of Sir JAMES WEIR HOGG, Bart., to SELINA CATHERINE, eldest daughter of Sir ERSKINE PERRY—29th ult, at St. Mary's Church, Bryanston Square, the Rev. ELIOT HENRY STAPLETON, third son of the Hon. and Rev. Sir Francis J. Stapleton, Bart., and grandson of the 22d Lord Le Despencer, to FRANCES MARY, eldest daughter of Sir WALTER STIRLING, Bart.; and at the same time and place, CHAS. LEVINGTON, second son of Sir JAMES WEIR HOGG, Bart., to HARRIET ANNE, youngest daughter of Sir WALTER STIRLING, Bart., and the Lady CAROLINE STIRLING—26th ult, at the British Legation, Turin, the Rev. GEORGE RAYMOND PORTAL, Rector of Albury, Surrey, to HELEN MARY CHARLOTTE, widow of the late WILLIAM DALBUE, Esq., of Killiow, Cornwall, and niece of his Excellency Sir James Hudson, K.C.B.—27th ult, at Twickenham, THOS. BRADSHAW, Esq., of Lincoln's Inn, to EMILY ISABELLA, only child of the late Col. FREDERICK HALKETT, Coldstream Guards, and granddaughter of General Sir Hugh Halkett, G.C.H.—1st inst. at Wimborne Minster, CORNWALL SIMEON, Esq., third son of the late Sir Richard Simeon, Bart., to MARY, youngest daughter of T. B. EVANS, of North Tuddenham, Norfolk, and Dean, co. Oxon, Esq.—New-Year's-day, at St. George's, Hanover Square, JOHN WALTER, Esq., M.P., to FLORA, third daughter of the late JAMES MONRO MACNABB, Esq., of Highfield Park, Hants.

DEATHS.—On the 31st ult, at Wiesbaden, the Hon. EDMOND SEXTEN PERY, youngest son of Edmund Henry, late Earl of Limerick, aged 63—25th ult, the Lady EMILY NEEDHAM, of Datchet House, Bucks, aged 69—26th ult, at her residence, in Bruton Street, Lady CLIFTON, widow of the late Sir Juckes Granville Juckes Clifton, Bart., of Clifton, Notts—23d ult, at her residence, 54, Montague Square, Lady HALES, widow of the late Sir Edward Hales, Bart., of Hales Place, Kent, aged 89—29th ult, at Dover, Lady BOLLAND, relict of Sir William Bolland, Knt., late one of her Majesty's Barons of Exchequer, aged 76—25th ult, at Littlegreen, MARIA SOPHIA, the beloved wife of Admiral Sir PHIPPS HORNBY, K.C.B., aged 76—22nd ult, at Malta, MARY, wife of Major-General CHARLES WARREN, C.B.—25th ult, at 25, Lansdown Place, Cheltenham, Major-General A. CAMPBELL, late H.E.I.C.S., and of Auchmannock and Avisyard, Ayrshire, aged 77—31st ult, at his residence, 9, St. James's Terrace, Regent's Park, Lieut.-Colonel JAMES PATERSON, late Commanding 3d Regiment, son of the late Lieutenant-General Sir William Paterson, K.C.H.—25th ult, at Ostend, Colonel HENRY C. STREATFEILD, late of her Majesty's 87th Regiment of Royal Irish Fusiliers, aged 76—29th ult, at East Molesey, Surrey, WILLIAM PENNELL, Esq., formerly H.B.M.'s Consul-General for the Empire of Brazil, aged 95—23d ult, at Stonehouse, Devon, JOHN WILLIAMS COLENSO, Esq., late mineral agent for the Duchy of Cornwall, and father of the Bishop of Natal, South Africa, aged 83—27th ult, at 36, Berkeley Square, Dr. EDWARD RIGBY, M.D., aged 57.

Markets.

BUTTER MARKET.—Jan. 4.

Best Fresh Butter . . .	18s. per dozen lbs.
Second do. do. . . .	15s. " "

Pork, 4s. 8d. to 5s. 0d. per 8 lbs.

COAL MARKET.—Jan. 2.

Byass's Bebside West Hartley, 17s. 3d.; Davison's West Hartley, 17s. 6d.; Hasting's Hartley, 17s. 6d.; Howard's Hartley, 17s. 6d.; Lambert's West Hartley, 17s.; Walls End Russells Hetton, 24s.; Walls End Cassop, 24s. 6d.; Walls End Hough Hall, 24s.; Walls End North Hartlepool, 18s. 6d.; Walls End South Durham, 24s.; Carway and Duffryn Malting, 23s. 6d.—18 ships at market.

COVENT GARDEN, Jan. 5.

The severe weather which we are now experiencing causes most things to realise better prices than they hitherto have done. Pine Apples have not altered, but Grapes still continue to be a good deal dearer. Oranges may still be obtained at about last week's prices. Good Cobs may be had at from 1s. to 1s. 6d. per pound. Cabbages, Carrots, and Turnips may be obtained in quantity. Cauliflowers are dearer, and so are most kinds of winter Greens. Potatoes realise from 6s. to 8s. per cwt. Asparagus and French Beans may now be

had, but prices for them are high. Cucumbers are scarce. Cut flowers chiefly consist of Orchids, Gardenias, Chrysanthemums, Violets, Mignonette, Heaths, and Roses.

FRUIT

Pine Apples, per lb., 4s to 8s	Apples, per doz., 6d to 1s 6d
Grapes, per lb., 6s to 10s	Oranges, per 100, 6s to 10s
Pomegranates, each, 4d to 6d	Lemons, per 100, 6s to 10s
Pears, per doz., 1s to 3s	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Cauliflowers, each, 6d to 8d	Onions, p. ½ sieve, 1s 6d to 2s6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 10s to 30s
Cabbages, do., 2s to 3s	Seakale, p. punnet, 3s to 3s 6d
Potatoes, p. ton, 100s to 130s	Shallots, per lb., 6d to 8d
— per bus., 3s to 4s	Garlic, per lb., 6d to 8d
— per cwt., 5s to 8s	Lettuces, Cabb., per score, 1s to 1s 6d
Carrots, per bunch, 8d	Lettuces, Cos, do., 1s to 1s 6d
Turnips, per bunch, 6d	Endive, p. score, 1s to 1s 6d
Spinach, p. sieve, 4s to 5s	Horse Radish, p. bun., 1s 6d to 4s
Cucumbers, each, 1s 6d to 3s	Mushrooms, p. pott., 2s to 3s
Artichokes, per doz., 4s to 6s	Parsley, p. 12 bunches, 4s to 6s
Beet, per doz., 1s 6d to 2s	Savory, per bunch, 2d to 4d
Celery, p. bundle, 1s 6d to 1s9d	

BRITISH WOOLS.—LONDON, FRIDAY, Jan. 4.

The state of American politics still continues to stop all business dependent on our connection with the United States, a disposition being entertained on the part of merchants to await the result of the present suicidal agitation before entering into further commercial relations with that excitable community, and as America takes so large a portion of our manufactures, wool is considerably influenced by the prosperous or adverse state of that Continent. It need not surprise any one, therefore, to hear that there is at present an entire absence of business in all descriptions of wool dependent on American demand, and it is only in the present pull of skin wool that any business is being transacted.

	s. d. s. d.		
South-down Hoggets..	1 7 to 1 8	Leicest. Wethers	1 6 to ..
Half-bred ditto..	1 8 — ..	Ditto Hoggs ..	1 8 — ..
Down Ewes ..	1 5 — 1 6	Combing Skins	1 0 — 1 4
Kent Fleeces ..	1 7 — ..	Blanket ditto ..	0 6 — 0 8
		Flannel Wool ..	1 0 — 1 8

POTATOES.—SOUTHWARK, Monday, Dec. 31.

During the past week the arrivals coastwise have been moderate, but there is still a large fleet here to dispose of; last week being holiday time the demand was very limited. The following are this day's quotations:—York Flukes, 160s. to 170s. per ton; Lincolnshire Regents, 100s. to 120s.; Dunbar Red Soil, 120s. to 140s.; North Berwick do. 120s. to 125s.; Fife, Forfar, and Perth do., 105s. to 115s.; Rocks and Reds, 90s. to 95s.; French Whites, 90s. to 100s.; Belgian do., 85s. to 90s.; Dutch do., 80s. to 85s.

HOPS.—BOROUGH MARKET, FRIDAY, Jan. 4

Messrs. Pattenden & Smith report that there is a more extensive demand for all fine yearlings at improved prices for consumption; fine 1855 and 1856's are sought after for speculation, but the new growth, except the very choicest, are almost neglected.

METROPOLITAN CATTLE MARKET.

MONDAY, Jan. 3.

We have a short supply of Beasts. Trade is not very brisk, but late rates are well maintained. The number of Sheep is very small; they are readily disposed of at advanced prices. Good Calves are scarce. From Germany and Holland there are 179 Beasts, 660 Sheep, and 22 Calves; from Spain, 228 Beasts; from Scotland, 200; from Ireland, 200; from Norfolk and Suffolk, 1000; and 900 from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	5 2 to 5 4	Best Long-wools.	5 4 — 5 8
Best Short-horns	5 0 — 5 2	Do. Shorn ..	.. to ..
2d quality Beasts	4 0 — 4 6	Ewes & 2d quality	4 8 — 5 0
Best Downs and Half-breds ..	5 8 to 5 10	Do. Shorn ..	.. — ..
Do. Shorn ..	.. — ..	Lambs ..	.. .. — ..
		Calves ..	.. 4 4 — 5 4
		Pigs ..	.. 4 4 — 5 4

Beasts, 3460; Sheep & Lambs, 16,600; Calves, 56; Pigs, 200.

THURSDAY, Jan. 3.

We have a short supply of Beasts and a fair demand; consequently Monday's prices are well maintained. Good qualities are scarce. Trade is not very brisk for sheep, although the number being small, we retain Monday's quotations. There is no alteration in the Calf trade. Our foreign supply consists of 50 Beasts, 60 Sheep, and 64 Calves; Milch Cows, 115.

Best Scots, Herefords, &c. ..	5 2 to 5 4	Best Long-wools.	5 4 — 5 8
Best Short-horns	5 0 — 5 2	Do. Shorn ..	.. — ..
2d quality Beasts	4 0 — 4 6	Ewes & 2d quality	4 8 — 5 0
Best Downs and Half-breds ..	5 8 — 5 10	Do. Shorn ..	.. to ..
Do. Shorn ..	.. — ..	Lambs ..	.. .. — ..
		Calves ..	.. 4 4 — 5 4
		Pigs ..	.. 4 4 — 5 4

Beasts, 955; Sheep & Lambs, 3870; Calves, 113; Pigs, 150.

MARK LANE.—MONDAY, Dec. 31.

The supply of Wheat from Essex and Kent to this morning's market was unusually small, and sold at an advance of 1s to 2s. per qr. upon the prices of this day se'nnight. Foreign met a good retail inquiry, at an improvement of 1s. per qr. Barley is a slow sale, with the exception of the finest malting qualities, which bring extreme prices. There is no alteration in the value of either Beans or Peas. Oats are in moderate demand at an advance of 6d. per qr. Barrel Flour is 6d. dearer than on this day week.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk.. White	54—65	Red	48—62
— — fine selected runs.. ditto	55—70	Red	55—67
— — Talavera	51—75		
— Norfolk	—	Red	—
— Foreign	50—76		
BARLEY, grind. & dist., 28s to 30s.. Chev.	40—45	Malting.	38—46
— Foreign.. grinding and distilling	30—36	Malting.	40—44
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire.. Potato	26—28	Feed ..	20—25
— Irish .... Potato	26—28	Feed ..	21—24
— Foreign .... Poland and Brew	24—26	Feed ..	20—26
RYE	35—38	Foreign.	—
RYE-MEAL, foreign	—		
BEANS, Mazagan.... 36s to 44s.... Tick	28—48	Harrow.	28—48
— Pigeon ...... 34s — 56s.. Winds	34—42	Longpod	—
— Foreign .... Small	40—50	Egyptian	—
PEAS, white, Essex and Kent .. Boilers	38—48	Suffolk .	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign.	38—48
MAIZE .... White	—	Yellow..	—
FLOUR, best marks delivered.. per sack	50—57		
— 2d do. .... ditto	38—50	Country.	38—50
— Foreign .... per barrel	30—35	Per sack	40—50

FRIDAY, Jan. 4.

The weather on Saturday, the 29th ult., was very fine with intense cold, Fahrenheit's thermometer standing at zero at 8 o'clock in the morning. On the 30th heavy rain fell the whole day; 31st, a cold damp fog; Jan. 1 was wet, with rain and brisk wind; the 2d was ushered in with a sharp black frost and N.E. wind, which has continued. The Wheat trade during the week continued to be very firm, with a demand (for the time of year) exceeding the average; and in many markets in the interior and on the east coast prices are quoted 1s. to 2s. per quarter. higher. The late value of all kinds of spring corn has been well supported. with an upward tendency. Flour has met a fair inquiry at the extreme rates of last week. During the past week 29 cargoes have arrived off the coast. The trade maintains a firm tone; but the demand is not very active, owing partly to the absence of daily expected cargoes, and the rise in the discount. In Paris, on the 3d January, although the business done in flower was not very active, prices were well maintained, and the trade ruled firm. For Wheat there was not much demand, as many millers abstained from buying, owing to the difficulty of getting the Wheat to their mills. A few parcels had been taken for Normandy. The arrivals of all descriptions of grain (eitherEnglish or foreign) during the week have been very moderate. The attendance at this morning's market was small. Wheat, either English or foreign, commanded the full prices of Monday last, but the sale of the latter was limited and of a retail character only. Barley is quiet at Monday's quotations. Oats bring an advance of 6d. per qr.

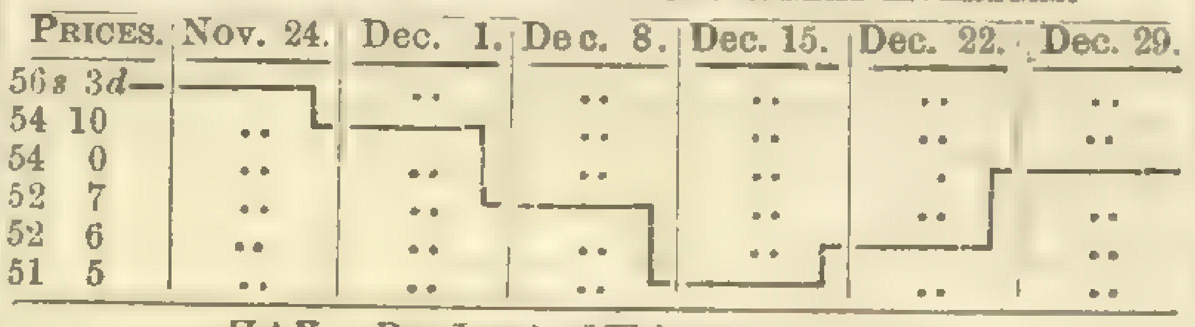
ARRIVALS FROM Dec. 31 TO Jan. 4.

	Wheat.	Barley.	Oats.	Flour.
English ..	920 qrs.	640 qrs.	210 qrs.	850 sks.
Irish	— „	— „	120 „	— „
Foreign ..	6040 „	2710 „	1600 „	1510 „ 3600 brls.

LIVERPOOL, Friday, January 4.—We had a moderate attendance of millers and dealers at our Corn Exchange this morning. There was a fair consumptive trade in Wheat at 1d. to 2d. per cental advance on Friday's quotations. Flour was a fair sale. Prices unaltered. Indian Corn, mixed, slow sale, 39s. to 39s. 6d.; Galatz, 40s. Beans rather more inquiry; 40s. 6d. to 41s. for Egyptian. Oats and Oatmeal a fair trade.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Nov. 24..	56s 3d	40s 11d	23s 3d	34s 4d	58s 11d	48s 4d
Dec. 1..	54 10	39 10	22 3	35 11	48 10	45 11
— 8..	52 7	39 2	22 5	35 0	47 9	45 0
— 15..	51 5	38 7	22 1	33 6	45 6	43 3
— 22..	52 6	38 6	21 8	35 2	42 2	43 10
— 29..	54 0	39 7	22 6	34 7	44 10	46 7
Agg. Aver.	53 7	39 5	22 5	34 9	46 10	45 7

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, Jan. 3.

[Pri]me Meadow Hay	75s to	84s	Clover	95s to	115s
Superior do. (old) ..	90	110	New Clover ..	—	—
Inferior do.	40	57	Old second cut ..	70	95
New do.	—	—	Straw	30	36
Rowen	30	50			

DAVIS & Co.

WHITECHAPEL, THURSDAY, Jan. 3.

Fine old Hay	105s to	110s	Fine old Clover ..	115s to	120s
Inferior do.	60	80	Inferior do	100	108
Prime New Hay ..	—	—	Fine 2d cut	84	95
Inferior do.	—	—	Inferior do.	—	—
Straw	36	40	Fine New Clover ..	—	—

WANTED, AS NURSERY FOREMAN, a steady, active, business Man, of good Address, who thoroughly understands the Cultivation of Roses and Nursery work in all its branches.—Address, stating Terms, &c. (by letter only), B. C., Messrs. Noble & Co., 152, Fleet Street, London, E.C.

WANTED, AS GARDENER, capable of Managing the usual Gardens attached to a Mansion; there are two men under him. Wages, with cottage on the estate, 1l. per week, with a yearly increase of 5l. during the first three years. The Wife must undertake the care of Poultry.—Apply by letter to H. E. P., Chertsey, Surrey.

WANTED, AS GARDENER, a strong active Man. Preferred one who has had the sole management in a clergyman's small well-kept garden, with some glass, in the country. A Boy with occasional help allowed. None who are not well disposed to work industriously need apply, and good references from a gentleman or lady required. Wages as an in-door and out-door Gardener to be stated.—Address T. J., Emsworth, Hants.

WANTED, AS WORKING GARDENER, a married Man (age not to exceed 35 years), who will be required to attend to a Vinery and Greenhouse, and who must understand his business thoroughly. Good references required as to character and ability.—Apply by letter or personally to Mr. J. FISHER, Orston, Elton, Notts.

WANTED, a young MAN used to Gardening as an Improver, where several men are employed, and nearly 5000 feet of piping heated by Ormson's one-boiler system.—ED. BENNETT, The Gardens, Osberton, Notts.

WANTED IMMEDIATELY, for a London Retail Seed Business, an active intelligent young Man, who has a good general knowledge of the Seed Trade.—Application by letter, giving references to present or last employer, and stating wages expected, to A. B., *Gardeners' Chronicle* Office.

WANTED, a married Man with good address, to attend Customers, to put up Orders in a small SEED and NURSERY BUSINESS, and to make himself generally useful in Growing a small collection of GREENHOUSE PLANTS.—Apply, by letter, to Messrs. PAMPLIN & SON, Nurserymen, Lea Bridge Road, Leyton, Essex, N.E.

WANTED, AS ASSISTANT SHOPMAN, in a country Seed Business, an active steady young Man, with a good knowledge of the Trade.—Apply to Mr. JOHN EDWARDS, Messrs. E. G. Henderson & Co., Wellington Road Nursery, St. John's Wood, London, N.W.

WANTED, AS GROOM, a married Man without children. He must thoroughly understand the care of Horses, and be able to drive, also to milk Cows, &c. His Wife will be required to manage a small Dairy, Poultry, &c., and open the Entrance gate. They will reside in the Lodge. Wages 60l. a year.—Address by letter only, B.C., 14, Wigmore Street, London, W.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 35, married, no incumbrance; understands his profession in all its branches. Three and a half years' character.—P. P., Plashet Park House, East Ham, Essex, N.E.

GARDENER (HEAD).—Understands Forcing [illegible] its departments, also Flower and Kitchen Gar[dening] [illegible] and a half years' good character from last place.—J. [illegible] Methven, Stanwell Nursery, Edinburgh.

GARDENER, (HEAD).—Age 40, married, no [incum]brance; understands his profession in al[l] [illegible] No single-handed place accepted; good character.—W [illegible] Office, Leytonstone, N.E.

GARDENER (HEAD).—Age 35, married; [illegible] 20 years' experience in the various branches [of Gar]dening, Land, and Stock. Wife professional Laundress [illegible] years' character.—T. B., 13, Huntsworth Terrace, [illegible] Market, Paddington, W.

GARDENER (HEAD).—Age 42, married; [illegible] considerable experience in the management [of] Vines, &c., and Kitchen and Flower Gardening. [illegible] testimonials from his last two places, where he [illegible] of twenty years.—M., Mr. Cranston, Nurseryman, K[illegible] Hereford.

GARDENER (HEAD).—Middle-aged, married; [illegible] upon the most improved principles for 20 y[ears] [illegible] successfully cultivated Pines, Peaches, Grapes, &c., Hot-house and Greenhouse plants. He has a thorough [illegible] knowledge of Forcing in general, and the [illegible] Flower, and Kitchen Gardens. If required can [illegible] management of Land, Stock, and Draining.—G. B. [illegible] Lawson & Sons, 27, Great George Street, Westminster, [illegible]

TO NOBLEMEN AND GENTLEMEN.

GARDENER (HEAD), Age 38, married, [no incum]brance.—P. KELLY, Gardener to the late Mrs. [illegible] Kidgmont, Bolton-le-Moor, Lancashire, is at liberty [to] engage in a similar capacity. Can have a good character [from] the friends of his lamented employer. Has had [illegible] experience in his present situation.—Direct as above.

TO NOBLEMEN AND GENTLEMEN.

GARDENER (HEAD).—Has successfully man[aged] one of the largest establishments in the Mid[land Coun]ties, is leaving in consequence of death in the family [illegible] be highly recommended by the nobleman with wh[om his ser]vices are about to terminate.—E. S. I., 21, Duke Street, [illegible]bury, London, W.C.

GARDENER (HEAD, OR FIRST-CLASS).—A[illegible] a well-known experienced Gardener, highly [recom]mended by several noted Horticultural gentlemen to [the] greatest satisfaction. Just left a first class family [illegible] Five years most excellent character.—H. W., Muskett [illegible] Clapham, S.

GARDENER (HEAD) OR GARDENER [AND] BAILIFF.—Good practical knowledge of his profession [in] all its various branches; also thoroughly experienced [illegible] and Land.—M., Post Office, Battersea Rise, Surrey, [illegible]

GARDENER (SINGLE-HANDED OR OTHERWISE).—Age 32, single; perfectly understands his profession [in] all its branches. Can have two years' good character.—[illegible] Post Office, Stockwell Green, S.

GARDENER, GROOM, OR WORKING BAIL[IFF]—Age 40, single; can Milk a Cow or Drive a [illegible] Horse and Trap. Is leaving for no fault. Four years [illegible] situation.—T. H., Oak Lodge, Barnet, Herts.

TO NURSERYMEN.

PROPAGATOR.—A young Man, of good abilities.—M. T., Mrs. Adams, 13, Artillery Lane, Bishopsgate Without, London, E.C.

ASSISTANT IN THE SEED TRADE.—Ha[s] [illegible] years' experience, and has a knowledge of Book-keeping.—X. Y., *Gardeners' Chronicle* Office, W.C.

TO FARMERS, MARKET GARDENERS, [illegible]

MANAGER, CLERK, OR FOREMAN.—Age [illegible] well acquainted with Market Gardening; has practi[sed] around London. Salary moderate. Can be highly re[com]mended; security if required.—Mr. W. CLARK, 25, Bis[hops]gate Street Within, E.C.

TO NOBLEMEN AND GENTLEMEN.

GENERAL MANAGER OF AN ESTATE, [or] Manager of a Home Farm; a native of Scotland [illegible] wanted by a native of Scotland, a situation as FARM BAILIFF.—Mr SANDERSON, Land Valuer, 13A, Cannon Row, West[min]ster, S.W., who can with the utmost confidence recommend [the] Advertisers.

TO NOBLEMEN AND GENTLEMEN.

STEWARD.—Age 40, married, no incumbrance; [has] lived in different localities in the south and [illegible] England; has had much practice in Horticulture and [Agricul]ture.—A. GREGORY, Caterham, Red Hill, Surrey.

TO NOBLEMEN AND GENTLEMEN.

FARM BAILIFF OR STEWARD.—Age [illegible] married; is well skilled in the Management of [illegible] and Heavy Land, Buying and Selling Stock, Erecting [illegible] Buildings, Carrying out Estate Improvements, [illegible] Accounts, &c. Has for the last 20 years been engaged [in the] Management of some of the largest Estates in the [illegible] Eight years in present situation. Character and testimonials highly satisfactory. Security given if required.—T [illegible] Greenland, Holmrook, Cumberland.

BAILIFF.—Age 39; thoroughly understands [the] Management of Land and Stock of all kinds, also a [good] Accountant. High references and testimonials for many [illegible] produce.—T. P., 34, Grafton Street East, Gower Street, W.C.

BAILIFF (WORKING).—Married, with[out incum]brance; the Advertiser has had great experience [in] Yorkshire in the Breeding and Rearing of First Class [illegible] Horned Cattle and Sheep, and the Management of [Light] and Heavy Land. First Class Testimonials. [illegible] character.—L. M., Post Office, Adlington, near [illegible] Lancashire.

BAILIFF (UNDER).—A steady young Man; has [had] experience with a First class Practical Farmer. [illegible] no object.—W. B., 32, Oxford Terrace, Hyde Park, W.

TO SEEDSMEN AND NURSERYMEN.

CLERK AND SHOPMAN.—Age 23; is a good Bo[ok]keeper, and has a fair knowledge of the Trade generally. Of good address, and could give references and security. A. B., Mr. Hunt's, Beulah Spa, Upper Norwood, S.

GAMEKEEPER.—Age 35, married; is compe[tent] to take a Head Gamekeeper's place; is an ex[cellent] Pheasant rearer. Can have nine years' character from [the] gentleman he is now leaving.—Mr. LOFFLEY, Gun-maker, Gallowtree Gate, Leicester.

COACHMAN, &c., to take charge of Horses [and] Carriage.—Wife will assist in-doors if required. Ref[er]ences.—W. M., Alscot Park, Stratford-on-Avon.

The Gardeners' Chronicle Newspaper.

SATURDAY, JANUARY 19, 1861.

GEOLOGY.—KING'S COLLEGE, LONDON.—Professor TENNANT, F.G.S., will commence a COURSE OF LECTURES ON GEOLOGY, on FRIDAY Morning, January 25, at 9 o'Clock. They will be continued on each succeeding WEDNESDAY and FRIDAY at the same hour. Fee 2*l.* 12*s.* 6*d.*—R. W. JELF, D.D., Principal.

NOTICE OF DIVIDEND.

BANK OF DEPOSIT (Established A.D. 1844), 3, Pall Mall East, London, S.W.—The WARRANTS for the HALF-YEARLY INTEREST, at the rate of 5 per cent. per annum, on Deposit Accounts, to December 31, are READY for delivery, and payable daily between the hours of 10 and 4.
January 12. PETER MORRISON, Managing Director.
Prospectuses and Forms sent free on application.

FOR SALE, the first four Vols. of the "GARDENERS' CHRONICLE," well and strongly bound in half calf, equal to new. No reasonable offer will be refused, the owner having duplicate copies.—Apply to Mr. J. H. MEYERS at the Public Library, Enfield, N.

TWENTY-FOURTH YEAR OF PUBLICATION.
Price One Shilling,

GLENNY'S GARDEN ALMANACK AND FLORIST'S DIRECTORY FOR 1861, containing full Directions for the Management of an Amateur's Garden for every month in the year, and other useful information.
W. KENT & Co., Paternoster Row, and sold by all Booksellers.

THE ILLUSTRATION HORTICOLE, published by AMBROISE VERSCHAFFELT, Nurseryman, Ghent, Belgium. The 12th Number (December, 1860), now ready, contains:

Epacris multiflora	Pandanus elegantissimus
Azalea indica Duke of Aremberg	Ceanothus elegans

A Specimen Number can be obtained free on application to the Publisher. Price, 14*s.* 6*d.* per year, free by post.

DRAINAGE OF LAND.
Price 6*d.*, or by Post for Eight Postage Stamps,

ON THE PROGRESS AND RESULTS OF UNDER DRAINAGE IN GREAT BRITAIN. Prize Essay. By J. BAILEY DENTON, Agricultural Engineer, and author of the "Prize Essay on Road Making," and other Agricultural Treatises.

Also by Mr. BAILEY DENTON, same price,

ARTERIAL DRAINAGE AND OUTFALLS, reprinted from the *Agricultural Gazette.*
52, Parliament Street, Westminster, S.W.

CATTLE, HAY, AND DRAINING.
Tenth Edition, price 2*s.* 6*d.* cloth, of

A NEW SET OF TABLES for Computing the Weight of Cattle by Measurement, the Quantity of Hay in Ricks of different Forms, the Value of Land, &c., with Concise System of FARM BOOK-KEEPING. By JAMES STRACHAN, Fochabers.

STRACHAN'S TABLES ON DRAINING, with Practical Directions. 2*s.* 6*d.*
OLIVER & BOYD, Edinburgh; SIMPKIN, MARSHALL, & Co. London.

MR. JOHN CHALMERS MORTON'S AGRICULTURAL HANDBOOK.
Just published, in 16mo, pp. 138, price 1*s.* 6*d.* sewed,

HANDBOOK OF FARM LABOUR: Comprising Labour Statistics; Steam, Water, Wind; Horse Power; Hand Power; Cost of Farm Operations; Monthly Calendar; Appendix on Boarding Agricultural Labourers, &c., and Index. By JOHN CHALMERS MORTON, Editor of the *Agricultural Gazette*, &c.

By the same Author,

HANDBOOK OF DAIRY HUSBANDRY, price 1*s.* 6*d.*
London: LONGMAN, GREEN, LONGMAN, & ROBERTS.

On Friday next, a New Edition, in fcp. 8vo,

RIVERS'S ROSE AMATEUR'S GUIDE: Containing ample Descriptions of all the fine leading Varieties of Roses, regularly classed in their respective Families; their History and Mode of Culture. The Seventh Edition, corrected and improved; with copious Additions, the result of recent experience.
London: LONGMAN, GREEN, LONGMAN, & ROBERTS.

LORD MACAULAY'S HISTORY OF ENGLAND.
Preparing for publication, in 8vo, Vol. V.

THE HISTORY OF ENGLAND FROM THE ACCESSION OF JAMES THE SECOND. By LORD MACAULAY. VOLUME THE FIFTH, edited by his Sister, Lady TREVELYAN.

This last volume of Lord Macaulay's History of England will contain the continuation of that work so far as the manuscript was left revised by him. The narrative is in immediate connection with the Fourth Volume, and, with two exceptions, is complete and consecutive, ending with the death of William the Third. A complete Index to the entire Work will be given in this Volume.
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Just published, in 8vo, with 2 Maps and numerous Woodcut Illustrations, price 2*s.* 6*d* sewed,

LECTURES ON THE HISTORY OF ENGLAND, delivered at Chorleywood by WILLIAM LONGMAN. Lecture the Third, the Reign of Henry III., from A.D. 1216 to A.D. 1272.

*** The First Lecture, English History from the Earliest Times to the Death of King John, price 1*s.*; and the Second Lecture, containing an Account of the Feudal System and of the Origin of the Laws and Government of England, price 2*s.*—may still be had.
London: LONGMAN, GREEN, LONGMAN, and ROBERTS.

LAND SURVEYING.
Third Edition, revised, octavo, 8*s.* 6*d.*,

PRACTICAL GEODESY: Chain Surveying, Surveying Instruments, Levelling, Trigonometry, and Mining; Maritime, Estate, Parochial, and Railroad Surveying. By BUTLER WILLIAMS, C.E.
London: PARKER, SON, & BOURN, West Strand, W.C.

This day, demy 8vo, price 10*s.*,

TRADES' SOCIETIES AND STRIKES. Report of the Committee on Trades' Societies appointed by the National Association for the Promotion of Social Science; presented at the Fourth Annual Meeting of the Association at Glasgow, September, 1860.
London: PARKER, SON, & BOURN, West Strand, W.C.

THE QUARTERLY REVIEW, No. CCXVII., is Published THIS DAY.
CONTENTS:—
I. CANADA.
II. WELSH LITERATURE.
III. IRON.
IV. MOTLEY'S UNITED NETHERLANDS.
V. ITALY.
VI. DOGS OF ROMANCE AND HISTORY.
VII. OXFORD ESSAYS AND REVIEWS.
VIII. FINANCE AND THE INCOME TAX.
JOHN MURRAY, Albemarle Street, W.

THE EDINBURGH REVIEW, No. CCXXIX., was published YESTERDAY.
CONTENTS:—
I. CHURCH EXPANSION AND LITURGICAL REVISION.
II. JAPAN AND THE JAPANESE.
III. THE VICTORIA BRIDGE.
IV. POLITICAL BALLADS OF ENGLAND AND SCOTLAND.
V. OCEAN TELEGRAPHY.
VI. AUTOBIOGRAPHY OF DR. A. CARLYLE.
VII. MOTLEY'S HISTORY OF THE UNITED NETHERLANDS.
VIII. FORBES AND TYNDALL ON THE ALPS AND THEIR GLACIERS.
IX. THE KINGDOM OF ITALY.
X. NAVAL ORGANISATION.
London: LONGMAN & Co. Edinburgh: A. & C. BLACK.

THE WEATHER FOR FEBRUARY AND MARCH 1861 will be predicted in the RECORD of the ASTRO-METEOROLOGICAL SOCIETY, published 1st February, price 6*d.*, by post 7*d.* G. BERGER, Holywell Street, Strand, W.C.

THROUGH 500 AGENTS MR. THORLEY is giving a circulation to THORLEY'S AGRICULTURAL GLEANER unsurpassed by all the other Agricultural papers of the day.—77, Newgate Street, City, E.C.

HORTICULTURAL GARDENS.—The *Gardeners' Chronicle* of May 12, containing Mr. NESFIELD'S COLOURED PLAN for the NEW GARDEN at Kensington Gore, is still on Sale at the Office, 41, Wellington Street, Covent Garden, W.C., and will be sent by post on receipt of six stamps.

THE FLORIST, FRUITIST, AND GARDEN MISCELLANY. By CHARLES TURNER and J. SPENCER, Monthly. Coloured Plates and Woodcuts, Price 1*s.* First Number for 1861 was published on January 1st. Volumes for 1860 and previous years neatly bound now ready, each complete in itself, price 13*s.* 6*d.* For New Year's Gifts nothing could be more suitable.—May be had at the "Florist" Office, 30, Southampton Street, Strand, W.C., and all Booksellers.

News of the Week.

A TELEGRAM from Gaeta was received on Monday announcing that KING FRANCIS II., in deference to the EMPEROR NAPOLEON, had accepted, without reserve, the proposals of France in reference to the armistice. The firing was consequently suspended on both sides, the belligerents being only allowed to repair damages. The *Moniteur* in announcing this result states that the presence of the French fleet, originally intended to cover the retreat of his Sicilian Majesty under conditions suitable to his dignity, had latterly become an encouragement to resistance, at variance with the character of strict neutrality which the EMPEROR had prescribed to it. The French Government had therefore induced the belligerent parties to agree to an armistice until the 19th inst., on the understanding that the fleet would then be withdrawn. The armistice expires to-day, and it is generally believed that it will be followed by the immediate resumption of hostilities, the KING, it is said, having written a letter to the EMPEROR OF AUSTRIA declaring his firm resolve to continue the defence of Gaeta to the utmost. The latest news from Naples announces that Baron POERIO has been entrusted with the formation of a new Administration, and that the reactionary bands in the Abruzzi have been defeated. The Prince of CARIGNAN has issued a proclamation as Viceroy, promising administrative reforms, and expressing the hope that Gaeta will shortly fall, and that the Neapolitan provinces will then be ready to make any sacrifice for the unity of Italy.

The *Moniteur* publishes a decree convoking the Senate and the Corps Legislatif for the 4th of February. It also publishes a comparative table of the revenue derived from indirect taxes, which shows a decrease in 1860 of 21 millions of francs as compared with 1859.

The Prussian Chambers were opened on Monday by the KING in person. In his speech from the throne HIS MAJESTY said that a new organisation of the army had become necessary, the defence of the integrity of the German territory being his first duty. The relations between the Great Powers had become still more friendly by the personal meetings which had taken place between the Sovereigns. It was therefore to be regretted that the steps taken by Germany for the settlement of the constitution of the German Duchies placed under Danish rule had remained without any result. Prussia, as well as the rest of Germany, recognised it as a national duty finally to bring about the proper solution of this question. The KING stated that it was his intention to remain faithful to the principles of Government which he imposed on himself on assuming the Regency, finding in those principles a safe guarantee against the revolutionary spirit spread abroad in Europe.

Accounts from Copenhagen state that in consequence of the hostile attitude of Germany, as manifested in the speech of the KING OF PRUSSIA and the resolutions of the Diet at Frankfort, the Danish Government is making energetic preparations for war. The infantry and artillery have been supplied with rifled muskets, a large number of horses for military purposes has been purchased, all soldiers on furlough have been recalled, and a provisional law is to be published calling out 4000 sailors.

Despatches from Vienna state that the Austrian Government is taking extraordinary measures of precaution with regard to Hungary, where the popular feeling is described as of the most revolutionary kind. General KLAPKA is in the Principalities preparing for a rising in Hungary, and the arms brought by the Sardinian ships are to be landed in Montenegro, whence they will be despatched to the Banat.

From the United States we learn that President BUCHANAN has rejected the demands of the South Carolina Commissioners, and declared his intention to send reinforcements to Charleston for the double object of protecting United States property and of enforcing the collection of the Federal revenue. The Commissioners immediately telegraphed to Governor PICKENS to put the State of South Carolina on a war footing, and to concentrate his forces at once. The State Convention has accordingly determined to sink any revenue vessel of the United States which may attempt to enter Charleston Harbour, and has passed a treason ordinance, making the levying of war against South Carolina punishable by death. A combination was also in progress for taking possession of Washington and preventing the inauguration of Mr. LINCOLN as President. Georgia has also pronounced for immediate secession, and has occupied the United States forts and arsenal in her territory; North Carolina and Mississippi have despatched troops to seize the forts of the United States within their borders; and Florida, Alabama, Louisiana, Virginia and Missouri are only waiting the course of events before they decide upon joining the new slave Confederation. Meanwhile the State Legislatures of New York and Pennsylvania have denounced secession in the strongest terms, and a resolution has been proposed in the former authorising the Governor to tender to the PRESIDENT 10,000 militia for the purpose of putting down insurrection in any part of the country.

Further accounts from New Zealand confirm the telegraphic announcement of the battle of Mahoetahi and the complete defeat of the natives with the loss of three chiefs and more than 70 killed and wounded. The force under General PRATT consisted of detachments of the 12th, 40th, and 65th Regiments, a few of the Royal Artillery, some seamen, and a strong force of Rifle Volunteers. The main body of the Waikatos lay in a swamp concealed from sight; another body held an intrenchment on the crest of Mahoetahi Hill. These positions were stormed with the greatest gallantry by the British force, who had previously taken by regular sap three of the strongly fortified pahs in which the natives had intrenched themselves.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family arrived at Windsor Castle on Saturday from Osborne. In the afternoon the Queen and Prince Consort, the Prince of Wales, Prince Alfred, and Princess Alice walked to Frogmore, and visited the Duchess of Kent. On Sunday morning the Queen and Prince Consort, the Prince of Wales, Princes Alfred, Arthur and Leopold, Princesses Alice, Helena, and Louisa, attended Divine service in the private chapel.

The Rev. H. J. Ellison, vicar of Windsor, preached the sermon, and the Dean of Windsor administered the Sacrament. On Monday morning the Queen, with Princess Helena, walked in the grounds of the Castle. The Prince Consort, accompanied by the Prince of Wales and Prince Alfred, went out shooting. The Duchess of Kent visited her Majesty and took luncheon. In the evening Prince Alfred visited the Duchess of Kent at Frogmore. On Tuesday morning Prince Alfred took leave of the Queen and Prince Consort, and left the Castle for Plymouth to join his ship. The Queen, with Princess Helena, walked to Frogmore and visited the Duchess of Kent. The Prince Consort and the Prince of Wales went to Virginia Water to skate. On Wednesday morning the Queen and Prince Consort walked in the Home Park. In the afternoon her Majesty and the Prince Consort, accompanied by the Prince of Wales, Prince Alfred, Princess Helena, and Princess Louisa, went to Virginia Water, where the Prince Consort and the Prince of Wales skated in the presence of the Queen and the Princesses. The Duke de Chartres, the Duke and Duchess of Manchester, Lord and Lady Proby, Lord and Lady Stanley of Alderley, the Right Hon. T. Milner Gibson, and Mr. Gibbs, arrived on a visit. On Thursday morning the Queen, with the Princess Alice, Prince Arthur, and Princess Louisa, drove to Virginia Water. The Prince Consort, accompanied by the Prince of Wales and the Duke de Chartres, went out shooting. It is understood that the Court will remain at Windsor until Monday, the 4th of February, when her Majesty will come to London for the purpose of opening the Houses of Parliament in person and will then remain in town for the spring season.

PRINCE ALFRED arrived at Plymouth on Tuesday afternoon by express train, for the purpose of joining his ship, the St. George, 91, and took up his residence at the house of Sir Houston Stewart, the Commander-in-Chief, where a large party was invited to meet him at dinner. In the course of the evening the Prince was vaccinated by Dr. Hilditch, M.D., Inspector-General of Hospitals, in consequence of the appearance of several suspected cases of smallpox on board the St. George. On Wednesday morning his Royal Highness, accompanied by the Hon. Captain Egerton, crossed Hamoaze in the St. George's gig, and visited the grounds of Mount Edgcumbe. In the afternoon the Prince embarked in the St. George, which left at 4 P.M. under sail and steam, for the North American station. It is understood that his Royal Highness will visit Madeira, Bermuda, and Barbadoes in rotation.

PARLIAMENTARY MOVEMENTS.—The election for Pembrokeshire terminated on Thursday in the return of Mr. G. Lort Phillips, the Conservative candidate, by a majority of 215 over Colonel Hugh Owen, the numbers being 1194 to 979. A requisition is to be presented to Captain Bathurst, son of Sir Frederick Bathurst, of Clarendon Park, requesting him to allow himself to be placed in nomination for South Wilts in the Conservative interest, in opposition to Mr. Grove, the Ministerial candidate.—Sir Alexander Bannerman, the Liberal candidate, has withdrawn from the contest for Aberdeenshire, and Mr. Leslie is at present the only candidate in the field.

MINISTERIAL MOVEMENTS.—Mr. T. G. Baring will succeed Lord de Grey as Under-Secretary for the War Department, acting under Lord Herbert; and Lord De Grey will take Mr. Baring's place in the India Office, and represent that department in the House of Lords.

THE ARMY.—The Coloneley of the 23d Foot, vacant by the death of General Rainey, has been conferred on Lieut.-Gen. Sir William Codrington; the Coloneley of the 54th Foot, vacated by this promotion, has been conferred on Lieut.-Gen. Mildmay Fane; and the Coloneley of the 96th Foot vacated by this promotion has been conferred on Major-General George Macdonald. It is reported that a considerable reduction in the army will be made by the Government at the end of the financial year. The project of converting the Tipperary Militia into a brigade of the Royal Artillery has been definitively abandoned.

THE CHANNEL FLEET.—Rear-Admiral Robert Smart has been appointed Commander-in-Chief of the Channel Fleet, and will hoist his flag in the Princess Royal, 91, screw line-of-battle ship.

THE IRON-CASED FRIGATES.—The Admiralty have decided upon increasing, without delay, the number of iron-cased men-of-war. Circulars were sent on Saturday from Whitehall to Messrs. Napier, Laird, Scott Russell, Mare, Samuda, Palmer, Westwood & Co., and the Thames Ship Building Company, requesting them to send in tenders by the 24th inst. for building two ships of about 4000 tons each, similar in construction to the Resistance and Defence, now nearly complete. They are to be 280 feet long, 56 feet broad, and plated with iron slabs fore and aft. The angular principle will not be adopted in this instance, though the report made by Captain Hewlett of the Excellent in August last was decidedly favourable to Mr. Josiah Jones' invention, and has been confirmed by the opinion of the principal scientific officers in the navy.

PUBLIC EXPENDITURE.—The following communication to the Premier is circulating for signature among Liberal members of the House of Commons, and has already been signed by Sir J. Duke, Mr. R. W. Crawford, Mr. Baines, Mr. Bristow, Mr. Buxton, Mr. Crossley, Mr. Ewing, Mr. S. Gurney, Mr. Hanbury, Mr. Mellor, Mr. Pilkington, Sir J. Shelley, Colonel Sykes, Mr. J. A. Turner, and about 50 other members.

"My Lord,—We feel it our duty, as members of the Liberal party in the House of Commons, who have generally supported your Government, respectfully to express to you the anxious concern with which we view the present state of the public expenditure, and to request for the subject the very serious consideration of the Government in preparing the estimates for the next Session. We cannot but hope that the enormous expenditure of the current financial year was forced upon the Government against their will by an unhappy combination of circumstances. Its amount, however, was so far beyond what has ever been known when the country was not engaged in a European war that a great responsibility will rest on the Government and the House of Commons if it should not be materially reduced at the earliest opportunity. The foreign relations of the country at the close of the year are such as to encourage a reasonable confidence in the maintenance of peace. The war with China is at an end. The Italian revolutions appear to be issuing in the establishment of the constitutional rule of Victor Emmanuel over the Peninsula, while the neutrality which has been observed by England is acknowledged both at home and abroad to have been the policy of wisdom. Above all, our relations with France have become decidedly amicable, having obtained the guarantee of a commercial treaty favourable to the interests of both countries, and being made still more friendly by the abolition, on the part of the Emperor, of the passport system in France, especially on behalf of the subjects of her Majesty. Under these circumstances the country will naturally expect a considerable reduction of our warlike establishments from the extraordinary scale of the present year. We would also invite attention to the civil and miscellaneous expenditure of the country, which has for many years been in course of rapid and extraordinary increase, until it has reached an amount which loudly demands revision and retrenchment. We are convinced that retrenchment will prove the truest policy of the Government as the only method of meeting the financial exigencies of the State, satisfying the expectations of Parliament, conciliating the good opinion of the commercial and moneyed interests, allaying the dissatisfaction of the taxpayers, and preventing the loud outcry which would inevitably arise in case of another unfavourable harvest or any check to the public prosperity. We are compelled to say that we should view an expenditure for the coming year approaching that of the current year with great regret and disapprobation; and we believe that that would be the feeling of our constituents and of the country at large. We have therefore thought it right to offer these suggestions in a friendly spirit to your Lordship, and we trust they may not be thought unworthy to receive the serious consideration of the Government. We are, my Lord, your Lordship's most obedient servants."

Foreign.

FRANCE.—The *Moniteur* contains a decree convoking the Senate for the 22d inst. to deliberate on the decree of November 24, which permits the debates of the Senate and Legislative Body to be reported and printed *in extenso*. It also contains a decree convoking the Senate and the Corps Legislatif for the 4th February, when the regular business of the session will be commenced. The *Moniteur* publishes a comparative table of the revenue derived from indirect taxes, which shows a decrease in 1860, as compared with 1859, of 21,000,000f. It also publishes a decree abolishing the surtax of 3f. per 100 kilogrammes on foreign sugars imported in French vessels from countries out of Europe. The *Moniteur* of Saturday says that the report of an impending change in the Ministry of Foreign Affairs is without foundation. The Emperor, it says, never thought of depriving himself of the enlightened and devoted concurrence of M. Thouvenel. Notwithstanding this denial, it is still asserted in Paris that the French Minister for Foreign Affairs will shortly retire from office. The *Moniteur* of Wednesday contradicts the report of the formation of a fourth regiment of Grenadiers of the Imperial Guard. The French Ambassadors at Vienna and Berlin officially informed the Austrian and Prussian Ministers of Foreign Affairs that the French fleet would leave Gaeta on the 19th inst. The *Moniteur* of Thursday published the following article on the armistice:—

"The object in sending the French fleet to Gaeta was to give a mark of sympathy to a Prince cruelly tried by destiny. The Emperor, faithful to the principle of non-intervention, never intended to take any active part in the conflict at that place. In prolonging this demonstration he would change its character, and would give encouragement and material support to the resistance of the King. It therefore became necessary to cause the cessation of this state of things. We could not indefinitely remain present at a conflict which could only lead to a greater effusion of blood. By the advice given by France to the belligerents hostilities are suspended until the 19th inst., and Admiral Barbier de Tinan will leave Gaeta on that day."

It is reported in Paris that the French troops will remain in Syria beyond the period of six months fixed by the convention with Turkey. It is said that in answer to a verbal communication made through Lord Cowley, M. Thouvenel has declared that regard for the lives of their co-religionists will not permit the French Government to recall the army of occupation at the expiration of the period fixed by the convention. The *Patrie* asserts that a project of law transferring the Bourse property to the State will be submitted to the Corps Legislatif. A rise in the funds was occasioned on Friday by the rumour that the turnstile at the entrance of the Bourse would be abolished. Mr. Lindsay, M.P., who has been in Paris for some days, has had an interview with the Emperor with a view to facilitate the opening of negotiations for the reciprocal abrogation of all discriminating duties, and for alterations in the navigation laws of France.—An interesting case will come before the Tribunal of First Instance at Paris on the 25th inst. Madame Bonaparte, first wife of the late Prince Jerome Bonaparte, ex-King of Westphalia and uncle of the Emperor, and her son by her marriage with the Prince, claim to inherit their part of the personal pr[illegible] by the Prince. Madame Bonaparte, who is [illegible] was an American lady named Paterson, and [illegible] object of the present suit is to re-establish the [illegible] legality of her marriage.

SPAIN AND MOROCCO.—The *Epoca* [illegible] week that the Moors not having fulfilled [illegible] lations of the treaty, Spain was about [illegible] the principal forts in Morocco. It is now said [illegible] Moors have declared their readiness to pay [illegible] instalment of 40,000,000 reals.—The Prince of [illegible] has been suffering from a severe sore throat, but [illegible] out of danger. The official Journal denies the [illegible] a dissolution of the Cortes and a modification [illegible] Ministry.

SWITZERLAND.—Austria and Bavaria have [illegible] to the Federal Council that they decline hence[illegible] co-operate with Switzerland for the construction [illegible] projected railway round the Lake of Constance. [illegible] gave as a reason for her resolution that [illegible] bardy has rendered it necessary that the German [illegible] should now pass through the Tyrol. The leave of [illegible] granted to the Marquis de Turgot, French Am[illegible] has been prolonged for three months.

HOLLAND.—Baron van der Goes van Dirk[illegible] been appointed Minister for Foreign Affairs in [illegible] Baron Zuyler van Nyevelt. The Dutch journ[illegible] filled with reports of the ravages caused by inund[illegible] A letter from Tiel states that a dyke in the Bom[illegible] waard had given way in two places on the [illegible] without doing much mischief. At Nieuwaal [illegible] 9th, 100 yards of a dyke gave way; and half [illegible] further, at Zuihchem, another rupture occurred. [illegible] embanked road from Bommel to Hedel is under [illegible] Thousands of persons in the different provinces [illegible] had their houses swept away, and are suffering [illegible] fully from cold and hunger.

DENMARK AND THE DUCHIES.—Accounts from C[illegible] hagen state that the Minister for War has caused [illegible] whole of the infantry to be supplied with rifled mus[illegible] and that steps have been taken to increase the [illegible] of horses for military purposes and for the speedy [illegible] calling of the soldiers on furlough. Preparat[illegible] also making for the evacuation of the arsenal of [illegible] burg. The military corps of Engineers has been [illegible] to submit to the Government plans for the exte[illegible] the fortifications of Dannevirke and of the redoubt[illegible] Friedericia. The artillery is to receive several [illegible] batteries. The works in the navy yards at Copenhag[illegible] are carried on as energetically as the state of [illegible] weather will permit, and the Government is about [illegible] publish a provisional law calling out 4000 sailors.

FRANKFORT.—In the sitting of the *Federal Diet* [illegible] Thursday, the two committees appointed to consider the proposition of Oldenburg submitted the [illegible] proposal:—

"That, as the patent of the 25th of September, 1[illegible] financial law of July, 1860, must be considered as illega[illegible] not having been sanctioned by the Estates, Denmark [illegible] be summoned to make a declaration within six [illegible] reference to her fulfilment of the Provisorium, in [illegible] with the resolution of the Federal Diet of the [illegible] 1860, and that, in the event of her non-complia[illegible] execution should be declared against Denmark."

HESSE CASSEL.—The agitation for the restora[illegible] the constitution of 1831 continues in full force. [illegible] reported that the Grand Duke of Baden and the K[illegible] of Prussia have seriously advised the Elector to re[illegible] peace to the country by meeting the wishes [illegible] subjects.

HESSE DARMSTADT.—Several communes have [illegible] upon the Grand Duke for the abolition of the Con[illegible] a new organisation of the Chambers, and a cessatio[illegible] the prosecutions against the National Association [illegible] in spite of the prosecutions, continues its [illegible] against the Government.

PRUSSIA.—The Chambers were opened on M[illegible] by the King in person. The following are [illegible] from the more important portions of the speech [illegible] livered by his Majesty on the occasion:—

"With deep emotion I bid you welcome. The [illegible] wishes which I expressed to you from this place [illegible] God's impenetrable decrees been fulfilled. With [illegible] my house you have to deplore the loss of the King, [illegible] severe suffering has been taken away from us. [illegible] Government of my brother his Majesty the late King [illegible] reposing in God, did for Prussia, how much the country [illegible] indebted to his magnanimous sway, I need n[illegible] the representatives of the Prussian people who [illegible] during his lifetime. Having declared, in the pres[illegible] leading Princes of the German Diet, that the first [illegible] German—of my European policy—should be to main[illegible] integrity of the German Confederation, it became [illegible] with the means you voted, to increase the streng[illegible] army in such guise that not only were the troops incre[illegible] number, but the new organisation provided them [illegible] every guarantee of stability and confidence. The [illegible] taken to effect this object come within the [illegible] ments of our army organisation. From the [illegible] that will be proposed to you, you will find that retrench[illegible] will be made for next year, which will be a guarantee [illegible] that only what is indispensably necessary for the [illegible] the army will be asked. My Government is on the [illegible] opening negotiations with the Imperial French Govern[illegible] for regulating, by treaty, the commercial relations [illegible] the Zollverein and France. In the course of [illegible] the opportunity, by personal interview with different [illegible] of placing our relations with them on a more [illegible] footing than ever, and these are guarantees for the [illegible] nance of the peace of Europe. Actuated by the grave [illegible] of affairs in Europe, my Government is anxiously en[illegible] to effect a revision of the organisation of the army [illegible] federation, as imperiously commanded by the increase [illegible] wants of the present day. I confidently look forward to [illegible] mate satisfactory result, as all German Governments [illegible] German races acknowledge united action to be the most [illegible]

[illegible] of the common Fatherland. In the electorate of Hesse a contention still exists which my well-meant and moderate counsels have not succeeded in allaying. The endeavours of my Government are indefatigably exerted to see the legal state of things restored. To my sorrow, the steps which Prussia, in concert with the other German Federal States, has taken for years to procure for the German duchies under the rule of the King of Denmark the enjoyment of a constitutional existence responding to their rights have not been attended with any result. With her German confederates, Prussia acknowledges it to be a national duty now at last to bring about a proper solution of this question. My Government has [illegible] in serious times; whatever may be in store for us, I shall adhere to the principles under which I undertook the Regency. The experience I have acquired in applying them has only tended to strengthen my belief in their value. Resolved to strengthen the efficiency of our institutions and of our laws, to develope the national interest of Prussia and of Germany with earnestness and purpose, I see in the [illegible] adherence to this system the surest guarantee against the spirit of revolution which is loose in Europe."

An extra edition of the official *Staats Anzeiger* of Sunday contained a Royal decree proclaiming an amnesty for all such persons as have been found guilty of high treason against the country, offences against His Majesty, crimes and offences constituting an abuse of the rights of citizens, and for those persons who have been convicted according to civil law for resisting the [illegible] of the State, or for disturbing public order. [illegible] to return freely is granted to those who, by [illegible] to flight, have evaded judicial inquiry and legal judgment, and in the event of their being afterwards condemned, the Minister of Justice is to make proposals for their pardon. The King himself will decide in the case of those who have been condemned by military tribunals, provided they implore pardon.—It is stated that the recruiting, which does not usually take place until October, will this year commence in April. This hasty mobilisation is attributed to the events which may arise on account of the complications with Denmark.

AUSTRIA.—In the political circles of Vienna it is said that the Emperor of Austria has received a letter from King Francis II., declaring his firm resolve to continue the defence of Gaeta to the utmost. The Archduke Maximilian, on his return from Berlin to Vienna by railway, had a narrow escape from being burnt to death. The hot air stove ignited the saloon carriage, and the engine-driver was only made sensible of the danger by Count Bombellis clambering over the roof of the carriage at the peril of his life The general meeting of the shareholders of the National Bank was held on Monday, and was less excited than had been expected. The proposals of the opposition were not adopted, and a dividend of 28 florins was declared.

HUNGARY.—The Vienna *Gazette* of Saturday contains an Imperial autograph letter, appointing Count George Apponyi Judex Curiæ for Hungary, in the place of Count Czirakys. The Committee of the Comitat of Neustra has resolved on the following programme—a responsible Ministry for Hungary; a Diet, elected on the basis of the law of 1848; the removal of all foreign troops from Hungary; the Hungarian troops to take an oath of fidelity to the constitution of 1848; reorganization of the National Guard; and a liberal constitution to the other crown lands of Austria. In consequence of these repeated demonstrations on the part of the Comitats, the Austrian Government has sent several German regiments into Hungary, and has concentrated 25,000 men at Grosswardein as a central point from which watch can be kept upon the Principalities, Servia, and Hungary.

POLAND.—A letter from Cracow of the 8th announces that the university of that city has been closed in consequence of the students having declared that they would not attend the lectures of professors unless they were delivered in the Polish language.

RUSSIA.—It is said that the Russian Government has sent a circular to its Ministers abroad, remonstrating, if not protesting, against the warlike projects attributed to the German Governments relative to the designs of Prussia on Denmark, and showing that the state of Southern Europe is sufficiently complicated without exciting any more difficulties in the North. The Emperor has authorised the State Bank to issue Exchequer Bills to the amount of 100,000,000 silver roubles.—General Ignatieff and Prince Kong signed and ratified at Pekin on the 2d of November an additional Convention to the Treaty of Tien-tsin. This Convention confirms the demarcation agreed upon as regards the right of traffic along the Amoor and the Oussouri. Trade is free across the new frontier, and open at Kashgar. Russian traders may go to Pekin. Russian consuls and factories will be established at Kashgar and Ourga, and there will be a monthly mail between Kiahkta and Pekin.

MALTA.—The *Patrie* says it is reported that the garrisons of Malta and Corfu have been increased to [illegible] their former strength, and that the English authorities intend organising militia at those places. It also states that the English squadron in the Mediterranean is to be reinforced. Both these statements are said by the Ministerial journals to be without foundation.

ITALY.—King Francis II. has, in deference to the Emperor Napoleon, accepted without reserve the proposals of France in reference to the armistice. A part of the French fleet left Gaeta on Monday, and Admiral Barbier de Tinan will remain with one single vessel of the fleet until the expiration of the armistice. The firing has been suspended on both sides, the belligerents being only allowed to repair damage. It is generally believed that the King has accepted the armistice in order to gain time, and without any intention to surrender. During the whole of last week the fire of the besiegers was terrible. After the recent departure of the Calabrian deputation from Gaeta, another arrived from Naples to confer with the King. The reactionary movement got up in the Abruzzi, under the influence of Count Trapani, has been suppressed by the Sardinian troops; but the Neapolitan General Rivira has been sent to cause a rising of the people in Calabria. King Victor Emmanuel has issued a proclamation to the inhabitants of the Neapolitan provinces, in which he says:—

"The affairs of the State compel me to separate myself from you. A domestic affliction has caused the retirement of Farini. Prince Carignan will govern the Neapolitan provinces in my name. Show that you always fervently desire the unity of Italy."

This proclamation has produced an excellent effect. Prince Carignan has arrived at Naples and has been enthusiastically received by the people. The Prince on his arrival was saluted by the English fleet. His Royal Highness has issued a proclamation in which he says that he has come among them to hasten the work of union and to maintain public order; and that the Government will respect the Church and its ministers, provided the clergy obey the King, the statutes, and the laws. The Prince promises administrative reforms, and concludes by expressing the hope that Gaeta will shortly fall, and that the Neapolitan provinces will be ready to make any sacrifice for the unity of Italy. Baron Poerio has been intrusted with the formation of a new Administration. This news has produced an excellent effect at Naples. Signor Farini has been appointed Secretary of the Private Cabinet of the King. A riotous assemblage has been dispersed at Naples, and numbers of the rioters, including several Muratists, have been arrested. Nearly all the troops forming the garrison of Naples have been sent into the provinces. A decree has been published, granting pensions to the poor priests.—Accounts from Rome state that General Goyon has demanded explanations from the Papal Government as to the object of the movement of Papal troops towards the Neapolitan frontier. Monsignor Mérode has refused to give any reply. General Goyon has, in consequence, referred to his Government on the subject. The Diplomatic Corps and the Papal Nuncio left Rome on the 15th for Gaeta, to congratulate King Francis II. on the occasion of his birthday. On the 12th inst. popular liberal manifestations took place in the Apollo Theatre, and have since been repeated in the other theatres of Rome. The Dowager Queen of Naples and the partisans of King Francis II. have been thrown into a state of great consternation at the news of the departure of the French fleet from Gaeta. The Pope is said to be much gratified with the results which will accrue to the Catholic Church from the success of the allied armies in China, and also with the secession of the Bulgarians to Catholicism. The Pope has also despatched provisions to Gaeta. The reported revision of the Concordat with Austria has been denied. Monsignor Mérode remains in office.—Accounts from Turin state that the reports that General Fanti had resigned, and that the political committees were enrolling volunteers, are both unfounded. The Persian Ambassador at Paris was received on Monday by the King, to whom he presented the decorations of the orders of Persia.

SICILY.—A formidable demonstration against Signor La Farina has taken place at Palermo. La Farina had ordered the arrest of Crispi; the National Guard opposed the execution of the order, and compelled the Lieutenancy Council to resign. The new Lieutenancy-Council is composed as follows:—Torrearsa, Finance; Emerico Amars, Interior; Orlando, Justice; Santelia, Public Works; Turisi, Agriculture.

TURKEY.—The *Cologne Gazette* states that the Porte is forming an army of 50,000 men, exclusive of the reserve, on the Danube, to be commanded by Omer Pacha. This demonstration is directed equally against the Principalities and against Russia. The latter power has assembled a large body of troops in Bessarabia, alleging to Austria as a reason that Russia cannot allow the Principalities to become a focus of insurrection. A portion of the Hasné Tavilis (Treasury bonds) is to be paid off in March next. The balance will be renewed. The Porte has demanded of M. Mirès whether he can carry through the loan or not. A party in the Cabinet wishes to break off the affair. The disturbances in Montenegro continue. It was reported at Cattaro on Monday that on the 9th inst. 2000 Montenegrins made a sudden attack upon the town of Sputz, on the Albanian frontiers, and arrived as far as the gates of the fortress, when they were repulsed with great loss. The Bosnian Commission of Inquiry has begun its labours. The secession of the Bulgarians from the Greek Church is confirmed. It is said that their secession was caused by the refusal of the Porte to grant them a separate Patriarchate.

THE PRINCIPALITIES.—General Klapka is in the Principalities, preparing for a rising in Hungary. The Danube is now closed by ice. News has been received of the approaching arrival of five more ships, laden with munitions for the Danube. The Austrian and Russian Legations have addressed strong notes to the Porte on this subject. The arms brought by these ships are to be landed in Montenegro, whence they will be despatched to the Banat.

SYRIA.—The trials at Beyrout have been concluded. The Druse prisoners were sentenced to deach and the Turkish to exile.

INDIA.—The following additional items are gathered from the news brought by the Calcutta mail:—

Bengal.—Mr. Grant, the Lieutenant-Governor of Bengal, has decided that teachers in Government schools may teach the Bible out of school hours, provided they do not teach it within the walls of the school. The volunteers in India are estimated at 2000.

Central India.—The Viceroy held a durbar at Patna on the 28th November. His lordship was to be at Benares on the 6th December.

Sikkim.—Dr. Campbell and his party retreated on the 30th November from their position in Sikkim, and arrived on the morning of the 1st December at Goak, within British territory, where they found a party of the 73d Native Infantry and 50 Europeans who had been sent out from Darjeeling to their relief.

Oude.—A commission had been appointed to inquire into the conduct of some European officials in Oude, who are alleged to have purchased government securities under questionable circumstances during the mutinies

CHINA.—The Overland Mail has arrived with papers and despatches from Hong Kong to the 29th November. These advices confirm the intelligence received last week by telegram. The Emperor had issued an edict ratifying the treaty and convention, which had been published in the *Pekin Gazette*, and printed on placards, and posted in all the conspicuous places of the city. In his interviews with the Prince of Kung Lord Elgin had impressed him with the advantages that would arise from the more direct intercourse between the foreign Ministers and the Government of Pekin which will take place under the new treaties. Mr. Bruce also, in a private interview with the Prince, had made a similar impression on him. The information Mr. Bruce gave him of the progress of the rebels, and the line of conduct the British Government would take in reference to them, was listened to by the Prince with great attention, who expressed himself obliged for the information, and said that much of it was quite new to him. As Lord Elgin found that it was not the intention of General Ingatieff to winter in Pekin, and as Baron Gros thought it was not advisable that M. de Bourbillon should establish himself there till the spring, his lordship determined that Mr. Bruce should withdraw to Tien-tsin, and return to Pekin when a suitable residence was prepared for him, Mr. Adkins, one of the student interpreters, volunteering to remain in the city to superintend the arrangements. The allied army left Pekin about the 10th Nov., a portion of the movement towards the sea being partially effected in boats. On the 17th the whole army had reached Tien-tsin, with the exception of 1500 men who were waiting at Hosi-wu, and many of the troops had already arrived in Hong Kong. Sir Robert Napier, with a portion of his staff, arrived there on the 27th inst. The Chesapeake, Admiral Hope's flag-ship, was expected shortly; and it was understood that Admiral Jones would proceed to Japan with a squadron, in order to make a moral demonstration. Chusan will be given up. The French will leave about 3000 men at Tien-tsin, and the rest of the force will be distributed principally between Shanghai and Canton. In the neighbourhood of Shanghai the rebels are again displaying some activity, and it was reported by the Toutae of that place that 400 boatfuls of them were on their way to attack it. They had beaten the Imperialist forces at Tsinghoo and at Sunkeong. At Ningpo, on which the rebels are believed to be marching, the greatest terror prevailed. The following is Lord Elgin's final despatch to Lord John Russell, dated Tien-tsin, Nov. 13:—

"My Lord,—I have the honour to enclose herewith the translation of a despatch which I received from the Prince of Kung on the 2d of this month, embodying an edict from the Emperor, which directs that the treaty of Tien-tsin of the year 1858, and the convention of Pekin of the year 1860, shall be published throughout the empire. Your lordship may remember that by the terms of the last article of the convention in question, the withdrawal of her Majesty's forces from Pekin is made contingent, *inter alia*, on the issue of an imperial edict to the above effect, and that this stipulation was the subject of a correspondence between Lieutenant-General Sir Hope Grant and me, the copy of which was transmitted to your lordship in my despatch of the 31st ultimo. The language of the edict forwarded to me by the Prince of Kung is very full and satisfactory. It amounts to a ratification and adoption by the Emperor of the treaty and convention in the most public form. I must add that the prince has shown every disposition to give effect to it. The documents referred to have not only been published in extenso in the *Pekin Gazette*, but have also been printed on placards and posted about the city in all conspicuous places. These proceedings will, it may be hoped, go far to ensure the faithful execution of their provisions. The despatch in which the prince communicated to me this edict was preceded by another in which he enclosed, and requested me to forward, letters respecting the cession of the Kowloon Peninsula, the payments due at Canton on the 1st of December next, and the legalisation of emigration, which had been addressed by him to the local functionaries, whose duty it will be to see these measures carried out. A translation of that despatch is also transmitted herewith. On the 7th inst. Mr. Bruce reached Pekin, having hastened up from Shanghai, in compliance with my request His arrival was most opportune, as it was very important that before my departure from the capital I should be able to confer with him on various matters, and more especially on the subject of the place of residence for the future of her Majesty's representative in China. Mr Bruce informed me that he was perfectly willing to take up his abode in Pekin at once. On consultation with Baron Gros and General Ignatieff, however, I found that the latter was about to leave Pekin for the winter, and that the former was of opinion that it would not be advisable that M. de Bourbillon should establish himself in the capital until the spring. I considered it therefore to be my duty to advise Mr. Bruce to return with me

for the present to Tien-tsin, and to remain there until a suitable residence should be provided for him in the capital. In order, however, that there might be no misapprehension on the part of the Chinese government in reference to this point, we selected a house which we thought might be adapted to the purpose, and which was procurable on easy terms, and we accepted the services of Mr. Adkins, one of the Student Interpreters, a very promising young man, who volunteered to remain at Pekin, and to superintend the arrangements necessary for putting it in order. I think it right to mention that Mr. Wade, Mr. Parkes, and Mr. Morrison, severally intimated to me their readiness to stay at Pekin, if I thought that the public interest would be promoted by their doing so. Having taken these measures I wrote to Prince Kung to express to him my sense of the good faith which he had evinced in the matter of the publication of the treaty, and to inform him that her Majesty's forces would at once return to Tien-tsin. I added that I proposed to pay him a visit, with the view of taking leave of him, and that I should bring with me Mr. Bruce, who had just arrived at Pekin. I inclose a copy of the letter which I addressed to the prince on these subjects, and of his reply. In introducing Mr. Bruce to the Prince of Kung on this occasion, I was especially desirous to convey to the latter the impression that the rank and authority of the former was in no degree inferior to mine. Accordingly, when the visit which I had offered in my letter took place, after conversing for some time very amicably with the prince, I requested the interpreters to inform him that with us the person representing the sovereign always held the highest rank; that peace being happily concluded between the countries my task was at an end; that Mr. Bruce, therefore, resumed his functions as the Queen's representative in China, and that I proposed, with the prince's permission, to cede to him the seat of honour which I was then occupying. On the following morning the prince returned our visit, and I purposely absented myself, in order that Mr. Bruce might receive him alone. They had a long and somewhat interesting conversation, in which, as in several interviews which he had previously had with me, the prince showed much less reserve than the provincial functionaries with whom we have formerly dealt ever dared to do, in discussing delicate questions, such as the advisability of the mission of a Chinese ambassador to England. Mr. Bruce took occasion to state that his correspondence would be henceforth with the Chinese Minister for Foreign Affairs at the capital, and that though he was returning to Tien-tsin until his residence at Pekin was prepared for his reception, he would be at hand, and ready to come up at any time if public business required his presence. Before the prince left, I entered the room to thank him for having paid me a visit of adieu, and we parted on good terms.—I have, &c,

"ELGIN AND KINCARDINE."

UNITED STATES.—Accounts from New York announce the President's reply to the Commissioners of South Carolina. The Commissioners demanded, as a preliminary step to the initiation of negotiations, that the troops should be withdrawn from the forts in Charleston harbour. The President positively refused to do this, and reiterated his views in reference to the public property as set forth in his Message to Congress, informing them that he not only intends to collect the revenue and execute the laws, but to defend the property of the United States with all the power at his command. He would not recognise the Commissioners officially, but said he regarded them as distinguished citizens of the United States from South Carolina. Instructions have been sent to the frigate Brooklyn, and another vessel at Norfolk to prepare to leave at a moment's warning. The question of reinforcement has not been fully determined on, but should an attack be made on Fort Sumpter, a large force will be at once despatched. Meanwhile General Scott had ordered all the available troops at Leavenworth to proceed to Fort McHenry near Baltimore. The Commissioners telegraphed to Governor Pickens the President's reply, and also their conviction that the President had determined to reinforce Major Anderson. They therefore urged the Governor to put the State upon a war footing, and to concentrate all his force at once. The latest news says that the Commissioners had returned home, disgusted with the unexpected attitude of President Buchanan. The President has nominated Mr. McIntire, of Pennsylvania, as Collector of Charleston, being unable to find a Southern man to accept it, but it is expected that the Southern Members of the Senate will resist the confirmation of the appointment. It is understood that Mr. McIntire will be sent to Charleston in a revenue cutter, and, if not allowed to land, he will anchor off the harbour, and there collect the revenue. The Convention of South Carolina has announced, through the Governor, that if the United States revenue cutter should enter Charleston Harbour, she will be fired upon unless sailing under a white flag. The Convention has also adopted various ordinances making provisions for a separate Government, and a treason ordinance, making the levying of war against the state of South Carolina punishable by death. It has also passed an ordinance, giving federal judicial power to the State Courts, and congressional power to the General Assembly. It was proposed to starve out the garrison of Fort Sumpter and then to attack it on rafts. The forts at Mobile had been taken by the State troops of Mississippi, and a combination was on foot to take possession of Washington, and prevent the inauguration of Mr. Lincoln as President. Georgia has also determined on immediate secession, and has occupied with her State troops the forts of Pulaski and Jackson, and the United States' arsenal in Savannah. A telegram from Richmond states that Governor Ellis, of North Carolina, had despatched troops to seize upon Fort Macon, at Beaufort, the forts at Wilmington, and the United States' arsenal at Fayetteville. Meanwhile the North is showing a growing determination to act with vigour against the Disunionists. The Governors of the two great States of New York and Pennsylvania have delivered their Messages at the opening of the Session of their respective Legislatures, and denounced secession in the strongest terms; and in that of New York, a resolution had been proposed authorising the Governor to tender to the National Administration 10,000 militia "to put down insurrection in any part of the country." It is probable that Pennsylvania will be equally energetic. There was an exciting scene in Congress on the 31st ult., when Mr. Benjamin made a secession speech, which he closed with a declaration that the South could never be subjugated. A scene of indescribable confusion ensued in the galleries, which were finally cleared by the sergeant-at-arms. Mr. Baker, of Oregon, obtained the floor for a rejoinder, but yielded to a motion to adjourn. The House of Representatives also had an exciting sitting on the 31st, during which, Mr. Pryor, of Virginia, moved that any attempt to preserve the Union between the States of the Confederacy by force would be impracticable and destructive to Republican liberty. The resolution was tabled by a majority of 98 to 55. Another resolution was carried directing the committee on military affairs to inquire into the distribution of arms during the past year.

AUSTRALIA.—Another ministerial crisis has occurred at Melbourne. The Nicholson Ministry having experienced an adverse vote in Parliament has once more resigned. The yield of the gold-fields in Victoria, as well as New South Wales, was increasing. The Government of New South Wales have ordered, through the Board of Trade, a supply of tram-rails and two cars from Mr. G. F. Train for a horse railway to connect the railway at Sydney with the docks.

NEW ZEALAND.—The following is an account of the battle of Mahoetahi, condensed from a letter from the Melbourne Correspondent of the *Times*:—

"About the 14th October General Pratt was turned back from pursuing his success at Kaihihi by certain information that large bodies of Waikattos were on their march to Waitara. Early in November it was ascertained that a considerable body had made their appearance on the south side of the Waitara. On the 5th November a slight skirmish took place between a working party of soldiers and the rebels; the latter were driven off with loss, and the troops had two wounded. On the morning of the 6th November 400 rank and file, with one 24lb. howitzer, left the camp at Waitara, under the command of Colonel Mould, R.E., and Major Nelson, with orders to join General Pratt at Mahoetahi, whither he had directed his march with a body of troops from New Plymouth. It appears to have been determined to occupy Mahoetahi on the Bell Block as a permanent military post, and it was for that purpose that the force now marched thither. The new Plymouth division consisted of 600 men. It was not until the attack had made some progress that the Waitara division arrived. On approaching the pah, a line of skirmishers was thrown out, and advanced in this order until within 300 yards of Mahoetahi, when it was found to be occupied by the rebels, who at once opened their fire, which was speedily returned, the line briskly advancing. The supports were now ordered up, and some shells were thrown into the pah. This lasted but a few minutes, for the 65th and Volunteers cheered and advanced to the pah. Upon observing this the natives rushed out, and entered a thick scrubby gully, from which they opened a heavy and galling fire. The guns were now brought into position, and a destructive cross fire with shell and canister did great execution. The natives showed great bravery, maintaining their position for an hour amid considerable slaughter around them. At length they gave way, retiring one or two at a time. It was at this moment that the Waitara division came up. Major Nelson at once brought his gun into position, and a few shells directed by Lieut. M'Naughten, R.A. forced the rebels out in a mass. They now commenced a hasty flight, pursued by the main division, who shot down and bayoneted several on the south side of the river, the Waitara division attacking them on the north. The natives were completely routed, many of them throwing away their guns and ammunition in their flight. While the town division continued in pursuit, the Waitara party collected the dead and wounded. After the muster, Mahoetahi was occupied by a strong party of troops, as originally intended. With the Waitara stockade garrisoned by 580 men, it will form the outpost against the advancing Waikattos from the north, unless this salutary check should deter them from further hostilities. The remainder of the troops then returned to their respective quarters. The whole affair occupied one hour and a half. General Pratt, apparently insensible to danger, was among the first in the pah, and in the thickest of the *mélée*, and yet came off unhurt. Major Nelson's conduct is also highly spoken of. A large number of guns and a good deal of ammunition fell into the hands of the troops. Three chiefs, all of rank, were among the slain, including Wetini Taiporutu, and Porokoru, who on the 1st November had sent the following insulting letter to the Government:—

"'To Mr. Parris.—Friend,—I have heard your word. Come to fight me, that is very good; come inland, and let us meet each other. Fish fight at sea—come inland, and stand on our feet; make haste, make haste, don't prolong it. That is all I have to say to you—make haste."

It is rumoured that Wi. Kingi watched the fight from a distance, but offered no aid to his northern allies. The three pahs called Mataiaio, Orongomaihangi, and Pukekakariki, on the small river Kaihihi, held by the hostile tribes, and situated 18 miles south of New Plymouth, were previously captured. The position of these pahs was admirably chosen for defence, they were of great strength, and furnished with rifle pits and other excavations for the protection of the defenders. The banks of the river are very steep, and are thickly wooded. The pah Mataiaio was on the left bank of the river, the pah Orongomaihangi on the right. The other was higher up the river, and about 100 yards from the bank, on a round insulated hill. The distance from Pukekakariki to Orongomaihangi is about 300 yards, to Mataiaio somewhat more, and they were evidently designed as one strong defensible position. North of Pukekakariki was a thick belt of bush. The natives had evidently prepared for an attack conducted on the same principle as those in the north, under Colonels Hulme and Despard, in 1845—*i. e.*, by breach and assault; and, if this mode of attack had been adopted, it is doubtful whether the pahs, or any one of them, could have been taken, and it is certain that the loss on the part of the troops must have been enormous. Approaching these pahs from the north the attacking forces would have found clear ground, and anticipating that the attack would be made by this open ground between the two pahs, on the right or north side of the river, the natives had constructed two lines of rifle pits—one on the bend of the river between the two pahs, and one on the skirt of the belt of bush north of the uppermost pah. An assaulting force without the defence of trenches, would have been exposed not merely to the fire of two pahs, but to that from the hidden natives in the rifle pits. A fearful sacrifice of life must have resulted, and in all probability a signal defeat of our troops. The attack was, however, made by regular sap. Trenches were constructed 200 yards in front of the Orongomaihangi pah. This seems to have completely disconcerted the natives, [illegible] not fire until the works had made some progress [illegible] working party was under cover. When they [illegible] that the Despard plan of assault was not [illegible] they opened fire. About noon the artillery was [illegible] and a brisk fire was opened from two 24lb. howitzers [illegible] mortar. Two objects seem to have been contemplated [illegible] proceeding—first, to effect a breach, and secondly [illegible] the rifle pits. The latter was quite successful, [illegible] quently entering the pahs and shells were found [illegible] rendered the pits quite untenable. This is alone a [illegible] to the natives. On the second day the works were [illegible] towards the pah by what, I believe, in military [illegible] called a 'flying sap.' The guns were advanced and [illegible] provided to blow up part of the stockade. This m[illegible] ceeding, so new to the natives, seems completely [illegible] concerted them, and it was found that they had evacuated [illegible] pah. The troops then entered it and destroyed it. It was [illegible] to be strong, with rifle pits, covered ways, and every [illegible] to resist artillery, such as covering the roofs with [illegible] of green flax. The natives had also abundant [illegible] potatoes, and evidently calculated on keeping [illegible] for some time; but they were quite unprepared for [illegible] but certain approaches under cover of trenches and [illegible]. The other two pahs were abandoned in succession. They [illegible] were entered and entirely destroyed. The list [illegible] Mahoetahi were:—65th Reg., 2 killed, 10 wo[illegible] ditto; Volunteers, 2 killed, 4 wounded; 40th Reg. [illegible]

Officers Wounded.—Lieutenant-Colonel C. Sillery, [illegible] slightly; 65th Reg.—Captain Turner, severely. [illegible] *Killed.*—Mr. F. Brown, Mr. H. Edgecumbe. [illegible] *Wounded.*—Messrs. J. Ward, R. Langman, W. [illegible] Veale.

Public Addresses.

SIR CHARLES WOOD, at a banquet given by [illegible] Lord Mayor of York last week, in returning thanks [illegible] the toast of her Majesty's Ministers, spoke as [illegible] on foreign affairs:—

"After referring to the treaty with France and the [illegible] movement, he congratulated the meeting on the term[illegible] of hostilities in China. He had been a member of two [illegible] ments which had been engaged in Chinese wars, and [illegible] run some risk in maintaining what they believed [illegible] honour and the interests of this country. In the [illegible] Government appealed to the country. The country [illegible] they were right, and he trusted that he might now congratulate the country upon having brought these hostilities to a [illegible] conclusion. Cruelty and treachery had marked the conduct [illegible] the Chinese from first to last; but the united skill [illegible] lantry of our troops had exacted retribution for their [illegible] and had, he hoped, impressed upon them a lesson which [illegible] preserve uninterrupted our relations with that country [illegible] some time to come. Hitherto some petty mandarin had [illegible] with the 'barbarians,' and reported what he pleased to [illegible] Emperor; but we had at last shown the supremacy [illegible] power in the smoking ruins of the Emperor's palace, and [illegible] proved to the Emperor and the people that it was our forbearance alone that prevented the destruction of that empire. [illegible] Chinese could no longer treat us with insolent contempt [illegible] he trusted that they would respect the articles of that [illegible] treaty which had recently been agreed to. In all that [illegible] cerned this country, at home and in our own immediate dependencies and relations, we commenced the year with tranquillity and prosperity. He wished he could say that [illegible] looking abroad the prosperity and tranquility were as [illegible] We had sympathised with the efforts of the people [illegible] parts of Italy to relieve themselves from the most [illegible] tyranny that ever existed, and we had admired their efforts [illegible] consolidate, as it were, their liberty. We had proclaimed [illegible] that no foreign interference ought to prevent the efforts of a people to win their liberty. He trusted the other P[illegible] would act upon that principle, and that we should see [illegible] nation, whose historical recollections were so proud, [illegible] for itself a place among the nations of Europe, and [illegible] portion of the glory which in former ages belonged to [illegible] was somewhat surprising that while in Italy different [illegible] had been struggling for liberty and unity, on the other side [illegible] the Atlantic a great and free nation was abusing its liberty [illegible] effect a separation of the Union. It seemed to him too [illegible] at present to look forward to what the issue of that [illegible] might be. All we could do was to express our hope [illegible] among a nation of kinsmen the soil might not be polluted [illegible] civil intestine war and bloodshed. Thank God, we had [illegible] some time ago the stain and curse of the slave trade, and [illegible] inhabitants of that county of York had taken no small part [illegible] effecting that triumph of humanity, which had been [illegible] to ourselves, as we might see by the example of those who had not done so. In the last century Yorkshire returned [illegible] the greatest champions for the abolition of slavery—[illegible] force, and on the last occasion when the united county [illegible] members to Parliament they returned another champion [illegible] the person of Henry Brougham."

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 91¼ to ⅜ for Money, and 91⅜ to ½ for the 7th February; Three per Cents. Reduced, 91¼ to [illegible] New Three per Cents., 91⅛ to ¼; New Two and a Half per Cents., 75¼; India Five per Cent. Stock, for Acct. 100¾ to ⅝; Ditto Bonds, 13s. to 9s. dis.; Exchequer Bills, 6s., 10s., to 4s. dis.—FOREIGN: Russian [illegible] and a Half per Cents., 92⅝ to ¾ ex div.; Spanish [illegible] mittee's Certificates, 5½; Turkish Six per Cents, 18[illegible] for Acct., 56¾ to 57.

Gazette of the Week.

TUESDAY—BANKRUPTS—W. ADAMS, Nottingham, [illegible] ALLANSON, late of Castle Street, Holborn, Australian Merchant—[illegible] BLUNDELL, New Broad Street, Dentist—A. BOWLES, Ipswich, [illegible] Music Seller—H. BROWN and B. HODGSON, Halifax, Yorkshire, [illegible] Manufacturers—R. W. CONNELL, Liverpool, Dealer in Teas—[illegible] Leamington Priors, Warwickshire, Jeweller—J. CROOK, [illegible] Place, City Road, India Rubber Web Manufacturer—V. FAILL, [illegible] Friars, and Ailie Place, Goodman's Fields, Ship Broker—J. HALL, [illegible] Lancashire, Manager of a Cotton Mill—C. HOOD and J. NIXON, [illegible] Warwickshire, Elastic Web Manufacturers—W. F. LAWRENCE, [illegible] Bromwich, Staffordshire, Draper—R. W. MARKHAM, Bradford, [illegible] Haberdasher—J. M. MARKS, Birmingham, Cabinet Maker—T. W. [illegible] Hawley Place, Kentish Town, Grocer—G. T. ROLLASON, Birmingham [illegible] China Dealer—J. ROUTH, Broad Street Buildings, Merchant—F. J. [illegible] Thurlow Place, Hackney Road, Designer in Embroidery—J. T. [illegible] New Church Street, Marylebone, Grocer—J. WAGSTAFF, Alfreton, [illegible] shire, Draper.

BANKRUPTCIES ANNULLED—H. REDGATE and J. REDGATE, Nottingham, Lace Manufacturers.

SCOTCH SEQUESTRATIONS—A. GUTHRIE (sometimes designated A. GUTHRIE, sen.), Glasgow, Merchant—W. MACDONALD, Glasgow, [illegible]

... M'Gregor, Perthshire, Cattle Dealer—W. Ross and Co., ... —BANKRUPTS—H. Dray, Priory Mills, Tonbridge, Miller— ... J. M. F. Jaquemot, New Broad ... Norfolk, Grocer— ... T. Jones, Northampton, Victualler—T. H. ... Merchant— ... H. S. Rogers, Strand, Importer ... Bookseller— ... J. Trevethan, Lombard Street, City, Cooper—J. J. ... ANNULLED—J. T. Holden, Birmingham, Jeweller. ... SEQUESTRATIONS—T. Brownlie, Glasgow, Boot and ... Galvanising Company, Govan, Lanarkshire— ... Manufacturer—J. and W. Parker, Girvan, ... Brassfounders—Mrs. F. Scott, Edinburgh—J. Stewart, Glasgow, ... Land Agent.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,479,845	Government Debt	£11,016,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	9,535,002
		Silver Bullion	1,469,843
	£25,479,845		£25,479,845

BANKING DEPARTMENT.

Proprietors' Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£8,713,721
Rest	3,286,418	Other Securities	21,123,578
Public Deposits (including Exchequer, Savings Banks, Commissioners of National Debt and Dividend Accounts	3,757,397	Notes	5,081,625
Other Deposits	13,477,425	Gold and Silver Coin ..	770,518
Seven day and other bills	662,833		
	£35,716,073		£35,759,442

... day of Jan., 1861. M. MARSHALL, Chief Cashier.

Metropolis and its Vicinity.

International Exhibition of 1862.—It is stated on authority that if an International Exhibition of Works of Art and Industry had not been announced to take place in London in 1862, it was the intention of the Emperor of the French that one should be held in Paris, but that now the French will give way to the English Exhibition.

Miss Nightingale.—The *Times* states from undoubted authority that the reported improvement in Miss Nightingale's health is entirely without foundation. Her malady, far from being alleviated, increases upon her, and her state, which confines her entirely to her apartment, is one of great exhaustion and severe suffering.

Her Majesty's Ship Camilla.—From the accounts received at the Admiralty by the last China mail, there seems to be little doubt that her Majesty's ship Camilla must have foundered at sea. It appears that she left Hakodadi on the 1st of September for Kanagawa, the port of Yeddo, and that between that day and the 9th of September, the day on which the heavy gale passed over Yeddo, light southerly winds prevailed, so that she had not probably made much progress to the south when she was lost. Her Majesty's steam vessel Berenice, of the Indian navy, proceeded along the coast from Kanagawa to Hakodadi, and back, between the 22d of September and 11th of October, but failed in procuring any intelligence of the Camilla from the numerous fishing-boats, or in discovering any portion of the wreck. A report had reached Admiral Hope that the ship was seen by a Prussian vessel-of-war to strike on a rock in a fresh breeze and go down. This report was to be traced to its source, but the Admiral was firmly convinced that she foundered at sea in the typhoon which prevailed on the Japanese coast on the 9th of September.

Entertainment to the Governor-General of Canada.—On Saturday evening the Lord Mayor and Lady Mayoress entertained a select circle at dinner in the Mansion House to meet Sir Edmund Head the Governor-General of Canada. About 100 guests were present. In acknowledging the toast of his health Sir E. Head said:—

"The Lord Mayor had ascribed to his rule much of the loyalty and attachment towards the parent state which characterized the people of Canada in an eminent degree. But it was not to any service of his that that attachment on the part of the Canadians was to be referred. On the contrary, it was to be ascribed to the people themselves, and to the principles and ideas they had carried there from the mother country. The people of Canada had and enjoyed their free institutions. They enjoyed a constitution similar to that of the mother country, and, enjoying that constitution, as the population increased, so their love of England grew also. He might say with peculiar appropriateness, speaking within the city of London, that there was one feeling strongly impressed on the minds of the people of Canada, and that was that all freedom must strike its roots to the bottom of the fertile soil of municipal institutions. They had in Canada an organization of municipal institutions It had its faults, but, on the whole, it was successful. It was well known and understood in England that those institutions were the substratum, the base, on which freedom must rest; and those institutions were spreading as well in Upper as in Lower Canada. He said, therefore, standing where he did, it was peculiarly apposite that in that, the first commercial city in the world, he should allude to the fact that the principles of municipal government were understood in the British colonies, and regarded as the bulwarks of liberty."

The Fatal Occurrence at Astley's.—The inquest on the body of Edward Smith, the man who was killed by a lion at Astley's Amphitheatre on the 7th inst., was resumed and concluded on Monday. The surgeon who examined the body, stated that death must have been instantaneous. The body exhibited a large number of wounds, some superficial, others deep and penetrating. On the upper portion of the body were 35 wounds—18 of which were below the angle of the jaw; and one scalp wound above the left eyebrow, exposing the bone. On the right groin and thigh were 45 wounds of a similar description. Part of the left ear was torn off, there were two large lacerated wounds in the head, another deep-seated wound in the neck which had fractured one of the vertebræ, and a deep wound in the abdomen. The conclusion drawn from the nature of the wounds and their situation was, that the man was seized from behind by the claws of the lion, and cuffed right and left on the head, which produced concussion of the brain, and in all probability immediate death. The lion then bit him in the neck, causing a wound of a very dangerous character. The wounds in the groin and thigh were caused by the animal picking him up to carry him about. Mr. Crockett, the keeper of the lions, said that they were confined in an iron cage, which was surrounded at night by wooden shutters, which fitted into grooves at the top of the cage. On the night before the accident he secured the lions and replaced the shutters, surrounding one part of the cage in which there was a sick lion with a piece of canvas. After the accident he found that one of the shutters had got out of its place, but he was unable to say how it happened. The coroner in summing up expressed his fear that the shutter which Crockett took down on the Sunday night, was not put into the groove at the top of the cage. The only other possible supposition was that some one took it out for a malicious purpose. It could not have been removed by the lions themselves. He would not go into the question of the propriety of exhibiting lions on a public stage. Fearful accidents might arise from such performances, but if the public rushed to witness them they must take the consequences. The jury, after a brief consultation, returned a verdict of Accidental Death; but expressed their opinion that the cage in which the lions are confined is not of sufficient strength for the safe keeping of such animals.

Return of Garibaldian Volunteers.—On Tuesday morning 240 Garibaldian volunteers arrived in London from the seat of war in Southern Italy, by the French steam packet from Boulogne. There were several wounded men among them, but, with the exception of one who was injured on the head by a fragment of a shell, they are all in a fair way towards recovery.

Fire in the Temple.—Yesterday afternoon, at 20 minutes before 3 o'clock, a fire broke out in the Temple, in the last house in King's Bench Walk. Engines from all parts of London arrived on the spot with surprising rapidity, and the fire was subdued in the course of an hour; the damage done being much less than might have been expected.

The Weather and the Parks.—The thaw which commenced on Friday afternoon had little effect on the ice, which was nearly 13 inches thick in the Serpentine. All the parks were crowded during the day, and at night the skating on the Serpentine was again carried on with great spirit, and there was a display of fireworks and various novel amusements. On Saturday, in spite of the thaw, the parks were again crowded, and on Sunday, although the weather was unfavourable and snow fell during great part of the day, there were upwards of 10,000 persons on the ice. On Monday the frost having again set in with great severity, the ice on the various ornamental waters had again obtained not only the solidity it had last week but a much finer and smoother surface than it previously possessed. The consequence was that many thousand persons, including ladies and gentlemen, members of the Skating Club, and others of almost every grade in society, crowded the parks from an early hour in the morning until late at night. The original intention as announced last week was to have had a monster fair upon the Serpentine. This, to some extent, was abandoned, the ice not being considered sufficiently strong after the rapid thaw of two days and nights. Nevertheless, an immense number of tents and marquees were pitched upon the ice, and were used for dancing. There were likewise a great number of refreshment tents for the sale of wine, spirits, beer, tea and coffee, and other articles of food. Upwards of 6000 persons, many of whom were skaters, with lighted links, took up their positions at the east end, and formed themselves in procession, headed by a brass band. After going through several feats of skating, they had a sham fight, carried on with fireworks of different descriptions, the effect of which, as seen from the banks, was singular and striking. In the course of the evening, several accidents occurred, but none of them were of a fatal nature. On Tuesday from the time the gates were opened in the morning persons of all grades in society, including ladies, members of the aristocracy, and mechanics, entered the parks, until the numbers on the Serpentine, with those on the Regent's Park, the Long Water in Kensington Gardens, the Round Pond, and St. James's Park amounted to 15,000. Various evolutions were gone through, including the ladies' quadrille performance, which was greatly admired. Several serious accidents occurred during the day, but none of them were fatal. At night there was another grand display which lasted from 8 o'clock to nearly midnight, when the scene that took place surpassed in brilliancy the performance of the previous night. The proceedings commenced with a man bearing on his hat a large red lamp, having a similar lamp on each shoulder; lamps tied upon each knee, and on the ankles just above the skates. He was followed by an extraordinary procession of skaters, several of whom had printed papers stuck in their hats, announcing that "Cambridge and Oxford Terms" had commenced that day. The scene was altogether of a most exciting character. Immense quantities of fireworks were ignited and thrown upon the banks among the public, and as they exploded and the sparks flew about, especially among the women, the scene became alarming, and upwards of 20 women were more or less burnt. A sham fight was then carried on, one party firing from the north shore, another from the south; but, eventually, both parties commenced the medley attack, and fireworks were thrown indiscriminately about, and many persons were injured. The tents were again brilliantly lighted up during the night, and many quadrilles were performed in them, with skittle matches, games of quoits, &c. On Wednesday night several thousand persons, including ladies, crowded the greater portion of ice on the Serpentine. Nearly 1000 yards, from the cascade to the bridge, were studded with tents, containing amusement courts and fires in large iron machines for cooking chops, steaks, &c. Thousands of persons formed themselves into a procession, headed by a band of bellringers and a brass band, and, after going through some extraordinary evolutions, such as fast skating, fancy skating, quadrilles, and the "Female Volunteer Battle Race," the whole party returned at "railway speed" to the east end of the river, where they formed themselves into military companies, and went through various military exercises. At length the word of command was to "advance." The ladies, the gentlemen, and the roughs then wheeled first to the right, then to the left, and, having formed themselves into an immense square, the sport of the night began. A Royal salute having been fired, the bellringers and the brass band struck up "God save the Queen;" after which fireworks, consisting of nearly 1500 serpents, crackers, squibs, &c., were discharged at one time. The first attack, a very dangerous one, was upon the spectators on the north and south shores, and several persons were seriously injured by the fireworks striking them in the face and eyes. The weather changed on Thursday, and there seems every probability that the frost has ended for the present season. There were immense sheets of water upon the ice in the different parks, and the footpaths were crowded with spectators. A number of fireworks were discharged at night at the Serpentine, not only upon the ice but among the crowds on the footpaths.

Distress in the Metropolis.—In consequence of the long continuance of the severe weather, and the consequent suspension of out-door work, the distress among the labouring classes in all parts of the Metropolis has been very great for some weeks past, and extraordinary efforts have been made by private and public benevolence to meet the emergency. At the Court of Common Council on Thursday, it was resolved to place at the disposal of the Coal, Corn, and Finance Committee the sum of 1000*l*., as a contribution towards a general fund for the relief of the suffering poor of the city of London, including the coal-whippers and fellowship porters, and to invite the citizens generally to contribute to the amount. An energetic movement was made on Monday in the Stock-Exchange to raise a similar subscription, when the total collected was about 1000*l*., which will be sent to the magistrates of the 12 police courts for distribution. Large sums have already been sent by the public to the magistrates for the same purpose, and many thousand tickets for coals and bread are issued daily at the police courts. A general meeting of guardians and directors of the poor from all parts of the country will be held in London on the 23d inst., Alderman Sidney, M.P., in the chair, on the subject of the law of settlement and the chargeability of the poor, as affecting their condition and their dwellings.

St. Paul's Cathedral.—The demand for tickets for the musical festival on the 25th inst. is increasing daily. Many of the nobility, the Archbishop of Canterbury, several of the bishops, the Lord Mayor, Sheriffs, and Aldermen have intimated their intention to be present. The first chorus rehearsal took place in the orchestra on Thursday evening; the second will take place on Monday; and the full rehearsal with the band, under the leadership of Mr. Henry Blagrove, is fixed for Wednesday next.—The new pulpit, a memorial to the late Captain Fitzgerald, by his brother officers in India, has been placed in its position for the special evening services, which will commence on the 27th inst. The pulpit, which is composed of various descriptions of marble, is hexagonal in plan, and rests on a slab of Cork marble, upon which is a sub-base of white-veined Carrara. Upon this sub-basement, at its outer edge, rise 12 columns, which with their bases and capitals are 5 feet 7¼ inches in height, their bases being of the Attic section, and formed of Plymouth black marble. The capitals are of modified Corinthian design. The shafts of the columns are of divers marbles—those at the extreme angles of the hexagonal plan, six in number, being of Cork marble, two of Mona green from North Wales, two of Plymouth grey, and two of verde antique. The floor at the basement level is inlaid in star like pattern in black and grey Plymouth marble, Cork marble, and alabaster, the whole of which are joined with perfect precision. The designs for the pulpit were furnished by Mr. Penrose, the architect to the cathedral.

Diocese of London.—The Bishop of London has instituted the Rev. Uriah Davis, B.A., to the incumbency of St. Matthew's Church, Islington, the Rev. T. J. Rowsell to the rectory of St. Margaret, Lothbury, the Rev. F. H. Vivian, to the incumbency of St. Peter's, Stepney, the Rev. W. Randall, M.A., to the rectory of Hayes, and the Rev. Alfred Povah, M.A., second master in Dulwich College, to the rectory of St. Olave, Hart Street, on the nomination of the trustees. The Rectory of St. Stephen's, Walbrook, vacant by the death of Dr. Croly, has been conferred by the Grocer's Company on the Rev. William Windle, M.A., of Magdalen Hall

Oxford, Vicar of Kirtling, near Newmarket, in the diocese of Ely, and formerly curate of Putney. There were 37 candidates for the vacant living. The minor canonry in St. Paul's, which became vacant some weeks since by the death of the Rev. Richard Shutte, has been conferred by the Dean and Chapter upon the Rev. William Sparrow Simpson, M.A., of Queen's College, Cambridge, rector of St. Matthew's, Friday Street.

CHILD MURDER AT NEWINGTON.—On Tuesday the 8th inst the body of a female child was found in Trinity Churchyard, Newington, in a shocking state of mutilation. The head, legs, and arms had been cut off, the skull had been broken in, and the stomach cut open by some sharp instrument. The medical evidence went to show that the child had been born alive, that the body had been cut to pieces for the purpose of destroying it, and the limbs separated for the purpose of burning them. The inquest was eventually adjourned to the 25th inst.

THE PUBLIC HEALTH.—The Registrar-Generals' Weekly Return still shows a heavy mortality,—the effect of extreme cold. In the week that ended Saturday, January the 12th, the deaths were 1707, the exact number of the previous week. The average number in the corresponding weeks of the 10 previous years 1851-60, corrected for increase of population, was 1365. The present return is therefore 342 above the average. During the week the births of 959 boys and 906 girls, in all 1865 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1702.

Provincial.

BRIDLINGTON.—The steamer Prince Alfred, which left Leith for London on Saturday, ran ashore near Flamborough Head on Sunday during the fog, and became a total wreck. The passengers and crew were saved; the amount of damage to the ship and cargo is not reported. The Prince Alfred was an iron screw steamer of 696 tons, built last year expressly for the Leith and London trade. Her value is estimated at nearly 220,000*l.*

BRISTOL.—Two men, named Charles and Matthew Wedmore, nephews of George and Sarah Waterman, were apprehended on Thursday night the 10th inst. in the Hotwells Road, Bristol, by two of the county constabulary and two constables of the Bristol force, on suspicion of being the perpetrators of the murder and outrage at Dundry on the previous day. They made a most determined resistance. One of them fired a pistol at the officers, but missed his aim, and the other was armed with a similar weapon, which was taken from him before he had an opportunity of using it. The pistols have been identified by Waterman as his property, and also a watch, which was in the possession of one of the prisoners. The old man on Friday made a deposition before the magistrates in the presence of the prisoners, positively identifying them as being the men by whom his wife was murdered and himself beaten and robbed. On Monday the prisoners were taken before the magistrates and fully committed for trial for the murder of Sarah Waterman, and the robbery of George Waterman with violence. The inquest has also terminated in a verdict of Wilful Murder against the prisoners. The old man is in so serious a state that he is not expected to live.

HENLEY-ON-THAMES.—On Tuesday the magistrates of this town held an inquiry at the Town Hall respecting the death of a young woman named Clarke, a domestic servant in the house of Mr. Robert Durno Mitchell, a retired surgeon of the Royal Navy. It appeared from the evidence that he lived in the suburbs of Henley with a wife and family, and in August last engaged deceased as a domestic servant. Two relatives of deceased deposed that she had been recently in good health, and was so at the time of her entering Mr. Mitchell's service. Three tradesmen stated that when calling with daily necessaries at the house they had been asked by deceased to purchase penny loaves for her, and had done so repeatedly. On two occasions since the severe cold set in, she had been observed to look very weak, and was so ill on the 4th inst. that Mr. Brook, a surgeon in practice in the town, was called in by Mr. Mitchell to see her. She then presented, according to the surgeon's evidence, all the appearances of "a person suffering from cold and want of food." She was removed to the union workhouse on the same day, and there, notwithstanding all that could be done for her restoration, she died five days afterwards. A post mortem examination of the body took place, and from the appearances presented, three medical men came to the conclusion that want of proper food and general neglect were the cause of her death. The magistrates, after a long inquiry, committed Mr. Mitchell for trial at the assizes, but consented to take bail, himself in 200*l.*, and two sureties in 100*l.* each. A coroner's inquest was held on the same day, when the jury returned a verdict of Manslaughter against Mr. Mitchell.

LIVERPOOL.—Within the last few days two or three rifled cannon have been shipped from Liverpool for Charleston, South Carolina.

MALTON.—At the adjourned inquest on Monday, on the persons killed by the recent explosion of a steam threshing machine on the farm of Mr. Holmer, of Langton, the evidence showed that the engine was in good working order, and that no negligence could be shown. The jury thereupon returned a verdict of Accidental Death.

PLYMOUTH.—Another of those shocking cases of military insubordination, attended with murder, that have of late prevailed in the army, took place in this garrison on the night of the 5th inst, when Lance-sergeant Jones of the 61st Regiment was shot dead by a private of the same regiment, an Irishman named Robert Hacked, at their quarters in Millbay Barracks. The assumed provocation offered to the murderer on this occasion was of the most trivial character, relating merely to some joke uttered by the sergeant in reference to the prisoner having given away his dinner to an old Irish pensioner who was in the habit of selling small wares to the soldiers, but the more apparent cause of the crime was drunkenness. The magistrates have committed the prisoner for trial on the capital charge, and the coroner's jury have also returned a verdict of Wilful Murder against him.—The brig Mignonette arrived in the Sound on Sunday evening from Surinam, with all the crew except the captain and three men suffering from fever and ague, which had attacked every person on board with one exception. Three of the crew died on the voyage, and five of them were sent ashore to the Sailor's Home, where they are proceeding favourably. They attribute their safe arrival in England entirely to the skill and perseverance of Captain Selbery, who was compelled to navigate the ship himself and to keep her almost exclusively under plain sail. He was for hours at the wheel, and had sometimes to go aloft to furl topgallant sails. Notwithstanding all these difficulties, and though the brig had to lie to three days in a heavy gale, she made a fair average passage from Surinam in 44 days.—The screw steamer Ibis on Friday fell in with the spar deck of a large ship off the Deadman with the skids and grips for boats attached, and painted lead colour. The wreck is supposed to have taken place recently.

PORTSMOUTH.—Her Majesty's ship Cossack was recently ordered home from the West Indies rather abruptly, on account of circumstances which occurred during the Prince of Wales's visit to Canada. While at Prince Edward's Island some of the crew of the ship deserted, but were afterwards captured. A court-martial was held on these men at Halifax, on the 8th October, when the charges were found proved against them, but on the trial certain statements were made against Captain Moorman, by a man named Isaiah Smith, charging him with cruelty and unofficerlike behaviour. During the court-martial at Halifax, the ship was ordered away to Barbados, and in the meantime the men were tried. In consequence of the charges preferred against the captain at the Halifax court-martial, the ship was ordered to England, and Captain Moorman was tried by court-martial on Monday, on board the Victory, on three charges of cruelty and oppression towards the man Isaiah Smith, who was a musician on board the ship. The evidence for the prosecution consisted almost entirely of the statements of Smith himself, the witnesses called by him contradicting him and each other on several important points. On Tuesday Capt. Moorman was heard in his defence. He showed that his orders and those of his officers had been disregarded by the man Smith, whom he had treated with great forbearance, though he set him at nought on the subject of cleanliness at a time when disease was raging in the ship for which no cause could be assigned. When the man deserted, though he might have been glad to get rid of him, he did his duty to his profession, which compelled him to endeavour to capture the deserter and hand him over to punishment, which he succeeded in doing. This was all that had subjected him to the degrading indignity of being sent home from a foreign station for trial by court-martial on such false and unfounded charges. The lieutenants and the gunner were called for the defence, and completely disproved the statements of Smith. After a short consultation the Court found the three charges not proved, and honourably acquitted Capt. Moorman, stating that they could not separate without properly noticing the gross disregard for truth shown by the witness Isaiah Smith. The President then addressed Captain Moorman, and said that he had much pleasure in handing him his sword.

ROCHESTER.—An inquest was held on the 10th inst. in this city on the body of William Jordan, one of the crew of the ship Warlock, which lately arrived at Chatham from Demerara, whose death was alleged to have been occasioned by the gross cruelty and inhuman treatment which he received on board that vessel at the hands of Peter Emslie, the captain. The evidence showed that deceased, who was a fine muscular man, was taken ill in the Downs and was treated as a "shammer" by the captain, who stuffed salt into his mouth and compelled him to lie on the wet deck of the forecastle with scarcely a vestige of clothing upon him and without food. The post-mortem examination showed that the body was healthy and without any signs of disease, and that death was caused by exposure to the cold, and neglect. The jury returned a verdict of Manslaughter against Peter Emslie, the captain, who was removed to Maidstone Gaol on Friday to take his trial at the next assizes.

Ireland.

THE VICEROYALTY.—The Lord Mayor of D[illegible] received an official intimation from the Earl [illegible] that it is not the intention of Government [illegible] this office.

RESIGNATION OF BARON GREENE.—Baron [illegible] has resigned his seat in the Court of Exche[illegible] account of ill health. It is said that Mr. La[illegible] been appointed his successor, the Government [illegible] unable to dispense with the services of the A[illegible] General in the House of Commons.

THE ROMAN CATHOLIC PRELATES AND THE [illegible]TIONAL SYSTEM.—Dr. Cullen and the Catholic [illegible] have issued a declaration prohibiting clerical pa[illegible] Catholic schools from sending their teachers [illegible] the model or training schools of the Nationa[illegible] and prohibiting Catholic patrons from employing [illegible] any literary capacity, pupils, monitors, pupil teacher[illegible] or teachers who may enter any of those institut[illegible] after the date of such prohibition. [illegible] Dean Mayler, menaced with suspension by [illegible] Cullen, has determined to resign his commiss[illegible] and that several lay Roman Catholic members of [illegible] board will follow his example, from influence br[illegible] bear upon them.

THE CASE OF MISS AYLWARD.—A commi[illegible] been formed under the auspices of Dr. Cullen [illegible] purpose of raising subscriptions to defray th[illegible] incurred in conducting the defence of this la[illegible] suffering imprisonment for the non-production [illegible] child Mary Mathews committed to her char[illegible] considerable amount has already been subscribe[illegible]

DOUBLE MURDER IN MONAGHAN.—A [illegible] murder was committed about two miles from G[illegible] on the night of Thursday the 3d, or early o[illegible] morning. Two brothers, Robert and James [illegible] lived by themselves in the townland of Belderg. [illegible] the morning of Friday the house continued [illegible] but as the men were often away from home no sus[illegible] arose until the afternoon, when the house was e[illegible] Both men were found dead, their heads and [illegible] bearing marks of gun-shot wounds. It is supp[illegible] that the murder was committed at midnight o[illegible] Thursday, as some people living in the neighbo[illegible] were awoke by the barking of dogs. The Shaws [illegible] unoffending men, holding three small farms under [illegible] Cremorne and Colonel Leslie, M.P.; they were [illegible] ever pretty well to do in the world, and were i[illegible] habit of lending small sums out at interest. It [illegible] at first conjectured that they had made enemies in [illegible] sequence of exacting a high rate of interest: [illegible] the evidence at the inquest on Friday last left no d[illegible] that the murder was the result of a family quar[illegible] Three persons are in custody charged with having take[illegible] part in the commission of the crime—William Sha[illegible] brother of the deceased; Thomas M'N[illegible] nephew, who lived in the same house with Willia[illegible] Shaw; and Richard Jackson. The inquest has be[illegible] adjourned for a few days.

THE SLIGO MURDER,—A man called Matthew Ph[illegible] who formerly occupied the house next to the O'Ca[illegible]han's, but became a bankrupt and left the town, has be[illegible] apprehended and committed for trial on the charg[illegible] having murdered them and their servant girl. He [illegible] in Sligo on the day of the murder, and when app[illegible]hended he was stupidly drunk, and a large su[illegible] money in bank notes which were saturated with [illegible] was found upon him, together with three razors, a[illegible] coat with marks of blood upon it, which has [illegible] identified as the property of the murdered man. [illegible] inquest has also terminated in a verdict of W[illegible] Murder against the prisoner.

Scotland.

THE BIBLE BOARD.—The Rev. Sir Henry Mo[illegible] Bart., has been appointed to succeed the late [illegible] Robertson as secretary to the Bible Boa[illegible] Edinburgh.

RESPITE OF M'FAYDEN THE MURDERER.—[illegible] sentence of capital punishment recently passed [illegible] the lad M'Fayden for the murder, by drowning [illegible] Clyde, of the poor child Shields, has been resp[illegible] during her Majesty's pleasure.

HIGHLAND RESIDENCE FOR THE PRINCE OF WALE[illegible] —It is said that the Highland property of Glengarry [illegible] likely to be purchased as a Highland reside[illegible] Prince of Wales. The estate belongs to the Right [illegible] E. Ellice, M.P.

Railways.

ACCIDENTS ON THE LONDON AND NORTH WESTE[illegible] —On Monday morning an alarming accident occu[illegible] to the Scotch mail train which is due at Eu[illegible] station about 4 o'clock. When a short distance [illegible] Harrow station, travelling at a speed of 45 mi[illegible] hour, a composite carriage was thrown off the r[illegible] pulling five others after it, and as it fell upon its si[illegible] was dragged some distance in that position. The eng[illegible] driver used with great promptitude and effect [illegible] power at his command to stop the train, in spite o[illegible] speed at which it was travelling and the slipper[illegible] of the rails. There were five passengers in the c[illegible]riage at the time, two ladies and three gentlem[illegible] One of the former had an arm fractured, and one of [illegible]

[illegible] Mr. Craik, son of the Rev. Dr. Craik of [illegible], received a comminuted compound fracture of [illegible] his legs, of so dangerous a character that it was [illegible] necessary, with a view to save his life, to amputate [illegible]. The traffic on both the up and down lines was interrupted for about four hours.—The inquest on Mr. Kelly, who was killed in the recent accident at the entrance of the Primrose Hill tunnel, was resumed and concluded on Monday. Colonel Yolland, Inspector of the Board of Trade, attended and stated that the accident was caused by the gauge at the points being nearly half an inch too narrow. The jury returned a verdict of Accidental Death, with a recommendation to the company to rectify as speedily as possible the defect which had been represented as the cause of the accident.

COLLISION ON THE EASTERN COUNTIES.—On Sunday [illegible] during a fall of snow which obscured the [illegible], a collision took place between a passenger train [illegible] a goods train at the Colchester station. Several of the passengers sustained bruises and contusions, including Mr. White, of Heigham, Norwich; Mr. J. Clarke, [illegible] Orwell Street, Ipswich; Mrs. Siggins, of Kelvedon; [illegible] of [illegible]; and Mrs. Hitchin, of Maldon, [illegible] were mostly wounded in the head and face. They were all however able to proceed to Ipswich, for which place most of them had taken tickets. The train did not leave the metals, nor was any material damage done to either engines or carriages.

Law.

COURT OF QUEEN'S BENCH: *The Fugitive Slave Case in Canada.*—Mr. Edwin James applied on Tuesday to the full Court for a writ of *habeas corpus* to be directed to the governor of [illegible], and to the sheriff and gaoler of the city of Toronto, commanding them to bring up the body of John Anderson, illegally detained a prisoner in the gaol of that city. He [illegible] their lordships to include the governor of the province [illegible] the writ, under the authority of what was known as the St. Helena case. The affidavit on which he moved was founded [illegible] the precedent of the St Helena case, and it was sworn by [illegible] secretary to the British and Foreign Anti Slavery Society. [illegible] affidavit said—"That, 1st, John Anderson, of the city of [illegible], in her Majesty's province of Canada, a British subject [illegible] there, now is, as I verily believe, illegally detained in the criminal gaol of the said city there against [illegible] will, not having been legally accused, or charged with [illegible] legally tried, or sentenced, of the commission of any crime [illegible] any offence against or recognised by the laws in force [illegible] the said province, or in any other part of her Majesty's dominions, or, not being otherwise liable to be imprisoned, or detained, under or by virtue of any such laws. 2nd. I verily believe that unless a peremptory writ of *habeas corpus* shall immediately issue by this honourable court, the life of the said [illegible] Anderson is exposed to the greatest and to immediate [illegible]. It will be remembered that John Anderson, [illegible] in the State of Missouri, made his escape to [illegible], and in so doing was waylaid by a planter [illegible] Digges, who attempted to capture him. A struggle ensued in which Anderson shot his assailant. The planter, Mr. Digges, died; and Anderson continued his journey into Canada, where for seven years he has industriously earned his [illegible] and conducted himself as a subject of her Majesty. [illegible] relatives of Digges, intent on tracing their father's [illegible], found out Anderson in Canada, and applied under a [illegible] statute that Anderson might be rendered up, in accordance with the terms of the Ashburton treaty. That [illegible] provided for the extradition of criminals accused of [illegible] attempts at murder, robbery, piracy, arson, and forgery. [illegible] Court of Queen's Bench in Canada by a majority of 2 to 1 [illegible] that as Digges, according to the law of Missouri, was in [illegible] exercise of a duty imposed upon him to arrest a slave attempting to escape, his death was murder, and that the [illegible] ought to be given up under the treaty. The judge who dissented from this decision considered that the law of Canada where the prisoner was found, held an assault upon [illegible] man, with a view to take from him his liberty, to justify [illegible] in resistance, even to the slaying of the assailant; that [illegible] crime, if any, was simply manslaughter, which is [illegible] neither in the treaty nor in the statute, and that [illegible] be justifiable homicide, which would override both treaty and statute.—Mr. E. James in now moving for the writ of *habeas corpus*, said that all he had to do was to satisfy the court that it had authority to issue it; for he had no doubt under the peculiar circumstances of the case their lordships would not hesitate to exercise their authority if they once came to the conclusion that the power was vested in them. The proposition for which he was prepared to contend was that the crown had the power to issue the writ of *habeas corpus* to any part of her Majesty's possessions. [illegible] originally a part of the continent of America, [illegible] some few years before the accession of James I.; but the first instance to be gathered of a charter being granted by the crown authorising emigration to Canada was about the thirteenth of James I., and it appeared that originally the whole of that portion of America was called "plantations." Canada belonged [illegible] England until [illegible], when it was ceded to France. It was [illegible], however, by England in 1759.—Justice Hill: The [illegible] III., cap 83, recites that it was then a part of the British possessions.—Chief Justice: That is enough for the [illegible].—Justice Hill: The 11th section of that statute declares that the Criminal Law of England is to prevail throughout the whole of the colony.—Mr. James then proceeded at great length to contend that in any part of her Majesty's dominions—more especially where the laws which governed [illegible] emanated from her Majesty in England—her [illegible] a right to know what had become of any one of her [illegible]. By the common law of England, the writ of *habeas* [illegible] any part of the Queen's dominions. The first [illegible] might be cited on that point was "Bacon's [illegible]," which spoke of the places to which the writ [illegible]. It was there laid down as having been held [illegible] *habeas corpus* lay to Calais at the time it was [illegible] the King of England. Up to the time of an Act of Parliament having been passed by the Irish Parliament, the King's writs also lay to Ireland.—Lord Chief Justice: There is [illegible] express case of the writ having been issued to Calais.—Mr James: Oh, yes, and a very remarkable case it was. He had a copy of the writ before him. In the reign of Richard [illegible], of the writ issued to the Governor of [illegible] to bring up the body of Thomas Duke of [illegible]. That case was to be found in "Rymer's Fœdera."—Justice Blackburn: If I remember rightly the writ was issued by the House of Lords sitting as a court of justice, and it was but a writ of *habeas corpus ad respondendum* not *subjiciendum*.—Mr. James then quoted the judgment of Lord Mansfield in the "King *v.* Burroughs," and the "King *v.* Cowell," in the Berwick case; "The Queen *v.* Crawford," in the Isle of Man case, and the judgments of Justice Paterson and Justice Erle thereon. Likewise "Vattel on the Law of Nations," "Campbell *v.* Hall," and the judgment of the court in that case.—Justice Crompton: In Cowell's case it was admitted that the town of Berwick was not subject to the law of Scotland.—Lord Chief Justice: The question is have we the power to issue the writ in cases where there is an independent legislature and an independent judicature? The case of the Isle of Man is certainly in your favour.—Mr. James: There are local courts in that island; yet it has been decided, at all events since the passing of the act of Geo. III., which vested the island in the King of England, that this court has the power to issue the writ of *habeas corpus* there. Likewise in the St. Helena case, the writ of *habeas corpus ad subjiciendum* was granted by this court. The learned counsel then proceeded to argue at length that the existence of a local judicature did not abridge the prerogative rights of the Crown of England, and their lordships represented the Crown of England. If the present application was refused, he might appear before the Court of Exchequer, or the Court of Common Pleas, and make a similar application there; for it would be no answer to him to be told that the Court of Queen's Bench had refused compliance. Their lordships were not asked to interfere with any judgment. The prisoner was not in custody under a conviction in the local courts. In the Jersey case the application was made under the common law right.—Lord Chief Justice: If our writ should be treated with contempt, as an interference with the local powers, it would be a very serious matter. What means have we of enforcing our authority?—Mr. James: By attachment.—Justice Hill: To whom would the attachment issue?—Mr. James: It would be for the Governor to execute the writ.—Justice Hill: Suppose he refused to do so?—Justice Crompton: Have you considered whether an indictment would lie for refusing to obey such a writ?—Mr. James: Canada is a British possession and the persons to whom the writ is directed are British subjects. The same objection might have been urged in the Isle of Man and Jersey cases.—Justice Blackburn: Hardly in the Isle of Man, but it might in the Jersey case.—Mr. James submitted that, on the authority of the Isle of Man and the Jersey cases, the writ ought to issue.—Their lordships then retired to consider their judgment, and, after an absence of 20 minutes, they returned into court.—The Lord Chief Justice then delivered the following judgment—"We have carefully considered this matter, and the result of our anxious deliberation is, that we think the writ ought to issue. We feel sensible at the same time of the inconvenience that may result from the exercise of such an authority. We feel sensible that it may be thought inconsistent with that higher degree of colonial independence, both legislative and judicial, which has been happily brought into effect in modern times. At the same time, in establishing local legislation and local judicial authority, the legislature of England has not gone so far as expressly to abrogate any jurisdiction which the Courts of Westminster Hall might possess with reference to the issue of the writ of *habeas corpus*. And we find that the existence of the jurisdiction in these Courts has been asserted from the earliest times, and exercised down to the latest. We have it upon the authority of Lord Coke, of Lord Mansfield, of Blackstone, and of Bacon's Abridgment, that these writs have been issued and are to be issued into all the dominions of the Crown wherever a subject of the Crown is illegally imprisoned. And not only have we this authority upon the dicta of eminent judges, and the authority of text-writers, but we have the practical application of the doctrine, down to modern times. The more remarkable cases are the instances where the writ of *habeas corpus* was carried into the Isles of Jersey and Man, and to St. Helena. All these are in very modern times. We find it asserted not only as a matter of argument, but carried into effect as a matter of practice, that even where there is an independent local judicature, the writ of *habeas corpus* has been issued in those dominions of the Crown. We believe that nothing short of legislative enactment can deprive us of such a power, or warrant us in omitting to carry it into effect when called upon to interfere for the protection of the liberty of the subject. It may be that the legislature has thought proper to leave a concurrent jurisdiction between this court and the colonial courts, similar to that which, as suggested by Mr. James, exists between the various courts in Westminster Hall, in reference to the writ of *habeas corpus*. We feel we can only act upon the authorities that have been brought before us, and that we should not be doing justice if we refused the writ." At the conclusion of the judgment there was a very general, but suppressed, expression of applause.

COURT OF COMMON PLEAS: *Kempe* v. *Neville, The Cambridge Proctors and the Spinning House.*—This case was reopened on Friday before the full Court by Mr. Edwin James moving that the verdict be set aside, and a new trial allowed on the ground of misdirection, various issues being raised on the record. After a long argument the Court directed the motion to stand over in order that it might be seen what course the defendant, the Vice-Chancellor of the University, would pursue in this and the case of "Ebbon *v.* Neville," yet to be heard, arising out of the imprisonment in the Spinning House. On Monday Sir Fitzroy Kelly moved, on the part of the Vice Chancellor, for a rule, to show cause why a verdict for the defendant should not be entered, and that for the plaintiff, Miss Kempe, set aside. The Court granted a rule nisi as well as the cross rule moved by Mr. Edwin James on Friday for a new trial on the ground of misdirection, with liberty to either party to go to the Court of Error.

CENTRAL CRIMINAL COURT: *Great Frauds in the Leather Trade.*—*Lewis Robert Poole*, of the firm of Poole and Bryan, boot and shoe manufacturers of New Oxford Street and Northampton, *Frederick Walter Ventris*, clerk to Messrs. Quilter and Co., accountants, and *Thomas Chapman*, were charged with unlawfully disposing of property with a view to defraud the creditors of the firm of Poole and Bryan, which was adjudged bankrupt on the 23d August last, the liabilities being about 20,000*l.* After a trial of two days the jury returned a verdict of *Guilty*. The prisoners were then with a man called *George Bellingham*, charged with misdemeanour in having committed perjury during their examination before the Commissioner in reference to the bankruptcy of Poole and Bryan. There were four indictments against Poole arising out of this transaction. The jury found them all *Guilty*. Mr. Justice Blackburn sentenced Poole to six years' penal servitude for the felony, and a like period, with a fine of 1*s.*, for the perjury; Chapman to four years' penal servitude for the felony, and four years, with 1*s.* fine, for the perjury; Ventris the same sentence as Chapman; and Bellingham 18 months' imprisonment, with hard labour.

Obituary.

THE COUNT AND COUNTESS DE MONTEMOLIN died suddenly at Trieste, on the night of the 14th; the Princess died towards midnight, and the Prince five hours later. No particulars are known, but the singular circumstance of the simultaneous death of both has produced suspicion, and will doubtless lead to inquiry. Count de Montemolin was son of Don Carlos, who for many years asserted, arms in hand, his claims to the throne of Spain. He was born in 1818, and married, in 1850, the Princess Caroline, sister of Ferdinand II., King of Naples. In 1845 Don Carlos renounced his claim to the throne of Spain in favour of the deceased, whose recent landing in the province of Valencia will be fresh in the recollection of our readers. It is but a few days ago that the Prince lost his brother, Don Ferdinand, who died at Vienna of scarlet fever. The only remaining son of Don Carlos is Don Juan, who is resident in England, and has two sons.

SIR RICHARD PAUL JODRELL, Bart., died on Monday last, at his residence in Portland Place. He was born in 1781, and married in 1814 a daughter of the Earl of Kingston, and succeeded his maternal grand uncle in the title in 1817. He was educated at Magdalen College, Oxford, where he graduated in 1804. In 1806 he was called to the bar of Lincoln's Inn. He is succeeded in the baronetcy by the Rev. Edward Repps Jodrell, M.A., of Queen's College, Oxford, rector of Saxlingham, Norfolk.

WILLS.—The will of the Duke of Norfolk has been sworn under 90,000*l.* personalty; the Hon. Eliza Blackwood, 30,000*l.*

BIRTHS.—On the 13th inst, at Egglesford House, the Countess of PORTSMOUTH, of a son—17th inst, at 37, Belgrave Square, the Countess of DALKEITH, of a son and heir—13th inst, at Stoneleigh Abbey, Warwickshire, Lady LEIGH, of a son—11th inst, at Veitch's Hotel, Edinburgh, the Lady HENRIETTA D'EYNCOURT, of a daughter, stillborn—8th inst, at the Earl of Gainsborough's, in Portman Square, the Lady LOUISA AGNEW, of a son—11th inst, at Horton Manor, Bucks, Lady YARDLEY, of a daughter—13 inst, at 13, Leinster Gardens, Hyde Park, the wife of ARTHUR ST. JOHN MILDMAY, Esq., of a son—11th inst, at Kilmington Rectory near Frome, the wife of the Rev. HENRY FOX STRANGWAYS, of a daughter.

MARRIAGES.—On the 8th inst, at Barmeath, county Louth, the Hon. JENICO PRESTON, eldest son of Viscount Gormanston, of Gormanston Castle, county Meath, to the Hon. ISMAY BELLEW, third daughter of the Right Hon. Lord Bellew—10th inst, at Saxby, Barton-on-Humber, ARTHUR HENRY, third son of Sir BENJAMIN HEYWOOD, Bart., of Claremont, near Manchester, to MARGARET HELEN, youngest daughter of the late JOHN FREDERIC FOSTER, Esq., of Alderley Edge, near Manchester—15th inst, at the Catholic Chapel, in Warwick Street, and at St. James's Church, Piccadilly, GERARD RICHARD FITZGERALD, Esq., second son of the late Sir James Fitzgerald, Bart., to AGNES GEORGIANA, second daughter of GEORGE WILDES, Esq., Elm Bank, Manchester—12th inst, at St. James's, Paddington, STANDISH G. ROWLEY, Esq., Sylvan Park, Meath, to FRANCES MACNAGHTEN, eldest daughter of the Hon. JOHN C. ERSKINE—10th inst, at the Church of St. Stephen-the-Martyr, Avenue Road, Regent's Park, HENRY MAPLETON, M.D., Deputy Inspector-General Army Medical Department, second son of the late David Mapleton, Esq., Commander R.N., to ELIZABETH, youngest daughter of the late Sir THOMAS MARRABLE—8th inst, at the Catholic Church of Our Lady and St. Joseph, Kingsland, PATRICK JOSEPH CONNEL FLYNN, Esq., of the Military Store Department, Tower, to MARY JANE, second surviving daughter of JOHN BERNARD LOCKE, Esq., and niece of the late Joseph Locke, Esq., M.P. for Honiton.

DEATHS.—On the 8th inst, the Hon. JOHN SINCLAIR, youngest son of the 12th Earl of Caithness, aged 52—At 18, Onslow Square, the Right Hon. the Dowager Lady HARRIS, aged 57—16th inst, at Brough Hall, Yorkshire, Lady LAWSON, wife of Sir William Lawson, Bart., aged 59—7th inst, at Shavington, Market Drayton, Lady HILL, widow of Colonel Sir Robert C. Hill, C.B., late of Prees Hall, Salop, aged 83—14th inst, at Tilgate, MABEL, the infant daughter of Mr. and LADY AGNES HYLTON JOLLIFFE, aged seven weeks—9th inst, at No. 12, Park Street, Grosvenor Square, ANNE, widow of the late MACLEOD OF MACLEOD, of No. 3, Great Cumberland Street, and Dunvegan Castle, Isle of Skye—7th inst, at Adel Lodge, Leeds, Yorkshire, Mrs. REGINALD DYKES MARSHALL, third daughter of Sir John Herschel, Bart.—6th inst, at Whitehead's Grove, Chelsea, Miss JANE NICKLE, last surviving sister of Major-Gen. Sir Rob. Nickle, Commander-in-Chief of the army in Australia, aged 71—8th inst, at Highgate, ELIZABETH ANN, widow of C. BROWNING, Esq., of Horton Lodge, Surrey, and Binfield Manor, Berks, and only surviving daughter and child of Sir Wm. More, Bart., aged 83—8th inst, at Winchester, AUGUSTUS LAVIE, R.N., third son of the late Captain Sir Thomas Lavie, K.C.B., R.N., aged 55—12th inst, at No. 20, North Bank, St. John's Wood, ANN MAPLETOFT, only surviving child of the Rev. Nathaniel and the Hon. Anna Maria Mapletoft, of Broughton, county of Northampton, aged 23—12th inst, at 15, Langham Place, Portland Place, ELIZABETH ANNE, wife of Sir CUSACK P. RONEY, aged 40—10th inst, at 2, Brunswick Villas, Hill Road, St. John's Wood, AMELIA MARGARET, widow of the late T. C. GRANGER, Esq., M.P., Durham, aged 39—6th inst, at her residence, Belmont, Bath, MARIA, widow of Major-General PINE COFFIN, C.B., aged 85—At her residence, Boulogne-sur-mer, Mrs. WALKER, widow of the late Rear-Admiral Walker, C.B., formerly relict of Captain Edward Penruddock, Coldstream Guards, and last surviving issue of the late Arnoldus Jones Skelton, Esq., of Branthwaite Hall, Cumberland—12th inst, at 274, rue St. Honoré, Colonel W. WOODGATE, C.B., late of the 5th Battalion 60th Regiment (Rifles), aged 82—5th inst, at his residence, at Acton Vale, Middlesex, Colonel JAMES CONWAY, aged 93—8th inst, at the residence of her son-in-law, Colonel Lefroy, R.A., Blackheath, of bronchitis, after a short illness, CHARLOTTE ANNA, widow of the late Colonel DUNDAS, of Carron Hall, Scotland, aged 64—17th November, Captain PEEL, 2d Battalion of 1st Royals, on the day he sailed from the anchorage of the Peiho River for Hong Kong and England—12th inst, at Rode Hall, Cheshire, RANDLE WILBRAHAM, Esq., aged 88—11th inst, at 21, Nottingham Place, Marylebone, LANCELOT SHADWELL, Esq., aged 52—8th inst, SARAH, widow of Dr. F. LEMANN, M.D., of Montagu Square and Bathampton, aged 81—9th inst, at Brattleby Rectory, near Lincoln, the Rev. JOHN CARR, Rector of Brattleby, and formerly Fellow of Balliol College, Oxford—8th inst, at the Rectory, Codford St. Mary, Wilts, the Rev. GEORGE M. WEBSTER, D.D., for 44 years rector of that parish, aged 85—14th inst, at Worton Cottage, Isleworth, FRANCES MATILDA, youngest child of EDWARD BECK, Esq., aged 5½—15th inst, at Worton Cottage, Isleworth, EDWARD BECK, aged 58.

Markets.

BUTTER MARKET.—Jan. 18.

Best Fresh Butter	.. ..	18s. per dozen lbs.
Second do. do.	.. ..	15s. " "

Pork, 4s. 0d. to 4s. 8d. per 8 lbs.

COAL MARKET.—Jan 16.

Bower's West Hartley, 17s. 9d; Byass's Bebside West Hartley, 17s 6d.; Howard's West Hartley, 17s 9d; Lambert's West Hartley, 17s. 3d.; Tanfield Moor Butes, 20s 3d.; West Hartley, 17s. 9d.; Walls End Byron, 24s.; Walls End Harton, 24s 3d; Walls End Whitwell[illegible], 24s [illegible]d.; Eden Main, 24s.; Walls End Belmont, 24s; Walls End Framwellgate, 24s.; Walls End Haswell, 26s. 0d; Walls End Hetton, 26s.; Walls End South Hettons, 26s.; Walls End Heugh Hall, 24s.; Walls End North Hartlepool, 18s. 6d.; Walls End Shincliffe, 24s. 3d; Walls End South Hartlepool, 24s. 9d.; Walls End Thorpe, 25s.; Walls End Whitworth, 12s.; Walls End Byers Green, 20s.; Walls End Woodhouse

Close, 22s. 6d.; Carway and Duffryn Malting, 24s. 6d.—90 ships at market.

COVENT GARDEN, Jan. 19.

Supplies of all kinds of winter Greens begin to fall off, and prices for them are rising. Pine Apples and Grapes have not altered since our last report. Oranges may still be obtained at about last week's prices. Shaddocks may be had in quantity, also American Lady Apples, which realise 2s. a dozen. Good Cobs may be had at from 1s. to 1s. 6d. per pound. Broccoli, Cabbages, and all kinds of Greens are not equal to the demand. Excellent Endive is, however, furnished from Algiers. Asparagus and French Beans may also be had, but prices for them are high. Cucumbers are scarce. Cut flowers chiefly consist of Orchids, Gardenias, Chinese Primulas, Violets, Mignonette, Heaths, and Roses.

FRUIT

Pine Apples, per lb., 4s to 8s	Apples, per doz., 6d to 1s 6d
Grapes, per lb., 6s to 10s	Oranges, per 100, 6s to 10s
Pomegranates, each, 4d to 6d	Lemons, per 100, 6s to 10s
Pears, per doz., 3s to 6s	Nuts, Cob, per lb , 1s to 1s 6d

VEGETABLES.

Broccoli, each, 6d to 8d	Onions, p. ½ sieve, 1s 6d to 2s6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 10s to 30s
Cabbages, do., 2s to 3s	Seakale, p. punnet, 3s to 3s 6d
Potatoes, p. ton, 100s to 130s	Shallots, per lb., 6d to 8d
— per bus., 3s to 4s	Garlic, per lb., 6d to 8d
— per cwt., 5s to 8s	Lettuces, Cabb., per score, 1s to 1s 6d
Carrots, per bunch, 8d to 10d	Lettuces, Cos, do., 1s to 1s 6d
Turnips, per bunch, 6d to 8d	Endive, p. score, 1s to 1s 6d
Spinach, p. sieve, 4s to 5s	Horse Radish, p. bun., 1s 6d to 4s
Cucumbers, each, 2s to 3s	Mushrooms, p. pott., 2s to 3s
Artichokes, per doz., 4s to 6s	Parsley, p. 12 bunches, 4s to 6s
Beet, per doz., 1s 6d to 2s	Savory, per bunch, 2d to 4d
Celery, p. bundle, 1s 6d to 1s9d	

BRITISH WOOLS.—LONDON, FRIDAY, Jan. 18.

The state of the money market and of American affairs has put a stop to all business here for the present, and it is impossible to affix any quotations, as no one is disposed to press his stock into the market until the value has become settled.

	s. d. s. d.		
South-down Hoggets..	1 7 to 1 8	Leicest. Wethers	1 6 to ..
Half-bred ditto..	1 8 — ..	Ditto Hoggs ..	1 8 — ..
Down Ewes ..	1 5 — 1 6	Combing Skins	1 0 — 1 4
Kent Fleeces ..	1 7 — ..	Blanket ditto ..	0 6 — 0 8
		Flannel Wool .	1 0 — 1 8

METROPOLITAN CATTLE MARKET.
MONDAY, Jan. 14.

We have a larger supply of Beasts and a very dull trade. Prices are lower for all kinds. The number of Sheep is about the same as on Monday last, but the demand has greatly decreased. There is a considerable reduction in price, and a clearance cannot be effected. Calves are also lower. From Germany and Holland there are 230 Beasts, 230 Sheep, and 97 Calves; from Scotland, 127 Beasts; from Ireland, 100; from Norfolk and Suffolk, 2000; and 500 from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 10 to 5 0	Best Long-wools.	5 0 — 5 4
Best Short-horns	4 6 — 4 10	Do. Shorn ..	.. .. to ..
2d quality Beasts	3 6 — 4 0	Ewes & 2d quality	4 4 — 4 8
Best Downs and Half-breds ..	5 4 to 5 6	Do. Shorn ..	.. .. — .
Do. Shorn ..	.. .. — ..	Lambs ..	.. .. — ..
		Calves ..	.. 4 4 — 5 0
		Pigs ..	.. 4 0 — 5

Beasts, 4040; Sheep & Lambs, 19,700; Calves, 110; Pigs, 400

THURSDAY, Jan. 17.

We have but a short supply of Beasts, and consequently although trade is dull we are enabled to dispose of them at about Monday's quotations. The number of Sheep is very small, yet it is quite equal to the demand. It is difficult to obtain an advance on Monday's prices. No alteration in the Calf trade. Our foreign supply consists of 60 Beasts and 151 Calves. Of Milch Cows 130.

Best Scots, Herefords, &c. ..	4 10 to 5 0	Best Long-wools .	5 0 — 5 4
Best Short-horns	4 6 — 4 8	Do. Shorn ..	.. .. — ..
2d quality Beasts	3 6 — 4 0	Ewes & 2d quality	4 4 — 4 8
Best Downs and Half-breds ..	5 4 — 5 6	Do. Shorn ..	.. .. to ..
Do. Shorn ..	.. .. — ..	Lambs ..	.. .. — ..
		Calves ..	.. 4 4 — 5 2
		Pigs ..	.. 4 0 — 5 0

Beasts, 670; Sheep & Lambs, 2100; Calves, 180; Pigs, 125.

MARK LANE.—MONDAY, Jan. 14.

The navigation remaining closed, the samples of English Wheat are confined to those by land carriage, and prices remain unaltered from Monday last. The market was better attended than last week, but buyers restricted their purchases of foreign Wheat to their immediate requirements. The value of all descriptions remains as on this day se'nnight. In spring corn there is but little doing; prices of all kinds are unaltered. Flour sells slowly at barely last week's prices.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk.. White	54—66	Red	48—62
— — fine selected runs..ditto	55—70	Red	55—67
— — Talavera	51—75		
— Norfolk	—	Red	—
— Foreign	50—76		
BARLEY, grind. & dist., 28s to 30s.. Chev.	40—45	Malting .	38—44
— Foreign..grinding and distilling	30—36	Malting .	40—44
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—25
— Irish ....Potato	26—28	Feed ..	21—24
— Foreign........Poland and Brew	24—28	Feed ..	20—28
RYE	35—38	Foreign .	—
RYE-MEAL, foreign	—		
BEANS, Mazagan....36s to 44s.... Tick	28—48	Harrow .	28—48
— Pigeon ......34s — 56s.. Winds.	34—42	Longpod	—
— Foreign ....Small	40—50	Egyptian	—
PEAS, white, Essex and Kent ..Boilers	33—48	Suffolk .	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign	38—48
MAIZE .... White	—	Yellow..	—
FLOUR, best marks delivered..per sack	50—57		
— 2d do.......................ditto	38—50	Country.	38—50
— Foreign ....per barrel	30—35	Per sack	42—50

FRIDAY, Jan. 18.

On the 12th inst. we had a slight thaw, since which the frost has been very severe until yesterday, when the weather again became slightly milder, and continues so to-day, after frost at night. The corn trade throughout the kingdom has been dull, all communication by water continuing to be interrupted by ice; Wheat has consequently been quoted cheaper, and the same will apply to Barley, and although no alteration has occurred here, in several of the leading markets prices are written 1s. per qr. lower. Other descriptions of spring corn have in most parts of the country supported their former value. The sale of Flour has been also dull, and in some instances slightly lower rates have been accepted here for American. In Liverpool and Glasgow it is quoted 1s. per qr. lower. The high rate of discount and the protracted absence of the number of cargoes now on their way to the United Kingdom, together with the difficulty of communicating with the interior, have put a stop to nearly all the floating business during the past week. The arrivals of foreign Wheat and Flour this week are to a fair extent, of all other grain very small. This morning's market was badly attended, and the business transacted of very moderate amount. Wheat, both English and foreign, must be written nominally the same as Monday, and the same applies to Spring Corn and Flour.

ARRIVALS FROM JAN. 14 TO JAN. 18.

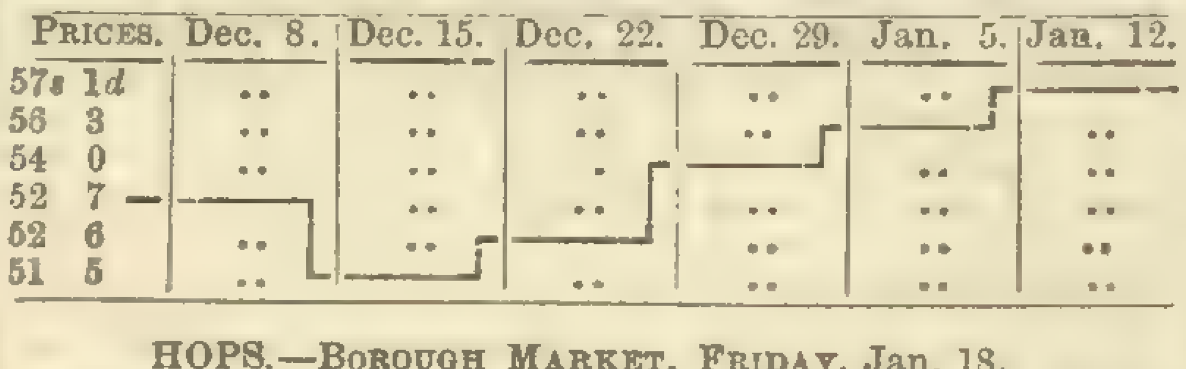
	Wheat.	Barley.	Oats.	Flour.
English ..	150 qrs.	1230 qrs.	140 qrs.	220 sks.
Irish	— „	— „	1000 „	— „
Foreign ..	9710 „	— „	1720 „	1530 „ / 13860 brls.

LIVERPOOL, Tuesday, January 15.—There was a good attendance at our Corn Exchange this morning. A good consumptive business was transacted in Wheat at the full prices of Friday. Flour the turn in favour of buyers, and a slow sale. Indian Corn 6d. per qr. dearer; mixed 38s. 6d.; Galatz 39s. 6d. to 40s. Beans unchanged. Oats and Oatmeal a fair sale at Friday's prices.

FRIDAY, Jan. 18.—To-day's market well attended. Wheat only in retail demand at Tuesday's prices. Flour met rather more inquiry. Indian Corn, mixed, 38s. to 38s. 3d. Other sorts unchanged. Beans steady. Oats and Oatmeal dull sale at unchanged prices.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Dec. 8..	52s 7d	39s 2d	22s 5d	35s 0d	47s 9d	45s 0d
— 15..	51 5	38 7	22 1	33 6	45 6	43 3
— 22..	52 6	38 6	21 8	35 2	42 2	43 10
— 29..	54 0	39 7	22 6	34 7	44 10	46 7
Jan. 5..	56 3	40 3	22 6	39 10	43 4	42 0
— 12..	57 1	40 6	22 6	34 6	43 10	44 6
Agg. Aver.	54 0	39 5	22 3	35 5	45 1	44 3

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



HOPS.—BOROUGH MARKET, FRIDAY, Jan. 18.

Messrs. Pattenden & Smith report a steady demand for consumption for yearlings and the best grown samples of the new growth at firm rates.

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, Jan. 17.

Prime Meadow Hay	75s to 84s		Clover	95s to 115s	
Superior do. (old)..	90	110	New Clover	—	—
Inferior do.	40	57	Old second cut ..	70	95
New do.	—	—	Straw	32	43
Rowen	30	50			

DAVIS & CO.

CUMBERLAND MARKET, THURSDAY, Jan. 17.

Sup. Meadow Hay..	114s to 120s		Inferior Clover ..	80s	110s
Inferior do.	60	98	New do.	—	—
New do.	—	—	Straw	38	44
Superior Clover ..	118	126			

JOSHUA BAKER.

WHITECHAPEL, THURSDAY, Jan. 17.

Fine old Hay	100s to 110s		Fine old Clover ..	110s to 120s	
Inferior do.	40	90	Inferior do	90	105
Prime New Hay ..	—	—	Fine 2d cut	80	100
Inferior do.	—	—	Inferior do.	—	—
Straw	36	40	Fine New Clover ..	—	—

POTATOES.—SOUTHWARK, Monday, Jan. 14.

In consequence of the frost there have been but few arrivals at the water side and limited by rail, and prices have advanced. The following are this day's quotations:—York Flukes, 165s. to 175s. per ton; Lincolnshire Regents, 110s. to 130s.; Dunbar Red Soil, 180s. to 190s.; North Berwick do., 130s. to 140s.; Fife, Forfar, and Perth do., 120s. to 130s.; Rocks and Reds, 110s. to 120s.; French Whites, 95s. to 105s.; Belgian do., 90s. to 95s.; Dutch do., 85s. to 90s.

PARTNERSHIP.—Wanted, an active business Man to take a Share in a well-established extensive NURSERY in the City of Dublin.—Apply by letter, stating amount of capital, &c., to A. W. B., *Gardeners' Chronicle* Office, W.C.

WANTED, A WOODMAN OR FORESTER to take charge of extensive Woodlands. He must be thoroughly acquainted with the Cultivation of Wood, experienced in the Valuing and Selling of Timber, and be a tolerable Accountant.—Apply by letter (enclosing testimonials), stating age and qualifications, addressed to W. S. YOUNG, Esqr., Estates Office, Baldersby Park, Thirsk.

WANTED, A GARDENER who understands Forcing Fruit and Flowers, and can take charge of Horses. Salary 1l. 5s. per week—live out of the House.—Apply by letter, Mr. COOPER, Alpha House, Coburg Road, Old Kent Road, S.

WANTED, AN UNDER GARDENER.—No one need apply who cannot look after and drive a Cart Horse, and have a good character for thoroughly understanding the management of Pigs and Cows.—Address, stating last employer, if married or not, age, and wages expected, to A. B., 26, Bride Lane, City, London, E.C.

WANTED, AS SHOPMAN, a Man who understands the Seed Business and all its branches, and if acquainted with the Nursery Business would be preferred. He must produce unexceptionable testimonials as to character, with reference.—Apply to G. R. DAVIDSON, Nurseryman and Seedsman, Kildare Street, Newry, Ireland.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD) to a nobleman or gentleman. Age 34, married, one child; has had great practical experience in all branches of his profession, including Forcing Fruits, Flowers, and Vegetables; and is a good Flower and Kitchen Gardener. Five years' good character from the nobleman he is about to leave—ROBT. STEWART, Campden House, Broadway, Worcestershire.

GARDENER (HEAD).—Middle-aged, married, without incumbrance; has a thorough practical knowledge of his profession in every department. Understands the Laying out of Grounds, Planting, and the Management of Trees; is a thorough good practical Botanist. Testimonials most satisfactory, from persons of the highest respectability, to whom also reference may be made.—M. D., F. Farrell & Son, 120, Capel Street, Dublin.

GARDENER (HEAD).—Age 26; thor... stands his profession. Can have a g... A. B., Post Office, Weald, Sevenoaks.

GARDENER (HEAD).—Age 30, sing... understands his profession in all its ... reference from last situation.—A. B., Post Office, ... Brough, Yorkshire.

GARDENER (HEAD).—Age 29, married... brance; well understands his profe... branches. Spotless character from present ... Post Office, Watton Hertford, Herts.

GARDENER (HEAD).—Age 35, married... brance; understands his profession in a... Three and a half years' character.—J. P., 5, F... Lane, Essex.

GARDENER (HEAD).—Age 28, single... understands his profession in all its ... Three years' character.—M. P. G., Stanly, ... Kent, S.E.

GARDENER (HEAD).—Age 35, married... brance; thoroughly qualified in his ... Grape Grower; understands Stock and ... 3, Harrow Cottages, Harrow Green, Leyton...

GARDENER (HEAD).—Married; 17 yrs ... in Early and Late Forcing of Fruit and ... Fruit and Flower Gardens. Three and a ... character.—S. T., Miller's Nursery, Andover, H...

GARDENER (HEAD). — Age 37, ... daughter, age 5; thorough knowledge of ... Stove and Greenhouse Plants, Kitchen, Flower ... Character will bear the strictest inquiry for ... &c.—A. B., Messrs. May, Seedsmen, 15, W... Strand, W.C.

GARDENER (HEAD).—Age 28; has a ... ledge of his profession in all its branches ... Foreman in some First-class establishments ... recommended to any nobleman or gentleman ... service of a practical Gardener.—A. B., William ... Architect, Register Square, Beverley, Yorkshire.

TO NOBLEMEN AND GENTLEMEN

GARDENER (HEAD).—Age 34, married; ... many years in first-class establishments, ... practical knowledge in every department of the ... Remodelling Flower Gardens, or any other ... required. Satisfactory reasons given for leaving ... tion as Head Gardener. First-class reference.— ... Cutbush, Nurseryman, Barnet, Herts.

GARDENER (HEAD, OR SINGLE-HANDED ... there is a convenient range of Glass).—Age ... able experience; thoroughly attached to his ... leaving in consequence of his employer having changed his residence.—Apply to JOHN HEATH'S, E... Arch, Tadcaster.

GARDENER.—Age 27, single; thorough... stands his profession. Good character ... any part.—W. J., Bennett, Seedsman, Dulwich, S.

GARDENER (UNDER).—Age 22; has a g... ledge of Forcing and Plant Departments ... G. G., Post Office, Buntingford, Herts.

GARDENER (UNDER).—Age 21; good ... knowledge of Forcing and Plant Growing ... character.—C. J., W. Hawe, Esq., Architect, Register Square, Beverley, Yorkshire.

GARDENER, GROOM, OR WORKING ... Age 40; will leave his situation at the ... Can drive or milk a cow. Is not leaving ... fault. Four years' character from last situation ... Lodge, Barnet, Herts.

AGENT OR MANAGING FARM BAILIFF ... a thorough knowledge of the Management ... tions of Land, Woods, Timber, &c.; also well up in ... and the Management of all kinds of Stock. ... the highest class from several gentlemen of ... care of Messrs. Francis and Arthur Dickson & ... Merchants, Chester.

BAILIFF AND MANAGER OF A LARGE FARM.—A well qualified Man wishes for a ... ment; has had great practical experience, and can ... recommended.—A. Z., W. Dawson & Sons, 74, C... London, E.C.

TO NOBLEMEN AND GENTLEMEN

FARM BAILIFF OR MANAGER OF AN ... —Has been engaged in the management of an ext... on the Borders of Scotland for some years; has a ... ledge of Stock, and has been regularly accustomed ... ing; has also some knowledge of Land Surveying ... tionable references will be given.—AGRICOLA, P... Newcastle-on-Tyne.

FARM BAILIFF.—Middle-aged, without ... brance; thoroughly understands Rearing ... Farming in all its branches. References unex... T. D., Mr. Cocksey, Audlem, Cheshire.

FARMING BAILIFF (now or in March) ... no incumbrance; thoroughly understands ... all its branches. His Wife as Cook and House... manage a Dairy or Poultry.—W. B., Post Office, ...

BAILIFF.—A native of one of the best ... counties in Scotland; a thorough practical ... to Draining and Improving Lands. Management ... Stock, both Sheep and Cattle; also Woods, &c. ... of the highest order.—J. B., Messrs. Peter L... 27, Great George Street, Westminster.

STOCKMAN. — A respectable middle-aged ... without incumbrance; can take the ma... Farm, understands Heavy and Light Soil. ... Dairy-woman. Good reference.—Mr. FAULTLESS, ... Street, Long Acre, W.C.

SEEDSMAN.—A young man who has had ... experience in a large provincial Seed business ... unexceptionable testimonials.—Mr. GEORGE YERBE, ... Street, Northampton.

TO NURSERYMEN OR SEEDSMEN.

SHOPMAN.—Ten years' experience in ... Country Houses.—A. B , Charles White's, H... Uxbridge.

TO SEEDSMEN.

SHOPMAN.—Has had great experience ... Wholesale and Retail trade, and thoroughly ... with every branch. Unexceptionable reference.— ... *Gardeners' Chronicle* Office, W.C.

The Gardeners' Chronicle Newspaper.

SATURDAY, JANUARY 26, 1861.

GEOLOGY.—KING'S COLLEGE, LONDON.—[illegible] TENNANT, F.G.S., will commence a COURSE OF [illegible] GEOLOGY, on FRIDAY Morning, January 25, [illegible] Clock. They will be continued on each succeeding [illegible]ESDAY and FRIDAY at the same hour. Fee 2*l*. 12*s*. 6*d*. [illegible] JELF, D.D., Principal.

LECTURES TO WORKING MEN.

GOVERNMENT SCHOOL OF MINES, Jermyn [illegible] THIRD COURSE OF SIX LECTURES ON [illegible] Professor RAMSAY, F.R.S., will be commenced [illegible] January 28, at 8 o'Clock. [illegible] working men only on MONDAY, [illegible] to 4 o'Clock, upon payment of a fee of 6*d*. [illegible] Course. Each applicant is requested to bring [illegible] address, and occupation written on a piece of paper, [illegible] the Ticket will be exchanged.

TRENHAM REEKS, Registrar.

NOTICE OF DIVIDEND.

BANK OF DEPOSIT (Established A.D. 1844), 3, Pall Mall East, London, S.W.—The WARRANTS for HALF-YEARLY INTEREST, at the rate of 5 per cent. per annum, on Deposit Accounts, to December 31, are READY for delivery, and payable daily between the hours of 10 and 4. January 12.

PETER MORRISON, Managing Director.

Prospectuses and Forms sent free on application.

News of the Week.

DESPATCHES have been received in anticipation of the Calcutta and China mail, with news from Hong Kong to the 16th, and from Calcutta to the 30th December. The China news informs us that all was quiet at Pekin, and that the first instalment of the indemnity had been paid. The greater part of the expeditionary force arrived at Hong Kong on the 15th December. The 31st, 67th, the Rifles, the Military Train, and two batteries remained at Tien-tsin, where they were comfortably housed and plentifully supplied with warm fuel and clothing. The weather was intensely cold, and the Peiho was completely frozen over, but the troops were very healthy. Lord ELGIN and Sir HOPE GRANT had left for Japan; Sir ROBERT NAPIER had returned to Calcutta. The rebels were still in force and gaining strength. From India we learn that a monster meeting had been held at Calcutta to protest against the grant of 520,000*l*. awarded by Sir CHARLES WOOD, as Secretary of State for India, to the descendants of TIPPOO SAIB. The grant had also been the subject of an angry discussion in the Legislative Council, and a series of resolutions calling for all the papers on the subject had been moved by Sir BARNES PEACOCK, and carried by the casting vote of the Chief Justice. The collection of the Income Tax was proceeding quietly at Bombay, and the import trade had been resumed after a suspension of six weeks.

Admiral BARBIER DE TINAN, with the whole of the French fleet, left the waters of Gaeta on Saturday. The armistice expired on the evening of that day; and on Monday, General MENABREA, on the part of KING VICTOR EMMANUEL, proposed to KING FRANCIS II. the terms of an honourable capitulation. The KING, with the concurrence of the Papal Nuncio, and of the Ambassadors of Austria, Spain, Saxony, Bavaria, and Portugal, refused to listen to these terms, whereupon Admiral PERSANO proclaimed the blockade, and allowed the inhabitants and the foreign vessels in the port a few hours' time to leave the place. On Tuesday morning hostilities were recommenced by the batteries of Gaeta, which unexpectedly opened a very heavy fire upon the Sardinians. The latter promptly replied, and compelled the fortress to slacken fire. The Sardinian fleet subsequently placed itself in line; but it does not appear that it had taken part in the bombardment up to the evening of the 24th. Several thousand Bourbon troops under the command of General LOVERA, had entered the Neapolitan provinces through the Roman territory last week, and defeated the less numerous Italian forces near Tagliacozzo, compelling them to retire on Avezzano. General SONNAZ immediately left Naples with reinforcements, and the latest news announces that the Bourbon troops had been completely defeated by General SONNAZ and driven back beyond the Papal frontier, and that the reactionary movement had been everywhere suppressed. The official organ of the Sardinian Government has announced the resolution of Count CAVOUR not to add to the existing complications by an attack on Austria for the sake of Venice; and GARIBALDI has charged General TURR to convey to KING VICTOR EMMANUEL a message of unchanged loyalty and conciliation, with the assurance of his readiness to curb the excessive zeal of his partizans, and to act in political unison with Count CAVOUR and the Sardinian Ministry so long as they continue faithful to their duty of arming the nation.

The KING OF PRUSSIA has delivered a warlike address to his generals, in which he says that the present moment is full of dangers in which he may have need of all their devotedness; that if he and other princes who desire the maintenance of peace do not succeed in turning aside the rising storm they will have need of all their forces to defend themselves in a conflict in which they must vanquish, if they are not willing to be annihilated.

The EMPEROR OF AUSTRIA has issued an imperial ordinance convoking the Hungarian Diet at Buda on the 2d of April. At the same time the EMPEROR has issued a series of resolutions annulling the elections of the political refugees, announcing the intention of the Government to "act severely" against all who refuse to pay taxes, forbidding the establishment of the institutions granted by the Constitution of 1848, and declaring that the Comitats have no executive power, and are consequently not to be allowed to issue ordinances. The Hungarians have replied to these resolutions by a declaration of their resolve to preserve all their ancient rights, and to maintain the laws of 1848 until the Diet shall have resolved on changing them. The latest news states that the Court Chancellor has informed the PRINCE PRIMATE OF GRAN that the recall of the refugees is at present prevented by the question of the sequestration of their property, but that after the settlement of that question, it is the intention of the EMPEROR to proclaim a general amnesty.

From the United States we learn that the example of South Carolina has been followed by Florida, Virginia, Georgia, Mississippi, Louisiana, and Alabama, which have all declared for immediate secession. The federal forts and arsenals in these States have been taken by the secessionists, and resolutions have been adopted for seizing all the fortifications on the southern coast. The federal troop-ship conveying the reinforcements sent by the PRESIDENT to Major ANDERSON, has been fired into at Charleston and compelled to retire without landing the troops. The Brooklyn, sloop of war has now been sent to Charleston to force an entrance for the troops, and the secessionists are making energetic preparations to resist the attempt. Major ANDERSON has sent to Washington for instructions, but it is generally believed that, at the first shot fired at the Brooklyn, he will open fire from Fort Sumter on the fortifications of the city, and that the fight will then become general. Meanwhile General SCOTT has ordered all the available troops at Leavenworth to proceed to Fort McHenry, near Baltimore; Mr. THOMPSON, Secretary of the Interior, has resigned on account of the despatch of reinforcements to Fort Sumter; and the PRESIDENT has sent a Special Message to the Senate, throwing the responsibility on Congress, and suggesting the restoration of the Missouri compromise.

A despatch from New Orleans announces that MIRAMON was completely routed and put to flight on the 22d December, and that the Liberals took possession of the city of Mexico on Christmas Day. This news has not yet been confirmed from any other quarter, but should it prove to be true, the war may be considered at an end.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family continue at Windsor Castle. On Thursday week the Duchess of Kent visited her Majesty and took luncheon. In the afternoon the Prince Consort, with the Prince of Wales and the Duke de Chartres, skated on Virginia Water. In the evening the third dramatic performance this season took place in St. George's Hall, where the comedy of "Masks and Faces," by Mr. Tom Taylor and Mr. Charles Reade, and Mr. Charles Mathews's comedy of "My Wife's Mother," were performed in the presence of the Queen and Royal family, the visitors at the Castle, and a number of invited guests. On Friday morning the Queen and Prince Consort, with the Prince of Wales, walked in the Home Park and visited the Duchess of Kent at Frogmore. The Prince of Wales afterwards took leave of her Majesty and left Windsor for Madingley Hall, Cambridge. The Duke de Chartres, the Duke and Duchess of Manchester, Lord and Lady Proby, Lord and Lady Stanley of Alderley, the Right Hon. T. Milner Gibson, and Mr. Gibbs left the Castle. On Saturday morning the Queen walked in the grounds of the Castle. The Prince Consort came to London, and presided at a meeting of the Finance Committee of the Royal Commission for the Exhibition of 1851, held at Buckingham Palace. The Duchess of Kent visited her Majesty and took luncheon. Lord Palmerston and the Hon. F. and Mrs. Stonor arrived on a visit. In the afternoon the Prince Consort, with Prince Arthur, skated in the Home Park. On Sunday morning the Queen and Prince Consort, the Princesses Alice, Helena, and Louisa, Prince Arthur and Leopold, and the visitors, attended Divine service in the private chapel. The Dean of Windsor officiated. Prince Philip of Wurtemberg arrived on a visit to her Majesty. On Monday morning the Queen, with Princess Alice, walked and drove in the Home Park, and visited the Duchess of Kent at Frogmore. The Prince Consort, accompanied by Prince Philip of Wurtemberg, went out shooting. Lord Palmerston and the Hon. F. and Mrs. Stonor left the Castle. On Tuesday morning the Queen walked in the grounds of the Castle. The Prince Consort, with Prince Arthur, skated in the Home Park. The Duchess of Kent visited her Majesty, and took luncheon. General von Bonin, on a special mission from the King of Prussia, accompanied by Lord John Russell and the Prussian Minister, Count Bernstorff, arrived on a visit. Shortly after their arrival her Majesty gave audience to General von Bonin, who presented letters from the King of Prussia. Count Bernstorff and Lord John Russell also had an audience of her Majesty. Prince Philip of Wurtemberg left the Castle. On Wednesday morning the Queen with Princess Helena walked and drove in the Home Park. The Prince Consort went out shooting, accompanied by Count Bernstorff. The Duchess of Cambridge and Princess Mary, the Lord Chancellor, the Marquis and Marchioness of Westminster, the Earl and Countess of Tankerville, Lord Waterpark, the Right Hon. the Speaker, the Right Hon. B. and Mrs. Disraeli, and Vice-Admiral the Hon. Sir R. S. Dundas arrived on a visit. On Thursday morning the Queen, accompanied by the Duchess of Cambridge, Princess Alice, and Princess Mary of Cambridge, drove out in an open carriage, and honoured the Belgian Minister and Madame Van de Weyer with a visit at New Lodge, Windsor Forest. The Prince Consort went out shooting, accompanied by Count Bernstorff and the Earl of Tankerville. In the afternoon Count Bernstorff, General von Bonin, and Lord John Russell left the Castle.

THE PRINCE OF WALES arrived at Cambridge on Friday afternoon, travelling from Windsor by a special train by Kew and the North London line to Stratford, and thence to Cambridge by the Eastern Counties without change of carriage. On arriving at the Cambridge station his Royal Highness proceeded by the backs of the colleges direct to Madingley Hall. There was a total absence of any official demonstration on the part of either university or town, in accordance with the expressed wish of the Prince. On Saturday morning the Vice-Chancellor, accompanied by the Heads of Colleges and Proctors, had the honour of being introduced to his Royal Highness at Trinity College Lodge. Immediately afterwards the Mayor of Cambridge, accompanied by the Town Clerk and a deputation from the corporation, were introduced to the Prince, and delivered an address, to which his Royal Highness made a brief reply. The Prince then went, attended by General Bruce and the Master of Trinity, to Magdalene College Lodge, the residence of the Vice-Chancellor, where he was received by the Vice-Chancellor, accompanied by Mr. Romilly, the registrar, and went through the ceremony of matriculation. Having signed his name in the Registrar's book, the Vice-Chancellor delivered to him a copy of the University Statutes. On Sunday morning, His Royal Highness attended Divine service at Madingley Church. The Rev. Thomas Field, of Emmanuel College, Cambridge, vicar of Madingley, officiated.

THE CABINET.—A Cabinet Council was held yesterday afternoon at the official residence of Lord Palmerston in Downing-street.

PARLIAMENTARY MOVEMENTS.—Sir T. E. Colebrooke, Bart., M.P. for Lanarkshire, will probably be selected to move the Address in the House of Commons in answer to the Speech from the Throne.—The requisition to Colonel Bathurst having received the signatures of upwards of 1200 electors out of a constituency of little more than 3000, the gallant officer has expressed his willingness to stand for South Wilts in the Conservative interest, and has issued an address to the electors. Colonel Bathurst's expenses have been guaranteed by his supporters, and between 2000*l*. and 3000*l*. was sub-

scribed at a meeting at Salisbury on Tuesday, some of the leading agriculturists of the district putting down their names for 50*l*. and 100*l*. each. The nomination will not take place until after the meeting of Parliament.—There are three candidates for the seat at Leicester vacant by the death of Dr. Noble,—Mr. Heygate, in the Conservative, Mr. Harris, in the Liberal, and Mr. P. A. Taylor, in the Radical interest.

Chief Justiceship of Madras.—Mr. Colley Harman Scotland, of the Oxford Circuit, has been appointed to the Chief Justiceship of Madras, vacant by the death of Sir Henry Davison.

The Dockyards.—Orders have been issued from the Admiralty for the discharge of all the hired shipwrights and sawyers, with the greater portion of the remaining hired men employed in the Royal dockyards, by the end of March next. Upwards of 1000 men will be discharged from Portsmouth yard alone.

The Volunteer Movement.—On Saturday afternoon a numerously attended meeting of commanding officers of the various Middlesex corps was held at the Volunteer Service Club for the purpose of promoting an address expressive of the sense so generally entertained of the great services rendered by Earl de Grey and Ripon to the Volunteer forces, and of the regret felt for his retirement from the office of Under-Secretary of State for War. Lord Elcho presided, and letters were read from the Marquis of Donegal, Lieut.-Colonel of the London Irish; Earl Grosvenor, Lieut.-Colonel of the Queen's Westminster; Viscount Ranelagh, Lieut.-Colonel of the South Middlesex; Viscount Enfield, Lieut.-Colonel of the North Middlesex (29th); Colonel Lindsay, St. George's; Major M'Leod, of the 1st Middlesex Engineers; Major Grey, &c., warmly approving the proposal, and regretting their unavoidable absence. Among the commanding officers present were Lord Elcho, London Scottish; Lord Truro, Major Commandant 4th Middlesex (Islington); Major-General Downing, Lieut.-Colonel Bigge, Railway Rifles; Lieut.-Colonel Colville, 39th (Clerkenwell); Captain Phillips, 38th (Artist); Major Wilkinson, 2d Administrative Battalion (Highgate, Hampstead, and Hornsey); Captain Hughes, 19th Middlesex (Working Men's College Corps); Captain Walters, Central London; and other commandants. The Chairman said, that though he had not personally had the pleasure of starting the idea of addressing Lord De Grey on his retirement, still no one could doubt the very strong claims which that noble lord possessed to the gratitude and respect of the entire Volunteer force of this kingdom, not alone for his personal urbanity and attention to the arduous duties he had had to perform in his capacity of Under Secretary of State for War, but for having originated and conducted the machinery of this great national movement with such ability that his successor would have little left but to follow in the footsteps of the noble lord who had preceded him in office. With these sentiments on the subject, the moment he had heard of this movement to present Lord De Grey with some address upon his retirement, he had most heartily joined in carrying it out. He could bear testimony on his own part to the exceedingly great value to be attached to the services of Lord De Grey to the Volunteer movement. No one could regret more on personal grounds than he did the retirement of Lord De Grey. Major Wilkinson (senior hon. secretary) then read the proposed address, and made a short statement as to the proceedings in the matter up to the present time. Several other commanding officers expressed similar sentiments to Lord Elcho, and, after some discussion, the address was unanimously adopted, and a deputation appointed to wait upon Lord De Grey and Ripon, and present it to his Lordship.—It is announced that the annual competitive trial of small-bore rifles will, by permission of the Commander-in-Chief, take place at Hythe on Tuesday, the 12th of February.—A company has been formed, under the auspices of influential noblemen and gentlemen, under the chairmanship of the Duke of Manchester, for the purpose of establishing a permanent camp where volunteers may learn every duty connected with military regulation. The price of the shares has been fixed at 2*l*. each, and many of them have already been taken. It is contemplated to erect 2000 huts within 13 miles of London by railway, each fitted and furnished for one volunteer, who will pay a small sum per week as rent.—The first annual dinner of the 7th Surrey (Lambeth and Southwark) Rifles took place on Saturday evening at the Freemasons' Tavern, Major Beresford in the chair, when a silver bugle was presented to the corps by the ladies of St. Mary, Newington, and a testimonial in the shape of a gold watch and purse of 20 guineas was presented to Colour-Sergeant-Major Wallis, of the Coldstream Guards, subscribed for by the officers and men of the corps.—On Saturday evening two silver bugles, the gift of the ladies of Islington, were presented to the 4th Middlesex, at Myddelton Hall.—A silver bugle has been presented to the 1st Surrey (Clapham and Wandsworth), the gift of the Misses Elliotson.—The second annual regimental ball of the Victoria Rifles took place on Tuesday night in St. James's Hall, under the patronage of the Duke of Wellington.—The Volunteer Guards (32d Middlesex) have held a general meeting in Hungerford Hall, to consider the expediency of addressing the lord lieutenant for the reduction of the present standard height of members, with a view to form additional companies, when it was resolved that the distinctive character of the Volunteer Guards as the Six Feet Corps continue unchanged.—A mounted Rifle Corps has lately been formed in Essex, with head-quarters at Latchingdon, and its services have been accepted by the name of the 1st Essex Mounted Corps.—The services of the Liverpool Press Guard, which now numbers 400 members of the newspaper, typographical, and kindred trades, have been accepted, and the corps is to be numbered the 80th Lancashire.—The two Cambridge companies having attained their maximum strength, steps have been taken for the formation of a third company.—A silver bugle was presented to the 2d Derbyshire at Sudbury, on Monday, by Lady Vernon. At a banquet which took place subsequently a handsome dress sword was presented to Lord Vernon by the two companies of Sudbury Rifles.—A grand Volunteer ball took place in the Assembly Rooms and Music Hall, Edinburgh, on the 17th inst. and was attended by about 500 ladies and gentlemen.—A meeting of the provisional committee of the Lancashire County Association, recently formed at Preston, was held on Tuesday at the Town Hall, Liverpool, Lord Stanley, M.P., in the chair, when it was resolved to appoint local committees to act in the principal towns of the county.—A public meeting was held on Tuesday at the Shire Hall, Gloucester, for the purpose of establishing a county Rifle Association for Gloucestershire, including the cities of Gloucester and Bristol. The Earl of Ducie, Lord-Lieutenant of the county, presided, and was supported by the Earl of Ellenborough; the Right Hon. Sotheron Estcourt, M.P.; Colonel Kingscote, M.P.; Sir George Jenkinson; Admiral the Right Hon. Sir Maurice Berkeley; Mr. Gore Langton, M.P.; Colonel Berkeley, M.P.; Mr. Holford, M.P.; Mr. Holland, M.P.; Sir M. C. Boevey, Sir J. F. Davis, the Mayors of Bristol and Gloucester, Major Noel, Captain Bush, Captain Guise, and a large gathering of the local gentry. The meeting was addressed by several noblemen and gentlemen, and resolutions were unanimously adopted for the formation of the association and pledging the meeting to carry its object into effect. A code of rules was also adopted, the main feature of which was an annual rifle contest for the members of the corps, and special prizes for all comers, the range to be 1200 yards with 1200 yards more beyond the butts.

Foreign.

France.—At the meeting of the Senate on Tuesday, a Senatus Consultum was presented, providing that official accounts of the sittings of the Senate and the Corps Legislatif shall be placed at the disposal of each journal every evening. A Commission was appointed by the Senate to examine this project. A number of senators and deputies have arrived in Paris from the departments, and it appears from their conversation that their constituents are all anxious that peace may be maintained. The French population in the departments are unanimous in their expression that the Emperor has done quite enough for Italy, and that France can find better employment for her blood and treasure. The deputies who have spoken on the question of the unity of Italy are of opinion that if it be accomplished it will be by the effect of time, and not by brute force. The *Moniteur* again denies that the Government is in any way responsible for the political pamphlets which make their appearance daily, and especially for the plans enunciated in recent *brochures*, for declaring the Gallican Church independent of the Pope. It says:—

"The Government is invested with no power to prevent the publication of books and pamphlets. It would therefore be unjust to render it responsible for senseless theories, which the good sense of the public stigmatises as being contrary to the Catholic feelings of the country, and to the respect due to the Holy Father, in regard to which the policy of the Emperor has always set an example."

M. Thouvenel has addressed two new circulars to the diplomatic agents of France in foreign countries; one relating to the affair of Gaeta, and the other to Syria, which are reported to contain most pacific declarations. The Prussian General Willisen was received on Wednesday by the Emperor, to whom he presented a letter from the King of Prussia announcing the death of his brother and his own accession to the Throne. The Minister of War has issued an order to arm the whole of the French army with six-barrelled revolvers. The organisation of a fourth battalion in each of the 103 regiments of the line is now completed, and it is reported that the army is to be increased by 17 additional regiments of infantry. For several weeks past extensive purchases of horses have been made by French agents in Eastern Prussia and Lithuania. All the troops of the new levy are undergoing a careful drill throughout the centre and south of France, and the generals commanding divisions have received orders that the instruction of the troops must be completed by the 1st of March. This measure is applied to the entire army, infantry, cavalry, artillery, and engineers. Immense activity also prevails in the French arsenals and military ports. At Toulon particularly shipbuilding is going on as rapidly as if the Government was going to send three or four fleets to sea, together with 20 steel-plated frigates; and, in order to provide officers for this increase in the navy, one additional admiral, four vice-admirals, 16 rear-admirals, 30 captains of line-of-battle ... captains of frigates, are about to be ap... periments are making in Paris with ... cannon, the effect of which it is said ... greater than anything yet accomplished ... strong or Whitworth guns. It will also ... a cannon or a mortar. In the first case the breech of the gun by means of a ... may be attached or removed with the ... The *Moniteur* contains a note respecting ... trial regarding the heirs of Prince J... the public to suspend its judgment, as ... documents put forth in M. Berryer's ... impugned, while the records of ... the marriage with Miss Paterson are ... peachable. It also publishes a decree ... 40f. to 10f. per 100 kilogrammes the ... merchandise imported into France is ... to the net weight. Monsignor ... Nuncio, is daily expected in Paris ... said that his stay in Paris will dep... the mission with which he is intrusted ... Rome. If unsuccessful he will return ... delay. Count de Persigny has refused ... application to be allowed to establish a ... in Paris. The Emperor, who has been ... engaged in writing a history of Julius C... orders for the construction of a trireme ... model of the old vessels of the Roman ... be built near Asnières, under the supe... M. Mongin, the engineer, and from draw... Historiographer of the Marine, and Con... Archives in that department. Two Chi... have arrived at the Tuileries. They were ... de Montauban to the Emperor after the ... Emperor of China's Summer Palace, wh... found. They were used for burning per... a very curious specimen of Chinese ... Emperor expressed his admiration of the ... ordered that they should be placed ... d'Apollon.—On Friday night the Count ... de Morny invited the Emperor and Emp... party to an illuminated *fête* on the ice ... Longchamps, in the Bois de Boulogne. ... carriages had arrived there long before ... their Majesties. The trees surrounding ... hung with red, blue, green, white, and ye... a number of persons were stationed on ... lanterns and torches. The Emperor sk... time on the ice and drove the Empress ... sledge, fitted up with violet velvet. N... sledges followed that of her Majesty, ... number of skaters were on the ice pushing ... sledge-chairs, in which were ladies in the ... toilets. The scene was most animated, ... passed off without any accident.

Spain and Morocco.—The Presi... has congratulated the Queen on the tran... perous condition of the Spanish nation ... the agitation prevailing in Europe. The M... clared in the Cortes that the statement ... of a Spanish vessel had given advice to the ... to placing their guns in a better direc... any foundation. The Spanish navy has ... to act in conformity with the policy of the ... which is to remain neutral.—The Court ... gone into "family mourning" for three m... Count and Countess de Montemolin.— ... journals state that General Cabrera and ... the Carlist party intend to return to ... according to the Carlist journals, they ... Austria to confer with the wife of Don J... of Modena), who has been for some tim... that country with her children.

Switzerland.—Accounts from Berne ... example of France in abolishing the pass... about to be followed in Switzerland. A ... been addressed to the several cantons up...

Saxony.—The Second Chamber ... refused, by a majority of 57 to 12, to ... sideration the proposition for re-establis... toral law of 1849.

Hanover.—The last difficulties in re... redemption of the Stade Dues have be... Hanover has been placed among the Sta... in the re-partition of the indemnity ... according to their naval importance. ... some formalities in Hanover and the ... communications from the Belgian Gover... only necessary for the settlement of the ...

Denmark.—A Royal decree has ... calling out 6700 sailors from the king... mark and the duchy of Schleswig. Th... Sjoelland has been recalled from the We... the Minister of Marine has ordered the ... a steam squadron of 22 vessels, including ... mortar-boats. A committee has been app... purchase of gunboats, and a reserve force ... is ordered to assemble on the 1st of ... Minister of Marine has announced that a ... ber of captains of merchant vessels can b... the naval service if they are prepared to ... of instruction in the Government ... which will be opened at the beginning of ... large popular meeting has been held at ... addresses were voted to the King for the ... sion of Holstein and Lauenburg from th... An address, signed by all the memb...

[illegible] Volksthings, is lying for further signa[illegible] public places. This address contains a [illegible] Majesty to resist every attempt from [illegible] re with the internal affairs of Denmark, [illegible] his Majesty not to abandon the Danish [illegible] the duchy of Schleswig. The address [illegible] the request that liberties may be granted [illegible] in conformity with the Danish consti[illegible] is reported that England, France, and [illegible] the point of coming to an understanding [illegible] about a solution of the Danish question [illegible] means. The German papers publish two [illegible] Lord John Russell to her Majesty's [illegible] Copenhagen and Berlin, on the relations [illegible] to Schleswig. In the former despatch [illegible]:—

"[illegible] Government do not entertain a doubt that [illegible] is bound in honour to fulfil the stipula[illegible] into with Prussia and Austria, not to [illegible] with Denmark, but to uphold inviolate [illegible] Constitution of Schleswig, as well as to [illegible] and the Danish nationalities in the duchy [illegible] It is no less his interest than his duty to fulfil [illegible] subjects should be led to perceive that [illegible] they possess equality of rights with their [illegible] citizens. They would then soon exhibit a feeling [illegible] archy, and a sincere desire to [illegible] and the concessions made to them would [illegible] of releasing the King in their eyes from the [illegible] the suspicion even, of having brought an intel[illegible] industrious part of his subjects to a hateful and [illegible]."

[illegible] despatch to Berlin Lord John Russell says:—

"[illegible] entered into by the King of Denmark, [illegible] matter give, in the opinion of her Majesty's [illegible] right to Austria and Prussia, or to the German [illegible] to mix themselves up in every single question [illegible] within the Duchy of Schleswig. Were [illegible] incorporated with Denmark—were Schleswig [illegible] her separate constitution—then could Germany [illegible] interference. If, on the other hand, the regu[illegible] individual church and of each individual school [illegible] were to become the motive for the German [illegible] to interfere, the royal authority of the King of [illegible] exist only in name."

[illegible]initz, the Prussian Minister for Foreign [illegible] addressed a despatch to the British Go[illegible] in reply to that of Lord John Russell, [illegible] that the question of Schleswig is not now [illegible] consideration, but simply that of Holstein and [illegible] which belong to the German Confederation. [illegible]initz has also addressed a note to the Ger[illegible] to declare that Prussia is not disposed to [illegible] executor of the Federal decrees to the exclusion [illegible] German Governments.

PRUSSIA.—On the day after the King transferred his [illegible] from Potsdam to Berlin he gave audience to [illegible] on service at Berlin. In his address his [illegible] the following remarks on the proba[illegible], which have caused some sensation in [illegible]:—

"[illegible] is the first time that I find myself in your midst as [illegible] Chief. The impenetrable decree of the Almighty [illegible] me to the throne, which hitherto it had been [illegible] to defend. This event has taken place at a [illegible] with dangers and with the prospect of [illegible] which, gentlemen, I shall perhaps stand in need [illegible] If my efforts and those of the Princes who [illegible] to maintain peace, do not avert the storm [illegible] around us, we shall have to collect all our [illegible] resist it and overcome it. I am happy to see at [illegible] such excellent health, Field Marshal General [illegible] As regards you, my dear Minister of War, Roon, [illegible] you on a bed of roses, and you will have to [illegible] to make the army what it ought to be for [illegible]. Let us not deceive ourselves! If I do not [illegible] the struggle, it will be a struggle in which [illegible], if we do not wish to be annihilated."

[illegible]tion of standards took place at Berlin on [illegible]. 142 standards were distributed among [illegible] regiments. The King was enthusiastically [illegible] The House of Nobles has agreed to its [illegible] reply to the Speech from the Throne. The [illegible] not make any allusion to the Holstein ques[illegible] regards the apprehension of a general war, [illegible] hope that peace will not be disturbed; [illegible] be otherwise decreed, Prussia, it says, will [illegible] man "for the homes, rights, and honour of Prussia."

AUSTRIA.—The *Official Gazette* contains an Imperial [illegible] ing the issue of a new 5 per cent. loan of [illegible] florins, at 88. The object of the loan being [illegible] anticipate the payment of the taxes, the [illegible] Finance is to issue the securities in such a [illegible] a fifth of their amount may be redeemed [illegible] the tax-collectors are ordered to accept [illegible] in payment of the taxes for the current [illegible] said that 120 rifled guns are making for [illegible] Austrian Government, one half to be delivered in [illegible] of this month, and the remainder by the 1st of March.—The sudden death of the Count and Countess [illegible]in is explained by the fact that they [illegible] brother Don Ferdinand during his [illegible] Vienna, and caught from him the scarlet [illegible] he died, and which in a few days proved [illegible] also. The lady of honour of the [illegible] Montemolin died on the same day as the [illegible]. The Court at Vienna has gone into mourning [illegible] 12 days on the occasion.—The Grand Cross of the [illegible] St. Leopold has been conferred on Prince [illegible] Metternich and Count Apponyi the Austrian [illegible] in London.

HUNGARY.—The official *Gazette* of Pesth of the 22d publishes the Imperial ordinances for the convocation of the Hungarian Diet, which will assemble on the 2d of April at Buda. As regards the elections of the [illegible]rs of the Diet, the 5th Article of the Electoral Law of 1848 remains in force, with some unimportant modifications. The following resolutions of the Emperor have been despatched to the Stadtholder of Buda by the Chancellor of Hungary:—

"The election to the Committee of the Comitat of those persons who are refugees from the country for political reasons is null and void. Severe punishments are to be inflicted on all persons who refuse to pay the taxes. The Comitats are prohibited from making any ordinances in reference to taxes. A vote of the Diet alone can bring about a change in the tribunals now existing, or in the present civil and penal codes. The practical establishment of the institutions granted by the Constitution of 1848 is prohibited, and the public functionaries are ordered to oppose it by the most severe measures. In case of refusal the Committees of the Comitat are to be either suspended or dissolved. The assemblies of the Comitat have no executive power, and are consequently not to be allowed to issue ordinances. The Imperial diploma of October 20 will, however, undergo no modification, and the concessions granted to Hungary will remain unabridged."

The General Assembly of the Comitat of Gran has voted a reply to these Imperial resolutions, of which the following is a summary:—

"The permanent conflicts with the Government have rendered Hungary distrustful. The Imperial Diploma of the 20th of October is in contradiction with the Pragmatic Sanction, which is binding on the King as well as on the nation. The oath taken by Charles III. is binding on his successors. Taxes not sanctioned by the Hungarian Diet are illegal. The Comitat demands guarantees for the rights of the Diet to sanction or to reject taxes, and wishes that the King (Emperor of Austria) should reside in Hungary."

The Comitat of Honth has resolved upon sending the following in reply to the Imperial Manifesto:—

"The Comitat has not transgressed, and will not transgress, the limit of lawful rights. It will, however, preserve all its ancient rights, and will maintain the laws of 1848 until the Diet shall have resolved upon a change in the same. The Comitat is of opinion that without the existence of an independent Hungarian Ministry, which was guaranteed by the laws of 1848, Hungary cannot be considered to be lawfully governed. The Comitat will gladly submit to the decision of such a Ministry."

At the sitting of the Committee of the Comitat of Pesth on the 21st, it was unanimously resolved to adjourn the discussion of the Imperial resolutions to the General Assembly of the Comitat on the 11th of February. At the General Assembly of the representatives of Pesth held on the 17th inst., M. Deak opposed the immediate assumption of the judicial power by the Hungarians. He said, "At this moment we have only to choose between Austrian laws and anarchy." The Conference for judicial organization, which had been convoked by the Judex Curiæ, was opened on the 23d, when M. Deak proposed the reestablishment of the Hungarian laws as far as can be done without interfering in questions of civil law with individual rights. The Court Chancellor, Baron Vay, has informed the Prince Primate of Gran that the recalling of the refugees is prevented at present by the question arising from the sequestration of their property. The Emperor has stated that after the settlement of that question, which has been ordered to take place at as early a period as possible, a general amnesty shall be proclaimed.

BOHEMIA.—The municipality of Prague assembled on the 22d in order to discuss and sign a petition requesting the responsibility of Ministers and the early convocation of the Imperial Diet.

ITALY.—Accounts from Gaeta state that on the morning of the 19th the Piedmontese General Menabrea put an end to the armistice, and offered conditions for the surrender of the fortress. The King refused to accept them, and it is said that the Papal Nuncio and the Ministers of Austria, Spain, Saxony, Bavaria, and Portugal, who repaired to Gaeta on the 16th, on the occasion of his Majesty's birthday, were parties to this refusal. These diplomatists remained in the fortress till the expiration of the armistice. The Russian and Prussian Ministers had previously returned to Rome. All the foreign vessels, even the merchant vessels chartered on account of the King of Naples, left Gaeta on Saturday evening. Admiral Persano declared the blockade on Monday, and allowed the inhabitants a few hours' time to leave the city. The French Admiral, Barbier de Tinan, left Gaeta on Saturday, after preventing the departure of a steamer laden with cannon and soldiers, destined to aid the reactionary movement in Calabria. On Tuesday morning at 8 o'clock the batteries of Gaeta unexpectedly commenced a very heavy fire upon the Sardinians. The batteries promptly replied, and compelled the place to slacken fire. The fire of the Sardinians was vigorously continued on Wednesday, and was slowly replied to by the batteries. On Thursday morning a powder magazine exploded in the Sardinian camp, killing 20 persons. The fleet, consisting of 14 ships, placed itself in line of battle at 12 o'clock on Tuesday; but it does not appear that it has yet taken part in the bombardment. The reactionary movement in the Abruzzi is directed by the Dowager Queen and Count Trapani. Several members of the San Fedisti party have left Rome for the Abruzzi with several Royalist officers and Roman peasants, with arms and ammunition. A large body of Bourbon troops which had entered the province through the Roman territory, under the command of General Lovera, last week attacked and defeated the Italian troops at Tagliacozzo, and compelled the latter, yielding to superior force, to retire on Avezzano. Reinforcements were immediately despatched to their relief under General Sonnaz, who has gained a complete victory over the reactionary bands, having driven them out of Tagliacozzo, and compelled them to recross the Papal frontier. The reactionary movement in the district surrounding Ascoli has also been suppressed by the Sardinians. Several prisoners were shot. A column of 2000 Sardinians has been disembarked at Civita Nova, and is marching on the province of Teramo. Troops have also been despatched from Naples to the Abruzzi and Calabria, where they were cheered by the inhabitants. Despatches from Naples state that numerous arrests have taken place in that city, and that many Royalist officers have been dismissed. The *Official Gazette* publishes a Royal decree confirming Prince Carignan's nominations of the new Council of Lieutenancy for Naples, which is composed as follows:—Liberio Romano, Interior and Agriculture; D'Aossa, Justice; Spaventa, Police; Laterza, Finances; Imbrani, Public Instruction; Mancini, Ecclesiastical Affairs; Oberti, Public Works. A Finance Committee has been instituted, under the presidency of Signor Manna. On Thursday Prince Carignan reviewed the National Guard, by whom he was received with enthusiasm. Prince Carignan was about to proceed to Mola di Gaeta. The confidence in the Government is increasing. The Royal princes arrived at Florence on Thursday, where fêtes are taking place in their honour.—The *Opinione*, the official organ of the Sardinian Government, contains an article unequivocally announcing to Italy and to Europe the resolution of the Government not to engage in hostilities with Austria for the sake of Venice, and its determination to resist the attempts of Garibaldi and his partisans to renew the war in spring. In another article it shows that all combinations for the formation of a united Italy will be in favour of France, to whom Italy is naturally allied, and expresses a hope that the French Chambers will coincide with the policy of the Emperor. "The deliverance of Rome will then," it says, "become more easy, and the tranquillity of Europe be better assured." General Turr has recently visited Garibaldi at Caprera for the purpose of presenting to him, in the name of the volunteers who disembarked with him at Marsala, a star in gold set in diamonds, named "The Star of the Thousand," in reference to the number of his earliest companions in arms, and also of presenting a New Year's Gift to his daughter from the King of Sardinia. Garibaldi, in acknowledging the gift, said—"That he yet reckons on his thousand when he shall carry the help of their arms to the beautiful country of General Turr, according to the oath he took on the tomb of the brave Hungarians who fell for Italy." At the same time he charged General Turr to convey to the King a message of unchanged loyalty and conciliation, with a promise that he will charge General Bixio with a special mission to curb the excessive zeal of his partisans, and that he himself will act in political unison with Count Cavour and the Sardinian Ministry so long as they continue faithful to their duty of arming the nation. He has since addressed a letter to the "Vigilance Committee" urging them to be diligent in procuring all the necessary means for facilitating to Victor Emmanuel the enfranchisement of the rest of Italy," and pressing upon electors to return those who will "impose on Government the arming of the nation."

TURKEY.—The new commercial treaties are advancing to a conclusion on the expected basis of uniform duties of 8 per cent. on imports and exports.

THE PRINCIPALITIES.—The Austrian Government has addressed a second protest to Prince Couza, on the continued negligence of the Rouman authorities in allowing cargoes of arms to ascend the Danube. It has now given notice of the presence in the Mediterranean of five other vessels laden with armaments, including an English vessel and a Greek one.

MONTENEGRO.—It now appears that no attack on the town of Sputz has really taken place. An attack was intended, and was only prevented by the representations made to the Montenegrins by the Austrian, French, and Russian Consuls. The Prince of Montenegro withdraws his troops from the Turkish frontiers, expecting the satisfaction promised to him by the Porte.

INDIA.—The Bombay and Calcutta mails have arrived with news from the former Presidency to the 27th, and from the latter to the 30th December. The following are the details:—

Calcutta.—Great indignation has been expressed in the Legislative Council at the grant of 520,000*l.* awarded by Sir Charles Wood to the descendants of Tippoo Saib, of Mysore. On the 15th Dec. Sir Barnes Peacock, the Chief Justice, moved a series of resolutions calling for copies of all papers on the subject, and declared that the Mysore princes had no claim whatever, "legal, equitable, or moral," to the gift. Sir C. Jackson also condemned the grant in similar language. After a most animated debate, in which every member took part, the Council divided, when there appeared four votes in favour of the motion and four against it. The casting vote lay with the Chief Justice, who decided in favour of the resolutions. The motion was therefore carried. Public demonstrations were also in progress against it. A monster meeting was held on the 21st, to protest against it, and was attended by every man of note or mark in Calcutta, the official community alone excepted.

Bombay.—The collection of the income tax is proceeding quietly, but has hardly commenced. The import trade has been resumed after six weeks' suspension.

Madras.—Sir Hope Grant, on his return from China, will succeed Sir Patrick Grant as Commander-in-Chief at Madras.

Sikkim.—400 Europeans of her Majesty's 6th have been detached from Barrackpore for Rajmahal by rail, whence they expect to reach Darjeeling by a three days' march; 290 Sikh and Goorkas of the police, and two companies of the 73d from Julpigoree, have also been sent to Darjeeling to reinforce the troops at that place.

Patna.—The Governor-General held a grand durbah at Patna on the 28th November, at which all the native gentry were introduced in order of their precedence. In presenting the khilluts to Rajah Bhoop Sing Bahadoor, the Viceroy observed that the prayer of his memorial had received his attention

and he had complied with it so far as to direct that the title, which had for so many years been recognised in the Rajah's family, should be continued to his son, and that two-thirds of the pension now enjoyed by the Rajah should be assigned to his children. His lordship complimented several of the Maharajahs on the management of their estates; and especially complimented Rajah Jye Mungal Sing Bahadoor on the zeal he had manifested in the service of the Government, and expressed his acknowledgments for the spontaneous assistance he had rendered to the commissioner of the district in carrying out the income tax assessment.

Ceylon.—The ship Herculean was totally lost on the 29th of November at Paul's Head. The crew were saved.

CHINA.—Despatches from Tien-tsin of Nov. 30 and from Shanghai of Dec 7 state that the first instalment of the indemnity has been paid. Great part of the expeditionary forces arrived safely at Hong Kong on December 15. The 31st, the 67th, the Rifles, the Military Train, and two batteries remain at Tien-tsin. All is quiet at Pekin. The weather is intensely cold, and the Peiho is completely frozen over. The troops are very healthy. Lord Elgin and Sir Hope Grant have left for Japan. Sir Robert Napier has left Hong Kong for Calcutta. Baron Gros and Mr. Ward have been at Canton. The site of Yeh's yamun has been selected by the French for a Roman Catholic cathedral, under permission. A steamer has been up the inland waters near Canton with perfect safety. The Yang-tse is infested with pirates. The rebels are still in force, and gain strength. It is reported that some member of the Imperial family of the Celestial Empire is to be sent on a special mission to London and Paris.

CAPE OF GOOD HOPE.—Accounts from Cape Town to the 22d December state that Governor Grey was on his way to the frontier to adjust matters in British Caffraria. The political question which excited the greatest attention was the scheme of separation with separate colony urged by many Eastern districts. The vine disease had again appeared, and great loss was anticipated in consequence. The Pioneer, one of the vessels belonging to Dr. Livingston's expedition, was in Simon's Bay, and was to leave shortly.

AUSTRALIA.—Considerable sensation has been caused in the Australian colonies by the extraordinary revelations recently made of the treatment of the passengers on board the Peninsular and Oriental steamers, in the hot latitudes. The recent death of Mr. Dunn, M.P., on board the Nemesis, and of several other gentlemen well known in Australia, has led to a memorial to the Lords of the Admiralty on the subject, signed by Colonel Hodson and 50 other passengers, and a protest has been signed by 11 medical officers of her Majesty's service against the admission of troops into vessels inadequate to the decent accommodation of the regular passengers. Besides the deaths on board the Nemesis it appears that three deaths, caused by the heat, occurred on board the Colombo, in the Red Sea; two of which were those of General Macrohon, Captain General of Manilla, and Mr. McLaren, Managing Agent and Engineer of the Labuan Coal Company.—Sir W. Denison's promotion to the Bombay Presidency has called forth a very general expression of good will towards him in New South Wales, and the report that Sir Henry Young, the Governor of Tasmania had been appointed his successor, though afterwards found to be erroneous, has also served as the occasion for a very gratifying expression of sentiment respecting the eminent services of Sir H. Young to the Colony.

WEST INDIES.—The differences between the Governor and the Legislature continued, with little chance of an amicable settlement. The Legislature had been in Session seven weeks, and had adjourned without having done more than adopt by large majorities a series of resolutions condemnatory of the principle sought to be established by the Governor. Intelligence from Nassau, Bahamas, state that one of the smaller and remoter islands of that colony was in December last visited by the captain and crew of a slaver, who had been wrecked on a neighbouring reef, and who, after forcing the keepers of the English lighthouse to assist them in disembarking 500 African slaves, obtained possession of a colonial schooner, in which they sailed to the opposite coast of Cuba, where they procured a large vessel, which returned with them and carried off the living cargo before the force which the Governor, on hearing the intelligence, had despatched to their rescue, could arrive. 400 slaves were wrecked off another of these islands in August last; and on a third, an exploring party, sent by the Governor in May last, discovered a barracoon, in which there was every appearance of slaves having been recently kept, while waiting for an opportunity of deportation to Cuba.

UNITED STATES.—The latest news states that the country is on the verge of civil war, and secession is extending beyond any hope of adjustment. Mr. Buchanan has been gradually deserted by all his Ministers: General Cass, Mr. Cobb, Mr. Floyd, and, now by Mr. Thompson, who has resigned on the ground that troops had been sent to Charleston contrary to distinct understanding that none were to be ordered South without the decision of the Cabinet. The example of South Carolina has been followed by the States of Florida, Virginia, Georgia, Louisiana, Mississippi, and Alabama, which are holding conventions and caucus meetings in favour of immediate secession. It is announced from Georgia that the governor of that state has seized, and garrisoned with militia, the forts in the harbour of Savannah, and a caucus of senators from Florida, Georgia, Alabama, Mississippi, and Louisiana have passed resolutions for taking possession of all the fortifications on the southern coast. The Alabama State troops on the 4th inst. seized the United States' arsenal at Mobile, in which were stored 1500 barrels of powder, 300,000 rounds of musket cartridges, and other munitions of war, but only six stand of arms. The Federal troops had abandoned all the forts at Pensacola except Fort Pickens, of which 300 men from Mobile had gone to take possession. Several forts and the Bâton Rouge Arsenal had been taken in Louisiana by the Secessionists. The Government were taking measures for the defence of Washington as the Federal capital, Harper's Ferry, Fort Washington on the Potomac, Pensacola, Key West, and Hampton Roads. A despatch from Charleston states that Fort Sumter had not yet been besieged, and that the Star of the West, with the reinforcements sent by the President for Major Anderson, had been fired into at Charleston, and compelled to retire without landing the troops. The sloop of war Brooklyn has sailed for Charleston with the Harriet Lane, with orders to accompany the Star of the West in the next attempt to enter Charleston harbour. The authorities of Charleston have removed the lights and buoys in the harbour, and have made extensive preparations for resisting the entrance of the Brooklyn. Major Anderson has sent to Washington for instructions, but it was fully expected that if the Secessionists fire on the frigate he will then open from Fort Sumter on the city fortifications, in which case the fight will soon become general. The conduct of Major Anderson in upholding the interests of the Federal flag at Charleston was highly approved. Salutes in his honour had been fired in various northern cities, and at Philadelphia an influential meeting had passed resolutions heartily approving of his conduct. Advices from Washington state that the President had sent a special Message to the Senate, throwing the responsibility on Congress, and suggesting the restoration of the Missouri Compromise. He has also written a long letter to the South Carolina Commissioners explaining the course of the negotiations, and attempting to justify his policy of non-interference by disavowing the act of Major Anderson. The President's Message was referred to a Special Committee of 5 by a majority of 133 to 62, with authority to inquire whether any arms had been removed from the State arsenals to Pittsburg, and if so, by whose authority and for what reasons. New York had offered the whole State force to the general Government. Mr. Seward has accepted the post of Premier under Mr. Lincoln, whose Cabinet will it is said be composed as follows:—State—William H. Seward, of New York; Treasury—Salmon P. Chase, of Ohio; Attorney-General—Edward Bates, of Missouri; War—Simon Cameron, of Pennsylvania; Navy—Robert E. Scott, of Virginia; Interior—William A. Graham, of North Carolina; Post-master-General — Gideon Welles, of Connecticut. The National Fast Day appointed by the President was observed on the 4th in the city of New York by an almost universal cessation of business. The city churches were numerously attended, and sermons appropriate to the occasion were preached in all the churches and chapels. In the Senate on the 3d, Mr. Crittenden offered his plan for the adjustment of the pending troubles, but on the 11th, after several adjournments, it was again laid over for future consideration. A large number of memorials from various parts of the country in support of Mr. Crittenden's proposition were presented. Mr. Baker, of Oregon, resumed and concluded his speech on the crisis, and was followed by Mr. Douglas, who spoke at great length in favour of peace. In the House a bill was reported by the Judiciary Committee providing for the collection of the revenue from on shipboard, or at any point deemed advisable, when such collections cannot be made at the usual places. The subject was to be resumed on the 8th inst. The democratic members of the legislature held a caucus on the 3rd, and unanimously agreed to support the resolutions introduced into the House by Mr. Robinson in favour of dividing all the territory of the United States into two States, and admitting them into the Union, thus taking for ever the territorial question as regards slavery out of Congress.

MEXICO. — Advices from Mexico, received through New Orleans, but not yet confirmed from other quarters, state that Miramon was entirely defeated on the 22d December, and after returning to the capital fled on the 24th. The Liberals took possession of the capital on Christmas Day. Puebla had capitulated. Juarez had been sent for, and was to leave on the 3d January for the capital. The city was tranquil and the war was supposed to be at an end.

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at $91\frac{3}{8}$ for Money, and $91\frac{1}{2}$ to $\frac{3}{8}$ for the 7th February; Bank Stock, $231\frac{1}{2}$ to 231; Three per Cents. Reduced, $91\frac{3}{8}$ to $\frac{1}{4}$; New Three per Cents., $91\frac{1}{2}$ to $\frac{1}{4}$; Thirty Years' Annuities, expiring in April, 1885, $16\frac{1}{4}$; India Five per Cent. Stock, for Acct., $100\frac{3}{8}$ to 100; Ditto Bonds, 15*s*. dis.; Five per Cent. Enfaced Rupee Paper, $93\frac{1}{2}$; Ditto Five and a Half per Cent., 100 to $99\frac{1}{2}$; Exchequer Bills, 2*s*. to 6*s*. dis.—FOREIGN: Mexican Three per Cents., for Acct., $22\frac{1}{8}$ to $\frac{1}{4}$; Portuguese Three per Cents., 1853, for Acct., 45...; Deferred Three per Cents., $40\frac{1}{4}$; Ditto ...; Turkish Six per Cents., 1854, for Acct. ...; 1858, for Acct., $55\frac{3}{8}$ to $\frac{3}{4}$; Ditto 100*l*. ...; Guarrnteed Four per Cents., $101\frac{7}{8}$.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,263,430	Government De... Other Securities Gold Coin and B... Silver Bullion
	£25,263,430	

BANKING DEPARTMENT.

Proprietors Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)
Rest	3,360,261	Other Securities
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	2,948,437	Notes ..
Other Deposits..	15,130,293	Gold and Silver Coin
Seven day and other bills	652,949	
	£34,644,940	

24th day of Jan., 1861 M. MARSHALL

Gazette of the Week.

TUESDAY — BANKRUPTS — W. ELLIOTT, B... FLOOD, Gomersal, Woollen Manufacturer—R. LAI... Scorton, Yorkshire, Farmer—T. P. PONTON, Wrether... CLIFFE, Saddleworth, Butcher—D. R. RICHARDS, B..., Shoe Manufacturer — J. RISLEY, Lombard Street, ... ROBERTSON, Liverpool, Baker—J. ROGERS, Merthyr... T. G. TOMKINS, Strand, Bookseller—C. WATSON, Great ...

SCOTCH SEQUESTRATIONS — R. BRANDER, L... Merchant—JOHN CAMPBELL, Edinburgh—JAMES CA... J. DUNCAN, Dumfries, Watchmaker—W. L. M'PHUN, G...

FRIDAY—BANKRUPTS — D. W. BUTCHART, W... Leather Seller—W. CHAMNEY, Portsmouth, Grocer—... BIGGS, Wolverhampton, Tin Plate Workers—S. DODD ... Woburn, Booksellers—W. ELLIOTT, Beaminster Gro... Portsmouth, Corn Merchant—J. GRIFFITHS and T... Worcestershire, Licensed Victuallers—J. HARLAND ... Cloth Merchants—J. HARP, Hanley, Staffordshire, ... Chesterton, Cambridgeshire, Miller—W. MONDAY, ... Coal Merchant—D. PHILIPP and M. VINESBERG, ... Basinghall Street, Importers of Foreign Goods—T. ... ampton, Currier—L. WINDLE and M. CANNING, ... Drapers.

SCOTCH SEQUESTRATIONS—P. BLACK, Co... Merchant—R. DOW, Blairgowrie, Wright—J. M... Merchant—A. JACK, Dalkeith, Spirit Dealer—C. M'G... Perthsire, Auctioneer—Mrs. M. MACLACHAN or M... Inverness-shire, Farmer—P. SMITH, Tomantoul, Banff...

Metropolis and its Vicinity.

PERFORMANCE OF THE MESSIAH AT ST. ...—This performance, which has excited so much ... musical circles, took place yesterday in the pre... the Lord Mayor and Aldermen, and about ... sons, including several members of Parliament, ... large number of the metropolitan clergy. ... formance was got up with much care, ... scale, and was in every respect successful. ... singers were Madame Sherrington, Mr. ... Lockey, Mr. Sims Reeves, Mr. Francis, ... Mr. Winn, and Mr. Thomas. The ... Chorus were 600 strong, and consisted of ... formers of the Sacred Harmonic Society ...

THE SPECIAL SERVICES AT ST. PAUL'S ... resumed to-morrow evening at 7 o'clock ... will be preached by the Bishop of London.

BANQUET TO SIR WILLIAM HAYTER.— ... members of the House of Commons inte... grand banquet to Sir William Hayter, ... under the presidency of Lord Palmerston ... day the 27th February, when a splendid te... sisting of a piece of plate containing 1100 ... will be presented to the right hon. baronet ... pliment will not be confined to the present ... the Lower House, but will comprise those ... Parliament at any time during the peri... William Hayter filled the office of Sec... Treasury.

BRITISH MUSEUM.—The Archbishop of ... the Lord Chancellor, and the Speaker of ... Commons, as acting Trustees of the Brit... have divided the department of Antiqu... the retirement of Mr. Hawkins, into ... which will be placed under the care ... Mr. Newton, and Mr. Vaux respectively. ... men have long been connected with ... Mr. Newton, who was lately appointed ... is now on his way to England to assume ... his new office.

PROPOSED UNION OF CITY BENEFICES.— ... meeting of the Court of Common Coun... Clerk read a communication addressed ... Mayor by the Bishop of London, stating ... his lordship's intention to issue a commission ... provisions of the recent Act of Parliament ... into and report upon the expediency ... union of the benefices of St. Mary-le-B... Pancras, Soper Lane, and Allhallows, H... Allhallows, Bread Street, with St. John the ... and St. Mildred, Bread Street, with St. ... Moses. Also, of a like commission with ... the union of St. Mary Aldermary with St. ... the Apostle; St. Antholin with St. John the ... Apostle; St. Michael Royal with St. Martin Vintry. ... like commission with reference to the ... Mary Somerset with St. Mary Mounthaw ...

Nicholas Coleabbey with St. Nicholas Olave. His lordship added, that as the Act of Parliament required that [illegible] of the commissioners should be lay members of the Church of England, and should be nominated by the Corporation of London, he should be obliged if the Lord Mayor would cause such nomination to be made in reference to each of the proposed unions, and suggested the expediency of the same gentlemen being nominated in each case, inasmuch as all the parishes proposed to be dealt with are in the vicinity of each other, and it would be convenient to have the three commissions issued simultaneously. After some discussion on the expediency of adopting a large and comprehensive scheme for the entire city, instead of applying the new statute to particular parts, it was resolved, on the suggestion of the Lord Mayor, to defer the appointment of the lay members of the commission until a committee which had met to consider the whole subject shall have made its report.

Representation of Chelsea and Kensington.—On Monday evening a public meeting was held in the Chelsea Vestry Hall, for the purpose of promoting the success of a Bill for forming Chelsea and Kensington into a borough, to be represented by two members in the House of Commons. Mr. Churchwarden Diplock presided, and the room was almost filled. Mr. Newton Finch in moving the first resolution said that they had in Chelsea a population of 75,000; between 8000 and 9000 houses, about 5000 persons rated to the relief of the poor, 780 acres of land, and 20 miles of streets. They were assessed to the county rate to the amount of 233,248*l.*, 213,115*l.* to the poor rate, and 267,897*l.* to the property-tax. Seventeen boroughs returned 27 members of Parliament, whose united population did not come up to that of the parish of Chelsea. Ninety-one boroughs, exclusive of the Scotch contributory boroughs, returned 134 members to Parliament; the united contributions of these boroughs to the property-tax not being equal to that of the parish of Chelsea. Instead therefore of asking for two members, they ought to have 27 members if population was to be taken into account, and 134 if the property-tax was to be taken as the basis of representation. He concluded by moving that—"On the eve of another session of Parliament the inhabitants of Chelsea and Kensington desire to reassert the paramount claim they have, considering their population and intelligence, and the large amount they contribute to the exigencies of the State, to a direct representation in the House of Commons." Mr. Archbutt seconded the resolution, which was carried unanimously. Mr. Torrens M'Cullagh moved, "That this meeting sanctions and adopts the Bill prepared by the committee for transferring to this district the seats formerly possessed by the borough of St. Alban's, which have now been vacant for the space of nine years, and requests and empowers the committee to take such steps as they may think advisable in promoting such a Bill at the earliest possible period of the session, to be withdrawn only in the event of Government dealing with the question of the franchise and a redistribution of the seats in a large and comprehensive manner." Mr. Wilkins seconded the resolution, which was unanimously agreed to. Mr. Watkins moved and Mr. Newton seconded a resolution confiding to Lord Enfield the charge of the Bill in Parliament, which, like the other resolutions, was cordially adopted. It was then resolved that a petition, to be signed by the inhabitants of Chelsea and Kensington, should be got up in favour of the Bill.

The Fugitive Slave Case.—In pursuance of the rule obtained in this case last week, a messenger of the Court of Queen's Bench proceeded on Saturday from Liverpool by the Cunard steamer for Canada to bring Anderson to England, unless it shall so happen that he has been liberated by the Court of Common Pleas in Canada before the messenger arrives out.

The Stonework of the Houses of Parliament.—The decay or efflorescence of the stonework of the Houses of Parliament is not, it would appear, confined to the exterior of the building, but is showing itself in the roof and stonework ornamentation of St. Stephen's Hall, arising, it is believed, from the destructive influence of the gas.

The Cawnpore Memorial Church. — At the January meeting of the Society for the Propagation of the Gospel a letter was read from the Bishop of Calcutta, informing the Society that the arrangements which he had been authorised to make with the Indian Government for the transfer of Christ Church, Cawnpore, to the Society for a mission church, had been brought to a satisfactory termination. Christ Church is a spacious building, recently restored, in the immediate vicinity of the terrible massacre of 1857, and it is proposed to erect within it a suitable memorial to the missionaries and catechists who were slaughtered in the mutiny.

Roofing the Royal Exchange.—A meeting of the committee on Gresham Affairs was held a few days since, the Lord Mayor in the chair, to consider the expediency of roofing the Royal Exchange with glass, which has frequently been mooted before, especially during the last year. After some discussion it was resolved that in the opinion of the committee the memorial of the merchants in favour of covering the area of the Exchange should be complied with, provided a suitable design can be adopted, and the assent of the tenants whose rights may be liable to interference can be obtained. The committee had previously advertised for plans, intimating their intention to award premiums to the three best. Thirty-three plans have been sent in, and the duty of selecting the three most desirable, so as to enable the committee to award the prizes and choose one for adoption, has been confided to the Lord Mayor and the Master of the Mercers' Company, with liberty to call to their assistance Mr. Tite, the architect of the Exchange, and Mr. Smith, the architect of the Mercers' Company.

South Kensington Museum. — Her Majesty's Government, through Mr. Robinson, curator of the art department of this Museum, has just purchased for a sum of nearly 6000*l.* the highly interesting collection of mediæval sculpture, marbles, terra-cottas, majolicas, ivories, &c., belonging to Signor Gigli, of Florence. The collection comprises a statue of Cupid, by Michael Angelo; some fine bas reliefs, by Donatello, including a Deposition from the Cross, a rare specimen of that early master's talent; some terra-cottas, by Lorenzo Ghiberti, Benvenuto Cellini, Pollajuolo, and Orcagna; some delicately carved ivories, by Orcagna; Madonnas, and other sacred subjects in marble, by Civitale and Jacopo della Quercia; majolicas, by Luca della Robbia; and 12 magnificent dishes of early Pisan majolica, supposed to have been executed about the year 1400, and representing, in different shades of blue, the 12 months of the year, with figures employed in the rural and agricultural avocations proper to each month.

The Public Health. — The Registrar-General's Weekly Return states that the mortality of London in the week ended on Saturday, January 19th, was very high, having advanced from 1707, the number returned in the previous week, to 1926. The average number in the corresponding weeks of the 10 previous years 1851-60, corrected for increase of population, was 1341. The present return is therefore 585 above the average. During the week the births of 939 boys and 920 girls—in all 1859 children—were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1693.

Provincial.

Bristol.—On Thursday afternoon a middle-aged man, of respectable appearance, fell from the Lion's Head, the loftiest point of the St. Vincent Rocks, which skirt the northern side of the Avon below the Clifton Hotwells, which has been the scene of many similar tragedies. His head was beaten to pieces by dashing in its descent against the different points of the rocks. His clothes were so much torn that it was difficult to decide the probable position in life which he had occupied, and the only thing that in any way pointed to his identity was the name "Pomphrey" found written on the lining of his hat. It is not known whether it was a case of suicide or an accident.

Canterbury.—On Saturday a meeting of influential landowners and hop-growers was held in the Music Hall of this city, Sir Brook Brydges, M.P. in the chair, to take steps for the total abolition of the hop duties. Lord Holmesdale, Mr. Beresford Hope, Mr. Dodson, M.P., Mr. Punnett, Mr. C. Walton, Mr. Neames, Mr. M. Body, and Mr. Nash addressed the meeting, and it was unanimously resolved that the total and immediate repeal of the hop duties is essential to the prosperity of the hop growing districts, and is just both to hop planters and the public; and the meeting pledged itself to afford its energetic support, by subscriptions and otherwise, to the Central Association formed to obtain the repeal of the duties; and to get up petitions for the purpose in the various parishes.

Chatham.—On Monday morning a frightful explosion took place in the laboratory of the Royal Engineer Barracks at Brompton, by which several of the Engineers were severely burnt. It appears that about 30 men were at work filling fuses and hand grenades, under the superintendence of a sergeant, when a man named Smith, a sapper of the Indian Engineers, who had previously been reprimanded for his carelessness, used so much violence in ramming home the powder that his fuse suddenly ignited, causing the magazine to explode with a shock which was felt for nearly a mile and a half. The explosion forced off a great portion of the roof of the building, blew out the side of the shed, and dislodged several large balks of timber from the r holdings. Considering the number of men at work in the place at the time it is surprising that there were not several killed. As it was, about a dozen were more or less injured, seven so seriously that it was necessary to remove them to the hospital. Many had their clothes nearly blown to shreds, one man having the entire front of his clothes blown off, and being otherwise terribly burnt. Two or three were found to be on fire, and were much hurt, one of them so severely that his life is despaired of, and if he should recover, it is feared that he will lose his sight.—A spirit of violent insubordination has been shown by the convicts in this garrison for some time; the ringleaders being the men sentenced to penal servitude for life. Though they are under a strict surveillance, they succeeded in manufacturing a key, with which they attempted an escape, but the attempt was discovered in time by the officers of the establishment. Fifteen of the worst have been removed to Millbank and Pentonville, where they will be subjected to corporal punishment, and reduced to the lowest class.—A young man, named Henry Hunnisett, aged 26, who has been employed in the Chatham post-office for a number of years, has been committed for trial by the magistrates on a charge of stealing a number of letters, all of which contained money and valuable articles. The magistrates refused to accept bail.

Hereford.—A few nights since a murderous attempt was made upon a gamekeeper in the employ of Lady Emily Foley, of Stoke Edith Park, by a navvie employed on the Worcester and Hereford Railway, and known to his companions by the *soubriquet* of "Lank." The gamekeeper was on his rounds when he came upon a man beating a field of turnips on a farm called Freetown, in the occupation of a gentleman named Pitt. He observed that the poacher had a gun and was watching the operations of the dog, and he therefore advanced towards him without attempting to warn him off. The poacher on seeing him called upon him to "stand back" or he would blow his brains out. The keeper was about to close with his antagonist when the latter raised the piece to his shoulder and deliberately shot him. The keeper partially avoided the charge by a dexterous movement of the body, but several of the shots struck him in the face, and one of his eyes is injured and discoloured, though it is thought he will not lose his sight. As soon as the keeper recovered himself he made another attempt to capture the poacher, who had in the meantime reloaded his gun, and swore that he would either shoot him dead or beat his brains out with the stock before he would allow himself to be made a prisoner. The keeper therefore abandoned the attempt and hastened home to have his injuries attended to. The poacher at once decamped, and has not yet been apprehended.

Leeds.—The adjourned inquest relative to the death of Mrs. Elizabeth Longley, the wife of Mr. W. Longley, builder, and a member of the Leeds Town Council, who was killed by the explosion of a kitchen boiler on Christmas Day, was resumed and concluded on Wednesday. The evidence of the scientific witnesses showed that the boiler, which was of cast-iron, had been made solely for kitchen purposes, and was not adapted or ever intended to be used for the purpose of warming the house, to which use Mr. Longley had put it; and that being a cast-iron boiler, it was not safe to be used for such a purpose. The jury returned a verdict of Accidental Death.

Liverpool.—Several American vessels have been registered during the past week under the British flag, in order to enable them to carry salt to South Carolina and return with cotton without fear of capture.

Manchester.—A general meeting of spinners and manufacturers was held in the Town Hall on Tuesday to consider the probable effects of the American crisis on the future supply of cotton, and the proposed formation of a cotton company with limited liability. The Mayor presided and the meeting was addressed by Mr. Cheetham, Mr. J. Pender, Mr. Bazley, M.P., Mr. H. Mason, Mr. T. M. Mackay of Liverpool, Mr. Dadabhai Naoroji, a Parsee merchant, Mr. E. Ashworth, Mr. Platt of Oldham, Lord A. Churchill, M.P., Mr. Turner, M.P., and other gentlemen, who pointed out the inexpediency of any longer depending mainly upon one source of supply for our cotton, and the necessity of taking immediate measures to promote the cultivation of c tton in India, Australia, and other colonies. It was stated that during the past year our supply of cotton from all sources was 5,554,000 bales, of which $84\frac{1}{2}$ per cent. came from America; and the average stock in the hands of the trade had not exceeded, on the average, 15 weeks' consumption for the last eight years. The following resolutions were unanimously adopted:—

"1. That this meeting deeply regrets the present dependence of the cotton trade upon one chief source of supply for its raw material, the production of which is now alarmingly imperilled by the disturbances in the Southern States of the American Union; and recommends that efforts commensurate with the impending danger should be called forth to prevent the calamities thus threatening capital and labour; as, unless cotton adequate to the existing large consumption be provided, loss and distress will result in fearful consequences. 2. That in the opinion of this meeting the emergency demands that prompt, liberal, and ample support should be afforded for the formation of a powerful Joint Stock Limited Liability Company, to promote an increased cultivation of cotton, by offering to purchase it in India, Australia, Africa, or other countries; and that a capital of 1,000,000*l.* sterling, in shares of 10*l.* each, should be raised for this purpose. 3. That this meeting cordially approves the initiatory efforts of the provisional directors of the 'Cotton Company, Limited,' and is of opinion that at the present crisis the basis of their action should be greatly enlarged, and hereby strongly recommends that the exertions of that body be vigorously renewed, its permanent directors appointed, the company registered, and operations commenced without delay."

During the meeting the following letter addressed by Lord John Russell to the Manchester Chamber of Commerce was read, as a proof that her Majesty's Government are alive to the importance of the American crisis as affecting the cotton manufacture of this country:—

"Foreign Office, Jan. 19.

"Sir—The uncertainty which must necessarily exist as to the effect that the present political crisis in the United States may have on the supply of cotton, and the serious results which might ensue if that supply were to fall short, appear to Lord John Russell to suggest the expediency of making timely inquiry as to the possibility of obtaining from other quarters such an amount of cotton as may compensate for any deficiency in the amount usually obtained from the United States. In compliance with the wishes of the Cotton Association of Manchester, the attention of her Majesty's consuls was some time since called to the facilities which the countries

wherein they resided offered for the cultivation of the cotton plant; and much valuable information on this point has been, from time to time, communicated by the Foreign Department to the Cotton Association; and it has been made apparent that, with proper encouragement, a vast supply of cotton might be produced for the British market in many places not hitherto resorted to for that purpose. It would seem, too, that, even without more than the ordinary encouragement to industry offered by the prospect of a sure market, no small amount of cotton might at once be obtained; and it occurs to Lord John Russell that it would be of great convenience and advantage to the cotton manufacturers in this country, in anticipation of a deficient supply from the United States, if they could obtain a fair estimate of the amount of supply which might at once be procured from other countries, if it were thought worth while to send and fetch it. Lord John Russell, therefore, desires to place at the disposal of the cotton manufacturers in this country the services of any of her Majesty's consuls residing in countries which, from the information now in the possession of the Cotton Association, offer a prospect of immediate supply, if it were necessary to have recourse to them. Lord John Russell would not indeed think it right that her Majesty's consuls should be allowed to incur any expenditure of public money on this account, or in any way to pledge the Government to the collectors or producers of cotton within their districts, that the fruit of their labours would surely find a British market. But the Consuls might ascertain what amount of cotton might be expected to be forthcoming in their respective districts to meet any sudden demand, or what amount might be brought into the local market if the native dealers had a reasonable assurance of finding customers for it at a given time. The attention of the Consuls, Lord John Russell conceives, might usefully be directed to these, as well as to other similar points which might be suggested by your Association in communication with the General Cotton Association, and also with the Chamber of Commerce of Liverpool. The practical knowledge possessed by the members of the several associations will enable them at once to judge whether any beneficial results would be likely to attend such an inquiry as that which Lord John Russell, if they choose to accept his offer, is prepared to instruct her Majesty's Consuls at once to set on foot. Lord John Russell is aware that in making this offer he is departing in some degree from the usual practice, but it appears to his lordship that the vast amount of the interests at stake, not only as regards the manufacturers themselves, but as regards also a very large proportion of the labouring population of this country, warrants him in informing the parties who, from their position, take a lead in such matters, that he is prepared and anxious to afford them all the assistance, more particularly at the present time, which the department under his superintendence is able to render.

"I am, &c., E. HAMMOND."

NOTTINGHAM.—A serious poaching affray took place on the morning of the 15th inst. in the preserves of Sir Arthur Clifton, at Barton, six miles from this town. Three of Sir Arthur's keepers were out watching, when they observed 12 poachers in the preserves, having with them nets and other implements for taking game. The keepers had with them powerful night dogs, and attempted to secure some of the gang, when a struggle ensued. The keepers let loose their dogs, and one of the animals immediately pulled one of the poachers to the ground, holding him tightly to the earth. Upon this another poacher stabbed the dog with an iron rod, and extricated his companion. After a further struggle the poachers separated. The keepers immediately despatched a messenger to the superintendent of the county police, who sent men to scour the country in pursuit of the gang. About 6 o'clock the same morning six of them were met by the police on Ratcliffe Bridge. The leader of the gang was among them, and was conspicuous by his fur cap and plume. The police succeeded in capturing the whole of them, and found upon their persons a quantity of hares and other game, nets, &c. On Saturday four of the prisoners, named Manners, Arnold, Bosworth, and Woodward, were identified by the witnesses, and committed by the magistrates for trial at the next assizes. The two others were discharged.

OXFORD.—The election of a Rector of Lincoln College in the room of the late Dr. Thompson, took place yesterday, when the Rev. Mark Pattison, B.D., Fellow of the College, was elected. The new rector is the writer of one of the "Essays and Reviews" which are attracting so much attention.

RYDE.—On Saturday afternoon as Captain Bartor, of the Royal Yacht Squadron schooner Zouave, was proceeding from Cowes to Ryde, where he resided, in the Emerald steampacket of Southampton, he fell through the skylight of the engine-room, and before the engineer could stop the machinery his head was severed from his body. He was literally smashed to atoms, except his feet. The fragments were gathered together, sewed up in a blanket, and carried ashore to his residence in this town. His wife and five children were removed to a neighbour's house.

WOLVERHAMPTON.—On Tuesday evening a fatal boiler explosion took place at the Cock Street colliery, near this town, belonging to Messrs. Aston & Shaw, by which two men were killed and another severely scalded. This is the second fatal boiler explosion which has occurred at the same colliery within nine days.

Ireland.

RUMOURED WITHDRAWAL OF THE MAIL SERVICE FROM GALWAY.—It is telegraphed from Limerick that Mr. Malcolmson, chairman of the Royal Mail Atlantic Company, has purchased from Mr. Dargan his immense interests as the chief shareholder in the Limerick and Foynes Railway, with the view of transferring the mail service by the company steamers from Galway to the Shannon.

THE DONEGAL MURDER.—The local papers state that one of the persons concerned in the murder of Mr. James Murray has turned approver, and that, acting on the information thus obtained, the four or five men from the neighbourhood of Glenveagh have been arrested and sent to Lifford under an escort of constabulary. The approver states that Mr. Murray was attacked by a numerous party, that he shot one of them with his revolver, and that the others then rushed in on him and beat him to death, and threw his body down the hill to the place where it was found. He also states a wide spread conspiracy existed to take away his life. The number of arrests now made amounts to 17, and all the prisoners have been committed for further examination.

DR. CULLEN ON PROSELYTISM.—At a public meeting of Miss Aylward's Orphan Association held a few days since, Dr. Cullen, who presided, made the following remarks on the circumstances which have led to that lady's imprisonment, and on the freedom of his Church from all charge of proselytism:—

"The history of Ireland for the past two centuries reveals to us the great efforts made to proselytise the population of the country. You will find that one huge system of proselytism was carried on. Catholic schools were suppressed, Catholic teachers refused permission to labour in their vocation, Catholic education prohibited, and Catholic parents forbidden to send their children to foreign countries to be educated. Schools were established in which Catholic children were brought up as Protestants. Certain classes were obliged to rear their children in the Protestant religion, as, for instance, attorneys, who could not practise if they did not do so. Again, there was a law of George II. by which magistrates were empowered to seize the children of beggars and to have them educated in Protestant schools. The system of proselytism, although not in the same shape, is still carried on with as much activity. Great advantages are often held out to poor Catholic widows, or other parent or guardian of children, if they consent to allow their children to be brought up in a way in which they themselves believe they cannot be saved. Your society has nothing of this kind in it. You endeavour to protect poor children, and to do it in a charitable, religious way. I trust you will continue to do so, and to protect the poor orphans from the dangers to which they are exposed. It was in reference to the case of Miss Aylward that these charges of proselytism were brought forward, but any one who understands the details of that case will easily perceive that that lady merely acted in conformity with the wishes of a Catholic parent in trying to give a Catholic education to his child. The parent of the child was a Catholic, and when dying he expressed a wish that his child should be brought up in that faith. He had come over from England expressly to prevent that child losing its faith, and his only anxiety in his dying moments was that his desires should be carried into effect. Miss Aylward, in endeavouring to bring up the child in the Catholic religion, simply fulfilled the dying injunction of the father. Nothing could be more in conformity with the natural rights of parents or the dictates of religion than the way in which she acted. The child was afterwards taken away from the nurse, but Miss Aylward was enabled truly to declare that she did not know where it was taken to or who had taken it. However, she is now suffering for carrying out the wishes of a poor dying Catholic. She will have her merit for it; and I trust that her sufferings will be the means of giving greater vigour and life to your association, and making it better known throughout the entire country."

ORANGE OUTRAGE ON MR. DAWSON, M.P.—On the 17th inst. Mr. Peel Dawson, one of the members for the county, who had consented to deliver a lecture on Historic Reminiscences of Londonderry at the Mechanics Institution at Derry, was subjected to a disgraceful outrage by the Prentice boys and Orangemen of the town, on account of a speech which he delivered in Parliament in the last session condemning the proceedings of the Orangemen at the Derrymacash affray, and deprecating the continuance of the July anniversaries. The Prentice boys took possession of the lecture hall, and received Mr. Dawson, on his appearance, with cries of "Put out Judas," "Away with him!" &c., and at length became so violent that in spite of the interference of the Mayor Mr. Dawson was obliged to discontinue his lecture, the greater part of which had been delivered in dumb show. On his leaving the hall accompanied by two ladies of his family the mob followed him, hooting and yelling in the most excited manner, and the police had great difficulty in protecting him and the ladies from their violence.

Law.

COURT OF QUEEN'S BENCH.—*The Queen* v. *William Walsby.* —*The Strikes in the Building Trade.*—This was an appeal from a conviction under the Combination Act, 6th of George IV., c. 129, before Mr. Corrie, the police magistrate. The defendant was a journeyman joiner, who, with his fellow-workmen in the employ of Mr. Philip Anley, had signed a paper requiring their master to dismiss two workmen who had signed a declaration, threatening, in case of non compliance, to leave his service in a body in the course of the day. The argument in the case was, whether this was a threat within the meaning of the Act. After a long consultation with his brother judges, the Lord Chief Justice delivered a judgment affirming the conviction. He said he was decidedly of opinion that every workman was entitled to the free and unfettered exercise of his own discretion whether he would remain in or quit his employment, if no contract existed, and if in the present instance they had put the question to their employer for the *bona fide* purpose of ascertaining his intention, so that they might have had an opportunity of exercising their own honest wishes of going or remaining, it would not have amounted to a threat, but, under the circumstances, he now thought, although at first he had great doubts upon the subject, that the appellant had brought himself within the clauses of the Act, and therefore that the conviction was right.

COURT OF COMMON PLEAS: *The Inclosure of Hainhault Forest.* —This matter came before the full court on Monday by way of an appeal against the award of the commissioner appointed under the statute passed in the present reign, for the purpose of disafforesting and inclosing Hainhault Forest.—The Solicitor-General said that it had been intended on the part of the crown to object to the award; but it had since been determined not to do so, and he should not therefore have to address the court upon the matter.—Mr. Walford, on behalf of the "southern parishes," argued at length that the commissioner was wrong in awarding that the parishes of Barking and Dagenham had rights of common over certain wastes in the other parishes.—Mr. Macaulay contended that Mr. Mills, the owner of Tomms' Wood, held his land exempt from any right of common; and Mr. Manisty appeared on behalf of the commissioner to support the award. The court ... that the award was good.

COURT FOR DIVORCE AND MATRIMONIAL C... Judge Ordinary, Mr. Justice Willes and Mr ... *Ryves* v. *the Attorney-General.*—*The Princess Cumberland.*—Mrs. Lavinia Jannetta Horton Ryves, of ... Kentish Town, petitioned under the Legitimacy Act for a declaration that her father, John Thomas ... Olive, his wife, were lawfully married, and that ... lawful child and a natural born subject of ... mother of Mrs. Ryves was a lady proclaimed ... daughter of Henry Frederick, Duke of ... brother of George III., by Olive, the daughter ... Wilmot. The marriage between the Duke ... Olive Wilmot was said to have been legally ... 4th March, 1767. The claim of Mrs. Serres ... the subject of public discussion, but no ... was raised by the present petition. Mrs ... person, and Mr. Welsby and Mr. Roche ... General.—Mrs. Ryves read the affidavit ... petition, in which she stated that on Septem... parents John Thomas Serres and Olive, his w... at the parish church of Barton-on-the-Heath, ... she was born at Liverpool on the 16th Mar... tised at St. Nicholas Church, Liverpool, ... 1797, and that she was lawfully mar... November, 1822, at the church of St. Ge... Surrey, to Anthony Thomas Ryves, from ... divorced *a mensâ et thoro* by a decree of the ... the 16th of February, 1841.—Mr. Reeve was ... duced a copy of the register of the marriage ... Serres, signed by the rector of Barton-on-the ... copy of the certificate of the petitioner's ... register of the church of St. Nicholas, Liverp... that several pages of this register were al... dampness or some other cause; that the c... a tracing that he had made as well as he w... the certificate of the incumbent was that th... near a copy as possible of the original ent... Ordinary said it would be necessary to ha... register produced. He asked whether the pet... other witnesses as to her identity?—Mr. R... 1822, when she applied for a marriage l... identified on oath at Doctors' Commons ... Ratcliffe, Rouge Croix of the Heralds' Coll... secretary of her late Majesty the Queen D... her and her father and mother, and she ... would have much pleasure in attending, ... identify her. Mrs. Ryves was then sworn, ... questions put by the Court, said she would ... old on the 16th of March next. Her fat... and her mother in 1834. She remembe... she was three and a half years old they ... Street, Cavendish Square. They afterwards ... Street, where her father established a ... Fine Arts. On the 18th of March, 18... mother separated by mutual consent ... differences in their tempers and dispositions. ... charge of her mother, who had an allowance ... her support and education. Her mother afte... various parts of the west end of London, a... first circles. Dr. Wilmot lived at Bath, and ... lived with her mother until her marriage ... in Trinity Square, Southwark, aged 14, and ... James's, Piccadilly. Her father was marine ... George III., to the Admiralty, and to the ... Clarence, and was employed under Lord Nels... and Trafalgar. He was a man of great talent ... of Dominic Serres, an original member of the ... After the war he resided in London and ... He was buried in the family vault ... Paddington. Mrs. Ryves added that sh... with six children under her care more tha... she had fought her way in the world and ... without assistance and now they were ... Lordships adjourned the case until Tuesday, ... original register might be produced from L... Mr. Goodwin the Secretary of the Queen ... attend. At the sitting of the Court on Tues... Ordinary informed Mrs. Ryves that the clergy... pool declined to part with the book for a ... that it would be necessary to subpoena him ... told her the steps that it would be nec... to procure his attendance, and said th... and a post-office order for 5*l.* would ... town. Some difficulty arose as to the service ... it was removed by Mr. Bell, an attorney, wh... in court, and who volunteered to have it served ... Mr. Goodwin, who was in court, was requeste... Thursday, and the case was again adjourned.— ... the Curate of St. Nicholas, Liverpool, prod... register containing an entry of the baptism ... on the 31st of August, 1797; and Mr Goodwin ... Ryves as the daughter of Mr. and Mrs. Serres ... Ordinary, in giving judgment, said the case ... to a reasonable degree of certainty. The Court ... in accordance with the prayer of the petition, ... Serres and Olive his wife were lawfully married ... September, 1791; that the petitioner was the ... and that she was a natural-born subject of ... Excellent Majesty. Mrs. Ryves—I thank you ... your trouble and kindness. The Judge Ordinary ... owes the Court any thanks. We are merely ...

Gurney v. *Gurney and Taylor.*—This was ... John Henry Gurney, M.P. for Lynn, for a ... marriage with his cousin Mrs. Mary Jary Gurney ... the late Mr. Richard Hanbury Gurney, on the ... adultery with William Taylor, a footman ... service. The facts, which are already familiar ... were so fully proved, that the respondent ... would be useless to contest them. The Judge ... there could be no doubt that the petitioner ... decree *nisi*. On the application of the Solicitor ... decree was suspended to give an opportunity ... as to setting aside for the benefit of the children ... the large property which Mrs. Gurney possessed ... right.

Railways.

THE LATE ACCIDENT ON THE SHREWSBURY AND HEREFORD.—The adjourned inquest on ... Miss Sophia Lowe, of Chester, and Mr ... Breinton, near Hereford, who were ... accident on the Shrewsbury and Hereford ... inst., was resumed and concluded on T... the jury returned a verdict of Accidental ... a recommendation to the railway company ... better quality of iron for the tires of the ... their rolling stock; and to have a ... between the guard and driver.

ACCIDENT ON THE MANCHESTER, SHEFFIELD ... LINCOLNSHIRE.—A fatal accident took ... Lincoln on the 14th inst. As the ...

[illegible] through the cutting at Greetwell the tire [illegible]-wheel came off; the engine ran off the [illegible] the carriages after it, ran into a bank [illegible] 8 feet high, and then turned over. The [illegible] Frederick Taylor, of New Holland, fell off, and [illegible] fell upon him, killing him on the spot. The [illegible]-driver was thrown upon the hedge, and had [illegible] severely cut. The tender was thrown upon its [illegible] a position that it formed an arch, under [illegible] stoker crept, and so escaped uninjured, [illegible] of the passenger carriages were Mr. Clarke, [illegible], and his son. On feeling a sudden jerk [illegible] Mr. Clarke jumped over the seat in front of him, and [illegible] with a few bruises. He had no sooner done so [illegible] the centre of the carriage than the end was [illegible] Mr. Clarke, jun., having his legs most [illegible], his left thigh being torn from the [illegible] the leg, laying the bone bare and tearing the [illegible]. The injury was so serious that it was [illegible] necessary to amputate the limb, but the loss of [illegible] had been so great that he died on the [illegible]. The jury at the inquest returned a verdict of Accidental Death in both cases, stating that "the tire [illegible] wheel was broken by atmospheric causes, over [illegible] had no control."

A[illegible] ON THE BUCKINGHAMSHIRE. — On [illegible] night as the last passenger train of the West M[illegible] Company to London, was proceeding on the B[illegible]ghamshire line, towards the Bletchley junction [illegible] London and North-Western, one of the wheels [illegible] class carriage flew off and buried itself in the [illegible]. Fortunately the accident was observed by the [illegible], who at once shut off steam and stopped the [illegible], the carriage having been kept by the other [illegible] its upright position. Had it run off the rail [illegible] must have been most serious, as the [illegible] at a rapid pace along that part of the line.

COLLISIONS ON THE LONDON AND NORTH-WESTERN. —On Friday night another accident occurred on this [illegible] within sight of the London terminus. In [illegible]nence of the slippery state of the rails the auxiliary [illegible] train on leaving the station came to a complete [illegible] near the Hampstead Road Bridge, and the [illegible] train to Wolverton, which followed after a few [illegible] interval, ran into it with considerable force. Several persons were injured by the shock, a commercial [illegible] called Solomons and the guard of the train [illegible] severe contusions; but the carriages received [illegible] little damage that both trains were in a short time able to proceed on their journey.—On Tuesday morning another collision on this line took place between two [illegible] trains near the Wigan station. Several [illegible] were injured, a lady and gentleman [illegible]; and one of the trains was very much damaged.

Obituary.

LORD E[illegible]INSTONE died a few days since at Bournemouth [illegible] enjoyed the title for about six months, having [illegible] his uncle, the late Governor of Bombay, in the [illegible] in July last. He was the only son of the Hon. [illegible] Fleming Elphinstone son of the 11th Lord [illegible] and was born in 1819. He was formerly in the [illegible] and at the close of the war held the rank of [illegible] commanding the 2d Light Dragoons of the Ger[illegible].

[illegible] WATHEN died on the [illegible]th inst. at Shrub [illegible]. She was the only surviving daughter of the [illegible] Rothes, and great aunt of the present peeress. She [illegible] 1779, and married in 1836 Major Augustus Wathen, who died in 1842.

GENERAL SIR GEORGE SCOVELL, G.C.B., Colonel of the 4th [illegible], died on the 17th inst. at Henley Park, Guildford, [illegible] 87th year. He was the son of Mr. G. Scovell, of [illegible], by the daughter of Mr. John Fielding. He was [illegible] 1774, and entered the army in 1798. He [illegible] campaign under Sir John Moore, terminating with [illegible] Corunna, at which he was present as Deputy-Assistant Quartermaster General. He served afterwards in the [illegible] same department at the head-quarters of the [illegible] Wellington, from 1809 to the end of the war in 1814, [illegible] at the passage of the Douro and pursuit of [illegible], the battles of Talavera, Busaco, and Fuentes [illegible], the sieges of Ciudad Rodrigo, and Badajoz, the [illegible] Salamanca, the siege of Burgos, the battles [illegible] the Pyrenees, Nivelle, and Nive, the passage of the [illegible], and the battle of Toulouse. He served also in the [illegible] of 1815, including the battle of Waterloo. For his [illegible] received the gold cross and one clasp, the silver war [illegible] and eight clasps, and the order of the 4th class of St Wladimir of Russia. He was appointed to the governorship at [illegible] 1837, which he resigned in 1856. He married in [illegible] daughter of Mr. S. Clowes, of Broughton, Lancashire, [illegible] 1824.

[illegible] PLAYFAIR died on the 21st inst., after a [illegible] illness, at his residence, St. Leonard's, [illegible] Andrews, in his 79th year. He was the son of Principal Playfair, of the United College, St Andrew's, and was born at the manse of Meigle and Newtyle, of which parishes his father was then minister, in 1786. In 1804, having pre[illegible] the Volunteers, in the Colonel's staff of which he [illegible], he received an artillery appointment [illegible], and was for some years in the East India [illegible]. In 1815 he was appointed Captain, and in [illegible], which rank he held when, in 1834, he left the [illegible] returned to St. Andrew's. He was subsequently [illegible] the rank of Lieutenant-Colonel. In 1842 he [illegible] Provost of St. Andrew's, and for the last 18 years [illegible] himself to the physical, social, and intellectual [illegible] of his native city. In 1856 the Queen conferred [illegible] the honour of knighthood, and in the same year the [illegible] conferred on him the degree of LL.D. He married, [illegible] daughter of William Dalgleish, Esq., of Scotscraig. [illegible] by this lady, who survives him, he leaves three [illegible] daughters.

THE DEAN OF EXETER (the Very Rev. Thomas Hill Lowe, M.A.) died on the 17th inst., at the Deanery, Exeter. He was [illegible] at Trinity College, Oxford, where he graduated in 18[illegible]. He was formerly Vicar of Grimley with Hallow, in the [illegible] of Worcester, and was appointed to the Deanery of Exeter in 1839, during Lord Melbourne's Administration.

COLONEL WOODGATE, C.B., formerly of the [illegible] Rifles, died on Saturday at Paris, in his [illegible]th year. On entering the army he served in Canada and the West Indies. He [illegible] with the [illegible] battalion of the [illegible] Rifles on the expedition to Portugal in 1808, under Sir Arthur Wellesley, and was present at the battles of Roleia, Vimiera, Talavera, and Busaco, the action at Sabugal, battle of Fuentes d'Onor ([illegible] he was wounded), siege of Badajoz in 1811, action of El Bodon, and siege and capture of Ciudad Rodrigo. He received the gold medal for Fuentes d'Onor, and the silver war medal and five clasps for Roleia, Vimiera, Talavera, Busaco, and Ciudad Rodrigo. In 1815 he was made a Companion of the Bath for his services in the Peninsula.

MR. VYNER died on Tuesday night at Newby Hall, Yorkshire. He was father of the Countess de Grey and Ripon, the Marchioness of Northampton, and Mr Vyner, the new M.P. for Ripon. He was son of the late Mr. Robert Vyner and Lady Theodosia, youngest daughter of the second Earl of Ashburnham. He married, in 1852, Lady Mary Gertrude, youngest daughter of the late Earl de Grey.

THE REV. STEPHEN REAY, B.D., of St. Alban Hall, senior sub-librarian of the Bodleian, and Laudian Professor of Arabic in the University of Oxford, died at his residence in St. Giles's on the 21st. inst. in his 79th year, after a long illness. He took his B.A. degree in 1817, M.A. in 1823, and B.D. in 1841; and was elected Laudian Professor of Arabic in 1840.

WILLS.—The will of Alderman Sir George Carroll has been sworn under 120,000*l*.

BIRTHS.—On the 20th inst, at Downing, Flintshire, the Viscountess FIELDING, of a daughter—20th inst, at [illegible] House, Northamptonshire, the Lady SUFFIELD, of a son—21st inst, at 2, Queen's Gate Gardens, Kensington, the Lady ISABELLA WHITBREAD, of a son—21st inst, at 41, Green Street, Lady LAMBERT, of a son—10th inst, the Hon. Mrs. AUGUSTUS BYRON, of a son—15th inst, at 14, Eaton Place South, the Hon. Mrs. GEORGE DENMAN, of a son—17th inst, at Goldsbro' Hall, the Hon. Mrs. EGREMONT LASCELLES, of a daughter—17th inst, at Dolforgan, Montgomeryshire, the wife of R. P. LONG, Esq., M.P., of a daughter.

MARRIAGES.—On Tuesday, the 22d inst, at All Soul's Church, Langham Place, the Hon. GEORGE WALDEGRAVE, Secretary to the Speaker, to the Countess of ROTHES—17th inst, at St. Thomas's Church, Portman Square, Sir JOHN NEWDIGATE LUDFORD CHETWODE, Bart., of Oakley, in the county of Stafford, and of Chetwode Manor, Bucks, to ARABELLA PHILLIS, widow of the late JAMES READE, Esq., of Lower Berkeley Street, Portman Square—17th inst, at St. George's, Hanover Square, WILLIAM SCOTT, Esq., eldest son of Sir William Scott, of Ancrum, Bart., M.P. for Roxburghshire, to AMELIA MURRAY MONTEATH DOUGLAS, eldest daughter of Lieut. General Monteath Douglas, C.B., of Douglas Support and Stonebyres, Lanarkshire, N.B.—22d inst, at St. Michael's, Chester Square, the Rev. THOMAS STONE CARNSEW, of Flexbury, and Vicar of Poughill, Cornwall, to FRANCES HALLETT, eldest daughter of the late Sir JOHN EDWARD HONEYWOOD, of Evington Place, Kent, Bart.—12th inst, at the British Legation, Frankfort-on-the-Maine, Major F. S. VACHER, 33d Regiment, to ELIZA HENRIETTA AUGUSTA, only surviving daughter of Sir FREDERICK WILLIAM FRANKLAND, Bart.—15th inst, at St. James's Church, Paddington, THOMAS BUTLER, Esq., son of Sir Thomas Butler, Bart., of Ballin Temple and Garryhunden, county Carlow, to EMMA ELIZABETH BERTIE, daughter of Vice-Admiral BERTIE CATOR, of 17, Sussex Square—2d October, at St. Luke's, Halifax, Nova Scotia, JOHN MATTHEW JONES, Esq., of the Middle Temple, barrister-at-law, youngest son of the late Rear Admiral Sir Charles T. Jones, of Frondeith, Montgomeryshire, to MARY, youngest daughter of Colonel W. J. MYERS, late 71st Regiment, Highland Light Infantry—17th inst, at Fairsted, Essex, DAVID STEUART, Esq., of Steuart Hall, Stirlingshire, and Captain in the 34th Foot, to DOROTHY EMILY, only daughter of the Rev. JOHN COX, Rector of Fairsted.

DEATHS.—On the 19th inst., at Torquay, ADELAIDE, the wife of Lieutenant General the Hon. THOMAS ASHBURNHAM, C.B.—17th inst., at Leigh Court, Bristol, ARTHUR GEORGE, the infant son of the Hon. and Rev. FRANCIS BYNG, aged eight and a half months—15th inst., at 30, Devonshire Place, in her [illegible]th year, MAITLAND, widow of the late WILLIAM ERSKINE, Esq., formerly of Bombay, and daughter of the late Right Hon. Sir JAMES MACKINTOSH—15th inst., at her residence, Spring House, Clifton, aged 7[illegible], MARTHA, widow of the late Rev. ROGER HITCHCOCK, and third daughter of the late Sir Wm. Gibbons, Bart., of Stanwell Place, Middlesex—21st inst., at his residence, Lansdowne Crescent, Kensington Park, in his 81st year, Sir JOHN HALL, K.C.H., formerly Secretary to the St. Katharine Dock Company—14th inst., at the residence of her daughter, Portland Road, Kilmarnock, after a short illness, JEAN BRUCE, in her 87th year, widow of JAMES STAUNTON, Esq., London, and daughter of the late General Bruce, Lieutenant-Governor of Dominica, West Indies—11th inst., suddenly, at Paris, ELIZA LAMB, wife of Dr. JAMES DAVENPORT, M.D., late of the Bengal Army, and only daughter of the late Major-General WILSON, C.B., of the [illegible]th Regiment N.I.—29th inst., at Exmouth, Devon, retired Rear Admiral PARSONS, aged 77—21st inst., at No. 80, Charlwood Street West, Warwick Square, Rear Admiral CHAFFEN in his 69th year—12th inst., at Lansdowne Road North, Notting Hill, ELIZA SHENSTONE LAWFORD, widow of the late John Lawford, Esq., and eldest daughter of the late JOHN WILKS, Esq., formerly M.P. for Boston—17th inst., at 6, Bedford Place, Russell Square, in his 61st year, the Hon. WILLIAM FIELD, Member of the Executive Council of the Cape of Good Hope, Collector of Customs, Cape Town, and specially employed in England conducting emigration to that country—29th of October, at his residence, Parnell, Auckland, New Zealand, in his 64th year, WILLIAM HENRY TIZARD, formerly Senior Examiner, Audit Office, Somerset House, London, and Private Secretary to the late Sir Robert Peel, Bart.—6th Nov., near New Plymouth, New Zealand, shot in battle, FRANCIS R., second son of the Rev. H. H. BROWN, of Omata, near New Plymouth, grandson of the late Rev. Dr. MORRIS, of Elstree, Herts, aged 15 years—12th inst., at Inverleith House, Edinburgh, ALEXANDER EARLE MONTEITH, Esq., Sheriff of Fife, aged 67—18th inst., at his residence, Westbourne Terrace, Hyde Park, London, CHARLES CHICHELEY HYDE, Esq., late of Bengal Civil Service, aged 67—17th inst., at his residence, Lee Road, Blackheath, in his 58th year, ARTHUR BLOXHAM CORNER, Esq., H.M.'s Coroner and Attorney in the Court of Queen's Bench—19th inst., at Brynsteddfod, Conway, HELEN, wife of the Venerable H. C. JONES, Archdeacon of Essex, eldest daughter of the late JOHN CARSTAIRS, Esq., of Stratford Green, Essex, and Warboys, Hunts, in the 69th year of her age—17th inst., the Rev. JAMES DONNE, B.D., Vicar of St. Paul's, Bedford, and Clapham, Bedfordshire, aged 65—17th inst., at 1, Circus, Bath, GEORGE NORMAN, Esq., F.R.C.S., for many years an eminent surgeon of the city.

Markets.

COVENT GARDEN, Jan. 26.

Supplies of winter Greens are still insufficient for the demand, and prices for them are in consequence high. Continental contributions have, however, improved since our last report. They consist of Endive, Lettuces, Carrots, Artichokes and Green Peas. The latter come from Portugal. Pine Apples and Grapes have not altered since our last. Oranges may be obtained at about last week's prices. Shaddocks may be had in quantity, also American Lady Apples, which realise 2s. a dozen. Good Cobs may be had at from 1s. to 1s. 6d. per pound. Broccoli and Cabbages are scarce. Asparagus, French Beans, and new Potatoes may be had, but prices for them are high. Cucumbers are scarce. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Heaths, and Roses.

FRUIT

Pine Apples, per lb., 4s to 8s	Apples, per doz., 6d to 1s 6d
Grapes, per lb., 6s to 10s	Oranges, per 100, 6s to 16s
Pomegranates, each, 4d to 6d	Lemons, per 100, 6s to 10s
Pears, per doz., 3s to 6s	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Broccoli, each, 6d to 8d	Onions, p. ½ sieve, 1s 6d to 2s 6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 10s to 36s
Cabbages, do., 2s to 3s	Seakale, p. punnet, 3s to 3s 6d
Potatoes, p. ton, 100s to 130s	Shallots, per lb., 6d to 8d
— per bus., 3s to 4s	Garlic, per lb., 6d to 8d
— per cwt., 5s to 8s	Lettuces, Cabb., per score, 1s to 1s 6d
Carrots, per bunch, 8d to 10d	Lettuces, Cos, do., 1s to 1s 6d
Turnips, per bunch, 6d to 8d	Endive, p. score, 1s to 1s 6d
Spinach, p. sieve, 4s to 5s	Horse Radish, p. bun., 1s 6d to 4s
Cucumbers, each, 2s to 3s	Mushrooms, p. pott., 2s to 3s
Artichokes, per doz., 4s to 6s	Parsley, p. 12 bunches, 4s to 6s
Beet, per doz., 1s 6d to 2s	Savory, per bunch, 2d to 4d
Celery, p. bundle, 1s 6d to 1s 9d	

BRITISH WOOLS.—LONDON, FRIDAY, Jan. 25.

Our market is in a quiet state. No business to any extent doing in any description of wool, as the consumers are using up all their present stock previous to making fresh purchases. American affairs conduce towards caution, whilst the lowness of stocks prevents the likelihood being entertained of any serious fall in price in the raw material.

	s. d.		s. d.		s. d.		s. d.
South down Hoggets	1 7	to	1 8	Leicest. Wethers	1 6	to	..
Half-bred ditto	1 8	—	..	Ditto Hoggs	1 8	—	..
Down Ewes	1 5	—	1 6	Combing Skins	1 0	—	1 4
Kent Fleeces	1 7	—	..	Blanket ditto	0 6	—	0 8
				Flannel Wool	1 0	—	1 8

COAL MARKET.—Jan. 23.

Benton's West Hartley, 17s. 3d; Byass's Bebside West Hartley, 17s. 3d; Buddle's West Hartley, 17s. 6d.; Davison's West Hartley, 17s. 6d.; Gordon, 18s.; Holywell, 19s.; Lambert's West Hartley, 17s.; South Pcareth, 16s. 6d.; Tanfield Moor, 17s 6d., West Hartley, 17s 6d.; Wylam, 19s; Eden Main, 20s.; Walls End Haswell, 22s.; Walls End South Hetton, 22s.; Walls End Stewarts, 22s.; Walls End Hartlepool, 21s. 9d.; Walls End Thorpe, 20s. 6d.; Carway and Duffryn Malting, 24s. 6d.—103 ships at market.

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, Jan. 24.

Prime Meadow Hay	75s to	84s	Clover	95s to	115s
Superior do. (old)	90	110	New Clover	—	—
Inferior do.	40	57	Old second cut	70	95
New do.	—	—	Straw	30	42
Rowen	30	50			

DAVIS & CO.

WHITECHAPEL, THURSDAY, Jan. 24.

Fine old Hay	105s to	108s	Fine old Clover	114s to	118s
Inferior do.	45	80	Inferior do	90	105
Prime New Hay	—	—	Fine 2d cut	95	100
Inferior do.	—	—	Inferior do.	75	84
Straw	30	34	Fine New Clover	—	—

POTATOES.—SOUTHWARK, Monday, Jan. 21.

During the past week the arrivals both coastwise and by rail have been limited, but owing to the mild weather the demand has not been so brisk, and prices have somewhat declined. The following are this day's quotations:—York Flukes, 160s. to 170s. per ton; Lincolnshire Regents, 105s. to 125s.; Dunbar Red Soil, 175s. to 185s.; North Berwick do, 125s. to 135s.; Fife, Forfar, and Perth do., 115s. to 125s.; Rocks and Reds, 105s. to 115s.; French Whites, 90s. to 100s.; Belgian do., 85s. to 90s.; Dutch do., 80s. to 85s.

BUTTER MARKET.—Jan. 25.

Best Fresh Butter	18s. per dozen lbs.
Second do. do.	15s. ,, ,,

Pork, 4s. 8d. to 5s. 0d. per 8 lbs.

METROPOLITAN CATTLE MARKET.

MONDAY, Jan. 21.

We have a much shorter supply of Beasts, and consequently prices have advanced on all kinds. The number of Sheep is unusually small. The demand has improved, and prices are much higher. Good Calves are in demand at higher rates. From Germany and Holland there are 59 Calves; from Spain, 450 Beasts; from Prussia, 28; from Scotland, 115; from Ireland, 100; from Norfolk and Suffolk, 1400; and 50 from the northern and midland counties.

	s d		s d		s d		s d
Best Scots, Herefords, &c.	4 10	to	5 2	Best Long-wools	5 4	—	5 8
Best Short-horns	4 8	—	5 0	Do. Shorn	..	to	..
2d quality Beasts	3 8	—	4 4	Ewes & 2d quality	4 4	—	5 0
Best Downs and Half-breds	5 8	to	6 0	Do. Shorn	..	—	..
Do. Shorn	..	—	..	Lambs	..	—	..
				Calves	4 4	—	5 4
				Pigs	4 0	—	5 0

Beasts, 5092; Sheep & Lambs, 12,100; Calves, 77; Pigs, 240.

THURSDAY, Jan. 24.

We have a larger supply of Beasts than on Thursday last, but the demand has proportionately increased. We retain Monday's quotations; they are not, however, quite as readily obtained as on that day. Although there is a considerable increase in the supply of Sheep, the number is still small, and Monday's prices are pretty generally realised. Calves are dearer. Our foreign supply consists of 150 Beasts, 150 Sheep, and 122 Calves. Of Milch Cows 140.

	s d		s d		s d		s d
Best Scots, Herefords, &c.	4 10	to	5 2	Best Long-wools	5 4	—	5 8
Best Short-horns	4 8	—	5 0	Do. Shorn	..	—	..
2d quality Beasts	3 8	—	4 4	Ewes & 2d quality	4 4	—	5 0
Best Downs and Half-breds	5 8	—	6 0	Do. Shorn	..	to	..
Do. Shorn	..	—	..	Lambs	..	—	..
				Calves	4 0	—	5 6
				Pigs	4 0	—	5 0

Beasts, 1200; Sheep & Lambs, 4020; Calves, 158; Pigs, 80.

MARK LANE.—MONDAY, Jan. 21

There was a moderate supply of Wheat from Essex and Kent to this morning's market, the greater part of which was in very miserable condition, and remained unnoticed; towards the end of the market the better parcels were taken at a decline of 2s. per qr. The attendance of country buyers was better than of late, but holders of foreign Wheat not being inclined to comply with an abatement in prices, very little business was transacted. English malting Barley 1s. per qr. cheaper; other descriptions unaltered in value. Beans are

fully 1s. per qr. lower, and Peas slow at late prices. The Oat trade is quiet, and prices are unaltered. American Flour is 6d. per barrel lower.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk..White	52—66	Red	48—60
— — fine selected runs..ditto	52—70	Red	54—65
— — Talavera	51—72		
— Norfolk..................	—	Red	—
— Foreign..................	50—76		
BARLEY, grind. & dist., 28s to 30s..Chev.	40—45	Malting.	38—40
— Foreign..grinding and distilling	30—36	Malting.	40—44
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—25
— Irish ....Potato	26—28	Feed ..	21—24
— Foreign........Poland and Brew	24—28	Feed ..	20—28
RYE	35—38	Foreign.	—
RYE-MEAL, foreign..................	—		
BEANS, Mazagan....30s to 44s....Tick	28—48	Harrow.	28—48
— Pigeon ......34s — 56s..Winds.	34—42	Longpod	—
— Foreign ....Small	40—50	Egyptian	—
PEAS, white, Essex and Kent ..Boilers	38—48	Suffolk .	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign.	38—48
MAIZE .... White	—	Yellow..	—
FLOUR, best marks delivered..per sack	50—57		
— 2d do.................. ditto	38—50	Country.	38—50
— Foreign ....per barrel	30—35	Per sack	42—50

FRIDAY, Jan. 25.

The thaw noticed on the 18th has continued, with the exception of slight frosts at night. The atmosphere was for the most part damp and raw, but yesterday and to day finer and milder. The Wheat trade throughout the kingdom has been very inanimate, and a decline of 1s. per qr. general. In some markets a reduction of 2s. has been submitted to on English Wheat. Barley must also be noted 1s. per qr. lower. Oats maintained their former value. Business in Beans and Peas has been slow. Flour was in moderate request at a decline of 6d. to 1s. per barrel. It is not possible to ascertain with any degree of correctness the stocks of grain here. Those of Wheat are estimated at about 400,000 qrs., which cannot be considered large. The arrivals off the coast, however, are likely to be numerous for some time, and it is probable that they will be purchased at some decline on the present prices, and at rates which will leave a fair margin for profit during winter and the early spring. A portion of the fleet now on its way from the South has arrived on the coast, in all 103 vessels. The arrivals of foreign Wheat and Flour this week are good, but almost entirely confined to American descriptions; of all other grain small. This morning's market was but moderately attended The English Wheat, consisting principally of samples which remained over from Monday, being in miserable condition, was much neglected, and could only have been disposed of at a further decline upon that day's quotations; the bulk remained unsold at a late hour, but had there been buyers of quantity they might probably have purchased on slightly easier terms. Spring Corn of all descriptions is unaltered from Monday.

ARRIVALS FROM Jan. 21 TO Jan. 25.

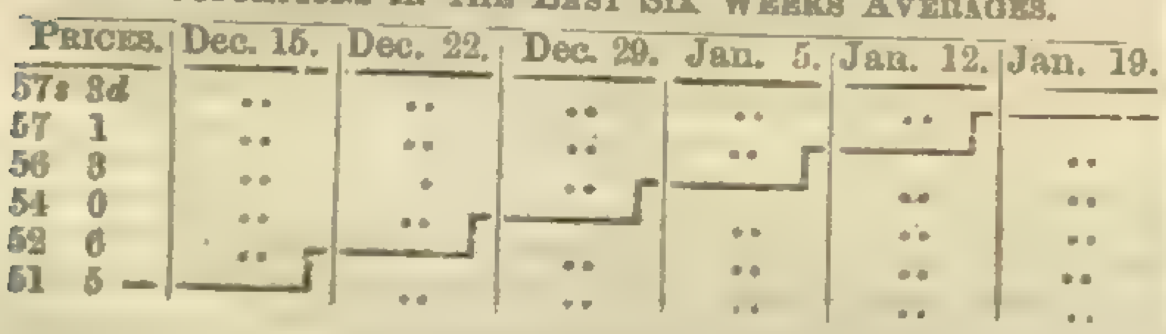
	Wheat.	Barley.	Oats.	Flour.
English ..	940 qrs.	1660 qrs.	150 qrs.	130 sks.
Irish	— „	— „	600 „	— „
Foreign ..	18790 „	200 „	— „	{ — „ 27660 brls.

LIVERPOOL, Tuesday, January 22.—There was a fair attendance of millers and dealers at our Corn Exchange this morning, and Wheat met a better consumptive inquiry than might have been anticipated from the dull market in London yesterday, whilst previous quotations were in most instances maintained, and even exceeded for American white. Flour had only a slow sale, and was 6d. per barrel cheaper ex ship. Indian Corn was little inquired after, and American mixed declined 3d. per qr. Oats and Oatmeal sluggish. Peas a shade dearer. Beans and Barley without alteration. The market closed with a quiet tone, but holders are in no degree anxious to press sales.

FRIDAY, Jan. 25.—To-day's market was well attended. Wheat and Flour in slow sale at declining prices. Beans and Indian Corn move off slowly, prices of both giving way. Other articles remain unchanged since Tuesday.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Dec. 15..	51s 5d	38s 7d	22s 1d	33s 6d	45s 6d	43s 3d
— 22..	52 6	38 6	21 8	35 2	42 2	43 10
— 29..	54 0	39 7	22 6	34 7	44 10	46 7
Jan. 5..	56 3	40 3	22 6	39 10	43 4	42 0
— 12..	57 1	40 6	22 6	34 6	43 10	44 6
— 19..	57 3	40 6	23 2	34 9	41 10	43 0
Agg. Aver.	54 9	39 8	22 5	35 5	44 1	43 11

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



PARTNERSHIP.—Wanted, a PARTNER in the NURSERY BUSINESS in London. Capital required 2000l.—For further particulars address A. Z., *Gardeners' Chronicle* Office, W.C.

PARTNERSHIP.—Wanted, an active business Man to take a Share in a well-established extensive NURSERY in the City of Dublin.—Apply by letter, stating amount of capital, &c., to A. W. B., *Gardeners' Chronicle* Office, W.C.

TO GARDENERS.

WANTED, BY THE WORCESTER PLEASURE GROUNDS COMPANY (Limited), a HEAD GARDENER, to take the general Superintendence of the Grounds. He must be married, possessed of good testimonials as to moral Character, a good Florist, and thoroughly acquainted with the Management of Ornamental Trees and Shrubs. His Wife will have to take charge of the Gate. Salary, 60l. per year, with house. Security to be given if required. A person who has had the management of similar grounds will be preferred. Testimonials to be sent to me on or before WEDNESDAY, February 5th. Previous to the appointment being made an interview will be required, of which due notice will be given. By order of the Directors.
ALFRED P. WATKINS, Secretary.
50, Foregate Street, Worcester, Jan. 26.

WANTED, for the Country, a thoroughly respectable MAN and his WIFE, without children; the former as GARDENER and BAILIFF, thoroughly understanding all its branches; the latter to take the LAUNDRY and occasionally assist in the House. They will have Two Rooms, with Coals, Vegetables, and Milk—Wages 20s per week. As the situation is very retired, being 2 miles from a village, it is requested that no parties will apply objecting to this—and strict investigation will be made as to their character.—Address, post paid, C. B., Post Office, Frimley, Surrey.

OUT-DOOR FOREMAN.

WANTED, A FOREMAN to Manage a Small Nursery near London. A thorough knowledge of Propagation of Nursery Stock indispensable.—J. REEVES, Ladbroke Nursery, Notting Hill., W.

WANTED, a GROUND FOREMAN, in a country Nursery; one who understands the general Propagation of Hardy Trees and Shrubs, and can Bud and Graft successfully. References as to character and abilities, together with terms, to be sent to G. T., Messrs. Hurst & McMullen, Seedsmen, Leadenhall Street, London, E.C.

WANTED, AS FOREMAN in a Nobleman's Garden, an active, trustworthy Man, who has a competent knowledge of Early and Late Forcing, Plant Growing, &c. Wages 14s. per week, with milk, lodgings, and vegetables. No one need apply who has not filled a similar situation before.—Address, stating age and references, to X. Y., Post-Office, Lutterworth, Leicestershire.

WANTED, as FOREMAN, an active, steady, and industrious Man, who thoroughly understands the Nursery business indoors and out. He must well understand the Forcing of Vines, &c., and be a good Propagator and Plant grower. Particulars, stating age, wages, &c.—Address to G. H. M., Post Office, Coventry.

WANTED, A PROPAGATOR, FOREMAN, AND SALESMAN, competent to manage Hard and Soft-Wooded Plants, Roses, Stove Plants, Vines, &c. Also a GROUND FOREMAN, who understands Management of general Nursery Stock.—State age, terms, reference, &c., in own handwriting. S. STAFFORD, Nurseries, Hyde, Manchester.

WANTED, AS HEAD GARDENER, a good practical Man, married, without encumbrance, to live on premises, the Wife to have charge of the Lodge—Apply, First floor, 111, Strand, W.C.

WANTED, AS GARDENER, a middle-aged (not above 40), unmarried, active man, to live in a quiet family, and to take the sole charge of a few choice Stove and Greenhouse Plants, Flower and Kitchen Garden, and able to mow well, and prepare his ground for crops. A lad kept. High testimonials for good conduct and practical ability required from a lady or gentleman lately left; none others received. No out-door, married, or widower with a family, need apply. Wages to be clearly stated.—T. I , Emsworth, Hants.

WANTED, A GARDENER (Protestant), who has a thorough practical knowledge of Gardening in all its branches; Vinery, Peach House, and Conservatory. Terms, 50l., with House, Fuel, and Milk.—Apply, with copies of Testimonials and reference to last employer, and stating whether married or single, and if the former, how many children, to CASTLE ARCHDALL, Enniskillen, Ireland. No Scotchman need apply.

WANTED, a thorough good PROPAGATOR of Hard and Soft-wooded Plants, Conifers, &c., well understanding the management and Forcing of Vines, &c.—P. A., Post Office, Coventry.

WANTED, in a Provincial Nursery, an active, steady young Man, to assist in Propagating, and to make himself generally useful.—Apply, stating age, wages, &c., to J. WOODS & SON, Nurseries, Woodbridge, Suffolk.

WANTED, AN UNDER GARDENER.—No one need apply who cannot look after and drive a Cart Horse, and have a good character for thoroughly understanding the management of Pigs and Cows.—Address, stating last employer, if married or not, age, and wages expected, to A. B., 26, Bride Lane. City, London, E.C.

WANTED, a first rate DAIRYMAID, who perfectly understands Milking, making Cheese, and the fattening and management of Poultry; also keeping the Dairy Accounts. An excellent character required.—Apply by letter to E. H., Griffin's, Crawford Street, Baker Street, London, W., stating wages, &c., and address.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 29, married, no incumbrance; well understands his profession in all its branches. Spotless character from present employer.—G. Z., Post Office, Watton Hertford, Herts.

GARDENER (HEAD).—Married; 17 years' practice in Forcing Early Fruits, &c., also Flower and Kitchen Gardens. Wife an experienced Laundress, if required. 3½ years' good character.—S. T., Miller's Nursery, Andover, Hants.

GARDENER (HEAD). — Age 37, married, one daughter, age 5; thorough knowledge of Pines, Grapes, Stove and Greenhouse Plants, Kitchen, Flower Garden, &c. Character will bear the strictest inquiry for honesty, sobriety, &c.—A. B , Messrs. May, 15, Wellington Street, Strand, W.C.

GARDENER (HEAD).—Age 28, single; thoroughly understands his profession in its various branches. Three years' character.—M. P., G. Stanly, High Road, Lee, Kent, S.E.

GARDENER (HEAD), to any nobleman or gentleman.—Age 31, married; thoroughly experienced. Can produce testimonials from present and previous employers that will not fail to give every satisfaction.—S. W. G., Post Office, Alton, Hants.

GARDENER (HEAD).—Age 30, married; has a thorough practical knowledge of his profession in all its branches. Unexceptionable testimonials as to character and ability.—T. P., 4, Charles Street, Bishop's Fields, Chester.

GARDENER (HEAD).—Age 26, single; thoroughly understands his profession. Good character, and no objection to any part.—A. B., Post Office, Weald, Sevenoaks.

GARDENER (HEAD), where two or more are kept. Age 30, married, no incumbrance; thoroughly understands his Profession in all its branches—Vines, Pines, &c. Good character.—Y. Y., Westbury, Salop.

GARDENER (HEAD).—Middle age; married, without incumbrance; thoroughly competent in the Management of a nobleman's or gentleman's establishment. Good reference.—J. H., 17, Caroline Cottages, Edmonton, N.

GARDENER (HEAD), Age 36, married, two children, understands Gardening in all its branches; first-rate propagator of both Hard and Soft-wooded Plants; understands Orchard House well. Can have four years' good character from present employer.—A. MATTHEWS, 45, South St , Moor, Sheffield

GARDENER (HEAD).—Age 32; well known as a most successful, enthusiastic, and thorough experienced gardener. Highly recommended by several noted Horticultural gentlemen, just left a first class family and garden, a thorough confidential man. Five years' most excellent character.—H. W., Muskett's Nursery, Clapham,

GARDENER (HEAD).—Age 33, married ... incumbrance; has a practical knowle... in all its branches Four and a half years' ... P. E., 22, Mill Hill Road, Acton, W.

GARDENER (HEAD).—Age 28; has a ... ledge of his profession in all its bran... Foreman in some First-class establishment... recommended to any nobleman or gentleman ... service of a practical Gardener.—A. B , W... Architect, Register Square, Beverley, Yorkshire.

GAMEKEEPER (HEAD).—Prime of life, ... has been brought up as a Keeper from a child ... knowledge of Deer, &c. Would undertake to ... to a large amount by contract or otherwise. ... can be given from the nobleman he is leaving.—A ... Office, Hatfield, Herts.

GARDENER (HEAD, OR SINGLE-HANDED).— ... perfectly understands his profession. Two ... character from last place.—6, Queen's Row, ...

TO NOBLEMEN, GENTLEMEN, ETC.

GARDENER (FIRST-CLASS) in every branch ... profession; married, without incumbrance ... great experience in the re-arranging Park ... down and planning Pleasure Grounds, the ... Horticultural Buildings and Heating on the ... principles; has grown Pines, Grapes, Peaches, ... to the highest perfection, and is experienced ... fruit trees in the orchard house. Has lived with ... of the highest distinction for 20 years, and is abo... his own wish a family of note where he has been ... having completed the new arrangement of the ... Houses, planting and making of the Vine and Pea... Testimonials and character unexceptionable.—Letters permitted to be addressed — A. B. C., A. Henders... apple Place, Edgeware Road, London, W.

GARDENER.—Age 32, one child; un... Kitchen and Flower Gardens, Greenhouse ... work; eight years Second Gardener with present ... Good character.—A. N , Post Office, Beckley, Sussex

TO NOBLEMEN AND GENTLEMEN

GARDENER.—Age 38, married, a thorou... getic man; has experienced 14 years superior ... Head Gardener where Plants, Fruits, and V... been cultivated extensively; can superintend the ... Land, Stock, &c. Wife can manage Dairy and P... required. Satisfactory reference for ability, &c.—... Cripps, Nurseryman, Tunbridge Wells.

GARDENER (UNDER).—Age 21; has a good ... ledge of Stove and Greenhouse Plants, the ... Early and Late Fruits, &c. Good reference.—B. ... Hall, Worksop. Notts.

GARDENER (UNDER).—Age 23; wishes ... tion in the Houses in a nobleman's or gentle... lishment, where Pines are well grown. No objection ... part of England, Scotland, or Wales.—A B, ... Gomersall, near Leeds, Yorkshire.

GARDENER, OR GARDENER AND BAILIFF ... Middle-aged, married, no encumbrance; 25 years ... tical experience. Left his last situation in conse... death of his employer. His Wife would take ... Dairy if required; is first-class in her profession. ... unexceptionable.—T. N., 11, Tucker's Place, St. J... London, N.W.

GARDENER, GROOM, OR WORKING BAILIFF. ... Age 40; will leave his situation at the ... Can drive or milk a cow. Is not leaving ... fault. Four years' character from last situation.— ... Lodge, Barnet, Herts.

FARMING BAILIFF (now or in March).— ... no incumbrance; thoroughly understands Farming ... all its branches. His Wife as Cook and Housekeeper ... manage a Dairy or Poultry.—W. B., Post Office, ...

BAILIFF AND MANAGER OF A LARGE ... FARM.—A well qualified Man wishes for a ... ment; has had great practical experience, and can ... recommended.—A. Z., W. Dawson & Sons, ... London, E.C.

BAILIFF.—Single; capable of taking the ... management of a large Farm. Good reference.— Stent's Library, Guildford, Surrey.

BAILIFF (UNDER), to any nobleman or gentleman —Age 18, well educated. Salary not so much ... as a good situation. Good references can be given.— ... Office, Bransford Road, St. John's, Worcester

BAILIFF.—A native of one of the best agr... counties in Scotland; a thorough practical man, ... to Draining and Improving Lands. Management ... Stock, both Sheep and Cattle; also Woods, &c. ... of the highest order.—J. B., Messrs. Peter Lawson ... 27, Great George Street, Westminster.

TO NOBLEMEN AND GENTLEMEN.

STEWARD ON A HOME FARM OR MAN... OF AN ESTATE.—Disengaged at Lady Day next ... practical experience in the Management and Im... Land, both in Scotland and England; Rearing B... Selling of Farm Stock; the Measuring of Land and ... also the Erecting of Farm Buildings. Reference as to ... and ability from present and previous employers if ... G. G , Farnborough, Hants.

NURSERY WORKMAN.—We are in want ... Country Grounds, one mile from Penrith, of ... dustrious, middle-aged man. A Cottage is now ... him. State Wages expected, &c.—JOSEPH TREMBLE... Penrith.

FOREMAN OR FOREMAN AND PROPAGATOR ... Age 29; well acquainted with the Propagation ... Grafting, &c. Good reference.—A. B., 9, Camden ... Camden Grove, Peckham, Surrey, S.

TO NURSERYMEN.

PROPAGATOR AND DAHLIA GROWER. ... tomed to grow Geraniums, Dahlias, &c., for ... Good references. Wages, 1l. per week.—ALPHA, P... Moor, Sheffield.

LANDSCAPE PLANTING.—A. GREGORY begs ... offer his services to any Lady or Gentleman wishing ... person for planning or carrying out improvements, ... permanent or occasional.—A. GREGORY, 70 Albany Street, Regent's Park, London, W.

TO SEEDSMEN.

ASSISTANT SHOPMAN.—Age 21; has been ... years in the trade. Active, Steady, and well ... mended by present employer.—E. S., Mr. Huddart's, ... man, Preston.

The Gardeners' Chronicle Newspaper.

SATURDAY, FEBRUARY 2, 1861.

GOVERNMENT SCHOOL OF MINES, JERMYN STREET.—The following COURSES OF LECTURES are about to be commenced:—

TWENTY FOUR LECTURES ON ORGANIC CHEMISTRY, by Dr. HOFMANN, F.R.S., to be delivered on MONDAYS and FRIDAYS at 10 A.M., commencing February 11th. Fee for the Course, 2l.

FORTY LECTURES ON MINERALOGY, by Mr. WARINGTON W. SMYTH, M.A., F.R.S. to be delivered at 3 P.M. on MONDAYS, TUESDAYS, THURSDAYS, and FRIDAYS, commencing February 11th. Fee for the Course, 2l.

THIRTY SIX LECTURES ON APPLIED MECHANICS, by Professor WILLIS, M.A., F.R.S., to be delivered on TUESDAYS, WEDNESDAYS, THURSDAYS, and FRIDAYS, at 12, commencing February 14th. Fee for the Course, 1l. 10s.

THIRTY SIX LECTURES ON GEOLOGY, by Professor RAMSAY, F.R.S., (assisted by Mr. A. GEIKIE, F.G.S.), to be delivered on MONDAYS, TUESDAYS, WEDNESDAYS, and THURSDAYS, at 2 P.M., commencing on February 11th. Fee for the Course, 1l. 10s.

Tickets and Prospectuses of the School may be had on application. TRENHAM REEKS, Registrar.

PROFESSOR OWEN, Superintendent of the Natural History Department, British Museum, will commence a COURSE of SIX LECTURES on FOSSIL REPTILIA, at the Museum of Practical Geology, Jermyn Street, on FRIDAY, February 8, at 3 o'clock; to be continued on each succeeding FRIDAY at the same hour. Tickets for the Course, price 5s., may be had at the Museum.

News of the Week.

THE elections to the Italian Parliament have taken place with perfect order and tranquillity both in Italy and Sicily, and the result has been to give a majority of more than three-fourths of the new Parliament to the Sardinian Government and the policy of Count CAVOUR. The city of Turin has elected Count CAVOUR, Signori MIGLIETTI and CASSINI; Naples has elected GARIBALDI and Baron POERIO; Florence has elected Baron RICASOLI, Signori PERUZZI and GINORI; Bologna has elected Count PEPOLI, Signori MINGHETTI, BERTI, and PICHAT; while other important cities have returned Generals CIALDINI, LA MARMORA and SIRTORI, Admiral PERSANO, Signori MALENCHINI, FABRIZI, RIBETTI, RATAZZI, and other satisfactory names. MAZZINI and the party of action have been everywhere left in a minority, Signor CABELLO having been defeated at Genoa, Dr. BERTANI at Milan, Signor GUERAZZI at Leghorn, Signor MORDINI at Lucca, Signor MONTANELLI at his native town of San Miniato, and Signor CRISPI at Palermo; while Signor BROFFERIO, who had been brought forward in at least 30 places, has been defeated in all. From Gaeta we learn that a flag of truce was sent on Sunday from the fortress to the fleet, and that the firing was afterwards suspended on both sides. It is said that KING FRANCIS II. had received a letter from the EMPEROR OF THE FRENCH counselling him to cease his resistance in order to save himself the humiliation of a capitulation. The officer bearing the flag of truce is supposed to have conveyed to Admiral PERSANO HIS MAJESTY's reply to the EMPEROR's letter. It was reported that the Ambassadors who remain at Gaeta with the KING had protested against the blockade, but we have at present no confirmation of the statement. In Central Italy the Sardinian troops have had three engagements with the Bourbon and Papal forces. After their defeat at Tagliacozzo, some of the Bourbon troops took shelter in the convent of Casamari in the Papal territory, followed by 1000 Sardinians, who attacked and dispersed them, and then set fire to the convent. The monks saved themselves by flight before the attack commenced. The Papal Zouaves subsequently attacked the Sardinian volunteers at Correse. Two Sardinians were killed and six wounded; while 50 were made prisoners and conveyed to Rome. On Monday last, 2000 Sardinians, with cavalry and artillery, attacked the reactionary troops at Canco. After an engagement which lasted seven hours, the Sardinians and Neapolitans evacuated the Papal territory.

Despatches from Hungary state that the Comitats continue to vote hostile addresses in answer to the EMPEROR's resolutions of the 16th ult. The PRINCE PRIMATE has addressed a circular to all the Comitats, counselling them to avoid precipitation, and not to alienate their Sovereign, who is, he says, "approaching with the branch of peace in his hand, animated with the best goodwill and the purest intentions."

Accounts from St. Petersburg informs us that the *corps d'armée* stationed in the provinces of Lithuania and Volhynia are to advance to the frontiers of the empire, and to be replaced by troops from the interior of Russia. Three *corps d'armée* have been placed on a war footing and are to be ready by the 1st March, one to march to the Pruth, another to the frontiers of Poland, and the third to any other destination which may be determined on.

A telegram from Constantinople, dated 20th ult., states that Prince LABANOFF, the Russian Ambassador, had remitted to the Porte a memorandum and further documents in reply to the report of KIBRISLI PASHA, on the state of the Christians in Turkey. These documents were accompanied by an energetic note demanding the convocation of a European Conference at Constantinople. The same telegram states that the Porte, having been called upon to sanction a prolongation of the French occupation of Syria, had replied that it must insist upon the execution of the Paris Convention.

The latest news from the United States informs us that the secession movement continued unchecked, and was considered likely to result in the establishment of three separate and independent confederations, composed respectively of the Gulf, the Border, and the Northern States. It was understood that the programme for the establishment of a Southern Confederacy was already perfected, and that the delegates from the Slave States would shortly meet at Milledgeville to elect a Provisional Government and a President, to provide for a local army, and to despatch Ministers to negotiate treaties with foreign Powers. Major ANDERSON had sent Lieutenant HALL to Washington for instructions, and South Carolina had despatched Colonel HAYNE on a mission to the Federal Government to demand the surrender of Fort Sumter. The latter had not officially presented his demand at the departure of the mail; but Lieutenant HALL had left Washington on his return to Charleston, and though the exact nature of his instructions had not transpired, it was understood that the Government had no intention of withdrawing the troops from the position they occupied, and that Major ANDERSON has been peremptorily directed to defend himself to the best of his ability if attacked.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family continue at Windsor Castle. In the evening of Thursday the 24th ult., the fourth dramatic performance this season took place in St. George's Hall, when Sir B. Lytton's play of Richelieu was performed in the presence of the Queen, Prince Consort, and the Royal family, the visitors at the Castle, and a large number of invited guests. On Friday morning the Queen and Prince Consort walked in the Home Park, and visited the Duchess of Kent at Frogmore. The Duchess of Cambridge, Princess Alice, and Princess Mary of Cambridge, drove out in an open carriage and four. The Lord Chancellor, the Marquis and Marchioness of Westminster, the Earl and Countess of Tankerville, the Right Hon. the Speaker, Vice-Admiral the Hon. Sir R. S. Dundas, and the Right Hon. B. and Mrs. Disraeli left the Castle. In the afternoon the Duchess of Cambridge visited the Duchess of Kent at Frogmore. On Saturday morning the Queen, with Princess Alice, drove out in an open carriage and four. The Prince Consort went out shooting. The Duchess of Cambridge and Princess Mary, and Lord Waterpark left the Castle. On Sunday morning the Queen and Prince Consort, the Princesses Alice, Helena, and Louisa, Prince Arthur and Prince Leopold attended Divine service in the private chapel. The Dean of Windsor officiated, and administered the Sacrament. On Monday morning the Queen, accompanied by Princess Alice, rode out on horseback. The Prince Consort went out shooting. The Countess Cowley and Lady Feodore Wellesley, Lord and Lady Ebury, General von Bonin, Colonel Blumenthal, and Captain von Bonin, arrived on a visit. On Tuesday morning the Queen, accompanied by Princess Alice, walked in the grounds of the Castle. The Prince Consort went to the Wellington College. General von Bonin, Colonel Blumenthal, and Captain von Bonin, left the Castle. The Duke of Newcastle, the Earl of Shelburne, and Colonel Seymour, of the Scots Fusileer Guards, arrived on a visit. On Wednesday morning the Queen, with Princess Alice, walked in the grounds of the Castle. Her Majesty, accompanied by Princess Alice and Princess Helena, afterwards honoured Sir James and Lady Clark with a visit at Bagshot Park. The Prince Consort rode out on horseback, and joined her Majesty at Bagshot. The Duke of Newcastle, the Countess Cowley, Lady Feodore Wellesley, and Lord and Lady Ebury, left the Castle. The Duke of Cambridge, the Prince and Princess de Joinville, and Princess Francoise d'Orleans; the Earl and Countess Grey, Lord John Manners, Lord and Lady Castlerosse, and Colonel and Lady Emma Talbot, arrived on a visit. On Thursday morning the Queen, accompanied by Princess Helena, Princess de Joinville, and Princess Francoise d'Orleans, drove out in a carriage and four. The Prince Consort, accompanied by the Duke of Cambridge and Prince de Joinville, went out shooting.

THE PRINCE OF WALES on Thursday evening the 24th ult., entertained the Vice-Chancellor, the Master of Trinity, and other officers of the University at dinner at Madingley Hall. On Saturday his Royal Highness hunted with the Cambridgeshire fox-hounds at Childerley, and in the evening attended a concert given by the Fitzwilliam Amateur Musical Society on behalf of the Hullah Fund.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of Lord Palmerston in Downing Street. Another Council was held on Monday, another on Wednesday, and another yesterday.

CONVOCATION.—It is generally understood that Convocation will assemble for business on Wednesday next, and that the Sessions will be continuous for the two or three days immediately following, her Majesty's Ministers having advised the Queen to grant the request for a Royal license to discuss the propriety of repealing the 29th Canon.

PARLIAMENTARY MOVEMENTS.—The Queen will open Parliament in person on Tuesday next, and the *Gazette* of last evening contains the usual notices to Peeresses who intend to be present on the occasion. A circular has been addressed by Lord Palmerston to the Liberal members of the House of Commons stating that as matters of considerable importance will come under discussion at the meeting of Parliament on Tuesday, he will feel greatly obliged by their attendance in the House of Commons on that day.—The Address in reply to the Speech from the Throne, to be moved by Sir E. Colebrooke, will be seconded by Mr. Charles Paget, M.P. for Nottingham.—The Right Hon. Edward Ellice has announced his intention to retire from the representation of Coventry at the next general election on account of ill health and advanced age.—Mr. Salt has announced his intention to resign his seat for Bradford on the reassembling of Parliament on account of ill health.—Mr. P. A. Taylor has announced himself a candidate for Leicester in the Radical interest in opposition to Mr. Heygate and Mr. Harris.—There is a vacancy for the county of Cork, caused by the elevation of Mr. Deasy, the Attorney-General for Ireland, to the Bench. Mr. Thomas St. John Grant, of Kilmurry, is mentioned as a candidate for the vacant seat.

THE VOLUNTEER MOVEMENT.—The Government have given notice of their intention to supply all volunteer corps with rifles from the Government stores, and to exchange those which individual members may have provided for themselves without regard to the uniformity of the weapon. They have also intimated to commanders of Corps that, with a view of promoting as much as possible a knowledge of the rifle among all classes of Volunteers, they will be prepared, after the 1st of April, 1861, to sanction the gratuitous issue of rifle ammunition to Volunteer Corps. It is not intended that this grant should be in addition to the quantity already allowed to be purchased by corps, but that the difference between the proportion issued gratis and the quantity which has hitherto been allowed to rifle corps may be continued to be issued to them at cost price.—The *Gazette* of Friday contains a notice of the appointment of General Lord Clyde as Honorary Colonel of the London Scottish.—On Saturday, the prizes won by the members of the Post Office companies of the Civil Service Rifles at their late contest, were distributed to the winners by Lord Stanley of Alderley, in the Newspaper Room of the General Post Office.—A county meeting, convened by the Earl of Verulam, the Lord-Lieutenant, has been held in the Shire Hall, Hertford, for the purpose of considering the best means of rendering the Volunteer Rifle Movement efficient and permanent. The Earl of Verulam presided, and there were also present Earl Brownlow, Sir Minto Farquhar, M.P.; Mr. Abel Smith, M.P.; Mr. James Bentley (the High Sheriff); the Hon. and Rev. R. G. Hastings, Mr. Dimsdale, Mr. Wilshere, Mr. W. R. Baker, and many other influential gentlemen connected with the county. It was unanimously resolved that the unavoidable contingent expenses of the Volunteer Corps should not fall upon the commanding officers, or depend upon the liberality of any individual, and that those gentlemen in the county of Hertford who are favourable to the Volunteer Movement be requested to give their names as annual subscribers to a general fund to be raised for that purpose.—A numerous and influential meeting was held in the

Shire Hall, Shrewsbury, on Saturday, to consider the advisability of establishing a rifle association for the county of Shropshire. Viscount Hill, Lord-Lieutenant of the county, presided, and the meeting was addressed by Viscount Newport, Mr. J. R. Ormsby Gore, M.P.; Mr. Slaney, M.P.; Sir V. R. Corbett, Bart.; Mr. Botfield, M.P.; and other gentlemen. Resolutions were unanimously adopted for establishing an association to assist in giving permanence to the volunteer corps, and to promote rifle shooting in the county. The rules for the government of the association were approved of, and a committee was appointed to carry them into effect.

Foreign.

FRANCE.—The Emperor Napoleon will open the French Legislative Session of 1861 in person, on Monday next, in the Grand Salle des Etats at the Louvre. The *Moniteur* announces that the Committee for examining the Sonatus-Consultum on the publication of accounts of the sittings has decided that these accounts must consist either in a full reproduction of the debates or in an account of the sittings drawn up under the authority of the President of the Senate. The *Moniteur* also publishes the following letter, addressed by the Minister of the Interior to the Councillor of State charged with the general superintendence of the press:—

"Monsieur le Conseiller d'Etat,—I have just read in a weekly paper, *Le Courrier du Dimanche*, an article which is an insult to our institutions. Up to the present moment, convinced that the liberty to discuss the acts of the authorities is as useful to the Government as to the public, and strengthened in that conviction by the attitude of the press during the last two months, I did everything in my power, as you are aware, conformably to the principles laid down in my circular of the 7th of December, to remove the obstacles which might practically tend to restrict that liberty. But I should be culpable towards the State to suffer for one moment that the principle of the Government should be discussed, and, what is more, insulted. I therefore request you at once to send an *avertissement* to the journal in question. I am informed, moreover, that the writer of the article, M. Gregory Ganesco, is not a Frenchman. I am surprised that a foreigner should presume to insult the institutions of our country, and, consequently, I have ordered the Prefect of Police to expel him from France, in virtue of the seventh article of the law of the 11th of December, 1849.—I am, &c., F. DE PERSIGNY."

The *Patrie* says that it is not true that the French Government has encouraged Denmark to resist the demands of Germany; or that France is organising a squadron to be sent to the Baltic. It also contradicts the report that the French troops are preparing to leave Rome. The *Moniteur* contains a decree ordering a medal to be struck in commemoration of the expedition to China, to be bestowed on all those who have taken part in the expedition. A regular service is about to be established between France and China by way of Egypt. The boats are to start from Marseilles, Suez, and Shanghai, and will stop at Saigon, the head-quarters of the French in the kingdom of Anam. It is asserted that the Emperor has resolved to construct with all despatch 10 iron-cased frigates of the class of La Gloire. The *Siècle* contains an article, headed "France without the Pope," in reference to the pamphlet of the same name, which has excited some attention as showing that the subject of an independent National Church is not likely to be let drop. The following is a summary of the article:—

"What would have been the history of France had she always been possessed of an independent church, and freed from connection with Rome? Had such been the position of France, there would not have taken place either the persecution of the Albigenses or of the Protestants at a later period. There would have been no St. Bartholomew, no revocation of the Edict of Nantes, and in our own day, no Ultramontanism. France, too, has always had the Popes for ungrateful enemies. They have been hostile to Louis XII., to Henry IV., to Louis XIV., and to Napoleon. With an independent Church there would be a clergy educated, as in Southern Germany, at the public schools, where they would imbibe the popular feeling and spirit, and not be exclusively indoctrinated, as they are now, with Ultramontane maxims."

The reception of the Rev. Père Lacordaire at the French Academy took place on the 24th ult. in the presence of the Empress, Princess Clotilde, and a large number of distinguished persons. M. Guizot replied to the speech of the new member, which by a strange coincidence at the present crisis in the United States was in praise of Democracy in America, the subject of the well known work of his predecessor, M. de Tocqueville. —Mr. Cobden has returned from Algiers. After having an audience of the Emperor he will proceed without delay to England.—General de Lamoricière has declined a sword of honour which the Catholics of Brittany proposed to present to him on the ground that such a distinction is only given to a General for a battle gained, for a fortress captured under remarkable circumstances, or for having defended a fortress beyond the period assigned for its resistance by competent judges. "Now," he says, "it is too well known that I have done nothing of this kind. The provinces which I defended were invaded, the towns captured, the war *matériel* lost, and the entire army led into captivity; and I cannot forget that a General who has solely saved the honour of his flag does not deserve, and cannot receive, any reward."—M. Marc Caussidière, Prefect of Police in the first half of the year 1848, died in Paris a few days since, and was buried on Monday in the Cemetery of Montmartre. —The Paterson-Bonaparte case was opened on Friday by M. Berryer, who stated the case for Mrs. Paterson in a very eloquent speech, which occupied four hours and a half in the delivery, but contained few facts beyond those which have already been published. M. Allou then replied for Prince Napoleon, and produced a great impression by the line of defence he took:—

He said before the marriage the French *Chargé d'Affaires* at Washington had protested against it; he had shown Prince Jerome that he was no longer under the code of 1792, and that he could not marry under 25 without his mother's consent. The Patersons, moreover, were fully aware of the possibility of the marriage being annulled. They were so determined on the union that it was reported that Miss Paterson had replied to the objections that were raised—"Let me be his wife but for one hour, and that will be sufficient." A clause, in fact, was inserted in the marriage contract providing for the case of the marriage being annulled by the French laws. As for the legal delay having expired before an objection was raised, he would show it to be unfounded. The law stated that the parents must object within a twelvemonth after receiving notice of the celebration of the marriage. In those days communications between Europe and America were not so rapid as at present, and two months was not an exaggerated allowance of time, considering the distance between France and the States and the difficulty of the communications. M. Allou then proceeded to show that the dissolution of the marriage was perfectly legal. In the course of his speech he startled the Legitimists who crowded the court by saying that, following out the claims of the descendant of the Paterson marriage, the Count de Chambord, the Bourbon heir to the throne of France, was neither a Frenchman nor legitimate. He said that three years after Prince Jerome's marriage at Baltimore, the Duke de Berri, then a refugee in England, married according to the English law, and also at the French Roman Catholic Chapel in London, a Miss Brown, with the consent of Louis XVIII., lived for 10 years with her at Camberwell, and had by her two daughters; but after the restoration the English wife was discarded, and, during her lifetime, he married Princess Caroline of Naples, by whom he had issue the Count de Chambord, the present "legitimate" heir to the French throne. These facts he said were recorded in the 'Encyclopédie des Gens du Monde,' the 'Nouvelle Biographie' of Didot, and the 'Histoire de la Restauration' of Lamartine. At the close of his address the case was adjourned for a week.

SPAIN.—The Ministers have officially announced to the Cortes the pregnancy of the Queen, and on the 25th ult. her Majesty went in state to the Church of Atocha, to return thanks for "the new favour accorded to the Royal family," and afterwards held at the Palace a reception for kissing hands. Some of the journals assert that the Carlists intend to proclaim the eldest son of Don Juan (still of tender years) lawful King of Spain, but Don Juan is said to have decided on relinquishing his pretensions to Royal rights, reserving only the eventuality of his being elected by universal suffrage. The official journal states that the report of the Queen having sent money to Gaeta is totally unfounded. The Spanish Minister, however, will stay with King Francis II. as long as he remains on Neapolitan territory. It also states that Tetuan will be occupied by Spanish troops until the entire execution of the treaty by the Moors. The Ministry has announced that, before liquidating the claim of France, it will give an account to the Cortes. Some of the journals attack the Government for having, on the prayer of the English Consul, granted a piece of ground for a Protestant cemetery at Bilboa.

DENMARK.—The Minister of Finance has authorized the Ministers of War and Marine to apply during the current year a portion of the funds voted for their departments on account of the next financial year. A Ministerial ordinance has been addressed to all the functionaries whose duties are in any way connected with the calling out of the soldiers for the army, ordering them to take such steps as will enable them to execute as speedily as possible the orders for the military convocation already proclaimed, or for any other which may yet be made. The men and horses belonging to the Dragoon Regiments stationed at Itzehoe, as well as two batteries, have been called out, and the inspection of the whole war *matériel* will be immediately proceeded with. It is reported at Hamburg that the great Powers have urgently requested Denmark to grant concessions to Schleswig-Holstein, and have hinted that they would by no means recognise any blockade of the German coasts which might be declared by Denmark in consequence of Federal execution being despatched to Holstein. The Danish Diet on the 28th ult. sanctioned the Government contract, from the 18th December, 1860, with Sir M. Peto, relative to the railway through Finland, the east coast of Jutland, from Aalborg to the South Schleswig Railway, and from Aarhuus towards the west coast.

PRUSSIA.—General La Marmora has arrived at Berlin on a mission from the King of Sardinia to congratulate his Majesty on his accession, and has met with a distinguished reception from the King and Royal family. The report that France had demanded explanations on account of the speeches delivered by the King since his accession to the throne is denied in Ministerial and Diplomatic quarters. In the sitting of the Chamber of Deputies on Wednesday the proposed address in reply to the speech of the King was read. It expresses the satisfaction of the Chamber at the proposed commercial treaty between France and the Zollverein, whereby, it says, among other advantages, the cheering prospect is opened of two great nations finding a better opportunity to compete for the prize in works of peace. It expresses a hope that, by the energetic employment of all proper means, the Government may succeed in re-establishing the Constitutional state of things in Electoral Hesse. It acknowledges it to be a national duty of Prussia to bring about, in common with the other German Federal States, a satisfactory solution of the question of the duchies of Schleswig and Holstein, and considers it certain that, in case of Federal execution in Holstein, the rights of Germany in reference to Schleswig will be reserved. The King sent his reply to the address of [illegible] Chamber on Wednesday. The following [illegible] from this document:—

"I have openly and distinctly explained the [illegible] my Government on assuming the Regency, and [illegible] what I wish to accomplish. I will not break [illegible] but I intend, when my convictions urge it upon [illegible] improvements in the institutions of the country [illegible] of glorious memory did in 1808, and as my [illegible] also induced to do by the events in his epoch. I have [illegible] before me the limit to which I can go, and I will [illegible] the course upon which I have decided. We [illegible] from one another that we are perhaps approaching [illegible] times. In view of this probability, everything [illegible] the country being, through its representatives, [illegible] I hope, I desire, and I expect this. It is thus [illegible] shall be strong both at home and abroad, and [illegible] the future with confidence."

AUSTRIA.—According to present arrangements [illegible] Empress of Austria, whose health has [illegible] improved, will leave Madeira about the middle [illegible] April, and reach Vienna in May.—The Austrian official organs deny the statement of the *Indépendance* [illegible] that Prince Metternich had verbally [illegible] Thouvenel that an attack by Garibaldi [illegible] part of the Austrian territory will be considered [illegible] Austria as a *casus belli*; and that M. Thouvenel['s] reply observed that if in the eventuality [illegible] Austria employs Federal contingents France [illegible] consider that act a violation of the principle [illegible] intervention. They also give a positive [illegible] statement that the National representation is [illegible] posed in the non-Hungarian provinces by [illegible] tions, and say:—"The members of the Council [illegible] Empire are to be elected from the Diets."

HUNGARY.—Placards were posted up at [illegible] Wednesday ordering the return of all men [illegible] to the military reserve by the 10th of February [illegible] latest. Those who may not have appeared [illegible] will be treated as deserters.—The Comitat [illegible] weissenburg has voted an address in answer [illegible] Emperor's resolutions of the 16th ult., [illegible] demanding the restitution of the property [illegible] Batthyani, which has, it says, been illegally [illegible] fiscated, and also demanding the recall of [illegible] Count Batthyani, who are abroad as [illegible] The Comitat of Samogy, in its address, expresses [illegible] that permission to return will be granted to the [illegible] gees, and declares that the Comitat will neither [illegible] vent nor support the levying of taxes, and will [illegible] from making any change in the judicial administration and from offering any resistance which may cause [illegible] employment of material force. The Comitat of [illegible] demands that the abdication of the late King [illegible] nand should be communicated to Hungary before [illegible] coronation of Francis Joseph as King of Hungary [illegible] decided upon, and declares that the King must reside in Hungary. The General Assembly [illegible] Warasdin has unanimously resolved upon the [illegible] tion of Croatia, and the restitution of the [illegible] Hungary. The Prince Primate has addressed [illegible] circular to all the Comitats, counselling them to [illegible] precipitation. The Primate says that over-haste [illegible] the forerunner of anarchy. He urges them [illegible] patience for a few months longer, and not [illegible] Sovereign, who is approaching with the [illegible] peace in his hand, animated with the best [illegible] the purest intentions.—The inhabitants of the [illegible] have protested against the incorporation of that [illegible] with Hungary in an arbitrary manner. They demand [illegible] convocation of a Servian National Assembly [illegible] should meet at the same time as the Hungarian [illegible]

VENETIA.—The *Patrie* and the *Pays* affirm [illegible] Emperor of Austria is about to confer on [illegible] constitution which will preserve to that [illegible] entire autonomy. The government of the [illegible] be left to the Italians, and Venice will be the [illegible]

ITALY.—The elections to the Italian Parliament [illegible] taken place with perfect order and tranquillity [illegible] have secured a large majority to the Government [illegible] in Northern and Southern Italy, the party of [illegible] having been completely beaten. Count [illegible] Signori Miglietti and Cassini have been [illegible] Turin, Garibaldi and Poerio at Naples, Baron [illegible] and Signori Peruzzi and Ginori at Florence, [illegible] Minghetti, Pepoli, Berti, and Pichat at [illegible] Among the other deputies elected in the [illegible] General Cialdini, Admiral Persano, General [illegible] General della Marmora, Signori Malenchini [illegible] Ribetti, Ratazzi, Farina, Amari, Torrearsa [illegible] and other satisfactory names. Signor [illegible] been defeated at Genoa, Dr. Bertani at [illegible] Guerazzi at Leghorn, Mordini at Lucca, Signor [illegible] tanelli at San Miniato, Signor Brofferio at [illegible] places, and Crispi at Palermo. The returns [illegible] kingdom of Naples show that three-fourths of the [illegible] are favourable to the Government, while those [illegible] Sicily show that Messina, Syracuse, and Catania [illegible] returned leaders of the Moderate party.—Accounts [illegible] Turin state that Signor Jacini, Minister of [illegible] Works, has tendered his resignation. A report [illegible] current that Garibaldi had left the island of [illegible] and gone to Hungary, but no confirmation of the [illegible] ment had been received.—From Gaeta we learn [illegible] the Ambassadors of the Powers remaining at [illegible] have protested against the blockade of that place [illegible] have protested against the blockade of that place [illegible]

Two Sardinian gun-boats were disabled, and obliged to return to Genoa with a frigate considerably damaged, and the whole fleet on the 23d found it necessary to withdraw to repair damages. On the 24th the bombardment was continued with prodigious effect from the batteries on the land side. During the morning a powder magazine exploded in the Sardinian camp, killing 20 persons. On Friday and Saturday the bombardment continued. On Sunday a flag of truce was sent from Gaeta to the fleet. An Italian steamer immediately proceeded to the fortress, and the firing was afterwards suspended on both sides. It is said that a French despatch boat had brought a letter to General Cialdini, containing a letter from the Emperor of the French for King Francis II., counselling the King to cease his resistance, in order to save himself the humiliation of a capitulation. The letter conveyed under the flag of truce to Admiral Persano was supposed to have contained a reply to the Emperor's letter. Deserters from the Bourbon army speak of a project to surrender Gaeta. The fire of the Cavalli guns is said to have been marvellous. Gaeta has suffered immensely from the bombardment, which has caused great devastation both in the town and fortress. King Francis II. has issued another appeal to the Sovereigns of Europe to come to his relief and save him from the perils by which he is now environed, owing to the withdrawal of the French fleet. He says:—

"It is not to be believed that the Sovereigns of Europe will any longer remain impassable at the spectacle of a King despoiled of his states by the most iniquitous aggressions, a prey to all the horrors of a long bombardment, and he hopes that in the unequal struggle which is about to continue the Powers of Europe will declare yes or no whether they recognise the blockade by the squadron now in the power of Piedmont. And if this blockade be not recognised his Majesty has, at least, the confidence that a collective summons will be sent to the King of Sardinia to guarantee his liberty if the hazards of a desperate siege should respect his life, and to secure against outrage the person of his young Queen, who, with a magnanimity worthy of her heart, and with an insensibility to all personal danger, has resisted the most continuous entreaties to devote herself to the care of the wounded in the hospitals."

The city of Naples is more tranquil. A treasonable correspondence of high importance, which had been entertained with Gaeta, has been discovered. The police have prohibited political demonstrations. Orders have been given for the trial of some Neapolitan naval officers before a Court-martial for having refused to take part in the siege of Gaeta. One thousand Sardinians have attacked the convent of Casamari, in the Papal States, where reactionary troops which were driven from Tagliacozzo had taken refuge. They dispersed the reactionary bands, set fire to the convent on the night of the 22nd ult., and afterwards re-entered the Neapolitan territory. The monks saved themselves by flight before the commencement of the attack. The district round Chieti has been tranquillised, but fighting continues in other parts of the Apennines, and several villages near Ascoli have been destroyed. During the night of the 25th ult. the Pontifical Zouaves of Monte Rotondo attacked a small body of Sardinian Volunteers, who were sleeping in the solitary osteria at Correse. Two Sardinians were killed and six wounded; 30 were made prisoners and were conveyed on the next day to Rome. The Piedmontese at Correse have been since reinforced. General Goyon has since addressed a despatch to the Intendant of Rieti, declaring that he was not aware of the movement of the Papal troops towards the frontiers at Correse, and that the Government of the Pope had given orders for their recall. On Monday last 2000 Sardinians, with cavalry and artillery, attacked the reactionary troops at Canco. The fight lasted seven hours. The Piedmontese and Neapolitans afterwards evacuated the Papal territory. The Sardinians are now threatening the province of Frosinone. The reactionary bands on the frontiers are in consequence greatly discouraged, and are being pursued, betrayed, and left entirely destitute of money and arms.—Riotous demonstrations of a most serious character have taken place in the Apollo Theatre at Rome, and the performance of "Il Trovatore" has been prohibited. Some students have been expelled from the university for having distributed tricoloured cockades.—The *Official Gazette* of Turin publishes the text of the convention concluded between Great Britain and Sardinia for the protection of literary property. It also publishes a royal decree appointing a commission to inquire into the state of the marshy districts of Tuscany and Sardinia, and to propose measures for improving their sanitary condition.

SICILY.—M. Cesare Valerio, an Italian engineer, has conceived the design of throwing a bridge across the Straits of Messina, and the Government has appointed a commission to examine the plans. The site proposed is between Reggio and Messina, and the bridge is to be supported on piers high enough to allow vessels to pass under.

RUSSIA.—The *corps d'armée* stationed in the provinces of Lithuania and Volhynia have been ordered to advance to the frontiers of the empire, and will be replaced by troops from the interior of Russia. The soldiers on furlough have already been recalled, and the formation of three *corps d'armée* on a war footing has been ordered by the 1st of March—one to march to the Pruth, the second to the frontiers of Poland, and the third to any other destination that may be required.—Prince Orloff, President of the Ministry and the Council of the Empire, has tendered his resignation on account of ill health. He is temporarily replaced in his post of President of the Council of the Empire by M. de Bludoff. It is asserted that the Czar has transmitted orders to the Russian Ambassador at Rome to return immediately to Gaeta.—The negotiations between the Bank of St. Petersburg and the Bank of France in reference to the exchange of gold for silver have failed. The Imperial Bank will, from the 6th to the 11th inst., receive subscriptions to the new loan of 12,000,000 roubles, in metalliques issued at par, and bearing 4 per cent. interest. It is asserted that the Grand Russian Railway Company is about to contract a loan abroad of 25,000,000 roubles in bonds at 4 per cent. The price at which these bonds are to be issued is not yet known.

TURKEY.—The Paris papers publish a telegram from Constantinople, dated the 20th ult., stating that Prince Labanoff had remitted to the Porte a memorandum and further documents in reply to the report of Kibrisli Pasha. These documents were accompanied by an energetic note demanding the convocation of an European conference at Constantinople. The same telegram states that the Porte, having been called upon to sanction a prolongation of the French occupation of Syria, had replied that she must insist upon the execution of the Paris Convention. Vely Pasha has been appointed Ambassador at Paris, in the room of Ahmed Vefyk Effendi, who has displeased the French Government by his strong opposition to the French occupation of Syria.

SYRIA.—Accounts from Alexandria state that a fresh massacre of Christians by Druses has been perpetrated. It appears that while the inhabitants of a village on Mount Lebanon were attending service in a church a band of Druses burst into the edifice and massacred them. On the receipt of the news Fuad Pasha immediately despatched a body of troops to the place, who surrounded the village and took 950 of the Druses prisoners, and they are said to be now under trial at Beyrout.

INDIA.—The following additional details are gathered from the advices received by the Calcutta and China mail:—

Calcutta.—A monster meeting was held at Calcutta on the 21st, to protest against the grant of 520,000*l.* to the descendants of Tippoo Saib. Fully one-half of those present were natives, a fact alluded to by several of the native speakers as a pledge of reunion between themselves and their European brethren, and a termination of the antagonism which has existed since the mutiny. The Europeans assented to the sentiment by loud cheers. The meeting adopted a petition to parliament praying for publicity of accounts, restraint upon the Secretary of State for India with regard to spending Indian funds, the opening of the Legislative Council, &c. The Government has published despatches of Lord Canning and Sir Charles Wood, in which the right of adoption on failure of natural heirs is extended to every native chief in India, Hindoo and Mahomedan, above the rank of Jagheerdar. The aristocracy and landowners of India will receive this charter as the greatest boon that was ever announced by a governing Power. It will identify their interests with English interests, and they will henceforth hold their estates on the sole tenure of fidelity to the British Crown.

Bombay.—Great efforts are making by the Military Finance Commission to effect reductions in the expenditure. In Madras and Bombay their plans are already working.

Madras.—Sir Hope Grant, on his return from China, will succeed Sir Patrick Grant as Commander-in-Chief at Madras.

Sikkim.—The first batch of the reinforcements destined to reoccupy Sikkim has arrived at Darjeeling. The whole force will consist of 1800 men, from Her Majesty's 6th Royals, Her Majesty's 19th, 73d Native Infantry, 3d Sikh Infantry, Bhagulpore Hill Rangers, with six mountain train guns, and will be commanded by Lieut.-Colonel Gowler, of Her Majesty's 73d Foot. It is certain that the territory from which Dr. Campbell was driven will be reoccupied, and perhaps retained. It is hoped also that the field-piece and the standard which the Doctor lost on his retreat will be recaptured.

UNITED STATES.—The programme for the establishment of a Southern Confederacy is understood to be already perfected. The secession of Georgia was expected daily, and it was understood that the delegates from South Carolina, Alabama, Florida, Mississippi, and Georgia would repair to Milledgeville to institute a Provisional Government, and elect a President and Vice-President *pro tempore*, besides providing for a Federal army and other defensive measures; and that Ministers would at once be despatched to foreign Powers to negotiate treaties. Armed bodies of Florida and Alabama troops had seized the Pensacola Navy-yard, which contained a considerable quantity of warlike stores. The Federal steamer Fulton was also captured. The Crusader and the Wyandotte only escaped by getting up steam and moving off out of the way. The Star of the West, which was compelled to retire from Charleston without landing the troops, has since retrned to New York with the troops, and with her bows damaged by a shot. The South Carolinian Secretaries of State and of War had visited Fort Sumter under a flag of truce, and remained two hours. Mr. Gourdin, a member of the South Carolina Convention, went to Fort Sumter the next morning, and held a private parley with Major Anderson. All kinds of rumours prevailed as to the cause of these visits. In some quarters it was said that disaffection existed among Major Anderson's men, and in others that they were on short allowance, that a surrender of the fort was contemplated, and that it would be evacuated. It was believed that negotiations were going on for a peaceful surrender of the fort, and for the cessation of a warlike attitude. Colonel Hayne, on the part of South Carolina, and Lieut. Hall, on the part of Major Anderson, had been sent to Washington, the former with proposals, the latter to obtain further instructions. Washington despatches of the 17th state that Lieut. Hall had started on his return to Fort Sumter. The exact nature of the instructions which he carried with him were, of course, not known, but it was ascertained with sufficient certainty that the Government had no intention of withdrawing the troops from the position they occupied, and that Major Anderson was instructed peremptorily to defend himself to the best of his ability if attacked. Colonel Hayne, remained at Washington, and it was understood that he had considerably modified his views relative to his duties during his sojourn there. He had, it is stated, telegraphed to that effect to Governor Pickens, and had asked for further instructions. Meantime, he had called on President Buchanan, and presented verbally the *ultimatum* of South Carolina, which was understood to insist upon the withdrawal of the troops from Fort Sumter. The President requested Colonel Hayne to put his communication in writing, and said that it would then be considered. It was rumoured in Washington that the Cabinet had determined unanimously to receive hereafter no communications whatever from any one claiming to be a commissioner from South Carolina. The President had sent to the Senate his nomination of Mr. Holt as Secretary at War. After a very personal and acrimonious debate of four hours, the nomination was confirmed by a vote of 38 to 13. The other proceedings in Congress had been of little interest, consisting merely of a continued suggestion of compromises which had led to no results. Senator Seward made a grand conciliatory speech on the 12th inst., in the Senate, in which he said:—

"Mutual recrimination and congressional compromises are not likely to save the Union. The Constitution of the United States, and the laws made in pursuance thereto, are supreme. The laws of the land are paramount to all State legislation. The Union can only be dissolved by the voluntary consent of the people of the United States in the manner prescribed by the constitution. The Congress ought, if it can, to redress any real grievances of the offended States, and should then supply the President with the means necessary to maintain the authority of the Union." Mr. Seward then proceeded to point out the numerous advantages of the Union, while a dissolution, he said, "will be perpetual civil war." He concluded by saying that, when the angry excitement had subsided and calmness had resumed its sway, and not till then, would he advise that a convention of the people be assembled to consider what amendments in the organic national law ought to be made."

The representatives of the Southern States have received instructions to remain at Washington until the spring, "to prevent unfriendly legislation." Despatches for the Commander of the Gulf Squadron were sent on the 16th to Vera Cruz. It was rumoured that they embodied orders for the concentration of the vessels composing the squadron at the mouth of the Mississippi and at the harbour of Pensacola. An enthusiastic demonstration by working men, against coercing the Southern States, was held in New York on the 14th inst.

NOVA SCOTIA.—A destructive fire at Halifax has destroyed 50 of the principal establishments of the town, including the American Consulate, the Exchange Rooms, Odd Fellows' Hall, several newspaper offices, stores, &c. One man was killed and many were injured.

MEXICO.—Advices from Vera Cruz confirm the news of the defeat of Miramon by General Ortega and the occupation of the capital by the Constitutional army. Miramon and his partisans, before leaving the capital, possessed themselves of 150,000 dollars belonging to English bondholders which remained in the Treasury. It is said that Juarez, the Constitutional President, has intimated his intention to make reparation for all the outrages committed, and that the claims of Great Britain will be among the first to be settled.

Public Addresses.

MR. BRIGHT attended a meeting of his constituents at Birmingham on Tuesday, and delivered a long speech on the public expenditure of the country, on the army and navy, and on our relations with France. The following extract contains his remarks on the latter subject:—

"Since the conclusion of the Russian war he would put it to every man present whether the most strenuous exertions had not been made by a certain party in this country to create alarm with regard to France. Now, for some years past we had been in partnership with France—we had made two Chinese wars needlessly in partnership with France, and transactions had taken place in Italy in which the policy of England had been mainly pursued. England wanted a united Italy, and for purposes for which the French did not want it. The French Emperor had done nothing actively to prevent it, but had watched the course of events, and so far as he could understand his policy was prepared to consent to the consummation when it arrived. So far the Emperor's conduct towards this country had been friendly, conciliatory, and proper. He next alluded to the Treaty of Commerce and the abolition of the passport system, the advantages of which he pointed out, and asked if these were signs of war. Since the days when France and England waged perpetual war with each other, centuries ago, there had never been a monarch upon the throne of France who in the same period of time had done so much to draw the two nations together, and to put an end for ever to strife between them. He admitted that the French Government spent too much upon her military armaments, but it should be borne in mind that the Emperor knew he had not too many friends among the orthodox monarchs of Europe, that the English aristocracy, whose mouthpiece was *The Times*, did not like him or his family, and that we have in our navy 84,000 men and boys, being more than all the men and boys in the mercantile marine of France, and 50,000 more than were in the Royal Navy of France. He complained that our Government allowed the false statements made by the press to be repeated by public speakers, while they had not the honesty and the courage to contradict them; for example, they had encouraged the Volunteer movement, which some people called mania, and others patriotism. He would not

give it any harsh names, conceiving that many had joined the Volunteer force from motives of patriotism. That movement might be regarded in two ways—either they were in danger of some attack from abroad; or they intended to raise a cheap force and so diminish the extravagant expenditure on the regular army. As to any attack from abroad the Government knew that it was the merest chimera, but they looked to the Volunteer force to create a greater taste for military display, so that less pressure might be excited in favour of a reduction of the standing army. Having dwelt further upon the waste in the public expenditure he adverted to the Session about to commence. He asked,—Shall we have the same waste, the same fraud, the same extravagant estimates provided for and condemned by a great Chancellor of the Exchequer? Let him warn them that if the estimates were as large as those of last Session there was some power in this country which intended war. Let them not interfere in foreign quarrels, and nobody would interfere with them, least of all the Emperor of the French. The people of France wished for peace with Europe, and especially with England. He believed that if our own Government gave authority to Mr. Cobden to ascertain whether the Government of France would consent to an amicable arrangement by which the navies of the two countries should not pass their present bounds,—he believed that it would be received by the French Government with as cordial a feeling as it received the proposition to make that great treaty of commerce. Of course, the men who suspected the French Emperor would smile at this credulity. He believed the opinion to be a sound one, but he was sorry to say that, judging from the past, he believed that the greatest obstacles would be found on this side of the Channel to any such convention. The Emperor, of course, would be safer the more his people felt that they were rightly governed. He was sure the Crown of England would be more safe to descend in an unbroken line to a late generation in the same family the more the people of England felt there was great moderation and great justice; but there could be neither without great economy in the expenditure of the public resources. He might be charged with unfavourable feelings towards Royal families and to people in authority, but he dared to assert that the time would come when the people would discover that they had been unjustly treated, and possibly they might discover that there was no family and no combination of families connected with the Government in this country that was worth 70,000,000*l.* a year."

City Intelligence.

New India Loan.—Notice has been issued of a new India 5 per Cent. Loan of 3,000,000*l.* The tenders are to be received on Friday week. The *minimum* price at which tenders will be accepted will be fixed by the India Council on the morning of that day. It is understood that the raising of this loan is in consequence of the non-payment of sums into the Indian Treasury by the railway companies, and that but for the difficulty experienced by these undertakings in obtaining their requirements it would not have been brought out.

The Indian Income-Tax.—A notice has been issued from the Inland Revenue Office stating that the Attorney and Solicitor-General have given an opinion that the double income-tax on Indian securities cannot be enforced, and that the claim has accordingly been given up. The amounts already deducted will, of course, have to be refunded.

Red Sea Telegraph Company.—A report has been issued by this Company stating that a delay must occur in the payment of the guaranteed interest now due, in consequence of the law officers of the Crown having declared that, according to the technical wording of the contract, the Government are not under obligation to pay the interest unless the line is in strict working order.

Money Market, Friday.—British Funds: Consols closed at 91⅞ to 92 for Money, and 92 for the 7th February; Three per Cents. Reduced, 91½ to ¾; New Three per Cents., 91¾ to ⅞; India Five per Cent. Stock, 1859, 99½ to 99; Ditto Four per Cent. Debentures, 1858, 95¾; Ditto, 1859, 95¼; Ditto Bonds, 17*s.* dis.; Five per Cent. Enfaced Rupee Paper, 94; Exchequer Bills, 7*s.* dis.—Foreign: Brazilian Five per Cents.. 1839 and 1859, 98½; Buenos Ayres Six per Cents., for Acct., 93½; Mexican Three per Cents., for Acct., 23¾ to ½; Russian Four and a Half per Cents., 91⅛; Spanish Passive, 17⅝ to ⅜; Turkish Six per Cents., 1854, for Acct., 70½; Ditto, 1858, 56¾; Ditto for Acct., 56¾ to 57; Ditto Guaranteed Four per Cents., 100, ex div.; Venezuela Three per Cents., for Acct., 21.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,317,660	Government Debt	£11,016,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	9,500,297
		Silver Bullion	1,282,363
	£25,317,660		£25,317,660

BANKING DEPARTMENT.

Proprietors Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£8,447,430
Rest	3,370,828	Other Securities	20,171,156
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	3,581,447	Notes	5,342,200
Other Deposits..	12,587,039	Gold and Silver Coin ..	774,956
Seven day and other bills	633,428		
	£34,725,742		£34,725,742

31st day of Jan., 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

Tuesday—Bankrupts—G. Abbott, Constitution Hill, Birmingham, Machinist—J. Cook, Walsall, Staffordshire, Tanner, Currier, and Leather Dealer—W. Fabian, Wall's End Wharf, Rosemary Branch Bridge, Hoxton, Coal Merchant—R. Farrall, Kidsgrove, Staffordshire, Grocer and Draper—P. Fenn, 13 and 14, Milk Street, City, Umbrella and Parasol Manufacturer—W. C. Foulkes, Birmingham, Draper and Tailor—R. G. Grimes, Queen's Arms, Public House, High Street, Poplar, and the Goat Public House, Golden Lane, Old Street, St. Luke's, Licensed Victualler—J. Groom, Wisbeach, St. Peter's, Cambridgeshire, Leather Dealer and Tanner—J. D. Hodges, Landport, Hampshire, Builder and Contractor—E. Jacobs, 65, Long Lane, City, Stationer and General Dealer—E. Kitt, Bent Arms, Lindfield, Sussex, Publican—T. Lenham, Wellington Chambers, Southwark, 21, High Street, Southwark, and Dublin, Butter and Provision Merchant—F. Marriage and W. Marriage, Barnes Mill, Springfield, Essex, Millers—J. B. [illegible], Norman's Buildings, St. Luke's, Dyer and [illegible] Lane, City, Packer—J. Richardson, 9, Victoria Road, Pimlico, Upholsterer—J. Vingoe, 9a, Westbourne Park,

Bayswater, Builder—T. Watts, Bristol, Sail and Ship's Colours Maker—R. Wilson, 25, Poultry, City, Commission Agent and General Merchant—S. Young, Racket Court Inn, Birmingham, Licensed Victualler.

Bankruptcies Annulled—J. Fell, 50, New Compton Street, Soho, Currier—F. Sage and P. Panter, 11, Hatton Garden, and 33a, Liquorpond Street, Builders and Shop Fitters.

Friday—Bankrupts—A Barker, Bilston, Staffordshire, Japanner—J. Brooksbank, King Street, Clerkenwell, Brush Board Cutter—J. Bulford, Hamworthy, Poole, Grocer—E. F. Cook and R. F Woodward, Birmingham, Iron Stampers—J. R. Davidson, Eden Cottage, near Carlisle, Builder, and W. Oughterson, Bush-on-Lyne, near Longtown, Builder—S. Dodd and J. C. Peeling, Woburn, Booksellers—I. Isaacs, Bristol, Jeweller—A. Iveson, Lombard Street, City, Timber Merchant—A. Jauncy, Forest Hill, Kent, Plumber—G. Kelland, jun., Lancaster, Grocer—J. Scott, Stonehouse, Devonshore, Draper—J. Stanton, Liverpool, China Dealer—W. R. Wagstaff, Fenchurch Street, Wharfinger—G. W. Ward, Worcester, Publican—W. Wilson, Birmingham, Paint Manufacturer.

Scotch Sequestrations—D Boyd and Co., Stationers, Glasgow—J. Carmichael, Dundee, deceased, Merchant—The Rev. J. A. M'Lennan Tomintoul, Banffshire—J. Thomson, Kirkintilloch, Dumbartonshire, Manufacturer—J. Wardrop, Pollockshaws, Renfrewshire, Calico Printers.

Metropolis and its Vicinity.

Decay of the Houses of Parliament.—A special general meeting of the Royal Institute of British Architects was held on Monday for the purpose of discussing the various processes for the preservation of stone, and especially in reference to the Houses of Parliament. Mr. Tite in opening the discussion said that nothing could be of more importance to them as a profession than to endeavour to discover the causes of the failure of the principal material employed in the construction of the Palace at Westminster, and to ascertain what steps ought to be taken to arrest the decay which, at so early a period, had manifested itself in a manner so marked as to render it an object of European notice and of national regret. The Palace of Westminster was a building of vast extent, newly finished, built without reference to cost, and intended to last for an indefinite period of time, and to defy the usual causes of accident in ordinary edifices. It was a building of which we were justly proud as a nation, from the combination which it presented of artistic learning and science with the greatest skill of the best of English artificers; and yet, when the sound of the finishing strokes of the axe and the hammer had hardly ceased, it was found externally in a state of lamentable decay—a decay so extensive that he thought the professional experience of any architect could not afford any parallel whatever. It was true they had seen, and were constantly seeing, in this and other countries, the necessity for restorations various in extent and character, and many of them due to the same causes as those they were now about to consider. He might quote the cases of Notre Dame and St. Denis, of Chartres and Rouen, and, in our own country, the familiar instances of Henry VII.'s Chapel and Redcliffe Church, Bristol; but those cases of decay were found after the lapse of centuries and not of years, and were due to causes perfectly intelligible, such as the use of Caen stone and Reigate stone in Henry VII.'s Chapel, and of the worst kinds of oolite in the church at Bristol. Not so with the Houses of Parliament. There science and caution had been exhausted. At the outset no probable foundation for the result which had followed was allowed to exist, and no expectation of failure could have been reasonably entertained. Such were the circumstances under which he had asked for the present meeting. He had no personal object to serve, no theory to maintain, no likings or dislikings of individuals to gratify. His sole object was to promote the discussion of a much vexed question in a candid and friendly spirit, and he was not without hopes they might arrive at some satisfactory result, seeing they must have among the ranks of their profession all the experience which existed on the subject, as well as the technical skill best able to appreciate any proposition which might be made for the amelioration of the great evil. He then gave a description of the various methods adopted in ancient and modern times for the preservation of stone. He said, with respect to the practice of the ancients, that all his experience of their buildings, and all his reading, would induce him to believe that they made no attempt to preserve the stone of which their edifices were composed, because no such attempt was necessary in their climate. It was true they decorated their buildings with colours, but that was for the sake of ornament. Their marbles required no protection, and none of the colours they used were in the slightest degree calculated to preserve their edifices from decay. Dioscorides mentioned, under the name of "zopissa," a pitch used by the Greeks for coating their vessels exposed to the action of the sea, and there were some remarks relating to the same substance in Pliny. It was clear, however, that zopissa was used exclusively for the protection of ships, and never for the preservation of stone. Vitruvius gave a detailed account of the process known by the name of encaustic, but encaustic was used for the preservation, not of stone, but of colours, and for giving a fine finish to the surface of statues. It would appear, however, from a letter published by Sir Henry Rawlinson that a mode of preserving stone from decay was known to the Assyrians, for in Mesopotamia he saw a huge rock the whole face of which was covered with inscriptions. Those inscriptions were coated over with what Sir Henry called a varnish, but what might be a silicate of lime artificially applied; and the sculpture, though executed 900 years before Christ, was in a perfect state of preservation, the varnish being even harder than the limestone rock beneath it. But, after all, the real question was—What were we to do in the present day? The stones commonly used in London were calcareous limestones, belonging to the group of oolites; but when the Palace of Westminster was [...] satisfied with being well, we desired [...] commissioners were appointed to discover [...] would last for ever. The commissioners [...] the country until at last, between [...] Yorkshire, they found a stone which [...] be indestructible. It was called dol[omite] [...] generally, magnesian limestone. [...] crystalline rock, and, when the crys[tallisation] [...] complete, imperishable. The pub[lic] [...] Jermyn Street was constructed of magnes[ian] [...] and it presented no symptoms of decay [...] nately, there was a bad selection of stones [...] of Parliament. The magnesia and lime [...] proper proportions, the crystallisation was [...] hence all the mischief which had taken [...] remedies had been suggested, which [...] three heads—the bituminous, the oleag[inous] [...] silicious. One fatal objection, he said, [...] of either pitchy or oily substances was [...] liable to decomposition, while the former [...] would soon become black. His leaning was [...] the process called silicated. Glass was [...] structible; it could be liquified; why [...] be found of applying it to the extern[al] [...] buildings like the Houses of Parliament [...] had been used with success in Berlin and [...] he saw no reason why it should not be [...] country. Mr. Ransome possessed a pate[nt] [...] a double decomposition, which he alleged [...] covered. There were some difficulties [...] mounted, but the process patented by Mr. [...] least showed the direction in which [...] be found. All that was wanted was [...] solution absorbed into the stone. After [...] his statement by several interesting [...] Mr. Tite concluded by suggesting that [...] should be referred to a committee of the [...] Mr. Burnell believed that all the mischief, [...] Houses of Parliament were concerned, had [...] the circumstance that while the stone [...] upon by the commissioners was crystallised [...] the stone actually used was an amorphous [...] could be no doubt that the decay was ca[used] [...] sulphate of ammonia in our London atmos[phere] [...] upon unstable carbonate of magnesia. The [...] Mr. Szerelmey had entirely failed, as might [...] the Speaker's Court, where the plaster, or [...] fallen in pieces from the walls. That of Mr. [...] was the best he had seen. He did not [...] to prejudge the case, and concurred in the [...] that the whole question, which was at present [...] in obscurity, should be referred to a comm[ittee] [...] architects and chemists.—The Right Hon. W. [...] M.P., Chief Commissioner of Works, said he [...] with great pleasure to the able and interesting [...] ment of Mr. Tite. He was anxious, [...] with the custody of the Palace of Westminster [...] secure all the aid which the science, [...] skill of the Institute could give him. The [...] Mr. Szerelmey was adopted upon the recomm[endation] [...] of Sir Charles Barry himself; but that [...] one that could confidently be applied to [...] the building. He was disposed, for his [...] await the suggestions of competent and scien[tific] [...] and he trusted that a committee of the ins[titute] [...] be appointed to go fully and carefully into [...] At present his impression was they would [...] they wanted in some application of [...] Water-glass had been used, not only [...] other places, but in protecting the frescoes [...] of Lords itself. Mr. Digby Wyatt, [...] meeting, said that the architects had done [...] power to suggest remedies, but it required [...] operation, he thought, to arrive at any [...] result. On the motion of Mr. G. G. Scott, [...] Mr. Godwin, a vote of thanks was given [...] for his interesting remarks, and the further [...] of the subject was adjourned until the [...] meeting of the Institute.

Meeting of the City Clergy.—A gener[al] [...] of the beneficed clergy of the City and [...] London was held on Friday, in the great [...] College, in compliance with a requisition [...] Fellows calling upon the President to [...] meeting to consider the best course to [...] reference to "the public profession of in[fidelity] [...] by ministers of the Church of England." [...] which was very numerously attended, was [...] by the Rev. J. V. Povah, M.A., rector of [...] Aldersgate, minor canon of St. Paul's, the [...] the current year. Before the commencement [...] business the Rev. T. J. Rowsell, rector [...] Margaret's Lothbury, protested against [...] "infidel" being applied to a body of minis[ters] [...] Church of England, and shortly afterwards [...] meeting, in company with one or [...] clergymen holding similar views. The [...] McCaul, prebendary of St. Paul's and [...] St. Magnus London Bridge, after pointing [...] dangerous tendency of the Essays and Re[views] [...] which certain clergymen of Oxford are [...] authors, moved an address to the Bishop [...] calling his Lordship's attention to the [...] to the necessity of some steps being adopted [...] rulers of the Church to stem the tide of [...] setting in, and which was all the more dan[gerous] [...] not proceeding from open enemies, but from [...]

... high spiritual and educational offices in connexion with the established church of the country. The Rev. Edward Auriol, rector of St. Dunstan's-in-the-West, seconded the motion, the Rev. William ..., vicar of St. Olave's, moved an amendment, ... from Dr. M'Caul's resolution in the entire ... of the charge of "infidelity" and of the term ... in any form, but equally condemning the ... Essays and Reviews. The amendment was carried ..., as was also a resolution requesting the ... to fix a day for receiving the clergy, with a view to the presentation of the address.

The Special Services at St. Paul's were resumed on Sunday evening at 7 o'clock and were attended by nearly 5000 persons, the bulk of whom assembled an hour and a half before the service began, while ... as many were unable to obtain admission. The sermon was preached by the Bishop of London.

Sir Benjamin Brodie underwent the operation for extraction of cataract from the right eye on Monday week and is proceeding favourably.

The Shipping Interest.—A deputation of the principal shipowners connected with the port of London had an interview with Lord John Russell, on Friday, to ascertain whether the Government purposed taking any steps upon the report of the committee appointed to inquire into the laws respecting reciprocity and belligerent rights. Having heard the special points urged by the deputation, his lordship stated that he could not of course give them an immediate reply on a question of so much importance, but he assured them that Her Majesty's Government would bestow upon it their most serious consideration.

New Street from Piccadilly to the Strand.—It is proposed to form a new street from the East End of Coventry Street through Princes Street and the small streets on the south side of Leicester Square into Orange Street and Hemmings Row, so as to form a direct line of communication between Piccadilly and King William Street, West Strand, widening Coventry Street to the uniform width of 70 feet by setting back the houses on the south side 20 feet, and carrying the street thence in the form of a crescent through Princes Street and Orange Street to the Strand.

Sale of Newspaper Property.—The copyright of *The Illustrated News of the World*, with the 146 steel plates of portraits, which have appeared simultaneously with the journal, were sold by public auction a few days since by order of the mortgagees. The property was divided into two lots. The first, the copyright of the journal, was put up at 500*l.*, and after a long competition was knocked down to Mr. Tallis at the price of 1370*l.* The second lot, the 146 steel plates of portraits, embracing some of the most eminent characters of the day, was put up at 150*l.*, and was bought by Mr. C. Furber for 328*l.* 10*s.*

Assessment of Government Establishments.—The long-pending question as to the payment of local rates for Government establishments has at last been settled by an agreement on the part of the Admiralty and the War Department to pay a fixed annual sum in lieu of rates. A sum of 2329*l.* has just been paid to the parish of Woolwich, 1750*l.* to the parish of Chatham, ...*l.* to Gillingham, and similar payments will also be made to the parishes of Deptford, Portsmouth, Devonport, Plymouth, and Pembroke.

The Record Office.—Mr. W. B. Turnbull has resigned the Calendarship of the Foreign State Papers, to which he was appointed by the Master of the Rolls in August, 1859. In resigning this office, Mr. Turnbull, who is a Roman Catholic, states that he has been for 18 months the object of a persecution involving his personal honour by three societies, the chief of which is the "Protestant Alliance," and he has therefore felt that no other course was open to him but to resign the appointment.

The City Meat Markets.—At the meeting of the City Commissioners of Sewers on Tuesday, Dr. Letheby, the medical officer, reported that during the week the officers had seized 3629 lbs., or nearly a ton and three quarters of meat in the City markets, as being diseased or otherwise unfit for human food. Dr. Abraham said that this diseased meat was sold to poor people at 1*d.* a pound, or 14 lb. for 1*s.*, and that the Court would be wanting in its duty to the public if it did not publish the names of the persons from whom the meat had been seized. A desultory discussion ensued, in which it appeared that the salesmen themselves had in many instances called the attention of the inspectors to the meat, and requested them to remove it, the persons who sent it from the country being really the guilty parties. It was ultimately resolved that in future the inspectors be directed to state the names of salesmen who call their attention to any diseased meat in their possession, and at the same time request them to give the names of the senders of such meat, with a view to a prosecution, with the understanding that if they refuse to do so they will be held personally responsible.

Depository for Wills of Living Persons.—By a recent regulation, sanctioned by the judge of the Court of Probate, the wills of living persons may be received by the district registrars of the 40 country district registries of the Court, for the purpose of being deposited for safe custody in the principal registry of Doctors' Commons, which is the sole depository yet appointed for the lodgment of such wills, under the 91st section of the Court of Probate Act. The will must be enclosed in a sealed envelope and delivered to one of the registrars of the Court, at the principal registry, or to a district registrar, either by the testator himself, or by some person specially authorised by him to deposit the same on his behalf. The will will not be delivered up to any person, but must remain in the registry until after the testator's death. The fees payable are, for depositing the will and receipt for same, 1*l.* 1*s.*; for drawing and entering minute of the registrar, 2*s.* 6*d.*; for filing each affidavit, 2*s.* 6*d.* Envelopes for wills, with the necessary forms, are to be had on application.

The Child Murder at Newington.—The adjourned inquest respecting the discovery of a female child shockingly mutilated in Trinity Churchyard, Newington, was resumed and concluded on Friday, when the jury returned a verdict of Wilful Murder against some person or persons unknown.

The Public Health.—The Registrar-General's weekly return states that notwithstanding the late mildness of the weather, the effects of the cold that preceded it are still legible in large characters in the registers of mortality. The number of deaths in London for the week that ended Saturday, Jan. 26, were 1783. The average number in the corresponding weeks of the 10 previous years 1851-60, corrected for increase of population, was 1330. The present return is therefore 453 above the average. During the week the births of 1034 boys and 944 girls—in all 1978 children—were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1749.

Provincial.

Birmingham.—A Conference was held in this town on the 23d and 24th ult. for the purpose of discussing the question of providing for the education of neglected and destitute children, and the duty of the Legislature and Government in reference to it. Sir John Pakington, M.P., presided, and the meeting was addressed by the Earl of Shrewsbury and Talbot, the Earl of Lichfield, Lord Lyttelton, Viscount Ingestre, M.P.; Mr. Spooner, M.P.; Mr. Scholefield, M.P.; Sir Baldwin Leighton, M.P.; Mr. R. Hanbury, M.P.; the Rev. Dr. Guthrie, the Rev. Dr. Miller, Archdeacon Hone, Mr. M. D. Hill, Recorder of Birmingham, Miss Carpenter, and others The following resolutions were unanimously adopted, and a committee appointed to carry them into effect:—

1. "That obedience to the laws of God and man is powerfully promoted by the diffusion of sound knowledge, and the training up of the young in the exercise of the great duties of life, wherefore it is incumbent on the state to ensure education to all children for whom their parents are through poverty or ignorance unable to provide it." 2. "That neglected and destitute children constitute a very large class of the community, yet that no educational aid is given for their education from the Parliamentary grant comparable to such as is given to such classes of schools as already receive Government assistance." 3. "That the experience of the last eighteen years has proved that this portion of the population is reached in many districts to a considerable extent, and can be effectually reached by ragged and industrial schools; but that schools of this class, which, to be good, involve much greater expenditure than ordinary schools of this class, cannot be permanently supported in the required efficiency, or extended to all districts requiring them by voluntary aid alone; and that it is therefore the duty of the State to give liberal financial aid to such schools, availing itself, as in the case of reformatories, of that voluntary effort which is an essential condition of our success."

Bristol.—The man who fell last week from the St. Vincent's Rocks has been identified as Mr. Blanning, a boot and shoemaker of this city. He had been ill and in a very low state for a fortnight before, but as there was no evidence to prove whether it was a case of suicide or an accident, the jury at the inquest returned an open verdict of "Died by a fall from St. Vincent's rocks."

Coventry.—The Queen, besides giving a liberal donation to the starving weavers and selecting various specimens of their skill, has just communicated to the Coventry trade the pattern of a Chinese ribbon found in the Summer Palace at Pekin, and has ordered some pieces to be woven in the distressed district for her own especial use. Lord Leigh has offered, through the Coventry School of Art, to give two medals—a gold one for the best fancy ribbon, in style, make, and harmony of colour; and a silver one for the best six designs for ribbons. Lady Leigh is about to give a prize for the best plain ribbon, having special reference to cheapness as well as quality.

Diss.—A mysterious case of poisoning has occurred in this town. A few days since Albert, the youngest son of Mr. R. Aldrich, a tradesman living in the town, was taken suddenly ill and died in a few hours, after suffering painful convulsions. Two other members of Mr. Aldrich's family were attacked in a similar manner, but recovered. The symptoms were at first those of bilious diarrhœa, followed by coma and convulsions, the pupils of the eyes very much dilated, and the thumbs curiously turned in. The boy died in the course of 24 hours after he was first attacked. A *post mortem* examination was made, when the body presented a perfectly healthy appearance, with the exception of a perforation in the stomach about the size of a shilling—such as might have been caused by the action of a strong corrosive poison, though the stomach did not present the appearances generally caused by the administration of arsenic or corrosive sublimate. At the inquest held by the deputy-coroner for Norfolk, the jury requested an adjournment in order that the stomach might undergo a proper analysis, but the deputy coroner said he did not feel it his duty to order an analysis. The jury then inquired the law on the subject, and, finding that the coroner had the option of acting as he pleased in the matter, they requested that a copy of the depositions should be forwarded to the Home Secretary. This course being also objected to by the deputy-coroner, the jury unanimously declined to return a verdict. The inquiry was eventually adjourned to enable the deputy-coroner to consult the coroner for the county upon the course to be pursued.

Liverpool.—The local papers report an unusual number of disasters to shipping belonging to this port. The ship Prince Consort, which left the Mersey for Melbourne on the 22d November with emigrants, after having been driven back to Southampton with serious damage, has again been obliged to put back to Queenstown with loss of all her topmasts and other injury. The passengers have therefore been 68 days since they originally shipped, and 13 days since repairing, tossing about in the Channel. The Prince Consort was fully manned, having an efficient British crew numbering 45 seamen.—The ship Queen of Martaban was totally lost near Akyab on her voyage from Moulmein to Calcutta. Eighteen of the crew were rescued by the ship Sardinia, of this port, after having been 13 days without food, and four out of six others, who had abandoned the ship on a raft, were picked up by the Inkerman. The sufferings of both parties had been extreme, and the body of one of those who died had been kept on the raft in reserve for food until they saw deliverance at hand.—The ship Lillydale, of this port, bound, with a very valuable cargo, for Bombay, took fire on Tuesday morning in the new harbour of Holyhead, and it was necessary to partly scuttle her before the fire could be subdued.—The screw steamer Empress Eugenie, of this port for London, foundered off Point Lynas on Friday evening. The crew and passengers, after being in the boats for two hours, were picked up by a steamer from Galloway, and landed at this port.—The ship Florence Graham, from the west coast of Africa to Liverpool, went ashore on the 24th ult., on Inch Bar, Dingle Bay, on the west coast of Ireland. The captain, mate, and 10 men were lost, and five saved.—The ship Telemaque, of 2000 tons, from Bombay, struck on a sand-bank in the Mersey, as she was entering the Albert Dock, on Saturday, and almost immediately went down. Her cargo has since been got out, and preparations are making for raising her, but it is feared that she has broken her back.

Norwich.—On Saturday James Bloomfield Rush, son of the murderer Rush, whose terrible deeds attracted such general interest 12 years since, was charged before the magistrates with breaking into the house of Mr. Abraham Cannell, of Cringleford, and stealing a quantity of children's dresses and miscellaneous articles of the value of 4*l.* The property was found in the house occupied by the prisoner at Wymondham, while a knife blade taken from his pocket when apprehended corresponded with impressions observed on some drawers which had been tampered with, though not broken open. Another chest had been opened and emptied of its contents, but in this case no knife marks could be detected. The prisoner, who reserved his defence, was committed for trial, but admitted to bail,—himself in 100*l.*, and two sureties in 50*l.* each.

Oxford.—In a convocation held on Tuesday, it was agreed to affix the University seal to an indenture for the foundation of a professorship, to be called "The Hope Professsorship of Zoology," which is to be endowed by the munificence of the Rev. F. W. Hope.

Plymouth.—The steamship Queen Victoria was floated from the rocks in Barn Pool on Monday afternoon, and placed on the beach at Cremhill, where she will be repaired.

Portsmouth.—The barque Victor Emmanuel, of London, with general cargo from Alexandria, went ashore at Cliff End, near Blackgang Chine, Chale Bay, Isle of Wight, on Wednesday evening, and by daylight on Thursday was a total wreck, with a loss of 15 lives out of her crew of 19. The Captain was lost after gaining the cliff. The boatswain and three men were saved.

Rochester.—In consequence of the official inquiry recently instituted by the mayor and magistrates relative to the great increase in the number of offences committed in this city by soldiers belonging to Chatham garrison, General Eyre has ordered that the pickets sent out nightly from the barracks at Chatham shall in future patrol the streets of both towns as far as Rochester Bridge, beyond which the troops are not allowed to pass. The garrison police are also to extend their operations so as to include Rochester, and are to co-operate with the police of the city. On Tuesday, two soldiers, named Peter Stephenson, 31st Regiment, and Richard Simcock, 73d Regiment, were examined and remanded by the mayor and magistrates at Rochester, on a charge of having wilfully set fire to a stack of wheat on the farm of Mr. John Rose Baker, near this city, whereby damage to the amount of 200*l.* was sustained.

Ryde.—The inquest on Captain Barton, of the yacht Zouave, who was killed by falling into the engine-room of the Emerald steamer, was resumed and concluded on Friday. A large number of witnesses were examined, whose evidence tended to one point—that the deceased was by no means sober at the time. The jury returned a verdict of Accidental Death, at the same time expressing an opinion that no sufficient protection was provided to prevent such accidents occurring

Wolverhampton.—On Tuesday the 22d ult, a fata

boiler explosion took place at the Cock Street colliery, near this town, belonging to Messrs. Aston & Shaw, by which two men were killed and another severely scalded. This is the second fatal boiler explosion which has occurred at the same colliery within nine days.

Worcester.—A meeting of the hop planters of Worcestershire and Herefordshire was held on Saturday in this city, when resolutions maintaining the necessity for immediate repeal of the hop duties, and a petition to the House of Commons on the subject, were adopted. A district committee was also formed to co-operate with the central one.—A keen controversy is raging in this diocese in reference to the residence of the newly appointed bishop, Lord Lyttelton leading one party and Sir John Pakington the other. From Lord Lyttelton's statement it appears that at the last vacancy of the see of Worcester it was a question with the proper authorities whether Hartlebury Castle, near Stourport, should be retained as the bishop's palace or sold. The question was at that time settled in favour of retention, but for the last 20 years it has been still before the commissioners as a prospective question. His lordship expresses a hope that a rather strong feeling may be found to exist in the diocese in favour of the preservation of the ancient palace in which the Bishops of Worcester have lived for just 1000 years. He adds:—"In its character, external and internal, no less than in its traditions, it is eminently—perhaps exclusively—ecclesiastical, and even episcopal. The late bishop believed it to be the best episcopal residence in England. It is in very good condition. The Commissioners, 20 years ago, spent 6600*l.* upon it for the very purpose of continuing its fitness for the use from which it is now possible that it may be diverted." Sir John Pakington on the other hand says: "It is not easy to imagine greater inconsistency and imprudence than assigning to the Dean of Worcester an episcopal palace for his residence, simultaneously with the reduction of his income to 1000*l.* a year. It is my hope, therefore, that a new deanery will be built, and that the old episcopal palace in the city will once more be the residence of the bishops of the diocese. I desire this arrangement, because I believe it to be the most advantageous, both for the diocese and the bishop himself. It may be true that Hartlebury is a more agreeable residence than Worcester, notwithstanding the beautiful situation of Worcester House; but I think the bishop will find ample compensation for any such difference in the greater facility with which his duties will be discharged, and the inconvenience from which his clergy will be relieved."

Ireland.

The Law Appointments.—It is now definitively announced that the present Attorney-General for Ireland, Mr. Serjeant Deasy, has been appointed Baron of the Exchequer, in the place of Baron Greene. It is also stated that Mr. O'Hagan has been appointed Attorney-General, and Mr. Serjeant Lawson Solicitor-General.

The Double Murder in Monaghan.—The adjourned inquest in reference to the murder of the brothers Shaw was resumed on Friday, when the jury returned a verdict of Wilful Murder against some person or persons unknown. As no further evidence was forthcoming against the persons arrested on suspicion, they were accordingly discharged from custody. A reward of 100*l.* has been offered for the discovery of the murderers.

National Education Board.—The competitive system having been introduced into the offices of the National Board of Education, as well as into other public departments in Ireland, a competition for five clerkships recently took place under the direction of the Civil Service Commissioners in London. Altogether 20 candidates were nominated — 10 Catholics and 10 Protestants, five of the latter being Episcopalians and five Presbyterians. The result was, that four out of the five places were won by Catholics, two of whom were, for some years, students of the Catholic University.

Scotland.

Lord Clerk Register.—The office of Lord Clerk Register of Scotland, vacant by the death of the Marquis of Dalhousie, has been abolished.

The Western Bank.—At the Edinburgh Court of Session on Friday a decision was arrived at as to the form in which the action on the part of the shareholders of the Western Bank of Scotland against the directors is to be conducted. There is to be a separate issue against each, as each has to answer for his own alleged fraud only, and the questions to be decided will be as to whether the plaintiffs were led to purchase their shares "by false representations as to the affairs of the bank fraudulently made and promulgated."

Marriage with a Deceased Wife's Sister.—An important decision was given on the 24th ult. by the Glasgow Court of Session, in the case of Fenton *v.* Livingstone and others. It appears that Admiral Sir Thomas Livingstone, of West Quarter and Bedlormie, died in April, 1853, and a competition immediately arose between his sister, Mrs. Fenton, and the son of her brother, Thurstanus Livingstone, by his deceased wife's sister, for the entailed estate of Bedlormie. Petitions were presented by each party respectively to the Sheriff in Chancery, to be served nearest and lawful heir to the deceased, which were conjoined and advocated to the Court of Session. Mrs. Fenton then raised an action of declarator of illegitimacy against Alexander Livingstone, on the ground that his mother was the sister of his father's first wife. The Lord Ordinary found that Alexander Livingstone was entitled to be served, and also assoilzied him from the action of declarator of illegitimacy. The first division, on a reclaiming note adhered to this result. These judgments were reversed by the House of Lords, and the case was remitted back to the Court of Session to proceed, and do therein as should be just. The question referred for determination by the House of Lords was whether Alexander Livingstone, the original defender, but now deceased, was the lawful son of Thurstanus Livingstone, the brother of Sir Thomas Livingstone? The Lord President, in giving judgment on this point, entered at great length into the law of the case, and said he had no doubt in declaring that, according to the law of Scotland, this was an unlawful marriage, and was within the prohibited degrees. The consequence was that, according to the instructions they had received from the House of Lords, this party was not the legitimate son of his reputed father. With reference to the question arising out of the English law, if it was to be held that there was no lawful marriage, and that it was between parties within the prohibited degrees, then it never was a marriage at all. He could not understand how a ceremony which did not make a marriage where the parties lived and died, could be regarded as a marriage anywhere; and he could not take it as the law of Scotland that what did not constitute a marriage between parties who never were in Scotland could be a marriage in Scotland. Therefore, in either view, this party must be regarded as the illegitimate son of the marriage between his father and the sister of his deceased wife, and consequently the judgment must go to that effect. Lord Ivory entirely concurred. Lord Curriehill gave a long and elaborate opinion entirely in conformity with that of the Lord President. Lord Deas agreed that according to the interpretation put by the constitutional writers or statutes regarding the 18th chapter of Leviticus, and laying down the prohibited degrees of marriage, that Thurstanus Livingstone's marriage was a nullity by the law of Scotland; and, therefore, that the judgment of the Court should be as suggested by the Lord President.

Execution at Glasgow.—Patrick Lunnay, who was convicted at the last Winter Circuit Court of the murder of James Cassidy, mason, Alexandria, Dumbartonshire, suffered the extreme penalty of the law in front of the County-buildings, Dumbarton, last week.

Railways.

Fatal Accident on the London and South-Western.—On Monday evening a fatal accident occurred to the Portsmouth express which leaves the Waterloo station at 5.10. The train was preceded by the 5 p.m. express to Southampton, which proceeded safely to its destination, but the Portsmouth train ran off the line at the Epsom junction about nine miles from Waterloo. The engine passed safely along the line, and was not at all concerned apparently in the accident. The tender appears to have mounted the rails close to a bridge about 20 yards from the junction, and sweeping completely the parapet of the bridge fell over into the road beneath. The upper part of the tender containing the water was completely severed from the under side, to which the wheels were attached, and turned upside down into the road. The framework of the tender also fell over, and rested in the road by the side of the tank with the wheels uppermost. A few yards further on several first and second class carriages left the line and turned over, the bodies being severed from the framework and wheels, the ends of the carriages being driven in, and nothing remaining sound save the middle compartments, which had the cushions and rugs driven about in utter confusion. The bank over which the carriages ran was about 20 feet high. Several carriages remained upon the line, two were off the line on the ballast, the foremost one being partly down the bank on the point of turning over, but fortunately stuck in the soft earth. Pieces of the woodwork of the carriages were scattered about in all directions on the line and down the bank. Altogether, the carriages which ran off were a perfect wreck; and they were all turned completely round, facing towards London—the opposite direction to which they were going at the time, showing that, after leaving the rails, each carriage swung completely round as it plunged over the bank. Dr. Baly, F.R.S., Physician to the Queen, who was travelling to Guildford to attend a consultation, was killed on the spot, crushed under one of the carriages which fell on the up line. Mr. Turner, an extensive linendraper at Portsea, was so badly crushed about the back and ribs that it was impossible for him to bear the pain of removal to a London hospital. He was therefore taken at once to a tavern adjoining the Wimbleton station, where he remains in a condition of intense suffering, and scarcely any hopes are entertained of his recovery. Miss Power, daughter of Colonel Power, of Talbot Square, Hyde Park, and Mr. Pullinger, were most seriously injured about the head, and George Miall, one of the Company's ticket collectors, had several ribs broken and was otherwise dangerously injured internally. These three were [illegible] Thomas's Hospital, where they are pro[illegible] ably. Captain Jack H. Murray, R.N. [illegible] received an injury in the spine, and Mr. [illegible] broken, though they were otherwise [illegible] injured to prevent their being conv[illegible] homes. Mr. Pewtress, of Gracechurch [illegible] some dreadful scalp wounds, and [illegible] removed to his own home, is still in [illegible] danger. Mr. Howell and Mr. Harr[illegible] mouth, and Dr. Wyatt, of Southsea, were [illegible] and shaken, but were able to proceed [illegible] The engine-driver, with great presence [illegible] that the carriage under which Dr. B[illegible] had fallen over the up line, let his [illegible] full speed for some few miles, when [illegible] waited for the up express from Southa[illegible] stopped with the red signal lamp. B[illegible] or two minutes more it would have da[illegible] into the carriage lying across the [illegible] probably have gone over the emba[illegible] rest, when the loss of life would ha[illegible] Having stopped this train, the engine[illegible] to Kingston for medical assistance, a[illegible] with the South-Western authorities [illegible] telegraph. At the same time the gua[illegible] the red or danger light, so that the [illegible] which were following at short inter[illegible] signal, pulled up before they reache[illegible] train from Leatherhead soon afterwa[illegible] conveyed the wounded passengers fro[illegible] the accident to London. The line nea[illegible] under repair, and the ballast was clea[illegible] the sleepers for the purpose of packing [illegible] rails were in perfect gauge, and the [illegible] examination has failed as yet to elucidat[illegible] the disaster. The inquest on Dr. Baly wa[illegible] Thursday at Merton, when it was proved [illegible] who was travelling in the same carria[illegible] deceased gentleman, that the bottom [illegible] was knocked out, and that Dr. Baly, [illegible] asleep, fell through the chasm as the [illegible] falling over, and was crushed to death be[illegible] negativing the statement of the railwa[illegible] he was in the act of getting out of the [illegible] it fell over. After the body had been [illegible] coroner adjourned the inquest for a week.

Accident on the South Coast.—On [illegible] morning as the early up train from P[illegible] crossing the single line drawbridge over [illegible] between Ford and Littlehampton, the p[illegible] the lever of the self-acting points by mistake [illegible] the passenger train directly into a cattle [illegible] was waiting to allow the up train to pass [illegible] collision was a violent one. The guard of the [illegible] was so severely injured about [illegible] were at first entertained of his recovery [illegible] of the same train was very much crushed [illegible] at Portsmouth in a very dangerous state. [illegible] was severly shaken, and was conveyed [illegible] mouth. One of the passengers, a soldier [illegible] the eye, but proceeded on his journey. [illegible] a similar nature took place near the sa[illegible] years since. The pointsman has been given [illegible] and will have to answer for his misconduct.

Law.

Court of Queen's Bench: *The Road Murder*[illegible] *Sylvester.*—Sir F. Kelly, on Wednesday, before the [illegible] showed cause against the rule obtained in [illegible] Attorney-General, calling upon George Sylves[illegible] the coroners for Wilts, to show cause why the [illegible] upon the body of Francis Saville Kent, on the [illegible] returned to this court, should not be quashed [illegible] *ad melius inquirendum* directed to special com[illegible] to inquire of and concerning the death [illegible] Saville Kent. After stating the circumstances [illegible] other details already familiar to our readers, [illegible] affidavit from Mr. Sylvester, entirely denying the [illegible] of corruption, and stating that the [illegible] were so determined in believing that [illegible] was committed by some one in Mr. Kent's [illegible] requested that Miss Constance Kent and her [illegible] should be examined, and some of them [illegible] Mr. Kent and the whole of the family should [illegible] nesses. In compliance with their request [illegible] examine Constance and her brother, and he [illegible] inquest to Road House for the purpose of doing [illegible] it dangerous to bring them through the [illegible] where the inquest was first held, while su[illegible] suspicion were entertained by the people [illegible] consideration also of this feeling against [illegible] family he did not enter upon a detailed exa[illegible] inmate of the house, though Mr. Kent's so[illegible] readiness of Mr. Kent and all his family to [illegible] regard to the other imputation that he had [illegible] it was not their duty to discover and fix the [illegible] and that he had said that this would be d[illegible] trates, the affidavit showed from newspaper [illegible] told the jury it was not their duty to find a [illegible] murder upon mere suggestions of suspicion, [illegible] course because Elizabeth Gough had been [illegible] and it would have been unjust to her and [illegible] after the four days' examination at Trowbridge [illegible] have been placed upon her trial at the Assize [illegible] inquisition. It also showed that the very [illegible] the affidavits to obtain a rule, not only [illegible] verdict, but signed the inquisition with[illegible] Affidavits from the Rev. Edward Peacock, [illegible] man of the jury, and from Mr Parsons, [illegible] attended the inquest, were read in supp[illegible] statements. Lord Chief Justice Cockburn [illegible] said that the only ground on which the applica[illegible] the allegation of misconduct on the part of the [illegible] single instance of his not accepting the offe[illegible] made by the solicitor of Mr. Kent, and [illegible] Mr. Kent. His lordship said he thought the [illegible]

[illegible] if he had accepted the [illegible] in judgment that this [illegible] by a coroner's jury, [illegible] *[illegible]ndum*. If there had [illegible] to justify the Court in [illegible], it would still be a question [illegible], and a new inquisition issued, [illegible] was—viz., to examine those [illegible] necessarily rested, to ascer[illegible] which of them had com[illegible] be a proper exercise of the [illegible] issue such an inquisition to obtain [illegible], for that was an object which the law [illegible].—Rule discharged.

Obituary.

[illegible] Earl of Guilford died on the 29th ult at [illegible] year. He was the eldest son of the [illegible] Rev. Brownlow North, Bishop of Winchester, [illegible] the nephew of the celebrated Lord North, [illegible] 1770 to 1781. He was born in 1772, and [illegible] St. Mary Hall, Oxford. He became B.A. in [illegible] M.A. in [illegible], and in the same year was appointed by his [illegible] Old Alresford, Rector of New Alresford, and [illegible]. In 1798 or 1799 he was further presented [illegible] St. Mary's, Southampton, and in 1808 was [illegible] Master of St. Cross Hospital, having shortly before [illegible] Canon of Winchester, the total value of his [illegible]ments being estimated at 6000*l*. a year. With the [illegible] of the Canonry, he continued Rector of the two [illegible], Medstead, and St. Mary's, Southampton, and Master of St. Cross up to 1850, when in conse[illegible] proceedings in Parliament and in the [illegible] resigned all his preferments, having [illegible], it is said, sufficient money to pay off all [illegible] ancestral estate near Dover. Since that [illegible] retirement at Waldershare. He married, [illegible] daughter of the Rev. John Harrison, rector [illegible], by whom he had no issue; and, secondly, [illegible] daughter of Lieut.-General Sir Henry Warde, [illegible] issue three sons and two daughters. [illegible] Lord North, born in 1829, was educated [illegible] in 1850, the third daughter of the Hon. [illegible] William Eden by the Dowager Lady Grey de Ruthyn. [illegible] suddenly in 1860, leaving issue three sons, the [illegible] Dudley Francis, born in 1851, now succeeds [illegible] as seventh Earl of Guilford. The late earl [illegible] his cousin Frederic, Chancellor of the [illegible] in 1827.

Mr. Macgregor Laird, well known in connection with African exploration, died on the 27th ult at 1, Surbiton Crescent, [illegible] Park, aged 52. At an early age he relinquished [illegible] an extensive engineering establishment in [illegible] was associated with Richard Lander in conducting [illegible] expedition up the Niger, with a view to [illegible] of the interior. After undergoing great [illegible] returned to England in 1832, with the few of his [illegible] had survived the effects of the climate. He [illegible] attention to Transatlantic steam navigation, [illegible] and enterprise materially contributed to [illegible] of that great object. Subsequently for a [illegible] superintended the great works in progress at [illegible]. During the last 12 years Mr. Laird devoted his [illegible] to the development of the trade and civi[illegible] of Africa, which he had for many years advocated as [illegible] only [illegible] extinguishing the slave trade. With [illegible] the Government and [illegible] the African Steamship Company, which maintains a monthly communication with the coast, and in 1854 he fitted out a trading and exploring expedition at his own expense, [illegible] Government support, the result of which was that [illegible] penetrated 150 miles beyond the furthest [illegible] previously been navigated; and so admirable [illegible] that this expedition was distinguished [illegible] which preceded it by the fact that not a single [illegible]. Encouraged by this result, and with the [illegible] Her Majesty's Government, as well as that of [illegible] who sympathized in his philanthropic exer[illegible] Mr. Laird fitted out another steam expedition on a still [illegible], opened up communications with the [illegible] established trading depôts, which still exist.

Mr. W. [illegible] Q.C., died on the 24th ult. at Kensington, [illegible]. He was the son of the late Rev. G. W. [illegible] M.A., of Ramsgate, and at an early age entered the [illegible] of the law. At 18 he published a book which at [illegible] his reputation, and at 23 he was a public pro[illegible] of the law of election. At 30 he was [illegible] a Royal commissioner on law amend[illegible] a Queen's counsel at 36. He was an active [illegible] the Juridical Society, and paid great attention to [illegible] of ensuring a more rapid and less costly transfer of [illegible]. He contested Pontefract in 1852, and afterwards stood [illegible] both cases without success. He has left a [illegible] one [illegible].

Dr. William Baly, M.D., F.R.S., Physician to her Majesty, [illegible] in the fatal accident which took place on Monday [illegible] the South Western Railway. He was on his way to [illegible] to attend a consultation at the time of the accident. [illegible] found [illegible] under a first class carriage on the up line. [illegible] that the body was scarcely recognis[illegible] was stripped from the right thigh, and the [illegible] fractured. A piece of iron of some kind [illegible] have been forced through the head above, and [illegible] apparently crushing it in its socket. Death [illegible] have been instantaneous and so far without [illegible]. It appears from the evidence at the inquest that the [illegible] was knocked out after it left the line, [illegible] the aperture while the carriage [illegible] crushed under it. His untimely death is a [illegible] profession, of which he was one of [illegible]. He was physician to her Majesty, [illegible] Royal College of Physicians, physician to Millbank Prison, lecturer on Forensic Medicine at St. Bartholomew's Hospital, fellow of the Royal Society and of the Medical Chemical, and Statistical Societies.

Miscellaneous.

Lord Derby's Translations of Horace.—M. Jules Janin, the celebrated French critic, appreciating the excellence of Lord Derby's translations of some of the best odes of Horace, recently confided to a friend in England a copy of his own French version of that poet, with a request that he would forward it to his lordship. M. Jules Janin joined to the work some graceful French verses in honour of the noble translator. The gift has been acknowledged by Lord Derby in the following letter, dated Knowsley, Dec. 31:—

"Sir,—A long and painful illness of between three and four months has thrown my correspondence greatly into arrear, and will, I hope, be accepted as an apology for my not having earlier acknowledged, with thanks, the receipt of your letter of the 20th ult., with the volume which you have been good enough to transmit to me on the part of M. Jules Janin. May I beg you, when you have an opportunity, to assure that gentleman how highly I feel flattered by the compliment which has been paid me, by one so highly distinguished in the literary world, in sending me a copy of his work, accompanied by his autograph, which will greatly enhance its value. At the same time I am bound to confess that he has done too much honour in classing me with himself in the list of translators of Horace. All that I have attempted in that way has been the translation of a few of the odes, two of which have appeared in a publication of a friend of mine, and which, I presume, are those which M. Jules Janin has honoured with his approval.—I have the honour to be, sir, your obedient servant,

"Derby."

BIRTHS.—On the 27th ult, in Lower Berkeley Street, the Lady Annora Williams Wynn, of a daughter—27th ult, at 12, Upper Hyde Park Gardens, Lady Bright, of a daughter—27th ult, at Grey Abbey, the Lady Charlotte Montgomery, of a son—27th ult, at Duncliffe, Edinburgh, Lady Brewster, of a daughter—30th ult, at Park Cottage, East Sheen, the Hon. Mrs. Adolphus Liddell, of a daughter—27th ult, at Coltishall, the wife of Major-General Prior, of a son.

MARRIAGES.—On the 26th ult, at St. Peter's, Eaton Square, H.S.H. Prince Victor of Hohenlohe-Langenburg, Captain R.N., to Laura Williamina, youngest daughter of Admiral Sir George Seymour, G.C.B.—26th ult, at Stoke-next-Guildford, Edward Baldwin Wake, Esq., of H.M.'s Bengal Light Cavalry, younger son of Sir Charles Wake, of Courteen Hall, Northamptonshire, Bart., to Mary, second daughter of Ross Donelly Mangles, Esq., of Woodbridge, Surrey, Member of the Council of India—24th ult, at Llangattock Vibon Avel, Monmouthshire, Cornwallis Wykeham Martin, Lieutenant R.N., third son of Charles Wykeham Martin, Esq., of Leeds Castle, Kent, to Anne Katherine, fourth daughter of John Rolls, Esq., of the Hendre, co. Monmouth—24th ult, at St. James's, Piccadilly, John Richard, second son of H. W. Howell, Esq., of Glaspant, Carmarthenshire, to Sarah, widow of the late Cuthbert Collingwood Hall, Esq., and granddaughter of the late Admiral Lord Collingwood—24th ult, at Wimborne Minster, Major Mullock, H.M.'s 70th Regiment, to Julia Florentia, only child of the late Lieutenant John Leigh Doyle Sturt, H.M.'s Bengal Engineers, and granddaughter of the late Sir Robert Sale, G.C.B.—24th ult, in the Chapel of the British Embassy, Paris, W. G. Romaine, Esq., C.B., Secretary to the Admiralty, to Phebe, daughter of Henry Tennant, Esq., Cadoxton Lodge, Glamorganshire.

DEATHS.—On the 22d ult, the Hon. Mrs. Gwynne, widow of the late T. H. Gwynne, Esq., and daughter of George, 13th Viscount Hereford—30th ult, at 68, Park Street, Grosvenor Square, the Hon. Julia, youngest daughter of the Viscount Chetwynd—3d November, at Pietermaritzburg, Annie Maria, wife of Major the Hon. David Erskine, Colonial Secretary at Natal—23d ult, at Paris, Frederick Arthur St John, late Captain 60th Rifles, second son of the late Robert William St. John, Agent and Consul-General at Algiers, and grandson of the late Hon. General Frederick St. John, aged 34—24th ult, at 2, Atholl Crescent, Edinburgh, Jane, widow of John Hope Oliphant, Esq., H.E.I.C.S., late of Penang, Prince of Wales' Island, and daughter of the late Sir John Wedderburn, of Blackness and Balindean, Bart., aged 87—25th ult, at Winchester, of pleurisy, Sarah, second daughter of the late Colonel James Wemyss, and sister of the late Lieut.-General Wemyss, C.B.—24th ult, at 10, North Parade, Bath, General James Welsh, of the Madras Establishment, aged 86—20th Dec., at Calcutta, from illness caused by over exertion during the Indian campaign, Captain Wilbraham Digby Milman, Royal Artillery, youngest son of the late Lieutenant-General Milman—22d ult, at Cheltenham, Elizabeth Catherine, widow of the late Lieutenant-General Alexander Cosby Jackson, of H.M.'s Forces, aged 68—21st ult, Rear-Admiral Samuel Radford, K.H., at his residence, Notting Hill, aged 76—23d ult, at Torquay, Elizabeth, second daughter of the late Admiral Wetherall—25th ult, at her residence, Rose Hill, Pendleton, near Manchester, Martha, widow of the late Joseph Brotherton, Esq., M.P. for Salford, aged 78—28th ult, at 5, Montagu Place, Montagu Square, Eliza, widow of the late Rev. Henry Fardell, Canon of Ely, and eldest daughter of the late Dr. Sparke, Bishop of Ely, aged 65—21th ult, at the Rectory, Great Haseley, Albimia Mary, youngest daughter of the late Donald Cameron, Esq., of Lochiel—22d December, at Kingston, Jamaica, the Hon. Richard O'Reilly, Judge of H.M.'s Supreme Court in that island—16th ult, at Malta, William Lawrence Colquhoun, Esq., of Clathick, aged 50—At Penrose Terrace, Penzance, Lieutenant-Colonel J. Pascoe, retired full pay Royal Artillery, aged 70—19th ult, at Guernsey, Lieutenant-Colonel de Lancey, aged 62—12th ult, at Graefrath, the Ober Medicinal Rath and Hofrath, Dr. de Leuw, Oculist to his Majesty the King of Hanover—2d ult, at the Crown Hotel, Harrogate, Jane, wife of John Rogers Griffith, Esq., of Pilton, near Barnstaple, and sister of the Rev. Christopher Benson, M.A., Canon of Worcester Cathedral—24th ult, the Rev. Henry Thomas Cooper Hine, M.A., rector of Quarrington, Sleaford, Lincolnshire—15th ult, the Rev. William Villiers, Vicar of Bromsgrove, and Honorary Canon of Worcester Cathedral—26th ult, at his residence, 8, New Inn, Strand, the Rev. Joshua Frederick Denham, M.A., F.R.S., Rector of St. Mary's-le Strand, and Sunday Evening Lecturer of St. Bride's, Fleet Street, aged 60—24th ult, at Torquay, Devon, the Rev. Henry Taylor, Rector of South Pool and Stokenham, Devon, aged 69—19th ult, at Brighton, the Rev. R. B. Smythies, M.A., of Emmanuel College, Cambridge, and Assistant-Master of Rugby School, aged 36—21st ult, at Hereford, Jane, the third daughter, and on the 22d ult, also at Hereford, Eleonora, the second daughter, of Colonel Matthews, late of Belmont, Herefordshire—29th ult, at Orchard House, Walton-on Thames, Matilda Caroline, widow of Samuel James Arnold, Esq., and daughter of the late Henry James Pye, Esq., formerly of Faringdon House, Berks, aged 85—26th ult, at Brooke House, Ash-next-Sandwich, John Godfrey, Esq., a Magistrate and Deputy-Lieutenant for the county of Kent, aged 71—25th ult, at his residence, 33, Cavendish Square, of apoplexy, G. R. Rowe, M.D., F.S.A., formerly of Chigwell, Essex, and surgeon in the army during the Peninsular war, aged 69—29th Jan., at his residence, 5, Binfield Place, Clapham Road, Mr. Richard Atlee, nurseryman and seedsman, deeply regretted, aged 60.

Markets.

COVENT GARDEN, Feb. 2.

Supplies of winter Greens are still insufficient for the demand. Continental contributions, however, continue to improve. They consist of Endive, Lettuces, Carrots, Artichokes, and Green Peas. The latter come from Portugal. Pine Apples and Grapes have not altered since our last. Oranges may be obtained at about last week's prices. Shaddocks may be had in quantity, also American Lady Apples. Good Cobs may be had at from 1s. to 1s. 6d. per pound. Cornish Broccoli is now arriving in crates[?]; but single heads of it realise as much as 6d. and 8d. each. Cabbages are scarce. Asparagus, French Beans, and new Potatoes may be had, but prices for them are high. Cucumbers are scarce. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Heaths, and Roses.

FRUIT

Pine Apples, per lb., 4s to 6s	Apples, per doz., 6d to 1s 6d
Grapes, per lb., 6s to 10s	Oranges, per 100, 6s to 10s
Pomegranates, each, 4d to 6d	Lemons, per 100, 6s to 10s
Pears, per doz., 3s to 6s	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Broccoli, each, 6d to 8d	Onions, per sieve, 1s 6d to 2s 6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 10s to 30s
Cabbages, do., 2s to 3s	Seakale, p. punnet, 3s to 3s 6d
Potatoes, p. ton, 100s to 160s	Shallots, per lb., 6d to 8d
— per bus., 4s to 6s	Garlic, per lb., 6d to 8d
— per cwt., 8s to 10s	Lettuces, Cabb., per score, 1s to 1s 6d
Carrots, per bunch, 8d to 10d	
Turnips, per bunch, 6d to 8d	Lettuces, Cos, do., 1s to 1s 6d
Spinach, p. sieve, 4s to 5s	Endive, p. score, 1s to 1s 6d
Cucumbers, each, 2s to 3s	Horse Radish, p. bun., 1s 6d to 4s
Artichokes, per doz., 4s to 6s	Mushrooms, p. pott., 2s to 3s
Beet, per doz., 1s 6d to 2s	Parsley, p. 12 bunches, 4s to 6s
Celery, p. bundle, 1s 6d to 1s 9d	Savory, per bunch, 2d to 4d

BRITISH WOOLS.—London, Friday, Feb. 1.

Our trade continues in about the same state, purchases being only made for immediate consumption. Rather more confidence is felt in some branches, and rather better prices are realised.

HAY.—Per Load of Thirty-six Trusses.

Smithfield, Thursday, Jan. 31.

Prime Meadow Hay	75s to	84s	Clover	95s to	115s
Superior do. (old)	90	110	New Clover	—	—
Inferior do.	40	57	Old second cut	76	95
New do.	—	—	Straw	37	43
Rowen	30	50			

Davis & Co.

Whitechapel, Thursday, Jan. 31.

Fine old Hay	100s to	108s	Fine old Clover	110s to	120s
Inferior do.	40	80	Inferior do	85	95
Prime New Hay	—	—	Fine 2d cut	80	95
Inferior do.	—	—	Inferior do.	—	—
Straw	30	36	Fine New Clover	—	—

POTATOES.—Southwark, Monday, Jan. 28.

During the past week the arrivals both coastwise and by rail have been numerous; prices have undergone a further reduction. The following are this day's quotations:—York Flukes, 155s. to 165s. per ton; Lincolnshire Regents, 110s. to 120s.; Dunbar Red Soil, 160s. to 170s.; North Berwick do. 120s. to 130s.; Fife, Forfar, and Perth do., 110s. to 120s.; Rocks and Reds, 105s. to 115s.; French Whites, 90s. to 100s.; Belgian do., 85s. to 90s.; Dutch do., 80s. to 85s.

BUTTER MARKET.—Feb. 1.

Best Fresh Butter .. .. 18s. per dozen lbs.
Second do. do. .. .. 15s. ,, ,,
Pork, 5s. 0d. to 5s. 4d. per 8 lbs.

METROPOLITAN CATTLE MARKET.

Monday, Jan. 28.

We have again a short supply of Beasts, and the demand is good; consequently late prices are fully maintained, and in some instances exceeded. The number of Sheep is very much smaller than was anticipated, and prices have advanced on all descriptions. Good Calves are also dearer. From Germany and Holland there are 314 Beasts, 40 Sheep, and 62 Calves; from Prussia, 19 Beasts; from Scotland, 150; from Norfolk and Suffolk, 1900.

	s d s d		s d s d
Best Scots, Herefords, &c.	5 0 to 5 2	Best Long-wools	5 4 — 5 10
Best Short-horns	4 10 — 5 0	Do. Shorn	.. to ..
2d quality Beasts	4 0 — 4 6	Ewes & 2d quality	4 10 — 5 0
Best Downs and Half-breds	6 0 to 6 4	Do. Shorn	[illegible]
Do. Shorn	.. — .	Lambs	[illegible]
		Calves	4 8 — 5 8
		Pigs	4 4 — 5 4

Beasts, 3250; Sheep & Lambs, 13,200; Calves, 75; Pigs, 380.

Thursday, Jan. 31.

The supply of Beasts is considerably larger than of late. Trade is dull, and Monday's quotations are barely realised. The number of Sheep is still small. Trade, however, is by no means brisk, and prices on the average are lower. There is no alteration in the Calf trade. Our foreign supply consists of 520 Beasts, and 74 Calves. Milch Cows 145.

	s d s d		s d s d
Best Scots, Herefords, &c.	4 10 to 5 2	Best Long-wools	5 6 — 5 10
Best Short-horns	4 8 — 5 0	Do. Shorn	.. — ..
2d quality Beasts	3 10 — 4 4	Ewes & 2d quality	4 8 — 5 0
Best Downs and Half-breds	6 0 — 6 2	Do. Shorn	.. to ..
Do. Shorn	.. .. — ..	Lambs	.. — ..
		Calves	4 8 — 5 8
		Pigs	4 4 — 5 4

Beasts, 1365; Sheep & Lambs, 3540; Calves, 114; Pigs, 170.

MARK LANE.—Monday, Jan. 28.

There was a fair show of Wheat from Essex and Kent to this morning's market; the great bulk, however, was as bad, both in quality and condition, as has been received on any day since harvest, and quite unfit for millers' use; it consequently remained on the stands at the close of the market, a few of the best samples having been selected at a decline of 2s. per qr. The market was tolerably attended by country buyers, who purchased foreign Wheat cautiously, and in retail quantites, at a decline of 1s. to 2s. per qr. upon our quotations of this day se'nnight. Barley of all descriptions is 1s. per qr. cheaper. Beans and Peas difficult of sale. Oats sell slowly at last week's rates. The Flour trade is very dull, and American barrels are 6d. lower.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk .. White	46—66	Red	40—60
— — fine selected runs .. ditto	50—70	Red	54—65
— — Talavera	51—72		
— Norfolk	—	Red	—
— Foreign	50—76		
Barley, grind. & dist., 28s to 30s .. Chev.	40—45	Malting .	38—40
— Foreign .. grinding and distilling	30—36	Malting .	40—43
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire .. Potato	26—28	Feed ..	20—25
— Irish .... Potato	26—28	Feed ..	21—24
— Foreign .... Poland and Brew	24—28	Feed ..	20—26
Rye	35—38	Foreign .	—
Rye-meal, foreign	—		
Beans, Mazagan .... 30s to 44s .... Tick	28—48	Harrow .	28—48
— Pigeon ...... 34s — 56s .. Winds	34—42	Longpod	—
— Foreign .... Small	40—50	Egyptian	—
Peas, white, Essex and Kent .. Boilers	33—48	Suffolk .	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign .	38—48
Maize .... White	—	Yellow ..	—
Flour, best marks delivered .. per sack	50—57		
— 2d do. .... ditto	38—50	Country .	38—50
— Foreign .... per barrel	30—35	Per sack	40—50

Friday, Feb. 1.

With the exception of a little fog and one or two nights' frosts the weather has during the last eight days been unusually fine and mild for the season. In many parts of the country great progress is being made in getting up the arrears of field work and sowing. The supplies of English Wheat at the various markets of the kingdom during the week have been good, and the change of the weather having caused the condition to be very wretched, and much of it unfit for millers' use, a decline in prices varying according to its depreciation

rom the above cause, and amounting generally to 1s. or 2s. on the least affected samples, to 4s. or 5s., and even more, on the worst has been necessary in order to effect sales. The long absence of demand for foreign, combined with the large recent importations, has in some cases caused a certain pressure to realise, and a reduction of 1s. to 2s. per qr. has been submitted to on most descriptions; the demand, however, has improved, and imparted a better tone to the trade. The inquiry for Spring Corn was limited, and each description has been purchaseable on rather lower terms, Barley in several markets being written 1s. and 1s. to 2s. lower. Flour has been taken to a moderate extent only, and at a reduction of 6d. per barrel. The arrivals of Barley, English and foreign, this week have been to a fair extent, of all other grain very moderate. This morning's market was but thinly attended. English Wheat is taken on Monday's terms, but slowly; there was some inquiry for foreign, both by town and country buyers, but it was chiefly confined to American descriptions, and at fully Monday's prices. Spring Corn of all descriptions sells slowly at Monday's quotations.

ARRIVALS FROM Jan. 28 TO Feb. 1.

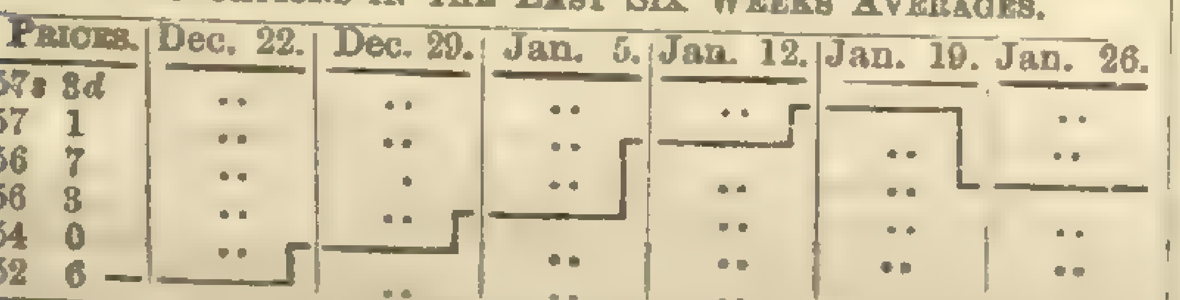
	Wheat.	Barley.	Oats.	Flour.
English ..	1630 qrs.	2020 qrs.	890 qrs.	1510 sks.
Irish	— „	— „	1700 „	— „
Foreign ..	12870 „	5340 „	— „	{ 150 „ 10570 brls.

LIVERPOOL, Tuesday, January 29.—This morning's market had a good attendance of both town and country millers and dealers, who were attracted here by the large supplies and the expectation of buying cheaper from the decline at Mark Lane yesterday. In the latter, however, they were disappointed, for as the market wore on holders gained confidence, and at the close both Wheat and Flour were fully as dear as on Friday, the demand, however, remaining chiefly in the former. Indian Corn was in good favour, and established an advance of 6d. per qr. on all descriptions. Oats and Oatmeal are without change. Beans, Peas, and Barley are held firmly at full prices. The market closed with a steady tone of feeling.

FRIDAY, Feb. 1.—There was a fair attendance at to-day's market. Wheat, fine sorts, rather better inquiry. Prices 1d. to 2d. dearer than on Tuesday. Other sorts unchanged. Flour firm. Indian Corn steady, at 37s. 9d. for mixed, and 39s. 6d. for Galatz. Beans without change. Oats and Oatmeal slow of sale.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Dec. 22..	52s 6d	38s 6d	21s 8d	35s 2d	42s 2d	43s 10d
— 29..	54 0	39 7	22 6	34 7	44 10	46 7
Jan. 5..	56 3	40 3	22 6	39 10	43 4	42 0
— 12..	57 1	40 6	22 6	34 6	43 10	44 6
— 19..	57 3	40 6	23 2	34 9	41 10	43 0
— 26..	56 7	40 7	23 1	35 10	42 5	41 8
Agg. Aver.	55 7	40 0	22 7	35 9	43 7	43 7

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



COAL MARKET.—Jan. 30.

Bell's Primrose Gas, 15s.; Benton's West Hartley, 16s. 6d.; Buddle's West Hartley, 17s.; Clark's West Hartley, 16s. 9d.; Davison's West Hartley, 17s.; Hastings Hartley, 16s. 6d.; Holywell, 18s.; Lambert's West Hartley, 16s. 3d.; Tanfield Moor Butes, 17s. 6d.; West Hartley, 17s.; Wylam, 18s 6d.; Walls End Byron, 19s.; Walls End Eden, 19s.; Walls End Wharncliffe, 18s. 6d.; Eden Main, 19s.; Walls End Braddyls Hetton, 20s.; Walls End Framwellgate, 19s.; Walls End Hetton, 21s.; Walls End Hetton Lyons, 19s.; Walls End Russel's Hetton, 20s.; Walls End South Hetton, 21s.; Walls End Heugh Hall, 19s.; Walls End South Whitworth, 17s. 6d.; Walls End Whitworth, 17s. 6d.; Carway and Duffryn Malting, 24s. 6d.—140 ships at market.

PARTNERSHIP.—Wanted, by a Nurseryman and Seedsman in a large manufacturing town, who has upwards of 100 acres of land, a PARTNER, who understands the Business in all its branches, with about 1000l. capital.—Apply to M. R. I., *Gardeners' Chronicle* Office, W.C.

TO GARDENERS.

WANTED, BY THE WORCESTER PLEASURE GROUNDS COMPANY (Limited), a HEAD GARDENER, to take the general Superintendence of the Grounds. He must be married, possessed of good testimonials as to moral Character, a good Florist, and thoroughly acquainted with the Management of Ornamental Trees and Shrubs. His Wife will have to take charge of the Gate. Salary, 60l. per year, with house. Security to be given if required. A person who has had the management of similar grounds will be preferred. Testimonials to be sent to me on or before WEDNESDAY, February 5th. Previous to the appointment being made an interview will be required, of which due notice will be given. By order of the Directors.

ALFRED P. WATKINS, Secretary.

58, Foregate Street, Worcester, Jan. 26.

WANTED, A FOREMAN, PROPAGATOR, AND PLANT GROWER, in a London Nursery, in the in-door department. He must be thoroughly experienced in Grafting and all kinds of Propagating and in the growth of Plants. Must produce the highest testimonials as to the practical knowledge of his profession and general good conduct. None need apply who has not previously held a similar situation.—Direct to C. N. S., Messrs. Hurst & M'Mullen, Seedsmen, 6, Leadenhall Street, City, E.C.

WANTED, a GROUND FOREMAN, in a country Nursery; one who understands the general Propagation of Hardy Trees and Shrubs, and can Bud and Graft successfully. References as to character and abilities, together with terms, to be sent to G. T., Messrs. Hurst & McMullen, Seedsmen, Leadenhall Street, London, E.C.

WANTED, in a retired place in the country, a thoroughly good practical UPPER GARDENER, where two are kept. Wages 20s. a week. Cottage and vegetables.—Address, with full particulars of services, and references for qualifications and character, which must bear the strictest investigation, T. K., Post Office, Fakenham, Norfolk.

WANTED IMMEDIATELY, A WORKING GARDENER, married, with a small family, with a good knowledge of Vines and Forcing. Wages 18s. weekly, house rent free, and milk occasionally. A good character indispensable.—G. H., Royal Nursery, Slough.

WANTED, AS WORKING GARDENER, an active, practical, married Man, between 30 and 40, for a single-handed place of 2 acres. His Wife would be required to assist in the Laundry for a day and a half. None need apply who have not filled the same kind of situation, and who have not at least two years' good character. Wages 20s. a week and two good rooms.—Apply by letter or personally to Mr. H. T., The Uplands, East Sheen, Surrey, S.W.

WANTED, A GARDENER who thoroughly understands the Management of a Greenhouse, Hothouse, and Flower and Kitchen Gardens.—Address, T. P., Post Office, Dudley.

WANTED, A GARDENER, in the neighbourhood of Birmingham. He must perfectly understand his business both in the Garden and Greenhouse. Wages 18s. A good Cottage.—Apply to T. L., W. H. Smith & Son, 33, Union Street, Birmingham.

WANTED, a practical GARDENER to go into the Country. Wages 25s., and Cottage.—Apply X. Y., William Clark, 25, Bishopsgate Within, E.C.

WANTED IMMEDIATELY, for a Garden with two Small Greenhouses and a Wall Kitchen Garden, and to tend two Cows, a thoroughly reliable industrious Man as Single-handed GARDENER, at One Guinea a week.—Address B., Post Office, Richmond, London, S.W.

TO GROUND WORKMEN.

WANTED, a young, active, and energetic Man, who understands all descriptions of Groundwork and Planting, &c., able to work from Plans and Sections, a good Manager of Men, and willing to carry out his employer's directions. Good reference from a practical Man required.—Address, stating wages, &c., to Mr. RUMBOLD, F.R.H.S., Tunbridge Wells.

WANTED, A PROPAGATOR OF HARD-WOODED AND NEW HOLLAND PLANTS.—Apply to E. G. HENDERSON & SON, Wellington Road, St. John's Wood London, N.W.

WANTED, A PROPAGATOR.—His business wil be exclusively confined to the Plant Department, where Cultivation and Propagation of all kinds of Plants under Glass are extensively carried on. None need apply whose ability, experience, and moral character will not bear the most rigid inquiry.—Application to be made in own handwriting, stating terms and references, to ARTHUR HENDERSON & Co., Pine-Apple Place, Edgware Road, W.

WANTED, A PROPAGATOR AND SALESMAN, competent to Manage Hard and Soft-wooded Plants, Vines, &c., for a Nursery in the North of England. References as to character and abilities, together with wages expected, to be sent to Messrs. NOBLE, COOPER, & BOLTON, Seedsmen, London.—February 2.

WANTED in a Nursery near London, a person well able to Propagate and Manage an extensive collection of Roses and Fruit Trees.—Apply by letter only to Mr. J. G. Waite, 181, High Holborn, London, W.C.

WANTED, AS UNDER GARDENER, a persevering, single young Man. Wages 15s. per week and lodgings.—Apply, stating age and experience, to A. B., Mr. Dods, Nurseryman, &c., Epsom.

WANTED, a Youth of 16 or 18, who writes well, to be employed chiefly in the Seed Shop and Counting House.—Application to be made in own handwriting to OSBORN & SONS, Nurserymen, &c., at Fulham, near London, S.W.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 26, single; thoroughly understands Early and Late Forcing, Kitchen and Flower Gardens. Seven years' good character.—A. B., 2, Royal Exchange Buildings, City, E.C.

GARDENER (HEAD).—Age 30, single; perfectly understands his profession in all its branches. Good reference from last situation.—A. B., Post Office, South Cave, Brough, Yorkshire.

GARDENER (HEAD).—Age 35, married; has great experience in every branch of his profession. Will be disengaged the middle of this month. Good references.—S., J. Bennett, Seedsman, Dulwich, Surrey, S.

GARDENER (HEAD).—Age 29, married, without incumbrance; well understands his profession in all its branches. Wife as Laundress if required. Good character from last situation.—A. B., Post Office, Hurst Green, Sussex.

GARDENER (HEAD).—Age 36, married; has a thorough knowledge of Early and Late Forcing, and the Management of Flower and Kitchen Gardens. Five years' good character, and can be highly recommended from present employer.—J. LEWIS, Oak Lodge, Archway Road, Highgate, N.

GARDENER (HEAD).—Age 28, single; thoroughly understands Cultivation of Vines, Stove and Greenhouse Plants, Early and Late Forcing, and Gardening in all its branches. Three years' character.—G. C., 3, Rose Terrace, High Road, Lee, Kent, S E.

GARDENER (HEAD).—Age 40, married, no incumbrance; has had 20 years' experience in all the branches of his profession; including Forcing of Pines, Vines, Peaches, &c. Character and testimonials will bear the strictest investigation.—A. C., Mr. A. Henderson's & Co., Pine-Apple Place, Edgware Road, W.

GARDENER (HEAD).—Age 34, married, no incumbrance; thoroughly understands the Cultivation of Stove and Greenhouse Plants, the Forcing of Fruit, and Flower and Kitchen Gardening. The Wife can manage Dairy and Poultry. Five years' good character.—A. B., Messrs. Thomas & Sons, 20, Cornhill, E.C.

GARDENER (HEAD).—Age 30, single; 15 years' practice in Early and Late Forcing of Fruits, &c.; also Kitchen and Flower Gardens, and the Management of Stove and Greenhouse Plants in first-class establishments in England and Scotland. Satisfactory testimonials.—A. B. C., 32, Northumberland Street, Strand, W.C.

GARDENER (HEAD), in a nobleman's or gentleman's family.—Thoroughly understands his profession in all its branches. No objection to the Superintendence of Land and Stock. Can have three years' unexceptionable character from the gentleman he is about to leave.—A. B., Mr. Jacob's, Champion Hill House, Camberwell, S.

TO NOBLEMEN AND GENTLEMEN.

GARDENER (HEAD).—Age 38, married, without incumbrance; well acquainted with the various branches of his profession, and is especially skilled in the Cultivation of the Grape Vine and of the Pine. No objection to the Management of Meadow Land. Good reference.—V. M., Post Office, 116, Edgware Road, London, W.

TO NOBLEMEN AND GENTLEMEN.

GARDENER (HEAD).—Age 27, single; has a thorough practical knowledge of Forcing all kinds of Fruits, Flowers, and Vegetables, the Culture and Propagation of Stove and Greenhouse Plants, and the Management of Fruit, Flower, and Kitchen Gardens. Unexceptionable reference.—H. M., 24, Cochrane Terrace, St. John's Wood, N.W.

GARDENER (HEAD).—Age 26, single; ... understands his profession. Good ... objection to any part.—A. B., Post Office, W...

GARDENER (HEAD).—Seven years' H... in the Gardens of His Grace the Duke ... land, Syon House.—A. B., 3, Bridge Terrace, B...

GARDENER (HEAD).—Age 32, married, ... brance; thoroughly understands his ... could take charge of house or lodge.—No. 9 L... Queen's Road, Hornsey Road, N.

GARDENER (HEAD).—Age 29, married, ... brance; well understands his profession ... branches. Unexceptionable character from ... —G Z., Post Office, Watton Hertford, Herts.

GARDENER (HEAD).—Age 29; good ... Growing as well as Forcing all kinds of ... Flowers; also Routine of Flower Garden, Lawn ... been under an excellent Orchid grower ... ceptionable.—S. C., Post Office, Newton St. ...

GARDENER (FOREMAN).—Age 2... to engage in a good establishment; ... in Forcing-houses, Plant-houses, &c., and ... knowledge of his profession. Good testimonials.— ... Mrs. Williams, Newton Bank, near Chester

TO NOBLEMEN, GENTLEMEN, ETC.

GARDENER (FIRST-CLASS) in every branch ... profession; married, without incumbrance ... great experience in the re-arranging Park ... down and planning Pleasure Grounds, the ... Horticultural Buildings and Heating on the ... principles; has grown Pines, Grapes, Peaches, ... to the highest perfection, and is experienced in ... fruit trees in the orchard house. Has lived with ... of the highest distinction for 20 years, and ... his own wish a family of note where he has ... having completed the new arrangement of the ... Houses, planting and making of the Vine and P... Testimonials and character unexceptionable.—... permitted to be addressed—A. B. C., A. Henderson ... apple Place, Edgeware Road, London, W.

GARDENER.—Age 35, married; experienced ... Management of Vines, Wall Trees, Flower ... Garden, &c. Good character.—M. T., 2, Bowling Green ... High Street, Stoke Newington, N.

GARDENER.—Age 36, single; has a ... knowledge of Gardening in all its branches, ... engaged in some of the principal Horticultural Es... in the metropolis and country for a considerable ... best references can be given from his present ... R. C., Mr. Weeks's Nursery, Chelsea, S.W.

GARDENER (WORKING).—Middle age, married ... incumbrance, healthy; has had much experience ... different branches of Gardening. Can be well rec... from this place.—A. B., The Earl of Clarendon ... Gardens, Watford, Herts.

GARDENER (UNDER), where Forcing and ... Growing are carried on to some extent.—Age ... had considerable experience. Three years' good character.— A. H., Post Office, Otterstraw, Chertsey, Surrey.

GARDENER, or GARDENER AND BAILIFF.— Middle age, married, without incumbrance; five years ... last place. Good character and good recommendation.— ... Messrs. Sutton & Sons, Reading, Berks.

TO NURSERYMEN.

FOREMAN.—Age 31, married, small incumbrance; has a thorough knowledge of the Propagation and ... of Nursery Stock generally (Orchids and Heaths ex...). Would prefer a place where Fruit Trees and Roses are ... extensively. Has held a similar situation in a large ... Nursery for the last seven years. Character first rate.— ... Mr. Heather's, News Agent, North Street, Chichester

FOREMAN OR GARDENER (UNDER).—Age ... has a good general knowledge of Plants and Management of Houses. Good references.—C. D., Wm. Paul's ... Nurseries, Waltham Cross, N.

LANDSCAPE PLANTING.—A. GREGORY begs to offer his services to any Lady or Gentleman wanting a person for planning or carrying out improvements ... permanent or occasional.—A. GREGORY, 70 Albany ... Regent's Park, London, W.

MANAGER (HORTICULTURAL OR AGRICULTURAL).—Gentlemen requiring a person to ... improvements, lay out Gardens, Farms, Draining, ... Surveying, or to manage an Establishment.—WILLIAM ... Seedsman, 25, Bishopsgate Within, City, E.C.

AGENT OR MANAGING FARM BAILIFF.— ... a thorough knowledge of the Management of ... tions of Land, Woods, Timber, &c.; also well up in ... and the Management of all kinds of Stock. Testimonials ... the highest class from several gentlemen of Standing.— ... Messrs. Francis and Arthur Dickson & Sons, Seed Merchants, Chester.

TO NOBLEMEN AND GENTLEMEN.

STEWARD OR BAILIFF.—Was in the ... Agricultural Estate in Norfolk; has since had the Management of High and Low Lands, Under Draining, Rearing ... Fatting Cattle, Buying and Selling Corn, Cattle, ... &c., Planning and Erecting Buildings, together with ... Management of Drain Pipe and Brick Making, ... Four years' good character.—A. B., 16, ... Street, Chelsea, S.W.

FARMING BAILIFF.—Middle age, married; understands every branch of Farming, Stock, Accounts ... all that belongs to his business. Will give every attention ... Wife will make herself generally useful.—W. Z., Post ... Russell, near Pewsey, Wilts.

BAILIFF.—A native of one of the best agricultural counties in Scotland; a thorough practical man, accustomed to Draining and Improving Lands, Management and ... Stock, both Sheep and Cattle; also Woods, &c. Testimonials of the highest order.—J. B., Messrs. Peter Lawson & ... 27, Great George Street, Westminster.

CLERK AND SHOPMAN.—Age 23; has a ... knowledge of Seeds and Plants, and is a good Bookkeeper. References and security.—J. M., 126, Islington, Liverpool.

TO SEEDSMEN.

SHOPMAN.—Ten years' experience in all branches of the Trade.—A. B., Charles White's, Hillingdon ... Uxbridge.

BUTLER.—Age 47, height 5 feet 10½ inches, ... good Brewer. Eighteen months' good character.— ... Richd. C. Adcock, Ironmonger, 4, Halkin Street West, ... grave Square, London, S.W.

The Gardeners' Chronicle Newspaper.

SATURDAY, FEBRUARY 9, 1861.

GOVERNMENT SCHOOL OF MINES, JERMYN STREET.—The following COURSES OF LECTURES are about to be commenced:—
TWENTY FOUR LECTURES ON ORGANIC CHEMISTRY, by Dr. HOFMANN, F.R.S., to be delivered on MONDAYS and TUESDAYS, at 10 A.M., commencing February 11th. Fee for the Course, 1l.
FORTY LECTURES ON MINERALOGY, by Mr. WARINGTON W. SMYTH, M.A., F.R.S., to be delivered at 3 P.M. on MONDAYS, TUESDAYS, THURSDAYS, and FRIDAYS, commencing February 11th. Fee for the Course, 2l.
THIRTY SIX LECTURES ON APPLIED MECHANICS, by Professor WILLIS, M.A., F.R.S., to be delivered on TUESDAYS, WEDNESDAYS, THURSDAYS, and FRIDAYS, at 12, commencing February 14th. Fee for the Course, 1l. 10s.
THIRTY SIX LECTURES ON GEOLOGY, by Professor RAMSAY, F.R.S. (assisted by Mr. A. GEIKIE, F.G.S.), to be delivered on MONDAYS, TUESDAYS, WEDNESDAYS, and THURSDAYS, at 2 P.M., commencing on February 11th. Fee for the Course, 1l. 10s.
Tickets and Prospectuses of the School may be had on application.
TRENHAM REEKS, Registrar.

THE QUARTERLY REVIEW, No. CCXVII., just Published.
CONTENTS:—
I. CANADA.
II. WELSH LITERATURE.
III. IRON.
IV. MOTLEY'S UNITED NETHERLANDS.
V. ITALY.
VI. DOGS OF ROMANCE AND HISTORY.
VII. OXFORD ESSAYS AND REVIEWS.
VIII. FINANCE AND THE INCOME TAX.
JOHN MURRAY, Albemarle Street, W.

News of the Week.

PARLIAMENT was opened on Tuesday by the QUEEN in person. HER MAJESTY commenced her Speech by saying that her relations with foreign powers continue to be friendly and satisfactory; and expressed the hope that the moderation of the Powers of Europe will prevent any interruption of the general peace. She stated that in Italy she had adopted the principle of non-intervention, believing that the Italians ought to be left to settle their own affairs. In Syria, by the conjoint action of the Turkish and French forces, she hoped that tranquillity would soon be re-established, and the objects of the convention fully attained. HER MAJESTY expressed her satisfaction at the successful termination of the China expedition, described the state of India as progressively improving, and hoped that the disturbances in New Zealand would speedily be suppressed and arrangements be made to prevent their recurrence. HER MAJESTY next referred to the differences which had arisen among the States of the North American Union, and said that it was impossible not to look with great concern upon any events affecting the happiness and welfare of a people nearly allied to her subjects by descent, and closely connected with them by the most intimate and friendly relations. After expressing her heartfelt wish that these differences may be susceptible of a satisfactory adjustment, HER MAJESTY gracefully acknowledged the kind and cordial reception given to the PRINCE OF WALES during his recent visit to the United States, and the loyalty and attachment to her person and throne manifested by her Canadian and other North American subjects during the residence of the PRINCE among them. HER MAJESTY next announced that she had concluded with the EMPEROR OF THE FRENCH conventions supplementary to the Treaty of Commerce, and with the KING OF SARDINIA a Convention for the reciprocal protection of copyright. Having informed the Commons that the estimates had been framed with a due regard for economy, HER MAJESTY concluded by announcing that measures would be laid before them for the consolidation of important parts of the criminal law; for the improvement of the law of bankruptcy and insolvency; for rendering more easy the transfer of land; for establishing a uniform system of rating in England and Wales; and for several other purposes of public usefulness.

In the Lords the Address in answer to the Speech was moved by the Earl of SEFTON, and seconded by Lord LISMORE. After some remarks by the Earl of DERBY and Earl GRANVILLE on our relations with France, the Address was agreed to.

In the Commons the Address was moved by Sir E. COLEBROOKE, and seconded by Mr. PAGET. Mr. J. WHITE complained that the subject of Parliamentary Reform was entirely omitted from the Speech, and moved an amendment pledging the Government to introduce a Reform Bill at an early day. After some discussion in which Mr. DISRAELI, Lord J. RUSSELL, and Mr. BRIGHT took part, the amendment was negatived on a division by 129 to 46. The Address was then agreed to. On Thursday the CHANCELLOR OF THE EXCHEQUER moved a resolution in reference to the sums payable to the Bank of England for the management of the National Debt, the main object of which is to reduce the rate of remuneration paid by the country to the Bank by about 50,000l. a year. The resolution was agreed to. Sir G. LEWIS obtained leave to bring in a Bill to amend the law with regard to parochial assessments in England, and a Bill for the better management of highways in England. On the motion of Lord PALMERSTON, a select committee was appointed to consider whether by any alterations in the forms and proceedings of the House the despatch of public business can be more effectually promoted. Sir J. TRELAWNY obtained leave to bring in a Bill to abolish Church-rates, and Mr. DILLWYN obtained leave to bring in a Bill to remove doubts as to the eligibility of certain persons to be trustees of certain charities.

The French Chambers were opened on Tuesday by the EMPEROR in person. In his speech HIS MAJESTY informed the Chambers that a general statement of the situation of the country would be laid before them every year, and that their Address would be allowed to express their opinions on the questions of the day, in a free and unrestricted manner. HIS MAJESTY referred with satisfaction to the internal condition of the Empire, and said that, in order to render articles of primary necessity as cheap as possible, he had diminished the duties on those articles, and entered into a commercial treaty with England; and though by this measure he had lost 90 millions of annual revenue, the budget would be presented in a state of equilibrium, without resort to new taxes or fresh loans. HIS MAJESTY said he had endeavoured, in his relations with foreign Powers, to prove his sincere desire to maintain peace. In Italy, in accordance with his allies, he had adopted the policy of non-intervention, permitting every country to be master of its own destinies. The fleet which he had sent to Gaeta when that fortress seemed to be the last refuge of the KING OF NAPLES had now been withdrawn, for the purpose of avoiding a continued breach of the principle of neutrality; and it was his firm determination not to enter on any conflict where the cause of France was not based on right and justice. The *Moniteur* announces that a treaty for the cession of Mentone and Roquebrune to France was signed on Saturday last in Paris by the PRINCE OF MONACO, and that Turkey and the other Powers have agreed on the principle of a Conference on the question of extending the French occupation of Syria.

In the Prussian Chamber of Deputies on Wednesday M. VON VINCKE moved an amendment on the Address, declaring that it was not in the interest either of Prussia or of Germany to place obstacles in the way of the consolidation of the unity of Italy. This amendment was strongly opposed by the Government, but was carried after a discussion of six hours by a majority of 13, the numbers being 159 to 146.

A despatch from Gaeta, dated Thursday last, states that within the preceding 36 hours the besiegers had blown up three powder magazines and destroyed the side curtain of the citadel. The garrison had asked for an armistice of 48 hours to bury the dead.

The latest news from the United States informs us that Georgia seceded on the 19th ult., by a vote of 208 to 89. Five States are now out of the Union, and Louisiana was on the point of following their example at the departure of the mail.

By the Overland Mail we learn that Lord CANNING had refused to communicate to the Indian Council the papers relating to the Mysore grant. India was quiet, though complaints were made of the indiscretion of the income-tax officials. News had been received in India that the landing of the American Ambassador had been repulsed at Japan.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family arrived at Buckingham Palace on Monday afternoon from Windsor Castle, travelling to town by a special train on the Great Western Railway. Soon after her arrival the Queen held a Court and Privy Council. At the Court Baron Brunnow had an audience, and presented his credentials as Ambassador from the Emperor of Russia. Colonel Arthur Cotton, of her Majesty's Madras Engineers, had an audience, and received from her Majesty the honour of Knighthood. Colonel the Hon. Alexander Gordon had an audience, and delivered to her Majesty the Riband of the Order of the Garter, and the Riband of the Order of the Thistle, worn by his father, the late Earl of Aberdeen. At the Privy Council Lord Napier, by command of the Queen, was sworn of her Majesty's Privy Council. The roll of High Sheriffs for the present year for the counties of England and Wales was pricked by the Queen. Her Majesty's Speech on opening the Session of Parliament was submitted to the Queen in Council, and approved. The report of the Committee of the Privy Council respecting the ordinances of the Scottish Universities Commissioners, with reference to degrees in medicine and surgery, was submitted and approved. An extension of the period of naval bounties, with a reduction of rates, was ordered. Sir George Grey, Chancellor of the Duchy of Lancaster, Lord Napier, Earl Granville, the Duke of Somerset, Viscount Palmerston, and Sir George C. Lewis had audiences of her Majesty. On Tuesday the Queen went in State to the House of Lords and opened the Session of Parliament with a Speech from the Throne. In the morning the Prince Consort presided at a meeting of the Council of the Duchy of Cornwall, and in the afternoon rode on horseback. In the evening the Queen and Prince Consort, with the Princess Alice and Princess Helena, honoured the performance at the Adelphi Theatre with their presence. On Wednesday morning the Prince Consort presided at a meeting of the Governors of the Wellington College. In the afternoon the Queen, accompanied by the Princesses Alice and Beatrice, took a drive in an open carriage and four. The Prince Consort rode on horseback. In the evening her Majesty had a dinner party. On Thursday morning the Queen and Prince Consort, accompanied by the Princess Alice, rode on horseback. In the afternoon the Queen received on the throne the Addresses of the House of Lords and the House of Commons in answer to her Majesty's Speech at the opening of Parliament. The Queen and Prince Consort, accompanied by the Princess Alice, visited Marlborough House. In the evening her Majesty and the Prince Consort, accompanied by the Princess Alice, honoured the performance at the St. James's Theatre with their presence.

COURT ARRANGEMENTS.—Notice has been given that the Queen will hold levees at St. James's Palace, on Thursday, the 14th inst., Wednesday, the 20th inst., and Wednesday, the 13th of March; and a Drawing Room on Thursday, the 21st of March. It is understood that the Court will visit Osborne early next month for a week or 10 days, and at the end of March return to Windsor for the Easter holidays.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of the First Lord of the Treasury in Downing Street. Another Council was held on Wednesday.

PARLIAMENTARY MOVEMENTS.—The election for Leicester terminated on Wednesday in the return of Mr. Heygate, the Conservative candidate, by a majority of 563 over Mr. Harris, and 619 over Mr. Taylor.—The Hon. Arthur Gordon has declined, under existing circumstances, to come forward for Aberdeenshire.—There is a vacancy for Bolton caused by the retirement of Mr. Crook.—The Liberal electors of Bradford have selected Mr. W. E. Forster as their candidate at the approaching election, and there is at present no other candidate in the field.—The nomination for South Wilts takes place on the 14th, and the polling on the 18th inst.—There are now three candidates for Cork County, the Hon. Colonel Evans Freke, brother of Lord Carbery, on Conservative principles, and Mr. Thomas St. John Grant and Mr. Henry Harding, of Firville, near Macroom, in the Liberal interest.

ORDER OF THE BATH.—The Queen has given orders for the appointment of Charles Pressley, Esq., Chairman of the Board of Inland Revenue, to be Civil Companion of the Bath.

OFFICE OF EARL MARSHAL.—The Queen has approved of the appointment of the Right Hon. Lord Edward George Fitzalan Howard, to be Deputy Earl Marshal of England.

CONVOCATION.—In consequence of the death of the youngest daughter of the Archbishop of Canterbury, Convocation was prorogued on Wednesday to Tuesday the 26th inst.

THE ARMY.—The Coloneley of the 4th Light Dragoons, vacant by the death of Sir George Scovell

has been conferred on Major-Gen. Sir James Hope Grant, G.C.B.

THE NAVY.—Rear-Admiral the Hon. Sir Henry Keppel was on Wednesday appointed Commander in Chief on the South American Station, in the room of Rear-Admiral Sir Stephen Lushington whose period of command has expired, and Rear-Admiral Sir Baldwin Walker was appointed Commander in Chief at the Cape of Good Hope in the room of Sir Henry Keppel. Rear-Admiral Robinson has been appointed by the Admiralty to succeed Sir Baldwin Walker as Surveyor of the Navy.

PUBLIC EXPENDITURE.—Lord Palmerston has addressed the following letter to Mr. Crawford in answer to the address presented to him by 63 Liberal members of the House of Commons on the subject of retrenchment in the public expenditure :—

"94, Piccadilly, Jan. 30.

"My dear Mr. Crawford,—I have to acknowledge the receipt of the letter signed by yourself, Mr. Baines, and Mr. Buxton, which transmitted to me the memorial addressed to me by some members of the Liberal party in the House of Commons, who have generally supported her Majesty's present Government. I beg to assure you that I am much gratified by the friendly spirit in which this memorial has been drawn up; and I entirely concur in the opinion it conveys, that a due regard to economy should be observed in making arrangements for the public services of the nation. It is the duty of the responsible advisers of the Crown to propose such establishments and such estimates as, according to the best judgment they can form upon the knowledge they possess of the general state of affairs, may appear to them to be requisite for the interest and security of the empire; and it will be the endeavour of her Majesty's Government so to perform this duty as to obtain the approval and support of Parliament and the country. My dear Mr. Crawford, yours sincerely, "PALMERSTON."

THE VOLUNTEER MOVEMENT.—A deputation from the commanding officers of the metropolis and county of Middlesex, consisting of Lords Elcho, Radstock, Colville, and Ranelagh; Lieutenant-Colonels Lindsay, M'Donald, and Colvill and several others, had an interview with Earl de Grey and Ripon on Wednesday, and presented to his lordship the address which had been agreed upon, on his retirement from the War Office. His lordship returned the following reply :—

"I return to you my most sincere thanks for the expression of your regret at my retirement from the office of Under Secretary of State for War contained in the address which you have just presented to me, and which I receive with feelings of pride and gratitude. The duties which I have had to discharge during the last 18 months in connection with the Volunteer force have been full of interest to me, and I shall always consider myself most fortunate in having been officially engaged in the establishment and organization of that most valuable addition to our national means of defence. Acting under the directions of the Secretary of State for War, and conforming myself to the principles which he laid down for my guidance, I was, it is true, through his confidence, intrusted with a large discretion in the management of the Volunteer business of the War Office; but if success has, as you intimate, attended my efforts, it has been mainly owing to the wisdom and excellence of the rules which Lord Herbert established in the first instance, and to the supervision which he afterwards exercised over the mode in which they were applied. The great principle which has directed all the feelings of the Government with the Volunteers has been that, while it was our duty to maintain and enforce adherence to certain broad rules of order and discipline, without which no body partaking of a military character could exist for any useful purpose, it was essential to the success of a movement of this kind, popular in its nature, as springing from the spontaneous patriotism of the nation, that it should be permitted, within the limits of those necessary rules, to develop itself in the freest and most unfettered manner. Heartily concurring in these principles, I endeavoured to apply them in the daily conduct of the business of my office, and, while I always maintained the just and proper authority of the Secretary of State, I trust that I never forgot that I had to deal with a body of Volunteers who were freely sacrificing their time, their money, and their personal convenience in the service of their Sovereign and their country, and who were on every ground entitled to receive the utmost consideration at the hands of the Government. I do not pretend to say that the task was free from difficulty, but it was to me most truly a labour of love, and it was greatly lightened, after the commencement of last year, by the able and invaluable assistance which I received from the Inspector-General of Volunteers, Colonel M'Murdo. Mention is made in your address of the success which attended the great gatherings of Volunteers which took place last summer, but very little indeed of the credit of that success is due to me. It was Colonel M'Murdo who organised those gatherings and, as far as the official arrangements are concerned, the chief praise is due to him. But if you are good enough to thank me for the efforts I have made to aid in the development and to promote the efficiency of the Volunteer force, I have far greater reasons to thank you and the commanding officers of Volunteer corps throughout the county for the frank and hearty co-operation by which you rendered comparatively easy the duties which I had to discharge. I have frequently had occasion to invite you, as commanding officers of metropolitan corps, and as representing to a great degree the feelings of the Volunteers generally, to meet me and discuss questions of interest to the force, as they arose; and from the ready assistance which you always gave me on such occasions I derived the greatest advantage. I do not deny that the inevitable severance of my official connection with the Volunteers has been to me a source of much regret; but it is an unexpected, and I fear little deserved gratification to have received at your hands this mark of your confidence, to which I shall always attach the highest value, and for which I shall ever be most grateful."

Foreign.

FRANCE.—The Emperor of the French opened the Chambers on Tuesday in person with the following Speech from the throne :—

Messieurs les Sénateurs; Messieurs les Députés,

"The speech at the opening of each Session reviews in a few words past acts and future projects. Until to day this communication, restricted by its nature, did not place my Government in sufficiently intimate relations with the great bodies of the State, and these latter were deprived of the faculty of strengthening the Government by their public adhesion, or of enlightening it by their counsels. I have decided that every year a general exposition of the situation of the Empire shall be placed before you, and that the most important despatches of diplomacy shall be laid on your tables. You will also be able, in an address, to manifest your sentiments on the facts which are being accomplished, no longer as formerly by a simple paraphrase of the speech from the Throne, but by the free and sincere expression of your opinion. This amelioration more amply initiates the country in its own affairs, causes it to become better acquainted with those who govern it, as well as with those who sit in the Chambers, and notwithstanding its importance, in no way affects the spirit of the constitution. You are aware that formerly the suffrage was restricted. The Chamber of Deputies had, it is true, more extended prerogatives, but the great number of public functionaries by whom it was constituted afforded the Government a direct action upon its resolutions. The Chamber of Peers also voted the law, but the majority were liable at any moment to be displaced by the right of the Government to add new members. Besides, the laws were not always discussed according to their real value, but with a view to the chance which their adoption or rejection might offer for maintaining or subverting a ministry. Thence arose the little sincerity in the deliberations, the instability in the progress of the Government, and the slight amount of useful work accomplished. Every law is now prepared with care, and matured by a council composed of enlightened men, who give their advice on all the measures to be adopted. The Senate, guardian of the fundamental pact, and whose conservative power only assumes its initiative in grave circumstances, examines the laws solely in regard to their constitutional character, and as a real political Court of Cassation. It is composed of a certain number of members, which cannot be exceeded. The Corps Legislatif does not, it is true, interfere in all the details of the administration, but it is directly appointed by universal suffrage, and does not count among its members any public functionaries. It discusses the laws with the most entire liberty. If they are not approved of it is a notification which the Government takes into account. But this rejection does not shake the Government, does not arrest the progress of affairs, and does not oblige the Sovereign to take for councillors men who do not enjoy his confidence. Such are the principal differences between the present constitution and the one which preceded the revolution of February. You will, gentlemen, during the voting of the address, closely enter into all discussions according to the measure of their gravity, in order that you may afterwards be able to entirely devote yourselves to the affairs of the country. For if the former claim a profound and conscientious examination, the interests of the country are, in their turn, impatient for prompt attention. On the eve of more detailed explanations I shall confine myself to summarily reviewing what has been done at home and abroad. In the Interior all measures taken tend to augment agricultural, industrial, and commercial productions. The increasing dearness of everything is the inevitable consequence of a growing prosperity. But at least we were obliged to endeavour to make the articles of primary necessity as cheap as possible. It is with this object that we have diminished the duties on those articles, have signed a treaty of commerce with England, have conceived the project of contracting others with neighbouring countries, and have everywhere facilitated the means of communication and transport. In order to realise these economic reforms we have thought it our duty to renounce 90 millions of our annual revenue. Nevertheless the Budget will, as I informed you last year, be presented to you balanced, without it being necessary to have recourse either to the creation of new imposts or to public credit. The changes which have taken place in the administration of Algeria have placed the superior direction of affairs in the midst of the population. The illustrious services of the Marshal who has been placed at the head of the colony are sure guarantees of order and prosperity. As regards the Exterior, I have endeavoured to prove in my relations with foreign Powers that France sincerely desires peace, and that without renouncing a legitimate influence she does not pretend to interfere in any place where her interests are not concerned, and finally, that if she sympathises with all that is great and noble, she does not hesitate to condemn everything which violates international right and justice. Events difficult to be foreseen have combined in Italy to complicate a state of things already embarrassed. My Government, agreeing with its allies, has considered that the best means of obviating the greatest dangers was to have recourse to the principle of non intervention, which leaves each country master of its destiny, localises questions, and prevents them from degenerating into European conflicts. I certainly am not ignorant that this system possesses the inconvenience of appearing to authorise many grievous excesses. Extreme views would prefer another course; some that France should participate in and make common cause with every revolution; others that France should place herself at the head of a general reaction. I will not allow myself to be diverted from my path by these opposite inducements. It is sufficient for the greatness of the country that its rights be maintained in the quarter in which they are incontestable, to defend its honour wherever it may be attacked, and to afford her support where it is supplicated in favour of a just cause. It is thus that we have maintained our rights in causing the recognition of the cession of Savoy and Nice. These provinces are now irrevocably re-united to France. It is that, to avenge our honour in the extreme East, our flag united with that of Great Britain floats victoriously over the walls of Pekin, and that the cross—emblem of Christian civilisation—again surmounts in the capital of China the temples of our religion, which have been closed for more than a century. It is thus that in the name of humanity our troops have gone to Syria in virtue of a European convention, in order to protect the Christians against a blind fanaticism. At Rome I have considered it necessary to increase the garrison when the security of the Holy Father appeared to be threatened. I sent my fleet to Gaeta at the moment when it seemed that it must be the last refuge of the King of Naples. After having allowed it to remain there four months, I withdrew it, however worthy of sympathy might be a Royal misfortune so nobly defended. The presence of our war vessels obliged us to depart every day from the system of neutrality which I had proclaimed, and gave rise to erroneous interpretations. But you know that in politics one hardly believes in the possibility of a purely disinterested step. Such is a rapid exposition of the general situation. Let any apprehension therefore be dissipated, and let confidence be re-established. Why should not commercial and industrial affairs assume a new development. My firm resolution is not to enter into any conflict in which the cause of France should not be based on right and justice. What have we, then, to fear? Can an united and compact nation, numbering forty millions of souls, fear to be drawn into struggles the aim of which she could not approve, or to be provoked by any menace whatever? The first virtue of a people is to have confidence in itself, and not to allow itself to be disturbed by imaginary alarms. Let us, then, calmly regard the future, in the full consciousness of our strength, as well as of our honourable intentions. Let us engage, without exaggerated preoccupations, in the development of the germs of the prosperity that Providence places in our hands."

The Corps Legislatif held a sitting on Tuesday, when Count de Morny delivered a speech in praise of the reforms indicated in the Emperor's Speech. On Wednesday, M. Baroche laid on the table an exposition of the state of the Empire, and several important diplomatic documents on the annexation of Central Italy to Piedmont, and of Savoy and Nice to France; and on the affairs of Rome, Southern Italy, the Warsaw interview, the expedition to Syria, and the war in China. —The *Moniteur* of Thursday publishes the following:—

"A treaty destined to put an end to the abnormal [illegible] which the districts of Mentone and Roquebrune have [illegible] since 1848, was signed on the 2d of February at the Ministry of Foreign Affairs by the Plenipotentiary of the Emperor and the Plenipotentiary of the Prince of Monaco. According to the terms of this treaty the two districts are ceded to France on conditions settled by mutual agreement between his Imperial Majesty and his Highness."

—The *Moniteur* publishes an Imperial decree regulating the sittings of the Senate and the Corps Legislatif. The projects of the addresses of the Senate and the Corps Legislatif will be drawn up by commissions composed of the Presidents and one member from each committee. Both addresses will be voted paragraph by paragraph. Any amendment to the addresses will only be discussed when signed by five members.—Admiral Barbier de Tinan has arrived in Paris on a special mission, and has requested instructions before reassuming the command of the fleet in the Mediterranean.—Marshal Bosquet, who commanded one of the French divisions in the Crimea, died a few days since. His career, though short, was one of the most brilliant among the French military celebrities. He was only 51 years of age, and had never completely recovered a wound he received in the Crimea.—The Paterson-Bonaparte case was resumed on Friday. The greatest excitement prevailed, and the Court was crowded to suffocation. The following is a summary of the proceedings :—

M. Berryer commenced his reply by alluding to the [illegible] good taste which had distinguished M. Allou's speech. He reasserted that at the time of the marriage Miss Paterson was only 18, and that Jerome Bonaparte was 21. He utterly denied that Miss Paterson had ever used the degrading expression imputed to her by M. Allou, that she would run all risks [illegible] could only be his wife for 24 hours. He pointed out the absurdity of describing the marriage as clandestine, when the French envoy was invited to attend and the French vice-consul was present. He showed that not only was there no opposition to the marriage, but the letters of Madame Mere, for a period of upwards of 20 years, during which she addressed M. Bonaparte as her son, show her to have approved of it. He recapitulated his argument, showing that the [illegible] of M. Bonaparte as a legitimate child had been recognised by the Bonaparte family for upwards of [illegible] years, and that it was further validated by an Imperial decree naturalising him a Frenchman. In answer to the passage in M. Allou's speech in which the latter had quoted as a precedent the marriage of the Duke de Berry with a Miss Brown whilst in exile in England, he read a letter from the clergyman of the church where the children had been christened, which proved that no such marriage had taken place. Then addressing M. Allou, he said—'You were very badly inspired, Monsieur, in venturing on the supposition that, were the Misses Brown to be placed in the position of my client, and the Comte de Chambord in that *of Prince Napoleon*, I should be standing in the place you *occupy*. *I appeal to* public opinion, I appeal to the Court, whether any part of my long career justifies the supposition that I would [illegible] myself by acting as the advocate of the Comte de Chambord were he to occupy the position of Prince Jerome in this deplorable case?' This passage caused such a burst of applause in the court that the sitting was suspended, and several persons were expelled. M. Allou then delivered his reply. In regard to the alleged marriage of the Duke de Berry with Miss Brown, he said it was recorded in some biographies of established reputation which had never been contradicted. As to the case now before the Court, he contended that there could be no difficulty in deciding between the two marriages—one contracted secretly, and in violation of his promise, by a boy of 19; the other celebrated in the face of the world, with all the formality of the law and all the pomp of religion. The Court again adjourned for a week to hear the Imperial Advocate on behalf of the Crown.

SPAIN.—At a late sitting of the Congress, the Minister of Marine, on being questioned as to the plan adopted in building an iron cased frigate now in course of construction, replied that it was his intention to follow the system of the French frigate La Normandie, which had received some improvements on that of the Gloire. As to the system followed in England, the Warrior had not given the results expected by the Admiralty.—The *Espana* of the 1st makes the singular statement that the pecuniary resources of Don Juan have been supplied by the Bible Society of London, and that, in return, he has undertaken to establish liberty of worship in the event of his becoming Sovereign of Spain!—According to the data collected by the Commission of Statistics, the Peninsula numbers 19 millions of inhabitants. Petitions continue to be prepared in the provinces for the suppression of passports.

SWITZERLAND.—The Federal Council has received official information from Rome that the Swiss troops have again embarked at Civita Vecchia to return to their country.

DENMARK.—The Danish Diet has been closed. The King, in his reply to the President's speech, said—"Should an enemy come near us, my people will defend themselves, if I call upon them to do so." The semi-official *Berlingske Tidende*, in publishing this speech, makes the following remarks :—

"'Should German troops enter Holstein without being called upon to do so by our Sovereign, and contrary to his wish, the violation of territory would then take place, and the Federal Diet would, in fact, have declared war against Denmark. War, at the present moment, would be inconvenient for Denmark. Germany, and is consequently convenient for [illegible] state of armed peace exhausts the strength of a country and weakens popular enthusiasm, without which a small people cannot make war. By a blockade we can now damage the commerce of Germany, and ruin the Prussian [illegible] long period. The dispute must, therefore, now be settled either by war or by negotiation.'"

It is said that the Danish Treasury can at the present moment dispose of a capital of 22,345,000 rix-dollars, or about 2,554,000*l*., besides the 5,000,000 rix-dollars required for the reimbursement of the English 5 [illegible]

...nt. loan, due on the 1st March. The weather is very severe in Denmark. The roads are blocked up by heavy masses of snow, and intercourse is stopped.

FRANKFORT.—In the sitting of the Federal Diet on Thursday the propositions of the Committee on the Affairs of Holstein were agreed to. The representative of Denmark contested the competency of the Diet, and reserved the rights of Denmark.

PRUSSIA.—In the sitting of the Chamber of Deputies on Wednesday, the discussion on the Address commenced. The following amendment was proposed by M. Von Vincke:—

"That we do not consider it to be either for the interest of Prussia or of Germany to place obstacles in the way of the consolidation of the unity of Italy."

Baron von Schleinitz, the Minister of Foreign Affairs, urgently entreated the Chamber to reject the amendment. He said:—

"The Prussian Government had not the least reason to be opposed to the development of Italy; but, without underrating the national idea of that movement, the Government could not attribute to it such a high significance. Although the Government did not always consider the principle of non-intervention as binding, it had not actively interfered in Italy. He repudiated the reproach of yielding to certain influences in his policy, and said that Venetia was militarily and strategically too important for Austria, and indirectly for Germany, to allow of its cession being allowed by Prussia. Austria and Sardinia, however, would remain on the defensive, and, through the influence of the great Powers, a conflict would at least be postponed, and perhaps entirely averted. The Prussian Government would in the future also not actively interfere with the Italian movement, so long as it remained a national movement, and did not acquire such an extension as might render any active interference necessary, by reason more especially of its reaching, or expressly claiming, any portion of German Federal territory."

After a discussion of six hours' duration, the amendment was carried by 159 to 146 votes. On Thursday the debate on the address was continued, when M. Stavenhagen proposed an amendment expressing the wish that Prussia should be placed at the head of United Germany and the Germanic Confederation. Baron Schleinitz opposed the amendment on the ground of the antipathy which prevails in many places against placing Prussia at the head of Germany, and dwelt on the necessity of not sowing discord at a time when concord is needed. M. Stavenhagen then withdrew his amendment. M. Overbeck, however, took it up, and proposed it on his own account, when the amendment was rejected by 261 to 41.—The King received on the 26th ult. a deputation of the inhabitants of Schleswig-Holstein, and gave them "the most satisfactory assurances concerning the re-establishment of their rights." At the head of the deputation was the Prince of Holstein-Augustenburg, officer of Hussars of the Prussian Guard, and Count Reventlow, ex-Governor of Holstein, and now member of the Chamber of Nobles at Berlin.—General della Marmora left Berlin on Tuesday evening for Turin. The King has conferred upon him the Order of the Red Eagle, first class, set in diamonds. A Prussian General officer will be sent on a special mission to Turin, to notify to the King of Sardinia the accession of King William. During his stay at Berlin General La Marmora repeatedly declared to the Prussian Government that Sardinia has no intention of attacking Venetia, but made no other political declarations.—The King has appointed Prince Frederick William, now the Crown Prince of Prussia, to be Governor of Pomerania, with the title of Statthalter, which is almost equivalent to that of Viceroy. These high unctions have been conferred on his Royal Highness on the occasion of the second birthday of his infant heir-apparent.

BADEN.—It is reported that negotiations are either pending, or have come to a conclusion, between Prussia and the Grand Duchy of Baden, for the cession of the Grand Duchy to Prussia.

AUSTRIA.—The *Official Gazette* of Tuesday contains an Imperial decree appointing the Archduke Rainier President of the Ministry, Count Nadasdy President of the Council of the Empire, Count Rechberg, Minister of the Imperial Household and Minister for Foreign Affairs, Herr von Lasser Chief of the Political Administration, Herr Pratobera Minister of Justice, Count Wickenburg Minister of Commerce, and Baron Schmerling Minister of Public Worship and Instruction, and of all affairs concerning the organisation of the Empire and the national political representation, excepting those of Hungary. The law regulating the religious affairs of the Protestants in the German and Slavonian Provinces has been adopted by the Council of Ministers, and will be published shortly after it has received the Imperial sanction. It grants complete self-government to the Protestant Church. As regards marriages between Catholics and Protestants, the existing regulations are for the present to remain in force. The semi-official *Donau Zeitung* gives a denial to the news published by some German journals, that a treaty relating to the Danubian Principalities had been concluded between Russia and Austria.

HUNGARY.—Baron Vay, the Chancellor of Hungary, has addressed a letter to the Cardinal Primate relative to the late Imperial protest against the proceedings of the Comitats. The Chancellor says that if these proceedings continue the meeting of the Diet must be indefinitely postponed. Meanwhile he pledges himself for the sincerity of his Sovereign. The Judex Curiæ has exhorted the Municipalities to await the result of the Judicial Conference, which is to meet shortly, before commencing the exercise of judicial functions. Kemeny has also issued an address, exhorting the citizens to act with moderation. He says that the attitude assumed by the Government until now has produced distrust, and that abuses have taken place, but the Aulic Chancellor, Baron Vay, merits the confidence of the country.—In the sitting of the Municipality of Pesth on the 1st inst., M. Deak read the projected address in reply to the Imperial rescript. This address was opposed by M. Szilagyi, as being too moderate, but was defended by M. Eötös, who caused its adoption by the Municipality. Numbers of the Hungarian soldiers on furlough, who had been ordered to return, have already arrived at their quarters.

RUSSIA.—Advices from Kiakhta, in the St. Petersburg journals, announce that the Russian merchants are taking all the necessary steps for turning to account the recent treaty with China. General Ignatieff, who left Pekin on the 10th November, arrived at Kiakhta in 15 days, the shortest time hitherto taken. On his arrival the church bells rang a peal, and a *Te Deum* was celebrated in the principal church.

ITALY.—The remaining elections have everywhere taken place peacefully, and have been favourable to the policy of Count Cavour. The scrutiny of the ballot, even in Lombardy, has ended in the return of moderate men, and in Southern Italy there is also a majority for the Ministry. Brofferio and Crispi have at length been elected Members of the Chamber of Deputies, the former by Casalmaggiore and Castelnuovo in Lombardy; the latter by Castelvetrano in Sicily. The King has appointed Ruggiero Settimo, Prince of Fitulia, a descendant from the ancient kings of Sicily, and the President of the Provisional Government of Sicily in 1848, to be President of the Senate of the Italian Kingdom. The King has appointed M. Waldino Peruzzi, a Tuscan, to succeed M. Jacini as Minister of Public Works. Count Brassier de St. Simon has presented to his Majesty the credentials confirming his appointment as Ambassador of the King of Prussia at Turin. Accounts from Gaeta state that the firing on the night of the 31st was very violent on both sides, the Sardinian projectiles having been especially directed against the city. During the night Monsignor Cresevolo, superior of the Seminary, was mortally wounded; the Curé of the Cathedral and one monk were badly wounded; and the Alcantarista Convent was nearly destroyed. For several hours a Sardinian gunboat fired near the Convent of the Holy Trinity, but when the battery Transylvania replied the gunboat retired. The fire was subsequently continued day and night without any remarkable incident on either side until Monday, when the Sardinian batteries blew up two of the Neapolitan powder magazines, and destroyed a portion of the curtain between the Citadel and the St. Antonio Bastion. On Wednesday another powder magazine in Gaeta blew up, killing a great number of the besieged. The garrison has asked for an armistice of 48 hours to bury the dead. This has been granted by General Cialdini, who has besides sent to the place necessaries for the wounded. The Sardinian fleet has not lately fired a shot, but confined itself to maintaining the blockade. On Sunday night a vessel left the harbour, eluding the vigilance of the Sardinian squadron, but the Spanish vessels which were despatched to Gaeta have been repulsed by Admiral Persano. A reactionary conspiracy has been discovered in Naples, and has led to several arrests, but the city itself is so tranquil that the remainder of the garrison has left for the Camp before Gaeta, and the city is guarded by Militia. Fresh corps of foreign Volunteers are however organizing. Prince Carignan is at Mola di Gaeta, and has visited the camp. Rumours of the surrender of Gaeta continue to be current, and the Prince's journey is said to be in connection with negotiations for the surrender. The district round Chieti has been tranquillised, and General Rocca reports that confidence and tranquillity are returning throughout the whole frontier of the Abruzzi. It has been ascertained that the reactionary movement in that province was organized by Count Trapani and Monsignor de Merode, the Papal Minister of War. Schiavone, one of the chiefs of the reactionary bands in the Abruzzi, has surrendered. Fighting, however, continues to take place, and a spirit of revenge is displayed on both sides. Sardinia has claimed the restoration of the soldiers who were made prisoners by the Papal Zouaves at Correse, and has arrested the Bishop of Poggio Mirteto in Sabina as a hostage. The Pope has given up all the prisoners of war, excepting those who are Roman subjects, and has ordered his soldiers to return to Rome, notwithstanding the orders of Monsignor de Merode to the contrary. General Goyon has sent French soldiers to occupy Correse, and the Sardinians have evacuated the Papal territory, in compliance with orders from the Emperor Napoleon. 15,000 Sardinian soldiers have passed through Umbria on their march to the kingdom of Naples. 400 muskets, destined for the reactionists in the Abruzzi, have been seized by the French at Ticovaro, near Perugia. The town of Sora has presented an address to General Sonnaz expressive of gratitude for his exertions to restore tranquillity. The peasants compel the demoralised reactionary bands to surrender to the Sardinians.

MONACO.—A convention was signed on Monday in Paris definitively ceding Mentone and Roquebrune to France, the sum paid to the reigning Prince for these territories being 4,000,000f. He retains however as his property the town of Monaco and its 3000 inhabitants.

TURKEY.—The French and Russian Ambassadors have presented to the Porte a strong note in reply to the Grand Vizier's report. This note reiterates the assertions of France and Russia that the Christians are oppressed. The Porte continues to refuse its consent to a prolongation of the French occupation of Syria. The draughts of the treaties of commerce which are about to be concluded between England and Turkey and France and Turkey have been sent home for the approval of the English and French Governments. The commercial crisis continues in Galata.

MONTENEGRO.—On the 28th January the Montenegrins, with a band of insurgents from the neighbouring villages, which they keep in a state of revolt, surprised several villages in the district of Niesich and behaved with the utmost cruelty and atrocity towards the peaceable Mussulman inhabitants, killing altogether 41 persons, of whom 10 were children and 3 women. A second band attacked the chief town, Cariantz, assassinated several people, burnt many houses, and acted with the greatest ferocity and cruelty towards the inhabitants.

SERVIA.—It is announced that the Austrian Government and Prince Michael of Servia have entered into a convention for the reciprocal extradition of political and other prisoners.

SYRIA.—All the Powers including Turkey are agreed on the principle of a conference on the affairs of Syria. This conference will hold its sittings in Paris, and will assemble forthwith. Letters from Beyrout state that the agitation was increasing. 1200 Druses were assembled at Moktara, and intended to prevent the execution of those who had been condemned to death for taking part in the massacres. Fuad Pasha had returned from Moktara. The European Commission at Beyrout has proposed to establish in Syria one sole Government for the Christian inhabitants, under the protection of the European Powers. On the other hand the Porte has proposed the establishment of two Governments, with General Councils composed of Christian and Mussulman members.

INDIA.—By the Overland Mail we have news from Bombay to the 12th and from Calcutta to the 3d January. The following are the details:—

Calcutta.—In the Legislative Council, on Dec. 22, a message was received from the Governor-General refusing to communicate the papers on the Mysore grant, on the ground of the incompleteness of the correspondence, but promising to transmit the resolutions of the Legislative Council to the Secretary of State. The message also states that no money has yet been paid on account of the extraordinary grant of 520,000*l.*, and that nothing beyond the usual yearly pensions to the Mysore family has been included in any of the estimates hitherto laid before the Legislative Council. Sir James Outram has finally given up all intention of returning to India, and has consequently resigned his seat in the Supreme Council.

Bombay.—The Bombay, Baroda, and Central India Railway has been officially opened by the Governor, Sir George Clerk. Some discontent had been caused by the indiscretion of the income-tax executive in the matter of surcharging, but the excitement was gradually dying out.

Oude.—A report from the Chief Commissioner of Oude on the working of the trades tax in all districts of the province, "with the exception of Lucknow," has been published. The tax has been levied on 440,000 persons, who have been assessed, on the average, at the rate of nearly two rupees a head. The produce of the tax has been 84,370*l.*; and the chief commissioner says that this sum has been collected without oppression on the part of the Government, or murmuring on the part of the people.

UNITED STATES.—Georgia seceded on the 19th ult. by a vote of 208 to 89, making the fifth State which has seceded from the Union. The secession of Louisiana was on the eve of accomplishment, and Virginia had adopted by unanimous vote a resolution, declaring for secession in the event of the continued refusal of the Republican North to concede the right claimed by the whole South, of free admission to a fair share of the common territory of the Union. This action of Virginia, coupled with the actual secession of Georgia, is already exerting an influence upon Maryland, the position of which derives a two-fold importance from the fact that the district of Columbia and the city of Washington lie embedded in the southern part of that State. The secession ordinance of Louisiana declares the freedom of navigation of the Mississippi. From Washington we learn that the Senators from Georgia, Florida, Alabama, and Mississippi had withdrawn from the Senate, but the Senate after some debate declined to recognise their withdrawal. It had been proposed that Congress should resign, and that a new one should be elected. The Augusta arsenal, in Georgia, had been surrendered to State troops. Vessels will leave Charleston with a clearance from the Carolina authorities, certified by the foreign Consuls. The Charleston populace were displeased with the actions of Governor Pickens, and an attack on Fort Sumter was expected. An attack was also expected at Pensacola, in Florida, where a large force is gathered, under command of Major Chase, formerly of the Federal army, with a view of attacking a small garrison in Fort Pickens. The Wyandotte was anchored west of the Fort, and was expected to assist in the defence. General Scott was fortifying Washington with increased zeal. The Government has sent reinforcements to Forts Pickens and Sumter. In the Senate, on the 23d, a motion to take up the Crittenden Resolutions was lost by 27 to 24. The Senate has passed the bill for the admission of Kansas into the Union. The Rhode Island Senate had passed an Act repealing the Personal Liberty Bill by a vote of 21 to 9. In

consequence of a rumour that the Navy Yard in New York would be attacked, marines were ordered under arms, and large police forces were held in readiness to act, but no attack took place. Mr. Dix, the new Secretary of the Treasury, had made an important communication to the House, that the amount required to pay the public expenditure till the 1st of July will exceed the revenue and other sources of income by 20 millions of dollars. The court-martial on Colonel Corcoran for declining to parade his regiment on the occasion of the visit of the Prince of Wales to New York was proceeding.

MEXICO.—Advices from Mexico state that Juarez left for the capital on the 5th of January, in order to establish a liberal Government. Some of Miramon's principal officers, including his Minister of Foreign Relations, had been captured by Indians. Miramon himself had also been taken, but subsequently escaped, after killing three Indians.

Parliament.

HOUSE OF LORDS.

TUESDAY.—The third Session of the sixth Parliament of Queen Victoria was opened on Tuesday by the Queen in person, with all the pomp and ceremony usual on such occasions. The Commons having been summoned to the bar, Her Majesty delivered the following Speech :—

"MY LORDS AND GENTLEMEN,

"It is with great satisfaction that I meet you again in Parliament, and have recourse to your assistance and advice.

"My relations with foreign powers continue to be friendly and satisfactory; and I trust that the moderation of the powers of Europe will prevent any interruption of the general peace.

"Events of great importance are taking place in Italy. Believing that the Italians ought to be left to settle their own affairs, I have not thought it right to exercise any active interference in those matters. Papers on this subject will be laid before you.

"I announced to you, at the close of the last Session of Parliament, that the atrocities which had then recently been committed in Syria had induced me to concur with the Emperor of Austria, the Emperor of the French, the Prince Regent of Prussia, and the Emperor of Russia, in entering into an engagement with the Sultan by which temporary military assistance was to be afforded to the Sultan for the purpose of establishing order in that part of his dominions.

"That assistance has been afforded by a body of French troops, who have been sent to Syria as representing the Allied Powers. The Sultan has also placed a considerable military force in Syria, under the direction of an able officer; and I trust that tranquillity will soon be re-established in that province, and that the objects of the convention will have been fully attained.

"I announced to you also at the close of the last session of Parliament, that the pacific overtures which my Envoy in China had made to the Imperial Government at Peking having led to no satisfactory result, my naval and military forces, and those of my ally the Emperor of the French, were to advance towards the northern provinces of China, for the purpose of supporting the just demands of the allied powers, and that the Earl of Elgin had been sent to China as Special Ambassador to treat with the Chinese government.

"I am glad to inform you that the operations of the allied forces have been attended with complete success. After the capture of the forts at the mouth of the Peiho, and several engagements with the Chinese army, the allied forces became masters of the imperial city of Peking; and the Earl of Elgin and Baron Gros, the ambassador of the Emperor of the French, were enabled to obtain an honourable and satisfactory settlement of all matters in dispute.

"Throughout these operations, and the negotiations which followed them, the commanders and ambassadors of the Allied Powers acted with the most friendly concert. Papers on this subject will be laid before you.

"The state of my Indian territories is progressively improving, and I trust that their financial condition will gradually partake of the general amendment.

"An insurrection of a portion of the natives of New Zealand has interrupted the peace of a part of that colony; but I hope that the measures which have been taken will speedily suppress these disturbances, and enable my Government to concert such arrangements as may prevent their recurrence.

"Serious differences have arisen among the States of the North American Union. It is impossible for me not to look with great concern upon any events which can affect the happiness and welfare of a people nearly allied to my subjects by descent, and closely connected with them by the most intimate and friendly relations. My heartfelt wish is that these differences may be susceptible of a satisfactory adjustment.

"The interest which I take in the well-being of the people of the United States cannot but be increased by the kind and cordial reception given by them to the Prince of Wales during his recent visit to the Continent of America.

"I am glad to take this opportunity of expressing my warm appreciation of the loyalty and attachment to my person and throne manifested by my Canadian and other North American subjects on the occasion of the residence of the Prince of Wales among them.

"I have concluded with the Emperor of the French conventions supplementary to the treaty of commerce of the 23rd of January, 1860, and in furtherance of the objects of that treaty.

"I have also concluded with the King of Sardinia a convention for the reciprocal protection of copyright.

"These conventions will be laid before you.

"GENTLEMEN OF THE HOUSE OF COMMONS,

"I have directed the estimates for the ensuing year to be laid before you. They have been framed with a due regard to economy and to the efficiency of the several branches of the public service.

"MY LORDS AND GENTLEMEN,

"Measures will be laid before you for the consolidation of important parts of the criminal law; for the improvement of the law of bankruptcy and insolvency; for rendering more easy the transfer of land; for establishing a uniform system of rating in England and Wales; and for several other purposes of public usefulness.

"I confidently commit the great interests of my empire to your wisdom and care; and I fervently pray that the blessing of the Almighty may attend your councils, and may guide your deliberations to the attainment of the object of my constant solicitude—the welfare and happiness of my people."

The Address.—On the reassembling of the House at 5 o'clock, the Earl of SEFTON moved, and Lord LISMORE seconded the Address.—The Earl of DERBY said he found no fault with the general tone of the Speech, and approved of its announcement of future measures. Still he thought that the Speech ought to have expressed some sympathy for the distress of the country, and that some notice should have been taken of our financial position. He congratulated the Government on the result of the Chinese war, but apprehended further difficulties in our measures for regulating the finances of India. But the most serious consideration involved in the Speech was that of our foreign relations. He called on the Government to explain distinctly the exact position of our relations with France. Passing to the Italian question, he blamed in warm terms the conduct of Sardinia, who had invaded Naples in direct violation of the law of nations. Were they acting with France in all those movements with which the Emperor Napoleon had lately astonished Europe? What were the objects they sought to accomplish in Italy? On this point her Majesty's Ministers had shown extreme candour, two despatches from the Foreign Secretary having appeared especially lucid and intelligible in terms, but, unfortunately, entirely inconsistent in tenour. He wished to know upon the principles of which despatch the Government intended to act, because if Sardinia were justified in interfering in Naples she would be equally justified in interfering in Venetia. He trusted that peace would be preserved; but it was of no use to blink the fact that peace depended upon the Emperor of the French, and, judging from a recent speech, he was not favourably impressed as to the French Emperor's desire for peace. The danger to the peace of Europe arose from the warlike attitude of France, from her large army, and, above all, her increased and increasing navy,—an attempt to rival this country in a department in which she ought to be supreme. Looking to these great naval preparations, he could not but think that all these efforts were directed against a possible rupture with this country. He did not ask them to perform impossibilities and reconcile these discrepancies, but considered that they were bound to explain the course they meant to pursue, and the part they proposed to take amidst the existing perturbations of the Continent.—Earl GRANVILLE defended the course of the Government upon Italian affairs, and challenged a full discussion of their foreign policy when the papers which had that night been laid on the table were published. Towards France, he said, their relations were neither those of blind distrust on the one hand nor blind confidence on the other, but were prompted by a sincere desire to maintain the most cordial friendship between two great nations, whose co-operation almost ensured the peace and prosperity of the civilized world. The Address was then agreed to.

THURSDAY.—*The Address.*—The House met at 2 o'clock, and proceeded to Buckingham Palace to present to her Majesty the Address in answer to the Speech from the Throne. On its return the House adjourned to Friday.

FRIDAY.—*Public Business.*—Earl GRANVILLE moved the appointment of a committee to inquire into the mode of transacting the business of the House. The House of Commons had already appointed a committee, and he believed it had been proposed last session to have a joint committee, but he thought the better course would be to have two committees acting independently.—The Earl of DERBY said that the practice of moving resolutions of urgency, in the case of Bills brought up late, simply because they were of great importance, was very much to be deprecated.—Lord REDESDALE said the real matter to be considered was, how business could be expedited in the House of Commons, so that they could send important Bills up to their Lordships' House at an early period. [Left sitting.]

HOUSE OF COMMONS.

TUESDAY.—*The Address.*—The SPEAKER having read the Royal Speech, Sir E. COLEBROOKE moved the Address in reply, which was seconded by Mr. C. PAGET.—Mr. WHITE said that though very reluctant to disturb the unanimity which generally prevailed on these occasions, there were omissions in the Royal Speech, and he felt bound to move an amendment. Nothing was said about the question as to the respective functions of the two Houses, and the abandonment of one of the most precious privileges of the Commons. The Royal Speech was defective in relation to France, and to the warlike preparations of the Emperor; and it made no mention of administrative or of Parliamentary reform. With regard to China, the treaty of Tien-tsin could only be considered as a truce, since stipulations so extorted could not be enforced. He moved as an amendment a clause to the effect, that the Government should, at an early day, introduce a Bill for the extension of the franchise, in fulfilment of their pledge when they came into office.—Mr. DIGBY SEYMOUR seconded the amendment.—Mr. DISRAELI admitted that the reception by the House of the late Reform Bill of the Government was not such as to encourage them in further efforts; however, therefore, they might regret the position of the question, they could not accuse the Government of having violated its trust. But there was another subject which was full of perplexity and apprehension. The general position of our foreign policy was one which we could not regard without anxiety. He did not accuse the Government of withholding information; on the contrary, it was from the information given them that their perplexities arose. But he demanded that the Government should declare its intentions so that the country could understand them. At present the country was so mystified by the official declarations as almost to regret the secret policy of former times, which was at least a system. From appearances the public might believe that our relations with France, so far from being friendly and satisfactory, as announced in the Speech, were most unfriendly and unsatisfactory. He had hitherto supported the French alliance, and saw no reason for regretting that support. But that alliance could not subsist without great forbearance and mutual sacrifices. The conditions of both of these had been observed by the late Government, and violated, as he contended, by Lord John Russell, who, on entering office, adopted a line of conduct which France believed contrary to her best interests. The noble lord, in his action in Italy, had professed the unity and independence of Italy. Was Italy united and independent? Rome was still garrisoned by the Gauls, Venetia was bristling with Austrian artillery. If Italy was to be free and united, it could only be by the sword of France. But could such an effort, and the sacrifice involved by the unity of Italy, be made by France without the expectation of some result? That result would be an alliance offensive and defensive with Italy—an alliance which France would then be justified in assuming. The Emperor would thus find himself at the head of a million of bayonets, and would be in a position to make those further changes which he would not then foreshadow. This would be the result of the policy into which our Government had urged the Government of France, which at first was unwilling to undertake it. If the noble lord had wished to effect the unity of Italy we should not have contented ourselves with moral influence, we should have adopted material measures, which would have given us a real claim on the gratitude of the Italians. Under such circumstances he did not want information, but he did want explanation, believing that our position was one of great danger. Either we must fall back upon such an arrangement as the Treaty of Zurich, or the far more perilous situation of Italy united by the sword of France, and with its resources in the power of France. Either of these contingencies involved a most serious responsibility on the part of the Government which had brought about such a position of affairs. But beyond this, it was im[possible to say] what the anarchical elements now evoked in [Italy might] produce. Those elements had been called [forth] ... Government were pursuing the phantom of ... What were they to understand? The information ... received had only bewildered them; the more ... told the less they seemed to know; ... in our relations with France, they ought ... whether the two nations were in Italy rivals or ...—Lord J. RUSSELL repeated that the policy ... lowed by the Government in Italy was simply ... the Italians to settle their own affairs. The ... and independent Italy was then, as it had always ... ject of derision with Mr. Disraeli, who could ... to praise but the King of Naples. He entered ... the position of affairs in Italy, defending at once ... the Government and the conduct of the King of ... expressed a sanguine hope that, notwithstanding ... aspect of affairs at many points at the present ... peace of Europe might nevertheless be preserved ... to the amendment and the subject of Reform ... it was better for the Government not ... ward a measure which, at the present ... create disappointment, and occupy a great ... time without leading to any satisfactory ... this question he always dreaded what ... by way of compromise. He had come to the ... order to carry a Reform Bill which would be ... country, there must be such an amount of public ... favour as would carry it through that House and ... Lords. The country, however, had the matter ... hands, and might declare that nothing would ... Parliamentary Reform; the Government were ... their best course would be to give their attention ... subjects indicated in her Majesty's Speech.—Mr ... he felt a grief which he could not express at ... from Lord John Russell, and at the tone in ... repudiated his obligation to bring forward a Reform ... entered into a detailed history of the successive ... to introduce Reform Bills in various sessions ... last ten years, maintaining that the members ... sent Government had repeatedly pledged themselves ... everything in their power to carry some large measure ... description. Admitting that no extensive ... existed on the question, he appealed to the House ... was not better to pass a bill framed on just principles ... cussed with calmness and deliberation, than to wait ... violent measures were forced upon them by public ... a period of discontent and excitement. The House ... when there were for the Amendment, 46; Against ... Majority against it, 83. The Address was then agreed ...

WEDNESDAY.—*Indian Loan.*—The report on ... having been brought up, Mr. CRAWFORD asked the ... of State for India whether the necessity for raising ... 3,000,000*l*. in London, for the service of the Government ... India, was owing to circumstances connected only with ... way receipts and expenditure; or whether it arose from ... falling off of the available sources of income or increase of ... penditure in India?—Sir C. WOOD said that his expectations ... to the results of Indian railways had not been realised ... expenditure would be six and a half millions instead ... and a half, while the receipts would be a ... half under the estimate, and it was on this ... alone that a loan was required. Meanwhile, the general ... pects of Indian finance were encouraging. The expenditure ... had been reduced last year by 3,300,000*l* and the year ... by 3,500,000*l*., so that, unless some unforeseen difficulty ... the income and expenditure might next year be expected ... balance each other. *Foreign Policy.*—Mr. S. FITZGERALD ... great length called attention to the foreign ... Russell, and denounced it as dangerous, ... comprehensible. His despatch of the 31st ... affairs enunciated the doctrines and almost the ... the revolutionary convention of France in 1792. ... lord could announce a cordial understanding with France ... announcement would be received by the House with ... found satisfaction, but he feared that the understanding ... prove the uncertain and unsatisfactory relations ... He demanded that the country should be reassured ... report that the island of Sardinia was to be the ... French interference in Italy, and that the ... of Syria by French troops would continue ... occupation was most dangerous to the existence ... the Turkish Empire and to the peace of Europe ... Lord JOHN RUSSELL said that Mr. Fitzgerald had ... misconceived the object of the despatches in question ... English Government could not bring their minds to the ... clusion that the subjects of the King of Naples were ... in conformity with constitutional practice, they had ... that their sympathies were in favour of the cause ... and they had avowed the pleasure with which they ... such a country as Italy prove herself worthy of ... traditions. With regard to the temporal and spiritual ... reignty of the Pope, he hoped that the Pope might ... arrangement with the King of Sardinia, play no ... part in the history of Italy. He hoped that the Pope ... spiritual head of the Roman Catholic Church, would ... to receive the allegiance and to enjoy the dignity of a ... Prince, but that the question of his temporal authority ... be amicably adjusted, the more readily as the time had ... away when it was necessary for him to assume ... power. With reference to our general relations with ... it was only necessary for him to say that the exertions ... Majesty's Government were directed unceasingly to the ... tenance of a good understanding between the two ... The object of both Cabinets was to maintain the ... Europe inviolate. England's only wish was that every ... of Europe should hold its own independence; and ... no projects of ambition and schemes of annexation ... look without jealousy at the growing prosperity ... nations. He was convinced that the true interests ... were those of peace, and he did not share the apprehensions ... those who thought we were on the eve of great ... The report was then agreed to. The House having ... itself into committee, leave was given to Mr. Hadfield ... in a Bill to render it unnecessary to make and subscribe ... declarations as a *Qualification for offices and employments*.

THURSDAY.—*The Address.*—The House met at 2 o'clock ... went to Buckingham Palace to present the Address in ... to the Speech from the Throne. *Bank of England.*—On the ... assembling of the House at 5 o'clock, in a committee ... Consolidated Fund Acts, the CHANCELLOR of the Exchequer ... moved a resolution to charge upon the Consolidated Fund ... gross the sums payable to the Bank of England on ... the management of the national debt. He said that he ... to introduce a Bill founded on the resolution, which would ... the effect of reducing the remuneration now ... the Bank of England for the management ... millions of the National Debt. That remuneration ... 250,000*l*. a year, and the Bank had consented not ... accept 200,000*l*. for the future, but it had also undertaken ... render increased service to the public, and to give facilities ... the payment of dividends at the branch banks in the ... In addition, the Bank would endeavour to shorten ... abolish altogether, the period called "short days," ... which transfers of stock were not received. The resolution ... agreed to.—Sir G. LEWIS obtained leave to introduce a ... amend the law relating to *Parochial Assessments* in ...

... being to establish a uniform system of assessment ... the modes of framing the county rate and the ...—Sir G. Lewis also obtained leave to bring in a Bill ... *Highways in England*.—Lord ... moved for a select committee to consider ... any alterations in the forms and proceedings ... the House, the *Despatch of Public Business* ... more effectually promoted. Various changes ... been made in the practice of the House, ... be desirable to ascertain whether the work of ... might not be carried still further.—Mr. Horsman ... that the terms of the reference were so restricted ... of the committee would be in great part in... He therefore moved as an amendment that the ... should inquire whether, by the more careful preparation ..., their early introduction, and a judicious distribution of the business between the two Houses, the public ... be accelerated.—Mr. Disraeli said he could ... the amendment, which implied a censure upon the ... in the conduct of business. He was satisfied with ... motion, which contained all that the House could ....—Mr. Bright hoped that the amendment would not ....—Sir G. Lewis objected to the amendment, and ... what he conceived to be the main defects in the ... of Parliamentary business, and the causes of its ... thrown into arrear. After some remarks by Mr. Newdegate, Mr. Milnes, Sir J. Pakington, and other members, Mr. Horsman withdrew his amendment, and the original motion ... agreed to.—Sir J. Trelawny obtained leave to bring in a ... *Church Rates*, and Mr. Dillwyn a Bill to remove ... as to the eligibility of certain persons to be *Trustees* ...

... —*The Indian Loan*.—Colonel Sykes asked the Secretary of State for India whether he had succeeded in raising the ... three millions for the purposes of India. Sir C. Wood ... that tenders had been sent in to the extent of thirteen ..., of which six millions were at the minimum price and ... millions above the price reserved by the Government. Consequently the loan had been effected upon more favourable terms to the public than the price fixed by the Government.

[Left sitting.]

City Intelligence.

Bank of England.—A Special General Court of Proprietors of the Bank of England was held on Thursday, when a proposal from the Chancellor of the Exchequer to modify the terms for the management of the public debt was agreed to on the recommendation of the Directors. The effect of this change will be to reduce the annual remuneration of the Bank on the present amount of debt from 244,883*l.* to 194,863*l.*, thereby saving about 50,000*l.* a year to the public. The Bank is also to contract the periods for "shutting," and to afford increased facilities for the payment of the dividends wherever the Bank may have branch establishments. It is also provided that the new plan shall remain in force for 25 years certain.

Money Market, Friday.—British Funds: Consols closed at 91⅞ to 92 for Money, and 92⅛ to ¼ for the 7th of March; Bank Stock, 231 to 233; Three per Cents. Reduced, 91⅝ to 91¾; New Three per Cents., 91⅞ to 92; Thirty Years Annuities, expiring in April, 1885, 16¼; India Stock, 219 to 218½; Ditto Five per Cent. Stock, 99½ to ⅝; Ditto, for Acct., 99¼ to 99½; Five per Cent. Enfaced Rupee Paper, 95; Exchequer Bills, 5s. to 1s. dis.—Foreign: Brazilian Four and a Half per Cents., 1860, 86; Dutch Two and a Half per Cents., 63¼; Mexican Three per Cents., for Acct., 23¼; Piedmontese Five per Cents., 76½; Portuguese Three per Cents., 1853, for Acct., 45⅞ to 46; Ditto Three per Cents., 1856, 1857, and 1859, 45⅞ to 46; Spanish Committee's Certificates, 5⅞; Turkish Six per Cents., 1854, for Acct., 71; Ditto, 1858, 56¼; Ditto, for Acct., 56⅜ to ½; Venezuela Three per Cents., for Acct., 21.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,488,315	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	9,744,970
		Silver Bullion	1,268,345
	£25,488,315		£25,488,315

BANKING DEPARTMENT.

Proprietors' Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£8,444,776
Rest	3,485,705	Other Securities	19,934,408
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	4,186,479	Notes	5,609,080
Other Deposits..	11,927,130	Gold and Silver Coin ..	819,521
Seven day and other bills	655 381		
	£34,807,785		£34,807,785

7th day of Feb., 1861.

M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY—BANKRUPTS—J. Alcock, Fuller Street, Bethnal Green, Carpenters' Joiner—G. Barton, Cromford, Derbyshire, Draper—J. Bickley, Burton-upon-Trent, Grocer—J. Brooksbank, King Street, Clerkenwell, ... Cutler—W. Buxton, Liverpool, Butcher—C. Cairns, Newport, ... Merchant—M. W. David, Aberamen, Glamorganshire, Draper—... M. Hallenstein, Addle Street, Aldermanbury, Trimming Dealer—M. Hayes, jun., Hounslow, Tea Dealer—W. Kirk, Birmingham, Wholesale ...—J. Le Mare and W. C. Currie, Broad Street Buildings, City, Merchants—A. M'Millan and W. Blackburn, Star Court, Bread Street, ... Warehousemen—E. Parkes, Gloucester, Currier—B. Penn and J. Attwell, Tipton, Staffordshire, Iron Manufacturers—A. Skinner, Camberwell Green, Surrey, Coach Builder—W. Whittaker, Bradford, Merchant.

SCOTCH SEQUESTRATIONS—Mrs. M. Lessels or M'Culloch, Kirkcaldy, Grocer and Spirit Dealer—A. J. Somerville, Glasgow, Builder—... B. Weir, Glasgow, Bootmaker.

FRIDAY—BANKRUPTS—H. Ashworth, Dukinfield, Cheshire, Machine Broker—T. Barrett, Market Drayton, Shropshire, Builder—J. Bent, the younger, Dudley, Grocer—E. Booth, Priors Lee, Shropshire, Maltster—J. F. ..., Blackburn, Lancashire, Draper—E. Curtis, Strand, Middlesex, Dealer in American Goods—W. P. Davis, Cardiff, Slate and Marble Merchant—F. C. J. Demoor, Northampton, Beerseller—J. Denton, W. Denton and J. Denton, jun., Dartmouth Park, Kent, Builders—W. ..., Burslem, Staffordshire, Grocer—L. Goldschmidt and H. Boas, Nottingham, Stationers—J. Hunt, Stockport, Cheshire, Cotton Manufacturer—J. Riley, Blackburn, Lancashire, Ironfounder—J. G. Shipley, 75 and 161, Regent Street, Saddler—R. Smith, Harewood Place, Hampstead Road, Middlesex, Builder.

Metropolis and its Vicinity.

The Houses of Parliament.—At the ordinary meeting of the Institute of Architects on Monday evening, the discussion on the various processes for the preservation of stone was resumed. The secretary read a letter from Mr. Szerelmy in reply to some statements made at the recent special meeting, and stating that his process had arrested the decay in the Houses of Parliament, and rendered the stone harder and more durable. Mr. Warrington, a chemist, gave a minute description of Ransome's process; and Mr. Smith, one of the commissioners appointed by the Government to select a stone for the Houses of Parliament, stated that there was no supervision of any kind either at the quarries or at Westminster. Mr. G. Scott, Mr. Godwin, and Mr. Ansted also took part in the discussion, which was again adjourned. It is said to be probable that the Institute, instead of appointing a committee of its own, will recommend the Government to refer the subject to a mixed commission composed of architects, chemists, and engineers.

Royal Exchange.—The Gresham Committee met a few days since, to receive the report of the judges on the merits of the different designs for covering the Merchants' Area with glass. The judges were the Lord Mayor and the Master of the Mercers' Company, professionally assisted by Mr. Tite, M.P., and Mr. George Smith. The first prize for the best design was awarded to Mr. Frederick Sang, of 42, Charing Cross; the second to Messrs. Driver and Buck, of the Brighton Railway Engineers' Office; and the third to Mr. Francis Fowler, of 32, Fleet Street.

The City Meat Markets.—Mr. F. W. Firmin, a meat salesman of that part of Newgate Market called Tyler's Market, was summoned on Monday before Aldermen Copeland and Mechi for unlawfully exposing for sale the carcases of five sheep in a diseased state, and totally unfit for human food. Mr. Charles Pearson, the City solicitor, prosecuted on behalf of the Commissioners of Sewers. It was proved by several witnesses that the sheep weighed only from 18 to 25 lbs. instead of 100 to 125 lbs. each; that defendant sold them to an agent of Mr. Lialter of Whitechapel for 1*s.* 8*d.* per stone, being exactly 2½*d.* per lb., and that Mr. Lialter refused to accept them because they were unfit for food. The defendant declined to state the name of the person who had consigned the sheep to him for sale. Alderman Copeland said that he had had 50 years' experience in farming and producing live stock, and was therefore well acquainted with the whole subject before him. He did not doubt Mr. Firmin's respectability, but it was quite clear that Mr. Lialter, for whom the sheep were purchased, rejected the purchase because the meat was unfit for food. The practice of sending such meat to the London market was extremely dangerous, and the time had now arrived when it should be stopped, and with that view he had decided upon fining the defendant 40*s.* for each of the five sheep. Some discussion here took place with regard to the power of appeal. Alderman Copeland said he was sorry there was no appeal, as he thought if there had been the authorities might have got at the consignor, but as Mr. Firmin had thought proper to stand in the gap between him and justice, he must take the consequences of his imprudence. The fines, amounting to 10*l.* and costs, were then paid.

Royal Academy.—Mr. Poole has been elected a Royal Academician by a majority of 1 over Mr. Boxall, the numbers being 15 to 14. Mr. Ansdell, Mr. Faed, Baron Marochetti, and Mr. Edward Barry have been elected associates of the Academy.

The St. Paul's Cathedral Fund.—It is stated that the clear gain from the recent oratorio will be about 600*l.* A meeting was held yesterday at the Mansion House under the presidency of the Lord Mayor, in aid of the fund.

Londoners over the Border.—The Bishop of London has recently issued a commission to Alderman Dakin and Mr. George Moore of Cheapside, to inquire into certain allegations made against the Rev. H. Douglas, M.A., minister of the temporary church adjacent to the Victoria Docks, a densely populated and extremely pauperised district, situate mainly in what are called the Plaistow Marshes. It appears that just before Christmas, 1859, Mr. Douglas made an appeal to the public in the *Times* newspaper, on behalf of "Londoners over the Border," the result of which was that upwards of 14,000*l.* was subscribed. Of this sum Mr. Douglas appropriated 4200*l.* towards the erection of a new church; between 300*l.* and 400*l.* for a site; 4500*l.* in land and money for its endowment: 720*l.* in land and money towards a parsonage; 200*l.* towards a church fund; and 220*l.* towards a school at the eastern extremity of his new parish, Mr. Morrison, a City merchant, having already commenced a choral school at the east end of the parish. A large portion of the remainder Mr. Douglas appropriated to the relief of the distress by which he is surrounded. Just before last Christmas Day Mr. Douglas made another public appeal which was most generously responded to. In that appeal he stated that he had introduced various employments amongst the people, with a view to the permanent amelioration of their condition—such as an institution for needlewomen, a manufactory of gloves, industrial and soup kitchens, and shops for wood cutting. In consequence of this statement some grave charges were made by Mr. James Scully, a horse contractor residing in the adjacent district of Canning Town, stating that Mr. Douglas was building his new church in a wild and uninhabited part of the parish, where there is not likely to be a congregation this side of the year 1900, instead of applying the funds to the relief of the poor; that the institutions referred to were conducted in an inefficient manner, and more than hinting at misappropriation of funds. Alderman Dakin and Mr. George Moore have inquired into these allegations at several sittings, and have reported to the Bishop that the institutions are not only in existence, but are flourishing and useful in providing, at small cost, a great deal of employment, and keeping girls in respectability who else might have adopted a less virtuous mode of living. They state that Mr. Douglas did not receive the whole amount of the subscriptions in cash. The accounts show a gross sum of 14,200*l.*, but of this more than 11,000*l.*, consists of promises, of land, donations, grants from societies, and such like, which have not yet been realised. Of the donations actually received in money all is fully vouched for except a sum of 316*l.*, which having been disbursed in small sums amongst some hundreds of people, cannot be accounted for in detail, though hundreds are ready to come forward to acknowledge the charity they have received. Mr. Douglas's private income was 1100*l.* a year, viz., 100*l.* for his services as clergyman, and 1000*l.* from private sources. He lived largely within these means next door to a working man whose wages were 30*s.* a week, his expenditure on his family not exceeding 600*l.*, while the rest was given away in his parish. They state that a solicitor and professional accountant attended on both sides, that all dubious vouchers were put aside for reconsideration, and that all were verified on a second inquiry except one for the small amount of 2*s.* 7*d.* for a brush, which was afterwards found to have been carried to a wrong account. The balance in hand of the money actually received was proved to be in the hands of Messrs. Heywood, bankers. It was also proved that the money has been spent without reference to the religious tenets of the recipients. On the whole the Commissioners, while stating that it is desirable that the accounts of such a subscription should have been put into the most regular form, at the earliest convenience of Mr. Douglas, entirely exonerate him from all blame; express their regret at the insinuations thrown out against him; and wish him a long continuance in his present self-denying but useful position. In consequence of this inquiry the parishioners of Mr. Douglas have rallied round him with great zeal, and have already presented addresses to him signed by Churchmen and Dissenters alike, thanking him for the exertions he has made, and congratulating him on the success which has attended his labours amongst them.

Murder of a Child by its Mother.—An inquest was held on Monday in the board-room of St. George the Martyr, Southwark, on the body of Mary Connor, a child 15 months old, who was reported to have died from starvation. The evidence showed that the child had been deliberately murdered by a system of cruelty and starvation. The surgeon stated that the body was healthy in every part, but there was no food in the stomach or bowels, and the child died from want of food. The jury returned a verdict of "Wilful Murder against Mary Connor," who was committed to Newgate for trial.

Accident in the Sewers.—Four men in the employ of the Board of Works were suffocated yesterday morning in the sewer in Seacole Lane, Farringdon Street. Three bodies have been got out, but the fourth has not been found, and it is supposed that the force of the current has washed it into the Thames.

The Public Health.—The Registrar-General's weekly return states that the deaths in London in the week that ended Saturday February 2d was 1544. The average number in the corresponding weeks of the ten previous years 1851-60, corrected for increase of population, was 1358. The present return therefore, though showing a clear decrease on the heavy returns of the two previous weeks, was still 186 above the average. During the week the births of 1049 boys and 1001 girls, in all 2050 children, were registered in London. In the ten corresponding weeks of the years 1851-60 the average number was 1739.

Provincial.

Ashton-under-Lyne.—A well-known clergyman of the Church of England in this town eloped a few days since with a young lady, the teacher of a young ladies' school, in the town. He had long been suspected of having an improper intimacy with the lady, and on his being watched, it was found that he visited the back of her house, and often left a card or a piece of paper in the window containing a few hints, such as "Manchester at such and such a time." A solicitor in the borough being consulted, employed a Manchester detective, who took his railway fare in the same train as the reverend gentleman and his companion, and proceeded with them to Worcester. The couple put up at an hotel, and the detective opposite, and the next morning he ascertained that they had passed the night together. On the following day about 12 o'clock the chambermaid at the

request of the detective knocked at the bed-room door and told the clergyman that a gentleman wanted him. The detective was thereupon asked into the bed-room, and held a conversation with both of them. The gentleman is a married man with a family, but has long been estranged from his wife. He is at least 40 years of age, whilst the lady is only about 21. A divorce will be sought for by the wife, and full evidence of the facts of the case has been laid before the bishop.

BIRKENHEAD.—At the weekly meeting of the Mersey Dock and Harbour Board, on Friday, it was resolved to construct a graving dock at Birkenhead, the length of which is to be 750 feet, the width 85 feet, and the depth 100 feet. It is to be large enough to accommodate two rows of ships, and to be so constructed as to admit two ships at a time. Its cost is estimated at 84,000*l*.

BIRMINGHAM.—A meeting was held in this town on Friday, the Mayor in the chair, at which it was resolved to form a Birmingham auxiliary to the African Aid Society. Lord Alfred Churchill in a speech of great length described the usefulness of this object as a means of obtaining a supply of cotton from that quarter. Labour, he said, was to be obtained at an extremely low rate, and there were from 40,000 to 50,000 coloured persons in Canada who had escaped from the United States, ready to emigrate to Abbeokuta and form a great negro nationality.

BURSLEM.—The extensive pottery works at this place, formerly in the possession of Messrs. Alcock and Son, have now passed, by purchase, into the hands of Alderman Sir James Duke, M.P., and his nephews—Mr. James Duke Hill and Mr. John Sheriff Hill. These works have for a long time enjoyed a high reputation for the excellence of their manufactures.

COVENTRY.—The committee appointed to obtain subscriptions for the relief of the distressed operatives of this town and neighbourhood have given notice that a sufficient amount has now been contributed by the public to meet the present necessities of the case. At the same time the committee tender their best thanks to all who have contributed to the fund.

HERTFORD.—A public meeting was held in this town on the 29th ult. for the purpose of considering the propriety of adopting a memorial to the Home Secretary in favour of the abolition of the coal dues of 1*s*. 1*d*. per ton levied by the Corporation of the City of London on Hertford and all places within 20 miles of the metropolis, and which, being now about to expire under various Acts of Parliament, it is proposed to continue for the embankment of the Thames and other purely London objects. The Mayor occupied the chair, and the meeting was addressed by the Right Hon. W. Cowper, M.P., Chief Commissioner of Works; Sir M. Farquhar, M.P.; Mr. Puller, M.P.; Mr. C. Dimsdale, Mr. Evans, and other gentlemen. The following resolutions, with a memorial founded upon them were unanimously adopted:—

1. "That the tax of 1*s*. 1*d*. per ton collected by the City of London upon all coals brought by sea or land within a radius of 20 miles of the metropolis is unjust to Hertford and places similarly situated, which derive no advantage from nor have any beneficial interest in the expenditure of the revenue derived from the tax. 2. That, as the Parliamentary authority for the collection of the coal dues will shortly expire, this meeting resolves to present a memorial to the Home Secretary, respectfully requesting that the Government may be pleased to oppose any attempt on the part of the Corporation of London, or by the Metropolitan Board of Works, or otherwise, to reimpose or continue those duties over the existing 20 miles radius."

HUNTINGDON.—A subscription is in progress among General Peel's constituents in this town, to secure a public portrait of the hon. and gallant member. About 300*l*. has been already collected, many of the poor having contributed shillings and sixpences. The cost of the portrait, which is to be painted by Mr. Grant, R.A., is estimated at 400 guineas.

LIVERPOOL.—A murder was committed in this town on Saturday week, arising out of a quarrel between a party of Irishmen who had been quarrelling in some spirit vaults, and on being turned out by the police began fighting in the street. A young man named Thomas Donnegan stabbed a man called Cassidy in the neck with a knife, dividing the jugular vein and causing almost instant death, and afterwards attacked his own uncle, stabbing him several times, and leaving him on the ground in a state of insensibility. The murderer immediately absconded, but a reward of 100*l*. having been offered for his apprehension, he was traced on Saturday to his place of concealment, and has since been committed to Kirkdale to take his trial at the assizes on the charge of Wilful Murder.

MAIDSTONE.—A meeting of the landowners and hop planters of Kent and Sussex was held on the 30th ult. in this town, to promote the objects of the Central Association for obtaining the total repeal of the excise duty on home-grown and the import duty on foreign hops. Earl Amherst presided, and the meeting was addressed by Lord Pevensey and Mr. Dodson, the members for East Sussex; Lord Holmesdale and Sir E. Filmer, members for West Kent; Sir Walter Stirling, Mr. Beresford Hope, Mr. Wykeham Martin, and several extensive planters from both counties. Resolutions were unanimously adopted declaring the customs and excise duties on hops to be impolitic and unjust to the planters, and injurious to the public, and pledging the meeting to support the Central Association by subscriptions and otherwise.

MANCHESTER.—A great conference was held in this city on the 29th ult. to consider the present condition of India in reference to its finances, public works, taxation, and cotton supply. Mr. E. Potter, President of the Chamber of Commerce, presided, and the meeting was addressed by Mr. Bazley, M.P.; Mr. Murray, M.P.; Mr. A. Turner, M.P.; Mr. Egerton, M.P.; Mr. Kinnaird, M.P.; Mr. Ross, Mr. Chesham, Mr. Dunlop, Mr. M. Gladstone, and other gentlemen, representatives of different chambers of commerce in the country. The conference assumed the form of a regular debate on Indian matters, the object being to press on the Government the necessity of taking energetic steps as soon as possible, to restore the equilibrium between Indian income and expenditure. The following resolutions were adopted:—

1. "That in the opinion of this conference the financial position of India is such as to excite great uneasiness, owing to her increasing debt, the continued excess of expenditure over revenue, and the suspension of reproductive works throughout the country, upon which large sums have already been expended, as announced in a minute issued by the supreme Government, at Calcutta, on the 19th Nov. last: and this conference is further of opinion that clear and simple statements of the accounts of the revenue and expenditure of India should be published annually, or more frequently if possible, showing distinctly the manner in which the revenue is received and disposed of, distinguishing the receipts and disbursements on the railways and on all other public works. 2. That, in the opinion of this conference, the enormous cost of the Indian army is one chief cause of the excess of Indian expenditure over revenue, and the consequent financial distress resulting in increase of debt over taxation, and the stoppage of public works; and that this conference would earnestly support her Majesty's Government in the determination which it has expressed to reduce the number, and therefore the cost, of the Indian army, and especially the native army and the armed police. 3. That in the opinion of this conference, unless means are otherwise available, a loan should be raised, to be specially and exclusively applied to the resumption and completion of reproductive works in India, under the control of a board of works to be appointed for each of the three Presidencies respectively, it being their firm conviction that some such course is necessary to develop the vast resources of the empire; and it is further the opinion of this conference that the revenue to be expected from judiciously-conducted reproductive works in India will suffice to pay the interest upon expenditure within a brief space of time, and may be so dealt with as to liquidate the whole outlay in the course of a limited number of years. 4. That this conference is of opinion that the high Customs duties recently imposed in India are greatly to be deprecated, inasmuch as they check the expansion of trade, and in the case of imports foster native manufactures under a false system of protection, reversing the free-trade policy under which our own country has made rapid progress in civilisation, influence, and wealth. 5. "That in the opinion of this conference the Government ought to be urged to afford every possible encouragement to European traders, planters, and capitalists who may be induced to settle or purchase property in India, it being their belief that in the increase of British settlers will be found the permanent prosperity of the country. And in order to give confidence to such settlers or capitalists, simple and effective powers, especially as regards contracts, should be enacted; and that every possible opportunity should be given for the purchase of land in fee simple."

OXFORD.—At an early hour on Tuesday morning a fire broke out in the north-east portion of Blenheim Palace, containing part of the porter's lodge, the bakehouse, the land clerk's room, the steward's room, and the Titian room, this portion of the buildings being separated from the palace by a fire-proof room and an open space used as a yard. About half-past 5 the porter was awoke by the smell of smoke and wood burning, and saw from the reflection that the bakehouse roof was on fire. He instantly rang the alarm bell, and with the other servants proceeded to ascertain in what quarter the fire was raging, when the roofs of the offices and the Titian-room were found to be in flames. Their first thought was about the deeds and family archives deposited in the steward's and clerk's offices, and they were successful in recovering the whole of them. They next endeavoured to save the valuable paintings of the Titian room, but the molten lead was pouring down so fast from the roof that it was out of the question to remain for a moment in the room. The loss of these pictures will be much regretted by all admirers of this celebrated master. They were a present from Victor Amadeus, King of Sardinia, to John, Duke of Marlborough, and remained unhung and hidden from the public view till the visit of Sir Joshua Reynolds to Blenheim in 1788. He was so forcibly struck with their beauty and value, that he recommended their being placed in the room they occupied. The following is a list of the pictures destroyed:—Mars and Venus, Cupid and Psyche, Apollo and Daphne, Pluto and Proserpine, Hercules and Dejanira, Vulcan and Ceres, Bacchus and Ariadne, Jupiter, Juno and Io, Neptune and Amphitrite—all painted on leather, by Titian, and a painting by Rubens, "The Rape of Proserpine," 8 feet 8 inches high, and 2 feet 1 inch wide, considered one of his masterpieces. The fire is supposed to have commenced in a room where faggots are kept at the extreme end of the eastern part of the building, and it is thought that when the servants went to fetch faggots for the morning fires a spark may have dropped and ignited the remainder. The palace was visited during the day by thousands of persons from Oxford and the surrounding neighbourhood, and the fact of the fire not having proceeded further was the subject of much gratification. The Duke of Marlborough was in London attending the meeting of Parliament, but the rest of the family, with several visitors, were resident in the palace.

POOLE.—The bank of Messrs. Ledgard and Sons, of this town, stopped payment on Monday. It had a fixed issue of 11,856*l*. notes.

TROWBRIDGE.—It is rumoured that Mr. Kent has resigned his office of inspector of factories, and that the Government have given him another situation, which will remove him from the scene of the [illegible] brought him and his family into [illegible] notoriety.

YORK.—A public meeting was held [illegible] the 29th ult., under the presidency of Earl [illegible] for the promotion of various objects [illegible] interests of the church. The Archbishop [illegible] the meeting originated, stated that in [illegible] third of the benefices were destitute [illegible] houses, and one-fourth of the livings [illegible] a year in value. To remedy these [illegible] deficiency of church accommodation, the [illegible] society was agreed upon, with proper [illegible] management. With a spirit of earnest [illegible] Fitzwilliam subscribed 2000*l*. to the funds [illegible] out the scheme.

Ireland.

MURDER IN KING'S COUNTY.—A murder [illegible] mitted on Saturday night at Ballinakill, between [illegible] hill and Philipstown, which has created great [illegible] ment and alarm among the inhabitants [illegible] A farmer, named Thomas Sheils, was seated [illegible] side conversing with his wife and child, [illegible] was fired at him through a window, [illegible] the fireplace. The shot passed through [illegible] instantly killed him. The unfortunate man [illegible] cently taken a farm which had been for a [illegible] vacant until he became the tenant, the former [illegible] having been thrice beaten, and so intimidated [illegible] surrendered the land. After the murder of [illegible] the wife was refused assistance by all the neighbours [illegible] nearly two hours, except by a servant girl [illegible] with her, and comforted her, until at last [illegible] of her husband had arrived. The jury at [illegible] returned a verdict of 'Wilful Murder against [illegible] person or persons unknown.' Two men named [illegible] who formerly held the land but were evicted [illegible] others, are in custody, and it is confidently [illegible] the local authorities are in possession of such [illegible] as will warrant the magistrates to commit [illegible] two of them for trial. On the same [illegible] late hour, an armed party visited the [illegible] William Stanley, a tenant on Lord Digby's [illegible] siding at Gorteen, near Geashill. Hearing [illegible] barking he got up, and having armed himself [illegible] pitchfork, went out to ascertain the cause, [illegible] shots were fired at him, but he fortunately escaped [illegible] injured.

Obituary.

THE DUCHESS DOWAGER OF CLEVELAND died on the [illegible] at her residence in Grosvenor Square, [illegible] was daughter of Mr. Robert Russell, and [illegible] the late Duke of Cleveland, whom she married in [illegible]

MR. GRANVILLE E. HARCOURT VERNON, late M.P. for [illegible] died on the 31st ult. at the Marquis of Ailesbury's [illegible] tenham Park, near Marlborough, from rheumatism. [illegible] was the eldest son of Mr. Granville Harcourt Vernon [illegible] the late Archbishop of York, and Chancellor of the [illegible] of York, and was born in 1816. He was educated [illegible] minster School, from which he was elected a student [illegible] Church, Oxford, at which University he [illegible] classics in 1839, and graduated M.A. in 1840. [illegible] 1845, he was private secretary to the Earl [illegible] Chief Secretary for Ireland, and officiated in the same [illegible] to the Earl of Lincoln, now Duke of Newcastle, [illegible] Commissioner of Woods, and Chief Secretary for Ireland. [illegible] Vernon was returned to the House of Commons for [illegible] the general election in 1852 as a Liberal Conservative [illegible] married in 1854, Lady Selina Catherine Meade, [illegible] of the Earl of Clanwilliam.

MR. HEATHCOAT, formerly M.P. for Tiverton [illegible] town on the 18th ult., in his 77th year. He was [illegible] very few members of the House of Commons [illegible] uninterrupted possession of a seat in that assembly [illegible] years. He was first returned for Tiverton in 18[illegible] retired from Parliament at the dissolution of 18[illegible] the son of a small farmer at Long Whatton, in Leicestershire, where he was born in 1784. He was apprenticed [illegible] age to a frame smith, at Hathern, a neighbouring [illegible] During his apprenticeship he acquired a complete knowledge of the business, and of all the mechanism [illegible] stocking frame, and warp machines. Some parts of [illegible] he improved by his own invention, when yet a boy. [illegible] by the application of a clever apparatus to [illegible] machines, whereby "mitts" of a lace-like appearance [illegible] produced, that his attention was first turned to [illegible] lace making. "Point net" lace had been extensively [illegible] by machinery. This was a looped mesh, and [illegible] and frail; but the attention of very ingenious [illegible] been turned for some years to the question of [illegible] mesh or lace of threads twisted round [illegible] formation of the mesh. Hitherto the [illegible] all their endeavours, reducing all who [illegible] to poverty, and driving some into insanity. Mr. H[illegible] after having served his term of apprenticeship [illegible] in Nottingham, and commenced business [illegible] account, as a "setter up" of hosiery and warp [illegible] in the machine shop of Mr. Leonard Elliott, in [illegible] Elliott was a man of superior mind and skill, [illegible] him young Heathcoat became acquainted with [illegible] ideas then afloat in the mind of Nottingham [illegible] Among these was how Buckingham or French lace [illegible] mechanically produced, and to this he [illegible] tion. Elliott described him to have had a [illegible] knowledge of mechanical powers and contrivances, [illegible] tive, persevering, undaunted by difficulty [illegible] consequent temporary want of success; [illegible] and very taciturn, but having surprising confidence [illegible] application of mechanical principles would be [illegible] tually with success. His great object was, the [illegible] machine that should do the work of the pillow, the [illegible] of pins, the threads and bobbins, and the fingers, [illegible] sede them in the production of lace, as the stocking [illegible] superseded the knitting needle. He first ascertained [illegible] vation what pillow lace was, and how it was made [illegible] analysing the component threads, and how they were [illegible] used in forming the resulting tissue, he slowly arrived at [illegible] fication into longitudinal and diagonal. The mass [illegible] entangled, he placed those used lengthwise on a beam [illegible]

[illegible] as weft, each thread to be working [illegible] to twist round a warp thread, [illegible] its appropriate neighbour [illegible] the upper and lower sides of the [illegible] the mechanical arrangements to [illegible] with certainty and speed. The bob- [illegible] the carriages and grooves in [illegible] mode of twisting round the [illegible] side of the machine, and a view [illegible] invented by Mr. Heathcoat, caused [illegible] it was one of the most [illegible] combinations, displaying uncommon [illegible] as well as originality and ingenuity. A [illegible] by Mr. Heathcoat, for producing [illegible] plan, and was well described as [illegible] but the experience gained in its con- [illegible] patented in 1809, which was [illegible] the first, but rectified its modes of [illegible] both remains embodied in the [illegible] present day, though with vast im- [illegible] was gained by the employment of [illegible] hours of bodily and mental toil, [illegible] of the day, without external [illegible] and in the face of mechanical difficulties [illegible] said, when describing in 1836 [illegible] Mr. Heathcoat said, "the single difficulty of [illegible] the affair, threads to twist in the allotted space [illegible] to be done I should probably not [illegible] Moreover, domestic straits and [illegible] cheerfully encountered during this [illegible] But at 24 years of age Mr. [illegible] inventor of one of the most [illegible] ever produced. And the solid [illegible] followed quickly on his success. The first [illegible] was cheaply sold from the machine at [illegible] the average price has been 5*d*. During the [illegible] returns of the trade have been [illegible] giving employment to probably [illegible] In 1816 the factory at Loughborough, in [illegible] Mr. Heathcoat's business was carried on, was attacked [illegible] the lace frames destroyed. This caused [illegible] manufacture to Tiverton, where it restored [illegible] had been lost by the decay of the woollen [illegible] about 2000 persons. For the benefit [illegible] have been established, a church [illegible] promoted in many ways, in addition [illegible] advantage of profitable employment. Mr. Heath- [illegible] in youth. His two daughters, Miss Heath- [illegible] Brown, have long employed their large property [illegible] carrying out their father's benevolent views [illegible] grandson, Mr. Heathcoat Amory, has for [illegible] the extensive business affairs of his [illegible] whom he is the sole male representative.

[illegible] the most eminent of our female novelists, died [illegible] at Linwood, Lyndhurst, after a week of severe [illegible] She was born in London in 1800. Her first production, [illegible] Mordaunt," was highly successful, and opened out [illegible] brilliant career for her as a writer of fiction, [illegible] the daily life of fashionable society. Among her [illegible] works may be mentioned "Women as they Are," [illegible] and Daughters," "Memoirs of a Peeress," "Hun- [illegible] Tales," "Cecil, or the Adventures of a Coxcomb," [illegible] Woman of the World," "The Popular Member," and [illegible] Book of Fashion." In 1823 she married Captain [illegible] of the 1st Life Guards, and became a widow in 1846. She [illegible] mother of 10 children, of whom two survive— [illegible] married to a son of the second Marquis [illegible] Wentworth Gore, A.D.C. to the Lord [illegible] served with distinction on the staff [illegible] campaign. Mrs. Gore had [illegible] her sight, and was in her 61st year.

THE REV. DR. BANDINEL, late Librarian of the Bodleian, [illegible] the 6th inst. at his residence in Beaumont Street, [illegible] at a very advanced age. He was educated at [illegible] and New College, of which he was for many years [illegible] He took the degree of B.A. in 1805, was appointed [illegible] Librarian in 1813, and served the office of Proctor in [illegible] He had also been for many years a Delegate of the [illegible] At the time of his death he also held the rich living of [illegible] Sterne, Durham, to the rectory of which he was [illegible]

THE REV. CHARLES WEBB LE BAS, M.A., prebendary of [illegible] principal of the East India Company's [illegible] Haileybury, and some time Fellow of Trinity [illegible] Cambridge, died on the 25th ult., at 74, Montpellier [illegible] in his 82d year. He graduated at Cambridge [illegible] he was fourth wrangler and Craven Scholar. He [illegible] appointed principal of Haileybury College, [illegible] for a long series of years. In 1842 he was [illegible] by Bishop Tomline to the prebendal stall of Marston [illegible] in Lincoln Cathedral. Mr. Le Bas was the author [illegible] works, chiefly biographical.

[illegible] the well known artist and proprietor of the [illegible] Leicester Square, died on the 29th ult., at his [illegible] Camden Road Villas, in his 70th year. He first [illegible] the Panorama in conjunction with the late Mr. Barker, [illegible] site of what is now the Strand Theatre, and about [illegible] transferred it to the present locality, where it [illegible] a popularity which made his name known in all parts [illegible] kingdom.

[illegible] MONTEZ, who some time since had a severe attack of [illegible] died of pneumonia at New York, on the 17th ult., in [illegible] year. She died in very reduced circumstances, and [illegible] subsisted entirely on charity supplied chiefly from [illegible] country.

[illegible]—The will of Mr. James Lindsay Barclay, of the [illegible] Medicine Warehouse in Farringdon Street, has been [illegible] Mr. Vincent Figgins, typefounder, of [illegible] Smithfield, 50,000*l*.; Sir George Simpson, Governor of the [illegible] Bay Company's territories, 20,000*l*.; Mr. George [illegible] of [illegible] in the county of Meath, 14,000*l*. personalty [illegible] in Ireland.

BIRTHS.—On the 29th ult., at 17, Eaton Place South, the [illegible] Mrs. CHARLES SPRING RICE, of a daughter—3d inst., at [illegible] Hall, Norfolk, the Hon. Mrs. RANDALL BURROUGHES, [illegible] at Brighton, the Hon. Mrs. KER, wife [illegible] Ker, Esq., [illegible]—5th ult., at Bangalore, Madras, the [illegible] Major THOMAS NISBETT, 1st (King's) Dragoon Guards, of [illegible] at Tiddington House, Stratford-on-Avon, the [illegible] Major A. R. E. HUTCHINSON, Bengal Army, of a [illegible]

MARRIAGES.—On the 31st ult., at the Chapel, Dalkeith [illegible] Lieut. Col. JOHN FRANCIS CUST, Grenadier Guards, to [illegible] Lady [illegible] HARRIET LASCELLES—6th inst., at St. [illegible] Eaton Square, by the Rev. Lord John Thynne, GEORGE H. FINCH, Esq., son of Mr. and Lady Louisa Finch, to EMILY [illegible] eldest daughter of Mr. and Lady GEORGINA BALFOUR—24th Dec., at Christ Church, Colombo, Ceylon, WILMOT, fifth son of the late [illegible] CAVE-BROWNE CAVE, Esq., of Repton Lodge, and grandson of the late Sir William Cave-Browne-Cave, Bart., to MARIE ANNIE, youngest child of the late WILLIAM SKINNER, Esq., of Calcutta, and granddaughter of the late Major-General Sir Robert Rollo Gillespie, K.C.B.—15th ult., at St. Anne's Church, Dublin, E. N. HILL, Captain 50th Regt., son of James T. Hill, Esq., of Anlaby, Yorkshire, to FREDERICA MARY, daughter of H. H. HAMILTON, Esq., Q.C., of Fitzwilliam Place, Dublin, and granddaughter of the late General Sir F. A. Wetherall, G.C.H., of Castle Hill, Middlesex—[illegible] ult., at St. John's the Evangelist, Westminster, the Rev. G. D. W. DICKSON, M.A., son of the late Sir David Dickson, M.D., R.N., to ELIZA BENNETT, eldest daughter of H. A. HUNT, Esq., of 14, Eccleston Square, and 4, Parliament Street.

DEATHS.—On the 1st inst., at Addington Park, near Croydon, MARIA, youngest daughter of the Archbishop of Canterbury, and wife of the Rev. JOHN THOMAS, Vicar of All Hallows, Barking—23d ult., at Portobello, near Edinburgh, MARY TURNER, eldest daughter of the late Hon. PATRICK MAITLAND, of Balgreggan and Freugh, and of the late Countess Dowager of Rothes, aged 85—8th Dec., at Meean Meer, East Indies, Lieutenant CHARLES W. GREY, of the 3d European Light Cavalry, only child of the late Charles Grey, Esq., of the Bombay Army, and grandson of the Hon. Edward Grey, D.D., formerly Bishop of Hereford, aged 21—15th ult., at her residence, Blackburne Terrace, Liverpool, JULIA, last surviving daughter of CHARLES EDWARD RAWLINS, Esq., of Liverpool, and of Brook House, Lancashire, and last female relative of Jane, the late Dowager Countess of Hyndford, and of John, Earl of Hyndford, of Carmichael House, Lanarkshire, Ambassador to the Courts of St. Petersburg and Vienna in the reign of George II., aged 50—1st inst., at Sledmere, Yorkshire, Lady SYKES, aged 68—21st ult., at his residence, Thornbury, county Cork, the Hon. CHARLES LUDLOW BERNARD, son of the 1st Earl of BANDON, aged 55—1st inst., at 54, Rutland Gate, Capt. ROBERT STANLEY WILLIAM BULKELEY, 9th Lancers, second son of Sir Richard William Bulkeley, Bart., M.P.—29th ult., at 5, South Crescent, Bedford Square, General ALEXANDER FAIR, C.B., of the Madras Army, aged 85—30th ult., at Bath, Lieutenant JOHN GREEN, R.N., brother of the late Vice-Admiral Sir Andrew Green—1st inst., at her house in Bolton Row, LETITIA, relict of Colonel JAMES ALEXANDER STUART, and daughter of the late Colonel Irvine, of Castle Irvine, co. Fermanagh, aged 8[illegible]—20th ult., at his residence, Woodfield Villa, St. John's, Sussex, Major CHARLES BAYNTUN, a magistrate for the county, formerly of the 6th Dragoon Guards and 54th Regiment, aged 86—29th ult., at his residence, Abbey Manor, Evesham, Worcestershire, EDWARD JOHN RUDGE, Esq., a deputy-lieutenant for the said county, and of Upper Harley Street, London, aged 68—2d inst., at Hackney, Dr. EDW. BENTLEY, M.D., formerly Physician to the City Dispensary, and to the City of London Hospital for Diseases of the Chest, aged 43—31st ult., after a short illness, the Rev. JOHN THOMAS P. COFFIN, of Portledge, Devon, Rector of Alvington, and Prebendary of Exeter Cathedral, aged 61—28th ult., at Tostock Rectory, Suffolk, the Rev. JAMES OAKES, Rector of Tostock and Rattlesden, and Vicar of Thurston, in the same county, aged 91.

Markets.

COVENT GARDEN, Feb. 9.

Supplies of winter Greens are still insufficient for the demand. Continental contributions, however, continue to improve. They consist of Endive, Lettuces, Carrots, Artichokes, and Green Peas. The latter come from Portugal. Pine Apples and Grapes have not altered since our last. Oranges may be obtained at about last week's prices. Shaddocks may be had in quantity, also American Lady Apples. Good Cobs may be had at from 1s. to 1s. 6d. per pound. Cornish Broccoli is now arriving in cratefuls; but good single heads of it realise as much as 4d. and 6d. each. Cabbages are scarce. Asparagus, French Beans, and new Potatoes may be had, but prices for them are high. Cucumbers are scarce. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Heaths, and Roses.

FRUIT

Pine Apples, per lb., 4s to 8s	Apples, per doz., 6d to 1s 6d
Grapes, per lb., 6s to 10s	Oranges, per 100, 6s to 10s
Pomegranates, each, 4d to 6d	Lemons, per 100, 6s to 10s
Pears, per doz., 3s to 6s	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Broccoli, each, 6d to 8d	Onions, p. ½ sieve, 1s 6d to 2s6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 10s to 30s
Cabbages, do., 2s to 3s	Seakale, p. punnet, 3s to 3s 6d
Potatoes, p. ton, 100s to 160s	Shallots, per lb., 6d to 8d
— per bus., 4s to 6s	Garlic, per lb., 6d to 8d
— per cwt., 8s to 10s	Lettuces, Cabb., per score, 1s to 1s 6d
Carrots, per bunch, 8d to 10d	Lettuces, Cos, do., 1s to 1s 6d
Turnips, per bunch, 6d to 8d	Endive, p. score, 1s to 1s 6d
Spinach, p. sieve, 4s to 5s	Horse Radish, p. bun., 1s 6d to 4s
Cucumbers, each, 2s to 3s	Mushrooms, p. pott., 2s to 3s
Artichokes, per doz., 4s to 6s	Parsley, p. 12 bunches, 4s to 6s
Beet, per doz., 1s 6d to 2s	Savory, per bunch, 2d to 4d
Celery, p. bundle, 1s 6d to 1s 9d	

BRITISH WOOLS.—LONDON, FRIDAY, Feb. 8

Our trade with Yorkshire in combing descriptions is almo[st] nil. With Lancashire for clothing skin there is a demand which takes off this sort of wool as fast as pulled from the skins, and at slightly higher prices. For Leicester the demand for combing skins is sluggish. Stocks on hand by no means large.

	s. d.		s. d.		s. d.		s. d.
South-down Hoggets	1 6	to	..	Leicest. Wethers	1 5	to	..
Half-bred ditto	1 7	—	..	Ditto Hoggs	1 7	—	..
Down Ewes	1 5	—	..	Combing Skins	0 11	—	1 3
Kent Fleeces	1 6	—	..	Blanket ditto	0 6	—	0 8
				Flannel Wool	1 0	—	1 8

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, Feb. 7.

Prime Meadow Hay	75s to	84s	Clover	95s to	115s
Superior do. (old)	90	110	New Clover	—	—
Inferior do.	40	57	Old second cut	70	95
New do.	—	—	Straw	32	43
Rowen	30	50			

DAVIS & Co.

CUMBERLAND MARKET, THURSDAY, Feb. 7.

Sup. Meadow Hay	112s to	120s	Inferior Clover	80s	108s
Inferior do.	65	100	New do.	—	—
New do.	—	—	Straw	38	43
Superior Clover	115	126			

JOSHUA BAKER.

WHITECHAPEL, THURSDAY, Feb. 7.

Fine old Hay	105s to	108s	Fine old Clover	112s to	118s
Inferior do.	50	80	Inferior do	80	95
Prime New Hay	—	—	Fine 2d cut	90	100
Inferior do.	—	—	Inferior do.	—	—
Straw	34	38	Fine New Clover	—	—

HOPS.—BOROUGH MARKET, FRIDAY, Feb. 8.

Messrs. Pattenden & Smith report a steady demand for consumption for the best grown samples of 1860, as well as for yearlings. There is also inquiry for good 1855's and 1856's on speculation.

POTATOES.—SOUTHWARK, Monday, Feb. 4.

During the past week the arrivals both coastwise and by rail have been large, and have caused a further reduction in prices. The following are this day's quotations:—York Flukes, 150s. to 160s. per ton; Lincolnshire Regents, 110s. to 120s.; Dunbar Red Seal, 150s. to 160s; North Berwick do., 120s. to 125s.; Fife, Forfar, and Perth do., 105s. to 115s.; Rocks and Reds, 105s. to 110s.; American Reds, 90s.; French Whites, 60s to 90s; Belgian do., 60s. to 80s.; Dutch do., 60s. to 80s.

BUTTER MARKET.—Feb. 8.

Best Fresh Butter	.. ..	16s. per dozen lbs.
Second do. do.	.. ..	14s. „ „

Pork, 4s. 8d. to 5s. 4d. per 8 lbs.

COAL MARKET.—Feb. 6.

Bowers West Hartley, 17s.; Byass's Bebside West Hartley, 17s.; Davison's West Hartley, 17s.; Lambert's West Hartley, 16s. 6d.; Howard's West Hartley, 17s.; Tanfield Moor, 16s. 3d.; Tanfield Moor Butes, 16s. 3d.; West Hartley, 17s.; Wylam, 17s. 6d.; Walls End Harton, 19s.; Londonderry Gas, 14s. 6d.; Walls End Braddyll's Hetton, 20s. 3d.; Walls End Haswell, 21s. 6d.; Walls End Pittington, 18s. 6d.; Walls End Kelloe, 20s. 3d.; Walls End Thorpe, 19s. 3d.; Carway and Duffryn Malting, 24s. 6d.—86 ships at market.

METROPOLITAN CATTLE MARKET.

MONDAY, Feb. 4.

We have a large supply of Beasts, but still choice descriptions are by no means plentiful. Prices on the average are rather lower. There are also a few more Sheep, but there is a demand for them, and quotations are very little altered. Good Calves are scarce and dear. From Germany and Holland there are 550 Beasts, 150 Sheep, and 70 Calves; from Scotland, 150 Beasts; from Norfolk and Suffolk, 2100; from Ireland, 200; and 100 from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c.	5 0 to	5 2	Best Long-wools	5 6 —	5 8
Best Short-horns	4 8 —	5 0	Do. Shorn	.. to	..
2d quality Beasts	4 0 —	4 4	Ewes & 2d quality	4 10 —	5 0
Best Downs and Half-breds	6 0 to	6 2	Do. Shorn	.. —	..
Do. Shorn	.. —	.	Lambs	.. —	..
			Calves	5 0 —	5 8
			Pigs	4 4 —	5 4

Beasts, 3890; Sheep & Lambs, 16,080; Calves, 86; Pigs, 350.

THURSDAY, Feb. 7.

The number of Beasts is considerably smaller than on Thursday last; however, trade is not very brisk, and prices are not higher than on Monday. There is about an average supply of Sheep; the demand is good, and Monday's quotations are fully realised. Good Calves are still scarce and dear. Our foreign supply consists of 911 Beasts, 380 Sheep, and 100 Calves. Milch Cows, 155.

	s d	s d		s d	s d
Best Scots, Herefords, &c.	5 0 to	5 2	Best Long-wools	5 6 —	5 8
Best Short-horns	4 8 —	5 0	Do. Shorn	.. —	..
2d quality Beasts	4 0 —	4 4	Ewes & 2d quality	4 10 —	5 0
Best Downs and Half-breds	6 0 —	6 2	Do. Shorn	.. to	..
Do. Shorn	.. —	..	Lambs	.. —	..
			Calves	5 0 —	5 8
			Pigs	4 4 —	5 4

Beasts, 1075; Sheep & Lambs, 3850; Calves, 189; Pigs, 140.

MARK LANE.—MONDAY, Feb. 4.

The supply of Wheat from Essex and Kent to this morning's market was small; good samples were sold readily at the extreme prices of this day week, but the damp remained difficult to quit. The attendance of country buyers was large, and they purchased foreign to supply their immediate requirements at prices which last week were unobtainable; towards the close some parcels were taken to hold over. For Barley there is rather more inquiry, and Beans and Peas are unaltered in value. The Oat trade is firm at late quotations. For Flour there is a better demand at last week's rates.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk..White	46—66	Red	40—60
— — fine selected runs..ditto	50—70	Red	54—65
— — Talavera	51—72		
— Norfolk	—	Red	—
— Foreign	50—76		
BARLEY, grind. & dist., 28s to 30s..Chev.	40—45	Malting.	38—40
— Foreign..grinding and distilling	30—36	Malting.	40—43
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—25
— Irish ....Potato	26—28	Feed ..	21—24
— Foreign........Poland and Brew	24—28	Feed ..	20—28
RYE	35—38	Foreign.	—
RYE-MEAL, foreign..............	—		
BEANS, Mazagan....30s to 44s....Tick	28—48	Harrow.	28—48
— Pigeon ......34s — 56s..Winds.	34—42	Longpod	—
— Foreign ....Small	40—50	Egyptian	—
PEAS, white, Essex and Kent..Boilers	33—48	Suffolk.	40—50
— Maple .... —s to —s ......Grey	40—42	Foreign.	38—48
MAIZE .... White	—	Yellow..	—
FLOUR, best marks delivered..per sack	50—57		
— 2d do. .... ditto	38—50	Country.	38—50
— Foreign ....per barrel	30—35	Per sack	40—50

FRIDAY, Feb. 8.

The past week has been a remarkably fine one, with a mild temperature, and W. and S.W. winds, rising to a gale since the 5th inst., to-day S.E. and colder. The improved tone we noted in the Wheat trade last week has continued, an increasing demand having enabled holders to realise, a slight improvement in both English and American descriptions in the majority of markets throughout the kingdom. A better demand has also caused the value of all kinds of Spring Corn to be well supported, and the same may be said of Flour. During the past eight days 70 cargoes were reported arrived off the coast, viz., 33 Wheat, 13 Maize, 10 Barley, 1 Rye, 2 Beans, 9 Linseed, 1 Rapeseed, and 1 Cotton seed. The sales have been on a liberal scale, and most descriptions of grain, at an improvement of 6d. to 1s. 6d. per qr. In Paris on the 7th, although there was not much doing in either Wheat or Flour, the trade was firm, and extreme prices have been obtained. The arrivals of English grain this week have been moderate, of foreign Oats small, but large of Barley, Wheat, and Flour. This morning's market was fairly attended by country buyers. Good English Wheat commands the full prices of Monday; but other qualities continue to be neglected; foreign meets a fair country inquiry at late rates. Spring Corn of all descriptions is steady at Monday's quotations.

ARRIVALS FROM Feb. 4 TO Feb. 8.

	Wheat.	Barley.	Oats.	Flour.
English ..	1110 qrs.	2350 qrs.	420 qrs.	640 sks.
Irish	— „	— „	1200 „	— „
Foreign ..	39430 „	21800 „	3790 „	300 „ 23720 brls.

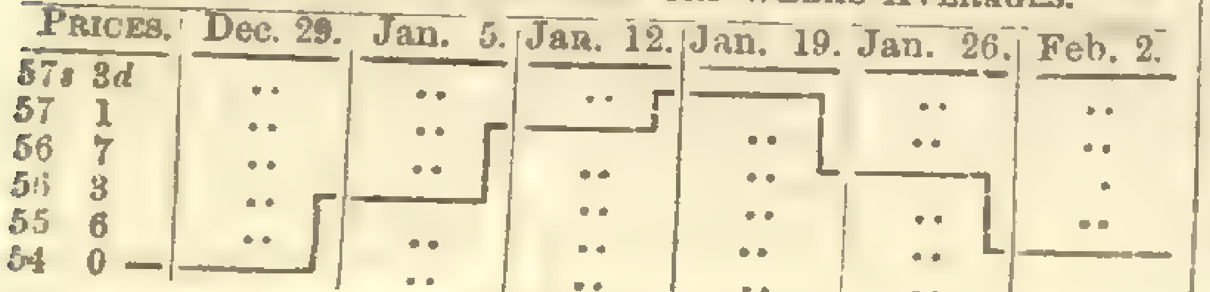
LIVERPOOL, Tuesday, Feb. 5.—There was a good attendance at this morning's market. Wheat meets a fair sale at 1d. to 2d. per cental advance. For Flour there was rather more inquiry, and prices a shade better. Indian Corn met with very good inquiry; mixed, 37s. 9d. to 38s.; Galatz, 39s. 6d. Beans rather scarce. Oats and Oatmeal dull sale, at unchanged rates.

FRIDAY, Feb. 8.—There was a fair attendance at to-day's

market, with a moderate business. Wheat at the extreme rates of Tuesday; Flour in more inquiry, prices unchanged. Indian Corn fair sale, at 37s. 9d. to 38s. for mixed, and 39s. 6d. for Galatz. Beans 6d. dearer, with good inquiry. Oats and Oatmeal dull sale.

AVERAGES	Wheat.		Barley.		Oats.		Rye.		Beans.		Peas.	
Dec. 29..	54s	0d	39s	7d	22s	6d	34s	7d	44s	10d	46s	7d
Jan. 5..	56	3	40	3	22	6	39	10	43	4	42	0
— 12..	57	1	40	6	22	6	34	6	43	10	44	6
— 19..	57	3	40	6	23	2	34	9	41	10	43	0
— 26..	56	7	40	7	23	1	35	10	42	5	41	8
Feb. 2..	55	6	40	0	23	3	34	3	40	8	43	0
Agg. Aver.	56	1	40	3	22	10	35	8	42	10	43	6

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



PARTNERSHIP.—Wanted, an active business Man to take a Share in a well-established extensive NURSERY in the City of Dublin.—Apply by letter, stating amount of capital, &c., to A. W. B., *Gardeners' Chronicle* Office, W.C.

WANTED, AS FOREMAN, an active, trustworthy Man, who has a knowledge of Pines, Vines, Peaches, and Stove and Greenhouse Plants. Wages 15s. a week, with Lodgings. No expenses paid down. No one need apply who has not filled a similar situation.—Apply by letter to A. B., D. Heald's, Bookseller, Wakefield.

WANTED, A FOREMAN, in a provincial Nursery, who has already filled a similar situation. He must be a good Salesman, and have a thorough knowledge of the propagation of out-door Stuff, particularly Grafting Rhododendrons, Coniferæ, &c., and of Hard-wooded Greenhouse Plants, and be able to produce full testimonials as to character and abilities.—Apply to Mr. YOUNG, Nurseryman, Taunton.

WANTED, a GROUND FOREMAN, in a country Nursery; one who understands the general Propagation of Hardy Trees and Shrubs, and can Bud and Graft successfully. References as to character and abilities, together with terms, to be sent to G. T., Messrs. Hurst & McMullen, Seedsmen, Leadenhall Street, London, E.C.

TO GARDENERS.

WANTED, A GRAPE AND PINE GROWER.—Messrs. JOHN WEEKS & Co. are now in want of a thorough practical Forcing Gardener, to grow Pines, Vines, Peaches, and other Hothouse Fruits on an extensive scale, which are Cultivated for Sale and Exhibition. Abilities and energy will be liberally rewarded. None need apply who cannot obtain high recommendations for their skill in the Forcing Department.—Apply first by letter, with full particulars of former experience and references, to JOHN WEEKS & Co., Horticultural Builders, and Hot-water Apparatus Manufacturers, King's Road, Chelsea, S.W.

WANTED, in a Nobleman's Garden, a LEADING WORKMAN in the Flower and Pleasure Garden Department. He must be a good Mower, handy in cutting out Flower Beds, and undeniably sober and well conducted. Wages 15s. per week.—Address W. L., Grantham, Lincolnshire.

WANTED, A GARDENER for the Orphan Working School, Haverstock Hill, and to attend at the Gate. He must have a good character for competence and for moral conduct. A married man without family would be preferred. He will reside at the Lodge. Wages 21s. per week, and Coals.—Apply to JOSEPH STARLING, Esq., 12, Copthall Court, Throgmorton Street, City, E.C., between 10 and 2 o'clock.

WANTED, a steady active Man as GARDENER; one accustomed to grow Strawberries, Grapes, and Flowers for market. Wages, 17s per week with cottage.—Apply to GEO. TOYNE & SON, Hounslow, W.

WANTED, A GARDENER, in the neighbourhood of Birmingham. He must perfectly understand his business both in the Garden and Greenhouse. Wages 18s. A good Cottage.—Apply to T. L., W. H. Smith & Son, 33, Union Street, Birmingham.

TO GARDENERS.

WANTED IMMEDIATELY, a steady, respectable Man, who thoroughly understands all Greenhouse Plants, and the Propagation of them; would have to assist in the sale of same.—Apply to THOMAS ALMEY, Nursery and Seedsman, Oakham, Rutland.

WANTED, for a permanency, in a small Florist's Garden and Nursery at Islington, a steady young WORKING GARDENER, as Propagator of Soft wooded Plants, and to assist generally in the business. Wages 18s.—Application, in own writing, to G. R., 11A, Oxford Street, Islington, London, N.

WANTED, a young Man in the Glass Department, under the Propagator; one that has been used to General Work indoors; active and willing, and of good character.—Application, stating terms, to Messrs. STIRZAKERS, The Nurseries, Lancaster.

WANTED, a steady respectable Man, with good address, who thoroughly understands the PROPAGATION AND GROWING OF PLANTS generally for Exhibition and Sale. Liberal wages given, and no one need apply who cannot produce the highest references.—A. B., *Gardeners' Chronicle* Office, W.C.

WANTED, A GARDENER AND GROOM, about 10 miles from town. A young man from the country preferred.—Apply next week, A. B., 25, Ludgate Street, St. Paul's, E.C.

WANTED, A BAILIFF, on a Market Garden Farm of about 200 acres.—Any one fully competent to undertake the above duties may apply personally at 10 and 11, Union Street, Spitalfields Market, on Friday next, between 2 and 4 o'clock.—Unexceptionable references will be required.

CENTRAL LONDON SCHOOL DISTRICT.

WANTED, A FARM BAILIFF.—The Board of Management require a Bailiff to Manage their Farm and Garden at Hanwell, Middlesex, comprising about 100 acres. He must be competent to Keep Accounts, to entirely Manage the Stock, and to Train Boys in Gardening and Farming operations. The salary will be 75l. per annum with residence. Applications in the handwriting of the candidate, stating age (which must be between 30 and 50), and present and previous occupations, are to be sent, with testimonials, to me at 10, Basinghall Street, E.C., before Friday, the 15th February inst., and notice will be sent to approved candidates, when they are to attend the Managers.—SAMUEL HEATH, Jun., Clerk to the Board, 10, Basinghall Street, E.C.—Feb 9.

WANTED, A PROPAGATOR AND SALESMAN, competent to Manage Hard and Soft-wooded Plants, Vines, &c., for a Nursery in the North of England. References as to character and abilities, together with wages expected, to be sent to Messrs. NOBLE, COOPER, & BOLTON, Seedsmen, London.—February 2.

WANTED, a good PLANTSMAN, an active steady young Man, who has a knowledge of Grape Growing.—Reference and terms sent to Z., *Gardeners' Chronicle* Office, W.C.

TO THE SEED TRADE.

WANTED, A SHOPMAN, for a permanency; a young Man who has been accustomed to the London trade preferred. Write, stating particulars as to salary, &c., to JAMES CARTER & Co., 237 and 238, High Holborn, London, W.C.

SEED TRADE.

WANTED, A JUNIOR CLERK, one used to the London trade preferred. Address by letter, stating terms, &c.—JAMES CARTER, & Co., 237 and 238, High Holborn, W.C.

WANTED, a Youth of 16 or 18, who writes well, to be employed chiefly in the Seed Shop and Counting House.—Application to be made in own handwriting to OSBORN & SONS, Nurserymen, &c., at Fulham, near London, S.W.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 40, married, no family; thoroughly practical in all its branches; 2½ years' good character.—W. G., 16, Crescent Road, Clapham, S.

GARDENER (HEAD).—Age 26, single; thoroughly understands Early and Late Forcing, Flower and Kitchen Gardens. Seven years' good character.—A. B., 2, Royal Exchange Buildings, City, E.C.

GARDENER (HEAD).—Age 38; competent to undertake the Management of any nobleman's or gentleman's Garden. Respectable. High references given.—EDMONDS, News Agents, High Street, Clapham, Surrey, S.

GARDENER (HEAD).—Age 30, single; perfectly understands his profession in all its branches. Good reference from last situation.—A. B., Post Office, South Cave, Brough, Yorkshire.

GARDENER (HEAD).—Understands Pines, Vines, Melons, Cucumbers, and Plant Growing. Two and-a-half years' good character.—J. H., Mr. Methven, Stanwell Nursery, Edinburgh.

GARDENER (HEAD).—Age 28; has a thorough practical knowledge of his profession, and competent to undertake the management of Pines, Vines, Cucumbers, and Melons; also Flower and Kitchen Garden. Three years' good character.—B. B., 4, Lily Terrace, Warwick Road, Kensington.

GARDENER (HEAD).—Married, without incumbrance; will be disengaged in a fortnight. Salary expected, 25s. per week, and House. The highest references can be given.—T. W., Mr. May, Seedsman, &c., Wellington Street, Strand, W.C.

TO NOBLEMEN AND GENTLEMEN.

GARDENER (HEAD).—Age 40; has a practical knowledge of his profession in all its branches. Can be highly recommended from his present employer. No objection to any part of England.—A. B., Post Office, Crouch End, Hornsey, Middlesex.

GARDENER (HEAD).—Age 37, married, one daughter, age 5; thorough knowledge of Pines, Grapes, Stove and Greenhouse Plants, Kitchen and Flower Garden, &c. Character will bear the strictest inquiry for honesty, sobriety, &c.—X. Y. Z., Messrs. P. Lawson & Son, 27, Great George Street, Westminster, S.W.

GARDENER (HEAD).—Age 43, married; has had great experience in the growth of Pines, Grapes, &c.; Kitchen and Flower Gardening generally. The highest testimonials from two families with whom he lived upwards of 16 years.—A. B., care of Mr. Flowd, Gardener, Abernant Gardens, Aberdare, Glamorganshire.

TO NOBLEMEN AND GENTLEMEN.

GARDENER (HEAD).—Age 38, married, without incumbrance; well acquainted with the various branches of his profession, and is especially skilled in the Cultivation of the Grape Vine and of the Pine. No objection to the Management of Meadow Land. Good reference.—V. M., Post Office, 116, Edgware Road, London, W.

GARDENER (HEAD).—Age 34, married, no incumbrance; thoroughly understands the Cultivation of Stove and Greenhouse Plants, the Forcing of Fruits and Flowers, and Kitchen Gardening. Can also take care of Grass Land. The Wife can manage Dairy and Poultry. Five years' good character.—C. H., Mr. G. Baker, American Nursery, Bagshot, Surrey.

TO NOBLEMEN, GENTLEMEN, ETC.

GARDENER (HEAD).—Middle-aged, married; thoroughly understands his profession in all its branches, including Pines, Grapes, Stove, Orchidaceous Plants, &c.; also the Laying Out or Improving Noblemen's or Gentlemen's Estates, having been employed by some of the principal families both in England and Wales. The best reference given.—J. FARRANT, 24, Cochrane Terrace, Portland Town, St. John's Wood, London, N.W.

TO NOBLEMEN, GENTLEMEN, ETC.

GARDENER (FIRST-CLASS) in every branch of the profession; married, without incumbrance. Has had great experience in the re-arranging Park Decorations, planning Pleasure Grounds, the construction of Horticultural Buildings and Heating on the best principles; has grown Pines, Grapes, Peaches, and other fruits to the highest perfection, and is experienced in the culture of Fruit Trees in the orchard house. Has lived with two families for 20 years, and is about leaving a family of note where he has been 3 years, having completed the new arrangement of the Grounds and Houses. Testimonials and character unexceptionable. No objection to go to Ireland.—A. B. C., A. Henderson, Pine-apple Place, Edgeware Road, W.

GARDENER, &c.—THOMAS LOWE (age 46, married, without incumbrance); upwards of 15 years Gardener and Bailiff to the late C. A. Peirce, Esq., and for the last few years Manager to Messrs. Weeks & Co., where his great success in the cultivation of Pines, Grapes, Peaches, and all kinds of Forced Fruits on a very extensive scale, has been highly approved of by all who have witnessed them, and which can be seen at any time. T. L. begs to state that he is now at liberty to engage with any Nobleman or Gentleman in want of a thorough practical and experienced Gardener in every branch.—THOMAS LOWE, Sussex Terrace, King's Road, Chelsea, London, S.W.

GARDENER.—Married; is leaving [illegible] situation on the 2nd March; prof[illegible] Mr. THOMAS WILLIAMS, Gardener, Gorstage H[illegible] wich, Cheshire.

GARDENER.—Age 24, either sing[illegible] where a man is kept. Understands F[illegible] a good character.—J. B., Mr. Clay's, Printer [illegible] Ampthill, Beds.

GARDENER (UNDER).—Age 25, sing[illegible] stands Milking. Good reference.—A. B[illegible] Cottage, High Street, Camberwell, S.

GARDENER OR WORKING BAILIFF.—[illegible] married, without incumbrance. Two years [illegible] his last situation, with unexceptionable charac[illegible] and Stock.—Y. Z., Chater, Seedsman, Braintree, Es[illegible]

GARDENER AND BAILIFF.—Age [illegible] has a practical knowledge of his profess[illegible] culture, Breeding and Rearing of Stock. [illegible] commended from his last place, where he was [illegible] for 7 years. Left through the death of his master [illegible] good Dairy-woman; can manage Poultry [illegible] Mr. Fairchild, Seedsman and Florist, West [illegible] Surrey.

TO NOBLEMEN AND GENTLEMEN

LANDSCAPE AND FLOWER GARDEN[illegible] A. JOHNSON, aged 32, having nearly complete[illegible] ment as Landscape and Flower Gardener to H[illegible] Duke of Marlborough, is desirous to engage w[illegible] man or gentleman in want of a thorough pract[illegible] has lived in several first-class establishments [illegible] land Park, Leigh Park, and Arundel Castle [illegible] been nearly four years with present employer [illegible] happy to answer any inquiry as to integrity or ab[illegible] heim Palace, Woodstock, Oxon.

PROPAGATOR AND GROWER of So[illegible] Plants generally. Has had many years' experi[illegible] London trade.—T. W., 2, Harriett Street, Sta[illegible] Fulham, S.W.

BUDDER, &c.—A young man, who [illegible] understands Budding, Grafting, and Pa[illegible] Trees; likewise various parts of his profession. [illegible] recommended, with good character from his present [illegible] —G. C., 1, Moore Park, Stanford Bridge, Fulham, S[illegible]

TO NOBLEMEN AND GENTLEMEN.

STEWARD OR BAILIFF.—Has had practi[illegible] rience in the Management and Improving [illegible] in Scotland and England, Rearing, Buying and [illegible] kinds of Farm Stock, the Measuring of Land and [illegible] the Erecting of Farm Buildings. Seven years' Chara[illegible] present employer.—G. G., Post Office, Farnboro Sta[illegible]

TO NOBLEMEN AND GENTLEMEN

FARM STEWARD OR BAILIFF.—M[illegible] 20 years' satisfactory testimonials of character [illegible] ciency will be produced.—DICKSONS & BROWN, Seed M[illegible] 43 & 45, Corporation Street, Manchester.

FARM BAILIFF.—Age 38, married; has a thoro[illegible] practical knowledge of every system of Agricu[illegible] Breeding, Buying and Selling of Stock. The wife to ma[illegible] Dairy if required. Unexceptionable testimonials.—[illegible] Post Office, Broadway, Worcestershire.

BAILIFF.—Thoroughly acquainted with [illegible] branch of Agriculture, both Heavy and Light Soils [illegible] the most approved system; Growing Roots, Drainage, & [illegible] Breeding, Buying, and Selling of Stock, [illegible] Management of a large Farm. Referen[illegible] character. Would undertake to Manage Dairy or P[illegible] Messrs. FLANAGAN & SON, 9, Mansion House Street, Lond[illegible]

TO NURSERYMEN AND SEEDSMEN.

SHOPMAN.—Ten years' experience in London [illegible] Country houses.—H. W., Chas. White's, Hilling[illegible] Uxbridge.

SEED TRADE.

SHOPMAN, by a young Man who has had [illegible] siderable experience. Understands Cropping [illegible] seasons for Sowing Garden and other Seeds, [illegible] acquainted with Book-keeping, Invoices, and Accounts [illegible] an excellent Penman. Moderate salary expected.—G. [illegible] 72, South Clerk Street, Edinburgh.

FORGERY AND FRAUD.—Understanding [illegible] there is at present an attempt being made by [illegible] principled parties in our city to deceive the public [illegible] inferior Starch, made up in packets closely resem[illegible] GLENFIELD STARCH, we consider it our duty [illegible] fair readers to be careful when purchasing to see that [illegible] "GLENFIELD," and the maker's name, "ROBERT [illegible] SPOON," is on every package, as none others are genu[illegible]

When you ask for Glenfield Starch see that you [illegible] inferior kinds are often substituted.

WHITE AND SOUND TEETH are indispens[illegible] to personal attraction, and to health and lon[illegible] the proper mastication of food. ROWLANDS' OD[illegible] Pearl Dentifrice, preserves and imparts a pearl-like [illegible] to the Teeth, eradicates Tartar and spots of incipient [illegible] strengthens the Gums, and imparts a delicate fragrance [illegible] Breath. Price 2s. 9d. per box.—Sold at 20, Hatton Garden [illegible] and by Chemists and Perfumers.

ASTHMA, COUGHS.—DR. LOCOCK'S P[illegible] MONIC WAFERS give instant relief and a rapid [illegible] Asthma, Consumption, Coughs, and all disorders of the [illegible] and Lungs. They have a most pleasant taste. P[illegible] 2s. 9d., and 11s. per box. Sold by all Medicine V[illegible]

KEATING'S COUGH LOZENGES.—[illegible] show that 50,000 persons annually fall victims [illegible] monary disorders, including Consumption, diseases [illegible] chest, and the respiratory organs. Prevention is at [illegible] better than cure; be therefore prepared during the [illegible] wintry season with a supply of KEATING'S COUGH LOZ[illegible] which possess the virtue of averting as well as of [illegible] cough or cold; they are good alike for the young or [illegible] aged.—Prepared and sold in boxes, 1s. 1½d., and tins, 2[illegible] 4s. 6d., and 10s. 6d. each, by THOMAS KEATING, Chemist [illegible] 79, St. Paul's Churchyard, London. Retail by all Druggists.

PARR'S LIFE PILLS act as a warm and [illegible] Aperient, removing without the slightest pain or [illegible] venience all obstructions, and restore the whole system [illegible] state of health and comfort.

PARR'S PILLS

may be relied on as the best medicine for indigestion [illegible] head-ache, heartburn, loss of appetite, disorders of the [illegible] and liver, redundancy of bile, dizziness of the eyes, [illegible] pains across the forehead, impaired memory, restlessness [illegible] bad dreams, stuporific dozing, flatulency, costiveness, &c. [illegible]

Sold in boxes, price 1s. 1½d., 2s. 9d., and in family pa[illegible] 11s. each, by all Chemists and Medicine Vendors. [illegible] prietors, T. ROBERTS & Co., 8, Crane Court, Fleet Str[illegible] London. *,* Ask for PARR'S LIFE PILLS.

The Gardeners' Chronicle Newspaper.

SATURDAY, FEBRUARY 16, 1861.

LECTURES TO WORKING MEN.

GOVERNMENT SCHOOL OF MINES, Jermyn [illegible].—The FOURTH COURSE, consisting of SIX [illegible] "ON THE RELATIONS OF MAN TO THE ANIMAL KINGDOM," by Professor HUXLEY, [illegible] will be commenced on THURSDAY, February 21, at [illegible]. Tickets may be obtained by Working Men only on [illegible], February 18, from 10 to 4 o'clock, upon payment of a [illegible] of 6d. for the whole Course. Each applicant is requested to bring his name, address and occupation written on a piece of paper, for which the Ticket will be exchanged.

TRENHAM REEKS, Registrar.

SPECIAL NOTICE.

PELICAN LIFE INSURANCE OFFICE, ESTABLISHED IN 1797.

No. 70, Lombard Street, E.C., and 57, Charing Cross, S.W.

Directors.

Octavius E. Coope, Esq.
W. Cotton, Esq., D.C.L., F.R.S.
John Davis, Esq.
J. A. [illegible], Esq., M.D., F.R.S.
[illegible] Hawkins, Jun., Esq.
[illegible] D. Hodgson, Esq., [illegible]
Henry Lancelot Holland, Esq.
William James Lancaster, Esq.
John Lubbock, Esq., F.R.S.
Benjamin Shaw, Esq.
Matthew Whiting, Esq.
M. Wyvill, Jun., Esq., M.P.

Robert Tucker, *Secretary and Actuary.*

BONUS.—All Policies effected on the Return System, and existing on the 1st July, 1861, will participate in the next Division of Profits, subject to such of them as have not then been in force for five years, being continued until the completion of that period.

LOANS on Life Interests in possession or reversion: also upon other approved Security in connection with Life Assurance.

*** For Prospectuses, Forms of Proposal, &c., apply at the Offices as above, or to any of the Company's Agents.

News of the Week.

IN the House of Lords on Friday on the motion of Earl GRANVILLE a Select Committee was appointed to inquire into the mode of conducting the business of the House, with power to communicate with the committee already appointed for the same purpose by the House of Commons. On Monday the LORD CHANCELLOR laid on the table a Bill for the repeal of certain useless statutes, as a preliminary step to a consolidation of the statute law. The Bill was read a first time. On Tuesday the LORD CHANCELLOR laid on the table a Bill to protect manufacturers against forged trade marks, by making the forging of these marks, or the sale of articles bearing false marks, a misdemeanour, punishable by fine and imprisonment. The Bill was read a first time. On the motion of Lord MONTEAGLE the Fictitious Savings Banks Bill, the object of which is to make it a misdemeanour to establish, under the name of savings banks, any institution which has not been regularly registered, was read a second time. On Thursday Lord HERBERT OF LEA moved the thanks of the House to the forces engaged in the Chinese expedition. The Earl of DERBY seconded the motion, which was supported by the Duke of CAMBRIDGE and unanimously agreed to.

In the Commons on Friday a Select Committee was appointed on the motion of Mr. VILLIERS to inquire into the administration and operation of the law for the relief of the poor, under the orders, rules, and regulations issued by the Poor Law Commissioners and the Poor Law Board. On the motion of the CHANCELLOR of the EXCHEQUER a resolution was agreed to for the amendment of the Red Sea and India Telegraph Act, as was also a resolution preliminary to the introduction of a Bill for giving new facilities for the deposit of small savings by means of the Money Order department of the Post Office, the minimum rate of interest to be 2*l.* 10*s.* per cent., with a power of increase within certain limits, and with a Government guarantee. On Monday the ATTORNEY-GENERAL moved for leave to bring in a Bill to amend the law relating to Bankruptcy and Insolvency, the main objects of which are to abolish the distinction between bankruptcy and insolvency, to transfer to the County Courts all estates under 300*l.*, to abolish the different classes of certificates, and to give power to the Commissioners to refuse the certificate altogether, to suspend the order of discharge, or to commit the bankrupt to prison for a term not exceeding twelve months. After a short discussion in which the principles of the proposed measure were generally approved of, leave was given to bring in the Bill. Mr. CARDWELL obtained leave to bring in Bills for the Registration of Births, Deaths, and Marriages in Ireland, and for the better regulation of Markets and Fairs in Ireland. On Tuesday Mr. COLLIER obtained leave to bring in a Bill to prohibit the payment of the expenses of conveying voters to the poll in boroughs, and Sir J. TRELAWNY obtained leave to bring in a Bill to establish county financial boards for the assessing of county rates and for the administration of county expenditure in England and Wales. Mr. WHITE moved for a return of offices and pensions held by members of the House. Sir G. LEWIS opposed the motion, which was negatived on a division by 112 to 53. Mr. DODSON obtained leave to bring in a Bill to provide that votes for the Universities may be recorded by means of voting papers. Mr. HUBBARD obtained leave to bring in a Bill to amend the law of Church Rates, similar to his Bill of last Session. Mr. COWPER obtained leave to bring in a Bill to enable the Commissioners of Works to acquire additional land for the purposes of the Public Offices Extension Act of 1859. On Wednesday, being Ash-Wednesday, the House met *pro formâ*, and almost immediately adjourned. On Thursday Lord PALMERSTON moved the thanks of the House to the Army and Navy engaged in the recent operations in China. Mr. DISRAELI seconded the motion, which, after a short discussion, was unanimously agreed to. The Bankruptcy and Insolvency Bill and the Bank of England Payments Bill were read a second time. The Red Sea and India Telegraph Bill was read a second time and referred to a select committee. The SOLICITOR-GENERAL obtained leave to bring in a series of seven Bills for consolidating and amending the Statute Laws of England and Wales, so far as they relate to offences against the person, malicious injuries to property, larceny, forgery, coinage offences, &c. Sir G. LEWIS obtained leave to bring in a Bill to assign the four seats forfeited by the disfranchisement of Sudbury and St. Alban's, one seat to be given to the West Riding, one to South Lancashire, one to the united parishes of Chelsea and Kensington, and one to Birkenhead. Mr. VILLIERS obtained leave to bring in a Bill to amend the laws relating to the removal of the poor, and the contribution of parishes to the common fund in unions; and a Bill to amend the law relating to the removal of poor persons to Scotland and Ireland.

Gaeta capitulated on Wednesday, and the KING OF SARDINIA will be able to announce, at the opening of the Italian Parliament on Monday, that KING FRANCIS II. has finally quitted the kingdom of the Two Sicilies. On Thursday General CIALDINI occupied Monte Orlando, and all the other fortifications, and after the embarkation of the Royal family the Sardinian troops were to occupy the town. The garrison of Gaeta will remain prisoners of war until the surrender of Messina and Civitella del Tronto.

A despatch from Vienna announces that the statutes for the organisation of the provinces and the statute in reference to the Council of the Empire have been adopted by the Ministers. The number of members of which the Diet will consist will be considerable, and the Council of the Empire will consist of two Chambers, and contain 350 members. The Assembly of the Comitat of Pesth has unanimously voted an address to the EMPEROR stating that his recent rescript has destroyed the confidence which had been created in Hungary by the imperial diploma of October last, that the law prohibits the payment of taxes until they have been voted by the Diet, and that an unreserved return to constitutional life alone can save the KING and the country.

From the United States we learn that Louisiana seceded on the 26th ult. by a vote of 113 to 17, and that Virginia had invited all the States in the Union to send commissioners to a conference to be held at Washington on the 4th inst. with a view to a peaceful adjustment of the existing differences. The PRESIDENT had sent a special Message to Congress, recommending them, at the suggestion of Virginia, to abstain from passing any law likely to produce a collision during the meeting of the Commissioners, and expressing his hope that the conference may be the destined means of perpetuating the Union.

By the arrival of the China mail we have news from Hong Kong to the 31st December. The Chinese Government had paid the second instalment of the indemnity, and although the cold at Tien-tsin was intense the health of the troops continued good. Lord ELGIN had not left Shanghae up to the 23d December. The last advices received at Melbourne from New Zealand state that no further aggressive movements had been made since the battle of Mahoetahi.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family continue at Buckingham Palace. On Friday morning the Prince Consort rode on horseback and visited the British Institution in Pall Mall. In the afternoon his Royal Highness presided at a meeting of the Fine Arts Commission. The Queen, accompanied by the Princesses Alice and Helena, visited the South Kensington Museum. In the evening the Queen and Prince Consort, accompanied by the Princesses Alice and Louisa, honoured the performance of the English Opera at Covent Garden Theatre with their presence. On Saturday morning the Queen and Princess Alice rode in the riding house of the Palace. In the afternoon her Majesty, accompanied by the Princess Alice, visited the Duchess of Cambridge at her residence in St. James's Palace. The Prince Consort visited the Duchess of Cambridge and went to the South Kensington Museum. In the evening the Queen had a dinner party. On Sunday morning the Queen and Prince Consort, the Princesses Alice, Helena, and Louisa, Princes Arthur and Leopold, attended Divine service in the private chapel. The Dean of Windsor preached the sermon. In the evening a selection of sacred music was performed at the Palace, the day being the 21st anniversary of the Queen's and Prince Consort's marriage. On Monday morning the Queen and Prince Consort, accompanied by the Princesses Alice, Helena, and Louisa, visited the Photographic Exhibition in Pall Mall East. The Prince Consort afterwards rode on horseback. The Princess Beatrice visited the Princess Mary of Cambridge. In the evening the Queen and Prince Consort, accompanied by the Princess Alice, honoured the performance at the Haymarket Theatre with their presence. On Tuesday morning the Prince Consort rode on horseback. In the evening the Queen had a dinner party. On Wednesday morning the Prince Consort rode on horseback. The Princesses Alice and Helena rode in the riding-house of the Palace. On Thursday the Queen held the first levée of the season in St. James's Palace, when 140 noblemen and gentlemen had the honour of being presented. In the evening the Queen and Prince Consort, accompanied by the Princesses Alice and Helena, honoured her Majesty's Theatre with their presence.

THE PRINCE OF WALES left Madingley Hall on Saturday for Wimpole Hall, near Royston, on a visit to the Earl and Countess of Hardwicke. On Sunday the Prince of Wales attended Divine service at the village church adjacent to the Hall. On Monday his Royal Highness was present at the meet of the Cambridgeshire hounds at Hardwicke, and afterwards returned to Cambridge. On Tuesday the Prince honoured the Master of Trinity and Lady Affleck with his company at dinner.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of the First Lord of the Treasury, in Downing Street. Another Council was held on Wednesday.

ORDER OF THE GARTER.—The Queen has signified her intention to enroll the King of Prussia in the list of Sovereigns who are Knights Extraordinary of the Garter. The Marquis of Breadalbane has been selected by the Queen to proceed on a special mission to invest his Majesty with the Order. His lordship will be accompanied by General Lord F. Paulet, Viscount Hinchinbrook, and Sir Charles Young, Garter King of Arms.

LORD LIEUTENANCY.—The Queen has appointed the Marquis of Huntly to be Lieutenant and Sheriff-Principal of Aberdeenshire in the room of the late Earl of Aberdeen.

KNIGHTHOOD.—At the levée on Thursday, Mr. Richard Charles Kirby, C.B., late Accountant-General of the War Department, was presented to the Queen by Lord Herbert, and received from her Majesty the honour of knighthood.

PARLIAMENTARY MOVEMENTS.—The election for South Wilts, in the room of Lord Herbert, took place on Thursday, when Lieut.-Colonel Bathurst, the Conservative candidate, was elected without opposition, Mr. Grove having previously retired from the contest.—Mr. W. E. Forster was elected for Bradford on Monday without opposition.—Mr. Thomas Barnes was elected for Bolton on Monday without opposition.—The death of Sir John Owen has caused a vacancy for Pembroke. There are already three candidates for the vacant seat,—Colonel Owen, who was beaten at the recent election for the county; Captain Ramsay, C.B., Superintendent of Pembroke Dockyard; and Mr. Thomas Meyrick, of Bush.—The reported retirement of Mr. Way from the representation of Bath, is contradicted

by the Conservative Association. The Liberal party, however, have held a meeting, and are canvassing the city as if the rumour were a fact. Lord Loughborough and Sir F. Slade, Bart., have been named as candidates in the Conservative interest.—The nomination for Aberdeenshire took place on Wednesday, when the Hon. Arthur Gordon was nominated in his absence by the Liberal party; and Mr. Leslie, of Warthill, was nominated in the Conservative interest. The show of hands was in favour of Mr. Gordon. The poll was to take place yesterday.—Major O'Reilly has declined to come forward for Cork county; Colonel Freke has withdrawn from the contest, and Mr. Leader, of Kanturk, is now mentioned as the Conservative candidate.

Delhi and Lucknow Prize Money.—The *Gazette* of Friday night contains Royal Warrants for the distribution to the commanders, officers, and men engaged in the capture of Delhi and Lucknow, of the proceeds of the booty taken on those occasions.

The Volunteer Movement.—His Royal Highness the Prince of Wales has presented 100*l.* as a prize to be shot for at the meeting of the National Rifle Association.—Notice has been given by the National Rifle Association that having last year established annual competitive trials of small bore rifles, the council, represented by Lord Elcho, General Hay, Colonel Kennedy, Mr. Deedes, Mr. W. Wells, and Captain Edmond Mildmay, met at Hythe on Monday morning. It had been generally stated that several competitors would send their rifles to be shot at Hythe according to the regulations laid down by the council of the Association, but after waiting nearly two hours it was found that no rifles but those sent by the Whitworth Rifle Company were entered for competition. The council then announced that they had no other alternative but to fall back upon the results of their competitive trial of last year. The Queen's prize will, therefore, again be competed for, at the annual prize meeting of the Association, with the Whitworth rifle.—Lord Ranelagh has published a letter stating that, with a view to ascertain in what numbers and time a body of Volunteers can be concentrated on a given point in the event of an emergency, it is proposed to test the operation in connection with a sham fight on Easter Monday. In consequence of the liberality of the directors of the London and Brighton Railway, the neighbourhood of Brighton has been selected as the locality in preference to Croydon, as originally intended, the cost of the journey by return tickets to Volunteers being only 1*s.* 6*d.*, available from Saturday to Monday. It is understood that commanding officers are to arrange for the commissariat of their respective corps. The commanding officers of the Metropolitan, the Surrey, and other Volunteers have (with only two or three exceptions) promised the attendance of their corps.

Foreign.

France.—The *Patrie* announces that a pamphlet entitled "France, Rome, et Italie," by M. de Laguerronnière, will be published this week. "This pamphlet," it says, "will complete the insight into the negotiations between France and Rome, given by the publication of documents, and will make France and Europe judges of the Imperial policy." It is also said that the pamphlet will propose to give the Pope all the honours of a temporal Sovereign, with a civil list, voted by Italy, transferring to Victor Emmanuel the vicariate over the ancient possessions of the Holy See, and the right of holding his Court and assembling the Italian Parliament at Rome.—Admiral Le Barbier de Tinan has left Paris for Toulon. The Mediterranean fleet is to be prepared for sea by next month. —The Academy of Inscriptions and Belles Lettres has filled up three vacancies in the list of its foreign correspondents, by the election of Mr. Samuel Birch, of the British Museum; M. Benfey, of Gottingen; and M. Bietz, of Bonn.—The Bonaparte Paterson marriage case was resumed at Paris on Friday, when M. Merveilleux Davignon, the Public Minister, summed up, on the part of the Crown, in a speech of which the following is a summary:—

"It was not his duty either to attack or defend, but simply to give his opinion on the arguments offered on both sides and on the law affecting the case. In reviewing the arguments he agreed with nearly all the propositions of M. Berryer, and dissented from those of M. Allou. He showed that the decrees of Napoleon I. and the senatus consultum not only did not affect the validity of the marriage, but were, in many particulars, illegal, unconstitutional, and ineffective. As to the plea that the marriage was clandestine, he did not consider it was borne out in the slightest degree; neither did the want of the publication of the banns in France work out the nullity of the marriage. In all respects he thought the marriage was a legal one, and that both parties had so considered it till the absolute will of the great Napoleon had worked an estrangement in the mind of his brother Jerome. The only point remaining, was the effect of the two sentences pronounced in 1856 by the *conseil de famille*. The *conseil* had decided against the validity of the marriage contracted in 1803, but also adjudged that M. Bonaparte was entitled to bear that name. The matter was thus *res judicata*, and therefore the court is debarred from further action, being bound by a previous decision."

The impartiality of these remarks produced a profound feeling of amazement among the public and considerable perplexity on the Bench. The judgment was postponed for a week.

Spain.—A motion for constitutional reform has been debated in the Cortes, and rejected by 134 votes to 35.

Portugal.—The *Prussian Gazette* affirms that there is no truth in the statement that the Princess of Hohenzollern is about to marry the King of Portugal.

The Azores.—A fearful storm raged at St. Michael's on the 26th ult., in which seven schooners which had gone to the island to load fruit were lost, and the entire crews of three of them, the Serpent, Mignon, and Bijou were drowned, the master of the Bijou being the only exception.

Switzerland.—A despatch from Berne states that Mr. Cobden has proposed that Switzerland should act as mediator in the differences between the States of America. The Federal Council has declined the proposal, declaring it to be impracticable.—It is announced that negotiations are to be commenced between the French and the Federal Governments for the conclusion of a treaty of commerce. The French wine growers on the Swiss frontier are most anxious that such a treaty should be speedily concluded.

Belgium.—The Belgian Government has followed the example of France, and decided that the verification of passports on the frontiers shall be suppressed from the 1st inst. Passports however will still be necessary for foreigners who intend to stay in the country. The Belgian Chamber of Representatives has subscribed 2900f. for the victims of the inundation in Holland.

Sweden.—In consequence of the stringent provisions of the new law on religious liberty, the funeral of Queen Marie Desirée, the King's grandmother, who was a Roman Catholic, was conducted without any public ceremony or the funeral honours usually accorded to members of the Royal family. The Archbishop of Sweden declared that the church used for the Royal funerals would be profaned if Catholic priests were allowed to celebrate the service in it, and by the new law, the Catholic clergy would have incurred a fine of from 50 to 300 crowns, or an imprisonment of from two months to a year, if they had pronounced a funeral oration over the Queen. As therefore the Government was bound to avoid whatever might infringe the new law, her Majesty's funeral took place as privately as possible. For this purpose a room was fitted up in the interior of the palace, where the funeral service was performed on the 10th inst.; the only persons present being those attached to the Court.

Denmark.—Thirty-nine students from Schleswig have presented an address to the Minister of War, stating that they place themselves at his disposal in the event of war breaking out. The Minister, in expressing his thanks, said:—"It is possible that an occupation of Holstein by the Federal troops would cause war with Germany, and might, perhaps, involve all Europe in war."

Prussia.—Letters from Berlin state that after their defeat on M. de Vincke's amendment, all the Ministers offered their resignations to the King, but his Majesty would not accept them. On the 12th his Majesty received the deputation which presented the address in reply to the Royal speech, and spoke as follows:—

"Gentlemen,—I accept with emotion the expression of the regrets which the Chamber of Deputies has testified on the death of his Majesty the King, my beloved brother. Your regards are now turned on me I trust with confidence. I have on various occasions expressed the principles according to which I am resolved to exercise the power which God has entrusted to me. The country entertains no doubt on this subject. I firmly rely that the National Parliament will second me in the accomplishment of my intentions, in the sense of the intact maintenance of the power of my Crown, for that is necessary for the real welfare of the country. As regards questions of home or foreign policy, touched upon in your address, already made known to me by the regulations of the Chamber, which, I hope with you, will receive ameliorations in the future, my government has clearly explained to you the points of view which guide it according to my intentions, and to which it will remain faithful. I hope that the Chamber of Deputies will support it by its assent. I hope that your labours, which will shortly commence, will bring to a satisfactory solution the important projects submitted to you by my government. We shall introduce reforms into many institutions, on legal grounds; there cannot be any doubt in that respect. Union is strength, and, as it is necessary that we should be strong, we must be united. This is true as regards Prussia as well as her position towards Germany. My efforts in this respect have been crowned with the happiest results. I know that my people will show me inviolable fidelity in good times as in bad times, and I heartily welcome the reiterated promise of such fidelity on the part of the chamber."

Austria.—The Prince of Tour and Taxis has arrived from Madeira with intelligence that the Empress of Austria was in the enjoyment of improved health. The statutes for the organization of the provinces and the statute in reference to the Council of the Empire have been adopted by the Council of Ministers. The number of members of which the Diet will consist is considerable. The Captain of the Country is to be appointed from among the members of the Diet. The Council of the Empire is to consist of two Chambers, and will contain 350 members. The legislative power of the Reichsrath will extend to economical questions and the taxation of the whole empire, but, as regards all other questions, to those only which concern non-Hungarian provinces. It is stated that the subscriptions to the new loan amount altogether to 30,091,400fl.

Hungary.—The Assembly of the Comitat of Pesth has unanimously voted an address to the King, which says:—

"The Royal Rescript has destroyed the confidence which had been created by the Imperial Diploma of October last. The law prohibits the payment of taxes until they have been voted by the Diet. Force alone could remove the citizens from the lawful ground they have taken up. An unreserved return to Constitutional life alone can save the King and the country."

The Assembly of the Comitat of [illegible] resolved to pay the taxes as heretofore [illegible] Diet shall have taken its resolution.—[illegible] pality of Pesth has resolved by 48 to [illegible] re-establishing without any modification [illegible] 1848 in reference to corporations and [illegible] also resolved upon changing the publ[illegible] Hungarian school, and has ordered the [illegible] those of the elementary teachers who are [illegible] with the Magyar language. The direct[illegible] German College have received notice [illegible] premises belonging to the Municipality [illegible] Chancellor has addressed a rescript to the [illegible] in which he refuses to comply with its [illegible] assemble the Hungarian Diet at Pesth. [illegible] assemble at Buda.

Transylvania.—The Conference of [illegible] resolved upon expressing its wishes in an [illegible] Government, containing three clauses—[illegible] Execution of the laws of 1848. 2. A new [illegible] 3. Establishment of a separate Constitu[illegible] sentation of Transylvania in a special [illegible] project for the union of Transylvania with [illegible] violently opposed.

Croatia.—The Obergespan has issued a pro[illegible] against the demonstrations and violent popul[illegible] ings which have taken place within the [illegible] and the city of Fiume and the surrounding [illegible] have been declared in a state of siege.

Galicia.—An address, signed by severa[illegible] the notables of Lemberg, petitions that [illegible] interest may be principally considered in the [illegible] ing election to the Diet, but that only [illegible] landed property should be entitled to be [illegible] that all other persons should be excluded.

Italy.—The capitulation of Gaeta took [illegible] Wednesday on the terms previously offered [illegible] Cialdini. On Thursday morning Gener[illegible] occupied Monte Orlando and all the fortific[illegible] after the departure of the Royal family [illegible] the city. The garrison will remain prison[illegible] until Messina and Civitella del Tronto sha[illegible] rendered. The King and the Queen, with the [illegible] were to embark on Wednesday evening in the [illegible] ship Mouette, but it is not yet known to wh[illegible] they intend to retire. His Majesty had [illegible] sent the French Consul to Naples to ask for the [illegible] of leaving. The Spanish Ambassador had [illegible] Naples for a Spanish steamer, as he wished to lea[illegible] operations which have led to this result may be [illegible] stated as follows. On Friday last, in consequence [illegible] damage done by the fire of the Sardinians the [illegible] requested that the armistice might be extende[illegible] 12 hours. General Cialdini at once granted the [illegible] and understanding that the hospitals were crowde[illegible] sent ice, leeches, and medicine to Gaeta; [illegible] offered to take charge of 400 of the [illegible] Two steamers were on the point of leaving [illegible] 200 of the wounded, when General Cialdini learned [illegible] the Neapolitans were violating the armistice by [illegible] their batteries and repairing the breaches caused [illegible] bombardment. He immediately broke off [illegible] cation with the place, declaring that he would [illegible] further concessions, that he would recommence the [illegible] bardment on the following day, and that hence[illegible] flag of truce would be received unless it should [illegible] propose the capitulation of the fortress. [illegible] steamer however afterwards went in and [illegible] of the wounded Neapolitans from Gaeta to M[illegible] Naples. The armistice expired at 10 o'clock [illegible] and the bombardment was at once renewed [illegible] course of the day a gunpowder magazine exploded [illegible] Porta di Terra. The cause of the explosion is [illegible] General Ferrari and 50 men were buried in [illegible] The Duke di Sangro and a French priest we[illegible] and Count Averspere and Majors Sangro and [illegible] were so severely injured that they have had [illegible] amputated. M. Jacquemine, commander of [illegible] recently received from Rome, also [illegible] denly. This explosion opened a breach [illegible] extremity of the fortifications facing [illegible] The Sardinians bombarded the city by land [illegible] with great violence until midnight, and [illegible] were burnt. On Sunday there were 100 dead [illegible] and the garrison was in want of wood [illegible] Sardinian fleet bombarded the place with [illegible] during the night, but the frigate Monarca [illegible] damage. On Monday the garrison de[illegible] armistice of 15 days, in order to negotia[illegible] surrender of the place. The demand was re[illegible] General Cialdini, who, however, declared himse[illegible] to enter into negotiations. During the [illegible] Monday and Tuesday the Sardinian batteries [illegible] the bombardment with great energy, causing [illegible] devastation. The firing from the batteries [illegible] began to slacken and then ceased, and the [illegible] did not reply to the fire of a Sardinian [illegible] which attacked it on Tuesday. In the [illegible] the bombardment blew up another powder maga[illegible] the fortress, and the explosion destroyed the [illegible] the Transylvania Bastion. In consequence [illegible] events the negotiations for surrender were [illegible] and General Cialdini and the Commandant of [illegible] appointed a mixed commission for the discussion [illegible] preparation of the terms of capitulation. The [illegible] however, was not suspended, but only slackened [illegible] the conditions of surrender should have been [illegible] M. Depennes, Attaché to the French Embassy [illegible]

[illegible]rived and demanded permission of General Cialdini to [illegible] the Empress of the French to the [illegible] Queen at Gaeta. This permission was granted. [illegible] General Ritucci, who had written a [illegible] discourteous terms to General Cialdini, was [illegible] his command, and replaced by General [illegible]. Previous to the opening of the negotiations for [illegible], the Saxon Minister who had announced his [illegible] share the last fortunes of the King, had [illegible] General Cialdini for a free passage to Rome, [illegible] application was refused on the ground that [illegible] had been allowed to every person in Gaeta to [illegible] the place, and that those who chose to remain [illegible] considered as having taken part with the besieged, [illegible] abide their fate. The Russian Minister, M. [illegible], had also been taken suddenly ill in [illegible], and another Russian diplomatic agent was [illegible] to convey to Gaeta the Grand Cordon of the Order of the White Eagle, conferred on Francis II. and [illegible] Bourbon Princes by the Emperor of Russia. An [illegible] from the ladies of Bavaria had been received by [illegible] young Queen.—Accounts from Rome state that the Abbé Passaglia, formerly belonging to the Order of Jesuits, had left for Turin, on a special mission from the Pope. The Carnival had passed off without any [illegible], the committee for annexation to Sardinia [illegible] advised the citizens to participate in the gaieties of the Carnival, as the aspect of affairs was satisfactory. There were, however, few foreigners in Rome. Monsignor de Merode was still organising reactionary movements. 470 Bourbon soldiers, whom he had armed, crossed the frontiers on the 9th inst., taking the direction of Carsoli, where an expedition of brigands had been organized. Lovera had distributed 1500 muskets sent by Cardinal Antonelli. One of the chiefs of the bands in the Abruzzi had returned to Rome, and the insurgents had withdrawn from Ascoli into the kingdom of Naples. Cardinal Della Genga was at the point of death. A popular movement had been suppressed at San Marino. A [illegible] gendarme was killed on the occasion.—Accounts from Naples state that a conspiracy in favour of the Bourbons had been discovered. A Capuchin monk had left Gaeta with the mission of raising an insurrection in Calabria. He was arrested near Cosenza, and was found to be the bearer of important papers. Calabria was tranquil, but disturbances had taken place at Nola, and Avellino, in the neighbourhood of Naples, and troops had been sent to suppress a reactionary movement which had broken out at Reggio. The Minister Liborio Romano had ordered the drawing of lots for the mobilisation of the National Guard, and for the office of captains.—The King of Sardinia left Turin on Monday for Milan, but will return to open the first session of the Italian Parliament on Monday next. The *Opinione* denies the report that Garibaldi had made a journey to Turin in order to confer with his Majesty. The corps of Garibaldians however are in full reorganisation, in four divisions. The 1st, commanded by General Türr, will shortly establish its head-quarters at Mondovi; the 2d, commanded by General [illegible], will proceed to Vercelli; the 3d, commanded by Medici, will be stationed at Biella; and the 4th, commanded by Cosenz, will have its head-quarters at Asti. His Majesty has appointed the Marquis Sauli Governor-General of Tuscany, in the room of M. Ricasoli, and Count Michel Amari, President of the Council and Minister of the Interior, in Sicily, in the room of his brother M. Emerico Amari. The *Official Gazette* announces that General Pinelli, commander of the [illegible] Brigade in the Abruzzi, has tendered his resignation.

Malta.—Early on the morning of the 9th inst. three slight shocks of earthquake were felt at Valletta. The most severe of them was at 20 minutes to 1. The sensation it produced was as if the island was shaken with a tremor, and not, as on the former occasion, passing from one side to the other. The only damage done in Malta was a small crack in the Governor's Palace, the Casino, and a few other private buildings. A telegram from Sicily, however, states that Modica has suffered great damage from the earthquake.

Turkey.—The Porte has replied to the Russian note, re-asserting the truth of the Grand Vizier's report. Sir Henry Bulwer takes the part of the Porte. The statement that France has joined in the note presented by Russia on the oppression of the Christians is denied in official quarters in Paris. The Grand Vizier has announced to the Prussian Ambassador that the Sultan is about to write a congratulatory letter to the King, on the accession of his Majesty to the Throne. The Redifs are to be embodied in the spring.

Montenegro.—The Montenegrins have made an attack on Nicksich, but have been repulsed.

Syria.—The Conference on the affairs of Syria will [illegible] about the 20th inst. at Paris.

Egypt.—The Viceroy left on the 27th of January for Suez, on his pilgrimage to the Holy Cities, accompanied by Kiamil Pasha and Kourchid Pasha, Governor of Alexandria.

Coast of Africa.—Accounts from Sierra Leone state that the King of Dahomey, in accordance with his expressed intention, had held the "grand custom," in remembrance of the death of the late King. The *West African Herald* publishes a narrative from eye-witnesses stating that this "grand custom" was one of the most revolting which had ever taken place. Several persons agree in stating that the number of persons slain on the occasion was estimated at 2000, but other accounts give the number as 7000, and state that the blood swept like a flood into a large reservoir. The poor victims are said to have met death with perfect indifference. Consul Foote had arrived with full powers to "treat" with the King for the abolition of these human sacrifices. The King of Badaboo was at variance with the Colonial Government at Gambia, and an expedition was about to be sent against him from Sierra Leone and the Gambia.

India.—By the arrival of the Overland Mail we have advices from Calcutta to January 8, and Madras to January 14. Very little of public importance had occurred since the departure of the previous mail. A minute by the Governor-General has been published, in which he reviews the Oude libel case, and condemns the conduct of all the authorities connected with the collection of the Income Tax in the city of Lucknow. The famine still continues in the north-west and in various parts of India. In Delhi a committee has been formed to assist the sufferers, and in the Meerut, Agra, and Rohilcund divisions the Government has undertaken public works. Accounts from Darjeeling dated the 2d Jan. announces the arrival of the greater part of the reinforcements. Colonel Gawler, who commands the whole force, had been for some days at Darjeeling, making his preparations for an advance into Sikkim. The 2d and 6th Regiments of Dragoon Guards, the 5th, 6th, 24th, 37th, 64th, and 37th Regiments of Foot are under orders to return to England.

China.—A despatch from Hong Kong to the 31st December states that there was no news of importance. The weather was intensely cold, but the condition of the troops was satisfactory. Lord Elgin was still at Shanghai on Dec. 23. General Grant and staff and all who were not to pass the winter at Tien-tsin left in the beginning of November, and embarked at Taku. The French and British embassies were in two of the best places in Tien-tsin, on the west side of the river, and but a short distance from the city wall. The French troops had taken up their quarters on the east side of the Peiho and the north of the grand canal. Besides the departure of the generals, the only circumstance worthy of note was the payment of two instalments of the indemnity money. The first was 200,000 taels, and the second 300,000 taels; and similar amounts were paid over to the French. It was understood that an expedition will be sent up the Yang-tsze early in the spring, with the view of opening up that river. The revised tariff was enforced at Canton. The Mandarins were levying heavy inland duties.

Japan.—News from Japan announces that two Europeans had been seized and imprisoned by the Japanese without any provocation, and that the state of affairs between the native and the foreign authorities was beginning to look serious. A despatch from Yakohama was brought to the Admiral while lying at the mouth of the Peiho, in consequence of which he departed immediately to Japan. The Prussian Envoy had not attained the objects of his mission.

Ceylon.—A despatch from Point de Galle of Jan. 18, states that the Loyal Lily had been lost on the island of Bintang.

New Zealand.—The Robert Lowe had arrived safely in Auckland with 506 officers and men of the 14th Regiment, after a fine passage of 82 days. The reinforcement was exceedingly timely, not so much for the assistance it would render to military operations as for the effect it had on the native mind. Since the battle of Mahoetahi no fresh engagements had occurred. The natives had not courted a fight, and the weather had been unfavourable for expeditions into the bush. Moreover, General Pratt's force was weakened by the necessity of sending 400 men northward for the protection of the capital.

United States.—The Louisiana State Convention passed the Ordinance of secession on the 26th by a majority of 113 to 17. A proposition to submit the Ordinance to the popular vote was voted down by 84 to 45. The resolution accompanying the Ordinance, declaring the right of free navigation of the Mississippi and its tributaries by all "friendly Powers," was passed unanimously. The Convention then adjourned, to meet again in New Orleans on the 29th. In the House on the 28th a resolution was adopted instructing the Senators, and requesting the Representatives in Congress to vacate their seats and return home. In the Senate a resolution was adopted asserting the right of secession, and declaring that any attempt to coerce a sister Southern State, from any quarter, would be regarded by Louisiana as an hostile act. The Louisiana State troops had seized the United States Marine Hospital at New Orleans, and had ordered the immediate removal of the patients, on the ground that the hospital was required for the troops of the state. It was asserted that the South Carolina Legislature had instructed Colonel Hayne peremptorily to demand the surrender of Fort Sumter. The Virginian Legislature had adopted a series of resolutions with a view to a peaceful settlement of the existing differences. The resolutions invite all States, slave-holding and non-slave-holding, to appoint commissioners to meet similar commissioners appointed by Virginia on Feb. 4, at Washington, to consider, and, if possible, agree on some suitable adjustment, and at the same time request the President to abstain in the meantime from any act calculated to produce a collision of arms between the seceded States and the Federal Government. The President had sent a special Message to Congress relative to these resolutions, in which he expresses his conviction that he does not possess the requisite power to abstain from all acts calculated to produce a collision, and that Congress alone can exercise it. He accordingly recommends that body to abstain from passing any law likely to produce a collision during the contemplated general assembly of Virginia, which he trusts may be the destined means of perpetuating the Union. The Message was delivered on the 28th, and on the 31st ult. Mr. Seward presented a petition from New York signed by 38,000 persons in favour of the adoption of resolutions for an adjustment on the plan proposed by Virginia. Mr. Seward's speech created the impression that Mr. Lincoln's Administration had resolved upon a coercive policy towards the South, should the endeavours for a peaceful settlement fail. The New York Legislature had decided on sending nine commissioners to Washington, the majority of whom were to decide how the votes of the whole were to be cast. The Convention Bill had passed the North Carolina Legislature. California was strong for the Union; their Assembly had failed to elect a President after 72 ballots. In consequence of the mediation of Virginia, the President had sent despatches to the commander of the Brooklyn, ordering him not to enter Pensacola harbour but to act strictly on the defensive, unless Fort Pickens should be attacked. Secretary Dix had instructed the commanders of the revenue cutters, if attacked, to make the best defence in their power; and if they were assailed by a superior force to run their vessels ashore and blow them up. He had also written a letter to the collector of New Orleans to apply to the Governor of Louisiana to revoke the act of seizing the government hospital and ordering 260 patients to be removed, in order that the building might be occupied as barracks by the state troops. He denounced the seizure as an act of outrageous barbarity, disgraceful to any age or country. On the 31st ult. the grand jury found indictments against Floyd, Russell, and Bailey for having defrauded the Government.

Mexico.—Advices from Vera Cruz to the 19th ult. state that the constitutional Government was in full operation. Passports had been sent to the Spanish Minister, the Papal Nuncio, and the Chargés from Guatemala and Equador. Considerable excitement prevailed among the Spaniards. The American Legation had removed to the city of Mexico. A National Congress was called to meet at the national capital on the third Tuesday in April.

Parliament.

HOUSE OF LORDS.

Friday.—*Public Business.*—Earl Granville's motion for a select committee to inquire into the mode of conducting the business of the House was agreed to.—The Bishop of Oxford laid upon the table a Bill for the *Suppression of Disorderly Houses.*

Monday.—*The Statute Law.*—The Lord Chancellor laid on the table a Bill for clearing the statute-book of a mass of useless matter as a preliminary step in the consolidation of the statute law. The Bill was read a first time.—In answer to Lord Colville, the Duke of Newcastle said that her Majesty's Government intended to introduce a Bill to regulate the *Salmon Fisheries in Scotland*, and that the Bill would mainly be founded on the report of the committee which had investigated the subject. The *Indictable Offences (Metropolitan District) Bill* was read a second time. The *Bonn Trials.*—Lord Wodehouse, in reply to the Earl of Shaftesbury, said that the correspondence relative to the Bonn trials would be produced at the proper time.—The *Select Committee on Public Business* was appointed.

Tuesday.—*Trade Marks.*—The Lord Chancellor laid on the table a Bill for the prevention of fraudulent practices in reference to trade marks, and explained that the object of the Bill was to afford to manufacturers and traders, and the public generally, protection not from competition but from fraud. It was proposed by the Bill that forging of trade marks should in future be an indictable misdemeanour punishable by fine and imprisonment. The Bill was read a first time.—Lord Monteagle moved the second reading of the *Fictitious Savings Banks Bill*, which was a measure which would make it a misdemeanour to establish, under the name of savings banks, any institution which had not been regularly registered, and the promoters of which had not complied with the Government regulations in reference to savings banks.—Earl Granville said that a provision similar to that which the Bill proposed to make law would be introduced into the Bill for establishing post-office savings banks. The Bill was read a second time. *Ribbonism in Leitrim.*—The Earl of Leitrim presented a petition from the farmers and inhabitants of South Leitrim praying for protection to life and property and that the laws should be properly and duly administered. He stated that in an experience of 20 years he had never known life and property more unsafe than at present, and he censured the conduct of Lord Granard as Lord Lieutenant of the county as well as that of Lord Carlisle.—Lord Granard denied at some length the charge brought against him, and Earl Granville defended Lord Carlisle.

Thursday.—*Vote of Thanks to the Forces in China.*—Lord Herbert of Lea moved the thanks of the House to the army and navy engaged in the recent operations in China. He eulogised the heroism and devotion of officers and men under circumstances of unusual difficulty, and stated that on no previous occasion had the honour of the British flag been more worthily upheld.—The Earl of Derby seconded the motion.—The Duke of Cambridge also bore testimony to the bravery of the troops, and especially referred to the satisfaction with which he found an Indian officer like Sir Robert Napier commanding a division on the occasion.—Earl Grey said that though he had always disapproved of the war he was quite prepared to join in the vote of thanks. He thought, however, that a discussion should take place on an early day on the origin of the war.—The Duke of Somerset referred to the services of the gun-boats in Chinese waters at the very moment when it was declared in England that they were rotten and worthless.—The Marquis of Bath characterised the destruction of the Emperor's Summer Palace as an act of

vandalism. He was sorry to hear that the act had been perpetrated not only with the sanction but by the orders of the British Ambassador.—The Earl of ELLENBOROUGH said that they must judge of the circumstance not from a European but from an Oriental point of view. He believed it was necessary, in dealing with a people like the Chinese, to impress them with a sense of the immensity of the power brought against them. He was unable to express how much he thought the country was indebted to the Earl of Elgin for getting the army out of the false position in which the advance upon Pekin had placed it. The vote was then agreed to without a dissentient voice.

FRIDAY.—*Annexation of Monaco.*—In answer to Lord TRURO, Lord WODEHOUSE said it was true that the Emperor of the French had given 26,000*l.* to the Prince of Monaco for a portion of his territory. The villages of Mentone and Roquebrun had been annexed to France, the subject having been under discussion for a great length of time. *New Law Courts.*—Lord ST. LEONARDS called attention to the report of the Commissioners of Inquiry as to the expediency of building new law courts on the same spot. [Left sitting.]

HOUSE OF COMMONS.

FRIDAY.—*The Trials in Syria.*—Sir JAMES FERGUSSON asked whether her Majesty's Government had received any information respecting the tribunal before which the Druse chiefs had been tried who voluntarily surrendered themselves; and whether it was true that the alleged offenders had been condemned to death.—Lord J. RUSSELL replied that the tribunal was an extraordinary one, appointed by Fuad Pasha, and that circumstances had come to the knowledge of the Government which induced them to think that the trial had not been a fair one. As soon as the result had been communicated to the Commissioners, they required the evidence to be laid before them, and if they considered the decision of the tribunal to be based upon insufficient or unfair testimony, they would at once interfere to prevent the executions being carried out. The noble lord added as an instance of the philanthropic and forgiving nature of the Christians of the Lebanon, that their bishops had recommended the execution of 4600 persons out of an adult male population of 8000 Druses. *The Navy.*—In answer to several questions on naval affairs Lord C. PAGET said the system of competition in the appointment of marine cadets, though not unlimited, worked very well and gave great satisfaction. As to naval cadets, it would be very difficult to introduce open competition among them. With regard to dockyard management, he indicated certain changes that were contemplated pending the presentation of the report of the commission; meanwhile the vacant office of surveyor of the navy had been filled up by the appointment for five years of a distinguished officer, who was well known to be a high authority upon the application of steam power to naval purposes. He hoped the Warrior would be got ready and sent to sea in the course of the approaching summer.—Mr. VANSITTART asked for some explanation as to the payment to the *Mysore family* of the sum of 520,000*l.*—Sir C. WOOD stated that her Majesty's Government were of opinion that the family had a strong moral, if not legal, claim to an adequate provision; and that, although the late Governor-General of India and the late Mr. Wilson had expressed a contrary opinion, they had directed that stock to the amount of 520,000*l.* should be created, the interest on which (17,000*l.* per annum) would be paid to the family in full satisfaction of all claims past and present.—In answer to Mr. Crawford, the CHANCELLOR of the EXCHEQUER said, that it was not his intention to modify the *Spirit Duties* as imposed last session. *The Canadian Extradition Case.*—In answer to Mr. SHERIDAN, Lord PALMERSTON said that on the 9th of last month the Duke of Newcastle had written to the Governor-General of Canada not to surrender Anderson until the question had been considered by the Government at home, and until he had received positive instructions to that effect. There was a general impression that the decision of the Court of Queen's Bench in Canada would have the effect of requiring that Anderson should be given up; but this was not so, as the decision merely meant that he should not be taken out of the custody in which he then was. The Governor-General of Canada was the only person who could issue a warrant for the surrender of the prisoner, and the Government of the United States would have to show that he had committed some crime which by the law of England was murder, and they would have to produce such evidence as would justify his committal for trial by a magistrate. *The Poor Law.*—Mr. VILLIERS moved for a select committee to inquire into the administration of the relief of the poor under the orders, rules, and regulations issued by the Poor Law Commissioners and the Poor Law Board, pursuant to the provisions of the Poor Law Amendment Acts. Lord R. CECIL commented on the insufficiency of the provision made by the parochial authorities of the metropolis to meet the pressing emergency arising from the late severe weather. He did not blame the Poor Law Department, without which he believed far greater evils would have existed; but there was abundant evidence to show that a searching inquiry into the management of the metropolitan workhouses was necessary.—Mr. AYRTON attributed the state of things to which Lord R. Cecil had alluded to the unequal system of rating. —Mr. DEEDES recommended the enlargement of the terms of the motion, and that the committee should also have power to inquire into the operation of the law in its various branches.—Sir G. LEWIS said there was no desire on the part of the Government or the Poor-law Board to restrict the inquiry. There was no objection therefore to amend the proposal by introducing the words, "and operation of the laws relating to the relief of the poor." After some further discussion the motion as amended was agreed to.—On the proposal of Sir G. LEWIS, it was agreed that no motion for the issuing of any new writ for *Gloucester* or *Wakefield* should be made without seven days' previous notice thereof being given in the votes.—In committee on the *Red Sea and India Telegraph Company Act*, the CHANCELLOR of the EXCHEQUER moved a resolution for the amendment of that Act, authorising the commissioners of the Treasury to guarantee interest at 4½ per cent. per annum on the paid-up capital of the company. He said that after introducing the Bill he should refer it to a select committee, not to consider the terms of the original agreement, for he apprehended that the Government were bound in good faith to carry out their contract with the company, but simply to consider the terms of the Bill itself.—After some remarks from Mr. DIVETT, Sir H. WILLOUGHBY, and other members, the resolution was agreed to.—In committee on the *Post Office Savings Banks* (Consolidated Fund), the CHANCELLOR of the EXCHEQUER moved a resolution on which to found a Bill, which was intended to give new facilities for the deposit of small savings to those who do not now possess them, or possess them very imperfectly through the existing saving banks. He proposed that the Post Office through its Money Order Offices should receive deposits and pay interest upon them at the rate of 2*l.* 10*s.* per cent. per annum, the Post Office guaranteeing the payment; all deficiencies, if any, being chargeable upon the Consolidated Fund.—Mr. CROSSLEY, Mr. KINNAIRD, and other members cordially approved of the proposed Bill, and the resolution was agreed to.

MONDAY.—Sir G. LEWIS stated that the Government had no intention of proposing during the present Session any measure for the *Reform of the Corporation of London*, but that he should introduce a Bill regulating the *Metropolitan Coal Duties*. On the report of the Committee on Supply being brought up, a desultory discussion took place on the subject of *Indian Finance*, when Sir C. WOOD explained and confirmed the favourable statement he had made on Friday. The report on the *Red Sea and Indian Telegraph* was brought up, and leave given to introduce a Bill founded upon it, the CHANCELLOR of the EXCHEQUER stating that he intended to refer the Bill to a Select Committee after the second reading. The report on the *Post Office Savings Banks (Consolidated Fund) Bill* was brought up and agreed to.—The ATTORNEY-GENERAL moved for leave to bring in a Bill to amend the *Law Relating to Bankruptcy and Insolvency*. He reminded the House that the great objection to the measure of last year was its ponderous proportions. That objection would not apply to the measure now under consideration, as it was less than half the size of its predecessor. The former Bill was a consolidating measure; and in consenting in the present instance to abandon consolidation, he frankly admitted that he had deferred to the opinions and wishes of others. No one could deny that recent circumstances in the mercantile world pointed to the necessity of some reform in the laws of bankruptcy and insolvency. The confusion hitherto existing between the judicial and administrative functions of the court was one of the evils of the old system. He would endeavour to separate these functions, and to establish uniformity and certainty of decision. He proposed to abolish the distinction between bankruptcy and insolvency, and to have a chief judge and five assistant judges, to be selected from the existing commissioners of bankruptcy, the number to be ultimately diminished to three. The Commissioners of Insolvency would be abolished, and one of the present number would be transferred to the Court of Bankruptcy until the arrears of business were cleared off. The procedure under the court would comprise, as originally intended, the transfer to the county court of all estates under 300*l.* With respect to large estates, he hoped that the Bill would have the effect of combining simplicity and economy in the realisation and distribution of them. Having explained at some length the machinery by which he hoped to accomplish these ends, he said that he proposed to do away with the different classes of certificate, but instead to arm the commissioners with the power either to refuse the certificate altogether, to suspend the order of discharge, or to commit the bankrupt to prison for a term not exceeding one year. From the final sentence of the chief judge he would give no appeal, although there would be an appeal from the decisions of the county courts. With regard to non-traders he proposed to apply certain tests of insolvency, so that the law of bankruptcy should not prevail except in cases where insolvency really existed. The first of these tests would be absconding from the country with the deliberate intent of evading or defeating the creditor: the remaining abroad to avoid or delay a creditor, or the remaining in prison with the object of withholding property from creditors, would also be treated as evidence of insolvency. He regretted that he could not, under present circumstances, venture to propose the abolition of imprisonment for debt. He believed, however, that the provisions of his Bill would be almost equivalent. By the present absurd state of the law the body of a debtor was considered satisfaction for the debt, and numerous cases had occurred in which persons had preferred remaining in prison for many years to surrendering their property. In all such cases it was proposed that the creditor should have the power to present a petition for adjudication in bankruptcy. The question of making the future property of a debtor responsible for his debts formed no portion of the Bill of last year; but he now proposed that the chief judge should have the power of annexing to the order of discharge conditions relating to property acquired in the future. He also proposed that paupers should have the power to present petitions to the county court at the expense of the county. If the House approved of the provisions which he had sketched, he hoped such progress would be made with the Bill as would enable them to send it to the other House of Parliament before the Easter recess.—Mr. HADFIELD, Mr. MALINS, Mr. CRAWFORD, Mr. WALPOLE, Mr. E. JAMES, Mr. MELLOR, Mr. TURNER and other members expressed their cordial approval of the Bill, and believed that it would confer great advantages on the mercantile community. Leave was then given to bring in the Bill, the second reading being fixed for Thursday.—Mr. CARDWELL moved for leave to bring in a Bill for the *Registration of Births, Deaths, and Marriages, in Ireland*. This measure he said would complete the system of registration already established in other parts of the United Kingdom, and with which Ireland had hitherto been most unaccountably left unfurnished. The general arrangement would be similar to those which had been found to work so well in England and Scotland.—After some remarks from Mr. V. SCULLY and Mr. M'MAHON, the motion was agreed to, and leave given to bring in the Bill.—Mr. CARDWELL also obtained leave to bring in a Bill for the *Better Regulation of Markets and Fairs in Ireland*.—Lord C. PAGET obtained leave to bring in two Bills enabling the Admiralty to acquire certain property for the enlargement of *Chatham Dockyard*, and of the Royal Marine Barracks at *Stonehouse*, Devon.—*The Select Committee on Public Business* was nominated on the motion of Lord PALMERSTON.

TUESDAY.—*Law of Oaths.*—Sir J. TRELAWNY inquired whether the judge of the County Court at Rochdale had rejected the evidence of a witness on account of her refusal to affirm her belief of a future state of rewards and punishments, and, if so, whether the Government would deem it necessary to amend the law applicable to such cases.—Sir G. LEWIS stated the facts of the case, that the witness, being asked whether she believed in a God, replied in the negative, and he read the rule of evidence on the subject, adding that the Government did not propose any alteration of the law.—Sir J. TRELAWNY protested against the injustice of this rule of evidence.—Mr. CONINGHAM considered that it was a case of crying injustice.—Lord PALMERSTON moved that the House, at its rising, do adjourn to 2 o'clock on *Ash Wednesday*, which was agreed to.—Mr. COLLIER moved for leave to bring in a Bill to prohibit the payment of the *Expenses of Conveying Voters to the Poll in Boroughs*, which he described as a small measure of reform, not calculated to provoke much opposition.—Mr. PEACOCKE opposed the motion.—Sir G. LEWIS said it was his intention shortly to ask leave to bring in a Bill on the subject of Corrupt Practices at Elections, and one part of the measure would deal with this matter. At the same time, if the House desired to have this fragmentary measure before it, he should not object to the introduction of the Bill.—Mr. JAMES thought the proper course was to leave the responsibility to the Government, which had contracted an obligation to introduce a Reform Bill when they ejected Lord Derby's Administration, and not to fritter it away by proposing modicums of reform.—After some remarks by Mr. W. D. SEYMOUR and Mr. MACKINNON, leave was given to bring in the Bill.—Sir J. TRELAWNY obtained leave to bring in a Bill to establish *County Financial Boards* for the assessing of county rates, and for the administration of county expenditure in England and Wales.—Mr. WHITE moved for a return of *Offices held by Members of the House*, when they were appointed, their salaries or emoluments, &c.—Sir G. LEWIS objected to the motion, observing that the return would occasion much trouble, and that the information was already accessible.—Lord R. CECIL, though he should not vote for the motion, hardly thought it prudent to refuse the return.—Mr. HADFIELD said he should vote for the return.—The motion was supported by Mr. BASS and Mr. CONINGHAM. On a division, the motion was negatived [illegible].—Mr. DODSON obtained leave to bring in a Bill [illegible] at *Elections for the Universities* may be [illegible] voting papers.—Mr. HUBBARD moved for [illegible] Bill to amend the law of *Church-rates*, [illegible] similar to the Bill of last session. He [illegible] ciples and the provisions of the measure.—Mr. [illegible] not object to the introduction of the Bill, [illegible] Hubbard that it would meet with the most [illegible] —Mr. GRIFFITH approved the objects of the Bill [illegible] was agreed to.—Mr. COWPER obtained leave [illegible] enable the Commissioners of her Majesty's W[illegible] additional land for the purposes of the Publ[illegible] *Act* of 1859.

WEDNESDAY.—The House met at 2 o'clock, [illegible] half an hour.

THURSDAY.—*Scottish Railways.*—The second [illegible] Bill for the amalgamation of the Caledonian, [illegible] Glasgow, and Scottish Central Railway Compan[illegible] by Mr. BLACK and other members, but was [illegible] sion by 134 to 85. *The Admiralty Board.*—[illegible] gave notice that he intended, on the first [illegible] move for a select committee to consider the [illegible] Board of Admiralty, and to inquire in[illegible] present administration of the navy might [illegible] efficient for the public service. *Drainage of* [illegible]—[illegible] Sir J. V. SHELLEY, Sir G. LEWIS stated that [illegible] preparation, and would be shortly introduced, [illegible] litating the drainage of lands by the improvem[illegible] and arterial channels. *Vote of Thanks to the For*[illegible]—Lord PALMERSTON moved that the thanks of [illegible] given to the army and navy engaged in the [illegible] tions in China. He referred in detail [illegible] operations of the combined forces in [illegible] to the lamentable fate of the prisoners who [illegible] tims of Asiatic treachery. It was true that [illegible] refused to join in the destruction of the Summer [illegible] Emperor (which, however, they had previously [illegible] Sir Hope Grant and Lord Elgin had resolved up[illegible] of retributive justice, and their conduct in that [illegible] received the full approval of her Majesty's Governm[illegible] DISRAELI seconded the motion. He eulogised the manner in which the expedition had been [illegible] attributed its immunity from sickness to the [illegible] sation of the medical and commissariat depa[illegible] was, he thought, significant of the power [illegible] Europe in the most distant regions of the [illegible] it was found that an army, little in [illegible] which Xenophon had led, had dictated term[illegible] in the ancient capital of a country contain[illegible] lation equal to that of one-third of the [illegible] Mr. V. SCULLY condemned the destruction of [illegible] Palace of the Emperor, as an act unworthy [illegible] civilised nation.—Mr. WHITE said he had no confi[illegible] efficiency of the Treaty of Tien-tsin.—Sir J. E[illegible] pressed a hope that compensation would be exacted [illegible] of life at the assault upon the Taku forts.—Lord [illegible] defended the conduct of Sir Hope Grant and L[illegible] ordering the destruction of the Summer Palace, and [illegible] under the circumstances, it was absolutely necessary [illegible] means should be taken to strike terror into the [illegible] Chinese Government. He thought Sir Hope Grant [illegible] Elgin were entitled to credit for the course [illegible] adopted; for had they insisted upon the person[illegible] able with the deaths of Captain Brabazon and [illegible] prisoners being given up, some miserable subordinate[illegible] have been sent in, and the guilty parties would [illegible] with impunity. The motion was then agreed to [illegible] the order of the day for the second reading of the Bankr[illegible] *and Insolvency Bill*, Mr. ROEBUCK and Mr. B[illegible] objections to several of its details.—Mr. [illegible] EWART, and Mr. HADFIELD, believed that the [illegible] community would be grateful for the measure.—The A[illegible] GENERAL said he should be happy in Committee [illegible] consider any practical suggestions which [illegible] The Bill was then read a second time. *The Bou*[illegible] *Payments Bill* was read a second time. On the [illegible] second reading of the *Red Sea and India Te*[illegible] Mr. CONINGHAM condemned the late Government [illegible] dent in having concluded a contract which he describ[illegible] untainted with fraud.—Mr. DISRAELI defended the [illegible] the late Government in reference to the subject, and [illegible] so highly was he impressed with the importance [illegible] dertaking, that he would have been prepared, [illegible] company offered, to recommend to his colleague[illegible] Government should themselves carry out the w[illegible] some observations from the CHANCELLOR of the Ex[illegible] the Bill was read a second time, and ordered to be [illegible] Select Committee. *The Criminal Law.*—The SOLICIT[illegible] moved for leave to bring in a series of seven Bills [illegible] date and amend the statute law of England [illegible] relating to offences against the person, to mali[illegible] ries to property, to larceny and other simi[illegible] to indictable offences by forgery, and to [illegible] and abettors of indictable offences, the stat[illegible] the United Kingdom against offences relati[illegible] coin, and to repeal certain enactments [illegible] in several Acts relating to indictable offences [illegible] matters. These Bills, he said, would not interfere [illegible] common, or unwritten law, but, as the great [illegible] criminal law depended upon statutes, they would [illegible] a very large portion of that law, which it would [illegible] and assimilate. *The Four Vacant Seats.*—Sir G. L[illegible] for leave to bring in a Bill to assign the seats forfei[illegible] disfranchisement of the boroughs of St. Alban's an[illegible] He said that the Government were most anxious [illegible] seats in such a manner as to give the largest [illegible] satisfaction to the public. With this view they [illegible] give one seat to the West Riding of Yorkshire, [illegible] South Lancashire, the two largest and most popu[illegible] in England. The two remaining seats would [illegible] united parishes of Chelsea and Kensington, and [illegible] Birkenhead, which contained a population of 30,[illegible] was the largest unrepresented community in the [illegible] Mr. BENTINCK protested against the scheme. If [illegible] of distribution had been regulated by an appeal [illegible] seats should have been given to counties, and not [illegible] —Mr. STIRLING advocated the claims of the Scottish [illegible] and Mr. MAGUIRE contended that two of the seats [illegible] been given to Ireland.—Mr. AYRTON charged the Govern[illegible] insincerity with regard to Parliamentary reform, and [illegible] the Bill as a device to evade their responsibility.—[illegible] MERSTON repudiated these insinuations, and main[illegible] when the rival claims of various places were fairly [illegible] would be admitted that the Government had made [illegible] appropriate selection open to them. He did not [illegible] either Ireland or Scotland had made out any c[illegible] seats were taken from England and ought in [illegible] restored to it. Leave was then given to bring in the [illegible] Mr. DUNLOP obtained leave to bring in a Bill [illegible] facilities for the better ascertainment of the *Law* [illegible] *Countries* when pleaded in courts within her [illegible] dominions.—Mr. VILLIERS obtained leave to bring in [illegible] to amend the laws regarding the *Removal of the Poor* [illegible] *to Scotland and Ireland*, and the law for regulati[illegible] tribution of parishes to the common fund in union.

FRIDAY.—*The Convict Outbreak at Chatham.*—In [illegible] Alderman SALOMONS, Sir G. LEWIS said that the first [illegible]

... was attributed to the poorness of the soup ... them, which however was unfounded, and was a ... for the outbreak. It was not true that any of the ... had been seriously injured. Forty-six men had been ... and all indulgences had been withdrawn. *The* ... —In answer to MR. WATLINGTON, MR. T. G. BARING ... that her Majesty's Government had put a sum on the ... estimates for the purpose of calling out the Yeomanry this ...

[Left sitting.]

City Intelligence.

BANK RATE OF DISCOUNT.—The Bank of England Directors, at their weekly meeting on Thursday, raised the rate of discount to 8 per cent.

THE INDIAN LOAN.—The negotiation of the Indian loan took place on Friday. The sum required was 3,000,000*l*., and the aggregate tendered for approached 14,000,000*l*. The *minimum* price was 98½, but the average of the upper bidding exceeded that price, and ranged from 98¾ to 100. The scrip was subsequently dealt in at a premium.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 91⅝ to ¾ for Money, and 92 to ⅛ for the 7th March; Bank Stock, 237; Three per Cents. Reduced, 91½ to ¾; New Three per Cents., 91½; New Two and a Half per Cents., 75½; India Five per Cent. Stock, 100¼ to 100; Ditto for Acct., 100⅝ to ⅛; Ditto Scrip, 100½; Ditto Four per Cent. Debentures, 1858, 95⅝; Ditto Bonds, 22*s*. dis.; Five per Cent. Enfaced Rupee Paper, 95¾; Exchequer Bills, 5s. dis.—FOREIGN: Brazilian Old Five per Cents., 99½; Danish Three per Cents., 83½; Mexican Three per Cents., 24¼; Ditto for Acct., 24½ to ⅜; Portuguese Three per Cents., 1853, for Acct., 46; Russian Four and a Half per Cents., 91¼; Spanish Three per Cents., 48¼; Committee's Certificates, 6¾ to ⅞; Turkish Six per Cents., 1854, 69⅞; Ditto for Acct., 70¼; Ditto, 1858, 56; Ditto for Acct., 56½ to ¼; Ditto 100*l*. Bonds, 58; Venezuela Three per Cents., for Acct., 21¼.

Gazette of the Week.

TUESDAY—BANKRUPTS—A. ARMSTRONG, York, Flour and Provision Dealer—H. BATEMAN, Timber Merchant, Old Broad Street, City, and of Lloyd's, Underwriter—J. CHAPMAN and G. GRANGER, Oldbury, Worcestershire, Iron Masters—F. COGMAN, Norwich, Tailor and Draper—JOHN COWELL and JAMES COWELL, Blackburn, Ironfounders and Machine Makers—J. DENTON, W. DENTON, and J. DENTON, jun., Dartmouth Park, Forest Hill, Kent, Builders and Brickmakers—H. DUTTON and E. DUTTON, Kidderminster, Builders—E. FLOWER, Liverpool, Silversmith and Jeweller—J. GENDERS, Darlaston, Staffordshire, Boot and Shoemaker—W. GREEN and J. G. B. SAYCE, Worcester and Malvern, Worcestershire and Llandudno, Carnarvonshire, Wine and Spirit Merchants—E. HALEY, W. HARGREAVES, ... and J. PERKIN, Bradford, Yorkshire, Wrought Iron Manufacturers—H. JONES, Wrexham, Denbigh, Ironmonger—W. KILNER, Ecclesfield, Yorkshire, Licensed Victualler—H. OWEN and G. UGLOW, Wood Street, City, and Tewkesbury, Gloucestershire, Hosiers—G. PINKERTON and F. HAWKINS, Great St. Helen's, City, Metal Brokers—C. PRESCOTT, Yarnton, Oxfordshire, Corn Dealer—W. ROSE, Birmingham, Rope Maker—C. R. SKINNER, Worcester, Tanner and Currier.

SCOTCH SEQUESTRATIONS—T. M'GREGOR, Glasgow, Hat and Cap Manufacturer—Mrs. J. MACKIE and A. M'PHAIL JOHNSTONE, Renfrewshire.

FRIDAY—BANKRUPTS—J. S. BOUGHEY, Great Tower Street, City, Wholesale Tea Dealer—G. BROOK, Canterbury, Kent, Boot and Shoe Manufacturer—G. BURROWS, Nottingham, Lace Manufacturer—W. DANIEL, Penydarren, near Merthyr Tydfil, Glamorganshire, Innkeeper and Grocer—R. H. W. DRUMMOND, Iceland Wharf, Old Ford, Bow, Contractor and Manufacturer of Manure—J. FERGUSON, Stonehouse, Devonshire, Draper—W. HOGG, Lapford, Devonshire, Buyer and Letter of Machines, Goods, and Commodities for Hire—T. HOWARTH and W. CRONSHAW, Warrington, Lancashire, Calico Manufacturers—A. M'MILLAN and W. BLACKBURN, Star Court, Bread Street, Cheapside, Woollen Warehousemen—J. NICKOLL and R. F. NORTH, Bishopsgate Street Within, Tallow Brokers—L. J. NIEMANN, Newman Street, Oxford Street, Picture Dealer—J. S. ROBERTS, Birmingham, Gunmaker—B. ROBINSON, Huddersfield, Yorkshire, Cloth Merchant—A. SMITH, Paragon Buildings, New Kent Road, Engineer—W. H. WILLIAMS, Plaistow, Essex, Apothecary.

BANKRUPTCY ANNULLED—C. CORNELL, Rochester, Kent, and Melbourne, Victoria, Merchant.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,226,005	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion	9,902,643
		Silver Bullion	848,362
	£25,226,005		£25,226,005

BANKING DEPARTMENT.

Proprietors Capital	£14,553,000	Government Securities (including Dead Weight Annuity)	£8,444,776
Rest	3,499,168	Other Securities	20,728,396
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	4,700,293	Notes	5,535,845
Other Deposits	12,161,148	Gold and Silver Coin	[illegible]
Seven day and other bills	615,735		
	£35,529,344		£35,529,314

14th day of Feb., 1861. M. MARSHALL, Chief Cashier.

Metropolis and its Vicinity.

CONFERENCES ON CHURCH RATES.—A very numerous conference, convened at the instance of the representatives of almost all the Dissenting denominations, was held on Tuesday in Freemasons' Hall, for the purpose of taking steps to ensure the passing of the Church-rate Abolition Bill by decisive majorities. Several hundreds were present, and all the principal towns and many of the rural parishes were represented. Among those who were present were Mr. Baines, M.P.; Lord Henley, M.P.; Mr. Scholefield, M.P.; Sir C. Douglas, M.P.; Sir J. Shelley, M.P.; Mr. Hankey, M.P.; Mr. Whalley, M.P.; Mr. Pilkington, M.P.; Mr. Dunlop, M.P.; Mr. Clifford, M.P.; Colonel Tynte, M.P.; Mr. Bristow, M.P.; Mr. Stansfeld, M.P., Mr. Hardcastle, M.P., Mr. Kinglake, M.P.; Rev. T. Binney, Rev. Dr. Steane, Rev. W. Brock, Mr. James Heywood, Rev. R. B. Aspland, Mr. Morley, Mr. Joseph Pease, and Mr. Chas. Curling. Mr. Scholefield, M.P., took the chair, and stated that it was the object of that conference to dissipate the delusion, founded upon the small minority of the last session, that the people were no longer with them in their agitation, and to prove that not only could they achieve the same majority which they achieved before, but a much larger one, and eventually carry the Bill, not only through the House of Commons, but through the House of Lords. The meeting was addressed by the Rev. Basil Cooper, Sir J. Shelley, Bart., M.P.; Sir Charles Douglas, M.P.; Mr. Sidebottom, of Manchester; Mr. Grimwade, Mayor of Ipswich; Mr. James Heywood; Mr. H. Cosham, of Bristol; the Rev. J. H. Hinton, Rev. T. Binney, Lord Henley, M.P.; Mr. Miall, Mr. Baines, M.P.; Mr. J. Coleman, of Norwich; Mr. Bristow, M.P.; Col. Tynte, M.P.; Mr. Hugh Mason, of Ashton; Mr. Rumney, of Manchester; Mr. Morley, Rev. T. N. Langridge, the Rev. Messrs. Ashby and Griffiths, of Anglesea; Dr. Ackworth, of Bradford; Rev. Dr. Steane, and the Rev. C. Short, of Swansea. The following resolutions were unanimously adopted:—

"1. That, in reviewing the parliamentary struggle for the abolition of church-rates, this conference finds that, during a period of nearly 30 years, there has been continuous and growing hostility to the exaction, as violating the principles of justice, as being repugnant to conscientious convictions, and as occasioning the bitterest social feeling. That successive governments have admitted the present law to be indefensible, and that successive parliaments have affirmed the principle of entire abolition, as the only practicable mode of settling the question. That the upholders of the impost have never been, and are not at this hour, agreed upon any measure by which the law may be amended, with any prospect of overcoming the strong antipathy with which it is regarded. Meanwhile, opposition to church-rates is constantly extending over a wider area, and is diminishing the revenue which is the object of contention, while the steadily increasing liberality of Episcopalians is supplying the funds required for the maintenance of their religious edifices and worship. That, in view of these facts, the members of this conference, in the interests of peace, of justice, and of religion, pledge themselves resolutely to adhere to the demand for the total extinction of church-rates, and appeal to abolitionists of every class to press that demand with a determination which will convince the legislature of the absolute necessity for passing Sir John Trelawny's bill. 2. That, it being the declared purpose of the leader of the conservative party in the House of Commons, to defeat the bill for abolition, in order to carry a measure by which church-rates will not only be perpetuated, but be levied for the support of numerous additional churches, and be also removed from popular control, this conference specially urges upon electors the paramount importance of frustrating this retrograde policy, by making such representations to their members as will secure their votes for the Bill on every division. 3. That a Committee be appointed to carry out the objects of this conference. 4. That to meet the expenditure involved in the special efforts already made, and which may be required to pass the Church-rate Abolition Bill into law, a fund of 3000*l*. be raised and placed at the disposal of the committee now appointed."

A subscription was then opened, and upwards of 1100*l*. was subscribed in the room, after which a declaration condemnatory of church-rates, signed by upwards of 10,000 members of the Methodist bodies, was presented. This was followed by a resolution, expressing the pleasure of the conference at the receipt of the declaration, and urging other Methodists to sign.—In connection with this subject, the following letter, which was frequently referred to during the meeting, has been addressed by the Bishop of Exeter to one of the Archdeacons in his diocess:—

"Dear Mr. Archdeacon,—Yours is not the only request which I have received for a declaration of my opinion on the question of church-rates. What that opinion would be if the question were asked under the same state of things as existed in past generations, it is hardly necessary for me to consider. I look at the problem actually presented to us, and, so looking, I am anxious to secure all that sound principle demands, without insisting upon all which we may think desirable, nor even all which most of us may think reasonable. The principle to be contended for, and never by us to be abandoned, is the union of Church and State in every nation calling itself Christian. This indispensable object would seem to me to be insured by retaining church rates as the legal instrument of providing for the maintenance of the edifices and churchyards, even if the support of the special services of the Church were no longer insisted upon. To require the maintenance of these edifices as a standing monument of the nation's faithfulness to God, is not open to the most specious, and therefore the most effective argument commonly used for the abolition of church-rates, namely, that such a charge is inconsistent with the rights of conscience; for very many are thus made to support a system of doctrine and of worship to which they are conscientiously opposed. Whether this argument is reasonable or not I forbear to inquire; I would rather seek to render it inapplicable. This would be accomplished by acting on the very simple expedient which I have suggested. For thus the great national object would be secured, without leaving any grievance of which any reasonable man could complain. I rejoice in thinking, too, that all which we should find practically necessary would be obtained. For, the necessary charges for public worship are not of a formidable amount, and those which are unnecessary—such as for organs, for lighting, warming, and the like—may be (shall I be afraid of saying ought to be) no longer demanded of those who cannot enjoy the use of them. In examining the list of strictly necessary charges, the first particular is at once the largest and most important—the supplying the elements at the Holy Communion. But this, I hesitate not to say, is most unfit to be made a charge on any man. None but those who actually communicate ought to be, I will not say compelled, but permitted, to contribute. In the Primitive Church, to make offerings of bread and wine, out of which the elements were taken, was a privilege, from which all but the faithful were strictly excluded; and it appears from the rubric at the end of the Communion, in the first Book of Common Prayer of Edward VI., that the earlier reformers were careful to observe the same principle. That rubric ordered that 'the pastors and curates shall find at their cost sufficient bread and wine for the Holy Communion, and that in recompense of such costs and charge, the parishioners of every parish shall offer every Sunday, at the time of the offertory, the just value and price of the holy loaf to those their pastors and curates, in such order as they were wont, and that one at least of that house in every parish to whom by course it appertaineth to offer for the charge of the Communion, or some other whom they shall provide to offer for them, shall receive the Holy Communion with the priest.' Thus careful, I repeat, were our reformers that the offering of the elements should not be made by those who are not communicants. To carry out this principle in consistence with our present object, the simplest and easiest method would probably be, to take the cost of the bread and wine out of the moneys collected at the offertory; and we need not doubt that devout communicants would offer somewhat more largely in consideration of this charge. The other necessary expenses are really very small; and these, as well as those which are not strictly necessary, might be safely left to voluntary contribution. Some charges are made by the State for its own purposes, such as providing and keeping registers, and making returns of the same, which the State itself would, doubtless, provide for. In conclusion, let me add the expression of an earnest hope that in any modification of the existing law on church-rates which shall now be adopted, the enforcement of them would be transferred from the ecclesiastical to the temporal courts. Common prudence and the manifest interest of peace demand the transfer. I am, dear Mr. Archdeacon, yours very faithfully, H. EXETER.

"P.S. I have omitted one consideration, which, however, strongly commends the measure above stated to my own acceptance. It leaves no ground for exemption in favour of any; for it recognises a common duty, resting on a principle which none ought to evade. I have also omitted all reference to the course to be adopted for ascertaining from time to time what repairs of the churches are really necessary, and by what authority they are to be ordered. These are matters which must be left to the judgment of Parliament."

LAW OF SETTLEMENT AND REMOVAL OF THE POOR.—A deputation of Guardians of the Poor had an interview with Sir G. Lewis, at the Home Office, a few days since, to present a memorial concerning "the injurious operation of the laws of settlement and chargeability of the poor and their dwellings, and their injustice to the ratepayers." The deputation was introduced by Alderman Sidney, M.P., and consisted of the Chairman of the West London Union, and several guardians and clergymen. Sir J. Duke, M.P.; Mr. Layard, M.P.; and Mr. Locke, M.P., were also present. Alderman Sidney explained that a meeting of guardians had been held recently in the City, and in accordance with the resolutions passed on that occasion, the deputation wished to bring under the Home Secretary's attention the necessity of equalising the rating of parishes, and of altering the law for the settlement of the poor. Mr. Harvey, chairman of the West London Union, then read a memorial agreed to at the meeting, pointing out the evils occasioned by the existing laws, and praying that "there should be an approximate equalised charge for the relief of the poor over an extended area (say a county), and that the laws of settlement should then be altogether abolished." After some discussion of details, Sir G. Lewis said:—

"With regard to the question of the law of settlement and removal of the poor, I am glad to hear the opinions entertained by so large a body of London guardians, for I was under the impression that the large towns believed the law of settlement operated to their advantage. I am glad to find that view is not taken in London, where the guardians are more experienced in the relief of the poor. My own opinion is not shared, I believe, by the majority of persons—it is that the law of settlement and removal of the poor might, with great advantage to the poor, and without any great disadvantage, I think, to the ratepayers, be altogether abolished. But this is a question wholly independent of the chargeability of the poor. In Ireland, for instance, there is no law of removal or settlement, but there are regulations for chargeability. With regard to an equal rate for a county, remember that you cannot have parish guardians if you have county relief. An alteration in the area of chargeability would necessarily involve an alteration in the area of administration. But, on the other point, I think the law of settlement and removal might be repealed with advantage."

ST. GEORGE'S-IN-THE-EAST.—The following address signed by 2176 parishioners of St. George's-in-the-East, including every member of the legal and medical professions belonging to the Church of England in the parish, with but one exception, has been presented to the Bishop of London:—

"We, the undersigned churchwardens, overseers, trustees, guardians, vestrymen, trustees of Raine's charities, and other parishioners of St. George's-in-the-East, respectfully desire to convey to your Lordship our deep sense of the obligation we are under for the restoration of peace to this long-distracted parish through your Lordship's instrumentality, by the discontinuance of those offensive innovations in the Church Service which had alienated so many of the parishioners from the parish church, and in directing a return to the old form of worship as it existed when the Rev. Bryan King became rector in the year 1842. In tendering to your Lordship our most grateful thanks we will only add our belief that no reward could be offered that would be more acceptable to your Lordship than that the parishioners should testify their gratitude by proving, as we are sure they will do, that they are still what the rector himself in his answer to their respectful address of remonstrance to him in the year 1845 acknowledged them to be, 'pre-eminent for their dutiful attachment to the Church and their loyal obedience to the Sovereign.'"

WESTMINSTER IMPROVEMENTS.—Application is to be made to Parliament for altering the constitution of the Westminster Improvement Commission, for winding up the old commission and appointing a new one, to be composed of six members, two to be elected by the bondholders, two by the mortgagees, and two of the old commissioners to remain, if willing. The new commissioners are to be empowered to borrow money on debentures, and to take lands and houses in Tothill Street, New Tothill Street, Dacre Street, Orchard Street, New Wharf, Dean Street, Duck Street, Old Pye Street, Victoria Street, Castle Lane, Henry's Place, Isabella Row, Palace Street, Castle Place, Francis Street, Union Court, Cottage Court, and Artillery Row, Horseferry Road, for the purpose of public improvements.

MR. SPURGEON'S TABERNACLE is now very nearly finished. During the last month the friends of the rev. gentleman have been using every exertion to raise the sum required for completing the building. 28,000*l*. have been already raised, and the sum of 2000*l*. is still required, but no doubt is now entertained that by the 26th of next month the building will be thrown open for Divine worship, entirely free from debt and without encumbrance of any kind. It is estimated that above

a million persons have contributed towards rearing this gigantic edifice; and not a single accident to life or limb has occurred during its erection.

Forgeries on the Bank of England.—In a parliamentary paper on the Bank of England, some information is given as to the expenses of the establishment. Among the losses last year was 2159*l.* by forgeries, but the report states that this is smaller than the average of former years. The net loss in 1830 alone, which included Fauntleroy's frauds, was 214,000*l.* Owing to improved measures adopted for preventing and detecting fraud, the annual loss by frauds during the last ten years is under 2000*l.* The average annual loss from the year 1808, including the cost of legal expenses, has been under 7000*l.*

St. Paul's Cathedral Fund.—At the meeting held on Friday at the Mansion House in aid of this fund, several letters were read promising munificent subscriptions, and resolutions embodying measures to raise the amount necessary to complete the decoration of the Cathedral were unanimously agreed to. The Bishop of London and the Bishop of Oxford were present, and took part in the proceedings.

The Fatal Accident in the Sewers.—The body of the fourth man who was killed on Friday in the Fleet Sewer was discovered in the course of the day in the Union Street sewer, Blackfriars. The medical evidence at the inquest showed that three had died from inhaling carbonic acid gas, and the fourth had been drowned. As it was desirable to ascertain the cause of this sudden generation of gas the inquiry was adjourned for a week.

Mission to Dahomey.—A deputation, consisting of the members of the committee and council of the African Aid Society, manufacturers, and others, waited upon Lord Palmerston on Friday and presented a memorial urging that a subsidy be given to the King of Dahomey compensating him for relinquishing slave-hunting. The memorialists were of opinion that the amount of the subsidy could be obtained by a corresponding reduction in the cost of the African squadron. They also suggested that a special high commissioner be despatched to the King, with full powers to negociate. His lordship acknowledged the importance to the Government of having the support of such associations, and expressed his hearty desire to carry out any practical suggestion that might be thrown out for effecting the ends desired. The deputation also waited upon Lord J. Russell with the same petition. In the course of his reply to the statements of the memorialists Lord John said that if it were consistent with the regulations on the point he should be happy to appoint a consul at Abbeokuta, a proceeding which he thought would be of great importance in aiding to extinguish slavery and promote legitimate commerce.

The Public Health.—The Registrar General's return states that the number of deaths registered in the week ended February 9, was 1459, being a higher rate than it usually is in the first week of February, though in consequence of the change of weather it was lower than in the preceding three weeks. The average number in the corresponding weeks of the 10 years 1851-60, corrected for increase of population, was 1360. The present return is, therefore, nearly 100 above the average. During the week the births of 1067 boys and 999 girls, in all 2066 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1774.

Provincial.

Chatham.—A fresh outbreak has taken place among the convicts in this garrison far more alarming than any which has occurred here. The 350 convicts employed on St. Mary's Island on Friday after complaining that their food was not good enough, threw their soup over the principal warder, destroyed their dinner utensils, and broke the windows, tables, and other furniture. A strong body of warders was sent to the island, when the whole number were secured, and, having been ironed, were chained together and marched off to the prison, where they were all heavily ironed and placed in the punishment cells. On Saturday a number of other convicts whose names were taken by the warders were also removed to the punishment cells for being concerned in the mutiny. During the whole of Saturday and Sunday the convicts in these cells created another disturbance by kicking the doors, hooting, and yelling. On Monday they refused to leave the prison, and demanded that the chief warder and one of the keepers should be given up to them, as they intended to hang them. Captain Gambier, the inspector of convict prisons, accordingly went down, but his presence, far from intimidating the convicts, was the signal for the most formidable riot that has ever taken place within the walls of a British gaol. The guard was overpowered and driven from the common yard, the keys were wrested from the warders, and the prisoners confined in the cells were released. Every accessible portion of the prison was sacked, books and returns were destroyed, clocks were smashed, and the building itself actually set on fire in several places. For two hours 1300 dangerous and desperate ruffians held undisputed possession of the prison, and would have proceeded to acts of outrage more gross than any yet perpetrated, if the dockyard guard and a large body of troops had not been called in, and ordered to charge the rioters at the point of the bayonet. About 40 of the ringleaders in the revolt were then seized, and, having been heavily ironed, were chained together and placed in one cell, with a strong guard over them. On Tuesday morning, Captain Gambier having ascertained the names of the principal parties concerned in the outrage and mutiny, directed that each of them should each receive three dozen lashes. An order was at once despatched to the Marine barracks for the halberds and cats, which were immediately sent to the prison, eight of the strongest drummers being at the same time despatched to administer the punishment, which was inflicted in the presence of a strong body of troops. Major-General Sir Joshua Jebb, K.C.B., Inspector-General of Prisons, subsequently arrived at the prison to institute an investigation into the outbreak. Twelve men were flogged at the prison during the afternoon, including Bassett, who was the ringleader in the outrage on St. Mary's Island, a notorious convict named Butt, and 10 others, each of whom received three dozen lashes. These men, who were the most violent during the outbreak, screamed most lustily under the application of the cat, while others bore the punishment without uttering a word. On Wednesday 34 others were flogged, and there are 73 other ringleaders who are still securely chained together, awaiting their punishment. A guard of soldiers, with loaded rifles, remains on duty at the prison day and night. From the inquiries instituted by Sir J. Jebb, it appears that the revolt is attributed by the convicts themselves to the bad provisions and the short supply of their daily rations. It appears, however, that they have daily one pint of cocoa and bread and butter for breakfast, six ounces of cooked meat, without bone or gristle, and one pound of vegetables for dinner, and one pint of gruel or tea, whichever they choose, for supper. It is certain, therefore, that the convicts live much better than the hard-working labourer. Their bread is the best that can be obtained, and the meat which is supplied to the prison is better than what is served out to the troops in Chatham garrison.

Jersey.—On Tuesday afternoon the London and Jersey iron screw-steamer Metropolis, of 600 tons burden, while on her return passage from the Thames, struck on the Rondiere rock, Jersey, and subsequently filled and sunk, the crew escaping in the boats. By the last accounts it appeared inevitable that she would become a total wreck. Part of her deck cargo was washed ashore.

Liverpool.—The storm of Saturday was felt with great severity on this coast. In the Mersey the casualties to shipping have been numerous and severe, attended with extensive loss of life.

Newcastle-on-Tyne.—A large and influential meeting of the coal owners of the north of England was held on the 17th ult. in this town to consider the details of a scheme for the drainage of the coalfield east of Newcastle, which is now under water. In the absence of Lord Ravensworth the chair was taken by Mr. Matthew Bell, a large colliery owner. Mr. T. J. Taylor, in laying the scheme before the meeting, stated that the coalfield east of Newcastle measured about 30 square miles, the whole of which was, in mining language, "drowned." Water had been permitted to accumulate till it had risen more than 100 fathoms above the high main seam, so that, in point of fact, there was a lake 100 fathoms deep underground, the consequence being that the high main seam was entirely submerged, while the lower seams could only be worked by a system which, though ingenious, was very uncertain. Cast iron caissons, or tubbing, were used in segments of 20 inches in height and 4 or 5 feet long. These were wedged together, and thus formed a sort of dam, which was not, however, to be depended upon. At Hebburn a fracture in the tubbing had occasioned the entire loss of the colliery, and might have also occasioned great loss of life. Cast iron was therefore not to be depended upon. Under these circumstances it was desirable to adopt some general plan of drainage. It was therefore proposed to drain a district of 22,000 acres, bounded by the main dyke on the north, the sea on the east, and the town of Newcastle on the west. This might be accomplished by placing draining engines at Jarrow, Howden, and other places in the district. They need not go to the bottom of the bas in all cases, but to intercept the feeders would do as well. Considering the vast amount of mineral wealth which was lying unemployed, he thought that they were fully justified in adopting a scheme, however extensive it was, which would utilize that wealth. In answer to various questions Mr. Taylor stated that the quantity of water was so great in the pits that at Percy Main colliery, before it was abandoned, 18 times more water than coal was raised from it. The sum which was required to carry out the proposed scheme was only 60,000*l.*, and the barriers of coal which were now left in the high main seam only amounted in themselves to more than double that sum. After several gentlemen had expressed their opinion respecting the proposed scheme, a committee of coalowners and others was appointed for the purpose of considering it and examining the Bill to be presented to Parliament in its favour.

Oxford.—The *Builder* states that the pictures on leather destroyed in the recent fire at Blenheim Palace, and attributed to Titian, were not by that master; but that the picture of the Rape of Proserpine was a fine and undoubted work of Rubens. Had the fire reached the other pictures in the Palace, including the [illegible] Rubens, Raphael, and Carlo Dolci, the loss [illegible] been irreparable.—Mr. J. H. S. Smith, M.A., [illegible] matical lecturer, senior dean, and fellow [illegible] College, has been elected to the Savilian Pro[illegible] of Geometry vacant by the death of the [illegible] Powell. In a Convocation held on the [illegible] John O. Westwood was admitted M.A. [illegible] Convocation, and at the same time was [illegible] sworn in as Hope Professor of Zoology.

Salisbury.—A choral festival will short[ly] [illegible] the nave of Salisbury Cathedral, a society [illegible] formed in the diocese with a view of [illegible] improving the music of the parochial choirs.

Sheerness.—An adjourned inquest was [illegible] town on Tuesday, on the bodies of three [illegible] killed by the fracture of a crane, while [illegible] weighing 28 tons. The jury, after an [illegible] tion, returned a verdict of Accidental [illegible] with the following remarks:—

"The immediate cause of the accident was [illegible] chain when riding on the third coil; the [illegible] sufficient strength to meet any addition to [illegible] which it was tested, the liability to surging, and [illegible] weights that are in practice thrown at different [illegible] working on certain parts thereof were the remote [illegible] accident; and there was not sufficient control [illegible] dence by a responsible person, who should be [illegible] in charge during the working of the travellers."

Shields.—A fearful gale burst upon [illegible] Saturday causing great destruction of [illegible] Hartlepool, Middleton, Wells, Blakeney, and [illegible] the other ports on the north-east coast. [illegible] 200 vessels are reported by Lloyd's agents at [illegible] outports to have been wrecked or stranded [illegible] period of six or eight hours. In many instances [illegible] seen to founder, with the whole of their [illegible] endeavouring to run for a place of shelter. [illegible] of the losses was among the vessels engaged [illegible] collier and coasting trade, which were mostly [illegible] the north country clubs, who will necessarily [illegible] very large extent. In this port several [illegible] driven on shore, and though four life-boats [illegible] for hours to render assistance, it was impossible [illegible] two of the crew of the schooner Fowler of Inver[illegible] they were drowned in the presence of 15[illegible] The crews of the other vessels were saved. A[illegible] pool 26 vessels were wrecked with a loss of 50 [illegible] lads, the value of shipping destroyed being 100,[illegible]

Whitby.—During the storm of Saturday 1[illegible] were wrecked off this port. Two vessels with [illegible] crews foundered. The lifeboat, which was new [illegible] September, after having saved the crews of four [illegible] capsized, and 12 out of the 13 hands who manned [illegible] were drowned.

Wolverhampton.—The jury at the adjourned [illegible] quest on the two men who were killed by the [illegible] of a steam-boiler at the Rough Hills Colliery [illegible] town returned a verdict of Manslaughter against [illegible] the managing engineer, one of the deceased, [illegible] that the other lost his life in consequence of his [illegible] neglect and carelessness in not attending to the [illegible] which was under his charge. The jury added a [illegible] mendation that there should be duplicate [illegible] buoys to all boilers, and that competent persons [illegible] be appointed to inspect them.

Ireland.

The Viceroyalty.—At the inauguration [illegible] the Lord Mayor on the 7th inst., the Lord-Lie[utenant] stated that he believed her Majesty's Government [illegible] neither the wish nor the intention to abolish [illegible] Viceroyalty, and that, in his opinion, the [illegible] mainly rested with the Irish representatives [illegible] Irish constituencies.

Law Appointments.—Mr. Serjeant S[illegible] been appointed law adviser to the Castle [illegible] Mr. Lawson, Q.C., promoted to the Solicitor-General[ship]

Roman Catholic Pastoral.—Dr. Dixon, the [illegible] Catholic Primate, has issued a Lenten Pastoral [illegible] which he exhorts his flock to pray earnestly [illegible] restoration of the Pope to the dominions of [illegible] has been sacrilegiously plundered.

Destructive Storm on the Coast.—[illegible] storm raged at Kingstown on Saturday, and [illegible] in the wreck of 16 vessels, and a lamentable [illegible] Captain Boyd, R.N., and 14 of the crew of [illegible] ship Ajax, were swept into the sea from [illegible] Pier, while endeavouring to save the crew of [illegible] vessel, and all perished. Many other lives [illegible] lost. Inquests were held on Monday at K[illegible] and Howth on the bodies of the unfortunate [illegible] the jury returned a verdict of Accidental Death [illegible] body of Captain Boyd has not been recovered, [illegible] some portions of his clothing have been washed [illegible] In addition to these disasters at Kingstown [illegible] shipwrecks have occurred along the eastern [illegible] attended by a considerable destruction of life and [illegible] perty. The iron steamship City of Lucknow, [illegible] tons, from Glasgow to Calcutta, was lost in the [illegible] Bangor, near Belfast. The crew and five passengers [illegible] with the exception of a sailor, were saved. The [illegible] and cargo are insured to the extent of 120,0[illegible] London, Glasgow, and Liverpool. The steamer [illegible] of 690 tons went ashore at Shell Wharf, but the [illegible] and passengers were safely landed. The steamer [illegible] Tonquin, from the Clyde to Santos, struck on [illegible]

[illegible], and the heavy seas having carried her off [illegible] water, she foundered with all on board, [illegible] 11 men and a woman.

[illegible] ATTEMPTED MURDER IN DUBLIN.—In the [illegible] Court on Monday the youth Joseph [illegible] was arraigned for the attempt to murder Wil[illegible] the porter of Messrs. Hyam, at [illegible] Parade, on the 28th December last, and, [illegible] advice of his counsel, pleaded Guilty to the [illegible] charging him with shooting with intent to kill. Mr. Justice Christian in passing sentence said that the [illegible] repudiated the ground of insanity on which [illegible] had been made for a remission of punish[illegible] but in consideration of his youth, they would [illegible] from passing upon him the extreme penalty of [illegible] servitude for life. He then sentenced him to [illegible] servitude for 20 years.

MURDER NEAR TRALEE.—A murder has been dis[illegible] at a place called Gortbrack, about three miles [illegible] Tralee. A discharged soldier, called Patrick Fitzgerald, who had been residing with his aunt on a [illegible] farm, having been missed, it was found that [illegible] had been carried off to a place 23 miles distant and [illegible] buried. The body was exhumed, when the *post-mortem* examination proved that he must have been murdered. John Mason, a nephew of Fitzgerald, is [illegible] on suspicion.

Railways.

FATAL ACCIDENT AT THE CRYSTAL PALACE STATION.—On Monday morning a fatal accident occurred at the Crystal Palace station. The train from Feversham [illegible] just arrived on the Croydon side, a porter was stationed at the junction to direct the passengers across the line to the London Bridge train, which was then [illegible] from the Victoria station, when an elderly lady [illegible] in the act of crossing as the train emerged from the tunnel. The porter, seeing the lady's danger, [illegible] forward to assist her, but the train came upon [illegible], and both were immediately killed. The bodies were frightfully mutilated. At the inquest on Thursday the jury returned a verdict of Accidental Death, and recommended that the directors of the company should compel persons passing from one line to the other to cross through the booking offices, or should erect a bridge.

THE DIVIDENDS.—The dividend of the Great Western [illegible] 3½ per cent. for the half year; that of the London and North Western is at the rate of 5¼ per annum; London and South Western, 5¼ per annum; London, Brighton, and South Coast, 3½ for the half year; Great Northern, *3l. 3s. 9d.* for the half year on the original stock; Blackwall, 4 per cent. per annum; Midland, 7 per cent. per annum; Caledonian, 5½ per cent. per annum.

Obituary.

THE COUNTESS DOWAGER OF HADDINGTON died on the 11th inst. at her residence, 43, Berkeley Square, in her 80th year. She was the widow of the ninth Earl of Haddington, formerly Lord-Lieutenant of Ireland and First Lord of the Admiralty, and was only daughter of the fourth Earl of Macclesfield, by the second daughter and co-heir of the Rev. Dr. Drake. She was born in 1781, and married in 1802 the late Earl of Haddington, who died in 1858, leaving no issue.

SIR JOHN OWEN, BART., M.P. for the Pembroke district of [illegible], and Lord Lieutenant of Pembrokeshire, died at [illegible] House, Gloucestershire, on the 6th inst. in his 85th year. He was born in 1776, and was the son of Mr. Joseph Lord, by the [illegible] of Lieut.-General Owen, who was the second son of Sir Arthur Owen third baronet of Orielton. He was educated at [illegible] and Christchurch, Oxford, and was called to the bar [illegible]. He married first, at Gretna Green, in 1800, the [illegible] of the Rev. J. L. Phillips, who died in 1829; secondly, [illegible], the second daughter of Mr. Edward Stephenson, of [illegible] Hill, Berks. By his first wife he had one son and four daughters, by his second three sons and one daughter, of whom three sons and four daughters survive. He sat for Pembrokeshire from 1806 to 1841, and has since [illegible] represented the Pembroke boroughs. Up to 1845 he was [illegible] as a Tory, but has latterly been classed among the [illegible]. In 1845, he supported the Maynooth Grant, and, in [illegible], the repeal of the corn laws. He voted for Lord Derby's [illegible] in 1852, but against Lord Derby's Reform Bill in 1859. He was lord-lieutenant of Pembrokeshire and governor of Milford Haven. He inherited the estates of Orielton, on the death of his kinsman, Sir Hugh Owen, Bart., in 1809, and having changed his name of Lord for that of Owen, was created a baronet in 1813. The original baronetcy of the [illegible] was conferred in 1641, and became extinct on the death in [illegible], of Sir William Owen Barlow, who was nephew [illegible] Sir John's mother. He is succeeded in the title and estates by Hugh, his eldest son, who sat as Conservative M.P. for the Pembroke boroughs, from 1832 to 1838. He was born in [illegible], and married in 1825 the daughter of Sir Charles Gould Morgan, Bart., sister of Lord Tredegar (who died in 1844), and has issue by her three sons and four daughters.

ADMIRAL SIR GEORGE MUNDY, K.C.B., died at his residence [illegible] Square on the 9th inst. He entered the Navy in [illegible], and served in several vessels in the Mediterranean, being present at the capture of many vessels and in the reduction of [illegible], Bastia, and Calvi. He became a Lieutenant in [illegible], and served in that capacity in the action of Cape St Vincent, and in the battle of the Nile. On becoming a commander in [illegible] he was employed on hazardous service off Cadiz and in the Mediterranean, and on receiving post rank in [illegible] he captured three privateers and a lugger. He was subsequently engaged in protecting Sicily and Sardinia during Lord Nelson's pursuit of the combined fleets to the West Indies. In 1806 he captured off Cadiz, in the presence of four French frigates, the national brig Le Furet, mounting 18 guns and with a complement of 132 men; and in April following, after a chase of 230 miles, took a Spanish war schooner of four guns. He subsequently escorted a fleet of transports to Sicily, conveyed the British Consul to Algiers, and, dispersing a fleet of gunboats on the coast of Granada, captured a Spanish letter of marque. In 1807, he took three armed polaccas, lying in the narrow harbour of Begu, on the Catalonian coast under strong batteries and a considerable land force. Afterwards, with the Leonidas frigate and several smaller vessels under his orders, he co-operated with the patriots on the Catalonian coast, blockaded Barcelona, and received the acknowledgments of Lord Collingwood, the Commander-in-Chief, for his zeal and energy. During the war of 100 days, Capt. Mundy was sent with the Ajax to Marseilles to ascertain the sentiments of the inhabitants, and was complimented by Lord Exmouth on the tact with which he executed his delicate mission. In 1816 he visited, under Lord Exmouth, Algiers, Tunis, and Tripoli, for purposes connected with the abolition of Christian slavery. In 1815 he was nominated a C.B., was promoted to the rank of Rear-Admiral when in command of the Royal George yacht, in 1830; was created a K.C.B. in 1837, Vice-Admiral in 1841, and Admiral in 1849.

LADY EVANS, wife of General Sir De Lacy Evans, M.P. for Westminster, died on the 8th inst., in Bryanston Square. She was the daughter of the late Colonel R. Arbuthnott, and was married to Sir De Lacy Evans in 1834.

THE REV. DR. DONALDSON, late Fellow of Trinity College, Cambridge, and formerly Head Master of King Edward's School at Bury St. Edmund's, died on the 10th inst., after four weeks' severe illness, at the residence of his mother, 21, Craven Hill, Hyde Park, aged 49. He was well known as the author of the "New Cratylus" and "Varronianus," and had placed himself by his attainments in comparative philology in the first rank of British scholars. He received his earlier education in the University of London, and afterwards proceeded to Cambridge, where in 1834 he obtained the highest place but one in the list of classical honours, and in the following year became Fellow of Trinity. This preferment, however, he did not long retain. In a short time he married and succeeded to the Mastership of the Grammar School at Bury St. Edmund's, where his abilities were devoted for some years to the work of direct education. About three years since he resigned that office, and was subsequently appointed Classical Examiner in the University of London.

BIRTHS.—On the 9th inst, at the Rectory, Corfe Castle, Lady CHARLOTTE BANKES, of a son—11th inst, at 16, Green Street, Lady ELIZABETH LESLIE MELVILLE CARTWRIGHT, of a daughter—10th inst, at Hopton Hall, near Lowestoffe, Lady PLUMRIDGE, of twin daughters—10th inst, Lady THOMAS, wife of Sir Godfrey J. Thomas, Bart., of a son—7th inst, at 54, Green Street, Grosvenor Square, the Hon. Mrs. WILLIAM NAPIER, of a son—7th inst, at 6, Dawson Street, the Hon. Mrs. HANDCOCK, of a daughter—6th inst, in South Street, the wife of ALEX. MATHESON, Esq., M.P., of a son—10th inst., at Government House, Devonport, the wife of Major-General HUTCHINSON, prematurely, of twins, stillborn—11th inst, at 4, Queen Street, Mayfair, the wife of Lieutenant-Colonel BOYLE, 89th Regiment, of a son—5th inst, at 22, Gloucester Crescent, Hyde Park, the wife of Captain W. DRISCOLL GOSSET, R.E., Treasurer of British Columbia, of a son.

MARRIAGES.—On the 6th inst, at Trinity Church, Chelsea, Brigadier-General Lord GEORGE PAGET, C.B., to LOUISA, youngest daughter of CHARLES HENEAGE, Esq., and the Hon. Mrs. HENEAGE—7th inst, by special licence, at the Chapel Royal, Windsor Park, Captain FERGUSON, Grenadier Guards, son of Admiral and the Hon. Mrs. Ferguson, of Pitfour, to NINA MARIA, eldest daughter of Colonel the Hon. A. N. HOOD and Lady MARY HOOD—6th inst, at St. Peter's Church, Dublin, WILLIAM ARMIT LEES, Esq., son of Thos. Orde Lees, Esq., of Bloomfield, Co. Dublin, and grandson of the late Sir John Lees, Bart., to MARY LOUISA, daughter of the late JOHN HAMILTON, Esq., of The Grove, and granddaughter of Henry Hamilton, Esq., of Ballymacoll, Co. Meath—7th inst, at the parish church of Wyke Regis, Dorset, the Rev. ROBERT FRANCIS, youngest son of THOMAS LYNES, Esq., of Boulton Villa, to LOUISA ELIZA JOSEPHINA, eldest daughter of ROBERT HASSALL SWAFFIELD, Esq., of the same parish, High Sheriff for the county—12th inst, at Sigston, Yorkshire, HENRY, eldest son of CHRISTOPHER BRAMWELL, Esq., of Hardwick Hall, in the county of Durham, to ELIZABETH, younger daughter of the Rev. H. J. DUNCOMBE, Rector of Kirby Sigston—12th inst, at the parish church, Leamington, JOHN ALBERT CRAVEN, Esq., Royal Horse Guards, son of Henry Craven Esq., of Wickham Hall, Kent, to ELLEN AMELIA, second daughter of the Rev. STUART MAJENDIE, Rector of Barnwell, Northamptonshire.

DEATHS.—On the 10th inst, at 3, Mansfield Street, the Lady EMMA PETRE—11th inst, at the Marquis of Bristol's, Kemp Town, ELIZA AUGUSTA CAROLINE, second daughter of the Rev. Lord and Lady ARTHUR HERVEY, aged 16—5th inst, at Brighton, the Hon. ARCHIBALD MACDONALD, aged 83—10th inst, at West-end, Hampstead, Lady BROWNE, widow of General Sir Thomas Browne, K.C.H., and daughter of Sir William Wolseley, Bart., aged 88—11th inst, at Shrewsbury, of scarlet fever, JANE, youngest daughter of Sir GEORGE S. BROOKE PECHELL, Bart., aged 6—4th inst, at Pontypool Park, CHARLOTTE GWEN, widow of the late THOMAS B. ROUS, Esq., of Courtyrala, Glamorganshire, and daughter of the late Sir Robert Salusbury, Bart., of Llanwern, Monmouthshire—6th inst, at Leamington, Captain GEORGE BAKER, R.N., second son of the late Sir Robert Baker, aged 64—5th inst, at Ancherfeld, near Edinburgh, ALEXANDER CUSHNIE MORISON, late Surgeon in H.M.'s Bengal N.I., son of Sir Alexander Morison, M.D.—5th inst, at 15, Craven Hill Gardens, General PETER DE LA MOTTE, C.B., of the 3d Regiment Bombay Light Cavalry, aged 79—3d inst, at Strathtyrum House, St. Andrews, Major-General GAIRDNER, C.B., aged 71—10th inst, at Victoria Road, Old Charlton, LUCINDA TOLER, wife of Major-General CLARKE—9th inst, at Thorington Hall, Suffolk, Colonel HENRY BENCE BENCE, aged 73—6th inst, at Boulogne-sur-Mer, Colonel DUNCAN MACPHERSON, late 27th (Inniskilling) Regiment—9th inst, at his residence, Hampstead, JOHN LEWIS MALLET, Esq., late Secretary to the Board of Audit, aged 85—12th ult, at Maceio, Brazil, of yellow fever, HENRY EDWIN GRIESBACH, Esq., British Vice-Consul at that port—9th inst, at Torquay, EDMUND LEWIS CLUTTERBUCK, Esq., of Hardenhuish Park, Chippenham, Magistrate and Deputy-Lieutenant for the county of Wilts, aged 36—7th inst, at Camden Grove, Kensington, SOPHIA HUTCHINS CALLCOTT, second daughter of the late Dr. Callcott, aged 66—8th inst, at the Warden's Lodge, the Rev. ROBERT SPECCOTT BARTER, Warden of Winchester College, aged 70—5th inst, at Hammoon, Dorset, the Rev. FREDERICK BLISS, rector of the parish, aged 41—8th inst, at the Royal York Crescent, Clifton, the Rev. RICHARD HERBERT, rector of Chetton, Shropshire, eldest son of the late Rev. Arthur Herbert, of Myross Wood, county Cork, Ireland, and grandson of the late Thomas Herbert, Esq., of Mucross Abbey, Killarney, county Kerry—8th inst, at Palestine Place, Bethnal Green, the Rev. JAMES BOARDMAN CARTWRIGHT, M.A., for 30 years minister of the Episcopal Jews Chapel, and Chaplain to the Society for Promoting Christianity among the Jews, aged 63—7th inst, at Canonbury, the Rev. JACOB KIRKMAN FOSTER, formerly President of the Countess of Huntingdon's College, at Cheshunt, aged 74.

Markets.

COVENT GARDEN, Feb. 16.

Supplies of winter Greens are improving both in quantity and quality. Continental contributions also continue to be imported. Pine Apples and Grapes have altered but little since our last. Oranges may be obtained at about last week's prices. Good Cobs may be had at from 1s. to 1s. 6d. per pound. Cornish Broccoli is still arriving in cratefuls, and in excellent condition, good single heads of it realise from 2d. to 4d. each. Asparagus, French Beans, and new Potatoes may also be had. Cucumbers are scarce. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Camellias, Heaths, and Roses.

FRUIT

Pine Apples, per lb., 4s to 8s	Apples, per doz., 6d to 1s 6d
Grapes, per lb., 8s to 14s	Oranges, per 100, 6s to 10s
Pomegranates, each, 4d to 6d	Lemons, per 100, 6s to 10s
Pears, per doz., 3s to 6s	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Broccoli, each, 6d to 8d	Onions, p. ½ sieve, 1s 6d to 2s6d
French Beans, p. 100, 4s	Asparagus, p. bundle, 10s to 30s
Greens, per doz., 6s to 8s	Rhubarb, p. bundle, 9d to 1s 3d
Cabbages, do., 2s to 3s	Seakale, p. punnet, 3s to 3s 6d
Potatoes, p. ton, 100s to 160s	Shallots, per lb., 6d to 8d
— per bus., 4s to 6s	Garlic, per lb., 6d to 8d
— per cwt., 8s to 10s	Lettuces, Cabb., per score, 1s to 1s 6d
Carrots, per bunch, 8d to 10d	Lettuces, Cos, do., 1s to 1s 6d
Turnips, per bunch, 6d to 8d	Endive, p. score, 1s to 1s 6d
Spinach, p. sieve, 4s to 5s	Horse Radish, p. bun., 1s to 4s
Cucumbers, each, 2s to 3s	Mushrooms, p. pottl., 2s to 3s
Artichokes, per doz., 4s to 6s	Parsley, p. 12 bunches, 4s to 6s
Beet, per doz., 1s 6d to 2s	Savory, per bunch, 2d to 4d
Celery, p. bundle, 1s 6d to 1s 9d	

BRITISH WOOLS.—LONDON, FRIDAY, Feb. 15.

Our prospects seemed more hopeful, and more disposition was manifested to transact business, until the decision of the directors of the Bank of England was made known relative to further advance in the rate of discount to 8 per cent., which has taken most business men by surprise, and has put a stop to transactions for the present.

	s. d.	s. d.		s. d.	s. d.
South-down Hoggets	1 6 to	..	Leicest. Wethers	1 5 to	..
Half-bred ditto	1 7 —	..	Ditto Hoggs	1 7 —	..
Down Ewes	1 5 —	..	Combing Skins	0 11 —	1 8
Kent Fleeces	1 6 —	..	Blanket ditto	0 6 —	0 8
			Flannel Wool	1 0 —	1 8

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, Feb. 14.

Prime Meadow Hay	75s to	84s	Clover	95s to	115s
Superior do. (old)	90	110	New Clover	—	—
Inferior do.	40	57	Old second cut	70	85
New do.	—	—	Straw	32	40
Rowen	30	50			

DAVIS & CO.

WHITECHAPEL, THURSDAY, Feb. 14

Fine old Hay	105s to	110s	Fine old Clover	115s to	120s
Inferior do.	60	80	Inferior do	80	95
Prime New Hay	—	—	Fine 2d cut	85	98
Inferior do.	—	—	Inferior do.	—	—
Straw	36	40	Fine New Clover	—	—

HOPS.—BOROUGH MARKET, FRIDAY, Feb. 15.

Messrs. Pattenden & Smith report that the demand although not extensive for Hops continues steady for consumption, at late prices; very little doing on speculation, on account of the agitation on the Hop duty question, with the increasing advance on discounts.

POTATOES.—SOUTHWARK, Monday, Feb. 11.

During the past week the arrivals both coastwise and by rail have been large. Prices have undergone very little change. The following are this day's quotations:—York Flukes, 150s. to 160s. per ton; Lincolnshire Regents, 110s. to 120s.; Dunbar Red Soil, 150s. to 160s.; North Berwick do. 120s. to 125s.; Fife, Forfar, and Perth do., 100s. to 110s.; Rocks and Reds, 100s. to 105s.; American Reds, 90s.; French Whites, 60s. to 90s.; Belgian do., 60s. to 80s.; Dutch do., 60s. to 80s.

BUTTER MARKET.—Feb. 15.

Best Fresh Butter	16s. per dozen lbs.
Second do. do.	15s. " "

Pork, 4s. 8d. to 5s. 0d. per 8 lbs.

COAL MARKET.—Feb. 13.

Bowers West Hartley, 17s. 3d.; Byass's Bebside West Hartley, 17s. 3d.; Davison's West Hartley, 17s. 3d.; Hollywell, 18s. 6d.; Howard's West Hartley, 17s.; Tanfield Moor, 16s. 3d.; Tanfield Moor Butes, 16s. 3d.; Wylam, 18s; Walls End Acorn Close, 20s 6d.; Walls End Eden, 20s. 6d.; Walls End Hedley, 20s.; Walls End Hilda, 19s. 6d.; Londonderry Gas, 14s. 6d.; Walls End Framwellgate, 20s. 6d.; Walls End Pensher, 18s.; Walls End Russel's Hetton, 21s.; Walls End South Hetton, 22s. 3d.; Walls End Cassop, 21s. 6d.; Walls End Hartlepool, 21s. 9d.; Walls End South Durham, 20s.; Walls End Low Bitchburn, 16s. 6d.; Walls End Pease's West, 16s. 6d.; Carway and Duffryn Malting, 24s. 0d.—45 ships at market.

METROPOLITAN CATTLE MARKET.

MONDAY, Feb. 11.

The number of Beasts is smaller than on Monday last, and the average quality is middling; consequently choicest kinds met with a ready sale at fully late rates. There are a few more Sheep, and trade is not very brisk, but we cannot quote lower. Good Calves are scarce and make higher prices. From Germany and Holland there are 598 Beasts, 900 Sheep, and 74 Calves; from Spain, 120 Beasts; from Scotland, 127; from Ireland, 150; from Norfolk and Suffolk, 1900; and 120 from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c.	5 0 to	5 2	Best Long-wools	5 6 —	5 8
Best Short-horns	4 8 —	5 0	Do. Shorn	.. to	..
2d quality Beasts	4 0 —	4 4	Ewes & 2d quality	4 8 —	5 0
Best Downs and Half-breds	6 0 to	6 2	Do. Shorn	.. —	..
Do. Shorn	.. —	..	Lambs	.. —	..
			Calves	5 0 —	6 0
			Pigs	4 4 —	5 4

Beasts, 3620; Sheep & Lambs, 17,080; Calves, 86; Pigs, 410.

THURSDAY, Feb. 14.

The number of Beasts is small, yet it exceeds the demand; consequently, Monday's quotations cannot be maintained, nor can a clearance be effected. Sheep are more plentiful than for some weeks past. This being the first week in Lent, trade is very slow. Prices are lower, and several remain unsold. Calves are not selling so well as on Monday. Our foreign supply consists of 118 Beasts, 1450 Sheep, and 119 Calves. Milch Cows 175.

	s d	s d		s d	s d
Best Scots, Herefords, &c.	4 10 to	5 0	Best Long-wools	5 4 —	5 6
Best Short-horns	4 6 —	4 10	Do. Shorn	.. —	..
2d quality Beasts	3 8 —	4 2	Ewes & 2d quality	4 6 —	5 0
Best Downs and Half-breds	5 8 —	6 0	Do. Shorn	.. to	..
Do. Shorn	.. —	..	Lambs	.. —	..
			Calves	4 8 —	5 8
			Pigs	4 4 —	5 4

Beasts, 980; Sheep & Lambs, 5470; Calves, 175; Pigs, 220.

MARK LANE.—MONDAY, Feb. 11.

The supply of Wheat from Essex and Kent to this morning's market was small, and taken at the prices of this day se'nnight. The attendance from the country was large, and a fair retail business was transacted in foreign on late terms. Barley is in fair demand, and fine malting qualities being scarce bring rather more money. Beans and Peas are unaltered in value.

The Oat trade is quiet, and prices are unaltered. Flour is steady at last week's quotations.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk..White	46—65	Red	40—60
— — fine selected runs..ditto	50—70	Red	54—65
— — Talavera	51—72		
— Norfolk	—	Red	—
— Foreign	50—76		
Barley, grind. & dist., 28s to 30s.. Chev.	40—45	Malting .	33—40
— Foreign..grinding and distilling	30—36	Malting .	40—43
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—25
— Irish ....Potato	26—28	Feed ..	21—24
— Foreign.......Poland and Brew	24—28	Feed ..	20—28
Rye	35—38	Foreign .	—
Rye-meal, foreign	—		
Beans, Mazagan....30s to 44s....Tick	28—48	Harrow .	28—48
— Pigeon ......34s — 56s..Winds.	34—42	Longpod	—
— Foreign ....Small	40—50	Egyptian	—
Peas, white, Essex and Kent ..Boilers	33—48	Suffolk .	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign .	38—48
Maize .... White	—	Yellow..	—
Flour, best marks delivered..per sack	50—57		
— 2d do. .... ditto	38—50	Country.	38—50
— Foreign ....per barrel	30—35	Per sack	40—50

Friday, Feb. 15.

The weather during the past eight days may be called fine, although we have had rain and snow occasionally, with sharp white frost at night. On Tuesday the thermometer was as low as 24° Fahr. The wind has blown from the east, varying from north to south; to-day south-west, with rain since yesterday afternoon. A steady demand has been experienced for all kinds of grain and Flour during the week, and prices of each have been well supported throughout the kingdom. During the past eight days only 30 cargoes have been reported arrived off the coast, viz., 13 Wheat, 5 Maize, 4 Barley, 1 Oats, 1 Beans, 2 Flour, 2 Linseed, and 2 Cotton seed. The sales have been to a fair extent at about former prices. In Paris, on the 14th, there was a steady demand for Wheat at fully late rates, and a fair amount of business has been transacted. Flour was also more inquired after, although in most instances prices have advanced about 1 fr. The arrivals of English grain this week have been moderate, of foreign Barley good, and of Wheat and Oats very small. This morning's market was fairly attended by town and country millers. Good English Wheat was in request at fully Monday's prices, and the value of foreign continues to be well supported. Spring Corn of all descriptions is steady at Monday's quotations.

Arrivals from Feb. 11 to Feb. 15.

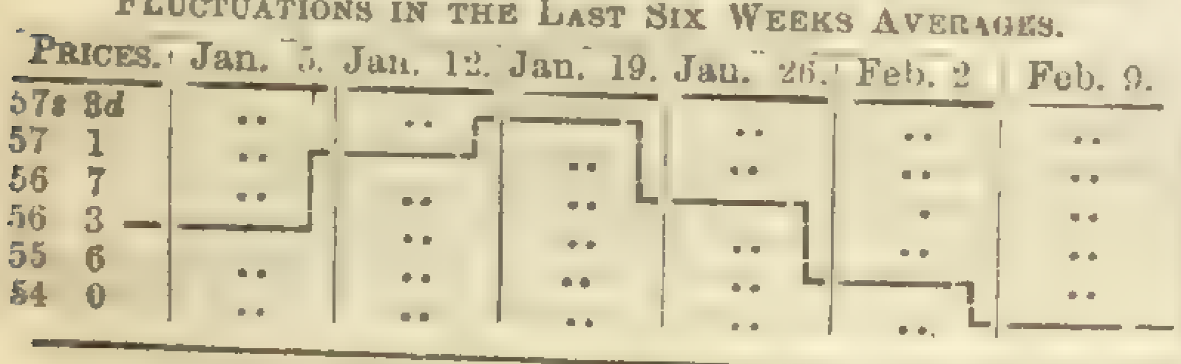
	Wheat.	Barley.	Oats.	Flour.
English ..	1150 qrs.	3580 qrs.	160 qrs.	1090 sks.
Irish	— „	— „	1930 „	— „
Foreign ..	3960 „	3200 „	4030 „	{ 10 „ / — brls.

Liverpool, Tuesday, Feb. 12.—There has been a fair attendance of millers and dealers at this morning's market, and Wheat has met a steady retail inquiry, without the least alteration in value. Flour moves slowly. Indian Corn had buyers at a reduction of 3d. per qr., but sellers held firmly for Friday's rates. Oats and Oatmeal steady. Peas and Beans are each the turn dearer. Barley unchanged. The market ruled steady throughout, but the business was chiefly of a retail character. Weather cold and frosty.

Friday, Feb. 15.—There was a fair attendance at to-day's market; Wheat, fine qualities, meet a fair consumptive demand at late rates, inferior kinds 1d. to 2d. lower. Flour firm, not much business doing. Indian Corn fair inquiry, at 37s. 6d. to 37s. 9d. for mixed, and 39s. 6d. for Galatz. Beans firm at 41s. for Egyptians. Oats and Oatmeal moderate sale at late rates.

Averages	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas
Jan. 5..	56s 3d	40s 3d	22s 6d	39s 10d	43s 4d	42s 0d
— 12..	57 1	40 6	22 6	34 6	43 10	44 6
— 19..	57 3	40 6	23 2	34 9	41 10	43 0
— 26..	56 7	40 7	23 1	35 10	42 5	41 8
Feb. 2..	55 6	46 0	23 3	34 3	40 8	43 0
— 9..	54 0	39 8	22 6	36 3	39 10	42 7
Agg. Aver.	56 1	40 3	22 10	35 11	42 0	42 10

Fluctuations in the Last Six Weeks Averages.



WANTED, as FOREMAN, a clever intelligent Man, age 23 or 24, who has had considerable experience in Growing Stove and Greenhouse Plants, and the general routine of his profession. One from a large establishment preferred. Good references will be required.—Apply, stating wages, P. P., Monksheath, Congleton.

WANTED, a NURSERY GROUND FOREMAN. —A steady, active, and experienced business Man who thoroughly understands the Management of general Out-door Nursery Stock.—Address, stating age, terms, reference, &c., to S. Stafford, Hyde, Manchester.

WANTED, a Man and Wife.—The Man as WORKING FOREMAN (not Bailiff); must be able to put up Stacks, and take the lead in any kind of Farm Work. Age not more than 45. Wife to give her whole attention to Poultry. Wages, One Guinea a week, good cottage and garden, and bush firing free.—Apply to W. G. K. Breavington, Vicarage Farm, Hounslow, Middlesex.

TO GARDENERS.

WANTED, a GRAPE and PINE GROWER.—Messrs. John Weeks & Co. are now in want of a thorough practical Forcing Gardener, to grow Pines, Vines, Peaches, and other Hothouse Fruits on an extensive scale, which are Cultivated for Sale and Exhibition. Abilities and energy will be liberally rewarded. None need apply who cannot obtain high recommendations for their skill in the Forcing Department.—Apply first by letter, with full particulars of former experience and references, to John Weeks & Co., Horticultural Builders, and Hot-water Apparatus Manufacturers, King's Road, Chelsea, S.W.

WANTED, a married Man, to undertake the Management of an extensive Collection of Fruit Trees and Roses; it is necessary that he should have had good experience in a similar capacity, and can produce a good recommendation.—Apply to George Clarke, Streatham Place Nursery, Brixton Hill, Surrey, S.

WANTED, a GARDENER who understands his business; single-handed place. Wife to undertake Dairy and Laundry.—Particulars of age, last situation, &c., to be addressed to W. S., Hales, Stationer, Lincoln's-Inn-Fields, London, W.C.

WANTED, in a Provincial Nursery, a steady, active young Man, to take the charge of a Greenhouse, Pits, &c. He must be a good hand at Propagating Bedding and Soft-wooded Plants, and be willing to make himself generally useful.—Apply, stating age, wages, &c, to J. Woods & Son, Nurseries, Woodbridge, Suffolk.

WANTED, a GARDENER, within four miles of London. Must be willing to make himself generally useful.—Address, stating age, wages expected, and former employment, to K. Z. Y., Post Office, Aldenham Terrace, Old St. Pancras Road, N.W.

WANTED, a GARDENER who understands the Management of Flower Garden, Forcing House, and Kitchen Garden. He will be required to superintend a small stock of Sheep and Cows on about 20 acres of Grass land. A Cottage will be provided for him, an Under-Gardener is kept, and occasional assistance given.—Apply by letter addressed X. Y. Z., Great Western Hotel, Paddington, stating age, whether single or married; if married, number in family; previous engagements, and amount of wages expected.

WANTED, a respectable Man, of active habits, who thoroughly understands his profession, as GARDENER, single-handed. Must be competent to undertake Greenhouse, Conservatory, and Forcing Pits, Pleasure Grounds and Kitchen Garden—about half an acre each. Wages, 18s. per week, with advance in proportion to satisfaction given.—"Exhibitor," Post Office, Cheltenham.

WANTED, a First-class TRAVELLER in the Plant, Shrub, Fruit Tree, and Seed line.—William Rollisson & Sons are desirous to engage in the above line a first class Traveller, who has been accustomed to take the usual annual journeys through Great Britain and Ireland. None need apply whose ability in the above capacity and general character will not bear the strictest investigation.—The Nurseries, Tooting.

WANTED, as WAREHOUSEMAN, a steady intelligent Man, to take charge of the Warehouse Department of a Provincial Seed Business. He must already have held a similar situation.—Apply by letter to D. A., Messrs. Fairhead & Son, 7, Borough Market, London, S.E.

WANTED IMMEDIATELY, to assist in SEED SHOP and COUNTING-HOUSE, a young Man, age 18 or 20. One who has been engaged at similar work preferred. He must write well and quick.—Apply to Messrs. Wm. Cutbush & Son, Highgate, N.

WANT PLACES.—Letters to be Post Paid.

GARDENER (Head).—Age 28; has a thorough practical knowledge of his profession in all its branches. Good reference.—H. B., *Gardeners' Chronicle* Office, W.C.

GARDENER (Head).—Age 27, single; thoroughly understands his profession. Good character, and no objection to any part.—J. W., Post Office, Weald, Sevenoaks.

GARDENER (Head).—Age 29, married, one child; has a good practical knowledge of his profession, having worked at it from his boyhood.—J. H., 86, Westbourne Street, Eaton Square, Pimlico, S.W.

GARDENER (Head), Age 27: and TWO UNDER GARDENERS, are open to engagements. The highest references for ability, sobriety, &c.—Josh. French, Melrose Hall, Putney, London.

GARDENER (Head) where two or more are kept.—Age 27; has a thorough practical knowledge of his profession in all its branches. Four years' good character.—A. B., Post Office, Ticehurst, Sussex.

GARDENER (Head).—Understands Pines, Vines, Melons, Cucumbers, and Plant Growing. Two-and-a-half years' good character.—J. H, Mr. Methven, Stanwell Nursery, Edinburgh.

GARDENER (Head), where Gardening in general is carried on.—Married, no incumbrance; good reference from last situation.—A. Z., 7, Howell Street, Hall Park, Edgware Road, W.

GARDENER (Head).—Age 28; has a thorough practical knowledge of his profession, and competent to undertake the management of Pines, Vines, Cucumbers, and Melons; also Flower and Kitchen Garden. Three years' good character.—B. B., 4, Lily Terrace, Warwick Road, Kensington.

GARDENER (Head).—Age 45, married; has for 20 years upon the most improved principles successfully cultivated Pines, Grapes, Peaches, Hothouse and Greenhouse Plants, with general Forcing, Fruit, Flower, and Kitchen Gardens. Has also had great experience in the Management of Land and Stock.—J. C., Pine-Apple Nursery, Edgware Road, W.

GARDENER (Head).—Age 28, single; thorough knowledge of his profession, including Forcing Fruits, Flowers, Vegetables, and Management of Flower and Kitchen Garden. Two years' unexceptionable character.—J. K., Mr. Dyers' Nursery, Bridgewater, Somerset.

GARDENER (Head).—Age 41, married, without incumbrance; has a thorough knowledge of his profession in all its branches, with good experience of Early and Late Forcing; also the Management of Flower and Kitchen Gardens. Good character, and can be highly recommended.—Wm. Wood & Son, Nursery, Maresfield, near Uckfield, Sussex.

GARDENER (Head), to any nobleman or gentleman.—Age 28, married, one child; a thorough practical Head Gardener; has had great experience in all branches of his profession where Early Forcing of Fruits, Flowers, and Vegetables is required; also a good Flower and Kitchen Gardener. Upwards of three years' good character from the gentleman he is about to leave.—E. R. B., Alderman Finnis, Wanstead Park, Wanstead, Essex.

GARDENER (Head).—Age 30, small incumbrance; has had practical experience in Gardening in all its branches in England, Ireland, and Scotland, including Early and Late Forcing of Vines, Peaches, Melons, Cucumbers, Strawberries, Stove and Greenhouse Plants, Pleasure Grounds, Flower, Fruit, and Kitchen Gardens. Will be disengaged on the 21st February. Three years and 7 months' character from present employer.—The Gardener, Castle Archdall, Enniskillen, Ireland.

TO NOBLEMEN AND GENTLEMEN.

GARDENER (Head).—Age 35, married; has lived nearly six years as Head Gardener where he has had the management of extensive Fruit, Vegetable, and Flower Gardens; also a great extent of Glass. Has been a successful Exhibitor at the London, Brighton, Crystal Palace, and Guildford Horticultural Exhibitions. Can have an excellent character from his present employer. Wages 75l. per year.—A. B. C., Messrs. Osborn & Sons, Nurserymen, Fulham, London, S.W.

GARDENER (Head).—Middle aged; ... practical knowledge of his profession ... understands Stock, &c. Good character.— ... Battersea Rise, S.W.

GARDENER (Head).—Age 32, married, ... brance; perfectly understands his profession ... branches. Wife can look after Poultry ... A. B., 8, Tothill Street, Westminster, S.W.

GARDENER (Head).—Age 34, married ... brance: thoroughly understands the ... and Greenhouse Plants, the Forcing of Fruits and ... Kitchen Gardening. Can also take care of ... Wife can manage Dairy and Poultry ... character.—C. H., Mr. Durrant's, Reigate, Surrey.

GARDENER (Head) or GARDENER BAILIFF over a moderate sized Farm.— ... one child; of good address; can be highly recommended ... the nobleman he is leaving and other gentlemen.— J. Perkins, 52, Market Square, Northampton.

GARDENER.—Age 27, married; well ... the Stove and Forcing Department, &c. ... —J. M., Bath Road, Bradford-on-Avon.

GARDENER.—Age 36, single; has ... knowledge of his Profession in all its branches ... be highly recommended. No single-handed place ... T. A., Mr. Weeks, Nursery, King's Road, Chelsea.

GARDENER (either Single-handed or where ... is kept).—Age 25; understands Forcing ... ing, and can be well recommended.—A. B., Mr. ... Stationer, High Street, Croydon, S.

GARDENER (Single-handed, or where ... more men are kept).—Middle-aged, married, ... Forcing in all its branches. Is leaving his present ... March. Six years' character.—Y., Messrs. Fisher & Co., Handsworth Nursery, Sheffield.

GARDENER (Under), to work in the ... Age 20.—A. L., Post Office, Wood Street, W... Essex, N.E.

GARDENER (Under).—Age 21; has ... knowledge of Stove and Greenhouse Plants, ... of Early and Late Fruits, &c. Good reference.— ... Hall, Worksop, Notts.

GARDENER (Under).—Has had five years' ... rience in Early and Late Forcing, also Flower and ... Gardens. Highest testimonials as to character ... —R. Y. Z., Post Office, Sturry, near Canterbury, Kent.

GARDENER (Under).—In a nobleman's or gentle- man's establishment where Forcing and Plant ... are carried on to some extent; has had considerable ex- perience. Three years' good character.—A. B., ... Ottershaw, Chertsey, Surrey.

HERBALIST.—To Persons wishing to establish the above Business. A young Man wishes for an engage- ment as MANAGER, having had several years' experience in the above business.—Letters post paid, Y. Z., *Gardeners' Chronicle* Office.

TO NOBLEMEN AND LANDED PROPRIETORS.

ESTATE AGENCY, at Michaelmas next, by a practical Norfolk Farmer, who thoroughly understands ... Heavy and Light Lands systems of Farming, Surveying ... Management of Woods, &c., and has had great experience ... Draining both Marsh and Upland.— ... Solicitor, St. Andrews, Norwich, Norfolk.

TO NOBLEMEN AND GENTLEMEN.

FORESTER, HEDGER, &c., now or at Whitsuntide term.—Middle-aged, without incumbrance, ... understands his profession in all its various ... Fences of any kind, Wood or Iron. ... manage a Sawmill where one is kept for the ... department, &c. Long experience and undoubted ... will be given. No objection to Ireland.—J. M., ... Killearn, near Glasgow.

TO NOBLEMEN AND GENTLEMEN.

STEWARD or BAILIFF.—Has had practical experience in the Management and Improving of Land ... in Scotland and England, Rearing, Buying and Selling ... kinds of Farm Stock, the Measuring of Land and ... the Erecting of Farm Buildings. Seven years' character ... present employer.—G. G., Post Office, Farnborough ...

FARM BAILIFF.—Middle-aged, married ... thorough knowledge of his business, both ... Light Soils; Cultivation and Management of ... ing, Rearing, and Buying of Stock. Seven years' ... Y. Z., Mr. Cattell's, Westerham, Kent.

BAILIFF.—A native of one of the best agricultural counties in Scotland: a thorough practical ... tomed to Draining and Improving Lands, Management ... Sale of Stock, both Sheep and Cattle, also Woods ... monials of the highest order.—J. B., Messrs. ... & Son, 27, Great George Street, Westminster, S.W.

BAILIFF.—Thoroughly acquainted with ... branch of Agriculture, both Heavy and Light ... the most approved system; Growing Roots, ... Breeding, Buying, and Selling of Stock, having ... Management of a large Farm. Reference ... character. Would undertake to Manage Dairy ... Messrs Flanagan & Son, 9, Mansion House Street ...

CUPISS'S CONSTITUTION BALLS —This justly celebrated Medicine after 25 years' ... tience is proved to be the best and cheapest for HORSES ... NEAT CATTLE, cheaper because required to be ... once a week, preserving health, vigour and condition ... cost too is saved by the food turning to a better account ... is an acknowledged fact, Horses will keep up their ... better upon three feeds of Oats daily when a Ball is ... given than with four feeds without the Balls. Neat Cattle ... also fatten much faster with the occasional use of the ... arrive at a greater state of perfection than they can ... without the Balls. Any one doubting this statement ... try the use of them and prove for himself, for the more ... are used the better they are appreciated. The Balls ... found admirable for Coughs, Colds, Strangles, Influenza, ... mation of the Eyes, swelled Legs, and other diseases ... to Horses and Neat Cattle, as may be seen by the ... and testimonials with each packet.

The Balls are prepared by Francis Cupiss, Diss, ... Author of the Prize Essay on the Diseases of the Liver ... Horse. And may be had of all Patent Medicine Vendors ... Packets (6 balls each), 3s. 6d. per packet, or 7 Packets ... with full directions. Persons using the Balls may ... Proprietor gratuitously by enclosing a stamp ...

The Gardeners' Chronicle Newspaper.

SATURDAY, FEBRUARY 23, 1861.

LINGHAM, BROTHERS, 170, Hampton Street, [illegible], Sole Manufacturers of the Improved MONO-[illegible] WOOD LABELS, for Garden Borders, Flower [illegible] in boxes of 100 each. These Labels have now stood the [illegible] opinion for many years, and are acknowledged by [illegible] used them as superior to any offered to the public, [illegible], and economy in price.—Sole Agents in [illegible], Messrs. DEANE & Co., Horticultural Implement [illegible], 46, King William Street, London Bridge, E.C.

PATENT GUTTA PERCHA SOLES.—[illegible] TO GARDENERS.—The Gutta Percha Company [illegible] to acknowledge the receipt of the following [illegible] G. GLENNY, Esq., the celebrated Florist:—

"420, Strand, London.

"Gentlemen,—I have worn Gutta Percha Soles and Heels [illegible] two years, and being so much in a garden as I neces-[illegible] weathers, and with the ground in all states, I [illegible] cannot be without them. As a matter of economy [illegible] Gardeners to use them, for they may [illegible] times by warming the material at [illegible] the thick parts to the worn parts. [illegible] enough. I think it the duty of all [illegible] wet their feet to adopt a [illegible] that completely defies damp. Many a gardener would [illegible] and rheumatism by the use of Gutta Percha Soles.

"Your obedient servant, G. GLENNY."

Every variety of Gutta Percha articles, such as Mill Bands, [illegible], Soles, Sheet, Pump Buckets, Fire Buckets, Bosses, [illegible], Flasks, Bottles, Bowls, Chamber Vessels, Toilet [illegible], Sponge Bags, Curtain Rings, Galvanic Batteries, [illegible] Trays, &c. manufactured by the Gutta Percha Company, and sold by their wholesale dealers in town or [illegible].—The Gutta Percha Company, Patentees, 18, Wharf [illegible], City Road, London, E.C.

DINNEFORD'S PURE FLUID MAGNESIA has been, during 25 years, emphatically sanctioned by the [illegible] Profession, and universally accepted by the Public, as [illegible] Remedy for Acidity of the Stomach, Heartburn, [illegible], Gout, and Indigestion, and as a Mild Aperient for [illegible] constitutions, more especially for Ladies and Children. [illegible] with the Acidulated Lemon Syrup, it forms an [illegible] Effervescing Draught, in which its Aperient qualities [illegible] increased. During Hot Seasons and in Hot Climates, [illegible] use of this simple and elegant remedy has been [illegible] highly beneficial.—Manufactured (with the utmost [illegible] to strength and purity) by DINNEFORD & Co., 172, New Bond Street, London, W.; and sold by all respectable Chemists throughout the Empire.

DR. DE JONGH'S

(KNIGHT OF THE ORDER OF LEOPOLD OF BELGIUM)

LIGHT BROWN COD LIVER OIL, prescribed by the most Eminent Medical Men throughout [illegible] world as the safest, speediest, and most effectual remedy for CONSUMPTION, CHRONIC BRONCHITIS, ASTHMA, COUGHS, RHEUMATISM, GOUT, GENERAL DEBILITY, DISEASES OF THE SKIN, RICKETS, INFANTILE WASTING, AND ALL SCROFULOUS AFFECTIONS.

IS INCOMPARABLY SUPERIOR TO EVERY OTHER VARIETY.

SELECT MEDICAL OPINIONS.

DR. JONATHAN PEREIRA, F.R.S.—"It was fitting that [illegible] author of the best analysis and investigations into the pro-[illegible] of this Oil should himself be the purveyor of this im-[illegible] medicine. I am satisfied that for medicinal purposes [illegible] Oil can be procured."

DR. GRANVILLE, F.R.S.—"Dr. Granville has found that Dr. De Jongh's Light Brown Cod Liver Oil produces the desired effect in a shorter time than other kinds, and that it does not cause the nausea and indigestion too often consequent on the administration of the Pale Oil."

DR. BARLOW, Physician to Guy's Hospital.—"I have been [illegible] satisfied with the effects of Dr. de Jongh's Oil, and believe [illegible] be a very pure Oil, well fitted for those cases in which the [illegible] of that substance is indicated."

DR. BANKS, King's Professor of the Practice of Medicine at the University of Dublin.—"I have in the course of my prac-[illegible] extensively employed Dr. de Jongh's Light-Brown Cod [illegible] Oil, and I have no hesitation in stating that I consider it [illegible] best of all the specimens of Oil which have ever come under [illegible] notice."

DR. DE JONGH'S LIGHT BROWN COD LIVER OIL is sold only in [illegible] half-pints, 2s. 6d.; pints, 4s. 9d.; quarts, 9s.; cap-[illegible] and labelled with his stamp and signature, *without which [illegible] can possibly be genuine*, by respectable Chemists.

SOLE AGENTS:

ANSAR, HARFORD, & Co., 77, Strand, London, W.C.

CAUTION.—BEWARE OF PROPOSED SUBSTITUTIONS.

ALL AFFLICTED WITH WEAK EYES may obtain instant relief by using DR. WARNER'S EYE WATER, [illegible] removes all inflammation arising from cold, dust, or [illegible] constitutional causes.—Sold in bottles, 2s. 9d. and 4s. 6d., by HANNAY, Oxford Street, W.; SANGER, Oxford Street, W.; [illegible], St. Paul's Churchyard, E.C.; HOOPER, King William Street, City, E.C., and all Chemists. Of whom may also be [illegible] DR. WARNER'S LOTION, a certain cure for sore and [illegible] legs, burns, and scalds, and bites of insects, and in [illegible] of inflammation is invaluable. In bottles, 1s. 1½d. and 2s. 9d.

PARR'S LIFE PILLS act as a warm and balsamic Aperient, removing without the slightest pain or incon-[illegible] all obstructions, and restore the whole system to a [illegible] of health and comfort.

PARR'S PILLS

[illegible] be relied on as the best medicine for indigestion, sick [illegible], heartburn, loss of appetite, disorders of the stomach [illegible] liver, redundancy of bile, dizziness of the eyes, violent [illegible] across the forehead, impaired memory, restlessness and [illegible] dreams, stuporific dozing, flatulency, costiveness, &c.

[illegible] in boxes, price 1s. 1½d., 2s 9d., and in family packets, [illegible] each, by all Chemists and Medicine Vendors. Sole Pro-[illegible], T. ROBERTS & Co., 8, Crane Court, Fleet Street, [illegible]. *** Ask for PARR'S LIFE PILLS.

KEATING'S COUGH LOZENGES.—Statistics show that 50,000 persons annually fall victims to pul-[illegible] disorders, including Consumption, diseases of the [illegible], and the respiratory organs. Prevention is at all times [illegible] than cure; be therefore prepared during the wet and [illegible] season with a supply of KEATING'S COUGH LOZENGES, which possess the virtue of averting as well as of curing a [illegible] or cold; they are good alike for the young or for the [illegible].—Prepared and sold in boxes, 1s. 1½d., and tins, 2s. 9d., [illegible], and 10s. 6d. each, by THOMAS KEATING, Chemist, &c., [illegible] St. Paul's Churchyard, London. Retail by all Druggists, &c.

PAPER COLLARS (REVERSIBLE), 6d. per dozen; Post free, 8d.—Patentee, ARTHUR GRANGER, Paper Manufactory, 308, High Holborn, W.C.

CHUBB'S PATENT SAFES, the most secure against Fire and Thieves.

CHUBB'S FIRE-PROOF STRONG ROOM DOORS.

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HEAL AND SON have patented a method of making a Spring Mattress portable. The great objection to the usual Spring Mattress is its being so heavy and cumbersome.

The SOMMIER ELASTIQUE PORTATIF is made in three separate parts, and when joined together has all the elasticity of the best Spring Mattress. As it has no stuffing of wool or horse-hair, it cannot harbour moth, to which the usual Spring Mattress is very liable; the prices, also, are much below those of the best Spring Mattresses, viz.:—

3 feet wide by 6 feet 4 inches long	..	..	£2	5	0
3 feet 6 in.	,,	,,	2	10	0
4 feet	,,	,,	2	15	0
4 feet 6 in.	,,	,,	3	0	0
5 feet	,,	,,	3	5	0
5 feet 6 in.	,,	,,	3	10	0

The SOMMIER ELASTIQUE PORTATIF therefore combines the advantages of elasticity, durability, cleanliness, portability, and cheapness.

An Illustrated Catalogue of Bedsteads, Bedding, and Bed-Room Furniture sent free by post on application.

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FORGERY AND FRAUD.—Understanding that there is at present an attempt being made by some unprincipled parties in our city to deceive the public with an inferior Starch, made up in packets closely resembling the GLENFIELD STARCH, we consider it our duty to warn our fair readers to be careful when purchasing to see that the word "GLENFIELD," and the maker's name, "ROBERT WOTHERSPOON," is on every package, as none others are genuine.

When you ask for Glenfield Starch see that you get it, as inferior kinds are often substituted.

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METCALFE, BINGLEY, AND CO.'S New Pattern and Penetrating Tooth Brushes, Penetrating unbleached Hair Brushes, Improved Flesh and Clothes Brushes, and genuine Smyrna Sponges; and every description of Brush, Comb, and Perfumery for the Toilet. The Tooth Brushes search thoroughly between the divisions of the Teeth and clean them most effectually—the hairs never come loose. M., B., & Co.'s new and delicious perfumes the Fairy Bouquet and the Oxford and Cambridge Bouquet, in bottles 2s., 3s. 6d., and 5s. METCALFE'S celebrated Alkaline Tooth Powder, 2s. per box.—Sole Establishment, 130B and 131, Oxford Street, 2d and 3d doors west from Holles Street, London, W.

WHITE AND SOUND TEETH are indispensable to personal attraction, and to health and longevity, by the proper mastication of food. ROWLANDS' ODONTO, or Pearl Dentifrice, compounded of Oriental ingredients, is of inestimable value in preserving and beautifying the Teeth, strengthening the Gums, and in giving a delicate fragrance to the Breath. It eradicates Tartar from the Teeth, removes spots of incipient decay, and polishes and preserves the enamel, to which it imparts a pearl-like whiteness. Price 2s. 9d. per box.—Sold at 20, Hatton Garden, E.C.; and by Chemists and Perfumers. Ask for "ROWLAND'S Odonto."

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ARTIFICIAL TEETH ON A NEW AND IMPROVED PRINCIPLE.—Mr. ESKELL'S PATENTED INVENTION (protected by her Majesty's Royal Seal, July, 1860) for adapting Artificial Teeth on Moveable Bases by Self-adhesion, are fixed without springs or any fastenings, without pain or extraction, restore perfect articulation and mastication, rendering detection impossible, and last a lifetime. "An admirable contrivance for remedying the defects of nature without requiring new sets of teeth."—*Sun*, July 20. "Will doubtless be extensively patronised."—*Court Circular*, July 21. "Unrivalled for its utility and economy."—*Morning Post*, July 20.—Consultations free. Terms strictly moderate.—8, Grosvenor Street, Bond Street; Old Steyne, Brighton; Bennett's Hill, Birmingham.

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THE COTTON MANUFACTURE OF GREAT BRITAIN, systematically investigated; with an introductory view of its comparative state in Foreign Countries. By ANDREW URE, M.D., F.R.S. New edition, revised and completed to the present time, by P. L. SIMMONDS. In two volumes, with 150 illustrations. Vol. I., post 8vo, cloth. 5s.

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HORTICULTURAL GARDENS.—The *Gardeners' Chronicle* of May 12, containing Mr. NESFIELD'S COLOURED PLAN for the NEW GARDEN at Kensington Gore, is still on Sale at the Office, 41, Wellington Street, Covent Garden, W.C., and will be sent by post on receipt of six stamps.

Now ready, price 2s. 6d.,

FOLIA ORCHIDACEA, Part IX. Containing the conclusion of Pleurothallis.

Parts I. to VIII., price 2s. 6d. each, may still be had.

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GEORGE MILLS' TREATISE ON THE CULTURE OF THE CUCUMBER, MELON, SEAKALE, AND ASPARAGUS will be sent free by post on the receipt of 3s. 6d. in postage stamps. See *Gardeners' Chronicle*, Jan. 12.

GEORGE MILLS, Uxbridge Road, Ealing, Middlesex.

GEORGE MILLS' TREATISE ON THE CULTURE OF THE PINE will be sent free by post on the receipt of 2s. 6d. in postage stamps. See *Gardeners' Chronicle*, Jan. 12.

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VERSCHAFFELT'S ILLUSTRATION HORTICOLE.—The Second Number of 1861 is just published, and contains the following Coloured Plates:—

ROSE (TEA) PRESIDENT. | BEGONIA IMPERIALIS.

METHONICA GRANDIFLORA.

A SPECIMEN NUMBER can be obtained gratis by writing to the Editor, AMBROISE VERSCHAFFELT, Nurseryman, Ghent, Belgium. Price 14s. 6d. a year, free.

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BRADBURY & EVANS, 11, Bouverie Street, Fleet Street.

PUNCH'S HISTORY OF THE LAST TWENTY YEARS.

☞ The Re-issue of "Punch," in Volumes, will commence on March 1. Full particulars and Prospectuses may be obtained at the Punch Office, 85, Fleet Street. Orders received by all Booksellers in town and country.

News of the Week.

IN the House of Lords on Friday Lord St. LEONARDS called attention to the proposed scheme of building new courts of law in a central position, and strongly deprecated the appropriation of the Suitors' Fee Fund of the Court of Chancery for their erection. The LORD CHANCELLOR defended the scheme, and said that there could be no possible objection to the employment of the Suitors' Fund if a guarantee were given by the Government for any claims that might be made upon it. On Monday the LORD CHANCELLOR gave notice that on an early day he should move for a Select Committee to inquire into the laws relating to persons entitled to sue for divorces in the Courts of England and Scotland. On Tuesday the Indictable Offences (Metropolitan Districts) Bill and the Constructive Notice Amendment Bill passed through committee. Earl GREY moved for copies or extracts of despatches received by HER MAJESTY'S Government explaining the objects of the expedition ordered to the Yang-tse-Kiang. He entered at great length into the causes of the China war, and said that it had left our trade on a more precarious footing than it was before. Lord WODEHOUSE defended the policy of the war, and the Earl of ELLENBOROUGH condemned it as likely to lead to the perpetration of fresh injustice and renewed calamities. The motion was then agreed to. On Thursday the Earl of DERBY gave notice that on Thursday next he should call the attention of the House to the displacement of the houses of the labouring classes in the metropolis in consequence of the introduction of railways and other public works. The Marquis of NORMANBY gave notice that on Tuesday next he would submit a resolution expressing the regret of the House that the Government had accepted Mr. TURNBULL'S resignation of his situation at the Record Office on the ground of his religious opinions. The Indictable Offences (Metropolitan District) Bill, the Fictitious Savings Banks Bill, and the Constructive Notice Amendment Bill were read a third time and passed.

In the Commons on Friday Sir E. COLEBROOKE obtained leave to introduce a Bill to provide for the formation of tramways on turnpike and statute labour roads in Scotland; and Mr. GARNETT obtained leave to introduce a Bill regulating the use of locomotives on public roads. On Monday the House went into committee on the Bankruptcy and Insolvency Bill. On the 42d clause, which provided for the payment of compensations to the holders of abolished offices, Sir H. WILLOUGHBY objected to the clause as entailing another charge on the consolidated fund. After some discussion the clause was carried by a majority of 50, the numbers being 78 to 28. The CHAIRMAN was then ordered to report progress. The Parochial Assessments Bill was read a second time on the understanding that it would hereafter be referred to a Select Committee. The Committee on the Red Sea and India Telegraph Bill was nominated after some discussion on the question whether the company had fulfilled their contract. On Tuesday Mr. LOCKE KING obtained leave to bring in a Bill to extend the franchise in counties, and Mr. BAINES obtained leave to bring in a Bill to extend the franchise in boroughs in England and Wales. Mr. W. WILLIAMS moved a resolution to the effect that real property should be made to pay the same probate duty as that now payable on personal property. The CHANCELLOR of the EXCHEQUER opposed the motion, which was negatived, on a division, by 167 to 51. Mr. HUBBARD moved for a select committee to inquire into the present mode of assessing and collecting

the income and property tax, with a view to ascertain whether any mode of levying it can be adopted so as to render it more equitable. The CHANCELLOR of the EXCHEQUER opposed the motion, which was carried, on a division, by 131 to 127, leaving Ministers in a minority of 4. Mr. MILNES obtained leave to bring in a Bill to make better provision for granting superannuations and other allowances to officers of prisons in England and Wales, and Sir M. PETO obtained leave to bring in a Bill to make further provision for the burial of Nonconformists. On Wednesday Mr. HADFIELD moved the second reading of the Qualifications for Offices Bill, the object of which was to render unnecessary the declaration now made by magistrates and others that they would not use the power or influence accruing from their office to the detriment of the Church of England. Mr. NEWDEGATE moved as an amendment, that the Bill be read a second time that day six months. On a division, the amendment was negatived by 93 to 80, and the Bill was read a second time. Mr. DILLWYN moved the second reading of the Trustees Charities Bill, the object of which was to provide that Dissenters might become trustees of endowed schools, unless it was expressly stipulated in the deed of foundation that the school was founded for a particular sect. Mr. SELWYN moved as an amendment that the Bill be read a second time that day six months. On a division the amendment was negatived by 164 to 157, and the Bill was read a second time. Mr. ALCOCK obtained leave to bring in a Bill for voluntary commutation of church rates. Sir J. TRELAWNY obtained leave to bring in a Bill allowing affirmations or declarations to be made instead of oaths in the case of persons who have conscientious objections to take an oath. On Thursday the House went into committee on the Bankruptcy and Insolvency Bill, and made progress to the 117th clause. A long discussion took place on clause 81, abolishing the distinction between traders and non-traders, but it was ultimately agreed to without amendment. The House went into committee on the Bank of England Payments Bill, when Sir J. PAXTON moved as an amendment, that the duration of the proposed contract with the Bank of England be 10 instead of 25 years. The CHANCELLOR of the EXCHEQUER opposed the amendment, which was ultimately withdrawn, and the Bill passed through committee. The Markets and Fairs (Ireland) Bill, and the SOLICITOR-GENERAL's Bills for the amendment of the Criminal Law were read a second time.

The Italian Parliament was opened on Monday by KING VICTOR EMMANUEL in person. In his speech from the throne HIS MAJESTY announced that the fall of Gaeta had worthily crowned the exploits of the army and navy, and that Italy was now almost entirely free and united. He expressed regret that the EMPEROR OF THE FRENCH, though assuring to them the benefits of non-intervention, had seen fit to recall his envoy; but declared that this act had not diminished their feelings of gratitude or their confidence in the alliance which France and Italy had indissolubly formed on the fields of Magenta and Solferino. Of England he said that the Government and people of "that ancient cradle of liberty" had firmly proclaimed the rights of the Italians to dispose of themselves, and they would preserve an imperishable remembrance of the support her good offices had afforded them. His MAJESTY congratulated the Chambers on the renewed diplomatic intercourse with Prussia, and said that he had sent an Ambassador to the new KING as a proof of their consideration and their sympathy for the noble German nation, which he hoped would be more and more convinced that the constitution of Italian unity could not injure either the rights or interests of other nations. He expressed his hope that the Parliament would not hesitate to give his Government the means of completing their warlike preparations by land and sea, and indirectly alluded to the Venetian question, by saying that his voice was once raised with boldness, but it was as wise to wait at the right time as to dare at the right time. Devoted to Italy he had risked his Crown for her sake; but no one had the right to risk the existence and the destinies of a nation. On Thursday the Government presented to the Senate a project of law according the title of King of Italy to VICTOR EMMANUEL and his successors. The project was received with great enthusiasm. The EX-KING and QUEEN of Naples arrived at Rome on Friday, and after a stay of a few days will proceed to Munich, accompanied by the QUEEN DOWAGER.

A telegram from Vienna states that a Royal rescript has been issued convoking the Diet at Buda for the 2d April, in order to make arrangements for the coronation of the EMPEROR OF AUSTRIA as King of Hungary. It appears, however, that the state of affairs in Hungary is becoming very serious, and that several districts, among which are Raab, Somogy, Peterwardein, and Buda, are about to be declared in a state of siege. The Judicial Conference of Pesth has demanded the immediate re-establishment of the Hungarian laws, and the Municipality of Buda has resolved upon excluding all non-Hungarian residents in that city from the exercise of electoral rights.

The latest news from the United States announces the secession of Texas from the Union, and the refusal of the PRESIDENT to comply with the demand of South Carolina for the surrender of Fort Sumter. The Peace Conference, proposed by Virginia, met at Washington on the 4th inst., under the presidency of Ex-President TYLER, but as the delegates had decided to sit with closed doors nothing was known of their proceedings.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family continue at Buckingham Palace. On Friday the Queen walked in the gardens of Buckingham Palace. The Duchess of Kent arrived on a visit to her Majesty. The Prince Consort presided in the afternoon at a meeting of the Fine Arts Commission. The Princesses Alice and Helena and Prince Leopold visited the South Kensington Museum. On Saturday Baroness Brunnow, wife of the Russian Ambassador, was presented to her Majesty the Queen at an audience at Buckingham Palace, by Lady John Russell. The Queen and Princess Alice and the Princesses Helena and Louisa, rode on horseback in the Riding House. In the evening her Majesty had a dinner party. Prince Arthur attended the performance at Her Majesty's Theatre. On Sunday morning the Queen, the Princesses Alice, Helena, and Louisa, Prince Leopold, and Prince Arthur attended Divine service in the private chapel. The Rev. H. Melvill preached the sermon. On Monday morning the Queen and Prince Consort walked in the garden of Buckingham Palace. In the afternoon the Queen, accompanied by the Princesses Alice and Beatrice, took a drive in an open carriage and four. In the evening her Majesty had a dinner party. Prince Arthur and Prince Leopold attended the performance at the Princess's Theatre. On Tuesday the Queen and Prince Consort walked in the garden of Buckingham Palace. The Prince Consort presided at a meeting of the Fine Arts Commission. The Duchess of Kent took a carriage drive. In the afternoon the Prince of Wales arrived at the Palace from Cambridge. The Prince Consort went to the Trinity House on Tower Hill. In the evening the Queen and Prince Consort, accompanied by the Prince of Wales and the Princess Alice, honoured the performance at the Adelphi Theatre with their presence. On Wednesday morning the Prince of Wales left the Palace for Cambridge. The Princess Alice visited the Duchess of Cambridge and Princess Mary at St. James's Palace. In the afternoon the Queen held the second *levée* of the season in St. James's Palace, when 104 noblemen and gentlemen had the honour of being presented. In the evening her Majesty had a dinner party. On Thursday morning the Queen and Princess Alice walked in the garden of the Palace. The Duchess of Kent took a carriage drive. The Princess Alice visited the Princess Mary of Cambridge at St. James's Palace. It is understood that the Queen, Prince Consort, and Royal family will leave Buckingham Palace on Tuesday for Osborne, where the Court will remain a fortnight.

THE PRINCE OF WALES visited Ely Cathedral on Monday. On Tuesday his Royal Highness arrived at Buckingham Palace from Cambridge, and on Wednesday, returned to Madingley Hall.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of the First Lord of the Treasury, in Downing Street. Another Council was held on Wednesday.

COURT APPOINTMENTS.—The Queen has appointed Dr. William Jenner, M.D., Professor of Pathological Anatomy in University College, to be Physician Extraordinary to her Majesty, in the room of the late Dr. Baly. The Rev. J. B. Lightfoot, Fellow and Tutor of Trinity College, Cambridge, has been appointed [illegible] lain to the Prince Consort, in the place of [illegible] now Bishop of Worcester.

PARLIAMENTARY MOVEMENTS.—The Aberd[illegible] election has terminated in the return of Mr. L[illegible] Conservative candidate, by a majority of 1[illegible] Hon. A. Gordon, the numbers being 851 [illegible] Pembroke election terminated on Thursday [illegible] of Sir Hugh Owen, the Liberal candidate, [illegible] of 86.—The nomination for the county of Cork [illegible] on Thursday, when Colonel Roche was put [illegible] by the Liberals, and Mr. Leader by the Conserv[illegible] A poll was demanded, which was fixed for M[illegible] understood that Dr. Lyons is about to retire [illegible] presentation of the city of Cork.—Sir Alexander [illegible] son has been selected by the Liberal party at [illegible] candidate for the seat about to be vacated [illegible] —Lord Stanley is mentioned as likely to [illegible] didate in the Conservative interest for [illegible] about to be created for South Lancash[illegible] expected that he will be returned without [illegible] Mr. Thomas Brassey, jun., and Mr. John [illegible] be brought forward as candidates for the new [illegible] of Birkenhead, the former in the Liberal, the [illegible] the Conservative interest.

THE VOLUNTEER MOVEMENT.—The Nation[illegible] Association held its second annual meeting [illegible] Rooms on Saturday. Lord Herbert of Lea, the [illegible] dent, took the chair, and addressed the meeting [illegible] length. His lordship said that when he [illegible] office in 1859 there were but 13 corps of volun[illegible] the country, and the numbers did not exceed 1[illegible] There are at this moment more than one corps [illegible] man in 1859, the number of corps now exist[illegible] about 1500, and the men enrolled amount [illegible] 140,000. His Royal Highness the Duke [illegible] bridge had consented to act as President [illegible] ensuing year; and it had been arrange[illegible] British colonists may compete for the Queen[illegible] other prizes, in addition to a silver medal [illegible] designed for competitors from colonial [illegible] The balance-sheet for the past year was submi[illegible] the meeting and adopted. The statement show[illegible] gross receipts since the formation of the society [illegible] 8452*l*., and the balance now in hand, [illegible] meeting was addressed by Lord Elcho, Lord [illegible] Earl de Grey and Ripon, Sir John Burgoyne, [illegible] Colonel Gladstone, Captain Damer, M.P., and [illegible] gentlemen, and it was unanimously resolved that [illegible] retaining the power of holding the annual meeting [illegible] such parts of Great Britain as may appear de[illegible] the objects of the association will be best promoted [illegible] holding the annual meeting for 1861 at Wimbled[illegible] Lord Dalhousie, Lord Herbert of Lea, and Sir De Lacy Evans were added to the council, and Lord De [illegible] Lord Bury, Sir Joseph Paxton, Colonel North, [illegible] Major Walker were elected extraordinary members [illegible] the council for 1861.

Foreign.

FRANCE.—M. dela Guerronnière's pamphlet, "[illegible] Rome, and Italy," has been copied in exte[illegible] nearly every paper in Paris, and continues to [illegible] considerable attention throughout Europe. [illegible] the history of the personal endeavours of the Em[illegible] and of French diplomacy, to induce the Pope [illegible] such a form of government as would rec[illegible] Holiness to his people, and place him [illegible] perpetual and united protection of all the [illegible] Powers of the world. It shows from the E[illegible] letters to the Pope, and from official despatches [illegible] every effort has been made on the part of France [illegible] the Pope and his Government respected at [illegible] abroad; that the Pope has turned a deaf ear to [illegible] ties, and that his Government preferred to subm[illegible] lution, loss of territory, and the scandal of [illegible] able to govern without foreign bayonets, [illegible] listen to the advice of France, respect the pub[illegible] of Europe, and promote the real interests [illegible] by making its head revered as the spiritual [illegible] Roman Catholic faith. It says that the spiritu[illegible] of the Papacy is not endangered, but the [illegible] power is now passing through a grave crisis. [illegible] of this crisis are, it says, to be found in the [illegible] between the Papacy and Italy, and the distr[illegible] the Vatican and the Tuileries. The whole [illegible] the pamphlet is concentrated in the following [illegible] with which the pamphlet concludes:—

"But, if Italy is free, she is not constituted, and [illegible] to her organisation is Rome. As long as the [illegible] antagonism exists which has been created betwe[illegible] ments of strength the union of which respon[illegible] interests, Italy and the Papacy will not be able [illegible] themselves. Let them unite, and from that alliance [illegible] their common greatness. It is as difficult to imagine [illegible] without a Pope, as to imagine a Pope without Italy [illegible] connected by tradition, by history, by the universal [illegible] all Catholic nations towards the Head of the Church [illegible] the Emperor went to war with Austria his intention [illegible] re-establish that precious union. On the day [illegible] that great idea is accomplished we shall [illegible] Papacy reassuming in modern society an auth[illegible] with its origin and mission. We shall be [illegible] to the political strength of her independence [illegible] strength of that quite exceptional position which [illegible] the land of spiritual sovereignty, the dominion [illegible] extends to the extremity of the world. Meantime [illegible] all that has taken place—despite so many [illegible] generous intervention of France—despite [illegible] injustice which have not shaken his devotion [illegible] we are convinced of it, will leave his sword at Rome [illegible] the safety of the Holy Father. Faithful to his [illegible]

... by the national will and as Eldest Son of the ... cannot sacrifice Italy to the Court of Rome, nor ... Unmoved like the conscience ... of a great people, he will await with patience ... when the Pontifical Government, ... as regards dangerous allies who have imposed ... will know how to distinguish between ... everything to ruin it, and those who have ... to save it."

The Plenipotentiaries of the different Powers interested in the treaty of 1856 met in conference on Tuesday at the Hotel of Foreign Affairs to take into consideration the condition of Syria. It is understood that after a warm discussion, the Plenipotentiaries decided that the French occupation should be prolonged for a period of two or three months beyond the term originally fixed. The Turkish Plenipotentiary is said to have protested against any occupation longer than that specified in the Convention. The Plenipotentiaries ... agreed to refer to their respective Governments, and to meet again in eight days.—The Emperor has offered the ex-King and Queen of Naples the Chateau of Pau if they think proper to reside in France, but their Majesties have not yet accepted the offer.—The *Moniteur* records with satisfaction the hope expressed by Lord ... that the soldiers of England and France would ever be found fighting side by side as in the Chinese war. "Such a noble desire," adds the *Moniteur*, "is shared equally by us on this side of the water." The *Moniteur* also contains a decree according to which raw tissues of cotton destined to be printed in France for re-exportation will be temporarily admitted free of duty. A direct transaction has been arranged between the Imperial Bank of Russia and the Bank of France for the exchange of 30,000,000 of francs in gold for the same amount in silver.—M. Mirès & Co., the managers of the Railways' Bank, contractors for the Turkish and other foreign loans, railway contracts, and domestic enterprises on a scale involving many millions of francs, suspended payment on Tuesday, and Count de Germiny, governor to the Bank of France, has been appointed to liquidate the estate. M. Mirès himself has been arrested and lodged in the prison at Mazas, several other persons connected with his transactions are under the control of the authorities, and others are said to be deeply implicated, including persons of high station. A distinguished colleague of M. Mirès in the direction of his railway bank—the Viscount de Richemont, Collector of Taxes in Paris, died suddenly on Tuesday evening, and though his death is attributed by the official papers to apoplexy, it is reported that he committed suicide, as he had been either threatened with or apprehended arrest. The liabilities of the firm are estimated at from 200 to 300 millions of francs.—M. Eugène Scribe, of the French Academy, the celebrated dramatist, was struck with apoplexy on Wednesday when driving in his carriage. His death was instantaneous. The Civil Tribunal of the Seine gave judgment on Friday in the Bonaparte-Paterson case, nonsuiting the Paterson family on the ground that the question was conclusively settled by the Emperor's family council in 1860, but abstaining from pronouncing any opinion on the merits of the case. The Paterson family are expected to appeal.—The Emperor has decided that a statue shall be erected at Pau to the late Marshal Bosquet, and, as the Marshal's mother has no private fortune, his Majesty has granted her a pension of 6000 francs. — Several naval engineers, together with officers of the Staff, are about to sail for Algiers. Their departure is connected with the fortifications of the coast of Algeria, which are to be completed with the greatest activity.

Spain.—Accounts from Madrid state that a ministerial crisis had occurred. Two of the Ministers, M. Zavala and M. Calderon-Collantes, had threatened to resign in the event of M. Posada, the Minister of the Interior, who had been directly accused of falsehood in the Congress, remaining in the Cabinet. It was rumoured however that the Duke of Tetuan had removed the ill feeling among his colleagues. Spain and Morocco have agreed that the Moors shall immediately complete the payment of 200,000,000 reals. The Customs of Tangier and Mogador will be mortgaged to Spain as a guarantee for the payment of the remainder of the war indemnity. The evacuation of Tetuan will take place at a fixed date.

Denmark.—In the sitting of the Council of State on the 19th the convocation of the Holstein Diet was fixed for the 6th of March. The purport of the communications to be made to the Diet is not yet known.—The *Berlingske Tidende* declares that no difference of opinion on questions of principle has existed between the Ministers, and that complete unanimity now prevails between them. The same journal says that the statement of the *Flyvepost* respecting the intention of the King to grant a constitution for the whole kingdom, and to institute two Chambers, is without any foundation.

Hungary.—A royal rescript convokes the Diet at Buda for the 2d April, in order to make arrangements for the coronation of the Emperor as King of Hungary, to receive communication of the inaugural diploma, and to elect the Palatine of Hungary. A telegram from Vienna announces that the state of affairs in Hungary is becoming very serious, and that several districts, among which are Raab, Somogy, Pieterwardein, and Buda, will be declared in a state of siege. The Judicial Conference of Pesth, on the recommendation of the Sub-Committee, has resolved on the abrogation of the Austrian penal law and the rules laid down by Austrian law for criminal trials, the immediate introduction of the Hungarian Criminal Code of 1844, with the regulations for criminal trials and the re-establishment of the Press Laws of 1848, with trial by jury. The Municipality of Pesth has forwarded an address to the Emperor, demanding the dismissal of the Ban of Croatia, and the appointment of a Hungarian in his place, and the municipality of Buda has resolved upon excluding all non-Hungarian residents in that city from the exercise of electoral rights. In a conference which took place on Friday, the Obergespänne addressed a declaration to the Court Chancellor, Baron Vay, stating that it was against the national law and their conscience to impose upon the country the obligation of paying the taxes before a decision had been taken by the Diet. The Prince Primate has accepted from the Obergespänne the mission of laying before the Emperor their petition for the re-establishment of the laws of 1848 and the convocation of the Diet at Pesth. The Court Chancellor, Baron Vay, in his reply to the Obergespänne, says:—"The diploma of October has created mutual obligations. The King has faithfully redeemed his pledge, and the country may now also fulfil its engagements by supporting the functionaries of the Government." M. Asboth, General of the Honved Regiments of 1848, has been arrested at Lugos and conducted to Temesvar, and orders to arrest several other Hungarians left Vienna on the 15th.

Croatia.—The General Congregation of Croatia has sent a deputation to the Ban, requesting him to raise the state of siege at Fiume. The Congregation has since been transferred from Fiume to Buccari, on account of the state of siege at the former place. It is said that the state of siege was declared because it was discovered that, notwithstanding the vigilance of the Austrian police, Fiume was the place of rendezvous for the leaders of the Hungarian insurrection at home with those abroad. It is asserted that General Klapka, who was supposed to have remained constantly at Naples, was within the last month in the neighbourhood of the Adriatic.

Italy.—The Italian Parliament was opened at Turin on Monday by the King in person. The following is a summary of his Majesty's speech:—

"Italy, almost entirely freed and united, confides in your wisdom, and it is on you devolves the task of her organisation. You will establish the greatest administrative liberty, taking care at the same time that her unity be protected. Public opinion is favourable to our national tendencies. The Emperor of the French, although assuring to us the benefits of non-intervention, has deemed it fitting to recall his Envoy. This act has excited our deep regret, without, however, affecting our gratitude. At Magenta and Solferino France and Italy have riveted ties of amity which will be indissoluble. England, the ancient home of liberty, has recognised our right to dispose of ourselves. We shall preserve an imperishable remembrance of the support which her good offices have afforded us. An illustrious Prince having ascended the throne of Prussia, I sent my Ambassador in order to testify to him our sympathy for his person and for the German nation. You will assist my Government in completing the armaments. In the consciousness of its strength the Kingdom of Italy will be able to follow the counsels of prudence. My voice was once raised with boldness, but it is as wise to wait at the right time as it is to dare at the right time. Devoted to Italy, I have risked my crown for her sake; but no one has the right to risk the existence and the destinies of a nation. The taking of a formidable fortress has worthily crowned the exploits of the army and navy. Thus they, as well as the volunteers, have acquired a renown which has given the country a just confidence in itself, and it is with pleasure that I express to the first Parliament of Italy the joy which, as King and soldier, I feel on this account."

On Thursday the Government presented to the Senate a project of law according the title of "King of Italy" to Victor Emmanuel and his successors. The project was received with loud cheers. The ex-King Francis II., with the Queen and suite, embarked on the morning of the 14th, in the French steam frigate Mouette for Terracina. Before they embarked Francis II. addressed an earnest farewell to the troops, who were deeply affected, and cheered the King. The Mouette fired a Royal salute at the moment of departure. The battery of the port fired a salute of 21 guns. Their Majesties arrived at Rome on Friday, and took up their residence in the Pope's Palace on the Quirinal, where apartments had been prepared for them. The brothers of the King and General Bosco had also arrived at Rome. The Pope and his distinguished guests subsequently exchanged visits. It was understood that after a few days' stay in Rome they would proceed to Trieste and thence to Bavaria, accompanied by the Queen Dowager. The suite of Francis II. speak in high terms of the bravery of the Piedmontese. The Diplomatic Corps also embarked on the 14th for Rome. The number of troops who were made prisoners at Gaeta was 11,000, several hundred of whom were suffering from typhus fever. The Sardinians found between 700 and 800 cannons and 60,000 muskets. Three Generals accompanied Francis II. to Rome; 25 are prisoners. The Sardinians are actively engaged clearing Gaeta of its ruins. The city had suffered enormously from the bombardment. Count Auersperg had died from the effects of his wounds. General Cialdini and the army had attended a mass for those who died in the late struggle. The General had also published an order of the day, announcing the taking of the fortress. The tone of the order is very moderate, and it concludes as follows:—"Death throws a sad veil over all human quarrels. The dead are all equal. Be generous towards the vanquished. Your hatred cannot last. As a soldier, Victor Emmanuel fights and forgives." Admiral Persano and General Cialdini, with troops, have left for Messina. General Mezzacapo, with a body of troops, has proceeded towards Civitella on the Tronto. Both fortresses will be attacked immediately if their commanders refuse to surrender. It is asserted that General Cialdini will receive the title of Duke of Gaeta.—Accounts from Naples state that the city had been grandly illuminated, and fêtes had taken place on account of the capitulation of Gaeta. A conspiracy in favour of the Bourbons had been discovered. During the fêtes a riotous assemblage attacked the Palace of the Archbishop, and the windows of the Spanish Consul's residence were smashed by the people. Commander Nigra promised to give satisfaction to the Consul, and to punish the guilty parties.—Accounts from Rome state that the surrender of Gaeta had given rise to great rejoicing in that capital, and that illuminations had taken place on the Corso in celebration of the event. During the demonstrations the crowd shouted, "Long live Victor Emmanuel!" "The Unity of Italy for ever!" Some priests were seen cheering with the multitude. The French patrols at length requested the crowd to disperse and were obeyed. The Committee for the furtherance of the unity of Italy had recommended the citizens to illuminate the city on Monday in honour of the opening of the Italian Parliament. The public mind at Rome is much agitated, and it is thought that it will be impossible for the Government to resist the national movement. It is rumoured that the influence of Cardinal Antonelli and Monsignor de Merode is much shaken. The Pope has ordered the publication of diplomatic documents, as a reply to the French Government. The return of Monsignore Sacconi, the Papal Nuncio, to Paris, has been postponed. The official journals of Rome and Turin deny the rumours of an arrangement between the Holy See and Piedmont. It was reported that the Pope's bands were making a rapid retreat from the Abruzzi. A telegram from Perugia, dated the 15th inst., announces that the Papal Zouaves had invaded the Sardinian territory, but that they had been repulsed by volunteers. The Pontifical soldiers had fortified themselves at Nanzano. During the recent stay of King Victor Emmanuel at Milan, his Majesty received General Bonin, the Envoy Extraordinary from the King of Prussia. The *Official Gazette* publishes a decree ordering the cessation of the administrative autonomy of Tuscany. Reports are current that the proclamation of the kingdom of Italy will not for the present be communicated in an official manner to the several governments.

Turkey.—The *Levant Herald* states that the Hasné Tahvilis are to be renewed for 14 years, and that a general suspension of the Galata bankers and merchants is impending. A meeting of the Hasné Tahvili holders has been held at Constantinople, at which it was resolved to address protests through the Embassies against the renewal of these bonds.

The Black Sea.—Great storms raged in the Black Sea during the first week in February. Among the vessels lost were the Sully and the Henri IV., of the French Messageries Impériales, which were wrecked near Trebizonde. The crews were saved.

Syria.—Accounts from Beyrout to the 29th ult. state that up to that date no executions had taken place.

Russia.—A meeting of the Council of the Empire was held on the 9th inst. at St. Petersburg under the presidency of the Emperor, and was engaged for seven hours and a half in the discussion of the first 14 articles of the project presented by the High Central Committee for the emancipation of the serfs. The Emperor, the Grand Duke Constantine, General Gagarine, M. Mouravieff, and General Ignatieff, father of the Minister in China, took part in the discussion. It was agreed that the emancipation shall be proclaimed on the 3d of March, the anniversary of the accession of the Emperor to the throne, when more than 20,000,000 of Christian souls will cease to be a property. The Emperor has appointed his Aide-de-Camp, General Count Stackelberg, to be Minister of Russia at the Court of Spain.

India.—By the arrival of the Bombay mail we have accounts from that Presidency to the 26th of January. The following are the details:—

North West Provinces.—The famine is very severe and is extending daily. At Meerut and Allyghur the drought is so severe that not a green blade is to be seen. Numbers of the people have died of starvation, and others have been prostrated to such a degree by want of food as almost to unfit them for labour. Cattle have also died in large numbers, owing to the scarcity and dearness of fodder. Whole villages have been deserted, and emigration towards Malwa and the eastern districts, where comparative plenty obtains, has been going on to a great extent.

Central India.—The Viceroy is at Jubbulpore holding durbars, to which the Rajahs and other chiefs are repairing in great numbers and in great state.

Bombay.—Sir George Clerk is making a tour through his presidency, in order to make himself acquainted with its condition and wants. The opposition to the income tax was dying out, and it had been hitherto paid with scarcely an instance of resort to the power of distraint. The Bombay Chamber of Commerce had made a demonstration against the duties on yarn and piece goods.

Cochin China.—The latest accounts from Saigon state that, notwithstanding the late events in China, the Emperor of Annam has just issued a fresh edict against the Catholics, and that fresh persecutions have commenced against the Christians in Tonquin and Cochin China.

United States.—The Peace Congress met at Washington on the 4th, Ex-President Tyler in the

chair, and was still in session on the 8th, but as it sat with closed doors, no reports of the proceedings had been published. It was however understood that nothing definite had been accomplished, but it was probable that many points of the Crittenden, Bigler, and Border States propositions would be adopted. The Texas Convention had definitively resolved to secede from the Union by a vote of 154 to 6, and the ordinance of secession was to be submitted to a popular vote on the 23d February. The Texans had threatened to take possession of Forts Washita, Cobb, and Arbuckle, in the Indian territory. The North Carolina Legislature had passed the Military Bill for arming the Volunteers, and had unanimously passed a resolution that in case the endeavours for reconciliation should fail, North Carolina would go with the other slave states. The State Government of Louisiana had seized the New Orleans Mint and Custom House, and had taken possession in the name of the State of a considerable sum of money deposited in the Mint. The Government draughts for the money had been repeatedly disregarded. The Louisiana Convention had also appointed a committee to decide upon a flag. A resolution was about to be brought before the Louisiana Convention inviting all States except those in New England to join the Southern Confederacy. The Louisiana senators, Messrs. Slidell and Benjamin, had withdrawn from Congress. The President had refused to comply with the demand of Colonel Hayne, of South Carolina, to surrender Fort Sumter, and on the 8th the latter left Washington, after sending the President an impertinent letter, which was returned. Lieut. Hill, the bearer of Major Anderson's message, also left Washington on the 8th inst. with despatches, on which will probably depend the breaking out of war. The steamer Marion had arrived at New York from Charleston with 56 women and children from Fort Sumter, who had been sent away by order of Major Anderson to relieve the garrison of Fort Sumter, and to place them in safety in case of an attack. The impression prevailed however that an attack would not take place immediately. A member of the Washington Convention had received communications from several leading New York bankers and brokers, that, unless a compromise were agreed to, incoming Administrations would have nothing to expect from capitalists in the way of upholding the financial credit of the Government. Accounts from Montgomery affirm that the Southern Congress was about to levy an export duty of 1 cent. per pound on cotton. Advices from Pensacola to the 2d February state that a truce had been concluded between Lieutenant Slammer and the state forces, and some papers speak of the withdrawal of the Federal troops from Pensacola as a measure decided upon. The United States steam ship Supply had arrived at New York from Pensacola, having on board the officers, marines, and sailors who were at Warrington yard when it was given up to the Floridans. The United States revenue cutter Lewis Cass had been surrendered by her officers to the state of Alabama. 50,000 people were stated to be on the verge of starvation in Kansas. On the 6th inst. Congress was again deluged with petitions, mostly in favour of the adoption of the Crittenden compromise. A serious rupture had taken place between the President and General Scott respecting the steps to be taken for the security of Washington, and also on account of the movements recently made by order of General Scott at Fort Monroe. The President, it was alleged, was much annoyed that the guns of this fortress should be turned "inland" just at the time when he was complimenting the Virginians in his special Message for their loyalty to the Union. The New York State Legislature had passed a Bill appropriating 500,000 dols. towards arming the militia. The Governor of Massachusetts had notified the military of that State to hold themselves in readiness to march to the assistance of the Federal Government in case of an attack upon Washington, which the Governor was led to believe might be expected soon to occur. A despatch from Washington announces that the Cherokees had rebelled, and seized Fort Gibson. The Bill admitting Kansas into the Federal Union had been signed by the President, and the representative of the new state took his seat in the House on the 30th ult. The Pacific Railroad Bill had passed through the Senate by a majority of 34 to 14. The representatives of Bremen, Great Britain, and Spain respectively have addressed communications to the state department relative to the condition of affairs at Charleston, as regards the customs and Federal courts, asking what the course of the Government will be in certain contingencies. The Secretary of State in reply said that the President would deeply regret that any injury should happen to the commerce of foreign or friendly nations, but declining to give any assurances on the points submitted to him until the necessity for raising the question should practically arise. The steam frigates Colorado, Mississippi, Minnesota, and Roanoke had been ordered to prepare for collecting Federal revenue.

Canada.—A telegram from Toronto reports that the Canadian Courts had issued a writ of *habeas corpus* in the Anderson extradition case, and that precedence had been given to the Canadian over the English writ. It appears that the Canadians do not like the interference of the English Courts, and the Toronto *Leader* denounces it as an outrage upon a free people, which can never be submitted to.

British Columbia.—Advices from British Columbia to the 12th of January state that the amount of gold shipped from that colony during the last two and a half years was 2,850,000 dollars. A great number of shipwrecks are reported in the Northern waters, principally small craft engaged in the lumber trade. The British gunboat Forward was among those believed to be lost.

Mexico.—Letters from Mexico to the 12th ult. contain the decree expelling Senor Pacheco, Spanish Ambassador, the Pope's Nuncio, the Chargé d'Affaires of Guatemala, and the Minister of Ecuador. The Spanish squadron off Havannah has been ordered to sail to Vera Cruz.

Parliament.

HOUSE OF LORDS.

Friday.—*The New Law Courts.*—Lord St. Leonard's opposed the scheme of applying the moneys of the Suitors' Fee Fund to the purpose of building New Law Courts in a central situation in the metropolis, upon the ground that it was inexpedient to take a sum of 1,400,000*l.* belonging to the Suitors' Fee Fund of the Court of Chancery in order to build courts which those suitors did not require for the benefit of all the law courts.—The Lord Chancellor said that the present limited accommodation for the courts of law and equity was a scandal and a reproach to the country. The estimates and plans of the new building were prepared, the notices had been served, and the Bill authorising the works would be laid upon the table of the House in a few days. He assured his noble and learned friend that he need be under no apprehension for the safety of the Suitors' Fee Fund, which would be amply secured for all who had an interest in it. There were now nearly 40 courts all sitting together, and yet the accommodation at Westminster-Hall was only sufficient for four. This was a state of things which he was sure their lordships would not wish to see perpetuated.—Lord Cranworth dissented from the views of Lord St. Leonard's, but thought the State would gain no ultimate advantage by the appropriation of the Suitors' Fund.

Monday.—*State of Syria.*—Lord Stratford de Redcliffe gave notice that on Monday he should move for copies of the correspondence relative to Syria. *Indian Service.*—The Earl of Ellenborough asked if any step had been taken to carry into effect the provision of the India Act of last session in favour of the sons of military men who had served in India since the transfer of the government to the Crown? Earl De Grey and Ripon said that general regulations as to the admission of officers to the army were in contemplation, when all due advantages would be secured to the persons in question. The *Constructive Notices Amendment Bill* was read a second time. *Divorce Court*—The Lord Chancellor gave notice that on an early day he should move for a select committee to inquire into the law relating to persons entitled to sue for divorces in the courts of England and Scotland.

Tuesday.—The *Indictable Offences (Metropolitan District) Bill* and the *Constructive Notices Amendment Bill* passed through committee. *The China War.*—Earl Grey moved for copies and extracts of any despatches received by Government explaining the objects of the expedition ordered to the Yang-tse-Kian. He reminded the House that the late Chinese expedition was the only one ever undertaken and concluded without the opinion of Parliament having once been expressed upon it. After tracing the cause and effects of the opium dispute, he declared his belief that the terms of the treaty of Hong Kong had been faithfully observed by the Chinese authorities. Even if they had not, we had ourselves violated the Chinese laws by our conduct with regard to the opium traffic. After strongly reprobating our conduct as to the coolie trade, he declared that we were wrong in the lorcha dispute, which was the origin of the war, and that we had inflicted on the Chinese the horrors of war at an enormous expense to ourselves, and left our trade on a more precarious footing than it was before.—Lord Wodehouse entered at large into a detail of the negotiations, treaties, and hostilities which had taken place between England and China since 1842. Throughout the whole of that period he maintained that the English Government had acted with the best intentions, and with an earnest desire to preserve peace and promote commerce. The wars that occurred were attributable solely to the barbarism or bad faith of the Chinese. In the last war especially the Europeans had acted with singular forbearance. Their armies had conducted hostilities with the utmost humanity, the negotiations exacted no harsh or mortifying terms, and the treaty that had been concluded was at once moderate and just.—The Earl of Ellenborough believed that England had behaved towards China with great injustice, and heavy calamities had been the consequence upon both countries. The fourth campaign of what he might call "the Bowring war" had ended, but he did not think that the war itself was yet concluded, but feared that our last proceedings would lead to fresh injustice and more calamities. After some remarks from Earl Grey in reply, the motion was agreed to. *Case of Mr. Turnbull.*—The Earl of Shaftesbury, referring to a notice given by the Marquis of Normanby respecting the appointment of Mr. Turnbull to a post in the Public Record-office, complained that no day had been fixed for the discussion. —The Marquis of Normanby said he should bring on his motion on an early day.—The Earl of Ellenborough hoped that when the debate took place some information would be given touching the objects and composition of the Protestant Alliance, which had played so conspicuous a part in the affair.

Thursday.—*Dwellings of the Labouring Classes.*—The Earl of Derby gave notice that on Thursday he should call attention to the displacement of the labouring classes in the Metropolis consequent upon the introduction of railways and other public works. *Case of Mr. Turnbull.*—The Marquis of Normanby gave notice of a resolution for Tuesday, expressive of regret at the resignation of Mr. Turnbull as tending to induce an impression on the public mind that Roman Catholics were excluded from offices which they were well qualified to fill, and with which their religious belief in no way interfered. The *Indictable Offences (Metropolitan Districts) Bill*, the *Fictitious Savings Bank Bill*, and the *Constructive Notices Amendment Bill* were read a third time and passed.—Lord Stratheden called attention to the report of the Select Committee of last session on the *Elective Franchise*, and moved for a return of the number of the 40*s.* freeholders of England and Wales. The motion was agreed to.

Friday.—*The Tipperary Militia.*—The Earl of Donoughmore called the attention of the House to the proposal for forming a brigade of Royal Artillery out of the Tipperary Regiment of Artillery, and complained of the course taken by the Government in first accepting the offer of their ser[illegible] abandoning the intention.—Lord Herbert [illegible]

[Left sitting.]

HOUSE OF COMMONS.

Friday.—*The Indian Council.*—In answer to Mr. [illegible] Wood said he had been in communication with [illegible] General on the recommendations of the Com[illegible] the admission of British settlers as well as [illegible] the local Legislative Councils, but had not [illegible] The employment of natives of India was [illegible] and had to a certain extent been adopted; [illegible] ferent thing to put them into the Legislat[illegible] cutta.—In answer to Mr. B. Cochrane, Lord [illegible] that the Prince of Monaco had sold the villages [illegible] Roquebrune to France for 4,000,000fr.; [illegible] stance was not of political importance, as [illegible] alter the territorial boundary between France [illegible] In reply to a question from Mr. D. Griffith [illegible] the maintenance of the temporal power of [illegible] J. Russell said that he could not give a [illegible] answer to it, as he was really unable to [illegible] He might say, however, that the only enc[illegible] her Majesty's Government had given the It[illegible] pression of an opinion that they ought to be [illegible] own affairs.—Sir E. Colebrooke obtained le[illegible] Bill to provide for the formation of *Tramways* [illegible] *Statute Labour Roads in Scotland.*—Mr. Garnett [illegible] to bring in a Bill for regulating the use of *Locomo*[illegible] *pike and other Roads*, and the tolls to be levied on [illegible] tives, and on the waggons and carriages drawn [illegible] them.

Monday.—*Board of Admiralty.*—Sir J. Pakington [illegible] that when he gave notice of motion for a committee into the Board of Admiralty he was not aware that [illegible] ment had promised a committee to Admiral [illegible] should therefore withdraw his motion, prefer[illegible] matter in the hands of the Government. He trusted that the inquiry would be commenced as speedily [illegible] *Rights of Belligerents at Sea.*—Mr. Horsfall asked what steps had been taken for the purpose of carrying [illegible] commendation of the Shipping Committee of [illegible] regard to the rights of belligerent Powers at sea.—[illegible] Russell explained that the delay arose from the [illegible] of the American Government to admit that vessels [illegible] to private persons should be exempt from capture [illegible] however, General Cass had addressed a note to the [illegible] Minister at Paris, wherein some disposition was [illegible] recognise this principle. His lordship added that [illegible] question affecting the whole maritime rights and [illegible] this country. The House then went into committee [illegible] to a resolution for the purpose of regulating the [illegible] judges under the *Bankruptcy and Insolvency Bill.*—[illegible] Loughby objected to throw the compensation to the [illegible] the Consolidated Fund.—The Attorney-General [illegible] he had no intention of the kind, not having [illegible] division of last year. The House then went into com[illegible] the Bill itself. On clause 2, authorising the appo[illegible] Chief Judge, a discussion arose on a suggestion that [illegible] tions might be assigned to one of the present [illegible] Chancery.—The Attorney General explained the [illegible] the judicial machinery under the Bill, and said that [illegible] fold duties of the Chief Judge would occupy his [illegible] On clause 8, giving jurisdiction in bankruptcy to the [illegible] courts, Mr. Walpole said he would not oppose the [illegible] he protested against the principle. After a long [illegible] to the powers and payment of the county court judges [illegible] clause was agreed to.—On clause 42, placing the [illegible] of certain compensations created under an old Act of [illegible] IV., upon the annual votes, Sir H. Willoughby objected to this charge upon the taxation of the country [illegible] posed an amendment, by which the [illegible] would be left to be provided for [illegible] fund of the Court of Bankruptcy. After a [illegible] which the Attorney-General, Mr. Barrow, Mr. [illegible] ley, and other members took part, the committee [illegible] when there were for the amendment, 38; against [illegible] majority against it, 50. The clause was then [illegible] to. Several other clauses having been passed, [illegible] postponed, the Chairman was ordered to [illegible] gress. On the order for the second reading [illegible] *cial Assessments Bill*, Mr. Henley, Mr. A. Smith [illegible] Deedes suggested delay. After a few words [illegible] Barrow, Sir G. Lewis said the principle of the [illegible] merely to provide a better machinery for establishing [illegible] and uniformity in framing assessments, and he was [illegible] the Bill were read a second time, to discuss on the [illegible] committal the question whether the Bill should [illegible] to a Select Committee. A short discussion ensued [illegible] Bill was read a second time, on the understanding [illegible] would hereafter be referred to a Select Committee [illegible] motion for the nomination of the Select Committee [illegible] *Red Sea and India Telegraph Bill*, a discussion arose [illegible] merits of the original contract, and as to whether the [illegible] had fulfilled their engagements. The Committee was [illegible] nominated.

Tuesday.—*The County Franchise.*—Mr L. King [illegible] leave to bring in a Bill to extend the franchise in [illegible] England and Wales. He said, that, as there was no [illegible] of a Government Reform Bill this Session, he thought [illegible] suitable occasion to bring this question once more [illegible] House, and to propose an instalment, and by no [illegible] significant one, of reform, extending the county [illegible] 10*l.* occupiers. He referred to the admission by Lord [illegible] and Lord Derby, of the principle of the measure, [illegible] the limit he proposed, and he concluded, in the words [illegible] J. Russell, that the measure, if acceded to [illegible] "would tend not only to improve but to [illegible] institutions."—Mr. Hadfield seconded the [illegible] Warner thought that the proper mode of [illegible] question of Reform would be to refer it to a Select [illegible] Still, though he did not think that the motion [illegible] practical result, he should vote for it, withdrawn [illegible] ment for a Select Committee, of which he had [illegible] Mr. D. Griffith then moved an amendment [illegible] the uniformity of the county and borough franchise [illegible] been considered as opposed to the spirit of our [illegible] constitution, it is not expedient to reduce the county [illegible] below 20*l.*—Captain Jervis seconded the amendment [illegible] Newdegate protested against the waste of time in [illegible] discussion of motions of this kind, which had no [illegible] success. The present proposal would only aggravate [illegible] admitted anomalies of our electoral system; [illegible] county constituencies, already so large, and [illegible] influence both of property and labour.—Mr [illegible] though this Bill was introduced under the pretence [illegible] ing the county franchise, its effect would be to [illegible] rural districts with town voters, and [illegible] all those habits of bribery and corruption [illegible] the county constituencies had been hitherto [illegible] Lord Palmerston said he did not mean to oppose the [illegible] or to argue the subject of the Bill. The first [illegible] courteous and expose him to the imputation of [illegible] opinion upon the subject; and he could not enter [illegible] cussion of the matter for the reasons why the Government [illegible] not proposed to introduce a Reform Bill this Session [illegible] could not assent to the amendment, because it was [illegible] anticipating a discussion that would properly belong [illegible]

[illegible] the Bill. There was a time for waiting, it had [illegible] as well as a time for action. The present Session, he [illegible] was [illegible] waiting upon this question, and not for [illegible] Believing that measures of reform were of vast importance, and that they ought to originate with a responsible [illegible] and not with private individuals, he regretted [illegible] of his friends had thought it their duty to anticipate [illegible] of the Ministers of the Crown, and they [illegible] upon themselves all the responsibility of [illegible] progress of their measures, allowing the [illegible] to deal with them as they might think [illegible] from time to time to do.—Mr. DISRAELI said [illegible] under the circumstances, he was not at all prepared to oppose the introduction of the Bill. He was however [illegible] strongly of opinion every day that, if there [illegible] be a measure for the reconstruction of Parliament, it [illegible] be large and comprehensive. If such a measure could [illegible] be passed, the inference was that there was no necessity [illegible], in a measure of such a character, all the responsibility [illegible] of Ministers was required. He hoped that after the [illegible] had performed the acts of courtesy to Mr. King and Mr. [illegible] in allowing them to introduce their Bills, some private [illegible] would be arrived at by which the House would [illegible] more of them.—Mr GRIFFITH having withdrawn [illegible] amendment, leave was given to introduce the Bill. *Probate Duty on Real Property.*—Mr. WILLIAMS moved a resolution, "That in the opinion of the House, real property should be made to pay the same probate duty as that now payable on personal property."—Mr HADFIELD seconded the motion.—The CHANCELLOR of the EXCHEQUER opposed [illegible] as neither just nor practicable. A large proportion of personal property passed under settlement and paid no probate duty. If there was an anomaly, this was the most glaring. The motion would [illegible] this or settled property in land, and therefore would affect the greater portion of landed property. The principle sought to be introduced would be a direct violation of the Succession Duty Act of 1853, which was fully understood at the time as a settlement of the question.—On a division the resolution was negatived by a majority of 157 to 51. *Income Tax.*—Mr HUBBARD moved the appointment of a select committee to inquire into the present mode of assessing and collecting the property and income tax, with the view of ascertaining whether any mode could be adopted for levying that [illegible] so as to render its incidence more equitable. He pointed [illegible] the iniquity of the tax as at present levied, and sketched a plan for its adjustment, which comprised an allowance of one-twelfth in the amounts assessed on land, of one-sixth on houses, and of one third on trades, professions, and all other descriptions of industrial income.—The CHANCELLOR of the EXCHEQUER opposed the motion. The nomination of the committee would give a conditional sanction to the idea that some change was to be effected in the tariff of the income tax as assessed upon the different schedules. This idea could [illegible] only in disappointment, if not in danger, to the financial system of the country, and he contended that the various [illegible] suggested by Mr. Hubbard would not practically [illegible] the injustice of the impost. Inequalities of various [illegible] there no doubt were, but their application was to persons rather than classes, and they could not be rectified by general and indiscriminate modifications. Every reduction must be compensated by new taxes. What was allowed to one man would be exacted from another; and after analysing in detail the different descriptions of income affected by the income tax, he came to the conclusion that the existing tariff was on the whole more equitable than any that could be substituted for it.—Mr WHALLEY recommended that the income tax should be raised on the same principle as the poor rate.—Sir STAFFORD NORTHCOTE opposed the motion, and advised that it should be withdrawn.—Mr HUBBARD declined to withdraw the motion, and on a division there were—for the motion, 131; against it, 127. Majority for the motion, 4.—Mr M. MILNES obtained leave to bring in a Bill making better provision for granting superannuations and other allowances to Officers of Prisons in England and Wales.—Sir M. PETO obtained leave to bring in a Bill to make further provision respecting the *Burial of Nonconformists.*—Mr. HARDCASTLE obtained leave to bring in a Bill to facilitate the appointment of *New Trustees in Public Charities.*—Mr. BAINES moved for leave to bring in a Bill extending the *Borough Franchise* in England and Wales to [illegible] householders. This simple measure would, he believed, accomplish a valuable instalment of reform, and possibly [illegible] more useful than any complicated and comprehensive [illegible]. He censured the tone in which the Government had [illegible] of the very question which had been their stepping-stone to office, and maintained that the present session, being free from extraneous distractions, and unembarrassed by important Bills, was peculiarly fit for the discussion of [illegible].—Mr HADFIELD seconded the motion.—Lord PALMERSTON said that he had offered no opposition to the introduction of Mr. Locke King's Bill, and should offer none to the present measure. The Government had, however, not thought it proper to bring in any Reform Bill of their own, and he could not promise any assistance to the further progress of [illegible] introduced by independent members. The motion was then agreed to, and leave given to bring in the Bill.

WEDNESDAY.—Mr. HADFIELD moved the second reading of the *Qualification for Offices Bill*, which rendered unnecessary the oath now taken by magistrates and others under the provisions of the Act for the repeal of the Test and Corporation Acts.—Mr. BAZLEY seconded the motion.—Mr. NEWDEGATE moved as an amendment that the Bill be read a second time that day six months. The provision was a most just one, merely requiring that persons taking the oath should declare that they intended no harm to the Church of England or the institutions of the country.—Mr. BARROW seconded the amendment.—Sir G. LEWIS believed that the declaration was idle and [illegible]. It afforded no security for the Established Church, and he therefore supported its repeal.—Mr. S. ESTCOURT had no objection to the Bill itself, agreeing that the declaration afforded no security to the Established Church. But he regarded the Bill as one of a series of attacks on the outworks of the Church, and he should prefer extending the terms of the Indemnity Bill to passing this measure. On a division the second reading was carried by 93 to 80.—Mr DILLWYN moved the second reading of the *Trustees of Charities Bill*, the object of which was to provide that Dissenters might become trustees of schools where in the deed of foundation it was not expressly declared that the school was founded for a particular sect. Most of these schools were, in point of fact, gifts to the nation, but had been taken possession of by the Church of England.—Mr. [illegible] moved as an amendment that the Bill be read a second time that day six months. The Bill would act as [illegible] to the Dissenters as to the Church itself. It would disturb a settled state of things, and introduce confusion into the administration of the schools. He referred to cases to show that there was not the doubt respecting the existing law which was alleged in the preamble of the Bill.—Mr MELLOR supported the Bill.—Sir W. HEATHCOTE opposed it.—Mr LOWE [illegible] that the Bill would promote conciliation and good [illegible], thinking that in the interests both of society and of [illegible] themselves useful persons should not be disqualified from acting as trustees on account of their religious belief. The Legislature had decided that Dissenters' children should [illegible] at these schools; and it was therefore right that there should be trustees to protect their interests.—Sir H. [illegible] said that under the present law there was no doubt as to the eligibility of trustees, while under the Bill there would be no certainty whatever. The Bill therefore proceeded upon a false basis. Moreover, the supporters of the Bill were afraid of their own principles, and would not venture on that explicit declaration which would remove all doubts. They professed to respect the wish of the founders when expressed in direct language, but totally disregarded it when it was evident by unquestionable implication.—Mr HENLEY protested against the doctrine which Mr. Lowe, with all the authority of a minister of education, had put forth, that because pupils of a school were Dissenters, therefore a part of the governing body should be Dissenters likewise. No one could tell where such a principle would end if once admitted.—After a reply from Mr. DILLWYN, the second reading was carried by 164 to 157.—Sir J. TRELAWNY obtained leave to bring in a Bill, substituting *Affirmations for Oaths* in the case of persons who had a conscientious objection to take an oath.—Mr. ALCOCK obtained leave to bring in a Bill for the voluntary *Commutation of Church Rates.* Both Bills were read a first time.

THURSDAY.—*State of Italy.*—Lord E. HOWARD asked whether her Majesty's Government would use its influence with King Victor Emmanuel to prevent bloodshed in his present hour of success.—Lord J. RUSSELL replied that he had not thought it necessary to use his influence hitherto, believing that, generally speaking, the Sardinian troops had shown much humanity. Atrocities had been committed by brigands which required to be dealt with severely, and it would be almost an affront to the Government of the King to preach humanity under such circumstances. He had received that day a communication from the Sardinian Minister stating that since the capture of Gaeta Southern Italy had settled down into the same tranquillity as the North. The House then resolved itself into a Committee on the clauses of the *Bankruptcy and Insolvency Bill.* On reaching the 81st clause, which abolished the distinction between trader and non-trader, Sir G. BOWYER moved that the clause be postponed. This motion was supported by Sir L. PALK, Lord J. MANNERS, and Colonel DUNNE, opposed by the ATTORNEY-GENERAL, and negatived. The clause was agreed to without further discussion. The question as to the principle of assimilating the law applicable to the two classes of debtors was, however, discussed at much length on the next clause, which set forth the acts that would constitute severally an act of bankruptcy. The clause, however, was agreed to without amendment. On reaching the 117th clause, the CHAIRMAN was ordered to report progress. On the order for the second reading of the *Markets and Fairs (Ireland) Bill*, Lord NAAS objected that there were no provisions for a uniformity of weights and measures, and that fairs were included in the Bill.—Mr. SCULLY urged the postponement of the second reading.—After a short discussion, in which Mr. CARDWELL replied to objections, the Bill was read a second time.—On the order for going into committee upon the *Bank of England Payments Bill*, Mr BASS reminded the House that they were going practically to surrender to the Bank of England for 25 years the control of our monetary affairs.—Sir J. PAXTON moved as an amendment to reduce the period of the agreement from 25 years to 10 years.—Mr. BUCHANAN supported the amendment.—Mr. HANKEY opposed it.—Mr. FINLAY was in favour of reducing the period to 5 years. The CHANCELLOR of the EXCHEQUER said that it was open to the Government to alter the arrangement at any time it so minded, and that the effect of the proposed reduction would be to put an end to the arrangement by which the public would gain a clear saving of 50,000*l.* a year, and to leave the remuneration to the Bank as it stood at present.—Sir J. PAXTON ultimately withdrew his amendment, and the clauses of the Bill were agreed to.—The Bills introduced by the SOLICITOR-GENERAL for the *Consolidation and Amendment of the Criminal Law* were read a second time and referred to a select committee. The *Law of Foreign Countries Bill* was read a second time.

FRIDAY.—*Metropolitan Tolls.*—In answer to Mr. DUNCOMBE, Sir G. LEWIS said that he intended to introduce a Bill for the abolition of tolls within the metropolitan district. *Harbours of Refuge.*—Mr. LIDDELL called attention to the subject of harbours of refuge. [Left sitting.]

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 91⅝ for Money, and 91⅝ to ¾ for the 7th of March; Bank Stock, 237 to 235½; Three per Cents. Reduced, 91⅜ to ½; New Three per Cents., 91½ to ⅝; Thirty Years' Annuities, expiring in April, 1885, 16 1-16; India Five per Cent. Stock, 99¼ to ½; Ditto for Acct., 99⅞; Ditto Scrip, 100½; Ditto Bonds, 18s. dis.; Exchequer Bills, 8s. to 3s. dis.—FOREIGN: Dutch Four per Cent. Certificates, 100⅜; Mexican Three per Cents., for Acct., 23½ to ¼; Peruvian Four and a Half per Cents., for Acct., 97; Ditto Three per Cents., for Acct., 74; Spanish Three per Cents., 48¼; Ditto for Acct., 48¾; Committee's Certificates, 6½; Turkish Six per Cents., 1854, for Acct., 69¾; Ditto, 1858, for Acct., 54½ to 54.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,563,725	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	10,240,363
		Silver Bullion	848,362
	£25,563,725		£25,563,725

BANKING DEPARTMENT.

Proprietors Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)	£8,444,776
Rest	3,564,936	Other Securities	20,458,277
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	5,654,607	Notes	6,045,645
Other Deposits..	11,453,279	Gold and Silver Coin ..	804,531
Seven day and other bills	590,407		
	£35,753,229		£35,753,229

21st day of Feb., 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY—BANKRUPTS—W. BROWN, Marlborough, Butcher—R. and J. BURRELL, Old Change, Warehousemen—G. BUTCHER, Prior Place, East Road, Old Kent Road, Boot Manufacturer—T. DARLINGTON, Grinshill, near Shrewsbury, Innkeeper—B. F. DUNCKLEY, Kettering, Grocer—T. W. FINCH, Braithwell, Yorkshire, Grocer—R. PADDY, Amelia Place, Brompton, Draper—M. ROBY, Leamington, Sauce Manufacturer—J. A. G. SMITH, Basinghall Street, Auctioneer—A. SMITH, Paragon Buildings, New Kent Road, Engineer—J. THORNLEY, Sneinton, Nottinghamshire, Lace Dresser.

SCOTCH SEQUESTRATIONS—J. B. CRUICKSHANK, Kinloss, Farmer—E. FINLAY, Leith, Baker—W. RALSTON, Glasgow, House Factor—J. ROGERS, Edinburgh, Ironmonger—T. STORMONTH, Edinburgh, Plumber—D. WATERS, Lybster, Caithness-shire, Hotel Keeper.

FRIDAY—BANKRUPTS—W. H. DAVIS, Ash, Surrey, Farmer—J. DUTTON, Walsall, Staffordshire, Grocer—A. R. ELEY, Chiswell Street, Middlesex, Upholsterer—H. GATES, Louth, Chemist—W. JOHN, Pontypridd, Glamorganshire, Grocer—T. P. JONES, Toxteth Park, Liverpool, Boot Manufacturer—S. W. LAVENDER, Liverpool, Merchant—J. NIXON, Lincoln, Painter—D. PHILLIPS, Neath, Glamorganshire, Grocer—W. POWELL, [illegible]—J. SANDERSON, Liverpool, [illegible]—[illegible], Coventry, Builder—S. SMITH, Fish Street Hill, City, Builder—A. P. STANDRING and C. P. STANDRING, Rochdale, Iron and Brass Founders—R. W. TILLEY, Weston-super-Mare, Draper—C. WISE, Liverpool, Slate Merchant.

SCOTCH SEQUESTRATIONS—G. AITCHISON, New Monkland, Shoemaker—G. FOWLIE, Turriff, Aberdeenshire, Druggist—J. GORDON, Inverness, General Merchant—D. M'GREGOR, Glasgow, Tobacconist—A. PATON, Kilwinning, Ayrshire, Merchant—C. PENNEY, Glasgow, Manufacturing Chemist—J. PHILLIPS, Girvan, Ayrshire, Grocer—R. WATSON, Campsie, Stirlingshire, Tinsmith.

Metropolis and its Vicinity.

MR. TURNBULL AND THE RECORD OFFICE.—On Tuesday a deputation waited upon Lord Palmerston, for the purpose of requesting his Lordship not to accept the resignation by Mr. Turnbull of the office of Calendarer of Foreign State Papers. The deputation consisted of the Marquis of Normanby, Captain Jervis, M.P., Mr. James Martineau, Professor Plumptre, of King's College; Mr. Froude, Mr. Hardy, Professor Brewer, Mr. Gairdner, Mr. S. Beale, M.P., Mr. Folkard, Professor Pearson, the Rev. J. Stephenson, and other gentlemen. The Marquis of Normanby, on introducing the deputation, said that their object was to present an address signed by 800 Protestant gentlemen praying his lordship not to accept Mr. Turnbull's resignation, which had been forced from him by circumstances. These signatures included the names of many distinguished clergymen of the Church of England, and almost every eminent scholar engaged in historical studies. Professor Pearson than read the address, which stated in effect that Mr. Turnbull had been appointed by the Master of the Rolls to calendar the foreign papers at the Public Record Office, having been recommended to that post by his proved acquaintance with foreign languages and ancient hand-writings—two acquirements which it is most unusual to find united in one person. In consequence however of a false insinuation that he was employed in writing the "History of Religion in England," the Protestant Alliance, the Religious Tract Society, and the Scotch Reformation Society petitioned against the appointment, and by quoting passages from a work he had published 20 years ago, succeeded in exciting such an agitation that Mr. Turnbull, harassed by the incessant attacks on his honour, and fearing that the public service would suffer if discredit were thrown on its officers, tendered his resignation. The address proceeded to say that it was not true that the nation at large believed a Catholic to be untrustworthy on account of his faith, and the memorialists therefore desired that no opportunities for fraud be given, that no unfit man be appointed to a place of trust, but also that no man be dismissed from a place of trust until he be proved unfit. Lord Palmerston in reply said:—

"This is a matter which I have had under my attention for a considerable time. First of all, let me say that it does not appear to me to be a question respecting the exclusion of men from certain appointments on account of their religious opinions. I had representations made to me last year which led me to communicate with the Master of the Rolls, and I had an answer from him. The objection to Mr. Turnbull, as I understand it, is made not on the ground that as a Catholic he is unfit to be employed by the Government, but that being a man of high personal honour and great ability and attainments, he happens, as converts very often are, to be a man also of very extreme opinions—in fact, almost a fanatic. It was thought, therefore, that he was not a person who was likely to bring to the particular duty upon which he was employed that calm judgment and impartial view which are essential in the abstracting and compiling of documents belonging to a period when differences of religious opinion connected with historical events were very strong. I concur in that opinion. I think it was an unfortunate selection. It would not have been difficult to find in the circle of literary men some other person who would be equally competent to perform the duty; and, although I do not in the least doubt that Mr. Turnbull most faithfully abstracted everything which he was ordered to abstract, yet I must say that his position was not altogether that which a man holding very strong opinions—strong opinions, I say, because his published works prove that they are strong—it was not a position in which a man of that frame of mind and of those opinions would feel himself comfortable. When he had to abstract documents relating to religious differences and controversies of former periods, it must have been against the grain to record them if they were unfavourable to the tenets to which he so strongly clung. At the same time, I must observe that Sir John Romilly stated he was satisfied that Mr. Turnbull was a fit person and would do his duty properly, and he said that unless I desired that he should be dismissed, he should not think of putting the matter into any other hands. Of course I did not feel that there was sufficient ground for that. Well, then came Mr. Turnbull's resignation. I think that Mr. Turnbull acted as a man of honour ought to act under such circumstances. He no doubt felt that, however unjust might be the imputations against him, still, as there was a strong feeling among a large class of the people that he was performing a duty for which he was not fit, it was best to escape from attack and get out of a place in which the confidence of a large portion of the community was denied to him. He very honourably resigned. The emoluments of the office were very small indeed. It was not a permanent office, the employment was merely temporary. Well, then, when it was put to me the other day, 'What should be done?' I thought it was only acting fairly by Mr. Turnbull to accept his resignation. I think he acted quite rightly in resigning instead of continuing to be a target to be shot at. I think, too, the acceptance of his resignation was fair to him and fair to the public. The only mode in which any one could ascertain whether or not his duties were performed fairly was by comparing the abstracts which he made with the original documents. That is a labour very few persons would undertake, though any one might try to ascertain by one or two specimens what was the general character of Mr. Turnbull's work; yet it is quite clear that in the performance of the duties intrusted to him he must be more or less liable to imputations, and I felt that, having regard to the public interest and to Mr. Turnbull's particular situation, as he tendered his resignation, it was my duty to accept it. It was true that Sir John Romilly had recommended that Mr. Turnbull's resignation should not be accepted, but, as he (Lord Palmerston) was the person to determine the

question, he judged for himself. He had no doubt that Sir J. Romilly's opinion of Mr. Turnbull's faithfulness was perfectly well founded; and in accepting the resignation he did not in the least impute to Mr. Turnbull that he had not most faithfully performed his duty. The question was not one of religious equality: it was whether an individual should perform a duty in which the bias of his mind might influence him. He was told that Mr. Turnbull had even written a panegyric upon Babington, who conspired against the life of Queen Elizabeth, showing that he regarded that as a chivalrous undertaking; and that he had said he would rather be damned with Papists than be saved with Protestants."

The Marquis of Normanby said it was with extreme regret he had heard the opinions expressed by his Lordship. His Lordship had stated that at some previous time Mr. Turnbull expressed strong opinions. If that were a sufficient ground for accepting his resignation, it would open the door to any religious society objecting to the appointment of any man to a particular office on account of his religious opinions. The question was one, not of opinions, but of good faith, and the good faith of Mr. Turnbull was proved by the manner in which he had performed his duties.—Captain Jervis said, that M. Guizot, a Protestant, was employed by the French Government many years ago to prepare documents, and though his appointment gave offence to many of the Ultramontane party it was not cancelled.—Mr. Folkard did not see how Mr. Panizzi could retain his office as Principal of the British Museum, after what Lord Palmerston had said. That gentleman was a Roman Catholic, and he had the custody of valuable historical manuscripts in the Museum. The same remark would apply to Mr. Atlee, private secretary to Lord Cowley.—Lord Palmerston said that there were degrees of opinion; and it did not follow that every Roman Catholic would not command public confidence.—Mr. James Martineau thought it a peculiar hardship that a presumption against a man on account of his religious opinions should be allowed to outweigh the fact that he had produced a work in which he had exhibited literary justice and perfect fidelity.—Lord Palmerston said it was not the mere fact of Mr. Turnbull's being a Catholic. The charge made against him was that of being fanatical. A moderate Catholic might be just as competent to do the work as a Protestant.—The Marquis of Normanby said he could assure his Lordship that his decision would not put an end to the controversy.

DINNER TO SIR ARTHUR COTTON.—A public dinner was given on Wednesday evening, at Willis's Rooms, to Colonel Sir Arthur Cotton, in acknowledgment of his great services in the development of the agricultural resources of British India, and the improvement of the condition of its native population by the extension of irrigation and canal navigation. The Earl of Shaftesbury presided, and was supported by Lord Lyveden, Lord Harris, Sir J. Elphinstone, M.P., Mr. Gregson, M.P., Mr. Justice Haliburton, M.P., General Hay, and a large number of gentlemen connected with the military and civil services of India.

THE "ESSAYS AND REVIEWS."—The following letter from the Archbishop of Canterbury, with the signatures appended of every bishop on the bench except the Bishop of Sodor and Man, has been received by the Rev. W. R. Fremantle, of Haydon Rectory, in reply to an address bearing upon the "Essays an Reviews."

"Lambeth, Feb. 12.

"Rev. Sir,—I have taken the opportunity of meeting many of my episcopal brethren in London to lay your address before them They unanimously agree with me in expressing the pain it has given them that any clergyman of our Church should have published such opinions as those concerning which you have addressed us. We cannot understand how these opinions can be held consistently with an honest subscription to the formularies of our Church, with many of the fundamental doctrines of which they appear to us essentially at variance. Whether the language in which these views are expressed is such as to make their publication an act which could be visited in the ecclesiastical courts, or to justify the synodical condemnation of the book which contains them, is still under our gravest consideration. But our main hope is our reliance on the blessing of God in the continued and increasing earnestness with which we trust that we and the clergy of our several dioceses may be enabled to teach and preach that good deposit of sound doctrine which our Church has received in its fulness, and which we pray that she may, through God's grace, ever set forth as the uncorrupted Gospel of our Lord Jesus Christ. I remain, reverend sir, your faithful servant, J. B. CANTUAR.

I am authorised to append the following names:—

C. J. EBOR.	R. D. HEREFORD.
A. C. LONDON.	J. CHESTER.
H. M. DUNELM.	A. LLANDAFF.
C. R. WINTON.	R. J. BATH AND WELLS.
H. EXETER.	J. LINCOLN.
C. PETERBOROUGH.	C. GLOCESTER AND BRISTOL.
C. ST. DAVID'S	W. SARUM.
A. T. CHICHESTER.	R. RIPON.
J. LICHFIELD.	J. T. NORWICH.
S. OXON.	J. C. BANGOR.
T. ELY.	J. ROCHESTER.
T. V. ST. ASAPH.	S. CARLISLE.
J. P. MANCHESTER.	

NEW FRESCO AT THE HOUSES OF PARLIAMENT.—The subject of the new fresco now painting by Mr. Maclise, in the House of Lords, is the meeting of Wellington and Blucher after Waterloo.

GREAT FRAUD ON THE COMMERCIAL BANK.—A serious case of embezzlement, bearing a strong resemblance to the Pullinger frauds at the Union Bank, was discovered on Friday at the branch of the Commercial Bank in Henrietta Street. The fraud was committed by the ledger clerk, Mr. John Durden, of Park Village East, Regent's Park, in conjunction with Mr. James Holcroft, of 109, Hatton Garden, agent and wholesale boot and shoe dealer. The fraud was effected in the following manner:—Durden, as ledger clerk, on receiving money to be entered to the account of a customer, regularly entered it to the credit of the customer, but at the same time entered the same amount to Holcroft's account. This was done with a large number of deposits from day to day, Holcroft's figures being omitted in the casting up, so that there did not appear any discrepancy in the sum total. These misappropriations have been going on for many years, and if Durden had at any time been absent from his post some of the discrepancies between the pass-books of the customers and the ledgers of the bank would have been certainly discovered; but though it was a strict rule of the Bank that every clerk should periodically absent himself for a holiday, he disregarded the rule, and was never away for a single day. A few days back, however, a paralytic seizure incapacitated him from attending to his duties, although he pertinaciously made an effort to do so, and the whole affair at once became known. Durden is a married man, about 40 years of age, with seven children, and had been 16 years in the bank. Building speculations in Westbourne Square and the streets adjoining were the channel through which the money was squandered, but he seems anxious to facilitate restitution as far as possible, and it is hoped that some considerable amount of property may be recovered. On the discovery of the fraud the manager convened a meeting of the board, when it was resolved in order to secure the protection of the moneys entrusted to their care to transfer the business to the London and Westminster, that bank at once undertaking to pay off all liabilities, on the cash and securities held by the Commercial being handed over to it. The transfer was effected in the course of the day, and there is no doubt that the prompt measures taken by the directors before the defalcation became known prevented a run upon the bank, which, in the present state of the money market, might have been attended with heavy loss. On Thursday Durden and Holcroft were brought before the magistrate at Bow Street and remanded, the magistrate refusing to accept bail in either case.

THE EAST KENT DEPUTATION ON THE HOP DUTIES.—The Chancellor of the Exchequer has refused to receive the deputation from the East Kent planters, for the purpose of presenting a memorial in favour of a further postponement of the second moiety of the 1859 duty, payable on the 1st March, on the ground that as a due regard to the intention of the Legislature in the act of last year entirely precludes his acceding to a request for a renewed postponement of the duty, his agreeing to receive a deputation would but be the means of raising a false expectation.

DESTRUCTIVE HURRICANE.—On Wednesday and Thursday nights the metropolis and suburbs were visited by a violent storm, which appears to have also raged with unexampled severity over the western and southern coasts. On Thursday night the storm increased to a perfect hurricane, doing considerable damage to many buildings, more especially on the Surrey side of the Thames. Numbers of chimney pots were blown down, trees were up-rooted in Battersea and Kennington Parks, rolls of lead and zinc guttering were blown from the roofs of houses like paper, and numerous barges, boats, and steamers on the river were driven from their moorings. At Sydenham, Croydon, and other places on the Kent and Surrey hills much damage was done to a great deal of property. Trees were uprooted in all directions and carried to a great distance, and the north wing of the Crystal Palace, which is used as a store, and in which the exhibitions of poultry, rabbits, &c., are held, was partially destroyed. In Sussex, the beautiful spire of Chichester Cathedral with its central tower and supporting arches, which had been for some time under repair, was blown down, fortunately without loss of life and without injury to the transept, nave and choir. In Worcestershire and Northamptonshire the storm raged with extraordinary violence for a midland district. At Worcester a tree fell upon one of the toll-houses outside the city, completely crushing in the roof. Trees in hundreds were uprooted, and a great number of chimney stacks and walls blown down. At Evesham a stack of chimneys fell upon a house, crushing through the roof into a room where a woman was sleeping, but who escaped without injury. At Northampton a house fell in, burying a whole family in the ruins, and causing the death of two persons. In Gloucestershire the storm was equally destructive. Several houses and tall chimneys at Bristol were blown down or unroofed; and at Gloucester the Great Western and South Wales Station was almost entirely destroyed, and a good deal of damage was done to the shipping in the docks and the Gloucester and Berkeley Canal. At Plymouth a French vessel was wrecked with the loss of three of the crew, and several vessels sustained damage. At Penzance, during the storm of the previous Monday, the brig Hero, of Bideford, broke from her anchors in the harbour, and drifted on shore, when her crew of five men, with three men who had jumped on board to assist in the emergency, were swept into the sea, and all, except one, were drowned.

THE FATAL ACCIDENT IN THE SEWERS.—At the adjourned inquest on Friday, Dr. Letheby said that he had ascertained by analysis that the four men who were killed in the Fleet sewer were poisoned by sulphuretted hydrogen gas, and that such gas was evolved from the deposits in the sewers [illegible] duction of acids. He had ascertained [illegible] quantities of acid were discharged int[illegible] time to time from a large metal castin[illegible] in Warwick Lane, but there was no p[illegible] caused the present accident. The jury [illegible] verdict of Accidental Death, and the C[illegible] Sewers pledged themselves to prosecute [illegible] tion in order that the recurrence of su[illegible] may be prevented.

THE PUBLIC HEALTH.—The Regist[illegible] weekly return states that the deaths in L[illegible] week that ended Saturday, Feb. 16, were [illegible] declined to that number from 1459 in [illegible] week. The average number for the [illegible] weeks of the 10 years 1851-60, corrected [illegible] population, was 1345. The present return [illegible] 17 below the average. During the week [illegible] 889 boys and 903 girls, in all 1792 children [illegible] tered in London. In the ten correspon[illegible] the years 1851-60 the average number wa[illegible]

Provincial.

BERWICK.—The Report of the Commiss[illegible] pointed to inquire into the existence of bri[illegible] last election for this borough, together [illegible] minutes of evidence, has been published. Th[illegible] are the findings of the commissioners, Messrs [illegible] Barstow, and Lushington:—

"We find that bribery was committed [illegible] election in April, 1859. We find that C[illegible] Gordon was privy to and cognisant of, and [illegible] Coutts Marjoribanks, Ralph Anstruther Ear[illegible] Stapleton were not privy to or cognisant [illegible] We find that the persons named in [illegible] this our report annexed, were guilty of [illegible] election in April, 1859, by corruptly giving [illegible] money or other valuable consideration to vote[illegible] chase of their votes, or on account of their [illegible] by corruptly advancing money for the purpose [illegible] We find that the persons named in Schedu[illegible] our report annexed, were guilty of bribery [illegible] in April, 1859, by receiving money or other [illegible] sideration for having given, or to induce them [illegible] to refrain from giving their votes. We find tha[illegible] committed at the election in August, 18[illegible] [illegible] Richard Hodgson was privy to and cognizant [illegible] Dudley Coutts Marjoribanks was not privy t[illegible] such bribery. We find that the several pers[illegible] Schedule C, to this report annexed, were guilty [illegible] the election in August, 1859, by corruptly giving [illegible] money or other valuable consideration [illegible] purchase of their votes, or on account of their [illegible] by corruptly advancing money for the purpose [illegible] find that the persons named in Schedule D, [illegible] annexed, were guilty of bribery at the electi[illegible] 1859, by receiving money or other valuable [illegible] having given, or to induce them to give, or [illegible] giving their votes."

BLACKBURN.—In consequence of the [illegible] facturers of Accrington having [illegible] of 5 per cent. in the rate of wages, the [illegible] town have struck to the number of [illegible] promise of an accession to their force of [illegible] the course of the week.

CHATHAM.—There are still about 500 [illegible] close confinement and placed on a diet of [illegible] water. About 200 who refrained from taking [illegible] the revolt and 300 others whose conduct has [illegible] considerable improvement are allowed to re[illegible] work in the dockyard and other public w[illegible] are allowed full labour diet. The severe [illegible] cipline to which recourse has been had [illegible] outbreak has had a most beneficial effect, and [illegible] order have been thoroughly restored. A spe[illegible] issued by Sir Joshua Jebb, has been read to [illegible] in sections by Captain Powell the gover[illegible] the prisoners are made sensible of the posit[illegible] they have placed themselves by their mutin[illegible] All the privileges heretofore enjoyed by [illegible] entirely forfeited, the usual remission of certa[illegible] of the terms of servitude has been suspended [illegible] gratuities which have been allowed to accum[illegible] they have completed their sentence, are all [illegible] although hopes are held out that some part [illegible] may be regained by a course of good conduct [illegible] This punishment is severely felt by the con[illegible] of whom on being discharged from [illegible] would have had as much as 20*l.* each [illegible] Sir Joshua Jebb has also given the co[illegible] tinctly to understand that no extra die[illegible] will be given them. Besides the convicts [illegible] corporal punishment last week there rema[illegible] class of offenders to be dealt with—prisoners [illegible] not equally culpable with the ringleaders [illegible] but who took an active part in the mutiny, [illegible] wards, on two or three subsequent occasions, [illegible] to commit acts of minor insubordination. The[illegible] number of 105 men, were ironed and chained [illegible] in batches of 13, and made to stand the wh[illegible] the parade-ground against the outer wall of th[illegible] in charge of the prison warders and militar[illegible] The strictest silence was enforced among the[illegible] night they were allowed to sleep, still chained [illegible] in the wash-house and bath-room, on boards [illegible] strong guard. This heavy punishment was [illegible] day after day until Sunday last, when the[illegible] were reduced to a state of such comp[illegible] tion that the governor ordered the [illegible] be removed, and each man to be permitted [illegible] to his cell, which he had not been a[illegible] enter for nearly a week. This concession was [illegible] by the convicts with an outburst of repe[illegible]

[illegible] were also permitted to attend Divine [illegible] Sunday in the prison chapel, where the [illegible] was observed. Full order being thus [illegible] the number of prisoners sent out to work will [illegible] increased, until the whole are permitted [illegible] their employment on full labour diet. It is [illegible] that certain alterations are to be made in [illegible] the Chatham prison, the deputy [illegible] has resigned, and some of the inferior officers, [illegible] rendered themselves obnoxious to the convicts, [illegible] removed. Ten of the warders have already [illegible] that their services are to be dispensed [illegible] A special inquiry has been instituted into the [illegible] of the circumstances connected with the recent [illegible], with the view of ascertaining if any, and [illegible] grievances, exist on the part of the prisoners.

[illegible].—A meeting of the creditors of Messrs. Ledgard and Son, bankers, of this town has been held, [illegible] it was announced that the Wilts and Dorset Banking Company will liquidate the estate by paying [illegible] in the pound at once, and as much more as the estate may realise.

[illegible].—After 27 sittings, the adjourned inquest on [illegible] killed in the colliery explosion on the 1st [illegible] was brought to a conclusion on Friday, when the jury returned the following verdict:—

"[illegible] died from the effects of an explosion [illegible] the Black Vein Coal-pit at Risca, which gas [illegible] suddenly in the group of stalls in the third cross-[illegible] fourth list level, but there is no evidence to [illegible] ignited. And the jury recommend: 1. [illegible] shall be revised. 2. That the working [illegible] shall be more frequently inspected. 3. That [illegible] Mr Brough, the Government Inspector, that [illegible] of underground workings shall be so arranged [illegible] any future explosion unfortunately occurring [illegible] would be confined to the district in [illegible] place and that a new pit shall be sunk for the [illegible] improvement of the ventilation of the colliery, [illegible] taken into the serious consideration of the directors [illegible] of the works. The jury also take the opportunity of remarking that the Stephenson lamp appears to them [illegible] the best and safest."

RYDE.—A coroner's inquest was opened on Monday at [illegible]-house Farm, about a mile from Ryde, and continued by adjournment on Tuesday, on the body of Jane Lacy, the wife of Henry Lacy, a farmer residing at that place. It appeared from the evidence of several witnesses that Lacy had thrown his wife downstairs, and that she died from the injuries she received. Lacy is a man of drunken habits, and it is supposed that he was intoxicated when he committed the crime. Susan Wilder, the niece of deceased, appears to have been implicated in the occurrence, or, at all events, to have endeavoured to conceal the fact that the unfortunate woman had been murdered. The body presented the strongest evidence of her having been murdered. Her head was one mass of bruises, and there were wounds on various parts of the body, which was reduced by disease or want of nourishment to that of a mere skeleton. The bed-dress in which she had been murdered had been taken off, and was not to be found. The corpse had been carefully washed and laid out, and it was evident that the husband and the niece had agreed to pass off the story of her having fallen down stairs. The jury returned a verdict of Wilful Murder against Lacy, who has been committed to Winchester Gaol for trial at the assizes. The niece, who is of rather repulsive appearance, has been examined before the magistrates, and remanded on the charge of having been an accomplice in the murder.

Ireland.

THE GLENVEAGH MURDER.—The 12 prisoners who were charged with the murder of Mr. Murray, and [illegible] at the Rev. A. Nixon, have been discharged from custody in consequence of the informer on being taken to the Glenveagh mountains being unable to [illegible] the place where the murder was committed. The law officers of the Crown have ordered the informer to be taken into custody and prosecuted for perjury.

Scotland.

THE RECENT LOSS OF THE PRINCE ALFRED.—The commissioners appointed to investigate the loss of this [illegible] off Flamborough Head on the 12th ult., have reported to the Board of Trade that she was lost through the default of the Master, Mr. G. W. Craig, who allowed her to run from the Fern Islands to Flamborough Head during a long winter's night without [illegible] the engines or taking soundings, leaving her in charge of the second mate, who neither held a certificate of competency nor of service. They, therefore, [illegible] the certificate to the Board to be dealt with as they may think fit. At the same time they state that a considerable amount of evidence was produced to show that up to the time of this casualty his reputation for care, vigilance, and good conduct was of a very high order.

Railways.

THE LATE ACCIDENT ON THE SOUTH-WESTERN.—The adjourned inquest on Dr. Baly was resumed for the fifth time at Merton on Tuesday. Mr. Beattie, the locomotive superintendent, said he could not assign any cause for the accident. He characterised any explanation of it as purely speculative, and declined to express a decided opinion, which he could not justify to his own mind. Mr. W. Pole, a civil engineer and professor of engineering at University College, made an elaborate statement of the appearances of the marks on the lines, and deduced therefrom that the middle wheels of the tender got off the rails, and that the accident arose from that cause. His farther evidence was, with the proceedings, adjourned till Tuesday next.

Law.

COURT OF PROBATE.—*Talbot* v. *Treherne*.—Last evening, at six o'clock, the jury decided in this case in favour of the plaintiff, thereby affirming the will of the Rev. G. M. Treherne. The case occupied ten days.

Obituary.

LIEUT.-GENERAL LESLIE, K.H., Colonel of the [illegible]th Regiment, died at Brighton on the 12th inst. in his 71st year. He entered the army in 1806, was at the taking of Travancore in 1808, and at the capture of Bourbon and the Isle of France in 1810, after which he served in Java, and was present at the three engagements in August, 1811. He served also in the Pindaree war in 1817, and afterwards with the army of occupation in France. For his services he was made a Knight of the Guelphic Order, and received the silver war medal and one clasp for Java. In 1857 he was appointed Colonel of the [illegible] Foot.

SIR WM. BURNETT, M.D., K.C.B., F.R.S., died on the 16th inst. in his 82d year. He entered the Navy as Assistant Surgeon in 1795, was appointed Physician and Inspector of Hospitals to the Mediterranean fleet in 1810; became Medical Commissioner of the Navy in 1822, and subsequently Director-General of the Medical Department of the Navy; and Physician in ordinary to William IV. He was present at the battles of Cape St. Vincent, the Nile, and Trafalgar, and for his services he was made a K.C.B., and decorated with four war medals. He was a Fellow of the Royal Society, and of the Royal College of Physicians.

LIEUT.-COLONEL SIR WILLIAM HENRY CLERKE, BART., of Mertyn, Flintshire, died on the 16th inst. at the Heath, Salop, aged 67. He was born in 1793, and was the eldest son of the Rev. Sir W. H. Clerke, Bart., by the daughter of Thomas Cartwright, Esq., of Aynho. His next brother is the Ven Charles Carr Clerke, D.D., Archdeacon of Oxford, and his father's sister married the first Sir Robert Peel. He was educated at Charterhouse, and entered the army as Ensign in the 52d Light Infantry in 1811. He served with the 52d at the battles of Nivelle, Nive, Orthes, Tarbes, and Toulouse, in the campaign of 1815, at the battle of Waterloo, and was also with the army of occupation in Paris. For his services he obtained the Peninsula medal with four clasps, and the Waterloo medal. He succeeded his father as ninth baronet in 1818, and married in 1820 the daughter of George Watkin Kenrick, Esq., of Mertyn, in the county of Flint, by whom he had issue four sons and one daughter. He is succeeded in his title and estate by his eldest son, William Henry, born in 1822, who married in 1849 the eldest daughter of Robert Gosling, Esq., of Botleys Park, Surrey.

MR. SECKER, the Magistrate of Marylebone Police Court, died on Wednesday at his Chambers in Essex Court, Temple, in his 63rd year. He is the third magistrate of the Marylebone Court who has died within the last nine months.

WILLS.—The will of Mr. Lancelot Shadwell has been sworn under 20,000*l*.; Mr. William Tassie, of Leicester Square, the gem engraver, 35,000*l*.; Mr. George Haycock, of Chelmsford, a member of the Society of Friends, 45,000*l*.

BIRTHS.—On the 17th inst, at 12, Hereford Street, Park Lane, the Right Hon Lady ROLLO, of a son—14th inst, at Bray, the Lady HARRIET LYNCH BLOSSE, of a son—16th inst, at 61, Cadogan Place, the Lady MARY READE, of a son—16th inst, at 20, Grosvenor Place, la Comtesse de LABROSSE DE VARENNES, of a daughter—1[illegible]th inst, at Eversley Cross, Hampshire, the wife of the Hon W. B. ANNESLEY, late 6th or Inniskilling Dragoons, of a son—16th inst., at 7, Merrion Square, Dublin, the wife of the Right Hon. Mr. Justice FITZGERALD, of a son—14th inst, at Dorchester, the wife of Major-General MICHEL, of a daughter—11th inst, at Cheltenham, the wife of Major-General J. T. BRETT, Madras Retired List, of a son—11th inst, at his residence, Eaton Square, the wife of GEORGE MOFFATT, Esq., M.P., of a daughter.

MARRIAGES.—On the 11th inst, at the chapel of the British Embassy at Paris, the Right Hon. the Earl of LINCOLN, eldest son of the Duke of Newcastle, to HENRIETTA, only daughter of HENRY THOMAS HOPE, Esq., of the Deepdene, Surrey—11th inst, at St. Peter's Church, Dublin, GEORGE HENRY LAWRENCE, B.C.S., to MARGARET, second daughter of the late Rev. R. STAVELEY, Prebendary of St. Munchin's, Limerick—7th inst, at the Parish Church of Charleton, Devon, OSWALD C. ARTHUR, Esq., youngest son of the late Vice-Admiral R. ARTHUR, C.B., to ELIZABETH FORTESCUE MARY, youngest daughter of Captain WELLS, R.A., of Slade House, Devon—11th inst, at the Catholic Church, Kilkursa, JOHN, second son of FRANCIS BLAKE, Esq., of Cregg Castle, in the county of Galway, to MARY, eldest daughter of GEORGE LYNCH STAUNTON, Esq., of Clydagh, in the same county—28th November, at Auckland, Lieutenant FRANCIS ALEXANDER HUME, R.N., third son of George Hume, Esq., of 20, Dorset Square, to HANNAH CHARLOTTE CLARA, eldest daughter of Major-General CHARLES EMILIUS GOLD—12th ult, at Panama, at the church of San Felipe, and afterwards at her Britannic Majesty's Consulate, CHARLES TOLL BIDWELL, Esq., to AMALIA, youngest daughter of the late DON MANUEL JOSÉ HURTADO, many years Minister Plenipotentiary at the Court of St. James's, for the Republic of Columbia.

DEATHS.—On the 16th inst, at Paris, the Dowager Lady CONGLETON, aged 78—18th inst, HENRY, third son of the late Hon. and Rev. FREDERICK PLEYDELL BOUVERIE, aged 42—18th inst, in Brunswick Square, Penrith, Major-General A. R. HARRISON, Royal Artillery, aged 71—13th inst, at his residence, Shrub's Hill, Lyndhurst, Rear-Admiral ROBERT AITCHISON, aged 63—18th inst, at Hillingdon, MARY PENELOPE, widow of the late Major-General JAMES GRANT, C.B., aged [illegible]—5th inst, Captain HENRY WHITE, 13th Light Dragoons, second son of Colonel White, M.P., of Woodlands, county of Dublin—11th inst, at Morden Lodge, Surrey, ARTHUR, son of Colonel DANIEL LYSONS, C.B., aged two years and seven months—1[illegible]th inst, at 18, Lower Ward, Windsor Castle, Captain ANDREW BEARTLEY, Military Knight of Windsor, formerly of the Royal Horse Guards (Blue), and for 25 years Captain and Adjutant of the East Kent Regiment of Yeomanry Cavalry—9th ult, at Sierra Leone, ARTHUR GEORGE FITZROY, Commander of H.M.S. Falcon, aged 34—9th inst, at Shell House, Exmouth, FRANCIS DANBY, Esq., A.R.A., aged 68—15th inst, at Campden Grove, Kensington, ARABELLA HUTCHINS CALLCOTT, daughter of the late Dr. Callcott, aged 61—15th inst, at 15, Upper Bedford Place, Russell Square, SARAH, the wife of CHRISTOPHER TEMPLE, Esq., Q.C.—13th inst, at the Rectory, Woodchurch, the Rev. JOSHUA KING, M.A., rector of Woodchurch, and of St. Matthew's, Bethnal Green, aged 83—15th inst, at the Round-wood, Ipswich, the residence of Charles Schreiber, Esq., the Rev. SPENCER WOODFIELD MAUL, rector of Drinkstone, Suffolk, aged [illegible]—[illegible] inst, at Vienna, the Right Rev. ERNST PAUER, Superintendent of the Lutheran Church of Austria, Counsellor of the Ecclesiastical Court of the Municipality, and First Minister of the Lutheran Church at Vienna—Feb. 16, being his 71st birthday, at Shepherd's Bush, Mr. WM. PLAMTRY, Florist, &c., and formerly of the Royal Forcing Gardens, Kensington.

Markets.

COVENT GARDEN, Feb. 23.

Supplies of winter Greens though improving are still insufficient for the demand. Continental contributions also continue to be imported. Pine Apples and Grapes have altered but little since our last. Oranges may be obtained at about last week's prices. Good Cobs may be had at from 1s. to 1s. 6d. per pound. Cornish Broccoli is still arriving in cratefuls, and in excellent condition; good single heads of it realise from 2d. to 4d. each. Asparagus, French Beans, and new Potatoes may also be had. Cucumbers are scarce. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Camellias, Heaths, and Roses.

FRUIT

Pine Apples, per lb., 6s to 10s	Pears, per doz., 3s to 6s
Grapes, per lb., 8s to 14s	Apples, per doz., 6d to 1s 6d
— new, per lb., 20s to 24s	Oranges, per 100, 6s to 10s
Strawberries, per oz., 2s	Lemons, per 100, 6s to 10s
Pomegranates, each, 4d to 6d	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 4s	Celery, p. bundle, 1s 6d to 1s 9d
Green Peas, p. ½ sieve, 20s	Onions, p. ½ sieve, 1s 6d to 2s 6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 16s to 30s
Cabbages, do., 2s to 3s	Rhubarb, p. bundle, 9d to 1s 3d
Potatoes, p. ton, 100s to 160s	Seakale, p. punnet, 3s to 3s 6d
— per bus., 4s to 6s	Shallots, per lb., 6d to 8d
— per cwt., 6s to 10s	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 10d	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 6d to 8d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 4s to 5s	Mushrooms, p. pott., 2s to 3s
Cucumbers, each, 2s to 3s	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 4s to 6s	Savory, per bunch, 2d to 4d

BRITISH WOOLS.—LONDON, FRIDAY, Feb. 22.

Our prospects seemed more hopeful, and more disposition was manifested to transact business, until the decision of the directors of the Bank of England was made known relative to further advance in the rate of discount to 8 per cent., which has taken most business men by surprise, and has put a stop to transactions for the present.

	s.	d.		s.	d.		s.	d.		s.	d.
South-down Hoggets..	1	6	to	..		Leicest. Wethers	1	5	to	..	
Half-bred ditto..	1	7	—	..		Ditto Hoggs ..	1	7	—	..	
Down Ewes ..	1	5	—	..		Combing Skins	0	11	—	1	3
Kent Fleeces ..	1	6	—	..		Blanket ditto ..	0	6	—	0	8
						Flannel Wool .	1	0	—	1	8

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, Feb. 21.

Prime Meadow Hay	75s to	85s	Clover	90s to	110s
Superior do. (old) ..	90	100	New Clover	—	—
Inferior do.	36	50	Old second cut ..	70	100
New do.	—	—	Straw	30	36
Rowen	—	—			

DAVIS & CO.

CUMBERLAND MARKET, THURSDAY, Feb. 21.

Sup. Meadow Hay ..	110s to	117s	Inferior Clover ..	90s	105s
Inferior do.	70	100	New do.	—	—
New do.	—	—	Straw	40	44
Superior Clover ..	112	120			

JOSHUA BAKER.

WHITECHAPEL, THURSDAY, Feb. 21.

Fine old Hay	100s to	108s	Fine old Clover ..	110s to	120s
Inferior do.	45	90	Inferior do	90	100
Prime New Hay ..	—	—	Fine 2d cut	90	100
Inferior do.	—	—	Inferior do.	—	—
Straw	36	38	Fine New Clover ..	—	—

HOPS.—BOROUGH MARKET, FRIDAY, Feb. 22.

Messrs. Pattenden & Smith report that the market continues firm, but not much doing.

POTATOES.—SOUTHWARK, Monday, Feb. 18.

During the past week the arrivals both coastwise and by rail have been very large, and a consequent reduction in prices has taken place with a downward tendency. The following are this day's quotations:—York Flukes, 150s. to 160s. per ton; Lincolnshire Regents, 110s. to 120s.; Dunbar Red Soil, 150s. to 160s.; North Berwick do, 120s. to 125s.; Fife, Forfar, and Perth do., 95s. to 105s.; Rocks and Reds, 90s. to 95s; French Whites, 60s. to 70s.; Belgian do, 60s. to 80s.; Dutch do., 60s. to 80s.

METROPOLITAN CATTLE MARKET.

MONDAY, Feb. 18.

The number of Beasts is about the same as on Monday last. Trade is slow, but the prices are not much altered. There are more Sheep and the demand is smaller. On the average trade is not so good, and a clearance cannot be effected. Calves are selling as on Thursday. From Germany and Holland there are 520 Beasts, 2000 Sheep, and 130 Calves; from Spain, 181 Beasts; from Scotland, 130; from Ireland, 200; from Norfolk and Suffolk, 1900; and 100 from the northern and midland counties.

	s	d		s	d		s	d		s	d
Best Scots, Herefords, &c. ..	4	8	to	5	0	Best Long-wools.	5	4	—	5	6
Best Short-horns	4	6	—	4	8	Do. Shorn			to	..	
2d quality Beasts	3	6	—	4	0	Ewes & 2d quality	4	0	—	5	0
Best Downs and Half-breds ..	5	8	to	6	0	Do. Shorn			—	..	
Do. Shorn			—	.		Lambs			—	..	
						Calves	4	8	—	5	8
						Pigs	4	6	—	5	0

Beasts, 3600; Sheep & Lambs, 19,150; Calves, 147; Pigs, 340

THURSDAY, Feb. 21.

The supply of Beasts is not large, but the demand is small; consequently it is difficult to effect a clearance. Prices are about as on Monday last. The number of Sheep is much smaller than on Thursday last, but quite equal to the demand. Trade is very slow at Monday's rates. Our foreign supply consists of 96 Beasts, 1250 Sheep, and 89 Calves. Milch Cows 145.

	s	d		s	d		s	d		s	d
Best Scots, Herefords, &c. ..	4	8	to	5	0	Best Long-wools .	5	4	—	5	6
Best Short-horns	4	6	—	4	8	Do. Shorn			—	..	
2d quality Beasts	3	6	—	4	0	Ewes & 2d quality	4	4	—	5	0
Best Downs and Half-breds ..	5	8	—	6	0	Do. Shorn			to	..	
Do. Shorn			—	..		Lambs			—	..	
						Calves	4	8	—	5	8
						Pigs	4	6	—	5	0

Beasts, 905; Sheep & Lambs, 3620; Calves, 132; Pigs, 120.

[MARK LANE.—MONDAY, Feb. 18.

The supply of English Wheat to this morning's market was small. The best samples found ready buyers at last week's prices, but damp and inferior qualities hung heavily on hand. The attendance of country buyers was considerably larger than of late, and a good retail business was transacted in foreign at

our previous quotations. Barley is a slow sale at barely last week's prices. Beans and Peas are unaltered in value. Oats are in fair demand at late rates. The Flour trade is dull, and American barrels are 6d. cheaper.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk..White	46—65	Red	40—60
— — fine selected runs..ditto	50—70	Red	54—65
— — Talavera	51—72		
— Norfolk	—	Red	—
— Foreign	50—76		
Barley, grind. & dist., 28s to 30s..Chev.	40—45	Malting .	38—40
— Foreign..grinding and distilling	30—36	Malting .	40—43
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—25
— Irish ....Potato	26—28	Feed ..	21—24
— Foreign........Poland and Brew	24—28	Feed ..	20—28
Rye	35—38	Foreign .	—
Rye-meal, foreign	—		
Beans, Mazagan....30s to 44s....Tick	28—48	Harrow .	28—48
— Pigeon ......34s — 56s..Winds.	34—42	Longpod	—
— Foreign ....Small	40—50	Egyptian	—
Peas, white, Essex and Kent ..Boilers	33—48	Suffolk .	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign .	38—48
Maize .... White	—	Yellow..	—
Flour, best marks delivered..per sack	50—57		
— 2d do. .... ditto	38—50	Country.	38—50
— Foreign ....per barrel	30—35	Per sack	40—50

Friday, Feb. 22.

During the past eight days we experienced fine spring weather with a mild temperature and S.E. winds, until the 20th, when it veered to S.W., increasing to a violent gale, which lasted through the night, and yesterday accompanied with heavy rain. To-day is fine; wind S.W. Excepting in Liverpool, Newcastle, Birmingham, and the Scotch markets, where the high rate of interest appears to have had some effect upon the corn trade, Wheat, both English and foreign, has been steady in price during the past week. Fair samples of English Wheat have been realised at fully previous rates; but the damp and inferior continue to be difficult of disposal, and prices are irregular. Where any alteration occurred in the value of Barley it has been in favour of the buyer. Former prices have been supported for other descriptions of Spring Corn, particularly Beans. The demand for Flour has been limited, and American obtainable at a decline of 6d. to 1s. per barrel. During the past week the arrivals off the coast have been more liberal, and 101 cargoes are reported, viz., 43 Wheat, 12 Maize, 26 Barley, 2 Rye, 4 Beans, 2 Flour, 6 Linseed, 1 Rape seed, 3 Cotton seed, and 2 oilcake. The sales have not been extensive. At the opening of the Paris market on the 20th holders of Wheat asked an advance of 1 fr. since last week, but they subsequently took 50 cts. over previous prices, at which a fair business resulted. Flour is in good demand at former rates. The arrivals of foreign Wheat and Barley this week have been large, of all other grain small. This morning's market was poorly attended. The best English Wheat is saleable at late prices, but all other descriptions move off slowly. Spring Corn of all kinds meets a slow sale at Monday's prices.

Arrivals from Feb. 18 to Feb. 22.

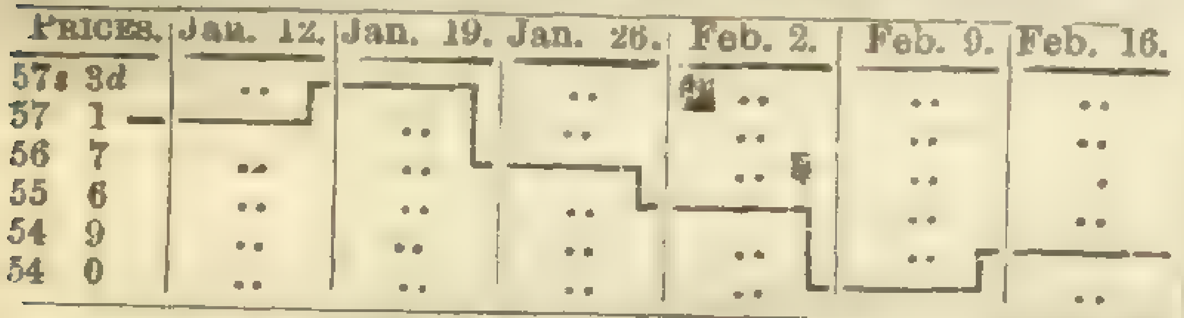
	Wheat.	Barley.	Oats.	Flour.
English ..	490 qrs.	1480 qrs.	100 qrs.	650 sks.
Irish	— „	— „	2540 „	— „
Foreign ..	29010 „	8940 „	5550 „	500 „ / 15510 brls.

Liverpool, Tuesday, Feb. 19.—The Corn market was well attended this morning. Wheat in good request, at a further decline of 1d. per cental on inferior qualities. Flour fair sale at a reduction of 6d. to 9d. per barrel; sacks unchanged. Beans steady at last rates. Oats and Oatmeal dull. Indian Corn, moderate business; mixed, 36s. 9d. to 37s.; yellow American, 37s. 9d.; Galatz, 39s. 6d.

Friday, Feb. 22.—There was a thin attendance at to-day's market; Wheat dull of sale at Tuesday's prices. Flour slow. Indian Corn a moderate sale at 36s. 6d. for mixed American, 39s. 6d. for Galatz. Beans steady. Oats and Oatmeal dull.

Averages	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Jan. 12..	57s 1d	40s 6d	22s 6d	34s 6d	43s 10d	44s 6d
— 19..	57 3	40 6	23 2	34 9	41 10	43 0
— 26..	56 7	40 7	23 1	35 10	42 5	41 8
Feb. 2..	55 6	40 0	23 3	34 3	40 8	43 0
— 9..	54 0	40 8	22 6	36 8	39 10	42 7
— 16..	54 9	38 11	23 0	35 7	40 0	44 7
Agg. Aver.	55 10	40 0	22 11	35 2	41 5	43 3

Fluctuations in the Last Six Weeks Averages.



BUTTER MARKET.—Feb. 22.

Best Fresh Butter .. .. 18s. per dozen lbs.
Second do. do. .. .. 15s. „ „
Pork, 4s. 4d. to 5s. 0d. per 8 lbs.

COAL MARKET.—Feb. 20.

Haswell Gas, 14s.; Hollywell, 18s.; Tanfield Moor, 16s. 3d. Wylam, 17s. 6d.; Walls End Harton, 19s. 6d.; Walls End Hedley, 19s. 6d.; Walls End Killingworth East, 17s. 6d.; Walls End Framwellgate, 20s.; Carway and Duffryn Malting, 24s.; Locomotive Coke, 25s.—16 ships at market.

TO CULTIVATORS of SOFT-WOODED PLANTS.—Mr. James Veitch, Jun., of the Exotic Nursery, King's Road, Chelsea, S.W., is in want of a really good PROPAGATOR and CULTIVATOR of SOFT-WOODED PLANTS, &c. A person of good address, who could also assist in attending on Company, would be desirable.—Unexceptionable references required.

TO SOFT-WOODED PLANT GROWERS.

WANTED, in a large Nursery Establishment near London, a Person thoroughly competent to Cultivate a first-rate and select collection of SOFT-WOODED PLANTS, more particularly Pelargoniums, Geraniums, Fuchsias, Chrysanthemums, &c. All the finest novelties, both English and foreign, will be purchased as they appear.—Applications to be addressed, with terms and references, to X. Y. Z., *Gardeners' Chronicle* Office, W.C. N.B. Successful cultivation will meet with its due reward.

WANTED, a WORKING BAILIFF and his Wife, for a gentleman's Farm, near London; the man must understand the Buying and Selling of Stock, keeping Accounts, and the management of Cows, Pigs, and Poultry. The Wife must be a good Dairy woman, and well accustomed to Rearing and Fatting Poultry, as a large quantity is kept. No one need apply who has not considerable experience in these matters. The farm being a small one they form the most important part of it and must be made to answer.—Apply by letter to A. B., Messrs. Lett & Co., 8, Royal Exchange, London, E.C.

WANTED, a steady, active, and industrious young MAN to attend to the Greenhouse Plants, &c., under the direction of the Foreman.—A. M. L., Post Office, Coventry.

WANTED, a Man and Wife, as OUT-DOOR SERVANTS, the Man a Gardener, the Woman to do part of a small family's Washing. She must have been used to getting up fine linen, &c., and must have a recommendation from the lady for whom she last washed. No glass.—Address, Rev. X. A., Alford, Lincolnshire.

WANTED, A KEEPER who knows country business, Building, taking care of Woods, &c.—Apply by letter only, post paid, to Y. Z., care of Mrs. Little, 34, Henrietta Street, Covent Garden, W.C.

WANTED IMMEDIATELY, an ASSISTANT SHOPMAN, in the Nursery and Seed Trade. One who has been accustomed to waiting in the Seed Shop preferred.—Apply by letter to W. Wright, Market Street, Retford, Notts.

WANT PLACES.—Letters to be Post Paid.

GARDENER (Head).—Age 37, married; understands all the branches, including Pines, Vines, &c.—J. G., Gardener, Beckham Park, near Plymouth.

GARDENER (Head).—Age 30, single; has a practical knowledge of the whole routine of his profession. Good references.—S. W., Post Office, Maidstone.

GARDENER (Head).—Age 27, single; begs to offer his services to any nobleman or gentleman wanting a good practical working Gardener. Good character. Wages, 60l. a year.—X. Y. Z., 21, Cochrane Terrace, St. John's Wood.

GARDENER (Head).—Age 38, married; has a thorough knowledge of his profession in every department of Gardening.—Head Gardener, Loseley Park, Guildford, Surrey.

GARDENER (Head).—Age 38, married, without incumbrance; fully understands Forcing Pines, Vines, Stove Orchids, &c., and first-class Plantsman, &c.—J. Farrant, 24, Cochrane Terrace, Portland Town, London, N.W.

GARDENER (Head).—Understands Pines, Vines, Melons, Cucumbers, and Plant Growing. Two-and-a-half years' good character.—J. H., Mr. Methven, Stanwell Nursery, Edinburgh.

GARDENER (Head).—Age 44, married; has had upwards of 20 years' practice as Head Gardener, where Pines, Grapes, &c., Kitchen and Flower Gardening has been carried on, on an extensive scale. The highest testimonials.—Y. Z., 33, St. Peter's Street, Islington, N.

GARDENER (Head), where two or more are kept.—Single; thoroughly understands the Forcing of Flowers, Fruits, and Vegetables; with a general knowledge of his profession in all its branches. Good references.—G. C., Mrs. Turner's, Hornsey Lane, Highgate, N.

GARDENER (Head) to any nobleman or gentleman requiring a good experienced Gardener.—Age 34, single; understands Forcing all kinds of Fruit, Flowers, and Vegetables. Can superintend Land. Good reference.—G. L., Messrs. Lee's Nursery, Hammersmith, W.

GARDENER (Head).—Age 34, married, no incumbrance; has a thorough knowledge of his profession in all its branches, with good experience of Early and Late Forcing; also the Management of Flower, Fruit, and Kitchen Garden. Good character.—J. C., Lodge, Love Hill, Langley Park, Bucks.

GARDENER (Head).—Single; thoroughly understands the management of Stove and Greenhouse Plants, Early Forcing of Fruits and Vegetables; also a good Flower and Kitchen Gardener. A good character given.—A. Z., E. Dickers, Westerham, Kent.

GARDENER (Head).—Age 45, married; has for 20 years upon the most improved principles successfully cultivated Pines, Grapes, Peaches, Hothouse and Greenhouse Plants, with general Forcing, Fruit, Flower, and Kitchen Gardens. Has also had great experience in the Management of Land and Stock.—J. C., Pine-Apple Nursery, Edgware Road, W.

GARDENER (Head).—Age 34, married, one child; has a thorough practical knowledge of his profession in all its various branches; including the Early Forcing of Fruits, Flowers, and Vegetables, Growing of Stove and Greenhouse Plants, &c., also the general routine of Kitchen and Flower Gardens: five years' good character from the nobleman he is leaving.—R. S., Campden House, Broadway, Worcestershire.

GARDENER (Head).—Age 30, small incumbrance; has had practical experience in Gardening in all its branches in England, Ireland, and Scotland, including Early and Late Forcing of Vines, Peaches, Melons, Cucumbers, Strawberries, Stove and Greenhouse Plants, Pleasure Grounds, Flower, Fruit, and Kitchen Gardens. Will be disengaged on the 21st February. Three years and 7 months' character from present employer.—The Gardener, Castle Archdall, Enniskillen, Ireland.

GARDENER (Head).—Age 35; active, and competent to undertake the Management of Hothouses, Conservatory and Greenhouse, and the Cultivation of Cucumbers and Melons; has had great experience in Flower and Kitchen Gardening, and well acquainted with the Culture of Fruit Trees. First class Testimonials may be had from the gentleman with whom the advertiser has been engaged upwards of six years.—W. F., The Gardens, Beesthorpe Hall, Newark.

TO NOBLEMEN AND GENTLEMEN.

GARDENER (Head).—Age 35, married; has lived nearly six years as Head Gardener where he has had the management of extensive Fruit, Vegetable, and Flower Gardens; also a great extent of Glass. Has been a successful Exhibitor at the London, Brighton, Crystal Palace, and Guildford Horticultural Exhibitions. Can have an excellent character from his present employer. Wages 75l. per year.—A. B. C., Messrs. Osborn & Sons, Nurserymen, Fulham, London, S.W.

GARDENER (Head), Age 27; and TWO UNDER GARDENERS, are open to engagements. The highest references for ability, sobriety, &c.—Josh. French, Melrose Hall, Putney, London.

GARDENER (Head, or Single-Handed).—Age 40, single; understands Kitchen, Fruit, and Flower Gardens, Glass Houses, &c. Good character.—S. D., Seedsman, Market Hill, Royston, Herts.

GARDENER.—Married; understands his profession, and can have a good recommendation.—Y. Z. Mr. Penton's, Post Office, 5, Lupus Street, Pimlico.

GARDENER.—Age 32, married, no incu[illegible] thoroughly understands his profession. Thre[illegible] character.—J. T., 4, Henry Street, Upper Kenn[illegible]

GARDENER.—Age 23; has a [illegible] Stove and Greenhouse Plants, [illegible] Garden. Two years' unexceptionable [illegible] Office, Waltham Cross, N.

GARDENER.—Age 35, single; [illegible] sound knowledge of his profession. [illegible] any part of England. Two years' go[illegible] testimonials and references of the hi[illegible] Barnes, Camden Nursery, Camberwell, S.

TO NOBLEMEN, GENTLEMEN [illegible]

GARDENER.—Married, withou[illegible] T. H. begs to offer his services to a[illegible] tleman in want of a thorough practical [illegible] gardener to the Hon. Talbot Agar, and [illegible] Grace the late Duke of Leeds, at H[illegible] shire. Is now about to leave his pres[illegible] has been engaged for over three years re[illegible] and gardens, in the Erection of Hort[illegible] growing Pines, Grapes, and Plants to the [illegible] well known to the most eminent Hort[illegible] and testimonials undeniable.—Direct t[illegible] Gardens, Cranbury Park, near Winchester, [illegible]

GARDENER (Second).—Age 21; in [illegible] blishment. Understands Kitchen Ga[illegible] Vines, Cucumbers, and Melons, Propagating [illegible] ing. Three years' good character fr[illegible] A. Ellis, Wenvoe Castle, near Cardiff.

GARDENER (Under).—Age 19; good [illegible] of the Flower and Kitchen Garden, and F[illegible] character.—G. H., Post Office, Wanstead, Essex [illegible]

GARDENER (Under).—Age 23; good [illegible] of Stove and Greenhouse Plants, the For[illegible] Late Fruits. Good character.—A. B., Post Office [illegible] Essex, N.E.

GARDENER (Under).—Age 22; in [illegible] gentleman's establishment where F[illegible] Growing is carried on to some extent. [illegible] J. A., Post Office, Leytonstone, Essex, N.E.

GARDENER, or GARDENER and St[illegible] Age 40; a good general Plant Grower, [illegible] Management of Land, Timber, and Stock. W[illegible] a Dairy. Nine years' and four months' g[illegible] E. S., Messrs. Henderson's, Pine-Apple Place, Edgw[illegible]

NOBLEMEN and gentlemen requiring [illegible] a Person to conduct Surveys, Horticultu[illegible] tural Improvements, Lay out Gardens, Farm[illegible] Plans of the Estate, or Superintend the Estab[illegible] to J. N., Messrs. Webster's, Stationers, 60, P[illegible]

STEWARD or FARM BAILIFF.—Ha[illegible] practical experience of Farming in seve[illegible] England. Would not object to go abroad.—A. G. [illegible] Office, Dorking, Surrey, S.

STEWARD or MANAGING FARM BAIL[illegible] Has a thorough knowledge of all descriptions [illegible] Breeding, Feeding, and a good judge of all kinds of [illegible] Farm produce; understands the Management [illegible] Sale of Timber, and the proper keeping of a Home Farm [illegible] class Testimonials and reference to a nobleman wh[illegible] glad to answer any inquiries.—Thos. Stevens, E[illegible] hurst, near Tunbridge, Kent.

BAILIFF or GENERAL MANAGER.—[illegible] conversant with every branch of C[illegible] Heavy and Light, reclaiming Waste, Drainage, [illegible] having had the entire Management of a N[illegible] L. M., Clubb & Smith, Agricultural Implement [illegible] Fenchurch Street, E.C.

FARM BAILIFF.—Middle-aged, married, [illegible] thorough knowledge of his business, both [illegible] Light Soils; Cultivation and Management of H[illegible] ing, Rearing, and Buying of Stock. Seven years [illegible] Y. Z., Mr. Cattell's, Westerham, Kent.

TO NOBLEMEN AND AGRICULTURAL GENTLE[illegible]

FARM BAILIFF, or in any similar [illegible] Age 34; has spent all his life between the [illegible] Market. Thoroughly understands both Light and [illegible] Land, Drainage, Breeding of Stock, Buying and [illegible] Produce, &c. First-class references from pr[illegible] H. H., 4, Ampthill Place, Vassall Road, Brixton, S.

FARM BAILIFF.—Age 40, single; has [illegible] practical knowledge of Farming, both Heavy [illegible] Soils; Breeding, Rearing, Buying and Selling Stock [illegible] jection to leave England. Unexceptionable referen[illegible] last 15 years.—W. W., Post Office, Guildford.

TO NOBLEMEN AND GENTLEMEN.

BAILIFF.—Age 45; has had great exper[illegible] the Breeding and Management of Stock, [illegible] present improvements in Farming in general, [illegible] charge of the Dairy and Poultry if required [illegible] 13 years' good character, and be strongly recomm[illegible] the gentleman he has just left.—A. B., 23, [illegible] Greenwich, S.E.

BAILIFF.—Thoroughly acquainted [illegible] branch of Agriculture, both Heavy and L[illegible] the most approved system; Growing Roots, [illegible] Breeding, Buying, and Selling of Stock, having [illegible] Management of a large Farm. Reference [illegible] character. Would undertake to Manage Dairy [illegible] Messrs. Flanagan & Son, 9, Mansion House Stre[illegible]

BAILIFF (Under), or to assist a gentleman [illegible] Farm.—Age 18; has had considerable practice [illegible] of a thousand acres in Lincolnshire. Wages not the [illegible] much as good practice.—A. S., 1, Radnor Villas, W[illegible] Kensington, W.

IMPROVER.—A strong Youth aged 18, wi[illegible] knowledge of gardening; can be well recomme[illegible] John Simpson, Junior, Saxilby, near Lincoln.

IMPROVER.—Age 21; is desirous of placing [illegible] self with some nobleman or gentleman's Garden[illegible] provement; willing to pay a small Premium.—[illegible] Astill's, Printer, Hertford Street, Coventry.

IMPROVER.—Age 23; wishes to further [illegible] rience in any gentleman's place. A pre[illegible] given; has also a good character.—J. W. B[illegible] Buckfastleigh, near Ashburton, South Devon.

IMPROVER in a nobleman's or gentleman's [illegible] lishment, where Gardening is carried on a [illegible] Would pay a Premium. Nearly two years' [illegible] Young, The Gardens, West Hill House, Highgate. [illegible]

The Gardeners' Chronicle Newspaper.

SATURDAY, MARCH 2, 1861.

REPEAL OF THE PAPER DUTY.—THE TENTH ANNUAL PUBLIC MEETING of the Association for promoting the Repeal of the Taxes on Knowledge will be held at the Whittington Club, Arundel Street, Strand, WEDNESDAY, March 13, 1861. The Meeting will be addressed by ACTON S. AYRTON, M.P.; G. AUGUSTUS SALA; GEORGE THOMPSON; Dr. JOHN WATTS, AND ALEXANDER YOUNG, Secretary to the Bituminised Paper Pipe Company. Doors open at 7, Chair taken at 8. Tickets for the Platform may be had at the Whittington Club, and at the Office of the Association, 162, Strand, W.C.

News of the Week.

In the House of Lords on Friday a discussion took place on the proceedings of the War department in declining to carry out the proposal for forming a brigade of Royal Artillery out of the Tipperary Militia Artillery. Lord HERBERT of LEA admitted that he had made a mistake in accepting the services of the corps, and the Duke of CAMBRIDGE expressed his readiness to take his full share of the responsibility of accepting and subsequently rejecting the proposition. The Duke of MARLBOROUGH laid on the table a Bill on the subject of Church rates. On Monday the LORD CHANCELLOR laid on the table a Bill for the better management of lunatics, by enabling the Court of Chancery to dispose of their property. The Bill was read a first time. Lord STRATFORD DE REDCLIFFE moved for copies of the correspondence on the affairs of Syria. Lord WODEHOUSE opposed the motion on the ground that a Conference is now sitting in Paris to consider the question. The motion was then withdrawn. On Tuesday the Bishop of OXFORD moved the second reading of two Bills for the Protection of Females and Children. After a short discussion the first Bill was withdrawn, and the second was negatived by 48 to 27. On Thursday, on the motion of the LORD CHANCELLOR, a Bill for the revision of the Statute Law, the object of which was to repeal a number of obsolete statutes, was read a second time. The Earl of DERBY presented petitions against the demolition of labourers' dwellings to make room for great public works and railways in the metropolis, and called attention to the evils which would result from sanctioning the numerous projects now before Parliament for bringing railways into the heart of the city. After some discussion in which the Earl of SHAFTESBURY, the Bishop of LONDON, Earl GRANVILLE, Earl GREY, and Lord REDESDALE took part, the petitions were ordered to lie on the table.

In the Commons on Friday, in answer to Mr. LIDDELL and other members, Lord PALMERSTON said that the President of the Board of Trade would shortly introduce a Bill on the subject of harbours of refuge. Mr. MONCKTON MILNES obtained leave to bring in a Bill to legalise marriage with a deceased wife's sister; Mr. TITE obtained leave to bring in a Bill to amend the Metropolis Local Management Acts; and Mr. AYRTON obtained the appointment of a select committee to inquire into the local taxation and government of the metropolis, and the local administration of justice therein. On Monday the House went into committee on the Bankruptcy and Insolvency Bill, and agreed to clauses from 118 to 193, when the Chairman reported progress. On the motion of Sir G. LEWIS the Appropriation of Seats (Sudbury and St. Alban's) Bill was read a second time, after a long discussion on the claims of the rural districts, the Scottish Universities, and Ireland, to the vacant seats. On Tuesday Mr. GRIFFITH moved that the House resolve itself into committee to consider an Address to the Crown, praying that the stoppage from the pay of cavalry and artillery officers for forage be discontinued. Mr. T. G. BARING opposed the motion, which was negatived on a division by 213 to 56. Mr. CAVE moved a series of resolutions on the subject of the slave trade, to the effect that the true remedy was to be found not so much in preventing the supply as in checking the demand, and that therefore the Government, while continuing the repressive system, should encourage the introduction of free immigrants into the West India colonies. A long discussion ensued, in which Lord JOHN RUSSELL and Lord PALMERSTON stated that the slave trade was kept up by the enormous profits realised at Cuba, by the shameful manner in which Spain evaded her engagements, and by the refusal of the United States to allow the search of vessels carrying the American flag, under which the traffic was carried on. The motion was ultimately withdrawn. On Wednesday Sir JOHN TRELAWNY moved the second reading of the Church Rates Abolition Bill. Sir WILLIAM HEATHCOTE moved as an amendment that the Bill be read a second time that day six months. On a division the second reading was carried by a majority of 15, the numbers being 281 to 266. The Law of Foreign Countries Bill passed through committee. On Thursday Lord J. RUSSELL announced, in answer to questions from Mr. FITZGERALD, Sir J. FERGUSSON, and Mr. LAYARD, that the Conference at Paris had decided in favour of the further occupancy of Syria by the French troops, notwithstanding the opposition of the Turkish ambassador, and that the 1st of May had been fixed as its limit. Sir J. ELPHINSTONE moved a series of resolutions respecting the reconstruction of the Board of Admiralty, but after a long discussion on various details of naval management, the motion was withdrawn. The Bank of England Payments Bill was read a third time and passed. The LORD ADVOCATE obtained leave to bring in two Bills, one relating to salmon fisheries in Scotland, and the other to Scotch roads and bridges.

Accounts from Turin inform us that the Senate in its sitting of Monday adopted by a majority of 129 to 2, the project of law granting the title of King of Italy to VICTOR EMMANUEL and his descendants. At Naples the new Government has issued a decree annulling the two Concordats with Rome, abolishing monasteries and convents, charging the property of the religious houses with the education of the people and the relief of the poorer clergy, and introducing into the judicial system of Naples the penal code of Sardinia and trial by jury.

The EMPEROR OF AUSTRIA has signed a new Constitution. The old Council of the Empire is to be enlarged into a permanent Parliament under the name of the "Reichsrath," consisting of two Chambers, the first to be partly hereditary and partly composed of life members, the other to consist of 343 members, to be elected by the provincial Diets. The Reichsrath is to have the power of legislation and initiation; its discussions are to be public, and it is to have the exclusive right to regulate taxation and to control the currency, revenue, and expenditure of the Empire.

From the United States we learn that the secession Congress at Montgomery has established a southern Confederacy under the title of the Confederated States of America, and has constituted a provisional government, with Mr. JEFFERSON DAVIS as President, and Mr. ALEXANDER H. STEVENS as Vice-President. Mr. LINCOLN, the new President, was on his way to Washington to assume the duties of his high office, and had been received with enthusiasm at Cincinnati, Pittsville, Ohio, and other important cities through which he had passed.

A telegram from Toronto states that the case of the Fugitive Slave ANDERSON, was decided on the 16th ult. The prisoner was discharged on technical grounds, the writ of *habeas corpus* being definitive, and not expressly charging him with the crime of murder.

The China mail has arrived with news from Shanghai to the 5th January. The troops at Tien-tsin continued healthy, and were comfortably quartered. The Allies had evacuated Chusan as stipulated in the treaty. The English admiral in the Impérieuse, with three sail of the line, had left for Japan. The treaty between Russia and China, which was signed at Pekin on the 14th of November, cedes to Russia the seaboard between the rivers Amoor and Tumen.

Home News.

THE COURT.—The Queen and Prince Consort, accompanied by the Princesses Alice, Helena, Louisa and Beatrice, Prince Arthur and Prince Leopold, left Buckingham Palace on Tuesday morning for Osborne, where they still remain. On Friday the Queen and Prince Consort, accompanied by the Princess Alice, visited the gardens of the Horticultural Society at South Kensington. The Duchess of Kent took a carriage drive. The Duke de Nemours visited the Duchess of Kent. In the evening the Queen and Prince Consort honoured the performance at the Princess's Theatre with their presence. On Saturday the Prince Consort honoured Mr. Durham with a visit at his studio in Devonshire Street. The Princess Mary of Cambridge visited the Duchess of Kent. The Marquis of Breadalbane had an audience of the Queen, on proceeding on a special mission to Berlin, to invest the King of Prussia with the insignia of the Garter. In the evening her Majesty had a dinner party. On Sunday morning the Queen and Prince Consort, the Princesses Alice, Helena, and Louisa, Princes Arthur and Leopold, attended Divine Service in the Private Chapel. The Bishop of London preached the sermon. The Duchess of Cambridge and Prince Philip of Wurtemberg visited the Duchess of Kent. On Monday morning the Queen and Princess Alice walked in the garden of Buckingham Palace. The Duchess of Kent took leave of the Queen on her return to Frogmore. The Prince Consort presided in the morning at an adjourned meeting of the Governors of Wellington College, and in the afternoon presided at a meeting of the Fine Arts Commission. In the evening the Queen and Prince Consort, accompanied by the Princesses Alice and Helena, honoured the performance at Covent Garden Theatre with their presence. On Tuesday morning the Queen, Prince Consort, and Royal family left London for Osborne, travelling to Gosport by a special train on the South-Western Railway. On Wednesday the Queen, Prince Consort, and Royal family walked and drove in the grounds at Osborne.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of the First Lord of the Treasury in Downing Street. Another Council was held on Wednesday.

ORDER OF THE BATH.—The Queen has given orders for the appointment of Colonel George Everest, on the Bengal retired list, formerly Surveyor-General of India, and Superintendent of the Great Trigonometrical Survey of that country, to be a Companion of the Bath.

THE ARMY.—The Colonelcy of the 35th Foot, vacant by the death of General Leslie, has been conferred on Lieut.-Gen. George Leigh Goldie, and the Colonelcy of the 77th Foot, vacated by this promotion, has been conferred on Major-Gen. Lord Rokeby.

PARLIAMENTARY MOVEMENTS.—The Cork County election has terminated in the return of Mr. Leader, the Conservative Candidate, by a majority of more than 2500 over Colonel Roche.

CONVOCATION.—Both Houses of Convocation met on Tuesday at Westminster for the despatch of business, being the first time for more than a century and a-half that Convocation has met for the despatch of actual business, under license from the Crown. In the Upper House her Majesty's license was read empowering Convocation to revise or repeal the 29th Canon of the Church. This canon requires that a child at baptism have three sponsors, and prohibits both the parents from acting as such. It was now moved by the Bishop of Oxford that the parents be allowed to stand as two of the required sponsors, and a friend be found to act as the third. After a lengthened discussion, the motion was agreed to unanimously. In the Lower House the standing orders were suspended to enable Dr. Jelf to bring forward a motion relative to the recently published "Essays and Reviews." After a long discussion, an address expressing the concurrence of the House in the unanimous censure already pronounced by the archbishops and bishops on the volume was adopted and ordered to be presented to the Upper House. On Wednesday, in the Upper House, the acting Prolocutor attended and presented the address agreed to on the preceding day. The Bishop of Oxford moved the appointment of a joint committee of both Houses, for the purpose of drawing up an address to the President, praying him to put himself in communication with the various metropolitan bishops in the colonies as to the regulations which should govern the relations of missionary bishops to the home and colonial Church. The Bishop of Norwich moved an amendment expressing an earnest desire that no action might be taken until further communication had been had with the bishops abroad. On a division the amendment was negatived, and the Bishop of Oxford's resolution was adopted. In the Lower House the Prolocutor communicated a message from the bishops, inviting the concurrence of the House with their lordships in the alterations they had agreed to on the 29th canon. After a long discussion on the omission to communicate the Royal license to the House it was resolved that certain terms in the license be referred to a committee, and the further consideration of the question was adjourned. On Thursday in the Upper House the Bishop of Oxford presented a petition asking their lordships not to terminate their sittings without

taking some legal and judicial notice of the publication of the "Essays and Reviews." The Bishop of Salisbury said that one of the writers was a beneficed clergyman in his diocese, but he should not act in any way until the archbishop and bishops of the two provinces had held the meeting which it was proposed to hold in the course of next month. The Bishop of London thought it was incumbent on the authors of the least objectionable essays to repudiate their participation in the unsound and pernicious doctrines of the others. The Bishop of St. David's said they should also explain why they had not taken this step before. The Bishop of Oxford said that few things could be more disastrous to the Church than that it should be supposed that any of the bishops thought it would be the slightest removal of objection to this volume if the writers, one and all, made a most solemn asseveration of holding the truth. Nothing but an entire retractation on the part of the writers would satisfy the Church. The Bishops of St. Asaph, Lincoln, Llandaff, Gloucester and Bristol, and Norwich also thought that no simple declaration on the part of the writers would be sufficient. The Archbishop of Canterbury said that when the bishops recently took the unusual course of publishing their opinion on these essays, it was doubtful what power they might have to ensure their condemnation. It was doubtful also what would be the effect of any formal condemnation of them by Convocation. Other measures had been pointed at, and were still under the gravest consideration. As the Upper House of Convocation, they were not now quite at liberty to take action upon this subject. The bishops had fixed a day next month when they would meet the bishops of the northern province, and on that occasion they hoped to be able to decide in what manner the essays could be legally dealt with. The public would gather from this that the bishops were by no means insensible to the gravity of the occasion, and that they wished to meet it by the best means in their power. In the Lower House a long debate took place on the 29th Canon, the result of which was the adoption of a resolution agreeing with the conclusion which had been arrived at by the Upper House.

THE VOLUNTEER MOVEMENT.—On Saturday a public meeting was held at Maidstone, for the purpose of forming a rifle association for Kent, on the model of those already established in Cheshire, Lancashire, and other counties. Viscount Sydney, the Lord-Lieutenant, took the chair, and said that as the county now contained at least 7000 efficient artillery and rifle volunteers, exclusive of the Cinque Ports corps, great advantages must result from such an organisation of the various corps as would enable them to give good prizes for the best shots, and provide convenient and efficient ranges for practice. Sir John Bligh, Mr. Randall, High Sheriff of the county; Earl Darnley, Sir Norton Knatchbull, Mr. Deedes, M.P.; Lord Harris, Earl Amherst, Sir E. Dering, the Marquis Camden, and Lord Sondes also addressed the meeting, and resolutions were unanimously adopted to the effect that with a view to the permanence of the Volunteer movement, a county organisation be formed for the purpose of promoting the practice of rifle shooting, and that the association be designated the "Kent Volunteer Association," so as to include the rifles, artillery, yeomanry cavalry, and the Cinque Ports corps, within the county. A council was appointed to collect subscriptions and carry the resolutions into effect.—On Wednesday week a public meeting was held at York, Lord Wenlock in the chair, at which a code of rules and regulations was adopted for the management of Yorkshire Rifle Association. Earl Fitzwilliam was elected President for the ensuing year, and it was resolved, on the motion of Earl Cathcart, that the first meting of the association be held in August next, on Strensall Common, near York, which Mr. L. Thompson, the Lord of the Manor, placed at the disposal of the meeting for that purpose.—A volunteer review on an extensive scale is to take place in the course of the spring on Wanstead Flats. The whole volunteer force of Essex will be present, with various corps from the metropolis and other districts. His Royal Highness the Commander-in-Chief is expected to review the troops.—A proposition has been made to the Secretary at War by Lieut.-Colonel Palmer, one of the verderers of Waltham Forest, for the formation of a volunteer encampment on Wanstead Flats during the months of June, July, and August; with the view of enabling the newly-formed corps in the vicinity of London to go down there for one or two nights in the week and acquire a knowledge of field-exercise as well as of night duty by posting sentries, piquets, outposts, &c.—It is said that nearly 15,000 members of the metropolitan and provincial corps of rifles and artillery have accepted the invitation of Lord Ranelagh to take part in the sham fight at Brighton on Easter Monday. The railway tickets will be available from Saturday to Tuesday morning; but the bulk of the volunteers will go down and return on the Monday, the Brighton Railway Company having adopted measures to secure the transit of any number of men. It has been determined that the entire force on arrival shall be echelonned fronting the sea, forming a line three miles in extent. After the parade the men will march to the ground selected for the operations, extending to Rottingdean on the one side, and as far as Falmer, to the north-east of Brighton, on the other.—On Friday evening a special meeting of the South Middlesex was held at the Floral Hall, when it was resolved to form an experimental company to be armed with breech-loading rifles.—At a meeting of the City Commissioners of Lieutenancy last week, Mr. A. Moore's motion to rescind the sanction given by the Court on the 22d December, to the scarlet uniform of the 3d City of London corps, originately designated the Working Men's Corps, was negatived by a large majority. The corps will therefore retain its uniform. The Court appointed Sir William de Bathe, Lieut.-Colonel of the corps, subject to the approval of her Majesty.—The services of the East Metropolitan (11th Tower Hamlets) corps, which has lately been established by members of the Jewish persuasion, have been accepted by the Queen. Although only four weeks have elapsed since its organisation, there are already nearly 200 enrolled members. The uniform is dark grey, brown accoutrements, and white plume.

Foreign.

FRANCE.—The Committee of the Senate has adopted the project of Address in reply to the opening Speech of the Emperor. This Address congratulates the Emperor upon his decree of the 24th of November, and upon his foreign policy, especially in Syria, China, and Italy. It says that in Syria his Majesty has "interposed the sword of France between the Christian inhabitants and Mussulman fanaticism;" that the French soldiers were sent to China as "Missionaries of Religion;" and that "it was a great day on which, in the centre of the restored cathedral, were heard the *Te Deum* for the Lord and the *Domine Salvum* for the Emperor." In Italy, it says, two interests which the Emperor wished to reconcile have clashed against each other—the liberty of Italy being in conflict with the Court of Rome. His Majesty's Government had done everything to arrest this conflict, and all equitable ways had been opened, the Emperor having only hesitated before the employment of force. The Address pronounces in favour of non-intervention, and makes the following remarks on the Papal question and the relations of France to the See of Rome:—

"Peace will be a benefit as precious for Italy as for us; for Italy will not be appreciated by the world which watches her if she does not prove that she has no wish to agitate Europe by her liberty after having so long troubled it by her misfortunes. Let her remember, above all, that Catholicism has confided to her the head of the Church, the representative of the greatest moral force of humanity. The religious interests of France demand that she shall not forget this; the friendly souvenirs of Magenta and Solferino lead us to hope that she will keep it in mind. But our firmest hope is in the tutelary and indefatigable band of your Majesty. Your filial affection for a holy cause, which you do not confound with those of intrigues which borrow its mask, is incessantly manifested in the defence and the maintenance of the temporal power of the Sovereign Pontiff; and the Senate does not hesitate to give its entire adhesion to all the acts of your loyal, moderate, persevering policy. For the future we shall continue to place our confidence in the monarch who covers the Papacy with the French flag, who has assisted it in its trials, and has constituted himself for Rome and the Pontifical throne the most vigilant and faithful sentinel."

On Wednesday a project of address was read in the Corps Legislatif. It expresses the thanks of the Deputies on account of the Imperial decree of November, applauds the policy of the Government in the interior, and expresses hopes for the maintenance of peace, and of the humane mission which France has fulfilled in Syria. The Address then continues:—

"We approve the policy which your Majesty has followed in Italy. The late diplomatic documents and the recent despatch of troops to Rome have given proofs of your constant efforts to insure the security of the Papacy, and have preserved its temporal power as much as the force of circumstances and the resistance of the Papal Government to wise counsels have allowed. In thus acting your Majesty has completely responded to the religious sentiments and the political traditions of France. As regards the future the Corps Legislatif entirely relies on your Majesty's wisdom, being convinced that you will always be guided by the same principles and the same feelings without allowing yourself to be discouraged by the injustice you have experienced, and which has distressed us."

Baron Gros arrived in Paris on Tuesday from China, and had an interview with the Emperor on Wednesday. The *Patrie* and the *Pays* deny the rumour that France has the intention of withdrawing her troops from Rome. The day for the second Conference on Syria is not yet fixed. It has been agreed that a further occupation by the French troops is necessary, and the 1st of May has been fixed as its limit, subject to the appprobation of the Porte. General Türr has arrived in Paris.—M. Dupanloup, the Bishop of Orleans, has published an answer to the recent pamphlet of M. de la Guéronnière. The Bishop denounces that pamphlet as incomplete and wanting in impartiality, and says that on former occasions the veil cast on anonymous pamphlets afforded no proof of their origin, and left the church to sad conjectures, but it is now certain that it is the Government itself which authorises it, and that "the Government deems it fitting that the Sovereign Pontiff, already so afflicted, should be denounced to the public by a Councillor of State!" He devotes several columns to the task of proving that the Emperor and his Ministers on frequent occasions pledged themselves to respect the temporal sovereignty of the Pope, and labours to hold France responsible for all that has followed in Italy since the war, and as a consequence of the war, with Austria.—The Bishop of Poitiers has since published a *mandement*, to be read in all the churches of his diocese, in which he likens the Emperor to Pontius Pilate, describes his policy as "a mystery of iniquity," and denounces the King of Sardinia as "an excommunicated [illegible] the despiser of all the rights of the Church [illegible] accomplice and the perpetuator of the most [illegible] crimes of the Revolution, the brutal aggressor [illegible] weak, and the spoliator of his own family, [illegible] of the most revolting usurpations for his own [illegible]. In consequence of this violent and offensive [illegible] the Government has submitted the *mandement* [illegible] jurisdiction of the Council of State. The [illegible] in announcing this proceeding, publishes [illegible] addressed by Count Persigny to the Prefect [illegible] relating to the *mandement* of the Bishop. The [illegible] says:—

"I considered that it would be contrary to the [illegible] of the Government to screen such excesses from the [illegible] of public opinion, and I would not therefore take any [illegible] to prevent the publication of documents in which [illegible] with such audacity, the secret views of the [illegible] under the veil of religion, has no other [illegible] attacking the elect of the French people."

The latest intelligence concerning the [illegible] Mirès is favourable. Prince Polignac, [illegible] his daughter, and at whose house he was [illegible] returned to the estate the whole of the [illegible] tion he received with his wife, and the [illegible] personages who were indebted to the house [illegible] have all paid up their liabilities.—A new cast-[illegible] constructed under the Emperor's personal [illegible] has been tried at Lorient with the greatest success [illegible] range is described as being 7½ miles, and the [illegible] it throws shatters with the greatest ease [illegible] 12 centimetres in thickness, such as protect [illegible] cased frigates recently launched.

SWITZERLAND.—The Treaty of Commerce [illegible] France and Switzerland, proposed by Zurich, [illegible] little approval. On Saturday the Federal Council [illegible] discussion which had lasted for two days, [illegible] project to its Customs Department for re-exam[illegible]. Three thousand citizens of Geneva have signed [illegible] test against the conclusion of any such treaty [illegible] the rights of Switzerland in reference to [illegible] Savoy be endangered thereby.

DENMARK.—A fresh change in the policy of [illegible] is spoken of. M. Hall, the Danish Minister, [illegible] have addressed to M. de Bulow, its representative [illegible] Frankfort, a note declaring that Denmark [illegible] allow the German troops to occupy Holstein [illegible] resistance.

PRUSSIA.—A despatch from Berlin dated [illegible] says that Prussia has not, up to the present [illegible] in her acquiescence to the recent French project [illegible] ence to Syria. A considerable increase in the [illegible] artillery is about to take place, the [illegible] having received orders to bore 200 4-pounder [illegible] guns for the use of the horse artillery. The [illegible] factory will also soon receive orders to bore [illegible] steel blocks, and to convert them into rifled 6-pounders. A new military convention has been agreed [illegible] Prussia and Gotha for the passage of troops [illegible] the Gotha territory, The convention is to [illegible] force immediately, and is to last for 15 years.

AUSTRIA.—The Emperor of Austria on [illegible] signed a Constitution, of which the following [illegible] summary:—

"The representation of the Empire will retain [illegible] Reichsrath. The Reichsrath will consist of two [illegible] The Upper House will be composed of hereditary [illegible] and of other persons nominated for life. The [illegible] will consist of 343 members, who will be elected [illegible] Diets. The Reichsrath will have the right of [illegible] initiative. Its sittings will be public. A Bill [illegible] when it has passed both Houses and has been sanctioned [illegible] Emperor. The Reichsrath will fix the amount [illegible] legislate in all matters of taxation, manage [illegible] the National Debt, audit the State Balance [illegible] superintend the affairs of the Bank. The [illegible] of the former Constitutions of Hungary [illegible] Slavonia, and Transylvania within the [illegible] diploma of the 20th of October, 1860, is [illegible] the other provinces liberal statutes, with [illegible] of the interests of the people, will be given. [illegible] representation will be at the rate of five per cent [illegible] lation. In rural districts it will be below five per [illegible] Provincial Diets are to legislate for their respective [illegible] to have autonomy, the right of initiative, and [illegible] Provincial Diets are to meet on the 6th, and the [illegible] the 29th of April. The Imperial patent also [illegible] stitutional rights of all the German and Slavonian [illegible] As regards Venetia, orders have been given [illegible] project of Constitution on the same principle. [illegible] Council of the Empire is dissolved, and a Council [illegible] tuted in its place. The Hungarian, Croatian, and [illegible] Diets are also summoned to send representatives [illegible]

HUNGARY.—General Klapka, in the [illegible] Democrats assembled at Turin, is said to [illegible] against the outbreak of a revolution in Hungary [illegible] which he represented the country as being [illegible] unprepared. On the night of the 24th ult. [illegible] military police, being insulted by some boys [illegible] of firearms. The disturbances took place [illegible] occasion of the Jewish Purim festival. The [illegible] patrol and several civilians were wounded.

CROATIA.—The Comitat of Agram has resolved [illegible] breaking off all official connexion with the [illegible] Pesth, on account of the resolution adopted [illegible] Municipality of Pesth in reference to the state [illegible] at Fiume. The Comitat has also resolved [illegible] ing the Emperor to open the Diet in person, [illegible] crowned as King in the city of Agram. The [illegible] Croatia has informed the Hungarian Chancellor [illegible] has given orders for the transfer of the islands [illegible] Mur River to Hungary.

ITALY.—Accounts from Turin state that the [illegible] in its sitting of Tuesday passed, by 129 against [illegible] the project of law granting the title of King [illegible]

Victor Emmanuel and his descendants. The Cabinet of Turin is now employed in organising a large national army, which will consist of about 300,000 men. The army moving throughout Central and Southern Italy will advance without delay. The ex-King Francis II., who was still at Rome, had refused to receive General Bosco on account of his having said to some Neapolitan officers, that he intended to return to Naples. The Queen of Spain was about to purchase some property of the ex-King. M. Casella, the Foreign Minister of Francis II., has addressed a circular to the various Courts, announcing the capitulation of Gaeta. He ascribes politically the fall of the fortress to the systematic hostility of England, the resolution of the Emperor of the French to maintain the principle of non-intervention, and the inaction of the other Powers; and militarily to the superior artillery and means of the Piedmontese. He concludes by condemning the conduct of General Cialdini in refusing to suspend hostilities while the negotiations for surrender were pending. The garrison of Gaeta, who were made prisoners of war, had been sent to the Neapolitan Islands. By a decree of the new Government of Naples the two Concordats with Rome are solemnly annulled and declared void. All persons, of whatever creed, are declared equal before the law, and ecclesiastics have no longer any peculiar exemption. All monastic orders for either sex cease to be recognised by the Government, as well as societies of all kinds without cure of souls, and all chapters of collegiate churches. The property of these religious houses is taken into the hands of the Government, and is to be charged, first with popular education, next with the augmentation of the salaries of parish priests, and with the relief of the most needy members of the clerical body. The fabrics are to be employed for school purposes, including infant and evening schools. Those of the present inmates of these houses who wish to continue a monastic life are to receive a pension, which is to be augmented by one-sixth if they reside out of the cloister, and no more novices are to be admitted. The penal code of Sardinia and trial by jury have also been introduced into the judicial system of the country. The suppression of the convents gave rise to disturbances on the 24th ult. The rioters attacked several convents. The National Guard interposed, and in order to prevent their destruction by the people, quartered themselves in the convents. Six hundred insurgents in the Abruzzi, having been surrounded by the Sardinians, laid down their arms, and withdrew into the Pontifical territory. About 1000 brigands, with artillery, under the command of Count Cristen, had attacked Carsoli. The Italian volunteers retired fighting. On receiving this news Colonel Mas and Major Vincentini hastened to the spot, energetically attacked the enemy, and pursued them as far as Oricola, killing many men. The Papal Zouaves had massacred Dr. Latini and his little daughter, aged six years, in the village of Collalto. The Neapolitan Minister of War has notified that all foreign soldiers who may have belonged to the Bourbon army, or been in the military service of the Pope, and who should join the reactionary bands in Southern Italy, will, if made prisoners, not be treated as soldiers, but will be punished with the greatest severity. The inauguration of the Italian Parliament has been celebrated in several towns of Venetia.—Accounts from Rome state that the inhabitants are secretly making preparations for the reception of King Victor Emmanuel. The National Committee have issued a proclamation announcing that Victor Emmanuel will soon be proclaimed King of Italy at the Capitol. The same proclamation expresses thanks to France for her reserved attitude in Rome. The French authorities had taken possession of the keys of the Capitol, in order to prevent the ringing of the bells by the people, and General Guyon had issued an order of the day censuring the demonstrations of the National Committee, rejecting the congratulations which the latter had extended to the French, and recommending the soldiers to avoid popular assemblies. An order of the day of General Guyon has been declared to be a calumny on the Pontifical Government. The French are about to occupy a portion of the province of Frosinone. General Guyon has presented his officers to Francis II., who is said to intend staying at Rome as long as the French remain. The Papal Government had exiled 15 persons, among whom was Signor Titoni, a rich merchant, who was suspected of having promoted the late political manifestations. Signor Passaglia had returned to Rome from Turin. The death of Cardinal Brunelli is announced. The official *Giornale di Roma* declares that the Pontifical Government declines the responsibility of the present crisis, which the pamphlet of M. de Laguerronnière throws upon it; and adds that that pamphlet is written with the same duplicity as the former French pamphlets on the Roman question. The article concludes thus:—

"The allocution delivered by his Holiness in January, 1860, and the allocutions of a more recent date, and also the despatch dated the 29th of February, 1860, addressed by Cardinal Antonelli to the Papal Nuncio at Paris, Monsignor Sacconi, having sufficiently proved with whom lies the responsibility of the late deplorable events."

SICILY.—Three colonels, a major, and two captains have deserted from the citadel of Messina. Admiral Persano arrived at Messina on Saturday, and summoned the fortress to surrender within 24 hours. General Fergola, the commandant, is understood to have declined, and expressed his resolution of resisting to the last. The heights commanding the citadel have since been occupied by the Sardinian troops. The representatives of the foreign Powers have protested to the commander of the citadel against any damage being caused to the city.

MALTA.—The English fleet has been ordered to leave Naples for Malta. It was expected to sail on Wednesday. The Victor Emmanuel alone remains.

RUSSIA.—Advices from St. Petersburg of the 16th inst. state that the sittings of the Council of the Empire respecting the emancipation of the serfs have occasionally assumed a stormy character. Various members had joined the so-called "noble party," and opposed the project. The Government has thought it advisable to take military precautions. The arms at the arsenal have been conveyed to the fortress. The *Journal de St. Pétersbourg* publishes a despatch addressed by Prince Gortschakoff to Count Kisseleff, the Russian Ambassador at Paris, authorising him to take part in the Conferences on the Syrian question. The despatch says:—

"Russia will support the prolongation of the French occupation of Syria. Should the Conference deem it expedient to increase the army of occupation by troops of the other great Powers you will offer no objection."

The project of a new tariff of import duties on European goods, drawn up by order of the Emperor, will shortly be published in the *Börsen Zeitung* of St. Petersburg.

POLAND.—It is stated on reliable information that on the occasion of the anniversary of the battle of Grochow, fought on the 25th of February, 1831, between the Russians and the Poles, disturbances took place at Warsaw, which rendered the interference of the police necessary.

TURKEY.—The financial embarrassments of the Government continue and increase. It is said that the Porte intends a new issue of 100,000,000 kaimés. A change in the Ministry is expected. Aali Pasha, it is said, will be grand Vizier and Achmed Vefik Effendi Minister for Foreign Affairs. The early arrival of Count Orloff on a special mission from St. Petersburg is rumoured. The Marquis de Lavalette returns home in May, to be succeeded, it is reported, by Marshal Niel. The assembling of a Russian army at Tiflis had given great uneasiness to the Turkish Government. Revolutionary disturbances have broken out at Sutorina. The insurgents are receiving reinforcements from all parts. Mehemed Pasha, at the head of a force, marched against them, but found the insurrection so serious that having only a small body of troops at his disposal he did not dare to attack the insurgents but retreated. The insurgents from the district of Yeni-bazaar, to the number of 5000, supported by Montenegrins, have since forcibly entered Bihar, killed more than 50 Mahomedans, among whom were several women, pillaged the city, and finally set fire to it.

SERVIA.—The Prince of Servia assembled the foreign Consuls at Belgrade on the 22nd inst., and explained to them the conduct of Servia. He also gave proofs of the imprudent conduct of the Porte. All the Consuls acknowledged the loyalty of Servia.

BATAVIA.—A treaty had been concluded between Holland and Siam. A destructive hurricane had passed over Batavia. The Coffee plantations had suffered severely.

INDIA.—The Calcutta mail has arrived with news from that Presidency to Jan. 22, and from Madras to Jan. 27. The following are the details:—

Calcutta.—Mr. Laing landed at Calcutta on the 10th Jan., and was well received. On the 16th a deputation of the four great commercial bodies of Calcutta waited upon him and presented a complimentary address. Mr Laing in reply, said that his system was perfect publicity; and expressed his belief that no one could suppose that India was to be kept as a close preserve for a limited number of persons, or that those who by their energy, enterprise, and skill had contributed so much to the well-being of the country could be regarded as "interlopers." The government of India has promised to publish monthly statements of the cash balances in the various treasuries in India, and to furnish other information relating to the finances periodically.

Bombay.—The Bombay Chamber of Commerce are still moving against the import duties imposed by the late Mr. Wilson on English manufactured goods and yarns. It is stated that the Inam commission at Bombay has been abolished, and that the rent-free lands are to be settled on a plan somewhat similar to that adopted in Madras.

Travancore.—The first Prince of Travancore has called on his brother princes to unite in subscribing for a throne of solid gold to be presented to her Majesty, as the sovereign of India. He himself offers to subscribe 500*l*.

Hyderabad.—A treaty has been concluded with the Nizam of Hyderabad, which provides for the restoration of certain territory to him, and cancels a debt of about half a million sterling due by him to the British Government.

North-West Provinces.—There is still great suffering in the North-West Provinces, in consequence of the failure of the crops. Public works have been ordered and private subscriptions are being raised to alleviate it.

Central India.—The Viceroy held a durbah at Jubbulpore on the 14th of January, which was attended by the Maharajah of Indore and other chiefs of Central India. His lordship was expected to return to Calcutta in February.

CHINA.—Accounts from Shanghai of Jan. 5 state that the troops at Tien-tsin were healthy, and in comfortable quarters. Lord Elgin and suite arrived at Hong Kong on the 8th Dec., and left on the 12th for Canton. On the 10th at noon he held a levee at the Government house. His lordship visits Manilla and Batavia before returning to England. The Island of Chusan, which by treaty provision had to be given up, has at length been evacuated by the allies. The treaty between Russia and China, which was signed at Pekin on the 14th of November, cedes to Russia the seaboard between the rivers Amoor and Tumen, a tract of land fully 900 miles long by from 100 to 200 in breadth.

JAPAN.—The Commander-in-Chief has gone to Nagasaki in the Chesapeake. Admiral Jones has also gone to Japan in the Impérieuse, accompanied by three other vessels. Matters have been slightly unsettled of late, owing to a collision between the Japanese officials and some Englishmen. It appears that an Englishman called Moss, having been arrested for shooting a goose, was rescued by a few of his countrymen, and further retaliation resulted in a Japanese official being shot in the arm. A good deal of angry feeling has been called forth, and a notification by Captain Howard Vyse, Acting-Consul at Kanagawa, against the practice of carrying fire-arms in the streets, has been remonstrated against by many English residents.

UNITED STATES.—Mr. Lincoln, the new President, had started from his residence at Springfield for Washington, and had been everywhere received with enthusiasm. He made speeches at Cincinnati, Pittsburg, and Ohio, on the present state of public affairs. At Cincinnati, he said:—

"I have spoken but once before this in Cincinnati. That was a year previous to the late Presidential election. On that occasion, in a playful manner, but with sincere words, I addressed much of what I said to the Kentuckians. I gave my opinion that we, as Republicans, would ultimately beat them as Democrats, but that they could postpone that result longer by nominating Senator Douglas for the presidency than they could in any other way. They did not, in any true sense of the word, nominate Mr Douglas, and the result has come, certainly as soon as ever I expected. I also told them how I expected they would be treated after they should have been beaten; and I now wish to call their attention to what I then said upon that subject. I then said, 'When we do as we say—beat you, you perhaps want to know what we will do with you. I will tell you, as far as I am authorised to speak for the Opposition, what we mean to do with you. We mean to treat you, as near as we possibly can, as Washington, Jefferson, and Madison treated you. We mean to leave you alone, and in no way to interfere with your institutions; to abide by all and every compromise of the Constitution; and, in a word, coming back to the original proposition, to treat you so far as degenerated men, if we have degenerated, may, according to the example of those noble fathers, Washington, Jefferson, and Madison. We mean to remember that you are as good as we; that there is no difference between us other than the difference of circumstances. We mean to recognize and bear in mind always that you have as good hearts in your bosoms as other people, or as we claim to have, and treat you accordingly.' Fellow-citizens of Kentucky, friends—brethren, may I call you in my new position?—I see no occasion, and feel no inclination, to retract a word of this. If it shall not be made good, be assured the fault shall not be mine."

The counting of votes for President commenced in Congress on the 13th, when Mr. Abraham Lincoln was declared President, and Mr. Hannibal Hamlin Vice-President of the United States, for four years from the 4th of March next. The following is the vote:—Lincoln and Hamlin, 180; Breckinridge and Lane, 72; Bell and Everett, 39; Douglas and Johnson, 12. The Committee of the Washington Peace Conference has reported a plan of pacification, understood to be compounded from the Crittenden, Guthrie, and Border States plans. The secession Congress at Montgomery, Alabama, has established a southern Confederacy under the title of the Confederated States of America. It has also constituted a Provisional Government, made arrangements for a loan of 14,000,000 dollars by the 1st of March, and unanimously elected Mr. Jefferson Davis President, and Mr. Alexander H. Stevens, Vice-President. The inauguration of Mr. Davis was to take place on the 18th ult., after which Mr. Davis would send a Minister to Washington to negotiate for the surrender of the Forts. The Louisiana State Convention had endorsed the acts of the Montgomery Congress, and adjourned to the 4th of March. The Virginia State Convention assembled on the 13th ult. Its President made a Union speech, but said that Virginia would insist on her rights as a condition of remaining in the confederacy. The Texas Convention had passed an ordinance in favour of the speedy formation of a Southern Confederacy. Tennessee had voted against the holding of a Convention, and the Union candidates in that State were expected to have an aggregate majority of over 50,000 votes. Five vessels belonging to New York ship owners had been seized at Savannah in retaliation for the seizure of muskets at the former city. The vessels were, however, subsequently released on the muskets being given up. The Rattlesnake Club at Savannah, which is composed of "rowdies," had tarred and feathered Captain Vaughan, of the British ship Kaloe, for asking a negro stevedore to dine with him. The British Consul at Savannah had offered a reward of 1000 dollars, and the mayor of the city one of 500 dollars, for the discovery of the perpetrators of the outrage. Advices from Fort Pickens, Pensacola, report that five of the Federal steamers were off the port. 12,000 State troops continued to threaten an attack on the fort. From Charleston we learn that the State Government was strengthening Fort Moultrie. The South Carolinians had erected an impregnable barrier of railroad iron on Cummings' Point, at a point so near the fort as to enable them to do much mischief. The Secretary of the Treasury had demanded an immediate loan of 8,000,000 dollars to meet indispensable payments. The following is an extract from a private letter from a well informed correspondent in the United States, received by yesterday's post:—

"It is now rather likely that we shall survive and gradua

extinguish secession. It would have been nipped in the bud but for traitors and dotards in the Government at Washington."

CANADA.—A telegram from Toronto, dated the 16th ult., states that the Anderson case was decided on that day. The prisoner was discharged on technical grounds, the writ of *Habeas Corpus* being definitive, and not expressly charging him with the crime of murder. The result was received with satisfaction.

MEXICO.—The Archbishops and Bishops who were exiled from Mexico had arrived at New Orleans.

Parliament.

HOUSE OF LORDS.

FRIDAY.—*The Tipperary Militia.*—The Earl of DONOUGHMORE in calling the attention of the House to the proposal for forming a brigade of Royal Artillery out of the Tipperary Regiment of Artillery, and to the course taken by the Government in first accepting the offer of their services and then abandoning the intention, said that the suggestion that the officers in the regiment should hold commissions in the Royal Artillery had not emanated from him, but from the Secretary-at-War. His own proposal was that the officers should receive commissions in the Line. While he regretted that the public promises of the Government had not been strictly performed, he made every allowance for the difficulties of the Secretary-at-War, and hoped that it would not be too late even now to obtain justice for the officers and men.—Lord HERBERT of LEA said that he had now heard for the first time that Lord Donoughmore had not contemplated that the officers of the Tipperary Militia Artillery should hold commissions in the Royal Artillery. This mistake was also shared by the Commander-in-Chief, who, on the matter being mentioned to him, doubted whether it were possible to transfer the officers to the Royal Artillery. That corps was a highly scientific body, and he could not, at a moment when there was no pressure, adopt a measure which would lower its standard and create dissatisfaction. In writing to accept the services of the corps he had made a mistake, and all he could do was to admit it.—The Duke of CAMBRIDGE took his full share of the responsibility of the original acceptance, and of the error. Had commissions been simply asked for one or two captains, the demand might have been acceded to without injustice to the Artillery.—After some remarks from Lord VIVIAN, the Earl of ELLENBOROUGH complained that a force of 600 or 700 artillerymen of high character had been turned adrift whose services might turn the balance in an European struggle.—Earl GREY hoped that the Government would profit by the lesson, and not withdraw the militia from its proper and constitutional services.—The Duke of MARLBOROUGH brought in a Bill on the subject of *Church-rates.* He said that it proposed to abrogate the jurisdiction of the ecclesiastical courts in the matter of Church-rates, to restore to parishes their ancient rights of assessing themselves, and relieved the Dissenters on their complying with certain conditions.

MONDAY.—*Management of Lunatics.*—The LORD CHANCELLOR laid on the table a Bill for the better management of lunatics, by enabling the Court of Chancery to dispose of their property. *Affairs of Syria.*—Lord STRATFORD DE REDCLIFFE moved for correspondence connected with the affairs of Syria. He thought the time had arrived when the House should be informed as to the correspondence which had taken place in regard to the treaty of occupation, the action of the British Commissioner, and the general condition of Syria at the present moment.—Lord WODEHOUSE regretted that considerations of public duty precluded the Government from presenting the papers to the House. A conference of the great Powers was sitting at Paris, and it would create great embarrassment to produce the papers while the discussion was pending. Refusing to discuss the general condition of Syria, he briefly described the energy which the Turkish Government had displayed in punishing delinquents and restoring order, and said that, under the protection of the Turkish and French armies, the Maronite Christians had unhappily manifested a strong desire for blood, 136 men, 25 women, and 15 children having been murdered by the Christians, and 86 persons wounded. The Druse chiefs tried at Beyrout were condemned to death, but the sentence had not yet been executed. After a few words from Lord CLANRICARDE, Lord STRATFORD DE REDCLIFFE withdrew his motion.

TUESDAY.—The Bishop of OXFORD moved the second reading of the *Houses of Ill-fame Bill*, stating that its object was to facilitate the conviction of persons keeping such houses by throwing the payment of expenses on the country.—The LORD CHANCELLOR said that the Bill imposed a new tax, and therefore could not be originated in their lordships' House. The Bill was then withdrawn.—The Bishop of OXFORD then moved the second reading of a Bill extending the protection of the law to *Female Children* of 13 years of age, instead of confining it, as at present, to the age of 12.—Earl GRANVILLE opposed the Bill as unnecessary, and moved that it be read a second time that day six months. On a division the Bill was lost by 48 to 27. *Mr. Turnbull's Case.*—At the request of Lord MONTEAGLE, the Marquis of NORMANBY postponed to Tuesday next the motion of which he had given notice relative to the resignation of Mr. Turnbull.

THURSDAY.—The LORD CHANCELLOR moved the second reading of the *Statute Law Revision Bill*, which repealed a series of obsolete statutes.—Lord CHELMSFORD suggested that the Bill be referred to a select committee.—The LORD CHANCELLOR said that it would take a committee five years to investigate all the statutes. The Bill was read a second time. *Dwellings of the Labouring Classes.*—The Earl of DERBY presented a petition complaining of the results of the displacement of labour consequent on the introduction of metropolitan railways. After recapitulating the extent and position of the various railway schemes, which it is proposed to carry into the very heart of the metropolis, he observed that the present plans involved the demolition of 500 houses and the removal of 5000 persons, to whom it would be death to remove far from the place of their occupation. Great overcrowding and its consequent evils would be the result, on the consequences of which he dwelt at considerable length. He suggested the propriety of appointing a committee to inquire into the effect upon the social condition of the metropolis of the great extension of railway works.—The Earl of SHAFTESBURY said that the mischief of overcrowding was caused by the wild schemes by which these poor people were turned out of their abodes, and much of our social evil arose from the same cause.—The Bishop of LONDON trusted that some measure would be taken on the subject.—Earl GRANVILLE said that the labouring classes benefited by the general advantages of the railway system. Much good was effected by the demolition of disreputable and low houses, which the metropolitan railways principally destroyed.—Earl GREY admitted the advantages of the railway system, but regretted that the Government had no plan for the relief of an admitted evil.—After some remarks from the Marquis of BATH, Lord REDESDALE said that matters could not go on much longer without the establishment of a railway board.—Lord STANLEY of ALDERLEY deprecated opposition to the great works of improvement because they involved displacement of the poor. The proposal of the late Government for the erection of new law courts would have demolished ten times the number of houses more than those which would be destroyed by the present railway schemes.—After some remarks from the LORD CHANCELLOR, the petition was ordered to lie on the table.

FRIDAY.—*Italian Affairs.*—The Marquis of NORMANBY moved an address for copies of despatches between her Majesty's Government and those of France, Sardinia, or of any other European Power on the question of the recognition of the blockade of Gaeta; and of various other despatches from her Majesty's Minister at Turin respecting Italian affairs.

[Left sitting].

HOUSE OF COMMONS.

FRIDAY.—*Marine Artillery Volunteers.*—In answer to Mr. NORTH Lord A. PAGET said that the Admiralty had frequently been asked to send gunboats to the ports where artillery volunteers were enrolled, and to send the latter to sea for practice. But as such a course would involve considerable expense to the country, the Board, with every desire to further the volunteer movement, had declined to accede to the request. The seafaring men who wished to learn their drill could do so by joining the Naval Reserve or the Naval Coast Volunteers. *Harbours of Refuge.*—Mr. LIDDELL called attention to the subject of harbours of refuge.—Lord PALMERSTON said the Government were fully sensible of the great national importance of such harbours; but, while aware of the magnitude of the evil, they could not shut their eyes to the magnitude of the demands for providing a remedy, and they were at present not prepared to propose to Parliament to advance from the public revenue a sum at all commensurate with the object in view. But the President of the Board of Trade had a Bill in preparation, the object of which was to enable the Exchequer Bill Loan Commissioners to make advances in England and Ireland to those who were willing to take them, on certain conditions, for the improvement of existing harbours.—Mr. HALIBURTON called attention to the *Case of the Fugitive Slave Anderson*, and to the difficulties which the decision of the British Court of Queen's Bench would occasion with the Canadian tribunals, who did not recognise its authority. The proceedings in England had excited great alarm in Canada, where the colonists felt that their privileges were seriously invaded—Mr. C. FORTESCUE said it was not his duty to enter into a discussion as to whether the Court of Queen's Bench were entitled to issue the writ. Along with the writ a despatch was sent to the Governor of Canada, ordering him to be guided by the opinion of his Canadian law advisers. The question, which lay between the Imperial Government and that of the United States, as to the construction of a treaty, was in the hands of her Majesty's Government. The correspondence would add nothing material to the public knowledge of the matter, and it was not desirable that papers relating to a transaction of so delicate a nature should be laid upon the table. *Galway and Cunard Companies.*—In answer to Mr. BAXTER the CHANCELLOR of the EXCHEQUER said that the Cunard Company had fulfilled their contract with admirable punctuality. With respect to the Galway line, though the present Ministers thought that the subsidy granted by their predecessors was not wise or prudent, they felt bound in good faith to carry it out in the spirit of its original intention.—Mr. M. MILNES moved for leave to bring in a Bill to legalise *Marriage with a Deceased Wife's Sister.* He apologised for reopening a question which had, within the last few years, been discussed six times, and which had no political interest. It was one, however, which affected the happiness of many thousand persons, and he therefore determined to bring forward the Bill. He proposed to leave ecclesiastical matters entirely as they stood at present, and simply to enact that the unions in questions might be legally contracted before a registrar, and by the merely civil process.—Mr. BUXTON seconded the motion.—Mr. WALPOLE warned the House how it proceeded to legislate in this direction, and predicted that if the Bill were passed into law the effect would be to launch the people into a flood of immorality.—After some remarks from Mr. SCULLY in reprobation of the measure, leave was given to bring in the Bill.—Mr. AYRTON moved for a Select Committee to inquire into the *Local Taxation and Government of the Metropolis*, and the local administration of justice therein. He explained at some length the grounds of his motion, the object being merely inquiry.—Sir G. LEWIS assented to the motion, which was agreed to after some discussion on the subject of the coal tax.—Mr. CARDWELL moved for a Select Committee to inquire into the administration of the *Relief of the Poor in Ireland*, and into the operation of the Poor Law of that country.—Lord NAAS thought the inquiry unnecessary, and that it might be under certain circumstances productive of mischief. After a short discussion the motion was agreed to.—Lord NAAS obtained leave to bring in a Bill to provide for the uniform *Registration of Births, Deaths, and Marriages in Ireland.*—Mr. CLIVE obtained leave to bring in a Bill to authorise the *Inclosure of certain Lands*, in pursuance of a report from the Inclosure Commissioners of England and Wales; and a Bill to render *valid Marriages* heretofore solemnised in Trinity Church, Rainow, and in other churches and chapels.—Mr. TITE obtained leave to bring in a Bill to amend the *Metropolis Local Management Act* (1855), and to settle the parishes, districts, and parts upon which certain debts of the Metropolitan Commissioners of Sewers shall stand charged. The Select Committee on *Poor Relief* was nominated. The *University Elections Bill* was read a second time.

MONDAY.—*Case of Mr. Laing.*—In answer to Mr. VANSITTART, Sir C. WOOD said that the charges made against Mr. Laing in the report of the Committee of Investigation appointed by the Great Western of Canada Railway Company had taken him entirely by surprise. It would be his duty to inquire into the subject; and till he was in possession of the statement on the other side it would be exceedingly unfair to express any opinion upon it. The House then resolved itself into a Committee, and resumed the consideration of the details of the *Bankruptcy and Insolvency Bill*, when clauses 118 to 197 were agreed to with very few amendments, and the Chairman was ordered to report progress.—On the order for the second reading of the *Appropriation of Seats (Sudbury and St. Alban's) Bill.* Sir G. LEWIS said that, as the only principle of the Bill was the filling up of four vacant seats, very little advantage could arise from discussing the Bill at this stage; the details could be more fitly discussed in the committee.—Mr. BAXTER urged the claim of Scotland, which he thought had not sufficient representatives, while Ireland had too many.—Mr. BENTINCK considered the proposal in the Bill unjust, as the seats were not bestowed in the quarter where the claim was greatest. The real grievance was the inadequate share in the representation possessed by the rural districts, on the principle that taxation and representation were convertible terms. He objected moreover to the proposal for increasing the number of metropolitan members, who were, he said, at present in the aggregate, a great inconvenience which ought to be abated.—Mr. CARNEGIE thought no place could show a greater claim than the Universities of Scotland.—Mr. PEACOCKE suggested that the present opportunity should not be lost of giving a direct representation to the working classes in such large towns as Liverpool and Manchester.—Mr. LOCKE defended the metropolitan members, contending that, upon the very grounds Mr. Bentinck had assigned for the increase of the county representation, the metropolis was entitled to more members.—Mr. BLACKBURN argued in favour of an increase of Scotch members.—Lord ENFIELD admitted the strong claim of the Scot[illegible] but thought there were important borough[illegible] England which had a higher claim.—Mr. [illegible] strongly advocated the claims of the Scot[illegible] and Colonel DUNNE insisted that one of the [illegible] given to Ireland.—After some observations [illegible] support of the Bill, Mr. HORSMAN said he [illegible] justice of giving additional seats to the me[illegible] the 20 metropolitan members, there were [illegible] connected with the metropolis representin[illegible] including Bank directors, aldermen, bankers, [illegible] others—who were all available for the representatio[illegible] politan interests.—After some further remarks [illegible] MANNERS, Mr. ROUPELL, Lord W. GRAHAM, Mr. SCULLY, and Mr. PARKER, the Bill was read a [illegible] Sir G. LEWIS moved the second reading of the [illegible] but, after a short conversation, the motion wa[illegible]

TUESDAY.—*Law of Bankruptcy in Ireland.*—[illegible] SCULLY, Mr. CARDWELL said that if the A[illegible] Bankruptcy Bill should pass, he should take [illegible] the law in Ireland. It was not his inten[illegible] propose any measure for altering the law in [illegible] *Marriages*, though it was very unsatisfactor[illegible] to great inconvenience. *Cavalry Forage.*—M[illegible] that the House resolve itself into committe[illegible] address to her Majesty, praying that the stop[illegible] of cavalry and artillery officers for forage ma[illegible] —Captain JERVIS seconded the motion, which [illegible] by Colonel DICKSON, Colonel DUNNE, and [illegible] and opposed by Mr. T. G. BARING, Mr [illegible] Mr. OSBORNE, who said that the propos[illegible] more nor less than transferring to the B[illegible] a sum of 20,000*l.* a year now paid by [illegible] On a division the motion was negatived by [illegible] HODGKINSON obtained leave to bring in a Bi[illegible] lous and fictitious defences to *Actions for D*[illegible] Bill was taken from the Bills of Exchange A[illegible] modifications. *The Slave Trade.*—Mr. CAVE [illegible] lowing resolutions:—1. That the means hither[illegible] this country for the suppression of the Afric[illegible] have failed to accomplish that object. 2. That [illegible] mainly arisen from our having endeavoured, [illegible] sively, to prevent the supply of slaves, instead [illegible] demand for them. 3. That the true remedy w[illegible] found in countenancing immigration into those [illegible] slavery exists, but in augmenting the working [illegible] those in which slavery has been abolished. [illegible] fore, while repressive measures should be [illegible] even rendered more effective, every possible [illegible] ment and assistance should be given to the [illegible] free immigrants, and especially of settlers from [illegible] British West India colonies.—Lord J. RUSSELL [illegible] measures employed for the suppression of the [illegible] not been so ineffectual as the resolutions suppos[illegible] trade had been interfered with to a considerable [illegible] pointed out the obstacles interposed by the [illegible] public feeling against slavery or the slave tra[illegible] countries; by the enormous profits of the trade [illegible] encouraged large associations at the Havannah [illegible] on; and by the fact that slave vessels were [illegible] American flag, the Government of the United [illegible] to allow the right of search and to concur in [illegible] for the suppression of the trade. As to the en[illegible] free immigration into our own colonies, he agreed [illegible] slavery was abolished, it should have been our p[illegible] the introduction of free labourers. But, when [illegible] posed to introduce them into the Mauritius [illegible] was adverse to the proposal, on the ground [illegible] lead to another kind of slave trade. Their im[illegible] however, been a great success in the Mauritius, and [illegible] be happy to see their immigration into our West [illegible] nies. It must be left to the Secretary for [illegible] frame plans for this object, her Majesty's G[illegible] fully aware of the advantage attending it, and [illegible] the abuses which had prevailed in the system [illegible] warded off. The Government were not, therefore, [illegible] opposed to the object Mr Cave had in view; but [illegible] see the practical advantage of adopting his [illegible] moved the previous question.—Mr. BUXTON [illegible] suggestions for the suppression of the slave [illegible] African coast.—Lord A. CHURCHILL urged the [illegible] free labour with slave labour, and the forma[illegible] establishments on the coast of Africa. After some [illegible] Mr. KINNAIRD, Mr. M'MAHON, Mr. SLANEY, Mr. [illegible] Mr. EWING, Sir M. FARQUHAR, and Mr. G[illegible] PALMERSTON said they were indebted to Mr Cave [illegible] brought the subject before the House, and he [illegible] what had passed in the discussion must conv[illegible] there was no difference of opinion between [illegible] Government. He described the efforts of Eng[illegible] suppression of slavery and the slave trade, [illegible] that centre of abominations—Cuba. He an[illegible] strong terms upon the profligate and shame[illegible] faith by the Spanish nation—a nation indivi[illegible] honour, though in the aggregate guilty of a shame[illegible] ment of its engagements that would almost justify [illegible] of war. After adverting to the impediments [illegible] to united action against the slave trade between [illegible] the United States of America, and reminding M[illegible] assurances given of the favourable feeling of the [illegible] towards the immigration of free labourers in[illegible] which was increasing, he expressed a hope that [illegible] think it necessary to press his resolutions to [illegible] compliance with this suggestion Mr. CAVE [illegible] motion.—*Naval Transport.*—Mr. LINDSAY moved [illegible] ment of a Select Committee to inquire into the [illegible] and management of those branches of the Adm[illegible] office, India-office, and Emigration Board, [illegible] business of transporting, by means of ship[illegible] convicts, emigrants, materials of war, stores [illegible] similar services, is now performed. The motion [illegible] The *Locomotives Bill* was read a second time.

WEDNESDAY.—*Church Rates.*—Sir J. TRELAW[illegible] second reading of the Bill for the Abolition [illegible] He said that he was not indisposed to an amica[illegible] if such were possible; but he warned the House [illegible] rejected this Bill, they would give great enc[illegible] those who had ulterior views; while, if it passed, [illegible] grievance now pressed by the Dissenters would [illegible] Lord FERMOY seconded the motion.—Sir W. HEATH[illegible] that the Bill be read a second time that day s[illegible] He admitted that the question could not be perm[illegible] in its present state, and it was therefore wi[illegible] an amicable compromise that he opposed [illegible] motion. — Mr. PACKE opposed, and Mr. [illegible] ported, the Bill. — The CHANCELLOR of the E[illegible] said there seemed to be on both sides [illegible] suasion that it would be for the credit [illegible] lature that this question should be settled. [illegible] that he remained of the opinion he had always [illegible] should refuse to vote for the second reading [illegible] there were a strong sentiment in favour of [illegible] Church rates, on the other hand, when the [illegible] rates came forward by thousands and tens [illegible] asking Parliament to be allowed to continue [illegible] showed a strength of principle and purpose wh[illegible] lawny would do well to take into his consid[illegible] get at the merits of the Church-rate question, [illegible] divided into two questions, as respected two [illegible]

[illegible] In populous parishes it might be in prac[illegible] and he would abandon the principle of the rate [illegible] rural parishes, where the rate was paid with as [illegible] as any other public charge, why was this [illegible] to be abolished? What paid the charge in rural [illegible] the land, and it was proposed to force 250,000*l.* [illegible] the proprietors of land. If the law of Church-[illegible] was a good law—if it provided for Divine [illegible] for the benefit of the poor, amounting to a large [illegible] the population, it was too much to say that we [illegible] such a law to meet, not the scruples, but the [illegible] of individuals. He suggested that the Legislature [illegible] by converting the power of the majority of the [illegible] firmly maintaining the right of the parish [illegible] giving to those parishes where the ancient [illegible] had lost the power of raising a voluntary rate. [illegible] quoted the recent "Essays and Reviews" to show [illegible] state of opinion in the Church, and contended that [illegible] of total abolition of Church-rates would satisfy [illegible] meet the necessities of the case. He pointed out [illegible] position of the Church of England, when, not [illegible] a Presbyterian Prime Minister appointed Anglican [illegible] several advertisements of livings for sale, [illegible] on the disgraceful nature of many of these transac-[illegible] the Dissenters in seeking the abolition of the rate, [illegible] in view, and they would never rest till they [illegible] it.—Mr Disraeli repudiated the charge of having [illegible] the Church-rate question to party purposes. The rate, [illegible] contended, was levied in strict accordance with the spirit [illegible] Constitution, being imposed entirely by the vote of a [illegible] the parishes. It belonged to the system of local [illegible] and free action which formed the basis of [illegible]. The Church of England was a part of our [illegible] institutions, and a barrier against that cen-[illegible] which had been in all other countries so [illegible]. It was because this Bill was repugnant to [illegible] that he should offer to it an uncompromising [illegible].—Lord J. Russell observed that this was a question [illegible] mere abstract right, but what was most beneficial to the [illegible]. He did not think the exemption of Dissenters would [illegible] settlement of this question. It seemed to him that in [illegible] to such a plan the value of a national Church would [illegible]. He did not see why those who differed from [illegible] the opinions of the Church of England should not [illegible] it as a great national benefit. Great difficulties [illegible] likewise be met with in carrying a law of exemption [illegible]. He did not believe that the taking away 250,000*l.* [illegible] from the Church of England would cause our ancient [illegible] churches to fall into decay; he believed that voluntary [illegible] would be forthcoming to maintain them. If so, [illegible] in his opinion, a great advantage to friends of the [illegible] to get rid of a cause of difference between them [illegible] Dissenters. By rejecting this Bill agitation [illegible] be allayed, and he did not think that the prosperity [illegible] Church of England depended upon the maintenance of [illegible] rates.—Mr Walpole said this question was not one of [illegible] grievance, for which a remedy was to be obtained, [illegible] whether Parliament should take away what Lord [illegible] had formerly maintained to be an obligation cast [illegible] owners of property in England, without providing a [illegible] substitute or an equivalent; Lord John had suggested only voluntary contributions, which never could be and never [illegible] a substitute.—Sir J. Trelawny having replied the [illegible] was negatived on a division by 281 to 266, and the [illegible] was read a second time. The *Law of Foreign Countries Bill* passed through committee.

[illegible]—*The Late Harvest.*—Mr. Caird called attention [illegible] necessity for economy arising out of the deficiency of the [illegible] harvest. The crop was the worst since the great failure in [illegible], and the deficiency followed a series of years of large [illegible] expenditure. The losses on last year's crops were not less than 20,000,000*l.*, and the prospects for the present year were not encouraging. He, therefore, thought that the mili-[illegible] and naval expenditure, owing to the improved condition [illegible] foreign relations, was rendered no longer necessary. [illegible] *and Syria.*—Mr. Fitzgerald asked for information [illegible] a note presented by the Russian Minister to the [illegible] Government on the ill-treatment of the Christian sub-[illegible] the Porte.—Sir J. Fergusson and Mr. Layard called [illegible] to the state of Syria and the effects of the [illegible] occupation.—Lord John Russell said that the [illegible] Prince Labanoff was in the nature of an answer [illegible] the report of the Grand Vizier, alleging that there [illegible] abuses which had not been brought to his notice, [illegible] British Government had recommended that, as some [illegible] charges were very serious, a reply should be made by [illegible] Turkish authorities. With regard to Syria, he thought it [illegible] that French occupation should cease, although [illegible] reason to believe that, if it had not been for the inter[illegible] of foreign troops, outrages such as those which had [illegible] the whole civilised world would have been perpetrated [illegible] and Jerusalem. The expediency of withdrawing [illegible] had recently been under discussion at the Confer-[illegible], should the Porte concur, he believed it had been [illegible] to withdraw the French troops from Syria on the 1st [illegible] May next, notwithstanding a representation by the French [illegible] of the danger that would attend such a step. *The [illegible] Board.*—Sir J. Elphinstone moved a series of 11 [illegible] on the subject of naval administration, pro-[illegible] to abolish the Board of Admiralty, and to sub-[illegible] a Minister of Marine. He discussed the subject at [illegible] length, intimating, however, that he did not mean to [illegible] resolutions to a division. At the same time he [illegible] his conviction that they contained the germ of a [illegible] which offered the only mode of getting out of our present [illegible] and a solution of the question.—Mr. Baillie seconded the motion.—Mr. Lindsay described the vigilance of [illegible] French Government in the construction of iron-plated [illegible], and expressed his surprise that we should continue [illegible] ships, which could be sunk by a single shell [illegible].—Sir John Pakington wished that [illegible] Government would undertake the inquiry into this subject; [illegible] they declined, he should prefer a Royal Commission to [illegible] committee.—Lord C. Paget said that the Admiralty intended constructing a number of batteries and forts armed with heavy [illegible] at several places along the coast for [illegible] marine artillery and coast volunteers. They [illegible] intended to bring in a Bill for the enrolment [illegible] officers as volunteers. With reference [illegible] of the navy, he assured the House [illegible] was no ground for alarm, as it was in a most [illegible] state, although it had not the same number of [illegible] as France.—After a few words from Mr. [illegible] Wood, and Captain Talbot, Sir M. Seymour [illegible] to the necessity of devising some plan of manning [illegible] reserve, so that in the event of any emergency [illegible] in commission.—After some remarks by [illegible] Admiral Walcot, the resolutions were with-drawn, and the House went into committee of supply pro [illegible]. The [illegible] *Bill* and the *Marriages Validity Bill* were [illegible] second time. The *Bank of England Bill* was read a third [illegible] passed.—The Lord Advocate obtained leave to [illegible] a Bill for the improvement, regulation, and protection [illegible] *Salmon Fisheries of Scotland*, and a Bill to enable coun-[illegible] in Scotland to abolish tolls and statute labour and to [illegible] their *Public Roads and Bridges* by assessment.

Friday.—*Westminster Improvement Bill.*—On the motion for the second reading of this Bill, Sir W. Gallwey moved, as an amendment, that it be read a second time this day six months. After a long discussion the Bill was read a second time, notice being given that a motion would be made that it should be referred to a select committee. *Affairs of Italy.*—In answer to Mr. Griffith, Lord J. Russell said that no proposition had been made by any European Government for a Congress on the affairs of Italy. [Left sitting.]

City Intelligence.

Money Market, Friday.—British Funds: Consols closed at 91⅝ to ¾ for Money, and 91⅞ to ⅞ for the 7th March; Bank Stock, 232; Three per Cents. Reduced, 91⅜ to ½; New Three per Cents., 91½ to ⅝; India Five per Cent. Stock, 100; Ditto for Acct., 99¼; Five per Cent. Enfaced Rupee Paper, 94½.—Foreign: Brazilian Four and a Half per Cents., 1852, 85; Ditto Four and a Half per Cents., 1860, 85; Buenos Ayres Six per Cents., for Acct., 92; Ditto Deferred, 29; Chilian Four and a Half per Cents., 82; Dutch Two and a Half per Cents., 63¼; Mexican Three per Cents., 24; Ditto, for Acct., 23⅞ to 24¼; Peruvian Four and a Half per Cents., for Acct., 96, ex div.; Portuguese Three per Cents., 1853, 46¼; Spanish New Deferred Three per Cents., 41¼ to 41; Ditto, Passive, 17¼; Turkish Six per Cents., 1858, for Acct., 52 to 51¼ ex div.; Ditto Guaranteed Four per Cents., 100.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,844,745	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	10,521,383
		Silver Bullion	848,363
	£25,844,745		£25,844,745

BANKING DEPARTMENT.

Proprietors Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£8,770,776
Rest	3,430,215	Other Securities	20,569,958
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	5,820,970	Notes	6,326,635
Other Deposits..	12,169,781	Gold and Silver Coin ..	838,976
Seven day and other bills	586,479		
	£36,506,345		£36,506,345

28th day of Feb., 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY—BANKRUPTS—J. Barnsley, South Wingfield, Derbyshire, Hay Dealer—W. T. Bellingham, Gresham Street, Auctioneer—E. Botting, Brighton, Grocer—F. Brotherton, Middlesbrough, Innkeeper—J. Carey, Tunbridge Wells, Bootmaker—I. French, Manchester, Cheese Factor—W. Griffin, Rowley Regis, Staffordshire, Anchor Maker—J. B. Hutt, Cambridge, Print Seller—T. Moore, St. Albans, Licensed Victualler—W. D. Simpson, late of Crayford, Kent, Brickmaker—J. Smith, Whittaker, Great Grimsby, Cooper—J. Westbury, Gloucester, Innkeeper.

BANKRUPTCY ANNULLED—J. M. Nicholson and G. Plummer, Manchester, Cabinet Makers.

SCOTCH SEQUESTRATIONS—J. Carlyle, Tundergarth, Dumfriesshire, Sheep Dealer—A. and A. Crawford, Milncroft, near Glasgow, Dyers—J. Davie, Glasgow, Merchant—J. Gall, Whiteshaw, Carluke, Farmer—A. Macalister, West Clyth, near Lybster, Caithness-shire, Fish Curer—M. Maclachlan or Macdonald, Lochmaddy, Inverness-shire, Innkeeper—J. and R. A. Ronald, Paisley, Shawl Manufacturers—J. Wright, Edinburgh, Stabler.

FRIDAY—BANKRUPTS—J. Allcock, jun., Ilford, Essex, Miller—C. Boddington, St. Martin's Lane, Worsted Dealer—J. Buxton, Manchester, Drysalter—B. Cail, Pavilion Place, Battersea, Cowkeeper—J. Copestake, Derby, Engineer—J. Fell, Liverpool, Tea Merchant—E. Hunt, Southwark, Surrey, Hop Merchant—W. T. Lloyd, Llangunnidor, Brecon, Miller—J. Lock, Barnsbury Grove, Islington, Builder—A. Nixon, Liverpool, Merchant—R. Oxley, Chippenham, Wilts, Maltster—G. Roper, Bincombe, Dorsetshire, Builder—W. Smith, Stoke upon Trent, Staffordshire, Draper—S. J. Wood, Millwall, Cement Manufacturer.

SCOTCH SEQUESTRATIONS—W. Bruce, Hamilton, Draper—W. Morison, Glasgow, Cattle Salesman—S. Peacock and T. Todd, sole and individual partners of the Edinburgh Machine Sewing Company.

Metropolis and its Vicinity.

International Exhibition of 1862.—The arrangements for holding the second International Exhibition of Works of Industry and Art in 1862 are steadily progressing. A Royal charter incorporating Earl Granville, K.G.; the Marquis of Chandos, Mr. Thomas Baring, M.P.; Mr. C. Wentworth Dilke, and Mr. Thomas Fairbairn Commissioners to conduct the Exhibition, has passed the Great Seal, and it may be useful to state briefly, for the information of the public, what are the powers of the Commissioners under that charter. After reciting the prayer of the Society of Arts, and constituting the commission, it proceeds to state that for the purpose of enabling the Commissioners to carry out the Exhibition it is necessary that they should be enabled to borrow the sum of 250,000*l.* This they are empowered to do upon a deed of guarantee being signed for that amount. The funds borrowed are to be expended on the erection of such building as may be necessary, and in the general expenses attending the enterprise. Of the building to be raised one acre only is to be of a permanent character, and upon this portion the sum of 50,000*l.* is to be expended in its erection and completion. In the event of the Exhibition being attended with a profit, the permanent building is to be vested in the Society of Arts, and used by them for purposes tending to promote arts, manufactures, and commerce; but in case of a deficiency at the close of the Exhibition, the Society of Arts is to have the power to claim a lease of the same upon its undertaking to pay to the Commissioners such money as the buildings would be likely to realise if taken down; but in case the Society of Arts should not claim a lease, then the Commissioners are to sell the one acre of permanent building, and to convert into money all properties and effects belonging to them, which can be sold and converted, particularly all the buildings erected by them for the purposes of the undertaking. Should there, however, at the close of the Exhibition, after the payment of all liabilities, be a sufficient surplus of profit remaining, then the one acre of permanent building is to be completed and the land retained for the purposes of a future Exhibition, by the payment of 10,000*l.* to the Royal Commissioners of the Exhibition of 1851, on whose land the Exhibition of 1862 is to be placed, and all further profits are to be applied to such purposes connected with the encouragement of arts, manufactures, and commerce as shall be determined by the guarantors at a meeting to be called for that purpose. Such are the general powers of the Commissioners under the charter, and the guarantors cannot therefore be called upon for contributions under any condition, unless a deficiency remain after every description of property belonging to the Commissioners has been converted into money. Since the charter passed the Great Seal the Commissioners, in a letter addressed to Sir Thomas Phillips, Chairman of the Society of Arts, state that they gladly accept a charter, which conveys to them her Majesty's gracious assurance that she is earnestly desirous to promote the holding of an International Exhibition of Works of Industry and Art in 1862, and they, being unwilling to lose valuable time, have taken such provisional steps as their position permitted, and have therefore considered the most pressing point—namely, the building required for the Exhibition, and on Saturday last it is stated that they came to a final decision as to the character of the building intended to be erected for the Exhibition of 1862, and so soon as the guarantee deed is signed the Bank of England will be prepared from time to time to advance the necessary funds, and Messrs. Kelk and Lucas, the eminent contractors, who sent in the lowest tenders, will jointly proceed with the erection of the building. It is also stated that the Commissioners have received the assurance of the French Government of its support of the Exhibition, accompanied by the statement that it had been the intention of the Emperor to hold an International Exhibition in Paris in 1862 had the project not been entertained in England. The Duke of Newcastle, Secretary of State for the Colonies, has addressed a communication to the Governors of her Majesty's colonies announcing the intention to hold the Exhibition. In England some of our largest manufacturers are already actively engaged in preparing for this second display, and as soon as the Society of Arts shall have completed the guarantee deed, the signature of which is progressing most rapidly, we may expect to see the building rise, and our great seats of industry actively engaged in preparation and anticipation of the competitive display of industry and art to be exhibited in 1862.

The Hayter Testimonial Banquet.—On Wednesday evening the testimonial subscribed for by the Liberal members and ex-members of the House of Commons, on the retirement of Sir W. G. Hayter, M.P. from his post of political secretary to the Treasury, was presented to him at Willis's Rooms. The event was celebrated by a magnificent banquet at which nearly 200 gentlemen were present. Lord Palmerston presided, and after proposing the toast of the Queen, proceeded to give the health of Sir W. Hayter, describing at some length his services to the Liberal party, and the judgment, courtesy and tact with which he had performed the varied duties of his office in the House of Commons. Sir W. Hayter returned thanks in an appropriate speech, in which he expressed his obligations to Lord Palmerston and Lord John Russell for the confidence they had reposed in him, and said that the success which had attended his services was due to the co-operation, sympathy, and forbearance which he had always met from every member of the Liberal party. Lord Harry Vane proposed the health of the chairman, which was duly acknowledged by Lord Palmerston. The only other toast proposed was that of those present who had ceased to be members of the House, which was briefly acknowledged by Lord Sandys.

The Embankment of the Thames.—At the last meeting of the Metropolitan Board of Works, a letter from the Right Hon. W. Cowper, First Commissioner of Works, was read, stating that he had determined on issuing a commission to inquire into the various plans for the embankment of the river, with a view to the selection of the best. The *Gazette* of Tuesday announces that the commission is to consist of the Lord Mayor; Major-General Sir Joshua Jebb, K.C.B.; Mr. Thwaites, Chairman of the Metropolitan Board of Works; Captain Douglas Galton, R.E.; Commander Burstal, R.N., secretary of the Thames Conservancy Board; Mr. H. A. Hunt, Surveyor of Her Majesty's Works and Public Buildings; and Mr. J. R. M'Clean, the Civil Engineer.

The Illuminated Indicators.—The seven columns erected by the Illuminated Advertising Column Company were sold by auction on Saturday morning. Each column was knocked down as a separate lot.

The Great Eastern.—At a meeting of the Great Ship Company on Thursday, the directors announced that they have determined to despatch the ship on another voyage to America early in April next. During the winter the main deck has been made thoroughly water tight, the saloon and cargo decks have been caulked, and many other minor but important works have been completed.

The Late Storm.—The effects of the great hurricane of Thursday night, the 21st ult., were more

serious than at first supposed. In the City the large casement above the well-known clock-face of St. Magnus' Church, London Bridge, was blown out and dashed to pieces, and the massive sheet of plate glass in the show-room of the establishment of Moses & Son, Aldgate, was blown into the street. At Hatton, near Hounslow, five of Messrs. Curtis & Harvey's gunpowder mills exploded during the storm, fortunately without loss of life. The storm was also severely felt in several of the western and midland counties. In Berkshire the well-known gateway of Reading Abbey, the restoration of which has been for some time under discussion, was seriously damaged, a large portion of the frontage above the north arch with a part of the arch itself and the north-west tower being blown down. About 20 feet of a lofty chimney at the large ironworks of Messrs. Barrett, Exall, & Andrews, agricultural implement makers, were blown down, and other damage was done to other property in the town and neighbourhood. The road from Leamington to Warwick was completely obstructed by the wrecks of fallen trees. Many ancient cedars adorning the lawn of Warwick Castle, and 50 cedars and elms in the Priory grounds, were destroyed. At Stratford-upon-Avon, Charlecote, Wellesbourne, and in fact throughout the southern portion of Warwickshire, the damage done to the timber of that finely-wooded county was unprecedented and immense. In Devonshire the storm raged with extraordinary violence. In Exeter houses were partially unroofed, walls blown down, and a vast number of large trees uprooted. In the Cathedral yard one of the old elm trees was blown down. In the streets carriages and carts were overturned by the violence of the gale. At Topsham several houses were unroofed and windows smashed, and so many of the trees in the highway were blown down that the road in many places was impassable. In the rural districts the storm did much damage to the homesteads. Ricks of corn and hay were blown down, and great loss was sustained. At Torquay the hurricane was terrific, and much destruction of property was caused. A servant at Falkland Villa was killed by a chimney falling through the roof into the kitchen. A large elm tree fell in upon Tor Church and demolished the outer porch. The telegraphic wires for some distance on the Bristol and Exeter Railway were blown down, and all communication stopped.

THE PUBLIC HEALTH.—The Registrar-General's return states that the deaths in London in the week that ended Saturday, Feb. 23, were 1318. The average number in the corresponding weeks of the 10 previous years, 1851-60, corrected for increase of population, was 1414. The present return is therefore 96 below the average. During the week the births of 1035 boys and 856 girls, in all 1891 children, were registered in London. In the 10 corresponding weeks of the years 1851-60, the average number was 1781.

Provincial.

BLACKBURN.—The factory operatives of this town and Accrington have resolved to abandon their opposition to the proposed reduction of prices, and from 15,000 to 20,000 hands have resumed work.

BRIGHTON.—A daring robbery of jewels was perpetrated on Friday night at the residence of Lady Otway, 14, Brunswick Terrace, in this town. The thieves must have effected an entry with skeleton keys while the servants were at supper, and are supposed to have concealed themselves behind the drawing-room curtains until the family had retired to rest, as the customary search was made through the rooms before locking up for the night. They then not only removed all the valuables which came within their reach in the different rooms, but actually took a costly gold watch and appendages from the pocket at the bed's head, and a diamond ring from off her ladyship's finger whilst she lay asleep. With the key attached to the watch they opened a desk in the drawing-room and took out a large sum in cash and bank notes. The property carried off is valued at 1700*l*. A reward of 150*l*. is offered for the discovery of the thieves.

CHICHESTER.—The destruction of the cathedral spire in the storm of Thursday week is the cause of deep regret, not only in Chichester and the neighbourhood, where the elegant and lofty spire was more immediately an object of the greatest interest, but also to the inhabitants of the country at large, who will no doubt unite in a general effort to restore it. It appears that the alterations commenced in 1859 as a memorial of the late Dean disclosed some serious defects in the supports of the great western arch of the tower. The four arches and their piers were erected at the end of the 12th century, and were, therefore, more than 700 years old. The tower was added about the year 1200, and the spire was placed upon it about 200 years later. The piers bore the enormous addition of weight with difficulty, and settlements and displacements have occurred at various periods. Those recently discovered were like the old fractures which had long been open to observation, and at first excited no apprehensions; but it was subsequently found that the western piers were split vertically, and the stones much crushed and fractured. The necessary reparation was immediately commenced. As a precaution, strong framings of timber were placed under the west, north, and south arches, which, up to the last moment, exhibited no sign of weakness whatever. In November last some part of the new work in the north-west pier was observed to yield slightly, having then been finished about a month, and a slight movement was also detected in the south-west pier, certain of the old fissures extending themselves into the new work. These were carefully watched, and it was believed that when the new work, which had been constructed in "lias" mortar, solidified they would be unimportant. On the 14th ult. a change was observed; cracks in the south-west and north-west piers began to enlarge, and it was determined at once to erect additional supports to the piers. Active measures were adopted. After the usual Sunday services on the 17th in the nave, which had been temporarily screened off, the church was taken possession of by the workmen, who pursued their task by night and day with little intermission, down to the hour of the final catastrophe. It soon became evident that the heart or core of the piers was rotten; the task of sustaining on each pier a weight exceeding 1400 tons thrust forward the facing on every side, and when the masonry was restrained in one place by props and shores the restraint caused it to bulge on the adjoining surfaces faster than it was possible to apply remedies. The terrific storm of wind on the night of Wednesday the 20th caused these difficulties to increase with alarming rapidity, but the efforts of 60 workmen still appeared to offer some possibility of ultimate success. About 4 A.M. on the following morning however it was found that the shores and braces exhibited many signs of suffering from the enormous strains to which they had been subjected. The number of men was increased, and various expedients were put in requisition to strengthen what was strained. The crushing and settlement of the south-west pier had caused a serious pressure on the top of the south-east and north-west piers, the entire separation of the church walls from the western supports of the tower had become evident, heavy stones burst out and fell, the core of the south-west pier poured out, crushed to powder, and the workmen were cleared out of the building and the spire left to its fate about 1 o'clock. Not more than a quarter of an hour later the tower and spire fell to the floor with but little noise, forming a mass of near 6000 tons of ruin in the centre of the church, and carrying with it about 20 feet in length of the end of the nave, and the same of the transepts and choir. The spire in its fall at first inclined slightly to the south-west, and then sank gently into the centre of the building. The appearance of the fall was that of a large ship quietly but rapidly foundering at sea. In a downfall of such a magnitude it is a subject of the greatest thankfulness that no lives were lost.

DURHAM.—The newly-appointed Bishop of Durham, the Hon. and Rev. Montagu Villiers, has produced a sensation in his diocese by the manner in which he has dealt with the first piece of preferment that has come into his hands since his translation from Carlisle. The bishop, as is well known, is a leading member of the Evangelical party in the Church, and was becoming extremely popular, having shown a great anxiety to make himself acquainted with every part of his large diocese, more especially with the condition of the large towns, in which as well as in the densely-populated mining districts of the diocese there are several exemplary clergymen who have spent their lives in toiling among the large populations on very slender stipends. It appears that when certain livings in the diocese were assigned to the Bishops of Chester, Manchester, and Ripon, the late Bishop, Dr. Longley, persuaded the Ecclesiastical Commissioners to leave undisturbed the patronage of five or six valuable rural benefices, Houghton-le-Skerne among the number, on the express ground that, "if deprived of them, the Bishop of Durham would have no means of adequately providing for and remunerating such clergymen as had distinguished themselves by long and useful service in the large towns." The recent death of Dr. Bandinel placed this living of Houghton-le-Skerne at the disposal of Bishop Villiers. It is worth about 1300*l*. a year, and there is a spacious mansion and pleasant garden attached, the population at the last census being only 1403. It was thought that the Bishop would have taken the opportunity offered and pressed upon him by the local landowners, churchwardens, and others, to form a new district and endow it with 200*l*. or 300*l*., which the living could easily have spared, and that the remaining 1000*l*. a year would have been conferred upon some hard working clergyman in the diocese as a reward for his past services. The Bishop however has conferred the living on the Rev. John Edmund Cheese, M.A., his domestic chaplain and son-in-law, who has been but three years in orders.

MAIDSTONE.—A numerously attended meeting of the hop-planters of Kent was held in this town on the 21st ult., to consider what steps should be adopted in consequence of the refusal of the Chancellor of the Exchequer to grant a further postponement of the duty payable in respect to the crop of 1859, or to receive a deputation on that subject. Mr. Punnett, of Chart, took the chair, and the meeting was addressed by Messrs. Elvy, Hatch, Hayes, and other gentlemen. It was unanimously resolved to co-operate with the Sussex planters to obtain a further postponement of the duty by every legal means.

Ireland.

THE LATE CAPT. BOYD.—The body of [illegible] was found on Monday morning by the H[illegible] the East Pier at Kingstown, some distance [illegible] where he was drowned. The body [illegible] clothing, and was so mutilated and [illegible] was with difficulty recognised. It [illegible] identified by the whiskers and the long [illegible] hands. It was conveyed on board the [illegible] buried yesterday at a public funeral.

Scotland.

LAUNCH OF THE BLACK PRINCE.—The B[illegible] iron-cased screw frigate was successfully [illegible] Wednesday afternoon from the yard of [illegible] & Sons at Glasgow. She went off beau[illegible] rounded and brought to a right posit[illegible] without accident of any kind. The Bla[illegible] 6173 tons, and 420 feet in length. She [illegible] partments, so that in the event of any [illegible] damage, the damage will be confined to [illegible] locality. About 213 feet of each side [illegible] from shot or shell, by armour plates of [illegible] from 15 to 16 feet long, 3 to 4 feet [illegible] inches thick, each averaging upwards of [illegible] has been constructed to carry 40 guns, and [illegible] that her armament will consist of 34 68-[illegible] the main deck, and two 68-pounders, [illegible] four 40-pounders, Armstrong guns, on the [illegible] The engines are nominally only 1250 horse [illegible] they may be worked up to about 4060 or [illegible] expected that the vessel will attain the spe[illegible] 15 knots an hour.

THE MORGAN HOSPITAL, DUNDEE.—The [illegible] Session has given authority for the applica[illegible] sum of 79,138*l*. of Three per Cent. [illegible] Annuities from the estate of the late Mr. J[illegible] for the erection of a hospital in Dun[illegible] lodging, board, education, and clothing [illegible] the sons of persons belonging to the working [illegible] and whose parents are dead or in necessit[illegible] stances. Mr. Morgan's succession has been [illegible] of eight years' litigation in the Court of S[illegible] House of Lords. After some years' contes[illegible] to be served as next of kin, on the footing [illegible] the town of Dundee succeeded, on appeal to the H[illegible] of Lords, in setting up as valid testamentary [illegible] some holograph jottings of deceased, and [illegible] the Court of Session had set aside, and [illegible] which the above sum is now set apart for [illegible] building and endowment of a boys' hospital. [illegible] personal estate of deceased, who made his fortune [illegible] India, considerably exceeded 90,000*l*., and there [illegible] also a small amount of heritable property. [illegible] the endowment of the hospital and the payment [illegible] expenses a comparatively small residue, if any, [illegible] left for the distant relatives whose claims ha[illegible] established before the town of Dundee stepped in.

Law.

HOUSE OF LORDS: COMMITTEE FOR PRIVILEGES.—*The* [illegible] *Peerage*.—This was the claim of Vice-Admiral [illegible] Frederick Fitzhardinge Berkeley, K.C.B., of Berkeley, [illegible] in the county of Glocester, to the title, honour, and [illegible] Baron of Berkeley. It will be recollected that the [illegible] sought to have it declared that he was Baron [illegible] to have a writ of summons to sit as a peer of the [illegible] ing to be a peer by tenure as holding the barony [illegible] *per baroniam*. The claim has been before the H[illegible] years, and after having been adjourned from time to [illegible] Lordships on Tuesday delivered judgment [illegible] Chancellor delivered his judgment in a long and [illegible] speech, showing that the Legislature, by the [illegible] chap. 24, had abolished the right of sitting [illegible] baronies by tenure, if it had ever existed, and that the [illegible] claimant had not made out his claim. Lords [illegible] Chelmsford, Wensleydale, and Redesdale concurr[illegible] judgment. It was then resolved that the [illegible] had failed to establish his case. Claim [illegible] cordingly.—*Beamish v. Beamish*.—*Writ of E*[illegible] was an appeal from a decision of the Court of E[illegible] Chamber in Ireland affirming a judgment of the [illegible] Queen's Bench. The question was, whether a marriage [illegible] formed by the Rev. Samuel Swayne Beamish, between [illegible] and a Miss Isabella Frazer, a young [illegible] him in position, was a valid marriage, and [illegible] Albert Beamish, their issue, was legitimate, so [illegible] succeed as heir-at-law to his grandfather, Dr. [illegible] Beamish, who died intestate. His right to [illegible] tested by the plaintiff in error, his uncle, w[illegible] the marriage was not legal, and that he himself [illegible] heir of his father, was entitled to take the property. [illegible] of Exchequer Chamber having affirmed the judgment [illegible] Court of Queen's Bench in favour of the defendant [illegible] present appeal was brought. In July last the case [illegible] before their lordships, assisted by several of the [illegible] judges, when a question was put to the latter as to [illegible] clergyman was capable of legally marrying himself. Mr. [illegible] Willes now delivered the unanimous opinions of the [illegible] that a clergyman had not the power of performing the [illegible] ceremony on his own behalf. The Lord Chancellor [illegible] the judges for their learned and lucid judgment, which [illegible] for all time be considered an authority on the [illegible] The opinions of the judges were then ordered to be [illegible] and the further consideration was adjourned [illegible]

COURT OF COMMON PLEAS: *Glass and another* [illegible] This was an action brought by Messrs. Glass & [illegible] telegraph manufacturers, against George [illegible] Messrs. Newall & Co., who carry on a similar business [illegible] damage done at his instigation to a submarine [illegible] appeared that the plaintiffs had obtained a contract [illegible] down the cable in question between the English and [illegible] coasts, and that a man called Curtis, who was engaged [illegible] board the vessel, in the work of submerging, drove [illegible] through the cable, and so rendered the power of transmission [illegible] defective, involving the necessity of taking up part [illegible] cable, and causing a loss to the plaintiffs of between [illegible]

[illegible] was called as a witness on their behalf, [illegible] that it was at defendant's instance that he [illegible] board the plaintiff's vessel, in order that [illegible] opportunity of damaging the cable. [illegible] this statement, but the jury, after a [illegible] found a verdict for the plaintiffs, the [illegible] to be the subject of reference. *Reade* v. [illegible] *Novels*.—This case involved [illegible] dramatising a novel without the consent [illegible] breach of copyright. It appeared that [illegible] "Never Too Late to Mend" had been [illegible] out at the Grecian Theatre. Mr. [illegible] delivering the judgment of the Court, said [illegible] right was the exclusive liberty of printing [illegible] copies of a work; that the represen[illegible] on the stage was not a publication; [illegible] published works existed only by statute; and [illegible] must be given for the defendent.

[illegible] *The Emperor of Austria* v. *Day and* [illegible] ex parte application for an injunction to [illegible] Messrs. Day and Sons of Gate Street, [illegible] for lithographing notes of the kingdom of [illegible] to be signed by Louis Kossuth, and [illegible] of the Kingdom of Hungary. The bill [illegible] contemplated was of 100,000,000fl., that [illegible] had been engaged in the manufacture, that the [illegible] were printed and on the eve of delivery for the [illegible] sold or otherwise brought into circulation in [illegible] was done without the sanction of the [illegible] of Austria; was a violation of his rights, [illegible] detrimental to his state and subjects. [illegible] that the notes were designed to be [illegible] purposes. Vice-Chancellor Stuart [illegible] until further order, as prayed; and [illegible] a copy of the bill should be served on the defen[illegible].

[illegible] Court. *The Tallow Frauds.*—*Robert Frazer* [illegible], a Russian broker, was charged with obtaining [illegible] the delivery of a large quantity of tallow, value [illegible] the property of Messrs. Hubbard and Co., Russia [illegible]. It appeared that he gave checks on the Bank of [illegible], having at the time a balance under 10*l*. [illegible] After the case had been stated, the Lord Chief [illegible] that such a proceeding did not amount either to [illegible] to the obtaining goods under false pretences, and [illegible] were directed to acquit the prisoner. It was stated during the trial that the warrants have been surrendered to the [illegible].

Railways.

Fall of a Tunnel on the Midland.—On Monday morning a fearful accident occurred at Sheffield, by which six men were buried alive, and a seventh was so severely injured that he is not expected to survive. At the side of a tunnel belonging to the Midland Company excavations have been made by Messrs. Hunt and Co. for the erection of warehouses; this appears to have weakened the tunnel so much that while the men were at work it suddenly gave way, burying them and the building they were erecting under the mass of earth and stones. The tunnel has fallen in for a length of about 40 yards, and more is expected to fall.

Great Western of Canada.—The Committee of Investigation into the affairs of the Great Western Railway of Canada have published a report which describes some of the most extraordinary acts of mismanagement and spoliation ever brought to light in connection with the railway, or any other system of joint-stock undertakings. The committee charge parties intimately connected with the company, with granting to themselves contracts for works, and the outlay of enormous sums of money as recompense for most questionable services. They state that Mr. Laing, now finance minister in India, while officiating as director of the company, entered into partnership with Mr. Wythes, of Reigate, the contractor who undertook to execute a certain portion of the works on the line. The works contracted for cost nearly 100,000*l*. beyond the original estimate, but Mr. Laing denies that he derived any emolument from the transaction, having dissolved the agreement before profit accrued. The committee, however, state that it was part of Mr. Laing's business to get up funds to companies on commission, and that, although he was disqualified in 1855, and ceased to be a director and even a shareholder, he nevertheless accompanied Mr. Wythes to the board meetings, and so effectually advocated his claims, which were in dispute, that Mr. Wythes received, in spite of the protests of the Canadian management, 20,000*l*. more than, in the judgment of the committee, he was entitled to receive. The report states that the amount of money in all "misappropriated or wasted would probably be a million sterling."

Obituary.

His Grace the Duke of Sutherland died at Trentham on Thursday night in his [illegible]th year. His Grace was the son of the 1st Duke by the Countess of Sutherland, daughter and heir of the 17th Earl of Sutherland. He was born in London in 1786, and married in 1823 the 3rd daughter of the Earl of Carlisle. He succeeded his father in the dukedom in 1833, and his [illegible] in the Scottish titles in 1839. He was educated at Christ Church, Oxford, where he graduated M. A. in 1810, and [illegible] D. C. L. in 1841. He was lord lieutenant of [illegible], and also of Shropshire down to 1845 when he resigned. His grace is succeeded in the title and estates by his [illegible] the Marquis of Stafford, born in 1828, and married in 1849 the only daughter of John Hay Mackenzie, Esq., [illegible].

The Countess of Roden died suddenly on Monday afternoon, at the [illegible] in Cavendish Square, in her 67th year. She had been in delicate health for some years past, and had only left her room to meet her three daughters, who had come to take luncheon with her, when she was attacked with an apoplectic stroke, and in less than half an hour was pronounced dead. The Earl of Roden was absent from town at the time, but reached London in the evening. The Countess Maria Frances Catherine Stapleton was second daughter of the 2nd Lord Le Despencer, and was born in 1794. She married in 1813 the Earl of Roden, by whom she leaves surviving issue the Marchioness of Londonderry; the Countess of Gainsborough; the widow of the Hon. Charles Weld Forester; Colonel the Hon. Strange Jocelyn, married to a daughter of Lord Broughton; and the Hon. William N. Jocelyn, belonging to the diplomatic service.

Lord Braybrooke died on the 21st ult., at his seat at Audley End. His lordship, whose state has been such as to cause serious apprehension for some time past, was found dead in his bed. The deceased, Richard Cornwallis Neville, Lord Braybrooke, Baron Braybrooke of the county of Northampton, in the Peerage of Great Britain, and Hereditary Visitor of Magdalene College, Cambridge, was born in 1820, and succeeded to the title in 1858 on the demise of his father. He married in 1852, Lady Clarissa Sarah Graham-Toler, fifth daughter of the 2d Earl of Norbury, by whom he leaves issue two daughters. He was the author of several important works on the Saxon and Roman cemeteries and other remains found in the neighbourhood of Audley End. He is succeeded by the Hon. Charles Cornwallis Neville (now 5th Baron Braybrooke), who was born in 1823, and married in 1849 the third daughter of Viscount Hawarden. His present lordship has no issue, and the remainder is in the Hon. and Rev. Latimer Neville, Master of Magdalene College, Cambridge.

The Dowager Lady Congleton, who died in Paris on the 16th ult., was the eldest daughter of the 1st Earl of Portarlington, and was born in 1782. She married in 1801 Sir Henry Parnell Bart., formerly well known in the political world as the Anti Corn-Law and Pro-Catholic M.P. for Portarlington, the Queen's County, and Dundee; and who was paymaster-general of the forces and treasurer of the navy from 1835 to 1841, and was created Baron Congleton of Congleton in 1841. His lordship committed suicide in a fit of insanity in 1842, leaving a widow (the late dowager baroness) and three sons and three daughters. Of the sons, the eldest is the present Lord Congleton, who has recently become somewhat remarkable as a Baptist preacher, and who is married to an Armenian lady; the second is the Hon Henry William Parnell, heir to the title; the third the Hon G D. Parnell. Of the daughters, the eldest married in 1831 the Rev. Dr Longley, head master of Harrow, now Archbishop of York, and died in 1858; the second married Lord Henry Moore, and is mother of the Marquis of Drogheda; and the third married the 5th Earl of Darnley, and is mother of the present earl.

BIRTHS.—On the 21st ult., at 42, Eaton Place, Lady Colville, of Culross, of a son—22d ult, at Brighton, Lady Emily Cavendish, of a daughter, stillborn—23d ult, in Grosvenor Street, Lady Smith, of Suttons, of a son and heir—21st ult, at 25, Eccleston Square, S.W., the wife of George Cubitt, Esq., M.P., of a daughter—21st ult, at Tubingen, Wurtemberg, the wife of Dr. Reinhold Pauli, of a daughter.

MARRIAGES.—On the 21st ult, at St. Marylebone Church, Arthur Julius Pollock, Esq., M.D., seventh son of the Right Hon. the Lord Chief Baron, to Ellen, daughter of the late Charles Bailey, Esq., of 5, Stratford Place, and Lee Abbey, Lynton, N. Devon—28th of November last, at Tauraraua, New Zealand, Matthew Fortescue Moresby, Esq., R.N., son of Vice Admiral Sir Fairfax Moresby, K.C.B., to Caroline, third daughter of Major-General Charles Emilius Gold—21st ult. at the Parish Church, Littlebourne, Kent, Colonel J. W. Armstrong, C.B., eldest son of the late James Armstrong, Esq., Bengal Civil Service, to Laura, daughter of Denne Denne, Esq., Elbridge House, Kent—21st ult, at the Parish Church, Prestbury, near Cheltenham, Edward S. R. G. Braddyll, son of Edward R. G. Braddyll, Esq., and grandson of Colonel Braddyll, late of Conishead Priory, Lancashire, to Anna Cecilia, daughter of Captain Edward Willis, H.M.'s Inspector of Constabulary for the Southern Division of England and Wales—20th Dec., at the Cathedral, Hong Kong, Alfred Fincham, Esq., of Canton, to Ann Maria, eldest daughter of the Hon. W. H. Adams, Chief Justice of Hong Kong.

DEATHS.—On the 24th ult, at Clifton, Lieutenant-Colonel the Hon. Charles Alexander Wrottesley, late of the 29th Regiment, second son of the 1st Lord Wrottesley, aged 61—14th ult, at Kennington, Elizabeth, daughter of the late William Manners, Esq., of Lambeth, and niece of the late Countess of Dysart—9th Jan., at Ghoona, Central India, Kenelm Neave, Esq., Bombay Army, second surviving son of Sir R. Digby Neave, Bart., and the late Hon. Lady Neave, aged 28—24th ult, at 2, Upper Hyde Park Gardens, Edith Hamilton, the infant daughter of Sir John Lawrence, aged 8 months and 16 days—18th ult, at Craven House, St. Michael's, Wakefield, Caroline, eldest daughter of the late John Cooksey, Esq., M.D., and sister of the late Hon. Mrs H. D. Erskine, aged 84—20th ult, at 5, Lower Berkeley Street, Portman Square, General Dyson, H.M.'s Indian Army, Colonel 18th Bombay Native Infantry—21st ult, at Dyrham Lodge, Clifton Park, M. Campbell, widow of Major General Campbell, late Lieut.-Colonel of the 51st Light Infantry—14th ult, at Berkeley Lodge, Shirley, Southampton, Captain John Chamberlayne, R.N., the last surviving son of Admiral Charles Chamberlayne, of Maugersbury, Gloucestershire—10th Jan., at Barrackpoor, Bengal, Louisa Mary, the wife of Lieut. Colonel Stratton, 6th Royal Regt., and eldest daughter of John Kingston, Esq., Gloucester Gardens, Hyde Park—17th ult, at her residence, 8, Sloane Street, Harriet, relict of the late Wm. Preston Lauder, M.D., F.R.S.E., and sister to the late Lieutenant General Thomas Dalmer, C.B., Colonel of the 47th Regiment—18th ult, at The Lodge, East Cowes, Mrs. Auldjo, of Bryanston Square, relict of the late John Auldjo, Esq., of Mottingham House, Kent, aged 85—19th ult, at Greenwich, the Rev Dr. William Collier Smithers, aged 65—21st ult, at the Vicarage, Bassingbourne, Cambridgeshire, the Rev. William Herbert Chapman, M.A., vicar of that parish, only son of the Rev. William Herbert Chapman, M.A., rector of Balsham, in the same county, aged 39—15th ult, the Rev. William Marsden, B.D., vicar of Eccles, Lancashire, aged 90—21st ult, at the Rectory, Bridge Casterton, near Stamford, the Rev. Henry Atlay, M.A., formerly Fellow of St. John's College, Cambridge, and 33 years rector of the parish, aged 75—At Packstone, Dorset, the Rev. Peter Wm. Jolliffe, for 70 years perpetual curate of St. James, Poole, aged 95.

Markets.

BRITISH WOOLS.—London, Friday, March 1.

The amount of business transacted is insignificant, as the present high rate of interest has paralysed all departments of the trade; also the Colonial sales being so near has been an inducement to purchasers to await their commencement previously to entering on any business of moment.

	s. d.		s. d.		s. d.		s. d.
South-down Hoggets	1 6	to	..	Leicest. Wethers	1 5	to	..
Half-bred ditto	1 7	—	..	Ditto Hoggs	1 7	—	..
Down Ewes	1 5	—	..	Combing Skins	0 11	—	1 3
Kent Fleeces	1 6	—	..	Blanket ditto	0 6	—	0 8
				Flannel Wool	1 0	—	1 8

Colonial Wool Sales.—The March series of Colonial Wool sales commenced last night. The number of bales expected to be sold is between 50,000 and 60,000, as nearly 50,000 had arrived a week previously, leaving the arrivals of six days more to come in. The sales will comprise a large proportion of Port Phillip wool, Cape taking the next place, and Adelaide and Sydney in smaller proportions, followed by small quantities of New Zealand and Van Diemen's Land. The sale last night went off quite as well as could be expected. Good medium qualities realising about the rates of the last series, and the best descriptions (which sold then at extravagant rates) having receded from 1d. to 2d. per lb. There were several first-class marks withdrawn, the importers being indisposed to submit to this reduction in price.

COVENT GARDEN, March 2.

Supplies of winter Greens though improving are still insufficient for the demand. Continental contributions also continue to be imported. Pine Apples and Grapes have altered but little since our last. Oranges may be obtained at about last week's prices. Good Cobs may be had at from 1s to 1s 6d. per pound. Cornish Broccoli is still arriving in cratefuls, and in excellent condition; good single heads of it realise from 2d. to 4d. each. Asparagus, French Beans, and new Potatoes may also be had. Cucumbers are scarce. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Camellias, Heaths, and Roses.

FRUIT

Pine Apples, per lb., 6s to 10s	Pears, per doz., 3s to 6s
Grapes, per lb., 8s to 14s	Apples, per doz., 6d to 1s 6d
— new, per lb., 20s to 24s	Oranges, per 100, 6s to 10s
Strawberries, per oz., 2s	Lemons, per 100, 6s to 10s
Pomegranates, each, 4d to 6d	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 4s	Celery, p. bundle, 1s 6d to 1s 9d
Green Peas, p. ½ sieve, 20s	Onions, p. ½ sieve, 1s 6d to 2s 6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 4s to 12s
Cabbages, do., 2s to 3s	Rhubarb, p. bundle, 9d to 1s 3d
Potatoes, p. ton, 100s to 160s	Seakale, p. punnet, 2s to 3s
— per bus., 4s to 6s	Shallots, per lb., 6d to 8d
— per cwt., 6s to 10s	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 10d	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 6d to 8d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 4s to 5s	Mushrooms, p. pott., 1s 6d to 2s
Cucumbers, each, 2s to 3s	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 3s to 4s	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

Smithfield, Thursday, Feb. 28.

Prime Meadow Hay	75s to	85s	Clover	90s to	110s
Superior do. (old)	90	100	New Clover	—	—
Inferior do.	36	50	Old second cut	70	100
New do.	—	—	Straw	30	36
Rowen	—	—			

Davis & Co.

Cumberland Market, Thursday, Feb. 28.

Sup. Meadow Hay	108s to	116s	Inferior Clover	70s	94s
Inferior do.	60	95	New do.	—	—
New do.	—	—	Straw	38	43
Superior Clover	112	120			

Joshua Baker.

Whitechapel, Thursday, Feb. 28.

Fine old Hay	100s to	105s	Fine old Clover	110s to	116s
Inferior do.	60	80	Inferior do	90	105
Prime New Hay	—	—	Fine 2d cut	95	100
Inferior do.	—	—	Inferior do.	70	80
Straw	32	36	Fine New Clover	—	—

HOPS.—Borough Market, Friday, March 1.

Messrs. Pattenden & Smith report that the market remains firm with but little doing, and where sales are pressed lower prices are accepted.

BUTTER MARKET.—March 1.

Best Fresh Butter .. .. 13s. per dozen lbs.
Second do. do. .. .. 15s. " "
Pork, 4s. 4d. to 5s. 0d. per 8 lbs.

COAL MARKET.—March 1.

Walls End Hetton, 21s.; Walls End Haswell, 21s.; Walls End Stewarts, 21s.; Walls End South Hetton, 21s; Walls End Hartlepool, 20s. 9d.; Walls End Braddyll's Hettons, 20s.; Walls End Russell Hetton, 20s.; Walls End Gosforth, 18s. 9d.; Walls End Riddells, 18s. 9d.; Walls End Thorpe, 19s.; Walls End Hedley, 19s.; Byron, 19s.; Bell's Primrose, 14s. 6d.; Wylam, 17s. 6d.; Tanfield Moor, 16s. 3d.; West Hartley, 17s.; Buddle's Hartley, 17s.; Davison's West Hartley, 17s.; Hastings Hartley, 17s.—169 ships at market.

METROPOLITAN CATTLE MARKET.

Monday, Feb. 25.

The supply of Beasts is shorter than on Monday last. Trade is active for them, and on the average prices are higher. The number of Sheep is considerably smaller; the demand, however, is by no means large, and there is scarcely any alteration in price. Calves are selling about the same as on Thursday. From Germany and Holland there are 560 Beasts, 2200 Sheep, and 75 Calves; from Spain, 200 Beasts; from Scotland, 150; and 1800 from Norfolk and Suffolk.

	s d		s d		s d		s d
Best Scots, Herefords, &c.	4 10	to	5 0	Best Long-wools	5 4	—	5 8
Best Short-horns	4 8	—	4 10	Do. Shorn	..	to	..
2d quality Beasts	3 8	—	4 2	Ewes & 2d quality	4 8	—	5 0
Best Downs and Half-breds	5 10	to	6 0	Do. Shorn	..	—	..
Do. Shorn	..	—	..	Lambs	..	—	..
				Calves	4 8	—	5 8
				Pigs	4 4	—	5 4

Beasts, 3360; Sheep & Lambs, 14,900; Calves, 85; Pigs, 390.

Thursday, Feb. 28.

There are a few more Beasts than on Thursday last. Trade is slow, but prices are about the same as on Monday. The supply of Sheep is again small. The choicest descriptions are readily disposed of. In some instances higher rates are obtained. Trade for Calves is unaltered. Our foreign supply consists of 95 Beasts, 150 Sheep, and 67 Calves. Milch Cows 155.

	s d		s d		s d		s d
Best Scots, Herefords, &c.	4 10	to	5 0	Best Long-wools	5 6	—	5 8
Best Short-horns	4 8	—	4 10	Do. Shorn	..	—	..
2d quality Beasts	3 8	—	4 2	Ewes & 2d quality	4 10	—	5 2
Best Downs and Half-breds	5 10	—	6 2	Do. Shorn	..	to	..
Do. Shorn	..	—	..	Lambs	..	—	..
				Calves	4 8	—	5 8
				Pigs	4 0	—	5 0

Beasts, 1065; Sheep & Lambs, 3200; Calves, 128; Pigs, 370.

POTATOES.—Southwark, Monday, Feb. 25.

During the past week the arrivals both coastwise and by rail have been moderate, but the quantity on hand and in store is considerable. Trade remains dull, with little alteration in price. The following are this day's quotations:—York Flukes, 150s. to 160s. per ton; Lincolnshire Regents, 110s. to 120s.; Dunbar Red Soil, 150s. to 160s.; North Berwick do. 120s. to 125s.; Fife, Forfar, and Perth do., 95s. to 105s.; Rocks and Reds, 85s. to 100s.; French Whites, 60s. to 90s.; Belgian do., 60s. to 80s.; Dutch do., 60s. to 80s.

MARK LANE.—Monday, Feb. 25.

The supply of Wheat from Essex and Kent to this morning's market was small, the best continues to be taken freely at late prices, and the inferior remains very unsaleable at very

irregular ones. Foreign was in fair demand for the country at fully previous rates. Barley is 1s. per qr. cheaper. Beans and Peas are a slow sale, and rather lower. The Oat trade is very dull, and prices are about the same as last week. Flour is unaltered in value.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk . . White	46—65	Red	40—60
— — fine selected runs . . ditto	50—70	Red	54—65
— — Talavera	51—72		
— Norfolk	—	Red	—
— Foreign	50—76		
Barley, grind. & dist., 28s to 30s . . Chev.	40—45	Malting .	38—40
— Foreign . . grinding and distilling	30—36	Malting .	40—43
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire . . Potato	26—28	Feed ..	20—25
— Irish .... Potato	26—28	Feed ..	21—24
— Foreign .... Poland and Brew	24—28	Feed ..	20—28
Rye	35—38	Foreign .	—
Rye-meal, foreign	—		
Beans, Mazagan .... 23s to 44s .... Tick	28—48	Harrow .	28—48
— Pigeon ...... 34s — 56s . . Winds.	34—42	Longpod	—
— Foreign .... Small	40—50	Egyptian	—
Peas, white, Essex and Kent . . Boilers	33—48	Suffolk .	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign .	38—48
Maize .... White	—	Yellow . .	—
Flour, best marks delivered . . per sack	50—57		
— 2d do. .... ditto	38—50	Country .	38—50
— Foreign .... per barrel	30—35	Per sack	40—50

Friday, March 1.

Since Monday, with the exception of heavy rain early on Thursday, the weather has been much finer than at the close of last and beginning of this week. We regret to hear numerous complaints of the bad appearance of the young Wheat plant from many districts, north, east, and south. Little change has occurred in the Wheat trade during the past week. The best samples of English have found buyers on previous terms; but all inferior in quality or condition continues to be neglected, and can only be realised by submitting to lower prices. Foreign has been scarcely so freely taken, and in the northern markets is again quoted 1s. per qr. lower. Barley was a dull sale, and in most instances obtainable at about 1s. per qr. decline. The value of Oats, Beans, and Peas is little altered; but where a change occurred it was in favour of buyers. The sale of Flour has not improved, and in several of the chief markets is written down 6d. to 1s. per barrel and sack. Here we observe no alteration. During the past eight days 70 vessels have been reported arrived off the coast, viz., 25 Wheat, 22 Maize, 12 Barley, 4 Beans, 2 Flour, 4 Linseed, and 1 Rapeseed. The demand for floating cargoes has been limited, and prices lower. The arrivals of all grain, English and foreign, this week have been very moderate, of barrel Flour good. This morning's market was not largely attended. The value of both English and foreign Wheat remains unaltered from Monday, and the business doing in the latter is limited, notwithstanding that the tone of the trade is firm. Spring Corn of all descriptions is a slow sale at Monday's quotations.

Arrivals from Feb. 25 to March 1.

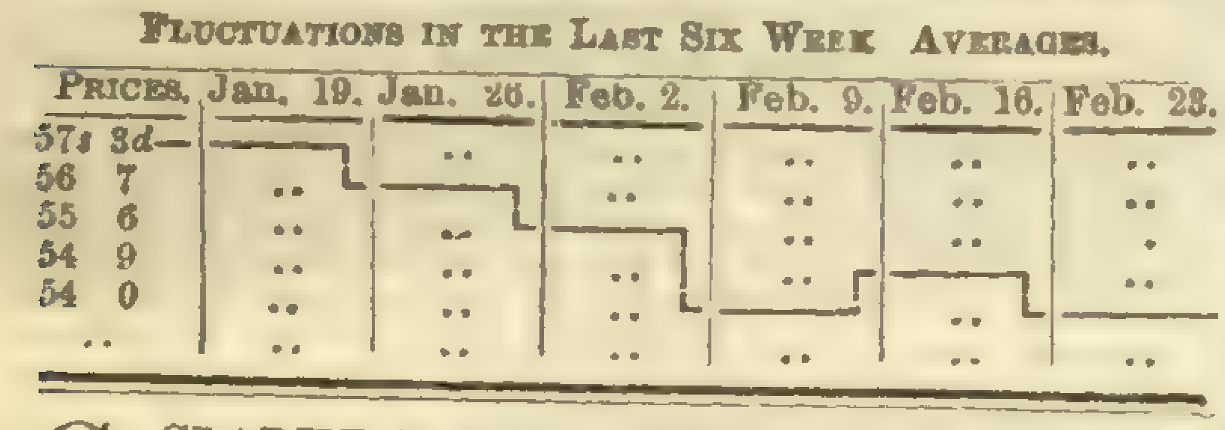
	Wheat.	Barley.	Oats.	Flour.
English ..	1380 qrs.	1970 qrs.	980 qrs.	2590 sks.
Irish	— "	— "	1230 "	— "
Foreign ..	5590 "	5480 "	10940 "	{ 70 " / 16040 brls.

Liverpool, Tuesday, Feb. 26.—The Corn market was well attended this morning. Wheat in rather better demand at the extreme rates of Friday. Flour steady. Indian Corn better; mixed selling at 36s. 9d. to 37s.; Galatz, 39s. to 39s. 6d. Beans, Oats, and Oatmeal without change.

Friday, March 1.—There was a fair attendance at to-day's market; a good business in Wheat at Tuesday's prices. Fine qualities of Flour more sought after, and a fair business done. Indian Corn steady. Beans rather easier. Oats and Oatmeal dull, without change.

Averages	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Jan. 19 ..	57s 3d	40s 6d	23s 2d	34s 9d	41s 10d	43s 0d
— 26 ..	56 7	40 7	23 1	35 10	42 5	41 8
Feb. 2 ..	55 6	40 0	23 3	34 3	40 8	43 0
— 9 ..	54 0	40 8	22 6	36 3	39 10	42 7
— 16 ..	54 9	38 11	23 [illegible]	35 7	40 0	44 7
— 23 ..	54 0	39 4	23 0	35 5	39 7	41 1
Agg. Aver.	55 4	39 10	23 9	35 4	40 9	42 8

Fluctuations in the Last Six Week Averages.



G. CLARKE is in want of a ROSE and FRUIT FOREMAN. One that has filled a similar situation, or has been under a good Foreman, will be preferred. A married Man.—G. Clarke, Streatham Place, Brixton Hill, S.

WANTED, a respectable MAN to Sell to Landowners and Country Gentlemen on commission. One able to push a good trade will be liberally treated with. Reference and security required.—Address, D. B., 55, Russell Street, City Road, Manchester.

WANTED IMMEDIATELY, a steady experienced Hand, to take charge of the BUDDING and GRAFTING of a large Collection of Fruits and Roses, together with a General Collection of Shrubs, &c. Very liberal wages given.—Applications to be addressed to Z., *Gardeners' Chronicle* Office, W.C.

WANTED, in a Small Nursery, near London, a MAN well acquainted with the Business, who understands Budding and Grafting, with the Propagation and Management of Soft-wooded Plants, one who would be willing to make himself useful in such capacity. Apply by letter, stating wages required, and where employed.—A. B. C., Post Office, East Hill, Wandsworth, Surrey, S.W.

WANTED, a GARDENER, a good practical Man, who thoroughly understands the business in all its branches. Another Gardener is kept who has other duties to perform, therefore it will be required for the Head Gardener to work as if single-handed. Salary, 25s. per week and house.—Apply, by letter only, to Mr. Cooper, Alpha House, Coburg Road, Old Kent Road, S.

WANT PLACES.—Letters to be Post Paid.

GARDENER (Head).—Age 39, married, no incumbrance; well understands his profession in all its branches. No objection to a few acres of Land, and Wife to look after Poultry. Six years' good character—W. B., 6, Park Cottages, Park Road, Hornsey, N.

GARDENER (Head).—Age 26, single; thoroughly understands Early and Late Forcing, Flower and Kitchen Gardens.—A. B., Mr. Cutbush, Highgate Nursery, N.

GARDENER (Head).—Age 38, married; has a thorough knowledge of his profession in every department of Gardening.—Head Gardener, Loseley Park, Guildford, Surrey.

GARDENER (Head).—Age 27; a Gentleman is desirous of obtaining a situation for a Young Man in his Establishment. Has a good practical knowledge of his profession.—W. S., Post Office, Ticehurst, Sussex.

GARDENER (Head), to any nobleman or gentleman.—Age 35, married; thoroughly experienced in all branches of his profession. Four and a half years' good character.—J. B., Bedford Nursery, Haverstock Hill, N.W.

GARDENER (Head).—Age 40, single; thoroughly understands his profession in all its branches. Has had great experience in Early and Late Forcing in his last situation, and likewise the Management of Land. Four years' good character from his last place.—J. B., Mr. Gravor's, Bourne Hill, Southgate, Middlesex.

GARDENER (Head).—Age 33, married, one child; has had 18 years' practice in the profession, where Pines, Grapes, and other choice fruits, Stove and Greenhouse Plants, Flower and Kitchen Gardening has been carried on extensively. An excellent character from the gentleman he is just leaving.—A. Weldsmith, 28, Rother Street, Stratford-on-Avon.

GARDENER (Head).—Age 41, married, without incumbrance; has a thorough knowledge of his profession in all its branches, with good experience of Early and Late Forcing; also the Management of Flower and Kitchen Gardens. Good character, and can be highly recommended.—Wm. Wood & Son, Nursery, Maresfield, near Uckfield, Sussex.

TO NOBLEMEN AND GENTLEMEN.

GARDENER (Head).—Age 29, married, one child; has a thorough practical knowledge of the Forcing of Fruits, Flowers, and Vegetables, the Culture and Propagation of Stove and Greenhouse Plants, and the Management of Fruit, Flower, and Kitchen Gardens. Is now acting as Foreman in a nobleman's garden, where he has been for several years. Character unexceptionable.—E. B., The Gardens, Wentworth Castle, Barnsley, Yorkshire.

TO NOBLEMEN AND GENTLEMEN.

GARDENER (Head).—Age 35, married; has lived nearly six years as Head Gardener where he has had the management of extensive Fruit, Vegetable, and Flower Gardens; also a great extent of Glass. Has been a successful Exhibitor at the London, Brighton, Crystal Palace, and Guildford Horticultural Exhibitions. Can have an excellent character from his present employer. Wages 75l. per year.—A. B. C., Messrs. Osborn & Sons, Nurserymen, Fulham, London, S.W

GARDENER (Head).—Age 32, married; for several years has had the opportunity of serving in establishments where the Cultivation of Early and Late Flowers, Fruit, and Vegetables has been carried on to perfection, combined with first-class order and general management of the establishment; also has had some experience in the alteration and laying out of Grounds. Is anxious to engage where a practical and energetic man is required. Five years' unexceptionabe character from his late employer.—G. H., care of Mr. Veitch, Royal Exotic Nursery, Chelsea.

GARDENER (Head, or Single-handed).—Age 30, single; has a thorough practical knowledge of every branch of his profession; including Early and Late Forcing.—H. Lawson, 8, Andover Place, Kilburn, N.W.

TO NOBLEMEN AND GENTLEMEN.

GARDENER (Head) or GARDENER and BAILIFF.—E. Booth, who is leaving his present situation at Belmont, East Barnet, in consequence of the death of his lamented employer, is open for an engagement as above. Has 10 years' character of the highest order.—Address, as above, or to Messrs. Cutbush & Son, Highgate Nurseries, London, N.

GARDENER (Head), Age 27: and TWO UNDER GARDENERS, are open to engagements. The highest references for ability, sobriety, &c.—Josh. French, Melrose Hall, Putney, London.

GARDENER, in or out of the house.—Age 28, single; has a practical knowledge of his profession in its various departments. Character will bear the strictest inquiries.—M. N., Mr. Weeks's Nursery, King's Road, Chelsea, N.

GARDENER.—Age 33, single; understands Forcing Grapes, Fruit, Flower, and Kitchen Garden. In or out of the house. Country preferred. Well recommended.—A. B., Mr. Williams, Gardener, Portsdown Place, Kilburn, N.W.

GARDENER.—Age 35, single; has a thorough practical knowledge of his profession. No objection to any part of England. Two years' excellent character, with other first-rate testimonials and references.—A. Z., Mr. Barnes, Camden Nursery, Camberwell, S.

TO NOBLEMEN, GENTLEMEN, &c.

GARDENER.—Married, no incumbrance; T. H. begs to offer his services to any nobleman or gentleman in want of a thorough practical Gardener; 14 years' Gardener to the Hon. Talbot Agar, and many years to his Grace the late Duke of Leeds, at Hornby Castle, Yorkshire. Is now about to leave his present situation, where he has been engaged for over three years re arranging the grounds and gardens, and in the Erection of Horticultural Buildings, &c., Has grown Pines, Grapes, &c., to the highest perfection. Well known to the most eminent Horticulturists: character and testimonials unexceptionable.—Direct to T. Harley, The Gardens, Cranbury Park, near Winchester, Hants.

GARDENER (Under).—Age 22; has a good knowledge of Forcing, Propagating and Plant growing in general. Good character.—A. B., Belmont, East Barnet

GARDENER (Under).—Age 21; one year and a half's good character.—J. R., Holly Lodge, Red Hill, Surrey.

GARDENER (Under), or FOREMAN.—Understands Early and Late Forcing, also the Management of Stove and Greenhouse Plants, Orchids and Ferns. Two years' and a half good character.—P. J., Tulse Hill House, Brixton Hill, S.

WORKING UNDER GARDENER or LABOURER in a gentleman's Garden.—Age 22; willing to make himself generally useful. No objection to look after Horse and Chaise and small Garden.—A. B., Post Office, Puttenham, Surrey.

GARDENER, or GARDENER and ... Age 40; a good general Plant Grower ... Management of Land, Timber, and Stock ... a Dairy. Nine years' and four months ... E. S., Messrs. Henderson's, Pine-Apple Place ...

GARDENER, or GARDENER and ... Age 40; thoroughly understands his profession ... branches, including Pines, Grapes (pot and ...), Melons, Peaches, &c., Orchidaceous Plants ... house, and the whole routine of Forcing.— ... Enfield.

GARDENER and BAILIFF.—Age 34 ... his profession in all its branches; Wife ... Woman if required, five years' good character ... tleman he is about to leave.—M. D., ... Lymington.

GARDENER and BAILIFF.—Age ... two children, youngest 8 years old. ... situation. Can have a first-rate character ... seryman, Sawbridgeworth, Herts, will be ... applications, as he can testify to the ... applicant.

FOREMAN, where Forcing and ... carried on to some extent. Has had ... ence in his profession, and can be well recommended ... Hoo Gardens, Luton, Beds.

FOREMAN, in a nobleman's or gentleman's ... —Age 22; has lived six years at the ... Rodney's, and two and a half at Basing Park ... Dowager Lady Rodney, Old Alresford House, Hants.

TO NURSERYMEN.

FOREMAN (General).—Has a thorough ... of Roses, Fruit Trees, Coniferæ, Ornamental ... Flowering Shrubs. Good character.—W. L., ... Highgate, N.

FOREMAN or IMPROVER, by a ... age 21; who has been nine years in a gentleman's ... —A. B., Messrs. Bunyard & Son, Nurserymen, Maidstone ...

FOREMAN, or JOBBING MAN.— ... thoroughly practical; understands Budding ... Laying, &c.; good hand at Roses, and knows ... Wages, 1l. 1s. per week.—S. S., Harris, Stationer ... Road, Notting Hill, W.

PROPAGATOR or PROPAGATOR and ... —Will be disengaged in a week to any one ... thorough practical man in either of the above ... References will be found satisfactory.—R. W., ... Street, Hampstead Road, N.W.

PROPAGATOR, or FOREMAN and PROPAGATOR, expert Grafter.—Age 29; several years' experience in some of the leading London and provincial ... Alpha, 22, Henry Street East, St. John's Wood, N.W.

TO NURSERYMEN.

PROPAGATOR, or FOREMAN and PROPAGATOR.—Has had 12 years' experience, ... eight years with Messrs J. & C. Lee of Hammersmith ... Mr. J. Veitch, Jun., Chelsea, from whom satisfactory testi-monials as to character and ability may be obtained.— ... Mr. J. Veitch, Jun., Royal Exotic Nursery, King's ... Chelsea, S.W.

GRAFTING.—A young Man who thoroughly understands Out-door Budding and Grafting, also ... his profession, and can be highly recommended ... employer.—A. B., 1, Rectory Place, ...

IMPROVER.—Age 18; a strong Youth is desirous of placing himself with some nobleman or gentleman's ... dener. Willing to pay a premium.—T. Penford, ... Sydenham, Kent, S.E.

IMPROVER.—Age 18; a strong useful Lad ... a practical man; would be found very useful ... amateur or gardener where there is Glass and Propagating ... E. T. L. Harris, Stationer, Prince's Road, Notting ...

IMPROVER.—Aged 25; who has had ... experience in plain Flower and Kitchen Gardening ... wishes for further improvement, offers a premium ... Gardener on a nobleman's or gentleman's estate ... may have the opportunity of gaining a thorough ... of Plant Growing, Forcing, &c. Good reference ... as to moral character —P. M., 82, West Street, Fare...

TO NOBLEMEN AND LANDED PROPRIETORS.

ESTATE AGENCY, at Michaelmas next ... tical Norfolk Farmer, who thoroughly understands ... Heavy and Light Lands systems of Farming, ... Management of Woods, &c., and has had great ... Draining both Marsh and Upland.—A. Z., T. H. ... Solicitor, St. Andrews, Norwich, Norfolk.

STEWARD or FARM BAILIFF.— ... practical experience of Farming in several ... England. Would not object to go abroad.—A. ... Office, Dorking, Surrey, S.

STEWARD or MANAGING FARM BAILIFF ... Has a thorough knowledge of all descriptions ... Breeding, Feeding, and a good judge of all kinds ... Farm produce; understands the Management ... Sale of Timber, and the proper keeping of a Home Farm ... class Testimonials and reference to a nobleman ... glad to answer any inquiries.—Thos. Sturgess ... hurst, near Tunbridge, Kent.

BAILIFF or GENERAL MANAGER.— ... conversant with every branch of Cultivation ... Heavy and Light, reclaiming Waste, Drainage ... having had the entire Management of a nobleman's ... Would undertake the Management of a Dairy ... L. M., Clubb & Smith, Agricultural Implement ... Fenchurch Street, E.C.

TO NOBLEMEN AND GENTLEMEN.

BAILIFF.—Age 45; has had great experience ... the Breeding and Management of Stock, ... present improvements in Farming in general ... charge of the Dairy and Poultry if required ... 13 years' good character, and be strongly recommended ... the gentleman he has just left.—A. B., 23, ... Greenwich, S.E.

FARM BAILIFF.—A Morayshire man; ... knowledge of Farming, Management of Stock, ... Buying and Selling, Improving Waste Land, ... Can give satisfactory references.—R., Post Office, ...

TO NOBLEMEN AND AGRICULTURAL GENTLEMEN.

FARM BAILIFF.—Age 34; has spent ... on the Farm and the Market. Thoroughly understands ... Light and Heavy Land, Drainage, Breeding of Stock ... and Selling of Produce, &c. First-class references ... tical men.—H. H., 4, Ampthill Place, ...

The Gardeners' Chronicle Newspaper.

SATURDAY, MARCH 9, 1861.

CARD.

SAMUEL N. McGERROW, GENERAL HORTICULTURAL BUILDER, Knotty Ash, near Liverpool.
Reference permitted to the Nobility and Gentry throughout Great Britain and Ireland.

HOTHOUSES FOR THE MILLION. — On the principle invented and patented by Sir Joseph Paxton, M.P., combining simplicity, cheapness, excellence, and durability, being capable of fulfilling, in the most perfect manner, all the requirements of Horticulture. Lean-to Houses, 30 feet in length, can be had for less than 17*l*. Span Roofs, 30 feet in length, for 24*l*.; and all other dimensions at equally low prices. Delivered free to any Railway Station round London.—Illustrated Circulars, with Lists of Prices, can be had on prepaid application to SAMUEL HEREMAN, 7, Pall Mall East, London.

IMPROVEMENTS IN HEATING, &c.

MUSGRAVE'S PATENT SLOW-COMBUSTION STOVE, for Warming Public Buildings, Halls, Shops, Conservatories, Factories, Drying Rooms, &c. Will burn in Churches from Saturday till Sunday evening, avoiding attention during the hours of worship. In Halls will burn day and night for weeks, with little care. Capable of warming a large apartment for 24 hours, at a cost of 3*d*.; and deserving of special attention, because of its safety, healthfulness, durability, and extreme simplicity. This Stove is the nearest approach to Warming by Hot Water.

MUSGRAVE BROTHERS now make a PORTABLE GREENHOUSE STOVE with "Vapour chamber" on this principle, which is a simple and economical means of Warming Conservatories of moderate size with safety to the plants.

This is the Stove so favourably noticed in the *Gardeners' Chronicle* of Saturday, December 22, 1860, page 1129.

For particulars address MUSGRAVE BROTHERS, Ann Street Iron Works, Belfast.

GARDEN ENGINES AND SYRINGES.

J. TYLOR AND SONS, Warwick Lane, Newgate Street, London, E.C., beg to call attention to their very superior manufacture of GARDEN ENGINES and SYRINGES.

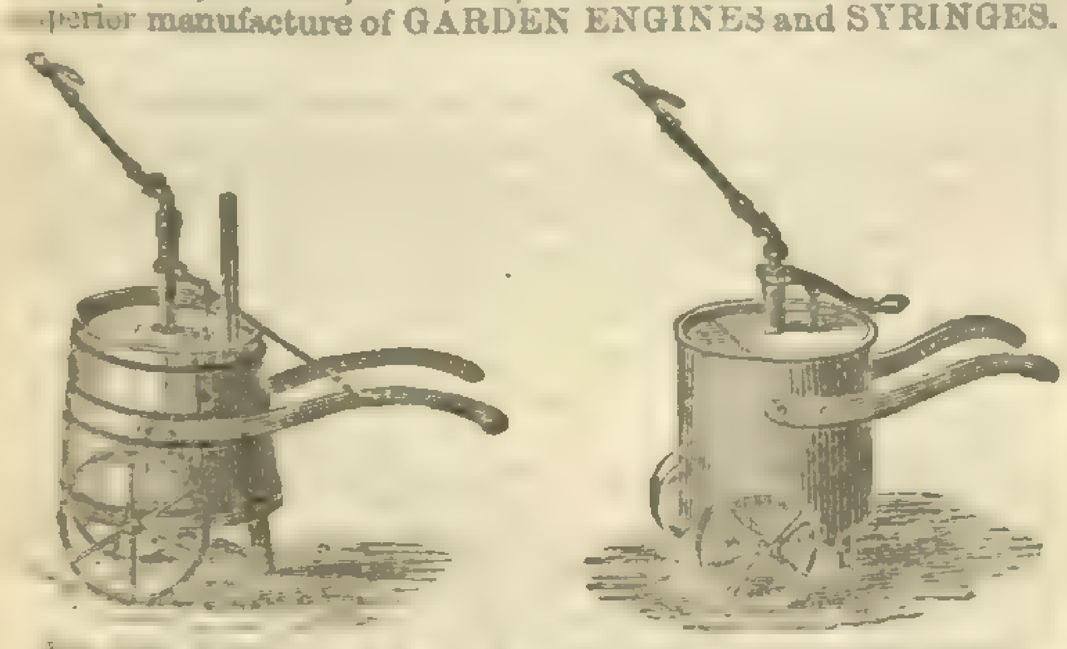


Fig. 598. J. TYLOR & SONS' BARROW GARDEN ENGINE in best well painted Oak tub, fitted with J. TYLOR & SONS' Improved Brass Pump, Universal Joint, and Registered Spreader, which answers the purpose of the separate rose, fan, and jet.

CONTENTS OF TUB:—
15 gallons .. £6 0 0 | 28 gallons .. £7 11 6

Fig. 599. Ditto TINNED IRON TUB.

CONTENTS OF TUB:—

8 gallons	12 gallons	16 gallons	24 gallons	30 gallons
£3 0 0	£3 6 8	£3 18 0	£5 7 0	£6 0 0

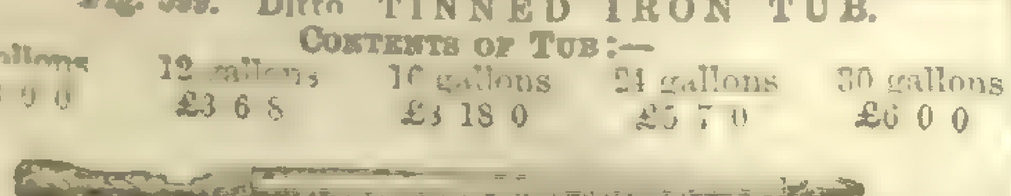


Fig. 618. No. 1 REGISTERED SYRINGE, with India-rubber suction tube, one rose and jet .. £1 8 0 each.
No. 2 Ditto ditto 1 2 6 ,,
Telescope Branch Pipe for ditto .. 0 10 0 ,,

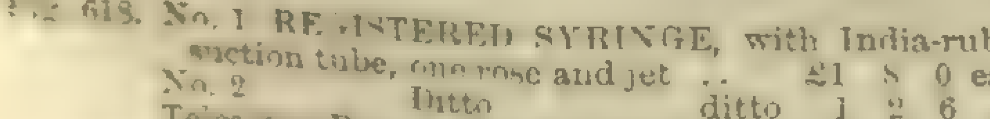


Fig. 619. Large GARDEN SYRINGE, with one rose and jet .. .. 11*s*. 6*d*. each
,, 620. Middle Ditto ditto 10 3 ,,
,, 621. Small Ditto ditto 9 0 ,,
,, 622. LADIES GARDEN SYRINGE, with do. 7 6 ,,

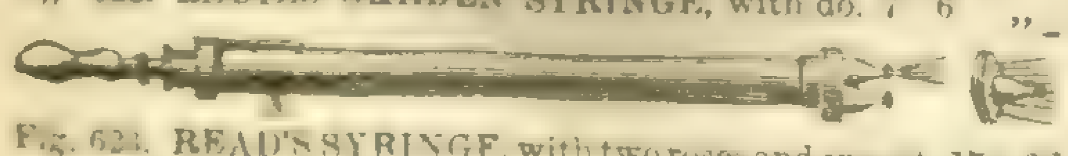
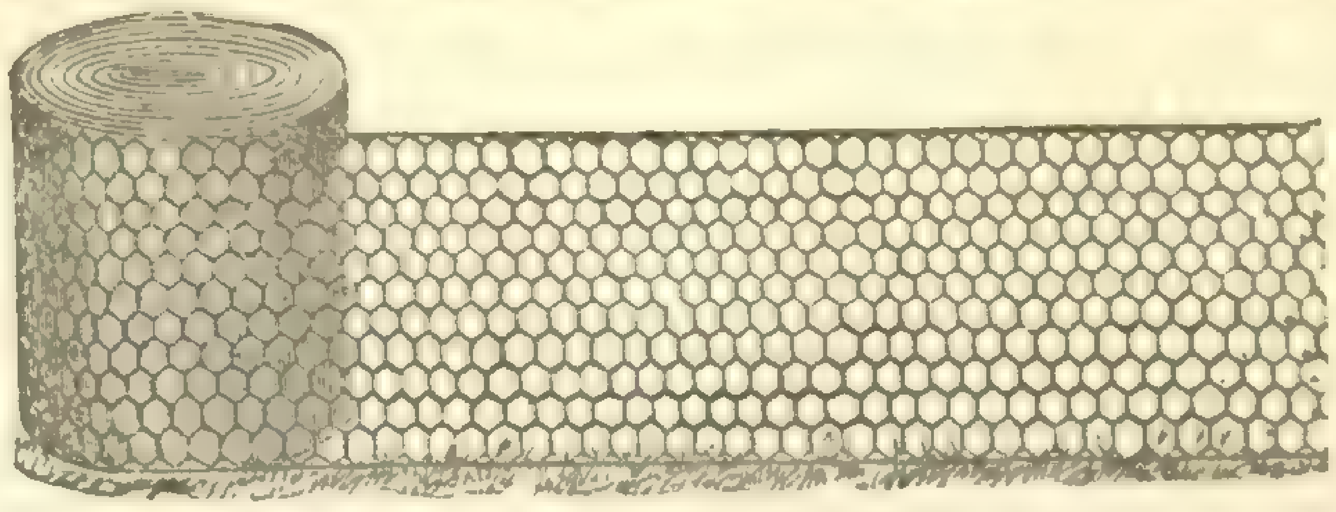


Fig. 623. READ'S SYRINGE, with two roses and one jet, 17*s*. 6*d*.
,, 624. READ'S SYRINGE, with one rose and jet, 15 0
,, 625. Improved ditto ditto large 14 0
,, 626. Ditto ditto ditto small 13 0

Garden Engines and Syringes of J. TYLOR & SONS' manufacture kept in stock by Ironmongers and Seedsmen in every part of the United Kingdom.

J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

IMPROVED PREMIUM WIRE NETTING.



PRICES PER LINEAL YARD, 24 INCHES HIGH:—

Size of mesh.	Mostly used for	Light.		Medium.		Strong.		Extra Strong.	
		Japanned.	Galvanized.	Japanned.	Galvanized.	Japanned.	Galvanized.	Japanned.	Galvanized.
2¼ inch	Hares, Dogs, Poultry	3½*d*.	4½*d*.	4½*d*.	5½*d*.	5*d*.	6½*d*.	6½*d*.	8*d*.
2 inch	Game Netting	4*d*.	5*d*.	4½*d*.	6*d*.	5½*d*.	7*d*.	7½*d*.	9½*d*.
1⅝ inch	Small Rabbits, Hares, &c.	4½*d*.	5½*d*.	5½*d*.	6½*d*.	6*d*.	7½*d*.	8*d*.	10*d*.
1½ inch	Smallest Rabbits..................	6*d*.	7½*d*.	7½*d*.	9*d*.	9*d*.	11*d*.	11*d*.	13*d*.

Quantities of 100 yards or upwards delivered free at nearly all the principal Railway Stations and Shipping Ports in England; and 200 yards or upwards delivered free to most parts of Scotland and Ireland.

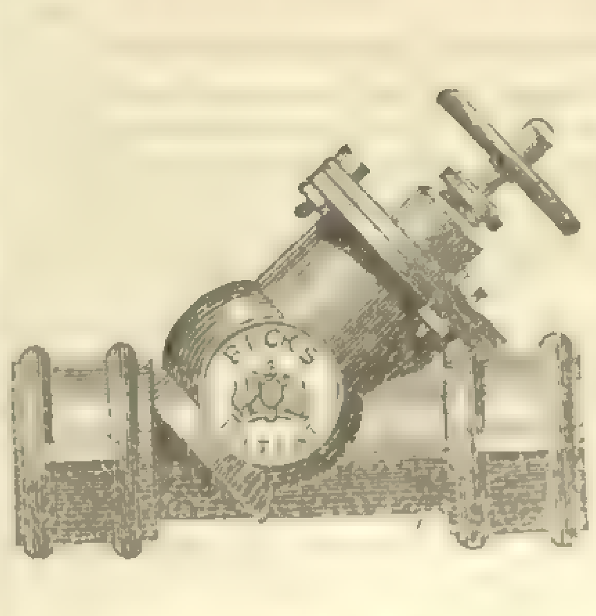
Any width of Netting under 8 feet made at proportionate prices.

☞ Every description of Netting warranted to give satisfaction, and if not approved will be exchanged, or may be returned unconditionally.

J. B. BROWN & CO., 18, CANNON STREET, CITY, LONDON, E.C.

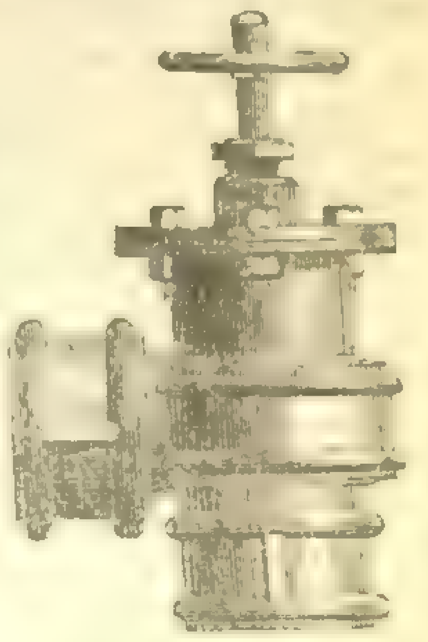
HORTICULTURAL WORKS, DANVER'S STREET, CHELSEA, S.W.

BECK'S PATENT HOT WATER VALVE.



HORIZONTAL VALVE.

2″	3″	4″
18s6d	25s.	30s.



ANGLE VALVE.

2″	3″	4″
17s.	23s.	28s.

JAMES GRAY, SOLE AGENT,

BEGS to call attention to this most simple and perfect Valve ever invented. It is perfectly water-tight, and is never liable to get out of order, or to get fixed by standing.

TO ARCHITECTS, ENGINEERS, GARDENERS, AND OTHERS.

BECK'S Patent Valve has been submitted to several of the most scientific men of the day, and has invariably met with unqualified approval.

A LIBERAL DISCOUNT TO THE TRADE.

CONSERVATORIES, GREENHOUSES, VINERIES, and every description of HOTHOUSE erected on the most improved principles, and of best materials, at the lowest possible price consistent with good workmanship.

HEATING BY HOT WATER IN ALL ITS BRANCHES.
BOILERS OF EVERY APPROVED DESCRIPTION, TUBULAR, SADDLE, CONICAL, &c.

JAMES GRAY, Horticultural Works, Danver's Street, Paulton's Square, King's Road, Chelsea, S.W.

GLASS WAREHOUSE.—ESTABLISHED 1750.

THOMAS MILLINGTON,

87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.

Reduced Tariff for Horticulture, Pictures, and Dwellings.

ORCHARD-HOUSE SIZES. Supplied to Mr. Rivers and many Others.

In. by In.		16 oz.	21 oz.
20 .. 12 20 .. 13 20 .. 14 20 .. 15	Common, per 100 feet,	13*s*. 6*d*.	18*s*.
	Super ,,	16*s*.	23*s*.

SMALL SQUARES.

In. by In.	In. by In.	Per 100 feet.	Per foot.
6 .. 4	8 .. 6	Common	1½*d*.
6½ .. 4½	8½ .. 6½	11*s*. 6*d*.	
7 .. 5	9 .. 7	Super.	1¾*d*.
7½ .. 5½	9½ .. 7½	12*s*. 6*d*.	

Squares in 100 and 200 Feet Boxes.

Inches by Inches.	Inches by Inches	Inches by Inches.	Inches by inches.	Inches by inches.		P. 100 feet.	P. foot.
10 .. 8	12½ .. 9½	13 .. 10	15 .. 10	13½ .. 11½	4ths.	12*s*. 6*d*.	1½*d*.
10½ .. 8½	13 .. 9	13½ .. 10½	12 .. 11		3ds.	14*s*. 3*d*.	1¾
11 .. 9	12 .. 10	14 .. 10	12½ .. 11½	14 .. 11	2ds.	18*s*.	2¼
12 .. 9	12½ .. 10½	14½ .. 10½	13 .. 11		1sts.	21*s*. 6*d*	2¾
16 .. 11	15 .. 12	16 .. 13	24 .. 14	24 .. 16	4ths.	13*s*. 6*d*.	1¾*d*.
16 .. 11	16 .. 12	17 .. 13	20 .. 15	20 .. 17	3ds.	16*s*.	2
17 .. 11	17 .. 12	20 .. 13	22 .. 15	20 .. 18	2ds.	19*s*. 8*d*.	2½
18 .. 11	18 .. 12	23 .. 13	24 .. 15	.. ..	1sts.	24*s*.	3
13 .. 12	20 .. 12	20 .. 14	20 .. 16	.. ..			
14 .. 12	22 .. 12	22 .. 14	22 .. 16	.. ..			

If less quantity than 100 feet is taken, a moderate charge made for package.

GLASS CUT TO ANY GIVEN SIZES NOT ON LIST.

16 oz.—4ths, 1¾*d*., 2*d*., and 2¼*d*. per foot.
,, 3ds, 2¼*d*., 2½*d*., and 3*d*. per foot.

21 oz.—4ths, 2¾*d*., 3*d*., and 3½*d*. per foot.
,, 3ds, 3½*d*., 4*d*., and 4½*d*. per foot.

HARTLEY'S IMPROVED PATENT ROUGH PLATE.
Not accountable for breakage.

GENUINE WHITE LEAD .. .. 32*s*. 0*d*. per cwt.
ANTI-CORROSION PAINT .. .. 24 0 ,,
LINSEED-OIL PUTTY .. .. 8 0 ,,

LINSEED OIL .. .. 2*s*. 7*d*. per gall.
BOILED ,, ... 3 0
TURPENTINE 2 10

BLACK, GREEN, and all other kinds of PAINTS, VARNISHES, BRUSHES, &c.

HORTICULTURAL AGENT AND VALUER.

MR. A. CHANDLER (of the late Firm of CHANDLER & SONS, 28, Priory Road, Wandsworth Road, S., begs to offer his services as above. Sales of Plants and Nursery Stock arranged, and Catalogues prepared.

J. VOKINS, late VOKINS & HURD, 2, York Place, Queen's Elm, Chelsea, S.W., HORTICULTURAL BUILDER AND HOT WATER APPARATUS Manufacturer. Estimates forwarded.

JOHN TURNER, HORTICULTURAL BUILDER, begs respectfully to inform the nobility and gentry that he is now carrying on all the branches connected with Horticultural Works, viz., Conservatory, Greenhouse, Hothouse, Orchard House, Stoves and Pits on the most improved principles of heating and ventilation. Having had many years' experience in Horticultural Works, J. T. can assure those who may favour him with their work that the best materials only will be used. Hot bed frames of all sizes, glazed and painted, always kept in stock at the Works, Cheetham Hill, Manchester.

HOT-WATER APPARATUS FITTED in every description of Hothouses, Mansions, Churches, Chapels, &c., on the most approved principle by J. MEREDITH, Vine Cottage, Garston, near Liverpool.
N.B. First-class references may be had on application.

HOTHOUSES FOR THE MILLION
MADE BY STEAM POWER AT

J. LEWIS'S HORTICULTURAL WORKS, Stamford Hill, Middlesex, N. These Hothouses are made on a much better and stronger principle than those manufactured on Sir J. Paxton's plan, and are more durable and cheaper.

					£
A span-roof measuring 30 ft. by 16 ft., with two glass ends and doors complete					30
Do.	do.	40 ft. by 20 ft.	do.	do.	50
Do.	do.	60 ft. by 24 ft.	do.	do.	90

The price of any other size forwarded on application to J. LEWIS.

HORTICULTURAL WORKS AND HOT-WATER APPARATUS MANUFACTORY.
KENSAL GREEN, HARROW ROAD, LONDON, W.

JOHN TAYLOR AND SON beg to call the attention of the nobility and gentry to the very superior manner in which they Erect all kinds of Conservatories, Vineries, Greenhouses, &c., combining every improvement with elegance of design and durability of materials and workmanship.

Their VENTILATING APPARATUS for the Fronts and Roofs of Houses has given the highest satisfaction. Churches, Chapels, Schools, Entrance Halls, Public Buildings, &c., heated with Hot-Water Apparatus in a most economical and efficient manner.

J. T. & SON have great pleasure in referring to numbers of the nobility and gentry by whom they are extensively engaged.

GARDEN BORDER EDGING TILES.

F. AND G. ROSHER, CEMENT, BRICK, AND TILE MERCHANTS, beg to invite attention to their varied Stock of ORNAMENTAL GARDEN BORDER-EDGING TILES in Terra Cotta, Terro-Metallic ware, and Red ware. They present advantages over Box or Grass-edging in that they afford no harbour for slugs, &c., take up less room, and once laid, require no further attention. They may be had of various patterns at F. & G. R.'s premises; Ward's Wharf, Upper Ground Street, Blackfriars, S.; and Kingsland Road Wharf, near the Canal Bridge, N.E.

N.B. Sketches of patterns sent by post on application. Garden Vases and Ornamental Flower Boxes for Windows and Balconies in stock.

ORNAMENTAL PAVING TILES FOR CONSERVATORIES, HALLS, CORRIDORS, BALCONIES, &c., as cheap and durable as Stone, in blue, red, and buff colours, and capable of forming a variety of designs.

Also WHITE GLAZED TILES, for Lining Walls of Baths, Dairies, Larders, Kitchen-ranges, &c. Grooved Terro-metallic and other Stable Paving Bricks of great durability, Clinkers, Red and White Wall-Copings, Glazed Drain Pipes, &c.
To be obtained of F. & G. ROSHER, at their premises as above.

LAWN MOWERS.

DRAY, TAYLOR AND CO. (late WM. DRAY & Co.) having secured a large stock of every make of the above machinery, solicit immediate orders to prevent disappointment. Green's, Boyd's, Whittaker's, and Shank's, all on show; together with the largest stock of first-class Horticultural Tools in London, at their New Central Depot, 4, Adelaide Place, London Bridge, E.C., (removed from Swan Lane). N.B. Every gardener, amateur or otherwise, should inspect DRAY, TAYLOR & Co.'s New Patent Universal Garden Barrows.

JOHN FOWLER, JUN., 28, Cornhill, London, E.C.— Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address. CATALOGUES containing Prices and Testimonials sent post free.

PRIZE FENCING FOR AGRICULTURAL PURPOSES.
ONLY MANUFACTORY—LIVERPOOL.

FRANCIS MORTON'S Patented Improvements in STRAINED WIRE FENCING, which have been awarded SILVER MEDALS by the principal Agricultural Societies, afford the only means of constructing a permanent and efficient fence at a greatly reduced cost.
Prices from 9d. to 2s. 2d. per yard of Fence.
Drawings and full particulars on application to
FRANCIS MORTON AND CO.,
Sole Manufacturers and Patentees, Liverpool.
London Office: 19, Parliament Street, Westminster, W.

REAPING AND MOWING MACHINES.

BURGESS AND KEY, 95, Newgate Street, E.C. PRIZEHOLDERS for the best Agricultural Machinery Manufactured.

ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price 42l. 10s.
M'CORMICK'S REAPER for Manual Delivery. Price 25l.
ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30l.
ALLEN'S GRASS MOWER, for one Horse. Price 22l. 10s.
COMBINED REAPER AND MOWER—Two-Horse Machine. Price 35l.
COMBINED REAPER AND MOWER—One Horse Machine, Price 24l.
These Prices include Packing and Delivering at any Railway Station.

TESTIMONIALS.
A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following from
MR. JAMES ARNOT, *of Woodcote, Carshalton.*
"Having used your Machine for four years, I would not be without one on any consideration; and I can safely say that I have saved over 50 per cent. in the expense every year I have used it. In fact I have never yet seen an implement which pays itself in so short a time."

PRICES REDUCED.

H. J. MORTON AND CO., Galvanised Iron Works, 2, Basinghall Buildings, Leeds.

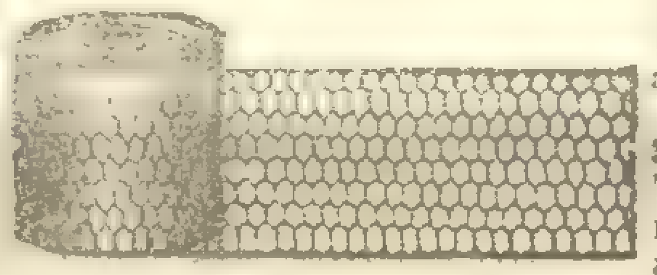
GALVANISED IRON ROOFING
for Farm Buildings and other Roofs; the cheapest, most durable, and neatest Roofing in use; also Spouting at 10½d. per yard.

WIRE STRAND CABLE FENCING.

(formed of Twisted Wires like a rope or cable), the strongest, cheapest, and neatest fence in use, will resist the largest cattle, and will not bend or get out of form by trespassing upon or over. Price, with five lines of the Galvanised Strand, iron main posts, and pronged Standards, 1s. 2½d. per yard.

This fence is far cheaper than posts and rails, or any kind of iron fencing; and possesses four times the strength of solid bars. Will not rust nor corrode. Upwards of 1200 miles of this Fencing supplied.

GALVANISED GAME AND POULTRY NETTING.



Galvanised, 24 ins. wide 2 inch mesh, 5½d., 7½d., and 9½d. per yard.
Galvanised, 24 ins. wide, 3-inch mesh, 4d., 5d., and 7d. per yard. The Netting made any width, and with openings of any size.

GALVANISED IRON CHAIN CAMP STOOLS & CHAIRS, POULTRY FOUNTAINS & FEEDERS, PRONGED DAHLIA RODS AND ROSE STAKES, &c.
Strong CATTLE HURDLES from 9s. per yard.

PATENT IMPROVED GAS WORKS,
of all sizes, for the use of Private Houses, Mansions, Railway Stations, Mills, Collieries, Mines, Villages, &c. Works from 10 to 500 lights estimated for. The works can be entrusted to an ordinary labourer.—Apply to
HENRY J. MORTON & Co. 2, Basinghall Buildings, Leeds.

BARNARD, BISHOP, AND BARNARDS, NORWICH.

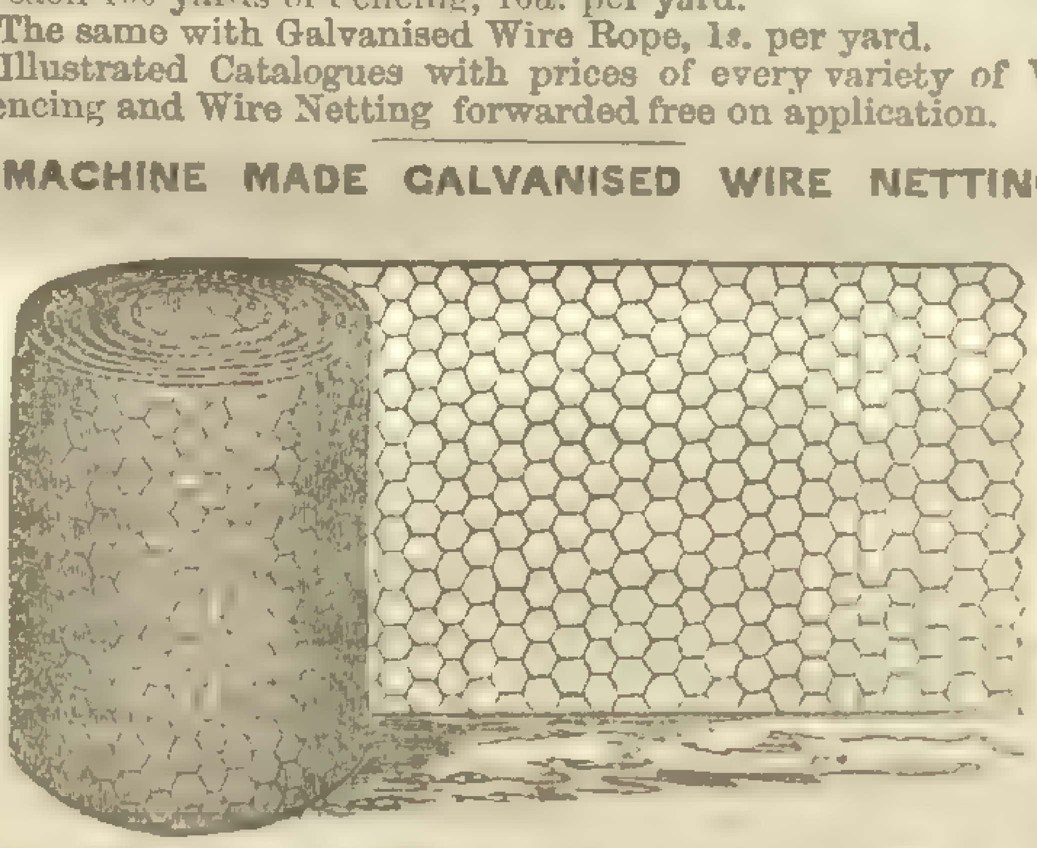
Reduced Prices of WIRE FENCING, and GALVANISED WIRE ROPE FENCING, suitable for the home trade or the colonies.

Five wires, 3 feet 6 inches high, pronged Standards, 8 feet apart, one wrought iron straining post and straining screws to each 100 yards of Fencing, 10d. per yard.

The same with Galvanised Wire Rope, 1s. per yard.

Illustrated Catalogues with prices of every variety of Wire Fencing and Wire Netting forwarded free on application.

MACHINE MADE GALVANISED WIRE NETTING.



BARNARD, BISHOP, AND BARNARDS, in consequence of improvements in their machinery for the manufacture of the above article, have been enabled to make a great reduction in the prices.

			Galvanised.		Japanned Iron.	
2-inch mesh,		24 inches wide ..	5d.	per yd.	4d.	per yd.
2-inch	,,	strong do.	6	,,	4¾	,,
2-inch	,,	intermediate, do.	7	,,	5½	,,
2-inch	,,	extra strong, do.	9½	,,	7½	,,
1⅝-inch	,,	24 inches wide ..	5½	,,	4½	,,
1⅝-inch		strong, do.	6½	,,	5½	,,
1⅝-inch	,	intermediate, do.	7½	,,	6	,,
1⅝-inch	,,	extra strong, do.	10	,	8	,,

All the above kinds can be made of any width (under 8 feet, at proportionate prices. If the upper half is of a coarser mesh than the lower, it will reduce the prices about one-fifth.

Strong Galvanised Poultry Netting, 8½d. per yard, 3 feet wide. Galvanised Sparrow-proof Netting for Pheasantries, 2½d. per square foot. Wire Netting of every mesh from half an inch 6 inches.

Wire Fencing and Netting delivered Carriage Free to the principal Railway Stations.

CHUBB'S PATENT SAFES, the most secure against Fire and Thieves.
CHUBB'S FIRE-PROOF STRONG ROOM DOORS.
CHUBB'S PATENT DETECTOR LOCKS and STREET DOOR LATCHES.
CHUBB'S CASH and DEED BOXES.
Illustrated Price List gratis and post free.
CHUBB AND SON, 57, St. Paul's Churchyard, London, E.C.

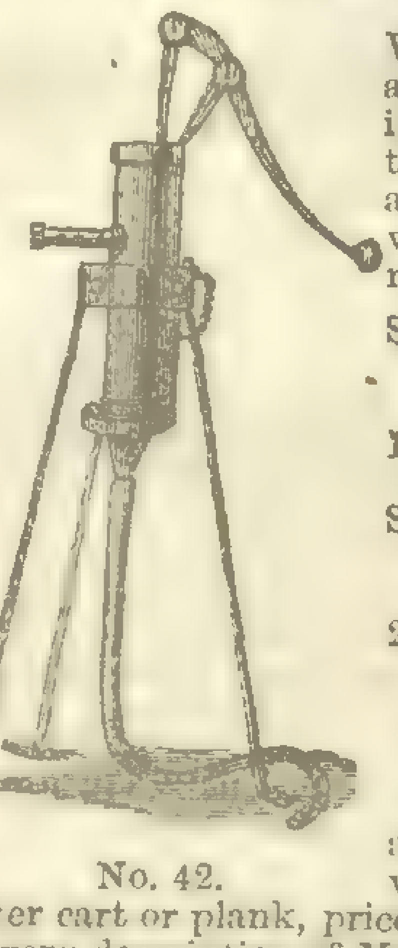
CORPORATE MARK.

JOSEPH HAYW[...] AND CO., MANUFACTURERS OF PRUNING AND BUD[DING] KNIVES, SPORTSMAN'S, and [...] of POCKET CUTLERY.

Dealers in Gambia [...] Shears, Scissors, Syringes, &c.

GLAMORGAN W[orks], Sheffield.

WARNERS' IMPROVED LIQUID [...] OR GENERAL PORTABLE PUMP.



No. 42.

This Pump is [...] WARNER'S Patent Bucket [...] and cannot clog in action. The [...] is made of galvanised iron, [...] to corrode, and can be raised [...] at pleasure on the stand, the [...] which fold together, and it may [be car]ried with ease by one man.

Stand and Pump, with screwed tail piece, fitted with strong brass union for suction pipe [...]
If fitted with barrel of planished copper .. .. [...]
Stand and Pump, with plain tail piece, for tying on suction pipe .. .. .. [...]
2-inch India rubber and canvas flexible suction pipe, on wires, either in 10, 12, or 15 feet lengths .. .. per foot [...]

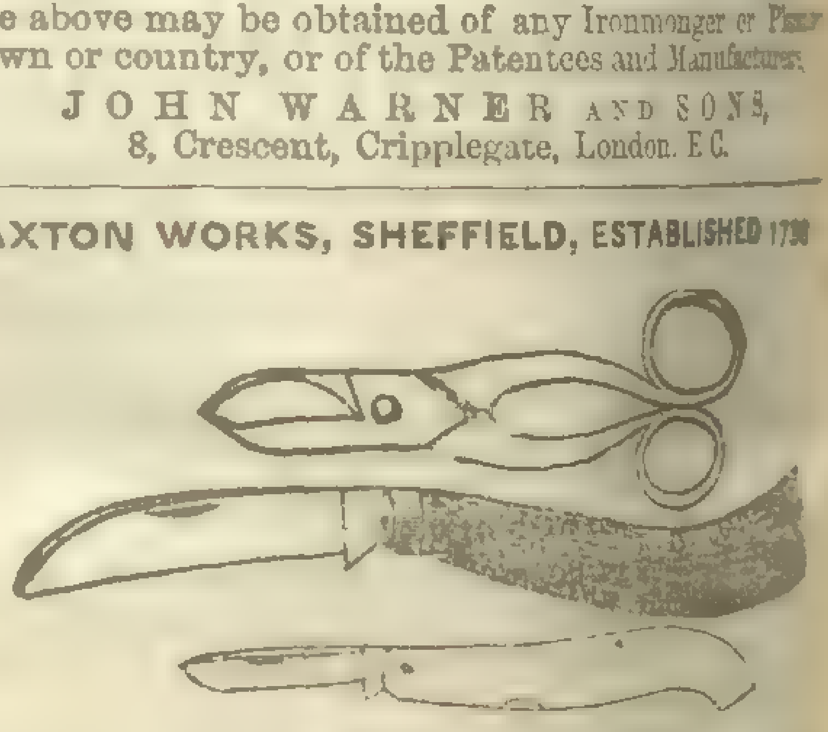
No. 43 is a similar Pump [...] above, without stand, but with [...] wrought-iron straps, for fixing [...] water cart or plank, price 2l. 5s.

Every description of Machinery for raising Water, by [...] of Wheels, Rams, Deep Well Pumps, &c.; also Fire and [...] Engines, &c.

J. W. & SONS' Illustrated Catalogue will be forwarded [...] free on application.

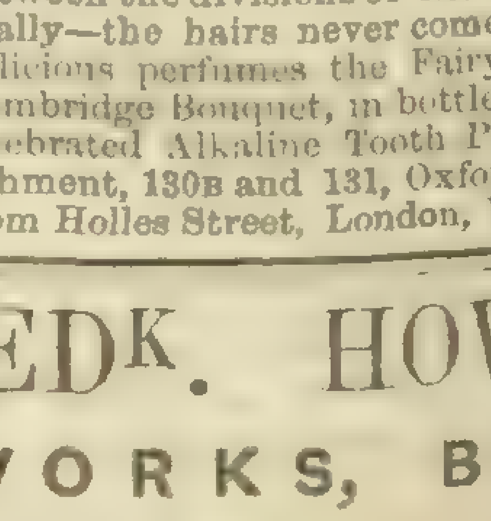
The above may be obtained of any Ironmonger or Plumber in town or country, or of the Patentees and Manufacturers,
JOHN WARNER AND SONS,
8, Crescent, Cripplegate, London. E.C.

PAXTON WORKS, SHEFFIELD, ESTABLISHED 17[..]



SAYNOR AND COOKE'S warranted PRIZE PRUNING and BUDDING KNIVES, SCISSORS, &c.— Sold by all respectable Nurserymen and Seed Merchants [in] the three Kingdoms.

BRADFORD'S PATENT WASHING MACHINE —"My experience of your Machine fully bears [out] Mr. ——'s recommendation, [and] accounts for its very enviable [reputa]tion."—*Vide a Purchaser.*



For Private Families .. [...]
Washing, Wringing, and Mangling [...]
For Family Mansion .. [...]
For Hotel, Hospital, Work-house, or other Public Institution.. .. .. [...]
Full particulars as to the [...] utility and universal approval [...] invaluable machine free by post.

THOS. BRADFORD, Patentee, Cathedral Steps, Manchester, and 63, Fleet Street London, E.C.
Works, Queen Street, Salford, Manchester.

PRIZE MEDAL, PARIS EXHIBITION 1855.

METCALFE, BINGLEY, AND CO.'S New Pattern and Penetrating Tooth Brushes, Penetrating unbleached Hair Brushes, Improved Flesh and Clothes Brushes, and genuine Smyrna Sponges; and every description of Brush, Comb, and Perfumery for the Toilet. The Tooth Brushes search thoroughly between the divisions of the Teeth and clean them effectually—the hairs never come loose. M., B. & Co. [...] delicious perfumes the Fairy Bouquet and the [...] Cambridge Bouquet, in bottles 2s., 3s. 6d., and 5s. [...] celebrated Alkaline Tooth Powder, 2s. per box.—Sole Establishment, 130B and 131, Oxford Street, 2d and 3d doors from Holles Street, London, W.

JAMES AND FRED^K. HOWARD,
BRITANNIA IRON WORKS, BEDFORD,
MANUFACTURERS OF
CHAMPION PLOUGHS,
HARROWS, HORSE RAKES, | HORSE HOES, SCARIFIERS.
AND OTHER IMPLEMENTS.
ALSO SOLE MANUFACTURERS OF
SMITH'S STEAM CULTIVATORS,
Of which they have sold more than ONE HUNDRED SETS in upwards of TWENTY COUNTIES of England, Scotland, and Ireland. Catalogues, with full particulars, and Reports from Purchasers sent free on application.

GLASS FOR GREENHOUSES.

ENGLISH GLASS.

16 ounces to the foot, in Sheets averaging 40 by 30, packed in Cases containing 300 feet, at 3l. 3s. per Case.

FOREIGN SHEET GLASS.

16 ounces, 4th quality, 300 ft., 1l. 19s. 9d.; Superior, 2l. 14s. 6d.; 21 ounces, 2l. 6s.; Superior, 4l. 1s.

GLASS cut to any given sizes not on List.
16 oz.—4ths, 1¾d., 2d., and 2½d. per foot
" 3rds, 2¼d., 2½d., and 3d. per foot
21 oz.—4ths, 2¾d., 3d., and 3½d. per foot
" 3rds, 3½d., 4d., and 4½d. per foot

GLASS FOR ORCHARD HOUSES,

As supplied by us to Mr. Rivers.

		16 oz.	21 oz.
20 in. by 12 in.	Common	13s. 6d. ..	£1 1s.
20 in. by 13 in.	Superior do. ..	16 0 ..	1 3
20 in. by 14 in.	English Glass ..	18 0 ..	1 9
20 in. by 15 in.			

The above prices include the Boxes.

London Agents for Hartley's Improved Patent Rough Plate.

Linseed Oil, Genuine White Lead, Carson's Paints, Paints of various colours ground ready for use.

Milk Pans, Propagating Glasses, and every description of Glass for Horticultural purposes.

JAMES PHILLIPS AND CO.,

100, Bishopsgate St. Without, London, E.C.

GLASS FOR CONSERVATORIES, ETC.

HETLEY AND CO. supply 16-oz SHEET GLASS of British Manufacture at prices varying from 2d. to 3d. per square foot for the usual sizes required, many thousands of which are kept ready packed for immediate delivery.

Lists of Prices and Estimates forwarded on application, for PATENT ROUGH PLATE, THICK CROWN GLASS, GLASS TILES, and SLATES, WATER-PIPES, PROPAGATING GLASSES, GLASS MILK PANS, PATENT PLATE GLASS, ORNAMENTAL WINDOW GLASS, and GLASS SHADES, to JAMES HETLEY & Co., 35, Soho Square, London, W.

See *Gardeners' Chronicle* of March 2.

DIPPENHALL FIRE BRICK FACTORY, near Farnham, Surrey.—Manufactory for Fire Bricks, White, Red and Black Facing Bricks, Plinth Bricks of various shapes and sizes, for string courses; ornamental Garden Edgings, Terra Cotta Chimney Pots, and Vases in great variety; superior Tesselated Buff, Black, Red, Buff, and White Paving Tiles, for churches, entrance halls, &c. All kinds of Ornamental Ridge Tiles, Sewage and other Pipes, Bends, and Junctions; Ornamental Garden Border Tiles to any pattern or colour.—Apply to Mr. J. WHATLEY, Manager of the Works. Agent for Guildford, Mr. JNO. MOON, Builder.

FOR GARDEN POTS, SEND YOUR ORDERS TO J. AND W. ADAMS, KILNS, Belle Isle, York Road, N., and be promptly attended to. Town and Country supplied.

TERRA COTTA.—Warranted to stand the most severe frost. This material is especially fitted for garden decorations, and for all exposed work, such as Fountain Basins, Garden Vases and Statues, Balustrades, Tracery for Terraces and Parapets, Terminals, Crosses for Gables, Capitals of Columns, Brackets, Consols, Chimney Shafts and Pots, and all other work exposed to wet, heat, and frost.—JOHN M. BLASHFIELD, Stamford, Lincolnshire. Specimens may be seen at 16, Great Marlborough Street, London, W., and at the Works, Stamford, Lincolnshire.

News of the Week.

IN the House of Lords on Friday the Marquis of NORMANBY moved for copies of despatches which had passed between the English, French, and Sardinian Governments, on the subject of the recognition of the recent blockade of Gaeta and on other matters connected with the recent events in Italy. Lord WODEHOUSE expressed the readiness of the Government to produce all papers in their possession, and after a long discussion on Italian affairs the motion was agreed to. On Monday the Marquis of NORMANBY moved for the appointment of a Select Committee to inquire into the circumstances attending the appointment and resignation of Mr. TURNBULL at the Record Office. The motion was opposed by Government and was negatived on a division by 41 to 26. The Trade Marks Bill was read a second time. On Friday the Admiralty Court Jurisdiction Bill was read a second time, the LORD CHANCELLOR at the suggestion of Lords CRANWORTH, CHELMSFORD, and KINGSDOWN, having consented to expunge the clause abolishing the right of appeal. On Thursday the Statute Law Revision Bill was passed through committee. On the motion of the Earl of CAMPERDOWN a return was ordered of the gross and net produce of the paper duties for three years up to the latest date at which it could be made up, with the view of ascertaining whether it was an increasing or decreasing duty.

In the Commons on Friday Mr. CHILDERS obtained a select committee to inquire into the present system of transportation and its effect upon colonisation, and to report whether any improvements could be effected therein. Admiral DUNCOMBE obtained a select committee to inquire into the constitution and duties of the Board of Admiralty, and the general effect of the system on the navy. Mr. BUTT obtained leave to bring in a Bill to amend the Tramways (Ireland) Act of last session. The Tramways (Scotland) Bill was read a second time, and the Law of Foreign Countries Bill was read a third time and passed. On Monday the CHANCELLOR OF THE EXCHEQUER proposed a series of resolutions with reference to a new system of Exchequer Bills, the effect of which was to allow them to be paid out of the Consolidated Fund and to circulate like a bank note. The proposal met with general approval, and the resolutions were agreed to. Mr. HENNESSY called attention to the active interference of Lord JOHN RUSSELL in promoting Piedmontese policy and to the effect of that policy in Italy. He condemned the course pursued in Italy by the Government, and described it as unjust to Naples and injurious to the interests of this country. Mr. LAYARD defended the policy of the Government, Sir G. BOWYER opposed it. The debate was then adjourned. The Parochial Assessments Bill was referred to a select committee, and the Local Government Act Amendment Bill was read a second time. On Tuesday Mr. A. MILLS obtained a select committee on colonial military expenditure, and Mr. MACKINNON obtained leave to bring in a Bill for establishing equitable councils of conciliation to settle differences between masters and operatives. Mr. DODSON moved a resolution to the effect that the maintenance of any duties upon hops is impolitic, and that in any remission of taxation or adjustment of financial burdens provision should be made for the removal of such duties. The motion was supported by Sir B. BRIDGES, Sir J. SHELLEY, Lord PEVENSEY, Lord HOLMESDALE, and Lord H. VANE; opposed by Mr. BRIGHT, the CHANCELLOR OF THE EXCHEQUER, and Mr. DISRAELI; and negatived on a division by 202 to 110. Sir J. ELPHINSTONE moved for a Select Committee to consider the present system of promotion and retirement in the Navy. The motion was opposed by Government, but was carried on a division by 102 to 97. On Wednesday, the Officers of Prisons Superannuation Bill was lost, on the question of the second reading, by 140 to 60. On the motion for going into committee on Sir J. TRELAWNY's Church Rate Abolition Bill, Mr. NEWDEGATE and Mr. CROSS moved amendments which led to considerable discussion, but at the suggestion of Sir J. PAKINGTON, Mr. HENLEY, and other members, who expressed themselves anxious for a compromise, the amendments were ultimately withdrawn, and the Bill then passed through committee. On Thursday the adjourned debate on Italy was resumed, when the policy of the Government was supported by Mr. E. JAMES, Sir R. PEEL, the CHANCELLOR OF THE EXCHEQUER, and Lord JOHN RUSSELL; and opposed by Mr. MAGUIRE. The debate then terminated, and the House went into Committee of Supply, and immediately resumed. The Qualification for Offices Bill was read a third time and passed.

The debate on the Address in the French Senate terminated on Thursday in the adoption of the whole Address as proposed by the committee by a majority of 120 to 3. An amendment in favour of the temporal power of the POPE had previously been negatived by 79 to 61.

A despatch from Turin announces the election of Signor RATAZZI, as President of the Chamber of Deputies, by a majority of 219 to 23. The Governors of Messina and Civitella del Tronto have refused to surrender, and the Sardinians are now engaged in the reduction of those fortresses.

A revolutionary movement broke out at Warsaw on the 25th ult., in which the troops were assaulted by the Polish citizens; the troops fired on the people, killing 6 and wounding a similar number. On Saturday the funeral of the killed was the occasion of a still greater demonstration in which 100,000 men took part. The troops however were confined to their barracks, so that a collision was avoided. A committee of public safety, composed of citizens, has since been formed for the preservation of order, and the municipality has sent an address to the EMPEROR soliciting the re-establishment of the Polish constitution, which has been suspended since 1831, and declaring that the country will never be settled till the principle of nationality is recognised.

From the United States we learn that Mr. LINCOLN has arrived at Washington to assume the Presidency of the United States. In a speech delivered to the Legislature of New Jersey on his journey through that State, he said amidst great cheering that he should endeavour to take the ground he deemed most just to the North, the East, the West, the South, and the whole country; that he should do all that might be in his power to promote a peaceful settlement of all their difficulties, that the man did not live that was more devoted to peace, none who would do more to preserve it; but it might be necessary to put the foot down firmly, and if he did his duty he was sure that they would sustain him. On the 18th ult. Mr. JEFFERSON DAVIS was inaugurated President of the Southern Confederacy at Montgomery. In his address on the occasion, he said that the judgment and the will of the people were that union with the Northern states was neither practicable nor desirable, and that if necessary they must maintain by final arbitrament of the sword the position they had assumed.

A telegraphic despatch in anticipation of the Bombay mail of the 12th Feb. states that the Paper Currency Bill is to be remodelled or abandoned altogether. The famine in the North-West Provinces is assuming a more serious character, and it is feared that it will exceed anything of the kind within memory.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family arrived at Buckingham Palace yesterday afternoon from Osborne. On Sunday morning the Queen, Prince Consort, Princess Alice, Princess Helena, Princess Louisa, Prince Arthur, and Prince Leopold attended Divine service at Osborne. The Rev. George Prothero officiated. On Wednesday morning the Prince Consort crossed in the Fairy to Portsmouth, and proceeded to Chichester for the purpose of visiting the cathedral. His Royal Highness arrived at Chichester at 11 o'clock, and was met at the station by the Duke of Richmond and the Mayor. Proceeding direct to the cathedral, his Royal Highness was received by the Bishop of Chichester, the Dean, and Mr. Gilbert Scott, the architect. After making a minute inspection of the ruins, the Prince accompanied the Duke of Richmond to Molcombe, where his Royal Highness took luncheon, and afterwards returned to Osborne.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of Lord Palmerston in Downing Street. Another Council was held on Wednesday.

PARLIAMENTARY MOVEMENTS.—The majority of Mr. Leader, the Conservative candidate at the Cork county election, as given at the official declaration of the poll, was 3589, the numbers being 6441 to 2852.—The Hon. E. F. Leveson Gower has contradicted the report that he intended to resign his seat for Bodmin in order to become a candidate for Sutherlandshire.—Mr. Torrens M'Cullagh, in reply to a requisition, has consented to become a candidate for the new borough of Chelsea and Kensington.

ORDER OF THE BATH.—The Queen has given orders for the appointment of Major-General Sir Patrick Grant, K.C.B., late Commander-in-Chief in China, to be a Knight Grand Cross of the Bath; General Montauban, Commander-in-Chief of the French Forces in China, to be a Knight Commander of the Bath; and of 60 officers of the army who were engaged in the recent operations in China to be Companions of the Order.

LORD LIEUTENANCY.—The Queen has appointed the Marquis of Huntly to be Lieutenant and Sheriff-Principal of the shire of Aberdeen, in the room of the late Earl of Aberdeen.

COLONIAL APPOINTMENT.—The Queen has appointed the Right Hon. Sir John Young, Bart., K.C.B., G.C.M.G., to be Governor of New South Wales.

CONVOCATION.—On Friday in the Upper House the proceedings were entirely formal, consisting mostly of the receipt of reports. In the Lower House another discussion took place on the amended form of the 29th Canon, in reference to the existing text of the Liturgy, and also on the expediency of agreeing to an authorised form of hymn-book. The alterations made by the Upper House in the Forms of Prayer for Special Services were considered and agreed to, with some further suggestions for amendment. On Saturday the Upper House only sat *pro formâ* and no business was transacted. In the Lower House several notices of motion were given, and a resolution was unanimously adopted representing to the archbishop and bishops the opinion of the House that Convocation should consider whether any and what steps might be taken towards the reunion of the dissenting bodies with the Church. Convocation was then prorogued to the 14th inst.

Foreign.

France.—The debate in the Senate on the Address commenced on the 27th ult., and has excited great interest on account of the important topics brought under discussion. The following is an abstract of the debates:—

The Marquis de Larochejacquelin and Count Heckeren spoke in favour of the temporal power of the Pope.—Senator Pietri, formerly Prefect of Police and late Imperial Commissioner in Italy, next spoke, and said that the temporal power of the Pope was lost, that they must confine themselves to the preservation of his spiritual power, and must consider the attitude of the reaction which had again raised its head, and so determine their line of conduct. Italy had an army of 300,000 men, which she would place on their side in the conflict with which they were threatened.—On Thursday the discussion was resumed by Prince Napoleon, who spoke as follows:—"I am astonished at the violence of the discussion. I leave to liberal opinion in Europe, to the patriotism of the Italians, to the 200,000 soldiers who, with the Emperor at their head, made the campaign of Italy, the task of replying to the insults which you have listened to. The Empire represents modern society, its progressive tendencies, and the liberal principles of 1789. The peoples are not mistaken if they rely upon Napoleon III., who will not fail in his mission. Count Heckeren, in recalling the words of the Emperor respecting Gaeta, has confounded the words 'pity' and 'sympathy,' the latter being only felt by the Emperor for the glorious cause of Italy and for the allies who have shed their blood at our sides at Magenta and Solferino. The English alliance which has been assailed by the Marquis de Larochejacquelin, is not with some particular Ministers, but with the great and liberal English people. It is an alliance with which we can defend the great principles of liberty and progress." The Prince justified the policy of Piedmont in Italy, and maintained that the unity of Italy was favourable to France, of whom, he said, she was the natural ally. This unity could only be prevented by an armed occupation which would throw the Italians into the arms of England, who would be in possession of Sicily before 10,000 Frenchmen could have crossed the Alps, and would disgust the country. It was therefore the true policy of France to favour Italian unity. It was, perhaps, a mistake to assist England in destroying the Russian fleet at Sebastopol. He did not think so himself, but could not deny that there was something in the argument. But those who thought so should not object to the creation of a 'secondary navy' in Italy, which English statesmen knew, and Lord Aberdeen had predicted in 1849, would side with France in the event of a great struggle. He uttered some sympathetic words respecting Venice, but said that he should deplore any untimely attack. He foresaw that Italy united would soon demand Rome as her capital, and continued:—"The difficulty is to insure the independence of the Pope, who cannot become subject to another Sovereign; but, by securing to the Pope the right side of the city of Rome, with a Papal garrison and a Papal budget, guaranteed by the Powers, his independence would be insured." In conclusion he said he was essentially opposed to the union of the temporal and spiritual powers, which would be a subjection of the conscience.—On Saturday the discussion was continued by Cardinal Mathieu, who spoke in defence of the temporal power of the Pope, and requested the councillors of the Crown to state whether the speech of Prince Napoleon represented the views of the Government. M. Billault in reply said:—"The Government of the Emperor is only pledged by those who are charged to speak in its name. Our fathers, who were sincere Catholics, never sacrificed the cause of the state to that of the temporal power of the Papacy. We are asked what will be our ulterior conduct in so difficult a diplomatic question. When every moment may furnish means for ameliorating the state of things such a declaration is impossible. The Emperor does everything in his power to defend the interests which confront each other, viz., that of Italian liberty, and that of the independence of the Holy Father. If you believe that the Emperor has done everything in his power to reconcile those interests, say so distinctly and sincerely." Count Segur d'Aguesseau asked whether the French troops would leave Rome? M. Billault said, "I shall not reply to that question. Nobody has the right to suspect our loyalty and devotion to the Holy Father. Insults and odious allusions have been recently expressed against the Emperor, who has constantly defended the Holy Father, without, however, being willing to abandon the interests of the country. These insults will affect neither the faith nor the policy of the Emperor, who will perseveringly continue to defend the just interests of France, the independence of the Holy Father, and the liberty of Italy." Cardinal Donnet next spoke in favour of the temporal power of the Pope, and moved an amendment to the effect that—"The sword of France continues to protect the independence of the Pope, and the maintenance of his temporal power." M. Baroche replied that the Government was opposed to this amendment. The general discussion was then closed. The discussion of the Address by paragraphs commenced on Monday, when the Marquis de Boissy expressed his regret that in the draught Address no mention was made of the navy, which would render such great service in a war with England, which he desired. This remark was received with expressions of dissatisfaction. The Marquis de Boissy maintained that the benefit of the English alliance had been exaggerated, and declared that a great majority of the country were of his opinion. He complained of the abolition of the passport system between France and England, "out of submission to the English," and attacked the Count de Persigny for having harangued "a drunken meeting" at the Mansion House about French policy. M. Billault in reply assured the Senate that the question of the abolition of the passport system had been long under consideration; and that the Government had satisfied itself of the annoyances, vexations, and utter inutility of the system. It had therefore been applied in the first instance to British subjects, with whom commercial relations had become more extended; it would soon be equally applied to Belgians and Germans. He defended the Ambassador for having attended a public dinner in accordance with the customs of a great nation, and recommended the Senate to insult nobody, and win the respect of others by respecting themselves. He blamed the desire of war with England, as the alliance of France and England would long continue to be the best security for liberty and the interests of peace. The Marquis de Boissy said he had no antipathy towards England nor to its banquets, for he often dined at the house of an Englishman; but he had always done his "best to keep up animosity, believing that war with England would be of great advantage to the dynasty," though he had heard of the Emperor having said that twenty years' alliance with England would be essential for his dynasty. Amidst shouts of contradiction the President called M. de Boissy to order. M. Dupin directed attention to the recent financial scandals, and congratulated the country that the Emperor would have the case of M. Mires penetrated to the bottom. Count Simeon endeavoured to justify his participation in the affairs referred to. M. Billault said the Government shared the sentiments of morality expressed by M. Dupin, and had instituted a strict investigation. Government desired that the guilty parties, if there were any, should be discovered and punished. The President said that public morality imposed upon the Senators the duty of guarding against becoming engaged in such affairs. Prince Napoleon said that the duty was imposed not only on the Senators, but also on the high functionaries of the Government. The first four paragraphs of the Address were then agreed to, In the sitting of Tuesday paragraphs 5, 6, and 7 were agreed to. An amendment of Senator Pietri, referring to the annexation of Savoy and Nice, was also adopted. On the paragraph relating to Syria being read M. Billault stated that negotiations on the question of the prolongation of the occupation having commenced it was impossible to enter into any explanation. The Conference would shortly reassemble, and there was reason to hope that the mission of pacification would be continued by France. On the paragraph relating to Rome, MM. Jules Favre, Darimon, Picard, Emile Ollivier, and Dr. Henon, members of the Opposition, proposed the following amendment:—"The hour has come for applying to Rome the wise principle of the system of non-intervention, and, by the immediate withdrawal of the French troops, to leave Italy mistress of her own destinies." The discussion of this amendment was adjourned to Wednesday, when the Committee appointed to examine the draught Address proposed the following amendment, which was agreed to:—"We remember the deeds of our friends of Solferino and Magenta, and it is therefore our duty to take them into consideration." The amendment in favour of the temporal power of the Pope was then discussed. Senator Casabianca, in the name of the majority of the Committee, opposed the amendment, and requested the members to have confidence in the Government of the Emperor. He maintained that neither the Committee nor the Government dreamt of abandoning the Chief of the Catholic Church. Baron de Bourqueney and the Duke of Padua supported the amendment. Senator Barthe likewise defended the amendment, and reproached Piedmont for having followed the advice of England and despised the counsels of France. M. Baroche opposed the amendment, considering the draught Address was quite sufficient. He maintained that there was nothing to indicate any intention on the part of the Government of withdrawing the French troops from Rome; on the contrary, everything tended to show that they would remain there. The amendment was then rejected by 79 against 61 votes. In the sitting of Thursday the whole Address was agreed to by 120 against 3 votes, after speeches had been delivered by several Cardinals and other Senators. A Committee of the Senate was to present the Address to the Emperor yesterday.

Prince Napoleon will embark for Italy in ten days. A levy of 1000 sailors has been ordered in the district of Toulon. The *Moniteur* contains decrees appointing several Vice-Admirals, Rear-Admirals, and other high naval functionaries, and announces that Duke Tascher de la Pagerie and General Montauban have been appointed Senators. It also announces that the interest on Treasury Bills has been raised to 3½, 4, and 4½ per cent., according to the length of time they have to run. The *Moniteur* of Tuesday contains a report, addressed by the Minister of Justice to the Emperor, on the subject of the affair of M. Mirès. The Minister alludes to the prevalent reports that M. Mirès had known how to procure for himself, by a suspicious generosity, protectors sufficiently powerful to shield him from the chastisement of justice; and that the evil was so general and so great that the Government, at the risk of saving the guilty parties, had resolved upon allowing the affair to drop, in order to avoid scandals, the results of which would be incalculable, rather than to lay bare the moral ulcers caused by corruption. "These assertions," says the Minister, "involve honour and justice in such a manner that I believe it necessary to point them out to your Majesty. Everybody in France acknowledges integrity, honour, and justice. It cannot be tolerated that the design should be attributed to Government of casting a veil over acts which are amenable to the severity of the penal law." The Minister recalls the words of the Emperor, who at the outset of this affair ordered that justice should investigate the matter resolutely and without attention to any personal considerations:—"Justice will be carried out with a care and patience which will not be baffled by any obstacles. Nothing will escape the investigation of justice, and if, contrary to my expectations, the accusations which party spirit has raised, and which are propagated by malignity and want of reflection, do not fall, before the examination which has been commenced, justice shall not fail in its mission." General Count Tascher de la Pagerie, one of the last surviving members of the family of the Empress Josephine, and Grand Master of the Household of the present Empress, died in Paris on Sunday. General Chrzanowski, one of the most eminent of the Polish refugees, has also just died in Paris. He served in the French army from 1809 to the campaign in Russia, in which he was taken prisoner; in 1828 9 he took part in the Russian campaign against Turkey under Marshal Diebitsch; in 1830 he was engaged in the insurrection of his countrymen against Russia; afterwards he served in Turkey and resided in England; he then entered the Sardinian army, and became Major-General, but after the battle of Novara, in which he held a command, he retired and passed the rest of his life in Paris.

Spain.—The Ministry have pronounced themselves in favour of the temporal power of the Pope, and against the partition of Rome between him and Victor Emmanuel, as well as against the transfer of the Papacy to Jerusalem. In the sitting of the Senate on Tuesday the Government announced that they had resolved on stationing cruisers on the coasts of Africa. These cruisers will be authorised to visit Spanish and English vessels, in order to prevent the slave traffic. The Ministry took the opportunity to repel the accusations of Lord Palmerston in regard to the slave trade, which accusations they stigmatise as unjust.

Holland.—The Minister of the Interior announced on Saturday that the Ministers had tendered their resignations to the King, and had respectfully requested his Majesty to form a new Cabinet. The King replied that he would consider what the interests of the country demanded, and in the meanwhile has provisionally prorogued the Chamber.

Switzerland—Capt. Lorts, an English [illegible] accidentally fell into the bear pit at Berne, [illegible] of the 2d inst. Before he was rescued the [illegible] the clothes from the body which he [illegible] shocking manner, and then killed him [illegible] neck. The body was afterwards removed [illegible] though with great difficulty. The Eng[illegible] has presented a note to the Federal Coun[illegible] ing of the conduct of the police in not ma[illegible] tempt to save the life of Captain Lorts.

Denmark and the Duchies.—The Esta[illegible] stein were opened at Itzehoe on Wednesday. [illegible] sen was elected President, and the Govern[illegible] mitted a communication concerning the [illegible] Constitution of 1859, and also a proj[illegible] relating to the provisional position of Ho[illegible] following are among the Royal proposals [illegible] the Estates of Holstein:—

"The project of a Constitution to be valid [illegible] monarchy. The establishment of two Legis[illegible] the Upper Chamber to be composed of 30 mem[illegible] for life. A revised special Constitution for inter[illegible] a responsible Minister, independence of judges, [illegible] press and of association, *habeas corpus*, religi[illegible] financial competency for the Estates, and inv[illegible] members. A distinct position for the army of Ho[illegible] stein to contribute two millions towards the expe[illegible] State."

The Austrian and Prussian Cabinets had [illegible] despatched notes to Copenhagen, requesting Den[illegible] lay before the Estates of Holstein the budget [illegible] The notes added that should this request not [illegible] plied with, Federal execution would take p[illegible] Holstein. England, France, and Russia also [illegible] that Denmark should lay before the Estates of [illegible] the draught of the budget for 1861.

Prussia.—The investiture of the King [illegible] Order of the Garter took place on Wednesday [illegible] White Saloon of the Royal Palace. During the [illegible] mony the Court did not wear mourning. The[illegible] present the Queen, the Princes and Princesses, [illegible] high military functionaries, the Ministers of State, [illegible] the highest functionaries of the Court. The [illegible] Commissioners who had brought the insignia [illegible] Order of the Garter to Berlin were conveyed in [illegible] carriage drawn by six horses and in two state [illegible] riages each drawn by two horses to the Royal [illegible] where they were received by the Governor and [illegible] Lord Chamberlain. The Marquis of Breadalbane [illegible] addressed a few words to the King in English, stat[illegible] the object of his mission, after which the investiture took place. According to reliable information Prus[illegible] has proposed a compromise on the affairs of Syr[illegible] tending to the prolongation of the French occupation until June.

Austria.—The new Constitution has not given satisfaction to the Viennese or the Hungarians, but the official telegrams from Prague, Brünn, [illegible] and Gratz, state that it has been favourably [illegible] by the Bohemians, Moravians, Silesians, and Styrians. Prince Metternich, the Austrian Ambassador at Paris, has received instructions to regard in the Conference on the affairs of Syria the territorial rights of the Porte as the principal point of Austrian policy in refer[illegible] ence to that question, but at the same time to leave [illegible] entirely to the Western Powers to come to an under[illegible] standing on the question of the prolongation of the occupation of Syria.

Hungary.—The Municipality of Pesth has [illegible] deputation to the Tavernicus to request the remova[illegible] the Imperial police. The Judicial Conference [illegible] resolved upon re-establishing the District [illegible] of Justice. An Imperial autograph letter [illegible] the assembling of a Servian National Cong[illegible] Karlowitz, under the Presidency of the [illegible] Rajachich, before the opening of the Hungar[illegible] The Congress is to be composed of Servian [illegible] only.

Croatia.—An Imperial autograph letter, addres[illegible] to the Ban of Croatia, sanctions the re-establishme[illegible] the electoral law of 1848 in that province, excep[illegible] however, the military frontier. The Diet will [illegible] on the question of the annexation of Dalmatia to Cro[illegible]

Russia.—The sittings of the Council of the Em[illegible] in reference to the question of the peasan[illegible] approaching their termination. It is said that [illegible] emancipation of the serfs will be proclaimed [illegible] Lent (old style). The *Patrie* and the *Pays* [illegible] the Czar will elaborate a project of constitu[illegible] Russia as soon as the question of the emancipation [illegible] be resolved.

Poland.—A revolutionary disturbance took place [illegible] Warsaw on the anniversary of the battle of Gro[illegible] fought on the 25th of February, 1831, between [illegible] Russians and the Poles. The people assembled in [illegible] numbers to celebrate the day, and were greatly [illegible] at the appearance of the Polish flag, but they [illegible] entirely unarmed, and everything would have p[illegible] off quietly if they had not been attacked by [illegible] gendarmes and cavalry. The troops fired on the peo[illegible] killing six and wounding a similar number. Order [illegible] since been re-established, and in the event of [illegible] disturbances taking place, a state of siege will [illegible] proclaimed. The town on Friday last presented a [illegible] gloomy aspect, and everybody was wearing mourning. [illegible] The funeral of those who fell in the recent [illegible] turbances took place on Saturday, when there was [illegible] great popular manifestation, at which 100,000 [illegible]

were present in deep mourning, but no collision occurred, as all the troops and police were confined to their barracks. Prince Gortschakoff, the Governor, in a proclamation, has reminded the citizens of the justice which Russia has accorded to them for 30 years, and has also given tranquillising assurances to a deputation from the Agricultural Society, which had voted unanimously, on the 24th ult., in presence of M. Moukanhoff, Minister of the Interior, and in opposition to the programme of the Government, a resolution tending to constitute owners of the soil those peasants whom the official project wishes to maintain simply as farmers. The Municipality of Warsaw has agreed to send an address to the Emperor, soliciting the re-establishment of the Polish Constitution, which has been suspended since 1831. The address says:—

"The late events have not been caused by one portion of the people alone, but are the deepest and most unanimous expression of the unsatisfied wants of the country, and the result of many years of suffering. The want of legal organs compels the people to make sacrifices in order to obtain a hearing. In the soul of every one of us there lives a strong and unalterable national sentiment. The country will never attain its development if the principles of nationality do not meet with valid recognition. The country appeals to the Emperor's love of justice."

This address has already been signed by 60,000 persons, and it is said that it will be presented by Prince Gortschakoff in person. The Emperor has summoned M. Karnicki, the Secretary of State, to St. Petersburg, in order to be fully informed as to the real state of affairs. It is generally believed that the policy of the Government in regard to the reorganisation of the nationality will undergo a complete change, and that a brother of the Emperor will shortly leave St. Petersburg for Warsaw. Prince Gortschakoff has appointed a delegation of 24 citizens, eight of whom are alternately to sit at the Town-hall, for the purpose of arranging measures for the maintenance of public order. This appointment has produced a satisfactory impression, and it is hoped that order will not again be disturbed. The revolutionary party is small, the people being convinced that any rising not supported by foreign intervention would have no result. The garrison of Warsaw is increased nightly by other troops. The Russian General Zabalkof, who gave the order to fire upon the people, has been brought before a court-martial. The Minister of Police, M. von Trepow, who was wounded in the disturbance, has been dismissed. All Polish noblemen holding offices throughout the kingdom of Poland have tendered their resignations, and their example has been followed by all the Poles in the Russian service.

THE CAUCASUS.—A communication from St. Petersburg states that notwithstanding the capture of Schamyl, and the consequent pacification of the Caucasus, as announced by Prince Bariatinsky, several of the tribes under two resolute leaders are still opposing the Russian forces, and much yet remains to be done before the long campaign against the mountaineers will be at an end.

ITALY.—Accounts from Naples state that on Friday morning Prince Carignan paid a visit to Admiral Mundy on board the Hannibal, and was received with great honour, all the ships of the English fleet firing royal salutes. The Neapolitan nobles who had fled the country were returning every day. The Mint and some other former Royal establishments had been suppressed. Placards secretly printed, demanding the local self-government of Naples, were much circulated. Tranquillity had not, however, been disturbed. The bombardment of Civitella del Tronto commenced on the 28th ult., the commander having refused to surrender in accordance with the King's convention for the surrender of Gaeta. Despatches from Rome state that Francis II. and his Queen were making preparations for departure to Bavaria. They were selling their carriages, and had dismissed their suite, composed of 100 persons, and also Prince Bisignano, the Grand Chamberlain. Prince Petrulla, ambassador of the ex-King at the Court of Vienna, had left for Rome with an autograph letter from the Emperor of Austria, inviting the King to go to Vienna. An Austrian frigate had been placed at his disposal for that purpose. General Bosco was about to proceed to Spain. Popular political manifestations were continually taking place at Rome. Placards have again been posted up bearing the words, "Long live Victor Emmanuel!" A fresh demonstration by the students of the University had taken place, and 20 of their number had been expelled. The works on the Roman Railways were to be continued. The funds for the next half-year's payments had been deposited at the Bank. It was reported that the frontier town of Frosinone was about to be occupied by the French troops.—A despatch from Turin states that Count Cavour has, in a diplomatic way brought under notice the necessity of settling the Roman question. Signor Ratazzi has been elected President of the Chamber of Deputies by 219 to 23 votes.

SICILY.—The official journal notifies the blockade of the citadel of Messina. Hostilities have commenced. All foreign vessels have left Messina, with the exception of those of England and America. The English captains have declared their intention of remaining in order to protect the property of their countrymen. General Fergola has declared to General Cialdini that the works commenced against the citadel constitute a violation of the convention concluded between himself and Garibaldi, and that he will bombard the city should they be carried on. General Cialdini has replied that for every inhabitant of the city who might be killed or wounded by the bombardment he would order an officer of the garrison of the citadel to be shot. He has also notified to General Fergola that he does not consider him as a general, but as a rebel against King Victor Emmanuel. According to despatches from General Cialdini, this resistance of General Fergola arises from orders received by the latter from Francis II.

TURKEY.—Serious dissensions prevail in the Ministry. An altercation has taken place between the Grand Vizier and the Kapudan Pasha on financial matters. The latter disapproved the recent policy of the Grand Vizier, and demanded new taxes on articles of luxury. The carrying out of the new kaimes scheme has been postponed. An answer has been delivered to the Russian note relative to the Grand Vizier's mission.

CAPE OF GOOD HOPE.—Sir George Grey continued on the frontier. His Excellency may go to Natal, and possibly to the Zambesi. He was expected at Port Elizabeth on the 15th January. The Separation movement is less popular. The Bishop of St. Helena, after assisting at the consecration of Archdeacon Mackenzie as Missionary Bishop for Central Africa, took passage in the Norman from Cape Town to St. Helena. The site of the railway terminus in Cape Town is fixed. Mr. Hawkshaw's decision that there shall be an upper stratum of heavy ballast on the line has given great satisfaction. On the Table Bay Harbour works 12,000*l.* has been expended in nine months. A sea wall is constructing at Simon's Bay, under the direction of the Admiralty.

INDIA.—A telegram from Bombay of Feb. 12 states that the famine in the North-West Provinces is assuming a more serious character. The failure of the Spring crops appears to be certain. The inhabitants of Cutch and Travancore are also starving. It is feared that the famine will exceed anything of the kind within memory. Singular frauds have been detected in the Electric Telegraph-office. The Paper Currency Bill is to be remodelled or abandoned altogether. The tariff on piece goods and yarn is to be reduced. The Inam Commission is breaking up.

UNITED STATES.—President Lincoln has made his entry into Washington after having visited New York, Philadelphia, and other important cities. He had been warmly welcomed everywhere during his journey. At Columbus in Ohio he made a speech in which he said that all that was wanted was time, patience, and reliance on God. At New York he said he wished he could bring as good a head as heart to the work, and expressed his devotion to the Union. At Philadelphia he expressed his hope that it would never become the duty of the State troops to shed fraternal blood, and said that if so painful a result should in any wise be brought about, it should be through no fault of his. At Trenton, in New Jersey, he said:—

"I shall endeavour to take the ground I deem most just to the North, the East, the West, the South, and the whole country. I take it, I hope, in good temper; certainly no malice towards any section. I shall do all that may be in my power to promote a peaceful settlement of all our difficulties. The man does not live that is more devoted to peace than I am. None who would do more to preserve it, but it may be necessary to put the foot down firmly. (Here the audience broke out in cheers so long and loud, that for some moments it was impossible to hear Mr. Lincoln's voice.) He continued—And if I do my duty and do right you will sustain me, will you not? (Loud cries of 'Yes, yes; we will.') I received as I am by the members of a legislature, the majority of whom do not agree with me in political sentiments, I trust that I may have their assistance in piloting the ship of state through this voyage, surrounded as it is by perils; for if it should suffer attack now, there will be no pilot ever needed for another voyage."

Mr. Jefferson Davis was inaugurated as President of the Southern Confederacy at Alabama on the 18th ult. The spectacle is described as the grandest ever witnessed in the South. The inaugural address of President Davis says:—

"The judgment and the will of the people are, that union with the Northern States is neither practicable nor desirable. If necessary, we must maintain by final arbitrament of the sword the position we have assumed among the nations of the earth."

The Southern Congress had declared the navigation of the Mississippi free. At Mobile and Charleston salutes of 100 guns were fired on the 18th ult., in honour of Mr. Davis. Arkansas had declared for the Union by an overwhelming majority. The Missouri election would probably result in favour of the Union candidates by a majority of 5000 votes. The difficulties between Georgia and New York were still unsettled. The Governor of Georgia had seized three New York vessels, and had declared his intention to retain them until the arms seized by the New York police should be given up. Forts Chadbonne and Belknap had been seized by the Texans, who had also seized the Californian overland mail. In the House of Representatives a Bill had been reported making an appropriation for a survey of the Northern Pacific regions, with the view of establishing a telegraph to Asia. The New Tariff Bill, which is almost prohibitory on all English and French manufactures, has been passed in the Senate. The signing of the provisional constitution was the only business before Congress on Feb. 18. An impression prevailed that a plan of adjustment would be adopted in the Peace Conference. The 129th anniversary of the birthday of Washington was celebrated on the 22d ult. The New York papers are filled with accounts of the celebration. The Indians were ravaging the territory of New Mexico. Application had been made at Washington for troops to assist in suppressing hostilities.

MEXICO.—Advices from Monterey, Mexico, announce that Mejia had entered the town of Riverde with 2000 men, butchered 200 men, and burnt the town.

Parliament.

HOUSE OF LORDS

FRIDAY.—*Italian Affairs.*—The Marquis of NORMANBY in moving an address for copies of despatches on Italian affairs entered at great length into the circumstances of the blockade of Gaeta, and of the transfer of the fortress to the King of Sardinia, and bitterly denounced the conduct of Italian statesmen, favoured by the countenance of the British Government. There had been throughout a constant abuse of high sounding terms, while, in fact, the Neapolitan army and navy had sold their allegiance for a considerable sum. He yielded to none in sympathy for Italian liberty, but it was the liberty of the past, not the spurious liberty of the present. He denounced the disregard of treaties and gross breach of faith perpetrated under the name of a regard for nationalities.—Lord WODEHOUSE said that no specific charge had been brought against the Government by the noble lord in his very diffuse speech, and he was therefore at a loss how to answer it. As for the papers he demanded, they might be granted by the Sardinian Parliament, but were out of the power of her Majesty's Ministers. In judging the conduct of the King of Sardinia towards Naples, they must look, not to the individual case, but to general principles. He denied that the British Government had attempted to influence Italian policy. Their uniform system had been to leave the Italians to themselves.—The Earl of MALMESBURY complained that, in the papers hitherto produced on the Italian question, the most important parts had been omitted. He reprobated the policy of Sardinia, which had from the first shown her designs of ambition and annexation.—Lord LLANOVER, having recently visited Italy, related various facts which had fallen under his own observation, and which showed that the Neapolitan population were well satisfied with the new order of things.—Lord NORMANBY having briefly replied, the subject dropped.

MONDAY.—The *Trade Marks Bill* on the motion of the LORD CHANCELLOR was read a second time. *Case of Mr. Turnbull.*—The Marquis of NORMANBY moved that a select committee be appointed to inquire into the circumstances attending the appointment and resignation of Mr. Turnbull in the Record Office. That resignation, he said, had been brought about by the direct interference of the Master of the Rolls, acting under the influence of a letter from Lord Palmerston. He entered at length into the circumstances of the case, protesting against the principles adopted by the Government, which made religious opinions a bar to efficient public service.—The Earl of SHAFTESBURY said that the secretary of the Protestant Alliance had received formal notice that he would be prosecuted for the libel on Mr. Turnbull. As the matter would thus come before the courts of law its discussion in Parliament would be highly inconvenient. At the same time he felt bound to vindicate himself personally from the charge of improper interference brought against him. He denied that the objection to Mr. Turnbull arose solely from his religious opinions, but he was liable to be carried away by the warmth of his temperament, which rendered him incapable of taking an impartial view of the documents under his charge—documents referring to a most important epoch in British history. It was as absurd to place such a man in such a position as it would be to make himself (Lord Shaftesbury) an inspector of Roman Catholic schools or a reporter on Benedictine monasteries. He supported these assertions by reading various passages from Mr. Turnbull's writings. He did not charge Mr. Turnbull with dishonesty, but with the absence of that impartiality which should attend such a position.—Earl GRANVILLE said that Mr. Turnbull had done his work well, and his resignation was contrary to the advice of his friends. But, having resigned, it became a question as to his fitness for the office, and it was this view of the case that Lord Palmerston had taken when he determined to accept the resignation. There was nothing in the conduct of Lord Palmerston which could in any way hurt the feelings of Roman Catholics.—The Earl of DERBY said that he knew nothing of the case except that Mr. Turnbull, in the language of an Irish newspaper, had renounced the errors of Protestantism, and embraced those of Catholicism. The real point at issue was whether an underhand plot had been formed against Mr. Turnbull in which he had not received the support he had a right to expect from the Government. As far as his information went, Mr. Turnbull had discharged his duties with probity and ability, and it was equally contrary to justice and policy that such a man should be whispered out of his office.—The Marquis of LANSDOWNE expressed his full belief that Mr. Turnbull was in every respect competent for the performance of the duties which he was required to fulfil in the Record Office. The only mistake he had committed was in sending in his resignation. The Government were however not responsible either for his appointment or retirement, and he did not believe that any benefit would be derived from the inquiries of the proposed committee.—After some remarks from Lord GREY, the House divided, when the numbers were—Contents, 26, non-contents, 41. The motion was accordingly negatived by a majority of 15.

TUESDAY.—*Divorce Courts.*—The LORD CHANCELLOR gave notice that on Monday he should move for a select committee to inquire into the law respecting the parties who have the right to sue for divorce in the courts of England and Scotland.—The LORD CHANCELLOR moved the second reading of the *Admiralty Court Jurisdiction Bill*, the object of which was to enlarge such jurisdiction. At present, while the cases were of an extreme importance, the power of the Court was greatly circumscribed; and he proposed to extend it to all shipowners residing within its jurisdiction. It likewise empowered the Court to grant salvage for life as well as property, at present only granted at certain distances from the coast, and abolished appeal to the Judicial Committee except in matters of law.—Lords CRANWORTH, CHELMSFORD, and KINGSDOWN, considered an appeal absolutely necessary in matters of facts as well as of law.—The LORD CHANCELLOR said he would act upon the suggestion and expunge the clause taking away the right of appeal. The Bill was then read a second time.

THURSDAY.—[illegible]—Lord W[illegible] in reply to the Marquis of BATH, said that the Russian Ambassador at Paris had received a letter from St. Petersburg desiring him to [illegible] the French occupation of Syria, without limitation of time, and [illegible] such a proposal would be [illegible] an increase of force. [illegible] The Duke of NEWCASTLE, in reply to [illegible] *Extradition of Criminals.*—[illegible] Lord DERBY, said that in September last instructions were sent to the Governor of [illegible] to [illegible] a bill [illegible] [illegible] Council of that colony [illegible] the extradition of [illegible] escaping from Cayenne, [illegible] [illegible] excluded from the operation of the measure, which was only intended to apply to criminals.—*The [illegible] Law [illegible] Bill* passed through committee.—The Earl of CLANCARTY? moved for a return of the gross and net returns of the *[illegible] Duty* for one year, with the view of ascertaining its increase or decrease, and the truth of the statement as to the difficulty of collecting it.—The Earl of DERBY suggested that the return

hould be made out for the last three years.—The Earl of CAMPERDOWN assented, and the motion as amended was agreed to.

FRIDAY.—*Metropolitan Labourers.*—The Earl of DERBY said that he intended to move on Monday that it should be made a special instruction to the railway committees that they should report particularly on the effect which the schemes brought before them would have in displacing the labourers of the metropolis. *The Qualification for Offices Bill* was brought up from the Commons and read a first time. *The Trade Marks Bill* passed through committee. *The Statute Law Revision Bill* was read a third time and passed.

HOUSE OF COMMONS.

FRIDAY.—*State of China.*—In answer to Mr. WHITE, Lord J. RUSSELL said that no authentic information of the occupation of Woosing by the rebels had been received by the Government. It had been our constant policy to observe a strict neutrality between the insurgents and the Imperial Government.—In reply to Mr. FENWICK, Mr. M. GIBSON said that early next week he hoped to introduce a Bill on the subject of *Passing Tolls.* *Colliery Accidents.*—Mr. DILLWYN called attention to the frequent recurrence and magnitude of colliery accidents, and to the importance of the fittest persons being on all occasions selected as colliery inspectors. He had reason to believe that many of the appointments were carried by favouritism, an instance of which had lately occurred in the appointment of an inspector for South Staffordshire.—Sir G LEWIS said that Mr. Baker, the new colliery inspector of South Staffordshire, had been recommended by the Lord-Lieutenant of the county, and was, he believed, a fit and practical person, though not a scientific or literary man. *Income Tax Collections.*—Sir MINTO FARQUHAR asked the Chancellor of the Exchequer whether he was aware that a document headed "Immediate payment required," calling for payment of the Assessed, Property and Income-taxes, due at Christmas last, and suggesting the discharge in advance of taxes due on the 20th March, had been issued in certain districts in London.—The CHANCELLOR of the EXCHEQUER said that the Government were not responsible for the document in question, which was issued by the local author ties. But the request for the January payment was undoubtedly made under the authority of the revenue department, warranted by the Act of Parliament of last year. As for the request of payment in advance, he disclaimed all responsibility in such a demand, which would undoubtedly create great confusion in our financial arrangements. It was entirely the act of the local authorities, and he greatly regretted it. *Thames Embankment.*—Mr. BENTINCK asked for information respecting the Commission for the Embankment of the Thames, and asked if it was to be paid out of the public revenue.—Mr. COWPER said that the Commission arose out of the recommendation of the committee of last year for the embankment of the Thames, and that the members would render their services gratuitously.—Mr. AYRTON objected to the Commission as useless, and all the worse for being unpaid, as its reports would thus be deprived of all responsibility.—Mr. CHILDERS moved for a Select Committee to inquire into the present system of *Transportation*, its utility, economy, and effect upon colonisation, and to report whether any improvement could be effected therein.—Sir G. LEWIS assented to the motion, admitting that our system of secondary punishment did not on the whole work in the most satisfactory manner.—After some remarks from Mr. HOPE and Mr. BLAKE, the motion was agreed to.—Admiral DUNCOMBE moved for the appointment of a Select Committee to inquire into the constitution of the *Board of Admiralty*, the various duties devolving thereon; and the general effect of such system on the navy. He disclaimed any intention of assigning blame to parties or individuals, but regarded the existing system of the Admiralty as a cumbrous and clumsy machine, which the inquiries, conducted by an intelligent committee, might, he believed, amend.—Admiral WALCOTT seconded the motion.—Lord C. PAGET said that the present Board of Admiralty had always courted investigation, and the present motion was brought forward not only with their concurrence, but to some extent, at their special instance.—Sir J. PAKINGTON considered that the principal point of inquiry by the proposed committee, should relate to the very unsatisfactory position of the First Lord as the head of the Board, and he hoped the Government would be careful in the constitution of the committee.—Sir F. BARING expected little benefit from the committee, and contended that in many cases the Admiralty had been unjustly and ignorantly assailed.—Mr. HENLEY said that the inquiry would show whether the evils complained of arose from the want of power in the department, or of concert in the different parts of the system, or from faults in the constitution of the Board of Admiralty. If this should be the result, it would be for the Government to propose a remedy.—Mr. BENTINCK hoped that the Committee would not comprise any ex-First Lords.—Sir C. WOOD did not anticipate that the Committee would find any great change necessary in the constitution of the Board.—Mr. DISRAELI was glad that this Committee was to be appointed, but he did not apprehend that the result would be any great alteration in the Board of Admiralty. He should be sorry if they recommended the head of the Board should be a naval officer; the next step would be to take the chief of that great department out of the House. The motion was then agreed to.—On the motion of Mr. WHITE a return of all persons receiving *Salaries, Pensions, and Grants* of public money to an amount exceeding 150*l.*, was ordered, after some objections by the CHANCELLOR of the EXCHEQUER.—Mr BUTT obtained leave to bring in a Bill to amend the *Tramways (Ireland) Act* (1860). The *Tramways (Scotland) Bill* was read a second time. The *Law of Foreign Countries Bill* was read a third time and passed.

MONDAY.—*Passports in Belgium.*—In reply to Mr. T. DUNCOMBE, Lord J. RUSSELL stated that the Belgian Government had consented to give up passports in the case of foreigners passing through the territory, but they would be required from those who intended to remain in the country, as proofs of nationality. *Japan.*—In reply to Mr. WARNER, Lord PALMERSTON said that a part of the British squadron had been sent to Japan, not with any hostile purpose, but for the protection of British interests. *Exchequer Bills.*—The CHANCELLOR of the EXCHEQUER moved the following resolutions:—That the principal moneys of Exchequer Bills issued under authority of Parliament, together with the interest, shall be charged upon and paid out of the Consolidated Fund. That the interest on such Bills shall be payable half-yearly, by coupons, at the Bank of England. That an option shall be given at the expiration of each 12 months to the holders to be paid the principal, such principal to be paid at the Bank of England; that all Bills not so paid off shall have currency for the next 12 months; and that when any Exchequer Bills shall be paid off, or received for duties, the Commissioners of her Majesty's Treasury may issue the like amount of Exchequer Bills to replace the bills so paid. He pointed out the inconveniences of the present system, under which Exchequer Bills were only permitted to be paid out of sums directly voted for the army, navy, or civil service. The system also injured the public interest in checking the circulation of the bills. To meet this he proposed to do away with the necessity of renewing Exchequer Bills yearly, and to give them the fixed and permanent character of a bank-note, the holders having the option of having the bills paid off every half year.—Mr. W. WILLIAMS, Alderman SALOMONS, Mr. CAYLEY, Mr. HANKEY, Sir H WILLOUGHBY, and Mr. GLYN expressed their approval of the proposed changes. The resolutions were then agreed to, and leave was given to introduce a Bill founded upon them. *State of Italy.*—On the motion that the House go into committee of supply, Mr. HENNESSY called attention to the active interference of her Majesty's Foreign Secretary in promoting Piedmontese policy, and its effects. Adverting to the former conduct of Lord John Russell, whom he charged with a terror of Austria and a morbid desire for interfering in Italy, he accused the noble lord of continuing in the same unhappy course, still truckling to Austria and imprudently interfering in Italy. He entered at length into the proceedings of Piedmont, all of which, both politically and financially, were adverse to good government, and warmly reprobated the policy of the British Government in aiding and encouraging those proceedings. He detailed at considerable length the injurious fiscal effects of the alteration of duties and other measures adopted by Sardinia since the annexation. The injury reacted upon British commerce, and yet more on that of other nations. He went through the despatches of Lord John Russell to prove that he had not left the Italians to themselves as he had so often professed, but was guilty of direct acts of intervention.—Mr. LAYARD was convinced that the policy adopted by the Government was in accordance with the almost universal bias of public opinion among the Italians, and accorded with the honour, interest, and dignity of England. There was throughout Italy an unanimous desire for the abrogation of the temporal Government of the Pope, respecting which he gave various details to show the tyranny, ignorance, and barbarism which characterised the administration of the Papal States. Enormous benefits had resulted in other parts of Italy from their annexation to Piedmont, and the time was entirely passed during which reform was possible either in Venetia or Rome. A united Italy would be a blessing to itself, and a benefit to Europe. It would prevent the interference and leave no field for the struggles of Germany and France in that part of the world. To England that consummation was especially desirable, and he should regard it as a heavy misfortune if any Administration succeeded to power which would reverse the policy that had been adopted towards Italy by the present Foreign Secretary.—Sir G. BOWYER contradicted Mr. Layard's statements as to the atrocities said to be committed by brigands in the Papal States. He asserted that there had been no massacre at all at Perugia, and that none were killed there but soldiers in fair fight. As to the observation that the King of Sardinia had not relied on foreign bayonets, he asked whether the revolution in Italy had not been initiated by French bayonets. He described Garibaldi as a pirate, and preferred a long series of charges against the King of Sardinia, comparing disadvantageously his conduct with that of the young King of Naples, fighting in defence of his rights against piracy and rebellion. He denounced the policy of the Foreign Office as fatal to the interests of this country, and as a policy which, in the end, must lead to war.—On the motion of Mr. E. JAMES the debate was then adjourned. *The Admiralty Committee.*—Sir J. PAKINGTON inquired whether it was true that Sir Baldwin Walker had been allowed to sail for the Cape, notwithstanding the nomination of the select committee on the Admiralty Administration, at which his evidence would be of the utmost importance.—Sir J. ELPHINSTONE and Mr. CONINGHAM thought the inquiry would be a mere mockery if Sir B. Walker was not to be examined.—Lord C. PAGET stated that Sir B. Walker could not be detained without detriment to the public service, and his professional duties were regarded as more important than any evidence he could give before the committee. If however the House wished it, he could be recalled.—Mr. HENLEY contended that the inquiry would be altogether imperfect without the information which Sir B. Walker alone could afford.—Lord PALMERSTON said that as the House seemed to concur in that opinion measures should be taken to bring Sir B. Walker home again.—The *Parochial Assessments Bill* was referred to a select committee, after some discussion and a division, in which the motion to that effect was carried by a majority of 47 to 15.—The *Local Government Act Amendment Bill* was read a second time.—The *Inclosure Bill* and the *Marriages Validity Bill* passed through committee.

TUESDAY.—*Recall of Sir B. Walker.*—Lord C. PAGET said that a telegram had been sent after the Narcissus, requesting Sir B. Walker to return, and give evidence before the committee on the administration of the navy.—Sir J. PAKINGTON asked if the message had not been delayed till half-past 11 that morning, and if the Avon which had been sent with it was not the slowest ship in the service?—Lord C. PAGET replied that both statements were perfectly true. But as the Narcissus had been forced to put back to Yarmouth, and the Avon was at Devonport, it was probable that she would be in time.—Mr. MACKINNON obtained leave to introduce a Bill to establish *Equitable Councils of Conciliation* to settle differences between masters and operatives.—Mr. A. MILLS moved for a select committee on *Colonial Military Expenditure*, to inquire and report whether any and what alterations may be advantageously adopted in regard to the defence of the British dependencies, and the proportions of cost of such defence as now defrayed from imperial and colonial funds respectively. The question was of considerable importance, since it involved the expenditure of 4,000,000*l.* a year, nine-tenths of which sum fell upon the taxation of this country. His object was to enable the colonies to realise those principles of self-reliance which alone would qualify them for self-government.—Mr. MARSH seconded the motion.—Mr. C. FORTESCUE said that Mr. Mills had greatly exaggerated the amount of the colonial military expenditure, the causes and conditions of which differed in different colonies, and that the doctrine that the colonies should defray the cost of their own defence might be carried too far. The question, in the opinion of the Government, was not a fit one for inquiry by a Committee of that House.—Mr. BAXTER and Lord R. CECIL supported the motion, and Mr. ADDERLEY strongly urged the Government to withdraw their opposition to an inquiry that might reduce a lavish and thankless expenditure, which taught the colonies to lean upon the mother country, and thus caused them to lose the strength and confidence inspired by self-reliance.—Lord PALMERSTON said that the objects sought by the motion were to determine the number of troops that should be maintained in each colony, and by whom they should be paid. The former question could only be properly determined by the Executive Government; and the latter must be a matter of negotiation between the home and colonial goverments. He could not, therefore, anticipate any practical result from the appointment of this Committee; nevertheless, if it appeared to the House that an inquiry was desirable he should not oppose the motion. The motion was then agreed to. *The Hop Duties.*—Mr. DODSON moved a resolution that the maintenance of any duties upon hops is impolitic, and that on any remission of taxation or adjustment of financial burdens, provision should be made for the removal of such duties. He pointed out the fluctuations in the yield of hops from year to year, contending that produce so uncertain was not a fit object for taxation. The system of long payments and postponements of duty, which were necessitated by the original injustice of the tax, were most objectionable and impolitic in principle. The tax was comparatively small in amount, and if it were done away the revenue would soon be amply compensated by the increased consumption of malt.—Sir B. BRIDGES seconded the motion, which was supported by Sir J. V. SHELLEY and Lord ROMSEY.—Mr. BRIGHT admitted that the Hop duty was absurd and ridiculous, and could never be regarded as a permanent source of revenue; but other imposts, and especially the paper duty, stood before it for remission.—Lord HOLMESDALE, on the contrary, contended that the tax on hops, as being a tax on the raw material, ought to have priority for remission.—The [illegible] EXCHEQUER said that the question now [illegible] turn upon the merits of the hop duty, [illegible] tinuing it as a source of revenue. [illegible] chargeable with many peculiar evils, being [illegible] precarious, and tending to press heavily upon [illegible] during seasons of distress. It was also [illegible] material. On the other hand it was [illegible] collected tax, and its collection, unlike [illegible] duty or the spirit duty, did not interfere [illegible] manufacture. The fact was, that hop cultivation [illegible] a lottery, in which the duty operated as a [illegible] prizes and an aggravation of the blanks. The [illegible] duty would not remove the liability to loss [illegible] the growers suffered through the operation [illegible] and though the product to the revenue was [illegible] fluctuation, he could not concur in the [illegible] ought, under present circumstances, to be [illegible] motion avoided all the other remissions with [illegible] be called upon to deal—the duties on tea, sugar [illegible] Income-tax, and pledged the House to an [illegible] which it might be most impolitic to fulfil.—[illegible] Lord H. VANE supported the motion.—[illegible] that every tax was a grievance, and the [illegible] sarily occasioned must be regarded entirely [illegible] the state of the revenue. The advocates [illegible] of the hop duty seemed to believe that the Chancellor of the Exchequer had a surplus to dispose of instead [illegible] face an enormous deficiency. Every proposal [illegible] duties ought to be postponed until the Budget [illegible] and the financial condition of the country [illegible] moment was critical, and the future state [illegible] of the revenue altogether mysterious. At such [illegible] was most inopportune to increase the embarrassments [illegible] Government. On a division the motion was [illegible] 202 to 110. *Naval Promotion.*—Sir J. ELPHINSTONE [illegible] a select committee to consider the present system [illegible] tion and retirement in the Royal Navy, and the [illegible] and position of the several classes of naval [illegible] report what changes therein are desirable with [illegible] increased efficiency of the naval service. There [illegible] of officers, he said, who had not just and [illegible] complaint, and he described the principle [illegible] to show that he did not move for a [illegible] insufficient reasons.—Mr. COCHRANE seconded [illegible] which was supported by Sir H. STRACEY, Admiral [illegible] Sir M. SEYMOUR, Sir J. PAKINGTON, and Lord J. M[illegible] opposed by Sir F. BARING and Lord C PAGET, [illegible] that the officers of the navy were underpaid, [illegible] the continual succession of motions and speeches [illegible] were called the wrongs of the navy, as being [illegible] excite discontent and injure the service.—Lord P[illegible] said that the rule of under pay prevailed [illegible] every branch of the public service, naval [illegible] and civil. If the inquiry was once opened [illegible] not in justice be limited to the navy [illegible] division the motion was carried by a majority [illegible] Mr. BUTT obtained leave to bring in a Bill to [illegible] effectual provision for the setting aside erroneous [illegible] granting new trials in *Criminal Cases*; and a Bill [illegible] amend the law relating to votes given for a [illegible] date at *Parliamentary Elections.*—Lord RAYNHAM [illegible] leave to bring in two Bills, one to amend the [illegible] Vict., c. 30, for the better *Prevention and* [illegible] *Aggravated Assaults*; and the other for the more [illegible] *Prevention of Cruelty to Animals.*

WEDNESDAY.—Mr. M. MILNES moved the second reading of the *Superannuation (Prisons Officers) Bill*, the object [illegible] was to induce the retirement of officers after they [illegible] incapable of discharging their duties.—Mr [illegible] it be read a second time that day six months.—[illegible] could not see that any better case had been [illegible] persons than for other officials.—Sir G LEWIS [illegible] objection. After some remarks in favour of the [illegible] KENDALL, Mr TOLLEMACHE, and Sir S N[illegible] Sir B. LEIGHTON against it, the House divided [illegible] was negatived by 140 to 61. The *Qualification* [illegible] passed through committee.—Sir J. TRELAWNY [illegible] for going into committee on the *Church Rates Bill*.—M[illegible]GATE moved as an amendment a resolution that [illegible] would on the following day resolve itself into [illegible] consider the propriety of establishing in lieu of [illegible] thenceforth to be abolished, a charge on all [illegible] respect of the occupancy of which church-rates have [illegible] within the last seven years; such charge to be [illegible] county rate at an uniform rate of poundage [illegible] being in all cases entitled to deduct from his rent [illegible] of the charge. He made this proposition in the [illegible] and conciliation, and said that its main feature [illegible] fixing this Church charge at 2*d.* in the pound, [illegible] that the amount be collected in the same manner [illegible] tax. He further proposed that all surplus moneys [illegible] vested until they reached a sum of which the [illegible] be sufficient for the rate—after which it would cease [illegible] that parish.—Mr. SELWYN seconded the resolution [illegible] some remarks from Mr. BALL and Mr. ALCOCK, [illegible] opposed the resolution, which made the levying [illegible] rates more compulsory than it was at present [illegible] destroyed their voluntary character.—Lord R C[illegible] the resolution on other grounds, declaiming [illegible] cession or conciliation after the speech of Mr Bright [illegible] debate on the subject. He felt satisfied that [illegible] satisfy the party to which Mr. Bright belonged [illegible] total abolition of tithes and confiscation of church [illegible] Lord ENFIELD likewise reprobated the speech of Mr [illegible] which had done more than anything else to [illegible] Church from the settlement of the question.—Mr. [illegible] was still in favour of compromise, but recommended [illegible] drawal of the motion. After some further debate [illegible] The House [illegible] NEWDEGATE withdrew his resolution. The House [illegible] into committee on the Bill.—Mr. CROSS moved a [illegible] providing that no church-rate shall be made or [illegible] parish in which no church-rate has been made or [illegible] the last seven years; that no church-rate shall be [illegible] any person who shall declare under his hand, [illegible] fide objects to the payment of church-rates, [illegible] person so exempted shall be entitled to vote [illegible] in reference to any church-rate, and that no church-rate [illegible] made for any other purpose than repairing [illegible] the fabric of the parish church and [illegible] lamented the speech of Lord R. Cecil, and said that [illegible] no surrender would only lead to continued [illegible] some remarks from Sir W. HEYGATE, Mr. ADDERLEY [illegible] Sir J. PAKINGTON [illegible] J. TRELAWNY, Mr. HENLEY and Sir J. PAKINGTON [illegible] strongly approved the policy of conciliation, but [illegible] the withdrawal of the clause and its introduction [illegible] stantive motion.—Mr. CROSS assented, and [illegible] clause. The Bill then passed through committee [illegible] committees on *Transportation* and *Metropolitan* [illegible] were nominated.

THURSDAY.—*Recall of Sir B. Walker.*—In reply [illegible] OSBORNE, Lord C. PAGET said that the Avon [illegible] without having intercepted Sir B. Walker.—Sir J. [illegible] asked why the Himalaya, or some other fast vessel [illegible] been despatched in pursuit?—Lord C PAGET asked [illegible] notice before he replied.—In reply to Major GAVIN [illegible] ARCHDALL, Mr. T. G. BARING said that Major [illegible] been suspended from all military duties while legal [illegible] were in progress. *The French in Syria.*—In [illegible]

[illegible] Lord J. Russell said that no proposal for increasing the French force in Syria had been made; and, therefore, he could not state what would be the answer of the [illegible]. The French army in Syria was between 7000 [illegible], and between 6000 and 7000 effective force.—[illegible] debate on *Italy* was resumed by Mr. E. James, [illegible] the accounts given of the material prosperity of [illegible] members. He defended with great [illegible] conduct of Garibaldi. He justified the conduct of [illegible] towards the King of Naples, declaring the [illegible] that the noble lord had prevented the King from [illegible] the head of his troops was simply absurd. He denied [illegible] excesses of the Piedmontese troops, but, if true, they were as nothing in comparison with the atrocities of the [illegible]. The policy of the British Government [illegible] been in accordance with the sympathies [illegible] and the honour and dignity of England.—Sir R. Peel [illegible] the tact and ability of the proceedings of Lord J. Russell in Italy. While such a policy was pursued abroad, [illegible] what small differences existed in our [illegible]. He rejoiced to see Victor Emmanuel [illegible] of Italian freedom. He declared that Venetia, [illegible] progress of events, must necessarily be associated with Italian unity, and believed that the same progress would [illegible] spiritual as well as to political liberty. He urged the Government to persevere in its support of Italian freedom, as long as the Italians proved themselves, as they had hitherto [illegible] their own affairs. He trusted that the re[illegible] until the world had seen the spectacle of a [illegible] regenerated Italy, supported by a reformed [illegible] priesthood.—The Chancellor of the Exchequer [illegible] the declamations of those who declared that the Italian revolution was a fraud and a fiction, and that the [illegible] of Italy had hitherto been deeply attached to the [illegible] Government which had so wisely administered their [illegible]. He reminded the House of Naples where perjury had [illegible] the tradition of its kings, and enlarged upon the flagrant [illegible] where the late monarch had audaciously violated the [illegible] to which he had solemnly sworn. No one, he said, [illegible] a throne with fairer prospects than the young King [illegible] Naples, and none had more recklessly thrown them away. [illegible] adverted to the Government of the States of the [illegible], distinguishing between the personal character of the [illegible] and his Administration, that execrable system of which [illegible] the Pope was both the instrument and the victim. He detailed various cases of executions and outrages in the [illegible] before the late revolution, acts which, whether [illegible] by their own Government or by a foreign soldiery, [illegible] justly exasperate the most patient people. He estab[illegible] by [illegible] proofs the fact of wanton and deli[illegible] murders at Perugia, and read details of particular [illegible] illegal executions in Modena, the pet state of Austria under the late "paternal" Government. Italy, he said, [illegible] had long yearned for unity, owed much to England, [illegible] debt of gratitude to France. But neither England nor France, nor even Victor Emmanuel, had made [illegible] unity; it was the policy which had been pursued [illegible] Austria towards Italy that had made her what she was.—Mr. Maguire denied the allegations of cruelty and atrocity which had been laid to the charge of the Papal and the Austrian Governments in Italy, and said that bigotry, party spirit, and the miserable intolerance of Exeter Hall, lay at the bottom of these attacks against the Pope.—Mr. A. Russell and Mr. Milnes expressed their approval of the policy of the [illegible] circumstances of great difficulty and delicacy.—Mr. [illegible] said that regarding the question simply in its [illegible] English interests, he wished to see Italy under one Government from the bottom of the Peninsula to the Mincio, wholly Italian. Against the power or the ambition of Russia, of Austria, and especially of France, a strong and independent kingdom of Italy would be the best safeguard for Europe. The great [illegible] was that Italy should become the vassal of France; and [illegible] preservation from this peril, he exhorted the Government [illegible] the policy which tended to extrude the Austrians [illegible] Italian territory. Austria was the natural ally of [illegible] on the Continent.—After some remarks by Mr. [illegible] and Mr. Monsell, Lord J. Russell said that the [illegible] had merely abstained, and sought to make other [illegible] abstain, from interfering with the free action of the [illegible] people in choosing their own rulers and forms of govern[illegible]. Many questions had been raised touching the com[illegible] merits of the Neapolitan, Papal, and Sardinian Governments. These did not lie within the jurisdiction of the British Parliament, but he nevertheless cited various instances showing the injustice, the atrocity, and the [illegible] of rule which prevailed under the old régime [illegible] the Neapolitan territories and the Papal States. He [illegible] the Austrian alliance, looking upon that Empire as [illegible] Conservative power; but he believed that the retention [illegible] Venetia was injurious to Austria herself, and could not [illegible] the assumption that England ought to interfere in any [illegible] prevent the disruption of that portion of the Austrian [illegible]. Throughout the whole series of events he had [illegible] to pursue not a party, but a national policy. He [illegible] that that policy was shared by the country, and [illegible] supported by it. After a few words from Mr. White, [illegible] Mr. Roebuck's views respecting Austria, the [illegible] was withdrawn, and the House went into Committee of Supply *pro forma*, the Chairman being immediately ordered to report progress.

Friday. *Church-rates.*—Sir J. Trelawny postponed the third reading of the Church-rates Bill until the 5th of June. *Recall of Sir Baldwin Walker.*—Sir J. Pakington again complained that a fast steamer had not been sent after the Narcissus, and Sir J. Elphinstone stated his belief that to prevent his giving evidence before the committee Sir B. Walker had been forced to leave in weather when no person would wish to go to sea.—Lord C. Paget denied the statement; the Admiralty did all in their power to secure his return, and no vessel at Plymouth would have been able to overtake the Narcissus.

[Left sitting.]

City Intelligence.

The Great Failures in the Leather Trade.—In the Court of Bankruptcy on Wednesday, Mr. Commissioner Holroyd gave judgment in the case of Messrs. Laurence, Mortimore, & Schrader. After reviewing the trading of the bankrupts and strongly condemning their dealings with accommodation bills, he said that the certificate of Mr. Laurence would be refused, but he would be at liberty to apply for protection after having been in prison six months; that Mr. Mortimore's certificate would be suspended for one year, and Mr. Schrader's for two years from the day of hearing, and when issued to be of the third class.

Money Market, Friday.—British Funds: Consols closed at 91½ for Money, and 92 to ⅛ for the 10th of April; Bank Stock, 234 to 232; Three per Cents. Reduced, for money, 91⅝ to ¾, cum div.; New Three per Cents., 91¾ to ⅞; India Stock, 221; Ditto Five per Cent. Stock, 100½ to 99⅞; Ditto Four per Cent. Debentures, 1858, 95½ to ¾; Ditto 1859, 95¾; Five and a Half per Cent. Enfaced Rupee Paper, 100¾.—Foreign: Brazilian Four and a Half per Cents, 1860, 85½; Belgian Two and a Half per Cents., 55; Ditto Four and a Half per Cents., 97; Mexican Three per Cents, for Acct., 23⅞; New Granada Active, 16½ to ¾; Sardinian Five per Cents., for Acct., 81⅞; Spanish Three per Cents., for Acct., 49; Turkish Six per Cents., 1858, for Acct., 53 to 52¾ ex div.; Ditto Guaranteed Four per Cents., 99⅞ to ¾.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,626,755	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	10,303,393
		Silver Bullion	848,362
	£25,626,755		£25,626,755

BANKING DEPARTMENT.

Proprietors Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£13,964,776
Rest	3,803,199	Other Securities	20,537,999
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	5,906,487	Notes	6,243,785
Other Deposits..	11,848,778	Gold and Silver Coin ..	[illegible]
Seven day and other bills	623,124		
	£36,734,588		£36,734,588

7th day of March, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY.—BANKRUPTS.—C. Dawes and C. Fiddian, jun., Birmingham, Coffin Furniture Manufacturers—J. Evans, Lampeter, Cardiganshire, Cattle Dealer—S. J. G. French, Norton Folgate, Chemist and Druggist—W. Gunnell and J. Browne, Landport, Hants, Biscuit Manufacturers—G. Harjette, Weaver Street, Bethnal Green, Skein Silk Dyer—J. Heck, Lincoln, Butcher—T. G. Johnson, jun., Coventry, Wine and Spirit Merchant—A. M. Owen, New Bond Street, China Dealer—C. Powell, Dartford, Kent, Grocer—G. E. Walker, Nottingham, Victualler—E. Weil, Bank Chambers, Lothbury, Merchant.

BANKRUPTCY ANNULLED.—R. Paddy, Brompton, Draper.

SCOTCH SEQUESTRATIONS.—A. Boswall and Company, Hawkslaw Works, Leven, Fifeshire, Spinners and Net Manufacturers—W. Dempsey, Lennoxtown, Campsie, Stirlingshire, Contractor—R. Field, St. Andrew's, Cupar, Fife, Tenant of the Royal Hotel—W. Freckleton, Glasgow, Hat and Cap Manufacturer—A. Gray and Sons, Perth, Manufacturers—D. C. M'Intyre, Glasgow, Brickmaker and Builder—J. Mitchell, Glasgow, Accountant and Sheriff Officer—F. C. Morris, Glasgow, Commission Agent—C. Pettie, Dunfermline, Baker.

FRIDAY.—BANKRUPTS.—E. Barnsley, Old Hill, Rowley Regis, Staffordshire, Gas Tube Manufacturer—W. Bennett, Nether Stowey, Somersetshire, Linendraper—W. Berrett, St. Mary-at-Hill, City, Licensed Victualler—T. Ellison, Liverpool, Baker—J. Farrar, Bury, Grocer—W. Beale, jun., Bishops Cannings, Wilts, Seedsman—G. Laver, Warwick Street, Pimlico, Watchmaker—E. Lewthwaite, Halifax, Watchmaker—F. Lock, Bridgwater, Somersetshire, Miller—G. Moore, Perry Barr, Staffordshire, Market Gardener—H. Noltey, Fieldgate Street, Whitechapel, Hotel Keeper—S. W. Richards, Birmingham, Hatter—A. Scherman, George Street, Minories, Merchant—H. T. Tidmarsh, Stratford-upon-Avon, Warwickshire, Draper—J. Wade, Blackburn, Ironmonger.

Metropolis and its Vicinity.

Testimonial to Sir James Outram.—A meeting was held on Tuesday at Willis's Rooms for the purpose of passing resolutions "with the view of giving public expression to the desire already recorded by a large and influential body of his countrymen to mark in a permanent manner their high sense of the great public services and eminent character of that distinguished soldier and statesman, Sir James Outram." The Duke of Argyll, who was to have presided, was unable to attend in consequence of the death of his father-in-law, the Duke of Sutherland. Lord Lyveden therefore took the chair, and spoke at some length in commendation of Sir J. Outram's career, and especially of the manner in which he had conducted the expedition to the Persian Gulf. The meeting was then addressed by Sir J. Fergusson, Bart., M.P., the Hon. A. Kinnaird, M.P., Mr. Crawford, M.P., Sir H. Rawlinson, The Earl of Shaftesbury, Colonel Sykes, M.P., Mr. James Burnes, and Lord Keane. The following resolutions were then unanimously adopted, and a committee was appointed to carry them into effect:—

"1. That this meeting desires to record its sense of the distinguished services of Lieutenant-General Sir James Outram, of his public character and private worth; and that, in order to give permanent expression to this feeling of respect and admiration, it is desirable that a public subscription should be opened with a view to the collection of funds for the erection in London of a statue of Sir James Outram, near that of his illustrious comrade, Sir Henry Havelock, and for such other memorials of his services as may be determined upon. 2. That the communities of the several Presidencies of India be invited to co-operate for these objects, and that a duplicate statue be erected in the metropolis of India. 3. That a service of plate, or such other heirloom as the managing committee may decide upon, be presented to Sir James Outram, with an address bearing the names of all those who have promoted the testimonial."

Proposed Increase of the Episcopate.—A memorial, signed by the Dukes of Buccleuch and Marlborough, the Marquis of Westminster, the Earls of Denbigh, Carnarvon, Romney, Nelson, Verulam, Effingham, and Galloway, Lords Eversley, Calthorpe, Redesdale, Leigh, Ebury, John Manners, M.P.; and Robert Cecil, M.P.; Sir John Patteson, Sir J. T. Coleridge, Mr. Adderley, M.P.; Mr. Sotheron-Estcourt, M.P.; Mr. Mowbray, M.P.; Vice-Chancellor Wood, Sir William Heathcote, Bart., M.P.; Sir Walter James, Bart.; Sir Walter Farquhar, Bart.; Sir S. R. Glynne, Bart.; Mr. Hubbard, M.P.; Mr. Kekewich, M.P.; Mr. Rogers, M.P.; Mr. Watlington, M.P.; Mr. Whateley, Q.C.; Mr. Roundell Palmer, Q.C.; and a large number of other influential laymen, asking for the adoption of measures for an increase of the episcopate, has been presented to Lord Palmerston, who has promised that the attention of the Government shall be directed to the subject. The memorialists state that the population of England and Wales has more than doubled itself during the last 50 years, but that the number of bishops has been only increased by one since the middle of the 16th century. In America and the British colonies the episcopacy may be increased according to the needs of the population, and they hold that it would be reasonable and just that a similar benefit should be enjoyed by her Majesty's subjects at home. The memorialists express their opinion that more frequent personal intercourse than is now practicable between a bishop and the clergy and laity of his diocese would promote unity and efficiency in the labours of those who are endeavouring to advance the moral and spiritual welfare of the people. They call his lordship's attention to certain dioceses which seemed to need subdivision, and in which there are already resources available for the foundation of additional sees. The diocese of London contains more than 2,000,000 souls. That diocese might be divided, and another see might be formed by converting the Collegiate Church of Westminster into a cathedral church, as it formerly was, and by raising the dean to the dignity of a bishop. Another diocese which requires subdivision is that of Exeter. It is the most extensive of any in England and Wales, and the cathedral city of Exeter is distant about 145 miles from the western extremity of the diocese. A similar instance may be found in the diocese of Durham, the population of which has increased with unexampled rapidity in the last few years. The income of the bishop is 8000*l.* a year, which greatly exceeds the average income of other sees. Means might thence be derived for the subdivision of that populous diocese, and for the erection and endowment of an episcopal see in the town of Newcastle-upon-Tyne. The memorialists having also called attention to the dioceses of Rochester, Lincoln, and Gloucester, conclude as follows:—

"Other dioceses might be mentioned which need subdivision. We consider, however, that the inhabitants of those dioceses are the parties most competent to express an opinion on this subject, and that, if they are desirous of such a subdivision, local contributions would not be wanting when once the necessary powers may have been given by Parliament for the erection of additional sees. With this view her Majesty's commissioners for inquiring into the state of cathedral and collegiate churches recommended, in 1855, that a permissive Bill should be framed and introduced into Parliament (similar to the Act 31 Henry VIII., cap. 9), empowering her Majesty and her Majesty's successors to divide any diocese under certain conditions of territory and population, and with the consent of the bishop where it is proposed to effect the division before the avoidance of the see. This recommendation of her Majesty's commissioners, among whom were the two archbishops, the late Bishop of London, the present Archbishop of York, and the Bishop of Oxford, appear to your memorialists to deserve attentive consideration; and since, as they understand, your lordship, on a recent occasion, expressed an opinion, in which they entirely concur, that any question of episcopal extension ought to be considered with reference to the country at large, they would earnestly entreat your lordship either to introduce into Parliament, or to support, such a legislative measure as may enable her Majesty's subjects who desire an extension of the episcopate to profit by such an exercise of the royal supremacy in constituting additional sees at home as has already been called into action and is now in operation, with very beneficial results, secular and spiritual, in the colonial dependencies of the British Crown."

The International Exhibition.—The Commissioners for the Exhibition of 1862 have issued a circular stating that they propose to retain the broad principle of classification laid down in 1851, according to which the industrial department of the Exhibition was divided into the three great sections of raw materials, machinery, and manufactures, these sections being further subdivided into numerous classes, the number of which, however, will probably on this occasion be slightly varied. In 1851 the arrangements for obtaining an instructive display of the industrial products exhibited in each of the classes were effected by means of local committees, while in connexion with the Paris Exhibition of 1855 the additional aid of trade committees was resorted to. The Commissioners are inclined to think that these arrangements on the present occasion might be more simple and systematic if conducted entirely through trade committees; but before finally deciding on this point they are desirous of obtaining the opinion of competent authorities with respect to it, and also with respect to the organisation and selection of the committees that may be determined on. With this view, the Commissioners have requested the following gentlemen to form a committee of advice.

The Marquis of Hartington, M.P.; Lord Stanley, M.P.; Lord Naas, M.P.; Lord Stanley of Alderley, the Lord Mayor of London, the President and Vice President of the Board of Trade, Thomas Bazley, Esq., M.P.; Thomas Field Gibson, Esq., and John Gott, Esq., Commissioners of the Exhibition of 1851; Dr. Lyon Playfair, C.B., Special Commissioner for the Exhibition of 1851, H. Cole, Esq., C.B., Commissioner for the Paris Exhibition of 1855, Warren Dargan, Esq., Dublin Exhibition, 1853, the President of the Royal Agricultural Society, the Chairman of the Society of Arts, the Chairman of the Royal Dublin Society, the President of the Institution of Civil Engineers, the President of the Institution of Mechanical Engineers, and the Presidents of the Chambers of Commerce of the United Kingdom.

Diocese of London.—The Bishop of London has conferred the rectory of St. Matthew's, Bethnal Green, value 500*l.* per annum, with a glebe house, on the Rev. Timothy Gibson, M.A., who has been for 18 years curate in charge of the parish. The Rev. Francis James Holland, M.A., of Trinity College, Cambridge, vicar of St. Dunstan's, Canterbury, has been appointed incumbent of Quebec Chapel, Marylebone, vacant by the preferment of the Rev. Dr. Magee to the rectory of Enniskillen; and the Rev. John Prior Farmer has been appointed minister of Berkeley Episcopal Chapel,

Mayfair, vacant by the resignation of the Rev. Francis Tate.

THE FRAUDS ON THE COMMERCIAL BANK.—On Friday, and again on Thursday last John Durden and James Holcroft were again brought up on remand, at the Bow Street Police Court, on the charge of being concerned in stealing various large sums of money, the property of the Commercial Bank. Some additional evidence was given, and the prisoners were again remanded in custody, Mr. Henry declining to accept bail to any amount for either prisoner.

THE SALMON FISHERIES OF ENGLAND.—During the autumn a Royal Commission has been inspecting the rivers of England and Wales, and inquiring into the salmon fisheries, with the view of increasing the supply of so valuable an article of food; and the report, with the evidence taken, has just been published in a volume of considerable size. The following is a summary of its contents:—

"Not only has the salmon fishery in England declined, but, unless timely measures be adopted for its recovery, it is threatened at no distant period with extinction. One point to be considered is the capture of fish out of season. There is, unfortunately, a ready market for cheap but unwholesome salmon in France, where it is supposed the ingenuity of cookery succeeds in making them palatable and harmless. The commissioners recommend that, in order to protect the salmon from capture or disturbance throughout the breeding season, it be 'close time' from the 1st of September to the 1st of February, except for anglers, to whom a few days later may be allowed, but not for sale. But there are other abuses to be dealt with. The law discountenances monopoly, and holds with the natural law of distribution, by which all, from source to sea, get their share of the produce of the waters; and, for the sake of the public interests, the law has always set its face against artificial obstructions to the free passage of the salmon ascending and descending the rivers in obedience to their natural instinct, and such an obstruction was pronounced by Lord Chief Justice Ellenborough a public nuisance at common law, which no length of time will make legitimate. Accordingly, the commissioners make the following recommendations:—That all fixed engines on the estuaries and seacoasts be suppressed by law; they scare away the fish when coming in shoals seeking the rivers; they are of modern invention or they would have been prohibited by the old statutes, as they are opposed to the whole aim and spirit of the fishing laws. That all fishing traps connected with mills, or placed in mill streams, be also suppressed, and that where there are mill or navigation weirs (not combined with any trap for taking fish), salmon ladders be put up as in Ireland, making the surplus water available for enabling the fish to surmount the weirs. There is more difficulty in the case of private fishing weirs or traps, because they are of great antiquity, recognised by ancient grants, and referred to in Acts of Parliament; but as they are at present of little value, and belong mostly to men of wealth, intelligence, and position, it is hoped that if they see other hindrances to the production of fish removed by law, they will not allow any privilege of theirs to stand in the way of the general good, and, at all events, these weirs should be placed under such regulation and supervision as may guard against abuses in the management of them, and against any further encroachment on the public rights; and in order to prevent the weirs being used so as to form, in violation of the intention of the law, an absolute bar to the passage of the fish, the proprietors should be required to leave what is called in Ireland a 'Queen's gap,' or 'Queen's share;' that is, an opening sufficient to allow the passage of some proportion of the fish to the upper waters, as the Irish Acts require. Further, it is recommended, with the same object, that there be a weekly 'close time,' from Saturday evening to Monday morning, during the open season. The sale of salmon roe to be prohibited. The commissioners recommend that some central authority, whether a new board or an existing department, be empowered to assist and control the local administration of the fisheries, which might be carried on by means of elected boards of conservators, the requisite funds to be raised by a rate on private fisheries and a licence duty on engines of all kinds, with perhaps, at first, some aid from local subscriptions. The expense of the salmon ladders might be defrayed from this fund where the weirs are of above 20 years' standing. The central authority might have some discretion to deal with the subject of poisoning by water from lead mines; at least, so far as to require in the case of new mines that efforts be made to neutralize or mitigate the mischief by the application of mechanical means. The commissioners are convinced that the salmon fisheries are capable, under judicious management, of supplying no inconsiderable amount of valuable food for the consumption of the people. That the improvement of these fisheries is a matter which concerns the public at large far more than any individual proprietor, but that any sacrifices required at the outset from individuals will be found to be more apparent than real, and to be amply compensated by the result in the course of a very few years. Every fact elicited during the inquiry bears witness to the conclusion that an open river is the best for all, and a recurrence to the ancient policy of this country, by the removal of obstructions, the sure and only road to the restoration of the fisheries.

MEDITERRANEAN EXTENSION TELEGRAPH.—The electric cable from Otranto to Corfu has been successfully submerged, and the line is now open for the transmission of messages.

THE PUBLIC HEALTH.—The weekly return of the Registrar-General states that the number of deaths registered in the week that ended Saturday, March 2d, was 1238, showing a considerable decrease on the return of the previous week. The average number obtained from the corresponding weeks of 10 previous years, 1851-60, corrected for increase of population, was 1387. The present return is therefore 149 below the average. During the week the births of 1020 boys and 1008 girls, in all 2028 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1762.

Provincial.

LIVERPOOL.—An inquest was held on Saturday in this town on the body of Captain Pyke, commander of the American ship General Parkhill, who was murdered on board that ship on the previous Monday. The ship had sailed on the Monday from Liverpool for Charleston, with a crew of 11 seamen. Soon after the pilot left the ship, when she had proceeded a little distance beyond the Bell Buoy, a mutiny broke out among the crew, which resulted in the murder of the captain, and the infliction of dangerous, if not indeed fatal injuries upon the chief mate, Cunningham Campbell, who was stabbed in 10 different parts of the body. The ship was brought back to Liverpool, and information having been conveyed to the police, a strong body of officers went on board, and placed under watch the whole of the crew. Those of the seamen who had not taken an active part in the murder were liberated, and admitted as witnesses, and from their evidence the jury returned a verdict of "Wilful Murder" against Dunlevy, Collins, Kelly, and Featherstone, who were committed for trial at the next assizes. Five of the crew have also been examined and remanded by the magistrates on the same charge.

MADRESFIELD.—The mansion of the late General Lygon, at Spring Hill, on the Broadway Hills, was partially destroyed by fire on the 19th ult. The late General's bedroom, Earl Beauchamp's bed-room, the pantry, and several other rooms near, were completely gutted; but the fire was prevented extending to the principal rooms. The pictures, furniture, and other valuables, were saved by the exertions of the neighbouring farmers and their labourers, but the damage done is estimated at between 5000*l.* and 6000*l.* The property was insured. The origin of the fire is not certainly ascertained, but is believed to have been caused by a beam in the chimney of the butler's pantry taking fire.

PENRITH.—The recent death of Mr. John Crosby, banker, of Kirkby Thore, a man highly respected by all classes of society, has revealed a state of insolvency which has caused great surprise and misery in Westmoreland. Mr. Crosby died very suddenly at his residence on the 12th ult., and on his executors examining his books after his death they found a great deficit. A meeting of the creditors was held on Saturday week in this town, when it was stated that the liabilities amounted to 81,000*l.*, and the assets to 39,000*l.*, leaving a deficiency of 42,000*l.* It is generally expected that the creditors will only receive about 5*s.* in the pound. The number of depositors was large. Many small farmers who had placed their money in the bank to be ready for their rent-day on the 25th March will be almost ruined; others who had taken farms had their money accumulating in the bank, as they thought, to stock them; farm servants had deposited their savings in Mr. Crosby's hands, and have lost all. The losses will be heavily felt in all the country side. It is supposed the insolvency must have been for a long time approaching a crisis, but Mr. Crosby kept his books strictly private, permitting no one, not even his son, who was in the office, to examine them. The creditors have appointed a committee of investigation.

PLYMOUTH.—The paddle-wheel steam-tender Avon left the Sound on Tuesday afternoon, in order, if possible, to intercept the screw-frigate Narcissus, now on her voyage to Madeira and the Cape, with Rear-Admiral Sir Baldwin Walker, and direct him to return to London to give evidence before the Parliamentary Committee on Admiralty administration. On Wednesday night the Avon returned to the Sound without having seen anything of the frigate.

PORTSMOUTH.—A discovery of considerable importance has been made in connection with the construction of the new lines of defence on the western side of Portsmouth harbour, which are executing by contract. Great numbers of piles have to be driven at different parts of the works, particularly at Alver Bank, where the main entrance to the works from the outer side will be formed, with culvert, &c., for supplying the moats with water at tide time. The authorities recently had occasion to draw some of these piles, and on examining them found each pile to be not only without its iron "shoe," but also 4 feet short of its stipulated length. This led to further examination, and in some work carried out by another contractor upwards of 100 piles which were drawn out were all found to be without their iron "shoe."

WISBEACH.—A shocking tragedy occurred on Saturday evening at the small village of Severington, Parson-drove, seven miles from this town. Mr. Augustus Hilton, who occupies a small farm there, drove his wife to Wisbeach Mart, and after dining together, left for home between six and seven o'clock, the husband being at the time the worse for liquor. On reaching home words ensued, which has been nearly a constant practice during the two years they have been married. The wife, who was a most respectable amiable woman, said she durst not live any longer with him, and would leave him and go to his father's. She then left the table where the tea was ready, and went up stairs. Her husband followed her and deliberately cut her throat, nearly severing the head from the body, and of course causing instant death. He then drove to his father's, a respectable farmer at Gedney Hill, about three miles distant, and told him that he had had as good a wife as ever walked, but he had cut her throat. In a few minutes he was in the hands of the police, and was conveyed to Wisbeach Gaol. On Monday morning he was privately taken before a magistrate, and remanded until the next day to await the decision of the coroner's inquest. The friends of both murderer and victim are very respectable, the murdered woman being the only daughter of a steam mill-owner and railway contractor, and she was within six weeks of her confinement.

Ireland.

THE YELVERTON MARRIAGE CASE.—The Court of Common Pleas in Dublin has been occupied ... with the trial of the cause of "Thelwall v. Yelverton," which has excelled in the interest of its ... incidents all the productions of dramatists ... The case was presented in the form of an ... whether the Hon. William Charles Yelverton ... surviving son of the Earl of Avonmore, and ... the Royal Artillery, was liable to pay Mr. Thelwall, an iron master residing at H... 259*l.* 17*s.* 3*d.* for the necessary maint... lodging of Mrs. Yelverton, and under ... inquiry there were laid before the jury ... auditory, and a scarcely less excited public ... of a marriage so romantic in its incidents ... all previous romances of the kind into the ... evidence on both sides has filled the Dublin ... nearly a fortnight to the exclusion of al... matters, several of them having omitted the ... ments and even their leaders in order to ma... the reports. The concluding speech of Mr. ... for the prosecution fills 17 columns of one ... papers, and the summing up of Chief Justice ... ghan occupied more than six hours in the ... The following is a summary of the evidence ... sides:—

The Hon. Mrs. Yelverton was the first witness ... She was sworn as "Theresa Yelverton." Mr. Brewster, for Major Yelverton, on one occasion called her Miss L... when she promptly remarked, "I am not Miss L..." and the judge ruled that she should be addressed ... she had given to the Court. She said that she ... Chetwood, in Lancashire. Her father was a silk ... Manchester, and was descended from an ancient ... mother died while she was very young, and she was ... France to be educated in a convent. Though ... were Protestants she was there brought up a R... Her father she described as an Atheist, who treat... severity, and made home disagreeable. After return... the convent in France she spent two years in Italy, ... completed her education. She had two sisters, ... educated in the same convent. One of these ha... French gentleman named Le Favre, at Boulogne ... paid a visit to this sister in 1852; and on her ... England she first met the defendant in the ... from Boulogne to Folkestone. She was accom... the steamer by her sister and her sister's husband ... weather was fine, and as the vessel was crowded ... many of the passengers remained on deck all night ... Yelverton was among them, and was polite and atten... during the voyage; they conversed a good deal ... one another, and he placed a plaid thrown into the ... her sister, over both their knees. When they ar... London he called a cab, and parted from her at the ... station, having obtained her address, which was at the ... dence of the Marchioness de la Belisle, where her sister ... Bellamy, was also staying. Major Yelverton paid her a ... there the next day, and she saw and heard nothing ... him for years. She went from London to Italy, ... Naples the chance suggestion of a banker ... applied to send a letter to a cousin in ... send the letter under cover to Major Yelverton at M... a request that he would forward it to her cousin ... packet. This led to a correspondence, which was ... years, and became warmer as it proceeded. When the ... war broke out she went to Constantinople with the ... Sisters of Charity. She wore their dress, but ... vows. While attending the sick and wounded ... Hospital she received a visit from Major Yelverton ... made her an offer of marriage, and asked her ... hospital, lest she might take fever or some other ... was about two years after the correspondence ... But she declined to leave the hospital ... was over. Soon after she went on a visit to ... Lady Straubenzee at Balaklava, where she ... six weeks. There Major Yelverton was ... visitor, and was received as her affianced ... knowledge and sanction of the General and ... whose protection she was living. He then ... mentioned his pecuniary difficulties, and said ... marry no one but a lady who could pay his ... would do. She replied that her fortune was not ... control, and she had but a life interest in it. He ... "because he could not stay away," and proposed a ... riage in the Greek Church of Balaklava, to which ... She returned to England in 1857; after that she ... burgh, Major Yelverton being then stationed ... Edinburgh she resided with Miss Macfarlane, ... author of that name, a convert to the Church ... now a Sister of Charity in London. In Edinburgh ... verton proposed a Scotch marriage, and perform... mony by reading together with Miss L...ngworth, ... service in Miss Macfarlane's Prayer Book, which ... the table. She was not satisfied with this ceremony ... that marriage is a sacrament, and that it would ... live with her husband, unless the union ... by a priest. Therefore she steadily refused ... In order to satisfy her scruples Major Yelverton ... a marriage by a Roman Catholic clergyman. She ... with her sister, Mrs. Bellamy, in Wales; and ... from Milford Haven to Waterford, where she met ... verton by appointment. There and at Th... ... and at Newry, whither they went in search ... stopped at the same hotels, but did not cohabit ... they found at Rostrevor, near Newry, a priest ... Mooney—willing to perform the ceremony, having ... dispensation from the Bishop to do it privately ... ton had bought a wedding-ring at Dublin, which ... wore. They met the priest in the chapel ... altar. She and Major Yelverton knelt together at ... repeated after the priest the marriage ceremony ... omitting nothing important. When the ceremony ... Major Yelverton gave the priest two ... notes, one ... pensation and one for his own fee. After that ... husband lived like married people, which they ... before. Major Yelverton had stated to the priest ... Catholic, and he feared not a good one, but was ... Protestant, and was therefore free to marry a Catholic ... the marriage they went to the Giant's Causeway ... to Belfast, where they parted, he going ... to Edinburgh. In about a fortnight he ... and they went on a tour in the Highlands ... burgh they were known as man and wife ... were received by Mr. and Mrs. Thelwall ... visitors' book at Doon Castle her husband wrote ... Mrs. Yelverton." He also put her name ... in a passport when they went to travel on ... Dunkirk he introduced her to a gentleman ...

[illegible] as man and wife at the *table d'hote* in the [illegible]. His leave of absence having expired he [illegible], where she became seriously ill. Madame [illegible], treated her barbarously after [illegible], on the pretext that she was not married at all, [illegible] under the false pretence that she was a [illegible] in the family way, and she told Major [illegible] towards her child required that she [illegible] the marriage, the knowledge of which he was [illegible] to keep from his family, as he had pledged [illegible] to marry without the approbation of his father. [illegible] Mrs Yelverton then went to her sister in [illegible], she was affectionately nursed. When she re-[illegible] to Scotland, and lived at Leith. There had [illegible] while she was at Bordeaux, but till within [illegible] of their final separation Major Yelverton [illegible] to write affectionate letters to her, affecting much [illegible] her health. He then told her that he was a [illegible] unless she consented to go to Australia or New [illegible], where he promised to join her in a few months. He [illegible] that she would go to Glasgow on her way, and his [illegible] meet her there in order to make arrangements [illegible] for her future support. She did not consent [illegible]. She remained at Leith, and in a few [illegible] of her husband's marriage with the widow [illegible] Forbes, of Edinburgh. She therefore [illegible] against him in the Scotch courts for her support as [illegible], on the strength of the Scotch marriage. He allowed [illegible] to go by default, and paid the money. The present [illegible] of a claim of the same kind, made on her behalf [illegible]. Mrs Yelverton's examination lasted three [illegible], two of which were occupied by one of the severest cross-[illegible] that has ever taken place in a public court. [illegible] prolonged ordeal she exhibited perfect self-posses-[illegible], unreserved, and dignified demeanour which [illegible] the sympathies of the court in her favour. [illegible] close of her cross-examination Mr. Brewster, [illegible] leading counsel for Major Yelverton, addressed [illegible] at great length, and contended that Major [illegible] never had any intention of marrying Miss Long-[illegible], that she followed him from place to place, and was [illegible] that she never could become his wife. Major Yel-[illegible] was then examined. He denied altogether the state-[illegible] of Mrs. Yelverton, and gave a very different account of [illegible]. He said that when they first met on board [illegible] steamer, she told him the history of her life, her [illegible] relations with her father, and said she and her [illegible] living in London, unknown to the world. At [illegible] station she invited him to accompany her to her [illegible], where he might dress, and save himself the trouble [illegible] to the United Service Club for that purpose. He did [illegible] her home in the cab, and dressed in a room to [illegible] conducted him. When he visited her in the hospital [illegible] he sat two hours alone with her, in a small room, on [illegible]. She took off her nun's cap. He made love to her, said [illegible] very loveable and attractive, put his arm round her [illegible], and kissed her several times. He confessed that there, [illegible] sofa, in the hospital where she was attending the [illegible] wounded soldiers, he formed—not the "design," that [illegible] too strong a word—not the "desire," that too was [illegible] strong a word—but the "idea" of making [illegible] his mistress. Nor did he think that incompatible [illegible] her holy mission there, for "some of the kindest-hearted [illegible] in the world are mistresses." Lady Straubenzee was [illegible] the hospital at the time of his visit, and she invited Miss [illegible] to go with her to Balaklava, which she did, and [illegible] six weeks. During that time Major Yelverton was [illegible] daily guest at General Straubenzee's hut, still [illegible] the "idea," and longing to realise it, and seeking [illegible] to do so while she was under the protection of [illegible] and his wife. At length the day arrived for the [illegible] departure for Constantinople. She was accom-panied to the steamer by General Straubenzee, Captain Straubenzee, and Major Yelverton, on whose car they went [illegible] the landing-place. Major Yelverton went on shore [illegible] others, and having started them off, he stole back to [illegible] steamer in pursuance of an arrangement which he said he [illegible] with Miss Longworth as they went down on the car. [illegible] together on the poop of the ship. He put his arm [illegible] her waist, and kissed her very much, they were both [illegible] excited, and then and there he attempted her virtue. [illegible] the Chief Justice ordered the ladies to leave the [illegible], and the details which followed were unfit for publica-[illegible]. He did not then succeed in his object, but he said that [illegible] on a subsequent occasion, and his evidence went [illegible] that she continued to be the slave of her [illegible] for him. He swore that he never loved her "purely [illegible] honourably," that his love was based upon dishonour from [illegible], that he never thought of marrying her, and that his [illegible] was to make her his "mistress-in-law." He [illegible] they had illicit intercourse in Edinburgh and in all [illegible] hotels where they stopped, and he denied that there [illegible] a Scotch marriage. There were portions of his [illegible] which excited intense indignation in the audience, and his leading counsel admitted that it was impossible to restrain the ebullitions of popular feeling unless the court ceased to be an open court. He produced a sensation by his definition of a "gentlewoman." A lady, he said, might have education, other accomplishments, manners, and virtue, but he would not consider her a gentlewoman if she had not "gentle blood," which Miss Longworth wanted, because her father was only a silk merchant at Manchester. Major Yelverton also volunteered a definition of seduction which [illegible] astounded the audience. When asked whether he [illegible] seduction laudable, he answered that "its lauda-[illegible] or otherwise" depends upon whether it is found out, on [illegible] position of the parties, and the blame it meets with. It is [illegible] laudable, he said, if the person seduced is a gentle-[illegible], as she has more to lose, and loses position. [illegible] statement was hissed by a portion of the audience. [illegible] reference to Mrs. Yelverton's distress of mind about the [illegible] her child being born to shame, if the secret marriage [illegible], he said that, in writing to her that "the [illegible] feared could be avoided," he meant that there were [illegible] of preventing its coming to maturity," an expression [illegible] he afterwards qualified by saying that the doctors could "manage to get the child born alive without letting it go to its [illegible]." He admitted that he took part in the ceremony in [illegible] of Rostrevor, that he told the priest he was a Pro-[illegible], but that Protestants called themselves Catholic; that [illegible] with a ring on the lady's hand; and repeated [illegible] service in the usual way, but not with the inten-[illegible] her his wife, having only consented to the [illegible] without witnesses in order to quiet the con-[illegible] Miss Longworth, whom he intended to make his [illegible]. The officiating priest was the Rev. Mr. Mooney, [illegible] that Major Yelverton said he was a "Protestant [illegible], that he read the service while they knelt before the [illegible], and that he received 10*l*., half of which was for his [illegible], and the other half for the bishop for granting the dispensation, but he kept the whole amount himself. He did not consider that he married them, but only renewed their consent, and it was agreed between him and Mrs. Yelverton [illegible] witnesses should be present, lest the secret should [illegible] the Major was a Protestant. He had, however, [illegible] a certificate of the marriage, stating that it had been [illegible] solemnised by him in the chapel in the presence of [illegible] witnesses. This evidence was received with hisses by the court. A great deal of evidence was then given by hotel people with reference to the beds occupied by Major and Mrs Yelverton in Ireland previous to the marriage ceremony at Rostrevor. The witnesses generally broke down on cross-examination, and in one case where a servant girl was produced to swear that Major and Mrs. Yelverton had occupied the same bedroom at the Midlands Hotel, and that Mrs. Yelverton had called upon her to ascertain what she could prove, a great sensation was produced by Mr. Whiteside confronting with the witness a young woman for whom he had telegraphed, and asking whether she was not the person who had called upon her with a lock of hair resembling that of Mrs. Yelverton for the purpose of bringing that lady to her recollection. The witness, pressed by Mr. Whiteside's questions, hesitated, wavered, doubted, and at length admitted that the young woman there quietly looking at her might be the person who had visited her as she had detailed. On Friday afternoon Mr. Serjeant Armstrong commenced his address to the jury, and resumed it on Saturday morning. Mr. Whiteside then replied for the plaintiff in a speech which lasted for six hours, and was not concluded till Monday. At the conclusion of his speech loud and enthusiastic cheers burst forth from every part of the court, accompanied with the waving of hats and handkerchiefs, which lasted several minutes.

Chief Justice Monaghan commenced summing up on Monday and concluded a charge very favourable to the plaintiff at 6 o'clock, when, amid breathless silence, the jury, who were seven Protestants and five Catholics, retired. At 20 minutes past 6 the jury returned, and stated, in answer to the Chief Justice—1st, that they had found the Scotch marriage to have been a valid one; and 2d, that there was a good Irish marriage. The Chief Justice asked them if they found Major Yelverton was a Roman Catholic, to which they replied that they did. The moment the jury announced their verdict the excitement of the audience burst into applause, which was continued for several minutes, and was taken up by the immense crowd which thronged the hall and crowded the quadrangle and quays. Cheers were given for the jury, Mr. Whiteside, and the other leading counsel for the plaintiff, and the cheers for the jury were redoubled when the foreman was seen to hand back to the Registrar the fees usually given to special juries. Mrs. Yelverton was in one of the chambers of the court, and when Mr. Whiteside entered the room, she sprang forward without saying a word, clasped both his hands in hers, pressed them convulsively to her breast, and kissed them. Overcome by the violence of her emotions, after such a long and terrible tension of the nervous system, she sank down exhausted and found relief in a flood of tears. The excitement outside the court when the verdict was announced was quite unprecedented. The route from the court to the Gresham Hotel in Sackville Street was thronged with thousands of persons of all ranks, a long line of carriages in which the ladies of Dublin had driven down to learn the result being drawn up on one side of the street. The crowd insisted on taking the horses from her carriage in order to draw her to her hotel, and the populace walked as a procession, arm-in-arm. After she had entered the hotel the people amidst tremendous cheering, waving of hats and handkerchiefs, called loudly for Mrs. Yelverton, who in compliance with the universal call of the vast multitude, presented herself at one of the drawing room windows, and said:—"My noble-hearted friends, you have made me this day an Irishwoman, by the verdict that I am the wife of an Irishman. I glory to belong to such a noble-hearted nation. You will live in my heart for ever, as I have lived in your hearts this day. I am too weak to say all that my heart desires, but you will accept the gratitude of a heart that was made sad and is now made glad. Farewell for the present, but for ever I belong in heart and soul to the people of Dublin." Mrs. Yelverton then withdrew amidst loud and long-continued cheering. Nothing is more certain than that if Major Yelverton had fallen into the hands of the mob he would have been thrown over the wall of the Liffey, or torn to pieces. Various rumours are in circulation respecting the intention of Mrs. Yelverton and of the Crown as to the ultimate proceedings, and it is ascertained that the question of the validity of the marriage will be carried by Major Yelverton to a higher court. It was stated in Parliament on Thursday that the Secretary of War had suspended Major Yelverton from his military duties until the question has been finally settled.

The Funeral of Captain Boyd.—The ceremony at the funeral of Captain Boyd on Friday was of an imposing character. The body was landed at Kingstown amid the firing of minute guns; and a procession, including about 300 officers, seamen and military, followed. After parading Kingstown the procession proceeded by train to Dublin, where it was joined by a firing party, a large detachment of military, and 200 students. The coffin was carried on a gun-carriage, followed by deceased's dog, and a seaman carrying his hat and sword. On the procession arriving at St. Patrick's Cathedral it was met by the Lord Lieutenant, the Lord Mayor, and others. The funeral service was then read, and the body committed to the grave.

Railways.

The Fatal Accident on the South-Western.—The inquest on the death of Dr. Baly, after nine adjournments was concluded on Monday at Merton, when Colonel Yolland of the Board of Trade, Mr. Bidder, President of the Institute of Civil Engineers, and other professional witnesses were examined. Colonel Yolland deposed that the accident was not caused by anything connected with the wheel of the tender. The only cause which he could assign for the carriage going off was the tightness of the gauge at one particular point where the side of the rail was laminated to a trifling extent; but this was not, in his opinion, attributable to any culpable neglect on the part of the company's servants, and might have been caused by the effects of the "packing" of the longitudinal sleepers, which, in his opinion, were not so well adapted for the narrow gauge as the transverse sleepers. He thought there should be a break-van attached next to the tender, and also one at the tail of the train; and if there had been such an amount of break power it was probable, but he would express no confident opinion, that the carriage in which Dr. Baly was travelling might have been arrested at a point before it went off the line. The jury after a consultation of upwards of two hours found the following verdict:—

"The jury find a verdict of Accidental Death, and they say this investigation has shown that one of the wheels of the tender was in a very dangerous state from the improper way in which the studs were inserted, although the evidence disproves this to have been the cause of the accident. We, the jury, strongly recommend to the consideration of the directors that additional break power should be applied to all passenger trains. We also cannot disperse without expressing our approval of the conduct of the guard, engine-driver, stoker, and pointsman for the promptitude and presence of mind displayed on this occasion."

Law.

SPRING ASSIZES.

Northern Circuit: Newcastle-on-Tyne.—*Malicious Shooting.*—*Mr. William Bewicke*, of Threepwood, near Hexham, was tried and convicted on the 1st inst. before Mr. Justice Keating, of a charge of maliciously shooting at two sheriff's officers on the 12th January last, with intent to do them grievous bodily harm. The case occupied the whole day, and the court was crowded. Mr. Bewicke is a gentlemanly-looking man of 36 years of age, and of good address, though of somewhat eccentric manners. He is the owner of a good estate near Hexham, in a beautiful district overlooking the vale of the Tyne; and about 18 months ago was a magistrate in the county of Northumberland. About the time mentioned he took it into his head that the wife of one of the hinds employed upon the estate had been guilty of theft, and on that supposition had her apprehended, and examined her in his own kitchen. He afterwards ordered her to be placed in durance, and next morning had her taken across the country to a magistrates' meeting at Haydon Bridge. As there was not a tittle of evidence to cause the detention of the woman the justices discharged her, and as great cruelty had been exhibited by prisoner to her while in custody she brought an action against Mr. Bewicke at the assizes, and recovered 50*l*. damages with costs. The conduct of Mr. Bewicke was also represented to the Lord Chancellor, and his lordship ordered his name to be removed from the roll of county magistrates. It seems that the prisoner had paid the damages and costs recovered by the plaintiff in the action, but he refused to pay his own attorney's bill, and they took out a writ against him, and in the early part of January entrusted it to Mr. Stainthorp, a sheriff's officer, at Hexham, to enforce it. On the 11th of January he and two followers proceeded to Threepwood with that purpose, but upon reaching the hall they found that the prisoner had received information of their intended visit, and had put his residence in a state of defence. He had a parley with the officer from one of the hall windows, and cocking a revolver, threatened to shoot him and his followers if they did not be off; as he swore that he would not pay the attorneys a penny. They however, were not intimidated by the threats, and the officer having taken possession of the stables and cow lyers, left his men encamped under a cart-shed all night. About 6 o'clock the next morning the prisoner having ascertained that the men were still under the shed, attempted to "pot" one or both of the bailiffs, "keeping up the fire" until the officer and several policeman arrived from Hexham. He then opened the hall door and made a rush at Stainthorp to shoot him, but he was disarmed by the policeman and taken into custody. The prisoner pleaded his right of being tried by his peers, but was informed by the judge that he could only object to any name in the list of common jurymen furnished by the sheriff. The jury, in finding him *Guilty*, recommended him to mercy. On being placed in the dock on the following morning to receive sentence the usual question was asked the prisoner, who objected to the mode in which he had been tried. He was sentenced to be kept in penal servitude for the period of four years. Prisoner: "I appeal against this. It is infamous to send a gentleman——" With this remark the prisoner was removed. Carlisle.—*Manslaughter*, *William Beaty*, 36, was charged with the manslaughter of his father, David Beaty, at the parish of Kirklinton, on the 2d of August last. The deceased was a passionate old man and often quarrelled with the prisoner, who in defending himself as he stated from a blow aimed at him by his father, struck the old man on the head and fractured his skull. The jury returned a verdict of *Guilty*, and the prisoner was sentenced to 15 months' imprisonment.

Western Citcuit: Winchester.—*The Wife Murder at Ryde.*—Henry Lacey, a farmer at St. Helen's near Ryde, Isle of Wight, was indicted for the murder of his wife, Jane Lacey. Sarah Willey, niece of the deceased woman, who had been committed for trial, on the charge of being an accomplice after the fact, was, at the suggestion of the judge, transferred from the dock to the witness-box. The jury found the prisoner guilty of Manslaughter, and Mr. Justice Willes sentenced him to six years' penal servitude.

Midland Circuit: Leicester.—*Murder by a Midwife.*—*Elizabeth Goddard*, aged 45, described as a midwife, was charged with the Wilful Murder of Sarah Kellam, a married woman separated from her husband, by inflicting such internal injuries upon her in endeavouring to produce miscarriage, that inflammation of the bowels supervened and ended in death. The evidence disclosed a shocking state of immorality on the part of deceased and her daughters, as well as of a man called Harrison, with whom she had been living since she left her husband, though they all appeared to be persons in a respectable position. The prisoner appeared from the evidence to be in extensive practice in the way referred to, and to be in the habit of receiving for her services from 1*l*. to 5*l*. from the women who consulted her under the pretext of having their fortunes told. The jury returned a verdict of *Guilty*. Mr. Justice Crompton then put on the black cap, and after expressing his fears that the prisoner had for some time been carrying on the fearful trade the pursuit of which had led her into her present position, said that, although the prisoner had no intention of killing deceased, yet death having ensued from her felonious act, she was guilty of murder. The learned judge added that he trusted the result of this trial would be to deter others from

pursuing so fearful a calling. His Lordship then passed sentence of *Death* in the usual form.

OXFORD CIRCUIT: OXFORD.—*The Charge of Starving a Servant Girl.*—*Mr. Robert Durno Mitchell*, a retired naval surgeon, of Henley-on-Thames, was charged with the manslaughter of his servant, Henrietta Clarke, in not providing her sufficient food. The trial occupied about 12 hours, but the evidence failed to establish the charge, the deceased being a person of weak intellect and impaired health before she entered the prisoner's service, and it was suggested that if she died from insufficiency of food, she must herself have abstained from eating it, as there was no attempt on the part of the prisoner or his family to deprive her of it. The jury, without leaving the Court, deliberated a few minutes, and then returned a verdict of *Not Guilty*. Mr. Justice Blackburn said he concurred in the verdict, and did not see how they could come to any other conclusion. The announcement of the verdict gave rise to some hissing in the body of the Court.

BIRTHS.—On the 1st inst, at 1, Hamilton Place, Lady AUGUSTA FREMANTLE, of a daughter—28th ult, at 34, Hyde Park Gardens, the residence of A. Mills, Esq., M.P., the wife of J. BARTON A. ACLAND, Esq., of a daughter—28th ult, at Killinchy, county Down, the wife of the Hon. RAWSON W. RAWSON, Esq., C.B., Colonial Secretary of the Cape of Good Hope, of twin daughters—2d inst, at 43, Lowndes Street, the wife of Colonel NEWTON, Coldstream Guards, of a son—2d inst, at 12, Norfolk Crescent, Hyde Park, the wife of Captain TYLER, Royal Engineers, of a daughter.

MARRIAGES.—On the 23d ult., at the British Consulate at Nice, France, Lieutenant-Colonel C. CHESTER MASTER, C.B., of H.M.'s 5th Fusiliers, to MADELINE HARRIET LOUISA, second daughter of Sir WILLIAM CURTIS, Bart., of Laynham Court, Ludlow, county of Salop.—26th Jan., at the Cathedral, George Town, AUGUSTUS FREDERICK GORE, Assistant Government Secretary of the Colony, Private Secretary and A.D.C. to the Governor, son of Captain the Hon. E. Gore, R.N., to ELIZA ARABELLA AUSTIN, eldest daughter of the Bishop of Guiana—28th ult, at St. Nicholas Church, Warwick, CHARLES TEMPLE, Esq., of the Bengal Civil Service, to HANNAH MARIA, youngest daughter of the late MICHAEL THOMAS SADLER, Esq., M.P., F.R.S.—1st inst, at Cross Street Chapel, Islington, the Rev. JAMES POOLEY, of Corsham, Wilts, to CORNELIA LIGHTFOOT, eldest daughter of the late Major-General Lightfoot, C.B., late Colonel of the 62d Regiment—28th ult, at St. Stephen's, Paddington, THOMAS FRANCIS JEKEN RUSSEL, Lieutenant 3d M.N.I., only son of the late Major-General Russel, Royal Artillery, to EMMA LOUISA, eldest daughter of the late Rev. JOHN PEACOCK BYDE, M.A., Pembroke College, and of Bengeo, Herts.

DEATHS.—On the 25th ult, at Leamington, MILDRED VIOLET, youngest daughter of the Hon. and Rev. GRANTHAM M. YORKE, aged 16—3d inst, at 1, Dean Street, Park Lane, ANNA MARIA, widow of the Hon. CHARLES B. AGAR, at an advanced age—27th ult, at Belsay Castle, Lady MONCK, wife of Sir Charles Monck, Bart.—26th ult, at Campsall Hall, near Doncaster, JANE, widow of CHARLES THOROLD WOOD, Esq., of South Thoresby, Lincolnshire, and only daughter of the late Sir John Thorold, Bart., M.P., aged 77—28th ult, at 4, Shandwick Place, Edinburgh, Miss SOPHIA CUMMING, last surviving daughter of the late Sir Alexander Penrose Gordon Cumming, of Altyre and Gordons Town, Bart., aged 75—28th ult, at his residence, Fysche Hall, Knaresborough, HUGH GEORGE CHRISTIAN, Esq., late Bengal Civil Service, second son of Rear-Admiral Sir Hugh Clobury Christian, K.B., aged 73—27th ult, at Whitchurch, Glamorganshire, RICHARD BLAKEMORE BOOKER, eldest surviving son of the late T. W. Booker Blakemore, Esq., M.P., of Velindra, in the same county, and The Leys, Herefordshire, aged 32—3d inst, at the Rev. F. Margett's, Duxford Vicarage, near Cambridge, HERBERT MOLYNEUX BULLER, fourth son of James Wentworth Buller, Esq., of Downes, M.P. for North Devon, aged 15—4th inst, at East Sheen, Surrey, EDWARD PENRHYN, Esq., magistrate for the county of Surrey, and brother-in-law of the Earl of Derby, aged 66—27th ult, at Fern Hill, Farnboro', SUSAN MARGARET EVELYN MITCHELL, youngest daughter of the late Colonel Hugh Mitchell, Grenadier Guards, aged 8—26th ult, at his residence, Parklands, Gloucestershire, Major MAURICE CELY TREVILIAN, of Midelney, Somersetshire, aged 64—1st inst, at Brighton, JOHN WALTER HULME, Esq., late Chief Justice of the Supreme Court, Hong Kong, China, aged 56—23d Jan., at Hamilton, Bermuda, the Hon. THOMAS BUTTERFIELD, formerly Chief Justice and President of the Council of that Colony—30th Jan., near Philæ, First Cataract of the Nile, accidentally drowned while bathing, DANIEL, youngest son of DANIEL CAVE, Esq., of Cleve Hill, Gloucestershire, aged 25—28th ult., at Sussex House, Slough, THOMAS GOULD, Esq., late of Curzon Street, London, aged 68—25th ult., at Redcar, EDWARD KEMP, B.A., Captain North York Rifles, only son of Edward Rounthwaite Kemp, Esq., of Layton Hall in the county of York, aged 26—26th ult., at Greenford Hall, Middlesex, ROBERT RIGG, Esq., F.R.S., aged 68—21st ult., at Up Ottery, near Honiton, Devon, RICHARD, third son of the Ven. Archdeacon RUSHTON, D.D., vicar of Blackburn, Lancashire, aged 29—27th ult., in the Cloisters, Chichester, the Rev. WILLIAM MILLER, Minor Canon, aged 79—3d inst., at Nice, S. France, the Rev. RICHARD TOWNSEND, J.P., rector of Ickford, Bucks, aged 51—27th ult., at the Rectory, Baconsthorpe, the Rev. JOHN ANTHONY PARTRIDGE, M.A., rector of Baconsthorpe and Bodham, in Norfolk, aged 66.

Markets.

COVENT GARDEN, March 9.

Supplies of winter Greens though improving are still insufficient for the demand. Large quantities of excellent Broccoli continue to arrive from Cornwall. Continental contributions are also still imported. Pine Apples and Grapes have altered but little since our last. Oranges may be obtained at about last week's prices. Good Cobs may be had at from 1s. to 1s. 6d. per pound. Asparagus, French Beans, and new Potatoes may now be had. Cucumbers are scarce. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Camellias, Heaths, and Roses.

FRUIT

Pine Apples, per lb., 6s to 10s	Pears, per doz., 3s to 6s
Grapes, per lb., 8s to 14s	Apples, per doz., 6d to 1s 6d
— new, per lb., 20s to 24s	Oranges, per 100, 6s to 10s
Strawberries, per oz., 2s	Lemons, per 100, 6s to 10s
Pomegranates, each, 4d to 6d	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 3s	Celery, p. bundle, 1s 6d to 1s 9d
Green Peas, p. ½ sieve, 20s	Onions, p. ½ sieve, 1s 6d to 2s 6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 4s to 12s
Cabbages, do., 2s to 3s	Rhubarb, p. bundle, 9d to 1s 3d
Potatoes, p. ton, 90s to 160s	Seakale, p. punnet, 2s to 3s
— per bus., 4s to 6s	Shallots, per lb., 6d to 8d
— per cwt., 6s to 10s	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 1od	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 6d to 8d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 4s to 5s	Mushrooms, p. pott., 1s 6d to 2s
Cucumbers, each, 2s to 3s	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 3s to 4s	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, March 7.

Prime Meadow Hay	75s to	85s	Clover	90s to	115s
Superior do. (old)	90	105	New Clover	—	—
Inferior do.	50	60	Old second cut	80	100
New do.	—	—	Straw	33	38
Rowen	—	—			

DAVIS & CO.

WHITECHAPEL, THURSDAY, March 7.

Fine old Hay	100s to	108s	Fine old Clover	110s to	120s
Inferior do.	60	80	Inferior do	80	100
Prime New Hay	—	—	Fine 2d cut	90	100
Inferior do.	—	—	Inferior do.	—	—
Straw	36	40	Fine New Clover	—	—

HOPS.—BOROUGH MARKET, FRIDAY, March 8

Messrs. Pattenden & Smith report that the market is firm, with but little doing.

BUTTER MARKET.—March 8.

Best Fresh Butter	18s. per dozen lbs.
Second do. do.	15s. „ „

Pork, 4s. 4d. to 5s. 0d. per 8 lbs.

POTATOES.—SOUTHWARK, Monday, March 4.

During the past week the arrivals both coastwise and by rail have been very large, and more than equal to the demand, and a further reduction in price has been the consequence. The following are this day's quotations:—York Flukes, 150s. to 160s. per ton; Lincolnshire Regents, 100s. to 110s.; Dunbar Red Soil do., 150s. to 160s.; do. do. Reds, 105s. to 110s.; North Berwick Regents, 120s. to 125s.; Fife, Forfar, and Perth do., 90s. to 105s.; do. Rocks and Reds, 90s. to 95s; do. do. Reds, 80s. to 90s.; French Whites, 60s. to 90s.; Belgian do., 60s. to 80s.; Dutch do., 60s. to 80s.

BRITISH WOOLS.—LONDON, FRIDAY, March 8.

We have no improvement to note in our trade, and the transactions continue on the most restricted scale—so small, in fact, that no alteration in the quotations can be made, and which consequently are merely nominal.

The COLONIAL WOOL SALES continue at about the same rates as they commenced.

COAL MARKET.—March 6.

Bell's Primrose Gas, 14s. 6d.; Bowers West Hartley, 16s. 3d; Buddle's West Hartley, 16s.; Byass's Bebside West Hartley, 15s. 6d.; Davison's West Hartley, 16s.; Hastings Hartley, 15s 6d.; Tanfield Moor, 15s.; West Hartley, 15s. 6d.; Walls End Byron, 18s.; Walls End Hedley, 18s.; Walls End Riddell, 17s. 9d.; Walls End Braddyll's Hettons, 19s.; Walls End Durham, 17s.; Walls End Framwellgate, 18s. 6d.; Walls End Haswell, 19s. 9d.; Walls End Hetton, 20s.; Walls End Russell Hetton, 19s.; Walls End South Hetton, 19s 9d.; Walls End Stewarts, 19s. 9d.; Walls End Cassop, 19s.; Walls End Hartlepool, 19s. 3d.; Walls End Heugh Hall, 18s. 6d.; Walls End Kelloe, 18s. 9d.; Walls End North Hartlepool, 15s. 3d.; Walls End South Hartlepool, 18s. 6d.; Walls End Thorpe, 18s 6d.; Walls End Whitworth, 16s. 6d.; Carway and Duffryn Malting, 24s.—255 ships at market.

METROPOLITAN CATTLE MARKET.

MONDAY, March 4.

We have rather a larger supply of Beasts than on Monday last, but the demand is good and some of the choicest kinds are rather dearer. The number of Sheep is again very small; they are consequently readily disposed of at fully late rates. Good Calves are rather dearer. From Germany and Holland there are 470 Beasts, 1300 Sheep, and 63 Calves; from Spain, 180 Beasts; from Scotland, 200; from Ireland, 100; from Norfolk and Suffolk, 2000; and 100 from the northern and mid land counties.

	s d s d		s d s d
Best Scots, Herefords, &c.	4 10 to 5 2	Best Long-wools	5 8 — 6 0
Best Short-horns	4 8 — 5 0	Do. Shorn	.. to ..
2d quality Beasts	3 8 — 4 4	Ewes & 2d quality	5 0 — 5 4
Best Downs and Half-breds	6 0 to 6 4	Do. Shorn	.. — .
Do. Shorn	.. — .	Lambs	.. — ..
		Calves	4 8 — 5 10
		Pigs	4 0 — 5 0

Beasts, 3640; Sheep & Lambs, 15,400; Calves, 84; Pigs, 360.

THURSDAY, March 7.

The supply of Beasts is about the same as on Thursday last, and there is very little alteration in the trade. Purchasers are more cautious, owing to a decline in the dead market. There are a few more Sheep, and the demand is limited; we have therefore to quote rather lower rates. Good Calves are scarce and dear. Our foreign supply consists of 205 Beasts, 358 Sheep, and 72 Pigs. Milch Cows 150.

	s d s d		s d s d
Best Scots, Herefords, &c.	4 10 to 5 0	Best Long-wools	5 8 — 5 10
Best Short horns	4 8 — 4 10	Do. Shorn	.. — ..
2d quality Beasts	3 8 — 4 4	Ewes & 2d quality	4 8 — 5 0
Best Downs and Half-breds	6 0 — 6 2	Do. Shorn	.. to ..
Do. Shorn	.. — ..	Lambs	.. — ..
		Calves	4 8 — 5 10
		Pigs	4 0 — 5 0

Beasts, 1040; Sheep & Lambs, 3850; Calves, 120; Pigs, 160.

MARK LANE.—MONDAY, March 4.

The supply of Wheat from Essex and Kent to this morning's market was very small, and met an improved sale at fully last week's terms. The market was well attended by country buyers, and foreign Wheat was in good retail demand at late prices. Barley sells slowly at a decline of 1s. to 2s. per qr. Beans are unaltered in value. For Peas there is no inquiry. The Oat trade is dull, and secondary qualities are 6d. to 1s. per qr. cheaper. Flour is in moderate demand at about last week's quotations.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk . . White	46—65	Red	40—60
— — fine selected runs . . ditto	50—70	Red	54—65
— — Talavera	51—72		
— Norfolk	—	Red	—
— Foreign	50—76		
BARLEY, grind. & dist., 28s to 30s . . Chev.	40—45	Malting	38—40
— Foreign . . grinding and distilling	30—36	Malting	40—43
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire . . Potato	26—28	Feed	20—25
— Irish . . Potato	26—28	Feed	21—24
— Foreign . . Poland and Brew	24—28	Feed	20—28
RYE	35—38	Foreign	—
RYE-MEAL, foreign	—		
BEANS, Mazagan . . 23s to 44s . . Tick	28—48	Harrow	28—48
— Pigeon . . 34s—56s . . Winds.	34—42	Longpod	—
— Foreign . . Small	40—50	Egyptian	—
PEAS, white, Essex and Kent . . Boilers	35—48	Suffolk	40—50
— Maple . . —s to —s . . Grey	40—42	Foreign	38—48
MAIZE . . White	—	Yellow	—
FLOUR, best marks delivered . . per sack	50—57		
— 2d do. . . ditto	38—50	Country	38—50
— Foreign . . per barrel	30—35	Per sack	40—50

FRIDAY, March 8.

At the close of last week and commencement of the present much rain fell, but since the 4th we have had less. During the week an improved feeling has manifested itself in the Wheat trade, and a better demand has been experienced at the extreme prices of last week for both English and foreign excepting always the inferior qualities ... cargoes waiting orders on the coast have ... Continent, which tends to impart confidence ... and although the high rate of interest ... chases on speculation, there is evidently ... operate. Barley has been difficult of disposal ... purchaseable on easier terms. The ... downward tendency, and also Beans in ... markets. In the prices of Peas and F... alteration. The floating trade during the ... not been very active, but several cargoes of W... taken for the Continent. The arrivals ... foreign Oats this week have been to a ... fair of foreign Wheat, and of Barley ... Wheat is inquired for, and the best qualities ... at Monday's quotations. The attendance ... was limited, but foreign Wheat met a ... late terms. Barley is slow, and rather ... trade is dull, and prices are unaltered.

ARRIVALS FROM March 4 TO March ...

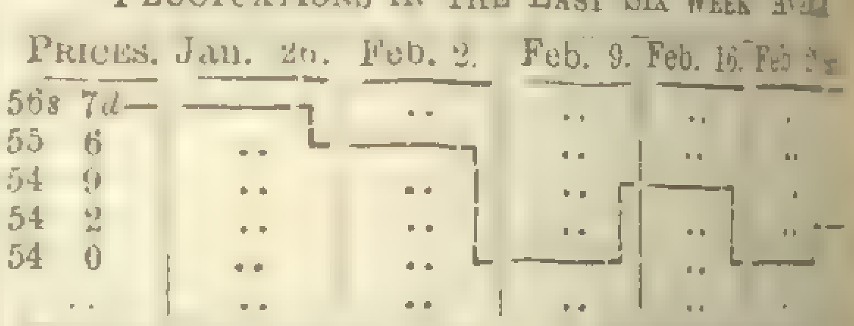
	Wheat.	Barley.	Oats.
English	240 qrs.	1250 qrs.	60 ...
Irish	— „	— „	3340 „
Foreign	14290 „	29460 „	27... „

LIVERPOOL, Tuesday, March 5.—There has been ... ance of millers and dealers from the interior ... market this morning, and a healthy consumptive ... been experienced for Wheat and Flour at the ... Indian Corn was eagerly sought after at the ... market, and all offering at Friday's prices was ... and Oatmeal were little dealt in. Beans, Peas ... were all held at fully former rates. The market ... a better tone throughout, and closed at its best ...

FRIDAY, March 8.—The general tone of the ... remains unchanged since Tuesday last.

AVERAGES	Wheat.	Barley.	Oats.	Rye	Be...
Jan. 26..	56s 7d	40s 7d	23s 1d	35s ...	...
Feb. 2..	55 6	40 0	23 3	34 3	...
— 9..	54 0	40 8	22 6	36 ...	...
— 16..	54 9	38 11	23 0	35 7	...
— 23..	54 0	39 4	23 0	35 5	...
March 2..	54 2	39 2	23 0	35 1	...
Agg. Aver.	54 10	39 7	23 0	35 5	...

FLUCTUATIONS IN THE LAST SIX WEEK AVERAGES ...



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News of the Week.

IN the House of Lords, on Friday, the Trade Marks Bill passed through committee, and the Statute Law Revision Bill was read a third time and passed. On Monday the LORD CHANCELLOR brought in a bill to remove the anomaly under which a marriage between a Roman Catholic and a Protestant, if performed by a Roman Catholic clergyman in Ireland, is void. A select committee was appointed on the motion of the LORD CHANCELLOR to consider the law respecting the parties who are, or ought to be, entitled to sue in the Divorce Court in England and in the Court of Session in Scotland for a dissolution of marriage, with a view to extend the operation of the English law to Ireland, as well as to enable Anglo-Indians to avail themselves of its provisions. The Earl of DERBY moved that it be an instruction to the select committee on metropolitan railways to inquire into and report on the number of houses and of inhabitants likely to be removed by the works of the respective railways, and whether any provision is required to be made for diminishing the evils consequent on a large simultaneous displacement of the labouring population. After some discussion the motion was agreed to. On Tuesday the Admiralty Court Jurisdiction Bill, the Inclosure Bill, and the Bank of England Payments Bill passed through committee. On Thursday Lord LYTTELTON moved the second reading of the Subdivision of Dioceses Bill. The motion was opposed by Earl GRANVILLE, the Earl of DERBY and other Peers, but was carried on a division by a majority of 4, the numbers being 27 to 23. The Trade Marks Bill and the Enclosure Bill were read a third time and passed.

In the Commons on Friday Sir JOHN TRELAWNY postponed until the 5th of June the third reading of his Bill for the Abolition of Church Rates. Mr. M. MILNES obtained a Select Committee to inquire into the constitution and efficiency of the present diplomatic service of the country. Mr. H. B. SHERIDAN moved for leave to introduce a Bill for the reduction of the duty on fire insurances. The CHANCELLOR OF THE EXCHEQUER opposed the motion, which was negatived on a division by 138 to 49. Mr. BUTT moved for the appointment of a Select Committee to inquire into the grand jury presentment system in Ireland. Mr. CARDWELL opposed the motion, which was negatived on a division by 119 to 25. On Monday the House went into Committee on the Naval Estimates, when the votes for the men, wages, and victuals were agreed to, after a long discussion on the relative strength of the French and English navies. The Red Sea and India Telegraph Bill passed through Committee. On Tuesday Mr. T. DUNCOMBE moved a resolution declaring that it was the duty of the House to carry out the recommendations of the Crown and fulfil the expectations of the people on the subject of Reform. Sir G. LEWIS opposed the motion, and at the suggestion of Mr. BRIGHT it was ultimately withdrawn. Mr. BENTINCK moved a resolution to the effect that in consequence of the great number of railway accidents which have recently occurred, it has become desirable that HER MAJESTY'S Government should introduce further legislation on the subject, with a view to enforce the adoption by all railway companies of the precautions recommended in the evidence given before the railway accidents committee. Mr. M. GIBSON opposed the motion, and after some discussion it was withdrawn. The Select Committee on the Board of Admiralty having been nominated, Lord PALMERSTON moved that the order on Sir J. ELPHINSTONE's motion of the 5th March for a Select Committee on Naval Promotion and Retirement be discharged, and that the Select Committee on the Board of Admiralty be instructed to consider the system of promotion and retirement in the Navy. The resolution was carried by 96 to 33. On Wednesday Mr. LOCKE KING moved the second reading of the County Franchise Bill. Mr. AUGUSTUS SMITH moved as an amendment, "the previous question." On a division the amendment was carried by 248 to 220; and the Bill was therefore lost. Sir J. TRELAWNY moved the second reading of the Affirmations Bill. Mr. HARDY moved as an amendment that the Bill be read a second time that day six months. Mr. CRAUFURD moved the adjournment of the debate. On a division the motion was negatived by 183 to 50, but the debate was then cut short by the arrival of the hour for adjournment. On Thursday the House went into committee of supply on the Army Estimates, when the vote for the land forces was agreed to. On the vote for pay and allowances, Colonel DUNNE moved that the chairman report progress. The motion was negatived on a division by 122 to 22, but it was subsequently arranged to take three millions on account of the vote, and the House resumed. The Red Sea and India Telegraph Bill was read a third time and passed. In Committee of the whole House, Sir G. LEWIS moved a resolution continuing for a term of 10 years the duties on coal and wine levied by the Corporation of London, the coal duty to be appropriated to metropolitan improvements, and to be levied only within the metropolitan police district, instead of in a circle of 20 miles as heretofore. After a short discussion the resolution was agreed to, and leave was given to bring in a Bill to carry it into effect.

The Address of the French Senate in answer to the Speech from the throne was presented to the EMPEROR on Friday. HIS MAJESTY in reply thanked the Senate for their approval of his conduct during the past, and for their expression of confidence in the future, and assured them that his policy would always be firm, loyal, and straightforward. In the Corps Législatif the discussion of the Address commenced on Monday, and is not likely to be concluded for some days.

A despatch from Warsaw announces that the EMPEROR OF RUSSIA, in reply to the address of the Polish citizens, has conceded almost all their demands. A separate Council of State has been granted to the Kingdom of Poland, with Count Zamoyski as President; the Municipality of Warsaw has been confirmed in its functions; all official acts are to be executed in the name of the Emperor as King of Poland; the system of public instruction is to be completely reformed; the municipalities are to be elected by the citizens; and Prince GORTSCHAKOFF is to convoke the principal Polish notabilities, in order that every necessary reform in all branches of the public administration may be proposed, examined, and ratified.

Accounts from Turin state that the project of law for the assumption of the title "Kingdom of Italy" has been unanimously adopted by the Chamber of Deputies. The Citadel of Messina surrendered on Wednesday evening after four days' firing, and the prompt surrender of Civitella del Tronto may be daily expected.

From the United States we have a report that an infernal machine was found under Mr. LINCOLN's seat in the train which conveyed him from Cincinnati, and that a conspiracy had been formed to assassinate him on his way to Baltimore. The report proceeds from Washington, but is not credited by some of the New York papers. Both branches of Congress had agreed to the amended Tariff Bill, and it was expected to pass immediately into law. The Peace Conference at Washington, after three weeks' labour, had adopted a scheme of adjustment founded upon the limitation of

slavery to the Southern States, but it was considered quite inadequate to effect a settlement of the existing difficulties.

Despatches from Canton of February 1st inform us that Pekin is quiet, and the troops at Tientsin continue healthy. The treaty is working satisfactorily, and Kowloong has been formally transferred to the British Crown.

Home News.

The Court.—The Queen, Prince Consort, and the Royal family continue at Buckingham Palace. On Saturday morning the Prince Consort rode on horseback. In the afternoon the Queen and the Prince Consort, accompanied by the Princesses Alice and Louisa, took a drive in an open carriage and four, and visited the Patriotic Asylum for the Orphan Daughters of Soldiers, Seamen, and Marines at Wandsworth. In the evening the Queen and Prince Consort, with the Princess Alice, honoured the performance at Her Majesty's Theatre with their presence. On Sunday morning the Queen and Prince Consort, the Princesses Alice, Helena, and Louisa, Princes Arthur and Leopold, attended Divine service in the private chapel of Buckingham Palace. The Rev. Dr. Thomson, Provost of Queen's College, Oxford, preached the sermon. On Monday morning the Queen and Prince Consort, accompanied by Prince Leopold and the Princess Beatrice, visited the Zoological Gardens in the Regent's Park. The Princesses Alice and Helena visited the Temple Church, and the Hall of Lincoln's Inn. In the evening the Queen and Prince Consort, accompanied by the Princess Alice, honoured the performance at the Olympic Theatre with their presence. On Tuesday morning the Queen, with the Princesses Alice and Helena, rode on horseback in the Riding House. In the afternoon the Queen and Prince Consort visited the Duchess of Kent, at Frogmore, travelling to and from Windsor by special trains on the South-Western Railway. Prince Leopold and the Princess Louisa visited the British Museum. In the evening the Queen and Prince Consort, accompanied by the Princess Alice, honoured the performance at Covent Garden Theatre with their presence. On Wednesday the Queen held the third Levée of the season at St. James's Palace, at which 270 noblemen and gentlemen had the honour of being presented. In the evening her Majesty had a dinner party. On Thursday morning the Prince Consort rode on horseback with Prince Arthur. In the afternoon his Royal Highness visited the Horticultural Gardens at South Kensington. The Princess Alice visited the Duchess of Cambridge and the Princess Mary at St. James's Palace, and afterwards went to Frogmore and v d the Duchess of Kent.

The Cabinet.—A Cabinet Council was held on Saturday at the official residence of Lord Palmerston in Downing Street. Another Council was held on Wednesday.

Parliamentary Movements.—A meeting of Liverpool and Manchester merchants was held at Manchester on Tuesday, when a joint deputation was appointed to communicate with the Right Hon. W. E. Gladstone, and request him to allow his name to be put in nomination for the third seat about to be created in South Lancashire.

Chief Justiceship of Madras.—The Queen has appointed Mr. Colley Harman Scotland, barrister-at-law, to be Chief Justice of the Supreme Court of Madras.

Knighthood.—At the Levée on Wednesday Colonel George Everest, C.B., late Surveyor-General and Superintendent of the Great Trigonometrical Survey of India, and Mr. Colley Harman Scotland, the new Chief Justice of Madras, were presented to the Queen, and received from her Majesty the honour of Knighthood.

Convocation.—Both Houses of Convocation reassembled on Friday. In the Upper House, the Prolocutor and a deputation of the Lower House attended and informed their Lordships that the Lower House had come to a resolution on the subject of the desirableness of uniting the scattered members of Christ's flock; and also presented a gravamen, signed by 20 individual members, complaining that a book, called "Essays and Reviews," had been published in London, containing teaching which was subversive of the inspiration and doctrine of Holy Scripture. The gravamen alleged that out of the seven writers of these "Essays and Reviews," six were clergymen of the Church of England. The members of the House who had signed the gravamen prayed that their Lordships would direct the appointment of a committee of the Lower House to make extracts from the book alluded to, and to report thereon to their Lordships' House. Two of the persons who had signed the gravamen had not signed that portion of it which related to the appointment of a committee. The Archbishop inquired whether the persons who signed the gravamen composed a majority of the House at the time. The Prolocutor, having answered in the affirmative, withdrew. The Bishop of Oxford said, it appeared to him to be the duty of their Lordships composing the Upper House of Convocation to acquiesce in the prayer of the petition. He therefore moved a resolution, acceding to the prayer of the petition. The Bishop of Chichester seconded the motion. The Bishop of London stated various objections to the course proposed. After a long discussion the Archbishop of Canterbury put the motion, when there appeared—for the motion the Bishops of Winchester, St. David's, Oxford, Bangor, Salisbury, Llandaff, St. Asaph, and Chichester; against it the Bishops of London, Bath and Wells, Gloucester and Bristol, and Norwich. The Archbishop, who did not vote either way, then declared the motion carried by 8 to 4. After the transaction of some further business their Lordships adjourned. In the Lower House after the adoption of the motion for sending to the Upper House the gravamen respecting "Essays and Reviews," a long discussion ensued respecting the revision of the Liturgy, and the subject was ultimately postponed.

The Volunteer Movement.—The commanding officers of the various metropolitan regiments intending to take part in the sham fight near Brighton, on Easter Monday, the 1st of April, received on Monday a communication from the London and Brighton Railway Company, enclosing a form to be filled up setting forth the number and character of the tickets they will require for their respective corps, and the arrangements made with respect to their issue. The document states that no application for tickets will be attended to without the production of one of the forms, which can only be obtained from Lord Ranelagh, and that such form when duly filled up must be sent to the secretary of the company before Saturday, the 23rd March. The tickets will entitle the holder to return by the special train on Tuesday morning, at the following fares—to Brighton and back, from any station, third-class, 1*s.* 6*d.*; officers only, first-class, 5*s.*; officers' horses, 20*s.* No one except an officer will be allowed to take or use a first-class ticket, and no ticket whatever will be available except for a volunteer in uniform and bearing arms. The spot selected for the sham fight is in the neighbourhood of the Earl of Chichester's park, between Lewes and Brighton, about four miles from the latter town. The position of the ground affords unusual advantages for military display, there being a succession of hills and a range of elevated downs which present fine opportunities for the Volunteers taking up position, &c. It has been proposed that the entire force as they arrive at Brighton should be echelonned fronting the sea, but it is not yet definitively known whether they will march direct to the field of operations or whether the proposal will be carried into effect.—At a meeting of the London Irish a few days since in the Floral Hall, the Marquis of Donegal, the Colonel, said that he had been asked to let the corps go to Brighton to the sham fight, but he did not wish them to go for two reasons, first that they were not sufficiently advanced in their drill, and secondly that it would be very expensive. It was proposed to take 20,000 men here, and from what he knew he did not think they could get that number into position before night.—At a meeting of the Queen's (Westminster) corps on Saturday in Hyde Park, Captain Bushby said it had been decided that the regiment should accompany Lord Truro's corps on Easter Monday to Wimbledon Common. This statement was received by mingled groans and cheers, a portion of the corps being anxious to go to the sham fight at Brighton on Easter Monday.—Arrangements are in progress for a grand review of the Volunteers of Warwickshire, Worcestershire, Gloucestershire, Staffordshire, Leicestershire, Derbyshire, Nottinghamshire, Oxfordshire, and Northamptonshire, to take place at Warwick on Monday the 22d of July, and from its great facilities of access it is likely to bring together a large gathering of the Midland Counties' Volunteers. The Secretary of State for War has given his sanction through Lord Leigh, the Lord-Lieutenant of the county. It is intended to invite the Commander-in-Chief to review them on this occasion.

Foreign.

France.—On Friday a deputation from t e Senate presented the Address of that body to the Emperor His Majesty replied as follows:—

"The new right of examining freely all acts of the Government was granted to the political bodies with the object of enlightening the country on the great questions which now agitate public opinion. The discussion must have convinced it that, notwithstanding the difficulties which have been created abroad by the conflict of extreme situations, we have not abandoned any of the opposed interests it was necessary to protect. My policy will always be firm, loyal, and without any afterthought. The address of the Senate approves of my conduct during the past, and expresses confidence in the future, for which I thank you."

The discussion of the Address in the Corps Législatif commenced on Monday. The following is a summary of the debates:—

M. Flavigny criticised the policy of Piedmont, which he reproached with ingratitude towards France. He extolled the Pope, and called upon the French Government to disavow the policy traced out by Prince Napoleon. Baron David defended the policy of the Emperor, and pointed out the hostility entertained at Rome against France, and stated that the Pope was misled by those hostile influences. He desired that the Pope should be requested to make serious reforms, and that in case of refusal the French troops should be withdrawn from Rome. Such a course of procedure would respond to the feelings of the country. He was opposed to the unity of Italy, and thought that Piedmont ought to accept an Italian Confederation, preserving the Vicariate of the Marches and Umbria; the second Italian kingdom being formed by Naples and Sicily, and Austria entering the Confederation with [illegible] gretted the ingratitude of Italy, which, he [illegible] same esteem for England as for France, [illegible] had rendered equal services to Italy. [illegible] policy of the Emperor, he expressed his [illegible] expressed a desire that honest men should [illegible] public functionaries, that the system [illegible] centralisation should be extended, and [illegible] government of the communes; and [illegible] should be emancipated. M. Kolb-Bernard [illegible] unity, as thereby an alliance between [illegible] Russia might be formed to drive England [illegible] Mediterranean and secure the communi[illegible] Kolb Bernard attacked the principle of [illegible] applied to nationalities, and opposed the [illegible] regard to Rome. He maintained that the [illegible] had been victorious in Italy, and asserted [illegible] France had become, in spite of herself, the [illegible] tion in Italy. He thought he perceived [illegible] on the part of France to surrender Rome [illegible] and concluded by urging the Government [illegible] conservative policy. The moment has [illegible] choose between principles which give [illegible] destroy; and they should not lose sight [illegible] was something worse than a subverted Government [illegible] was a Government which followed a [illegible] Billault replied:—"The Government protests [illegible] ceding speech, and against the reproach [illegible] France has been lowered, and against the [illegible] that disturbances might break out in the [illegible] afterwards show that the policy of France is [illegible] the same time Liberal; that it has never been [illegible] and finally, that it will remain a French policy [illegible] in the name of the Government, denied [illegible] agitated, and said, "Agitation only reigns where [illegible] mask themselves in order to attack the [illegible] Emperor." On Tuesday the discussion was [illegible] M. de Ségur, who criticized the Emperor's [illegible] maintained that the English policy had [illegible] He said, "England wishes to surround us [illegible] and to unify Italy and Germany. England [illegible] hostile to the policy of France." M. Plichon [illegible] general disquietude prevailed in all the [illegible] and that the armaments were universal, as if [illegible] approaching rupture. The Emperor's Italian [illegible] was imposed upon France by England. He [illegible] King Victor Emmanuel, and pointed [illegible] arising for France if she allowed three [illegible] to be created around her, by which, he [illegible] be threatened. He advised the Emperor [illegible] on the Russian alliance, and to return to [illegible] of the Treaty of Villafranca. M. Baroche said [illegible] they had just heard was full of gall and [illegible] Government of the Emperor has never been [illegible] violently either in England or Austria. He [illegible] Plichon for having said that the name of [illegible] become the object of mistrust in Europe. He [illegible] at the praise lavished by M. Plichon on Sovereigns [illegible] against France at Solferino, and was surprised [illegible] thies for certain Governments, and his insults [illegible] ments which were the allies of France. He [illegible] accusation of duplicity and intrigue made [illegible] and justified the policy of the Emperor in Italy [illegible] in Rome. On Wednesday the debate was resumed [illegible] who denounced the Emperor's policy towards [illegible] said that France had retraced her steps [illegible] before an astute Power behind her, and that [illegible] lution, supported by England, personified in [illegible] It was this revolution which, holding bombs [illegible] daggers in the other, would establish at the [illegible] State of 25,000,000 of inhabitants, having Rome [illegible] A struggle was going on between the Catholic [illegible] revolutionary faith, as in 1848. The time had [illegible] the silence which so powerfully encouraged [illegible] lutionists, and to return to the policy [illegible] revolution in the face, and to say that it should [illegible] M. Billault complained of the violent [illegible] Government, and protested against the [illegible] Government drew back from fear of the [illegible] He could not have believed it possible [illegible] should have been uttered, and desired [illegible] should reassume tranquillity. He then [illegible] of the Italian question, which, he said, [illegible] interests than those of the Papacy. He [illegible] influence of Austria had been destroyed in [illegible] "The Government of the Emperor being [illegible] popular will, could not repress the same [illegible] The great Powers have done nothing for [illegible] Emperor has alone protected him. The Government [illegible] reserve the other explanations until the discussion [illegible] graphs of the Address." The general discussion [illegible] then closed. The debate on the first paragraph [illegible] on Thursday by M. Jules Favre, who proposed [illegible] in favour of the abolition of the exceptional [illegible] security, and spoke of the sensation produced [illegible] return of France to the exercise of representative [illegible] limited rights. He asserted that the Government [illegible] the doctrines of popular right to germinate [illegible] broken the treaties of 1815, and had liberated [illegible] great nations, who were entering on [illegible] liberty. "France cannot," he said, [illegible] apostle of liberty without obtaining [illegible] He then recalled the principles of [illegible] had not been followed up. He criticised the [illegible] security, and protested against the present [illegible] cipal power, and against the system [illegible] nominated by the Government in the [illegible] mentioned several facts in reference to the [illegible] and also censured the *régime* of the press. M. [illegible] the arguments respecting the internal po[illegible] ment, and spoke against the adoption of [illegible] M. Emile Ollivier defended the liberty of [illegible] amendment was then rejected, and the first [illegible] Address adopted.

The *Moniteur* denies that the Conference [illegible] question held a sitting on Monday, and [illegible] sitting will probably be held at the end of [illegible] week. The *Patrie* contradicts the report [illegible] Napoleon is about to proceed to Italy [illegible] Turin the object of which is to negotiate the [illegible] of the French garrison from Rome, to be replaced [illegible] troops of King Victor Emmanuel. The [illegible] announces that Baron Gros has received [illegible] Cross of the Legion of Honour. By [illegible] cluded with the Turkish Government [illegible] agreed that the draughts accepted by Messrs. [illegible] Co. for the settlement of the Turkish Loan [illegible] by the Crédit Industriel Company. [illegible] who was condemned to death in 1839, and [illegible] latter of whom is a journeyman turner [illegible] arrested in Paris on a charge of belonging [illegible] political society. Both had come from London [illegible]

Spain and Morocco.—A telegraphic [illegible]

[illegible] of the 9th, states that the Spanish Government had received the Morocco treaty, with its official signature. Tetuan would be evacuated in May.

Portugal.—The Portuguese Government has submitted to the Cortes a project of law for the reorganisation of the Brotherhoods and Sisterhoods of Charity. The Ministers are said to be divided on religious questions. Dissension likewise prevails in the Cortes. A change of Ministers may be expected, and a coalition between the Duke of Saldanha and the Marquis of Loulé is seriously spoken of.

Holland.—The new Ministry will be composed as follows:—Baron Zuylen van Nyveldt, Foreign Affairs; M. [illegible], Justice; Baron van Heemstra, Interior; M. van Tets de Goudriaan, Finance; Colonel van [illegible], War; M. J. Loudon, Colonies; M. Streus (Catholic) and M. Jolles, or M. Boscha (Protestant), Public Worship.

Switzerland.—The Federal Council has authorised the Swiss Minister at Paris to commence negotiations for the conclusion of a treaty of commerce between France and Switzerland. The Sardinian Government has proposed to Switzerland to appoint Commissioners for the settlement of the question of Ticino, and has sent a protest to the Federal Council against the pastoral letter of M. Marilley, Bishop of Fribourg, which contained a violent attack against Victor Emmanuel. This protest was referred by the Federal Council to the Government of Fribourg, which has rejected it on the ground that the French Bishops had promulgated more violent attacks upon Victor Emmanuel than the Bishop of Fribourg, and that the Sardinian Government had not protested against them. A dreadful gale has raged on the Lake of Constance, during which two steamers came into collision. The Bavarian steamer Louis sank and 13 persons were drowned.

Sweden.—The Duchess Sophia of East Gothland, the consort of Prince Oscar, eldest brother of the reigning Sovereign, Charles XV., gave birth on the 27th ult. to a prince, who has received the name of Charles Oscar William, and the title of Duke of West Gothland.

Prussia.—In the sitting of the Upper House on Wednesday, the project of law relating to marriage was discussed. The clause rendering the civil ceremony necessary for the validity of marriages was rejected by 124 to 44 votes. The proposal that the civil ceremony should be optional was likewise rejected by 122 to 45 votes. At the request of the Minister of Justice the further discussion of the project of law was adjourned. M. de Zedlitz, President of Police, has challenged M. de Vincke to fight a duel with pistols within four weeks' time; so that if it is not prevented it will take place in the Easter vacation. About the same time M. de Zedlitz will be appointed President of Regency at Liegnitz.

Austria.—An autograph letter of the Emperor appoints Baron Lichtenfels President of the Council of State, and orders him to make propositions for its reorganisation. The Archduke Rainer has been appointed Curator of the Academy of Sciences. In consequence of the establishment of the Council of State Count [illegible], MM. Thierry, Salvotti, Haimberger, and Wolkenstein have been relieved of their functions as members of the Council of the Empire. Count Mensdorff Pouilly has been appointed civil and military Governor of Gallicia, and a separate provincial government, the seat of which is to be in Czernowitz, has been granted to the Bukowina.

Hungary.—M. Deak and M. Szalay have been elected by acclamation at Pesth as members of the Diet,—the former for the inner city, and the latter for the Leopoldstadt suburb. In the other electoral districts the voting is proceeding in perfect order. Several Comitats have energetically pronounced themselves against any representatives being sent by the Diets to the Council of the Empire. The dissatisfaction of the Hungarians has been increased by the decree ordering the assembling of a Servian National Congress at Karlowitz. A letter from General Turr and General Klapka has been published, exhorting the Hungarians not to compromise the deliverance of Hungary by a premature movement, which Austrian agents are endeavouring to bring about. Generals Turr and Klapka urge their countrymen to preserve their forces intact for more favourable circumstances. The Vienna journals state that Prince Lichtenstein, the Austrian Commander-in-Chief in Hungary, has, in compliance with his demand, received reinforcements, with full powers to place, in case of need, the fortresses of Arad, Temeswar, Peterwardein, and Komorn in a state of siege.

Croatia and Dalmatia.—The Slavonian inhabitants of Dalmatia have addressed a petition to the Emperor praying for the incorporation of their province with Croatia, in order that they may be protected against the Italian portion of the inhabitants, which, the Slavonians declare, endeavours to exercise a tyrannical influence over them. The Municipality of Fiume has resolved upon sending an address to the Emperor praying for the re-incorporation of Fiume with Hungary. The Municipality has likewise determined not to send any deputies to the Croatian Diet, and to suspend the payment of the additional taxes.

Venetia.—Count Bembo, Podesta of Venice, has been received in a most friendly manner by the Emperor, who gave him a most gracious assurance in reference to the wishes of the Venetian deputation.

Russia.—The Emperor of Russia has conferred on Francis II. and his Queen the military order of St. George. Prince Paskiewitsch will be the bearer of the insignia of the order.

Poland.—General Meyendorff has arrived at Warsaw with the Emperor's reply to the address of the Polish citizens. A separate Council of State has been granted by the Emperor to the kingdom of Poland, of which Count Zamoyski has been appointed President. The Municipality of Warsaw has been confirmed in its functions. All official acts are to be executed in the name of the Emperor as King of Poland. Complete reforms are to take place in the system of public instruction, the municipalities are to be elected by the citizens, and Prince Gortschakoff is to convoke the principal Polish notabilities in order that every necessary reform in all branches of the public administration may be proposed, examined, and ratified. All the Polish officials had resolved to tender their resignations *en masse* if the Emperor's reply had proved unfavourable. Militia guards, composed of citizens, had also been formed in the provinces. Tranquillity now prevails everywhere; and at Warsaw, 500 citizens and town militiamen alternately patrol the city every night. On Saturday morning religious funeral ceremonies took place in all the churches of Warsaw. The Exchange was closed. The town militia, composed of citizens to the number of 140 men, maintained public order, without the concurrence of the police. A judicial inquiry conducted by a commission composed of Poles and Russians, under the presidency of General Liprandi, is impartially carried on. Notwithstanding the Emperor's concessions the city is still in deep mourning. The shop windows contain nothing but articles of mourning, and the booksellers' windows nothing but black prayer books. Photographic portraits of those who fell in the late disturbances are sold in great quantities. The burial ground in which they were all interred has been decorated with a great number of flower wreaths. The *Czas* of Cracow has received advices stating that the Bank of Poland has in its keeping Russian bonds belonging to the Government, which it is not bound to pay in specie. The Government, however, demanded payment of these bonds in hard cash, and on the Bank authorities refusing to comply the Bank was surrounded by military, who took the amount required from the metallic reserve. The same journal announces that the Royal Castle has been transformed into barracks.

Italy.—In the Chamber of Deputies on Monday Signor Zanolini, President by seniority, resigned the chair to Signor Rattazzi, when a debate took place of which the following is an abstract:—

Signor Zanolini expressed a hope that Italy was about to complete her unity by transporting to Rome the capital of her kingdom. He also expressed his confidence that the deliverance of Venice was approaching, and eulogised Garibaldi. Signor Rattazzi then took the chair, and in his speech applauded the tenor of the speeches of Prince Napoleon and M. von Vincke. He also paid a tribute of praise to Garibaldi, and expressed himself confident of a solution of the questions of Rome and Venice. Count Cavour, in presenting a project of law proclaiming the Kingdom of Italy, said, "Italy is completing the work of her constitution, and is making herself one country by laws and institutions, as she is already one by origin and language. On the occasion of the opening of the Parliament you saluted Victor Emmanuel under the new title which Italy, from Turin to Palermo, has accorded him, and you will confirm it, as the Senate has done, by your unanimous suffrages." In the debate on Wednesday, Signor Brofferio censured the Minister for depriving the representatives of the people of the initiative in regard to the title of "Kingdom of Italy." Count Cavour said that the Government took the initiative because it had also taken the initiative in the redemption of Italy, a fact now in course of accomplishment. It would be a great boldness on the part of Italy to adhere unanimously to the proposition of the Government, as they might depend it would meet with opposition abroad, quoting as proof certain Parliamentary discussions now taking place in a foreign country. He also announced that Government would shortly submit to the Chamber a project of law relative to the future headings of public Acts when published. The Chamber then agreed to the title "Kingdom of Italy."

On Wednesday Count Cavour announced in the Chamber of Deputies the surrender of the citadel of Messina. The Chamber passed by acclamation a vote of thanks to the land and sea forces. From Rome we learn that the Duke de Gramont has been charged to announce to the Pope that the Emperor has disavowed the speech of Prince Napoleon in the Senate. It appears that the speech has produced great enthusiasm in Italy, and that a subscription has been opened among the inhabitants of Rome with the object of presenting a token of their gratitude to the Prince. Cardinal Antonelli has addressed a long letter to Mgr. Meglia, Auditor of the Nunciatura in Paris, in reply to the pamphlet of M. de la Gueronnière. The Cardinal throws no new light on the subject, but endeavours principally to repel on the part of the Pope the reproach of obstinacy in not granting any reforms, and in refusing all the counsels given by France. A demonstration of an extraordinary character, which may probably lead to an early solution of the crisis now pending, is said to be near at hand. Alletz (a Swiss) has been appointed commander of the Zouaves, in place of Becdelièvre. A report was current fixing the date of the arrival of the Sardinians at Rome for the 18th inst. A Consistory has been held for the proclamation of some new Bishops. The Frenchmen who had come to Rome to take service in the Papal army have formed a club, and are about to establish a new newspaper. The Queen of Spain has offered to the Pope her Royal Palace at Madrid. His Holiness, however, intends remaining at Rome. He has recalled all his soldiers to Rome with the exception of three companies of Papal Zouaves, which are still at Anagni. There was an encounter a few days since between the French 71st Regiment of the Line and 700 Papal Zouaves. A French Colonel was killed and 43 men wounded. How the affair ended has not transpired. Romano has tendered his resignation, which has been accepted. The municipal elections will take place on the 24th. Accounts from Naples state that the sick and wounded brought from Gaeta have communicated typhus fever among the hospitals and in the city itself. Troops have been sent to Lecce. The Archbishop refused to be present at a *Te Deum* celebrated for the surrender of Gaeta. Popular disturbances ensued, and the Archbishop's palace was attacked by the people. Strict orders have been sent respecting the resistance of the prelates.

Sicily.—The citadel of Messina surrendered to the Sardinian troops on Wednesday. A despatch from General Cialdini, dated Messina, March 13, announces that the citadel surrendered at discretion after four days' firing, during which the Sardinian artillerymen caused a great fire in the citadel. A capitulation was refused. Five Generals, 150 officers, and 5000 men were taken prisoners; 300 cannon also fell into the hands of the Sardinians. The *Moniteur* publishes the following statement:—

"The good offices of the Government of the Emperor have succeeded in preventing a further effusion of blood in Italy, and in preserving the town of Messina from the danger with which an imminent conflict threatened it. The Sardinian Government has consented to grant to the garrisons of the citadel of Messina and of Civitella del Tronto, with some slight modifications, the same terms as allowed to the capitulation of Gaeta, and a steamer has been despatched to General Fergola with an order from King Francis II. to accept these conditions. A special messenger has been sent with the same order to Civitella del Tronto."

Turkey.—Vely Pasha has not yet quitted Constantinople. The Porte in its recent verbal answer to the Russian note respecting the Grand Vizier's mission, repeats its former verbal reply, and denies all right of foreign interference in the internal affairs of the empire. A diplomatic conference had been held at the residence of the English Ambassador on the subject of the disturbed state of the Herzegovina. The Porte refused to enter into a discussion on what it considered a question of interior policy, and stated that it alone could suppress any insurrection which might break out. The Turkish fleet, with the troops and six months' provisions on board, is about to cruise off the coast of Dalmatia.

The Danube.—The damage caused by the inundation to the granaries of Galatz and Ibraila, especially in the former city, is so great that it is apprehended commerce will be seriously affected.

Syria.—The Paris papers publish telegrams dated Beyrout, 25th February, asserting that the Mussulmans had redoubled their insults and provocations against the Christians at Damascus. The Mussulmans were said to have thrown down the crosses and trampled them under foot, as they did before the late massacres. The Paris papers add:—"It is asserted that consular reports confirm that the Christians are in danger." The emigration is said to have recommenced. The Druses of the Haouran threaten the most implacable vengeance should Fuad Pasha order the execution of the condemned Druses.

Coast of Africa.—A war has broken out on the Gambia between the English and the Mandingoes. The British force was composed of the 1st and 2d West India Regiments, the Gambia Artillery, 600 Volunteers, a Land Transport Corps 240 strong, and a few French Artillerymen. The fleet was composed of H.M.S. Arrogant, Commodore Edmonstone; H.M.S. Falcon, Commander Hancase; Torch, Commander Smith; the Dover, and a host of small craft, the large steam transport Avon being used for conveying the troops. This force marched towards the town of Saba on the 21st February, and found it strongly stockaded, and defended by upwards of 3000 men, infantry and cavalry. After some very severe fighting the English succeeded in taking the town. The loss of the enemy exceeded 200 killed and 300 wounded. The English lost Mr. Hamilton, mate of her Majesty's ship Arrogant, two marines, and two seamen of the same vessel. Amongst the wounded were Lieut. Harford, of the Arrogant, Lieut. Martin, of the Torch, 16 seamen and marines of the Arrogant; Lieut. Bourke, 1st West India Regiment (severely), Ensign M. Clare Garcia (who had his horse shot under him, and was wounded in both legs when entering the stockades with the sailors); Lieut. Eyre, of the 2d West India Regiment, six privates of the 1st West India Regiment, and one sergeant of the 2d West India Regiment. Twelve prisoners were taken, and two of the King's sons were killed in the town. An armistice of three days was then granted.

India.—The Bombay and Calcutta Mails have arrived with news from Bombay to the 12th Feb., and from Calcutta to the 8th Feb. The following are the details:—

North West Provinces.—The famine continues to assume a terrible character in the North West Provinces, where the people are dying at the rate of [illegible] or [illegible] a day. It is also decimating Travancore, in the South of India, where mothers are selling their children as slaves for sixpence each, that they may have wherewith to purchase bread, if only for a single day. The Government and the public have exerted themselves with liberality and promptness to relieve this terrible calamity. In Bombay alone nearly 80,000 rupees have already been collected; and Calcutta and other great cities have also responded nobly to the appeal of the Relief Committee. In the North-West the showers of rain that have lately fallen have, it is said, saved

the spring crop; and it is therefore hoped that the worst is past.

Sikkim.—A small expedition of 1000 men has been despatched into Sikkim, with the Hon. Ashley Eden as political agent; but the annexation of the country will it is said be unnecessary, terms of peace having been proposed by the Sikkimites, and accepted by Lord Canning.

Nepaul.—Colonel Brasyer, who took so conspicuous a part in hunting down the rebels, asserts positively that Nana Sahib is still alive, and in the Nepaul hills, watching his opportunity. This is supposed to explain the disturbed state of that frontier.

Calcutta.—Lord Canning was expected to reach Benares on his return to Calcutta on Feb. 12th. He was expected to pay a flying visit to Lucknow, and to be in the presidency by the end of the month.

Bombay.—A meeting has been held in Bombay to expose the systematic frauds committed in the electric telegraph department, enormous speculations in opium, the profits of which may be counted by lacs of rupees, having been carried on by means of the falsification of telegraphic messages. The Bombay Income-tax Commissioners have quarrelled among themselves, and one of the native members has retired. No less than 10,000 blank returns have been sent in, and of those which have been filled up the Commissioners are said to have surcharged at least one-half.

Singapore.—The Java cable has been lost.

Ceylon.—Sir W. Denison has left Ceylon for Madras.

CHINA.—Accounts from Shanghai of Jan. 24 state that Pekin was quiet; the troops at Tien-tsin were healthy, and the treaty was working satisfactorily. The rebels had been defeated by the Imperialists at Ehsien, and Sang-ko-lin-sin had been defeated at Shantung. Lord Elgin had left for Manilla. The English Admiral and Sir Hope Grant had arrived at Canton. Kowloon had been formally transferred to the British.

COCHIN CHINA.—The French had been victorious at Saigon. The French transport Weser had been wrecked.

JAPAN.—In Japan affairs were peaceful. The Prussian Embassy had concluded a treaty with Japan.

NEW ZEALAND.—Accounts from Auckland of Jan. 14 state that the war continued. Several pahs had been taken by General Pratt, and these advantages had been actively followed up. The Boanerges had arrived with troops.

UNITED STATES.—Mr. Lincoln had arrived at Washington before the day on which he was expected, and on the 26th ult. he was notified of his election to the Presidency of the United States. It was reported, in explanation of his sudden arrival, that an infernal machine had been found under his seat in the train which conveyed him from Cincinnati, and that he had abandoned his intended visit to Baltimore, and departed secretly by night from Harrisburg to Washington, in consequence of having received information that the conspirators had determined to run the railway train off the line and down an embankment on the following day; and, if that failed, to assassinate him with a dagger or pistol. These reports, however, are not credited by some of the New York papers. It was reported from Washington that the despatch of a reinforcement to Fort Sumter and the sending of war vessels to attempt to collect the revenues in the Gulf ports would be among the first acts of President Lincoln's administration. The Peace Conference had adjourned *sine die* after adopting a plan of adjustment, embodied in seven resolutions, of which the following is an abstract:—

The 1st resolution restores in substance the Missouri Compromise by limiting Slavery in the Territories to the regions south of 36° 30′ north latitude. The 2nd requires that no Territory shall be acquired by the United States, except with the consent of a majority of the Senators from the Slave and a majority of the Senators from the Free States. The 3rd negatives the power of Congress to abolish Slavery in any State or territory where it is already recognised. The 4th provides for legislation for the delivery of fugitive slaves; the 5th abolishes the foreign Slave Trade; the 6th provides that no alteration shall be made in the terms agreed upon without the consent of all the States; and the 7th binds the Government of the Union to make compensation for fugitive slaves.

The *New York Herald*, referring to these resolutions, says:—"All hope of adjustment has passed." Major Anderson had written that he expected that Fort Sumter would be attacked immediately after the 4th, and President Davis was making every preparation for a bloody contest. The Texas election was unanimously in favour of secession. A collision between the Federal Government and the Texas State troops was imminent. General Twigg had surrendered the Federal army and all the military property in Texas to the State authorities. In consequence of this treachery he had been struck off the army roll as a coward and a traitor. The voting in Galveston and Houston had resulted in favour of secession by a large majority. The election in North Carolina had gone in favour of union by a small majority. The Californian Assembly had endorsed the Crittenden proposition. The Senate and the House of Representatives had agreed to all the amendments to the Tariff Bill, with the exception of the articles relating to tea and coffee. It was hoped however that President Buchanan would veto the Bill. On the 27th ult. President Buchanan communicated to the Senate the correspondence between the United States and Great Britain in regard to the case of the fugitive slave Anderson. The Senate went into executive Session upon this correspondence, and ordered it to be printed. The Select Committee of Five had reported respecting the correspondence between President Buchanan and the South Carolina Commissioners. They conclude by saying that they are not able to resist the inference that in the beginning of the revolutionary movements against the Government there were relations of an extremely friendly character between those who contemplated rebellion and those whose duty it was to suppress it.

BRITISH COLUMBIA.—Accounts from British Columbia to the 27th January, and from Oregon to the 2d ult. state that on the 24th January there was a large sale of real estate, belonging to the Hudson Bay Company, situated near the centre of Victoria. The property sold was unusually high, and realised 121,000 dols., indicating confidence in the progress of the colony. Some Oregon capitalists were about to ship flour from that State to Liverpool.

Parliament.

HOUSE OF LORDS.

MONDAY.—*Marriage Law in Ireland.* The LORD CHANCELLOR brought in a Bill to remove the anomaly under which a marriage between a Roman Catholic and a Protestant, if performed by a clergyman of the Roman Catholic faith in Ireland, is void. The Bill was read a first time. *Law of Divorce.*—The LORD CHANCELLOR moved for the appointment of a Select Committee to consider the law respecting the parties who are entitled, or ought to be entitled, to sue in the Divorce Court in England, and in the Court of Session in Scotland, for a dissolution of marriage. He explained that one of the objects he had in view was to extend the operation of the new law of divorce to Ireland, and to enable Anglo-Indians to avail themselves of it.—Lord CRANWORTH saw no reason why all her Majesty's subjects should not be enabled to appeal to the Divorce Court now established.—Lord MONTEAGLE protested against the introduction of the law to Ireland, where, he said, there was a general repugnance to the law of marriage as at present administered in Sir C. Cresswell's Court.—The Earl of WICKLOW claimed for the Protestants of Ireland the right to avail themselves of the new law of marriage, or any amendment thereof. It did not follow that, because the Roman Catholic population of Ireland regarded marriage as an indissoluble contract, the Protestants who held a different opinion should be excluded from the benefits of the new law. The motion was then agreed to. The *Inclosure Bill* and the *Bank of England Payments Bill* were read a second time. *Dwellings of the Labouring Classes.*—The Earl of DERBY moved that it be an instruction to the select committee on the metropolitan railways to inquire into and report upon the number of houses and of inhabitants likely to be removed by the works of the respective railways; and whether any provision has been made, or is required to be made, for diminishing the evils consequent on a large simultaneous displacement of the labouring population. He adduced statistics on the progress of the population from the years 1801 to 1851, to show that while the population had increased, the number of houses both within, but especially without, the city wall, had diminished. In the course of the metropolitan street improvements made by the corporation many of the humbler class of dwellings had been swept away, and to remedy this evil the corporation had recently voted a large sum to erect model lodging houses in Victoria-street, but this particular site had been since sold to the Metropolitan Railway Company. Again, the Metropolitan Extension Company had served with notice half the population in the parish through which it was to run, and he contended that the great number of houses which would be pulled down by the proposed branch to the North London from the North Western, and the number of people who would suffer thereby, as well as by the extension of numerous lines into the metropolis, required the instruction which he moved to the Select Committee.—Lord EBURY could not see how Lord Derby's desire was to be realized.—Lord POWIS did not think the demolition of dwellings due to railways, but to the increase of warehouses, for it was not till very recently that railways had penetrated the metropolis.—Lord REDESDALE did not think the resolution would stop the formation of railways in the metropolis.—Earl GRANVILLE read a letter from the Vicar of St. Giles, Cripplegate, deprecating the views embodied in the petition presented a few nights ago by Lord Derby, and contending that, so far from the railroad proposed being injurious, it would be of positive benefit to that district.—Lord COLCHESTER, Lord CLANRICARDE, and Lord GREY were in favour of the instruction. The motion was then agreed to.

TUESDAY.—The *Admiralty Court Jurisdiction Bill*, the *Inclosure Bill*, and the *Bank of England Payments Bill* passed through committee.

THURSDAY.—Lord LYTTELTON moved the second reading of the *Subdivision of Dioceses Bill*, the object of which was to modify the machinery by which dioceses were at present divided, and to vest in the Ecclesiastical Commissioners the power of providing for an increase in the number of Bishops, without the necessity of previously obtaining the consent of Parliament.—Earl GRANVILLE said that the imperfect state of the Bill would render considerable modifications necessary before it passed into law.—The Bishop of LONDON fully concurred with the important object of the Bill, but did not think the present measure would effect it.—The Earl of DERBY thought the Bill in its present state ought not to receive their Lordships' assent. At the same time, he quite agreed that an increase in the episcopate was necessary. He objected strongly to the powers which the Bill, if passed, would confer on the Ecclesiastical Commissioners.—The Bishop of OXFORD recommended the withdrawal of the Bill, because, although he concurred with the two leading principles of the measure, he could not agree with many of its details. After a short conversation, in which the Duke of MARLBOROUGH, Lord REDESDALE, the Archbishop of CANTERBURY, Lord LYTTELTON, the Bishop of ST. DAVID'S, and the Duke of SOMERSET took part, a division ensued, when the numbers were, for the second reading—Content, 27, Non content, 23. So the Bill was read a second time. The *Trade Marks Bill* was read a third time and passed.

FRIDAY.—*Poland.*—In answer to Lord STRATFORD DE REDCLIFFE, Lord WODEHOUSE said that her Majesty's Government had received an official communication with reference to the disturbances at Warsaw, but he could not at present say whether there would be any objection to lay the papers before the House on Monday next.—Lord CRANWORTH moved the second reading of the *Charitable Uses Bill*. He explained that the object of the Bill was to amend the law of mortmain in some respects in which its operation had been found prejudicial to the interests of charities.—The Lord CHANCELLOR thought that the measure was one which was not likely to give any satisfaction. [Left sitting.]

HOUSE OF COMMONS.

FRIDAY.—*Recall of Sir B. Walker.*—Mr. HENLEY suggested that, as the vessel sent to intercept Sir B. Walker had failed to find him, the nomination of the committee on Admiralty affairs should be postponed. Admiral DUNCOMBE assented, but expressed his opinion that there was really no necessity for Sir B Walker's attendance before the committee, as his evidence had already been given before the Dockyard Commission.—Mr. BENTINCK acquitted the Government of any intention to break faith with the House. *Indian Affairs.*—In answer to Colonel SYKES and Sir M. FARQUHAR, Sir C. WOOD gave details relating to the medical charge of her Majesty's native troops in India, and to the appointment of officers serving in India to staff or civil employments.—Mr. MONCKTON MILNES moved for a select committee to inquire into the constitution and efficiency of the present *Diplomatic Service* of the country. The motion was seconded by Mr. GRANT-DUFF, and supported by Mr. B. COCHRANE.—Lord J. RUSSELL, in assenting [illegible] that he did so not on the ground of there [illegible] the system.—Mr. H. B. SHERIDAN moved for [illegible] a Bill to reduce the duty on *Fire Insurance*. [illegible] last Session gone fully into the whole [illegible] been annually discussed. He therefore [illegible] proposal was to reduce the duty from 3s. [illegible] HAM seconded the motion, which was opposed [illegible] and supported by Alderman SIDNEY.—The CHANCELLOR of the EXCHEQUER said that the effect of the proposal [illegible] condemnation of 900,000*l.* of the revenue [illegible] The proposal was made in total ignorance [illegible] the country, when it was not known whether [illegible] revenue to give away, and whether this was [illegible] of financial remission if there was a surplus [illegible] meaning of the motion was that neither the [illegible] the paper duty, nor the tea duty, nor the [illegible] be put in competition with the duty on fire [illegible] special selection being urged by a combination [illegible] bodies.—Mr. MALINS and Mr. SPOONER supported [illegible] Mr. BLACK, Mr. GREGSON, and Mr. HENLEY [illegible] PALMERSTON said that the House was not [illegible] present to determine whether we could afford [illegible] tax, or whether it was clear that this was [illegible] other for repeal. It was trifling with the [illegible] country to determine to remit any part [illegible] knowing the state of our finances. On a [illegible] was negatived by 138 to 49.—Mr. BUTT moved [illegible] mittee to inquire into the *Grand Jury Presentments* [illegible] with the view of ascertaining whether any [illegible] be made in the laws regulating the administration [illegible] county fiscal business, and especially whether [illegible] expedient to introduce the principle of representation [illegible] popular election.—Mr. P. URQUHART seconded [illegible] Colonel DUNNE opposed it.—After several Irish [illegible] spoken, most of them against the motion, [illegible] suggested that the subject should be dealt with [illegible] Lord FERMOY objected to this course, which [illegible] shelve the question. On a division, the motion was [illegible] by 119 to 25. The select committee on the *Income Tax* was nominated on the motion of Mr. HUBBARD.

MONDAY.—*Naval Expenditure.*—Sir H. WILLOUGHBY [illegible] attention to the changes made by the Treasury [illegible] priation of moneys voted by Parliament for [illegible] the year 1859-60, stating that out of 508,88[illegible] liament for ships building by contract, 200,[illegible] stores and 38,521*l.* for machinery, the latter [illegible] sonal authority of the Secretary to the Treasury [illegible] of these changes, he observed, was to alter the [illegible] priation of moneys voted by the House, and [illegible] lution,—"That the powers of the Treasury to [illegible] priation of the grants of money by this House [illegible] defined and limited by law."—Mr. W. WILLIAMS [illegible] motion.—Mr. F. PEEL explained the circumstances [illegible] which transpositions took place of moneys from [illegible] excess to another that had failed, and pointed [illegible] ties in the way of an exact limitation of their appropriation [illegible] After some remarks by Sir S. NORTHCOTE, Sir [illegible] it was impossible to bind down the expenditure [illegible] to a particular appropriation of the sums [illegible] thought the changes made should be reported [illegible] After some remarks by Lord C. PAGET, Mr [illegible] Colonel SYKES, the resolution was withdrawn. [illegible] having resolved itself into a Committee of Supply [illegible] PAGET moved the *Navy Estimates*. The total sum [illegible] the year 1861-2 would be 12,029,475*l*, being a decrease [illegible] pared with the current financial year, of 806,[illegible] [illegible] of men which he proposed to take for the [illegible] 78,200, including all classes in the service, being [illegible] of 7300. The reserve force was making great progress [illegible] becoming a part of the established force of the [illegible] consisted of—naval reserve proper, 4000 men; [illegible] teers, 7000; coast guard, 4000; supernumeraries [illegible] ports, 1500; marines on shore, 8000, boys in [illegible] 2000; making a force of upwards of 26,000 [illegible] moment's notice to man a powerful fleet. He [illegible] House, notwithstanding what had been said as [illegible] faction in the service and want of discipline [illegible] that there was no truth whatever in the assertion [illegible] at no previous period was the discipline [illegible] than at present. The Government had not [illegible] commendation which had been made by the [illegible] manning the navy with reference to training [illegible] vice, and he was happy to say that we had now [illegible] would, in the course of time, take the place of [illegible] men. Having contrasted at some length the [illegible] strength of the navies of France, Russia, Spain, [illegible] and read statistics of ship building abroad, to [illegible] European Power, including Italy, was making [illegible] tions to build and maintain ships of war, he [illegible] progress of ship building at home. He stated [illegible] 7 iron-cased ships in course of construction, of [illegible] Warrior and the Black Prince, were afloat. He [illegible] experiments made with the Gloire had proved [illegible] doubt that similar ships were not only formidable [illegible] defences, but also as sea-going vessels of [illegible] We were building iron vessels double the [illegible] French, in order to meet the improvements [illegible] of projectiles, and to afford greater stowage [illegible] and provisions. With respect to the [illegible] tion of our fleet, he discussed the [illegible] vantages and disadvantages of iron vessels [illegible] vessels iron clad, and the expediency of [illegible] iron ships, suggesting considerations why we [illegible] tinue to build wooden vessels. He concluded [illegible] first vote, for 78,200 men.—Sir J. PAKINGTON [illegible] course taken by the Government in building so [illegible] ships, and expressed his apprehensions at the [illegible] pline in the navy.—Mr. BAXTER contended that [illegible] a reduction in the estimates, which were based [illegible] exaggerated estimate of the naval preparations [illegible] resources of France.—Mr. BENTINCK dissented [illegible] views, and insisted that the discipline in the [illegible] bad as represented by Sir J. Pakington.—Sir M. [illegible] Mr. LIDDELL made a few remarks upon [illegible]—Mr. LINDSAY dwelt upon the vast [illegible] of the navy of England over that of France [illegible] had, he said, been exaggerated and [illegible] After some remarks by Sir J. ELPHINSTONE, Mr. [illegible] and Admiral WALCOTT, Mr BRIGHT treated the [illegible] ing the French preparations as founded on the [illegible] and most criminal falsehood, and he imputed [illegible] Government in allowing the alarm to exist. [illegible] have reduced the Estimates 3,000,000*l.* or 4,[illegible] PALMERSTON said it was impossible to shut our eyes [illegible] and our ears to the truth that the policy of France [illegible] get up a Navy equal or superior to that of England [illegible] not blame her for this, but if we wished to [illegible] France and at peace with her, we must keep [illegible] tion that our weakness should not invite attack. [illegible] iron ships, we were not in that condition, and it [illegible] to strengthen ourselves. It should moreover [illegible] that France had an army six times as great as [illegible] she could bring 600,000 men into the field. The [illegible] posed in these Estimates, however the amount [illegible] gretted, was not larger than the interests [illegible] country required.—The vote and the two succeeding [illegible] wages and victuals, were then agreed to, and the [illegible]

then reported progress.—*The Red Sea and India Telegraph Bill*, after some discussion, passed through Committee.

[illegible]—*[illegible] Fisheries*.—In answer to Mr. A. [illegible], Lord John Russell said that the commissioners on the [illegible] fisheries had reported in 1859, but that there [illegible] questions at issue upon which no arrangement [illegible] completed. *Parliamentary Reform*.—Mr. T. [illegible] moved a resolution that it was the duty of the [illegible] no further time in giving such complete effect [illegible] of the last reign, whereby reforms were made in the [illegible] system, as should carry out the subsequent [illegible] of the Crown, and fulfil the just expectations of the people.—Mr White seconded the motion.—Sir G. Lewis denied that the House or the Government had [illegible] any disinclination to discuss the question [illegible], inasmuch as leave had been given to Mr. Locke King and Mr Baines to bring in Bills to extend the county and borough franchise. He considered the resolution [illegible], and would therefore vote against it.—On the recommendation of Mr. Bright the motion was then withdrawn.—Mr. Slaney moved for a select committee to consider the means of improving the *Dwellings of the Working Classes* in [illegible], and of obtaining for them air, exercise, and [illegible], so as to conduce to their health and [illegible].—Mr. Williams seconded the motion.—Sir G. Lewis [illegible] the more practical way of dealing with the [illegible] which the hon gentleman had in view [illegible] by a Bill than by inquiry before a select committee. The motion was ultimately withdrawn.—Mr. Lygon [illegible] leave to bring in a Bill for the *Voluntary Disgrading [illegible]*.—Mr Bentinck moved a resolution to the effect that [illegible] the great number of *Railway Accidents*, [illegible] had arisen from the non-adoption by railway [illegible] of precautions recommended in the evidence given before the Railway Accidents Committee, it [illegible] desirable that her Majesty's Government should [illegible] further legislation on the subject of railway traffic, [illegible] to enforce the adoption by all railway companies [illegible] precautions which, by the general testimony of railway [illegible], had been shown to be desirable. Mr. Jackson seconded the motion. After some remarks by Mr. Thompson, Mr H. Baillie, Mr. Dutton, Sir F. Smith, Colonel Gilpin, Sir J. Paxton, Mr E James, and Mr. Haliburton, Mr. Milner [illegible] said that the result of repeated inquiries by committees [illegible] Houses of Parliament was a recommendation that [illegible] should be no additional surveillance on the part of the Government in the management of trains. The railway companies themselves had shown no indisposition to assist in [illegible] the causes of accidents, and until they did so [illegible] interference would be injudicious. The best protection which the public had was Lord Campbell's Act, under [illegible] compensation had already been paid exceeding 300,000*l.* [illegible] the principal railway companies had adopted a mode [illegible] between the guard and the engine-driver, and [illegible] that in a short time it would be generally adopted. After some further discussion, Mr. Bentinck withdrew his [illegible].—Colonel Sykes called attention, at great length, to [illegible] the papers upon *China Affairs* relating to events [illegible], and asked what line of policy it was intended to [illegible] in our future relations with the Taepings or national [illegible] in China.—Lord J. Russell said that Mr. Bruce and Mr. [illegible] were right in resisting the attack upon Shanghae. [illegible] of the Taepings was a blasphemous parody upon Christianity; they were in fact idolaters of a worse form even than the Chinese Buddhists themselves, and the policy which the English Government would pursue was one of strict [illegible] between them and the Imperial Government.—[illegible] moved the nomination of the select committee on the *Board of Admiralty*.—Mr. Bentinck objected to the preponderance of official persons on the committee. [illegible] put three ex First Lords of the Admiralty on it would be to constitute those gentlemen judge and jury in their own case, and to vitiate the whole inquiry. He therefore opposed the names of Sir J. Graham, Sir F Baring, and Sir J. Pakington.—Admiral Walcott and Mr. H. Baillie concurred in the objection.—Lord Palmerston defended the constitution of the Committee, and reminded the House that its [illegible] was not to inquire into the conduct of private individuals, but into the working of a system, and that the presence of the three ex First Lords would be most useful for that [illegible].—Mr Osborne was opposed to the formation of the committee altogether, as it would usurp the duty of the Executive.—Mr Disraeli confessed he was dissatisfied at the [illegible] in which it was proposed to deal with this question. [illegible] it would have been better to have delegated the [illegible] to a royal commission, which should add to its inquiry the subjects proposed for Sir J. Elphinstone's Committee. He moved the adjournment of the debate.—Mr. Henley said that in the absence of Sir Baldwin Walker, he objected to serve on the committee.—Lord J. Russell defended the conduct of the Government in consenting to the appointment of a Committee, which, he said, was always a [illegible] course of proceeding in the House of Commons.—[illegible] remarks from Admiral Duncombe, Mr. Bright and [illegible] members, the motion for the adjournment was withdrawn, [illegible] committee as originally nominated was then agreed to.—[illegible] Palmerston moved two resolutions, 1. that the order of [illegible] for the appointment of a select committee to [illegible] the present system of *Promotion and Retirement in the [illegible] Navy*, and the present pay and position of the several [illegible] naval officers and to report what changes therein [illegible] desirable with a view to the increased efficiency of the [illegible] service, be discharged, and 2, that it be an instruction to [illegible] committee appointed to inquire into the constitution [illegible] Board of Admiralty, and the various duties devolved [illegible] as to the general effect of such system on the navy, to consider the present system of promotion and retirement in the royal navy.—Sir J. Elphinstone complained of the [illegible] taken by the Government, but the motion was carried [illegible] by 96 to [illegible].

Wednesday.—*County Franchise Bill*.—Mr. L. King moved [illegible] second reading of this Bill, and said that it was a very [illegible] measure, the principle of which had been often discussed [illegible] by the House.—Mr. A. Smith moved as an amendment the previous question, stating that he took this [illegible] instead of moving to defer the second reading for six months, because he was unwilling to pledge members one way [illegible] the other in the present state of the Reform question.—[illegible] Dr. Camp seconded the amendment. After a [illegible] discussion, in which Lord Henley, Mr. Adderley, Mr. [illegible], Sir L. Palk, Lord Enfield, Mr. Hunt, [illegible], Mr Barlow, and Mr A. Egerton took part, [illegible] Lewis said that the House had, on the first night of the [illegible] by a large majority the decision of the [illegible] that it was not advisable that they should introduce [illegible] extensive measure for lowering the [illegible] counties and boroughs. Although he felt that [illegible] were many advantages in proceeding gradually, still [illegible] that the question of reform could be satisfactorily [illegible] only by a more comprehensive measure [illegible] submitted to the House. The "previous question" [illegible] dispose of the Bill. His vote would be given for its [illegible] at the same time he was of opinion that the [illegible] not a favourable opportunity for bringing the subject under the consideration of the House.—Mr. Osborne said he was puzzled by the speech of Sir G. Lewis, who admired Mr. King's Bill as much as ever, but thought it had not been introduced at a favourable moment; giving his vote for the Bill, but damning it with faint praise.—Mr. Beach and Mr. W. Egerton spoke in opposition to the Bill.—Lord J. Russell said that any further amendment of the Constitution would be better done by some comprehensive measure; and that no measure was likely to succeed which was not founded upon a due regard to the general interests of all classes. But it seemed to him that it was not necessary for the House to wait for a comprehensive measure. The preamble of this Bill, which declared that it is expedient to extend the franchise to certain persons who had not hitherto enjoyed it, did not bind the House to any particular amount to which the franchise should be lowered, and he considered it his duty to vote for the second reading.—Mr Disraeli objected to deal with the question of extending the suffrage in counties otherwise than by a complete and comprehensive measure, in connexion with the borough franchise, and with all that affected the representation of the people in Parliament. He denied that this Bill was in any degree in harmony with the Bill of the late Administration, which provided for local Government and for that protection to the land which was necessary to public liberty. Upon a division, the amendment of the previous question was carried by 248 to 220; so the Bill was virtually lost.—Sir J Trelawny moved the second reading of the *Affirmations Bill*, the object of which was to allow persons who objected to take an oath to make a form of affirmation in lieu of an oath.—Mr. G. Hardy moved that the Bill be read a second time that day six months.—The amendment was seconded by Mr Malins.—Sir G. Lewis concurred in the objections offered to the Bill, which, wide as it was in its operations, was, he remarked, founded upon a very narrow basis.—Mr. Crawfurd moved the adjournment of the debate, but the motion was negatived on a division by 183 to 50. The debate was then cut short by the arrival of the hour for adjournment. *Supply*.—In committee of ways and means, a resolution was passed that, towards making good the supply granted to her Majesty, the sum of 4,000,000*l.* be granted out of the consolidated fund.—Mr. Bristow obtained leave to bring in a Bill to exempt the volunteer forces of Great Britain from the *Payment of Tolls*.

Thursday.—*The China War*.—In answer to General Peel, the Chancellor of the Exchequer said that the greater part of the vote of 850,000*l.* on account of the China War had been absorbed by the army expenditure, and that the residue would be applied to the Indian claims on account of the expedition. *The Hungarian Notes*.—In answer to Mr. T. Duncombe, Sir G. Lewis said that Sir R. Mayne had called his attention to the manufacture of Hungarian notes, and under his direction had communications with Messrs. Day, and gave them notice not to suffer the notes to leave their premises. He was not aware that any detective had been introduced into Messrs. Day's premises in the disguise of a workman. No expense had been incurred by the Government, who had declined to be parties to the legal proceedings.—Sir H. Cairns asked for some explanation as to the course taken on behalf of the Crown in the recent *Prosecutions at Armagh*, and complained that although there had been rioting on both sides, the indictments were laid against Protestants only.—Mr. Cardwell replied that no informations had been sworn against the other side, and he challenged Sir H. Cairns to produce any case in which the Government ought to have prosecuted and did not.—The House then went into a Committee of Supply on the *Army Estimates*, when Mr. T. G. Baring made the usual statement, accompanied by details. The number of men proposed for the current year was 146,044, exclusive of the force in the East Indies, which would raise the aggregate number to 212,773. The sum to be voted was 14,606,751*l.*, which was less than the Estimates of 1860-61 by 185,795*l.* This was, however, less than the real decrease, which was 295,795*l.* He noticed the improvements which had been effected in re-enlistments, food, and clothing. The health of the Army during the past year had been extremely good; the mortality abroad had been below the average. With regard to the education of officers, it was proposed for the future that every young gentleman preparing for the army should pass one year at a training college, in order to learn the rudiments of his profession. A sum of 38,000*l.* was included in the estimates for the expenses of the yeomanry corps, who were to be called out for duty this year. There was also an increase of 27,000*l.* under the head of "volunteers," chiefly for the pay and allowances of adjutants. He was happy to say that there was no prospect of any falling off in the numbers of this popular force, as the increase during the year was 507 corps, consisting of 40,000 men. There were in all 217 battalions, of which 130 were administrative. He then referred to stores and *matériel*, describing the steps taken to improve and lessen the cost of producing Armstrong guns and rifles. With respect to works and fortifications, it was not proposed to take any large vote, but land would be purchased, so that in the event of an emergency works might hereafter be added. He concluded by moving a vote for 146,164 men and officers, exclusive of the forces in India.—Colonel Dunne, Mr. Williams, Col. Dickson, and Mr. Henley complained of the enormous amount and increase of the estimates in all branches of the service.—Lord Palmerston said that every one seemed to feel that the number of men was not greater than the interests of the country required. The great bulk of the increase in the Estimates was caused, first, by the augmented number of men; and, secondly, by the changes in the *matériel* of war. Then members suggested improvements in barracks, clothing, and other charges, which, good as they were, all added more or less to the expenditure, and tended to swell the Estimates.—After some further debate, the vote was agreed to. On the next vote, of 4,78[illegible]*l.* for the pay and allowances of the land forces, an objection was made to proceeding further; but, after some debate, a vote of [illegible]*l.* was taken on account, and the Chairman was then ordered to report progress. The *Red Sea and India Telegraph Bill* was read a third time and passed. In committee of the whole House on the *London Coal and Wine Dues*, Sir G. Lewis moved a resolution for continuing for ten years the existing dues on coal and wine levied by the Corporation of London, to be appropriated to metropolitan improvements including the embankment of the Thames, and to be levied only in the metropolitan police district instead of within a circle of 20 miles as heretofore.—Mr. Ayrton objected that no notice had been given of the resolution, which, was, however, agreed to, and leave was given to bring in a Bill founded thereupon.—Mr Caird obtained leave to bring in a Bill to extend the jurisdiction of the *Sheriffs' and Small Debts Court*.—Sir G. Lewis obtained leave to introduce a Bill to amend the *Law relating to Elections of members of Parliament*. [illegible] to amend the law relating to *[illegible] Schools*.—The Lord Advocate obtained leave to bring in a Bill for the improvement, regulation, and protection of the *Salmon Fisheries in Scotland*.

Friday.—*The Budget*.—In answer to Mr Moffat, the Chancellor of the Exchequer said he was not able to state exactly when he could introduce the budget, but he hoped to be able to do so on Thursday the 18th of April. *Church Rates.*—Mr. Long gave notice that on the motion for the third reading of the Church Rates Abolition Bill he should move that it be read a third time that day six months.

[Left sitting.]

City Intelligence.

Money Market, Friday.—British Funds: Consols closed at $91\frac{7}{8}$ to $92\frac{1}{8}$ for Money, and $92\frac{3}{8}$ to $\frac{1}{2}$ for the 10th of April; India Five per Cent. Stock, $100\frac{3}{4}$ to $\frac{1}{4}$; Ditto Four per Cent. Debentures, 1858, $95\frac{3}{4}$; Exchequer Bills (June), 4s. to 5s. dis.; Ditto March, 3s. to 5s. prem.—Foreign: Brazilian Four and a Half per Cents., 1860, $85\frac{1}{2}$; Dutch Two and a Half per Cents., $63\frac{1}{8}$; French Four and a Half per Cent. Rentes, 94fr. $37\frac{1}{2}$c.; Mexican Three per Cents., for Acct., $24\frac{3}{8}$ to $\frac{1}{2}$; New Grenada Active, 15[illegible]; Russian Four and a Half per Cents., $91\frac{1}{2}$; Ditto Three per Cents., 1859, $61\frac{1}{4}$; Spanish New Deferred Three per Cents., for Acct., $41\frac{1}{4}$; Ditto Passive, $17\frac{3}{4}$ to $\frac{1}{8}$; Turkish Six per Cents., 1854, for Acct., 73; Ditto 1858, for Acct., $53\frac{3}{4}$ to $54\frac{1}{4}$ ex div.; Ditto 100*l.* Bonds, $56\frac{1}{8}$ ex div.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,918,975	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	10,595,613
		Silver Bullion	848,362
	£25,918,975		£25,918,975

BANKING DEPARTMENT.

Proprietors Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£9,479,729
Rest	3,816,784	Other Securities	20,071,017
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	6,648,884	Notes	6,883,645
Other Deposits	11,[illegible]	Gold and Silver Coin ..	[illegible]
Seven day and other bills	[illegible]		
	£37,369,168		£37,369,168

14th day of March, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY.—BANKRUPTS.—W. Ballinger, Swansea, Glamorganshire, Maltster, Brewer, and Baker—J. Bridger, Florence Terrace, New Cross Road, Deptford, Grocer, Cheesemonger, and Tea Dealer—A. Bryce and J. S. Oswin, Manchester, Merchants and Commission Agents—H. Clench, High Street, Newington Butts, Milliner—T. Fleming, Halifax, Yorkshire, Manufacturer—J. Hainsworth, Halifax, Yorkshire, Plumber and Glazier—S. C. Harrison, Ipswich, Innkeeper—J. R. Horner, Ashton-under-Lyne, Corn Merchant—E. Ingram, Bilston, Staffordshire, Grocer and Corn Factor—J. Payne, Milton Street, Dorset Square, Horse Dealer—H. Rawson, Manchester and Whitebrook, Monmouthshire, Printer, Stationer, and Paper Manufacturer—S. J. Rosenthal and H. S. Rosenthal, Liverpool, Billiard Table Proprietors and Butchers—J. Sutcliffe, Scarborough, Yorkshire, Upholsterer.

SCOTCH SEQUESTRATIONS.—W. Cook, Stornoway, Rosshire, Shipbuilder—J. Lennox, Kelso, Roxburghshire, Cattle Salesman—D. Gibson, Glasgow, Cabinetmaker—A. Meldrum, jun., Huntly, Aberdeenshire, Draper—R. Paul, Dumfries, Writer—T. M. State and J. G. Stuart, Kirkcaldy, Merchants—S. Sutherland, Aberdour, Aberdeenshire, Farmer—J. Weir, Falkirk, Draper—T. White, Dundee, Grocer.

FRIDAY.—BANKRUPTS.—T. Bell, Bolton, Lancashire, Machine and Roller Maker—E. Blood, Leicester, Innkeeper—J. T. Green, Garratt Mills, Wandsworth, Surrey, Manufacturer of Materials for Making Paper—[illegible] Griffin, Basinghall Street, Woollen Warehouseman—E. Lightfoot, Nantwich, Cheshire, Confectioner—J. Savage, Macclesfield, Cheshire, [illegible] Dealer—[illegible] Steven, West Hartlepool, Durham, Grocer and Provision Merchant—W. Ward, Barkby Fagnel, Lincolnshire, Farmer and Cattle Dealer—H. Weatherhill, Kingston-upon-Hull, Coach Builder.

BANKRUPTCIES ANNULLED.—W. Millward, formerly of Birmingham, Warwickshire, afterwards of Aston, near Birmingham, now of Kates Hill, Dudley, Worcestershire, Grocer and Provision Dealer—D. Phillips and J. Vinsberg, Guildhall Chambers, Basinghall Street, Importers of Foreign Goods.

Metropolis and its Vicinity.

The Great Exhibition of 1862.—The designs for the Great Exhibition building are completed and drawn. The building differs in many essential particulars from its predecessor. It will be much larger, and more imposing in its interior, while from without its aspect will be of remarkable magnitude and grandeur. Glass and iron are no longer to be the chief features in the design, and are only to be used where lightness with ornamental effect is needed. Externally the building will be 1200 feet by 700. The average height will be 100 feet, nearly 60 of which will be solid brickwork. Taking one of the main sides of the building, on the Exhibition Road, as an example, it will present a lofty recessed façade, from the centre of which will rise a dome of glass and iron to the height of 250 feet, with a base of 160 feet diameter. These, for there are to be two, one at each end of the building, will be the largest domes ever built. That of St. Paul's is only 108 feet in diameter at the base, and even St. Peter's is only 139. These domes are to be reared over the intersection of the nave and transepts at right angles, and as the floors beneath both will be elevated above the level of the floors of the rest of the building, an unequalled view will be obtained from these raised floors through almost every part of the vast interior. One magnificent nave will be continued from this entrance in the Exhibition Road to the extreme end of the building in the grounds of the Horticultural Society, and at the termination of this the second dome will rise. The nave is, therefore, to be 1200 feet long by 85 wide and 100 high. The transepts, in which it terminates at either end, will be each 700 feet long by 85 broad and 100 high. All the roofs will be of wood coated with felt, and will meet in the centre at an angle, like the roof of Westminster Hall and most of our old cathedrals. The effect, however, from the interior will not be that of an angular roof, as the girders will be arched and coloured. On the side walls, beneath the roof of all the naves and transepts, will be a clerestory 25 feet high of glass and iron, which, with the light from the domes, the glass and iron entrances, and the windows in the walls, will make the light as equal as it was in the old building; while, by the present one being erected due east and west, the glare of the sun will be obviated. The inside, as heretofore, will be entirely fitted with iron columns and girders, but arranged in more Gothic form and style, and with a keener view to picturesque effect than in 1851. The picture gallery will run the whole length of the structure, and will be built of brick, with a wall thickness of about two feet. The pictures will not be hung higher than 20 feet from the floor; therefore only the

upper portion will be used as the gallery for modern art. As this is the first instance of an International Fine Art Exhibition in England, a question has arisen whether it should be confined to the works of living artists, or might not with advantage embrace a more extended period of art. Before coming to any decision on this point, the Commissioners are desirous of obtaining the opinion of persons of acknowledged authority in matters relating to the Fine Arts. They have therefore resolved to request the following gentlemen to form a committee of advice:—The Duke of Buccleuch, the Marquis of Lansdowne, the Marquis of Hertford, Earl Spencer, Earl Stanhope, the Earl of Malmesbury, Earl Somers, the Earl of Dudley, Lord Ashburton, Lord Overstone, Lord Talbot de Malahide, Lord Llanover, Lord Taunton, Lord Elcho, M.P.; the Lord Chief Baron, Sir Stafford Northcote, M.P.; Sir Francis Scott, Mr. T. Ashton, Mr. H. Cheney, Rev. E. Coleridge, Mr. Field, Mr. R. S. Holford, M.P.; Mr. H. T. Hope, Mr. John Ruskin, Mr. Stirling, M.P.; Mr. Sheepshanks, Mr. S. J. Stern, Mr. Tom Taylor, Mr. John Walter, M.P.; Mr. William Wells, and the Presidents of the Royal Academy, the Royal Scottish Academy, the Royal Hibernian Academy, the Old and the New Societies of Painters in Water Colours, the Society of British Artists, the Institute of British Artists, and the Royal Institute of British Architects. Another improvement upon the plan of 1851 is the abolition of local committees through the country. In place of these will be substituted a large trades council, composed of the representative men of the various branches of trade and manufacture throughout the kingdom. The decision of this body will regulate the amount of space to be allotted to each branch of manufacture. Only the same Council medals and certificates of honourable mention will be awarded as prizes as on the last occasion. Some doubt exists whether the rule in 1851, by which no prices were to be affixed to any article, shall be adhered to on this occasion. The arrangements for the refreshment departments will be very different from those made on the last occasion. Two departments will be set aside for one English contractor, one department for some eminent French contractor, and one for an Italian, and it is understood that wines, beer, and spirits will be sold in the building. The *Gazette* of last evening contained a notice from the commissioners, stating that the guarantee now amounts to 250,000*l*. The design and all the plans connected with the building are the work of Captain Fowke, R.E. The time fixed for the Exhibition is the same as that in 1851—viz., from the 1st of May to the 15th of October. The Royal Commissioners meet daily to arrange details, and set in motion the whole of that vast provincial and continental organisation which in 1851 achieved such successful results.

THE "ESSAYS AND REVIEWS."—A meeting of the archbishops and bishops of the two provinces of Canterbury and York was held on Wednesday to determine what course their lordships will take in reference to the Essays and Reviews; and the archbishops of Armagh and Dublin have addressed a letter to the bishops of their provinces, calling attention to the work with a view to their "putting their clergy specially on their guard against the possible inroads of erroneous and strange doctrines in this new form." On Wednesday a deputation of considerable influence in position and numbers, comprising representatives of the two great parties in the Church, and headed by Bishop Trower, had an interview with the Archbishop of Canterbury, to present an address signed by upwards of 8000 clergymen of all parties in the church, including deans, archdeacons, canons, prebendaries, heads of colleges, professors at Universities, and beneficed clergymen, from which the following is an extract:—

"We respectfully request your grace's attention to certain opinions contained in a volume of 'Essays and Reviews,' recently published, the tendency of which, as it appears to us, is to annihilate the authority of the Bible as the inspired Word of God, to reject all miracles (not excepting those of our blessed Lord) as incapable of proof and repugnant to reason, and in one instance, at least, to undermine faith in God as the Creator. These opinions have been promulgated, with one exception, by clergymen of our Church holding positions of great trust, and possessing opportunities favourable in no ordinary degree for the diffusion of error. We therefore earnestly entreat your grace to take counsel with the other members of the Episcopate, and to devise such measures as may, with God's blessing, banish and drive away from our Church all such erroneous and strange doctrines. The opinions against which we protest as being repugnant to the natural meaning of our formularies, and inconsistent with the teaching of the Church of England, are expressed in the accompanying extracts from the essays to which we refer.'

The Archbishop expressed his gratification in receiving the deputation, and his full concurrence in every opinion embodied in the memorial. With regard to the means to be adopted in this case, his grace showed the difficulty of acting legally, owing to the technicalities and formalities attending the ecclesiastical courts, which might have the effect of protracting the discussion over two or three years. His chief confidence, he said, was in the answers which the "Essays" would receive from the members of the clergy themselves, who were well qualified to answer them; and he had no doubt but that each one of the essays would in this way be shown to be a frivolous and answerable publication. —The Rev. Dr. Thomson, Provost of Queen's College, Oxford; the Rev. Professor Ellicott, B.D., of Cambridge; the Rev. Professor Mansel, B.D., of Oxford; the Rev. George Rawlinson, M.A., of Oxford, and other clergymen distinguished in the Church, have announced their intention of replying to the "Essays and Reviews" in a volume which they will speedily publish, under the title of "Aids to Faith." The clergy of the archdeaconry of London will meet at Sion College on the 25th inst., when an address on the duty of the clergy in reference to the "Essays and Reviews" will be delivered by the Rev. B. Morgan Cowie, B.D., vicar of St. Lawrence Jewry, and Gresham Professor of Geometry. A meeting of the clergy of the Archdeaconry of Exeter was held on Monday in the Chapter House, Exeter, "to express the thanks of the clergy to the archbishops and bishops for the unanimous censure which they had passed upon "Essays and Reviews." On the other hand two beneficed clergymen have declared themselves defenders of the volume. One of them is the Rev. Dr. G. J. Wild, of Emmanuel College, Cambridge, vicar of Dodderhill, near Droitwich, in the diocese of Worcester, who proposes "to show by extracts from their works that similar doctrines have been maintained by eminent divines and living dignitaries of our Church." The other is the Rev. R. B. Kennard, of St. John's College, Oxford, rector of Marnhall, near Blandford, in the diocese of Salisbury, who expresses his sympathy with the seven writers, and protests against the condemnation which the Bishop of Salisbury has passed upon the work by affixing his signature to the Archbishop of Canterbury's letter.

NEW ROYAL HORTICULTURAL GARDENS, SOUTH KENSINGTON.—A preliminary inspection of these gardens by the Fellows and their friends took place on Thursday and yesterday, and will continue to-day. The grounds were thronged by visitors, and on Friday Her Majesty honoured the Society by her presence.

DECAY OF THE PALACE OF WESTMINSTER.—The Chief Commissioner of Works, in accordance with the suggestion of the Institute of British Architects at the termination of their recent discussion on this subject, has appointed a committee consisting of the following scientific men to consider the best means of preserving the stone of the Palace of Westminster:—Architects: Mr. William Tite, M.P.; Mr. Digby Wyatt, Mr. G. G. Scott, Mr. Sydney Smirke, and Mr. Edward Barry. Geologists: Sir Robert Murchison, Professor Ansted, Professor Tennant, and Mr. C. H. Smith. Chymists: Professor Hofmann, Dr. Frankland of St. Bartholomew's, and Mr. F. A. Abel of Woolwich.

LORD MACAULAY'S HISTORY.—The fifth volume of Macaulay's "History of England," edited by his sister, Lady Trevelyan, has been published this week. It comprises the events of the years 1698, 1699, 1700, and 1701, including the death of James II. and the memorable general election of 1701, and contains that portion of the continuation of the History which Lord Macaulay left fairly transcribed and revised for the press. It is given to the world precisely as it was left. Besides the revised manuscript, a few pages containing the first rough sketch of the last two months of William's reign are all that is left. From this Lady Trevelyan has, with some difficulty, deciphered the account of the death of William. No attempt has been made to join it on to the preceding part, or to supply the corrections which would have been made by the hand of the author.

BRITISH MUSEUM.—At a meeting of the standing committee on Saturday, Sir Roderick Murchison's proposal to open the British Museum for public exhibition on Sundays was rejected by a majority of 11 to 1.

LORD ADOLPHUS VANE TEMPEST, M.P. for North Durham was charged at Marlborough Street Police Court on Wednesday week, with creating a disturbance in Coventry Street in open day. His conduct before the magistrate was of the most extraordinary character, and in default of finding bail in two sureties of 500*l*. each, he was sent to the House of Detention. It is now announced that his lordship has, under medical advice, been removed by his friends to a private lunatic asylum, there being little doubt that he is labouring under temporary derangement.

METROPOLITAN POLICE COURTS.—Mr. Edmund Humphrey Woolrych has been appointed a magistrate of the Thames Police-court, in the room of Mr. Yardley, who has succeeded the late Mr. Secker at Marylebone.

THE LATE DESTITUTION IN ENGLAND AND WALES. —A Parliamentary document has been issued, showing the extent of the recent destitution in England and Wales. It appears that in the third week in January there were as many as 948,379 persons in receipt of relief, against 829,997 of the same period in the preceding year, being an increase in one week of 118,382. In the metropolis alone the increase was 38,851. In the last week in January there was a considerable decrease, which has continued to the present time.

THE PUBLIC HEALTH.—The Registrar-General's Weekly Return states that the deaths in London in the week that ended Saturday, March 9, were 1279. The average number in the corresponding weeks of 10 previous years 1851-60, corrected for increase of population, was 1422. The present return is therefore 143 below the average. During the week the births of 1066 boys and 1006 girls, in all 2072 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1799.

Provincial.

ABERDARE.—On Friday morning an explosion occurred in the "Four-feet vein" pit of the Blaengwawr Colliery, Aberdare, belonging to Mr. David Davis. Fourteen men were killed on the spot, and others were seriously injured. The cause of the explosion has not yet been ascertained, but a Government inspector has arrived for the purpose of investigating the case.

BRIGHTON.—The police have succeeded in [illegible] the supposed perpetrator of the late daring [illegible] Lady Loftus Otway's. He is a discharged [illegible] Lady Otway's, and was captured in the [illegible] in Adam Street West, Marylebone. The [illegible] in his possession a valuable gold watch and [illegible] gold chains and rings, and a considerable [illegible] gold. He was only discharged on the 17th [illegible] the House of Correction after six months' [illegible] ment.

ROAD.—The *Western Morning News* [illegible] received information from a quarter entitled [illegible] that in consequence of the completion of [illegible] evidence conclusively establishing [illegible] murder at Road House has been confessed [illegible] Constance Kent, who states that she [illegible] child, and afterwards cut its throat, and [illegible] shutters of the house to avert suspicion [illegible] The report adds that Miss Constance Kent [illegible] unmistakeable evidence of derangement, and [illegible] confinement. The Bristol papers assert that [illegible] statements are without foundation, and that [illegible] surrounding this extraordinary case is apparently impenetrable as ever.

RUGELEY.—On Saturday night an inquest [illegible] cluded on the bodies of four men and two [illegible] were killed on the 8th of January last in a [illegible] Wyrley colliery, near Brownhills, on the Cannock [illegible] way. The inquiry had been adjourned from [illegible] time for additional evidence, and especially [illegible] to be examined by the Government inspector [illegible] careful deliberation, the jury returned a verdict of Accidental Death.

TRENTHAM.—The funeral of the late Duke of [illegible] land took place on Saturday in the family [illegible] Trentham church. The chief mourners were [illegible] the Marquis of Stafford, the present duke, [illegible] Ronald and Albert Leveson Gower; the others [illegible] including his sons-in-law, the Duke of Argyll, Marquis of Kildare, Lord Blantyre, and Earl [illegible] the Hon. and Rev. the Dean of Lichfield, the [illegible] of Westminster, Earl Granville, Hon. Frederick [illegible] son Gower, Mr. Loch, Mr. Jackson, the Earl [illegible] mere, &c. The Duchess of Sutherland, the Duchess of Argyll, Lady Blantyre, the Marchioness of Kildare, Lady Constance Grosvenor were also present. [illegible] grace had the consolatian of being surrounded [illegible] whole of his family on his death-bed.

Ireland.

MEETING OF ROMAN CATHOLIC PRELATES.—[illegible] meeting of all the Roman Catholic bishops of [illegible] was announced to be held in Dublin on Tuesday [illegible] discussion of the National system of Education, [illegible] Queen's Colleges, the Poor Law System, [illegible] proposed bill for the registration of births, deaths [illegible] marriages. On Tuesday morning, however, [illegible] announced that the meeting was postponed [illegible] middle of April.

THE YELVERTON CASE.—It is stated in several [illegible] Dublin papers that this extraordinary case, [illegible] virtually settled by the recent verdict, will [illegible] Court of Session in Scotland early next summer, [illegible] will also be carried to the House of Lords. [illegible] subscription has been opened with a view to [illegible] for Mrs. Yelverton, and a large sum has [illegible] been received. It has also been proposed that [illegible] Yelverton and her counsel shall each be presented [illegible] piece of plate by the ladies of Dublin. Major [illegible] had an interview on Saturday with the authorities [illegible] Horse Guards. The announcement of this [illegible] put an end to the current rumour that he [illegible] Forbes had sailed for New York from Queenstown [illegible] the last mail. Mrs. Forbes left Kingstown [illegible] to join Lady Ashworth and her sisters in London. [illegible] authorised denial has been given to one of the [illegible] important statements in Major Yelverton's [illegible] Miss Longworth—that he could not marry her [illegible] was dependent upon his uncle, who held his [illegible] 1000*l*. According to the following article in [illegible] paper, this representation was a complete fiction:—

"In his letters to Miss Longworth, Major Yelverton [illegible] as the principal motive for a clandestine marriage [illegible] pendence upon his uncle. He affirmed that he was [illegible] uncle, the Hon. William Henry Yelverton, the sum of [illegible] that this uncle had compelled him to give a bond [illegible] amount; and, that the stipulation exacted was, that [illegible] Yelverton should not marry under penalty of execution [illegible] bond. He further stated that his uncle had ulterior [illegible] being desirous that the title of Avonmore should descend [illegible] his sons. Major Yelverton added that he had great [illegible] tions from his uncle, and that to displease him would [illegible] ruin. These representations induced Miss Longworth [illegible] to consent to a secret marriage. We have the authority [illegible] Hon. W. H. Yelverton, brother of Lord Avonmore [illegible] state that all these statements of Major Yelverton [illegible] without a shadow of foundation. There is not a particle [illegible] truth in the story from beginning to end. Major Yelverton [illegible] never owed a single shilling to his uncle and consequently [illegible] never could have given him a bond. Major Yelverton [illegible] expectations from his uncle, for, though prosperous and [illegible] he has children of his own to settle in life, and he [illegible] man to conceive so cruel a purpose as has been attributed [illegible] him. It is right, when alluding to this subject, to state that, though the Hon. William Yelverton and the [illegible] members of the Avonmore family entertained the [illegible] sympathy for Mrs. Yelverton, and a natural detestation [illegible]

[illegible] given her only [illegible] the rumour that the [illegible] being without foundation."

The [illegible] Riots.—At the Armagh assizes [illegible] Guilty of Manslaughter [illegible] Tate; Guilty of riot and unlawful [illegible] 12 of the 17 on trial; a verdict of [illegible] unlawful assembly against 2 others; and [illegible] in the case of the remaining 3. The [illegible], 21 in number, were admitted to bail [illegible] recognisances. The parties found Guilty [illegible] to various periods of imprisonment [illegible] six weeks to six months, except Tate, [illegible] sentenced to 15 months' imprisonment from [illegible] committal in July last. The conviction of [illegible] as a case of great importance in [illegible] to its social results, as it is the first time since the establishment of the Orange Society that a jury exclusively Protestant has convicted an Orangeman of homicide in a party riot.

The Glenveagh Murder.—The approver, James [illegible], who had been indicted for perjury in having [illegible] that he had heard several persons of the name of [illegible] bargaining to kill M'Murray at Glenveagh, [illegible] acquitted, the only witnesses against him [illegible] the parties he had charged with the murder. [illegible] approver, Deery, on whose information 40 or [illegible] had been arrested, pleaded Guilty, and was sentenced to seven years' penal servitude.

Law.

[illegible] Committee of Privy Council.—*Case of the Rev. [illegible]*—Judgment was given by Lord Cranworth on Wednesday in the case of appeal brought by the Rev. Alfred Poole [illegible] the Bishop of London for having revoked his licence as [illegible] of St. [illegible], Knightsbridge, in consequence of his [illegible] and other practices in the church. Mr. [illegible] in the first instance to the Archbishop, who [illegible] the act of the Bishop, and the present was [illegible] appeal from the Archbishop's decision. It was now [illegible] by the Court that no right of appeal existed from the [illegible] of the Archbishop, whose judgment in the matter [illegible] final. The appeal was therefore dismissed.

[illegible] Circuit: Aylesbury.—*Bliss* v. *The London and North Western Railway Company.—Fremantle, Bart.,* v. *The Same.*—[illegible] actions were tried together, and it was arranged [illegible] of damages, should the plaintiffs succeed in [illegible] their right to recover against the defendants, [illegible] ascertained by arbitration. The damages sued for [illegible] by a fire which occurred on the 2d of May, [illegible] in the afternoon, on premises called "Moco [illegible]," in the parish of Swanbourne, Bucks, then in the occupation of Mr. Bliss as tenant to Sir Thomas Fremantle; the [illegible] alleging the fire to have been caused by a hot cinder [illegible] from a locomotive engine, dragging a train of 32 empty waggons on the Oxford and Bletchley branch of the London and North-Western, which passes the farm premises at a distance of [illegible] feet from the rickyard. The plaintiff's case was [illegible] have been caused by a hot cinder from the [illegible] breaking out within a few seconds after the [illegible] there being no other assignable cause to [illegible] the defendants it was contended that [illegible] proved to have been caused by their engine, and further that Mr. Bliss had been guilty of culpable negligence in keeping his stackyard so near the railroad. The trial [illegible] two days. The jury after a consultation of about 15 [illegible] returned a verdict for the plaintiff, the foreman stating [illegible] opinion was that Mr. Bliss had not been guilty of culpable negligence. A verdict for the plaintiff was then [illegible] Sir T. Fremantle's case.

Western Circuit: Exeter.—*Murder by a Soldier.*—*Robert [illegible]*, aged [illegible], a private in the 61st Foot, was indicted for the [illegible] murder of Henry Jones, a sergeant in the same regiment, at Plymouth, on the 5th of January. The prisoner, who is a [illegible] man, and deceased, had served together through [illegible], and the prisoner had earned a medal for [illegible] in the field. On the 5th of January, Jones, the [illegible], and others were in the mess-room of the barracks at [illegible]. Hacked had brought with him a pensioner, who had also been in India, and to whom he gave his dinner. Whilst at dinner the conversation turned on the Delhi prize money, and in the course of the conversation Jones jocularly said that the pensioner would spin a similar yarn the next day for another such a dinner. The prisoner said nothing at that time, but left in a few minutes, and did not return again for several hours. At about half past five he came to the barrack room [illegible], and complained of the sergeant insulting his friend (the pensioner). Upon this Jones made an observation, to which the prisoner rejoined, "It was all your fault, Harry." Jones, who was lying down on his bed, made use of some coarse expression, whereupon the prisoner said that if he was [illegible] sergeant, and if it were not for his getting 50 lashes, he [illegible] where he lay in his cot. The prisoner then [illegible] in a few minutes returned again with his rifle and [illegible]. Jones went into an inner room, and whilst standing [illegible] from the prisoner, the latter put his rifle, not to [illegible] to his hip, and shot the sergeant through the [illegible] the backbone, the bullet passing out of the [illegible] and causing death in a few minutes. When taken into custody the prisoner said he did not intend to shoot Sergeant Jones, but [illegible] witness he said that he had, and intended [illegible] several others. It was proved that the prisoner and deceased had been on the best terms previous to this [illegible]. The defence was that the prisoner, whilst in [illegible] drunkenness, had brought his rifle into the [illegible] accidentally discharged it without any [illegible] intention to kill deceased. His lordship having summed up, the jury, after deliberating three-quarters of an hour, returned a verdict of *Guilty*, but recommended the prisoner to mercy. Mr. Justice Willes then put on the black [illegible] and passed sentence of *Death*, telling the prisoner that [illegible] little chance of mercy being extended to him on [illegible]. The interest and excitement were [illegible]. [illegible]chester.—*Highway Robbery.*—*John Williams* [illegible] were indicted for assaulting and [illegible] Orchard of his purse, containing 20*l.* 5*s.*, at [illegible] on the night of the fair in October last, and *Mary* [illegible], wife of the first-named prisoner, was charged with being an accessory after the fact. Mr. Baron Martin said the female prisoner must be acquitted, as by law a wife could not be an accessory after the fact as regarded her husband. The jury found the two male prisoners *Guilty*, and they were sentenced to 15 years' penal servitude.

Obituary.

General Sir Archibald Maclaine, K.C.B., Colonel of the 52d Regiment, died on Saturday morning at his residence in Cumberland Street, Hyde Park, in his 78th year. He had seen much active service, particularly in the East Indies and in the Peninsula. From the Mysore campaign of 1797 against Tippoo Saib, [illegible] storming of Seringapatam, [illegible] battle of [illegible], where he was dangerously wounded and had a horse killed under him, General Maclaine was in continuous active employment except when disabled by wounds. His defence of Matagorda with a very small force [illegible] French troops for 55 days was one of the [illegible] of the Peninsular war. For his services [illegible] he was decorated with the Order of the Bath, and [illegible] the Order of Charles III. of Spain. He was appointed Colonel of the 52d Foot in 1847, and in 18[illegible] was [illegible] a Knight Commander of the Bath. He was the second son of Mr. Gillean Maclaine, Isle of Mull, by the eldest daughter of Macquarie, Chief of Ulva.

Lieut.-General Sir Lovell Benjamin Lovell, K.C.B., K.H., Colonel of the 12th Lancers, died on the 11th inst., at 57, Brunswick Terrace, Brighton, aged 75. He entered the army in 1805. After serving with the 15th Hussars under the command of Sir Samuel Auchmuty at the taking of Monte Video in 1807, he proceeded to the Peninsula and was present at most of the principal battles of the war, [illegible] general actions, 40 minor actions or skirmishes, and 7 sieges. He received the war medal with 11 clasps, [illegible] Busaco, Fuentes d'Onor, Badajoz, Salamanca, Vittoria, the Pyrenees, Nive, Orthes, and Toulouse. He was nominated a Knight Commander of the Bath in 1856, and a Knight of the Hanoverian Order in 1835. He attained the rank of major-general in 1854, and lieut.-general in 1860. He was appointed colonel of the 12th Lancers in 1856.

Colonel Sir George Couper, Controller of the Household of the Duchess of Kent, died on the 28th ult., at Frogmore, after a short illness, in his [illegible] year. Before Sir George became connected with the Royal household, he saw [illegible] active service in the army. He was Assistant Engineer at Copenhagen; as captain in the 92d he served with Sir John Moore's army in Sweden and in Portugal and was Aide-de-Camp to Lord Dalhousie in Walcheren. He served as first Aide-de-Camp to Sir H. Clinton in the Peninsula in 1811 and 1812, and in a similar capacity to Lord Dalhousie from 1812 to the close of the war, and was present in all the actions in which they commanded divisions during those periods. He was Assistant Quartermaster-General with the army in the Gulf of Mexico in 1814-15. He was secretary to Sir James Kempt when Master-General of the Ordnance, and subsequently accompanied the late Earl of Durham to Canada, on his appointment as Governor General of that colony. On the retirement of the late Sir John Conroy he was appointed Principal Equerry and Controller of the Household to the Duchess of Kent. In 1831 he was made a Companion of the Guelphic Order, and in 18[illegible] was nominated a Companion of the Bath. He had obtained the silver war medal with four clasps for Badajoz, Salamanca, Vittoria, and the Pyrenees. He was created a baronet in June, 1841. He married in 1822 the daughter of Sir John Wilson, and is succeeded in the baronetcy by his son George W. Couper, born in 1824.

Wills and Bequests.—The will of General Sir George Scovell, G.C.B., has been sworn under 70,000*l.*; Sir Charles Fellows, 20,000*l.*; Lady Back, 25,000*l.*; Mr. James Russell, Q.C., 100,000*l.*; Mrs. Sarah Gould of Petworth, 30,000*l.*; Alderman Wire, 35,000*l.*; Miss Maria Powell of Clapton, 200,000*l.*

BIRTHS.—On the 12th inst., at 16, Grafton Street, the Marchioness of Winchester, of a son, stillborn—14th inst., at 23, Wilton Crescent, the Lady Katharine Valletort, of a daughter—7th inst., at 10, Chester Square, the Hon. Mrs. Arthur Hardinge, of a daughter—9th inst., at 13, Half Moon Street, Piccadilly, the Lady Vaughan, of a daughter—10th inst., at Shrubhurst, Oxted, the wife of Lieut.-Colonel S. Burdett, of a daughter—8th inst., at Gogerddan, Cardiganshire, the wife of Pryse Loveden, Esq., of a daughter—10th inst., at 18, Chesham Place, the wife of Wyndham S. Portal, Esq., of a daughter.

MARRIAGES.—On the 2d Jan., at Deyrah, N.W. Provinces, Bengal, William James Money, Esq., eldest son of David Inglis Money, Esq., to Emily, daughter of Brigadier General Gray, Bengal Army—6th inst., at St. James's Church, Piccadilly, Frederick Carr Swinnerton Dyer, Captain 17th Regiment, third son of Sir Thomas Dyer, Bart., to Selenah Maria Ann Richards, third daughter of the late Rev. E. D. Windsor Richards, rector of St. Andrew's, Glamorganshire—24th Jan., at St. John's Church, Calcutta, William, eldest son of the late Surgeon William Lewis McGregor, M.D., and grandson of the late General C. R. Skardon, both of the Bengal Army, to Jane Margaret, youngest daughter of the late Lieut.-Colonel G. Holmes, C.B., of the Bengal Army.

DEATHS.—On the 6th inst., at Sudbury, Derbyshire, the Hon. Mrs. Brooke Boothby, aged 72—8th inst., at Blackgang, Isle of White, Lady White-Jervis, wife of Sir Henry Meredyth Jervis White-Jervis, Bart.—7th inst., at Warneford Place, Wilts, Lady Harriet Elizabeth Wetherell Warneford, widow of the late Sir Charles Wetherell, Knight, aged 57—7th inst., at Ifield, near Crawley, Sussex, Henry Charles Curtis, Esq., third son of the late Sir William Curtis, Bart., and formerly of H.M.'s 85th Regiment of Light Infantry, aged 4[illegible]—2d inst., at Hyères, France, Eliza, eldest daughter of the late Captain James Gilbert, Royal Artillery, and granddaughter of the late General Sir Anthony Farrington, Bart., Royal Artillery—4th inst., at Victoria Villa, Priory Street, Cheltenham, Mary Ann, eldest daughter of the late Sir John Hales, Bart., of Blackthorn, Lincoln, and Cullam, in the county of Oxford, aged 82—[illegible] inst., at The Hill, Whitchurch, Hants, Charlotte, widow of Hart Davis, Esq., formerly Deputy-Chairman of the Board of Excise, daughter of the late Major-General Thomas Dundas, of Fingask, and granddaughter of Alexander, ninth Earl of Home, aged 71—9th inst., at 43, Montpelier Terrace, Cheltenham, Lieutenant-Colonel Charles Stevens, formerly of H.M.'s 20th Regiment, aged 84—7th inst., at his house, 39, Montagu Square, Major Charles Bulkeley, formerly of the 2d Regiment of Life Guards—27th ult., at the Barracks, Mullingar, Ireland, Rowland Henry Egerton Warburton, only son of Major H. Egerton Warburton, late 47th Regiment, Barrack Master, aged 2[illegible]—[illegible] inst., at her residence, [illegible] Hall, Shropshire, Amelia, widow of John Herbert Harington, Esq., formerly Member of the Supreme Council of Bengal, aged 70—4th inst., at Clarendon Lodge, Kensington Park, Jane, wife of Colonel John Richard Bladen Hall, of Bradley, in the county of Gloucester, aged [illegible]—11th inst., Thomas [illegible] Burne, Esq., of Loynton Hall, Staffordshire, a magistrate, and Deputy lieutenant of that county, aged 70—8th inst., at Whitehaven, George Harrison, Esq., J.P., of Linethwaite and Whitehaven, in the county of Cumberland, aged 74—7th inst., at Putney Hill, the Rev. Christopher Thomas Robinson, Incumbent of Putney, aged 6[illegible]—5th inst., at No. 1, Russell Square, Dr. Henry Shuckburgh Roots, late Physician of Guy's Hospital, aged 75—8th inst., at his residence, 52, Russell Square, Henry Wakefield, Esq., aged 68—8th inst., at 1, Dartmouth Street, Westminster, Lionel Gisborne, Esq., civil engineer, aged 37.

Markets.

COVENT GARDEN, March 14.

Supplies are [illegible] in quantity, but they are still insufficient for the demand. [illegible] continues to arrive from Cornwall, and good samples of Lettuces, Endive, Artichokes, and Cauliflowers, come from France. Pine Apples and Grapes have not altered since our last. Oranges may be obtained at last week's prices. Good Cobs may be had at from 1s. to 1s. 6d. per lb. Asparagus, French Beans, and new Potatoes may now be had. Cucumbers are scarce. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Camellias, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 6s to 10s	Pears, per doz., 2s to 4s
Grapes, per lb., 8s to 14s	Apples, per doz., 6d to 1s 6d
— new, per lb., 20s to 24s	Oranges, per 100, 6s to 10s
Strawberries, p. oz., 1s 6d to 2s	Lemons, per 100, 6s to 10s
Pomegranates, each, 4d to 6d	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 5s	Celery, p. bundle, 1s 6d to 1s 9d
Green Peas, p. ½ sieve, 20s	Onions, p. ½ sieve, 1s 6d to 2s 6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 4s to 12s
Cabbages, do., 2s to 3s	Rhubarb, p. bundle, 9d to 1s 3d
Potatoes, p. ton, 90s to 160s	Seakale, p. punnet, 1s 6d to 3s
— per bus., 4s to 6s	Shalots, per lb., 6d to 8d
— per cwt., 6s to 10s	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 10d	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 4s to 5s	Mushrooms, p. pott., 1s 6d to 2s
Cucumbers, each, [illegible]	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 3s to 4s	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, March 14.

Prime Meadow Hay	75s to	85s	Clover	90s to	115s
Superior do. (old) ..	90	105	New Clover	—	—
Inferior do.	50	60	Do. second cut ..	90	100
New do.	—	—	Straw	33	38
Rowen	—	—			

Davis & Co.

WHITECHAPEL, THURSDAY, March 14.

Fine old Hay	100s to	108s	Fine old Clover ..	112s to	120s
Inferior do.	40	80	Inferior do	80	95
Prime New Hay ..	—	—	Fine 2d cut	90	100
Inferior do.	—	—	Inferior do.	—	—
Straw	36	40	Fine New Clover ..	—	—

HOPS.—Borough Market, Friday, March 15.

Messrs. Pattenden & Smith report that there is nothing fresh to communicate; the market is inactive, and where sales are pressed lower prices have to be submitted to; a little speculation going on in 1855 and 1856 Hops. Foreign Hops find buyers as they arrive.

BUTTER MARKET.—March 15.

Best Fresh Butter .. .. 18s. per dozen lbs.
Second do. do. .. .. 15s. " "
Pork, 4s. 4d. to 5s. 4d. per 8 lbs.

POTATOES.—Southwark, Monday, March 11.

During the past week the arrivals both coastwise and by rail have again been very heavy, and trade is in a very depressed state. A great many have been stored to save demurrage, and a further reduction in the price has taken place. The following are this day's quotations:—York Flukes, 140s. to 160s. per ton; Lincolnshire Regents, 100s. to 110s.; Dunbar Red Soil do., 140s. to 160s.; do. do. Reds, 105s. to 110s.; North Berwick Regents, 120s. to 125s.; Fife, Forfar, and Perth do., 90s. to 105s.; ditto Rocks, 80s. to 90s.; ditto ditto Reds, 75s. to 80s.; French Whites, 60s. to 90s.; Belgian do., 60s. to 80s.; Dutch do., 60s. to 80s.

BRITISH WOOLS.—London, Friday, March 15.

Our quotations are still almost nominal, as the lowering of price at the Colonial sales has put a stop to purchases except of the most trifling description.

Colonial Wool Sales.—These sales are dragging on at a reduction from the opening, and some quantity is withdrawn most nights.

COAL MARKET.—March 13.

Bowers West Hartley, 15s. 6d.; Byass's Bebside West Hartley, 15s. 6d.; Davison's West Hartley, 15s. 6d.; Hastings Hartley, 15s. 6d.; Howard's West Hartley, 15s. 6d.; Tanfield Moor, 13s. 6d.; West Hartley, 16s.; Walls End Sheriff Hill, 15s.; Walls End Braddyll's Hettons, 18s. 9d.; Walls End Haswell, 19s. 6d.; Walls End Kepier Grange, 18s. 3d.; Walls End Russell Hetton, 18s. 3d.; Walls End South Hetton, 19s. 6d.; Walls End Stewarts, 19s. 6d.; Walls End Hartlepool, 19s.; Walls End Kelloe, 18s. 9d.; Walls End South Hartlepool, 18s.; Walls End South Kelloe, 18s. 6d.; Walls End Thorpe, 17s. 6d.; Walls End Trimdon Hartlepool, 18s. 6d.; Carway and Duffryn Malting, 24s.—171 ships at market.

METROPOLITAN CATTLE MARKET.

Monday, March 11.

We have a larger supply of Beasts and a very slow trade. Prices generally are lower, although there is not much reduction in some of the choicest kinds. Sheep are more plentiful, and the demand is smaller. Prices for all kinds are lower, and several remain unsold. Calf trade is unaltered. From Germany and Holland there are 329 Beasts, 950 Sheep, and 62 Calves; from Scotland, 250 Beasts; from Ireland, 80; from Norfolk and Suffolk, 2500; and 120 from the northern and midland counties.

	s	d	s	d		s	d	s	d
Best Scots, Herefords, &c. ..	4	8 to	5	0	Best Long-wools.	5	6 —	5	8
Best Short-horns	4	6 —	4	10	Do. Shorn ..	4	8 to	5	0
2d quality Beasts	3	4 —	4	0	Ewes & 2d quality	4	8 —	5	0
Best Downs and					Do. Shorn ..	..	.. —	..	[illegible]
Half-breds ..	5	8 to	5	10	Lambs ..	..	.. —	..	
Do. Shorn ..	5	0 to	5	2	Calves ..	4	8 —	5	10
					Pigs ..	4	0 —	5	0

Beasts, 4130; Sheep & Lambs, 18,840; Calves, 74; Pigs, 380.

Thursday, March 14.

The supply of fresh choice Beasts is not large, several left over from Monday being included in the number returned. Trade is slow at about Monday's rates. The demand for Sheep is very small, and a considerable portion remains unsold. We have a few choice Lambs from the Isle of Wight, which meet with a ready sale at high prices. Our foreign supply consists of 250 Beasts, 320 Sheep, and 51 Calves. Milch Cows 145.

	s	d	s	d		s	d	s	d
Best Scots, Herefords, &c. ..	4	8 to	5	0	Best Long-wools.	5	6 —	5	8
Best Short-horns	4	6 —	4	10	Do. Shorn ..	4	8 —	5	0
2d quality Beasts	3	4 —	4	0	Ewes & 2d quality	4	8 —	5	0
Best Downs and					Do. Shorn ..	..	.. to	..	
Half-breds ..	5	8 —	5	10	Lambs ..	..	.. —	..	
Do. Shorn ..	5	0 —	5	2	Calves ..	4	8 —	5	10
					Pigs ..	4	0 —	5	0

Beasts, 1040; Sheep & Lambs, 5050; Calves, 110; Pigs, 180.

MARK LANE.—Monday, March 11.

The supply of Wheat from Essex to this morning's market was very small; from Kent there was a fair quantity, and all

samples fit for millers' use were quickly disposed of at an improvement of 1s. to 2s. per qr. upon the prices of this day se'nnight; inferior continued to be very unsaleable; foreign was generally held for an advance, which checked business, but was taken freely at last week's prices where obtainable. Barley sells slowly at a decline of 1s. per qr. Beans and Peas are unaltered in value. The Oat trade is steady at last week's quotations. For Flour there is a good demand at the extreme prices lately current.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk..White	46—65	Red	40—60
— — fine selected runs..ditto	50—70	Red	54—65
— — Talavera	51—72		
— Norfolk	—	Red	—
— Foreign	50—76		
BARLEY, grind. & dist., 28s to 30s.. Chev.	40—45	Malting .	38—40
— Foreign..grinding and distilling	30—36	Malting .	40—42
OATS, Essex and Suffolk	29—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—25
— Irish ....Potato	26—28	Feed ..	21—24
— Foreign........Poland and Brew	24—28	Feed ..	20—28
RYE	35—38	Foreign .	—
RYE-MEAL, foreign	—		
BEANS, Mazagan....23s to 44s.... Tick	28—48	Harrow .	28—48
— Pigeon ......34s — 56s.. Winds.	34—42	Longpod	—
— Foreign ....Small	40—50	Egyptian	—
PEAS, white, Essex and Kent ..Boilers	38—48	Suffolk .	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign	38—48
MAIZE .... White	—	Yellow..	—
FLOUR, best marks delivered..per sack	50—57		
— 2d do. .... ditto	38—50	Country.	38—50
— Foreign ....per barrel	30—35	Per sack	40—50

FRIDAY, March 15.

The weather during the past eight days has been fine for the season, but broken by very heavy showers of rain and hail and very high N.W. winds, until Wednesday evening, when sharp white frost set in. We are unable to report any improvement in the appearance of the young Wheat; indeed, the reliable accounts we receive from many important districts represent it as looking much worse than it did three weeks ago. The improved feeling in the Wheat trade which manifested itself last week has since continued, and during the present week an advance of 1s. per qr. has been generally established. Barley still declines in value, and in the majority of markets is quoted 1s. per qr. lower. The value of Oats, Beans, and Peas is unchanged. Flour has met a good inquiry at slightly in excess of last week's prices. During the past week only 15 cargoes were reported arrived off the coast. The floating trade has been very firm, and for most descriptions of Wheat better prices have been obtained. The arrivals of English grain this week continue to be very small; of foreign Wheat they are also limited, good of Barley, and fair of Oats. To day's market was tolerably attended. Fair samples of English Wheat commanded the extreme prices of Monday last; foreign was also inquired after; but buyers generally refusing to pay an advance upon previous rates, the business transacted was limited. Barley, Beans, and Peas are unaltered in value. Oats are 6d. per qr. cheaper. Flour is held for rather more money, which checks the sale.

ARRIVALS FROM March 11 TO March 15.

	Wheat.	Barley.	Oats.	Flour.
English ..	610 qrs.	1340 qrs.	920 qrs.	1020 sks.
Irish	— „	— „	1220 „	— „
Foreign ..	6840 „	7230 „	15650 „	{ 80 „ 9870 brls.

LIVERPOOL, Tuesday, March 12.—Grain market active. Wheat and Flour selling freely at 1d. to 2d. advance on former and 6d. on latter. Indian Corn and Beans 3d. to 6d. dearer. All other articles firm.

FRIDAY, March 15.—There was a moderate attendance at to-day's market. Wheat quiet but firm, at full prices of Tuesday. Flour rather better sale, at extreme rates. Indian Corn moderate sale, at 37s. 6d. for mixed, and 39s. 6d. to 44s. for Galatz. Egyptian Beans steady, at 40s. Oats and Oatmeal without change.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Feb. 2..	55s 6d	46s 0d	23s 3d	34s 3d	40s 8d	43s 0d
— 9..	54 0	40 8	22 6	36 3	39 10	42 7
— 16..	54 9	38 11	23 0	35 7	40 0	44 7
— 23..	54 0	39 4	23 0	35 5	39 7	41 1
March 2..	54 2	39 2	23 0	35 1	39 7	41 7
— 9..	54 2	38 11	23 6	34 6	41 8	43 8
Agg. Aver.	54 5	39 4	23 1	35 2	40 3	42 9

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.

WANTED, A FOREMAN AND TIMEKEEPER, on a Farm and Market Garden. Knowledge of the latter branch is not indispensable. Applications to be made by letter only, stating qualifications, age, and salary required, also to what extent applicant understands the drill and steam engine, and knowledge, if any, of Wheelers' and Blacksmiths' work. No one who is not possessed of active and energetic habits need apply, and no answer will be returned but to the candidate selected.—Address WILLIAM WALKER, Oatlands, Enfield Highway, N.

WANTED, in a London Establishment, a first-class MAN to manage the Geranium department. Apply by letter, stating the situations previously filled and what other plants they are familiar with the culture of; also if they have any practical knowledge of Hybridising. A liberal salary will be given, and if successful further benefits.—H., *Gardeners' Chronicle* Office, W.C.

WANTED IMMEDIATELY, a good practical WORKING GARDENER. One that has had experience in Planting a new place on the most improved principles, such as Vines, Orchard-house, Early Forcing, &c.; also the Cultivation of Grass Land.—Apply, stating wages expected, naming at the same time all previous situations, reference, &c, to M. D., Post Office, Lancaster.

WANTED, A GARDENER who understands the general routine of gardening, and will make himself generally useful.—Apply to 15, Hatton Garden, from 10 to 4.

WANTED IMMEDIATELY, a person possessing a thorough knowledge of PRACTICAL FARMING, to undertake the management of an Estate of 500 or 600 acres.—Apply by letter, stating salary required, with testimonials, to COTTERELL & SPACKMAN, Land Surveyors, 6, Terrace Walks, Bath.—March 16.

WANTED, in a Small Nursery, a steady, active Man. One who has had some experience in Growing Plants for the Market would be preferred.—Address, stating terms, &c., O. Z., Post office, Clifton.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 29, married; has had great experience in the Management of Orchids, &c. Can be highly recommended.—R. F., Middleton Hall, Leeds, Yorkshire.

GARDENER (HEAD).—Age 34, single; has a thorough practical knowledge of his profession in all its branches. Good character.—JAMES TEGG, Gr. to Baron Hambro, Roehampton.

GARDENER (HEAD) to any nobleman or gentleman.—Age 35, married; thoroughly experienced in all branches of his profession; four-and-a-half years' good character.—A. B., Mr. Wood, Bedford Nursery, Haverstock Hill, N.W.

GARDENER (HEAD).—Age 28; understands the Forcing of Grapes, Peaches, Melons, Cucumbers, &c., and the various branches of his profession. Can have an excellent character.—A. B., Langley Park Gardens, Beckenham, Kent, S.E.

GARDENER (HEAD).—Aged 32, married; perfectly understands the Management of Kitchen and Flower Garden, Greenhouses and Hothouses; likewise Early and Late Forcing. Four years' good character from his late employer. R. G., Seedsman, Prospect Place, Old Kent Road, Surrey, S.E.

GARDENER (HEAD).—Age 33, married, one child.—D. WEBLEY, late Head Gardener to the Rt. Hon. Edward Horsman, M.P. Can have a good character for conduct and abilities from his last and previous employers.—D. WEBLEY, 5, Alpha Road, Slough.

GARDENER (HEAD).—Age 40, single; understands his profession in all its branches. Has had great experience in Early and Late Forcing in his last situation. Management of Land. Four years' good character from last place.—J. B., Mr. Gravor's, Bourne Hill, Southgate, Middlesex.

GARDENER (HEAD).—Age 30, married, without incumbrance; has a practical knowledge of Early and Late Forcing, Vines, Peaches, Strawberries, Cucumbers, Melons; Flower and Kitchen Gardens. Seven years' good recommendation from late employers.—T. C. W., Wellesbourne Lodge, Warwick.

GARDENER (HEAD).—WILLIAM BARNES can recommend a married Man, age 38, thoroughly competent to conduct the Management of a nobleman's or gentleman's Garden, where Plants, Fruits, and Vegetables are required to be cultivated extensively. Can take charge of Meadow Land, Stock, &c.—Mr. BARNES, Camden Nursery, Camberwell, S.

GARDENER (HEAD).—J. FRENCH (Age 27, married), Second Gardener to the Earl of Carysfort, Melrose Hall, Putney, is desirous to obtain a situation as above. 17 years' experience in every branch of Gardening. Highly recommended by his employer. Leaving owing to his employer's lease having expired.—Address as above.

GARDENER (HEAD).—Age 35, married, no incumbrance; has a practical knowledge of both Early and Late Forcing of Vines, Pines, Melons, Cucumbers, Strawberries, Vegetables, and the management of Fruit, Flower, and Kitchen Gardens. Can take charge of Meadow Land. The wife to attend to Poultry or Dairy.—L. M., Mr. B. Glass, Slough.

GARDENER (HEAD).—Age 29, married; is open to engage with any Gentleman requiring a thorough practical Gardener, having had good experience in Early and Late Forcing of Fruit, Flowers, and Vegetables; also the Cultivation of Stove and Greenhouse Plants, Kitchen and Flower Gardens. Good character from present employer.—J. S., Gardener's Cottage, Oakenshaw, Surbiton Hill, Kingston, Surrey.

GARDENER (HEAD).—Age 35, married, one child; has a thorough practical knowledge of the Forcing of every description of Fruit, Flowers, and Vegetables, the Culture and Propagating of Stove and Greenhouse Plants, and the general routine of the Fruit, Flower, and Kitchen Gardens; also the Management of Plantations and Meadow Land. Five years' good character from the nobleman he has just left.—S. S., Mr. Pearson, Nurseryman, Hampstead Road, N.W.

GARDENER (HEAD), OR GARDENER AND BAILIFF.—Middle-age, married; thoroughly understands his profession, the Management of Land, Breeding and Rearing of Stock. Highly recommended.—G. P., Post Office, Battersea Rise, S.W.

GARDENER.—Age 23; has a good knowledge of Stove and Greenhouse Plants, Flower and Kitchen Garden. Two and a half years' unexceptionable character.—T. P., Post Office, Waltham Cross, Herts, N.

GARDENER.—Age 30, married, no incumbrance; Wife (age 28) could Manage a Dairy or Poultry or some other employment in or out of the house. Excellent testimonials with good reference.—B. W., Mr. Cavington, 5, Gough Street North, Gray's Inn Road.

GARDENER.—Age 28, married; has had experience in Growing Vines, Cucumbers, Melons, and general management of Kitchen and Flower Garden. Wife can take charge of Dairy, Poultry, &c. Would accept moderate wages if a comfortable situation were offered. Can be well recommended.—J. J., Charles Noble, Bagshot, Surrey.

GARDENER.—Middle-aged, married, without incumbrance; good Kitchen Gardener, can manage Vinery, Greenhouse, and Lawn. No objection to a single-handed place. Has been in gentlemen's families from his youth. Three years' good character; 18 years' previous.—Y. Z., 8, Park Road Terrace, Forest Hill, Sydenham, Kent.

GARDENER.—Married; has for 20 years devoted all his energies to the most improved principles of Early and Late Forcing of Fruits, Flowers, and Vegetables; has been a successful competitor at the principal shows in the metropolis with Pines, Grapes, Peaches, and Nectarines, and Hothouse and Greenhouse Plants. Is thoroughly practised in every branch of Gardening; has also had the management of 900 acres of Land, Stock, &c.—J. C., Pine-apple Nursery, Edgeware Road, W.

TO NOBLEMEN AND GENTLEMEN.

GARDENER.—T. HARLEY, age 46, married, no incumbrance, is at liberty to engage with any Nobleman or Gentleman in want of a thorough practical Gardener in every branch of the profession. For many years Gardener to his Grace the late Duke of Leeds, at Hornby Castle, Yorkshire, and has been engaged 2½ years with Thomas Chamberlyne, Esq., at Cranbury Park, near Winchester, in re-arranging the Grounds and Gardens, and the erection of Horticultural Buildings and Heating; perfectly understands the growing of Pines, Grapes, Peaches, and the cultivation of Fruits in the Orchard House, and is known to the most eminent horticulturists. Character and testimonials unexceptionable.—T. HARLEY, Messrs. Page & Toogood, Royal Seed Establishment, Southampton.

GARDENER.—Age 28, married, ... has a thorough knowledge of the ... Greenhouse Plants, Vineries, &c; ... Kitchen Gardens. Good character.—W. ... *Chronicle* Office, W.C.

GARDENER (SINGLE-HANDED, ...).—Age 25, single; understands Green... Kitchen Gardens, Fruit trees, Forcing, &c. ... character from last place.—E. J., Lot... Guildford.

GARDENER (WORKING).—Age 3..., ... had 11 years' experience of his pro... branches. Two-and-a-half years' good ... Pearits, News Agent, Wimbledon, Surrey.

TO HEAD GARDENERS.

GARDENER (SECOND, for improve...) ... give a portion of his wages to the Head... *Gardeners' Chronicle* Office, W.C.

GARDENER (UNDER).—Age 22; ... Good character.—A. B., Post Office, We...

GARDENER (UNDER).—Age 22. ... or gentleman's establishment, where ... Growing are carried on to some extent. ... experience; 7 years' good character.—A. J. ...

GARDENER (UNDER, where Early ... is carried on).—Age 22; two years' ... T. M., Post Office, Leytonstone, Essex, N.E.

GARDENER (UNDER), OR IMPROV... has had several years' experience; is des... himself to any nobleman's or gentleman's ... will have an opportunity of improving ... Gardens, Brent Lodge, Nether Street, Finch...

GARDENER, OR GARDENER AND ...—Age 40; a good general Plant Grower ... Management of Land, Timber, and Stock. ... a Dairy. Nine years' and four months' ... E. S., Messrs. Henderson's, Pine-Apple Place ...

IMPROVER.—Age 23; desirous of ... with a gentleman's Gardener in order to ... knowledge of Fruit Growing and Forcing. ... premium. Three years' good character.—B ... *Chronicle* Office, W.C.

FOREMAN.—Age 31, married; has ... tice in all branches of Gardening. G... A. C., Simmons's Library, 1, Moore Park Road, F...

NURSERY FOREMAN OR FORE... PROPAGATOR.—Practically experienced ... Grafting, &c., also in the indoors, the Grow... &c. A liberal salary expected, satisfactory refere... application.—L. C., Godalming Nursery, Surrey.

STEWARD OR FARM BAILIFF.—E... practical experience of Farming in seve... England. Would not object to go abroad.—A. ... Office, Dorking, Surrey, S.

FARM STEWARD OR BAILIFF.—A g... recommends his Bailiff, aged 38, married ... understands the Improved Systems of Farming, & ... been engaged for nine years past on 1200 acres ... Mr. Bishop, Advertising Agent, 1, Lillypot La...

BAILIFF OR GENERAL MANAGER.—... single; practically acquainted with the d... above profession, breeding and rearing ... Purchase of Farm Produce. Has had ... country; can also kill Sheep or Pigs if required ... Two and a half years' character.—A. B., Post Office ... Surrey, S.W.

TO AGRICULTURISTS AND OTHERS.

BAILIFF.—The Son of a small Farmer ... where he would have the means of improving ... and at the same time render himself active and ... Steady, industrious, and obliging.—Mr USHER, ... Bedford.

BAILIFF.—Thoroughly acquainted ... branch of Cultivating Heavy and Light Soils ... approved system, Reclaiming Waste, Making Roads & ... good judge of Buying and Selling Stock. Has had ... Management of a Home Farm. The highest refer... Z. Z., *Estates Gazette* Office, 200, Fleet Street, ...

BAILIFF (WORKING).—Age 34, ma... Aberdeenshire; understands Light and He... Buying and Selling Farm Stock, &c., and keep... Wife understands Dairy work, and the Management ... Can be highly recommended by present ... England.—B. S., care of Mr. Copland, Butc... Street, Windsor, Berks.

BAILIFF.—A Gentleman is anxious to ... situation for a Man who lived with him ... years, and whom he can strongly recommend as ... Farmer, and a trustworthy, intelligent, and ... His Wife thoroughly understands the care of ... Poultry.—X. Y. Z., Lovegrove's, Stationer, ... Belgrave Square, W.

FARM BAILIFF.—Middle-aged, single; ... kinds of Soils in different parts of England ... rience in Buying and Selling. Highest referen... objection to go abroad.—H. J. G., 20..., Mr. Douglas, ... Valuer, &c., Ampleforth, Oswaldkirk, York.

TO NOBLEMEN AND AGRICULTURAL GENT...

FARM BAILIFF.—Age 34; has spent ... on the Farm and the Market. Thoroughly ... Light and Heavy Land, Drainage, Breeding ... and Selling of Produce, &c. First-class reference ... men.—H. H., 4, Ampthill Place, Vassal Road, Brix...

FARM BAILIFF AND DAIRYWOMAN.—... no incumbrance; understands Heavy and ... also Breeding and Feeding of Stock, and will ... useful. The Wife is a good Dairy-woman. ... character from last situation.—A. B., Howell's ... 16, Drury Lane, London, W.C.

TO CORN AND SEED MERCHANTS, OR OTHERS.

CLERK OR ASSISTANT in any Large ... House (in London preferred).—Age 1..; has ... experience in the former Trade.—Apply, stating ... of attendance required, &c., to G. H., Post Office, ...

SHOPWOMAN in a Seed or Fruit Shop, ... combined.—Age 24, has been brought up in ... Further particulars may be obtained by ... Mrs. Norris, Spencer's Wood, near Reading, ...

ROYAL HORTICULTURAL SOCIETY.

THE FIRST GRAND EXHIBITION OF FLOWERS AND FRU

WEDNESDAY AND THURSDAY, JUNE 5 & 6, 1861.

TO BE HELD AT THE NEW GARDENS, KENSINGTON GORE, W.

The Special Regulations can be had on application to Mr. EYLES.

FLOWERS.

Class.		1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
1.	15 Stove and Greenhouse Plants .. .. *(Open)*	20 0	15 0	10 0	7 0
2.	12 Stove and Greenhouse Plants .. *(Nurserymen)*	12 0	9 0	6 0	3 0
3.	9 Stove and Greenhouse Plants .. *(Amateurs)*	10 0	8 0	6 0	4 0

NOTE.—Two plants of a genus will be admitted in Classes 1, 2, and 3.

Class.		1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
4.	6 Stove and Greenhouse Plants .. *(Amateurs)*	6 0	5 0	4 0	3 0

NOTE. — Exhibitors can only show in one of the Classes 1, 2, 3, and 4. Orchids and ordinary *Florists' flowers are excluded.*

Class.		1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
5.	12 Fine Foliaged and Variegated Plants *(Nurserymen)*	10 0	7 0	5 0	
6.	10 Fine Foliaged and Variegated Plants *(Amateurs)*	10 0	7 0	5 0	3 0
7.	6 Dracænas and Cordylines .. .. .. *(Open)*	3 0	2 0	1 0	
8.	20 Orchids .. .. *(Amateurs)*	20 0	15 0	10 0	5 0
9.	16 Orchids .. .. *(Nurserymen)*	15 0	10 0	7 0	
10.	10 Orchids .. .. *(Amateurs)*	10 0	7 0	5 0	3 0
11.	Orchids. Single specimens .. .. .. *(Open)*	3 0	2 0	1 0	
12.	9 Greenhouse Azaleas .. .. .. *(Amateurs)*	12 0	10 0	7 0	5 0
13.	9 Greenhouse Azaleas .. .. .. *(Nurserymen)*	9 0	7 0	5 0	3 0
14.	6 Greenhouse Azaleas .. .. .. *(Amateurs)*	6 0	5 0	3 0	2 0
15.	9 Greenhouse Azaleas. New kinds sent out since 1856 .. .. *(Open)*	6 0	4 0	3 0	2 0
16.	6 Rhododendrons. Distinct .. .. .. *(Open)*	5 0	4 0	3 0	2 0
17.	Rhododendrons. Single specimens of Sikkim or Bhotan .. .. *(Open)*	4 0	3 0	2 0	
18.	15 Roses in pots. Distinct .. .. .. *(Open)*	15 0	10 0	7 0	5 0
19.	10 Roses in pots. Distinct .. .. *(Amateurs)*	10 0	7 0	5 0	3 0
20.	12 New Roses in pots. Two of a kind admitted *(Open)*	5 0	4 0	3 0	
21.	6 Tall Cacti .. .. *(Open)*	5 0	4 0	3 0	
22.	6 Cape Heaths .. .. *(Open)*	5 0	4 0	3 0	
23.	9 Pelargoniums. Distinct .. .. *(Amateurs)*	8 0	6 0	4 0	2 0
24.	12 Pelargoniums. Distinct .. .. *(Nurserymen)*	8 0	6 0	4 0	2 0
25.	6 Fancy Pelargoniums. Distinct .. *(Amateurs)*	5 0	4 0	3 0	
26.	9 Fancy Pelargoniums. Distinct .. *(Nurserymen)*	5 0	4 0	3 0	
27.	9 Spotted Pelargoniums. Distinct .. .. *(Open)*	5 0	4 0	3 0	

NOTE.—Plants in Classes 23, 24, 25, 26, and 27 to be grown in pots 8 inches in diameter.

Class.		1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
8.	9 Variegated Begonias. Distinct .. .. *(Open)*	5 0	4 0	3 0	
9.	6 Tree Ferns. Duplicates admitted .. .. *(Open)*	5 0	4 0	3 0	
0.	12 Exotic Ferns .. .. *(Amateurs)*	6 0	5 0	4 0	2 0
1.	12 Exotic Ferns .. .. *(Nurserymen)*	5 0	4 0	3 0	
2.	6 Anæctochilus and other variegated-leaved Orchids .. .. *(Open)*	3 0	2 0	1 0	
33.	3 Tuberous Tropæolums, trained on columnar or cylindrical trellises. Distinct.. .. *(Open)*	2 0	1 10	1 0	
34.	New or extremely rare Plants in flower	S.K.	S.B.	B.	
35.	Hardy ornamental Plants. New species . ..	S.K.	S.B.	B.	

☞ All new Plants will be adjudicated upon by the officers of the Society.

N.B. The Medals awarded will not be exchanged or money.

Class.		1st Prize. £ s.	2d Prize. £ s.
36.	Wardian Cases filled with Plants. The most effectively arranged..	5 0	3 0
37.	Miscellaneous. For Plants not specially mentioned ..	2 10	2 0

Exhibitors are informed that Prizes will not be awarded in this Class for any Plants named in the foregoing Classes.

In Classes 34, 35, 36, and 37, Exhibitors may compete for all the prizes.

FRUIT.

A dish of Grapes to consist of 3 bunches; Peaches of 6 fruits; Nectarines [illegible] *Strawberries of 50; and Figs of 10 fruits.*

ALL FRUIT MUST BE RIPE AND FIT FOR TABLE.

Class.		1st Prize. £ s.	2d Prize. £ s.
A.	Collection of 6 dishes. 6 distinct kinds	6 0	5 0
B.	Pine Apple. The best Queen	3 0	2 0
C.	Pine Apple. The best Cayenne	3 0	2 0
D.	Pine Apple. Any other variety	3 0	2 0
E.	Grapes, Black. Single dish..	3 0	2 0
F.	Grapes, White Muscat. Single dish	3 0	2 0
G.	Grapes, White. Any other variety. Single dish ..	3 0	2 0
H.	Peaches. Single dish..	3 0	2 0
I.	Nectarines. Single dish	3 0	2 0
J.	Figs. Single dish	2 0	1 0
K.	Cherries. Single dish..	2 0	1 0
L.	Strawberries. 3 dishes, distinct	3 0	2 0
M.	Strawberries. Single dish	1 10	1 0
N.	Strawberries in pots. 6 plants	2 0	1 0
O.	Melons. Green-fleshed	2 0	1 0
P.	Melons. Scarlet-fleshed	2 0	1 0
Q.	Vines in pots. 4 plants	4 0	3 0
R.	Miscellaneous	2 10	2 0

☞ Prizes will be given for fruit of superior excellence although not specified in the Schedule.

SPECIAL PRIZES for the best three groups of FRUIT and F[illegible] for the decoration of the dinner table are offered by C. WENTWORTH D[illegible] V.P.R.H.S. Baskets of any material, China vases, glass dishes, or [illegible] be used. First Prize, 10*l.*; Second, 5*l.*; Third, 3*l.*; Fourth, 2*l.*

*** Beautiful arrangement will be the test of merit in this Exhibi[illegible] flowers or fruits are therefore not demanded. Each set must con[illegible] baskets. Ladies are invited to join in the competition. The Prizes will [illegible] by a jury of ladies. The groups will be received as late as 11 o'clock [illegible] vided space shall have been reserved for them the day before. Ladies [illegible] men residing in the country can secure the space required by letter, [illegible] the Superintendent, Royal Horticultural Society, Kensington Gore, [illegible] necessary that the articles exhibited should be grown by the exhibitor.

GRAND ROSE SHOW,

WEDNESDAY, JULY 10, 1861.

The Special Regulations can be had of Mr. EYLES.

The Council have great pleasure in announcing that the Rev. S. R. HOLE, F.R.H.S., on the part of the promoters of the Grand National Rose Show, has intimated that the Exhi[illegible] Roses contemplated by the Royal Horticultural Society will render a separate Exhibition on the part of the National Society unnecessary; and also that Mr. HOLE, with the [illegible] the aforesaid promoters, has consented to aid the Council in the endeavour to make the Exhibition a complete success.

The FOURTH GRAND NATIONAL ROSE SHOW will therefore be held in connection with this Exhibition. THE REV. S. REYNOLDS HOLE, F.R.H.S., Honorary Sec[illegible]

Exhibitors of cut flowers to provide their own stands. Entries in each class to be exhibited on separate stands.

The stands are to be 1 foot 6 inches broad, 6 inches high at the back, and 4 inches in front. Any deviation from these dimensions will disqualify.

Class.		1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
1.	96 Varieties. 3 trusses of each .. . *(Nurserymen)*	7 0	5 0	3 0	2 0
2.	48 Varieties. 3 trusses of each .. ..*(Nurserymen)*	4 0	3 0	2 0	1 0
3.	24 Varieties. 3 trusses of each .. ..*(Nurserymen)*	2 10	2 0	1 10	1 0
4.	24 Varieties. Single blooms .. ..*(Nurserymen)*	2 0	1 0	0 10	
5.	48 Varieties. 1 truss of each . .. *(Amateurs)*	6 0	4 0	3 0	2 0
6.	24 Varieties. 1 truss of each .. .. *(Amateurs)*	4 0	2 0	1 0	0 10
7.	12 Varieties. 1 truss of each .. .. *(Amateurs)*	2 0	1 10	1 0	

NOTE.—Exhibitors in Classes 5 and 6 cannot also show in Class 7.

Class.		1st Prize. £ s.	2d Prize. £ s.
8.	12 Varieties. Single blooms .. .. *(Amateurs)*	1 10	1 0
9.	12 Roses, 12 varieties, in pots not exceeding 13 inches in diameter .. ..*(Open)*	6 0	4 0
10.	50 Roses, not less than 12 varieties, in pots not exceeding 8 inches in diameter .. ..*(Open)*	6 0	4 0
11.	20 New Roses, not less than 10 kinds, in pots not exceeding 8 inches in diameter .. ..*(Open)*	6 0	4 0

NOTE.—No variety which has been publicly sold for more than three years to be accounted new.

Class.		1st Prize. £ s.	2d Prize. £ s.
12.	12 New Roses of 1860 and 1861, single trusses, distinct .. ..*(Open)*	2 0	1 10
13.	Moss Roses (single trusses), best collection of *(Open)*	3 0	2 0
14.	18 Tea scented Roses (single trusses) .. . *(Open)*	3 0	2 0
15.	Best decorated basket or vase of Roses ..*(Open)*	3 0	2 0

GRAND SHOW OF DAHLIAS AND OTHER CUT FLOWERS,

WEDNESDAY, SEPTEMBER 11, 1861.

The Special Regulations can be had of Mr. EYLES.

Exhibitors of cut flowers to provide their own stands. Entries in each class to be exhibited in separate stands of the following dimensions:—

	Length.	Breadth.	
48 Dahlias, 2 stands	4 ft. each.	1 ft. 6 in.	Height of stands 6 inches behind, and 4 in front.
24 Dahlias, 1 stand	4 ,, each.	1 ,, 6 ,,	
12 Dahlias, 1 stand	2 ,, each.	1 ,, 6 ,,	
48 Roses, 2 stands	4 ,, each.	1 ,, 6 ,,	
24 Roses, 1 stand	4 ,, each.	1 ,, 6 ,,	
24 Hollyhocks, 1 stand	4 ,, each.	1 ,, 6 ,,	
24 Asters, 1 stand	2 ,, each.	1 ,, 6 ,,	

Class.		1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
1.	48 Dahlia Blooms. Distinct. .. .. *(Nurserymen)*	8 0	6 0	4 0	
2.	24 Dahlia Blooms Distinct. .. .. *(Nurserymen)*	5 0	3 0	2 0	1 0
3.	18 Dahlia Blooms. Fancies, distinct .. *(Nurserymen)*	4 0	3 0	2 0	1 0
4.	24 Dahlia Blooms. Distinct .. .. *(Amateurs)*	6 0	4 0	3 0	2 0

Class.		1st Prize. £ s.	2d Prize. £ s.
5.	12 Dahlia Blooms. Distinct. .. . *(Amateurs)*	4 0	3 0
6.	6 Dahlia Blooms. Distinct .. .. *(Amateurs)*	2 0	1 10
7.	12 Dahlia Blooms. Fancies, distinct .. *(Amateurs)*	3 0	2 0
8.	48 Cut Roses. [illegible] trusses, distinct .. *(Nurserymen)*	4 0	3 0
9.	24 Cut Roses. [illegible] trusses, distinct .. *(Amateurs)*	4 0	3 0
10.	24 Cut Roses. Distinct. Single blooms. *(Open)*	2 0	1 0
11.	12 Roses, in pots, not more than two of one kind *(Open)*	5 0	4 0
12.	12 Hollyhocks, in spikes. Distinct .. .. *(Open)*	3 0	2 0
13.	12 Hollyhocks, single flowers. Distinct .. *(Open)*	2 0	1 0
14	24 German Asters. "Quilled," distinct .. *(Open)*	2 0	1 0
15.	24 French Asters. "Tasselled," distinct . *(Open)*	2 0	1 0
16.	24 Gladioli, cut spikes. Distinct .. .. *(Open)*	2 10	1 10
17.	12 Gladioli, cut spikes. Distinct .. *(Amateurs)*	1 10	1 0
18.	12 Pots of Gladioli. Distinct. Not more than 3 in each pot . .. . *(Open)*	3 0	2 0
19.	24 Phloxes, single trusses. Distinct . *(Open)*	2 0	1 0
20.	12 Phloxes, in pots. Distinct . .. *(Open)*	3 0	2 0
21	24 Verbenas, 5 trusses of each. Distinct .. *(Open)*	1 10	1 0
22.	Miscellaneous. For Flowers not specified .. *(Open)*	1 10	1 0

ROYAL HORTICULTURAL SOCIETY.—*Continued.*

GRAND FRUIT AND CHRYSANTHEMUM SHOW,

WEDNESDAY AND THURSDAY, NOVEMBER 6 & 7, 1861.

The Special Regulations can be had of Mr. Eyles

FRUIT.

A dish of Grapes to consist of 3 bunches; of Apples, Pears, Oranges, Lemons, and such like, 6 fruits of each; and of Plums, 9 fruits.

Class.		1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.
A	Collection of Fruit .. .. (*Fruiterers only*)	4 0	3 0	
B	Collection of Fruit .. .. (*Private Growers*)	6 0	4 0	3 0
C.	Pine Apples, collection of. 3 distinct kinds	4 0	3 0	2 0
D.	Pine Apple. Single fruit, any variety	2 10	2 0	1 0
E	Grapes White Muscat. Basket of, not less than 10 lbs. weight	4 0	3 0	2 0
F.	Grapes, White Muscat. Single dish	2 10	2 0	1 0
G.	Grapes, White. Any other variety, single dish..	2 10	2 0	1 0
H.	Grapes, Black Hamburgh. Basket of, not less than 10 lbs. weight	4 0	3 0	2 0
I	Grapes, Black Hamburgh Single dish	2 10	2 0	1 0
J	Grapes, Frankenthal or Dutch Hamburgh. Single dish ..	2 10	2 0	1 0
K.	Grapes, Black. Any other variety, single dish	2 10	2 0	1 0
L.	Pears, dessert, collection of, 1 dish of each	4 0	3 0	2 0
M	Pears, dessert, collection of 6 dishes, distinct kinds	3 0	2 0	1 0
N.	Pears, dessert, collection of 3 dishes, distinct kinds ..	1 10	1 0	0 10
O	Pears, dessert. Single dish, any variety	1 0	0 15	0 10
P	Pears, kitchen. Uvedale's St. Germain. Single dish.. ..	1 0	0 15	0 10
Q	Pears, kitchen. Catillac Single dish	1 0	0 15	0 10
R.	Pears, kitchen. Single dish, any variety	1 0	0 15	0 10
S	Pears. Heaviest 5 fruits, dessert	1 0	0 15	0 10
T.	Pears, Stewed, jar of	2 0	1 10	1 0
	Note.—These are to be prepared without sugar, spice, or any colouring matter, and to be shown in white glass jars. Ladies are particularly invited to cause jars of fruit to be sent for examination.			
U	Apples, dessert, collection of, 1 dish of each	4 0	3 0	2 0
V	Apples, dessert, collection of 6 dishes, distinct kinds	3 0	2 0	1 0
W	Apples, dessert, collection of 3 dishes, distinct kinds	1 10	1 0	0 10
X	Apples, dessert. Single dish, any variety	1 0	0 15	0 10
Y.	Apples, kitchen, collection of 1 dish of each	4 0	3 0	2 0
Z	Apples, kitchen, collection of 6 dishes, distinct kinds.. ..	3 0	2 0	1 0
AA.	Apples, kitchen, collection of 3 dishes, distinct kinds.. ..	1 10	1 0	0 10
BB.	Apples, kitchen. Single dish	1 0	0 15	0 10
CC	Apples, kitchen. Heaviest 5 fruits..	1 0	0 15	0 10
DD	Pommes Tapés; that is to say, Apples dried in the same way as Normandy Pippins: of which an account is given in the *Gardeners' Chronicle* for 1860, p. 932. Note.—It must be observed that this process is quite different from that employed in preparing Norfolk Beefings.	3 0	2 0	1 0
EE.	Oranges, Lemons, &c., collection of 1 dish of each	3 0	2 0	1 0
FF.	Oranges. 4 plants, in pots or boxes, bearing fruit	3 0	2 0	1 0
GG.	Oranges, best specimen of Tangerines, in pot	1 10	1 0	0 10
HH	Melons. Single fruit, any variety	1 0	0 15	0 10
II.	Plums. Single dish, any variety	2 0	1 10	1 0
JJ.	Strawberries. Single dish	1 0	0 10	0 5
KK.	Currants. Single dish	0 10	0 7	0 5
LL.	Raspberries. Single dish	0 10	0 7	0 5

Note.—Fruit specified in the above Classes will be excluded from MM.

MM. Miscellaneous .. .. 60*s*., 50*s*., 40*s*., 30*s*., 20*s*., 10*s*.

CHRYSANTHEMUMS.

Exhibitors of cut flowers to provide their own stands, of the following dimensions:—
For 24 Blooms, 1 stand 4 feet long, 1 foot 6 inches broad.
For 12 " " 2 " " "
For 6 " " 1 " " "
Height of stand, 6 inches behind, 4 inches in front

☞ Preference will be given to plants trained in the bush-like or pyramidal form.

Class.		1st Prize. £ s.	2d Prize. £ s.	3d Prize. £ s.	4th Prize. £ s.
1.	6 Plants. Distinct varieties, on single stems (*Nurserymen*)	4 0	2 0	1 0	
2.	6 Plants. Distinct varieties, on single stems (*Amateurs*)	6 0	4 0	2 0	1 0
3.	3 Plants. Distinct varieties, on single stems (*Amateurs*)	2 10	2 0	1 0	
	Note.—Pots not to exceed 11 inches in diameter in Classes 1, 2, and 3.				
4.	6 Plants, Pompons. Distinct varieties, on single stems .. .. (*Nurserymen*)	4 0	2 0	1 0	
5.	6 Plants, Pompons. Distinct varieties, on single stems .. .. (*Amateurs*)	6 0	4 0	2 0	1 0
6.	6 Standard Chrysanthemums or Pompons .. (*Open*)	4 0	2 0	1 0	
	Note.—Pots not to exceed 8 inches in diameter in Classes 4, 5, and 6.				
7.	6 New varieties of the current year	2 0	1 0	0 10	
8.	Single specimen, single stem, either Chrysanthemum or Pompon .. .. (*Open*)	1 0	0 15	0 10	
9.	24 Cut blooms. Distinct .. .. (*Nurserymen*)	2 0	1 0	0 15	0 10
10.	24 Cut blooms. Distinct .. .. .. (*Amateurs*)	3 0	2 0	1 0	0 15
11	12 Cut blooms. Distinct .. .. .. (*Amateurs*)	1 10	1 0	0 10	0 7
12.	6 Cut blooms. Distinct .. .. .. (*Amateurs*)	0 15	0 10	0 7	0 5
13.	6 Cut blooms Distinct. Anemone flowered (*Open*)	0 15	0 10	0 7	0 5
14.	Best group of cut blooms .. .. (*Open*)	2 0	1 0	0 10	

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HORTICULTURAL GARDENS.—The *Gardeners' Chronicle* of May 12, containing Mr. Nesfield's COLOURED PLAN for the New Garden at Kensington Gore, is still on Sale at the Office, 41, Wellington Street, Covent Garden, W.C., and will be sent by post on receipt of six stamps

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News of the Week.

We deeply regret to announce the death of Her Royal Highness the Duchess of Kent, which took place on Saturday morning at Frogmore House, in her 76th year. Her Royal Highness had for some time been suffering from cancer, but though her malady was of a nature to create anxiety, it did not assume, until Friday afternoon, so serious a character as to cause apprehension of immediate danger. Her Royal Highness became rapidly worse on Friday evening, and her weakness gradually increased until half-past 9 o'clock on Saturday morning, when her Royal Highness expired peaceably, and without pain, in the presence of the Queen, the Prince Consort, and Princess Alice.

In the House of Lords on Friday, on the motion of Lord Cranworth, the Charitable Uses Bill was read a second time; the Select Committee on the Divorce Court and Dissolution of Marriage Bill was nominated; the Admiralty Court Jurisdiction Bill and the Bank of England Payments Bill were read a third time and passed. On Monday in answer to the Earl of Ellenborough, Lord Wodehouse stated that the King of Denmark, in accordance with the recommendation of France, England, and Russia, had agreed to submit the "whole budget" to the deliberate vote of the Estates of Holstein, and it was hoped that this important concession would avert the danger of hostilities with Prussia. Earl Granville moved an address of condolence to the Queen on the death of the Duchess of Kent.

The Earl of DERBY seconded the motion, which was unanimously agreed to. On Tuesday Lord TAUNTON moved the second reading of the Qualification for Offices Bill. Lord CHELMSFORD moved, as an amendment, that the Bill be read a second time that day six months. On a division, the amendment was carried by 49 to 38. The Bill was therefore lost. On Thursday the Earl of SHELBURNE moved the second reading of the Metropolitan Central Hotel Company Bill. Lord REDESDALE moved, as an amendment, that the Bill be read a second time that day six months. On a division the amendment was carried by 33 to 25. The Bill was therefore lost. The Red Sea and India Telegraph Bill was read a third time and passed, on the understanding that HER MAJESTY'S Government would not give a similar guarantee without first submitting it to Parliament.

In the Commons on Friday Mr. M. GIBSON obtained leave to bring in a Bill to facilitate the construction and improvement of harbours by authorising loans to harbour authorities to the extent of 360,000*l.* a year, as well as to abolish passing tolls, and for other purposes. Sir E. COLEBROOKE obtained leave to bring in a Bill to amend the law regarding the registration of county voters in Scotland; and Colonel FRENCH obtained leave to bring in a Bill to amend the laws regulating grand juries in Ireland. On Monday Lord PALMERSTON moved an address of condolence to the QUEEN on the death of the DUCHESS OF KENT. Mr. DISRAELI seconded the motion, which was unanimously agreed to. The House then went into committee on the Bankruptcy and Insolvency Bill, and agreed to the remaining clauses. The Post Office Savings Bank Bill was read a second time, after a short discussion, in which the CHANCELLOR of the EXCHEQUER said that the Bill would be extended to Ireland, and that it would in no way interfere with the old savings banks. On Tuesday Mr. CRAWFORD called attention to the levy of income tax on the same incomes in England and India, and moved that the petitions from merchants and others against the double tax be referred to the select committee on the income and property tax. The CHANCELLOR of the EXCHEQUER acceded to the motion, but in deference to the general wish of the House it was ultimately withdrawn. Mr. DUNLOP moved the appointment of a select committee to consider the Correspondence relating to Affghanistan, as presented in 1839, and the same correspondence as presented in 1858, and to report on the discrepancies between the two, caused by the mutilation of the despatches of Sir ALEXANDER BURNES in relation to the Affghan war. Lord PALMERSTON opposed the motion, and after a long debate it was negatived on a division by 159 to 49. On Wednesday Sir J. TRELAWNY moved the second reading of the County Rates and Expenditure Bill. Sir M. RIDLEY moved as an amendment, that the Bill be read a second time that day six months. After a long debate the amendment was carried on a division by 163 to 125. The Bill was, therefore, lost. On Thursday the Bankruptcy and Insolvency Bill, as amended, was considered, and several alterations were agreed to. The question of assimilating the law to the case of the non-trader was further discussed, and an amendment for the protection of the non-trader under certain circumstances was agreed to. The clauses which proposed to give power to the creditors of deceased debtors to petition the Court for the distribution of their estates were opposed by Sir H. CAIRNS, and negatived by 135 to 119. The House went into Committee on the Mutiny Bill, when Mr. WHITE moved the omission of Clause 22, which gives courts-martial the power of inflicting corporal punishment. The motion was opposed by Government, and negatived on a division by 142 to 37. The clause was then agreed to, and the Bill passed through committee. The Marine Mutiny Bill and the Exchequer Bills Bill also passed through committee.

The Plenipotentiaries of the great Powers in Paris resolved on Friday to adopt the proposition of Prussia prolonging the French occupation of Syria to the 5th of June next, being about three months beyond the term originally covenanted between France and Turkey. A convention to this effect was signed in Paris on Tuesday.

From Turin we learn that a royal decree was issued on Sunday by which King VICTOR EMMANUEL assumed for himself and his successors the title of King of Italy. The Ministers have since tendered their resignations, which have been accepted, and Count CAVOUR has been entrusted with the formation of a new Cabinet, in which all the different States of Italy will be represented. After a bombardment of four days, Civitella del Tronto has surrendered to General MEZZACAPO.

The decree for the emancipation of the Russian serfs was issued on the 3rd inst., and has been received both in the capital and in the provinces with great enthusiasm. The transition state is extended over two years, during which the peasants will remain in their former state of dependence. The latest accounts from Warsaw state that the Imperial rescript in answer to the address of the Polish citizens has produced a most unsatisfactory impression, and that Prince GORTSCHAKOFF has issued a notice warning the people in a most serious manner against making any further demonstrations.

From the United States we have received the inaugural speech of the new President, Mr. LINCOLN. He declares that no cause for secession exists, and that nothing will be attempted by his administration that will in any way interfere with the rights of the Southern States. He considers the Union to be unbroken; expresses his intention to "hold, occupy, and possess" property and places belonging to the Government, to collect the revenue in every state, no matter what opposition he may encounter, and to carry the mails throughout the South, provided they be not repelled. This speech is generally considered to mean war, and both parties are consequently preparing for the anticipated conflict. The Southern Congress has organised a standing army of 50,000 men, and has appointed General BEAUREGARD to take the command at Charleston. On the other hand the Federal Government has recalled all the troops now in Mexico and Texas, and has ordered all the United States ships of war in the Mediterranean and the Pacific to return to the northern ports.

The Lord High Commissioner of the Ionian Islands has again found it necessary to prorogue the Ionian Parliament. In answer to his speech at the opening of the Parliament on the 1st inst. the deputies denounced the English Protectorate, demanded annexation to Greece, and adopted an address to the Christian nations of Europe, calling upon them to decree the independence of the whole Greek race, and the removal of the Turkish Government from Eastern Europe. In consequence of these proceedings Sir HENRY STORKS prorogued the Parliament for six months.

A telegraphic despatch from Bombay announces that Mr. LAING has abandoned Mr. WILSON'S currency scheme as unsound and dangerous, and that a new scheme is to be introduced. Sir W. DENISON arrived at Madras on the 18th February. The area of the famine was increasing daily.

Home News.

DEATH OF THE DUCHESS OF KENT.—Her Royal Highness the Duchess of Kent died about half-past 9 o'clock on Saturday morning at Frogmore House, in the presence of the Queen, Prince Consort, and Princess Alice. Her Royal Highness, whose health has been failing for some time, was attacked on Friday by a severe rigor, after which the symptoms assumed such a dangerous character that her Majesty was suddenly summoned to Frogmore in the course of the afternoon. Her Royal Highness has for several years been suffering from cancer, which has of late made alarming progress, but no immediate danger was apprehended until Friday, when the prostration of strength became such as to cause the greatest alarm. Her Royal Highness Victoria Mary Louisa, Duchess of Kent and Strathern in Great Britain, Countess of Dublin in Ireland, was daughter of his Serene Highness Francis Frederic, late reigning Duke of Saxe Coburg Saalfield. She was born in August 1786, and was consequently in her 76th year. She married first, in 1803, his Serene Highness Prince Emich Charles of Leiningen, who died in 1814, and by whom her Royal Highness had issue the late reigning Prince of Leiningen, and Princess Anne, married to Prince Hohenlobe Langenburg. Her Royal Highness married, secondly, at Coburg, in May, 1818, and at Kew, in J[illegible] Royal Highness the late Duke of Kent, [illegible] George III., by whom, who died 23d J[illegible] her Royal Highness had issue an only c[illegible] Queen. The Courts of Berlin, Brussels, an[illegible] will be placed in mourning by the death [illegible] Highness. Telegrams announcing the ev[illegible] once despatched to the Crown Princess of P[illegible] Duke and Duchess of Cambridge, the K[illegible] Belgians, the King of Prussia, the King of [illegible] King of Hanover, the Duke of Saxe Coburg, P[illegible] henlohe and other relatives of the deceased D[illegible] also to Lord Palmerston and her Majesty's [illegible] and in accordance with a communication fro[illegible] Secretary, the great bell of St. Paul's, wh[illegible] tolled except on the death of a member of [illegible] family, boomed the sad intelligence over [illegible] polis. The Prince of Wales, who had been [illegible] from Madingley Hall, Cambridge, arrived at F[illegible] at 12 o'clock. The Princesses Helena, Lou[illegible] Beatrice, Prince Arthur, and Prince [illegible] at Windsor from Buckingham Palace [illegible] Princess Helena joined Her Majesty and [illegible] family at Frogmore. About 7 o'clock [illegible] evening the Queen, Prince Consort, the [illegible] Wales, Princess Alice, and Princess Helena [illegible] from Frogmore to Windsor Castle, where H[illegible] and the Royal family remain for the pres[illegible] Duke of Nemours, and Prince Philip of W[illegible] went to Frogmore in the forenoon, [illegible] admitted to the presence of the Queen [illegible] Duchess of Cambridge and the Princess [illegible] accompanied by the Duke of Cambridge, [illegible] Windsor on Saturday afternoon and paid a vis[illegible] dolence to the Queen and Prince Consort. [illegible] evening the Princess Royal, Crown Princess of [illegible] arrived from Berlin, on a visit of condolence [illegible] Majesty. The Prince of Wales went to Dover [illegible] her Royal Highness and accompanied her to [illegible] The Duchess of Cambridge, Princess Mary, [illegible] Duke of Cambridge paid a visit of condolence [illegible] Majesty. On Monday Viscount Sydney, Lord Cham[illegible]lain, and the Hon. Spencer Ponsonby, Vice-Cham[illegible] went to Windsor to make arrangements for the [illegible] of her Royal Highness, which will take p[illegible] 11 o'clock on Monday morning in St. George's [illegible] Windsor. The ceremony of lying in state [illegible] dispensed with, and the funeral will be conducte[illegible] the strictest privacy, no tickets of admission [illegible] chapel being issued. It is understood [illegible] principal mourners will be the Prince Cons[illegible] the Prince of Wales. The body of Her Royal Hi[illegible]ness will only be deposited temporarily in the [illegible] vault in St. George's Chapel, and will hereafter [illegible] removed to a mausoleum, which was commenced [illegible] than 12 months ago at the desire of the Du[illegible] favourite retreat in Frogmore Gardens, and w[illegible] when completed in the course of the present [illegible] receive the remains of the Duke of Kent as [illegible] those of the Duchess.

THE COURT.—The Queen, Prince Consort, and [illegible] family, have remained during the week in strict [illegible]ment at Windsor Castle. On Wednesday the E[illegible] St. Germans, Lord Stewart, and Viscount [illegible] Treasurer of the Household, arrived from [illegible] with the Addresses of Condolence to her [illegible] from both Houses of Parliament. It is [illegible] announced that in consequence of the death [illegible] Royal Highness the State apartments at W[illegible] Castle are closed until further notice, and [illegible] Majesty's Drawing Room, announced for Thursday [illegible] the 21st inst., will not take place.

ARRIVAL OF THE CROWN PRINCESS OF PR[illegible]—Her Royal Highness the Crown Princess [illegible] Dover on Monday afternoon from Berlin. [illegible] Highness on landing was received by the [illegible] Wales, who had arrived at Dover on the [illegible] evening, and had passed the night at the S[illegible] Their Royal Highnesses arrived at Windsor at [illegible] The Prince Consort met the Princess at the [illegible] station at Windsor and accompanied her Roy[illegible]ness to the Castle.

PRINCE ALFRED arrived at Barbadoes in [illegible] George on the 22d ult., and met with the most [illegible]siastic reception. Great preparations were ma[illegible] Demerara for the reception of his Royal High[illegible] anticipation of his honouring that colony with a [illegible]

COURT MOURNING.—Orders were issued fr[illegible] Lord Chamberlain's Office on Monday for the [illegible] go into mourning on Thursday the 21st inst. [illegible] Duchess of Kent. It is understood that the mo[illegible] will be for six weeks. Notice has also been gi[illegible] the Deputy Earl Marshal that all persons are exp[illegible] to put themselves into decent mourning.

THE CABINET.—A Cabinet Council was held on S[illegible]day at the official residence of the First Lord [illegible] Treasury in Downing Street. Another Council [illegible] held on Wednesday.

PARLIAMENTARY MOVEMENTS.—The reported in[illegible]view between a deputation from South Lancashire [illegible] Mr. Gladstone for the purpose of inviting him to be [illegible] a candidate for that county, is contradicted.—Sir [illegible] Dundas, who filled the office of Solicitor-General [illegible] Lord John Russell's Government, is a candidate [illegible] Sutherlandshire, in the room of the Marquis of Sta[illegible]

CONVOCATION.—On Friday the Upper House [illegible] *pro formá* and almost immediately adjourned. [illegible] the Lower House the Rev. Dr. M'Caul moved [illegible]

[illegible] for the appointment of a joint committee, to [illegible] what means might be devised to promote the [illegible] endowment of incumbents for whom a competent maintenance was not provided. The motion was agreed to. Rev. Canon Wordsworth moved a resolution deprecating the proposed change in the law of marriage permitting marriage with a deceased wife's sister. The motion was agreed to, Dr. M'Caul alone [illegible] his approval of the proposed change. The [illegible] then prorogued Convocation until May 14.

THE VOLUNTEER MOVEMENT.—Notice has been [illegible] from the War Office stating that the mourning to be worn by volunteers when in uniform for the Duchess of Kent will be a piece of black crape three [illegible] wide, worn round the left arm above the elbow. —The proposed sham fight on Easter Monday at Brighton is causing considerable agitation and ill-feeling among the metropolitan corps, and it is considered [illegible] improbable that it may eventually lead to the retirement of some of the ablest commanding officers. Earl Grosvenor, Viscount Bury, Lord Elcho, and Lord [illegible] have declined to attend with their regiments at Brighton, while Lord Ranelagh, Colonel Lindsay, [illegible] Knox, M.P., and other commanding officers, have resolved to go there. The former intend to have a review of their respective corps on Wimbledon Common, which they consider more suitable to the purpose than a place so far distant from the metropolis as Brighton. Lord Ranelagh will act as commander-in-chief of the Brighton review, assisted by Lieut.-Colonel Loyd Lindsay and Lieut.-Colonel Cole as quartermaster generals, and other officers. The force which will take part in the proceedings is expected to be under 20,000, consisting chiefly of the Middlesex, Surrey, Kent, and Sussex corps, with the Cinque Ports Artillery.

Foreign.

FRANCE.—The debate on the Address in the Corps Legislatif has been continued during the week. The following is a summary of the discussion :—

On Friday the debate was resumed by M. Gillibert, [illegible] protested against the omission in the *Moniteur* of the words, "I, who am a Republican," pronounced on the previous day by M. Ollivier in his speech. The President explained that those words had escaped a member whose speech was in other respects marked by honesty and moderation, and rendered justice to the Government, but [illegible] was at liberty to repeat the expression. The [illegible] then passed to the order of the day, and the debate [illegible] on the second paragraph of the Address. [illegible] made a speech against the decree of the 24th of November, and demanded that the responsibility of Ministers for their acts should be [illegible] decreed. The second paragraph was then adopted, as were also the six following. On the discussion of the ninth paragraph several members insisted on being informed whether the 1st October, 1861, was to be maintained as the date for executing the articles of the treaty of commerce with England. They likewise demanded explanations relative to the treaty of commerce between France and Belgium. M. Baroche replied that the treaty with Belgium still formed the subject for negotiations, and said—As regards the date fixed for the execution of the English treaty the inquiry has produced contradictory results, and it has not yet been decided therefore whether the date will be advanced. Government would only take this step if the interests of French commerce should be clearly shown to demand it." The 9th paragraph was then adopted. On Saturday, on the 10th paragraph, M. Darimon maintained the necessity for voting the Budget by chapter, and not by Ministry; otherwise, he said, there was no real control. He also maintained that without [illegible] resources the Budget of 1862 would show a deficit [illegible], and not a surplus of 11,000,000f. M. Devinck then moved an amendment in favour of voting [illegible] budget of expenses by chapter. He complained of the [illegible] of the information supplied to the Corps Legislatif respecting the Budget, and said that if the Government [illegible] to take the question of voting the Budget by chapter into serious consideration, he would withdraw his amendment. M. Darimon said that in that case he would take [illegible]. On Monday M. Magne refuted the arguments of MM. Devinck and Darimon, and justified the financial policy of the Government and the increase of the duties on tobacco. He [illegible] that the duty on alcoholic liquors was only provisional, and was imposed to meet a temporary necessity [illegible] by the economical reforms. He justified the supplementary credits, which he said were caused by the increase in the number of French troops at Rome, and the expedition to China and Syria. He maintained that the control of the [illegible] was real, and favoured economy as much as the [illegible] representative system, which permitted interference in [illegible] administrative questions, and thereby weakened the Government. He acknowledged that the voting of the Budget by chapters, the number of which could be reduced, would [illegible] the great interests—viz., the independence of the executive power and the interest of the Chamber to inquire into the expenditure. The question, he said, was a [illegible], but merited serious consideration. The Government upheld the system of a complete separation of the powers of the Government from those of the Chamber, but would not object to examine for the next Session the question whether a combination as indicated could lead [illegible] result. (This declaration was received with [illegible].) He then examined the different budgets since [illegible] stated that the deficit in 1860 would amount to [illegible] would raise the total of the deficits to [illegible] would, however, be reduced to a much [illegible] the resources which the law placed at the disposal of the Government.—M. Gouin blamed the Government for having recourse to loans and new taxes, and explained the necessity of voting the Budget by chapters. In consequence of the declaration of the Minister he withdrew his amendment, but he requested the Government not to make the number of chapters too limited. He then examined the [illegible] of the finances, and expressed apprehensions for the [illegible] Government, he said, intended guaranteeing a minimum [illegible] for railways, dating from the year 1865. He was [illegible] that from the very beginning an annual sum of [illegible] francs would be required for that object. The discussion was continued by several other deputies. The words of the address, "inexhaustible resources," were again criticised, and a proposal was made to refer paragraphs 11 and 12 to a committee. After a doubtful vote the proposal was rejected. Paragraphs 11 and 12 were then agreed to. On Tuesday the debate was resumed, when an amendment moved by M. Jules Favre, relating to the [illegible] of Paris and Lyons, was discussed. M. [illegible] called attention to the magnitude of the budget of the city of Paris, and [illegible] the present system of [illegible]. M. Devinck and M. Billault defended the municipal administration. The amendment was rejected, and paragraphs 13, 14, 15, and 16 were agreed to. M. Jules Favre proposed an amendment to paragraph 17, regretting the re-establishment of the military system of administration in Algeria. He explained and condemned the inconveniences of the military system, which, he said, paralysed colonisation. On Wednesday M. Allard, the Government Commissioner, opposed this amendment, which was rejected, and paragraph 17 was agreed to. On paragraph 18, relating to the annexation of Savoy and Nice, Count Deboigne explained the motives which decided the annexation, one of which, he said, was the anti-Catholic policy of Piedmont. M. [illegible] said he shared the feelings of satisfaction expressed by Count Deboigne on account of the annexation, but he vindicated the policy of Piedmont, which was so unjustly attacked, and contested the reproach of irreligion and ingratitude to France. He supported the policy of Piedmont in Italy, which responded to the national sentiment, and would lead to the establishment of Italian nationality either by confederation or unification. Paragraphs 18 and 19 were then agreed to. On the paragraph relating to Syria, M. Guillaumin proposed an amendment, the sense of which, although agreeing with the Address, was [illegible]. M. [illegible] lamented the feeling of distrust which [illegible] England. He admitted that the French troops had not left Syria at the date first fixed, but it was only because tranquillity was not re-established. England was wrong in supposing that the object of the occupation was to deprive her of the route to India. The French, he said, occupied Syria simply from motives of humanity. M. Baroche said that the whole world was in favour of the maintenance of the patronage of France over the Christians in the East. He considered the Address satisfactory. France, he said, intended completely to fulfil her mission. He expressed a hope that the International Commission would soon accomplish its mission, and said there was no reason for attacking any other nation on account of this question. Paragraphs 20, 21, and 22 were then adopted. M. Billault declared that the Government would energetically carry on the expedition in Cochin China. Paragraphs 23 and 24 were agreed to after the rejection of two amendments of MM. Jouvenel and Lebut in favour of the King of Naples. On Thursday M. Favre brought forward an amendment requesting the withdrawal of the French troops from Rome. He recalled the hopes which were entertained on the accession of Pius IX., and said the Italians then believed that it was possible to reconcile the Papacy with the independence of Italy, but unhappily the illusion was of short duration. Since then, also, the Pope had refused to associate himself with the war against Austria, and by so doing abdicated his temporal power. He cited documents to prove that all Europe condemned the Roman Government. He praised Victor Emmanuel for drawing his sword in the service of Italian unity, and the Government of the Emperor for not maintaining a pusillanimous neutrality. It would, he said, be impolitic to allow the sword of France to remain at Rome to repress the movement which France had provoked. Rome was necessary to the Italians, as the capital of their kingdom, and the maintenance of the *status quo* was impossible. M. Granier de Cassagnac supported the paragraph as drawn up by the Committee, and said, that the Holy See ought to understand the impossibility of isolating itself from Italy. Italy, also, should understand that she could not do without the Pope. The *role* of France was to reconcile Italy and the Papacy.

The *Moniteur* announces that the Conference of the Five Great Powers and Turkey resolved on Friday to prolong the French occupation of Syria until the 5th of June next; and that it assembled on Tuesday for the purpose of signing the convention to that effect. The *Moniteur* also announces that, in consequence of the death of the Duchess of Kent, the Imperial Court will go into mourning for nine days. It likewise contradicts the report that M. Mocquard had resigned the post of Secretary in the Emperor's Cabinet, that General Goyon was to be replaced at Rome by another French General, and that orders had been given for the recall of the French troops from Rome. The Prefect of the department of the Loiret has addressed a circular to the functionaries of the department stating that as M. Dupanloup, Bishop of Orleans, has assumed an attitude of political hostility to the Imperial Government and has made himself a rallying point for the disaffected, all official functionaries are forbidden to visit him, and all persons who have had relations with the Prelate are expected to show their exclusive devotion to the Emperor's Government.

WURTEMBURG.—A debate of five days' duration on the concordat concluded with the Pope in 1857, has just taken place in the Chambers at Stuttgard, and has resulted in the complete defeat of the advocates of the treaty. The following resolution was adopted by 63 to 27 votes, and was immediately transmitted to the Government.

"The Chamber of Deputies resolve that the agreement concluded with the Papal See on the 8th April, 1857, for the regulation of the affairs of the Catholic Church in Wurtemburg shall be considered as not binding, that they enter a protest against its fulfilment, and that with this view they humbly request the Government to declare inoperative the decree of the 21st December, 1857, respecting the agreement concluded as to the affairs of the Catholic Church, and to regulate these affairs in accordance with the laws of the country."

DENMARK AND THE DUCHIES.—A despatch from Itzehoe of the 18th inst. states that the report of the committee appointed to examine the propositions of the Government concludes with the following proposals:—

"That the Assembly should declare that it [illegible] the constitution for the whole kingdom as [illegible] by Government at the assembling of the Estates. That the Assembly should further decline the project of law on the Provisorium. Finally, that it should instruct the President of the Chamber to bring under the notice of the Federal Diet the proposals of the Danish Government and the reply of the Estates."

It is reported from Copenhagen that the King has consented to submit the whole budget to the Estates of Holstein. The construction of earthworks for the fortification of Dannervicke has been commenced, and blockhouses have been sent to the frontier of Schleswig.

PRUSSIA.—The coronation of the King and Queen of Prussia, which was to have taken place at Kœnigsberg in May, has been postponed to the month of June. The Crown Princess left Berlin on Sunday morning for London on account of the death of the Duchess of Kent. No Prussian troops have been sent to Posen on account of any apprehension being entertained by the Government of disturbances in that town.

AUSTRIA.—The elections to the Provincial Diet have everywhere resulted in the return of Liberal members. The city of Vienna has elected the following:—Minister Baron Schmerling almost unanimously; M. Kuranda, a Jew, and editor of the *Ost-Deutsche Post*; M. Franz, a Protestant; Dr. Muhlfeld, a barrister; and Dr. Berger, the counsel who defended Richter, and who in 1848 was the Liberal member of the German Parliament.

HUNGARY.—A Conference of Hungarian magnates has been held by the Emperor at Vienna, at which his Majesty declared that he will respect the rights of the Hungarian nation to the fullest extent, but will never tolerate any infringement of the rights of the Crown. The Diet will assemble first at Buda, and afterwards at Pesth. The coronation of the Emperor as King of Hungary will take place in the garrison church of Buda. Reports had been current for some days that on the 15th inst., being the anniversary of the revolution at Pesth in March, 1848, popular demonstrations would take place in that city. Owing, however, to the exertions of the municipality, no demonstrations were made. The shops remained open, and the traffic was not interrupted. The students published a declaration stating that they would oppose any demonstration. The elections at Bosing have since given rise to a violent party struggle. Three electoral parties pelted one another with stones. 20 persons were slightly wounded, and the military were compelled to interfere. The Committee of seven members will in the course of this week proclaim the propositions of the Judicial Conference as a binding Judicial *Provisorium* for the whole country.

CROATIA.—The congregation of Fiume has resolved upon refusing the request of the Ban of Croatia to send members to the Croatian Diet, declaring that Fiume will only belong to Hungary.

VENETIA.—Popular demonstrations took place in several Venetian towns on the 14th in honour of the birthday of King Victor Emmanuel. On the morning of that day all the shops at Venice remained closed till 10 o'clock, when the police compelled them to be opened. In the evening the inhabitants in the various towns, and especially at Verona, made it a holiday and paraded the streets. Bengal lights, of the Italian colours, were lighted on some of the eminences. Some persons have been arrested. At Padua the military were called out, but no collision took place.

ITALY.—Accounts from Turin state that in the sitting of the Senate on Monday the Government submitted a project of law proposing that all public Acts should in future commence with the following words:—"Victor Emmanuel II., by the grace of God and the will of the nation, King of Italy." The project was received with general applause, and its urgency was acknowledged by the Senate. The *Official Gazette* assumed on Sunday the title of *Official Gazette of the Kingdom of Italy*, and published the law by which Victor Emmanuel II. assumed for himself and his successors the title of "King of Italy." In the sitting of the Chamber of Deputies on Wednesday Count Cavour announced that the whole Ministry had tendered its resignation, and that he had advised the King to form a Ministry according to the new elements of the kingdom. It was, he said, the intention of Government to deprive the Councillors of Lieutenancy at Naples of their political character, and to reform the organisation of the Council by placing it under the Central Government, which would be responsible for all its acts. Count Cavour has been intrusted by the King with the formation of the new Cabinet, and the Chamber of Deputies stands adjourned until the Ministry has been formed. Before its adjournment a discussion took place on the French occupation of Rome, of which the following is an abstract:—

Count Cavour, in reply to a question respecting the state of the Roman question, acknowledged that the discussion of that question was both opportune and advantageous, and promised that he would give the explanations required on the 21st of March. In the sitting of Saturday, Signor Macchi presented a petition, signed by [illegible] citizens, urging the Government to use its influence with the Emperor Napoleon in order to obtain the speedy withdrawal of the French troops from Rome. Signor Macchi demanded that the Chamber should declare the urgency for the discussion of this proposition. After speeches delivered by Signors Brofferio, Bixio, and La Farina, the Chamber declared the urgency for the discussion by an unanimous vote.

In the Senate the Minister Fanti presented a project of law granting a life annuity of 10,000f. to General Cialdini, as an acknowledgment of the services he had rendered to the country.—Accounts from Naples state that the Council of Lieutenancy has been dissolved, and that the Ministry is to be modified so as to bring it into more direct communication with Turin. On the 19th a grand and enthusiastic *fête* was held in honour of Garibaldi's birthday; and another fête took place on Thursday in his honour in the San Carlo Theatre and in the Royal Palace. Perfect order and tranquillity prevailed. The Chevalier de Nigra was present in a private box during the fête in the theatre. Zappetta, President of the Associations of Workmen, delivered a moderate speech in honour of Garibaldi. The journal *Italia del Popolo* having accused Alexander Dumas of

having taken 40,000 ducats from the Government during the Dictatorship of Garibaldi, Dumas has sent a challenge to the editor of that journal. Count Teleki and M. Winkler will be his seconds. The typhus fever has disappeared from Naples. General Fergola, the late commander of Messina, arrived at Naples on Monday, accompanied by his staff. Although he surrendered unconditionally King Victor Emmanuel has consented to grant him the terms agreed on with the French Government before the fall of the citadel was known. After a well-sustained fire, which lasted four days, Civitella del Tronto has surrendered to General Mezzocapo. On Monday the garrison and forts at Naples saluted the proclamation of the kingdom of Italy. It is asserted that King Victor Emmanuel will go to Naples and make a stay of several months.—Accounts from Rome state that the Pope has received an autograph letter from the Emperor of the French. The *Perseveranza* asserts that the priests are exercising a pressure on the Pope with the object of inducing him to proceed to Venice. M. Bellegarde is now in Vienna, conducting negotiations to that effect. It would appear, however, that Austria fears the responsibility which such a step might involve. General Goyon only prevented a manifestation on the 14th inst. by a great display of military force. On the following morning, however, placards favourable to King Victor Emmanuel were posted up in every street. In the halls of the Academy of the Fine Arts and in the University great cheering was raised by the students in honour of the King of Italy. Several of those who had posted up placards were arrested. During the night placards were also posted up bearing the portrait of Victor Emmanuel, with the title of King of Italy. Ten persons were arrested on this account. The French prevented the hoisting of the national flag on the summit of the Antonine column. On the 17th further demonstrations in favour of Victor Emmanuel took place in the University and in the Academy of Fine Arts. On the 18th the Pope held a Consistory, in which he delivered an address, of which the following is an abstract:—

"In reply to those who have asserted that the Papacy is incompatible with civilisation, he said that, on the contrary, the present Papacy had always contributed to the diffusion of real civilisation. He declared that he was only opposed to that pretended modern civilization which persecutes the Church, imprisons her cardinals, bishops, and priests, suppresses religious orders, despoils the Church, and tramples justice under foot. He deplored that the Concordat had been violated in the kingdom of Naples. He declared that he would spontaneously have granted concessions, and would have accepted those which have been advised by the Catholic Sovereigns, but that he could not receive the counsels and unjust demands of an usurping Government. In conclusion he deplored the subversion of all authority, and promised forgiveness to all who had been misled. He confided, he said, the cause of the Church to God, the avenger of justice and right."

SICILY.—The citadel of Messina surrendered to the *Sardinian troops* on the 13th inst. General Fergola, before receiving the order of Francis II. to surrender, opened fire against the works of the Sardinians, but at the same time wrote to General Cialdini that he would spare the city of Messina. General Cialdini replied, complimenting him for having come to this determination, and saying that he desired to carry on war without passion and to terminate it without rancour. Numbers of persons were wounded by projectiles during the bombardment. A violent gale has raged at Messina.

IONIAN ISLANDS.—The Lord High Commissioner, Sir Henry Storks, opened the Ionian Parliament on the 1st with a speech, in which he called attention to the report of a Commission appointed to inquire into the financial condition of the States, with a view to the reduction of the export duties on currants and oil. He said they would gather from the report that the whole system of Ionian finance is founded on mistaken principles; that it is uncertain and fluctuating in its character, and that the difficulties of arriving at a more healthy state of things were at the present moment almost insuperable. In the address in answer to this message, the Parliament declared that the English Protectorate must be considered as the sole cause of the grievances of the Ionians. One deputy demanded a vote for annexation to Greece. Another read a memorial directed against the English Protectorate, to be addressed to the Governments and peoples of Europe. After these incidents the Lord High Commissioner prorogued the Chamber for six months.

TURKEY.—The Grand Vizier has tendered his resignation. The Sultan has refused to accept it. The project for consolidating the public debt has been renewed. Prince Labanoff, the Russian Ambassador, has offered to withdraw his demand for a Conference of the European Ambassadors to sit permanently at Constantinople on condition that the Porte will submit its project of reforms to the Powers. The Porte has replied that it would communicate the reforms after their promulgation by the Sultan. The Porte has just concluded commercial treaties with England and France, the principal stipulation of which is that one uniform *ad valorem* duty of 8 per cent. on both imports and exports is to be temporarily substituted for those now in operation. The Sardinian Legation has been destroyed by fire.

THE PRINCIPALITIES.—The Banshee has left Constantinople for Galatz, to receive on board the arms which were brought by the Sardinian ships, and seized by order of the Turkish Government. The arms are provisionally to be held in British possession.

BOSNIA.—The news from Bosnia is alarming. The whole Herzegovina is in a state of revolution, being supported by the Montenegrins. The fighting has become general. Several Turkish villages on the frontier have been reduced to ashes, and it is said that the Turkish troops have been defeated at Gazko. The calling out of the Bashi-Bazouks by means of beacon fires has been ordered to take place with the least possible delay.

RUSSIA.—The following is a summary of the Imperial Manifesto proclaiming the emancipation of the serfs, dated the 3d of March (February 19th, O.S.), and published on Sunday at St. Petersburgh:—

"The proprietors of landed property preserve the rights attached to the same. The landed proprietors are, however, to cede to the peasants for their permanent use the dwellings with the ground, which will be allotted to them anew by law, in consideration of the payment of dues. During this state of things, which will form a transitory period, the peasants are to be designated 'tributary peasants.' The peasants are permitted by law to purchase their dwellings, and, with the consent of the landlords, the land also. The peasants will then become free landed proprietors. This new order of things is to be carried out throughout the Empire within two years, and until then the peasants remain in their former state of dependence upon the landlords."

A committee has been appointed for the uniform regulation of the affairs of the serfs. It will be presided over by the Grand Duke Constantine. The Imperial manifesto has been received with enthusiasm in the provinces, and has produced a good impression at St. Petersburg and at Warsaw. At the latter place a deputation from the delegation of citizens warmly complimented the Polish noblemen and the agricultural societies which recently and spontaneously recommended the emancipation of the serfs. They also expressed a hope that reforms concerning the Polish peasantry would soon be carried out.

POLAND.—The following is the text of the letter addressed by the Emperor of Russia to Prince Gortschakoff:—

"Prince Michel Dmitriewitsch,—I have read the petition which you have sent me. I ought to consider it as null and void, as a few individuals, under the pretext of the disturbances which have taken place in the streets, have arrogated to themselves the right of judging on their own authority the whole conduct of the Government. Nevertheless, I shall only look upon this step as an act of impulse. I devote all my solicitude to the important reforms which have become necessary in my kingdom, consequent upon the progress of the age and the development of interests. My subjects in the kingdom share equally my care. Nothing will be found indifferent to me which may tend to their welfare. I have already proved to them my desire to make them participate in the blessings of useful, serious, and progressive reforms. I shall maintain the same intentions and sentiments. I have a right to expect that they will not be ignored or paralysed by uncalled for and exaggerated demands, which I cannot confound with the happiness of my subjects. I will fulfil all my duties. Under no circumstance will I allow material disorder. The attempts that endeavour to find therein a support are condemned beforehand. They would destroy all confidence, and would meet from me a severe reprobation, as their consequence would be to throw back the country from the regular path of progress, in which it is my firm will to maintain it. Yours affectionately, ALEXANDER."

This Imperial rescript has produced a most discouraging impression at Warsaw. The delegation of citizens has resolved upon placing their resignation in the hands of the people, and to request from Prince Gortschakoff, the Governor, the constitution of a new delegation by means of a general election. The delegation has likewise protested to Prince Gortschakoff against the expression "a few individuals" contained in the Imperial rescript, pointing to the large number of signatures attached to the petition. The Prince replied, that he declined to receive any more signatures, and should regard their collection as an act of sedition, which he would treat in a military manner. The delegation also represented to the Prince that the fresh symptoms of agitation rendered necessary the immediate proclamation and execution of the reforms which he had confidentially promised. Prince Gortschakoff has since issued a proclamation warning the inhabitants in a most serious manner against making any demonstration. This warning referred especially to a projected procession of the women of Warsaw. M. Laszczynski has replaced M. Muhkanoff as Curator of Poland, and the latter has left Warsaw. Illuminations have taken place in consequence. A confidential circular which had been addressed by Muhkanoff to the civil governors, recommending them to exercise vigilance against what it termed the seditious spirit, and expressing a hope that the peasants would seize the instigators of disturbances, even should they be their own landlords, and deliver them up to the authorities, has since come to light. On its contents becoming known the delegation of citizens of Warsaw made representations to the Government against their dangerous nature. Addresses had been received at Warsaw from the towns of Mohilew, Polotsk, Wilna, Grodno, and Minsk, the capitals of the five districts of Lithuania. These addresses express great devotion to the cause of progress and warm approbation of the conduct of the inhabitants of Warsaw, and of the pacific movement which they direct with so much moderation and firmness. The Guild of Merchants of Warsaw, taking into consideration the late events, and in order to give a proof of their union, have resolved to grant to the Jewish merchants an equal position with themselves in their guild.

INDIA.—A telegraphic despatch from Bombay of February 27, states that Sir William Denison arrived at Madras on the 18th February. The late Mr. Wilson's currency scheme had been abandoned by Mr. Laing as unsound and dangerous. A new scheme wa[illegible] introduced. The area of the famine was [illegible] daily. Captain Napier, of the 8th Hussars, [illegible] killed at Meerut. The Queen Marga[illegible] wrecked in the Hooghly.

UNITED STATES.—The ceremony of Mr. L[illegible] auguration as President took place on the [illegible] Washington. The following is a summary [illegible] delivered by the new President on the [illegible]

"Apprehension seems to exist among the [illegible] Southern States that by the accession of a Rep[illegible] tration their property, peace, and personal [illegible] dangered. There has never been any reas[illegible] such an apprehension. I quote one of my [illegible] which I declared that 'I have no purpose, direct[illegible] to interfere with the institution of slavery in [illegible] exists. I believe I have no lawful right, as I [illegible] tion, to do so. I reiterate the sentiments ex[illegible] election, and press it upon public atten[illegible] property, peace, and security of no section [illegible] by the incoming Administration. There is [illegible] respecting the delivering up of fugitives [illegible] labour. The clause in the constitution relati[illegible] declares that slaves whose cases come within [illegible] clause shall be delivered up. All members [illegible] bound to that proposition by oath. I take the [illegible] day with no mental reservation, and with no purpose [illegible] ing the Constitution or laws by any exceptiona[illegible] upon my task under great and peculiar difficu[illegible] stitution of our liberal Union, heretofore menace[illegible] formidably attacked. I hold that in contempla[illegible] universal State and of its Constitution the [illegible] States is perpetual, and shall continue to execute [illegible] provisions. Our national Constitution and our Un[illegible] ever. No State upon its own mere motion can [illegible] the Union. Resolutions and ordinances to [illegible] are legally void, and acts of violence within any State [illegible] against the authority of the United States are insurr[illegible] or revolutionary according to circumstances. [illegible] consider the Union as unbroken, and to the exte[illegible] ability I shall take care that the laws of the U[illegible] executed in all the States. I trust this will not be re[illegible] a menace, but only, as a declared purpose of [illegible] be constitutionally defended, maintains itself. In [illegible] there shall be no bloodshed nor violence, unless [illegible] the national authority. The power confided in me [illegible] used to hold, occupy, and to possess property a[illegible] belonging to the Government, and to collect the [illegible] Beyond what is necessary for these objects there [illegible] invasion or force. Where the hostility to the Union [illegible] so great and universal as to prevent com[illegible] holding offices, there will be no attempt [illegible] obnoxious strangers among people who [illegible] mails, unless repelled, will continue to be furnish[illegible] parts of the Union. I understand that a proposed ame[illegible] to the Constitution has passed Congress, to the effect [illegible] Federal Government shall never interfere with the [illegible] institutions of States, including that of persons he[illegible] I will say that I have no objection to this amendment [illegible] made express and irrevocable." After an appeal to [illegible] to consider the subject well and calmly, Mr. Lincoln [illegible] as follows:—"In your hands, dissatisfied fellow co[illegible] and not in mine, is the momentous issue of civil war [illegible] ment will not assail you, so that you can have no confl[illegible] out being yourselves the aggressors. You have no oath reg[illegible] in Heaven to destroy the Government, while I shall have [illegible] solemnly to protect and defend it. I am loth to close [illegible] We are not enemies, but friends, and we must not be [illegible] Though passion may have strained, [illegible] bonds of affection. The mystic chords of [illegible] from every battle-field and patriot grave to every [illegible] in this broad land, will yet swell a chorus of union, when [illegible] touched, as surely they will be, by the better angels [illegible] nature."

President Lincoln had nominated the following [illegible] men as his Cabinet—William H. Seward, of New [illegible] Secretary of State; Salmon P. Chase, of Ohio, Sec[illegible] of the Treasury; Simon Cameron, of Penn[illegible] Secretary of War; Gideon Welles, of Co[illegible] Secretary of the Navy; Caleb B. Smith, of [illegible] Secretary of the Interior; Montgomery Blair, of [illegible] land, Postmaster-General; Edward Bates, of [illegible] Attorney-General. The nomination of this Cabin[illegible] confirmed by the United States' Senate on the [illegible] The diplomatic corps made their first formal [illegible] President Lincoln on the 7th, in accordance [illegible] custom. Mr. Lincoln was addressed on behalf [illegible] body by the representative of Portugal, and [illegible] a brief speech of welcome. In the Senate, [illegible] Mr. Clingman spoke in condemnation of [illegible] of the President's Message, and interpret[illegible] meaning war. Mr. Douglas, in reply, sa[illegible] calculated to continue peaceful relations [illegible] promised reconciliation between the [illegible] The Tariff Bill was signed by President Buchan[illegible] 2d inst., and will come into operation on the [illegible] April. Lord Lyons had notified to the Wa[illegible] Government that the British Government [illegible] recognise the blockade of the Southern ports [illegible] such blockade be complete and effectual. It was [illegible] that the French Government would shortly [illegible] similar notice, and that this course would be [illegible] by the leading European Powers interested. [illegible] Secretary Floyd had arrived at Washington [illegible] purpose of appearing before the Criminal [illegible] answer an indictment found against him by the [illegible] jury in connection with the stolen Indian trust [illegible] Despatches from Montgomery, Alabama, and [illegible] Orleans say that war between the North and So[illegible] now considered inevitable. The Southern Co[illegible] was busily engaged in organising a standing army [illegible] the anticipated conflict. The Arms Bill had [illegible] passed, and 50,000 men would soon be ready [illegible] the field. General Beauregard had been appoint[illegible] the government of the Confederate states to take [illegible] mand at Charleston. He had arrived at his post, [illegible] pressed perfect confidence that Fort Sumter co[illegible] duced. In the Virginia Convention an ordinance [illegible] the political connexion of Virginia with the other States [illegible] the Union had been referred. In the Missouri [illegible] Convention the report of the committee on [illegible] relations was to be presented on the 9th inst. It [illegible]

[illegible] emphatically for union, and recommend the [illegible] of the Crittenden resolutions. North Carolina [illegible] against the holding of a state convention by [illegible] majority of 1000. The Louisiana State Convention [illegible] in secret session passed an ordinance [illegible] to the government of the Confederate [illegible] the sum of 536,000 dollars, the amount of [illegible] received and monies seized by the State. [illegible] Brown of Georgia had released the bark [illegible], which was reprised for certain illegal seizures [illegible] property in New York. The State of Texas was out of the Union. It was stated that the people ratified the ordinance of secession by a majority of from 40 to [illegible]. General Houston had resigned the governorship. It was stated that certain officers of the Federal [illegible] at Washington had been offered lucrative [illegible] by the Confederate States. It was reported from Washington that the reinforcement of Fort Sumter had been decided upon, General Scott having declared his opinion that reinforcements could be easily thrown in, and with little loss of life. All the United States ships now in the Pacific and Mediterranean had been ordered home to northern ports. All the troops now in Mexico and Texas had also been recalled. The President and his Ministers had resolved on not recognising the Southern Commissioners. It was stated that on their return to Montgomery, President Davis would demand the surrender of Fort Sumter. It was said that Major Anderson, now in command of the Fort, would be nominated to the generalship of the Federal army lately made vacant by the removal of General Twiggs.

MEXICO.—Advices from Mexico state that the confiscation of Church property continued. Thirteen nunneries were suppressed on the 13th of February.

Parliament.

HOUSE OF LORDS.

FRIDAY.—Lord CRANWORTH having moved the second reading of the *Charitable Uses Bill*, the LORD CHANCELLOR and Lord [illegible] opposed the Bill.—Lord WENSLEYDALE and Lord CHELMSFORD supported it. The Bill was then read a second time without a division. The select committee on *Divorce Court and Dissolution of Marriage (Scotland) Bill* was nominated. The *Admiralty Court Jurisdiction Bill* and the *Bank of England Payments Bill* were read a third time and passed.

MONDAY.—*Denmark and the Duchies.*—The Earl of ELLENBOROUGH asked in what position the difficulties which have [illegible] between Denmark and Germany with respect to Holstein now stand. He reviewed the demands of the Diet on Denmark and of the concessions of Denmark to Holstein, and described the consequences to Germany and Europe if Prussia, by en[illegible] at the present time, should afford France the [illegible] in behalf of the Danes.—Lord WODEHOUSE [illegible] on the complicated nature of the [illegible] which had taken place between [illegible] and Prussia, and said that Her Majesty's Government had received information that day of a concession made by the King of Denmark, to the effect that "the whole," instead of the nominal, "Budget should be submitted to the [illegible] vote of the State of Holstein." This important concession, he hoped, would induce Prussia to come to an arrangement, and so to avoid those dangers to the peace of Europe which had been pointed out. *Death of the Duchess of Kent.*—Earl GRANVILLE moved that an address of condolence be presented to her Majesty on the domestic [illegible] which has befallen her in the death of her mother, the Duchess of Kent. After describing the important duties of [illegible] the Sovereign of a great country which had devolved upon the late Duchess, and the exemplary manner in which [illegible] had been performed, he dwelt upon the uniform [illegible] of her life, the happiness of which had been [illegible] by the numerous virtues of her Royal daughter and [illegible], and by the loyalty and affection which they had [illegible] in her subjects.—The Earl of DERBY entirely concurred in the motion, and observed that her Majesty would derive [illegible] from the reflection that during the whole [illegible] of her life she had discharged her duty to her [illegible] in the same exemplary manner as she had fulfilled the duties of her private, social, and public life. [illegible] was agreed to unanimously. The *Lunacy Regulation Bill* was read a second time.—Earl DE GREY and RIPON, in answer to Lord LYVEDEN, said that Lord Canning would for the next few months at least continue to hold the appointment of *Governor-General of India;* but that no arrangement had been made as to the precise time during which he would hold office. The *Charitable Uses Bill* passed through committee. The *Red Sea and India Telegraph Bill* was read a second time.

TUESDAY.—Lord TAUNTON moved the second reading of the *[illegible] for Offices Bill*. He said that the object of the [illegible] was to repeal the declaration hitherto taken by the holders of certain offices under the act repealing the Test and Corporation Acts, binding them not to use their offices for the purpose of injuring or impairing the Church of England.—Lord CHELMSFORD could not but regard this as a step in [illegible] towards the ultimate object which the enemies of the Established Church had in view. In his opinion, if the declaration were necessary at the time of its adoption, it was [illegible], when the attacks of the Dissenters were [illegible] against the supremacy of the Church. He [illegible] moved, as an amendment, that the Bill be read a second time that day six months.—Earl DE GREY and RIPON supported the Bill. He denied that the position or [illegible] of the Church would be impaired by the repeal of the [illegible]. The [illegible] of the Church rested upon the [illegible] and respect with which her services and her ministers [illegible] by the great body of the community, and not [illegible].—Lord TEYNHAM and the Marquis of [illegible] supported the Bill. On a division, the [illegible] carried by 49 to 38, and the Bill was [illegible]. In committee on the *Red Sea and India Telegraph Bill*, the Earl of [illegible] dwelt upon the necessity, in a [illegible] point of view, of securing a telegraphic communication between this country and her possessions in the East.—Lord STANLEY of ALDERLEY explained that the present Bill had no [illegible] to that object, but only to the carrying out of [illegible] with the telegraph company by the late Government. The Bill passed through committee.

THURSDAY.—*Ionian Islands.*—The Duke of NEWCASTLE, in answer to the Marquis of NORMANBY, explained the circumstances under which the Lord High Commissioner of the Ionian Islands had recently prorogued the Chambers. He denied that the proceedings of the discontented party in the assembly had been instigated or encouraged by Lord John Russell's despatch of Oct. 27, on Italian affairs, in which the noble lord laid down the principle that nations were entitled to judge for themselves on the form of government they might consider most suitable for them. Her Majesty's Government, whilst respecting the rights and [illegible] of the Ionians, were nevertheless determined [illegible] the responsibility of maintaining the integrity of [illegible] in reference to the protectorate of those islands.—In answer to the Earl of HARROWBY the Duke of SOMERSET said that [illegible] instructions had been given to Sir [illegible], either directly or indirectly, to hasten his departure from this country for the purpose of assuming the command at the Cape.—The Earl of SHELBURNE moved the second reading of the *Metropolitan Central Rail Company* [illegible].—Lord [illegible] moved as an amendment that it be read a second time that day six months. On a division the amendment was carried by [illegible] to 25. The Bill was accordingly lost. *City [illegible]*.—The Earl of SHAFTESBURY moved that at the [illegible] Select Committees on Railway Bills to inquire and report on the houses and inhabitants likely to be displaced by the new works be made a standing order. The motion was agreed to. The *Red Sea and India Telegraph Bill* was read a third time and passed, Lord STANLEY of ALDERLEY giving a pledge that her Majesty's Government would not give another guarantee of this sort without submitting the matter in the first instance to Parliament. The *Law of Foreign Countries Bill*, the *[illegible] Government Bill*, and the *Consolidated Fund* (4,000,000*l*.) *Bill*, were read a second time.

FRIDAY.—The *Royal Assent* was given by commission to the Consolidated Fund Bill, 4,000,000*l*., the Enclosure, the Bank of England Payments Bill, and the Red Sea and India Telegraph Bill. *The Suitors Fund.*—Lord ST. LEONARDS called attention to some circumstances connected with the funds of the suitors of the Court of Chancery. [Left sitting.]

HOUSE OF COMMONS.

FRIDAY.—*The Adriatic.*—In answer to Mr. DUNCOMBE Lord J. RUSSELL said that the interests of the British Government in the Adriatic were connected with the protectorate of the Ionian Islands. In answer to Mr. BENTINCK he stated the nature, extent, and date of the information he had received respecting the *Expedition of Garibaldi* and the invasion of the Papal States, and said that he had no objection to produce the correspondence with the Austrian Government on the subject. *The Bible in Spain.*—In answer to a question by Sir R. PEEL respecting the imprisonment of certain persons in Spain for their religious opinions, Lord JOHN said that he agreed in condemning the punishment of persons for entertaining religious views totally unconnected with political opinions; but, considering how the penal code of Spain regarded the matter, and the influence of the clergy over the Spanish people, he thought it inexpedient to exert any diplomatic influence that would probably be ineffectual, and that it was better to leave the question to the action of public opinion. *The Wine Duties.*—In answer to Mr. CRAWFORD the CHANCELLOR of the EXCHEQUER said that the Government did not intend to propose to Parliament a compliance with the prayer of the wine trade for a uniform duty on foreign wines, without further experience, but would adhere to the principle of classification by the alcoholic test. *[illegible]*.—In answer to questions by Mr. [illegible], Mr. BAILLIE, Mr. [illegible], Mr. AYRTON, Mr. EWART, and Colonel SYKES, Sir C. WOOD explained the state of the case in regard to the property of the late Rajah of Tanjore, and said it would be the duty of the Government of India to make provision for the family. The last accounts from India were more favourable, the distress arising from the famine being confined to a much smaller area than was apprehended. Every possible means of alleviating the suffering would be taken by the Government. No alteration whatever has been made by which the service in India will in future be open to all natives without distinction of caste or creed. *Case of Mr. Turnbull.*—Mr. MAGUIRE made inquiry respecting a correspondence between the Government and the Master of the Rolls relative to the appointment and resignation of Mr. Turnbull, which was not included in the return.—Lord PALMERSTON said that the correspondence in question was of a private or an unofficial character, and he thought it was not expedient to establish a bad precedent by producing it to Parliament, though he stated the substance of the letters. The House then went into committee, when Mr. MILNER GIBSON moved for leave to bring in a Bill to facilitate the *Construction and Improvement of Harbours* by [illegible] to harbour authorities, to abolish passing tolls, and for other purposes. Very little had hitherto been done to improve existing harbours by loans of money. It was therefore proposed by this Bill to assist in the improvement of existing harbours, and in the construction of new ones, by loans on easy terms compared with those upon which money had been formerly lent by the Public Works Loan Commissioners. The sum of 360,000*l*. would be annually placed at the disposal of the commissioners for the purpose of being advanced to harbour authorities. The money would be lent at [illegible] per cent. interest, and the repayment would be extended over a period of [illegible] years. Provision would also be taken to abolish all tolls ordinarily known as "passing tolls," now levied by harbours upon ships which did not enter them. All such tolls would cease to be collected from the end of the present year. Care would be taken that creditors should not suffer by the abolition of passing tolls, as they would receive the security of the consolidated fund. Other relief would also be given to British shipping by the abolition of certain dues now levied by charitable corporations for charitable purposes. A tax of 4000*l*. a year levied upon the trade of Dublin in respect of advances made for the construction of the harbour at Dunleary would likewise be remitted. Another provision would be made for further diminishing the charges upon shipping by abolishing differential dues, and by gradually discontinuing the unjust compensation now paid for the abolition at certain ports of those dues.—Mr. LIDDELL and Mr. LINDSAY expressed their approval of the Bill, and congratulated the shipping interest on the large measure of relief which the Government proposed to award to them.—Lord HOTHAM and Mr. CLAY protested against any violation of the rights of property.—Mr. GEORGE and Mr. VANCE expressed their approval of the measure, and asked whether it was to be extended to Ireland.—Mr. M. GIBSON having replied in the affirmative, leave was given to bring in the Bill.—Sir T. COLEBROOKE obtained leave to bring in a Bill to amend the law regarding the registration of *County Voters in Scotland*.—Colonel FRENCH obtained leave to bring in a Bill to amend the laws regulating *Grand Jury Presentments in Ireland*. The *Consolidated Fund* (4,000,000*l*.) *Bill* was read a second time. The select Committee on the *Diplomatic Service* was [illegible] a division in which a motion for adjourning the debate was rejected by 55 to 11.

MONDAY.—*The Volunteer Sham Fight.*—In answer to General BUCKLEY, Mr. T. G. BARING said that the Government had no objection to the proposed sham fight at Brighton and that a general officer would attend to report the result. *Death of the Duchess of Kent.*—Lord PALMERSTON moved an address to her Majesty, tendering the respectful [illegible] of this House on the recent death of her mother, and the [illegible] of their deep concern at the great loss her Majesty had sustained.—Mr. DISRAELI seconded the motion, which was unanimously agreed to. The House then went into committee upon the remaining clauses of the *Bankruptcy and Insolvency Bill*, commencing at the 197th clause. The clauses (207 to 218) relating to the distribution of the estates of deceased debtors were opposed by Sir H. CAIRNS, Mr. MALINS, Mr. ROLT, and other members, who argued that the [illegible] they created did not properly belong to Bankruptcy [illegible]. After some discussion the clauses were [illegible], on the understanding that the question [illegible] should be [illegible], should be [illegible] on the report, [illegible] were traders [illegible] at the time of their death being [illegible]. The rest of the clauses in the Bill were agreed to, with a few unimportant amendments. The new clauses were then considered and the Bill passed through Committee. The House then went into Committee of *Ways and Means*, when, on the motion of the CHANCELLOR of the EXCHEQUER, a resolution granting a supply to her Majesty out of the Consolidated Fund, towards making good the supply, was agreed to. On the order for the second reading of the *Post Office Savings Banks Bill*, Mr. S. ESTCOURT urged various objections to the Bill, and the risks to which it would expose the Government. The advantages to these banks would render them so popular that, in his opinion, they would draw off the deposits from the other savings banks, for which the House ought to be prepared, and to endeavour to dovetail the two together.—Mr. W. [illegible], Mr. HANKEY, and other members spoke in favour of the Bill.—The CHANCELLOR of the EXCHEQUER said he thought the proposed savings banks and the old banks might exist and flourish together. The object of this Bill, however, was not competition with the old banks, but to supply additional facilities to depositors. The machinery of the Post Office would, in his opinion, provide safeguards against fraud. The Bill was then read a second time. The *Exchequer Bills Bill* and the *Mutiny Bills* were read a second time. The *Consolidated Fund* (4,000,000*l*.) *Bill* passed through committee.

TUESDAY.—*The Adjournment.*—Sir G. LEWIS stated that Lord Palmerston would, on Friday, move that the House at its rising adjourn over the holidays. The Government took this course in consequence of the funeral of the Duchess of Kent being fixed for Monday.—*The Consolidated Fund* (4,000,000*l*.) *Bill* was read a third time and passed.—Mr. CRAWFORD called attention to the levy of *Income Tax upon Incomes and Profits arising in India*, which were already subject to an income tax in that country, and moved that the petitions from merchants and others against the tax be referred to the select committee on income and property tax. The petitioners included the holders of public securities in India, annuitants, and persons engaged in industrial and commercial pursuits. The position of the fund-holder was very much prejudiced by the imposition of this direct tax, and the industry of India was so greatly affected by it that we should look in vain for any extension of the operations of planting in that country while the tax remained upon its present footing.—Sir M. FARQUHAR seconded the motion.—Mr. HANKEY contended that the House had really nothing whatever to do with the question of this double taxation, unless it was prepared to say that all incomes taxed elsewhere should be exempted from taxation here.—The CHANCELLOR of the EXCHEQUER had no objection to the motion. The point which would no doubt be fully considered by the committee was the question whether an income-tax which was payable in India by residents there, in respect of profits accruing there, should also be levied in England. He could not, however, agree that the case of India ought to be treated as an isolated one.—Sir S. NORTHCOTE thought that they would be overburdening the committee in referring these petitions to it.—Mr. DISRAELI also hoped the petitions would not be referred to the committee. The subject of the motion was a most legitimate one for the decision of the House; but if it were referred to the committee it would not only increase and complicate their labours, but drag before them topics of a totally different character from those originally intended to be submitted to them. The claim for exemption, in his opinion, would not bear any argument whatever.—Mr. BRIGHT felt confident that if this question was referred to the committee it would lead to all possible mischief to the committee itself, and do not the least good to the clients of his hon. friend.—Mr. CRAWFORD then withdrew his motion. *The Affghan War.*—Mr. DUNLOP moved the appointment of a select committee to consider the "Correspondence relating to Affghanistan," as presented to the House in 1839, and the same correspondence as presented in 1858, and to report on the discrepancies between the two with a view of seeing what precautions could be taken to secure that documents presented by the Government as copies or extracts of correspondence should give a true representation of the contents. He read extracts from the despatches of Sir Alexander Burnes to show the systematic manner in which everything that would throw a light on the conduct of Dost Mahomed in relation to this country was steadily expunged from the official correspondence.—Sir H. WILLOUGHBY seconded the motion.—Lord PALMERSTON could not agree that the correspondence presented to the House in 1839 conveyed the false impression alleged by the hon. member. They must not judge the conduct of Lord Auckland and the Indian Government by the opinion entertained by a subordinate agent at Cabul. The whole argument rested upon the assertion that the opinion of Lieutenant Burnes ought to have been the guide of the Government of India. That was a short-sighted view of the case, and was not the ground upon which a responsible Government would have been justified in acting in a matter so grave and important as the then existing state of affairs in Asia. The object in laying papers before Parliament was to show the grounds upon which our authorities entered upon a particular line of policy, and the papers in this case were amply sufficient to indicate all the reasons which had induced them to act as they had done. Sir Alexander Burnes was no doubt a zealous and energetic officer; but, owing to his natural simplicity of character, he had fallen into the mistake which subordinates were apt to commit, of identifying himself with the Government to which he was accredited, and believing everything said to him by Dost Mahomed. At that time Russia was adopting measures to push disturbance to the frontiers of our Indian empire. Dost Mahomed was one of her tools in the conspiracy, and the Government of India was quite right in declining to be guided by the opinions of Sir Alexander Burnes. He thought it would not be expedient to submit the proposal of the hon. member to any further consideration. If Mr. Dunlop induced Parliament in this year 1861 to go into an examination of the conduct of the government of 1837 and 1838 in regard to the operations in Affghanistan, he might ask for a Committee to inquire into the treaty of Vienna, the Walcheren expedition, or the bombardment of Copenhagen.—Mr. [illegible] said that the object of the motion was not the policy of the war in Affghanistan, but to learn who it was [illegible], as a member of a former government, had stooped so low and been so dead to a sense of right as to offer to the House mutilated, garbled, and even forged, opinions of a public servant who had lost his life in the service. The object of the committee would be to learn whether it was the noble lord himself or Lord Broughton who had passed on the same papers knowingly forged. A heinous offence had been committed against the House and against truth, and they wished to know who was the delinquent, so that they might [illegible] the honour of Parliament.—After a few words from Colonel SYKES, Mr. DISRAELI could not agree with the noble lord when he spoke of Sir A. Burnes in a tone of disparagement. The House was asked to look to the policy which had been called in question, and to the information which, in vindication of it, was subsequently laid before Parliament. He thought they were not called upon to review that policy now. I[illegible]

was not the Government of the day but the House of Commons which was, to a great extent, responsible for the position in which they were placed. These despatches were the subject of argument and criticism years ago, and the hon. member for Birmingham and his friends were well acquainted with the whole of the policy and conduct of the Government of the time; and yet he had gone to Willis's Rooms less than two years ago to meet the two noble lords on the Treasury bench and express his confidence that they were the only men who ought to govern the country. He thought they were asked to take a course which the preceding circumstances did not warrant. Although the Government of the time might have acted erroneously, he believed they had acted conscientiously, and with the glory of their country in view. He, for one, could not sanction an attempt to brand them in this manner, after the lapse of 20 years.—Mr. WALPOLE should vote for the motion, in order to give the noble lord the fullest opportunity of making an explanation which might satisfy the country.—Lord J. RUSSELL thought it was not desirable to place on record opinions which must have been accompanied by the opinion of the Governor-General that Sir Alex. Burnes was entirely mistaken in his views, and had acted erroneously, and that his conduct had not been such as to benefit the British Government in India. If they deprived the Ministers of the Crown of any discretion as to the papers to be presented to Parliament, they would then follow the example of the United States and have a committee like the committee of the American Senate, and put aside altogether the authority of the Crown. That was a plan totally inconsistent with our monarchical institutions.—Colonel DICKSON supported the motion.—Mr. HORSMAN complained that the foreign policy of the Government was carried on too much by means of private letters instead of public despatches.—After a few words from Mr. BAILLIE, Mr. BAXTER moved as an amendment to leave out all the latter part of the motion. On a division, the amendment was also negatived by 158 to 61. The House then divided on the original question, which was also negatived by 159 to 49. Mr. CLIVE obtained leave to introduce a Bill for the abolition of contributions by counties for the relief of prisoners in the *Queen's Prison*, and for the benefit of *Bethlehem Hospital*. The *Recovery of Debts Bill*, and the *Tramways (Ireland) Act Amendment Bill* were read a second time.—Mr. TITE moved the second reading of the *Metropolis Local Management Acts Amendment Bill*. Mr. LOCKE moved that it be read a second time upon that day six months. The hon. member was proceeding with his opposition to the Bill, when the House was counted out.

WEDNESDAY.—Sir J. TRELAWNY moved the second reading of the *County Rates and Expenditure Bill*, stating that its object was to give a more equitable control to the ratepayers in the management of the county rates. It proposed, with regard to matters which were clearly economical, such as the construction and repair of prisons and the levy of rates, that the controlling power should be entrusted to financial boards, leaving, however, so much power in the hands of the magistrates as was essential to the exercise of their judicial functions. With regard to pauper lunatics it proposed that the management of the internal affairs of county asylums should remain in the hands of the magistrates, but that the expenditure should be vested in the new financial board.—Sir M. RIDLEY moved as an amendment that the Bill be read a second time that day six months. He argued that no such measure was required, and that its effect would be to create a revolution in the management of county finances without insuring any commensurate advantage.—Mr W. E. FORSTER and Sir J. SHELLEY supported the Bill; Mr. PACKE and Mr. PHILIPPS opposed it.—Sir G. LEWIS said that it was desirable, in the management of local affairs, to combine, where practicable, representation with taxation, but whether the principle of representation should be exclusively or partially applied was a problem yet to be solved; and judging from the experience of the Metropolitan Board of Works, it was still doubtful whether the system of indirect representation was not open to much criticism. There were, he thought, two grounds upon which legislation might be required; the one was, proved mismanagement—the other, general discontent with the system. As to the first point, the management was at present vested in a body of gentlemen who were ratepayers, and possessed a strong pecuniary interest in an economical administration; and it could not be said that there was any general mismanagement. In the rural districts the machinery worked smoothly and efficiently, but in many non-municipal towns, and in some of the populous counties, and in that of Middlesex especially, great jealousy and dissatisfaction prevailed with regard to the power of the magistrates. On that ground therefore he intended to give his vote for the second reading, but reserved to himself the right of objecting to details in committee.—Colonel W. PATTEN expressed his surprise that the Home Secretary, instead of giving any assistance to the Bill, appeared to be totally opposed both to its principle and its details.—Mr. BARRON supported the Bill.—Mr. OSBORNE said the Government ought to take up the question, and complained of the course taken by Sir G. Lewis.—Mr. DEEDES opposed the Bill.—Sir J. PAKINGTON also opposed it, and protested against the inconsistency of the Home Secretary in speaking against the Bill, and at the same time expressing his determination to vote for it.—Mr. WYLD gave a modified support to the Bill.—Mr. HENLEY said he was convinced that the subject was one which could not be properly handled by a private member. The machinery of the Bill in its present shape could not work.—After some further discussion, Sir J. TRELAWNY replied, and the House divided, when the amendment was carried by 163 to 125. The Bill was therefore lost. The *Public Charities Bill* was withdrawn. The *Greenwich Hospital Bill* was read a second time. Mr. H. B. SHERIDAN obtained leave to bring in a Bill to enable cities, towns, and boroughs of 25,000 inhabitants and upwards, to facilitate the appointment of *Stipendiary Magistrates*; and a Bill for the discovery and prevention of *Trespasses and Frauds upon Landowners in Mines*.

THURSDAY.—*The Maynooth Grant.*—Mr. SPOONER stated, in reply to Mr. WHALLEY, that in consequence of failing sight it would not be in his power to make his annual motion this session for the repeal of the grant to the Royal College of Maynooth.—Mr. WHALLEY then gave notice that he would himself, shortly after Easter, move for leave to bring in a Bill on the subject. *Ionian Islands.*—In reply to Mr. MAGUIRE, Mr. C. FORTESCUE explained the circumstances under which the Ionian Parliament had been prorogued by the Lord High Commissioner, a step which, he added, had been favourably received at Corfu. *Music Halls and Casinos.*—In answer to Mr. H. BERKELEY, Sir G. LEWIS said that the Government intended to bring in a Bill in the course of the present session for the regulation of music-halls and casinos. The *Bankruptcy and Insolvency Bill*, as amended, was considered, and several alterations and amendments were agreed to. The chief question discussed was that relating to the proposed assimilation of the law of bankruptcy in the case of non-traders, and it was ultimately arranged that the latter should be made amenable under certain conditions and safeguards to protect the interests of absent persons. The clauses by which it was proposed to give power to the creditors of deceased debtors to petition the Court for the distribution of their estates, were opposed by Sir H. CAIRNS, who moved their rejection. The ATTORNEY-GENERAL offered, as a compromise, that the estates to be so dealt with should not exceed the value of 500*l.*; but the amendment was carried on a division by 135 to 119. Clauses from 207 to 218 were accordingly struck out. The Bill was subsequently recommitted for the reconsideration of certain clauses, and the ATTORNEY-GENERAL stated that the third reading would be taken immediately after Easter. In committee on the *Mutiny Bill*, Mr. WHITE moved the omission of the clause which gives courts-martial the power of inflicting corporal punishment.—Mr. WILLIAMS seconded the motion.—Mr. LOCKE and Mr. CONINGHAM supported it.—Mr. T. G. BARING stated that the punishment was limited to certain disgraceful offences, and though the Government looked with confidence to its diminution, they felt that its abolition would seriously interfere with the discipline of the army. The motion was negatived, on a division, by 142 to 37, and the Bill passed through Committee. The *Marine Mutiny Bill*, and the *Exchequer Bills Bill*, passed through Committee. The *Admiralty Court Jurisdiction Bill*, sent down from the Lords, the object of which is to improve the procedure and enlarge the jurisdiction of the Court of Admiralty, was read a second time. The *Smoke Nuisance Scotland Act Amendment Bill* was read a second time. The *Greenwich Hospital Works Bill* passed through committee.

FRIDAY.—*The Budget.*—The CHANCELLOR of the EXCHEQUER stated that he would make his financial statement on the 15th April. *Bankruptcy and Insolvency (Stamp Duty).*—The report of the committee on the resolution relative to the stamp duty was brought up and agreed to. The House then went into committee on this Bill, and agreed to an amended resolution, moved by the ATTORNEY-GENERAL. [Left sitting.]

City Intelligence.

BANK RATE OF DISCOUNT.—The Bank of England on Thursday reduced their rate of discount from 8 per cent., at which it was fixed on the 14th of February, to 7 per cent. The Bank of France on the same day reduced their rate from 6 to 5 per cent.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at $91\frac{7}{8}$ for Money, and $92\frac{1}{8}$ to $\frac{1}{4}$ for the 10th of April; India Stock, 220; Ditto Five per Cent. Stock, $100\frac{1}{4}$; Ditto Four per Cent. Debentures, 1859, $95\frac{1}{2}$; Ditto Bonds, 30*s.* dis.; Exchequer Bills, March, 7*s.* to 2*s.* dis.; Ditto, June, 15*s.* dis.—FOREIGN: Brazilian Five per Cents., 1839 and 1859, $101\frac{1}{2}$; Ditto Four and a Half per Cents., 1860, $85\frac{1}{4}$ to 86; Mexican Three per Cents., for Acct., $24\frac{3}{8}$ to $\frac{1}{2}$; New Grenada Active, $16\frac{3}{8}$; Peruvian Four and a Half per Cents., $93\frac{1}{2}$ ex div.; Russian Four and a Half per Cents., $91\frac{1}{4}$; Sardinian Five per Cents., 82; Spanish Three per Cents., for Acct., $49\frac{1}{8}$; Turkish Six per Cents., 1858, for Acct., $55\frac{1}{4}$ to $54\frac{7}{8}$ ex div.; Ditto Guaranteed Four per Cents., $100\frac{1}{4}$.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£26,304,620	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	10,981,258
		Silver Bullion	848,362
	£26,304,620		£26,304,620

BANKING DEPARTMENT.

Proprietors Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£10,599,072
Rest	3,825,441	Other Securities	19,707,299
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	8,224,094	Notes	7,453,425
Other Deposits..	11,452,254	Gold and Silver Coin ..	871,805
Seven day and other bills	676,812		
	£38,631,601		£38,631,60[illegible]

21st day of March, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY — BANKRUPTS—R. BARRIE, York Street, Covent Garden, Builder—T. GRAY, Wandsworth, Manufacturer of Materials for Making Paper—G. GROOM, Aldermanbury, Lithographic Printer—A. W. LAIDLAW, Bury Court, St. Mary Axe, Wine Merchant—J. MESSOR, Brighton, Upholsterer—A. MORDAUNT, Southampton, Chemist and Druggist—W. PARRY, Brecon, Builder—S. P. PENNELL, Liverpool, Commission Merchant—W. RILEY, Ilkeston, Derbyshire, Butcher—J. B. ROBERTSON, South Shields, Draper—P. SCOTT, Liverpool, Timber Merchant.

SCOTCH SEQUESTRATIONS—G. BRUHNS, Glasgow, Cotton Agent—R. DAVIDSON, Dundee, Builder—J. FORTUNE, Edinburgh, Watch and Clock Maker—W. MACKERSY, Edinburgh, Writer to the Signet—J. STORMONTH, Edinburgh, Teacher.

FRIDAY—BANKRUPTS—W. BOWEN, Swansea, Glamorganshire, Victualler—J. FIELDING, Macclesfield, Cheshire, Cotton Spinner and Manufacturer—G. GRIFFIN, Walsall, Staffordshire, Grocer and Provision Dealer—J. W. HUNT, Liverpool, Lamp Manufacturer—F. D. HUNT, Bootle, near Liverpool, Innkeeper—EDWARD KIRKBY, Liverpool, and SAMUEL BRACEGIRDLE, Northwich, Cheshire, Salt Proprietors and Timber Merchants—SAMUEL SALOMONSON, Abchurch Lane, City, Bill Broker and Scrivener—W. SCOTSON, Liverpool, Cab Proprietor—W. SIMPSON, now or late of Newsham Mill, near Pickering, Yorkshire, Corn Miller—G. STEVENS, Great St. Helen's, City, Merchant—S. W. P. STEWARD, formerly of Heilesdon, Norfolk, Brick Maker, but now of Fordham, Cambridgeshire, Farmer—W. H. THOMAS, Dawlish, Devonshire, Builder—A. W. VOIGT, Cheltenham, Dealer in Pianofortes—W. WEST, Bristol, Bookseller and Stationer—A. WILSON, Kensington, Draper—C. F. YOUNG, Chemist and Druggist.

BANKRUPTCIES ANNULLED—J. GRIFFITH, Hanway Street, Oxford Street, Bookseller and Stationer—H. PAINE, Strand, Tailor and Draper.

Metropolis and its Vicinity.

THE EXHIBITION OF 1862.—The Committee of Advice requested by the Commissioners for the Exhibition of 1862, to assist the Commissioners with their counsel as to the Fine Arts department of the Exhibition, held their second meeting at the Society of Arts on Wednesday. Lord Stanhope, on the motion of Lord Lansdowne, was called to the chair. After considerable discussion, in which Mr. Hurlstone, Sir Charles Eastlake, Mr. Redgrave, Lord Elcho, Dr. Coleridge, Lord Overstone, Mr. Tom Taylor, Mr. Frederick Taylor, and Lord Taunton took part, the committee came to the conclusion with regard to the foreign schools to be represented in the Exhibition, that it should be left to each country to fix the limitations under which its selections should be made, each being informed of the space allotted to it, and of the understanding that the selection is to be made with a view to exhibit the present condition of the school. With [illegible] English school, the committee came to [illegible] the collection should include the works [illegible] have lived since 1762, so as to take in H[illegible] Reynolds, Gainsborough, and Wilson.

THE FOREIGN OFFICE.—There is [illegible] prospect that the rickety building in [illegible] will be vacated in a few weeks by Lord [illegible] and the officials of that department [illegible] Workmen are now employed in making [illegible] House and the Earl of Malmesbury's [illegible] for the reception of the Foreign [illegible] employés until the new office in Downing [illegible]

BUCKINGHAM PALACE.—Improvements [illegible] for some time in progress in the rear of [illegible] Palace, abutting on Queen's Row, the [illegible] from Buckingham Gate by the Royal [illegible] Road, &c. A lofty mound of earth has [illegible] within the walls of the Palace garden [illegible] prevent their being overlooked by [illegible] and adjacent buildings on the south side [illegible] planted with trees and shrubs which [illegible] complete screen. The private chapel is [illegible] with a new and more elegant entrance, and [illegible] fications and improvements have been effected [illegible] parts of the building.

THE GUNBOAT FORWARD.—The Admiralty [illegible] received despatches by which the apprehensions [illegible] tained for the safety of her Majesty's gunboat [illegible] have been entirely removed. The vessel [illegible] Esquimalt Harbour in safety on the 25th Jan[illegible]

METROPOLITAN BOARD OF WORKS.—[illegible] meeting of this Board Mr. Vulliamy was elected [illegible] intending Architect to the Board in the [illegible] Marrable, by a majority of 7. There were [illegible] didates.

THE BUILDING TRADE.—The carpenters [illegible] and operatives of the building trade have [illegible] to renew the agitation in favour of the [illegible] question. A crowded meeting on the subject [illegible] last week at Freemasons' Hall, and the master [illegible] penters of Edinburgh, Leith, and other [illegible] towns have already struck. Four of the [illegible] building firms of London—viz., Lucas Brothers [illegible] Smith (of Pimlico), and Peto & Co., have [illegible] paying their workmen by the hour on and after [illegible] inst., in order to take away the slightest [illegible] another strike in the metropolis, and it is expected [illegible] the trade generally will shortly adopt the [illegible] The rate of wages will be 7*d.* per hour [illegible] mechanics and $4\frac{1}{2}d.$ per hour for labourers [illegible] advance of 1*s.* 2*d.* per week to the former, [illegible] week to the latter, assuming that they work [illegible] per week, as at present.

THE ATLANTIC TELEGRAPH.—At a meeting of [illegible] company on Monday, the report of the [illegible] that there are now no outstanding liabilities [illegible] amount of 875*l.* advanced by the directors to [illegible] current expenses of carrying on the company [illegible] and that all the loans advanced by the shareholders [illegible] the purpose of attempting to repair the cable [illegible] repaid with interest. The directors think [illegible] would be highly imprudent to wind up [illegible] solve the company, since by so doing [illegible] would sacrifice, without any adequate [illegible] valuable privileges secured to them by the [illegible] companies, and the governments of England [illegible] United States. They state that a cable might [illegible] laid down between Ireland and Newfoundland [illegible] it could be worked at a large profit. To give [illegible] this proposal it will be necessary to create [illegible] about 3,000*l.*, and the directors hope that, having [illegible] selves contributed nearly 900*l.* towards it, [illegible] holders will assist in completing the sum [illegible] voluntary contributions of moderate amount.

THE STREET RAILWAYS.—At the Marylebone [illegible] court on Monday, Mr. Train, the tramway [illegible] appeared as defendant to a summons taken [illegible] Beresford Hope, charging him with breaking [illegible] injuring the surface of the Uxbridge-road [illegible] complained of had been done for the purpose [illegible] a tramway, and it was urged that when [illegible] line would prove obstructive and dangerous [illegible] traffic. Evidence having been heard as to [illegible] the case, an adjournment was ordered.

DWELLINGS FOR THE POOR.—A block of [illegible] from the designs of Mr. H. A. Darbishire [illegible] erected by Miss Burdett Coutts on a [illegible] bounded by Charles Street and Crabtree [illegible] south-east side of Hackney Road. They are [illegible] provide comfortable dwellings for the poorest [illegible] industrious classes in their neighbourhood [illegible] suited to their means. They contain dwellings [illegible] two, and three rooms, furnished with cooking [illegible] ratus, cupboards, &c. Lavatories and [illegible] provided on each floor. Club-rooms, wash-houses [illegible] large drying places occupy the topmost story [illegible] buildings are five stories high, and are [illegible] built of the plainest and least expensive materials [illegible] living rooms average 13ft. by 10ft. 6in.; the [illegible] 13ft. by 8ft. 3in.; the club-rooms 34ft. by [illegible] the wash-houses 32ft. by 8ft. 6in. All the rooms [illegible] 8ft. high, except the club-rooms, which are [illegible] tenements are situated on either side of an [illegible] corridor, divided in the middle of its length by [illegible] area, which separates the rear of the buildings [illegible] wings. Each wing contains an open stone [illegible] which gives access to the corridors, and [illegible]

... supply of fresh air to the tenements. Adjoining each staircase are two sculleries—one for the use of the men, the other for the women. Both have two latrines, lavatory, with washing basins, bath, sink, waste, &c., and a plentiful supply of water from cisterns in the attic. In the centre of each staircase a dust shaft is provided, with a receiver in each corridor. The shaft communicates with a large dust-bin in the basement, to which a separate external access is provided. A resident superintendent keeps the accounts and acts as general manager, and a porter attends to the cleanliness of the staircases, corridors, and lamps. The rents, which are paid in advance, are collected every week, and not more than one week's arrears are allowed. As Miss Coutts's object in undertaking so large a work was to provide dwellings for the very poorest of the industrious classes, it was considered desirable to fix the rents at a rate low enough to insure the dwellings being taken by these classes, and yet sufficiently high to yield a net return of about 3 per cent. upon the cost. The tenements which consist of three rooms each realise 4s. and 5s. per week, according to their size; those of two rooms realise 3s. 6d.; and those of one room (occupied by widows and persons without children) realise 2s. 6d. or 2s. according to their size. With these rents a net return of 3 per cent. is obtained. The buildings are always full, and there are more applicants for residence than can be accommodated. The tenants are most orderly in their conduct and regular in the payment of their rent, and the general result so far as it has proceeded may be regarded as highly satisfactory. Other buildings of the same description are in course of erection. When the whole are completed, they will accommodate at least 175 families.

Management of Dulwich College.—A deputation of members of the vestries of St. Botolph, Bishopsgate Without; St. Giles's, Camberwell; St. Luke's, Middlesex; and St. Saviour's, Southwark, being the four parishes jointly interested in the management and control of Dulwich College, had an interview with Sir George Lewis on the 5th inst. at the Home Office, for the purpose of urging upon the Government the necessity of taking some measures for the alteration of the system by which it is now governed. Mr. H. Potter read a memorial on the subject as follows:—

"That the unsatisfactory nature of the provisions of the Act of Parliament under which Dulwich College is now governed has shown itself in its practical working, and has been discussed in each of our vestries, and some means taken to seek its amelioration. That during such discussion the destitution of the inmates of Alleyn's Almshouses, in the parish of St. Luke, and the entire want of provision being made for them, has been brought to their notice. That the election of a poor brother and sister in two of the other parishes has shown to your memorialists the urgency of using every available means to meet the distressed condition of the non successful candidates. That, while the object of the memorialists is mainly to call attention to the distressed state of the poor brethren and sisters, they also desire to call attention to the educational branch of the institution, and to the unfavourable contrast it presents to the City of London school."

In reply, Sir G. Lewis said he would take care that the matter should be inquired into.

The Public Health.—The Registrar-General's Weekly Report states that the deaths registered in London in the week that ended on Saturday, March 16th, were 1226. The average number in the corresponding weeks of the 10 years, 1851-60, corrected for increase of population, was 1427. The present return is therefore 201 below the average. During the week the births of 996 boys and 964 girls, in all 1960 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1788.

Provincial.

Cambridge.—An influential conference of about 30 senior members of the University was held a few days since in the Philosophical rooms—the Norrisian Professor of Divinity in the chair, when the Rev. F. Meyrick explained the objects of a new Society called the Anglo-Continental society. He alluded to the dense ignorance which prevailed on the Continent as to the true character of the Church of England, most people abroad believing that we were little better than deists. The desire of religious reformation in many countries was then touched on, and the duty of our Church to give the required information was considered. The policy adopted by the Society was not to irritate by circulating violent tracts, but to put into the hands of inquirers clear expositions, in their own language, of the doctrines and discipline of our Reformed Catholic Church, in the hope that, by such means, an internal reformation might be accomplished, without destroying the fabric of the Church, or splitting the flock into a hundred sects. Brief addresses were subsequently delivered by Lord Charles Hervey, Professor Pryme, Messrs. Browne, D'Orsey, and Beamont; and it was unanimously resolved to hold a public meeting in aid of the society before the end of the term.

Chatham.—The Lords of the Admiralty have directed the iron-cased mail-clad steamer ordered to be built at this dockyard to be named the Achilles. She is to be of 1250 horse-power, and will be pierced to carry 40 Armstrong guns. Admiralty orders have been received for the following screw-frigates and other vessels to be built as soon as the ships which are now in progress have been completed, viz., the Boadicea, 51 guns, 600 horse-power; Pactolus, 22, 200 horse-power; Diligence, 17, 200 horse-power; Salamis 4, 250 horse-power; and Albatross, 4, 200 horse-power.

Mansfield.—It is stated that Newstead Abbey, so well known as the residence and property of the poet, Lord Byron, has been purchased by Mr. William Frederick Webb, late of the 17th Lancers, of Pepper Hall, Yorkshire, for 150,000*l*. The late Colonel Wildman, the last owner of the property, is stated to have expended between 200,000*l*. and 300,000*l*. on the restoration and decoration of the abbey and grounds.

Oxford.—On the 9th inst, at Lambeth Palace, the Archbishop of Canterbury with Lord Wensleydale and Dr. Travers Twiss as his assessors, gave judgment in the case of appeal brought by three of the fellows of All Souls' College, against certain proceedings of the Warden and other fellows of that college. The case has been argued at considerable length, the question being briefly this—whether, after a candidate for fellowship has satisfactorily passed his examination as to educational and intellectual fitness, it is in accordance with the statutes governing the college that the electors should make inquisition into his moral and social character—that this inquisition should be conducted altogether in secret—and that the electors should have power to elect or reject the candidate according to the result of this inquiry, whatever might be the degree of his eligibility on the strength of his examination. Lord Wensleydale and Dr. Twiss read a report stating at great length the grounds on which they had come to the conclusion that the electors do possess the right of inquiry referred to. The archbishop thanked the assessors for their report, and said it was his duty to confirm their report and to decide the appeal in accordance with it.

Plymouth.—The Queen Victoria screw steamer, which ran aground in this port some months since, while on her way to Rangoon with a telegraph cable, was floated off from Cremyll beach on the 13th inst. She has been taken into the Great Western Docks, and has since been placed in the graving dock, where she was surveyed on Tuesday in order to ascertain the amount of damage, and the time required for repairing. Should the surveyors decide in favour of repairing, the ship will be temporarily repaired in this port, and the cable will be sent to the Mediterranean in other vessels built for the purpose.

Portsmouth.—On Friday the 8th inst. a fire broke out in the stable belonging to a large building recently erected in the Commercial Road by Messrs. Cooke, of Astley's Amphitheatre, for equestrian performances. In consequence of the inflammable material of which the building was composed, the fire raged with such violence for three hours and a half that the large circus was completely destroyed, seven of the adjacent houses were burned down, and eight partially destroyed. There were 45 horses in the stables; 37 were with difficulty saved, and eight were burned to ashes, including "Snowdrop," and seven others of the most valuable of the stud. The armoury and wardrobe, which were of an unusually valuable character, and the personal effects of all the members of the company were also destroyed. Messrs. Cooke were not insured, and the total loss is estimated at 2000*l*. On Friday evening a public meeting was held to devise means to assist the sufferers, and it is understood that a public subscription will be opened for their relief. A strong opinion is now generally entertained that the circus was wilfully set on fire, and a reward of 50*l*. has been offered for the conviction of the guilty party.

Rugby.—A rumour has been current that the trustees of Rugby School have called upon Dr. Temple to resign the head mastership of the school, in consequence of his participation in the authorship of "Essays and Reviews." The Birmingham papers state that there is no foundation for the rumour. On Sunday last, while preaching at Rugby, Dr. Temple took occasion to refer to the volume with which his name has become identified, and in the course of his remarks stated that the essay contributed by him to that volume was preached some years ago as a sermon before the University of Oxford without exciting any adverse comment.

Ireland.

The Yelverton Marriage Case.—The Rev. Mr. Mooney, who played so conspicuous a part in this trial, has published a long letter in the Dublin papers, giving a history of his share in the Irish marriage, and of his subsequent conduct. He says that this is a simple statement of the facts as they would have been given by him on the trial, had he not been subjected from the very first to a "bullying cross-examination," instead "of having a fair direct examination." He proceeds at some length to refute the charges which have been brought against him of being "grossly ignorant of the doctrines of his Church, or of having equivocated for fear of a criminal prosecution; that he was tampered with or bribed by the major's party, and that he took money under false pretences." With reference to the certificate given by him, he says, "I merely gave it to satisfy a continental priest that Mrs. Yelverton was a married lady, which I knew to be a fact. I inserted the names of witnesses merely *pro formâ*, because without them the foreign priest would have regarded it as a spurious document, and Mrs. Yelverton would have been thereby placed in a very unpleasant position. I now feel that in filling up the certificate in the manner and for the purpose just mentioned I acted wrongly and unwisely. It is a fault for which I since sincerely suffered, through many months, both in mind and body. But that I was not influenced by a corrupt, or by any other than a benevolent or humane motive, must be quite evident to any one who reads the letter in which Mrs. Yelverton applied for that certificate. Had I in the least foreseen that it would have been used for any purpose but the one for which I gave it, nothing could have induced me to have written it."—In the Outer House of the Court of Session on the 7th inst, before Lord Ardmillan, the case of "Yelverton *v.* Yelverton" was mentioned. These are conjoined actions of declarator of marriage, and of putting to silence between Major and Mrs. Yelverton, in which a proof has been going on for some time before the sheriff-commissary. The Lord Ordinary appointed the pursuer to conclude her proof before the 6th April, and the defender to conclude his by the first sederunt day.

Law.

House of Lords, Appeals—*Brook v. Brook. Marriage with a Deceased Wife's Sister.*—On Monday their lordships assembled at 11 o'clock to deliver judgment in this important appeal from the Court of Chancery. The question was whether a marriage, duly solemnised on the 9th June, 1850, at the Lutheran Church of Handsbeck, near Altona, in the duchy of Holstein, in the kingdom of Denmark, between William Leigh Brook, Esq., late of Meltham Hall, near Huddersfield, Yorkshire, and Miss Emily Armitage, the sister of his first wife, was or was not a valid marriage; and whether the issue thereof were legitimate according to the laws of England, such marriage being valid and such issue being legitimate according to the laws of the said duchy. The Court below, assisted by Sir Cresswell Cresswell, decided that the marriage was void, as being contrary to the 5th and 6th William IV., cap. 54. The case was argued on the 25th of last month, when Sir F. Kelly, Mr. Malins, and Mr. G. Lake Russell appeared for the appellants, the two sons and daughters of the second marriage; and the Attorney-General and Mr. Wickens represented the respondent, the son of the first marriage. Their Lordships now delivered judgment *seriatim*:—The Lord Chancellor said that such a marriage as this could have been set aside by the Ecclesiastical Court before the statute 5 and 6 Wm. IV., c. 54. That act did not render marriages illegal which were legal before; and he was of opinion that no marriage was valid which, before that act could, in the lifetime of the parties, have been set aside,—which, having been celebrated in England, was deemed unlawful, on the ground of being contrary to God's word. Acting judicially, he was bound to say, that marriage with a deceased wife's sister being expressly within the statute, it made no difference that such a marriage was celebrated in a foreign country, where it was not held to be invalid. There was no doubt that marriages celebrated in foreign countries might be regulated by the *lex loci* as to the mode of contract; but while the contract was such as would be contrary to the law of the country in which the parties were domiciled subjects, such a marriage was not valid in that country. Acting as a judge, and bound to enforce the existing law, he would give no private opinion as to the propriety of such marriages, or whether they were opposed or not to the feelings of large numbers of his countrymen, but he could only state what, in his opinion, was the solemnly pronounced act of the Legislature, in defining the degrees within which marriages should be contracted; and that these marriages were declared incestuous he had no doubt. No state could allow its domiciled citizens by a temporary residence in a foreign country, to break the laws of their own country. He was not prepared to admit the argument that, if this law of marriage was declared to be the law of England, it would be operative in all the colonies, for the provisions of that Act did not go that length. He was also not prepared to say that the marriage in question would have been held to be valid even in Denmark, inasmuch as the parties were domiciled English subjects, contracting a marriage which was contrary to the law of England. His opinion rested on the plain ground that marriages of this kind were prohibited by the law of England as being contrary to the law of God. He examined all the authorities, pointing out that they did not militate against the opinion he had formed, and concluded by saying that the arguments on the part of the appellants were insufficient to convince him that the decree appealed against was erroneous; he must, therefore, hold that it should be affirmed, and he was bound to say that, by the law of England, this marriage was invalid. Lord Cranworth, Lord St Leonards, and Lord Wensleydale concurred, and the appeal was dismissed. *Aikman v. Aikman.—Scotch Marriage.*—This was an appeal from the Court of Session in Scotland, and was heard at great length before the House of Lords last year. The action was brought for the purpose of having it declared that the appellant, George Robertson Aikman, is the eldest legitimate son of George Robertson Aikman, deceased, and the heir of the entailed estates of Ross and Broomhilton, in the county of Lanark. The Lord Chancellor, in delivering judgment, stated his opinion that the domicile by origin of George Robertson Aikman the elder was Scotch, and the question was whether subsequent events had changed that domicile. Looking to all the circumstances as they appeared from the evidence he had come to the conclusion that the Scottish domicile was never lost; and that being so, according to the law of Scotland the marriage legitimated the children born previous to the ceremony. In his opinion, therefore, the decision of the Court of Session must be affirmed, and the appeal dismissed with costs. Lord Cranworth and Lord Wensleydale gave judgments to the same effect, and the concurrence of Lord Brougham was also stated. Appeal dismissed without costs at the request of the respondent, who expressed his wish that his brother should not be saddled with the payment of costs.

Northern Circuit: York.—*The Wakefield Bribery Prosecution—The Queen v. John Barff Charlesworth.*—This was a criminal information filed by the Attorney-General against John Barff Charlesworth, charging him with bribery at the Wakefield election. There were various counts charging the defendant with different acts of bribery, to which he pleaded Not Guilty. The Solicitor General stated the case, and called as one of his witnesses Mr Fernandez, an agent of Mr Charlesworth. On being questioned however as to whether he received money from Mr. Charlesworth, Mr. Fernandez declined to answer, inasmuch as by doing so he should criminate himself. A royal pardon was then handed to him, and the questions were repeated, but he still pertinaciously refused to answer questions, alleging that the pardon was not sufficient. Mr. Justice Hill therefore, sentenced him to six months' imprisonment, and imposed a fine of 500*l*. The case therefore broke down for the want of evidence, and Mr. Justice Hill on the application of the Solicitor-General discharged the jury. In the next case, *The Queen v. John Dodgson Charlesworth*, the Solicitor General withdrew the record. *Queen v. Crowther.*—This also was a criminal information filed by the Attorney-General against the defendant for bribery at the Wakefield election in April, 1859. The Solicitor-General stated the case for the prosecution, and Sir F. Kelly addressed

the jury for the defendant. Mr. Justice Hill, in summing up said it was obvious that bribery was very rife at Wakefield at the election in question, and that, if it was important that bribery should be suppressed, this was undoubtedly an important case. He then read over the evidence, pointing out its applicability to the various counts. The jury retired at 6 o'clock to consider their verdict, and were locked up until 9 o'clock on the following morning, when not having arrived at a verdict they were discharged. *Regina* v. *Jubb*.—This was another charge of bribery, arising out of the Wakefield election. The defendant, who is a farmer at Thorn, was charged with having called on Reuben Leighton, a gardener at Wakefield, and offered to forgive him a debt of 5*l.* if he would vote for Mr. Charlesworth, and also promised that if he would vote for Charlesworth he would induce his brother George to give up a promissory note for 20*l.* which he held of the defendant, and also to give him a further sum of 20*l.* The evidence in support of the charge was that of Leighton and his wife, who had each sworn before the Commissioners directly contrary to the testimony they now gave, and it was suggested that they had done so by the persuasion of the prisoner. The jury after a few minutes' consultation returned a verdict of *Not Guilty*.

WESTERN CIRCUIT: EXETER.—*Murder.*—*John Binnicombe*, gardener to Mr. Walter Paul, near Totness, was indicted for having administered, on the 23d October, to his fellow servant, Charlotte Tapston, a quantity of tartar emetic, with intent to injure her. Other counts varied the charge, and stated the noxious thing to be five grains of antimony. The poison was put in the puddings, and several of the other servants were affected by it. The jury found the prisoner *Guilty*, and he was sentenced to be imprisoned with hard labour for 18 months.

OXFORD CIRCUIT: STAFFORD.—*Alleged Robbery at a Colliery.*—*Adam Hickman, John Hickman, Edwin Hickman*, and *John Wright*, surrendered to take their trial upon a charge of stealing 10,474 tons of coal from the Haden Colliery, the property of Alfred Haden Barrs, at Rowley Regis. The prosecutor was the occupier of the Haden Colliery, at Rowley Regis, and the prisoners, the three Hickmans and Wright, were in partnership, and occupied an adjoining mine called the Old Hill Colliery. The charge was that in working the latter, they had trespassed on the prosecutor's colliery and stolen upwards of 10,000 tons of his coal. The jury after a short consultation found that the prisoners had taken the prosecutor's coal, but did not do it wilfully. A verdict of *Not Guilty* was then entered, and the prisoners were discharged. *Poaching.*—*John Mountjoy, Joseph Barker, William Smith*, and *Richard Bailey*, surrendered to take their trial on a charge that they, on the night of the 19th January last, armed with guns, entered certain enclosed land, in the parish of Welford, in the occupation of Sir Robert Peel, for the purpose of taking game thereon. The jury found them *Guilty*, and Mr. Baron Wilde sentenced Smith to four years' penal servitude, and each of the other prisoners to be imprisoned with hard labour for 12 calendar months. *Charles Sheldon, John Gratton*, and *Elijah Beardmore* surrendered to take their trial on a charge that on the night of the 6th October last, they, armed with bludgeons and other offensive weapons, entered the lands of Mr. Wilkinson at Norton-on-the Moors, for the purpose of taking game. The jury found them all *Guilty*, and the judge sentenced Sheldon (who had been before convicted) to 15 months, Beardmore to 12 months, and Gratton to 10 months' imprisonment, with hard labour. *Stabbing.*—*Abraham Rushton*, 36, was convicted of stabbing his brother Aaron Rushton, with a knife, with intent to do him some grievous bodily harm, on the 25th February last, at Wolstanton, and *Thomas Astley* was convicted of stabbing Thomas Smith, on the 20th October, at Sedgeley. Mr. Baron Wilde, in passing sentence, said that stabbing with a knife was a crime which could not be tolerated in this country. His lordship then sentenced Rushton to 10 years, and Astley to 6 years' penal servitude.

MIDLAND CIRCUIT: NOTTINGHAM.—*The Nottingham Forgeries.*—*Francis Edward Shipley*, jun., aged 32, colliery proprietor, and formerly sheriff of Nottingham, was charged with *forging the acceptance of Thomas Pacey, coal merchant, Fiskerton, near Newark, in a bill for 67l. 16s.* The fact that the bill was a forgery was proved by Mr. T. Pacey, who swore that the acceptance was not his, and that he had never accepted any bill drawn by the prisoner. After several other witnesses had been examined, the Lord Chief Justice told the jury that there was only one conclusion to which they could come upon the facts, which could leave no doubt upon their minds. The foreman said that they found the prisoner *Guilty*, without any fraudulent intent. The Chief Justice informed the jury that the fraudulent intent followed from the act. One of the jurymen then said that their verdict was one of *Guilty*, with a strong recommendation to mercy on account of his previous good character, a recommendation in which the counsel for the prosecution occurred. The prisoner withdrew his plea of *Not Guilty* to five other indictments for similar offences, and pleaded *Guilty*. He was sentenced to three years' penal servitude.—*Robert White*, lace and hosiery manufacturer, 32, and *John Davis*, commercial traveller, 25, were charged with feloniously uttering forged bills of exchange, well knowing them to be forged. The prisoner White has for several years been in trade as a lace and hosiery manufacturer, in partnership with two brothers. Previous to the forgeries there had been a fire on their premises, the damages arising from which had been paid by an insurance company. The firm afterwards failed, and the prisoner absconded, and was apprehended at Plymouth under the name of Seymour, as he was about to embark in the Cambria packet for the Cape, with three boxes full of lace goods. He told the officer that he had received the bills through his traveller Davis, who was subsequently apprehended in lodgings, in Tottenham Court Road, London. When charged with forging a number of bills of exchange, he said he had not forged any, but had only acted in accordance with instructions he had received from the prisoner White, in getting the bills he sent signed by different persons. The jury after an absence of an hour and a quarter returned a verdict—That it was the intention of White and Davis to get this acceptance signed in the name of George Smith by a person whose name was not George Smith, and that it was their intention the signature should be made by White to appear as the signature of George Smith. His Lordship then said that the finding of these facts amounted to a finding that the prisoners were guilty of forgery. The jury also found that the prisoner White was *Guilty* of feloniously uttering the bills in question. White was sentenced to six and Davis to four years' penal servitude. There were many other cases against the prisoners, which were not proceeded with.—*Great Will Case.*—*Rumbold* v. *Forteath.*—This was an action brought by Sir Charles C. H. Rumbold, Bart., against Mr. and Mrs. Forteath, of Bunny Hall, Notts, to contest the validity of the will of the late Lord Rancliffe, uncle to the plaintiff. His lordship married one of the French nobility, and she having left him and become the paramour of one of his servants, he formed a *liaison* with Mrs. Burtt, widow of a surgeon, and formerly a milliner of Nottingham. At his death in 1850, Lord Rancliffe left the Bunny estates, yielding about 7000*l.* a-year, to his mistress, Mrs. Burtt, giving her full power to dispose of the property at her death as she thought proper. The plaintiff contested the legality of the will, on the ground that Mrs. Burtt, who has since married a barrister called Forteath, exercised undue influence over the mind of the noble lord. Mr. Edwin James, Q.C., was specially retained on behalf of the plaintiff. After several witnesses had been examined, Dr. Hutchinson, for many years the physician of Lord Rancliffe, and who had known him for 15 or 20 years, deposed that Lord Rancliffe's mind was not affected beyond a mere mental irritation, and that he was sensible to a few hours before his death. He spoke frequently in praise of Mrs. Burtt, saying that she had the best heart and the best head that woman ever had. At this point the case was stopped by the judge, who expressed his opinion that the evidence of this witness entirely settled the case. The jury concurring, a verdict for the defendant was recorded. DERBY.—*Robbery with Violence.*—*Patrick Talbot* was charged with robbery with violence, and also with cutting and wounding Ann Wood, with intent to murder her. The prosecutrix, Ann Wood, lived with her husband at Church Broughton, and on the 16th of October last, about 1 o'clock in the afternoon, when she was alone in their cottage, a man, who was masked, entered it, demanded her money, and, on her answering that she had none, threw her down and knelt upon her chest, and in so doing the mask parted from his face so as to enable her to identify him. He then, with a knife, cut her upon the left breast and right arm, inflicting severe wounds, and, having robbed her of a half-sovereign, left the house. The jury returned a verdict of *Guilty* on the second count, and sentence of *Death* was ordered to be recorded.

Obituary.

LORD LILFORD died on Friday last at Lilford Hall, near Oundle, after a protracted illness. He was born in 1801, and on the death of his father in 1825 he succeeded to the title and estates. He married in 1830 the Hon. Mary Elizabeth Fox, daughter of the third Lord Holland. He is succeeded in the family honours and estates in Northamptonshire and Lancashire by his eldest son, the Hon. Thomas Lyttleton Powys, born in 1833, and married in 1859 to the youngest daughter of Mr. Robert William Brandling, of Low Gosforth, Northumberland.

LADY MATILDA BUTLER, youngest daughter of the Countess of Glengall and the late Earl of Glengall, died a few days since. She had only returned recently to town from Torquay, where she had been residing during the winter with the view to benefit her health. She was born in 1836, and was consequently in her 25th year.

ADMIRAL SIR WILLIAM BEAUCHAMP PROCTOR, died on the 14th inst., at Langley Park, Norfolk. He was the son of the second baronet by the daughter of Mr. Robert Palmer, of Sunning, Berkshire. He was born at Langley Park in 1781, entered the navy in 1794, and assisted in the capture of a Batavian frigate on the coast of Norway, in which he was wounded. In 1801 he received the Turkish gold medal for his services in Egypt, and in 1802 was advanced to the rank of Commander, in which capacity in the Zebra he served at the bombardment of Havre in 1804. He attained flag-rank in 1841. He is succeeded in his title and estates by his son, Thomas William Brograve Proctor Beauchamp, married to the youngest daughter of the second Lord Radstock.

SIR WM. PYM, M.D., K.C.H. died on the 18th inst. at his residence in Upper Harley Street, in his 85th year. On the previous Friday, while in the billiard-room at the United Service Club, he was seized with a paralytic stroke, which terminated fatally on Monday night. He was the son of Mr. Joseph Pym, of Pinley, Warwickshire, a descendant of John Pym, of the time of Charles I. For many years he was connected with the medical department of the army, and was made a deputy-inspector-general in 1810, and inspector-general in 1816. He served in the 35th and 70th Regiments, and in a light infantry battalion in the West Indies during the expedition under General Sir Charles Grey, and subsequently on the staff in Gibraltar, Malta, and Sicily. He was knighted by William IV. in 1830, on his return from Gibraltar, where he had volunteered his services during a visitation of yellow fever in 1828.

MR. JOHN HENRY MANDEVILLE, late Minister Plenipotentiary to the Argentine Republic, died on the 16th inst. He was born in Suffolk in 1773, and had therefore almost attained the advanced age of 88. He was the oldest member of the diplomatic service, and his long career embraced an extraordinary variety of incidents and events. At an early age he entered the navy; and subsequently held a commission in a dragoon regiment; he was the British agent in France for the exchange of prisoners before the Peace of Amiens; was attached to Lord Whitworth's Embassy, was secretary to Sir Arthur Paget at Vienna in 1805, and afterwards served in the missions of Frankfort, Constantinople, Lisbon, Paris, &c. In 1835 he was appointed Minister Plenipotentiary at Buenos Ayres, where he remained for 11 years.

WILLS.—The will of Sir Richard Paul Jodrell, Bart., of Portland Place and Sall Park, Norfolk, has been sworn under 250,000*l.*; William Leveson Gower, Esq., of Brook Street and Titsey Park, near Godstone, 90,000*l.*

BIRTHS.—On the 14th inst, the Lady ALFRED PAGET, of a son—9th inst, at Stormanstown House, near Dublin, the wife of the Right Rev. the BISHOP of LABUAN, of a daughter—19th inst, at 35, Hill Street, Berkeley Square, Lady EMILY WALSH, of a daughter—17th inst, at Bradfield, Cullompton, the Hon. Mrs. WALROND, of a son—15th inst, the Hon Mrs JAMES DRUMMOND, of a son—13th inst, at Belefield House, Fulham, the wife of H. B. SHERIDAN, Esq., M.P., of a daughter.

MARRIAGES.—On the 14th inst, at Christ Church, St. Marylebone, ANGELO COLLEN, son of Sir GEORGE HAYTER, Knt., and K.S.L., to AUGUSTA, daughter of Sir RICHARD CHARLES KIRBY, C.B., late Accountant-General of the Army—14th inst, at Holy-cross Church, EDWARD WM. CADWALLADOR LLOYD, Esq., 7th Royal Fusiliers, son of the late Rev. WILLIAM Lloyd, Fenbor Glebe, to ANNIE, daughter of EDWARD WILSON, Esq., Raheen-park, county Tipperary—19th inst, at the parish church of Kensington, Lieut.-Colonel OAKES, 12th Royal Lancers, to FRANCES, youngest daughter of the late J. L. K. LENNOX, Esq., of Lennox Castle, N.B.—13th inst, at Leiston Church, CHARLES POPE JAMES, Esq. of Foulsham, Norfolk, third son of the late William Rhodes James, Esq., of Wyndham House, Aldeburgh, to MADELINE EMILY, eldest daughter of the Rev. JOHN CALVERT BLATHWAYT, incumbent of Leiston, Suffolk.

DEATHS.—On the 17th inst, at Lamorran Rectory, MAUD, the youngest child of the Hon. and Rev. J. T. BOSCAWEN—12th inst, at Great Coxwell, near Farringdon, the Rev. JOHN FRANCIS CLEAVER, Vicar of that parish, and second son of the Right Rev. William, formerly Bishop of St. Asaph, aged 72—10th inst, at Nice, Lady KINLOCH, widow of Sir Alexander Kinloch, of Gilmerton, Bart., aged 88—16th inst, at Longhope, Gloucestershire, the Rev. VERNON GEORGE GUISE, vicar of that parish, and third surviving son of General Sir John W. Guise, Bart, aged 57—15th inst, at Pau, Basses Pyrenees, JOHN, younger son of the late Rev. Sir J. GODFREY THOMAS, Bart, aged 35—8th inst, at Oxendean, Dunse, Berwickshire, General HENRY J. RIDDELL, K.H., Colonel of the 6th Regiment of Foot—17th inst, at Prinsted Lodge, Emsworth, MARGARET, the wife of Major-General ANDERSON GIBSON, R.M.A., and third daughter of the late WILLIAM COX, Esq., of Stoney House, Essex—Lost, on his passage to England, in the ship Cleveland, which is supposed to have foundered at sea in the spring of last year, Lieutenant J. BRADSHAW, 60th Rifles, only son of the late Lieutenant-Colonel Bradshaw, C.B., 60th Rifles—28th Jan., near Meerut, East Indies, JAMES FREDERICK BRIND, the eldest son of Colonel James Brind, C.B., of H.M.'s Bengal Horse Artillery, aged 25—1[illegible] Place, Bath, Lieutenant-Colonel ROBERT [illegible] late 59th Bengal Native Infantry, aged [illegible]—in an engagement with the natives [illegible] the river Gambia, Western Africa, JAMES [illegible] of H.M.S. Arrogant, younger son of [illegible] Hamilton, rector of Beddington, aged [illegible]—[illegible]haven, GEORGE HARRISON, Esq., J.P., [illegible] Whitehaven, in the county of Cumberland [illegible] at Woolston Lawn, Southampton, JAMES [illegible] aged 74—12th inst, at Howard Lodge, [illegible] STEPHENS, Esq., formerly manager [illegible] Bank, at Adelaide, aged 49—1st inst, [illegible] Breock, Cornwall, the Rev. JOSEPH [illegible] that parish, and formerly incumbent of [illegible] aged 83—15th inst, the Rev. CHARLES [illegible] Heckington, Lincolnshire, aged 59—15th inst, [illegible] Kent, the Rev. JOHN HILTON, aged 68.

Markets.

COVENT GARDEN, March 2[illegible]

Supplies continue to improve in quantity [illegible] insufficient for the demand. Continental [illegible] Broccoli are excellent, and good samples [illegible] Artichokes, and Cauliflowers, come from France [illegible] samples of new Grapes are offered at comparatively [illegible] prices. Asparagus, French Beans, and new [illegible] now be had. Cucumbers are scarce. [illegible] consist of Orchids, Lily of the Valley, [illegible] Violets, Mignonette, Camellias, Heaths, and [illegible]

FRUIT

Pine Apples, per lb., 6s to 10s	Apples, per doz [illegible]
Grapes, per lb., 8s to 14s	Oranges, per [illegible]
— new, per lb., 20s to 24s	Lemons, per [illegible]
Strawberries, p. oz., 1s to 2s	Nuts, Cob, per [illegible]
Pears, per doz., 2s to 4s 6d	

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., [illegible]
French Beans, p. 100, 3s	Celery, p. bundle [illegible]
Green Peas, p. ½ sieve, 20s	Onions, p. [illegible]
Greens, per doz., 6s to 8s	Asparagus, p. [illegible]
Cabbages, do., 2s to 3s	Rhubarb, p. [illegible]
Potatoes, p. ton, 90s to 160s	Seakale, p. punnet [illegible]
— per bus., 4s to 6s	Shallots, per [illegible]
— per cwt., 6s to 10s	Garlic, per lb., [illegible]
Carrots, per bunch, 8d to 10d	Endive, p. score, [illegible]
Turnips, per bunch, 4d to 6d	Horse Radish, p. [illegible]
Spinach, p. sieve, 4s to 5s	Mushrooms, p. [illegible]
Cucumbers, each, 2s to 3s	Parsley, p. 12 bunches [illegible]
Artichokes, per doz., 3s to 4s	Savory, per [illegible]

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, March 21.

Prime Meadow Hay	75s to	85s	Clover .. .. [illegible]
Superior do. (old) ..	90	105	New Clover .. [illegible]
Inferior do.	50	60	Do. second cut [illegible]
New do.	—	—	Straw .. .. [illegible]
Rowen	—	—	

CUMBERLAND MARKET, THURSDAY, March [illegible]

Sup. Meadow Hay ..	108s to	114s	Inferior Clover [illegible]
Inferior do.	65	95	New do. .. [illegible]
New do.	—	—	Straw .. [illegible]
Superior Clover ..	112	120	

WHITECHAPEL, THURSDAY, March 21.

Fine old Hay	98s to	108s	Fine old Clover [illegible]
Inferior do.	50	80	Inferior do. [illegible]
Prime New Hay ..	—	—	Fine 2d cut [illegible]
Inferior do.	—	—	Inferior [illegible]
Straw	38	42	Fine New [illegible]

BUTTER MARKET.—March 22.

Best Fresh Butter . .. 17s per [illegible]
Second do. do. .. .. 15s. " "
Pork, 4s. 8d. to 5s. 4d. per 8 lbs.

POTATOES.—SOUTHWARK, Monday, March [illegible]

During the past week the arrivals both [illegible] have been large; the trade still continues [illegible] state, with very little alteration in prices [illegible] The following are this day's quotations:—[illegible] to 150s. per ton; Lincolnshire Regents, [illegible] Red Soil do., 140s. to 160s.; do. do. Reds, [illegible] Berwick Regents, 120s. to 125s.; Fife, Forfar [illegible] 90s. to 105s.; ditto Rocks, 80s. to 90s., [illegible] 75s. to 80s.; French Whites, 60s. to 90s.; [illegible] to 80s.; Dutch do., 60s. to 80s.

BRITISH WOOLS.—LONDON, FRIDAY, Mar[illegible]

There has been some amount of business done [illegible] as holders have in some descriptions met the [illegible] others the buyers have taken freely at [illegible] lower rates have been accepted in several [illegible] transactions may be reported.

	s. d.	s. d.	
South down Hoggets	1 5	to ..	Leicest. [illegible]
Half bred ditto ..	1 6	— ..	Ditto Hoggs [illegible]
Down Ewes ..	1 4	— ..	Combing Skins [illegible]
Kent Fleeces ..	1 5	— 1 6	Blanket [illegible]
			Flannel Wool [illegible]

COLONIAL WOOL SALES.—These sales are [illegible] more definite [illegible] a close, and are consequently more [illegible] as till within the last few days there had been [illegible] feeling of dread which made inferior descriptions [illegible] able, and compelled the withdrawal of a [illegible] tion of them; but now all sorts [illegible] decidedly better terms than during the middle [illegible]

COAL MARKET.—March 2[illegible]

Bowers West Hartley, 15s.; Brass's [illegible] 15s.; Davison's West Hartley, 15s.; Hastings [illegible] Howard's West Hartley, 15s.; Tanfield [illegible] 15s. 6d.; Walls End Acorn Close, [illegible] Hill, 14s. 6d.; Walls End Braddyll's Hetton [illegible] End Haswell, 18s. 6d.; Walls End [illegible] Walls End Russell Hetton, 17s. [illegible] Walls End Stewarts, 18s. 6d.; [illegible] 18s. 6d.; Walls End Kelloe, 17s. [illegible] pool, 18s.; Walls End South Kelloe [illegible] Hartlepool, 16s. 9d.; Walls End Trimdon Hetton [illegible] End Thorpe, 17s.; Walls End [illegible] Walls End Trimdon Thornley, 17s. 6d.; [illegible] worth, 15s.; Carway and Duffryn [illegible] market.

METROPOLITAN CATTLE MARKET.

MONDAY, March 18.

Although the supply of Beasts is very [illegible] Monday last, it is quite equal to the demand [illegible] and prices are no better. We have [illegible] Sheep as last week. Quotations remain unaltered [illegible]

[illegible] are scarce and dear. From Germany and [illegible], 187 Sheep, and 27 Calves; from Scotland, 180 Beasts; and 2200 [illegible] northern and midland [illegible].

	s. d. s. d.		s. d. s. d.
Best Scots, Herefords, &c. ..	4 8 to 5 0	Best Long-wools	5 6 — 5 8
Best Short-horns	4 6 — 4 10	Do. Shorn ..	4 8 to 5 0
2d quality Beasts	3 4 — 4 0	Ewes & 2d quality	4 8 — 5 0
[illegible] and		Do. Shorn	.. .. — ..
[illegible]		Lambs ..	.. .. — ..
[illegible]	[illegible]	Calves ..	.. 5 0 — 6 0
[illegible]	[illegible] 2	Pigs ..	.. 4 0 — 5 0

Beasts, [illegible]; Sheep & Lambs, 18,4[illegible]; Calves, 46; Pigs, 230.

THURSDAY, March 21.

[illegible] supply of Beasts, and choicest kinds are [illegible] generally the trade is dull. Prices on [illegible] Monday. The number of Sheep is [illegible] are in demand, but other [illegible]. Choice Lambs and Calves are scarce [illegible] supply consists of 130 Beasts, 350 [illegible] Milch Cows 135.

	s. d. s. d.		s. d. s. d.
Best Scots, Herefords, &c.	4 8 to 5 0	Best Long-wools	5 6 — 5 10
[illegible]	4 [illegible] — 4 1[illegible]	Do. Shorn ..	4 10 — 5 2
[illegible] Beasts	[illegible] 4 — 4 [illegible]	Ewes & 2d quality	4 8 — 5 4
		Do. Shorn	.. .. to ..
[illegible] and		Lambs ..	.. .. — ..
[illegible]	[illegible] — 6 [illegible]	Calves ..	.. 5 4 — 6 0
[illegible]	[illegible] — [illegible] 4	Pigs ..	.. 4 0 — 5 6

Beasts, [illegible]; Sheep & Lambs, [illegible]; Calves, 144; Pigs, 200.

MARK LANE.—MONDAY, March 18.

[illegible] new English Wheat at this morning's [illegible] samples were quietly bought at [illegible] prices of this day se'nnight. The attend[illegible] a large business transacted in foreign, at [illegible] general qualities. Barley [illegible] prices. Beans are unaltered in value. [illegible] Oats meet a moderate demand at a [illegible] upon the prices of Monday last. American [illegible] money, and extra States brings an [illegible] per barrel.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk .. White	3[illegible]—66	Red	52—62
— — fine selected runs .. ditto	50—72	Red	54—68
— — Talavera	51—72		
— Norfolk	—	Red	—
— [illegible]	70—78		
BARLEY, grind. & dist., 28s to 3[illegible]s .. Chev.	40—45	Malting ..	38—40
— Foreign, grinding and distilling	[illegible]—36	Malting ..	40—42
OATS, Essex and Suffolk	2[illegible]—24		
— [illegible] and Lincolnshire .. Potato	26—28	Feed ..	[illegible]0—25
— [illegible] .... Potato	26—28	Feed ..	21—24
— Foreign .... Poland and Brew	24—28	Feed ..	20—28
RYE	35—38	Foreign ..	—
RYE-MEAL, foreign	—		
BEANS, Mazagan .... 28s to 44s .... Tick	28—48	Harrow ..	28—48
— Pigeon .... 24s — [illegible]s .. Winds	24—42	Longpod ..	—
— Foreign .... Small	40—50	Egyptian ..	—
PEAS, white, Essex and Kent .. Boilers	3[illegible]—48	Suffolk ..	40—50
— Maple .... —s to —s .... Grey	40—42	Foreign ..	38—48
MAIZE .... White	—	Yellow ..	—
FLOUR, best marks delivered .. per sack	50—57		
— 2d do. .... ditto	38—50	Country ..	38—50
— Foreign .... per barrel	30—35	Per sack	40—50

FRIDAY, March 22.

During the past week the weather has continued to be stormy, with two or three sharp frosts, heavy rain, and hail; [illegible] the Wheat plant, as may be [illegible] not improved, but [illegible] several [illegible] serious. The Wheat trade has been [illegible] some large transactions have occurred at an [illegible] of 1s. to 2s. per qr. A considerable business has [illegible] from the Baltic, fine old 134 lbs. [illegible] 70s., new 61 to 62 lbs. Rostock 6[illegible]s. and 64s. [illegible] malting [illegible] to be extremely [illegible] tendency in prices. Beans are [illegible] demand and value. Peas remain neglected. [illegible] is without alteration. Holders of Flour are [illegible] selling unless at an advance. During the past [illegible] only [illegible] reported. The trade is [illegible] not very [illegible]. The supplies of all grain, English and foreign, this [illegible] moderate extent. The attendance at [illegible] Good English samples were saleable [illegible] over the prices of Monday. Foreign was held [illegible] improvement, which checked business, and was [illegible] realised. Spring Corn of all descriptions is steady at Monday's prices.

ARRIVALS FROM MARCH 18 TO MARCH 22.

	Wheat.	Barley.	Oats.	Flour.
English	1[illegible]7 qrs.	126 qrs.	1[illegible] qrs.	1719 sks.
Irish	— "	— "	630 "	— "
Foreign	6[illegible] "	1670 "	7290 "	300 " / 6000 brls.

LIVERPOOL, TUESDAY, March 19.—This morning's market had a [illegible] of both town and country millers and [illegible] that a consumptive business has been done in both [illegible] an average improvement of 1d. per cental [illegible] per barrel and sack on the latter. Indian [illegible] holders asking an advance of 6d. per qr. [illegible] steady without any change in value. Beans [illegible] per qr. more money. Peas and Barley [illegible] rates in retail. The market closes very steady.

FRIDAY, March 22.—The market has been very quiet, and [illegible] Wheat, Flour, and Indian Corn have been [illegible] the retail rates of Tuesday.

AVERAGES.	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Feb. 9..	[illegible]	40s [illegible]d	22s 6d	36s 3d	39s 10d	42s 7d
— [illegible]	[illegible]4 [illegible]	[illegible] 11	23 0	35 7	40 0	44 7
— [illegible]	[illegible]4 [illegible]	[illegible] 4	23 0	35 5	39 7	41 1
March 2..	54 [illegible]	39 [illegible]	23 0	35 1	39 7	41 7
— 9..	54 [illegible]	38 11	23 6	34 6	41 8	43 8
— 16	5[illegible] 8	[illegible] 7	23 9	34 10	40 1	41 0
Aggr. Aver.	[illegible]4 2	[illegible] 1	23 2	35 3	40 1	42 5

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.

Prices.	Feb. 9.	Feb. 16.	Feb. 23.	March 2.	March 9.	Mar. 16.
[illegible]	..	..	..	..	..	..
[illegible]	..	..	..	..	..	..
[illegible]	..	..	..	..	..	..
[illegible]	..	..	..	..	..	..
	..	..	..	..	..	..
	..	..	..	..	..	..

HOPS.—BOROUGH MARKET, FRIDAY, March 22.

Messrs. Pattenden & Smith report that there is a steady [illegible] demand for the best grown samples of 1860, and [illegible] for yearlings and good sound 1855's and 1856's, at firm rates.

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12 Tea Spoons	0 16 0	1 2 0	1 5 0	1 7 0
6 Egg Spoons, gilt bowls ..	0 10 0	0 13 6	0 15 0	0 15 0
2 Sauce Ladles	0 6 0	0 8 0	0 9 0	0 9 6
1 Gravy Spoon	0 6 6	0 10 0	0 11 0	0 12 0
2 Salt Spoons, gilt bowls ..	0 3 4	0 4 6	0 5 0	0 5 0
1 Mustard Spoon, gilt bowl	0 1 8	0 2 3	0 2 6	0 2 6
1 Pair of Sugar Tongs ..	0 2 6	0 3 6	0 4 0	0 4 6
1 Pair of Fish Carvers ..	1 4 0	1 7 6	1 10 0	1 12 0
1 Butter Knife	0 2 6	0 5 6	0 6 0	0 7 0
1 Soup Ladle	0 10 0	0 17 0	0 17 0	1 0 0
1 Sugar Sifter	0 3 3	0 4 6	0 5 6	0 5 6
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GARDENER (Head).—Married, no incumbrance; understands his profession in all its branches. Can be highly recommended. — J. Baker, 12, Allington Street, Pimlico, S.W.

GARDENER (Head).—Age 28; understands the Forcing of Grapes, Melons, Cucumbers, &c., and the various branches of his profession. Can have an excellent character. A single handed place accepted.—C. H. G., Langley Park Gardens, Beckenham, Kent, S.E.

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SATURDAY, MARCH 30, 1861.

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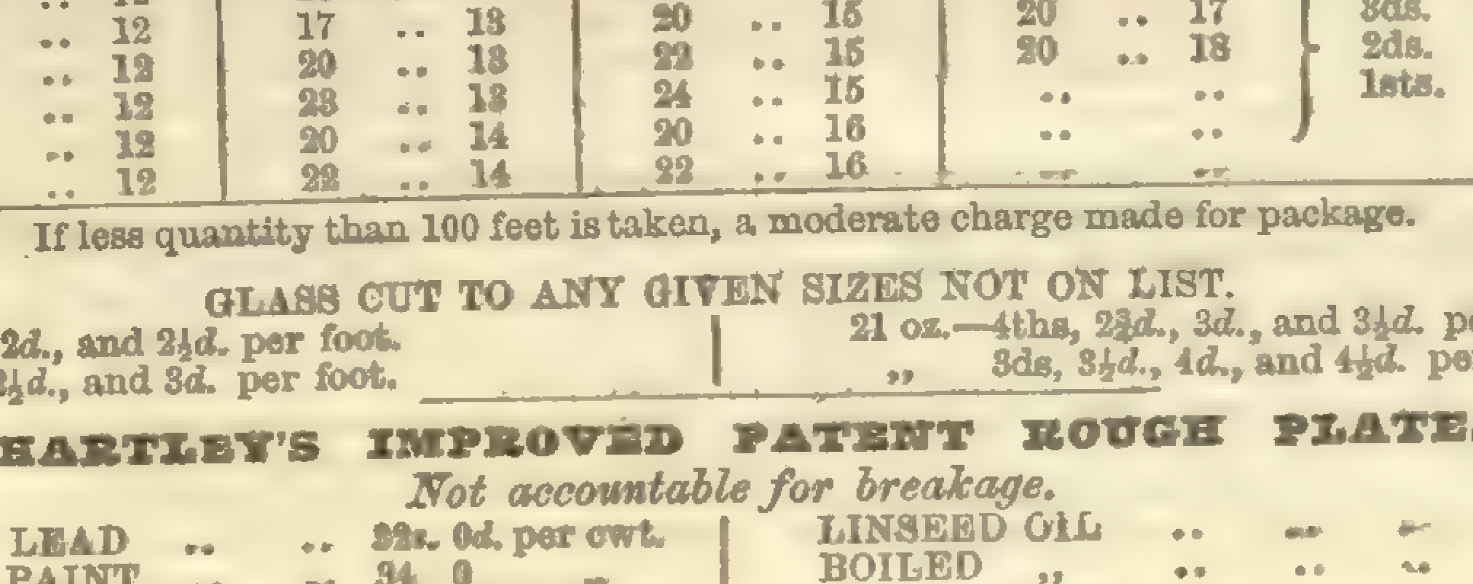

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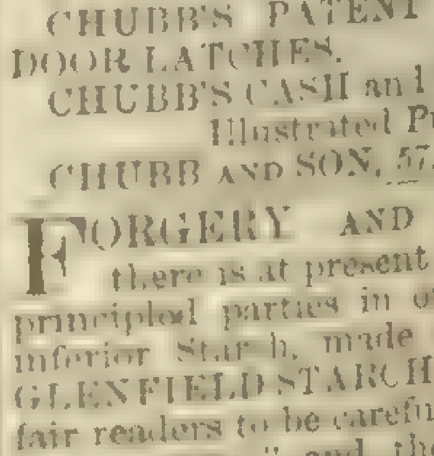

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News of the Week.

Both Houses of Parliament adjourned on Friday for the Easter holidays, the Lords to Tuesday the 9th, and the Commons to Monday the 8th of April. In the Lords on Friday, in answer to the Earl of Ellenborough, Lord Wodehouse stated that the committee appointed on behalf of the States of Holstein had refused the propositions made by the King of Denmark, and had instructed the President to lay the matter before the Diet. The Charitable Uses Bill was read a third time and passed; and the Queensland Government Bill passed through committee. In the Commons on Friday the Chancellor of the Exchequer gave notice that he intended to make his financial statement on Monday, the 15th April. The House went into Committee on the Bankruptcy and Insolvency Bill, the further amendments of which were reported, and the Bill was ordered to be reprinted. After a desultory discussion on the instructions given by the Admiralty to Sir Baldwin Walker, the recent occurrences at Warsaw, the affairs of Mexico, and the future government of the Lebanon, the House was counted out.

The Corps Législatif on Friday agreed to the Address in answer to the Speech from the Throne, by a majority of 212 to 13. On Saturday a deputation went to the Tuileries and presented the Address to the Emperor. His Majesty thanked the Deputies for

the confidence they reposed in him, and said that he believed himself worthy of it by his constant solicitude in considering questions from only one point of view—the true interest of France. His Majesty added, that notwithstanding the animated character of the debates he did not at all regret their discussing the question of foreign policy, and thought the country would derive advantage from it.

Accounts from Italy announce the continued concentration of Austrian troops on the Italian frontier, and the sudden recall of General CIALDINI's force from Gaeta and Messina to protect the lower line of the Po. In consequence of these demonstrations the Paris Bourse on Wednesday was agitated by a report that a collision had taken place between the Austrians and Sardinians, but the rumour proved to be premature. It is said that the French Government has since asked the Austrian Ambassador for explanations, and has been assured by Prince METTERNICH that the concentration of Austrian troops in Venetia is only to be considered a precautionary measure against a possible aggression of the Sardinians. A debate on the Roman question has taken place in the Italian Chamber of Deputies, in which Count CAVOUR declared that Rome must become the capital of Italy, and that they must go there with the consent of France. All sincere Catholics, he said, would then be convinced that the Church, far from suffering, would gain by the transfer, for the union of the temporal and spiritual power had always and everywhere been a source of evil. When they entered Rome they intended to proclaim ample liberty to the Church, and to guarantee that liberty by a special statute. Signor BUONCOMPAGNI then moved a resolution approving the declaration of the Ministry, and expressing the confidence of the Chamber that, after having insured the dignity and independence of the POPE, and the complete freedom of the Church, the principle of non-intervention will, in concert with France, be applied to Rome, and that Rome will be made the capital of Italy. After three days' debate this resolution, on Wednesday, was almost unanimously agreed to. The formation of the new Italian Ministry has produced an excellent impression at Naples, and generally through all the other provinces of the kingdom.

The EMPEROR OF RUSSIA has given another signal instance of his desire to respect the feelings of the Poles. On the representation of the citizens of Warsaw, pointing out the injurious nature of a circular issued by M. MUHKANOFF relating to the recent events, HIS MAJESTY has deprived that Minister of his functions as Director of the Interior and of Public Worship. This concession has afforded much satisfaction, and its announcement was received with great enthusiasm.

The latest news from Washington states that President LINCOLN had declined to hold any intercourse with the Southern commissioners, and that the Cabinet has determined to evacuate Fort Sumter as untenable.

A telegram in anticipation of the Bombay mail of March 1st informs us that Lord CANNING had returned to Calcutta, and that the British troops had advanced into Sikkim, the people abandoning the country on their approach. From Shanghae we learn that the troops at Tien-tsin were still shut in by the ice. General COLLINEAU, Commander of the French Army, died on the 15th of January of small-pox, which was prevalent in the French army and among the Chinese. The rebels were making desperate efforts to go south, and business was completely suspended. Lord ELGIN left Point de Galle on the 3d inst. on his return to England.

Home News.

THE FUNERAL OF THE DUCHESS OF KENT took place on Monday morning in St. George's Chapel, Windsor, and in strict accordance with the understood wishes of her Royal Highness was conducted in the most private manner and with a limited ceremonial. The body was removed from Frogmore to St. George's Chapel at 4 o'clock in the morning, and remained in a temporary chapel near the Princess Charlotte's monument, under the charge of the Vice-Chamberlain and the officers of his department until the hour appointed for the funeral. A company of the Scots Fusilier Guards, under the command of Colonel Hepburn, took up their position in the Chapel Yard as a guard of honour at 10 o'clock; and half an hour later those who had received her Majesty's commands to attend the ceremony, but who were not called upon to take part in the procession, began to enter the chapel by a side door on the left of the altar. These included the Foreign Ministers of the several countries connected by relationship with her Majesty's family,—the Belgian, Hanoverian, Portuguese, Prussian, and Saxon; the Premier, the Lord President of the Council, the Secretary of State for Foreign Affairs, the Great Officers of State and of the Royal Households, and about twenty other invitations. The Foreign Ministers and the Great Officers of State were conducted by the gentlemen of the Lord Chamberlain's Department to their seats in the knights' stalls, Lord John Russell, who came in with the Foreign Ministers, taking his place between Count Bernstorff and Count Vitzthum. Lord Palmerston and Earl Granville entered together, and seated themselves in the lower range of stalls near the royal vault. At a few minutes before 11 the bier supporting the coffin was removed from the temporary chapel into the nave, where the procession was formed. Over the remains was thrown a black pall, upon which the armorial escutcheons of the late Duchess's arms were emblazoned. The pall was supported by Lady Augusta Bruce, Lady Susan Leslie Melville, the Dowager Lady Couper, Lady Fanny Howard, Lady Katherine Vernon Harcourt, and the Hon. Lady Cust, all of whom had been Ladies in Waiting or near personal friends of the deceased. At 11 o'clock the organ pealed forth the solemn chant, "I am the resurrection and the life;" and as the choir sang the opening sentences of the burial service, the procession moved slowly up the nave in the appointed order. The chief mourner was the Prince Consort, supported by the Prince of Wales and the Prince of Leiningen. The funeral was also attended by Prince Arthur, the Duke of Cambridge, the Count de Paris, the Duc de Nemours, Duc de Chartres, Duc d'Alençon, Prince Philip of Wurtemberg, Prince Edward of Saxe-Weimar, Prince Frederick of Schleswig-Holstein, and Prince Victor of Hohenlohe. The burial service was read by the Dean of Windsor, and at its close Garter King at Arms proclaimed the style and title of her Royal Highness. The members of the Royal family were then conducted out of the chapel by the Lord Chamberlain, while the "Dead March in Saul" pealed forth from the organ. It was generally understood that the Queen and the Crown Princess of Prussia, with other members of the Royal family, witnessed the mournful ceremony from the Royal Closet overlooking the altar; but no obtrusive curiosity was allowed to disturb their private sorrow.

THE COURT.—The Queen, Prince Consort, and the Royal family continue at Windsor Castle. On Saturday the Prince of Leiningen and Baron de Loewenfels arrived at the Castle to attend the funeral of the Duchess of Kent, the latter as representative of the Duke of Saxe Coburg. On Sunday morning Divine service was performed in the private chapel of the Castle by the Dean of Windsor. In the afternoon the Dean performed a service at Frogmore House before her Majesty, the Prince Consort, the Prince of Wales, the Crown Princess of Prussia, Princesses Alice, Helena, and Louisa, Prince Arthur, and Prince Leopold, the Duchess of Cambridge and Princess Mary, the Prince of Leiningen, and the household of the late Duchess of Kent. On Monday the Prince Consort, the Prince of Wales, and Prince Arthur, with the foreign Princes staying at the Castle attended the funeral of the Duchess of Kent. On Tuesday the Prince of Leiningen, Prince Frederick of Schleswig-Holstein-Augustenburg, and Prince Victor of Hohenlohe, left the Castle. On Wednesday Baron Loewenfels left the Castle for Coburg.

THE COURT MOURNING.—Notice has been given from the Lord Chamberlain's office that the Court will change the mourning for the Duchess of Kent, on the 18th, and again on the 25th of April, and will go out of mourning on Thursday the 2d May. Notice has also been given that the public are not expected to appear in mourning after Thursday, the 11th April.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of the First Lord of the Treasury in Downing Street.

CONSECRATION OF THE BISHOP OF WORCESTER.—The ceremony of consecrating the Right Rev. Dr. Henry Philpott, as Bishop of Worcester, took place on Monday morning, in the private chapel of Lambeth Palace. The ceremony was performed by the Archbishop of Canterbury, assisted by the Bishops of London and Llandaff.

VISIT OF PRINCE ALFRED TO CANADA.—A despatch from the Secretary of State for the Colonies has been received by the Governor General, stating that Prince Alfred will visit Canada this summer.

PARLIAMENTARY MOVEMENTS. — Lord Palmerston was re-elected for Tiverton on Thursday without opposition, his seat having become vacant by his acceptance of the office of Lord Warden of the Cinque Ports and Governor of Dover Castle.—A numerous and influential meeting of the Liberal electors of South Lancashire was held on Wednesday at Newton-in-the-Willows, Mr. O. Heywood, of Manchester, in the chair, at which it was unanimously resolved to present a requisition to Mr. Gladstone, inviting him to become a candidate for South Lancashire.

THE ARMY.—The colonelcy of the 52d Foot, vacant by the death of Sir A. Maclaine, has been conferred on Lieut.-General Sir William Rowan; and [illegible] of the 19th Foot, rendered vacant by [illegible] has been conferred on Major-General Sir [illegible] Cloete.

THE VOLUNTEER MOVEMENT.—The [illegible] proposed sham fight on Easter Monday at [illegible] causing considerable agitation and ill-feeling [illegible] metropolitan corps has been contradicted [illegible] and Lord Elcho, who state that the [illegible] Wimbledon and Richmond have been arrang[ed] [illegible] a spirit of rivalry or opposition, but with [illegible] object of not interfering with the Brighton [illegible] On Monday afternoon, in accordance with [illegible] to the mayor, a public meeting was held [illegible] hall, Brighton, at which it was resolved [illegible] as a general holiday, in order to afford [illegible] to all classes of the inhabitants to witness [illegible] fight. Lord Ranelagh, who is now [illegible] Bedford Hotel, is actively engaged [illegible] in making arrangements for the event, [illegible] meeting of the Brighton directors and [illegible] resolved to place at his lordship's disposal [illegible] quarters the newly-erected Industrial [illegible] are situated on the scene of action, in [illegible] the race-hill. The grand stand will be occu[pied] [illegible] Earl of Chichester, Lord-Lieutenant of the [illegible] other distinguished visitors, with the band [illegible] Dragoon Guards. The different corps of [illegible] proceed to the ground by various routes, and [illegible] race-course by the south end, passing betw[een] [illegible] lines of spectators. The whole force is expe[cted] [illegible] on the ground at half-past 11 o'clock, wh[en] [illegible] of defence will be formed, to meet a supp[osed] [illegible] advancing from Shoreham. One defen[sive] [illegible] face the grand stand and extend for [illegible] whilst the second will extend from the [illegible] to Ovendean. The artillery on the extre[me] [illegible] first open fire on the enemy, and the evol[utions] [illegible] dental to a conflict in the battle-field [illegible] carried out in accordance with a program[me] [illegible] most complete arrangements will be made [illegible] accommodation of the public, who, from [illegible] the site selected, will obtain an excellent [illegible] spectacle.—The following corps are expec[ted] [illegible] present at the Wimbledon review:—Ca[illegible] Mounted Rifles, 1st Middlesex Light [illegible] Metropolitan Light Horse; Infantry—[illegible] 4th Middlesex, Civil Service Regiment, Que[en's] [illegible] minster), 29th and 38th Middlesex, 1s[t] [illegible] 12th Surrey, 2d City of London, 3d West[illegible] The various corps will march from their [illegible] parades to Knightsbridge and there assemble [illegible] the barracks in time to march thence at 11 [illegible] ceed by Fulham Road and over Putney Bri[dge] [illegible] Wimbledon Common. On arriving at Wimbledon [illegible] will bivouac, each corps providing its own [illegible] After resting a short time they will [illegible] two brigades, and perform a series of brigade [illegible]—A public meeting presided over by the [illegible] Chichester was held on Saturday at Brighton [illegible] it was resolved to establish a rifle associa[tion] [illegible] county of Sussex. A council was appointed [illegible] were adopted for its guidance, and a liberal [illegible] made on the spot.—The Kent County Asso[ciation] [illegible] also received considerable support from [illegible] Lieutenant and resident gentry of the coun[ty] [illegible] stability of the association is now guaranteed. [illegible] Camden has been elected president for [illegible] year.—The Midland Counties review at War[wick] [illegible] 22d July is expected to be attended by the [illegible] of the following counties:—Warwick, [illegible] Stafford, Salop, Hereford, Glouceste[r] [illegible] Northampton, Leicester, Derby, and N[illegible] intended to invite the Commander-in-Ch[ief] [illegible] the Volunteers on the occasion.—The first [illegible] the Suffolk Association will be held at Ips[wich] [illegible] prizes offered will be shot for on the [illegible] the longest range will be 1000 yards.—[illegible] which have been formed in the county of [illegible] just been united for administrative purpose[s] [illegible] battalions.

Foreign.

FRANCE.—The debate on the Address in [illegible] Legislatif terminated on Friday, when [illegible] was adopted by a majority of 199. The [illegible] summary of Friday's discussion:—

M. Lemercier spoke in favour of the tempo[ral] [illegible] the Pope, and insisted upon knowing the [illegible] Government. M. Billault said:—"The situa[tion] [illegible] plicated. On the one side a great political [illegible] been obtained in Italy, and on the other [illegible] poral power of the Pope is undermined and [illegible] Government will neither sacrifice the Pope [illegible] Italy nor the unity of Italy to the Pope. [illegible] Government is to reconcile these two interests [illegible] tion proposed at Villafranca was the true [illegible] problem, but it was not accepted. Other solu[tions] [illegible] been rejected. We must negotiate with the Pope [illegible] of Piedmont. We have to consider the popu[lations] [illegible] have also to consider England and Austria [illegible] present themselves everywhere. France cannot [illegible] will upon the peoples by violence. The Pope [illegible] negotiation. The court of Rome is a prey [illegible] French party and an anti-French party are [illegible] face." The Minister then entered into details [illegible] despatch of the Duke de Gramont and other [illegible] concluded as follows:—"We are the sons of [illegible] Our soldiers are in Syria, in China, in Japan, and [illegible] interest of the Catholic faith has to be defended [illegible] also the children of 1789. The flag of France pro[tects] [illegible] liberty." The amendment was rejected by [illegible] votes. M. O'Quin then brought forward his amend[ment] [illegible]

[illegible] of the temporal power of the Pope. Count de Morny, [illegible] of the Committee opposed the amendment, and said [illegible] of the Government during the past was a [illegible] for the future. He called upon the Chamber [illegible] the paragraph as an unqualified vote of confidence in the Emperor, and to consign to his care the [illegible] of this delicate question. M. O'Quin then withdrew [illegible]. The amendment of M. Lascases was likewise [illegible]. Paragraph 25, with the omission of the words "opposition to the wise counsels" was agreed to. The words "[illegible] to the wise counsels" were then adopted by 161 to [illegible]. The remaining paragraphs having been voted, the [illegible] address was agreed to by 213 to 13 votes.

On Saturday the Address was presented to the Emperor by a deputation from the Chamber. His Majesty replied as follows:—

"I thank the Chamber for the sentiments which it expresses [illegible], and for the confidence which it places in me. If that confidence honours me and flatters me, I think I deserve it from my constant solicitude of only looking upon questions in one point of view, viz. the real interests of France. To live up to the age, to preserve of the past all that is good, to prepare the future by sweeping off the path of civilisation all the prejudices which obstruct it, or utopias which compromise it,—that is how we shall bequeath calm and prosperous days to our children. Despite the vivacity of the discussion, I by no means regret to see the great bodies of the State discuss the difficult questions of foreign policy. The country benefits from it in many respects. These discussions instruct it without alarming it. I shall be always happy, believe me, to act in concert with you. Issuing from the same suffrage, guided by the same sentiments, let us mutually aid each other in promoting the grandeur and prosperity of France."

The *Patrie* publishes an article, signed by its chief editor, M. Leymairac, directing attention to the presence of the Princes of Orleans at the funeral of the Duchess of Kent, and asking the meaning of such a demonstration on the part of the Royal family of England, and of the apparent intention to encourage divisions in France. "The English people," it says, "have no participation in such puerile manifestations. The two peoples need more than ever to become united, and, thank God! the great interests of the world are not subordinate to the caprices of the Courts."—The Bourse was affected on Wednesday by a rumour that a collision had taken place between the Sardinian and Austrian troops, but the rumour was not confirmed. General Goyon has been authorised to make contracts for supplies for the army at Rome for six months, which would show that there is no intention of withdrawing the troops for the present.—The *Moniteur* announces that the interest on Treasury Bills has been raised to 4, 4½, and 5 per cent. respectively.—The case against the Bishop of Poitiers in reference to his late *mandement* on the Roman question was decided on Thursday by the Council of State, when the Bishop, who was defended by M. Cornudet, was condemned to be formally reprimanded.—The Bishop of Orleans preached his promised charity sermon in behalf of the "poor Irish" at St. Roche on Monday. He avoided all allusions to the Partry case, to the English Government, and the Protestant church in Ireland, and said he did not come there to add a fresh irritation to the wounds of controversy or to perform the part of an accuser. He held up the national points of character, introducing some allusions to O'Connell, M'Mahon, and the assimilation of the Celtic to the Gallic type of character. In this matter he quoted a saying of Louis XIV., that "Irishmen needed no Bill of naturalisation in France." The church was crowded by legitimists and other celebrities of the Faubourg St. Germain, and the collection was made by the Duchess of Hamilton, Princess Wittgenstein, the Duchess de M'Mahon, the Duchess of Fitz-James, the Duchess d'Estissoc, Marchioness de la Forte, Countess de la Revorte, and Mademoiselle M'Loyd. The Empress sent her contribution; and some time back Madame M'Mahon forwarded to Ireland the sum of 100*l*. received for this occasion. Altogether a very large sum must have been collected.

Spain.—M. A. Barrot, the French Ambassador at Madrid, remitted to the Queen on Friday an autograph letter from the Emperor.

Portugal.—The Chamber of Deputies has been dissolved. The Ministry, under the Presidency of the Marquis de Loulé, will continue to direct public affairs.

Denmark and the Duchies.—The preliminary discussion on the report of the Committee of the Estates of Holstein appointed to examine the propositions of the Danish Government, commenced at Itzehoe on the 21st inst. The Royal Commissioner warned the Assembly of the responsibility it was about to incur. MM. Versmann, Reventlow and Blome supported the proposals of the committee. M. Renck opposed them. The whole Assembly protested against the suggestion which was thrown out in one of the speeches, that Holstein should dissolve her connection with the Germanic Confederation. The committee subsequently made the following additional proposal:—

"That the Diet should declare that the Danish Government has not submitted a budget to the Estates of Holstein, nor even declared itself ready to do so."

In the sitting of the 25th inst. the proposition of the Committee, that the proposal of the Danish Government in reference to the bases of a Constitution for the whole kingdom should be rejected, was unanimously agreed to. In reply to the interpellation respecting the budget made by the spokesman of the Committee, the Royal Commissioner stated that the discussion of the budget, in so far as it concerned Holstein, would certainly be readily permitted to the Estates. In the sitting of the 26th the Royal Commissioner declared that he could not yet reply to the question in reference to the budget put on the previous day, as the Government wished to consider the question, and therefore agreed to a prolongation of the Session. The members of the Committee energetically complained of the equivocal nature of this declaration. The Estates then adjourned until the 4th of April. The King of Denmark has written the following letter in reply to one addressed to him by the Duke of Oldenburg, in which the Duke gave him advice in a German point of view respecting the question at issue between Denmark and the German Confederation:

"I have examined your communication with the attention which it deserves. To my sincere regret I have found the views expressed by your Royal Highness too similar to those of a subversive party which has already once attempted a rebellion against the Sovereign of his country to allow me to enter into a closer discussion of the subject. As King, and as head of the elder branch of the Oldenburgs, I should myself be the first called upon to appreciate the Royal promises of my forefathers and predecessors on the throne of Denmark. I am happy to say I shall never be under the necessity of seeking aid from a foreign Prince in any portion of my dominions to maintain my subjects in their duties; and if I see, no less than your Royal Highness, in the re-establishment of a good and durable understanding between my States and Germany the best guarantee for a profitable development of reciprocal interests, I may hope that my untiring efforts, of which I have recently again given proof, will finally succeed in achieving that object, however difficult it has become by the attitude assumed by the German Governments, among which I have with sorrow beheld your Royal Highness taking a prominent part."

Wurtemberg.—In consequence of the vote by which the Chamber of Deputies of Wurtemberg refused all legal authority to the Concordat, M. Rumelin, the Minister of Public Worship, has tendered his resignation.

Bavaria.—The Bavarian Ministry perseveres in the liberal path on which it has entered. A motion having been made in the Chambers for the abrogation of all the civil restrictions to which the Jews are still subjected in Bavaria, the Minister of the Interior declared that the Government would not oppose the motion, and that if the Chamber adopted it they would propose the Royal sanction.

Austria.—According to the Vienna journals of Thursday the Emperor will not open the Hungarian Diet in person, but will proceed later to Buda for his coronation. The steam-yacht Adler is fitting up to convey the Emperor and his Court to Buda. His Majesty will be accompanied by the Archdukes Regnier, Joseph, and Ernest. Accounts from Madeira state that the Empress, whose health is re-established, will leave that island about the end of April, and return to Vienna by the Mediterranean and the Adriatic.

Hungary.—The Vienna papers state that the resolutions of the Hungarian Judicial Conference in reference to the re-establishment of the Hungarian laws of 1848, and the demand for an independent Ministry for Hungary, have been rejected by the Government. The Congregation of the Comitat of Posega has adopted a resolution declaring the Council of the Empire to be an institution incompatible with the constitution of the kingdom. The Congregation has also protested against the sending of representatives to the Council of the Empire. The municipality of Temesvar resolved on Tuesday to protest against the order of the Director of Finance for the collection of the taxes by execution in cases where payment is refused. The Obergespann has published a proclamation warning the people against instigators of disturbances.

Venetia.—An Imperial decree grants to the congregations of Lombardo-Venetia the right of electing 20 delegates to the Council of the Empire. On the 18th inst. a popular demonstration took place at Venice in honour of Garibaldi, in consequence of which five persons, natives of Udine, two from Pardinone, two from Verona, and one from Treviso, were arrested and conveyed to Olmutz. Two other persons were conveyed to Iglau and Hrubschitz.

Italy.—On Friday morning the King of Italy received the deputation of the Chamber of Deputies, who presented to him the Address in answer to the Speech from the Throne. His Majesty in reply said:—

"I thank the Chamber for the sentiments which they have expressed. I have learned to appreciate the Italians in the difficult times through which we have passed. I am aware that I have no need to recommend to you concord; but at this moment prudence is equally necessary to us. For the rest, whatever may happen, the Italians know they may rely upon me."

Count Cavour has submitted for the approval of the King the following list of the new Ministry:—

Count Cavour, President of the Council and Minister for Foreign Affairs and Marine; General Fanti (Modenese), War; Signor Cassinio (Piedmontese), Grace and Justice; S. Minghetti (Bolognese), Interior; S. Desanctis (Neapolitan), Public Instruction; S. Natoli (Sicilian), Agriculture and Commerce; S. Bastogi (Leghorn), Finance; S. Peruzzi (Tuscan), Public Works; S. Niutta (Neapolitan), Minister, without portfolio.

In the sitting of the Chamber of Deputies on Saturday, Count Cavour, after reading the list of the new Cabinet, stated that the Government intended to maintain the lieutenancies of Naples and Palermo, but would modify their duties so as to conciliate the speedy despatch of business with the prerogative of the central power. It was also the intention of Government to send to the south administrators from the northern provinces, and to the north those of the southern. M. Sforza formally requested the Government to take steps to induce France to withdraw her troops from Rome. Count Cavour announced to the Chamber of Deputies that the Ministerial programme has undergone no change.—On Monday a debate commenced on the affairs of Rome, of which the following is an abstract:—

M. Audinot expressed his belief that the Government of the Pope was incompatible with the liberty and independence of the country and the civil rights of any civilised nation. He asked the Ministry whether any negotiations were in progress for the purpose of terminating the foreign intervention at Rome, or what other measures the Government had in view for the solution of the question. Count Cavour said, "We have a right to have Rome as the capital of Italy. The city of Turin is ready to sacrifice her position. But we must go to Rome with the consent of France, when all sincere Catholics will be convinced that the Church, far from suffering, will gain by it. The union of the temporal and spiritual power has always and everywhere been a source of evil. When we enter Rome we shall proclaim ample liberty to the Church, and this liberty shall be guaranteed by a special statute. If the Court of Rome persists in the union of the two powers of the papacy, its policy will be responsible for the schism which may result therefrom." On Tuesday the Marquis Pepoli protested against the unjust accusations brought against Piedmont by some members of certain foreign Legislative Assemblies. He eulogised Napoleon III., who, by separating the spiritual from the temporal power, will, he said, render a greater service to the Church than Charlemagne by his fatal gift of temporal sovereignty to the Papacy. Signor Buoncompagni said that the Italian movement had nothing in it offensive to religious feelings. He proposed that the Chamber should vote the following resolution:—"The Chamber having heard the declaration of the Ministry, and being confident that after having insured the dignity and independence of the Pope, and the complete freedom of the Church, the principle of non-intervention will, in concert with France, be applied to Rome, and that Rome will be made the capital of Italy, passes to the order of the day." Several speakers of the Left proposed the simple proclamation of Rome as the capital of Italy, and the calling upon Napoleon III. to withdraw his troops. Signor Ferrari said, "Our only political system is alliance with France." On Wednesday Signor Chiaves spoke against the transfer of the capital of the kingdom of Italy to Rome. Count Cavour in reply maintained that it was urgent that Rome should be immediately declared the capital of Italy. "The transfer will," he said, "take place in consequence of a law adopted by the Chambers, and without any disturbances. The time for it will be fixed by law. We offer to the spiritual power of the Pope all the guarantees for its liberty and moral force which a friendly Government can ever give to the Papacy. I hope that public opinion will very soon be disposed for the proclamation, and that France will agree with us in this matter." Count Cavour supported Signor Buoncompagni's proposal, which was almost unanimously agreed to by the Chamber. The debate then closed.

The Chamber of Deputies is adjourned until Tuesday next, on which day Signor Massari will make his interpellation in reference to the affairs of Naples. Five vessels have arrived at Genoa bringing back the troops from Messina. These troops will immediately proceed to Bologna, and will form a part of the 4th *corps d'armée*, under the command of General Cialdini. The first division of this corps has already arrived at Ferrara, and protects the lower line of the Po, behind which the Austrian army is assembled. It is said that the Austrian Ambassador at Paris has since informed the French Government that this concentration of the Austrian troops on the Po is a purely defensive measure.—From Naples we learn that the formation of the new Italian Ministry has produced an excellent impression in that city and public opinion is favourable to the centralisation of the administration. The office of Director-General of the Post has been suppressed. Neapolitan noblemen are daily returning from Rome to Naples. A telegram from Perugia states that the Pontifical Gendarmes at Canino near Viterbo treacherously attacked the citizens, three of whom were killed. The indignation was general, and addresses to the Emperor Napoleon were in progress praying him to protect the city.—Accounts from Rome assert that Francis II. will leave Rome for Bavaria on the 2d of April. The Pope's allocution has been published. It is a very long document, somewhat more violent in tone than the last, but precisely the same in substance. The following is an extract:—

"We have made all the concessions which the most ordinary notions of prudence did not render impossible. But when we are asked to sanction injustice, it is our duty to refuse. If, however, it be our pardon that is solicited, we are prepared to grant it without restriction." Those who venture to offer remonstrances as to the course the Pope is pursuing are described as—"Apostates who hold forth not in God's name but Satan's! Their doctrines are shameful. The acme of their hypocrisy is their recommendation of a reconciliation between the kingdom of Italy and the Holy See. Before God and before mankind we declare it, no earthly power shall ever bring us to consent to such a reconciliation."

Russia.—The *St. Petersburg Gazette* publishes the manifesto of the Emperor Alexander, announcing to his subjects the emancipation of the serfs in his dominions. This important document was read in all the churches of St. Petersburg and Moscow on Sunday, the 3d inst., and was followed by solemn prayers for the preservation of the health and prolongation of the life of the Emperor. The manifesto and the accompanying regulations are to be sent as rapidly as possible to all the chiefs of departments, proprietors of land, and communes of peasants throughout the empire. Myriads of copies are, of course, required, and some weeks, it is said, must elapse before the requisite number can be distributed. The following is a summary of the leading provisions of the manifesto:—

"Called by Divine Providence and by the sacred right of inheritance to the throne of our ancestors, we took a vow in our innermost heart so to respond to the mission which is intrusted to us as to surround with our affection and our Imperial solicitude all our faithful subjects of every rank and of every condition, from the warrior who nobly bears arms for the defence of the country to the humble artisan devoted to the works of industry; from the official in the career of the high offices of the State to the labourer whose plough furrows the soil. Patriarchal relations have hitherto existed between the peasants and the proprietors, but as simplicity of manners has disappeared the condition of the serfs has been unfavourably affected. We were convinced, therefore, that a great amelioration of their lot was a mission to which we were called by Divine Providence. We then took occasion to consult the nobility, to form committees, and to consider various propositions, and a mode of emancipation was ultimately agreed to

with the cordial co-operation of the nobility. Russia will never forget that the nobility, moved solely by their respect for the dignity of man and by the love of their neighbour, have spontaneously renounced the rights which the serfdom now abolished had given them, and have laid the foundations of a new future for the peasants. We therefore call upon our subjects to carry out faithfully and conscientiously the regulations which have been deemed fittest for the great end in view. When the first news of this great reform became diffused amongst the rural populations, who were scarcely prepared for it, it gave rise in some instances to misunderstandings amongst individuals more intent upon liberty than mindful of the duties which it imposes. But generally the good sense of the country has not been wanting. It has misunderstood neither the inspirations of natural reason, which says that every man who accepts freely the benefits of society owes it in return the fulfilment of certain positive obligations; nor the teachings of the Christian law, which enjoins that 'every one be subject unto the higher powers' (St. Paul to the Romans, xiii. 1); and to 'render to all their dues,' and above all, to whomsoever it belongs, tribute, custom, fear, and honour (Ibid., 7 v.). It has understood that the proprietors would not be deprived of rights legally acquired, except for a fit and sufficient indemnity, or by a voluntary concession on their part; that it would be opposed to all equity to accept this enjoyment of the lands conceded by the proprietors without accepting also towards them equivalent charges. And now we hope with confidence that the freed serfs, in the presence of the new future which is opened before them, will appreciate and recognise the considerable sacrifices which the nobility have made on their behalf. They will understand that the blessing of an existence supported upon the base of guaranteed property, as well as a greater liberty in the administration of their goods, entails upon them, with new duties towards society and themselves, the obligation of justifying the protecting designs of the law by a loyal and judicious use of the rights which are now accorded to them. For if men do not labour themselves to ensure their own well-being under the shield of the laws, the best of those laws cannot guarantee it to them. It is only by assiduous labour, a rational employment of their strength and their resources, a severe economy, and, above all, by an honest life, a life constantly inspired by the fear of the Lord, that they can arrive at prosperity and ensure its development. The authorities entrusted with the duty of preparing by preliminary measures the execution of the new organisation, and of presiding at its inauguration, will have to see that this work is accomplished with calmness and regularity, taking into account the requirements of the seasons, in order that the cultivator may not be drawn away from his agricultural labours. Let him apply himself with zeal to those labours, that he may be able to draw from an abundant granary the seed which he has to confide to that land which will be given him for permanent enjoyment, or which he has acquired for himself as his entire property. And now, pious and faithful people, make upon thy forehead the sacred sign of the cross, and join thy prayers to ours to call down the blessing of the Most High upon thy first free labours, the sure pledge of thy personal well-being and of the public prosperity. Given at St. Petersburgh, the 10th day of February (March 3), of the year of grace 1861, and the seventh of our reign.

"ALEXANDER."

The Russian Ambassador at Vienna has been ordered by his Government to officially declare to the Austrian and Turkish ministers that Russia disavows any participation of Montenegro in the insurrection in the neighbouring provinces, and had sent an energetic note to the Prince of Montenegro.

POLAND.—In compliance with the demands of the delegation of the citizens of Warsaw, supported by General Kotzebue and other persons of high standing, a proclamation has been published announcing that the resignation of M. Muhkanoff, as Director of the Interior and of Public Worship, has been accepted by the Emperor. This announcement has been received with the greatest enthusiasm by the people, and illuminations have taken place in consequence. M. Muhkanoff took his departure from Warsaw with great precipitation. He was unable, however, to avoid encountering popular demonstrations at the railway terminus, which were repeated at the other stations on his route. Major-General Gecewicz, who is personally much liked in Poland, has been appointed to replace M. Muhkanhoff. The regulations for public instruction have been abolished, and a special Commission for Public Worship and Instruction, under the direction of M. Wielopolski, has been appointed for carrying out reforms in matters relating to public instruction. National establishments of a superior class for public instruction, and especially an academy for legal instruction, are to be opened. A Council of State is to be established, composed of members of the clergy, dignitaries, and the most distinguished persons of Poland. The right of petition is granted to the nation. The Government councillors, the district councillors, and the municipalities of the larger towns are to be elected by the inhabitants.

TURKEY.—A telegram from Constantinople dated March 27, asserts that in consequence of an invasion of Spitza in Albania by Garibaldians, the representatives of the Powers had insisted on the Porte's sending a mixed Commission to the Herzogevina. The same telegram asserts that the Porte had refused to submit to the Powers, before promulgation, the reforms it intends to grant, apprehending that Russia might again take up the project of a permanent Conference at Constantinople. The Powers are said to have insisted upon compliance with their demand. It had previously been announced that Prussia and Austria, like France and Russia, had remitted notes to the Porte, stating the urgent necessity of reforms. The *Levant Herald* publishes the scheme of a forced loan of 12 millions of Turkish pounds, which is under the consideration of the Ministry, and which, it states, is likely to be enforced. The amount is to be receivable within two years, and repayable in 10, with 6 per cent. interest. The Bulgarian bishops have been excommunicated and sentenced to exile by the Greek Patriarch. Sir Henry Bulwer and the Dutch minister have, however, interfered, and prevented the execution of the sentence of exile. The Sardinian Ambassador has protested against the embarkation of the sequestrated arms on board the Banshee, at Galatz. Sir Henry Bulwer has replied to the protest, defending the act on international grounds.

BOSNIA.—The disturbances in Bosnia have not had any serious result. The Porte has satisfied the claims of the Mussulman chiefs by restoring to them their former rights.

MONTENEGRO.—The troops under the command of Ismail Pasha are concentrated at Trebinye. Since the last fight hostilities have been suspended. The insurgents, however, are preparing for a fresh attack in concert with the Montenegrins. All the places south of Trebinye have done homage to the Prince of Montenegro.

SERVIA.—The Turkish commissioner at Belgrade has proclaimed the act of amnesty granted to the Christian refugees of the Pashalic of Nissa. The refugees have declared, however, that they cannot venture to avail themselves of the amnesty, and have sent a petition to the Sultan.

SYRIA.—The international committee at Beyrout had demanded the prompt execution of the condemned Druses. At the instance of Sir Henry Bulwer the Porte has consented not to execute the Druse chief Seyd Bey Hjemblat. No decision has yet been given on the demand for the execution of Kurschid and Tahir Pashas. The execution is, however, not likely to take place.

INDIA.—A telegraphic despatch has arrived in anticipation of the Bombay mail of March 1st. The following are the details:—

Calcutta.—Lord Canning returned to Calcutta on the 18th of February. The following are the main features of Mr. Laing's Currency Bill:—"1. It adopts as a principle the issue of paper only against coin or bullion, with the exception of a certain limited amount, beyond which paper currency, it might be reasonably supposed, could never fall. The issue to be limited to four millions. 2. The notes are to be issued through the agency of the Presidency banks and the collectors in the districts. 3. Instead of currency circles, as originally proposed by Mr. Wilson the notes are to circulate throughout the country. 4. A subsidiary gold currency, to be adopted to the extent of one-fourth of the issue of paper, at fluctuating rates, to be fixed from time to time, the rates being liable to revision after six months' notice. 5. The notes are not to be of a lower denomination than 20 rupees, it having been ascertained that notes of a lower amount have a very small circulation, and it being believed that their place will be supplied by the subsidiary gold currency."

Sikkim.—The British troops have advanced by three marches into Sikkim. The country is abandoned by the people. Colonel Harvey, of the 43d Regiment, is dead.

North-West Provinces.—The famine in the North-West continues to increase. Calcutta has sent about 8000*l.* and Bombay 12,000*l.* for the relief of the sufferers. The Calcutta Committee of the Relief Fund have addressed a letter to the Lord Mayor of London, begging his co-operation in obtaining assistance for the starving people.

CHINA.—Accounts from Shanghai of February 6 state that the troops at Tien-tsin were shut in by ice. General Collineau died on the 13th of January of small pox, which was prevalent among the French troops and the Chinese. At Foo-chow the treaty is ignored, and the mandarins decline, on application from the consul, to adjust duties according to the new tariff. The Taontai was levying a heavy tax on the native dealers. The Yang-tze expedition was to leave on the 9th February, and its result was looked forward to with much interest. The rebels were making desperate efforts to go South. Business was completely suspended.

COCHIN CHINA.—The French mail service has been established between Singapore and Saigon. His Imperial Majesty's steamer Weser has been lost off the entrance to Saigon, but the stores, &c., were likely to be saved.

CEYLON.—Lord Elgin left Point de Galle on the 2d March, for Suez.

JAPAN.—M. Heusken, the Secretary of the American Minister at Jeddo, has been murdered. The foreign Ministers have retired to Kanagawa. The Prussian treaty has been signed.

UNITED STATES.—Accounts from Washington state that Mr. Lincoln's cabinet had at length resolved on evacuating Fort Sumter, General Scott having been satisfied by the reports of General Totten, chief engineer of the department, and also of Captain Ward, of the Navy, that the fortifications constructed by the secessionists had rendered it untenable. The late nominations of President Lincoln had been confirmed by the Senate. From Charleston we learn that Mr. Lincoln's inaugural speech was regarded as a declaration of war, and every preparation was making for immediate hostilities. The Southern Confederacy was also making rapid strides towards forming a substantial and permanent government, and a plan has already been matured which will produce ample revenue to carry on the government even in time of war. The constitution of the Confederate States had been published. It declares that no foreigner, or other person not a citizen of the Confederate States, shall be allowed to vote for civil or political state and federal officers; that Congress shall not be allowed to raise revenue by means of duties to foster any branch of industry; that the foreign slave trade shall be prohibited; and that the President and Vice-President shall hold office for six years. The Alabama Convention had passed a resolution varying the permanent Constitution of the Southern Confederation by 87 to 5 votes. Captain Hill had surrendered Fort Brown. Governor Houston had refused to recognise the Texas Convention, considering that its functions ended when the Secession ordinance was passed. [...] that Texas should join the Southern [...] The Convention claims full powers, and [...] place Governor Houston if he maintains [...] to take the oath to the State. It was [...] Governor Houston was raising troops [...] account. The new Southern Tariff [...] operation on the 1st of May. Compared [...] United States' tariff, 30 per cent. duty [...] 25 per cent., and 24 and 19 per cent. [...] Tariff also contains a large 10 per cent. [...] small free list. The Supreme Court has [...] great Orleans case in favour of Mrs. G[...] the property of the late Mr. Daniel Clark [...] from 10,000 dollars to 15,000 dollars by [...]

MEXICO.—Advices from Vera Cruz [...] that the British Minister had recognised [...] Government.

Parliament.

HOUSE OF LORDS.

FRIDAY.—*Denmark and the Duchies.*—In [...] Earl of ELLENBOROUGH, Lord WODEHOUSE [...] committee appointed by the States of H[...] jected the propositions of the Danish [...] had instructed the President to lay the [...] the Diet. The report of the committee was [...] consideration, but the probability was that [...] Denmark would not be entertained. Whatever [...] result, it was not likely that war could take [...] month of August next. *Mexico.*—In answer to [...]CARDE, Lord WODEHOUSE said that the Government [...] Juarez was using its best efforts to repay the [...] taken by General Miramon from the British [...] Majesty's Government had also insisted on the [...] 400,000 dollars abstracted by General Degollado. [...] *Uses Bill* was read a third time and passed. [...] *Government Bill* passed through committee. [...] adjourned to Tuesday the 9th of April.

HOUSE OF COMMONS.

FRIDAY.—*The Bankruptcy and Insolvency Bill* [...] to be reprinted. The *Hungarian Notes*—Mr. [...] asked for some further explanation with [...] "patriot" bank notes manufactured for M. K[...] Messrs. Day the lithographers.—Sir G. LEWIS [...] Chief Commissioner of Police became possessed [...] consequence of its having been brought to him [...] but that Sir Richard Mayne had never employed [...] any other persons in obtaining information [...] proceedings of M. Kossuth, and that until [...] placed in his hand he was in total ignorance [...] The translation of the note into English had [...] Foreign Office, and he afterwards gave Sir R. Mayne [...] to hand it over to the Austrian Embassy. [...] In answer to Mr. FENWICK, Sir G. LEWIS said [...] to make legislation effectual for the protection [...] a draught upon the public treasury [...] hoped to be able to introduce a measure [...] Mr. GREGSON called attention to the *Cu[...] Sugar*, and suggested that the Government [...] subject into their earliest consideration.—[...] the EXCHEQUER admitted the great importance [...] the subject; but pending the financial statement [...] quite impossible for him to enter upon the [...]tion.—Lord ELCHO put a series of questions to [...] the Admiralty with reference to the alleged [...] *Sir Baldwin Walker*, and asked if it was true [...] been sent to him to put to sea immediately [...] himself to be caught.—Lord C. PAGET in reply [...] neither the Duke of Somerset, nor himself [...] connected with the Admiralty, had sent [...] Sir J. PAKINGTON insisted that it was an act [...]priety and of disrespect to the House on the [...] Admiralty to grant the Committee, and to [...]ture of so necessary a witness as Sir Baldwin Walker [...] *Affairs.*—In answer to questions by Lord H. [...] GRAHAM, and Mr. MONSELL Lord J. RUSSELL [...] official despatches had been received on the [...] *Escape of Miramon* from Mexico through the [...] the French authorities, and no steps could be [...] the circumstances of the case were known. [...] events at *Warsaw* it was necessary to speak [...] reserve; but he could say thus much, that the [...] people had shown much forbearance, and, on the [...] that the Emperor of Russia had evinced the great [...] improve the condition of his subjects. He [...] think it would be right for her Majesty's Government [...] fere on the subject. With regard to *Syria*, [...] one of very great difficulty. A violent [...]sisted between the Maronites and the [...] European occupation could not go on for [...] would be transferring the country from T[...] other Power.—Lord HOTHAM asked for information [...] further proceedings on the *Harbours Bill*.—Mr. [...]mised that ample time should be given between [...] reading of the Bill and the Committee. The [...] House at its rising should adjourn to Monday, the [...] then agreed to.—Mr. COCHRANE moved a resolution [...] the evidence taken before the Select Committee [...] *Appointments* proved that the present system of [...] should be modified, in order to meet the requirements [...] public service. He was arguing in support of [...] the House was counted out.

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS. [...] being Good Friday, was observed as a close [...] the Stock Exchange. The closing prices [...] were as follows:—Consols for Money, 91¾ to [...] to ⅞ for the Account; India Stock, 220 to [...] Rupee Paper, 93¾ to 99¼; India [...] Loan, 100 to ¼; Exchequer Bills, 13s. to 8s. dis.—[...] 30s. dis.; Brazilian Five per Cents., 102; Four and a Half [...] 103; Equador [...] to 86; Chilian Six per Cents., [...] Mexican, 24¼ to ½; [...] solidated, 12⅝ to ⅞; New Granada Active [...] Account, 24⅜ to ½; Portuguese [...]vian Three per Cents., 75 to 74½; Spanish, 49½; Ditto [...] to ⅛; Sardinian, 83; Turkish Six per [...] Passive, 17½; Certificates, 5⅝; [...] 1854, 74 to ½; Ditto, 1858, 54 to ½; Four per [...] Guaranteed, 100 to 99¾.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£2?,377,080	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	11,053,705
		Silver Bullion	848,[illegible]
	£2?,377,080		£2?,377,080

BANKING DEPARTMENT.

Proprietors' Capital	£14,553,000	Government Securities (including Dead Weight Annuity)	£10,599,072
Rest	3,[illegible]	Other Securities	19,967,528
Public Deposits, including Exchequer, Savings Banks, Commissioners of National Debt, and Dividend Accounts	8,415,844	Notes	6,967,990
Other Deposits	11,164,920	Gold and Silver Coin ..	953,391
Seven Day and other Bills	573,732		
	£38,487,981		£38,487,981

[illegible] day of March, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

[illegible] — BANKRUPTS — J. BOOTH, jun., Bramley, Yorkshire, [illegible] Manufacturer — J. CRAVEN, Birstal, Yorkshire, Stuff Manufacturer — [illegible], Merionethshire, Flannel Manufacturer — R. [illegible], and Moreton in the Marsh, Gloucester [illegible] — R. W. [illegible], Stockport, Cotton Spinner — J. H. [illegible], Builder — C. K. JONES, Sheffield, Book [illegible], Cotton Manufacturer — J. KING, New[illegible] and Harness Maker — J. MANLEY, Liverpool, [illegible] — J. NORMAN, Birmingham, Brassfounders — [illegible], Moorgate Street and of Buckingham Street, Strand [illegible] — R. S. PARTRIDGE, Birmingham, Surgeon and [illegible], Newcastle-under-Lyme, Mercer and Draper [illegible], Liverpool, Ship Chandler — P. RAPHAEL, Duke Street, Aldgate, [illegible] and Publican — R. SNOWDON, Newcastle-upon-[illegible] — W. B. STEWART, Manchester, Yarn and Cloth [illegible], Wrexham, Victualler — T. WOOD, Colchester, [illegible].

BANKRUPTCY ANNULLED. — T. ELLISON, Liverpool, Baker and Flour [illegible].

[illegible] SEQUESTRATIONS. — J. CAMPBELL and Co., Glasgow, [illegible], Ayrshire, Innkeeper — N. GRIEVE and Co., [illegible] — S. LEASK, Gamrie, Banffshire — J. LEASK, Gamrie, [illegible] — A. THOMSON, Kilmarnock, Shoemaker.

[illegible] BANKRUPTS. — J. W. ALDINGTON, Oldbury, Worcestershire, [illegible] — B. G. BOTTOMLEY, Devonport, Ironmonger and Lodging [illegible] — A. BURTON, Sheffield, Grocer — B. CARMAN and R. BAILEY, [illegible] Cabinet Makers and Copartners — J. COWTON, Birmingham, [illegible], Maidstone, Baker and Confectioner — W. J. DALTON, [illegible] — J. DAVIS, Manchester, Manufacturer — [illegible], Lancashire, Draper — G. DRAKE, Devonshire, [illegible] — [illegible], Whitehaven, Cumberland, Stock and [illegible] Agent — G. GRIFFIN, Walsall, Staffordshire, [illegible] Dealer — W. PROBERT, Worcester, Hop Dealer and [illegible] — T. [illegible], Swansea, Glamorganshire, Grocer and [illegible], Gravesend, Chemist and Druggist — W. SKINNER, [illegible], Innkeeper — W. THOMAS, Llantarnum, Monmouthshire, [illegible] — WALKER, Manchester, Small Ware Manufacturer.

Metropolis and its Vicinity.

THE INDIAN FAMINE.—A public meeting was held on Thursday, in the Egyptian Hall at the Mansion House, to devise immediate measures for alleviating the distress caused by the famine in India. The Lord Mayor presided; and the meeting was addressed by the Marquis of Clanricarde, the Chancellor of the Exchequer, Mr. Crawford, M.P., Hon. A. Kinnaird, M.P., Mr. Gregson, M.P., Sir Herbert Edwardes, Sir Edward Ryan, Mr. Vansittart, M.P., Alderman Finnis, Mr. W. Dent, Mr. Arbuthnot, and Mr. Dadabhai Naoroji. The Chancellor of the Exchequer in his speech said that the Indian famine was one of "the severest visitations which have been sent on any portion of mankind within our memory," and that the present meeting was one of a missionary character, inasmuch as every Hindoo whose sufferings would be relieved would be a living monument of the results of practical Christianity. Resolutions were unanimously adopted expressing the sympathy of the meeting with their suffering fellow subjects in India, and calling upon the country at large to contribute to a public subscription for their relief. It was also resolved to invite the cooperation of all the cities and towns in the United Kingdom, and a Committee was appointed to carry the resolutions into effect. Nearly 3800*l.* were subscribed in the course of the day, making, with the sums previously remitted to the Lord Mayor, an aggregate amount of upwards of 4000*l.*

INTERNATIONAL EXHIBITION OF 1862.—The following is the classification likely to be adopted by Her Majesty's Commissioners for the Great Exhibition of next year:—

Section I. *Raw Materials.*—Mining, Quarrying, Metallurgy, and Mineral Products; Chemical Substances and Products, and Pharmaceutical Processes; Substances used for Food, including Wines; Animal and Vegetable Substances used in Manufactures. Section II. *Machinery and Engineering.*—Railway Plant, including Locomotive Engines and Carriages; Carriages not connected with rail or tram roads, Manufacturing Machines, and Tools; Machinery in general, as applied to industry; Agricultural and Horticultural Machines and Implements, [illegible] Architectural and Building Contrivances; [illegible] Armour, and Accoutrements, Ordnance and Small Arms; Naval Architecture and Ships' Tackle; Philosophical Instruments, and Processes depending on their use; Photographic and Photographic Apparatus; Horological Instruments; Musical Instruments; Surgical Instruments and Appliances. Section III. *Manufactures.*—Cotton; Flax and Hemp; Silk and Velvet; Woollen and Worsted, including Mixed Fabrics generally; Carpets; Woven, Spun, Felted, and Lace Fabrics, when shown as specimens of Printing or Dyeing; Tapestry, Lace, and Embroidery; Skins, Furs, Feathers, and Hair; Leather, including Saddlery and Harness; Articles of Clothing; Paper, Stationery, Printing, and Bookbinding; Educational Works and Appliances; Furniture and Upholstery, including Paper Hangings and Papier Mâché; Iron and General Hardware; Steel and Cutlery; Works in Precious Metals and their imitations, and Jewellery; Glass; Pottery; Manufactures not included in previous Classes. Section IV. *Fine Arts (Modern).*—Architectural Designs; Paintings in Oil and Water Colours and Drawings; Sculpture, Models, Die-sinking, and Intaglios; Etchings and Engravings. In the Exhibition of 1851 there were only 35 Classes. In the proposed one, therefore, there are five additional.

THE NAVAL YARDS COMMISSION.—The report of the Commissioners appointed to inquire into the control and management of her Majesty's naval yards, was issued on Friday, together with the minutes of evidence. It is signed by Mr. Dalglish, M.P.; the Earl of Gifford, and Sir H. Willoughby, M.P., who have visited and carefully inspected all the dockyards. It states that the system of control and management of the dockyards is inefficient. This inefficiency is attributed by the Commissioners to the constitution of the Board of Admiralty; the defective organisation of the subordinate departments; the want of clear and well-defined responsibility; and the absence both now and in times past of any means of effectually checking expenditure, owing to the want of accurate accounts. The Commissioners offer the following suggestions, with the view of rendering control and management more efficient:—

"1. That a Ministry for the Navy department should be appointed, and should be held entirely responsible for the control and management of the dockyards. 2. That the dockyards should be looked upon as large manufacturing establishments for the purpose of building and repairing the ships of your Majesty's navy. 3. That the Minister of the Navy should have the power of appointing a controller-general acquainted with and qualified to manage such establishments. 4. That the Controller General should have the power, subject to the approval of the Minister, of selecting the superintendents of the different dockyards, as these officers are the instruments for carrying out his instructions. 5. That the superintendents of the dockyards should, subject to the approval of the Minister, have the selection of the officers under them, with the exception of the officers in the accountants' and storekeepers' departments. 6. That the Storekeeper-general of the Navy should be appointed by the minister, but should be under the controller-general. 7. That the storekeeper-general of the navy should, subject to the approval of the minister, have the selection of the officers in his department. 8. That the director of engineering and architectural works should be appointed by the minister, but should be under the controller-general. 9. That the director of works should, subject to the approval of the minister, have the selection of the officers in his department. 10. That the accountant-general of the navy should be appointed by and be responsible to the minister for the navy department; that he should have the entire control of the whole accounts connected with the dockyards, and that he should furnish all accounts required by the controller-general. 11. That the accountant general of the navy should have the selection of the officers in his department, subject to the approval of the minister. 12. That the officers and men in the dockyards should be placed under the same restrictions as to voting at elections as the officers in the Post-office, the Customs, and the Inland Revenue. 13. That in each dockyard the captain of the steam ordinary should be appointed to superintend the fitting out of ships, that he should be held responsible for any deviations from the established rules as to fittings, which he may, in his judgment, think necessary; and should be the medium of communication between the officers of the navy and the superintendent of the dockyard. 14. That all the departments of the Admiralty connected with the dockyards should be brought under one roof. 15. That the minister should be empowered to employ scientific and practical men when he may find it advisable to consult them upon inventions and improvements connected with the department. 16. That the estimates laid before parliament should be accompanied by the annual programme of shipbuilding works, with the estimated cost of each ship under the heads of 'materials' and 'labour.' 17. That a surplus arising on any vote of the navy estimates should not be permitted to be applied to make good a deficiency upon another vote, even with the sanction of the Treasury. 18. That the power of the Treasury to increase the expenditure on one item of a vote by applying the monies voted on another item of the same vote should be limited. 19. That vote No. 10 be divided into five votes under the heads of—1. Timber; 2. Other stores; 3. Vessels built by contract; 4. Steam machinery; 5. Coals; and that each vote should be set out in detail showing the establishment in each case; the different descriptions of timber and other stores to be purchased, the names of vessels to be built by contract, their tonnage, horse power, and estimated cost, and the ships for which the steam machinery is to be provided. 20. That a return to parliament of the expenses incurred on your Majesty's ships should be made in a prescribed form, and be laid on the table of the House of Commons, with the navy estimates." Under the second head of the report—purchase of materials and stores—the commissioners suggest that the large contracts, especially for timber, should be more divided, and that the period for which standing contracts are entered into should be reduced. Timber, not of contract dimensions, or in excess of the quantity required, should, they say, be rejected. "The system of accounts," they observe, "is elaborate and minute; but, so far as we can judge, its results are not to be relied upon for any practical purpose." They proceed, in 20 paragraphs, to illustrate this, and then refer to their remarks under the head of Control given above, and add the following additional suggestions for their improvement:—"1. That the accountant-general should be instructed to frame a new system of accounts on the principle of double entry. 2. That the accounts should be made up in the dockyards each month, and transmitted to the accountant-general by the 15th of the following month. 3. That an annual account should be laid before Parliament, giving a detailed statement showing how the money voted for the dockyards has been expended on ships and services. 4. That the forms of account should be carefully revised. 5. That the accountant-general should consult with the officers and decide upon an uniform system of classification of heads of service at the different yards, with the view of removing ambiguity in heading the issue and workmanship notes, and for the purpose of enabling the controller-general to institute comparisons between the cost of similar descriptions of work at the different yards. 6. That the storekeepers should be cashiers; and should pay the wages at the yards. 7. That the practice of issuing stores without vouchers should be immediately checked by the superintendents of the dockyards. Such being the condition of the dockyards accounts, the commissioners abstain from expressing any opinion upon the cost of building, converting, &c., the ships of the navy, based upon data furnished by these accounts. They express the opinion that the system of task and job work as at present carried on in the dockyards is open to great abuse. They recommend also "that with the submission for building of a ship, the controller general should also submit a carefully prepared estimate of the entire cost of the ship, distinguishing materials, labour, fitting and rigging, and engines. That in all cases where alteration or repair of a ship is proposed, a similar estimate should be prepared. That these estimates should be signed by the Controller General, the Constructor, the Engineer in Chief of the Navy; and the Master Attendant, Master Shipwright, Chief Engineer, and Storekeeper of the dockyard, where the ship is to be built, altered, or repaired." The last subject treated of is the expenditure in converting and altering ships. Under a proper system of dockyard management, large retrenchments, they believe, may be made without impairing the efficiency of the yards. They detail instances in which alterations have been made in vessels from their original designs in the course of construction, and remark that they see no reason to doubt that these alterations were judiciously made. They also state their opinion that iron shipbuilding should not be carried on in her Majesty's dockyards under the existing system of accounts.

BLACKFRIARS BRIDGE.—A special Court of Common Council was held on Tuesday at Guildhall, the Lord Mayor presiding, for the purpose of considering a report of the Committee for letting the Bridge-house estates, recommending the demolition of Blackfriars Bridge and the erection of a new one in its stead. The report stated that the present bridge cannot be put in an efficient state of repair for a less sum than 10,000*l.* per arch; that the London, Chatham, and Dover Railway Company are about to erect a bridge, at a distance of little more than 100 ft. to the east of Blackfriars Bridge, for carrying their line across the Thames; and that the proposed embankment of the river will cause such a deepening of its bed as to render any repairs of the present structure almost immediately useless. Mr. Vallance, chairman of the committee, moved that the present bridge be taken down and a new one erected in lieu of it, and that the committee be empowered to obtain designs and estimates for the construction of a new bridge, with a less number of piers at a greater depth than the present, the plans to be submitted to the Court for its approbation. Alderman Rose seconded the motion, and said that as much money had been expended on the present bridge in the last 2? years as would have defrayed the cost of a new one, and that it would be wise economy to build one at once. Alderman Dakin moved, as an amendment, that the consideration of the subject be deferred until the embankment of the river is actually decided upon, and the plans for giving practical effect to the project are definitively settled. After some further discussion, in which Alderman Salomons, M.P., Mr. H. L. Taylor, Alderman Phillips, and other members took part, the motion for the adoption of the report of the committee was carried on a division by 72 to 47.

THE PAPER MANUFACTURE.—A deputation of the paper manufacturers of England and Scotland, about 60 in number, waited on Lord Palmerston on Friday, to represent to his lordship the great injury done to their trade by the Chancellor of the Exchequer's measure of last session. They represented that while by that measure the foreign manufacturer of paper was placed on a footing of equality with the English manufacturer in our market, the exportation of rags from France and other continental countries was virtually prohibited, and that consequently it was impossible for English manufacturers to compete successfully with those of continental countries. They presented a memorial to Lord Palmerston praying for the appointment of a committee to inquire into the operation of the measure of last session. His lordship in reply said the subject was one of so much importance that he would bring it under the special attention of the Cabinet. Although no reference was made by the deputation to the paper duties, Lord Palmerston remarked that the rags question was the major question, and the paper duties the minor one, and then stated that no alteration would be made this year in the excise laws as regarded the duties on paper.

GREENWICH PENSIONERS.—An alteration in the condition of the in-pensioners of Greenwich Hospital is about to be made in accordance with the report of the commissioners appointed by Parliament last session. Hitherto, the money allowance made to the pensioners, under the denomination of "tobacco money," has been 1*s.* per week, irrespective of the rank attained in the service prior to being superannuated. By the new arrangement the pensioners are to be divided into three classes, according to their previous rank, the first class receiving 5*s.*, the second class 4*s.*, and the third class 3*s.* per week. This alteration will not only add to the comfort of the old men, but will remove their objections (as shown by the decreased number of pensioners at present compared with former years) against entering the establishment and surrendering the whole of their pensions, with the exception of the solitary 1*s.* before alluded to. In the classification to be made, those pensioners who have lost limbs, or been wounded and disabled while in active service, will be included in the next highest class to that to which their previous rank would have otherwise entitled them. With regard to the hospital schools, also, improvements have been effected by the abolition of the distinction which has hitherto existed in the degree of education imparted to the pupils of the upper and the lower school, and the whole of the pupils will henceforth have the opportunity of passing through all the classes. The present number of the boys is likewise to be increased from 800 to 1000.

THE NATIONAL GALLERY.—The improvements at the National Gallery, for which a vote was granted in the last session of Parliament, are rapidly advancing towards completion, and it is confidently expected that they will be completed by the latter end of April, so as not to delay the opening of the exhibition of the Royal Academy on the 1st of May. The old sculpture gallery has been removed, and the new one designed by Mr. Pennethorne, the Government architect, is advancing rapidly. Its dimensions are 70 feet long by 50 wide and 20 feet high, being about four times the size of the former gallery, and will be lit by a large circular skylight and side lights. Above this the new picture gallery, which abuts upon the barracks, is also proceeding simultaneously, under the superintendence of Mr. G. Street, the clerk of the works, the entire contract being in the hands of Messrs. Cubitt. The new picture gallery will have an elliptical roof, composed of wrought and cast-iron girders, and

will be 75 feet by 30 and 32 feet high, and surrounded by ante-rooms.

WESTMINSTER PALACE HOTEL. — This extensive structure is now completed. The hotel is six stories high, and occupies an extensive frontage in Victoria Street, overlooking the Houses of Parliament and Westminster Abbey. The grand entrance has an opening to the roof, terminating in a sky-light. The galleries are lighted by side windows. The public coffee-room is 90 feet long by 30 wide, the ceiling being supported by scagliola columns. Next to it is the dining-room, 70 feet long, with numerous reception-rooms, a library, ladies' coffee-room, and smoking-rooms. The other stories comprise sitting-rooms and suites of apartments, and about 120 bed-rooms and baths. The extent of the structure may be inferred from the fact that there are 700 rooms in all, 140 of which are occupied by the India Council. The cooking department, which already supplies the India House, is on a scale commensurate with the other departments, and the general tariff is similar to those of the Great Western and Euston Hotels. The hotel, it is expected, will be a great accommodation to persons visiting London during the Parliamentary Session. Owing to the great height of the building and the consequent tediousness of ascending the stairs, an hydraulic lift has been designed, by means of which, seated on a sofa with their luggage, visitors may ascend and descend to or from any one of the six stories at pleasure.

THE NEW CENSUS.—The district registrars and others who are to take the census on Monday week the 8th of April have arranged the division of the parishes and townships into enumeration districts, an operation which required that every square yard of land should be comprised within an enumeration district. This preliminary work having been completed an enumerator has been appointed to each district, so that every house in the different parishes of the kingdom will be visited in the course of Monday week, for the purpose of collecting the householder's return previously left to be filled up. In 1851 upwards of 30,000 of these officers were employed in England and Wales alone, and upon the present occasion a staff of 30,441 will be required. They will work under 2192 district registrars and 631 superintendent registrars. In the metropolitan district the applicants for the appointment have been exceedingly numerous, and several clergymen, Scripture readers, and others, influenced by philanthropic motives, have undertaken to enumerate districts inhabited by the poorer classes. Each enumerator, for his duties in delivering the forms and explaining their object at each house in the course of the ensuing week, and afterwards collecting the forms, filling them up where necessary on the 8th April, will receive a fixed fee of 1*l.*, with an additional allowance at the rate of 2*s.* for every 100 persons enumerated over and above the first 400 in his district. The duties include making a transcript of the particulars in the returns in the "Enumeration Book." The arrangements of the census are under the direction of the Registrar-General, as chief commissioner, with Dr. Farr, F.R.S., and Mr. J. T. Hammack, as assistants, so far as England is concerned. In Scotland and in Ireland the census will be taken on the same day, under the superintendence of the Registrar-General acting in each of those parts of the United Kingdom. There will also be a census in most of the colonies.

THE STATUE OF GENERAL HAVELOCK.—On Thursday afternoon the full length bronze statue of General Havelock, by Mr. Behnes, was successfully placed upon its granite pedestal, opposite Northumberland House, where it forms a companion statue to that of Sir Charles Napier at the west end of the square. The workmen had much trouble at getting at solid ground for the purpose of laying the foundation for the pedestal. In digging they came upon an old dung-pit and cesspool, supposed to have belonged to the stables of old Carlton House, which stood upon this spot, and were consequently obliged to go down about 17 feet before solidity was obtained.

THE STRIKE IN THE BUILDING TRADES. — The bricklayers and masons in the employ of Messrs. Lucas, Mr. Kelk, and Sir M. Peto struck work on Saturday on the ground that the masters' terms of 7*d.* per hour would open the way to the systematic working of overtime, and would also take away the privilege of 4 o'clock on Saturday. It appears that the masters' proposition instead of reducing wages would actually increase them by nearly 2*d.* a-day. The 58 hours of work at the present rate produce the men 33*s.* a-week, whereas at the proposed rate the product would be 33*s.* 10*d.* It is therefore expected that as in the strike at Messrs. Trollope's the masters will not allow themselves to be broken in detail, but will adopt the same course as in 1859, and close their yards till work is resumed at Messrs. Lucas, Mr. Kelk's, and at Sir Morton Peto's. In the case of Messrs. Lucas the strike is particularly unfortunate, as they are the contractors for the Great Exhibition building for 1862. The ground has already been broken at Kensington, and the preparations advanced for laying the foundations of the brick walls, but now all is stopped. There is no doubt that this combination among the men will be again defeated, but at the usual heavy price of misery and privation to the operatives themselves, and great loss and inconvenience to the masters.

WESTMINSTER SCHOOL.—The committee appointed at the recent meeting of Old Westminsters, in carrying out the resolution for keeping the school on the old site, have succeeded in effecting some important improvements. The dormitory has been partitioned into separate sleeping places, and has been well lighted and ventilated. A gymnasium and a fives court, available in all states of the weather, are to be established. The hour for attendance by boys who reside at a distance is to be 9. A proper building or hall for the reception of home boarders during the interval between school hours is to be built in Dean's Yard, and is to be under the supervision of a master specially appointed for the purpose.

INAUGURATION OF THE FIRST STREET RAILWAY.—On Saturday the first street railway in the metropolis, constructed and carried out under the management of Mr. G. F. Train, was opened to the public. The line extends from the Marble Arch to Porchester Terrace, being about one mile in length. From an early hour of the morning until dusk three carriages, each drawn by two horses, were kept incessantly passing up and down the tramway, thronged with visitors invited by Mr. Train to inspect the vehicles, and to judge of the merits of this new mode of transit. The carriages, which were built by Messrs. Prentiss, of Birkenhead, are exceedingly light and airy, and constructed to hold 24 passengers inside and 12 on the front and back. The experiment was undoubtedly successful, though the most vexatious obstacles were placed in the way of the carriages by the incessant intrusion of vehicles of every description upon the tramway, with the view, apparently, of contesting Mr. Train's right to a monopoly of any part of the road. In the afternoon about 350 gentlemen were entertained by Mr. Train at a collation in St. James's Hall.

THE PUBLIC HEALTH. — The Registrar-General's weekly return states that the number of deaths registered in the week that ended Saturday, March 23, was 1214. The average number in the corresponding weeks of the 10 previous years 1851-60, corrected for increase of population, was 1432. The present return is therefore 218 below the average. During the week the births of 991 boys and 989 girls, in all 1980 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1741.

Provincial.

CHATHAM.—Several of the daily papers have published an account of another intended outbreak of the convicts in Chatham Prison on Sunday last, and of the formidable means taken by the civil and military authorities to frustrate it. It now appears that there is no truth whatever in the report; that on Sunday the convicts were more than usually quiet; and that so far from there being any increase of the guards during the time they were taking their exercise, a great number of the civil guard were allowed to leave for the day. Since the 19th there has been no disturbance, and everything has been quiet at the prison.

CHICHESTER.—An influential meeting of the inhabitants of the county of Sussex was held on the 21st inst., in the Town Hall, Brighton, the Earl of Chichester, the Lord Lieutenant of the county, in the chair, for the purpose of raising funds for the restoration of the spire of Chichester Cathedral. A report by Mr. G. G. Scott was read, stating that after minutely examining the cathedral for the purpose of forming an opinion as to the best course to be adopted in reconstructing the fallen parts, and providing for the present and permanent security of the fabric, he calculates the probable cost of effecting these objects as follows:—Rebuilding of the tower and spire, 25,000*l.*; rebuilding of the four adjoining bays, 12,000*l.*; necessary repairs of other portions, 7000*l.*; cost of shoring up and providing temporarily for the services, 2000*l.*; total, 46,000*l.*, exclusive of superintendence and other incidental expenses, which will probably increase the outlay to 50,000*l.* The Duke of Richmond, the Bishops of Chichester and Oxford, the Dean of Chichester, Mr. Blencowe, Mr. Darby, Lord Henry Lennox, M.P.; Mr. H. Wyndham, M.P.; Mr. W. Campion, Mr. Dodson, M.P.; Mr. Mitford, M.P.; and other gentlemen addressed the meeting, and it was unanimously resolved to open a subscription, entrust the work to Mr. Scott, organise a general committee for the whole county, and appoint local committees in the principal towns for the collection of subscriptions, to be placed in the hands of the Duke of Richmond, Mr. Haslar Holted, and the Rev. Mr. Gurney, as trustees of the fund. Among the subscribers were the Duke of Richmond, the Bishop of Chichester, Lord Leconfield, and the Rev. John Gurney, for 1000*l.* each; the Earl of Chichester 500*l.*, and several other gentlemen for the same or similar amounts.

HOUNSLOW.—On Saturday evening an explosion of a working charge took place with an unusually loud report, at Messrs. Curtis and Harvey's Powder Mills, just previously to the cessation of work. As the material was in a very imperfect state the damage was unimportant, and no person was injured.

KINGSTON-ON-THAMES. — A shocking murder was committed on Tuesday morning at the Militia Barracks in this town. The victim was a fine young woman only 20 years old, named Diana Wickins, who was murdered while asleep by her step-sister, a married woman, the wife of a sergeant-major in the 3d Surrey Militia. Her head was nearly severed from her body, the right carotid artery, the jugular vein, and the windpipe having been completely divided with a razor. The husband of the murderess, who [illegible] by his officers, had left his bed about [illegible] the morning, and went out into [illegible] leaving his wife in bed, and her s[illegible] joining room, where she slept upon a [illegible] made up for her upon a sofa. The w[illegible] up almost immediately after he left [illegible] one of his razors from the drawer in [illegible] and then proceeded to the adjoining [illegible] deceased was lying. The medical evide[illegible] deceased was at the time asleep and [illegible] side, and while in that position the [illegible] throat on the right side. Death [illegible] instantaneously, for on the first sen[illegible] young creature raised one of her hands [illegible] received a severe injury upon the [illegible] got out of bed, and staggered for abo[illegible] adjoining room, where she fell dead, [illegible] with blood. Two medical men were [illegible] tendance, but all human aid [illegible] unavailing. After committing the [illegible] the murderess went out to the [illegible] where she met a sergeant belonging to [illegible] to whom she at once stated that she had [illegible] sister; she then went to the pump [illegible] hands, which were covered with blood. [illegible] taken into custody, and in the course of [illegible] was taken before the borough magistrates [illegible] of wilful murder. Several witnesses [illegible] whose evidence completely establishe[illegible] against the prisoner, but threw no light [illegible] which induced her to commit the crime. [illegible] however, from the medical evidence that [illegible] had been in the West Indies, and ha[illegible] England suffering from diseased liver. [illegible] ill at that time but recovered, and she [illegible] keep herself quiet and free from exc[illegible] solicitor who attended on her behalf sa[illegible] evidence was of that character that the [illegible] had no alternative but to commit her [illegible] should not even ask for a remand, but, on [illegible] he thought it would be much the better [illegible] should be committed, and removed a[illegible] possible from the scene of horror. The [illegible] then formally committed to take her [illegible] murder at the summer assizes for Surrey. [illegible] is a very tall, powerful, and rather plain [illegible] During the examination she was in dreadful [illegible] mind, and repeatedly interrupted the proce[illegible] her hysterical sobs and ejaculations, some [illegible] being of the most painful and distressing [illegible] She was seated at the end of the magistrates [illegible] the side of her husband, a very respectable [illegible] who evidently endured considerable [illegible] while the prisoner held one of his hands [illegible] during the whole period of the examination [illegible] entreated him in agonised tones not to leave [illegible] town-hall was crowded during the proceedings [illegible] deepest interest was manifested by every [illegible] The inquest was held on Thursday, when [illegible] after a very brief deliberation, returned [illegible] Wilful Murder against the prisoner.

LIVERPOOL.—The Liverpool and New [illegible] Middlesex, 1490 tons, which sailed from [illegible] the 18th ult., sprung a leak in the fearfu[illegible] set in about a week afterwards in the Atlantic [illegible] dered between the 10th and 12th inst., a fe[illegible] miles off the Irish coast, carrying with her [illegible] crew and passengers. She had six boats [illegible] were destroyed except one, in which the [illegible] the crew, and four passengers got away [illegible] After being exposed for four days and [illegible] severest weather, without food or water, [illegible] washed ashore at Great Blasket Island, a [illegible] the westward of Dingle Bay, on the south [illegible] of Ireland. Two of them, however, died [illegible] boat gained the land from exposure and [illegible] Middlesex was valued at 15,000*l.*, and the [illegible] cargo, is calculated at 17,000*l.*—The ship [illegible] ward bound from that port for Baltimore, [illegible] lost in a collision with the ship Joseph [illegible] Liverpool, for Key West, which took place [illegible] coast on the 16th inst., and it is inferred [illegible] tain, first officer, and ten of her crew were [illegible] The loss of the ship is reported to be abo[illegible] A fever of the typhoid character has broke[illegible] Southern Hospital, in consequence of the [illegible] 32 Egyptian seamen belonging to the Egy[illegible] Sergehab, from Alexandria. The men arr[illegible] Mersey in a state of fever and dysentery, [illegible] most filthy condition, and it appears that [illegible] mitted to the hospital they communicated [illegible] the clergyman and some of the attendants. [illegible] four of whom have died. They had previ[illegible] the public baths, the superintendent and [illegible] assistants of which were subsequently atta[illegible] the fever which has proved fatal to [illegible] the [illegible] assistants. It is now said that no further [illegible] apprehended.

LYNN.—On Monday morning, during the [illegible] absence of the governor at Norwich, four prisoners [illegible] their escape from the borough gaol after [illegible] dering their keeper. The prisoners were [illegible] characters, named Loxton, Howell, Cooper, and [illegible] and were awaiting their trial at the sessions for [illegible] and felony. After breakfast, when the turnkey [illegible] the cells to remove the utensils, they [illegible] pinioned him, and having obtained possessio[illegible]

[illegible] made their escape from gaol. The turnkey [illegible]ed for some time in an insensible state, and on [recov]ering his consciousness he found that he had been [lock]ed in. His cries for help were at length heard by [the] governor's wife, who immediately liberated him. [He] was then faint and bleeding profusely, having been [wou]nded in the face, arms, and legs, with a desperate [weapon] the prisoners had formed out of a piece of [iron] which they had wrested from their night tub, [and sharpen]ed into a most dangerous weapon. Every [member of] the police force was at once sent out to scour [the country]. This was done so skilfully that within an [hour the] prisoners were all captured, but not without desperate resistance, as they were making their way up into Norfolk. Thousands of persons escorted them as they were brought in one after the other. The prisoners have all been heavily ironed, and placed in separate confinement.

Manchester. On Sunday the executive committee of the weavers of South Lancashire held a meeting in [this city] to consider the position of affairs in reference to the power-loom weavers now on strike, owing to a reduction of 7½ per cent. on their wages. Manchester, Ashton, Staleybridge, Hyde, Oldham, Clitheroe, and [many] other towns were represented by delegates. After a very lengthy discussion, the majority of the meeting [decided] that, although the present turn-out was not in [accordance] with their views, the workpeople generally [having] accepted the advice of the various committees, it was now the most judicious course to cease work, as in 1842, until their demands were complied with. In accordance with this resolution all the mills in Hyde, Ashton-under-Lyne, and Staleybridge, were at a stand-still on Monday, and in the course of the day upwards of 12,000 turn-outs went to Glossop and called upon the [hands] in that town to turn out, which they agreed to do. On Tuesday afternoon about 7000 or 8000 of the Ashton and Staleybridge turn-outs marched to Oldham, and turned out the weavers in that town, and another body threatened to proceed to Stockport.

Milford.—The Great Eastern left the gridiron on Tuesday evening, and steamed off admirably for Milford, where she dropped anchor at a quarter past seven. Amongst those on board were Messrs. Crooch and Fothergill Cooke, two of the directors; Captain [illegible], R.N., Captain Hall, R.N., Captain Cragie, and other dockyard officials. Everything worked perfectly, and this first trial trip was most satisfactory.

Newcastle-on-Tyne.—It will be remembered that Mr. Bewicke, a country gentleman, an ex-magistrate of Northumberland, was recently convicted at the assizes in this town of shooting at two sheriff's officers who had gone upon his estate to levy for an attorney's bill, and was sentenced to four years' penal servitude. The Commissioners of Greenwich Hospital have since taken possession of his goods and chattels at Threepwood, the family seat in the vale of Tyne, and they will be brought to the hammer. This step has been taken under the authority of an old Border Act granted to the Earl of Derwentwater, whose estates in Northumberland were apportioned by the Government to Greenwich Hospital. The Act of Parliament conferred on the unfortunate earl, as lord of the manor of Langley, power to seize the goods and chattels of any person convicted of felony within that barony, and the Hospital Commissioners, as trustees of the property, are bound to prosecute the order.

Portsmouth.—The chief cashier of the branch of the National Provincial Bank of England in this town, Mr. Treakston, absconded from that establishment on Friday last, with 1000*l.* in gold. He had been in the bank for 25 years, and was in receipt of a salary of 400*l.* per annum, and it is feared that other discoveries will yet be made. He left a note addressed to a gentleman employed in the bank, stating that he had money sufficient to carry him to London, and intended to destroy himself.

Windsor.—In the recent excavations in St. George's Chapel for the temporary grave of the Duchess of Kent, a small opening was made into the vault which contains the coffins of Henry VIII. and one of his Queens, the Lady Jane Seymour; Charles I. and an infant child of Queen Anne. The coffins, and even the crimson velvet on which are placed the coronets, were in a tolerable state of preservation; and the spear-hole in the coffin of Henry VIII., said to have been made by one of the soldiers of Oliver Cromwell, was clearly discernible.

Ireland.

The Irish Marriage Law.—An important meeting was held on Monday in Dublin for the purpose of obtaining an amendment of the marriage law in Ireland. Numerous clergymen and laymen of all denominations of Protestants were present, and a deputation, consisting of the Rev. Dr. Miller and the Rev. J. M'Naughten, attended from Belfast, where the movement originated. The meeting was addressed by the deputation, by the Rev. Dr. Kirkpatrick, Rev. R. Massaroon, Rev. Dr. Urwick, and others, who pointed out the evils arising from the present unequal and anomalous state of the marriage law. Mr. Foley, barrister, stated that a member of the House of Commons was about to move for a committee to investigate the whole subject, and that this meeting was held for the purpose of strengthening his hands. A petition to Parliament, praying for legislative interference, was adopted, to be presented by the members for the city, county, and University of Dublin.

The Derrymackash Trials.—Tait, the Orangeman convicted at the Armagh Assizes of manslaughter, and whose case has been referred to several times in the House of Commons, was liberated on Monday by the Lord Lieutenant.

The Belfast Inhibition Case.—This long-pending case has at last been brought to a conclusion. Judge Ratcliffe has pronounced judgment in the Consistorial Court to the effect that the Bishop of Down and Connor had full right to prohibit the Rev. Mr. Potter from preaching in Dr. Millar's church; and that great inconvenience might result from the liberty claimed by the latter as incumbent. But as different opinions had been given on the question by ecclesiastical lawyers; as the circumstances were novel, peculiar, and irritating; as Dr. Millar and Mr. Potter did not, in the judge's opinion, intend deliberate defiance of the authority of the bishop; and as the prohibition was felt as an insult by Mr. Potter, the decision of the Court was that each party should pay his own costs, no punishment having been sought on the part of the bishop. The decree was, that the Rev. Mr. Millar should be admonished, and inhibited from allowing the Rev. Mr. Potter to preach until duly authorised and licensed, and that the Rev. Mr. Potter should be inhibited from officiating within the diocese of the bishop until licensed or otherwise authorised.

National Education.—Letters patent have passed the great seal of Ireland, granting a supplemental charter to the Commissioners of National Education, and appointing the following to be additional commissioners:—Earl of Dunraven, Chief Justice Monahan, Chief Baron Pigot, Mr. James A. Lawson, Rev. John Hall, Mr. Laurence Waldron, M.P., Mr. John Lentaigne, and Mr. John O'Hagan.

The Ballymote Murder.—At the Sligo Assizes a man called Phibbs was charged with the murder of an old man called Callaghan, his wife, and maidservant, at Ballymote, on the 7th January last. On the 8th the door was broken open, and the three persons were found lying dead, with their throats cut. Phibbs, a dissipated man, who had been their near neighbour, was suspected, pursued, and arrested. Portions of the murdered man's property were found in his possession, and also two bloody shirts. Other proofs were strong against him. The jury were locked up till 12 o'clock on Saturday night, when it was announced that 11 were for a conviction, but one held out. The judge proposed a new trial on Monday, but it was found that the Crown counsel in the case had gone to Castlebar. The prisoner was therefore ordered to be kept in confinement till the next assizes.

The Shooting at Lord Leitrim.—At the Leitrim assizes James Murphy was charged with firing at the Earl of Leitrim in the town of Mohill on the 15th September. It appeared from the evidence that the prisoner belongs to a family deeply tainted with insanity, his mother, sister, and two nephews being lunatics, while he himself has for years laboured under various delusions. He was therefore acquitted on the ground of insanity, and ordered to be sent to an asylum.

Discovery of the Skeleton of a Giant.—As the workmen employed in sinking a foundation for the enlargement of the parish church of Mullingar were pursuing their work at the east end of the building, they discovered, among the other remains of human beings, the perfect skeleton of a man, measuring more than seven feet in length, and which appeared from the immense size of the skull, bones of the hands, jaw, &c., to have equalled in its other dimensions its extraordinary height. Its position was considerably deeper in the earth than that at which skeletons are generally found. There was sufficient appearances of a coffin to prove that it had received proper interment, but everything connected with it indicated its having been buried for several centuries.

Scotland.

The Western Bank.—A gentleman, on the part of the directors of the Western Bank, has offered 200,000*l.* for a settlement of all the actions at law now in dependence. The liquidators, who had named this sum, recommend it to the acceptance of the shareholders, with whom it now lies whether the litigation shall be brought to a close or not.

Law.

Oxford Circuit: Shrewsbury.—*Child Murder.—Elizabeth Griffin*, 36, a servant at King Edward's School, Birmingham, was charged with the wilful murder of her illegitimate child by drowning it in a pond on the [illegible] of March last, at Monk-moor Farm, near Shrewsbury. When before the magistrates the prisoner said she could not support her two children and keep herself, and that statement was now put in for the defence. The jury returned a verdict of *Guilty*, with a recommendation to mercy on account of her helpless and desolate condition. Mr. Justice Blackburn said that the recommendation should have due weight, and sentenced the prisoner to *Death* in the usual form. The prisoner left the dock apparently overpowered by the sentence. *Burglary by Navigators.—William Deeley*, 21, *Samuel Carter*, [illegible], *John Hughes*, [illegible], *George Robinson*, 3[illegible], *Charles Sutton*, 24, and *John Evans*, [illegible], all labouring men, were charged with burglariously breaking into the dwelling-house of Thomas Dewin, on the night of the [illegible] of January, at Westbury, and stealing a large quantity of goods. The prosecutor kept a grocer's shop in a lonely place, at Westbury, about 50 yards from a turnpike road. On the night of Sunday, the [illegible]th of January, he was asleep in bed when he was awakened by a noise of glass breaking, and of a window being forced open in the lower story. He looked out of his bedroom window and saw seven or eight men round his house. At first they demanded his money or his life, and then they asked for bread, saying that they had no work, and would not "steal," or starve. Mrs. Dewin thereupon fetched some loaves and handed them to the men through the window, and also gave them 1s. in money. Some voices then cried out, "God bless you, Missus; good night." The prisoner Evans said, "No, they have got, and we will have it." He and the prisoner Hughes then broke open the door of the house, and while one with a bludgeon stood guard over Mr. and Mrs. Dewin downstairs the other men went upstairs and rifled the bedrooms. Mrs. Dewin was so terrified that she had a fit, and had not wholly recovered herself at the time of the trial. Evans and Hughes then forced Mr. and Mrs. Dewin back into bed, and the noise of several people rifling the shop below was heard for some time. It appeared that the prisoners had all been drinking together at a neighbouring publichouse till within a short time of the burglary, and they were all navigators, sleeping in huts on the Shrewsbury and Welshpool line, which is in course of construction, and their road home from the publichouse lay near the prosecutor's house. Part of the stolen property was found next day in a barn near those huts, and very remarkable evidence was given of the footmarks of four of the prisoners round Mr. Dewin's house. Evans and Hughes were clearly identified by Mr. and Mrs. Dewin, and the other prisoners by their voices and other evidence. The Jury found Evans and Hughes *Guilty* of burglary as principals, Carter, Sutton, and Robinson *Guilty* of aiding and abetting them, and Deeley *Not Guilty.—William Deeley, Charles Sutton,* and *John Evans,* three of the men indicted in the last case, were then put on their trial charged with feloniously assaulting William Rogers, and stealing from his person a sovereign, a tobacco-box, and a hat, on the 20th of January, at Alberbury. On the night of the burglary mentioned in the last case, the prosecutor, who was a waggoner, went to a public house at Winnington, in the parish of Alberbury, where about a dozen men were drinking. The prisoners were of the party. The prosecutor had occasion to take out a sovereign, which he afterwards put in a tobacco-box and deposited in his pocket. The prisoner Evans came up to him and blacked his face and then struck him. The prosecutor returned the blow and went out out of the house and was followed, as he said, by the three prisoners, who knocked him down, kicked him, and robbed him of his tobacco-box and its contents. The prosecutor was very ill used, but after a little while he got up and scrambled home across the fields without his hat to the residence of his master, Captain Severne of Wallop. Several witnesses were examined, but the main question was as to the identity of the prisoners, which chiefly rested on the prosecutor's testimony. The jury found all the prisoners *Guilty*. A previous conviction was proved against Evans. Mr. Justice Blackburn then sentenced Evans to penal servitude for life; Hughes, penal servitude for 20 years; Sutton six years for the burglary and four for the robbery, concurrent; Robinson, six years' penal servitude; Carter six years' penal servitude; and Deeley four years' penal servitude.

South Wales Circuit: Brecon.—*The Talgarth Murder.—William Williams*, 1[illegible] years of age, but who appeared to be even younger, was charged with the wilful murder of his aunt, Ann Williams, at the parish of Talgarth, on the 19th October last. The prisoner, who lived in service with an uncle at a farm called Penlan in Lambeder, went on the evening of the 18th October to the house of his aunt, who lived at a small farm at Fawydden, about seven miles distant having with him a gun. The other inmates at the time were a sister of prisoner, his aunt, and a little boy, the illegitimate son of the latter. About 3 o'clock on the following afternoon the sister went across some fields to get hay for a heifer, taking the child with her. Her brother accompanied her across the fold-yard, where he stood while she went on. While returning she heard a gun shot, and on the fold met the prisoner, who said that his aunt had shot herself. Hurrying in she found her aunt sitting where she had left her, in an arm-chair, with a deep wound in the lower part of her back, and the clothes on fire. The unfortunate woman died in two minutes without speaking. The shot had been fired so close as not only to burn her clothes, but to cause the charge to pass between two rails of the chair without touching any part of it. On being taken into custody the prisoner said that the gun had gone off by accident as he was passing through the door and removing it from one arm to the other; but subsequently he made a statement to the superintendent at Crickhowell, in Welsh, which he afterwards repeated in English to the chief constable, stating that he did it intentionally to get possession of his aunt's property, as he had no home with his mother. The defence was that the prisoner was a wretched, neglected being, who had not sufficient knowledge of the consequences of crime to make him legally responsible. The jury returned a verdict of *Guilty*, with a recommendation to mercy on account of prisoner's youth. Mr. Justice Byles put on the black cap and passed sentence of *Death*, holding out no hope of mercy, but promising to send the recommendation of the jury to the proper quarter. The prisoner, who for the first time appeared to realise his position, was with some difficulty removed from the dock. *The Sham Clergyman.—Edward Seymour Beech*, alias *Norman Carew*, aged 22, tutor, was charged with having unlawfully solemnised matrimony according to the rites of the church of England in the parish church of Llangorse, on the 17th August 1860, falsely pretending to be in holy orders. He was also charged with a similar offence in the parish church of Llangasty, on 31st August 1860. The prisoner having represented himself as an ordained clergyman engaged to perform the duties of the Rev. Mr. Hosken, in the parish of Langas, during the absence of that gentleman from home for a few weeks. During that period he not only solemnised matrimony in that parish, but also officiated at a marriage in Llangorse, during the absence of the vicar. He had represented himself to be the Rev. Norman Carew, whose name appeared in the "Clerical Directory" as curate of Calington, Devon. That gentleman appeared in the witness-box in person, to negative the assumption of his name. The jury returned a verdict of *Guilty*, and Mr. Justice Byles sentenced him to seven years' penal servitude. He was then removed to be tried on a similar charge at Devizes. *The Trecastle Murder.*—The bill preferred against *David Davies* for the wilful murder of David Price, near Trecastle, on the 19th October, was ignored by the grand jury.

Western Circuit: Devizes.—*The Sham Clergyman.—Edward Seymour Beech*, who had previously been convicted at the Brecon Assizes of a similar offence, was found *Guilty* of feloniously and wilfully solemnising matrimony according to the rites of the Church of England, not being in holy orders, and feloniously pretending to be in holy orders, on the [illegible] of November, at Bristol. Baron Martin, in passing sentence, remarked on the serious character of the offence, as exposing the parties supposed to be married to ruin and misery, affecting the rights of property and the legitimacy of children. He said that when a man falsely pretended to be a clergyman the time was come to show that the law could punish; and, as an example to others, he should sentence the prisoner to be kept in penal servitude for 10 years. Taunton.—*The Dunster Murder.—Matthew Wedmore* and *Charles Wedmore* were indicted for the wilful murder of Sarah Waterman, at Dunster, on the 9th of January. It will be remembered that the prisoners were the nephews of deceased, who was the wife of an old Chelsea pensioner, and that the prisoners, believing

that he had saved a little money, determined to rob him of it, and in so doing inflicted dreadful injuries on both the old people, and causing the death of their aunt. They were found *Guilty* on the clearest evidence as well as upon the written statements of the prisoners, each of whom laid the actual murder on the other. Baron Martin passed sentence of *Death*, telling them that there was no hope of mercy for them in this world.

HOME CIRCUIT: MAIDSTONE.—*Arson.*—*Michael Clarke*, 19, and *Peter Stevenson*, 20, two soldiers, were found guilty of wilfully setting fire to stacks and other property, with the object of escaping from military service. Mr. Justice Wightman, in passing sentence, said that their offence was very aggravated, and, although they would undoubtedly effect the object they had in view, they would find that they had not gained anything by the change. He felt it his duty, as a warning to others in the like position, to order them to be kept in penal servitude for 18 years. The prisoners appeared quite astounded at the sentence. *Poaching.*—*Pass Collison, Charles Day*, and *George Huggins*, who were convicted of assaulting a gamekeeper belonging to Sir E. Filmer, M.P., were sentenced to 12 months' hard labour. *Bigamy.*—*William Lindsay Robinson*, an engineer in the Royal Navy, was convicted of bigamy, and sentenced to four months' imprisonment and hard labour. LEWES.—*Arson.*—*Edmund Shepherd*, 36, a respectable-looking man, described as a beershop keeper and a man of good education, was charged with wilfully and maliciously setting fire to a stack of hay, the property of Ralph Walker, an extensive farmer in the neighbourhood of Chichester. The prisoner had given himself up to a policeman as the person who had fired the stack, but afterwards endeavoured to explain away his confession on the ground that he was drunk when he made it. The jury, after a short deliberation, returned a verdict of *Guilty*. Lord Chief Justice Erle said that the prisoner had committed a crime of the most dangerous description, and, as an example to deter others, he felt it his duty to pass a severe sentence, which was that he be kept in penal servitude for the space of 10 years.

Sporting.

THE UNIVERSITY BOAT RACE.—On Saturday morning the great event of the rowing season, the Oxford and Cambridge eight-oared cutter match, took place on the Thames on the usual course between Putney and Mortlake. The weather was all that could be desired, and a fair start was made about 11 o'clock, from Putney. For a few seconds Cambridge had the lead, but Oxford shortly recovered their loss, and ultimately shot ahead, pulling past the flag boat at Mortlake 30 strokes in advance of their opponents, the entire distance being accomplished in 23 minutes 27 seconds. Both crews dined at Willis's Rooms in the evening, at the invitation of the Thames Subscription Club.

Obituary.

LADY JANE PEEL died on the 27th inst., at her residence in Great Stanhope Street. Her ladyship was the sister of the late and aunt of the present Duke of Richmond, and married Mr. Laurence Peel in 1822.

THE RIGHT HON. RICHARD WILSON GREENE, ex-Baron of the Irish Court of Exchequer, died on Saturday at his residence, Stephen's Green, Dublin, in his 70th year. He was the eldest son of Sir Jonas Greene, formerly Recorder of Dublin. Called to the bar, in 1814, his talents and industry gradually won for him the highest distinctions in his profession. Under the Government of Sir Robert Peel he was made First Serjeant. He was Solicitor-General when the present Master of the Rolls filled the office of Attorney-General, and in 1844 he was engaged in the State prosecutions when the law officers of the Crown had to contend with the most formidable bar ever mustered in the Dublin courts. Mr. O'Connell used to say that his opinions had "the sterling ring of legal power." In times of great political excitement he enjoyed the respect of all parties, not only for his judicial qualities but for his personal worth. He was elevated to the Bench by Lord Derby's Government in 1852. During the whole period from that time till his retirement about two months ago he suffered intensely from a painful malady. This, however, was not the cause of his death, which resulted from gastric fever, with which he was attacked about a fortnight since. Only a few days before his death the members of the bar presented an address to him through their chairman expressing their admiration of his character as a judge, and their esteem and regard for him as a man.

SIR JAMES DALRYMPLE HAY, BART., died on the 19th inst. at his seat, Dunragit, Wigtonshire, in his 72d year. He was son of the first baronet by the only daughter of Sir Thomas Hay, Bart., of Park, on inheriting whose estates in right of his wife in 1794, the first baronet assumed the name of Hay. The deceased was born in 1789, and married, first, in 1819 the daughter of Sir John Heron Maxwell, Bart., and secondly, in 1823, the daughter of Mr. George Hawthorn, who died in 1838. He is succeeded in the title and estates by his only son by the first marriage, Captain now Sir John Charles Dalrymple Hay, R.N., who was born in 1821, and married in 1847, the third daughter of the late Lord Napier. He was educated at Rugby School and having entered the navy, served in the operations on the coast of Syria, including the bombardment of Beyrout and St. Jean d'Acre, and afterwards saw much service in Borneo and China. He commanded the Hannibal during the Russian war, and was present at the capture of Kertch and Kinburn, and at the bombardment and fall of Sebastopol.

GENERAL VERNON, C.B., died on the 22d inst at Hilton Park, Staffordshire, in his 82d year. He entered the army in 1798, and served the campaign of 1808 and 1809 in the Peninsula as a deputy-assist.-adjutant-general, and subsequently in the same capacity with the Duke of Wellington's army until June, 1811, and was present at the battle of Talavera. He served with the 2d battalion of the 66th at Arroyo de Molino, and other operations, until the capture of Badajoz; and subsequently served with the Queen's at the reduction of the forts and battle of Salamanca, where he was slightly wounded early in the day, and very severely at the close of the action, a ball having entered his breast and lodged near the heart, after tearing along two ribs. At the expiration of three weeks he resumed the command of his regiment, with which he served in the various operations, preceding, during, and subsequent to the siege of Burgos. He received the gold medal for Salamanca, and the silver war medal and one clasp for Talavera.

MAJOR-GENERAL GIBSONE, R.M., died on the 22d inst at Prinsted Lodge, Emsworth, in his 79th year. He entered the Royal Marines at an early age, and had seen considerable service. In 1804 he served on shore in Bearhaven Bay; in 1811 he was present in a severe action with Danish gun boats off Anholt, and in 1812 he served on the north coast of Spain. In the two following years he served in the American War, and was present at the attack on Craney Island, the taking of Hampton, defence of the lines of Chippewa, and on other occasions on the Niagara frontier, where he was severely wounded.

MR. MARTIN JOSEPH BLAKE, D.L., formerly M.P. for Galway county, died a few days since at the Club House Galway, where he was staying during the assizes. He had been in bad health for some time, and became so much worse on his arrival at Galway that he was unable to return to his residence at Ballyglunin Park, Athenry.

WILLS.—The will of Dr. Baly, M.D., F.R.S., physician extraordinary to her Majesty, has been sworn under 7000*l.*; the Very Rev. Dr. Lowe, Dean of Exeter, 25,000*l.*; Lieut.-Colonel the Hon. Charles A. Wrottesley, 9000*l.*

Miscellaneous.

THE SOURCES OF THE NILE.—Mr. Petherick, her Majesty's Consul at Khartúm, has recently left England to explore the sources of the White Nile, and to aid the expedition of Captain Speke, already despatched by way of Zanzibar for the same direction. The Royal Geographical Society raised a subscription of about 1100*l.* in aid of the expedition, to which the Society itself gave 105*l.*; the Foreign Office, 100*l.*; Lord Ashburton and Miss Burdett Coutts 50*l.* each. It is understood that Mr. Petherick will reach Gondokoro in November next; he will then explore till March, 1862, and, after the rainy season, start afresh, and continue his travels till the end of 1863 or the beginning of 1864.

BIRTHS.—On the 22d inst, at Glenarm Castle, North Ireland, the Countess of ANTRIM, of a son—19th inst, at Argyll House, the Hon. Mrs. GORDON, of a son—24th inst, at 33, Cadogan Place, the Hon. Mrs. HAY, of a daughter—20th inst, at 32, Brook Street, Grosvenor Square, Lady SITWELL, the wife of Sir Reresby Sitwell, Bart., of a daughter—12th ult, at Malabar Hill, Bombay, the wife of Sir A. GRANT, Bart., of a son and heir—24th inst, at Byrkley Lodge, Staffordshire, Mrs. NEWDIGATE, of a daughter, prematurely—20th inst, at 118, Eaton Square, the wife of EVELYN PHILIP SHIRLEY, Esq., M.P., of a daughter—26th inst, at 25, Belgrave Square, Mrs. CALLANDER, of Preston Hall, of a daughter.

MARRIAGES.—On the 21st inst, at Mauldslie Castle, Lanarkshire, Major RANDLE JOSEPH FEILDEN, 60th Rifles, second son of Joseph Feilden, Esq., of Witton Park, Lancashire, to JANE CAMPBELL, eldest daughter of JAMES HOZIER, Esq., of Mauldslie Castle, N.B.—19th inst, at the parish church of Kensington, Lieutenant-Colonel OAKES, 12th Royal Lancers, to FRANCES, youngest daughter of the late J. L. K. LENNOX, Esq., of Lennox Castle, N.B.—2d ult, at Agra, Lieutenant-Colonel CHARLES VERNON OXENDEN, Rifle Brigade, only son of the Rev. Charles Oxenden, of Barham, Kent, to NORAH L., only daughter of MARTIN H. GUBBINS, Esq., B.C.S.—28th ult, at Pyle, Glamorganshire, ARTHUR CHAMPION PHILIPS WILLYAMS, Esq., of Truro, and Carmanton Park, Cornwall, to CHARLOTTE ELISABETH LONGUEVILLE JONES, second daughter of the Rev. H. LONGUEVILLE JONES, of Ty-Mawr, H.M.'s Inspector of Schools for Wales—25th inst, at the Church of the Holy Trinity, Chester, FRANCIS HALLOWELL INGLEFIELD, Esq., Lieutenant 38th Regiment B.N.I., fourth son of the late Admiral INGLEFIELD, C.B., to HANNAH MORE, third daughter of the late SAMUEL JOHNSTON, of Liscard, Cheshire, Esq.

DEATHS.—On the 23d inst, at North Lodge, Ealing, Middlesex, SARAH, widow of the late Hon. HENRY ARTHUR ANNESLEY—25th inst, at the residence of her brother, at 38, Grosvenor Place, ELIZABETH, eldest daughter of the late Sir GEORGE SHEE, Bart.—17th inst, at Woodburn, near Edinburgh, GEORGE ROSS, Esq., advocate, the last surviving son of the late Admiral Sir John Lockhart Ross, Bart., of Balnagowan, aged 87—22d inst, at Hammersmith, ROBERT MORRIS, Esq., eldest son of the late Robert Morris, M.P. for Gloucester—18th inst, at 54, St. George's Road, Pimlico, at the house of her brother-in-law, Captain Jervis, M.P., the wife of the Rev. JOHN JERVIS WHITE JERVIS, and third daughter of the late Thomas Massa Alsager, Esq.—9th ult, at Ardsheal, Bermuda, DUNCAN STEWART, Esq., of Lincoln's inn, barrister-at-law, her Majesty's Attorney-General for the colony, aged 65—22d inst, at Sedgeford Hall, Norfolk, FRANCIS CRESSWELL, Esq., of King's Lynn, aged 71—21st inst, suddenly, at his residence, Ashton Park, Preston, EDWARD PEDDER, Esq., D.L., and J.P. for the county of Lancaster, aged 50—24th inst, at 1, Princes Gate, ADA FRANCES, daughter of R. C. L. BEVAN, Esq., aged 3 years and 9 months—24th inst, at the Royal Naval Hospital, Plymouth, Commander JOHN TREVENEN, R.N., eldest son of James Trevenen, Esq., of Bosahan, Helston, Cornwall, aged 33—22d inst, at Leicester, the Rev. JOHN WING, M.A., vicar of St. Mary's, and confrater of Wigston's Hospital in that town, aged 59.

Markets.

COVENT GARDEN, March 30.

Contributions of Cornish Broccoli continue to be excellent, and good samples of Lettuces, Endive, and Artichokes come from France. Some good samples of new Grapes are offered at comparatively moderate prices. Asparagus, French Beans, and new Potatoes may also now be had. Cucumbers are scarce. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Camellias, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 6s to 10s	Apples, per doz., 6d to 1s 6d
Grapes, per lb., 8s to 14s	Oranges, per 100, 6s to 10s
— new, per lb., 20s to 24s	Lemons, per 100, 6s to 10s
Strawberries, p. oz., 1s to 2s	Nuts, Cob, per lb., 1s to 1s 6d
Pears, per doz., 4s 6d to 8s	

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 3s	Celery, p. bundle, 1s 6d to 1s 9d
Green Peas, p. ½ sieve, 20s	Onions, p. ½ sieve, 1s 6d to 2s 6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 4s to 12s
Cabbages, do., 2s to 3s	Rhubarb, p. bundle, 9d to 1s 3d
Potatoes, p. ton, 90s to 160s	Seakale, p. punnet, 1s 6d to 3s
— per bus., 4s to 6s	Shallots, per lb., 1s 6d
— per cwt., 6s to 10s	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 10d	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 4s to 5s	Mushrooms, p. pott., 1s 6d to 2s
Cucumbers, each, 2s to 3s	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 3s to 4s	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, March 28.

Prime Meadow Hay	75s to	85s	Clover	90s to	115s
Superior do. (old) ..	90	105	New Clover ..	—	—
Inferior do.	50	60	Do second cut ..	80	100
New do.	—	—	Straw	32	38
Rowen	—	—			

DAVIS & CO.

WHITECHAPEL, THURSDAY, March 28.

Fine old Hay	98s to	108s	Fine old Clover ..	110s to	120s
Inferior do.	50	80	Inferior do.	80	95
Prime New Hay ..	—	—	Fine 2d cut	90	100
Inferior do.	—	—	Inferior do.	—	—
Straw	33	42	Fine New Clover ..	—	—

HOPS.—BOROUGH MARKET, WEDNESDAY, ... Messrs. Pattenden & Smith report ... demand for good new and yearling Hops ... was also some inquiry for 1858's and ...

BUTTER MARKET.—M...

Best Fresh Butter	1s...
Second do. do.	1s...

Pork, 4s. 4d. to 5s. 0d per ...

POTATOES.—SOUTHWARK, M... During the past week the arrivals ... rate, but plentiful by rail; the quantity ... than equal to the demand, the prices ... The following are this day's quotations ... to 140s. per ton; Lincolnshire Regents ... Red Soil do., 140s. to 160s.; do. do. Rocks ... Berwick Regents, 120s. to 125s.; Fife ... 90s. to 110s.; ditto Rocks, 80s. to ... 75s. to 80s.; French Whites, 60s. to ... to 80s.; Dutch do., 60s. to 80s.

BRITISH WOOLS.—LONDON, THURSDAY. There have been some lots of fleeces ... holders anxious to quit their stocks. ... inquired after, as it is now of good length ... scarce.

	s.	d.		s.	d.	
South-down Hoggets	1	5	to	..		Leicest. ...
Half-bred ditto ..	1	6	—	..		Ditto Hogg...
Down Ewes ..	1	4	—	..		Combing ...
Kent Fleeces ..	1	5	—	1	6	Blanket ...
						Flannel W...

COLONIAL WOOL SALES.—These sales ... evening. First class qualities have kept ... out the series, but poor descriptions ... decline a few days after the commencement ... agreed to buy only good wool at anything ... and it must soon become obvious to ... both Australian and Cape, that their interest ... their wool in good condition. The East India wool has gone off at about late rates.

COAL MARKET.—March ...

Bell's Primrose Gas, 13s. 6d.; Cragh... Davison's West Hartley, 15s. 9d.; Dean's Pr... Hastings Hartley, 15s. 9d.; Tanfield M...; Walker Primrose, 12s. 9d.; Walls End ... Walls End Braddyll's Hettons, 17s; W... 18s. 6d.; Walls End Tunstall, 17s; W... 15s.; Carway and Duffryn Malting, 24s.—...

METROPOLITAN CATTLE MARKET.

MONDAY, March 25.

There are a few more Beasts than on Monday ... dull, and that day's prices are with difficulty ... There is very little alteration in the supply ... trade for them. Prices have rather a ... Choice Lambs and Calves are in demand at ... Germany and Holland there are 369 Beasts, ... 51 Calves; from Scotland, 280 Beasts; from ... Norfolk and Suffolk, 2000; and 100 from the ... midland counties.

	s	d		s	d	
Best Scots, Herefords, &c. ..	4	8	to	5	0	Best Long-wools ...
Best Short-horns	4	6	—	4	10	Do. Shorn ...
2d quality Beasts	3	4	—	4	0	Ewes & 2d quality ...
Best Downs and Half-breds ..	5	8	to	6	0	Do. Shorn ...
Do. Shorn ..	5	0	to	5	4	Lambs ...
						Calves ...
						Pigs ...

Beasts, 3580; Sheep & Lambs, 19,260; Calves ...

THURSDAY, March 28.

We have a very moderate supply of Beasts, ... is very small, and they cannot be disposed of ... reduction of fully 2d. per 8 lbs. in all kinds ... plentiful than of late. Trade is exceedingly ... proportion remain unsold. Choice Lambs and ... usual at this season of the year, the ... demand; they are scarce and dear. We have a ... number of inferior quality, which are unsaleable ... supply consists of 220 Beasts, 300 Sheep, and ... Milch Cows 140.

	s	d		s	d	
Best Scots, Herefords, &c. ..	4	8	to	4	10	Best Long-wools ...
Best Short-horns	4	4	—	4	8	Do. Shorn ...
2d quality Beasts	3	0	—	4	0	Ewes & 2d quality ...
Best Downs and Half-breds ..	5	6	—	5	10	Do. Shorn ...
Do. Shorn ..	4	10	—	5	2	Lambs ...
						Calves ...
						Pigs ...

Beasts, 910; Sheep & Lambs, 7320; Calves, ...

MARK LANE.—MONDAY, March ...

The supply of English Wheat to this morning's ... small, and disposed of at an improvement of ... the prices of this day se'nnight. The attendance ... but foreign Wheat being held for 1s. to 2s. per ... checked business and only a retail sale resulted ... week's prices were not generally exceeded. Barley ... at last week's prices. Beans are firm, but Peas ... Oats are a slow sale at a decline of 6d. per qr. ... is firm, and ordinary qualities are 6d. to 1s. per ...

PER IMPERIAL QUARTER.

	s. s.
WHEAT, Essex, Kent, & Suffolk .. White	35—65 Red
— — fine selected runs .. ditto	50—72 ...
— — Talavera	51—72
— Norfolk	— ...
— Foreign	50—70
BARLEY, grind. & dist., 28s to 30s .. Chev.	40—45 Malt...
— Foreign .. grinding and distilling	0—3... Malt...
OATS, Essex and Suffolk	22—24
— Scotch and Lincolnshire .. Potato	25—28 Feed
— Irish .... Potato	26—28 Feed
— Foreign .... Poland and Brew	24—28 Feed
RYE	35—36 Foreign
RYE-MEAL, foreign	—
BEANS, Mazagan .... 23s to 44s .... Tick	38—48 Harrow
— Pigeon ...... 34s — 56s .. Winds	34—42 Longpod
— Foreign .... Small	40—50 ...
PEAS, white, Essex and Kent .. Boilers	35—4...
— Maple .... —s to —s .... Grey	40—42 ...
MAIZE .... White	— Yellow
FLOUR, best marks delivered .. per sack	50—57
— 2d do. .... ditto	58—... Country
— Foreign .... per barrel	33—35 Per sack

WEDNESDAY, March 27.

The supply of Wheat and Flour this week is ... proved. Barley and malt moderate, and Oats, Beans ... short. Of Scotch and Irish Oats we have ... The foreign arrivals of Flour are liberal from America ... few sacks from Spain. Wheat a good supply ... with a little Mediterranean and Spanish. Barley ... extremely limited from Sweden and Denmark ... arrival, nearly all Swedish. To-day the Wheat ... quiet at the quotations of Monday for both foreign and ...

[illegible] and no alteration in value, which is [illegible] Very little being [illegible] the attendance of [illegible] prices same as on Monday. Flour [illegible] on Monday, but that day's advance [illegible] Beans and Peas same as of late. Tares very slow. [illegible] but business small. Linseed and [illegible] Floating cargoes. The trade very quiet, [illegible] quotations fully supported.

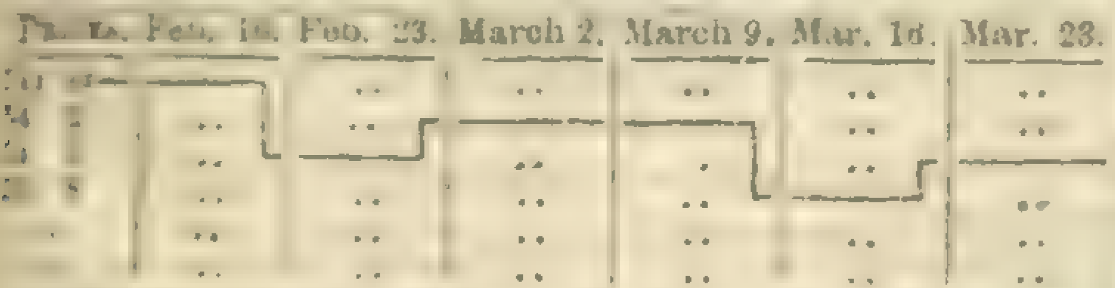
ARRIVALS FROM March 25 to March 27.

	Wheat.	Barley.	Oats.	Flour.
English	[illegible] qrs.	1,[illegible] qrs.	100 qrs.	1150 sks.
Irish	— „	— „	300 „	— „
Foreign	[illegible] „	[illegible]10 „	9250 „	700 „ / 11340 brls.

[illegible], Tuesday, March 26.—There was a fair attendance [illegible] morning's market, and with the advance in [illegible] a good demand was anticipated; this was, [illegible] and the quotations of last market day [illegible] Flour was held firmly at full prices, [illegible] inquiry was experienced. [illegible] attracted little attention, and the rates of Friday [illegible] Oats and Oatmeal dull of sale. Beans [illegible] Peas and Barley unchanged. The market [illegible] some firmness, but buyers show little dispo[illegible].

AVERAGES	Wheat.		Barley.		Oats.		Rye.		Beans.		Peas.	
Feb. [illegible]	[illegible]s.	[illegible]d.	[illegible]s.	[illegible]d.	23s.	0d.	35s.	7d.	40s.	0d.	44s.	7d.
— [illegible]	[illegible]	[illegible]	[illegible]	4	23	0	35	5	39	7	41	1
March [illegible]	[illegible]	[illegible]	39	2	23	0	35	1	39	7	44	7
— [illegible]	54	[illegible]	38	11	23	6	34	6	41	8	43	8
— [illegible]	[illegible]	[illegible]	38	7	23	9	34	10	40	1	41	0
— [illegible]	54	0	[illegible]8	6	23	10	32	11	40	1	40	9
Agg. Aver.	54	1	38	11	23	5	34	9	40	2	42	1

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



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GARDENER.—Age 28, married, one child; has a good practical knowledge. Four years' good character.—A. B., 48, Manby Street, Manby Park, Stratford, Essex.

GARDENER (SINGLE-HANDED, ... given, or Second in a good estab... is extensively carried on).—Age 26, ... profession 13 years, and had good ... branches. Can glaze if required. ... —C. P., Sutton & Sons, Royal Berks ... Reading.

TO NOBLEMEN AND GENTLEMEN

GARDENER.—A Gentleman w... commend his late Gardener (married ... to any Nobleman or Gentleman in ... practical and trustworthy person, fully ... the management of a first-class place, ... Forcing is carried on extensively, and ... Modern Gardening is fully carried ... Gentleman requiring a thorough ... advertiser worthy of notice.—D. W. K., ... Castle, Wareham, Dorset.

GARDENER (UNDER).—Age ... practice. Good character.—B. C., ... Wickham, Kent.

GARDENER (UNDER) in a noble... man's family.—Age 21. Good refere... Nursket's, Nurseryman, Clapham.

GARDENER (UNDER).—Age 22; ... and late Forcing, Flower and Kitchen ... character from present and previous ... Eardiston Gardens, near Tenbury, Worcester...

GARDENER (UNDER, in a nobleman's ... Garden).—Age 21; well acquainted ... Culture. Two years' good character.—W. ... Terrace, Park Road, Norbiton, Kingston-on-Thames.

GARDENER, OR GARDENER AND ... —Age 40, married; is a good gener... Understands the Management of Land, ... Wife can manage a Dairy. Nine years' good ... Messrs. Henderson, Pine-Apple Place, Edgware ...

IMPROVER.—Age 20; has been under ... Gardener between 5 and 6 years.—G. F., ... near Bedford.

IMPROVER.—Age 21; has been six years ... Two years' good character. Willing to pay ... R. O., Post Office, Bramley, Surrey.

IMPROVER.—A respectable youth, age ... his age) has had considerable experience in ... ment, wishes an engagement where he might ... generally useful and improve his Agricultural ... where his services would be deemed an equi... board.—T. U. V., Post Office, Buckingham.

FOREMAN.—Age 24; thoroughly ... Early and Late Forcing; also Stove and ... Plants, including Orchids. Three years' good character ... place he has just left—G. W., Mr. Hurt, ... Builder, Radnor House, Radnor Street, King's ...

TO SEEDSMEN.—A person *au fait* at the ... of great experience offers his services. ... his antecedents will be found of the most satisfactory ... and his references of the highest order. ... amount.—Letters to D., favour of J. A. ... terden Street, Hanover Square, London W.

MANAGER, BOOK-KEEPER ... DENT.—A Practical Gardener ... of a considerable Nursery business will ... 25 years in the Trade. Extensive connections ... the world where Plants and Seeds are ... *Gardeners' Chronicle* Office, W.C.

TO MARKET GARDENERS, FARMERS, AND SALESMEN

GENERAL MANAGER OR SALESMAN ... practical Market Gardener, who has been ... to the entire Management (for the last 13 years ... including Selling the Produce at Covent Garden ... Testimonials as to character and ability ... leading London Growers.—A. B., Post Office, ... Peckham, Surrey, S.E.

TO ENGINEERS, HOT-HOUSE BUILDERS AND ...

FITTER.—A young man who is a thorough ... Water Engineer wishes for a constant situation ... has no objection to fill up his time in Gene... F. RUSSELL, Mr. Cook, Stationer, Desborough ... Road, W.

AGENT OR BAILIFF.—Middle-aged, ... habits; considerable experience in cultivating ... Light Land in the North and South of England ... scale, Reclaiming Waste, Drainage, &c.; practical ... with the use of Artificial Manures and growing ... Breeding and Selling Short-horn and other Cattle ... reference.—X. Y., Mr. VEITCH, Nurseryman, ... Chelsea, London, S W.

STEWARD OR BAILIFF.—A respectable ... Son, age 30; thoroughly understands his profession ... branches.—A. B., Post Office, Five Ashes, Mayfield ...

TO NOBLEMEN AND GENTLEMEN

FARM BAILIFF.—Age 26, single; has ... several years in Selkirkshire; is well acquainted ... the most improved Farming in all its branches ... dently recommended by Mr SANDERSON, Land ... Cannon Row, Westminster, S.W., to whom application ... be made.

FARM STEWARD.—A highly respectable ... and Valuer of great experience wishes to ... situation as FARM STEWARD to any nobleman or ... requiring the same; has a thorough and practical ... of everything relating to Agriculture, the Breeding ... ing of Stock, the Management of Timber, ... The highest references given.—W. C., Ford's ... posts, Southampton.

TO AGRICULTURISTS AND OTHERS.

BAILIFF.—The Son of a small Farmer ... where he would have the means of improving ... and at the same time render himself active and ... Steady, industrious, and obliging.—Mr. USHER, ... Bedford.

BAILIFF, OR GENERAL MANAGER.—A ... practically acquainted with Breeding and Rearing ... Stock, Land, Draining, and Sale or Purchase of Farm ... for the last 35 years. First class references to a ... the relatives of the Lady with whom he last ... manager for upwards of 30 years until her decease ... man in whom the greatest confidence can be placed ... good Dairywoman. Wages no great object, providing ... fortable situation is obtained.—J. C., Messrs. ... M'Mullen, Seed Merchants, 6, Leadenhall Street, London.

The Gardeners' Chronicle Newspaper.

SATURDAY, APRIL 6, 1861.

ARTIFICIAL MANURES, &c.—Manufacturers and others engaged in making ARTIFICIAL MANURES may obtain every necessary instruction for their economical and efficient preparation, by applying to J. C. NESBIT, F.G.S., &c., Principal of the Agricultural and Chemical College, Kennington, London, S. Analyses of Soils, Guanos, Superphosphates of Lime, Coprolites, &c., and Assays of Gold, Silver, and other Minerals are executed with accuracy and despatch. Gentlemen desirous of receiving instruction in Chemical Analysis and Assaying, will find ample facility and accommodation at the College.

ESTABLISHED 1821.—UNIVERSAL SUCCESS OF GRIFFIN, MORRIS, AND GRIFFIN'S MANURES. They have now been tried in 20 English counties, and extensive testimony borne to their value as Manures adapted for the TURNIP, MANGEL WURZEL, WHEAT, GRASS, AND POTATO CROPS.

Full particulars upon application to GRIFFIN, MORRIS, & GRIFFIN, [illegible] Works, Wolverhampton.

LAWES'S MANURES.
The Manures manufactured by J. B. LAWES for the present season of 1861, are now ready for delivery at his Factories, at the following prices:—

LAWES'S PATENT TURNIP MANURE, AND BONE SUPERPHOSPHATE OF LIME	£6 6
LAWES'S SUPERPHOSPHATE OF LIME FROM BURNT BONE OR MINERAL PHOSPHATES ..	5 5
LAWES'S BARLEY, GRASS, AND MANGEL MANURES	8 0

These Manures can be obtained of MR. LAWES, or through his appointed Agents, in all parts of the United Kingdom, at prices varying according to cost of carriage.

Genuine Peruvian Guano direct from Messrs. Gibbs; Nitrate of Soda, Sulphate of Ammonia, and other Chemical Manures.

American and other Cakes at market prices.

Address JOHN BENNET LAWES, 1, Adelaide Place, London Bridge, E.C.; and Liffey Buildings, Eden Quay, Dublin.

BURNARD, LACK, AND CO.'S CONCENTRATED SUPERPHOSPHATE OF LIME; guaranteed to contain Phosphoric Acid soluble, equivalent to 40 per cent. of Tribasic Phosphate of Lime.

CONCENTRATED TURNIP MANURE, equal in value to the preceding.

Of these Manures Dr. Voelcker says:—"These results must be very gratifying to you, and are the best proof of the very high agricultural and commercial value which characterises your concentrated superphosphate."

Detailed analyses, with opinions of the late and present Chemists to the Royal Agricultural Society, with Testimonials, Prices, &c., may be had on application to BURNARD, LACK, & Co., Sutton Road, Plymouth.

THE LONDON MANURE COMPANY (ESTABLISHED 1840,)
Are now prepared to send out the following MANUFACTURED MANURES:—

SUPERPHOSPHATE OF LIME, of best quality.
DISSOLVED BONES, AND BONE MANURE FOR PASTURES.
CONCENTRATED URATE.
BLOOD MANURE FOR CORN AND ROOTS.
CORN MANURE FOR TOP DRESSING.
MANGOLD MANURE.

They would call particular attention to the article DISSOLVED BONES, in which they guarantee every portion both of the soluble and insoluble phosphate, to be obtained entirely from Bones.

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116, Fenchurch Street, E.C. EDW. PURSER, Secretary.

GENUINE ROLL TOBACCO CLOTH.
WARRANTED EQUAL IN STRENGTH TO TOBACCO.

JOSEPH BAKER, 10, Gough Square, Fleet St., E.C., having dealt upwards of 20 years in the above, can recommend it as the best article for destroying the Fly. 1s. 4d. per lb.; over 10 lbs., 1s. Post-office Orders payable Fleet Street.

FOR SMOKING GREENHOUSES.

NEAL'S PATENT APHIS PASTILS light with a Candle, save all trouble, destroy all Insects, are already used in the Royal and leading Nurseries in England, Ireland, and Scotland, and may be obtained of the principal Seedsmen and Nurserymen, 2s. per packet of six Pastils.—Manufacturer and Patentee, J. NEAL, Edward Street, Birmingham.

PAGE'S BLIGHT COMPOSITION—Extra strong, 4s. per Gallon, sufficient to make Forty Ten Gallons and upwards, Carriage Free to London.

NINE YEARS extensive manufacture has enabled PAGE & TOOGOOD to effect great improvement in their Blight Composition. It is prepared upon Chemical principles, to destroy SCALE, THRIP, MEALY BUG, RED SPIDER, MILDEW, AMERICAN BLIGHT, &c., without injuring vegetation.

LONDON AGENTS:—
HENDERSON & Co., Pine-apple Place, N.W.
VEITCH & SON, Chelsea, S.W.
CUTBUSH & SON, Highgate Nursery, N.
Mr. BAINES, Camden Nursery, N.W.
Mr. HOPWOOD, Shepherd's Bush, W.
Mr. CLARK, Streatham Place, S.

The leading Provincial Houses, and of the Manufacturers and Inventors, PAGE & TOOGOOD, Royal South Hants Seed Establishment, Southampton.

GISHURST COMPOUND, for preventing and destroying Red Spider, Mealy Bug, Mildew, Thrip, Scale, Green and Brown Fly, American Blight, Ants, &c., and Bed Bugs, contains no deleterious ingredient, is recommended in *Gardeners' Chronicle*, "Cottage Gardener," *Field*, Mr. Rivers' "Orchard House," 8th edition, and Mr. Hogg's "Gardeners' Year Book for 1861."

Full directions for use and particulars of the experience of many great Gardening authorities are enclosed with the boxes of Gishurst. These are supplied retail through any Nurseryman and Seedsman at 1s., 3s., and 10s. 6d. each, wholesale, by PRICE'S PATENT CANDLE CO., LIMITED.

If the smell be disliked, make the solution 48 hours before use.

FUMIGATING AND SYRINGING.

GRIFFITHS AND AVISS, TOBACCONISTS, Coventry, call attention to their TOBACCO PAPER. It is simple in use, safe in application, altogether effective in the destruction of Green Fly, Black Thrips, &c., nominal in price, 12s. 6d. per dozen pounds (not including carriage), sent to any part of the kingdom on receipt of Post Office Order. To those in the Trade a liberal discount on 28 lbs. and upwards. The following practical gentlemen have submitted it to every kind of ordeal, and bear testimony it is all we represent:—

Mr. Charles E. West, the Earl of Denbigh, Newnham Paddox
Mr. Wm. Oliver, the Earl of Craven, Combe Abbey
Mr. A. Henderson, His Grace the Duke of Sutherland, Trentham
Mr. Wm. Pool, the Earl of Aylesford, Packington Hall
Mr. John Jennings, the Earl of Derby, Knowsley Park
Mr. Thomas Pond, the Viscount Hood, Whitley Abbey
Mr. Geo. Tranter, the Hon. Granville D. Ryder, Westbrook, Hemel Hempstead
Mr. Geo. Bennett, J. Beech, Esq., Brandon
Mr. Jas. Knackston, J. R. West, Esq., Alcot Park
Mr. W. H. Mountford, H. R. Hughes, Esq., Kinmel Park, St. Asaph, North Wales
Mr. Peter Conlon, C. Webb, Esq., The Gardens, High Grounds, Hoddesden
Mr. Francis R. Kinghorne, Nurseryman, Seedsman, and Florist, Richmond, Surrey
Mr. John Reeves, Ladbroke Nursery, Notting Hill, W.
Mr. John Jennings, Nurseries, Shipston-on-Stour
Mr. Edward Perkins, Nurseryman, Seedsman, and Florist, Leamington Nursery
Mr. John Ogden, Nurseryman, Seedsman, and Florist, Coventry
Messrs. S. Perkins & Sons, Nurserymen, Seedsmen, and Florists, Coventry

. Agents Wanted. Nurserymen and Florists preferred.

N.B. Cast Fumigating Pots, Tobacco Water for Syringing, and Tobacco Juice for Sheep Dressing.

PRIZE GARDEN AND CORN SCYTHES.

JAMES PAYNE begs to direct the attention of Farmers and Gardeners to his improved patent adjustable Scythes, which have been awarded Six Prizes, and are acknowledged to be the best implements of the kind yet invented. The adjustment is neat, simple, and effective, and the workmanship first class.

Illustrated Circulars and Testimonials on application.

Garden Scythes complete, 11s.; Corn ditto ditto, 11s. 6d.

Parties wishing the above will please order through their Ironmonger or Seedsman, who will supply them at the above prices, with carriage added.—Address, JAMES PAYNE, Ironmonger, Kirkcudbright.

TENANT FARMERS' MANURE COMPANY.

ODAMS'S BLOOD MANURE FOR CORN.
ODAMS'S BLOOD MANURE FOR ROOTS.
ODAMS'S SUPERPHOSPHATE OF LIME,

MANUFACTURED BY THE PATENT,

NITRO-PHOSPHATE OR BLOOD MANURE COMPANY (LIMITED),

Consisting of TENANT FARMERS, occupying upwards of 30,000 Acres of Land.

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Offices: 109, FENCHURCH STREET. Manufactory: PLAISTOW MARSHES, ESSEX.

JAMES AND FREDK. HOWARD,
BRITANNIA IRON WORKS, BEDFORD,
MANUFACTURERS OF
CHAMPION PLOUGHS,
HARROWS, HORSE RAKES, HORSE HOES, SCARIFIERS,
AND OTHER IMPLEMENTS.
ALSO SOLE MANUFACTURERS OF
SMITH'S STEAM CULTIVATORS,
Of which they have sold more than ONE HUNDRED SETS in upwards of TWENTY COUNTIES of England, Scotland, and Ireland. Catalogues, with full particulars, and Reports from Purchasers sent free on application.

GLASS WAREHOUSE.—ESTABLISHED 1750.
THOMAS MILLINGTON,
87, BISHOPSGATE STREET WITHOUT, LONDON, E.C.
Reduced Tariff for Horticulture, Pictures, and Dwellings.

ORCHARD-HOUSE SIZES. SMALL SQUARES.
Supplied to Mr. Rivers and many Others.

In. by In.		16 oz.	21 oz.
20 .. 12			
20 .. 13	Common, per 100 feet,	13s. 6d.	18s.
20 .. 14	Super ,,	16s.	28s.
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In. by In.	In. by In.	Per 100 feet.	Per foot.
6 .. 4	8 .. 6	Common 11s. 6d.	1½d.
6½ .. 4½	8½ .. 6½		
7 .. 5	9 .. 7	Super 12s. 6d.	1¾d.
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Squares in 100 and 200 Feet Boxes.

Inches by Inches.	Inches by Inches.	Inches by Inches.	Inches by inches.	Inches by inches.		P. 100 feet.	P. foot.
10 .. 8	12½ .. 9½	13 .. 10	15 .. 10	13½ .. 11½	4ths.	12s. 6d.	1½d.
10½ .. 8½	13 .. 9	13½ .. 10½	12 .. 11		3ds.	14s. 3d.	1¾
11 .. 9	12 .. 10	14 .. 10	12½ .. 11½	14 .. 11	2ds.	18s.	2¼
12 .. 9	12½ .. 10½	14½ .. 10½	13 .. 11		1sts	21s. 6d	2¾
15 .. 11	15 .. 12	16 .. 13	24 .. 14	24 .. 16	4ths.	13s. 6d	1¾d.
16 .. 11	16 .. 12	17 .. 13	20 .. 15	20 .. 17	3ds.	16s.	2
17 .. 11	17 .. 12	20 .. 13	22 .. 15	20 .. 18	2ds.	19s. 8d.	2½
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13 .. 12	20 .. 12	20 .. 14	20 .. 16	.. ..			
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If less quantity than 100 feet is taken, a moderate charge made for package.

GLASS CUT TO ANY GIVEN SIZES NOT ON LIST.

16 oz.—4ths, 1¾d., 2d., and 2¼d. per foot.
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21 oz.—4ths, 2¾d., 3d., and 3½d. per foot.
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HARTLEY'S IMPROVED PATENT ROUGH PLATE.
Not accountable for breakage.

GENUINE WHITE LEAD	32s. 0d. per cwt.
ANTI-CORROSION PAINT	34 0 ,,
LINSEED-OIL PUTTY	8 0 ,,
LINSEED OIL	2s. 7d. per gall.
BOILED ,, ...	3 0
TURPENTINE	2 10

BLACK, GREEN, and all other kinds of PAINTS, VARNISHES, BRUSHES, &c.

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SAMUEL N. McGERROW, General Horticultural Builder, Knotty Ash, near Liverpool.
Reference permitted to the Nobility and Gentry throughout Great Britain and Ireland.

HOT-WATER APPARATUS FITTED in every description of Hothouses, Mansions, Churches, Chapels, &c., on the most approved principle by J. Meredith, Vine Cottage, Garston, near Liverpool.
N.B. First-class references may be had on application.

JOHN TURNER, Horticultural Builder, begs respectfully to inform the nobility and gentry that he is now carrying on all the branches connected with Horticultural Works, viz., Conservatory, Greenhouse, Hothouse, Orchard House, Stoves and Pits on the most improved principles of heating and ventilation. Having had many years' experience in Horticultural Works, J. T. can assure those who may favour him with their work that the best materials only will be used. Hot bed frames of all sizes, glazed and painted, always kept in stock at the Works, Cheetham Hill, Manchester.

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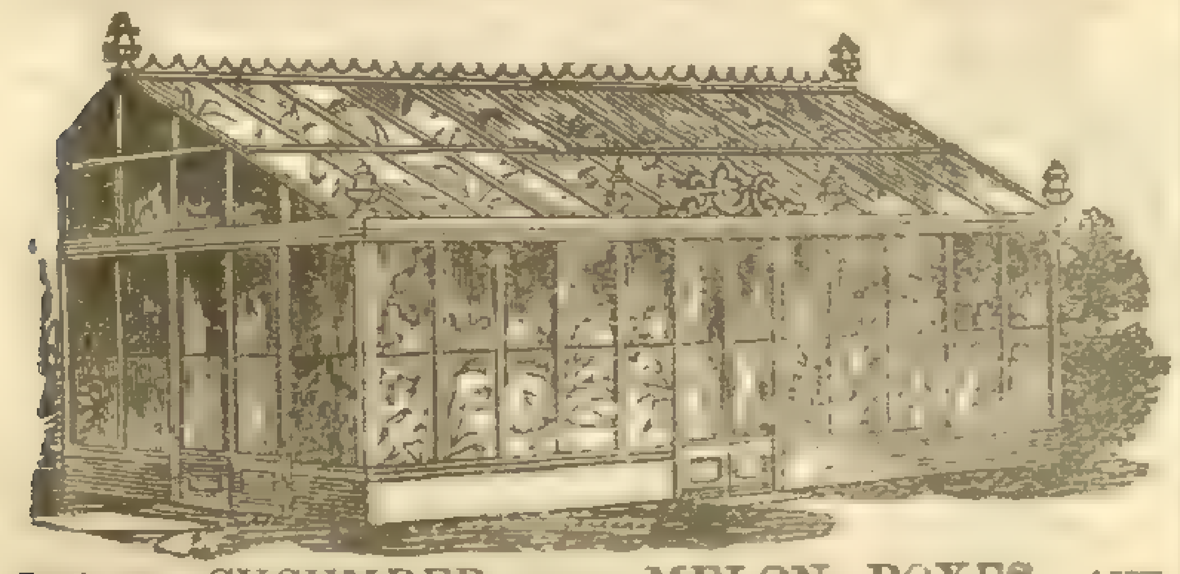
Kensal Green, Harrow Road, London, W.

JOHN TAYLOR and SON beg to call the attention of the nobility and gentry to the very superior manner in which they Erect all kinds of Conservatories, Vineries, Greenhouses, &c., combining every improvement with elegance of design and durability of materials and workmanship.
Their VENTILATING APPARATUS for the Fronts and Roofs of Houses has given the highest satisfaction. Churches, Chapels, Schools, Entrance Halls, Public Buildings, &c., heated with Hot-Water Apparatus in a most economical and efficient manner.
J. T. & Son have great pleasure in referring to numbers of the nobility and gentry by whom they are extensively engaged.

JAMES WATTS and CO., Hothouse Builders and Hotwater Apparatus Manufacturers, near the Green Man, Old Kent Road, London, S.E.



200 CUCUMBER and MELON BOXES, and LIGHTS, and from 400 to 500 LIGHTS for PITS of all SIZES kept in STOCK
Glazed and Painted complete, ready for immediate use. Packed and sent to all parts of the kingdom.

IMPROVEMENTS IN HEATING, &c.

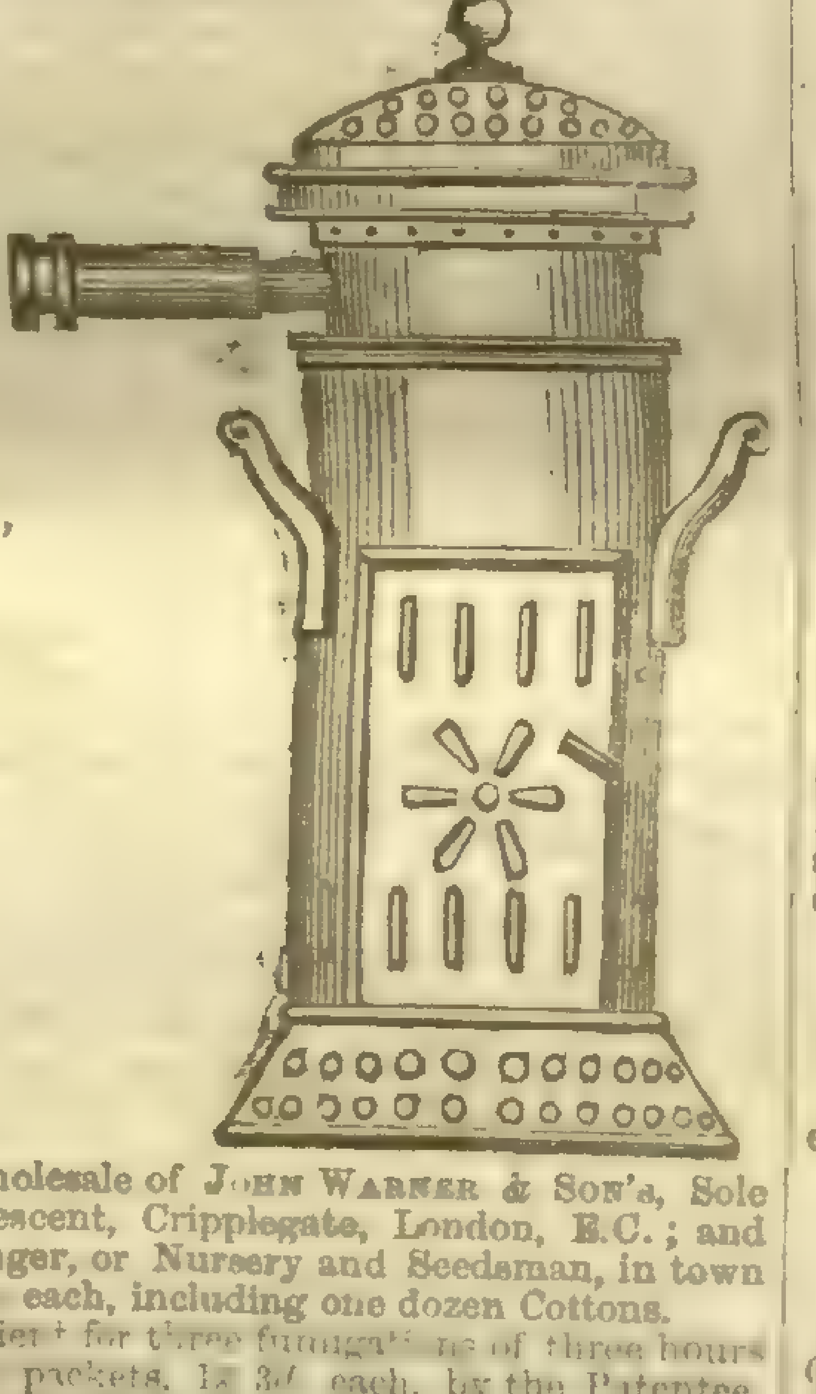
MUSGRAVE'S PATENT SLOW-COMBUSTION STOVE, for Warming Public Buildings, Hall, Shops, Conservatories, Factories, Drying Rooms, &c. Will burn in Churches from Saturday till Sunday evening, avoiding attention during the hours of worship. In Halls will burn day and night for weeks, with little care. Capable of warming a large apartment for 24 hours, at a cost of 3d.; and deserving of special attention, because of its safety, healthfulness, durability, and extreme simplicity. This Stove is the nearest approach to Warming by Hot Water.

Musgrave Brothers now make a PORTABLE GREENHOUSE STOVE with "vapour chamber" on this principle, which is a simple and economical means of Warming Conservatories of moderate size with safety to the plants.
This is the Stove so favourably noticed in the *Gardeners' Chronicle* of Saturday, December 22, 1860, page 1129.
For particulars address Musgrave Brothers, Ann Street Iron Works, Belfast.

BY ROYAL
LETTERS PATENT.

SPARY'S FUMIGATOR and MILDEW ANNIHILATOR, for the destruction of Mildew in Grapes, Vines, and Plants, without injury to the Fruit or Foliage. The efficiency of its application has been most successfully proved by practical and experienced Grape growers in Brighton and its vicinity, and from practical experience E. Spary can recommend it with the greatest confidence.

INVENTED AND PATENTED BY EDWARD SPARY, F.R.H.S. QUEEN'S GRAPERIES, BRIGHTON, SUSSEX.



To be obtained wholesale of John Warner & Son's, Sole Manufacturers, 8, Crescent, Cripplegate, London, E.C.; and retail of any Ironmonger, or Nursery and Seedsman, in town and country, price 25s. each, including one dozen Cottons.
The material (sufficient for three fumigations of three hours each time), is sold in packets, 1s 3d. each, by the Patentee, and by his Agents, Mr. W. D. Savage, 65, Edward Street, Brighton, and Messrs. Barclay & Sons, 95, Farringdon Street, London, Wholesale and Retail by Nursery and Seedsmen, full directions accompanying each packet of material & Fumigator.

J. VOKINS, late Vokins & Hurd, 2, York Place, Queen's Elm, Chelsea, S.W., HORTICULTURAL BUILDER and HOT-WATER APPARATUS Manufacturer.
Estimates forwarded.

GARDEN ENGINES AND SYRINGES.

J. TYLOR and SONS, Warwick Lane, Newgate Street, London, E.C., beg to call attention to their very superior manufacture of GARDEN ENGINES and SYRINGES

Fig. 598. J. Tylor & Sons' BARROW GARDEN ENGINE in best well painted Oak tub, fitted with J. Tylor & Sons' Improved Brass Pump, Universal Joint, and Registered Spreader, which answers the purpose of the separate rose, fan, and jet.
15 gallons .. £5 12 6 | 28 gallons .. £7 2 0

Fig. 599. Ditto GALVANIZED TINNED IRON TUB.

8 gallons	12 gallons	16 gallons	24 gallons	30 gallons
£2 15 0	£3 5 0	£3 15 0	£5 0 0	£5 18 0

Fig. 618. No. 1. REGISTERED SYRINGE, with India-rubber suction tube, one rose and jet .. £1 8 0 each.
No. 2. Ditto ditto 1 2 6 ,,
Telescope Branch Pipe for ditto .. 0 10 0 ,,

Fig. 619. Large GARDEN SYRINGE, with one rose and jet .. .. 11s. 6d. each
,, 620. Middle Ditto ditto 10 8 ,,
,, 621. Small Ditto ditto 9 0 ,,
,, 622. LADIES GARDEN SYRINGE, with do. 7 0 ,,

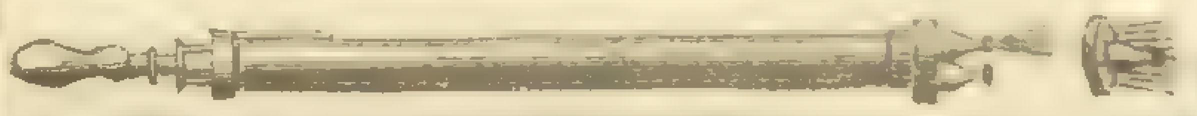
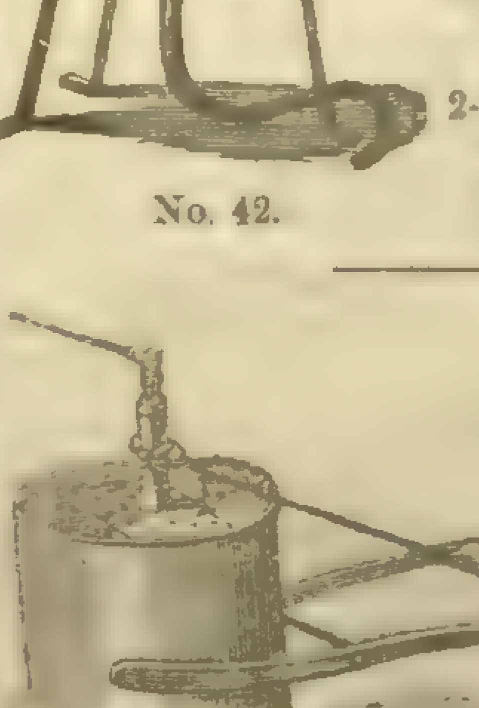


Fig. 623. READ'S SYRINGE, with two roses and one jet, 17s. 6d.
,, 624. READ'S SYRINGE, with one rose and jet, 15 0
,, 625. Improved ditto ditto large 14 0
,, 626. Ditto ditto ditto small 13 0

Garden Engines and Syringes of J. Tylor & Sons' manufacture kept in stock by Ironmongers and Seedsmen in every part of the United Kingdom.

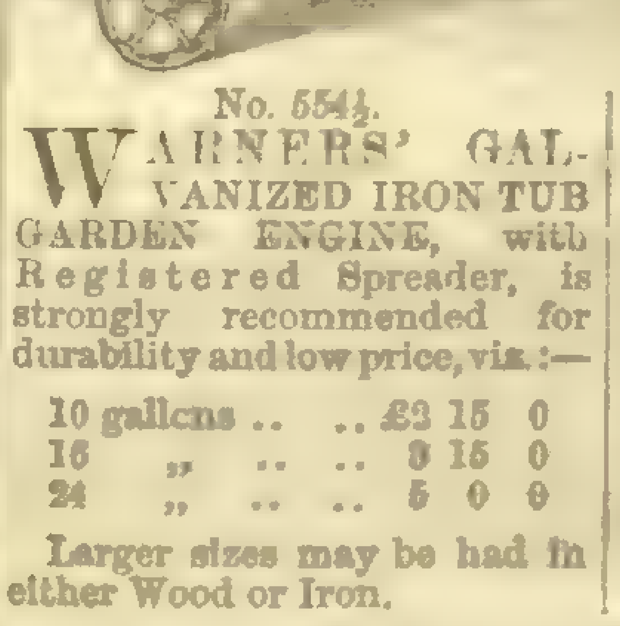
J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

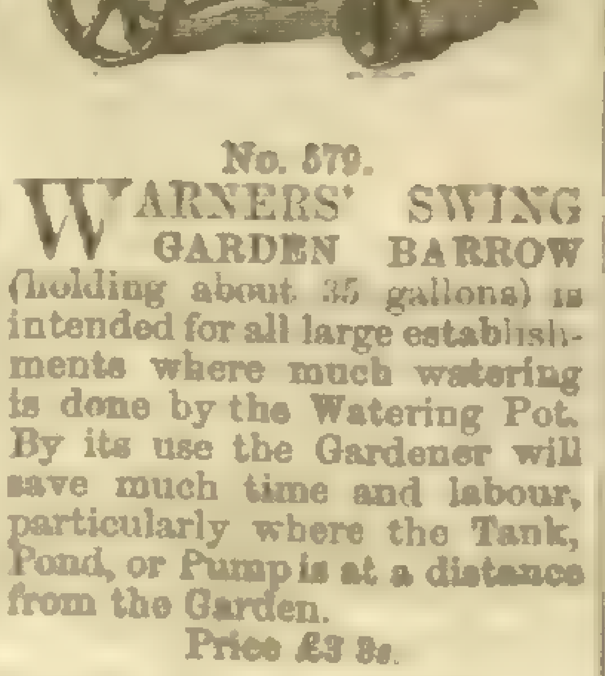
JOHN WARNER and SONS
Crescent, Cripplegate, E.C.



No. 42.

IMPROVED LIQUID MANURE OR GENERAL PORTABLE PUMP.
These Pumps are fitted with Warner's Patent Bucket and Valve, and cannot clog in action. The Barrel is made of Galvanised Iron, not likely to corrode, and can be raised or lowered at pleasure on the stand, the legs of which fold together, and may be carried with ease by one man to tank or pond £ s. d.
Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe 2 15 0
If fitted with Barrel of Planished Copper .. 3 17 0
Stand and Pump, with plain Tail Pipe, for tying on Suction Pipe 2 9 0
2-inch Patent Rubber and Canvas Flexible Suction Pipe, on wires, either 10, 12, or 15 feet .. .. per foot 0 2 2



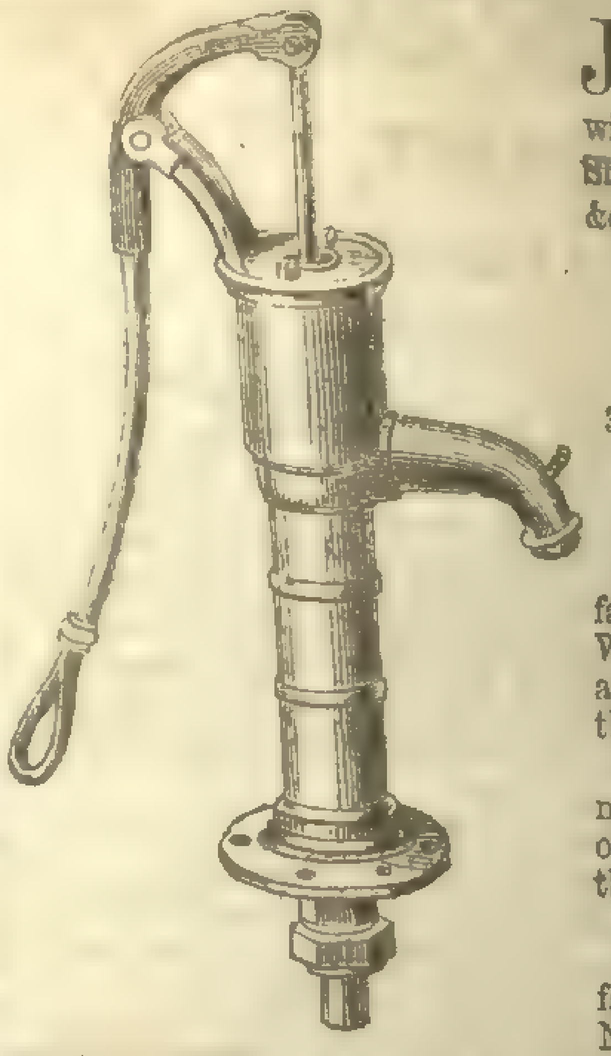


No. 554½.
WARNERS' GALVANIZED IRON TUB GARDEN ENGINE, with Registered Spreader, is strongly recommended for durability and low price, viz.:—
10 gallons £2 15 0
16 ,, ... 3 15 0
24 ,, ... 5 0 0
Larger sizes may be had in either Wood or Iron.

No. 579.
WARNERS' SWING GARDEN BARROW (holding about 35 gallons) is intended for all large establishments where much watering is done by the Watering Pot. By its use the Gardener will save much time and labour, particularly where the Tank, Pond, or Pump is at a distance from the Garden.
Price £3 3s.

BRASS SYRINGES, from 9s. to 21s.

May be obtained of any Ironmonger or Plumber in Town or Country, at the above prices, or of the Patentees and Manufacturers,
JOHN WARNER and SONS,
8, Crescent, Cripplegate, London, E.C.
☞ Engravings sent on application



J. TYLOR an[d] ... PATENT ... with ... Shallow Wells ... &c. Price ...
IRON ... AN[D] ... GARDEN ...
3 feet 6 inches ...
2½ 3 ...
43s. 53s. ...
J. TYLOR ... facture PUMPS ... WELLS which ... any fixing ... the ground.
PUMPS ... manufacture ... of Plumbers ... the United K[ingdom].
J. Tylor ... facturers, ... Newgate Street ...

PRICES REDUCED

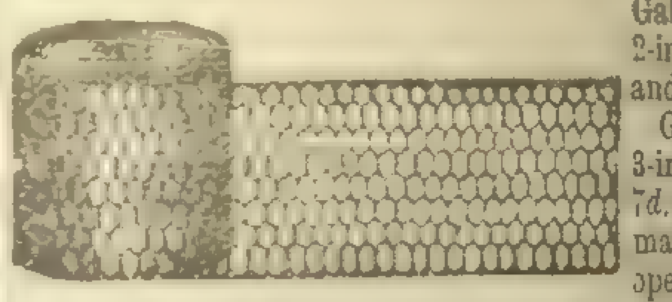
H. J. MORTON and CO., Galvanised ... 2, Basinghall Buildings, Leeds

GALVANISED IRON ROOF...
for Farm Buildings and other Roofs; the cheape[st] ... able, and neatest Roofing in use; also Spouting ...

WIRE STRAND CABLE FENCING

(formed of Twisted Wires like a rope or cable) ... cheapest, and neatest fence in use, will resist ... and will not bend or get out of form by tres[passing] ... over. Price, with five lines of the Galvanised Stra[nd] ... posts, and pronged Standards, 1s. 2½d. per yard.
This fence is far cheaper than posts and rails, ... iron fencing; and possesses four times the stre[ngth] ... bars. Will not rust nor corrode. Upwards of ... this Fencing supplied.

GALVANISED GAME AND POULTRY ...



Galvanised, ... 2-inch mesh, ... and 9½d. per ya[rd] ... Galvanised ... 3-inch mesh ... 7d. per yard. ... made any wid[th] ... openings of any ...

GALVANISED IRON CHAIN CAMP STOOLS & ... POULTRY FOUNTAINS & FEEDERS, PRONGED ... RODS and ROSE STAKES, &c.
Strong CATTLE HURDLES from 2s. per yard.

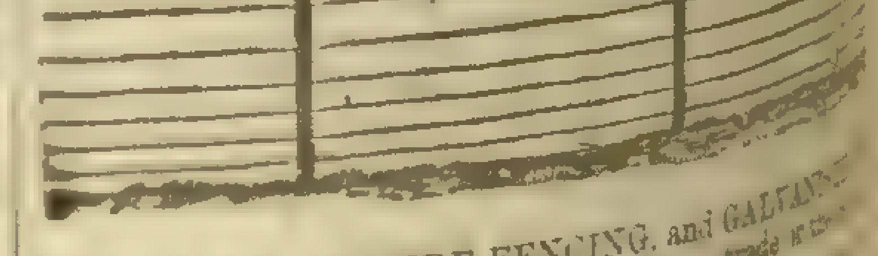
PATENT IMPROVED GAS WORKS
of all sizes, for the use of Private Houses, ... Stations, Mills, Collieries, Mines, Villages & ... 10 to 500 lights estimated for. The w... an ordinary labourer.—Apply to
Henry J. Morton & Co. 2, Basinghall Buildings ...

BARNARD, BISHOP, and BARNA[RDS], NORWICH.
FURTHER REDUCTION IN THE PRICE OF ... NETTING.

BARNARD, BISHOP, and BARNARDS beg to ... friends and the public that they have made a ... in the prices of Machine made Wire Netting, and ... their Nettings are now Galvanised after being ... adds much to the appearance, strength, and dura[bility] ...

	Guage.	Galvanised per yard
2-inch mesh, 24 inches wide ..	No. 19 ..	4½
2-inch ,, ,, ,, ..	,, 18	5
2 inch ,, ,, ,, ..	,, 17 ..	6½
2 inch ,, ,, ,, ..	,, 16 ..	8
1½ inch ,, ,, ,, ..	,, 19 ..	[illegible]
1½ inch ,, ,, ,, ..	,, 18 ..	6
1½ inch ,, ,, ,, ..	,, 17 ..	[illegible]
1½-inch ,, ,, ,, ..	,, 16	9

All the above kinds can be made any width ... at proportionate prices.
Strong Galvanised Poultry Netting, 8½d. per yard ... Galvanised Sparrow-proof Netting for Pheasantries ... yard, 3 feet wide. Wire Netting of every mesh from ... inch to 6 inches.



Reduced Price of WIRE FENCING, and GALVANISED ... ROPE FENCING, suitable for the home trade ...
Five wires, 3 feet 6 inches high, pronged standards ... apart, one wrought iron straining post and stra[iner] ... to each 100 yards of Fencing, 10d. per yard!
The same with Galvanised Wire Rope, 1s. per yard ...
Illustrated Catalogues with prices of every variety ... Fencing and Wire Netting forwarded free on application ...
☞ Wire Fencing and Netting delivered Carriage Free ... the principal Railway Stations.

GLASS FOR GREENHOUSES.
ENGLISH GLASS.
[illegible] squares averaging 40 by 30, packed in [illegible] per Case.
FOREIGN SHEET GLASS.
[illegible] 1l. 12s. 6d.; Superior, 2l. 14s. 6d.; [illegible] Superior, 4l. 1s.
GLASS cut to any given sizes not on List.
[illegible] 2½d. per foot
[illegible] and 3d. per foot
[illegible] and 3½d. per foot
[illegible] and 4½d. per foot
GLASS FOR ORCHARD HOUSES,
As supplied by us to Mr. Rivers.

		16 oz.		21 oz.
[illegible]	Common	13s. 6d.	..	£1 1s.
[illegible]	Superior do. ..	16 0	..	1 3
[illegible]	English Glass	18 0	..	1 9

The above prices include the Boxes.
[illegible] Hartley's Improved Patent Rough Plate. [illegible] White Lead, Carson's Paints, Paints [illegible] ready for use. [illegible], and every description of [illegible] purposes.
JAMES PHILLIPS AND CO.,
180, Bishopsgate St. Without, London, E.C.

GARDEN WATERING ENGINES, PAIL-MACHINES, CONSERVATORY PUMPS, and GREENHOUSE SYRINGES, with all the latest improvements. Manufactured only by the Patentees, [illegible], Piccadilly, London, W. [illegible] and Drawings post free.

GREENHOUSES, ORCHARD HOUSES, &c.
H. FREEMAN'S Horticultural Works, Triangle, Hackney, N.E. Established 20 years. Substantially [illegible] glazed, ready for fixing, 42 feet by 13 feet, [illegible] feet by 10 feet, 15l. Orchard [illegible] cheaper. A large assortment kept. [illegible] Heating or any branch in iron or wood.

LINGHAM, BROTHERS, 170, Hampton Street, [illegible] Sole Manufacturers of the Improved MONO-[illegible] WOOD LABELS for Garden Borders, Flower [illegible] each. These Labels have now stood the [illegible] for many years, and are acknowledged by [illegible] as superior to any offered to the public, [illegible] utility, and economy in price.—Sole Agents in London, Messrs. DEANE & Co., Horticultural Implement Warehouse, 46, King William Street, London Bridge, E.C.

INDELIBLE GARDEN TALLIES.— Mark your Tallies of wood, parchment, or zinc for the greenhouse or [illegible], with DUNN'S PATENT SOLID MARKING INK [illegible], and they will be indelible. Retail at Messrs. BUTLER [illegible] and Messrs. HOOPER & Co., Covent Garden, [illegible], High Holborn, W.C.; T. BRIGDEN, [illegible], London Bridge, S.E.; and all Nurserymen and Seedsmen, Chemists, Stationers, &c. With screw-holder, [illegible]; will refill for 1s.; by post for 19 penny stamps. Wholesale by J. LUSHER, 19, Holborn Hill, E.C.; [illegible] Street, E.C.; or any other wholesale house; and JOHN MACKAY, 121, George Street, Edinburgh. N.B. These Pencils are unequalled for marking indelibly on Linen, &c., for which purpose a much finer point is made, at the same price, than that contained in the Gardener's Pencil. Exposure to light or heat renders it permanent.

FOR GARDEN POTS, SEND YOUR ORDERS TO J. AND W. ADAMS, KILNS, Belle Isle, York Road, N., and be promptly attended to. Town and Country supplied.

TERRA COTTA.—Warranted to stand the most severe frost. This material is especially fitted for [illegible] Decorations, and for all exposed work, such as Fountain Basins, Garden Vases and Statues, Balustrades, [illegible] for Terraces and Parapets, Terminals, Crosses for [illegible] of Columns, Brackets, Consols, Chimney [illegible] Pots, and all other work exposed to wet, heat, and [illegible] M. BLASHFIELD, Stamford, Lincolnshire. [illegible] be seen at 15, Great Marlborough Street, [illegible] the Works, Stamford, Lincolnshire.

GARDEN BORDER EDGING TILES.
F. AND G. ROSHER, CEMENT, BRICK, AND TILE MERCHANTS, beg to invite attention to their varied Stock of ORNAMENTAL GARDEN BORDER-EDGING TILES in Terra Cotta, Terro-Metallic ware, and Red ware. They present advantages over Box or Grass-edging in [illegible] harbour for slugs, &c., take up less room, [illegible] require no further attention. They may [illegible] patterns at F. & G. R.'s premises; Ward's [illegible] Ground Street, Blackfriars, S.; and Kingsland [illegible], near the Canal Bridge, London, N.E.
N.B. [illegible] of patterns sent by post on application. [illegible] and Ornamental Flower Boxes for Windows and [illegible].

ORNAMENTAL PAVING TILES FOR CONSERVATORIES, HALLS, CORRIDORS, BALCONIES, &c., [illegible] durable as Stone, in blue, red, and buff colours, [illegible] forming a variety of designs.
[illegible] WHITE GLAZED TILES, for Lining Walls of Baths, [illegible], Kitchen-ranges, &c. Grooved Terro-[illegible] Stable Paving Bricks of great durability, [illegible] and White Wall-Copings, Glazed Drain Pipes, &c. [illegible] F. & G. ROSHER, at their premises as above.

DIPPENHALL FIRE BRICK FACTORY, near Farnham, Surrey.—Manufactory for Fire Bricks, White, Red, and [illegible] Bricks, Plinth Bricks of various shapes [illegible]; ornamental Garden Edgings, [illegible] Pots, and Vases in great variety; superior [illegible] Red, Buff, and White Paving Tiles, for [illegible]. All kinds of Ornamental Ridge [illegible] Pipes, Bends, and Junctions; Ornamental [illegible] Tiles to any pattern or colour.—Apply [illegible], Manager of the Works. Agent for [illegible], Builder.

WHY NOT PRESERVE YOUR HAY? BENJAMIN EDGINGTON, Rick Cloth, Marquee, and [illegible] Street, London Bridge, S.E. [illegible] SECOND-HAND MARQUEES, TENTS, and [illegible] greatly reduced prices. [illegible], Charing Cross, S.W. [illegible] free by post. [illegible] Duke Street, Southwark, S.E.

PRIZE FENCING FOR AGRICULTURAL PURPOSES.
[illegible] MANUFACTORY—LIVERPOOL.
FRANCIS MORTON'S Patented Improvements in STRAINED WIRE FENCING, [illegible] SILVER MEDALS by the principal Agricultural Societies, [illegible] means of constructing a permanent [illegible] cost. [illegible] per yard of Fence. Drawings and full [illegible] on application to FRANCIS MORTON AND CO., Sole Manufacturers and Patentees, Liverpool. London Office: 19, Parliament Street, Westminster, W.

STRAW MATTING OR THATCH is the best covering from frost for Hot-beds, Wall Fruit, Seedings, &c. MACHINES to weave the Matting [illegible] by MAGGS & [illegible].

TANNED GARDEN NETTING for preserving Seed Beds, Fruits, Strawberries, from Frost, Blight, Birds, &c., and as a Fence for Fowls, &c. 1 yard wide, 1½d.; 2 yards, 3d.; 3 yards, [illegible]; [illegible] yard, in any quantity, may be had at [illegible], Strand, W.C.
Greenhouse and Flower-pot Sticks [illegible] 14, 4d.; 2, 5d.; [illegible] Sticks Varnished, [illegible] 6, 3s. 6d. An allowance to Nurserymen.

TANNED NETTING AT REDUCED PRICES.— 200 square yards [illegible] yards, 47s. SCRIM CANVAS for WALL FRUIT, GREENHOUSE SHADES and TULIP COVERS.
ADDRESS IN FULL,
FREDERICK EDGINGTON,
MARQUEE, FLAG, AND BANNER MANUFACTURER,
Thomas Street, Old Kent Road, London, S.E.

NETTING for Fruit Trees, Seed Beds, Ripe Strawberries, &c. TANNED NETTING for Protecting the above from Frost, Blight, Birds, &c., 2 yards wide, 3d. per yard, or 100 yards, 20s.; 4 yards wide, 6d. per yard, or 50 yards, 20s. New Tanned Netting, suited for any of the above purposes, or as a Fence for Fowls, 2 yards wide, [illegible] per yard; 4 yards wide, 10d. per yard; 6 yards wide, 1s. 3d. per yard. ½-inch mesh, 4 yards wide, 1s. 4d. per yard.—Can be had in any quantity of EATON & DELLER, 6 and 7, Crooked Lane, London Bridge, E.C.

BRITTAIN'S GARDEN NETTING.—The serious injury done to Fruit Crops by Frost for several past seasons has proved the absolute necessity of providing protection to the Trees early in the year. For this purpose, we may now say, without fear of contradiction, that we have succeeded in manufacturing the only Fabric which is altogether unobjectionable. Without unduly excluding, it effectually protects the young germ, and does not impede the action of light and due circulation of air.—NETTINGS: No. 1, 5d.; No. 2, 6d.; No. 3, 8d. the linear yard. [illegible] inches wide. TIFFANY, yard wide, 2½d. per yard; extra quality, 3d.
Peel Street, Manchester.

CHURNS.—The Royal Agricultural Society's Prize CHURN is the best invented. Butter produced in 12 minutes. Price 30s. and upwards.—Full particulars forwarded on application to BURGESS & KEY, Agricultural and Gardening Machinery Stores, 95, Newgate Street, E.C.

JOSEPH HAYWOOD AND CO.,
MANUFACTURERS OF PRUNING AND BUDDING KNIVES, SPORTSMAN'S, and all kinds of POCKET CUTLERY.
Dealers in Gambia Garden Shears, Scissors, Syringes, &c.
GLAMORGAN WORKS, Sheffield.

PAXTON WORKS, SHEFFIELD, ESTABLISHED 1738

SAYNOR AND COOKE'S warranted PRIZE PRUNING and BUDDING KNIVES, SCISSORS, &c.— Sold by all respectable Nurserymen and Seed Merchants in the three Kingdoms.

PRIZE LIQUID MANURE DISTRIBUTOR.

JAMES'S PATENT LIQUID MANURE DISTRIBUTOR OR WATER-CART, warranted not to choke up or otherwise get out of order. It is [illegible] adapted for Drill Crops, or Pasture Land, or for Watering Streets; has been awarded NINE FIRST PRIZES.
Full Particulars and Testimonials may be obtained of the Patentee, ISAAC JAMES, Tivoli Waggon Works, Cheltenham.
N.B.—Improved LIQUID MANURE PUMPS, either fixed or portable.

BRADFORD'S PATENT WASHING MACHINE. —"My experience of your Machine [illegible] Mr. [illegible] accounts [illegible] reputation."—[illegible]

For Private Families .. No. 2
Washing, Wringing, and Mangling [illegible]
For Family [illegible] .. No. 4
For Hotel, Hospital, Work-house, or other Public Institution .. No. [illegible]
Full particulars [illegible] invaluable [illegible] free by post.
THOS. BRADFORD, Patentee, Cathedral Steps, Manchester; and 63, Fleet Street, London, E.C.
Works, Queen Street, Salford, Manchester.

"FRIGI DOMO."—Patronised by her Majesty, the Queen, the Duke of Northumberland [illegible] House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, [illegible] Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.
PROTECTION FROM THE COLD WINDS & MORNING FROSTS "FRIGI DOMO," a Canvas [illegible] Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.
Two yards wide .. .. 1s. 6d. per yard run.
Four yards wide .. .. 3s. per yard.
An improved make, 3 yards wide, [illegible] per yard run.
Also "Frigi Domo" Netting, 2 yards wide, 1s. 4d. per yard run.
ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen [illegible]. "It is much cheaper than mats as a covering."

REAPING AND MOWING MACHINES
THE FIRST CONSIGNMENT JUST ARRIVED.
"Mr. Wood has sent across the Atlantic the most useful Reaper and Mower yet invented, and RICHMONDS AND NORTON, of Liverpool, set them agoing anywhere, and any day at an hour's notice."
The careful attention given to the manufacture, combined with correct principle and mechanical proportions, aided by the Patentee's long experience in the United States, has undoubtedly placed it foremost as the most simple, efficient, and durable machine yet made.
[illegible] these Machines [illegible] in this country with the most complete success, as is amply testified by the users of them, many of whom have kindly permitted reference to be made to them. These Machines are unsurpassed in lightness of draft and quality of work, and will cut any kind of Grass or grain at the rate of One Acre per hour.
Machines are ready for immediate delivery, and a Man sent to start each (by payment of expenses). Testimonials and further information may be obtained on application to
RICHMONDS & NORTON, European Stores, Sea Brow.
Head Office:—South John Street, Liverpool.
*** Agents for SAMUELSON'S Patent Improved LAWN MOWING MACHINES.

REAPING AND MOWING MACHINES.
BURGESS AND KEY, 95, Newgate Street, E.C. PRIZEHOLDERS for the best Agricultural Machinery Manufactured.
ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price 42l. 10s.
TESTIMONIALS.
A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following from
MR. JAMES ARNOT, of Woodcote, Carshalton.
"Having used your Machine for four years, I would not be without one on any consideration; and I can safely say that I have saved over 50 per cent. in the expense every year I have used it. In fact I have never yet seen an implement which pays itself in so short a time."
M'CORMICK'S REAPER for Manual Delivery. Price 25l.
ALLEN'S GRASS MOWER, which received the last prize given by the Royal Agricultural Society. Price 30l.
ALLEN'S GRASS MOWER, for one Horse. Price 22l. 10s.
COMBINED REAPER AND MOWER—Two-Horse Machine. Price 35l.
COMBINED REAPER AND MOWER—One Horse Machine, Price 24l.
The last two Machines are fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.
These Prices include Packing and Delivering at any Railway Station.

JOHN FOWLER, JUN., 28, Cornhill, London, E.C.— Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address. CATALOGUES containing Prices and Testimonials sent post free.

HORTICULTURAL AGENT AND VALUER.
MR. A. CHANDLER (of the late Firm of CHANDLER & SONS), 28, Priory Road, Wandsworth Road, S., begs to offer his services as above. Sales of Plants and Nursery Stock arranged, and Catalogues prepared.

JUPP'S HORSE AND CATTLE FOOD is the cheapest and the best, 35s. per cwt. Quality guaranteed by Dr. Letheby's Analysis.
New PIG AND POULTRY FOOD, 16s. per cwt.
W. & R. JUPP & Co., 6, Cross Lane, Eastcheap, E.C.
*** Agents wanted in all large towns.

News of the Week.

A DESPATCH from Turin announces that Lord JOHN RUSSELL has officially notified to the Marquis D'AZEGLIO that the QUEEN of ENGLAND will receive him as Minister of the KING of ITALY, and that the Federal Council of Switzerland has made a similar announcement to the Sardinian minister at Berne. General GARIBALDI arrived at Turin from Caprera on Tuesday, and had a long interview with KING VICTOR EMMANUEL but the subject of the conference is not known. He has been received with the greatest enthusiasm by the people, and it is said that he has consented to receive a deputation from the city of Naples. The official journal of Wednesday published an important article on the Roman question, in which it says that the French occupation cannot be further prolonged without rendering the position of France more difficult, and that the national army can fulfil with dignity the mission of the French army from the moment that Italy grants guarantees for the security of the POPE and the freedom of the Church.

From Paris we learn that all the Marshals of France are summoned to attend an extraordinary

Council of War at the Tuileries on Monday next, and that the EMPEROR, on Thursday, commenced a series of reviews of all the divisions of the Paris garrison. Prince MURAT has published a letter expressing doubts as to the success or stability of Italian unity, and offering to undertake the reconstitution of the Neapolitan kingdom, on being proclaimed Sovereign, as the son of JOACHIM MURAT. The *Moniteur* and the *Constitutionnel* declare on authority that this letter is altogether of an individual character, and in no way engages the policy of the Government, to which they say it is evidently contrary.

A Ministerial crisis has occurred at Vienna. Baron SCHMERLING and the German members of the Cabinet tendered their resignations, on the ground that the EMPEROR was disposed to make concessions to Hungary of which they did not approve. The EMPEROR has since rejected the democratic programme of the Hungarian leader, M. DEAK, who demanded the absolute separation of the Administration of Hungary from that of Austria. His Majesty has also declared that he intends to abide by the reforms he has already granted. In consequence of this declaration, Baron SCHMERLING and his colleagues have withdrawn their resignations, and remain provisionally in office. The formal installation of the members of the Hungarian "Curia Regia" took place at Pesth on Wednesday, when the PRINCE PRIMATE delivered a speech in the Hall of Assembly, in which he laid particular stress on the importance of the concessions obtained from the Government. The opening of the Diet is expected to take place at Buda to-day.

Prince GORTSCHAKOFF, the Minister of Foreign Affairs, has addressed a circular to the Russian representatives abroad, stating that the EMPEROR has taken the initiative by granting reforms, and desires that what he has granted shall become a reality and open to Poland a path of regular progress. The latest news from Warsaw, dated Thursday last, states that great agitation has been again produced by a manifesto published by the Governor, and a speech recently delivered by him. The citizens immediately resolved to wear the deepest mourning. The persons intrusted with the maintenance of public order returned their cards of office, and a large number of the delegation of citizens declared their intention to tender their resignations. Count WIELOPOLSKI having made urgent representations to the Prince Governor on this critical state of things, the Prince published a second address, which tranquillised the public mind. These events in Warsaw have not been without their influence on Prussian Poland. On Sunday last serious riots took place at Kalisch, where a crowd of 3000 persons assembled, and made an insulting demonstration before the house of the captain of the district. The rioting was renewed on Wednesday, when crowds of people assembled at the frontier station, and made a hostile demonstration before the house of the director. The Government has since given orders to suppress the disturbances by military force if necessary.

A despatch from Constantinople states that Sir HENRY BULWER has presented to the Porte a project of financial reform, embracing retrenchment, the publication of a budget, the consolidation of the debt, and the issue of guaranteed paper-money, and that the project has been well received by the Divan. The report that Spitza, in Albania, has been invaded by Garibaldians, is said to be entirely without foundation. The Porte has ordered the blockade of the coast of Montenegro, and it is expected that OMAR PASHA will be appointed commander of the army in Bosnia and the Herzegovina.

From the United States we learn that Mr. LINCOLN still refused to receive the Southern Commissioners, and that some of the leading members of the Administration had expressed their opinion that the most practicable solution of the existing troubles was a peaceable separation. It was reported that Major ANDERSON would surrender Fort Sumter on the 23d ult. In the Senate the Committee on Foreign Relations had recommended that the dispute with Great Britain respecting the island of San Juan should be referred to the arbitration of Switzerland.

The Revenue Returns for the year and quarter ended the 31st March were published on Monday. They show a decrease of 805,995*l.* on the year, and a decrease of 1,683,821*l.* on the quarter.

Home News.

THE COURT. — The Queen and Prince Consort, accompanied by the Prince of Wales, Princesses Alice, Helena, Louisa, and Beatrice, Prince Arthur and Prince Leopold, left Windsor Castle on Wednesday for Osborne. In consequence of the mourning for the Duchess of Kent, the usual guards of honour and all ceremonies were dispensed with, by her Majesty's command. On Good Friday morning the Queen and Prince Consort, the Prince of Wales, the Crown Princess of Prussia, and the Princesses Alice, Helena, and Louisa, attended Divine service in the private chapel. The Dean of Windsor administered the sacrament, and the Rev. H. J. Ellison, vicar of Windsor, preached the sermon. On Saturday morning the Prince Consort came to town and presided at a meeting of the Committee of the Horticultural Society at South Kensington. The Duke of Cambridge, the Prussian Minister and Countess Bernstorff visited the Crown Princess of Prussia. On Sunday morning, being Easter Day, the Queen and Prince Consort, the Prince of Wales, the Crown Princess of Prussia, the Princesses Alice, Helena, Louisa, Prince Arthur, and Prince Leopold attended Divine service in the Private Chapel. The Dean of Windsor performed the service, and administered the Sacrament. The Prince of Leiningen arrived at the Castle. His Serene Highness left on Monday for the Continent.

THE CROWN PRINCESS OF PRUSSIA left Windsor Castle at 7 o'clock on Tuesday morning for Dover on her return to Berlin. The Prince of Wales accompanied his sister to Dover, and returned to the Castle in the afternoon.

PRINCE ALFRED left Barbadoes in the St. George on the 1st ult. for St. Vincent, Martinique, Dominica, Guadaloupe, Antigua, Port au Prince, and Jamaica. At Barbadoes and St. Vincent he received the most enthusiastic welcome; and though his visit to Martinique was understood to be of a private character, the French governor, Admiral de Maussion de Candé, gave him a distinguished reception, accompanying his Royal Highness everywhere, so that the military honours paid to the Prince might be excused as having been paid to himself as governor. The public rejoicings on the occasion were also most brilliant, and included a dinner, a ball, an illumination, and fireworks. The St. George left Martinique on the 10th, for Dominica and Guadaloupe. The Jamaica House of Assembly had voted 1000*l.* for his Royal Highness's reception.

THE LATE DUCHESS OF KENT.—It is understood that the Duchess of Kent has, by her will, appointed the Prince Consort her sole executor, and that the bulk of the property is placed at her Majesty's disposal. On the day of the funeral, after the household had returned to Frogmore, a paper was read stating that all the servants would be liberally provided for, her Royal Highness having, by her will, left 3000*l.*, to which her Majesty had added 2000*l.*, to be divided in proportions, regulated according to the time of servitude and position in the household, and that the servants would be pensioned on a scale similar to that by which her Majesty's servants are provided for.

RETURN OF LORD ELGIN FROM CHINA.—The Earl of Elgin arrived at Trieste on Friday in her Majesty's steam frigate Terrible, and will probably arrive in Paris to-day. His Excellency is not expected to return to England till next week.

THE GOVERNOR-GENERALSHIP OF INDIA.—It is stated that the Duke of Newcastle will succeed Lord Canning as Governor-General of India, and that he will probably leave England during the month of May.

THE ARMY.—The colonelcy of the 12th Light Dragoons, vacant by the death of Sir Lovell Lovell, has been conferred on Major-General Lockwood; the colonelcy of the 6th Foot, vacant by the death of General Riddell, has been conferred on Lieut.-General the Hon. Sir Charles Gore; and the colonelcy of the 91st Foot, vacated by this promotion, has been conferred on Major-General Charles Murray Hay.

THE DOCKYARDS.—Captain E. G. Fanshawe has been appointed Captain Superintendent of Chatham Dockyard, in the room of Captain Goldsmith, whose period of service has expired.

THE CHANNEL FLEET. — The Hero, Donegal, Aboukir, Conqueror, and Centurion, part of the Channel fleet wintering at Plymouth, have been ordered to take in stores for Channel cruising.

THE SOUTH AMERICAN COMMAND.—Rear-Admiral R. L. Warren has been appointed commander-in-chief on the South American station, in the room of Rear-Admiral Sir Henry Keppel, who has been superseded at his own request.

PARLIAMENTARY MOVEMENTS. — The Right Hon. Sir David Dundas has been elected for ...
without opposition in the room of ...
Stafford, now Duke of Sutherland.

THE REVENUE.—The Revenue re...
and quarter ended March 31, show ...
805,995*l.* on the year, and a decrease ...
the quarter. The year's account sh...
the Customs of 1,155,125*l*; Excise, ...
105,000*l.*; Miscellaneous, 348,483*l.*; ...
in the Stamps of 304,814*l.*; Property Ta...
Post Office, 90,000*l.*; Crown Lan... The
quarter's account shows a decrease in the ...
of 1,978,000*l.*; Post Office, 20,000*l.*; ...
390,357*l.*; and an increase in the Customs ...
Excise, 366,000*l.*; Stamps, 63,154*l.*; ...
Crown Lands, 1000*l.*

THE VOLUNTEER MOVEMENT.—The
Review and sham fight at Brighton, wh...
the last three weeks given rise to ...
among the metropolitan corps, took ...
Everything which could add to the eff...
display was in its favour. Unlike the ...
metropolis, the day was all that cou...
Brighton,—clear, mild, and genial. The ...
mense concourse of spectators, 80,000 ...
come from all parts of the country ...
fight. The day was kept a general ho...
and, in short, no accessory was wanting ...
éclat to the whole demonstration. The ...
of the Volunteers on the ground was ab...
4000 of whom came from London. The ...
ments began to arrive a little before ...
railway arrangements were excellent. The ...
up outside the ordinary passenger sta...
outbuilding for rolling stock, capable ...
5000 men. The men formed up at on...
space beyond the shed, and thence marched ...
by their bands, along the Moutpelier Road ...
open space called the Level, where they ...
into battalions. About noon the Earl ...
Lord-Lieutenant of the county, took up h...
Grand Stand, accompanied by Major-Genera...
Scarlett, Military Commandant of the dis...
Staff, representing the authorities of the H...
Before 12 the Volunteers began moving ...
by different routes, and were gathered in ...
of companies on the brow of the hill next ...
the Stand. At a little after 1 the marching ...
menced in the following order:—

Staff of Lord Ranelagh.—Lord Seymour, 1st ...
Light Horse; Captain Temple, 1st Dorset. ...
1st Devon; Captain Richardson; R. Nevile ...
Surrey Yeomanry; Captain Trewman, 19th Surrey ...
Cox, 2d South Middlesex; Lieutenant ...
Middlesex. Military Secretary: Captain ...
South Middlesex Victoria Rifles. *Artillery Brigade.*—
Estridge commanding. 1st Battalion ...
4th Battalion, Cinque Ports, ...
1st Brigade Infantry. — Lieut.-Colonel ...
ing; Captain Deedes, Brigade Ma...
Colonel M'Leod: 1st Middlesex Engineers ...
Major Atherly: 32d Middlesex Guards ...
Captain Ives: 2d South Middlesex: 11th ...
George's: 36th Middlesex, Paddington. ...
Radstock commanding; Captain ...
1st Battalion, 9th Middlesex, West: 2d ...
Battalion. 2d Battalion, Colonel Money: ...
4th ditto and 7th Islington. 3d Battalion, ...
39th Middlesex (Clerkenwell); Kent Rifles (...
17, 21, 34). *3d Brigade.* — Colonel Moorsom ...
Major Penton, Brigade Major. 1st Battalion, ...
Administrative Sussex. 2d Battalion: 1st ...
3d Battalion: 2d Battalion Administrative Sussex. ...
—Colonel Valancy commanding; Major Deedes, ...
1st Battalion, Colonel Conran: 1st Hants (...
ditto; 4th (Havant); 5th (Portsmouth); ...
2d Battalion (Major Roupell, M.P.), 19th Surrey ...
10th Surrey (Bermondsey). 3d Battalion, ...
Fletcher: 6th Surrey (Esher); 20th ditto (...
—3d City of London; Brighton Cadets; 11th ...

The marching past took place in open col...
panies. The whole body then proceeded ...
of the amphitheatre in front of the Grand ...
formed line on the crest of the second hill ...
lery took up position on the left, resting ...
having on their right the 4th Brigade, ...
in succession, the Middlesex Engineers, ...
Guards, and the South Middlesex being on ...
right. The engagement was commenced ...
line was formed by four field pieces open...
whole line immediately commenced firing ...
companies, upon the enemy, who were ...
advancing after landing at Brighton. The ...
ordered to retire, upon which the line for...
panies into solid battalions. and proceeded ...
hill. Behind the crest of this they refor...
this time, whether from accident or desi...
patch of furze between the line and the ...
was set on fire, producing at a distance th...
village in flames. The left was here ...
to receive the enemy's cavalry, who ...
posed to be on the point of succeeding ...
the flank; and after several other volleys ...
and formed solid squares, from which ...
volley after volley, by sides. Meanwhile the ...
Brigade, with guns and carbines, kept up ...
fire protecting the left, and the retreat was ...
further for a final stand to give the enemy ...
line was then reformed, and extended very ...
miles, the right resting on the Sussex Re...
the Industrial Schools, and the left ...
village, which was covered by the 3d (...
Corps acting as a reserve. The centre and the ...
the brunt of the battle, and the centre appe...

[illegible] to be thrown into disorder by the ideal charge [illegible], but quickly rallying it kept up a successful [illegible] and volley firing. The enemy were now [illegible] to be finally repulsed, and the line had orders [illegible] the right throwing out a body of skirmishers [illegible] the rear of the flying foe. The officers were then [illegible] to the front, when General Sir James Scarlett [illegible] the Volunteers in the following speech:—

[illegible] and gentlemen, I have much pleasure in [illegible] the extreme satisfaction with which I have [illegible] to-day. Having been commanded [illegible] Secretary of State for War to attend officially and [illegible] of this force, I shall have extreme satisfaction [illegible] they have reflected the greatest credit [illegible] who have commanded brigades, [illegible] commanded battalions, and upon [illegible] you have respectively commanded. [illegible] with those which it has been [illegible] ly performed by the Line; and when [illegible] vely limited opportunities of assembling and exercising in large numbers which the Volunteer force has enjoyed, I am not only gratified, but completely astonished at the perfection with which the various manoeuvres have been [illegible]. I think the Volunteer force is under a debt of gratitude to Lord Ranelagh, as well for the able manner in [illegible] laid down the programme of the day's [illegible] and skilful manner in which [illegible] has [illegible] this large force. I beg to assure you that it will be a [illegible] gratification to me to present so favourable a report of the day's proceedings to the War Office as the complete success of this day warrants me in doing."

Sir J. Scarlett then rode along a part of the line and was loudly cheered. Three hearty cheers were then given for Lord Ranelagh, after which the corps marched off by battalions headed by their respective [illegible] to the railway station, where they were temporarily [illegible] for purposes of refreshment, and in the [illegible] of the evening were conveyed safely to their [illegible].—The number of troops at the *Wimbledon* [illegible] was probably about 4200, composed exclusively of Middlesex and Surrey corps, which were distributed [illegible] to the following arrangement:—

[illegible], consisting of Middlesex Corps, under the command of [illegible], M.P. 1st Battalion.—4th and [illegible]th Middlesex [illegible] Rifles, commanded by Major Whitehead. [illegible]—A troop of Metropolitan Light Horse, under command of Lord Truro. 2d Battalion.—29th Middlesex, Captain [illegible]. 3d Battalion.—21st Middlesex (Civil Service), Captain [illegible] Artists, Capt. Phillips; 2d City of London, Capt. [illegible] *Brigade*, Surrey Corps, commanded by Lieut.-[illegible] 1st Surrey Rifles. 1st Battalion, Colonel Camp-[illegible]—[illegible] Administrative Battalion of Surrey Rifles (Croydon, [illegible], and [illegible]), Major Jones; 7th Surrey, Major [illegible]. 2d Battalion, Major Cochrane.—12th Surrey, Major [illegible]. 3d Battalion, Captain Freeman.—1st Surrey, [illegible]. Cavalry.—A troop of 1st Surrey Mounted [illegible], under the command of Captain Miller.

The field movements took place under the command of [illegible] Bury, and in spite of the heavy rain they were [illegible] by not less than from 12,000 to 14,000 spectators. [illegible] the day a drizzling mist hung over the marshy common, and nothing was to be seen but two or three thousand dripping umbrellas. At intervals, however, there was a little clearing up, and then the crowd [illegible] possession of every little eminence, trying in vain [illegible] what the various battalions, which had been [illegible] ground for hours without doing anything, could [illegible]. Indeed, it was not until nearly 4 o'clock [illegible] any successful attempt was made to form the brigades, though by far the larger number of the troops [illegible] their march to the ground as early as half-past 11 o'clock. The two brigades then took up a [illegible] position on the crest of a hill looking towards [illegible] on the common, just on the left of the Portsmouth Road, by which a large body of the enemy was [illegible] to be advancing. After a great deal of skirmishing through the furze and marsh, the troops having [illegible] the advance of the enemy by the Portsmouth [illegible] threw out a new body of skirmishers and [illegible] across the common to check the attempt of the enemy to gain the Wimbledon Road. Having [illegible] this movement they formed in line, [illegible] in companies and in volleys, and then advanced [illegible] bayonets at the double. The operations [illegible] with a charge made by the 1st Surrey Mounted Rifles and the 1st Middlesex Light Horse, [illegible] the command of Captain Mellor. The officers [illegible] ordered to the front, and the men having [illegible] up, Colonel M'Murdo, Inspector-General of [illegible] addressed them as follows:—

[illegible].—It is not necessary that the movements which [illegible] to-day should be fully explained: but I [illegible] necessary to call your attention to the nature of the position [illegible] taken up. The first of the positions which [illegible] was naturally of very great strength [illegible] indeed that two-thirds of the enemy must have been [illegible]—that is to say, neither could his cavalry have been of [illegible], nor could his artillery have produced [illegible] effect [illegible]. But it was supposed that the enemy [illegible] reach this [illegible] position too strong, endeavoured to [illegible] flank [illegible] which you are now standing by turning [illegible] Wimbledon. It was therefore necessary that you should quit the position you formerly held by changing your front to the [illegible]. The enemy had a double object in doing this. He desired to come on plain level ground, where he would be able to bring [illegible] into action, as well as his infantry; [illegible] your left flank to reach the [illegible] through you on [illegible] point out to you the difficul[illegible] you held. While on the rugged crest [illegible] artillery could reach you, [illegible] yourselves. You looked [illegible] posted there could [illegible]. But here you are brought on ground as [illegible]—and perhaps you [illegible] the best troops in [illegible] battalions—I do [illegible] they have had very little practice—[illegible] in coming into line. And if they [illegible] into line to-day, what would be the [illegible] by the artillery of the enemy, and if, when you were clinking with [illegible] and many of your comrades were falling beside you, the very ground was suddenly [illegible] by heavy masses of cavalry [illegible] you? [illegible] how [illegible] would [illegible] steadiness. What is the [illegible] of this? Discipline and discipline alone. By the term discipline, I do not not mean the checking of bad conduct. I mean that [illegible] which, that [illegible] of mind and body brought to bear on a certain object—that [illegible] which takes away all individual action, and makes the company, the battalion, or the brigade act like a machine. Now, this can only be gained by company drill. I regard a company as the unit of an army, for where the men in each company are steady and well drilled the whole army will be steady and well drilled likewise. All that you have learned in the way of shooting—all your zeal and patriotism will be of no avail in the day of battle, without a thorough knowledge of company drill. I [illegible] company drill because nothing else will do. I beg you, therefore, not to think that excellence in shooting is everything; it is nothing unless you have perfect steadiness of formation under fire. You have gone through a hard day's work, gentlemen, and your feet are wet. I will not detain you longer, but will let you return to the homes which you are well able to protect."

On leaving the ground, Colonel M'Murdo was loudly cheered. The different regiments then prepared to march off, several of the metropolitan corps, notwithstanding the fatigue they had undergone, preferring to return to town on foot to the delay which must necessarily be incurred before the whole force could be conveyed to London by railway.—Notwithstanding the gatherings at Brighton and Wimbledon, a sufficient number of Volunteers were found to make a display at Richmond. The total number of men under arms at one time was 1200. They included the 19th Middlesex, under Colonel Bathurst, the 16th Middlesex (Twickenham) under Captain Murray, and the Central London Rangers (40th Middlesex), under Captain Isaacs and Captain Woods.—The 2d Tower Hamlets had a grand review and field day, to the number of 500, comprising seven companies, on Wanstead Flats.—The London Irish mustered at Child's Hill, Hampstead, and competed for three Whitworth rifles, presented by Colonel the Marquis of Donegal.—The different companies constituting the Maidstone corps had a grand field day and review at Mote Park, the use of which had been granted for the purpose by the Earl of Romney.

Foreign.

France.—The remains of the Emperor Napoleon I. were transferred on Tuesday afternoon from the Chapel of St. Jerome in the Church of the Invalides, where they have rested for the last 20 years, to their final resting-place in the tomb which has been erected for their reception under the Dome. This ceremony was performed in presence of the Emperor, the Empress, Prince Napoleon, the Princes Lucien and Joachim Murat, and the other members of the Imperial family, the officers of the Imperial Household, the Ministers, the members of the Privy Council, the Marshals, Admirals, the Governor of the Invalides and his entire staff. The Emperor was received on his arrival at the entrance of the Invalides by the Governor and by Prince Murat and his son. A double line was formed by the old soldiers, through which the Emperor walked. The Cardinal Archbishop of Paris recited the vespers in the chapel of St. Jerome. After the prayers the remains of the Emperor Napoleon I. were carried by 24 Cent-Gardes and lowered into the crypt. The Count de Cambacérès, Grand Master of the Ceremonies, conducted the cortége. The banners were carried by Marshals Magnan, Vaillant, and Randon. At the conclusion of the ceremony the Emperor reviewed the old soldiers and distributed crosses.—The *Pays* says, on very doubtful authority, that General Ulloa has arrived in Paris with a petition to Prince Murat, signed by 750,000 persons, 80,000 of whom are inhabitants of Naples. The *Patrie* publishes a letter from Prince Murat, in which he expresses doubts as to the success or stability of Italian unity, and charges Piedmont with the "most dangerous enterprises" and the "blindest fanaticism." He says that it is not easy to "slaughter the kingdom of the Two Sicilies, to make Naples a provincial town, or to invade Rome without regard to reasons of state or to the moral force which supports the Papacy." If, he says, Piedmont should persist in going to Rome, it will not only have to encounter the Austrian army but the "Neapolitan autonomy." Should these gloomy forebodings be realised he feels that the recollection of his father shines as a ray of hope. He says:—

"So long as the people of the Two Sicilies exist, so long will the name of Joachim Napoleon continue an object of love and veneration; and I, his son, would think it an honour to encounter the dangers and troubles with which the mission of filling his place in virtue of a popular election, cannot but be surrounded. I would only undertake so great a mission for the purpose of commencing the era, so necessary for Italy, of a fruitful political and social elaboration, and with the will of laying the foundations of an edifice which shall not totter like the work of annexation, held up only by [illegible] support. I would guard your independence as a treasure, and I would share with a parliament all that is noble in the duties of a king—the development of social activity by the encouragement given to industry, to commerce, to science, to the arts, to great public works, and to every element of collective education and of national progress."

The *Constitutionnel* publishes an article signed by its secretary, M. Boniface, explaining that this letter was only written by Prince Murat for the purpose of giving some explanations. It adds,—

"We are authorised to declare that this document is altogether of an individual character, and in no way engages the policy of the Government, to which it is evidently opposed."

The *Moniteur* republishes this article, which is also reproduced by the other official journals. The *Moniteur* also says that the reports of pretended modifications in the Ministry are without any foundation. An Imperial decree has been published [illegible], in accordance with the recent decision of the Council of State, that there is an abuse in the pastoral letter of the Bishop of Poitiers of the 22d Feb., and ordering the letter to be suppressed. Count Rodolph d'Ornano has been raised to the rank of Marshal of France.—The last conference on the commercial treaty between France and Belgium was held on Monday, and the treaty itself was signed on Tuesday.—All the Marshals of France are summoned to attend an extraordinary Council of War at the Tuileries on Monday next. General Ladmirault's division was reviewed by the Emperor in the court of the Tuileries on Thursday, and received orders to march for the camp in the east of France. The Emperor is about to hold reviews of all the other divisions of the garrison of Paris.—The French navy has, by command of the Emperor, been organised into five divisions. Each of these divisions is to be placed under the orders of an Admiral. Three steel-plated frigates are to be attached to each division. The squadron of evolution at Toulon has finished taking in stores, and is making preparations for sailing. It is said that the division of Admiral Paris, consisting of four ships of the line and one frigate, will proceed immediately to the Syrian waters, where England is increasing her naval force. M. Chasseloup Laubat, Minister of Marine, went to L'Orient last week and witnessed the launch of a new 40 gun steel-plated frigate, La Couronne, of which the steel plating is inserted between a double lining of timber. This new mode of arming vessels is said to be the invention of the Emperor himself. Another steel-plated frigate, to be called the Invincible, was launched at Toulon on the 4th inst., and orders have been given for laying down two more steel-plated frigates at L'Orient, to be called the Heroine and the Surveillante. During his stay in that port the Minister went to Gavres to witness experiments with steel cannon, one of which is stated to be the invention of the Emperor.

Spain.—The Madrid journals strongly oppose the demand for religious toleration in Spain recently made in the English Parliament; and declare that if granted it would prepare the way for the introduction of English principles, which they look on as a great evil. One of the journals says that some working men have been arrested at Seville, on the charge of having circulated Protestant Bibles and tracts.

Portugal.—Advices from Lisbon state that risings have taken place in several parts of Portugal under the pretext of the taxes being unequally distributed. Very strong debates have taken place in the Cortes, and the Government being in a minority, it was thought that they would dissolve the Chamber.

Denmark.—The Danish Government, without departing from its conciliatory attitude, is making preparations for all eventualities. The 7th and 20th battalions are about to receive orders to march for Sonderburg and Schleswig. On the 15th inst. the effective of the battalions will be doubled. A battery of rifled cannon is ready, and three others, after the French model, will be ready in the course of next month. M. Raaslöff, the Minister for Holstein, has been compelled to tender his resignation on account of having failed to declare to the Estates of Holstein that by Article 13 of the Provisorium the Budget had been already submitted to the Estates, notwithstanding that a resolution had been unanimously adopted in the Ministerial Council deputing M. Raaslöff to make this declaration. The King has accepted his resignation. M. Hall, President of the Council, has provisionally assumed the portfolio for Holstein. The official journal has published the report of the President of the Council to the King in reference to this affair, giving an historical outline of that question. The following is a summary of the report:—

On the 1st of March the great Powers insisted that the Budget should be submitted to the Estates of Holstein. The Danish Government replied on the 4th of March that Article 13 of the Provisional Constitution of Holstein contained the Budget. On the 1[illegible]th and [illegible]th of March the Government sent instructions to the Royal Commissioner at the Diet of Itzehoe, ordering him to explain clearly to the Estates the bearing of Article 13 on the question of the Budget. On the 24th of March the Government gave instructions to the Commissioner to declare to the Estates that Article 13 of the Provisional Constitution gives to the Estates the opportunity of voting on, accepting, rejecting, or amending the Budget, even if they should reject all the other articles of the Provisorium. On the 2[illegible]th of March the Government forwarded fresh instructions to the Commissioner to declare to the Estates that, by Article 13 of the Provisorium, the Diet was rendered quite as competent on that question as if the Budget itself were submitted to it. Notwithstanding these instructions, however, the Royal Commissioner declared his inability to give a distinct reply to the interpellation on that question. On the 2[illegible]th of March Lord Wodehouse declared to the Danish Ambassador at London that he understood and approved the views of the Danish Government, according to which Article 13 of the Provisorium sufficiently provided for the communication of the Budget to the Estates. Lord Wodehouse also declared that his reply to the interpellation of Lord Ellenborough was to the same effect.

In the sitting of the Estates at Itzehoe, on Thursday, the Government Commissioner declared that documents relating to the state of the finances would be submitted to the Estates by Government. He said the Estates never had the right of giving a definitive vote on the Budget, either of Holstein or the whole monarchy. The committee were to make a report on this communication at the next sitting.

SWITZERLAND.—The Turin *Military Gazette* having published an article proposing to France, Italy, and Austria the partition of Switzerland, Count Cavour has officially declared to the Federal Council that this article does not represent the policy of the Italian Government. The Federal Council has, at the instance of Sardinia, appointed Federal Commissioners for adjusting the affair of the Ticino Bishopric. The conferences will be held at Turin. The majority of the Piedmontese Commission charged to examine the project of a railway through the Alps which separate Italy from Switzerland have voted in favour of cutting the tunnel through the Lukmanier. The minority were for cutting it through the Splugen. In consequence of this decision the Bundner Oberland has voted 1,000,000f. towards the construction of a line of railway through the Lukmanier.

AUSTRIA.—The Austrian Diet will be opened to-day after a religious service at St. Stephen's. Baron Schmerling and the other German members of the Cabinet last week tendered their resignations. This crisis is said to have been caused by the affairs of Hungary, the retiring Ministers considering that the Emperor should refuse further concessions. It is now said that the crisis is over, and that the Emperor having adopted the views of Baron Schmerling on this point, the Ministry remain provisionally in office. The *Military Gazette* of Saturday says:—"The Emperor has ordered that all the soldiers belonging to the effective reserve whose term of service expires at the end of June next may at once go on furlough." Herr Staudigl, the renowned bass singer, died in the State Lunatic Asylum, Vienna, on the 28th ult.

HUNGARY.—The Emperor has decided that the Diet is to be opened at Buda, whence it will be immediately transferred to Pesth. Count Apponyi has been appointed to open the Diet. The Emperor has rejected the democratic programme of the Hungarian leader, M. Deak, who demanded the absolute separation of the administration of Hungary from that of Austria. The Emperor declared that he intended to abide by the reforms he had already granted. Notwithstanding this decision, it is said that the Democratic party maintain its demand for the absolute separation of the Administration of Hungary from that of Austria. The official journal announces that the propositions of the Judicial Conference have received the Royal sanction. The Prince Primate arrived at Buda on Tuesday, and the formal installation of the members of the Curia Regia took place on Wednesday. The *Veni Sancte* was celebrated by the Prince Primate. After the religious ceremony the President delivered a speech in the Hall of Assembly, in which he laid particular stress on the importance of the occasion, and of the concessions obtained from the Government. The Provisional Judicial Administration has been suppressed. A sanguinary conflict took place at Lippa between the German and the Roumaic inhabitants, on the occasion of the elections. Three persons were killed, 15 persons were seriously and many slightly wounded. Upwards of 250 Hungarian volunteers, provided with Moldavian passports, have embarked for Constantinople with the intention of proceeding to Naples.

THE BANNAT.—A despatch from Temesvar states that an Imperial decree had convoked a Servian National Congress composed of 25 clerical and 50 lay members. This Congress has appointed a committee of 22 members, a large majority of whom expressed their sympathies and confidence in the cause of Hungary.

CROATIA.—An Imperial decree has been issued ordering that in place of the Government Chancellery for the administration of Croatia and Sclavonia, now located in Agram, a Royal Government Council shall be established in that city, for the administrations of the kingdoms of Dalmatia, Croatia, and Sclavonia. On Sunday evening last riotous assemblages took place in Agram. The windows of the police-office were broken by the people, and the Imperial Eagle was torn down from the Government buildings.

TRANSYLVANIA.—The Emperor has sanctioned the proposed reorganisation of the political administration of Transylvania, by which that province will be restored to its former position of local self-government.

VENETIA.—It is reported by the Belgian papers that the French Ambassador at Vienna, in virtue of his secret instructions, has had some confidential interviews with Count de Rechberg, on the subject of a new arrangement for the cession of Venetia to the Italian kingdom, in consideration of a territorial compensation. An Imperial decree grants to the congregations of Lombardo-Venetia the right of electing 20 delegates to the Council of the Empire. Another Imperial decree orders the resumption of payments in silver in Lombardo-Venetia, the authorities of that province having secured the necessary stock of specie. Several editors of French newspapers, who were on an excursion to Venice, were, immediately after arriving in that city, roughly expelled by Governor Toggenburg, though the *visa* of the Austrian Embassy at Paris was affixed to their passports. The movements of the Austrian army in Istria continue. Urgent orders have been given for the construction of additional works to the fortifications of Pola.

MALTA.—The Malta papers state that the British fleet in the Mediterranean is to be distributed in three divisions: the first to be stationed at Malta under the Commander-in-Chief, Vice-Admiral Fanshawe Martin; the second to be stationed on the coast of Syria, under the command of Rear-Admiral Mundy; and the third in the Adriatic, under the command of Rear-Admiral Dacres.

IONIAN ISLANDS.—The *Patrie* of Thursday says that the English naval division stationed at Malta has been despatched to the Ionian Islands, where the agitation is increasing.

ITALY.—The *Opinione* of Sunday says:—

"It has been notified to the Marquis d'Azeglio, on the part of the Queen of England, that her Majesty would receive him in the quality of Minister of the King of Italy. The Federal Council has made a similar declaration to our Minister at Berne."

General Garibaldi left Caprera for Genoa on Sunday evening, and arrived at Turin on Tuesday. Immediately after his arrival he had a conference with the King, the result of which is not yet known. He has been received with the greatest enthusiasm by the people, and it is said that he has consented to receive a deputation from the city of Naples, and that he will be present at the discussion of the affairs of Southern Italy in the Chamber of Deputies. He has since however been indisposed, and had not yet been present at the sittings of the Chamber up to Thursday last. It is asserted that a fresh order has been addressed by Garibaldi to his officers residing in Switzerland, requesting them to be ready to assemble at his summons within a fortnight hence. General Della Marmora has resigned his office as Commander-in-Chief of the Sardinian army, and has resisted not only General Cialdini's solicitations, but even the King's pressing invitation to withdraw his resignation. The discussion of the 23d of March is said to have deprived the country of his services. Signor Brignole has tendered his resignation as Senator. In the sitting of the Chamber of Deputies on Tuesday Signor Massari made an interpellation in reference to the affairs of Naples. He maintained that there would be no safety for Italy unless she were united; he criticised the present organization of the Neapolitan provinces, and proposed several remedies, one of which was the suppression of the Council of Lieutenancy. Signor Paternostro expressed his regret that a factious minority had caused anarchy in Sicily. The Minister of the Interior answered the interpellation on Wednesday in a speech, of which the following is a summary:—

He declared that the inconveniences of the administration of Naples pointed out by those members had been exaggerated. He would remedy those which really existed, and the Government would increase the military forces in the southern provinces as a measure of public safety. He stigmatized the accusations brought against some public functionaries as calumnies, and refuted the other points in the interpellation of Signor Massari. He then considered the question of arming the National Guard, and said that the arguments he had adduced in regard to Naples could be applied to Sicily, where the Marquis de Montezemolo, Lieutenant of the province, would be replaced at his own request. He then gave explanations relative to the railway, postal, and telegraphic services in Southern Italy, and drew attention to the fact that several contracts for railways has been signed. In the sitting of Thursday Signor Ferrari, amidst signs of disapprobation, spoke in favour of the autonomy of Naples. He eulogised Garibaldi, and proposed that he should be appointed governor of the Southern provinces. Signor Scialoja refuted the arguments of Signor Ferrari. The Marquis Pepoli said that Murat was the first to proclaim in 1815 the independence and unity of Italy.

The debate was then adjourned to the next day. The bishops of the four provinces of Genoa, Milan, Turin, and Vercelli, have sent an address to King Victor Emmanuel, protesting against the institution of civil marriage. The *Opinione* of Wednesday publishes an article on the Roman question, which says:—

"The French occupation could not be further prolonged without rendering the position of France more difficult. France maintains her troops at Rome to protect the Pope; but from the moment that Italy grants the amplest guarantees for the security of the Pope and for the freedom of the Church the mission of the French soldiers can be fulfilled with dignity by the national army."

The official *Gazette* announces that a conspiracy has been discovered in Modena and the Romagna, in which some disbanded volunteers from the army of Southern Italy are implicated. The object of the conspiracy was to engage in a conflict with the Austrians. The Government of the King has taken precautionary measures. The news that the Austrians had evacuated certain positions on the north side of the Po is confirmed. This measure however is not to be taken as a sign of war.—A despatch from Rome states that on Tuesday during service the Pope fainted away. Assistance was immediately rendered, and the indisposition of his Holiness is not of a serious nature. On the night of the 29th ult. 40 waggons of the Sardinian army were observed near Rome, coming from Gaeta. General Goyon ordered their immediate departure for Terni, under an escort of Gendarmes. The Municipality of Rome sent to General Lamoricière on the 29th ult. a magnificent gold medal which had been struck in his honour.—From Naples we learn that an unimportant demonstration has been made by about 400 persons, styling themselves Garibaldians, who demanded money at the Ministry of Finance. These persons were dispersed by the authorities with great moderation. The Republican newspapers were raising unjust accusations against the Government. General Cocca had published an order, to the effect that no person should wear the Garibaldian red flannel shirt without being able to prove that he had belonged to the Garibaldian Volunteers. On Wednesday the police confiscated some five-grani pieces bearing the effigy of Francis II., which had been sent from Rome. The Holy Week had pass[ed] … Naples and in the provinces. The steam[er] … foundered off the island of Capri, par[ts] … having been found in the neighbourhood …

RUSSIA.—Prince Gortschakoff, the M[inister of] Foreign Affairs, has addressed a circula[r, dated the] 20th ult., to the Russian Ministers at F[oreign Courts,] stating that "Russia and Europe have … proof that the Emperor, far from deferr[ing] … initiative, by granting reforms, and ca[rrying them out] with perseverance." "The Emperor," … circular, "desires that what he has gra[nted] … become a reality, and open to Poland a pa[th of] progress."

POLAND.—Another proclamation, addre[ssed by Prince] Gortschakoff to the people, has be[en issued,] which says:—

"The important moment compels me to … you words of reason. The institutions … promised you guarantee the dearest interests … religion, and nationality. These institutions … carried out. Avoid disturbances which … cannot approve, and which would impede all p[rogress."]

M. Wielopolski has given orders for the … of a project of law similar to the Fre[nch] … and reports are current that the censorship … is to be abolished. It is expected that … papers will henceforth be delivered with[out ob]literation of those portions of them which … ing to the Government. M. Wielopolski … announced to the Medical Academy th[at it should] consider itself as one of the faculties of [the] University of Warsaw. A despatch fr[om …] dated March 30, says that these and th[e con]cessions granted by the Emperor had not … people. The wearing of mourning had be[come] general, and a much greater number of peo[ple …] in the national costume. The journals advoca[te the ne]cessity for moderation, and the concentrati[on …] continued. Unarmed citizens, doing duty … patrolled the streets. The 24 delegates be[gan to] act as a Provincial Municipality, but at th[e …] Prince Gortschakoff, the number of citizens … the Delegation had been reduced to 12. Th[e members] of the Delegation were provisionally held … Hall until the regular Municipal Council … upon its functions. Count Zamoyski, on th[e occasion] of his being received at an audience … Gortschakoff, addressed him in a speech … following is a summary:—

"The country," said Count Zamoyski, "r[eceived the] reforms with gratitude, but at the present m[oment they are] but nominal. The country now depends upon the[ir being] carried into execution."

Prince Gortschakoff replied:—

"It was not incumbent upon the Emp[eror to grant any]thing, but in granting reforms His Majesty … loyally."

Subsequent accounts dated Thursday last state … agitation has been produced by this speech … recent manifesto published by the Gov[ernor …] citizens agreed to wear the deepest mo[urning …] persons entrusted with the duty of main[taining] order returned their cards of office as cons… authorities. A great number of the mem[bers of the] delegation of citizens declared themselves … tender their resignation. Count Wielop[olski] made urgent representations to the Prince … the critical state of things, Prince Gortsc[hakoff pub]lished a second address, which had the e[ffect of tran]quillizing the public mind. As, however, … had much increased within the previous … Governor had taken the necessary measures … eventualities.

PRUSSIAN POLAND.—Riots took place … Kalisch, in Prussian Poland. A multitu[de of] 3000 persons made a noisy and insulting de[monstration] before the house of the Captain of the … windows of the house were smashed, and … fled to the Cadet School, amid the shouts … the people. His deputy was likewise insu[lted …] demonstrations afterwards took place befo[re the house] of the President of the Tribunals and the … Schools. Order was re-established by the … committee, composed of 24 citizens, was … established for maintaining order in the … surrounding country. The latest accounts … nesday last state that the disturbances … Crowds had assembled at the frontier sta[tion for the] purpose of making an insulting demonstra[tion against] M. Szczypiorno, the Director. The windows … were smashed by the people. It is said … have arrived to suppress the disorders by … if necessary.

TURKEY.—Sir Henry Bulwer has presented … of financial reforms to the Porte, advising … tion of the Budget, retrenchment in the … the consolidation of the public debts, and … guaranteed paper money. This scheme ha[s been] received by the Divan.

MONTENEGRO, BOSNIA, AND ALBANIA.—Tr[oops have] been hastily sent by the Porte to the … on Montenegro, which the Porte has … blockaded. Omar Pasha has been rec… Sultan and it is likely that he will … commander of the army in Bosnia and … govina. The news of a landing of … at Spitza in Albania is a mere invention. … gents in the Herzegovina have been repulsed … Turkish troops.

Syria.—The report of the proceedings of the international Commission at Beyrout had been received at Constantinople. This report indicates dissension amongst the members.

India.—A telegraphic despatch from Bombay dated March 12th, states that the Bishop of Madras died at Madras on the 4th inst. Sir Robert Napier has met with a serious accident by the fall of his horse. There is no news of importance.

Cape of Good Hope.—The Cape mail has arrived but the intelligence it brings is not very important. The Governor, Sir George Grey, returned from British Caffraria to Cape Town on the 15th February. Lieut.-Colonel Maclean has been appointed Lieutenant Governor of British Caffraria. The judgeship has been conferred on Mr. Denyssen. The Cape Parliament was to assemble on April 26, when the separation project, responsible government, railways, &c., were to be discussed. The Miles Barton, with the 1st battalion of 3d Buffs, went ashore in Struys Bay on Feb. 8. All were saved except one private. News had been received from the Zambezi mission, confirming the account of the death of the Rev. Mr. and Mrs. Helmore, and the child of Rev. Mr. Price at Linyanti, and giving an account of very bad conduct of Sekeletu towards the missionaries; it was even feared that the deaths were occasioned by poison administered to them by that chief. Messrs. Price and Mackenzie had since arrived at Lechulatebis Town at Lake Ngami, but Mrs. Price died on the way. Dr. Livingstone and party had been met on their way to Linyanti, but they had not reached Moselikatze's country up to the latter end of October.

United States.—The *New York Herald* publishes in full the new tariffs of the Southern and the United States. It praises the former, but condemns the latter. It was stated that no duties would be imposed on goods passing through the Confederate States for States beyond their jurisdiction. Mr. Charles Adams, grandson of the second President of the United States, had been appointed States' Minister to England, and Mr. William Dayton Minister to France. In the Senate the Committee on Foreign Relations recommended that the dispute between Great Britain and the United States respecting the island of San Juan should be referred to the arbitration of Switzerland. Mr. Lincoln still refused to receive the Southern Commissioners, and no definite reply had been given to them by the Administration. It was stated that the Administration was engaged in devising some peaceable solution of the existing troubles, and that in the opinion of Messrs. Seward and Chase the most practicable one was a peaceable separation. Colonel Mallone, one of the Southern Commissioners to Europe, arrived at Washington on the 22d ult. He stated that no doubt was entertained at Montgomery of the speedy recognition of the Southern Confederacy by foreign Powers. The Hon. W. L. Yancey of Alabama, Judge Rost of Louisiana, and Colonel Dudley Mann, the Special Commissioners of the Southern Confederacy to England and France, were to sail from Savannah on the 27th ult. for Southampton. It was expected that Major Anderson would withdraw the garrison from Fort Sumter on the 23d ult. The mode of surrender had not been decided. The Charleston *Mercury* announces the commissioning of the Lady Davis as the first war vessel of the Southern Confederacy. She is armed with 24-pounders, and is under the command of Lieutenant Huger, seconded by Lieutenants Dozier and Grimball, all late of the Federal Navy. The completion of the floating battery at Charleston has been celebrated by a salute of seven guns, each gun representing a seceded State. By proclamation of General Bragg, of the Confederate army, all vessels were forbidden to furnish supplies to war vessels off Pensacola or to Fort Pickens, under penalty of forfeiture to the Confederacy. In accordance with this proclamation a Federal supply vessel had been seized off Pensacola. The barracks on the river Brazos and at Santiago had been surrendered to Texas. A collision was anticipated in Texas between the Unionists and the Secessionists. The Southern Congress had adjourned until May, without adopting the new tariff. North Carolina had voted against the holding of a Convention by a majority of 1200. The Louisiana Convention had rejected the Southern Constitution. The Missouri Convention had adjourned until the third Monday in December. The Arkansas State Convention had passed a Secession ordinance, subject to approval by a vote of the people. It was stated that the Havre Customs' authorities had decided that ships belonging to the seceded States would be received on the same footing as those sailing under the Federal flag. The Philadelphia banks had resumed specie payments. The two indictments against John B. Floyd, ex-Secretary of War, had been dismissed by the Washington Court as untenable.

Canada.—The Canadian Parliament assembled at Quebec on the 16th ult. The speech of the Governor congratulated the members on the returning prosperity of the country; alluded to the visit of the Prince of Wales; recommended assimilating laws in the two sections of the province; a bankrupt law for Upper Canada, and improvement in the discipline of the prisons. He stated that great efforts will be made to establish a sound system of emigration, and promote the settlement of the wild lands. He then made a brief allusion to the Anderson case. A messenger from the Prince of Wales had arrived at Chicago with two beautiful pointer dogs—a male and female; and two valuable Southdown sheep—a ram and ewe; as presents for the Hon. John Wentworth, mayor of that city, in acknowledgment of his services during his Royal Highness's visit.

West Indies.—The Jamaica Legislature has at last availed itself of the West Indian Encumbered Estates Act passed by the Imperial Parliament in 1854, and has passed an act similar in principle to that which has wrought such remarkable changes in Ireland.

Public Addresses.

Lord Palmerston, at his re-election for Tiverton last week, made the following remarks on public affairs:—

"I believe that I may congratulate you that the internal condition of the country is on the whole satisfactory and good. We had unfortunately a bad summer last year, we have had a winter of unexampled severity, and no doubt during that period of extreme rigour there must have been and there were great sufferings among the poorer classes of the community. The produce of the last harvest was below the average amount, but the result of that wise measure, the abolition of the protective duties upon corn, has been wonderfully exemplified by that which is now passing, for, although our own produce has fallen short of the average quantity, yet we have been enabled, by the wise change which some years ago was made in the corn laws of the country, to profit by the superfluities of other countries where the seasons were more advantageous, and, while on the one hand we have thus received greater supplies of food than we should have otherwise had, on the other hand the productive industry of the manufacturing districts of the country has received an additional stimulus to produce the commodities which were to pay for the supply of food from abroad. The attention of Parliament has been directed, and is directed to various internal improvements; and, even though the Session has hitherto been of short duration, we have passed through the most important stage in the House of Commons that Bill about Bankruptcy and Insolvency, with regard to which I can assure you that the anxious solicitude of all the mercantile and trading interests of the country has for a long period been sedulously directed. We trust that that measure will give additional security to the interests of commerce, and be attended with great advantage to the nation at large. With regard to matters of the country, it is not to be denied that the state of Europe at the present moment affords great subject of uneasiness and anxiety. We see on all hands nations under the direction of their Governments, arming, both in regard to land and sea. There are questions pending not only as to internal differences, but as to international differences also, which may eventually produce results that will lead to lamentable consequences. But we trust that the moderation of Governments and a due regard to national interests on the part of sections and parties in all those countries may, under the blessing of Providence, so compose and settle all questions that are at issue, that we may see the summer pass over without the occurrence of those hostilities which have been prognosticated to take place in the spring. We were told that in the month of March swords would be drawn and guns would be fired, and that Europe would be involved in the calamities of general warfare. March has already almost passed. The prediction has been transferred to April, but I trust that April like March will, according to the old saying, if it comes in like a lion go out like a lamb. Let us hope for a continuance of that condition of international peace and friendship which is so much calculated to promote the interests of all the European community. No doubt, if unfortunately war were to take place, it would be the duty of the Government of this country to show that they had placed the defences of the country in that state of respectable preparation, that we might be enabled to witness without fear or alarm the storm that might rage elsewhere. I trust that we should be able to show that we have in that respect performed our duty. We have an army as efficient as any British army ever could boast to be. We have a navy strong in numbers, and well equipped in all that constitutes naval strength, and we have besides that of which we see a specimen before us—those noble bands of Volunteers amounting now to something like 150,000 men—brave men, who sacrificing all consideration of personal ease, and frequently at great expense to themselves, devote to the acquirement of military skill those hours which, perhaps, might otherwise be passed in unprofitable indolence. We cannot be too thankful to those brave men, and I can assure you that the example which they have set, and the figure which they have made, have inspired every nation of the Continent with additional respect for the patriotism, the independence, and the public spirit of the British nation. Well, in spite of all differences that have arisen on the Continent of Europe, we have the satisfaction of seeing the principle of constitutional government rapidly extending itself over the whole face of the Continent. There was a time towards the end of the last century when England was the only nation that could boast of real representative and constitutional institutions. England was then the admiration, no doubt, of other countries, but their admiration was mingled with despair of being able to imitate the example set them by England. At the present moment we have the satisfaction of knowing that that example has borne its fruits, and that the diplomatic and other influences of England have been steadily and truly exerted, and successfully exerted, in enabling other countries of Europe to follow our example, and to share those constitutional blessings of which we have so long enjoyed the fruits. Instead of seeing the Continent one vast camp of despotism now, from the Mediterranean to the German Ocean we have the pleasure of seeing constitutions established. Portugal has its constitutional Government; Spain has its constitutional Government; Italy, now fortunately united, aided by the influence and auspices of England, which influence and auspices have been ably and steadily, and with an enlightened spirit, directed by my noble friend Lord John Russell as the organ of the British Government and the British nation.—Italy has now nearly completed her union, and we have the satisfaction of seeing an Italian Parliament, representing nearly the whole of the Peninsula, assembled and discussing with moderation, with talent, with enlightenment and wisdom, those common interests of the whole Peninsula which persons who are adverse to the spread of constitutional principles told us could not be done, by reason of local jealousies and ancient traditions. We see also in France a Parliament assembled using the utmost proper and constitutional latitude of discussion. We have seen a constitutional Government established in Prussia, and more recently the Emperor of Austria, following the example of other countries, is giving his subjects also representative institutions. The only power in Europe which yet remains to be so improved is Russia; and even in Russia we find the Sovereign, animated by feelings of benevolence towards his subjects, carrying out a great and noble work by the emancipation of the serfs. Hitherto the vast multitude of the agricultural peasantry have been in a state of qualified slavery. The Emperor has now published an edict which gives them their liberty, and there cannot be a doubt that he has thus laid the foundation for a further administrative and organic improvement in his vast empire. But, while we rejoice that so large a portion of the human race are gradually more and more admitted to the enjoyment of liberty, we cannot, I think, avoid entertaining some feelings of pride in reflecting that this country set the first and leading example, and that most of the improvements which have been made elsewhere have been owing to the proof which England had given of the prosperity and happiness which constitutional monarchy extends to those who are happy enough to live under it. There is but one spot in the political horizon, the contemplation of which must inspire us with regret and uneasiness. I mean those convulsions which are now taking place among our cousins in North America, leading to a dissolution of the union of the formerly United States. It is not for us to judge between the contending parties. It is not for us to say what ought to be; whether compromises ought to be made by which the Union may be maintained or whether it is best for the happiness of the sections that they should separate and form respectively different associations and confederacies. But of this I am sure, every man who hears me, every British heart will feel that it is our cordial wish that whatever may be the ultimate result of the differences now prevailing, that result may be brought about by amicable adjustments, and that the world may be saved from the afflicting spectacle of seeing brothers arming against brothers and parents against children, and of seeing that state of social happiness which has hitherto been the admiration of mankind, deformed by dissension, and a country which has been the scene of peace and industry polluted by the effusion of blood."

Mr. Rowcliffe, one of the electors, then addressed his Lordship:—

"He said the noble Lord had spoken a good deal about foreign affairs, but had passed over domestic matters. He wished to know what he had done with his Reform Bill. His Lordship turned out a Government far better than his own on the Reform question, and what he had done himself? Turning to Lord Palmerston, he said,—I will put some questions to you about home affairs. You Whigs have had power since 1832. You pledged yourselves to economy and retrenchment, but I have never seen you carry it out. The expenditure in 1832 amounted to little more than 40,000,000*l.* a year, but what is it now? You Whigs have made a great many fresh laws, but look at the cost of working those laws. You have filled the country with commissioners and useless placemen, and you have forgotten your pledge. I believe it is now time for a change. You must see it yourself. You had a majority in the House of Commons one time, but now how has it dwindled down? Why, the majority has pretty nearly come to a minority. I only wish I were there myself. I should walk right out of the House of Commons when the subject of reform was discussed. You are fond of taxing the working classes, but you do not study their interests. The House of which you are Premier is rotten to the core. Not 100 members of the House have been sent by the pure votes of electors. There are not 100 honest members in that House. Why did you not stand by the Reform Bill, as promised when on the hustings here? You did not intend to carry it, or you would never have given it up after it had been debated night after night. If Sir Robert Peel had been the legislator he would have died on the floor rather than have given up that Reform Bill. You come to Tiverton to gull the people; but this conduct does not suit the labouring classes, who are the producers of wealth. You trust your servants with property, with jewels, and money, but still you will not trust them with a vote. I have given you Whigs a long trial, and now I have thrown you overboard altogether. I will tell you why. I never found a man of them who would not humble down to the Government for the sake of office. You have a great man among you—Mr. Milner Gibson. I once thought he was an honest man, but the plum you gave him was too big; it stopped his mouth. You do not attempt to lighten taxation. You cut down the pay of a few men in the dockyards earning 1*l.* or 1*l.* 1*s.* a week, but why not cut down your great placemen who are too lazy to work. You come down to Tiverton to gull the people, but you don't gull me, my Lord. Now, my advice to you is to go back and meet your colleagues in Downing Street, or where it is you meet them, and tell them that they must bring in an honest, pure, and just Reform Bill, and then the people will rally round you, but these humbugging measures which you have introduced have only put off Reform. I tell you the people will no longer allow you to play the double shuffle. We expected that this Session you would have brought in a Reform Bill but not a word was said about it. You have refused to give an explanation on this point, my Lord, and your majority will soon become a minority. Look at the elections throughout the country. The people have deserted the Whigs. I ask you, my Lord, once more, why you did not bring in a Reform Bill, and whether you intend to bring forward one this session."

Lord Palmerston replied:—

"I am glad to see people of all kinds and of all opinions, and, among curiosities, among rarities, which are always matters of amusement, I have great pleasure in seeing my friend Mr. Rowcliffe. Now, I am sorry that my friend Mr. Rowcliffe entertains so bad an opinion of the members of the House of Commons, for what must he think of those who sent them there? He says there are not 100 honest men in the House of Commons. Well, 100 honest men are a very good allowance in any number of people, and, if working steadily together, they may do a great deal. But my friend Mr. Rowcliffe says nothing would go right unless he was in the House of Commons. Well, I advise him to try it, and if he will allow me to give him a bit of advice, not at all intending it to be personal, I should say the further off the place which he tried to represent, and the less he was known there, the better would be his chance of succeeding. Pray understand me. I do not mean any imputation upon his personal character, because I am sure that if he were in the House of Commons there would be 101 honest men there. But what I mean is that my friend Mr. Rowcliffe has peculiar and fantastic notions of things in general, which, if I understand rightly the character and opinions of the British people, the less they are known, the better they would be liked. He has put certain questions to me; he has asked me why I said nothing about home affairs. Why, I dealt with home affairs upon the principle that they say charity begins at home, and my speech began at home, and began with home affairs; but what I stated was rather of a consolatory character; and the temper of my friend Mr. Rowcliffe's mind is not to be consoled, but to be dissatisfied. He did not like my speech because I said something good of what Parliament had done, and because I said that, all things considered, though we had had two bad seasons, the country was not so badly off as it might have been made in our legislation. I am sorry that those topics are not to the mind of my friend Mr. Rowcliffe. He asked me a pointed question. He asked why did the Government of which I am a member not fulfil its pledge to bring in a Reform Bill. He answered that question himself. He said we had brought in a Reform Bill, and that we were obliged to withdraw it. I might therefore rest upon his own answer, upon his own question. Did he like our Reform Bill of last year? He has not told us that. I presume he did from the regret which he expressed at its failure. And why did it fail? Because the House of Commons were not disposed to accept it, and because the constituents of the

country at large did not urge upon their members to accept it; because the objections to it came from the Liberal side almost as much as from the Opposition side, and some of those who were most adverse to it were representatives of great communities—of Edinburgh, for instance, of Salford, and other places. It was absurd to go on pressing a Bill which the experience of several months had shown us Parliament was not in a temper to receive; and the silence of the country since has shown that the conduct of their members was not found fault with by the electors who sent them to the House of Commons. My friend asked me why we did not renew that Bill this year? Why, because we were not geese; because, having seen that the House of Commons was not disposed in the first year of its existence to pass a Bill which would have insured an early dissolution, we thought it was not wise, not profitable, not useful in the second year of its existence, to repeat a measure which had been decidedly not agreeable to the taste either of the House or of its electors. Mr. Roweliffe may think we were wrong; I maintain that we were right, and I think that the manifestation of public opinion shows that the country sides with us, and not with Mr. Roweliffe. But we have not had a sufficient regard to economy. My friend says we ought to have reduced all unnecessary places. I tell him there were none to reduce. All sinecures have been abolished. Places now are places with duties attached to them, and with salaries not greater than the labours of the offices require. My friend Mr. Roweliffe speaks in the simplicity of his heart, with a total ignorance of the matters which he is discussing, and that is a most advantageous position for a person to stand in who addresses a large audience, because he draws upon his fancy for his facts, and upon his imagination for his arguments. But, gentlemen, I suppose he means that we ought to have reduced the army and the navy, because they are the great sources of national expenditure. I wish he would ask those gallant Volunteers whether they wish to see the army reduced. I wish he would ask the multitude of persons whom I now see before me whether they think the country is too much protected? We have heard of complaints against protection in the shape of duties and customs upon the importation of articles; but the protection against the importation of a foreign force, I believe, is very much to the taste of the people of this country. Have we too large a navy? Why, we are urged in the House of Commons to increase our iron ships; and I am sure that our iron ships ought to be increased, because they are not at present upon a par with the iron fleet of other countries, especially of our neighbouring country on the other side of the Channel. But, if we are not to diminish our army and navy, I should like my friend to state where it is that he would produce such a great reduction of expenditure. Would he wish to cut off the supplies that go to the education of the poorer classes? Would he wish to continue the reign of ignorance in the country? It is said that in the kingdom of the blind the one-eyed man is a king. Perhaps Mr. Roweliffe wishes to be Sovereign in the land of ignorance; he is only half enlightened, and therefore he might be qualified. I believe I have now answered his questions, but I will state that though the Government thought it right not to interpose and retard the general legislation of the country by introducing again a Reform Bill, still certain ardent Reformers have on their own account introduced Bills. Mr. Locke King introduced a Bill to extend the county franchise, and Mr. Baines has a Bill to extend the borough franchise. When the debate upon Mr. Locke King's came, the Government, though they were no parties to the Bill because they thought it was unwise to bring in, nevertheless voted for it. It is true that we were then in that minority which Mr. Roweliffe so much regrets; and which, if he had been in the House, no doubt would have been greater by one, unless any speech which he made in favour of the measure might have turned more people against him than his own vote for it was worth. We voted for that Bill, and there was a majority of 28 against us. We shall in all probability vote for Mr. Baines's Bill. Whatever the result of that division may be it is not for me to say, but it is clear to my observation that the House of Commons is as little inclined this year to pass any great measure of organic change as it was in the Session of last year."

Lord Herbert of Lea attended a public meeting at Wilton on Wednesday, in aid of the Indian Famine Relief Fund, and spoke as follows on the sufferings of the North-west Provinces of India:—

"You will be aware from the statements which have appeared in the public papers that India has been visited by famine, and that the numbers supposed to be suffering under that calamity are put at the lowest estimate at 1,500,000. Now, India is an immense tract of country, and we must not forget that the result of that great extent is to aggravate immensely the sufferings of the people, because where the means of communication are defective, and where, for example, there are no railroads except one, and almost no roads, of course the difficulty of transporting food is immensely aggravated, and delay in this case is death. Well, the country has been desolated, not only by famine, but, within the last few years, by civil war, which like all wars, tends greatly to impoverish a country. Crops are laid waste, houses are burnt, the ordinary avocations of industry are interrupted, the production of the country is greatly impeded and diminished, and therefore a famine which comes at such a time, when a country is unable to meet the requirements for its own preservation, is naturally attended with the most disastrous consequences. Now, I confess that, looking back upon the history of our connection with India, and judging it impartially, we do not stand very well in the eyes of the nations of the world. We have gone there as traders, we have gone there as conquerors, and we have made a great deal of money and attracted great prosperity to this country through our connection with India. But I am not certain that we have done all that we might or ought to have done for the country itself. In the first place, I believe that we Anglo-Saxons, who are accustomed to self-government—who have been accustomed in fact not to be governed at all—who have no notions of government, therefore, beyond that of giving security to life and property—we have not the genius of dealing with Asiatics, who require a mind to guide them, energy to supply the failure of that quality, and a hand to execute what the brain imagines. We have left the country too much to itself, and have not done enough in the way of public works, for example, which might have saved the country from famine. The irrigation effected by means of canals and the diversion of rivers from their course has saved those portions of the country in which it has taken place from the perils and dangers of famine; but through a great tract of country we have done nothing, and the people are reaping the reward of it. It is often said—I have often heard it said—that we should carry Christianity to India. Well, we have not carried Christianity to India, and perhaps one of the reasons is that Christians are little agreed amongst themselves, and that Christianity, therefore, means to the ears of the Hindoo some great diversity of opinion amongst the different religious sects. The people of India see that we do not agree amongst ourselves, and therefore they are unwilling to listen to us. But on this occasion we may carry Christianity to them. In this sense we shall show the practical effects and fruits of that religion in our desire to do good, and in attempting, as far as we can, to relieve them from their wants and necessities. I have seen it stated at the time of the Irish famine that not only did the natives of India subscribe very liberally to the relief of the sufferers from the famine in Ireland, but actually the native soldiers; those men who certainly—as time has shown—were not well affected to our rule, subscribed their pay, and sent it to alleviate the sufferings of their conquerors, and surely that ought to operate as a lesson to us. Having with a strong hand put down the Indian rebellion and re-established the government of the Queen, shall we not show them that we forget all the sufferings which that rebellion caused by looking upon them now as fellow-subjects in distress, as a nation stretching out their hands to us for food? I trust, therefore, that all as Englishmen we shall do our part in Wilton to show that we are not deaf to their calls, but that we have the same anxiety to relieve their distress which they showed on a previous occasion towards us."

City Intelligence.

The Bank of England on Thursday reduced the rate of discount from 7 per cent., at which it was fixed on the 21st ult., to 6 per cent.

Money Market, Friday.—British Funds: Consols closed at 91⅞ to ¾ both for Money and the 10th inst.; India Stock, 222; Ditto Five per Cent. Stock, 1859, 100⅛ to 100; Five per Cent. Enfaced Rupee Paper, 94 to 93¾; Ditto Five and a Half per Cent., 100; Exchequer Bills, 4s. to 3s. dis.—Foreign: Brazilian Four and a Half per Cents, 1860, 85⅞; Buenos Ayres Deferred, 28¼; Dutch Two and a Half per Cents., 63¾; Mexican Three per Cents., 24½ to ⅜; Portuguese Three per Cents, 1853, small, 47 to 46½; Russian Four and a Half per Cents., 91½ to 91; Sardinian Five per Cents., 82¼; Spanish Three per Cents., for Acct., 48¾; Ditto New Deferred Three per Cents., for Acct., 41¼; Ditto Passive, 16¾; Committee's Certificates, 5⅜ to ½; Turkish Six per Cents., 1854, 73½; Ditto, 1858, for Acct., 53⅞; Ditto Guaranteed Four per Cents., 99¼.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£26,668,460	Government Debt	£11,016,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	11,345 098
		Silver Bullion	848,362
	£26,668,460		£26,668,460

BANKING DEPARTMENT.

Proprietors Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£10,608,024
Rest	3,858,803	Other Securities	20,218,063
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat Debt, and Dividend Accts.)	7,823,669	Notes	6,814,490
Other Deposits	11,635 180	Gold and Silver Coin ..	8.6,670
Seven day and other bills	606 295		
	£38,477,247		£38,477,247

4th day of April, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY—BANKRUPTS—C. K. Ashley, Sheffield, Common Brewer—J. B. Copland, Manchester, Wine and Spirit Merchant—J. Edwards, Cwm Yniscoy, Monmouthshire, Draper—W. Freeman, Belper, Derbyshire, Builder and Contractor—J. Isenberg and D. Myers, Skinner Street, Snow Hill, Boot and Shoe Warehousemen—J. Robinson, East Hartlepool, Durham, Linen and Woollen Draper.

SCOTCH SEQUESTRATIONS—D. Anderson, Aberdeen, Baker—T. Boskill and J. Boskill, jun., Glasgow, Ironmongers—R. Clarke, Wishaw, Lanarkshire, Innkeeper—P. Hall, Glasgow, Newspaper Proprietor—H. Reid, Glasgow, Auctioneer and Valuator.

FRIDAY—BANKRUPTS—T. D. Carter, Blue Anchor Yard, Coleman Street, City, Livery Stable Keeper—G. T. Chambers, Finsbury Pavement and Green Street, Spitalfields, Umbrella Manufacturer—S. G. Dean, Trig Wharf, Upper Thames Street, Lead, Glass, and Colour Merchant—T. Fitzpatrick and B. Fitzpatrick, Newark-upon-Trent, and Nottingham, Travelling Drapers—N. Iseen and F. Engebrethsen, Great Tower Street, City, and Russell Street, Rotherhithe, Ship Chandlers and Sail Makers—W. Moss, Macclesfield, Boot and Shoe Manufacturer—C. Osmond, Hemington, Northamptonshire, Buyer and Letter of Thrashing Machines for Hire and Corn Thrasher—W. H. Rhodes, Milton next Gravesend, Kent, Licensed Victualler—R. Scott and W. T. Scott, Southampton, Tailors—R. White, J. White, and W. White, Nottingham, Lace Manufacturers.

BANKRUPTCY ANNULLED—J. R. Horner, Ashton under Lyne, Corn Merchant.

Metropolis and its Vicinity.

Indian Famine Relief Fund.—The donations received at the Mansion House up to Thursday night, amounted to at least 23,000l., and the mail which left on Wednesday for Bombay carried out 20,000l. to Sir George Clerk, the Governor of that presidency, to be distributed by his Excellency in such proportions as he may think desirable among the distressed districts. The contributions transmitted to the Lord Mayor on Monday exceeded 3500l., those transmitted on Tuesday exceeded 6000l., and those on Wednesday exceeded 3500l. Several clergymen in various parts of the country have responded to the appeal addressed to them by the Lord Mayor, by having collections in their churches on Good Friday and Easter Day. A letter, emanating from the Committee, under the hand of the Lord Mayor, has now been addressed to the Lord-Lieutenants of counties, inviting them to convene public meetings in their several counties in aid of the Fund.

The Westminster Clock and Bells.—The bells of the New Palace of Westminster have lately been playing some strange vagaries. On the morning of Thursday the 14th ult., at 3 o'clock, the great bell struck slowly about 20 times, and at 4 and 5 o'clock it struck 10 or 12 times instead of the proper number. On Monday last at 1 A.M. it struck 37. At 2 and 3 o'clock it gave the right numbers, but at 4 it struck 30. On both occasions on Monday when these numbers were given, the striking of the hours commenced before the ordinary quarter chimes, which came in towards the close.

Mr. Spurgeon's Metropolitan Tabernacle.—At a meeting of the contributors to the Tabernacle Building Fund held a few days since at the chapel, Sir Henry Havelock in the chair, Mr. Spurgeon announced that the remaining sum of 3000l., which was required to finish the chapel at the beginning of ... not only collected, but the total sum ... purpose of enabling him to open the ... debt, was no less than 3700l. He also ... beyond the 30,000l. which had been ... erection, about 1200l. more would be ... complete the approaches and furnish the ... that even now he wanted between 400l. and ... he had no doubt of getting by the time ... services were concluded. Mr. Spurgeon and ... will remove from New Park Street and ... commence their religious services in the ... to-morrow evening. He will preach at ... the morning.

The Savoy Chapel.—On Sunday last ... Chapel Royal in the Savoy, connected ... of Lancaster, was re-opened by two ... of which was preached by the Archbishop ... bury. The restoration of the church ... be remembered, was seriously damaged ... months since, is in every way complete.

The Royal Exchange.—The scaffolding ... rior of the Royal Exchange was taken ... and the new scheme of the Gresham C... covering in the area was exposed to public ... a roof resembling an ordinary railway ... across the centre of the building; and it is ... support this roof by cast iron columns ... fixed against the columns of the lower ... court. It is officially announced that ... intended simply as an experiment with a ... public opinion; and that the Gresham Com... been prevented from erecting a roof at the ... area by the objections made by the ... Lloyd's who protested against any interference ... ventilation of their apartments. The Gresham ... mittee have therefore been obliged to have ... way of compromise, to the experiment of ... elevation which might suit the convenience ... parties, though unavoidably detracting from ... tectural elegance of the structure itself.

Murder of a Young Woman.—On Sa... young man named Thomas Frederick K... committed to Horsemonger Lane Gaol, on ... warrant, charged with the murder of Victoria ... girl with whom he associated, and whose ... found in the Grand Surrey Canal.

The Strike.—It is said that there is ... prospect of a permanent adjustment of the ... between the masters and workmen, and that ... mise is likely to be effected on terms more ... to the men than they at first had any right ... The terms are that the men shall accept the ... of working by the hour, at 7d. per ... of 10 hours each, and shall have a ... 1 o'clock on Saturday, receiving the same ... weekly earnings as heretofore. The ... men without the half-holiday are now 33s., ... henceforth receive for 5 days of 10 hours ... Saturday 6½ hours up to 1 o'clock, 3s. ... together 33s., exactly the same as at present ... said that by this concession Messrs. Lucas ... Kelk will lose upwards of 14,000l. on their ... contracts.

The Public Health.—The Registrar... weekly return states the deaths registered ... in the week that ended Saturday, March 30 ... The average number in the corresponding ... 10 years 1851-60, corrected for increase of ... was 1580. The present return is therefore ... the average. During the week the births ... and 913 girls, in all 1974 children, were ... London. In the 10 corresponding weeks ... 1851-1860 the average number was 1881.

Provincial.

Ashton.—The number of hands out ... Ashton, Stalybridge, Dukinfield, Hyde, ... the immediate districts, is now about 25,0... them on strike, but some of them in conse... strike. In Hyde, Newton, and Godley ... are out, and in other places there is a ... number. The amount of money thus ... circulation is, at the lowest estimate, ... a week.

Exeter.—The execution of Robert H... soldier who was convicted at the recent ... wilful murder of Sergeant Henry Jones at ... shooting him with his rifle after some ... took place on Saturday morning in front of ... gaol in the presence of a great concourse of ... He died penitent, and maintained to the ... did not intend to shoot the Sergeant, but ... act to the effect of drink.

Louth.—An extensive post office robbery ... committed between this town and Lond... parcel belonging to the Lincoln and Lindsey ... Company, and containing bills, notes, and ... value of 1361l., having been stolen. The ... posted on the evening of the 27th Feb. by ... clerk of the Louth branch, at the Louth ... was directed to Messrs. Prescott and Co., ... agents, and has never since been heard of ... of the letter can be fully proved, and the ... entirely exculpates every one in the ... from any participation in the robbery. The ... has brought to the knowledge of the ...

[illegible] until the last few days, was never dreamt of. [illegible] is, that at Peterborough the mail bags from Louth are opened and the letters re-sorted. It has been discovered that two 100*l.* Bank of England notes [illegible] in the parcel, and in whose safety nearly every one believed, have been cashed in France, and have since been returned to this country. It is therefore concluded that all the notes, amounting to 295*l.*, have been converted into money.

PETERBOROUGH.—A serious fraud has been discovered in the neighbourhood of this city, by which the Great Northern Railway Company has suffered to the extent [illegible] 7*d.* per annum for nine consecutive years. The railway runs through the parish of Warrington, to which the company pay rates on the sum of 1295*l.* About three or four years ago, when there was a dispute between the company and the parish about the [illegible], Mr. Rowell, the overseer and collector, returned a large sum to the company, stating that he had [illegible] an 8*d.* rate of them instead of a 6*d.* one. The company having no suspicion of any fraud paid the rates to him as usual. Lately, however, another dispute arose with the company, and Rowell on this occasion returned them a sum of money, stating that he had by mistake taken a 6*d.* rate instead of a 4*d.* one. This caused the company to have the matter looked into, when it was found that Rowell had been practising the fraud upon them ever since 1852. A warrant was at once taken out for his apprehension, but before it could be executed he attempted to commit suicide by cutting his throat. He was, however, found before life was extinct, and it is said that there is some chance of his recovery.

PORTSMOUTH.—The Glasgow, 51 gun screw frigate, was successfully launched from this dockyard last week in the presence of many thousands of people. Her figure-head is the bust of a Highlander, with Glengarry bonnet and plume, with a shield beneath bearing the arms of the city of Glasgow—the traditional salmon and tree—and the motto, "Lord, let Glasgow flourish." The engines of the Glasgow are to be of 600 horse-power, and her armament will consist of 30 eight inch guns on the main deck, 18 32-pounders on the upper deck, and two of Sir W. Armstrong's 100-pounders as pivots. According to present arrangements, it will be nearly 12 months before any other man-of-war will be launched from this dockyard.

ROCHDALE.—On Good Friday a fatal accident occurred on Hollingworth Lake, near this town. The lake was crowded with a multitude of pleasure-seekers in steamers and boats, when a collision occurred between two of the boats, containing, it is supposed, about 18 persons. Both boats were upset, and four persons lost their lives. The jury at the inquest returned a verdict of Accidental Death.

SUDBURY.—A woman called Harriet Salmon, the wife of a coal carter residing in the village of Edwardstone near this town, murdered two of her children last week by drowning them in a pond. There is reason to believe that she is insane. The jury at the inquest returned a verdict of Wilful Murder against her.

TAUNTON.—The execution of Matthew Wedmore and Charles Wedmore for the murder of their aunt, Sarah Waterman, took place yesterday morning in front of the county gaol. The culprits mounted the scaffold with a firm step, apparently indifferent to the execrations and cries with which they were received, but neither of them said anything up to the last moment as to the crime. The crowd present was immense.

Scotland.

REPRESENTATION OF THE SCOTCH UNIVERSITIES.—The Town Council of Edinburgh has resolved, by 19 to 7, to petition Parliament not to grant a member to the Scotch Universities, being thus almost the only public body north of the Tweed that has actively opposed the movement for Scotch University representation.

CHANCELLORSHIP OF ABERDEEN UNIVERSITY.—It is understood that the Duke of Richmond is to be put in nomination for the office of Chancellor of the University of Aberdeen. Though his Grace was one of the petitioners against the ordinances when they were discussed last year under appeal to the Queen in council, he has since declared his opinion to be decidedly unfavourable to any attempt to reverse the decision then pronounced.

WRECK OF AN EMIGRANT SHIP.—On the night of the 25th ult. the ship Johannes, from Bremen to Baltimore, with 133 passengers and general cargo, stranded during a thick fog in the Bay of Newark, in the island of Sanday, Orkney, and will probably become a total wreck. The emigrants and crew were landed safely, and it is hoped that the cargo will also be saved.

Railways.

GREAT WESTERN OF CANADA.—The directors of the Great Western Railway of Canada have published an answer to the report of the committee of investigation. They state that although they were not in office at the period of the events which have been brought up against Mr. Laing, they have the means of testing the allegations in question, and feel it their duty to do so, as he is no longer in Europe to defend himself. They then give a minute explanation of each charge brought against Mr. Laing as well as against the directors themselves, and assert that the statements of the committee were in all the main points hasty and unfounded. The whole matter will be discussed at the meeting of the Company on the 11th inst.

Law.

NORTHERN CIRCUIT: LIVERPOOL.—*The Liverpool Murder.*—*Thomas Donegan*, aged 2[illegible], was indicted for the wilful murder of James Cassidy, at Liverpool on the 2[illegible]th of January, by stabbing him in the neck with a knife. This crime arose out of a drunken quarrel, and as there appeared to have been no previous animosity the jury found the prisoner *Guilty* of Manslaughter. Mr. Justice Hill sentenced him to penal servitude for life.—*Joaquin Francisco*, 27, a Brazilian sailor, was indicted for the murder of a Spanish sailor, also named Francisco, on the 17th of March, at Liverpool, by stabbing him with a knife. The jury found him *Guilty* of Manslaughter, and he was sentenced to penal servitude for life. *Shooting with Intent to Murder.*—*Lot Benson Lowther*, 21, was found *Guilty* of having, at Eston, on the 1[illegible]th of December, feloniously shot with a pistol Jane Mooney, with intent to murder her, and was sentenced to 10 years' penal servitude. *Burglary.*—*Roger Haydock*, 2[illegible], *John Barnes*, 1[illegible], *John Jackson*, [illegible], *William Mawdsley*, 19, and *Richard Corbridge*, [illegible], were charged with breaking into the house of John Bourne, farmer, residing at Dilworth, near Blackburn, and stealing 44*l.* 1[illegible]*s.*, and other things, on the 10th of February last. They also committed various acts of violence and outrage on the prosecutor and his daughter. The jury found them all *Guilty*. Mr. Justice Hill, after commenting upon the atrocious crime of which they had been found guilty, said he felt it to be his duty to pass upon them such a sentence as would strike terror into every person disposed to violate the law in the outrageous manner they had done. He sentenced Barnes, Jackson, and Mawdsley to 12 years' penal servitude each; Haydock, whom he looked upon as the ringleader of the gang, to 14 years' penal servitude; and Corbridge, who committed the outrage on Miss Bourne, to 15 years' penal servitude. *Railway Accidents.*—*Friedlander v. London and North Western Railway.* In this case plaintiff, a dealer in fancy goods, residing in Manchester, sued the company for damages occasioned by the collision which took place at Roby station on the 18th of May last. The jury immediately gave a verdict for 300*l.* *Crossdale v. Lancashire and Yorkshire Company.*—In this case Mr. James Crossdale, a cap manufacturer, recovered 100*l.* from the Lancashire and Yorkshire Company, as compensation for injuries sustained during a collision near Wigan.

NORTH WALES AND CHESTER CIRCUIT.—*Garotte Robbery.*—*Thomas Lynch*, 21, weaver, was charged with assaulting and robbing Henry Johnson, at Macclesfield, on the 23d of February last. The Jury found the prisoner *Guilty* and Mr. Justice Byles sentenced him to 4 years' penal servitude. *Murderous attack on a Gaol Warder.*—*Thomas O'Brien* was charged with cutting and wounding Arthur Dunning, on the 22d of January last, at the gaol of Chester Castle, with intent to do him grievous bodily harm. The jury almost immediately found the prisoner *Guilty*, and he was sentenced to 7 years penal servitude.

Obituary.

THE BISHOP OF MADRAS (THE RIGHT REV. THOMAS DEALTRY, D.D.) died in Madras on the 4th of March, in his 60th year. He graduated at St. Catherine's Hall, Cambridge, and after taking holy orders, served in subordinate posts in the Church until 1835, when he was appointed Archdeacon of Calcutta. This post he held for rather more than 12 years, and on resigning it, returned to England. In 1849 he was appointed to succeed Mr. Baptist Noel as Minister of John Street Chapel, Bedford Row, and in the same year was appointed to succeed Bishop Spencer as Bishop of Madras.

LADY CHARLOTTE BURY did on the 31st ult. at an advanced age. Her ladyship was the youngest daughter of Field-Marshal the Duke of Argyll, by the widow of the Duke of Hamilton, and consequently she was aunt to the present Duke of Argyll and the Earl of Derby. In her youth Lady Charlotte was remarkable for her personal beauty, and throughout life for the charm of her manners. She was twice married—first to Colonel J. Campbell, of Shawfield, and secondly to the Rev. Edward Bury. By her first marriage she had a numerous family, only two of whom survive—Lady A. Lennox and Mrs. W. Russell. By her second marriage she had two daughters, one of whom, Mrs. Lyon, is the only one now living.

COLONEL R. R. DAWSON, C.B., R.E., died on the 28th ult. at Blackheath, in his 6[illegible]d year. He was originally employed on the Ordnance Survey, and on the establishment of the Tithe Commission became connected with that commission. He was subsequently appointed assistant commissioner and head of the Survey Department of the Commons Inclosure and Copyhold Commission. He was made a Companion of the Bath for his Civil services.

SIR MATTHEW BARRINGTON, BART., Crown Prosecutor for the counties of Munster, died in Dublin on Monday in his 73rd year. He had held the very lucrative office of Crown Solicitor for Munster, for nearly 4[illegible] years. The office was worth, in ordinary times, about 4000*l.* a year, and in extraordinary, when Crown prosecutions were frequent, double or treble that amount. It is now said that the office will be divided into three, viz., Cork, Limerick, and the united counties of Clare and Kerry.

CAPTAIN FELTON HERVEY, Inspector-General of Prisons, died in Dublin on the 30th ult., aged 3[illegible]. He had held the office of Inspector-General for several years, and discharged its duties to the satisfaction of the public.

BIRTHS.—On the 30th ult, at 10, Lowndes Street, Lady EDWIN HILL, of a daughter—27th ult, at Mains House, Chirnside, Berwickshire, N.B., the Lady SUSAN GRANT SUTTIE, of a daughter—26th ult, at 48, Eaton Place, the Hon. Mrs. FREDERICK BYRON, of a son—27th ult, at Brecon, the Hon. Mrs. H. GORE LINDSAY, of a son—2[illegible]th ult, at 17, Brook Street, the wife of Lieut.-Colonel BARNARD, Grenadier Guards, of a son—31st ult, at 5, Upper Hyde Park Street, Mrs. GEORGE LYALL, of a son—2d inst, at 77, Eaton Square, the wife of WILLIAM JONES LOYD, Esq., of a son.

MARRIAGES.—On the 2d inst, at the Roman Catholic Church of St. John's, Black Rock, near Dublin, the Right Hon. RICKARD DEASY, Baron of her Majesty's Court of Exchequer in Ireland, to MONICA, youngest daughter of the late HUGH O'CONNOR, Esq., of Sackville Street, Dublin—2[illegible] inst, at Marylebone Church, ALEXANDER YOUNG SPEARMAN, Esq., eldest son of Sir Alexander Spearman, Bart., of Hanwell, Middlesex, to LOUISA ANN CAROLINE AMELIA, only daughter of the late EDWARD PELLEW MAINWARING, Esq., and granddaughter of Rear-Admiral Mainwaring, of Whitmore Hall, Staffordshire—15th ult, at Paris, ALFRED THOMPSON, late of her Majesty's 6th Inniskillen Dragoons, to ALICE, daughter of the PRINCE DE TURSCHAROFF, of Nonnay-Ardeche, France—27th ult, at the British Legation in Stuttgardt, ALEXANDER GRAHAM DUNLOP, Esq., Attaché to her Majesty's Embassy at the Court of Austria, eldest son of John Dunlop, Esq., of Gairbraid, &c., Lanarkshire, to MARY ELIZABETH GUFF GORDON, widow of the late PATRICK SPENCE, Esq., of St. James's, Jamaica, eldest daughter of the late Hon. William Gordon, Member of her Majesty's Council in that island, and niece of General Gordon, of Culdraine, Aberdeenshire.

DEATHS.—On the 1st inst, at Charlotte Street, Perth, MARIA ANN SYMSON, widow of ALEXANDER OGILVY, Esq. (late Member of the Bengal Medical Board), and eldest surviving daughter of the late Major-General the Hon. Mark Napier, aged 7[illegible]—[illegible]th ult, at Ryde, Isle of Wight, CHARLOTTE, widow of the late Major General Sir CHARLES BRUCE, K.C.B., aged 6[illegible]—At 4, Park Street, Bath, HENRIETTA, daughter of the late Sir THOMAS BUTLER, Bart., Garryhundon, Ballintemple, Carlow—29th ult, at her residence, 1[illegible], Lansdown Place, Brighton, CATHERINE, relict of A. R. FIRTH, Esq., and youngest daughter of the late Sir John Call, Bart., of Whiteford House, Cornwall—26th ult, at St. Leonard's on Sea, MARIA GEORGINA, daughter of the late General GENT, aged [illegible]—20th ult, at Hyères, south of France, MARIA, daughter of the late Lieutenant-General CONYERS, C.B.—31st ult, in London, FANNY, widow of the late Rear Admiral WISE, C.B., of Hoe Gate House, Plymouth, aged 68—12th Feb., near Congo River, West Coast of Africa, of fever, Lieut. CHARLES WILLIAM THACKERAY, R.N., of H.M.S. Wrangler, youngest son of the late Gen. Thackeray, R.E., aged 23—31st ult, at Elstead House, near Maidstone, RICHARD FIENNES, second son of the late FIENNES WYKEHAM MARTIN, Esq., of Leeds Castle, aged 2[illegible]—22d ult, at Cefn Mawr, Pwllheli, N. Wales, PATRICK OGILVY CALNDAY, Esq., late of the H.E.I.C. Civil Service, and a Deputy Lieutenant of the county of Carnarvon, aged 76—25th ult, THOMAS LITTLEDALE, Esq., of Highfield, near Liverpool, a Deputy Lieutenant of the County, and Captain in the 2d Royal Lancashire Militia—2[illegible]th ult, at Harker Grange, near Carlisle, the Rev. JOSEPH LOWTHER HODGSON, M.A., incumbent of Wetheral with Warwick, Cumberland, and third son of the late William Hodgson, Esq., of Houghton House, in that county, aged 42—24th ult, at Blackheath, THOMAS THROGBEAR WILLIAMS, M.D., aged [illegible]—31st ult, at 7, Percy Place, Bath, RICHARD BLAGDEN, Esq., F.R.C.S., late of Albemarle Street, London, Surgeon Accoucheur to the Queen, and Surgeon Extraordinary to the late Duchess of Kent, aged 72.

Markets.

COVENT GARDEN, April 6.

Cornish Broccoli continues to be furnished in excellent condition, and good samples of Lettuces, Endive, and Artichokes come from France. Samples of new Grapes are offered, and fetch good prices. Asparagus, French Beans, and new Potatoes may also now be had. Cucumbers are coming in plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Camellias, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 6s to 10s	Apples, per doz., 6d to 1s 6d
Grapes, per lb., 15s to 24s	Oranges, per 100, 6s to 10s
Strawberries, p. oz., 1s to 2s	Lemons, per 100, 6s to 10s
Pears, per doz., 4s 6d to 8s	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 1s6d to 5s	Celery, p. bundle, 1s 6d to 1s9d
Green Peas, p. ½ sieve, 20s	Onions, p. ½ sieve, 1s 6d to 2s6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 4s to 8s
Cabbages, do., 2s to 3s	Rhubarb, p. bundle, 6d to 1s 3d
Potatoes, p. ton, 90s to 160s	Seakale, p. punnet, 1s 6d to 2s
— per bus., 4s to 6s	Shallots, per lb., 1s 6d
— per cwt., 6s to 10s	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 10d	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 4s to 5s	Mushrooms, p. pott., 1s3d to 1s6d
Cucumbers, each, 1s 6d to 2s	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 3s to 4s	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, April 4.

Prime Meadow Hay	75s to	85s	Clover	90s to	115s
Superior do. (old)	90	105	New Clover	—	—
Inferior do.	50	60	Do second cut	80	100
New do.	—	—	Straw	36	44
Rowen	—	—			

DAVIS & CO.

WHITECHAPEL, THURSDAY, April 4.

Fine old Hay	100s to	105s	Fine old Clover	110s to	120s
Inferior do.	80	90	Inferior do	85	95
Prime New Hay	—	—	Fine 2d cut	90	105
Inferior do.	—	—	Inferior do.	—	—
Straw	38	42	Fine New Clover	—	—

HOPS.—BOROUGH MARKET, FRIDAY, April 5.

Messrs. Pattenden & Smith report that the demand for fine yearlings has improved, and prices for such are fully 8s. per cwt. dearer. The best grown samples of new are also in more request.

BUTTER MARKET.—April 3.

Best Fresh Butter	16s. per dozen lbs.
Second do. do.	14s. " "

Pork, 4s. 8d. to 5s. 4d. per 8 lbs.

POTATOES.—SOUTHWARK, Monday, April 1.

During the past week the arrivals coastwise have been light, but with what is left from former arrivals, the supply is still more than equal to the demand, and prices without alteration. The following are this day's quotations:—York Flukes, 130s. to 140s. per ton; Lincolnshire Regents, 100s. to 110s.; Dunbar Red Soil do., 140s. to 160s.; do. do. Reds, 105s. to 120s.; North Berwick Regents, 120s. to 125s.; Fife, Forfar, and Perth do., 100s. to 110s.; ditto Rocks, 85s. to 90s.; ditto ditto Reds, 75s. to 80s.; French Whites, 60s. to 90s.; Belgian do., 60s. to 80s.; Dutch do., 60s. to 80s.

BRITISH WOOLS.—LONDON, THURSDAY, April 4.

There have been some lots of fleeces sold at low rates by holders anxious to quit their stocks. Skin wool is more inquired after, as it is now of good length and comparatively scarce.

	s. d.		s. d.		s. d.		s. d.
South-down Hoggets	1 5	to	..	Leicest. Wethers	1 4	to	..
Half-bred ditto	1 6	—	..	Ditto Hoggs	1 8	—	..
Down Ewes	1 4	—	..	Combing Skins	0 10	—	1 8
Kent Fleeces	1 5	—	1 6	Blanket ditto	0 6	—	0 7
				Flannel Wool	1 0	—	1 0

COAL MARKET.—April 3.

Bell's Primrose Gas, 13s.; Davison's West Hartley, 17s. 3d.; Holywell, 16s. 6d.; Lambert's West Hartley, 17s. 3d.; West Hartley, 17s. 3d.; Walls End Walker Primrose, 15s. 3d.; Walls End Eden, 15s. 6d.; Walls End Hetton, 1[illegible]s. 6d.; Walls End Hedley, 15s. 6d.; Walls End Braddyll's Hettons, 17s.; Walls End Framwellgate, 15s. 3d.; Walls End Hetton 18s. 6d.; Walls End Kepier Grange, 17s.; Walls End Stewarts, 18s. 6d.; Walls End Hartlepool, 18s. 6d.; Walls End Heugh Hall, 1[illegible]s. 9d.; Walls End Kelloe, 17s. 6d.; Walls End South Hartlepool, 16s. 9d.; Walls End Denison, 13s. 6d.; Carway and Duffryn Malting, 24s.—62 ships at market.

METROPOLITAN CATTLE MARKET.

MONDAY, April 1.

The number of Beasts is very small, and consequently prices have advanced a trifle. Trade is, however, very slow. We are

country at large did not urge upon their members to accept it; because the objections to it came from the Liberal side almost as much as from the Opposition side, and some of those who were most adverse to it were representatives of great communities—of Edinburgh, for instance, of Salford, and other places. It was absurd to go on pressing a Bill which the experience of several months had shown us Parliament was not in a temper to receive; and the silence of the country since has shown that the conduct of their members was not found fault with by the electors who sent them to the House of Commons. My friend asked me why we did not renew that Bill this year? Why, because we were not geese; because, having seen that the House of Commons was not disposed in the first year of its existence to pass a Bill which would have insured an early dissolution, we thought it was not wise, not profitable, not useful in the second year of its existence, to repeat a measure which had been decidedly not agreeable to the taste either of the House or of its electors. Mr. Rowcliffe may think we were wrong; I maintain that we were right, and I think that the manifestation of public opinion shows that the country sides with us, and not with Mr. Rowcliffe. But we have not had a sufficient regard to economy. My friend says we ought to have reduced all unnecessary places. I tell him there were none to reduce. All sinecures have been abolished. Places now are places with duties attached to them, and with salaries not greater than the labours of the offices require. My friend Mr. Rowcliffe speaks in the simplicity of his heart, with a total ignorance of the matters which he is discussing, and that is a most advantageous position for a person to stand in who addresses a large audience, because he draws upon his fancy for his facts, and upon his imagination for his arguments. But, gentlemen, I suppose he means that we ought to have reduced the army and the navy, because they are the great sources of national expenditure. I wish he would ask those gallant Volunteers whether they wish to see the army reduced. I wish he would ask the multitude of persons whom I now see before me whether they think the country is too much protected? We have heard of complaints against protection in the shape of duties and customs upon the importation of articles; but the protection against the importation of a foreign force, I believe, is very much to the taste of the people of this country. Have we too large a navy? Why, we are urged in the House of Commons to increase our iron ships; and I am sure that our iron ships ought to be increased, because they are not at present upon a par with the iron fleet of other countries, especially of our neighbouring country on the other side of the Channel. But, if we are not to diminish our army and navy, I should like my friend to state where it is that he would produce such a great reduction of expenditure. Would he wish to cut off the supplies that go to the education of the poorer classes? Would he wish to continue the reign of ignorance in the country? It is said that in the kingdom of the blind the one-eyed man is a king. Perhaps Mr. Rowcliffe wishes to be Sovereign in the land of ignorance; he is only half enlightened, and therefore he might be qualified. I believe I have now answered his questions, but I will state that though the Government thought it right not to interpose and retard the general legislation of the country by introducing again a Reform Bill, still certain ardent Reformers have on their own account introduced Bills. Mr Locke King introduced a Bill to extend the county franchise, and Mr. Baines has a Bill to extend the borough franchise. When the debate upon Mr. Locke King's came, the Government, though they were no parties to the Bill because they thought it was unwise to bring in, nevertheless voted for it. It is true that we were then in that minority which Mr. Rowcliffe so much regrets; and which, if he had been in the *House, no doubt would have been greater by one, unless any* speech which he made in favour of the measure might have turned more people against him than his own vote for it was worth. We voted for that Bill, and there was a majority of 28 against us. We shall in all probability vote for Mr. Baines's Bill. Whatever the result of that division may be it is not for me to say, but it is clear to my observation that the House of Commons is as little inclined this year to pass any great measure of organic change as it was in the Session of last year."

LORD HERBERT OF LEA attended a public meeting at Wilton on Wednesday, in aid of the Indian Famine Relief Fund, and spoke as follows on the sufferings of the North-west Provinces of India:—

"You will be aware from the statements which have appeared in the public papers that India has been visited by famine, and that the numbers supposed to be suffering under that calamity are put at the lowest estimate at 1,500,000. Now, India is an immense tract of country, and we must not forget that the result of that great extent is to aggravate immensely the sufferings of the people, because where the means of communication are defective, and where, for example, there are no railroads except one, and almost no roads, of course the difficulty of transporting food is immensely aggravated, and delay in this case is death. Well, the country has been desolated, not only by famine, but, within the last few years, by civil war, which like all wars, tends greatly to impoverish a country. Crops are laid waste, houses are burnt, the ordinary avocations of industry are interrupted, the production of the country is greatly impeded and diminished, and therefore a famine which comes at such a time, when a country is unable to meet the requirements for its own preservation, is naturally attended with the most disastrous consequences. Now, I confess that, looking back upon the history of our connection with India, and judging it impartially, we do not stand very well in the eyes of the nations of the world. We have gone there as traders, we have gone there as conquerors, and we have made a great deal of money and attracted great prosperity to this country through our connection with India. But I am not certain that we have done all that we might or ought to have done for the country itself. In the first place, I believe that we Anglo-Saxons, who are accustomed to self-government—who have been accustomed in fact not to be governed at all—who have no notions of government, therefore, beyond that *of giving security to* life and property—we have not the genius of dealing with Asiatics, who require a mind to guide them, energy to supply the failure of that quality, and a hand to execute what the brain imagines. We have left the country too much to itself, and have not done enough in the way of public works, for example, which might have saved the country from famine. The irrigation effected by means of canals and the diversion of rivers from their course has saved those portions of the country in which it has taken place from the perils and dangers of famine; but through a great tract of country we have done nothing, and the people are reaping the reward of it. It is often said—I have often heard it said—that we should carry Christianity to India. Well, we have not carried Christianity to India, and perhaps one of the reasons is that Christians are little agreed amongst themselves, and that Christianity, therefore, means to the ears of the Hindoo some great diversity of opinion amongst the different religious sects. The people of India see that we do not agree amongst ourselves, and therefore they are unwilling to listen to us. But on this occasion we may carry Christianity to them. In this sense we shall show the practical effects and proofs of that religion in our desire to do good, and in attempting, as far as we can, to relieve them from their wants and necessities. I have seen it stated at the time of the Irish famine that not only did the natives of India subscribe very liberally to the relief of the sufferers from the famine in Ireland, but actually the native soldiers; those men who certainly—as time has shown—were not well affected to our rule, subscribed their pay, and sent it to alleviate the sufferings of their conquerors, and surely that ought to operate as a lesson to us. Having with a strong hand put down the Indian rebellion and re-established the government of the Queen, shall we not show them that we forget all the sufferings which that rebellion caused by looking upon them now as fellow-subjects in distress, as a nation stretching out their hands to us for food? I trust, therefore, that as Englishmen we shall do our part in Wilton to show that we are not deaf to their calls, but that we have the same anxiety to relieve their distress which they showed on a previous occasion towards us."

City Intelligence.

The Bank of England on Thursday reduced the rate of discount from 7 per cent., at which it was fixed on the 21st ult., to 6 per cent.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at $91\frac{5}{8}$ to $\frac{3}{4}$ both for Money and the 10th inst.; India Stock, 222; Ditto Five per Cent. Stock, 1859, $100\frac{1}{4}$ to 100; Five per Cent. Enfaced Rupee Paper, 94 to $93\frac{3}{4}$; Ditto Five and a Half per Cent., 100; Exchequer Bills, 4*s.* to 3*s.* dis.—FOREIGN: Brazilian Four and a Half per Cents, 1860, $85\frac{3}{4}$; Buenos Ayres Deferred, $28\frac{1}{4}$; Dutch Two and a Half per Cents., $63\frac{7}{8}$; Mexican Three per Cents., $24\frac{1}{4}$ to $\frac{3}{8}$; Portuguese Three per Cents, 1853, small, 47 to $46\frac{1}{2}$; Russian Four and a Half per Cents., $91\frac{1}{2}$ to 91; Sardinian Five per Cents., $82\frac{1}{4}$; Spanish Three per Cents., for Acct., $48\frac{3}{4}$; Ditto New Deferred Three per Cents., for Acct., $41\frac{1}{4}$; Ditto Passive, $16\frac{3}{4}$; Committee's Certificates, $5\frac{3}{8}$ to $\frac{1}{2}$; Turkish Six per Cents., 1854, $73\frac{1}{2}$; Ditto, 1858, for Acct., $53\frac{7}{8}$; Ditto Guaranteed Four per Cents., $99\frac{3}{4}$.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£26,668,460	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	11,345 098
		Silver Bullion	848,362
	£26,668,460		£26,668,460

BANKING DEPARTMENT.

Proprietors Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£10,608,024
Rest	3,858,803	Other Securities	20,218,063
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	7,823,669	Notes	6,814,490
Other Deposits..	11,635,480	Gold and Silver Coin ..	806,670
Seven day and other bills	606.295		
	£38,477,247		£38,477,247

4th day of April, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY—BANKRUPTS—C. K. ASHLEY, Sheffield, Common Brewer—J. B. COPLAND, Manchester, Wine and Spirit Merchant—J. EDWARDS, Cwm Yniscoy, Monmouthshire, Draper—W. FREEMAN, Belper, Derbyshire, Builder and Contractor—J. ISENBERG and D. MYERS, Skinner Street, Snow Hill, Boot and Shoe Warehousemen—J. ROBINSON, East Hartlepool, Durham, Linen and Woollen Draper.

SCOTCH SEQUESTRATIONS—D. ANDERSON, Aberdeen, Baker—T. BOSKILL and J. BOSKILL, jun., Glasgow, Ironmongers—R. CLARKE, Wishaw, Lanarkshire, Innkeeper—P. HALL, Glasgow, Newspaper Proprietor—H. REID, Glasgow, Auctioneer and Valuator.

FRIDAY—BANKRUPTS—T. D. CARTER, Blue Anchor Yard, Coleman Street, City, Livery Stable Keeper—G. T. CHAMBERS, Finsbury Pavement and Green Street, Spitalfields, Umbrella Manufacturer—R. G. DEAN, Trig Wharf, Upper Thames Street, Lead, Glass, and Colour Merchant—T. FITZPATRICK and B. FITZPATRICK, Newark-upon-Trent, and Nottingham, Travelling Drapers—N. ILLES and F. ENGELBRETHSEN, Great Tower Street, City, and Russell Street, Rotherhithe, Ship Chandlers and Sail Makers—W. MOSS, Macclesfield, Boot and Shoe Manufacturer—C. ORMOND, Hemington, Northamptonshire, Buyer and Letter of Thrashing Machines for Hire and Corn Thrasher—W. H. RHODES, Milton next Gravesend, Kent, Licensed Victualler—R. SCOTT and W. T. SCOTT, Southampton, Tailors—R. WHITE, J. WHITE, and W. WHITE, Nottingham, Lace Manufacturers.

BANKRUPTCY ANNULLED—J. R. HOBNES, Ashton-under-Lyne, Corn Merchant.

Metropolis and its Vicinity.

INDIAN FAMINE RELIEF FUND.—The donations received at the Mansion House up to Thursday night, amounted to at least 23,000*l.*, and the mail which left on Wednesday for Bombay carried out 20,000*l.* to Sir George Clerk, the Governor of that presidency, to be distributed by his Excellency in such proportions as he may think desirable among the distressed districts. The contributions transmitted to the Lord Mayor on Monday exceeded 3500*l.*, those transmitted on Tuesday exceeded 6000*l.*, and those on Wednesday exceeded 3500*l.* Several clergymen in various parts of the country have responded to the appeal addressed to them by the Lord Mayor, by having collections in their churches on Good Friday and Easter Day. A letter, emanating from the Committee, under the hand of the Lord Mayor, has now been addressed to the Lord-Lieutenants of counties, inviting them to convene public meetings in their several counties in aid of the Fund.

THE WESTMINSTER CLOCK AND BELLS.—The bells of the New Palace of Westminster have lately been playing some strange vagaries. On the morning of Thursday the 14th ult., at 8 o'clock, the great bell struck slowly about 20 times, and at 4 and 5 o'clock it struck 10 or 12 times instead of the proper number. On Monday last at 1 A.M. it struck 37. At 2 and 3 o'clock it gave the right numbers, but at 4 it struck 30. On both occasions on Monday when these numbers were given, the striking of the hours commenced before the ordinary quarter chimes, which came in towards the close.

MR. SPURGEON'S METROPOLITAN TABERNACLE.—At a meeting of the contributors to the Tabernacle Building Fund held a few days since at the chapel, Sir Henry Havelock in the chair, Mr. Spurgeon announced that the remaining sum of 3000*l.*, which was required to finish the chapel at the beginning of [illegible] not only collected, but the total sum [illegible] purpose of enabling him to open the [illegible] debt, was no less than 3700*l.* He a[illegible] beyond the 30,000*l.* which had been [illegible] erection, about 1200*l.* more would [illegible] complete the approaches and furnish the [illegible] that even now he wanted between 400*l.* [illegible] he had no doubt of getting by the time [illegible] services were concluded. Mr. Spurgeon [illegible] will remove from New Park Street and [illegible] commence their religious services in [illegible] to-morrow evening. He will preach at [illegible] the morning.

THE SAVOY CHAPEL.—On Sunday las[illegible] Chapel Royal in the Savoy, connected [illegible] of Lancaster, was re-opened by two [illegible] of which was preached by the Archbi[illegible] bury. The restoration of the church [illegible] be remembered, was seriously damaged [illegible] months since, is in every way complete.

THE ROYAL EXCHANGE.—The scaffolding [illegible] rior of the Royal Exchange was taken aw[illegible] and the new scheme of the Gresham C[illegible] covering in the area was exposed to publ[illegible] a roof resembling an ordinary railway [illegible] across the centre of the building; and it [illegible] support this roof by cast iron columns [illegible] fixed against the columns of the lower [illegible] court. It is officially announced th[illegible] intended simply as an experiment with a [illegible] public opinion; and that the Gresham Com[illegible] been prevented from erecting a roof at [illegible] area by the objections made by the [illegible] Lloyd's who protested against any interfe[illegible] ventilation of their apartments. The Gr[illegible] mittee have therefore been obliged to have [illegible] way of compromise, to the experiment [illegible] elevation which might suit the conve[illegible] parties, though unavoidably detracting fro[illegible] tectural elegance of the structure itself.

MURDER OF A YOUNG WOMAN.—On S[illegible] young man named Thomas Frederick K[illegible] committed to Horsemonger Lane Gaol, [illegible] warrant, charged with the murder of Vict[illegible] girl with whom he associated, and whose [illegible] found in the Grand Surrey Canal.

THE STRIKE.—It is said that there is [illegible] prospect of a permanent adjustment of [illegible] between the masters and workmen, and [illegible] mise is likely to be effected on terms mor[illegible] to the men than they at first had [illegible] The terms are that the men shall [illegible] of working by the hour, at 7*d.* pe[illegible] of 10 hours each, and shall have a [illegible] 1 o'clock on Saturday, receiving the sa[illegible] weekly earnings as heretofore. The [illegible] men without the half-holiday are now 33[illegible] henceforth receive for 5 days of 10 hours [illegible] Saturday $6\frac{1}{2}$ hours up to 1 o'clock, 3[illegible] together 33*s.*, exactly the same as at pre[illegible] said that by this concession Messrs. Lu[illegible] Kelk will lose upwards of 14,000*l.* [illegible] contracts.

THE PUBLIC HEALTH.—The Registrar[illegible] weekly return states the deaths registere[illegible] in the week that ended Saturday, March 30, [illegible] The average number in the corresponding [illegible] 10 years 1851-60, corrected for increase o[illegible] was 1580. The present return is there[illegible] the average. During the week the births [illegible] and 943 girls, in all 1974 children, were re[illegible] London. In the 10 corresponding weeks [illegible] 1851-1860 the average number was 1881.

Provincial.

ASHTON.—The number of hands out [illegible] Ashton, Stalybridge, Dukinfield, Hyde, [illegible] the immediate districts, is now about 25[illegible] them on strike, but some of them in conseq[illegible] strike. In Hyde, Newton, and Godley [illegible] are out, and in other places there is a [illegible] number. The amount of money thus [illegible] circulation is, at the lowest estimate, [illegible] a week.

EXETER.—The execution of Robert H[illegible] soldier who was convicted at the recent [illegible] wilful murder of Sergeant Henry Jones at [illegible] shooting him with his rifle after some trif[illegible] took place on Saturday morning in front of [illegible] gaol in the presence of a great concourse of [illegible] He died penitent, and maintained to the la[illegible] did not intend to shoot the Sergeant, but [illegible] act to the effect of drink.

LOUTH.—An extensive post office robbery [illegible] committed between this town and Londo[illegible] parcel belonging to the Lincoln and Lind[illegible] Company, and containing bills, notes, and [illegible] value of 1361*l.*, having been stolen. The [illegible] posted on the evening of the 27th Feb., b[illegible] clerk of the Louth branch, at the Louth p[illegible] was directed to Messrs. Prescott and Co. [illegible] agents, and has never since been heard of. [illegible] of the letter can be fully proved, and the [illegible] entirely exculpates every one in the L[illegible] from any participation in the robbery. [illegible] has brought to the knowledge of the pub[illegible]

[illegible], until the last few days, was never dreamt of, and that is, that at Peterborough the mail bags from [illegible] are opened and the letters re-sorted. It has [been discovered] that two 100*l*. Bank of England notes [enclosed] in the parcel, and in whose safety nearly every one believed, have been cashed in France, and [have since] been returned to this country. It is therefore concluded that all the notes, amounting to 295*l*., have been converted into money.

PETERBOROUGH.—A serious fraud has been discovered in the neighbourhood of this city, by which the Great Northern Railway Company has suffered to the extent of 60*l*. or 70*l*. per annum for nine consecutive years. The railway runs through the parish of Warrington, to which the company pay rates on the sum of 1295*l*. About three or four years ago, when there was a dispute between the company and the parish about the [illegible] Mr. Rowell, the overseer and collector, returned a large sum to the company, stating that he had received an 8*d*. rate of them instead of a 6*d*. one. The company having no suspicion of any fraud paid the rates to him as usual. Lately, however, another dispute arose with the company, and Rowell on this occasion returned them a sum of money, stating that he had by mistake taken a 6*d*. rate instead of a 4*d*. one. This caused the company to have the matter looked into, when it was found that Rowell had been practising this fraud upon them ever since 1852. A warrant was at once taken out for his apprehension, but before it could be executed he attempted to commit suicide by cutting his throat. He was, however, found before life was extinct, and it is said that there is some chance of his recovery.

PORTSMOUTH.—The Glasgow, 51 gun screw frigate, was successfully launched from this dockyard last week in the presence of many thousands of people. Her figure-head is the bust of a Highlander, with Glengarry bonnet and plume, with a shield beneath bearing the arms of the city of Glasgow—the traditional salmon and [tree]—and the motto, "Lord, let Glasgow flourish." The engines of the Glasgow are to be of 600 horse-power, and her armament will consist of 30 eight inch guns on the main deck, 18 32-pounders on the upper deck, and two of Sir W. Armstrong's 100-pounders as pivots. According to present arrangements, it will be nearly 12 months before any other man-of-war will be launched from this dockyard.

ROCHDALE.—On Good Friday a fatal accident occurred on Hollingworth Lake, near this town. The lake was crowded with a multitude of pleasure-seekers in steamers and boats, when a collision occurred between two of the boats, containing, it is supposed, about 18 persons. Both boats were upset, and four persons lost their lives. The jury at the inquest returned a verdict of Accidental Death.

SUDBURY.—A woman called Harriet Salmon, the wife of a coal carter residing in the village of Edwardstone near this town, murdered two of her children last week by drowning them in a pond. There is reason to believe that she is insane. The jury at the inquest returned a verdict of Wilful Murder against her.

TAUNTON.—The execution of Matthew Wedmore and Charles Wedmore for the murder of their aunt, Sarah Waterman, took place yesterday morning in front of the county gaol. The culprits mounted the scaffold with a firm step, apparently indifferent to the execrations and cries with which they were received, but neither of them said anything up to the last moment as to the crime. The crowd present was immense.

Scotland.

REPRESENTATION OF THE SCOTCH UNIVERSITIES.—The Town Council of Edinburgh has resolved, by 19 to 7, to petition Parliament not to grant a member to the Scotch Universities, being thus almost the only public body north of the Tweed that has actively opposed the movement for Scotch University representation.

CHANCELLORSHIP OF ABERDEEN UNIVERSITY.—It is understood that the Duke of Richmond is to be put in nomination for the office of Chancellor of the University of Aberdeen. Though his Grace was one of the petitioners against the ordinances when they were discussed last year under appeal to the Queen in council, he has since declared his opinion to be decidedly unfavourable to any attempt to reverse the decision then pronounced.

WRECK OF AN EMIGRANT SHIP.—On the night of the 24th ult. the ship Johannes, from Bremen to Baltimore, with 133 passengers and general cargo, stranded during a thick fog in the Bay of Newark, in the island of Sanday, Orkney, and will probably become a total wreck. The emigrants and crew were landed safely, and it is hoped that the cargo will also be saved.

Railways.

GREAT WESTERN OF CANADA.—The directors of the Great Western Railway of Canada have published an answer to the report of the committee of investigation. They state that although they were not in office at the period of the events which have been brought up against Mr. Laing, they have the means of testing the allegations in question, and feel it their duty to do so, as he is no longer in Europe to defend himself. They then give a minute explanation of each charge brought against Mr. Laing as well as against the directors themselves, and assert that the statements of the committee were in all the main points hasty and unfounded. The whole matter will be discussed at the meeting of the Company on the 11th inst.

Law.

NORTHERN CIRCUIT: LIVERPOOL.—*The Liverpool Murders.*—*Thomas Donegan*, aged 2[illegible], was indicted for the wilful murder of James Cassidy, at Liverpool, on the [illegible] of January, by stabbing him in the neck with a knife. This crime arose out of a drunken quarrel, and as there appeared to have been no previous animosity the jury found the prisoner *Guilty* of Manslaughter. Mr. Justice Hill sentenced him to penal servitude for life.—*Joaquin Francisco*, 27, a Brazilian sailor, was indicted for the murder of a Spanish sailor, also named Francisco, on the 17th of March, at Liverpool, by stabbing him with a knife. The jury found him *Guilty* of Manslaughter, and he was sentenced to penal servitude for life. *Shooting with Intent to Murder.*—*Lot Ireton Leath*, [illegible], was found *Guilty* of having, at Elton, on the 13th of December, feloniously shot with a pistol Jane Mooney, with intent to murder her, and was sentenced to 1[illegible] years' penal servitude. *Burglary.*—*Roger Haydock*, [illegible], *John Barnes*, [illegible], *John Jackson*, [illegible], *William Mawdsley*, 39, and *Richard Corbridger*, 39, were charged with breaking into the house of John Bourne, farmer, residing at Dilworth, near Blackburn, and stealing 44*l*. [illegible], and other things, on the 10th of February last. They also committed various acts of violence and outrage on the prosecutor and his daughter. The jury found them all *Guilty*. Mr. Justice Hill, after commenting upon the atrocious crime of which they had been found guilty, said he felt it to be his duty to pass upon them such a sentence as would strike terror into every person disposed to violate the law in the outrageous manner they had done. He sentenced Barnes, Jackson, and Mawdsley to 12 years' penal servitude each; Haydock, whom he looked upon as the ringleader of the gang, to 14 years' penal servitude; and Corbridge, who committed the outrage on Miss Bourne, to 15 years' penal servitude. *Railway Accidents.*—*Friedlander v. London and North Western Railway.* In this case plaintiff, a dealer in fancy goods, residing in Manchester, sued the company for damages occasioned by the collision which took place at Roby station on the 18th of May last. The jury immediately gave a verdict for [illegible]*l*. *Crosslale v. Lancashire and Yorkshire Company.*—In this case Mr. James Crosslale, a cap manufacturer, recovered 100*l*. from the Lancashire and Yorkshire Company, as compensation for injuries sustained during a collision near Wigan.

NORTH WALES AND CHESTER CIRCUIT.—*Garotte Robbery.*—*Thomas Lynch*, 21, weaver, was charged with assaulting and robbing Henry Johnson, at Macclesfield, on the 23d of February last. The Jury found the prisoner *Guilty*, and Mr. Justice Byles sentenced him to 4 years' penal servitude. *Murderous attack on a Gaol Warder.*—*Thomas O'Brien* was charged with cutting and wounding Arthur Dunning, on the 22d of January last, at the gaol of Chester Castle, with intent to do him grievous bodily harm. The jury almost immediately found the prisoner *Guilty*, and he was sentenced to 7 years' penal servitude.

Obituary.

THE BISHOP OF MADRAS (THE RIGHT REV. THOMAS DEALTRY, D.D.) died in Madras on the 4th of March in his 60th year. He graduated at St. Catherine's Hall, Cambridge, and after taking holy orders, served in subordinate posts in the Church until 1835, when he was appointed Archdeacon of Calcutta. This post he held for rather more than 13 years, and on resigning it, returned to England. In 1849 he was appointed to succeed Mr. Baptist Noel as Minister of John Street Chapel, Bedford Row, and in the same year was appointed to succeed Bishop Spencer as Bishop of Madras.

LADY CHARLOTTE BURY did on the 31st ult. at an advanced age. Her ladyship was the youngest daughter of Field-Marshal the Duke of Argyll, by the widow of the Duke of Hamilton, and consequently she was aunt to the present Duke of Argyll and the Earl of Derby. In her youth Lady Charlotte was remarkable for her personal beauty, and throughout life for the charm of her manners. She was twice married—first to Colonel J. Campbell, of Shawfield, and secondly to the Rev. Edward Bury. By her first marriage she had a numerous family, only two of whom survive—Lady A. Lennox and Mrs. W. Russell. By her second marriage she had two daughters, one of whom, Mrs. Lyon, is the only one now living.

COLONEL R. K. DAWSON, C.B., R.E., died on the 28th ult. at Blackheath, in his [illegible] year. He was originally employed on the Ordnance Survey, and on the establishment of the Tithe Commission became connected with that commission. He was subsequently appointed assistant-commissioner and head of the Survey Department of the Commons Inclosure and Copyhold Commission. He was made a Companion of the Bath for his Civil services.

SIR MATTHEW BARRINGTON, BART., Crown Prosecutor for the counties of Munster, died in Dublin on Monday in his 73rd year. He had held the very lucrative office of Crown Solicitor for Munster for nearly [illegible] years. The office was worth, in ordinary times, about 4000*l*. a year, and in extraordinary, when Crown prosecutions were frequent, double or treble that amount. It is now said that the office will be divided into three, viz., Cork, Limerick, and the united counties of Clare and Kerry.

CAPTAIN FELTON HERVEY, Inspector-General of Prisons, died in Dublin on the 30th ult., aged 5[illegible]. He had held the office of Inspector-General for several years, and discharged its duties to the satisfaction of the public.

BIRTHS.—On the 30th ult., at 10, Lowndes Street, Lady EDWIN HILL, of a daughter—27th ult., at Mains House, Chirnside, Berwickshire, N.B., the Lady SUSAN GRANT SUTTIE, of a daughter—26th ult., at 48, Eaton Place, the Hon. Mrs. FREDERICK BYRON, of a son—27th ult., at Brecon, the Hon. Mrs. H. GORE LINDSAY, of a son—29th ult., at 17, Brook Street, the wife of Lieut.-Colonel BARNARD, Grenadier Guards, of a son—31st ult., at 5, Upper Hyde Park Street, Mrs. GEORGE LYALL, of a son—2d inst., at 77, Eaton Square, the wife of WILLIAM JONES LOYD, Esq., of a son.

MARRIAGES.—On the 2d inst., at the Roman Catholic Church of St. John's, Black Rock, near Dublin, the Right Hon. RICKARD DEASY, Baron of her Majesty's Court of Exchequer in Ireland, to MONICA, youngest daughter of the late HUGH O'CONNOR, Esq., of Sackville Street, Dublin—[illegible], at Marylebone Church, ALEXANDER YOUNG SPEARMAN, Esq., eldest son of Sir Alexander Spearman, Bart., of Hanwell, Middlesex, to LOUISA ANN CAROLINE AMELIA, only daughter of the late EDWARD PELLEW MAINWARING, Esq., and granddaughter of Rear-Admiral Mainwaring, of Whitmore Hall, Staffordshire—15th ult., at Paris, ALFRED THOMPSON, late of her Majesty's 6th Inniskillen Dragoons, to ALICE, daughter of the PRINCE DE TURSCHAROFF, of Nonnay-Ardeche, France—27th ult., at the British Legation in Stuttgardt, ALEXANDER GRAHAM DUNLOP, Esq., Attaché to her Majesty's Embassy at the Court of Austria, eldest son of John Dunlop, Esq., of Gairbraid, &c., Lanarkshire, to MARY ELIZABETH GUISE GORDON, widow of the late PATRICK SPENCE, Esq., of St. James's, Jamaica, eldest daughter of the late Hon. William Gordon, Member of her Majesty's Council in that island, and niece of General Gordon, of Culdraine, Aberdeenshire.

DEATHS.—On the 1st inst., at Charlotte Street, Perth, MARIA ANN SYMSON, widow of ALEXANDER OGILVY, Esq. (late Member of the Bengal Medical Board), and eldest surviving daughter of the late Major-General the Hon. MARK NAPIER, aged 7[illegible]—[illegible] ult., at Ryde, Isle of Wight, CHARLOTTE, widow of the late Major-General Sir CHARLES BRUCE, K.C.B., aged 6[illegible]—At 4, Park Street, Bath, HENRIETTA, daughter of the late Sir THOMAS BUTLER, Bart., Garryhundon, Bagenalstown, Carlow—29th ult., at her residence, 1[illegible], Lansdown Place, Brighton, CATHERINE, relict of A. R. PRICE, Esq., and youngest daughter of the late Sir John Call, Bart., of Whiteford House, Cornwall—29th ult., at St. Leonard's-on-Sea, MARIA GEORGINA, daughter of the late General GENT, aged [illegible]—29th ult., at Hyères, south of France, MARIA, daughter of the late Lieutenant-General CONYERS, C.B.—31st ult., in London, FANNY, widow of the late Rear-Admiral WEST, C.B., of Hoe Gate House, Plymouth, aged [illegible]—19th Feb., near Congo River, West Coast of Africa, of fever, Lieut. CHARLES WILLIAM THACKERAY, R.N., of H.M.S. Wrangler, youngest son of the late Gen. Thackeray, K.H., aged 2[illegible]—31st ult., at Eastfield House, near Maidstone, RICHARD FIENNES, second son of the late FIENNES WYKEHAM MARTIN, Esq., of Leeds Castle, aged 58—22d ult., at Cefn Mine, Pwllheli, N. Wales, PATRICK OGILVY CARNEGY, Esq., late of the H.E.I.C. Civil Service, and a Deputy-Lieutenant of the county of Carnarvon, aged 56—2[illegible] ult., THOMAS LITTLEDALE, Esq., of Highfield, near Liverpool, a Deputy-Lieutenant of the county, and Captain in the 2d Royal Lancashire Militia—2[illegible] ult., at Harker Grange, near Carlisle, the Rev. JOSEPH LOWTHER HODGSON, M.A., incumbent of Wetheral with Warwick, Cumberland, and third son of the late William Hodgson, Esq., of Houghton House, in that county, aged 4[illegible]—24th ult., at Blackheath, THOMAS THROGMORTON WILLIAMS, M.D., aged [illegible]—31st ult., at 7, Percy Place, Bath, RICHARD BRACHES, Esq., F.R.C.S., late of Albemarle Street, London, Surgeon Accoucheur to the Queen, and Surgeon Extraordinary to the late Duchess of Kent, aged 72.

Markets.

COVENT GARDEN, April 6.

Cornish Broccoli continues to be furnished in excellent condition, and good samples of Lettuces, Endive, and Artichokes come from France. Samples of new Grapes are offered, and fetch good prices. Asparagus, French Beans, and new Potatoes may also now be had. Cucumbers are coming in plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Camellias, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 6s to 10s	Apples, per doz., 6d to 1s 6d
Grapes, per lb., 15s to 24s	Oranges, per 100, 6s to 10s
Strawberries, p. oz., 1s to 2s	Lemons, per 100, 6s to 10s
Pears, per doz., 4s 6d to 8s	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 1s6d to 5s	Celery, p. bundle, 1s 6d to 1s9d
Green Peas, p. ½ sieve, 20s	Onions, p. ½ sieve, 1s 6d to 2s6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 4s to 8s
Cabbages, do., 2s to 3s	Rhubarb, p. bundle, 9d to 1s 3d
Potatoes, p. ton, 90s to 160s	Seakale, p. punnet, 1s 6d to 2s
— per bus., 4s to 6s	Shallots, per lb., 1s 6d
— per cwt., 6s to 10s	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 10d	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 4d to 6d	Horse Radish, p.bun., 1s 6d to 4s
Spinach, p. sieve, 4s to 6s	Mushrooms, p.pott., 1s4d to 1s6d
Cucumbers, each, 1s 6d to 2s	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 3s to 4s	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, April 4.

Prime Meadow Hay	75s to	85s	Clover	90s to	115s
Superior do. (old) ..	90	105	New Clover ..	.. —	—
Inferior do.	50	60	Do second cut	.. 80	100
New do.	—	—	Straw	.. 36	44
Rowen	—	—			

DAVIS & Co.

WHITECHAPEL, THURSDAY, April 4.

Fine old Hay	160s to	165s	Fine old Clover ..	110s to	120s
Inferior do.	80	90	Inferior do	85	95
Prime New Hay ..	—	—	Fine 2d cut	90	105
Inferior do.	—	—	Inferior do.	—	—
Straw	38	42	Fine New Clover ..	—	—

HOPS.—BOROUGH MARKET, FRIDAY, April 5.

Messrs. Pattenden & Smith report that the demand for fine yearlings has improved, and prices for such are fully 8s. per cwt. dearer. The best grown samples of new are also in more request.

BUTTER MARKET.—April 3.

Best Fresh Butter	.. ..	16s. per dozen lbs.
Second do. do	.. ..	14s. ,, ,,

Pork, 4s. 8d. to 5s. 4d. per 8 lbs.

POTATOES.—SOUTHWARK, Monday, April 1.

During the past week the arrivals coastwise have been light, but with what is left from former arrivals, the supply is still more than equal to the demand, and prices without alteration. The following are this day's quotations:—York Flukes, 130s. to 140s. per ton; Lincolnshire Regents, 100s. to 110s.; Dunbar Red Seal do., 140s. to 160s.; do. do. Reds, 105s. to 120s.; North Berwick Regents, 120s. to 125s.; Fife, Forfar, and Perth do., 100s. to 110s.; ditto Rocks, 85s. to 90s.; ditto ditto Reds, 75s. to 80s.; French Whites, 60s. to 90s.; Belgian do., 60s. to 80s.; Dutch do., 60s. to 80s.

BRITISH WOOLS.—LONDON, THURSDAY, April 4.

There have been some lots of fleeces sold at low rates by holders anxious to quit their stocks. Skin wool is more inquired after, as it is now of good length and comparatively scarce.

	s. d.		s. d.		s. d.		s. d.
South-down Hoggets	1 5	to	..	Leicest. Wethers	1 4	to	..
Half-bred ditto ..	1 6	—	..	Ditto Hoggs ..	1 8	—	..
Down Ewes ..	1 4	—	..	Combing Skins	0 10	—	1 8
Kent Fleeces ..	1 5	—	1 6	Blanket ditto ..	0 6	—	0 7
				Flannel Wool .	1 0	—	1 0

COAL MARKET.—April 3.

Bell's Primrose Gas, 13s.; Davison's West Hartley, 17s. 3d.; Holywell, 1[illegible]s. 6d.; Lambert's West Hartley, 17s. 3d.; Walker Primrose, 1[illegible]s. 3d.; West Hartley, 17s. 3d.; Walls End Eden, 15s. 9d.; Walls End Hetton, 1[illegible]s. 6d.; Walls End Hedley, 1[illegible]s. 6d.; Walls End Braddyll's Hettons, 17s.; Walls End Framwellgate, 15s. 3d.; Walls End Hetton 18s. 6d.; Walls End Kepier Grange, 17s.; Walls End Stewarts, 18s. 6d.; Walls End Hartlepool, 18s. [illegible]; Walls End Heugh Hall, 15s. 9d.; Walls End Kelloe, 17s. 6d.; Walls End South Hartlepool, 16s. 9d.; Walls End Denison, 15s. 6d.; Cardiff and Duffryn Malting, 24s.—62 ships at market.

METROPOLITAN CATTLE MARKET.

MONDAY, April 1.

The number of Beasts is very small, and consequently prices have advanced a trifle. Trade is, however, very slow. We are

also but scantily supplied with Sheep, yet prices are not any better, the demand being very limited. Good Calves and Lambs are very scarce and dear. From Germany and Holland there are 141 Beasts, 3160 Sheep, and 8 Calves; from Scotland, 310 Beasts; from Norfolk and Suffolk, 1800; and 80 from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 8 to 5 0	Best Long-wools.	5 4 to 5 8
Best Short-horns	4 6 — 4 8	Do. Shorn ..	4 8 — 5 0
2d quality Beasts	3 0 — 4 0	Ewes & 2d quality	4 8 — 5 0
Best Downs and Half-breds ..	5 6 to 5 10	Do. Shorn ..	4 0 — 4 4
Do. Shorn ..	4 10 to 5 2	Lambs	7 4 — 8 0
		Calves	5 4 — 6 0
		Pigs	4 4 — 5 2

Beasts, 2650; Sheep & Lambs, 15,710; Calves, 13; Pigs, 320.

THURSDAY, April 4.

The number of Beasts is about the same as on Thursday last; the average quality is very inferior. Choice descriptions are readily sold at Monday's rates. We have a short supply of Sheep, but sufficient for the demand. Prices remain unaltered. Good Lambs and Calves are very scarce, and make very high prices. Our foreign supply consists of 890 Sheep, and 39 Calves. Milch Cows 140.

Best Scots, Herefords, &c. ..	4 8 to 5 0	Best Long-wools.	5 4 to 5 8
Best Short-horns	4 6 — 4 8	Do. Shorn ..	4 8 — 5 0
2d quality Beasts	3 0 — 4 0	Ewes & 2d quality	4 8 — 5 0
Best Downs and Half-breds ..	5 6 — 5 10	Do. Shorn ..	4 0 — 4 4
Do. Shorn ..	4 10 — 5 2	Lambs	7 4 — 8 4
		Calves	5 4 — 6 4
		Pigs	4 4 — 5 4

Beasts, 870; Sheep & Lambs, 5965; Calves, 85; Pigs, 130.

MARK LANE.—MONDAY, April 1.

The Wheat trade during the past week was firm, but not very active. The supply of English Wheat from Essex and Kent to this morning's market was one of the smallest we remember, quality very inferior, and its value unaltered; fine samples were inquired after, and for such last week's prices would have been exceeded. There was a good attendance of country buyers, who purchased foreign in retail at previous rates. Malting Barley is 1s. to 2s. per qr. cheaper, grinding unaltered in value. Beans are fully as dear. For Peas there is no inquiry. Of Oats there is a large arrival, and we reduce our quotations 6d. per qr. Flour is in fair demand at the prices of this day se'nnight.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk . . White	36—66	Red	52—62
— — fine selected runs . . ditto	50—72	Red	54—68
— — Talavera	51—72		
— Norfolk	—	Red	—
— Foreign	50—78		
BARLEY, grind. & dist., 28s to 30s. . Chev.	40—45	Malting .	38—40
— Foreign . . grinding and distilling	30—36	Malting .	40—42
OATS, Essex and Suffolk	23—24		
— Scotch and Lincolnshire . . Potato	26—28	Feed ..	20—25
— Irish .... Potato	26—28	Feed ..	21—24
— Foreign .... Poland and Brew	24—28	Feed ..	20—28
RYE	35—38	Foreign .	—
RYE-MEAL, foreign	—		
BEANS, Mazagan .... 23s to 44s .... Tick	28—48	Harrow .	28—48
— Pigeon ...... 34s — 56s . . Winds	34—42	Longpod	—
— Foreign .... Small	40—50	Egyptian	—
PEAS, white, Essex and Kent . . Boilers	38—48	Suffolk .	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign .	38—48
MAIZE .... White	—	Yellow . .	—
FLOUR, best marks delivered . . per sack	50—57		
— 2d do. .... ditto	38—50	Country .	38—50
— Foreign .... per barrel	30—35	Per sack	40—50

FRIDAY, April 5.

The weather this week has been raw and showery, and the country is again becoming wet. The Wheat trade during the same period has been inactive, with a tendency to depreciation in the value of new foreign and inferior English, the arrivals of the former in several markets exceeding the immediate demand. For fine new English and old foreign, which are comparatively scarce, previous rates are maintained. The supplies of Barley continue to exceed the demand, and in the majority of markets its value is declining. The arrivals of foreign Oats here and on the east coast being good, and for the most part of inferior condition and quality, are obliged to be sold at somewhat lower terms; but in the interior former prices have been maintained; also for Beans and Peas. Flour has been in only moderate request, but we do not alter our quotations. Since the 22d March 146 vessels have been reported arrived off the coast. The floating trade was firm, but quiet. The arrivals of English grain this week have been very small, of foreign large. To-day's market was thinly attended. English Wheat was neglected, and Monday's prices were barely supported; the demand for foreign was limited, particularly new; the majority of millers participating in the arrivals, which they have purchased c. f. and i., and late rates are unobtainable. Barley, Beans, and Peas are unaltered in value. Oats are 6d. per qr. cheaper.

ARRIVALS FROM April 1 TO April 5.

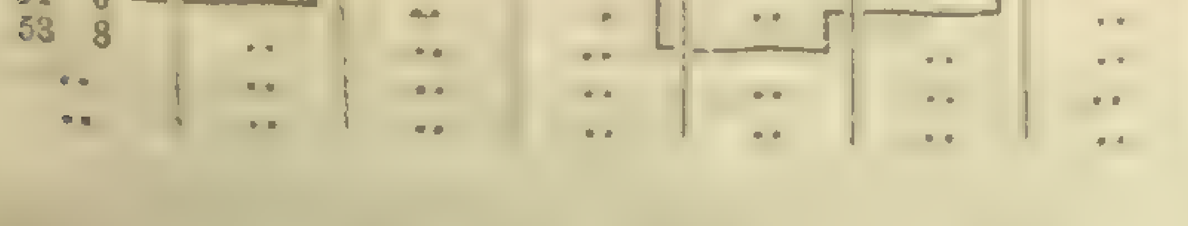
	Wheat.	Barley.	Oats.	Flour.
English ..	848 qrs.	281 qrs.	167 qrs.	920 sks.
Irish	— „	— „	1282 „	— „
Foreign ..	32392 „	10296 „	63807 „	700 „
—				7042 brls.

LIVERPOOL, Tuesday, April 2.—The American arrivals since Tuesday last are to a fair extent, but from other quarters unimportant, except somewhat larger supplies from Egypt than of late. From Ireland and coastwise the receipts are light. There was a fair attendance of buyers at this morning's market, but the business passing was chiefly of a retail character, and there is no alteration to notice in the value of either Wheat or Flour as compared with Tuesday last. Indian Corn was little inquired after, and mixed American might have been bought on rather easier terms; all other descriptions however were fully as dear. Oats and Oatmeal are both dull of sale. Beans and Peas from scarcity were both the turn dearer. Barley on the contrary declined about 2d. per bushel.

FRIDAY, April 6.—A moderate attendance at to-day's market. Wheat, consumptive demand; prices in some instances 1d. lower. Flour slow sale, at about 6d. reduction in price. Indian Corn steady; mixed 37s., Galatz 39s to 40s. Beans, Oats, and Oatmeal without change.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Feb. 23..	54s 0d	39s 4d	23s 0d	35s 5d	39s 7d	41s 1d
March 2..	54 2	39 2	23 0	35 1	39 7	41 7
— 9..	54 2	38 11	23 6	34 6	41 8	43 8
— 16..	53 8	38 7	23 9	34 10	40 1	41 0
— 23..	54 0	38 6	23 10	32 11	40 1	40 9
— 30..	55 2	37 11	23 4	36 7	40 11	43 4
Agg. Aver.	54 2	38 9	23 5	34 11	40 4	41 11

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



PRACTICAL GEOLOGY: KING'S COLLEGE, London.—Professor TENNANT, F.G.S., will give a COURSE OF LECTURES ON GEOLOGY, having especial reference to the application of the science to Engineering, Mining, Architecture, and Agriculture. The Lectures will commence on FRIDAY Morning, April 12, at 9 o'clock. They will be continued on each succeeding WEDNESDAY and FRIDAY, at the same hour. Fee, 1l. 11s. 6d. R. W. JELF, D.D., Principal.

EVENING LECTURES ON GEOLOGY, at the Government School of Mines, Jermyn Street, S.W.—Mr. WARINGTON W. SMYTH, M.A., F.R.S., will commence a COURSE of TEN LECTURES on GEOLOGY, on MONDAY, April 15, at 8 o'Clock; to be continued on each succeeding THURSDAY and MONDAY Evening, at the same hour. Tickets for the whole course, price 5s., may be had at the Museum of Practical Geology.

PROFESSOR TYNDALL, F.R.S., will commence a COURSE of THIRTY-SIX LECTURES on PHYSICS, at the Government School of Mines, Jermyn Street, S.W., on MONDAY, April 15, at 2 P.M.; to be continued on each succeeding TUESDAY, WEDNESDAY, THURSDAY, and MONDAY, at the same hour. Fee for the Course, 30s.
TRENHAM REEKS, Registrar.

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£100 REWARD.—It having come to the knowledge of JOSEPH THORLEY, of No. 77, Newgate Street, E.C., and Steam Mills, Caledonian Road, King's Cross, London, N., that many unprincipled persons are manufacturing and palming off on the public spurious imitations of his justly celebrated condimental Food for Cattle, and adopting his trade marks, circulars, and advertisements: Now be it hereby known that the original receipt of this Condiment as compounded and manufactured by JOSEPH THORLEY, is known only to himself, that all such imitations are spurious and utterly worthless, are devoid of the condimental and fattening properties of THORLEY'S, and the said JOSEPH THORLEY hereby offers the above reward of 100l. to be paid to any person or persons whomsoever who may give such information as will enable the said JOSEPH THORLEY to prosecute to conviction any person or persons who may Manufacture, Vend, or Sell Cattle Food, use the trade marks, adopt the language of the Circulars or otherwise illegally and dishonestly interfere or infringe upon the acknowledged and legal rights of JOSEPH THORLEY in his own manufacture, and the Nobility, Gentry, Agriculturists, and others are hereby duly cautioned and recommended not to purchase or use any other Condimental Food for Cattle than is procured direct from 77, Newgate Street, E.C., the Manufactory, King's Cross, N., or from some one of his acknowledged and appointed agents. G. F. COOKE,
Solicitor for the said JOSEPH THORLEY,
30, King Street, Cheapside, E.C.—April 4.

THE QUARTERLY REVIEW. No. CCXVIII.—ADVERTISEMENTS for the forthcoming Number must be forwarded to the Publishers by the 4th, and BILLS for insertion by the 6th instant.
50, Albemarle Street, London.—April 6.

THE QUARTERLY REVIEW, No. CCXVIII, will be Published NEXT WEEK.
CONTENTS:—
I. PEARLS AND MOCK PEARLS OF HISTORY.
II. EUPHUISM.
III. LORD DUNDONALD.
IV. SPIRITUAL DESTITUTION.
V. INDIAN FINANCE AND LEGISLATION.
VI. GERMAN, FLEMISH, AND DUTCH ART.
VII. AFRICAN DISCOVERIES—LIVINGSTONE—SPEKE—PETHERICK—DU CHAILLU, &c.
VIII. STANHOPE'S LIFE OF PITT.
*** NOTE—IRON MANUFACTURE.
JOHN MURRAY, Albemarle Street.

THE EDINBURGH REVIEW, No. CCXXX. Will be published on SATURDAY NEXT.
CONTENTS:—
I. DIXON'S PERSONAL HISTORY OF LORD BACON.
II. THE REPUBLIC OF ANDORRE.
III. POLITICAL DIARIES—LORD AUCKLAND AND LORD COLCHESTER.
IV. ETON COLLEGE.
V. REMAINS OF ALEXIS DE TOCQUEVILLE.
VI. ESSAYS AND REVIEWS.
VII. AUTOBIOGRAPHY AND LETTERS OF MRS. PIOZZI.
VIII. FABLES OF BABRIUS.
IX. FORBES' ICELAND.
X. ELECTION OF PRESIDENT LINCOLN AND ITS CONSEQUENCES.
London: LONGMAN & Co. Edinburgh: A. & C. BLACK.

HORTICULTURAL GARDENS.—The Gardeners' Chronicle of May 12, containing Mr. NESFIELD'S COLOURED PLAN for the NEW GARDENS at Kensington Gore, is still on Sale at the Office, 41, Wellington Street, Covent Garden, W.C., and will be sent by post on receipt of six stamps.

GLENNY'S FORGET-ME-NOT, for presents, 38 engravings, 19 stamps; cloth and gold, 32. GLENNY'S ANNUAL ADVERTIZER, 48 pages, free for the stamp. GLENNY'S LIST OF THE BEST 60 FLOWER SEEDS, free for the directed envelope.—G. GLENNY, Fulham, S.W.

Sixth Edition, carefully revised, fcap. [illegible], 7s. 6d.
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JOHN CHURCHILL, New Burlington Street.

TO GARDENERS.
"No book on Practical Gardening [illegible] Loudon's Encyclopædia of Gardening."—[illegible] Feb. 12, 1859.
"There is no more general book than Loudon's Encyclopædia of Gardening, which treats of all [illegible]"—Gardeners' Chronicle, March 12, 1859.
LOUDON'S ENCYCLOPÆDIA OF GARDENING: Comprising the Theory and Practice of Floriculture, Arboriculture, and Landscape [illegible] cluding all the latest Improvements. New E[illegible] and improved by Mrs. LOUDON.
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PRACTICAL GEOLOGY: KING'S COLLEGE, London.—Professor TENNANT, F.G.S., will give a COURSE OF LECTURES ON GEOLOGY, having especial reference to the application of the science to Engineering, Mining, Architecture, and Agriculture. The Lectures will commence on FRIDAY Morning, April 12, at 9 o'clock. They will be continued on each succeeding WEDNESDAY and FRIDAY, at the same hour. Fee, 1l. 11s. 6d. R. W. JELF, D.D., Principal.

EVENING LECTURES ON GEOLOGY, at the Government School of Mines, Jermyn Street, S.W.—Mr. WARINGTON W. SMYTH, M.A., F.R.S., will commence a COURSE of TEN LECTURES on GEOLOGY, on MONDAY, April 15, at 8 o'Clock; to be continued on each succeeding THURSDAY and MONDAY Evening, at the same hour. Tickets for the whole course, price 5s., may be had at the Museum of Practical Geology.

PROFESSOR TYNDALL, F.R.S., will commence a COURSE of THIRTY-SIX LECTURES on PHYSICS, at the Government School of Mines, Jermyn Street, S.W., on MONDAY, April 15, at 2 P.M.; to be continued on each succeeding TUESDAY, WEDNESDAY, THURSDAY, and MONDAY, at the same hour. Fee for the Course, 3l.

TRENHAM REEKS, Registrar.

News of the Week.

BOTH Houses of Parliament have reassembled this week after the Easter holidays. In the Lords on Tuesday the Queensland Government Bill passed through committee, and the Bankruptcy and Insolvency Bill was brought up from the Commons and read a first time. On Thursday

Lord REDESDALE moved that no private Bill brought from the House of Commons should be read a second time after the 9th July next. The motion was agreed to. The Exchequer Bills Bill was read a second time, and the Queensland Government Bill was read a third time and passed.

In the Commons on Monday the Bankruptcy and Insolvency Bill was read a third time and passed. The Post Office Savings Banks Bill passed through committee with some verbal amendments. Sir G. LEWIS moved the second reading of the London Coal and Wine Dues Continuance Bill, the object of which was to continue the existing duties for 10 years within the metropolitan police district, the 4*d.* dues to be applied to paying off the corporation debt of 540,000*l.*, and the 8*d.* and 1*d.* dues to be appropriated to works of public utility, including the embankment of the Thames. Mr. ROUPELL moved, as an amendment, that the second reading be adjourned for six weeks. On a division the amendment was negatived by 135 to 20. Mr. AYRTON then moved that the coal tax be continued for one year only. This amendment was negatived by 119 to 10, and the Bill was read a second time. The Industrial Schools Bill, the object of which is to amend the Bill of 1857, was read a second time. Sir G. LEWIS moved the second reading of the Election Law Amendment Bill. Mr. H. BERKELEY moved as an amendment that the Bill be read a second time that day six months. After some discussion the amendment was withdrawn, and the Bill was read a second time. The Exchequer Bills Bill, the Mutiny Bill, and the Marine Mutiny Bill were read a third time and passed. The CHANCELLOR of the EXCHEQUER moved that a select committee be annually appointed to revise the public accounts after they have passed through the hands of the Executive Government. The motion was agreed to. On Tuesday Sir H. STRACEY moved a resolution to the effect that Sailors' Homes were of such national importance as to deserve the support of Parliament. Mr. M. GIBSON opposed the motion, which was negatived without a division. Sir G. BOWYER moved a resolution restricting the votes in divisions on questions of Supply to those members who have been present during the debate. The motion was opposed by Sir G. LEWIS, and negatived without a division. On Wednesday Mr. BAINES moved the second reading of the Borough Franchise Bill, the object of which was to extend the franchise in boroughs to the occupiers of houses of the value of 6*l.* instead of 10*l.* Mr. CAVE moved, as an amendment, the previous question. On a division the amendment was carried by 245 to 193. The Bill was, therefore, lost. The Consolidated Fund (3,000,000*l.*) Bill was read a third time and passed. On Thursday Mr. LINDSAY moved a series of resolutions, to the effect that it is inexpedient to incur at present any further expenditure in constructing or converting wooden line-of-battle ships, or in adapting her Majesty's dockyards for the construction of iron vessels. The resolutions were opposed by Lord C. PAGET, and after a long discussion on the relative merits of wooden and iron ships for war purposes, the motion was withdrawn. Sir JOHN TRELAWNY called attention to the state of affairs in the North Island of New Zealand, and moved a resolution in favour of referring the disputed land question in that colony to a special tribunal after the re-establishment of the QUEEN'S authority. The motion was supported by Mr. SELWYN and opposed by Mr. C. FORTESCUE, Lord C. HAMILTON, and Mr. HOPE. The debate was then adjourned.

Despatches from Warsaw announce that a fatal collision took place on Monday between the Russian troops and the unarmed population of that city. It appears that the discontent caused by the dissolution of the committee of citizens for maintaining public order was greatly increased on Friday by the dissolution of the Agricultural Society. On Sunday and Monday larger popular demonstrations than usual took place, and on the latter day a large but unarmed crowd paraded the streets, and ultimately appeared before the castle. The cavalry immediately charged and the infantry fired upon the people; and one of the accounts states that upwards of 100 persons, including several women and children, were killed and wounded. Prince GORTSCHAKOFF subsequently published a proclamation exhorting the citizens to maintain tranquillity, and stating that he will otherwise be compelled to proclaim a state of siege. The latest news states that Prince GORTSCHAKOFF has been recalled, and that General MOURAVIEFF of Kars has been appointed his successor. Up to Wednesday last no fresh conflict had taken place.

The Austrian journals announce that the EX-GRAND DUKE OF TUSCANY has sent to the European Cabinets a protest against the assumption of the title of King of Italy by KING VICTOR EMMANUEL, and that the EX-DUKE OF MODENA and the EX-KING OF NAPLES are expected to send a similar protest. The debate in the Italian Chamber of Deputies on the affairs of Naples and Sicily terminated on Saturday in the adoption of a resolution expressing the confidence of the Chamber that the Ministry will take the most suitable means for hastening the administrative union of Naples and Sicily, and for promoting the promised measures of public safety and the execution of public works. The debate on the Roman question has since terminated with a vote of confidence in the Government. A Bourbon conspiracy, with extensive ramifications in the provinces under the direction of General Bosco, has been discovered at Naples. The Government has arrested the Duke of CAJANIELLO, Bishop TROTTA, Signor RUGGIERO and several priests; and the police are said to be on the track of General Bosco. The conspirators meet with no sympathy from the people, who regard their proceedings with great indignation.

The Diets of Austria, Styria, Salzburg, and Bohemia, as constituted by the late Imperial rescript, were opened on Saturday. The proceedings were conducted with great order and loyalty, those of Austria, Styria, and Salzburg adopting resolutions thanking the EMPEROR for the concession of constitutional principles. The EMPEROR has since issued two decrees, one of which unreservedly places his Protestant subjects on the same footing both civilly and politically with the Catholics, while the other confers on women the right of voting at elections of members to the Diet. The Hungarian Diet was also opened on Saturday by Count APPONYI, who announced the abdication of King FERDINAND and the accession of FRANCIS JOSEPH, and said it was the sincere wish of the KING that the right of Hungary should be maintained. Prince ESTERHAZY paid a tribute of respect to the memory of Count BATTHYANI, who was executed for high treason in 1849, and said that the patriotism of that martyr was an example for others. Count ZICHY demanded the formation of a Hungarian ministry, and the demand was supported by the majority of the members.

The French Government has at length resolved to curb the attacks of the Ultramontane clergy. M. DELANGLE, the Minister of Justice, has addressed a circular to the Procureurs-General throughout France, calling their attention to the fact that many priests publicly discuss subjects which the law expressly interdicts them from discussing, while others criticise the acts of the Government, personally attack the EMPEROR, and overwhelm him with insults. M. DELANGLE points out that such abuses are punishable with imprisonment or banishment; and charges the Procureurs to take notice of such infractions of the law, and send their authors, whoever they may be, before the competent tribunals; for it is time, he says, that the law should resume its sway.

By the Calcutta and China Mail, we learn that the Yangstze expedition has started, and that Prince SAN-KOLINSIN has been defeated by the rebels. There is no news from Tien-tsin. The French and Spanish have captured five forts in Saigon, after an obstinate resistance on the part of the Cochin Chinese. In New Zealand the Maories boldly attacked our troops on the 23d Jan. and the 10th Feb., but were defeated on both occasions.

Home News.

THE COURT.—The Queen, Prince Consort ... Royal family continue at Osborne ... The Prince of Wales left Osborne on Monday on his return to Cambridge.

PRINCE ALFRED has visited St. Thomas, ... received by an immense concourse of people ... island was illuminated during his stay. ... 27th ult. for Santa Cruz and Jamaica.

THE CABINET.—A Cabinet Council was ... for Wednesday, but was postponed in ... the illness of Lord Palmerston, who was ... Broadlands by an attack of gout. ... since been able to come to town, and ... Cabinet Council held on Thursday ... dence in Piccadilly. Another Council ... day at Cambridge House.

RETURN OF LORD ELGIN.—... the Earl of Elgin, late Plenipotentiary ... at Dover in the presence of an ... spectators, and was presented with ... gratulation by the Mayor and Corporation ... ship arrived in London on the same ...

PARLIAMENTARY MOVEMENTS.—Mr. ... has issued an address to the electors ... resigning his seat for that borough, on ... the punctual performance of his duties ... and the constant attendance at the ... questions affecting their interests, requiring ... ing sacrifice of his professional ... cannot at present afford to continue.

THE PENNY TAXES.—A deputation ... London, consisting of Mr. Crawford, M.P., ... glish, M.P., Mr. Moffatt, M.P., Mr. Lindsay ... J. C. Ewart, M.P., Mr. Somes, M.P. ... Hankey, M.P., and Mr. W. J. Thompson, ... view with the Chancellor of the Exchequer ... to present a memorial suggesting the ... new taxes "in aid of charges for collection ... 1st, the quarter per cent.; 2d, the stamp ... package of goods imported, goods in bulk, ... 3d, the stamp on delivery orders. 4th, ... warrants; and 5th, the stamp on bills of ... Liverpool Chamber of Commerce has ... sented a memorial to the Chancellor of the ... quer soliciting the immediate abolition of the ... on the ground that they have operated ... riously upon trade by the needless ... trouble which they have occasioned, and the ... nue derived therefrom has been so ... no means to compensate for their ... It appears from an official return that the ... on each package of goods imported, goods in bulk, ... animals, produced last year ... 1*s.* 6*d.* stamp on shipping bills ... duced 30,254*l.*; the 3*d.* duty on dock warrants ... 8595*l.*; and the stamp duty on bills ... above 4000*l.* produced 245,601*l.* ... year the duty on all bills, inland and foreign, ... 521,329*l.*

THE VOLUNTEER MOVEMENT.—A ... was held at Nottingham on the 3d inst., ... of establishing a Rifle Association ... concert with the National Rifle Association ... giving permanence to the Volunteer ... offer of prizes, and for the encouragement ... shooting throughout the country. The ... House of Commons presided. Mr. ... moved the first resolution, declaring ... meeting that it is desirable to promote ... rifle shooting as one of the most im... extending and rendering permanent ... movement, by forming an association in ... the National Rifle Association, to be ... Rifle Association. Mr. Milward seconded ... which was carried unanimously. Mr. ... and other gentlemen afterwards addressed ... and a committee was appointed ... resolutions into effect.—A rifle contest ... Volunteers of Nottinghamshire took ... 2d inst., at Epperstone. The first ... cup, was won by Ensign Perry, of ... pany; the second by Sergeant Brown ... pany; the third by Mr. Toplis, 10th ... the fourth by Corporal Dennet, ... of the Robin Hood Rifles.—A ... were shot for last week by the Bury ... Corps. The principal prize was a silver ... Mr. Clay, the ex-Mayor, and for this ... competed—viz., 39 from the 1st company ... the 2d. The 25 best shots made an ... points each; and Sergeant Armour ... Private Scotcher made 15 points each ... has still to be shot off.—A large ... bled at Belvoir Castle, the seat of the ... Rutland, on the 3d inst., when a silver ... presented to the 2d Leicestershire ... Lady Adeliza Norman, on behalf of a ... mittee, formed some time since for the ... On Thursday the 4th inst., there was a ... on Barham Downs, Canterbury, in which ... Volunteer Corps of East Kent, and a ... troops of the line from the barracks at ... took part. The Volunteers were represented ... the 7th (Margate), 5th and 6th (Canterbury), ...

Faversham), the 16th (Sittingbourne), the 24th (Ash), and the 26th (Wingham). The regular troops consisted of 700 men belonging to the various infantry depôts forming the 4th Depot Battalion at Canterbury. The operations were intended to represent the movements of the line and volunteers to check the approach of an enemy from Dover, and lasted from an early hour in the morning till nearly 7 in the evening.

Foreign.

FRANCE.—The *Patrie* of Friday evening contained the following article respecting the recent letter of Prince Murat:—

"We learn that the Emperor, faithful to the policy he has constantly followed in regard to Italy—a policy excluding all family interests and all idea of conquest—has written a letter to Prince Murat expressing these noble sentiments, and consequently disapproving the manifesto of the Prince."

The *Moniteur* of Tuesday published a circular, addressed by M. Delangle, Minister of Justice, to the Attorneys-General, in reference to the Catholic priests who publicly discuss either verbally or in writing, and in the exercise of their functions, matters which the law expressly interdicts them from discussing. The following are extracts from the circular:—

"Some of them, forgetting that a priest's mission is to watch over the religious instruction of the faithful, criticise the acts of the Government, provoking also mistrust and censure of the Emperor's policy. Others attack the Sovereign personally, overwhelming him with insults; others trouble the consciences of their flocks by the announcement of imaginary misfortunes. Such abuses are amenable to Articles 201 and 204 of the Penal Code, which punish offences of the kind with imprisonment or banishment. Although these articles have remained unapplied, they have lost nothing of their authority. The Government would fail in its duty if it did not employ them against such hostile demonstrations. The Attorneys-General are therefore charged to cause accounts to be rendered to them of such infractions of the law, and, when the facts are sufficiently proved, to send their authors, whoever they may be, before the competent tribunals. It is time that the law should resume its sway."

The *Presse* and the *Siècle* contain articles referring to the late divisions in the Legislative Body, and call on the Government for a dissolution, on the ground that the members of the Legislative Body do not represent the actual opinions of France, but only that alliance between the Empire and the Church which was in full vigour when they were chosen. "The Legitimist party," says the *Presse*, "has no root in the country, and the clerical party has no other force than that which has been too long given to it by the favour of the Government."—The Government has resolved to create a new French consulate in England, and has fixed upon Leeds as its seat. M. Boisselier, the Chancellor to the Consul-General in London, has been appointed to the new office, and M. Gleizal, Chancellor to the Consul at Newcastle-on-Tyne, has been named to succeed M. Boisselier in London. M. Thibaudier, Secretary of the Consulate at Newcastle, succeeds M. Gleizal as Chancellor.—The Swiss papers state that the French Government has entertained favourably the overtures of the Swiss Government for a treaty of commerce between France and Switzerland, and has ordered the competent authorities to examine the details of the question.—The reported departure of the fleet for Syria is said by the official journals to be completely false. The squadron of evolution, composed of three divisions, will leave Toulon in the second fortnight of April, in order to execute manœuvres on a large scale in the open sea.—M. Ganesco, the Wallachian publicist who was recently expelled from Paris, has received permission to return to France.

SPAIN.—The Spanish government is making extraordinary efforts to increase the naval armaments of the country. In addition to the work going on in the royal dockyards, orders have been sent to an iron ship-building company at La Seyne, near Toulon, to build with the utmost despatch a steel-plated frigate, 600 tons larger than the French plated frigate Foudre; with another steamer on the same model, but of larger size, with all the proportions of a metal-cased ship-of-the-line. The Duke and Duchess of Montpensier have left Seville for England, on a visit to their mother, the ex-Queen Marie Amélie. The committee charged to examine the press laws have presented the project of a new law to the Cortes. The great Lyceum Theatre of Barcelona was destroyed by fire on Tuesday. Several of the adjoining houses were also burnt down. It is officially announced that perfect tranquillity prevails in Morocco, and that the treaty between that country and Spain will be faithfully carried out.

PORTUGAL.—According to advices from Lisbon the Portuguese Government has authorized the cultivation of cotton in their African possessions.

SWITZERLAND.—The ex-Grand Duke of Tuscany has addressed a note to the Federal Council, dated from Dresden, protesting against any recognition of the kingdom of Italy on the part of Switzerland.

DENMARK AND THE DUCHIES.—The Committee of the Estates of Holstein appointed to examine the Danish proposals respecting the Budget presented its report in the sitting of Monday. The following is a summary of the report:—

"No Budget has in reality been submitted to the Estates by the Government. The financial arrangements for 1861-62 were long fixed by law, and have not since been suspended. The Estates have, therefore, no opportunity of examining the Budget. Instead of the right of voting the Budget, the right of giving an opinion only on the Budget has been accorded to the Estates in the present Session. There is no prospect of any result being obtained by such an expression of opinion. The Estates could not, on account of this valueless concession, renounce the claims of the Federal Diet, and cannot, therefore, enter into a discussion of any communications respecting the Budget."

At a Cabinet Council held at Copenhagen on Monday, it was resolved that the whole infantry force should be doubled. It is said that the entire army will be placed on a war footing.

ITALY.—The debate on Naples was resumed on Friday in the Chamber of Deputies at Turin, and was concluded on Saturday by a vote of confidence in the Government. On Tuesday a discussion took place on the Roman question with the same result. The following is a summary of these debates:—

On Friday Signor Minghetti, the Minister of the Interior in his reply to the various points contained in the interpellation of M. Massari, denied the alleged extent of brigandage in the south, supporting his assertion by the authority of General Arnulfo, of the Carabineers, who, in a communication forwarded from Naples at the end of last month, affirmed that the country was as quiet as any other part of Italy. Signor Valente, a Neapolitan Deputy, said that the Neapolitans were for Italian unity, with Victor Emmanuel for King. But if the Government did not apply a prompt remedy to the present state of things, if they allowed the work that had been accomplished to fall to pieces again, they would have the ridicule of Europe and the curse of God. On Saturday the following order of the day, proposed by Signori Torrearsa and Massari, was adopted:—"The Chamber, taking into consideration the declarations of the Ministry that the law shall be strictly executed, and being confident that the Ministry will take the most suitable measures for hastening the administrative unification of the provinces of Naples and Sicily, and insisting on the immediate publication of the measures of public safety promised by Government, and on the execution of public works, passed to the order of the day." On Tuesday Signor Rocca put an interpellation to Count Cavour respecting the affairs of Rome. Count Cavour, in reply, said that in the Roman question the Italian Government could only employ moral means, and could not act against Rome as a conqueror. He admitted that the solution of the Neapolitan question was bound up with the Roman question, and that it was necessary for the tranquillity of the Southern provinces that the antagonism between the State and the Church should shortly cease. The Government, he said, would energetically suppress any disorders at Naples, but the most efficacious means to that end would be the solution of the Roman question. The hopes which he recently expressed had not diminished. He maintained that the Italians were not only liberal, but as much Catholics as the French and the Belgians. The Chamber then almost unanimously adopted the following order of the day proposed by Signor Matteucci:—"The Chamber, having confidence in the Government, and acknowledging the necessity for the union of Rome to Italy, in accomplishing which, however, the grandeur and independence of the Church and the Pope will be guaranteed, passes to the order of the day." In the same sitting Count Cavour, in reply to an interpellation, gave a formal denial to the rumours of an intended cession of the island of Sardinia to France. In the sitting of Wednesday Signor Brofferio put an interpellation relative to the inquiry which had been instituted at Genoa at the office of the Garibaldian committee. Signor Minghetti in reply said that an investigation had taken place on account of the indications of an illegal enlistment, which the Government absolutely wished to prevent. Signor Brofferio then proposed an order of the day, which was rejected by the Chamber. Signor Ricasoli gave notice that on Monday next he should put interpellations relative to the Southern army and its commander.

The supplementary elections, so far as the result is at present known, all show a great majority favourable to the Government. General Garibaldi has intimated that he will not accept the pension of 6000*l.* per annum, which it has been proposed in the Italian Parliament to vote him. The proposal has consequently been withdrawn. Signor Liborio Romano has arrived at Genoa. It is stated that he is seriously indisposed. A despatch from Rome states that the health of the Pope is not satisfactory.—A well organised Bourbon conspiracy has been discovered at Naples, and with ramifications extending to the provinces. General Bosco arrived at Naples last week in order to direct the movement, which was to have broken out on Saturday. In consequence of this discovery the Duke Cajanella and Bishop Trotta have been arrested, with several Bourbon officers and priests implicated in the conspiracy, and the police are said to be on the track of General Bosco. Seven of the city curés and numerous individuals, bearers of important papers, have also been arrested. On Sunday 300 rifles were seized, and on Monday 600 muskets and ammunition were seized at Naples. Bourbonist uniforms and important papers have also been seized in the Monastery of Santa Maria Nuova, and on Tuesday evening the National Guard arrested some Bourbon soldiers who were carrying a white flag. Forty-three armed persons were arrested on Sunday at Caserta. Attempts at insurrection were also made at Castiglione in the Abruzzi, at Vico in the Capitanata, and at Volturara, Sorbo, Salsa, Avigliano, Faviano, Racale, and Allista, but they were all easily suppressed. The insurgents at Castiglione committed incredible atrocities. The Muratists of Naples took advantage of the excitement to make a demonstration on their own account by sending voting tickets to the houses of the inhabitants, bearing the inscription, "Murat, King of Naples, by the vote of the people." The Chevalier di Nigra displayed great firmness in this affair, and the demonstration was without result. All the reactionary attempts in the environs of Naples were suppressed by the National Guard, and the latest news states that the inhabitants have requested the Government to take energetic measures against the reactionists. A searching inquiry relative to the conspiracy is in progress, and an order has been issued recalling all soldiers of the ex-Neapolitan army who are absent from their communes, or who attempt to disturb public order. The city is now tranquil, and on Monday great numbers of the inhabitants went to the races, at which Prince Carignan was present.

PRUSSIA.—In the sitting of the Chamber of Deputies on Saturday Baron von Schleinitz expressed in the most energetic and distinct terms his disapproval of the proceedings of M. Schlippenbach with respect to the clandestine correspondence between General Bosco and the citadel of Palermo. The Minister said that he had applied for authentic explanations on the subject, and would take the necessary steps.

AUSTRIA.—The Austrian Diet was opened on Saturday by the Governor of the province of Austria, after a religious service at St. Stephen's. The Governor, in his opening speech, laid stress on the necessity for maintaining the administrative unity of the whole monarchy. Prince Colloredo, in his speech, pointed out the necessity for union between the people and the Emperor. On Monday the Diet voted an address to the Emperor containing assurances of loyalty to his Majesty, and praying for the maintenance of the administrative unity of the empire in conformity with the constitution of February 26. The address also laid particular stress on the necessity for the further development of the Constitutional principle. On Monday the Emperor signed a patent law for Protestants in the German and Sclave provinces of the Empire. The leading features are—complete independence in religious and educational matters; Presbyterian form of Church government, but with a Consistory formed of Protestants nominated by the Emperor; the right to build churches with steeples and bells, and to acquire property in all the provinces. Matrimonial matters are for the present to be treated in accordance with the laws of the Civil Code. The decree, therefore, unreservedly places the Protestants on the same footing, both civilly and politically, with the Catholics. In the sitting of Wednesday, Superintendent Franz (a Protestant member) proposed, and the Diet unanimously passed, a vote of thanks to the Emperor and the Ministry for this new law. Another law has just been published, granting to women the right of voting at the elections of members to the Diet.

STYRIA, SALZBURG, AND BOHEMIA.—The Diets of Styria, Salzburg, and Bohemia were also opened on Saturday. In those of Styria and Salzburg addresses were adopted thanking the Emperor for the concessions he had granted. On Wednesday the Bohemian Diet adopted a resolution praying for a general amnesty. On Friday it has sent a deputation to the Emperor to request his Majesty to go to Prague for the purpose of being crowned King of Bohemia. A manuscript of John Huss, hitherto unknown, was discovered a few days since by Professor Hofler in the Imperial Library at Prague. It is a fragment of a diary written at Constance.

RUSSIA.—Letters from St. Petersburg state that in all parts of Russia the decree for emancipating the serfs has been received by the people with real gratitude. In St. Petersburgh itself crowds collect every Sunday before the Emperor's palace to applaud him, and on the same day deputations arrive from the provinces to express their thanks to his Majesty.

POLAND.—Great agitation was produced at Warsaw last week by the suppression of the delegation of citizens for the maintenance of public order. Every citizen without exception agreed to wear the deepest mourning, and all the theatres were closed for a fortnight. On Thursday night a crowd of about 3000 persons assembled on the spot where the victims of February fell. Prayers were intoned before the picture of the Virgin on their behalf. The crowd afterwards dispersed, shouting the words "Until we meet again." The military, which were stationed a short distance off, made no attempt to interfere. On Friday evening the demonstration which took place on the previous night before the picture of the Virgin was repeated. The crowd again dispersed without being interfered with by the military. Notice was then given by the governor that the Agricultural Society of Poland was dissolved, on the ground that it was an institution which did not harmonise with the present state of things. This announcement added greatly to the prevailing excitement, and it was agreed on Saturday that a monster demonstration should take place on the following day. On Sunday, accordingly, numerous bands of people proceeded to the cemetery where the victims of February were buried, and afterwards made a great popular demonstration before the Palace of the Governor, in consequence of which the military were called out. The Governor personally exhorted the people to maintain order and disperse. The people replied that they would do so if the military were first withdrawn. The Governor gave orders to that effect, and the crowd then dispersed quietly. On Monday another popular demonstration took place in the streets. A large but unarmed crowd appeared before the castle, when the cavalry charged and the infantry fired on the people. The official telegram states that the conflict was renewed several times, that 10 persons were killed and 10 wounded, and that 5 soldiers were killed. The French official journals, however, assert that a number of the killed and wounded was much greater, one account stating that they were upwards of 100, and that several women and children were among the number. Another account states that 30 were killed and several hundreds wounded. The corpses of the victims were carried to the citadel, and were buried within the fortifications. A proclamation has been published at Warsaw, in which Prince Gortschakoff

exhorts the inhabitants to maintain tranquillity, and states that he will otherwise be compelled to proclaim a state of siege. An ordinance has also been published specifying the penalties which will be inflicted on disturbers of public order. A police regulation has been issued prohibiting those persons who were wounded in the recent disturbances from showing themselves in the streets. Another police regulation prohibits the carrying of loaded canes. Up to Wednesday last no fresh conflict had taken place. On Tuesday night last the Russian troops, who are said to have been increased to 32,000 men, were encamped in the squares of Warsaw, or posted in the public buildings. All the shops, workshops, and offices were closed. Great crowds of people assembled in the streets, but they were forbidden to stand still. The national costume and mourning are no longer to be seen. No newspapers are published. The individuals who have been arrested are to pass their terms of imprisonment within the kingdom. The council of the municipality has been dissolved. At present all is quiet, but a renewal of the disturbances is apprehended. Demonstrations are likewise taking place in the Polish provinces. The Governor of Suwalki has tendered his resignation, which has been accepted. The Governor of Lublin has left that city for Warsaw.

Prussian Poland.—The latest news from Kalisch states that order was maintained by the delegation of citizens. A civic guard had been formed and the military maintained a passive attitude. The Landrath, who was unpopular, had resigned, and all the unpopular Mayors of the neighbouring towns had been dismissed.

Hungary.—The Hungarian Diet was opened at Buda on Saturday, by Count Apponyi, who in his opening speech, announced the abdication of King Ferdinand and the accession of Francis Joseph, and said that it was the sincere wish of the King that the rights of Hungary should be maintained. He urged the necessity of reconciling the interest of the whole State with the Hungarian constitution. His reference to the patent of February last was received with low murmurs. Prince Esterhazy, in most touching terms, paid a tribute of respect to the memory of Count Batthyani, who was executed for high treason in 1849, and held up the patriotism of that martyr as an example for others. Count Zichy demanded the formation of a Hungarian Ministry. The demand was supported by the majority of the members. In the Lower House official documents relating to the abdication of King Ferdinand and the accession of Francis Joseph were laid on the table. On Monday being the anniversary of the death of Count Szecheny, religious ceremonies took place in his honour. All the shops were closed, and black flags were everywhere displayed. The streets were crowded with people, but perfect order prevailed.

Transylvania.—The reorganization of the tribunals of Transylvania, and the transfer of the administration of justice to the judicial authorities formally established there, have been sanctioned by the Emperor.

Croatia.—The Imperial Eagle has been replaced on all the public offices at Agram in the presence of the garrison, which was stationed in the public squares on the occasion. The city is now tranquil. The Municipality has decided on sending a deputation to the King to request the removal of the regiment Stephen, some soldiers be onging to it having insulted the national arms.

Ionian Islands.—The Paris *Presse* states that a dispatch has been received from Corfu announcing that several thousand persons, headed by the Archbishop, the legislature, and the municipality of Corfu, proceeded to the residence of the Greek consul, with loud acclamations for annexation.

Turkey.—A telegram from Constantinople of the 6th inst. states that Sir Henry Bulwer's financial scheme will probably be substantially adopted. It has been modified by the introduction of the alternative of a forced loan for three or five millions sterling, in the event of the money for the deposit against the issue of the new paper money not being immediately realizable on the Crown lands. The rate of exchange has risen alarmingly, the Turkish livre being at 162, and is expected to rise still higher after the issue of the paper money. A loss of about 50 per cent. will be sustained by the *employés* and the army. A gloomy impression prevails in the capital, and a financial crisis appears imminent. The value of a gold medjidié has already risen to 166. During the Crimean war it did not exceed 120. Money is scarce, and commerce is almost at a standstill. The price of food is rapidly rising—that of meat is more than doubled. A catastrophe is generally apprehended. 300 Hungarians have left Constantinople for Italy.

Servia.—On Wednesday last 91 Bulgarian families, numbering 568 persons, emigrated to Servia, with numerous flocks. The Turks stopped their passage, and inflicted punishment upon 160 of them. The agitation is increasing on the frontiers.

Montenegro, &c.—A memorandum has been addressed to the Representatives of the Powers announcing the blockade of the court of Montenegro. The insurgents in the Herzegovina have made a fresh attack on Poglizza, but were repulsed by the Turkish troops, after a fight which lasted four hours. The conflict however still continues, and places have proclaimed the Prince of Montenegro.

Syria.—The Paris *Pays* states that the garrison of Malta has been provisioned and augmented with a view to the embarcation of an expeditionary corps. It add that the belief in the prolongation of the French occupation of Syria is not foreign to these precautionary measures, and that a rumour is current at Malta that it is the intention of England to occupy a point of territory between Upper Syria and Egypt. The *Morning Post* declares these statements to be entirely without foundation.

India.—Sir Patrick Grant, Commander-in-Chief of the Madras army, has resigned his command and taken his departure for England. The Governor-General has summoned Sir Hugh Rose from Simla to Calcutta by telegraph, his presence being required in connection with the scheme for the amalgamation of the Indian and Royal armies. A Special military Commission is now sitting in Calcutta to organise its details. Major Generals Sir R. Napier, Sir R. Birch, Balfour, Chesney, and Eyre, are members of this commission. The news from Sikkim is unsatisfactory. Our troops are represented as being in the heart of the country, and finding it abandoned by the inhabitants. The native aristocracy of the Punjaub are busy in making preparations for the arrival of the Maharajah Dhuleep Sing, who is at present in Calcutta.

China.—A despatch from Shanghai, of Feb. 21, states that there is no news from Tien-tsin. The Yang-tze expedition had started, accompanied by Messrs. Hamilton, Michie, and Ballance. Sankolinsin had been defeated by the Shantung insurgents. Business was slowly improving.

Cochin China.—Advices from Saigon state that the French and Spanish captured five forts on the 24th February, after an obstinate resistance. Col. Tesard was killed.

Japan.—Intelligence has been received from Japan to the 28th January confirming the news of the murder of Mr. Huskins, the Secretary of the American Legation at Jeddo. Trade was interrupted.

Java.—Immense damage and loss of life have been caused by floods. The extent of the destitution and distress is incredible.

New Zealand.—Accounts from New Zealand to the 11th February state that the Maories boldly attacked our troops on the 23d January and the 10th February, but were defeated. The 57th Regiment had arrived from Bombay.

United States.—The debate in the Senate on Mr. Douglas's resolution, calling for information as to the policy of the administration with reference to the seceded states, terminated on the 26th ult. in the resolution being laid on the table by a vote of 23 against 11. Mr. Breckinridge and Mr. Clingman then offered resolutions to the effect that the Senate recommend the withdrawal of the federal troops from the limits of the Confederate States, but they were laid over for future consideration. The Secretary of the Treasury had advertised for an additional loan of eight millions, an amount which he thinks will be sufficient to carry the Government through to the end of the current fiscal year. It was reported that the Administration would not attempt to collect the revenue in the Gulf ports; that the Cabinet was considering the question of evacuating Fort Pickens, and that there was good reason to believe the fort would be abandoned within 30 days. The Southern Commissioners were said to be on friendly terms with the English and French Ministers at Washington. The South Carolina State Convention re-assembled on the 26th, and the first proposition presented was a resolution to cut off all the supplies and mail facilities hitherto afforded to the garrison of Fort Sumter. It was not thought likely that the resolution would be carried. A resolution had been introduced in the Louisiana Convention declaring in favour of free trade between the Western and Confederate States. All the fortifications, arsenals, lighthouses, and revenue cutters belonging to Louisiana were to be handed over to the Southern Government. It was said that a party of Filibusters had invaded Lower California. A daring and ingenious attempt had been made to rob the New York Exchange Bank. The thieves actually dug a tunnel under the foundation to the length of 70 feet. They succeeded in gaining access to the vault, but the safe within this resisted all their efforts, and they were obliged to abandon the attempt.

Mexico.—Advices from Vera Cruz to the 21st ult. state that the principal roads leading to the city of Mexico were swarming with bands of robbers. Captain Aldham, of Her Majesty's steamer Valorous, had been attacked and severely wounded while returning from the City of Mexico to Vera Cruz. The Constitutional Government was making but slow progress.

Parliament.

HOUSE OF LORDS.

Tuesday.—The House reassembled to-day after the Easter holidays. *Denmark and Holstein.*—Lord Wodehouse, in answer to the Earl of Ellenborough, corrected a misapprehension which had arisen in Denmark and Holstein in regard to certain remarks he had made on the affairs of Holstein. What he had said was, not that the whole Budget of the Danish Monarchy was to be submitted to the Holstein States, but that Holstein should have the power of giving its vote as to the quota which it should pay towards the expenses of the Danish Government for the year 1862. The *Queensland Government Bill* passed through committee. The *Bankruptcy and Insolvency Bill* was read a first time, and the second reading appointed for Tuesday next.

Thursday.—*Private Bills.*—On the motion of Lord Redesdale, it was resolved that no private Bill [illegible] House of Commons should be read a second [illegible] 9th July next. The *Queensland Government Bill* [illegible] third time and passed. The *Exchequer Bills Bill* [illegible] second time.

Friday.—*Syria.*—In answer to the Earl of [illegible] Wodehouse said that Fuad Pasha had condemned [illegible] death in this district, and 11 at Beyrout. [illegible] the 58 a very large measure of clemency [illegible] With regard to those at Beyrout a difference [illegible] arisen among the commissioners, and their [illegible] consideration. *The Mutiny Bill* was read a second time.

HOUSE OF COMMONS.

Monday.—The House re-assembled after the Easter [illegible] On the motion of the Attorney-General the *Bankruptcy and Insolvency Bill* was read a third time and passed. [illegible] The House then went into committee on the [illegible] *Banks Bill*, and the early part of the evening was [illegible] the consideration and discussion of its details [illegible] passed through committee, and was reported [illegible] to the House.—Sir G. Lewis moved the [illegible] *London Coal and Wine Duties Continuance* [illegible] that at present a duty was raised upon [illegible] within a radius of 20 miles of St. Paul's, [illegible] ton for the benefit of the City corporation, [illegible] ton for certain works of public utility. Last year [illegible] mittee sat on the question of embanking the [illegible] came to the unanimous resolution that, [illegible] and the halfpenny duty on wine would [illegible] they should be renewed for a limited period [illegible] or part of the cost of the Thames embankment [illegible] a first charge upon them. The main [illegible] Bill, therefore, was to carry out that [illegible] by continuing the duties for 10 years, reserving [illegible] however, the power of directing the application [illegible] duties to such purposes as it might think fit [illegible] commission had reported on the Thames embankment [illegible] regard to the 4*d*. duty, which the Bill also [illegible] alive for 10 years, if the Bill went into committee [illegible] move the insertion of a clause appropriating [illegible] which he estimated at 60,000*l*. a year, to the [illegible] interest upon, and to sinking the capital of the [illegible] debt of 540,000*l*. So far as the radius within [illegible] duties should be levied was concerned, the Bill [illegible] confine it hereafter to the metropolitan police [illegible] a drawback for all places which lay beyond that [illegible] W. Williams urged the postponement of the Bill [illegible] inhabitants of the metropolis an opportunity of [illegible] their opinion as to the continuance of the Coal [illegible] Roupell moved the adjournment of the debate [illegible] that the House ought to have a clear statement [illegible] question affecting millions of people and a very [illegible] of money.—Alderman Sidney defended the [illegible] which did not affect the poor, while the working [illegible] most interested in the improvement of the metropolis [illegible] Shelley opposed the Bill.—The Lord Mayor said the [illegible] tion of London had expended not only the 4*d*. [illegible] great deal more, for the public benefit, and the [illegible] whether, there being a growing demand for improvements [illegible] which money must be raised, a tax to which the public [illegible] accustomed should be sacrificed and thrown [illegible] Hankey opposed the adjournment of the debate. [illegible] mode of raising funds for effecting improvements [illegible] suggested than the coal-tax, which was easily collected [illegible] lightly on the poor.—Mr. Crawford opposed the adjournment of the debate.—Mr. Tite said, unless the [illegible] tinued, or some other mode of taxation could be found, the [illegible] improvements now in operation and [illegible] up, and London be left as it is.—Mr. [illegible] whether funds for improvements [illegible] or an additional rate on houses, [illegible] taxation was a just one; but the Bill, in [illegible] the area unfairly.—Mr. Ayrton objected [illegible] the Bill, which gave to the City of London [illegible] duty, which had not been claimed as a right.—[illegible] supported the Bill.—General Peel, objecting [illegible] area proposed by the Bill, should vote against the [illegible] reading.—Sir G. Lewis, in reply, said that [illegible] postponing the Bill indefinitely was equivalent [illegible] defer the second reading for six months. [illegible] motion for adjournment was negatived by [illegible] Ayrton then moved an amendment declaring [illegible] the House that the coal-tax and the wine [illegible] continued for a year only, viz. to the [illegible] —Sir G. Lewis said that this was an [illegible] the details of the Bill which might be [illegible] Committee. After some further discussion [illegible] was negatived on a division by 119 to 10. The [illegible] read a second time.—Sir G. Lewis moved the [illegible] of the *Industrial Schools Bill*, the object [illegible] amend the Act of 1857. After some remarks [illegible] Mr. Adderley, the Bill was read a second time. [illegible] moved the second reading of the *Election Law* [illegible] stating that it involved no new general [illegible] Berkeley objected to discussing the Bill [illegible] hour, and moved to defer the second reading [illegible] months.—Mr. Peacocke said that the Bill [illegible] providing of conveyances for voters for [illegible] for boroughs, and he objected to the [illegible] H. B. Johnstone and Mr. Cave opposed the [illegible] supported by Mr. Griffith.—Mr. Deedes urged [illegible] ment of the second reading.—Sir G. Lewis [illegible] tage would arise from adjourning the debate [illegible] Berkeley having withdrawn his amendment, [illegible] read a second time. The *Exchequer Bills Bill*, the [illegible] and the *Marine Mutiny Bill* were read a third time [illegible] —On the motion of the Chancellor of the Exchequer [illegible] Committee was appointed to revise the *Public* [illegible] they had passed through the hands of the Government.

Tuesday.—*The Ballot.*—Mr. H. Berkeley gave [illegible] Tuesday, the 23d inst., of his annual motion [illegible] ballot.—In answer to Lord Stanley, Mr. T. G. Baring [illegible] that it was intended to abolish *Purchase* in the [illegible] above the rank of major, but that the Secretary for [illegible] to see how the system worked in that case before [illegible] it to the English army.—Sir H. Stracey moved [illegible] that in the opinion of the House, the establishment [illegible] *Homes* has been so conducive to the benefit of seamen [illegible] sequently of so great national importance, as to be [illegible] of the support and encouragement of the Legislature.—Mr M. Gibson [illegible] Walcott seconded the motion.—Mr [illegible] the ground that the sailor had no special claim [illegible] of the state more than any other section of the [illegible] He was well paid and well treated, and it was [illegible] him to say that he was as a rule the victim of every [illegible] encountered him. Upon the whole he thought [illegible] leave these "homes" to private generosity for the [illegible] Mr. Henley and Mr. Lindsay thought that [illegible] institutions would do more harm than [illegible] marks by Mr. Kinnaird, Capt. Jervis, and Lord [illegible] motion was negatived. *Divisions on Supply.*—Sir [illegible] moved a resolution that, on any division, when the [illegible] in Committee of Supply, so soon as the votes [illegible] taken, the doors be closed immediately after [illegible] have withdrawn. He urged inconveniences [illegible]

[illegible] which, he thought, were a very [illegible] the House. If his proposal were adopted [illegible] the country would see what members had [illegible] of Supply.—Sir G. Lewis opposed [illegible] he believed, if carried, it would be advan[illegible] for the time being. The rule of the [illegible] member should vote unless he was present [illegible] was put. If this motion were assented to it [illegible] other committees, and to all measures [illegible]. The effect of a rule that no member should [illegible] having heard the whole of the debate would be to [illegible] the condition of a jury.—The motion was [illegible] by Mr. Newdegate, Mr. Bass, and Colonel [illegible]. The motion was negatived without a division.—[illegible] leave to bring in Bills confirming the [illegible] of the *Charity Commissioners* relating to certain [illegible] in the parish of Burford, Oxfordshire; the Hospital [illegible] Trinity, at Guildford, and its subsidiary endow[illegible] the Hospital at Temple Balsall, Warwickshire; and [illegible] charities in the borough of Reading. The *London [illegible] Continuance Bill* was committed *pro forma*. The *Royal Marine Barracks (East Stonehouse) Bill*, and the *Consolidated Fund* (3,000,000*l*.) *Bill* passed through committee.

[illegible].—*The New Law Courts.*—The Attorney General [illegible] that on Thursday the 18th inst. he will move [illegible] to bring in a Bill for the concentration of the whole [illegible] courts of law and equity, and offices connected with [illegible] in one spot, and for the application of certain funds in [illegible] Court of Chancery to the purchase of the site, and the [illegible] of the necessary buildings thereon.—Mr Baines, in a [illegible] of about [illegible] members, moved the order of the day for [illegible] his *Borough Franchise Bill*. In doing so, [illegible] for having as a private member assumed [illegible] of introducing a measure of such importance, and [illegible] the executive Government in the discharge of [illegible] ought to rest upon them. He argued in behalf [illegible] of the working classes for the exercise of the [illegible] by reason of their advance in intelligence, industry, [illegible], and virtue, since the enactment of the Reform [illegible]; and in which they had greatly outstripped the [illegible] in population that had taken place in the interval. [illegible] proposal was to extend the franchise in boroughs from a [illegible] occupation; in other words, he adopted in its sim[illegible] the recent scheme of Lord J. Russell; and he estimated [illegible] virtual effect would be to add about 170,000 to the pre[illegible] number of borough voters, an augmentation which was in [illegible] calculated to alarm the most timid of Conserva[illegible] the most jealous of popular rights. He reminded the [illegible] that they had been elected expressly for the purpose of [illegible] this very measure, and that the prosperity and peace [illegible] by this country were the fruits of adopting [illegible] and useful reforms.—Mr. Digby Seymour seconded [illegible] motion.—Mr. Cave moved as an amendment [illegible] previous question. He said that he took this [illegible] in preference to moving the rejection of the Bill altogether, because he and those who sat around him were not opposed to admitting such a number of the working classes to the franchise as could be invested with it safely. But he ob[illegible] the measure on three distinct grounds. First, it ap[illegible] in a most objectionable shape; secondly, it was intro[illegible] at an inopportune period; and thirdly, it emanated [illegible] a source which did not command the confidence of the country.—Mr. A. Smith seconded the amendment.—Mr. [illegible] spoke in support of the Bill.—Sir J. Ramsden said [illegible] the House agreed to the second reading, it would only [illegible] waste of time, without a chance of carrying the Bill [illegible]. He considered that the Government had acted [illegible] in not reintroducing the question in the present session. [illegible] resolutions were a mistake, and [illegible] to disguise the fact that Ministers had not presented a measure of reform simply because they were unable to do so, and their inability arose quite as much from [illegible] friends as themselves.—Mr. Lawson and Mr. Stansfeld supported the Bill, Mr. Black opposed it. On a division the "previous question" was carried by 245 to 193. The *Consolidated Fund* (3,000,000*l*.) *Bill* was read a third time and passed.

Thursday.—*The Navy*.—On the order for going into Committee of supply on the navy estimates, Mr Lindsay moved [illegible] following resolutions:—"That it is expedient to defer any [illegible] expenditure on the construction or conversion of wooden line-of-battle ships; that it is inexpedient to incur [illegible] the present year the expenditure requisite for the com[illegible] of the line-of-battle ships now on the stocks; and that [illegible] the present year it is not expedient to commence the [illegible] of any wooden vessels which carry guns on more [illegible] deck; that it is inexpedient, without further experi[illegible] to sanction the expenditure of any money for the purpose [illegible] adapting her Majesty's dockyards for the construction [illegible] vessels." He argued that if these suggestions [illegible] adopted and acted upon by the Admiralty, the [illegible] might be reduced to the extent of 1,150,000*l*., and [illegible] could be accomplished without impairing the efficiency [illegible], and still enable us to maintain our position as a [illegible] maritime power.—Sir M. Peto seconded the motion. [illegible] wooden ships would be utterly useless for warlike [illegible], and therefore the building of them ought to be discontinued, as had been done in France.—Lord C. Paget opposed the resolutions, which would go to destroy all responsibility in the administration of the navy. It was not intended to build any more wooden line-of-battle ships; but he could not agree to stop the conversion of vessels of that class which was now going on. No practical man could subscribe to the doctrine that wooden ships should be abolished altogether in the navy, and iron vessels substituted for them. The fact was that the latter description of ships was quite unfitted for service in warm latitudes, owing to the rapidity with which their bottoms fouled. In reference to the third resolution, there was no intention on the part of the Admiralty to adapt the Government dockyards to the construction of iron vessels.—[illegible] Bentinck and Mr. Corry opposed the resolu[illegible].—Lord Gifford, as one of the Royal Commissioners, [illegible] with all of them except the concluding declara[illegible] that it was inexpedient to adapt her Majesty's [illegible] to the construction of iron ships.—Sir J. Paxton [illegible] that in the course of a few years the fleet must [illegible] of iron, as the best and most economical [illegible] that could be employed in the building of ships of [illegible]. The present was a period of transition in the history of [illegible], and he recommended that a Royal commission [illegible] appointed, composed of eminent scientific men, to [illegible] and report upon the reconstruction of the navy.—[illegible] thought the Government had done well, in the [illegible] state of iron naval architecture, in not [illegible] the construction of wooden ships.—Sir [illegible] said that the smaller class of vessels of war must [illegible] of wood, and hoped that no delay would [illegible] in prosecuting such experiments as would enable [illegible] to determine what our ships were hereafter to [illegible]. After some remarks by Mr. Dalglish, Mr. Horsman, and [illegible] Williams, Sir J. Pakington said the resolutions might be [illegible], and would in fact take out of the [illegible] of the executive [illegible] a question which, above all [illegible] ought to be left to their discretion. For his own part, [illegible] no prospect of the entire abandonment of wooden ships, [illegible] class of which must still continue to be built. [illegible] regard to the third resolution, he thought the Admiralty [illegible] acted wisely in trying the experiment of building one of the new iron ships in their own dockyard.—After a few remarks from Admiral Walcott, the resolutions were withdrawn. *New Zealand.*—Sir J. Trelawny called attention to the position of affairs in the north island of New Zealand, which he said had arisen out of a gross blunder and injustice that was a disgrace to our boasted civilisation. He moved a resolution in favour of referring the question of title to the disputed land to a special tribunal after the restoration of the Queen's authority.—Mr C. Fortescue defended the policy pursued by the Government in reference to the land question. If the treaty of Waitangi had been a dead letter, it was solely owing to the natives themselves, who, not understanding the advantages of such treaties, would not submit to observe their provisions. Up to this time it had been impossible to establish courts in the island for the settlement of these land claims, and the only course which had been open to the Governor was to negotiate directly with the chiefs themselves. He believed the real cause of the disturbances had been the Maori King and land league movement; but it was the determination of the Government to maintain inviolate the provisions of the Waitangi treaty.—Mr. Selwyn cited the authority of the Bishop of New Zealand to show that the quarrel between the colonists and the natives had commenced long before the Maori King movement existed. The real origin of the dispute was to be traced to the constant endeavour of the settlers to dispossess the aborigines of their lands, in contravention of the treaty of Waitangi; and he believed that the establishment of some special tribunal for the settlement of the questions at issue would go far to tranquillise the native mind and prevent the spread and continuance of this unhappy war.—Lord C Hamilton and Mr. Hope concurred in thinking that it would be injurious, and paralyse the arm of the Colonial Government, to pass a resolution like the one proposed.—The debate was then adjourned.

Friday.—*Denmark and the Duchies.*—In answer to Mr. H. Baillie and Sir H. Verney, Lord J. Russell said that there had been great obscurity in the propositions which had been made on both sides. The French Government had asked her Majesty's Government what course they had taken, and all the communications having been submitted, M. Thouvenel said that his course had been completely in accordance with that of her Majesty's Government. He had that day received information that Holstein did not consider the arrangement made on its behalf equitable, and, therefore, refused to be bound by it. The Governments of France, Russia, and Sweden took the same view of the question as her Majesty's Government; and he had therefore endeavoured, by communication, to bring about an amicable arrangement. [Left sitting.]

City Intelligence.

Bank Rate of Discount.—The Bank of England on Thursday reduced their rate of discount from 6 per cent., at which it was fixed on the 4th inst., to 5 per cent.

Money Market, Friday.—British Funds: Consols closed at 91½ for Money, and 91⅝ to ¾ for the 9th May; Bank Stock, 227; Three per Cents. Reduced, 90 to ⅛; New Three per Cents., 90⅛ to 90; India Stock, 220½; Ditto Five per Cent. Stock, 100⅜ to ⅝; Ditto Bonds, 25*s*. to 20*s*. dis.; Five per Cent. Enfaced Rupee Paper, 94; Ditto Five and a Half per Cent., 100¼; Exchequer Bills, 5*s*. dis.—Foreign: Brazilian Old Five per Cents., 98 ex div.; Ditto Four and a Half per Cents., 1860, 85 to ⅞; Chilian Four and a Half per Cents., 82½; Dutch Four per Cent. Certificates, 98⅝ to ¾ ex div.; Mexican Three per Cents., 24 to 23⅞; Russian Four and a Half per Cents., 91½; Spanish Three per Cents., 49¼.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£26,848,700	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion	11,525,338
		Silver Bullion	848,362
	£26,848,700		£26,848,700

BANKING DEPARTMENT.

Proprietors Capital	£14,553,000	Government Securities (including Dead Weight Annuity)	£10,222,938
Rest	3,167,568	Other Securities	18,816,008
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	4,902,527	Notes	6,690,360
Other Deposits	13,2[illegible]1,791	Gold and Silver Coin	748,730
Seven day and other bills	6[illegible]155		
	£38,478,036		£38,478,036

11th day of April, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY—BANKRUPTS—J. Bristow, Stourbridge, Worcestershire, Licensed Victualler—J. Burrows, Chesterfield, Derbyshire, Cabinet Maker—J. Cobb, Great Yarmouth, Currier—F. De Yrigoiti, Muscovy Court, Tower Hill, Wine Merchant—C. Marshall, Sheffield, Saw Manufacturer—J. M. Martin, Chesterfield, Derbyshire, Ironmonger, Brazier and Gasfitter—W. P. Poad, Portsmouth, Draper and Mercer—W. Watson, Gravel Lane, Southwark, Licensed Victualler—F. H. Wood, Manchester, Brewer.

BANKRUPTCY ANNULLED—E. Pritchard, Liverpool, Wine and Spirit Merchant.

SCOTCH SEQUESTRATIONS—J. Bain, Glasgow, Bookseller—R. Brash, sen., Airdrie, Lanarkshire, Cooper—T. Craigie, Dunfermline, Plumber—J. Laird, jun., Port Glasgow, Grocer—J. M'Gregor, Aberdeen, Druggist—J. Muir, Paisley, Spirit Dealer—R. Waddell, Glasgow, Contractor—A. Weir, Kilmarnock, Spirit Merchant.

FRIDAY—BANKRUPTS—H. Austin, Bermondsey, Manufacturing Chemist, Druggist, and Drysalter—G. F. Barratt, Baker's Row, and Guildford Place, Bagnigge Wells Road, Clerkenwell—J. Calverley, Portsdown Road, Maida Vale, Builder—J. Jackson, Brighton, Hatter—J. King, Shepard's Terrace, West India Dock Road, Limehouse, Hatter and Clothier—J. Knighton, Nottingham, Licensed Victualler—J. Lake, Penge, Surrey, Builder—H. Norris and W. Norris, jun., Mare Street, Hackney, Middlesex, Builders—D. S. Pizzala and G. S. Pizzala, Great Tower Street, City, Merchants—P. Roberts, Barlaston, Staffordshire, Grocer and Corn Dealer—J. Robinson, Liverpool, Plumber, Painter and Glazier—S. Webb, Sudbury, Suffolk, Builder—W. J. Webb, King Henry's Walk, Ball's Pond Road, Mat and Rug Manufacturer—J. Weston, Leek, Staffordshire, Tailor and Draper—A. E. Williams, Stainsbury Road, Limehouse, Cooper—G. Woodruff, Hulme, Manchester, and Bolton-le-Moors, Butcher and Cattle Dealer—S. Wynn, Upper Tranmere, Cheshire, Contractor, Brickmaker, and Farmer—J. J. C. Young, Stonebridge Common, Kingsland, Licensed Victualler.

Metropolis and its Vicinity.

Exhibition of 1862.—Her Majesty's Commissioners of the International Exhibition of 1862 have appointed the following committees of advice:—"On all Matters relating to the Building:" the Earl of Shelburne, Mr. William Fairbairn, LL.D., F.R.S., and Mr. William Baker, C.E. "On Finance:" the Right Hon. Robert Lowe, M.P., Vice-President of the Council of Education; Sir Alexander G. Spearman, Bart., Mr. Thomas Field Gibson, Mr. Henry Thring, Q.C., Mr. Edgar A. Bowring, and Lord Frederick Cavendish (Secretary). Mr. J. J. Mayo, of the Board of Trade, has been appointed principal financial officer.

The Strike.—The trades' unions connected with the masons, bricklayers, and plasterers now on strike have resolved to continue firm in their determination not to return to duty till the masters concede the nine hours' work with ten hours' pay. In spite of this decision the strike is virtually at an end, as the men are beginning to assert their independence of the unions, and are daily returning to work. During Monday and Tuesday a great many of them returned to Messrs. Lucas and Kelk's and the other contractors, where they had been on strike. Messrs. Lucas have now four-fifths of the hands they require, and applications daily come in from mechanics of all trades and from all parts of the country for engagements under the hour system of payment. It is understood that other leading firms will at once follow the example of Messrs. Lucas and Kelk, and adopt the hour system. Mr. Smith has already done so, and refuses to employ skilled workmen on any other terms than 7*d*. per hour, with liberty to leave work at 1 o'clock on Saturday.

The Indian Famine Relief Fund.—The amount received by the Lord Mayor up to Thursday evening was nearly 40,000*l*., nearly the whole of which has been collected in the metropolis. Taking into account the donations already made by some of the principal cities and towns, especially of Edinburgh, Manchester, Dublin, Birmingham, Liverpool, Leeds, Huddersfield, and Bradford, the aggregate amount of the fund in the metropolis and the provinces up to this time must be considerably upwards of 50,000*l*., although only a fortnight has elapsed since the subscription was set on foot. Of this sum about 44,500*l*. is now on its way to India, to be expended in the purchase of food under the superintendence of the local authorities. Among the sums received on Tuesday at the Mansion House was a donation of 200*l*. from the Prince of Wales.

The City Coal Dues.—On Friday night a public meeting was held in the London Tavern, Mr. Nicholay in the chair, for the purpose of organising an opposition to the Government Bill now before Parliament for the renewal of the coal dues levied by the city. Mr. Lawrence moved, and Mr. A. B. Richards seconded a resolution to the effect that it is inexpedient and inconsistent with the policy of the day to levy enormous dues on an article of necessary consumption, and that, considering the state of the London poor last winter, and the price of fuel, a tax on coal entering London is a grievous burden, and ought not to be entertained. Mr. G. Brook moved an amendment declaring that the meeting while desirous of inducing the Government not to continue the tax on coals, is of opinion that if the Bill for levying the tax be carried, a portion of the tax should be applied for the purpose of doing away with the bridge and road tolls in and near the metropolis. The Chairman pronounced the amendment incompetent, as the question was whether or not there should be a coal tax, and not how it should be applied. Mr. Pearce said there must be some fund for paying the expense of public improvements, and he supported the coal dues until a good substitute was proposed. Mr. J. R. Taylor supported the resolution. On the resolution being put to the meeting great confusion and disorder arose. The Chairman professed himself unable to decide whether the show of hands was in favour of or against the continuance of the tax, and each side loudly claimed the majority. At length tellers were appointed, and the vote was declared to be against the resolution, and in favour of the tax.

Launch of the Steam Ram Resistance.—A further addition to our iron-cased frigates was made on Thursday by the launch of the Resistance from Messrs. Westwood and Baillie's yard, near Millwall; and the sister vessel, the Defence, will be launched to-day from Messrs. Palmer's works near Newcastle. Within this week, therefore, England will possess four armour-plated frigates actually afloat, and four more of which the frameworks have been commenced. The Resistance and Defence are built as steam rams. They are about 4000 tons burthen and 600 horse-power, and are to carry 16 guns.

Fire in the Docks.—On Monday morning the American ship Hortense, lying in the London Docks and about to sail for Port Phillip, was discovered to be on fire. The flames were not extinguished without much damage to the cargo, when it was found that a large quantity of lucifer matches and fusees in the fore hold had ignited. It is fortunate that the fire broke out before the vessel left the Docks, or greater mischief might have resulted. Had the accident occurred at sea the vessel would in all probability have been lost.

The Public Health.—The Registrar-General's Weekly Return states that the number of deaths registered in London in the week that ended Saturday April 6th was 1,220. The average number in the corresponding weeks of the ten years 1851-1860, corrected for increase of population, was 1323. The present return is therefore 103 below the average. During the week the births of 1,012 boys and 988 girls, in all 2,000 children, were registered in London. In the ten corresponding weeks of the years 1851-60 the average number was 1,642.

Provincial.

Ashton.—The strike of weavers and the lock-out in Ashton, Staleybridge, Dukinfield, and the Hyde district still continues. Messrs. Bayley's weavers at Staleybridge are now out, together with those of Messrs. Neild, Sutcliffe, & Co., Ashton, and Messrs. Sidebottom of Waterside. The number of hands now on strike in these districts amounts to about 30,000, and they are sacrificing upwards of 20,000*l.* per week in their resistance to the attempted reduction of 7½ per cent. on their wages.

Jersey.—It is stated that M. Victor Hugo is ill, and, having been ordered change of air, is about to leave this island for Belgium.

Lincoln.—At a meeting of the Kesteven justices on Friday, a married woman, named Fanny Moore, was charged with having on the 30th ult. feloniously attempted to suffocate a man named Samuel Holmes, his wife, and family, who reside under the same roof as defendant, in the parish of Bassingham. The defendant had set fire to some brimstone in a room occupied by the complainant and his family, and stated that she and her husband had done so to diminish the damp, as complainant's family were always throwing water into the room through the crevices. Two of complainant's children narrowly escaped being suffocated. As there was not sufficient evidence to place the defendant or her husband on their trial for attempted murder, the bench could only bind the husband in his own recognisances of 10*l.* for six months for the good behaviour of his wife, with the cost of the proceedings. The magistrates expressed great regret at not being able to punish them both, as, if the inmates of the room had unfortunately been asleep, death by suffocation must inevitably have been the consequence.

Nottingham.—A foreigner, representing himself as Baron Zychlinski, has been frequently brought before the sitting magistrates of this town on remand, charged with obtaining 400*l.* by false pretences from the Rev. Henry Maltby. It appears that on the 18th Sept. last the prisoner arrived at the Flying Horse Hotel, Nottingham, accompanied by his courier. The Rev. Henry Maltby, his brother, and brother's wife were staying at the same hotel. Mrs. Maltby, wife of the rev. gentleman, resided chiefly abroad on an allowance of 300*l.* a year made to her by her husband. Mr. Maltby had previously been staying at Bedford, from which place he was followed to Nottingham by the prisoner. While at the Flying Horse the prisoner stated, through his interpreter, that he was honourably attached to the prosecutor's eldest daughter, who was then at Dover with her mother, and solicited from Mr. Maltby his daughter in marriage. He represented himself to be the Baron Zychlinski, son and heir-in-law of Count Zychlinski, of Zychlin, near Warsaw, and captain of cavalry in the Prussian service. He then said that he had befriended the wife of the rev. gentleman when she was staying in Rome and suffering from pecuniary difficulties, and also that he possessed her written acknowledgments for what he had advanced. The repayment of the money, he said, was only a secondary consideration, as compared with being able to satisfy his family of the respectability of the Maltbys, in order that he might have the consent of his own family to take Miss Maltby in marriage. These representations made a strong impression on the prosecutor, who thought he had said enough to induce him to repay the money said to have been advanced, if Mr. Campbell, his solicitor (who was present at the time), was satisfied about the matter. The prisoner then showed Mr. Campbell a number of documents, passports, &c., which represented him to be what he had stated; he also produced documents said to have been received from his advocate, instructing the Baron to commence an action against the prosecutor for the recovery of the money said to have been advanced to his wife when in Rome. The prisoner showed bills and receipts from Mrs. Maltby amounting to 400*l.*, said to have been received from the prisoner. He pressed for immediate payment, as he wished to leave the town that afternoon for Germany. Mr. Campbell then took the prisoner to Messrs. Wright's bank, and gave him the draft for the money. Before he left Nottingham prosecutor gave his consent for the prisoner's marriage with his daughter, which was arranged to take place at Dover, and which was consummated. Soon after the marriage however an inquiry was made as to the position of the prisoner, when he was found to be an impostor, being in fact a deserter from the Prussian service, in which he had been serving as a private soldier. On the prisoner's character becoming known the prosecutor took his daughter away from him, and he had not been seen for some time until last month, when he called at Mr. Campbell's office, and was immediately apprehended. Mrs. Maltby admitted that she had fallen into pecuniary difficulties at Rome, and that being ashamed to apply to her husband for more money, she had signed a paper stating that the prisoner had lent her 400*l.* She did this at the suggestion of the prisoner, who was then engaged to her daughter, and who told her that the money would be got more easily from her husband in that way. She expressed her pain in making this confession, and said she had recently informed her husband of the deception she had practised in representing to him that the 400*l.* was owing, whereas it was not. The baron turned witness out of his house at Hyères, because he said she had calumniated him. He also wrote to her husband the most depraved letters concerning her, which were entirely false. Adolphus Chaplin Woolotski said he came from the Duchy of Posen in Poland, and knew Count Zychlinski of Zychlin, who has two sons, but the prisoner was not one of them. The prisoner was also identified by a soldier in the regiment from which the prisoner had deserted, and who had been sent from Berlin by the British ambassador at the desire of Lord John Russell. Another witness, a Polish refugee, proved that the prisoner was no relation of Count Zchylinski of Posen, and that he could never have been, as he had represented, at the Military School at Riga, because there was no such school in that city. At the final examination on the 2d inst. evidence was adduced to refute the prisoner's statement as to the money having been advanced to Mrs. Maltby, the principal witnesses on this point being Mrs. Maltby herself, and her daughter, the wife of the prisoner. Mr. Ford then addressed the Bench on behalf of the baron, contending that there was no evidence of fraud. He remarked strongly upon the nature of the evidence which had been adduced, and said that there was not the slightest ground for anything else but an acquittal, as no case of fraud had been made out. The Bench, after some consultation, acquitted the prisoner. A burst of applause immediately broke out in court, which lasted for some time. The baron was then liberated, and afterwards received the congratulations of many of the spectators.

Sheffield.—In consequence of the dissatisfaction felt by some of the constituency of this borough at the conduct of Mr. Roebuck on two occasions—first, when in 1859 he voted for the continuance in office of Lord Derby's administration; and secondly this session, when he delivered a speech favourable to Austria in the House of Commons, a meeting was held in Sheffield about three weeks ago, at which the hon. member was charged with having been induced by a subsidy for the Galway Packet Company to support Lord Derby's Administration, and with having invited Lord Palmerston's sympathies to the case of the 30,000,000 subjects of the Austrian Empire struggling for political rights, in preference to the claims of certain nationalities. A resolution was ultimately adopted calling upon him to explain his conduct in person. On Monday the 1st Mr. Roebuck accordingly attended a meeting of the electors in the Temperance Hall, to answer the charges made against him. All attempts however to address the meeting failed; the Hall was insufficient to hold the number desirous of hearing his explanation, and a large body in the street joined with those who were closely packed and half suffocated within the building in demanding an adjournment to the open air. Mr. Roebuck said his health would not allow him to speak in the open air, and he declined to accede to the demand. A scene of indescribable uproar and rioting ensued; and amid hootings, cheering, and jeering, Mr. Roebuck put on his hat and left the platform, after which the meeting was adjourned to the following morning in the Surrey Music Hall. At this adjourned meeting Mr. Roebuck, having obtained a hearing, addressed the electors at great length, denying that he had any pecuniary interest in promoting the Galway contract, or that he was influenced in his advocacy of Austria by any but patriotic feelings, which had satisfied him that the destruction of Austria would lead to the dangerous predominance of France, and he had no confidence in the Emperor Napoleon or his policy. As to voting for Lord Derby he had done so conscientiously, and as long as he sat in Parliament he should continue to vote as he thought best. The following resolutions were then proposed:—

1. "That this meeting is perfectly satisfied with Mr. Roebuck's explanations in answer to the calumnies that had been cast upon him, and avows its full confidence in his personal integrity and political worth: 2. That, having heard Mr. Roebuck's exposition of his views on the subjects of Austria and Italy, this meeting agrees with him in desiring that the principles of constitutional and commercial freedom should prevail in Austria; but also reiterates its ardent sympathy with the efforts of the Italians to free their country from internal tyrants and external domination, and its hope that before long Venetia and Rome may be peacefully united to the Italian kingdom."

The first resolution was carried unanimously with loud cheering, and the second was carried with a small number of dissentients. Mr. Roebuck then thanked the meeting for the confidence which they had expressed in his honesty and worth as their representative.

Walton-on-Thames.—On Saturday night Burhill Park, one of the finest mansions in the county of Surrey, the seat of Mr. Francis Thomas Bircham, solicitor to the South-Western Railway, was almost entirely destroyed by fire. The flames spread so rapidly that the furniture, paintings, and plate were either destroyed or buried in the ruins. Mr. Bircham himself was severely burned in endeavouring to save some part of the property.

Ireland.

Fatal Omnibus Accident.—On Saturday night as an omnibus was returning from Rathmines to Dublin it stopped on Portobello Bridge to let out a passenger when the horses became restive and backed into the canal. Six of the passengers and the horses were drowned. The driver and conductor escaped. The following are the names of the victims:—Mrs. Byrne, aged 26, and her infant child; Mr. Gunn, proprietor of a music establishment in Westland Row; a man named Cunningham, a night watchman in one of the docks; Mrs. O'Connell, the wife of a solicitor, from the co. of Clare; Miss O' Connell, her daughter, aged ..., who was at St. Patrick's ball in the Castle ... evenings before, and was much admired for her beauty. The two last and the child were immediately conveyed to Mercer's Hospital; the rest were taken to the ... Hospital, where every exertion was made to restore animation but without effect. An inquest was opened on Monday and continued by adjournment until Wednesday, when the jury returned the following verdict:

"That the several persons in question lost their lives by simple drowning, owing to the omnibus having backed suddenly into the chambers of the Grand Canal ... do not attach any blame to any of the persons ..., believing that all exerted themselves to the best of their judgment on that occasion."

The jury at the same time called the attention of the Rathmines Commissioners to the want of ... at the canal and sufficient light on the bridge, and Mr. Wilson, the proprietor, was recommended to have breaks on his omnibuses.

The Crown Solicitorship of ...—This lucrative office has been divided into three. ... has been conferred upon Mr. Croker Barrington, ... the late Sir Matthew; and another on ..., agent of Lord Fermoy.

The Inhibition Case.—The Primate ... the final decree in this case at the Palace, ... the 2nd inst. The decree inhibited the ... Miller from allowing the Rev. Mr. Potter to ... assist in the performance of Divine service in ... Church, Belfast, or in any other place in ..., until duly licensed. It also inhibited the ... Potter from preaching or performing Divine ..., &c., in St. Anne's Church, or elsewhere in the ..., until duly licensed. An appeal, *pro forma*, ... entered, for which 30 days are allowed before the decree becomes absolute.

The Yelverton Case.—It appears that the ...ton affair will shortly come again before the ..., the Major having lodged an appeal, which ... be argued before the 12 judges next term. ...tions were taken to portions of the judge's charge, as well as to some points connected with the reception of evidence, so that nearly the entire of the case ... gone over again before the Court of Appeal.

Railways.

Great Western of Canada.—At the meeting of the Great Western of Canada Railway Company ... day, to consider the recent report of the Committee of Investigation, the resolutions proposed by the Board of Directors were carried.

Law.

Commission of Lunacy.—*Case of the Earl ...*—The inquiry into the state of mind of the Earl of Kingston ... opened this week in St. Clement's Hall, before Mr. ..., Q.C., one of the Masters in Lunacy. For some time ... proceedings of his lordship have given great ... friends, and his mind had evidently become ... serious losses he sustained through the ... Mr. Sadleir. Drs. Conolly, Munro, and Swansey ... on the part of the petitioners, and stated that ... his lordship was undoubtedly of unsound mind. ... Mr. Digby Seymour, his lordship's counsel, stated ... Seymour had been requested by him to see ..., and the result of his interview was that, though ... prepared to say, but rather the contrary, that ... operating in the noble lord's mind were not ... intervals, upon the whole he considered him ... mind. That being so, he had come to the conclusion ... draw from the case, merely expressing his hope that ... lord, in the heavy affliction which had visited him ... age, would receive from his family that ... sympathy which he was sure the court would ... extended to him. Mr. M. Chambers expressed ... tion at the course which his learned friend had ... master then said that there was nothing left for him ... to pronounce "Robert Henry Earl of Kingston, ... town, in the county of Cork, to be a person of unsound mind, ... not competent for the control of himself, his lands, ... ments, or possessions."

Norfolk Circuit.—*Poisoning.*—*Sarah Andrews* ... with administering sulphate of copper to her mistress, ... Ann Spooner, at North Elmham. After a ..., Justice Williams expressed his opinion that the ... ministering poison with intent to murder or do grievous ... harm had failed; but under a recent act of Parliament, ... prisoner might be convicted, if the jury thought ..., misdemeanor for administering poison with an intent ... to annoy. The jury returned a verdict of ... *Burglary.*—*James Bloomfield Rush*, aged 20, ... indicted for burglary in the house of Mr. A. Cann... ..., and stealing various articles of clothing ... January, and for receiving the property knowing ... been stolen. The prisoner is the son of James Bloomfield Rush, formerly of Stanfield Hall. The case against the prisoner ... on the stolen property being found in his house. It ... proved that a burglary had been committed, and ... property stolen had been found secreted four days ... in a house occupied by the prisoner and his wife ... and there was no evidence of any other person living ... been seen in the house where the property was ... The jury deliberated about 10 minutes, and then returned a verdict of *Not Guilty.*

Sporting.

EPSOM SPRING MEETING.

Thursday.—The *London Bridge Stakes.* Mr. ... Crater beat Gallus, Avalanche, and 8 others.—The ... *Suburban Handicap.* Lord Ailesbury's Cantine beat ... Sir William, and 25 others. Won by a length. ... third, a neck from Saweutter; General Hess, fourth; ... fifth; First Lord, sixth; and East Sheen, seventh; ... last but one; and Tightfit last.—The *Two-Year-Old Stakes.* ... Merry's Express beat Estrella, Barcelona filly, and ... —The *Heathcote Plate.* Mr. Harrison's Apollo beat ...

[illegible] and 6 others.—The *Paddock Stakes.* Mr. Hudson's [illegible] beat Sir W. Armstrong, Viscountess, and 9 others.—[illegible] *Plate.* Lord Chesterfield's Baron Munchausen [illegible]. British Grenadier, Lord of the Tees, and [illegible].

FRIDAY.—*Metropolitan Handicap.* Parmesan beat Bramble [illegible] and 12 others.—*Waterloo Plate.* General Hesse [illegible] Glover, and 5 others.—*Walton Stakes.* Kildonan beat [illegible], Barbarian, and 5 others.—*New Two Year Old Stakes.* [illegible] beat Patriot, Walpole, and 8 others.—*Balaklava* [illegible] *Stakes.* St. Bernard beat Otho and Wolsey.—*Dardans Stakes.* [illegible] beat Vulture and Sharpshooter.

Obituary.

LADY HARRIETTE BURY, second daughter of the late Earl and Countess of Charleville, was accidentally killed on the [illegible] inst., by falling from the top of the stairs, at the family seat, Charleville Castle, Tullamore. Her ladyship, who was in her [illegible] year, had been sent by her governess from the schoolroom to the nursery to wash her hands before dinner, and after [illegible], she began sliding down the banister of the principal [illegible] of the mansion, which was highly polished and as slippery as glass. When thus amusing herself she lost her balance, and fell a distance of between 10 and 15 feet, and when taken up it was found that she was dead, the spine having been dislocated. The deceased was a lively and intelligent child, and of the most engaging disposition. Immediately after the death of her father she, with her brother and sister, were [illegible] in Chancery, and resided with one of their guardians, the Hon. Alfred Bury, in the family residence, Charleville Castle. The jury at the inquest, which was composed of the most respectable inhabitants of Tullamore and its vicinity, returned a verdict of Accidental Death.

THE HON. FREDERIC BYRON, M.A., barrister-at-law, died suddenly on the 4th inst. at Lord Byron's town residence, 48, Eaton Place. He was the second son of Vice-Admiral Lord Byron, by the daughter of Mr Sacheverell Chandos Pole, of Radborne, Derbyshire, and was born in 1822, so that he had only just completed his 39th year. He was educated at Westminster School and at Baliol College, Oxford; graduating B.A. in 1843, and M.A. in 1845, and was elected a Fellow of All Souls. He was called to the bar of Lincoln-inn in 1848, was appointed captain of the Sherwood Rifle Rangers in 1859, and was also a deputy lieutenant of Essex. He married in 1851 the second daughter of the Rev. William Wascomb, rector of Langford, Essex, co-heiress of Mr. John Emmerton Wascomb, of Thrumpton Hall, Notts, and Langford Grove. The eldest son of Lord Byron had married in 1843 a sister of the Hon. Mrs. Frederic Byron, and as he had no issue by his marriage, the deceased was heir presumptive to the title—a position which devolves upon his [illegible] son by his premature death.

REAR-ADMIRAL ROBERTSON died suddenly on the 6th inst. at Bath, in his 75th year. He entered the navy in 1803, and took part in the battle of Trafalgar. He afterwards served in the Spencer, 74, in the expedition against Copenhagen. He was taken prisoner, but escaped in May, 1809, and in August the same year joined the Victory, 100, flag-ship of Admiral Sir James Saumarez, in the Baltic. In 1818 he joined the Isabella, Captain J. Ross, in which vessel he was employed in exploring Baffin's Bay, and inquiring into the probability of effecting a north-west passage to China. After serving on the South American station he, in 1823, joined the Galatea as Flag Lieutenant to Admiral Sir Thomas Hardy, under whom he escorted to Lisbon a body of [illegible] as a reinforcement to the Portuguese Constitutionalists. He was actively employed up to 1837, and attained the rank of retired Rear-Admiral in 1857.

MR. THOMAS FLOWER ELLIS, Recorder of Leeds, Attorney-General of the Duchy of Lancaster, and one of Lord Macaulay's executors, died on the 5th inst. at his residence, 15, Bedford Place, Russell Square, in his 66th year.

WILLS AND BEQUESTS.—The will of the Dowager Countess of [illegible] has been sworn under 20,000*l.*; the Rev. the Earl of Guilford, 200,000*l.*; the Hon. Lady Matilda Butler, 12,000*l.*; William Spence, Esq., F.R.S., the Entomologist, 100,000*l.*

BIRTHS.—On the 8th inst., in Chesham Place, the Lady [illegible], of a daughter—5th inst., at 15, Grosvenor Place, London, the Lady LILFORD, of a son—1st inst., the Lady ANNA CHANDOS-POLE, of a son—7th inst., at Acton Place, [illegible], the Lady FLORENCE BARNARDISTON, of a daughter—4th inst., at 34, [illegible] Street, the Hon. Mrs. AUGUSTUS HALFORD, of a daughter—[illegible] inst., at Cranmer Hill, Norfolk, Lady JONES, the wife of Sir Willoughby Jones, Bart., of a son—9th ult., at Malabar Hill, Bombay, Lady ARNOULD, of a daughter—20th inst., at Antony, Mrs. POLE CAREW, of a daughter—5th inst., at 64, High Street, [illegible], the wife of the DEAN OF WELLS, of a son.

MARRIAGES.—On the 2d inst., at the Parish Church of Hove, Brighton, the Hon. SPENCER JAMES POMEROY, only son of Viscount Harberton, of Carberry Castle, Kildare, to FLORENCE WALLACE, only daughter of WILLIAM WALLACE LEGGE, Esq., of Malone House, Antrim—8th inst., by special licence, at Saint Andrew's Chapel, Brighton, the Baron DE TEISSIER, to CATHERINE MARGARET, eldest daughter of the late THOMAS WALPOLE, Esq., and Lady Margaret Walpole, of Stagbury, Surrey—At St. James's Church, EDGAR BURY, Esq., son of the late WILLIAM BURY, Esq., of Bury, Lancashire, to CICELY ANNA, daughter of the late Sir EDWARD BOWYER SMITH, Bart., of Hill Hall, Essex, and widow of the late HENRY [illegible], Esq., of Faulkbourne Hall, Essex—4th inst., by special licence, at King's Worthy, Hants, Baron HAMBRO, of Milton Abbey in the County of Dorset, and of Roehampton, Surrey, to ELIZA FRANCES GREATHED, widow of Hervey Harris Greathed, Esq., of the county of Dorset—9th inst., at St. George's, Hanover Square, FREDERICK CECIL, youngest son of the late Sir E. H. ALDERSON, Baron of the Exchequer, to KATHARINE [illegible], second daughter of the late Sir J. J. GUEST, Bart., M.P., of Dowlais House, Glamorganshire, and Canford Manor, Dorset—6th inst., at Chew Magna, the Rev. EDWARD OCTAVIUS TYLER, M.A., Vicar of Portbury, Somerset, son of Admiral Sir G. TYLER, K.H., of Cottrell, Glamorganshire, to CHARLOTTE [illegible], daughter of the Rev. EDWARD A. OMMANNEY, M.A., Vicar of Chew Magna, and Prebendary of Wells—4th inst., at [illegible], Gloucestershire, R. F. EATON EDEVEAIN, Esq., of the Middle Temple, son of the late Captain Edeveain, R.N., [illegible] nephew of Captains W. and C. Forsyth, R.N., to ELIZABETH [illegible], widow of the late SIR ARTHUR DE CAPELL BROKE, Bart., of Great Oakley Hall, Northamptonshire—4th inst., at St. [illegible] Church, Brighton, the Rev. MORRIS EDGAR STAN[illegible], M.A., to AUGUSTA HERRIES, youngest daughter of Sir [illegible] Young SEAMAN, Bart.

DEATHS.—On the 5th inst., at Rydal Hall, Westmorland, ANNE FREDERICA ELIZABETH, widow of Sir DANIEL FLEMING, Bart., and only daughter of the late Sir Michael A. Fleming, Bart., of Rydal Hall, aged 77—30th ult., at Lismore, Ireland, HENRY LAURENCE COTTON, eldest son of the Ven. Henry Cotton, Archdeacon of Cashel, aged 42—3d Feb., at Victoria, British Columbia, suddenly, EDWARD NAPIER BERKELEY PORTMAN, [illegible] of Major Portman, Dean's Court, Dorsetshire, [illegible] 1st ult., at Cheltenham, SUSAN LOUISA, wife of Lieut.-Colonel J. D. MEIN, Madras Horse Artillery, and third daughter of the late Major-General Blundell, C.B., Madras Army—3d inst., LOUISA, fifth daughter of Lieut.-Colonel DICKINSON, aged 2—1st inst., at Rownhams, Hants, CAROLINE MARY, third daughter of Lieut.-Colonel WM. PAYNE, aged 14—7th inst., at 33, St. James's Place, Lieut.-Colonel HENRY HAWKINS, late of the Fusilier Guards, aged 7[illegible]—[illegible] inst., at [illegible] Terrace, Westbourne Park, Col. GEO. SPILLER, late Royal Artillery, aged 69—11th ult., on board the P. and O. steamer Bengal, between Aden and Suez, Captain HENRY [illegible] SHEPPARD, Esq., 3d Madras Light Cavalry, and Commandant of the Hon. the Governor's Body Guard at Madras—30th ult., at Exeter, ELEANOR MARY ELIZABETH, widow of Mr. EDWARD HAWKE LOCKER, late Commissioner of Greenwich Hospital—[illegible] ult., at Llyfart, THOMAS OAKLEY, Esq., a magistrate and Deputy-Lieutenant for the county of Monmouth, aged 87—3d inst., at his residence, Newark Park, Gloucestershire, LEWIS CLUTTERBUCK, Esq., Deputy-Lieutenant of the county of Gloucester, and J. P. for Gloucestershire and Wiltshire, aged 67—5th inst., at Finedon, FRANCES, widow of the late WILLIAM SOMERSET DOLBEN, Esq., of Finedon Hall, Northamptonshire, aged 73—3d inst., at No. 29, St. James's Place, ALEXANDER MILNE, Esq., C.B., aged 80—26th ult., at Wembley, Middlesex, the Rev. BROWNLOW VILLIERS LAYARD, rector of Uffington and vicar of Tallington, formerly Domestic Chaplain to his Royal Highness the Duke of Kent, and eldest son of the late Dr. LAYARD, Dean of Bristol, aged 82—2d inst., at Winterbourne, Teignmouth, the Rev. WILLIAM PAGE RICHARDS, LL.D., rector of Stoke Abbas, Dorset, aged 88—31st ult., at Genoa, the Rev. ARCHIBALD BERTRAM MOUNSEY, B.A., of Emm. Coll., Cambridge, only surviving son of the late Saml. Mounsey, Esq., of Rochdale, Lancashire.

Markets.

COVENT GARDEN, April 13.

The supply of most things has become greatly improved, and trade is brisker. Cornish Broccoli continues to be furnished in excellent condition, and good samples of Lettuces, Endive, and Artichokes are received from France. Samples of new Grapes are offered, and fetch good prices. Asparagus, French Beans, Green Peas, and new Potatoes may also now be obtained. Cucumbers are coming in plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Camellias, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 8s to 12s	Apples, per doz., 6d to 1s 6d
Grapes, per lb., 8s to 15s	Oranges, per 100, 6s to 10s
Strawberries, p. oz., 6d to 1s	Lemons, per 100, 6s to 10s
Pears, per doz., 4s 6d to 8s	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 9d to 1s 6d	Celery, p. bundle, 1s 6d to 1s 9d
Green Peas, p. ½ sieve, 20s	Onions, p. ½ sieve, 1s 6d to 2s 6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 4s to 8s
Cabbages, do., 2s to 3s	Rhubarb, p. bundle, 9d to 1s 3d
Potatoes, p. ton, 90s to 160s	Seakale, p. punnet, 1s 6d to 2s
— per bus., 4s to 6s	Shallots, per lb., 1s 6d
— per cwt., 6s to 10s	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 1od	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 4s to 5s	Mushrooms, p. pott., 1s 3d to 1s 6d
Cucumbers, each, 9d to 2s	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 3s to 4s	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, April 11.

Prime Meadow Hay	75s to 85s		Clover	90s to 115s	
Superior do. (old) ..	90	105	New Clover	—	—
Inferior do.	50	60	Do. second cut	80	100
New do.	—	—	Straw	36	44
Rowen	—	—			

DAVIS & Co.

CUMBERLAND MARKET, THURSDAY, April 11.

Sup. Meadow Hay ..	114s to 120s		Inferior Clover ..	80s	105s
Inferior do. ..	63	98	New do.	—	—
New do.	—	—	Straw	42	48
Superior Clover ..	115	123			

JOSHUA BAKER.

WHITECHAPEL, THURSDAY, April 11.

Fine old Hay	100s to 105s		Fine old Clover ..	110s to 126s	
Inferior do.	80	95	Inferior do	80	95
Prime New Hay ..	—	—	Fine 2d cut	90	100
Inferior do.	—	—	Inferior do.	70	85
Straw	40	44	Fine New Clover ..	—	—

HOPS.—BOROUGH MARKET, FRIDAY, April 12.

Messrs. Pattenden & Smith report that there is an improving market for all fine samples of both old and new Hops.

BUTTER MARKET.—April 12.

Best Fresh Butter .. .. 16s. per dozen lbs.
Second do. do. .. .. 14s. " "
Pork, 4s. 8d. to 5s. 4d. per 8 lbs.

METROPOLITAN CATTLE MARKET.

MONDAY, April 8.

Although considerably larger than on Monday last, the supply of Beasts is by no means excessive, consequently that day's prices are fully realised. There are also a few more Sheep; the demand has, however, increased, and in some instances we quote higher. Good Lambs and Calves continue to be very scarce and dear. From Germany and Holland there are 252 Beasts, 1100 Sheep, and 45 Calves; from Scotland, 330 Beasts; from Norfolk and Suffolk, 1800; and 100 from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 8 to 5 0	Best Long-wools.	5 6 to 5 10
Best Short-horns	4 6 — 4 8	Do. Shorn ..	4 8 — 5 2
2d quality Beasts	3 4 — 4 0	Ewes & 2d quality	4 8 — 5 4
Best Downs and Half-breds ..	5 8 to 6 0	Do. Shorn ..	4 0 — 4 6
Do. Shorn ..	5 0 to 5 4	Lambs	7 4 — 8 4
		Calves	5 4 — 6 4
		Pigs	4 4 — 5 4

Beasts, 3630; Sheep & Lambs, 19,650; Calves, 59; Pigs, 370.

THURSDAY, April 11.

There are a few more Beasts than on Thursday last; but the demand is good, and Monday's quotations are well maintained. The supply of Sheep is moderate, and choicest kinds have a ready sale, but trade is dull for other descriptions. Lamb is more plentiful, and trade for them is not quite so brisk. Calves are rather lower. Our foreign supply consists of 170 Beasts, 300 Sheep, and 129 Calves. Milch Cows 140.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 8 to 5 0	Best Long-wools.	5 6 to 5 8
Best Short-horns	4 6 — 4 8	Do. Shorn ..	4 8 — 5 0
2d quality Beasts	3 4 — 4 0	Ewes & 2d quality	4 8 — 5 4
Best Downs and Half-breds ..	5 8 — 6 0	Do. Shorn ..	4 0 — 4 4
Do. Shorn ..	5 0 — 5 4	Lambs	7 0 — 8 0
		Calves	5 0 — 6 0
		Pigs	4 4 — 5 4

Beasts, 1060; Sheep & Lambs, 6040; Calves, 236; Pigs, 150.

MARK LANE.—MONDAY, April 8.

The supply of English Wheat from Essex and Kent to this morning's market was small, and met a slow sale (excepting the picked samples) at a decline of 1s. to 2s. per qr. upon the prices of this day se'nnight. The market was well attended, nevertheless no progress could be made with new foreign Wheat except at a similar decline; old was taken slowly and in retail at about last week's prices. Barley is a slow sale at a decline of 1s. per qr. Beans are 1s. per qr dearer. For Peas there is no demand. With a very large arrival of Oats the trade is dull at a reduction of fully 1s. per qr. Flour is difficult of sale; American barrels must be quoted 6d. to 1s. cheaper.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk .. White	56—66	Red	52—62
— — fine selected runs .. ditto	50—72	Red	54—65
— — Talavera	51—72		
— Norfolk	—	Red	—
— Foreign	50—78		
BARLEY, grind. & dist., 28s to 30s .. Chev.	40—45	Malting .	38—40
— Foreign .. grinding and distilling	30—36	Malting .	40—42
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire .. Potato	26—28	Feed ..	20—25
— Irish .... Potato	26—28	Feed ..	21—24
— Foreign .... Poland and Brew	24—28	Feed ..	20—28
RYE	35—38	Foreign	—
RYE-MEAL, foreign	—		
BEANS, Mazagan .... 23s to 44s .... Tick	28—48	Harrow .	28—48
— Pigeon ...... 34s — 56s .. Winds	34—42	Longpod	—
— Foreign .... Small	40—50	Egyptian	—
PEAS, white, Essex and Kent .. Boilers	35—44	Suffolk	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign .	38—48
MAIZE .... White	—	Yellow ..	—
FLOUR, best marks delivered .. per sack	50—57		
— 2d do. .... ditto	38—50	Country .	36—50
— Foreign .... per barrel	30—35	Per sack	40—50

FRIDAY, April 12.

Since this day week the wind has been from the N. E., the weather cold and dry, with white frost. This auspicious change was much to be desired (field work being considerably in arrear), and has enabled great progress to be made with sowing spring corn. The Wheat trade throughout the kingdom has been depressed; the quantity of Wheat shown at the different country markets has not varied in quality from heretofore, nor improved in condition, the price of the best descriptions having been the turn in favour of the buyer, whilst the low sorts have given way 2s. to 3s. per qr. With the wind favourable from the North of Europe, ships have made quicker passages, and the arrivals here as well as at the other outports have been considerable. The best descriptions of foreign Wheat have scarcely receded in price, but holders of ordinary and out-of-conditioned parcels had to submit to a decline of 1s. to 2s. per qr. in order to effect sales. Barley continues to be a dragging trade. Oats, in consequence of very large supplies, have declined 1s to 2s. per qr. Flour has given way 6d and 1s. per barrel, and fully 1s. per sack. The arrivals of English grain continue to be moderate, good of foreign Wheat, and large of Oats and Barley, but there has been little addition since Tuesday. To-day's market was very thinly attended, and the few millers present evinced great indisposition to purchase. Wheat was freely offered at Monday's prices, and in some instances a decline on those rates would have been accepted on new descriptions. Barley is a very slow sale at barely Monday's prices. Beans are fully as dear. White Peas cheaper. For Oats there is rather more inquiry at a decline of 6d per qr. Flour dull, and to effect sales holders had to accept lower prices.

ARRIVALS FROM April 8 TO April 12.

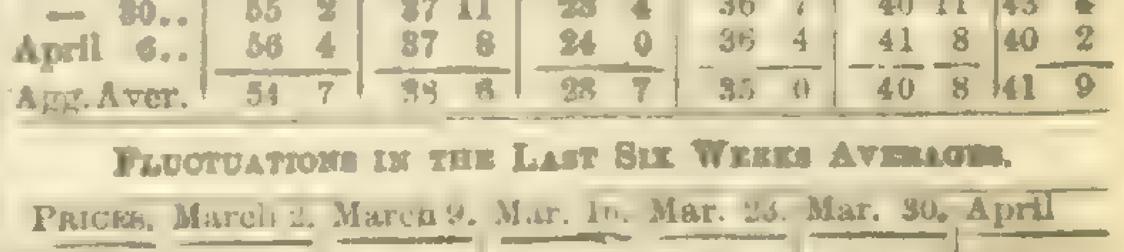
	Wheat.	Barley.	Oats.	Flour.
English ..	1290 qrs.	250 qrs.	880 qrs.	1640 sks.
Irish ..	— "	— "	1600 "	— "
Foreign ..	20570 "	7010 "	68720 "	1280 " / 1210 brls.

LIVERPOOL, Tuesday, April 9.—This morning's market has had only a small attendance of country buyers, and the demand has been quite on a retail scale, sellers generally making a concession of from 1d. to 2d. per cental on Wheat. Flour was difficult to move, and must be quoted from 3d. to 6d. per barrel cheaper. The quantity of Indian Corn offering was small, and holders were firm at the extreme currency of last market day. Oats and Oatmeal attracted little attention. Peas brought 6d. per qr. more money. Beans and Barley, on the contrary, were both 6d. per qr. cheaper. The market was of an irregular character throughout.

FRIDAY, April 12.—The market has been dull, and there is hardly any change to report since Tuesday, the transactions being restricted to the supply of present wants, and buyers generally have obtained a slight advantage in prices.

AVERAGES	Wheat.	Barley.	Oats.	Rye	Beans.	Peas.
March 2..	54s 2d	39s 2d	23s 0d	35s 1d	39s 7d	41s 7d
— 9..	54 2	38 11	23 6	34 6	41 8	43 8
— 16..	53 8	38 7	23 9	34 10	40 1	41 0
— 23..	54 0	38 6	23 10	32 11	40 1	40 9
— 30..	55 2	37 11	23 4	36 7	40 11	43 4
April 6..	56 4	37 8	24 0	36 4	41 8	40 2
Agg. Aver.	54 7	38 6	23 7	35 0	40 8	41 9

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



BRITISH WOOLS.—LONDON, FRIDAY, April 12.

The aspect of our trade is more cheerful in consequence of money matters becoming more settled; still the same caution is manifested by manufacturers, who continue to purchase only such articles as they require for immediate consumption.

	s. d. s. d.		
South-down Hoggets	1 5 to ..	Leicest. Wethers	1 4 to ..
Half-bred ditto ..	1 6 — ..	Ditto Hoggs ..	1 8 — ..
Down Ewes ..	1 4 — ..	Combing Skins	0 10 — 1 0
Kent Fleeces ..	1 5 — 1 6	Blanket ditto ..	0 6 — 0 8
		Flannel Wool ..	1 0 — 1 6

POTATOES.—SOUTHWARK, Monday, April 8.

During the past week the arrivals coastwise have been moderate; trade continues dull, and very little alteration in price. The following are this day's quotations:—York Flukes, 130s. to 140s. per ton; Lancashire Regents, 100s. to 110s.; Dunbar Red Soil do., 100s. to 105s.; do. do. Reds, —s. to —s.; North Berwick Regents, 125s. to 135s.; Fife, Forfar, and Perth do., 100s. to 115s.; ditto Rocks, 85s. to 95s.; ditto ditto Reds, 75s. to 85s.; French Whites, 80s. to 90s.; Belgian do., 60s. to 80s.; Dutch do., 60s. to 80s.

COAL MARKET.—April 10.

Bowers West Hartley, 15s.; Burnhope Gas, 14s.; Hartlepool West Hartley, 16s. 6d.; Holywell, 16s. 6d.; Lambert's West Hartley, 17s. 6d.; Tanfield Moor, 13s. 6d.; Walker Primrose, 12s.; Walls End Harton, 15s. 3d.; Walls End Hetley, 15s. 6d.; Walls End Hilda, 15s. 3d.; Walls End Braddyll's Hettons, 17s. 3d.; Walls End Framwellgate, 16s. 6d.; Walls End South Hetton, 18s. 6d.; Walls End Stewarts, 18s. 6d.; Walls End Cassop, 17s.; Walls End Hartlepool, 18s.; Walls End Heugh Hall, 16s. 6d.; Walls End

Kelloe, 17s. 9d.; Walls End South Hartlepool, 16s. 9d.; Walls End Thorpe, 17s.; Carway and Duffryn Anthracite, 20s.; Carway and Duffryn Malting, 24s.—85 ships at market.

AGRICULTURAL PUPILS.—Mr. G. Martin has a VACANCY for a FARMING PUPIL, who could see and assist in Transacting the Business upon upwards of 1300 acres of land, where a large quantity of Stock is kept, and Steam Machinery and Implements of the most modern description are used.—Thorney, near Peterborough.

PARTNER.—The Proprietor of an established and extensive Nursery has a VACANCY for a young gentleman, who after acquiring sufficient information may share the business with him.—B. W., Post Office, Stalbridge, near Blandford, Dorset.

GENTLEMEN WANTING GARDENERS.—First-rate Men always recommended. Postages only charged. For forms of application, address James Garaway & Co., Durdham Down Nurseries, Bristol.

SEED TRADE.

WANTED, by a London House, a FIRST-CLASS SHOPMAN, from 30 to 40 years of age, and who has had some experience on the road. He must be of good address and be able to furnish unexceptionable testimonials.—A. Z., *Gardeners' Chronicle* Office, W.C.

WANTED, a married Man with good address, to attend Customers, to put up Orders in a small SEED and NURSERY BUSINESS, and to make himself generally useful in Growing a small collection of GREENHOUSE PLANTS.—Apply, by letter, to Messrs. Pamplin & Son, Nurserymen, Lea Bridge Road, Leyton, Essex, N.E.

WANTED, a young Man of good address, from 18 to 21 years of age, as CLERK; he must be an efficient Accountant, write a good business hand, be acquainted with Plants, of good general character, and be willing to engage occasionally in the lighter duties of the Nursery. To those whose testimonials are unexceptionable, and whose ability is equal to the office, constant employment will be given. Apply, own handwriting, to F. & A. Smith, Dulwich, S.

WANTED, by a gentleman, a first-rate GARDENER, who can grow first class Grapes all the year round. It is also necessary that he should be a good Pine, Melon, Peach, and Plant-grower, &c.—Apply to J. Meredith, Landscape Gardener, Vine Cottage, Garston, near Liverpool.

WANTED IMMEDIATELY, A GARDENER who understands Jobbing: 18s. a week given.—Apply at 9, Clephaine Road, St. Paul's Road, Canonbury, Islington.

WANTED, AS GARDENER, an active, steady Man understanding a Greenhouse, Vinery, and Melons, &c Not a large family. A member of the Church of England Wages, 20s. a week and Cottage. A Boy kept under the Gardener Apply, A. Z., Post-Office, Spalding, Lincolnshire.

WANTED, AN UNDER GARDENER, without incumbrance; whose Wife can take the charge of the Laundry.—Application to be made to Mr. J. Kellett, Widnes Docks, near Warrington.

WANTED, in a gentleman's Garden, a LAD, age from 16 to 18; one who has had some little experience preferred.—Address Mr. Geo. Tranter, Westbrook, Hemel Hempstead, Herts.

WANT PLACES.—Letters to be Post Paid.

GARDENER (Head).—Age 30, married; has a practical knowledge of his profession. Good references as to character.—J. H., Mr. Dods, Epsom Nursery, Surrey.

GARDENER (Head).—Age 32, married, no incumbrance; thoroughly understands his profession; 2½ years' unexceptionable character. No single-handed place accepted.—J. F., Paradise Nursery, Seven Sisters Road, Holloway, N.

GARDENER (Head).—Single, age 36. Any nobleman or gentleman requiring a thorough practical Man of 21 years' experience, may find such by applying to Mr. John Standish, The Royal Nursery, Bagshot, Surrey.

GARDENER (Head).—Age 34, married; has had great experience in Early and Late Forcing of all kinds, and the Management of Flower and Kitchen Garden. 4½ years' good character.—A. B. C., Bedford Nursery, Haverstock Hill.

GARDENER (Head).—Age 40, married, one child, age 12; perfectly understands his profession in every department.—C. E., Mr. Naiden's, Pend Hill, Hatfield, Herts

GARDENER (Head).—Age 30, married; thoroughly understands the Management of Forcing Vines, Melons, Cucumbers, and Flowers, &c.; also Kitchen Garden. No objection to a single-handed place. Good character.—S. T., W. Liversage, Florist, Sydenham Road, Croydon Common, S.

GARDENER (Head).—A young Man, who has been between three and four years in a nobleman's establishment, and is now leaving on account of the death of the proprietor; has a thorough practical knowledge of his profession. Unexceptionable references can be given.—E. S., Mr. Hart, Bookseller, Saffron Walden.

GARDENER (Head, age 36).—Geo. S. Dods can recommend a Married Man, thoroughly competent to conduct the management of a nobleman's or gentleman's Garden, where Plants, Fruits, and Vegetables are required to be cultivated extensively.—Geo. S. Dods, Epsom Nursery, Surrey.

GARDENER (Head), age 34, married.—Mr. G. Cockburn, Gardener to the Earl of Mansfield, Hampstead, can with confidence recommend to any nobleman or gentleman a thoroughly practical experienced Gardener in all branches of his profession. Character and testimonials of the highest order can be obtained.

GARDENER (Head, in a gentleman's family).—Age 30, married, one child; has a thorough practical knowledge of his profession in all its branches. Four years' good character from last place. First-class references given (if required) from previous places.—A. B., Mr. Pullens, Gardener to W. D. Adams, Esq., Lower Sydenham, Kent, S.E.

GARDENER (Head).—Age 35, married, no incumbrance; thoroughly experienced in Forcing of Pines, Vines, Peaches, Stove, Greenhouse, and Exotic Plants, Kitchen and Flower Gardens, all growing to the highest perfection. Has had the Management of Farm and Stock. Character and testimonials unexceptionable from his late employer, a baronet.—G., Wm. Randall, Heath Field Lodge, Bracknall, Bucks.

GARDENER (Head).—William Barnes can recommend a married Man, age 38, thoroughly competent to conduct the management of a nobleman's or gentleman's Garden where Plants, Fruits, and Vegetables are cultivated extensively, or for exhibition. Can take charge of Land, Stock, &c. Four years' reference.—Mr. Barnes, Camden Nursery, Camberwell, S.

GARDENER (Head, or Single-handed).—Age 30, single; has a practical knowledge of his profession in its various branches.—Mr. Thos. Cripps, Nurseryman, &c., Tunbridge Wells, Kent.

GARDENER (Head, or Single-handed), or where two are kept.—Thoroughly understands growing Grapes, Melons, Cucumbers, Stove and Greenhouse Plants, and Kitchen Garden, &c. Three years' good character from the gentleman he is leaving.—T. O., The Oaks Park, Woodmansterne, Surrey.

GARDENER (Head), or GARDENER and STEWARD.—Age 40; a first-rate General Plant Grower. Understands the Management of Land, Timber, and Stock. Wife can Manage a Dairy, &c. Nine years' good character.—S. E., 7, Cuthbert Street, Hall Park, Edgeware Road, N.W.

TO NOBLEMEN AND GENTLEMEN.

GARDENER (Head) and BAILIFF.—Age 31, will be open to engagement about the end of June next; has had 17 years' practical experience; a thorough knowledge of his profession in its branches; would prefer a large establishment where Early and Late Forcing of Fruit, Flower, and Vegetables is extensively required. Can take charge of Woods and Plantations, preparing Planting and Drainage of new plantations. Also, measuring felled and growing Timber and general management of Timber Sales; has a thorough practical knowledge of Farming on the most improved principles, Breeding, Feeding, Buying, and Selling of Stock, Farm Produce &c. Has 13 years' good character from present and last employer.—H. C. M., Post Office, Wavertree, near Liverpool.

GARDENER.—Accustomed to the Forcing of Fruits, Flowers, and Vegetables. Well recommended from last situation.—W. E., Post Office, Buckingham.

GARDENER (Single-handed, Out-door).—Age 26, single; understands his profession.—A. S., Mr. Haigh, Nurseryman, Plaistow, Essex, E.

GARDENER (Practical).—Age 32, married, one child; thoroughly understands his profession in all its branches. Highest references.—C. S., Bedford's Nursery, Hampstead Road, N.W.

GARDENER.—Age 26, single; thoroughly understands the Management of Vinery, Greenhouse, Flower and Kitchen Gardens. Four years' good character.—J. C., Post Office, 146, Waterloo Road, London, S.

GARDENER.—Age 40; can milk a cow; lived with a gentleman four years on Barnet Common, who has just left the neighbourhood.—J. H., J. W. Sharman, Wellingborough, Northamptonshire.

GARDENER, age 31, married, 3 children.—Thos. Cripps, Nurseryman, &c., Tunbridge Wells, Kent, has great pleasure in recommending to the notice of any lady or gentleman a good practical, industrious, sober and trustworthy Man as above, where one or more are kept.

GARDENER.—Age 28, married, no incumbrance; thorough knowledge of Stove and Greenhouse Plants, Vineries, Fruit, Flower, and Kitchen Gardens. No objection to a Single-handed place. Good character.—W. W. W., Messrs. Dawson & Sons, 74, Cannon Street, City, E.C.

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News of the Week.

IN the House of Lords on Friday the Law of Foreign Countries Bill passed through committee. On Monday the Lunacy Regulation Bill passed through committee. On Tuesday the Bankruptcy and Insolvency Bill was read a second time. The Law of Foreign Countries Bill, the Mutiny Bill, the Marine Mutiny Bill, the Exchequer Bills Bill, and the Consolidated Fund Bill were read a third time and passed. On Thursday the committee on the Bankruptcy and Insolvency Bill was postponed to the 3d May. The Subdivision of Dioceses Bill was referred to a select committee, and the Lunacy Regulation Bill was read a third time and passed.

In the House of Commons on Friday, in answer to Mr. H. BAILLIE, Lord JOHN RUSSELL stated that her Majesty's Government were making every effort to bring about an amicable arrangement between Denmark and Holstein, and that France, Russia, and Sweden took the same view of the question as the English Government. Mr. LOCKE KING obtained leave to bring in a Bill to afford facilities for performing divine service by ministers of the Church of England and Ireland. The Annoyance Juries (Westminster) Bill, and the Charitable Uses Bill were read a second time. The Post Office Savings Bank Bill was read a third time and passed. The adjourned debate on Sir JOHN TRELAWNY's motion on New Zealand was resumed, and after a short debate the motion was negatived by 38 to 24. The House then went into committee of supply on the navy estimates, and agreed to several of the votes. On Monday, the CHANCELLOR of the EXCHEQUER made his financial statement. He said that the actual expenditure of last year was less than the estimated expenditure by 822,000*l.*, and that the estimated income of the present year will exceed the estimated expenditure by 1,928,000*l.* This surplus he proposed to apply to the reduction of the Income Tax from 10*d.* to 9*d.*, and to the abolition of the Paper duties, leaving a balance in hand of 408,000*l.* He also proposed to double the duty on chicory, to impose on house-agents an annual licence of 2*l.*, to give wholesale spirit-dealers the privilege of selling by retail on payment of an extra licence of 3*l.* a-year, to reduce the stamp duty on agreements to let furnished houses from 10*s.* to 2*s.* 6*d.*, to reduce hawkers' licences from 4*l.* to 2*l.* a year, and to tax smoking rooms kept open after a certain hour on the same scale as refreshment houses. He proposed to continue the Income Tax and the tea and sugar duties for one year only, in order that Parliament may be left free to make further remissions next year. He concluded by moving a resolution doubling the duty on chicory. After a brief discussion the resolution was agreed to, and ordered to be reported to the House. The Births, Deaths, and Marriages (Ireland) Bill was read a second time. On the motion that it be committed, Mr. SCULLY moved as an amendment that it be referred to a Select Committee. On a division the amendment was carried by 100 to 94. The Harbours Bill, the Trades Marks Bill, and the Queen's Prison Bill were read a second time. The Statute Law Revision Bill, and the Registration of Births, &c. (Ireland) Bill were read a second time, and referred to a Select Committee. On Tuesday, on the motion for postponing for a fortnight the second reading of the Street Rail Company's Bill, Mr. SCULLY moved, as an amendment, that the second reading be postponed for six months. This amendment was agreed to, and the Bill was therefore lost. Mr. A. SMITH moved for a select committee to inquire into the rights of the Crown and individuals in connection with the foreshores and tidal waters of the United Kingdom. The motion was opposed by Sir J. HANMER and the ATTORNEY-GENERAL, and

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was negatived on a division by 176 to 67. Sir F. SMITH called the attention of the House to the report of the Dockyards Commission, and was proceeding with a motion for a revised estimate for the building and conversion of ships, when the House was counted out. On Wednesday, on the motion for going into committee on Trustees of Charities Bill, Mr. SELWYN moved as an amendment that the House go into committee that day six months. On a division the amendment was carried by 200 to 171, and the Bill was therefore lost. Mr. M. MILNES moved the second reading of the Bill to legalise marriage with a deceased wife's sister. Mr. HUNT moved as an amendment that any measure that would have the effect of placing the law of marriage with regard to the prohibited degrees on a different footing in different parts of the United Kingdom would be highly inconvenient. On a division the amendment was carried by 177 to 172. The Bill was, therefore, lost by a majority of 5. On Thursday on the motion for going into committee of supply on the army estimates, Colonel DICKSON moved as an amendment that their consideration be deferred, with a view to their revision. After a long discussion the motion was negatived. The House then went into Committee, and agreed to several of the votes. The Charitable Uses Bill was read a third time and passed, and the select committee on public accounts was nominated.

Accounts from Warsaw state that the city is completely overpowered by the military, and that three generals have been sent from St. Petersburgh to assist Prince GORTSCHAKOFF. Fresh troops are continually arriving, and numerous arrests are made daily. The number of killed, wounded, and arrested is now said to amount to more than 1000. Count ZAMOYSKI and M. LEWINSKI have refused to take office under the Government unless the military be withdrawn to their barracks and a civic guard established throughout the country. The exasperation of the people is increasing in all the provinces of Poland, and disturbances have already taken place at Lublin, Kiew, and Cracow, some of which are said to have led to fresh conflicts with the troops.

From Vienna we learn that a riotous demonstration took place on Monday in the square of St. Stephen's Cathedral, and ended in the arrest of several individuals. The Diet of Istria and the Communal Councils of Venice, Verona, Padua, and Piacenza, have refused to send deputies to the Council of the Empire. The Galician Diet has demanded the autonomy of that part of Poland, and the Upper House at Pesth has called for the re-establishment of the Hungarian laws which were in existence prior to 1848.

A despatch from Turin informs us that General GARIBALDI took his seat in the Chamber of Deputies on Thursday, and delivered a speech of such violence on the reorganisation of the Southern Army, that it excited a tumult in the Chamber. Count CAVOUR protested against his offensive allusions to the Ministry, the President of the Chamber put on his hat, and the sitting was suspended for several minutes. General BIXIO, amidst loud cheers, recommended concord and conciliation, and after some friendly remarks from Count CAVOUR, General GARIBALDI expressed his belief that Count CAVOUR loved Italy, and concluded by explaining his reasons for desiring the reorganisation of the volunteers in Southern Italy. The debate was then adjourned.

The accounts from the United States are of an alarming character. The warlike rumours and naval preparations of the Government caused a panic on the New York Stock Exchange on the 5th inst, and both at Charleston and at Washington there was a general impression that the country was on the brink of a civil war. The Senate has postponed to the next session the decision on the proposal of Great Britain to submit the determination of the San Juan dispute to arbitration. The eastern portion of San Domingo has been annexed to Spain with the assistance of the Spanish forces from the Havannah, and it is said that Hayti will soon share the same fate, with the consent of France.

Home News.

THE COURT.—The Queen, Prince Consort and the Royal Family continue in strict retirement at Osborne. On Saturday the Judge-Advocate-General had an audience of her Majesty. On Sunday morning the Queen, Prince Consort and the Royal Family attended Divine service at Osborne. The Rev. George Prothero officiated. On Tuesday the Queen held a Privy Council. Yesterday morning the Prince Consort came to town, and returned to Osborne in the afternoon.

THE LEVEES AND DRAWING ROOMS.—Notice has been given that the Prince Consort will hold Levées on the part of her Majesty at St. James's Palace on Saturday the 4th, and on Wednesday the 15th of May. It is understood that the Queen will hold two Drawing Rooms at St. James's Palace towards the end of June.

PRINCE ALFRED.—Her Majesty's ship St. George, with Prince Alfred on board, arrived at Tortola from St. Kitts on the 24th March, and left the next day for St. Thomas. He left that island on the 27th ult. for Barbadoes, where he met with an enthusiastic reception, and proceeded thence to Santa Cruz and Jamaica, where preparations were making to give him a magnificent ball. The Prince had visited St. Lucia, Martinique, Dominica, Guadaloupe, and Antigua; and throughout his tour had been received by the people with joyful demonstrations.

PARLIAMENTARY MOVEMENTS.—The nomination for Marylebone took place on Wednesday, when Mr. Harvey Lewis, Mr. Wingrove Cooke, Mr. J. C. Marshman, and Mr. Harper Twelvetrees, were put in nomination by the Liberal party, and Sir Robert Carden by the Conservatives. The show of hands was declared to be in favour of Mr. Lewis, upon which a poll was demanded on behalf of the other candidates. Mr. Twelvetrees and Mr. Marshman however subsequently retired from the contest. The polling took place on Thursday, and terminated in the return of Mr. Lewis by a majority of 2657 over Sir R. Carden, and of 2900 over Mr. Cooke, the numbers being,—for Mr. Lewis, 5269; Sir R. Carden, 2612; Mr. Cooke, 2369.—There are three candidates in the field for Tynemouth, Mr. Richard Hodgson, in the Conservative interest, and Mr. N. G. Lambert, and Mr. Arthur Otway, brother-in-law to Lord Clarence Paget, in the Liberal interest.

THE VOLUNTEER MOVEMENT.—An influential meeting of officers commanding Volunteer corps was held at the Thatched House Tavern on Tuesday, for the purpose of conferring with Lord Elcho on the measure he is about to bring before Parliament with the view of obtaining government aid to Volunteer corps. Deputations attended from some of the principal towns in England and Scotland. The Mayor of Bristol occupied the chair. Mr. Sheriff Bell, of Glasgow, moved, and the Hon. Col. Egerton, M.P., seconded, a resolution declaring the opinion of the meeting that, in order to meet the great expense of the Volunteers, an amount of 1*l.* per man should be asked from government to enable the Volunteers to meet the expense of drill and musketry instruction, drill halls and drill grounds, keeping and maintaining arms, practice ranges, and travelling expenses. The resolution was carried unanimously. A second resolution, which was to a certain extent confirmatory of the first, was also agreed to on the motion of Sir J. Shelley, M.P., seconded by Lord Ranelagh. It was also resolved to impress upon all members of the House of Commons connected with the various districts from which the deputations came the propriety of giving every aid in their power towards obtaining from Government the assistance contemplated in the resolutions.—A numerous and influential meeting was held on Saturday in the Shire Hall, Dorchester, for the purpose of promoting the formation of a county rifle association. The Earl of Shaftesbury, lord lieutenant of the county, presided; and the Earl of Ilchester, Lord Digby, Sir J. H. D'Oyly, Bart., and General Michel took part in the proceedings. Resolutions for the formation of a Dorsetshire Association, offering prizes to Volunteers of all arms, and for assisting in the payment of the expenses of members of rifle and artillery Volunteer corps when attending battalion drill, were unanimously adopted, and a council was appointed to carry them into effect.—The principal metropolitan corps marched out on Saturday last, or assembled at their head-quarters for drill. The Inns of Court Corps marched to the Waterloo Station and proceeded thence by South-Western Railway to Richmond Park; the Queen's Westminster and Rifle Rangers (40th Middlesex) marched to Hyde Park; the St. George's (11th Middlesex), the 29th (North) Middlesex, the 19th Middlesex and the 1st administrative battalion, comprising the 3d, 13th, and 14th (Hornsey, Highgate, and Hampstead) marched to Regent's Park; the 1st Middlesex Engineers (South Kensington) marched to Chelsea Hospital; the London Scottish, London Irish, 19th Middlesex, and 21st Surrey marched to Battersea Park; the 3d City of London Light Infantry marched from Broad Street through Cheapside, the Strand, Pall Mall, St. James's Street, Piccadilly, and thence home; the 2d (South) Middlesex paraded at Walham Green; the 1st Surrey marched to Clapham Common, the 7th Surrey mustered at their head-quarters in Kennington Lane, and the 19th Surrey at their head-quarters in South Place, Kennington.—A rifle contest will take place at Hythe by the permission of Major-General Hay, Inspector-General of Musketry, on Wednesday, the 24th inst., when prizes of the value of [illegible] competed for. The competition will [illegible] rifle and artillery Volunteers only, [illegible] all comers.—The first regimental [illegible] Brigade took place in St. James's [illegible] the Duke of Cambridge, the Commander-in-[illegible] chair. His Royal Highness expressed [illegible] wishes for the perfect success of the [illegible] made the following remarks on the [illegible] adopt in order to attain the efficiency [illegible] troops:—

"All who wish well to this great [illegible] their minds to this fact—that it is only [illegible] that the approach to perfection, which [illegible] ever be attained. Let me tell you frankly [illegible] think of the Volunteer movement. It [illegible] addressing you to suppose that you [illegible] near as possible to the perfection of [illegible] troops. We, as soldiers, naturally [illegible] to attain that point of perfection, as [illegible] your other avocations and duties, [illegible] enable you to attend as minutely to [illegible] like myself professionally engage in the [illegible] of your abilities you are naturally [illegible] this standard. How does the regular [illegible] fection? Each year every soldier in [illegible] the army, from Her Majesty's Household [illegible] the last number of the regiments of [illegible] a regular course of drill. They go through [illegible] company, and the battalion drill, and [illegible] brigade drills, and afterwards the [illegible] the field. That, I think, is exactly [illegible] desirable for you to adopt, and the [illegible] adopted the sooner you will obtain that [illegible] all aiming, and you will be enabled to [illegible] the regular troops in a manner creditable [illegible] satisfactory to those in charge of you. [illegible] now going to say I may be treading upon [illegible] ground, but I have seen statements made [illegible] respecting the conduct of the Horse Guards [illegible] day, for instance, it was broadly stated [illegible] had been thrown by the Horse Guards [illegible] the Volunteer movement, and that, [illegible] not supported the meeting at Brighton. [illegible] point, if you wish to have my [illegible] you wish to have my real opinion. My [illegible] meeting at Brighton was very well intended [illegible] went there who did not imagine it [illegible] advantage to the Volunteer movement; [illegible] wrong, and I think the meeting at Brighton [illegible] take. I would much rather have seen [illegible] employed at drill on that day, and then, [illegible] season, asking to have some extensive [illegible] ferent corps, associated with the regular troops [illegible] officers of the regular army to superintend [illegible] Had such an application been made to [illegible] the War Office, we should have said that [illegible] most desirable, and most useful for the Volunteers [illegible] and we should cheerfully have given the [illegible] port and assistance. But, if you ask me [illegible] as much of the meeting at Brighton I [illegible] I did not. However well meant—and [illegible] it was well meant and well intended—[illegible] saying that it was a mistake, and [illegible] have seen a movement of the [illegible] mentioned—better calculated, [illegible] the drill of the corps. You [illegible] objection to that meeting. [illegible] it was the wrong time of year. [illegible] regiment in the country was engaged [illegible] drill, and when it was impossible to [illegible] with you. Another point is, why [illegible] in the metropolis a very large number [illegible] easily got together; and I admit that [illegible] advantageous thing for any three [illegible] assemble occasionally for brigade [illegible] according to arrangements made by [illegible] for the convenience of their respective [illegible] teers should wish to go to Wimbledon [illegible] Scrubs, or to any other part where [illegible] desirable for them to assemble, there [illegible] noble friend at the War Office or myself [illegible] to facilitate the movement and to meet [illegible] way. But then it is necessary that there [illegible] like system in these movements. What [illegible] meeting at Brighton? We were told [illegible] fight. Well, I suppose it was a sham fight. [illegible] Sir James Scarlett says that he was present [illegible] and that nothing could have been more [illegible] than that field day at Brighton; that the [illegible] shown by the Volunteers to do their work [illegible] great order and excellent system were [illegible] various corps together. But still it was [illegible] which, to my mind, had really no result. [illegible] Volunteer force is to be, as far as possible [illegible] army. If it should happen that to-morrow [illegible] called out for active duty, they would [illegible] army. Then why not let us act in peace [illegible] is no hurry or confusion, as we should [illegible] dangerous times, and accustom ourselves [illegible] services such as the necessities of the [illegible] Why should we not do now what we should [illegible] do then, associated with the regular [illegible] have suggested that it would be a very [illegible] arrangement could be made which would [illegible] teers associating with the troops at Aldershot [illegible] I really should rejoice at such an arrangement [illegible] it would be an admirable thing for [illegible] The only objection I see to the proposal [illegible] much whether the members of the corps [illegible] leisure or convenience for leaving their [illegible] occupations for more than 24 hours at a time [illegible] of opinion that you can spare the necessary [illegible] willing to undertake the journey, as far as we [illegible] concerned, we shall rejoice to see you at [illegible] presence there would be of great advantage [illegible] would see what services the troops are called [illegible] the field, and what the officers are expected [illegible] throw out the suggestion in case it should [illegible] show you that while I deprecate such [illegible] Brighton, I should at the same time be the [illegible] arrangement of the nature I have just [illegible] Volunteer movement is one which, if kept [illegible] and I hope will be, within due bounds, is [illegible] description; but, on the other hand, it is [illegible] kept within due bounds, for if everyone [illegible] exactly as he liked, we should get [illegible] complete and helpless confusion. [illegible] of the military authorities to interfere [illegible] are willing to abide by certain rules, [illegible] certain regulations, but any movement [illegible] which is not properly and thoroughly organised [illegible] cannot be of that value which it would [illegible] those great principles of organization and order [illegible] the strength and the importance of our military [illegible]

Foreign.

France.—An immense sensation has been caused in Paris by the publication of a pamphlet entitled "Lettre sur l'Histoire de France." It is written by the Duke d'Aumale and signed with his name, "Henri d'Orleans," and is intended as a reply to the recent attacks of Prince Napoleon in the Senate on the Princes of the Orleans family. The Government lost no time in ordering the pamphlet to be seized, but many thousand copies had meanwhile been sold, and after the order for its seizure had been issued it was smuggled from hand to hand and copies of it were sold for fabulous prices. The following is an abstract of its more important passages:—

The [illegible] of Prince Napoleon on the dissensions of the Bourbon family, and the weaknesses of some of its members, are met by the answer that in the history of the House of Savoy, with which Prince Napoleon is allied, are to be found similar instances of family feud, and that the Prince himself proves that the members of a reigning family may be raised to wealth and high functions without having given any proof of genius. "Remember that you can no longer judge princely [illegible] with the rigour of a Republican philosopher. You [illegible] one fine day a Senator, a Grand Cordon, a [illegible], a Prince of the Blood—not by your merit, [illegible] unknown, but by right of birth; and your [illegible] of view ought to have changed with your fortune. [illegible] there is no such thing as a *parvenu* [illegible] at the Palais Royal or the Tuileries. Sovereign [illegible], I suppose, claim to belong to one—know but [illegible]—their founder. That title, for it is one, history [illegible] the obscure sub-lieutenant of artillery, who, [illegible] he left the school at Brienne, placed upon his head the crown of Charlemagne. But the man who set up his [illegible] at Strasburg and Boulogne, who passed without [illegible] from exile to power, and who calls himself Napoleon III., is no *parvenu*. You talk now in very magnificent [illegible] the *coup d'état* of Dec. 2. But you were not found [illegible] the group of faithful followers who assembled at the Elysée to commit themselves courageously to the [illegible] of the new dictator. Neither were you with the representatives of the nation who protested at the mayoralty of the tenth arrondissement and elsewhere against the confiscation of the laws of their country. Where were you then? To this hour nobody would know, were it not that among the resolute men who debated in that trying hour whether it was not their duty to fight behind the barricades, there are some who remember having seen you appear for a moment, but only to disappear when, fortune having pronounced, the police came to arrest them in the name of the conqueror. Believe me, [illegible] so much of your tardy zeal, and, in your retrospective enthusiasm, beware, out of regard of your Italian [illegible] of establishing between the lucky conspiracy in question [illegible] enterprise a comparison which probably would not be to the taste of the patriot of Caprera. One thing [illegible] me, and that is that the Duke of Orleans, my grandfather, found no favour in your sight, for you, like him, sat on the left side of a republican assembly. There, indeed, the [illegible] stops, for he expiated his fault. He left the [illegible] to mount the scaffold, while you descended [illegible] of the Mountain to enter the splendid [illegible] the Duke of Orleans was born." The [illegible] in sarcastic terms the [illegible] [illegible] and his son to King Louis Philippe just before February, the kindness of the King in permitting the entrance into France of Hortense and her son, the present Emperor, in the year [illegible]—an opportunity which the latter used for communicating with the Republican party. It then inveighs against the Sardinian Government, defends the unfortunate King of Naples, interrupted in his career of reforms, and expresses admiration for General Lamoricière [illegible] when [illegible] a holy cause, and called "in these times of [illegible] a general separated from his country." [illegible] the following remarks in condemnation of the Imperial policy:—"You treat affairs with as [illegible] [illegible] persons, and in dwelling upon the outward appearances of parliamentary government, you have had good reason for [illegible] its realities. The first necessity of a government [illegible] in the presence of a free assembly is to have an [illegible], and to defend it against the opinion of one [illegible] leaning loyally upon the opinion of another; but [illegible] has hitherto consisted in deceiving everybody [illegible] promises and hopes to nobody. You have two [illegible] daily show them both. You say to the Catholics, [illegible] know me any longer? I am the government [illegible] the expedition to Rome, which [illegible] the Pope [illegible] sympathies before, during, and after the war, which [illegible] peace at Villafranca, which reinforced the garrison [illegible] recalled its ambassador from Turin, which [illegible] before Gaeta.' You say to the extreme supporters of the Italian revolution, 'Why do you suspect me, and [illegible] presence of my troops at Rome? Have you forgotten that I originally consented unwillingly to the Roman [illegible] I wrote the famous letter to Edgar Ney; that [illegible] Villafranca has been a dead letter in my hands; [illegible] man who set out for Castelfidardo [illegible]; that in the end I recalled my fleet from Gaeta, and that there is [illegible] Roman States nor a kingdom of Naples.' [illegible] turning to France, and pointing out both parties [illegible] and deceived by turns, you extract from the very [illegible] of your acts a last vanity; you erect this contradiction into a system, and you say, 'See what complaints [illegible] against me; am I not moderation in [illegible]. Have I not contrived to maintain a prudent [illegible]? Am I not the *juste milieu* resuscitated? Casimir Perier [illegible] be satisfied.' And it is to play a part in this [illegible] the face of Europe that you have given freedom [illegible] to the deputies of France. You had better have [illegible] for 10 years, the fragments of the [illegible] beneath the hands of your soldiers for a [illegible]. When the Bonapartes threaten to shoot [illegible] may be relied upon. And note this, prince, [illegible] promises made by you and yours, that is the [illegible] I would rely. For it must be admitted [illegible] French Government, all fortunate as it has [illegible] is less successful as regards the fulfilment [illegible] other things. One man only swore [illegible] Constitution, and that man was the author [illegible] man said, 'The empire is peace,' and [illegible] the wars of the Crimea and Lombardy. In [illegible] free to the Adriatic; Austria is still at Verona and Venice. The temporal power of the Pope was to be respected; we know what has become of that, and the Grand Dukes are still waiting for their restoration, which was [illegible] by the peace of Villafranca. After your [illegible] against the elder and younger Bourbons you in [illegible] a panegyric on the Napoleons. The Napoleons! After the Patterson trial this use of the plural number is [illegible] surprising. . . . Don't you fear to diminish the [illegible] of your demigod—the Emperor—by attempting to [illegible] all the family in his glory? We know what contemporaries thought of the Emperor's brothers. Have you [illegible] that it was found necessary to take away the crown of Holland from Louis, to remove Joseph from the command of the army of Spain, and Jerome from that of the corps which he was leading to Russia? Have you [illegible] Louis Lucien, if I mistake not, who, in the very crisis of the continental blockade, was born in England, whither his father was a refugee? And Murat in 1814. But here I stop. For he at least led our squadrons to victory a hundred times over; and, moreover, I have that respect for the conquered and the dead which you so imperiously demand for the fortunate and the living. You, prince, dream of great changes in Europe. I form a wish for France, and that is that my country may be relieved from a state which renders her liable to be launched into great enterprises which she does not sanction beforehand, a state which leaves her asleep under the *régime* of protection to wake up in the arms of free trade; to pass without transition from peace to war, from prosperity to ruin; that she may, in short, be delivered from the *régime* of 'good pleasure,' under whatever form it may be disguised. Whenever the nation, whenever every Frenchman shall enjoy the same security, the same liberty, the same inviolability, then we shall have a right to inscribe at the head of our constitution the principles of '89, freed from the utopias of '91, the crimes of '93, and the hypocrisy of another epoch. I stop—it is useless to add a pang to the sorrows of exile, to dwell too long on the woes and dangers of one's country. But you who treat with the arrogance of good fortune, and the injustice inseparable from undeserved success, those ancient races which reigned so long over a generous nation, and which, successively rejected and restored by the tide of revolutions, were [illegible] with her liberty as they were formerly with her [illegible], you who enjoy the accumulated fruits of so great [illegible], of so much wisdom, and so much glory, and who every day imperil the destiny of the nation, be well assured that if you do not quit the bad paths in which you are so deeply entangled, it is not to the Bourbons, it is not to the Orleanists, who were never obnoxious to such a reproach, but it is to you and yours that the words of your uncle to the Directory will be applied, 'What have you done with France?'"

In the sitting of the Corps Legislatif on Wednesday, after some remarks from several deputies, the project of law exempting from stamp duty newspaper supplements containing the accounts of the sittings of the Chambers was unanimously adopted.—The *Moniteur* of Sunday published a report addressed to the Emperor by M. de Persigny, Minister of the Interior, followed by an Imperial decree, which changes the whole domestic and municipal government of the French empire. This decree decentralises the existing system by giving power to the prefects and sub-prefects to decide on certain departmental and communal affairs and on various other subjects which, until now, were decided by the different Ministries.—The *Moniteur* publishes an account of the indirect revenue for the first three months of the present year, which shows a decrease of 5,931,000 fr. as compared with the same period in 1860.—Vely Pasha, the new Turkish Ambassador to the Court of the Tuileries, has arrived in Paris.—The Emperor reviewed on the 11th inst, in the courtyard of the Tuileries, the 2d Division of Infantry of the First *Corps d'Armée* and three batteries of the 2d Regiment of Artillery. This division, commanded by General Vinay, having under his orders Brigadier-Generals Goze and Gault, is composed of the 5th Battalion of Chasseurs à-Pied, and of the 6th, 44th, 97th, and 103d Regiments of Infantry of the Line. Several detachments of infantry regiments and of the rifle battalions have arrived at Paris by rail, from garrisons in the interior of France, and are on their way to Chalons-sur-Marne to be employed at the preparatory works for the installation of the camp which is to be formed almost immediately. Special trains have been running from Paris on the Strasburg Railway since Monday, carrying ammunition and various warlike stores. 200 mules and 30 baggage waggons left Paris for the same direction on Tuesday. It is not yet known whether these stores are intended for the camp of Chalons, or for Metz and Thionville.

Belgium.—After spirited speeches by the Ministers of War and Finance, General Chazal and M. Frère, the Chamber of Deputies on Wednesday voted a credit of 15,300,000f. for artillery by a majority of 63 to 32.

Austria.—A riotous demonstration took place on Monday at Vienna in the square of St. Stephen's Cathedral, and ended in the arrest of several individuals. Strong patrols, mounted and on foot, were stationed in St. Stephen's Square and in the adjoining streets of Graben and Kohlmarkt, two of the principal thoroughfares of Vienna. The crowd, unmolested, quietly promenaded the streets, which presented a very animated appearance. On Tuesday an immense crowd again assembled in St. Stephen's Square. The palace of the Archbishop was occupied by a strong body of soldiers, and numerous mounted patrols and gendarmes traversed the streets. The people were very quiet, and the patrols maintained a calm and watchful attitude. It is reported that soon after the return of the Empress from Madeira the Emperor and Empress will visit the different provinces of Austria.

Hungary.—The Austrian *Gazette* denies in the most positive terms the news published by the Vienna papers of Saturday, that the Government intends to grant an independent Ministry to Hungary, and that it no longer requires the Hungarians to send deputies to the Council of the Empire. The majority of the Upper House at Pesth demanded on Saturday the re-establishment of the Hungarian laws which were in existence before 1848. The Liberal party of the country demand the maintenance of the laws adopted in 1848 by the Hungarian Diet. The sittings of the Lower House have been adjourned for eight days. A Conference of Magnates was held at Pesth on Monday for the purpose of taking into consideration a letter addressed by General Benedek, the commander of the troops in Hungary, to the President of the Upper House. A resolution was adopted stigmatising the letter as an insult to the Magnates, and ordering the publication of a reply thereto. The wording of the reply was intrusted to a committee, among the members of which is Count Teleki. The recent eulogy on the memory of Count Batthyani was not delivered, as has been stated, by Prince Esterhazy, but by Count Michael Esterhazy.

Istria.—The Diet of Istria has refused to send deputies to the Council of the Empire. A second voting for the election of Deputies took place on Tuesday, when the number of votes given not being sufficient to elect any representative, the Diet was prorogued.

Moravia.—The Emperor received on Monday a deputation with the address of the Moravian Diet. His Majesty, in reply, said that he had imposed upon himself the mission of securing at the same time the necessary independence of his provinces and the power and strength of the whole Monarchy of Austria.

Croatia.—The Diet was opened on Monday. The Ban was honoured with a popular ovation on the occasion. Neither Dalmatia nor Fiume has sent any representatives to the Diet.

Galicia.—The Galician Diet was opened at Lemberg on Tuesday. An address expressive of loyalty to the Emperor, but demanding the self-government of that part of Poland, was voted by acclamation.

Venetia.—The assemblies of the Councillors of the communes of Venice, Verona, and Vicenza, for the purpose of electing Deputies to the Council of the Empire at Vienna, have led to no result, as there was not the number of Councillors present prescribed by law. At Padua not one Councillor appeared. The Communal Council of Udine has appointed as Deputies three citizens who are at present prisoners in the fortress of Olmütz.

Italy.—The discussion on the project of law on the new Title of Government Acts, commenced on Tuesday in the Chamber of Deputies at Turin, and concluded on Wednesday in the adoption of the project of law, as proposed by the Committee, by a majority of 174 to 58. A project of law relative to a commercial convention with the Hanseatic Towns was also agreed to. On Thursday Garibaldi was present at the sitting, and was received with such an outburst of applause that the business of the Chamber was temporarily suspended. General Garibaldi took his seat on the Left, at the side of Signor Macchi, and afterwards addressed the Chamber. The following is a summary of the debates:—

In the sitting of the 11th inst. the Minister of Public Works, replying to an interpellation, declared that the progress of the works of the Roman Railways left nothing to be desired. "The Government," he said, "does not approve the project by which the nominal value of each share would be reduced to 400f." The Minister stated that the sum of [illegible] was still required to carry on the works. He expressed hopes that [illegible]f. would be obtained by the liquidation of M. Mires' estate, and considered that by demanding the full amount of 500f. per share, and by issuing the obligations which had not been taken up, all future emergencies could be provided for. In Saturday's sitting the President read a letter from Garibaldi, in reference to a reply he had made to an address of the Milan workmen, in which he told them that Italy must be constituted in defiance of the sad defects produced by a policy of "vassalage" unworthy of the country, and of the herd of "lackeys" by whom that policy was upheld, and at the same time intimated that the King "should be made to do his duty." In the present letter Garibaldi declared that he had no intention of offending either the King or the Parliament; that his devotion to the King was too well known, and that, consequently, his conscience would not allow him to descend to justify himself against the charge of offending his Majesty. His acts in favour of the country were too notorious to allow it to be supposed that he wished to insult it. He added that the manner in which the Southern Army had been treated filled his soul with disdain, and concluded by proposing a project of law for a vast national armament. No sign either of approbation or disapprobation marked the reading of this letter. On Thursday Baron Ricasoli put his interpellation relative to the Southern Army, and requested the Ministry to state their motives for disbanding the Army of Southern Italy, and what prompted the measures ordered to be taken for its reorganisation. General Fanti, the Minister of War, defended the measures which had been taken, and said that the system of volunteering was not always favourable to discipline. He said it was impossible to incorporate all the Garibaldian officers in the Royal army with the rank they previously held. He justified the measures which had been taken with regard to the Bourbon army, and concluded by reviewing the state of the Royal army. Gen. Garibaldi then pronounced a speech so violent that it excited a tumult in the Chamber. He made offensive allusions to the Ministry, and accused them of having fomented the fratricidal war in Southern Italy. Count Cavour and the majority of the members protested against this accusation. The President of the Chamber put on his hat, and the sitting was suspended for several moments. Gen. Garibaldi, on resuming his speech, spoke with more moderation. He defended the conduct of his comrades in arms, and said that the formation of three divisions of volunteers as decreed was not sufficient for a national armament. General Bixio, who spoke with much warmth, recommended concord and conciliation. His speech was received with loud applause. Count Cavour said he accepted the words of conciliation expressed in the speech of General Bixio, and declared that he would forget the unpleasant incident of the sitting. Count Cavour then gave some explanations respecting the armaments, and concluded by laying stress on the importance of the present [illegible] of the national Government. Gen. Garibaldi explained [illegible] by Count Cavour, and expressed [illegible] Cavour [illegible] Italy. He demanded that the nation should be armed in the same manner as in England. He designated the French army as an enemy of Italy, because it occupied Rome. He indicated, as a means for reconciling the different parties of the country, the reorganisation of the army of volunteers, and its immediate despatch to the Two Sicilies, for the suppression of all disturbances. Several orders of the day were then proposed, and the discussion was adjourned to the next day.

The official journals publish a royal decree relative to the Southern Army, ordering the formation of a Volunteer Corps, to comprise three divisions, in which the Garibaldian officers will hold rank. General Fanti presented in the Chamber on Satur-

day a project of law for levying 18,000 men in the Neapolitan provinces. Signor Guerazzi, Opposition candidate, has been elected member of the Chamber of Deputies. The authorities of Sinigaglia have brought the Bishop before the tribunals for having given instructions to the confessors to undermine the authority of King Victor Emmanuel. The *Opinione* publishes a correspondence from Verona announcing that numerous Austrian emissaries had crossed the frontier of the kingdom of Italy on the side of Lombardy.—An official despatch from Rome says that the Pope is better; but his unsatisfactory condition gives the greatest anxiety. The ex-King of Naples is about to fix his quarters at Castel Gandolfo, the Pope's Villa on the Lake of Albano on the high road to Naples. A letter written by the Prelate Liverani against the temporal power of the Pope, and printed at Turin, is circulating at Rome. Cardinal Antonelli is said to be preparing a reply.—The official journal announces that the National Guard have energetically repressed the reactionary attempts in the Neapclitan provinces, whither troops have been sent, and that tranquillity has been everywhere re-established. Forty persons coming from Rome have been arrested at Naples, where another depôt of arms and very important papers relative to the conspiracy have been discovered. The garrison has been reinforced by 10,000 men. Excepting a demonstration made by the women of the Chiaja, tranquillity prevails in Naples.

RUSSIA.—A resolution of the Imperial Council, dated the 11th inst., and published on Wednesday, permits the merchants of Kiachta to trade unlimitedly with China, either by barter or by payments in gold or silver. The resolution also permits, from April, 1862, the importation of merchandise by sea from Canton into Russia and Poland.

POLAND.—A proclamation of Prince Gortschakoff was published on Friday, in which he accuses the inhabitants of having thrown stones at the troops, and thereby caused the death of two soldiers and wounded 10 others. Three generals have arrived at Warsaw from St. Petersburg to assist Prince Gortschakoff. The Council of Municipality of Warsaw has not been dissolved, as was stated, but its functions have been restricted. Troops are continually arriving at Warsaw, arrests continue to be made, and the system of repression is extending. The troops bivouack in the public squares, and foreigners entering Poland are subjected to a strict examination. M. Alexander Nieurarowski, editor of the journal *Pszczoka*, and M. Nicolas Upstein, son of the banker of that name, and a director of the railway company, and two members of the former Delegation of Citizens are among the persons arrested. The number of the killed, wounded, and arrested amounts altogether to 1000. It is said that 85,000 Russian troops are now in Poland. The Governor has refused to grant an audience to citizens of high standing, and has been ordered all dealers in arms to deliver the whole of their stocks to the Citadel. General Paniutin, the Military Governor, has published a proclamation sternly prohibiting the wearing of political emblems, and limiting the followers of a funeral to the family of the deceased. The city of Warsaw is ordered to contribute daily the sum of 2000 roubles for the maintenance of the troops, and to pay 1500 roubles to defray the expense of burying those who fell in the recent disturbances. Two popular Poles, M. Michael Lewinski and Count Zamoyski, have been invited by the Government to take office, but their acceptance is at present doubtful. M. Lewinski was called to assume the functions of Minister of the Interior for Poland, but he made his acceptance of the office dependent on the fulfilment of three conditions, viz.:—That Count Zamoyski should be appointed President of the Council of State, that the troops should be withdrawn into the citadel and barracks, and, finally, that citizens should be again allowed to do duty as constables. Count Zamoyski also refused to accept the Presidency of the Council of State unless the military were withdrawn to their barracks and a civic guard established throughout the country. The Government has not yet agreed to these conditions, and consequently the negotiations at present remain without result. M. Wielopolski will shortly proceed to St. Petersburg, the Emperor wishing to have a personal conference with him on the state of things in Poland. The women of Warsaw refuse to discontinue wearing mourning, and are organising a pilgrimage to the shrine of the Virgin at Czenstochowa. The exasperation of the people is increasing throughout the whole country, and the news from the provinces indicates the existence of an irritable feeling among the peasants against the noblemen. In every district petitions have been signed expressing gratitude and confidence in Count Zamoyski, who was formerly President of the Agricultural Society, recently dissolved. The civil Governor of Lublin, M. Machiewicz, has been dismissed for leaving his post without permission. In the absence of all the Russian authorities, authority is exercised by the municipality under the presidency of the bishop. General Chruleff is marching upon the city, and rumours are current of a bloody conflict having taken place.

THE UKRAINE.—Disturbances have broken out in Kiew, the capital of the Ukraine, in consequence of a funeral service for the victims of Warsaw. A bloody conflict took place between the inhabitants and the Russian troops, and many were killed and wounded. One account states that the number was 150.

CRACOW.—In consequence of the recent events at Warsaw popular demonstrations daily take place in Cracow, whereby order is disturbed. Public processions are likewise held, but have been prohibited by the authorities. The *Czas* publishes an article earnestly exhorting the people to remain quiet, and thereby avert the misfortune with which the city is threatened.

TURKEY.—The Government scheme for the issue of new kaimés has been published. It states that the total amount will be 1250 millions of piastres, which will be issued by March next. In the meantime the issue will be at the rate of 30 millions per month. An Exchange Bank, with a capital of 375 millions of piastres, is to be established. The new notes are to circulate all over the empire, and are repayable in 18 years. The French Ambassador demands the execution of the Hatti Humayoun.

SERVIA.—Prince Garaschanin has gone to Constantinople, to demand the evacuation of Belgrade by the Mussulmans. A despatch from Belgrade states that on the 10th inst. 91 Bulgarian families, numbering 561 persons, emigrated to Servia with numerous flocks. The Turks stopped their passage, and inflicted punishment upon 160 of them. The agitation is increasing on the frontiers.

THE PRINCIPALITIES.—The Paris papers publish a telegram stating that the Porte has sanctioned the union of the Danubian Principalities under Prince Couza, and has demanded that the conference at Paris should take official notice of the fact. It is stated that neither the Austrian nor any other diplomatic representative has offered any opposition to this measure.

DALMATIA.—The *Patrie* of Friday evening says that the news of the disembarcation of Italian volunteers at Spitza has been confirmed, and that the number of these volunteers who have taken refuge in the mountains of Dalmatia is about 500.

MONTENEGRO AND BOSNIA.—Omar Pasha has been appointed Generalissimo of the army in the Herzegovina, and will conduct the inquiry in Bosnia. The conflict in the Herzegovina still continues. Several places have proclaimed the Prince of Montenegro.

ALBANIA.—The Turkish Government has officially communicated to the European Powers a *memorandum* dated the 27th March, stating that the coasts of Albania, from Durazzo to the neighbouring coasts of Austria, have been placed in a state of blockade, and that the Turkish naval forces are charged with carrying out regularly the said blockade, commencing from the 13th April.

SYRIA.—The report of the Syrian Commission is so voluminous that it will be sent back for revision and abbreviation. All the commissioners, with the exception of the representative of France, recommend the appointment of three Kaimakans for the Lebanon—namely, a Druse, a Maronite, and a Greek. The French Commissioner insists on the appointment of only one Kaimakan, to be a Maronite. The Commissioners are to remain at Beyrout.

INDIA.—The Calcutta and Bombay mails have arrived with news to the 27th March, of which the following is a summary:—

The Governor-General had invited the attention of the several local Governments in the cotton-producing districts, to suggest measures whereby the power of India to meet the increased demand for cotton may be augmented by the help of Government. The details of Mr. Laing's Currency Bill have been slightly altered in committee. In consequence of representations from the mercantile community a 10 rupee note has been conceded in those districts in which the Government consider it advisable to introduce it. The accounts of the famine were as serious as ever, though everything had been done to mitigate its severity. In the Delhi district thousands were dying, and many who managed to escape from starvation fell victims to crime. Frequent and terrible murders were occurring daily. In Umballa there had been a good fall of rain which lasted three days. There had also been a little rain at Rawul Pindee and Bareilly. Throughout the Central Doab the distress was universal. Fears were entertained that the famine would extend to the Madras Presidency. The accounts from the indigo districts were also of a very alarming character. From Sikkim the latest intelligence is that our force had advanced within an easy distance of Tumloong, the capital of the Rajah. All prisoners previously taken by the enemy had been restored, and several missing men had turned up. The Bhootias had been dispersed, and it was stated that the Rajah had acceded to our demands, which were,—the extradition of the Dewan, the restoration of stolen property, and the surrender of criminals. The next account will probably bring us intelligence of the return of our force. The Army Amalgamation Committee was still sitting at Calcutta. The result of its deliberations was impatiently awaited by the army. Lieut. Fryer, of the 35th Foot, was drowned at Meerut on the 16th. Colonel Knollys, of the 75th Foot, has died suddenly.

COCHIN CHINA.—Advices from Saigon state that on the 24th Feb. an attack was made by the French and Spanish forces (the latter only 200 men in action) on the Anamese, and, although the allies came off victorious, it was a much more serious affair than was expected. Five forts were taken, and also a fortified camp, with a large quantity of ammunition and arms. The loss of the Anamites cannot be ascertained, as they invariably carry off their wounded. 20 prisoners only were made. The loss of the French was Lieut.-Colonel Tesard and Midshipman Le Regnière killed, the General and five officers wounded, and 300 rank and file killed and wounded. The Spanish lost five killed and 35 wounded. A Spanish colonel also was wounded. A new expedition was to be organised to follow up the success, and it was hoped that part of the country where large quantities of grain were stored would be secured.

UNITED STATES.—The *New York Herald* of the 6th inst. states "that warlike rumours and the naval preparations of the Government had created intense excitement throughout the city. On the 5th inst. a panic prevailed among stock operators. The [...]
ton correspondent of the same journal [...]
country is on the brink of a civil war [...]
States' frigate Powhattan was fully [...]
sea. The Government had chartered [...]
Atlantic, which, with the Powhattan [...]
Illinois, would sail immediately under [...]
A despatch from Charleston, dated [...]
terrible moment is evidently at hand. [...]
Washington and New York state that [...]
impression "that within 24 hours war [...]
Every man has been ordered on duty [...]
activity prevails. The highest officials [...]
present state of things can last but [...]
The excitement is intense. Everything [...]
aspect." According to the *New York* [...]
Beauregard had declared to Major [...]
must evacuate Fort Sumter, or [...]
within 48 hours. Major Anderson [...]
be cut of immediately. The [...]
had received no intelligence from [...]
for several days. This caused [...]
the fort had been attacked [...]
communications cut off by the [...]
General Lamon, President Lincoln's [...]
to Charleston, had returned to [...]
and reported favourably upon [...]
of Fort Sumter, but was fully satisfied [...]
forcements could not be introduced [...]
serious collision, and that the attempt [...]
duce them would be of doubtful success [...]
forces at the command of the Administration [...]
scribed the military preparations of the [...]
of great magnitude, and very skilfully made [...]
Lincoln had become severely indisposed [...]
exertion. Judge M'Lean, of the Supreme C[...]
The Secretary for the Treasury has refused [...]
any bids for the new loan under 94. The [...]
came into operation on the 1st inst., [...]
trouble, confusion, and annoyance. The [...]
Commissioner for Europe embarked at New [...]
the 31st of March. The election of members [...]
gress in Connecticut will probably result [...]
the Republican party. It was stated that [...]
visions, and ammunition were constantly [...]
Southern army. The Senate had refused [...]
present session to enter on the proposal [...]
Britain to refer the San Juan question to [...]

SAN DOMINGO AND HAYTI.—The [...]
Domingo to Spain is on the point of being [...]
It seems that a system of Spanish [...]
going on at that island, the [...]
when the proper time arrived [...]
and invoke the aid of Spain. [...]
16th ult., much to the astonishment [...]
natives. When the news [...]
frigate Bianca, fully armed, and [...]
troops on board, was despatched to San [...]
screw frigates were soon to follow, [...]
A large naval and military force is [...]
from Spain to Cuba. It was stated [...]
soon share the same fate as that of [...]
the consent of France. The Haytian [...]
publish a proclamation against Spain [...]
stating that the only way to save the [...]
revolution.

Parliament.

HOUSE OF LORDS.

FRIDAY.—*Syria.*—In answer to the Earl [...]
WODEHOUSE said that her Majesty's Government [...]
strongest manner that Seid Bey should [...]
The French, Russian, and Prussian Commissioners [...]
had urged the carrying out of the capital [...]
of Foreign Countries Bill passed through [...]
Mutiny Bill, the *Marine Mutiny Bill*, and [...]
(3,000,000*l*.) *Bill* were read a second time.

MONDAY.—The *Lunacy Regulation Bill* passed [...]
mittee, with an amendment introduced [...]
the Earl of SHAFTESBURY, by which one member [...]
appointed to take charge of lunatics under [...]
Court of Chancery, instead of the present [...]
Mutiny Bill, the *Marine Mutiny Bill*, the [...]
and the *Consolidated Fund* (3,000,000*l*.) *Bill* [...]
committee.

TUESDAY.—The LORD CHANCELLOR moved the [...]
of the *Bankruptcy and Insolvency Bill*. He [...]
sition on the part of the House to the measure [...]
that the objections formerly entertained [...]
lordships had been met by the Bill before the [...]
the present system were unnecessary de[...]
official charges,—evils which caused the trading [...]
the Court of Bankruptcy and to settle cases [...]
up privately. Briefly touching upon the state [...]
vency, the abolition of the distinction of traders [...]
and the proposed alterations, he proceeded to [...]
of the Bill, and entered at some length [...]
Lord CHELMSFORD thought that the Bill, with [...]
alterations, would hardly acquire the confidence [...]
It sacrificed the smaller estates to the larger, [...]
introduce machinery which would be found [...]
for smaller bankruptcies. The proposed [...]
and checks, and the addition of the creditors [...]
of diminishing would increase expenses, and [...]
between the assignees to a complete dead[lock] [...]
the abolition of the distinction between [...]
traders, he strongly objected to the retrospective [...]
hoped that the House would refer the Bill [...]
mittee.—Lord CRANWORTH thought the Bill [...]
excellent provisions, that the mode in which [...]
to abolish the distinction between traders [...]
most satisfactory, and that the retrospective [...]
these clauses was to a certain extent reasonable [...]
however, whether the jurisdiction of the [...]
could be extended to bankruptcy cases.—L[...]
examined the effects of the abolition of [...]
between traders and non-traders, and thought [...]

[illegible] to give creditors summary powers in the case [illegible] latter case it would lead to many hard- [illegible] in the case of inexperienced young men. He [illegible] the appointment of a Judge, as he thought [illegible] capable of dealing with the matters [illegible]. The bill would lead to great confusion, [illegible] expect that it would conduce to lessen the [illegible]. He hoped that the Bill would be [illegible] in committee.—Lord WENSLEYDALE sup- [illegible].—After a reply from the LORD CHANCELLOR, the [illegible] read a second time. The *Law of Foreign Countries Bill*, [illegible], the *Marine Mutiny Bill*, the *Exchequer Bills Bill*, [illegible] *Consolidated Fund* (3,000,000*l.*) *Bill*, were read a third [illegible].

[illegible].—The committee on the *Bankruptcy and Insol-* [illegible] postponed to the 3d of May.—Lord LYTTELTON [illegible] *of Dioceses Bill* be referred to a [illegible].—The Bishop of CARLISLE said he would not [illegible], but urged that the proceedings of the com- [illegible] carefully scrutinised, and that no rash and [illegible] should be taken for the increase of the episco- [illegible] discussion, in which the Bishops of LON- [illegible], OXFORD, Lords GRANVILLE, EBURY, REDESDALE, [illegible], and the Duke of MARLBOROUGH took part, the [illegible] was agreed to. *City Railways.*—Lord SHAFTESBURY presented a petition from the Corporation of the city of London, praying that all railway companies whose railways enter the city should be required to run cheap trains daily. The [illegible] *Incumbents Restriction Bill* was read a second [illegible] *Regulation Bill* was read a third time and passed.

[illegible]—*State of Italy.*—The Earl of ELLENBOROUGH asked whether the Government was engaged in any correspondence [illegible] reconciling the spiritual independence of the [illegible] the exercise of temporal sovereignty within [illegible] territory of the King of Italy. He considered it [illegible] that Rome should be the capital of the new kingdom, and that the future position of the Pope should be [illegible] a commission of the Catholic Powers. As to Venetia, [illegible] Austria had not been fairly treated on the question, [illegible] her interest to come to an understanding with Italy respecting it. By giving up Venetia, Austria would become united in herself, and the maintenance of Austria in her full strength was essential to the balance of power in Europe.

[Left sitting.]

HOUSE OF COMMONS.

FRIDAY.—*Church Services.*—Mr. L. KING obtained leave to bring in a Bill to afford facilities for performing [illegible] service by ministers of the Church of England and Ireland. The *Smoke Nuisance (Scotland) Act Amendment Bill* passed through Committee, and the *Industrial Schools Bill* was committed *pro formâ*. The *Annoyance Juries (Westminster) Bill* was read a second time. The *Post Office Savings Banks Bill* was read a third time and passed. The *Charitable Uses Bill* was read a second time. The adjourned debate on *New Zealand* was resumed by Mr. LONGFIELD, who spoke in support of Sir. J. [illegible]'s resolution.—Mr. LOWE cited the declaration of Wiremu Kingi as evidence of the case set up on his behalf—that, confident in his power, he defied the English Government. It was no question of law or right, but an effort to set aside the Queen's authority by force. The decision of a tribunal would have no effect upon a man who acknowledged no right but [illegible] his own will.—Mr. ADDERLEY remarked upon the difficulty of discussing native rights in the House of Commons, and urged that these questions could be more advantageously considered in the colonial Parliament.—Mr. [illegible] that nothing like conciliation had fallen [illegible] the Government.—Colonel DUNNE bore testimony to the character of Governor Brown.—Mr. DUNLOP thought a prospect should be held out to the natives of a tribunal that would do [illegible]. On a division, the amendment was negatived by [illegible]. The House then went into a Committee of supply on the *Navy Estimates*, when certain votes were agreed to, after discussion.

MONDAY.—*The Budget.*—The CHANCELLOR of the EXCHEQUER in Committee of Ways and Means made his financial statement. He commenced by observing that in taking a retrospective view of the last year he would have to make the [illegible] unfavourable statement which it had been his lot to lay before the House of Commons. It was a year in which the last remnant of protective duties was abolished, a year of the [illegible] taxation and the greatest expenditure ever known [illegible] the midst of a European war, and finally, it was [illegible] by a succession of seasons—spring, summer, autumn, and winter—the most unhappy which it had pleased Providence [illegible] with for half a century. The estimated expenditure [illegible] by the House in the year 1860-61 was 73,664,000*l.*, [illegible] of the special vote for fortifications, while the [illegible] expenditure was 72,842,000*l.*, being a difference of 822,000*l.* [illegible] of the country. The revenue of the financial [illegible] was 71,089,000*l.*, and that of 1860-61 [illegible], being a deficiency in the latter year [illegible]. A considerable portion of this deficit [illegible], to be traced to the exceptional circum- [illegible] for all financial purposes the year 1860-61 was [illegible] by three days than its predecessor. The year 1859-60 [illegible], and contained one additional day; the year [illegible] ended on a Sunday, thereby losing one day; [illegible] there were two Good Fridays, whereas, to [illegible] the matter, strange though it might appear, there would be no Good Friday at all in the year 1861-62. The [illegible] in the revenue by the abstraction of three days from the year 1860-61 accounted for 506,000*l.* of the 806,000*l.* to which he had referred. The taxes remitted last year [illegible] numbers to 3,000,000*l.*, but as 3,000,000*l.* of [illegible] imposed, the remissions and impositions [illegible] other. Last year he estimated the Excise to [illegible], but it had only produced 19,430,000*l.*, [illegible] a deficiency of 1,829,000*l.* The deficit on hops [illegible], on malt 800,000*l.*, and on spirits 900,000*l.* The [illegible] duty on corn had, however, produced [illegible] the duties on tea, sugar, and tobacco [illegible] stationary. The estimated loss on [illegible] 830,000*l.*; the actual loss, however, was [illegible] the total increase in the consumption of [illegible] within the year was 3,331,000 gallons. [illegible] detail to the operation of the French [illegible] a high compliment to the manner in which [illegible] Government had given effect to it, he [illegible] the gradual extension of taxation from 1853 [illegible], and stated, as an illustration, that whereas [illegible] imperial and local expenditure was under [illegible] the imperial expenditure alone rose to [illegible] local expenditure amounted to 18,000,000*l.* [illegible], or an increase of 26,000,000*l.*, in [illegible] years, or equivalent to the whole savings of [illegible] for a term of eight years. With regard to the year [illegible], the estimated expenditure of the year, including an [illegible] of credit of 1,000,000*l.* on account of the Chinese [illegible] for the expense of the census, was [illegible]. The estimated revenue for the year, including a [illegible] Chinese indemnity, was 71,823,000*l.*, which would [illegible] of revenue over expenditure of 1,923,000*l.* He [illegible] that the revenue would be made up of the following [illegible] Customs, 23,[illegible]; Excise, 19,463,000*l.*; Stamps, [illegible]; Taxes, 3,170,000*l.*; Income Tax, 11,200,000*l.*; Post Office, 3,500,000*l.*; Crown Lands, 295,000*l.*; Chinese Indemnity, 750,000*l.*; Miscellaneous, 1,4[illegible], making a total of 71,823,000*l.* According to [illegible] there would be a surplus of [illegible]. [illegible] would be made which he expected would yield a sum of about [illegible] a year, which they would afford relief to certain classes. He proposed to [illegible] the duty upon chicory; to make [illegible] and an annual license of 2*l.*; to give wholesale dealers in spirits the privilege of retailing small quantities on payment of an extra sum of [illegible] a year; to reduce the stamp duty upon agreements to let furnished houses for a less period than [illegible] months from [illegible] to 2*s.* 6*d.*; to reduce hawkers' licenses from [illegible] a year to 2*l.*; and to tax [illegible] rooms kept open after a certain hour on the same scale as refreshment houses. With regard to the disposal of this balance, the Government had come to the conclusion that it was too large a sum to retain in hand. Hitherto two classes of taxation had been imposed upon the country—viz., direct and indirect. As Chancellor of the Exchequer he had been compelled to resort to both, and the appeal which he had thus made to the national resources had been met with an ungrudging hand. He felt, however, that direct taxation had now reached a point at which it became desirable to apply the process of reduction. He was aware that some persons held the opinion that he ought to repeal the income-tax without finding a substitute, and were it possible he would feel but too happy to be the Chancellor of the Exchequer, who, like Lady Godiva, was to "take away the tax, and build himself an everlasting name;" but although he was not without hope, he feared that until the country was content to be governed on an expenditure of sixty-five millions, it would be futile to think of repealing the tax. The Government were, however, prepared to make a commencement by remitting the penny which was added to the tax last year. The tax collectable therefore in the current year would be at the rate of 9*d.* in the pound on incomes of 150*l.* and upwards, and 6*d.* on incomes under 150*l.* per annum. The loss which the revenue would sustain by the remission of one penny on the income tax would be 850,000*l.*, which, if deducted from the surplus of 1,923,000*l.*, would still leave 1,073,000*l.* A portion of this amount it was intended to devote to the repeal of an indirect tax, namely, the paper duty. This was a subject which he hoped might now be approached without awakening adverse feelings or arraying class against class, and in this expectation it was proposed that the duty on paper should be repealed on the 1st of October next. The remission of the paper duty would cost 675,000*l.*, and in addition there would be a loss on customs commodities in connection with the manufacture of paper of 15,000*l.*, making the total loss by the repeal 690,000*l.* From this, however, there was to be deducted a sum of 25,000*l.* for the saving which would be effected in stationery and establishment charges, leaving the net loss at 665,000*l.* The total remission of taxation would therefore be 1,515,000*l.*, leaving a balance or surplus of 408,000*l.* He proposed, with the view of leaving the hands of Parliament free to make further remissions next year, that the income tax and the tea and sugar duties should be imposed for one year only. With regard to the manner of levying the income tax they would return to the normal mode of collection, and one quarter would be collected at the rate of 10*d.*, and three quarters at the rate of 9*d.* in the pound. In laying this statement before the House, and leading it, as it were, through a wilderness of figures, he could not do justice to his own feelings without referring to what he believed to be the danger of unbounded excess of expenditure. This, in his opinion, was not only a pecuniary waste, but a moral evil; and much as he [illegible] sweeping and rash reductions, he confessed that he regarded the tendency to excessive expenditure with feelings of unmitigated apprehension. Neither was there, he thought, any good reason for breaking down the bounds and limits of expenditure. The resources of the country were ample, the spirit of the people was excellent. There never was a nation in history so willing to bear without murmuring the heavy burden imposed upon it, or so generously disposed to overlook the errors of those by whom it was governed. For his own part, he thought that if the country would steadily and consistently remain as wise in the use of her treasure as she was [illegible] in its produce, and as moderate in the exercise of her strength as she was [illegible] in the possession of it, she might well indulge the hope that she was reserved for a great mission, and that for many generations yet to come she would continue to hold her former place among the nations of the world. The right hon. gentleman concluded a speech of exactly three hours amid loud and general cheering by placing in the hands of the chairman a resolution imposing a double duty upon chicory.—Sir STAFFORD NORTHCOTE said that a million of Exchequer bills would have to be paid off in 1862-63, which in all probability would interfere with those future remissions of taxation to which reference had been made, and convert the assumed surplus into a positive deficiency.—Mr. HADFIELD expressed his regret that some portion of the fire insurance duty had not been remitted.—Mr. DODSON, Mr. BALL, Mr. BENTINCK, and other members representing agricultural constituencies contended that malt and hops were fit subjects for the indulgent consideration of the Government.—Mr. GLYN gave his hearty approval to the scheme, and congratulated the Chancellor of the Exchequer upon the happy skill which had enabled him to convert what had the world believed would be a deficiency into a surplus.—Mr. MALINS said that as the proposition with regard to the paper duty was calculated to put an end to a fruitful source of irritation in the country, and to restore the two Houses of Parliament to their former amicable relations, he hoped that hon. members on his side of the House would not offer it any further opposition.—Mr. OSBORNE thanked the Chancellor of the Exchequer for the statesmanlike manner in which he proposed to deal with the paper duty, and recommended the House to give their support to the budget in all its integrity.—Mr. CAIRD denied that the agricultural was a suffering interest, and declared emphatically that the farmer had profited largely by the free trade legislation of late years.—After some further discussion, the resolution was agreed to, and the House resumed. The *Births, Deaths, and Marriages (Ireland) Bill* was read a second time, after considerable discussion. On the motion for referring the Bill to a committee of the whole House, Mr SCULLY moved as an amendment that it be referred to a select committee. On a division the amendment was carried by 100 to 94. Several other bills were advanced a stage. The ATTORNEY-GENERAL, in committee of the whole House, obtained leave to bring in a Bill to amend the law relating to *Copyright in Works of Fine Art.*

TUESDAY.—*Street Railways.*—Mr. CHILDERS moved, at the instance of the promoters, to postpone for a fortnight the order of the day for reading the Street Rail Company's Bill a second time.—Mr. SCULLY objected to the Bill that it would empower a single company to lay down tramways similar to that in operation between the Marble Arch and Notting Hill in the streets of every town in the kingdom, and moved as an amendment that the order be postponed for six months.—A long discussion ensued, in the course of which Mr MASSEY, the chairman of committees, stated that the bill was to all intents and purposes a public Bill, and could not, therefore, be treated as a private one. The motion for the second reading was thus negatived, and the amendment was carried. The Bill is therefore virtually lost. *Fore Shores.*—Mr. A. SMITH moved for a Select Committee to inquire into the rights of the Crown and public, as well as of individuals, as connected with the fore shores and tidal waters of the United Kingdom; the manner in which the Commissioners of Woods and Forests are dealing with the same, and the state of the law affecting this description of property.—Captain JERVIS seconded the motion.—Sir J. HANMER opposed it. He denied that this was a new right claimed by the Crown; it had existed in every reign since the Conquest. The law of the seashore was plain; the title of the Crown was a legal right, and, if disputed, the question could be decided by a court of law.—Mr. FINLAY supported the motion. The question had produced irritation and antagonism towards the Crown, and there was no better way of setting it than by an inquiry by a select committee.—The ATTORNEY-GENERAL said that the proposed inquiry embraced not only the rights of the Crown and of the public, but of individuals, and a more revolutionary or extravagant proposition had never been submitted to the House. He explained the legal principle under which the property in question vested in the Crown, and was transferred to the Commissioners of Woods and Forests in trust for the public, and it was their bounden duty to make the best of the property. The doctrine that the Crown's right was only fiduciary, would disturb the title of all the grantees, and he hoped the House would not for a moment entertain a motion that would shake the foundation of property. On a division the motion was negatived by 1[illegible] to 67.—Sir F. SMITH called attention to the report of the Commissioners appointed to inquire into the control and management of *Her Majesty's Naval Yards*, and was proceeding in his observations when the House was counted out.

WEDNESDAY.—*Trustees of Charities Bill.*—On the order for going into Committee upon this Bill, moved by Mr DILLWYN, Mr SELWYN said that the Bill, in his opinion, was so objectionable in principle, so dangerous, and so unjust, that he felt it his duty to oppose its further progress, and moved that it be committed that day six months. The amendment was seconded by Mr. BERESFORD.—Mr MELLOR defended the Bill, the simple object of which was to make all persons, without regard to their religious opinions when not excluded by the words of the founder, eligible to be elected as trustees of charitable schools.—Mr G. HARDY said that the Bill was a covert attack upon endowments throughout the country, and that those who were strenuous advocates of the voluntary principle were perpetually striving to get hold of endowments, to be used for political purposes.—Mr. DILLWYN defended the Bill, and Lord R. CECIL pointed out what he believed would be its mischievous effects under the active agency of the Liberation Society.—Mr HADFIELD denied that Dissenters coveted the endowments of the Church.—Mr. ADDERLEY said that the Bill, though innocent on the face of it, would, if passed, eliminate from these schools all religious instruction.—Mr. BALL said he had hitherto supported the Bill, but he had been since very much influenced by the representation of the Wesleyan body that it would be very injurious to their society. A large portion of the Dissenters were likewise more inclined to oppose than to support the measure. Mr HENLEY thought it better to leave the questions arising in these cases to a court of law.—Mr BUXTON said he had come down to the House intending to support the Bill, but what he had heard induced him to change his intention.—Mr WHITESIDE complained that, on a measure which affected the institutions of the country, and revolutionised the law of evidence, the Government had not favoured the House with the advice of the law officers of the Crown. On a division, the amendment was carried by 200 to 171; so the Bill was lost. On the next order, for the second reading of the *Marriage Law Amendment Bill*, legalising marriage with a deceased wife's sister, moved by Mr. M. MILNES, Mr HUNT, adverting to the clause exempting Scotland and Ireland from its operation, moved as an amendment a resolution declaring that any measure that would have the effect of placing the law of marriage with regard to the prohibited degrees on a different footing in different parts of the United Kingdom would be highly inconvenient.—Mr. PEASE supported the Bill.—Mr. KER SEYMER said that the law of the land had always held these marriages to be illegal, and the argument in favour of an alteration of it derived from their frequency would be applicable to bigamy, which was equally frequent. The practice of foreign Protestant countries upon this as well as other points should be no guide to us.—Sir M. PETO said the Nonconformists did not condemn marriages of this nature. He regarded this as a poor man's question, and, treating it merely as a social one, he should support the Bill.—Mr. LYGON read a petition in favour of polygamy, the arguments in which were, he remarked, identical with those employed by the advocates of this Bill.—Mr. DENMAN was of opinion that the law as it existed was inexpedient; that it was unnecessary and unfair to keep up the restriction, and that the law ought to be altered.—Mr. WHITESIDE said that the highest legal authorities had pronounced against the proposed alteration of the law, and that the present Bill, excluding Scotland and Ireland, would create endless confusion in regard to the inheritance of property.—Mr. MILNES having replied, the House divided, when the amendment was carried by 177 to 17[illegible]. The Bill was therefore lost.—The *Admiralty Court Jurisdiction Bill*, and the *Smoke Nuisance (Scotland) Amendment Bill* were read a third time and passed.—Mr. BRAND brought up the report of the committee on *Ways and Means.*—Sir C. BURRELL obtained leave to bring in a Bill to diminish the danger incurred by *Servants in cleaning Windows.*—Mr. BAXTER obtained leave to bring in a Bill to facilitate the transfer of *Railway Mortgages in Scotland.*

FRIDAY.—*Army Estimates.*—On the order for going into a Committee of Supply on the Army Estimates, Colonel DICKSON complained of the enormous amount of the estimates in relation to the number of the troops, pointing out, among other items susceptible of reduction, the Medical Staff, the charges for troops in the colonies, the Staff of the War-office and the Horse Guards, and barrack-building, and concluded by moving that the consideration of the estimates be deferred, with a view to their revision.—Mr T. G. BARING said that the matters referred to could be discussed in the Committee.—Colonel DUNNE called attention to the necessity of further returns as to the expenditure of stores.—Mr. OSBORNE complained of the money expended at Aldershott, which had been wasted, he said, upon a gigantic job—an indifferent preparatory school for forming indifferent generals, which was at once useless and demoralizing.—Colonel NORTH, General LINDSAY, and Colonel GILPIN bore testimony to the utility of Aldershott.—Mr. MONSELL, comparing our War Estimates with those of France, considered that we were incurring a wild expenditure that would, if persevered in, cause a reaction in the country, and the amount would be forced down below what it ought to be.—General PEEL expressed an opinion that the Government had not taken money enough for the number of men they proposed.—Lord PALMERSTON said that there never was a wiser appropriation of the public money than that at Aldershott. The object was to provide a place to learn combined movements, and he appealed to every military man whether the scheme had not been successful. The land might be sold at any time for more than its original purchase-money. After some further discussion, the amendment was negatived. The House then went into Committee of Supply on the Army Estimates, when Colonel DICKSON moved to reduce the vote for the medical staff by the sum of [illegible], being the difference between the estimate for last year and this. On a division the motion was rejected by 66 to 45, and the vote was agreed to.—Lord A. CHURCHILL moved the omission of the item of 1035*l.* 14*s.* 7*d.* for the major-general commanding the brigade of Guards and his staff.—On a division the motion was negatived by 8[illegible] to 52. The vote was then agreed to. Severa

other votes were agreed to, and the House resumed. The *Queen's Prison, &c., Bill*, and other Bills, passed through Committee. The *Volunteers (Tolls Exemption) Bill* was withdrawn. The *Charitable Uses Bill* was read a third time and passed. On the motion of the CHANCELLOR of the EXCHEQUER, the *Select Committee on Public Accounts* was nominated.

FRIDAY.—*Religious Persecution in Spain.*—In answer to Sir R. PEEL, Lord J. RUSSELL said that the Spanish Government had intimated to Sir A. Buchanan that they were not indisposed to grant facilities for religious worship, but that they had ascertained that seditious assemblies had been held under the guise of religious meetings. *Indigo Planters.*—Mr. LAYARD called attention to the correspondence respecting the Indigo Planters in India. [Left sitting].

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 92 to ⅛ for Money, and 92⅛ to ¼ for the 9th May; Bank Stock, 229½ to 231; Three per Cents. Reduced, 90½; New Three per Cents., 90½ to ⅝; Thirty Years' Annuities, 1885, 15⅝; India Stock, 223 to 222; Ditto Five per Cent. Stock, 101⅛ to 102⅛; Ditto Four per Cent. Debentures, 1858, 96⅞ to ½; Ditto Bonds, 13s. dis.; Five per Cent. Enfaced Rupee Paper, 91¼ to 93¼; Ditto Five and a Half per Cent., 100¼; Exchequer Bills, 2s. dis. to 2s. prem.—FOREIGN: Brazilian Old Five per Cents., for Acct., 99, ex div.; Ditto Four and a Half per Cents., 1860, 86½ to ¾; Dutch Four per Cent. Certificates, 98⅝, ex div.; Portuguese Three per Cents., 1853, for Acct., 46½ to ¼; Russian Four and a Half per Cents., 91¾ to ¼; Spanish Three per Cents., for Acct., 49¼; Turkish Six per Cents., 1854, 70½ ex div.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£26,843,850	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	11,520,488
		Silver Bullion	848,362
	£26,843,850		£26,843,850

BANKING DEPARTMENT.

Proprietors Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£10,272,928
Rest	3,177,820	Other Securities	18,414,769
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	4,195,906	Notes	6,548,645
Other Deposits..	13,379,936	Gold and Silver Coin ..	763,353
Seven day and other bills	693,033		
	£35,999,695		£35,999,695

18th day of April, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY—BANKRUPTS—R. K. BOORMAN, Marden, Kent, Cattle Dealer—E. BREEZE, Kingswinford, Staffordshire, Grocer and Provision Dealer—H. C. CHOWN, Sheffield, Shoe Dealer—J. COWDEROY, late of Acton and Brentford Lane, Acton, but now of Peckham, Surrey, Innkeeper—J. DUFFIELD and W. R. DAUBER, Sheffield, Grocers—S. GREENHAIGH, Bury, Lancashire, Confectioner—W. H. HAMBURGH, High Street, Poplar, Upholsterer—E. T. N. JENKINS, Victoria Park Square, Bethnal Green, Cigar and Snuff Manufacturer—M. T. LEVITT, Minories, Middlesex, Chronometer and Watch Manufacturer—W. A. PUTMAN, New Oxford Street, Middlesex, Glass and China Dealer—E. RAE, Eastcheap, City, Commission Agent and Merchant—J. M. ROTTON, near Oldham, Lancashire, Cotton Manufacturer.

SCOTCH SEQUESTRATIONS—P. and A. COPELAND, Newtyle, Forfarshire, General Merchant—J. GUNION, Glasgow, Cheesemonger—A. HILL, Edinburgh, Wood Carver—J. LOCHEAD, Ardrishiag, Argyleshire Merchant—J. SEATON, Musselburgh, Hat Manufacturer—J. M. WATSON, Edinburgh, Engineer.

FRIDAY—BANKRUPTS—F. W. ADAMS, King Street, Covent Garden Carver, Gilder, Picture Frame Manufacturer, and Dealer in Pictures—L. BEGHIN, St. Mary-at-Hill, City, Merchant—W. BRAIN, Risca, Monmouthshire, Grocer and Brick Maker—E. COPELAND, March, Cambridgeshire, Grocer and Druggist—T. DIGBY, Ottery Saint Mary, Devonshire, Tailor—H. FREEMAN, Leadenhall Street, City, Merchant and Commission Agent—E. R. GILBERT, Cripplegate Buildings, Mantle Manufacturer—J. B. GOUGH, Theberton Street, Liverpool Road, Islington, Timber Merchant—W. T. HEMMING, Old Broad Street, City, Bill Broker and Scrivener—A. C. LEWIS, Bath, Tailor and Draper—S. LYON, Frederick's Place, Hampstead Road, Cabinet Maker and Upholsterer—G. G. M'KAY, Liverpool, Ship's Store Dealer—J. MILLS, Stratford-upon-Avon, Warwickshire, Builder and Timber Dealer—T. PARKINSON, Halifax, Yorkshire, Stock and Share Broker—W. PARSONS, Brill, Buckinghamshire, Draper—C. R. PETTIT, Marlborough, Wiltshire, Corn Dealer and Seedsman—J. PIPER, Clarendon Street, Pimlico, Wine Merchant—J. TALLIS, Strand, and Water Street Strand, Printer and Publisher.

Metropolis and its Vicinity.

DINNER TO HER MAJESTY'S MINISTERS AT THE MANSION HOUSE.—On Wednesday evening the Lord Mayor entertained her Majesty's Ministers and a distinguished company at dinner in the Egyptian Hall. Lord Palmerston acknowledged the toast of her Majesty's Ministers, the Turkish Ambassador that of the Corps Diplomatique, the Duke of Somerset that of the Navy, the Lord Chancellor that of the House of Lords, and the Chancellor of the Exchequer that of the House of Commons. Lord Palmerston said:—

"It is satisfactory to those who stand in the position we occupy, to be able to congratulate the public, as I think we may, on the internal condition of the country. After a season most inclement, which in former times might have produced either famine or a financial crisis, the Chancellor of the Exchequer has shown to Parliament and the country a surplus of revenue over expenditure which has enabled him to propose a large remission of the burdens of the people without diminishing in the slightest degree those military and naval means of defence, any diminution of which on our part, in the present state of the world, would have been a betrayal of the trust confided to us. I say that it is a great proof of the solidity of the resources of the country, and of the productive nature of the national industry, that, in spite of those unfortunate circumstances, and notwithstanding the large reductions of taxation made last year, the Chancellor of the Exchequer has been able to present to the nation so favourable a prospect as that which he has, no longer than two days ago, submitted to Parliament. Gentlemen, this is most encouraging, not simply with a view to our internal condition, but also in regard to our external relations. The function of England is to endeavour, by that influence which she justly possesses, to maintain the peace of the world. She has no ambitious objects; she has no aggressive policy; she has no warlike propensities. We wish not only ourselves to enjoy the blessings of peace, but we wish by the legitimate exercise of our influence with other countries to secure for the rest of the world those blessings which we wish for ourselves. But I need not, I am sure, remark that the influence which a country can exercise by its sage and prudent counsels with others must necessarily depend on its own internal and defensive strength, and unless a nation is able to boast that she is secure against any foreign attack—that she is in a condition to repel hostilities, come from what quarter they may—her counsels may bear the appearance of timidity on her part; she may seem to be discouraging war because she is afraid of its recoil on herself, and her advice therefore would naturally have proportionately less influence and weight. The state of the world at present is such that the useful influence of this country may perhaps be as well exercised as at any former time. There are questions pending in different parts of the Continent, which, if judiciously made use of by those who wish to disturb the peace of the world, may furnish at least half-a-dozen respectable wars. Yet there is not one of those questions which may not be amicably and honourably settled without any appeal to arms, and I trust that the wisdom, good sense, and good feeling of the rulers of the nations and of the leaders of parties may lead to such a happy conclusion. I trust that the clouds now lowering over some parts of the Continent may be dissipated and dispersed. I trust, at all events, that the glorious consummation of the unity of Italy may be accomplished without any check or hindrance. There is no subject to which, I am sure, the wishes and feelings of the people of this country point with greater intensity than the accomplishment of that object. I can only say that the influence of England, as exercised by her Majesty's Government, will be directed to the maintenance of peace, and that, whatever may be the aspect of affairs in some quarters of the world, I do still trust that the year 1861 will pass over as a year of peace; and that the apprehensions which were at one time entertained that the spring and summer of this year would be disturbed by the clash of arms, and stained by the effusion of blood, will be disappointed, and that we shall arrive at the termination of the year with that happiness which peace confers, and enjoy that prosperity which our security and our industry must afford."

THE INTERNATIONAL EXHIBITION.—Her Majesty's Commissioners have received communications from the French, Belgian, and Swedish Governments, stating that active measures are in progress for the formation of commissions to represent the exhibitors from those countries. The Minister of the Interior in Belgium will in the meantime communicate with Her Majesty's Commissioners. In Hanover the directors of the Society of Trades, and the committee of the Society of Arts, will act as the Commission for that country.

THE INDIAN FAMINE RELIEF FUND.—The aggregate sum received by the committee at the Mansion House amounted on Thursday to upwards of 54,000*l.* This sum is exclusive of the subscriptions now in progress in Liverpool, Edinburgh, Dublin, Manchester, Glasgow, and other large towns, the total amount of which can be little, if at all, short of 20,000*l.*; thus augmenting the fund to upwards of 74,000*l.*

IMPROVEMENTS IN HYDE PARK.—On Monday, by order of the Right Hon. W. Cowper, the Chief Commissioner of Works, a number of workmen were employed in converting the unsightly circular space, formerly a reservoir, on the east side of Hyde Park, near Grosvenor Gate, into a garden decorated with ornamental fountains. The Wellington Vase, which was removed to this site, has been taken away.

THE STREET RAILWAYS.—It will be seen from our Parliamentary report that the second reading of the Street Rail Company Bill in the House of Commons was postponed on Tuesday for six months, which is equivalent to the rejection of the Bill. On Monday a new line of tramway on Mr. Train's principle was opened in Westminster. It extends from Westminster Abbey to the Victoria Railway Station at Pimlico, and is about a mile in length. A large number of persons travelled on the line throughout the day, and the event was celebrated by a dinner at the Westminster Palace Hotel. On Saturday, the vestry of Islington resolved, by a large majority, to allow Mr. Train to lay down a line from the end of King Street, Lower Road, southward to the bridge in New North Road. Meanwhile Mr. Yardley has given judgment at the Marylebone Police Court on the summons issued against Mr. Train, at the instance of Mr. Beresford Hope, for injuring and breaking the Uxbridge Road. Mr. Yardley said that the Commissioners of Turnpike Roads had gone beyond their power in granting their licence, and that they ought not to have given their licence for laying down a tram. He therefore decided that the line was not consistent with the General Turnpike Act, and fined Mr. Train in 1*s.* and costs, in order that they might appeal to a higher court. In spite of this opposition, the new railways appear to be becoming extensively popular, and it is stated that on Sunday last as much as 30*l.* was taken in twopenny fares by the two-horse carriage on the Bayswater Road.

CLOSE OF THE STRIKE.—The great majority of the hands in the building trades have accepted the terms which the masters had agreed to offer, and the strike may be considered at an end. The most important step towards putting an end to the dispute was made by the men at Messrs. Lucas's on Friday, when they held a meeting and decided by a large majority, in defiance of the trades union, that they would accept the Saturday half-holiday and the hour system of payment. On Saturday therefore the pay-books were opened before 1 o'clock, and the men left off work at that hour, receiving under the new system the same wages as they did for working through the Saturday afternoon. In the course of the day between 40 and 50 workmen, belonging to the different building trades of Paris, arrived in London from Dover, having come over at their own expense, in the full persuasion that they would be readily engaged by the master builders to replace the operatives who had withdrawn from their employment. They appeared however greatly to regret the step they had taken when informed ... was at an end.

DUCHY OF LANCASTER.—Mr. Frederick ... vers, Clerk of the Council and Registrar ... of Lancaster, has retired from that office ... of more than 30 years. He has been succeeded ... J. H. Gooch, chief assistant in the office.

CONSECRATION OF ALL SAINTS' CHURCH, ... TON.—On the afternoon of the 9th inst. ... London consecrated the new church of ... sington Park, which owes its erection to the ... of the Rev. Dr. Walker, rector of St. C... the model of whose beautiful church ... been erected. It is built in the second ... Edward II., and consists of a nave, ... south aisles, north and south transepts ... with a chancel containing ample ... service. The seats are all open, ... tion for about 1000 persons. The ... have cost 25,000*l.* but it is not ... pulpit in the interior and the tower ... an unfinished state. The Rev. John ... Trinity, College, Dublin, formerly ... and Stepney, has been appointed the ... The church, which is a conspicuous ... Great Western Railway, is from the ... White, of Wimpole Street.

THAMES EMBANKMENT.—A large ... for the embankment and improvement ... Thames has been sent into the commissioners ... to inquire into the subject, and it is ... they will commence their labours forthwith.

THE COMMERCIAL BANK FRAUDS.—... the prisoners Durdin and Holcroft were ... before the magistrate at Bow Street, for ... amination. It was stated in evidence ... account shows gross payments into the bank ... of 153,000*l.*, and that fictitious entries to ... of 55,000*l.* had been made by Durdin to ... Both prisoners were fully committed for ... various charges, the counsel for the prosecution ... pressing an opinion that at present there ... sufficient evidence to sustain an indictment ... against Durdin.

THE PUBLIC HEALTH.—The Registrar's ... weekly return states that the total deaths ... in the week that ended Saturday, April ... 1209. The average number in the ... weeks of the 10 previous years 1851-60, ... increase of population, was 1288. The present ... is therefore 79 below the average. ... the births of 1012 boys and 992 girls ... dren, were registered in London. ... ponding weeks of the years ... number was 1723.

Provincial.

BIRMINGHAM.—The first free library ... of Birmingham was formally opened ... in the presence of the Mayor, the ... tham Yorke, the Rev. Dr. Miller, and ... local influence, about 120 of whom ... assembled at breakfast at the Royal ... library, in connection with which is a ... contains 4000 volumes. Three other of ... are to be established in convenient parts ... in addition to which it is proposed to erect ... reference library, to be a kind of adjunct ... land Institute.

CAMBRIDGE.—Lord John Russell has ... letter to the Prince Consort as Chancellor ... University, stating that he will have ... nominating as candidates to compete ... Civil Service Commissioners for the office ... Interpreter in China or Japan any three ... the University whom the Chancellor or ... may recommend. The age of the candidates ... between 16 and 26. The salary is 200*l.* ... free passage. A similar offer has been ... University of Oxford, and to King's ... University College, London.

DANBURY.—On Monday afternoon a little ... of age was murdered in this village. He ... by his mother on some errand to the house ... bour called Martha Weaver, from which ... returned. On proceeding in search of ... house was found to be locked; but an entrance ... been effected, the child was found lying ... floor, death having been caused by strangulation ... Jury at the inquest returned a verdict ... Murder against the woman Weaver, who ... committed for trial.

FARRINGDON.—The Farringdon and W... (Messrs. Barnes, Medley, & Ansell) stopped ... last week. A meeting of the creditors ... Wednesday, when a composition was agreed ... in the pound, 5*s.* on or before the 4th of ... balance secured. The total liabilities are ... of which about 15,500*l.* are expected to ... against the estate. The assets available ... bution, including the amount from the ... of Mr. Barnes, are estimated to produce ...

PORTSMOUTH.—The Royal yacht ... Albert sailed from Portsmouth on ... Madeira, to convey the Empress of Austria ... island to Trieste. The Osborne, ...

[illegible] Portsmouth on Friday for Madeira, calling at [illegible] on the way out to coal.

[illegible].—The bank of Messrs. Pedder & Co. (the [illegible] Old Bank) has stopped payment. It did not issue [illegible] notes, and its connections were chiefly among [illegible]. It was established 85 years ago, and [illegible] liabilities may amount, it is thought, to [illegible] or [illegible]. Among the assets are landed [illegible] and mortgages on lands, and a favourable reali[illegible] is considered probable.

Road.—Several London and provincial papers last week stated that Mr. Kent, of Road House, and his [illegible] were about to leave the country and travel [illegible]. It appears that there is no foundation for the [illegible], and that on the contrary, Mr. Kent has [illegible], and has now under consideration, the offer of [illegible] and a better appointment under Government, [illegible] in terms of great sympathy and consideration for him. With the consent of the family an authorised narrative, together with a critical commentary on the social and scientific aspects of the case and its present position, by Mr. Stapleton, surgeon, Trowbridge, will shortly be published in London. It will be illustrated by a ground plan of the house, and by several engravings from photographs of the house and grounds, taken expressly for this purpose.

Stockport.—On Tuesday an inquest was held in this town on the body of a child 2½ years old, which had been found in a brook covered with bruises. It appeared that the child has been murdered by two other children, only 8 years old. According to their own confession the act was done with wanton deliberation. They threw the child into the water, pulled him out and beat him with sticks till he was dead, and then threw the body once more into the brook. Both the boys were committed for trial at the assizes on the charge of Wilful Murder.

Scotland.

Chancellorship of the University of Aberdeen.—At a meeting of the general council of the University of Aberdeen on the 10th inst., the Lord Rector (the Solicitor General) presiding, the Duke of Richmond was unanimously elected Chancellor of the University.

Sporting.

NEWMARKET CRAVEN RACES.

Monday.—The *Craven Plate.* Mr. Sargeant's Crater beat [illegible], and 9 others.—*Sweeps.* Lord Stamford's Little [illegible] beat [illegible], Conqueror, and Sporting Life.—*Handicap Sweeps.* Mr. John Day's **Monastery beat Nicholas, Shingle,** [illegible], Baron Rothschild's b. f., and Conundrum.—*Match.* Lord [illegible]'s Brother to Schiedam beat Montenegro.—*Handicap Plate.* **Baron de Niviere's Cosmopolite beat The** [illegible], **General Hess, and 7 others.—The *Grosvenor Plate Sweeps.* Baron Rothschild's Janus beat Carbineer, Lord Wilton's c, East Sheen,** and Reveille.—A *Sweeps.* Lord Stamford's Imaus walked over.—The *Forty-seventh Riddlesworth Stakes.* Duke of Bedford's Paste walked over.

Tuesday.—The ***Newmarket Handicap.*** **Mr. Gratwicke's Ebony** beat Parmesan, [illegible], and 12 others.—*Sweeps.* Mr. Merry's [illegible] beat [illegible].—The *Fifth Sale Stakes.* Mr. T. Parr's Kilkenan beat [illegible], [illegible], and [illegible].—*First Year of the Third Newmarket Biennial Stakes.* Mr. Merry's [illegible] beat Yorkminster, Asteroid, and 11 others.—*Handicap Sweeps.* Mr. Mulholland's Benbow **beat Angelo, King of the** [illegible], and Contadina.—*Sweeps.* **Duke of Bedford's Shingle** beat [illegible] and The Greek.—***Renewal of the Sweeps.*** **Mr.** [illegible] Starlight beat Tenvris and **Ellerton.—The *Second Year of the Second Newmarket Biennial Stakes.* Mr. Parr's** [illegible] **beat Umpire, Vanquisher, and 5 others.**

Wednesday.—*Sweeps.* **Duke of Bedford's Memo beat Letty** [illegible].—*Subscription Plate.* **Baron de Niviere's Cosmopolite** beat [illegible], Fravola, and 3 others.—*Sweeps.* Duke of Bedford's [illegible] beat **Adrasta, Cantatrice, and Savannah.—*Handicap Sweeps.*** Lord Coventry's Mousetrap beat [illegible].—*Plate.* Lord Stamford's Ballerino beat Olive Branch, Tolurno, and [illegible] others.—*Sweeps.* **Mr. E. Hall's Fravola beat Emily.—The *Column Stakes.* Lord Exeter's Knight of St. Patrick beat Folkestone** and West End.—*Sweeps.* Baron Rothschild's Janus beat [illegible] and Prudence.—*Handicap Sweeps.* Lord Clifden's c. by [illegible] beat Mdlle. de Chantilly.

Thursday.—*Sweeps.* Duke of Bedford's Asteroid beat [illegible] and Voltigeur.—*Sweeps.* Lord Glasgow's b. c. by West Australian beat Folkestone and Zingaro.—*Subscription Plate.* Mr. Fleming's Paul Clifford beat Southport, Roselale, and [illegible] others.—*Second Year of the Seventh Aske Produce Stakes.* Lord Zetland's Carbineer walked over.—*Sweeps.* Duke of Bedford's Asteroid beat The Rambler.—*Handicap Sweeps.* Mr. [illegible] Infanta beat Doubloon.—*Sweeps.* Lord Stamford's [illegible] beat Conqueror and Deerfoot.—***Handicap Plate.*** **Lord** [illegible] by Surplice beat **Faultless, Eastern Princess, and** [illegible] others.—The *Carat Stakes.* **Mr. Merry's Thormanby beat** [illegible] and [illegible].—*Sweeps.* **Lord Stamford's Emily** walked over.—*Sweeps.* Lord Stamford's Estrelda walked over.

Friday.—*Sweeps.* [illegible] Croxley beat Canto.—*Sweeps.* Plum [illegible] beat [illegible].—*Sweeps.* Walloon beat Hesper, and 2 others.—*[illegible] Stakes.* Wing beat Prince Plausible and 4 others.—*Sweeps.* Madge Wildfire beat Palaiseau, and [illegible] others.—*[illegible] Handicap Plate.* Neophyte beat Southport, [illegible], and 7 others.—*Post Stakes.* Wizard walked over.—*[illegible] Plate.* Ben Webster beat Bivouac, Anthem, and [illegible] others.

Obituary.

Lord Berwick died on the 12th inst. at his seat, Cronhill, near Shrewsbury, after long and severe suffering from an internal tumour. He was son of the fourth Baron by the second daughter of the late Mr. Mostyn Owen, of Woodhouse. He was born at [illegible], in 1800, was educated at Rugby, and succeeded his father in 1848. He devoted himself almost entirely to agricultural and mechanical pursuits. He was one of the most successful breeders in England of Hereford cattle, and his farm buildings are models of order and neatness. He obtained numerous prizes at the shows of the Royal Agricultural Society, at Birmingham, at the Smithfield shows, and several places in the provinces. His genius as a mechanic was extraordinary, and he was a first rate rifle shot. He took no part in politics, but the family are Conservative. He is succeeded in his title and estates by his next brother, Colonel the Hon. William Noel Hill, who entered the army in 1827, served in the **Burmese war in 1825-6, and was present at the** battles of [illegible] and [illegible].

Lady Le Fleming died on the [illegible] inst. She was born in **1784, and was the only child of Sir Michael Le Fleming, Bart., of Rydal Hall, Westmoreland, by the only daughter and** heir of the 14th Earl of Suffolk. She married, in 1807, her cousin, Sir Daniel Le Fleming, who had succeeded to her father's title the year before, and dying in 1821 was succeeded by his brother the Rev. Richard, Rector of Grasmere and Windermere.

Lord Sidney Godolphin Osborne died on the [illegible] inst. at his seat, Bettrams, Hampstead, where he had lived in retirement for a long time. His lordship was the only son of the 5th Duke of Leeds, by his second marriage with the daughter of Mr. Thomas Anguish, Accountant-General of the Court of Chancery. He was born in 1789, and was educated at Eton and Christ Church. He was half-uncle to the late and to the present Duke of Leeds.

The Dowager Lady Forbes, **of Newe, Aberdeenshire, died** on the 14th inst., at Chester House, Wimbledon. She was the daughter of Major Cotgrave, H.E.I.C.S., and married in 1800, Mr. Charles Forbes, of Newe, Aberdeenshire, a merchant in Bombay, who was created a baronet in [illegible]. By him she had issue four sons and a daughter. The eldest son, who married a daughter of Mr. H. L. Hunter, of Beech Hill, Berks, died in **1840, leaving issue a son, who became 2d baronet on the death of his grandfather in 1849, and who died at the early age of 19, in 1852, when the baronetcy was inherited** by the second son of the deceased lady.

Wills.—The will of H.R.H. the Duchess of Kent has been sworn under [illegible],000*l.*; **the Duchess Dowager of Cleveland, 800,000*l.*; Lady Harriet Wetherell-Warneford, 180,000*l.***

BIRTHS.—On the 15th inst., at Finborough Hall, Stowmarket, **the Lady Frances Pettiward, of a daughter—4th inst., at 34, Hill Street, the Hon. Mrs. Augustus Halford, of a daughter** —9th inst., at Pipewell Hall, Northamptonshire, the Hon. Mrs. O. Hambrough, of a son, stillborn—10th inst., at Windsor, the Hon. Mrs. Edwd. Wingfield, **of a son—16th inst., at 56,** Eccleston Square, the wife of **W. P. Adam, Esq., M.P., of a son** —6th inst., at Wiesbaden, **the wife of Lieut.-Colonel C. F. Maxwell, of a daughter.**

MARRIAGES.—On the 16th inst., at Petersham Church, the Rev. Henry Montagu Villiers, eldest son of the Hon. and Right Rev. the Bishop of Durham, and nephew **of the Earl of** Clarendon, to Victoria, second daughter of **the Right Hon.** Lord John Russell, M.P.—16th inst., at Morchard, Devon, the Right Hon. Lord Churston, to Caroline, second daughter of the late Sir Robert Wm. Newman, Bart., and sister of the present Sir Lydston Newman, Bart., of Mamhead—10th inst., at Lamesley, Colonel Sir David Wood, Bart., K.C.B., to the Hon. Miss Liddell, eldest daughter of Lord Ravensworth, of Ravensworth Castle, Durham, and Eslington, Northumberland.—9th inst., at All Saints', Knightsbridge, John, youngest son of the late Thomas Barrett Lennard, Esq., M.P., to Isabella Jane, second daughter of the late Sir John Lambton Loraine, Bart., of the county of Northumberland—17th inst., at St. James's Church, Piccadilly, Captain Blackett, Coldstream Guards, to Georgiana Frances Corbet, youngest daughter of the late Sir Andrew Corbet, Bart., of Acton Reynald, Shropshire—11th inst., at St. Alphege Church, Greenwich, Gustavus C. Cornwall, Esq., Secretary to the General Post Office in Ireland, son of John Cornwall, of Brownston House, Co. Meath, Esq., to Elizabeth Grace, youngest daughter of Sir William Cunningham C. Dalyell, Bart., of **Burns, Linlithgowshire—11th inst., at All Saints', Fulham,** the Rev. Edmund Batty, eldest son of William Batty, Esq., **of Woodham Lodge, Wandsworth, to Frances Beatrice, youngest daughter of Major General Sir Joshua Jebb, K.C.B.**

DEATHS.—On the 6th inst., at Artramont, in the county of Wexford, Susan, widow of the late Right Hon. Edward Pennefather, formerly Lord Chief Justice of Ireland, aged 75—[illegible] inst., at Rydal Hall, Westmoreland, Anne Frederica Elizabeth, **widow of Sir Daniel Fleming, Bart.,** and only daughter **of the late Sir Michael le Fleming, Bart.,** of Rydal Hall, aged 77—4th inst., in London, Sir James C. Anderson, Bart., late of Buttevant Castle, county Cork, aged [illegible]—[illegible] inst., at Blackheath, Lady Brown, the relict of the late Captain Sir Samuel Brown, R.N., of Vanbrugh Lodge, Blackheath, Kent—7th Feb., at Sydney, New South Wales, Eleanor Elizabeth, third daughter of Sir Alfred Stephen, Chief Justice, aged 21, and **shortly afterwards, on the same day,** Eleanor Martha, **mother of Lady Stephen, and widow of the** late Rev. William **Bedford, D.D., senior chaplain of Tasmania,** aged 7[illegible]—11th inst., **at Afon House, Mortlake, Surrey,** Anne, eldest daughter **of the late Edw. Willes, Esq., barrister, and grand**daughter of Judge Willes, aged 68—[illegible] inst., at Toul, in France, Isabella Frederica, wife of the Baron Victor d'Huart, and daughter **of the late Lieut.-Colonel William Granville Eliot, R.A.—13th inst., at Baskerville House, Worcester, Lieut.-Colonel Jasper** Taylor Hall, late of the Coldstream Guards, aged 63.

Markets.

COVENT GARDEN, April 20.

The supply of ordinary Vegetables is insufficient for the demand, and prices for things in that way are high. Cornish Broccoli continues to be furnished, and good samples of Lettuces, Endive, and Artichokes are received from France. New Grapes are offered, and fetch fair prices, and of Strawberries there is a tolerably good supply considering the season. Asparagus, French Beans, Green Peas, young Carrots, and new Potatoes may also now be obtained. Cucumbers are coming in plentifully. Cut flowers chiefly consist of Orchids, **Lily of the Valley, Chinese Primulas, Violets, Mignonette, Camellias, Heaths, and Roses.**

FRUIT.

Pine Apples, per lb., 8s to 12s	**Apples, per doz., 6d to 1s 6d**
Grapes, per lb., 8s to 12s	Oranges, per 100, 6s to 10s
Strawberries, p. oz., 6d to 1s	Lemons, per 100, 6s to 10s
Pears, per doz., 4s 6d to 8s	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 9d to 1s 6d	Celery, p. bundle, 1s 6d to 1s 9d
Green Peas, p. ½ sieve, 10s	Onions, p. ½ sieve, 1s 6d to 2s 6d
Greens, per doz., 6s to 8s	**Asparagus, p. bundle, 4s to 8s**
Cabbages, do., 2s to 3s	**Rhubarb, p. bundle, 9d to 1s 3d**
Potatoes, p. ton, 80s to 200s	Seakale, p. punnet, 1s 6d to 2s
— **per bus., 4s to 6s**	Shallots, per lb., 1s 6d
— **per cwt., 6s to 10s**	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 10d	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 4s to 5s	Mushrooms, p. pott., 1s 3d to 1s 6d
Cucumbers, each, 9d to 2s	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 3s to 4s	Savory, per bunch, 2d to 4d

POTATOES.—Southwark, Monday, April 15.

During the past week the arrivals coastwise and by rail have been more plentiful, and last week's prices barely maintained. The following are this day's quotations:—York Flukes, 130s. to 140s. per ton; Lincolnshire Regents, 100s. to 110s.; Dunbar Red Soil do., 140s. to 160s.; ditto do. Reds, —s. to —s.; North Berwick Regents, 12[illegible]s. to 13[illegible]s.; Fife, Forfar, and Perth do., 100s. to 115s.; ditto Rocks, 85s. to 95s.; ditto ditto Reds, 75s. to 85s.; French Whites, 60s. to 90s.; Belgian do., 75s. to 85s.; Dutch do., [illegible] to 80s.

HAY.—Per Load of Thirty-six Trusses.

Smithfield, Thursday, April 18.

Prime Meadow Hay	75s to 85s		Clover	98s to 115s	
Superior do. (old) ..	90	105	New Clover	—	—
Inferior do.	50	60	Do. second cut ..	80	100
New do.	—	—	Straw	36	44
Rowen	—	—			

Davis & Co.

Cumberland Market, Thursday, April 18.

Sup. Meadow Hay ..	114s to 120s		Inferior Clover ..	90s	100s
Inferior do.	70	10[illegible]	New do.	—	—
New do.	—	—	Straw	40	45
Superior Clover ..	120	126			

Joshua Baker.

Whitechapel, Thursday, April 18.

Fine old Hay	1[illegible]s to 10[illegible]s		Fine old Clover ..	110s to 120s	
Inferior do.	**60**	**95**	**Inferior do .. ..**	**90**	**100**
Prime New Hay ..	—	—	Fine 2d cut	80	105
Inferior do.	—	—	Inferior do.	—	—
Straw	38	42	Fine New Clover ..	—	—

COAL MARKET.—April 17.

Benton's West Hartley, 15s. 9d.; **Grey's West Hartley, 16s. 3d.; Lambert's West Hartley, 16s.** 6d.; Tanfield **Moor, 13s. 3d.; Walker Primrose, 12s. 9d.; Wylam, 16s. 6d.;** Walls End Eden, 16s. 9d.; Walls End Hetton, 16s.; Walls End Haswell's Hetton, 17s. [illegible]; Walls End Framwellgate, 16s. [illegible]; Walls End South Hetton, 17s. 3d.; Walls **End Cassop, 17s. 6d.; Walls End Hartlepool,** 1[illegible]s. [illegible]; **Walls End Hough Hall, 16s. 9d.; Walls End Shincliffe, 16s. 6d.; Walls End Thornley, 14s. 9d.; Walls End Thorpe, 17s.; Walls End Trimdon Thornley, 15s.; Carway and Duffryn** Anthracite, 21s. 6d.; Cowpen Hartley, 16s. 3d.—79 **ships at market.**

HOPS.—Borough Market, Friday, April 19.

Messrs. Pattenden & Smith report a much better de**mand for yearling Hops, as well as for the best grown 1860's, at improving prices.**

BRITISH WOOLS.—London, Friday, April 19.

Our trade is healthy but without excitement, **operations being carried on merely for the supply of current orders, which have been on the whole satisfactory of late—in fact, better than was anticipated.**

	s. d.	s. d.		s. d.	s. d.
South-down Hoggets	1 5 to	..	Leicest. Wethers	1 4 to	..
Half-bred ditto ..	1 6 —	..	Ditto Hoggs ..	1 6 —	..
Down Ewes ..	1 4 —	..	Combing Skins	0 10 —	1 0
Kent Fleeces ..	1 5 —	1 6	Blanket ditto ..	0 6 —	0 8
			Flannel Wool ..	1 0 —	1 6

METROPOLITAN CATTLE MARKET.

Monday, April 15.

We have a few more Beasts than on Monday last, trade is **consequently dull. Choice qualities, however, are not much lower. There is about an average supply of Sheep; the** demand is very limited, and it is difficult to realise late rates. Calves and Lambs are not quite so much in demand as they have lately been. From Germany and Holland there are 410 Beasts, 1[illegible]50 Sheep, 76 Calves, and 40 Pigs; from Scotland, 410 Beasts; from Norfolk and Suffolk, 2600; and 80 from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 8 to	5 0	Best Long-wools	5 4 to	5 8
Best Short-horns	4 6 —	4 8	**Do. Shorn .. ..**	**4 8 —**	**5 0**
2d quality Beasts	3 0 —	4 0	**Ewes & 2d quality**	**4 8 —**	**5 4**
Best Downs and Half-breds ..	5 8 to	6 0	**Do. Shorn .. ..**	**4 0 —**	**4 6**
Do. Shorn ..	5 0 to	5 4	**Lambs .. ..**	**7 0 —**	**8 0**
			Calves	**5 0 —**	**6 0**
			Pigs	**4 4 —**	**5 4**

Beasts, 3800; Sheep & Lambs, 20,030; Calves, 116; Pigs, 340.

Thursday, April 18.

We have a short supply of Beasts, but trade is dull, and Monday's prices are not fully realised. The number of Sheep is rather smaller than of late, the demand, however, is very limited, and they cannot all be disposed of. The Lamb trade is active, yet rates are not higher. Calves are rather lower. Our foreign supply consists of 202 Beasts, 500 Sheep, and 106 Calves. Milch Cows 130.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 8 to	4 10	Best Long-wools	5 4 to	5 6
Best Short-horns	4 4 —	4 8	Do. Shorn	4 8 —	4 10
2d quality Beasts	3 0 —	4 0	Ewes & 2d quality	4 8 —	5 2
Best Downs and Half-breds ..	5 8 —	5 10	Do. Shorn	4 0 —	4 4
Do. Shorn ..	5 0 —	5 2	Lambs	7 0 —	8 0
			Calves	5 0 —	5 10
			Pigs	4 4 —	5 2

Beasts, 870; Sheep & Lambs, 5160; Calves, 206; Pigs, 140.

MARK LANE.—Monday, April 15.

The supply of English Wheat from Essex and Kent to this morning's market was small, and all samples in tolerable **condition were cleared at the prices of this day se'nnight.** The attendance was good, and foreign Wheat met an improved demand at the rates of last week, excepting the inferior and out-of-conditioned new, which is difficult of disposal, and can only be sold at irregular prices. Barley is unaltered in value, fine qualities being in better demand. Beans are 1s. to 2s. per qr. dearer. Peas dull at former prices. The Oat trade is steady at the prices of this day se'nnight. For Flour there is a moderate demand at rather under the prices of this day week.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk .. White	36—66	Red	52—62
— — **fine selected runs .. ditto**	50—72	Red	54—68
— — **Talavera**	51—72		
— Norfolk	—	Red	—
— Foreign	50—78		
Barley, grind. & dist., 28s to 30s. .. Chev.	40—45	Malting .	38—40
— Foreign .. grinding and distilling	30—36	Malting .	40—42
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire .. Potato	26—28	Feed ..	20—25
— Irish .... Potato	26—28	Feed ..	21—24
— **Foreign** .... Poland and Brew	24—28	Feed ..	20—24
Rye	35—38	Foreign .	—
Rye-meal, foreign	—		
Beans, Mazagan .... 28s to 44s. ... Tick	[illegible]—48	Harrow .	28—46
— Pigeon .... 34s — [illegible]s .. Winds.	34—42	Longpod	—
— Foreign .... Small	40—50	Egyptian	—
Peas, white, Essex and Kent .. Boilers	38—44	Suffolk .	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign .	38—48
Maize .... White	—	Yellow ..	—
Flour, best marks delivered .. per sack	50—57		
— 2d do. .... ditto	38—50	Country .	38—50
— **Foreign** .... **per barrel**	30—35	Per sack	40—50

Friday, April 19.

The weather during the past eight days has been fine, with **cold easterly winds. In some** of the principal markets of the **kingdom increased firmness** has been observable in the Wheat **trade this week; but at the** same time there has been **a want** of activity. Some falling off in the arrivals from abroad may, however, now be looked for, particularly from America, whence

importations during the next two months will be comparatively small. Barley has not undergone any alteration in value. Prices of Oats have been fully maintained, and the late large arrivals having ceased, dealers evince more disposition to purchase at the extreme rates lately current, which have been occasionally exceeded. Beans in some markets have improved 1s. per qr., and are generally held firmly. The latter may also be said of Peas. Flour this week has been more pressed upon the market, and the sales effected have been rather below the previous currency. Since Friday last 35 vessels have been reported off the coast. The transactions have not been extensive, but there is rather more demand for Wheat, holders having reduced their pretensions. The arrivals of English grain, foreign Wheat, and Barley this week have been moderate, of Oats small. The attendance at this morning's market was not large, but included several country buyers, with whom a fair retail business was transacted in foreign Wheat at Monday's prices; English is unaltered in value. Spring Corn of all descriptions is steady at Monday's quotations.

ARRIVALS FROM April 15 TO April 19.

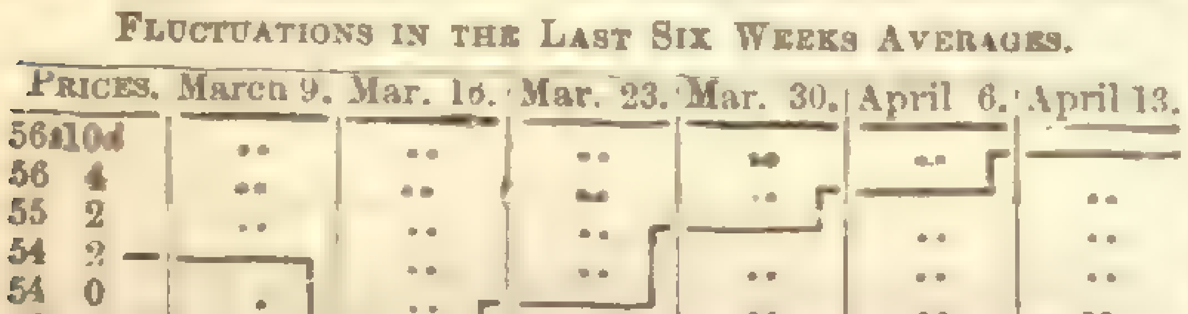
	Wheat.	Barley.	Oats.	Flour.
English ..	1120 qrs.	2030 qrs.	10 qrs.	1710 sks.
Irish	— „	— „	400 „	— „
Foreign ..	13320 „	2020 „	8360 „	{ 720 „ / — brls.

LIVERPOOL, Tuesday, April 16.—This morning's market has had a very fair attendance of buyers, and holders of Wheat showing more firmness a moderate consumptive business has resulted at the quotations of Friday last. Flour is little inquired for and is nominally unaltered in value. Indian Corn attracts little attention, and must be noted the turn in buyer's favour. Oats and Oatmeal support late rates in retail. Beans and Peas are both fully as dear. Barley slow sale. The market closes steady for Wheat, but dull for most other articles.

FRIDAY, April 19.—Since Tuesday the trade has been in a rather languid state, and purchasers being restricted to retail quantities for present use, there is scarcely any variation to report in prices of Indian Corn, Wheat, or Flour. Oats and Oatmeal quiet.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
March 9..	54s 2d	38s 11d	23s 6d	34s 6d	41s 8d	43s 8d
— 16..	53 8	38 7	23 9	34 10	40 1	41 0
— 23..	54 0	38 6	22 10	32 11	40 1	40 9
— 30..	55 2	37 11	23 4	36 7	40 11	43 4
April 6..	56 4	37 8	24 0	36 4	41 8	40 2
— 13..	56 10	37 5	24 1	35 11	41 6	40 0
Agg. Aver.	55 0	38 2	23 9	35 2	41 0	41 6

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



BUTTER MARKET.—April 19.

Best Fresh Butter .. .. 16s. per dozen lbs.
Second do. do. .. .. 14s. „ „
Pork, 4s. 8d. to 5s. 4d. per 8 lbs.

GENTLEMEN WANTING GARDENERS.—First-rate Men always recommended. Postages only charged. —For forms of application, address JAMES GARAWAY & Co, Durdham Down Nurseries, Bristol

WANTED, a WORKING FOREMAN, by a Market Gardener; one accustomed to Market Gardening around London preferred. Wages, 1l. per week.—Address, ISRAEL COLEMAN, Market Gardener, King St., Sandwich, Kent.

WANTED, by a gentleman, a first-rate GARDENER, who can grow first class Grapes all the year round. It is also necessary that he should be a good Pine, Melon, Peach, and Plant-grower, &c.—Apply to J. MEREDITH, Landscape Gardener, Vine Cottage, Garston, near Liverpool.

WANTED, for a Nursery and Florist Establishment within 10 miles of London, a PERSON well acquainted with the best and most expeditious mode of Growing Soft and Hard-wooded Plants for Market; a married Man from 25 to 45 years of age preferred, as he will live in the Dwelling House on the premises. This application offers great advantages to any person having a small capital for a start in business.—Apply to Mr. LEWIS SOLOMON, Fruiterer, Grand Row, Covent Garden, W.C., or Mr DODS, Nursery, Epsom, Surrey, S.

WANTED, A GARDENER.—A Man who is steady and industrious, and who understands the Management of a Kitchen Garden, Shrubbery, and the Growth of Outdoor Flowers in abundance. In 12 or 18 months there will be a large Greenhouse. 21s. per week wages at present, and when Greenhouse is erected, 24s.—Apply to THOMAS CLAPHAM, Royal Park, Leeds, Yorkshire.

WANTED, AN UNDER GARDENER, without incumbrance; whose Wife can take the charge of the Laundry.—Application to be made to Mr J. KELLETT, Widnes Docks, near Warrington.

WANTED, a respectable well-educated Youth, from 15 to 18 years of age, as an APPRENTICE to the NURSERY BUSINESS in the South of Scotland. One who has a slight knowledge of the Business will be preferred.—Application to be made to Mr. WILLIAM CUTHBERTSON, Printer and Stationer, Annan, Dumfries-shire, N.B. A small Premium will be required.—Annan, April 20.

Seed Trade.

WANTED, by a London House, a first-class SHOPMAN, about 30 years of age, and who has had some experience on the road. He must be of good address and be able to furnish unexceptionable testimonials.—A. Z., *Gardeners' Chronicle* Office, W.C.

WANTED, an active and industrious YOUNG MAN to assist in looking up Orders, Packing, &c., also to attend to visitors occasionally. One from the south preferred. —Apply by letter to WM. COLE, Nurseries, Withington, near Manchester.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 42, married, no incumbrance; a thoroughly practical and trustworthy person. Has lived as Head Gardener nearly 20 years with three families, where gardening has been carried on extensively, and is well acquainted with Forcing of all kinds of Fruits and Flowers, the Formation of Vine and other Fruit Tree Borders. Good Flower and Kitchen Gardener. Nearly six years' good character. Satisfactory reasons given for leaving. Wages, about 75l.—G. W., Mr Liddle, Post Office, Woodford, N.E.

GARDENER (HEAD).—Age 30, married; has a practical knowledge of his profession. Good references as to character.—J. H., Mr. Dods, Epsom Nursery, Surrey.

GARDENER (HEAD).—Age 31, married; understands his profession, including Pines, Vines, Orchard House, &c.—J. G., Paul & Son, Old Nurseries, Cheshunt, Herts.

GARDENER (HEAD).—Age 26, single; thoroughly understands the Forcing of Vines, Pines, Peaches, Flower and Kitchen Garden. Seven years' good character.—A. B. C., Mr. Cutbush's Nursery, Highgate, N.

GARDENER (HEAD).—Age 40, married; has a thorough knowledge of Gardening in every department. Can be well recommended.—G. S., Mr. Young's, Milford Nurseries, near Godalming.

GARDENER (HEAD).—Age 38, practical; thoroughly acquainted with the Culture of Plants and Fruits, Forcing, Kitchen and Flower Gardens.—H. EDMONDS, News Office, Clapham, S.

GARDENER (HEAD).—Age 30; perfectly understands his profession in all its branches. Good character. Can be strongly recommended.—S. W., Mr. Allman, Nursery, Horsham.

GARDENER (HEAD).—Age 30, married, no incumbrance; understands Vines, Pines, &c. Unexceptionable character. No single-handed place accepted.—Y. Z., Post Office, Folkingham, Lincolnshire.

GARDENER (HEAD).—Age 28; has had 14 years' practical experience in some of the best Establishments in England and Scotland; unexceptional character for ability, honesty, and sobriety.—S. T., Mr. Forsyth's Nursery, Rectory Road, Stoke Newington, N.

GARDENER (HEAD).—Age 32, married, one child; practical; thoroughly understands growing Fruits, Cucumbers, Melons, Grapes, Flower and Kitchen Garden, Stock if required. Two years' character.—C. S., Bedford Nursery, Hampstead Hill, N.W.

GARDENER (HEAD).—Single, aged 40; has had great experience in early and late Forcing of all kinds of Fruit, Vegetables, and Flowers, and likewise in the Management of Meadow Land. Four years' excellent character from his late employer.—G. S. F. Post Office, Southgate, Middlesex, N.

GARDENER (HEAD).—Age 34, married, no incumbrance; has a thorough practical knowledge of Early and Late Forcing Fruits, Flowers, and Vegetables, the Cultivation of Stove and Greenhouse Plants, and Management of Flower and Kitchen Gardens. Good references for character and ability.—J. C., Mr. Class, High Street, Slough.

GARDENER (HEAD).—Age 30, married, no incumbrance; has a practical knowledge of Flower and Kitchen Gardens, Early and Late Forcing Vines, Peaches, Strawberries, Cucumbers and Melons. Can have seven years' good recommendation from late employers.—S. M. A., Houndshill House, Stratford-upon-Avon.

GARDENER (HEAD, age 36).—GEO. S. DODS can recommend a Married Man, thoroughly competent to conduct the management of a nobleman's or gentleman's Garden, where Plants, Fruits, and Vegetables are required to be cultivated extensively.—GEO. S. DODS, Epsom Nursery, Surrey.

GARDENER (HEAD).—Messrs. J. C. WHEELER & SON, Nurserymen, Gloucester, can highly recommend a first class Gardener, age 35, married, no incumbrance. High wages are not so much his object as an opportunity of showing his skill.—Further particulars on application.

GARDENER (HEAD).—Age 35, married, no incumbrance; thoroughly understands Flower and Kitchen Gardens, Stove and Greenhouse Plants of every description. Seven years' good character.—F. C., Mr. Young's Nurseries, Milford, near Godalming.

GARDENER (HEAD).—G. COCKBURN, 37 years Gardener to the Earl of Mansfield, Caen Wood Gardens, Hampstead, London, N., can with confidence recommend a thorough practical experienced Gardener (age 34, married). Seven years' unexceptionable character from the gentleman he last served as Head Gardener.

GARDENER (HEAD).—Age 35, married, one child, native of Scotland; understands his profession, including Pines, Vines, Stove and Greenhouse Plants, Flower and Kitchen Garden. Can undertake the Management of Plantation and Land. No single-handed place accepted. No objection to Ireland. The highest testimonials as to character and abilities.—A. B., Post Office, [illegible]

GARDENER (HEAD).—Age 30, married, one child. The advertiser has had considerable experience in the Management of all kinds of Early and Late Forcing, including Pines, Grapes, Peaches, Orchard Houses, &c., and the general routine of Gardening. Has been a successful exhibitor at the metropolitan and other shows. Character for ability, &c., will bear the strictest investigation.—J. F., 6, Jane Street, Commercial Road, East Middlesex.

GARDENER (HEAD), OR GARDENER AND BAILIFF.—Married, two children, youngest 11 years; understands his profession, also Stock and Land. Wife can take charge of a Dairy. Highly recommended.—F. F., Mr. Neal, Seedsman, High Street, Wandsworth, Surrey, S.

GARDENER (HEAD), OR GARDENER AND BAILIFF.—Age 40; a first-class Grower of Grapes and other Fruits, Stove and other Plants, the Forcing of all Vegetables required; has had the care of Woods, Plantations, Timber Measuring, Pasture Land, Stock, &c., and the care of an Estate in general. Nine years' good character. Wife can Manage a Dairy.—E. S., 7, Cuthbert Street, Hall Park, Edgeware Road, W.

GARDENER.—In the prime of life, married; well versed in his profession. Three and a half years' excellent character.—J. BENNY, W. H. Botkin's, Esq., West Hill, Highgate, N.

GARDENER.—Age 35, single; has a thorough practical knowledge of his profession in all its branches, with two years' unexceptionable character, with other testimonials and references of the highest order, and has no objection to any part of England.—A. Z., Mr. Barnes, Camden Nursery, Camberwell, S.

GARDENER.—Age 30, single; understands thoroughly the management of Greenhouses and Glass generally, also Melons, Cucumbers, &c. Leaving his present situation in consequence of the death of his employer and the breaking up of the establishment. Has an excellent character of 13 years' standing. The neighbourhood of London preferred.—Apply to ROBT. F. DARBY, The Nurseries, Cirencester, Gloucestershire.

GARDENER.—Age 39, single; well understands his profession. Highly recommended.—J. F. [illegible] Sheering, Harlow, Essex.

GARDENER.—Age 26, single; understands [illegible] houses and Flower and Kitchen Garden [illegible] Cow. Two years' good character from last place.—[illegible] Shamley Green Post Office, near Guildford.

GARDENER.—Age 32, married, no [illegible] understands Vines, Melons, Cucumbers F[illegible] Garden. Can have a good character.—A. B., [illegible] Horsley, Ripley, Surrey.

To Noblemen and Gentlemen.

GARDENER.—In the prime of life; [illegible] disengaged; is desirous of offering his [illegible] gentleman requiring a good practical Man. [illegible] monials as regards his ability and integrity.—[illegible] Office, Woodford, Essex, N.E.

GARDENER (SINGLE-HANDED), [illegible] —Age 26, married; strong and [illegible] excellent character from his present [illegible] lived as Foreman for the last four years [illegible] hurst, Tunbridge Wells, Kent.

GARDENER (UNDER), in a noble[illegible] man's family.—Age 21.—X. Y., Mr. J. [illegible] seryman and Seedsman, Clapham.

GARDENER (UNDER).—Age 21; in a [illegible] or gentleman's Establishment where [illegible] Growing is carried on to some extent. Has a [illegible] of his profession. Good character.—JOHN WHA[illegible] Thorndon Hall, Brentwood, Essex.

To Noblemen and Gentlemen.

GARDENER, OR GARDENER AN[illegible] age 40, married, no incumbrance.—Mr [illegible] DERSON, Nurseryman, Pine-Apple Place, E[illegible] London, W., can with confidence recommend t[illegible] or gentleman a trustworthy business active [illegible] thoroughly practical in every branch of the pro[illegible] has had great experience in the re-arranging [illegible] Park and Pleasure Grounds, the Erecting of [illegible] Buildings, and cannot be surpassed in Pine, Grape [illegible] Growing, and the Cultivation of Fruit Trees in [illegible] House. Character and testimonials of 16 years [illegible] noblemen will be found to give great satisfaction.—[illegible] HENDERSON'S, Pine-Apple Place, Edgware Road, L[illegible]

To Noblemen and Gentlemen.

GARDENER, OR GARDENER AND STE[illegible] W. M., age 33, is open for engagement in [illegible] the above capacities, having studied Gardening [illegible] branches in the best conducted establishments [illegible] in Scotland, and for some time in one of the [illegible] establishments in England, where the practice of [illegible] is such as not to be excelled; the Formation, Plan[illegible] After-Management of Plantations, whether [illegible] obtain Timber for Sale, Shelter, Effect, or Ornament; [illegible] general routine of Management on the Home Farm, [illegible] presenting Arable and Pasture Land; the Management [illegible] Stock, whether for Feeding or Dairy purposes; [illegible] practical knowledge of the working of Smith's [illegible] vator; Draining, Formation of Roads, Carriage Drives, [illegible] Combined with the above W. M. possesses a thorough [illegible] knowledge of the Surveying of all kinds of [illegible] as generally come within range of the Manager; [illegible] Laying out, and Planting of [illegible] ordinary Architecture, &c.—For further particulars [illegible] Mr. GLENDINNING, Chiswick Nursery [illegible]

FOREMAN, in a gentleman's [illegible] thoroughly understands Early and Late [illegible] the Management of Stove and Greenhouse [illegible] &c. Can be highly recommended.—A. Z., P[illegible] Sutton, Surrey.

PROPAGATOR.—Will be disengaged [illegible] A thorough practical Man. Satisfactory [illegible] S. V., 7, Rose Cottages, West Fields, Barnes.

IMPROVER.—Age 20; has been under [illegible] Gardener five or six years.—A. B., Pavenham [illegible]

BAILIFF, GARDENER, OR [illegible] MANAGER.—Middle-aged; practically [illegible] the duties of his profession. Breeding and Rea[illegible] Stock, Sale or Purchase of Farm Produce, Mea[illegible] Sale of Timber, Repairs and Improvement of Fa[illegible] and Cottages, Collecting small Rents, &c. Sure[illegible] will be given.—JOHN KIRK, Royal Horticultural [illegible] Kensington, W.

To Gentlemen and Landed Proprietors.

BAILIFF.—Age 27, single; has had [illegible] perience in Scotland, and thorough kn[illegible] profession in all its branches. First-class tes[illegible] known gentlemen in the north.—L. M. S., [illegible] Haverstock Hill, N.W.

BAILIFF, &c.—Married, no incumbrance; [illegible] stands his business, and the Management [illegible] Arable and Grass Land, Roots, &c. on various soils. [illegible] Accounts. Understands Game. Wife can Manage [illegible] Poultry. References to several gentlemen.—A. [illegible] Pattenden & Smith, 247, High Street, Borough, S.

To Noblemen and Gentlemen.

LAND STEWARD OR BAILIFF.—Age [illegible] understands the Norfolk system of Farming [illegible] Heavy Soils, and the Management of Cattle.—[illegible] Osborne Arms, Franchise Street, Derby.

BAILIFF OR FARM STEWARD.—M[illegible] has had great experience in every branch [illegible] and general Management of an Estate, Drain[illegible] Timber, &c. Purchasing, Breeding and Selling [illegible] had the Management of a Home Farm. Refer[illegible] highest character.—R. S., 76, Cannon Street West.

TO FARMERS.—A gentleman, age 30, re[illegible] the army in consequence of injured health, [illegible] income, wishes to obtain board and residence [illegible] Is fond of farming occupations, and would be [illegible] make himself useful. Terms about 40l. a year [illegible] references given.—A., Eversfield Library, St. Leonards.

A YOUTH, well-educated, wishes to be rec[illegible] the family of a Scientific Farmer, Catholic [illegible] learn the business.—Mr. HILLES, 5, Albion Road, [illegible] London, S.

To Nurserymen and Seedsmen.

ASSISTANT CLERK, SALESMAN, [illegible] ASSISTANT.—Age 27, well acquainted [illegible] and Seed Trade, a first [illegible] the Nursery and Seed Trade, [illegible] no objection to assist in the [illegible] Budding or Grafting. Satisfactory references [illegible] ability, &c.—C. T., Post Office, Southampton Street, [illegible]

The Gardeners' Chronicle Newspaper.

SATURDAY, APRIL 27, 1861.

Card.

SAMUEL N. McGERROW, GENERAL HORTICULTURAL BUILDER, Knotty Ash, near Liverpool.
Reference permitted to the Nobility and Gentry throughout Great Britain and Ireland.

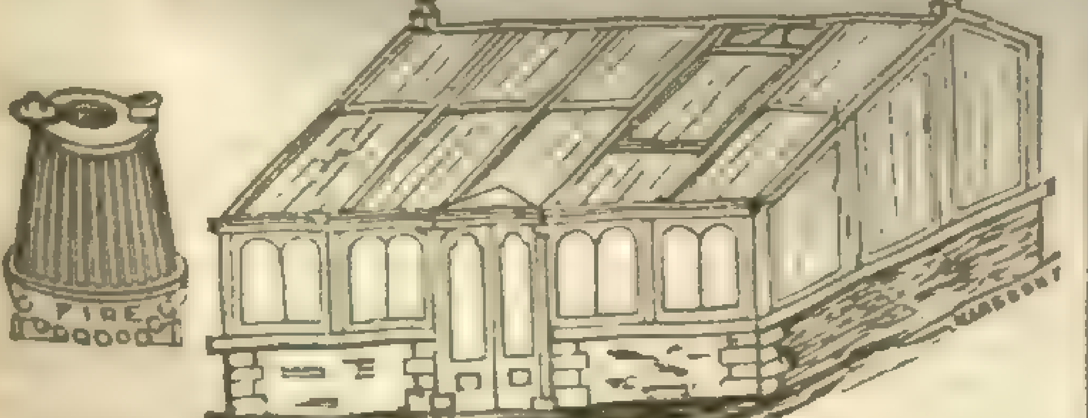
Greenhouses, Orchard Houses, &c.

H. FREEMAN'S Horticultural Works, Triangle, Hackney, N.E. Established 20 years. Substantially made Greenhouses, glazed, ready for fixing, 42 feet by 13 feet, ... ; ... feet by 13 feet, 28*l.*; 12½ feet by 10 feet, 15*l.* Orchard Houses 10 per cent. cheaper. A large assortment kept. Estimate given for Heating, or any branch in iron or wood.

JOHN TURNER, HORTICULTURAL BUILDER, begs respectfully to inform the nobility and gentry that he is now carrying on all the branches connected with Horticultural Works, viz., Conservatory, Greenhouse, Hothouse, Orchard House, Stoves and Pits on the most improved principles of heating and ventilation. Having had many years' experience in Horticultural Works, J. T. can assure those who may favour him with their work that the best materials only will be used.
Hot bed frames of all sizes, glazed and painted, always kept in stock at the Works, Cheetham Hill, Manchester.

HOTHOUSES FOR THE MILLION. — On the principle invented and patented by Sir Joseph Paxton, M.P., combining simplicity, cheapness, excellence, and durability, being capable of fulfilling, in the most perfect manner, all the requirements of Horticulture. Lean-to Houses, 30 feet in length, can be had for less than 17*l.* Span Roofs, 30 feet in length, for 33*l.*; and all other dimensions at equally low prices. Delivered free to any Railway Station round London.
Illustrated Circulars, with Lists of Prices, can be had on prepaid application to SAMUEL HEREMAN, 7, Pall Mall East, London.

West of England, Ireland, and Wales.



V. SKINNER (late Partner with J. WEEKS & Co.), HORTICULTURAL BUILDER and HOT-WATER APPARATUS MANUFACTURER. Establishments Heated on the ONE-BOILER SYSTEM. Plans and Estimates on application.
Bridewell Street, Bristol.

FELTHAM AND TRUSS, MANUFACTURERS OF HOT-WATER APPARATUS of every description for heating Conservatories, Offices, Churches, and Public Buildings, with TRUSS'S Patent Pipes and Elastic Joints.

The advantages of this new principle consist, not only in its cheapness, but in the expedition with which the work is executed, dispensing entirely with the present tedious and expensive mode of jointing, and supplying an important desideratum in the facility with which the Pipes may be disconnected and removed, or altered at pleasure, without injury to either Pipes or Joints, the arrangement being so simple as to be perfectly under the control of an intelligent labourer. Estimates given by the yard, including every charge, on application at their Offices,
53, Gracechurch Street, London, E.C.

J. VOKINS, late VOKINS & HURD, 2, York Place, Queen's Elm, Chelsea, S.W., HORTICULTURAL BUILDER AND HOT-WATER APPARATUS Manufacturer. Estimates forwarded.

WILLIAM HURD, HORTICULTURAL BUILDER and HOT-WATER APPARATUS MANUFACTURER, Radnor House, Radnor Street, King's Road, Chelsea.
TUBULAR BOILERS from 3*l.*

JOHN WARNER AND SONS, Crescent, Cripplegate, E.C.

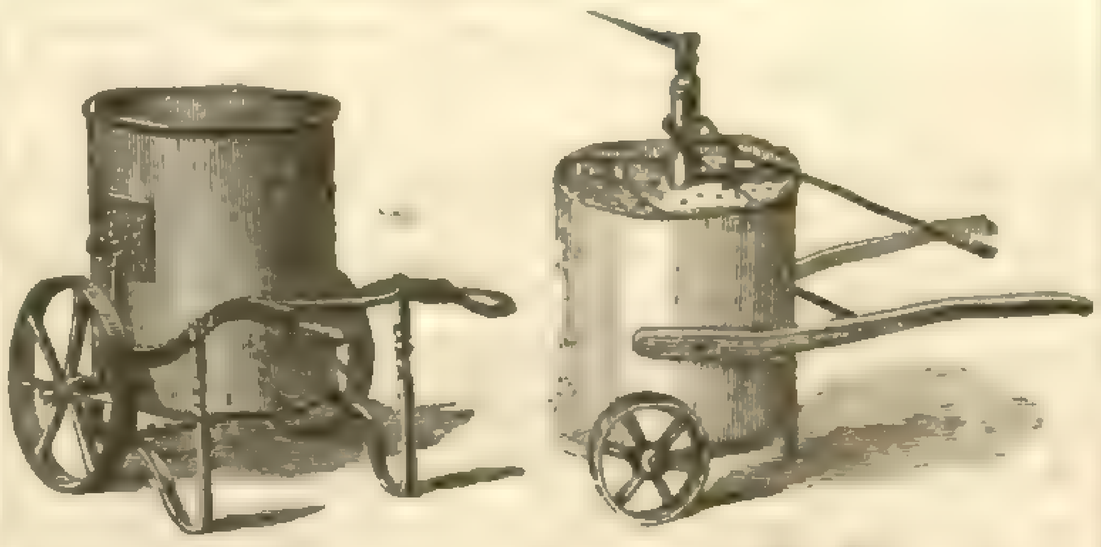
WARNERS' PATENT VIBRATING STANDARD PUMPS.

PATENT CAST-IRON PUMPS for Farms, Cottages, Stable Yards, &c., where the Well does not exceed 25 feet in depth; fitted with WARNER'S Patent Metal Bucket and Valve, which cannot clog in action. These Pumps can be made right-handed, left-handed, or with handle opposite the nose by removing four screws only.

Diameter.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead,	1 1 0
2½ ,, long	3 ,, 3 ,,	gutta percha	1 10 0
3 ,, ditto	3 ,, 6 ,,	or cast iron	2 4 0
3½ ,, ditto	3 ,, 6 ,,	flanged pipe	2 9 0
4 ,, ditto	3 ,, 6 ,,	as required.	2 18 0

2½ ,, short, with 15 feet of Lead Pipe attached, ready for fixing 2 0 0
2½ ,, long ditto ditto ditto 2 14 0

No. 35. The short-barrel Pump is very convenient for fixing in situations of limited height and space for the supply of Coppers and Sinks in Wash-houses, with soft water from underground tanks, or in Hot, Forcing, and Plant Houses; they may be fixed, when desired, under the stage.



No. 554½. WARNERS' GALVANIZED IRON TUB GARDEN ENGINE, with Registered Spreader, is strongly recommended for durability and low price, viz.:—

10 gallons	£2 15 0
16 ,, ...	3 15 0
24 ,, ...	5 0 0

Larger sizes may be had in either Wood or Iron.

No. 579. WARNERS' SWING GARDEN BARROW (holding about 35 gallons) is intended for all large establishments where much watering is done by the Watering Pot. By its use the Gardener will save much time and labour, particularly where the Tank, Pond, or Pump is at a distance from the Garden.
Price £2 10*s.*

BRASS SYRINGES, from 9*s.* to 21*s.*

May be obtained of any Ironmonger or Plumber in Town or Country, at the above prices, or of the Patentees and Manufacturers,
JOHN WARNER & SONS, 8, Crescent, Cripplegate, London, E.C.
☞ Engravings sent on application.

Garden Engines and Syringes.

J. TYLOR AND SONS, Warwick Lane, Newgate Street, London, E.C., beg to call attention to their very superior manufacture of GARDEN ENGINES and SYRINGES.

☞ Fig. 598. J. TYLOR & SONS' BARROW GARDEN ENGINE in best well painted Oak tub, fitted with J. TYLOR & SONS' improved Brass Pump, Universal Joint, and Registered Spreader, which answers the purpose of the separate rose, fan, and jet.
15 gallons .. £5 12 6 | 28 gallons .. £7 2 0
☞ Fig. 599. Ditto GALVANIZED TINNED IRON TUB.

8 gallons	12 gallons	16 gallons	24 gallons	30 gallons
£2 15 0	£3 5 0	£3 15 0	£5 0 0	£5 18 0

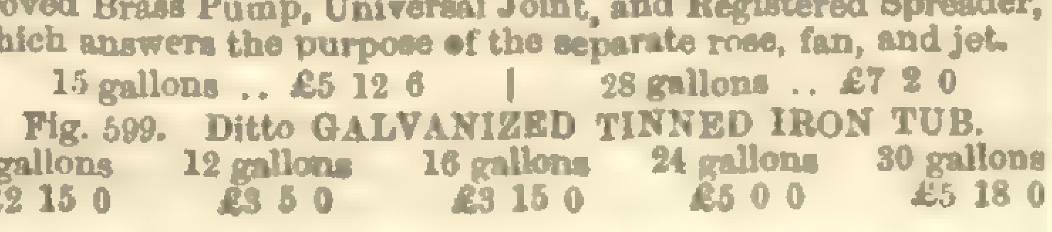


Fig. 618. No. 1. REGISTERED SYRINGE, with India-rubber suction tube, one rose and jet .. £1 8 0 each.
No. 2. Ditto ditto 1 2 6 ,,
Telescope Branch Pipe for ditto .. 0 10 0 ,,

Fig. 619. Large GARDEN SYRINGE, with one rose and jet .. .. 11*s.* 6*d.* each
,, 620. Middle Ditto ditto 10 8 ,,
,, 621. Small Ditto ditto 9 0 ,,
,, 622. LADIES GARDEN SYRINGE, with do. 7 6 ,,

Fig. 623. READ'S SYRINGE, with two roses and one jet, 17*s.* 6*d.*
,, 624. READ'S SYRINGE, with one rose and jet, 15 0
,, 625. Improved ditto ditto large 14 0
,, 626. Ditto ditto ditto small 13 0
Garden Engines and Syringes of J. TYLOR & SONS' manufacture kept in stock by Ironmongers and Seedsmen in every part of the United Kingdom.
J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

HOT-WATER APPARATUS FITTED in every description of Hothouses, Mansions, Churches, Chapels, &c., on the most approved principle by J. MEREDITH, Vine Cottage, Garston, near Liverpool.
N.B. First-class references may be had on application.

Horticultural Works and Hot-Water Apparatus Manufactory.
Kensal Green, Harrow Road, London, W.

JOHN TAYLOR AND SON beg to call the attention of the nobility and gentry to the very superior manner in which they Erect all kinds of Conservatories, Vineries, Greenhouses, &c., combining every improvement with elegance of design and durability of materials and workmanship.
Their VENTILATING APPARATUS for the Fronts and Roofs of Houses has given the highest satisfaction. Churches, Chapels, Schools, Entrance Halls, Public Buildings, &c., heated with Hot-Water Apparatus in a most economical and efficient manner.
J. T. & SON have great pleasure in referring to numbers of the nobility and gentry by whom they are extensively engaged.

JOSEPH HAYWOOD AND CO., MANUFACTURERS OF PRUNING AND BUDDING KNIVES, SPORTSMAN'S, and all kinds of POCKET CUTLERY.
Dealers in Gambia Garden Shears, Scissors, Syringes, &c.
Glamorgan Works, Sheffield.

Paxton Works, Sheffield, Established 1738.

SAYNOR AND COOKE'S warranted PRIZE PRUNING and BUDDING KNIVES, SCISSORS, &c.
Sold by all respectable Nurserymen and Seed Merchants in the three Kingdoms.

Bee-Hives.—PRIZE MEDAL AWARDED TO G. N. & SONS, FOR BEE-HIVES AND HONEY, AT THE PARIS EXPOSITION OF 1855.

NEIGHBOUR'S IMPROVED COTTAGE BEE-HIVE, as originally introduced by GEORGE NEIGHBOUR & SONS, with all the recent improvements, three glasses, and thermometer, price 35*s.*, securely packed for the country.
This unique Hive has met with universal commendation, and may be worked with safety, humanity, and profit, by the most timid; its arrangements are so perfect that the Honey may be taken at any time of the gathering season without at all injuring the Bees.
Early applications addressed to GEO. NEIGHBOUR & SONS, 127, High Holborn, W.C., or 149, Regent Street, London, W., will receive prompt attention.
Their newly-arranged Catalogue of other Improved Hives, with drawings and prices, sent on receipt of two stamps.
AGENTS:—Liverpool .. JAMES CUTHBERT, 12, Clayton Street.
,, Manchester . J. WILSON, 50, King Street.
,, Birmingham J. H. COTTRELL, 15, Bull Ring.
,, Dublin .. J. EDMONDSON & Co., 61, Dame Street.

J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25*s.* 6*d.* each.

IRON YARD AND GARDEN PUMPS
3 feet 6 inches under spout

2½	3	3½ inch
43*s.*	53*s.*	60*s.* each.

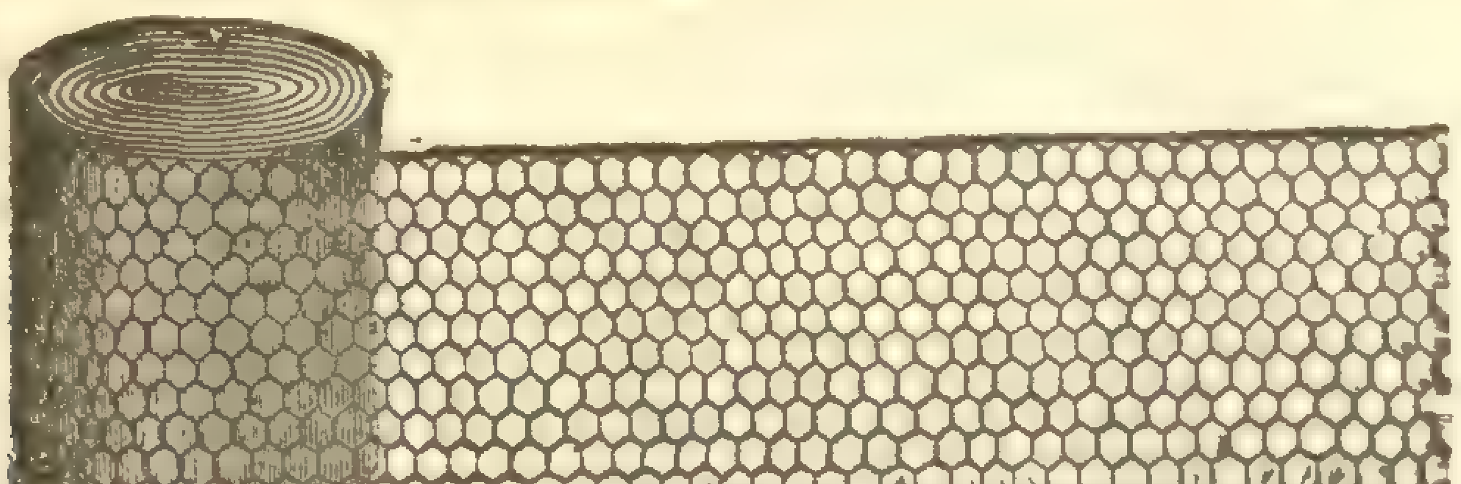
J. TYLOR and SONS manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.
PUMPS of J. TYLOR & SONS' manufacture to be obtained of Plumbers in all parts of the United Kingdom.
J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

BRADFORD'S PATENT WASHING MACHINE. —"My experience of your Machine fully bears out Mr. ——'s recommendation, and accounts for its very enviable reputation."—*Vide a Purchaser.*

For Private Families .. .. No. 2
Washing, Wringing, and Mangling.
For Family Mansion .. .. No. 4
For Hotel, Hospital, Workhouse, or other Public Institution.. .. .. .. No. 6
Full particulars as to the practical utility and universal approval of this invaluable machine free by post.
THOS. BRADFORD, Patentee, Cathedral Steps, Manchester and 63, Fleet Street London, E.C.
Works, Queen Street, Salford, Manchester.

NEW IMPROVED PREMIUM WIRE NETTING.

GREAT IMPROVEMENT WITH REDUCED PRICE.



Both the Galvanized and the Japanned Netting have been much improved. The Galvanized Netting is now galvanized after being made, and is thus much stronger and more durable, with an improved appearance. The Japanned Netting has a very durable and bright chocolate varnish coating and looks well. With these increased advantages the prices are much reduced, as under :—

PRICES PER LINEAL YARD, 24 INCHES HIGH :—

Size of mesh.	Mostly used for	Light. Japanned.	Light. Galvanized.	Medium. Japanned.	Medium. Galvanized.	Strong. Japanned.	Strong. Galvanized.	Extra Strong. Japanned.	Extra Strong. Galvanized.
2¼ inch	Hares, Dogs, Poultry	3*d.*	4*d.*	3½*d.*	5*d.*	4½*d.*	6*d.*	5½*d.*	7*d.*
2 inch	Game or Poultry Netting	3½*d.*	4½*d.*	4*d.*	5*d.*	5*d.*	6½*d.*	6½*d.*	8*d.*
1⅝ inch	Small Rabbits, Hares, &c.	4*d.*	4¾*d.*	4¾*d.*	6*d.*	5½*d.*	7*d.*	7*d.*	9*d.*
1½ inch	Smallest Rabbits	5*d.*	6*d.*	5½*d.*	7*d.*	7*d.*	9*d.*	9*d.*	11*d.*

These prices being a reduction from ½*d.* to 1*d.* on the 2¼-inch mesh, and 1*d.* to 2*d.* per yard on the smaller meshes, will, it is believed, still further stimulate the more general use of Wire Netting, which is already so extensively used for various purposes.

Quantities of 100 yards or upwards delivered free at nearly all the principal Railway Stations and Shipping Ports in England; and 200 yards or upwards delivered free to most parts of Scotland and Ireland.

☞ *Every description of Netting warranted to give satisfaction, and if not approved will be exchanged or may be returned unconditionally.*

J. B. BROWN & CO., 18, CANNON STREET, CITY, LONDON, E.C.

ST. PANCRAS IRON WORKS,

OLD ST. PANCRAS ROAD, N.W.

IRON HURDLES, FENCING, AND GATES.

THE PROPRIETORS OF THE ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, WERE AWARDED THE SILVER MEDAL of the ROYAL AGRICULTURAL SOCIETY for their IRON HURDLES AND GATES, which, by their peculiar construction, are more than twice as strong and durable as those in ordinary use.

Lists per post on application. Gates from 30*s.* to 500*l.*

The Hurdles can be seen in process of Manufacture at the Works.

GAME WIRE NETTING.

PROFESSOR VARNELL'S ENAMELLED AND WROUGHT-IRON STABLE FITTINGS.

These Patent Mangers and Stable Fittings obtained the Commendation and the Silver Medal of the Royal Agricultural Society of England and the Royal Agricultural Society of Ireland, are adopted by the Royal Veterinary College, and Professor Spooner of that Institution states that they should be used by all who value the health and comfort of their horses. They can be had plain, galvanised, or enamelled.

A Show Room is devoted entirely to every description of Stable Furniture, and full-sized stalls and loose boxes are erected for inspection at St. Pancras Iron Works.

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ST. PANCRAS IRON WORKS, OLD ST. PANCRAS ROAD, LONDON, N.W.,
OPPOSITE OLD ST. PANCRAS CHURCH.

GLASS WAREHOUSE.—ESTABLISHED 1750.

THOMAS MILLINGTON,

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REDUCED TARIFF FOR HORTICULTURE, PICTURES, AND DWELLINGS.

ORCHARD-HOUSE SIZES.
Supplied to Mr. Rivers and many others.

In. by In.		16 oz.	21 oz.
20 .. 12 20 .. 13	Common, per 100 feet,	13*s.* 6*d.*	18*s.*
20 .. 14 20 .. 15	Super ,,	16*s.*	23*s.*

SMALL SQUARES.

In. by In.	In. by In.	Per 100 feet.	Per foot.
6 .. 4 6½ .. 4½	8 .. 6 8½ .. 6½	Common 11*s.* 6*d.*	1¼*d.*
7 .. 5 7½ .. 5½	9 .. 7 9½ .. 7½	Super. 13*s.* 6*d.*	1½*d.*

SQUARES IN 100 AND 200 FEET BOXES.

Inches by Inches.	Inches by Inches.	Inches by Inches.	Inches by inches.	Inches by inches.		P. 100 feet.	P. foot.
10 .. 8	12½ .. 9½	13 .. 10	15 .. 10	13½ .. 11½	4ths.	12*s.* 6*d.*	1¼*d.*
10½ .. 8½	13 .. 9	13½ .. 10½	12 .. 11		3ds.	14*s.* 3*d.*	1½
11 .. 9	13 .. 10	14 .. 10	12½ .. 11½	14 .. 11	2ds.	18*s.*	2¼
12 .. 9	12½ .. 10½	14½ .. 10½	13 .. 11		1sts.	21*s.* 6*d.*	2¾
15 .. 11	15 .. 12	16 .. 13	24 .. 14	24 .. 16	4ths.	13*s.* 6*d*	1¾*d.*
16 .. 11	16 .. 12	17 .. 13	20 .. 15	20 .. 17	3ds.	16*s.*	2
17 .. 11	17 .. 12	20 .. 13	22 .. 15	20 .. 18	2ds.	19*s.* 8*d.*	2½
18 .. 11	18 .. 12	23 .. 13	24 .. 15	.. ..	1sts.	24*s.*	3
13 .. 12	20 .. 12	20 .. 14	20 .. 16	.. ..			
14 .. 12	22 .. 12	22 .. 14	22 .. 16	.. ..			

If less quantity than 100 feet is taken, a moderate charge made for package.

GLASS CUT TO ANY GIVEN SIZES NOT ON LIST.

16 oz.—4ths, 1¾*d.*, 2*d.*, and 2¼*d.* per foot.
,, 3ds, 2¼*d.*, 2½*d.*, and 3*d.* per foot.

21 oz.—4ths, 2¾*d.*, 3*d.*, and 3½*d.* per foot.
,, 3ds, 3½*d.*, 4*d.*, and 4½*d.* per foot.

HARTLEY'S IMPROVED PATENT ROUGH PLATE.

Not accountable for breakage.

GENUINE WHITE LEAD	32*s.* 0*d.* per cwt.	LINSEED OIL	2*s.* 7*d.* per gall.
ANTI-CORROSION PAINT	34 0 ,,	BOILED ,,	3 0
LINSEED-OIL PUTTY	8 0 ,,	TURPENTINE	2 10

BLACK, GREEN, and all other kinds of PAINTS, VARNISHES, BRUSHES, &c.

CUCUMBER GLAS...

24 inches long	..	2*s.* 0*d.*
22 ,,	..	1 10
20 ,,	..	1 8
18 ,,	..	1 6

16 inches long ...
14 ...
12 ...
Made to ...

BEE GLASSES.

4 inches diameter	0*s.* 6*d.*	each
5 ,,	0 8	,,
6 ,,	0 10	,,
7 ,,	1 1	,,
8 ,,	1 4	,,

9 inches diameter ...
10 ...
11 ...
12 ...
Not made ...

PROPAGATING GLASSES.

	s.	*d.*	
2 ins. diameter	0	3½	each
3 ,, ,,	0	4½	,,
4 ,, ,,	0	5½	,,
5 ,, ,,	0	6½	,,
6 ,, ,,	0	8	,,
7 ,, ,,	0	10	,,
8 ,, ,,	1	0	,,
9 ,, ,,	1	2	,,
10 ,, ,,	1	4	,,
11 ,, ,,	1	6	,,

12 ins. ...
13 ,,
14 ,,
15 ,,
16 ,,
17 ,,
18 ,,
19 ,,
20 ,,

LACTOMETERS, FOR TESTING THE ...
Four Tubes .. .. 4*s.* 6*d.* | Six Tub...
With Stands complete ...

Milk Pans and every description of G... purposes.

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TODD'S PROTOXIDE PAINT.—Th... largely used by the Clergy and Gentry, ... Builders, for Painting Stucco, Brickwork, ... Ironwork. It prevents the latter from corros... decay, and masonry from damp.

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TANNED GARDEN NETTING for ... Seed Beds, Fruits, Straw... Birds, &c., and as a Fence for F... 2 yards, 3*d.*; 3 yards, 4½*d.*; and 4 ya... quantity, may be had at CHAS. W... Greenhouse and Flower pot Sticks ... 1½, 4*d.*; 2, 5*d.*; 2½, 7*d.*; 3, 10*d.*; 4, 1*s.* ... Sticks Varnished, per dozen :—3 feet, 1*s.* ... 6, 3*s.* 6*d.* An allowance to Nurserymen.

BRITTAIN'S GARDEN NETTING.— ... injury done to Fruit Crops by Frost ... seasons has proved the absolute necessity ... tion to the Trees early in the year. For th... now say, without fear of contradiction, that ... in manufacturing the only Fabric which is ... tionable. Without unduly *nursing*, it effect... young germ, and does not impede the action ... circulation of air.—NETTINGS: No. 1, 5*d.*; No. ... the linear yard. PIECES, 30 yards long, 35 inches ... FANY, yard wide, 2½*d.* per yard; extra quality, ... Peel Street, Manchester.

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"FRIGI DOMO," a Canvas made of patent pre... and Wool, a perfect non-conductor of Heat and Co... wherever it is applied, a fixed temperature. It is ... all horticultural and floricultural purposes, for ... Fruits and Flowers from the scorching rays of the ... wind, from attacks of insects, and from morning ... be had in any required lengths.

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An improved make, 3 yards wide, 2*s.* 6*d.* per yard.
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THE HANDY LAWN MOWER. — FERRABEE'S Patent. It can be worked by a boy, and is the most [illegible] Machine yet produced. Price 4l. 10s., carriage-[illegible] Railway Station in England.

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GARDENERS and Others are respectfully solicited [illegible] PAYNE'S PATENT ADJUSTIBLE GARDEN [illegible], as they are sure to give the most entire satisfaction, [illegible] the hardiest, best finished, and most easily [illegible] implements in use; price 11s. each.

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F. AND G. ROSHER, CEMENT, BRICK, and TILE Merchants, beg to invite attention to their varied [illegible] of ORNAMENTAL GARDEN BORDER-EDGING TILES in Terra Cotta, Terro-Metallic ware, and Red ware. They present advantages over Box or Grass-edging in [illegible] harbour for slugs, &c., take up less room, and [illegible] laid, require no further attention. They may be [illegible] various patterns at F. & G. R.'s premises; Ward's Wharf, Upper Ground Street, Blackfriars, S.; and Kingsland Road Wharf, near the Canal Bridge, London, N.E.

N.B. Sketches of patterns sent by post on application. Garden Vases and Ornamental Flower Boxes for Windows and [illegible] in stock.

ORNAMENTAL PAVING TILES FOR CONSERVATORIES, HALLS, CORRIDORS, BALCONIES, &c., [illegible] durable as Stone, in blue, red, and buff colours, [illegible] forming a variety of designs.

Also WHITE GLAZED TILES, for Lining Walls of Baths, [illegible], Larders, Kitchen-ranges, &c. Grooved Terro [illegible] and other Stable Paving Bricks of great durability, [illegible] Red and White Wall Copings, Glazed Drain Pipes, &c. [illegible] at F. & G. ROSHER, at their premises as above.

TERRA COTTA.—Warranted to stand the most severe frost. This material is especially fitted for [illegible] Decorations, and for all exposed work, such as [illegible] Basins, Garden Vases and Statues, Balustrades, [illegible] for Terraces and Parapets, Terminals, Crosses for [illegible], Capitals of Columns, Brackets, Consols, Chimney [illegible] and Pots, and all other work exposed to wet, heat, and frost.

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JOHN FOWLER JUN., 28, Cornhill, London, E.C.—[illegible] FOWLER'S PATENT STEAM PLOUGH [illegible] at the above address. CATALOGUES [illegible] and Testimonials sent post free.

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for Cottage Houses, &c., to contain 50 gallons, 26s.; 80 gallons, [illegible] each; and 140 gallons, 37s., and fitted with tap, keeping the water perfectly sweet and clean; will not rust or corrode. Cisterns of all sizes.

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for Liquid Manure or Domestic Use, 3 inches diameter, 30s. and [illegible] each; Tail Pipe for same at from 10d. per foot.

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Reaping and Mowing Machines.

BURGESS AND KEY, 95, Newgate Street, E.C. Prize-sellers for the best Agricultural Machinery [illegible].

ROYAL AGRICULTURAL SOCIETY'S PRIZE REAPER, with BURGESS & KEY'S Screw Delivery Platform. Price [illegible].

TESTIMONIALS.

A great number of highly flattering Testimonials in favour of their Machines have been received, amongst them the following:—

From MR. JOHN RICHARDS, *Bailiff to* Dr. N. CARNE, *Dimland Castle, Glamorgan.*

"I hereby certify that I have for five years worked Messrs. Burgess & Key's Reaper, in my master's Home Farm, and [illegible] it when lent to tenants on the estate. During the above mentioned period the Machine has not cut [illegible] of all kinds of crops, with the same two knives [illegible] with the Machine. Dr. N. Carne having [illegible], the machine is now in the hands of his tenant, Mr. D. Thomas, of Llanwrst, and is in excellent order."

M'CORMICK'S REAPER for Manual Delivery. Price 25l.

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The last two Machines are fitted with a Sickle Edge Knife for Reaping, and the plain Allen's Knife for Mowing.

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PATENT GUTTA PERCHA SOLES.—IMPORTANT TO GARDENERS.—The Gutta Percha Company have the pleasure to acknowledge the receipt of the following letter from G. GLENNY, Esq., the celebrated Florist:—

"420, Strand, London.

"Gentlemen.—I have worn Gutta Percha Soles and Heels these two years, and being so much in a garden as I necessarily am in all weathers, and with the ground in all states, I would on no account be without them. As a matter of economy I would recommend gardeners to use them, for they may repair the worn part at all times by warming the material at the fire, and pressing it from the thick parts to the worn parts as easily as if it were so much dough. I think it the duty of all persons who must occasionally wet their feet to adopt a material that completely defies damp. Many a gardener would escape colds and rheumatism by the use of Gutta Percha Soles.

"Your obedient servant, G. GLENNY."

Every variety of Gutta Percha articles, such as Mill Bands, Tubing, Soles, Sheet, Pump Buckets, Fire Buckets, Bosses, Union Joints, Flasks, Bottles, Bowls, Chamber Vessels, Toilet Trays, Sponge Bags, Curtain Rings, Galvanic Batteries, Calotype Trays, &c. manufactured by the Gutta Percha Company, and sold by their wholesale dealers in town or country.

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UNIVERSITY COLLEGE, LONDON
LECTURES ON BOTANY

Professor OLIVER, F.L.S., will commence his COURSE on WEDNESDAY, May 1, at 4 o'Clock, P.M.

In the First Division of the Course, terminating about the middle of June, the class will be occupied with the General Principles of Structural, Physiological, and Systematic Botany.

The Second Division, terminating at the end of July, will be devoted to Instruction in the Characters of the Natural Orders, with constant reference to their Medicinal and other products; Exposition in detail of Vegetable Structure, the Development of Organs, Minute Anatomy, and the Chemical composition of Tissues and of the principal Cell contents.

During the Lectures, fresh specimens will be furnished to Students, and the Lectures will be abundantly illustrated by a very extensive series of Drawings and Diagrams, Herbarium and Museum specimens, &c.

Occasionally (probably on Saturdays) the class will have the opportunity of accompanying the Professor in Excursions.

Fee for a Summer Term, 3l.; Perpetual, 4l. A Course of about Twenty Lectures for advanced students, designed especially for candidates for Degrees in Science, will be commenced in October, Fee 1l. 10s. For perpetual attendance in both Courses, Fee 5l.

JOHN E. ERICHSEN, Dean of the Faculty of Medicine.
RICHARD POTTER, A.M., Dean of the Faculty of Arts and Laws.
CHAS. C. ATKINSON, Secretary.
April 22, 1861.

LIFE ASSURANCE.—SPECIAL NOTICE.—The next investigation into the profits of the Life Department of the SCOTTISH UNION INSURANCE COMPANY will be made at August 1, 1861, and parties taking out Policies before that date will participate in the division.

625 New Policies, for 304,[illegible]l., yielding 98[illegible]l. 6s. 2d. of new premiums, were issued during the year ending August 1, 1860.

Thirty days' grace allowed to renew Life Insurances and 15 days to renew Fire Insurances, during which time, on payment of the premium, the Company hold themselves liable.

No extra premium charged for members of Volunteer or Rifle Corps within the United Kingdom.

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A copy of the last report, forms of proposals, and prospectuses, may be had at the Offices, 37, Cornhill, London, E.C.; and of the Agents throughout the Kingdom.

FREDK. G. SMITH, Secretary to the London Board.
No. 37, Cornhill, London, E.C.

CRYSTAL PALACE.—SEASON 1861-2.—Tickets for the NEW SEASON, commencing Wednesday, the 1st of May next, and terminating the 30th April, 1862, are now ready for issue. They are of two classes, viz.:—

Two guineas, admitting free on all occasions.

One guinea, admitting free on all occasions when the price of admission to the Palace on the day is under 5s., but admitting on those days on which the price of admission is 5s. or upwards on payment of 2s. 6d.

The days already fixed on which the price of admission will be 5s. or upwards, are,

The Great Festival Performance of Haydn's Creation, on Wednesday, May 1.

The Twelve Opera Concerts, on Fridays, in May, June, and July.

The Great Flower-Show, on Saturday, May 18.

Season Tickets for children under 12 years of age will be issued at the uniform rate of half-a-guinea.

Tickets and the published programme of the season at the usual agents; at the Crystal Palace; or at 2, Exeter Hall.

By order. GEORGE GROVE, Secretary.

CRYSTAL PALACE.—SEASON TICKETS.—Intending Season Ticket-holders are respectfully invited to provide themselves with Tickets, and TO SIGN THEM before the opening day, in order that they may be spared from delay and inconvenience at the entrances to the Palace on May 1.

News of the Week.

IN the House of Lords on Friday, in answer to the Earl of ELLENBOROUGH, Lord WODEHOUSE said that HER MAJESTY'S Government, in accordance with their policy of strict non-intervention, had determined to leave the settlement of the Papal question to the Roman Catholic Powers, and, with regard to the Venetian question, had uniformly advised both Austria and Italy not to be the assailant, but to leave it to time to bring about a peaceable solution of the difficulty. On Monday the Wills of Personalty by British Subjects Bill, and the Post Office Savings Banks Bill were read a second time. On Tuesday, in answer to the Earl of CARNARVON, the Duke of NEWCASTLE stated that he had taken measures for remedying the abuses in the convict establishment in Bermuda, and he intended to reduce the number of convicts with the view of ultimately abolishing the establishment altogether. The Marriage Law Amendment Bill, on the motion of the LORD CHANCELLOR, was read a second time. On Thursday the Leases by Incumbents Restriction Bill, and the Bills of Exchange and Promissory Notes (Ireland) Bill were read a second time. The Post Office Savings Banks Bill passed through committee.

In the Commons on Friday, in answer to Mr. LAYARD, Sir C. WOOD expressed his regret that the Legislative Council of India should have sanctioned the introduction of a Bill in opposition to the report of the Indigo Commission, and stated that he had sent a despatch to India which would no doubt lead to the withdrawal of the measure. Mr. COWPER obtained leave to bring in a Bill to enable the Commissioners of Works to acquire the site for the erection of the new courts of justice. Mr. KINNAIRD obtained leave to bring in a Bill to provide additional means for the establishment and maintenance of reformatory schools in Scotland, and Mr. BRISTOW obtained leave to bring in a Bill to exempt the Volunteer force of Great Britain from the payment of tolls. On Monday the House resolved itself into Committee of Ways and Means on the CHANCELLOR of the EXCHEQUER'S financial statement. Mr. T. BARING examined the Budget in detail, and expressed his opinion that it would be impolitic and unwise to repeal the Paper Duties, which, if once lost, could not be re-imposed in case of emergency; and that it would be better to remit the war duties on tea and sugar, the increased consumption of which would ultimately recoup any temporary loss the Exchequer might sustain. A long discussion ensued, in which the Budget was supported by Mr. WHITE, Mr. BAXTER, Mr. DODSON, Mr. POLLARD URQUHART, Mr. W. EWART, Mr. NORRIS, Mr. BLACK, Mr. WARNER, and Sir J. PAXTON; and opposed by Lord R. MONTAGUE, Mr. STANHOPE, Mr. BLACKBURN, Mr. BAILLIE, Mr. LONGFIELD, Mr. R. LONG, Mr. BENTINCK, and Sir S. NORTHCOTE. The debate was then adjourned to Thursday. On Tuesday Mr. HENRY BERKELEY moved for leave to bring in a Bill for the protection of electors in voting for members to serve in Parliament. Sir C. DOUGLAS seconded the motion. As no other member rose to take part in the debate, the House immediately divided, when the motion was negatived by 279 to 154. A motion by Mr. T. DUNCOMBE for copies of the correspondence relating to the recent seizure of arms by the Moldo-Wallachian Government was opposed by Lord J. RUSSELL and negatived on a division by 119 to 33. Sir F. SMITH again called attention to the report of the dockyards commissioners, and was proceeding with his motion when the House was counted out. On Wednesday the University Elections Bill, moved by Mr. DODSON, was referred to a select committee on the recommendation of Sir G. LEWIS. Sir M. PETO moved the second reading of the Nonconformists' Burial Bill, the object of which was to allow the ministers of all sects of Dissenters to perform their funeral services in the burial grounds of the Church of England. Sir W. HEATHCOTE moved as an amendment that the Bill be read a second time that day six months. On a division the amendment was carried by 236 to 155. The Bill was therefore lost. The Common Law Procedure Act (1854) Extension Bill was withdrawn. On Thursday the adjourned debate on the order for going into Committee of Ways and Means was resumed, when the Budget was supported by Mr. M. GIBSON, Mr. MARSH, Mr. DUTTON, Mr. PEASE, Mr. BAZLEY, Mr. OSBORNE, and Mr. MAGUIRE; and opposed by Mr. S. FITZGERALD, Mr. BALL, Mr. FARRER, Mr. BEACH, Mr. HORSFALL, Mr. VANSITTART, Major HAMILTON, Major PARKER, Mr. MOFFATT, Mr. WHITESIDE, Mr. HALIBURTON, and Major EDWARDS. The debate was then adjourned to Monday.

Accounts from Warsaw inform us that the

Minister of Public Worship has prohibited national prayers in the churches of Warsaw, and closed some of the higher schools, but these rigorous measures have failed to intimidate the people. The negotiations with the leading men of Poland have been broken off, and the Russian army concentrated in Poland already numbers 80,000 men.

The Hungarian Chamber of Deputies, having been definitively constituted, held its first sitting on Friday. M. GHYCZY, the President, in his opening speech laid stress on the equality of the rights of all citizens and all nationalities of Hungary, and urged the necessity for maintaining the integrity of the country.

The debate in the Italian Chamber of Deputies on the reorganisation of the Southern Army was continued on Friday and Saturday, when Count CAVOUR explained the position of the Government in relation to Rome and Venetia, and said that they would not take the initiative in a war for their recovery. After some further explanations on both sides the discussion terminated in the adoption of a vote of confidence in the Government by a majority of 120, the numbers being 197 to 77. A serious breach subsequently took place between General CIALDINI and GARIBALDI arising out of the speech delivered by the latter on the preceding Thursday. The latest news however announces that a perfect reconciliation has taken place between GARIBALDI, Count CAVOUR, and General CIALDINI, and that it was brought about by the influence of a very high personage, who induced them to come to frank explanations and an open reconciliation.

A despatch from the United States contains the important news that civil war has commenced, and that Fort Sumter has surrendered to the Secessionists. It appears that General BEAUREGARD, the Commander-in-Chief of the Southern Army, having in vain summoned Major ANDERSON to surrender, opened fire upon the fort on the 12th inst. After a heavy and continuous bombardment of 40 hours from the batteries of Sullivan's Island, Cummings' Point, and Stevens' Battery, during which every building in the fort was destroyed by fire, Major ANDERSON struck the federal flag and unconditionally surrendered. No one appears to have been killed or wounded on either side, and the fleet which had been sent to Charleston by the Federal Government took no part in the conflict. Major ANDERSON and his men were conveyed to Morris Island as prisoners of war, and Major ANDERSON subsequently proceeded to Charleston where he is now the guest of General BEAUREGARD. An extra session of the Southern Congress has been summoned; 20,000 troops are concentrated in Charleston, and each Secession State has been summoned to send its contingent. This news has caused great excitement at Washington; the Volunteers, Militia, and the Regulars had been placed under arms, and telegraphic despatches have been received from every free state, assuring President LINCOLN of their enthusiastic support of the government with men and money.

A despatch from Shanghai of the 6th March, states that the Yang-tze expedition arrived at Nanking on the 21st February. Everything so far had proceeded satisfactorily. The frost continued at Tien-tsin. A famine prevailed at Pekin, and the insurgents were gaining ground. Accounts from Japan state that the English, French, and Dutch Ministers had returned to Jeddo, on the invitation of the Japanese authorities.

Home News.

THE COURT.—The Queen and Prince Consort, with the Princess Alice and other members of the Royal family, will return to Buckingham Palace this afternoon from the Isle of Wight. Her Majesty will remain in town three days, after which time, according to present arrangements, her Majesty and the Prince Consort will go to the White Lodge, Richmond Park, late the residence of the Prince of Wales, where they intend to remain for ten days. The Queen will then either return to Osborne or go to Windsor. On Sunday morning the Queen, Prince Consort, and Royal family attended Divine service at Osborne. The Rev. G. Prothero officiated. On Monday afternoon the Queen and Prince Consort, accompanied by the Princess Alice and Princess Beatrice, drove out in an open carriage. Her Majesty will hold a Privy Council on Tuesday next, at Buckingham Palace.

COURT ARRANGEMENTS.—The Queen will hold Drawing Rooms at St. James's Palace on Wednesday, June 19, and on Thursday, June 27. All persons attending the Drawing Room on the 19th of June will be expected to appear in mourning. Her Majesty's birthday will be kept on Wednesday, July the 10th, but there will be no Birthday Drawing Room.

COURT APPOINTMENT.—The Queen has appointed the Duchess of Wellington to be Mistress of the Robes, in succession to the Duchess Dowager of Sutherland.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of the First Lord of the Treasury in Downing Street.

LORD LIEUTENANCY.—The Queen has appointed Lord Kensington to be Lord-Lieutenant of Pembrokeshire, and the Duke of Sutherland to be Lord-Lieutenant of Sutherlandshire.

PARLIAMENTARY MOVEMENTS.—The Tynemouth election terminated on Tuesday in the return of Mr. Hodgson, the Conservative candidate, by a majority of 47 over Mr. Otway, the numbers being 421 to 374.—The election for Southwark, rendered necessary by the appointment of Mr. John Locke, Q.C., to the Recordership of Brighton, took place on Wednesday, when Mr. Locke was re-elected without opposition.—There is a vacancy for the Montgomery boroughs caused by the death of Mr. David Pugh.—Major Gordon Duff has retired from the representation of Banffshire from ill health. A requisition is in course of signature inviting Mr. Abercromby of Glassaugh to come forward on Liberal principles.

THE VOLUNTEER MOVEMENT.—A meeting of commanding officers was held at the Volunteer Service Club, St. James's Street, on Saturday, Viscount Elcho, M.P., in the chair. There were also present the Marquis of Donegal, Lord Grosvenor, M.P.; Lord Truro, Lord Radstock, Lord Bury, M.P.; Lord Ranelagh, the Hon. T. C. Bruce, Lieut.-Colonel Money, Lieut.-Colonel Wood, Major Creed, Captain Glover, Major Wilkinson, Captain Meller, Sir J. V. Shelley, M.P.; Lieutenant-Colonel McLeod of McLeod, Captain Templer, Lieut.-Colonel Bathurst, Captain Phillips, Lieut.-Colonel Colville, Lieut.-Colonel Hicks, Major Hughes, Lieut.-Colonel Macdonald, and Lieut.-Colonel Walker. The following resolutions were passed:—

"1. That with a view to the efficiency of the Volunteer force, it is desirable that brigade field days, as sanctioned by the War Office memorandum, of the 6th of June 1860, should be held by private arrangement between officers commanding corps in the metropolitan district. 2. That it is further desirable that field manœuvres on a more extended scale should be held at least once a year, in the course of the summer, at some convenient and suitable place. 3. That these field manœuvres should be organised by the War Office, and directed by military authority, the command being intrusted to some military officer specially appointed for the purpose, and that those corps only should be permitted to take part in these manœuvres which, after inspection, have been declared by the Inspector-General fit to do so."

Foreign.

FRANCE.—The Ministerial papers announce that orders have been transmitted to Toulon to complete the fitting out of the transports intended to bring back the troops in Syria. It is therefore inferred that the French Government will evacuate Syria, according to the stipulations of the last convention, by the 5th of June. The *Pays* denies the report that it was intended to withdraw the French troops from Rome. The *Moniteur* officially announces that Prince Napoleon, on learning that a prosecution had been commenced against the publisher of the Duc d'Aumale's "Letter on the History of France," addressed a letter to the Emperor, requesting that the prosecution might be stopped. It says, however, that "it has not been thought possible to accede to the Prince's wish by interrupting the course of justice." It has been currently reported through Paris that Prince Napoleon was about to leave for London to demand explanations from the Duc d'Aumale of some observations in the pamphlet, which appeared to the Prince injurious to his honour. A *Conseil de Famille*, however, has declared itself entirely opposed to such a step, and the Emperor is said to have expressed his approval of their resolution. M. Mocquard, Private Secretary of the Emperor, has addressed a letter to the papers denying the Duc d'Aumale's statement, that whilst the Duchess de St. Leu, the mother of the present Emperor, was entreating favours from Louis Philippe, Louis Napoleon himself was conspiring against him. He states that the Emperor's "sentiments at that time were so little opposed to the government of Louis Philippe that he applied to the King for permission to serve as a private in the French army, and that although when in exile or in prison, he wrote pamphlets containing unfavourable allusions to the government of the day, he never allowed himself to attack the person of the King, or any member of his family." The *Moniteur* of Tuesday contains the following article on Poland:—

"The late events at Warsaw have been unanimously commented upon by the French press, with the traditional sympathy which the cause of Poland [illegible] West of Europe. But these expressions [illegible] serve the Polish cause if they had [illegible] public opinion, by allowing it to be [illegible] of the French encourages hopes which [illegible] The generous ideas displayed by the Emperor [illegible] his accession to the throne, especially [illegible] the emancipation of the peasants, are a [illegible] desire to likewise realise the ameliorat[illegible] state of things in Poland. It is only [illegible] not be prevented from so doing by ma[illegible] nature as to place the dignity of the [illegible] Russian empire in antagonism with the [illegible] Sovereign."

It is currently reported that the Pope [illegible] will not send another Nuncio to Paris [illegible] has protected the Papacy at some cost [illegible] that a secretary of embassy will [illegible] Sacconi.—The Emperor reviewed [illegible] court-yard of the Tuileries, the 3d [illegible] of Paris, consisting of the 19th [illegible] and the 33d, 34th, 37th, and 7[illegible] Line, under the orders of General [illegible] altogether about 6000 men. On T[illegible] reviewed a division of the cavalry [illegible] champs.—The Bank of France has [illegible] two proposals which have been [illegible] parties in Constantinople and in [illegible] necessary guarantees to enable the [illegible] Marseilles which have lately suspended [illegible] sume business.—The opera of Charles VI. [illegible] in the theatre of Bordeaux on Friday [illegible] terval of 20 years, and produced an imme[illegible] The passage in which the Dauphin [illegible] "France shall recover her lost liberty" [illegible] with a tempest of applause, and the [illegible] that "the English shall never rule in France" [illegible] a scene of extraordinary excitement. The [illegible] have since forbidden the repetition of the [illegible] —The Emperor received on Sunday in [illegible] a deputation from the Royal Society for the [illegible] of Cruelty to Animals, consisting of M[illegible] Gurney, M.P., Mr. John Curling, Rev. M. [illegible] General Sir J. Scott Lillie. The deputation [illegible] His Majesty a statement touching the [illegible] schools at Alfort, Lyons, and other places [illegible] most cruel experiments were practised on [illegible] animal. They prayed his Majesty to aid in [illegible] making in England either to prohibit [illegible] generally, or rigidly curtail its improper [illegible] penalties. They stated that during [illegible] year, between March and July, on each Monday [illegible] Thursday at 9 o'clock in the morning, [illegible] wretched horses, previously bought at a low price [illegible] kept from 24 to 48 hours without any food whatever [illegible] "cast" on the ground, and rendered helpless; and [illegible] thereupon separate operations, some of them [illegible] most exquisitely painful [illegible] by no less than eight pupils, [illegible] 5 o'clock in the evening, [illegible] meantime the most excruciating [illegible] pupils practises upon the eyes, another [illegible] uses cupping, another removes a [illegible] operates for (imaginary) stone. The Emperor [illegible] his surprise at the existence of these [illegible] he had been ignorant, expressed himself [illegible] getically on them, and promised an [illegible] He expressed his great sympathy with the [illegible] views of the society, and the satisfaction [illegible] seeing the deputation, and there is reason [illegible] that the matter will not rest here.

SPAIN.—In the sitting of the Cortes on [illegible] Ministers, in replying to an interpellation [illegible] they had not permitted the publication of [illegible] of the Duc d'Aumale in Spain, as they [illegible] remain on good terms with a friendly [illegible] Duke of Montpensier has renounced [illegible] voyage to England. The Empress of Austria [illegible] expected at Cadiz, on her return from Ma[illegible] official journals deny the statement that [illegible] Government intends to reject the offer of the [illegible] of St. Domingo. The Minister for Foreign [illegible] had another conference with the Ambassador [illegible] who is said to have requested, in the [illegible] Government, a Spanish protectorate over [illegible] order to preserve the administrative and ju[illegible] of the republic.

BELGIUM.—It is said in official circles [illegible] Belgian Treaty of Commerce with France [illegible] on Tuesday at Paris.

SWITZERLAND.—It was officially noti[illegible] Federal Council on Friday that M. de [illegible] French Minister, will return to his post [illegible] May. The negotiations for the conclusion [illegible] of commerce between France and Switz[illegible] actively carried on.

DENMARK.—The Minister of Marine [illegible] the interest of the mercantile marine, [illegible] ordinance permitting the sailors lately [illegible] to be sent on leave of absence, part [illegible] once, and part later. The ordinance stipu[illegible] ever, that they may not go beyond the [illegible] the North Sea, in order that they may be [illegible] at the very shortest notice. Orders have [illegible] time been given for the fitting out of one [illegible] line, one frigate, and a war steamer.

FRANKFORT.—Confidential despatches have [illegible] dressed by Count Rechberg to the Austrian Am[illegible] at Frankfort, in which the latter is instructed [illegible] that the Diet should neither recognise the [illegible] "Kingdom of Italy," nor receive any Ambassador [illegible]

[illegible] The report that the representative of King Victor Emmanuel at Frankfort has already [illegible] from the Diet is contradicted.

Austria.—The Austrian Provincial Diet elected its members to the Council of the Empire on Saturday. All [illegible] belong to the Right, or Conservative side of the Diet. The *Official Gazette* of Monday publishes a decree appointing the hereditary representatives of the non-Hungarian Provinces in the Upper House. The decree reserves the appointment of the members for Croatia, Hungary, Slavonia, and [illegible] until the question as to the manner in which these provinces shall be represented has been settled. Among the members appointed are the Pro- [illegible] Superintendent, the three poets—Francis Grillparzer, Anastasius Grün, and Frederick Halm—and [illegible].

Hungary.—The Chamber of Deputies having been definitively constituted, held its first sitting on Friday. M. Ghyczy, the President, in his opening speech, laid stress on the equality of the rights of all citizens and all nationalities of Hungary, and urged the necessity for maintaining the integrity of the country. He expressed his regret at the absence of the representatives of Transylvania, Croatia, Slavonia, the military frontier, and the district of Fiume.

Zara.—The Diet of Zara has voted an address expressive of loyalty to the Emperor, and has elected members to the Council of the Empire.

Croatia.—The state of siege in the city of Fiume has been raised.

Venetia.—The Vienna journals assert that out of [illegible] Venetian communes 131 have regularly taken part in the elections of Deputies to the Council of the Empire. In the other communes, especially in the provincial towns, the elections remained without any result, and the *Austrian Gazette* of Wednesday states that the Central Congregation of Venetia has refused to send representatives to the Council of the Empire at Vienna.

Italy.—The great debate on the proposed reorganisation of the Southern Army terminated on Saturday in a vote of confidence in the Ministry. The following is a summary of the latter portion of the debate, the commencement of which was given in our last number:—

In the sitting of Friday Signor Liborio Romano defended the conduct of the Neapolitan army. General Bixio said that the Garibaldian officers of superior rank and those who were Deputies had resigned their military titles. He then proposed an order of the day insisting upon the forts being [illegible], even if they should be occupied by the National Guard. The army should speedily number [illegible],000 men, and the [illegible] should vote all the necessary supplies, and when they had [illegible] such an army they would be able to [illegible]. General Garibaldi proposed [illegible] the gratitude of the Chamber to the [illegible] appointed by decree of the Dictator, and requesting the Ministry to reconstruct and maintain the Southern army. Signor Cugia supported the decree ordering the formation of three divisions of Volunteers, and opposed the proposition of Garibaldi. On quitting the hall Count Cavour and General Garibaldi were cheered by an immense concourse of people. [illegible] expressed the desire of the people for a reconciliation between Garibaldi and Cavour. In the sitting of Saturday Signor [illegible] supported the order of the day proposed by Garibaldi. Count Cavour defended General Fanti's project of law, and declared that the Minister of War had no intention of wounding the feelings of the Garibaldian generals, whom the Ministry highly esteemed, and whose [illegible] would be productive of lamentable consequences. [illegible] defended the decree of April, ordering the formation of three divisions of Volunteers. He examined the orders of the [illegible] proposed by Garibaldi and Baron Ricasoli, and showed the [illegible] in the way of immediately placing the Volunteers on active service. If, he said, after the speech of General [illegible] the Government were to give him the command of the Volunteers, it would be a kind of declaration of war. The Government had frequently declared to Europe that the aim of the Italians was to complete the kingdom of Italy by the [illegible] of Rome, but that it would be done peacefully and with the consent of France. The Government had likewise declared that it would not take the initiative in a war for the recovery of Venetia. A spark might set all Europe in a blaze. England had positively declared that she would be against those who should provoke such a conflagration. It was therefore necessary to listen to the advice of friendly Governments in order to [illegible] between Italy and another Power. The Ministry [illegible] to the order of the day proposed by Garibaldi. He admitted the possibility of following a contrary policy; [illegible], it would be necessary to declare it openly. In such a case the members of the Cabinet, as Italians, would co-operate [illegible] possible means. General Bixio gave explanations respecting the resignation of the Garibaldian officers, which were [illegible]. General Fanti also gave some satisfactory [illegible], and it was then stated that the resignations [illegible] be withdrawn. General Garibaldi [illegible] he owed nearly all his successes to his [illegible]. He then put a question to Count [illegible] to the arming of the nation. Count Cavour, in [illegible] as far as the regular army was concerned, they [illegible] Central Italy, and one levy was ordered in [illegible]. A levy in Sicily also was under consideration. [illegible] required was almost completed. [illegible] batteries of artillery, and thanks to the [illegible] Power they had also a great quantity of [illegible] the Volunteers, the Government would [illegible] in order to make use of them at any opportunity. In case of danger of war the Volunteers would [illegible] and Garibaldi would be requested to take the [illegible]. [illegible] said he was not satisfied with these [illegible] from the interior and the exterior [illegible]. He insisted, therefore, on the reorganisation of the Southern Army. The Chamber then adopted the following order of the day, proposed by Baron Ricasoli, by 194 against 77 votes:—"The Chamber, having heard the declarations of the Ministry, and being convinced that the decree for the formation of three divisions of Volunteers will be faithfully [illegible], and that the Government will suitably provide for [illegible] Southern Army, and that the Government will know [illegible] and [illegible] our forces in an efficacious [illegible], being convinced that the Government of the King will actively occupy itself with the armaments for the [illegible] of the country, a duty which appertains to the Government alone, passes to the order of the day." In the sitting of Monday the Chamber agreed by a large majority to take into [illegible] the [illegible] of Garibaldi in reference to the [illegible] of the country. [illegible]

The *Turin Gazette* of Tuesday published a letter from General Cialdini to Garibaldi, recalling the friendship and admiration he had always possessed for him, but declaring that his last acts painfully affected him. He says:—

"You are not the man I thought; you are not the Garibaldi I loved. The charm is broken, and with it the affection that bound me to you vanishes. I am no longer your friend, and freely, openly go over to the ranks of your adversaries. You dare put yourself on a level with the King, and speak of him with the affected familiarity of a comrade. You presume to place yourself above our usages by presenting yourself at the Chamber in a strange fantastic costume. You place yourself above the Government by calling the Ministers traitors because they are not subservient to you. You place yourself above Parliament, and overwhelm with outrages the deputies who are not of your own way of thinking. You place yourself above the country, and [illegible] suits you. Well, General, there are men [illegible] all that, and I am one of them. I am a foe to all tyranny, whether it be clad in black or in red, and I will fight yours *à l'outrance* like any other. I am aware of the orders given by you and yours to Colonel Tripoti, that we might be received in the Abruzzi with bullets. I know the words spoken by Sirtori in Parliament, those that you yourself uttered, and, following them up to their conclusion, I arrive at the secret idea of your party, which aims at rendering itself master of the army and the country, threatening us, if unsuccessful, with civil war. I do not know what the country thinks of this; but I can assure you that the army fears not your threats; it is only afraid of your government. You have reason to boast of your great and marvellous enterprise, but you exaggerate its results. When we arrived you were at the Volturno, in a very bad condition. The fall of Capua, Gaeta, Messina, and Civitella del Tronto was not brought about by your operations. [illegible] Bourbon soldiers were beaten and dispersed by us. It is therefore incorrect to say that you have delivered the kingdom of the Two Sicilies. Our army and fleet took some part in the work of destroying more than half the Neapolitan army, and also took four fortresses. I believe I know the army sufficiently well to be sure that it shares the feelings of disgust and sorrow which the intemperance displayed by you and your party has raised in my mind."

Garibaldi has published a reply to this letter, in which he says:—

"Strong in my conscience as an Italian soldier and citizen, I will not condescend to justify myself against these accusations, as by so doing I should fail in respect to the King and to the army. I know nothing of the orders said to have been given by me to Colonel Tripoti. I gave orders that the Italian soldiers of the Northern Army should be received as brothers, although I knew that that army had come to put down the revolution, which, according to the words addressed by Signor Farini to Napoleon III., was personified in me. I believe that in my character as Deputy I have stated to the Chamber a few of the [illegible] which the Southern army has sustained at the hands of the Ministry. I believe I had a right to do so. The Italian army will find in its ranks one soldier more when it has to fight against the enemies of Italy. You are well aware of this. All that others may have said of me is a calumny. It is not true that when on the Volturno we were in a bad condition. As far as I know, the army has applauded the free and moderate words of the soldier Deputy, to whom the Italian honour has been an object of worship all his life. If any one is offended at me for speaking in my own name only, I wait calmly for satisfaction to be demanded for my words. I desire the establishment of a national monarchy."

The *Turin Gazette* also publishes a letter from General Sirtori, expressing regret at the publication of General Cialdini's letter, and giving some explanation in reference to his recent speech in Parliament, to which General Cialdini alluded. General Sirtori expresses his desire for concord, and says that Italy is personified in the Parliament and in the King. A letter from Colonel Tripoti has also been published, denying the assertion made by General Cialdini that orders had been given to receive the Sardinians in the Abruzzi with musket-shots. He declares that, on the contrary, Garibaldi enjoined him to receive the Sardinians as brothers. The Southern soldiers belonging to the garrison of Mondovi have also protested against the letter of General Cialdini, and arrests have been made in consequence. A perfect reconciliation has since taken place between Garibaldi, Count Cavour, and General Cialdini. It was brought about by the influence of a very high personage, who induced them to meet and come to frank explanations and an open reconciliation. Garibaldi and General Cialdini embraced each other as reconciled brothers. Garibaldi afterwards left Turin, and proceeded to the Villa Pallavicini. The papers state that great joy was manifested by the people at the announcement that Garibaldi and Count Cavour had become reconciled, and the majority of Garibaldi's former lieutenants and superior officers have expressed their satisfaction at the result. An attempt to excite a popular manifestation was made on Wednesday evening at Milan by about 100 Garibaldians, who ran shouting through the streets.—The following protest of the Pope against the assumption of the title of "King of Italy" by King Victor Emmanuel has been addressed by Cardinal Antonelli to the Foreign Ambassadors at Rome:—

"A Catholic King, forgetful of every religious principle, in contempt of all right, trampling under foot all law, after having by degrees despoiled the august chief of the Catholic Church of the largest and most flourishing part of his lawful possessions, now takes the title of 'King of Italy.' By this he wishes to put the seal on the sacrilegious usurpations which he has already accomplished, and which his Government has manifested the intention of completing at the expense of the patrimony of the Holy See. Although the Holy Father had solemnly protested against each fresh enterprise by which his sovereignty was attacked, he is not the less obliged to make a fresh protest against the act by which a title is assumed the object of which is to legitimise the iniquity of so many previous ones. [illegible] PENINSULA.—CARDINAL ANTONELLI."

The *Indépendance Belge* publishes a statement, which is at present unconfirmed from any other quarter, to the effect that the Pope, with the sanction of 61 cardinals, has constituted Cardinal Wiseman the representative of the papacy in the case of his death, or of his forced or voluntary abdication, and that during the interregnum which will probably elapse before the regular election of a new Pope, Cardinal Wiseman will administer the affairs of the Church under the name of Pius X., the seat of the Papacy being for the time transferred to England. Thirteen students have been expelled from the University of Rome. As a fresh protest, the tricolor flag has been hoisted by the students at the University.—The reactionary movements in the provinces of Naples have been completely suppressed. Rionegro, Melfi, Venosa, Barile, and Vico, the last retreats of the insurgents, have been occupied by Piedmontese troops. The disturbances at Cosenza are at an end. The Municipality has been expelled, the Prefect being suspected of sympathising with the Reactionists. The trial of those concerned in the conspiracy at Naples will shortly take place. The number of persons to be tried is 186. A popular demonstration in favour of Garibaldi took place on Wednesday in the Via Toledo. Order however was not disturbed. The Municipality of Naples has contracted a loan for carrying on public works.

Poland.—Prince Gortschakoff has read to the Council of Administration of Warsaw a letter from the Emperor, expressing to the authorities of the city his Majesty's thanks for the re-establishment of order. M. Trepow, Director of Police, has been dismissed, with a pension of 20,000fl., to be paid out of the Polish Treasury. Several arrests have taken place at Warsaw, in consequence of the singing of patriotic songs in the churches, and the Minister of Public Worship has strictly prohibited national prayers in the churches of that city. Two higher classes of the Radom School have been closed, and Prince Gortschakoff has issued a proclamation stating that no assemblage of people for political discussions will be tolerated, and that order can only be maintained by the civil officers of the State with the assistance of the military, but nowhere by delegates of the citizens. In the manufacturing town of Lodz the German manufacturers broke into the houses of their Jewish competitors on the night of the 21st inst., and entirely demolished their factories. The peasants in the immediate neighbourhood came to the assistance of the Jews, and a sanguinary conflict ensued. One person was killed, and many were wounded. The Cossacks have set fire to the city of Chelm for the purpose of plundering it, but the fire was extinguished. There are now in Warsaw 29,000 troops, and the whole of Russian Poland swarms with soldiery, the army already numbering 80,000 men. The troops are receiving the additional payment usually granted them when placed on a war footing. It is rumoured that a war-tax amounting to 6,000,000 fl. will be imposed upon the country. In spite, however, of the severe military government, the movement is extending to Volhynia, Lithuania, and Posen. The Government has decided on sending M. Platanoff instead of M. Wielopolski, to St. Petersburg. It is said that the Emperor himself will designate the persons who are to be called to official functions. The report that the Government had imposed a war contribution on the city of Warsaw for the maintenance of the troops is said to be without foundation.

Turkey.—The *Presse* and *Pays* assert that a Russian army, numbering 50,000 men, has been concentrated on the Pruth, and placed on a war footing in consequence of the fermentation prevailing in European Turkey. Austria has taken similar measures, but will not in any case order her troops to cross the frontier. The new financial scheme has been published. It differs widely from that proposed by Sir Henry Bulwer, and gives general satisfaction. It is stated that, at the request of the Turkish Ministry, the English Government has authorised one of the Commissioners of the Board of Trade, accompanied by an official conversant with accounts, to proceed to Constantinople to assist in an investigation of the finances of the Empire, with a view to their adjustment upon some defined basis. French officials are said to have already reached Constantinople on a similar errand.

Montenegro.—Omar Pasha arrived on the 23d at Antivari, and immediately proceeded to Trebinye. He has now been nominated to the command of the army in Roumelia. A special Conference of the Foreign Representatives is likely to be held on the affairs of Montenegro. The Consuls of the different European Powers resident at Mostar have, in pursuance of instructions from Constantinople, urged Prince Nikolaus-

to conclude an armistice with the Turkish troops, and to withdraw the Montenegrins from the siege of Niksiki. This town, which contains a population of 4000, is reduced to the last extremity, and fears are entertained that cruelties may be practised upon the inhabitants.

THE PRINCIPALITIES.—The Elective Assembly of Wallachia has been convoked for the 22d of April. The National Assembly of Moldavia has voted, by 84 against 16, for re-uniting the two assemblies of Moldavia and Wallachia, in order to deliberate in common upon a new law in reference to the relations between the peasants and their landlords, the definitive settlement of which question is considered urgent by the Assembly.

SYRIA.—A despatch from Beyrout, dated the 20th inst., announces that the English squadron arrived in the roads on the 19th inst. The English Admiral afterwards left Beyrout, accompanied by the English Consul, on an excursion to the mountain. Troops and money have been sent to Beyrout from Constantinople.

CHINA.—A despatch from Shanghai, of March 6, states that the Yang-tse expedition arrived at Nankin on the 21st February. Everything, so far, had proceeded satisfactorily. The frost continued at Tien-tsin. The French and the Hon. Mr. Bruce's despatches had been sent to Europe viâ Chefoo. A famine prevailed at Pekin. The insurgents were gaining ground, and business operations at Shanghai were restricted.

JAPAN.—The English, French, and Dutch Ministers had been invited and had returned to Jeddo.

COCHIN CHINA.—Advices from Saigon to the 14th March state that since the affair of the 24th Feb. there had been no further hostilities.

SIAM.—The Siamese Government have determined to send an Embassy to France.

UNITED STATES.—Hostilities commenced at Charleston on the 12th inst., and Fort Sumter has surrendered to the Secessionists. General Beauregard, on the approach of the Government vessel, demanded the surrender of the fort. On Major Anderson's refusal, Fort Moultrie commenced firing at 4 A.M. on the 12th inst. Fort Sumter replied vigorously. Seven Charleston batteries then operated against Fort Sumter. Major Anderson and his comrades, after a gallant struggle of 40 hours' duration, in which he sustained a heavy and continuous fire from the batteries of the Secessionists, which not only greatly damaged the fort, but also set on fire the wooden structures within it, struck his flag and surrendered to the revolutionists. No accounts are given of the casualties of the Federal forces. It is stated positively, however, that none of the officers of the garrison were wounded, and that none of the State troops were killed. The fleet off the harbour took no part in the conflict. Major Anderson and his men were conveyed to Morris Island, and subsequently Major Anderson proceeded to Charleston, where he is the guest of General Beauregard. Troops had commenced swarming into Charleston, and it was stated that 20,000 men were concentrated in that city. An extra Session of the Southern Congress had been summoned. The Southern Government had called on each Secession State for 3000 troops, except Florida, which was to furnish 1500. The citizens of the Arizona territory have held a convention, and have voted themselves out of the Union. Despatches describe Washington as in a frantic state of excitement. Business is half suspended. The Republicans are wild with indignation, and curse the rebels. The free states have telegraphed to President Lincoln, assuring him of their enthusiastic support with men and money. An intense bustle prevailed at the War Department. The Volunteers, Militia, and Regulars were under arms, and an attack on Washington was anticipated. The President is described as being calm and composed. The announcement that hostilities had broken out startled the public, but there was no panic. The Southern Commissioners have sailed for Europe, without having been officially received by President Lincoln. The steamers Atlantic, Baltic, Illinois, Ocean Queen, Fashion, Thomas Freeborn, Coatzacoalcos, and Yankee, had been chartered by the Government for the conveyance of troops. Orders had been issued by the Navy Department to have the Star of the West, Empire City, Wabash, Vincennes, Savannah, and Jamestown frigates, fitted for active service with despatch. The Powhattan frigate was to sail immediately under sealed orders. The chartered transports Baltic and Illinois, with 300 troops and a quantity of war material on board, and the cutter Harriet Lane, sailed on the 8th inst. under sealed orders. It was understood that the flying artillery, cavalry, and sappers and miners were to proceed to Texas, to co-operate with General Houston, for the restoration of the Federal authority in that State, while a portion of the fleet has to reinforce Fort Pickens and other posts on the Gulf coast.

BRITISH COLUMBIA.—Lady Franklin has arrived at Victoria. It was reported that the British Government had determined to build a naval depôt at Esquimault, and that 150,000 dols. was already set aside for that purpose. The miners were working as high up the Frazer river as Lytton City. The weather had been very favourable for their operations.

SAN DOMINGO.—A Spanish squadron, with 3000 men and war *matériel* of all descriptions, had left Havannah for St. Domingo. It is stated that an army of occupation of 7000 men would be sent from Havannah. The President of St. Domingo had issued a proclamation officially announcing the transfer of the Government to Spain.

Parliament.

HOUSE OF LORDS.

FRIDAY.—*State of Italy.*—The Earl of ELLENBOROUGH asked whether the government was engaged in any correspondence with the object of reconciling the spiritual independence of the see of Rome with the exercise of temporal sovereignty within the Roman territory of the King of Italy. The subject for the consideration of the House was not the past misgovernment of the Italian peninsula, but how the work so auspiciously begun could be best completed for the happiness of the Italians and the benefit of Europe. The means by which the unity of Italy had been brought about plainly showed the hand of Providence, but the keystone of the arch was wanting until Rome should become the capital of the new State. The acquisition of Rome, on account of its central position and ancient renown, would suppress local jealousies, and unite in one general feeling the whole of Italy, which would then constitute a nation. The occupation of Rome, however, by French troops precluded that unity, placed France in a false position, and did not even conciliate the feelings of the French clergy. It would be more advantageous both for France and the Pope that the present state of things should cease. The dignity of the Pope would be better consulted by the separation of his spiritual from his temporal authority, and by assigning him a liberal revenue, than by leaving him in possession of a nominal power and dependent on precarious offerings. If such alterations were to be made in a liberal spirit, the French clergy would probably be satisfied, and Rome might at once assume her proper position as capital of Italy. With regard to the relations of Austria and Venetia he felt that Europe owed much to Austria for her gallant conduct in the great war, and that she had only carried out the intentions of the Congress of Vienna in maintaining herself in Italy; but the time had at length arrived for her to reconcile herself with the Italian people. Not only was Venetia a cause of endless expense to Austria, and since the improvements in artillery, of comparatively small value as a strategical position, but the retention of Venetia by Austria threw Italy into the arms of France, whereas it ought to be the policy of Austria to make common cause with the Italians, and to look on Italy as her vanguard against French aggression. He deprecated, however, any interference of the Italians in Hungary, and said that he should consider any one desirous of raising a war in Hungary against Austria as criminal in the presence of Europe. For 45 years he had cherished hopes of Italian unity, and he rejoiced that he had been permitted to live to see those hopes and aspirations almost gratified.—Lord WODEHOUSE briefly stated the reasons why the Government had not thought it becoming or desirable for a Protestant country to take the initiative in the Papal question. Everything depended on the withdrawal of the French troops from Rome, and her Majesty's Government had not disguised their opinion that it was desirable those troops should be withdrawn. With regard to the Venetian question, the advice given to both parties was not to be the assailant.—The Earl of CLARENDON said that the Roman question was one of vital importance to Europe. Rome never could become the capital of Italy without the consent of France. He believed that the Emperor of the French would be extremely glad to recall his army from its present humiliating position at Rome, if it were not that he feared to compromise the independence of the Pope; and that his reason for giving permission to General de Lamoricière to take service in the Papal army was in the hope that the French army might thereby be ultimately withdrawn.—The Earl of DERBY entirely agreed with the remarks of Lord Ellenborough on the rights of Austria in Venetia, and the importance of removing all differences between Austria and Italy. He also heartily concurred with the principle of strict non-interference in the settlement of the Romish question laid down by Lord Wodehouse. To this country, considering the number of its Roman Catholic subjects, it was of the greatest importance that the Pope should be independent, and not subject to the dictation of any foreign Power; but the extent of his temporal power was entirely distinct from his independence. For some years the Pope had enjoyed only a nominal power, but until some solution of the present difficulties was found it would be impossible to urge upon France the withdrawal of her troops. He would not express so strong an opinion as that Rome should of necessity be the capital of Italy, as, in his opinion, it would have been better to form a north and south kingdom in Italy, in which case Rome would have lain between the two, and the solution of the question would have been easy. As, however, there was now only one Italian kingdom, it was a natural desire that Rome should be the capital, but it was a desire which created the greatest embarrassment. Whatever conclusion was arrived at, the importance of maintaining the real independence of the Pope should never be lost sight of. The House then adjourned to Monday.

MONDAY.—*Wills of Personalty by British Subjects Bill.*—Lord KINGSDOWN moved the second reading of this Bill, and said that its object was to amend the present law in reference to the wills of British subjects abroad. At present it was impossible for a British subject resident abroad to tell whether any will he made was in compliance with the law of this country, or was not invalid in consequence of a non-observance of certain forms upon which the person making the will had no opportunity of obtaining information. By the present Bill he proposed to render wills valid, whether prepared in accordance with the law of the country in which the testator was domiciled at the time of his death, or in accordance with the general law of England.—Lord WENSLEYDALE opposed the Bill; the LORD CHANCELLOR and Lord CRANWORTH supported it.—Lord ST. LEONARD's assented to the principle that a will should be valid if made in accordance with the general law of England, but dissented from the proposal that the will should be valid if executed only according to the laws of the country in which the testator was domiciled. The Bill was read a second time.—Lord STANLEY OF ALDERLEY then moved the second reading of the *Post Office Savings-banks Bill*, briefly explained its scope and object, and dwelt upon the utility of such a measure to the poorer classes of the country. Lord COLCHESTER did not oppose the Bill, as he thought, if it were carried out, it would be a very excellent measure. But it was not quite clear how rural postmasters were to be remunerated for the additional trouble cast on them, or how the money was to be transmitted.—Lord MONTEAGLE said the Bill amounted to a subversion of the present savings-banks, and that it provided no adequate machinery for conducting the new institutions. He also condemned the possible speculations of a Chancellor of the Exchequer with a capital of 40,000,000*l.*, which, with the knowledge he possessed, would resemble gambling with loaded dice. Lord REDESDALE feared that under the scheme which the Bill established the accounts could not be preserved from confusion.—The Marquis of CLANRICARDE anticipated that the measure would prove a failure, and increase the expense as well as labour of the Post Office. The Bill was read a second time. The *Lunacy Regulation Bill* was read a third time, and passed.

TUESDAY.—*Marriage Law Amendment Bill.*—The LORD CHANCELLOR moved the second reading of this Bill, and stated that the object of the measure was to remedy the evils at present arising from the uncertainty of the [illegible] between a Protestant and a Catholic.—After [illegible] Lords MONTEAGLE, DERBY, ST. GERMANS, [illegible] the Bill was read a second time. [illegible] *Bermuda.*—The Duke of NEWCASTLE, [illegible] NARVON, stated the measures which had [illegible] vestigate the truth of charges made by the [illegible] Bermuda hulk against the discipline and [illegible] convicts confined there. The recently [illegible] had received instructions to make a [illegible] into the system pursued at Bermuda, [illegible] Her Majesty's Government contemplated [illegible] diminishing the number of convicts at [illegible] view of ultimately abolishing it in that [illegible] Marquis of SALISBURY compared the establishment [illegible] with that in Bermuda, and showed the [illegible] former over the latter, which he believed [illegible] reason of its defective administration.

THURSDAY.—The *Leases, &c., by Incumbents* [illegible] and the *Bills of Exchange and Promissory* [illegible] were read a second time. The *Post Office* [illegible] after some preliminary conversation, [illegible] mittee.

FRIDAY.—*The Government of India.*—[illegible] sented a petition from the inhabitants [illegible] cutta and of Bengal proper, complaining [illegible] Government in India, and asked when [illegible] the measure relating to the Government [illegible] brought forward.—Earl DE GREY and [illegible] state the precise time at which it would be [illegible] noble friend in the other House to bring forward [illegible] to the Legislative Council of India; but the [illegible] forward state, and would be brought under [illegible] the House very shortly. [Left sitting.

HOUSE OF COMMONS.

FRIDAY.—Mr. LAYARD called attention to [illegible] dence respecting the *Indigo Planters in Bengal* [illegible] whether, notwithstanding the minute of the [illegible] Governor of Bengal on the report of the [illegible] sion, a Bill had been introduced into the Legislative [illegible] of India to enforce contracts for the [illegible] tural produce; and, if so, whether such [illegible] introduced with the sanction of the Government. Sir C. WOOD expressed his regret that the Legislative [illegible] had sanctioned the introduction of the [illegible] stated that he had sent a despatch to India expressing [illegible] opinion to that effect. He trusted therefore [illegible] withdrawn. *Volunteers at Elections.*—General [illegible] Palmerston if it was true that at the recent election [illegible] he was escorted to the Hustings by the Volunteers [illegible] it was the intention of Government to sanction [illegible] of Volunteers with their arms at elections.—[illegible] MERSTON admitted, as a general principle [illegible] improper that armed bodies should participate [illegible] He had found, in going from his hotel to the [illegible] that the Tiverton Volunteers wished to accompany [illegible] as there was no contest, he thought it [illegible] prudery if he objected to walk with them. [illegible] aside their weapons, they appeared [illegible] the quality of unarmed citizens. It was [illegible] to issue a circular stating that it was not [illegible] Volunteers should take part in any election. [illegible] In answer to Mr. HOPE, Mr. C. FORTESCUE said that a [illegible] was under the consideration of the Home Government [illegible] enable the Governor of New Zealand [illegible] assent of competent persons in the [illegible] confidence of the native population [illegible] deciding questions relating to [illegible] the ownership of lands. *Japan.*—[illegible] J. RUSSELL said that Mr. Alcock [illegible] had abandoned Jeddo on account [illegible] which had been pursued towards the [illegible] the refusal of the Japanese Government [illegible] protection.—Mr. COWPER obtained [illegible] enable the Commissioners of her Majesty's [illegible] site for the erection of *New Courts of* [illegible] offices belonging to the same.—Mr. [illegible] to bring in a Bill to provide additional [illegible] ment and maintenance of *Reformatory* [illegible] Mr. BRISTOW obtained leave to bring [illegible] Volunteer forces of Great Britain from the [illegible] The select committee on the *Public Offices* [illegible] nominated. The *Queensland Government* [illegible] second time. The *Queen's Prison, &c., Bill*, [illegible] *Bill*, the *Reading Charities Bill*, and the [illegible] *Bill* were read a third time and passed.

MONDAY.—*Agricultural Statistics.*—In [illegible] Sir G. LEWIS said that he proposed to address [illegible] county magistrates at quarter sessions to ask [illegible] in their opinion, it was desirable to use the [illegible] the purpose of ascertaining the acreage [illegible] agricultural crops in Great Britain for the [illegible] *Budget.*—On the motion for going into committee [illegible] Means, Mr. T. BARING said that it was [illegible] present moment that the House and the [illegible] perfectly understand our financial position [illegible] neither satisfactory nor safe to meet a deficiency [illegible] which were practically an increase of the [illegible] asked whether it was wise to remit taxation [illegible] mission would not make the taxation [illegible] of increased consumption, and when the [illegible] reimposed when once removed. If there was [illegible] prudence in dealing with our finances was [illegible] looking at the future, now, he thought, was [illegible] even over caution was a virtue. The Chancellor [illegible] chequer had taken credit in his estimate [illegible] for a payment of 7[illegible]0l. from China [illegible] not be wise to await the actual payment [illegible] the delay of which would at once convert the [illegible] into a deficiency. He urged the House [illegible] removal of any duty which would not give [illegible] revenue, unless there was a great reduction [illegible] Yet the Chancellor of the Exchequer, besides [illegible] Yet the Chancellor of the Exchequer proposed to repeal [illegible] penny of the income-tax, he could dispense with [illegible] It, as he had told them, he could [illegible] next consideration was how taxation could be [illegible] the remission, while it improved the prospects [illegible] would stimulate trade and increase the con[illegible] which would be the effect of a reduction of [illegible] duty upon tea. He begged the Government [illegible] matter, and said that if he was asked to say [illegible] Budget was safe, politic, or even honest [illegible] should be obliged to answer in the negative [illegible] expressed his unqualified approval of the [illegible] MONTAGU said that if there were really a surplus [illegible] was not the paper duty, but the [illegible] and sugar that ought to be repealed.—Mr. [illegible] concurring generally in the financial [illegible] Government, urged the necessity of reducing [illegible] Mr. STANHOPE opposed the remission of the [illegible] because he did not see that the Chancellor [illegible] had any surplus at all. If the paper duty were [illegible] with the income-tax would be 9d. instead [illegible] —Mr. DODSON saw no reason why he should [illegible] calculations of the Chancellor of the Exchequer [illegible] year, those of last year having turned out [illegible] —Mr. BLACKBURN examined some of the [illegible]

[illegible] the Budget rested, and urged the expediency of having a surplus actually in existence before taxes were repealed.—Mr. Pollard-Urquhart supported the repeal of the paper duty, which would, he said, be a great boon to Ireland.—Mr. [illegible] objected to the repeal of the paper duty, which would [illegible] the proprietors of the penny news[illegible].—Mr. W. Ewart [illegible] the Budget a wise and sensible [illegible].—Mr. [illegible] argued that the available surplus was [illegible] and that there was in truth a deficiency of revenue [illegible] that the speech of Mr. Baring was not [illegible] conclusion, and that he had not [illegible] opposition to the Resolutions of the [illegible] Exchequer.—Mr. Norris, Mr. Black and Mr. [illegible] supported the repeal of the paper duty.—Mr. [illegible] the Chancellor of the Exchequer of carrying [illegible] Free Trade to an extravagant length. It [illegible] that the great mass of the people would be [illegible] the repeal of the paper duty, whereas the [illegible] war duty on sugar would be a positive boon [illegible]. He asked what those who called themselves the [illegible] were about, why they were prepared to [illegible] arrangements of the Chancellor of the [illegible]. He could [illegible] but two possible objects for [illegible] Budget: one was to reclaim the wavering [illegible] portion of the supporters of the Govern[illegible]; the other was to defy, he would not say insult, the [illegible] of the Legislature. He denied that there was [illegible]; it was real, it would not be possible for the [illegible] Exchequer in another year to fall back upon [illegible] a large increase of the income tax.—Sir J. [illegible] that the repeal of the paper duty would be a very [illegible] to the consumers of paper, though he admitted that he believed the papermakers, as a whole, were against the repeal because it would interfere with their monopoly.—Sir S. Northcote said that the Budget had its political side and its financial side; the discussion had turned on the latter, and to that side he should confine himself. He believed that there was no real surplus, and that, taking the revenue as it [illegible] the re-imposition of duties, there was a [illegible] deficiency, the accounts laid before the House [illegible] that we had added to our debt last year [illegible], besides a large reduction of the balances in the [illegible]. Before revenue was thrown away, the House [illegible] know more both of the expenditure and revenue. He [illegible] into calculations regarding the finances of 1862-63, to [illegible] that they would leave a deficiency of revenue to the [illegible] probably of [illegible]l. In the condition of our trade, [illegible] of which showed a marked decline, and in the [illegible] foreign affairs, there might be reasons for a provisional Budget like the present; but this was not a time for introduc[illegible] the surrender of a large amount of revenue, and he [illegible] the House not to commit itself irrevocably to such a [illegible], since it must contemplate the possibility of [illegible] demands.—On the motion of Mr. S. Fitzgerald the [illegible] was adjourned. *Scottish Poor Law.*—Mr. Dunlop ob[illegible] to bring in a Bill to make provision for the disso[illegible] of combinations of parishes in Scotland as to the [illegible] of the poor.

[illegible] — *Cattle Show in the Parks.*—Mr. Cowper, in reply to Sir J. Paxton, stated that in compliance with the request of the Royal Agricultural Society he had given his consent to their holding an exhibition of stock in one of the metropolitan parks during the summer of 1862, so that foreigners who might visit the Great Exhibition might see what the British farmer could do in rearing stock of the best description. He had not, [illegible] in what park the exhibition should be [illegible]. *The [illegible] Statue.*—In answer to Mr. G. Bentinck, [illegible] his predecessor in office had given per[illegible] the statue of Sir Henry Havelock in Trafalgar Square at the end of 1857, and had also expressed his approval of the statue and pedestal in the beginning of the following [illegible]. For himself he might say that he had objected to the [illegible] of the pedestal, and had represented to Mr. Behnes, the [illegible], and the committee of subscribers, that he thought it [illegible] proportionate to the statue itself, and much too high for the situation where it was placed. *The Ballot.*—Mr. H. Berkeley moved for leave to bring in a Bill for the pro[illegible] of electors in voting for members to serve in Parliament. He sketched the [illegible] which were elected and the practices resorted to [illegible], quoted numerous passages from the evidence taken before the select committee [illegible] corrupt practices to show the extent to which bribery, [illegible] treating, and intimidation prevailed, and argued that the [illegible] of secret voting would prove an effectual cure for [illegible] and be an ample protection for the [illegible].—Sir C. [illegible] seconded the motion. The House immediately [illegible] when the motion was negatived by 279 to 154. *The [illegible] of Arms on the Danube.*—Mr. T. Duncombe moved for papers relating to certain arms conveyed last year under the [illegible], from Genoa to the East, and seized by the Moldo-Wallachian Government; and to the bringing back the said arms from Galatz to Genoa in her Majesty's ship [illegible].—Lord J. Russell objected to the production of the papers as inconvenient to the public service, observing that the arms were not desired by the Moldo-Wallachian [illegible], which were not in any way connected with Hungary. He had no desire whatever to interfere between Austria and Hungary: all he could do was to [illegible] that the Austrian Government and the Hungarian [illegible] might come to an agreement, that those promises of [illegible] which the former had given would be fulfilled, and that the Hungarians would find that they had such ample [illegible] for freedom of discussion and freedom of the press, and such guarantees for personal liberty, that they might [illegible] to live under the Government of the King of Hungary. On a division the motion was negatived by 119 [illegible]. *Select Committees.*—Mr. W. Ewart moved a resolution, that the number of members constituting Select Committees [illegible] to 7 or 9; and that they be chosen by the [illegible] of Selection on account of their acquaintance [illegible] the subject submitted to their consideration.—Sir [illegible] entertained some doubts as to the policy of the [illegible] upon which the motion was founded, and showed that there would be difficulties in applying it. The motion [illegible] without a division. *The Dockyards.*—Sir F. [illegible] attention to the report of the commissioners [illegible] into the control and management of her Majesty's naval yards, but before he had concluded his speech the House was counted out.

[illegible] — *University Elections Bill.*—On the order for [illegible] committee on this Bill, Sir G. Lewis expressed a [illegible] who had charge of it, would consent to [illegible] select committee. The Bill proposed that votes [illegible] the universities should be taken by proxy [illegible] personal attendance of electors who [illegible] at a [illegible] distance from the place of election [illegible] with.—Mr. Walpole said that the details [illegible] Bill would require much modification before the measure [illegible]. It was, therefore, extremely desirable that [illegible] be referred to a select committee.—Mr. Walpole [illegible] the Bill would create an entirely new constituency [illegible] the power from the resident electors and throwing [illegible] hands of country gentlemen.—Mr. Denman supported the principle of the Bill, but approved [illegible] to a select committee.—Sir W. Heathcote and [illegible] were also in favour of referring the Bill to a select committee. After a short discussion, the Bill was referred to a select committee.—Sir M. Peto moved the second reading of the *Nonconformists Burial Bill*, the object of which was to legalise the burial of Dissenters in Church of England burial grounds. He referred to the [illegible] entertained by the High Church party [illegible] who had been baptised by Dissenters, and deprecated the [illegible] which existed between different sections of the Christian community. He had taken no part in the agitation got up by the Liberation Society, and he believed that [illegible] with those of the Church Defence Association, had [illegible] to retard the progress of civil and religious liberty. The only object which he had in [illegible] the Bill was to remedy a grievance, and not to achieve a Nonconformist triumph.—Mr. Baines seconded the motion.—Sir W. Heathcote regarded the Bill as a most aggressive measure, the effect of which would be to hand over to Dissenters the [illegible] and user of the burial-grounds of the Church, and to legalise any sort of ceremony. Under those circumstances, he felt bound to move as an amendment that the Bill be read a second time that day six months.—Lord [illegible] said that in his opinion a practical grievance existed in country districts for which Parliament was bound to provide a remedy.—Mr. [illegible] opposed the Bill, believing it to be one of a series of measures which were intended to undermine, and destroy the constitution of the country.—Sir G. Lewis could not admit that there was any constitutional or fundamental objection to the second reading of the Bill, since there was on the statute book Lord Plunket's Act for Ireland legislating on the same subject. He thought however that the House should understand the precise nature of the grievance complained of. By the 68th canon a minister was bound not to suffer any delay in burying a corpse which was brought to him, according to the [illegible] of the Book of Common Prayer. The soil of the churchyard was the freehold of the incumbent, and if there was a common right of the parishioners to interment, any person who died in the parish might be brought to the parish churchyard, and the clergyman was bound to allow the interment, and to perform the burial service over the body, provided the deceased person was not excommunicated, had not laid violent hands upon himself, or had not received baptism. It was true that the Baptists who did not practise infant baptism were liable to be excluded, but he thought that clergymen should not be over nice [illegible] in their inquiries upon this point. He did not, however, think that the Dissenters had established a case to justify a measure like that proposed, and he could not give it his support.—Lord R. Cecil looked upon the Bill as a measure which was intended to encroach upon the Established Church quite as much as if it included a clause to allow Cardinal Wiseman to perform mass in Westminster Abbey.—Mr. Bright suggested that the House should read the Bill a second time, so as to introduce in committee such amendments or modifications as would make the Bill resemble that which had been passed for Ireland many years ago. He denied that it was the intention of Dissenters to undermine the Established Church. That operation, whenever it occurred, would, he believed, be brought about by its own members, and by the differences which now prevailed so extensively being brought to a crisis.—Mr. Newdegate opposed the Bill, and recommended that it should be withdrawn as unnecessarily offensive to the feelings of Churchmen.—Mr. Buxton thought the Dissenters had a serious practical grievance, and that they were entitled to the redress claimed.—Mr. Walpole said that the Bill proposed to redress the minimum of grievance by the maximum of inconvenience. The only grievance of which Dissenters could complain was that their dead might be separated from those whom in life they loved; and if any proposition were introduced by the Government which could meet that objection, it would have his support.—Mr. Baines said that the best course would be to withdraw the Bill, and [illegible] another to the details of which there would be no objection.—Sir M. Peto offered to withdraw the Bill if Sir W. Heathcote would withdraw his amendment.—Sir W. Heathcote declined to withdraw his amendment.—Sir G. Grey advised Sir W. Heathcote to reconsider his determination.—Mr. Disraeli expressed his surprise that the Government had not undertaken to deal with the matter. Instead of doing so, however, a Cabinet Minister had suggested the withdrawal of the amendment in order that the promoter of the Bill might have another opportunity of showing how unskilfully and unsatisfactorily he could deal with the question. The House then divided, when the amendment was carried by 236 to 125. The Bill was consequently lost. The *Common Law Procedure Act* (1854) *Extension Bill* was withdrawn. The *Railway Companies Mortgages Transfer (Scotland) Bill* was read a second time. The *Borough of Dublin Bill* was read a third time and passed.

Thursday.—*Austrian [illegible].*—In reply to Mr. Griffith, Lord J. Russell stated that it was true that [illegible] of the ex-Duke of Modena's troops had lately been placed on the Italian frontier of Venetia, but he had received an assurance from the Austrian Government that there was no intention on their part to make any attack upon the Italian kingdom.—Mr. Whiteside gave notice that, on a future day he will move a series of resolutions condemnatory of the existing system of *National Education in Ireland*. The adjourned debate on the order for going into committee of ways and means to consider *the Budget* was resumed by Mr. S. Fitzgerald, who contended that the Chancellor of the Exchequer had not dealt fairly and candidly with the House. He pointed out examples of what he considered to be unfair and deceptive statements, and questioned the accuracy of Mr. Gladstone's estimates of the expenditure for the current year, and his anticipations of the revenue. He could not understand the grounds upon which he had calculated that he would receive [illegible]l. from China, inferring from the details he read, and from the stipulations of the Treaty of Tien-tsin, that not one farthing of this sum could come into the Exchequer. With regard to the paper duty, he denied that the House was pledged to its repeal either by its resolution or by the Bill of last year; but it was deeply and solemnly pledged to repeal the Income-tax and the tea and sugar war duties and, if there was a real surplus of revenue, it should be applied to the remission of duties that would relieve the great bulk of the people.—Mr. M. Gibson said the estimated yield of the Excise and Customs had been honestly made in conference with the heads of those departments of the revenue. He complained that none of the opponents of the Budget had suggested any substitute. The Government had provided adequately for the public service, and had proposed a remission of taxation that would, in their opinion, be most beneficial to the general interests of the country. With respect to the 750,000l. expected from China, Lord Elgin and Baron Gros had told the Government that a sum of about 1,000,000l. would be paid during the financial year, which would be paid rateably to the Government and to the merchants, and, basing their opinion upon the statements of the only persons who were fit to guide them, the Government considered that at least 750,000l. would be received by the British Exchequer. He read returns of the trade in order to show that there was no ground for indulging gloomy anticipations; and, believing that they had a surplus of revenue, the Government were bound to propose some remission of taxation. He contended that in selecting that remission it would be impossible to overlook the paper duty, and that the Government had taken a bold, consistent, and honourable course. It had been said that the repeal of this duty would benefit only cheap newspapers; but he insisted that it was a landed as well a commercial question—that the agricultural interest would experience a relief by the removal of a tax which checked the expansion of the manufacture of paper.—Mr. Ball said that if there was to be any remission of duty, it ought not to be that on paper. He had ascertained that the papermakers objected to the remission of the duty as very hurtful to them. A real benefit would have been conferred upon the community by the remission of the duties upon tea and sugar or malt, which would have been more extensive, and, in the case of tea and sugar, the remission would likewise have been a relief to the agricultural interest.—Mr. Maguire said that taking off the duty upon paper would be a greater relief to the working classes than the removal of the war duties upon tea and sugar. [illegible] restrictions which hampered them.—Mr. [illegible] recommended the retention of the duty on paper, and the repeal of the war duties on tea and sugar, which would [illegible] a direct [illegible] to the country.—Mr. Black [illegible] thought that it was scarcely prudent to remove a tax of a permanent nature which pressed so lightly on the community as the paper duty.—Mr. Dutton said if there was any tax the repeal of which he should prefer to that of the paper duty it was the malt-tax, the reduction of which would be a great boon to the agricultural interest. He thought, however, that it would be better to accept the Budget as a whole.—Lord [illegible] said that, if there was a surplus, neither penny should be taken off the Income-tax or that the war duties on tea and sugar should be removed.—Mr. Frank [illegible] that the time had come for the repeal of the paper duty, which interfered with the education of the people.—Mr. Horsfall said they should look at the general taxation of the country, distinguishing between the ordinary taxation and the extraordinary, imposed to meet the extraordinary exigencies of the State, and he believed that [illegible] that the latter should be the first repealed.—Mr. [illegible] supported the [illegible] of finance laid down by Mr. T. Baring.—Mr. [illegible] the repeal of the paper duty would be a great benefit to the industrious classes.—Major Hamilton said the majority of the people of Scotland desired that the duties on tea and sugar should be taken off in preference to the paper duty.—Mr. Caird said that the last deficient harvest, and the prospects of the country as to supply of corn before the next harvest, would probably influence the calculations in the Budget.—Mr. Moffatt had very great doubts as to the accuracy of the estimates in the Budget, and whether there was any surplus of revenue. He dwelt upon the glaring failure of the small taxes upon commercial operations imposed last year, as affording ground for the doubts he had expressed, and suggested other reasons for questioning the existence of a surplus. Of the 750,000l. expected from China he believed, if justice was done, not 100,000l. would find its way into the Exchequer.—Mr. Whiteside commented on the ingenuity displayed in the Budget in the contrivance of a machinery to get rid of the paper duty, and to exhibit an imaginary surplus. As to the duty on paper, the Government had relied upon an abstract resolution. But the House was oppressed with abstract resolutions; there had been one on the subject of reform. Supposing the existence of a surplus, the Income-tax had been stigmatised by the Chancellor of the Exchequer as an immoral tax, which could not be said of the paper duty; why, then, should the former be retained and the latter remitted? So with the war duties on tea and sugar,—reason and humanity recommended their repeal rather than the paper duty. He adopted the character of the Budget given by Mr. Baring, that it was not an honest Budget.—Mr. Haliburton condemned the manner in which the poor were imposed upon by delusions and falsehoods on the subject of the expenditure necessary for the defence of the country. He asked whether any person could imagine that the tea and sugar duties and the paper duty stood on the same footing. To call this duty a tax upon knowledge was mere cant.—Mr. [illegible] said that the Budget, like all Budgets, dealt in anticipations. He believed there was a surplus of [illegible]l. and that there ought then to be a remission of taxation. The first tax remitted ought to be the Income-tax, and the next the paper duty. The honour of the House of Commons was, in his opinion, pledged upon this question; and he should support the Government in their proposal to repeal it.—Major Edwards had come to the conclusion that, instead of a surplus, there was a deficiency, and that we were not in a position to reduce taxation.—Mr. Maguire said the paper manufacture was a most important one; it was in an embarrassed condition, and that the House was bound by the promise made to the trade. He showed the pressure of the duty upon the manufacture of paper, which was almost crushed by it in Ireland. The abolition of the Excise duty upon paper would be one of the greatest boons conferred upon the country, and the obligation upon Parliament to repeal it was strong.—On the motion of Mr. Horsman, the debate was again adjourned to Monday.—The *Railway Companies Mortgages (Scotland) Bill* passed through committee.

Friday.—*Illness of the Speaker.*—A letter was read from the Speaker, stating that he was compelled to be absent on account of illness, but he trusted to be well enough to appear on Monday. Mr. Massey, chairman of committees, according to the standing orders of the House then took the chair. *Case of Captain Macdonald.*—In answer to Lord R. Cecil, and Mr. Maguire, Lord Palmerston said that no expressions could be too strong to stigmatise the conduct of the Prussian authorities at Bonn towards Captain Macdonald. The whole proceedings were of the most unfriendly character on the part of the Prussian Government. He thought the notoriety which this matter would acquire and the indignation with which this proceeding would inspire in every British subject would be a sufficient warning to the Prussians. *Syria.*—In answer to Sir F. Ferguson, Lord Palmerston said he did not consider it prudent to lay any papers on the table as to the future government of Syria. The question was not yet settled. *Cardinal Wiseman and the Pope.*—In answer to Mr. Newdegate, Lord Palmerston said he had seen the statement relative to the proposed elevation of Cardinal Wiseman to the Papacy, but her Majesty's Government had received no information bearing out the rumour. [Left sitting.]

City Intelligence.

Money Market, Friday.—British Funds: Consols closed at 91¾ for Money, and 91⅞ to 92 for the 9th of May; Bank Stock, 232; Three per Cents. Reduced, 90¾ to ⅞; New Three per Cents., 90¾ to ⅞; Thirty Years' Annuities, 1885, 15⅛; India Stock, 225 to 223; Ditto Five per Cent. Stock, 102½; Ditto Four per Cent. Debentures, 1858, 96½ to ¾; Ditto 1859, 96 to ¼, Ditto Bonds, 10s. dis.; Five per Cent. Enfaced Rupee Paper, 94; Exchequer Bills, 3s. dis.—Foreign: Brazilian Four and a Half per Cents., 1858, 87½; Ditto Four and a Half per Cents., 1860, 87¼ to ½; Chilian Four and a Half per Cents., 82½; Dutch Two and a Half per Cents., 64¼; Russian Four and a Half per Cents., 91¼.

Gazette of the Week.

Tuesday—Bankrupts.—J. Andrews, Desborough Place, Harrow Road, Paddington, Butcher and Cattle Dealer—W. Blagg, Bakewell, Derbyshire, Baker and Confectioner—R. Bellamore, Boon Gate and New England, Peterborough, Northamptonshire, Baker, Grocer, and Draper—H. [illegible], Pomeroy Place, Pomeroy Street, New Cross, Omnibus Proprietor—W. [illegible], Islington, Licensed Victualler—G. Gandy, Leckwood, Flint

shire, Ironmaster—S. H. Hanley, Stoke-upon-Trent, Staffordshire, Furniture Dealer, Tailor and Draper—G. Hickes, Portwood, Stockport, Cotton Manufacturer — T. Hughes, Digbeth, Walsall, Staffordshire, Licensed Victualler—G. H. Kirkpatrick, Liverpool, Draper—A. Moore, Wednesbury, Staffordshire, Chemist and Druggist—J. Neech, Norfolk, Miller and Coal Merchant — H. J. Norfor, Great Yarmouth, Norfolk, Builder—T. Owens, Holyhead, Anglesey, Baker, Grocer, Flour and Provision Dealer—S. Shepley, Chesterfield, Derbyshire, Chemist and Druggist—T. Swift and R. Wigfall, Manchester, Coal Merchants—F. Trumlett, Upton Helions, Devonshire, Miller—G. Trickett, Great Winchester Street, City, Metal Merchant and Factor—S. W. H. Wade, Leeds, Yorkshire, Wine and Spirit Merchant, and Produce Merchant.

FRIDAY—BANKRUPTS—J. Allen, Radcliffe Bridge, Lancashire, Smallware Manufacturer—J. T. Ballard, Leicester, Draper—W. S. Bartlett, Oldbury, Worcestershire, Grocer and Provision Dealer—P. Bates, Croydon, Surrey, Draper—W. Clark, jun., Southwark Bridge Road, and Rockingham Row, New Kent Road, Timber Merchant—F. Ellyett, Portsea, Hants, Hatter—W. Gibson, Leeds, Provision Merchant—J. Goddard, Earl Soham, Framlingham, Suffolk, Draper—S. Goosman, Great Grimsby, Lincolnshire, Innkeeper, Licensed Victualler, and Livery Stable Keeper — P. Haynes, James Street, Old Bethnal Green Road, Silk Manufacturer—J. Jukes, jun., Wharf Road, City Road, Manufacturer of Patent Furnaces—T. Mott, Salisbury, Cabinet Maker and Upholsterer—T. P. Peterson, Bristol and Downend, Gloucestershire, Scrivener, Dealer in Horses, Cattle, Corn, and Timber—F. Sanderson, Dublin, and Tottenham Street, Fitzroy Square, Coachmaker—J. Tonks, Birmingham, Victualler.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£26,802,960	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	11,437,102
		Silver Bullion	890,858
	£26,802,960		£26,802,960

BANKING DEPARTMENT.

Proprietors Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£10,272,938
Rest	3,183,435	Other Securities	17,956,119
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	4,757,607	Notes	6,763,975
Other Deposits..	12,604,075	Gold and Silver Coin ..	788,989
Seven day and other bills	693,904		
	£35,782,021		£35,782,021

25th day of April, 1861. M. MARSHALL, Chief Cashier.

Metropolis and its Vicinity.

The Exhibition of 1862.—The French Government have appointed a commission under the presidency of Prince Napoleon to organise and arrange in classes of science, arts, manufactures and raw materials the various articles intended to be sent by French exhibitors to the international display of next year. The Netherlands Minister of the Interior has invited the Societies for the encouragement of Industry at Haarlem, Amsterdam, and the Hague to nominate a commission, which, if approved by the Government, will represent the interests of exhibitors from that country. The Government of the Grand Duchy of Mecklenburg-Strelitz will communicate direct with her Majesty's Commissioners on all questions relating to the Exhibition; as will those of Hanover, Oldenburg, Brunswick, Saxony, Saxe-Coburg Gotha, and Saxe-Meiningen. Her Majesty's Commissioners, having had the subject of Registration of Patents and Designs under their consideration, have decided that, looking to the alteration which has been made in the law since 1851, it will be unnecessary for them to apply to Parliament for any alteration on this occasion. Her Majesty's Commissioners have named the 1st of May next as the date before which all applications for space must be sent in. By far the larger portion of the space which can be allotted to British exhibitors has already been applied for.

The Indian Famine Relief Fund.—The total sum remitted to the London committee down to Thursday night was upwards of 66,430*l.*, exclusive of the subscriptions in Manchester, Liverpool, Dublin, and Edinburgh, which probably by this time amount in the aggregate to more than 20,000*l.* The mail of last evening carried out to the Governor of Bombay 10,000*l.* from the Mansion House, which, together with 50,000*l.* despatched on three previous occasions, makes a total of 60,000*l.* The mail of last week took out more than 3000*l.* from Liverpool, a second instalment of 2500*l.* from Manchester, and 1500*l.* from Dublin. At the last meeting of the committee it was resolved to address letters to the Governors of the colonies, and to all the Ambassadors, Ministers, and Consuls abroad, requesting them to open subscriptions in aid of the Fund.

Roofing the Royal Exchange.—A meeting of the Gresham Committee was held on Tuesday to consider the ultimate mode in which the quadrangle of the Royal Exchange shall be covered, when a resolution was adopted empowering the Lord Mayor and the Master of the Mercers' Company to confer with the Committee of Lloyd's, with the view, if possible, to prevail upon them, in deference to public opinion, to waive the objections they have hitherto urged against roofing the building at the higher level on the ground that it would interfere with their light and air. The Lord Mayor and the Master are to be at liberty, if they think fit, to avail themselves of the advice and assistance of Mr. Tite, M.P., the architect of the Exchange, and Mr. Smith, the surveyor to the Mercers' Company, in the interview. Mr. Tite had previously addressed a letter to the Lord Mayor, protesting against the specimen roof recently erected over the area, and stating that the merchants' court could never be sufficiently ventilated by the louvres in such a roof; that a heavy fall of snow, which it would be difficult if not impossible to remove, would put the whole place in darkness, and that he could not see how the water was to be safely conveyed away. Sir Joseph Paxton and Mr. George Godwin had also addressed letters to the *Times* in condemnation of the specimen roof at the lower level. Sir J. Paxton in his letter stated that a roof properly constructed at the top of the building would not only leave the present ventilation uninjured, but in the hot weather of summer would much improve it, by creating a constant change of air; and that no gilding or ornament, or increase in the size of the glass, could make more tolerable an expedient which was vicious in principle, and the defects of which would be only more apparent the more they are made prominent by any attempt at embellishment. Mr. Godwin stated that if the present scheme was carried into execution, the architecture would be disfigured, and the city would get little more than a railway shed, with many serious inconveniences attaching.

The London Poor.—An influential meeting, called by the Lord Mayor in compliance with a numerously-signed requisition, was held on Thursday in the Council Chamber, Guildhall, to consider the causes of the late destitution among the labouring classes of the East-end, and in relation with that the subject of equalising poor rates. Alderman Sidney moved a resolution expressing deep regret that during the late severe winter many thousands of the labouring population of the metropolis were dependent for support on funds administered chiefly by the clergy and magistrates, instead of receiving assistance from the legally constituted authorities established for the relief of the poor, and expressing the opinion that the defects of the law require supervision and amendment. Mr. John Locke, M.P., moved that the best remedy for these defects will be to equalise the charges for the relief of the poor over an extended area of chargeability, so that every description of rateable property may be made to bear an equal share of the burden, and that petitions founded on these resolutions be presented to both Houses of Parliament. Both resolutions, with a petition to Parliament founded upon them, were adopted.

Attempted Murder at Islington.—On Sunday evening an attempted murder and burglary were committed at the residence of Mr. G. Higgins, butcher, 47, Chapel Street, Thornhill Road, Islington. It appears from the depositions of the servant girl, Mary Ann Redkison, which were taken by the magistrate at the hospital, that the family had gone out, leaving her alone in the house, when a young man, called Frederick Strugnell, about 18 years of age, who had formerly been in her master's employment, called on the pretence of paying her a visit. After a short time she heard a noise in the house and wished to call in the police, but was prevented by Strugnell, who attacked her with a knife or chopper, and inflicted such dreadful injuries that she immediately became insensible. The man with three others connected with him escaped by getting over the wall at the back of the house, taking with them an iron chest containing 105*l.*, the money of Mr. Higgins. The neighbours, hearing cries for help, broke open the door and found the servant girl lying senseless in the shop, with extensive injuries to her face and head. The nose was smashed into the face, the bones being completely broken. There was a dangerous wound on the forehead penetrating the skull, another on the back of the head, and lacerated wounds on the left arm and forefinger of the left hand. She was immediately taken to the hospital, where she remained for some time insensible from loss of blood. She rallied in the course of the night, and on Monday was in such danger that the magistrate attended at her bedside and took her deposition. She had previously stated to her master that the outrage had been committed by Strugnell, who was accordingly taken into custody, and whose guilt was conclusively established by the deposition which was made in his presence. The prisoner was then remanded for a week. The police have since succeeded in apprehending two of the other men concerned in the outrage. They are both butchers residing in the neighbourhood. They were taken before the magistrate at Clerkenwell on Thursday, when it was proved that they had been seen leaving the prosecutor's house on the evening of the robbery, and carrying an iron box corresponding in appearance to the one lost. The prisoners were remanded till Tuesday. There is now some prospect that the poor girl will survive, notwithstanding the dreadful nature of her wounds.

The Late Strike in the Building Trade.—Messrs. Trollope, of Pimlico, who, in 1859, had to bear the brunt of the then protracted strike, received last week a written request from their workmen to be put on the same footing as those employed by Messrs. Lucas and Kelk, which request has been acceded to.

The Public Health.—The Registrar-General's Weekly Return states that the total number of deaths registered in London in the week that ended Saturday April 20, was 1210. In the corresponding weeks of the 10 years 1851-60 the average number, corrected for increase of population, was 1225. The present return is therefore 15 below the average. During the week the births of 1007 boys and 954 girls, in all 1961 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1713.

Provincial.

Brecon.—The execution of William Williams, who was convicted at the recent assizes for the wilful murder of his aunt on the 19th October last at Fawyd den, Talgarth, took place on Tuesday morning in front of the county gaol, in the presence of a vast number of persons, who showed a feeling of commiseration for the culprit on account of his extreme youth and his lamentable state of ignorance. After hanging the usual time the body was cut down and buried in the precincts of the gaol.

Midhurst.—A monumental [illegible] memory of Otway the dramatist, [illegible] Johnson characterised as "one of the [illegible] British drama," has recently been [illegible] church of Trotton, of which place Otway [illegible] The cost of this somewhat tardy [illegible] has been defrayed by a descendant [illegible] who, several years since, held extensive [illegible] Sussex, comprehending the manor of T[illegible]

Newcastle-on-Tyne.—The iron-cased [illegible] Defence was successfully launched on [illegible] the building-yard of Messrs. Palmer [illegible] entering the water she took the ground [illegible] side of the river, but floated off on the [illegible] without damage. The Defence is 2[illegible] and 54 feet in breadth, with a me[illegible] tons, and engines of 600 nominal horse [illegible]

Plymouth.—A deliberate murder [illegible] circumstances of great ferocity, took [illegible] night, on board the Cork Steamship [illegible] lying in the Great Western Docks, [illegible] between three Irish seamen belonging to the [illegible] Minahan, Harrington, and Hart, and a [illegible] which Hart stabbed Minahan to the heart [illegible] of course instantaneous. Hart was taken [illegible] on the charge of murder, and Harrington [illegible] apprehended on the charge of assaulting the [illegible] man. At the inquest on Tuesday the jury [illegible] verdict of Wilful Murder against Hart, [illegible] mitted for trial at the assizes. The other [illegible] admitted as Queen's evidence.

Portsmouth. On Monday morning a [illegible] was made by a party of convicts employed [illegible] cable store of this dockyard on the two [illegible] had them in charge, and but for the prompt [illegible] which arrived there is every reason to believe [illegible] have ended in murder. It appears that [illegible] of the worst characters among the convicts [illegible] in the chain-cable store, in charge of [illegible] named Lawrence and Edson. The latter [illegible] unusual noise behind him looked round [illegible] convicts rushing at Lawrence and striking [illegible] iron hooks, about 3 feet long, with which [illegible] been moving the cables. Edson at once [illegible] the assistance of Lawrence, but was [illegible] powered; he however made his escape [illegible] assailants, and getting out of the building [illegible] for help. This door opens directly on the [illegible] alongside which is the gridiron for the [illegible] small craft, and on which at the time the crew [illegible] Majesty's revenue schooner Argus were [illegible] scrubbing her copper. The cries of the warder [illegible] heard and understood from the schooner's deck, [illegible] a few moments a party of 25 seamen, [illegible] officers of the vessel, dashed into the [illegible] cutlasses and confronted the convicts, [illegible] pletely alarmed by the sudden appearance [illegible] body of armed men. Three of them [illegible] building before they could be got [illegible] stood in advance of the rest and dared [illegible] do their worst. This extremity was, [illegible] by the convicts surrendering themselves [illegible] save life, for the seamen were getting [illegible] Lawrence, the warder, was found lying [illegible] injured, having received a severe wound in the [illegible] from one of the chain hooks, and several [illegible] on the face and body, but they are not likely [illegible] fatal. The convicts who had committed the [illegible] marched off to prison, and the three who [illegible] on the first appearance of the sailors, were [illegible] distance off, two of them armed with chain [illegible] the other with a hammer. They at first re[illegible] fender, but at length threw their weapons [illegible] ground, and were then taken to prison. [illegible] leader was a man named Simpson, who [illegible] keeper at Coldbath Fields Prison, and is [illegible] servitude for 20 years.

Pwllheli.—On Monday last Mrs. Jones [illegible] head Street in this town, the widow [illegible] Robert Jones, Wesleyan Minister, was [illegible] her son. She appears to have been atta[illegible] frying-pan and beaten about the head [illegible] covered with blood. The son, who has [illegible] the, went almost immediately to the [illegible] and gave himself into custody.

Woking.—On Friday night, the 19th [illegible] broke out on the common land belonging to [illegible] Necropolis Company, near the great Con[illegible] lishment at Knaphill. The flames spread [illegible] ordinary rapidity in the direction of P[illegible] nearly four hours elapsed before they exha[illegible] selves. It has been discovered that the fi[illegible] work of incendiaries.

Scotland.

Lord Elgin at Dunfermline.—On [illegible] week the Earl of Elgin arrived at Dunfermline [illegible] to Broomhall, his seat in the neighbourhood. [illegible] The municipal authorities made great pre[illegible] receive his lordship at the railway station, [illegible] arrival presented an address eulogising the [illegible] which his lordship had conducted the va[illegible] missions in which he had been employed, [illegible] especially those of China and Japan. [illegible] replied in a speech of some length, in which [illegible] capitulated the different treaties he had [illegible]

[illegible] negotiating, and took some credit to himself [illegible] amount of benefit he considered they were calculated to confer on the country. The following is an extract from his speech :—

Gentlemen, I have been for many years, very much, [illegible] much of a wanderer, but I have not been an [illegible] from this country from choice. When I first entered [illegible] life in 1841 I little expected that duty would call me [illegible] from this country. I was received in the House of [illegible] with that courtesy which is so uniformly extended [illegible] that great assembly, to a new member who shows a [illegible] to take an earnest and patriotic part in its deliberations. Before I had been many weeks a member of it, I sustained a calamity which not only deprived me of an [illegible] parent, but, in point of fact, seemed for the [illegible] to entirely interrupt my public career; for, by [illegible] to a Scotch peerage, I was expelled from the House of Commons without being admitted into the House of Lords. At that time the Earl of Derby, then Lord Stanley, [illegible] me the honour to ask me to undertake the government of Jamaica. In the position in which I found myself, I [illegible] it my duty to obey that summons. To Jamaica I [illegible] and remained there five years. At the end of that time I came back, and found myself still in the same position as a [illegible] peer. I was then invited, in the most gratifying manner, by the then Colonial Secretary, with whom I was not personally acquainted, to undertake the government of Canada. I again accepted the post, and remained there eight years. Soon after my return I was asked to go to China. I don't conceal from you that there were some of my friends who rather dissuaded me from undertaking that task. I was told that the China question, owing to circumstances which will be fresh in your recollection, and the divided state of feeling in the country, was a very ticklish subject to meddle with. I was told it was a task, if I succeeded, in which success would offend the consciences of some people, and if I failed, failure would hurt the pride of England. But I considered that the simple rule in such a case for a public man—a rule I have always followed in life, and which I trust I shall follow to the end—was to undertake any public duty in which he thought that his services might be valuable to his country. I undertook that task, and I need not ask you whether I have any reason to repent of it. Well, gentlemen, here I am, after all I have gone through, after a good many years, not quite used up yet, but still not so young as when some of us first became acquainted. This is not an occasion for going at length into these matters; but there is one point on which I wish to say something to the people of Dunfermline. When I went to Japan in 1858 to negotiate a treaty I found myself in a very difficult position. In the first place, I had only a fortnight and no more—owing to an obligation which I was under to return to China to arrange a tariff with the Chinese Commissioners—from the day of my arrival at Yeddo to perform the whole business. It was a curious thing, but I am never allowed more than a fortnight for such negotiations. When I went to the United States, in 1854, I was allowed only a single fortnight to negotiate a treaty which has admitted the whole produce of British North America to be brought into competition with the products of the United States in their own markets; and which likewise put an end to the risk of collision on the subject of the fisheries between this country and America, which was the most serious risk which had presented itself during the whole time I have been a public servant. I was in the same position in Japan. I found that the American Minister, who had been resident for some years in the country, had succeeded in obtaining a treaty which involved a very considerable concession on the part of the Japanese, and was a great advance on the former state of their relations with foreign countries. I found that the Japanese were exceedingly unwilling to go beyond the conditions of that treaty. They were willing to give me a treaty on the same conditions as they had negotiated with the United States, but they were very unwilling to go beyond the provisions of that treaty. And you will understand that their disinclination was not very unreasonable when you reflect that by those treaties we deprive them of the same control over the fiscal affairs which we enjoy in this country. When we want in this country to make any alteration on our customs, or any other fiscal matters, we get our Chancellor of the Exchequer to deal with them as Parliament or the nation thinks they require, but we bind these Oriental nations by treaties which deprive them of any power, whatever exigencies may arise, to impose other duties. It is very desirable, therefore, and it is only fair to them, that these treaties should be all as nearly as may be in the same terms, otherwise merchants would go and pick and choose among the articles, and the result would be an amount of confusion which neither the merchants nor the Japanese could disentangle. I therefore agreed to accept the American treaty. If you compare my treaty with China, which was my own making, with the treaty with Japan, which was made with the American Minister, I think you will [illegible] agree with me in liking the Chinese one the best. In [illegible] alterations on the Japanese treaty, I confined myself as much as possible to things which were of the greatest importance; and one thing which I considered to be of the greatest importance was to obtain a lower rate of importation duties for articles likely to be in most extensive demand. In the American treaty, I think 25 per cent. was the *ad valorem* duty imposed on all foreign imports, and I knew that if we could induce the Japanese to relax that duty with regard to a few articles of large consumption—the thin edge of the wedge having been inserted in that way—in a short time we should, in all cases where we wished it, obtain a 5 per cent. instead of a 25 per cent. *ad valorem* duty. Well, we had a great deal of difficulty and discussion about this. I found the Japanese exceedingly intelligent negotiators, very tenacious, and properly so, of their rights. At length I succeeded in inducing them to agree to an *ad valorem* duty of 5 per cent. in the case of cotton and woollen manufactures; but I was quite aware that it was useless to try to obtain any relaxation as to linen manufactures. This was not, however, of very great importance, for at that time I believe linen goods were not at all, or hardly at all, known in that country. But I am happy to say that the principle upon which I went has been entirely justified by the result; because in one year after that another knock was given to the wedge, and our linen manufactures were let in at the same rate, I believe I am justified in saying, as wool and cotton. I don't pretend to tell you that there will be a great demand in Japan for linen immediately—we must create these demands; but the Japanese are a very changeable sort of people, and when they see the admirable specimens of linen manufacture that come from Dunfermline and other towns in this district, I believe they will be fascinated by them, and we shall have by and by a large demand.

EDINBURGH MARKET CROSS.—A movement is in progress for the restoration of the old Market Cross of Edinburgh, which was removed from its situation on the High Street above a century ago. The only remaining fragment of the cross, which is associated with many historical and traditional incidents, is the centre pillar, which has remained in obscurity for above a century on the estate of Drum, and was recently offered back to the city by the proprietor. A sketch of the proposed restoration has been prepared by the city architect, Mr. Cousin. It will be an octagonal structure of open Gothic columns supporting a balcony, from which the Scottish heralds will read the Royal proclamations, and in the centre of which will stand the old pillar surmounted by the unicorn rampant bearing a St. Andrew's cross.

THE EPISCOPAL CHURCH IN SCOTLAND.—A committee, consisting of the Archbishops of Canterbury, York, and Armagh, the Earl of Morton, the Hon. G. F. Boyle, Sir M. S. Stewart, M.P., Mr. William Stirling, M.P., Mr. Cayley, Sir Archibald Campbell, the Bishop of London, the Bishop of Bangor, and other gentlemen, has been formed for the purpose of carrying out the following objects in connection with the diocess of Argyll and the Isles. 1. The augmentation of the episcopal income, which is now little more than 200*l.* a-year. 2. Assistance to the clergy in the diocess. 3. Support of education, especially of students for the Gaelic ministry. 4. A reimbursement of the Bishop for the great pecuniary sacrifices made by him in past years, nearly the whole of his private fortune having been expended for his diocess, which embraces a territory extending from the extremity of the island of Lewis on the north, to the front of Cantyre on the south, and from the island of Iona on the west, to the district of Glengarry on the east, above 200 miles from north to south, and 120 from east to west. The episcopate itself possesses no resources beyond the small endowment of the late Bishop Low. The present Bishop has struggled with its difficulties from 12 to 13 years, and last year came to the conclusion that, unaided, he was unequal to the work. His resignation he has deferred in the hope that something may be done for the diocess which will render it unnecessary. In a recent letter he states that experience has shown him that so extensive and destitute a district as Argyll and the Isles cannot be administered under an annual expenditure of from 700*l.* to 800*l.*, while the revenue belonging to the episcopate from all sources is little over 200*l.* Liberal subscriptions in aid of the objects sought to be accomplished have been made, in addition to those of the committee, by the Duke of Buccleuch, the Duke of Grafton, the Marquis of Lothian, the Bishop of St. Asaph, the Bishop of Lincoln, Lord Calthorpe, Mr. Henry Hoare, Mr. Cornwall Simeon, Mr. J. L. Hammond, &c.

Law.

HOUSE OF LORDS: APPEAL.—*Beamish v. Beamish.*—Their Lordships on Monday delivered judgment in this case, which was an appeal from the Court of Exchequer in Ireland, affirming a judgment of the Court of Queen's Bench in that country. The point in dispute was whether a clergyman was legally able to perform the marriage ceremony between himself and another person. This question the Court below decided in the affirmative, and against that decision the present appeal was brought. The case had been argued during the two last sessions, and the judges before whom it was heard were of opinion that the marriage was invalid. The LORD CHANCELLOR, in delivering judgment, said this was a writ of error from a judgment of the Court of Exchequer Chamber in Ireland, affirming a judgment of the Court of Queen's Bench in that country, pronounced in an action of ejectment brought by the respondent against the appellant, his uncle, to recover lands of which John Samuel Beamish, the grandfather of the respondent and the father of the appellant, had been seised in fee simple at his death, which happened after the death of the Rev. Samuel Swayne Beamish, the father of the respondent. The question turned entirely upon the validity of the marriage between the respondent's father and mother, which took place under the following circumstances:—The Rev. Samuel Swayne Beamish, a clergyman of the Church of England, on the 27th November, 1831, performed a ceremony of marriage between himself and Isabella Frazer, the mother of the respondent, at a private house in Cork, by reading the form of marriage from the Prayer Book. There was not any clergyman present besides the respondent's father, and the only witness was a woman who saw the ceremony through the window. Had this case been brought before the House previously to the decision of "The Queen v. Millis" in 1844, he should not have hesitated to advise their Lordships to affirm the judgment of the Court below in favour of the validity of the marriage and the legitimacy of the respondent. The parties believed they had contracted a valid marriage, and before the passing of Lord Hardwicke's Act in 1753 this would have been sufficient to make the marriage valid even without the presence of a priest. The canon law held such a marriage legal, and, according to Lord Stowell and numerous other authorities, the canon law regulated our law of marriage until Lord Hardwicke's Act was passed. However, it must now be considered as determined by that House that no marriage was legal without the presence of a priest. He had deemed the decision in "The Queen v. Millis" so unsatisfactory that he had deemed it his duty to enter a protest against it, as he considered there ought to be a public form to which no person could object, and which might, by registration, be of easy, safe, and perpetual proof, the addition of the religious ceremony being highly desirable, although not absolutely necessary. He would have asked their Lordships to reconsider their decision in "The Queen v. Millis," only he felt bound by it so long as it was the settled law of the land. The question then arose whether the clergyman could officiate at his own marriage. He thought not. Could a testator witness his own will? Could a donee witness his own act in executing a power? Surely not. He could find neither principle nor authority to support the judgment appealed against, and, therefore, with much reluctance, he must advise their Lordships to reverse the decision of the Court below.—Lord CRANWORTH said he concurred with the *dictum* laid down by Chief Justice Tindal, that the contract of marriage never constituted a full and complete marriage unless made in the presence of a minister in holy orders. He thought it quite clear that a minister must be present at such marriage, and must be a third person, and not one of the contracting parties. The presence of such minister was not required merely for the purpose of securing religious sanction to the contract. It was his duty to see that the parties were not too near of kin, and that he might be a trustworthy witness hereafter as to the due celebration of the marriage. But all these conditions were opposed to the idea that the minister could celebrate his own marriage, because in that case he would have a direct interest in the ceremony, and if it were disputed subsequently those interests might militate against the due performance of the duties which were imposed upon him by the law of the land. Although the question did not arise in this case, he wished to guard himself against the expression of any opinion that the case of "The Queen v. Millis" was applicable to marriages of necessity, which might take place, for instance, in the colonies or on board ship, and in which the presence of a clergyman could not be obtained.—Lord WENSLEYDALE said that being one of the judges consulted in "The Queen v. Millis," he had felt considerable difficulty in arriving at a conclusion, and he could not satisfy himself that he should give an opinion contrary to his colleagues. It was by that judgment of their Lordships' House, irrevocably settled that the marriage of two persons without the presence of a priest was absolutely null and void, and it could not be supposed that a priest who married a woman could be intrusted with those duties which a priest supposed to be the third party had placed in him. For the reasons advanced by the learned judges who delivered their opinions, and those stated by his learned friends, the judgment of the Court below must be reversed.—Lord CHELMSFORD agreed, with the greatest reluctance, in the view that had been expressed by his noble and learned friends. It was impossible that he could feel otherwise when he regarded the position of the respondent, whose social *status*, arising from the cohabitation of his parents, must by their Lordships' judgment be so much altered. But, with every desire to come to an opposite conclusion, he felt with his noble and learned friends that the case of "The Queen v. Millis" was binding upon them, and that a marriage, to be valid, must be celebrated in *facie ecclesiæ*. Therefore in his opinion the judgment of the Court below must be reversed.

Sporting.

DONCASTER SPRING MEETING

TUESDAY.—The *Trial Stakes.* Baron Nivière's Palaiseau beat Helenus, Whitewell, and Tresilian.—The *Doncaster Spring Handicap.* Mr. Saxon's The Moor beat Ipswich, Alderman, Palaiseau, and 7 others.—The *Hopeful Stakes.* Colonel Towneley's Imperatrice beat Jung Frau, Bannerdale, Birdhill, and 6 others.—The *Londesborough Plate.* Captain Little's General Hess beat Lopcatcher, Erica, and 7 others.—The *Municipal Stakes.* Mr. Fawkes's Birdlime beat Bookaloon, Buttercup, Twinkle, and Noisy.—The *Stand Plate.* Colonel Towneley's Whitewell beat Sadie, Polyolbion, Mervyn, and Old Towler.

WEDNESDAY.—The *Betting Room Stakes.* Captain White's Jung Frau beat Birdhill, Tommy Jones, Johnny Armstrong, and Wetherby.—The *Juvenile Selling Stakes.* Mr. Over's Fugleman's Daughter beat Old Towler and Harrogate.—The *Chesterfield Plate.* Baron Nivière's Cosmopolite beat Lopcatcher, Tresilian and 6 others.—The *Scurry Stakes Handicap.* Baron Nivière's Palaiseau beat Vixen and Foretop.—The *Innkeepers' Stakes.* Mr. T. Bancroft's Tidlywinks beat Twinkle and Suckling.—*Handicap Hurdle Race.* Mr. Saxon's Vixen walked over.

Obituary.

VICE-ADMIRAL APLIN died on the 14th inst., in his 71st year. He was second son of the late Admiral Peter Aplin, and grand-nephew of Christopher D'Oyly, Esq., M.P., comptroller general of accounts during Lord North's administration. He was born at Berwick-upon-Tweed, in 1790, and entered the navy in 1801. While midshipman of the Terpsichore he served in her boats, cutting out from under the batteries of St. Denis, Isle de Bourbon, the French corvette Tourterelle in 1805. In 1813 he commanded the Arrow, schooner, and was officially noticed for his activity on the coasts of France and Spain, particularly at Quimper, Quiberon, and Ile de Ré, and at the siege of St. Sebastian and Santona. He subsequently served for some time on the coast of Newfoundland as commander of the Grasshopper sloop of war. He obtained his flag in 1854. He married in 1816 the youngest daughter of Vice-Admiral D'Auvergne, Duke de Bouillon, by whom he had three sons, one of whom is in the army, and another in the navy.

GENERAL A'COURT REPINGTON, C.B., Colonel of the 41st Regiment, and father of Lady Herbert of Lea, died on the 16th inst., at Amington Hall, near Tamworth, after a protracted illness. General Repington was the youngest son of Sir William Pierce Ashe A'Court, by his second marriage with the daughter of Mr. Henry Wyndham, of the College, Salisbury. He was born in 1785, and married in 1815, the only daughter of Mr. Abraham Gibbs. He entered the army in 1801, and for 15 years saw much active service in Italy, Sicily, and Spain, having been present at Tarragona, the action of Villa Franca, the occupation of Leghorn, capture of Genoa, siege of Savona, and the surrender of Naples in 1815. He was for some time one of the Poor Law Commissioners. In 1818 he was made a Knight of the Hanoverian Order in recognition of his military services, and in 1831 was made a Companion of the Bath. He was also a Knight of St. Ferdinand and Merit of Naples, and a Knight of St. Maurice and Lazare of Sardinia. In 1848 he was appointed Colonel of the 41st Foot.

GENERAL SIR CHARLES PASLEY, K.C.B., Colonel-Commandant of the Royal Engineers, died on Friday night at 12, Norfolk Crescent, in his 81st year. He had seen much service in the Royal Engineers at Maida, Gaeta, Capri, and Corunna, and in the Walcheren expedition. He was also well known for his successful operations in blowing up the wreck of the Royal George at Spithead between 1839 and 1841. He was the author of several works on military subjects, and was appointed Colonel Commandant of the Royal Engineers in 1853.

MR. DAVID PUGH, M.P., for the Montgomery boroughs, died on Saturday, at his seat, Llanerchydol, Welchpool. He had sat during three Parliaments for these boroughs in the Conservative interest, and had served the office of high sheriff for the county.

MR. ROBERT JAMIESON died at his house in Gloucester Square on the 5th inst. He was well known for his exertions to civilise the native races of Africa, and in 1839 he built and fitted out at Liverpool the Ethiope steam-ship, which he sent under the command of the late Captain Beacroft to explore the great rivers and their tributaries on the Atlantic coast, in which expedition she ascended to higher points in some instances than had ever previously been reached by Europeans. Narratives of these voyages were published by Mr. Jamieson, and others are given in the Journal of the Royal Geographical Society. The success of his plans was marred by the interference of Government, and when the unfortunate "Niger expedition" was projected, Mr. Jamieson, being convinced of the unsoundness of the scheme, published two appeals against the project. When the disastrous consequences followed which he had foreseen, the orders that he had given to the Ethiope enabled Captain Beacroft to rescue from destruction her Majesty's ship Albert, one of the vessels employed in the expedition, while by carrying her down to Fernando Po he saved those on board from perishing by fever. Mr. Jamieson had also extensive transactions as a merchant with South America, Brazil, India, and China.

WILLS.—The will of the Earl of Cawdor has been sworn under 120,000*l.*; Robert Allies, Esq., of Hill House, Worcester, 12,000*l.*; Stafford Price, Esq., of Hendon House, Middlesex, 60,000*l.*

BIRTHS.—On the 18th inst., at Kedleston, Derbyshire, the Lady SCARSDALE, of a daughter.—14th inst., at Ampney Park,

the Lady GIFFORD, of a son—21st inst, the Lady HESTER LEEKE, of a daughter—17th inst, at 42, Thurloe Square, the Lady BEAUJOLOIS DENT, of a son—16th inst, at Hollybrook, Skibbereen, Ireland, the Lady EMILY BECHER, of a daughter—18th inst, at 23, Rutland Gate, the Lady BLANCHE DUPPLIN, of a son—18th inst, at Scaldwell Rectory, the Hon. Mrs. ARTHUR DOUGLAS, of a daughter—8th ult, at Lahore, Punjaub, Lady OAKELEY, wife of Sir Charles W. A. Oakeley, Bart., of a son, stillborn—16th inst, at 56, Eccleston Square, the wife of W. P. ADAM, Esq., M.P., of a son—21st inst, at Oxford, the wife of the Rev. WILLIAM THOMSON, D.D., Provost of Queen's College, of a son.

MARRIAGES.—On the 17th inst, at Wardour House, ALFRED JOSEPH TICHBORNE, Esq., only son of Sir James Francis Doughty Tichborne, Bart., of Tichborne Park, to the Hon. TERESA MARY, daughter of Lord and Lady ARUNDELL, of Wardour—23d inst, at St. James's, Piccadilly, CECIL VAN NOTTEN POLE, Esq., only son of Sir Peter van Notten Pole, of Todenham House, Gloucester, and grandson of the late Earl of Limerick, to FRANCES ANNA, eldest daughter of the Rev. HENRY RICE, and grand-daughter of the Hon. and Very Rev. the Dean of Gloucester—20th inst, at St. John's Episcopal Chapel, Edinburgh, Major R. J. Hay, R.A., second son of the late Admiral Hay, of Belton, East Lothian, to GEORGINA HARVEY, youngest daughter of the late Sir ALEXANDER RAMSAY—9th inst, at Crickhowell, Breconshire, Sir JOSEPH RUSSELL BAILEY, Bart., of Glanusk Park, to MARY ANN, eldest surviving daughter of H. LUCAS, Esq., M.D., of Glan-yn-afon—17th inst, at Christ Church, Bayston Hill, the Rev. LIONEL CORBETT, son of Uvedale Corbett, Esq., of Aston Hall, Salop, to FRANCES HARRIET, daughter of the Rev. ROBERT HORNBY, of Lythwood Hall, in the same county—9th ult, at St. John's Church, Trichinopoly, Lieutenant A. G. D. LOGAN, 37th Grenadiers H.M.'s Madras Army, son of Major-General Archibald Logan, Madras Army, to MARIA EUGENIA, second daughter of T. HARRIS, Esq., Civil and Sessions Judge of Trichinopoly — 16th ult, at Dinapore, Captain WALTER COLQUHOUN GRANT, 2d Dragoon Guards, to JANE ELIZA, eldest daughter of the late Ven. JOHN WILLIAMS, Archdeacon of Cardigan.

DEATHS.—On the 20th inst, at Edinburgh, aged 6 months, the Hon. ARTHUR FITZCLARENCE, fourth son of the Earl and Countess of Munster—At her house, in Edinburgh, Miss DALYELL, the youngest daughter of the late Sir Robert Dalyell, of Binns, Bart.—19th inst, at 15, William Street, Lowndes Square, Lady NICHOLSON, wife of Captain Sir Frederick Nicholson, Bart., R.N.—17th inst, at Hayward's Heath, ALEXANDER THISTLETHWAYTE COLLIER, only son of the late Rear-Admiral Sir Francis Augustus Collier, C.B.—15th inst, at Torquay, WILLIAM LATHAM, second son of the late J. BAILEY, Esq., M.P. for Herefordshire, aged 18—At his residence at Bruges, Belgium, Lieut.-Colonel CHRISTOPHER CHAPMAN BIRD, formerly Secretary to the Government of the Cape of Good Hope, aged 90—19th inst, at 5, Langham Street, Portland Place, ANNE ELIZABETH, relict of the late THOMAS DAX, Esq., Senior Master of the Court of Exchequer—11th ult, at Mhow, after a very short illness, SOPHIE, the wife of Major WINCKWORTH SCOTT, of 13th Native Infantry, Bombay, and elder daughter of the late Jeffery Amherst Sinclair, M.D., Surgeon-General, Bombay Medical Board—28th Dec., on his passage to New Zealand with his Regiment, the 57th, Captain H. DOUGLAS M. SHUTE, youngest son of the late Thomas Deane Shute, Esq., of Bramshaw and Burton, Hants—19th inst, at 1, Harley Street, Major CHARLES GONNE SOUTHEY, of H.M.'s 3d Madras European Regiment, eldest son of H. H. Southey, M.D., aged 41—21st inst, at Grove Place, Walthamstow, Essex, ROBERT THORP, Esq., the last surviving son of the late Samuel Thorp, Esq., of Walthamstow, many years senior member of the Corporation of London, and brother of the late Alderman Thorp, M.P., aged 81—17th inst, at his residence in Hertfordshire, HENRY JOHN GRANT, Esq., of Wormley Bury, Herts, and the Gnoll, Glamorganshire, aged 81—17th inst, at South Hill, Henley-on-Thames, LOUISA, the wife of JOSEPH GWILT, Esq., aged 78—16th inst, of bronchitis, at the Rectory, West Dean, near Salisbury, the Rev. FRANCIS GLOSSOP, M.A., rector of West Dean, aged 73

Markets.

COVENT GARDEN, April 27.

The supply of ordinary Vegetables is insufficient for the demand, and prices for things in that way are high. Cornish Broccoli continues to be furnished, and good samples of Lettuces, Endive, and Artichokes are received from France. New Grapes are offered, and fetch fair prices, and of Strawberries there is a tolerably good supply considering the season. Asparagus, French Beans, Green Peas, young Carrots, and new Potatoes may also now be obtained. Cucumbers are coming in plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Camellias, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 8s to 12s	Apples, per doz., 6d to 1s 6d
Grapes, per lb., 8s to 12s	Oranges, per 100, 6s to 10s
Strawberries, p. oz., 6d to 1s	Lemons, per 100, 6s to 10s
Cherries, French, p. box, 8s	Nuts, Cob, per lb., 1s to 1s 6d
Pears, per doz., 4s 6d to 8s	

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 9d to 1s 6d	Celery, p. bundle, 1s 6d to 1s 9d
Green Peas, p. ½ sieve, 10s	Onions, p. ½ sieve, 1s 6d to 2s 6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 4s to 8s
Cabbages, do., 2s to 3s	Rhubarb, p. bundle, 9d to 1s 3d
Potatoes, p. ton, 80s to 200s	Seakale, p. punnet, 1s 6d to 2s
— per cwt., 6s to 10s	Shallots, per lb., 1s 6d
— new, per lb., 6d to 2s	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 10d	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 4s to 5s	Mushrooms, p. pott., 1s 3d to 1s 6d
Cucumbers, each, 9d to 2s	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 3s to 4s	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, April 25.

Prime Meadow Hay	75s to	86s	Clover	95s to	118s
Superior do. (old)	90	105	New Clover	—	—
Inferior do.	50	60	Do. second cut	80	100
New do.	—	—	Straw	30	42
Rowen	—	—			

DAVIS & Co.

WHITECHAPEL, THURSDAY, April 25.

Fine old Hay	100s to	105s	Fine old Clover	115s to	120s
Inferior do.	70	90	Inferior do	95	110
Prime New Hay	—	—	Fine 2d cut	90	105
Inferior do.	—	—	Inferior do.	—	—
Straw	30	42	Fine New Clover	—	—

POTATOES.—SOUTHWARK, Monday, April 22.

During the past week the arrivals have been very large both by rail and coastwise, and trade exceedingly heavy at reduced prices. Second-rate or inferior samples are unsaleable. The following are this day's quotations:—York Flukes, 120s. to 150s. per ton; Lincolnshire Regents, 95s. to 105s.; Dunbar Red Soil do., 120s. to 160s.; do. do. Reds, —s. to —s.; North Berwick Regents, 115s. to 135s.; Fife, Forfar, and Perth do., 90s. to 105s.; ditto Rocks, 80s. to 85s.; ditto ditto Reds, 70s. to 80s.; French Whites, 60s. to 80s.; Belgian do., 60s. to 80s.; Dutch do., 60s. to 80s.

COAL MARKET.—April 24.

Bell's Primrose Gas, 13s. 3d.; Dickson's West Hartley, 16s.; Lambert's West Hartley, 16s. 9d.; Tanfield Moor Butes, 13s.; Walker Primrose, 12s. 3d.; Wylam, 16s. 6d.; Walls End Bell, 15s. 6d.; Walls End Haxton, 15s. 9d.; Walls End Braddyll's Hettons, 17s. 9d.; Walls End Wharncliffe, 16s. 3d.; Walls End Haswell, 19s. 0d.; Walls End Lambton, 18s. 9d.; Walls End South Hetton, 19s.; Walls End Tunstall, 16s. 6d.; Walls End Hartlepool, 18s. 3d.; Walls End Kelloe, 17s. 9d.; Walls End Elm Park, 15s. 6d.; Carway and Duffryn Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.—45 ships at market.

HOPS.—BOROUGH MARKET, FRIDAY, April 26.

Messrs. Pattenden & Smith report a good demand for both new and yearling Hops, at gradually improving prices. 1855's and 1856's are also inquired for on speculation, as well as for consumption at slightly enhanced rates.

BRITISH WOOLS.—LONDON, FRIDAY, April 26.

We have no change to report in the value of either fleece or skin wool. The latter sells freely at former rates, and as fast as pulled, but advances, although required, are not acceded to.

BUTTER MARKET.—April 26.

Best Fresh Butter .. .. 16s. per dozen lbs.
Second do. do. .. .. 14s. " "
Pork, 4s. 8d. to 5s. 4d. per 8 lbs.

METROPOLITAN CATTLE MARKET.

MONDAY, April 22.

The supply of Beasts is shorter, and the weather is favourable; consequently, although the trade is dull, prices for choicest kinds are rather improved. The number of Sheep is smaller; the demand is not large, but a better clearance is effected at rather higher rates. Good Calves are dearer. Trade for Lambs remained unaltered. From Germany and Holland there are 540 Beasts, 1200 Sheep, 51 Calves, and 20 Pigs; from Scotland, 430 Beasts; from Ireland, 50; from Norfolk and Suffolk, 1900; and 120 from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c.	4 8 to 5 0	Best Long-wools	5 4 to 5 8
Best Short-horns	4 6 — 4 8	Do. Shorn	4 8 — 5 0
2d quality Beasts	3 4 — 4 0	Ewes & 2d quality	4 8 — 5 4
Best Downs and Half-breds	5 8 to 6 0	Do. Shorn	4 0 — 4 6
Do. Shorn	5 0 to 5 4	Lambs	7 0 — 8 9
		Calves	5 4 — 6 0
		Pigs	4 4 — 5 4

Beasts, 3610; Sheep & Lambs, 17,620; Calves, 65; Pigs, 580.

THURSDAY, April 25.

The supply of Beasts is about the same as on Thursday last. We have a brisker trade, and prices on the average are better. Sheep are by no means plentiful. Trade is rather slow, but Monday's prices are fully maintained. Good Lambs continue to be scarce and dear; inferior qualities are with difficulty disposed of. Calf trade remains unaltered. Our foreign supply consists of 190 Beasts, 400 Sheep, and 100 Calves. Milch Cows 140.

	s d s d		s d s d
Best Scots, Herefords, &c.	4 10 to 5 0	Best Long-wools	5 4 to 5 8
Best Short-horns	4 8 — 4 10	Do. Shorn	4 8 — 5 0
2d quality Beasts	3 8 — 4 4	Ewes & 2d quality	4 8 — 5 4
Best Downs and Half-breds	5 8 — 6 0	Do. Shorn	4 0 — 4 6
Do. Shorn	5 0 — 5 4	Lambs	7 0 — 8 0
		Calves	5 4 — 6 0
		Pigs	4 4 — 5 4

Beasts, 910; Sheep & Lambs, 5630; Calves, 240; Pigs, 160.

MARK LANE.—MONDAY, April 22.

The supply of Wheat from Essex and Kent to this morning's market was small; good and dry samples were taken readily at the prices of this day se'nnight, but other descriptions were difficult of disposal. The attendance was tolerably good, but buyers of foreign insisted on a decline, which being generally resisted by holders, the amount of business transacted was limited. Barley brings last week's rates. Beans are 2s. per qr. dearer. Peas are neglected. For Oats there is a fair demand, and the best qualities bring an advance of 6d. per qr. The Flour trade is steady without alteration in value.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk..White	56—66	Red	52—62
— — fine selected runs..ditto	50—72	Red	54—68
— — Talavera	61—72		
— Norfolk	—	Red	—
— Foreign	50—78		
BARLEY, grind. & dist., 28s to 30s..Chev.	40—45	Malting .	38—40
— Foreign..grinding and distilling	30—36	Malting .	40—42
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—25
— Irish ....Potato	26—28	Feed ..	21—24
— Foreign........Poland and Brew	24—28	Feed ..	20—24
RYE	35—38	Foreign .	—
RYE-MEAL, foreign	—		
BEANS, Mazagan....26s to 46s....Tick	30—50	Harrow .	30—50
— Pigeon ......36s — 58s..Winds.	34—44	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
PEAS, white, Essex and Kent ..Boilers	33—44	Suffolk .	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign .	38—48
MAIZE .... White	—	Yellow..	—
FLOUR, best marks delivered..per sack	50—57		
— 2d do. .... ditto	38—50	Country .	38—50
— Foreign ....per barrel	30—35	Per sack	40—50

FRIDAY, April 26.

The weather during the past week has been very fine, with one or two sharp night frosts. The wind was N.E. until the 24th, when it changed to N.W. During the above interval the Wheat trade has been dull, but holders generally show great indisposition to make any concession in price, and sales have consequently been limited. Fine malting Barley has been rather more in request, and former rates were fully realised; in other descriptions there is no alteration. Peas continue to be difficult of disposal. Beans as well as Oats have been in good demand, and commanded a slight improvement in prices. The Flour trade is heavy, and in some instances rather lower rates have been accepted to make progress. Since Friday last 32 vessels have been reported off the coast. The floating trade has ruled quiet, and the transactions have been limited. For Barley there is rather more demand. The arrivals of English grain, and foreign Oats this week have been small, moderate of foreign Barley, and of Wheat large. The attendance at this morning's market was very limited. The value of English Wheat is nominally the same as on Monday; business in foreign was confined to a few retail purchasers at about late rates. In the value of spring corn there is no alteration.

ARRIVALS FROM April 22 TO April 26

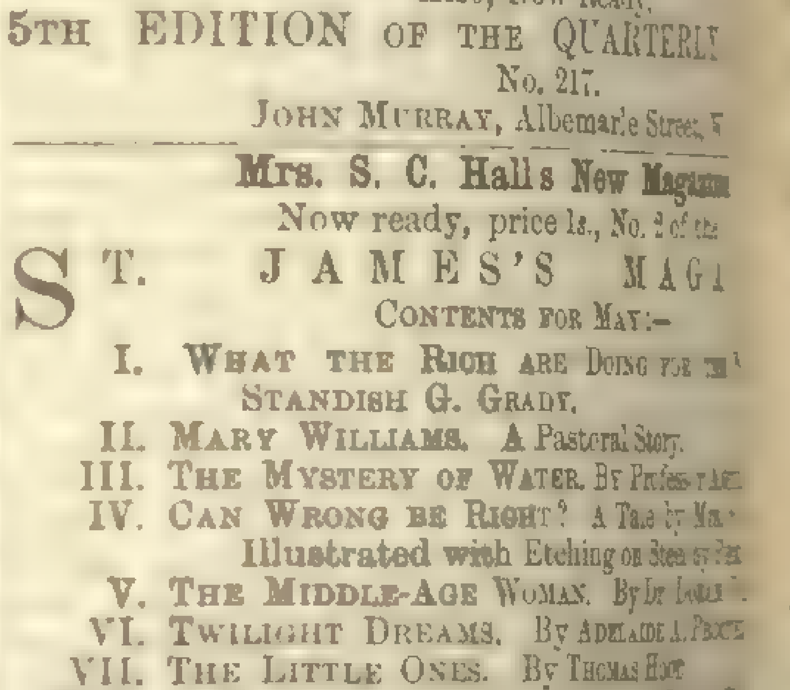
	Wheat.	Barley.	Oats.	Flour.
English ..	1169 qrs.	420 qrs.	— qrs.	430 sks.
Irish	— "	— "	190 "	— "
Foreign ..	44450 "	8600 "	16910 "	2170 " — brls.

LIVERPOOL, Tuesday, April 23.—At this morning's market Wheat was held firmly at former prices, and some descriptions, such as choice amber and winter red, were from scarcity even a shade dearer; only a small retail business however resulted. Flour was difficult to dispose of, and both American and new French might have been bought 6d. cheaper. Indian Corn was offered freely, and some sales of mixed American were made ex ship at a decline of 1s. per qr.; other ... way 6d. Oats and Oatmeal suffered no ... Peas both steady at former prices. Barley ... for grinding. The market closes irregular.

FRIDAY, April 26.—Moderate attendance ... Fair sale for Wheat at Tuesday's prices. ... change. Indian Corn, mixed, 35s. 3d. ... demand. Beans steady. Oats and Oatmeal ...

AVERAGES	Wheat.	Barley.	Oats.	Rye.	...
Mar. 16..	53s 8d	38s 7d	23s 9d	[illegible]	[illegible]
— 23..	54 0	38 6	23 10	[illegible]	[illegible]
— 30..	55 2	37 11	23 4	[illegible]	[illegible]
April 6..	56 4	37 8	24 0	[illegible]	[illegible]
— 13..	56 10	37 5	24 1	[illegible]	[illegible]
— 20..	56 9	37 3	23 5	[illegible]	[illegible]
Agg. Aver.	55 6	37 11	23 9	[illegible]	[illegible]

FLUCTUATIONS IN THE LAST SIX WEEKS.



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News of the Week.

IN the House of Lords on Monday, in answer to the Earl of MALMESBURY, Lord WODEHOUSE said that HER MAJESTY'S Government, after mature deliberation, had decided that it was not desirable to intrude their advice or counsel unasked on the United States Government or on the seceding States. The Post Office Savings Banks Bill was read a third time and passed. The Bills of Exchange and Promissory Notes (Ireland) Bill passed through committee. The Queen's Prison &c., Bill was read a second time. The Duke of NEWCASTLE brought in a Bill to amend the Passengers' Act. On Tuesday the Queen's Prison &c., Bill passed through committee, and the Bills of Exchange and Promissory Notes (Ireland) Bill was read a third time and passed. On Thursday the Marriage Law Amendment Bill and the Leases, &c., by Incumbents Restriction Bill passed through committee, and the Queen's Prison &c., Bill was read a third time and passed. Last night Earl GRANVILLE brought up a message from the QUEEN announcing the approaching marriage between the Princess ALICE and Prince LOUIS OF HESSE. His lordship moved a suitable address to HER MAJESTY in reply, which was seconded by the Earl of DERBY and unanimously agreed to.

In the Commons on Monday the adjourned debate on the Budget was resumed by Mr. HORSMAN, who opposed the abolition of the Paper Duties, and spoke in favour of the remission of the war taxes on tea and sugar, and of a further reduction of the income-tax. Mr. BRIGHT, Mr. O'BRIEN, and Mr. GREGSON supported the Budget; Sir J. FERGUSON, Mr. B. COCHRANE, and Mr. LIDDELL opposed it. The CHANCELLOR of the EXCHEQUER in reply defended the accuracy of the Budget, and expressed his belief that unless the current year was one of universal convulsion, it would be found that the estimates of the Government had been framed with the extremest caution. Mr. DISRAELI contended that Parliament was solemnly pledged to remit the war duties on tea and sugar. He would offer no opposition to the first resolution for the reduction of the income tax, but with regard to the second resolution renewing the war duty on tea and sugar, the member for Liverpool, Mr. HORSFALL, would move the remission of that tax instead of the paper duty. Lord PALMERSTON admitted that the course proposed to be taken by the Opposition was a constitutional one. The House then went into committee, when the resolution fixing the income tax at 9*d*. in the pound for the current year was put and agreed to. On Tuesday, 40 members not being present at 4 o'clock, no House was made. On Wednesday Mr. HODGKINSON moved that the House go into committee on the Recovery of Debts Bill. Mr. M'MAHON moved, as an amendment, that the committee be postponed until that day six months. On a division the amendment was carried by 121 to 23. The Bill was therefore lost. The Constructive Notice Amendment Bill was referred to a select committee. Mr. LOCKE KING moved the second reading of the Religious Worship Bill, and stated that its object was to enable any clergyman of the Established Church, after having been duly licensed by the bishop of the diocese, to preach or pray in any parish without permission of the incumbent. Mr. SOTHERON-ESTCOURT moved, as an amendment, that the Bill be read a second time that day six months. After some discussion the amendment was carried on a division by 191 to 145. The Bill was therefore lost. On the motion for the second reading of the Presentment Sessions (Ireland) Bill, Mr. LONGFIELD moved, as an amendment, the previous question. On a division, the amendment was carried by 86 to 66. The Bill was therefore lost. The Combination of Marriages Dissolution (Scotland) Bill was read a second time. On Thursday, in answer to Mr. J. C. EWART, Lord J. RUSSELL said that the Government had directed an adequate naval force to proceed to the coast of America for the protection of British shipping and British property in that region. With regard to privateers sailing under the flag of an unrecognised power, the

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A

questions involved were of so momentous a character that he had determined on referring them to the law officers of the Crown for their opinion, in order to guide the Government in their instructions to HER MAJESTY'S Ministers in America and the Commander of the British squadron in those seas. His lordship concluded, amidst general cheering from both sides of the House, by saying, "We have not involved ourselves in this contest, either by offering advice or by any other act, and being free, for GOD'S sake let us, if possible, keep out of it." The House then went into Committee of Ways and Means on the Budget, when the CHANCELLOR of the EXCHEQUER moved a resolution continuing the present duties on tea and sugar until the 1st of July, 1862. Mr. HORSFALL moved to amend the resolution by reducing the duty on tea on and after the 1st of October to 1*s*. per lb. Mr. HENNESSEY, Lord HOLMESDALE, Sir S. NORTHCOTE, and Mr. DISRAELI supported the amendment; the Marquis of HARTINGTON, Mr. PAGET, Mr. NORRIS, Sir G. LEWIS, and Lord PALMERSTON spoke in favour of the original resolution. On a division the amendment was negatived by 299 to 282, giving Ministers a majority of 17. The resolution of the Government continuing the tea and sugar duties was then agreed to. Last evening Lord PALMERSTON brought up a message from the QUEEN announcing the intended marriage of the Princess ALICE, and gave notice that on Monday he will move that the House go into Committee to consider HER MAJESTY'S Message.

The two Houses of the Austrian Council of the Empire were opened on Wednesday with a speech from the throne. The EMPEROR expressed his hope that Austria and Europe at large will enjoy undisturbed the blessings of peace, and declared his conviction that free institutions, accompanied by a conscientious protection of the equal rights of all the nationalities, and the equality of all citizens will lead to a safe reorganisation of the whole monarchy. With this aim in view he had, he said, sanctioned the introduction of tried constitutional forms, and determined to develop a liberal policy equally in all parts of the empire, with special regard for the historical traditions of the provinces, and for the inviolable foundation of the unity and indivisibility of the whole monarchy.

From the United States we learn that President LINCOLN has issued a proclamation calling out the militia of the States to the number of 75,000 men, for the purpose of retaking the forts and public property seized by the Secessionists, and has convened an extraordinary session of Congress to meet on the 4th July next, to consider and determine such measures as the public safety and interest require. In another proclamation President LINCOLN has declared a blockade of all the ports in the seceded States, and has announced that Southern privateers will be treated as pirates. On the other hand Mr. JEFFERSON DAVIS, President of the Southern Confederation, has met Mr. LINCOLN'S proclamation by calling for a levy of 150,000 soldiers, and has issued a proclamation authorising letters of marque. The great State of Virginia has seceded from the Union, has closed the mouth of Norfolk harbour to prevent the egress of the Federal ships of war, and has taken possession of Harper's Ferry, the arsenal of which had previously been burnt by the Federal commander. North Carolina has seized the forts in her territory, Kentucky and Missouri have refused to supply troops to the Federal Government, and a Massachusetts regiment, while passing through Maryland on its way to Washington, had been attacked by the people of Baltimore, when many persons were wounded, and some killed. The Governor of Maryland has since informed PRESIDENT LINCOLN that he would send troops for the protection of Washington, but not for the invasion of the South. All the northern regiments will, therefore, be obliged to proceed to Washington by sea.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family arrived at Buckingham Palace on Saturday evening from the Isle of Wight. The Royal party travelled from Gosport by a special train on the South-Western Railway to the private station at Vauxhall, and arrived shortly before 7 o'clock at Buckingham Palace, alighting at the garden entrance. By her Majesty's command the usual guards of honour and other ceremonies were dispensed with. On Sunday morning the Queen and Prince Consort, the Princesses Alice, Helena, and Louisa, Prince Arthur and Prince Leopold, attended Divine service in the private chapel of Buckingham Palace. The Dean of Windsor officiated. On Monday the Queen gave audience to the Right Rev. Dr. Philpott, who did homage on being appointed Bishop of Worcester. Sir George Lewis had an audience of the Queen. In the afternoon the Prince Consort visited the gardens of the Royal Horticultural Society at South Kensington. On Tuesday the Queen held a Privy Council at which Her Majesty declared her consent to a contract of matrimony between the Princess Alice and Prince Frederic William Louis of Hesse; and directed her consent to be signified under the Great Seal. Earl Cawdor took the oaths on being appointed Lord-Lieutenant of Carmarthenshire, and Lord Kensington took the oaths on being appointed Lord-Lieutenant of Pembrokeshire. The Duke of Sutherland had an audience and delivered to her Majesty the Insignia of the Garter worn by his father the late Duke of Sutherland. Earl Granville and Lord John Russell had audiences of the Queen. The Prince Consort presided in the morning at a meeting of the Council of the Duchy of Cornwall, and in the afternoon at a meeting of the Council of the Horticultural Society at South Kensington. On Wednesday afternoon the Queen and Prince Consort, accompanied by the Princesses Alice, Helena, Louisa, and Beatrice, left Buckingham Palace for the White Lodge, Richmond Park. Prince Arthur and Prince Leopold accompanied the Queen to the White Lodge, but returned in the evening to Buckingham Palace. On Thursday morning the Prince Consort rode to London, and visited the Exhibition of the Royal Academy.

THE PRINCE OF WALES arrived at Buckingham Palace on Tuesday from Madingley Hall, and returned to Cambridge on Wednesday morning.

THE PRINCESS ALICE.—The *Darmstadt Gazette* of Thursday contains the official announcement of the betrothal of her Royal Highness Princess Alice to Prince Louis of Hesse.

PRINCE ALFRED arrived at Jamaica on the morning of the 2d ult., and landed amidst every conceivable demonstration of rejoicing. The festivities and excitement are described as unprecedented in the history of Jamaica; but the arrival of the mail with the intelligence of the death of the Duchess of Kent, suddenly put an end to all the entertainments, and the Prince privately embarked on board the Styx on the 6th, and immediately returned to Port Royal. His Royal Highness was to leave Port Royal for England on the 10th ult.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of the First Lord of the Treasury, in Downing Street.

CHURCH OF SCOTLAND.—The Queen has appointed Lord Belhaven to be her Majesty's High Commissioner to the General Assembly of the Church of Scotland.

THE CHANNEL FLEET.—The western division of the Channel fleet consisting of the Donegal, Aboukir, Conqueror, Centurion, and Hero, which left Plymouth about 10 days since for a cruise, was off the Sound on Sunday evening, beating in for the anchorage against a north-east wind. When sufficiently near to hold communication by signal with the Port-Admiral all five ships bore away under canvas, for Portland.

Foreign.

FRANCE.—A Government Bill for calling out 100,000 men of the class 1861 was presented to the Corps Législatif on Monday. The Session of the Chamber was afterwards prorogued to the 4th of June. MM. Dumineray and Beau, the publisher and printer of the Duc d'Aumale's pamphlet, are to be tried to-day (Saturday) before the Correctional Police, on the charge of inciting to the "hatred and contempt of the Government." They will be defended by MM. Dufaure and Hébert, both of whom are at the head of the Paris bar. M. Dufaure was one of the counsel for Count de Montalembert at his trial in 1858, and was one of Louis Philippe's Ministers. M. Hébert also was Keeper of the Seals under the same Government. The Minister of Marine has sent orders to place Cherbourg in a state of defence. At present the sea batteries are unprovided with guns, and some of them have been greatly injured by the inroads of the sea. The *Patrie* denies that the French army is to quit Rome, where, it says, it remains not only to protect the Holy Father but to secure peace to Italy, and to prevent a conflict between Austria and Piedmont. For these reasons, it says all the Powers, with England at their head, see without regret the prolongation of the occupation. Another detachment of French troops has embarked at Marseilles for Syria. The *Temps* asserts that Turkey has proposed that 1,000 French soldiers should be left at Beyrout until the reforms which have been decided upon by the European Commission have been completely carried out. It also says that England insists upon the complete evacuation of Syria by the 5th of June.

SPAIN.—In the sitting of the Cortes on the 22d ult., the Ministry, in reply to an interpellation, said:—"We have not permitted the publication of the pamphlet of the Duke d'Aumale in Spain, as we desire to remain on good terms with a friendly country." The Duke and Duchess of Montpensier have renounced [illegible] voyage to England on account of the [illegible] the Duchess's health. The official [illegible] that the Emperor Napoleon has congratulated [illegible] Isabella II. on the reincorporation of [illegible] with Spain.

PORTUGAL.—The elections to the Cortes [illegible] off quietly, and have resulted in the [illegible] Ministerial and 16 Opposition candidates [illegible] Government candidates have been returned [illegible] and Oporto, and all the Ministers have been [illegible] The vine disease is again appearing.

SWITZERLAND.—Prince Napoleon arrived [illegible] on Thursday, accompanied by a small [illegible] to the villa which he has ordered [illegible] at Nyon. The treaty between Switzerland [illegible] Italy for carrying a railway over the [illegible] been concluded, and the construction [illegible] menced on Monday near Bellinzona, [illegible] of the chief engineer, M. Pestalozzi, [illegible] of the authorities. Switzerland [illegible] 48,000,000f. towards the cost of construction [illegible] also stipulates that when 25,000,000 [illegible] shall have been guaranteed, and 5,000 [illegible] spent on the construction of the railway [illegible] of Italy will, within four years, contribute [illegible] which will not, however, bear interest. [illegible] further stipulated that the cost of laying [illegible] over that portion of the Alps between [illegible] Olivone shall be defrayed by the kingdom [illegible] The canton of St. Gall has already voted [illegible] towards the expenses.

BELGIUM.—The Plenipotentiaries of [illegible] Belgium signed on Wednesday a treaty of [illegible] convention concerning navigation, and a [illegible] guaranteeing literary, artistic, and industrial rights. A disturbance took place on Sunday caused by a strike of the weavers and the [illegible] nation of the masters to supply their place [illegible] fresh hands from the country. The police [illegible] pelled to use their weapons, and many [illegible] seriously injured. On Monday the disturbance [illegible] renewed, and assumed so serious an aspect [illegible] necessary to call out the military. A great [illegible] persons have been arrested.

PRUSSIA.—In the sitting of the Chamber [illegible] on Thursday M. von Vincke put a question [illegible] Ministry relative to the affair of Captain [illegible] Bonn. Baron Schleinitz, Minister for Foreign [illegible] promised to reply on Monday next.

AUSTRIA.—The Empress of Austria arrived [illegible] on Tuesday, from Madeira, in the Royal [illegible] and Albert. Both Houses of the Council [illegible] Empire were opened on Wednesday by the Emperor [illegible] person. His Majesty delivered a speech from the Throne, of which the following is an abstract:—

"It affords me the greatest [illegible] this assembly the Imperial Princes, [illegible] Church, and the heads of the noble families [illegible] I also welcome the Deputies. I have been [illegible] the many addresses of thanks which I [illegible] Provincial Diets. I consider them as [illegible] which is rich in hope. I am convinced [illegible] tions, accompanied by a conscientious [illegible] the equal rights of all the nationalities [illegible] of all citizens, will lead to a safe [illegible] the whole monarchy. With this aim [illegible] tioned the introduction of tried constitutional [illegible] A liberal policy shall be equally developed in [illegible] empire, with special regard for the historical [illegible] provinces. I desire to learn positively, through [illegible] the representatives of the people, what they [illegible] the welfare of the country. It is necessary [illegible] that political, national, and religious differences [illegible] an insurmountable obstacle to a national [illegible] Austria is powerful enough safely to carry [illegible] ment of her internal interests. She will inspire [illegible] because we shall avoid all passionate excitement [illegible] the justice of my policy and on the intelligence [illegible] I expect a satisfactory solution of the question [illegible] tation of Hungary, Transylvania, Croatia, and [illegible] soon as they shall understand the real state [illegible] be inspired with the necessity for and the [illegible] institutions I have granted, and will then [illegible] fidence by their actions, and I shall see [illegible] greatest satisfaction the representatives of [illegible] I hope to enjoy undisturbed the blessings [illegible] feels the same want, as she wishes to repose [illegible] of recent times, and to recover her equilibrium [illegible] feeling imposes upon the Powers the duty of [illegible] precious treasure of peace to any danger. [illegible] ledges this duty, which has also been admitted [illegible] Powers, in order to give herself up to work [illegible] of state. Estimates will be submitted to you [illegible] an equilibrium between the income and expenditure [illegible] proposals for the introduction of desirable [illegible] some branches of the revenue, and for the [illegible] relations between the National Bank and the [illegible] I have [illegible] ledge the duty which, as a Sovereign, [illegible] nations, to protect with all my power the Constitution [illegible] whole Empire in the sense of the diploma [illegible] February last, as the inviolable foundation of [illegible] indivisibility of the whole monarchy; and [illegible] intention to repel any violation of the same as [illegible] existence of the monarchy, and on the rights [illegible] provinces and nationalities."

The allusions to the unity of the Empire and [illegible] institutions granted to the country were [illegible] applauded by the members. Baron Vay [illegible] Szechen were present at the opening of the [illegible] At night the city and suburbs were brilliantly [illegible] nated. The Emperor drove through the [illegible] streets in the evening, and was loudly cheered [illegible] people. On Thursday the Upper House [illegible] address in reply to the speech of the Emperor [illegible] Lower House the address was proposed. [illegible] sitting a member addressed a question [illegible] Minister of State with reference to the [illegible] to be sent by Hungary to the Council of the

[illegible] Upper House has elected Prince Charles von [illegible] as its President (the Archduke Albert [illegible] the appointment), and Baron Kraus as [illegible] Vice-President. The Chamber of Deputies has [illegible] Dr. Hein President and Herren Mazzuchelli and [illegible] Vice-Presidents.

[illegible]—The whole of Galicia has taken part in the [illegible] of members for the Council of the Empire.

HUNGARY.—The funeral of President Palvezy took place at Pesth on Monday. Nearly all the inhabitants were present, but no disturbance took place. All the [illegible] were draped with black; national songs were [illegible] by the students, and patriotic speeches were [illegible]. A circular has been issued by the [illegible] Committee of the Financial Administration at [illegible], ordering the Directors of Finance in the [illegible] districts to summon the communes to pay the taxes which are due, and to threaten them, in case of [illegible], with the employment of severe measures.

CROATIA.—The Magnates have declared that they will not send any representatives to the Hungarian Diet so long as the relation of Croatia to Hungary remains unsettled.

VENETIA.—The 20 representatives whom Venetia has [illegible] to the Council of the Empire have been elected. Among them are three members of the Mocenigo family, [illegible] Revedin, Balmarare, Pellegrini, Citadella, [illegible], Freschi, and Bellatorre.

ITALY.—The official journals announce that the Kings of Portugal and Greece, the Emperor of Morocco, the Bey of Tunis, and Prince Couza, of the Danubian Principalities, have followed the example of England and recognised the new kingdom of Italy. The Duchess Regent of Parma has published a protest against the usurpation of the title of King of Italy by Victor Emmanuel. In the sitting of the Chamber of Deputies on Monday, the Minister of Finance presented a bill for the establishment of a great book of the public debt of the kingdom of Italy. The Minister also stated that he will shortly present a Bill for negotiating a loan of 500,000,000 of lire to cover the deficit, which amounts to 314,000,000. Letters from Turin state that prior to the recent reconciliation of Garibaldi with Cavour and Cialdini the King sent for them to his study, where they met Generals Fanti, Lamarmora, Durando, Cosenz, and Bixio. M. Ratazzi, though indisposed, was also at this important meeting. The statements made by the King respecting a general armament were considered satisfactory by Garibaldi's generals, for Bixio left the same evening for Mondovi, and Sirtori for Fori, in both of which places there are depots of volunteers. The young men of Pavia honoured Garibaldi with an [illegible] while he was visiting a friend near Pavia. On Tuesday morning Garibaldi arrived at Genoa in order to be present at the marriage of his daughter with Signor Canzio, a Garibaldian officer, which took place on Wednesday. After the ceremony Garibaldi returned to Caprera. The Turin journals contain articles applauding the recent reconciliation, and state that the news has produced an excellent impression in all parts of the provinces. An attempt to excite a popular manifestation was made on Wednesday week at Milan by about 100 Garibaldians, who ran shouting through the streets. A telegram from Verona asserts that riotous assemblages of refugees from Venetia had [illegible] taken place in Milan.—On the 25th ult. a demonstration was made at Naples by some insubordinate National Guards against Signor Spaventa, in consequence of his having issued a circular prohibiting the National Guards from wearing their uniform unless on duty. About 30 National Guards entered Signor Spaventa's [illegible] and uttered threats against him. The National Guard afterwards arrived and re-established order. Prince Carignan on Friday issued a proclamation urging upon the inhabitants to maintain order and tranquillity, which produced an excellent effect. On Saturday afternoon the drums of the National Guard beat a general alarm, and numerous patrols traversed the streets. Several arrests were made among [illegible] who had escaped from prison and assumed the uniform of the National Guard. These events were the result of a Bourbon conspiracy. In the provinces also a reactionary movement was made by some Bourbon soldiers and brigands, who were prepared to march on Naples in the belief that the [illegible] movement had succeeded there. Five [illegible] brigands had entered the Roman States in the [illegible] of Aquila. Four vessels having left Civita Vecchia for Naples with Bourbon soldiers and brigands on board, an Italian war vessel has gone to meet them. Troops have also been despatched to the Roman frontiers. The officers of the National Guard have, in the name of the entire corps, published a protest against the events which have taken place in their name, and declaring that they are ready to defend the Government. They have also presented an address to Prince Carignan, in which they disavow the disturbers of order. The National Guard is also about to offer a grand banquet to the regular army. Order has been completely restored, and no further demonstrations are expected to take place. The functions of Commander-in-Chief of the National Guard have been suppressed, and Signor [illegible] has been appointed Governor of the provinces of Naples. Large bodies of troops embarked at Genoa on Thursday for Southern Italy.

SICILY.—Accounts from Palermo to the 28th ult. state that a popular assembly had been held there, at which shouts of "Long live Garibaldi!" were raised. The assembly was dispersed by the National Guard.

IONIAN ISLANDS.—The *Patrie* says that the Lord High Commissioner of the Ionian Islands has issued a proclamation declaring that, should the disturbances which have broken out at several points continue, the country will be placed in a state of siege. It also asserts that Corfu is militarily occupied, and that the troops are encamped in the squares and streets. At present there is no confirmation of these statements.

RUSSIA.—The *Journal de St. Petersburg* of Wednesday publishes an article which says:—

"The last war in Italy, the success of a fortunate soldier, the contagious example of Hungary, and the declamation of the foreign press [illegible], have exercised a great influence on Poland. The Government, however, can reckon on the support of the [illegible] population."

POLAND.—An ordinance of the Governor of Poland was published at Warsaw on Monday, ordering proceedings to be taken, without any reserve, against all clergymen who may excite the people by their preaching in the churches. A number of the principal inhabitants have been forbidden to receive company at their houses. A project for organising the Council of State has been submitted by the Government to certain of the Polish inhabitants of Warsaw in whom it placed confidence, requesting them to express an opinion thereon. They have, however, declined to do so. The President of the Court of Appeal at Modlin has declared all the persons who were made prisoners during the late events to be not guilty.

TURKEY.—By an arrangement between Sir Henry Bulwer and the Porte, the sequestrated arms have been stored in the Seven Towers.

THE PRINCIPALITIES.—The Porte has notified its consent to the union of the Principalities during the life of the present Hospodar.

HERZEGOVINA, BOSNIA, AND MONTENEGRO.—The European consuls arrived on the 25th ult. in the defiles of Douga, and entered into negotiations with the insurgent Christians, who, in deference to the Great Powers, abandoned the defiles of Douga and Christach. They have however again risen in insurrection, and demand local self-government. The consuls arrived on the 26th of April at Niksich, the siege of which place has since been raised, and they were about to proceed to Piva and Coupché. Omar Pasha is the bearer of a proclamation from the Sultan, assuring the inhabitants of Bosnia that the Pasha will protect them against the Montenegrins. The latest despatches announce a concentration of troops at Yenibazar against Montenegro, and assert that the English and Turkish squadrons had received orders to act in concert. The Turkish squadron has received provisions from the arsenal of Corfu.

SYRIA.—Advices from Beyrout to the 22d ult. announce that five Turkish vessels, with troops on board, had arrived from Constantinople, and that another body of French troops was on its way to Syria On their arrival Fuad Pasha will have 35,000 men at his disposal. An address was in course of signature, calling upon the European Powers to settle the question of indemnity, and to take energetic measures for the protection of the Christians in Syria.

CAPE OF GOOD HOPE.—The Cape Parliament was to meet on the 26th of April. The most important question for discussion was that of finance, the expenditure being in excess of the revenue, in consequence of an increase in the Government expenses, the construction of roads, and the reduction in the sources of revenue. Various schemes had been proposed to meet the exigency. A commission had been appointed to make the necessary arrangements for representing the colony in the forthcoming Exhibition in London. The Supreme Court had decided the cause of the Bishop of Cape Town against the Rev. W. Long in favour of the bishop. Considerable progress had been made with the works connected with the Cape Town railway. A portion of the line would soon be open. The separation movement continued. The affair was, however, in much the same state as it was two months since. The frontier districts and the Eastern Province were favourable to the movement; the Northern and Midland districts, however, were opposed to separation. The Western Province was neutral. The League was calling upon members of Parliament to resign. Several agricultural meetings had been held in Cape Town. The vintage was a great failure, the produce having been only a tenth of the usual quantity; 500 tons of sulphur had been ordered for the purpose of endeavouring to cure the disease. The Rev. Mr. Price and the Rev. Mr. M'Kenzie had returned in safety from the Makoloto mission. The Rev. Mr. Helmore, Mrs. Helmore, two of their children, Mr. Price's child, Mrs. Price, and several native members of the expedition perished in quick succession, and there is now reason to fear, that their deaths were caused not by the fever of the Zambesi, but by the poison of the Makoloto chief. Their treatment otherwise was also altogether barbarous. Great anxiety was felt about Dr. Livingstone, and the return of the Lyra to the Cape was looked for with much interest. Mr. Raines, of the Livingstone expedition, left for the Zambesi on the 21st of March. The present mail brings upwards of 500*l*. for the relief of the sufferers by the floods in the Netherlands.

UNITED STATES.—President Lincoln has issued the following proclamation calling for 75,000 men to take the field immediately, with a view to retake the forts and public property seized by the Secessionists, and convening an extraordinary Session of Congress for the 4th of July:—

"BY THE PRESIDENT OF THE UNITED STATES.

"A PROCLAMATION.

"Whereas the laws of the United States have been for some time past, and now are, opposed and the execution thereof obstructed, in the States of South Carolina, Georgia, Alabama, Florida, Mississippi, Louisiana, and Texas by combinations too powerful to be suppressed by the ordinary course of judicial proceedings, or by the powers vested in the Marshals by law; now, therefore, I, Abraham Lincoln, President of the United States, in virtue of the power in me vested by the Constitution and the laws, have thought fit to call forth, and hereby do call forth, the militia of the several States of the Union to the aggregate number of 75,000, in order to suppress said combinations and to cause the laws to be duly executed. The details for this object will be immediately communicated to the State authorities through the War Department. I appeal to all loyal citizens to favour, facilitate, and aid this effort to maintain the power, the integrity, and the existence of our national Union and the perpetuity of popular government, and to redress wrongs already long enough endured. I deem it proper to say that the first service assigned to the forces hereby called forth will probably be to repossess the forts, places, and property which have been seized from the Union; and in every event the utmost care will be observed, consistently with the objects aforesaid, to avoid any devastation, any destruction of or interference with property, or any disturbance of peaceful citizens in any part of the country; and I hereby command the persons composing the combinations aforesaid to disperse and retire peaceably to their respective abodes within twenty days from this date. Deeming that the present condition of public affairs presents an extraordinary occasion, I do hereby, in virtue of the power in me vested by the Constitution, convene both Houses of Congress. The Senators and Representatives are therefore summoned to assemble at their respective Chambers at 12 o'clock, noon, on Thursday, the 4th day of July next, then and there to consider and determine such measures as, in their wisdom, the public safety and interest may seem to demand. In witness whereof, I have hereunto set my hand and caused the seal of the United States to be affixed. Done at the city of Washington this 15th day of April, in the year of our Lord 1861, and of the Independence of the United States the 85th.

"ABRAHAM LINCOLN."

"By the President. WM. H. SEWARD, Secretary of State."

President Lincoln had also issued a proclamation declaring the blockade of all the ports in the seceded States, and it was announced that the Federal Government would condemn as pirates all privateer vessels which might be seized by Federal ships. No more provisions or arms were allowed to go South. Nearly all the Northern and Western States were raising and organising troops and volunteers with great energy, in answer to the call of the President. Money was liberally tendered from all quarters to support the Federal Government, and troops were arriving daily at Washington from all points. On the 20th ult. 5000 men were under arms at Washington. On the other hand the accounts from the neutral States were of the gravest character. The great State of Virginia had seceded, and the Governor had issued a proclamation recognising the Southern Confederacy. Virginia had also closed Norfolk harbour by sinking vessels at its mouth, in order to prevent egress from the navy yard. A Federal ship of war threatened to level the town if the obstructions were not removed. The Governors of Kentucky, North Carolina, and Missouri had refused to supply troops to the Federal Government. North Carolina had seized the forts in the State, and all the Slave States appeared to be arming in defence of the South. All the bridges have been destroyed between Baltimore and Washington. A Massachusetts regiment, while going to Washington, was attacked in Baltimore by the mob. Eleven were killed on both sides, and many wounded. Martial law had been proclaimed at Baltimore. Governor Hicks had declined to allow the Federal troops to pass through Maryland, and had informed President Lincoln that he would send troops for the protection of Washington, but not for the invasion of the South. All the Northern regiments will therefore have to proceed to Washington by sea. The Massachusetts regiment reached Washington on the 19th. The Federal troops from Philadelphia will be forwarded *viâ* Havre de Grace and Annapolis. On the 18th ult. Lieut. Jones, the Federal Commander at Harper's Ferry, being pressed by 1000 Virginians, destroyed the armoury, arsenal, manufactory buildings, and 15,000 stands of arms. He then withdrew his men into Pennsylvania, with the loss of three men. The Virginian troops, to the number of 1500, are now in possession of the town at Harper's Ferry. The Southern loan had been all taken. President Davis had issued a proclamation authorising letters of marque, and the Confederate Government was about to issue a call for 150,000 volunteers. A naval commission had been appointed for the purpose of purchasing or contracting for a certain number of gunboats, ship-rigged propellers of 1000 tons burden, capable of carrying at least one 10-inch and four 8-inch guns. These vessels are to be well built, of light draught and great speed, suitable for those waters. More troops had left New Orleans for Pensacola. All the Law Courts had been closed until May. Immense quantities of munitions of war were arriving at Savannah. A Federal vessel left Charleston for New York on the 16th ult. with Major Anderson and his men. The Federal fleet had also left Charleston on its return to New York. General Beauregard was strengthening every position. He had offers of regiments from Alabama and Georgia, and 10,000 troops were offered from Tennessee. At Columbia every man from 16 to 60 was under arms.

CANADA.—The deficiency in the public revenue of Canada for the past year is 760,000 dollars. A destructive fire occurred at Montreal on the 15th ult. Con-

siderable damage had also been occasioned by a great rise in the river.

NOVA SCOTIA.—The Legislature at Halifax was in Session on the 13th, when the telegram arrived announcing the bombardment of Fort Sumter. The following resolution was immediately moved amid intense emotion, and passed unanimously:—"That this House has heard with deep sorrow and regret of the outbreak of civil war among their friends and neighbours in the United States; that this House, without expressing any opinion upon the points in controversy, sincerely laments that those who speak their language and share their civilization should be shedding each other's blood, and desire to offer up their fervent prayers to the Father of the Universe for the restoration of peace."

THE BRAZILS.—Advices from Rio de Janeiro to the 9th ult. state that a dreadful earthquake had destroyed part of the city of Mendoza, in the Argentine Republic, by which 7000 lives and 2000 houses were destroyed, the loss of property being estimated at 14,000,000*l.* sterling. The city of Mendoza is situated almost at the extreme west of the republic, on a rich and well irrigated plain near the Andes, within about 100 miles of the Chilian frontier, and it has long had a large population and active transit trade.

Parliament.

HOUSE OF LORDS.

FRIDAY.—*The Government of India.*—Lord LYVEDEN presented a petition from the inhabitants and taxpayers of Calcutta and of Bengal proper, complaining of the system of Government in India, and especially of the oppressive nature of the income and indigo tax, and of the absence of public works. They also complained that while the people were burdened with taxation, the Government proposed to give the Mysore princes half a million sterling, which was equivalent to 50 per cent. of the income tax. They therefore demanded that changes should be made in the constitution of the Legislative Council.—Earl DE GREY and RIPON explained the nature of the arrangement with the princes of Mysore, which he said was on the whole beneficial to the public service, as a very large claim for an annuity had been capitalised by the payment of a given sum of money, for which the Government received an abundant equivalent by the annexation of the territories of the Prince of Mysore. The Government intended in the course of the present session to bring in a Bill for the regulation of the Legislative Council. After a few words from the Duke of ARGYLL, the Earl of ELLENBOROUGH expressed his deep regret that he had been induced to give his assent to the Legislative Council. He now admitted that he was mistaken, and he hoped that the Council would be abolished with as little delay as possible.—The Marquis of CLANRICARDE suggested that the Government should introduce the Bill for the remodelling of the Legislative Council in their lordships' House, and not in the Commons.—Earl GREY expressed his hope that the miserable farce of the Legislative Council might be done away with as soon as possible. The House then adjourned to Monday.

MONDAY.—*Civil War in the United States.*—The Earl of MALMESBURY asked whether Her Majesty's Government had used their good offices to avert hostilities in the United States, or whether they were in correspondence with any of the other European powers for that purpose.—Lord WODEHOUSE said that Her Majesty's Government, after mature deliberation, had decided that it was not desirable that this country should intrude her advice or counsel on the Government of the United States, as it was highly probable that a great and independent nation like the United States might not welcome advice given upon her internal affairs if that advice were proffered without being asked. Lord Lyons, therefore, had been instructed to give no advice unless asked for by the contending parties, but at the same time to express on every fitting occasion the earnest desire entertained by Her Majesty's Government that the differences between the North and South might be peacefully arranged. He also informed the House that the Government had not been in communication with any foreign Government on the subject. The *Post Office Savings Banks Bill*, after some remarks from Lords MONTEAGLE and STANLEY of Alderley, was read a third time and passed. The *Bills of Exchange and Promissory Notes (Ireland) Bill* passed through committee. The Duke of NEWCASTLE laid on the table a Bill to amend the *Passengers' Act*, which was read a first time. The *Queen's Prison Bill* was read a second time.

TUESDAY.—The *Royal Marine Barracks (East Stonehouse, Devon) Bill* was read a second time, the *Queen's Prison, &c. Bill* passed through committee, and the *Bills of Exchange and Promissory Notes (Ireland) Bill* was read a third time and passed.

THURSDAY.—The *Marriage Law Amendment Bill* and the *Leases, &c., by Incumbents Restriction Bill*, passed through committee; and the *Queen's Prison Bill* was read a third time and passed. *Scottish Poor Houses.*—In answer to inquiries by Lord DERBY and Lord WICKLOW relating to the religious instruction of Roman Catholics in Scotch poor-houses, the Duke of ARGYLL said that he did not consider there was any necessity for a change in the law, or for any alteration in the Poor Law Board of Scotland as at present constituted. *The Italian Parliament.*—The Marquis of NORMANBY asked for a copy of a report made to the Parliament at Turin with regard to the late Italian elections, and forwarded in a despatch to the Foreign Office by Sir J. Hudson.—Lord WODEHOUSE said that as no such despatch had been received from Sir James Hudson, none could be produced. He had the authority of Count Cavour for saying that the Parliament now sitting at Turin might be regarded as a fair exponent of public opinion in Italy.

FRIDAY.—*The Marriage of the Princess Alice.*—Earl GRANVILLE brought up a message from the Crown, which was read by the Lord Chancellor, communicating to the House her Majesty's intention to sanction a marriage between the Princess Alice and the Prince Louis of Hesse. The numerous proofs her Majesty had received of the loyalty of that House, and of its attachment to her person and family, left her no room to doubt the willingness of their lordships to make such a provision for this marriage as might be suitable to the dignity of the Crown.—Earl GRANVILLE said that this was not the time to go in detail into the subject of her Majesty's message, but at present it was his duty to ask their lordships to agree at once to a suitable address to her Majesty. They would have the greater pleasure in doing this at the present moment when her Majesty had so recently suffered a severe domestic affliction.—The Earl of DERBY cordially concurred in the motion. He had no doubt whatever that their lordships would willingly agree to any provision made by the House of Commons. The motion was agreed to. *The Bankruptcy Bill.*—On the motion of the LORD CHANCELLOR that their lordships should go into committee on this bill, the Earl of DERBY moved that the Bill be referred to a Select Committee.

[Left sitting.]

HOUSE OF COMMONS.

FRIDAY.—General PEEL asked what steps the Government had taken to ascertain whether the report of the *Murder of Captain Brabazon*, of the Royal Artillery, by the Chinese was true. His relatives entertained doubts of the truth of the report, and he thought there was no absolute proof of his death.—Mr. GREGORY also stated facts tending to throw discredit upon the story of Capt. Brabazon's decapitation. While the evidence was so unsatisfactory, every exertion ought to be made to ascertain the truth.—Lord PALMERSTON said he sympathised with the relatives of Captain Brabazon in their anxiety to ascertain the real truth as to his fate, but he was afraid the only consolation left to them was that he had escaped the lingering and barbarous torments to which his unfortunate comrades had been subjected. At the same time, he assured the House that Lord J. Russell had taken every means that could be employed to clear up the mystery. *Brazilian Claims.*—Sir H. CAIRNS asked for information as to the suspension of the proceedings under the convention for the settlement of the claims between this country and Brazil.—Lord PALMERSTON said that the proceedings had been suspended in consequence of the Government of the Brazils putting forth claims which were considered inadmissible. *Flogging in Prisons.*—Mr. KINNAIRD called attention to the returns on the subject of flogging children and others in prison. A desultory debate followed, in the course of which Sir G. LEWIS gave explanations as to the classes of cases in which flogging was inflicted, and the persons who sanctioned the punishment. The subject, he said, was under the consideration of a committee sitting upstairs. *See of Worcester.*—Sir J. PAKINGTON moved for a copy of all communications with the Ecclesiastical Commissioners with reference to a transfer of the Episcopal residence of the Bishop of Worcester from Hartlebury Castle to Worcester, and of all minutes and proceedings of the Board relating thereto. The motion was agreed to. The House then adjourned to Monday.

MONDAY.—*The Berwick Election.*—Mr. HODGSON inquired what steps were intended to be taken in reference to the charges of bribery brought against him by the Commissioners of Inquiry into the election practices at Berwick-upon-Tweed, and entered into explanations in relation to his conduct.—The ATTORNEY-GENERAL stated the grounds upon which he had come to the conclusion that the hon. member had been guilty of bribery, and said that he should forbear from instituting a prosecution on account of the absence of a material witness who had absconded from justice, and the difficulty of making him give evidence if he could be brought back. *The Budget.*—The adjourned debate on the order for going into Committee of Ways and Means was resumed by Mr. HORSMAN, who said that he could hardly understand how the Chancellor of the Exchequer had again this year brought on the question of the paper duties and the difference with the House of Lords. With the whole ocean of finance to navigate, and in a calm sea, he had run the ministerial barque on the only rock that was laid down in the chart. When the right hon. gentleman determined to take this course his colleagues yielded to him; for he was felt to be the keystone of that arch which now bridged over the chasm between Birmingham and Tiverton. He doubted whether there was any surplus at all. The Chancellor of the Exchequer indeed admitted this, for he reproached the House for the extravagance of its expenditure. But that expenditure had risen from 40 to 100 per cent. during the administration of the right hon. gentleman. England was not the only country that was arming. There was not a country in Europe that was not increasing its expenditure; and every country declared that its one terror was France, the destroyer of treaties, the rectifier of boundaries, and the champion of nationalities. In France itself the expenditure for the present year was estimated at 75,000,000*l.*, and a new loan of 30,000,000*l.* was about to be negotiated, making an addition of 180,000,000*l.* to the public debt in France within the last 12 years. Yet this was the Emperor who had declared that his mission was peace. Such being the state of Europe, he did not believe the House ought to part with any taxes; but if there was to be a remission it ought to be given to the poor in the shape of a cheapening of tea and sugar rather than to the capitalists among the paper makers. In taking this course he did not believe they would endanger the existence of the Ministry. To resign after a defeat on this question would be as little creditable to the Premier's patriotism as to his philosophy. He called on the House, therefore, to reject the Budget, and thus not only save the finances of the country but avert the insult aimed at the House of Lords.—Mr. BRIGHT taunted Mr. Horsman with his fondness for prognostications, and their constant falsification by events. His own creed, from which he hoped never to depart, was, that whenever a Chancellor of the Exchequer, of whatever party, declared there was a surplus, always to believe him. He believed, therefore, that there was now a surplus, and the only question was how it was to be disposed of. Now, apart from other considerations, he contended that the remission of the paper duties would be a greater boon to the working classes than the reduction of tea and sugar duties, because it would stimulate the trade and industry of the country. The excise had, in fact, strangled all the little paper manufacturers, and concentrated the trade in the hands of a few rich monopolists. Turning to the political view of the question, he contended that those who were most anxious to have this question quietly settled were the best friends to the constitution and to the House of Lords. He believed that the Budget was a just one for the Parliament to pass, and that it would be beneficent to the people; and therefore he gave it his hearty support. If England alone were tranquil, it was to be attributed to those budgets, which he had always supported, and which hon. gentlemen had, unfortunately for their reputation, always opposed.—Sir J. FERGUSSON said that the surplus was illusory; and that if the reduction of taxation was as opportune as it was the contrary, the paper duties were among the last that deserved the consideration of the House.—Mr. GREGSON said he would vote this time for the remission of the paper duties, but he hoped this would be the last year that the House would be called upon to continue the tea and sugar duties.—Mr. B. COCHRANE objected to the reduction either of the paper or the tea and sugar duties, and insisted that every remission of burden which the House could afford ought to be made on the Income-tax.—Mr. O'BRIEN supported the repeal of the paper duties.—Mr. LIDDELL said that if taxes were remitted, they should be those which fall upon the necessaries of life, rather than a duty the removal of which the poor would not value.—The CHANCELLOR of the EXCHEQUER remarked upon the transposition of the constitutional duties of the Government and the House which had appeared on this occasion. The Government said they had a surplus of 2,000,000*l.*, and proposed to surrender 1,500,000*l.* of taxes, and this proposition had caused a number of members to rise up in arms. According to the doctrine of the Constitution, it was the duty of the Government to take care that too little was not asked for the public service, and the duty of the House to see that it did not grant too much. There were two questions to be considered—first, whether there was a surplus, and, secondly, how it was to be dealt with. Now the opponents of the Budget were not agreed upon either question. On the first it had been said it was the interest of the Government to make out a surplus; but there were others who had an interest in showing there was none; there were prophets last year who were as much pledged to a negative as he was to an affirmative. He then went through, in detail, the calculations upon which the arguments against a surplus were founded, pointing out their inaccuracies, and justifying his own calculations. He insisted that the estimate of the amount to be received from China was a sound one, he demurred to the doctrine that the merchants were to be paid first. The estimates of the inland revenue had been framed with the concurrence of able and experienced officers, and he showed the cautious manner in which the produce of the income-tax had been computed. The Estimates were based upon the expectation of an ordinary season and ordinary circumstances, and he never had a stronger conviction than that there was likely to be an excess over the estimated revenue. With regard to the second question, how the surplus was to be disposed of, he balanced the claims of tea and sugar on one side and paper on the other. The reduction of the duties upon articles of popular consumption was not the only object kept in view by Sir R. Peel in 1842, but the liberation and extension of trade; this principle lay at the root of our reformed financial policy, and had governed almost every Budget. In asking the House to consent to a resolution for the repeal of the paper duties, which would close the controversy of 1860, the Government had done that which would be approved, he believed, by those who brought a candid mind to a view of the question before the House.—Mr. DISRAELI complained that the House had not been treated with frankness and candour by the Government, and warned the House to proceed with more caution than in respect to last year's Budget. The deficiency of last year appeared to have been supplied by increasing the liabilities and diminishing the resources of the country, by diminishing the balances in the Exchequer and increasing the debt. As to the question of a surplus, if the Chancellor of the Exchequer confessed a surplus, it was not the business of the House to prove he was mistaken. It was founded upon estimates of the great branches of the revenue, and he made it a rule not to question those estimates. They had therefore to deal with a surplus, though the mode by which it was arrived at was very peculiar, by the retention and renewal of war duties. The proposal was to repeal the duty on paper. He examined what he termed the pedigree of this question. It had been assumed that the House was pledged to repeal this duty; but he contended that it was not so pledged. The object of the motion of 1850 was to free the press from the taxes on knowledge, and that object had been accomplished; the result had been a vast multiplication of cheap newspapers, and the duty on paper then became a financial question. The alleged pledge of 1858 was, he contended, no pledge at all. There was an understood condition that the war duties should be first removed. We had an income tax of 9*d.* and war taxes on tea and sugar, and if war taxes were left upon the people in time of peace, what prospect was there, if an appeal was made to them hereafter, they would come forward and bear their share of the public burdens? The Chancellor of the Exchequer had suggested that the expenditure called for by the country was an obstacle to the repeal of the war taxes; but it was not the country nor the House that forced the expenditure upon the Government. He claimed for the House the privilege of expressing an opinion as to the distribution of a surplus of revenue for the relief of their constituents. The Opposition had shown no desire to embarrass the Government in their financial plans, but had supported them under difficulties. They, therefore, claimed the right of deliberation as to the appropriation of the surplus revenue. He should offer no opposition to the first resolution as to the income tax. With regard to the second resolution, for the renewal of the duties on tea and sugar, his hon. friend Mr. Horsfall would propose the remission of the war tax on tea instead of the paper duty, and he prayed that the decision of the Committee of Ways and Means might be for the advantage of the country and the maintenance of its commerce.—Lord PALMERSTON said the only question, now that a surplus was admitted, was how it should be disposed of, and the proposition of which Mr. Disraeli had given notice was a fair question for consideration. He preferred the repeal of the duty on paper, which, in his opinion, was recommended by, among other considerations, its bearing on its relations between the two Houses. The House then went into a Committee of Ways and Means, when, after considerable discussion, the resolution imposing the income tax was agreed to, and the Chairman reported progress.

TUESDAY.—As there were not 40 members present at 4 o'clock, no House was made.

WEDNESDAY.—*Recovery of Debts Bill.*—On the order for going into committee on this Bill, moved by Mr. HODGKINSON, Mr. M'MAHON said that the Bill was uncalled for, and embodied a principle new to our legislation; and he moved to go into committee for three months.—Mr. MILLER, Mr M. SMITH, Mr. COLLIER, and Mr. HENLEY also opposed the Bill, and on a division the amendment was carried by 121 to 23, so the Bill was lost. On the order for going into committee upon the *Constructive Notice Amendment Bill*, sent from the Lords, Mr. WALPOLE moved to discharge the order and refer the Bill to a select committee.—Sir F. GOLDSMID, who had given notice of his intention to move to defer the motion for committee for six months, assented to the motion, and the Bill was accordingly referred to a select committee.—Mr. L. KING moved the second reading of the *Religious Worship Bill*, and explained that its objects were to enable a clergyman of the Church of England to go into any parish, after having obtained licence from the bishop, but without consent of the incumbent, to officiate in any place other than a consecrated place of religious worship. He argued that this was a concession just and equitable to the parishioners, and was an advantage possessed by the members of other denominations.—Mr. ESTCOURT moved as an amendment that the Bill be read a second time that day six months. He described the Bill as one for introducing a rival and competitor to the incumbent in every parish. It would be a means of introducing religious discord, which was the worst of all kinds, into the parishes of England, and would eventually destroy the parochial system. He hoped the House would reject a Bill so meagre and unguarded, the professed objects of which could be attained by other means.—Sir G. LEWIS said if the Bill required the consent of the incumbent and the licence of the Bishop, and if the object of the Bill was merely to deal with the former, he was prepared to give his support to the second reading. It did not appear to him that the Bill would interfere with the parochial system, and if it provided proper safeguards, and the Bishop's consent was preserved, he did not think the dangers apprehended would be likely to be realised, or that the measure would have more than a narrow and limited operation.—Lord J. MANNERS insisted that the rights of the parochial clergy would be invaded by the Bill, which would sanction irritating intrusions and destroy the vitality of the parochial system.—Mr. BASS and Mr. SPOONER supported the Bill, as calculated to provide means of worship in those outlying districts of parishes which were too far from the parish church for the population to attend.—Mr. G. HARDY said that the Bill authorised any clergyman licensed by the Archbishop to go as a roving preacher into any parish in the province, and officiate there without the consent of the incumbent. He objected to such a disturbance of the existing system, which would upset the discipline of the Church, and provoke jealousy, rivalry and dissension. The Bill went far beyond any grievance that was really felt, and must inevitably lead to further innovations.—Mr. BUXTON said that the object of the Bill was to strengthen the Church of England, and its effect would be to diminish strife, and amend a state of the law which drove many persons into dissent.—Mr. NEWDEGATE opposed the Bill as unsound in principle and fraught with dangerous consequences.—

erton, as the framer of the Bill, said its real object was to emancipate the laity from the despotism of 14,000 clergymen, who were at liberty now to do as they pleased, and not to interfere with the parochial system.—Sir W. Heathcote pressed on the attention of Sir G. Lewis that every one of the modifications suggested by him, and upon which he had justified his vote for the second reading, had been disclaimed by the framer of it.—Mr. Horsfall supported the Bill in the interests of the laity.—Mr. L. King, in reply, signified his readiness to adopt the suggestions of Sir G. Lewis. On a division the amendment was carried by 191 to 145; so the Bill was lost. On the order for the second reading of the *Present Sessions (Ireland) Bill*, moved by Mr. Butt, Mr. Longfield moved as an amendment the previous question, contending that there was no urgent necessity for legislation on the subject, and that it should be left to the Government to deal with the whole grand jury system.—Mr. Dawson seconded the amendment.—Mr. Butt and Mr. M'Mahon defended the Bill.—Colonel Dunne opposed it.—Mr. Cardwell said that the Bill would require most material alterations. On a division, the previous question was carried by 86 to 66. The *Combination of Marriages Dissolution (Scotland) Bill* was read a second time.

Thursday.—*The Civil War in America.*—Mr. J. Ewart asked whether in the possibility of privateering being permitted by the Southern Confederation, her Majesty's Government had placed a sufficient force in the Gulf of Mexico, to protect British shipping and British property on board of American ships; and if privateers sailing under the flag of an unrecognised Power would be dealt with as pirates.—Lord John Russell replied that the Government had directed an adequate naval force to proceed to the coast of America for the protection of British shipping and British interests in that part of the world. With regard to the latter part of the question, the matters which it involved were of so momentous a character, that he had determined upon taking the opinion of the law officers of the Crown thereon for the guidance and instruction of our Minister in America, and the commanders of her Majesty's ships in those seas. The accounts which reached the Government daily as to the civil war now going on in the States were of a most lamentable description, and nothing but imperative duty would justify our interference in any way. We had not involved ourselves in the contest either by offering advice or otherwise; and, being thus free, for God's sake let us if possible continue to keep out of the quarrel. (This statement was received with loud cheers from all parts of the House). *Ionian Islands.*—In reply to Mr. Cochrane, Lord J. Russell said that no intelligence had been received at the Foreign Office in corroboration of the announcement in the French papers that a conflict had taken place at Corfu between the British troops and the citizens. *The Budget.*—On the order of the day for going into committee on Ways and Means, Mr. Hubbard moved an amendment to the effect that it was not expedient to remit taxation to such an extent that the annual produce of the remitted taxes should exceed the estimated surplus revenue in the budget for the current financial year.—Mr. Newdegate seconded the motion.—After a few words from the Chancellor of the Exchequer, the motion at the suggestion of Mr. Disraeli was withdrawn.—The House having gone into committee, the Chancellor of the Exchequer moved the resolution continuing the duties on tea and sugar, as at present imposed, until the 1st of July, 1862. There were, he said, two questions—the absolute merits of the tea duty, and its claims to remission in comparison with those of the paper duties. He discussed the relative merits of the proposed reduction compared with the repeal of the paper duties. He argued that the remission of duties non-recuperative was in perfect harmony with the views of the late Sir Robert Peel, who desired to augment the means of employing labour. The reduction of the duty on tea would, no doubt, give an impulse to labour, but it would be foreign labour, that of the Chinese; whereas the remission of the paper duties would stimulate British labour in the manufacture of paper and the produce of agricultural fibre, while the removal of the Excise regulations would relieve the trade from restrictions that operated as a check upon it by stinting and repressing enterprise. In his opinion the House was solemnly pledged to repeal the paper duty, and he called upon it to redeem its honour. He could not for a moment believe that the majority of the House of Commons would reverse that free trade policy which had done so much of late years to promote the welfare of the people and the general prosperity of the country.—Mr. Horsfall moved as an amendment that the duty on tea be reduced after the 1st of October next to 1s. per pound. The House, he said, had pledged itself to reduce the tea duty to 1s. long before any pledge was given in regard to the paper duty, and a Committee had recommended a considerable reduction of the duty. He believed that if the reduction were carried out, the revenue would recover itself in three or four years. To the repeal of the paper duty he was not opposed when the proper moment arrived, but he considered that the labouring classes had a prior claim to the remission of the tea duty. The Marquis of Hartington, Mr. Paget, and Mr. Norris supported the repeal of the paper duties; Mr. Hennessey and Lord Holmesdale supported the amendment.—Sir S. Northcote said the question had been argued as if we were in possession of a surplus; but he contended that a surplus must be made. He urged the House, on the ground of general policy, good faith, and sound finance, to agree to the amendment. He contended that it would be unwise to part with so considerable a source of revenue as that produced by paper; while, if the tea duty were reduced, the elasticity of the article would soon restore to the Exchequer what it had lost.—Sir G. Lewis replied to what he termed "the cobweb logic" of Sir Stafford Northcote, and defended the propositions of the Government, as on the whole calculated to give the largest measure of satisfaction to the country. With the views entertained by the Opposition, instead of proposing the reduction of an indirect tax like that on tea, they ought rather to have come forward with an amendment to effect a further diminution of the income tax.—Mr. Disraeli referred to the historical circumstance that the Conservative party were the first, eight years ago, to recommend the reduction of the duty on tea, on the ground that it would be a boon to the working classes. Nothing, he thought, could be more inconsistent than the conduct of the Chancellor of the Exchequer in insisting upon the retention of the war duties on tea, seeing that only four years ago, when Sir G. Lewis was Chancellor of the Exchequer, he denounced their repeal in fiery language, and with anything but "cobweb logic." On that occasion he even went the length of declaring that if he were an agitator for Parliamentary Reform he should desire nothing better as a basis on which to raise an agitation than the refusal of the House to remit these duties. The reduction of the duty on tea would stimulate consumption and open up new outlets of commerce to the trade and industry of the country, and any proposition which would effect that object was worthy the acceptance of the House.—Lord Palmerston said that as a surplus was now admitted, the simple question to be decided was the issue between tea and paper. The duty on tea was much lower than at any former period; the price of the article had fallen considerably; the consumption had increased, and the supply was augmenting. On these grounds, this was not a case of such urgency as to lead the House to select tea in preference to every other article. On the other hand, the Excise Duty on paper was oppressive to the trade; resolutions had been adopted condemning the duty, a Bill had passed that House abolishing it, and they had now an opportunity of settling, with the consent of the other House, a question which, if left unsettled, might be productive of differences between the two Houses hereafter. At 1 o'clock the House divided, when the amendment was negatived by 299 to 282. The resolution was then agreed to.

Friday.—*The Marriage of the Princess Alice.*—Lord Palmerston brought up a message from her Majesty, stating that a marriage had been agreed upon between Princess Alice and the Prince Louis of Hesse. It would be the duty of the House to express its feeling on the subject, and to take the earliest opportunity of thanking her Majesty for the communication. All who had had the honour of seeing the Princess Alice knew that she inherited all those eminent qualities of head and heart which so greatly distinguished her royal parents. He concluded by proposing an address to her Majesty on the subject.—Mr. Disraeli seconded the motion, which was agreed to.—Lord Palmerston then gave notice that on Monday he would move that the House go into committee to consider her Majesty's Message. *Business of the House.*—Lord Palmerston moved a series of resolutions relating to the business of the House in accordance with the report of the select committee recently appointed on the subject.—Lord John Russell seconded the motion.—Mr. Bentinck moved an amendment to the effect that it is not expedient to sanction the proposed alterations in the standing orders, and in the practice of the House.—Mr. Knightley seconded the amendment.

[Left sitting.]

City Intelligence.

Money Market, Friday.—British Funds: Consols closed at 91¼ to ⅜ for Money, and 91⅞ to 92 for the 9th inst.; Bank Stock, 232½ to 232; Reduced and New Three per Cents., 90 to ⅛; India Stock, 222; Ditto Five per Cent. Stock, 101⅞ to 102; Ditto Scrip, 101⅞; Ditto Four per Cent. Debentures, 1858, 96¾; Five and a Half per Cent. Enfaced Rupee Paper, 100¼; Exchequer Bills, 3s. to 6s. dis.—Foreign: Mexican Three per Cents., for Acct., 23⅝; Peruvian Uribarren Four and a Half per Cents., 82¾; Russian Four and a Half per Cents., 91½; Spanish Three per Cents., 50½ to ⅝; Ditto New Deferred Three per Cents., for Acct., 42¼; Ditto Passive, 17; Turkish Six per Cents., 1854, for Acct., 72 to 71¾; Ditto, 1858, 57½; Ditto for Acct., 58 to ¾; Ditto 100*l.* Bonds, 58½ to 61; Ditto Guaranteed Four per Cents., 100½.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£26,514,950	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion	11,336,498
		Silver Bullion	713,452
	£26,514,950		£26,514,950

BANKING DEPARTMENT.

Proprietors Capital	£14,553,000	Government Securities (including Dead Weight Annuity)	£10,272,938
Rest	3,190,173	Other Securities	17,886,117
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	5,578,523	Notes	6,207,645
Other Deposits	11,180,611	Gold and Silver Coin	798,698
Seven day and other bills	862,891		
	£35,165,398		£35,165,398

2d day of May, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY—BANKRUPTS—J. Argent, Fleet Street, Innkeeper and Licensed Victualler—T. Benfield, Nuneaton, Warwickshire, Innkeeper and Brewer—W. Clayton, J. W. Clayton, and C. Billington, York, Contractors and Builders—A. Cox, Bedminster, Bristol, Victualler—J. Gibson, Birmingham, Licensed Victualler—J. Graham, Liverpool, Blue Manufacturer and Dealer—C. W. Jenner, Hunmanby, Yorkshire, Surgeon and Apothecary—R. W. Kibbus, Walton-on-the-Hill, near Liverpool, Lancashire, Chemist and Druggist—T. Mould, Sudbury, Derbyshire, Farmer—G. Pearson, Store Street Mills, Manchester, Machine Maker—G. Peffani, Minories, Sail Maker and Ship Chandler—J. Perrott, Cheddar, Somersetshire, Draper and Grocer—T. W. Randall, Wexham, near Slough, Buckinghamshire, Corn Dealer—L. Tallis, Warwick Square, City, and Chadwell Street, Pentonville, Bookseller and Publisher—J. Trevett, Sheffield, Boot and Shoemaker—T. T. Tyrack, Liverpool and Bootle-cum-Linacre, Flour Dealer and Baker—G. Wall, Canterbury, Common Brewer—A. Williams, Melcombe Regis and Weymouth, Dorsetshire, Builder.

FRIDAY—BANKRUPTS—H. Blake, Slade, Newport, Isle of Wight, Maltster and Corn Merchant, and Portsea, Brewer—W. Braddon, Holloway, Coal Merchant—S. Cooke, Nottingham, Builder and Provision Dealer—J. Day, Coventry, and Noble Street, London, Ribbon and Trimming Manufacturer—W. Downes, Wolverhampton, Grocer and Tea Dealer—G. Evans, Tyn-rhos, near the Valley, Anglesey, Corn Merchant—E. Fairhurst, Ormskirk, Lancashire, Grocer—D. Gamon, Colney Hatch Station, Middlesex, Builder—W. R. Hayne, Devonshire Terrace, Camden Road, Apothecary—G. Jackson, Birmingham, Tobacconist—L. Kiss, Watling Street, City, Merchant—J. Moore, Charlton Street, Euston Road, Ironmonger—J. Morgan, Greenfield Street, Whitechapel, Draper—G. H. Oates, Brighouse, Yorkshire, Ironmonger—D. Pilditch, Oakley Crescent South, Chelsea, Builder—F. Taylor, Cradley Heath, Rowley Regis, Staffordshire, Grocer and Provision Dealer—T. Thomson, Halifax, Stuff Manufacturer—W. Tunbridge, Ware, Hertfordshire, Draper and Grocer—B. J. Warton, Endell Street, Long Acre, Carver and Gilder, Picture Dealer.

Metropolis and its Vicinity.

Dinner to Lord Derby at the Mansion House.—On Wednesday evening the Lord Mayor gave a State banquet to the Earl of Derby and the leading members of the Conservative party at the Mansion House. The Earl of Lucan acknowledged the toast of the Army, Sir John Pakington that of the Navy, and Lord Colville that of the Volunteers; the Earl of Derby returned thanks for the Conservative party, the Duke of Rutland for the House of Peers, Mr. Disraeli for the House of Commons, the Marquis of Salisbury for the Magistracy of Middlesex, and Mr. Whiteside for the Bar. The following are extracts from Lord Derby's speech:—

"My Lord Mayor, I may say that never during the period I have been connected with the Conservative party have I felt greater pride, never have I felt a higher admiration for their position and their bearing, than I do at the present moment. Never, I believe, since the moment of their unfortunate disruption in 1846, have they at any time stood so high in the opinion of the country as they do at the present moment. My Lord, what some persons call the cold shade of Opposition has failed to dissipate their zeal or diminish their numbers. In the country we see them day by day increasing in numbers and in energy. Every fresh election bears testimony to the increasing hold their opinions and principles have on the country. Not that I would wish to be understood as saying that the feeling of the country is reactionary, but I believe that the country is becoming awake to the conviction that the greatest promisers are not always the greatest performers—that the great cause of social advancement, of legal improvement—that much boasted shibboleth of civil and religious liberty, are at the least as safe in the hands of the Conservatives as in the hands of the Liberal party, and that the great institutions of the country—the Church, the Peerage, and the Monarchy—may be a trifle safer. It is little—though that is indeed a height to which some political parties are unable to attain—it is little to abstain from vexatious opposition to a Government in which you place no confidence—it is little to abstain from vexatious division and hostile movement; but it is no slight thing when a party for the support of the Government to which they are opposed sacrifice all their personal feelings, all idea of personal resentments, all feeling of private or party interest, for the purpose of coming down day after day, not to offer any active opposition, but to give a cordial and zealous support to the Ministers of the Crown, although the conduct of those Ministers be not such as to inspire that confidence. And yet this is the course which day after day we have the pride to see the Conservative party pursue. My Lord, it is well known that if the Conservative party were to cease the vigilance of their attendance in Parliament for the protection of her Majesty's Government, the noble viscount at the head of the Government would very shortly sustain the fate of Actæon, and be torn to pieces by his own dogs. We know that the jarring elements of which the Liberal party—God save the mark!—is now composed are kept together solely and entirely by their apprehension and fear of the united power of the great Conservative party who oppose them; and, if for one single moment we were to relax our vigilance we know that their discords would break out into open rebellion, and that the Queen's Government could not be sustained during the Session. Day after day and week after week the Conservative members of the House of Commons are going down to that House for the purpose of assisting her Majesty's Government in their weak and half-hearted opposition to measures of which they know the danger, and supporting and assisting them against their own allies in the great Liberal party, and not unfrequently repeating the triumph which Wednesday after Wednesday has seen—protecting, not, indeed, the Ministers of the country, but that which is more important than any Ministry—the great institutions of the country against the combined attack of the supporters of the Ministry, and the half-accorded and feeble support occasionally given by that Ministry itself. It is little indeed for one who, like myself, has attained, very undeservedly, the highest honours a public man can attain to—it is little for one who has held, and may hold again, distinguished station to wait their time with forbearance and patience; but there are young and laudable ambitions panting for opportunities of distinguishing themselves, conscious of their own powers, conscious of the powers of their own party; and I say that to see them restrain their personal and political feelings, to see them give a daily support to a Government they distrust, is an act of self-command, of forbearance, and discipline which in a corps like themselves, essentially volunteer, may well put to shame the discipline and tactics of a trained army and of a disciplined leader; and depend upon it, gentlemen, as in war so in politics, self control, forbearance, discipline, waiting for the right time, if they are not more effectual in winning a battle, are certainly more effectual in winning the campaign than the most brilliant valour and daring onslaught. It is this quality, I say, I most honour in the party which has done me the honour to follow my advice. But I say again, why do we take this course? Why, because we are firmly convinced that, whatever our personal advantages, it is for the advantage of the country, whose interests are, and I trust always will be, the prime object of our Conservative attachment, that there should not be constant changes of Government. We desire to see a strong Government. I fear we have not one at present, and I must confess honestly I do not see the mode of forming a strong Government; but that which is most to the prejudice of the country is a succession of weak Governments, and a perpetual change creating embarrassment and inconvenience—embarrassment to the Sovereign, embarrassment in all our foreign and diplomatic relations, embarrassment and want of steadiness in carrying on the domestic policy of the country. And we know by past experience that if, by any hasty move or any impatience, we were to do what it is little to say any week or fortnight we have the means of doing—compelling the resignation of the present Government—the union of the Conservative party in office would lead again to those renewed combinations of the advanced sections of the Liberal party which might again cause another change, disturbance, in the social and political relations of the country. If I may be permitted to allude but shortly to the state of political affairs, I must say there never was at any time a moment when it was more important that those who have to deal with political affairs in England should exercise the greatest amount of moderation, of temper, of judgment, and of forbearance. With regard to foreign policy, I believe that as to the foreign policy that ought to be pursued in this country there is little if any difference of opinion among any class of Englishmen. We all of us have a national sympathy for countries desirous of extending their own liberties and rights; we all sympathise with their efforts to obtain and maintain the constitutional liberties which we have long enjoyed and know how to value; but, on the other hand, every Englishman desires that those rights should be won by those countries themselves—that they should not be obtained by the intrigues of other Powers—that other countries should not be stimulating and exciting secret intrigues and fomenting discontent among the population of countries with which they are in alliance. We have no object to pursue, no ambition to gratify; all our desire is—and I believe it is the desire universally of every Englishman with regard to our foreign policy—that the influence of this great country should be used for the purpose of maintaining the peace of the world—for the purpose of conciliating differences—for the purpose of securing to all that amount of peace which is the surest herald of prosperity, and which we ourselves know how to enjoy. But in the present state of Europe unhappily we are compelled by the necessities of our position to incur heavy and grievous expenditure, to submit to an oppressive burden of taxation, because there is one object and one primary object in comparison with which every other sinks into insignificance, and that is the maintenance of the military, and especially the naval power of this great country. It may be desirable for other countries to increase their naval power; it may be desirable for them to increase their armed forces to an amount we cannot pretend to rival; but if we once permit any Power, or any two Powers, to be more powerful than ourselves at sea, from that moment the independence of this country is in jeopardy; and to avoid such a calamity, if other nations make great warlike preparations, this country will cheerfully and willingly submit to any sacrifice, to any amount of taxation, to any burdens, for the purpose of insuring the independence and promoting the strength of the country. At this moment a question is pending in one of the Houses of Parliament as to the application of the surplus of the present year. I do trust that the House of Commons will cordially and diligently consider the various modes which may be proposed to them for the distribution of that presumed surplus. I have a very strong opinion that one portion at least of the mode in which the Government propose to deal with this question is not the mode which, financially or politically, is most desirable; and I believe if the country were polled from one end to the other—it would almost reconcile me to that favourite nostrum, that skulking hole of political cowards, the vote by ballot, if I could put before the country for their deliberate decision the question whether they would give for

the advantage of the country 1,250,000*l.* for the abolition of the duty on paper, or 1,250,000*l.* on the remission of the duty on tea. That is the question which the House of Commons will have to decide this week; and I think, without pretending to be afraid of the consequences, I can venture to say, that if her Majesty's Government should find themselves in a minority on the question they will not appeal to the constituencies of the country to confirm their policy. Nothing I should like better than for the Ministry to go to the country with such a motto inscribed on their banner, "Down with the Duty on Paper and up with the Duty on Tea." I have said it is a question for the House of Commons seriously to consider; and I say emphatically the House of Commons, because no man is more ready than myself to say that to that House belongs exclusively the imposition, and mainly, if not exclusively, the regulation of the taxation of the country; and that when a surplus has been established to the satisfaction of that House, and they have formed their judgment as to the best mode of dealing with it, they need not apprehend what some persons pretend to apprehend, any collision upon the subject between the two Houses of Parliament. It is quite true that last year, when circumstances had altered, when the Chancellor of the Exchequer came forward with an amended budget, entirely falsifying the previous calculations, showing a manifest deficiency in the revenue, the House of Lords did feel it their duty to exercise an exceptional, but at the same time a perfectly constitutional right, by interposing to diminish the extent of the deficit by retaining the million and a quarter of the paper duty; and although the Chancellor of the Exchequer was very angry with his colleagues for pocketing the affront, he with the greatest possible composure pocketed the additional million and a quarter, and thereby to that extent improved his own position. It is for the House of Commons, then, to decide how that surplus shall be applied, and I do not hesitate to say that, however that question may be decided, they very little know the spirit that actuates the House of Lords who believe that the moderation prescribed by the Constitution will be exceeded by that branch of the Legislature, or that they will be tempted to forget their own dignity or resent any petty pique to provoke a collision between the two Houses."

The New Houses of Parliament.—The Fine Arts Commissioners issued their 12th report on Saturday. They state that with regard to paintings, they have found that, under the existing conditions of lighting, oil pictures prove altogether unfit for the purpose, and they have therefore restricted the works now in progress to fresco or to the water-glass process which has been for some years practised with good results in Germany. They report that there has been unnecessary delay in the instance of the Peers' robing-room, to be painted by Mr. J. R. Herbert, R.A., but they believe it is to be attributed rather to repeated experiments and a conscientious study of the subjects by the artist than to any feeling of indifference or interruption from other occupations. Mr. Dyce, R.A., undertook to complete the painting of the Queen's robing-room by June, 1855 (afterwards extended to June, 1856), and had at that time received the stipulated remuneration; but the work is, to the extreme mortification of the Commissioners, still unfinished. The delay now is understood to be from ill-health. They regret the more any impediment to the completion of this work, since the portion already executed is in their judgment highly creditable to the artist. In one of the large compartments of the Royal Gallery Mr. Maclise, R.A., is painting the meeting of Wellington and Blucher after the battle of Waterloo; and, finding fresco painting imperfectly adapted for a multiplicity of details, he has adopted the stereochrome or water-glass method of painting, of which a full account is subjoined. The commissioners add that such is the encouragement now extended to painting by opulent lovers of art that the artists could in almost every case be more profitably, though not more honourably employed in other and less arduous undertakings. With regard to statues, a committee, consisting of the Prince Consort and Lords Stanhope and Llanover, have recommended, in addition to Gibson's marble statue of Her Majesty, already completed for the Prince's Chamber, a series of 37, comprising Edward the Confessor, Harold, and then from William the Conqueror downwards; 12, including the Sovereigns of the Houses of Brunswick and Stuart, to be placed in the Royal Gallery; 5 (the Tudor series) in the Queen's Robing-room; 16 older Sovereigns on the principal landing-place and in the adjoining porch, and the four most ancient of the series, selected as representing the Saxon and Norman periods, on the lower landing place, the 20 on the landing-places to be of metal, the other 17 of white marble; and they recommend that Mr. Theed be invited to undertake two of the latter (William IV. and George IV.), and Mr. T. Thornycroft other two (Charles I. and James I.), at 800*l.* each. Accordingly the report proposes that the vote this year be 3200*l.*, instead of the usual 4000*l.*, for the balances of former grants in hand for payment of works in painting are in advance of those works.

The Special Services at St. Paul's.—On Sunday last the special evening services under the dome of St. Paul's were brought to a close. The series was commenced on Sunday, Jan. 28, so that there have been only 14 services, being far less than in previous years. The first sermon was preached by the Bishop of London, and the others were preached by the Bishops of Durham, Cork, Ripon, Carlisle, Canon Dale, Canon Wordsworth, and other clergymen.

Westminster Bridge. Before very long all that remains of old Westminster Bridge will have disappeared. The removal of the last arch was accomplished last week, and the remaining portions of the original structure are principally under water. All the ornamental iron-work, parapet, and balustrades of the western half of the new bridge have been put up, so that a good idea of the effect of the whole structure when completed can now be formed. It is simple, light, and beautiful in the extreme, and when finished, will doubtless be one of the most beautiful, not only in London, but even in Europe. The ornamental shields, which are to fill up the Gothic quatrefoils on the spandrils of the arches, are not yet placed. These will be of cast iron, and emblazoned with the arms of Westminster and England in gold and colours. The crown of the arch is more than 11 feet lower than the highest point of old Westminster Bridge. The entire space allowed for waterway under the new bridge is 750 feet, and of this no less than 140 feet are now occupied by the remains of the old piers and the scaffolding necessarily erected for building the new. In a few months these will be removed, and for the first time for the last 20 years the tide will flow unrestrictedly, and with greatly increased facilities for its passage up the Thames.

Decay of the Stone at the Bank of England.—The stone-work of the Bank of England has begun to show a rapid decay, similar to that of the new Houses of Parliament. In order to arrest the progress of the decomposition, a coating of a newly-invented composition has been applied to the Threadneedle Street front, by way of experiment. The buildings of the Bank were erected in 1732, enlarged in 1771, improved in 1796, and partly rebuilt in 1824.

The Royal Mint.—The office of resident engraver to Her Majesty's Mint has become vacant by the superannuation of Mr. James Wyon.

Departure of the Great Eastern.—The Great Eastern left Milford on Wednesday evening at 7.50 for New York, with 100 passengers. The vessel was in the most perfect order. The Waterford steamer accompanied her for some distance, and brought back the directors, visitors, and the Government pilot. She went away at a rapid rate with both screw and paddles, and it is expected that she will make the passage out within nine days.

Indian Famine Relief Fund.—The total sum received at the Mansion House up to Thursday evening amounted to 77,230*l.* By the mail which left last evening the Committee sent out another 10,000*l.* to Bombay. Taking into account the sums subscribed in the provinces, the total amount of the fund must be now upwards of 100,000*l.*

Club for Working Boys.—The Rev. Henry White, incumbent of the Chapel Royal of the Savoy has established a "Youth's Club and Institute" at the Lowther Arcade Exhibition Rooms, where he has now about 170 young men and boys who are constant attendants. These lads have the instruction of an ordinary evening school by means of a library and reading-room, with classes on every necessary subject. The institute also gives them the opportunity for free and friendly intercourse with lads of their own age, by means of a cheerful well-warmed room, provided with a large variety of games—chess, draughts, dominoes, and the like, while daily and weekly newspapers and other periodicals are amply provided.

The Union of the City Benefices.—The Bishop of London has issued a commission to the Lord Mayor; the Rev. B. Gibson, rector of St. Mary Abchurch and St. Lawrence Pountney; the Rev. Michael Gibbs, rector of Christ Church, Newgate Street; the Rev. Samuel Rowsell, rector of St. Christopher-le-Stocks; and Mr. Bloomfield Burnell—to inquire into the expediency of uniting as one the benefices of St. Alban, Wood Street; St. Olive, Silver Street; St. Michael, Wood Street; and St. Mary Staining; also St. Margaret, Lothbury; St. Bartholomew - by - the-Exchange, St. Christopher-le-Stocks, and part of St. Stephen, Coleman Street; also the rectory of St. Augustine with St. Faith, and a portion of St. Mary Magdalen, Old Fish Street, with St. Gregory; the rectory of St. Paul's Wharf with St. Peter's, Paul's Wharf; and a portion of St. Mary Magdalen, Old Fish Street, with St. Gregory. This inquiry is preliminary to the pulling down of several of the old City churches, and rebuilding them in other parts of the metropolis where church accommodation does not exist. About 20 churches are to be thus removed.

The "Old Westminsters" Memorial.—The monument erected in the Broad Sanctuary by Westminster men in memory of their schoolfellows who fell in the Crimean and Indian wars, was completed a few days since. It consists of a column of red Aberdeen granite, surmounted by four sitting figures and a model of St. George and the Dragon, and rises to a height of about 68 feet, the whole having been designed by Mr. G. G. Scott, the architect. The four sitting figures are: Edward the Confessor, founder of the original school; Henry III., second founder; Queen Elizabeth, founder of the present school; and Queen Victoria. Round the column are shields, with armorial bearings, and the names of the old Westminsters who fell are engraved on the plinth. There are no railings, but kerb-stones will be raised round the column, and there will be two Gothic lamps at its base.

Fire at Woolwich Steam Flour Mills.—On Sunday morning, at an early hour, the steam flour mills of Messrs. Rose & Scrivener, New Road, Woolwich, were discovered to be on fire. Owing to the want of water the flames for three quarters of an hour continued their ravages unchecked. The interior of the mills was nearly consumed, and the adjoining property, consisting of dwelling-houses, was much damaged.

Metropolitan Drainage. The total length of the sewers intended to be constructed by the Metropolitan Board of Works for the main drainage of London is within a few yards of 74 miles. The length executed at present is not 19 miles, but ... course of execution, and the total ... is 46 miles.

The Public Health.—The ... Weekly Return states that in ... Saturday, April 27, the deaths in L... average number in the corres... years 1851-60, corrected for increase ... 1234. The present return is ... average. During the week the b... 928 girls, in all 1858 children, were ... don. In the 10 corresponding weeks ... 1851-60 the average number was 1...

Provincial.

Farringdon.—At the Court ... Friday, the adjudication of ba... against Messrs. Barnes, Medley ... ringdon and Wantage, was disp... the ground that he had not as... the bank, upon which the adjudic... that the affidavit filed in suppor... adjudication was untrue, inasmuch ... Barnes resided on the premises ... don. It appeared that he had ... the places where the bank was carr... that he had taken no part in the ... contributing to its necessities upwar... adjudication was, therefore, annu... quence is, that a composition, offe... by the creditors to pay them 10s. ... carried out without further interrup...

Manchester.—On Monday a mee... tive weavers was held at Hyde to ... should be taken with respect to ... 4000 persons were present. The ... stated his opinion that the operatives ... ing their own interests by going to ... price, and it was ultimately resolved to ... Thursday morning.

Oxford.—A meeting of the Provost ... Queen's College was held on Tuesday ... of electing a successor to the Rev. ... recently resigned the headship of St. ... The choice of the election fell ... Branthwaite, M.A., fellow of Queen's ... master of St. Nicholas College Grammar ... ham. The rectory of Great Gaten... annum, is held by the University ... principal of this hall.

Portsmouth.—Christopher Edwin ... chief clerk at the Portsmouth Branch ... England, who absconded in March ... sum of money in his possession, and ... hension a reward of ... arrested on Monday nig... by two detective officers ... tracing him. When they ... prisoner was denied to them ... several doors in order to get ... were thus engaged, The ... frightful manner. The officers ... surgical assistance, and the pr... veyed to Westminster Hospital, ... in a very precarious condition. His ... but as soon as he is able he will be ... for examination.

Road.—The sale of the effects ... Road Hill House terminated on Satur... for three days. Numbers of people ... the opportunity to visit Elizabeth ... and the detached building in wh... child was discovered. The furnit... servants' bed-rooms was first br... The prices began at very low figures ... rapid rise, and occasionally more ... article was paid. Miss Constance K... bed, however, obtained no more th... The oil paintings did not in any ... of their value. A portrait of M... Zuccaro, for which Mr. Kent ha... offered 100*l.*, was sold or bought in ... "Rent Day," and "The Reading of ... 22*s.* and 21*s.* The gross proceeds ... sale amounted to about 1000*l.*, ex... logues sold at 1*s.* each. The h... been let to a titled gentleman, wh... possession, changing the name to L... place forming portion of the Lang... Kent and his family are at present ... super-Mare.

Shrewsbury.—The sentence of ... Elizabeth Griffin, who was convicted ... of the murder of her infant child, has ... to penal servitude for life.

Ireland.

The Roman Catholic Prelates.— ... Catholic prelates held a conference ... which occupied several days. ... doors, but the following abstract ... has been made public:—

"The principal subjects with which ... pied were the Catholic University, ... education, the Poor Laws, and the ... deaths, and marriages. The rectorship ...

[illegible] resignation of Dr. Newman, has been con[illegible] Woodlock, President of the College of All [illegible] simultaneous annual collection for the support of [illegible] is to be made on the third Sunday in November [illegible] diocese in Ireland. In regard to primary [illegible] satisfactory the few changes recently made [illegible] national system, and supporting their claim [illegible] of the Royal Commission on [illegible] England. On the registration of births, deaths, [illegible] it was agreed to co-operate with the Govern[illegible] the existing penal laws as to mixed marriages [illegible] instead of the proposed scheme of [illegible] through Poor Law officials, a Catholic clergyman [illegible] as general registrar in each diocese, to whom [illegible] would transmit their respective [illegible]

The [illegible] Universities.—Lord John Russell has [illegible] at the disposal of Trinity College and the Queen's University three nominations, each for candi[illegible] before the Civil Service Commissioners [illegible] as student interpreters in China and Japan.

The Yelverton Case.—The Scotch commission, which has been sitting at the Palatine Hotel, Man[illegible] several days, terminated its labours on [illegible] The object of the commission was to find out, on the part of Major Yelverton, something prejudicial to the character of Mrs. (Longworth) Yelverton, but has ended, it is said, in a total failure. The lady, who has been staying during the last eight days at the private residence of a gentleman in the neighbourhood, left Manchester on Tuesday. Some doubts have been expressed whether Mrs. (Forbes) Yelverton would live with the Major until the proceedings now pending before the Irish and Scotch courts, relative to the legality of his first marriage with Miss Longworth, were [illegible]. The following paragraph from a Dublin paper of Saturday sets the question at rest:—"The Hon. Major Yelverton and Mrs. Forbes Yelverton arrived in Dublin on Thursday evening from London."

Scotland.

Conviction for Wife Murder.—At the Circuit Court at Perth on the 25th ult. Alexander Hutchison, labourer and quarrier, Dundee, was tried for the murder of his wife, Christina Fowler, on the 6th of April. It appeared from the evidence of their children that deceased was very much addicted to drink, and that, having come home in a state of intoxication the prisoner knocked her down with a poker and trampled on her, causing almost immediate death. Several witnesses deponed that the prisoner was a quiet, indus[illegible] and that deceased had for years [illegible] drinking; that she was constantly [illegible] for drink, and had been twice con[illegible] it. The jury found the prisoner Guilty, but recommended him to mercy on account of the great provocation he had received. Lord Ardmillan sentenced the prisoner to be executed at Dundee on the 22d of May.

Law.

Court of Exchequer.—Sittings in Banco. (Before Lord Chief Baron and Barons Bramwell, Martin, and Wilde.)—In Re [illegible]—The Lord Chief Baron [illegible] judgment on Tuesday in this case. He said it was a [illegible] for a habeas corpus to bring up the body of [illegible] in order to be discharged out of custody. The argu[illegible] occupied a considerable time, at the end of which the [illegible] that the writ ought not to issue, but upon the points of law they took time to consider their judg[illegible]. The question raised was whether the Court of Assizes was [illegible], and therefore not obliged to set out the [illegible] for which the defendant was committed. The Court had considered the whole case very attentively, and had come to the conclusion that Mr. Justice Hill, who was sitting at the Court of Assize on the day in question, was quite right [illegible] it to be a superior court, and was, therefore, [illegible] set out the cause of commitment. There would [illegible] rule, and the habeas would not issue.

Court of Chancery.—The Apothecaries' Company v. Royal College of Physicians.—This was an information filed by the Apothecaries' Company to restrain the College of Physicians [illegible] the resolution adopted by them in April [illegible] authorising their licentiates to com[illegible] the medicines they prescribe, or in any other [illegible] the calling of an apothecary. The defendants [illegible] information. The case was argued at great length [illegible] on Tuesday, and on Wednesday Vice-Chancellor [illegible] gave judgment to the effect that the plaintiffs had [illegible] case, and that the College of Physicians [illegible] the course they were taking.

Court of Common Pleas.—Sittings in Banco. (Before Lord [illegible] Justices Willes, Byles, and Keating.)—Russell v. the Great Ship Company.—In this case there had been a reference [illegible], and an award was made in favour of Mr. Russell [illegible] amount of 18,000l. An action was com[illegible] award, and at the trial before the Lord Chief [illegible] both judge and jury, he gave a [illegible] Mr. Russell. On Friday a motion was made [illegible] for a rule for a new trial, on the [illegible] had exceeded their authority in [illegible] not arising under the contract. Their [illegible] that the arbitrators had not [illegible] and that consequently the verdict [illegible] the award must stand. Counsel on behalf of Mr. Russell [illegible] speedy execution against the company, [illegible] a limited company, and the only property [illegible] was the great ship, which was advertised to sail for America. If the ship got once out of the jurisdiction of the [illegible] to say whether she would ever come [illegible] might be utterly unable to enforce his [illegible] the company opposed the application, [illegible] to be instructed to ask for leave to appeal [illegible] Court of Queen's Bench had given as clear and [illegible] against this award as their lordships had [illegible] and this upon precisely the same [illegible]. The Lord Chief Justice said if Mr. Russell got his writ he had no doubt that there would be a reconciliation between them, and that some arrangement would take place, and considering that the company was a limited one, and that the only property was [illegible] he thought that there should be execution forthwith. On Thursday Sir F. Kelly applied to the Court on behalf of the defendants for leave to appeal against their judgment. The Court took time to consider [illegible], and on Saturday gave judgment to the effect that the verdict obtained by Mr. Russell was right and he was entitled to keep it, and that the case was not in which the defendants ought to have leave to appeal against it. Leave to appeal must therefore be refused. [illegible] was subsequently made by which the departure of the ship was not delayed.

Sporting.

NEWMARKET SPRING MEETING.

Monday.—*Sweeps.* Count Batthyany's [illegible] beat Reveille and Rapparee.—[illegible] beat Raspberry, Latlef, Stormer, Bye-ways and Dapple.—*Match.* Duke of Bedford's Palm Oil beat Misfire.—*Sweeps.* Mr. Payne's [illegible] beat [illegible], Queen of the Vale, and Brother to Schiedam.—[illegible] Lord Stamford's Malta beat [illegible], Sweetbread, and [illegible] others.—*Sweeps.* Duke of Bedford's Paste beat [illegible].—*Sweeps.* Lord Strathmore's [illegible] beat Southport, Dr [illegible], [illegible] and Whitewell.—The *Queen's Plate.* Lord Ailesbury's Cantine beat Avalanche, Juno, Feodorowna, and Hagar.—*Sweeps.* Mr. Merry's Thormanby walked over.

Tuesday.—*Sweeps.* Captain Coates's Dux beat Knight of the Garter, Hambleton Lass, and [illegible] others.—[illegible] The *Two Thousand Guineas.* Lord Stamford's [illegible] beat Kettledrum, Klarkoff, and 1[illegible] others.—*Handicap Plate.* Mr Savile's Gurzlet beat [illegible], and [illegible] others.—The *Coffee Room Stakes.* Lord Stamford's [illegible] walked over.—*Sweeps.* Mr W. I'Anson's Bab received forfeit.

Wednesday.—*Sweeps.* Lord Stamford's Paleface beat Richmond.—*Sweeps.* Duke of Bedford's Hesper beat Dux.—*Handicap Plate.* Mr. W. D. Gardner's Iona beat [illegible], Necromancer, Ellen, and 1[illegible] others.—*Sweeps.* Lord Fitzwilliam's Zingaro beat Robinson Crusoe and Radiance.—*Sweeps.* Mr. H. Savile's Parmesan beat Cap, Flyaway and Umpire.—*Selling Handicap Sweeps.* Mr. Flutter's Lady Derby beat Forester, Warrior, [illegible], and Chiffonniere.—*Sweeps.* Mr. G. Bryan's Gauntlet beat Woman in Red, Dr. Nichol, and 4 others.—*Sweeps.* Lord Stamford's Little Lady beat [illegible] and King of the Forest.—*Plate of 50 sovs.* Lord Stamford's Malta beat Cowley, Handsome Jack, and 6 others.—*Renewal of the Sweeps.* Mr. Saxon's Big Ben beat Zingaro.—*Jockey Club Plate.* Mr. H. Savile's Parmesan walked over.—*Sweeps.* Duke of Bedford's Asteroid received forfeit.

Thursday.—*Handicap Plate.* Mr. Mellish's [illegible] beat Jacob, Gaylad, Royal Sovereign, and [illegible] others.—*Handicap Sweeps.* Lord Stamford's Elcho beat Lady Derby, Snapshot, Amy, and 4 others.—*Sweeps.* Captain James's [illegible] beat Southport, Stanton, and [illegible] others.—[illegible] Duke of Bedford's Asteroid beat Starlight.—*The One Thousand Guineas Stakes.* Mr. Fleming's Nemesis beat Fairwater, Duchess, and 6 others.—*Handicap Sweeps.* Mr W. S. Crawfurd's Nicholas beat Molly, [illegible], Tiara, Ingestre, and Rockley.—The *Newmarket Two-year-old Plate.* Baron Rothschild's Wingrave beat Marignon, Discretion, Farfalla, and 19 others.—*A Plate.* Duke of Bedford's Asteroid beat Mdlle. Chantilly and [illegible].

Friday.—*Newmarket Stakes.* Russley beat Knight of St. Patrick and Wing.—*Match.* Lady Blanche beat Vaga.—100*l.* *Handicap Plate.* Asteroid beat Old Squire.—50*l.* *Handicap Plate.* Broad Arrow beat [illegible], and 7 others.—*Sweeps.* Warrior beat Dr. Nichol, Forester, and 4 others.—*Sweeps.* Hambleton Lass beat Dux, Misfire, and 5 others.—*Handicap Sweeps.* Rising Sun beat Flutter filly, Necromancer, and 8 others.—*Sweeps.* Starlight beat Physalis colt.

Obituary.

Sir Hedworth Williamson, Bart., died on the 24th ult., at Whitburn Hall, Durham, in his 64th year. He was born in 1797, and succeeded to the family honours and estates at the early age of [illegible], on the death of his father, the sixth baronet. He married in 18[illegible] the daughter of the [illegible] Lord Ravensworth, and sister of the Marchioness of Normanby, the Countess of Hardwicke, Viscountess [illegible], and Lady [illegible]. He was educated at St. John's College, Cambridge, where he graduated M.A. in 1819; and from 1847 to 1853 he represented Sunderland in the House of Commons.

Professor Porter of Dublin died suddenly on Sunday morning at the age of 7[illegible]. He was for [illegible] years surgeon of the Meath Hospital, and for 25 years Professor of Surgery to the Royal College of Surgeons, and was chosen representative of the College of Surgeons on the General Medical Council of Education and Registration. He was the author of several medical works, which were much valued, not only in this country, but in America and on the Continent.

Alderman Kinahan of Dublin died suddenly on the 29th ult. at [illegible], Piccadilly, London. He was the head of one of the largest mercantile establishments in Dublin, an extensive employer, and a member of the corporation, and in all his relations he was respected by all parties. He was to a great extent the architect of his own fortune, and by his high character and laborious industry he raised himself to the highest place among the merchants of Dublin.

BIRTHS.—On the [illegible] ult., at 4[illegible], Charles Street, the Hon. Mrs. Curzon, of a son—25th ult., at [illegible] Queen's Gate, Hyde Park, the Hon. Mrs. Clifford Butler, of a daughter—2[illegible] ult., at Bruntsfield House, the Lady Binning, of a daughter.

MARRIAGES.—On the 30th ult, at St. Paul's, Knightsbridge, Colonel Henry Ponsonby, Grenadier Guards, to the Hon. Mary Elizabeth Bultfel; and at the same time and place, Edward Charles Baring, Esq., to Louisa Emily Charlotte Bulteel—24th ult, at the Episcopal Chapel, Melrose, Sir George Hector Leith, Bart., of Ross Priory, Dumbartonshire, to Eliza Caroline, only child of Thomas Tod, Esq., of [illegible] grange, N.B.—22nd ult, at St. Mary's Church, [illegible], Commander Charles Wesley Hope, Royal Navy, only son of the late Rear-Admiral Charles Hope, to [illegible] Elizabeth, eldest daughter of G. B. J. Jordan, Esq., of Pigeon's-ford, Cardiganshire, and [illegible], Pembrokeshire, and grand-daughter of the late Sir John Owen, Bart, M.P.—23d ult, at St. Thomas's Church, Portman Square, Gordon Stonhouse Hughes, Esq., late 9[illegible] Highlanders, son of the late Brigadier-General Hughes, C.B., [illegible], and stepson of Colonel Lloyd Vaughan Watkins, M.P., Lord-Lieutenant of the county of Brecknock, to Emma, youngest daughter of James Bennett, Esq., of Cadbury House, in the county of Somerset—25th ult, at Fussa Chapel, near Killarney, Daniel O'Connell, Esq., of Darrynane Abbey, eldest grandson of the "Liberator;" and late High Sheriff of Kerry, to Isabella, eldest daughter of Denis Shine Lawler, Esq., of Grenagh, Killarney.

DEATHS.—On the 19th ult, at Hurstpierpoint, Major General Thomas Dickinson, late of the Bombay Engineers, aged 77—29th ult, at 18, Charles Street, St. James's Square, George Whannell, Esq., late Lieutenant-Colonel commanding the 33d (the Duke of Wellington's) Regiment, [illegible] Swiss Villa, Sidmouth, James Godolphin [illegible], Esq., of the Royal Artillery, one of the few surviving officers engaged in the [illegible], aged 81—26th ult, after a long illness, Joyce [illegible], the wife of Colonel William Williams [illegible], C.B., of Regency Square, Brighton, aged [illegible]—[illegible] Feb., at [illegible], Caroline Lucy, the wife of Major H. [illegible] commanding [illegible]—[illegible] ult, at [illegible], of bronchitis, [illegible] Stevens Wallis, Esq., formerly of St. Ives and of [illegible] House, Cornwall, and a Magistrate and Deputy Lieutenant for that county, aged 7[illegible]—[illegible] ult, at her residence, Northampton, Miss Ann Elizabeth Baker, sister of the late George Baker, Esq., historian of the county, authoress of the "Glossary of Northamptonshire," aged 74—23d ult, at 10, Chester Palace, Regent's Park, Herbert [illegible], Esq., aged [illegible]—[illegible] ult, at [illegible], Lincolnshire, of which parish he had been rector 41 years, the Rev. Thomas Du Pré, only son of the late Rev. John Du Pré, D.D., of Wendover, aged [illegible]—[illegible] ult, at the residence of his father, Bishopwearmouth, Sunderland, the Rev. George Smart, M.A., formerly of Lincoln College, Oxford, aged [illegible]—[illegible] ult, at Stock House, [illegible], Dorset, the Rev. Harry Farr Yeatman, aged [illegible]—[illegible] ult, very suddenly, F. G. Probart, Esq., M.D., of Bury St. Edmund's, aged 79.

Markets.

COVENT GARDEN, May 4.

The supply of [illegible] is still insufficient for the demand, and prices for things in best way continue high. [illegible] is [illegible] in small quantities and good samples of Lettuces, [illegible], and Artichokes are received from France. New Grapes fetch fair prices. Of Straw[illegible] there is a tolerably good supply considering the season. Asparagus, French Beans, Green Peas, young Carrots, and new Potatoes may also now be obtained. Cucumbers are coming in plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 8s to 12s	Apples, per doz., 6d to 1s 6d
Grapes, per lb., 8s to 12s	Oranges, per 100, 6s to 10s
Strawberries, p. oz., 6d to 1s	Lemons, per 100, 6s to 10s
Cherries, French, p. box, 8s	Nuts, Cob, per lb., 1s to 1s 6d
Pears, per doz., 4s 6d to 8s	

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 9d to 1s 6d	Celery, p. bundle, 1s 6d to 1s 9d
Green Peas, p. ½ sieve, 10s	Onions, p. ½ sieve, 1s 6d to 2s 6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 4s to 8s
Cabbages, do., 2s to 3s	Rhubarb, p. bundle, 9d to 1s 3d
Potatoes, p. ton, 80s to 200s	Seakale, p. punnet, 1s 6d to 2s
— per cwt., 6s to 10s	Shallots, per lb., 1s 6d
— new, per lb., 6d to 2s	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 1od	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 4s to 5s	Mushrooms, p. pott., 1s 6d to 1s 6d
Cucumbers, each, 9d to 2s	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 3s to 4s	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, May 2.

Prime Meadow Hay	75s to	86s	Clover	95s to	118s
Superior do. (old)	90	105	New Clover	—	—
Inferior do.	50	60	Do. second cut	80	100
New do.	—	—	Straw	30	42
Rowen	—	—			

Davis & Co.

CUMBERLAND MARKET, THURSDAY, May 2.

Sup. Meadow Hay	108s to	115s	Inferior Clover	90s	11[illegible]s
Inferior do.	65	98	New do.	—	—
New do.	—	—	Straw	40	45
Superior Clover	118	126			

Joshua Baker.

WHITECHAPEL, THURSDAY, May 2.

Fine old Hay	100s to	10[illegible]s	Fine old Clover	115s to	123s
Inferior do.	45	80	Inferior do	[illegible]	100
Prime New Hay	—	—	Fine 2d cut	90	105
Inferior do.	—	—	Inferior do.	—	—
Straw	38	42	Fine New Clover	—	—

POTATOES.—Southwark, Monday, April 29.

During the past week the arrivals coastwise have still been greater than the demand, and trade very heavy; there is no alteration in price to note. The following are this day's quotations:—York Flukes 1[illegible]s. to 1[illegible]s. per ton; Lincolnshire Regents, 90s. to 105s.; Dunbar Red Soil do., 120s. to 1[illegible]s.; North Berwick Regents, 115s. to 130s.; Fife, Forfar, and Perth do., 90s. to 105s.; ditto Rocks, 8[illegible]s. to 8[illegible]s.; ditto ditto Reds, 7[illegible]s. to 80s.; French Whites, 6[illegible]s. to 80s.; Belgian do., 60s. to 75s.; Dutch do., [illegible] to 7[illegible]s.

COAL MARKET.—May 1.

Bell's Primrose Gas, 13s. 6d.; Bates' West Hartley, 1[illegible]s.; Lambert's West Hartley, 16s. [illegible]d.; Tanfield Moor Buttes, 12s. 6d.; West Hartley, 1[illegible]s. 6d.; Wylam, 16s. 3d.; Walls End Belmont, 15s. 6d.; Walls End Hetton, 18s. 6d.; Walls End Braddyll's Hetton, 17s. [illegible]d.; Walls End Haswell, 1[illegible]s. [illegible]d.; Walls End Kepier Grange, 17s.; Walls End Russel's Hetton, 17s.; Walls End South Hetton, 18s. 6d.; Walls End Tunstall, 16s. 6d.; Walls End Hartlepool, 18s.; Walls End Kelloe, 17s. 6d.; Walls End South Durham, 16s. 3d.; Walls End Tees, 18s. 6d.; Walls End Trimdon Thornley, 15s. 6d.; Carway and Duffryn Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.—61 ships at market.

HOPS.—Borough Market, Friday, May 3.

Messrs. Pattenden & Smith report the demand good for the best samples of new and yearling Hops, at firm rates. 1855's and 1856's are also in request, and prices for these are fully as dear.

BRITISH WOOLS.—London, Friday, May 3.

The state of our trade continues healthy, and sales for immediate consumption continue to be made at former rates. The next series of Colonial Wool Sales are advertised to commence on the 9th. 70,000 bales are expected to be sold.

	s. d.	s. d.		s. d.	s. d.
Southdown Hoggets	1 5 to	..	Leicester Wethers	1 4 to	..
Half bred ditto	1 6 —	..	Ditto Hoggs	1 6 —	..
Down Ewes	1 4 —	..	Combing Skins	0 10 —	1 0
Kent Fleeces	1 5 —	1 6	Blanket ditto	0 6 —	0 8
			Flannel Wool	1 0 —	1 6

BUTTER MARKET.—May 3.

Best Fresh Butter .. .. 15s. per dozen lbs.
Second do do .. .. 1[illegible]s. " "
Pork, 4s. 8d. to 5s. 4d. per 8 lbs.

METROPOLITAN CATTLE MARKET.

Monday, April 29.

The supply of Beasts is small and the demand for choice kinds active, consequently in some instances advanced rates are realised; on the average, there is not much alteration in price. The number of Sheep and Lambs is about the same as on Monday last, and the prices of that day are fully obtained. Calves are not selling quite so well. From Germany and

Holland there are 183 Beasts, 1000 Sheep, 95 Calves, and 25 Pigs; from Scotland, 500 Beasts; from Norfolk and Suffolk, 2000; and 80 from the northern and midland counties.

	s d		s d		s d		s d
Best Scots, Herefords, &c. ..	4 10	to	5 2	Best Long-wools.	5 4	to	5 8
Best Short-horns	4 8	—	5 0	Do. Shorn ..	4 8	—	5 0
2d quality Beasts	3 8	—	4 4	Ewes & 2d quality	4 8	—	5 4
Best Downs and Half-breds ..	5 8	to	6 0	Do. Shorn ..	4 0	—	4 6
Do. Shorn ..	5 0	to	5 4	Lambs	7 0	—	8 0
				Calves	5 0	—	5 8
				Pigs	4 0	—	5 0

Beasts, 3580; Sheep & Lambs, 18,480; Calves, 107; Pigs, 350.

THURSDAY, May 2.

We have about an average supply of Beasts. Trade is not quite so brisk as on Monday, but that day's quotations are pretty well maintained. Good Sheep are not plentiful, and are readily sold at late rates. Trade for Lambs is rather dull, and prices not quite so high. Good Calves are in demand, but there is very little alteration in price. Our foreign supply consists of 190 Beasts, 470 Sheep, 122 Calves, and 50 Pigs. Milch Cows 135.

Best Scots, Herefords, &c. ..	4 10	to	5 2	Best Long-wools .	5 4	to	5 8
Best Short-horns	4 8	—	5 0	Do. Shorn ..	4 8	—	5 0
2d quality Beasts	3 8	—	4 4	Ewes & 2d quality	4 8	—	5 4
Best Downs and Half-breds ..	5 8	—	6 0	Do. Shorn ..	4 0	—	4 6
Do. Shorn ..	5 0	—	5 4	Lambs	6 8	—	7 8
				Calves	5 0	—	5 8
				Pigs	4 0	—	5 0

Beasts, 965; Sheep & Lambs, 5540; Calves, 232; Pigs, 260.

MARK LANE.—MONDAY, April 29.

The supply of Wheat from Essex and Kent to this morning's market was small; best selected samples were taken early at last week's prices; but other qualities moved off slowly. The attendance from the country was good, but the amount of arrivals induced the majority of buyers to postpone purchasing, and the business transacted in foreign was limited; fine qualities remain nominally unaltered in value; to force sales irregular and lower prices must have been submitted to. Barley is steady at the quotations of this day se'nnight. Beans are 1s. to 2s. per qr. dearer. Peas are unaltered in value. The Oat trade is firm at last week's quotations. The top price of town-made Flour is reduced 2s. per sack, and foreign is rather cheaper.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk..White	36—66	Red	52—62
— — fine selected runs..ditto	50—72	Red	54—68
— — Talavera	51—72		
— Norfolk..........................	—	Red	—
— Foreign..........................	50—78		
BARLEY, grind. & dist., 28s to 30s..Chev.	40—45	Malting .	38—40
— Foreign..grinding and distilling	30—36	Malting .	40—42
OATS, Essex and Suffolk..............	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—25
— Irish ....Potato	26—28	Feed ..	21—24
— Foreign........Poland and Brew	24—28	Feed ..	20—24
RYE	35—38	Foreign .	—
RYE-MEAL, foreign..................	—		
BEANS, Mazagan....25s to 46s....Tick	30—50	Harrow .	30—50
— Pigeon ......36s — 58s..Winds.	36—44	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
PEAS, white, Essex and Kent ..Boilers	33—44	Suffolk .	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign .	38—48
MAIZE .... White	—	Yellow..	—
FLOUR, best marks delivered..per sack	50—55		
— 2d do.................... ditto	38—50	Country.	38—50
— Foreign ....per barrel	30—35	Per sack	40—50

FRIDAY, May 3.

Since the 27th ult., when there was a heavy fall of rain and sleet, the weather has been dry, with two or three sharp night frosts. The dullness which has prevailed in the Wheat trade during the past month has rather increased this week, and in the majority of markets throughout the kingdom Wheat has been purchaseable on rather easier terms. Holders in general, however, prefer to warehouse, and take the chances of markets in preference to forcing sales at a decline, which decision appears to be favoured in some degree by the civil war in America. Although in New York up to the 16th April no interruption to the supplies from the West was looked for, nevertheless the diminished means of transport (from the proscription of American vessels), and consequent increased expenses and risk of transit, can scarcely fail to diminish our arrivals, the extent of which must depend on the energy and means employed by the seceding States. Barley has undergone little alteration of value, but the sale is inactive. Oats firm, and for the most part rather dearer. Beans in many markets are also quoted 1s. per qr. higher; Peas a slow sale, without alteration in price. In Liverpool, Glasgow, and Newcastle Flour has undergone a decline of 1s. per sack and barrel; here the top price of town-made was reduced 2s. per sack. The arrivals of English grain, and foreign Barley and Oats this week have been small, but of foreign Wheat fair. To-day's market was very thinly attended. English Wheat was neglected, but we do not alter our quotations. The demand for foreign was particularly limited, but as sales were not pressed prices remain nominally unaltered. Spring corn of all descriptions is very quiet at Monday's prices. In Flour there is very little doing.

ARRIVALS FROM April 29 TO May 3.

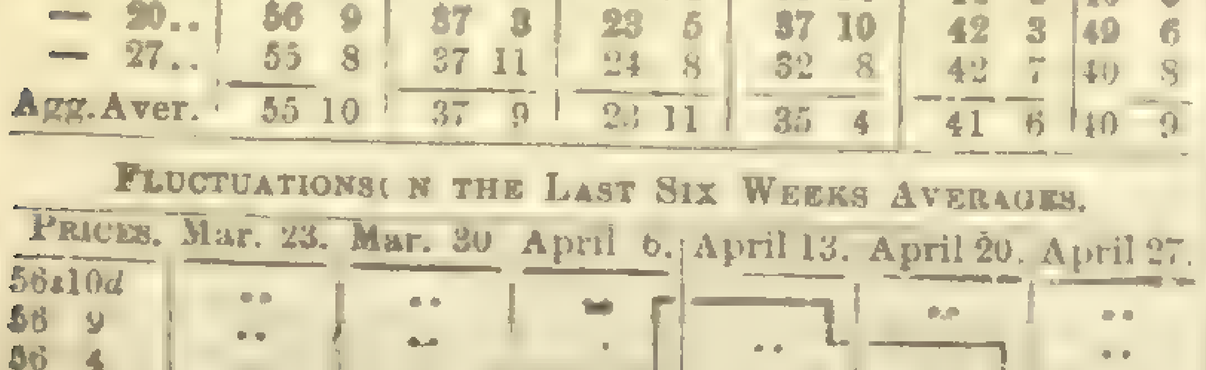
	Wheat.	Barley.	Oats.	Flour.
English ..	1410 qrs.	420 qrs.	150 qrs.	1230 sks.
Irish	— ,,	— ,,	1940 ,,	— ,,
Foreign ..	17820 ,,	1390 ,,	11770 ,,	2050 ,, 8230 brls.

LIVERPOOL, Tuesday, April 30.—There has been only a small attendance of country buyers at this morning's market, and the demand for Wheat is quite in retail, without quotable change in value. Flour is scarcely asked for, and prices are somewhat irregular. Indian Corn attracts little attention, and being freely offered all descriptions have given way 6d. per quarter. Oats and Oatmeal remain as last quoted. Beans are more plentiful, and 6d. per quarter cheaper. Peas and Barley very slow. The day is fine, and market dull throughout.

FRIDAY, May 3.—Moderate attendance at to-day's market. Wheat rather better; sales at full prices. Flour nominal. Indian Corn firm; 35s. mixed. Beans without change. Oats and Oatmeal at late rates.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Mar. 25..	54s 0d	38s 6d	23s10d	32s11d	40s 1d	40s 9d
— 30..	55 2	37 11	23 4	36 7	40 11	43 4
April 6..	56 4	37 8	24 0	36 4	41 8	40 2
— 13..	56 10	37 5	24 1	35 11	41 6	40 0
— 20..	56 9	37 3	23 5	37 10	42 3	40 6
— 27..	55 8	37 11	24 8	32 8	42 7	40 8
Agg. Aver.	55 10	37 9	23 11	35 4	41 6	40 9

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



AGRICULTURAL PUPIL.—Mr. JOHN ALGERNON CLARKE will shortly have a VACANCY as above. References given and required.—Long Sutton, Lincolnshire.

GENTLEMEN WANTING GARDENERS.—First-rate Men always recommended. Postages only charged. —For forms of application, address JAMES GARAWAY & Co., Durdham Down Nurseries, Bristol.

WANTED, a thoroughly competent and energetic Person to undertake the management of an established retail SEED BUSINESS in London. Must have been accustomed to that particular branch, and have practical knowledge in carrying out a regular system. Parties applying must give their full name, and state with whom they have lived. A liberal Salary will be given.—Address, by letter only, X. Y. Z., Mr. W. Symons, Lansdown Road, South Lambeth, S.

WANTED, A ROSE FOREMAN AND PROPAGATOR.—The undersigned are in want of an active, industrious Man, to take the entire charge of the Rose department of their Nursery. He must be thoroughly experienced in the propagation of Roses by Budding, Grafting, Layers, and Cuttings, and be able to write respectably. State former servitude, references and wages expected.—FRANCIS & ARTHUR DICKSON & SONS, Upton Nurseries, Chester.

WANTED A YOUNG MAN, accustomed to the Propagation of Soft-Wooded Plants.—Apply WILLIAM HOLMES, Frampton Park Nursery, Hackney, N.E.

WANTED, A SHOPMAN, about 30 years of age, of good address, and who has a thorough knowledge of his business. A preference would be given to one who has taken the journeys. He must be able to furnish the most unexceptionable testimonials.—Apply, by letter only, to MINIER, NASH, & NASH, Seedsmen, 60, Strand, London, W.C.

WANTED, A DAIRYMAID, between 20 and 30 years of age, in a gentleman's family. She is not required to Milk or Bake.—For particulars apply to Mrs. JAMES, Feteham Park, Leatherhead.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 35, married; understands the Management of Cows. Two years' good character.—A. G., *Gardeners' Chronicle* Office, W.C.

GARDENER (HEAD).—Age 28, single; has a thorough knowledge of Vines, Stove and Greenhouse Plants, and Gardening in all its branches. Three years' character.—G. C., 3, Rose Terrace, High Road, Lee, Kent, S.E.

GARDENER (HEAD).—Married; thoroughly understands his profession in all its branches. Can have an excellent character from last situation.—J. B., Post Office, Potter's Bar.

GARDENER (HEAD).—Single; practically and thoroughly understands his profession in all its branches. Also Cows and Pigs. Character and abilities unexceptionable. —A. B. C., Leyton, Essex, N.E.

GARDENER (HEAD).—Age 29, married; can be highly recommended to any Nobleman or Gentleman by his late employer as a thorough Practical Gardener.—W. X., Barbey's, Stationer, 9, Middle Row North, Knightsbridge, S.W.

GARDENER (HEAD).—Age 35, married, no incumbrance; thoroughly understands Flower and Kitchen Gardens, Stove and Greenhouse Plants of every description. Seven years' good character.—F. C., Mr. Young's Nurseries, Milford, near Godalming.

GARDENER (HEAD or otherwise).—Age 35, married, two children; no objection to the management of a Cow. A Clergyman's family preferred. Good character.—T. W. T., Mr. Smith's, Florists, Dulwich, Surrey.

GARDENER (HEAD WORKING).—Age 37, married; has a practical knowledge in Forcing all kinds of Fruits, Flowers, and Vegetables; also Flower and Kitchen Gardens.—A. B., Post Office, Guildford, Surrey.

GARDENER (HEAD).—Age 40, single; great experience in Early and Late Forcing of Vines, Melons, and Cucumbers; thorough knowledge of Flower, Fruit, and Kitchen Gardens; had the Management of Land in last situation. Four years' undeniable character.—A. M., Graver's, Bourne Hill, Southgate, Middlesex, N.

GARDENER (HEAD).—Age 43, married, no incumbrance; has had 26 years' practical experience in all the branches of his profession; is a first class Plant cultivator and Forcer of all kinds of Fruits, Flowers, &c. Three years' character, and testimonials unexceptionable.—W., Mr. A. Henderson's, Pine-apple Place, Edgeware Road, W.

GARDENER (HEAD).—Age 34, married, no incumbrance; has a thorough knowledge of Early and Late Forcing Fruit, Flowers, and Vegetables, the Cultivation of Stove and Greenhouse Plants, and the Management of Flower and Kitchen Gardens. Good references for character and ability.—A. B., Mr. Glass, High Street, Slough.

GARDENER (HEAD).—Age 29, married, no incumbrance; thoroughly understands Growing Grapes, Melons, Cucumbers, Stove and Greenhouse Plants, and Kitchen Garden. Has been Head Gardener in England and Scotland. Good character.—E., Mr. Udall's, Grocer, Putney Lower Common, Surrey, S.W.

GARDENER (HEAD).—Age 42, married, no incumbrance; a thoroughly practical and trustworthy person, who has lived as Head Gardener nearly 20 years with three families where gardening has been carried on extensively, and is well acquainted with Forcing of all kinds of Fruits and Flowers, the formation of Vine and other Fruit-tree Borders. Good Flower and Kitchen Gardener. Nearly six years' good character. Satisfactory reason given for leaving. Wages about 75*l*.—G. W., Mr. Liddle, Post Office, Woodford, N.E.

GARDENER (HEAD, or SINGLE-HANDED).—Age 30, married, no incumbrance; understands the culture of the Greenhouse, Conservatory, and Stove Plants; also the Forcing of Vines, Cucumbers and Melons, and the Management of Flower and Kitchen Gardens. No objection to live in a Lodge. Can have a good character from the gentleman he has just left.—A. B., 2, Perry Hill, Sydenham, Kent, S.E.

GARDENER (HEAD) OR GARDENER AND BAILIFF.—Age 53, single; thoroughly acquainted with every branch of the above professions. For reference, &c., G. G., Messrs. Milne & Co., Camellia Nursery, Wandsworth Road, London, S.

GARDENER (HEAD), OR ... BAILIFF.—Age 40; a first-class ... Stove and other Plants, the Forcing of ... the care of Woods, Plantations, ... Land, Stock, &c., and the care of ... years' good character. Wife can ... 7, Cuthbert Street, Hall Park, Edgware Road.

GARDENER.—Married, no incumbrance; ... understands his profession in ... *Reporter* Office, Chesterfield.

GARDENER.—Has a thorough practical knowledge of Forcing and Gardening in ... character.—A. B., Mr. J. Newman, ... Street, Chichester.

GARDENER.—Age 38; 20 years ... Flower and Kitchen Gardens, ... soft), Forcing, late and early. Good ... High Street, Clapham, S.

GARDENER.—Age 32, married; ... thoroughly experienced in ... Fruit, and Flower and Kitchen Gardens ... —C. S., Bedford Nursery, Hampstead H...

GARDENER.—Age 37, married; ... thoroughly understands all branches ... also Land and Stock; has had good experience ... England. Wife could manage Dairy and ... good character.—M. N., Five Ashes, ... Sussex.

To Noblemen and Gentlemen.

GARDENER AND FORESTER.—... quired his profession by much practice ... home and abroad. If applied to will give ... lities, which will be found all to the interest ... Y. Z., 18, New Street, Portland Town, ...

GARDENER (SECOND or UNDER) ... Forcing Vines, Cucumbers, Melons, ... Gardens, &c. Three years in last situation ... Hall Gardens, West Wickham, Kent.

GARDENING AND ESTATE IN... SUPERINTENDED, by a F.R.H.S. ... in Horticulture and Agriculture, prepares ... Gardens; Farms, Building, Draining, ... Stock, &c. Excellent reference.—B. D. ... and News Agent, Upper Southwick Street, ...

To Nurserymen.

PROPAGATOR, OR FOREMAN ... GATOR.—A person of first-class ... many years' experience in some of the ... provincial nurseries.—A. B., Messrs. ... Nurseries, Wandsworth Road, London.

STEWARD AND GARDENER ... MANAGER.—Age 40, married; ... Steward and Gardener to a nobleman, ... has had the entire Management of the ... ing, Feeding, Buying, and Selling of ... Produce, and also the Management of ... Estate, Timber, Woods, and Plantations ... of the Kitchen and Flower Gardens and ... He is now leaving his present situation ... of his late employer. The most ... will be given as to character and ... 26, Broad Street, Worcester.

STEWARD OR BAILIFF.—... derstands Farming in all its ... unexceptionable reference from ... this country on her Majesty's service ... Arnewood Farm, Sway, Lymington, ...

LAND STEWARD OR BAILIFF.— ... incumbrance; a native of ... able experience in the Management ... Buying, Selling, and Management ... and Reclaiming Waste Land, Buying ... Testimonials of the highest character ... Rhayader, Radnorshire.

BAILIFF OR FARM-STEWARD.— ... energetic business habits; has ... Agriculture on the most Modern ... Crops, Woods, Drainage and Reclaiming ... Purchasing and Selling Stock, and ... on a large scale. The highest references ... Cannon Street West, London, E.C.

AGENT OR BAILIFF to a nobleman ... —Age 36, single; has a thorough ... culture in all its branches, having had ... experience in the Breeding, Rearing, ... descriptions of Stock; the Drainage, ... Improvement of Land; and also in ... both Corn and Cattle Markets. ... travelled a good deal in Ireland and ... England, and has thereby obtained ... tical information. References given ... Post Office, Richmond, Yorkshire.

FARM FOREMAN.—A Baronet ... mend his Farm Foreman (age ... 9 years of age), whom he is compelled ... change in his establishment. John B. ... Accountant, practically understands ... Roads, and other works connected with ... Estates, the Management of Steam Engines, ... portable, and most of the modern Farm ... Land Measuring, &c.; is a good judge of ... work, and, above all, is thoroughly steady ... would be an acquisition to any Steward ... man or gentleman, and is at present in ... 500 acres.—Mr. JOHN B. USHOR, ... Nottingham.

IMPROVER.—Age 19; has been ... enced Gardener. Eighteen months ... Mr. Clark, News Agent, Upper Sydenham.

To Gardeners.

IMPROVER (age 18) in a nobleman's ... Garden, where he can learn the ... premium. Three years' good character ... Woolhampton, Newbury, Berks.

To Seedsmen.

SHOPMAN.—Age 22; has been ... business, and has a knowledge ... unexceptionable.—A. G., *Advertiser* Office ...

SHOPMAN, TRAVELLER, &c.— ... Seed Trade by an experienced person ... May, 1, Wellington Street, Strand, W.C.

The Gardeners' Chronicle Newspaper.

SATURDAY, MAY 11, 1861.

LIFE ASSURANCE.—SPECIAL NOTICE.—The next [illegible] into the profits of the Life Department of [illegible]TTISH UNION INSURANCE COMPANY will be [illegible] August 1, 1861, and parties taking out Policies [illegible] will participate in the division.

[illegible] Policies, for [illegible], yielding [illegible] 6s. 2d. of new [illegible] during the year ending August 1, 1860. [illegible] grace allowed to renew Life Insurances and 15 [illegible] Fire Insurances, during which time, on payment [illegible], the Company hold themselves liable.
[illegible] premium charged for members of Volunteer or [illegible] within the United Kingdom.

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[illegible].—Messrs. Oliverson, Lavie, and Peachey.

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CONTENTS:
I. PEARLS AND MOCK PEARLS OF HISTORY.
II. EUPHUISM.
III. LORD DUNDONALD.
IV. SPIRITUAL DESTITUTION.
V. GERMAN, FLEMISH, AND DUTCH ART.
VI. AFRICAN DISCOVERIES—LIVINGSTONE—SPEKE—PETHERICK—DU CHAILLU, &c.
VII. STANHOPE'S LIFE OF PITT.
VIII. INDIAN CURRENCY, FINANCE, AND LEGISLATION.
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News of the Week.

IN the House of Lords on Friday the Bankruptcy and Insolvency Bill, on the motion of the Earl of DERBY, was referred to a select committee. In reply to the Earl of CARNARVON, Earl GRANVILLE said there was no truth in the statement in the French journals, that a fatal collision had taken place at Corfu between the troops and the people. On Monday, in answer to the Earl of CARNARVON, Lord WODEHOUSE said that the difficulties of constructing the Suez Canal were every day developing themselves in a way that rendered it more than ever doubtful whether it would succeed. If, however, contrary to expectation, the canal should be constructed, guarantees would be taken that it should not be used to the detriment of foreign Powers. The report on the Marriage Law Amendment Bill was brought up, and the Bill ordered to be recommitted. On Tuesday the Wills of Personalty by British Subjects Bill was referred to a Select Committee. The Smoke Nuisance (Scotland) Act Amendment Bill, and the Railway Companies Mortgage Transfer (Scotland) Bill were read a second time. On Thursday, being Ascension Day, the House did not sit.

In the Commons on Friday Lord PALMERSTON moved a series of resolutions to give effect to the recommendations of the Select Committee on the Business of the House. Mr. BENTINCK moved, as an amendment, that it was not expedient to sanction the proposed alterations. On a division the amendment was negatived by 253 to 98. The resolutions were then discussed separately, and agreed to with the exception of the 5th, which was withdrawn for further consideration. Lord JOHN RUSSELL announced that HER MAJESTY'S Government were in communication with several Powers of Europe, with a view of making a proposition which might lead to a settlement of the differences between Denmark and the German Confederation on the question of the Duchies. The House then went into Committee of Supply, when certain sums were voted on account for Civil Contingencies. On Monday in answer to Mr. GREGORY, Lord J. RUSSELL stated that the various questions likely to affect British interests arising out of the civil war in the United States had been submitted to the Law Officers of the Crown; but he was not yet in a position to state the conclusion at which they had arrived. With regard, however, to the outfit of privateers by the Southern States, HER MAJESTY'S Government had come to the resolution to recognise the belligerent rights of the Southern States. The House then went into committee on the QUEEN'S Message respecting the marriage of the Princess ALICE, when Lord PALMERSTON moved two resolutions, the first granting a dowry of 30,000*l.*, and the second granting an annuity of 6,000*l.* per annum to her Royal Highness. Both resolutions were unanimously agreed to. The House then went into Committee of Ways and Means, when the CHANCELLOR of the EXCHEQUER moved that the Excise duties on paper should cease on and after the 1st of October next. After considerable discussion the resolution was agreed to, on the understanding that the general policy of the financial scheme will be discussed at a future stage. The resolutions imposing stamp duties on house agents and agreements for hiring furnished houses, on hawkers' and pedlars' licences, and on foreign bills of exchange, empowering wholesale dealers in spirits to sell by retail, and legalising the sale of table beer, were agreed to. The resolution extending the licensing system to Refreshment Houses was withdrawn for reconsideration. The Copyright in Works of Art Bill, after some discussion, was read a second time. On Tuesday, on the recommendation of Mr. WALPOLE and Lord PALMERSTON, Mr. HORSFALL withdrew his intended motion on the subject of belligerent rights at sea. Mr. MAGUIRE moved for papers relating to the special mission of Mr. GLADSTONE to the Ionian Islands, and to the subsequent proceedings of Sir H. STORKS as Lord High Commissioner. The motion was opposed by Government and ultimately withdrawn. Mr. Serjeant

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PIGOTT obtained leave to bring in a Bill to amend the constitution, practice, and procedure of the court of the Island of Jersey. The House went into committee on the Tramways (Ireland) Bill, and agreed to the first two clauses. It was then moved that the chairman report progress. On a division the motion was carried by 181 to 79. The report on the QUEEN'S Message respecting the marriage of the Princess ALICE was brought up and agreed to. On the motion that the report on Ways and Means be agreed to, Mr. DISRAELI and Lord ROBERT CECIL opposed it, and Mr. R. LONG moved as an amendment the adjournment of the House. On a division the amendment was negatived by 160 to 98. The CHANCELLOR of the EXCHEQUER then gave way and agreed to postpone the reception of the report until Thursday. On Wednesday, on the motion of Sir L. PALK, the Labourers' Cottages Bill was read a second time and referred to a Select committee. Lord RAYNHAM moved the second reading of the Cruelty to Animals Prevention Bill. Sir G. LEWIS and Mr. HENLEY opposed the motion, which was ultimately withdrawn. Mr. BLACKBURN moved the second reading of the Valuation (Scotland) Acts Amendment Bill. The LORD-ADVOCATE moved that the Bill be read a second time that day six months. On a division the amendment was carried by 146 to 78; and the Bill was lost. The County Voters (Scotland) Bill was read a second time. The House then went into Committee upon the Tramways (Scotland) Bill, and agreed to the clauses with amendments. Mr. MACKINNON moved the second reading of the Masters and Operatives Bill, which proposed Councils of Conciliation. The SOLICITOR-GENERAL opposed the motion. After considerable discussion the debate was cut short by the adjournment of the House. On Thursday, in answer to Mr. FORSTER, Sir G. LEWIS stated that the Government intended to issue a proclamation, under the provisions of the Foreign Enlistment Act, cautioning HER MAJESTY'S subjects against any interference in the hostilities that had unfortunately arisen between the *Northern and Southern States of America*. The Princess ALICE'S Annuity Bill passed through committee. On the order for resuming the adjourned debate on the report on Ways and Means, Mr. DISRAELI intimated that, if the Government would give the House a fair opportunity of expressing its opinion upon their financial propositions, he would assist in passing the resolutions at once. The CHANCELLOR of the EXCHEQUER said that he proposed to take the second reading of the Bill to be founded on the resolutions as the first order on Monday. The resolutions were then passed, and leave was given to bring in a Bill to give effect to them. The House went into Committee of Ways and Means, when the CHANCELLOR of the EXCHEQUER moved a resolution to the effect that from and after the 1st of October next the Customs duties on paper shall be repealed. Mr. MAGUIRE moved that the Chairman report progress. On a division the motion was negatived by 100 to 54. The resolution was then agreed to. The House went into Committee of Supply on the army estimates, when the first vote of 196,000*l*. for the expenses of the departments of the Secretary of War and Commander-in-Chief, after a protracted discussion, was carried on a division by 124 to 103. The Edinburgh Assessments Bill and the Roads and Bridges (Scotland) Bill were read a second time, the latter being referred to a select committee.

Despatches from Italy announce that many thousands of the inhabitants of Rome have signed an address to the EMPEROR NAPOLEON requesting him to withdraw the French garrison from that City. The Chamber of Deputies at Turin on Monday approved of the Government Bill for raising 36,000 men in the Neapolitan provinces, to be furnished in two levies.

A despatch from Pesth informs us that Count TELEKI, one of the leaders of the extreme party in Hungary, has been found dead in his house, but it has not yet been ascertained whether he was murdered or committed suicide. Great agitation has been caused by the announcement that the Austrian Government had come to the resolution to compel the payment of taxes in Hungary, and had despatched large bodies of troops to the non-paying districts to assist the collectors. The Congregations of the Comitats have protested in a body against these proceedings.

From the United States we learn that Washington has been in danger of falling into the hands of the Secessionists, but the anxiety for its safety has been allayed by the arrival of a sufficient body of Federal troops to protect the city from the apprehended attack. The United States officers have burnt the Federal navy yard at Norfolk and 11 vessels of war, in order to prevent their falling into the hands of the Confederates. Fort Smith, in Arkansas, has been taken by the state troops. The union sentiment in Maryland is increasing, and in some parts of that State the people have threatened to hang their representatives if they vote for secession.

Home News.

THE COURT.—The Queen, Prince Consort, and the Princesses continue at White Lodge, Richmond Park. On Saturday the Prince Consort held a *levée* on the part of the Queen at St. James's Palace, at which 120 noblemen and gentlemen were presented. The Queen drove out in the morning with Princesses Helena and Louisa, and again in the afternoon with the Prince Consort. On Sunday morning the Queen, Prince Consort, and the Royal family attended Divine service at the White Lodge. The Dean of Windsor officiated. On Monday morning the Queen drove out, accompanied by Princess Alice. The Prince Consort rode to Kew Gardens. The Duchess of Wellington had an audience of her Majesty, on her appointment as Mistress of the Robes. On Tuesday the Earl of St. Germans, Lord Steward, and Lord Proby, Controller of the Household, had an audience of the Queen, and presented the replies of the two Houses of Parliament to her Majesty's Message on the marriage of the Princess Alice. In the afternoon the Queen, with the Princesses Helena and Louisa, drove out. The Prince Consort and Princess Alice accompanied her Majesty on horseback. On Wednesday morning the Queen and Prince Consort drove out. In the afternoon her Majesty and the Prince again drove out, accompanied by the Princesses Helena and Louisa. The Prince Consort rode on horseback, and visited the Cambridge Asylum for soldiers' widows at Kingston-on-Thames. Prince Arthur and Prince Leopold visited her Majesty, and afterwards returned to London. On Thursday morning the Queen and Prince Consort walked and drove in the park, accompanied by the Princesses Alice and Helena. According to present arrangements the Queen, Prince Consort, and Royal family will leave the White House, Richmond, on the 17th or 18th inst. for Osborne, where it is her Majesty's intention to remain until a few days after her birthday, the 24th inst., and then return either to Windsor or Buckingham Palace.

THE PRINCE OF WALES.—It is understood that his Royal Highness will employ the midsummer vacation in the practical study of military duties and movements at the Curragh of Kildare. His Royal Highness will probably be attached to the 1st Brigade, and do duty with the 1st Battalion of Grenadier Guards, in which corps he will go through a course of military instruction.

THE CABINET.—A Cabinet Council was held on Monday at the official residence of the First Lord of the Treasury in Downing Street. Another Council was held on Tuesday, and another yesterday.

THE ARMY.—The Queen has appointed His Royal Highness the Duke of Cambridge, K.G., General Commanding-in-Chief to be Colonel of the Royal Artillery and Royal Engineers.

THE VOLUNTEER MOVEMENT.—His Royal Highness the Commander-in-Chief has consented, at the request of the Secretary of State for War, to hold a review on Wimbledon Common during the month of July of such metropolitan Volunteer Corps as may wish to be present. The ordinary arrangements will be observed with regard to applications from corps desirous of attending on the occasion; but it is understood that sanction will not be given for the attendance of any corps which is not previously reported to be sufficiently advanced in battalion drill to take part in the review.—The general meeting of the National Rifle Association will be held at Willis's Rooms, on Monday, the 27th inst. His Royal Highness the Duke of Cambridge, President of the Association, will preside.—On Saturday last nearly all the metropolitan corps assembled at their head-quarters and marched out for battalion drill. Some of them had a brigade field day in the Regent's Park in accordance with the recommendation adopted by 24 commanding officers of the principal metropolitan corps at the recent meeting, and sanctioned by a memorandum from the War Office.

THE CENSUS.—The returns for many of the principal provincial towns are now made up, and will be perused with interest. Omitting places w[illegible] inhabitants, the following list w[illegible] some of the most important results.—

	1861.	1851.
Ipswich	37,717	32,697
Lincoln	20,995	17,532
Brighton	77,828	65,568
Scarborough	18,350	12,844
Hull	105,000	82,502
Preston	82,888	69,360
Lancaster	14,480	14,562
Swansea	30,316	21,586
York	40,151	36,302
Newcastle-under-Lyme	12,636	10,569
Newcastle-on-Tyne	109,000	89,156
Cambridge	26,351	27,702
Stafford	15,061	13,092
Rotherham	12,094	6,816
Middlesborough	18,273	7,893
Bury St. Edmund's	13,316	13,902
King's Lynn	16,510	2[illegible],314
Stockport	54 907	53,835
Stratford	19,004	10,576
Peterborough	11,728	8,673
Northampton	32,801	26,657
Leeds	207,134	172,258
Bradford	106,203	103,786

In the case of the towns marked [illegible] returns are not quite completed. [illegible] affords fresh proof that the manufac[illegible] and especially the large towns, [illegible] expense of the agricultural districts [illegible] in population, notwithstanding the [illegible] culture and the increase of agricu[illegible]

Foreign.

FRANCE.—The trial of MM. [illegible] the publisher and printer of the [illegible] d'Aumale, took place on Saturday, [illegible] was condemned to a year's impr[illegible] and M. Beau to six months' imp[illegible] fine, the pamphlet being seized [illegible] fiscated. Among the incidents [illegible] tioned that M. de Basson, secretary [illegible] Amelie, who went over to Paris [illegible] trial, was followed from London [illegible] agent, and on his arrival [illegible] thrown into prison, and his [illegible] which he was set at liberty. [illegible] at Poitiers, who in March [illegible] Charge of the Bishop of [illegible] Pamphlet by M. de la Gue[illegible] by the police court of [illegible] The same printer was se[illegible] a fine of 100f. for a similar [illegible] the Senate on Tuesday, M. [illegible] report of the Committee upon [illegible] ing that measures should be [illegible] renewal of the massacres in [illegible] proposed to reject the petition [illegible] of the day. The discussion [illegible] next. In the sitting of the [illegible] Wednesday, several members [illegible] Treaty of Commerce complained [illegible] the Government was proceeding [illegible] duties on the exportation of [illegible] duties established by the Fren[illegible] Commerce did away with the [illegible] by the committee. Several [illegible] laid on the table, one of wh[illegible] a credit of 45,000,000f. for [illegible] utility, and another for issu[illegible] to 104,000,000f., repayable [illegible] Minister of the Interior has [illegible] for Swedish and Norwegian [illegible] henceforth to be allowed to [illegible] the same facilities as Engl[illegible] instructions with regard to [illegible] to the French Ambassador at Co[illegible] Pasha, the new Turkish Ambassador [illegible] M. Thouvenel on Friday. Count [illegible] ex-King of Naples, is expected [illegible] his way to Bavaria. Cardinal [illegible] solemn service in the Church [illegible] Tuesday last for the victims [illegible] Dominican, Father Menjard, prea[illegible] the same occasion. The Archbish[illegible] lished a letter to the Minister [illegible] demning the policy of the Govern[illegible] Pope, and intimating that if [illegible] be abolished Catholics all over [illegible] hold the Emperor responsible. [illegible] Government to elect whether th[illegible] or war; and warns them that [illegible] depriving the Pope of his tempora[illegible] ministers, soldiers, diplomatists, a[illegible] been concerned in the perpetration [illegible] will ruin their prospects in this [illegible] doom in the next is frightful. [illegible] Guizot delivered a speech a few da[illegible] toire before the Consistory of the [illegible] in which, to the astonishment of [illegible] fended the temporal power of the P[illegible] declarations have excited great [illegible] among the Protestants of France [illegible] that he will be compelled to resig[illegible] dent of the two great Protestant [illegible] *Biblique* and *Société pour l'Hist*[illegible]

[illegible] establishment of the English protectorate [illegible] that there must be something radically [illegible] of this country to account for the manifestation [illegible] people in favour of annexation to Greece, [illegible] demanded their nationality; [illegible] these circumstances, England ought to place [illegible] with the other powers of Europe [illegible] to the treaty of Vienna, in order to see [illegible] might not be transferred to [illegible] in the name of justice, that a Government [illegible] in the person of [illegible] that it was the champion [illegible] and the propagandist of revolution [illegible] concede to the [illegible] that principle of [illegible] The Government were, [illegible] due regard for their own [illegible] to produce the correspondence [illegible] had moved.—The CHANCELLOR of the EXCHEQUER [illegible] of the papers asked for [illegible] and could only be produced [illegible] injury upon the public service. [illegible] correspondence which tended to [illegible] people should be [illegible] upon the [illegible] he had made to the islands had convinced [illegible] prevailed there to withdraw from the [illegible] except in the part of a few demagogues [illegible] attempted to take advantage of a [illegible] which was entertained by the respectable classes [illegible] origin from which they had sprung. On the contrary, [illegible] felt that there were at present [illegible] insurmountable character that prevented [illegible] the precipitate measures [illegible] popular zeal, were fomented for selfish [illegible] As far as he was [illegible] to think that England [illegible] from the present [illegible] in the [illegible] her protection [illegible] maintenance [illegible] "free [illegible]"

[illegible]

[illegible] his sympathy [illegible] for the acknowledgment [illegible] described [illegible] the Government were prepared [illegible] which Mr. Maguire [illegible] PALMERSTON trusted that [illegible] there was no [illegible] the Parliament, [illegible] an earnest desire to [illegible]

[illegible] described in the [illegible] discussion [illegible] in the world.—Mr. ALCOCK moved [illegible] a Royal Commission to inquire and [illegible] be desirable and practicable [illegible] system of assessment in lieu of the [illegible] the *Turnpike Roads and Bridges* [illegible] by tolls.—Sir G. LEWIS opposed the [illegible] a few remarks by Mr. PHILIPS and Mr. [illegible] without a division.—Mr. S. ESTCOURT [illegible] in a Bill to require all *Friendly and* [illegible] to render to every member thereof, or [illegible] therein, a copy of their annual [illegible] went into Committee upon the *T*[illegible] *Amendment Bill*, when an animated discussion [illegible] the clauses, which was brought to a close by [illegible] Chairman report progress. On a division [illegible] carried by 181 to 79. The report on the [illegible] was brought up and agreed to. [illegible] *Committee of Ways and Means on the Budget* [illegible] brought up. Mr. R. LONG moved that [illegible] it being then nearly half-past [illegible] o'clock [illegible] followed on the proceeding of the Government [illegible] resolutions, the CHANCELLOR of the [illegible] they had not departed from the [illegible] DISRAELI and Lord R. CECIL contending [illegible] and the latter noble lord [illegible] the Chancellor of the Exchequer [illegible] On a division, the motion [illegible] negatived by 169 to 95.—The CHANCELLOR of [illegible] way and proposed to [illegible] the [illegible] on Thursday, more especially as it [illegible] Robert Cecil an opportunity of reconsidering [illegible]—After some remarks by Mr. DISRAELI, the debate was accordingly adjourned.

WEDNESDAY.—*Labourers' Cottages Bill*.—Sir L. PALK moved the second reading of this Bill, the object of which was to provide for the erection of cottages for the labouring poor. To accomplish this object power would be given to owners of [illegible] upon mortgage, the repayment of [illegible] and interest to be made a first charge upon the [illegible]—Sir G. LEWIS said he would not oppose the present [illegible] the Bill, but he feared there would be great difficulty [illegible] carrying its provisions into effect. He would reserve to himself [illegible] to object to the details in committee.—Mr. [illegible] suggested that the Government should themselves [illegible] of money at 3 per cent. interest.—Sir W. JOLLIFFE [illegible] thought the only way to meet the difficulty would [illegible] some amendment in the Irremovable Poor [illegible] opposed the present Bill as impracticable.—[illegible] objected in strong terms to the chairman of

[illegible] of the [illegible] suggested that the [illegible] measure if submitted [illegible] committee of the whole [illegible] the Bill was read a [illegible] should be committed [illegible] amendments [illegible] in the course of the debate [illegible] RAYNHAM moved the second reading of the [illegible] Prevention Bill. He said that the Bill was [illegible] the debate [illegible]

[illegible] property [illegible] as Bill would [illegible]

[illegible]

[illegible] the Southern States of the American [illegible] principle of which [illegible] no British subject [illegible] be service of any foreign prince or [illegible] of ways [illegible] he [illegible] of [illegible] the state of [illegible] increase in our naval [illegible] whether there was not [illegible] from recent accounts, that the [illegible] supply of cotton would not materially [illegible] our trade revenue.—Mr. CRAWFORD suggested whether it [illegible] the question of a [illegible] supply of cotton when the market was in an excited state.—Mr. DISRAELI said that if the Government were prepared to give the House a fair opportunity of expressing its opinion on the resolutions upon the second reading of the Bill, he for one would not oppose the reading of them.—The CHANCELLOR of the EXCHEQUER said that the House was entitled to [illegible] such opportunity, and he would fix the second reading of the Bill for the first order of the day on Monday.—Mr. DISRAELI thought the proposal a very fair one.—Lord PALMERSTON, reverting to the questions of Mr. Bentinck, said he did not anticipate that anything which was now passing in the United States was likely to render necessary any additions to our naval and military establishments, or have the effect of diminishing the revenue derived from the duties of Customs and Excise below the estimate of the Chancellor of the Exchequer. The resolutions were then agreed to, and leave was given to bring in a Bill founded thereon. On the order for going into committee of ways and means [illegible] Lord R. [illegible] inquired [illegible] the French Government were willing [illegible] England; but the [illegible] Government [illegible] indisposed to [illegible] export duty [illegible] 12 francs per 100 kilogrammes [illegible] per ton, which [illegible] per cent. [illegible] The House then went into committee of ways and means, when the CHANCELLOR of the EXCHEQUER [illegible] next, the Customs duties on [illegible] pasteboard, books, prints [illegible] would enable the Government to negotiate with France [illegible] what was a mere act of justice, but absolutely necessary [illegible] salvation of the trade, which, though entitled to fair [illegible] would, by a tax on the raw material, be left to compete upon unequal terms with the foreigner. He moved that the Chairman report progress.—The motion was supported by Mr. BIDDELL, Mr. BUXTON, Mr. NORRIS, and Colonel DUNNE, and opposed by [illegible] TURNER, and Mr. CROSSLEY.—The CHANCELLOR of the EXCHEQUER called upon the House not to [illegible] legislation in favour of the paper [illegible] policy of the last 20 years. [illegible] could export rags to England, [illegible] enough for their own use. He had [illegible] British paper-makers to compete with the [illegible]

[illegible] but with the present restrictions they were [illegible] the best description of paper to the Continent. Under [illegible] absurd to say that they required protection. [illegible] the motion for reporting progress was negatived by [illegible] to 24. The resolution was agreed to and the CHANCELLOR of the EXCHEQUER [illegible] report [illegible] The House then went into committee of supply on the [illegible] Navy Estimates [illegible] the [illegible] and other members [illegible] the expenses of administration had been greatly augmented [illegible] were made to [illegible] was carried by 121 to 10[illegible] after which the [illegible] and the Chairman reported [illegible] committed [illegible] *Intramural Bill*, Mr. [illegible]

[illegible] answer [illegible] best wishes for the [illegible] Empire, but one of [illegible]

City Intelligence.

MONEY MARKET. [illegible]

[illegible]

Bank of England.

[illegible]

Gazette of the Week.

TUESDAY.—BANKRUPTS.—W. [illegible] BAILEY and H. J. H. SKINNER, [illegible] BLAKE, Shide, Isle of Wight, Hampshire [illegible] of Portsea, Hampshire, Brewer—W. M. [illegible] shire, Letter Press Printer—H. CARTER, [illegible] Painter and Plumber—G. ELLIOTT, Farnham, Surrey [illegible] Licensed Victualler—J. HICKSON, Sheffield, Builder and Contractor—[illegible] MORGAN, Gelligaled, near Pontypridd, Glamorganshire, Draper, [illegible] and Beerhouse-keeper—J. PERRY, Brudenell Place, New North Road, Dealer in Hams—R. PRATT, Great Yarmouth, Bricklayer and [illegible] ROYCE, Puddington, Northamptonshire, Miller and Corn [illegible] Dealer—G. TODD, Jun., Cheyne Walk, Chelsea, Builder—[illegible] Broker.

SCOTCH SEQUESTRATIONS.—W. [illegible] Glasgow, House-factor—J. JAMIESON, Glasgow, Straw Hat Manufacturer—J. VICARS, Devonvale, Clackmannanshire, Wool Spinner.

FRIDAY.—BANKRUPTS.—W. BRAY, [illegible]—T. [illegible] Street, Westminster, Grocer—J. [illegible] Norfolkshire, Auctioneer—A. HARRIS, Shoreditch, [illegible]—[illegible] HARVEY, Birmingham, Gold and Silver Chain Manufacturer—[illegible] Fleet Street, Bookseller—J. MARTIN, Dewsbury, Yorkshire, [illegible]—J. MILLER, Chandos Street, Covent Garden, Bookseller—J. [illegible] Mark Lane, City, Oysterer—J. F. BURTON, Coleman Street, City, Bill Discounter—F. R. SHERREN, Richmond [illegible], Bayswater, Builder—L. SIMON, Nottingham, Manufacturer—J. [illegible], F. O'NEILL, and H. D. [illegible], Milk Street, City, Warehousemen.

Metropolis and its Vicinity.

[illegible] the Mansion House [illegible] the Lord Mayor entertained [illegible] of Elgin at a banquet, in the Egyptian Hall [illegible] company invited on the occasion numbered [illegible] The Duke of [illegible] returned thanks [illegible] the Navy, Sir [illegible] the Army, the Duke of [illegible] Lords, and Lord Harry [illegible] Commons. Lord Elgin replied [illegible] his health in a speech of great length, from which the following is an extract:—

"Little [illegible] has elapsed [illegible] chamber of the [illegible] was under [illegible] and [illegible] was still incomplete [illegible] it was with the hope that an opportunity [illegible]

nity would be afforded by pledging myself to fresh exertion, and to renewed sacrifices, if such should be necessary, in order to justify the confidence which was then so generously given to me by way of anticipation. I trust you will not think that I have altogether failed in my endeavours to redeem that pledge. The Canton quarrel of four years ago was an event which produced feelings of considerable anxiety and disgust in the country. It affected the course of our domestic politics, brought a powerful Administration into collision with the House of Commons, and placed the House of Commons in apparent antagonism with the constituencies of the country. With the heavy responsibility which devolved upon me I left England for China, but before I had reached my destination I was placed in the strangest dilemma in which any public man ever found himself. I had to choose between a course of proceeding which would no doubt have seriously imperilled my own success in China, and another course, which would have deprived my friend Lord Canning of the military aid which would be important to him at the time of his greatest need in India; but after mature and careful deliberation, I preferred the former of those risks to the latter. I attach greater value to contemporary accounts than those which have been delivered after the event, and the most gratifying of these was contained in a letter which I received from the late Sir Henry Ward, then governor of Ceylon, who expressed his belief that in placing at Lord Canning's disposal the *troops of the Chinese expedition*, I had secured the safety of India and served the interests of my country. I think this is a *testimony*, coming as it does from such a man, of which any one may be proud. After this sacrifice had been made I proceeded to China. The Canton question had become already so complicated that it was impossible to come to any terms of arrangement with the local Government in that neighbourhood, and the capture of that city was a matter of absolute necessity. But as soon as that capture was effected —and I am very desirous to impress this on your minds, because it is not sufficiently understood in England — I deemed it my duty to take every possible step in order to bring the war to a close, and to arrange terms of peace and good understanding with the Chinese Government. With this view I persuaded not only my excellent friend Baron Gros the French Ambassador, but also the admirals of the United [illegible] and of Russia, to join me in a request [illegible] Pekin that they should send a Plenipotenti[illegible] at Shanghai, in order that we might arrange a[illegible]ween China and the respective countries there [illegible] Shanghai, though very distant from Pekin, was [illegible] open to trade, and it was impossible to [illegible] a [illegible] proposition to the Chinese Govern[illegible]; but they [illegible] rejected it, but they rejected it with contumely. It was not [illegible] we reached Tien-tsin that we were able to find a negotiator to treat with us. As soon as we found him we made a peace, and concluded that peace in the most solemn manner. The Emperor of China, influenced by the same evil counsel which had persuaded him not to send an Ambassador to meet us at Tien-tsin in the fall of the year, put obstacles in the way of carrying out the treaty, and the consequence was that that great expedition was fitted out and sent from this country which has achieved such wonderful success in so short a period of time, and which has arranged all our difficulties with China in the capital of that great empire. Now, I am quite aware that that narrative must be rather tedious to you, but I am anxious that it should be understood in this country that we have not acted harshly or ungenerously towards the Chinese—that at every stage of our proceedings we have offered reasonable terms and conditions, and only resorted to force when the obstinate perversity of the Chinese drove us to that alternative. But I know that another question lies behind which will probably be more interesting to you than this review of the past, namely, what are the advantages we are likely to derive from the new privileges and rights we have obtained under *the new treaty with China? That question* opens up a wide field for speculation. If we can succeed in establishing friendly relations not only with the Government, but with the people of China—if we can persuade them to adopt some of our tastes and habits, and though they are very averse to change they are not, like many other Oriental nations, cut off from all communion with us by the inveterate prejudices of caste—if we can succeed in those objects it is impossible to put a limit to the amount of trade which is likely to grow up between two nations so industrious and commercial. But there is one particular advantage which is likely to arise from having an ambassador of the Queen at Pekin, and it is remarkably illustrated by what has lately occurred in Japan. A serious crime was perpetrated in that country. A European —not a British subject—was murdered under circumstances which showed culpable indifference on the part of the Japanese Government. What followed? Our Minister, acting with excellent judgment, retired a short distance from the capital. He did not threaten war, but he threatened what we all understand in Europe by the cessation of diplomatic relations. If our former experience in China is any guide to us, we may conclude with absolute certainty that if such a threat were made to a subordinate Chinese functionary it would be of no effect whatever. That subordinate would report to his superiors that he had kicked the barbarians out, and would claim all manner of honours and rewards for his services. But Mr. Alcock was resident in the capital of Japan, and in relation to the Supreme Government, and, seeing their danger, that Government took alarm at his menace, and within a few days they talked of his departure as one of the greatest calamities which could possibly befal Jeddo. They implored our Minister to go back again, and offered him any guarantee for the future which he chose to demand. I am quite aware of the wide difference between Japan and China, and that the advisers of the Emperor of China are not such intelligent people as those of the Emperor of Japan; but I feel confident that the threat of suspension of diplomatic relations will now have the same effect at Pekin in the prevention of war and the preservation of peace, as it has recently had at Jeddo. At the same time, I must say, that the misconduct of our own countrymen in China is, perhaps, one of the greatest difficulties with which a British representative there has to deal. We send out honourable merchants and devoted missionaries, who scatter benefits in every part of the country they visit, and elevate the standard of civilisation, but unfortunately there slip out from among us dishonest traders—ruffians who disgrace our name and set the feelings of the people against us. Public opinion in this country can do much to encourage the one class of persons and to discourage the other, and I trust that the efforts of this great city will be directed to that end. When addressing the merchants at Shangh[illegible] told them it was my intention to obtain a treaty [illegible] Pekin, but that when force and diplomacy had effected in China all that they could legitimately effect, the work which [illegible] had to do in that country would be only at its commencement. That statement I repeat here. General Grant [illegible] his sword to its scabbard, and diplomacy has, so far as treaty-making is concerned, placed its pen on the shelf; but the work of construction, of bringing China, with its extensive territory, its fertile soil, and its industrious population, into the community of nations, [illegible] selves in [illegible] being—that [illegible] are more [illegible] chants of this great city, and [illegible] in the [illegible] my heart I pray that their efforts may be attended with success.

Indian Famine Relief Fund.—The total amount received at the Mansion House up to Thursday evening was about 85,900*l*. The committee sent out by the mail of last evening another 10,000*l*., making the total sum remitted by them, 85,000*l*. The Dublin subscription now amounts to 4000*l*., and that of Glasgow to 5510*l*.

Sale at the East India House.—The sale by auction of the furniture, fittings, and other articles at the East India House, preliminary to the sale of the huge building itself, commenced on Monday, and was continued daily until Thursday. The articles found ready buyers and realised good prices, and all that is now left of the once thriving and populous establishment in Leadenhall Street are the walls of the deserted house, which will also be sold in the course of a week or two. It is supposed that it will be applied to the extension of Leadenhall Market, or converted into a railway station or offices. The East India House was built in 1726, and the present portico was added to it in 1797 from the designs of Mr. Jupp, the company's surveyor.

Return of Mr. Cobden.—It is stated that Mr. Cobden has arrived in Paris on his return from Algeria to England, and during his journey through France has been occupying himself in collecting the necessary information for the elucidation of the important question of a fixed import duty on French wines in England. The *Globe* states that Lord Palmerston, on the part of the Government, has signified his desire to advise her Majesty to bestow on Mr. Cobden a baronetcy and the distinction of a Privy Councillor for his services in carrying out the details of the Commercial Treaty [illegible] France, but that he has declined both hon[illegible]

Royal Academy.—On Saturday at [illegible] President and Council of the Royal Academy gave their annual entertainment in Trafalgar Square, to inaugurate the opening of the exhibition. The Duke of Cambridge returned thanks for the army, the Duke of Somerset for the navy, and Lord Bury for the volunteers. The President then proposed in succession the health of the Earl of Elgin, and of General Sir Hope Grant, both of whom responded to the toasts. The [illegible] acknowledged the toast of the Visitors [illegible] that of her Majesty's Ministers, the [illegible] Exchequer that of the Interests of Lit[illegible] Earl Granville that of Her Majesty's Commissi[illegible] the Exhibition of 1862, and General Sabine [illegible] of the Royal Society.

Metropolitan Drain[illegible] West Ham district now extend[illegible] and the depth of the cutting [illegible] the surface of the high road. [illegible] works at the outlet at Barking Creek will [illegible] and two tunnels will extend from that point to Stratford, forming a junction at Bow. [illegible] Stratford Broadway to Bow Bridge [illegible] completed [illegible] the remainder of the Stratford [illegible] works will be completed in August.

British Museum.—The two vacancies in the trust of the British Museum have been filled up by the election of the Duke of Northumberland and Sir Thomas Phillipps, of Middle-hill.

The Public Health.—The Registrar-General's weekly return states that the deaths in London registered in the week that ended Saturday, May 4, rose to 1261, being more than have been shown in any previous return since the first week in March. The average number in the corresponding weeks of the 10 previous years 1851-60, corrected for increase of population, was 1220. The present return is therefore 41 above the average. During the week the births of 951 boys and 1057 girls, in all 2008 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1717.

Provincial.

Carlisle.—A case of murder and suicide has for some days been under investigation in this city, and has occupied the coroner's court at several adjourned sittings. The deceased persons were Mrs. Davidson, wife of a respectable man who is the landlord of the Pack Horse public-house, and her son-in-law, a young man called William Horsley. The latter was found dead in the kitchen with his handkerchief twisted tight round his neck, in a crossed knot, with a pool of blood by his side, which had flowed from his nose. On the following morning the mother-in-law died after violent sickness. The dress she wore on the night before had marks of blood upon it, and there were many stains of blood upon her apron. The evidence at the inquest left little doubt that an immoral intimacy had subsisted between the parties, and that it was chiefly [illegible] by the woman's influence over her son-in-law, [illegible] in vain endeavoured to put an end to it. [illegible] also proved by a post-mortem examination and analysis of the stomachs that Mrs. Davidson must have strangled Horsley as he lay asleep, and afterwards poisoned herself by swallowing arsenic. On this testimony the jury returned a verdict of Wilful Murder and Suicide against Jane Davidson.

Frome.—On Wednesday morning this town and neighbourhood were visited with a very heavy fall of snow, which lasted without intermission for nearly seven hours—indeed, so heavy was the fall, that nearly 2 feet of snow covered the ground in some parts. In the afternoon a rapid thaw set in, and there was some apprehension of a frost.

Haverfordwest.—On the 11th [illegible] Wilson, wife of Captain Le Hunte W[illegible] before the magistrates of this town, [illegible] in July last, together with a man [illegible] wife, conspired to fraudulently pa[illegible] the Browns as his lawful child, so t[illegible] death of Mr. Wilson possess as tena[illegible] of which Mr. Wilson is tenant for li[illegible] defrauding the next elder brother [illegible] the statement of Mr. Sleigh the [illegible] defendant was married some few [illegible] Wilson; she was then in very h[illegible] and very uneducated. Captain Wilson [illegible] of large wealth, but was unfortun[illegible] mental disease. To the estate [illegible] by Captain Wilson, his young[illegible] heir in tail, and would inher[illegible] were no issue by the marriage [illegible] Mrs. Wilson, however, desirous to [illegible] an expedient, and as there was n[illegible] her having a child by Capt. Wilson [illegible] [illegible] off a surreptitious child upon [illegible] [illegible] was carried out with [illegible] [illegible]. It appeared that in April [illegible] Capt. Wilson's coachman, and [illegible] Wilson's sister, resided at [illegible] Wilson's residence, at Minchinham[illegible] part of that month Mrs. Brown was [illegible] and at this time Mrs. Wilson was [illegible] with a companion, a Miss E[illegible] went to London, where [illegible] of July, while [illegible] was sent to Mrs. Brown [illegible] and her husband were [illegible] with them; they were [illegible] who conducted them [illegible] Street, where Brown [illegible] midnight, Mrs. B[illegible] residence [illegible] Pimlico [illegible] Mrs. Brown, and [illegible] Mrs. Wilson [illegible] [illegible] Davies [illegible] defendant [illegible] death [illegible] House, London, but [illegible] and two [illegible] John [illegible] Gen [illegible] an application [illegible] witnesses [illegible] deed [illegible] obtain [illegible] and her husband [illegible] Con[illegible] the [illegible] time, and [illegible] the [illegible] Captain [illegible] was that [illegible] interior [illegible] cution was [illegible] instituted [illegible] ing a feeling of animosity to his [illegible] he thought that under all the [illegible] to grant the application, and [illegible] stands over to the next ses[illegible]

Sheffield.—On Saturday [illegible] robbery of a most daring charac[illegible] an old man named Ralph Bar[illegible] his housekeeper, a young man c[illegible] called Samuel Mitchell, aged [illegible] previously obtained a sovereign [illegible] false pretences, and on Saturd[illegible] gentleman to ask forgiveness [illegible] finding him alone in the house [illegible] the head with a poker till he [illegible] then took his keys and rifled [illegible] short time the fellow made off. [illegible] dreadfully injured, had sufficient [illegible] window and attract the attenti[illegible] went to his assistance. The h[illegible] traces of the brutality which [illegible] The floor was nearly covered [illegible] Barber himself was in such a dang[illegible] magistrate attended and took [illegible] assailant Mitchell was taken into [illegible] evening, and remanded.

Ireland.

Conversion to Romanism.—[illegible] Sir Charles Domville, Bart., wh[illegible] high sheriff of the county of Dub[illegible] a member of the Roman Cath[illegible] to be married to a young la[illegible] daughter of an Irish nobleman [illegible] however, is of the Reformed [illegible] difference of persuasion being [illegible]

Attempted Assassination.—[illegible] at murder was committed on S[illegible] towndelvin, Westmeath. It appe[illegible] named Monaghan was proceeding [illegible] on his car, driven by a servant [illegible]

[illegible].—The Count de Marcellus died a few days [illegible], after a short illness, at the age of 61. He was secretary of embassy at London when M. de Chateaubriand was ambassador. He had a considerable literary [illegible], was the discoverer of the Venus of Milo, and was very likely to have been elected to one of the seats now vacant in the French Academy.—Snow fell on Sunday in various parts of France as well as in Paris. The hills in the neighbourhood of St. Etienne were covered with a thick coat of snow, and at [illegible] snow fell continuously the same day from 11 in the morning to 3 in the afternoon. The telegraph announces that snow also fell at Nice on Sunday, and that the mountains in that neighbourhood are as white as during the winter. Despatches from all the departments state that the fruit crop is irretrievably lost, and that the continual frosts have jeopardised the [illegible]. A terrible fire broke out on Monday at Limoges, which destroyed a whole quarter of the town. On Tuesday at noon the fire still continued. The Prefect was seriously hurt by the fall of a beam.

SPAIN.—The Madrid journals state that the Spanish squadron has been assembled at Algesiras, not to [illegible] the execution of the treaty by the Moors, but merely to protect the African possessions of Spain. The sittings of the Cortes will soon be closed. The Government has not yet taken any definitive resolution respecting the proposed annexation of San Domingo to Spain, but the official journals state that the annexation will be accepted, but that slavery is not to be introduced, and that the legislation will be the same as that now valid in the Antilles.

FRANKFORT.—In the sitting of the German Diet on Saturday the Danish representative declared that the Patent of 1859 would be submitted to the Estates of Holstein to receive their ratification, although there would be no power to cancel it. He also refuted the objections recently raised by the Estates against the proposals of the Danish Government. In the same sitting the Diet passed a resolution respecting the Federal military organisation. The division of the Federal Reserve is to be maintained, and an increase of the troops furnished by each contingent was also resolved upon.

PRUSSIA.—In the sitting of the Chamber of Deputies on Monday, M. von Vincke's question with reference to the affair concerning Captain Macdonald was discussed. M. von Vincke expressed his regret at what he termed "the attacks" pronounced by Lord John Russell and Lord Palmerston. He spoke of the esteem in which Prussia had always held the English alliance, recalled its [illegible] traditions, and said that the alliance with Prussia was likewise a necessity for England on account of the [illegible] taken up by the other great Powers. Baron von Schleinitz, the Minister for Foreign Affairs, thanked M. von Vincke for having afforded him an opportunity of stating his own views on the subject. He said that the impression produced in Prussia by the words of Lord Palmerston with reference to this affair was most lamentable and painful. He said:—

"Lord Palmerston does not recognise in a neighbouring nation of equal rank with England the same noble and just [illegible] with which he directs the destinies of a great nation. Without underrating the value of an understanding with England, I may say that Prussia, thank God, need not in any way sacrifice her independence for the friendship of any Power."

Baron Schleinitz then communicated to the Chamber the following note, which he had addressed to Count Bernstorff, the Prussian Ambassador at London, in order to be communicated to Lord John Russell, and expressed a hope that the good understanding which was necessary to all Europe would not be disturbed:—

"I have observed from the public journals, with as much surprise as deep regret, the manner in which Lord Palmerston replied to the questions addressed to him in the House of Commons on the 26th of last month on the subject of Captain Macdonald. We could not expect that he would take in this matter the same view as the Prussian Government, but we might have taken it for granted that the Prime Minister of England, fully cognisant of the [illegible] stated by us, would abstain from heaping [illegible] on the Government and laws of Prussia. He [illegible] not do otherwise than acknowledge that the conduct of the Prussian officials had been in accordance with the Prussian laws. And, in truth, the Prussian Court placed upon the [illegible] of Captain Macdonald the mildest interpretation [illegible], and merely inflicted upon him a small [illegible]. Those whose signatures were affixed to the [illegible] have been, it is true, condemned by the judge, but [illegible] punishment, because the Royal amnesty of the [illegible] of this year has affected them. Finally, the Prussian Government, which did everything in its power to [illegible] of Captain Macdonald's confinement, has expressed [illegible] to the British Government its regret [illegible] itself. How, in so clear a case, the Prussian Government can be reproached with having neglected [illegible] was incumbent on it as a great Power, and [illegible] friendly relations with England, even [illegible] speech, has not succeeded in showing. [illegible] statesman makes mention of me in [illegible] I cannot but be personally grateful to him [illegible] to my knowledge of the mode of [illegible] of the English people, I cannot, before all [illegible] observation that during the several years of [illegible] which my official position afforded me, [illegible] with greater admiration than the sense of right [illegible] everywhere firmly rooted in the English people [illegible] manifested in respect for judicial sentences [illegible] suppose that the English people would deny this [illegible] the sentence of Prussian judges in a case of [illegible] Englishman, a violation of the laws [illegible] which he has been residing [illegible] the legal advisers of the [illegible] acknowledge that the proceedings [illegible] in accordance with the laws of the [illegible] the judicial condemnation of the subjects of another appears to me not to be a circumstance which could disturb the mutual relation of two Governments, a close friendly union between which is in the interest of both. I cannot, however, conceal from myself that accusations of such a kind as those which Lord Palmerston, without ground or justification, has raised against the Government and the laws of Prussia, are well calculated to excite in the Prussian people an ill-feeling against a Government the leader of which has no hesitation in designating the condition of Prussia as lamentable. If such an ill-feeling should result in an alienation of the Government of Prussia and England—which I should deplore in the highest degree—the Prussian Government would, at least, bear no blame in the disturbance of the good understanding with England which it has always honestly laboured to foster and promote. I beg your Excellency to read the present despatch to Lord John Russell, and to deliver to him a copy of it.—SCHLEINITZ."

AUSTRIA.—The Empress of Austria left Seville on the 6th for Gibraltar, whence she will proceed direct to Trieste. The Emperor was about to go to Trieste to meet her Majesty on her arrival. The Emperor has granted an annual pension of 3000 florins to the widow of the late Minister of Finance, Baron von Bruck. The *Austrian Gazette* of Tuesday publishes a letter from Herr von Plener, the present Minister of Finance, in which he testifies to the honesty and integrity of the late Baron von Bruck in the discharge of his official duties.

HUNGARY.—In the sitting of the Lower House on Wednesday, M. Ghyczy, the President, announced the mournful tidings that Count Teleki had been found murdered in his house. On this announcement the House raised a cry of despair, and several ladies in the galleries were carried away fainting. M. Deak, in a voice nearly stifled by emotion, proposed that the sittings of the House should be adjourned until Monday next. It is alleged that Count Teleki committed suicide, but this statement is doubted. The city is highly excited, and great agitation prevails throughout the whole country. Large bodies of troops have been despatched to several places in various Comitats to enforce payment of the taxes. The Congregations of the Comitats have protested in a body against these coercive proceedings.

CROATIA.—The Ban of Croatia has left for Vienna, accompanied by a numerous deputation, in order to make representations to the Emperor respecting the representation of the military frontier in the Croatian Diet, and the administrative incorporation of Dalmatia with Croatia. The Congregation of the district of Fiume has unanimously adopted a resolution rejecting, for the third time, the request of the authorities of Agram to send deputies to the Croatian Diet.

VENETIA.—The military movements in Venetia continue. In consequence of the desertion of three Hungarian officers the garrison of Riva de Trento has been changed.

ITALY.—The Chamber of Deputies, in its sitting of Monday, approved the Government Bill for raising 36,000 men in the Neapolitan provinces, to be furnished in two levies. By a decree of the 5th the King of Italy has confirmed Lieut.-Generals Cosenz, Medici, Bixio, Turr, and Sirtori, as also Major-General Sacchi, in the ranks they held in the corps of Italian Volunteers. By another decree Lieut.-General Bixio is appointed a member of the committee for considering the claims of the officers of that corps, in lieu of Lieut.-General Cosenz. The anniversary of Garibaldi's expedition to Sicily has been celebrated at Genoa. Perfect order prevailed. Signor Torrearsa has been sent on a mission to Sweden and Denmark. It is said that King Victor Emmanuel will proceed to Naples at the end of this month, and will reside there for two months. Prince Carignan and the Chevalier de Nigra are shortly expected at Turin. The appointment of the Commander de Martino as Lieutenant of the King at Naples has been decided upon. On Tuesday last about 200 Bourbon soldiers were defeated by the National Guard at a village near Capua. They are now surrounded at Caserta Vecchia and Marroni by the National Guard and a detachment of Bersaglieri. 3000 troops of the Italian army have arrived at Naples. Military operations are continued against the insurgents in the Basilicata. A letter addressed by the Director of Public Worship to the Archbishop of Naples has been published, in which he reproaches the Archbishop with having forbidden public prayers for King Victor Emmanuel, and warns him that if he persists in such a course he will be prosecuted according to law. The Bourbon bands, commanded by Chiavone, have been completely beaten at the village of Lenola, near Foudi, by a battalion of the Italian army. The fugitives were pursued towards the Roman frontier. Some disturbances at Nola have been easily suppressed. Orders had been received from Turin, confirming Garibaldi's grant to the English residents of a piece of ground for the purpose of building a church. —From Rome we learn that the Papal Government has ordered Count Christen and two other Frenchmen to quit that city on account of their having taken part in the insurrection in the Abruzzi. The address of the inhabitants of Rome to the Emperor Napoleon, requesting him to withdraw the French garrison from Rome, already bears thousands of signatures. The sheets which have been signed lie at the French Embassy. On the 2d inst. the Pope gave a grand dinner to the French and Pontifical Generals. By order of the Pope, the Catholic Club, which had been established by a society of Frenchmen, has been dissolved. The official journal announces that the total amount of Peter's pence received up to the present time from all parts of the world is less than 3,000,000 scudi, "a sum," it says, "altogether insufficient to carry on a civil war." The *Nazione* of Florence states that the Jockey Club of that city has effaced the name of the Marquis of Normanby from its list of members, as a mark of their indignation at the hostility which his lordship evinces towards the national cause.

SICILY.—The rumours which were current here of the proclamation of a republic at Palermo have proved entirely false. They originated in an attempt at a Garibaldi demonstration made in that city on the 29th ult. The members of the United Democratic Association succeeded however in tranquilising the people. General Carini has taken the command of the National Guard at Palermo. No popular rising has taken place at Messina, although one was expected. Great uneasiness, however, prevails there. The troops are encamped outside the town for fear of being taken by surprise. The Archbishop of St. Andrea and three large landed proprietors have been arrested.

IONIAN ISLANDS.—The report of an outbreak at Corfu was entirely without foundation, but there has been a disturbance at Zante, caused by a drunken squabble between the inhabitants and the soldiers, of which the *Patris* publishes the following account:—

"On the evening of [illegible], the [illegible] of April, a conflict took place between the inhabitants of the town and the English garrison. The number of persons wounded on both sides is about [illegible]. About [illegible] in the evening the soldiers excited [illegible] the [illegible] and struck the citizens with their bayonets, [illegible] pursued them as far as the principal street, from which they were driven back. They returned with reinforcements. The inhabitants had by this time increased in number, and, more than 1000 strong, advanced against the soldiers, upon whose heads stones and tiles were thrown from the windows. The people armed themselves with [illegible]. The police, who endeavoured to protect the inhabitants, were ill-treated by the English, one of them was [illegible] wounded. Stronger detachments having arrived on the ground and crossed bayonets against the crowd, it momentarily dispersed, but returned in such numbers that the troops were compelled [illegible]. Finally the [illegible] was occupied [illegible], the communications between the different streets intercepted, and the Director of the Police succeeded in calming the masses and induced them to disperse. The excitement continues since the events of that evening, and at night strong mixed patrols parade the streets."

POLAND.—Extraordinary sittings of the Council of State have been held for several days past at Warsaw, on account of some peasants having refused to perform the forced labour required of them. The latest news announces that in some districts the peasants are less refractory. Increased precautionary measures of a military character have been taken at Warsaw on account of the Russian Easter holydays. Cannon have been planted in front of the Cathedral. Arrests and judicial inquiries by the civil authorities continue to be made. Communication with Warsaw is difficult, as the Government is said to intercept letters. Count Zamoyski was at Warsaw on the 1st of May, and, notwithstanding reports to the contrary, was not to leave that city. The promotion of Colonel Trepow, the late Chief of Police, to the rank of Major-General, and that of General Zabłocki, the general who gave the order to fire on the 27th of February, to the Ministry of War at St. Petersburg, has spread indignation among the people. The Municipality of Warsaw have placed their resignations in the hands of General Gecewich. It is said that General Paniutin, the Military Governor, and General Zabasckoi have been dismissed, and that the former will be succeeded by General Lambert. The report that the School of Medicine at Warsaw had been closed is without foundation.

BOSNIA, MONTENEGRO, &c.—Advices from Constantinople to the 1st inst. state that Omar Pasha was to leave the following week for Bosnia, accompanied by a delegation composed of one attaché from each Embassy of the great Powers. The town of Niksich has been supplied with provisions, according to the arrangement made between the foreign Consuls and the Christian inhabitants. It was said that the Christians had attacked a convoy in the defiles, and killed 50 Mussulmans. The Porte has agreed that the European Commission shall proceed to the Herzegovina.

SYRIA.—A French steamer had proceeded to Beyrout to bring back the International Commission to Constantinople.

THE PRINCIPALITIES.—Prince Couza in replying, a few days ago, to the deputation which brought up the address of the Chamber in favour of the union of the two assemblies, said:—

"Gentlemen, I appreciate the gravity of the step you have taken, and I am happy at being able to inform you from positive assurances which I have received that the union is henceforth an accomplished fact. Your resolution will have this good result, however, that it will prove [illegible] of wicked [illegible] that [illegible] been the [illegible]. I am proud of the encouragement and support I receive from you [illegible] interests."

SERVIA.—Prince Gortschakoff, who is in Constantinople on a special mission from Servia, has claimed from the Porte hereditary rights for the reigning family of Obrenovitsch.

UNITED STATES.—The accounts from New York to the 25th ult. are of a very serious character. The hostile feeling between the contending states is daily becoming more intense, and there is no longer any hopes of averting a civil war of a desperate character. It was reported that a Secession army of 6000 men, under President Davis and General Beauregard, were in the neighbourhood of Washington on the 22d ult. The

government had thrown up defences and barricades round the capital and the public buildings, and taken every precautionary measure possible. Four New York regiments had since arrived at Washington, and the capital was supposed to be strong enough to resist any attack. The route from Annapolis to Washington was kept open by Federal troops, but the Baltimore railroad communication was still interrupted. Fort Smith, in Arkansas, with property of the estimated value of 800,000 dollars, had been taken by the State troops. The Confederate flag had been hoisted on the fort. The Governor of New York had made a call for 21 additional regiments. The Governor of Delaware had responded to President Lincoln's call for troops. The Federal Government was chartering all the available steamers for transports and gunboats. The Union sentiment in Maryland was increasing. In some parts the people had threatened to hang their representatives if they voted for secession. The Southern troops were reported to be marching on Washington in detachments. Planting was neglected in the South. The growing crops were in danger from want of cultivation. The *New York Herald* says that the slaves are emigrating in masses from the Border States, and that in consequence of this movement a kind of border warfare has already commenced. In consequence of the secession of Virginia and the closing of the entrance of Norfolk harbour by the State authorities, the Federal officers stationed at Norfolk on the 28th ult. set fire to the dockyard and ships of war to prevent their falling into the hands of the Secessionists. All the most valuable property there was destroyed, including the line-of-battle ship Pennsylvania, the screw frigate Merrimac, the sloop of war Germantown, the brigs Plymouth and Dolphin, the frigates Colombia, Potomac, and Delaware, the line-of-battle ship New York (on the stocks), and other vessels of less value, together with the arms, munitions and stores, shiphouses, and storehouses. The Governors of North Carolina and Missouri had refused to supply troops to the Federal Government. Kentucky had declared herself neutral.

San Domingo.—Official advices have been received at Washington stating that General Santana surrendered San Domingo to Spain on the 18th of March. General Geffrard, President of Hayti, has formally protested against it, on the ground that Spain "has no more claim to St. Domingo than England or France, and that she might just as well lay claim to Mexico, Columbia, or Peru, or any other republic of Spanish origin." Advices from Havannah state that an additional number of Spanish troops had gone to San Domingo. Mr. Seward, the American Secretary of State, has addressed a note to the Spanish minister, protesting against the Spanish expedition to San Domingo, and reminding him of the good faith of that government in all its transactions with Spain. Copies of the protest have been forwarded to the British and French legations.

Parliament.

HOUSE OF LORDS.

Friday.—*Bankruptcy Bill.*—On the order for going into committee on this Bill, the Earl of Derby moved that it be referred to a Select Committee. Such a course would greatly facilitate the passing of the Bill, and, considering its length and technical nature, it would be much more satisfactorily discussed by 18 or 20 persons familiar with the subject than if debated in the House itself. He was sure their lordships would not deal with the Bill in an obstructive spirit, but there were some of its provisions which would require serious consideration, especially those clauses which brought the non-trader under the operation of the Act. — The Lord Chancellor and Earl Granville assented to the motion, and the Bill was referred to a Select Committee of 18 members. *Ionian Islands.*—In answer to the Earl of Carnarvon, Earl Granville said that the Government had no information on the subject of the alleged disturbances at Corfu, but the report was doubtless incorrect, as the Lord High Commissioner would have sent telegraphic messages to the Foreign Office, in accordance with his special instructions, if any collision had occurred.

Monday: *The Suez Canal.*—The Earl of Carnarvon moved for copies of correspondence between Her Majesty's Government and the Consul-General of Egypt, and of any other communications that have passed between Her Majesty's Government and the Governments of Turkey and France relative to the proposed construction of the Suez Canal. He pointed out the danger which would arise if a foreign Government, acting through a foreign company, should become owners of property in the very heart of Egypt, and asked under what sanction this work was carried on.—Lord Wodehouse admitted the importance of the subject, and said that it had occupied the serious attention of the Government. The difficulties in the way of forming the canal were very great, owing to the nature of the soil, and were every day developing themselves in a way that rendered it more than ever doubtful whether it could succeed. If, however, contrary to expectation, the canal should be constructed, guarantees would be taken that it should not be used to the detriment of foreign Powers. Under these circumstances he hoped the noble earl would not press his motion, as the production of the papers would be inconvenient to the public service.—Lord Stratford de Redcliffe believed that the speculation would not succeed, so that there need be no alarm on the subject.—The Earl of Ellenborough pointed out the great importance this canal would be to France in case of a war with this country.—The Earl of Carnarvon withdrew his motion. The report on the *Marriage Law Amendment Bill* was brought up, and the Bill ordered to be recommitted.

Tuesday.—*Wills of Personalty by British Subjects Bill.*—On the order of the day for going into committee on this Bill, Lord Lyndhurst spoke at considerable length in support of the Bill, whose object, he said, appeared to have been misapprehended in certain quarters. It had been represented to be inconsistent with international law, but in his view of the subject it was quite the reverse, and rather went to reconcile the law of England with the law of nations. In all cases of disposition of freehold property it mattered not where a man was domiciled when he made his will; and why, he asked, should he not have the same power of disposing of his personal property consistently with the laws of his country. That, however, was the only object to which the measure was directed. He thought that frequent intercourse between foreign nations was calculated to remove prejudices and increase their mutual respect; and although Lord St. Leonards had expressed some apprehension with regard to the possible effect of the Bill, he could assure him that it had been introduced with no covert design whatever; and when it had passed through committee he was satisfied that it would accomplish the laudable object for which it was intended.—Lord St. Leonards said he was willing to approve of the principle of the Bill, if they could only settle the question of domicile satisfactorily; but he was not prepared to give greater facilities to a man for making his will in a foreign country than he now enjoyed at home. One object of the measure was to get rid of the law of domicile, but that law was the law of nations, and unless they could induce other countries to agree with them the Bill would have no effect, except so far as regarded personalty within the jurisdiction of our own courts.—After some remarks by Lord Wensleydale, Lord Chelmsford, and Lord Kingsdown, the Bill was referred to a select committee. The *Smoke Nuisances (Scotland) Act Amendment Bill* and the *Railway Companies Mortgage Transfer (Scotland) Bill* were read a second time.

Thursday.—To-day being Ascension Day the House did not sit.

Friday.—*Civil War in America.*—In answer to the Earl of Derby, Earl Granville said that the Government intended to issue a proclamation in accordance with former precedents warning her Majesty's subjects to preserve that neutrality which it was the desire of this country to maintain in respect of the struggle in America.—Lord Brougham expressed his sincere regret at the state of things that prevailed in America, and agreed in the necessity of such a proclamation as that referred to.—The Earl of Hardwicke denied that privateers were to be regarded in the light of pirates. If fairly conducted their position was a very different one. *State of Syria.*—Lord Stratford de Redcliffe called attention to the French occupation of Syria.

[Left sitting.]

HOUSE OF COMMONS.

Friday.—*Business of the House.*—Lord Palmerston moved a series of resolutions for amending the practice of the House in the conduct of public business, by fixing committees of supply and ways and means for Monday, Wednesday, and Friday, and for any other day when the House meets for the despatch of business; constituting Mondays, Wednesdays, Thursdays, and Fridays, "order days," with the right reserved to the Ministry of placing Government orders at the head of the list on every order day except Wednesday; directing that the House at its rising on Friday should stand adjourned until the following Monday without any question being put, and that while the committees of supply and ways and means are open, the first order on Friday should be either supply or ways and means; and making other provision for the despatch of the public business.—Lord John Russell seconded the motion.—Mr. Bentinck moved an amendment to the effect that it is not expedient to sanction the proposed alterations in the standing orders, and in the practice of the House. He contended that the resolutions, if carried, would be a serious infringement on the rights of private members without materially facilitating the public business.—Mr. Knightley seconded the amendment, which was supported by Mr. Paull and Mr. Henley.—Sir J. Graham, as chairman of the select committee, and Mr. Sotheron-Estcourt supported the resolutions. On a division Mr. Bentinck's amendment was negatived by 253 to 98. The several resolutions were then discussed *seriatim*. Several amendments were moved on matters of detail, but, after considerable discussion, were negatived or withdrawn, and resolutions were ultimately agreed to, with the exception of the 5th, which proposed to invest select committees on public Bills with the functions of committees of the whole House, which was withdrawn for further consideration. *State of Poland.*—In answer to Mr. Cochrane, Mr. M'Evoy, and Sir H. Verney, Lord J. Russell said that he had never, in any despatch of his, endeavoured to excite nationalities. It was impossible not to feel sympathy for Poland; but he should be reluctant to say anything that might induce the Poles to expect that their nationality would be restored by any efforts to be made in their behalf by Great Britain. He did not believe that any party in this country, or any Government which could be formed here, would be likely to take up arms for the restoration of Polish independence; and if they were not prepared to do that he did not think it was a case for diplomatic despatches or exertions. *State of Naples.*—In answer to Mr Hennessy, Lord J. Russell said that tranquillity prevailed at Naples, although the provinces were disturbed by the disbanded soldiery of the late King, who were excited by money and arms supplied to them from Rome. *Denmark and Holstein.*—In answer to Sir H. Verney, Lord J. Russell said that her Majesty's Government were in communication with several of the Powers of Europe with the view, of making propositions which they thought would lead to an arrangement between Denmark and the German Confederation.—Sir W. Somerville obtained leave to bring in a Bill to extend the provisions of the Acts to facilitate the *Improvement of landed property in Ireland*, and to further provide for the erection of dwellings for the labouring poor in Ireland.—Mr Peel moved the order of the day for going into committee of supply on the *Civil Service Estimates.*—Mr. A. Smith objected to going into committee at so late an hour as a quarter before 12. On a division the motion was carried by 52 to 27. The House then went into committee. On the vote of 500,000*l.* on account of civil contingencies, Mr. A. Smith moved that the vote be reduced to 80,000*l.*, the sum required for paying the census enumerators.—Mr. Peel resisted the motion, and pointed out the inconvenience which would result from postponing the vote. After a desultory conversation the vote was agreed to and the House resumed. The remaining business was disposed of, and the House adjourned shortly before 1 o'clock to Monday.

Monday.—*Convocation.*—In answer to Mr. H. Seymour, Sir G. Lewis said that Convocation had not submitted to the Government any proposition to modify the canon in relation to baptismal sponsors. An opinion had been given that the modification of the canon was inconsistent with an old law on the subject. *The Civil War in America.*—In answer to Mr. Gregory, Lord J. Russell stated that the opinion of the Queen's Advocate had been taken on the question of the claim of the United States Government to levy dues on vessels coming to the ports of the Southern States, and the answer was still under consideration. With regard to the belligerent rights of the Southern States to issue letters of marque, a precedent for allowing them was to be found in 1825, when our Government recognised the belligerent rights of the insurgent Greeks, and in accordance with that precedent the Government had come to the conclusion of recognising the rights of the Southern States as belligerent. *Marriage of the Princess Alice.*—The House having resolved itself into committee to take into consideration her Majesty's Message in relation to the marriage of the Princess Alice, Lord Palmerston reminded the House that the Crown had given up all private property to Parliament on the understanding that the country was to provide for the different branches of the blood Royal; and [illegible] Majesty during her lengthened reign had [illegible] for any addition to the civil list wh[illegible] her at her first accession. In proposing a [illegible] cess Alice, he should not propose so large [illegible] granted to the Princess Royal, which was [illegible] should propose to fix it at 30,000*l.* The an[illegible] the Princess Royal was 8000*l.*; for the Princess [illegible] propose 6000*l.* a year. A resolution granting [illegible] then agreed to unanimously, and in comm[illegible] dowry of 30,000*l.* was voted with equal unan[illegible] —In answer to Sir H. Willoughby, the Chan[illegible] Exchequer said he had made no [illegible] no necessity for making any, for [illegible] ture consequent on the disturbances in [illegible] the necessity of sending out a fleet [illegible] interests on that coast. He believed that [illegible] the Indian Government for the Chinese war [illegible] the provision he had made for it. *The Pa*[illegible] House then went into committee of ways and [illegible] the Chancellor of the Exchequer moved [illegible] and after the 1st of October, 1861, the duties payable upon paper of any denomination, and mill-board, paste-board, and scale-board made [illegible] Kingdom, and also all allowances and drawb[illegible] respect of such duties, shall cease.—Lord E[illegible] against the whole policy upon which the Bud[illegible] —Mr. Gower supported the resolution, and [illegible] have been very glad to reduce the tea duties [illegible] the proper course would have been to [illegible] tax in order to reduce the tea duties, [illegible] that the Opposition had not made [illegible] Bentinck said that he was very unw[illegible] to endanger the existence of the Govern[illegible] sidered the repeal of the paper duty [illegible] dangerous, and he appealed to Lord Palmerston [illegible] considering what had recently occurred [illegible] States, he was prepared to uphold the pr[illegible] Hamilton complained that, in their financ[illegible] Government had tried to evade resp[illegible] Baines defended the Budget, and contended [illegible] duty pressed upon the working classes as w[illegible] publishers of works.—Sir L. Palk said that [illegible] the paper duty would not be felt by the com[illegible] appreciated by the working man.—Mr. Disra[illegible] would not be desirable to take the opinion of t[illegible] question at the present time. He would [illegible] friends, therefore, not to divide on the underst[illegible] allowing the resolution to pass now, they sh[illegible] cluded from discussing the general policy at a f[illegible] The Chancellor of the Exchequer assented [illegible] and the resolution was therefore agreed to. [illegible] increasing the *Excise duty on Chicory* was also [illegible] the resolution amending and extending the Act [illegible] which imposed an *Excise duty on licences to* [illegible] *Houses*, Mr. Ayrton stated at considerable len[illegible] tions to the principle of this tax, as virtu[illegible] food, insisting upon its injustice and the system which it would introduce.—The Chancellor [illegible] defended the resolution, the intention of which [illegible] give effect to the Act of last Session.—Mr. Henley [illegible] Sir M. Peto, and other members objected to the [illegible] and the Chancellor of the Exchequer ultimately [illegible] to reconsider and endeavour to remodel it so as to [illegible] objections. This resolution was accordingly withdr[illegible] resolution charging a duty of 3*l.* 3*s.* upon the [illegible] *Dealers in Spirits*, authorising them to sell by retail [illegible] any quantity not less than a quart bottle, not to be [illegible] on the premises, was objected to by Lord Fer[illegible] defended by the Chancellor of the Exchequer. The [illegible] tion was agreed to, after much discussion [illegible] imposing *Stamp duties on Leases* [illegible] less than a year. The resolution charging a [illegible] on licences to be taken out by House A[illegible] licenced auctioneers or appraisers, was opposed by [illegible] but, with certain modifications suggested by the [illegible] of the Exchequer, it was agreed to. The resol[illegible] the stamp duties upon licences to Hawkers [illegible] trading in a certain manner was likewise agreed [illegible] discussion. The resolution charging, in lieu [illegible] stamp duties upon *Foreign Bills of E*[illegible] payment of a sum exceeding 50[illegible] 1*s.* per cent., and the last resolution, [illegible] duty of 5*s.* upon licences to be taken out by [illegible] *Table beer by retail* at a price not exceeding 1½*d.* [illegible] agreed to.—On the motion that the resolutions [illegible] Mr. Bentinck repeated the question he had addressed [illegible] Palmerston in an early part of the debate.—Lord [illegible] the recent news from America would not bear [illegible] manner upon our financial affairs.—Lord Palmerston [illegible] that, however they might regret it, all must [illegible] the result of the separation of the two sect[illegible] States, and the Government had not thought [illegible] gence should make any difference in their arrange[illegible] Disraeli reserved to himself the right to chal[illegible] ceeding of the Government in repealing the duty [illegible] future stage, and he inquired what course they [illegible] take to bring the subjects of the resolutions [illegible] House.—The Chancellor of the Exchequer sa[illegible] report the resolutions on Tuesday, and take the [illegible] on Thursday. The motion for reporting the [illegible] was then agreed to. On the report of the [illegible] Supply, Mr. Hennessy objected to the [illegible] of 500,000*l.* for the *Civil Service*, and moved to [illegible] tion for a fortnight.—Lord Palmerston said [illegible] wanted for current expenses. The amendment [illegible] and the report agreed to. On the order for the [illegible] of the *Copyright (Works of Art) Bill*, Mr. W[illegible] that the Bill, the professed object of which [illegible] artists against pirates, went much further, [illegible] artist to retain the copyright of a picture [illegible] chaser, who would be deprived of the pow[illegible] picture copied, engraved, or photographed. [illegible] were raised by Mr. Coningham, Lord Fer[illegible] Layard.—The Attorney-General said that [illegible] could buy a picture with or without the copy[illegible] former case he would become the absolute owner [illegible] adequate price; in the latter case he would [illegible] enjoyment of the picture and the right of sale. [illegible] then read a second time.

Tuesday.—*The Civil War in America.*—Mr. W[illegible] pealed to Mr Horsfall, in the present aspect of [illegible] United States, to postpone the motion of which he [illegible] notice upon the subject of belligerent rights at sea [illegible] Palmerston urged a similar request, and said that [illegible] hon. member persisted with his motion, in the present [illegible] tion of things her Majesty's Government would have [illegible] native but to remain absolutely silent on the [illegible] Horsfall said that under these circumstances he [illegible] native but to accede to the suggestion. The mo[illegible] postponed *sine die*. *Ionian Islands.*—Mr. Ma[illegible] address for copy of papers and correspondence [illegible] mission of Mr. Gladstone to the Ionian Islands [illegible] Commissioner Extraordinary, in November [illegible] papers and correspondence in continuation from [illegible] Sir Henry Storks in Corfu on the 16th of February [illegible] latest period, including those in relation to the [illegible] the Legislative Assembly by Sir Henry Storks in Mar[illegible] He entered at some length into the political history [illegible]

[illegible], one of whom caught his horse's head [illegible] fired two shots at him. Although [illegible] made a gallant resistance, and being an [illegible] was more than a match for the man at [illegible], with whom he at once grappled. He [illegible] by the three men, who beat him [illegible] with a crowbar. His wife attempted to [illegible] suffered severely for her bravery. His [illegible] walked deliberately away. It is said [illegible] boy looked on without offering the [illegible]. He has since been arrested, in [illegible] of information that an effort was making [illegible] out of the country.

Law.

[illegible] —*Emperor of Austria v. Louis Kossuth.*— [illegible] judgment on Saturday in this case, [illegible] for an injunction to restrain the issue [illegible] Hungarian notes. The judgment was to the [illegible] lithographers, are to deliver [illegible] Messrs. Day & Son, the lithographers, are to deliver [illegible] for the purpose of being cancelled, [illegible]. Application for an appeal to the [illegible] made to the Lord Chancellor [illegible] will not be carried into effect [illegible]. No costs were applied for by [illegible].

[illegible] Pleas.—(Sittings in Banco, before Lord [illegible], and Justices Willes and Byles.)—*In Re* [illegible] *Baron Fenton.*—The Court of Exchequer [illegible] our last refused a writ of habeas [illegible] application was made to the Court of [illegible] writ of habeas to discharge Mr Fernandez [illegible] the ground that Mr. Justice Hill had no [illegible] to prison for not answering certain [illegible] alleged bribery at the Wakefield [illegible] the warrant of commitment was [illegible] time to consider their decision, and [illegible] Lord Chief Justice delivered judgment to the [illegible] warrant of committal was perfectly valid, and [illegible] of the tribunal from which it emanated was [illegible] and other reasons, therefore, he was [illegible] that the writ should be refused. The other [illegible]. Application refused.

[illegible] Criminal Court: *The London Meat Market.—Peter* [illegible] countryman of Hitcham, Herts, [illegible] indictment preferred against him by the Com[illegible] of Sewers for the City of London, charging him [illegible] with others in sending up to Newgate [illegible] in a diseased state, unfit for human food, with [illegible]. The jury found him *Guilty*, but recommended [illegible]. The judge said the offence was a very serious [illegible] public benefit it became necessary to punish [illegible] with severe punishment, at all events with [illegible]. As however the jury had recom[illegible] to mercy, he should order him to be im[illegible] hard labour for two months.—*George Jervis*, a [illegible] of Sedley, in Dorsetshire, was found *Guilty* [illegible] in having unlawfully sent a quantity of diseased [illegible] to Newgate Market for sale as human food, and was [illegible] two months' imprisonment without hard labour.

Obituary.

The Hon. Thomas Edward Mostyn Lloyd Mostyn, M.P. for Flintshire, died on Wednesday last, at Birling Manor, the residence of his father-in-law, the Earl of Abergavenny. He has been for some months in a delicate state of health, and in consequence [illegible] unable to attend to his Parliamentary duties. He was the eldest son of the present Lord Mostyn, [illegible]. He married, in [illegible], Lady Henrietta [illegible] of the Earl of Abergavenny, by whom he leaves two sons.

The Hon. Mrs. Jane Annesley, long resident in Guernsey, died [illegible], at the great age of 102 years. Death was [illegible]. The venerable lady having fallen [illegible] a few days previous [illegible]. She was the daughter of Mr. John Digby, and [illegible] Hon. and Very Rev. William Annesley, son of the [illegible] Annesley, who died in 1817.

[illegible] George Jackson, K.C.H., one of the oldest diplomatic [illegible] Crown, died on the 2d inst., at Boulogne. He [illegible] Rev. Dr. Jackson, Canon of St. Paul's, and [illegible] his brother, Mr. Francis Jackson, to Paris on the [illegible] after the French Revolution. He was [illegible] to Berlin from [illegible], and [illegible] a special mission to that country. In 18[illegible] Secretary of Legation and Chargé d'Affaires [illegible] home in consequence of the Peace [illegible] in the meantime been selected to bring [illegible] treaty of peace with Prussia, and since [illegible] of the surrender of Copenhagen to the King [illegible]. In [illegible] he was appointed Secretary to the [illegible] in Spain. In 1813 he was appointed Secretary [illegible] Chargé d'Affaires at Berlin and remained with [illegible] at Berlin till after the Battle of Waterloo. In [illegible] Secretary to the Embassy at St. Peters[burg] [illegible] at Berlin he attested the marriage of the late King of Hanover, then Duke of Cumberland. In 1822 he was [illegible] Madrid, and in the following year was [illegible] at Washington, under the 1st Article [illegible] of Ghent, which appointment he held till 1827. [illegible] Commissary Judge at Sierra Leone in 1828; [illegible] at Surinam, in August, 1841; and at [illegible], 1845. For his diplomatic services he was [illegible] a Knight Commander of the Guelphic Order, by [illegible].

Mr. Charles William Grenfell, late M.P. for Windsor, died on the [illegible] inst. in his [illegible]th year. He was born in 182[illegible], and was the eldest son and heir of Mr. Charles Pascoe Grenfell, [illegible], M.P. for Preston, by Lady Georgiana Isabella [illegible], daughter of the second Earl of Sefton. He was educated at Harrow school and at Christ Church, Oxford, [illegible] B.A. in 18[illegible] and M.A. in 18[illegible]. He was returned [illegible] for Sandwich in 1847, and retained his [illegible] year he stood successfully for Windsor, [illegible] the general election of 1852, when he was defeated by Mr. G. W. Hope. He married in 1852 the daughter of the Right Hon. William Sebright Lascelles, M.P., brother of the late Earl of Harewood, by the eldest daughter of the [illegible] Earl of Carlisle. By this marriage he was nephew of the Earl of Sheffield, Lord Portman, and the Hon. G. H. Cavendish, M.P., and cousin of Lord Wharncliffe and the Earl of Harewood, and by his mother he was cousin of the Earl of Sefton.

Mr. Herbert Coleridge died a few days since of con[sumption] [illegible]. He was the son of the late Mr. Henry Nelson Coleridge, and Sara Coleridge, the daughter of [illegible] poet and philosopher, and seemed to have inherited all the [illegible] of that gifted family. His career at Oxford was [illegible] with the highest honours, and he took a double first [illegible]. On leaving the University he was called to the bar, but literature continued to occupy his leisure. He became Secretary to the Philological Society, and was associated with the Dean of Westminster in the proposed dictionary of words used by the best writers of the 17th century, but which have since become obsolete.

Wills.—The will of the Dowager Lady Colton has been sworn under 25,000*l.*; Colonel Sir George Cowper, Bart., 50,000*l.*

Miscellaneous.

New Comet.—A new comet has made its appearance in this country and in America. Mr. Hind, in a letter to the *Times*, says that by a rough calculation of the orbit from an American observation on April 11, and two estimated places on April 29 and May 4, it appears that the comet is not one that has been previously computed. "It will arrive at its least distance from the sun about June 2, in heliocentric longitude 243°. The ascending node is situate in about 31° of longitude, and the orbit is inclined to the ecliptic 78° or 79°. The distance from the sun in perihelion is 92-100ths of the earth's mean distance, and the true motion in the orbit is direct. From these numbers we find that the comet arrived at its least distance from the earth on May 5, when it was separated from us rather more than 30,000,000 miles. Its brightness will now be slowly diminishing, though it may yet be well observed for a fortnight or three weeks. It is an extraordinary circumstance, in these days of close observation of the heavens, that a comet visible to the naked eye, or, at any rate, very little beyond unassisted vision, should have been traversing the circumpolar region of the sky so long without being earlier detected at some one of the many European observatories."

BIRTHS.—On the 5th inst., at 69, Eaton Square, the Hon. Mrs. Reynolds Moreton, of a son.—6th inst., at 15, New Street, Spring Gardens, the wife of G. Sclater Booth, Esq., M.P., of a son.—3d inst., at 9, Clifford Street, W., Mrs. Edward Sayer, of a son.—29th ult., at Cambridge, the wife of Sidney Stanley, Esq., of Long[illegible]stowe Hall, of a son.—17th ult., at Funchal, Madeira, the wife of Newton J. Lane, Esq., of Elmhurst Hall, Staffordshire, of a daughter.—6th inst., at 4, Albyn Place, Edinburgh, the wife of Lieut.-Col. Alison, C.B., of a daughter.—1st ult., at Serampore, East Indies, the wife of William Wynyard, Esq., H.M.'s Bengal Civil Service, of a son.

MARRIAGES.—On the 8th inst., at Clifton, Captain Granville Lewis, of H.M.'s Indian Army, eldest son of the late Hon. Sir G. A. Lewin, Q.C., to Gertrude, [illegible] of the late Hon. Percy Fellowes.—[illegible] ult., at St. George's, Hanover Square, [illegible] Richmond, eldest son of the Hon. S. G. Henty, member of the Legislative Council, Melbourne, to Agnes Barbara, youngest daughter of the Rev. Edward Reid, of Cheltenham, and grand-daughter of the late Sir Edward B. Sandys [illegible] Mary's Church, W[illegible] Park, [illegible] Marshall, Esq., [illegible] House, [illegible] Frettiy, Somerset, grandson of the late Colonel Marshall, to Grace, daughter of the late William Marshall, Esq., and grand-daughter of the late Francis Brodie, of Brodie, and of Myvoir House, Westmeath.—7th inst., at Christ Church, Upper Hyde Park Gardens, Algernon, fifth son of the Lady Caroline [illegible] and the late Sir James [illegible], K.C.B., to Rosetta, second [illegible] daughter of Thomas [illegible], Esq., of [illegible] Upper Hyde Park Gardens, and [illegible], Ireland.—[illegible] inst., at [illegible], [illegible], Gloucestershire, John [illegible], Esq., of [illegible], eldest son of John Dillwyn Llewelyn, Esq., of Penllergare, [illegible], to Caroline Julia, eldest daughter of the late Sir Michael Hicks Beach, Bart., of Williamstrip Park, in the county of Gloucester.—[illegible] inst., at the parish church, St. Mary's, Twickenham, Adolphus Arthur [illegible], Esq., youngest son of the late J. C. [illegible], Esq., of Notting Hill, to Frances, youngest daughter of the late Latham Osborn, Jun., Esq., of Margate, and grand-daughter of the late Sir Richard Burton, of Sackett's Hill House, Isle of Thanet.—7th inst., at the German Chapel, Islington, Mr. Nicholas Trübner, of Paternoster Row, [illegible] St. Mary's Road, Canonbury, to Cornelia, only daughter of Octavius [illegible], Esq., of [illegible] Terrace, Hyde Park, [illegible] and Secretary of Legation to the King of the [illegible].—[illegible] inst., at St. Michael's Church, Chester Square, Charles Thomas Newton, Esq., Student of Christ Church, Oxford, Keeper of the Greek and Roman Antiquities at the British Museum, to Mary, daughter of Joseph Severn, Esq., her Majesty's Consul at Rome.

DEATHS.—On the [illegible] ult., at Milnegraden, in the county of Berwick, Margaret, the wife of the Hon. A. F. Cathcart, and second daughter of the late W. F. Home, of Wedderburn and [illegible].—3rd inst., of consumption, Susanna, youngest daughter of Richard Bullen, Esq., [illegible] of the late Admiral Sir Charles Bullen, G.C.B., aged [illegible].—4th inst., at Blackheath, Lieutenant-Colonel Walter Warde, [illegible] son of the late General Sir Henry Warde, G.C.B., aged [illegible].—[illegible] inst., at Cheltenham, Elizabeth, wife of Lieutenant-General Ward, Royal Engineers, aged [illegible].—4th inst., at the Whitefriars, Canterbury, [illegible], Jane, wife of Henry Denne, Esq., and eldest daughter of the late Major [illegible], Royal Artillery.—5th inst., at the Lumington House, [illegible] Street, Thomas Haggerston Robertson, only surviving son of David Robertson, Esq., M.P., of Lady Kirk, Berwickshire, aged 17.—28th ult., at Thurstaston Hall, Lieutenant-Colonel Glegg, aged 87.—1st inst., at Harley Place, Regent's Park, Thomas Edward Fielder, Esq., of Money Hill, Hertfordshire, late of Kyre, Worcestershire, and Hartham Park, Wiltshire.—30th ult., at Finglass, near Dublin, Edward Eustace Hill, Esq., late resident magistrate, county Longford, [illegible].—[illegible] inst., at Spring Grove, Richmond, Surrey, Henry Lowning, Esq., of the Middle Temple, barrister-at-law, aged 39.—14th Feb., on his voyage home from India, Thomas Gerard Elrington, Esq., [illegible] Dragoon Guards, only son of the Rev. W. F. Elrington, of Great Haywood, Stafford, aged 30.—6th inst., at Leamington, John Hunter, Esq., late Captain, [illegible] Light Dragoons, aged 74.—6th inst., at his residence, [illegible] Square, James Malcolmson, Esq., of Campden Hill, Kensington, aged 58.—6th inst., at 39, Regency Square, Brighton, G. R. Gainsford, Esq., aged 67.—7th inst., at Cambridge Heath, Hackney, Mary, relict of the late Samuel Beverley Jones, Esq., of Bow Lane, Cheapside, and only daughter of the late Thomas Taylor, Esq., of Walworth, the Platonist, aged 71.—1st inst., at the residence of her brother, [illegible], Esq., Dartford, Kent, Eliza A. Vigors, relict of the late N. A. Vigors, Esq., M.P., aged [illegible].—5th inst., at 18, Lower Berkeley Street, Seth Thompson, Esq., M.D., Fellow of the Royal College of Physicians, and formerly Physician to the Middlesex Hospital, aged 61.—5th inst., at Worthing, the Rev. W. Browne, rector of Letheringsett, Norfolk, and late Fellow of Worcester College, Oxford.

Markets.

COVENT GARDEN, May 11.

Vegetables are still scarce and dear. Broccolis furnished from Cornwall and good samples of Lettuces, Endive, and Artichokes from France. Grapes fetch fair prices. Of Strawberries there is a tolerably good supply considering the season. Asparagus, French Beans, Green Peas, Young Carrots, and new Potatoes may also now be obtained. Cucumbers are [illegible] more plentiful. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 8s to 12s	Apples, per doz., 6d to 1s 6d
Grapes, per lb., 8s to 12s	Oranges, per 100, 6s to 10s
Strawberries, per oz., 6d to 1s	Lemons, per 100, 6s to 10s
Cherries, French, per box, 8s	Nuts, Cob, per lb., 1s to 1s 6d
Pears, per doz., 4s 6d to 8s	

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, [illegible] to 1s6d	Celery, p. bundle, 1s 6d to 1s9d
Green Peas, p. ½ sieve, 8s to 12s	Onions, p. ½ sieve, 1s 6d to 2s6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 4s to 8s
Cabbages, do., 2s to 3s	Rhubarb, p. bundle, 9d to 1s 3d
Potatoes, p. ton, 80s to 120s	Seakale, p. punnet, 1s 6d to 2s
— new, per lb., 6d to 2s	Shallots, per lb., 1s 6d
— — per cwt., 10s to 10s	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 1s0d	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 4d to 6d	Horse Radish, p. bun., 1s6d to 4s
Spinach, p. sieve, 4s to 5s	Mushrooms, p. pott., 1s 6d to 1s6d
Cucumbers, each, 9d to 2s	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 3s to 4s	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, May 9.

Prime Meadow Hay	75s to	86s	Clover	95s to	115s
Superior do. (old) ..	90	105	New Clover	—	—
Inferior do.	50	60	Do. second cut ..	80	100
New do.	—	—	Straw	30	42
Rowen	—	—			

DAVIS & CO.

WHITECHAPEL, THURSDAY, May 9.

Fine old Hay	100s to	108s	Fine old Clover ..	116s to	123s
Inferior do.	40	60	Inferior do	90	99
Prime New Hay ..	—	—	Fine 2d cut	90	105
Inferior do.	—	—	Inferior do.	—	—
Straw	37	42	Fine New Clover ..	—	—

POTATOES.—SOUTHWARK, Monday, May 6.

During the past week the arrivals both coastwise and by rail have been liberal, and a further reduction in prices had to be submitted to on second rate sorts. The following are this day's quotations:—York Flukes, 120s. to 140s. per ton; Lincolnshire Regents, 80s. to 100s.; Dunbar Red Soil do., 120s. to 140s.; North Berwick Regents, 105s. to 120s.; Fife, Forfar, and Perth do., 80s. to 100s.; ditto Rocks, 75s. to 80s.; ditto ditto Reds, 70s. to 80s.; French Whites, 60s. to 80s.; Belgian do., 60s. to 70s.; Dutch do., 60s. to 70s.

METROPOLITAN CATTLE MARKET.

MONDAY, May 6.

We have a much larger supply of Beasts, but the demand is good, and late quotations are for the most part realised. The number of Sheep is considerably larger; trade for them is however brisk, and prices are not much altered. Good Lamb [illegible] demand. Calves are not selling quite so well. From Germany and Holland there are [illegible] Beasts, [illegible] Sheep, and [illegible] Calves; from Scotland, [illegible] Beasts; and [illegible] from Norfolk and Suffolk.

	s	d		s	d		s	d		s	d
Best Scots, Herefords, &c. ..	4	10 to	5	2		Best Long-wools.	5	4 to	5	8
Best Short-horns	4	8 —	5	0		Do. Shorn ..	4	8 —	5	0
2d quality Beasts	3	8 —	4	4		Ewes & 2d quality	4	8 —	5	4
Best Downs and Half-breds ..	5	8 to	6	0		Do. Shorn ..	4	0 —	4	6
Do. Shorn ..	5	0 to	5	4		Lambs	6	8 —	7	8
						Calves	5	0 —	5	6
						Pigs	4	0 —	5	0

Beasts, 3900; Sheep & Lambs, 21,[illegible]; Calves, 118; Pigs, 470.

THURSDAY, May 9.

The number of Beasts is rather larger than it has been for the last few weeks. Trade is dull except for choicest descriptions. Prices are scarcely as good as on Monday. Sheep and Lambs are more plentiful and the trade heavy, consequently a clearance cannot be effected, although prices are not much reduced. Calves are rather lower. Our foreign supply consists of [illegible] Beasts, 1200 Sheep, and [illegible] Calves. Milch Cows 140.

	s	d		s	d		s	d		s	d
Best Scots, Herefords, &c. ..	4	10 to	5	0		Best Long-wools ..	..	to	..	
Best Short-horns	4	8 —	4	10		Do. Shorn ..	4	8 —	5	0
2d quality Beasts	3	6 —	4	4		Ewes & 2d quality	..	—	..	
Best Downs and Half-breds ..	5	8 —	6	0		Do. Shorn ..	4	0 —	4	6
Do. Shorn ..	5	0 —	5	4		Lambs	6	8 —	7	8
						Calves	4	8 —	5	6
						Pigs	4	0 —	5	0

Beasts, 1030; Sheep & Lambs, 7680; Calves, 272; Pigs, 270.

MARK LANE.—MONDAY, May 6.

The supply of English Wheat to this morning's market was again small; good qualities continue to be taken at late prices, and inferior at irregular ones. This morning's market was tolerably well attended and a fair sale was experienced for foreign Wheat in retail at previous rates; low qualities are still difficult to quit, and their value uncertain. Barley is a steady sale at last week's prices. Beans and Peas are unaltered in value. Good Oats are fully as dear, but out-of-condition parcels are 6d. per qr. cheaper. Flour sells slowly at about late quotations.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk .. White	56—66	Red	48—62
— — fine selected runs .. ditto	50—72	Red	54—66
— — Talavera	51—72		
— Norfolk	—	Red	—
— Foreign	50—78		
BARLEY, grind. & dist., 28s to 30s .. Chev.	40—45	Malting	38—40
— Foreign .. grinding and distilling	30—36	Malting .	40—42
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire .. Potat.	26—28	Feed ..	20—25
— Irish .... Potat.	25—[illegible]	Feed .	21—24
— Foreign .... Poland and Brew	24—[illegible]	Feed .	20—24
RYE	35—38	Foreign .	—
RYE-MEAL, foreign	—		
BEANS, Mazagan .... 38s to 42s .... Tick	40—44	Harrow	40—44
— Pigeon ...... 42s — 46s .. Winds	—	Longpod	—
— Foreign .... Small	42—[illegible]	Egyptian	—
PEAS, white, Essex and Kent .. Boilers	3[illegible]—44	Suffolk	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign .	38—48
MAIZE .... White	—	Yellow ..	—
FLOUR, best marks delivered .. per sack	50—5[illegible]		
— 2d do. .... ditto	38—50	Country	38—50
— Foreign .... per barrel	[illegible]—35	Per sack	40—50

FRIDAY, May 10.

The weather on the 4th inst. was wet, with sharp showers of hail and snow. The 5th was also wet, but the intervening days dry and dull. The temperature has been low, with one or two night frosts. A somewhat improved tone has been manifested in the Wheat trade during the present week, and an increased business transacted at fully former prices. The value of spring corn was also fully supported, with rather an

upward tendency for feeding kinds. The Flour trade has been everywhere quiet, until towards the close of Wednesday's market here, when we experienced an extensive demand at the extreme rates lately obtained. Since Friday last 76 vessels have been reported off the coast, viz., 35 Wheat, 23 Maize, 7 Barley, 2 Rye, 1 Oats, 1 Beans, 3 Flour, 3 Linseed, and 1 Cottonseed. The transactions have not been very extensive, but during the last few days more demand has been experienced, and Maize has partly recovered from the decline quoted at the beginning of the week. The arrivals of English grain this week have been to a trifling extent, small of foreign Barley and Oats, and of Wheat moderate. This morning's market was tolerably attended. We observe no alteration in the value of English Wheat. Foreign was more inquired after, and a fair amount of business transacted at the extreme rates lately obtainable. Spring Corn is firm at Monday's quotations. For barrel Flour there is a good demand, and in some instances a slight advance is obtained.

ARRIVALS FROM May 6 to May 10.

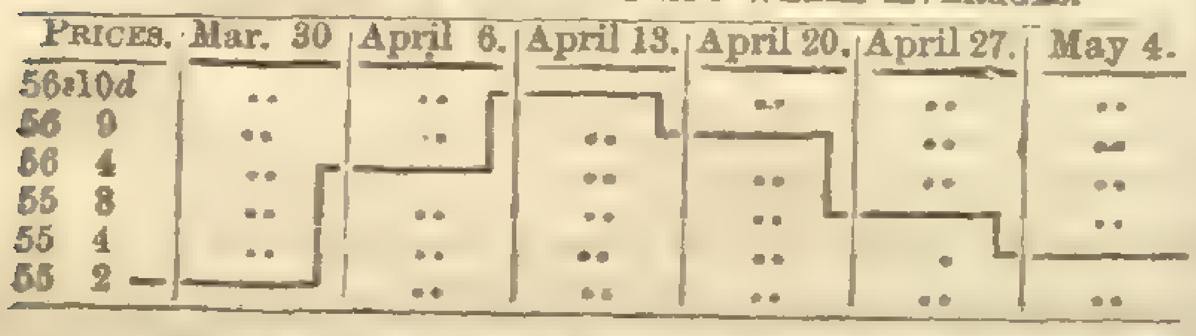
	Wheat.	Barley.	Oats.	Flour.
English ..	530 qrs.	320 qrs.	10 qrs.	880 sks.
Irish	— ,,	— ,,	1590 ,,	— ,,
Foreign ..	14130 ,,	1730 ,,	11340 ,,	400 ,, / — brls.

LIVERPOOL, Tuesday, May 7.—There has been a fair attendance of buyers at this morning's market, and a good consumptive demand has been experienced for Wheat at the full rates of Friday last, and in a few instances an advance of 3d. per cental has been obtained on medium qualities of American Red. Flour was in fair request at the improvement of 6d. per barrel established yesterday; sacks unaltered. Indian Corn is held for an advance of 3d. per qr., which checks business. Oats and Oatmeal steady at full prices. Beans are 6d. per qr. higher. Pease and Barley unchanged. The market closes with a steady tone of feeling.

FRIDAY, May 10.—A good attendance at to-day's market. Wheat meets a ready sale at an advance of 1*d*. per cental. Flour good consumptive demand, prices a shade dearer. Indian corn rather more doing—mixed 34s. 6d., Galatz, 36s. to 36s. 6*d*. Beans without change. Oats and Oatmeal rather better. Sales at extreme rates of Tuesday.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Mar. 30..	55s 2d	37s 11d	23s 4d	36s 7d	40s 11d	43s 4d
April 6..	56 4	37 8	24 0	36 4	41 8	40 2
— 13..	56 10	37 5	24 1	35 11	41 6	40 0
— 20..	56 9	37 3	23 5	37 10	42 3	49 6
— 27..	55 8	37 11	24 8	32 8	42 7	40 8
May 4..	55 4	36 10	24 7	35 2	42 11	40 8
Agg. Aver.	56 0	37 6	24 0	35 9	42 0	40 9

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



HOPS.—BOROUGH MARKET, FRIDAY, May 10

Messrs. Pattenden & Smith report the demand steady for good yearlings and 1860's, at about the same prices as this day week. Sound and well kept old Hops are also in fair request, at fully as much money.

BUTTER MARKET.—May 10.

Best Fresh Butter	.. ..	15s. per dozen lbs.
Second do. do.	.. ..	13s. ,, ,,
Pork, 5s. 0d. to 5s. 8d. per 8 lbs.		

BRITISH WOOLS.—LONDON, FRIDAY, May 10.

The state of our trade continues healthy, and sales for immediate consumption continue to be made at former rates. The next series of Colonial Wool Sales are advertised to commence on the 9th. 70,000 bales are expected to be sold.

	s. d.	s. d.		
South-down Hoggets	1 5 to	..	Leicest. Wethers	1 4 to ..
Half-bred ditto ..	1 6 —	..	Ditto Hoggs ..	1 6 — ..
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News of the Week.

In the House of Lords on Friday Lord Stratford de Redcliffe moved a series of resolutions on the affairs of Syria, affirming the expediency of not prolonging the French occupation beyond the 5th June, and the necessity of inducing the Turkish Government to reform their system of revenue and administration. The motion was opposed by Lord Wodehouse, the Marquis of Clanricarde, and Earl Granville, and after a long discussion was withdrawn. On Monday the Princess Alice's Dowry Bill was brought up from the Commons and read a first time. The Earl of Shaftesbury moved for copies of the evidence upon which the report of the Education Commissioners relating to ragged schools was founded, characterising the report as untrue, unfair, and ungenerous. The Duke of Newcastle opposed the motion, and expressed his opinion that the report was one of the fairest and most impartial documents ever laid before the House. After some remarks from Lord Portman and Earl Granville, the motion was withdrawn. The Passengers' (Australian Colonies) Bill and the Marriages Validity Bill passed through committee. On Tuesday, Lord Wodehouse, in reply to Lord Brougham, said that the Spanish Government had informed Her Majesty's Government that they did not intend to introduce slavery into that part of San Domingo which was about to be re-annexed to Spain. The Princess Alice's Annuity Bill was read a second time. On Thursday the Earl of Ellenborough asked for information respecting the terms employed in the Proclamation which had been issued by the Queen in Council enjoining on all British subjects a strict neutrality during the civil war in America. Earl Granville in reply said that if a blockade were maintained in proper form and manner, and with such a force as to make it effective, it would be a lawful and actual blockade. As to articles contraband of war, many were obviously of such a nature as to require no further definition than the phrase itself conveyed, while with regard to others they must be adjudicated upon in the Prize Courts. The Earl of Derby thought that the Government ought to come to some understanding with the United States as to the exact nature of the blockade to be established, and also that privateering should not be treated as piracy. The Princess Alice's Annuity Bill was read a third time and passed.

In the Commons on Friday Lord J. Russell, in answer to Sir J. Ferguson, described the present position of affairs in Syria, and said that he had every reason to rely on the good faith of the Emperor of the French to complete the arrangement into which he had entered. The House then went into Committee of Supply, and after a long discussion agreed to certain votes. The Princess Alice's Annuity Bill was read a third time and passed, and the Lords' amendments of the Savings Banks Bill were agreed to. On Monday Mr. Roebuck moved for a Select Committee to inquire into the circumstances under which Mr. Steuart voted in the recent division on the Tea duties, stating that he had been brought down to the House to vote while in a state of mental derangement. Mr. Macaulay, Lord H. Lennox, and other members denied this statement, and declared that Mr. Steuart, on the night of the division, was as perfectly well in mind and body as any member of the House. After some further discussion the motion was negatived without a division. On the order for the second reading of the Customs and Inland Revenue Bill. Mr. Macdonough, Lord J. Manners, Mr. Rolt, Mr. Whiteside, and Lord R. Cecil, spoke against the Bill; Sir J. Graham, Sir J. Goldsmid, Mr. Collier, and Lord John Russell supported it. Mr. Ducane moved the adjournment of the debate. On a division, the motion was negatived by 247 to 164. Mr. Bentinck then moved the adjournment of the House. Lord Palmerston resisted the motion, which was negatived on a division by 233 to 145. Colonel Dickson moved the adjournment of the debate. Lord Palmerston, upon this, gave way, and

the debate was adjourned to Thursday. On Tuesday Sir H. CAIRNS moved the appointment of a select committee to inquire into the law affecting the contracting and celebration of marriage in Ireland. Mr. WHITESIDE seconded the motion. Mr. SCULLY moved as an amendment an address to the Crown praying for a Royal commission to inquire into the marriage laws of England, of Ireland, and of Scotland respectively. After some discussion the amendment was withdrawn, and the motion was then agreed to. Mr. M'MAHON obtained leave to bring in a Bill to enable religious congregations in Ireland to obtain sites for places of worship. Mr. ANGERSTEIN moved for some returns connected with Woolwich Dockyard, but had not completed his speech when the House was counted out. On Wednesday Mr. BUTT moved the second reading of the New Trials in Criminal Cases Bill, the object of which was to give the prisoner the right of appeal in cases of treason and felony. Sir G. LEWIS moved that the bill be read a second time that day six months. On a division the amendment was agreed to. The Bill was therefore lost. The House then went into Committee on the Annoyance Jurors (Westminster) Bill, the clauses of which were agreed to, with amendments. The Piers and Harbours Bill, and the Reformatory Schools Bill (Scotland) were read a second time. On Thursday, the adjourned debate on the Customs and Inland Revenue Bill was resumed, when the Bill was opposed by Mr. DUCANE, General PEEL, Mr. HORSMAN, Mr. NEWDEGATE, Mr. MALINS, Sir J. NORTHCOTE, Mr. W. E. DUNCOMBE, and Mr. DISRAELI, and supported by Sir W. HEATHCOTE, the CHANCELLOR of the EXCHEQUER, Mr. PULLER, Mr. WHALLEY, Mr. LOCKE, and Lord PALMERSTON. The Bill was then read a second time without a division, and ordered to be committed on Monday week. The Excise and Stamps Bill was read a second time.

In the French Senate on Wednesday, M. BILLAULT stated that transports had been sent to Syria to bring back the French troops on the 5th of June in accordance with the convention, and that if the withdrawal of the troops should lead to lamentable consequences, the responsibility would rest not on France but on Europe, which had refused to prolong the occupation.

The EMPEROR OF AUSTRIA received on Tuesday the members of the Lower House of the Reichsrath, who presented their address in reply to the speech from the Throne, expressing their hope that the indivisibility of the Empire would be maintained, and that Hungary would be induced to accept the new constitution and send members to the Reichsrath. The EMPEROR, in reply, said that it was his intention to maintain not only the unity of the Empire, but also as much as possible the autonomy of the provinces.

From the United States we learn that 18,000 armed troops have been concentrated in Washington, and no fears are now entertained of the safety of the Federal capital. President LINCOLN has issued a proclamation declaring a blockade of all the Southern ports, and has called for 42,000 volunteers,—23,000 for the army and 18,000 for the navy. On the other hand, President JEFFERSON DAVIS has convened the Southern Congress at Montgomery for the purpose of devising means to replenish the Treasury, and of providing for the defence of the country. Fort Pickens has been successfully reinforced without resistance on the part of the Secessionists. Fort Smith, in Arkansas, has been taken by the State troops, and a body of Federal troops has surrendered to the Texans. North Carolina is virtually out of the Union and is equipping for war; Tennessee has gone over to the Seceders, but Maryland and Western Virginia are true to the Union, and Kentucky is still neutral.

By the Overland Mail we have news from Calcutta to the 18th, and from Hong Kong to the 1st April. The accounts from Calcutta represent the prospects of the indigo crop as very bad, no rain having fallen up to the 18th April. The Yang-tse expedition had reached Hankow, and the three trading ports had been selected. The expedition had met with no impediment from the rebels, who had shown themselves anxious to be on good terms with the foreigners. The ice had given way in the Gulf of Pecheli, and the mails had at length reached Tien-tsin. The Chinese Government had issued a decree establishing a Board of Foreign Affairs at Pekin.

Home News.

THE COURT.—The Queen, Prince Consort, and the Princesses are at Buckingham Palace. On Saturday afternoon her Majesty visited Hampton Court, accompanied by the Princesses Alice, Helena, and Louisa. The Prince Consort came to London and visited the exhibition of Antiquities and objects of Art, at Ironmongers' Hall. His Royal Highness afterwards presided at a meeting of the Council of the Duchy of Cornwall. Prince Arthur left Buckingham Palace for Cambridge on a visit to the Prince of Wales at Madingley Hall. On Sunday morning the Queen and Prince Consort, Princesses Alice, Helena, and Louisa, and Prince Leopold attended Divine service in the White Lodge. The Dean of Windsor officiated. On Monday morning her Majesty and Princess Alice drove to Kew Gardens. The Prince Consort accompanied her Majesty on horseback. In the afternoon the Queen held a Council, at which a proclamation enjoining neutrality in the civil war in America was agreed to. Earl Granville and Lord Palmerston had audiences of her Majesty. On Tuesday morning the Queen, accompanied by Princesses Alice, Helena, and Louisa, drove to Sion House, and walked in the gardens. The Prince Consort went to Cambridge University, returning in the evening to Richmond. In the afternoon the Queen drove out in an open carriage with Princesses Helena and Beatrice. On Wednesday morning the Comtesse de Neuilly, with the Princesse de Joinville, the Duc de Nemours, and the Comte de Paris, visited the Queen at the White Lodge. In the afternoon the Prince Consort held a *levée* on behalf of the Queen, in St. James's Palace, at which 180 noblemen and gentlemen were presented. After the Levee his Royal Highness rode out on horseback. In the evening the Queen, accompanied by the Princesses Alice, Helena, Louisa, and Beatrice, arrived at Buckingham Palace from the White Lodge, Richmond Park. On Thursday the Queen held a Court at Buckingham Palace, at which Mirza Djafer Khan-Muchir-ud-Dowle, Persian Ambassador, attended by his Secretary and Interpreter, had an audience to take leave; the Hon. George Mifflin Dallas had an audience, and delivered his letters of recall as Minister from the United States; and Mr. Charles Francis Adams had his first audience, and delivered his credentials as Minister Plenipotentiary from the United States. Prince Arthur visited the Duke of Cambridge at the Horse Guards. In the afternoon the Prince Consort rode on horseback.

THE PRINCE OF WALES met with an accident while boating on the Cam on Friday. The boat upset at the back of Trinity, and his Royal Highness and Capt. Grey were precipitated into the water. Assistance was at hand, and the Prince and his companion were soon on shore again, with no other inconvenience than a wetting.

PRINCE ALFRED left Port Royal, Jamaica, in the St. George on the 10th ult., on a cruise of three weeks, after which she was to proceed to Bermuda to coal, and return thence direct to England.

THE CABINET.—A Cabinet Council was held on Wednesday at the official residence of the First Lord of the Treasury, in Downing Street.

ORDER OF THE BATH.—The Queen has conferred the Companionship of the Bath on Mr. Henry Loch, private secretary of Lord Elgin in his late mission to China, and on Mr. Thomas Wade, Chinese secretary to the mission at Shanghai, who acted as chief interpreter during the expedition.

PARLIAMENTARY MOVEMENTS. — Mr. Hughes, of Kinmel Park, and Lord Richard Grosvenor, son of the Marquis of Westminster, are mentioned as candidates for Flintshire, the former in the Conservative, the latter in the Liberal interest. Capt. Johnson, R.N., son-in-law of the late member, has been returned for the Montgomery boroughs in the Conservative interest without opposition; the Liberal candidate, the Hon. Captain Tracy, having retired from the contest.

BISHOPRIC OF MADRAS. The Queen has directed letters patent to pass the Great Seal of the United Kingdom, nominating the Rev. Frederick Gell, B.D., to the Bishopric of Madras, in the room of the late Right Rev. Dr. T. Dealtry.

COLONIAL BISHOPRIC.—Another colonial bishopric has been founded, and the Rev. John Coleridge Patteson, M.A., of Merton College, Oxford, eldest son of the Right Hon. Mr. Justice Patteson, has been appointed the first bishop. The diocese comprises the western islands of the Pacific. The ceremony of consecration was performed at Auckland by the Bishops of New Zealand, Wellington, and Nelson. Mr. Patteson has been for some years past an active missionary in the Polynesian Islands.

THE ARMY.—The Coloneley of the 41st Foot, vacant by the death of General A'Court Repington, has been conferred on Lieut.-General Sir Richard England, G.C.B., and the Coloneley of the 50th Foot, vacated by this appointment, has been conferred on Major-General G. Morton Eden. Lieut.-General W. Redman Ord has been appointed Colonel Commandant of a Battalion of the Royal Engineers in the room of the late Sir Charles Pasley.

LAW APPOINTMENT.—Mr. Charles [illegible] of Petitions to Private Bills, has been app[illegible] Speaker to the office of Taxing-master [illegible] Commons, in the place of the late M[illegible] salary of the office has been reduced from [illegible] a year.

FOREIGN ENLISTMENT—THE CIVIL W[illegible] RICA.—At the Privy Council held by [illegible] White Lodge, Richmond Park, on Monday [illegible] ing Proclamation was issued command[illegible] neutrality during the hostilities in Americ[illegible]

BY THE QUEEN.—A PROCLAMAT[illegible]

VICTORIA R.

Whereas we are happily at peace with all S[illegible] and States: And whereas hostilities ha[illegible] menced between the Government of the U[illegible] America and certain States styling themse[illegible] rate States of America:" And whereas w[illegible] with the Government of the United States, [illegible] Royal determination to maintain a stric[illegible] trality in the contest between the said [illegible] "We therefore have thought fit, by and [illegible] of our Privy Council, to issue this our R[illegible] And we do hereby strictly charge and [illegible] loving subjects to observe a strict neutrality [illegible] aforesaid hostilities, and to abstain from v[illegible] ing either the laws and statutes of the realm [illegible] the law of nations in relation thereto, as [illegible] the contrary at their peril. And whereas [illegible] statute made and passed in the 59th year [illegible] George III., entitled "An Act to prevent [illegible] gagement of his Majesty's Subjects to [illegible] Service, and the Fitting out or Equipping [illegible] Dominions, Vessels for Warlike Purposes, w[illegible] Licence," it is, among other things, decl[illegible] follows:—"That if any natural-born su[illegible] his heirs and successors, without the le[illegible] Majesty, his heirs or successors, for that p[illegible] obtained, under the sign manual of his M[illegible] successors, or signified by Order in Council [illegible] of his Majesty, his heirs or successors, s[illegible] or shall agree to take or accept a[illegible] mission, or shall otherwise enter [illegible] service as a commissioned or non-commi[illegible] shall enlist or enter himself to enlist, or s[illegible] or to enter himself to serve as a soldier, or [illegible] shall serve in any warlike or military ope[illegible] of or for or under or in aid of any foreign [illegible] Potentate, colony, province, or part of any p[illegible] or of any person or persons exercising or assu[illegible] the powers of government in or over any [illegible] colony, province, or part of any province [illegible] an officer or soldier, or in any other milit[illegible] any natural-born subject of his Majesty [illegible] leave or licence as aforesaid, accept or agree [illegible] any commission, warrant, or appointment [illegible] shall enlist or enter himself, or shall agree [illegible] himself, to serve as a sailor or marine [illegible] engaged, or shall serve in and on board [illegible] war, or in and on board any ship or vessel [illegible] or equipped, or intended to be used for [illegible] in the service of or for or under or in aid of [illegible] prince, state, potentate, colony, province [illegible] vince or people, or of any person or pers[illegible] assuming to exercise the powers of government [illegible] foreign country, colony, province or part [illegible] people; or, if any natural-born subject [illegible] without such leave and licence [illegible] agree to go, or shall go, to any [illegible] vince, or part of any province [illegible] seas, with an intent or in order [illegible] with intent to serve, in any warlike [illegible] whatever, whether by land or by sea [illegible] under or in aid of any foreign prince [illegible] province, or part of any province [illegible] or for or under or in aid of any person [illegible] or assuming to exercise the powers [illegible] any foreign country, colony, province [illegible] or people, either as an officer or [illegible] military capacity, or as an officer [illegible] such ship or vessel as aforesaid, [illegible] or pay or reward shall have been or [illegible] of the cases aforesaid actually paid to [illegible] any person to or for his use or benefit [illegible] whatever, within the United Kingdom [illegible] Ireland, or any part of his Majesty's [illegible] in any country, colony, settlement, island [illegible] to or subject to his Majesty, shall hire [illegible] procure, or shall attempt or endeavour [illegible] procure any person or persons whatever [illegible] engage to enlist, or to serve or to be e[illegible] service or employment as aforesaid, as [illegible] or marine, either in land or sea service [illegible] and of any foreign prince, state, potentate [illegible] or part of any province or people, or [illegible] of any person or persons exercising [illegible] any powers of government as aforesaid [illegible] go or embark from any part of his Ma[illegible] the purpose or with intent to be so enlisted [illegible] or employed as aforesaid, whether any enlist[illegible] reward shall have been or shall be act[illegible] or not, in any or either of such cases e[illegible] shall be deemed guilty of a misdemeanour [illegible] convicted thereof, upon any information [illegible] be punishable by fine and imprisonment [illegible] the discretion of the Court before which [illegible] convicted." And it is in and by the sai[illegible] "That if any person, within any part of [illegible] or in any part of His Majesty's domin[illegible] shall, without the leave and licence [illegible] purpose first had and obtained as aforesaid [illegible] fit out, or arm, or attempt or endeavour [illegible] out, or arm, or procure to be equipped [illegible] or armed, or shall knowingly aid, ass[illegible] in equipping, furnishing, fitting out, [illegible] or vessel, with intent or in order that [illegible] shall be employed in the service of [illegible] state, or potentate, or of any [illegible] vince, or part of any province or people [illegible] or persons exercising or assuming to [illegible] of government in or over any fore[illegible] province, or part of any province or pe[illegible] or store ship, or with intent to cruise [illegible] against any prince, state, or potentate [illegible] jects or citizens of any prince, state [illegible] against the persons exercising or assu[illegible] powers of government in any colony [illegible] any province or country, or against [illegible] foreign colony, province, or part of any [illegible] with whom his Majesty shall not be [illegible] shall, within the United Kingdom, or [illegible] dominions, or in any settlement, colony [illegible] or place belonging or subject to his [illegible] deliver any commission for any ship or ves[illegible] that such ship or vessel shall be em[illegible]

[illegible], every such person so offending shall be deemed guilty of a misdemeanour, and shall upon conviction thereof, upon [illegible] or indictment, be punished by fine and imprisonment, or either of them, at the discretion of the Court in which such offender shall be convicted; and every such [illegible] vessel, with the tackle, apparel, and furniture, together with all the materials, arms, ammunition, and stores which may belong to or be on board of any such ship or vessel, shall be forfeited; and it shall be lawful for any officer of her Majesty's Customs or Excise, or any officer of her Majesty's [illegible] who is by law empowered to make seizures, for any forfeiture incurred under any of the laws of Customs or Excise, or the laws of trade and navigation, to seize such ships or vessel, and in such places and in such manner in which the officers of her Majesty's Customs or Excise and the officers of her Majesty's navy are empowered respectively to make seizures under the laws of Customs and Excise, or under the laws of trade and navigation; and that every such ship and vessel, with the tackle, apparel, and furniture, together with all the materials, arms, ammunition, and stores which may belong to or be on board of such ship or vessel, may be prosecuted and condemned in the like manner, and in such courts as ships or vessels may be prosecuted and condemned for any breach of the laws made for the protection of the revenues of Customs and Excise, or of the laws of trade and navigation." And it is enacted by the said Act that "if any person, in any part of the United Kingdom of Great Britain and Ireland, or in any part of his Majesty's dominions beyond the seas, without the leave and license of his Majesty for that purpose first had and obtained as aforesaid, shall, by adding to the number of the guns of such vessel, or by changing those on board for other guns, or by the addition of any equipment for war, increase or augment, or procure to be increased or augmented, or shall be knowingly concerned in increasing or augmenting the warlike force of any ship or vessel of war or cruiser, or other armed vessel which at the time of her arrival in any part of the United Kingdom, or any of his Majesty's dominions, was a ship of war, cruiser, or armed vessel in the service of any foreign prince, state, or potentate, or of any person or persons exercising or assuming to exercise any powers of government in or over any colony, province, or part of any province or people belonging to the subjects of any such prince, state, or potentate, or to the inhabitants of any colony, province, or part of any province or country under the control of any person or persons so exercising, or assuming to exercise the powers of Government, every such person so offending shall be deemed guilty of a misdemeanour, and shall, upon being convicted thereof, upon any information or indictment, be punished by fine and imprisonment, or either of them, at the discretion of the Court before which such offender shall be convicted." Now, in order that none of our subjects may unwarily render themselves liable to the penalties imposed by the said statute, we do hereby strictly command, that no person or persons whatsoever do commit any act, matter, or thing whatsoever contrary to the provisions of the said statute, upon pain of the several penalties by the said statute imposed, and of our high displeasure. And we do hereby further warn all our loving subjects, and all persons whatsoever entitled to our protection, that if any of them shall presume, in contempt of this our Royal Proclamation, and of our high displeasure, to do any acts in derogation of their duty, as subjects of a neutral sovereign, in the said contest, or in violation or contravention of the law of nations in that behalf—as, for example and more especially, by entering into the military service of either of the said contending parties as commissioned or non-commissioned officers or soldiers; or by serving as officers, sailors, or marines on board any ship or vessel of war or transport of or in the service of either of the said contending parties; or by serving as officers, sailors, or marines on board any privateer bearing letters of marque of or from either of the said contending parties; or by engaging to go or going to any place beyond the seas with intent to enlist or engage in any such service, or by procuring or attempting to procure, within her Majesty's dominions, at home or abroad, others to do so; or by fitting out, arming, or equipping any ship or vessel to be employed as a ship of war, or privateer, or transport, by either of the said contending parties; or by breaking, or endeavouring to break, any blockade lawfully and actually established by or on behalf of either of the said contending parties; or by carrying officers, soldiers, despatches, arms, military stores, or materials, or any article or articles considered and deemed to be contraband of war according to the law or modern usage of nations, for the use or service of either of the said contending parties, all persons so offending will incur and be liable to the several penalties and penal consequences by the said statute, or by the law of nations in that behalf imposed or denounced. And we do hereby declare that all our subjects and persons entitled to our protection who may misconduct themselves in the premises will do so at their peril and of their own wrong, and that they will in no wise obtain any protection from us against any liability or penal consequences, but will, on the contrary, incur our high displeasure by such misconduct. Given at our Court at the White Lodge, Richmond Park, this 13th day of May, in the year of our Lord 1861, and in the 24th year of our reign. God save the Queen.

The Volunteer Movement.—The prize meeting on Wimbledon Common will begin on Thursday, the 4th of July, instead of Monday, the 1st of July. An official notice has been issued earnestly requesting officers commanding Volunteer Rifle Corps to reply, without delay, to the circular of the 13th of March, to enable the Association to make the necessary preparations for the meeting. 1280 circulars have been issued, to which only 187 replies have been received. The number of intending competitors should be made known immediately; their names will not be required until the 25th of June.

Foreign.

France.—An important discussion commenced on Saturday in the Senate, on a petition presented by Admiral Romain Desfossés from the shipowners, masters, and seamen engaged in the northern fisheries, praying for a repeal of the provisions in the Anglo-French treaty reducing the import duty on fish, salted or fresh, the produce of foreign fisheries, from 48f. to 10f. per 100 kilogrammes, and stating that this reduction will enable the English fishing-boats, especially those engaged in the herring fishery, to compete with them on advantageous terms. The admiral stated that under the regulations introduced for the protection of the fisheries by the Emperor, the *inscription maritime* had increased by 12,000 men, and predicted that in the event of the prayer of the petitioners being refused the fisheries would be ruined, the maritime inscription would melt away, and in her hour of need France would be left in want of sailors. He moved that the petition be referred for consideration to the Ministers of Marine, Commerce, and Foreign Affairs. M. Michel Chevalier and M. Rouher opposed the motion, which was supported by Admiral Cecile. The debate was adjourned to Monday, when the motion was supported by Admiral Rigault de Genouilly, Cardinal Mathieu, and other Senators, and opposed by M. Baroche, the President of the Council of State. The motion was ultimately agreed to by a majority of 99 to 14. In the sitting of Tuesday the petition in favour of the occupation of Syria was discussed. The Marquis Larochejaquelin, Cardinal Donnet, MM. Chapuys and Montlaville, Baron Dupin, General Castelbajac, and Count Segur d'Aguesseau opposed the proposal of the committee to reject the petition, by passing to the order of the day. M. Sainey supported it. The discussion was adjourned to Wednesday, when M. Billault gave an historical outline of the events in Syria, of which the following is a summary:—

The almost powerless state of Turkey had obliged the great Powers to act with extreme circumspection. After long negotiations the occupation of Syria by French troops was agreed upon and was afterwards prolonged until the 5th of June, notwithstanding some objections. England only consented to the prolongation on the express condition that this should be the last term. With regard to the organisation of Syria, the Commission had [illegible] the whole [illegible] of Mount Lebanon, had [illegible] adopted. The only thing to be done, therefore, was to execute the convention, and evacuate Syria on the 5th of June. If the withdrawal of our troops should have unfortunate consequences, certain persons had accepted a great responsibility. Should blood be shed because the counsels of France had been misunderstood, they should call Europe to witness the immense responsibility it had incurred. It was not France who evacuated Syria; it was Europe. When France supported a cause of her own, her acts were free, and she did not withdraw. What would now be the course of the Emperor? France would not forget her duty. With the transports which were to bring back the troops would sail six vessels, which would cruise in the waters of Beyrout and be the terror of the murderers. England was aware of this, and associated herself with France. Her fleet would be in the Levant side by side with those of France and Russia, and then, if necessary required them, other measures would be taken. M. Billault read the circular of M. Thouvenel, dated May 5, explaining the course which France would follow, and concluded by saying that France, being freed from the mandate of Europe in regard to Syria, recovered all her individual liberty. He then proposed that the Senate should pass to the order of the day.

The Marquis Larochejaquelin expressed his satisfaction at the Ministerial declaration, and said that he should vote for the motion. The order of the day was then adopted almost unanimously, there being only two dissentient votes. A despatch from Toulon states that the whole squadron stationed there has received orders to sail on the 20th inst., with all the steam transports. M. Thouvenel has addressed a circular to the French consular agents in America, recommending them to observe the strictest neutrality in the events now taking place in that country, and the French Government have determined to send out a squadron across the Atlantic for the protection of French commerce. It is to consist of four steamships, the frigate Descartes, the corvettes Lavoisier and Prony, and the sloop Norvel. The three commissioners sent to Europe by the President of the Southern Confederation have arrived in Paris. They have not yet been received by the Emperor, but have had an interview with M. Thouvenel. M. Kossuth has passed through Paris, but it is not known if his movements have any political meaning. M. Louis Veuillot has just published a pamphlet under the title of "Waterloo," in which he argues that the battle of Waterloo was a triumph of Protestantism over Catholicism; that the expedition to Rome, and the restoration of the temporal power of the Pope in 1849, was the revenge of Catholic nations for their defeat in 1815; and, lastly, that the Protestant nations are plotting a second and more terrible Waterloo against their Catholic rivals, by conspiring to overthrow the temporal power of the Pope. He concludes with a complaint that the bishops are not permitted to reply in their own newspapers to the attacks of the Liberal press, and that they are threatened with exile, imprisonment, and banishment if they attack the Government.

Spain and Morocco.—Solyman, the brother of the Emperor of Morocco, with some Kabyle tribes, are said to oppose the payment of the war indemnity to Spain. The Emperor, however, shows himself firmly resolved to pay it. It is reported that the Moors have humbly explained the difficulty they will have in paying the portion of the indemnity due at the end of May, and offer to pay as much as lies in their power. The latest news states that there is no fear of tranquillity being disturbed in Africa, and that it is not true that England has diplomatically interfered in the question.

Portugal.—The Portuguese Chambers will be opened on the 20th inst. It is said that the Council of State has proposed to the King to create 15 new Ministerial Peers in order to overcome the Opposition Peers. MM. Cabral and Avila are among the persons recommended for peerages. The question of the Sisters of Charity continued undecided. It was probable that the Portuguese Government would issue a decree dissolving this religious body and ordering the French sisters to leave the country. A subscription had commenced for establishing a new order compatible with the laws of Portugal. The Portuguese Committee for the Universal Exhibition of 1862 had been inaugurated under the presidency of Don Fernando. The Portuguese war steamer Mindello had been withdrawn from Civita Vecchia.

Switzerland.—The town of Glarus, with the exception of a few houses, was completely burnt down on Friday night. The public buildings and even several fire engines were destroyed.—The members of the Government of Geneva have tendered their resignation in a body on account of the ill-treatment sustained by M. James Fazy, Chief of the Government of the Canton of Geneva, not having been found by the jury to constitute a violation of his official dignity. During the recent visit of Prince Napoleon to the Lake of Geneva, the appearance of the French flag on the Lake caused some alarm, and was the cause of many absurd reports.

Frankfort.—In the sitting of the Federal Diet on Thursday, the representative of Gotha urged the Diet to come to a decision on the proposal of Hesse Darmstadt to suppress the National Association. In the same sitting the representative of Austria made a vague declaration with reference to the proposal of Prussia respecting the command in chief of the Federal army.

Prussia.—M. Patzke, the chief of the executive police at Berlin, is now in prison on a charge of forgery. It appears that M. Zedlitz, the head of the police, whose duty it was to have had M. Patzke watched by order of the Court, gave him three days' leave, which the latter took advantage of to effect his escape. He was captured at Ystadt, in Sweden.

Bavaria.—The Bavarian Chambers have finally adopted a proposition of M. Paur, removing the restrictions to which the Jews were subject in certain industrial professions. The Archbishop of Munich, the Bishop of Augsburg, and the President of the Protestant Consistory, voted for the proposition.

Austria.—The Emperor received on Tuesday the members of the Lower House of the Reichsrath, who presented to his Majesty the address in reply to the speech from the Throne. This address, like that of the Upper House, expressed a wish for the maintenance of the Constitution, and the indivisibility of the Empire. It also expressed a hope that Hungary may be induced to send representatives to the Reichsrath, and that peace may be maintained, and declared that the House was ready to make sacrifices if required. The Emperor, in his reply, said that it was his intention to maintain not only the unity of the empire, but also, as much as possible, the autonomy of the provinces. In the sitting of the two Houses on Saturday, Baron Schmerling, Minister of State, presented 14 Bills, among which were a new press law, a matrimonial law, and a law decreeing inviolability of the person and the irresponsibility of speech of the members of the Reichsrath and the deputies to the Diet. The debate on the address in the Chamber of Deputies was of the most animated character, and lasted eight hours. The Czechs, Poles, and the aristocratic party of great landed proprietors proposed amendments in favour of a federal system. These amendments were rejected by a majority. A report is current, which, however, requires confirmation, that the Polish and Czech members will leave the Reichsrath on account of this decision.

Hungary.—Accounts from Pesth place the fact of Count Teleki having died by his own hand beyond question. He shot himself with a pistol, and for some days previously had excited the attention of his friends by the state of nervous excitement under which he was labouring. In the sitting of the Chamber of Deputies on Monday M. Deak exhorted the Assembly to act with prudence and moderation, and moved that the wishes of the country should be submitted to the Emperor in the form of an address, demanding the independence of Hungary, the Constitution of 1848, and a responsible Ministry. This proposal was received with applause by the majority of the Deputies. The debate on M. Deak's motion commenced on Thursday when M. Tisda said that an understanding with Austria was impossible, and that he did not wish the adoption of any Address until the rights of the country had been restored. He requested the House to pass a resolution giving a greater extension to the proposition of M. Deak. Some deputies spoke in favour of and others against the adoption of the Address. It is understood that in the event of M. Deak's motion being adopted, the Diet will be dissolved, and that the Government will appeal to the country. The official journal of Wednesday says, that if the inhabitants of those communes of Hungary, the taxes of which are in arrear, should still refuse to pay them, notwithstanding the requisition of the Special Commissioners, the communes will be militarily occupied until two-thirds of the arrears be paid. On Sunday evening a crowd of people, partly armed, endeavoured to liberate four deserters from the Hussar Regiments who had been consigned to the military prison at Raab. Their design was, however, frustrated by the garrison. Three of the rioters were killed and 15 wounded. The sentry of the military prison was stabbed to death. Several soldiers were wounded.

Croatia.—A report is current that Croatia has determined to send representatives to the Reichsrath.

Venetia.—The Austrian official organ says that all the gentlemen whose election in Venetia has been announced have declined to take their seats in the Council of the Empire, on the ground that they cannot consider that a few communes represent the will of the country. Even Count Aloise Mocenigo has withdrawn his consent to be nominated as a member of the Reichsrath.

Russia.—It is asserted that M. de Budberg will

replace M. de Balabine as Ambassador of Russia at the Court of Vienna. A letter from St. Petersburg states that the recent disturbances at Kasan originated in an impostor, who declared himself a descendant of Peter III., and the real heir to the throne of Russia. Some of the misguided peasants believed in him. He has been captured and shot.

ITALY.—The *Opinione* of Friday contains an article explaining that the moral adhesion of France to the Kingdom of Italy is not sufficient. The article continues thus:—

"The time has arrived in which France should explicitly and officially recognize the new state of things. Such a course would deprive the enemies of the Kingdom of Italy of any pretext. The enemies of France would then no longer be able to say that her policy is equivocal."

The Bill for the abolition of feudal rights was voted by the Chamber of Deputies at Turin in the sitting of the 11th, by 151 votes to 54. In the same sitting the Minister of Agriculture and Commerce brought in a Bill for an Italian Exhibition of Agriculture, Manufacture, and Arts, to be held at Florence in September next. Another Bill was brought in for calling in all the old copper money of the Æmilian provinces, and replacing it by a new coinage. On Wednesday a Government Bill for a line of railway from Naples to Ancona was laid on the table. On Monday Signor Ricciardi will put a question to the Ministry with reference to certain events at Naples. The report of an approaching modification of the Ministry is contradicted. M. Salamanca left Turin on Wednesday, after having signed a convention for the construction of the Roman railways. The National Guard of Naples gave a grand dinner to the army on Tuesday evening in the San Carlo Theatre. More than 9000 persons were present. Signor Toppulli proposed the "Health of the King of Italy and of the Army," which was drunk with general enthusiasm. The Chevalier di Nigra and Signor Durando replied to the toast. Much regret is expressed at the approaching departure of the Chevalier di Nigra for Turin. It is generally believed that the French garrison will soon quit Rome, where the Bourbon party is preparing fresh expeditions to the Abruzzi. The French Gendarmes have seized two boxes containing coins, which had been struck in Rome, with the effigy of Francis II. They were directed to the Neapolitan provinces. General Goyon lodged a complaint with Francis II., who denied any participation in the affair. The enlistment of soldiers for the Bourbon service and the vexatious interference of the police continue at Rome. A priest in the service of the Reactionary party, and bearer of compromising papers, has been arrested at the Roman frontier. The city and suburbs of Perugia were visited by a shock of earthquake on the 8th inst., in which several lives were lost. The shock was felt also at Montepulciano and at Citta della Pieve. At the latter place several houses were thrown down, one person killed, and several wounded. A committee has been formed at Florence, under the presidency of Marquis Bartolomini, Gonfaloniere of the city, and with the co-operation of Baron Ricasoli, for the purpose of collecting subscriptions for a national crown to be presented to Victor Emmanuel, as a substitute for the iron crown withheld by Austria. Branch committees are to be established at Turin, Milan, Genoa, Bologna, Perugia, Ancona, Naples, Palermo, and Cagliari.

MALTA.—The Royal yacht Victoria and Albert, with the Empress of Austria on board, arrived at Malta on Monday afternoon, and was afterwards followed by the Osborne. The health of her Majesty is much improved. It was doubtful whether she would land. The yachts were to leave on Tuesday for Trieste.

TURKEY.—Omar Pacha left Constantinople on Thursday for Kustendje, with a conciliatory proclamation, promising a reduction of the taxes and a remission of all arrears, granting the right of free election of the municipal councillors, and allowing the Christians to have bells on their churches. The International Commissioners arrived at Constantinople on Wednesday. A great fall has taken place in the value of money.

THE PRINCIPALITIES.—All the great Powers, including Austria, have now agreed to the union of the Danubian Principalities.

EGYPT.—It is rumoured that M. de Lesseps has just returned from Egypt to Paris, to raise further funds for the prosecution of the Suez Canal. According to some accounts about 800,000*l.* has already been spent without adequate result, an expensive dyke on the Mediterranean side having been washed away.

COAST OF AFRICA.—Accounts from Cape Coast to the 14th April state that affairs were in an unsatisfactory state in the Bight of Benin: the King of Porto Nuovo had defied Mr. Consul Foote, and had fired into the Brune, when the consul summoned him to come on board. A dispute had also arisen between the Governor of Cape Coast and the King of Anamaboe, but was speedily brought to a conclusion by the governor dispatching 100 men to Anamaboe, when the King surrendered, and was reprimanded and fined 50*l.* At Dahomey the sanguinary proceedings of the King had had the effect of nearly putting a stop to trade. A native missionary who witnessed the "grand custom," states that more than 2000 males and about as many females and young children, besides enormous numbers of deer, turkeys, buzzards, and other animals, were slaughtered. The *West African Herald* says that "it will be a mercy when some civilised power shall undertake to put down the abominable kingdom of Dahomey, which is the terror and scourge of one of the finest portions of Africa."

INDIA.—By the Calcutta mail we have news from that presidency to April 10, and a telegraphic despatch has since arrived with news to April 18. The following is a summary:—

There are very bad prospects for the next Indigo crop. No rain has fallen yet. The ryots still refuse to sow in Lower Bengal. The plan of the Secretary of State for amalgamating the local European force with the line has been published. Officers and men are to be asked to volunteer; those who decline will be formed into regiments for local service. Three regiments of cavalry and nine of infantry are to be formed out of the existing force and added to the Line. The Madras Government has decided that only such works of the Irrigation and Canal Company shall be proceeded with as are not likely to exceed the guaranteed capital of one million. The Penal Code is not to come into operation till the 1st of January, 1862. The duty on Malwa opium has been raised to Rs. 700 per chest. The duty on salt has been raised 50 per cent. The famine continues chiefly in the Delhi district.

CHINA.—Mr. Bruce was expected to go to Pekin on the 20th March, and it was reported that the Emperor was to return to the capital. An Imperial edict had appeared, establishing a Board of Foreign Affairs at Pekin. The ice at Tien-tsin had broken up, and business was likely to be resumed with activity. The river Yang-tse had been declared open above Chinkiang and as far as Hankow to British vessels. The navigation, however, is found so difficult that only steamers can be used. The towns where Consular establishments will be placed are Chinkiang, Kinkiang, and Hankow, and vessels of war will be stationed at these places and Nankin. In a communication held with the Taeping authorities, by order of Admiral Hope, the former agreed not to interfere with British vessels. Admiral Hope, with the fleet, was close to Hankow on the 11th ult. The foreigners who visited Hankow had been courteously received by the Chinese authorities.

NEW ZEALAND.—The news from New Zealand is more pacific. An armistice of 48 hours had been granted to the natives at their own request.

UNITED STATES.—The telegraphic communication between New York and Washington has been re-established. Eighteen thousand armed troops are now in Washington, and the capital is said to be perfectly secure. The prospects of an immediate collision have diminished, but the levy of troops and war preparations continue with great zeal throughout the Northern and Southern States, and President Davis has answered Mr. Lincoln's proclamation of war by convening the Southern Congress at Montgomery to provide the ways and means necessary for defence. President Lincoln has issued another proclamation, calling for 42,000 volunteers,—23,000 for the regular army and 18,000 seamen. He has also issued a proclamation declaring a blockade of all the southern ports. The blockade has already commenced at Norfolk Bay, and 50 additional vessels, with steam transports and 20,000 men, are ready to sail. A forward movement of Federal troops from Washington on Virginia is daily expected. The President will demand the restoration of the Norfolk Navy Yard, Harper's Ferry, and Arsenal. Lord Lyons has contradicted a report that he had solicited an armistice, and Mr. Seward, the Secretary of State, has published a similar contradiction, stating that "that sort of business ended on the 4th of March." The North Carolina Legislature has been convened. The State is virtually out of the Union, and is equipping for war. A deputation from Western Virginia has informed President Lincoln that Western Virginia will support the Union if the people are armed. A report on Federal relations, very hostile to the Federal Government, has passed the Maryland Legislature. The majority of the committee are reported to be Secessionists. Baltimore is quiet, and the Federal flag has been re-hoisted on the Custom House. The Governor of Missouri, in his Message to the Legislature, condemns the action of President Lincoln's Administration. The Governor of Tennessee has informed President Lincoln that he will furnish no troops to the Federal Government, but will rather furnish 50,000 men against the North. It is rumoured that the Tennessee Convention has passed a secession ordinance. Kentucky will maintain a neutral position. It is reported that a proposition has been made by the Governor of Kentucky to the Governor of Ohio, that the Governors of the Border States propose to the United States Government to become arbitrators between the contending parties in the present difficulties. The chartered steamer Atlantic has arrived; she reports having reinforced Fort Pickens successfully, and without resistance on the part of the Secessionists. At India Ville, Texas, 450 Federal troops, under Major Sibley, have surrendered to 800 Texans, under Colonel Vomdorn, after having first attempted to escape in two sailing vessels. They were overtaken by steamers. The men will be allowed either to join the Confederate army, or to take oath not to serve against the Confederation. Fort Smith, in Arkansas, with property of the estimated value of 800,000 dollars, had been taken by the State troops. The Confederate flag had been hoisted on the fort. A despatch from Harrisburg states that it was currently reported that ex-President Buchanan had hurriedly disposed of his farm at Wheatland, and fled to Canada, in consequence of threatening remarks made to him by the Ohio troops, who are quartered 2000 strong at Lancaster. The Governor of Louisiana had made a call for 5000 additional troops. It is now said that several persons were killed at Fort Moultrie ... the fire of the federal garrison at F... Jefferson Davis in his message to the ... congratulates the Carolinians upon ... before, and heroism, daring, and ... the bombardment of Fort Sumter ... the discretion and caution observ... fleet off Charleston, in having abs... any attempt to relieve that fortress.

CANADA.—A severe gale, accomp... snowstorm, visited the mouth of ... the 25th ult. Four ships were ... four others were lost in the ice, ... saved. The steamer United States, ... Quebec, was also lost on the Bird Ro... passengers, with the exception of one ... were saved and taken to Quebec. ... Parliament a division on an amendme... Estimates resulted in favour of the ... majority of 10 votes.

HONDURAS.—A despatch from R... an insurrection had broken out amo... that Capt. Dunn's West India Regime... for the scene of action. The Engli... give up the island of Ruatan on the ... Honduras accepts it or not. An ... arrived in the harbour on the 22d ... same day for Belize.

Parliamen[t]

HOUSE OF LO[RDS]

FRIDAY.—*Civil War in America.*—Th... attention to the rumour that letter... received in this country from the So... and expressed a hope that the pr... issued by the Government, with regar... English subjects to take service with ... distinct and emphatic in warning ... interfered on either side in the ... had broken out in the United States ... upon their own heads, and that it w... country for protection or redress.—E... the proclamation would be so worded ... warning to all her Majesty's subjects ... it had been delayed was that its ... considered. After such a proclama... captured as a privateer and trea... entitled to claim the official prot... *State of Syria.*—Lord STRATFORD DE ... resolutions to the effect that ... with extreme regret any ... continuance, however brief, ... Syria beyond the 5th of June ... sidered the late calamitous ev... clusively attributable to local ... to the general state of the ... in point of revenue and admin... was deeply impressed with ... Porte a prompt adoption ... measures as might best ... Hatthomayoon of 1856, a ... of those sanguinary condi... to the support of the Hou... calculated to strengthen th... the Sublime Porte the nece... reforms in the internal admi... WODEHOUSE said that a good ... to the dangers appearing ... The difficulties which the Sult... some degree traceable to the ... which was found in all parts of ... difficulty arose from the ... remedy for this evil consisted ... the Porte upon a sound basis ... vision and examination, than ... more high sounding character. ... would not press his resolutions ... of CLANRICARDE stated his belief ... French Government's intention ... from Syria; but was convinced ... be serviceable to Turkey was ... would propose such a thing at ... point of Turkey was her want ... BURY thought that Turkey had ... interference, and that in fact that ... the original cause of the scan... complaint was made.—Earl GREY ... dition of Turkey was to be traced ... constant interference of the grea... affairs for the last 30 years. He ... because their real meaning was ... GRANVILLE appealed to Lord Strat... draw his resolutions, as no practi... adoption. The resolutions were the...

MONDAY.—The *Princess Alice's ...* from the House of Commons and ... *Schools.*—The Earl of SHAFTESBURY ... which the part of the report ... relating to ragged schools was founded ... report as unfair and ungenerous, ... that the Duke of Newcastle, ... have appended his name to the docu... report as inaccurate, and charged ... having brought accusations against ... equally applicable to other schools ... school system with some warmth, ... that magistrates, gaol chaplains, and ... the criminal administration of ... borne testimony to the salutary ... by those institutions on the ... —The Duke of NEWCASTLE ... one of the most able and impartial ... ever been laid before the House. ... the statistics relating to them had ... school unions themselves, and all the ... was, that as they did not look upon ... educational institutions, they could ... grants of public money.—Lord ... full credit to the ragged schools ... been made out to entitle them ... grants.—Earl GRANVILLE hoped that ... on the subject.—After a reply from the ... the motion was withdrawn.—The ... (*Colonies*) *Bill*, and the *Marriages* ... committee.

TUESDAY.—*Annexation of San D...* in reply to Lord BROUGHAM, stated that ... ment had learnt from the Government ...

[illegible] of the inhabitants, accepted the annexation [illegible] of the island of St. Domingo, and he was [illegible] communication was accompanied by an [illegible] it was not intended to allow the re-establish[illegible].—The *Princess Alice's Annuity Bill* and [illegible] *Act Amendment Bill* were read a [illegible] *Passengers (Australian Colonies) Bill* and the [illegible] were read a third time and passed.

[illegible] *The Queen's Proclamation.*—The Earl of ELLEN[BOROUGH] [illegible] to her Majesty's proclamation on the [illegible] of the Confederated States of America, [illegible] the inadequacy of the language employed to [illegible] was meant, legally and practically, by the [illegible] and "articles contraband of war."—[illegible] GRANVILLE explained that if a blockade were main[tained] [illegible] and with such a force as to [render it] [illegible] if not impossible, for vessels to get [in or out of the] port, that was both a lawful and an [effective blockade]. As to articles "contraband of war," certain [articles were] looked upon by all nations as contraband, [illegible] in which the determination of a Prize [Court was] necessary.—The Earl of DERBY was not in[clined to quarrel] with the terms of the proclamation, as it was [illegible] definitions as would include all cases. It [illegible] considered, that the Northern States should [illegible] country would not recognise any blockade [illegible] nor would admit the power assumed by [illegible] of constituting privateering piracy and inflicting the [punishment of death] for such an act, as such a course of [proceeding would be] contrary to the law of nations.—Lord [illegible] that privateering was, by the law of [illegible] subject, however, joining in an expedi[tion against a] Power at peace with her Majesty was guilty [illegible] and his blood must rest on his own head.—[illegible] dissented from Lord Brougham's opinion that [illegible] joining in privateering expeditions would [illegible].—The LORD CHANCELLOR said that, although [a British] subject [joining] a privateering expedition would violate [the] laws of this country, still if he accepted a commission from [either] of the belligerents he was carrying on a *justum bellum*, [and would] not [be liable] to the penalties for piracy.—Lord KINGSDOWN [said that if] the Northern States chose to consider the [Southern] States as rebels, they had no right to consider and [treat the] subjects of foreign States as such because the [Southern States] had been recognised by us as belligerents. It [illegible] to define contraband of war. The *Princess Alice's Annuity Bill* was read a third time, and passed. The [illegible] *(Scotland) Bill* passed through committee.

FRIDAY.—*The Royal Assent* was given by commission to the *Princess Alice's Annuity Bill*, the *Law of Foreign Countries* [illegible], and several private Bills. The *Smoke Nuisance (Scotland)* [illegible] Bill was read a third time and passed. The *State* [illegible].—The Earl of HARDWICKE asked whether the question of [the] State [illegible] had or had not been settled within the last [illegible] hours, and whether England would have a sum of money [to] pay [as] compensation.—Lord WODEHOUSE declined to answer [the] question, and Earl GRANVILLE complained that it had been asked without notice.

HOUSE OF COMMONS.

FRIDAY.—*Affairs of India.*—Sir C. WOOD stated, in reply to Mr. EWART and Mr. VANSITTART, that the Government had not received any official information on the subject of increasing the [facilities] of communication between India and Thibet; but [they] had learnt by private letter from Mr. Eden that a treaty had been concluded with the Rajah of Sikkim for the purpose. With regard to the contemplated reorganisation of the Indian [illegible], he hoped to introduce a measure on the subject soon after Whitsuntide. *Austria and Italy.*—On the order for going into Committee of Supply, Mr. PEACOCKE called attention to the affairs of Austria and Italy, and indicated what he considered to be the true policy of the former in relation to her Italian possessions, and, not in a spirit hostile to Austria, believing her to be our natural ally, he suggested that she would best consult her interests by withdrawing from the Quadrilateral and concentrating her strength within her own proper provinces. He considered that Lord J. Russell's foreign policy [illegible] the gratitude of the country, and moved for copies of any despatches which have been received from our Ambassador at Vienna describing the nature of the Constitution granted by the Emperor of Austria to the various provinces of his empire.—Mr. ST. AUBYN also eulogised the foreign policy of Lord J. Russell, and concurred in thinking that the Austrian Government would do well to retire from Venetia and the Pope to withdraw from Rome.—Mr. COCHRANE, on the other hand, condemned the foreign policy of the Government, which, in his opinion, was calculated to prejudice English interests, and he [condemned] in severe terms Lord J. Russell's doctrine of [illegible].—Lord J. RUSSELL said he did not think it would be [illegible] to produce the despatches moved for. On the subject of the new Austrian Constitution, he pointed out the [illegible] embarrassed attempts at constitutional [government] from the present state of the Continent, and from [illegible] national parties acting against each other. Without [illegible] a dogmatical opinion upon the subject, [he] was [illegible] very much of Mr. Peacocke's way of thinking [in] regard to the true policy of Austria with reference to Venetia. Austrian statesmen had found great burdens imposed upon them by the possession of the Belgian provinces, and the Italian possessions had brought similar burdens. He [must] say, at the same time, that the accusations made against Austria were often exaggerated. Still it was true that constant attempts were made in Venetia which showed dislike and disaffection towards Austria, and as long as Venice belonged to Austria, it could not be expected that Austria and Italy, or Germany and Italy, would be on those terms of amity so necessary for the maintenance of the balance of power. He trusted that a day might [come when the] question could be settled without war. It was [illegible] the Austrian House of Commons would [illegible] which the Austrian people would have to [pay] for [their] Italian possessions; but these were Austrian [questions], and it was for the people to settle with their Government.—The motion was then withdrawn. *Affairs of Syria.*—Sir J. F[ERGUSSON] [illegible] called attention to papers recently presented [relating] to Syria, and moved an address for a copy of the [illegible] of the international commission for the [illegible] of the Lebanon; and asked whether Ministers [would] urge the adoption of the plan of her Majesty's [illegible] for the government of Syria upon the Porte.—Lord J. RUSSELL described the present position of affairs in Syria [illegible] her Majesty's Government as to the best [illegible] as to the head of the Government [illegible] which differences of opinion had existed [illegible] the Commissioners, whose final report had been forwarded to Constantinople. He hoped, he said, that means might be found to improve the condition of the people of the Lebanon. There was this difficulty, that the Russian Government [illegible] bound to take under its special protection [illegible] belonging to the Greek Church, while France [illegible] patronised the Roman Catholics. The [illegible] Her Majesty's Government was [illegible] to all without distinction. With regard to the evacuation of Syria by the French troops, he had, he said, every reason to rely upon the good faith of the Emperor of the French. It was not in his power to produce the papers moved for.—Mr. LAYARD urged that, if Syria was to be well governed, the responsibility should be left to the Porte. He denied that there was any systematic oppression of the Christians by the Turkish authorities.—After some observations by Mr. [illegible] and Sir H. VERNEY, Mr. MONSELL quoted the opinion of Lord Dufferin that Maronites and Druses would live in perfect harmony if left alone. It was the Turks who were to be controlled, and the French troops should not be removed from Syria till some system of government had been introduced.—Mr. FREELAND believed that the [illegible] rested almost entirely on the Ottoman Government, which must be spoken to very plainly.—After some remarks by Mr. GRIFFITH, the motion was withdrawn.—In answer to Mr. HADFIELD, Sir G. LEWIS said the *Indemnity Bill* was always brought in at the end of the Session and printed like other Bills. The House then went into a Committee of Supply upon the *Army Estimates*, when certain votes were agreed to, after a long debate upon each. The *Princess Alice's Annuity Bill* was read a third time and passed. The Report of the Committee of *Ways and Means* was brought up and agreed to, and likewise the Report of the Committee of *Supply*. The Lords' amendments of the *Post-office Savings Banks Bill* were agreed to. Other Bills were advanced a stage. The House then adjourned to Monday.

MONDAY.—*Privilege.*—Mr. ROEBUCK brought under notice a question of privilege, which, he submitted, was of great interest and importance. On the division on the tea duties on Friday week Mr. Andrew Steuart, one of the members for Cambridge, who for some days previously had been an inmate of a private lunatic establishment in the neighbourhood of Richmond, was conducted to the lobby of the House, where he recorded his vote. It appeared that with a prescience of impending calamity Mr. Steuart had himself applied to Dr. Forbes Winslow for admission to his establishment, and had been received there on the certificate of two medical men, representing him to be a lunatic who was dangerous to himself and others. Under these circumstances he thought that Mr. Steuart's being brought to the House to vote was a reprehensible act; and in order to fasten the responsibility upon somebody he moved the appointment of a select committee to inquire into the circumstances under which the hon. member voted in the last division.—Mr. MACAULAY deprecated the taste and feeling of Mr. Roebuck in bringing such a matter before the House. Ten days before the division he received a letter from Mr. Steuart, stating that, having been labouring under mental depression, he had placed himself in the hands of Dr. Winslow, and hoped in a short time to be able to return to his Parliamentary duties. He had also seen him on the night of the division, and could assert that he had not the slightest trace of insanity or mental derangement about him, and was, in fact, as sane and responsible for his actions as Mr. Roebuck himself.—Sir G. LEWIS thought the House was not in possession of sufficient information to enable it to deal with the matter. The case had been investigated on oath by the Commissioners in Lunacy, and the better course would be for the Home Office to call upon the Commissioners to make a report, which could be laid on the table of the House.—Mr. BALL said that the action taken by Mr. Roebuck was indelicate and unfeeling, and recommended that the House should not discuss it.—Lord PALMERSTON thought that the matter involved other and higher considerations than those of a personal character. It was a very serious thing that a gentleman labouring under a mental infirmity, and at the moment under medical care and treatment, should present himself to the House to vote on any question of public interest. He deemed it desirable that steps should be taken to prevent the recurrence of such a proceeding, and recommended that Mr. Roebuck should withdraw his motion, and content himself with the offer made to him by the Secretary of State.—Mr. HORSMAN suggested that Colonel Clifford, the member for Hereford, who was one of the unpaid Commissioners in Lunacy, should state the circumstances of the case.—Sir G. LEWIS pointed out the impropriety of Colonel Clifford responding to the invitation without communicating with his colleagues.—Mr. BOUVERIE contended that even if Mr. Steuart had been an irresponsible agent at the moment he voted, the House had no jurisdiction in the matter. He hoped that the motion would be met by a negative.—Mr. MILLER said that he also had seen Mr. Steuart after the division, and that he was quite as sensible and collected as any member of the House.—Lord H. LENNOX, Mr. M. SMITH, and other members described Mr. Steuart's condition on the night of the division as that of a sane person, and characterised the motion as unwarranted and unfeeling. After some further discussion, the motion was negatived without a division.—On the motion for the second reading of the *Customs and Inland Revenue Bill*, Mr. MACKNIGHT said that the Chancellor of the Exchequer was not justified in including the whole of the financial propositions of the Government in one Bill. There was no instance in which a Bill rejected by the House of Lords had been afterwards introduced into a supply Bill for the year [illegible], that the only attempt which had been made in the reign of Queen Anne had been unsuccessful, and that "tacking" was always condemned by the constitution, and was now placed under the ban of law by Parliament. He called upon the Chancellor of the Exchequer not to throw down a defiance to the House of Lords, and not to exhibit to the world, at a moment like this, the spectacle of an irritated and disunited Parliament.—Sir J. GRAHAM said that the Chancellor of the Exchequer was justified in uniting his propositions in one Bill. He believed that the House of Lords had last year exercised an ancient right in rejecting the Bill for the repeal of the paper duty, but that the policy was doubtful, and that the right itself had been pushed to the extreme. The course now recommended by the Government was sustained by usage, and under the circumstances of the case was right in policy. If, however, the Opposition were dissatisfied nothing could be more reasonable than that they should move a vote of want of confidence in Ministers. Something had been said lately of "Down with the paper duty, and up with the tea duty," but he ventured to predict that if a cry were raised of "Up with the House of Lords, and down with the House of Commons," the country would confirm by a triumphant majority the power, usage, and authority of the House of Commons.—Lord J. MANNERS warned the House not to raise an issue which might involve the two Houses in collision.—Sir F. GOLDSMID supported the Bill.—Mr. ROLT admitted the right of the House to include the whole budget in one Bill, but urged that it was a novel course intended to assert a triumph of the House over the Lords by substituting direct for indirect taxation.—Mr. COLLIER was of opinion that the House had availed itself of the only course open to it in order to maintain its privileges and avoid a conflict with the House of Lords. He recommended the House to read the Bill a second time by a large majority.—Mr. WHITESIDE charged the Government and their supporters with an attempt to coerce the conscience of the House of Lords at the expense of their patriotism. He regarded this as an unjust, unwise, and unreasonable experiment, and as an insult upon the House of Lords.—Lord J. RUSSELL reminded the House that the real question before it was the privilege of the House of Commons, and that precedents were not wanting in which the Upper House had carried Bills similar to the present [illegible] for the readjustment of the finances of the country. Mr. Pitt, for example, brought in a Bill to abolish certain [illegible] assessed taxes which had become obnoxious, and to impose an income tax instead, which the House of Lords agreed to without demur. It was, he thought, a matter of surprise that, although the Opposition had first asserted that the surplus was a pure fiction, they had subsequently recommended the House to reduce duties exceeding by a quarter of a million those which the Government recommended.—Lord R. CECIL still doubted the fact of a surplus, and had no confidence in the budget.—Mr. DUCANE moved the adjournment of the debate.—The CHANCELLOR of the EXCHEQUER opposed the motion.—Mr. DISRAELI contended that further opportunity ought to be afforded for discussing the budget as a whole.—Lord PALMERSTON said that no opposition had been offered to the second reading of the Bill, and, if further discussion was desired, there would be several other opportunities for that discussion, and he must oppose the adjournment. On a division there were for the adjournment, 164; against it, 247; majority against it, 83.—Mr. BENTINCK moved the adjournment of the House. On a division there were for the adjournment, 145; against it, 2[illegible]; majority against it, 8[illegible].—Colonel DICKSON then moved the adjournment of the debate.—Lord PALMERSTON upon this gave way, and the debate was accordingly adjourned.

TUESDAY.—*Marriage Law in Ireland.*—Sir HUGH CAIRNS moved for the appointment of a select committee to inquire into the law affecting the contracting and celebration of marriage in Ireland. He said that he had been prevented by accidental circumstances from bringing forward the question last session, and had not been influenced by a recent remarkable trial to introduce it on the present occasion. He explained the existing state of the law of marriage as it affected the various denominations of Christians in Ireland. So far as the Established Church and the Presbyterian body (with the exception of the Cameronians) were concerned, they were satisfied with the law as it stood; but by the Act of 1844 the privileges which were enjoyed by the Independents, Baptists, and Methodists under the Act of 18[illegible] had been removed, and the very existence of these denominations ignored. Under the present law, therefore, persons belonging to any of these persuasions had to go before the civil registrar; notice of their intended marriage must be given at three successive meetings of the board of guardians, and if the parties desired to have their union sanctioned by a religious ceremony in their own place of worship, it must be in the presence of the registrar, who must supply them with a certificate that he had married them. This was felt to be a great grievance by the various Dissenting communities, and the inconvenience was not confined to them, for it sometimes happened that several persons were married at the same time in different chapels in the same district, and the registrar not being gifted with ubiquity, much annoyance and trouble was the result. With regard to Roman Catholic marriages a priest might marry persons of his own persuasion when and how he pleased; but in the case of a mixed marriage the law was, that if either of the parties had professed the Protestant religion within 12 months before the ceremony, such marriage was held to be void in law, a state of things which struck him as the very perfection of absurdity.—Mr. WHITESIDE seconded the motion, and pointed out the anomalies and inconveniences of the present system.—Mr. SCULLY moved, as an amendment, that an address be presented to her Majesty, praying for a royal commission to inquire into the marriage laws of England, of Ireland, and of Scotland respectively.—Mr. CARDWELL assented to the appointment of the proposed committee, and expressed a hope that Mr. Scully would not persist with his amendment. He thought it would be better under the circumstances to confine the inquiry to Ireland, if the House desired to legislate effectively and usefully in the present session, for the law of marriage in England gave general satisfaction, whilst in Scotland the institution of any inquiry would give rise to great jealousy and alarm.—Mr. PEEL DAWSON, Mr. M'MAHON, and Mr. BUTT expressed their approval of the committee, while Mr. M. O'FARRELL protested against it. Mr. SCULLY consented to withdraw his amendment, and the motion for the committee was agreed to.—Mr. M'MAHON obtained leave to bring in a Bill to enable religious congregations in Ireland to obtain *sites for places of worship*.—Mr. ANGERSTEIN moved for copies of the reports of the officers of Woolwich dockyard, and of the principal officers of the Admiralty, on the errors referred to in the 18th clause of the third head of the report of the *Dockyard Commissioners*. He was citing passages from the report in support of his motion, when the House was counted out at 10 minutes to 7 o'clock.

WEDNESDAY.—Mr. BUTT moved the second reading of the *New Trials in Criminal Cases Bill*, the object of which was to provide for the formation of a tribunal to review erroneous verdicts in criminal cases. He proposed to abolish the distinction which now existed between felonies and misdemeanours; to give a right of appeal in the former as in the latter cases; and to enable the Court of Queen's Bench to send a writ of *certiorari* to any court of criminal jurisdiction, in order that the verdict may be reviewed.—Sir G. LEWIS moved, as an amendment, that the Bill be read a second time that day six months. It was substantially the same as the Bill which was negatived last year, and he thought that harm rather than good would result from the alteration of the law which it contemplated. The object of the Bill was to make all indictments for treason and felony removable by *certiorari*, and to give power to a superior court to grant a new trial. But, according to the evidence of very high authorities, the conviction of an innocent person was a matter of very rare occurrence, and if an appeal were given to the prisoner without a corresponding appeal being given to the prosecutor, the feeling of merciful forbearance which was now the characteristic of our criminal administration would be very much diminished. After a few words from Mr. M'MAHON and Mr. BUTT, the second reading was negatived without a division. The Bill was therefore lost. The *Annoyance Jurors (Westminster) Bill* passed through committee. The *Piers and Harbours Bill* and the *Reformatory Schools (Scotland) Bill* were read a second time. The *Fictitious Savings Banks Bill* passed through committee *pro formâ*.—The CHANCELLOR of the EXCHEQUER obtained leave to bring in a Bill to increase the facilities for the transfer of stocks and annuities transferable at the *Bank of Ireland*, and to make further provision respecting the mutual transfer of capital in certain public stocks or funds transferable at the Banks of England and Ireland respectively; and for other purposes.

THURSDAY.—The *Galway Packet Contract.*—The CHANCELLOR of the EXCHEQUER, in reply to Mr. BAXTER, said that the Postmaster-General had given a formal notice to the Atlantic Royal Mail Steam Company, that, in the discharge of his public duty, he had no alternative but to exercise the power reserved to him and declare the contract for carrying the mails between Galway and America at an end.—In answer to Sir H. STRACEY, Mr. GIBSON stated that he intended to bring in his Bill to amend the *Merchant Shipping Act* as soon as possible after Whitsuntide. *The Paper Duties.*—The adjourned debate on the second reading of the Customs and Inland Revenue Bill was resumed by Mr. DUCANE, who said he would not dispute that the Chancellor of the Exchequer was in possession of a surplus, and that the Estimates had been framed upon a sound basis, but the question was how the surplus should be disposed of, and whether the House would sanction the general substitution of direct for indirect taxation. He did not deny that the Paper Duty possessed many of the objectionable features of an Excise duty, but there was no one class interested in favour of its repeal, or that would be greatly benefited by it.—Sir W. HEATHCOTE said that most of the objections to the second reading of the Bill involved the relations of that House and the House of Lords, and he was of opinion—in which Mr. Walpole coincided—that there was nothing unconstitutional in the form of the Bill, and that

it did not interfere with the privileges of the Lords.—General PEEL said the question whether there was a balance of revenue depended as much upon the accuracy of the estimates of expenditure as upon those of income, and he suggested grounds for doubting whether all the items of charge had been taken into account.—The CHANCELLOR of the EXCHEQUER complimented Mr. Macdonogh upon the ability with which he had raised the constitutional issue on a previous evening. He then discussed the question of "tacks" to Bills sent to the House of Lords, and having cited several precedents relating to purely financial measures, argued that everything contained in the Bill in the shape of combination was supported by the practice and usage of the House. The practical question now at issue was, whether the power of adjusting the income and charge of the year was to remain in the hands of the Commons. Did the House, or did it not, claim that as a right which appertained exclusively to itself? If it were determined to assert that claim, then the course recommended by the Government was the most convenient, respectful, and considerate to the Lords. If, however, it was not so prepared, let it at once rescind the resolutions of last year.—Mr. HORSMAN said that the constitutional right of the Lords to reject a Bill of supply was settled by the committee of last year, and this House must abide by the decision. It was said, however, that the right of the Lords was dangerous to the privileges of the Commons and ought to be restrained: but he thought that what was most to be guarded against was the inordinate growth of the power of the House of Commons. He warned the House that in countenancing the Government to break the compact of last session with the House of Lords they were doing that which they might hereafter have reason to deplore.—Mr. PULLER approved of the course taken by the Government in including the whole financial scheme in one Bill.—Mr. NEWDEGATE contended that the Bill unduly curtailed the rights and privileges of the other House, and was not sanctioned by anything in the resolutions.—Mr. MELLOR, Mr. WHALLEY, and Mr. LOCKE supported the Bill; Mr. MALINS, and Mr. W. E. DUNCOMBE opposed it.—Sir S. NORTHCOTE said that by the Bill before them they proposed to vote upwards of 20,000,000*l.* of taxation for one year only. Henceforward, therefore, the tea and sugar duties and the income tax would be dependent upon the annual votes of the House; the result of which would be to unsettle trade, and excite class against class.—Lord PALMERSTON congratulated the House upon the success which had attended the discussion of the different questions raised in this debate. There was no dispute now as to the existence of a surplus; the House had acquiesced in the expediency of abolishing the Paper Duty, and also in the arrangement of the matters to be sent up to the House of Lords. In the midst of this general harmony, however, in stepped Mr. Horsman with the torch of discord, and attempted to sow dissension between the two Houses of Parliament. It had been said by high authority, "Blessed are the peacemakers," but what was to be the reward of the sowers of discord and promoters of quarrels had not been so clearly defined. He hoped it would not be an opposite fate.—Mr. DISRAELI said the Government had created an artificial surplus in order that they might perpetrate a financial caprice. By a bare majority of 18, who so voted because they shrunk from the responsibility of disturbing the Government, they had succeeded in passing a resolution which was not to be submitted to the revision of the other House of Parliament. He complained of the occult influences which were, he said, straining the Constitution. If the repeal of the Paper Duty was sent up last year as a separate Bill, why should it not be done now? It was for this object or nothing,—to deprive the House of Lords of a power admitted to be legal and constitutional, and which had been exercised in a manner the nation had ratified as sound and politic. The Opposition had not assented to the policy of the Government, and would hold themselves at liberty to take any course with reference to the Bill which they should deem beneficial to the country. The Bill was then read a second time, and ordered to be committed on Monday week. The *Excise and Stamps Bill* was read a second time.

FRIDAY.—*The Whitsun Recess.*—On the motion of Lord PALMERSTON, it was resolved that the House at its rising should adjourn to Thursday next. *Religious Intolerance in Spain.*—In answer to Sir R. PEEL, Lord PALMERSTON said that full instructions had been sent by Lord J. RUSSELL to the Ambassador in Madrid, to lose no opportunity of making representations to the Government of Spain, not only with regard to the privileges of British subjects there, but also on the laws and practices which render Spain so intolerant in matters of religion. *Education in Ireland.*—Mr WHITESIDE moved a series of resolutions on the subject of National Education in Ireland. [Left sitting.]

City Intelligence.

BANK RATE OF DISCOUNT.—The Bank of England on Thursday raised their rate of discount from 5 per cent., at which it was fixed on the 11th of April, to 6 per cent.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at $91\frac{3}{8}$ to $\frac{3}{4}$ for Money, and $91\frac{1}{2}$ for the 6th of June; Bank Stock, 232; Three per Cents. Reduced, $89\frac{7}{8}$ to $\frac{1}{2}$; New Three per Cents., $89\frac{7}{8}$ to $\frac{7}{8}$; Thirty Years Annuities, 1885, $15\frac{5}{8}$; India Five per Cent. Stock, $101\frac{3}{4}$ to $\frac{1}{4}$; Ditto for Acct., $101\frac{1}{2}$; Ditto Four per Cent. Debentures, 1858, $96\frac{1}{2}$; Five per Cent. Enfaced Rupee Paper, 94; Exchequer Bills, 6s. dis.—FOREIGN: Brazilian Old Five per Cents., $98\frac{1}{4}$; Ditto Four and a Half per Cents., 1860, $88\frac{1}{4}$; Buenos Ayres Six per Cents., $90\frac{1}{2}$; Ditto Deferred, $28\frac{3}{4}$; Chilian Six per Cents., 100 to $101\frac{1}{2}$; Dutch Four per Cent. Certificates, 100 to $99\frac{1}{4}$; Mexican Three per Cents., $22\frac{7}{8}$; New Grenada Deferred, $5\frac{1}{2}$; Russian Four and a Half per Cents., $91\frac{5}{8}$; Spanish Three per Cents., $51\frac{1}{8}$; Ditto, for Acct., 51; Ditto New Deferred Three per Cents., for Acct., $42\frac{3}{4}$; Ditto Passive, $16\frac{1}{4}$; Turkish Six per Cents., 1858, for Acct., $55\frac{7}{8}$.

Gazette of the Week.

TUESDAY—BANKRUPTS—J. ANDERTON, Liverpool, Stone Mason and Builder—J. B. BEHRENDS and W. A. NICHOLS, 14, St. Mary Axe, City, East India and General Merchants—A. COHEN, 13, George Street, Minories, City, Wine Merchant—J. DALLEY, Starcross, Keaton, Devonshire, Innkeeper and Coal Merchant—R. FORSHAW (and not FORSHAM, as advertised in the Gazette of Friday last), Liverpool, Machine Manufacturer—R. FOSTER, Tranmere, Cheshire, Engineer and Boiler Maker—J. GREENWOOD, Sheffield, Yorkshire, Stone Sawyer and Stone Dealer—E. HARDING, Liverpool, Draper—J. MANNION, Liverpool, Leather Dealer—P. T. MILLER, Aylesbury, Buckinghamshire, Linen Draper—J. REES, Swansea, Glamorganshire, Builder, Mason, and Carpenter—S. SHEARD, High Town, Birstal, Yorkshire, Carrier—J. THOMPSON, Wakefield, Yorkshire, Yarn and Worsted Spinner.

SCOTCH SEQUESTRATIONS—GOLDSMITH and Co., Aberdeen, Watchmakers—J. MITCHELL, Edinburgh, Wine and Spirit Merchant.

FRIDAY—BANKRUPTS—S. BATEMAN, Norwich, Tea Dealer and Grocer—L. BEYNON, Bristol, Tailor and Draper—B. BRYANT, Newmarket St Mary's, Suffolk, Corn and Coal Merchant—H. H. CHAMBERS and F. R. PARSONS, Worthing, Wine, Spirit, and Coal Merchants—C. CURME, Hilperton, Wiltshire, Common Brewer—R. KIRBY, the younger, Leicester, Butcher—T. KNEATH, Swansea, Wine and Spirit Merchant—S. LEEMING and J. HILL, Batley Carr, Yorkshire, Woollen Manufacturers—C. B. MATHER, Newbury, Berkshire, Tea Dealer and Grocer—C. NICHOLSON, E. PASCALL, and W. STONE, Cannon Street West, City, Warehousemen—R. OVERBURY, Henley in Arden, Warwickshire, Hotel Keeper—G. J. PARIS and W. H. T. PARIS, Liverpool, Provision Merchants—G. PENROSE, Eagle's Bush and Eskyn Collieries, near Neath, and Vale of Neath, Glamorganshire, Coal and Coke Merchant—R. READ, Newport, Isle of Wight, Tailor and Outfitter—J. SMITH, now of Creed Place, Maize Hill, Greenwich, and late of Great Portland Street, Oxford Street, Ironmonger—W. G. WILSON, Cannon Street, City, Engineer and Iron Merchant—J. WOODFORD, Upper Broughton, otherwise Broughton Sulney, Nottinghamshire, Carpenter and Builder.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£26,020,985	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	10,883,008
		Silver Bullion	662,977
	£26,020,985		£26,020,985

BANKING DEPARTMENT.

Proprietors Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£10,180,938
Rest	3,261,606	Other Securities	19,796,757
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	6,725,187	Notes	5,978,195
Other Deposits..	11,591,539	Gold and Silver Coin ..	836,461
Seven day and other bills	661,019		
	£36,792,351		£36,792,351

16th day of May, 1861. M. MARSHALL, Chief Cashier.

Metropolis and its Vicinity.

INTERNATIONAL EXHIBITION OF 1862.—The guarantee fund up to Wednesday night exceeded 400,000*l.*, and further subscriptions are expected. The building for the Exhibition is proceeding most satisfactorily, and the demands for space by intending exhibitors pour in daily to an extent far exceeding what was ever contemplated. Notifications have been received by her Majesty's Commissioners from several foreign Governments of the appointment of commissioners to represent the products of the respective countries. Information has also been received that local committees have been formed at Birmingham, Belfast, Bath, Gravesend, Gloucester, Thurlington, Hertford, Newark, Newcastle-on-Tyne, Staffordshire Potteries, Stockton-on-Tees, Stafford, and Walsall, to assist in preparing works of industry for the Exhibition, and intimation has been received from nearly every town in the kingdom that it will be represented at the Exhibition.

NATIONAL GALLERY.—After an interval of eight months the National Gallery was opened to the public on Saturday. The changes it has undergone are considerable, both as regards the building and the arrangement of the pictures. Sir Charles Eastlake has added three new purchases to the collection. They are in *tempera*—viz., a Predella, in five compartments, by Fra Angelico, which was formerly in the church of San Domenico at Fiesole; an "Entombment," by Roger Vander Weyden the elder; and the "Baptism of Christ," by Pietro della Francesca, recently purchased at the Uzielli sale. The five beautiful and perfectly preserved Fra Angelicos bought at Rome, and for which the Papal Government exacted an exportation fine of 720*l.*, being 20 per cent. on the purchase money, are among the most valuable acquisitions made during Sir Charles Eastlake's administration. The subject appears to be "Christ Assembling the Blessed, after the Last Judgment." Mr. Pennethorne's alterations of the building, which have been already described in this Paper, are very generally approved of.

BRITISH MUSEUM.—The estimate of the sum required to defray the salaries and expenses of the British Museum, including the amount required for buildings, furniture, fittings, &c., for the year ending 31st March, 1862, is 100,414*l.* The total number of persons admitted to view the general collections, exclusive of readers in 1860, was 536,939, being an increase of 19,044 over 1859. The visitors to the reading-room were 127,763, being 5339 more than in 1859. The daily average last year was 437 readers; each reader consulting, on an average, 9 volumes per day. The number of volumes added to the library last year amounted to 30,949, including music, maps, and newspapers. The total number of articles received, including broadsides, ballads, and various miscellaneous pieces, was 78,071, of which 419 were received under the international copyright treaties. The additions made to the manuscript department in the course of the year were as follows:—To the general collection: MSS., 815; original charters and rolls, 90; original seals and impressions, 34. To the Egerton collection: MSS., 32. The departments of antiquities and geology received numerous and remarkable acquisitions. The total number of additions made to the departments of zoology, geology, and mineralogy during the year was above 45,250.

THE DISPUTE IN THE BUILDING TRADE.—The system of hour payment, at increased rates, which the masters adopted in answer to the strike for the nine hours' movement, appears to be rapidly extending. Messrs. Trollope, Messrs. Clements, and Messrs. Gammon have adopted it, and have found the system work so well that they are about to extend it to all the men in their employ. The works of Messrs. Kelk and Lucas are in full activity, and the latter firm have more applicants for employment than they can find work for. All the works of Messrs. Peto and Messrs. Smith are likewise in full employ. It is therefore thought improbable that there will be any general strike. The report that the masters were about to yield and [illegible] with the trades' unions, is entirely [illegible]

INDIAN FAMINE RELIEF FUND.—[illegible] received at the Mansion House up [illegible] was 93,000*l.*, of which 1000*l.* was [illegible] of a collection from the Wesleyan M[illegible]

SUICIDE ON PRIMROSE HILL.—[illegible] was held on Monday evening [illegible] Robert Goring, aged 34, who commit[illegible] shooting himself on the top of Prim[illegible] 4th inst. It appeared from the [illegible] adduced at this and the two previous [illegible] deceased committed the act on account [illegible] and after he had seceded from the Prot[illegible] Romish Church, apparently because [illegible] who had refused to marry him was a [illegible] written paper he had left at his lodgings [illegible] property, consisting of 70*l.* in [illegible] &c., at the disposal of the Roman [illegible] whom he had been converted. The jury [illegible] tracted deliberations refused to return [illegible] verdict than that of *Felo-de-se*, until [illegible] *post-mortem* examination of the [illegible] tion was accordingly made, and [illegible] evidence of the medical men the jur[illegible] of *Felo-de-se*.

THE PUBLIC HEALTH.—The [illegible] Weekly Return states that the death[illegible] week that ended on Saturday, May 1[illegible] average number in the corresponding [illegible] years 1851—60, corrected for incre[illegible] was 1202. The present return is [illegible] the average. During the week the [illegible] and 876 girls, in all 1848 children, were [illegible] London. In the 10 corresponding w[illegible] 1851—60 the average number was 16[illegible]

Provincial.

BASSINGBOURN.—On Sunday last, the [illegible] Barber, of Queen's College, Cambridge, [illegible] Bassingbourn, a village near Cambridge, [illegible] in the reading desk. The *Te Deum* was [illegible] the choir, when he was observed to be [illegible] congregation, thinking he was tired, [illegible] the circumstance. When however the [illegible] concluded, he was found to be quite [illegible] he shortly afterwards expired. The deceased [illegible] a very abstemious man, died, according to [illegible] opinion, of serous apoplexy, and the jury [illegible] verdict accordingly. His wife and family were [illegible] at a watering place at the time of his death. [illegible] Barber was formerly scholar of his college, and [illegible] author of a "Translation of Boss's Grecian [illegible]

CAMBRIDGE.—The Prince Consort paid a visit [illegible] town on Tuesday. His royal highness arrived [illegible] Cambridge by special train shortly [illegible] proceeded to Trinity College, [illegible] was in waiting. From Trinity the Prince [illegible] Professor Kingsley's, where the Prince [illegible] attending lectures. At two, Professor [illegible] Robert Rede's lecturer, delivered a [illegible] Senate-house, on "The History of [illegible] The Prince Consort and the Prince of [illegible] present, and the Senate-house was filled [illegible] the town and neighbourhood. At the [illegible] Professor Willis's lecture the Prince C[illegible] Prince of Wales went to Madingley H[illegible] turning thence, the Prince Consort started [illegible] shortly before five o'clock.

GATESHEAD.—On Saturday last the wi[illegible] named Stoker, murdered two of her ch[illegible] ting their throats and afterwards commit[illegible] the village of Eighton Banks, near this [illegible] the discovery was made the unfortunate [illegible] still alive, but she died on Sunday mor[illegible] asked as to her motive she said "she was [illegible] head." Since the birth of her youngest [illegible] been depressed in spirits, and this depression [illegible] increased by the fact that her husband [illegible] and unable to work during the last fort[illegible] about 34 years of age, and bore an exc[illegible] as a wife and a mother. Much sympathy [illegible] husband, who is said to be a steady and [illegible] pitman.

ILKESTON.—A young man named [illegible] a twist hand, a few days since murder[illegible] Joseph Smith, a shoemaker and a [illegible] residing in Bath Street in this tow[illegible] him in the head with a pistol. The [illegible] the eldest son of deceased, and about [illegible] seems to have been a profligate, and [illegible] tute of principle. On the day in ques[illegible] abstracted his father's bank book, and ma[illegible] cessful attempt to obtain possession of [illegible] deposited. Exasperated by his failure he [illegible] the design of murdering his father. For [illegible] he provided himself with a pistol at Nott[illegible] going home at midnight deliberately [illegible] father's brains as he came down from his [illegible] his night-shirt, to reprimand his son for [illegible] late and taking the bank-book. He had [illegible] written a note to a girl at Belton, [illegible] engaged to marry contrary to the wishes of [illegible] saying that he had told his father, who was [illegible] man, and would, he was sure, make away [illegible] The pistol was found next morning at [illegible] about 50 yards from the house, having been [illegible]

[illegible] The prisoner was imme- [illegible] and has since been com- [illegible] charge of Wilful Murder.

[illegible].—The failure of the Peterborough [illegible] Bank of Messrs. D. Yorke & Co. [illegible] on Wednesday. This bank was esta- [illegible] and enjoyed an authorised note [illegible] The [illegible] are not supposed to [illegible]. The bank of Messrs. Yorke & [illegible] and Kettering, is in no way con- [illegible] the firm.

[illegible].—Samuel Mitchell was re-examined last [illegible] borough magistrates on the charge of [illegible] to murder Mr. Ralph Barber, who, [illegible] services, has sustained injuries of so seri- [illegible] that they may yet prove fatal. Several [illegible] seen the prisoner leave the [illegible] Mr. Barber lastly about the time of the [illegible] other evidence tended strongly to fix the [illegible] upon him. The magistrates committed him for trial.

W[illegible].—The excavations of the Roman City of U[illegible], which have been suspended during the [illegible], are about to be resumed with increased activity. Mr. [illegible], M.P., who has so liberally contributed to [illegible] during the last three years, offers a [illegible] of 50 guineas on condition that 50 other subscriptions of not less than a guinea each can be obtained. The rich collection of coins, bronzes, pottery, tessellated pavements, &c., which have been [illegible] in the Shrewsbury Museum attests the interest [illegible]. It is intended that the operations of the present season shall include the examination of the site of the Roman cemetery, in addition to the remains [illegible] "the Old Wall," but until further funds are [illegible] the excavations must of necessity be on a limited scale.

Ireland.

THE PRINCE OF WALES'S VISIT TO IRELAND.—In anticipation of the Prince's visit to Ireland, a large number of troops are daily assembling at the Curragh. It is expected that his Royal Highness will arrive about the [illegible], and occupy during his stay the quarters which Lord Seaton had whilst at the Curragh.

THE "EXODUS" FROM AMERICA.—The local papers state that although the stream of emigration to the States from Ireland seems to have suffered little check [illegible] outbreak of the civil war in the United States, every vessel which arrives at Liverpool from America brings back whole families of Irish, who prefer [illegible] to their own country to risking the [illegible] in that of their adoption. Not a few of those who have returned were liable to be drafted into the militia of the States in which they were resident. From the reports of these home bound emigrants it appears that hundreds of Irish families are selling off their property in the United States and returning home.

THE NATIONAL PETITION.—A meeting of the committee which has charge of this document has been held, and an arrangement made for forwarding it to the O'Donoghue. It is said to bear 420,036 signatures.

THE YELVERTON CASE.—The *Evening Mail* is [illegible] to contradict the statement that Mrs. (Teresa) Yelverton has arrived in Dublin with Major Yelverton, the fact being that since the verdict she has been residing with her mother, Lady Ashworth, in Brighton.

Railways.

AMALGAMATION OF THE GREAT WESTERN AND WEST MIDLAND.—An agreement has been arranged by the [illegible] of the Great Western and West Midland for the amalgamation of the two companies. It is stated that the agreement binds the Great Western to lay [illegible] immediately, the narrow gauge from Reading to [illegible], so as to give the West Midland an unbroken gauge between the whole of their system and [illegible]. It is understood that at the end of [illegible] years the West Midland is to be merged into the Great Western, with a division of receipts in the proportion of 82½ per cent. to the latter, and 17½ to the former.

GREAT WESTERN OF CANADA.—The Overland Mail from India has brought Mr. Laing's reply to the recent report of the Committee of Investigation of the Great Western of Canada Railway. It denies the charges altogether, and shows by minute details of all the transactions that the charges are untenable.

Law.

COURT OF EXCHEQUER.—*Hatch* v. *Lewis and Lewis*.—This was an action brought by the Rev. Mr. Hatch against Messrs. Lewis and Lewis, before the Lord Chief Baron and a special jury, to recover damages for negligence in conducting his defence at the recent trial at the Old Bailey. The negligence complained of was chiefly not having called witnesses who [illegible] at the trial to rebut the evidence of [illegible], and the evidence, it was alleged, had [illegible]. Mr. and Mrs. Hatch and others were examined, but the judge ruled that the Secretary of State for the Home Department, who had been subpœnaed, could not be examined as to the reasons which induced him to grant Mr. Hatch a free pardon, as any such statement would not be evidence. The Lord Chief Baron however stated in the course of the proceedings that he considered a pardon from the Crown [illegible] Mr. Serjeant [illegible], who had been engaged by defendants as Mr. Hatch's counsel, was examined and stated that he held himself entirely responsible for witnesses not having been [illegible]. On [illegible] the Lord Chief Baron summed up and the jury after an hour and a quarter's deliberation returned a verdict for the plaintiff, with [illegible] damages. The verdict was received with loud cheers, but there were hisses when the amount of damages was announced.

Obituary.

THE DUKE OF BEDFORD, K.G., who has for some months past been in declining health, died on Tuesday afternoon at Woburn Abbey shortly after [illegible]. Lord John Russell and Mr. F. H. Russell were summoned by telegraph at an early hour, and arrived at Woburn in time to be present at the Duke's [illegible]. The late Right Hon. Francis, sixth and [illegible] Earl of Bedford, Marquis of Tavistock, Baron Russell of Thornhaugh, and Baron Howland of Streatham, county of Surrey, in the peerage of England, was the eldest son of the sixth Duke by his first marriage with the Hon. Georgiana Elizabeth Byng, second daughter of the fourth Viscount Torrington. He was born in 1788, and married in 1808, Lady Anna Maria Stanhope, eldest daughter of the late Earl of Harrington, by whom, who died in 1857, his Grace leaves issue an only son, William, Marquis of Tavistock, now Duke of Bedford. The deceased peer was educated at Westminster School, whence he removed to Trinity College, Cambridge, to complete his studies. Before he graduated as M.A. in 1808 he had gone the tour of Europe, as customary in those days. On his return to England he entered the House of Commons as M.P. for Bedfordshire, which county he represented in [illegible] Parliaments until he was summoned, in 1833, to the House of Lords in his father's barony of Howland. During his parliamentary career in the Lower House his Grace voted on all occasions with the Whig party, and although an unfrequent speaker in the House of Peers, invariably supported the views and measures of the Whig Governments. On the death of his father, in 1839, he succeeded to the Dukedom. In [illegible] he was appointed Special Deputy Warden of the Stannaries, and on the death of the late Earl de Grey was made Lord Lieutenant of Bedfordshire. In 1846 he was made a member of the Privy Council, and the year following a Knight of the Garter. On the death of Lord Macaulay he became High Steward of Cambridge. By his death the extensive estates belonging to the house of Russell in Bedfordshire, Devonshire, Herts, Cambridgeshire, and Middlesex, as well as the titular honours, devolve upon his only son, the present Duke, who was born in 1809, and was M.P. for Tavistock from 1832 to 1841.

DR. SETH THOMPSON, M.D., died a few days since in Lower Berkeley Street, in his [illegible] year. He graduated M.D. at the University of Edinburgh in [illegible], was censor of the College of Physicians in 18[illegible], and became a fellow in [illegible]. He was also a Fellow of the Medical [illegible] Society, Physician to the Middlesex Hospital and to the Marylebone Dispensary.

WILLS.—The will of Lord Sidney Godolphin Osborne, of Bartram's, Hampstead, has been sworn under [illegible]; John Clarke, Esq., of Bentley Terrace, Maida Vale, [illegible].

BIRTHS.—On the 11th inst., at 16, Portman Square, Lady Wortley, of a daughter—[illegible] inst., at 31, [illegible] Street, the Lady [illegible], of a son—[illegible] March, at [illegible], the Lady [illegible], of a [illegible] inst., at [illegible] Street, the Hon. Mrs. [illegible], of a son—[illegible] inst., in Dublin, the Hon. Mrs. [illegible], wife of [illegible], of a son and heir—11th inst., at Lees Court, Faversham, the Hon. Mrs. Milles, of a son and heir—13th inst., at the residence of her mother, the Hon. Mrs. Hobart, Langdown, near Southampton, the wife of Robert Needham Cust, Esq., Bengal Civil Service, of a son.

MARRIAGES.—On the 14th inst., at [illegible], [illegible] Henry [illegible], Esq., [illegible] son of the late William [illegible], Esq., of [illegible], to the Hon. Emily [illegible], daughter of the Right Hon. and Right Rev. Lord [illegible], Lord Bishop of Bath and Wells—[illegible] inst., at Christ Church, Upper Hyde Park Gardens, [illegible], of the late [illegible] and the late Sir James [illegible], K.C.B., to [illegible], second daughter of Thomas Alexander, Esq., of [illegible], Upper Hyde Park Gardens, and [illegible]—[illegible] inst., at [illegible] Church, Warwickshire, Major Gaspard Le Marchant Tupper, Royal Horse Artillery, to Mary Charlotte, eldest daughter of the late Sir Charles H. [illegible], Bart., of [illegible]—14th inst., at St. [illegible], Portman Square, [illegible] W. G. Fairholme, Esq., Bengal Artillery, [illegible] son of the late Charles George Fairholme, Esq., formerly of the Scots Fusilier Guards, to Augusta Sophia, second daughter of [illegible] Hoare, Esq.—[illegible] inst., at Christ Church, [illegible], Affleck Moore, Esq., [illegible] son of the late A. Moore, Esq., Deputy Commissary-General, New South Wales, to Elizabeth Harriet Lambe, only child of the late David Lambe, Esq., and niece of Lacon William Lambe, Esq., of Henwood, near Hereford—14th inst., in Westminster Abbey, Edward Henry May, Esq., of 68, Pentonville Road, surgeon, to Sarah, [illegible] daughter of the Rev. James Lupton of the Cloisters, Westminster.

DEATHS.—On the 6th inst., at Mount Pleasant Terrace, Plymouth, Lady Elliott, widow of the late Captain Sir Wm. Elliott, Royal Navy, C.B., K.C.H., K.T.S., aged 58—24th ult., Anna Maria, only child of the late William Edwardes, Esq., R.N., and widow of the late William Dixwell Oxenden, Esq., younger son of the late Sir Henry Oxenden, Bart., of Dene, in the county of Kent, aged 38—8th inst., at Nordaesque, France, Rear-Admiral Edward Hinton Scott, aged 73—At 1, Bentinck Street, Charlotte, widow of Lieutenant-General O'Loghlin, aged [illegible]—10th inst., at her residence, [illegible] Eaton Place, Mary, widow of the late Colonel George Carpenter, commanding 41st Regiment, C.B., who fell at the head of his regiment at Inkerman, and daughter of the late General G. Cardew, Royal Engineers—12th inst., at Richmond, Surrey, Anne, widow of Lieutenant-Colonel George Woodroffe, of Poyle Park, Surrey, and Nash Court, Kent, aged 79—[illegible] inst., in Ker Street, Devonport, Lieutenant-Colonel Isaac Richardson, late of H.M. 11th Regiment of Foot, aged [illegible]—[illegible] inst., at her house, 22, Cadogan Place, [illegible], widow of the late Colonel Lewis, of the [illegible]—9th inst., at Arkley, Essex, after a few hours' illness, Major Henry Clinton Martin, retired, Royal Artillery—[illegible] inst., at 4, Sussex Gardens, Hyde Park, William Henry Fitton, Esq., M.D., F.R.S., &c., aged [illegible]—9th inst., in [illegible] Square, Joseph Hunter, Esq., F.S.A., one of the Assistant Keepers of her Majesty's Records, aged [illegible]—[illegible] inst., at Glanogwr, Glamorgan, the Rev. J. Harding, M.A., Rector of Coyty and Coychurch (Llandaff), and Proctor in Convocation for the Clergy of that Archdeaconry, aged [illegible]—[illegible] inst., in London, of paralysis of the brain, the Rev. [illegible] Reynolds, vicar of St. Andrew's, Whittlesea, Cambs.—11th inst., at Paignton, the Rev. Robert Gee, Vicar of Paignton and Marldon, aged 75—10th inst., at 34, Gloucester Street, Pimlico, Jane, wife of James Fraser, Gardener, Luton Hoo Park, Beds., aged 46.

Markets.

BRITISH WOOLS.—LONDON, FRIDAY, MAY 17.

We have very little business to report on this week, as the last accounts from America have tended towards war more decidedly than any before, and this has prevented manufacturers from [illegible] wool than they [illegible] obliged.

	s. d.	s. d.		s. d.	s. d.
South-down Hoggets	1 5 to	—	Leicest. Wethers	1 4 to	..
Half-bred ditto	1 6 —	..	Ditto Hoggs	1 6 —	..
Down Ewes	1 4 —	..	Combing Skins	1 [illegible] —	1 6
Kent Fleeces ..	1 5 —	1 6	Flannel Wool .	1 0 —	1 6

[illegible] WOOL SALES.—The May series commenced on the [illegible] inst., with a large attendance of buyers, both home and Continental. The prices realised were about the same as the last series, with the exception of Cape wool, which being in [illegible] quantity has sold at higher prices. The number of bales advertised is only about [illegible], being less than was expected, in consequence of the non-arrival of vessels on their way, delayed by adverse winds.

COVENT GARDEN, MAY 18.

Notwithstanding the favourable change that has taken place in the weather, Vegetables are still scarce and dear. Broccoli is furnished from Cornwall, and good samples of Lettuces, Endive, and Artichokes from France. Grapes fetch fair prices. Of Strawberries there is now a tolerably good supply. Asparagus, French Beans, Green Peas, young Carrots, and new Potatoes may also now be obtained. Cucumbers are coming in more plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., [illegible] to 12s	Apples, per doz., 6d to 1s 6d
Grapes, per lb., [illegible] to 1[illegible]	Oranges, per 100, [illegible] to 10s
Strawberries, p. oz., [illegible] to 1s	Lemons, per 100, 6s to 10s
Cherries, French, p. box, [illegible]	Nuts, Cob, per lb., 1s to 1s 6d
Pears, per doz., 1s 6d to [illegible]	

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 9d to 1s6d	Celery, p. bundle, 1s 6d to 1s9d
Green Peas, p. ½ sieve, [illegible]	Onions, p. ½ sieve, 1s 6d to 2s6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 4s to 8s
Cabbages, do., 2s to 3s	Rhubarb, p. bundle, 9d to 1s 3d
Potatoes, p. ton, 80s to 120s	Seakale, p. punnet, 1s 6d to 2s
— new, per lb., 6d to 2s	Shallots, per lb., 1s 6d
— — per cwt., 10s to 16s	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 10d	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 4s to 5s	Mushrooms, p. pott., 1s 4d to 1s 6d
Cucumbers, each, 9d to 2s	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 3s to 4s	Savory, per bunch, 2d to 4d

METROPOLITAN CATTLE MARKET.

MONDAY, MAY 13.

The number of Beasts is considerably larger than for some time past, consequently on the average prices are lower, although there is not much reduction in the choicest description. The supply of Sheep and Lambs is about the same as on Monday last. Trade is dull, and prices are scarcely as good as on that day. Good Calves are in demand at rather higher rates. From Germany and Holland there are 450 Beasts, [illegible] Sheep, and 111 Calves; from Spain, 330 Beasts; from Scotland, 850; from Norfolk and Suffolk, 2500; and 120 from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 8 to	5 0	Best Long-wools ..	to	..
Best Short-horns	4 6 —	4 8	Do. Shorn ..	4 8 —	5 0
2d quality Beasts	3 4 —	4 2	Ewes & 2d quality ..	—	..
Best Downs and			Do. Shorn ..	4 0 —	4 6
Half-breds ..	5 4 to	5 10	Lambs	6 6 —	7 6
Do. Shorn ..	5 0 to	5 4	Calves	5 0 —	5 8
			Pigs	4 0 —	5 0

Beasts, 4480; Sheep & Lambs, 21,980; Calves, 111; Pigs, 350.

THURSDAY, MAY 16.

There is very little alteration in the supply of Beasts, but the sudden change of weather has caused a decreased demand, and a consequent reduction in price. We are well supplied with Sheep and Lambs; trade is exceedingly dull, and they cannot all be sold, although lower prices are submitted to. Calves also are lower. Our foreign supply consists of 252 Beasts, [illegible] Sheep, and 120 Calves. Milch Cows [illegible].

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 6 to	4 10	Best Long-wools . ..	to	..
Best Short-horns	4 4 —	4 8	Do. Shorn ..	4 8 —	4 10
2d quality Beasts	3 0 —	4 0	Ewes & 2d quality ..	—	..
Best Downs and			Do. Shorn ..	4 0 —	4 4
Half-breds ..	.. —	..	Lambs	6 0 —	7 4
Do. Shorn ..	5 0 —	5 2	Calves	5 0 —	5 6
			Pigs	3 8 —	5 0

Beasts, 915; Sheep & Lambs, 8040; Calves, 39[illegible]; Pigs, 170.

MARK LANE.—MONDAY, MAY 13.

The supply of English Wheat to this morning's market was small, and disposed of at the extreme rates of Monday last, in some instances 1s. per qr. advance was realised. The market was tolerably well attended. Foreign Wheat was held at the opening for a similar improvement, but as little progress could be made it was not generally established. Barley, Beans and Peas are firm at the prices of this day se'nnight. The Oat trade is steady, and fine qualities are in demand at full prices. Barrel Flour brings an advance of 6d. upon our last week's quotations.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk .. White	56—66	Red	48—62
— — fine selected runs .. ditto	50—72	Red	54—68
— — Talavera	51—72		
— Norfolk	—	Red	—
— Foreign	50—78		
BARLEY, grind. & dist., 28s to 30s .. Chev.	40—4[illegible]	Malting	38—40
— Foreign .. grinding and distilling	[illegible]	Malting .	40—42
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire .. Potato	26—28	Feed ..	20—25
— Irish .... Potato	26—28	Feed ..	21—24
— Foreign .... Poland and Brew	24—28	Feed ..	20—24
RYE	35—38	Foreign .	—
RYE-MEAL, foreign	—		
BEANS, Mazagan .... 38s to 42s .... Tick	40—44	Harrow .	40—44
— Pigeon ...... 42s — 46s .. Winds	—	Longpod	—
— Foreign .... Small	4[illegible]—[illegible]	Egyptian	—
PEAS, white, Essex and Kent .. Boilers	[illegible]—44	Suffolk	40—50
— Maple .... —s to —s .... Grey	40—42	Foreign .	38—48
MAIZE .... White	—	Yellow ..	—
FLOUR, best marks delivered .. per sack	[illegible]		
— 2d do. .... ditto	[illegible]—50	Country	38—50
— Foreign .... per barrel	[illegible]—35	Per sack	40—50

FRIDAY, MAY 17.

The weather was very wet and cold until the 13th, when it became warm, and the wind changed to S. and S.W.; on the [illegible] very cold wet, N. and N.W. wind, and sharp frost at night, since which it has been fine, warm, and genial. In the Wheat trade a fair amount of business has been generally transacted throughout the kingdom, at the extreme prices of the previous week. The respective values of spring corn have been also well supported. The demand for Flour has been

less active this week in the country markets. Barrels nevertheless must be quoted 6d. dearer in the country markets. During the past eight days 63 vessels have been reported off the coast, viz., 25 Wheat, 22 Maize, 6 Barley, 1 Flour, 2 Rye, 3 Linseed, and 4 Cottonseed. The tone of the floating trade is firm. The arrivals of English grain this week are comprised in 650 qrs. Wheat and 93 qrs. Barley; the supply of foreign has been to a fair extent. The attendance at this morning's market was small. The sale of English Wheat slow at previous rates. The demand for foreign limited, and chiefly confined to retail purchases of secondary qualities for the country; we observe no alteration in its value. The trade for spring corn is quiet at Monday's quotations. The business doing in Flour is limited, and prices are unaltered.

ARRIVALS FROM MAY 13 TO MAY 17.

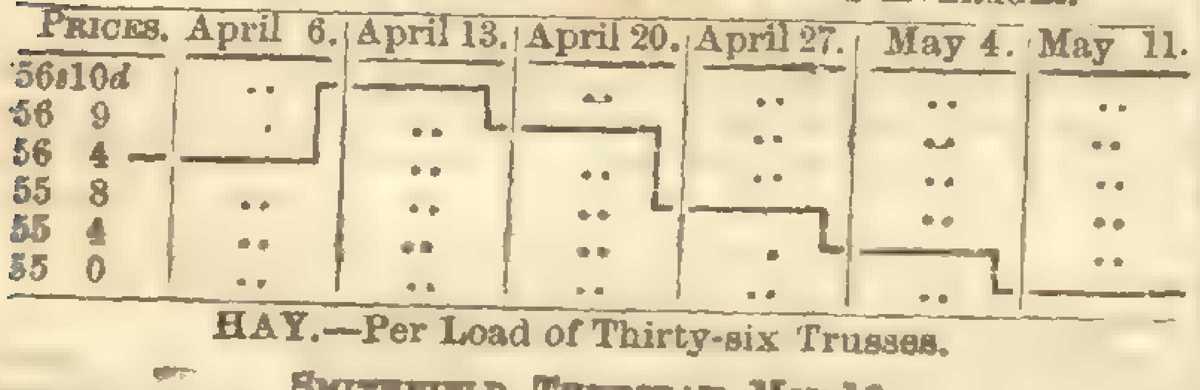
	Wheat.	Barley.	Oats.	Flour.
English ..	650 qrs.	93 qrs.	— qrs.	1695 sks.
Irish	— „	— „	— „	— „
Foreign ..	13160 „	3570 „	22350 „	{ 2364 „ 6542 brls.

LIVERPOOL, Tuesday, May 14. — The imports of Wheat, Flour, and corn during the past week are on a pretty liberal scale, chiefly from America; of Spanish Wheat and Flour there are also a few arrivals. Other articles in light supply. There has been a larger attendance than usual at this morning's market, and a healthy consumptive demand has been experienced for both Wheat and Flour at the extreme rates of Friday last. Indian Corn attracted a fair inquiry at an improvement of about 3d. per qr. Oats and Oatmeal both steady. Beans, Peas, and Barley each support late rates in retail. The market closes with a steady tone, and sellers of good useful qualities of American Wheats are not disposed to go on except at a slight advance, these descriptions being now in narrow compass.

FRIDAY, May 17.—The market to-day has been rather quiet, and trade generally inactive, and quite of a retail character. Former prices only sustained.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
April 6..	56s 4d	37s 8d	24s 0d	36s 4d	41s 8d	40s 2d
— 13..	56 10	37 5	24 1	35 11	41 6	40 0
— 20..	56 9	37 3	23 5	37 10	42 3	39 6
— 27..	55 8	37 11	24 8	32 8	42 7	40 8
May 4..	55 4	36 10	24 7	35 2	42 11	40 8
— 11..	55 0	36 4	25 0	30 0	43 10	40 11
Agg. Aver.	56 0	37 3	24 0	35 7	42 5	40 4

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, May 16.

Prime Meadow Hay	75s to	86s	Clover	95s to	118s
Superior do. (old) ..	90	105	New Clover	—	—
Inferior do.	50	60	Do. second cut ..	80	100
New do.	—	—	Straw	30	42
Rowen	—	—			

DAVIS & Co.

WHITECHAPEL, THURSDAY, May 16.

Fine old Hay	100s to	105s	Fine old Clover ..	100s to	123s
Inferior do.	80	90	Inferior do	80	95
Very inferior	36	60	Fine 2d cut	80	108
Prime New Hay ..	—	—	Inferior do.	—	—
Straw	38	42	Fine New Clover ..	—	—

POTATOES.—SOUTHWARK, Monday, May 13.

During the past week the arrivals both coastwise and by rail have been more moderate, still more than equal to the demand, and trade very heavy; many sorts are almost unsaleable. The following are this day's quotations:—Yorkshire Flukes, 120s. to 140s. per ton; Lincolnshire Regents, 80s. to 100s.; Dunbar Red Soil do, 120s. to 140s.; North Berwick Regents, 105s. to 120s.; Fife, Forfar, and Perth do., 80s. to 100s.; ditto Rocks, 75s. to 80s.; ditto ditto Reds, 70s. to 80s.; French Whites, 60s. to 80s.; Belgian do, 60s. to 70s.; Dutch do., 60s. to 70s.

HOPS.—BOROUGH MARKET, FRIDAY, May 17

Messrs. Pattenden & Smith report that the market is very firm, at fully late prices. The accounts from the plantations continue to state that the bine with very few exceptions is in a backward and unkindly state; a few flies are reported.

COAL MARKET.—May 15.

Walls End Haswell, 17s. 3d.; Walls End Hartlepool 17s; Walls End Braddyls Hetton, 16s. 9d.; Walls End Russell Hetton, 16s. 9d.; Walls End Heugh Hall, 15s. 9d.; Walls End Kelloe 16s. 3d.; Wylam, 16s.; Bell's Primrose, 13s.; 23 ships at market.

WANTED in the Counting House Department of a London Seed Establishment, a Gentleman of good address, who thoroughly understands the business and is a good Accountant. As the situation is a confidential one, it is particularly requested that no one will apply whose character will not bear the strictest investigation, and who cannot if required find security for 500l. To one duly qualified a liberal salary will be given.—Apply, by letter only, stating age and full particulars, to X. P., care of Messrs. Dawson & Sons, Cannon Street, City, E.C.

WANTED, a thoroughly competent and energetic Person to undertake the management of an established retail SEED BUSINESS in London. Must have been accustomed to that particular branch, and have practical knowledge in carrying out a regular system. Parties applying must give their full name, and state with whom they have lived. A liberal Salary will be given.—Address, by letter only, X. Y. Z., Mr. W. Symons, Lansdown Road, South Lambeth, S.

WANTED, A SECOND GARDENER.—He must not be under 30 years of age; must have a good character, and be able to assist occasionally in the Forcing Houses.—Apply at 1, Upper Woodcote Place, Lower Norwood, S., to SAMUEL SMITH, Gardener to W. Quilter, Esq.

WANTED, A SHOPMAN, about 30 years of age, of good address, and who has a thorough knowledge of his business. A preference would be given to one who has taken the journeys. He must be able to furnish the most unexceptionable testimonials.—Apply, by letter only, to MINIER, NASH, & NASH, Seedsmen, 60, Strand, London, W.C.

WANTED, AS COWMAN, a person who understands the Management of Cows, and would make himself otherwise generally useful. A middle-aged man preferred. Wages, 14s. per week.—Apply if by letter, to W. Z., Marble Hill, Twickenham, Middlesex, S.W.

WANTED, for the North of England, a working married couple; the Man to be a good common Kitchen Gardener, and his Wife to do the Washing of an extensive establishment. A House, Coals, Soap, Candles, &c., is allowed, together with 30s. per week wages. No persons with a young family accepted, and first-class testimonials indispensable.—Apply by letter only to Mr. ABBOTT, Archer Street, West Hartlepool.

WANTED, A PLAIN COOK, who understands Baking, in a small family; age about 30.—For particulars apply to Mrs. BOLLAND, Fetcham, Leatherhead.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 36, married, two children; practical, and thoroughly understands growing Fruit, Cucumbers, Melons, Grapes, also Flower and Kitchen Gardens.—A. B., Mr. C. Nicholas, Chessington, near Kingston.

GARDENER (HEAD).—Has a thorough practical knowledge of Forcing and Gardening in all its branches. Good character.—A. B., J. Newman & Co., Nurserymen, &c., South Street, Chichester.

GARDENER (HEAD).—Age 39, thoroughly practical and well acquainted with the Culture of Plants and Fruits, the Kitchen and Flower Gardens, Groundwork and Plantations.—J. H., J. F. Muscat, Florist, Clapham, S.

GARDENER (HEAD).—Age 36, married, no incumbrance; has a thorough knowledge of Gardening in all its branches. Eleven years' good character.—W. P., 12, Gloucester Grove East, Old Brompton, S.W.

GARDENER (HEAD).—Age 34, married; practical; has had great experience in every branch of gardening. Four and a half years' good character.—A. B., Bedford Nursery, Haverstock Hill, W.

GARDENER (HEAD). — Middle-aged, married; eminently qualified in every branch, untiring in his duties, a thorough workman, trustworthy and obliging. Wages moderate.—A., Post Office, Finchley, N.

GARDENER (HEAD). — Age 34, married; has a thorough knowledge of Early and Late Forcing, and Management of Flower and Kitchen Gardens. Nine years' unexceptionable character.—C. NEAVE, North End, Hampstead.

GARDENER (HEAD).—Age 34, married; has had great experience in Early and Late Forcing of all kinds, and the Management of Flower and Kitchen Gardens. Six years' good character.—Z. Z., Woodbine Cottage, Nunhead Green, Peckham Rye, Surrey, S.W.

GARDENER (HEAD).—Age 45, married, no incumbrance; understands Greenhouse, Flower and Kitchen Gardening. Can have a most unexceptionable character of nine years' standing from his last place.—A. J., Mr. Francis's Nursery, Hertford.

GARDENER (HEAD), to any nobleman or gentleman.—Age 30; has a thorough practical knowledge of his profession in all its branches. Satisfactory testimonials as to character and ability from his present employer.—W. S., Rev. W. Sinclair, Pulborough Rectory, Petworth, Sussex.

GARDENER (HEAD).—Age 33, married, no incumbrance; good practical knowledge of Pines, Vines, Peaches, Cucumbers, and Melons; Flower and Kitchen Gardens.—J. B., Carter & Co., Seedsmen, 237 and 238, High Holborn, London, W.C.

GARDENER (HEAD).—Age 29, single; has had good experience in growing Pines, Vines, Orchids, Stove and Greenhouse Plants; also Flower, Fruit, and Kitchen Garden. Three years' good character.—J. W. T., 32, Dorset Place, Dorset Square.

GARDENER (HEAD).—Age 45, married, no incumbrance; has a thorough practical knowledge of the treatment of Orchids, Stove and Greenhouse Plants, Forcing of Flowers and Fruit, and the Management of Fruit and Kitchen Gardens. Nine years' excellent character.—J. B., 5, Victoria Grove, Bayswater, London, W.

GARDENER (HEAD).—Age 34, married, Scotchman; thorough practical knowledge of his profession in all its branches, Early and Late Forcing, the Management of Flower and Kitchen Gardens. Character and abilities in hands of present employer.—A. H., Gardener, Adwell House, near Tetsworth, Oxfordshire.

GARDENER (HEAD), age 28. — C. PILCHER, Gardener to S. Rucker, Esq., West Hill, Wandsworth, would be glad to recommend to any lady or gentlemen in want of a Gardener, a young man who has been his Foreman between three and four years, but who is now seeking for a situation as Gardener.—Address as above.

GARDENER (HEAD).—Age 35, married, no incumbrance; has had great experience in Early and Late Forcing, is a First Class Grape, Peach, and Pine Grower, and understands the culture of Orchid, Stove, and Greenhouse Plants, the Management of the Kitchen and Flower Gardens, Re-planting and Laying out new Gardens, and the care of Land and Stock, 20 years' experience. Two and a half years' good character from a Baronet.—H. RANDALL, Arbour Vale Cottages, Slough.

To Noblemen and Gentlemen.

GARDENER (HEAD).—Married, no incumbrance; thoroughly competent to conduct the Management of any nobleman's or gentleman's Garden in every department. Has lived several years as Head Gardener with a nobleman, and leaves owing to the death of his employer. The most unexceptionable references will be given as to character and respectability by several noblemen and gentlemen of distinction.—W. F., Mr. Stone, Bookseller, 3, Hanway Street, Tottenham Court Road, W.

GARDENER (HEAD WORKING).—Age 37, married; has a practical knowledge of Forcing all kinds of Fruits, Flowers, and Vegetables; also a good Kitchen and Flower Gardener.—A. O. P., Post Office, Guildford, Surrey.

GARDENER (HEAD), OR FOREMAN in a large Establishment. The Advertiser, who has been living in a nobleman's establishment, and has left by reason of the death of the proprietor, has a thorough knowledge of his profession. Unexceptionable references can be given.—A. B., Post Office, Trimley St. Martin, Ipswich.

GARDENER (HEAD), OR FORESTER AND BAILIFF.—Age 40; a first-class Gardener, Forester, and Bailiff. Nine years' good character. Wife can manage a Dairy.—A. B., 29, Princess Street, Edgware Road, W.

GARDENER (UNDER), OR FOREMAN in a nobleman's or gentleman's Establishment.—Age 21; has a practical knowledge of his profession, and can be highly recommended.—J. W., Mr. Wilson, Leytonstone, Essex, N.E.

GARDENER.—Age 26, single; […] Flower, Fruit, and Kitchen Garden […] Cucumbers and Melons. Good character […] Haigh, Nurseryman, Plaistow, Essex, E.

GARDENER.—The Advertiser […] a respectable, trustworthy, married […] energetic and industrious Gardener, […] every branch of his profession.—D. M. […] Hampstead, N.W.

GARDENER.—Age 32, married […] thoroughly understands his profession […] to make herself useful. Characters […] investigation. Family leaving.—B. C. […] Hampstead Hill, N.W.

To Noblemen and Gentlemen.

GARDENER (FOREMAN).—Age […] knowledge of Stove and Greenhouse […] and Soft-wooded, the Forcing of Pines, Grapes […] &c. Good reference.—B. H. W., The Gardens […] Putney, Surrey, S.W.

GARDENER (UNDER).—Age […] knowledge of his profession. Four years […] —Y. Z., 2, Alpha Street, Park Road, New Peckham […]

GARDENER (UNDER).—Age […] several places where Gardening […] spirit, both in Forcing and Flower and Kitchen […] be well recommended from last Gardener […] Gardener, Norwood Grove.—J. M. […] Streatham, Surrey, S.

GARDENER OR WORKING […] can Milk a Cow or two, or drive […] years' character.—J. H., near the Chapel […] Ripley.

To Noblemen and Gentlemen.

GARDENER OR STEWARD.—[…] to offer his services to any nobleman […] want of a thorough practical Gardener […] ence in Cultivating Fruits, Flowers, […] person competent to Superintend the […] Plantations, management of Men, payment […] Accounts, and other responsible duties […] the care of a Land Steward or General Manager […] man's establishment. Twelve years' unexceptionable […] and testimonials.—D. BRIGHTON, Botanic […] Park, N.W.

STEWARD AND GARDENER, […] MANAGER.—Age 40, married; has […] Steward and Gardener to a nobleman, and […] has had the entire Management of the Farm […] ing, Feeding, Buying, and Selling of all […] Produce, and also the Management of […] Estate, Timber, Woods, and Plantations […] of the Kitchen and Flower Gardens, and […] He is now leaving his present situation […] of his late employer. The most unexceptionable […] will be given as to character and respectability […] 26, Broad Street, Worcester.

To Noblemen and Gentlemen.

STEWARD OR BAILIFF.—Has had […] perience in the Management and Improvement […] both in Scotland and England; Rearing […] of all kinds of Farm Stock, the Measuring of […] Timber, and the Erecting of Farm Buildings. Leaving in con- […] sequence of the estate being sold. […] F. S., 1, Columbia Square, Hackney R[…]

BAILIFF.—Age 25; a Farmer's […] —D. W., Messrs. Page & T[…] ampton.

FARM BAILIFF.—Age 33, […] has had the management of […] seven years; understands Light and Heavy […] of Stock, has gained Prizes for Oxen and […] Sell, and keep Accounts. Can be highly […] present employer. Wife can manage […] required.—P. L., Bray, near Maidenhead, Berks.

BAILIFF.—Thoroughly acquainted […] branch of his duties, including […] Buildings, Reclaiming Wastes, and Making […] Purchasing, and Selling Stock, Cultivating […] Soils on the most approved system. Highest […] Messrs. Carter, Seedsmen, 237, High Holborn […]

FARM FOREMAN.—A Baronet wishes […] mend his Farm Foreman (age […] 9 years of age), whom he is compelled […] change in his establishment. JOHN BOSS[…] Accountant, practically understands […] Roads, and other works connected with the […] Estates, the Management of Steam Engines […] portable, and most of the modern Farm Implements […] Land Measuring, &c.; is a good judge […] work, and, above all, is thoroughly steady […] would be an acquisition to any Steward […] man or gentleman, and is at present in […] 500 acres. Ten years in present situation.—Mr. […] Ruddington Manor, near Nottingham.

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To Head Gardeners.

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COOK (VERY GOOD).—Aged 37; no […] Dairy. Good character from the gentleman […] left.—E. B., 13, Westenbury Street, Clapham, S[…]

The Gardeners' Chronicle Newspaper.

SATURDAY, MAY 25, 1861.

HISTORY OF WATER-COLOUR PAINTING.—An EXHIBITION of PAINTINGS, illustrating the [illegible] of the Art, and of Works by Female Students of the [illegible] of Art, will be OPENED on JUNE 1, at the Society of [illegible] John Street, Adelphi. [illegible] a.m. to 6 p.m. [illegible] One Shilling.—Catalogues, Sixpence.

By Order of the Committee.
LOUISA GANN, Secretary.

Female School of Art, 43, Queen Square, W.C. [illegible] Gower Street.)

[illegible] in aid of the Building Fund of the School will [illegible]

DISTRIBUTION of MEDALS and PRIZES to the STUDENTS of the FEMALE SCHOOL of ART, and [illegible] of the Metropolitan Districts Schools of Art. The Earl GRANVILLE, K.G., Lord President of the Council, will distribute the Medals and Prizes to the Students in the [illegible] Theatre of the Museum of Geology, Jermyn Street, on SATURDAY, June 1, at 12 o'Clock.

An Exhibition of the Works of Female Students will open at [illegible] Street, Adelphi, on the same day, [illegible] Exhibition of Works illustrating the History of Water-Colour Painting.

LIFE ASSURANCE.—SPECIAL NOTICE.—The next [illegible] the profits of the Life Department of the SCOTTISH UNION INSURANCE COMPANY will be made at August 1, 1861, and parties taking out Policies before that date will participate in the division.

[illegible] New Policies, for 304,703*l.*, yielding 9828*l.* 6*s.* 2*d.* of new premiums, were issued during the year ending August 1, 1860.

Thirty days' grace allowed to renew Life Insurances and 15 days to renew Fire Insurances, during which time, on payment of the premium, the Company hold themselves liable.

No extra premium charged for members of Volunteer or [illegible] Corps within the United Kingdom.

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No. 37, Cornhill, London, E.C.

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3 feet wide by 6 feet 4 inches long	.. ..	£2	5 0
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4 feet ,, ,,	.. ..	2	15 0
4 feet 6 in. ,, ,,	.. ..	3	0 0
5 feet ,, ,,	.. ..	3	5 0
5 feet 6 in. ,, ,,	.. ..	3	10 0

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JAMES RIDGWAY, 169, Piccadilly, W.; W. ROBERTS, Exeter, and all Booksellers.

News of the Week.

IN the House of Lords on Friday the Royal assent was given by commission to the Princess Alice's Annuity Bill; the Offences in Territories near Sierra Leone Prevention Bill was read a second time, and the Smoke Nuisance (Scotland) Act Amendment Bill was read a third time and passed. The House then adjourned to Monday next for the Whitsun holidays.

In the Commons on Friday, in answer to Sir R. PEEL, Lord PALMERSTON said that her Majesty's Minister at Madrid had been instructed to make a representation to the Spanish Government on the subject of the persecutions of Protestants, and he was glad to say that the Executive Government had evinced every disposition to extend to British subjects free power to perform religious ceremonies in their private houses. Mr. WHITESIDE then submitted a series of resolutions on the subject of national education in Ireland, the object of which was to obtain a participation in the Parliamentary grant for those schools which declined to subscribe to the rules of the National Board on the subject of religious instruction. The O'CONOR DON opposed the

motion, and at the close of his speech the House was counted out. On Thursday the House re-assembled after the Whitsun holidays. On the motion for going into Committee of Supply, Sir F. SMITH called attention to the report of the Dockyards Commission, and moved a resolution to the effect that such reforms should be made in the control and management of the dockyards as will tend to promote greater efficiency and economy in those establishments. Lord CLARENCE PAGET said that it was the intention of the Admiralty to carry out many of the recommendations of the Royal Commissioners, that a new system of accounts had been agreed upon, and that a correspondence was now in progress with the Treasury with a view to unite the two branches of the Admiralty under one roof. After some discussion Sir F. SMITH said he was satisfied with the assurances given by Lord C. PAGET, and withdrew his motion. The House then went into Committee of Supply on the Navy Estimates. On the vote of 3,489,477*l.* for naval stores for the building, repair, and outfit of the fleet, steam machinery, and ships built by contract, Mr. LINDSAY objected to the amount which it was proposed to expend for the purchase of timber, and moved as an amendment that the vote be reduced by 300,000*l.* On a division the amendment was negatived by 66 to 30. Mr. LINDSAY then moved that the item of 271,757*l.* for metals, &c., be reduced by 71,757*l.* After considerable discussion the amendment was negatived on a division by 76 to 32. Mr. LINDSAY next moved that the sum of 100,000*l.* for iron for an iron-cased ship to be built at Chatham be omitted, on the ground that the commissioners had reported that it was not advisable to build such ships in the Government dockyards. On a division the amendment was negatived by 66 to 31. The CHAIRMAN then reported progress.

Count DE PERSIGNY has issued another circular to the prefects, calling their attention to the prosecution arising out of the publication of the DUC D'AUMALE's pamphlet, and exhorting them to prevent for the future any publication emanating from persons who have been banished or exiled. The Toulon squadron sailed on Monday for Syria to bring back the army of occupation.

A despatch from St. Petersburg announces that Prince GORTSCHAKOFF has addressed a letter to the Russian Ambassador in Paris calling the attention of foreign Cabinets to the danger incurred by the departure of the French troops from Syria, and declining to share the responsibility in regard to the results of their withdrawal. The death of Prince ORLOFF, President of the Council of Ministers, is announced.

From Italy we learn that the exiled Hungarian chiefs are exhibiting much activity in Italy. KOSSUTH has arrived at Turin to have a conference with General KLAPKA, on his return from a visit to GARIBALDI at Caprera. The petition addressed by 10,000 inhabitants of Rome to the Emperor NAPOLEON, requesting the evacuation of Rome by the French troops, has been despatched to Paris, notwithstanding the efforts of the police to prevent it. A popular demonstration has taken place at Milan against the Capitulary Vicar, who had prohibited the clergy from taking part in the approaching national fête. The people tore down the escutcheon from the door of his palace, and would have proceeded to acts of a much graver character had not the National Guard interfered, and restored order.

The QUEEN OF SPAIN on Monday signed the decree for the annexation of San Domingo to Spain. An official declaration has been published stating that Spain will not re-establish slavery in the Island.

From the United States we have the Message addressed by President JEFFERSON DAVIS to the Southern Congress at Montgomery. It asserts the right of the seceding States to dissolve connection with the Federal Government when they find themselves hopelessly in the minority, and recommends the Congress to sanction the issue of letters of marque, and to take steps for the organization of a large standing army. We have also a despatch addressed by Mr. SEWARD, the Federal Secretary of State, to the American Minister at Paris, requesting him to inform the French Government that the Federal Government will never allow a dissolution of the Union. Meanwhile, the Southern Congress has recognised the existence of war with the Federal Government, and has passed an Act granting letters of marque. North Carolina, Tennessee, and Arkansas have passed secession ordinances, and Virginia was formally admitted into the Southern Confederacy in a secret session on the 7th inst. The Virginians have commenced operations by taking possession of the heights on the Maryland side of the Potomac, which they are engaged in fortifying, and Washington has been again in such imminent peril that 21,000 Federal troops have been concentrated in the city for its protection. The Federal Government is making extensive preparations for the impending conflict. The blockade of the Virginian ports is complete, and Charleston, Savannah, and New Orleans will be blockaded within a week. The Federal troops under General BUTLER have taken possession of Baltimore without resistance, and martial law has been proclaimed in the city. The Maryland legislature however has adopted a resolution condemning the war, and discountenancing the interference of the Federal troops. It is stated that 300,000 volunteers have offered their services to the Federal Government, and that the Southern Confederacy is in a position to send 150,000 men into the field for a year's campaign.

The Overland Mail has arrived with news from Bombay to the 27th, and from Calcutta to the 29th April. The scheme for the amalgamation of the British and Indian armies has been published, and is considered an equitable arrangement. The duty on cotton twist and yarn has been reduced to 5 per cent. The large sums sent from England in aid of the Famine Relief Fund have been received with feelings of lively gratitude, and have greatly tended to alleviate the distress in the North-West Provinces.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family are at Osborne. On Friday the Queen held a Court at Buckingham Palace, at which the Earl of Elgin had an audience of the Queen on his return from China, and Sir John Crampton, her Majesty's Minister at Madrid, had an audience of leave. Sir G. Lewis had an audience of the Queen. The Prince Consort rode on horseback. On Saturday afternoon the Queen, Prince Consort, and the Royal family left town for Osborne, travelling to Gosport by a special train on the South-Western Railway. The journey was performed in the most private manner, the ceremonies usually observed on such occasions being entirely dispensed with. The Royal party arrived at Osborne shortly before 7 o'clock. On Sunday morning Prince Louis of Hesse arrived at Osborne from Ostend in her Majesty's ship Black Eagle. The Queen, Prince Consort, the Princesses Alice, Helena, and Louisa, Prince Arthur, and Prince Leopold attended Divine service at Osborne. The Rev. G. Prothero officiated. On Monday the Queen and Prince Consort, accompanied by Princess Alice and Prince Louis of Hesse, drove out. On Tuesday the Queen and Prince Consort, with the Princesses Alice, Helena, and Louisa, and Prince Louis of Hesse, drove out in an open carriage. On Wednesday the King of the Belgians and the Count of Flanders arrived on a visit to her Majesty. On Thursday morning the Queen and Prince Consort, with the King of the Belgians, walked out in the grounds. The Prince of Wales arrived at Osborne from Cambridge. Yesterday the Queen attained her 42d year, but in consequence of her Majesty's recent bereavement the day was kept in privacy at Osborne, and the public celebration of the event was deferred to the second week in July.

THE KING OF THE BELGIANS, accompanied by the Count of Flanders, arrived at Osborne on Wednesday on a visit to her Majesty. His Majesty landed at Dover from Ostend and proceeded thence to Portsmouth by a special train. At Portsmouth his Majesty was met by the Prince Consort and Prince Louis of Hesse, who accompanied him to Osborne in the Royal yacht Fairy under the usual salutes from the garrison, and from the ships of war in harbour and at Spithead.

THE PRINCE OF WALES left Cambridge at an early hour on Thursday morning for Portsmouth, where he embarked in the royal yacht Fairy for Osborne. By his Royal Highness's request the visit was considered a private one, and consequently the salutes usual on such occasions were dispensed with.

PRINCE ALFRED has arrived at Bermuda in the St. George on his return to England. During his tour among the West India Islands, his Royal Highness has visited Barbadoes, St. Vincent, St. Lucia, Martinique, Point-au-Petre, Guadaloupe, Dominica, Antigua, Montserrat, Nevis, St. Kitts, Tortola, St. T[illegible] Jamaica.

THE VOLUNTEER MOVEMENT.—The [illegible] National Rifle Association have given no[illegible] will be a Public Schools competition a[illegible] Meeting at Wimbledon in July next. 1[illegible] cup, value 50*l.*, will be given by Lord [illegible] to all public schools having unenrolled V[illegible] the competitors to be 11 from each school[illegible] will be awarded to the 11 making the [illegible] gate score, and the challenge cup wil[illegible] winning school until the next annual priz[illegible] the Association. 2. A cup, value 25*l.*, w[illegible] the *Volunteer Service Gazette*, to be com[illegible] the members of the winning 11, and to be [illegible] property of the winner. Distance—200 ya[illegible] shoulder; 500 yards Hythe position. Ea[illegible] to have five shots at each distance, and [illegible] those in use in the school. Schools intendin[illegible] are requested to give notice on or before the [illegible] There will be no competition unless at lea[illegible] enter. Should there be a sufficient number [illegible] notice will be given of the day fixed for [illegible] —A company is now forming for establi[illegible] training ground near London. An [illegible] been chosen for this purpose near [illegible] 15 miles from town, on the London and [illegible] The plan has been approved by a la[illegible] commanding officers. The main objec[illegible] taking is to enable Volunteers, eithe[illegible] individually, to obtain the advantages [illegible] practice and instruction, which will be [illegible] the system carried on at Hythe. T[illegible] capital will be 100,000*l.*, divided in [illegible] of 2*l.* each.—On Saturday the Inns of Co[illegible] teers, 450 in number, paid a visit to [illegible] volunteers of the University of Cambridge. [illegible] M'Murdo reviewed the two companies [illegible] Piece, in the presence of the Prince of Wales [illegible] the usual military evolutions the visitors were [illegible] at the various colleges, and returned to [illegible] evening.—On Saturday the City of London R[illegible] to the number of about 500 men and officers [illegible] panied by their cadet corps, 160 strong, [illegible] Guildhall, and marched for battalion practice [illegible] piece of vacant ground in the vicinity of the [illegible] layers' Arms Railway station, the use of which [illegible] been granted to the brigade for a mere nominal [illegible] sideration by the committee of the Corporation [illegible] Managing the Bridge House Estates.—The [illegible] dlesex went by water on Saturday from [illegible] Pier to Wimbledon, and were there inspected.—The [illegible] City of London marched to the [illegible] Cricket Ground, Chalk Farm, and [illegible] Sir William De Bathe.—In the evening [illegible] was delivered to the [illegible] teers (24th Surrey) by Lieut.-Colonel [illegible] an old comrade of the late Sir H. Havelock, [illegible] accepted the honorary colonelcy of the [illegible] Monday a grand field day took place [illegible] Park, under the command of Lord Ranelagh [illegible] ing corps taking part in the review [illegible] Artillery, 2d or South Middlesex, [illegible] West Middlesex, Lord Radstock; St. George's, [illegible] Colonel Lindsay and Captain [illegible] Paddington, Colonel Wood; 32d Middlesex [illegible] Guards, the Hon. C. T. Bruce; 6th [illegible] Lieut.-Colonel Money; the Horsey, and [illegible] of the 7th Middlesex. The movements were [illegible] fully executed, the only drawback being [illegible] behaviour of the mob, which threw sticks [illegible] the Volunteers, many of whom were [illegible] while no less than three horses of the [illegible] were maimed by deliberate knife thrusts. [illegible] circumstances, Lord Ranelagh declared [illegible] not again peril his men in front of a London [illegible] Queen's Westminster, commanded by Lord [illegible] and the London Scottish, commanded [illegible] went to Windsor on Monday, and went [illegible] of field movements in the Great Park.—The [illegible] Middlesex, under the command of Lord [illegible] their cadet company, headed by their [illegible] band for the first time, marched to Ham[illegible] where they went through battalion and [illegible] evolutions.—The 1st Middlesex (Victoria [illegible] Kilburn, and proceeded by rail to Kew [illegible] of having a field day on Hounslow Heath [illegible] and Westminster (46th Middlesex) ass[illegible] lington Barracks under the command of [illegible] ley, M.P., and marched along Pall Mall and [illegible] Hyde Park, where they halted for a short [illegible] passing through the Marble Arch, marched [illegible] Street, Holborn, Farringdon Street, and [illegible] the Horse Guards, where they were dis[illegible] was the first occasion of the corps [illegible] public, and of the appearance of their [illegible] 40th Middlesex assembled in Gray's Inn, [illegible] by railway to Enfield, where they were [illegible] the Hon. Sir J. Yorke Scarlett.—The 19th [illegible] on Monday evening at the Bridge House [illegible] Bridge, being a return dinner to the [illegible] non-commissioned officers and privates—[illegible] there was a grand review of several of the [illegible] Corps at Springfield Place, near Chelms[illegible] Volunteers were brigaded with the West [illegible] and were 680 strong. The Militia were [illegible] that the total force on the ground was about [illegible] review passed off with the greatest success.

Foreign.

France.—Count de Persigny, the Minister of the Interior, has addressed the following circular to the Prefects, calling their attention to the prosecution of the printer and publisher of the Duc d'Aumale's pamphlet entitled "A Letter on the History of France," and inviting them to watch with care for any attempt at publication which may be made in the name of persons who have been either banished or exiled:—

"Paris, May 1[illegible]

"Monsieur le Prefect,—The judicial proceedings carried on against a recent pamphlet has raised a point to which I think it my duty to call your attention. The question has been raised whether persons banished or exiled from the territory, and consequently placed beyond the reach of the common law, and protected by their very position from any judicial action, can have in France the benefits of publicity by sheltering themselves behind a printer or a publisher? In the work in question [illegible] so characterised against our institutions, and [illegible] excitement to hatred and contempt of the Government, that the praiseworthy eagerness of the magistracy to prosecute the seditious writing was called for by the very nature of things, and when once entered on, justice must have its course. You are, however, aware, Monsieur le Prefect, of the inconveniences of such proceedings. On the one hand, the writer, by a publication of several thousand copies, may have every facility for spreading insult and calumny on persons and things, whilst on the other, he is protected, he and his, by the [illegible] itself, against any reply and any recrimination; and it is thus that a representative of the policy of [illegible] has been able with impunity to address to the conqueror of [illegible] this strange question, 'What have you done with France?' However this may be, it is to be presumed that pretensions so clearly avowed will be again reproduced, that the example given will be followed, and that the Government which has drawn France out of the abyss, may be again exposed to the insults of those who allowed her to fall into it. I have been already informed that writings of the same kind are being now prepared; that, better advised, the instigators or the authors of these petty manœuvres flatter themselves on escaping, even in the persons of the printers, the rigours of justice, by artifices of wording and publication, thus hoping through the fissures of the law to penetrate with impunity into the very heart of our institutions. But the Government cannot tolerate the renewal of such scandals. As far as I am concerned, the more I endeavour to remain faithful to the liberal idea of the 24th of November, by favouring liberty of discussion, the more I must preoccupy myself with defending the State against the attacks of its enemies. I request you therefore to carefully watch over any attempt at publications which might be made in the name of persons banished or exiled from the territory. Of whatever nature those publications may be, and under whatever form they may appear—books, journals, or pamphlets—you must immediately proceed to an administrative seizure, inform me of the fact, and wait for my instructions.—

F. de Persigny."

The printer and publisher of the Duc d'Aumale's pamphlet have declined to appeal. Prince Napoleon has been elected Grand Master of the Freemasons of France, by a majority of two thirds of the votes, in the place of Prince Lucien Murat, who had offended the Order by his recent vote in the Senate in favour of the temporal power of the Pope. The whole squadron at Toulon left that port on Tuesday for Syria. Six vessels will remain in the port of Marmoritza.—The Prefect of the Loiret announced at the late agricultural show at Orleans, that it is the intention of the Emperor to give medals to veteran ploughmen and farmers in the same manner as a military medal is conferred on soldiers for distinguished services. The medal will confer on the bearer the right to an annuity of 100f. a year.—The French Academy has decided, by a majority of 18 votes to 11, to recommend to the Government that the biennial prize of 20,000f. founded by the Emperor should be conferred on M. Thiers for the last volume of his "History of the Consulate and the Empire."—A general meeting of the Suez Canal Company has just been held at Paris, at which M. de Lesseps read a report, stating that, whatever the English Ministers may have said to the contrary, the works of the canal are proceeding rapidly, that the company have found quarries close to the canal, from which an abundance of good stone can be obtained at a small cost, and that the number of workmen at present employed is 8000. The report also stated that the whole of the fresh-water canal, and about half of the salt-water canal, will be finished this year, and that next year the two seas will be joined. M. de Lesseps also announced that the cost of the canal would be far below the estimates. The report was approved and confirmed, and it was resolved to make another call of 100f. per share in July.—A meeting of the American residents in Paris was held a few days since, when several thousand francs were subscribed to purchase rifled cannon, which are to be presented to the Government at Washington.—During the past week a body of 1656 British workmen have been visiting Paris for instruction and amusement. Mr. Layard, M.P., Sir J. Paxton, M.P., and Mr. Jerrold accompanied the excursionists and kindly aided in procuring them facilities for seeing public places and looking after their comforts. The weather being very fine, the trip may be said to have answered every expectation, and will no doubt be repeated.—A manuscript missal of the 15th century, belonging to the Abbey of St. Lo, at Rouen, was sold a few days since, at the public sale rooms in the Rue Drouot. It was put up at 1500f., and the biddings went very slowly to 10,000f., but at that moment the competition became more animated, and the hammer ultimately fell at the sum of 24,850f., about 1000*l*.

Spain and Morocco.—The official journals contradict the statement published in the *Commercio* of Friday, that the batteries of Tangier are arming, and the town has been supplied with provisions. The *Madrid Gazette* of the 17th contains a Royal decree setting forth what dignitaries of State are to attend at the Palace on the occasion of her Majesty's confinement, which is now shortly expected. It also announces that the little Infanta Donna Concepcion, who had been exceedingly ill, is out of danger. The Queen has signed the decree for the annexation of San Domingo to Spain, and orders have been sent to the island to establish without delay electric telegraphs and to construct roads. General Santana will remain in command of the military at San Domingo.

Portugal.—The King opened the Cortes on Monday. The Speech from the Throne was not of political importance. It stated that a loan would be contracted for by Portuguese capitalists, that the financial state of the country was satisfactory, and that the colonies required the attention of the Cortes. The proposal of the Council of State with reference to the creation of 15 new peers has been approved by the King. Among the future peers are MM. Avila, Herculano Franzini, Costa Lobo, Passos, Manoel Foscoa, Braancamp, and Luz. It is expected that a measure will be brought before the Cortes to reduce the duties on sugar, and that the duty on salt fish will be lowered, which is important to parties interested in the Newfoundland fisheries. Baron Forrester was accidentally drowned in the Douro on the 13th inst. The show of grapes is excellent, but symptoms of the vine disease are strongly developed.

Belgium.—The Chamber of Deputies on Saturday voted, without alteration and unanimously, the new Treaty of Commerce with France.—The Society for Improving the Breed of Horses and developing Horse-racing in Belgium has been reconstituted at Brussels, under the patronage of the Duke de Brabant and Count de Flanders.

Switzerland.—According to an official report, 500 buildings were reduced to ashes, 3000 people were rendered homeless, and four persons were killed or burnt by the recent fire at Glarus. The loss in money value is estimated at 8,000,000 fr. The councils of Berne and Argovia have each voted 20,000 fr. for the relief of the sufferers, and these examples have been imitated with the utmost generosity by other cantons, so that hundreds of thousands of francs in ready money, and dozens of cars laden with food and clothes, have been despatched to Glarus.

Sweden.—The Swedish Government has joined the mediating Powers, France, England, and Russia, to prevent the conflict which would take place between Denmark and Germany if the threats of the Diet of Frankfort were put into execution.

Denmark.—An address, signed by 71,006 electors, was presented to the President of the Council of Ministers, on Friday. The President, in reply, dwelt chiefly on the necessity for granting to Holstein an independent position in the monarchy, and expressed a hope that the desire for peace might be realised. The following is the official report of his speech:—

"The Government share the views expressed in the address, and consider that they have acted in accordance with them. They await the moment when a more complete statement can be made to the Diet without damaging the interests of the country by an anticipation of the result of the negotiations which are still pending. Nevertheless, I will state that it is the conviction of the Government that a solution of the question now the subject of controversy is urgently necessary. Painfully acquired experience has convinced me that a solution is only attainable when such an independent position is granted to Holstein as may enable the King, without allowing any encroachment on the Government of those parts of the country which do not form part of the German Confederation, to satisfy the demands made by the Federal Diet on the Duke of Holstein, even if they be not founded on Federal right. Friendly Powers have acknowledged the conciliatory nature of the steps taken by Denmark, and have admitted the danger of leaving the question open. I may therefore be permitted to express a hope that they will adopt the view of the Government that this is the only possible solution. The Government are preparing for any eventual conflict, but they still retain the hope of a peaceful arrangement and a re-establishment of good relations between Denmark and Germany, which are both natural and desirable."

The official journal announces that the majority of the soldiers who were lately called in will be allowed to go on furlough at the end of the present month. Three-fourths of the army will then be placed on a peace footing.

Austria.—The Empress of Austria arrived at Trieste on Saturday morning in the Royal yacht Victoria and Albert, which was accompanied by the Osborne. The Emperor, accompanied by the Archduke Maximilian, left Trieste in the yacht Fantasia at 7 o'clock in the morning, in order to meet the Empress at sea, followed by five steamers, containing a number of invited persons. The Emperor and Empress disembarked at Miramai, where they passed the day. A salute of 450 guns was fired in their honour from the forts of Trieste. The Emperor has granted a full amnesty to all those persons who had been condemned for political offences by the military authorities of Trieste.

Hungary.—The adjourned debate on M. Deak's motion in the Chamber of Deputies at Pesth was resumed on Friday, when the principal speaker was Baron Eötvös, who pronounced a conciliatory speech. He declared, however, that the execution of the diploma of February last, granting Constitutions to Austria and Hungary, was impracticable. In the sitting of Saturday M. Lonijay declared that Hungary, reserving her rights, was ready to bear her share of the common burdens of the State, and would enter into negotiations on the subject with the Council of the Empire. The collection of the arrears of taxes by military execution is to be suspended, the Hungarian Diet having intimated its intention of provisionally sanctioning the amount due until the question of the taxes has been settled. The statement of some Italian journals that Count Teleki, shortly before he committed suicide, received a letter from Kossuth, informing him that the foreign Cabinets were little disposed to support the movement in Hungary, is formally contradicted.

Croatia.—In Saturday's sitting of the Diet of Croatia, documents relating to the abdication of King Ferdinand were laid on the table. The election of deputies from the district of Fiume to the Croatian Diet took place on Tuesday. Only 1478 persons took part in the proceedings.

Russia.—The *Journal de St. Pétersbourg* of Wednesday publishes a letter, addressed by Prince Gortschakoff to Count Kisseleff, the Russian Ambassador in Paris, calling the attention of the Representatives of the Foreign Cabinets to the danger incurred by the departure of the French troops from Syria, and declaring that Russia declines to share the responsibility in regard to the results of such a resolution, the consequences of which she has foreseen and pointed out. The death of Prince Orloff, President of the Council of Ministers, is announced. Although the Neva has been already open for navigation, it was on Monday suddenly covered with thick ice coming from Lake Ladoga. Many vessels were damaged, and many barges, laden with grain, sunk. The losses caused were very considerable.

Poland.—The *Official Gazette* of Warsaw says that the Bills relating to the reforms to be introduced in the kingdom of Poland have now been drawn up. MM. Platanoff and Karnicki have left for St. Petersburg for the purpose of obtaining the Imperial sanction to the Bills. A portion of the troops have been withdrawn from the public squares of Warsaw. The Archbishop having been summoned to the Palace of the Governor, he was requested to prohibit the singing of the National Hymn by the clergymen. The Archbishop decidedly refused to accede to this demand, and said that he would not deprive the people of that which alone afforded them consolation in their grief.

Italy.—A despatch from Turin states that Denmark has acknowledged the new kingdom of Italy. In the sitting of the Chamber of Deputies on Monday Signor Minghetti, Minister of the Interior, stated that administrative difficulties existed in the Neapolitan provinces, but that there was no political danger. In the sitting of Tuesday Signor Tecchio called the attention of the House to the recent circulars issued by Count Rechberg on the state of affairs at Venice. He said that the people of Venice did not desire the domination of Austria, and that the opposition to the Austrian Government in Venetia was not provoked from without. He concluded by recommending Venetia to the attention of the King and the Italian Parliament. Count Cavour thanked Signor Tecchio for having brought the question under the consideration of the House. He said that Signor Tecchio had proved by his speech that what Count Rechberg had alleged in his circular notes was wrong. He did not, he said, doubt the present liberal intentions of the Austrian Ministers; but they would always meet with insurmountable obstacles in Venetia; and this fact was principally important from its influence on public opinion in Germany, where liberal ideas were now progressing. The following order of the day was then adopted:—

"The Chamber having heard with extreme interest the recital of the sufferings of Venetia, passes to the order of the day."

The municipal elections are everywhere proceeding regularly. The number of persons voting is numerous. General Klapka has left Turin for Caprera, to pay a visit to General Garibaldi; and will return to Turin to meet Kossuth, who arrived at Turin on Saturday. M. di San Martino, the new Lieutenant of the King, left Turin on Sunday for Naples. He has since issued a proclamation, expressing his intention to govern with power, energy, and unity of action. He declares that all loyal citizens are in favour of the union of the Italian peoples. He requests the support of the country, and promises improvements in the public services. Prince Carignan and the Chevalier di Nigra arrived at Turin on Wednesday from Naples. Before his departure from the latter city the Prince Carignan issued a proclamation, in which he mentioned the reforms he had carried out, and thanked the people and the National Guard for their co-operation. 100,000 ducats, destined to pay the Reactionary bands, have been seized at the house of a person attached to the Bourbon party at Naples, and a depôt of spoil, the results of the late plundering expedition of the Reactionary bands, has been discovered at Isernia. The number of Italian soldiers killed and wounded in the suppression of brigandage since the 6th April is under 30.—Accounts from Rome state that the petition addressed by the inhabitants of Rome to the Emperor Napoleon, requesting the evacuation of Rome by the French troops, and bearing 10,000 signatures, has been despatched to Paris, notwithstanding the efforts of the police to prevent it. The text of the petition which has been published by some Italian papers is inauthentic. Cardinal Antonelli has addressed a circular to the diplomatic body at Rome, protesting against the sale by the Italian Government, of the convents and other Church property, and warning intending purchasers of the guilt they incur and the risk they run by participating in the spoliation of the Church. M. de Cadore will be intrusted with the affairs of the French Embassy in the capital during the absence of

the Duke de Gramont, who will return to France in June to drink the waters of Vichy.—A despatch from Milan states that the Capitulary Vicar has prohibited the clergy from taking part in the approaching national *fête*. The canons and *curés* of the city have replied in a respectful letter, that they will obey. but that they disapprove the measure. Some popular demonstrations have since taken place against the Capitulary Vicar. The escocheon on the door of his palace was destroyed by the populace, and the demonstrations ultimately assumed a subversive character. The mob were about to attack a liqueur manufactory, but the National Guard and the troops re-established order. The city is now quiet.

SICILY.—A despatch from Messina states that the decree ordering a levy of the people for the army has been published, and received with enthusiasm.

TURKEY.—A despatch from Constantinople dated the 22d inst. announces that on the previous day the International Commission on the affairs of Syria held their first sitting at the residence of the Marquis de Lavalette, the French Ambassador.

SERVIA.—Omar Pasha arrived at Belgrade on Thursday, accompanied only by his suite.

INDIA.—By the Bombay Mail we have news from Bombay to the 27th, and from Calcutta to the 29th of April. The following is a summary of the news:—

The announcement that two lacs of rupees had been sent to India by the mail of the 3d of April in aid of the Famine Relief Fund has been received with feelings of gratitude and admiration by British India. The famine is still severe; but the Relief Fund is greatly alleviating the distress. There has been a fall in the price of grain, and there is reason to hope for a still further reduction. Calcutta has contributed about two lacs; Bombay about 1½ lac; and Madras about half a lac. The amalgamation order was published in the *Government Gazette* on the 25th April. The arrangement is considered equitable; there is to be no examination for members of present Staff; and the native corps are gradually to become irregular troops. The Sikkim force is broken up and the native troops are returning to their several stations. The railway line from Kurrachee to Kotree is completed, and the first engine has run the entire length. Mr. Laing has published his defence to the charges brought against him in connexion with the Great Western of Canada Railway; and it is universally considered a satisfactory vindication. The statement that the Duke of Newcastle has been appointed to succeed Lord Canning as Governor General of India has been received with great satisfaction. The duty on cotton twist and yarn has been reduced to 5 per cent.

UNITED STATES.—The American papers publish a long message to the Southern Congress at Montgomery from President Jefferson Davis, of which the following is an abstract:—

After describing the events which followed the War of Independence, and the provisions of the Constitution of 1787 in reference to the Sovereign rights of the individual States, it enters into a history of the dissensions which have long embittered the two sections of the Republic against each other, in order to prove that secession was a necessary remedy for intolerable evils. He states that the Abolitionist Associations and the opposition to the Fugitive Slave Law were sufficient injuries to justify the Slave States in withdrawing from political association with the North, and that it was a piece of knavery in the people of the Northern States to attack the "institution" after they had made money by selling their own negroes to the cotton-growers when slavery was no longer profitable at the North. The slaveholders, he says, bought the negroes "without harbouring a suspicion that their quiet possession was to be disturbed by those who were inhibited not only by want of constitutional authority, but by good faith as vendors, from disquieting a title emanating from themselves." Another cause of secession was the conflicting interests of the two sections—the one being purely agricultural, and desirous of free trade, as producing the most valuable staple in the world, while the Northerners "have endeavoured to render the common Government subservient to their own purposes, by imposing burdens on commerce as a protection to their manufacturing and shipping interests." He criticises President Lincoln's proclamation of April 15, and sneers at the "paper blockade" which he has declared. He says that the five millions loan has all been taken, but that more money will be needed. He states that he has in the field 19,000 men, and that 16,000 are marching to Virginia; and he recommends the formation of an army 100,000 strong. He admits that the navy of the Confederacy is but a small affair at present, but predicts that it will soon be larger. He concludes by saying:—"We feel that our cause is just and holy; we protest solemnly in the face of mankind that we desire peace at any sacrifice save that of honour and independence; we seek no conquest, no aggrandisement, no concession of any kind from the States with which we were lately confederated; all we ask is to be let alone; that those who never held power over us should not now attempt our subjugation by arms. This we will, this we must resist to the direst extremity. The moment that this pretension is abandoned the sword will drop from our grasp, and we shall be ready to enter into treaties of amity and commerce that cannot but be mutually beneficial. So long as this pretension is maintained, with a firm reliance on that Divine Power which covers with its protection the just cause, we will continue to struggle for our inherent freedom, independence, and self-government."

Mr. Stephens, the Vice-President of the Confederate States, has also made a warlike speech at Atlanta. He declared that if Maryland seceded the Confederate States would claim Washington, as the district of Columbia would fall by reversionary right to Maryland. He said that the Southern States could call out a million of people, if need be, and when they were cut down could call out another and another, until the last man of the South met a bloody grave rather than submit to the foul dictation of the North. The Southern Congress at Montgomery has passed an Act recognising the existence of war with the United States, and also an Act for granting letters of marque and reprisal, 30 days to be allowed to United States' vessels now in Confederate ports to quit. It is also understood to be making arrangements in secret Session for the vigorous prosecution of the war, and for placing the Confederacy in the best condition of defence. It is stated that it has sufficient ordnance, &c., at its disposal to put 150,000 men into the field for a year's campaign. In a secret session on the 7th, Virginia was admitted into the Southern Confederacy. It was thought probable that the seat of Government and the Congress of the Confederate States would be removed to Richmond, Virginia. The Governor of Virginia has issued a proclamation, declaring his intention to resist any invasion of that State, and authorising the General of the State army to call out as many volunteers as may be necessary. Large bodies of troops, said by one account to number 50,000 men, are advancing into Virginia from the South, and every able-bodied man from 16 to 60 is compelled to take up arms. The Virginians have set fire to the forests on the mountains at Harper's Ferry, and have taken possession of the heights on the Maryland side of the river Potomac, which they are engaged in fortifying with a number of Secession troops. They have also seized the steamer which communicated between Old Point and Norfolk. The President of the Defence Committee has telegraphed to Albany to the Governor of New York, requesting him to send more troops to Washington, as reliable information had been received that the capital was in imminent peril. 31,000 Federal troops are now at Washington. A private letter states that the Confederate troops at Harper's Ferry which number only 6000 are badly provided with arms and provisions. The Governor of North Carolina has sent a warlike message to the Legislature, urging the immediate calling of a Convention of the people to declare for secession and condemn President Lincoln's policy. An ordinance of Secession was read in the Legislature on the 2d, and a resolution was passed by both Houses authorising the Governor to appoint a Commissioner to represent the State of North Carolina to the Government of the Confederate States, at Montgomery. The president and directors of the Bank of North Carolina had tendered to the State a loan of 500,000 dollars for purposes of defence. The Legislature of Tennessee has passed a secession ordinance, subject, however, to a vote of the people. Arkansas passed a secession ordinance on the 6th inst. by a majority of 61 to 1. A despatch from Fort Smith, Arkansas, states that the United States troops are about to evacuate another of the United States forts, Fort Washita. Despatches from Pensacola state that General Bragg is making active preparations to attack Fort Pickens with 6000 men. The United States ships-of-war Powhattan, Brooklyn, Sabine (storeship), Supply, Wyandotte, and Waterwitch, were off Fort Pickens. A partial blockade exists at Pensacola, where the entrance to the channel has been obstructed by sinking vessels to prevent the entrance of ships of war. As there are several English ships inside the harbour, it was expected that this blockade would cause the immediate interference of England. The Pennsylvania Legislature has passed a Bill for a loan of 4,000,000 dols. and 15 additional regiments beyond what the President has called for. The preparations of the Government at Washington are most vigorous and extensive. The blockade of the Virginia waters is complete. A precautionary notice has been issued for all vessels to leave those waters within 15 days. Charleston, Savannah, and New Orleans will be blockaded within a week. The Government has sent agents to Europe to purchase a number of modern gun-boats of light draft to complete the blockade. The frigate Minnesota has sailed from Boston under sealed orders, and the Niagara is on her way to blockade Charleston. The steamer Pembroke has left Boston with reinforcements for Fort Monroe. All the bridges except one have been repaired between Baltimore and Washington. Fort M'Henry, in Baltimore, has been reinforced. General Butler, with 2000 troops and a section of artillery, has taken possession of Baltimore without resistance. Martial law has been proclaimed in the city. The Maryland legislature has adopted a resolution condemning the war, and discountenancing the interference of the Federal troops. Large numbers of Secessionists have left Maryland to join the Virginians at Harper's Ferry. Several British vessels consigned to Norfolk were in Baltimore awaiting orders, being prevented by the blockade from entering Norfolk, which the authorities were fortifying in all directions. Upwards of 400 vessels of the fishing fleet have passed Father Point. The Great Eastern is now lying below New York. The Government is in treaty for employing her as a transport ship. The cutter Harriet Lane has arrived at Annapolis, bringing up a privateer schooner which she captured off the Virginia Capes. Upon being chased the crew of the privateer abandoned her with two exceptions. General Frost's Brigade of Missouri Militia, numbering 800 men, has been captured near St. Louis by Federal Volunteers. On arriving at St. Louis the mob threw stones at the Volunteers, who thereupon fired, killing about 20 people. The Governor of Kentucky has issued a proclamation, recommending the Legislature to call a convention of the people to declare for or against the Union. The rumour of a negro insurrection in Kentucky, published in the New York papers, is said to be unfounded. The Governor of Indiana has refused to join the Governor of Kentucky in a league for mutual peace, and has called upon Kentucky to stand by the Federal Government against rebellion. Major Anderson has been promoted to the rank of colonel, and with the consent of the President has accepted the command of the Kentucky brigade. The Federal Government has telegraphed to New York for 5000 stand of arms, and the Secretary of the ... invites offers at current rates for the ... 9,000,000 dols. A corps of British V... ing five full companies, had been sworn ... of the United States in New York. Mr. S... to inquiries made by New York merchants ... that a foreign vessel could not be sent ... Norfolk for a foreign port. Mr. Seward's ... spondence with the United States' Minister ... been published. He requests the Minister ... French Government that the Federal ... never allow a dissolution of the Union.

"There is not now, nor has there been ... any—the least—idea existing in this Government ... a dissolution of the Union to take place ... The thought of a dissolution of this Union ... force, has never entered into the mind of ... man here, and it is high time that it be ... men in Europe."

CANADA.—The Duke of Newcastle has ... the Governor-General of Canada for ... announcement that, in accordance with ... desire, Colonial Volunteers will be ... for the Queen's prize and gold medal ... terms as the Volunteers of Great Britain ... association will give one silver med... tions.

SOUTH AMERICA.—The recent ... Argentine Republic has proved more ... was at first supposed. Though the ... eight seconds the cities of Mendoza ... San Luis were reduced to ruins, ... persons perished. The two latter cities ... by the San Juan river, which left ... over them after the shock. At Mendoza ... remains standing. To add to the ... tunate survivors were attacked and ... guachos who had accompanied Colonel ... order." The latest advices represent ... be extreme, there being neither food ... shelter for the survivors, everything ... beneath the ruins. Subscriptions were ... surviving sufferers, not only in the ... the republic, but in the neighbouring States.

Parliament.

HOUSE OF LORDS.

FRIDAY.—*Delhi Prize Money.*—Earl De Grey ... in reply to Lord BERNERS, explained ... had prevented the distribution of the ... and said that as soon as the names had been ... different regiments the rates would ... distributed. On the motion of the ... *Offences in Territories near Sierra Leone* ... a second time with the full ... The House then adjourned to ... holidays.

HOUSE OF ...

FRIDAY.—*Religious Intolerance* ... asked what steps had been taken ... Government to show English Protestants ... in the exercise of their religious ... it was true that Mr. Gordon the ... refused the English permission to ... accordance with Protestant forms ... under the protection of the British ... said that full instructions had been ... the Ambassador in Madrid, to ... making representations to the ... not only with regard to the ... jects there, but also on the laws and ... Spain so intolerant in matters of religion ... however, that the Government at Madrid ... disposition to extend to British subjects ... worship in their own houses and ... schools for the education of their children ... Mr. Gordon he felt confident that if the ... to his noble friend the Foreign Secretary ... care that right should be done in the ... *Canada.*—In answer to Lord J. MANNERS ... stated that a detachment of 100 men had ... locks of the St. Lawrence Canal; and that ... representations made to the Colonial ... mander-in Chief in Canada it was ... battalion of the line to that colony, ... regiment and the Canadian Rifles already ... *Ireland.*—Mr. WHITESIDE moved the following ... 1. That the advantages afforded by parliament ... purpose of education in Ireland ought not ... school upon the ground that the Holy Scriptures ... therein. 2. That a discretion should be ... who are entrusted with the administration ... for educational purpose in Ireland, ... books and other school requisites, ... societies engaged in carrying on the ... and religious education in schools in ... conscientiously decline to subscribe to the ... Board, subject, so far as relates to secular ... inspection and control of the officers of the ... recent reconstruction of the National Board ... to ensure a satisfactory administration ... grant for education in Ireland. He contended ... of the working of the rule of exclusion ... Schools had suffered from its application ... mixed education was illusory; that the ... upon the voluntary principle, where ... formed part of the instruction, stood ... the other schools supported by the ... State, and that it was a positive wrong ... schools because they admitted the Scriptures ... testimony to the declining state of the National ... the absence of local sympathy, the ... religious persons and the clergy. ... resolution he speculated upon the motives ... of the new Board, and read, with comments ... Commissioners, one of whom he thought ... selection.—The O'CONOR DON coincided ... some parts of his argument; but, ... present system had not been so ... anticipated, he thought the resolutions ... but that a radical change was necessary ... departures from the original scheme ... the rules, or their interpretations, to which ... objected. Experience, he said, had shown that ... had not, and would not, put down religious ...

[illegible] regulations, as they appeared on the paper, would not [illegible] Roman Catholics the same advantages as they would [illegible] the Established Church, and their interpretation might [illegible] less favourable. The House was counted out at [illegible]

[illegible]—The House re-assembled to-day after the Whitsun [illegible]. *The Dockyards.*—Sir F. SMITH called attention [illegible] of the Commissioners appointed to inquire into [illegible] and management of her Majesty's naval yards. [illegible] instances, established by the evidence, of [illegible] and want of due control in the yards, and to [illegible] of the Commissioners, who had [illegible] their opinion that "the control and [illegible] of the dockyards is inefficient," and he moved a [illegible] that it is expedient that such reforms should be [illegible] to promote greater efficiency, and con[illegible] greater economy, in those establishments.—[illegible] the importance of the subject, [illegible] was to say what the reforms should be, [illegible] accounts and estimates.—Lord C. PAGET said [illegible] intended to carry out many of the recom[illegible] of the Commissioners. With regard to the im[illegible] of accounts, forms, on the double entry [illegible] been prepared, and it was proposed to submit the [illegible] to an officer at Somerset House, so that [illegible] the cost of each ship should be earlier laid before Parliament. The Admiralty were also in correspondence with the Treasury with a view to promote the greater [illegible] of the service by uniting under one roof the two [illegible] of the Admiralty now at Whitehall and Somerset House. [illegible] hoped that the motion would [illegible]. After some remarks by Admiral WALCOTT, Sir H. [illegible], Capt. JERVIS, and Mr. WHITBREAD, Mr. [illegible] said he was not satisfied with the answers of Lord C. Paget, and pointed out charges in the report which he thought required explanation. Better accounts, he said, would not enable the Admiralty to build ships at less cost. With a well organised system there might be a saving of [illegible] in our naval expenditure. He expressed doubts whether our iron-cased ships were of the right form.—Sir J. PAKINGTON thought that Mr. Lindsay's statement as to the cost of building men-of-war in the dockyards was calculated to alarm the public. He considered the answers of Lord C. Paget to be satisfactory. The motion was then withdrawn. *Austria and Italy.*—In answer to Mr GRIFFITH, Lord J. RUSSELL said the Government had no information as to the alleged removal of the [illegible] troops from Venetia, and declined to enter upon a discussion of the questions between Austria and Hungary. *Case of Captain Macdonald.*—In reply to Mr. SCULLY, Lord PALMERSTON stated that a further despatch had been received respecting the case of Captain Macdonald, and that he had no objection to lay upon the table a copy of the despatch and of the answer of her Majesty's Government as soon as the latter had reached Berlin.—The House went into a *Committee of Supply*, when, on the motion of Mr. PEEL, 7,225,500*l.* was voted to pay off and discharge *Exchequer Bills Outstanding.* The Committee then resumed the consideration of the *Navy Estimates*, commencing with vote No. 10, which Mr. LINDSAY proposed to amend by reducing the sum of 949,371*l.*, for timber, by [illegible].—Lord C. PAGET opposed the amendment, on the ground that the House was in a manner pledged to the vote, as the Government had entered into contracts for the purchase of timber. After a long and interesting discussion, this amendment was negatived by 66 to 30. Mr. LINDSAY then moved that the Chairman report progress, in order that [illegible] of the contracts for timber might be laid before the Committee. Some information was given regarding these contracts, and the motion to report progress was negatived.—Mr. LINDSAY then moved to reduce the sum of 171,747*l.* for metals, &c., by [illegible]. In the debate to which this amendment gave rise the comparative merits and price of the Admiralty anchors and Trotman's anchors were discussed. The amendment was negatived by 76 to 31.—Mr. LINDSAY then moved to omit the sum of 100,000*l.* for iron for the iron-cased ship to be built at Chatham, objecting to the building of iron ships in Government yards. This amendment was, after much discussion, negatived by 66 to 31.—The CHAIRMAN was then ordered to report progress.—In a Committee of Ways and Means, on the motion of Mr. PEEL, a sum of 10,000,000*l.* was voted out of the Consolidated Fund. Certain Bills were forwarded a stage.

FRIDAY.—At 4 o'clock, there being only 34 members present, the House stood adjourned.

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 91⅛ to ¼ for Money, and 91¼ to ⅜ for the 6th of June; Bank Stock, 233½ to 232; Three per Cents. Reduced, 89⅞ to ½; New Three per Cents., 89⅞ to ¾; Thirty Years' Annuities, 1885, 15¼; India Stock, 225½; Ditto Five per Cent. Stock, 101½ to ¾; Five per Cent. Enfaced Rupee Paper, 93½; Ditto Five and a Half per Cent., 100; Exchequer Bills, 6s. dis.—FOREIGN: Brazilian Five per Cents., 1839 and 1859, 97¼; Belgian Four and a Half per Cents., 97; Dutch Four per Cent. Certificates, 99¼; Mexican Three per Cents., for Acct., 22¾; Russian Four and a Half per Cents, 91¼; Spanish Three per Cents., 51; Ditto for Acct., 51½; Committee's Certificates, 5½; Turkish Six per Cents., for Acct., 71⅞ to ⅞; Ditto, 1858, for Acct., 56⅞ to 57.

Gazette of the Week.

TUESDAY.—BANKRUPTS.—W. H. BLACKMORE, Dean Street, Soho Square, Plumber, Painter, and Glazier—W. FOSTER, Manchester, Cloth Cap Manufacturer—[illegible], Mount Radford, St. Leonard, and Exeter, [illegible] Maker—J. [illegible], Deptford, Licensed Victualler—[illegible], Manchester, Rent and Rag Dealer—L. MINSHULL, [illegible], Worcestershire, Banker—W. SERJEANT, Kingston-[illegible] and Contractor—S. S. SHORT, Stonehouse, Middlesex, [illegible] Manufacturer—[illegible] STUART, Portsmouth, Draper—N. TUCKER, [illegible], Cattle Salesman—J. WILSON, Liverpool, Boot and Shoemaker.

BANKRUPTCY ANNULLED.—W. READING, Mortimer Street, [illegible] Builder—T. KETAKES, late of Swansea, Glamorgan[illegible]—[illegible] H. WOOL, Manchester, Brewer.

SCOTCH SEQUESTRATIONS.—A. FULTON, Glasgow, Ironforger—J. [illegible] Farmer—G. PATERSON, Glasgow, Grocer—[illegible] Merchant.

FRIDAY.—BANKRUPTS.—[illegible], Manchester, Cotton Spinner and [illegible]—[illegible], Nottingham, Bleacher—J. COOK and H. B. [illegible] Wine and Spirit Merchants—J. CROSSLEY, [illegible], Yorkshire, Cotton Manufacturer and [illegible], Cutler—W. M'CHERRY and [illegible], London Bridge, City, Provision Agents—J. W. [illegible], Printer, Bookseller, and [illegible], Shirt and Collar Manufacturer—[illegible], Licensed Victualler—[illegible], Leather Cutter—E. W. THOMAS, [illegible], City, [illegible] and Commission Agent—G. THOMPSON, [illegible].

SCOTCH [illegible]—H. VAN GELDER, [illegible], City, Merchant.

BANKRUPTCY ANNULLED.—W. CRABB and J. C. CRABB, Lees Hall, Oldham, and Ashenhurst Mill, Blackley, Lancashire, Cotton Manufacturers.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,634,940	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion	10,667,281
		Silver Bullion	[illegible]
	£25,634,940		£25,634,940

BANKING DEPARTMENT.

Proprietors Capital	£14,553,000	Government Securities (including Dead Weight Annuity)	£10,180,920
Rest	3,771,990	Other Securities	19,722,847
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	6,906,189	Notes	5,820,380
Other Deposits	11,201,212	Gold and Silver Coin	836,161
Seven day and other bills	626,844		
	£36,559,326		£36,559,326

23d day of May, 1861. M. MARSHALL, Chief Cashier.

Metropolis and its Vicinity.

INTERNATIONAL EXHIBITION OF 1862.—A few days since a summons was taken out against Mr. John Kelk, the builder, for having commenced the works of the Exhibition on the north side of Cromwell Road, South Kensington, without giving two days' notice to Mr. T. L. Donaldson, the district surveyor, as required by the Metropolitan Building Act. Mr. Donaldson contended that the building contravened the provisions of the Act, which provides that no building shall be constructed beyond a certain extent (216,000 cubic feet) without party walls and iron doors. At the adjourned hearing on Tuesday, at the Hammersmith Police Court, Mr. Finch, the solicitor of the defendant, produced a communication from the superintending architect of the Metropolitan Board of Works, dated the 17th inst., addressed to the Commissioners of the Exhibition, stating that the board had approved of their plans for the construction of the building, and also informing them that on two sets of plans being furnished one of them would be sent to the district surveyor. He also contended that the building being for a temporary purpose and erected under Royal Charter was exempt from the operation of the Act. Mr. Donaldson held that the Act applied to buildings of a temporary character, as well as to permanent buildings, and that the Metropolitan Board did not supersede the jurisdiction of the district surveyor. After a long argument the summons was adjourned to Wednesday next to give time for the transmission of the plans to the district surveyor, and also to allow the magistrate to consider the provisions of the Royal Charter. Her Majesty's Commissioners have appointed the following committees in connection with the Classes relating to railway plant, manufacturing machines and tools, machinery in general, civil engineering, architectural and building contrivances:—The Duke of Sutherland; the Earl of Caithness; John Anderson, Esq.; Frederick J. Bramwell, Esq.; Joseph Cubitt, Esq.; James Fenton, Esq.; John Fernie, Esq.; Captain Douglas Galton, R.E.; T. E. Harrison, Esq.; G. W. Hemans, Esq.; Sampson Lloyd, Esq.; J. R. M'Clean, Esq.; H. Maudslay, Esq.; John Penn, Esq.; and John Scott Russell, Esq. The Commissioners have appointed the following committee in connection with Military Engineering, Armour, Accoutrements, Ordnance, and Small Arms:—Major-General the Hon. James Lindsay, M.P.; Colonel Shafto Adair, Suffolk Militia Artillery; Captain Tyler, R.E.; Major Porter, R.E.; Lieut.-Colonel A. Lane Fox, Grenadier Guards; and Captain A. C. Tupper, Brecknockshire Rifle Militia. The Commissioners have also appointed the following committee in connection with Philosophical Instruments and Processes depending on their use:—Sir David Brewster, F.R.S.; Professor B. C. Brodie, F.R.S.; Mr. Charles Brooke, F.R.S.; Dr. Carpenter, F.R.S.; Dr. Frankland, F.R.S.; Mr. Francis Galton, F.R.S.; Mr. J. P. Garriet, F.R.S.; Professor Tyndall, F.R.S.; and Professor Wheatstone, F.R.S.

THE STREET RAILWAYS.—On Saturday a memorial bearing several thousand signatures of persons using the Notting Hill and Marble Arch tramway was presented to the Commissioners of Roads, praying them to grant a continuation of Mr. Train's line to Shepherd's Bush, with a double line of rails. It appears that Mr. Prowse, the chief surveyor of roads north of the Thames, has been engaged for several days past with his assistants in making a return of the numbers availing themselves of the tramways in Victoria Street and Uxbridge Road. The number of passengers carried by one car on week days, and two on Sundays, on the Victoria Street line, since its opening on the 15th ult. amounted to 31,500. On the Uxbridge Road and Marble Arch line the two cars running on week days, and the three, and occasionally four, on Sundays, have yielded a return of 120*l.* per week, which, at 2*d.* per head, makes the number of passengers amount weekly to 14,400. The traffic on the latter line has so much increased that an extra carriage has been put on for permanent running. Lines have been commenced on the Surrey side from Kennington Park to Westminster Bridge, in the Southgate Road, Hackney, and King's Road, Islington.

THE NEW RIVER.—The northern suburbs will soon lose the sight of this stream, that portion of it from Colebrooke Row, close to the cottage once the residence of Charles Lamb, down to the New River Head, being about to be filled in. The water will for the future be conveyed through iron pipes, about 5 feet in diameter, and sunk about 8 feet below the level of the present bank. As soon as the piping is completed, the course of the stream will be diverted into it, and the bed of the river filled up. The New River Company are also removing their old reservoirs and building on the sites they occupied.

THE GREAT EASTERN arrived at New York at 11.30 A.M. on the 11th inst., after a passage of 9 days 15½ hours from Milford Haven.—The Great Ship Company held a meeting on Friday for the purpose of considering the present state of the company's affairs. The report of the directors stated that the decision in the Court of Common Pleas in favour of Mr. Russell had thrown an additional liability on the company of about 21,000*l.*, and that great loss was sustained in passengers by the uncertainty created by the writ of execution. The directors had paid 8596*l.* in cash, and had given a mortgage to Mr. Russell for 11,340*l.*, together with other mortgages amounting in the whole to 35,000*l.* Under these circumstances the directors proposed to raise the sum of 35,000*l.* on debentures at 12 months, at 10 per cent.; the security to be a first mortgage on the vessel. If the money was not raised within a month after the return of the ship to Liverpool, she would be sold by the mortgagees. 1200 Mormons had offered 3*l.* per head for a passage, but the directors thought it a low offer, and declined it. The Chairman, in reply to some questions, said that it was impossible to say what would be the result of the voyage to America. If a sale were effected, it would be conditional on the approval of the proprietors. Of the 35,000*l.* required, upwards of 26,000*l.* was subscribed during the meeting, and about 2000*l.* or 3000*l.* more was promised in the room.

ARRIVAL OF M. BLONDIN.—Among the passengers by the Bremen, which arrived at Cowes on Thursday from New York, was M. Blondin, the celebrated rope-walker of the Falls of Niagara, who, after a short stay in Southampton, left by train for London, for the purpose of completing the arrangements at the Crystal Palace for his first ascent on Saturday the 1st of June.

THE NEW FLORAL HALL, COVENT GARDEN.—On Wednesday morning the Floral Hall, adjacent to Covent Garden Theatre, was opened for the use of the public, with a collection of flowers of every kind, all of which are marked for sale in plain figures. Entering from Bow Street, tables are laid out with open spaces at regular distances, so that visitors may walk about without interruption. In the centre is a large circular bed, filled with mignonette and stocks.

THE PUBLIC HEALTH.—The Registrar-General's Weekly Return states that the deaths in London in the week that ended Saturday, May 18, were 1219. The average number in the corresponding weeks of the 10 previous years, 1851-60, corrected for increase of population, was 1171. The present return is therefore 48 below the average. During the week the births of 1013 boys and 922 girls, in all 1935 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1622.

Provincial.

ARUNDEL.—Mr. John King, bricklayer and farmer, died on the 3d inst., after a week of severe illness, in his 52d year. Many of our readers doubtless remember the brutal attack made on him by a man named Charles Puryer, a native of Pulborough, five years since, when Mr. King was frightfully cut and wounded. It was thought that he could not possibly survive, and indeed he never but partially recovered from the wounds he received. The next morning after the attack the man Puryer was found asleep in the cabin of a barge near Hardham Mill, having in his possession a clasp knife, covered with fresh blood, the point of the blade being broken. It was considered to have been recently done, but Puryer positively declared that the blade was broken before the attack. Since Mr. King's death his head has been examined by a surgeon, who extracted from it the top of a knife about half an inch in length, and quite black. The deceased must have suffered intensely at times from its effects.

CAMBRIDGE.—An extraordinary Congregation was held on Tuesday for granting honorary degrees and for the public recitation of the University prizes. The Vice-Chancellor presided in the absence of the Prince Consort, the Chancellor. The Prince of Wales was present, and was received with the most uproarious cheering by the undergraduates. The honorary degree of D.D. was conferred on Dr. Gell, Bishop designate of Madras, and the honorary degree of LL.D. upon the Earl of Elgin, Lord Stratford de Redcliffe, Sir W. R. Hamilton, Sir Roderick Murchison, Major-General Sabine, Dr. Robinson of Dublin, Mr. Motley, the historian of the Dutch Republic, and Mr. Grote the historian of Greece. This ceremony was followed by the recitation of the prizes, the most interesting of which was, of course, the English poem, "The Prince of Wales at the Tomb of Washington," by Mr. Myers. In the evening the Vice-Chancellor entertained the Prince of Wales and a large party of distinguished visitors at Magdalene College Lodge.—The death of the Duke of Bedford has rendered vacant the High Stewardship of the borough of Cambridge, to which his Grace succeeded on the death of Lord Macaulay. The appointment is in the gift of the Town Council, who are said to be anxious to induce Lord Palmerston to fill the post. His Lordship graduated M.A. in 1806, and for some time represented the University in Parliament. The other names men-

tioned are those of Lord Broughton, M.A. 1808; Lord Carrington, M.A. 1815; Lord Monteagle, M.A. 1833; Lord Stratheden, M.A. 1846; and Mr. Monckton Milnes, M.A. 1831.

CHENIES.—The funeral of the late Duke of Bedford took place on Wednesday in the family vault in the church of this parish. The body was removed from Woburn Abbey on Tuesday evening, escorted by a large number of the tenants on the duke's estates in Bedfordshire, and was deposited in the library of the rectory until 1 o'clock on Wednesday, the hour fixed for the funeral. Lord John Russell officiated as chief mourner, and was attended by the Rev. Lord Wriothesley Russell, Lords Edward, Charles, Francis, and Alexander Russell, Lord James Butler, the Marquis of Abercorn, Lord Foley, the Earl of Strafford, the Hon. F. Byng, the Earl of Harrington, Mr. Sandford, Mr. F. H. Russell, M.P., Lord Foley, the Hon. Edward Russell, Messrs. John, George, and William Russell, the Mayor and Aldermen of Bedford, and several personal friends. The service was read by the Rev. Mr. Cumberlye, Vicar of Woburn.

CLIFTON.—The census returns for this town show that the population consists of 13,603 females and only 7772 males, so that in 100 persons there are 64 females and only 36 males.

HARWICH.—About 50 years ago, when it was determined to erect a redoubt in this port, large quantities of stone were dredged up and carried away from the neighbourhood of the harbour—a proceeding which had the unexpected result of removing the sea's natural barrier, and leaving the sand and shingle to be driven along the beach and deposited at the entrance of the harbour. Some years since the Government determined to carry out a jetty for 800 yards to stop this process, but only 500 yards were executed, and it has now become manifest that the mischief is increasing. Captain Washington, hydrographer to the Admiralty, reports that a large portion of Landguard east beach, including two martello towers, built in 1808, and a part of a graveyard, has been swept away, while Landguard Point has advanced 700 yards; and that the channel, in which there was a depth of 42 feet at low water, is now a dry beach 6 feet above high water, being a filling up of 60 feet perpendicular—a rate of increase unknown, he believes, in any other part of the British isles. The extension of Landguard Point, which has averaged 12 yards a-year for many years, threatens in short to block up the entrance to this important harbour, which is reduced now to a width of little more than a cable's length. Harwich would be of great use in case of another North Sea war; it is the only sheltered port between Sheerness and the Humber in which a coal depot could be safely moored; it is the entrance to the fast increasing port of Ipswich; and it is also an important strategical point in the defence of the country, the north-eastern approach to the capital being one of the least defended, and the most open to attack. Captain Washington considers that the extension of the jetty would no longer be efficacious, but he thinks a groyne in a different spot, about 300 yards in extent, and not costing more than 10,000*l.* or 12,000*l.*, would effect the object in view. The subject has been referred by the Lords of the Admiralty to the Treasury for consideration.

RICHMOND.—The Bishop of Ripon has ordered the removal of a tombstone placed on the grave of the late Mr. W. Priestman, in the parish churchyard of this town. The stone consisted of an ornamental cross, with a crown of thorns encircling the monogram "I.H.S." The stem of the cross divided the front of the stone into two compartments, on the left side of which was the following inscription:—"Of your charity pray for the repose of the soul of William Priestman, who departed this life September 6th, 1860, aged 62 years. R. I. P. Eternal rest give to him, O Lord." Running down the stem of the cross are the following words:—"*Miserere me, Deus.*" The bishop's interference was caused by the purgatorial doctrine implied in the inscription, which is contrary to the Articles of the Church of England. After the stone had been up for about a week, the rector received an order from the Bishop directing that it be at once removed. This having been notified to the family of Mr. Priestman, they declined to comply with the Bishop's order. The church authorities thereupon directed the immediate removal of the stone, which was carried out on Saturday week. No such occurrence could have taken place in a public cemetery, but by the common law of the land the rector has the freehold in the churchyard.

ROMSEY.—Lord Palmerston is about to build a chapel at his own expense at Lee, on his lordship's estate in this parish. Some parts of the estate are three miles from the parish church, and the walk in winter is not only a long but a very dirty one. His lordship also intends to give the ground, and to build a cottage near the chapel for a resident schoolmistress.

SALFORD.—At a recent sitting of the County Court a person who passed as Thomas Green, and was employed as a mill hand in this town, was sued on a judgment summons for a debt of 1*l.* 14*s.* 6*d.*, being the balance of a tailor's account for a suit of clothes. The result was a committal for 20 days to the New Bailey, where it was discovered that, though attired as a man, the prisoner was of the female sex. She was subsequently liberated, a portion of the debt having been paid. It has since been ascertained that the female, when very young, was in the service of a lady who dressed her up as a page and took her abroad with her. On returning to this country she continued to dress in male attire, and was in the service of another lady 10 or 12 years. She is now between 30 and 40 years of age, and has for some time been married to a female in Salford. The peculiarity of the affair is increased by the fact that although she has on two previous occasions been committed to prison she has continued to preserve her disguise.

SALISBURY.—The Bishop of Salisbury has addressed a letter to the Archdeacon of Dorset, stating that he has informed Dr. Rowland Williams, whose name is prefixed to one of the essays in the book entitled "Essays and Reviews," that he has determined to institute legal proceedings against him in the Court of Arches. His lordship says, that as he believes on the very best advice that the writer of this essay has brought himself within the reach of the ecclesiastical law, he cannot escape from the conclusion that he is bound to endeavour to show that the Church of England does protect her members against such false teaching as is contained in different parts of Dr. Rowland Williams's essay.

SOUTHAMPTON.—Workmen are now employed in digging the foundation for a statue to Dr. Isaac Watts in this town. Lord Palmerston has been invited to attend the inauguration of the statue.

WAKEFIELD.—The fine of 500*l.* on Mr. J. L. Fernandes, for contempt of Court, at the last York assizes, has been paid, a Queen's messenger having visited Wakefield and obtained the money.

Ireland.

PEOPLE'S PARK FOR DUBLIN.—The *Freeman's Journal* says that Mr. Benjamin Lee Guinness, the munificent brewer of Dublin, who recently restored St. Patrick's Cathedral at his own expense, has become the purchaser of an extensive piece of ground, which he intends to present to the citizens for the purpose of a park and cricket ground. It also states that he intends making many improvements in the gardens for the benefit of the people.

THE RELICS OF THE DEFENDERS OF DERRY.—The local journals are indignant at an act of sacrilege that has been committed at Derry Cathedral. In order to make room for the introduction of hot-air flues and atmospheric air under the new flooring of the church, it was deemed necessary to excavate the ground to a depth of 3 feet. In carrying out this work, however, it would seem that no provision was made for collecting the remains of the defenders of Derry in the siege of 1688-9, many of whom were buried within the cathedral. About 150 skulls, with the principal bones, have been turned up by the excavators, wheeled into the grave-yard, and there, it is stated, left in a heap to be carried away for ships' ballast. The Apprentice boys held a meeting last week, and adopted a series of resolutions expressing their indignation at the proceeding, and calling upon the churchwardens to take prompt measures for reinterring the remains within the walls of the cathedral.

CONVOCATION IN IRELAND.—A memorial signed by the bishops of Down and Connor on behalf of the diocesan committee of Down, Connor, and Dromore, has been addressed to the Lord Primate, stating that the province of Canterbury has been permitted by the Crown to take legislative action on the proposed alteration of the 29th canon, and requesting his Grace, in conjunction with the Archbishop of Dublin, to take steps for the purpose of making the voice of the Irish provinces of the United Church be heard in Convocation. The Lord Primate, in reply, states that when it was announced in Parliament that the royal license had been granted to the Convocation of Canterbury to repeal or alter the 29th canon, he had consulted Sir Fitzroy Kelly, Sir Hugh Cairns, Mr. Archibald J. Stephens, and Mr. Jebb on the course which he ought to recommend to the Irish provinces of the United Church. The opinion of those eminent lawyers was that in the event of the repeal or alteration of the canon by the Convocations of York and Canterbury, it would not be necessary that any steps should be taken with a view to preserve uniformity of discipline throughout the United Church, inasmuch as the repeal or alteration of that canon, even if sanctioned by her Majesty, would be inoperative, because the rubric prefixed to the order of baptism in the Book of Common Prayer (which is a statutable provision, and consequently can only be altered with the consent of the Legislature) requires that every child shall have three godparents, who, according to the terms employed in the rubric, must be persons other than the natural parents. The Primate therefore did not see the necessity for acting on the prayer of the memorialists.

Scotland.

THE YELVERTON CASE.—In the outer house of the Court of Session on the 14th inst., before Lord Ardmillan, the conjoined actions "Yelverton v. Yelverton" came on. The proof in chief for Mrs. Yelverton was closed on the 6th of April; that on the opposite side was appointed to be reported on the 29th of May, but a further prorogation has been applied for. Mr. Miller moved that before the proof of Major Yelverton is closed, the appeals taken in the course of the proof on the other side should be disposed of by the Lord Ordinary. The motion was oppose[illegible] Fraser, and his Lordship postponed [illegible] the question.

THE DUNDEE MURDER.—Alexander [illegible] convict under sentence of death in [illegible] for the murder of his wife, has had his [illegible] muted to penal servitude for life. [illegible] wife was a most profligate and abandoned [illegible] that it was in consequence of her [illegible] that he committed the violence which [illegible] death.

Railways.

ACCIDENT AT THE METROPOLITAN [illegible] accident of an alarming character [illegible] morning at the works which are going [illegible] Road, St. Pancras, for the formation [illegible] or underground, railway. About [illegible] morning the earth on each side of the [illegible] has been excavated from kerb to [illegible] Street and Wilstead Street was observed [illegible] way, and as the earth continued [illegible] along the foot pavement was stopped [illegible] were warned of the danger. About [illegible] of the earth in front of the pavement [illegible] the pavement itself, and the walls [illegible] of eight houses, fell in, shaking [illegible] and causing the inhabitants to [illegible] The whole of the gas, water, telegraph [illegible] fell in, and were destroyed, and the [illegible] for supporting the earth on either [illegible] half. Workmen were immediately [illegible] up the walls and houses, and to stop the [illegible] pipes, for both being full on, great danger [illegible] apprehended. The forecourts and the [illegible] south side are very much cracked, and [illegible] state.

Law.

HOUSE OF LORDS—APPEALS.—*The Court of* [illegible] *Court of Session.—General Stuart v.* [illegible] *Colonel Stuart v. Marquis of Bute.*—In this case [illegible] appeals, two from the Court of Session [illegible] from the Court of Chancery in England. The [illegible] volved was as to the guardianship of the Marquis [illegible] minor. The marquis is the son of the [illegible] second wife, the Lady Sophia Frederica [illegible] second daughter of the first Marquis of Hastings [illegible] at Mountstuart House, in the island of Bute [illegible] September, 1847. His baptism was [illegible] of the church of England. His father was [illegible] in England; and, in addition to the family [illegible] he kept up establishments at Cardiff Castle [illegible] at Luton Hoo, in Bedfordshire; at Keithing [illegible] and at Stuartfield Lodge, Durham. He died [illegible] 1848, at Cardiff Castle, and was buried at Kirtling [illegible] will was in the English form, and [illegible] will. As it did not contain any [illegible] ship of the infant marquis [illegible] family descended, a petition was presented [illegible] Chancery, and his mother, the marchioness [illegible] his guardian. In 1848 Lord James Stuart [illegible] cutors of the will, obtained in Scotland [illegible] dative to the said infant, but he never [illegible] person of the marquis. The marchioness [illegible] 1859, and by her will requested that [illegible] would appoint General Stuart, the appellant [illegible] Gilbert, Bart. and Lady Elizabeth Moore [illegible] guardians to her son. Sir Francis Gilbert [illegible] kingdom, General Stuart and Lady Elizabeth [illegible] appointed guardians in February, 1[illegible] with the latter at Mountstuart House [illegible] little time; but arrangements having [illegible] should reside with General Stuart at [illegible] he was brought to London in March, 1[illegible] after some correspondence Lady Elizabeth [illegible] 16, 1860, left London, taking the Marquis [illegible] proceeded to Edinburgh. On April [illegible] by the Vice-Chancellor for the education [illegible] residence of the Marquis, to which [illegible] consented, by which he was to reside [illegible] until August, 1860, when he was to be [illegible] afterwards to a public school, and necessary [illegible] lishments were to be kept up for him [illegible] and Mountstuart House. It appeared [illegible] which the Marquis was entitled [illegible] in Wales, Bedfordshire, Herts, [illegible] Durham, the proceeds of which were [illegible] and of estates in Scotland which [illegible] making together 93,000*l* a year. [illegible] was ordered to be set aside for his [illegible] minority. General Stuart having in vain [illegible] the marquis from Lady Elizabeth Moore, [illegible] the Court of Chancery, ordering her to [illegible] discharging her from the guardianship [illegible] 1860, a petition was presented by General [illegible] of Session, praying for an order on Lady [illegible] deliver up the marquis. The appellant [illegible] had succeeded his late father, Lord [illegible] dative in Scotland of the Marquis, appe[illegible] the petition to the Court of Session [illegible] the proceedings, by which Lady Elizabeth [illegible] custody of the marquis for four months [illegible] having been made to transfer him to the [illegible] Galloway pending the decision of the [illegible] ladyship took the marquis to Glasgow, and [illegible] avoid this arrangement, to which, however, [illegible] assented, and she surrendered him on [illegible] his tutor-at law in Scotland, who committed [illegible] of the Earl of Galloway. On the 7th February [illegible] of Session made an interlocutor, by which [illegible] that the Scotch guardian had the exclusive [illegible] for the custody, residence, and education [illegible] prohibited his being removed on any [illegible] whatever from the jurisdiction of that [illegible] the Court of Chancery and the Court [illegible] conflict, and the matter to be decided was [illegible] tion should prevail. The present appeal [illegible] The Lord Chancellor, in giving judgment [illegible] judicial jurisdiction Scotland and England [illegible] under the same crown, and under the [illegible] one united Legislature, were to be considered [illegible] pendent foreign countries, unconnected with [illegible] This case was of a judicial nature, although [illegible] parties who were plaintiffs and defendants [illegible]

[illegible] in the reign of Queen [illegible] ... question of the appellant was "[illegible]" ... Seal had authority [illegible] ... [illegible] ... was clearly limited to the [illegible]. Cardinal Wolsey was im[illegible] ... Chancellor of England, ... he conceived that the [illegible] ... [illegible] Court of Chancery was not [illegible] than an interlocutor of the [illegible]. Nor, as far as jurisdiction was [illegible] slightest difference that the ward [illegible] ... a peer or a peasant. He must [illegible] ... the interlocutor of July 20, 1860, [illegible] ... the Court of Session had [illegible] ... the 24th July, 1860, must be reversed. [illegible] ... the Court of Chancery which [illegible] ... were to be vacated. It remained [illegible] ... Major-General Stuart should be continued as [illegible] ... Lord Cranworth, Lord Wensleydale, Lord Chelmsford, and Lord Kingsdown concurred. The interlocutors [illegible] ... were reversed accordingly, the costs of [illegible] the infant's estate.

Obituary.

THE HON. AND REV. HENRY COCKAYNE CUST died on Sunday [illegible] at the Cloisters at St. George's, Windsor, in [illegible] year. He was brother of the late Lord Brownlow, and [illegible] Peregrine Cust. He was appointed Canon [illegible] in 1813, and has consequently [illegible] family living of [illegible] ... [illegible] Lady Anne Maria Needham, sister to the [illegible] ... secretary of the West India [illegible].

LADY ELIZABETH TOLLEMACHE died on Monday at Brighton [illegible]. She was born in 1778, and was the third [illegible] Earl of Aldborough, by the daughter of [illegible] Hamilton, eldest son of Lord [illegible] ... Rear-Admiral John Richard Delap Hal[illegible] ... Lady Jane Tollemache ... [illegible] Earl of Dysart ... [illegible] Palmerston, and now Chief Commissioner of [illegible].

LADY ST. LEONARDS died on the 13th inst. at Boyle Farm, [illegible] in the 80th inst. She was the only child of Mr. John Knapp, and married, in 1808, Mr. Edward Burten[illegible] ... been called to the bar by the Society of [illegible] ... who became King's Counsel ... in 1829, Lord Chancellor of Ireland, [illegible] ... Lord St. Leonards.

[illegible] F.R.S., one of the founders of the British [illegible] a few days since, at the advanced age of [illegible] ... been much before the public [illegible] ... he had retired from the [illegible] in the scientific world. His [illegible] more than half a century ago, on [illegible] ... the chalk and oolite in the [illegible] ... published at an early period in [illegible] ... raised him to an European [illegible] ... elected President of the Geological Society ... President who introduced the prac[illegible] ... of the general progress of the [illegible] presented by the Society with the [illegible] services. He was a member of [illegible] other societies, and contributed several [illegible] history of geology to the *Quarterly Review* [illegible].

THE REV. [illegible] HENSLOW, Rector of Hitcham, and Professor of Botany in the University of Cambridge, died on the [illegible] at Hitcham Rectory, Suffolk, in his 65th year.

THE REV. DR. CARDWELL, Principal of St. Alban's Hall, Oxford, died on the 23d inst., after an illness of several weeks' duration. He took his Bachelor's degree in 1809, and afterwards became Fellow of Brasenose. He was elected to the [illegible] ... author of se[illegible] ... be enumerated an edition [illegible] ... Coinage of the Gree[illegible] ... Jud.," "The Two [illegible] ... "History of Conferences on the Prayer Book," [illegible].

MR. [illegible] ... Oxford, [illegible] a few days since at [illegible] ... year. He was for 13 years private secretary to the late Viscount Melville, when First Lord of the Admiralty, and was subsequently Under-Secretary for the Colonial Department.

Miscellaneous.

EMIGRATION. Some surprise may be excited by the fact made apparent by an official return that in the last 15 years 3,501,062 persons have emigrated from the United Kingdom. This prodigious exodus has in great part taken three directions,—the North American colonies, the United States, and the Australian colonies. But an analysis shows that the United States have, notwithstanding the powerful allurements of the antipodean gold discoveries, obtained by far the lion's share of our surplus strength. Thus, every 100 emigrants selected their future homes in the following proportions:—

Year.	British America.	United States	Australasia	Other places
1846	34	63	2	1
1847	42	55	2	1
1848	13	76	9	2
1849	14	73	11	2
1850	12	79	6	3
1851	13	[illegible]	6	1
1852	9	[illegible]	24	1
1853	10	79	10	1
1854	14	60	25	1
1855	10	[illegible]	[illegible]	[illegible]
1856	9	63	26	2
1857	10	60	20	1
1858	8	53	33	5
1859	6	58	26	10
1860	7	[illegible]	20	6

The great preponderance obtained by the United States was derived from the Irish emigration, through religious and political influences, and, subsequently, family ties. What influence the present disturbances may exert upon the Republican territory as an emigration field it is of course impossible to predict, but they can hardly exercise a favourable effect. Canadian journals are evidently of this opinion, and are doing their utmost to divert the tide of emigration to their own shores. The advocates of emigration to Canada have, however, it will be seen, met with singular ill success, for it is now only one-fourth as popular as it was 15 years since, the emigrants to British America having numbered 43,439 in 1846, as compared with 9,786 in 1860. This, no doubt, is due to the superior attractions now presented by Australia, New Zealand, the Cape, and other emigration fields.—*Times.*

BIRTHS.—On the 18th inst., at 45, Queen's Gate Terrace, the Lady AUGUSTA FORBES, of a daughter—22d inst., at 13, [illegible] Square, the Lady ELIZABETH CUST, of a daughter—20th inst., at 7, Ainslie Place, Edinburgh, the Lady CHARLOTTE [illegible], of a daughter ... [illegible] ... wife of Sir Bernard Burke, Ulster, of a son—19th inst. ... [illegible].

MARRIAGES.—On the 21st inst., at St. George's, Hanover Square, GRANVILLE LEVESON GOWER, Esq., of [illegible] Park, Surrey, to the Hon. SOPHIA LEIGH, youngest daughter of the late [illegible] ... [illegible] ... General WALPOLE ... HENRY, son of the late Rev. H. H. [illegible] ... Thomas Elrington, D.D., Lord Bishop of Leighlin and Ferns, to MARY M. PACKENHAM MARSH, second daughter of Edward Marsh, Esq., of [illegible] and Ivy Church, county Kent ... [illegible] ... GEORGE ELTON, of Nailsea, Somerset, to [illegible], youngest daughter of the late Rev. J. J. Goodenough, D.D., formerly Fellow of New College, and Rector of Broughton Poggs, Oxfordshire—14th inst., at St. Barnabas, Kensington, the Rev. VERE BROUGHTON SMYTH, Rector of [illegible] ... BALLOW, Bart.—20th inst., at St. [illegible], Captain JAMES MENZIES CLAYHILLS, 7th Royal Fusiliers, second son of G. D. Clayhills Henderson, Esq., of [illegible], Perthshire, to EUGENIA C., eldest daughter of the late Vice-Admiral WATTS, C.B., of Alma House, [illegible]—[illegible] inst., in the Church of the Holy Trinity, Upper Chelsea, the Rev. REYNOLDS HOLE, Vicar of Caunton, Notts, to CAROLINE, eldest daughter of the late JOHN FRANCKLIN, Esq. of Gonalston.

DEATHS.—On the 16th inst., at 2, Belgrave Square, Monkstown, the Lady JANET, daughter of the 21st Earl of Mar, and wife of EDWARD WILMOT CHETWODE, Esq., of Woodbrook, Portarlington, aged 59—18th inst., at Valetta, Malta, RICHARD WELLESLEY, Esq., of consumption, eldest son of the late Richard Wellesley, Esq., and grandson of Richard, Marquis Wellesley, aged [illegible]—13th inst., at Brighton, LADY ELIZABETH TOLLEMACHE, widow of the late Admiral Tollemache—16th inst., at his seat, Scottowe Hall, Norfolk, Sir THOMAS HENRY ESTRIDGE DURRANT, Bart., aged [illegible]—18th inst., at 14, [illegible] Square, LADY LEEKE, wife of Vice-Admiral Sir Henry Leeke, K.C.B., M.P.—16th inst., at Knightsbridge, AMELIA, Lady SMITH, wife of HENRY PORNSETT, Esq., and relict of Major General Sir Sigismund Smith, K.C.H.—18th inst., at Lewes, Sussex, ARTHUR RENNIE [illegible], Esq., youngest son of Sir John Briggs, of Brighton, aged 51—[illegible] inst., at 77, South Audley Street, SARAH, widow of Lieut.-General GEORGE GUY CARLETON L'ESTRANGE—[illegible], at Tobago, EDWARD DYER SANDERSON, Esq., Chief Justice of that island, and one of the Judges of the Circuit Court of Appeal in the Windward Islands, aged 51—19th inst., at Pembroke Dock, deeply regretted, Colonel ST. JOHN BROWNE, Royal Artillery, aged 45—11th inst., EDWARD MORGAN, Esq., of Golden Grove, Flintshire, Lieut.-Col. of the Royal Merioneth Militia, aged 68—[illegible] inst., at [illegible] Hill, Wimbledon, JOHN HENEAGE [illegible], Esq., [illegible] Military Secretary, Commander-in-Chief's Office, Horse Guards, third son of the late [illegible], Esq., M.P., aged 61—[illegible] inst., at Douglas, Isle of Man, [illegible], Esq., Lieutenant of the Royal Marines, and last surviving officer of Lord Nelson's flag-ship Victory, aged [illegible]—[illegible] inst., at Little-grove, East Barnet, Hertfordshire, FREDERICK CASS, Esq., a magistrate and deputy-lieutenant for that county, aged 7[illegible]—14th inst., at Barton-under-Needwood, the Rev. JOHN [illegible], M.A., aged [illegible]—[illegible] inst., at the Parsonage, Wilton, Yorkshire, the Rev. HENRY [illegible], aged 64—16th inst., at [illegible], in the county of Northampton, the Rev. JAMES W[illegible], M.A., aged [illegible]—[illegible] inst., at the Rectory, [illegible], Essex, the Rev. GEORGE PRICE, M.A., aged [illegible]—[illegible] inst., at 21, [illegible] Place, Stoke Newington Common, the Rev. FRANCIS [illegible], aged 76—12th inst., at his residence, [illegible] House, Bishop's [illegible], the Rev. CECIL SMITH, J.P., aged 6[illegible]—[illegible] inst., at Sandyford, in the parish of [illegible], in the county of Stafford, the Rev. THOS. WILDE, M.A.—14th inst., at London, the Rev. F. H. WILKINSON, M.A., incumbent of West Ashton, Wilts, and younger son of the late Henry Wilkinson, Esq., of White Webbs Park, Enfield, Middlesex, and of Clapham Common, Surrey, aged 40—16th inst., at Hitcham Rectory, Suffolk, Rev. J. S. HENSLOW, Rector of Hitcham, and Professor of Botany in the University of Cambridge.

Markets.

COVENT GARDEN, May 25.

The supply of Vegetables generally is improving, with the exception of Cauliflowers, which are scarce. Good samples of Lettuces, Endive, and Artichokes come from France. Grapes fetch fair prices. Of Strawberries there is a good supply. Asparagus, French and Broad Beans, Green Peas, young Carrots, and new Potatoes may also now be obtained. Cucumbers are coming in more plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 8s to 12s	Pears, per doz., 4s 6d to 8s
Grapes, per lb., 6s to 10s	Apples, per doz., 6d to 1s 6d
Strawberries, p. oz., 6d to 1s	Oranges, per 100, 6s to 10s
Melons, each, 5s to 10s	Lemons, per 100, 6s to 12s
Cherries, French, p. box, 4s to 6s	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 9d to 1s 6d	Celery, p. bundle, 1s 6d to 1s 9d
Green Peas, p. ½ sieve, 8s to 10s	Onions, p. ½ sieve, 1s 6d to 4s 6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 3s to 6s
Cabbages, do., 2s to 3s	Rhubarb, p. bundle, 9d to 1s 3d
Potatoes, p. ton, 80s to 120s	Tomatoes, p. doz., 6s
— new, per lb., 6d to 2s	Shalots, per lb., 1s 6d
— — per cwt., 10s to 10s	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 10d	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 4s to 5s	Mushrooms, p. pott., 1s 3d to 1s 6d
Cucumbers, each, 9d to 1s 6d	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 3s to 4s	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, May 23.

Prime Meadow Hay	75s to	86s	Clover	95s to	118s
Superior do. (old) ..	90	105	New Clover	—	—
Inferior do.	50	60	Do. second cut ..	80	100
New do.	—	—	Straw	30	42
Rowen	—	—			

DAVIS & CO.

CUMBERLAND MARKET, THURSDAY, May 23.

Sup. Meadow Hay ..	108s to	120s	Inferior Clover ..	96s	106s
Inferior do.	65	98	New do.	—	—
New do.	—	—	Straw	40	45
Superior Clover ..	110	120			

JOSHUA BAKER.

WHITECHAPEL, THURSDAY, May 23.

Fine old Hay	100s to	105s	Fine old Clover ..	115s to	123s
Inferior do.	40	80	Inferior do	80	100
Very inferior	—	—	Fine 2d cut	90	108
Prime New Hay ..	—	—	Inferior do.	—	—
Straw	36	40	Fine New Clover ..	—	—

BRITISH WOOLS.—LONDON, FRIDAY, May 24.

Our business continues of a very limited character, as both demand and supply are small, the one being strictly regulated by the other—the hand-to-mouth system of business being the only one now adopted by dealers and consumers. At the same time this prevents the violent fluctuations in prices which have taken place in former years in consequence of derangements in general business so far less important than that occasioned by the present state of America. The trade of the country is however so much more extensive that it is more independent of any particular disorder than it used to be.

	s. d.	s. d.			
South-down Hoggets	1 5 to	..	Leicest. Wethers	1 4 to	..
Half bred ditto ..	1 6 —	..	Ditto Hoggs ..	1 6 —	..
Down Ewes ..	1 4 —	..	Combing Skins	0 10 —	1 6
Kent Fleeces ..	1 5 —	1 6	Blanket ditto .	0 6 —	0 0
			Flannel Wool .	1 0 —	1 8

COLONIAL WOOL SALES.—These sales have progressed very uniformly, good wool having sold relatively at better rates than inferior descriptions, which are very much neglected. The losses sustained by colonial merchants through the inferiority of the wool consigned of late to these auctions must be very considerable, and this must react on the wool growers abroad, who seem to act as if it were more profitable to get up their wool in bad condition than in a good marketable state. They will, however, discover that in the long run honesty is the best policy in this as in other matters, and take care that their wool be got up in a more respectable manner.

BUTTER MARKET.—May 24.

Best Fresh Butter	. ..	13s. per dozen lbs.
Second do. do.	.. ..	11s. " "

Pork, 4s. 4d. to 5s. 0d. per 8 lbs.

HOPS.—BOROUGH MARKET, FRIDAY, May 24.

Messrs. Pattenden & Smith report that the accounts from the Hop plantations this morning speak of a general increase of fly, from 10 to 20 on a leaf, and lice following in quick succession. Market very firm, with but few good Hops on offer. Duty 1[illegible],000*l*.

METROPOLITAN CATTLE MARKET.

MONDAY, May 20.

The number of Beasts is considerably smaller than on Monday last; but being holiday week the demand is limited; the warm weather also affects the trade. Prices are rather better than on Thursday. The supply of Sheep is good as regards number, but deficient in quality. Trade is slow, but Thursday's quotations are well maintained. Trade is dull for Calves, but there is not much alteration in price. From Germany and Holland there are 432 Beasts, 4380 Sheep, and 116 Calves; from Spain, 200 Beasts; from Scotland, 750;

from Norfolk and Suffolk, 1500; and 100 from the northern and midland counties.

	s d		s d		s d		s d
Best Scots, Herefords, &c. ..	4 8	to	4 10	Best Long-wools. ..		to	..
Best Short-horns	4 6	—	4 8	Do. Shorn ..	4 8	—	4 10
2d quality Beasts	3 4	—	4 0	Ewes & 2d quality ..		—	..
Best Downs and Half-breds ..	..	to	..	Do. Shorn ..	4 0	—	4 4
				Lambs	6 0	—	7 0
				Calves	5 0	—	5 6
Do. Shorn ..	4 10	to	5 2	Pigs	3 8	—	4 8

Beasts, 3540; Sheep & Lambs, 20,460; Calves, 143; Pigs, 390.

THURSDAY, May 23.

The number of Beasts is about the same as on Thursday last. Trade is very dull, and Monday's quotations are with difficulty realised. Sheep and Lambs are not quite as plentiful as on this day week, but the supply exceeds the demand; prices are not much altered. Good Calves are in demand, but inferior kinds are not selling. Our foreign supply consists of 210 Beasts, 1700 Sheep, and 148 Calves. Milch Cows 90.

Best Scots, Herefords, &c. ..	4 8	to	4 10	Best Long-wools ..		to	..
Best Short-horns	4 6	—	4 8	Do. Shorn ..	4 8	—	4 10
2d quality Beasts	3 0	—	4 0	Ewes & 2d quality ..		—	..
Best Downs and Half-breds ..	..	—	..	Do. Shorn ..	4 0	—	4 4
				Lambs	6 0	—	7 0
				Calves	5 0	—	5 6
Do. Shorn ..	4 10	—	5 0	Pigs	3 8	—	4 8

Beasts, 930; Sheep & Lambs, 7820; Calves, 288; Pigs, 170.

MARK LANE.—MONDAY, May 20.

The supply of English Wheat to this morning's market was very small, and all good-conditioned parcels cleared at the full prices of this day se'nnight. The sale of foreign slow, and chiefly confined to retail purchases for immediate consumption. We do not alter our quotations. Barley is very difficult of sale, and rather cheaper. Beans and Peas are unaltered in value. With a large arrival of Oats, fine qualities barely support last week's prices, and secondary are fully 6d. per qr. lower. The Flour trade is very dull.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk .. White	36—56	Red	48—62
— — fine selected runs .. ditto	50—72	Red	54—68
— — Talavera	51—72		
— Norfolk	—	Red	—
— Foreign	50—78		
BARLEY, grind. & dist., 28s to 30s .. Chev.	40—45	Malting .	38—40
— Foreign .. grinding and distilling	30—36	Malting .	40—42
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire .. Potato	26—28	Feed ..	20—25
— Irish .... Potato	26—28	Feed ..	21—24
— Foreign .... Poland and Brew	24—28	Feed ..	20—24
RYE	35—38	Foreign .	—
RYE-MEAL, foreign	—		
BEANS, Mazagan .... 38s to 42s .... Tick	40—44	Harrow .	40—44
— Pigeon ...... 42s — 46s .. Winds.	—	Longpod	—
— Foreign .... Small	42—52	Egyptian	—
PEAS, white, Essex and Kent .. Boilers	33—44	Suffolk .	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign .	38—48
MAIZE .... White	—	Yellow ..	—
FLOUR, best marks delivered .. per sack	50—55		
— 2d do. .... ditto	38—50	Country .	38—50
— Foreign .... per barrel	30—35	Per sack	40—50

FRIDAY, May 24.

The weather on the 18th was dull and cold, with N.E. wind, but improved on the 19th, and has since continued fine and warm, which is greatly improving the appearance of the growing crops. The shipments from New York during the fortnight ending the 6th inst. were large, but are likely for the future to be considerably below what has been anticipated, owing to the state of politics there, and the consequent disturbance of the currency and distrust. The weather and large foreign arrivals have caused a dull trade in Wheat throughout the kingdom, but holders have for the most part shown considerable firmness, so much so that a decline of 1s. per qr. can scarcely be called general. The demand for Barley has been limited. Previous values of Beans and Peas were supported, and also of Oats, excepting in this market, where the large arrivals of certain qualities have compelled factors to concede to a reduction of fully 6d. per qr. The sale of Flour has been limited, and previous rates difficult to realise. During the past eight days 86 vessels have been reported off the coast. The floating trade has been heavy, but prices unchanged. The arrivals of English grain this week have been very small, but of foreign and American Flour considerable. To-day's market was thinly attended, millers being generally indisposed to purchase, and holders not inclined to press sales at a reduction. The value of Wheat, both English and foreign, must be considered nominally the same as on Monday, and the amount of business done limited. Barley, Beans, and Peas are unaltered in value. The Oat trade is very heavy, and all but the finest qualities are 6d. per qr. cheaper.

ARRIVALS FROM May 20 TO May 24.

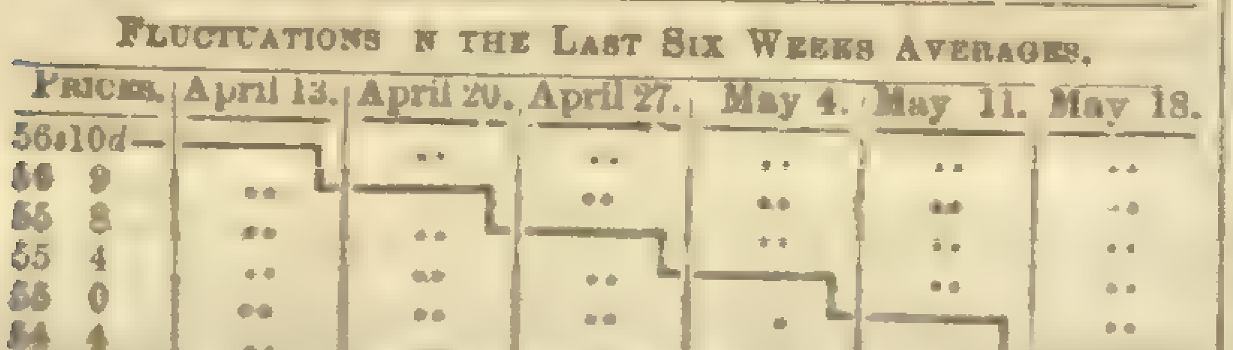
	Wheat.	Barley.	Oats.	Flour.
English ..	770 qrs.	40 qrs.	50 qrs.	1190 sks.
Irish	— „	— „	1310 „	— „
Foreign ..	33110 „	4790 „	47740 „	370 „ / 40760 brls.

LIVERPOOL, Tuesday, May 21.—Wheat has had only a slow sale at this morning's market, and on several parcels ex quay a concession of 1d. to 2d. per cental has been made in order to make clearances. Flour is difficult to move, and must be noted 6d. per barrel and sack cheaper. Indian Corn is offered at a reduction of fully 6d. per qr., without finding buyers, and some sales of mixed American are reported as low as 33s. 6d. ex quay. Oats and Oatmeal steady in price, from scarcity. Beans, Peas, and Barley are each 6d. per qr. cheaper. The market has been pretty well attended, but a dull tone has ruled throughout.

FRIDAY, May 24.—The market has been very dull to-day. In the absence of buyers quotations are almost nominal. Wheat 2d., Flour 6d., Indian Corn 1s. to 1s. 6d., Beans 6d., Oats 1d., and Oatmeal 6d. lower.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas
April 13..	56s 10d	37s 5d	24s 1d	35s 11d	41s 6d	40s 0d
— 20..	56 9	37 8	23 5	37 10	42 3	39 6
— 27..	55 8	37 11	24 8	32 8	42 7	40 8
May 4..	55 4	36 10	24 7	35 2	42 11	40 8
— 11..	55 0	36 4	25 0	30 0	43 10	40 11
— 18..	54 4	35 11	25 1	32 0	44 4	40 5
Agg. Aver.	55 8	36 11	24 6	34 9	42 11	40 4

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



POTATOES.—SOUTHWARK, Monday, May 20.

During the past week the arrivals coastwise have been large for the season, and the prices of the former week were not maintained. Trade dull at the following quotations:—Yorkshire Flukes, 120s. to 140s. per ton; Lincolnshire Regents, 80s to 100s.; Dunbar Red Soil do, 120s. to 140s.; North Berwick Regents, 105s. to 120s.; Fife, Forfar, and Perth do., 80s. to 100s.; ditto Rocks, 70s. to 80s; ditto ditto Reds, 70s. to 75s.; French Whites, 60s. to 80s.; Belgian do., 60s. to 70s.; Dutch do., 60s. to 70s.

COAL MARKET.—May 22.

Walls End Stewarts, 17s. 6d.; Walls End South Hetton, 17s. 6d.; Walls End Trimdon Hartlepool, 16s. 3d.; Walls End Hartlepool, 17s.; Walls End Braddyls Hetton, 16s. 6d.; Walls End Russell Hetton, 16s. 6d.; Walls End South Hartlepool, 15s. 9d.; Walls End Wharncliffe, 15s. 3d.; Walls End Kelloe, 16s. 3d.; Walls End Thorpe, 14s. 9d.; Walls End Tunstall, 16s.; West Hartley, 16s.; North Percy Hartley, 15s.; Davidson's Hartley, 16s.; Hastings Hartley, 16s.; Carway and Duffryn Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.

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News of the Week.

THE House of Lords re-assembled on Monday after the Whitsuntide recess. The Offences in Territory near Sierra Leone Prevention Bill passed through committee. On Tuesday, on the second

reading of the New Provinces (New Zealand) Bill, the Duke of NEWCASTLE stated, in answer to Earl GREY, that, in the present condition of New Zealand, HER MAJESTY's Government had thought fit to re-appoint Sir GEORGE GREY to the governorship, but had no intention to suspend the constitution of the colony. On Thursday the LORD CHANCELLOR brought up the report of the Select Committee on the Bankruptcy and Insolvency Bill, and stated that the amendments made by the Committee were of sufficient importance to demand the serious consideration of the House. The Marriage Law Amendment Bill was recommitted. The Duke of SOMERSET moved the second reading of the Officers of Reserve (Royal Navy) Bill, the object of which was to enroll officers of the merchant service as a naval reserve in time of peace, and to give them the rank of Master or Mate in the Navy in time of war. The Earl of HARDWICKE moved that the Bill be read a second time that day six months. On a division the second reading was carried by a majority of 3, the numbers being 59 to 56. In answer to the Earl of CARNARVON and Lord STRATFORD DE REDCLIFFE, Lord WODEHOUSE said that the Government had received positive assurances, from Lord DUFFERIN and the Turkish authorities, that the death of SAID BEY had arisen from natural causes, and not from poison; and that the conference at Constantinople had at present a proposal under consideration for the appointment of a Christian governor of the Lebanon, but that no decision had yet been arrived at.

In the Commons on Monday, on the motion that the House resolve itself into committee on the Customs and Inland Revenue Bill, Mr. NEWDEGATE moved, as an amendment, that it be an instruction to the committee to divide the Bill so that each of the taxes to which it related might be separately treated. The CHANCELLOR of the EXCHEQUER opposed the motion, which was negatived on a division by 196 to 34. The House then went into committee and agreed to the first three clauses. On the question that clause 4, repealing the duty on paper, be agreed to, Mr. KER SEYMER opposed the clause on the ground that it was inexpedient at the present moment to part with a source of revenue which produced 1,500,000*l.* per annum without inflicting hardship on any portion of the community. The clause was supported by Mr. MILNES, Mr. POLLARD-URQUHART, and Mr. AYRTON, and opposed by Mr. LYGON, Mr. HENNESSEY, Sir J. WALSH, Sir J. RAMSDEN, and Sir R. PEEL. The debate was then adjourned until Thursday. The Public Offices Extension Bill passed through committee. On Tuesday, in answer to Mr. DUNCOMBE, Mr. BOUVERIE, and other members, Lord J. RUSSELL said that he had received a notification of the blockade of the ports of South Carolina and Virginia; but no communication had yet been received in reference to the blockade of other ports. HER MAJESTY's Government would recognise these blockades when they were carried out in a regular manner. With regard to the protection of British interests, instructions had been sent to Admiral MILNE to be present on the coast with a sufficient squadron for that purpose. On the motion of Lord PALMERSTON, it was agreed that the House at its rising should adjourn over the Derby-day. Sir S. NORTHCOTE obtained a select committee to inquire how the education of destitute and neglected children may be most efficiently and economically assisted by any public grant. On Thursday, in answer to questions from various members, Lord JOHN RUSSELL said that the statement which had appeared in a morning journal to the effect that the Government had entered into a compromise to continue the Galway contract for six months, with the view of obtaining the support of the Irish members in the approaching division on the Paper Duty, was totally without foundation, and a calumny on the character of the Administration. The House having again resolved itself into Committee on the Customs and Inland Revenue Bill, the adjourned debate on clause 4, repealing the duty on paper, was resumed. The clause was supported by Mr. MELLOR, Lord J. RUSSELL, Sir J. V. SHELLEY, Mr. LINDSAY, Mr. OSBORNE, Sir J. PAXTON, Mr. COBDEN, the CHANCELLOR of the EXCHEQUER, and Lord PALMERSTON; and opposed by Mr. DISRAELI, Capt. TALBOT, Sir W. JOLLIFFE, Sir M. FARQUHAR, Mr. MONSELL, Mr. BENTINCK, Mr. BARING, and Sir J. PAKINGTON. On a division the clause was carried by 296 to 281, giving Ministers a majority of 15.

In the French Senate on Saturday the Government Bill for calling out the contingent of 100,000 men was carried by a majority of 230 to 7. In the Corps Legislatif on Wednesday, the Bill for the modification of the import duties on grain, flour, and other alimentary commodities was carried by 228 to 12. In the sitting of Thursday a Government Bill on the press laws was laid on the table, and it was announced that the session had been prolonged to the 19th June.

Prince GORTSCHAKOFF, the Governor of Poland, died on Thursday at Warsaw. He had previously received leave of absence for a year on account of ill health, and General SOUKHOZANETT had been provisionally intrusted with the administration of Poland, with the rights of a lieutenant of the EMPEROR.

Accounts from the United States announce that Charleston is blockaded by the Federal frigate Niagara, and that British ships have been refused entrance into the harbour. No collision has yet taken place between the forces assembled in the neighbourhood of Washington, but both sides are actively preparing for the impending conflict. Baltimore is occupied by Pennsylvania troops, and General SCOTT has ordered the occupation of Arlington heights by Federal artillery. Advices from Montgomery state that President DAVIS will command the Southern forces in person. Ammunition and heavy ordnance continue to arrive at Harper's Ferry from the South. The Secessionists have threatened Fort Monroe, but were compelled to retire. An attack on a large scale is, however, anticipated. The report that the Virginians had removed the remains of WASHINGTON from Mount Vernon is said to be without foundation. The Federal Governmen is said to have notified to the foreign Ambassadors that it will cease to hold intercourse with any foreign Power which recognises any commissioners from the rebel States.

By the Indian mail we learn that Mr. LAING was to produce his budget on the 27th April. The scheme for the amalgamation of the QUEEN's and Indian forces was officially published on the 22d April. Mr. BRUCE arrived at Pekin on the 26th of March.

Home News.

THE COURT.—The Queen, Prince Consort, the King of the Belgians, and the Royal family continue at Osborne. On Thursday afternoon, the 23d ult., the Queen and Prince Consort, accompanied by the King of the Belgians, the Count of Flanders, the Prince of Wales, Princesses Alice, Helena, and Louisa, embarked in the Royal yacht Fairy, and steamed up the Southampton Water. The Royal party returned at half-past 7 o'clock. On Friday the Queen and Prince Consort, accompanied by the King of the Belgians, the Prince of Wales, the Count of Flanders, Princesses Alice, Helena, and Louisa, and Prince Arthur, drove out in open carriages. On Saturday afternoon the Prince Consort, accompanied by the King of the Belgians, the Prince of Wales, and the Count of Flanders, went to Portsmouth in the Royal yacht Fairy, and visited the new lines of defence erecting for the protection of the western side of Portsmouth harbour and dockyard. The Royal party returned to Osborne at 8 o'clock. On Sunday morning the Queen, Prince Consort, the King of the Belgians, the Prince of Wales, Princesses Alice, Helena, and Louisa, and Prince Arthur, attended Divine service at Osborne. On Monday morning the Prince of Wales left Osborne for Cambridge. In the evening the Prince Consort, accompanied by the King of the Belgians, the Count of Flanders, and Prince Arthur, went in the Fairy to Spithead, where they went on board her Majesty's ship Edgar, on a complimentary visit to Admiral Erskine. The Royal party returned to Osborne at 8 o'clock. On Tuesday the Queen, accompanied by the Princesses Alice, Helena, and Louisa, drove out in an open carriage and four. On Wednesday morning the Count of Flanders left Osborne for London. The Queen and Royal family walked in the grounds. In the afternoon the Queen drove out, accompanied by the King of the Belgians, Princess Helena, and Princess Louisa. The Prince Consort and Princess Alice rode on horseback. It is expected that the Queen, Prince Consort, and the Royal family will arrive at Buckingham Palace [illegible] on Monday or Wednesday next for the season, and that the Queen will occasionally visit White Lodge, in Richmond Park, during the season.

THE DRAWING ROOM.—Notice has been given that at the drawing-room on the 19th inst. all ladies are expected to appear in mourning. The ladies of the Corps Diplomatique, the wives of her Majesty's Ministers, and of her Majesty's Household, will wear deep crape mourning with black ornaments. All other ladies attending the Court will appear in black, with black feathers, lappets, and gloves; diamonds may be worn. Ladies to be presented on their marriage, and young unmarried ladies to be presented for the first time, may appear in white.

THE PRINCE OF WALES on Monday, in passing through Spithead on his way from Osborne to Cambridge, paid a complimentary visit to the officers of the Hero line-of-battle ship, in which he made his voyage to America. The Prince remained on board about two hours, and received the usual salutes on his arrival and departure. His Royal Highness will devote his midsummer vacation to military studies, and Colour-Sergeant Hazlewood, of the Grenadier Guards, who is acting as drill instructor to the Cambridge University Rifle Corps, of which the Prince is honorary Colonel, has received instructions to attend twice a-week at Madingley.

PRINCE ALFRED, who is now on his way to Canada, is expected home for a month's leave of absence towards the end of August.

PRINCE LOUIS OF HESSE has been attacked by measles at Osborne. The symptoms first appeared on the 23d ult. The disease, which is of a mild character, is passing through its natural course, and the eruption is now disappearing.

THE CABINET.—A Cabinet Council was held on Wednesday at the official residence of the First Lord of the Treasury in Downing Street.

LORD-LIEUTENANCY.—The Earl Cowper, grandson of Lady Palmerston, has been appointed to succeed the late Duke of Bedford, as Lord-Lieutenant of Bedfordshire.

THE DEANERY OF EXETER, which has been so long vacant, has been offered by Lord Palmerston to the Rev. Charles John Ellicott, of St. John's College, Cambridge, Professor of Divinity in King's College, London.

PARLIAMENTARY MOVEMENTS.—*The election for* Flintshire took place on Tuesday, when Lord Richard Grosvenor, the Liberal candidate, was elected by a majority of 318 over Mr. H. R. Hughes, the numbers being 1253 to 935.

THE CHANNEL FLEET.—Rear-Admiral Erskine's division of the Channel fleet, now lying at Spithead, comprising the flagship Edgar, 91; Donegal, 101; Hero, 91; Flying Fish, 6; and Diadem, 32, all screw steamships, has received orders for sea, and is expected to sail from Spithead in the course of the week.

THE VOLUNTEER MOVEMENT.—The general meeting of the National Rifle Association was held on Monday at Willis's Rooms, the Duke of Cambridge, president, in the chair. There were also present the Duke of Newcastle, the Duke of Buccleuch, Earl de Grey and Ripon, Lords Elcho, Radstock, Ducie, Colville, Vernon, Tankerville, Truro, Bury, and A. Hay; Generals Peel, Seymour, and Hay; Hon. H. Law, Hon. F. Byng, Sir John Ogilvie, Sir John Shelley, and Sir J. Paxton. His Royal Highness, in opening the business of the meeting, spoke as follows:—

"Centuries ago the archers and bowmen of England were noted throughout the world for their proficiency in the use of that rude weapon. In modern times science had progressed more rapidly, and to a greater extent in improving fire-arms than any other description of weapon, and it became necessary to consider how we could best adapt those improvements so as to derive from them the greatest amount of advantage. That object could not be accomplished without infinite care and trouble, and without frequent meetings to judge of the progress made in the use of the national weapon. Of course the reason of the great necessity for their Association was the movement made by the Volunteer corps throughout the country. The expenditure necessary for the various details connected with the last meeting at Wimbledon had amounted to a considerable sum—no less than 3807*l.* 9*s.* 4*d.* That, it was thought, was a large amount, especially when it was recollected that the Association had then only 1[illegible] subscribers paying little over 1200*l.* Much of the expense of the Wimbledon meeting had been incurred for plant, such as the butts, &c., and some outlay had taken place for [illegible] which the committee had since found were not absolutely necessary. There had been a slight falling off in the number of subscribers for this year, yet on the whole the amount of subscriptions were augmented and amounted to 1335*l.* Such a subscription might possibly cover the expenses of the forthcoming Wimbledon meeting in July, though he much feared that more than this sum would be required. There was only a balance in hand at present of 551*l.*, and in this respect therefore the finances of the Association were by no means in so satisfactory a state as could be wished. Under these circumstances it was thought that the Association might be benefited as well as augmented by union with the various county Rifle Associations, such as those established in Cheshire, Glocester, Yorkshire, [illegible], Kent, Berkshire, Dumfries, Angus, Nairne, Shropshire, Nottingham, and it was also proposed to institute a Rifle Derby at Wimbledon, the competitors to pay an entrance fee of 2*l.* per head, open to all comers. He was sorry to see from the returns of the Association that the various rifle corps did not subscribe to it to the extent that had been hoped and wished. There was no doubt that each corps had many expenses of its own, so that some possibly might not be able

afford this; yet it was almost a pity to find that only 254*l.* had been subscribed last year, and not more than 43*l.* for this. With regard to the prizes to be offered at the meeting this year the report was most satisfactory, and the list had been extended by several additional gifts. There was a new cup given by the Prince of Wales, value 100*l.*, a members' cup of 50*l.*, a public schools' cup of 50*l.*, and a cup given by the editor of the *Volunteer Gazette*, value 25*l.* Last year the various prizes had been distributed at the Crystal Palace, but it had been felt that much more interest would attach to this ceremony if it took place on the very ground on which the triumph had been achieved. That course, therefore, would be adopted with the distribution this year, and it had also been arranged, as he thought most judiciously, that the ceremony of distribution should be followed by a Volunteer review of such corps as chose to take part in it. Thus, the early part of whatever day was fixed upon would be set apart for allotting the prizes, and the remainder to the evolutions of the corps on the ground. He looked on such assemblages of the Volunteers for field days and brigade drill as most important aids to their improvement, but, at the same time, it was absolutely necessary to their success that they should be so arranged as to insure their perfect good order and their being carried out in the best manner. He was delighted to say that the Volunteer movement had been carried out in the Colonies in the most successful and praiseworthy manner, and the Rifle Association established in Canada under the presidency of Sir Alan M'Nab, showed this year a subscription list for prizes amounting to 1600*l.*, actually an excess over the subscriptions to their own Association. The Queen's prizes were, of course, open to all these Colonial Volunteers, and the Volunteers of Nova Scotia, Prince Edward Island, and New Brunswick were already in communication with the society."

The Duke of Newcastle, in moving a formal resolution that members of the County Rifle Associations shall be entitled to admission to the National Association on paying 10*s.* per annum, or 5*l.* for life membership, paid a high compliment to the Robin Hood Nottinghamshire Regiments he had recently reviewed, and especially bore testimony to what he had seen of the high efficiency of Canadian Volunteers. The resolution was agreed to. Earl de Grey and Ripon moved that an entrance fee of 10*s.* be required from all Volunteers contending for the prizes of the Association, except those sent by regiments subscribing to the Association to the extent of 1*l.* per company. Such a step as this was absolutely necessary to keep the funds of the Association in the state in which it was necessary they should be maintained. The resolution was carried unanimously. In reply to questions, Lord Elcho stated that those who contended for prizes open to all comers could use whatever rifle they chose. The public schools would use whatever rifle they had been instructed in, but the Queen's prizes could only be shot for with the long Enfield. Colonel Lindsay then announced the intention of the St. George's corps to present a challenge cup, value 150*l.*, to be shot for at the meeting in 1862, the amount derived from the entrance fees for such cup to go to the funds of the National Rifle Association.—A *joint-stock company*, incorporated under the Limited Liability Act, has just been formed, for the purpose of constructing in the neighbourhood of London a permanent practice ground, with an ample supply of butts, at the various ranges up to 1000 yards, sufficient to accommodate all the metropolitan rifle corps and accessible from every part of the metropolis. A piece of land has been already secured at Kensal Green, upwards of 1100 yards in length. Forty-six targets will be erected upon it, in the first instance, so placed as to allow the whole of them to be used with perfect safety at all the ranges and at the same time. To prevent interruption by bad weather the firing stations will be partially covered. The electric self-registering target adopted by Government will be used, by which the point struck by each shot is instantaneously recorded at the firing station. Ample space will be provided for spectators of prize contests. The price of the land is expected to be about 30,000*l.* The proposed capital of the company is 60,000*l.*, to be raised in 12,000 shares of 5*l.* each. The terms suggested for the use of the range are, for individual Volunteers one guinea, and for a corps of one company 25 guineas. The honorary directors are the Duke of Wellington, Earl Grosvenor, M.P., Lord Ranelagh, Lord Frederick Paulet, Lord Radstock, Lieut.-Colonel Lindsay, Major-General Sir J. Yorke Scarlett, Lieut.-General Sir F. Love, Sir Duncan M'Dougall, Lieut.-Colonel Bathurst, and Lieut.-Colonel Hicks. The ordinary directors are Messrs. W. Dent, T. Hughes, A. Johnston, jun., R. W. Kennard, M.P., F. Mildred, and H. Vavasseur.

Foreign.

FRANCE.—The Emperor left Paris on Tuesday for Havre, to inspect the works of the Lower Seine. His Majesty returned to Paris in the evening, and on Thursday left the Tuileries with the Empress and the Prince Imperial for Fontainebleau. An official notice from the Prefect of Police was affixed to the doors of the Freemasons' lodges, on Friday, announcing that all meetings at the lodge of the Grand Orient were suspended, and that the assembly was adjourned until October next. In consequence of these proceedings Prince Napoleon has resigned the office of Grand Master of the Freemasons, and will leave Paris to-morrow, accompanied by the Princess Clotilde, on a tour of two months in Portugal and Spain. It is also said that they will visit Algeria and probably Syria before their return to France. The official journals deny the statement of the Belgian journals that Count Cavour is about to visit Paris. Imperial decrees have been published nominating MM. Bremer and Stourm as senators. An important debate took place in the Senate on Saturday on the bill for calling out the contingent of 100,000 men. M. Picard objected to keep up such an immense army in time of peace, and pointed out the drain it imposed on the country, both in men and money. General Allard, on the part of the Government, argued that an army of 600,000 men was necessary for the defence of the country, and the Senate passed the Bill by a majority of 230 to 7. In the sitting of the Corps Legislatif on Wednesday, the Bill for the modification of the import duties on grain, flour, and other alimentary commodities was agreed to by a majority of 228 to 12. In the sitting of Thursday it was announced that the Session had been prolonged until the 19th inst. A Government Bill on the press laws was laid on the table. The Chamber voted a pension to the mother of General Bosquet. The *Moniteur* of yesterday published a decree by which all the French seaports and the Custom Houses at Lille, Valenciennes, Turcoing, and Roubaix are open for the importation of cotton yarn of certain numbers. Another decree orders that all the articles of the treaty of commerce between France and Belgium shall also be applied in favour of England. Other decrees relate to the treaty of commerce between France and Belgium. The *Moniteur* reprints an article published by Dr. Veron in the *Constitutionnel* against a dissolution of the Corps Legislatif. An imperial decree has been issued ordering that the French Commission instituted for the International Exhibition of 1862 shall submit all their decisions relative to that object to the approbation of the Emperor; shall organise all measures for the execution; shall for that purpose correspond with the prefects and other authorities, through their president or secretary-general acting for him. M. Rouher, Minister of Commerce, is to preside over the commission in the absence of Prince Napoleon; and M. Le Play, Councillor of State, is named Secretary-General. The Government have withdrawn the licenses of Messrs. Dumeneray & Beau, the publisher and printer of the Duc d'Aumale's pamphlet. The members of the different Academies of the Institute of France assembled on Wednesday, and by 96 against 50 votes confirmed the choice of M. Thiers for the Emperor's prize of 20,000f. for his "History of the Consulate and the Empire." The Chambre des Mises en Accusation has decided on sending M. Mirès for trial before the Tribunal of Correctional Police, and the case is expected to come on early in the present month.—The relations at present existing between France and the Pope are illustrated in a remarkable manner by the fly-sheets which are now circulating, with the permission or connivance of the Government, among the middle and lower classes in Paris. One of these, entitled "Our Holy Father the Pope," purports to test the Pope, his Government, and his proceedings by the precepts of the Gospel and the example of the Founder of Christianity, and might have been written at the time of the Reformation. The following are extracts:—

"Always the same tune! In the street and at home, in the newspapers and in conversation, at church and at the pot-house, we hear nothing else but discussions on our Holy Father the Pope. All this noise becomes tiresome. The poor dear old man may have made some mistakes, that is his misfortune; but it is his own look-out. If, as is said, he has broken faith with his people by making promises to them which he has never kept, I think that, after having exhausted their stock of patience, they have a right to say to him, 'Holy Father, we beg you a thousand pardons for leaving you, but we prefer to have for a temporal leader a brave and gallant King who keeps his word.' If he mistakes obstinacy for dignity, the *non possumus* for magnanimity, Castelfidardo for a glorious battle-field, the abductions of Mortara and Bluth for acts of heroic virtue—truly the infallibility of the Holy Father appears to me somewhat at fault. If he followed in the steps of Christ, proving to us by his conduct that he is the first disciple of a kind and loving master; If, instead of reminding us of Peter's pence and the patrimony of the Church, he spoke to us of a celestial kingdom and of the treasures of faith and morality; If he busied himself a little less with rifled cannon, and a little more with the spiritual weapons with which he would teach us to overcome injustice, idleness, and debauchery; If, following in the steps of the Lord, he would drive the vendors out of the Temple, that the whole edifice should contain only works of purity, charity, and piety; If, in a word, he only gave us as a command the holy Gospels,—Oh, then we should vie with one another to give him a welcome! A thousand voices would shout, 'Hail to the Pontiff we want! Long live the Holy Father!' But if he refuses to take one step to place himself on a level with the age and to agree with Him who is the master of all ages, we have but one choice—to do without him. Let this alarm no one. His fall cannot hurt us, because it is not he who saves us. His name is not to be found on the lips of Jesus Christ or of the Apostles. The first Christians did without him, and were none the worse for it. Let us, then, not trouble ourselves about the fate of the Pope. Let us acknowledge Jesus Christ as our only master. Let us take as a guide the Holy Gospels, and leave to those whom it concerns the right of settling the affairs of Rome."

SPAIN AND MOROCCO.—The official journals state that there is no fear of war with Morocco, the Government having decided not to undertake a war on the question of indemnity. All accounts received from Tangier are entirely pacific. The Moors are anxious to pay the indemnity, and do not desire war. The Emperor of Morocco has dismissed the Pasha of Tangier for being inimical to the Spaniards. A great movement however has taken place among the vessels stationed at Algesiras. Admiral Pinzon has proceeded to Tetuan for the purpose of holding a conference with the commander of the Spanish forces. Two Moorish personages of rank are expected at Alicante. It is believed that there is a probability of the fall of the Emperor of Morocco, with whom Soliman Abbas disputes the throne. The Kabyles support the Emperor, while the army is favourable to Soliman. The Spanish journals assert that England also favours the pretensions of Soliman.

PRUSSIA.—M. de Clercy, the French negotiator for the Treaty of Commerce between France and Prussia, has concluded his mission to Berlin, and the negotiations will not be resumed until Prussia shall have come to an understanding on the bases of the treaty with the other German States who have an interest in it. Some demonstrations against the police authorities have taken place at Berlin, and several arrests have taken place in consequence. In the sitting of the Chamber of Deputies on the 27th ult., the Minister of Justice, in reply to a question addressed to him in reference to the right of citizenship of those persons who had received the King's amnesty, said that the right of Prussian citizenship was forfeited by a stay of 10 years abroad. The amnesty only cancelled other disqualifications which had been pronounced against the refugees, the right of citizenship being a public one, and not belonging to the category of those the forfeiture of which constituted a punishment remissible by amnesty. The Government assumed, however, that the persons who had received an amnesty were no longer to be suspected on account of the offences which had been forgiven them. The Bill on Military Reform was discussed in the Chamber on the 28th ult. The Minister of Finance, in reply to a question which was addressed to him, said:—

"The right of the representatives of the nation to vote the supplies for the maintenance of the army does not admit of a doubt. If ever there were a conflict between that right and the rights of the supreme Commander-in-Chief of the army, the solution of the difficulty could not be sought for apart from the Constitution, but in the Constitution itself."

AUSTRIA.—An inquiry has been instituted by the Criminal Tribunal of the Voralberg with reference to the fanatical persecution of the Protestants by the people in that province.

HUNGARY.—In the sitting of the Lower House on Tuesday, Count Zichy spoke in favour of a pacific arrangement, and said that there was no doubt that the Emperor had the loyal intention of governing constitutionally. This speech was much applauded by the Assembly.

ITALY. — In the sitting of the Chamber of Deputies on Friday questions were put by several members respecting the approaching celebration of the national fête. Signor Minghetti, Minister of the Interior, in reply, stated that the disturbances at Milan had terminated. The *Official Gazette* of Saturday contradicts the report that the Italian Government claims the right of depriving the bishops of office, and declares that nothing has been changed in the relations between Italy and the Pope in reference to the bishoprics. The municipal elections are everywhere proceeding regularly. The number of persons voting is numerous.—M. di San Martino, the new Lieutenant of the King at Naples, has inaugurated his Government by several severe measures against the Mazzinians, among whom numerous arrests have been made. He has also issued a proclamation, expressing his intention to govern with power, energy, and unity of action. He intimates the intention of the Government to uphold legality above the movements of political parties. He declares that all loyal citizens are in favour of the union of the Italian peoples. He instructs the functionaries to whom the circular is addressed to listen to all complaints and diverse opinions, but not to entertain any accusation unless accompanied by proofs. In conclusion, he urges the strict execution of all orders transmitted to them by the Government. He has also despatched orders to the provinces to suspend the execution of the brigands who had been condemned. The trial of the Duke of Cajanello is drawing to a close. He is treated with great kindness. A reorganisation of the National Guard is expected. On Monday last a band of brigands, commanded by Chiavone, appeared in the suburbs of Sora, and threatened to enter the city. The National Guard and the troops exchanged some shots with the brigands, and pursued them for a distance of three miles. The brigands then recrossed the Roman frontier, after burning the village of Castelluccio. — Accounts from Rome state that the Papal Government has entered into negotiations with the Powers for the preservation of the Papal territory. Secret orders have been given for the organisation of reactionary committees in the Pontifical provinces which have been annexed to Sardinia, and it is asserted that encyclical letters are secretly circulating, with the object of exciting agitation among the clergy. Christen, one of the military leaders of the reactionary movement, has returned to Rome. The French police are on the alert to prevent the enlistment of brigands. The budget of expenses of the Papal Government for 1861 has been covered by the sale of the Campana Museum to France. General Goyon has restored the money bearing the effigy of Francis II., which he had seized on the frontier, believing it to be destined for the reactionary bands in the Abruzzi. The presence of Francis II., who does not intend to quit Rome, is believed to be compromising to the Papal Government. The acts of Monsignor de Merode are, it is thought, carrying the Papal Government towards a crisis. A very impressive popular manifestation took place on Monday last as the Pope was passing through the streets. A great Liberal manifestation is organising at Rome for to-morrow the 2d June. On the 23d ult. several

students of the University were arrested on account of a demonstration which was made at the burial of one of their fellow-students.

RUSSIA.—The Emperor left St. Petersburg on Wednesday for Moscow. By a decree of the Emperor, Admiral Paniutin has been appointed Minister of Public Instruction in the place of M. Kowalewski, who has tendered his resignation.

POLAND.—Prince Gortschakoff, the Governor of Poland, who had just received leave of absence for one year on account of ill health, died on Thursday at Warsaw. General Soukhozanett, Minister of War, has been provisionally intrusted with the administration of Poland, with the rights of a Lieutenant of the Emperor. He is to be assisted by General Milatine, who will direct the Ministry of War. General Merchelewicz, Military Governor of Warsaw, had previously been intrusted with the supreme control of the civil administration. MM. Platanoff and Karnicki have been relieved of their functions, and the latter has left with his wife for his estate in Lithuania. On Monday and Tuesday conflicts between the police and the people took place before the Carmelite Church at Warsaw, occasioned by the former taking down the names of those who sang the national hymn. Gensdarmes were despatched to the scene of the disturbances, and re-established order. A proclamation signed by the Governor's deputy has been posted up at the corners of the streets exhorting the people to keep the peace, otherwise, it says, severe measures will be taken.—The law relating to the redemption of compulsory labour by the peasants in Russian Poland has been published. It indicates four different methods by which the redemption may be effected. The peasants will be finally relieved from all compulsory labour on the 1st October next.

GREECE.—Several officers of high rank and some subalterns have been arrested at Athens. The Ministers have been summoned to meet in Council. Domiciliary visits have taken place. The motives for this measure are unknown. Public order prevails, but great uneasiness exists among the people.

TURKEY AND SYRIA.—According to telegrams from Constantinople, the International Conference, in its third sitting, accepted the proposition of France that Syria should be governed by a single Christian Chief. The Marquis de Lavalette, the French Ambassador at Constantinople, is expected to return to Paris at the end of this month.

HERZEGOVINA AND MONTENEGRO.—Omar Pasha has arrived at Bosna Serai, and is about to address a note to the Prince of Montenegro urging him to observe the stipulations of the Convention of 1859. It is said that an *ultimatum* will afterwards be sent to the Prince, which, if rejected, will be followed by hostilities. There has been another massacre by Montenegrins of Mussulmans, who were escorting a convoy of provisions destined for the city of Niksich. The International Commission on the affairs of the Herzegovina held their first sitting at Mostar on the 25th ult.

INDIA.—By the Overland Mail we have news from Calcutta to the 22d April, and from Hong Kong to the 4th April. The Governor-General held a grand durbar on the 16th ult. for the reception of the principal Talookdars of Oude and the native gentry of Calcutta and the neighbourhood. The scene was very imposing. Mr. Laing was to produce his budget on the 27th inst. It is said that it will be more favourable than seemed possible six months ago. Mr. Beadon, one of the members of Council, has been obliged by ill health to leave India. The famine in the North-West shows no sign of abatement. The amalgamation scheme, which had been looked for with so much anxiety, was published on the 22d in a *Gazette Extraordinary*. The document is of great length, occupying 14 columns of the papers. The following is a brief summary of its leading features:—

"There are to be three regiments of cavalry and nine of infantry formed out of the different regiments of Europeans formerly in the East India Company's service. These are to be officered by volunteers from the officers of the respective arms of the Indian service, and are to be called the 19th, 20th, and 21st Light Dragoons, and the 101st to 109th Regiments of Foot. Officers of regiments ordered to serve out of India will be allowed to count such foreign service year for year, but officers volunteering hereafter for such service will have to count two years abroad as one in India. Officers of old regiments volunteering for the new will retain their present rank, and all the advantages they are now entitled to from the various funds. They will rise according to the system of seniority to which they have been accustomed, as high as the rank of major, after which promotion is to be regulated by merit. The remainder, under the rank of colonel, are to be absorbed into a staff corps, or by service with native regiments. Officers now holding staff appointments will be permitted to retain them, but are to have the option of taking their chance in the staff corps if under the prohibited rank. The term "staff employ" is understood as embracing all civil and political employments whatever, all military appointments on the general and personal staff, and the appointments of commandant, second in command, adjutant, interpreter, and quartermaster; but the staff corps will be divided into two great departments, civil and military, with sub-divisions for the sake of convenience. No vacancies will be caused in their regiments by officers joining the staff corps, or volunteering for general service, but their names will be entered in italics, to regulate promotion from the lower ranks. With regard to the Artillery and Engineers, their position is to be much the same as the corresponding branches of the Royal army; a certain number of brigades will be added to their strength, retaining their present privileges, as in the case of the cavalry and infantry. Officers of all arms who may prefer retirement to any of the terms offered, are to be allowed bonuses, the amount of which is to be determined by the Secretary of State for India. As regards the men, they are invited to volunteer for general service, for which they will receive a handsome bounty; while those who prefer not to be liable to serve out of India will be formed into a local force, in which they will retain all the old privileges guaranteed to them on enlistment. All regiments are to retain their honorary distinctions as before the amalgamation. In the native army very large reductions are to be made, and the enormous "levies" which have been growing up since the mutinies are to be swept away bodily. Native commissioned officers whose services are dispensed with are to be adequately compensated, and are to be allowed to retain their swords and the privilege of being seated in the presence of European officers.

CHINA.—The news from Hong-Kong is to the 15th of April. The expedition up the Yang-tse River was looked on as perfectly successful, and the beneficial results likely to ensue from it absorbed public attention. There is no news from Tien-tsin. Mr. Bruce arrived at Pekin on the 26th of March. M. de Bourbalon, the French Minister, made his entry into the capital on the previous day. The rebels, as usual, were troublesome, and increasing in ferocity.

COCHIN CHINA.—The town of Mythô has been taken and occupied by the French force under Admiral Charner. The possession of this town, which is situate at the southern extremity of Cambodge, gives France, says the *Patrie*, "the entire command of a country which may be considered one of the richest of Asia, and which, from the amount and variety of its produce, will become a flourishing colony for France."

UNITED STATES.—The Federal Government is said to have notified to the foreign Powers that it will cease to hold intercourse with any foreign Power which recognises any commissioner from the rebel states. General Scott has arrested several spies at Washington, many of whom had registered their names at the hotels as coming from the North. It is probable that they will be summarily dealt with. Secretary Seward had written a letter to a New York firm virtually declaring that it is an act of treason to sell vessels to Secessionists. General Mansfield has issued an order prohibiting Adams' Express Company from carrying any express matter, including letters, farther south than Washington. The Government, in pursuance of its programme, has appointed collectors of customs at the different Southern ports, selecting men who can be relied upon for that office. The duties will be collected on the decks of ships of war at all hazard. President Lincoln has issued a proclamation, setting forth that insurrection exists in the State of Florida, and directing the Commander of the forces of the United States on the Florida coast to permit no person to exercise any office or authority upon the islands of Key West, the Tortugas, and Santa Rosa which may be inconsistent with the laws and constitution of the United States, authorising him at the same time, if he shall find it necessary, to suspend there the writ of *habeas corpus*, and to remove from the vicinity of the United States' fortresses all dangerous or suspected persons. Earthworks are to be erected all along the railroads from the North through Maryland to Washington, which is now completely encircled with encampments, controlling all the railways. The Massachusetts Legislature has appropriated 3,000,000 dols. for the war, and has authorised the Governor to lend 7,000,000 dols. The Boston banks have offered to take 5,000,000 dols. of the Federal loan. Baltimore is at present occupied by Pennsylvania troops, 2200 muskets and 4000 pikes have been seized in the city, and the manufacturer has been arrested. Two schooners laden with arms have also been seized. The Governor of Maryland has called for four regiments to support the Federal Government within the limits of Maryland, or to protect the capital. The Secessionists have threatened Fort Monroe, but were compelled to retire. It is understood that a Federal army of 15,000 men is to be concentrated at Fort Monroe, and an attack on a large scale is anticipated. Ammunition and heavy ordnance continue to arrive at Harper's Ferry from the South. The batteries of the Virginians at Harper's Ferry and on the James and York rivers are said to be of the most formidable character, and are mounted with the heaviest Columbiad and Dahlgren guns. The report of the removal of the remains of Washington from Mount Vernon by the Secessionists is said to be totally false. The Virginia papers report continued arrivals of Confederate troops, and their departure for points not designated. In Western Virginia, a proposition has been made to a Convention of Delegates to separate from the eastern part of the State, and form a New Virginia. More than 40 counties were represented in the Convention which met at Wheeling. It refused to pass an ordinance for the division of the State, but resolved to call a general Convention for the 11th of June. The Governors of Ohio and Pennsylvania have pledged their States to protect the Unionists in Western Virginia. Advices from Montgomery state that President Davis will command the Southern forces in person. It is rumoured that General Scott has ordered the occupation of Arlington heights by Federal artillery. The Kentucky Legislature has passed a resolution maintaining the neutrality of the State, and approving the Governor's refusal to supply troops to the Federal Government. Charleston is blockaded by the United States' frigate Niagara. British ships have been refused entrance into the harbour, but others have got in, in spite of the blockade. It is rumoured at New York that a secret agent of the French Government is travelling through the Southern States. The remaining division of the Federal troops in Texas is said to have surrendered to the Secessionists.

NOVA SCOTIA.—A gold field has been discovered at Tangier, about 30 miles distant from Halifax, of [illegible] extent and richness to attract thither a large [illegible] of persons. The gold is said to be of the very finest [illegible] and, judging from the rude means hitherto [illegible] to separate it from the rock in which it is embe[illegible] is expected that it may be profitably worked.

HONDURAS.—Disturbances caused by the [illegible] have taken place at Honduras. The British re[illegible] in Belize have been threatened. The British [illegible] who demanded redress have been brutally treated.

Parliament.

HOUSE OF LORDS.

MONDAY.—The House reassembled to-day for the first [illegible] after the Whitsun recess. The *Offences in Territory near Sierra Leone Prevention Bill* passed through committee.

TUESDAY.—*Colonial Cotton.*—Lord BROUGHAM called atten[illegible] to the necessity of urging the cultivation of cotton on [illegible] Colonial Governments.—The Duke of NEWCASTLE said that [illegible] cultivation of cotton in the colonies did not depend so m[illegible] upon soil and climate as upon a supply of labour. The Govern[illegible] ment had taken measures to promote the emigration [illegible] Coolies from India, in order to supply the want of labour [illegible] the West Indian and other colonial markets. *The Duke of* NEWCASTLE moved the second reading of the *New Provinces (New Zealand) Bill*, the object of which was to give effect to certain measures passed by the New Zealand General Assembly for the creation of new provinces in that colony.—Earl GREY [illegible] no objection to the Bill, but thought it ought not to be passed without attention being called to the deplorable state [illegible] things in New Zealand. We had already suffered and inflicted much damage, and the reinforcements we had been obliged to send thither would have a material effect in diminishing the surplus of the Chancellor of the Exchequer. He regretted that a policy had been pursued in total opposition to [illegible] general principles laid down by the late Governor, Sir G. Grey, who, not contented with mere laws, had done his best to w[illegible] the affections of the natives. Had Sir G. Grey's policy be[illegible] carried out this great end might have been reached; but [illegible] blame could be imputed to the Governor, as it was [illegible] possible for him under the present constitution of [illegible] colony—a constitution granted to the colony before [illegible] was fitted for it—to carry out any definite line [illegible] policy. He urged, therefore, that her Majesty's Govern[illegible] ment should at once take steps to put an end to [illegible] sacrifice of the interests of the natives to the ex[illegible] gencies of a popular Government by temporarily suspending the constitution of the colony, and by sending out Sir G. Grey with special powers to deal with the emergency.—Lord LYTTELTON was, on the whole, quite satisfied with the course taken by the Government.—The Duke of NEWCASTLE said he was convinced that the Governor was right and Wirimu [illegible] was wrong—an opinion corroborated by that of the [illegible] Chief Justice of the colony—for the only principle [illegible] Wirimu Kingi acted was that of might making right. He proceeded to vindicate the course pursued by the Governor [illegible] contended that, although the piece of ground at stake was [illegible] insignificant, the principle involved was most importan[illegible]. Having shown that no undue haste had been used [illegible] settling the right of selling and purchasing the la[illegible] in question, he gave reasons why the institution of a tribuna[illegible] for the decision of claims between colonists and natives would not be of the advantage expected to the latter, and took occasion to animadvert on the conduct of the Bishop of New Zealand and his missionaries, who were the principal advo[illegible] cates for the establishment of such tribunals, in very stro[illegible] terms, observing that both the interference of the Bishop a[illegible] the tone of his pamphlet were a great impropriety. T[illegible] question of land was a mere pretext, the whole affair wa[illegible] struggle of nationalities—a movement which had been conte[illegible] plated by the Maories for some years. In the native mi[illegible] dispute had now assumed the aspect of a trial for sovere[illegible] between Queen Victoria and the Maori King, and of co[illegible] was impossible for us to yield on that point. He dispu[illegible] assertion that representative government had led to the [illegible] state of things, but admitted that the change of the con[illegible] tution which took place in 1852 had curtailed [illegible] power of the Governor in dealing with the na[illegible] The New Zealand Assembly, however, had shown by [illegible] debates no disposition to press hardly upon the native [illegible] tants. With regard to the expenses of the war, the Gover[illegible] ment had repudiated the demand on the part of New Zea[illegible] that this country should pay not only for the troops, but [illegible] Militia and Volunteers employed, and he was glad to see [illegible] the New Zealand Government was taking means to defray [illegible] expenses. Having reviewed the present chances of [illegible] peace, he stated that, as the present Governor's term [illegible] office was nearly at an end, her Majesty's Government [illegible] thought fit to appoint Sir G. Grey at once to the Governme[illegible] of New Zealand, and at the same time, to show their [illegible] in the present Governor, the Government had appoin[illegible] to another Colonial Government.—Earl GREY inquired [illegible] it was intended to suspend the constitution of the colony.—The Duke of NEWCASTLE replied in the negative, stating [illegible] would not be just to punish the innocent with the guilty [illegible] Bill was then read a second time.

THURSDAY.—*Bankruptcy and Insolvency Bill.*—The [illegible] CHANCELLOR laid upon the table the report of the Select Com[illegible] mittee on this Bill, and said that several alterations ha[illegible] made in it by the Committee which would require the se[illegible] consideration of the House. The *Marriage Law Amend[illegible] Bill* was recommitted.—The Duke of SOMERSET moved [illegible] second reading of the *Officers of Reserve (Royal Navy) Bill* w[illegible] provided that officers of the merchant service, who have com[illegible] manded ships of the merchant navy on ocean voyages, may [illegible] production of certificate of competence under the Merchant Shipping Act become entitled to the rank of master or [illegible] mate in the Royal navy in case of war, but to form [illegible] naval reserve only in time of peace.—The Earl of HARDWICKE opposed the Bill on the ground that wh[illegible] it would inflict hardship upon officers in the navy, [illegible] was not likely to be popular with the merchant service.—The Earl of MALMESBURY did not altogether object to [illegible] principle of the Bill, but thought it ought to be reserved [illegible] an emergency arose.—Earl GREY supported the Bill, cons[illegible] ing that it would be most unwise on the part of the Gov[illegible] ment to defer until the emergency arose the steps w[illegible] might be necessary to meet it. On a division the [illegible] reading was carried by 59 to 56. *Affairs of Syria.*—The Earl of CARNARVON called attention to the death of the Druse [illegible] Said Bey, in prison at Beyrout, and asked if the repor[illegible] he had been poisoned was true.—Lord STRATFORD DE REDCLIFFE asked whether the telegram which a[illegible] appointment of a Christian Governor of the Lebanon [illegible] and whether due arrangements had been made for [illegible] evacuation of Syria by the French troops.—Lord W[illegible] said there was every reason to believe that Said Bey [illegible] not from poison, but from natural causes. The propos[illegible] appointing a Christian Governor of the Lebanon was st[illegible] consideration at Constantinople.

FRIDAY.—*Officers of Reserve (Royal Naval) Bill.*—The Earl of HARDWICKE called attention to this Bill, and expressed his [illegible] that the Masters in the Navy deserved considerat[illegible]

officers of the Merchant Service.—The Duke of SOMERSET thought it would be better to postpone the Bill for the present.—*The Leases by Incumbent Restriction Bill.*—On the motion of Lord LYTTELTON this Bill was read a third time. *Salmon Fisheries.*—The Earl of MALMESBURY called the attention of the House to the report and recommendations of the Commissioners on the Salmon Fisheries of England and Wales.

[Left sitting.]

HOUSE OF COMMONS.

MONDAY.—On the order for going into Committee upon the *Customs and Inland Revenue Bill*, Mr. NEWDEGATE moved that it be an instruction to the committee to divide the Bill, so that each of the taxes to which it related might be separately treated. In passing the Bill in its present form the House would be acting contrary to all practice and precedent, and be lending itself to an unworthy stratagem in order to force the measure through the House of Lords. To a great extent also the House, while thus attacking the privileges of the Lords, would be parting with its own, and giving to the Crown or its representatives in the Commons a control over the public finances that was utterly unconstitutional and was the peculiar function of this House. — The CHANCELLOR of the EXCHEQUER said that the form of proceeding did not limit the powers of the House in any respect; and that the combination of the several financial proposals of the Government in one measure did not abridge the opportunity for discussion of the several stages of the Bill. So far from that, it greatly extended the liberty of discussion, inasmuch as the repeal of the paper duty was presented to them, not only in the form of a preliminary motion, but in conjunction with all the other financial operations with which it was connected. He denied that he had resorted to an unworthy statagem to override the Lords; for that House might not only reject but alter the Bill; and he argued that the course proposed was entirely in accordance with the principles of the constitution as bearing upon the financial powers of the Commons.—Mr. SPOONER supported the resolution, and said that although the House of Lords had the power of altering a money Bill, as well as rejecting it, it was well known that if they ventured to make such an alteration it was invariably thrown out by the Commons.—Mr. HORSMAN opposed the motion because it would not elicit an indication of the real opinion of the House. He therefore recommended Mr. Newdegate to withdraw it.—Mr. KNIGHTLEY preferred going into committee and moving the omission of the objectionable clauses, to adopting the motion of his hon. friend. In the general principle of the motion, however, he perfectly concurred; but thought its introduction at that moment was ill-timed.—On a division, the motion was negatived by 195 to 34. —The House then went into committee; and the first three clauses of the Bill were agreed to, after a short explanation by the CHANCELLOR of the EXCHEQUER with reference to the mode and time of making the new assessment for the income and property tax.—On Clause 4, repealing the *Excise Duty on Paper*, Mr. K. SEYMER opposed the clause, on the ground that it was inexpedient, at a moment like the present, to part with a source of income which produced 1,500,000*l.* a year without inflicting hardship upon any portion of the community.—Mr. MILNES spoke in favour of the clause, and contended that any loss which the revenue might sustain by the repeal of the duty would be amply repaid by the stimulus it would give to a most important branch of manufacturing industry.—Mr. LYGON was at a loss to know what great interest in the country required the abolition of the duty. He believed that its repeal would only benefit the manufacturers of paper and a few individuals who were in the habit of using paper to a large extent. —Mr. POLLARD URQUHART and Mr. NORRIS supported, and Mr. HENNESSY opposed the clause.—Sir J. WALSH said that the Opposition, in objecting to the measure as a mischievous one, were but acting as the exponents of public opinion; and he felt convinced that even in that House the proposal had been accepted by a majority through a combination of parties brought about by the more advanced Liberal section of the House.—Mr. AYRTON said that the sole object of the Conservatives in prolonging discussion was delay, in the hope that some circumstances would arise to enable them to give character and colour to their opposition. In his judgment the paper duty was of all others most obnoxious, and ought to be immediately abolished.—Sir J. RAMSDEN said that the revenue derived from the tea duties was almost stationary, which showed that consumption was checked by the high duty, whilst the revenue from the tax on paper was a constantly growing one, proving on the other hand that the impost was not severely felt. He had always understood that a surplus was either cash in hand, or something in an equally tangible form. But the surplus of the Chancellor of the Exchequer was built upon calculations, hopes, and conjectures, every one of which was liable to turn out as fallacious as the bubble schemes of any speculator on the Stock Exchange. If, therefore, the Chancellor of the Exchequer persisted in his proposal he would be acting in the teeth both of this House and of the country, and exposing himself to the charge of rash and wilful imprudence. Considering, then, that this renewed attempt to repeal the paper duty on the faith of a surplus, which events might prove to be as illusory and artificial as that of last year, was unfair to the country; and that the time chosen for the experiment connected it so unmistakeably with the proceedings of last year as to impart to it a mean and petulant character, which was unworthy of the House, and must be embarrassing to the House of Lords, he should vote against the clause.—Sir R. PEEL said that the financial measures of the Chancellor of the Exchequer reminded him of the words of Flavius when Timon of Athens commanded him to give great gifts out of empty coffers. He declined to support a scheme which tended to make the country dependent upon the receipt of money from China, and argued that, whilst the repeal of the paper duty would be for the advantage of a limited interest only, even that result would be achieved at the expense of the already overburdened tax-payers of this country. The threatening aspect of affairs in different parts of the world—France in possession of Syria, Rome, and the southern slopes of the Alps; buccaneering Spain seizing St. Domingo at the instigation of France; Hungary in the throes of a revolution, and the model republic across the Atlantic falling to pieces by its own inherent weakness—rendered it most desirable that a rash and experimental system of legislation like the present should not be persisted in. The House had already laid itself open to the charge of reckless expenditure. He warned it, therefore, to show that it knew when and how to husband its resources, and preserve that immense wealth which Providence had placed in our grasp, in order to meet those eventualities which might any day imperil our political and commercial greatness. —Mr. MELLOR moved the adjournment of the debate.—Mr. DISRAELI expressed a hope that if the proposal were sanctioned by the Government, gentlemen on the opposition side of the House would be no more reproached with interposing obstacles to the progress of the public business, and encouraging discussion when discussion was unnecessary.—Lord PALMERSTON said he should certainly not object to the motion; and expressed his hope that the Opposition would be in the same frame of mind during the remainder of the session.—The debate was then adjourned to Thursday. *The Boundaries of Burghs Extension (Scotland) Act Amendment Bill*, and the *Public Offices Extension Bill*, passed through Committee. The Reports of the *Committee of Supply* and of the *Committee of Ways and Means* were brought up and agreed t[o].

TUESDAY.—*Thames Embankment.*—On the order for the second reading of the Thames Embankment Bill, promoted by the London, Chatham, and Dover Railway Company, proposing to take advantage of the embankment for their railway, and to levy tolls on passengers, Mr. COWPER moved that the Bill be read a second time that day six months, on the ground that it contained a clause affecting the public interests, inasmuch as it provided that it should be lawful for the Commissioners of Woods and Forests to purchase out of the sums of money that belonged to their department all the lands adjoining the river, and to appropriate to the company such portion of these lands as might be required for their purposes. After a short discussion the motion was agreed to; the Bill was, therefore, lost. *The Galway Contract.*—The O'DONOGHUE inquired whether it was the intention of the Government to carry out the views of the Postmaster-General, expressed in a recent letter, and to annul the Galway contract.—Lord PALMERSTON replied that the communication made to the Galway Company by the Postmaster-General was the decision of the Government, and it was competent to the parties concerned to make any representation they might think fit with regard to that communication. The correspondence had been ordered to be laid before the House, which would then have an opportunity of judging of all the circumstances of the case. *Civil War in America.*—Lord J. RUSSELL, in laying upon the table the correspondence relating to the blockade by the United States of the ports of the Southern Confederacy, stated that the Federal Government had notified that a blockade had been established of the ports of Virginia and South Carolina, but upon Lord Lyons inquiring from what date it took effect he was informed that it would be from the day on which it might be declared by the naval commander on the station, and that 15 days would be allowed to the ships of neutrals to come out. This blockade of the ports of Virginia had since been duly notified by the naval officer, and her Majesty's Government were prepared to acknowledge them in all cases where they were efficiently instituted.—Mr. T. DUNCOMBE asked what protection the Government intended to give to British subjects in the Slave States of America. He referred to outrages in those States, of which he said he had received reliable information in private letters, and he suggested that immediate steps should be taken to increase our squadron on the coasts of the Southern States.—Mr. OSBORNE protested against the line taken by Mr. Duncombe, as prejudging the question, and said that he had reliable information that gave the lie to the alleged outrages.—Mr. BRIGHT said he thought nothing could be more injudicious or more unfortunate than that statements should be made in the House upon this subject on the faith of private letters. Whatever quarrel there might be between the Northern and Southern States, they were both anxious to avoid any cause of quarrel with this country; our policy was neutrality, and we should avoid as much as possible discussions which might add to the difficulties of the Government in pursuing this wise line of policy.—Mr. GREGORY likewise deprecated statements founded upon private communications.—Mr. BOUVERIE wished to know whether the mercantile interest were to understand that an actual public notification had been given to this country of a blockade of the ports referred to, or whether it was merely an intimation that a blockade would be notified to the neutral ships when they arrived off the ports.—Lord J. RUSSELL said that the papers on the table would give full information upon the subject. When Mr. Seward was asked if he would give a public notification, he refused, on the ground that there was no precedent for taking such a course, but he said he should leave it to the naval officer in command on each station to declare that a blockade had been instituted, and that upon such declaration it must be considered that the blockade was regularly established. With regard to the protection of British interests, instructions had been sent to Admiral Milne to be present on the coast with an efficient squadron for the protection of British interests; and instructions had been given to the Admiralty to dispatch some additional ships to strengthen our naval force in those seas. *The Derby Day.*—On the motion of Lord PALMERSTON it was agreed, "as an arrangement for the convenience of hon. members," that the House at its rising should adjourn over Wednesday. *Ragged Schools.*—Sir S. NORTHCOTE moved for a select committee to inquire how the funds voted by Parliament for the promotion of national education might be most efficiently and most economically applied in the case of neglected and destitute children. He observed that the amount of grant for the education of the class below the middle class was 800,000*l.*; and it was distributed on such conditions that upon reaching a certain level they arrived at a point below which, though above the industrial schools, there were still poorer classes of children for whom the fund was not available. His object in moving for a committee was to inquire what was to be done with these children, and examine into the whole subject of the administration of the grant.—Mr. LOWE said, as far as the Government were concerned, there would be no objection to inquiry into the subject, and he should rejoice at any good result from the inquiry. He objected, however, to the terms of the motion, and, after explaining the principles upon which the Committee of the Privy Council made grants to schools, he suggested that the motion should be amended so that the Committee should be instructed to inquire how the education of neglected and destitute children may be most efficiently and most economically assisted by any public funds.—Mr. HANBURY spoke in commendation of Ragged Schools, which he considered were pioneers of much good.—Sir J. PAKINGTON said he was glad the Government had consented to the motion, which he had understood was to be resisted.—Mr. H. SEYMOUR hoped that the Committee would finish their labours this year, and that no obstacle would delay the next step in the general education of the country. He did not coincide with Mr. Hanbury in his views regarding Ragged Schools.—Mr. ADDERLEY protested against overlaying the inquiry of a Royal Commission, just completed at a cost of 40,000*l.*, by a fresh inquiry. Where, he asked, were these inquiries to end? The Commissioners had made Ragged Schools one of the objects of their inquiry, and this fresh inquiry would do harm.—Sir G. LEWIS thought the motion not an unreasonable one. The subject of Ragged Schools was only one into which the Commissioners had inquired, and Sir S. Northcote differing from their recommendations, asked for a Committee, in which there was nothing unusual or unreasonable.—After a few remarks by Mr. DILLWYN, Mr. CAVE, and Mr. HENLEY, Lord J. RUSSELL concurred in what he believed was the object of the inquiry. He inclined to think that, where Ragged Schools were conducted by persons who took precautions as to the means of the parents, these schools were beneficial, by affording education to children who would otherwise have no education at all. He should resist any attempt on the part of the Committee to go beyond the immediate object of the inquiry. The motion as amended, was agreed to. On the motion of Mr. NORRIS, a Select Committee was appointed to inquire into the laws of foreign countries regarding the *Exportation of Rags.* Sir G. LEWIS obtained leave to bring in a Bill to amend the section of the Municipal Act relating to the precedence of *Mayors of Corporations*, and Mr CLIVE obtained leave to bring in a Bill to confirm certain provisional orders under the *Local Government Act*, 1858, relating to the districts of Brighton, East Cowes, Preston, Morpeth, Bromsgrove, and Durham. Several Bills were forwarded a stage.

THURSDAY.—*The Galway Contract.*—Lord PALMERSTON, in reply to Mr. LANIGAN, stated that the Government had received a long printed statement from the Galway Company on the subject of the withdrawal of the subsidy. That statement would be considered by the Postmaster General, and as soon as it had been answered the correspondence would be laid upon the table.—Mr. BEAMISH asked if the contract was at an end.—Lord PALMERSTON said there could be no doubt of the advantages of a rapid communication between the United Kingdom and America, and that Ireland was that part of the kingdom from which it could best be established. Her Majesty's Government would not be indisposed to take into consideration any proposals that might be made for that purpose, founded upon the principle of open competition, and which might appear to them calculated to accomplish the object.—Colonel FRENCH asked if the House was to understand that it was not intended to continue the contract.—Lord PALMERSTON replied that the House was already in possession of everything that had passed upon the subject. *Civil War in America.*—Lord J. RUSSELL, in reply to a question by Mr. A. EGERTON, stated that he had that day received a communication from her Majesty's consul at New Orleans to the effect that a British subject, enrolled in the militia there, had been arrested; but that upon a representation to the state authorities he had been released. It had also come to the knowledge of the Government that other British subjects had been enrolled in the militia, but immediately liberated upon proof of their nationality being adduced in the proper quarter. *The Paper Duty.*—The adjourned debate on the order of the day for going into committee on the Customs and Inland Revenue Bill was resumed by Mr. MELLOR, who urged the benefit which the remission of the paper duty would confer upon trade and upon the consumers of paper. It had been reported that they were on the eve of a dissolution, in consequence of the resolution of the Government to terminate the Galway contract; but he did not believe that the Irish members would lend themselves to a system of tactics that had been adopted to bring about such a result.—Mr. DISRAELI said if the House entertained a conviction that there had been on the part of the Government such financial and political negligence that they had not provided for the exigencies of the State, it would be its duty to declare a want of confidence in the Government; but he thought it was in the present case bound to accept the statement of the Minister that he had a surplus of revenue. The question then was, to what purpose it should be applied. With respect also to the form in which his financial measure had been proposed by the Minister, he thought he was justified; but that its adoption this year was unwise, unnecessary, and impolitic, being calculated to provoke a collision with the other House. Assuming, then, the existence of a surplus, which he had never denied, he laid it down as a principle in our financial policy that in the remission of taxation war taxes should have the preference, and that, upon every ground of policy as well as political economy, a public contract with the nation should be rigorously fulfilled. The income-tax was not essentially a war tax, but if the whole surplus had been appropriated to its reduction he should not have objected; the remission of the war duty on tea, however, would not only relieve consumers and stimulate consumption, but give an impulse to our trade with China. Although the House had resolved not to remit that duty, he insisted that the Opposition should not lose any opportunity of urging the inexpediency of repealing an Excise duty upon paper, affecting only a limited industry, rather than reducing another indirect tax which had so many claims to a preference. He gave, therefore, his sincere opposition to this clause, which stood in the way of the question whether the war duties on tea or on sugar should be remitted. In conclusion, he took the opportunity of contradicting the rumour that he had given a pledge to any person connected with the Galway Company on the subject of the Galway contract.—Lord J. RUSSELL declared that the Government were altogether clear of the imputation contained in a morning newspaper, to the effect that they had entered into a compromise to continue the Galway contract for six months, with a view to neutralising the opposition of certain members of that House. The statement was totally void of foundation and a calumny upon the Government. Rather than that the Government should alter their decision for such a purpose, it were better that 10 Ministries should fall and that Parliament should be 10 times dissolved, and it was matter for consideration by the great party opposite how far they had favoured such an attempt to force the Government to adopt an opinion that they did not entertain. He then discussed the constitutional part of the question, and proceeded to consider the subject of the application of the surplus, contending that in applying it to the remission of the paper duty the House would be granting the largest amount of relief to the industry of the country.—Mr. PEACOCKE, Captain TALBOT, Sir W. JOLLIFFE, Sir M. FARQUHAR, Mr. MONSELL, and Mr. BENTINCK opposed the repeal of the paper duty; Sir J. SHELLEY, Mr. LINDSAY, Mr. OSBORNE, and Sir J PAXTON supported it.—Mr. COBDEN supported the repeal of the paper duty, and said that it was the large manufacturers who originated the opposition to it. As to the surplus, if there really was none he would hold the Government responsible for it. A great deal of discussion had taken place in reference to the export duty on French rags; but so far as regarded the French Government it had acted not only with good faith in dealing with that subject, but had shown an enlightened appreciation of the business which it had in hand, and taken especial precaution that there should be no misunderstanding on the subject of the exportation; and what had been done was with his full consent.—Mr. T. BARING said that if Mr. Cobden would poll the country he would find it the opinion of the people that it was not the duty on paper that should be removed, but that if our financial prospects permitted the remission of taxation at all, the war taxes had the first claim.—The CHANCELLOR of the EXCHEQUER expressed a hope that the past career of Mr. Cobden, and the services which he had rendered the cause of free trade, would induce the House to regard him as a higher and better authority on the present occasion than Mr. Baring, who had steadily opposed it throughout his public life. He then proceeded to show that the duties on tea and sugar in their present shape were not war duties, having been imposed in time of peace and not for the purposes of war; and taunted the Opposition with the inconsistency of first denying the existence of a surplus and then voting for the remission of duties to the extent of 285,000*l.* more than the amount of the paper duty. The proposals of the Government were not the commencement but the conclusion of a new system of commercial legislation, and with that view he put it to the House that the repeal of the paper duty was founded upon as sound principles of finance and industrial economy as any proposal that had received the approval of Parliament during the last 20 years.—Sir J. PAKINGTON said he should vote against the clause, on the ground that the Budget of the Chancellor of the Exchequer was open to three fatal objections—that it was financially unwise; that it was a manœuvre in the interests of party and not of the country; and that it involved unnecessary offence, not to say insult, to the House of Lords. —Lord PALMERSTON expressed his satisfaction at the return of Mr. Cobden and stated, in answer to an inquiry from Mr BENTINCK, that there was nothing in the aspect of American affairs to call for increased armaments by sea or land, or to lead to any serious interruption of our export trade. In this opinion he was confirmed by the fact that the revenue derived from customs, excise, and stamps during the eight weeks ending on Saturday last exceeded by half a million the receipts for the corresponding period of last year. He reminded the House that the real question at issue was one of financial policy, not of party, and that throughout these discussions not

a single member had risen to defend the paper duty, but had treated it as an impost that was no longer defensible. He looked with confidence to the result of the division. The committee then divided, and the numbers were—For the clause, 296; against it, 281; majority for Ministers, 15. The announcement was received with immense cheering from the Ministerial benches. The remaining clauses were then agreed to, and the Bill was reported, with amendments, to the House.

FRIDAY.—*Appropriation of Seats.*—Sir G. LEWIS gave notice that on Thursday next he would bring on the Bill for the appropriation of the four vacant seats. *Commercial Intercourse with China.*—Mr. DUNLOP moved an address to her Majesty praying that instructions may be given to her representative in China in the exercise of an impartial neutrality between the two contending parties in that empire, to afford to British subjects equal facilities for commercial intercourse with both. —Mr. BAXTER seconded the motion. [Left sitting.]

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 91⅞ for Money, and 91⅞ to 92 for the 6th of June; Bank Stock, 233½ to 234; Reduced and New Three per Cents., 89¾ to ⅞; India Stock, 227 to 228; Ditto Five per Cent. Stock, 101¼ to ½; Ditto for Acct., 101⅜; Ditto Four per Cent. Debentures, 1859, 96; Ditto Bonds, 30*s.* to 20*s.* dis.; Five and a Half per Cent. Enfaced Rupee Paper, 99½; Exchequer Bills, March, 6*s.* to 5*s.* dis.; Ditto advertised, 3*s.* dis., par.—FOREIGN: Brasilian Five per Cents., 1839 and 1859, 97½; Ditto Four and a Half per Cents., 1860, 89½; Equador New Consolidated, 12; New Grenada Active, 16; Ditto Deferred, 5¼; Portuguese Three per Cents., 1853, 48 to 47½; Spanish Three per Cents., 51; Ditto New Deferred Three per Cents., 43⅝ to ⅞; Ditto Passive, 16½; Committee's Certificates, 5½; Turkish Six per Cents., 1858, 56⅛; Venezuelan Three per Cents., 19; Ditto One and a Half per Cents., 9½.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,812,530	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	10,824,972
		Silver Bullion	512,558
	£25,812,530		£25,812,530

BANKING DEPARTMENT.

Proprietors Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£ 9,916,605
Rest	3,221,128	Other Securities	19,636,908
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	6,873,828	Notes	6,442,860
Other Deposits	11,643,565	Gold and Silver Coin ..	830,738
Seven day and other bills	535,000		
	£36,827,111		£36,827,111

30th day of May, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY—BANKRUPTS—R. J. BAYFIELD and J. V. NEEDHAM, Birmingham, Gun Manufacturers—E. A. BURGER, Bristol, Merchant—T. T. BUTTERWORTH, Birmingham, Licensed Victualler—J. CLARKE, B. CLARKE, and J. R. CLARKE, Worsley, Lancashire, Cotton Spinners—R. EDMESTON and T. HIGHAM, Birstal, Yorkshire, Stuff Manufacturers—B. GADSBY, Birmingham, Brush Maker—G. W. HALL, Lime Street, City, Merchant—J. LEMERE, Victoria Row, Old Ford North, Bow, Oil and Colourman—W. S. MARSHALL, Durham, Cooper—T. OWENS, Holyhead, Anglesey, Flour Dealer—P. PRESTON, Liverpool, Boot and Shoemaker—J. SAVILE, jun., Leeds and Wakefield, Patent Manure Dealer—G. SIMONS, Leicester, Manufacturer—W. WHITTEM, Meriden, Warwickshire, Grocer—S. WILMOTT, Nottingham, Lace Manufacturer.

BANKRUPTCY ANNULLED—W. F. and J. HOOPER, Bermondsey, Leather Factors.

SCOTCH SEQUESTRATIONS—J. BROWNLIE, Wishaw, Lanarkshire, Hotel Keeper—J. FERGUSON, Glasgow, Grocer—W. THOMPSON, Granton, Mid Lothian, Commission Merchant—J. WATSON, Hamilton, Lanarkshire, Accountant.

FRIDAY—BANKRUPTS—E. C. BROWNE, Birmingham, Music Seller and Agent—J. CHAPMAN, Sidney Street, Cambridge, Boot and Shoemaker—T. F. DIAMOND, Blue Boar Court, Friday Street, City, Warehouseman and Commission Agent—R. HARGRAVE, Leeds and Bradford, both in Yorkshire, Worsted Stuff Merchant—J. HILL and W. HILL, Nottingham, Coal Merchants—J. PARKES, Birmingham, Warwickshire, Coal and Brick Merchant—G. P. ROONEY, Liverpool, Licensed Victualler and Builder—J. SMITH, Bradford, Yorkshire, Stuff Manufacturer—E. TROOD and E. TROOD, the younger, Bridgewater, Somersetshire, Grocers—J. WADESON, Fleet, Lincolnshire, Innkeeper and Common Brewer—G. WOOLFORD, Lydiard Millicent, Wilts, Butcher.

Metropolis and its Vicinity.

INTERNATIONAL EXHIBITION OF 1862.—Her Majesty's Commissioners have appointed the following Committee in connexion with Naval Architecture and Ships' Tackle:—Captain Arrow, Trinity House; Rear-Admiral Bethune, C.B.; Captain Close, Trinity House; Captain Collinson, C.B.; Captain Fishbourne, C.B.; Mr. John Laird, Birkenhead; Captain Sir Frederick Nicolson, Bart., C.B.; Captain Nolloth; Captain Washington, Admiralty; and Mr. Clifford Wigram, Blackwall.—The case against Mr. Kelk, the builder of the Exhibition buildings at South Kensington, for not giving two days' notice to the district surveyor before commencing the works, was resumed on Wednesday at the Hammersmith Police Court, when Mr. Ingram the magistrate decided that the defendant had no right to begin the works before giving two days' notice, and inflicted a nominal penalty of 1*s.* and 2*s.* costs. Mr. Donaldson applied for larger costs, as it was a question of some importance to the district surveyor. Mr. Ingham ultimately allowed a guinea costs, which was immediately paid.

DRAINAGE OF LONDON.—A return just made by the Metropolitan Board of Works states that it may be expected that by about the end of 1862 sewage will be diverted from the Thames to the extent of 50,000,000 gallons a day, besides the rainfall.

THE GREAT EASTERN.—The latest accounts from the United States mention that the Great Eastern was loading at New York with grain, flour, &c., for Liverpool, and was advertised to sail on the 25th ult., carrying freight and passengers. She may, therefore, be expected in the Mersey on Monday or Tuesday next.

DINNER AT THE MANSION HOUSE.—On Saturday evening the Lord Mayor entertained the Duke of Cambridge, the President and Council of the Royal Society, the President and Council of the Royal Academy, and nearly 300 other persons connected with art, literature, and science, at a dinner at the Mansion House. The principal speakers were the Duke of Cambridge, the Duke of Northumberland, Sir Roderick Murchison, Sir C. Eastlake, Earl Stanhope, Major-General Sabine, Mr. Milnes, M.P., and the French statesman, M. Fould.

WESTMINSTER SCHOOL.—The Dean and Chapter having renounced all purpose and intention of changing the site of Westminster School, are now taking steps to make the dormitories light and comfortable, and have already provided a covered playground for the use of the boys. They have, however, declined to remove the obstructions between Great and Little Dean's Yard, or to allow the boys into the college garden. With respect to the play, the statutes of the college require the performance at Christmas of a Latin and English play, either tragedy or comedy, by the scholars and choristers, with a view to their improvement in pronunciation and action; but in carrying out that rule the Dean and Chapter consider they are bound to remember that the moral and religious interests of the school must be their first consideration.

INDIAN FAMINE RELIEF FUND.—The total amount received by the London Committee up to Saturday evening was 97,694*l.*, of which 90,000*l.* had already been remitted to India, and 5000*l.* more were transmitted by the mail of Monday. It is understood that the amount now contributed will be found sufficient, and that the subscription will be forthwith closed.

EXPLOSION AT WALTHAM ABBEY POWDER MILLS.—On Monday morning at 7 o'clock a series of frightful explosions took place at the Government Gunpowder Works at Waltham Abbey. The mills had been cleared for repairs, when one of the men applied a crowbar to force a roller out of its position to enable him to sweep the powder from under it. It is supposed that the crowbar came in contact with the iron plate, caused friction, and ignited the powder. The man who was using the crowbar saw the flash, and remembered nothing further until he found himself extricated from a stream of water into which he had thrown himself head foremost to extinguish his burning clothes. After the first explosion the flames rapidly penetrated into the three adjoining mills, for scarcely a moment elapsed before they exploded. The effect of each was most destructive. The iron roofs, sides, &c., were blown about in all directions, and large pieces were found many yards off, standing in the ground into which they had been forced. A large number of workpeople were speedily on the spot, and rendered valuable assistance. One unfortunate man, named James Woodham, was found lying in the long grass in front of the mill, his clothes in one mass of flame. His apparel was torn and cut from his body as rapidly as possible, but before this could be accomplished he was so frightfully burnt that his life is despaired of. Three others were also badly burnt. The Board of Ordnance have instituted a searching inquiry into every circumstance connected with the explosion.

DESTRUCTIVE FIRES.—On Wednesday a fire broke out in the factory of Mr. Bunsmead, pianoforte-maker, in Chenies Mews, Tottenham Court Road, and was not entirely extinguished until Thursday morning. The factory and its contents were entirely destroyed, and the school-house and lecture rooms of Mr. Phillips, the premises of Messrs. Oetzman & Plumb, pianoforte-makers, and some stables and other buildings adjoining, were seriously damaged by fire and water. The value of the property destroyed is estimated at from 10,000*l.* to 12,000*l.*—On Sunday morning a fire broke out in the steam rice mills of Messrs. Yearsley, Dock Street, Whitechapel, which entirely destroyed those immense buildings, as well as the large stock of rice they contained. The Seamen's Church, the rectory, and the Sailors' Home in close proximity, were placed in great jeopardy, and were more or less damaged by the fire.

THE PUBLIC HEALTH.—The Registrar-General's weekly report states that the total number of deaths registered in the week that ended Saturday, May 25, was 1237, a mortality as high as that of the last week of March, when the air was many degrees colder than it has been lately. The average number in the corresponding weeks of the ten years 1851—60, corrected for increase of population, was 1157; the present return is therefore 80 above the average. During the week the births of 892 boys and 934 girls, in all 1826 children, were registered in London. In the 10 corresponding weeks of the years 1851—60 the average number was 1640.

Provincial.

LIVERPOOL.—On Friday evening there was a service at St. Chrysostom's Church, Everton, of which the Rev. John Macnaught is the incumbent, for the purpose of opening a new organ which has recently been erected in the church. It had been advertised that the Rev. Henry Bristow Wilson, vicar of Great Staughton, and author of one of the "Essays and Reviews," would preach on the occasion as well as on the Sunday following; and in consequence of the notoriety which has been attained by that volume considerable curiosity was manifested, and a large congregation assembled to hear the service, including local ministers of various denominations and strangers. In the course of the afternoon however the Bishop of Chester had served the Rev. J. Macnaught, the incumbent of St. Chrysostom's, with a notice forbidding him to allow Mr. Wilson either to preach or take any part in divine service in his church or diocese, and the consequence was that, instead of preaching, the reverend essayist was simply a listener to his own sermon, which was read by the incumbent. The other two sermons prepared by Mr. Wilson were read in like manner by the Rev. Mr. Macnaught on Sunday.

PLYMOUTH.—It is said that the line of fortifications north of Plymouth has again been altered, and will be carried out to Crown Hill, above Knackersknowle, which being on a higher level, will form a strong position. It is also rumoured that the fortress inside the breakwater is not to be constructed.

PORTSMOUTH.—The fortifications of Portsmouth are about to be strengthened at the salient points of the sea face and the approaches to Spithead with 40 of the 100-pounder Armstrong guns. The sites selected to receive them on the town lines comprise the pivot platforms of the three traversing 68-pounders, guns on the St. James's Gate, the Semaphore 8-inch shell battery, and the King's Bastion. The smaller batteries of Southsea Castle and the new fort at Lumps are to be supplied with two each. Others are to be placed at Blockhouse Fort, Monckton Fort and the Browndown batteries, and the remainder will be distributed between Hurst Castle and the forts of Cliff End and Victoria, near the Needles.

Ireland.

THE GALWAY CONTRACT.—A numerous and influential meeting was held a few days since in the large room of the Rotunda, the Lord Mayor in the chair, to express the feeling of the public on the conduct of the Government in putting an end to the Galway postal contract. The meeting was addressed by Mr. Guinness, Alderman Reynolds, the Right Hon. J. Whiteside, M.P., Mr. Fisher (Wexford), Mr. Alexander Parker, Mr. Malcolmson (chairman of the Atlantic Steam-packet Company), Mr. W. Maunsell, Alderman Carroll, Mr. J. Maguire, Mr. George Morris (Galway), Sir Edward Grogan, M.P., the Mayor of Kilkenny, Mr. J. Kennedy (Belfast), Mr. M. Darcy, Mr. Edward Fox, and Mr. J. M. Lynch. Resolutions to the following effect were passed unanimously:—

1. That they heard with feelings of surprise and deep indignation that her Majesty's Government had consented to the cancelling of the postal contract made by a former Government, and confirmed by the present, with the sanction of Parliament. 2. That the reasons assigned for the cancelling are most unsatisfactory and inconsistent with the terms on which the subsidy was originally granted; 3. That to withdraw it now is a grievous and intolerable injury to the commercial interests of Great Britain and Ireland; 4. That it indicates positive hostility on the part of the Government to the progress of this country; 5. That, as nearly 2000 people have invested money in the enterprise, all of which would be lost if the subsidy be taken, the Government that would take it unworthy to be supported by the representatives of Ireland; 6. The Irish representatives of every shade of politics should therefore be present in the House when the question is discussed, and should withhold their support from the Government which perseveres in inflicting an insulting wrong on the people of Ireland; 7. That the Irish people of all classes should petition Parliament for the restoration of the subsidy; 8. That a deputation be appointed to wait upon Government; 9. That a petition on the subject be adopted by the meeting; 10. That a committee be appointed to carry out the resolutions.

A meeting to the same effect was held on Tuesday in Limerick, and requisitions have been extensively signed in Drogheda and Waterford, calling upon the mayors to hold public meetings to protest against the withdrawal of the subsidy. A deputation from Galway, accompanied by the Lord Mayor, waited on the Lord Lieutenant on Friday, requesting him to use his influence with the Government to get the subsidy restored to the company. His Excellency expressed his concurrence in the views of the deputation, but said that he had not been accurately informed of the arguments on the other side. He would, however, recommend their case to the favourable consideration of the Government.

Scotland.

THE CUSTODY OF THE MARQUIS OF BUTE.—In the Court of Session, on Saturday, the case of the custody of the young Marquis of Bute came before their Lordships, on the part of General Stuart, to apply the judgment of the House of Lords. The Lord Justice Clerk, in a speech of considerable length, stated the ... entering into a defence of the Court of Session in reference to its recent decision on the question before them. His lordship concluded as follows:—

"I am quite at a loss to understand how the dignity of the Court can have been truly involved—either compromised or enhanced—by its proceedings in this case. We are not accustomed to seek the promotion of our dignity, except by a ... and unpretending discharge of our duty. We have no ... tunities for the display of magnanimity. We must be content to rest our reputation on a faithful observance of our ... office, which binds us to administer the law of Scotland ... we strive to do so with the lights we have to the best of our ability. We have also another duty occasionally to perform, which is to carry out the orders of the House of Lords ...

our own original opinions, and to this duty we address ourselves most cheerfully, and with the fullest reliance on the support of that most honourable House. But we are now, I believe, for the first time required to execute a judgment of the House of Lords, without the possibility of knowing whether, if we had been allowed to consider and decide the case, our judgment would or would not have been in accordance with that of the Court of Appeal. The form of the order will be to apply the judgment, and in terms thereof to authorize and enjoin Colonel Stuart and the Earl of Galloway to deliver the custody of the pupil to the petitioner, and to this effect to recall the interdicts formerly granted."

Railways.

ACCIDENT ON THE GLASGOW AND SOUTH-WESTERN.—On Wednesday night, as the train due at Carlisle at 7 15 P.M. was passing the village of Dornock, about three miles from Annan, the carriages ran off the line, and many of them were overturned. The mail guard, Mitchell, was killed on the spot; Mr. Thomas Bate Crowther, corn merchant, a member of the Carlisle Town Council, received such serious injuries that he died in the course of two hours; Mr. Carr, manure merchant of Carlisle, sustained a serious compound fracture of the leg, and is in a precarious state; Mr. Nicholson, corn merchant, of Carlisle, received a wound on the forehead 3 or 4 inches in length; Mr. Blamire, innkeeper, Carlisle, was slightly injured, as were also Robert Ismay, a butcher, and a woman from Wigton, who had a child in her arms. A platelayer on the line had his thigh fractured, and another platelayer belonging to Gretna, was much shaken and bruised. Many others were much injured.

ACCIDENT ON THE NORTH EASTERN.—On the evening of the 22d ult. some person or persons placed a pair of wheels on the line of the Leeds and Thirsk branch of the North Eastern, between the Pannal and Harrogate stations, and the consequence was that the engine-driver of a train was killed, the stoker injured, and much damage done to the train. The company have offered a reward of 100*l.* for any information which shall lead to the detection of the perpetrators of the crime. There are circumstances of a strongly suspicious character against two or three "navvies," and steps have been taken to have them apprehended.

THE MID-DEVON AND CORNWALL BILLS.—On Tuesday, to the surprise of both parties, after an expensive contest of some days, the Committee of the House of Commons threw out both the Mid-Devon and Cornwall and Devon Central Railway Bills, without assigning any specific reason, beyond the intimation that the preamble of neither Bill had been proved to their satisfaction.

Sporting.

EPSOM RACES.

TUESDAY.—*The Craven Stakes.* A dead heat between Lord Aylesbury's Cantine and Lord Derby's Cape Flyaway, beating Knight of St. Patrick, and 8 others. Deciding Heat—The stakes were divided, and Cantine walked over.—*The Rous Stakes.* Mr Thornton's Curlew beat Lava, Rapture, and 13 others.—*The Woodcote Stakes.* Baron Rothschild's Wingrave beat Walbrook, Coulon, and 9 others.—*The Brighton Stakes.* Mr. Thomas's Touch Me Not beat Palaisseau, the Don, and 15 others.—*The Horton Stakes.* Mr. Onslow's Southport beat Hedgehog, Revolt, and Nomad.—*The Heathcote Plate.* Lord Stamford's Little Lady beat Baliverne, Sister to Morella, Miss Julia, and 7 others.

WEDNESDAY.—*Epsom Town Plate.* Baron Nivière's Wedding beat Miss Emma, Narcissus, Vulture, Wildbird, The Don, and Tibbie Shields. Won by three lengths, a head separating the second and third.—*The Derby Stakes* of 50 sovs. each, h. ft., for 3-yr-olds. Mile and a half. 238 subs. Value 6450*l.* Colonel Towneley's Kettledrum, by Rataplan, beat Dundee, Diophantus, and 15 others. Betting—3 to 1 agst Dundee, 4 to 1 agst Diophantus, 6 to 1 agst Dictator, 7 to 1 agst Klarikoff, 12 to 1 agst Kildonan 14 to 1 agst Rouge Dragon, 16 to 1 agst Kettledrum, 20 to 1 agst Royallieu, 25 to 1 agst The Drake, 40 to 1 agst Yorkminster, and 1000 to 15 each agst Atherstone and Aurelian. Precisely at the time set down the horses left the paddock and took their preliminary canters, after which Mr. Manning marshalled them in line, and in due course handed them into the custody of the starter, who lost no time in getting them to the post, and after one slight failure the flag was lowered, amid the shouts of the anxious spectators, and they were off at 3.24—to an indifferent start, Rouge Dragon, Klarikoff, and Lupus being left many lengths behind. On settling into their places, Royallieu immediately went to the front, and with Imaus, Diophantus, Kettledrum, and Yorkminster lying close up, cut out the work at a good pace; the rear division being headed by Dundee, who was running in the centre, Atherstone, Dictator, and Kildonan following in his wake, Rouge Dragon, Klarikoff, and Lupus still being in the rear. With little or no alteration they ran thus to the "furzes," when Diophantus, as in the "Two Thousand," rushed to the front and took a slight lead, Kettledrum going on second close at his girths, with Royallieu, Atherstone, and Aurelian in close attendance. Descending the hill Klarikoff began to improve his position, and before the turn was made was on equal terms with his horses. Diophantus, on entering the straight, still held a conspicuous lead, Aurelian at this point lying second, Kettledrum on the whip hand; Klarikoff, on the lower ground next the rails, creeping up, was fourth; then came Atherstone, Royallieu, and the favourite, the others presenting a lengthened tail, the last of them being Rouge Dragon, Russley, Lupus, and Seven Dials. In this way they ran to the road, crossing which Atherstone swerved, and drove Royallieu out of his stride, and in so doing sent him on to Dundee, who at that moment was in the act of coming up on the outside, and nearly knocked him over, but Custance fortunately had him in hand and saved him from falling, but before the distance had been reached, Dundee was observed to falter, and in a few strides further broke down badly, but gamely struggled on to the half distance, where he joined Diophantus, who with Kettledrum, Aurelian, and Klarikoff closely laid up, ran on together to the entrance of the stand enclosure, where Bullock called upon his horse, who answered with great gameness, and in a stride or two took a clear lead. Dundee at the same time made his final effort, but was unable to "act" through his misfortune, and was beaten, after a game struggle, by a length, defeating Diophantus by a head only for the second money, the latter beating Aurelian by a neck. Klarikoff, who never fairly got to his horses, finished an indifferent fifth, Royallieu sixth, the others, headed by Imaus, Kildonan, and Atherstone, came in at wide intervals beaten off a long way, the last three being Lupus, Rouge Dragon, and Seven Dials.—*Manor Plate.* Mr. W. Day's Deserter beat Jenny Longlegs, Dartmoor, and 4 others.—*Bentinck Plate.* Captain Coates's Hesper beat Curlew, Neophyte, and 10 others.—*Burgh Stakes.* Mr. Merry's Calliope filly beat Grant, Nomad, and Montebello.

THURSDAY.—*The Shirley Stakes.* Lord Stamford's Ellerton walked over.—*The Grand Stand Stakes.* Lord Lincoln's Lupus walked over.—*The Two-Year-Old Stakes.* Capt. Coates's Patriot beat Baliverne, King of Hearts, and 6 others.—*The Epsom Cup.* Baron Nivière's Surprise beat Lady Trespass.—*The Walton Stakes.* Mr. Hughes's Broad Arrow beat Revolt and Hedgehog.—*The South-Western Stakes.* Mr. Mellon's Sporting Life beat Twilight, Gallus, and 7 others.—*Her Majesty's Plate.* Mr. Parr's Avalanche beat Allington.—*The Epsom Four-Year-Old Stakes.* Mr. Ten Broeck's Umpire beat Loiterer.

FRIDAY.—*The Oaks Stakes.* Brown Duchess beat Lady Ripon, Fairwater, Silverhair, and 13 others.—*Ewell Stakes.* Neophyte beat Lopcatcher and Deserter.—*Derby and Oaks Stakes.* Dux beat Gazelle and 9 others.—*Surrey Foal Stakes.* Undergraduate walked over.—*Durdan Plate.* Lady Ripon beat Industrious, The Don, and 5 others.—*Glasgow Plate.* Miss Emma beat Miss Julia, Fractious, and 7 others.

Law.

COURT OF EXCHEQUER.—(Sittings in Banco, before the Lord Chief Baron, and Barons Martin, Bramwell, and Channell.)—*The Rev. Mr. Hatch's Case.—Hatch v. Lewis and Lewis.*—The Lord Chief Baron on Thursday delivered the judgment of the Court in this case. He said that a verdict had been obtained by the plaintiff with 40s. damages in the action brought by him against the defendants, for negligence in conducting the plaintiff's defence at the Old Bailey on charges of assault upon the two girls Plummer, and that a rule nisi for a new trial was afterwards moved for on the grounds of misdirection, improper rejection of evidence, and the inadequacy of the damages. If the judge had misdirected the jury, which the Court did not admit, still as the jury found for the plaintiff, it was of no consequence. With regard to the rejection of evidence, the Court were unanimously of opinion that it was properly rejected. As to the inadequacy of the damages, there was room for very great differences of opinion; but as the Court could not say the verdict was altogether wrong, there would be no rule. Rule refused accordingly.

Obituary.

VICE-ADMIRAL MOORSOM, chairman of the London and North-Western Railway, died on the 26th ult., at 5, Montague Place, Russell Square, in his 68th year, from the effects of an operation rendered necessary by the results of a wound received so far back as the battle of Copenhagen. He was born in 1792, and was the son of Admiral Sir Robert Moorsom, K.C.B., by the daughter of Mr. Thos. Scarth, of Stakesby, near Whitby. He entered the navy in 1809, and served in various ships on the coast of Spain, the Brazils, and North America. He commanded the Terror bomb at the bombardment of Algiers, in 1816, and subsequently commanded the Ariadne and Andromache on the Cape Station. He afterwards commanded the Prince Regent line-of-battle ship, bearing his father's flag, down to 1827, since which time he has not been afloat. For some years past he has devoted his attention to railway matters, and has for a long time been a director of the London and North-Western, of which railway he was appointed chairman on the recent resignation of the Marquis of Chandos. He married in 1822 the daughter of Mr. Joseph Maude, of Silsby Hall, Durham, by whom he has five sons and three daughters.

WILLS.—The will of Lord Lilford has been sworn under 90,000*l.*; General Vernon, C.B., 18,000*l.*

BIRTHS.—On the 23d ult. at 38, Brook Street, Grosvenor Square, the Lady GWENDOLINE PETRE, of a daughter—20th ult, at 7, Ainslie Place, Edinburgh, the Lady CHARLOTTE FOTHERINGHAM, of a daughter—21st ult, at 1, Great Cumberland Street, the Hon. Mrs. HORATIO FITZROY, of a son—25th ult, at Waghen Hall, Beverley, Yorkshire, the Hon. Mrs. BLAKENEY, prematurely, of a stillborn daughter—23d ult, at 4, Queen's Gate Gardens, S. Kensington, the wife of M. E. GRANT-DUFF, Esq., M.P. of a son—21st ult. at Pentre, Pembrokeshire, the wife of Arthur H. SAUNDERS DAVIES, Esq., High Sheriff of Carmarthenshire, of a daughter.

MARRIAGES.—On the 28th ult, at St. Nicholas, Brighton, Lieut. CHARLES WEBBER, Royal Engineers, to the Hon. ALICE AUGUSTA GERTRUDE HANBURY TRACY, *fourth daughter of Lord* Sudeley—28th ult, at All Saints, Paddington, the Rev. THOMPSON PHILLIPS, M.A., incumbent of Holme Eden, near Carlisle, to ELIZA CATHERINE, the second daughter of General Sir JAMES WALLACE SLEIGH, K.C.B., Colonel of the 9th Lancers—23d ult, at Stamford Hill, J. C. LAMB, Esq., of Ryton House, county Durham, to ISABELLA ANDERSON, second daughter of the late P. HUTCHISON, Esq., Hon. East India Company's Service, and niece to the late Col. Sir Alex. Anderson, K.C.B.—22d ult, at St. Paul's Church, Bury, Lancashire, Captain HALES WILKIE, H.M.'s 20th Regiment, eldest son of C. E. Hales Wilkie, Esq., of Chislett Court, Kent, to ELEANOR, youngest daughter of WM. WALKER, Esq., of Lark Hall, near Bury, Lancashire, and of Summerfield Bowden, Cheshire—22d ult, at Enfield Parish Church, the Rev. CLAUDE BOSANQUET, incumbent of St. Osyth, Essex, second son of Samuel Bosanquet, Esq., of Dingestow Court, Monmouth, to AMELIA ELEANOR, youngest daughter of Captain C. J. BOSANQUET, R.N., of Wildwood, Enfield.

DEATHS.—On the 20th ult, suddenly, at Dingwall, N.B., the Hon. CHARLES ANNESLEY—27th ult, at Exmouth, Devon, the Hon. Mrs. WELLINGTON, second daughter of GEORGE, 13th Viscount HEREFORD—23d ult, LOUISA, eldest daughter of the Hon. GUSTAVUS RUSSELL, aged one year and nine months—21st ult, at Cranbourne Lodge, Dorset, Mrs. E. DOUGLAS, daughter of the late Right Rev. Dr. Douglas, Lord Bishop of SALISBURY, in her 89th year—23d ult, at Ramsgate, ETHEL GERTRUDE, 10th and youngest child of the Very Rev. Dr. Saunders, Dean of PETERBOROUGH, aged 20 months—28th ult, at 6, Eaton Square, LOUISA ANNE, eldest daughter of the late Colonel GEORGE HART DYKE, Coldstream Guards, and niece of Sir Charles Lemon, Bart—27th ult, at Dunachton, Inverness-shire, after a short illness, ALEXANDER MACKINTOSH, of Mackintosh, the 28th Laird of Mackintosh, and the Chief of Clan Chattan—28th ult, the Ven. JAMES WILLIAM FORSTER, LL.D., Archdeacon of Aghadoe, Treasurer and Vicar-General of Limerick, and Rector of Aghadoe and Tankardstown, Killarney—28th ult, at Richmond, Surrey, BERKELEY ISAAC, son of ISAAC BUTT, Esq., M.P., aged 13—21st ult, at Heavitree, near Exeter, MARGARET, the wife of Major-General P. FADDY, Royal Artillery—15th ult, at Ootacamund, Lieut.-Colonel FRANCIS RUSSELL, 3d N.I.—19th ult, at Pembroke Dock, Colonel ST. JOHN T. BROWNE, Royal Artillery, youngest son of the late Lieutenant-Colonel Arthur Browne, Lieutenant-Governor of Charles Fort and Kinsale, Ireland, aged 45—22d ult, suddenly, at 25, Regent Terrace, Edinburgh, WILLIAM MARSHALL, Esq., Danish Consul-General for Scotland—21st ult, at St. Leonard's-on-Sea, CHARLES GARDINER, fourth son of WILLIAM BOWLES, Esq., late of Fitzharris House, Berkshire, aged 27—22d ult, at Antony, Cornwall, WILLIAM LYTTELTON, third son of W. H. POLE CAREW, Esq., aged 5—25th ult, at 15, Inverleith Place, Edinburgh, EBENEZER FERNIE, Esq., formerly of Tottenham, and Kew, Surrey, J.P., and Deputy Lieutenant for the county of Middlesex, aged 75—20th ult, GEORGE OLLIVER, Esq., of Kingston, near Arundel, a Deputy Lieutenant for the county of Sussex, aged 61—21st ult, at Eaton Hall, Congleton, GIBBS CRAWFURD ANTROBUS, Esq., aged 67—5th April, at Madras, Dr. RAMSAY SLADEN, Physician General, aged 78—24th ult, at Silver Hill, Torquay, Dr. ALEX ROBERT SUTHERLAND, M.D., F.R.S., aged 79—23d ult, at Dover, Dr. HENRY URMSTON THOMSON, M.D., aged 76—16th ult, the Rev. RICHARD FOLEY, rector of North Cadbury, Somerset, aged 59—22d ult, the Rev. JOHN PRESTON REYNOLDS, rector of Necton, in Norfolk, aged 66—22d ult, at Surbiton, Surrey, the Rev. TERENCE LIVINGSTONE, rector of Bigbury, Devon—22d ult, at his residence, Nycol's Nymett, near Bow, North Devon, the Rev. H. A. HUGHES, M.A., aged 80.

Markets.

COVENT GARDEN, June 1.

The supply of Vegetables generally continues to improve, with the exception of Cauliflowers, which are scarce. Good samples of Lettuces, Endive, and Artichokes come from France. Tolerably good English Peas may also now be obtained. Grapes fetch fair prices. Of Strawberries there is a good supply, and large quantities of French Cherries have been imported this week. Asparagus, French and Broad Beans, young Carrots, and new Potatoes may also now be obtained. Cucumbers are coming in more plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 8s to 12s	Cherries, French, p. box, 4s to 6s
Grapes, per lb., 6s to 10s	Pears, per doz., 4s 6d to 8s
Strawberries, p. oz., 6d to 1s	Apples, per doz., 6d to 1s 6d
Melons, each, 5s to 10s	Oranges, per 100, 6s to 10s
Peaches, per doz., 15s to 30s	Lemons, per 100, 6s to 10s
Nectarines, do., 15s to 24s	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 9d to 1s 6d	Celery, p. bundle, 1s 6d to 1s 9d
Green Peas, p. ½ sieve, 8s to 10s	Onions, p. ½ sieve, 1s 6d to 4s 6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 3s to 6s
Cabbages, do., 2s to 3s	Rhubarb, p. bundle, 9d to 1s 3d
Potatoes, p. ton, 80s to 120s	Tomatoes, p. doz., 6s
— new, per lb., 6d to 2s	Shallots, per lb., 1s 6d
— — per cwt., 10s to 10s	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 10d	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 4s to 5s	Mushrooms, p. pott., 1s 3d to 1s 6d
Cucumbers, each, 9d to 1s 6d	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 3s to 4s	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, May 30.

Prime Meadow Hay	75s to	86s	Clover	95s to	118s
Superior do. (old)	90	105	New Clover	—	—
Inferior do.	50	60	Do. second cut	80	100
New do.	—	—	Straw	30	42
Rowen	—	—			

DAVIS & CO.

CUMBERLAND MARKET, THURSDAY, May 30.

Sup. Meadow Hay	108s to	117s	Inferior Clover	80s	110s
Inferior do.	65	98	New do.	—	—
New do.	—	65	Straw	40	45
Superior Clover	118	123			

JOSHUA BAKER.

WHITECHAPEL, THURSDAY, May 30.

Fine old Hay	95s to	105s	Fine old Clover	110s to	120s
Inferior do.	60	80	Inferior do	80	100
Very inferior	—	—	Fine 2d cut	[illegible]	[illegible]
Prime New Hay	—	—	Inferior do.	[illegible]	[illegible]
Straw	36	40	Fine New Clover	—	—

BRITISH WOOLS.—LONDON, FRIDAY, May 31.

Our trade is characterised by a general indisposition to operate on the part of all parties concerned. A large failure of a merchant at Bradford has contributed to general discouragement, and the general idea is that prices must be lower.

	s. d.	s. d.		s. d.	s. d.
South-down Hoggets	1 5 to	..	Leicest. Wethers	1 4 to	..
Half-bred ditto	1 6 —	..	Ditto Hoggs	1 6 —	..
Down Ewes	1 4 —	..	Combing Skins	0 10 —	1 6
Kent Fleeces	1 5 —	1 6	Blanket ditto	0 6 —	0 0
			Flannel Wool	1 0 —	1 8

COLONIAL WOOL SALES.—These sales progress as before for first-class wool, but second and lower qualities are taken at lower quotations.

BUTTER MARKET.—May 31.

Best Fresh Butter	13s. per dozen lbs.
Second do. do.	11s. " "

Pork, 4s. 8d. to 5s. 4d. per 8 lbs.

COAL MARKET.—May 22.

Walls End Hetton, 17s 6d.; Walls End Haswell, 17s. 6d.; Walls End Stewarts, 17s. 6d.; Walls End South Hetton, 17s. 6d.; Walls End Trimdon Hartlepool, 16s. 9d.; Walls End Hartlepool, 17s.; Walls End Braddyls Hetton, 16s. 6d.; Walls End Russell Hetton, 16s. 6d.; Walls End South Hartlepool, 16s.; Walls End Heugh Hall, 15s. 3d.; Walls End Kepier Grange, 16s. 3d.; Walls End Cassop, 15s. 9d.; Walls End Eden Main, 16s.; Walls End Thorpe, 14s. 6d.; Tunstall, 15s.; Bell's Primrose, 13s.; Howard's Hartley, 15s. 6d.; Lambert's Hartley, 15s. 3d.—115 ships at market.

HOPS.—BOROUGH MARKET, FRIDAY, May 31.

Messrs. Pattenden & Smith report that nothing could be worse than the accounts from all parts of the Hop plantations this morning, and there is now every appearance of its proving the severest blight known for years. More business doing in Hops of all descriptions at advanced prices. Duty 100,000*l.*

METROPOLITAN CATTLE MARKET.

MONDAY, May 27.

There are a few more Beasts than on Monday last, but there is a demand for them, consequently prices are not lower; indeed some of the choicest have reached 5s. Sheep and Lambs are also rather plentiful. Trade is active for them, and last week's quotations are well supported, and in some instances exceeded. Calves are selling about the same as on Thursday. From Germany and Holland there are 542 Beasts, 5680 Sheep, and 119 Calves; from Spain, 160 Beasts; from Scotland, 700; from Norfolk and Suffolk, 1600; and 110 from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c.	4 8 to	4 10	Best Long-wools	.. to	..
Best Short-horns	4 6 —	4 8	Do. Shorn	4 8 —	5 0
2d quality Beasts	3 4 —	4 0	Ewes & 2d quality	.. —	..
Best Downs and Half-breds	.. to	..	Do. Shorn	4 0 —	4 4
Do. Shorn	5 0 to	5 4	Lambs	6 0 —	7 0
			Calves	5 0 —	5 6
			Pigs	3 8 —	4 8

Beasts, 3790; Sheep & Lambs, 22,410; Calves, 166; Pigs, 390.

THURSDAY, May 30.

The supply of Beasts is about the same as on Thursday last.

The trade is brisk, and the exceptional price of Monday last is currently given. Sheep and Lambs are rather more plentiful: there is, however, an active demand for them at advanced rates. Calf trade is slow at Monday's quotations. Our foreign supply consists of 80 Beasts, 1240 Sheep, 250 Calves, and 30 pigs. Milch Cows 105.

Best Scots, Herefords, &c. ..	4 10 to 5 0	Best Long-wools . ..	tc ..
Best Short-horns	4 6 — 4 10	Do. Shorn ..	5 0 — 5 2
2d quality Beasts	3 6 — 4 4	Ewes & 2d quality ..	— ..
Best Downs and Half-breds	— ..	Do. Shorn ..	4 4 — 4 8
		Lambs	6 0 — 7 0
		Calves	5 0 — 5 6
Do. Shorn ..	5 4 — 5 6	Pigs	3 8 — 4 8

Beasts, 865; Sheep & Lambs, 9110; Calves, 434; Pigs, 220.

MARK LANE.—MONDAY, May 27.

To-day's market was fairly attended, including some buyers from France. The little English Wheat on sale was disposed of at the prices of this day se'nnight. Buyers of foreign continue to be cautious, nevertheless former rates were generally insisted upon for granaried samples, but where it was necessary to clear a quantity from the ship, a decline of 1s. per qr. was submitted to. Barley sells slowly at late rates. Beans are 1s per qr. cheaper. Peas are unaltered in value. The Oat trade is heavy at a decline of 6d. to 1s. per qr. For Flour there is but little inquiry, and American barrels must be quoted 6d. to 1s. cheaper.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk..White	36—66	Red	48—62
— — fine selected runs..ditto	50—72	Red	54—68
— — Talavera	51—72		
— Norfolk..................	—	Red	—
— Foreign..................	46—76		
BARLEY, grind. & dist., 28s to 30s..Chev.	40—45	Malting.	38—40
— Foreign..grinding and distilling	30—36	Malting.	40—42
OATS, Essex and Suffolk..............	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—25
— Irish ....Potato	26—28	Feed ..	21—24
— Foreign........Poland and Brew	24—28	Feed ..	20—23
RYE	35—38	Foreign.	—
RYE-MEAL, foreign..................	—		
BEANS, Mazagan....37s to 41s....Tick	40—43	Harrow.	40—43
— Pigeon ......41s — 45s..Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
PEAS, white, Essex and Kent ..Boilers	38—44	Suffolk .	40—50
— Maple .... —s to —s ...... Grey	40—42	Foreign.	38—48
MAIZE .... White	—	Yellow..	—
FLOUR, best marks delivered..per sack	50—55		
— 2d do.................. ditto	38—50	Country.	38—50
— Foreign ....per barrel	30—34	Per sack	40—50

FRIDAY, May 31.

The weather during the past se'nnight has been fine, warm, and very genial for the growing Wheat, which although generally somewhat thin and patchy, has considerably improved in appearance. The Grass and spring crops would be benefited by rain. The fine weather and a continuance of good foreign arrivals of Wheat at the chief ports of the kingdom have had their usual effect upon the trade; a decline of 1s. per qr. both upon foreign and English has been submitted to throughout the kingdom. The demand for consumption has been limited, but here we have experienced some inquiry for low priced Wheat for France and Belgium, and for the former country several cargoes, both of English and foreign Wheat, have been taken, and also cargoes waiting orders on the coast. The sale of Barley, Beans, and Peas has been dull; but the value of Oats was fully supported. Flour has been in very limited request, and a reduction of 6d. to 1s. per barrel upon American pretty general. The fresh arrivals of grain and seed-laden vessels off the coast during the last week amount to 53 cargoes. The arrivals this week of English grain and foreign Wheat have been moderate, good of foreign Barley, and small of Oats. To-day's market was thinly attended. Wheat, both English and foreign, is held for Monday's prices, but very little business was transacted. Spring Corn of all descriptions is steady at Monday's quotations.

ARRIVALS FROM May 27 TO May 31.

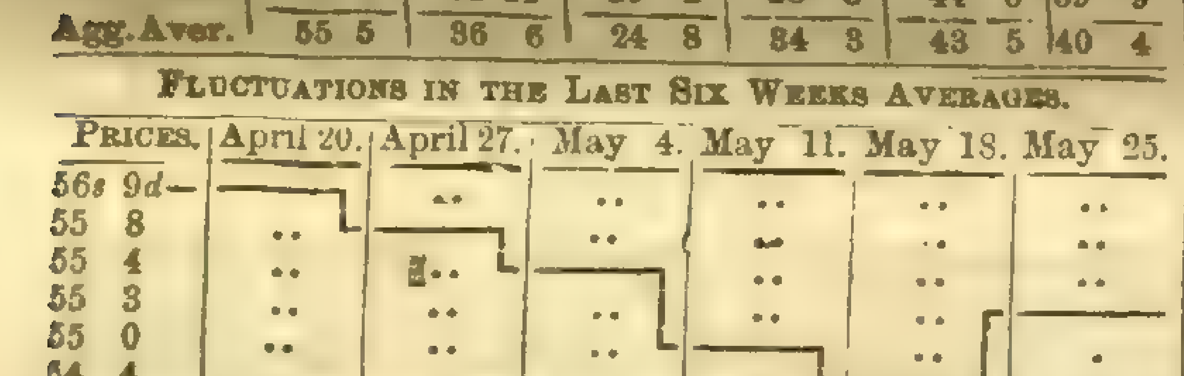
	Wheat.	Barley.	Oats.	Flour.
English ..	1450 qrs.	1010 qrs.	120 qrs.	870 sks.
Irish	— ,,	600 ,,	1880 ,,	— ,,
Foreign ..	13090 ,,	3810 ,,	8770 ,,	3230 ,, / 15110 brls.

LIVERPOOL, Tuesday, May 28.—This morning's market has been pretty numerously attended both by local and country buyers, attracted no doubt by the large arrivals from America and the expectation of buying on much lower terms. In this, however, they were partly disappointed, as holders were not disposed to give way more than from 1d. to 2d. per cental on Wheat, and 6d. to 1s. per barrel on Flour, at which reduction only a moderate business resulted. Indian Corn declined to 31s. per qr. for American mixed in large parcels ex ship, and white and yellow were also reduced in the same proportion, but round descriptions are held more firmly. Oats and Oatmeal dull but not cheaper. New Egyptian Beans gave way 1s. per qr. Peas and Barley unchanged. The market closes without animation, and sellers have the worst of it.

FRIDAY, May 31.—There was a fair attendance at to-day's market. Wheat steady, with a consumptive trade at Tuesday's prices. Flour firm in price, but not much business doing. Indian Corn rather better inquiry; mixed 31s., white 33s. 6d. to 34s., Galatz 34s. 6d. to 35s. Beans 1s. lower. Oats unchanged in favour of buyer.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
April 20..	56s 9d	37s 3d	23s 5d	37s 10d	42s 3d	39s 6d
— 27..	55 8	37 11	24 8	32 8	42 7	40 8
May 4..	55 4	36 10	24 7	35 2	42 11	40 8
— 11..	55 0	36 4	25 0	30 0	43 10	40 11
— 18..	54 4	35 11	25 1	32 0	44 4	40 5
— 25..	55 3	34 11	25 2	33 8	44 6	39 9
Agg. Aver.	55 5	36 6	24 8	34 3	43 5	40 4

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



POTATOES.—SOUTHWARK, Monday, May 27.

During the past week the arrivals coastwise and by rail have been good for the season, but owing to the very warm weather the consumption has fallen off more than one-half, and trade very dull at reduction in price. The following are this day's quotations:—Yorkshire Flukes, 110s. to 130s. per ton; Lincolnshire Regents, 80s. to 90s.; North Berwick Regents, 100s. to 110s.; Fife, Forfar, and Perth do., 70s. to 90s.; ditto Rocks, 65s. to 75s.; ditto ditto Reds, 60s. to 70s.

PARTNERSHIP.—A NURSERYMAN and SEEDSMAN, of a first-class business, wants a PARTNER to take charge of the Book and Cash matters. An excellent income guaranteed; capital required about 1500l.—Apply to Mr. CHANDLER, Horticultural Valuer, Vauxhall, London, S.

WANTED, AS HEAD GARDENER, an experienced first rate Gardener, married, without children, age 40.—Apply at the Counting House, 34, King Street, Holborn, W.C.; if by letter, to C. F. R.

WANTED, by a Clergyman in Norfolk, a single Man as IN-DOOR SERVANT, and to manage a small Greenhouse and Flower-Garden. A good character indispensable. Address, THE RECTOR, Wickmere, Norwich.

WANTED, in a large Establishment, where several Labourers are employed, a YOUNG MAN to attend the Glass department.—ALPHA, Post Office, Worksop, Notts.

WANTED, AS SHOPMAN, an active intelligent young Man, who must be well acquainted with the Retail Seed Trade, and should have some knowledge of Plants.—Apply, in own handwriting, stating terms and references, to E. COOLING, 18, Irongate, Derby.

WANTED, A SHOPMAN, well acquainted with the Retail Trade. If accustomed to call on Farmers and Gardeners preferred. Active, sober, and trustworthy.—State age, wages, &c., to J. H. COTTRELL, 15, Bull Ring, Birmingham.

WANTED, in London, an ASSISTANT in the Retail Seed Trade. Apply by letter, stating age, and where and how previously engaged, to A. C., *Gardeners' Chronicle* Office, W. C.

WANTED IMMEDIATELY, in a gentleman's family, a strong, active GIRL, about 25, who thoroughly understands the Dairy, Baking, and care of Poultry. A person brought up in a farm-house would suit. Good wages given to a competent person.—Apply to Mrs. W. BILLINGBEAR, Wokingham, Berks.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 35, married; has a thorough knowledge of Early and Late Forcing, and the Management of Flower and Kitchen Gardens. Nine years' unexceptionable character.—C. NEAVE, North End, Hampstead.

GARDENER (HEAD).—Age 29, married; perfectly understands his business in all its branches.—A. B., Mr. Moyland's, Norland Nursery, Notting Hill, W.

GARDENER (HEAD).—Age 39, married; has a thorough knowledge of his profession in all its branches. Can be highly recommended. Has upwards of nine years' character.—J. S., Hatchlands, Guildford.

GARDENER (HEAD).—Age 33, married, no incumbrance; good practical knowledge of Pines, Vines, Peaches, Cucumbers and Melons, Flower and Kitchen Gardens.—J. R., Crystal Palace Nursery, Perry Hill, Sydenham, S.E.

GARDENER (HEAD).—Age 36, married; experienced in every department, including Forcing, Kitchen and Flower Gardens, Pleasure Grounds, &c., and culture of Stove and Greenhouse Plants for Exhibition if required. Good reference.—T. M., Mr. Bryant, Florist, Brixton, S.

GARDENER (HEAD).—Age 45, married, no incumbrance; understands Greenhouse, Flower and Kitchen Gardening. Can have a most unexceptionable character of nine years' standing from his last place.—A. J., Mr. Francis's Nursery, Hertford.

GARDENER (HEAD).—Age 28, single; 12 years' good practical knowledge of his profession. Excellent character from his late employers, and well known to Mr. Bennett, Osberton Hall, Worksop, Notts, who would be happy to answer any inquiries respecting him.

GARDENER (HEAD).—Age 35, married; understands Kitchen and Flower Gardens, Forcing Vines, Melons, Cucumbers, &c. No objection to Manage Land, Haymaking, Cattle, &c. Wife can Manage a Dairy if required.—M. D., Mrs. Deakon, 2, Lime Cottages, Lower Norwood, Surrey, S.

GARDENER (HEAD).—Age 34, married; has had practical experience in Forcing Vines, Pines, Melons, the Management of the Orchard House, Flower and Kitchen Gardens, and is a good Mushroom Grower. Character will bear strict inquiry.—A. B., Mount Field House, Bonchurch, Isle of Wight.

GARDENER (HEAD OR SINGLE-HANDED).—Age 37; no objection to the care of Cows. Wife very good Cook; no objection to the Dairy. Two years' good character.—E. B., Mr. Pavy, Florist, King's Road, Chelsea, S.W.

To Noblemen, Gentlemen, and Nurserymen.

GARDENER under a First-rate Gardener.—Age 21. Four and a half years' good character.—C. W., 33, Gray's Inn Lane, W.C.

GARDENER (SECOND OR ASSISTANT).—Where Forcing is carried on to some extent. Two and a half years with Dr. Butler of Woolwich. Satisfactory references.—J. M., The Gardens, Red Lion Street, Woolwich, Kent.

GARDENER (UNDER).—Age 22; has had seven years' experience in noblemen's and gentlemen's Gardens in England and Scotland. Satisfactory recommendations.—J. W., Mr. Wilson's, 19, Edgeware Road, Hyde Park, London, W.

GARDENER, OR GARDENER AND BAILIFF.—Age 39, married, (native of Northumberland); thoroughly understands his profession. Unexceptionable character.—A. DIXON, Horticultural Gardens, Kensington, London, S.W.

GARDENER AND WIFE.—Ages 35, without incumbrance; Wife to do the family's Washing. Good characters.—D., Burton Cottage, Wanstead, Essex.

IMPROVER.—A Gardener's Son, aged 17 years, is anxious to enter the garden of a nobleman or gentleman where he would have the opportunity of learning the profession well. Has a knowledge of Plants, and would pay a small premium.—A. B., Mr. JOHN PERKINS, Nurseryman, 52, Market Place, Northampton.

BAILIFF.—Age 32 (Son of a Farmer); active and persevering; practically acquainted with every branch of modern Agriculture on Heavy and Light Soils, Woods, &c., Breeding and Management of all kinds of Stock, and Dairy. Has had great experience on noblemen's estates, to whom he would refer.—X. Y., Mr. Veitch, Nurseryman, King's Road, Chelsea, S.W.

FOREMAN.—Age 26; has a thorough practical knowledge of his profession. Three years' good character.—M. N., 2, Devonshire Street, Hammersmith Gate, W.

To Nurserymen, Florists, &c.

FOREMAN, OR GENERAL MANAGER.—Experienced, middle age, industrious, 9 years' character.—A. B., Mr. Shillinglaw's, Walthamstow, Essex, N.E.

To Nurserymen.

GENERAL NURSERY FOREMAN OR SAL...—Aged 30, married. First class references ... and moral character will be given.—S. B., Mr. ... Northwick Nursery, Worcester.

NURSE in a gentleman's family.—Age 35; ... the charge of the child from the month. ... recommended by a medical gentleman.—E. L., 13, ...burgh Street, Clapham, Surrey, S.

TANNED NETTING AT REDUCED PRI...
200 square yards, 10s.; 500 yards, 24s.; 1000 yards ...
SCRIM CANVAS for WALL FRUIT, GREENHOUS...
SHADES and TULIP COVERS.
ADDRESS IN FULL,
FREDERICK EDGINGTON, Marquee, Flag, and Banner Ma...facturer, Thomas Street, Old Kent Road, London, S.E.

TANNED NETTING for Fruit Trees, at redu... prices; 200 square yards, 10s.; 500 yards, 24s. Scr... Canvas for Wall Fruits; Tulip Covers, Sun Shades, a... Awnings; Rick Cloths, with Poles and Ropes comple... Marquees, Tents, and Flags, for sale or hire.
EDGINGTON & Co., 17, Smithfield Bars, London, E.C.

TANNED GARDEN NETTING for preservi... Seed Beds, Fruits, Strawberries, from Frost, Blight, Birds, &c., and as a Fence for Fowls, &c. 1 yard wide, 1½d.; 2 yards, 3d.; 3 yards, 4½d.; and 4 yards, 6d. per yard, in any quantity, may be had at CHAS. WRIGHT'S, 376, Strand, W.C.
Greenhouse and Flower-pot Sticks Varnished:—1 foot, 3d.; 1½, 4d.; 2, 5d.; 2½, 7d.; 3, 10d.; 4, 1s. 6d. per dozen. Dahlia Sticks Varnished, per dozen:—3 feet, 1s. 6d.; ... 6, 3s. 6d. An allowance to Nurserymen.

SHAW'S TIFFANY FOR SHADING, &c.
Sold in Pieces. Per piece ...
No. 1, 20 yards long, by 38 inches wide .. ..
No. 2, do., do., the same material, manufactured with a Patent Mineral Solution to prevent it from rotting
No. 3 (double strength), 18 yards long by 39 inches wide
No. 4 (treble strength), 18 yards long by 39 inches wide
Sold by all respectable Seedsmen. See that every piece is marked "Shaw's Tiffany," Manchester. Samples and Circulars sent free by post.
JOHN SHAW & Co., 29, Oxford Street, Manchester.

BENJAMIN EDGINGTON'S RICK CLOTHS,
New and Second hand, with Poles, &c.
BENJAMIN EDGINGTON'S MARQUEES AND TENTS, New, Second-hand, and on hire.
BENJAMIN EDGINGTON'S FLAGS AND BANNERS of all Nations on hire.
BENJAMIN EDGINGTON'S NETTING for Fruit Trees; ... "Brittain's Patent."
Address, 2, Duke Street, Southwark, London Bridge, ...
A Warehouse, 32, Charing Cross. No other establishment.

TENTS, &c.—A quantity of Government Bell ... and Marquees, suitable for Rifle Companies, C... Clubs, &c.; also Rick and Hay Cloths, Ropes, &c. Prices ... application to JOHN MORISON, 25, Norton Folgate, N.E.

JOHN FOWLER JUN., 28, Cornhill, London, E.C.—Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address.
Catalogues containing Prices and Testimonials sent post free.

JAMES AND FREDK. HOWARD, Britannia Iron Works, Bedford, Manufacturers of
CHAMPION PLOUGHS | HORSE RAKES
STEAM PLOUGHS or CULTIVATORS | HORSE HOES
HARROWS | SCARIFIERS
And other Implements.
Catalogues with full particulars sent free on application.

Garden Border Edging Tiles.
F. AND G. ROSHER, CEMENT, BRICK, and ... MERCHANTS, beg to invite attention to their ... Stock of Ornamental Garden Border-edging Tiles in ... Cotta, Terro-Metallic ware, and Red ware. They present ... tages over Box or Grass-edging in that they afford no harbour for slugs, &c., take up less room, and once laid, require no further attention.
They may be had of various patterns at F. & G. R.'s premises; Ward's Wharf, Upper Ground Street, Blackfriars, S.; ... Kingsland Road Wharf, near the Canal Bridge, London, N.E.
N.B. Sketches of patterns sent by post on application. Garden Vases and Ornamental Flower Boxes for Windows and Balconies in stock.

ORNAMENTAL PAVING TILES for Conservatories, Halls, Corridors, Balconies, &c., as cheap as ... durable as Stone, in blue, red, and buff colours, and ... of forming a variety of designs.
Also WHITE GLAZED TILES, for Lining Walls of ... Dairies, Larders, Kitchen-ranges, &c. Grooved ... metallic and other Stable Paving Bricks of great ... Clinkers, Red and White Wall-Copings, Glazed Drain Pipes ...
To be obtained of F. & G. ROSHER, at their premises ...

METCALFE, BINGLEY, AND CO.'S N... PATTERN TOOTH BRUSHES, Penetrating Unbleached Hair Brushes, genuine Smyrna Sponges, and every description of Brush and Comb and Perfumery for the toilet. ... celebrated Alkaline Tooth Powder, 2s. per box.

THE FAIRY BOUQUET.—This delicious perfume was originally discovered by one of Titania's ... attendants. It is made from wild flowers, culled by ... hands from "the bank whereon the wild Thyme grows." The authenticity of the recipe is vouched for with the same degree of certainty as is the existence of Titania herself. It is now prepared solely by METCALFE, BINGLEY & Co., Perfumers, &c., 130 B and 131, Oxford Street, London, W.—In bottles, 2s., 3s. 6d., and 5s. each.

Le Sommier Elastique Portatif.
HEAL AND SON have patented a method of making a Spring Mattress portable. The great objection to the usual Spring Mattress is its being so heavy and cumbersome.
The SOMMIER ELASTIQUE PORTATIF is made in three separate parts, and when joined together has all the elasticity of the best Spring Mattress. As it has no stuffing of wool or horse-hair, it cannot harbour moth, to which the usual Spring Mattress is very liable; the prices, also, are much below those of the best Spring Mattresses, viz.:—
3 feet wide by 6 feet 4 inches long .. .. £...
3 feet 6 in. ,, ,, ...
4 feet ,, ,, ...
4 feet 6 in. ,, ,, ...
5 feet ,, ,, ...
5 feet 6 in. ,, ,, ...
The SOMMIER ELASTIQUE PORTATIF therefore combines the advantages of elasticity, durability, cleanliness, portability, and cheapness.
An Illustrated Catalogue of Bedsteads, Bedding, and Bed Room Furniture sent free by post on application.
HEAL & SON, 196, Tottenham Court Road, W.

The Gardeners' Chronicle Newspaper.

SATURDAY, JUNE 15, 1861.

EMPLOYMENT OF EDUCATED WOMEN.—The support of all friends of the Employment of Educated Women is earnestly requested for the GRAND FANCY BAZAAR in aid of the BUILDING FUND of the FEMALE SCHOOL OF ART, which will be held in the Rooms adjoining the South Kensington Museum, on SATURDAY, June 15 (admission 2s. 6d.), and on MONDAY and TUESDAY, June 17 and 18 (admission 1s.) Under the especial Patronage of the Queen. Prospectuses will be sent on application to

43, Queen's Square, W.C. LOUISA GANN, Secretary.

Government Security Life Policies.

THE CONSOLS ASSOCIATION, 429, Strand, London, W.C.

1. Provides the Security of Consols for its Policies.
2. It lends, or returns to Insurers ON DEMAND at any time, about One-Half of all Premiums Paid.

Undoubted Security for Money with a liberal Rate of Interest.

The Association possesses a large Capital, subscribed by several Hundreds of Shareholders.

Full information may be obtained on application to

THOMAS H. BAYLIS, Managing Director.

Special Notice.

PELICAN LIFE INSURANCE OFFICE
ESTABLISHED IN 1797.

No. 70, Lombard Street, E.C., and 57, Charing Cross, S.W.

Directors.

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John Davis, Esq.	John Lubbock, Esq., F.R.S.
J. A. Gordon, Esq., M.D., F.R.S.	Benjamin Shaw, Esq.
Edward Hawkins, Jun., Esq.	Matthew Whiting, Esq.
Kirkman D. Hodgson, Esq., M.P.	M. Wyvill, Jun., Esq., M.P.

Robert Tucker, *Secretary and Actuary.*

BONUS.—All Policies effected on the Return System, and existing on the 1st July, 1861, will participate in the next division of Profits, subject to such of them as have not then been in force for five years, being continued until the completion of that period.

LOANS on Life Interests in possession or reversion; also upon other approved Security in connection with Life Assurance.

. For Prospectuses, Forms of Proposal, &c., apply at the Offices as above, or to any of the Company's Agents.

LIFE ASSURANCE.—SPECIAL NOTICE.—The next investigation into the profits of the Life Department of the SCOTTISH UNION INSURANCE COMPANY will be made at August 1, 1861, and parties taking out Policies before that date will participate in the division.

625 New Policies, for 304,705*l.*, yielding 9828*l.* 6*s.* 2*d.* of new premiums, were issued during the year ending August 1, 1860.

Thirty days' grace allowed to renew Life Insurances and 15 days to renew Fire Insurances, during which time, on payment of the premium, the Company hold themselves liable.

No extra premium charged for members of Volunteer or Rifle Corps within the United Kingdom.

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A copy of the last report, forms of proposals, and prospectuses, may be had at the Offices, 37, Cornhill, London, E.C.; and of the Agents throughout the Kingdom.

FREDK. G. SMITH, Secretary to the London Board.
No. 37, Cornhill, London, E.C.

FENDERS, STOVES, FIRE-IRONS, AND CHIMNEY PIECES.—Buyers of the above are requested, before finally deciding, to visit WILLIAM S. BURTON'S SHOW ROOMS. They contain such an assortment of FENDERS, STOVES, RANGES CHIMNEY-PIECES, FIRE-IRONS, and GENERAL IRONMONGERY as cannot be approached elsewhere, either for variety, novelty, beauty of design, or exquisiteness of workmanship. Bright Stoves, with ormolu ornaments and two sets of bars, 3*l.* 15*s.* to 33*l.* 10*s.*; Bronzed Fenders, with standards, 7*s.* to 5*l.* 12*s.*; Steel Fenders 2*l.* 15*s.* to 11*l.*; ditto, with rich ormolu ornaments, 2*l.* 15*s.* to 18*l.*; Chimney-pieces, from 1*l.* 8*s.* to 100*l.*; Fire irons, from 2*s.* 3*d.* the set to 4*l.* 4*s.* The BURTON and all other PATENT STOVES, with radiating hearth-plates.

CUTLERY, WARRANTED.—The most varied assortment of TABLE CUTLERY in the world, all warranted, is on sale at WILLIAM S. BURTON'S, at prices that are remunerative only because of the largeness of the sales. Three and a half inch Ivory-handled Table Knives, with high shoulders, 12*s.* 6*d.* per dozen; Desserts to match, 10*s.*; if to balance, 6*d.* per dozen extra; Carvers, 4*s.* 3*d.* per pair; larger sizes from 20*s.* to 27*s.* 3*d.* per dozen; extra fine Ivory, 32*s.*; if with Silver Ferrules, 30*s.* to 50*s.*; White-bone Table Knives, 6*s.* per dozen; Desserts, 5*s.*; Carvers, 2*s.* 3*d.* per pair; Black-horn Table Knives, 7*s.* 4*d.* per dozen; Desserts, 6*s.*; Carvers, 2*s.* 6*d.*; Black-wood handled Table Knives and Forks, 6*s.* per dozen; Table Steels from 1*s.* each. The largest stock in existence of Plated Dessert Knives and Forks in cases and otherwise, and of the new plated Fish Carvers.

CLOCKS, CANDELABRA, BRONZES, AND LAMPS.—WILLIAM S. BURTON invites inspection of his Stock of these, displayed in two large Show-Rooms. Each article is of guaranteed quality, and some are objects of pure Vertu, the production of the first manufacturers of Paris, from whom WILLIAM S. BURTON imports them direct.

			s.	d.		£	s.	d.	
Clocks	..	.. from	7	6	to	25	0	0	
Candelabra	..	.. „	13	6	to	16	10	0	per pair.
Bronzes	..	.. „	18	0	to	16	16	0	
Lamps, Moderateur	..	.. „	6	0	to	9	0	0	

WILLIAM S. BURTON'S GENERAL FURNISHING IRONMONGERY CATALOGUE may be had gratis, and free by post. It contains upwards of 500 Illustrations of his illimited Stock of Sterling Silver and Electro Plate, Nickel Silver, and Britannia Metal Goods, Dish Covers, Hot Water Dishes, Stoves, Fenders, Marble Chimneypieces, Kitchen Ranges, Lamps, Gaseliers, Tea Trays, Urns, and Kettles, Clocks, Table Cutlery, Baths, Toilet Ware, Turnery, Iron and Brass Bedsteads, Bedding, Bed Room and Cabinet Furniture, &c., with Lists of Prices, and Plans of the 20 large Show Rooms, at 39, Oxford Street, W.; 1, 1A, 2, 3, and 4, Newman Street; 4, 5, and 6, Perry's Place; and 1, Newman Mews, London.

"FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.

PROTECTION FROM THE COLD WINDS & MORNING FROST.

"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.

Two yards wide .. .. 1*s.* 6*d.* per yard run.
Four yards wide .. .. 3*s.* per yard.
An improved make, 3 yards wide, 2*s.* 6*d.* per yard run.

Also "Frigi Domo" Netting, 2 yards wide, 1*s.* 4*d.* per yard run.

ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.

"It is much cheaper than mats as a covering."

CHUBB'S PATENT SAFES, the most secure against Fire and Thieves.

CHUBB'S FIRE-PROOF STRONG ROOM DOORS.
CHUBB'S PATENT DETECTOR LOCKS and STREET DOOR LATCHES.
CHUBB'S CASH and DEED BOXES.

Illustrated Price List gratis and post free.
CHUBB & SON, 57, St. Paul's Churchyard, London, E.C.

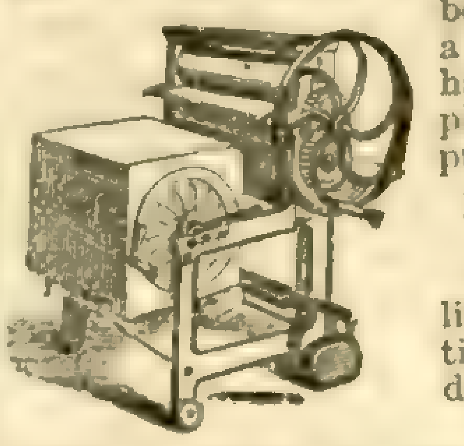
MAKE ONE TRIAL.—H. S. & J. SMITH, 83, Gracechurch Street, E.C. (adjoining Spread Eagle), sell choice TEAS from the chest, as imported, at wholesale prices. Private warehouse and no shop—small profits and small expenses.

A List of prices free on application. Orders by post with a remittance or reference punctually attended to.

GLENFIELD PATENT STARCH, used in the Royal Laundry. The ladies are respectfully informed that this Starch is exclusively used in the Royal Laundry, and Her Majesty's Laundress says, that although she has tried Wheaten, Rice, and other Powder Starches, she has found none of them equal to the Glenfield, which is the finest Starch she ever used.

WOTHERSPOON & Co., Glasgow and London.

BRADFORD'S PATENT WASHING MACHINE—"My terms of delivery as usual—A month's trial before payment—a severe ordeal for a domestic machine, but which I have now the greater confidence and pleasure in submitting to intending purchasers."



NEW IMPROVEMENTS IN BRADFORD'S WASHING MACHINERY.

It is with pleasure that I give publicity to the improvements and additions made in my Washing Machines during the last few months.

My original Machine has now been before the public four years, during which, time and experience have fairly tested it, and while proving its excellence, have also suggested improvements, both in construction and mechanical detail; the result is, the labour of working is reduced to the smallest possible minimum, while the efficiency is increased, and a compactness and convenience of detail in the arrangements for both Washing, Wringing, and Mangling attained, that at once wins over prejudice, and secures the congratulation of my customers in a manner to cause me regret, that the Machines of my original customers (to whom I am so much indebted) do not possess the same advantages.

Most obediently, T. BRADFORD.

THOS. BRADFORD, Patentee, Cathedral Steps, Manchester; and 63, Fleet Street, London, E.C.

Works, Queen Street, Salford, Manchester.

METCALFE, BINGLEY, AND CO.'S NEW PATTERN TOOTH BRUSHES, Penetrating Unbleached Hair Brushes, genuine Smyrna Sponges, and every description of Brush and Comb and Perfumery for the toilet. METCALFE'S celebrated Alkaline Tooth Powder, 2*s.* per box.

THE FAIRY BOUQUET.—This delicious perfume was originally discovered by one of Titania's principal attendants. It is made from wild flowers, culled by fairy hands from "the bank whereon the wild Thyme grows." The authenticity of the recipe is vouched for with the same degree of certainty as is the existence of Titania herself. It is now prepared solely by METCALFE, BINGLEY, & Co., Perfumers, &c., 130 B and 131, Oxford Street, London, W.—In bottles, 2*s.*, 3*s.* 6*d.*, and 5*s.* each.

PAPER COLLARS (any pattern), 6*d.* per doz., post free 7*d.*, or 6*s.* per gross.

Patentee, ARTHUR GRANGER, Paper Drapery and Cheap Stationery Store, 308, High Holborn, W.C. Trade supplied. Agents wanted.

Just out, in appropriate bindings, price 1*s.* each,

HANDY BOOK OF GARDENING, AND MONTHLY CALENDAR OF OPERATIONS, giving Plain and Practical Instructions in the Cultivation of Fruit, Flower and Kitchen Gardens.

HANDY BOOK OF WILD FLOWERS, showing where to Gather them—How to Preserve them—and their Medicinal Uses. Illustrated with many beautiful specimens.

. The above constitute Nos. 3 and 4 of the "Indispensable Handy Book," each book complete in itself.

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This day, price 2*s.*, ornamental cover,

ONLY A WOMAN. A Novel. By Captain LASCELLES WRAXALL.

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News of the Week.

IN the House of Lords on Friday Earl GRANVILLE moved the second reading of the Customs and Inland Revenue Bill. The Duke of RUTLAND moved as an amendment that the Bill be read a second time that day six months. The Earl of DERBY said he could not concur in the amendment, and expressed his hope that it would not be pressed to a division. After a discussion in which the Duke of ARGYLL, Earl GREY, and Lord MONTEAGLE took part, the Duke

of RUTLAND withdrew his amendment, and the Bill was read a second time. On Monday the House went into committee on the Bankruptcy and Insolvency Bill, when Lord CHELMSFORD moved the insertion of a clause exempting existing contracts and liabilities on the part of nontraders from the operation of the Bill. After some discussion, the clause was carried on a division by 98 to 61. The remaining clauses were agreed to, and the Bill passed through committee. The Wills of Personalty by British Subjects Bill, and the Customs and Inland Revenue Bill passed through committee. On Tuesday the Greenwich Hospital Bill was read a second time. The Government of the Navy Bill was read a second time after an important speech from the Duke of SOMERSET, in which he described the recent experiments in naval architecture and gunnery, and assured the House that the Admiralty are taking all necessary steps to maintain the maritime supremacy of the country. The Customs and Inland Revenue Bill was read a third time and passed. On Wednesday the Royal Assent was given by commission to the Customs and Inland Revenue Bill, and other Bills. On Thursday the Railway Companies Mortgage Transfer (Scotland) Bill passed through committee The report of amendments on the Bankruptcy and Insolvency Bill was received and agreed to. The Wills of Personalty of British Subjects Bill was read a third time and passed.

In the Commons on Friday Mr. GREGORY, in compliance with the unanimous wish of the House, expressed by Colonel WILSON PATTEN, consented to postpone *sine die* the notice which he had placed upon the paper in favour of the prompt recognition of the Southern Confederacy of America. The House went into committee on the Army Estimates. On the vote of 133,276*l*. for the Volunteer service, Lord ELCHO called attention to the wants of the Volunteer corps, and urged upon the Government the importance of contributing towards their permanent expenses. Mr. T. G. BARING in reply said that, although the Government was opposed to any money grant to the force, still that it was not indisposed to do something in the direction of finding drill instruction, targets, &c. The vote was then agreed to. The Excise and Stamps Bill was recommitted with amendments. The Report of the Committee of Supply was brought up and agreed to. On Monday, on the order for going into committee on the Appropriation of Seats (Sudbury and St. Albans) Bill, Earl JERMYN moved as an amendment that the House go into committee that day six months, on the ground that Sudbury and St. Albans were too severely punished by the Bill, while other boroughs still more corrupt were allowed to escape. Sir G. LEWIS opposed the amendment, which was negatived on a division by 338 to 44. The House then went into committee. On clause 1 Mr. COLLINS moved its postponement, with the view of hereafter proposing a division of the West Riding of Yorkshire into two portions, each returning two members. Sir G. LEWIS opposed the motion, which was negatived on a division by 118 to 81. Colonel DUNNE moved as an amendment that the county of Cork be inserted in the clause instead of South Lancashire. Sir G. LEWIS objected to the amendment, which was negatived on a division by 228 to 67. Mr. BAZLEY moved as an amendment that Salford should return two members instead of one. Sir G. LEWIS objected to the amendment, which was withdrawn. Clauses 1 and 2 were then agreed to. In clause 3 Mr. KNIGHTLEY moved as an amendment the omission of the words "the parishes of Chelsea and Kensington." The amendment was opposed by Government, but was carried, on a division, by 275 to 172, being a majority of 103 against Ministers. The further progress of the committee was then postponed to Monday. The Industrial Schools Bill passed through committee. On Tuesday seven Bills for the consolidation of the Criminal Law passed through committee, certain clauses having been reserved for consideration on a future day. Mr. BRADY moved a resolution in favour of the claims of Mr. W. H. BARBER to further compensation. The motion was opposed by Sir G. GREY and the CHANCELLOR of the EXCHEQUER, and was negatived without a division. Sir J. TRELAWNY moved a resolution on the affairs of New Zealand, and was proceeding to enter into details when the House was counted out. On Wednesday the adjourned debate on the motion for the second reading of the Affirmations Bill was resumed, when the Bill was lost on a division by a majority of 136 to 66. The Locomotives Bill passed through committee. On Thursday the East India Loan Bill passed through committee. The Indian Council Bill, the India High Court of Judicature Bill, and the India (Civil Service) Bill, were read a second time. The Excise and Stamps Bill was read a third time and passed, and the Queensland Government Bill passed through committee.

The French Corps Législatif, in its sitting of Thursday agreed to the whole budget by a majority of 242 to 5. The French Government has adopted the same line of policy as that of England with reference to the struggle in the United States. The *Moniteur* of Tuesday published an Imperial Decree announcing that the EMPEROR intends to observe the strictest neutrality during the struggle between the Government of the Union and the States which pretend to form a separate confederation. It announces that no ships of war or privateers will be allowed to remain with their prizes in any French port or roadstead more than 24 hours, or to sell any portion of their prizes in such ports; it forbids all French subjects to enter the service of either of the belligerents in any capacity whatever; and it declares that all Frenchmen, whether in France or elsewhere, who act contrary to this decree shall have no claim to the protection of the Government. It is reported that the EMPEROR has determined to recognise the new kingdom of Italy without further delay.

A despatch from Pesth states that M. DEAK and the members of the Right quitted the Chamber of Deputies on Wednesday, on the rejection of their proposal to insert certain words in the address in reference to the abdication of King FERDINAND. It is currently reported that M. DEAK intends to withdraw the address.

In the Italian Chamber of Deputies on Wednesday Baron RICASOLI announced the formation of the new Ministry, and declared that the policy of the new Cabinet would be a continuation of that of Count CAVOUR. He said that Italy had a right to constitute herself as a united nation; that the basis of the new Ministry would be respect for the constitution and the laws, and the maintenance of public order; and that their first care would be zealously to continue the armament of the country, and to develop the resources of Italy.

Accounts from Constantinople inform us that the Syrian question has at length been settled. At the sitting of the Conference on Friday it was resolved that the governor of the Lebanon should be appointed for three years, and should not be subject to dismissal unless with the joint consent of the Porte and the Great Powers. It was also unanimously resolved that the governor may be chosen without distinction from among the Christian subjects of the SULTAN in any province of the empire.

From the United States we learn that the Federal Government will make a conditional call for 100,000 men. The Federal troops are rapidly taking up positions around the city of Richmond, the head-quarters of the Seceders, who are concentrating large reinforcements in that neighbourhood. The Federal steamers have attacked the Confederate batteries at Aquia Creek, on the Potomac, but the result of the engagement is not yet known. Large bodies of troops are moving upon Harper's Ferry from Pennsylvania, with a view, it is supposed, of cutting off the Southern forces from Richmond. General BUTLER is awaiting reinforcements from the North at Fort Monroe, preparatory to an attack upon the city and dockyard of Norfolk. On the other hand the Confederate troops are menacing Alexandria. Western Virginia has declared against secession, but in the other division of the State the majority for secession is 150,000. It is asserted that the Confederates have given up all idea of capturing Fort Pickens. New Orleans was blockaded on the 28th ult., and the blockade is rapidly extending to the further points in the Gulf.

By the Overland Mail we have accounts from Calcutta to the 8th May, and from Hongkong to the 1st of May. Mr. LAING is suffering from a severe attack of dysentery; the popularity of his financial measures continues unabated. The British and French ambassadors have established themselves in their residences at Pekin, and their reception by the authorities and people appears to have been friendly. The Chinese Government has resolved to establish an English school in Pekin. The war in New Zealand terminated on the 19th March by the unconditional surrender of the natives.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family, with the King of the Belgians and Prince Louis of Hesse, continue at Buckingham Palace. On Thursday evening, the 7th inst., the Count of Flanders left Buckingham Palace for Dublin on a short tour in Ireland. On Friday morning the Prince Consort and Prince Louis of Hesse visited the Exhibition of the New Society of Painters in Water Colours and the British Institution. In the afternoon the Queen, accompanied by the Princess Alice and Princess Louisa, took a drive in an open carriage and four. The Prince Consort, accompanied by Prince Louis of Hesse, rode on horseback. On Saturday morning the Prince Consort and Prince Louis of Hesse rode on horseback. In the afternoon the Queen, accompanied by the Princess Alice and the Princess Helena, took a drive in an open carriage and four. The Prince Consort and Prince Louis of Hesse rode on horseback. On Sunday morning the Queen and Prince Consort, the King of the Belgians, Prince Louis of Hesse, and the Princesses Alice, Helena, and Louisa, attended Divine service in the private chapel. The Dean of Canterbury preached the sermon. On Monday morning the Princess Alice, Helena, and Louisa rode on horseback in the Riding House of Buckingham Palace. In the afternoon the Queen, accompanied by the Princess Alice and the Princess Helena, took a drive in an open carriage and four. The Prince Consort, accompanied by Prince Louis of Hesse, rode on horseback. On Tuesday morning the Queen walked in the gardens of the Palace. The Prince Consort presided at a meeting of the Council of the Duchy of Cornwall. Prince Louis of Hesse visited the Tower of London. In the afternoon the Prince Consort, accompanied by Prince Louis of Hesse, rode on horseback. On Wednesday morning Earl Cowley had an audience of the Queen. The King of the Belgians, the Prince Consort, the Princesses Alice, Helena, and Louisa, and Prince Louis of Hesse, visited the Exhibition of the Royal Botanic Society in the Regent's Park. In the afternoon the Queen and Prince Consort, accompanied by the Princess Alice and Prince Louis of Hesse, took a drive in an open carriage and four. On Thursday morning the Queen walked in the gardens of Buckingham Palace. In the afternoon the Prince of Wales arrived at Buckingham Palace from Cambridge. The Prince Consort, accompanied by the Prince of Wales and Prince Louis of Hesse, rode on horseback.

PRINCE ALFRED arrived at Halifax, Nova Scotia, on the 22d ult, and attended the review in honour of the Queen's birthday on the [illegible]. On the 29th at midnight his Royal Highness landed at St. John's, New Brunswick, and was received by the Governor and civic authorities. There was a large torchlight procession by the fire companies in uniform. On the 30th the Prince left St. John's for Frederickton, and it is supposed he will proceed to Quebec by the River St. John and the Lakes to the River de Loup. After visiting Canada his Royal Highness will return to England in a small steamer some time in August.

PRINCE ARTHUR has had an attack of measles at Buckingham Palace. His Royal Highness is going on favourably, as are also the Princess Beatrice and Prince Leopold, who were previously attacked by the same malady.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of the First Lord of the Treasury in Downing Street. Another Council was held on Wednesday.

BOARD OF ADMIRALTY.—Admiral Sir F. Grey, K.C.B., and Commodore the Hon. J. R. Drummond, C.B., have been appointed Lords Commissioners of the Admiralty in the room of the late Sir Richard Dundas and Admiral Pelham, who has retired in consequence of ill health.

THE CHANNEL FLEET.—Rear-Admiral Erskine's division of the Channel squadron, consisting of the screw steam-ships Edgar, 91; Hero, 91; Donegal, 101; and Trafalgar, 90; left Portland on Tuesday evening for Leith. The Plymouth division, comprising the Aboukir, 90; Conqueror, 101; Centurion, 80; and Revenge, 91, have arrived in the Downs.

IRON-PLATED SHIPS.—The Iron Plate Commission, which has been for some time past sitting in Victoria Street under the presidency of Captain Sir John Dalrymple Hay, R.N., has called to its assistance a consulting committee of gentlemen whose occupations make them practically familiar with iron structures. Messrs. Laird, Samuda, Scott Russell, Fairbairn, and Palmer are among those who have been applied to for advice.

THE ARMY IN NORTH AMERICA.—It has been determined to send three regiments of infantry and a sufficient amount of artillery and munitions of war to reinforce the garrisons in British North America. These garrisons had been so reduced of late years as scarcely to afford sentries enough for the protection of the public buildings at the most important military posts, and, as their weakness seemed even to invite attack, it has been thought desirable to place them in a position to command respect from any irregular body which, in a moment of excitement, might feel tempted to assail a place which seemed incapable of defence.

THE CENSUS.—By a summary of the results of the late census, published in anticipation of the detailed and revised tables, it appears that on the 8th of April, 1861, there were in England and Wales 20,061,725 persons. Of these, 9,758,852 were males, and 10,302,873 females. The population of the metropolis on the day of enumeration was 2,803,034, giving an increase, since 1851, of 440,798, or nearly half a million. During the last decennial period the actual increase of population in England and Wales was 2,169,576, which is about 12 per cent. On the night when the census was taken there were 3,745,463 occupied houses, 27,580 building, and 182,325 uninhabited.

CHURCH RATES.—The following scheme of compromise has been transmitted by Mr. Sotheron Estcourt to Sir J. Trelawny, and published in the form of a Parliamentary paper :—

"Abstract of a Bill to Abolish the Jurisdiction of Ecclesiastical Courts in respect of Church-rates, and to Alter and Amend the Law relating to Church-rates. 1. Jurisdiction of ecclesiastical courts in regard to the validity and enforcement of church-rates to be transferred to the same tribunal as the poor-rate. 2 Each ecclesiastical district to be a separate parish for the purposes of this Act. No rate to be collected in any district, except for the church or chapel of such district. 3 Churchwardens to be empowered and required once in their year of office to publish on the church door for three successive Sundays, and after publication to levy and collect an owner's church-rate, not exceeding one penny in the pound, upon all property in respect of which the occupier has been assessed to a church-rate within the last five years, such rate to be solely applied to the following purposes, viz. :—Repair of church, church clock, bells, belfry, and maintenance of the churchyard. Providing of books required for registers, and for performance of divine worship, according to law. Insurance of all the above against fire. Payment of fees due by law. This rate to be payable by tenants, and deducted from rent due to the landlord. 4. Church vestry, as hereinafter defined, to have power to levy an occupier's church-rate for any purpose connected with Divine worship. Such rate to be collected only from occupiers who are members of the church vestry. The church vestry to consist solely of owners who have been rated as aforesaid, and of all occupiers who shall during the preceding 12 months have paid any church rate, or, being ratepayers, have contributed to any subscription in lieu or in aid thereof, and who shall not decline to be members of such church vestry, by delivering to the churchwardens before Easter in each year, a notice in the form set forth in the schedule. 6. Church vestry to have under its control the audit of churchwarden's accounts, furniture and fittings of the church, salary of officers, appropriation of seats, and all expenditure incurred for the benefit of the congregation. 7. Small Tenements Acts to be applicable to occupiers' rates under this Act. 8. All rates under this Act to be assessed according to the poor-rate. 9. After this Act comes into operation, no church-rate to be assessed or levied except in accordance with the provisions of it. 10. Saving where money is due on security of rates. 11. Saving provisions of local Acts. 12. This Act to come into operation on Easter Day, 1862. SCHEDULE.—Form of Notice. To the Churchwardens of —— Parish. I, A. B., give you notice that I decline to be a member of the church vestry of this parish for the year ——. Date. ——. (Signed) ——."

Foreign.

FRANCE.—In the general discussion of the Budget in the Corps Législatif the financial statement of the Government was severely criticised by M. Kœnigswarter, who said that though the Ministers took credit for not asking for a loan, they were nevertheless heavily indebted to several companies, and that their liabilities exceeded their assets by more than 24,000,000f. He proposed, as a remedy for this state of things, to reduce the military expenses by 60,000,000f., to diminish the number of functionaries, and lastly to impose an income tax. The last proposition was received by the Chamber with evident dissatisfaction. In the discussion of the different budgets on Saturday, those for the Ministries of State and Justice were adopted. When the budget for the Ministry of Foreign Affairs came under discussion, M. Plichon reviewed the Syrian question since 1840, and said that if fresh distrusts should thwart the policy of France, the Government might depend upon the concurrence of all France for maintaining that policy. M. Billault replied that the Syrian question formed the subject of negotiations which he hoped would soon lead to a satisfactory result. "He would not," he said, "enter into inopportune details, but was happy to state that the Corps Législatif, as well as the Senate, the Government, and the whole country, attached serious and practical interest to that question. The Government were cognisant of their duties, had fulfilled them in the past, and would fulfil them in the future." Loud cheers followed this declaration. The Budget for Foreign Affairs was then adopted. On proceeding to the vote on the Budget for the Ministry of the Interior, M. Keller criticised the state of things in the interior. He condemned the revolution, and deplored the exceptional laws for general security, which he said, had been made against the revolutionists, but which would soon be turned against the old political parties. He then attacked the Government and the magistracy of the country, and complained of the tolerance of the Government towards the revolutionary journals, of its attacks against the Church, its hostility towards the Pope, and its "persecution" of the bishops and the clerical papers. On Monday, M. Ollivier, an Opposition member, refuted what he called the Jesuitical abuse of M. Keller's speech in the previous sitting. M. Baroche likewise replied to M. Keller in the name of the Government. M. Darimon explained his amendment in favour of the suppression of the laws for general security, which was, however, rejected. The Budgets for the Ministries of the Interior and Finance were then adopted. On Tuesday the Budgets for the Ministries of War and Marine were voted without opposition, and on Thursday the whole Budget was voted by a majority of 242 to 5. In the Senate, on Tuesday, a debate took place on the petition of Madame Libri, setting forth the unjust condemnation of her husband on a charge of stealing books from the Royal Library. M. Mérimée vindicated the reputation of M. Libri against the aspersions of his prosecutors. On the other side M. Dupin, M. Delangle, and M. de Roger, the three law officers of the Crown, denied the possibility of the French magistracy not being actuated by the purest motives, and said that, next to her army, the magistracy was the greatest glory of the country. The Senate passed to the order of the day. The Emperor is said to have sent off an autograph letter to King Victor Emmanuel on receiving the news of the death of Count Cavour. The *Débats* announces the opening of a subscription in Paris to raise a monument to the great Italian statesman Cavour. A funeral service has been celebrated in his honour at the Madeleine. The Ambassadors from the King of Siam, bearing presents for the Emperor of the French, have arrived at Toulon. The artillery of the Syrian expeditionary corps has commenced disembarking at Marseilles. Count and Countess Trani embarked on Monday evening at that port for Civita Vecchia. The Court has gone into mourning for four days for the Princess Bathilde Bonaparte, Countess de Cambacérès, who died suddenly on Sunday in her 20th year. She was the youngest daughter of the Prince de Canino, son of Lucien. The Count and Countess de Persigny have left Paris for Fontainebleau, to which place M. Fould has been summoned by the Emperor. It is said that there is no truth in the report that he will thence proceed to Turin.—The French man-of-war Donauwerth, with troops, has arrived at Messina from Syria, and will sail for Toulon after having been supplied with provisions. —The *Moniteur* publishes the following declaration in reference to the Civil War in America :—

"His Majesty the Emperor of the French, taking into consideration the state of peace which exists between France and the United States of America, has resolved to maintain a strict neutrality in the struggle between the Government of the Union and the States which propose to form a separate Confederation. In consequence, his Majesty, considering Article 14 of the naval law of August, 1681, the 3d Article of the law of the 10th of April, 1825, Articles 84 and 85 of the Penal Code, 65 and following of the Decree of the 24th of March, 1852, 313 and following of the *Code Pénal Maritime*, and Article 21 of the *Code Napoléon*. Declares :—1. No vessel of war or privateer of either of the belligerent parties will be allowed to enter or stay with prizes in our ports or roadsteads longer than 24 hours, excepting in case of compulsory delay. 2. No sale of goods belonging to prizes is allowed in our ports and roadsteads. 3. Every Frenchman is prohibited from taking a commission under either of the two parties to arm vessels of war, or to accept letters of marque for privateering purposes, or to assist in any manner whatsoever the equipment or armament of a vessel of war or privateer of either party. 4. Every Frenchman, whether residing in France or abroad, is likewise prohibited from enlisting or taking service either in the land army or on board vessels of war or privateers of either of the two belligerent parties. 5. Frenchmen residing in France or abroad must likewise abstain from any act which, committed in violation of the laws of the Empire, or of International law, might be considered as an act hostile to one of the two parties and contrary to the neutrality which we have resolved to observe. All persons acting contrary to the prohibitions and recommendations contained in the present declaration will be prosecuted, if required, conformably to the enactments of the law of the 10th of April, 1825, and of Articles 84 and 85 of the Penal Code, without prejudice to the application that might be made against such offenders of the enactments of the 21st Article of the *Code Napoléon*, and of Articles 65 and following of the Decree of the 24th of March, 1852, on the merchant service, 313 and following of the Penal Code for the Navy. His Majesty declares, moreover, that every Frenchman contravening the present enactments will have no claim to any protection from his Government against any acts or measures, whatever they may be, which the belligerents might exercise or decree. NAPOLEON. THOUVENEL, Minister of Foreign Affairs."

SPAIN.—The Spanish squadron lately stationed at Algesiras has sailed in the direction of Palma. Admiral Pinzon has left for Tangier with two vessels. The Admiral has received instructions to the effect that if the Emperor of Morocco should not consent to exchange Tetuan for Mogador, the Spanish squadron is to take possession of the latter place by force, and disembark there the troops now encamped on the coast of Arragon. An official denial has been given to the rumour of a treaty between France and Spain for securing the possession of the Antilles.

PORTUGAL.—The Cortes are chiefly occupied in examining the result of the late elections. The Government are unable to count upon a majority, and a change of Ministry is not impossible. The Portuguese Government has proposed to Spain a mutual abolition of the duty on cattle. A royal proclamation prohibits the open-air meetings convened on Sunday by the Patriotic Society. It is said that seditious manifestoes have been distributed among the troops.

FRANKFORT.—In the sitting of the Federal Diet on Thursday, Prussia proposed the formation of a coast division by Prussia and Hanover, and that those Powers should also form the reserve division. Prussia also communicated her views in reference to the command in chief of the Federal army.

HESSE-DARMSTADT.—In the sitting of the Second Chamber on the 7th inst. the Ministry proposed to raise the appanage of Prince Louis of Hesse from 18,000 gulden yearly to 40,000, in consequence of his betrothal to the Princess Alice. The increase is to commence on the 1st April of this year.

BAVARIA.—The marriage of Count de Trani, brother of King Francis II. of Naples, to the Princess Matilda, Duchess of Bavaria, took place on the evening of the 5th, in the Court Chapel. All the members of the ducal family were present except the Empress Elizabeth of Austria and Queen Mary of Naples. Baron de Schrenk, the Minister of the King's Household, was the only member of the Cabinet present; the ceremony being kept as a strictly private one, without any official state. On the morning after the marriage the Royal couple left for Rome by way of Lindau, Switzerland, and Marseilles.

AUSTRIA.—The *Pays* denies the report that Austria intends to reduce her army. The Polish and Czech members of the Lower House have made a proposal that the Emperor should prorogue the sittings of the Council of the Empire until a representation of the whole Monarchy be obtained, and that he should immediately convoke the provincial Diets. In the sitting of the Lower House on Saturday the Minister of Finance declared that the landed property possessed by the National Bank was the property of the State, and never formed part of the provincial Crown domains. The Minister also stated that the sale of the property was to be deferred until the new regulations of the bank should have been agreed upon. The proposals in reference to Ministerial responsibility and the periodical assembling of the Reichsrath were adopted.

HUNGARY.—The discussion on the paragraphs of the Address proposed by M. Deak, the presentation of which to the Emperor had been agreed to in principle, was continued on Wednesday in the Chamber of Deputies. M. Deak and the members of the Right left the House on the rejection of their proposal to insert certain words in the Address in reference to the abdication of King Ferdinand. It is currently reported that M. Deak intends to withdraw his proposed Address. The collection of taxes by military execution is everywhere carried out with the greatest severity. The Municipal Council of Pesth have resolved upon forming a civic guard on account of the personal security of the inhabitants becoming more endangered.

ITALY.—The *Turin Gazette* announces that the new Ministry has been formed as follows :—

Baron Ricasoli, Foreign Affairs and President of the Council Signor Minghetti, Interior ; Signor Bastogi, Finance ; Signor Scialoja, Commerce ; General Della Rovere, War ; General Menabrea, Marine ; Signor De Sanctis, Public Instruction ; Signor Cordova, Agriculture ; Signor Peruzzi, Public Works.

In the sitting of the Chamber of Deputies on Wednesday, Baron Ricasoli announced the formation of the new Ministry. He said :—

"In accepting so great a task, he and his colleagues had yielded to a sentiment of duty. After having dwelt on the immense loss sustained by Italy in the death of Count Cavour, he continued, 'No one has bent under this misfortune, nor have we lost our faith in the destinies of Italy." He then explained that the policy of the new Cabinet will be a continuation of that of the one presided over by Count Cavour, who, he said, united boldness with prudence. He maintained that Italy had a right to constitute herself as a united nation, and said :—'The basis of the new Ministry will be, respect for the constitution, respect for the laws, and maintenance of public order. The first care of the Government will be zealously to continue the armament of the country, and at the same time to develope the economical forces of Italy, and to establish the balance of the revenue and expenditure.' He concluded by expressing his full confidence in the support of Parliament, and in the good sense and patriotism of the Italians.

Loud applause followed the words of the Minister. A similar communication was made in the Senate. The new Ministry took the oath of allegiance on Thursday. In the Chamber of Deputies a Bill was laid on the table for the construction of a naval and military arsenal at Spezzia. The Chamber has approved the Bill for a railway from Florence to Ancona, and on the motion of its President has decided that a marble statue of Count Cavour should be placed in the Hall of Assembly. The Municipality of Florence has resolved to erect a mausoleum to the Count at Santa Croce, and the municipality of Foligno has voted a sum of 5000 fr. towards the monument to be erected to the Count at Turin. There is reason to believe that the death of Count Cavour will hasten the recognition of the new Kingdom of Italy on the part of France. It is said that it will take place under certain reservations, so far as Rome is concerned, which for the present will not be the capital of Italy. It appears that Count Cavour's mind was perfectly composed when he died, and in his delirious moments he frequently gave utterance to the words "Italy, Rome, Venice,

Napoleon," and added, "I will have no state of siege. Italy must regenerate herself by liberty. Italy cannot perish." He sent for his confessor some time before his physicians declared his death to be near, and had every religious consolation. A deputation from the Municipality of Turin demanded that his remains should be interred in a conspicuous part of the cemetery of Turin, but the Cavour family would not consent, because the Count expressed a wish to be buried in the city of Santena. His funeral accordingly took place at Santena on Friday evening, and was performed with almost royal pomp. All the bodies of the State, the authorities, and various deputations joined the procession, which was followed by the whole population. A number of Polish and Hungarian refugees were also present, with General Klapka and Kossuth at their head. During the funeral ceremony frequent discharges of cannon took place, and all the houses were draped in black. The body however will only be deposited temporarily at Santena, as the King has ordered it to be interred in the royal Basilica of the Superga. The report of Garibaldi's illness is positively contradicted. The police authorities of Milan have been instructed to institute an inquiry with a view to discover and prosecute the authors of the proclamation lately posted up at Milan, in which the Hungarians were called upon to take arms against their Government.—The national fête was celebrated in all parts of Naples on the 2d inst., and everywhere passed off quietly. The societies of working men who are devoted to Garibaldi declared their meetings permanent, and held themselves in readiness to put down any opposition to the popular rejoicings. Demonstrations and speeches were made in favour of the deliverance of Rome and Venice. The Neapolitan provinces are struck with consternation at the death of Count Cavour.—A despatch from Rome, dated the 6th inst., announces that the Pope had experienced some shiverings on that day, which were followed by slight symptoms of fever, and prevented His Holiness from taking part in the religious processions. His health, however, is now entirely re-established. The Princes Leopold and Ferdinand of Lorraine are shortly expected at Rome. A subscription has been opened at Rome for the future erection of a monument to Count Cavour in the Capitol. Four of the Roman Princes, Piombino, Fiano, Rospigliosi, and Gavotti, having refused to withdraw their signatures for the withdrawal of the French troops from Rome, have been exiled by the Pope. They are now on their way to Paris, and will present the address of their countrymen to the Emperor of the French. A notary has been arrested, and 15 physicians have been exiled, in consequence of the discovery of proclamations and tricoloured cockades. About 50 peasants, who had taken refuge in the Papal territory to escape the conscription for the Italian army, were arrested, but were afterwards set at liberty.

SICILY.—At Palermo all the shops were closed on receipt of the intelligence of Count Cavour's death.

POLAND. — According to advices received from Warsaw, an ordinance has been published there enumerating the articles of dress which the inhabitants are prohibited from wearing, namely—square caps, Polish tunics, amaranth coloured waistcoats and neckties, coloured boots and shoes, and any dress of a showy colour or unusual cut. It is said that the Grand Duke Michael is expected at Warsaw.

TURKEY AND SYRIA.—A telegram from Constantinople announces that the International Conference in its sitting of Friday last resolved that the Governor of the Lebanon should be appointed for three years, to reside at Der-il-Kamar with the rank of Mushir, and not to be dismissed without a previous understanding between the Porte and the Great Powers. At the end of the three years the Porte is to come to a fresh understanding with the Powers respecting the government of the Lebanon. The Conference also unanimously resolved that the Governor of the Lebanon may be chosen, without distinction, from among the Christian subjects of the Sultan in any province of the empire. Order is to be maintained in the mountains by militia, recruited from the inhabitants of the country. Turkish troops are only to advance into the Lebanon on the requisition of the Governor.

CAPE OF GOOD HOPE.—Intelligence has been received of the meeting of Dr. Livingstone and Bishop Mackenzie at the mouth of the Zambesi. From the lateness of the season and the unhealthiness of the Zambesi, it was resolved, at Dr. Livingstone's suggestion, to alter their plans, and instead of proceeding up that river, to try the Ruvuma river for transit into the country and seat of the mission. The party accordingly re-embarked and proceeded to Johanna, one of the Comoro isles, where the staff of the mission party is located, Bishop Mackenzie, Dr. Livingstone, Dr. Kirk, and the Rev. Mr. Rowley having proceeded in the Pioneer up the Ruvuma, which is above the line of the Portuguese territory. Dr. Livingstone, after having made full inquiries, thinks the Makololo missionaries fell victims to a pestilential fever, not to the treachery of the Makololo chief and people.

INDIA.—By the arrival of the Overland Mail we have advices from Calcutta to May 8. There is no news of importance. The papers are still discussing Mr. Laing's financial measures which continue to be popular. Mr. Laing, however, has been suffering from a severe attack of dysentery. He was to have gone to sea in the steamer which brought this mail, but was not equal to the exertion. The volunteering for the new regiments of the line, formed out of the local European Corps, has been almost universal. A gentleman has been appointed to report on the districts in Bengal which are capable of producing cotton. It is reported that the Madras Chamber of Commerce has applied to Government for the services of a gentleman to visit the cotton districts. Ten thousand Shans have emigrated into British Burmah, where they have been allowed to settle.

CHINA.—The British and French embassies are established at Pekin. The flags of both nations were hoisted in the capital on the 26th of March, with every appearance of satisfaction to the inhabitants. The best understanding appears to exist between Mr. Bruce and Prince Kung. The Emperor, on account of ill-health, has postponed his return to Pekin till the warm weather is over, which will be about the end of September. The Chinese Government has resolved to establish an English school in Pekin. Our forces at Tien-tsin are in good health, and enjoying the return of spring. Our traders had already begun to take advantage of the opening of the Yang-tsze-kiang. The rebels were moving in the direction of Hankow, and there had been some fighting in the district of the Yang-tsze, but with no marked result.

NEW ZEALAND.—The war in New Zealand has terminated by the unconditional surrender of the natives. Peace was concluded between Governor Brown and Kingi and his allies on the 19th of March. The Waikatos at once departed for their homes. Kingi retreated from the disputed territory, and friendly relations were resumed between the native tribes and the settlers. Major General Pratt, having resigned the command of the forces in New Zealand, returned to Melbourne on the 12th of April.

UNITED STATES.—We have accounts from New York to the 1st inst. The New York press interprets the Queen's Proclamation as a *quasi* recognition of the Southern Confederacy. The Federal steamers have attacked the Confederate batteries at Acquia creek, the terminus of the Richmond, Fredericksburgh, and Potomac Railroad, about 55 miles below Washington, on the Potomac. The result is not known. The Federal Government will make a conditional call for 100,000 men. A man has been shot dead in the streets of New York for expressing secession views. The blockade of the Southern ports would seem to be extending to the furthest points in the Gulf, as well as along the Atlantic coast. New Orleans was blockaded on the 28th ult. Western Virginia has declared itself against secession. The Federal troops have taken possession of Grafton, in Western Virginia, but in the other division of the State the majority for secession is 150,000. Other Federal troops are strengthening their positions on the heights along the Potomac. Recruiting and the war excitement continue throughout the Northern States. The capture of Hampton by General Butler has been confirmed. No attack was made on Sewall's Point, and General Butler has returned to Fort Monroe, where he is awaiting reinforcements, on whose arrival an immediate attack will be made on Norfolk. No less than 450 slaves, including women and children, have fled into General Butler's camp, and reported that a general rising of the slave population was expected. Ten thousand Southern troops are at Harper's Ferry, towards which large bodies of Pennsylvanian troops are moving, and it is expected that the Federal forces will endeavour to cut off the Southern troops from Richmond. The war steamer Minnesota was to leave Fort Monroe for the blockade of Charleston, and will be followed by others. General Beauregard has relinquished the command of the forces around Charleston to Colonel R. H. Anderson, and has arrived at Memphis, to take command of the western division of the Confederate army. Twenty-three prizes have been taken to Fort Monroe, and several British vessels laden with tobacco have been taken into Hampton Roads as prizes, for attempting to break the blockade. It is reported that the Secessionists are throwing up entrenchments at Monassas. They have effected a junction at Alexandria, and expect reinforcements from Richmond. The report of fighting at Alexandria has not been confirmed, but strong entrenchments have been thrown up commanding the town. It would seem that troubles are not at an end in Baltimore. The mob made a hostile demonstration on the guard of the 12th and 13th Regiments while protecting the baggage, which had been thrown off the track by the rioters. Cheers were given for Jeff. Davis, and three shots were fired at the troops. The Ex-Governors Pratt and Lowe had been arrested and sent to the Washington Navy yard. From St. Louis it is stated that the Unionists in Missouri are determined to crush out Secession by force, and that General Harney has been removed from the command of that department, and General Lyon appointed in his place. The steam transport Philadelphia has arrived from Fort Pickens. She reports that the Secessionists had entirely relinquished all idea of attacking the fort. The death of Mr. Douglas from cancer of the stomach is hourly expected at New York. The *New York Express* states that the next Federal Congress will levy a duty on tea and coffee. The *New York Herald* states that Cortinas has organised a large force of Mexicans for the invasion of Texas. The Federal loan of 9,000,000 dols. has been subscribed for at 85 (?).

Parliament.

HOUSE OF LORDS.

FRIDAY.—*The Budget.*—Earl GRANVILLE moved the second reading of the *Customs and Inland Revenue Bill.* He explained the causes which had led to a surplus, and stated in detail the reasons which had induced the Government to apply that surplus to the abolition of the paper duty.—The Duke of RUTLAND moved as an amendment that the bill be read a second time that day six months. He doubted if there was any real surplus, and if that surplus existed, there were other taxes, whose abolition would confer greater benefit on the country than the one it was proposed to remove.—The Earl of DERBY said that, however much he might concur with the noble duke in his objections to the measure, he could not agree with him in the conclusion to which he had arrived. Even if the boasted surplus really existed, there were other taxes which bore more oppressively upon the springs of industry—taxes which were imposed for special purposes to meet a temporary exigency, and which therefore had a far greater claim than the duty on paper to be taken off or reduced. He also thought the Bill objectionable in point of form, because it had been sent to their lordships with the avowed intention of precluding them from exercising that deliberate judgment which it was for the advantage of the constitution and for the country that they should always bring to bear upon the subjects that came under their review. But, admitting there was a surplus, he did not see why the tea and sugar duties should be passed over in favour of the proprietors of penny newspapers and the makers of band-boxes. The majority of the House of Commons had, however, decided in favour of the repeal of the paper duty, and he readily admitted that, upon a question of repeal of duties and financial arrangements generally, it was most inexpedient that their lordships should, unless in exceptional cases, interfere with the judgment and discretion of the House of Commons. He would not, therefore, take upon himself the responsibility of advising their lordships to set themselves on this occasion in opposition to the decision of the Commons. With regard to the amendment he hoped the Duke of Rutland would withdraw it, and leave with the Government the heavy responsibility of having dealt with the public finances in this inconsiderate and reckless manner. — The Duke of ARGYLL defended the Bill on financial and constitutional grounds, and denied that the remission of the duty would only benefit the producer, contending that by the extension of the paper trade and the cheapening of literature, it would be of vast benefit to the community.—Earl GREY congratulated the House on the conclusive testimony which the Bill gave to the propriety and wisdom of the course which they had pursued last year on the subject of the paper duty. He took it as admitting that their lordships had the right to exercise a control over the finances of the country. At the same time, he readily agreed with Lord Derby that the right should be enforced with judgment and discretion, and that, unless in extreme cases, they ought not to interfere with the financial arrangements that had received the sanction of the House of Commons. He considered that the Budget was an eminently speculative one, and that the present was not a favourable moment for such a policy. He called upon the Government to enter upon a new career of judicious retrenchment, and, whilst maintaining the efficiency of the national defences, to exercise a wise and judicious economy.—Lord MONTEAGLE said the budget was open to all the objections which had been urged against its predecessor last year. With regard to the form of the Bill, the combination of the repeal of the paper duty with the other financial proposals of the Government in one Act was quite unnecessary, as it was evident, from the tone of the debate that night, that even if the paper duty had come up in a separate Bill their lordships would not have opposed it.—The Duke of RUTLAND then withdrew his amendment, and, after a short reply from Earl GRANVILLE, the Bill was read a second time.

MONDAY.—*Bankruptcy and Insolvency Bill.*—On the motion of the LORD CHANCELLOR the House went into committee on this Bill, when Lord CHELMSFORD moved the insertion of a clause limiting the operation of the Act to debts contracted and liabilities incurred after the date of its passing. It would be unjust, he thought, to attach consequences never contemplated to existing liabilities by means of retrospective legislation. —The LORD CHANCELLOR denied that the Bill was retrospective, and opposed the introduction of the clause, which had already, after considerable discussion in the Select Committee, been rejected by a large majority. The Bill [illegible] provided that if a debtor chose to go abroad and [illegible] luxuriously upon the property of his creditors he might be declared a bankrupt. He regretted the course taken by the Committee in reference to the Chief Judge, and hoped that the clause in reference to that functionary would be restored.—The Earl of DERBY explained the circumstances under which the clause relating to the Chief Judge was rejected, and supported the amendment of Lord Chelmsford. There were many persons absent from the country who had contracted debts and liabilities under the existing law, and he deemed it most unjust to subject them to the new procedure of bankruptcy.—Lord CRANWORTH said that all the Bill did in its present shape was to give a new and an increased power of enforcing existing rights, and therefore it was prospective [illegible] retrospective legislation.—Lord BROUGHAM said the Bill, as it stood, was not only retrospective, but penally retrospective, for it imposed the punishment of imprisonment upon the debtor for liabilities contracted prior to the passing of the Act.—After a few words from Lord WENSLEYDALE a division took place upon the clause, when the numbers were —for the clause 98; against it, 61. The clause was then added to the Bill.—Lord CRANWORTH moved the rejection of a clause inserted by the Select Committee, the object of which was to prevent the sale of reversionary interests.—The Earl of DERBY supported the clause, which was retained.—The other clauses were then agreed to, and the Bill passed through Committee. The *Wills of Personalty by British Subjects Bill*, and the *Customs and Inland Revenue Bill* also passed through committee.

TUESDAY.—*The Greenwich Hospital Bill*, the object of which is to improve the internal economy of that institution, was read a second time, on the motion of the Duke of SOMERSET. On the motion for the third reading of the *Government Navy Bill*, the Earl of CARNARVON called attention to the fact that not only was France vastly superior to this country in the number of iron-cased vessels of war, but that the French dockyards were constructing similar vessels for Spain and Italy. The acquisition of a navy by Spain or Italy was of small importance in itself, but if a supposed combination of the naval forces of those two nations with France were admitted, it was full of danger to our naval [illegible] in the Mediterranean. In case of such a con[illegible] a naval battle would probably occur in that sea, where, in consequence of bad management at Malta, we had not an effective dock to refit a damaged fleet. He did not blame Her Majesty's Government for this, for he thought the evils were due to the incessant changes which [illegible] ised the naval administration of the country.—The Duke of SOMERSET said that the Admiralty, in constructing iron-cased ships of war, had not rashly committed themselves to new inventions, but had proceeded experimentally, and had now seven of these vessels in course of construction. In addition to this it had been decided to plate some of our wooden ships with iron, although he did not think they would be

[illegible] for it was his opinion that we ought to construct our [illegible] entirely of iron. None, however, of the armour yet [illegible] could resist the tremendous power of the Armstrong [guns], and in consequence the Admiralty had ordered, [illegible] it was proved that ships could not be made as secure as could be desired, that our ships should have the best [means] of offence, and be armed with the Armstrong guns. [The] Government had no official information of what was [going on] in the French dockyards; and he censured Admiral [illegible] for his exposure of what he had seen there. He [repelled] the charge of vacillation and change brought against the Admiralty, stated the measures taken by the Government [for] improving the harbour of Malta, and expressed his con[viction] that, if need were, we could soon, by means of the [public] and private yards of the country, produce a fleet of [iron] ships far greater than all the other Powers of Europe together. In conclusion he assured the House, that the Admiralty were fully alive to the importance of the present [crisis], and that he and the Government of which he was a member were determined, come what would, to maintain the [naval] supremacy of England.—Earl GREY expressed his [satisfaction] with this statement. The Bill was then read [a second] time. The *Customs and Inland Revenue Duties Bill* [was read] a third time and passed. *Ragged Schools.*—The Earl [of] SHAFTESBURY moved for certain returns in order to test the [truthfulness] of the statements contained in the report of the [Education] Commissioners on the Ragged School system. He [accused] the Duke of Newcastle of having, on a former occasion, read garbled extracts from the report.—The Duke of NEWCASTLE protested against this charge, and vindicated the Commissioners from the attacks of Lord Shaftesbury, which were by no means justified by the report. After some remarks by Lord OVERSTONE and the Lord CHANCELLOR, the motion was withdrawn.

WEDNESDAY.—The Royal Assent was given by Commission [to] the *Customs and Inland Revenue Bill* and several other Bills.

THURSDAY.—*The French Dockyards.*—The Earl of HARDWICKE complained of the language which had been used by the Duke [of] Somerset on a previous evening with regard to Admiral Elliott and his recent visit to the French dockyards, and [warmly] deprecated the insinuation thrown out by the noble [duke] that the admiral had acted as a spy. The visit had been [made] publicly, upon the ordinary understanding, and it was [not] at all unusual for officers of the military or naval service to communicate to their friends the results of their observations. —The Duke of NEWCASTLE said that the First Lord of the Admiralty was absent on public duty, and expressed his belief [that] the course taken by Admiral Elliott in making his information public, instead of confining himself to an official report, was viewed with disfavour in France. The *Railway Companies Mortgage Transfer (Scotland) Bill* passed through committee. [The] report of amendments on the *Bankruptcy and Insolvency* [Bill] was received and agreed to, the Bill to be read a third time [on] Tuesday. The *Wills of Personalty of British Subjects Bill* was [read] a third time and passed. *Mail Steamers.*—On the motion [of] the Marquis of NORMANBY a return was ordered of the [recent] breaches of contract committed by the Cunard, the Peninsular and Oriental, and the West India Mail Packet Companies.

FRIDAY.—*The Navy.*—In answer to the Earl of HARDWICKE, [the] Duke of SOMERSET said that the recent experiments with [the] Armstrong gun were superintended by scientific persons. He repeated his regret at the course Admiral Elliott had adopted in regard to the French Dockyards. *The Public Offices Extension Bill* was read a second time. *The Greenwich Hospital Bill* passed through committee.

HOUSE OF COMMONS.

FRIDAY.—*Civil War in America.*—Lord JOHN RUSSELL stated, in reply to an inquiry from Mr. LIDDELL, that Her Majesty's Government had made no proposal to the United States and the so-called Confederate States of America, to interdict the armed ships and privateers of both [sides] from carrying prizes into the ports of the United Kingdom, or of any British possessions abroad; but the Government had given power to the harbour authorities in the [several] ports to interdict the sale of such prizes therein. It [was] very difficult to say what was the usage in a contest of this [kind, as] no great war had occurred in modern times in which [England] had been a neutral. Her Majesty's Government, [however], were of opinion that they had a discretion in acting [as they] had done.—Colonel PATTEN appealed to Mr. Gregory to [withdraw] the notice which he had given to call the attention [of the House] to the expediency of promptly recognising the [Southern] confederacy.—Mr. GREGORY said that hitherto the [quarrel] between the Northern and Southern States had been [presented] to the British people entirely from the Northern [point of] view, and his object in putting the notice on the paper [was to] give the Southern Confederacy the advantage of having [its case] also stated to the House. But in deference to what [seemed] to be the general wish he would postpone the motion. —Lord PALMERSTON announced that the first *Morning* [sitting] would be taken on Tuesday next, when the House [would] be invited to consider the series of Bills for the [consolidation] of the criminal law. *Death of Count Cavour.*—[Mr.] PEEL called attention to the death of Count Cavour, [who might] be described as the most conspicuous states[man] who had appeared on the continent in the cause of constitutional government.—Lord J. RUSSELL said the conduct of Count Cavour as a statesman was worthy of all praise, and he could not withhold the expression of his regret, or the tribute of his admiration to his statesmanlike qualities. He declared emphatically that there never was a man who had devoted himself more, heart, mind, and soul, to his country than the late Prime Minister of Italy.—The O'DONOGHUE said Count Cavour was a determined opponent of the temporal power of the Pope, and he saw the finger of God's justice in his [death].—Mr. MILNES said their object was not to dispute over the [memory] of Count Cavour, but merely to express their [sympathy] to Italy and Europe.—Lord PALMERSTON [expressed his] admiration of the brilliant qualities which distinguished the lamented statesman, and referred to the claims which he had upon the gratitude and attachment of all Italians. Count Cavour had laid the foundation of improvements, social, political, and material, which would long survive him, [illegible] advantages upon the country over whose [destinies] he had exercised so powerful an influence for good. [It might] be said of him that he had lived a life, "to point [a moral and adorn a] tale;" and although his death was premature, [it could] not be said that he had died too soon for his glory. [—The] House then went into Committee of Supply on [the Army Estimates]. On the vote of 133,276*l.* for the [Volunteer Corps], Lord ELCHO called attention to the [illegible] of the Volunteer corps, and urged upon the Government [the expediency] of encouraging them by contributing towards [their incidental] expenses. He estimated the number of [volunteers] now under arms at 147,000, and the amount they [had] expended upon their equipment at a million and a half. [If the Government] would allow a sum of from 20*s.* to 25*s.* [per man] per year to meet the expenses of drill, practice, [&c.], it would give vitality to the force; for he thought [it unwise] to calculate upon the continuance of [the subscriptions] from the public which had hitherto flowed in. —Mr. H. BERKELEY called attention to the defects [of the] Yeomanry Cavalry, guarding himself, however, against [imputing] them to any other cause than want of discipline. He [moved to reduce] this part of the vote from 91,000*l.* to 32,000*l.* —[Colonel] MILES, as Commander of a Yeomanry Corps, entered into financial details in reply to Mr. Berkeley. After a long discussion, in which the merit of the two forces, the Volunteer Rifles and the Yeomanry Cavalry, were occasionally compared, Mr. T. G. BARING commended the patriotism and efficiency of the Volunteers, and said that although the Government were opposed to any money grant to the force, still they were prepared to do something in respect of providing it with instruction in drill, targets, &c. As to the amendment of Mr. Berkeley, he need say nothing more than that the Government considered the Yeomanry as a very valuable force.—Mr. BERKELEY having withdrawn his amendment, the vote of 133,276*l.*, for Volunteer Corps in Great Britain, was agreed to. Other votes were passed after much discussion, when the CHAIRMAN was ordered to report progress. The *Excise and Stamps Bill* was recommitted, and received further amendments in its details, after a good deal of debate. The *Report of the Committee of Supply* was brought up and agreed to. The *Lace Factories Bill*, the *Naval Medical Supplemental Fund Society Bill*, and the *Transfer of Stocks and Annuities Bill* were read a second time. The remaining business having been disposed of, the House adjourned to Monday.

MONDAY.—*Appropriation of Seats (Sudbury and St. Albans Bill.)*—On the order for going into committee on this Bill, Earl JERMYN moved, as an amendment, that the House go into committee that day six months. He disavowed all intention to treat lightly the offence of which the borough of Sudbury had been guilty, or to identify himself with the encouragement of bribery, but he thought that that constituency had been too severely punished for the sins of a minority amongst them, and that their claim to a restoration of one or more of the forfeited seats should not be set aside without due consideration. The corruption for which Sudbury had been disfranchised was by no means so extensive as that which had been committed by other boroughs still in the enjoyment of the franchise, and, as he viewed the question, Sudbury and St. Alban's had been made scapegoats for the electoral sins of those boroughs.—Sir G. LEWIS said that the amendment was an attempt to resuscitate the defunct borough of Sudbury; but if Sudbury were to have its lost franchise restored to it, he did not see why Grampound should not put in a claim, and Yorkshire be asked to surrender the two members which it had received upon the disfranchisement of that borough. Sudbury had long been notorious for corruption, and both sides of the House had concurred in regarding its disfranchisement as a final act. Mr. Disraeli had so treated it in his Assignment of Seats Bill, in 1853, and again when he introduced his more general measure of reform in 1859.—Major PARKER condemned the disfranchisement of Sudbury as the punishment of the many for the offences of the few.—Mr. SCULLY protested against such a miserable Reform Bill. It was no sort of fulfilment of the pledge upon which Ministers had taken office, and having failed to perform that pledge, they were in his opinion bound to resign their places.—Mr. STIRLING could not vote for the amendment, although the Bill did tardy justice on the offenders of Sudbury and St. Alban's. At the same time he thought that those boroughs had reason to complain that guiltier parties than themselves had not been included in the measure, such, for example, as Gloucester, Wakefield, and Berwick. For his part, he should much prefer, in redistributing the four vacant seats, to create two new constituencies in England, one in Scotland, and one in Ireland.—Colonel DUNNE contended that Ireland was not sufficiently represented, and that one of the vacant seats ought to be appropriated to the great county of Cork, rather than to South Lancashire or Chelsea.—Sir H. WILLOUGHBY apprehended that the House was about to enter upon a controversy with reference to the respective claims of various constituencies, which was full of danger. On a division the amendment was negatived by 238 to 44. The House then went into committee.—Mr. COLLINS moved the postponement of the first clause, conferring an additional member on the West Riding and South Lancashire, with the view of proposing the division of the West Riding into two parts, each returning two members. The West Riding was entitled to this distinction by reason of its occupying the first rank among the English counties for territorial extent, wealth, and population.—Sir G. LEWIS opposed the motion, which would have the effect of giving three out of the four vacant seats to counties and only one to a borough.—Lord J. MANNERS supported the motion. After some further discussion the motion was negatived on a division by 118 to 81.—Colonel DUNNE moved as an amendment the omission of South Lancashire from the clause and the insertion of the county of Cork.—Sir G. LEWIS objected that the four seats to be distributed were English, and that to assign any of them to Ireland would disturb the present arrangement of the representation between the two countries. After some discussion, the amendment was negatived on a division by 228 to 67.—Mr. BAZLEY moved as an addendum to the clause, that the borough of Salford should be entitled to return two members instead of one.—Sir G. LEWIS said that as Salford was a suburb of Manchester, the effect of the amendment would be virtually to give the latter place not less than four members. It should also be borne in mind that it was proposed by the Bill to give an additional member to South Lancashire. The amendment was then withdrawn, and the first clause was ordered to stand part of the Bill, as was also Clause 2. On Clause 3, which assigns one of the vacant seats to Chelsea and Kensington, Mr. KNIGHTLEY moved the omission of the words parishes of Chelsea and Kensington.—Sir G. LEWIS said that it was only fair to award one of the four seats to the metropolis on account of the great increase of population. The same proposal had been made in the two last Reform Bills that were introduced into the House.—Mr. DISRAELI intimated that it was not contained in the Bill of Lord Derby's Government.—Sir G. LEWIS said that it was in the measure of last session; and he considered that on account of their great magnitude and imprtance, Chelsea and Kensington were fairly entitled to one member.—Sir J. GRAHAM supported the clause, and said that should Mr. Knightley's amendment be carried, he would move, that the member be given to the University of London: although he admitted that he was in favour of giving weight to the question of population.—Mr. WALPOLE was of opinion that the reasons given by the Government for appropriating a seat to Chelsea and Kensington were not conclusive, as other places had increased in greater proportion. He felt bound, therefore, to give his vote for the amendment.—Mr. BARROW animadverted upon the undue influence which the large number of borough members exercised in the House, and which, he observed, was generally used to swamp any efforts to do justice to the rural populations. On a division, Mr. Knightley's amendment was carried against the Government, by 275 to 172.—Sir G. LEWIS then moved that the Chairman report progress.—Mr. DISRAELI said that the proposition of the Government was a reasonable one. A main feature of their Bill had just been rejected, and he thought it only fair that they should have time to consider the position in which they now stood in respect to the measure generally.—The CHAIRMAN then reported progress, the committee to be resumed on Monday next. The *Industrial Schools Bill* was further considered in committee, and the other business having been disposed of, the House adjourned.

TUESDAY.—*Criminal Law Consolidation.*—The House had a morning sitting for the first time this session, for the consideration in committee of the following Bills for the consolidation of the criminal law:—Offences against the Person Bill, Larceny, &c., Bill, Malicious Injuries to Property Bill, Forgery Bill, Coinage Offences Bill, Accessories and Abettors Bill, Criminal Statutes Repeal Bill, all of which went through committee, certain amendments having been reserved for future consideration.—At the evening sitting, Mr. LOWE stated, in reply to Mr. COGAN, that the Department of Science and Art were in favour of opening the *Botanic Gardens in Dublin* on Sundays in the same way as Kew and Hampton Court were opened, but that it could only control the action of the directors by withdrawing the estimates, which would be before the House in a few days. *Troops in Canada.*—In answer to Mr. ADDERLEY, Mr. T. G. BARING stated that two regiments of infantry and a battery of field artillery, in addition to the regiment that was previously under orders, were about to proceed to Canada in the Great Eastern. The expense had already been provided for in the estimates of the year. *Affairs of Syria.*—Lord J. RUSSELL informed the House that the Conference at Constantinople had unanimously agreed to recommend that a Christian governor should be appointed over Syria, in subordination to the Sultan. *Colonels in the Army.*—General LINDSAY moved an address to the Crown to take into consideration the position of the officers promoted to the rank of colonel for distinguished service in the field in 1855 and 1856, who when the list of colonels was revised in 1858 were unfortunately overlooked. He stated several instances to show that in consequence of the revision these officers were farther removed from obtaining the rank of general than if they had never seen any service at all.—Mr. T. G. BARING, on the part of the Government, assented to the motion; and after some conversation the motion was agreed to. *Case of Mr. Barber.*—Dr. BRADY moved a resolution that Mr. Wm. Henry Barber, who was convicted with others, of forging claims to the unclaimed dividends, and who afterwards had his sentence reversed, was entitled to the consideration of the Government. He admitted that the Government had formerly awarded Mr. Barber a sum of money in compensation for his sufferings; but he contended that was insufficient, and he asked now for 3700*l.* more.—Sir G. GREY said the sum formerly voted was 5000*l.*, and far from its then being thought insufficient, many persons thought it too liberal, and it was only obtained after a division. He hoped the House would not listen to this renewed claim.—Sir F. KELLY said the principle of compensation to Mr. Barber was admitted, the only question was one of degree. The 5000*l.* formerly granted him replaced the sum of money he had actually lost. The sum now asked for was that which he had spent in seeking to be restored to his position as an attorney.—The CHANCELLOR of the EXCHEQUER reminded the House that the principle now urged was that person unjustly convicted should receive a money compensation from this House. He hoped the House would not listen to such an appeal.—Mr. LONGFIELD and Mr. SERJEANT PIGOTT opposed the motion, Mr. MAGUIRE supported it.—Mr. MALINS recommended Dr. Brady not to press his motion, but the CHANCELLOR of the EXCHEQUER refused to allow it to be withdrawn; and it was in consequence put and negatived.—Sir J. TRELAWNY rose to move a resolution on the subject of *New Zealand*, and was entering into details, when the House was counted out shortly after 8 o'clock.

WEDNESDAY.—The adjourned debate on the second reading of the *Affirmations Bill*, and Mr. G. Hardy's amendment, to defer the second reading for six months, was resumed by Mr. DILLWYN, who contended that the Bill would afford relief to a large class of her Majesty's subjects who were at present subjected to serious disabilities on account of holding sincere convictions on theoretical and speculative opinions.—Lord R. MONTAGU opposed the Bill.—Sir G. LEWIS said the Bill proposed to relieve those to whom objections were made, and not those who conscientiously objected to take an oath. It proceeded altogether upon a wrong basis, and threw upon the judges an obligation which they could not discharge satisfactorily. Upon these grounds he felt himself compelled to vote against the Bill.—Mr. ROEBUCK did not regard the administration of an oath as a guarantee of the truth of the witness, and therefore supported the measure.—Mr. WALPER opposed the Bill, on the ground that it would destroy that principle of conduct which was the main distinction between man and beast.—Mr. DENMAN argued that the measure would be the means of bringing to the surface in courts of law a great deal of truth which would otherwise be unobtainable.—Mr. M. SMITH opposed, and Mr. J. B. SMITH supported, the Bill.—Sir W. HEATHCOTE and Mr. M'MAHON opposed the measure at some length.—Mr. LOCKE explained the difference between his Bill (the Criminal Proceeding Oaths Relief Bill) and that under discussion, and stated that the former was not open to many of the objections urged against the latter. On a division the amendment was carried by 136 to 66. The Bill was therefore lost. The House then went into committee on the *Locomotive Bill*, the clauses of which were agreed to after a discussion for some hours. On the order for the committal of the *Criminal Proceedings Oath Relief Bill*, Mr. M'MAHON urged various objections to the Bill, and moved to defer the Committee for three months.—Mr. LOCKE and Mr. CRAUFORD supported the Bill, the SOLICITOR-GENERAL and Sir H. CAIRNS opposed it. The debate was then adjourned.

THURSDAY.—*Affairs of Syria.*—Lord J. RUSSELL, in reply to a question by Sir J. FERGUSSON, said it had been arranged that there should be a Christian governor of the Lebanon, but it was not specified whether he should be a native of the Lebanon or not, and in that arrangement the English envoy had concurred. *France and Italy.*—In answer to Mr. CRAUFURD, Lord J. RUSSELL said that he had received no information as to the King of Italy having left Turin for the frontier of France, for the purpose of meeting the Emperor of the French.—On the order for going into committee on the *East India Loan Bill*, Sir C. WOOD replied to various objections which had been urged against the loan, and expressed his willingness to insert a clause in a measure to amend the Real Property Act, allowing trustees to invest in this and other loans raised for the purposes of India. He declared his general confidence in the present state of Indian finance, and said that at this moment the balance in the Exchequer was one million sterling higher than Mr. Laing had estimated in February last. Except for the railways, he did not anticipate the necessity of borrowing a single shilling for Indian expenditure during the current year. The Bill then passed through committee. On the order for reading the *Indian Council Bill* a second time, Mr. VANSITTART, Mr. W. E. FORSTER, Mr. LAYARD, Sir E. COLEBROOKE, Colonel SYKES, and other members, made remarks on its details.—Sir C. WOOD in reply said that the publication of the reports of the proceedings in Council, was a question which would be left to the discretion of the Indian Government. With regard to the desire that had been expressed to obliterate all distinctions between the conquerors and the conquered, by associating natives in the Government, that principle ran through all the Bills. Natives would be admitted to seats in the council and in the courts of judicature, and to offices in the civil service from which until now they had been excluded. He was anxious to convince them that it was for their own interest that British rule should be perpetuated, and that there should be no distinction between the subjects of the Queen, whether Native or European.—The Bill was then read a second time, as was also the *East India (High Courts of Judicature) Bill*. On the motion for reading the *East India (Civil Service) Bill* a second time, a long discussion ensued in which Mr. VANSITTART, Mr. LIDDELL, Mr. LAYARD, Lord STANLEY, Mr. HENLEY, and other members took part and suggested various amendments.—Sir J. ELPHINSTONE moved the adjournment of the debate.—Sir C. WOOD said that so far from the Bill having the effect of injuring the interests of the civil service of India, he believed it would rather improve

their position. He had no objection to insert a clause containing the limitation of a seven years' residence; but with regard to the test of language, it was difficult to define such a regulation. He would, however, consider in what form the question might be dealt with, in order to introduce a regulation on the subject in committee. The motion for adjourning the debate was then negatived, and the Bill was read a second time. The *Excise and Stamps Bill* was read a third time and passed. The *Queensland Government Bill*, the *Courts of Justice Buildings Bill*, and the *Transfer of Stocks and Annuities Bill* passed through committee.

FRIDAY.—*Savings' Banks Bill.*—In answer to Sir A. AGNEW, the CHANCELLOR of the EXCHEQUER said that this Bill would extend to all parts of the United Kingdom. *The Vacant Seats.*—In answer to Mr. DUNCOMBE, Sir G. LEWIS said it was not the intention of Government to propose any measure this session relating to Gloucester and Wakefield, but they would proceed with the allotment of the four seats on Monday. *Galway Contract.*—Mr. GREGORY moved for a select committee to inquire into the circumstances attending the termination of this contract by the Postmaster-General. [Left sitting.]

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 89⅞ to 90 for Money, and 90¼ to ⅜ for the 10th of July; Bank Stock, 231; Reduced and New Three per Cents., 89⅞ to ½; India Five per Cent. Stock, 98¼ to ⅝, ex div.; Ditto, for Acct., 98⅞ to 99, ex div.; Ditto Four per Cent. Debentures, 1858, 95¾ to 96; Five per Cent. Enfaced Rupee Paper, 94¼; Ditto Five and a Half per Cent., 100; Exchequer Bills, March, 2s. to 6s. dis.; Ditto June, 4s. prem.—FOREIGN: Brazilian Four and a Half per Cents., 1860, 87⅞ ex div.; Mexican Three per Cents., for Acct., 22¼; Russian Three per Cents., 1859, 61¾; Sardinian Five per Cents., for Acct., 78½, ex div.; Turkish Six per Cents., 1854, for Acct., 71¼; Ditto, 1858, 55½.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,585,230	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	10,747,688
		Silver Bullion	362,542
	£25,585,230		£25,585,230

BANKING DEPARTMENT.

Proprietors' Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£9,888,607
Rest	3,236,606	Other Securities	19,866,813
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	7,567,503	Notes	6,241,140
Other Deposits..	10,952,235	Gold and Silver Coin ..	901,674
Seven day and other bills	583,890		
	£36,898,234		£36,898,234

13th day of June, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY.—BANKRUPTS.—C. COLLIER, Swindon, Wiltshire, Cabinet-maker, Upholsterer, Dealer in Furniture, China and Glass, and Auctioneer—E. CROOT, Exeter, Licensed Victualler—W. J. HEARN, Dover, Draper—G. HEATH, Chesterfield, Derbyshire, Builder and Contractor—J. GOMERSALL and J. BERRY, Heckmondwike, Yorkshire, Carpet Manufacturers—J. JONES, Wrexham, Denbighshire, Draper—J. PLATNAUER, Carpenter's Buildings, London Wall, Dealer in Prints and Picture Frame Maker—P. POWELL, Tonbridge, Gun Manufacturer and Ironmonger—M. ST LEGER, Bagnigge Wells Road, St. Pancras, Victualler—A. WOOD, Huddersfield, Woollen Cloth Manufacturer—J. WOOD, sen., Birmingham, Builder.

SCOTCH SEQUESTRATIONS.—J. CRUICKSHANK, Forres, Elginshire, Wine Merchant—J. FAIRWEATHER, Dundee, Forfarshire, Merchant—W. FLEMING, Tradeston, Glasgow, Pawnbroker—G. KEY, Edinburgh, Merchant—A. M'LAREN, Dunfermline, Fifeshire, Grocer—T. RUTHERFORD, Paisley, Renfrewshire, Carrier—T. W. SMITH, Kirkcaldy, Fifeshire, Chemist.

FRIDAY.—BANKRUPTS.—G. AMES, Sible Hedingham, Essex, Cattle and Sheep Salesman—E. R. ANDREWS, Littleton-upon Severn, Gloucestershire, Cattle Dealer—J. H. BROWN, Liverpool, Draper—J. COLLIER, Menston, Otley, Yorkshire, Top Maker—E. COX, Warwick Street, Pimlico, Tailor—J. CUSKER, Manchester, Cotton Waste Dealer—T. GEDDES, Liverpool, Draper—G. HARTLEY, Sheffield, Common Brewer—T. M. HEATHORN, Stafford, Brewer—S. HIGGS, Dudley, Worcestershire, Grocer, Provision and Corn Dealer—G. H. HOBSON, Upper Ground Street, Blackfriars Road, Pump Manufacturer and Wholesale Ironmonger—T HOLT, Leeds Retailer of Beer—R. JERRAM, Nottingham and Lambley, Nottinghamshire, Innkeeper and Cattle Dealer—S. LANGSDALE, Nottingham, Trimmer and Dresser of Hosiery and Calenderer—H. W. LUPTON, Liverpool, Licensed Victualler—W. MELLOR (and not MELLON, as previously advertised), Alderley, Cheshire, Butcher and Cattle Dealer—T. TAYLOR and R. BANKS, Salford, Lancashire, Cotton Manufacturers—J. TURNER, jun., Little Ormond Street, Licensed Victualler—A. WICKENS and S. PALMER, Mark Lane, City, and Seymour Street, High Street, Deptford, Manufacturers of Ivory Black and Sacharra, and General Commission Merchants.

Metropolis and its Vicinity.

THE GREAT EASTERN has been chartered by the Government for the conveyance of 2500 men, 100 officers, and 122 horses to Quebec. The troops will include the 4th Field Battery of the Royal Artillery, consisting of 7 officers, 220 men, 20 women, 25 children, and 110 horses; the 30th Regiment of Foot, consisting of 39 officers, 868 men, 80 women, 120 children, and 6 horses; the 4th battalion of the 60th Rifles, consisting of 39 officers, 868 men, 80 women, 120 children, and 6 horses. In addition to these the ship will take out 4 officers, 102 men, 9 women, and 19 children belonging to the 16th, 17th, and 100th Foot, and the Canadian Rifles. All of these are to be accommodated in standing berths, which are to be fitted up by Mr. Laird, Birkenhead, the Admiralty supplying the bedding. The troops are to be victualled by the Great Ship Company, and are to be embarked in Liverpool, the ship being under orders to be ready for sea in about 10 days. Besides the Great Eastern, the Golden Fleece has also been taken up to convey the 47th Regiment to Quebec. The Regiment consists of 39 officers, 868 men, and the usual number of women and children, and horses. They are to embark at Dublin, for which city the Golden Fleece sailed from Liverpool on Thursday.

RENEWED STRIKE IN THE BUILDING TRADE.—The whole of the masons in London, and a large number of the bricklayers, plasterers, painters, and carpenters, struck work on Monday morning, the masons' committee withdrawing their men from every firm within the postal district which refused to pay on the terms of the compromise offered by them, viz., 6s. per day for five days, with 3s. for the half day on Saturday. They have therefore not only struck against those firms which have adopted the hour system, but against every one which has not, whether their contracts were in town or country. Meanwhile the four firms which originated the hour system have obtained their full complement of hands, who refuse to strike, having thrown off their connection with the Trades' Unions altogether. Thus, the very contractors against whom the blow is levelled are in full work, while those who lately adopted the hour system, or who never adopted it at all, are left entirely without masons. Since Monday the following firms have acceded to the terms of the men, who have accordingly resumed their work, viz.:—Messrs. Johnson, the contractors for the new bridge at Westminster; Mr. Wythes, the contractor for the new railway bridge at Hungerford Market; Mr. Bowes, of Millbank; Mr. Glen, of Kensal Green; Mr. Moore, of Paddington; Mr. Eason, of Wandsworth; and Mr. Woodruff of Pimlico. Among other works almost entirely suspended are those of the Duke of Buccleugh's mansion at Whitehall; Baron Rothschild's at Piccadilly; the London Bridge Terminus Hotel, and some large city jobs. It is understood that the master builders will hold a meeting in a few days to consider the steps they shall pursue under present circumstances.

INDIAN FAMINE RELIEF FUND.—At a meeting of the committee on Friday a discussion took place as to the propriety of closing the subscription. Sir John Lawrence and Sir Charles Trevelyan read letters from Upper India, stating that though the famine had been locally severe, it had not extended over so large an area as the public were at first led to believe, and that there were indications of its abating. On those grounds they urged, as did also Sir Edward Ryan and Sir F. Halliday, that the subscription should now cease. Sir J. Lawrence moved, and Sir E. Ryan seconded a resolution to this effect, but it was lost on a show of hands. An amendment, moved by General Alexander, and seconded by Major Macgregor, was then carried by a narrow majority, authorising the sub-committee to take such steps as they might think requisite for closing the fund, should the official information expected by the next mail be such as to warrant that course.

TOTAL DESTRUCTION OF THE SURREY MUSIC HALL.—On Tuesday afternoon this fine hall, in the establishment of which more than one fortune has been wrecked, was totally destroyed by fire. The building, which was erected for musical performances, was opened in July, 1856. Since that period it has been the scene of many of M. Jullien's triumphs, and has also obtained some note from Mr. Spurgeon's preaching. From that time, however, it has somewhat degenerated, but the present lessees, Messrs. Caldwell & Bishop, had been for some months making great exertions to restore its reputation. Numerous concerts had been planned, and engagements entered into with several of the leading performers of the day, both vocal and instrumental. The gardens were in excellent order, everything had been repainted, and the finishing stroke was just in progress, in the shape of some repairs to the roof. But as this involved the employment of plumbers, and the use of a portable fire, negligence or accident is supposed to have been the cause of the catastrophe. The fire broke out in one of the western towers, and it is said that a few buckets of water would at that time have extinguished it entirely, but the alarm of the workmen and the difficulty of getting water to such a height caused great delay, during which period the wind, which was blowing strongly from the south-west, fanned the small beginning into a mass of flame, which before the engines arrived had got such hold that the water offered no obstacle to its progress. The fire continued its course along the whole of the roof, gradually igniting the interior until the hall was one entire body of flame. The two eastern towers were soon reached, and as speedily destroyed, and in little more than three hours nothing was left of the hall but its four walls.

THE ATTEMPTED MURDER AT ISLINGTON.—On Monday Frederick Strugnell, William Liney, and George Quilter, butchers, who have been in custody a considerable time, were brought up on remand at Clerkenwell Police Court, charged with the murderous assault on Mary Ann Redkison, and stealing an iron box containing 105*l*., and other property, belonging to her master. The unfortunate young woman, who has been in the hospital ever since the brutal attack, is now so far recovered that she was able to attend and give her evidence, which was confirmatory of the depositions taken by the magistrate when it was feared the case might have a fatal termination. At the close of the examination all the prisoners were fully committed for trial.

THE PUBLIC HEALTH.—The Registrar General's weekly return states that the deaths registered in London in the week ended Saturday, June 8, were 1101. The average number in the corresponding weeks of the 10 years 1851-60, corrected for increase of population, was 1093. The present return is therefore 8 above the average. During the week the births of 963 boys and 884 girls, in all 1847 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1594. The same return states that the population of London as ascertained by the late census has been returned by the [illegible] officers at 2,803,034. The population on the same area in 1851 was 2,362,236, and the increase [illegible] 440,798. The new comers are nearly equal in number to the total inhabitants of any of the largest [illegible] Europe, except Paris and St. Petersburg.

Provincial.

BLAKENEY.—On Wednesday evening last a [illegible] murder was committed in the parish church [illegible] Blakeney, a village between Newnham and [illegible] on the South Wales line, and about four miles from [illegible] latter place. The parish clerk, named Steel, left [illegible] house as usual to get some beer for supper, and [illegible] turning for some time his wife went to the [illegible] house in search of him. She was told he had [illegible] there, but left as soon as he got the ale, and that he might have called at the church, which was [illegible] way home, she went there and found him lying on [illegible] floor strangled, his handkerchief tied in a tight [illegible] round his neck. Some strangers, supposed to be [illegible] the Forest of Dean, had been seen in the village during the day, and it is conjectured that they had entered the church by means of a false key for the purpose of stealing the plate, and that the clerk, [illegible] door open, went to see who was there, [illegible] attacked him. They probably did not intend [illegible] murder, but finding the man dead they quitted [illegible] church in alarm, leaving their key in the door. [illegible] thing in the church was found untouched. There [illegible] marks of a severe struggle having taken place, [illegible] fortunate man having apparently been dragged [illegible] the floor for a considerable distance. No clue [illegible] murderer or murderers has yet been discovered.

CAMBRIDGE.—The election to the high steward[illegible] of this borough, vacant by the death of the [illegible] Bedford, took place on Tuesday, when the [illegible] Devonshire was unanimously elected. His [illegible] distinguished member of the University, having [illegible] out as second wrangler in 1829, the present [illegible] Worcester being the senior wrangler of the year. [illegible] Rev. Churchill Babington, B.D., F.L.S., fellow [illegible] John's College, was on Wednesday elected Professor [illegible] Botany in the University, in the room of the [illegible] Professor Henslow.

CLAYCROSS.—A fatal colliery accident took [illegible] Tuesday in the Black Shale Pit, in the neighbourhood of this town. The workings are very extensive, [illegible] scending to a depth of 160 yards at the bottom [illegible] shaft, and thence rising to a higher level. [illegible] neighbourhood there are the pits and galleries [illegible] deserted mine, filled with water. Towards these [illegible] stalls of the Black Shale Mine have been gradually extending. A collier on Tuesday [illegible] part of his stall to try if the water, [illegible] through, would flow faster, when a gush [illegible] the thickness of his pick handle." He gave the [illegible] and the men rushed from all parts of the mine [illegible] pit-bottom, to be pulled up. They knew [illegible] entrance to the shaft, being the lowest part, [illegible] first blocked up by the rising water. When [illegible] the top of the pit became aware of what had [illegible] the news spread, and the wives and children [illegible] engaged below rushed to the spot. The [illegible] sent down and brought up with the utmost [illegible] speed, each time bringing a large freight [illegible] By 6 o'clock, however, the water had risen [illegible] to shut out all hope of saving more lives. [illegible] man saved swam to the chain he perceived [illegible] within the mine, from want of ventilation, [illegible] suffocating. Nineteen men residing in Claycross [illegible] yet accounted for, and it is supposed that [illegible] some others below who belong to neighbouring [illegible] When it was found that the water had [illegible] bottom of the shaft an attempt was made [illegible] the water, but though great exertions [illegible] during the whole night, they did not [illegible] rise of the flood. 64 horses were employed [illegible] and were all drowned.

KENDAL.—A shocking murder has been [illegible] by the keeper of a toll-bar, about two [illegible] Keighley and this town. The man, whose [illegible] Holdsworth, lived with his wife and daughter, [illegible] state of great unhappiness owing to his [illegible] conduct. On Monday night the wife's brother [illegible] come to take her away from her husband [illegible] the latter seized a gun and deliberately [illegible] tunate woman dead on the spot. T[illegible] have returned a verdict of Wilful Murder [illegible] and he has been committed for trial [illegible] charge.

REIGATE.—On Monday night a shocking [illegible] committed at the Parsonage House, [illegible] residence of the Rev. S. B. Taylor, close [illegible] of Mr. Alcock, M.P. The victim, the wife [illegible] Halliday, the parish clerk, has for a [illegible] care of the house in the absence of Mr. Taylor [illegible] last seen alive on Monday evening by her [illegible] went on Tuesday morning to the parsonage [illegible] usual slept at his own cottage in the [illegible] 300 yards distant. Finding the [illegible] went up to his wife's room. There he [illegible] the floor with her hands and feet tied, a [illegible] fastened tightly round her head and mouth, [illegible] a stocking crammed into her mouth. [illegible] dead. No sign of external violence was dis[illegible]

[illegible] the house it was found that the burglars had [illegible] an entrance at the kitchen window, where they cut out one pane of glass, but found the shutters [illegible] barred. They afterwards went to the rear of [illegible], and by the aid of the trunk of an old tree [illegible] upon the roof of a low building, broke a square of [illegible], and opened the window of Mrs. Halliday's room, [illegible] is supposed to have immediately heard them, and [illegible] to give an alarm. The burglars had turned [illegible] everything in the room, but had not broken into [illegible] other part of the house, having it is supposed [illegible] alarmed by the noise made by the village schoolmaster who lived at a short distance from the parsonage, and returned home late at night about the time when the murder must have been committed.

Law.

[illegible] of Chancery.—(Before the Lord Chancellor and the [illegible] Justices.)—*The Emperor of Austria* v. *Day and Kossuth.* [illegible] was an appeal from a decree of Vice Chancellor Stuart, [illegible] a perpetual injunction to restrain Messrs. Day from [illegible] any notes purporting to be notes of the state of [illegible], and ordering them to deliver up to be cancelled 23 [illegible] notes already manufactured by them by [illegible] Kossuth. The Lord Chancellor, in [illegible], stated that the decree of the Vice Chancellor [illegible], but not on the ground that the preparation of the notes was for the purpose of promoting revolution [illegible]. In his judgment a person in this country, under [illegible] to the Queen, was not allowed to do acts [illegible] injurious to the rights or property of a foreign [illegible], and the Court of Chancery had jurisdiction in such a [illegible] such persons by injunction. In this case it must [illegible] that the Emperor of Austria was King of Hungary, and [illegible] of the notes in question in that kingdom [illegible] spurious in reference to the currency of the realm, [illegible] thereby inflict an injury on the Sovereign and [illegible] that country. Persons who resided in this country [illegible] been driven by persecution or revolution from [illegible] native land, enjoyed this asylum on the condition that [illegible] in England they entered into no conspiracies [illegible] against existing governments in foreign states, which [illegible] an infraction of our municipal law by native-born [illegible]. He was therefore of opinion that the decree appealed [illegible] to be affirmed, and that the appeal must be dis[illegible]. The Lords Justices concurred. On the question of [illegible] an offer was made on the part of the Emperor to forego [illegible] condition that the notes were destroyed. This was [illegible], and it was arranged that the notes should be [illegible], and the paper, when reduced to pulp, sold by [illegible], at the market price; the plaintiff to have the [illegible].

[illegible] Criminal Court.—*The Commercial Bank Robbery.*—[illegible], 45, and *James Holcroft*, 50, were indicted for [illegible] several sums of money the property of the Commercial [illegible] in which establishment the former had been employed [illegible]. Holcroft was in business as a boot and shoe manu[illegible], and it was alleged that, under colour of keeping an [illegible] bank he had aided in these fraudulent transac[illegible] the sum of 70,000*l.*, all of which appears to [illegible] through a person named Ramsay in building [illegible] property so built being at present under [illegible] extent of nearly 40,000*l.* Owing to the [illegible] witnesses to be examined and the mass of evidence [illegible] forward, the court was occupied with the case till a [illegible]. On the jury returning into court they said they [illegible] in opinion as to the guilt of Holcroft. Mr. Baron [illegible] then informed them that, in that case, they could not [illegible] either of the prisoners; they, therefore, returned a [illegible] of *Not Guilty.* On Thursday the prisoners were again [illegible] up on other indictments, charging them with stealing [illegible] sums of money, the property of the Commercial Bank. [illegible] made on behalf of the prisoner Holcroft, to [illegible] trial adjourned till next session, was granted. The [illegible] Durden was then proceeded with, and after a long trial [illegible] returned a verdict of *Guilty.* Baron Bramwell, [illegible] sentence, characterised the offence as one of a most [illegible] description, involving plunder to the amount of [illegible] deserving the heaviest punishment allowed by law. [illegible] sentenced the prisoner to 14 years' penal servitude. [illegible]—*Catherine Barbara Wilson*, a very fashionably attired woman, surrendered to answer an indictment for conspiracy [illegible] attempting to pass off a child on her husband as her own. Counsel for the prosecution stated that a writ of *certiorari* had been obtained, removing the case into the Court of Queen's Bench, and he therefore asked that defendant should now [illegible]. Bail was then ordered and put in, in three [illegible], one in 800*l.* and two in 400*l.* each. *Sale of Diseased Meat.*—[illegible] Seymour surrendered to take his trial for sending to Newgate Market the carcases of seven sheep in a state unfit for human food. The jury *Acquitted* him. *John Cox*, of Highbridge, Dorset, a very old man, was convicted of a similar charge. A fine of 20*l.* was imposed in lieu of imprisonment on account of his age.

Sporting.

ASCOT RACES.

[illegible]DAY.—*The Trial Stakes.* Lord Portsmouth's Buccaneer beat Satellite, Wedding, and 8 others.—*A Handicap Plate.* [illegible] Lane's Southport beat Lisbon, Gaberdine, and 13 [illegible].—*The Gold Vase.* Mr. Savile's Parmesan beat Silverhair, [illegible] and 5 others.—*A Maiden Plate.* Mr. Merry's The [illegible] beat Hippodamia, Absinthe, and 15 others.—*The Third* [illegible] *Ascot Triennial Stakes.* Lord Ailesbury's St. [illegible] beat King of Diamonds, Allington, and Plumper.—*The* [illegible] Mr. Ten Broeck's Optimist beat Intimidation, [illegible], Bandsman, and 10 others.—*The Queen's Stand* [illegible] Mr. Merry's Buckstone beat Marignan, Gabrielle [illegible], and 17 others.—*The Ascot Derby Stakes.* Baron [illegible] beat Knight of St. Patrick, Struggler, and [illegible].—*The First Year of the Fourth Ascot Biennial Stakes.* [illegible]'s Alerte beat Lord Burleigh, Carisbrook, and [illegible].

[illegible].—*A Plate.* Mr. Merry's The Knave beat Alerte, [illegible], and 11 others.—*Sweeps.* Mr. E. Brayley's Ladylike [illegible].—*The Royal Hunt Cup.* Lord Portsmouth's [illegible] beat Pretendant, Baron Munchausen, Lava, and [illegible].—*A Plate.* Mr. E. Thomas's Dux beat Incitatus, [illegible], and 6 others.—*The Visitors' Plate.* Mr. Payne's [illegible] beat Niger, Sycophant, and 9 others.—*The* [illegible] *Stakes.* Count F. de Lagrange's Marignan beat Brown [illegible], and 4 others.—*The Coronation Stakes.* [illegible]'s Queen of the Vale beat Juno, Pardalote, [illegible], and Preceptress.—*The Second Year of the* [illegible] *Biennial Stakes.* Mr T. Parr's Lupus beat Janus, [illegible], and British Prince.—*Sweeps.* Sir H. Des Vœux's [illegible] beat The Pope, Handsome Jack, Miss Emma, Apollo, and [illegible].

[illegible]DAY.—*Sweeps.* Mr. Saxon's Big Ben beat Cashio.—[illegible] Sir H Des Vœux's Snapshot beat Nuthatch, Sycophant, and 5 others.—*The St. James's Palace Stakes.* Lord Stamford's Walloon beat Knight of St Patrick and Lisbon.—*The Gold Cup.* Mr. Merry's Thormanby beat Fairwater, Parmesan, and 4 others. Won with ease by two lengths; Parmesan a bad third. St. Alban's, who broke down in the off fore leg, fourth, and Royallieu next, the others pulled up and trotted in some time after. Run in 4 minutes 39 seconds.—*A Plate.* Mr. R. Ten Broeck's Satellite beat Rattlebone, Gallus, and Gibraltar.—*The New Stakes.* Mr. W. Day's Alvediston beat Buckstone, Hippodamia, Wingrave, and 9 others.—*The Royal Stand Plate.* Mr. R. Ten Broeck's Optimist beat Lady Ripon, Surprise, Sporting Life, Umpire, and Queen of the Vale.—*A Plate.* Captain Coates's Libellous beat Leontes, Acco, The Principal, and 9 others.

Friday.—(By Electric Telegraph).—*Sweeps.*—Brown Duchess beat Walloon. 50*l.* *Plate.*—Cheesecake beat Vixen. *First Class Wokingham Stakes.*—Gibraltar beat Moorhen, Camerino, and 7 others. *Second Class Wokingham.*—Nutbush beat Southport, Confidence, and 6 others. *Queen's Plate.*—Dulcibella beat Moorcock, British Prince, and one other. *Extra Wokingham Stakes.*—Dead heat with Sister to St. Albans and The Sage, beating two others. 50*l.* *Plate.*—Juliet beat Rosalind.

Obituary.

Lady Dorchester died on the 7th inst. at Greywell, near Odiham, the seat of Lord Dorchester, in Hampshire. Her ladyship was the daughter of W. J. Wauchope, Esq., and was married to Lord Dorchester in 1837. She died without issue.

The Hon. Arthur Legge, R N., brother of the Earl of Dartmouth, died on the 8th inst. at Brighton in his 26th year. He was born in 1835, and was the third son of the fourth Earl of Dartmouth, by his second marriage. He became a mate in the Royal Navy in 1855, and received the rank of lieutenant and a medal for his services in the Russian war.

Lady Carew died on the 7th inst. at Haccombe, Devonshire. She was the daughter of the late Major-General Taylor, C.B., of Ogwell House, and was born in 1817. She married, in 1837, Sir Walter-Palk Carew, eighth baronet, of Haccombe and Tiverton Castle, Devon, and had issue one son, Walter-Palk, born in 1838, and two daughters.

BIRTHS.—On the 12th inst, at 50, Portland Place, Madame Van De Weyer, wife of His Excellency the Belgian Minister, of a daughter—2d inst, at Chiswick, Gabrielle, Vicomtesse de Torre Bella, wife of Russell Manners Gordon, Esq., of a daughter—9th inst, at 54, Sloane Street, the Hon. Mrs. Henry Maude, prematurely, of a son, stillborn—9th inst, at 18, Abbey Place, St. John's Wood, the wife of Major R. C. Lawrence, C.B., Military Secretary to the Punjaub Government, of a daughter—7th inst, at Headingley Hill, Leeds, the wife of Thomas Wolryche Stansfeld, Esq., of a son—9th inst, at The Hall, Wem, Salop, the wife of Henry Corbett, Esq., of a daughter.

MARRIAGES.—On the 6th inst, at St. Paul's, Knightsbridge, Mark Robert Pechell, Commander R.N., son of the Rev. Horace and Lady Caroline Pechell, to Ellen Maria, youngest daughter of C. Derby, Esq., and niece to Sir Samuel Fludyer, Bart.—6th inst, at Queenstown, Captain Duncan M'Neill, Scots Greys, third son of the late Captain Alexander M'Neill, of Colonsay, to Fanny Charlotte Emma, second daughter of Rear-Admiral Charles and the Hon. Charlotte Georgiana Talbot—30th ult, at the Church of St. Pierre, and afterwards at the British Embassy, Paris, Eugène de Cantillon de Ballyhigne, of the Imperial Guard, second son of the late Baron de Cantillon de Ballyhigne, to Georgina, only daughter of the late Adolphus Cottin Murray and Lady Murray, of Ardley, Bury, Hertfordshire—6th inst, at Monken Hadley, John Phillips Thomas, Esq., only son of J. Thomas, Esq., of Bletsoe Manor, Bedfordshire, to Julia Pauline, eldest daughter of the late Sir Richard Plasket, K.C.M.G.—6th inst, at the Catholic Church, Cheltenham, William, sixth son of the late Sir Edward Mostyn, Bart., to Clementina, fourth daughter of the late Edmund Jerningham, Esq.

DEATHS.—On the 2d inst, the Hon. Mrs. Kneller, wife of J. L. Kneller, Esq.—3d inst, at Grasmere, Lady White, wife of Sir Thomas Woollaston White, Bart., of Wallingwells, Notts—2d inst, at the Rectory, Copford, Essex, the Rev. Kennett Champain Bayley, second son of the late Right Hon. Sir John Bayley, Bart., aged 62—2d inst, at Tumby Lawn, Lincolnshire, Catherine Anne, wife of Major Smart, and eldest daughter of the late Sir Henry Hawley, Bart., of Leybourne Grange, in the county of Kent, aged 53—3d inst, at Malvern, Arthington Worsley, second son of Sir W. Worsley, Bart., of Hovingham, Yorkshire, aged 30—8th inst, at 4, Pembroke Villas, Clifton, Frances, relict of the late John Synge, Esq., of Glanmore Castle, county Wicklow, and eldest daughter of the late Sir Richard Steele, county Dublin, Bart., aged 61—6th inst, at Ramsgate, George Keble, ninth and youngest surviving child of the Dean of Peterborough, aged 3 years and 5 months—4th inst, at Hampton Bishop, Hereford, Ann, the widow of the late Colonel Weare, K.H., Aide-de-Camp to the Queen, aged 71—10th inst, at 9, Sussex Square, Hyde Park, Mary Anne, wife of Lieutenant-Colonel Charles Rogers—8th inst, suddenly, at Edinburgh, Lieut.-Colonel Anderson, Fort Major of Edinburgh Castle—6th inst, at 14, Princes Terrace, Hyde Park, Albert John Hambrough, Esq., F.S.S., F.G.S., of Steephill Castle, S.W., aged 40—9th inst, at Halesowen Vicarage, Worcestershire, Augusta Maria, widow of the late Joseph T. Hone, Esq., Barrister-at-Law, and a Bencher of the Middle Temple, aged 85—8th inst, William Vernon Mitford, late Lieutenant-Colonel 9th Bengal Cavalry, eldest son of the late Bertram Mitford, Esq., LL.D., of Clontarf, county Dublin, aged 52—1st inst, at Belfast, James M'Adam, Esq., F.G.S., President of the Natural History and Philosophical Society of Belfast—1st inst, at 26, Wellington Square, Hastings, the Rev. James Frederick Lateward, rector of Perrivale, Middlesex, aged 73.—13th inst., at his father's residence, 12, Harewood Square, Regent's Park, of coma, Richard, the eldest son of Mr. Richard Stains, of the Yorkshire Stingo Brewery, aged 27.

Markets.

HAY.—*Per Load of Thirty-six Trusses.*

Smithfield, Thursday, June 13.

Prime Meadow Hay	75s to	86s	Clover	95s to	118s
Superior do. (old) ..	90	105	New Clover	—	—
Inferior do.	50	60	Do. second cut ..	80	100
New do.	—	—	Straw	30	42
Rowen	—	—			

Davis & Co.

Whitechapel, Thursday, June 13.

Fine old Hay	100s to	105s	Fine old Clover ..	110s to	120s
Inferior do.	60	90	Inferior do	80	95
Very inferior	—	—	Fine 2d cut	95	105
Prime New Hay ..	—	—	Inferior do.	—	—
Straw	34	38	Fine New Clover ..	—	—

COVENT GARDEN, June 15.

The supply of Vegetables is now nearly equal to the demand, and prices are lower. Good samples of Lettuces, Endive, and Artichokes come from France. Good English Peas may also now be obtained. Grapes fetch fair prices. Of Strawberries there is a tolerably good supply from the open ground. Large quantities of French Cherries have been imported this week. Asparagus, French and Broad Beans, young Carrots, and new Potatoes may also now be obtained; the latter fetch 2d. per lb. Cucumbers are coming in more plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 8s to 12s	Cherries, French, p. lb., 2s to 3s
Grapes, per lb., 5s to 8s	Pears, per doz., 4s 6d to 6s
Strawberries, p. punn., 2s to 6s	Apples, per doz., 6d to 1s 6d
Melons, each, 3s to 8s	Oranges, per 100, 6s to 10s
Peaches, per doz., 15s to 24s	Lemons, per 100, 6s to 10s
Nectarines, do., 12s to 20s	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Broccoli, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 9d to 1s 6d	Celery, p. bundle, 1s 6d to 1s 9d
Green Peas, p. quart, 2s 6d	Onions, p. ½ sieve, 1s 6d to 4s 6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 3s to 6s
Cabbages, do., 1s 3d to 1s 6d	Rhubarb, p. bundle, 9d to 1s 3d
Potatoes, p. ton, 80s to 120s	Tomatoes, p. doz., 6s
— new, per lb., 6d to 2s	Shallots, per lb., 1s 6d
— — per cwt., 10s to 10s	Garlic, per lb., 6d to 8d
Carrots, per bunch, 8d to 10d	Endive, p. score, 1s to 1s 6d
Turnips, per bunch, 4d to 6d	Horse Radish, p bun., 1s 6d to 4s
Spinach, p. sieve, 4s to 5s	Mushrooms, p. pott., 1s 3d to 1s 6d
Cucumbers, each, 9d to 1s 6d	Parsley, p. 12 bunches, 4s to 6s
Artichokes, per doz., 3s to 4s	Savory, per bunch, 2d to 4d

POTATOES.—Southwark, Monday, June 10.

During the past week the arrivals both coastwise and by rail have been good for the season, and with what was left from former arrivals more than equal to the demand, and the trade still continues very heavy. The following are this day's quotations:—Yorkshire Flukes, 110s. to 140s. per ton; Lincolnshire Regents, 80s. to 90s.; North Berwick Regents, 100s. to 110s.; Fife, Forfar, and Perth do., 60s. to 85s.; ditto Rocks, 60s. to 70s; ditto ditto Reds, 60s. to 70s.

BUTTER MARKET.—June 14.

Best Fresh Butter	13s. per dozen lbs.
Second do. do.	11s. " "

Pork, 4s. 0d. to 4s. 8d. per 8 lbs.

COAL MARKET.—June 14.

Walls End Hetton, 19s.; Walls End Haswell, 19s.; Walls End South Hetton, 19s.; Walls End Trimdon Hartlepool, 18s. 3d.; Walls End Hartlepool, 18s. 6d.; Walls End Braddyls Hetton, 17s. 6d.; Walls End South Hartlepool, 17s. 3d.; Walls End Heugh Hall, 17s.; Walls End Keepier Grange, 17s. 6d.; Walls End Cassop, 17s. 6d.; Walls End Harton, 17s.; Bell's Primrose, 13s.; Byron, 17s.; Wylam, 16s. 3d.; Hastings Hartley, 15s. 9d.—39 ships at market.

METROPOLITAN CATTLE MARKET.

Monday, June 10.

There are a few more Beasts than on Monday last; the demand, however, is good, and Thursday's quotations are fully maintained. The number of Sheep and Lambs is about the same as on Monday last, but trade is slow and prices are not quite so good. Calves are selling about the same as on Thursday. From Germany and Holland there are 600 Beasts, 4350 Sheep, and 229 Calves; from Scotland, 700 Beasts; from Norfolk and Suffolk, 1800; and 250 from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	5 0 to 5 2	Best Long-wools. ..	to ..
Best Short-horns	4 8 — 5 0	Do. Shorn ..	4 8 — 5 0
2d quality Beasts	3 8 — 4 4	Ewes & 2d quality ..	— ..
Best Downs and Half-breds	to ..	Do. Shorn ..	4 2 — 4 6
Do. Shorn ..	5 0 to 5 4	Lambs	5 8 — 6 4
		Calves	4 6 — 5 2
		Pigs	3 8 — 4 8

Beasts, 3940; Sheep & Lambs, 26,460; Calves, 279; Pigs, 440.

Thursday, June 13.

There is a very considerable increase in the number of Beasts. Trade is very slow at a reduction of fully 2d. per 8 lbs. from Monday's quotations. Sheep are also more plentiful, and prices lower. Lambs and Calves meet with an exceedingly dull sale. A large number remain unsold, although prices are much reduced. Our foreign supply consists of 483 Beasts, 1470 Sheep, 473 Calves and 22 Pigs. Milch Cows 95.

Best Scots, Herefords, &c. ..	4 8 to 5 0	Best Long-wools . ..	to ..
Best Short-horns	4 6 — 4 10	Do. Shorn ..	4 8 — 5 0
2d quality Beasts	3 8 — 4 2	Ewes & 2d quality ..	— ..
Best Downs and Half-breds	— ..	Do. Shorn ..	4 0 — 4 6
Do. Shorn ..	5 0 — 5 2	Lambs	5 4 — 6 0
		Calves	4 0 — 4 8
		Pigs	3 8 — 4 6

Beasts, 1375; Sheep & Lambs, 11,130; Calves, 700; Pigs, 160.

MARK LANE.—Monday, June 10.

The supply of Wheat from Essex and Kent to this morning's market was small, and the general quality very inferior, we consequently reduce our quotations 1s. to 2s per qr. We had a good attendance to-day, and a better tone pervaded the trade. The forced sales of Friday were not continued. On all good foreign Wheat the prices of this day se'nnight were realised, but on some of the low and out-of-conditioned qualities a decline of 1s. per qr. was submitted to. Barley is a slow sale at about last week's prices. Beans and Peas are 1s. per qr. lower. The Oat trade is very heavy, and to effect sales it is necessary to submit to a decline of 6d. to 1s. per qr. There is no alteration in the price of town-made Flour, but American barrels are 6d. to 1s. per qr. cheaper.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk .. White	46—66	Red	48—62
— — fine selected runs .. ditto	50—72	Red	54—68
— — Talavera	51—72		
— Norfolk	—	Red	—
— Foreign	46—76		
Barley, grind. & dist., 28s to 30s .. Chev.	40—45	Malting .	38—40
— Foreign .. grinding and distilling	30—36	Malting .	40—42
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire .. Potato	26—28	Feed ..	20—25
— Irish .... Potato	26—28	Feed ..	21—24
— Foreign .... Poland and Brew	24—28	Feed ..	20—[illegible]
Rye	35—38	Foreign .	—
Rye-meal, foreign	—		
Beans, Mazagan .... 37s to 40s .... Tick	40—43	Harrow .	40—43
— Pigeon ...... 41s — 45s .. Winds	—	Longpod	—
— Foreign .... Small	42—5[illegible]	Egyptian	—
Peas, white, Essex and Kent .. Boilers	36—40	Suffolk .	40—42
— Maple .... —s to —s ...... Grey	40—42	Foreign .	35—38
Maize .... White	—	Yellow ..	—
Flour, best marks delivered .. per sack	50—5[illegible]		
— 2d do. .... ditto	38—50	Country	38—50
— Foreign .... per barrel	28—33	Per sack	42—50

Friday, June 14.

Much rain fell between the 8th and 11th, but the weather has since been fine and warm. The Wheat trade has been greatly depressed throughout the kingdom, and everywhere a decline in prices varying from 1s. to 2s. 6d. per qr. has been quoted. The forced sales of American Wheat made for account of the holders of bills of lading, where bills against the same were not accepted, still continue, and have driven down the prices of this description 4s. to 5s. below the rates current 14 days ago, which has necessarily affected more or less all other qualities of new. The sale of old is very limited, but being in few hands nearly former rates are insisted upon. Business in spring corn of all kinds has been also restricted by the genial weather and good supplies; each description was

purchaseable at a reduction of about 1s. per qr. The sale of Flour has been of the most retail character, and prices tending downwards. During the past eight days 23 cargoes have been reported off the coast. Very little business was done, and prices declined 1s. per qr. on most articles. The arrivals of English grain this week have been small, of foreign Barley good, and of Wheat, Oats, and Flour moderate. The attendance of buyers at to-day's market was exceedingly limited. Fine English Wheat commanded Monday's prices; other qualities were neglected; very little business was transacted in foreign, but to have forced sales a decline of 2s. per qr. upon the rates of Monday would probably have been required. In Spring Corn there is but very little business doing, and with the exception of Oats, which are 6d. per qr. cheaper, there is no alteration in prices. For foreign Flour there is no demand.

Arrivals from June 10 to June 14.

	Wheat.	Barley.	Oats.	Flour.
English ..	820 qrs.	— qrs.	70 qrs.	1610 sks.
Irish	— „	— „	230 „	— „
Foreign ..	11020 „	4010 „	15160 „	1430 „ / 9080 brls.

Liverpool, Tuesday, June 11.—There was a fair attendance at this morning's market, and a good business doing in choice samples of Wheat, but middling and inferior may be quoted 2d. to 3d. less. Flour finds buyers at a reduction of 6d. on barrels and sacks. Indian Corn commands more attention, and there being a good inquiry holders are more firm. Oats without change. Oatmeal 6d. cheaper. Beans and Peas quiet. Barley unsaleable. Market closes rather dull.

Friday, June 14.—The Corn market was very dull, and buyers only supplying immediate wants. Prices nominally unaltered, but sales can only be effected at a further decline. Weather splendid. Attendance limited.

Averages	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
May 4..	55s 4d	36s 10d	24s 7d	35s 2d	42s 11d	40s 8d
— 11..	55 0	36 4	25 0	30 0	43 10	40 11
— 18..	54 4	35 11	25 1	32 0	44 4	40 5
— 25..	55 3	34 11	25 2	33 8	44 6	39 9
June 1..	55 5	34 3	25 8	33 1	45 11	40 7
— 8..	54 5	32 8	25 0	30 6	44 0	39 10
Agg. Aver.	55 0	35 2	25 3	32 10	44 3	40 4

Fluctuations in the Last Six Weeks Averages.

PARTNERSHIP.—A Nurseryman and Seedsman of a First-class Business wants a PARTNER to take charge of the Book and Cash Matters. An excellent income guaranteed. Capital required, about 1500*l*.—Apply to Mr. Chandler, Horticultural Agent and Valuer, 28, Priory Road, Wandsworth Road, London, S.

WANTED, as FOREMAN and PROPAGATOR, a sober, steady, active, industrious Man, well acquainted with the management of Vines, and the general routine of the Nursery business, in-doors and out.—Address, stating age, reference, wages, and all other necessary particulars, to T. G., Post Office, Coventry.

To Propagators.

WANTED, in a first-class Nursery, a short distance from London, a thoroughly competent PROPAGATOR of all kinds of Hardy things, more particularly Conifers, Rhododendrons, and Roses. Every encouragement will be given to a good Man, and the Salary regulated by ability and success.—Applications, stating terms, references, &c., to be made to A. B. C., *Gardeners' Chronicle* Office, W.C.

WANTED, as GARDENER, a steady married Man without family or more than one child. One who well understands the general routine of Forcing, Kitchen and Flower Gardening, &c., the Mowing being done by the aid of a Machine He will have two or three men under him, and his Wife will be required to attend to the Lodge Gate. His character must be such as will bear strict investigation.—Apply by letter to Hooper & Co., Seedsmen, Covent Garden Market, London, W.C.

WANTED, an industrious WORKING MAN to look after Fruit Trees. He must be a good Budder, Grafter, and Trainer.—Apply to John Cranston, King's Acre Nurseries, near Hereford.

WANTED, 6 or 8 first-rate BUDDERS and GRAFTERS.—Liberal Wages will be given. Applicants must state how many years' practice they have had, and in whose Nurseries.—Address B. U. D., Messrs. Hurst & M Mullen, 6, Leadenhall Street, London, E.C.

WANTED, Two or Three good HANDS who can BUD and GRAFT well, either Roses or Fruit Trees. None need apply who have not had several years' experience.—John Cranston, Nurseries, King's Acre, near Hereford.

WANTED, Two or Three MEN well versed in the general routine of Out-of-doors Nursery work, including the Layering, Grafting, and Budding of Hardy Trees, Shrubs, Fruit Trees, &c.—Address, stating wages required, to Thomas Cripps, Nurseryman, Tunbridge Wells, Kent.

WANTED IMMEDIATELY, a GARDENER for a Market Garden, 20 miles from London; who has a practical knowledge of Forcing Peaches, Grapes, Melons, Cucumbers, Strawberries, and Mushrooms. He must also be a good Plant Grower.—Apply personally or by letter to Mr. G. Bush, Nurseryman, Barnet, Middlesex

WANTED IMMEDIATELY, as BAILIFF and GARDENER, a middle-aged Man, to take the Management of a Garden and Small Farm, he must also be able to Superintend the General Repairs to Cottages and Farm Buildings, also Selling of Underwood and Timber on a Small Estate in Bedfordshire. Salary 50*l*. a-year, with Cottage on the Estate.—Address L. S., Post Office, Saffron Walden, Essex.

WANTED, a GARDENER and LAUNDRESS.—A married couple without incumbrance. The Gardener to thoroughly understand the cultivation of Vines, Fruit, and Flowers, with aid when required; Wife to be experienced and competent to take the management of the Laundry. Lodge to live in, with fire and candle; Gardener's wages, 17*s*. per week; Laundress, according to time employed.—Address, with all particulars of ages, length of services, and capabilities, to A. B., Messrs. Cartwright's, Law Stationers, Chancery Lane, London.

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By Order,
June 13. James Kilner, Clerk.

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News of the Week.

IN the House of Lords on Friday the Public Offices Extension Bill was read a second time, and the Greenwich Hospital Bill passed through committee. On Monday the Edinburgh Assessments Bill and the Excise and Stamps Bill were read a second time. The Public Offices Bill and some other Bills passed through committee. On Tuesday the Bankruptcy and Insolvency Bill, after some discussion on the alterations made by the select committee, was read a third time and passed. On the motion for the recommitment of the Greenwich Hospital Bill, the Earl of HARDWICKE moved that the Bill be recommitted that day three months. The Duke of SOMERSET defended the Bill, which ultimately passed through committee, and was ordered to be reported to the House. The Excise and Stamps Bill passed through committee. On Thursday, being the anniversary of the QUEEN'S Accession, the House did not sit.

In the Commons on Friday Mr. GREGORY moved for a Select Committee to inquire into the circumstances attending the termination of the postal contract with the Royal Atlantic Steam Navigation Company. After a discussion which occupied the whole evening, the motion was assented to by the Government, and agreed to. The East India Loan Bill was read a third time and passed. On Monday the House went into committee on the Appropriation of Seats (Sudbury and St. Alban's) Bill. On clause 3, Mr. KNIGHTLEY moved as an amendment that the county of Middlesex should in future return three instead of two members. On a division, the amendment was negatived by 236 to 186. The clause itself, at the suggestion of Sir G. LEWIS, was then negatived. Mr. SCULLY moved that the chairman report progress. After some discussion the motion was negatived, and the House divided on the clause giving a seat to Birkenhead, which was carried by 163 to 26. The remaining clauses were then agreed to, Sir G. LEWIS giving notice that on bringing up the report he will propose a clause to give four members to the West Riding, and to separate the Riding into two divisions. On the motion for going into committee on the County Surveyors (Ireland) Bill, Mr. SCULLY moved, as an amendment, that the committee be postponed to that day three months. On a division the amendment was negatived by 152 to 59. The House then went into committee on the Bill, and made some progress with the clauses. The Bills of Exchange and Promissory Notes (Ireland) Bill, and the Transfer of Stocks and Annuities Bill, were read a third time and passed. On Tuesday the East India Council and High Courts of Judicature (Salaries, &c.) Bill passed through committee. The House went into committee on the Harbours Bill, and agreed to the first six clauses. Lord R. MONTAGU moved an Address to the Crown on the question at issue between Denmark and the Duchies of Schleswig-Holstein, and was proceeding with his motion when the House was counted out. On Wednesday Sir C. BURRELL moved the second reading of the Window Cleaning Bill. Sir F. GOLDSMID moved as an amendment, that the Bill be read a second time that day three months. On a division the amendment was carried by 79 to 38. The Bill was therefore lost. Sir J. TRELAWNY moved the third reading of the Church Rates Abolition Bill. Mr. SOTHERON-ESTCOURT moved, as an amendment, that the Bill be read a second time that day three months. After a long debate the House divided, when the numbers were equal, viz., 274 for the third reading and 274 against it. The SPEAKER gave his casting vote against the Bill, stating that he gathered from the opinions of the House that it was in favour of some settlement of the question different from that contained in the Bill. The County Voters (Scotland) Bill passed through committee up to clause 10. The Poor Assessment (Scotland) Bill passed through committee. On Thursday the House went into committee on the East India Council Bill, when some new clauses were brought up and agreed to, and a motion was adopted substituting two years for one year as the term of office for the members of the new Council. The Industrial Schools Bill passed through committee. The Salmon and Trout Fisheries Bill was read a second time, and referred to a select committee. The Queensland Government Bill was read a third time and passed.

The session of the French Corps Législatif has been prolonged to the 27th inst. The note of the French Government on the recognition of the kingdom of Italy arrived at Turin on Tuesday, and will be published when the reply of the Italian Government shall have reached Paris. The French Government has declined the proposal of Austria and Spain, that the question of the temporal power of the POPE should be settled by the Roman Catholic Powers.

A despatch from Madrid announces that the Spanish Government has resolved to preserve a strict neutrality in the civil war in America.

The discussion on the Address in the Upper House of the Hungarian Diet commenced on Monday and terminated on Thursday in the unanimous adoption of the Address. The Vienna papers assert that in the last Ministerial Council it was resolved that the Address should not be accepted, and that the Municipality of Pesth should be dissolved.

The EMPEROR OF RUSSIA has issued Imperial decrees granting reforms to Poland. These reforms are conceived in a liberal spirit, and make satisfactory concessions to the country. The military have been withdrawn from the streets and squares, and the Club and Theatre have been reopened.

A despatch from Constantinople states that the SULTAN is so seriously ill that a physician has been summoned by telegraph from Paris. DAVAD EFFENDI, an Armenian, now director general of telegraphs, has been appointed Governor of the Lebanon.

From the United States we learn that the Federal troops are making further advances into Virginia, and with the exception of some outpost

skirmishes, have met with no opposition. It is expected that the Secessionists will make a stand at Manasses Junction. The officers of the Federal frigate Susquehanna resigned their Commissions on arriving at Boston. There is still a highly hostile feeling against England in the Northern States, caused by the impression that her policy is favourable to the Secessionists. The Federal steamers have abandoned the attack on the Confederate batteries at Acquia Creek, for want of ammunition. Mr. DOUGLAS died at Chicago on the 3d inst.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family continue at Buckingham Palace. On Friday morning the Prince Consort presided at a meeting of the Council of the Horticultural Society, at South Kensington. The Prince of Wales rode on horseback. The Princesses Alice, Helena, and Louisa rode on horseback in the riding-house. In the afternoon the Queen, accompanied by the Princess Alice and the Princess Louisa, took a drive in an open carriage and four. The Prince Consort rode on horseback, accompanied by the Prince of Wales and Prince Louis of Hesse, and honoured Mr. Thornycroft with a visit at his studio, in Wilton Place. The King of the Belgians went to Claremont and returned to Buckingham Palace in the afternoon. On Saturday morning the Prince of Wales inspected at the French Gallery Mr. George Brown's picture of the "Bay and City of New York," presented to his Royal Highness by the citizens of New York. The Princesses Alice, Helena, and Louisa visited the Fancy Bazaar in aid of the building fund of the Female School of Art, at the new rooms adjoining the South Kensington Museum. Prince Louis of Hesse visited the National Gallery and Westminster Abbey. In the afternoon the Prince Consort presided at a meeting of the Fine Arts Committee of the Horticultural Society at the society's gardens. The Queen, accompanied by the Princess Alice, the Prince of Wales, and Prince Louis of Hesse, went in a carriage and four to White Lodge, Richmond Park, returning to Buckingham Palace about 8 o'clock. On Sunday morning the Queen and Prince Consort, the King of the Belgians, Prince Louis of Hesse, the Prince of Wales, the Princesses Alice, Helena, and Louisa, attended Divine service in the private Chapel. The Rev. W. H. Brookfield preached the sermon. In the afternoon the King of the Belgians visited Prince Edward of Saxe-Weimar at his residence in Portland Place. On Monday morning the Prince of Wales and Prince Louis of Hesse rode on horseback. In the afternoon the Queen, accompanied by the Princess Alice, took a drive in an open carriage and four. The Prince Consort, accompanied by the Prince of Wales and Prince Louis of Hesse, rode on horseback. In the evening the Prince of Wales and Prince Louis of Hesse honoured the performance of "The Colleen Bawn" at the Adelphi Theatre with their presence. On Tuesday morning the Prince Consort, the Prince of Wales, and Prince Louis of Hesse went to Aldershott, and were present at a review of the troops in camp. In the afternoon the Queen, accompanied by the Princess Alice, drove out in a carriage and four, and called on the Dowager Duchess of Northumberland, and her Royal Highness the Duchess D'Aumale at Twickenham. In the evening the Count of Flanders returned to Buckingham Palace from a tour in Ireland. On Wednesday the Queen held a Drawing Room, the first of the season, at St. James's Palace, when 211 ladies had the honour of being presented. After the Drawing Room the Queen, accompanied by Princess Alice, Princess Louisa, and Prince Louis of Hesse, drove out in a carriage and four. The Prince Consort, with the Prince of Wales and the Count of Flanders, rode out on horseback. On Thursday morning Prince Louis of Hesse visited the British Museum. The Countess de Neuilly visited the King of the Belgians at Buckingham Palace. In the afternoon the Queen and Prince Consort, accompanied by the Princess Alice, the Prince of Wales, and Prince Louis of Hesse, went to Windsor, by a special train on the South Western Railway. At the Datchet station the Prince Consort and the Prince of Wales left her Majesty, and went to attend the meeting and bazaar of the Windsor Royal Association, in the Home Park. The Queen proceeded to Frogmore House. The Royal party returned to Buckingham Palace shortly before 8 o'clock. In the evening the Prince of Wales and the Count of Flanders honoured the performance of the Royal Italian Opera with their presence. Her Majesty and the Prince Consort, accompanied by the Princess Alice and the youthful members of the Royal family, are expected to leave London on the 4th July for Osborne, for the season.

THE KING OF THE BELGIANS and the Count of Flanders close their visit to the Queen on the 1st July, when they will leave England for Ostend, on their return to Brussels.

THE PRINCE OF WALES is expected to arrive on Saturday next at Powerscourt, in the county of Wicklow, and will make a long stay in that part of Ireland.

THE CROWN PRINCE AND PRINCESS OF PRUSSIA, with their son, are expected to leave Berlin for London on the 28th inst., on a visit to her Majesty of more than two months' duration. The Royal yacht Victoria and Albert will leave Portsmouth to-morrow for Antwerp, for the purpose of bringing their Royal Highnesses to England.

PRINCE LEOPOLD arrived at Buckingham Palace on Wednesday from Osborne. His Royal Highness is convalescent from the measles, as are also the Princess Beatrice and Prince Arthur.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of the First Lord of the Treasury in Downing Street.

THE CONSERVATIVE PARTY.—A meeting of Conservative members was held on Monday at the residence of the Earl of Derby for the consideration of the course it might be advisable to take on the subject of Church rates. Upwards of 200 members of the House of Commons were present.

ORDER OF THE BATH.—The Queen has appointed Lord Dufferin and Claneboye, late British Commissioner in Syria, to be Knight Commander of the Bath.

CONVOCATION.—Both Houses of Convocation of the Province of Canterbury assembled on Tuesday at Westminster for the despatch of business. In the Upper House a request which had been made by the Lower House for the appointment of a joint committee to consider a new Church hymnal was taken into consideration. After a long discussion their lordships agreed that it was not advisable to proceed with the matter at present. It was also agreed to send an intimation to the Lower House that their lordships did not approve of the alterations which had been made in the 29th canon affecting the sponsorship at baptism. In the Lower House Archdeacon Denison, as chairman of the committee appointed to examine the "Essays and Reviews," read the report agreed to by the committee. This report contained an analysis of the leading principles of the work, a statement of the several doctrines of Scripture which are denied or disparaged in it, and many closely-printed pages of extracts, showing in parallel columns their opposition to the articles of the Church. The report concluded by saying that it appeared to the committee that, "while the professed intention of the volume was the 'free handling in a becoming spirit' of religious subjects, the general tendency and effect of the volume was unduly to exalt the authority of human reason, to lower the authority of Revelation in regard to things Divine and spiritual, to unsettle faith, and to consign the reader to a hopeless scepticism." After some discussion it was resolved to inform the Upper House of the presentation of the report, accompanied by a request that the Lower House might proceed to its consideration. On Wednesday in the Upper House, a deputation from the Lower House brought up the report of the committee on the "Essays and Reviews," and received permission from their lordships to act upon it. Leave was also given for the appointment of a committee to consider an increase of the episcopate. A proposal was also received from the Lower House that the discussion on the 29th Canon should be postponed until February next, in consequence of the differences which existed between the two Houses on the subject. After some discussion it was resolved, on the motion of the Bishop of Oxford, that it was inexpedient to defer to a distant session the consideration of the 29th Canon, and that the Lower House should be directed to bring up any difficulties, in order that the two Houses might confer together on the matter. A proposition to institute a weekly offertory for the purpose of supplementing the resources of poor incumbencies was discussed at considerable length, and a committee was appointed to consider the subject in detail. In the Lower House the Rev. J. Fendall submitted a resolution for leave to frame a canon expressing the opinion of the Church with regard to the ornaments and vestments to be used in the service of the Church. After some discussion the motion was withdrawn. The amendments of the Upper House on the 29th Canon were in the main agreed to and reported. On Thursday in the Upper House an address to the Crown was agreed to, praying her Majesty to cause an occasional service of thanksgiving after harvest to be proclaimed; a report was presented on the subject of missionary bishops, and the 29th Canon as amended was agreed to, and was afterwards signed by both Houses in due form, a ceremony which has not been performed for upwards of 200 years. In the Lower House Archdeacon Denison moved a resolution that in the opinion of the House there were sufficient grounds for proceeding to a synodical judgment on the book entitled "Essays and Reviews." The Rev. Dr. M'Caul seconded the motion. The Rev. Sir H. Thompson moved an amendment, stating that the House was not prepared to recommend a synodical judgment on the Book. Canon Wordsworth moved an amendment, that the Ecclesiastical Courts were the proper tribunals for the trial of heresy. These amendments having been objected to as improper, were negatived or withdrawn. The Archdeacon of Stafford then moved an amendment, declaring the opinion of the House, that though there were sufficient grounds for proceeding to synodical judgment, it was not expedient to revive the power of synodical action under the existing circumstances of the Church. After a long discussion the debate was adjourned.

THE VOLUNTEER MOVEMENT.—The following Circular has been issued from the War Office to the Lords Lieutenants of the different counties:—

War Office, June 7.

"Having observed that in several instances Volunteer corps have assembled under arms for various purposes unconnected with drill, parade, or rifle practice, I think it right to inform you that no such assemblies ought to take place, except with the approval of the lord-lieutenant; and that if the number of Volunteers who propose to be present should exceed the strength of one battalion, previous application must be made to the Secretary of State for War for his sanction, in accordance with the circular memorandum of June 6, 1860. I have also learnt that in some cases Volunteer corps have been called out in aid of the civil power on the occurrence of local disturbances, and I have, therefore, to point out to you, that as the Volunteer force is not intended to be employed in this manner it is inexpedient to assemble it on any such occasion. I desire further to draw your attention to the impropriety of the presence of any armed body at parliamentary or municipal elections, and to request that you will give directions to the commanding officers of all Volunteer corps within the county under your charge not to assemble their corps for drill or any other purpose between the issue of a writ and the termination of the election in any county or borough in the neighbourhood of their head-quarters or during the progress of any municipal election in any town to which they may belong.—I have, &c.,

HERBERT."

A grand review took place on the great lines of Chatham on Saturday, at which the City of London Rifle Brigade were brigaded with the troops of the line in the garrison. Major-General Eyre took the command, and the review went off with great success.—Several influential gentlemen are organising an Artillery Volunteer corps in the metropolis, which will consist of colonists who are natives of the West Indies, the Cape of Good Hope, Australia, New Zealand, British North America, and other dependencies of the Crown.—Efforts are making to raise a Volunteer Marine Battalion of six companies, the head-quarters of which are to be in London, the First Lord of the Admiralty for the time being to be *ex officio* honorary colonel. It is proposed to raise one company for the metropolis, and the remainder on the seaboard of Great Britain, or at a distance not exceeding 12 miles inland. In the event of invasion or urgent circumstances requiring the assistance of the battalion, they will be liable to be called upon to serve in marine fortresses, or on board guard or block ships; but should their services be further required they will be allowed to volunteer to do duty as Marines on board any of her Majesty's ships at a distance of not more than ten miles from the coast.

Foreign.

FRANCE.—The *Moniteur* of Wednesday announces that the Session of the Corps Législatif is prolonged until the 27th inst. In the sitting of the Corps Législatif on Tuesday the new law on the press was discussed. M. Jules Favre, in a speech of great length and eloquence, demanded the suppression of the administrative *régime* of the press, and the re-establishment of the law of 1819. M. Billault, Minister without Portfolio, replied in detail to the arguments of M. Favre, and the Government Bill was adopted. The *Moniteur* of Sunday reproduces from the *Patrie* an article stating that negotiations have been opened for the recognition of the kingdom of Italy by France, and that France will recognise accomplished facts, without, however, accepting any engagement for the future. The *Pays* also contains an article entitled "The Kingdom of Italy," signed by its chief editor, M. Limayrac, stating that the death of Count Cavour has hastened the recognition of the kingdom of Italy by France, but that, although France will recognise the new kingdom, her troops will remain at Rome. It expresses a hope that the policy of the Emperor will bring about a reconciliation between Italy and the papacy. M. de Vimercati, the semi-official representative of Sardinia, left Paris on Sunday for Turin, and the French Government is awaiting the answer of the Sardinian Cabinet, in order to give an official form to the recognition. It is said that the report of new territorial concessions demanded by France as compensation for the recognition is entirely unfounded, and that the question of the cession of Sardinia has never been raised. Rear-Admiral Reynaud, who has been appointed to the command of the American station, sailed from Brest on the 17th for the West Indies, and as soon as he assumes his command, will visit with his squadron New York, Charleston, and other ports of the Atlantic. Admiral Chappart has arrived at Toulon in order to form a new naval division. A solemn service for the repose of the soul of Count Cavour took place at the Madeleine on Monday, and had all the importance of a political manifestation. The church was filled to suffocation, and many hundreds were unable to gain admission. The service was performed by M. Daguerry, the new Bishop of Marseilles, and was attended by Marshal Vaillant, Minister of the Emperor's Household; Marshal Regnault de St. Jean d'Angely, Commander-in-Chief of the Imperial Guard; M. Thouvenel, Count de Persigny, Count de Morny, Marshal Magnan, M. Roger, Vice-President of the Senate, two military officers sent by Prince Napoleon and the Princess Mathilde, the Marquis Gropello and the gentlemen of the Italian Embassy, the Ministers of Switzerland, Persia, and Sweden, a large number of the most respectable British subjects in Paris, great numbers of Poles and Hungarians, a few Garibaldians, and an unusual number of the leading writers of the Paris journals. On Thursday week the Emperor and Empress attended a hunt in the Forest of Fontainebleau, which lasted three hours. The Emperor will leave on the 1st of July for Vichy, to which place

the French Ambassadors at Rome, Constantinople, Madrid, Berlin, Vienna, and probably St. Petersburg, have been summoned to meet his Majesty. The steam corvette Prince Jerome, with Prince Napoleon and the Princess Clotilde on board, while on the voyage to Algiers, grounded off Cap de Fer, near Stora, but was got off by three steamers, which were sent to her assistance. The Government has obtained an immense majority in the elections for the members of the Conseils Généraux which have just taken place. Out of 1000 members elected, only 12 belong to the Opposition. The Prefect of Police last week seized a lithographed work entitled "Vues sur le Gouvernement de la France," written by the Duc de Broglie, but not, it appears, intended for publication. The Duke immediately summoned the Prefect of Police to restore his property, on the ground that it was illegally seized on his warrant and by his agents. This summons not producing any effect, the Duke in due form demanded of the President of the Civil Tribunal of the Seine permission to summon the Prefect before that Court. The President complied with the demand. The Prefect has accordingly been summoned to appear before the Court within eight days from the date of the summons. Meanwhile the Government has ordered the Duc de Broglie to be prosecuted before the Correctional Police, on the ground that printing or lithographing a book is tantamount to publication. The *Moniteur* announces that the printer and publisher of the Duc d'Aumale's pamphlet, whose licences were withdrawn, are to be allowed to sell their property and transfer their licences. The Editor of the *Courrier du Dimanche*, who was expelled from France a few months back, by order of M. de Persigny, has been allowed to return to Paris. Judgment was given on Wednesday evening in the affair of the *Monde* newspaper. The charges of insult and libel brought against the proprietors were admitted by the Tribunal. M. Taconet was fined 500f., and M. Crampon was sentenced to 15 days' imprisonment and a fine of 500f. Blanqui was tried on Friday at Paris, on a charge of belonging to a secret society. The Court found him guilty, and condemned him to four years' imprisonment. Three of his accomplices, one of whom was a woman, were sentenced to terms of imprisonment varying from one year to six months. The iron cased frigate Gloire has just made the passage from Toulon to Algiers in 66 hours, being 6 hours less than the shortest passage ever made by the fastest French steamers, and without using her full propelling power.—In the recent debate on the budget of the Navy in the Corps Législatif, the following speech, which throws much light on the actual condition and *future strength* of the French navy, was delivered by M. *Dupuy* de Lome, the builder of the Gloire, who attended as Councillor of State in behalf of the Government:—

He said that in 1857 it was found necessary to reorganise the fleet, and it was resolved that the navy should consist of 150 steam vessels—40 ships of the line, 20 frigates, and 90 corvettes and advice boats. There was also to be a flotilla of gun boats, coast guards, and transports. As to the latter, it was decided that this number should be rather large in order to be able to carry war stores to a distance. Recent events had proved the advantage of that measure. In the report addressed to the Emperor it was proposed that until the fleet of the future could be constructed, a transition fleet should be formed by the transformation into steamers of sailing vessels capable of receiving engines. As to sailing vessels, it was decided that no more should be built, and that the number necessary for the maritime service should alone be kept up. The sum considered indispensable for the fleet of the future was 244,000,000f., and 13 years were demanded for the construction of it. But at the same time as a steam fleet was created, it was necessary to think of placing ports and docks in a state to provide for all new wants; and for the repairs of vessels it was necessary to establish workshops and foundries in the dockyards. Nor was that all. The reserve of the old fleet remained constantly on the stocks, but what was possible with sailing vessels is no longer so with steamers. A reserve of steamers on the stocks would have been of little value, owing to the length of time necessary for fitting up a steam vessel. Simply to fix engines required four months. This, then, proved the necessity of having a great number of vessels afloat. The budget of hydraulic works up to 1857 was 7,000,000f., but at that epoch it was seen that during the construction of the fleet that sum would be insufficient. A committee of the Council of State charged to examine the question admitted in principle that there ought to be no more sailing vessels, except for the current service, and reduced the number of transports, fixing at 14 years the time necessary to complete the fleet. From all these circumstances, it resulted that a sum of 65,000,000f. was every year set apart to the execution of the programme. That programme could not be called ambitious, as it fixed at 150 the number of vessels of war. In 1846 it was proposed that the French fleet should be in time of peace 328 vessels; the future fleet would be much inferior in number, but it would be as near perfection as science can make it. On the conclusion of the speech the Chamber voted 150,000,000f. for the navy estimates.

SPAIN.—The Spanish Government has resolved to preserve a strict neutrality in the civil war in America. It has also demanded the solemn promise of Mexico to execute the treaties before entertaining her proposition with regard to reparation on account of the late differences with the Spanish Ambassador in Mexico. The Bank of Madrid has afforded assistance to several mercantile houses whose affairs were embarrassed.

PORTUGAL.—Revolutionary proclamations are circulating in Portugal, accusing the Government of intending to weaken the army, with the object of betraying the national independence. These proclamations conclude with the words—"Saldanha for ever!"

DENMARK.—The election of members for the Folksthinge took place on Friday. Ministerial candidates only were elected, among whom were MM. Hall, Fenger, and Casse, the Ministers for Foreign Affairs, Finance, and Justice. M. Blixen, Opposition candidate, and formerly Minister, was defeated. The Ministers, in their addresses to the electors, expressed themselves in favour of the independence of Holstein, and the incorporation of Schleswig with Denmark on the broadest constitutional basis.

SWITZERLAND.—The English Minister at Berne has protested before the Federal Council against the assertion of France that the opposition offered by England to the annexation of Savoy and Nice was the principal reason why France had not ceded the neutral territory of Savoy to Switzerland.

PRUSSIA.—A despatch from Berlin states that there is not the least foundation for the report of a resignation of the Prussian Cabinet. The official *Gazette* states that the Prussian Ministry intend to put an end to all further explanations respecting the Macdonald affair by abstaining from giving any reply to the last note of Lord John Russell. It says that diplomatic relations with England are not to be interrupted, but orders have been sent to Count Bernstorff, the Prussian Minister in London, not to communicate with the English Cabinet except on the most pressing affairs.

AUSTRIA.—The Empress will leave Vienna to-day for Corfu, her Majesty's health having become more impaired. The *Vienna Gazette* publishes an address which the dignitaries of the Roman Catholic clergy, who form part of the Council of the Empire, have presented to the Emperor, praying him to maintain the Concordat, the prerogatives of the catholic clergy, and the laws of intolerance. They beg the Emperor to remember that his mission is "to defend upon this earth the kingdom of God in the succession of St. Peter." None of the Hungarian prelates have signed this petition. In the sitting of the Lower House of the Council of the Empire on Wednesday, the Minister of State announced that he was authorised by the Emperor to declare the Bill proposed in the Provincial Diet of the Tyrol against the emancipation of the Protestants to be inadmissible. The Emperor has promised to grant an amnesty to those persons committed for political crimes in Bohemia who should request his Majesty's pardon. The official *Gazette* of Saturday contains an ordinance of the Minister of Finance, ordering the resumption of the payment of the interest of the National Loan in specie.

HUNGARY.—In the sitting of the Chamber of Deputies on Friday, the revised Address was agreed to, and sent in the Upper House. The discussion on the Address in the Upper House commenced on Monday, when the Address was supported by nearly all the members who spoke on the subject. Bishop Haynald declared himself in favour of the union with Transylvania and the maintenance of the connection between Austria and Hungary. On Tuesday the debate was continued, when the Primate of Hungary laid stress on the necessity for a reconciliation between Hungary and the Emperor, and for a revision of the laws of 1848. All the members who spoke were in favour of sending an Address to the Emperor in the form proposed by M. Deak in the Lower House. The discussion on the address terminated on Thursday, when the address was unanimously agreed to. The Vienna papers of Thursday assert that in the last Ministerial Council it was resolved that the Address should not be accepted, and that the Municipality of Pesth should be dissolved.

CROATIA.—A third attempt to elect members in the district of Fiume to the Croatian Diet took place on Saturday, but without any result, not a single elector having been present.

ITALY.—The *Opinione* of Thursday announces that the note of the French Government on the recognition of the Kingdom of Italy arrived on Wednesday at Turin, and that it will be published when the reply of the Italian Government shall have reached the Emperor. The note is said to state that the Emperor, in acceding to the demand of King Victor Emmanuel, thinks it necessary to call the attention of the Italian Government to the obligations created by the events accomplished within the few last years, and announces that the occupation of Rome will be continued, until the necessary guarantees shall be given to France for the safeguard of those interests which she intended to protect in occupying Rome. To-morrow (Sunday) the King will receive Prince Piombino, who was exiled from Rome for having refused to withdraw his signature from the petition for the withdrawal of the French troops. Information has been received by the authorities of Turin that Austrian emissaries would attempt to blow up the powder magazines. The guards stationed near them have, in consequence, been trebled for the last few days, and all access to the magazines has been prohibited. Up to the present time no attempt has been made. Perfect tranquillity prevails in Turin. A Bill for levying 24,000 men in the old Æmilian provinces, the Marches, Umbria, and in Sicily, was laid on the table of the Chamber of Deputies on Monday. On Thursday the Chamber adopted the Bill for the Consolidation of the different Public Debts of Italy by a majority of 229 to 9. The debate on Garibaldi's bill on the national armament commenced on Thursday, and the clauses were to be discussed yesterday. Parliament will continue sitting throughout July. General Cialdini took his oath and his seat for the first time in the Italian Chamber of Deputies on the 15th. A commission has just been appointed by order of King Victor Emmanuel to examine plans for the establishment of a great commercial port in the Bay of Naples, which has long been desired by the inhabitants. The confessor of the late Count Cavour has arrived at Rome. It is asserted that he is the bearer of a message from the deceased Minister to the Pope. The *Patrie* says:—"We are enabled to guarantee the incorrectness of the statement that the priest who administered the last sacraments to Count Cavour either obtained or demanded a retractation of his acts and opinions." A despatch from Florence, dated the 18th inst., states that on the previous day some journeymen bakers attempted to get up a manifestation, with the object of obtaining an increase of wages. The coalition did not, however, succeed.—The recent indisposition of the Pope was caused by an attack of erysipelas, but he is again ill. On the 30th inst. he will go to Castel Gandolfo, on the Lake of Albano. It is said that the Pontifical Treasury now contains 13,000,000f. in money. Francis II. has proposed to the French Government the sale of the Farnese, Farnesina, and Caprarola Palaces. This alienation has been sanctioned by a Pontifical rescript. Popular manifestations have taken place in the Aliberti Theatre. Cries of "Victor Emmanuel for ever" were raised. Tricoloured bouquets were showered on the principal ballet dancer, who was afterwards arrested. The Theatre has since been closed in consequence of this national manifestation. A sanguinary collision has taken place between the Pontifical Gendarmes and the workmen employed on the railway near Velletri, caused by the latter shouting "Viva Garibaldi." Disturbances have also taken place at Amelia, originating in a demonstration against the priests who abstained from taking part in the national *fête* of the 2d inst. The Neapolitan towns of San Marco and Bignano having risen in insurrection, have been taken by assault by the Italian troops. Four Piedmontese were burnt alive by the inhabitants, 20 of whom were shot for having been concerned in this atrocity. Both towns were afterwards set on fire, and the inhabitants deported into the neighbouring villages. The students of Pavia have sent an address to the students of France, in reply to the one issued by the latter on the death of Count Cavour.

RUSSIA.—The *Northern Bee* of Wednesday says that up to the end of May last insurrections of peasants had taken place in 141 villages of Podolia, containing altogether a population of 71,000. These disturbances arose from a wrong interpretation of the Imperial ordinances. Order has now been re-established.

POLAND.—A courier arrived at Warsaw on Monday with the Imperial decrees granting reforms, which are said to make satisfactory concessions to Poland. The statutes of the future Council of State for Poland were published at Warsaw on Tuesday. The military have been withdrawn from the streets and public squares. The Ressource Club was re-opened on Tuesday, and the theatre on Saturday. The Emperor has appointed Prince Alexander Gortschakoff, Minister of Foreign Affairs, and brother of the late General Gortschakoff, to be President of the Commission for drawing up new laws for the kingdom of Poland. The Commission will meet on the 1st of July at Moscow, and will remain there until its labours are terminated. The following is an abstract of the Imperial decrees:—

"The new Council is to be composed of the members of the Council of Administration, of members appointed by the Emperor, the members of the superior clergy, the Governors of the provinces, and the President of the Agricultural Association. Its functions are to examine and give a deliberate vote on new laws, on the Budget for the year, and on all charges brought against public functionaries. The sittings of the Council will be secret, and its resolutions are not to be published before having been approved by the Emperor. The laws regulating the election of members to the Provincial District and Municipal Councils are conceived in a liberal spirit. The eligibility of members is in no way affected by their religion or profession. The electoral franchise is very comprehensive. No person under 25 years of age can be an elector. The Judge of the District will be the President of each District Council, and the Burgomaster that of each Municipal Council."

TURKEY AND SYRIA.—The Sultan continues ill from a complication of a cancer in the stomach and a disease of the spinal marrow. A physician has been telegraphed for from Paris. Davad Effendi, an Armenian, and now Director-General of Telegraphs, is to be Governor of the Lebanon. Accounts from Beyrout to the 7th inst., state that Fuad Pasha was proceeding through the Druse districts and engaging the inhabitants to preserve tranquillity. The Paris papers state that immediately after the departure of the French troops from Syria disturbances broke out near Mouktara, which were, however, speedily suppressed by Fuad Pasha. One Druse chief was executed. This example, it is added, intimidated the Druses, but fears of retaliation were entertained. Subsequent accounts state that the destruction which the Druses committed was confined to the demolition of the roofs of the houses in a village.

THE PRINCIPALITIES.—A new Ministry, selected from the ranks of the Left, has been formed under the presidency of M. Cartagi. The Minister for Foreign Affairs has announced to the Legislative Assembly that the Porte has consented to the complete union of the Danubian Principalities, and that an international conference will shortly assemble at Paris for the purpose of settling this question in a satisfactory manner. The National Central Commission has been convened. The Georgius barracks, valued at four millions, have been destroyed by fire.

SERVIA AND BULGARIA.—Accounts from Belgrade of June 10 state that the extortions of the Turkish functionaries cause increasing distress among the

people. It is asserted that in Bulgaria the Turkish authorities have, under threats of death, extorted the signatures of the people to addresses favourable to the existing state of things. Some districts are agitated.

HERZEGOVINA AND MONTENEGRO.—In the recent fights between the Turks and the insurgents, in the Herzegovina, the former were defeated. Dervisch Pasha was marching with 4000 men against the insurgents, by whom his vanguard was beaten. His troops were discouraged. Omar Pacha, immediately on arrival at Mostar, ordered measures to be taken to prevent the Montenegrins from perpetrating any further massacres. The Beys, or Sub-Governors, of the provinces have refused to recognise the concessions made to the Christians in Omar Pasha's proclamation, as being in opposition to the dogmas of the Koran.

COAST OF AFRICA.—Accounts from Sierra Leone of the 21st ult. state that the war was still carried on between the King of Lagos and the British. Portanova had been bombarded and was captured on the 26th of April. The Niger expedition was at the mouth of the Nun River, and was to proceed in July. The British war steamer Torch captured a slave schooner on the 10th of May at Debreeka. The United States steamer Saratoga had captured, near Congo River, the American ship Nightingale, from Liverpool, with 960 slaves on board, and ready to carry 1600 in all.

WEST INDIES.—Accounts from Jamaica to the 24th ult. state that a large public meeting, convened by the Mayor in accordance with a numerously signed requisition of the citizens, was held in the old Court house on the 18th ult. at which a memorial to the Queen against the proposed transfer of the Republic of St. Domingo to Spain was adopted. Late advices from Hayti received at Jamaica state that a most unsettled and threatening state of things exists in St. Domingo. The native population have taken up arms against the Spaniards in several of the country districts, and are determined to fight for their independence. The question of cotton cultivation is occupying the attention of the Jamaica press, the most influential portion of which is decidedly favourable to the enterprise.

UNITED STATES.—The Federal troops are making further advances into Virginia, directing their movements towards Fairfax, the occupation of which is said to be their first object. They are also reported to be advancing on Cairo. With the exception of some skirmishes of outposts, they have not met with any serious opposition, but it is supposed that the Secessionists will make a stand at Manassas Junction, which they are making strenuous efforts to defend. The attack of the Federal steamers on the batteries at Acquia Creek lasted two days, but was abandoned on the 3d inst. for want of ammunition, and has not since been resumed. The Secession prisoners captured at Alexandria have been released. The officers of the United States frigate Susquehannah resigned their commissions on arrival at Boston. The Board of Underwriters have advanced the war risks on American ships to 6 per cent. The policy of England in the present crisis is the general topic of discussion in all circles. The impression prevails that Southern privateers will be able to sell their prizes in English ports. This causes a highly hostile feeling towards England in the Northern States. The *Evening Post* states that the Confederate Government will send an agent to Brazil to try and form an alliance. A despatch from Washington, dated the 3d inst., announces that the Kentucky Brigade, encamped near Cincinnati, has received marching orders for Louisville, and adds:—"This is highly important, as the advance of Federal troops upon Kentucky soil will bring the loyalty of that State to a test."

Parliament.

HOUSE OF LORDS.

MONDAY.—*The Galway Contract.*—The Marquis of NORMANBY called attention to a statement of Mr. Cardwell in the House of Commons on a previous night, that the Lord Lieutenant of Ireland had not been consulted upon the subject of the withdrawal of the Galway contract; and said that if that principle was to be acted upon nobody would be found to accept the office of Viceroy in future.—Earl GRANVILLE said that the statement referred to had undoubtedly been made, and very properly so, seeing that the Galway contract had nothing whatever to do with the Government of Ireland. The question was simply whether a particular company could fulfil its engagements, and if not whether it was wise to continue a contract with it; and to have asked the Lord Lieutenant for his opinion would have been to place him in an unfair position. The *Edinburgh Assessments Bill* and the *Excise and Stamps Bill* were read a second time. The *Public Offices Bill* and some other Bills passed through committee.

TUESDAY.—*Bankruptcy and Insolvency Bill.*—On the third reading of this Bill, the Earl of DERBY asked Lord Granville whether, as he had not opposed the alterations made by the select committee he would use his influence with his colleagues in the Lower House to induce them also to agree to them; or if any alterations were made in the Bill, it would be sent back in sufficient time for their lordships to consider them.—Earl GRANVILLE declined to pledge himself as to any course the Government might pursue in the House of Commons; but said it would be their duty, if alterations were made, to send the Bill back to their lordships as soon as possible.—Lord OVERSTONE expressed his opinion that the alterations made by the select committee had materially improved the Bill.—The LORD CHANCELLOR thought the Bill had been mutilated and deteriorated by the abolition of the Chief Judgeship.—Lord CRANWORTH and Lord WENSLEYDALE stated their convictions that a chief judge was unnecessary. The Bill was then read a third time and passed. On the order for going into committee on the *Greenwich Hospital Bill*, the Earl of HARDWICKE objected to the Bill, on the ground that it would place the Hospital more than ever under the Lords of the Admiralty, and moved as an amendment that it be recommitted that day three months.—The Duke of SOMERSET defended the Bill. The amendment was ultimately withdrawn, and the Bill passed through committee. The *Excise and Stamps Bill* passed through committee.

THURSDAY.—To-day being the anniversary of the Queen's Accession the House did not sit.

FRIDAY.—*Church Rates.*—The Earl of DERBY, on presenting a petition against the abolition of Church rates, expressed a hope that the recent division on the subject would lead to a satisfactory settlement of the question. *Standing Orders.*—Lord REDESDALE moved an amendment to the standing orders, that no provision authorising any company to raise money for the undertaking of another company shall be introduced into any Bill which is not brought in by the company thereby authorised to raise money. [Left sitting.]

HOUSE OF COMMONS.

FRIDAY.—*The Galway Contract.*—Mr. GREGORY moved for a select committee to inquire into the circumstances attending the termination of this contract by the Postmaster-General. He advocated the appointment of the committee, not upon the ground that a joint-stock company or a particular town would benefit largely by a restoration of the subsidy, but that the contract was regarded by Ireland as a national undertaking. If the Irish people and the Irish members viewed the withdrawal of the subsidy in a political light, they were forced to give it that complexion, because the Government had exhibited a strong *animus* and feeling against the Galway Company. The misfortunes and difficulties into which the company had fallen were in great part to be traced to the doubt and suspicion thrown on the undertaking by the present Administration. If the committee were granted he believed it would be shown that no further concessions had been granted to the Galway Company than had been extended to other undertakings of a similar kind in England. So convinced was he of the justice of his case that he was quite willing to leave the matter in the hands of a committee composed exclusively of English members.—Lord JOHN RUSSELL having stated his belief that the Rev. Mr. Daly had not been authorised to threaten Lord Palmerston with a deputation of Irish members, said he would not go into the merits of the question, inasmuch as the Government were prepared to accede to the motion. He hoped the result would be that if any injustice had been committed either to the Galway Company or to Ireland that injustice would be remedied.—Mr. BAXTER approved of the appointment of the committee, because he was satisfied that the more investigation there was upon the subject the clearer would it be made apparent that the Postmaster-General had only done his duty in terminating the contract. He contended that the company never had sufficient capital to carry on their business.—Sir HUGH CAIRNS said that the company had been remodelled, and was now conducted by gentlemen of energy and experience. The feeling in Ireland was greatly in favour of a transatlantic packet station at Galway.—The CHANCELLOR of the EXCHEQUER said, if postal subsidies were to be granted as matters of grace and favour, the result would be to open up a fountain of political corruption so large and foul, that all such transactions of former times would sink into utter insignificance by comparison. The simple question to be considered was, what service was necessary for the country as a whole, and next, what was a just remuneration to be paid for that service. The view of the Government had been to concede everything that they could, and even to grant more indulgence than had been extended in any similar case, and when any question of doubt had arisen, that it should be decided rather in favour of the company than against them. In coming to the conclusion, therefore, that it was their duty to put an end to this contract, they had done so in the belief that, after so much indulgence, if further relaxation were allowed, it would establish a dangerous precedent and prevent them from enforcing the conditions of any contract for the future. The motion was supported by Lord DUNKELLIN, Mr. HENNESSY, Mr. CLAY, and Mr. BLAKE.—Lord NAAS commented upon the manner in which the Lord-Lieutenant of Ireland had been treated in reference to the matter, and insinuated that his Excellency had never been informed of the step which the Government were about to take.—Mr. CARDWELL assured the House that the Lord-Lieutenant had been informed of the intentions of the Government; but that as the question was viewed as an imperial, and not as a local one, his opinion upon it had not been invited.—Col. FRENCH, Mr. MAGUIRE, Mr. ENNIS, and Colonel GREVILLE approved of the course adopted by the Government, but hinted that it was dictated by a sense of self-preservation.—Mr. DUNLOP said the Scotch members were opposed to all Government subsidies.—Mr. OSBORNE was of opinion that, in granting this committee so readily, the Government had shown symptoms of weakness; that they had acted too hastily either in terminating the contract, or in turning round and assenting to this motion.—Mr. DISRAELI vindicated with confidence the policy of the late Government in having granted the subsidy, and complained of the manner in which their successors had systematically blackened their character by attempting to raise an unjust odium against them on its account. If the object of the Chancellor of the Exchequer in 1858 was to make a corrupt bargain to gain political influence in Ireland, would he have drawn the contract in such a form as to make it subject to the annual criticism of the House of Commons. The motion submitted to the House by Mr. Gregory was substantially a vote of want of confidence, for it was an appeal from the decision of the Cabinet to a select committee. This being undoubtedly the case, the Government had, by conceding to the motion, placed themselves in a position of unprecedented humiliation.—Lord PALMERSTON said that it was unnecessary to discuss the merits of the original contract, although much might be said upon the point. The Government had acted without passion and prejudice in the matter: and they felt that when the company failed to perform their duty the only course left was to put an end to the contract. With regard to the Cabinet not having remitted to the Lord-Lieutenant of Ireland the decision of the matter, he had only to say that the question was an imperial and not a local one, and that it would have been unfair to have thrown the responsibility upon the representative of the Crown.—Mr. BOUVERIE contended that there was no use in appointing the committee, as all the facts connected with the contract were already known.—Lord J. MANNERS recommended Mr. Bouverie to take the opinion of the House if he really thought the committee was unnecessary. After some further discussion, in which Mr. HERBERT, Mr. NEWDEGATE, and Colonel DUNNE took part, the motion was agreed to.—The *East India Loan Bill* was read a third time and passed.—The other business was disposed of, and the House adjourned to Monday.

MONDAY.—*M. Blondin's Exhibition.*—Sir G. FORSTER asked if the attention of the Home Secretary had been drawn to the proceedings at the Crystal Palace on Saturday, when M. Blondin had introduced a child of tender years as a sharer in his dangerous exploits.—Sir G. LEWIS said that the circumstance had been brought under his notice, and he had felt it his duty to write the directors of the Palace, conveying to them a warning on the subject, and he trusted that that communication would have the effect of preventing a renewal of the performance. The House then went into committee on the *Appropriation of Seats (Sudbury and St. Alban's) Bill.*—Mr. T. DUNCOMBE moved the insertion, in Clause 3, of "Burnley, Lancashire," in lieu of "Chelsea and Kensington."—Sir G. LEWIS admitted the claims of Burnley, but said that by giving one of the seats to that borough all the four seats would be distributed over a limited area in Lancashire, and therefore declined to support the motion.—Mr. SCULLY moved as an amendment that the [illegible] be filled up with the words "county of Cork."—Mr. AYRTON complained that the Government embarrassed the Committee by allowing the seat to be scrambled for [illegible] should say what they intended to do. He moved that the Chairman report progress.—Sir G. LEWIS said that the difficulty was not occasioned by the Government. The committee having negatived the proposal to confer the franchise on Chelsea and Kensington, the Government had considered the other motions on the paper, and were prepared to vote a third member for Middlesex.—Mr. DISRAELI said he had expected that the Government would have been furnished with a proposal of their own to countervail the inconvenience which had arisen from the committee having struck Chelsea and Kensington out of the clause.—After a desultory debate, Mr. DUNCOMBE and Mr. AYRTON withdrew their motions, and the Committee divided on a motion by Mr. KNIGHT to amend the clause so as to give an additional member to Middlesex, which was negatived by 236 to [illegible].—Lord PALMERSTON then suggested that the Committee should agree to the third seat being allotted to Birkenhead, as proposed by the next clause, that four members should be given to the West Riding of Yorkshire, and that the Riding should be divided.—Mr. AYRTON protested against the four seats being given to manufacturing districts in the North.—Mr. DISRAELI objected to trifling with a question of such imperial importance, and recommended that the Government should take time to consider whether the seats could not be appropriated more satisfactorily. On the whole he was inclined to think that the most prudent course would be to divide the West Riding and the county of Middlesex, and although the claims of Birkenhead were no doubt respectable, give the four seats to these two great communities.—Sir J. SHELLEY urged the Government to withdraw the Bill.—Sir G. LEWIS said the enfranchisement of Birkenhead was a part of the original proposal, and he invited the committee to agree to the clause. He should then be ready on the report to bring up a clause for giving a fourth member to the West Riding, separated into two divisions. After some further debate, the clause appropriating a seat to Birkenhead was carried on a division, by 163 to 26.—The remaining clauses having been agreed to, Sir F. GOLDSMID gave notice that on bringing up the report he should urge the claims of the University of London to the right of representation.—Mr. STIRLING gave a similar notice on behalf of the Scotch universities, and Mr. AYRTON gave notice of his intention to move that the seat awarded to South Lancashire should be transferred to Middlesex.—On the order for committing the *County Surveyors, &c. (Ireland) Bill*, Mr. S[illegible] moved as an amendment that the Bill be committed that day three months.—Mr. CARDWELL explained the scope and object of the Bill, which was founded, he said, on the unanimous report of a Committee, and its provisions were not compulsory, but permissive, giving power to the grand juries to increase salaries and grant superannuations, if they saw fit.—Lord J. BROWNE, Mr. HERBERT, Mr. BUTT, and Mr. HASSARD spoke in support of the Bill, which was opposed by Mr. GEORGE, Sir E. GROGAN, Colonel DUNNE, Mr. OSBORNE, Lord FERMOY, and Lord C. HAMILTON.—On a division, the amendment was negatived by 152 to 59. The House then went into Committee upon the Bill, and at the 6th clause, the Chairman was ordered to report progress. The *Bills of Exchange and Promissory Notes (Ireland) Bill*, and the *Transfer of Stocks and Annuities Bill* were read a third time and passed. The other orders were then disposed of.

TUESDAY.—At the morning sitting, the *East India Council and High Courts of Judicature (Salaries, &c.) Bill* passed through committee.—Mr. M. GIBSON moved that the House go into committee on the *Harbours Bill*.—Mr. LINDSAY called attention to the various important alterations which had been made in the Bill since the second reading.—Mr. THOMPSON moved that the Bill be referred to a select committee.—Mr M. GIBSON [illegible] the amendment, which would practically defeat the Bill, and said the alterations which had been made were not vital. It was still intended to abolish passing tolls from the 1st of January next, but the dues levied by charitable corporations would be continued to them for 10 years.—Mr. THOMPSON then withdrew his amendment, and the House went into committee, when the six first clauses were agreed to with verbal alterations. The committee was engaged on the 7th clause when the hour for adjournment arrived. *M. Blondin.*—At the evening sitting, Sir G. LEWIS, referring to the question put to him on Monday respecting the performances of M. Blondin and his infant daughter at the Crystal Palace, read a letter from the secretary to the company, intimating that that portion of M. Blondin's performances would not be repeated. *Denmark and the Duchies.*—Lord R. MONTAGU moved an address to the Crown, praying that steps might be taken to prevent any foreign interference with the ancient hereditary rights of succession in the kingdom of Denmark and the duchies of Schleswig-Holstein. He complained that the Danes were attempting to crush the German element in the duchies, contrary to the rights of the people. He undertook to prove two things—first, that Schleswig and Holstein were connected together from the earliest times, and next that there had been at all times an intrigue to separate the duchies from each other, or, as the phrase went, to preserve the integrity of the Danish monarchy. In proof of these points he entered into a historical narrative of the connection of the duchies with Denmark, and with each other, when the House was counted out at 20 minutes to 8.

WEDNESDAY.—*Window Cleaning Bill.*—Sir C. BURRELL moved the second reading of this Bill, stating the reasons, founded on humanity, which had induced him to reintroduce the measure, though it had failed last Session.—Sir F. GOLDSMID, giving credit to the hon. member for benevolent intentions, pointed out the inconveniences and vexations which the minute legislation would occasion, and moved that the Bill be read a second time that day three months.—Sir G. LEWIS opposed the Bill, Mr. S. ESTCOURT and Mr. MALINS supported it. On a division, the amendment was carried by 79 to [illegible]; so the Bill is lost.—Sir J. TRELAWNY moved the third reading of the *Church Rates Abolition Bill*.—Mr. COLLIER supported the Bill, and said that the compromise proposed by Mr. [illegible] did not contain the elements of a satisfactory settlement of the question. There was, in his opinion, only one way of dealing with this tax, and that was its abolition.—Mr. S. ESTCOURT said he objected to the Bill on two main grounds. In the first place, it prohibited parishioners from exercising a mode of local self-government coeval with the earliest period of [illegible] legislation, putting an end to an old common law right. In the next place, the [illegible] was an inherent vice of the Bill. In the next place, the question stood in the way of a practical solution of the question, and shutting the door, precluding every attempt at compromise, and which it was desirable against an amicable arrangement, which it was desirable to keep open to the last. Without discussing the scheme he adverted to which was offered ineffectually as a compromise, he adverted to what an arrangement considered to be the principle upon which an arrangement should be based. The only safe course was to depart as [illegible] as possible from the old system of Church-rate. Allow [illegible] man to exempt himself personally from an obligation, and [illegible] support a Church of which he was not a member, and [illegible] this principle in the form least offensive. The Bill as it [illegible] the House prevented any such arrangement and all [illegible] concessions; it was, therefore, better that it should be [illegible] and he moved that the Bill be read a third time that day three months.—Lord R. CECIL seconded the amendment.—Mr. [illegible]—Mr. HARVEY LEWIS supported the Bill.—Mr. [illegible] opposed it, on the ground that it stood in the way of a just [illegible] a compromise. He thought it would be a [illegible]

…ment of the question to allow every man to be exempt upon his simply stating that he objected to the rate.—Sir G. Lewis said he was prepared to vote for the third reading, but at the same time was ready to listen to any compromise which might be proposed. In his view of the subject, the best solution would be to lay the charge upon those who were members of the Church, and who testified their membership by attending at the church. Let them form a vestry and impose a new rate upon themselves, the rate so imposed to be compulsory and to possess all the legal qualities of a rate. Then there would be no "ticketing" of dissenters, whilst a sufficient fund would be provided for the maintenance of the fabric of the church.—Mr. Newdegate opposed the Bill, and said that the effect of the Home Secretary's proposal would be to "ticket" churchmen, and lay a tax on them only for the benefit of the whole community.—Mr. Buxton approved the compromise proposed by Mr. Estcourt.—Mr. Bright said all the plans which had been proposed did not hit the grievance. The object was to get rid of every shred of what the Dissenters regarded as the supremacy of the Church of England in relation to this particular question; to place the Church and other sects in that respect upon an equality. The resistance to Church-rates was not grounded upon the amount; there must be something deeper in the matter than money. He should vote for the third reading of the Bill; but he was ready to assent to a compromise by which the compulsory power of levying the rate should be withdrawn and the term of total abolition delayed.—Mr. Hubbard and Mr. Whiteside opposed the Bill.—Mr. Stansfeld supported it. On a division, the numbers proved to be equal,—for the third reading 274, against it 274. The Speaker, in giving the casting vote, said that, having collected from the course of the debate that the opinion of the House was in favour of some settlement of the question different from that contained in the Bill, he thought he should best discharge his duty by leaving to the future and deliberate determination of the House to effect a change in the law, if it thought right to do so, rather than take upon himself the responsibility of that change. He, therefore, gave his voice with the noes. The Bill is, consequently, lost. The House went into Committee upon the *County Voters (Scotland) Bill*, but got through only a portion of its clauses. The *Poor Assessment (Scotland) Bill* passed through committee.

Thursday.—*Church Rates.*—Mr. Cross gave notice that on Monday next he should move for leave to bring in a Bill to amend the law of Church-rates. *The Pope.*—In answer to Mr. Griffith, Lord J. Russell said that he had received a communication from the French Ambassador to the effect that a proposal had been made to the French Government by the Austrian and Spanish Ambassadors at Paris in general terms that the Roman Catholic Powers should act in concert in protecting the temporal Power of the Pope, and that this general proposal had been answered in the negative. The House then went into Committee upon the *East India Council Bill*, and proceeded with the consideration of the clauses and amendments proposed by private members. The only important change effected in the Bill was the adoption of a motion substituting two years for one year as the term for which the members of the new Council are to hold office. Sir C. Wood also undertook to send out a despatch to India directing the admission of natives to the Council. Some new clauses were brought up and added to the Bill, which then passed through committee and was reported to the House. The *Industrial Schools Bill* passed through committee. The *Salmon and Trout Fisheries' Bill* was read a second time, and referred to a select committee. The *Queen's and Government Bill* was read a third time and passed.

Friday.—*Harbours Bill.*—The House went into Committee on this Bill, when Mr. M. Gibson said that the Government had no intention of dealing with Ramsgate Harbour under the provisions of the Bill, and withdrew the clauses relating to it. An amendment moved by Mr. Lindsay to substitute 1867 for 1872 was negatived by 123 to 28. After a good deal of discussion the clauses were agreed to with amendments, and the Bill was ordered to be reported. [Left sitting.]

City Intelligence.

Money Market, Friday.—British Funds: Consols closed at 89¾ to ⅞ for Money, and 90 to ⅛ for the 10th of July; Bank Stock, 231⅛; Reduced and New Three per Cents., 89¼ to ⅛; India Five per Cent. Stock, 98½ to ⅝, ex div.; Ditto Four per Cent. Debentures, 1858, 96⅛; Ditto 1859, 95¾ to ⅝; Ditto Bonds, 12*s.* dis.; Five per Cent. Enfaced Rupee Paper, 94; Exchequer Bills, March, 7*s.* dis.; Ditto June, 3*s.* prem.—Foreign: Brazilian Old Five per Cents., 98¼; Ditto Four and a Half per Cents., 1860, 87 to 86¾, ex div.; French Four and a Half per Cent. Rentes, 94fr. 25c.; Portuguese Three per Cents., 1853, 47½; Venezuela Three per Cents., for Acct., 18¾.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,892,965	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion	11,155,442
		Silver Bullion	262,523
	£25,892,965		£25,892,965

BANKING DEPARTMENT.

Proprietors' Capital	£14,553,000	Government Securities (including Dead Weight Annuity)	£9,868,607
Rest	3,245,994	Other Securities	19,721,896
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	7,855,633	Notes	6,708,095
Other Deposits	11,082,951	Gold and Silver Coin	977,828
Seven day and other bills	558,848		
	£37,296,426		£37,296,426

… 20th day of June, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

Tuesday.—Bankrupts.—P. Alder, West Malvern, Worcestershire, Builder—T. Bacon, Newmarket, Hotel Keeper—J. B. Brown, Coventry, Ribbon Manufacturer—J. Douglas, Wolverhampton, Dealer and Chapman—W. Hervey, Little Stretton, Shropshire, Licensed Victualler—C. Kerman, Millbrook, Hampshire, Engineer—H. Kidd, Stockport, Cheshire, Cotton Manufacturer—E. Parkin, sen., Sheffield, File Manufacturer—T. Perkes, Ecclesfield, Yorkshire, Corn Miller—W. T. Smith and S. Cannon, Liverpool, and Rock Ferry, Cheshire, Traders—T. Symons, Islington, Leather Seller—J. Tree, Worcester, Scrivener—J. Turner, Bury, Lancashire, Cotton Manufacturer.

Friday.—Bankrupts.—C. F. Bielefield, Wellington Street North, Strand, Gower Street, Bedford Square, and Staines, Middlesex, Papier Mache Manufacturer—D. and W. Browne, Macclesfield, Chester, Silk Manufacturers—H. Cooper, Southampton, Tailor—T. Cooper and H. S. Walker, Perry Barr, Staffordshire, Millers and Maltsters—T. Cooper, Innkeeper and Coal Dealer—T. S. Dalton, H. Dalton, and W. Heap, Manchester, Calico Printers—J. French, Martock, Somersetshire, Butter and Corn Factor—M. Glueckstein, Leeds, Tobacconist—R. Harris, late of Grafton Road, now of Church Terrace, Kentish Town, Builder—J. Holroyd, Winterton, Lincolnshire, Chemist, Druggist, and Seedsman—A. D. Kerr, Fore Street, and Cripplegate Buildings, City, Straw Hat Manufacturer—W. Laidle, Sunderland, Boot and Shoe Manufacturer—C. M'Loughlin, Cheltenham, Gun Maker—S. W. Moor, Nottingham, Lace Manufacturer—G. Moorhouse, T. Moorhouse, W. Moorhouse, E. Moorhouse, Byerden Mills, Lancashire, Cotton Manufacturers—J. Peacock, Upper Gornal, Sedgley, Staffordshire, Licensed Victualler, Builder, and Brickmaker—R. Royds and H. F. Whittle, Freemantle, Millbrook, Southampton, of Barnsley, Yorkshire, and Higher Bebington, near Birkenhead, Cheshire, Contractors and Builders—F. Rundall, Muscovy Court, Tower Hill, Wine Merchant—W. Thomas, Llanerchymedd, Anglesey, Draper—G. Wakefield, Torriano Terrace, Kentish Town, Dealer in Timber—G. Zanni, King Street, Holborn.

Bankruptcy Annulled.—J. Holroyd, Winterton, Lincolnshire, Chemist.

Metropolis and its Vicinity.

International Exhibition of 1862.—Her Majesty's Commissioners have received the gracious intimation that the Queen and Prince Consort will contribute from their collections any pictures, statues, or articles of *virtù* which may be thought desirable for the Exhibition. The Commissioners have given notice that no demands for space, either from local committees or individual exhibitors, in the United Kingdom, Isle of Man, or Channel Islands, will be received after Tuesday, the 1st of October next, and that the allotment of space will then be made on the returns sent in up to that date. Where no local committees are formed, provincial applications for space will be referred to, and determined by, National or Metropolitan Trade Committees. In addition to the general committee in connection with the Fine Art section of the Exhibition, the Commissioners have requested the following gentlemen to form a committee of advice and selection for the class of Architecture:—William Tite, Esq., M.P., F.R.S., President of the Institute of British Architects; A. J. Beresford Hope, Esq.; Prof. Donaldson; G. G. Scott, Esq.; Digby Wyatt, Esq.; Sydney Smirk, Esq.; James Fergusson, Esq.; and Arthur Ashpitel, Esq., with J. B. Waring, Esq., as Superintendent. The Commissioners have also appointed the following gentlemen as a committee for the class of Paintings in Oil and Water Colours and Drawings—Sir Charles Eastlake, President Royal Academy; Sir J. W. Gordon, President Royal Scottish Academy; S. Chatterson Smith, Esq., President Royal Hibernian Academy; F. Y. Hurlstone, Esq., President Society of British Artists; F. Tayler, Esq., President Society Painters in Water Colours; H. Warren, Esq., President New Society Painters in Water Colours; and R. S. Lander, R.S.A., President National Institution of Fine Arts, with R. Redgrave, Esq., R.A., as professional assistant. The Commissioners have appointed the following as a committee for the class of Sculpture, Models, Die Sinking, and Intaglios—The Marquis of Lansdowne; the Earl of Gifford, M.P.; A. H. Layard, Esq., M.P.; J. H. Foley, Esq., R.A.; and R. Westmacott, Esq., R.A. The Commissioners have appointed the following as a committee for the class of Etchings and Engravings—W. H. Carpenter, Esq., British Museum; D. Colnaghi, Esq.; G. J. Doo, Esq., R.A.; R. J. Lane, Esq., A.R.A.; and W. Smith, Esq. The Commissioners have appointed the following as a committee for the Department of Art Designs for Manufactures:—the Marquis of Salisbury, the Earl of Dudley, Sir J. P. Boileau, Bart.; D. Maclise, Esq., R.A.; C. D. Fortnum, Esq.; Monckton Milnes, Esq., M.P.; H. Cole, Esq., C.B.; Godfrey Sykes, Esq.; Digby Wyatt, Esq.; and J. H. Bowler, Esq. The Commissioners have appointed the following as a committee for the class of Surgical Instruments and Appliances—William Lawrence, Esq., Joseph Henry Green, Esq., James Moncrieff Arnott, Esq. John Flint South, Esq., Cæsar Henry Hawkins, Esq., James Luke, Esq., F. Seymour Haden, Esq., and James Paget, Esq. The commission presided over by Prince Napoleon, for furthering and promoting the interests of French manufacture at the Exhibition, has issued its first circular. It says:—

"The great competition in question will open under better auspices than any preceding one, that of 1851 having followed close on a revolution which had shaken most of the States of Europe, and that of 1855 taking place in the midst of the struggles and hazards of war. At the present time peace reigns in almost all the nations of the world; communications have became extended and multiplied; and the barriers which had before closed the extreme countries of Asia have fallen before the victorious flag of civilisation. The French school of the fine arts is now called on, as it was in 1855, to prove that sound artistic traditions are still perpetuated in the country. The Exhibition Palace in London opens its doors to all the *chefs d'œuvre* of modern art. The circular expresses a hope that the offer thus cordially made will be eagerly accepted, and that merchants, manufacturers, and agriculturists will do all they can to uphold the credit of France. Such peaceful relations must strengthen more and more the alliance between two great nations, and tend to remove all feelings of hatred, prejudice, or mistrust."

British Museum.—Mr. Braidwood, the Superintendent of the London Fire Brigade, has given his opinion as to lighting the British Museum in the evenings with gas. He says that, independently of the danger of explosion, to which every place where gas is used is liable, notwithstanding the accuracy of the fittings, the use of gas desiccates everything within its reach, especially ceilings, rendering them much more inflammable, and making what would otherwise be a trifling fire a serious conflagration. Besides which the heat and fumes evolved by the combustion of gas are decidedly against the preservation of any vegetable or animal substances, and tend to discolour stone and marble in such a manner that it is very difficult to restore the original colour. He maintains that on no consideration should the British Museum, containing such invaluable property, be subjected to the risk of gaslighting. Mr. Smirk, the architect to the Museum, has reported that he doubts the expediency of introducing gas into the British Museum, but that with regard to the escape of mischievous vapours Mr. Braidwood has omitted to allude to the successful contrivances adopted in various buildings for preventing that escape—contrivances, however, adding very considerably to the cost, and requiring constant and careful attention. The trustees, after considering these opinions, have resolved unanimously that they would not be justified in allowing the collections of the British Museum to be open at any hour which would require gaslight.

The Builders' Strike.—The masons' committee report that four additional employers have accepted the terms of the compromise, viz., Messrs. Gibbs, of Chelsea; Pearce, of Garden Street; Nixon, of Lambeth; and Deard, of Blackfriars, and that many of the large employers had expressed themselves favourable to the compromise. The committee on Monday paid about 600 men their dividend from the subscriptions received from the country. There are more masons now out than there were during the lock-out of 1859-60. The bricklayers on Monday evening withdrew their men from the works of Messrs. Cubitt, of Gray's Inn Road.

The Orpheonists' Visit to London.—At the last meeting of the Court of Common Council it was resolved that a sum of 350*l.*, paid by the Orphéonists of France, on their visit to the Crystal Palace last year, for the use of the two hotels belonging to the corporation at the Metropolitan Market, should be returned to them.

M. Blondin's Exhibitions.—The exhibition at the Crystal Palace on Saturday was attended by 12,500 persons. The performance comprised, in addition to his former feats his wheeling a barrow filled with gardening implement, across the rope, and afterwards returning with his daughter in the barrow, a child 7 years of age, who distributed to the audience bouquets of flowers bound with white ribbon, on which was inscribed in gold letters, "Souvenir. Adèle Blondin." At the conclusion of the performance the shouts of applause were enthusiastic in the extreme. It will be seen from our Parliamentary report that the Secretary of State has taken steps to prevent the renewal of this exhibition so far as the child is concerned.—On Monday one of the workmen employed in fixing the rope across the lake, over which M. Blondin took his perilous walk on Tuesday, missed his footing and fell to the ground from an altitude of nearly 100 feet. He sustained a severe fracture of the spine and other injuries, and is now lying in St. Thomas's Hospital with little hope of his recovery.—M. Blondin made his first provincial ascent on Monday, at the Botanical Gardens, Sheffield, in the presence of upwards of 90,000 persons, the great majority of whom were brought by excursion trains from all the great towns of the district from an early hour. In the afternoon business was completely suspended. The rope was about 400 feet in length and 100 feet high. M. Blondin went in a carriage to the Gardens, and so great was the enthusiasm that it was with difficulty the crowds assembled were prevented from taking the horses from the carriage and drawing him to the spot. The ascent comprised the same feats as performed on M. Blondin's first appearance at the Crystal Palace on the 1st of June. The astonishment and excitement of the country people was beyond all description; nothing like it has, probably, ever been witnessed in this country. His second provincial engagement was at Bradford on Wednesday, when he made his ascent in the presence of a large assemblage of persons; he will repeat his performance in that town to-day, and will visit Liverpool on the 27th, 28th, and 29th inst.

The Public Health.—The Registrar-General's Weekly Return states that the deaths in London registered the week that ended Saturday, June 15, were 1121. The average number in the corresponding weeks of the 10 years 1851-60, corrected for increase of population, was 1099. The present return is therefore 22 above the average. During the week the births of 1017 boys and 926 girls, in all 1943 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1544.

Provincial.

Addiscombe.—The Royal Military College at Addiscombe, at which so many officers distinguished in Indian history received their education, was finally closed after the recent half-yearly examination of the cadets. Sir Charles Wood, Secretary of State for India, Sir J. W. Hogg, and several other members of the Council for India, and a large number of visitors were present.

Blakeney.—The alleged murder of Richard Steel the parish clerk, in the church of this place, has proved to be a fiction. At the inquest a very rigid inquiry was instituted, when the wife after having first firmly adhered to her former statement, admitted on cross examination that she found her husband lying on the floor of the church, and dragged him to the belfry steps, where he expired. It appeared that deceased had had an attack of apoplexy, and that his wife thought he was intoxicated, and was desirous of taking him home unobserved. A warrant has been issued for the apprehension of the wife on the charge of perjury.

Bristol.—On Saturday evening the iron steam-tug Alarm blew up under the bow of the Minerva, West Indiaman, in this harbour. There were four men and a boy on board at the time. The boy was below, and went down with the hull. The men were on deck and were thrown to a considerable distance, but only one was seriously hurt. The cause of the accident is not yet known, but it is supposed that the boy, who was a stranger, had been meddling with the machinery.

CARDIGAN.—A woman living in a cottage in the valley of Cly Hwr, Llandissil, in this county, who married in December last, has poisoned her husband with phosphoric powder, commonly used to destroy rats. An investigation has taken place, which has resulted in her committal on the charge of Wilful Murder.

CLAYCROSS.—There is no longer any doubt that 23 men were drowned or suffocated in the recent accident in the Claycross pits, but a week or 10 days will probably elapse before the water can be sufficiently lowered to recover their bodies. The loss from the horses alone, without calculating the expense of the operations for relieving the pit from water, will exceed 1500*l.*

HOUGHTON-LE-SKERNE.—The Bishop of Durham's son-in-law, the Rev. E. Cheese, has given his formal consent to the endowment of the district chapelry of Sadberge, in this parish. In 1856 the Ecclesiastical Commissioners obtained an order in Council which severed Sadberge from the rectory of Houghton; but, as no endowment could be made without the consent of the late rector, Dr. Bandinel, it remained a dead letter, and no incumbent was appointed by the Bishop of Manchester, in whom the patronage was vested. This want has now been supplied by Mr. Cheese's assent to the arrangement made 6 years ago by the Commissioners, setting aside the tithes of Sadberge and another township in the parish, so as to provide 335*l.* 18*s.* 4*d.* for the incumbent of Sadberge. This arrangement has been accompanied by a graceful act on the part of Lord Palmerston, who, finding that the Bishop of Manchester had allowed his patronage to lapse, at once yielded to the solicitation of the Bishop of Durham, and appointed in the name of the Crown to the newly-endowed chapelry the Rev. David Piper, who had been for 35 years the curate of Dr. Bandinel.

KENDAL.—On Friday, John Holdsworth, the tollbar keeper at Hawcliffe, who shot his wife as she was leaving the house to escape from his brutality, was taken before the magistrates at Keighley, and committed to take his trial for Wilful Murder. He was also committed on the charge of wounding his wife's brother, who received a part of the shot while walking by his sister's side.

MANCHESTER.—Mr. Edward Williamson of Greenfield House, the Manchester agent of the Royal Exchange Insurance Company, who has hitherto moved in the first circles of society in this city, and has been supposed to be a man of large property, was brought before the magistrates on the 13th inst. charged with having obtained money from the principal office in London by representing, through forged documents, that losses had been caused by fire on the premises of persons insured in the office, when in point of fact no such fires had taken place. He was also charged with having increased the amounts of *bonâ fide* claims made by insurers who have incurred losses by fire, and with forging signatures endorsed on bills which he had been ordered to draw, to pay some of the fictitious claims which he had made. The only case entered into on Thursday was a claim for 600*l.*, which he had made on account of an alleged fire on the premises of Messrs. Moon & Co., in Lever Street, no such fire having taken place. After evidence had been taken in support of the charge the prisoner, who seemed utterly bowed down with grief, was remanded. It is understood that the amount of his frauds is from 50,000*l.* to 60,000*l.*—At the City Police Court last week, Mr. Frank Atkin was brought up on remand, charged with obtaining, by false pretences, from Messrs. Milne, Saville & Co., cotton spinners, Mosley Street, 3000 pieces of calico, valued at 1106*l.* The depositions of several witnesses having been taken in support of the charge, the prisoner was committed for trial at the sessions, bail being refused.—On Friday night the extensive India rubber manufactory of Messrs. Hamer and Nephew was destroyed by fire, when one fireman was killed and three others injured by the fall of a gable. The loss of the property is estimated at nearly 14,000*l.* On Saturday evening the machine factory of Messrs. Parr, Curtis, and Madeley, at Ancoats, was destroyed by fire, the loss being calculated at upwards of 100,000*l.*, and about 1500 men being thrown out of employment.

OXFORD.—The Rev. Osborne Gordon, B.D., student of Christ Church, has issued a card, signifying to members of Convocation that he is a candidate for the Camden Professorship of Ancient History.

REIGATE.—A packet of papers has been discovered in the Parsonage of Kingswood, which had been accidentally dropped by the murderers before they left the house. These papers show by the names and addresses on the letters, that the murderers were Germans. One of the letters was addressed by the writer, a man signing himself Adolphe Krohn, to Madlle. Tietjens, the eminent singer, soliciting pecuniary assistance; another was a book with which each working German is provided by order of the State, and in which the owner is described as Johanna Carl Frantz, of Konigstein, in Saxony. It has been ascertained by the police that Madlle. Tietjens declined to give the man who called upon her any assistance in money, but handed him a letter to Mr. Krool, the proprietor of the Hamburgh Hotel in America Square, for the purpose of providing him with a passage at her expense to Germany, accompanied by another German. Instead of presenting this letter, the man, accompanied by another German, walked down to Reigate, where they bought a ball of stout cord, a portion of which has been identified with the pieces of cord with which the legs and arms of the murdered woman were tied together. They then left Reigate for Kingswood, and there made particular inquiries of two persons respecting the Rev. Mr. White, and found that he was away with his family. They were last seen at Sutton, where they stated that they were on their way to Old Pye Street, Westminster, but all trace of them from that point has been lost. All the accounts agree in identifying them with the German who called upon Mdlle. Tietjens and with a German mechanic who was afterwards seen in his company, and the police confidently anticipate that they will soon be in custody. Detective officers have been placed at every seaport, and every vessel starting for abroad is closely watched. The foreign *cafés* and the sugar-baking district of Whitechapel, where a great many Germans congregate, are also narrowly watched. Two men who were supposed to answer the description were apprehended on Wednesday near Chichester, but as they satisfactorily proved that they were at a considerable distance from Kingswood on the night of the murder they were discharged. A reward of 100*l.* has been offered by Government, and an additional 100*l.* by Mr. Alcock, M.P., for the discovery of the murderers. The body of the unfortunate woman has been interred in Kingswood churchyard, her funeral being attended by all the inhabitants of the district.

SHEFFIELD.—A labourer named James Windle, about 45 years of age, has been committed for trial by the borough magistrates for attempting to poison with strychnine. He had paid his addresses to a widow named Liversedge, with whom he had lodged, but his addresses were rejected. Meeting the widow's son on his way from a public-house with a pot of beer, he dropped something into the mug. The lad told his mother what had happened, and she threw the beer into the sink, when a bluish powder was seen at the bottom. A small portion of it was preserved, and sent for analysis to Mr. Bingley, a chemist, who discovered it to be a preparation of strychnine, known as "Battle's Vermin Killer." Windle had been heard to say that if Mrs. Liversedge did not marry him he would be the death of her.

SHOEBURYNESS.—A series of interesting experiments has been made at Shoeburyness, with a view of testing the effect of heavy shot on iron batteries, which had been previously found to stand any amount of pounding with the lighter projectiles from a 68-pounder smooth bore. The battery was built up as a solid wall of iron, 10 inches thick, on Thornycroft's system of dovetailing, and was backed up in the strongest manner with heavy timber, and braced with iron bars. It conveyed the impression that, after having stood the brunt of so much firing, the battery might, for all practical purposes, be considered indestructible. The first shot was fired from an Armstrong 120-pounder shunt gun, with a projectile weighing 126 lb.; and such was the effect of this mass, combined with its velocity, that at a distance of 600 yards it cleared out one of the plates 10 inches in thickness, and, at the same time, carried away the back fastenings. The second shot was fired from an ordinary 100-pounder Armstrong, with a solid projectile weighing 110 lb. This struck the battery at another point, but without doing equal damage with the first shot, yet making a breach clean through the entire structure, and so weakening it as to insure its entire demolition by the third shot, weighing like the former 110 lb., and fired from a 100-pounder gun, which brought the whole battery, above the point struck, immediately to the ground. A second series of experiments took place on Friday in the presence of Lord Herbert, Secretary for War; the Duke of Somerset, First Lord; and other members of the Admiralty; General Bloomfield, Inspector-General of Artillery; General Sir R. Dacres, and a large number of Artillery and Engineer officers. The target was, as on the former occasion, composed of a solid wall of iron plates, 10 inches thick, backed by heavy timber-work, braced with iron bars, and constructed on Thornycroft's system of dovetailing. Instead of the former range of 600 yards, it was attacked at 400 yards range by the 100-pounder rifled Armstrong, and the 120-pounder shunting Armstrong, which broke the bars with almost every shot, producing cracks in the bars both above and below, and drove back the 10-inch screen one or two feet, while the masonry which supported the 8-inch screen, at the points where the screen rested, was forced bodily back about three-quarters of an inch. The remainder of the masonry was cracked through and through from top to bottom, showing that the heavy rifled ordnance of Sir W. Armstrong is the most destructive agent known in modern warfare.

WORCESTER.—On Sunday morning the wife of the Dean of Worcester, who has been for some time an invalid, took by mistake a copious dose of laudanum in place of some other medicine, which she supposed to be contained in a bottle standing in her room. The unfortunate lady remained for some time in a state of syncope, with a few partially rallying moments, but she is now in a fair way towards recovery.

Ireland.

GREAT MARRIAGE CASE—CORRY *v.* LORD CREMORNE.—This was a petition filed in the Court of Chancery by Mrs. Corry, widow of the late Mr. Thomas C. S. C[illegible] of Rockcorry Castle, in the county Monaghan, [illegible] she alleged she was married on the 2d of April [illegible] 38 years since—to obtain a decree for dower [illegible] respondent was Lord Cremorne, for whom the [illegible] on which the dower was stated to be charged [illegible] purchased, when a minor, in 1831, under the [illegible] of the Court of Chancery, and without notice [illegible] marriage or any claim for dower. After several [illegible] trial the Chancellor delivered judgment on Friday [illegible] effect that the trustees of Lord Cremorne [illegible] under the Court, and are consequently protected [illegible] third of 8th and 9th Victoria. He therefore dism[illegible] the petition with costs.

THE ULTRAMONTANE PRESS ON COUNT CAVOUR'S DEATH.—The Roman Catholic journals which are [illegible] the influence of Dr. Cullen and Dr. M'Hale, gen[illegible] regard Count Cavour's death at the moment [illegible] Rome seemed within his grasp as a judgment. [illegible] *Nation* says "Digitus Dei—Count Cavour is dead [illegible] is the third of the eminent Italian annexors wh[illegible] departed this life since the seizure of the property [illegible] the Holy See. 'We must go to Rome,' said the co[illegible] only a short time ago. He has not *gone to Rome*; but we hope he shall find mercy in the place he has gone to." The *Cork Examiner* says: "He is not the first [illegible] queror who has been compelled to yield to a [illegible] greater than himself. He is not the first [illegible] progress of whose plans has been stayed by the [illegible] of the 'fell sergeant Death.' He has gone to a [illegible] ment seat where our ill word cannot hurt him; [illegible] the sophistries of diplomacy are of no avail; and [illegible] not even the testimonials of an English Foreign Se[illegible] tary or the powerful aid of British non-interventi[illegible] affect his destiny." At Castletown, Berehaven, [illegible] barrels were burnt when the news of his death [illegible] and a bonfire was lit on the hill of Knockoora.

Law.

JUDICIAL COMMITTEE OF PRIVY COUNCIL.—*The Hon.* [illegible] *Robert Liddell* v. *James Beal, Robert Hull, and Edward* [illegible]—This was a motion on the part of the respondent James Be[illegible] for an order of the Court, to enforce their monition [illegible] the 22d June, 1860, calling upon Mr. Liddell, the incumb[illegible] and Messrs. Parke and Evans, churchwardens of St. [illegible] Pimlico, to comply with the decree of this Court, [illegible] on the 27th March, 1857, commanding them to rem[illegible] stone structure used as a communion table in the said [illegible] together with the cross on or near the same, and [illegible] instead thereof a flat moveable table of wood, and to [illegible] any cover used at the ministration of the sacrament, [illegible] embroidered with lace or otherwise ornamented, and to sub[illegible] stitute a fair white linen cloth, without lace or embroidery [illegible] other ornament, to cover the communion table. Mr. Beal, [illegible] appeared in person, submitted that the terms of their lordships' monition had not been carried out. He therefore asked that the monition should be enforced. Dr. Phillimore and Dr. Tristram, on the part of Mr. Liddell, submitted [illegible] of the Court had been *bonâ fide* carried [illegible] full meaning and intent of the monition, and at the [illegible] expense of the incumbent and his friends. The Lord [illegible] Knight Bruce delivered the judgment of their [illegible] said, the question was whether the minister, [illegible] the churchwardens had complied with the monition [illegible] the course of last year; and their lordships having [illegible] fully through all the allegations contained in the petition [illegible] considered the evidence, had come to the unanimous [illegible] that there had been no evasion or disobedience of the [illegible] and that no irregularity had taken place, and what [illegible] done was in conformity with the judgment and monition [illegible] Court; their lordships were of opinion, therefore, the [illegible] motion must be dismissed, but without costs.

COURT OF QUEEN'S BENCH.—(Sittings in Banco, before [illegible] Chief Justice Cockburn, and Justices Wightman, Crompton, [illegible] Blackburn.)—*The Queen* v. *Charlesworth.—Wakefield* [illegible]—This was an application for a rule to stay proceedings [illegible] indictment for bribery which had been preferred [illegible] defendant, on the ground that he could not be put [illegible] second time, because the jury were unlawfully dis[illegible] the first trial, instead of their being directed to return [illegible] of acquittal. The court granted a rule, on the unde[illegible] that it should come on for argument at the sittings [illegible] after this term, so that the point may be decided [illegible] next assizes.——Before the Lord Chief Justice and [illegible] Jury.—*Pym* v. *Great Northern Railway Com*[illegible]—[illegible] was an action brought by Mrs. Pym, the widow and [illegible] her late husband, Mr. Pym, a magistrate of Hertford[illegible] behalf of herself and nine children, to recover damages [illegible] sequence of Mr. Pym having been killed at Had[illegible] 23d April, 1860, while travelling in a Manchester express [illegible] through the alleged negligence of the defendants [illegible] The jury returned a verdict for the plaintiff. Damages [illegible] for the widow, and 1500*l.* each for eight children [illegible] total of 13,000*l.*

COURT OF COMMON PLEAS.—(Sittings in Banco, before the Lord-Chief Justice, and Justices Williams, Willes, and Byles.)—*Kemp* v. *Nevill, Ebben* v. *Nevill—The Cambridge Proctor and the Spinning House.*—The plaintiffs in this case, two young women, had been arrested by the Proctor of the University of Cambridge whilst in an omnibus with [illegible] University and some other persons, about [illegible] supper and dancing party at a public-house [illegible] Cambridge. They were afterwards taken before the Vice-Chancellor, who committed them to the spinning house [illegible] days as persons "suspected of evil." Subsequent [illegible] led to their discharge before the expiration of the [illegible] they thereupon commenced this action against the Vice-Chancellor to recover damages for false imprisonment. The [illegible] came on for trial before the Lord Chief Justice at West[illegible] when the jury having answered certain questions [illegible] to them, a verdict was entered for the plaintiffs, the [illegible] being assessed at 25*l.* A rule, however, was granted [illegible] purpose of having certain questions of law dec[illegible] argument having been heard, and time taken [illegible] matter, the Court now gave judgment to the effect [illegible] Vice-Chancellor, by virtue of his office, was justified [illegible] in what he had done, that the verdict for the plaintiffs [illegible] set aside, and a verdict entered for the defendant.

COURT OF EXCHEQUER.—(Sittings in Banco, before [illegible] Chief Baron and Barons Martin and Wilde.)—*Har*[illegible] *and Lewis.—The Costs.*—In this case Mr. Chambers [illegible] obtained a rule on behalf of the plaintiff, calling upon [illegible] dants to show cause why they should not pay plaintiff [illegible] in the action which was tried before the Lord Chief [illegible] negligently conducting his defence in a prosecution [illegible] assault upon two children named Plummer. Mr. S[illegible]

[illegible] on Wednesday to have the rule enlarged, when the Lord Chief Baron said that he had consulted all the judges of the court, and two of them thought he ought to certify for [illegible], and two that he ought not; that the two barons who thought he ought to certify were not quite agreed as to the amount, one of them thinking he ought to certify if the views [illegible] the other barons were correct. If there had been [illegible] of the barons who thought he ought to certify he would [illegible], but as the other members of the court were equally divided, he thought he should follow his own opinion. The grounds of that opinion were, that with respect to the [illegible] there was no ground for giving more, and as three members of the court were of that opinion he considered he ought not to certify for costs, for if a man is only entitled to [illegible] he is not justified in incurring expenses which he was [illegible] amounted to from 500*l.* to 600*l.* After some discussion the rule was enlarged, so the case stands over till November next.

CENTRAL CRIMINAL COURT.—*Great Silk Robbery.*—*William Crane*, porter, *Joseph Barker*, shoemaker, *Peter Debock*, silk [illegible], and *John Newton*, silk dealer, were charged with stealing [illegible] bales of silk, worth 100*l.*, the property of the St. Katharine's Dock Company. The evidence, which was very voluminous, occupied the whole of Friday and Saturday. The jury Acquitted Newton, Crane, and Barker, and returned a verdict of Guilty against Debock, who was sentenced to 18 months' imprisonment.

MARYLEBONE POLICE COURT.—*Robbery of Gardens.*—*Charles Reading* and *Ann Shaw*, who have been living together as man and wife, were charged with having stolen a number of geraniums, in pots, the property of Sir Edwin Landseer, of St. John's Wood Road. Reading was in the service of Thomas [illegible], a gardener in Maida Vale, who is employed to keep Sir Edwin Landseer's garden and grounds in proper condition. Plants had on many occasions been missed. A policeman who had received information of the fact, concealed himself at 5 on Wednesday morning in a spot adjacent to the garden, and at five minutes past 7 saw the woman Shaw walk up and down several times. She presently stopped, when Reading handed over the wall a basket, which she took and went away with it. The officer followed and stopped her. On asking where she had brought the geraniums from, she said from [illegible] Place and that she was going to take them there again. He took her into custody, and on the way to the station house upon being told what she was charged with she said, "If I did receive them I don't think I did much wrong." After she was locked up he returned to the garden, and seeing Reading at work, took him also. Reading, on being asked what he had to say, replied that the geraniums were his own, and that he had potted them himself. He admitted having handed the basket over the wall. The female prisoner had nothing more to say, than that she was going to take home the plants, which she believed to belong to Reading. After some further evidence the prisoners pleaded "Guilty" rather than go for trial. Mr. Yardley thereupon sentenced Reading to three months' and Shaw to six weeks' imprisonment.

Railways.

FATAL ACCIDENT ON THE LONDON AND NORTH-WESTERN.—On Tuesday the 11th inst. as an empty coal train was proceeding from Warwick to Coventry, the bridge near Wooton between Leamington and Kenilworth gave way, dragging the tender and five coal-trucks with it, snapping the wood of the bridge into fragments, and the iron tie-rods into points like needles. The engineer and the stoker were carried down with the engine and killed. The bodies of both were extricated with difficulty, that of the former being fixed fast between the furnace and the tender. When taken out the poor fellow was found to be frightfully scalded and burnt. As this is a single line, all traffic is stopped between Leamington and Coventry. The remains of the bridge show it to have been rotten, and the surprise felt by all who witnessed it was that it had not fallen long before.

A GREAT NORTHERN TRAIN ON FIRE.—On Wednesday afternoon a fire broke out in the train which left the King's Cross Station at noon for the North, which resulted in the destruction of the celebrated racehorse Klarikoff. It appears that several horses in the training of Mr. John Scott were sent down by this train from their recent quarters at Leatherhead to Malton. Klarikoff was conveyed in a van placed upon a truck, and was attended by three stable boys, who occupied a spare compartment. The train proceeded safely as far as Retford, but before reaching the Bawtry station one of the lads in the van was alarmed by a smell of fire, and saw the upper portion of the van in a blaze. He immediately seized the two rings attached to the horse's tether, but the strong breeze soon caused the whole front of the van to become one mass of fire. The flames enveloped the head of Klarikoff, who kicked violently. The lads made their escape to the front of the truck out of the way of the flames, and the horse's plunges at length forcing out the side of the van the whole became one mass of fire. Some platelayers were at length alarmed by the lads, and they drew the attention of the engine-driver to the fire. The train was stopped a little north of Bawtry, and it was then found that the van was consumed, Klarikoff reduced to a mere cinder, and some valuable goods in the van destroyed. The lads escaped comparatively unhurt.

Sporting.

THE FIGHT FOR THE CHAMPIONSHIP.—The fight for the champion's belt and 400*l.* between Hurst, "The Stalybridge Infant," and Mace, of Norwich, took place on Tuesday in an island of the Medway. Hurst is a man of gigantic size and strength, but without any boxing skill, while Mace is a small thin man, with great activity and reputation as a scientific pugilist. The contest terminated in favour of Mace, who punished his gigantic antagonist so fearfully that he may literally be said to have almost killed him without receiving a single blow in return. The fight lasted 50 minutes in eight rounds, during which Hurst was completely blinded and saturated with blood, presenting one of the most horrible sights ever witnessed by the oldest members of the prize ring. At its close he gradually became almost insensible, and all the restorative arts of the ring were exhausted in efforts to keep him from fainting, which, in the absence of a surgeon, and with his power fast failing, might have been a most serious affair. It has since been ascertained that his injuries are of so severe a character as to occasion considerable apprehensions as to the result. The nasal and the maxillary bones, forming the bridge of the nose, were fractured, and the "ethmoid," a bone of the skull was also broken—an injury which, it is feared, may extend to the base of the brain. Hurst is now under the care of an eminent surgeon in London.

Obituary.

ADMIRAL JAMES PATTISON STEWART, C.B., died at Pisa on the 3d inst. He entered the Navy in 1797, and had served in the flagship of Rear-Admiral Cochrane at the action off St. Domingo. In 1811, in the defence of the Island of Anholdt, he distinguished himself by the chase of 16 of the enemy's gunboats and armed vessels, two of which he succeeded in capturing. From 1813 to 1815 he was employed on the Baltic and North Sea stations. In 1813 he was attached to the in-shore squadron off Walcheren, and volunteered to command the boats of the fleet under Admiral Young, and to attempt the capture of four French frigates at Flushing. He was appointed a Commander of the Bath in 1815.

MAJOR CHARLES NASMYTH, the gallant defender of Silistria, died on the 2d inst. at Pau, in the Pyrenées. In 1843 he was nominated a cadet of the East India Company's College at Addiscombe, and in 1845 was appointed to the Bombay Artillery. In 1853 he was sent to England on sick certificate and was recommended to take change of air to the Mediterranean. After a short stay at Malta he proceeded to Constantinople, and thence to Omar Pasha's camp at Shumla. From Shumla he visited the Dobrudscha after it was vacated by the Turks, supplying information to Lord Stratford de Redcliffe regarding the state of the country. Having reached Silistria before the siege had commenced, he made his services available to the garrison, and for so doing he received the approbation of both English and Turkish governments, the latter accompanied by medals for the campaign of the Danube and the siege of Silistria, and by the Order of the Medjidie. The hardships and anxieties of that period again shattered his health, and he was for some time afterwards invalided at Constantinople, having lost all his personal property. In 1854 he was transferred from the East India Company's service to the Royal army, with which he served in the Crimea, and obtained the medal with clasps for Alma, Inkermann, and Sebastopol. From the Crimea he was invalided and returned to England. He was then appointed to the Kilkenny district as Assistant-Adjutant-General, afterwards Brigade-Major at the Curragh, and later Brigade-Major and Deputy-Assistant-Adjutant-General in Dublin. At the Curragh his health became further impaired, and he was transferred to Australia; but he was invalided home at the end of 1852, and proceeded to Pau, in the south of France, where he remained until his death.

MR. GEORGE BISHOP, F.R.S., the well known astronomer, died on the 14th inst. at his residence, South Villa, Regent's Park, in his 77th year. He successively filled the offices of Secretary and Treasurer of the Royal Astronomical Society, and was elected President of that body in 1857. His observatory, which he maintained in activity for nearly a quarter of a century, has contributed, in addition to incidental work, an extensive catalogue of double stars, 11 new planets, two comets, and upwards of 25 variable stars to our list, besides a remarkable star which suddenly became visible in 1848, the only one of its nature which has been seen since the year 1670. He took a deep interest in the dissemination of astronomical knowledge, munificently employed his wealth in the promotion of the science, and threw open his private observatory for the use of all who were desirous of a practical acquaintance with it.

THE REV. LAWRENCE OTTLEY, M.A., Canon residentiary of Ripon, and rector of Richmond, Yorkshire, brother-in-law of the Lord Bishop of Ripon, died a few days since. He graduated at Trinity College, Cambridge, and was presented, in 1837, by Earl Howe, to the rectory of Acton, Suffolk, and in 1850 the Lord Chancellor gave him the rectory of Richmond, Yorkshire. He married the elder daughter of the Rev. John Bickersteth, rector of Sapcote, Leicestershire, and on her brother's elevation to the see of Ripon he was appointed his lordship's chaplain, and was subsequently appointed a canon of Ripon Cathedral. Mr. Ottley was one of the most popular and laborious clergymen in the diocese, and was also rural dean, surrogate, and a proctor for the clergy of Ripon in the Convocation of York.

THE REV. PATRICK BRONTË, B.A., incumbent of Haworth, in the West Riding, died at his parsonage on the 7th inst. He was father of Charlotte, Anne, and Emily Jane Brontë, the authoresses originally known as Currer, Acton, and Ellis Bell. He was born in 1777, and was consequently in his 84th year. His health had been declining for a considerable time, and for some hours prior to his death he was unable to articulate. Mr. Brontë was himself an author, having at different periods written and published two small volumes of poems, chiefly on homely and rural subjects, and two prose compositions, one a tale of Irish life, and the other a narrative entitled the "Cottage in the Wood; or, the Art of becoming Rich and Happy."

MR. JOHN MURRAY, of Sark Bar Hotel, the Gretna Green blacksmith, died a few days since at the age of 63. He was the successor of the original blacksmith who riveted so many matrimonial chains in the old days of runaway matches. On his death Mr. J. Murray succeeded him, and he in his turn for many years drove a brisk trade in performing the ceremony for the many hundreds of couples who sought his offices.

MAJOR-GENERAL MONINS, Colonel of the 8th Regiment, died on Sunday last, at his residence, Castle Hill, Walmer. He entered the army in 1814, and served with the 52d Light Infantry during the campaign of 1815, and was present at the battle of Waterloo. He afterwards served with the Army of Occupation in France. Deceased's officer's commissions bore date as follows:—He attained the rank of Major-General in 1854; and was appointed Colonel of the 8th Foot, in 1860.

WILLS.—The will of Lord Braybrooke has been sworn under 80,000*l.* personalty; Mr. Joseph Tasker, of Middleton Hall, Essex, 500,000*l.*; Mr. Alexander Milne, C.B., formerly one of the Commissioners of Woods and Forests, 12,000*l.*

BIRTHS.—On the 16th inst, at Orleans House, Twickenham, Her Royal Highness the Duchess D'AUMALE, prematurely, of a daughter—14th inst, at 39, Princes Gate, the Lady ULRICA THYNNE, of a son—12th inst, at Beeston Hall, Norfolk, Lady PRESTON, of a son—10th inst, at St. Leonard's Court, Gloucester, the residence of her father, the Hon. J. H. Knox, the Countess ZEPPELIN, of a daughter—16th inst, at 93, Eaton Square, the Hon. Mrs. MOSTYN, of a son—11th inst, at Glenmore, the Hon. Mrs. STYLE, of a son—11th inst, at Birr Barracks, Ireland, the Hon. Mrs. SOMERSET WARD, of a daughter—12th inst, at Broomwood, Surrey, the residence of her father, Sir Charles Forbes, Bart., of Newe, Lady FORBES, the wife of Sir William Forbes, Bart., of Fintray and Craigievar, of a daughter.

MARRIAGES.—On the 18th inst, at St. George's, Hanover Square, Lord PELHAM, eldest son of the Earl of Chichester, to ELIZABETH MARY, daughter of the Hon. Sir JOHN DUNCAN BLIGH, K.C.B.—17th inst, at the Chapel Royal, Dublin, Major GEORGE BAGOT, comptroller of the household to the Lord-Lieutenant of Ireland, and son of the late Bishop of Bath and Wells, to the Hon. MARY BROWNE, daughter of Lord and Lady Kilmaine—18th inst, at St. Paul's, Knightsbridge, Captain the Hon. J. W. C. VIVIAN, to FLORENCE, daughter of the late Major ROWLEY, of the Bombay Cavalry, and niece of the Countess of Kinnoull—15th inst, at St. George's, Hanover Square, the Rt. Hon. WM. HUTT, of Gibside, M.P., Paymaster Gen. and Vice-President of the Board of Trade, to FANNY ANN JANE HUGHES, daughter of the Hon. Sir F. and Lady Stanhope, and niece of the Earl of Harrington—13th inst., at the parish church, Taynton, Gloucestershire, Capt. A. G. ONSLOW, 97th Regt., eldest son of Rich. Foley Onslow, Esq., Oxenhall, Gloucestershire, to MARY, fifth daughter of the late Sir JOHN OWEN, Bart., M.P., Lord Lieutenant of the county of Pembroke—18th inst, at North Cray Church, NEVILE, third son of Sir JOHN W. LUBBOCK, Bart., of High Elms, Farnborough, Kent, to HARRIET CHARLOTTE, second daughter of WESTERN WOOD, Esq., of North Cray Place, in the same county—13th inst, at Nether Winchendon, Bucks, JOSEPH NAPIER HIGGINS, Esq., of New Square, Lincoln's Inn, Barrister-at-law, to SOPHIA ELIZABETH, youngest daughter of THOMAS TYRINGHAM BERNARD, Esq., M.P.—11th inst, at St. Mary's Church, Cheltenham, THOMAS ROXBURGH POLWHELE, Esq., M.A., only son of Major-General Thomas Polwhele, and nephew of Lieut.-Colonel Richard Graves Polwhele, of Polwhele, Cornwall, to FANNY, only child of the late THOMAS CARNE, Esq., and granddaughter of the late Joseph Carne, Esq., F.R.S., &c., of Penzance, Cornwall—10th inst, at St. George's Church, Hanover Square, and afterwards at the Chapel of the Russian Embassy, Count NICOLAS ROSTOVTZOFF, Aide-de-Camp to his Imperial Majesty the Emperor of Russia, to MARY, eldest daughter of Dr. BRIDGEMAN, Woolwich Common—5th inst, at Trinity Church, St. Marylebone, the Rev. CHARLES E. DONNE, B.A., son of W. Bodham Donne, Esq., of Mattishall, Norfolk, a Deputy-Lieutenant of that county, to MILDRED, daughter of the late J. MITCHELL KEMBLE, Esq., M.A.—On the 20th inst. at St. Budeaux, near Plymouth, by the Rev. B. W. S. Vallack, JAMES RADCLIFFE, Esq., eldest son of the late James Radcliffe, Esq., of Bath, to MARY LYNE, only child of ALEXANDER PONTEY, Esq., of Plymouth.

DEATHS.—On the 12th ult, at Coonoor, Neilgherries, MARY, eldest daughter of Sir WILLIAM DENISON, K.C.B., Governor of Madras—17th March, at Waitara, New Zealand, in an engagement with the enemy, Lieut. EDMUND CHARLES MACNAGHTEN, Royal Artillery, the youngest son of Sir Edmund Macnaghten, Bart., of the county Antrim, Ireland, aged 22—10th inst, of whooping-cough, at Chantry, near Frome, CHARLES DACRE DYSON, youngest child of the late General J. F. Dyson, aged 15 months—22d April, on his journey from Pallamcottah to the Neilgherries, ALEXANDER FRASER TYTLER, Esq., Lieutenant 17th Regiment Madras Native Infantry, eldest son of the late Patrick Fraser Tytler, Esq.—14th inst, at Sydenham, ANN, relict of the late ROBERT WELTON, of Wickham Market, Suffolk, and mother of Mrs. Jerome Rogers, of Chelsea, aged 80. Goodness, kindness, and amiability were the great characteristics of her long life—14th inst, at Torquay, Captain BRUCE ROXBURGH, formerly of the 6th Bengal Cavalry, aged 64—17th inst, at 14, Belgrave Square, DAVID BAILLIE, Esq., of Hill Park, Sevenoaks, aged 74—13th inst, at Heidelberg, CHARLES D. FINCH, M.D., late of Tulse Hill, Surrey, aged 42—13th inst, at his residence, 8, Wilton Street, Belgrave Square, HENRY GRAY, Esq., F.R.S., F.R.C.S., aged 34—11th inst, at his residence, 77, Gloucester Place, Portman Square, BENJAMIN PHILLIPS, Esq., F.R.S., F.R.C.S., aged 56—14th inst, the Rev. WILLIAM GLAISTER, M.A., rector of Beckley, Sussex, some time Fellow and Tutor of University College, Oxford, aged 66—15th inst, at Tunbridge Wells, the Rev. JOHN LYON, incumbent of Bardsea, aged 43.

Markets.

COVENT GARDEN, June 22.

The supply of most things continues to improve. Good supplies of Lettuces, Endive, and Artichokes come from France. Good English Peas are plentiful. Grapes fetch fair prices. Of Strawberries there is a good supply from the open ground. Large quantities of French Cherries have been imported this week, and also Apricots. Asparagus, French and Broad Beans, young Carrots, and new Potatoes may also now be obtained; the latter fetch 2d. per lb. Cucumbers are coming in more plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 8s to 12s	Cherries, French, p. lb., 2s to 3s
Grapes, per lb., 4s to 8s	Pears, per doz., 4s 6d to 8s
Strawberries, p. pun., 6d to 1s 6d	Apples, per doz., 6d to 1s 6d
Melons, each, 3s to 8s	Oranges, per 100, 6s to 10s
Peaches, per doz., 15s to 24s	Lemons, per 100, 6s to 10s
Nectarines, do., 12s to 20s	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Cauliflowers, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 9d to 1s 6d	Celery, p. bundle, 1s 6d to 2s 6d
Green Peas, p. quart, 1s to 1s 6d	Onions, p. ½ sieve, 1s 6d to 4s 6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 2s to 6s
Cabbages, do., 1s 3d to 1s 6d	Rhubarb, p. bundle, 6d to 9d
Potatoes, p. ton, 80s to 120s	Tomatoes, p. doz., 6s
— new, per lb., 6d to 2s	Shallots, per lb., 1s 6d
— — per cwt., 10s to 16s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 4d to 6d	Endive, p. score, 1s to 1s 6d
Carrots, new, do., 1s 3d to 1s 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., 1s 3d to 1s 6d
Cucumbers, each, 9d to 1s 6d	Parsley, p. 12 bunches, 4s to 6s
Artichokes, each, 4d to 6d	Savory, per bunch, 2d to 4d

POTATOES.—SOUTHWARK, Monday, June 17.

During the past week the arrivals coastwise have been moderate, but owing to the excessive heat of the weather very few were wanted. As this week will finish the sale of old Potatoes, this will be our last report for the season. The quotations are:—Yorkshire Flukes, 110s. to 140s. per ton; Lincolnshire Regents, 60s. to 80s.; North Berwick Regents, 60s. to 90s.; Fife, Forfar, and Perth do., 50s. to 70s.; ditto Rocks, 60s. to 70s.; ditto ditto Reds, 60s. to 70s.

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, June 20.

Prime Meadow Hay	70s to	80s	Clover	95s to	118s
Superior do. (old)	84	100	New Clover	—	—
Inferior do.	36	50	Do. second cut	80	100
New do.	—	—	Straw	30	42
Rowen	—	—			

DAVIS & Co.

CUMBERLAND MARKET, THURSDAY, June 20.

Sup. Meadow Hay	108s to	116s	Inferior Clover	84s	100s
Inferior do.	60	95	New do.	—	—
New do.	60	85	Straw	40	45
Superior Clover	110	120			

JOSHUA BAKER.

WHITECHAPEL, THURSDAY, June 20.

Fine old Hay	[illegible] to	105s	Fine old Clover	110s to	118s
Inferior do.	65	90	Inferior do.	80	95
Very inferior	—	—	Fine 2d cut	80	105
Prime New Hay	—	—	Inferior do.	—	—
Straw	36	38	Fine New Clover	—	—

HOPS.—BOROUGH MARKET, FRIDAY, June 21.

Messrs. Pattenden & Smith report that the extreme heat of the last few days, accompanied by partial thunder storms and heavy showers, causes some few persons to be more

anxious sellers of Hops, fearing it may decrease blight; but all the reports received since speak of large quantities of fresh fly having again made their appearance, and lice greatly on the increase. Large sums are offering against 70,000*l*. Prices are very firm.

BUTTER MARKET.—June 21.

Best Fresh Butter .. .. 13s. per dozen lbs.
Second do. do. .. .. 11s. " "
Pork, 4s. 0d. to 5s. 0d. per 8 lbs.

BRITISH WOOLS.—LONDON, FRIDAY, June 21.

The new clip has begun to arrive, and each few days brings a lower price, in sympathy with prices in the North of England, and in consequence of the state of things in America, which completely paralyses a considerable branch of our trade for the manufactured article.

	s. d. s. d.		
South-down Hog-		Leicest. Wethers	1 2 to ..
gets.. ..	1 3 to 1 3½	Ditto Hoggs ..	1 3 — ..
Half-bred ditto..	1 3 — 1 3½	Combing Skins	0 10 — 1 5
Down Ewes ..	1 2 — 1 3	Flannel Wool ..	1 0 — 1 5
Kent Fleeces ..	— ..	Blanket ditto ..	0 6 — ..

METROPOLITAN CATTLE MARKET.

MONDAY, June 17.

The number of Beasts is nearly the same as on Monday last; trade is very slow for them at reduced rates. Several remain unsold. Sheep and Lambs are rather more plentiful. The demand is small, and consequently prices are lower. A considerable number of inferior Lambs remain unsold. Calves also are lower. A considerable number of inferior Lambs remain unsold. From Germany and Holland there are 600 Beasts, 5100 Sheep, and 312 Calves; from Scotland, 800 Beasts; from Norfolk and Suffolk, 1600; and 300 from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 6 to 4 10	Best Long-wools..	to ..
Best Short-horns	4 4 — 4 8	Do. Shorn ..	4 6 — 4 10
2d quality Beasts	3 4 — 4 0	Ewes & 2d quality	.. — ..
Best Downs and Half-breds ..	to ..	Do. Shorn ..	3 8 — 4 4
		Lambs ..	5 0 — 6 0
		Calves ..	3 8 — 4 6
Do. Shorn ..	4 8 to 5 0	Pigs ..	3 8 — 4 6

Beasts, 3320; Sheep & Lambs, 28,460; Calves, 383; Pigs, 520.

THURSDAY, June 20.

We have a larger supply of Beasts, and a very dull trade. Quotations are almost the same as on Monday last, but a clearance cannot be effected. The number of Sheep and Lambs is larger than we have had on a Thursday for a long time past, consequently prices are not better, although there is more activity amongst choice qualities. Calves are very plentiful and cheaper. Our foreign supply consists of 320 Beasts, 2560 Sheep, and 490 Calves. Milch Cows 105.

Best Scots, Herefords, &c. ..	4 6 to 4 10	Best Long-wools ..	to ..
Best Short-horns	4 4 — 4 8	Do. Shorn ..	4 6 — 4 10
2d quality Beasts	3 4 — 4 0	Ewes & 2d quality ..	— ..
Best Downs and Half-breds ..	.. — ..	Do. Shorn ..	3 8 — 4 4
		Lambs ..	5 0 — 6 0
		Calves ..	3 8 — 4 4
Do. Shorn ..	4 8 — 5 0	Pigs ..	3 8 — 4 4

Beasts, 1235; Sheep & Lambs, 14,340; Calves, 745; Pigs, 250.

MARK LANE.—MONDAY, June 17.

The supply of English Wheat to this morning's market was small; best qualities must be written 1s. to 2s. per qr. lower than on this day se'nnight; but the inferior were very unsaleable and prices irregular. The attendance was good, but buyers acted with great caution. Old and granaried parcels of foreign Wheat were held at previous rates; but on sales pressed from the ship a decline of 1s. to 2s. per qr. and in some instances even more was acceded to. Barley sells slowly at a decline of 1s. per qr. Beans and Peas are unaltered in value. The Oat trade is very heavy; good Corn was 6d. per qr., and light and inferior 1s. per qr. cheaper. In Flour there is scarcely any business doing, and prices are about the same as last week.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk..White	46—66	Red	46—62
— — fine selected runs..ditto	50—72	Red	52—68
— — Talavera	51—70		
— Norfolk	—	Red	—
— Foreign.................	40—75		
BARLEY, grind. & dist., 28s to 30s.. Chev.	40—45	Malting.	38—40
— Foreign..grinding and distilling	30—36	Malting.	40—42
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—25
— Irish ....Potato	26—28	Feed ..	21—24
— Foreign........Poland and Brew	24—28	Feed ..	20—23
RYE	35—38	Foreign.	—
RYE-MEAL, foreign..................	—		
BEANS, Mazagan....37s to 40s.... Tick	40—43	Harrow.	40—43
— Pigeon ......41s — 45s..Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
PEAS, white, Essex and Kent ..Boilers	36—40	Suffolk .	40—42
— Maple .... —s to —s ...... Grey	40—42	Foreign.	35—38
MAIZE .... White	—	Yellow..	—
FLOUR, best marks delivered..per sack	50—55		
— 2d do. .... ditto	38—50	Country.	38—50
— Foreign ....per barrel	28—33	Per sack	43—50

FRIDAY, June 21.

During the past week the weather has been fine, warm, and generally reported as very beneficial to the growing crops. Wheat is now coming into ear, and its most critical stage (the blooming) consequently approaching. The wind has been easterly, chiefly N.E. The depression in the Wheat trade which has prevailed during the last four weeks continues unabated, and a further decline of 1s. to 2s. per qr. has taken place in its value throughout the kingdom. All descriptions of Spring Corn have also been obtainable at reduced prices; Barley and Oats about 1s., Beans 1s. to 2s., and Peas in Liverpool and Glasgow 2s. to 4s. Flour has been extremely difficult to quit, and sales could only be made at a decline of 1s. per barrel and 2s. per sack upon foreign, but we have not heard of barrels being sold here at this reduction. During the past eight days 55 cargoes have been reported off the coast. The floating trade has been very inactive, and we have to quote a further decline of about 2s. per qr. for Wheat and Maize, and of fully 1s. for Barley. The arrivals of English grain and foreign Wheat and Barley this week have been moderate, of foreign Oats large. At this morning's market there were very few buyers of any description of Corn. Business in Wheat, either English or foreign, was confined to a few forced sales from ship, which could only be effected at a slight reduction upon the prices of Monday. For Barley, Beans, and Peas there is no demand, and on the little business doing in Oats there is a decline of 6d. per qr.

ARRIVALS FROM June 17 TO June 21.

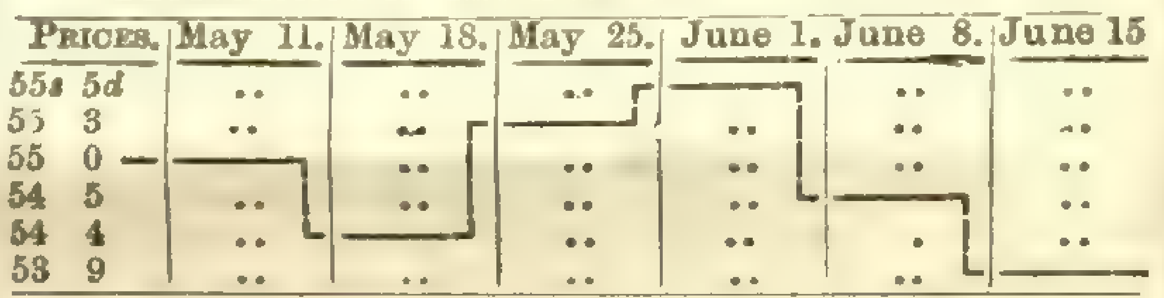
	Wheat.	Barley.	Oats.	Flour.
English ..	950 qrs.	— qrs.	30 qrs.	710 sks.
Irish	— "	— "	2580 "	— "
Foreign ..	14420 "	2680 "	59890 "	1660 " / 6130 brls.

LIVERPOOL, Tuesday, June 18.—Trade is still quiet, and the transactions very few. Corn is 1s. lower, and Beans 6d. Wheat unchanged in value. There was an average attendance of local and country buyers at this morning's market, but the demand is quite on a retail scale, sellers generally making a concession of 1d. to 2d. per cental on Wheat, or about 4d. on the week. Flour difficult to move, and must be quoted 6d. per barrel cheaper. Corn in fair request at the decline noticed above. Oats without change. Oatmeal heavy. Beans 1s. lower than on Friday. Peas and Barley attract little attention. The market closes irregular. Weather magnificent.

FRIDAY, June 21.—The Corn market was moderately attended. Wheat in demand at 1d. to 2d. lower. Flour slow sale, at 6d. per barrel and sack decline. Indian Corn dull, at 28s. 6d. to 29s for mixed, and 29s. for yellow. Beans in moderate request at 32s. for Bakera, and 33s. to 33s. 6*d*. for new Saidi. Oats and Oatmeal dull, prices nominally the same as on Tuesday.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
May 11..	55*s* 0*d*	36*s* 4*d*	25*s* 7*d*	30*s* 0*d*	43*s* 10*d*	40*s* 11*d*
— 18..	54 4	35 11	25 0	32 0	44 4	40 5
— 25..	55 3	34 11	25 1	33 8	44 6	39 9
June 1..	55 5	34 3	25 2	33 1	45 1	40 7
— 8..	54 5	32 8	26 0	30 6	44 10	39 10
— 15..	53 9	34 3	25 2	41 2	44 3	44 1
Agg. Aver.	54 8	34 9	25 4	34 1	44 6	40 5

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



COAL MARKET.—June 21.

Walls End Haswell, 18s. 6d.; Walls End South Hetton, 18s. 6d.; Walls End Hartlepool, 18s.; Walls End South Hartlepool, 16s. 9d.; Walls End Kepier Grange, 16s. 3d.; Walls End Thorpe, 16s. 6d.; Walls End Harton, 15s. 9d.; Tanfield Moor, 12s. 9d.; Bebside Hartley, 15s. 6d.; Straker's Hartley, 15s. 6d.—41 ships at market.

PRIVATE TUITION.—The Rev. G. HENSLOW, Son of the late Professor HENSLOW, and M.A. of Cambridge, who took HONOURS in three triposes, Mathematical, Divinity, and Natural Science, has VACANCIES for TWO PUPILS preparing for the Public Schools, &c., or for the Universities. N.B. Geology and Botany form a part of his system of education. Further particulars on application.—Address, Rev. G. HENSLOW, Steyning, Sussex.

WANTED, A MANAGING FOREMAN in a good Market Garden. He must understand the Management of Grapes, Pines, Peaches, Mushrooms, &c. One who has had the charge of a Market Garden would be preferred.—Address, stating terms, references, &c., A. B., Box, Kingston-on-Thames.

WANTED, AS FOREMAN AND PROPAGATOR, a sober, steady, active, industrious Man, well acquainted with the Management of Vines, and the general routine of the Nursery business, in-doors and out.—Address, stating age, reference, wages, and all other necessary particulars, to T. G., Post Office, Coventry.

WANTED, A WORKING UPPER GARDENER, in a retired place in the Country, where two only are kept. He must be a good Florist, and thoroughly capable of Growing Grapes and Peaches under Glass in perfection. Character for conduct and qualifications must be unexceptionable. Wages 20*s*. a week, Cottage, and Vegetables. No application will be noticed which does not contain full particulars of service, age, and family.—Address T. K., Post Office, Fakenham, Norfolk.

WANTED, by a gentleman with extensive Ornamental Gardens, several Vineries and Peach Houses, an energetic practical GARDENER, who will be expected to produce well coloured Grapes in succession during 10 or 11 months in the year; who has experience in supplying Forced Fruit and Early Vegetables, as well as a constant supply of the usual Vegetables required for Kitchen use the year round. He must be accustomed to keeping Accounts and the Management of Men, with a good knowledge of the routine of a Flower Garden and Producing Early Forced Flowers for Decoration; the Pleasure Grounds and Walks are to be kept in the highest order. There is an excellent Cottage and all conveniences in the Kitchen Garden, therefore a married man, with little or no incumbrance, would be preferred, and not to exceed 35 years of age, and well versed in the modern art of growing Fruit and Flowers with a large amount of Ventilation.—Messrs. WATERER & SONS, of the American Nursery, at Bagshot, are enabled to give further particulars to those who can furnish unexceptionable references as to their capability, integrity, and experience, without which it would only be loss of time for them to apply.

WANTED, an industrious WORKING MAN to look after Fruit Trees. He must be a good Budder, Grafter, and Trainer.—Apply to JOHN CRANSTON, King's Acre Nurseries, near Hereford.

WANTED, 6 or 8 first-rate BUDDERS and GRAFTERS.—Liberal Wages will be given. Applicants must state how many years' practice they have had, and in whose Nurseries.—Address B. U. D., Messrs. Hurst & M'Mullen, 6, Leadenhall Street, London, E.C.

WANTED, a Young Man in the House, who understands Gardening, Milking, and can take charge of a Horse and Chaise.—Apply to Messrs. MAY & Co., 15, Wellington Street, Strand, W.C.

WANTED, A GARDENER, and his Wife as LAUNDRESS, &c., without incumbrance. The Man must be strong, and willing to make himself useful in a small family.—Apply at 4, Strand, Charing Cross, S.W.

WANTED IMMEDIATELY, for the Country (20 miles from London), a Man and his Wife, without incumbrance; the former as GARDENER, the latter as COOK. Both must perfectly understand their duty in all its branches, and have unexceptionable characters.—Address, stating full particulars of age, capabilities, &c., to J. C., Post Office, Gerrard's Cross, Bucks.

WANTED, a Man and Wife, without incumbrance. —The Man as UNDER GARDENER, to take charge of Cows, &c., and to be generally useful. Wife, Laundry and small Dairy.—Address by letter to Mr. CAREY, Oak Hall, Wanstead, N.E.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 39, no incumbrance; has had 26 years' practical experience in Forcing Vines, Melons, and Management of Orchard House, Flower and Kitchen Gardens, and the Management of Land and Stock. A good character.—THE GARDENER, Leigh Rectory, Cheadle, Staffordshire.

GARDENER (HEAD).—Age 28, single; [illegible] Early Forcing and Gardening in [illegible] GARDENER, Mill House, Ponder's End, M[illegible]

GARDENER (HEAD).—Age 28; [illegible] knowledge of his profession in [illegible] years' character.—G. C., G. Stanly, High Road, [illegible]

GARDENER (HEAD).—Age 33, married; [illegible] has a practical knowledge of his profession [illegible] branches. Good character, with further reference [illegible] —E. P., Post Office, Acton, W.

GARDENER (HEAD).—Married; has a [illegible] knowledge of his profession. Testimonials [illegible] highest order.—A. W., Elliven Cottages, New Road, [illegible] ford, Middlesex, W.

GARDENER (HEAD).—Age 33, married; [illegible] thorough knowledge of his profession [illegible] Can be highly recommended. Seven years' character [illegible] J. S. Pike, Nurseryman, Winchmore Hill, London, N.

GARDENER (HEAD), age 28, married.—A [illegible] man wishes to recommend his Gardener [illegible] gentleman in want of a steady and industrious Man [illegible] Mower.—G. M., Oak Villa, Beulah Hill, [illegible]

GARDENER (HEAD), to any nobleman or gentleman.—Age 30, married; good practical working gardener. Good character. Wages, [illegible] a year, with cottage [illegible] X. Y. Z., 24, Cochrane Terrace, St. John's Wood, London, [illegible]

GARDENER (HEAD).—Age 37, married; has had 20 years' practical experience in a Garden where Flowers, Fruits, and Vegetables have been successfully [illegible] be at liberty the first week in July.—T. P., Mr. Quick[illegible], Harefield, Uxbridge, Middlesex.

GARDENER (HEAD), where one or two more are kept.—Age 22, single; understands the Management of Vines, Cucumbers, Melons, Flower and Kitchen Gardens, &c. Highly recommended.—A. B., Mr. Barnes, Camden Nursery, Camberwell, S.E.

GARDENER (HEAD), OR FORESTER and BAILIFF.—Age 40; a first-rate Gardener. [illegible] unexceptionable character from late employer. Wife [illegible] Dairywoman.—A. B., 29, Princess Street, Edgware Road [illegible]

GARDENER (HEAD WORKING)—Married, no incumbrance; has had a thorough knowledge of [illegible] Late Forcing, and the Management of Flower and [illegible] Gardens. Character unexceptionable.—G. C., Post Office, Clapham Common, S.

GARDENER (HEAD).—Age 40, married; [illegible] thorough knowledge of the Cultivation of Fruits of all classes, and the Management of Stove and Greenhouse Plants, Flower and Kitchen Gardens. Can have two and a half years' good character from his present employer.—A. [illegible] Hanley Road, Hornsey Road, Holloway, N.

GARDENER (HEAD), to any nobleman or gentleman.—Age 37, married; a thorough practical [illegible] Has had for six years the management of a [illegible] where Plants, Flowers, Fruits, and Vegetables are [illegible] the highest perfection, and by whom he can be highly recommended.—J. P., Mr. Bragg, Star Nursery, [illegible]

GARDENER (HEAD).—Age 40, married; thoroughly acquainted with his profession, having had extensive practice in all departments of Horticulture and [illegible] the cultivation of Exotic Fruits and Plants, also the Management of the Flower and Kitchen Garden, Meadow, Pasture, and Arable Land.—Wm. H., 8, South Street, St. Mark's [illegible] West Brompton, S.W.

GARDENER (HEAD).—Age 32, single; [illegible] engage with any nobleman or gentleman [illegible] require the services of a thorough practical Gardener, [illegible] great experience in Early and Late Forcing of Fruits, [illegible] and Vegetables; also the Management of Stove and [illegible] house Plants. Character and abilities will bear [illegible] investigation.—A. B., Mr. J. Veitch, J[illegible] Nursery, King's Road, Chelsea, S.W.

GARDENER (FOREMAN).—Age 25, single; [illegible] years' experience in first-class establishments [illegible] recommendations.—D. Y., Stanstead Park Nursery, [illegible] Hill, London, S.E.

GARDENER (SINGLE-HANDED).—Age 2[illegible], [illegible] one child.—A. B., Post Office, Hampton W[illegible]

GARDENER (SINGLE-HANDED or [illegible] Age 23, single; understands Forcing, &c., [illegible] Kitchen Garden. Best references can be given.—[illegible] James, Falcon Road, Battersea, Surrey, S.W.

GARDENER (SECOND), in a gentleman's [illegible] man's family not far from Town.—Age [illegible] Three years' good character.—F. G., 1, Clarendon [illegible] Camden Road Villas, Camden Town, N.

GARDENER, OR GARDENER AND BAILIFF.—Possesses a thorough practical knowledge of Gardening, both Kitchen, Flower, and Conservatory [illegible] objection to Laundry or Dairy as well. Un[illegible] references furnished.—Y. Z., Post Office, Bushey, [illegible]

To Nurserymen.

FOREMAN, OR PROPAGATOR AND FOREMAN in the Plant Department.—A steady sober man [illegible] had 16 years' experience, principally in the London trade [illegible] undertake for market or exhibition. First rate at [illegible] O. P. Q., Post Office, Clifton, Bristol.

BAILIFF.—Middle-aged; has a practical knowledge of everything relating to Farming, [illegible] experience on Arable and Pasture Land, the [illegible] Woods, Erecting Buildings, &c. Would undertake [illegible] Poultry. The highest testimonials given.—[illegible] Corner of Half Moon Street, Piccadilly, W.

MANAGER of a Small Farm, and Garden [illegible] —No incumbrance; experienced.—J. B., M[illegible] 13, High Street, Stoke Newington, N.

LAND STEWARD OR BAILIFF.—The A[illegible] has had practical experience in the Management [illegible] ing, and Improving of Land; Rearing, Feeding, [illegible] Selling of all kinds of Farm Stock; also the [illegible] Repairing of Farm Buildings, the Surveying [illegible] the Measuring and Value of Timber. Unexceptionable [illegible] ence as to character given.—F. S., 47, W[illegible] Strand, W.C.

FARM BAILIFF (WORKING).—Age [illegible] a native of East Lothian. Best references [illegible] character, &c.—A. W., Post Office, Wolverton Station, [illegible]

To Seedsmen.

SHOPMAN.—Age 26; has had nine years' experience. Can be well recommended. At liberty [illegible] August.—W. S. L., *Gardeners' Chronicle* Office, W.C.

The Gardeners' Chronicle Newspaper.

SATURDAY, JUNE 29, 1861.

Government Security Life Policies.

THE CONSOLS ASSOCIATION, 429, Strand, London, W.C.
Provides the Security of Consols for its Policies.
Refunds, or returns to Insurers ON DEMAND at any time, about One-Half of all Premiums Paid.
Undoubted Security for Money with a liberal Rate of Interest.
The Association possesses a large Capital, subscribed by several Hundreds of Shareholders.
Full information may be obtained on application to
THOMAS H. BAYLIS, Managing Director.

LIFE ASSURANCE.—SPECIAL NOTICE.—The next investigation into the profits of the Life Department of the SCOTTISH UNION INSURANCE COMPANY will be made at August 1, 1861, and parties taking out Policies before that date will participate in the division.
New Policies, for 294,70*l*., yielding 9828*l*. 6*s*. 2*d*. of new premiums, were issued during the year ending August 1, 1860.
Thirty days are allowed to renew Life Insurances and 15 days to renew Fire Insurances, during which time, on payment of the premium, the Company hold themselves liable.
No extra premium charged for members of Volunteer or Rifle Corps within the United Kingdom.

LONDON BOARD.
President.—The Right Hon. the Earl of Mansfield.
Directors.

P. Anstruther, Esq.	H. M. Kemshead, Esq.
Charles Balfour, Esq.	John Kingston, Esq.
Robert Cullum, Esq., M.D.	J. R. Robertson, Esq.
J. E. Goodhart, Esq.	Hugh F. Sandeman, Esq.

George Ramsay, Esq., *Manager.*
Secretary.—F. G. Smith, Esq.
Surgeon.—E. W. Duffin, M.D.
Solicitors.—Messrs. Oliverson, Lavie, and Peachey.
A copy of the last report, forms of proposals, and prospectuses, may be had at the Offices, 37, Cornhill, London, E.C.; and of the Agents throughout the Kingdom.
FREDK. G. SMITH, Secretary to the London Board.
No. 37, Cornhill, London, E.C.

News of the Week.

IN the House of Lords on Monday EARL GRANVILLE announced the sudden death of LORD CHANCELLOR CAMPBELL on the previous day, and moved the immediate adjournment of the House as a mark of respect to his lordship's memory. The motion was unanimously agreed to. On Tuesday the Excise and Stamps Bill, the Railway Companies Mortgage Transfer (Scotland) Bill, the Edinburgh Assessments Bill, were read a third time and passed. The East India Loan Bill passed through committee. The Public Offices Extension Bill was reported with amendments. On Thursday Sir RICHARD BETHELL took the oaths and his seat as Lord Chancellor by the title of Lord Westbury of Westbury, in the county of Wilts. The East India Loan Bill and the Public Offices Bill were read a third time and passed. The Church Building Acts Amendment Bill was withdrawn.

In the Commons on Friday Mr. B. COCHRANE moved a resolution that the system of civil service examinations should be modified in order to meet the requirements of the public service. After some discussion the motion was negatived without a division. Sir M. PETO called attention to the proposed fortifications at Spithead and suggested that the defence of Portsmouth should be committed to iron-clad ships instead of stone fortifications. Sir F. SMITH, Capt. JERVIS, and Lord PALMERSTON, supported the building of the forts. Admiral DUNCOMBE opposed them. The House then went into Committee of Supply on the Army Estimates, and after some discussion a vote of 179,407*l*. for civil buildings was agreed to. On Monday Mr. SCULLY moved an address to the Crown for the removal of Mr. ADAIR from the commission of the peace on account of the Derryveagh evictions. Mr. CARDWELL opposed the motion, which was negatived without a division. The House went into Committee of Supply on the Civil Service Estimates, when Mr. A. SMITH moved that the Chairman report progress. The motion was negatived on a division by 148 to 99. A vote of 830,000*l*. on account was then agreed to. The Parochial and Burgh Schools (Scotland) Bill was read a second time. On Tuesday, on the order for going into committee on the London Coal and Wine Duties Bill, Mr. AYRTON moved a series of instructions to the committee, empowering them to transfer the Bridge House Estates to the Metropolitan Board of Works. The motion was opposed by Sir G. LEWIS, and negatived on a division by 160 to 5. The House then went into committee, and agreed to the six first clauses. Mr. VIVIAN moved for a select committee to inquire whether a more efficient weapon than the Enfield rifle may not be provided for the use of the army without additional cost or serious inconvenience to the service. After some discussion the motion was withdrawn. The House then went into Committee of Supply, and made some progress with the Army Estimates. On Wednesday the adjourned debate on the second reading of the Masters and Operatives Bill was resumed, when Sir G. LEWIS's amendment that the Bill be read a second time that day three months was carried without a division. The Bill was therefore lost. The Labourers' Cottages Bill passed through committee. Mr. Serjeant PIGOTT moved the second reading of the Jersey Court Bill. Sir G. LEWIS moved, as an amendment, that the Bill be read a second time that day three months. After some discussion the Bill was by leave withdrawn. The Industrial Schools (Scotland) Bill, and the Attorneys and Solicitors (Ireland) Bill passed through committee. On Thursday the report on the East India Council Bill, as amended, was brought up and agreed to, after two divisions on amendments moved by Mr. D. SEYMOUR and Mr. LAYARD, which were negatived by large majorities. The East India Civil Service Bill, after two divisions, passed through committee with amendments. The East India (High Courts of Judicature) Bill also passed through committee. The House then went into Committee of Supply, and agreed to a vote for the Packet Service.

A despatch from Constantinople announces the death of the SULTAN ABD-UL-MEDJID and the accession of his brother, ABD-UL-AZIS. The new Sultan has published a *Hatt* declaring that he will follow the present foreign policy of the Turkish Government, and will introduce great reforms in the interior in favour of all his subjects, without distinction of religion. He concludes by insisting on the necessity for economical and financial reforms.

In the sitting of the Italian Chamber of Deputies on Tuesday, Baron RICASOLI, President of the Council of Ministers, announced that the EMPEROR OF THE FRENCH has recognised VICTOR EMMANUEL as King of Italy. In a long speech he described the great services rendered by the French Government to the cause of Italian independence, and assured the Chamber that the recognition of the kingdom of Italy does not involve any condition or any insult to their national rights. In regard to the Roman question he said that the Government has no intention of allowing it to rest, and that the difficulties surrounding it can only be overcome by negotiations with the EMPEROR NAPOLEON, expressing his conviction that these negotiations will ultimately lead to such a result as will meet the best wishes of the nation. The POPE continues seriously ill, and great doubts are entertained of his recovery.

From the United States we learn that warlike operations have commenced in earnest. A force of 3000 Federal troops attacked the Confederate position at Fort Bethel on the night of the 9th inst., but were repulsed with serious loss. The Confederates have, however, been obliged to evacuate Harper's Ferry, which they did in great haste, previously destroying all the Government property. They subsequently abandoned the whole line of the Potomac with the intention of concentrating their forces at Manassas Junction, where a general engagement is daily expected to take place. The Queen's proclamation excluding the privateers and armed vessels of both parties from bringing prizes into British ports, is considered favourable to the North. Mr. ADAMS, the new Minister at this Court, is said to have sent home a despatch conveying the assurance of Lord John Russell that he had expressed no sympathy with any attempt to overthrow the Government of the United States; and Mr. DALLAS the late Minister has declared at Philadelphia that the British Government have no other intention than that of strict neutrality, and that the sympathies both of the Government and people of England are solely with the North.

The Overland Mail has arrived with news from Bombay to the 27th ult. Mr. LAING has arrived at Penang in improved health. The famine has been effectually relieved. Slight disturbances have taken place in the South-Western provinces and the indigo districts. Four Bombay regiments have been disbanded. The amalgamation order is still unpopular with the officers, but the volunteering for general service is making great progress with the men.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family continue at Buckingham Palace. On Saturday morning the Prince of Wales and Prince Louis of Hesse visited St. Paul's Cathedral. In the afternoon the Queen, accompanied by the Princess Alice, took a drive in an open carriage and four. The Prince Consort, accompanied by the Prince of Wales, the Count of Flanders, and Prince Louis of Hesse, rode out on horseback. The King of the Belgians visited the Duchess of Cambridge and the Princess Mary at St. James's Palace. On Sunday the Queen and Prince Consort, the King of the Belgians, Prince Louis of Hesse, the Prince of Wales, Prince Arthur, the Princesses Alice, Helena, and Louisa attended Divine service in the private chapel. The Rev. J. Lightfoot, chaplain to the Prince Consort, preached the sermon. On Monday morning the Prince of Wales and Prince Louis of Hesse were present at the cavalry inspection at Wormwood Scrubs. Prince Arthur and Prince Leopold left Buckingham Palace for the White Lodge, Richmond Park. Earl Granville, Lord President of the Council, had an audience of the Queen, and delivered to her Majesty the Great Seal of England. The Queen and Prince Consort, accompanied by the Princess Helena and the Count of Flanders, went to the Horticultural Gardens at South Kensington. The Prince Consort afterwards visited the South Kensington Museum. The Duke of Nemours and the Count D'Eu visited her Majesty, and the Queen Marie Amelie visited the King of the Belgians at Buckingham Palace. The Count of Flanders visited the Duke of Cambridge at Glocester House. In the afternoon the Queen, accompanied by the Princess Alice, the Princess Helena, and Prince Louis of Hesse, took a drive in an open carriage and four. The Prince Consort, the Prince of Wales, and the Count of Flanders rode on horseback. On Tuesday morning the King of the Belgians and the Count of Flanders took leave of her Majesty on their return to Belgium. The Prince Consort went to the Trinity House, Tower Hill, and was sworn in on his re-election as Master of the Corporation. Prince Louis of Hesse paid visits to the Duchess of Cambridge and the Duchess of Hamilton. In the afternoon the Queen and Prince Consort, accompanied by the Princess Alice, the Prince of Wales, and Prince Louis of Hesse, went to Claremont and visited the Countess de Neuilly. In the evening the Prince of Wales honoured the performance of the Royal Italian Opera, Covent Garden, with his presence. On Wednesday morning her Majesty the Queen held a Privy Council, at which Sir Richard Bethell was sworn as a Privy Councillor and took his seat at the Board, after which he received from her Majesty the Great Seal of England. He then took the oath of Lord Chancellor, and kissed her Majesty's hand on his appointment. The Prince Consort presided at a meeting of the Governors of Wellington College. The Crown Prince and Princess of Prussia, with their two children, Prince William and Princess Charlotte, arrived at the Palace from Berlin on a visit to her Majesty. In the afternoon the Queen, accompanied by the Crown Princess of Prussia and the Princess Alice, took a drive in an open carriage and four. The Prince Consort, the Prince of Wales, the Crown Prince of Prussia, and Prince Louis of Hesse rode on horseback. On Thursday the Queen held a Drawing-room in St. James's Palace, at which 131 ladies had the honour of being presented. After the Drawing-room the Queen, with the Crown Princess of Prussia, the Princess Alice, and Prince Arthur, drove out in a carriage and four. The Prince Consort, accompanied by the Prince of Wales, the Crown Prince of Prussia, and Prince Louis of Hesse, rode out on horseback. Prince Arthur and Prince Leopold arrived from the White Lodge, Richmond Park.

THE KING OF THE BELGIANS, accompanied by the Count of Flanders, left Buckingham Palace on Tuesday, on his return to Brussels, travelling to Dover by a special train from the Bricklayers' Arms Station. The Prince Consort and the Prince of Wales accompanied his Majesty from the Palace to the Station, escorted by a detachment of Lancers.

THE CROWN PRINCE AND PRINCESS OF PRUSSIA, with their two children, landed at Gravesend on Tuesday morning from the Royal yacht Victoria and Albert, and proceeded by a special train on the North Kent Railway to the Bricklayers' Arms Station, where they were met by the Prince Consort. The Royal party entered four of the Queen's carriages at the station, and, escorted by a party of Lancers, proceeded to Buckingham Palace. The Queen, accompanied by the Princess Alice, the Princess Helena, the Princess Louisa, the Princess Beatrice, and Prince Louis of Hesse, received her Royal visitors at the entrance of the Grand Hall.

THE PRINCE OF WALES will leave town this morning for Ireland, to take a round of military duty at the

Camp at the Curragh. His Royal Highness will embark this afternoon at Holyhead in the Connaught for Dublin, and is expected to reach Kingstown about 5 o'clock. He will there receive an address from the commissioners, and then proceed to the Viceregal Lodge. It is officially announced that his Royal Highness will visit the Art Exhibition in Dublin on Monday.

PRINCE ALFRED visited the Saguenay on the 10th inst., and arrived at Quebec on the evening of the 12th. He was received by the civil and military authorities and a large concourse of spectators, who cheered him heartily. The Prince drove at once to the Governor-General's residence. He visited the citadel on the following day and rode through the upper town. There was no formal demonstration in honour of the Prince's visit, but he was greeted everywhere with enthusiastic expressions of loyalty and respect.

THE DUKE AND DUCHESS OF MONTPENSIER and their family, embarked on Monday in a Spanish war steamship at Santander for England. The Royal party will land either at Plymouth, Falmouth, or Southampton.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of the First Lord of the Treasury in Downing Street.

MINISTERIAL MOVEMENTS.—Sir Richard Bethell, the Attorney-General, has been appointed Lord Chancellor in the room of the late Lord Campbell. It is rumoured that either Mr. Justice Wightman or Mr. Justice Hill will retire to make way for the elevation of the Solicitor-General to the Bench, that Mr. Roundell Palmer will be appointed Attorney-General, and that either Mr. Collier, Mr. Mellor, or Mr. G. Denman, will succeed Sir W. Atherton as Solicitor-General.

NEW PEERAGE.—The Queen has directed letters patent to be passed under the Great Seal, granting the dignity of a Baron of the United Kingdom to Sir Richard Bethell, the new Lord Chancellor, and to the heirs male of his body lawfully begotten, by the title of Baron Westbury, of Westbury, in the county of Wilts.

PARLIAMENTARY MOVEMENTS.—The elevation of Sir R. Bethell to the peerage has caused a vacancy at Wolverhampton. Mr. Weguelin, the banker, late member for Southampton, and Mr. T. Lloyd, ex-Mayor of Birmingham, are candidates for the vacant seat, the former in the Liberal, the latter in the Conservative interest. There are two candidates in the field for Westbury, Sir John C. Dalrymple Hay, R.N. in the Conservative, and Mr. Smethurst in the Liberal interest.

THE CHANNEL FLEET.—Rear Admiral Erskine's division of the Channel Fleet, consisting of the Edgar, Donegal, Hero, and Trafalgar, joined Admiral Smart's division, composed of the Revenge, Aboukir, Conqueror, and Centurion, in Leith Roads on Saturday evening. It was expected that they would leave that anchorage early on Wednesday morning to proceed northward by the Moray and Pentland Firths, and subsequently visit the north of Ireland and the Clyde.

DIPLOMATIC MOVEMENTS.—Lord Dufferin, British Commissioner in Syria, arrived in London on Sunday night from Constantinople. Lady Dufferin, who proceeded to Syria on learning that her son was suffering from fever, accompanied his lordship home.

CONVOCATION.—On Friday several amendments to Archdeacon Denison's motion on the subject of "Essays and Reviews" were moved, expressing in different terms the opinion that it is not expedient to proceed to synodical judgment. After a long and animated discussion all the amendments were rejected; Archdeacon Hony's by 29 to 10; the Dean of Ely's by 24 to 13; Professor Jeremie's by 26 to 16; Canon Selwyn's by 28 to 13, the Rev. F. Vincent's finding no seconder. Several riders were then proposed by Canon Wordsworth, Sir H. Thompson, Mr. Woodgate, Mr. Massingberd, and Dr. M'Caul, but they were also lost by a majority of voices. Archdeacon Denison's original motion was then carried by 31 to 8, amid loud cheering. The resolution was communicated to the Upper House with the report, and Convocation was then prorogued to July 9.

ORDER OF KNIGHTHOOD FOR INDIA.—The *Gazette* of Tuesday contained the following document, dated India Office, June 25, announcing the creation of a new Order of Knighthood for India:—

The Queen, being desirous of affording to the princes, chiefs, and people of the Indian empire a public and signal testimony of her regard, by the institution of an order of knighthood, whereby her resolution to take upon herself the government of the territories in India may be commemorated, and by which her Majesty may be enabled to reward conspicuous merit and loyalty, has been graciously pleased, by letters patent under the Great Seal of the United Kingdom of Great Britain and Ireland, to institute, erect, constitute, and create an order of knighthood, to be known by, and have for ever hereafter, the name, style, and designation of "The Most Exalted Order of the Star of India." And to ordain, direct, and appoint that the said order shall consist of the Sovereign, a grand master, and 25 knights, together with such extra and honorary knights as her Majesty, her heirs, and successors shall from time to time appoint. And to ordain, direct, and appoint that her Majesty, her heirs, and successors, kings and queens regnant of the said United Kingdom, shall be sovereigns of the said most exalted order. And that the Viceroy and Governor-General of India for the time being shall be grand master of the said order, and that he shall, in virtue thereof, be the first and principal knight of the order. And that the said most exalted Order shall be governed by statutes and ordinances, to be from time to time made and ordained by her Majesty, her heirs, and successors, sovereigns of the said Order. And to ordain and direct that it shall be competent for the Sovereign of the said Order to confer the dignity of a knight of the Order upon such native princes and chiefs of India as shall have entitled themselves to her Majesty's favour, and upon such of her Majesty's British subjects as have, by important and loyal services rendered by them to the Indian Empire, merited her Majesty's favour. The Queen has been further pleased to ordain, constitute, and appoint the Right Hon. Charles John, Earl Canning, G.C.B., and her Majesty's Viceroy and Governor-General of India, to be the first Grand Master of the said Most Exalted Order of the Star of India; and to nominate and appoint his Highness Nizam-ool-Moolk, Nuwab Tuyinat Ali Khan, Nizam of Hydrabad; General Viscount Gough, K.P., G.C.B., some time Commander-in-Chief of H.M.'s forces in the East Indies; his Highness Jyajee Rao Sindhia, Maharaja of Gwalior; the Lord Harris, some time Governor of the Presidency of Madras; his Highness Maharajah Duleep Singh; General Lord Clyde, G.C.B., late Commander-in-Chief of her Majesty's forces in the East Indies; his Highness Runbeer Singh, Maharajah of Cashmere; Sir George Russell Clerk, K.C.B., Governor of the Presidency of Bombay: his Highness Tookoojee Rao Holkar, Maharajah of Indore; his Highness Maharàjah Khunde Rao, Guicowar of Baroda; the Right Hon. Sir John Laird Mair Lawrence, Bart., G.C.B., late Lieut.-Governor of the Punjab; his Highness Nurendur Singh, Maharajah of Putiala; Lieut.-General Sir James Outram, Bart., G.C.B., late member of the Council of the Governor-General of India; her Highness Nuwab Sekunder, Begum of Bhopal; General Sir Hugh Henry Rose, G.C.B., Commander-in-Chief of her Majesty's Forces in the East Indies; and his Highness Yoosuf Ali Khan, Nuwab of Rampore—to be Knights of the said Most Exalted Order of the Star of India. The Queen, in order to mark the high sense and esteem in which her Majesty holds the said Order, and to give an additional proof of her affectionate regard for his Royal Highness the Prince Consort and his Royal Highness Albert Edward, Prince of Wales, has been pleased to nominate and appoint their Royal Highnesses to be Extra Knights of the said most exalted Order of the Star of India.

Foreign.

FRANCE.—The *Moniteur* of Tuesday officially announces that the Emperor has recognised Victor Emmanuel as King of Italy. It says:—

"In notifying this determination to the Cabinet of Turin, the Government of the Emperor declared that they would decline any solidarity in enterprises of a nature to disturb the peace of Europe, and that the French troops will continue to occupy Rome so long as the interests which caused their presence there shall not be protected by sufficient guarantees."

Count Vimercati, who arrived from Turin on Friday night, left Paris on Tuesday for Fontainebleau. Count Arese is on his way from Turin, accompanied by Signor Artour, with the official reply of the Italian Ministry to the communication from the French Court. It is asserted that Marshal Niel is about to proceed to Turin to notify officially to the Italian Government the recognition of the Kingdom of Italy by France.—The Corps Législatif was prorogued on Thursday. Count Morny, the President, in his closing speech congratulated the Corps Législatif on having fully appreciated the new privileges granted to them. The Deputies dispersed, shouting "Long live the Emperor!"—It is said that the Empress Eugenie will shortly undertake another tour to England, and will then join the Emperor at Cherbourg, to witness the trial trips of the iron-plated frigates Normandie and Magenta. Their Majesties will then proceed together to Biarritz, and the Empress will pay, alone, a visit to the Queen of Spain. It is also said that Count de Persigny is about to visit England for a course of sea-bathing, and that his post will be filled *ad interim* by M. Billault. It is rumoured that Count de Persigny will not resume his post in the Cabinet, but will replace Count de Flahault as French Ambassador in London. M. de Lesseps arrived at Marseilles on Tuesday, from Suez.—The *Moniteur* says, that numerous deputations having manifested their intention of proceeding to Vichy during the sojourn of the Emperor, it is authorized, to prevent needless trouble, to announce that his Majesty, who goes to Vichy for the benefit of his health, will not receive any deputations or any persons who ask for an audience. It is rumoured that the King of Prussia has invited the Emperor Napoleon to the great manœuvres which are to take place in the autumn near Coblentz, and that the Czar will pay the French Sovereign a visit at Chalons.—The Abbé Cruice has been appointed Bishop of Marseilles. He is of Irish descent and is the author of several works remarkable for their style and the clearness of their ideas. He was appointed by the late Archbishop of Paris to the direction of the School des Carmes.—The following are extracts from the more important portions of the despatch alluded to by Lord John Russell in the House of Commons, as having been addressed by M. Thouvenel to Prince Metternich and M. Mon, Ambassadors of Austria and Spain, announcing that the Emperor of the French declined to accede to a proposal made by those two Powers for a common action of the Roman Catholic Powers in favour of the temporal authority of the Pope:—

"The Emperor's Government has deplored, as much as it has blamed, the aggression on the Pontifical States; and if the grave political considerations, which Austria and Spain also took into account, did not permit it at the time to react against accomplished events, it neglected nothing calculated to limit the consequences of them. The army of occupation at Rome was increased without delay; and the Pope being able to remain with security in his capital, in the midst of the storm which agitated Italy, owed to the presence of the French troops the preservation of part of his territory. The Emperor's Government does not hesitate to render homage, has testified, and still does so, the profound and invariable sympathies which animate it with regard to the Chief of the Church. The precarious situation in which circumstances have placed the temporal power of the Holy See does not the less excite painful anxiety among the Catholic nations; and as it is of importance to the peace of consciences that such serious questions should not remain too long suspended over the world, it is certainly the duty of Governments to unite their efforts to simplify them, and to facilitate their solution. I do not, however, consider useful to discuss here, with the necessary development, the system by which the States of the Pope and the city of Rome would constitute, so to speak, property in mainmort, set apart to all Catholicity, and placed in virtue of a right which is inscribed nowhere above the rights which regulate the fate of all other sovereignties. I confine myself to remarking that the oldest, as well as the most recent historical traditions do not appear to sanction that doctrine; and that England, Prussia, Russia, and Sweden, Powers separate from the Church, signed at Vienna by the same right as France, Austria, Spain, and Portugal, the treaty which restored to the Pope the possessions he has lost. I hasten to proclaim that the highest considerations of propriety are in accord with the most important social interests in requiring that the Chief of the Church may maintain himself on the throne which has been occupied by his predecessors for so many centuries. The opinion of the Emperor's Government is very firm on that subject, but it thinks also that the prudent exercise of the supreme authority, and the consent of the populations, are in the Roman States as elsewhere, the first conditions of the solidity of the Government. The gravest dangers which now menace the temporal sovereignty of the Holy See come, it is true, from beyond its frontiers; and if the occupation of Rome provides for the present, the future remains exposed to hazards which we could sincerely wish to set aside. Austria and Spain invite us to take part in performing this task, but they do not indicate the means of accomplishing it; and yet some explanations on their part are the more necessary that their position with regard to Italy differs in a certain respect from that of France. We have seen with regret that the stipulations of Villafranca and of Zurich were not completely executed, and we could have wished that the monarchy of the Two Sicilies had not been overthrown; nevertheless, the march of events, though contrary to its wishes, has not affected the Emperor's Government so directly as it has done the Courts of Vienna and Madrid. Without according our approbation to what has taken place, and without being disposed to protect by our guarantee the existence of the new state of things, no dynastic interest prevents us from establishing relations with the kingdom of Italy, and the obstacle to its recognition only exists for us in the difficulties inherent in the affairs of Rome. In the principle of non-intervention which has preserved the peace of Europe, excluding now, as it did a year ago, the employment of force, there exists in our eyes a close connection between the regularisation of the events which have so greatly modified the situation of Italy and the solution to be given to the Roman question. The Emperor's Government would therefore be very happy to learn that Austria and Spain consider it possible to enter also into the sole path which seems to it likely to lead without new shocks to a practical result; but it does not hesitate in any hypothesis to give the assurance that for its part it will not adhere to any combination incompatible with the respect it professes for the independence and dignity of the Holy See, and which might be in disaccord with the object of the presence of its troops at Rome."

SPAIN AND MOROCCO.—The Emperor of Morocco has issued a proclamation, announcing his determination to fulfil the treaty with Spain, agreeably to the request of France. The *Correspondencia Autografa* of Saturday says:—"The Spanish Government finds the propositions acceptable which have been submitted to it as a solution of the Moorish question, and is indulgent to Morocco on account of the present state of things in that country, and of the good intentions of the Moors, especially of Muley Abbas."

PORTUGAL.—The Lisbon journals assert that the Portuguese Government has refused to acknowledge the new Italian kingdom. The *Official Gazette of Tuesday* publishes a Royal decree finally suppressing the Order of Sisters of Charity. The Duke of Saldanha has published a letter, in which he declares that he is willing to form a new Cabinet, but will not take the lead of any revolutionary party. In consequence of the open-air meetings of the Patriotic Society having been prohibited by the Government, the friends of liberty met on the 16th for the purpose of electing a committee to present a petition to the Cortes. The British Government has sent to this country the report of the Bradford Chamber of Commerce upon Portuguese wools. The Department of Public Works is now taking measures to make known the suggestions contained in the report for the amelioration of the article in Portugal.

DENMARK.—It is reported that the Council of the Empire, representing Denmark and Schleswig, will be summoned to meet at the beginning of October.

HESSE CASSEL.—The Committee for the examination of the Constitution has unanimously resolved to send a declaration to the Diet, stating that it is incompetent to carry on Parliamentary business, and is of opinion that a requisition should be made to the Elector demanding the re-establishment of the Constitution of 1831.

BAVARIA.—Count von Leiningen, a captain of cavalry in the Bavarian service, was married on the 20th inst. to the daughter of a brewer at Munich, named Floosmann, by which marriage the daughter of a citizen of Munich becomes allied to the Royal family of England.

PRUSSIA.—The anniversary of the battle of Waterloo was celebrated at Cologne on the 21st by a grand popular *fête*. The celebration opened at six in the morning by a salute of 18 guns, and closed at 11 at night by a similar salute. The French papers, in noticing the *fête*, asks whether the name of Waterloo was placed between transparencies bearing those of Jena and Auerstadt.

AUSTRIA.—The condition of the Empress inspires serious anxiety. After remaining a few months at Corfu, her Majesty will proceed to Egypt and pass the winter in Cairo. Both Houses of the Council of State sent deputations to the Emperor on Saturday to express their sympathy on the occasion. The Emperor replied that these demonstrations of loyalty afforded him great consolation under the melancholy circumstances. The semi-official journals contradict the assertion of some French papers that the English Ambassador at Vienna had, in an interview with the Emperor, insisted upon a solution of the Hungarian question.

HUNGARY.—The agitation in Hungary is increasing. Thirty thousand men are concentrated near Pesth. The Lower House of the Hungarian Diet has resolved that the address shall be presented to the Emperor by

the President of the Lower House and a member of the Upper House.

ITALY.—In the sitting of the Chamber of Deputies on Tuesday Baron Ricasoli, President of the Council of Ministers, made the following statement on the recognition of the kingdom of Italy by France:—

"The Government is happy to announce to the Chamber an event which will be received with great satisfaction by the Italian people. The Emperor of the French has recognized Victor Emmanuel as King of Italy. The right of our nationality, which until now has only been graven in the consciences of the people of Italy, will soon become a right recognized by all Europe. The recognition of the Kingdom of Italy by France and England definitively determines our position in Europe. Italy is now placed among the other sisterly nations, and occupies the place which has long been denied her. The recognition of the Italian Kingdom is the fulfilment and the seal of the memorable words pronounced by the Emperor of the French in July, 1859. In replying to the congratulations of the constitutional bodies of State of France, shortly after his return from the glorious campaign in Italy, he said, 'The future will show the results of this peace for the happiness of Italy, the greatness of France, and the peace of Europe.' The Chamber will certainly acknowledge as a fresh proof of the Emperor's goodwill the moment itself which he has chosen for making this solemn manifestation. It is certainly his intention to render less painful to Italy the great misfortune by which she has been overtaken. Italy will see in this fresh cause for being grateful to the generous nation whose genius and noble instincts the Imperial Government so well represents. I do not consider that I am lowering the dignity of Italy in declaring that she ought to be thankful to France. Do not fear that our gratitude towards France can demand of us the least sacrifice of our rights or of our interests. Between France and Italy there cannot be any conflict of interests. Liberty, progress, and humanity will henceforth be the sole, common aims of civilised peoples. Italy and France will go hand in hand to this noble result. Such is the new basis of the policy of the Emperor of the French inaugurated by the war in Italy, a policy which will form the best title of his glory, and which will give to the world that which it is most in need of—namely, peace founded on justice. Let us rejoice at this new success, but do not let us forget that our work is not yet completed. We owe this success principally to wisdom, constancy, concord, magnanimous emulation, efforts, and sacrifices. We still require these virtues, the effect of which cannot be compensated by any friendship or foreign support. These virtues are the true motives of the past, and the most sure token of the future. There is at present no Ambassador of Italy at Paris, and no French Ambassador at Turin. This part of our relations has not been settled, but will be so very shortly. As regards Rome the Government has no intention of allowing the question to rest. It is too important for the Government not to incessantly occupy themselves with it. The Chamber will, however, understand the gravity of the question, the difficulties of which must be overcome solely by way of negociations with Napoleon which are continually going on. I flatter myself that in time, the period of which I certainly cannot fix, we shall arrive at such a result as will meet the best wishes of the nation. In the meantime I can assure you that the recognition of the kingdom of Italy does not involve any condition or any insult to our national rights."

In the sitting of Thursday Baron Ricasoli laid upon the table of the House the diplomatic correspondence exchanged between France and Italy in reference to the recognition of the Kingdom of Italy. The following is a summary of the French note:—

"The Emperor, on the demand of Victor Emmanuel, has recognised him as King of Italy. But by this recognition he does not approve the past policy of the Cabinet of Turin, nor does he encourage enterprises of a nature to compromise the general peace of Europe. The Emperor regards the principle of non-intervention as a rule, but he declines the responsibility of any project of aggression. The French troops will continue to occupy Rome so long as the interests which brought France to Rome are not covered by guarantees."

Baron Ricasoli, in his note in reply to the foregoing, thanks the Emperor for the recognition of the Italian Kingdom. He recalls the programme set forth in the recent votes of the Chambers, and expresses a hope that the wished-for solution may be brought about without interruption. He says:—

"Our wish is to restore Rome to Italy, without depriving the Church of any of its grandeur, or the Pope of his independence. We hope that after a time the Emperor will be able to withdraw his troops from Rome without exciting the apprehension of the Catholics. We leave it to the high wisdom of the Emperor to determine the moment, and trust that France will not refuse to bring Rome to accept an arrangement which would be fruitful in happy consequences."

The Chamber of Deputies on Monday, after an animated debate, adopted the Bill on the national armament by a majority of 218 to 30. In the sitting of Wednesday the Bill relating to the loan for 500,000,000f. was discussed. Signor Ferrari opposed the Bill, and attacked the political, financial, and administrative systems of the Government. He, however, highly eulogised Count Cavour. Signor Desanctis replied, and showed that the present Cabinet had maintained the system followed by Count Cavour. The discussion was resumed on Thursday when Signor Joachim Pepoli, although supporting the Government on political grounds, opposed the Bill for financial reasons. Signori Galeotti and Brofferio also spoke on the subject.—The *Opinione* publishes a letter from the brother of Count Cavour, denying the assertions of the Church papers in regard to the circumstances which accompanied the last religious acts of the Minister.—Accounts from Naples state that the National Guard of that city have arrested a band of brigands on Mount Vesuvius. A commission has just been appointed by order of King Victor Emmanuel to examine plans for the establishment of a great commercial port in the Bay of Naples, which has long been desired by the inhabitants.—Accounts from Rome state that the Pope's health is extremely precarious. He has an abscess in the right leg which infects his whole body. Though he is able to give audiences, much uneasiness is manifested by the Cardinals as to the result of his illness. It is reported that in anticipation of his death Austria has made arrangements to receive the College of Cardinals in one of the fortresses of Venetia for the election of a new Pope. Cardinal Antonelli was officially informed by the Duke de Gramont, the French Ambassador, on the 20th inst., of the recognition of the Kingdom of Italy. In reply, the Cardinal said, "This is where we have been led by the solemn promises made by your Emperor at the beginning of the war." The Duke de Gramont will leave Rome for France on the 30th inst.

SICILY.—The official Journal contradicts the report that 120 Bourbon partisans had disembarked near Syracuse, where they were surrounded by Italian troops and 23 of them shot. It states that only three brigands in the pay of the Bourbon party have landed there from Malta.

RUSSIA.—Their Imperial Majesties returned to St. Petersburgh on Saturday from their journey to Moscow.

POLAND.—M. Wielopolski had proposed the formation, under the title of Polish military, of a flying column of 6000 men to maintain public order in the country, instead of the Russian troops. Prince Waldimar Czetwertynski has been arrested and sent to the fortress of Modlin. Count Tyszkeiwicz has been suspended from his functions of Marshal of the Nobility of Wilna, and the countess, his wife, exiled for having made a collection for the purpose of giving an Easter banquet to the working classes. The laws in connection with the reforms recently published have in no way given satisfaction. The privileges granted to the Council of State and the Municipal Councils are found to be so insignificant that their proceedings promise no results. The dissatisfaction of the people is increasing, and the aspect of affairs in general is most gloomy.

TURKEY.—The Sultan died on Tuesday morning. His brother Abdul Aziz Khan was immediately recognised as his successor. The new Sultan, on his accession, published a *Hatt*, declaring that he will follow the present policy of the Turkish Government. He also announces his intention to introduce great reforms in the interior in favour of all his subjects, without distinction of religion. He concludes by insisting on the necessity for economical and financial reforms. It is stated that a modification of the Ministry is probable. Riza Pasha, the Minister of War, will, it is said, be replaced. All is quiet at Constantinople.

INDIA.—We have accounts from Calcutta to the 24th, and from Bombay to the 27th May. The following are the details:—

Calcutta.—Mr. Laing, who has been dangerously ill with dysentery, was put on board the Government steam-ship Australian as soon as it was safe to remove him, and sent to sea for a cruise. He arrived at Penang on the 24th May, and had then nearly recovered from his illness. The volunteering for general service is going on briskly among the men, but the officers are holding back. 7039 men of all arms have volunteered for general service, 393 for local service, and 399 have claimed their discharge. Of these many have since decided for general service.

Bombay.—Four Bombay regiments—viz., the 29th, 30th, and 31st Native Infantry and the 2d Jacob's Rifles—have been disbanded. The Indigo Contracts Bill has been referred to the Bombay Chamber of Commerce.

The Provinces.—The famine in the North West has been effectually relieved. The relief committee are busily distributing the large remittances sent from England, which it is thought are more than sufficient to meet the emergency. Slight disturbances have taken place in the South-West Provinces and Indigo districts. All is quiet in the Santhal Pergunnas; the causes of the late excitement are unknown. A thorough inquiry has been made regarding disturbances at Jessore. All is now quiet in that neighbourhood. Measures are in progress for the amalgamation of the Surat and Broach Collectorates. Lieut. Hughes, of the 68th Foot, has been killed by an elephant. Captain Merywether has died at Simla.

CHINA.—Accounts from Hong Kong state that the reported capture of Hankow by the rebels has not been confirmed; but the insurrection is spreading, and no effectual measures of repression seem possible to the Imperialists. The Foreign Ministers continue to reside peaceably at Pekin, but Mr. Bruce has declared his intention to grant no passports at present to British subjects to visit the capital. Fresh captures of English and American subjects in the service of rebels and Imperialists have been made on the banks of the Yang-tsze.

CAPE OF GOOD HOPE.—The Cape Parliament was opened on the 26th April. The Governor, in his speech on the occasion, expressed confidence in the maintenance of peace and progress on the frontier, and in the general prosperity of the country. The Estimates of the revenue submitted to Parliament were far below the expenditure. A Bill for separating the provinces had been introduced, but it was considered likely to be thrown out. The Home War Office had asked for 30,000*l.* towards the expenditure on account of the military forces in the colony. It was not likely to be granted this session. The exports of wine had fallen from 35,000*l.* to 15,000*l.* Horse sickness and lung disease were prevalent among the stock. Both had proved very destructive in the country districts.

UNITED STATES.—Accounts from New York to June 18th state that the recent proclamation issued by the British Government, prohibiting privateers and armed vessels from bringing prizes into British ports, is considered favourable to the North. Mr. Adams, the new Minister to England, has sent home a despatch describing his interview with Lord John Russell, in which his lordship said he had uttered no sentiment that he supposed could be taken as an expression against the Government of the United States, or in sympathy with any attempt tending to overthrow that Government. He also assured Mr. Adams that he would instruct Lord Lyons to have an interview with Mr. Seward, expressing the earnest belief and hope that the result would be perfectly satisfactory to the President of the United States. Mr. Dallas, the ex-Minister to England, had visited Philadelphia, and stated privately that the British Ministry had no other intention than that of strict neutrality in the present struggle, and that the people of England were radical in their sympathy and affiliation with the North. Several skirmishes have taken place in the vicinity of Washington, but without any serious result. Some excitement has been caused by a rumour that Gen. Beauregard is marching on Washington at the head of a large force. Advices to that effect have been received at the War Department, but are not relied on. 3000 Federal troops left Fort Monroe on the night of the 9th to attack the Confederate position nine miles distant. In the darkness two Federal regiments fired on each other with fatal effect. At daybreak the Federals advanced, but were repulsed by masked batteries of heavy rifled cannon. Brigadier-General Pierce, commanding the Federal forces, is said to have lost presence of mind, and the Federals, after having been exposed for one hour to a galling fire, retired to Fort Monroe. General Butler reports the Federal losses at 14 killed and 45 wounded. The news of this victory has been received with great enthusiasm in the South. Harper's Ferry has been evacuated by the Confederates in great haste. They attempted to destroy the railway bridge, but failed. All the Government property has been burnt. The Confederates have abandoned the whole line of the Potomac, with the intention of concentrating their forces at Manassas Junction, where a pitched battle is daily expected to take place. The Federal troops are advancing from the eastward by three routes on Harper's Ferry, and General M'Chelland's forces are rapidly moving towards the same point from the West. The Union army in Western Virginia was said to be assuming formidable dimensions. It is reported that General Butler has completed his preparations for an attack on Yorktown. Three companies of Federal troops, while making a reconnaissance in the direction of Vienna, Virginia, were fired upon by a masked battery. 20 men were killed, wounded, or missing. The Virginia Convention at Wheeling has passed an ordinance vacating the State offices and providing a Provisional Government. It is stated that 1500 troops were entrenched at Charlestown, Virginia, with 6-pounders ready mounted; and that they had two or three members of the Wheeling Convention in gaol there. It is asserted that one of the first acts of the Virginia Provisional Government will be the raising of 10 regiments for war. Five hundred Secessionists have been routed at Romney, Virginia, by an Indiana regiment. Several people have been shot at St. Louis by a detachment of Volunteers, in return for the reported wounding of their captain by a shot from a house. A serious fight is imminent in Missouri. The Governor of Missouri has issued a proclamation calling for 50,000 State troops to resist the Federal usurpation. He and the State officers have abandoned Jefferson city, and burnt the railway bridges west of that point, with the idea of concentrating their forces at Arnow Rock. General Lyon, with a large body of Federal forces, followed them in close pursuit. At the election of a member to Congress in Maryland the Union party triumphed. Eastern Tennessee has given 10,000 votes against secession. A doubtful report is current that the Confederate troops are moving towards Cairo. The Federal troops at that place are considered sufficient to meet all emergencies. The first privateer captured by the Federal ships has been taken to New York. The vessels at the New York navy-yard have been ordered to keep up steam in order to be able to start at a moment's notice. The steamer Vanderbilt, which has been chartered by the Federal Government, has sailed from New York with Colonel Wilson's New York Zouaves on board, it is reported for Fort Pickens.

NEWFOUNDLAND.—The riots at St. John's are attributed entirely to political causes, the Radical party demanding vote by ballot and an extension of the elective franchise accorded to them by the British Government. Two Radical members were returned to Parliament, but the House refused to receive them. A collision thereupon took place between the military and the people, in which four persons were killed and several wounded. The rioting continued from day to day, and the dwelling-house and stables of Mr. Hayles, the leader of the Government, were set on fire by the mob and destroyed. The mob was ultimately tranquillised by the Roman Catholic bishop and his clergy. The first troops sent from Halifax were found to be insufficient, and on the 18th a second detachment was despatched in a war-vessel which had just arrived from Bermuda.

Parliament.

HOUSE OF LORDS.

FRIDAY.—*Indian Navy.*—The Earl of ELLENBOROUGH called attention to Mr. Laing's plan for the abolition of the Indian Navy; and said that when he was in India he had himself endeavoured to accomplish that abolition, but the Admiralty of that day would not consent. He approved of the step now proposed, but he would advise that a local body of marines should be maintained in India, who might serve on board the Queen's vessels, and would be ready for any emergency.—The Duke of SOMERSET said the question was still under the consideration of the Admiralty, who had not yet come to a decision. In any case it was determined to retain the smaller class of vessels for postal and river purposes.

The *Railway Mortgages (Scotland) Transfer Bill*, and the *Edinburgh Assessment Bill* passed through committee. The *East India Loan Bill* was read a second time. The *Public Offices Extension Bill* passed through committee.—The Duke of SOMERSET, on bringing up the report on the *Greenwich Hospital Bill*, said that, as he understood the Bill was considered objectionable in point of form, and was threatened with powerful opposition in the House of Commons, he should not proceed with it. At the same time he repelled the imputation that he wished to use the patronage of the livings at the disposal of the Admiralty for political purposes.—After a few words from Lords ELLENBOROUGH and HARDWICKE, Lord GREY said that the best way of getting rid of such imputations was by selling the Greenwich Hospital property, a course from which an immediate accession to the income of the Hospital would arise. The Bill was then withdrawn.—Lord MONTEAGLE presented a petition from certain *Natives of India*, complaining of their exclusion from the public service. He urged in strong terms the claims of the natives generally to a share in the administration of the empire, and deprecated the obstacles now raised to their admission.—Lord HERBERT explained that, after mature consideration, it had been determined that the natives of India could not be allowed to compete for service in northern climates, but that it would be competent for them to do so in reference to colonial employment in warm latitudes.—After some remarks by the Earl of ELLENBOROUGH and the Marquis of CLANRICARDE in favour of employing natives as medical officers the petition was ordered to lie on the table.

MONDAY.—*Death of the Lord Chancellor.*—Lord REDESDALE, as Deputy Speaker, took his seat on the woolsack in the room of the late Lord Campbell.—Earl GRANVILLE moved the adjournment of the House, as a mark of respect to the late Lord Chancellor, who had so recently as Friday last presided over their deliberations. He said that on Saturday he had met his noble and learned friend at the Cabinet Council, and again in the evening at his own house at a social gathering. By a strange coincidence the Lord Chancellor lately made a statement to a friend which was equivalent to the expression of a preference for a sudden death, rather than one preceded by a lingering illness. His lordship concluded by asking the unanimous assent of their lordships to a motion for which there was, happily, no precedent in the records of the House. —Lord BROUGHAM and Lord ST. LEONARDS expressed their sense of the merits of the late Lord Chancellor, and highly eulogised his professional character and attainments. The motion was unanimously agreed to.

TUESDAY. — The *Railway Companies Mortgage Transfer (Scotland) Bill*, the *Edinburgh Assessments Bill*, and *the Excise and Stamps Bill* were read a third time and passed. The *East India Loan Bill* passed through committee. The *Public Offices Extension Bill* was reported with amendments.—The Duke of SOMERSET moved for a copy of the regulations under which masters or mates of merchant vessels may be enrolled as officers of the *Royal Naval Reserve*, and explained the provisions of the Bill for the purpose of admitting officers of the merchant service to the navy. The principal object would be to give to officers of the merchant service commissions in the navy as lieutenants to serve under captains in time of war, and to retire with honorary rank at its termination. The motion was agreed to.

THURSDAY.—*The New Lord Chancellor.*—Sir R. BETHELL took the oaths as Lord WESTBURY, and then assumed his seat on the woolsack. The *East India Loan Bill* and the *Post Office Extension Bill* were read a third time and passed.—The Bishop of CHICHESTER withdrew the *Church Buildings Act Amendment Bill*. *Turner's Pictures.*—In answer to Lord ST. LEONARDS, Earl GRANVILLE said that the question of a suitable building in connection with the National Gallery for the reception of the pictures bequeathed to the nation by the late Mr. Turner had not yet been decided on, but in the meantime the pictures were perfectly safe, as they were in a gallery universally admitted to be well adapted both for their exhibition and preservation.—Lord OVERSTONE admitted the difficulty of carrying out the conditions of Mr. Turner's bequest, but thought the nation was bound in some way or other to comply with them.—After a few words from Lord MONTEAGLE and the Earl of ELLESMERE the subject dropped.—Lord REDESDALE moved for a select committee to inquire into the progress made in the wall-paintings of the *Peers' Robing Room*, and to report when the room would be ready for occupation. The motion was agreed to.

FRIDAY.—The Royal Assent was given by Commission to the *Excise and Stamps Bill*, *East India Loan Bill*, and several other Bills. *State of Turkey.*—In answer to Lord STRATFORD DE REDCLIFFE, Lord WODEHOUSE said that the Turkish Ambassador had assured the Secretary for Foreign Affairs that the new Sultan would carry out the policy of his predecessor in foreign affairs; and in internal politics would inaugurate new and important reforms. *Annexation of Savoy.* — The Earl of CARNARVON called attention to the prolonged occupation of Northern Savoy by France, and asked what arrangements had been made to give effect to the treaty of Vienna, guaranteeing the independence of Switzerland. [Left sitting.]

HOUSE OF COMMONS.

FRIDAY.—*San Domingo.*—In answer to Mr. W. E. FORSTER Lord J. RUSSELL said that he had received assurances from the Spanish Government that slavery would not be introduced into the island in consequence of its annexation to Spain. *Civil Service Examinations.* — On the motion for going into committee of supply, Mr. COCHRANE moved a resolution to the effect that the evidence taken before the select committee on civil service examinations proved that the system of examination should be modified in order to meet the requirements of the public service. He read extracts of the evidence, in which heads of departments and practical official men testified that no advantage had accrued to the public service from the system since 1855, and adduced examples from the Military Examination Papers of the questions put to candidates, which, he contended, were not calculated to test their powers and intelligence.—After some remarks by Mr. HENNESSY and Mr. MILNES in favour of the report, Lord STANLEY vindicated the fairness of the conclusion at which the committee had arrived, and urged that their report was in harmony with the evidence adduced before them. He hoped the House would not come to the conclusion that it had abused the power delegated to it, namely, that of investigating and reporting upon facts which could not by reason of their complicated character be examined in detail by the House itself.—Mr. BENTINCK complained of the total irresponsibility of the Civil Service Commissioners.—The CHANCELLOR of the EXCHEQUER censured the manner in which Mr. Cochrane had endeavoured to throw ridicule on the subjects selected by the examiners, and said that those gentlemen had discharged a very difficult and important duty to their own credit and to the public satisfaction. —Lord R. CECIL was of opinion that the select committee had not given the evidence that appreciation which it deserved. They had, for instance, reported in favour of open public competition, although the most competent witnesses in the Civil service had, when examined on the subject, given their evidence strongly against such a system.—Sir S. NORTHCOTE defended the report of the Committee, and insisted upon the vices attending the old nomination system, which had been extinguished by the competitive system.—Mr. MAGUIRE opposed the motion, which was negatived without a division.—Colonel DICKSON asked the position of the *Lord-Lieutenant of Ireland* with reference to the Government of that country; and whether the Earl of Carlisle intended to retain that office after the slight put upon him in reference to the Galway Contract.—Lord PALMERSTON said that the relations between the Government and the Earl of Carlisle were those founded by law and usage, and that there was no reason to suppose that his excellency was unwilling to continue to fill the office of Irish Viceroy. *Indian Army.*—Sir C. WOOD stated, in reply to Colonel Sykes, that the Native Regiments of the Bengal Army had been changed from the regular to the irregular system some time since; that the change would be made in the Madras and the Bombay services very gradually; and that no officer would suffer any loss in position or emolument by the change. *The Spithead Forts.*—Sir M. PETO called attention to the fortifications about to be erected at Spithead with reference to the great changes now taking place in naval armaments, and inquired if the Government intended to reconsider the question whether floating batteries would not prove more effective for the defence of the arsenal than the forts proposed to be constructed on the shoals. He suggested various points which, he thought, ought to induce the Government not to be precipitate, but to reconsider the question.—Sir F. SMITH differed from Sir M. Peto, and hoped the Government would not relax their efforts to complete the construction of the forts, but push them on with vigour.—Admiral DUNCOMBE, on the other hand, thought the Government would not be justified at present in incurring great expense in building forts on the shoals.—Captain JERVIS urged the necessity of building the proposed forts.—Lord PALMERSTON declared himself in favour of forts, which would require fewer men than floating batteries, and could be made to resist artillery of the greatest power. It was absurd to say that permanent defences would serve as buoys to guide foreign ships of war into our harbours, as authentic charts were to be had, showing precisely the manner in which a ship should be steered into them. If an enemy's fleet should get to Spithead, he had, he said, no doubt that the forts, armed with Armstrong guns, would very soon send the ships to keep company with the Royal George. After some further remarks upon the subject by Mr. BENTINCK, Sir H. VERNEY, and Mr. T. G. BARING, the House went into a Committee of Supply upon the remaining *Army Estimates*, and certain votes for civil buildings were taken. The *Durham University Bill* was read a second time. The *Chatham Dockyard Enlargement Bill* passed through Committee. Other Bills were forwarded, and the House adjourned at half-past 12 o'clock to Monday.

MONDAY.—*Export of Salt to France.*—In answer to Sir J. PAKINGTON Mr. M. GIBSON said that no arrangement had yet been made with the Government of France for the admission of British salt into that country, but that an inquiry by the French Government was now going on, and there was every reason to believe that it would soon be followed by a reduction of the duty on British salt. *The Derryveagh Evictions.*—On the order for going into Committee of Supply, Mr. SCULLY moved an address to Her Majesty, representing that Mr. John George Adair, one of the Justices of the Peace for the county of Donegal, has recently ejected all the inhabitants from a tract of land in that county under circumstances which appear to this House to affect seriously the general peace and well being of the district; and praying for an inquiry, with a view to consider whether it is fitting that Mr. Adair shall continue to hold Her Majesty's commission. He detailed the circumstances attending the evictions, examining the reasons alleged by Mr. Adair for the course he had taken, and insisting that there is no ground whatever for depopulating the lands by a system of eviction which, though strictly speaking within the pale of the law, was nevertheless fraught with the most disastrous consequences to society in Ireland.—Mr. HENNESSY seconded the motion.—Mr. CONOLLY defended the conduct of Mr. Adair, who was fully justified in evicting the tenantry of Derryveagh in his opinion. There was the best evidence that the whole of the male adult inhabitants of that district had been acting in complicity with the Ribbon conspiracy in the recent murder of his steward. Mr. Adair found himself hemmed in by that society; his own life had been threatened; and if he had not taken the course he did, he would have been driven either to give up his estate, or hold it subject to the control of those midnight conspirators.—Mr. BUTT denied that the tenantry of Mr. Adair were implicated in the Ribbon conspiracy, and expressed a hope that the House would agree to the motion for an inquiry, so that the facts of the case might be put beyond all dispute. —Mr. LONGFIELD and Capt. LEWIS opposed the motion.—Mr. M'MAHON and Mr. MAGUIRE supported it.—Mr. CARDWELL said that the question was, whether the Crown had neglected its duty in not superseding Mr. Adair in the commission of the peace. On a former occasion he had stated that there was no sufficient ground to justify the Government in doing so, and he remained of the same opinion. He regretted, and he had expressed his regret, that Mr. Adair should have taken the course of ejecting so many families; but the question was whether the Government would be justified in removing from the commission of the peace a gentleman not charged with any violation of the law, but who had acted within the limits of his legal rights, and he thought they would have no ground on which they could have vindicated such an act.—The amendment was negatived without a division. *Canada and the United States.*—Sir J. FERGUSSON called attention to the recent augmentation of the military force in Canada. He considered the subject of great importance, as one likely to interfere with the resolution to take no share in the disputes between the Northern and Southern States of America, while nothing had occurred there or in the colony to justify it. If the reinforcements were intended only to strengthen the garrisons it was not necessary to send them at this critical moment and in such an ostentatious manner.—Lord PALMERSTON said that the Government had expressed, in a solemn and public manner, their determination to abstain from taking part in the contest between the Northern and Southern States of America; and, so far as the people of Canada were concerned, they relied upon their fidelity and loyalty most implicitly. It was the ordinary practice of all Governments, when war broke out in a neighbouring State, to take the precaution of strengthening their military force on the borders, and it was a laudable precaution. This force, a small one, was only sent out in common prudence to reinforce our garrisons, and was sent at a proper time and in a proper manner.—Mr. DISRAELI said that what engaged the attention of the country was the policy of sending out these troops at the time when a conflict was going on in the United States. He thought it was a very serious step on the part of the Government; he doubted its wisdom; he feared there was a feverish character about it, and thought it would have been better to show more forbearance. *Spain and Morocco.*—In reply to Sir R. PEEL, Lord J. RUSSELL explained the present position of the questions in dispute between Spain and Morocco, and added that the good offices of England had been requested by Morocco, and that terms of settlement had been proposed, and were now under the consideration of the two Governments. The House then went into a committee of supply on the *Civil Service Estimates*, when Mr. A. SMITH moved that the Chairman report progress. After a discussion on the expediency of taking votes on account, the motion was negatived by 148 to 99. A vote on account of 830,000*l.* was then agreed to. The *Parochial and Burgh Schools (Scotland) Bill* was read a second time.

TUESDAY.—*London Coal and Wine Duties Bill.*—At the morning sitting, on the order for going into committee on this Bill, Mr. AYRTON moved a series of instructions to the committee empowering them to make provision in the Bill for transferring the Bridge House Estate to the Metropolitan Board of Works, and for the payment of the metage dues on grain, fruit, wares, or merchandise, received by the corporation of London, and of the surplus of the annual income received by the conservators of the Thames, to the account to be opened under the Bill.—The LORD MAYOR and Sir G. [illegible] opposed the instructions as foreign to the enactments of the Bill; and they were negatived on a division by 169 to [illegible]. The House then went into committee, and progress was made so far as the 6th clause, when the Chairman reported progress. *Egypt and Turkey.*—At the evening sitting, Lord J. RUSSELL, in reply to Mr. GRIFFITH, stated that her Majesty's Consul General in Egypt had written home to the effect that M. de Lesseps had obtained authority from the Pacha of Egypt to compel the natives, by forced labour, to work on the Suez Canal, but that on representations being made by her Majesty's Government on the subject they received an assurance that such was not the case. His lordship added that a telegraphic message had reached the Foreign Office announcing the death of the Sultan that morning. *Enfield and Whitworth Rifles.*—Mr. VIVIAN moved for a select committee to inquire whether a more efficient weapon than the Enfield rifle may not be provided for the use of her Majesty's forces without additional cost or serious inconvenience to the service. He contended that the Enfield was an inferior weapon to the Whitworth rifle, and cited the opinion of the late Lord Hardinge and General Hutchinson in favour of the latter. He also complained that Mr. Whitworth had not received fair play at the hands of the committee on small arms; and urged that an inquiry would establish the efficiency and superiority of his rifle over every other.—Mr. T. G. BARING opposed the motion on the ground that a committee appointed by the Government were already engaged in testing the merits of Mr. Whitworth's rifle in comparison with other descriptions of small arms.—After some remarks by Mr. NEWDEGATE, Capt. JERVIS, Mr. MONSELL, Lord ELCHO, and Mr. CROSSLEY, Lord PALMERSTON said he was fully sensible of the importance of furnishing the army with the best possible weapon; and the Government were at that moment occupied in a scientific inquiry with the view of ascertaining not only what would be the best weapon, but whether the superiority of one weapon over another was so great as to counterbalance the expense and inconvenience of effecting a general change in the armament of the service. The motion was then withdrawn.—Mr. SLANEY obtained leave to bring in a Bill to amend and extend the act for *Co-operative and Provident Societies*.—Mr. M. SMITH obtained leave to bring in a Bill to amend the act 9th George III., c. 16, for quieting *Possessions against the Crown*, and certain acts relating to suits by the Duke of Cornwall; and Lord C. PAGET obtained leave to bring in a Bill to amend the law relating to *Greenwich Hospital*. —On the motion of Mr. GREGORY the select committee on the *Galway Contract* was nominated. The House then resolved itself into a Committee of Supply on the remaining *Army Estimates*. On the first vote, which included a sum of [illegible] for improving the stables at *Aldershott*, Mr. OSBORNE attacked the whole scheme of the military establishment at Aldershott as a permanent camp, the enormous expenditure incurred by it, the blunders committed in its arrangements, its hut barracks, stoves, &c., and moved as an amendment that the sum of 7000*l.* be omitted from the vote.—Lord PALMERSTON defended the Aldershott establishment, and the amendment was negatived on a division by 147 to 50. Another division took place on an amendment to omit a sum of 15,000*l.* for increasing the *Military College at Sandhurst* to receive cadets, which was negatived by 54 to 49. Another division took place on the vote before it was finally agreed to, when the CHAIRMAN reported progress. The remaining orders were then disposed of.

WEDNESDAY.—*Masters and Operatives Bill.*—The adjourned debate on the second reading of this Bill and the amendment moved by Sir G. LEWIS, to defer the second reading for six months, was resumed. After a short discussion, in which the Bill was supported by Mr. AYRTON, Mr. SLANEY, and Mr. MACKINNON, and opposed by Mr. HARDY, the amendment was agreed to without a division. The *Labourers' Cottages Bill*, after a long discussion on the clauses, passed through committee.—Mr. Serjeant PIGOTT moved the second reading of the *Jersey Court Bill*, the object of which was to amend the constitution, practice, and procedure of the Royal Court in the island of Jersey, by abolishing the [illegible] tions of the jurats and re-constituting the Court of the Bailiff as chief judge, and two puisne judges to be appointed by the Crown, and paid out of the surplus fee fund of the court.—Sir G. LEWIS said that no reasonable doubt could exist as to the power of Parliament to legislate for the Channel Islands; but the inhabitants of Jersey were not universally of that opinion. On the contrary, they considered that laws affecting their constitution could only be made by the States and the Crown; and that Jersey stood to the Crown of England in the same constitutional relation as Scotland did before the Union. He did not subscribe to that doctrine; but it had been the practice of Parliament to include the Channel Islands in general statutes, and to direct such measures, by orders in Council, to be registered in the Supreme Court of Jersey, in which manner they had obtained the force of law; but it would be a difficult thing to point out in the statute-book a single act which formed a precedent for this Bill. Moreover, the inhabitants of Jersey were a loyal and well affected people, although their geographical position rather connected them with France than England; and in the absence of any dissatisfaction on their part he thought it would be scarcely prudent for Parliament to interfere. He therefore moved as an amendment that the Bill be read a second time that day three months.—Mr. [illegible] and Mr. WALPOLE opposed the Bill, Mr. HADFIELD and Mr. S. ESTCOURT supported it. The Bill was ultimately withdrawn. The *Industrial Schools (Scotland) Bill* and the *Attorneys and Solicitors (Ireland) Bill* passed through committee.—Mr. LAYARD obtained leave to introduce a Bill for legalising *Bank Unions*.

THURSDAY.—*East India Council Bill.*—The Report on this Bill having been brought up, Mr. H. D. SEYMOUR moved as an amendment that a fifth member in the Supreme Council at Calcutta should be permissive only, and not compulsory. [illegible] Mr. LAYARD moved that the legal member of Council should be a barrister of ten, instead of five years' standing. The first amendment was negatived by a majority of 125 to [illegible]; the second by a majority of 132 to 73. The report, with some verbal amendments, was then received. On the *East India Civil Service* [illegible] for going into committee on the Bill on the ground [illegible] *Bill*, Mr. BAILLIE objected to the Bill on the ground that it would increase the patronage of the Crown. Mr. ASTELL, Sir H. WILLOUGHBY, Colonel SYKES, Mr. ADAIR, Sir M. FARQUHAR, and other members objected to hasty legislation, and deprecated the interference with the covenanted service which this Bill contemplated, contrary to the declared opinions of some of the most distinguished members of the Indian Council.—Sir C. WOOD, in reply, stated that he did not consider his Council as a check on him in a legislative but only in his executive capacity; and therefore they were not entitled to be consulted on this question. The introduction of uncovenanted servants was only intended for special and exceptional cases; the chance of the civil servants being injured by such introductions was exceedingly small, and if any case of injury could be proved the party injured would have a good claim for compensation. The House then went into committee. On the 1st clause a long discussion took place on the question whether the practice of appointing uncovenanted persons to certain offices

in India should be extended to other offices that had not yet been opened up.—Mr. VANSITTART moved as an amendment that the relaxation should be confined strictly to those offices that had already been opened up. On a division, the amendment was negatived by a majority of 46 to 31. On the 2d clause an addition by Sir C. WOOD was agreed to, that uncovenanted servants appointed to office shall have resided for seven years in India.—Mr. ADAM moved an amendment, that they should also be subjected to the same tests as those that were now, or might hereafter be applied to the covenanted servants. On a division the amendment was negatived by a majority of 66 to 51. Another amendment by Mr. ADAM, subjecting this new class of servants to the same restrictions as the covenanted servants, of not receiving presents, or engaging in trade, was opposed by Sir C. WOOD as unnecessary, and was negatived by 76 to 57. The Bill then passed through committee. The House again went into committee on the *East India (High Courts of Judicature) Bill*. After a long and desultory discussion on the various clauses, the Bill passed through committee.—The House then went into *Committee of Supply*, when a vote of 250,000*l*. on account, was granted for the Packet Service.—On the motion for the third reading of the *Courts of Justice Building Bill*, Mr. AYRTON considered that the site for the Courts had not been fully considered, and moved that the Bill be recommitted.—After some discussion, the amendment was withdrawn, and the Bill was read a third time and passed.—The *Scotch Public-houses Acts Amendment Bill* and the *Government of the Navy Bill* were read a second time.—The *Local Government Supplemental Bill* and the *Labourers' Cottages Bill* passed through committee.—The *Piers and Harbours Bill* was read a third time and passed.

FRIDAY.—*Irremovable Poor Bill.*—At the morning sitting Mr. VILLIERS moved that the House go into committee on this Bill.—After considerable discussion, in which Mr. S. ESTCOURT, Sir J. GRAHAM, Sir J. PAKINGTON, Mr. HENLEY, Sir G. LEWIS, and other members took part, the motion was carried by 87 to 44. The House then went into committee, but no progress was made before the hour for adjournment. At 6 o'clock the House resumed. [Left sitting.]

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at $89\frac{1}{4}$ to $\frac{3}{8}$ for Money, and $89\frac{1}{2}$ for the 10th July; Bank Stock, 229; Three per Cents. Reduced, $88\frac{1}{2}$ to $\frac{5}{8}$; New Three per Cents., $88\frac{1}{2}$; India Five per Cent. Stock, $98\frac{5}{8}$ to $\frac{3}{8}$, ex div.; Ditto for Acct., $98\frac{1}{2}$, ex div.; Ditto Four per Cent. Debentures, $95\frac{7}{8}$; Ditto April, 1864, $95\frac{3}{4}$; Ditto Bonds, 14*s*. to 18*s*. dis.; Exchequer Bills, March, 10*s*. dis.; Ditto June, par, 3*s*. dis.; Ditto Small, 2*s*. prem.—FOREIGN: Brazilian Four and a Half per Cents., 1860, $86\frac{1}{4}$; Mexican Three per Cents. for Acct., $22\frac{3}{8}$ to $\frac{1}{8}$; Sardinian Five per Cents., $78\frac{7}{8}$ to $\frac{1}{4}$; Turkish Six per Cents., 1854, $71\frac{1}{2}$; Ditto for Acct., 72; Ditto, 1858, $57\frac{1}{8}$; Ditto for Acct., 57 to $57\frac{1}{4}$; Ditto 100*l*. Bonds, 59.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£26,153,680	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	11,466,281
		Silver Bullion	212,399
	£26,153,680		£26,153,680

BANKING DEPARTMENT.

Proprietors' Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£9,967,654
Rest	3,258,846	Other Securities	20,180,066
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	8,159,026	Notes	6,949,160
Other Deposits..	11,511,296	Gold and Silver Coin ..	965,980
Seven day and other bills	580,692		
	£38,062,860		£38,062,860

27th day of June, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY.—BANKRUPTS.—W. P. ANDREW, Crutched Friars, City, Wine Merchant—C. ASHFIELD, Hammersmith, Boot and Shoe Manufacturer—F. L. BROOKING, jun., Totnes, Grocer—J. HAYDAY, Little Queen Street, Lincoln's Inn Fields, Bookbinder—S. KINSMAN, Poole, Printer—W. LAIDLER (and not "LAIDLE," as advertised in last Friday's "Gazette") Sunderland, Boot Manufacturer—J. PETFORD, Ferdinand Place, Hampstead Road, Smith—T. PYLE and R. PYLE, Durham, Grocers—G. W. SEAGER, High Street, Newington Butts, Licensed Victualler—H. E. SPARK, Oxford Street, Carver and Gilder.

BANKRUPTCY ANNULLED.—J. LOCK, Islington, Builder.

SCOTCH SEQUESTRATIONS.—J. BERTRAM, Perth, Contractor—A. CAMPBELL, Tongland, Kirkcudbright, Farmer—P. CRAM, South Queensferry, Linlithgowshire, Grocer—D. GIBSON, Ayr, Pastrycook—P. REID, Falkirk, Stirlingshire, Shoemaker.

FRIDAY.—BANKRUPTS.—T. GERMAIN, Gracechurch Street, City, Italian Warehouseman—J. C. HARRIS, Liverpool, Licensed Victualler—A. HOOKE, Shoe Lane, City, Baker—G. JONES, Holloway Road, Islington, Jeweller—D. K. MAWER, Fetter Lane, Wine and Spirit Merchant, and Licensed Victualler—J. PARKIN and E. PARKIN, Oughtybridge, near Sheffield, Iron Forgers—W. RAYNER, Wellington Street, Southwark, Bill Broker and Commission Agent—J. J. ROSS, Duke Street, Manchester Square, Ecclesiastical Repository and Carver in Wood—W. H. TRAISH, Lorne, Hatleyford Road, Kennington, and Upper Kennington Lane, Surrey, Ale and Porter Merchant.

Metropolis and its Vicinity.

GREAT FIRE AT LONDON BRIDGE.—On Saturday evening the metropolis was visited by one of the most terrific conflagrations that has occurred since the great fire of London. Certainly for the amount of property destroyed, nothing like it has been experienced during the last half century, the loss being estimated at little less than two millions. The scene of the catastrophe is on the waterside portion of Tooley Street, nearest London Bridge, a locality which has been singularly unfortunate during the last 25 years, some of the largest fires having occurred there. It took place in the extensive range of premises known as Cotton's Wharf and the bonded warehouses belonging to Messrs. Scovell. They had an extensive river frontage, and the whole space on the land side extending to Tooley Street was covered with eight or nine warehouses six stories in height, some of which had formerly been used as Ordnance stores, and the whole occupying, it is believed, about three acres. These buildings were filled with valuable merchandise of every description. In the upper floors there were stored thousands of chests of tea and bales of silk, while in the lower were immense stocks of Russian tallow and tar, oils, bales of cotton, hemp, and grain. Every portion of the establishment might be said to have been loaded with goods, and of the whole of this property not a vestige remains but the bare walls and an immense chasm of fire, which has been burning fiercely all the week and is likely to do so for many days to come. To be added to this very serious loss is the destruction of the whole of the western range of Alderman Humphrey's warehouses flanking the new dock, known as Hay's Wharf, the burning of four warehouses and a quay, comprising Chamberlain's Wharf, adjacent to St. Olave's Church, besides 12 houses in Tooley Street, 11 houses in Hayes Lane, and a sloop and a barge moored to the quays which the state of low water rendered it impossible to remove. The saddest loss of all, however, was the deplorable accident which befell Mr. Braidwood, the director of the London Fire Brigade, who perished at an early stage of the fire. It appears that the fire broke out in the first story of a warehouse, which was perfectly new, and constructed on approved principles of architecture; strong party walls, provided with iron doors, dividing the fabric, and the warehouses in the vicinity were reputed to be fireproof also. The workmen were still on the spot, and one of them actually discovered in a small heap of smoking jute the germ of that conflagration which before midnight was represented by three acres of flame. Unhappily, the smoke at that early period was so dense as to forbid all approach, and the flame was left to do its work. After the steam floating engines had been set to work by Mr. Braidwood a large number of land engines took up their position in Tooley Street and prepared for action, but no water could be obtained from the mains for nearly an hour. Mr. Braidwood therefore posted his men where the best command could be had over the fire, and proceeded down the avenue leading to the wharf nearest St. Olave's Church, where four of his men were supporting and directing two branches from the floating engine. He found the men in a very distressed state from the intense heat, and was in the act of giving them some brandy when an explosion in the warehouse flanking the avenue suddenly occurred. In an instant it was seen that the frontage of the second warehouse was coming down, falling outwards into the avenue. Mr. Henderson, the foreman of the Southern district of the brigade, who was standing within a few paces of Mr. Braidwood, shouted for all to run. The men dropped their branches. Two, with Mr. Henderson, escaped by the front gateway, and the others ran in the opposite direction to the wharf, where they jumped into the river. Mr. Braidwood made an effort to follow Mr. Henderson, but was struck down by the upper part of the wall, and buried beneath some tons of brickwork. His death must have been instantaneous. Several of his men rushed to extricate him, hopeless as the task was, but another explosion occurring they were compelled to fly. The sad fate of their chief had a most depressing effect upon all, and to add to their trouble, the conflagration now assumed a most awful ascendancy. It was said that there were three men standing by at the time, and that they had perished. It has however been ascertained that Mr. Braidwood is the only member of the fire brigade who has been killed, all the men having answered to the roll. A gentleman named Scott who had some property in one of the warehouses, perished with him. The exertions of the brigade were quite powerless to check the progress of the flames, which rapidly spread into Tooley Street, destroying several warehouses and houses of tradesmen in that street and crossed thence to the North Kent Railway Station, where the heat became so great that the ground-glass windows at the side could scarcely be touched. But for a change of wind at this critical moment the Greenwich, North Kent, South Eastern and Brighton Stations, and half Southwark would have been reduced to ashes. During the night the flames were visible not only through the metropolis but for 30 miles round. During the whole week the work of destruction has continued without cessation, and the flames are still burning fiercely in the ruins, filling the Pool at times with dense masses of smoke. Great danger has been apprehended from the extension of the fire to the vaults running under the street as far as the London Bridge Railway, which contained 15,000 casks of tallow, besides oil, butter, bacon, turpentine, and other combustible materials, but it is now understood that they have nearly burnt themselves out and are well saturated with water, the engines having been playing into them day and night since the outbreak of the fire. On Saturday evening, when the news of the magnitude of the fire had spread all over the metropolis, the number of people who flocked to London Bridge was so great as to render the bridge and the Borough quite impassable. The balustrades and outside coping of London Bridge were fringed with thousands of spectators, and in one instance a person in his struggle to obtain a place fell over into the river and was drowned. All the roofs of the houses on the north side of the river, the public buildings, the masts and spars of vessels, the quays and wharves, the tops of church steeples—even the gallery of the Monument—were crowded with thousands upon thousands of spectators. The river itself was never seen so thronged with small boats. From far below the Custom House to above London Bridge the stream was actually covered with them. One of these small boats and a barge were drawn into the vortex of the fire. The boat with one man in it is supposed to have been burnt; the barge was also burnt, but three men in it were rescued by some boatmen, amidst loud cheers from the spectators. Another barge took fire and was scuttled, and it has since been ascertained that several persons were burnt to death in boats while endeavouring to collect the melted tallow which was floating on the water. One poor Irishman had his neck broken by the chain of the floating engine getting round him. Four men were also taken to St. Thomas's Hospital badly burnt, one of them dreadfully so. At Guy's one person is lying badly injured by a fall. The body of Mr. Braidwood was found on Monday morning quite dead but little burnt; but the body of Mr. Scott, who had a large sum of money on his person, has not yet been found, and it is considered very doubtful if it will ever be recovered, the intense heat having probably long since reduced it to cinders. Her Majesty the Queen sent on Sunday morning two messages to the scene of the catastrophe, to know whether Mr. Braidwood had been killed or not. The Prince of Wales also visited the scene on Sunday, and Sir Richard Mayne, Captain Harris, Captain Balmondiere, with the other principal officers of police, took possession of the principal thoroughfares leading to the premises, by which means the immense crowd was kept out of danger. This precaution has since been continued daily, the immense mass of burnt and toppling walls being in such a dangerous state that it is perilous to approach them. These walls are so numerous, stand so close together, and are of such enormous height, weight, and thickness, that the fall of one would bring down half the others, almost from the mere concussion. It is understood that the Ordnance authorities have been applied to for the use of cannon to fire on and level the most dangerous with the ground, but in consideration of the danger of the operation, they have refused to have anything to do with the matter.—The inquest on Mr. Braidwood took place on Tuesday, when several witnesses were examined at great length as to the cause of the fire, and the circumstances which led to the fall of the warehouse wall. It appeared from the evidence of the officers of the Fire Brigade that the explosion which preceded the fall was considered by them to be an explosion of saltpetre, but the storekeepers and others connected with Mr. Scovell's warehouse, deposed that no explosive matter of any kind was kept on the premises, and that the first explosion of saltpetre took place in a distant store some hours after Mr. Braidwood's death. They stated that the upper floor of Mr. Scovell's warehouse was filled with bales of cotton which had been packed by hydraulic pressure, and that when the fire reached that floor the bales expanded, causing the beams to give way, and with them forcing out the sides of the building. The coroner in summing up told the jury that if the fall of the wall arose from an explosion of combustible matter on the premises, the parties keeping such matter on their premises in a crowded neighbourhood were liable to be indicted for a misdemeanour, even if no fire took place or loss of life was sustained; but when death ensued from such a cause, the offence would be one of manslaughter. He, however, left it to the jury to say whether the fire was occasioned by the explosion of any combustible matter, and whether such explosion caused the falling of the wall. There was, however, no evidence that it was caused by an explosion, and if the jury were of that opinion, their verdict would be one of accidental death. The jury, after a consultation of an hour and a half, stated that they desired an adjournment for the production of Messrs. Scovell's books, and an explanation of what were the contents of the warehouse and the portion of building in which the saltpetre was placed. After some discussion several witnesses were called to give explanation on these points and on the mode in which the warehouse was built. The jury again retired, and on their return the foreman delivered their verdict as that of Accidental Death, and, on behalf of the jury, passed a high eulogium upon Mr. Braidwood, and expressed their regret at his death.

ELECTION OF SHERIFFS.—The liverymen of the City of London met on Monday in Guildhall, in accordance with ancient usage, for the election of Sheriffs of London and Middlesex for the year ensuing. The Aldermen in rotation for the office and the other principal citizens are said to have evinced an uncommon desire to postpone their pretensions for a year, until the heir apparent to the Throne attains his majority, for a reason well understood and appreciated. Only two gentlemen therefore were put in nomination—Mr. George Joseph Cockerell and Mr. William Holme Twentyman, who on a show of hands were declared to be duly elected.

HARROW SCHOOL.—The first stone of the "Vaughan Library" will be laid by Lord Palmerston on Thursday next, July 4, immediately after the speeches. This building, intended to commemorate the Head Mastership of Dr. Vaughan, will be erected from a design furnished by Mr. G. G. Scott, who was also the architect of the chapel. The subscription to the library fund amounts to 4,600*l*., and the whole of the ground between the chapel and the Head Master's house has been secured for the site.

THE STRIKE IN THE BUILDING TRADE.—On Monday evening one of the most important and influential meetings ever held in the building trade took place at Radley's Hotel, to consider the steps to be taken by the masters against the determined combination of the trades unions. Nearly the whole of the leading firms, employing nine-tenths of the building labour of the metropolis, were present, and the senior partner of the firm

of Cubitt & Co., of Gray's Inn Lane, presided. After a short discussion it was resolved, without a single dissentient voice, that on and after the 1st of July the system of payment by the hour, which has been found to work so advantageously with the great firms that have already adopted it, should be carried into effect by all employers as the rule for all their business engagements for the future. On Saturday evening the masons of London and its vicinity called a meeting in the Westminster Road, at which it was resolved to ask the Council of the Royal Institute of Architects to arbitrate between them and the masters. The Council have expressed their readiness to do so if each party consented to abide by their decision, but it is understood that the masters have refused to reopen the case.

M. Blondin.—On Friday evening M. Blondin gave a private performance at the Crystal Palace, in the presence of the directors, on a rope only 10 feet from the ground, in which he surpassed all his previous feats, dancing in baskets, on stilts, and in wooden shoes without his balance pole, traversing the rope in a four-legged chair, and playing the violin and drum. It was, on the whole, the most extraordinary performance of the kind that has ever been witnessed, and was infinitely more interesting to general spectators than any dangerous exhibition on a rope at a great height from the ground. A notion has got abroad that M. Blondin has offered 100*l.* in vain for some one to consent to be wheeled in the barrow across the rope, and this erroneous impression has led to his receiving nearly a thousand letters from all parts of the country, offering the services of the writers in return for the money. No person, however, is needed, for no future attempts of the kind will be made at the Crystal Palace.

Sailing of the Great Eastern.—The Great Eastern having embarked the troops for Canada on Tuesday and Wednesday, sailed from the Mersey on Thursday on her voyage to Quebec, steaming down the river with both paddles and screw. An immense concourse of people assembled to witness her departure and loudly cheered her as she passed, while salutes were fired from the landing stages and the forts.

Murder and Attempted Suicide.—On Monday evening a married woman, named Palethorpe, residing at 15, Northampton Street, near the Old St. Pancras Road, attempted to murder her three children by poison, and subsequently to commit suicide by the same means. The unfortunate woman, who is 37 years of age, occupied the first floor back room of the house, and had three children, aged 6, 4, and 2, whom she supported by slop work, from which at the most she derived a miserable pittance of 5*s.* a week; her husband having deserted her about 12 months since. On Monday evening she was informed that her husband had a few days ago sailed to America with another woman. This had such a depressing effect upon her mind, that she visited several chemists' and surgeons' shops, and purchased a quantity of laudanum, of which she gave a portion to the children and took the rest herself. When the neighbours were alarmed by the continued stillness of her room, the second child was found dead in her arms, but the three others with the mother herself were still alive, but in so dangerous a condition that it was necessary to remove them to the Infirmary of St. Pancras Workhouse, where they are likely to recover. In her room were found two bottles containing laudanum, and a letter stating that she was in great distress, and wanted her goods sold, as she was about leaving this world, and the proceeds to be applied towards paying her bread bill and other expenses. On Thursday the mother was taken before the magistrate on the charge of murdering the child, and was remanded; but she was so ill that it was ultimately considered proper that she should be committed at once, in order that she might be placed in the infirmary of the prison.

The Public Health.—The Registrar General's Weekly Return states that the total number of deaths registered in London, in the week that ended Saturday June 22nd, was 1077. The average number in the corresponding weeks of the 10 years 1851-60, corrected for increase of population, was 1119. The present return is therefore 42 below the average. During the week the births of 882 boys and 867 girls—in all 1749 children, were registered in London. In the ten corresponding weeks of the years 1851-60 the average number was 1632.

Provincial.

Aldershot.—No less a sum than 1,421,153*l.* has been expended at Aldershot in the purchase of land, erection of barracks and huts, supply of water, and other works. The Government have approved of further works which will cost 91,563*l.*, and a vote for 54,563*l.* towards that sum will be proposed this session.

Birmingham.—The whipmakers of this town are on strike against the employment of women in the trade of whipmaking.

Guildford.—On Wednesday, the 19th, the 2d battalion of the Scots Fusilier Guards marched from Kingston to this town on their way to Aldershot, the distance being 18 miles. As the regiment was to be absent from barracks for five weeks the men were obliged to carry all their things or lose them, and consequently their knapsacks weighed about 47 lbs. To lighten this weight most of the men had on two pairs of trousers, and likewise wore their usual bearskin caps and tight stocks. The battalion left Kingston at 6 o'clock in the morning. On arriving at Cobham each man had a pint of beer and bread and cheese, which was paid for by the officers. On the march some idea may be formed of the state of the men from the fact that on arriving at a horse-trough in front of any public-house they drank out of it, and dipped their heads in the water. About 2½ miles from Guildford, a private called Norton fell out from the extreme heat of the weather, but was ordered to fall in again, as he had but a short distance to walk. He did so, observing that he would not fall out again, but would rather fall dead on the road. Just before entering the town, however, he fell down, and died in the course of the evening. The battalion came into the town, but before proceeding to their respective billets two other men, named Griffith and Horner, also fell in the street from the same cause. A *post mortem* examination was made by the assistant-surgeon of the regiment, who ascertained that death had been caused from congestion of the brain, produced by a long march under a hot sun. The jury, after some consultation, adjourned the inquiry, in order that the surgeon who attended deceased when he first fell out, and the sergeant of the company, might attend. On Tuesday both these officers were examined, and at the close of their evidence the jury returned a verdict of Death from Natural Causes, the result of sun-stroke received on the march between Kingston and Guildford. The deceased, who had a good conduct stripe, and was much respected, was buried on Friday in this town with military honours.

Manchester.—On Wednesday, Mr. Edward Williamson was again brought up at the City Police Court, charged with extensive frauds and forgeries committed by him whilst agent in this city for the Royal Exchange Insurance Company. Two fresh charges were brought against him, and at the close of the evidence in support of these, the magistrates committed him for trial at the assizes.

Reigate.—There is little doubt that Franz, one of the perpetrators of the Kingswood murder has at length been discovered. A German was apprehended on Friday night, on a charge of being in one of the houses in the City of London for an unlawful purpose. His dress and general appearance corresponded exactly with those of one of the men, and after he was lodged in Newgate it was ascertained that for several days he had been living at a lodging-house in Wentworth Street, Whitechapel, under the assumed name of M'Donald, and some articles of clothing were found which tended strongly to strengthen the suspicion against him. Several persons were subsequently brought up from Reigate and Kingswood, who identified him as one of the two men who were seen there at the time of the murder. At the Mansion House on Thursday he was brought up for examination, but as there was no person present who could identify him, the prisoner was remanded for further examination. The necessary evidence as to identity was given yesterday, and the Lord Mayor ordered the prisoner to be taken before the local magistrates for examination. The jury at the inquest returned a verdict of Wilful Murder against some person or persons unknown.

Rochdale.—Mr. Cobden paid his long promised visit to the electors of this borough on Wednesday evening, and was received with enthusiasm by crowds of people on his arrival, and afterwards by a public meeting of some thousands of the inhabitants, presided over by the Mayor. Mr. Cobden spoke for an hour and a half, his observations being directed chiefly to refute the opinion that the French Emperor and Government were to be held responsible for the increase of the naval armaments of England, or that the French navy had been formidably and unduly augmented. The following is a summary of his speech:—

While reserving the expression of any judgment as to the Volunteer movement in general, he wished now to say, after no small experience in France, that so far as to there being danger from that country to warrant such a preparation, in his opinion they acted with perfect propriety in refusing to form a Rifle Corps in that town. When they came to that decision, the French Government were entering on the subversion of their commercial system, by throwing their markets open to the products of this country, and opening the markets of England to the productions of France. Was not this *primâ facie* evidence to make us pause before believing what was said by certain Admirals, who offered no fact in proof of their assertion, that the rulers of France were meditating an invasion of England without cause of quarrel or grievance assigned? On this fallacy was based a claim upon the pockets of the English people, which must be counted by millions sterling per annum. But he spoke to them also in the character of their representative, who was placed in a responsible and delicate position in reference to this very question. At the time so many meetings were held and such strong language uttered in England to encourage the establishment of Rifle Corps, he was in Paris with the known object of promoting a Treaty of Commerce between this country and France. If the French Emperor had, then, any such design as to make an attack upon England, would it not have convicted him of the most absolute folly that he should at the same time have been disturbing all his commercial interests, setting ironmasters and cotton spinners and all the great capitalists in France against him, when he would have required the support of all these interests to abet him in any attack upon Great Britain? Looking on the Emperor of the French as an intelligent being, which was his great characteristic, for he was a remarkably intelligent man, what must we have said of his conduct in proposing at the same time to adopt a policy which would knit these two countries in the bonds of commercial dependence, so that it would have been increasingly difficult to cause a rupture between them, while he was also arming ships of war for piratical expeditions [illegible] us? However, he did not ask his hearers to [illegible] probabilities for a judgment in this matter; there [illegible] which any man in the world had the opportunity of [illegible] and to which he would also appeal. For the last [illegible] had been a tacit understanding that in the [illegible] peace the French navy should be little more than [illegible] England, and during all that period the French [illegible] penditure had been little more than half of what we [illegible] selves spent in the same way. He would candidly [illegible] before taking a step in reference to the recent [illegible] satisfied himself upon the facts as to the alleged [illegible] of French armaments, and had he found one fact [illegible] what was then stated in England at public meetings, that the French Government had done anything to [illegible] the proportions which had so long existed between the [illegible] of France and England, he should have suspected some [illegible] design, and should have considered himself a traitor [illegible] country had he allowed himself to be made the means [illegible] winking the English people by making them suppose the French Government were about to enter on a course of [illegible] mercial amity when there were grounds for believing [illegible] meditate a policy of hostility. But he had found that the [illegible] naval expenditure for the 10 years down to 1858 inclusive [illegible] only been rather more than half of what England had spent [illegible] her navy in the same time. He did not come nearer [illegible] because French estimates were not a fair criterion of [illegible] pended, as the amount was frequently altered by supplementary estimates, while the definitive, audited financial statements [illegible] French Government expenditure, which appeared after a delay [illegible] two years, were admitted, without cavil or reserve, to [illegible] thoroughly trustworthy. But though he would not speak [illegible] the expenditure of the last two years, there was proof that [illegible] was we ourselves who during that time had been making larger naval preparations in proportion to those of France [illegible] at any time of peace during the last century. It was [illegible] admitted fact that the number of men in the navy was [illegible] to all the expenditure upon it, and while last year the French voted 30,400 men and boys for their navy, we had [illegible] own. Even with the addition of all the able-bodied [illegible] in the French mercantile marine their naval force [illegible] would not be brought up to the number of our own. He [illegible] advocate for reducing our navy in any degree below the [illegible] portion to the French which the exigencies of our service [illegible] quired. On the contrary, if the French Government showed [illegible] sinister design in increasing their navy to equal ours [illegible] offering every explanation in order to prevent such [illegible] absurdity, he would rather vote 100,000,000*l.* sterling [illegible] allow the French navy to be raised to a level with ours. The answer to the question how it was there should [illegible] colour of evidence to warrant the cries of alarm for the [illegible] superiority of our own naval armaments was to be found [illegible] the recognised fact that the affairs of our Admiralty were [illegible] deplorably mismanaged, and the money at its [illegible] disastrously thrown away. He then referred to what he [illegible] the most lamentable, the most deplorable civil strife now [illegible] on in America. He hoped our Government would not [illegible] fere, and he deprecated our having sent 3000 troops to [illegible] since there was no prospect of an attack being made upon [illegible] by Americans, and the act might engender ill-feeling in the breasts of the Americans towards us. After briefly [illegible] of co-operative societies and Parliamentary reform, he [illegible] his seat amidst great applause.

Saddleworth.—On Saturday a destructive [illegible] occurred in the Greenfield Valley near this town. The water rushed down from the hills with terrific violence, sweeping everything before it, and destroying property to an immense amount. An old woman, her grand-daughter, and another child, were washed out of their house by the torrent and drowned.

Ireland.

The Catholic University.—On Sunday last the Very Rev. Monsignor Woodlock, late President of All-hallows College, was solemnly inaugurated Rector of this University in the room of Dr. Newman, [illegible] the University Chapel, [illegible] bishop Cullen, in the University Chapel, [illegible] Green. The ceremony consisted in his reading [illegible] creed of Pope Pius IV. in Latin, as his confession of faith, which he did kneeling before the Archbishop, who occupied his throne upon the altar, wearing [illegible] mitre with white vestments.

Scotland.

The Wallace Monument.—On Tuesday, being [illegible] anniversary of the Battle of Bannockburn, the foundation stone of the Wallace Monument was laid by the Duke of Athol, on the Abbey Craig, near Stirling. The monument is to be an imitation of a [illegible] baronial tower, 200 feet high and 36 feet square. [illegible] site commands a magnificent view of the broad [illegible] which lie the plain of Bannockburn, the [illegible] Stirling, and those picturesque reaches of the [illegible] among which Wallace gained his victory. The procession was marshalled in the King's Park at Stirling, [illegible] presence of an immense concourse of spectators, [illegible] marched thence to the craig, which is two miles distant from the town. It included the Artillery Corps, the Rifle Volunteers, the Royal Engineers, the Free Gardeners, [illegible] Freemasons, Odd Fellows, [illegible] of St. Crispin, and the different civic [illegible] front of the latter were borne a number of interesting relics, including the swords of Wallace, Robert Bruce, and Sir John Graham. Sir Archibald Alison addressed the assemblage, and in thanking, in the name of [illegible] present, the building committee, said that [illegible] gathering had mustered near that spot since the [illegible] when the army which fought at Bannockburn assembled under the Abbey Craig. Mr. Sheriff Glassford [illegible] then thanked the subscribers to the monument [illegible] said that Scotland and England now stand side by side, but their offspring should remember that they [illegible] from separate mothers. The Rev. Dr. Rodgers, [illegible] tary, moved a vote of congratulation to the [illegible] family, represented in the male line at the [illegible] General Sir Maxwell Wallace. At a banquet which [illegible] place in the Corn Exchange Hall, "The Memory of Wallace" was proposed by Sir Archibald Alison, [illegible] Bruce by Sheriff Bell, and that of Scottish [illegible] by Professor Blackie.

Railways.

The Fatal Accident on the North Western.—The inquest on the bodies of the two men killed by the falling of the goods train through the bridge between Leamington and Kenilworth terminated on Friday. Captain Tyler, the Government inspector, who was examined, said that railway companies were getting into the habit of putting more traffic on their lines than they were originally constructed to bear. It would, he said, if persisted in, lead to many accidents. The jury by their verdict support this opinion, for they ascribe the accident to the insufficiency of the bridge. They find that there was a crack in the second girder which had existed long enough to allow of its detection. They do not assert that the omission to detect this flaw amounted to criminal neglect in any servant of the company, but they find that Elliot Sewell, the inspector of the permanent way, had not satisfactorily performed his duty, that the girders, even if originally sound, were insufficient to sustain the strain of an engine weighing upwards of 30 tons, and that this fact ought not to have escaped the notice of Henry Woodhouse, the engineer in charge of the line, although they do not hold him to have been criminally culpable. They append to their verdict a recommendation that the resident engineers and superintendents of locomotives should in all cases inform each other of facts necessary to ascertain the strength of the permanent way, in relation to the weight to be carried by it.

Accident on the North Staffordshire.—On Friday evening an accident of a very fearful character took place on this line. The train was in full speed about two miles from Burton-on-Trent, when the engine and guard's van broke away, and were precipitated over the embankment. The driver and guard were killed on the spot; the stoker was so dreadfully scalded that he died on Saturday morning; one passenger, Mr. Rogers of Uttoxeter, received a fractured leg, another had his ear cut off by the force of the shock, and about six others were more or less injured. The inquest was opened on Monday at Tutbury, and was ultimately adjourned for a few days, in order that the Secretary of State might be communicated with in reference to a Government inspector being sent down to investigate the matter.

Accident on the South Western.—On Thursday, the 20th, a serious accident happened at the Kingston Junction. In consequence of Hampton Races, several additional trains ran, some of which returned empty to London. Whilst one of these empty trains was crossing the junction, a Southampton train ran into it, smashing two or three carriages, and throwing several down the embankment into the fields below, causing the destruction of a considerable amount of property, but unattended with injury to life or limb. The Southampton engine was slightly injured, but otherwise the train sustained no material damage. The line was blocked up for some time.

Obituary.

The Lord Chancellor died suddenly on Sunday morning at his residence, Stratheden Lodge, Knightsbridge. On Saturday his lordship presided in the Court of Chancery, and in the afternoon attended the Cabinet Council in Downing Street. To his colleagues he appeared cheerful, and full of mental vigour. In the evening he entertained a party of 18 friends at dinner, and showed no symptoms of illness. At 1 o'clock his lordship bade his daughters good night in the drawingroom, and retired to bed. On Sunday morning, shortly before 8 o'clock, his butler as usual entered his bedroom, and was greatly alarmed to find his lordship seated in a chair motionless, with his head thrown back and blood flowing from his mouth. On his approach he found his lordship insensible, and at once gave alarm to the household. Medical men were immediately sent for, but they declared that his lordship had been dead at least two hours, death having been caused by a rupture of one of the principal arteries in the region of the heart, internal bleeding causing suffocation. The Right Hon. John Campbell, Lord Campbell, was the second and youngest son of the Rev. Dr. George Campbell, minister of Cupar, by the only daughter of Mr. John Hallyburton, of Fodderance. He was born at Springfield, Cupar, in 1779, and was consequently in his 82d year. He received the rudiments of his education at the grammar school of his native town, whence he removed at a comparatively early age to enter as a student at the University of St. Andrew's. After taking the degree of Master of Arts he came to London to try his fortune at the English bar, and entered his name among the students of Lincoln's Inn. He was called to the bar in 1806. While a student of Lincoln's Inn, with an honourable desire of independence, he acted as one of the parliamentary reporters on the *Morning Chronicle*, and occasionally employed his pen on important trials and dramatic critiques. By indomitable perseverance and industry, after the toil of years, he gained renown in his profession; and before he obtained his "silk gown" was considered one of the best leading counsel. He published early in his career four volumes of Nisi Prius Reports. It was not until 1827 that he obtained the long-sought honour of being made a King's counsel. In 1830 he was first returned to the House of Commons for Stafford, and strenuously supported Parliamentary reform, and was again returned at the ensuing general election. In the next Parliament of 1832 he obtained a seat for Dudley, having been appointed Solicitor General by Earl Grey, in place of the late Sir William Horne. He sat for Dudley till he was made Attorney-General in 1834, when he was defeated by a large majority. In May following he was elected for the city of Edinburgh in conjunction with the late Lord Dunfermline. He continued to represent that city up to June, 1841, when he was appointed Lord Chancellor of Ireland by Lord Melbourne, an office he held only for a few months. On the return of the Whig party to office in 1846, after the resignation of the late Sir R. Peel, Lord Campbell joined the Cabinet, and was appointed Chancellor of the Duchy of Lancaster. In 1850 he was appointed Lord Chief Justice of the Queen's Bench, in succession to Lord Denman. He held that post until Lord Palmerston's accession to office in 1859, when he appointed Lord Campbell to be Lord Chancellor. His lordship married in 1821, Mary Elizabeth, eldest daughter of Sir James Scarlett (afterwards Lord Abinger), by whom, who was created Baroness Stratheden in 1836, and who died about 15 months since, he leaves issue three sons and four daughters—namely, William Frederick, Lord Stratheden; the Hon. Hallyburton, and the Hon. Dudley Campbell; the Hon. Louisa, married to the Rev. W. S. White; the Hon. Mary, the Hon. Cecilia, and the Hon. Edina. His lordship was the author of "Lives of the Lord Chancellors of England" and "Lives of the Chief Justices of England."

Lord Abinger, brother-in-law of the late Lord Chancellor Campbell, died on Monday at Abinger Hall, the family seat, near Dorking. The Right Hon. Campbell Scarlett, Baron Abinger, of Abinger, in the county of Surrey, was the eldest of the three sons of Sir John Scarlett, who was created a peer on being appointed Chief Baron of the Exchequer. He was born in 1794, and was educated at Trinity College, Cambridge, where he graduated M.A. in 1818. He was educated for the law, and was called to the bar of the Inner Temple in 1818. In 1835 he was elected M.P. for Norwich, and in 1841 was elected for Horsham, which he represented until the death of his father in 1844. He married, in 1824, the second daughter of Mr. George Smith, late Chief Justice of the Mauritius, by whom he leaves issue an only son, Lieut.-Colonel the Hon. William Frederick Scarlett, of the Scots Fusilier Guards, and two daughters, the Hon. Henrietta Elizabeth, married to the Hon. Otway F. Toler, and the Hon. Frances Mary. His lordship was brother of General the Hon. Sir James Yorke Scarlett, Adjutant-General; his Excellency the Hon. Peter Campbell Scarlett, late ambassador to the Court of Tuscany; and the late Baroness Stratheden.

Rear-Admiral the Hon. Frederic Pelham, C.B., who so recently resigned his office as one of the Lords of the Admiralty, died on the 21st inst. at his temporary residence at Brighton. He was the second son of the second Earl of Chichester by the eldest daughter of the fifth Duke of Leeds, was born in 1808, and married in 1841 the daughter of Mr. Rowland Mitchell, by whom he leaves a youthful family. He entered the navy in 1823; and saw much service in the Mediterranean, the coast of Spain, and other stations. During the Russian war he distinguished himself in the Baltic, and was nominated a Companion of the Bath for his services in 1855.

Rear-Admiral the Hon. J. F. Fitzgerald De Ros died on the 19th inst. at his residence in Piccadilly. He was the youngest son of Lord Henry Fitzgerald, third son of the first Duke of Leinster and Charlotte Baroness De Ros, and brother of the present premier peer of England and the Countess Cowley. He was born in 1804, and at the age of 14 he entered the navy and served on the Mediterranean and South American Stations. He was a Fellow of the Royal Society, and was the Author of "Travels in the United States and Canada," and of "Observations on the Maritime Resources of North America, and the State of the Dockyards and Navy."

Mr. Samuel Leigh Sotheby, the head of the well known firm of Sotheby & Wilkinson, the literary and artistic auctioneers, was accidentally drowned in the Dart on the 19th inst. In the course of last summer he removed from Norwood with his family to Buckfastleigh Abbey, for the purpose of enjoying trout fishing in the river, the right of which he has taken great pains to preserve. On the 19th he left his residence about mid-day to take a short walk, and, not returning as expected, his family became alarmed, and as night closed in without his return, the alarm increased, and parties were employed to make search for him. On the following morning his body was discovered in a shallow part of the river, lying on the left side, quite dead. Mr. Sotheby was connected with the literary world, not only in his business capacity, but as the writer of several important and expensive works of considerable value. His "History of Block Books" is one of the gems of literary antiquarianism, and he was just on the point of publishing an elaborate work on "The Autograph of Milton."

Mr. Braidwood, the Superintendent of the Fire Brigade, who was killed in the Great Fire at London Bridge on Saturday evening, was a native of Edinburgh. His father was a cabinet-maker in that city, and under him he served an apprenticeship to the same business. In 1824 he originated the Edinburgh Fire Brigade, previous to which the insurance offices had the management of that department. He continued superintendent of the Edinburgh Brigade from 1824 to 1832, and in 1832 he published a pamphlet on fires, their cause and prevention, which attracted so much attention that, immediately after its appearance, he was offered the situation of superintendent of the London Brigade, which he accepted, and retained during the long period of 30 years. It was through his ability and exertions that the force attained its present efficiency. On all matters affecting the security of the public buildings he was consulted by the Government, and of late years he held an appointment as superintending inspector of the Royal Palaces and Government establishments with reference to their protection from fire. He was conspicuous for watching over the movements of his men when they were likely to be placed in great peril, and would not permit them to take up a position or to enter any place until he was satisfied that they were not opposed to unnecessary risk. He was in his 61st year, and has left a widow and six children. He was a member of several scientific institutions. The Rev. Dr. Cumming in the course of his sermon on Sunday at the Scotch church, in Crown Court, referred to his death, and said that Mr. Braidwood had been upwards of 15 years past a member of his congregation; a leading and influential member of the educational and benevolent committees connected with the church; that he was marked in all his opinions and suggestions by no ordinary good sense, devotedness, and energy; and that to his wisdom and discretion he personally owed much of the success that had crowned his exertions as a minister. Of all the men he ever met, Mr. Braidwood was the most practical, self-denying, and disinterested. He had known him spend two days in investigating the elements of a difference between two good men on the same committee, and rejoicing with no ordinary delight on finding or rather creating, a happy issue out of all. His was real genius, whether in dealing with a material conflagration or a moral dispute. Patience, forbearance, rich common sense, and a general sympathy that endeared him to all, made his loss that of no common ally on account of his numerous and successful efforts to do good—for these were the distinguishing excellencies of his friend. Dr. Cumming said he felt his sudden removal no ordinary calamity to his flock, to his Scottish countrymen, and his own labours as a Christian pastor; but "he died on the post of duty, and whether it was the battle-field, or at the head of the fire brigade, the holiest place on earth on which to live or die was not on encaustic soil, or on tesselated pavement, but at the post of duty."

BIRTHS.—On the 23d inst, at 28, Princes Gate, Lady Constance Grosvenor, of a son—22d inst, at 11, Princes Gate, Lady Skelmersdale, of a daughter—24th inst, at Laverstoke House, Hants, the Lady Charlotte Portal, of a son—22d inst, at Riseholme, near Lincoln, the wife of the Bishop of Lincoln, of a daughter—19th inst, at 10, Great George Street, Westminster, the Hon. Mrs. John Gilbert Talbot, of a son—24th inst, at Canonteign House, Devon, the wife of the Hon. Fleetwood Pellew, of a son—17th inst, at Bedfords, Essex, the Hon. Mrs H. W. Petre, of a son—22d inst, at Edinburgh, the wife of J. T. Hopwood, Esq, M.P., of a daughter.

MARRIAGES.—On the 25th inst., by special license, at Capernuray Church, the Hon. William Spencer Flower, second son of Viscount Ashbrook, to Augusta Madeline Henrietta, eldest daughter of George Marton, Esq, of Capernuray Hall, Lancashire—20th inst., at Howth, Sir Charles Domvile, Bart., of Santry, to Lady Margaret St. Lawrence—20th inst, at the Parish Church of Danbury, Essex, George Gooch Clowes, Major 8th Hussars, youngest son of Lieutenant Colonel Clowes, late 3d Dragoons, of Broughton Old Hall, Lancashire, to Susan Caroline Wigram, eldest daughter of the Lord Bishop of Rochester—18th inst, at Kew, the Rev. Dacres Olivier, second son of Lieut.-Colonel Olivier, of the Manor House, Potterne, Wilts, to Emma Selina Eden, fourth daughter of the Lord Bishop of Moray and Ross—13th inst, at the Rectory, Maiden-Newton, Dorset, Lieut.-Colonel John A. Digby, to Diana Alicia, eldest daughter of the Hon. and Rev. William H Scott, rector of Maiden-Newton, &c.—2‍th inst, at St. Paul's Church, Knightsbridge, Captain Hartopp, of the Royal Horse Guards, eldest son of E. B. Hartopp, Esq., M.P., of Dalby Hall, Leicestershire, to Lina, second daughter of the late Thomas Howe, Esq.—22d inst, at St. Michael's Church, Chester Square, Colonel Charles Conway Mills, 94th Regiment, to Gertrude, second daughter of Samuel Charles Whitbread, Esq., of Cardington, Bedford.

DEATHS.—On the 24th inst, at Dover, Henry, son of Sir Henry Bold Hoghton, Bart., aged 18—20th inst, at Paris, Alexander Fraser, son of Sir John Cheape, aged 7 months—19th inst, at Wells, Somerset, Frances Gould Tudway, relict of the late J. P. Tudway, Esq., M.P. for Wells, aged 78—22d inst, at 5, Chester Street, Grosvenor Place, Marian, widow of the late Major-General Gabriel, aged 71—20th inst, at 8, King's Terrace, Southsea, General William Hallett Connolly, late of the Royal Marines Light Infantry, aged 79—23d inst, at Cheltenham, Susannah Anne, widow of the late Lieut.-Colonel George Procter, of the Royal Military College, Sandhurst, aged 67—16th inst, at Ewenny Abbey, Lieut.-Colonel Turbervill, of the 12th Regiment of Foot, a magistrate and deputy-lieutenant of the county of Glamorgan, aged 70—16th inst, at Fluder House, King's Kerswell, Devon, Lieut.-Colonel Edward Mason, aged 68—17th inst, at Brighton, Lieut.-Col. John Jopp, late of the Bombay Engineers, aged 68—26th March, at his residence, Corio Terrace, Geelong, Australia, Roger Kelsall, Esq, late Lieut.-Col. Royal Engineers, age 67—21st inst, at 5, Chandos Street, Cavendish Square, Joseph Hollingworth Adams, Esq., Commissary-General to her Majesty's Forces, aged 80—18th inst, at Harwich, from the accidental discharge of his rifle while at carbine practice, Henry Nunn Cox, only surviving child of the late Anthony Cox, Esq., of Harwich, Essex, Banker, aged 19—19th inst, at Hatton Castle, Douglas, J. M. Urquhart, wife of Garden W. Duff, Esq., of Hatton, and third daughter of B. C. Urquhart, Esq., of Meldrum and Byth—15th inst, at Durham, Honor Eyre, of Alfred Street, Bath, daughter of the late Rev. Anthony Fountayne Eyre, Canon Residentiary of York, aged 76—23d inst, at 9, Bedford Square, Dr. Clement Hue, M.D., Fellow of the Royal College of Physicians, for more than 40 years Physician to St. Bartholomew's Hospital, aged 82—14th inst, at the Rectory, Nymphsfield, Gloucestershire, the Rev. Charles Thorp, rector of Nymphsfield, aged 57—18th inst, at Boulogne-sur Mer, suddenly, the Rev. Broome Lake Witts, Incumbent of Hercham, Walton-on-Thames, aged 44—24th inst, at Dalston Nursery, Mary, the wife of Mr. Wm. Harrington, Nurseryman, of Kingsland and Dalston Nurseries, Middlesex.

Markets.

COVENT GARDEN, June 29.

The supply of most things continues to improve, and that of Vegetables is now nearly sufficient for the demand. Good samples of Lettuces, Endive, and Artichokes come from France. Peas are plentiful. Grapes still fetch fair prices. Of Strawberries there is a good supply from the open ground. Cherries are also everywhere plentiful; also Asparagus, French and Broad Beans, young Carrots, and new Potatoes; the latter fetch 2d. per lb. Cucumbers are coming in more plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 8s to 12s	Cherries, French, p. lb., 2s to 3s
Grapes, per lb., 4s to 8s	Pears, per doz., 4s 6d to 8s
Strawberries, p. pun., 6d to 1s 6d	Apples, per doz., 6d to 1s 6d
Melons, each, 3s to 8s	Oranges, per 100, 6s to 10s
Peaches, per doz., 12s to 24s	Lemons, per 100, 6s to 10s
Nectarines, do., 12s to 20s	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Cauliflowers, each, 6d to 8d	Beet, per doz., 1s 6d to 2s
French Beans, p. 100, 9d to 1s 6d	Celery, p. bundle, 1s 6d to 2s 6d
Green Peas, p. quart, 1s to 1s 6d	Onions, p. ½ sieve, 1s 6d to 4s 6d
Greens, per doz., 6s to 8s	Asparagus, p. bundle, 3s to 6s
Cabbages, do., 1s 3d to 1s 6d	Rhubarb, p. bundle, 6d to 9d
Potatoes, p. ton, 80s to 120s	Tomatoes, p. doz., 6s
— new, per lb., 6d to 2s	Shallots, per lb., 1s 6d
— — per cwt., 10s to 10s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 4d to 6d	Endive, p. score, 1s to 1s 6d
Carrots, new, do., 1s 3d to 1s 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., 1s 3d to 1s 6d
Cucumbers, each, 9d to 1s 6d	Parsley, p. 12 bunches, 4s to 6s
Artichokes, each, 4d to 6d	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

Smithfield, Thursday, June 27.

Prime Meadow Hay	75s to	84s	Clover	90s to	120s
Superior do. (old) ..	88	100	New Clover	—	—
Inferior do.	36	50	Do. second cut ..	—	—
New do.	50	80	Straw	30	40
Rowen	—	—			

Davis & Co.

Cumberland Market, Thursday, June 27.

Sup. Meadow Hay ..	108s to	118s	Inferior Clover ..	84s	108s
Inferior do.	70	98	New do.	70	90
New do.	70	90	Straw	38	45
Superior Clover ..	114	120			

Joshua Baker.

Whitechapel, Thursday, June 27.

Fine old Hay	90s to	100s	Fine old Clover ..	110s to	120s
Inferior do.	60	80	Inferior do	80	100
Very inferior	—	—	Fine 2d cut	95	105
Prime New Hay ..	—	—	Inferior do.	—	—
Straw	36	38	Fine New Clover ..	—	—

HOPS.—Borough Market, Friday, June 28.

Messrs. Pattenden & Smith report that the plantation accounts at Maidstone market yesterday were very much worse; the strong and vigorous Middle Kent grounds are daily becoming more infested with lice and fresh fly. The reports from other districts are also worse, with the exception of a portion of Worcester and Canterbury. Market very firm for all descriptions of Hops at full prices. Duty 60,000*l.* to 70,000*l.*

BUTTER MARKET.—June 28.

Best Fresh Butter	14s. per dozen lbs.
Second do. do.	12s. .. ..

Pork, 4s. 4d. to 5s. 4d. per 8 lbs.

COAL MARKET.—June 26.

Bell's Primrose, 13s.; Byass's Bebside West Hartley, 15s. 6d.; Holywell, 16s.; Lambert's West Hartley, 15s. 3d.; Tanfield Moor, 12s. 9d.; Walker's Primrose, 12s. 3d.; West Hartley, 15s. 6d.; Wylam, 15s. 6d.; Walls End Gosforth,

5s 3d.; Walls End Hetton, 18s. 6d.; Walls End Kepier Grange, 16s. 9d.; Walls End Cassop, 16s. 9d.: Walls End Hartlepool, 18s. 6d.; Walls End Heugh Hall, 16s.; Walls End Trimdon Thornley, 15s. 3d.—13 ships at market.

BRITISH WOOLS.—London, Friday, June 28.

Our market continues in a dull state, and for the most part prices merely nominal.

	s.	d.		s.	d.			s.	d.		s.	d.
South-down Hoggets..	1	3	to	1	3½		Leicest. Wethers	1	2	to	..	
Half-bred ditto..	1	3	—	1	3½		Ditto Hoggs ..	1	3	—	..	
Down Ewes ..	1	2	—	1	3		Combing Skins	0	10	—	1	5
Kent Fleeces ..	..		—	..			Flannel Wool .	1	0	—	1	5
							Blanket ditto ..	0	6	—	..	

METROPOLITAN CATTLE MARKET.

MONDAY, June 24.

The number of Beasts is smaller than for many weeks past; the trade is consequently active at higher prices. The supply of Sheep and Lambs is rather smaller. Trade is slow, but on the average prices are higher. There is also a small improvement in the Calf trade. From Germany and Holland there are 610 Beasts, 4430 Sheep, and 182 Calves; from Spain, 260 Beasts; from Scotland, 450; from Norfolk and Suffolk, 1500; and 300 from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c.	.. 4 10 to 5 2	Best Long-wools.	.. to ..
Best Short-horns	4 8 — 5 0	Do. Shorn	.. 4 8 — 5 0
2d quality Beasts	3 8 — 4 4	Ewes & 2d quality	.. — ..
Best Downs and Half-breds	.. .. to ..	Do. Shorn	.. 4 0 — 4 6
		Lambs ..	.. 5 4 — 6 4
		Calves ..	.. 4 0 — 4 10
Do. Shorn	.. 4 10 to 5 2	Pigs ..	.. 3 8 — 4 6

Beasts, 3210; Sheep & Lambs, 26,750; Calves, 285; Pigs, 440.

THURSDAY, June 27.

We have a large supply of Beasts, but the demand is good, and Monday's quotations are fairly supported. Sheep and Lambs are not quite so plentiful as on Thursday last; a better clearance is therefore effected, and in some instances prices are rather better. The number of Calves is again large, but trade is rather more active. Our foreign supply consists of 332 Beasts, 1180 Sheep, and 361 Calves. Milch Cows 95.

	s d s d		s d s d
Best Scots, Herefords, &c.	.. 4 10 to 5 2	Best Long-wools .	.. to ..
Best Short-horns	4 8 — 5 0	Do. Shorn	.. 4 8 — 5 0
2d quality Beasts	3 8 — 4 4	Ewes & 2d quality	.. — ..
Best Downs and Half-breds	.. .. — ..	Do. Shorn	.. 4 0 — 4 6
		Lambs ..	. 5 4 — 6 4
		Calves ..	.. 4 0 — 4 10
Do. Shorn	.. 4 10 — 5 2	Pigs ..	.. 3 8 — 4 6

Beasts, 1335; Sheep & Lambs, 11,410; Calves, 621; Pigs, 180.

MARK LANE.—Monday, June 24.

The supply of Wheat from Essex and Kent to this morning's market was very small; nevertheless a reduction of 2s. per qr. upon the rates of this day se'nnight was necessary to effect a clearance. The attendance was limited, and the demand for foreign Wheat much so; business was confined to such cargoes as continued to be forced from the ship, which could only be done at a decline of 1s. per qr., and in some instances 2s. per qr., upon the rates current on Monday last. Barley is a slow sale at about last week's quotations. Beans and Peas are rather cheaper. The Oat trade is dull, and we reduce our quotations 6d. to 1s. per qr. For Flour there is very little demand, and barrels are 1s. cheaper.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk..White	46—58	Red	46—60
— — fine selected runs..ditto	50—76	Red	50—65
— — Talavera	51—67		
— Norfolk	—	Red	—
— Foreign	40—74		
Barley, grind. & dist., 28s to 30s.. Chev.	40—45	Malting .	38—40
— Foreign..grinding and distilling	27—30	Malting .	40—42
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—25
— Irish ....Potato	26—28	Feed ..	21—24
— Foreign........Poland and Brew	22—25	Feed ..	18—23
Rye	35—38	Foreign .	—
Rye-meal, foreign	—		
Beans, Mazagan....37s to 40s....Tick	40—43	Harrow .	40—43
— Pigeon ......41s — 45s..Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
Peas, white, Essex and Kent ..Boilers	36—40	Suffolk .	40—42
— Maple .... —s to —s ...... Grey	40—42	Foreign .	35—38
Maize .... White	—	Yellow..	—
Flour, best marks delivered..per sack	50—55		
— 2d do.................... ditto	38—50	Country.	38—50
— Foreign ....per barrel	26—32	Per sack	42—50

FRIDAY, June 28.

The weather during the past week has been warm and showery, and is reported as highly beneficial to the growing crops. Wheat during the past week has again been offered more freely than buyers could be found for it, which has caused a further decline of 1s. to 2s. per qr throughout the kingdom. The decline, however, is at last inducing some reflection on the part of holders, and in several markets during the last few days less disposition to force sales has been evinced. A renewed inquiry has also arisen from France, and during the week several floating cargoes have been disposed of for that country. Spring Corn continues to follow Wheat; Barley and Oats in the majority of markets were written 6d. to 1s. lower; Beans and Peas 1s., in some instances 2s. Here the top price of Flour has remained unaltered, but in many of the country markets English, and here foreign, has been obtainable at 1s. to 2s. per sack and 6d. to 1s. per barrel decline. During the past eight days 144 vessels have been reported off the coast. A further decline in prices and some demand for the Continent have given a fresh impetus to the floating trade, and a fair amount of business has been transacted in cargoes off the coast. Most of the Wheat cargoes sold have been directed to France. The arrivals of English grain this week are small, of foreign Barley large, and of Wheat and Oats moderate. The attendance at this morning's market was not large. Wheat, both English and foreign, was held firmly for Monday's prices, but the business transacted was limited. Spring Corn sells slowly at about previous quotations.

ARRIVALS FROM JUNE 24 TO JUNE 28.

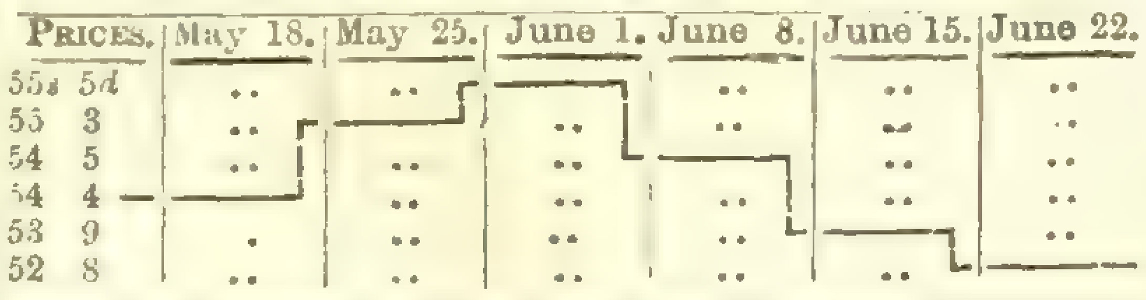
	Wheat.	Barley.	Oats.	Flour.
English ..	420 qrs.	— qrs.	— qrs.	760 sks.
Irish	— "	— "	— "	— "
Foreign ..	14510 "	9200 "	12530 "	{ 6990 " { 10500 brls

LIVERPOOL, Tuesday, June 25.—This morning's market had a better attendance of both local and country buyers than of late, and a fair consumptive business has been done in Wheat at the quotations of Friday last. Flour was not much asked for, but there is less pressure on the part of holders. Indian Corn had a fair inquiry, and American descriptions brought an advance of 6d. per qr., but most qualities of round on the contrary, being more plentiful, were 6d. cheaper. Oats and Oatmeal are without alteration. Beans and Peas have each given way 1s. per qr. Barley unchanged. The market closed with less depression.

FRIDAY, June 28.—There is materially no change in the market to-day, but the downward tendency appears checked, and the little business done has been at the full prices of Tuesday.

Averages	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
May 18..	54s 4d	35s 11d	25s 0d	32s 0d	44s 4d	40s 5d
— 25..	55 3	34 11	25 1	33 8	44 6	39 9
June 1..	55 5	34 3	25 2	33 1	45 1	40 7
— 8..	54 5	32 8	26 0	30 6	44 10	39 10
— 15..	53 9	34 3	25 2	41 2	44 3	44 1
— 22..	52 8	32 6	25 2	35 5	44 0	38 8
Agg. Aver.	54 4	34 1	25 5	34 4	44 6	40 1

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



PRIVATE TUITION.—The Rev. G. Henslow, Son of the late Professor Henslow, and M.A. of Cambridge, who took Honours in three triposes, Mathematical, Divinity, and Natural Science, has VACANCIES for TWO PUPILS preparing for the Public Schools, &c., or for the Universities. N.B. Geology and Botany form a part of his system of education. Further particulars on application.—Address, Rev. G. Henslow, Steyning, Sussex.

Oxford Incorporation.

WANTED, as GARDENER, for the INDUSTRIAL SCHOOL at Cowley, a single Man or Widower, without incumbrance, not less than 25 nor more than 45 years of age. Salary 20l. per annum, with Board, Lodging, and Washing, and such further sum as the Council of Education may direct. The person to be appointed will also act as Porter, and must be fully competent to instruct the Boys in Gardening and the Cultivation of about 7 acres of Land attached to the School. —Applications in the handwriting of Candidates, together with recent testimonials of character, endorsed "Application for Situation of Gardener," to be forwarded to me sealed on or before Wednesday, July 10. The Election will take place at a meeting of the Board of Guardians on July 11.—By order,
Oxford, June 29. H. Jacob, Clerk to the Guardians.

WANTED, 6 or 8 first-rate BUDDERS and GRAFTERS.—Liberal Wages will be given. Applicants must state how many years' practice they have had, and in whose Nurseries.—Address B. U. D., Messrs. Hurst & M'Mullen, 6, Leadenhall Street, London, E.C.

WANTED, a sober industrious Man, a good hand at Potting Plants, Painting and Glazing, and who would make himself generally useful. Constant place. Wages 1l. per week, which may be increased.—Apply to Mr. Bird, Nurseryman, Green Lanes, Stoke Newington, N.

WANTED, as GARDENER in a single-handed place, a steady, industrious, and intelligent Single Man, from 40 to 45 years of age. He must be a good Vegetable Grower, and capable of managing a Lawn and Flower Garden. There is no glass, with the exception of a frame or two. A man who could milk occasionally, in the absence of another servant, would be preferred. He will live in the house.—Address, by letter only, with references, 257, *Midland Counties Herald* Office, Birmingham.

WANTED, as GARDENER (Single-handed, with aid if required), a married Man without incumbrance, or only one child. He must thoroughly understand the culture of Vines, &c., but no Early Forcing required. If Wife is experienced in Laundry or Needlework she will also be employed. Lodge to live in, with fire, candles, and milk; wages 17s. per week; Wife to be paid as employed.—Address, with full particulars of age, length of service and with whom, to A. B., Messrs. Cartwright, Law Stationers, Chancery Lane, London, E.C.

WANTED, an intelligent AGRICULTURAL LABOURER to take charge of about 30 boys labouring on a Farm of 20 acres. He would be required to devote the whole of his time to the duties of the Institution. Also a HOUSEKEEPER, who would be required to superintend the house work of the Institution. A married couple without incumbrance would be preferred. Some knowledge of Cows and Butter making is absolutely necessary. Coals, lighting, rooms, and 20s. offered to a really useful couple.—Apply by letter, The Governor, Reformatory, Blackley, near Manchester.

WANT PLACES.—Letters to be Post Paid.

GARDENER (Head).—Age 32; a thorough practical knowledge of his profession in all its branches, including Early and Late Forcing of Fruits and Flowers. Satisfactory references.—X. Y. Z., Post Office, Reigate, Surrey.

GARDENER (Head).—Married; has a thorough knowledge of his profession. Can also Manage Land, &c. Testimonials are of the highest order.—A. W., Elliven Cottages, New Road, Old Brentford, W.

GARDENER (Head or Single-handed).—Age 32, single; understands Early Forcing, and Gardening in all its branches. Good character.—B. A., Mrs. Reaves, Rosslyn Street, Hampstead, N.

GARDENER (Head Working).—Age 45, no incumbrance; understands Vines, Strawberries, Melons, and Cucumbers. Good recommendation.—A. A., Hart & Son, Guildford, Surrey.

GARDENER (Head).—Age 34, married; a practical industrious Man, has had great experience in Forcing of Fruits, Flowers, and Vegetables; also Flower and Kitchen Gardens. Four years' good character.—W. M., Bedford Nursery, Haverstock Hill, N.W.

GARDENER (Head). — Age 30, single; has a thorough practical knowledge of his profession in all its branches. Can be highly recommended by the gentleman he has just left, having been in his service five years.—F. W., Sion House, Lower Clapton, N.E.

GARDENER (Head).—Age 37, married; has had 20 years' practical experience in a Garden where Flowers, Fruits, and Vegetables have been successfully grown. Will be at liberty the first week in July.—T. P., Mr. Quickenden's, Harefield, Uxbridge, Middlesex.

GARDENER (Head).—Age 34, married; has a thorough practical knowledge of his profession; every description of Exotic Plants, Fruit, Flowers, and Kitchen Garden; Early and Late Forcing of Pines, Vines, Peaches, Melons, and Cucumbers, and Early Vegetables. Can take charge of Plantations and Grass Land if required. Highly recommended.—J. F., Mr. J. Veitch, Jun., Royal Exotic Nursery, King's Road, Chelsea, S.W.

GARDENER (Head, Working).—Age [illegible] no incumbrance; thoroughly understands [illegible] tion of Pines, Vines, Melons, Cucumbers, & [illegible] of Flower and Kitchen Gardens. Character [illegible] —F. H., Post Office, Clapham Common, [illegible]

GARDENER (Head).—Age 28, [illegible] experienced in Early Forcing, Pines, Vines, [illegible] Melons, &c., the Management of Stove and [illegible] Kitchen and Flower Gardens. Four years' good [illegible] A. B., 1, Princes Row, Pimlico, London, S.W.

GARDENER (Head).—Age 35, [illegible] practical knowledge of his profession, the Early [illegible] of Vegetables, Fruits, and Flowers, and Management [illegible] Kitchen and Flower Gardens. Four and a half years' character.—S. S., J. Veitch, Jun., Royal Exotic Nursery, [illegible] Road, Chelsea, S.W.

GARDENER (Head, where two or three are kept).—Age 34, married; well skilled in every [illegible] having had several years' experience with [illegible] all kinds of Early and Late Forced choice Fruits, Flowers, [illegible] Vegetables. References of first order.—[illegible] Stationer, Southampton Street, Camberwell, S.

GARDENER (Head).—Age 30; [illegible] acquainted with his profession, having had [illegible] perience in Early Forcing of Fruits, Flowers, and Vegetables, the Cultivation of Stove and Greenhouse Plants, [illegible] general routine of Flower and Kitchen Gardens; also the Management of Meadow Land. Can be highly recommended, having left in consequence of a change [illegible] George Davey, 17, South Street, St. [illegible] Brompton, London, S.W.

GARDENER (Head), or Forester [illegible] BAILIFF.—Age 40; a first-rate Gardener [illegible] unexceptionable character from late employer [illegible] Dairywoman.—A. B., 29, Princess Street, Edgware Road, [illegible]

GARDENER (Head, or Under).—Age [illegible] understands the Management of Land and [illegible] produce first-class testimonials.—B. B., Post Office, [illegible] Heath, near Brierley Hill, Staffordshire.

GARDENER.—Age 42, married; [illegible] understands his profession. Ten years' character.—[illegible] Post Office, Brentwood, Essex.

GARDENER, where one or more are kept.—Age 28, married, samll incumbrance; understands his profession in all its branches. 2 years' good character.—[illegible] Post Office, Godalming, Surrey.

GARDENER.—Age 35, married; understands Greenhouse, Vines, Flower and Kitchen Gardens. [illegible] years' character.—W. T., Mr. Collett's Library, [illegible] Middlesex.

GARDENER (Single-handed) in a gentleman's family.—Age 25; of sober and industrious habits, [illegible] have a good character from present employer.—[illegible] Moat, Charing, near Ashford, Kent.

GARDENER (Single-handed or Second).—Age 23, single; understands Forcing, &c., Flower and Kitchen Gardening. Excellent references can be given.—[illegible] Mr. James, Falcon Road, Battersea, S.W.

GARDENER (Under).—Age 22, single; 18 months' good character from last place.—A. S., 6, Paradise [illegible] Hammersmith, W.

GARDENER (Under).—Age 21, [illegible] six years' experience in the general [illegible] ing. Good references. Willing to pay a Premium [illegible] ments.—W. [illegible], 92, Hall Park, Maida Hill, W.

To Noblemen and Gentlemen, &c.

GARDENER, or GARDENER and BAILIFF [illegible] any nobleman or gentleman.—Age [illegible] brance; thoroughly practical and experienced [illegible] of his business; has grown Pines, Grapes, [illegible] Fruits and Plants to the highest perfection [illegible] obtained first class prizes at the London [illegible] Flower and Vegetable department is particularly [illegible] attended to. Has had much experience in the [illegible] of park plantations and pleasure grounds [illegible] heating of horticultural buildings, and [illegible] duties. The most unexceptionable references [illegible] from two noblemen, with whom he has lived [illegible] which will give entire satisfaction.—Y. Z., Mr. [illegible] Curator of the Botanic Gardens, Liverpool.

Laying-out Gardens from Plans.

FOREMAN.—To conduct the Works of Laying-out and Planting new Gardens. Can take charge [illegible] required. L. S. D., Mr. Cook, Stationer, [illegible] Harrow Road, W.

FOREMAN or SECOND GARDENER.—[illegible] single; thoroughly understands Stove and [illegible] Plants, fine Foliage Plants, Ferns, Forcing, &c. [illegible] monials.—A. B., 12, Royal Terrace, Royal Road, [illegible]

PROPAGATOR, or PROPAGATOR and [illegible] MAN.—First-class references.—A. B., [illegible] and Rare Plant Establishment, King's Road, [illegible]

BUDDER.—One of the Old School, [illegible] understands the Budding of Roses and Fruit [illegible] Training, Nailing, Layering, &c.—G. T., 4, Portland Place, [illegible] Portland Road, Notting Hill, W.

BAILIFF.—A practical Man from [illegible] has had great experience in Improving [illegible] Cultivating Land, Breeding, Rearing, Buying [illegible] Stock.—T. R. S., Mr. Newman, 38, West Smithfield, E.C.

STEWARD or BAILIFF.—Having had 20 years' ample practice in the East, South, and West [illegible] where Machinery was extensively employed, together [illegible] Planning and Erecting Buildings, Under-Draining [illegible] and Woods. Character first-class.—A. B., 17, Charles [illegible] Hampstead Road, N.W.

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The Gardeners' Chronicle Newspaper.

SATURDAY, JULY 6, 1861.

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[illegible] New Policies, [illegible], yielding 98,8l. 6s. 2d. of new [illegible], were issued during the year ending August 1, 1860.
[illegible] days' grace allowed to renew Life Insurances and 15 [illegible] which time, on payment [illegible] liable.
[illegible] members of Volunteer or [illegible] United Kingdom.

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News of the Week.

IN the House of Lords on Monday the East India Council Bill was brought up from the Commons and read a first time. On Tuesday the Subdivision of Dioceses Bill was lost on the question of going into committee by 68 to 11. The Landed Property Improvement (Ireland) Bill was read a second time. The Officers of Reserve (Royal Navy) Bill passed through committee. On Thursday the Harbours Bill and the Locomotive Bill were read a second time. The Portpatrick Harbour Bill and the Officers of Reserve (Royal Navy) Bill were read a third time and passed.

In the Commons on Friday Mr. B. COCHRANE moved that the existence of the Garibaldi Fund or of any other society, formed for the purpose of raising funds to assist a revolutionary party in any country with which we are in strict alliance, is inconsistent with the principle of non-intervention. The motion was opposed by Lord J. RUSSELL and other members, and was ultimately withdrawn. Major EDWARDS moved the issue of a writ for the borough of Wakefield. After three divisions on motions for adjournment it was agreed to adjourn the debate to Friday. The House then went into committee of supply, and agreed to the remaining votes on the Army Estimates. Votes were also taken for the Customs and Inland Revenue Departments, and the General Post Office. The London Coal and Wine Duties Bill passed through committee, and the East India Council Bill was read a third time and passed. On Monday, on the order for considering the Appropriation of Seats (Sudbury and St. Alban's) Bill, as amended, Mr. T. DUNCOMBE moved as an amendment that the order be postponed for three months. On a division the amendment was rejected by 204 to 28. Mr. STIRLING then moved to leave out the first clause, and in lieu thereof to insert another enabling the Universities of Scotland to return one member. After some discussion the motion was withdrawn. Sir J. GRAHAM also withdrew the motion of which he had given notice in reference to the claim of the University of London. Sir G. LEWIS then moved a clause dividing the West Riding into two divisions, each to return two members. The clause was agreed to; and on a division, Pontefract was constituted the place of election for the Southern Division instead of Wakefield, by 97 to 67. The House then went into Committee of Supply on the Civil Service Estimates, and agreed to several votes. The Municipal Corporations Act Amendment (No. 2) Bill and the Windsor Suspended Canonries Bill were read a second time. On Tuesday, in answer to Mr. HADFIELD, Lord PALMERSTON stated that it is the intention of the Government to proceed with the Bankruptcy and Insolvency Bill. Lord ENFIELD moved an Address to the Crown for the appointment of a Royal Commission to inquire into the operation of the Burial and Cemetery Acts, with a view to give compensation to the incumbents of parishes in England and Wales for the loss of fees occasioned by the closing of churchyards under the Acts. Sir G. LEWIS opposed the motion, which was negatived on a division by 59 to 48. Mr. HENNESSY called attention to the recent events in Poland, with reference to the treaties of 1815, and moved for the production of the correspondence between this country and Russia on Polish affairs in the years 1831-32. Lord J. RUSSELL and Lord PALMERSTON assented to the motion, which was agreed to. Sir J. ELPHINSTONE moved a resolution declaring it to be the duty of the Government to compel all seagoing vessels to be sufficiently supplied with anchors and chains, properly tested as to strength and workmanship. The motion was opposed by the Government, and negatived without a division. Mr. BUTT moved a resolution that a full inquiry was necessary into all the circumstances of the Derryveagh evictions. On a division the motion was negatived by 88 to 23. On Wednesday the House considered in committee the University Elections Bill as amended by the Select Committee. On the first clause, Mr. AYRTON moved the omission of the provision allowing electors to vote by proxy. On a division the

provision was carried by 120 to 74. An amendment moved by Mr. BUTT in reference to the time for signing the proxy papers was negatived by 138 to 86. The remaining clauses were then agreed to. Mr. WALPOLE moved the second reading of the Indictable Offences (Metropolitan District) Bill, the object of which was to abolish grand juries in the metropolis except in political cases. Mr. HUNT moved as an amendment that the Bill be read a third time that day three months. Mr. NEWDEGATE moved the adjournment of the debate, which was agreed to. The Labourers' Cottages Bill was read a third time and passed. On Thursday, in answer to Sir R. PEEL, Lord J. RUSSELL said that in consequence of the refusal of Morocco to comply with the stipulations of the treaty with Spain, the Government of Madrid had announced their intention to annex Tetuan to the Spanish dominions. He hoped however that an arrangement would yet be effected by the mediation of HER MAJESTY'S Government. The House then went into Committee of Supply on the Civil Service Estimates. On the vote for harbours of refuge, Mr. BAXTER moved that the vote of 90,000*l*. for works at Alderney be disallowed. On a division, the motion was negatived by 65 to 50. On the vote for public buildings in Ireland, Mr. GREGORY moved that the sum proposed for the Royal Dublin Society be disallowed, on the ground that the Society had refused to comply with the wish of the House in regard to the opening of the Glasnevin Gardens to the public on Sundays. After a long discussion the motion was withdrawn on the understanding that the annual vote would be withheld until the Society had given a pledge to open the Glasnevin Gardens subject to the restrictions which are in force at Kew. The vote was then agreed to. The East India (Civil Service) Bill as amended was considered and agreed to. The Appropriation of Seats (Sudbury and St. Albans) Bill was recommitted, and some new clauses were added.

In the Italian Chamber of Deputies on Saturday the Budget of 1861 was voted. On Tuesday the National Loan Bill was voted by a majority of 242 to 14, after a speech from Baron RICASOLI, in which he emphatically declared that he would not cede a foot of Italian soil to France as the price of her recognition of the new kingdom, and that he intended to fulfil the policy of Italy in regard to Venice and Rome. On Thursday the Neapolitan Railways Bill was voted by a majority of 215 to 19. The Government is said to have informed GARIBALDI that attempts would be made on his life, and that measures had been taken to watch the entry to Caprera.

The EMPEROR OF AUSTRIA has refused to accept the Address of the Hungarian Diet, on the ground that it is disloyal and hostile to the rights of the Crown. A royal rescript announcing this decision was sent to the Diet on Sunday, with an intimation that if the Diet refuses to alter the form and contents of the Address, it will be dissolved.

An imperial *Hatti* was read on Monday at Constantinople, announcing the policy of the new SULTAN. It confirms in their posts the Grand Vizier and all other Ministers and public functionaries, with the exception of Riza Pasha, whose accounts are to be investigated by a commission. It confirms all existing laws, guarantees the equality of all subjects before the law without distinction, and recommends the Ministry to introduce order and economy in the administration of the finances. The SULTAN has since set the example of reform by dismissing 500 Palace servants, and by reducing the civil list from 75 to 12 millions.

From the United States we learn that the general tone of the American press continues hostile to England. An engagement has taken place at Boonville between the Missouri State and Federal troops, in which 300 of the former are said to have been killed. A battle is considered imminent at Fairfax, towards which place the outposts of the Federal army are gradually extending. Several minor engagements have taken place between the Federal gunboats and the Secessionists on the Potomac. The Indiana regiment has been surrounded at Cumberland, in Maryland, by a force of more than 10,000 Confederates, and all chances of retreat have been cut off. An immense quantity of ammunition has been found on the premises of the Marshal of Baltimore, who has been arrested by General BANKES on a charge of treason. Three British ships have been captured by the Federal cruisers.

The Revenue Returns for the year and quarter ended on Sunday show an increase of 445,507*l*. on the year, and an increase of 1,578,420*l*. on the quarter.

Home News.

THE COURT.—The Queen and Prince Consort, accompanied by the Crown Prince and Princess of Prussia, and the other members of the Royal family, left town on Thursday for Osborne. On Friday morning the Prince Consort, accompanied by the Crown Prince and the Crown Princess of Prussia, visited the two Water Colour Exhibitions. The Duchess of Cambridge and the Princess Mary visited the Crown Princess of Prussia at Buckingham Palace. In the afternoon the Prince Consort went to Snaresbrook and laid the foundation stone of the Merchant Seamen's Orphan Asylum. His Royal Highness afterwards proceeded to Wanstead and visited the Infant Orphan Asylum. The Prince of Wales, the Crown Prince of Prussia, and Prince Louis of Hesse rode on horseback. The Crown Princess of Prussia, the Princess Alice, and the Princess Louisa took a drive in an open carriage and four. The Princess Beatrice, Prince Leopold, Prince William, and Princess Charlotte of Prussia took a carriage drive. In the evening a State concert of sacred music took place at Buckingham Palace by command of the Queen. The Prince Consort, the Prince of Wales, the Crown Prince and Crown Princess of Prussia, the Princess Alice, and Prince Louis of Hesse were present at the concert, but the Queen passed the night in retirement at the White Lodge, Richmond Park, accompanied by the Princess Helena. On Saturday morning at 7 o'clock the Prince of Wales left Buckingham Palace for the Curragh of Kildare. The Queen, accompanied by the Princess Helena, returned to Buckingham Palace. The Prince Consort presided at a meeting of the Provident Institution in St. Martin's Place, and afterwards presided at a meeting of the Council of the Duchy of Cornwall. The Crown Prince and Princess of Prussia visited the British Institution. In the afternoon the Queen, accompanied by Prince Leopold and the Princess Louisa, took a drive in an open carriage and four. The Prince Consort, the Crown Prince and Princess of Prussia, the Princess Alice, Prince Arthur, and Prince Louis of Hesse visited the Horticultural Gardens and the South Kensington Museum. On Sunday morning the Queen, Prince Consort, the Crown Prince and Princess of Prussia, Princesses Alice, Helena, and Louisa, Prince Arthur, Prince Leopold, and Prince Louis of Hesse attended Divine service in the private chapel. The Rev. Dr. Moberly, Head Master of Winchester, preached the sermon. On Monday the Queen held investitures of the Orders of the Thistle and the Bath at Buckingham Palace. Her Majesty afterwards held a Court at which the Right Rev. Dr. Gell kissed hands on his appointment as Bishop of Madras, and Mr. Hastings Russell had an audience, and delivered to her Majesty the insignia of the Order of the Garter, worn by the late Duke of Bedford. The Crown Prince and Princess of Prussia paid a visit to the Dowager Duchess of Sutherland at Stafford House. Prince Arthur and Prince Leopold took a drive in an open carriage and four. In the evening Prince Louis of Hesse took leave of the Queen, and left the Palace for Dover on his return to Germany. The Crown Prince and Princess of Prussia honoured the performance at the Adelphi Theatre with their presence. On Tuesday morning the Prince Consort visited the Duchess of Cambridge at St. James's Palace. Prince William and Princess Charlotte of Prussia visited the Zoological Gardens. The Duke de Nemours, accompanied by the Princesses Marguerite and Blanche, the Count d'Eu, and the Duke d'Alençon, visited the Queen and the Crown Prince and Princess of Prussia at Buckingham Palace. In the afternoon the Queen, accompanied by the Crown Princess of Prussia, the Princess Alice, and Prince William of Prussia, took a drive in an open carriage and four. The Prince Consort, accompanied by the Crown Prince of Prussia, rode on horseback. On Wednesday morning the Prince Consort visited the Horticultural Gardens. The Right Hon. T. E. Headlam, Judge Advocate-General, had an audience of the Queen, and submitted to her Majesty the proceedings of some Courts-martial. The Crown Prince and Princess of Prussia went to Claremont and visited the Countess de Neuilly. Their Royal Highnesses afterwards proceeded to Hampton Court Palace. In the afternoon the Prince Consort presided at a meeting of the Fine Arts Commission. The Queen, accompanied by the Princess Alice and the Princess Beatrice, took a drive in an open carriage and four. The Prince Consort rode on horseback. On Thursday morning the Crown Prince and Princess of Prussia visited the Exhibition of the Royal Academy. In the afternoon the Queen and Prince Consort, accompanied by the Princesses Alice, Louisa, and Beatrice, Prince Arthur, Prince Leopold, the Crown Prince and Princess, Prince William, and Princess Charlotte of Prussia, left Buckingham Palace for Osborne, travelling to Gosport by a special train on the South-Western Railway.

THE QUEEN'S VISIT TO IRELAND.—It is the Queen's intention to visit Ireland towards the latter end of August. Her Majesty will remain four or five days at the Viceregal Lodge in the Phœnix Park, and will probably visit the camp at the Curragh of Kildare, and make an excursion to the Lakes of Killarney. Her Majesty's visit being of a private character, like that in 1853, no public receptions or ceremonies are contemplated.

PRINCE ALFRED arrived at Quebec on the 18th ult., and has since visited the Falls of Niagara.

THE DUKE AND DUCHESS OF MONTPENSIER landed at Falmouth yesterday morning from a Spanish war steamer, and left at noon for London.

ORDER OF THE THISTLE.—The Queen held a Chapter of the Order of the Thistle on Monday, when the Earl of Zetland and Lord Belhaven, having been duly elected Knights of the Order, received from her Majesty the honour of knighthood, and were invested with the insignia of the Order with the usual ceremonies.

ORDER OF THE BATH.—The Queen held a Chapter of this Order on Monday, when Lieut.-General Sir James Hope Grant, Major-General Sir Patrick Grant, General Sir Arthur Benjamin Clifton, General Sir James Archibald Hope, General Sir Thomas William Brotherton, General Sir Thomas Willshire, Vice-Admiral the Right Hon. Sir Maurice Frederick Fitzhardinge Berkeley, and Lieut.-General Sir Harry D. Jones, were invested with the insignia of Knights Grand Cross; Rear-Admiral Robert Lambert Baynes, Lord Dufferin and Claneboye, Major-General George Hall Macgregor, late Bengal Artillery; Vice-Admiral Henry William Bruce, Major-General William Brereton, and Colonel the Earl of Longford, having received the honour of knighthood, were invested with the insignia of Knights Commander, and the following received from the Queen their respective decorations as Companions of the Order.

Major-Gen. Farquhar, late Bombay Infantry; Capt. G. Hand, R.N.; Lieut.-Col. G. W. Williams, late commandant Meerut Volunteers; Lieut. J. W. W. Osborne, late Political Agent at Rewah; Mr. Henry B. Loch, Private Secretary to the Earl of Elgin in China; Mr. Charles Pressly, Chairman of the Board of Inland Revenue; Lieut.-Col. Archibald Alison, unattached; Lieut.-Col. W. K. Stuart, 86th Regiment; Lieut.-Col. J. Ross, Rifle Brigade; Lieut.-Col. R. M. Sutherland, 92d Regiment; Lieut.-Col. G. A. Lockhart, 78th Regiment; Col. A. Shepheard, Bombay Infantry; Col. W. Riddell, Bengal Infantry; Col. R. R. Younghusband, Bombay Infantry; Col. W. H. Miller, Madras Army; Lieut.-Col. J. H. Smyth, Bengal Artillery; Lieut.-Col. J. Metcalfe, Bengal Infantry; Lieut.-Col. G. S. Cotter, Madras Artillery; Brigadier-Gen. W. Sutton, late ... Regiment; Col. G. M. Reeves, 99th Regiment; Major-Gen. S. W. ..., 2d Regiment; Col. E. W. Crofton, Royal Artillery; ... Pattle, 1st Dragoon Guards; Col. F. G. Urquhart, 1st Regiment; Col. C. P. B. Walker, 2d Dragoon Guards; Col. J. R. Gascoigne, Royal Marines; Lieut.-Col. A. Browne, 44th Regiment; Lieut.-Col. T. Addison, 2d Regiment; Lieut.-Col. G. ... Ambrose, 3d Regiment; Lieut.-Col. W. W. Barry, Royal Artillery; Lieut.-Col. J. O. Travers, Royal Marines; Lieut.-Col. A. a'Court Fisher, Royal Engineers; Inspector-General of Hospitals, W. M. Muir, M.D.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of the First Lord of the Treasury in Downing Street.

MINISTERIAL APPOINTMENTS.—Sir William Atherton has been appointed Attorney-General in the room of the present Lord Chancellor, and is succeeded by Mr. Roundell Palmer in the office of Solicitor-General.

PARLIAMENTARY MOVEMENTS.—Mr. Rich has retired from Richmond to make room for Mr. Roundell Palmer, the Solicitor-General, who is expected to be returned without opposition.—The election for Wolverhampton terminated on Tuesday in the return of Mr. Weguelin, the Ministerial candidate, by a large majority, the numbers being, for Mr. Weguelin, 1363; Mr. Griffiths (Liberal), 772; Mr. Hill (Conservative), 665.—The elevation of Sir W. Atherton to the Attorney-Generalship has caused a vacancy at Durham. The Attorney-General offers himself for re-election, and will be opposed by Lord Loughborough, eldest son of the Earl of Rosslyn.

CONSECRATION OF THE BISHOP OF MADRAS.—The consecration of the Rev. Frederick Gell to the Bishopric of Madras took place in the chapel of Lambeth Palace on Saturday morning. The Archbishop of Canterbury officiated, and was assisted by the Bishops of London, Durham, Chester, Carlisle, and Labuan. The Sermon was preached by the Rev. J. Y. Nicholson, B.D., rector of Aller, Somersetshire.

DEANERY OF EXETER.—The Rev. Professor Ellicott, B.D., to whom Lord Palmerston offered the Deanery of Exeter a few weeks ago declined the appointment, but at the request of the Bishop of Exeter and the Premier has since reconsidered his determination and accepted the office, on the understanding that he will be allowed to hold with the deanery the principalship of a new Theological College for the West of England, towards the foundation of which the Bishop of Exeter has given the sum of 10,000*l*. The *Gazette* of Tuesday therefore contains the official announcement of the appointment to the deanery.

THE ARMY.—The Colonelcy of the 8th Foot, vacant by the death of General Monins, has been conferred on Major-General Gerrard Ball; and the Colonelcy of

46th Foot, vacated by this promotion, has been conferred on Major-General C. A. Windham.

THE NAVY.—Captain Sir F. W. E. Nicolson, C.B., has been appointed Commodore-Superintendent of Woolwich Dockyard.

THE REVENUE.—The Revenue returns for the year and quarter ended June 30 were published on Monday. The total revenue of the year was 71,862,094*l.*, and that of the quarter 18,397,594*l.*, showing an increase of 445,507*l.* on the year, and an increase of 1,578,420*l.* on the quarter. The year's account shows an increase in the Stamps of 314,912*l.*; Property Tax, 2,320,184*l.*; Post Office, 50,000*l.*; Crown Lands, 5589*l.*; and a decrease in the Customs of 692,261*l.*; Excise, 1,035,000*l.*; Taxes, 101,000*l.*; Miscellaneous, 613,917*l.* The quarter's account shows an increase in the Customs of 87,223*l.*; Excise, 57,000*l.*; Stamps, 117,758*l.*; Taxes, 9000*l.*; Property Tax, 1,499,184*l.*; Crown Lands, 1000*l.*; and a decrease in Miscellaneous, 192,745*l.*

THE VOLUNTEER MOVEMENT.—The second annual meeting of the National Rifle Association commenced on Thursday on Wimbledon Common. The weather was exceedingly unfavourable; the wind being so high as to interfere materially with steadiness of aim, and the heavy rain at times almost obscuring the targets from view, so that as a whole the shooting was not up to the mark that was expected. The firing commenced soon after 12 o'clock with the first stage of the competition for the Queen's Prize, open to all home and colonial volunteers, at a range of 200 yards. The list of names, printed *in extenso*, fills nearly three columns of the daily papers. The highest score gained during the day was by Mr. Dickens, of the Victoria Rifles, who marked 13 in five shots, being within 2 of the greatest number that could be reached by hitting the centre each time. After him came Sergeant Dougan, of the 26th Lancashire, who scored 12. Several scored 11, 10, 9, and 8. Mr. Ross, the champion shot of last year, who was suffering from an inflammation of the eye, and who shot with the Cambridge Corps as a member of the University, only scored 8, and was therefore in this first stage beaten easily by several. In spite of the unfavourable weather, the money paid by competitors amounted to 450*l.*, and there were 710 entries for the Queen's prize, and 312 for that given by the Prince of Wales.

Foreign.

FRANCE.—The Emperor arrived in Paris on Wednesday, and presided at a Council of Ministers. On Thursday his Majesty left for Vichy, where he arrived the same evening and was warmly received. Count Arese was received by the Emperor on Monday at Fontainebleau as Ambassador Extraordinary from the King of Italy, to thank his Imperial Majesty for the recognition of the new kingdom. The Prince de Piombino, bearer of the address signed by a number of the inhabitants of Rome, petitioning the Emperor to withdraw his army from that city, has been received by the Minister of Foreign Affairs, but simply, it is said, as a private individual, and not as delegate of the petitioners.—The Siamese Ambassadors were received by the Emperor on Friday at Fontainebleau, when they presented to his Majesty the Order of the White Elephant, studded with diamonds; a crown of massive gold, covered with diamonds; a gold waist-belt, with a plate ornamented with diamonds; gold dishes, richly enamelled, of enormous weight; and a number of palanquins, thrones, arms, &c. On entering the Emperor's apartment they went on their knees and advanced in that way to the foot of the throne of their Majesties, as they do in approaching their own Sovereigns. The First Ambassador handed to the Emperor an address from the First King of Siam, which Father Renaudie, missionary and interpreter to the Embassy, read in French to their Majesties.—Count de Persigny returned to Paris on Wednesday from London, to have an interview with the Emperor before his departure for Vichy.—An Italian who is said to be an agent of Mazzini, has been arrested at Marseilles on a charge of conspiracy against the Emperor's life. He has undergone a first examination, and is to be sent to Paris for trial.—The Imperial Court delivered judgment on Monday in the Patterson-Bonaparte case. The Court dismissed the appeal, and declared that the suit instituted by Madame Patterson and her son, Jerome Napoleon Bonaparte, is not maintainable, and condemned them to pay the costs. An ordinance of the Juge d'Instruction has stopped the legal proceedings instituted against the Duke de Broglie and the printer of his work entitled "Views on the Government of France," and has ordered the restitution of all the copies seized by the police. The Duke had previously declined the jurisdiction of the Correctional Police, on the ground that by the Imperial decrees issued in 1852 and 1858 Knights Grand Cross of the Legion of Honour could only be tried before "the High Court of Justice."—M. Gautier, the tutor of one of the sons of the Duke de Nemours, arrived in Paris a few days since from Madrid, on his way to London. He was arrested about an hour after his arrival, and taken to the Conciergerie, where he spent the night in gaol. His trunks and papers were searched; but, as nothing was found among them but two copies of the Duc d'Aumale's pamphlet, he was released next morning. It is said that a police spy accompanied M. Gautier all the way from Madrid, and gave notice of his arrival at Paris.—The steel-plated frigate Solferino was launched at Lorient with complete success on the 24th ult., the anniversary of the battle. The steel-plated frigate Normandie is about to commence her trial trips at Cherbourg. A new military harbour is to be constructed opposite Alderney, at the bottom of the bay between Cherbourg and Cancale, behind the Chaucey islets. The place offers great natural capabilities, and affords a secure shelter against north-west gales. An entrenched camp for 40,000 men is to be constructed in the neighbourhood, so as to be equidistant from the new harbour, Brest, and Cherbourg, with all three of which it will be connected by railway.

SPAIN.—The *Correspondencia Autografa* of Saturday says that the Spanish Government has resolved to abandon its claims against Morocco, to declare Tetuan the property of Spain, to render it impregnable, and to colonise the territory. A band of 300 Republicans has risen in insurrection in the environs of Loja. They were vigorously pursued by the Royal troops, which succeeded in surrounding them at Loja. The insurgents have offered to surrender on condition of their lives being spared. The authorities, however, require them to surrender at discretion. Two waggons, laden with powder, have been seized on the road to Loja. The latest news states that the insurrection is entirely confined to Loja, and the troops now surround the town. The insurgents are shouting, "Republic for ever! Death to the Pope!"

PORTUGAL.—Prince Napoleon has arrived at Lisbon in the yacht Reine Hortense, on a visit to the King. He was conducted in the Royal barge to the Palace of the Necessidades. The political condition of Portugal is giving great uneasiness to European diplomacy. The Government has recognised the Kingdom of Italy. The recent decree dissolving the Order of the Sisters of Charity has caused great agitation in the Upper Chamber. A popular demonstration in favour of the Duke de Saldanha has occurred in the public gardens. The duke, however, did not countenance the enthusiasm of the people, but left the place, as also did the King's father, Don Fernando. The tradespeople are getting up meetings to oppose the new regulation of weights and measures, which, after the 1st July, are to be on the French system. Accounts from the port wine districts are all to the effect that the disease is committing great havoc among the grapes.

SWITZERLAND.—The National Council and the Council of the States were opened on Monday. Mr. Rainer, member for Berne, was elected President of the National Council, and Mr. Escher, member for Zurich, Vice-President. Mr. Hermann, member for Uri, was elected President of the Council of the States, and Mr. Vignier, member for Solothurn, Vice-President. The Council of the States in its sitting of Wednesday voted the sum of 100,000f. to defray the cost of an expedition to Japan for concluding a treaty of commerce with that country. In the National Council on Wednesday it was decided to treat the affair of Savoy as an open question, and to energetically protect the rights of Switzerland. The Marquis de Torrearsa, who has passed through Berne, from Turin, on his way to Copenhagen, has officially notified to the Federal Council the elevation of Victor Emmanuel to the sovereignty of Italy.

HESSE-CASSEL.—In the sitting of the Second Chamber on Monday, the proposals of the Committee in reference to the Constitution were unanimously adopted. The Commissioner immediately read a decree dissolving the Diet.

SAXE-COBURG.—A military convention has been concluded between Saxe-Coburg-Gotha and Prussia. The Coburg Contingent to the Federal army passes over to Prussia as it now stands—officers and men, guns and ammunition, and the Prussian military code will henceforth be law in Coburg.

SWEDEN.—The Marquis di Torearsa, Italian Ambassador, has arrived at Stockholm and been received with great enthusiasm. He has also been honoured with marks of distinction by the King and the people. In the course of next week a grand banquet will be given in his honour by the principal inhabitants of Stockholm.

ITALY.—The discussion on the Loan Bill in the Italian Chamber of Deputies was suspended on Saturday in order to consider the budget for the last six months of 1861. The proposition of the Finance Committee to extend the war tax of a *decime* to the Southern provinces created an uproar in the Chamber. The majority of the Southern members strongly opposed the proposal. The budget was ultimately voted. The discussion on the Loan Bill was resumed on Monday, when Signor Musalino opposed the Bill, and declared that he had no confidence in a Ministry that wished to maintain the alliance with France. He said that England was the only true friend of Italy, and that France should be compelled to cease the occupation of Rome. "The Italians," he continued, "cannot await for an indefinite period the good pleasure of a foreign Power, which, to speak candidly, defends the wickedness of the Roman Government." Signor Farini supported the alliance with France, "which," he said, "is the foundation and shield of popular right not only of Italy, but of all Europe. Italy is indebted to France and the Emperor for many blessings, the value of which history and ourselves will highly appreciate." On Tuesday Baron Ricasoli delivered an important speech, of which the following is a summary:—

"We arm not only for the defence of the national territory such as it actually is, but also to complete it—to restore it to its natural and legitimate boundaries. The Government has the happiness to announce to Parliament that, with the exception of Austria, its friendly relations with the principal Powers of Europe are of the most satisfactory kind. The Italian cause enlists general sympathy, and can still count upon having allies. The recognition of the Kingdom of Italy by England and France and other Powers is a solemn proof of the confidence which we inspire in our friends, and we have reason to believe that it will not be long before these examples are followed by Europe generally. Thanks to the principle of non-intervention, our nationality will very soon be universally and solemnly acknowledged, as well as our incontestable right to complete our independence I have heard people talk about 'cessions.' Allow me, gentlemen, to scout with all the disdain of my soul the very word and thought of it The King's Government, I repeat it, the King's Government knows not of an inch of Italian land to be given up, not one inch will be given, not one inch must be given. What the King's Government sees is a territory to defend, a territory to recover. It sees Rome; it sees Venice! To the eternal city and the queen of the Adriatic it turns the thoughts, the hopes, and energies of the nation. The Government feels the heavy task that lies before it; with God's help, it will fulfil it. Opportunity matured by time will open our way to Venice. In the meantime we think of Rome. Yes, we will go to Rome. Shall Rome, politically severed from the rest of Italy, continue to be the centre of intrigue and conspiracy, a permanent threat to the public order? To go to Rome is for the Italians not merely a right, it is an inexorable necessity. But how are we to go there? The King's Government will be open and precise upon that even more than upon any other subject. We do not wish to go to Rome by insurrectional movements, unreasonable, rash, mad attempts, which may endanger our former acquisitions, and spoil the national enterprise. We will go to Rome hand-in-hand with France Gentlemen, you declared it in the memorable sitting of the 27th of March. The Government cannot depart from the resolution of Parliament. We wish to go to Rome, not as destroyers but as builders, affording to the Church the means and opening to her the way for self-reformation; giving her that freedom and independence which may enable and stimulate her to regenerate herself in the purity of her religious feeling, in the simplicity of her customs, in the severity of her discipline, which so greatly contributed to her honour and dignity during her venerable primitive times."

The Loan Bill was then voted by a majority of 242 to 14. At the same sitting Signor Brofferio presented a petition, signed by several thousand citizens, praying Parliament for the repeal of the Royal decree excluding Mazzini from the amnesty given to all political offenders in 1859. Signor Brofferio asked the Chamber to declare the "urgency" of the petition, in order that it might be taken into immediate consideration. After a short discussion the Chamber voted the "order of the day pure and simple," by which it declared the petition vexatious and unworthy of further notice. On Thursday the Chamber passed the Neapolitan Railways Bill by a majority of 215 to 19. The elections resulting from the change of Ministry have taken place at Turin. Baron Ricasoli, President of the Council, was elected in the first, and Signor Minghetti, Minister of the Interior, in the second electoral assembly. The Government have informed Garibaldi that attempts would be made on his life; and that measures have been taken for watching the entry to Caprera. It is said that a mysterious society, whose members are partisans of Austria, the Duke of Modena, and the clergy, and can command a large amount of money, had sent four emissaries to Genoa on two different days; they embarked at Genoa with letters of introduction to Garibaldi, but in the meantime their plot had been discovered. Two of these emissaries are said to belong to a religious order.—From Rome it is reported that the French have evacuated Civita Vecchia, and are also about to evacuate Viterbo; but the *Patrie* of Thursday says that France is about to increase the garrison of the frontier towns of the Patrimony of St. Peter. Six hundred brigands have left Rome for the Neapolitan frontier. The Pope officiated publicly at mass on the 29th ult., and was to receive the Diplomatic Corps on the 1st of July. Accounts from Naples state that two Bourbon Committees have been discovered in that city, several arrests have been made, and 500 muskets have been seized by the police. General Cialdini will replace General Durando in the command of the army of the Southern Provinces.

PRUSSIA.—Baron de Schleinitz has addressed a despatch to the Prussian Minister at Washington, announcing the intention of Prussia to observe a strict neutrality, and recommending the United States Government to adhere to the declaration of Paris on maritime law. At the same time the Prussian Government has addressed a proclamation to all the ship-owners of its ports, forbidding them to participate in any act contrary to the strictest neutrality. The judgment given in the affair of the late duel having been confirmed, Major-General Manteuffel was sent on Friday to Magdeburg to undergo his sentence of three months' imprisonment in the fortress.

AUSTRIA.—A Cabinet Council was held at Vienna on Sunday evening, when it was definitively resolved to send a Royal rescript to the Hungarian Diet, declining to accept their address. This rescript was read on Tuesday in the Upper House of the Council of the Empire, and was received with great enthusiasm. Count Clam-Gallas proposed that the House should declare that it considered any violation of the Imperial dignity and rights as an attack against the whole monarchy, and thus the Government could not only reckon on the concurrence and devotion of the House, but also on the active co-operation of the whole empire. The proposal was received with cheers and agreed to. On Wednesday the Emperor received a deputation appointed by the Upper House to express its approval of the Imperial rescript. The Emperor declared to the deputation his intention to maintain, in reference to Hungary, the policy announced in his speech at the

opening of the Reichsrath. Count Rechberg, the Austrian Minister for Foreign Affairs, has addressed to Prince Metternich a despatch in answer to the note of M. Thouvenel to the Courts of Vienna and Madrid, relative to their proposal of intervention in the affairs of Rome. The following extracts contain the most important portions of this despatch:—

"We hasten to express the satisfaction with which we receive the assurance by M. Thouvenel that the Government of the Emperor of the French will not adhere to any combination incompatible with the respect it professes for the dignity and independence of the Holy See, and which would be at variance with the object of the presence of the French troops at Rome. This assurance, together with the fact that the sentiments inspired in the Government of the Emperor of Austria by the position of the Holy Father entirely harmonise with those which the French Government itself experiences, is of a nature calculated to calm the recent and lively apprehensions which the late manifestations of the parliament of Turin had created in all Catholic countries. Austria and Spain made themselves the mouthpiece of those apprehensions; full of confidence in the intentions of France, we desired, nevertheless, to be strengthened in the conviction that the Holy Father would not find his sad position become yet more painful, and that the Sovereign Pontiff would not be reduced to the cruel alternative of either quitting his capital or of sharing it with his spoliators. We wished, in short, to state once more that we were disposed to lend to France, when she desired it, our eager concurrence in preserving the independence of the chief of the Church. Let it suffice, then, for the present, to proclaim with M. Thouvenel that the highest expediency concurs with the greatest social interests in requiring that the chief of the Church should maintain himself upon the throne occupied by his predecessors for so many centuries. We remit to France with confidence the care of making her opinion respected, and we are ready to second her with all our strength in securing the uncontested triumph of a principle which we regard as the basis of all social order."

Hungary.—After the decision of the Cabinet Council held at Vienna on Sunday evening, declining to accept the Address of the Diet, the President of the Hungarian Chamber of Deputies immediately returned to Pesth. The Royal rescript was at the same time sent to the Diet, in which the Address was stigmatized as disloyal, hostile to the rights of the Crown, and such as could not be accepted by the Emperor. The Diet was also requested to alter the form and contents of the Address, with an intimation that in case of refusal it would be dissolved. On Monday, when the rescript was laid, sealed, on the table of the Lower House cries were raised of "Return it unopened." After some remonstrances, however, on the part of the President, the rescript was quietly read. It was read in the Upper House without disturbance.

Croatia.—The Croatian Diet has declined to accept the union with Hungary, unless the latter consents to assume a different position in her treatment of that question.

Greece.—King Otho is about to visit Germany. The Queen will act as Regent during his absence.

Russia.—The thousandth anniversary of the existence of the Russian Empire will be celebrated next year, and in Novgorod a monument which is to be erected for the occasion has already been commenced. A money crisis is becoming daily more imminent at St. Petersburgh. Both gold and silver coin have disappeared from the market. Discount has risen to 9 per cent., even at which rate money is very scarce. The export trade is stagnant. A fresh issue of Treasury bonds to the amount of 6,000,000 roubles is announced.

Poland.—In consequence of important news, an extraordinary council of the high functionaries has been held in the Governor's Palace at Warsaw. Fresh popular demonstrations having taken place in the Saxony and Krasynsky gardens in that city, the Government has taken strong measures to prevent an outbreak, and the gardens have been suddenly transformed into a military camp. Much agitation prevails in Warsaw and the provinces.

Turkey.—An Imperial Hatti, conceived in a very liberal spirit, was read on Monday at Constantinople. It confirms in their posts the Grand Vizier and all other Ministers and public functionaries, with the exception of Riza Pasha, whose accounts are to be investigated by a commission, and commands them to faithfully discharge their duties. It also confirms all existing laws, and guarantees the equality of all subjects before the law without distinction. It further recommends the Ministry to introduce order and economy in the administration of the finances, and directs sweeping reforms in the Imperial household. It directs the dismissal of the civil *employés* belonging to the Palace, with pensions in proportion to their rank and time of service, that the military officers and *employés* shall be incorporated in the Ottoman army, that all the women in the harem who have no children shall be married off, and that those who have children shall be suitably provided for; the debts of the household to be paid out of the Imperial purse. The Sultan has also dismissed 500 Palace servants, and has reduced the civil list, which was previously 75 millions, to 12 millions, stating that this sum will suffice for the wants of himself and family, independently of the revenue arising from his own private property. The Sultan has also conferred upon his nephews, the sons of the late Sultan, the title of Pasha, with a suitable appanage. Two of these nephews, at their own request, will enter the Military School at Constantinople. The Sultan received, on the 30th ult., the Patriarch of the Armenians, the Catholic Archbishop, and the chiefs of the other Christian communions. He assured them that the interests of the Christians of the Ottoman empire should be the object of his anxious solicitude. The Sultan has since received the Ambassadors in solemn audience, and his investiture was to take place on the 4th. His Highness has ordered the construction of a new armour-plated vessel, to be named the Mahmoud. Mehemet Ali Pasha, brother of the Viceroy of Egypt and son-in-law of the late Sultan, has died suddenly at Constantinople from apoplexy. The Bulgarian Patriarch, who was recently consecrated by the Pope in person on becoming a convert to Catholicism, has scandalised all the Catholics of Pera by lapsing back into Greek "orthodoxy." The English steam-frigate Terrible anchored at Constantinople on the 28th ult., after having obtained from the Porte the firman required by the convention relative to the Straits of the Dardanelles.

Syria.—Daoud Effendi left Constantinople on Monday for his post in Syria. The evacuation of Syria by the French troops commenced on May 30, and was completed on the 10th ult. The troops amounted to about 8400 men, and were embarked on board 14 ships of war and transports in perfect order and without excitement among the populace. General Beaufort and his Staff, after the embarkation of the troops, remained at Beyrout for a frigate to convey them to France, and were expected to sail on the 17th ult. in the Mogador, which had arrived shortly before. At the latest dates tranquillity continued to prevail in that part of Syria and in the Mountain.

China.—Accounts have been received at St. Petersburg from Pekin to the 29th of April, which state that the famous San-Wan, Commander-in-Chief of the Tartar army, has been repeatedly beaten by the rebels. In the last battle the Imperialist army was completely routed, and San-Wan narrowly escaped falling into the hands of the enemy. The insurgents then marched rapidly against Pekin, and were menacing that capital. The English and French envoys were living quietly at Pekin. After their installation the Russian Mission paid them a visit of ceremony. The English and French representatives were living in the Palace of the Princes, near the Russian Mission. The French Plenipotentiary had employed 700 operatives to rebuild the Palace of the Embassy. The Palace thus restored will bear the stamp of the European style of building combined with the Chinese. The Emperor of China is still residing at Geoke, where he proposes to remain until next autumn. The state of the country, caused by the progress of the insurrection, renders his return uncertain. The Russian priests and monks sent into the Chinese provinces to convert the idolators have had immense success.

Cochin China.—Vice-Admiral Charner, commanding the French naval force in Cochin China, has solicited his recall, in consequence of ill health. The troops are said to be suffering greatly from the climate.

United States.—The general tone of the American press continues to be hostile to England. The *New York Herald* declaims against its "tortuous policy," calls upon the Cabinet of Washington to "send back the British Ambassador to his Government," and asserts that "the speeches and the circular of the Minister for Foreign Affairs are remarkable samples of that blackleg and Puritan policy which has characterised the dealings of England with other nations in times past." Another journal says, "There can be no doubt that the issuing of the Proclamation of Neutrality was produced partly by the despatch of Mr. Seward, warning the European Powers that our Government would hold no further diplomatic intercourse with them if they recognised the Commissioners from the Southern Confederacy." Mr. Dallas also is now reported to say, in conversation, that the Federal Government cannot depend upon the neutrality of England, that he believes the British Ministry to be hostile to them, that "the great arbiter is cotton," and that "if the war shall not be over by the time the next cotton crop shall be ready for the market, the fleets of England will be employed to raise the blockade." All is quiet in the vicinity of Washington, though a battle is considered imminent at Fairfax, towards which place the outposts of the Federal army are gradually extending. Northern troops are reaching Washington at the rate of 5,000 a day. The Indiana regiment of Colonel Wallace has been surrounded at Cumberland, in Maryland, by a force of more than 10,000 Confederates, commanded it is said by General Joe Johnston, and all chances of retreat cut off. The Confederate forces have not abandoned the line of the Potomac in the vicinity of Harper's Ferry, but still continue to annoy the Union troops on the other side of the river. An engagement has taken place at Mathias Point, on that river. The rebels fired on a small party from the gunboats, killing two men and wounding several others. Several minor engagements have taken place between the Federal gunboats and the rebels on shore. The steamer Alliance, which has just returned from a cruise up the Potomac, reports the capture of 11 Southern vessels which were endeavouring to supply the enemy with provisions. General Banks has arrested the Marshal of Baltimore on a charge of treason, and has appointed a Provost-Marshal for the city. An immense quantity of ammunition was found on the premises of the Marshal at Baltimore. The British ship America, bound to Charleston with contraband of war, has been captured and taken to Philadelphia, and the British ship Forfarshire has been captured in the Gulf of Mexico by Federal ships. The Columbia District Court has given an opinion in the case of the English schooner Tropic Wind for violating the blockade of the Virginian ports. The Court held that such conduct entailed the forfeiture of the vessel and cargo [illegible] 22,000 dols. It reserves its ultimate dec[illegible] question of fact respecting the alleged rel[illegible] strict law of blockade in favour of Britis[illegible] Judge Sprague, of the District Court of Bos[illegible] charge to the jury, said that if any citizen [illegible] to Mr. Gregory, member of the British Parlia[illegible] the purpose of defining the measures of the U[illegible] States' Government, he would be held liable t[illegible] fine and imprisonment. The Federal Govern[illegible] recognised the new Provisional Government of V[illegible] The forces under the command of General M'[illegible] are rapidly concentrating in Virginia from the West [illegible] has made no compact not to occupy the soil of Ken[illegible] General Scott is rapidly pushing forward his [illegible] towards Manassas Junction, and the advance guard [illegible] reached Leesburg, the western terminus of the Ma[illegible] Railroad, after two skirmishes on the road. The New [illegible] journals assert that the Southern troops are falling [illegible] The commander of the Federal troops in Missour[illegible] issued a proclamation declaring his intention [illegible] down the rebellion of the State authorities. [illegible] engagement has since taken place at [illegible] between the Missouri State and Federal troops, [illegible] which it is reported that 300 of the former were killed, after which the Governor of Missouri fled. [illegible] accounts state that the Missouri troops wh[illegible] concentrated in large force at Indepen[illegible] moved to Lexington, where it is thought they [illegible] make a decided stand against the Union army of General Lyon. A vessel just arrived reports having been chased [illegible] privateers. Several New York journals strongly advo[illegible] the hanging of the crew of the privateer which has [illegible] captured. A slave ship has arrived at New Y[illegible] from Monrovia in charge of a prize crew. When [illegible]tured she had 1000 negroes on board. It is [illegible] that Mr. Secretary Chase will propose [illegible] income-tax.

Parliament.

HOUSE OF LORDS.

Friday.—*Annexation of Savoy.*—The Earl of Car[illegible]von called attention to the prolonged occupation of [illegible]thern Savoy by France, and asked what arrangement [illegible] been made to give effect to the treaty of Vienna, guaranteeing the independence of Switzerland. He described the im[illegible] of confiding the passes of the Alps to a Power strong [illegible] to defend, but not too strong to abuse them, and con[illegible] that the French occupation of Northern Savoy [illegible] decision of the Treaty of Vienna, as it practically trans[illegible] those passes from Switzerland to France, and [illegible] Switzerland, bound hand and foot, to that Power.—[illegible] Wodehouse stated that the question remained in precisely the same position as last summer, and that no negotiations [illegible] taken place in regard to it, because the other great Powers parties to the Treaty of Vienna, had not thought it desirable to enter into such negotiations. It w[illegible] with the dignity of this country, or even [illegible] discussions that could lead to no practical result.—[illegible] Clancarty moved for the production of [illegible] relative to the opening of the *Glasnevin Bo[illegible] Dublin to the Public on Sundays.*—An animated [illegible] ensued, in the course of which Lord Talbot de Ma[illegible] Earl Granville, the Earl of Donoughmore, Lord [illegible] the Earl of Eglinton, and the Bishop of Down ex[illegible] approval of throwing open the gardens, and objected [illegible] to abridging the means which they afforded of [illegible] relaxation from toil and recreation to the working [illegible] whilst the measure received the unqualified [illegible] Lord Clancarty and the Bishop of Carlisle. The [illegible] *Road Bill* and the *Portpatrick Harbour Bill* passed [illegible] committee.

Monday.—*Church Rates.*—The Duke of Marlbor[illegible] nounced that, as a Bill had been recently introduced [illegible] other House for the settlement of the Church-rate que[illegible] should not proceed further with his measure on th[illegible] The Bishop of London, in presenting a number [illegible] against the unqualified abolition of Church-rates, sa[illegible] was authorised by the Archbishop of Canterbury to [illegible] his Grace was desirous of seeing a speedy settlement [illegible] question on the basis of the recommendations of [illegible] committee of last year. He also expressed his belief [illegible] spoke the sentiments of the whole Episcopal bench [illegible] said that they would deplore any arrangement which [illegible] excite a feeling of rancour in the breasts of their [illegible] brethren.—The *Cork Infirmary Bill* passed [illegible]mittee.—Lord Brougham moved for a copy of a [illegible] signed by 3700 persons, addressed to the [illegible] State from Jamaica, against the *Annexation of St. [illegible] to Spain.* He attacked the conduct of the [illegible] Government in regard to the slave trade, and [illegible]mently protested against the annexation of St. [illegible] as it would give an increased stimulus to that [illegible] The Duke of Newcastle regretted that the noble and learned lord should think proper, in season and out of season, to make these charges against the Spanish Government. He thought it was calculated to do injury to the noble cause which he was so desirous to serve. The Government at Madrid had [illegible] repeated and emphatic assurances that [illegible] annexation of St. Domingo they would not [illegible] slavery in the island under any form.—Lord Stratford de Redcliffe thought that the Spanish Government [illegible] give more positive and satisfactory assurances on the [illegible] before the annexation was acknowledged by this country.—The motion was then agreed to.—The *Holyhead Road B[illegible]* a third time and passed.—The *Portpatrick H[illegible] Bill* passed through committee.—The *East Ind[illegible]* was brought up from the Commons and read a first time.

Tuesday.—*The Grand Duke of Modena.*—The M[illegible] Normanby gave notice that, on Monday next, he [illegible] for copies or extracts of any dispatches relating [illegible] the duchy of Modena from her Majesty's minister [illegible] Central Italy from 1855 to 1858 inclusive, with the view [illegible] ing to the charges recently brought against the Grand [illegible] the Chancellor of the Exchequer, and which had so [illegible] his Highness that he had declared, if there were [illegible] truth in them he should consider himself to have been guilty of murder.—Lord Brougham said that it [illegible] much more conduced to the vindication of the Grand [illegible] he been defended in the place where the attack [illegible] made. He plainly perceived that the object of the [illegible] partly to defend the Duke of Modena and partly to attack the Chancellor of the Exchequer.—The Marquis of N[illegible] that Lord Brougham's comments would have had more [illegible] if the noble and learned lord had retained the opinions [illegible]

[illegible] so much admired some 10 years ago.—Lord [illegible] moved the committal of the *Subdivision of* [illegible] *Bill*.—The Bishop of LONDON stated several objections [illegible], and recommended that it should be withdrawn [illegible], and a scheme of a more general nature for improving [illegible] law introduced in its stead.—Lord OVERSTONE concurred in this recommendation.—The Duke of MARLBOROUGH expressed a hope that his noble friend would not [illegible] the request which had been made to him.—The Duke of NEWCASTLE and the Earl of MALMESBURY urged Lord [illegible] not to press the measure, seeing that it was not likely to receive the sanction of the other House in the present session.—Lord LYTTELTON intimating that he should persist with the Bill, their lordships divided, when the motion for going into committee was negatived by 68 to 11. The Bill was [illegible].—The Marquis of CLANRICARDE moved the second reading of the *Landed Property Improvements (Ireland)* [illegible], the object of which was to enable the tenant for life to [illegible] money upon loan for the purpose of improving the [illegible] of the labouring classes on his estate.—The Marquis of BATH said that all the powers sought [illegible] the Bill were already in force, under the Leases and [illegible] Act. After some discussion the Bill was read a second time.—The House went into committee on the *Officers of* [illegible] *(Royal Navy) Bill*.—The Earl of HARDWICKE moved an amendment that officers of the merchant service should be subjected to the same examination as midshipmen of the navy before they received the rank of lieutenant.—The Duke of SOMERSET said that the result of the amendment would be to [illegible] the Crown in the face of a sudden emergency.—The Earl of ELLENBOROUGH, although concurring in its [illegible], was surprised that the Bill should have been introduced, because the Government had already the power by Order in Council to do all that the measure contemplated. The amendment was negatived without a division, and the Bill went through committee. The *Cork Infirmary Bill* passed through committee.

THURSDAY.—The *Harbours Bill*, which had passed through the Commons, was read a second time after some discussion.—The *Locomotives Bill*, the object of which is to legalise the use of steam carriages on common roads, and to regulate the tolls to be levied upon them, was read a second time.—The *Portpatrick Harbour (Scotland) Bill* and the *Officers of Reserve (Royal Navy) Bill* were read a third time and passed.—The Marquis of CLANRICARDE asked what steps the Government had taken to establish a direct postal and steampacket communication between *Ireland and North America*.—Lord STANLEY of ALDERLEY declined to answer the question until the Committee of the House of Commons had reported on the subject. Ireland at present enjoyed communication with America by means of [illegible] weekly services, and he therefore did not think any inconvenience could be experienced.

FRIDAY.—*Consolidation of the Statutes.*—The LORD CHANCELLOR said that the five Bills for the consolidation of the statutes had been referred to a select committee, and returned to the House with scarcely any alterations; four of them had been passed, and had been read a first time by their lordships. With regard to the fifth, the House of Commons was in doubt whether [illegible] to murder should be made a capital felony or only a misdemeanour. This would shortly be settled, and he hoped their lordships would then pass the Bills as speedily as possible.—Lord BROUGHAM concurred in this hope.

[Left sitting.]

HOUSE OF COMMONS.

FRIDAY.—On the motion for going into Committee of Supply on the Army Estimates, Mr. COCHRANE called attention to the [illegible] of a society advertised as the *Garibaldi Fund for* [illegible] *of Italy*, which was presided over by the hon. member for the Ayr Burghs, while other members of that House were on the committee of management; and moved a resolution to the effect that the existence of any society formed for the purpose of raising funds to assist a revolutionary party in any country with which we are in strict alliance is inconsistent with the principle of non-intervention.—Lord J. RUSSELL, in reply, said that so far from the society being revolutionary in its character, its object was simply to raise funds to maintain [illegible] of the Italian kingdom.—Lord J. MANNERS inquired whether the noble lord meant seriously to contend that the subscriptions raised by the society were really for the maintenance of the *status quo*.—Sir G. BOWYER called upon the Solicitor-General to say whether the raising of subscriptions in this country, with the avowed object of [illegible] war against a Power with which we were in alliance, was not illegal.—The SOLICITOR-GENERAL said that the resolution was a mere abstract proposition, which it would not be becoming in the House to discuss; and which, if discussed, would be productive of the greatest mischief by giving a handle against ourselves to foreign Governments.—After some remarks from Mr HENNESSY, Mr. Serjeant PIGOTT, and Sir J. WALSH, Mr. [illegible] defended himself from the censure conveyed in the motion, and expressed his warm approval of the objects of the Garibaldi Fund.—Mr. HENLEY pointed out the inconvenience of negativing a motion which simply declared a truism, namely, that assisting a revolutionary party in any country in alliance with ourselves would be inconsistent with the principle of non-intervention. The motion was subsequently withdrawn.—Lord PALMERSTON called attention to the state of the *Business of the House*. At the present moment there were not less than [illegible] votes of supply to be disposed of, and a great many Bills, which it would be undesirable to drop. As the session was so far advanced he suggested that hon. members should on Government days refrain, as far as possible, from interposing motions on the question that the Speaker leave the chair to go into Committee of Supply, unless in cases of great urgency, or where some practical object was to be attained.—The suggestion gave rise to a discussion, in the course of which Lord J. [illegible] complained of the great inconvenience arising from the abuse of the privilege of raising questions on a motion for [illegible] of any great grievances, but questions which might be discussed on notice nights, if they were worthy of the attention of the House at all. The time must come when the House must adopt some remedy for this abuse, and he suggested a rule which would have that effect. The House then, at the unusually early hour of a quarter past 8 o'clock, went into Committee of Supply, and agreed to the remaining votes of the *Army Estimates*. Votes were also taken to defray the salaries, allowances, and compensations of the *Customs and Inland Revenue Departments* and the *General Post Office*. The House then went into committee upon the *London Coal and Wine Dues Continuance Bill*, and agreed to all its clauses. In a Committee on the *Inland Revenue Acts*, on the motion of the CHANCELLOR of the EXCHEQUER, certain resolutions were agreed to. The Report of the *Committee of Supply* was brought up and agreed to. The *East India Council, &c., Bill* was read a third time and passed. The *Crown Suits Limitation Bill*, and the *Book Unions Bill* were read a second time. *The Wakefield Writ.*—Major EDWARDS moved the issue of a new writ for electing a burgess to serve in Parliament for Wakefield in the room of W. H. Leatham, whose election had been determined to be void.—Mr Serjeant PIGOTT thought that at that late hour the House could not do justice to this important question, and moved that the House do adjourn.—Sir G. LEWIS supported the amendment, and said that they could not dissociate the case of Wakefield from that of Glocester. On a division the amendment was negatived by 93 to 76. Mr. W. MARTIN moved that the debate be adjourned. Sir G. LEWIS supported the motion. After some discussion the motion was negatived by 81 to 77.—Mr. CONINGHAM moved that the House adjourn. On a division the motion was again negatived by 81 to 74.—Mr LOCKE moved that the debate be adjourned.—Sir G LEWIS, in this state of the question, expressed a doubt whether due notice of this motion had been given by Major EDWARDS. After some debate this formal objection was overruled by the CHAIR.—Major EDWARDS then moved the adjournment of the debate to Friday, which was agreed to.

MONDAY.—*Appropriation of Seats (Sudbury and St. Alban's) Bill*.—On the Report upon this Bill as amended, Mr. DUNCOMBE moved the postponement of the question for three months, contending that the measure in its present form was not the one which the House had sanctioned on the second reading. It would be better to abandon the Bill altogether than submit it to a process of tinkering wholly inconsistent with its original design.—Mr. SCULLY seconded the motion.—Lord J. RUSSELL said that no case had been made out to induce the House to reject the Bill, three out of the four propositions which it contained having already met with approval.—Lord FERMOY supported the amendment, and argued that the Government were to blame for not taking a manly stand upon the Bill in its original shape, and declaring that if it were not carried in that form they would appeal to the country. On a division Mr. Duncombe's amendment was negatived by 204 to 28.—Mr. STIRLING then moved the omission of the first clause, and the substitution of another enabling the universities of Scotland to return one member. Parliament had given a pledge that it would consider the case of the Scottish universities, and he argued that if such a constituency were created, it would fairly represent the educated mind of the country and be thoroughly independent. The number of persons whom it would enfranchise was nearly equal to the electoral body of Oxford, double that of the University of Dublin, and larger than any existing constituency in Scotland except Glasgow.—Mr. C. BRUCE seconded the motion.—Sir G. LEWIS admitted that the universities of Scotland had a strong claim to be considered in any scheme for the re-distribution of seats, but as the four forfeited seats had been taken from boroughs in England, it was only right that they should be assigned to English constituencies.—Sir J. GRAHAM, in withdrawing the claim of the University of London, expressed a hope that on some future occasion it would be taken into consideration in common with that which had been put forward by the sister institution in Scotland.—After some observations from Mr BLACKBURN, Mr. H. BAILLIE, Viscount HAMILTON, Lord J. RUSSELL, and Colonel SYKES, Mr. STIRLING withdrew his motion.—Sir G. LEWIS moved clauses dividing the West Riding of Yorkshire into two divisions, to be called the northern and southern division, and giving two knights of the shire to each.—Mr. BAINES protested against compromising the borough interest by conferring upon counties three out of the four seats taken from boroughs. The clauses were agreed to, and after some discussion upon the comparative merits of Pomfret and Wakefield, the former on a division was constituted the place of election for the southern division of the West Riding, by 97 to 67. The Bill was then ordered to be recommitted on a future day, with a view to the introduction of the necessary verbal amendments. On the order of the day for going into a Committee of Supply, Captain JERVIS drew attention to the present state of *Harwich Harbour*, which he complained was gradually filling up with silt and fast becoming useless; and moved that it is the duty of her Majesty's Government, before applying to this House for grants of money to construct harbours of refuge, to take steps that the natural harbours of refuge of this country be maintained.—Mr M. GIBSON admitted the importance of maintaining the natural harbours of refuge, especially one so commodious and convenient as Harwich. He promised that the subject should receive the fullest consideration on the part of the Board of Trade. The motion was then withdrawn, and the House went into Committee of Supply on the *Civil Service Estimates*. Various votes were discussed, and, among them, a vote of 20,895*l*., to complete the *Houses of Parliament*, was subjected to a rigid scrutiny, which extended to the frescoes, the cause of their decay, the preservation of the external stonework, the statues, including that of Oliver Cromwell, and other incidental topics. It transpired in the course of the discussion, that the vote was for completing only those portions of the building which are now in hand, exclusive of that portion to be built in New Palace Yard, and of the filling up of the rough wall in the clock-tower. With reference to the four statues of Sovereigns of England proposed to be placed in the Royal Gallery Mr. GREGORY conceived there had been a departure from an understanding last Session that they were not to be in a chronological series, but to be selected from our most distinguished princes, and moved that the sum of 3200*l*. proposed for the statues be omitted from the vote. This amendment was, however, negatived, and the vote agreed to.—The votes for the *South Kensington Museum* and the *Public Parks* were also discussed at some length, and a motion to reduce the former was negatived by 190 to 25.—The CHAIRMAN then reported progress. On the report upon the *East India (High Courts of Judicature) Bill*, as amended, certain amendments were moved by Mr. BUTT, and negatived, and others moved by Sir C WOOD were adopted. The report of the *Committee of Supply* was brought up and agreed to. The Report upon the *Inland Revenue Acts* was likewise agreed to, and a Bill was ordered to be brought on. The *Municipal Corporations Act Amendment (No. 2) Bill* was read a second time.—Sir G. LEWIS moved the second reading of the *Windsor Suspended Canonries' Bill*, explaining its object.—Mr. BOUVERIE and Mr. DEEDES strongly objected to the Bill upon principle. After a short debate, the Bill was read a second time. The *County Surveyors &c. (Ireland) Bill* passed through committee, Mr. CARDWELL having given up the clauses relating to superannuations.

TUESDAY.—At the morning sitting the House went into committee on the *Parochial and Burgh Schools (Scotland) Bill*, when progress was made as far as the 6th clause.—The *White Herring Fishery (Scotland) Bill* passed through committee.—In the evening Lord PALMERSTON stated, in answer to Mr. HADFIELD, that the Government intended to proceed with the *Bankruptcy and Insolvency Bill*, but that owing to the absence of the Attorney-General he was unable to name the day on which the Lords' amendments would be taken into consideration. *Gloucester and Wakefield.*—Mr. H. BERKELEY gave notice that, on Monday he would move that a writ be issued for the election of members for Gloucester.—Sir G. LEWIS also gave notice that, when Mr. Berkeley brought forward his motion, he should take the opportunity of stating the views of the Government with reference to the writ for Wakefield. *The Burial and Cemetery Acts.*—Lord ENFIELD moved an address for the appointment of a Royal commission to inquire into the operation of the Burial and Cemetery Acts in reference to the incumbents and ministers of parishes and districts in England and Wales, and to the amount of and mode of compensation, if any, to be provided for the loss of fees or other rights and privileges occasioned to them by the closing of churchyards and burial-grounds under the said Acts.—Mr. B. WESTHEAD seconded the motion.—Mr. HADFIELD [illegible] that the motion be limited to the districts [illegible] in the Bills of Mortality.—The motion was opposed by Mr [illegible] and Mr. BAINES, and supported by Mr NEWDEGATE, Sir M. PETO, and Mr. WHITESIDE.—Sir G. LEWIS admitted that, by the change of the law, there had been a very considerable diminution of the emoluments of some of the clergy. As regarded burial fees, they were a remuneration for special services, and could not be demanded unless they were performed. There was, however, no fund applicable to compensation for losses arising from the effect of the change of the law, except—assuming that a claim could be established—by a charge on the rates of the parish, and this would be creating a Church-rate in another form. Under these circumstances he felt it to be his duty, reluctantly, to oppose the motion.—Sir G. GREY said, that, although cases of hardship had arisen under this great sanitary measure, they had resulted from no failure on the part of the Government or the Legislature. The amendment having been withdrawn, the original motion was negatived on a division by 59 to 48. *Poland.*—Mr. HENNESSY called attention to the events in Poland, with reference to the Treaties of 1815. He entered upon a long historical narrative, commencing with the partition of Poland, of the conduct of the Continental Powers towards the Poles, and argued that the destruction of the independence of Poland and its incorporation with Russia materially affected the interests of England, as well as the political and commercial condition of Europe. Recent events in Poland, he thought, justified the House of Commons in making an effort to serve the Poles, as some atonement for the past conduct of England. He moved for copies or extracts of correspondence on the subject of Poland in 1831 and 1832 between the Governments of Great Britain and Russia.—Mr MILNES seconded the motion.—Lord J. RUSSELL said that the great Napoleon felt it beyond his power to restore the independence of Poland. Everything which could be done by British diplomacy in favour of Poland was done at the Congress of Vienna; but whatever Lord Castlereagh might have been able to accomplish was entirely set aside by the landing of Napoleon from the island of Elba, and a feeling still existed in Russia and at St. Petersburg that Poland should not enjoy larger privileges. He defended the Government of this country from the charge of complicity in the treatment of the Poles. England, he said, had been altogether hostile to the partition of Poland. With regard to Russia, he urged the delicacy and the danger of any interference on behalf of the Poles, and even to go to war on their behalf would not accomplish the object, or be for the interests of Poland. Greater hopes might be entertained from the peaceable progress of enlightenment and knowledge. He did not oppose the production of the papers moved for.—After some remarks by Sir H. VERNEY, Mr. J. WHITE, and Mr. SCULLY, Lord PALMERSTON said there was no objection to the production of the papers, which would show that the English Government had protested against that iniquitous act—the destruction of Polish nationality. It was impossible for any man with a love of liberty in his breast not to admire the Polish character; or for any one with a just sense of wrong, not to lament the misfortunes which had befallen the Poles from the first partition of their country down to the present moment; but he thought with his noble friend, that any interference by this country in their affairs was calculated rather to retard the consummation of their wishes than to promote it. The motion was then agreed to.—Sir J. ELPHINSTONE called attention to the report of the Select Committee on *Chains and Anchors* of 1860; and moved that, in the opinion of the House, it was the duty of her Majesty's Government to take measures to ensure that all sea-going vessels, especially those employed in the carriage of passengers, should be sufficiently supplied with anchors and chains, properly tested as to strength and workmanship.—Admiral WALCOTT seconded the motion.—Mr. M. GIBSON and Lord C. PAGET opposed it on the ground that it would entail upon the Government the expense and responsibility of not only testing, but of re-testing, the anchors and chains of all merchant vessels, which would lead to an amount of interference intolerable to the owners.—Mr. BENTINCK and Mr HASSARD supported the motion.—Sir M. SEYMOUR opposed it. The motion was negatived without a division.—Mr. BUTT called attention to the *Derryveagh Evictions*, and submitted a series of resolutions in favour of instituting an inquiry by means of a Royal Commission.—Mr. CARDWELL opposed the motion.—Lord PALMERSTON condemned the interference of the House in a case where a landlord had only enforced his legitimate rights, much as the extreme measure he had resorted to was to be regretted.—On a division the motion was negatived by 88 to 23. Mr. CARDWELL obtained leave to bring in three Bills to reduce and alter the rate of duty payable on proceedings under the *Landed Estates Act of* 1858, to provide for the costs of certain proceedings to be taken under the *Landlord and Tenant Law Amendment (Ireland) Act of* 1860, and to enable justices in Ireland to commit to *Local Bridewells* persons convicted of drunkenness.—Mr PEEL obtained leave to introduce a Bill to make arrangements as to the disposal and management of property belonging to the *University of Edinburgh*, and to regulate the application of the annuity of 2500*l*. payable from the revenues of the *harbour and docks of Leith*. The *Metropolitan Police Force Pensions Bill* and the *Industrial Schools (Scotland) Bill* passed through committee. Several other Bills were advanced a stage.

WEDNESDAY.—*University Elections Bill*.—The House went into committee on this Bill as amended by the Select Committee. On the first clause, Mr AYRTON moved that the provision allowing electors to vote by proxy should be struck out.—After a long discussion, in which the system of voting by proxy was opposed by Sir G. LEWIS and Mr HENLEY, the provision was carried on a division by 129 to 74.—Mr BUTT moved an amendment, the effect of which was that the proxy papers should not be signed till after the nomination.—The amendment was negatived by 1[illegible] to 86.—The remaining clauses were gone through, and the Bill was ordered to be reported.—Mr WALPOLE moved the second reading of the *Indictable Offences (Metropolitan District) Bill*, which had come down from the Lords. The object of the Bill was to supersede the action of the grand jury within the limits of the Central Criminal Court, and to send a prisoner direct to a jury if he had been committed for trial by a police magistrate. All political offences were exempted from the operation of this Bill, and persons charged with these offences would still have all the protection that could be thrown round them by the grand jury system. In ordinary offences he contended that the intervention of a grand jury was a positive obstruction rather than a help to justice.—Mr. AYRTON opposed the Bill, which, he said, if once adopted in the metropolitan district, would soon be extended over the whole kingdom. He recommended that the Bill be withdrawn.—Sir G. LEWIS supported the Bill, and said there was no analogy between the metropolis and the rest of the country.—Mr HUNT said that the grand jury was an institution that had come down from their forefathers, that it had in former times proved a safeguard of political liberty, and, if troublous times were to return, might be so again. He, therefore, moved that the Bill be read a second time that day three months. On the motion of Mr NEWDEGATE, the debate was adjourned.—Mr. [illegible] postponed his *Church-rate Bill* to Wednesday, the 24th [illegible], that being the first open day which he could secure for a [illegible] full discussion. The *Labourers' Cottages Bill*, the *Metropolitan Police Force Pensions Bill*, and the *Tramways (Ireland) Act Amendment Bill* were read a third time and passed. The *Attorneys and Solicitors (Ireland) Bill*, and the *Police Houses (Scotland) Bill* passed through committee.

THURSDAY.—The *Lunatics Bill* was brought down from the Lords, and read a first time. On the order for going into Committee of Supply, Mr DILLWYN directed attention to the [illegible] increasing amount of the *Educational Estimates*, and moved a resolution that votes in aid of educational establishments should, so far as may be consistent with existing arrangements, be limited to those in which elementary instruction alone is given, and to those for the training of school-

masters.—Sir G. LEWIS opposed the motion, which was negatived without a division. *Spain and Morocco.*—In answer to Sir R. PEEL, Lord J. RUSSELL said that since the friendly offices of her Majesty's Government in the difference between Spain and Morocco had been accepted, information had been received that it was not the intention of the Moorish Government to comply with the stipulations of the treaty. In these circumstances, the Spanish Government had stated that the alternative was either a renewal of the war, or the taking possession of Tetuan; but that they were ready to receive any overtures from the Moorish Government. He still hoped that an arrangement would be effected.—Mr. S. FITZGERALD expressed a hope that the Government had addressed the most vigorous remonstrance to Spain against the occupation of any part of the territory of Morocco.—Lord J. RUSSELL did not think it advisable to enter into a discussion as to the importance of Tetuan, or that it would become Her Majesty's Government to say that Morocco was not bound by the obligations of the treaty. *Reports of the Debates.*—Mr. SCULLY complained that the reports of the debates in the daily papers did not do justice to his speeches, and made him ridiculous in the eyes of his constituents.—Mr. BASS expressed his opinion that the speech just made by the hon. member was not calculated either to improve his reputation or add to the dignity of the House. It was absolutely necessary that the House should curb in a high degree the licence of too much speaking, which was at present exercised by many members, and by none more so than the hon. and learned gentleman himself. The House having gone into Committee of Supply on the *Civil Service Estimates*, Mr. BAXTER moved to reduce the vote for harbours of refuge by 90,000*l.*, the sum asked for works at *Alderney*. After a short debate, in which Mr. LIDDELL, Sir J. GRAHAM, and Lord C. PAGET took part, the motion was negatived by 65 to 50. The vote was then agreed to. On the vote for public buildings in Ireland, Mr. GREGORY moved the omission of the sum of 2382*l.* for additional repairs and alterations of the Royal Dublin Society's buildings, and for the erection of a new palm house at *Glasnevin Gardens*, on the ground of the Society's refusal to open the gardens to the public on Sundays. After considerable discussion Mr. CARDWELL assured the House that, unless the Society conformed to the wish of the House, and consented to open the gardens as desired, subject to the same restrictions which are in force at Kew, the annual grant to the Society would not be brought forward by the Government. On this understanding Mr. GREGORY withdrew his amendment. The vote was then agreed to. A vote of 5000*l.* for the repair of *Highland Roads and Bridges* was opposed by Mr. WHITE, Mr. WILLIAMS, and Mr. COLLINS; but was carried, on a division, by 72 to 59. Several other votes were agreed to, and the House resumed.—The *East India (Civil Service) Bill* was committed *pro forma*, with the view of introducing certain amendments, in accordance with suggestions made in the course of the recent debates.—On the report on the *Industrial Schools Bill*, Lord R. CECIL moved to defer the consideration of the report for three months. After a short discussion, the amendment was negatived, and the report was, with a few amendments, agreed to.—The *Appropriation of Seats (Sudbury and St. Alban's) Bill* was recommitted, and certain new clauses were added.—Several other Bills were advanced a stage.

FRIDAY:—*Irremovable Poor Bill.*—The House went into committee on this Bill. On clause 1, Mr. LOCKE moved an amendment constituting the metropolis a union in itself.—Sir G. LEWIS opposed the amendment which was withdrawn.—Mr. KNIGHT moved an amendment, making five years the claim to a settlement. The amendment was rejected, and clause 1 was agreed to. Clauses 2 to 7 inclusive were also agreed to. On clause 8, Mr. AYRTON moved as an amendment that this Act remain in force for a period of five years. The amendment was rejected, and the clause agreed to. [Left sitting.]

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at $89\frac{5}{8}$ to $\frac{3}{4}$, both for Money and the 10th inst.; Three per Cents. Reduced, $88\frac{3}{4}$ to $\frac{7}{8}$; New Three per Cents., $88\frac{7}{8}$ to $\frac{3}{4}$; Thirty Years' Annuities, 1885, $15\frac{5}{8}$; India Five per Cent. Stock, $98\frac{3}{8}$ to $\frac{1}{2}$, ex div.; Ditto for Acct., $98\frac{1}{2}$, ex div.; Ditto Four per Cent. Debentures, 1863, 96; Ditto, 1859, $95\frac{3}{8}$; Five and a Half per Cent. Enfaced Rupee Paper, $100\frac{3}{4}$; Exchequer Bills, June, 5*s.* dis.—FOREIGN: Dutch Two and a Half per Cents., $63\frac{1}{2}$ ex div.; Greek, $7\frac{3}{4}$ to $\frac{1}{2}$; Mexican Three per Cents., for Acct., $22\frac{1}{8}$ to $\frac{1}{4}$; New Granada Active, 15; Ditto Deferred, $5\frac{1}{2}$; Portuguese Three per Cents., 1853, $46\frac{3}{8}$ to $\frac{1}{8}$, ex div.; Russian Three per Cents., 1859, $61\frac{5}{8}$ to $\frac{7}{8}$; Turkish Six per Cents., 1854, for Acct., $74\frac{1}{4}$; Ditto, 1858, for Acct., 60 to $60\frac{1}{2}$.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,696,910	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	11,149,946
		Silver Bullion	71,964
	£25,696,910		£25,696,910

BANKING DEPARTMENT.

Proprietors' Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£9,988,202
Rest	3,307,315	Other Securities	21,401,660
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	7,291,844	Notes	5,633,830
Other Deposits..	12,092,482	Gold and Silver Coin ..	849,862
Seven day and other bills	620,913		
	£37,865,554		£37,865,554

4th day of July, 1861. M. MARSHALL, Chief Cashier

Gazette of the Week.

TUESDAY.—BANKRUPTS.—R. BATLEY, Park Village East, Regent's Park, Timber Dealer—H. DONLEVY, New York Brinsworth, Yorkshire, Glass Manufacturer—J. GEARNS and F. A. TARRANT, Bucklersbury, Auctioneers—W. GREEN, Liverpool, Licensed Victualler—M. GRIFFIN, Liverpool, Leather Dealer—J. JESSOP, Preston, Brockhurst, Shropshire, Innkeeper—J. JOSEPH, Houndsditch, City, Importer of Foreign Goods—N. KIMBERLEY, Lloyd, Birmingham, Grocer—J. LEGGE, Willenhall, Staffordshire, Draper and Haberdasher—W. G. MARTIN, Risca, Monmouthshire, Innkeeper—J. MOSSOP, Liverpool, Provision Dealer—J. A. MOWATT, Crawford Street, Marylebone, Boot and Shoemaker—J. PRESTON, Kingsland Road, Tobacconist—J. SUGDEN, Sydenham, Kent, Builder.

SCOTCH SEQUESTRATION.—J. FRASER, Glasgow, Restaurant Keeper.

FRIDAY.—BANKRUPTS.—J. DENNIS, Sneinton, Nottinghamshire, Draper and Milliner—S. FLEET, Audlem, Cheshire, Mercer and Draper—R. HALL, Great Warley, Essex, Army Clothier and Tailor—C. HARDEN, Fenchurch Street, City, Warehouseman—G. HILLIER, Trowbridge, Wiltshire, Marine Store Dealer—J. LAWS, New Church Street, Marylebone, Chemist and Druggist and Omnibus Proprietor—H. LENOX, Liverpool, Merchant—J. MARTIN, Faversham, Watchmaker and Jeweller—H. F. OVENDEN, Maidstone, Kent, Dealer—S. VAGG, commonly known as SAM COLLINS, late of Hyde, Hendon, Middlesex, now of Gower Place, Bedford Square, Licensed Victualler.

Metropolis and its Vicinity.

THE GREAT FIRE.—During the whole week the fire at London Bridge has been burning without cessation among the oil and tallow in the vaults. The land and floating engines have been continuously pouring water into the ruins, and fresh outbursts of flame have occurred daily at intervals owing to the bursting of the tallow casks. On Sunday afternoon and again on Monday night the flames rose above the highest walls of the ruins, and dense volumes of black smoke were carried over the railway and Bermondsey, filling the atmosphere with the smell of burning tallow. It is now admitted that the tallow in the vaults must burn itself out, and that it will probably take another week to do so. The water having no effect upon this mass of floating grease, Phillipps' patent fire annihilators were tried on Saturday, but with only partial success, and it appears that London is at present without the means of suppressing a conflagration of such vast magnitude as that which has raged in Tooley Street for the past week. The operations of shoring up the dangerous walls next Tooley Street have commenced, as have also those for the recovery of salvage, the amount of which it is now admitted will ultimately be much larger than was at first anticipated, although many weeks—several months, in fact—must elapse before those goods which are uninjured either wholly or in part can be entirely disinterred from the superincumbent mass of fallen brickwork and rubbish. Yesterday afternoon the men employed in searching for the body of Mr. Scott discovered among the ruins a gold watch, a gold chain, several half sovereigns, and some silver, all very much burnt, and some small bones, which have been examined by the district medical officer, who pronounces them to be those of a human being. The chain has been identified as that of Mr. Scott.

THE FUNERAL OF MR. BRAIDWOOD took place on Saturday in Abney Park Cemetery in the presence of an immense concourse of spectators. Seldom, if ever before in London, has such a marked tribute of public respect been paid to any private individual. The London Rifle Brigade, the Tower Hamlets Volunteers, all the public and private fire brigades, with a large number of the city and metropolitan police, and the representatives of the great fire companies, attended on the occasion, and formed part of the procession, which extended upwards of a mile in length. The hour fixed for the departure of the *cortége* was 3 o'clock, but long before that time every avenue leading to Watling Street was blocked by a dense and almost impenetrable crowd, while throughout the entire length of the route along which it was to pass, every path was thronged, and the windows and even roofs of the houses were crowded. Before 3 nearly all the shops were shut up, and at some houses the shutters were closed and the blinds drawn. Every bell from the city churches rang out a funeral peal, excepting only St. Paul's, which only tolls on the death of some member of the Royal family, and of the Lord Mayor during office. The funeral was attended by the Duke of Sutherland, the Earl of Caithness, and the Rev. Dr. Cumming, who read the service on arriving at the cemetery. The body was buried in the grave of Mr. Jackson, Mr. Braidwood's son-in-law, who was killed by a similar accident in 1855.—A public meeting was held on Thursday at the Mansion House, Alderman Salomons in the chair, at which it was resolved to raise a fund by public subscription as a testimonial to Mr. Braidwood's family.

ANNIVERSARY OF AMERICAN INDEPENDENCE.—The 85th anniversary of American independence was commemorated on Thursday by a public breakfast at the Opera Colonnade Hotel in Charles Street, St. James's. The Rev. Dr. Patten, of New York, presided, and was supported by about 120 American gentlemen resident or staying in the metropolis, by a few Englishmen chiefly ministers of religion, and several ladies. The speeches delivered were strongly in favour of the Union and expressive of unabated attachment to the mother country, coupled with disappointment that England did not respond so sympathetically as they had expected.

SIR BENJAMIN BRODIE.—Within the last few days an operation for cataract has been performed on Sir B. Brodie, the result of which is said to have been most favourable.

MR. SPURGEON.—During the service on Sunday last Mr. Spurgeon stated that the excitement of a visit to Swansea and Merthyr Tydvil, where he had during the past week addressed large multitudes, had brought on a tremulous feeling, accompanied by indisposition, from which he was still suffering. His medical advisers had informed him that unless he abstained from all labour beyond that connected with his own chapel he might lose his voice for ever. He had resolved, therefore, to preach nowhere but in his own chapel, and he begged his friends not to countenance any attempt to induce him to break through his determination.

CLOSE OF THE WESTMINSTER ABBEY SPECIAL SERVICES.—On Sunday evening the series of 26 special services at Westminster Abbey for the present year were brought to a close, having been successful throughout in drawing immense congregations, principally composed of members of the working classes.

THE BUILDERS' STRIKE.—On Monday the unionists who are out on strike sustained a defeat which shows that their case is altogether hopeless. It was the first day of the general system of hour payments, and hopes were entertained by the advocates of the strike that masters would not receive sufficient assistance to enable them to carry on their works. This, however, was a mistake, for when the yards were opened nearly the full complement of men was obtained. This was especially the case at the yards of Messrs. Lucas, Messrs. Myers, and Messrs. Kelk, at all of which the men expressed themselves thoroughly satisfied with the new arrangement, which enable them to work as many hours as they please, and to earn an increased amount of wages at the end of the week if they are inclined to work as long as they have hitherto done. The men however were subjected to a great deal of persecution at the hands of the unionists, who placed members of their body at the different yards to entice away those who had entered, and in a very few cases succeeded in doing so.

THE PUBLIC HEALTH.—The Registrar-General's Weekly Return states that the deaths from all causes registered in London in the week that ended Saturday, June 29, were 1092. The average number obtained from the returns of the corresponding weeks of the ten previous years 1851-60, corrected for increase of population, was 1220. The present return is therefore 128 below the average. During the week the births of 963 boys and 941 girls, in all 1904 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1662.

Provincial.

CHIPPENHAM.—On Tuesday evening, as the family of Mr. West Awdry, Under Sheriff of Wilts and cousin of Sir John Awdry of Notton Hall, were amusing themselves in boats on the river Avon, accompanied by the Misses Lowther, of Derry Hill, one of the boats containing Mr. W. S. Awdry and the Misses Lowther accidentally upset and threw its occupants into the river. The elder Miss Lowther clung to Mr. Awdry, who made a desperate effort to carry her ashore. Although a good swimmer, the young lady clung to him so tightly that all his attempts to save her and himself were unavailing, and they were both drowned. The younger Miss Lowther was rescued by the [illegible] Mr. Clarke, who happening to be near boldly plunged into the water, and brought her to land just as she was on the point of sinking.

COVENTRY.—On Thursday night, the 28th ult., the rectory-house of Bagington, near this city, was the scene of a shocking accident, which has resulted in the death of Mrs. Gooch, the wife of the rector of the parish, the Rev. F. Gooch, and daughter of the Right Hon. W. Yates Peel, brother of the late Sir Robert Peel. It appears that the unfortunate lady retired to her chamber about half-past 10 o'clock for the purpose of going to bed. Previous to doing so she had resort to a bottle of Rimmel's toilet vinegar for the purpose of fumigating the apartment, but instead of pouring some of the liquid into the small iron vessel in which it was to be heated before exposing it to the action of the fire, she seems to have incautiously made the vessel hot first, by holding it over the candle, and then [illegible] in the vinegar. The liquid consequently at once [illegible] and overflowed the vessel upon her dress, which, being muslin, was in a blaze in a moment. She screamed loudly for help, and, with unusual presence of mind, unloosed the skirt of her dress, but finding her other garments aflame also, she ran down the stairs to the drawing-room to her husband, who succeeded by means of the hearthrug in subduing the flames, by which she had at that time become almost wholly enveloped. Medical aid was obtained as speedily as possible, but of no avail. The unfortunate lady was so badly burnt that she expired in the afternoon of the following day. An inquest was held on Saturday morning, and a verdict of Accidental Death returned.

HULL.—The screw steamer Baltic, on her voyage from Hull to Cronstadt has been wrecked on [illegible] Ground, near Dagoe, not far from the Gulf of Finland. Dagoe is noted for its powerful magnetic attraction, and this steamer and several other Hull vessels have been wrecked in its vicinity, from no other cause than the derangement of the ship's compasses.

REIGATE.—On Monday the German who has given the name of August Salzmann, but who is supposed to be Johann Carl Franz, one of the men concerned in the murder of Mrs. Holliday, was brought before the magistrates in this town. Several witnesses were examined, who proved that the prisoner had been seen in the town with another foreigner on the 10th ult.; that they had been seen together at the Cricketers' Arms, in Reigate, on that day, and that some cord which they had bought of Mrs. Pitcher, in Reigate, was exactly similar to that with which the prisoner's bundle was tied, and to that with which the legs of Mrs. Holliday were tied. Mr. Coward, superintendent of police, proved that on showing the prisoner the book which had been found in the room in which the murder was committed, he looked at it for a moment, turned pale, and [illegible] down his head, and seemed absorbed in thought. He now said that the book had no reference to him; that there were many Germans about the place, and the description given in the book of the owner might apply to any other German as well as to him. He persisted in denying any knowledge of the murder. Mr. [illegible] then applied for a remand, saying he had every

to believe that by the next examination he should be able to establish the identity of the prisoner with the owner of the book. The magistrates remanded the prisoner, and he was taken back to prison.

Ireland.

THE PRINCE OF WALES'S VISIT TO IRELAND.—His Royal Highness landed at Kingstown about half-past 5 on Saturday afternoon, under Royal salutes from the ships of war and the forts, and amidst the most enthusiastic cheers of the vast crowd which had assembled to greet him. His Royal Highness was met at Kingstown by the Lord-Lieutenant, and after receiving an address from the commissioners, proceeded to the Viceregal Lodge. On Sunday morning the Prince attended the Chapel Royal, where the Dean of Down preached. His Royal Highness afterwards honoured Colonel White, of Woodlands, with his company at a [illegible], and planted a tree in the park. In the evening the Prince dined with the Duke of Leinster at Carton. On Monday the Prince drove to the Castle in an open carriage and four, accompanied by the Lord Lieutenant, and received an address from the Corporation of Dublin in St. Patrick's Hall, to which he returned the following reply:—

"My Lord Mayor and Gentlemen,—I receive with most heartfelt pleasure the cordial address, which, emanating as it does from the Corporation and citizens of the Irish metropolis, I venture to regard as expressing sentiments entertained by the country at large. Although, in compliance with my own wishes, public formalities were in a great measure dispensed with on the occasion of my landing, the enthusiastic welcome spontaneously tendered to me by the vast and important community which you represent was not only grateful to myself, but afforded the most unequivocal evidence of their affectionate devotion to the Queen, my mother, and to her family. That you should discern in me any promise of the virtues and exalted qualities which have so endeared her Majesty to her subjects is, I fear, due rather to your generous partiality than to my own deserts. But you may be assured, at least, that I am profoundly sensible of their inestimable value, and that to learn to imitate them is my earnest study and fondest desire. I come here, as I have visited other parts of the country, for the purpose of self-improvement, and specially on this occasion to profit by the great advantages which the plains of the Curragh present as a school for practical military instruction. My time will be chiefly occupied in this pursuit; but I am most anxious to acquire a more full acquaintance with the material and industrial resources of Ireland, and yield to no one in my sense of their importance and in earnest desire for their increase and development."

At the conclusion of this ceremony the Prince proceeded to the Art Exhibition in Kildare Street, accompanied by the Lord-Lieutenant and suite. Dame Street, College Green, Nassau Street, Dawson Street, Molesworth Street, and Kildare Street were thronged with spectators, and the enthusiasm was extraordinary. On Tuesday his Royal Highness proceeded by special train to the Curragh camp, where it is supposed he will remain for about six weeks. The quarters occupied by the late commander-in-chief, Lord Seaton, have been fitted up for the reception of his Royal Highness. On his arrival at the Curragh the Prince was received by the Commander-in-chief, Sir George Browne, and a Royal salute was fired by a field battery of Horse Artillery as he rode to his quarters. On Wednesday his Royal Highness was present at a grand review and sham fight, in which about 10,000 of the troops in camp were engaged. The Prince was loudly cheered by the crowd of spectators.

Scotland.

FUNERAL OF LORD CHANCELLOR CAMPBELL.—The body of the late Lord Campbell was removed from Stratheden Lodge on Friday the 28th ult, to Hartrigge, his seat in Roxburghshire, and the funeral took place on Saturday in Jedburgh Abbey in the most unostentatious manner, and without any of the pomp usually attendant on the funeral of a person of such high dignity. The Church of England service was performed by the Rev. W. Spranger White, his lordship's son-in-law.

Railways.

FALL OF A TUNNEL.—On Tuesday evening the stone arch of the tunnel which is in course of construction under Haddon Hall, on the new line between Buxton and the Rowsley terminus of the Manchester, Buxton, Matlock, and Midland Junction fell in, by which five men and a horse were killed, and several others received serious injuries.

Sporting.

NEWMARKET JULY MEETING.

TUESDAY.—*Handicap Plate.* Mr. H. Jones's Eastern Princess beat Boabdil, Predictor, and 5 others.—*The Plate.* Lord Stamford's Malta beat Kildonan, Pastime, Brother to Spanish Fly, and La Vapeur.—*The July Stakes.* Mr. T. Parr's Tolurno beat Costa, Sir William Armstrong, and 7 others.

WEDNESDAY.—*Sweeps.* Mr. Merry's Chieftain's Daughter beat Pergula.—*Match.* Mr. Barnard's Wolsey beat Bayonet.—*Handicap Plate.* Mr. French's Leontes beat Jacintha, The Prophet, and 9 others.—*Sweeps.* Mr R. Ten Broeck's Reporter beat Hambleton Lass, Evangeline, and Twinkle.—*Sweeps.* Baron Rothschild's Janus beat Walloon and Begonia.—*The Stamford Plate.* Mr. Alexander's Thunderbolt beat Stampedo, [illegible], and 8 others.—*Sweeps.* Lord Clifden's Barb Pigeon walked over.—*The Town Plate.* Mr. H. Jones's Eastern Princess beat Malta and Ducat.—*Plate.* Lord Stamford's Donna [illegible] beat Night Revel, Baron Rothschild's f, and 12 others.

THURSDAY.—*Handicap Sweeps.* Lord Stamford's Little Lady beat Lady Derby, Apollo, Bavard, and Herman.—*Sweeps.* Mr. [illegible]'s Leontes walked over.—*Handicap Sweeps.* Baron Rothschild's f. beat Boabdil and Jacintha.—*Handicap Plate.* Baron Nivière's Cosmopolite beat Waterwitch, Mr. Godding's c. and 9 others.—*The Midsummer Stakes.* Lord Stamford's [illegible] beat Russley and Grouse.—*The Chesterfield Stakes.* Mr. Merry's Costa beat Xurullo, Sister to Fravola, and 4 others.—*Plate.* Mr. Greville's Rosalind beat Mr. Harlock's f., Snake, and 6 others.

Obituary.

THE RIGHT HON. SIR J. PATTESON died on the 28th ult. at his seat, Feniton Court, near Honiton, Devon, in his 71st year. He was the second son of the Rev. Henry Patteson, of Drinkstone, Suffolk, by the daughter of Mr Richard Ayton Lee, a banker of London, and was born in 1790, at Coney Weston, Suffolk. He was educated at King's College, Cambridge, where he graduated M.A. in 1816, and was called to the Bar at the Middle Temple in 1821. In 1830 he was appointed one of the Judges of the Court of King's Bench, and received the honour of knighthood. In 1852 he resigned the judgeship, and was then made a Privy Councillor. In the following year he was made a commissioner to inquire into the corporation of the city of London. He was twice married; first to the third daughter of Mr. George Lee, of Dickleburg, Norfolk; and secondly to a daughter of Mr. James Coleridge, of Ottery St. Mary, Devon.

SIR WILLIAM OGILVIE, BART., of Carnousie, in the county of Banff, died recently at Christchurch, New Zealand, in which colony he had for some time resided. He was born in 1810, succeeded his father in 1824, and married, in 1838, the daughter of Mr. James Grange, of the Treasury. He was a claimant of the barony of Banff and the earldom of Findlater.

Miscellaneous.

A NEW COMET.—A brilliant comet of enormous magnitude, even exceeding that which made its appearance three years ago, was discovered on Sunday. Its nucleus is well defined, much larger and brighter than a star of the first magnitude, and its tail extends nearly 30° in length. Its position when discovered was directly under the pole star, about 20° from the horizon, and the tail extended faintly to near the pole star itself. It was at first supposed to be the great comet of 1556, which induced the Emperor Charles V. to abdicate, and which has been expected by astronomers for three years past; but Mr. Hind, who calculated the motion of that comet, has written to the *Times* stating that it is certainly not the comet of Charles V. He adds, that "its distance from the earth on Sunday evening was rather over 13,000,000 miles, and a little less than 15,000,000 at 11 o'clock last evening. It is therefore receding slowly from us, as well as from the sun. The apparent length of the tail on Monday night was 70°, corresponding to a true length of 16,000,000 miles. The nucleus, which is extremely brilliant, is about 400 miles in diameter."

BIRTHS.—On the 2d inst, at 15, Park Road, Regent's Park, the Princess VICTORIA GOURAMMA, the wife of Lieut.-Col. J. CAMPBELL, of a daughter—25th ult, at Holly Lodge, Campden Hill, the Countess of AIRLIE, of a son—27th ult, at Rutland Gate, Lady EDWARD FITZALAN HOWARD, of a daughter—28th ult, at 38, Upper Grosvenor Street, the Lady MARY HERBERT, of a son—27th ult, at 42, Belgrave Square, Lady OCTAVIA SHAW STEWART, of a son—25th ult, at Springwood Park, Kelso, Lady SCOTT DOUGLAS, of a daughter—30th ult, at Sutton Vicarage, Isle of Ely, the Hon. Mrs. CHARLES SPENCER, of a son—1st inst, at 35, Eaton Place, the Hon. Mrs. Adderley, of a son—29th ult, at Duffryn, Aberdare, the wife of H. A. BRUCE, Esq., M.P., of a daughter—20th ult, the wife of WILLIAM BOVILL, Esq., M.P., of a daughter, stillborn—28th ult, at Swarcliffe Hall, Yorkshire, the wife of JOHN GREENWOOD, Esq., M.P., of a son.

MARRIAGES.—On the 4th inst, at St. Peter's, Eaton Square, the Right Hon. Lord RENDLESHAM to Lady EGIDIA MONTGOMERIE, daughter of the Earl of EGLINTOUN—26th ult, by special licence, at the Royal Chapel, Windsor Great Park, DAVID ERSKINE, Esq., of Cardross, Perthshire, to HORATIA ELIZABETH, eldest daughter of Major General and Lady EMILY SEYMOUR—26th ult, at St. James's Church, Paddington, ALEXANDER YOUNG SINCLAIR, Esq., Captain H.M.'s Bombay Army, eldest son of Sir John Sinclair, Bart., of Dunbeath, to MARGARET CRICHTON, eldest daughter of the late JAMES ALSTON, Esq., of Bryanston Square—1st inst, at Bishop's Lydeard Church, Somerset, EDWARD RALEIGH KING, Esq., late Captain 13th Light Dragoons, eldest son of Bolton King, Esq., of Chadshunt, Warwickshire, late M.P. for that county, to SUSANNA OCTAVIA, youngest daughter of Sir JOHN HESKETH LETHBRIDGE, Bart., of Sandhill Park, Somerset—27th ult, at the parish church, Dromohaire, EDMUND YATES PEEL, second son of the late Jonathan Peel, Esq., of Culham, Oxfordshire, to LOUISE LONGRIDGE, eldest daughter of the late HENRY PALMER, Esq., of Shriff, in the county of Leitrim—5th inst, at Halifax, Nova Scotia, Major RICHARD M. POULDEN, late of the Royal Artillery, son of the late Rear-Admiral Poulden, to ELIZABETH, youngest daughter of the late Chief Justice the Hon. Sir BRENTON HALLIBURTON—18th of May, at Singapore, J. BROOKE BROOKE, Esq., of Sarawak, to JULIA CAROLINE, second daughter of the late BENJAMIN WELSTEAD, Esq., of Kimbolton, Huntingdonshire.

DEATHS.—On the 25th ult, at Kempsford, the Lady GEORGIANA BOURKE, widow of the Rev. Sackville Bourke, and daughter of the late Earl of Bessborough—27th ult, in Park Crescent, MARY, widow of the late Right Rev. WILLIAM CAREY, Lord Bishop of St. Asaph, aged 84—27th ult, suddenly, MABEL BEATRICE, youngest daughter of Lieut.-Colonel and Lady EMILY CAVENDISH—27th ult, at Bruges, CAROLINE, eldest daughter of the late Lieut.-General Sir JAMES BATHURST, K.C.B., and of Lady Caroline Bathurst—28th ult, at Debdale Grove, Finedon, FRANCES JULIANA, eldest daughter of the late Sir DIGBY MACKWORTH, Bart., of Cavendish Hall, Suffolk, aged 71—26th ult, at Dover, EMILIA, wife of Major-General WILLIAM NEPEAN, and daughter of the late Colonel JOHN YORKE, aged 65—30th ult, at Caversham Hill, Reading, ELLEN ANN ELIZABETH, relict of the late Major-General LOCKYER, aged 63—13th May, at Hazareebagh, of dysentery, GEORGE CARNAC BARNES, Esq., C.B., late Foreign Secretary to the Government of India—5th May, at Thayet Myo, Pegue, from exposure to the sun in the discharge of his duties, Lieut. GEO. SPICER HUTCHINGS, 9th M.N.I., formerly of H.M.'s 18th R.I., the son of Colonel J. HUTCHINGS, Madras Retired List—26th inst, at Tunbridge Wells, GERTRUDE HOLDEN-ROSE, second daughter of Lieut.-Col. Holden-Rose, late 17th Lancers, and of The Ferns, Wivelsfield, Sussex—1st inst, at Roskrow, near Penryn, DAVID BARCLAY, Esq., of Eastwick Park, Surrey, aged 7[illegible]—30th ult, at 1, Portland Place, LLOYD H. BAMFORD HESKETH, Esq., of Gwrych Castle, Denbighshire, aged 7[illegible]—[illegible] ult, in Cavendish Place, CHARLES KYNASTON MAINWARING, Esq., of Oteley Park, Shropshire, aged 57—26th ult, at Dundas Castle, MARY, fourth daughter of JAMES DUNDAS, Esq., of Dundas—22d ult, at Southend, Essex, CATHERINE, widow of the late GEORGE WRIGHT, Esq., and daughter of the late Dr. Lukin, Dean of Wells, aged 86—25th ult, at Fingest House, Henley-on-Thames, JOHN JONES DYER, Esq., late of the Admiralty, Whitehall, aged 61—1st inst, WILLIAM WHITAKER MAITLAND, Esq., of Loughton Hall and Woodford, Essex, aged 66—30th ult, at his residence, in the Cathedral-close, Hereford, the Rev. HUGH HANMER MORGAN, B.D., canon residentiary of the cathedral church of Hereford, aged 78.

Markets.

COVENT GARDEN, July 6.

The supply of most things continues to improve, and that of Vegetables is now sufficient for the demand. Good samples of Endive and Artichokes come from the Continent; also Apricots and Green Figs, Greengages in large quantities, and new Apples and Pears; the latter come from Lisbon and Oporto. Several cargoes of West India Pines have also arrived. Peas are plentiful. Grapes are still realising good prices. Of Strawberries there is still a good supply. Cherries are also everywhere plentiful; also Asparagus, French and Broad Beans, young Carrots, and new Potatoes; the latter fetch 1d. per lb. Cucumbers are coming in more plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 5s to 8s	Cherries, English, p. lb., 6d to 1s
Grapes, per lb., 2s to 7s	Pears, per doz., 4s 6d to 8s
Strawberries, p. pun., 6d to 1s	Apples, per doz., 6d to 1s 6d
Melons, each, 2s to 4s	Oranges, per 100, 6s to 14s
Peaches, per doz., 15s to 24s	Lemons, per 100, 6s to 10s
Nectarines, do., 12s to 20s	Nuts, Cob, per lb., 1s to 1s 6d
Apricots, do., 1s to 3s	

VEGETABLES.

Cauliflowers, each, 6d to 8d	Beet, per doz., 1s 6d to 6s
French Beans, p. 100, 9d to 1s 6d	Celery, p. bundle, 1s 6d to 2s 6d
Green Peas, p. quart, 1s to 1s 6d	Onions, p. ½ sieve, 4s 6d
Greens, per doz., 2s to 4s	Asparagus, p. bundle, 3s to 7s
Cabbages, do., 1s 3d to 1s 6d	Rhubarb, p. bundle, 6d to 9d
Potatoes, p. ton, 80s to 120s	Tomatoes, p. doz., 6s
— new, per lb., 2d to 6d	Shallots, per lb., 1s 6d
— — per cwt., 6s to 10s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 4d to 6d	Endive, p. doz., 3s to 4s
Carrots, new, do., 1s to 1s 3d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., 1s 3d to 1s 6d
Cucumbers, each, 6d to 9d	Parsley, p. 12 bunches, 4s to 6s
Artichokes, each, 4d to 6d	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, July 4.

Prime Meadow Hay	75s to	84s	Clover	90s to	120s
Superior do. (old) ..	88	100	New Clover ..	—	—
Inferior do.	36	50	Do. second cut ..	—	—
New do.	50	80	Straw	30	40
Rowen	—	—			

DAVIS & Co.

WHITECHAPEL, THURSDAY, July 4.

Fine old Hay	97s to	105s	Fine old Clover ..	110s to	120s
Inferior do. ..	60	80	Inferior do ..	90	100
Very inferior ..	—	—	Fine 2d cut ..	90	108
Prime New Hay ..	—	—	Inferior do. ..	—	—
Straw	37	40	Fine New Clover ..	—	—

HOPS.—BOROUGH MARKET, FRIDAY, July 5.

Messrs. Pattenden & Smith report no improvement in the plantation accounts, except a portion of the Worcester district. There is a fair trade doing in Hops of all descriptions at firm rates. Duty 60,000*l.* to 70,000*l.*

BUTTER MARKET.—July 5.

Best Fresh Butter	.. ..	14s. per dozen lbs.
Second do. do.	.. ..	12s. " "

Pork, 4s. 4d. to 5s. 0d. per 8 lbs.

COAL MARKET.—July 3.

Bell's Primrose, 13s.; Hastings Hartley, 15s. 3d.; Tanfield Moor, 12s. 6d.; Tanfield Moor Butes, 12s. 6d.; Walker Primrose, 12s. 3d.; Wylam, 15s. 6d.; Walls End Acorn Close, 16s. 3d.; Walls End Braddyls Hetton, 17s. 6d.; Walls End Haswell 18s. 6d.; Walls End Hetton, 18s. 6d.; Walls End South Hetton, 18s. 6d.; Walls End Hartlepool, 18s. 3d.; Walls End Heugh Hall, 16s 3d.; Walls End Kelloe, 18s.; Walls End South Hartlepool, 17s. 3d.; Walls End South Kelloe, 17s. 6d.; Walls End Thornley, 15s.; Walls End Trimdon Hartlepool, 18s.; Walls End Trimdon Thornley, 15s 3d.; Walls End Peases West, 14s. 6d.; Carway and Duffryn Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.—76 ships at market.

BRITISH WOOLS.—LONDON, FRIDAY, July 5.

The present clip of wool has begun to arrive from the farmers, but not in sufficient quantities to establish any price. The general tone of the trade is not worse than last week and deep grown wool is rather more inquired for.

METROPOLITAN CATTLE MARKET.

MONDAY, July 1.

We have a larger supply of Beasts, but the demand for choice qualities is good, and the price is not lower. Trade is not quite so brisk for inferior kinds. The number of Sheep and Lambs is about the same as on Monday last. Trade is dull, and on the average quotations are lower. Calves are selling about the same as on Thursday. From Germany and Holland there are 750 Beasts, 3770 Sheep, and 256 Calves; from France, 26 Calves; from Scotland, 500 Beasts; from Norfolk and Suffolk, 1500; from Ireland, 70; and 250 from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c.	.. 4 10 to 5 2	Best Long-wools ..	to ..
Best Short-horns	4 8 — 5 0	Do. Shorn	.. 4 8 — 4 10
2d quality Beasts	3 8 — 4 4	Ewes & 2d quality	.. — ..
Best Downs and Half-breds	.. to ..	Do. Shorn	.. 4 0 — 4 6
Do. Shorn	.. 4 10 to 5 0	Lambs ..	.. 5 4 — 6 4
		Calves ..	.. 4 0 — 4 8
		Pigs ..	.. 3 8 — 4 6

Beasts, 3550; Sheep & Lambs, 27,260; Calves, 341; Pigs, 510.

THURSDAY, July 4.

We have a fair supply of Beasts, and the trade for them is about the same as on Monday. Sheep and Lambs are more plentiful than on Thursday last. Trade is exceedingly dull, and prices are lower. A clearance cannot be effected. Calves are selling about the same as on Monday. From Germany and Holland there are 250 Beasts, 1810 Sheep, 200 Calves, and 40 Pigs; from Spain, 200 Beasts; Milch Cows, 105.

	s d s d		s d s d
Best Scots, Herefords, &c.	.. 4 10 to 5 2	Best Long-wools ..	to ..
Best Short-horns	4 8 — 5 0	Do. Shorn	.. 4 6 — 4 8
2d quality Beasts	3 8 — 4 4	Ewes & 2d quality	.. — ..
Best Downs and Half-breds	.. to ..	Do. Shorn	.. 4 0 — 4 4
Do. Shorn	.. 4 10 — 5 0	Lambs ..	.. 5 0 — 6 0
		Calves ..	.. 4 0 — 4 8
		Pigs ..	.. 3 8 — 4 6

Beasts, 1245; Sheep & Lambs, 14,550; Calves, 850; Pigs, 145.

MARK LANE.—MONDAY, July 1.

The supply of Wheat from Essex and Kent to this morning's market was small even for the season, and taken off at the prices of this day se'nnight. The attendance was not large, and business in foreign Wheat was chiefly confined to retail purchasers from the country at late rates. Barley and Beans are each 1s. and Peas 2s. per qr. cheaper. The Oat trade is quiet, fine sweet Corn brings last week's rates.

masters.—Sir G. LEWIS opposed the motion, which was negatived without a division. *Spain and Morocco.*—In answer to Sir R. PEEL, Lord J. RUSSELL said that since the friendly offices of her Majesty's Government in the difference between Spain and Morocco had been accepted, information had been received that it was not the intention of the Moorish Government to comply with the stipulations of the treaty. In these circumstances, the Spanish Government had stated that the alternative was either a renewal of the war, or the taking possession of Tetuan; but that they were ready to receive any overtures from the Moorish Government. He still hoped that an arrangement would be effected.—Mr. S. FITZGERALD expressed a hope that the Government had addressed the most vigorous remonstrance to Spain against the occupation of any part of the territory of Morocco.—Lord J. RUSSELL did not think it advisable to enter into a discussion as to the importance of Tetuan, or that it would become Her Majesty's Government to say that Morocco was not bound by the obligations of the treaty. *Reports of the Debates.*—Mr. SCULLY complained that the reports of the debates in the daily papers did not do justice to his speeches, and made him ridiculous in the eyes of his constituents.—Mr. BASS expressed his opinion that the speech just made by the hon. member was not calculated either to improve his reputation or add to the dignity of the House. It was absolutely necessary that the House should curb in a high degree the licence of too much speaking, which was at present exercised by many members, and by none more so than the hon. and learned gentleman himself. The House having gone into Committee of Supply on the *Civil Service Estimates*, Mr. BAXTER moved to reduce the vote for harbours of refuge by 90,000*l.*, the sum asked for works at *Alderney*. After a short debate, in which Mr. LIDDELL, Sir J. GRAHAM, and Lord C. PAGET took part, the motion was negatived by 65 to 50. The vote was then agreed to. On the vote for public buildings in Ireland, Mr. GREGORY moved the omission of the sum of 2382*l.* for additional repairs and alterations of the Royal Dublin Society's buildings, and for the erection of a new palm house at *Glasnevin Gardens*, on the ground of the Society's refusal to open the gardens to the public on Sundays. After considerable discussion Mr. CARDWELL assured the House that, unless the Society conformed to the wish of the House, and consented to open the gardens as desired, subject to the same restrictions which are in force at Kew, the annual grant to the Society would not be brought forward by the Government. On this understanding Mr. GREGORY withdrew his amendment. The vote was then agreed to. A vote of 5000*l.* for the repair of *Highland Roads and Bridges* was opposed by Mr. WHITE, Mr. WILLIAMS, and Mr. COLLINS; but was carried, on a division, by 72 to 59. Several other votes were agreed to, and the House resumed.—The *East India (Civil Service) Bill* was committed *pro forma*, with the view of introducing certain amendments, in accordance with suggestions made in the course of the recent debates.—On the report on the *Industrial Schools Bill*, Lord R. CECIL moved to defer the consideration of the report for three months. After a short discussion, the amendment was negatived, and the report was, with a few amendments, agreed to.—The *Appropriation of Seats (Sudbury and St. Alban's) Bill* was recommitted, and certain new clauses were added.—Several other Bills were advanced a stage.

FRIDAY:—*Irremovable Poor Bill.*—The House went into committee on this Bill. On clause 1, Mr. LOCKE moved an amendment constituting the metropolis a union in itself.—Sir G. LEWIS opposed the amendment which was withdrawn.—Mr. KNIGHT moved an amendment, making five years the claim to a settlement. The amendment was rejected, and clause 1 was agreed to. Clauses 2 to 7 inclusive were also agreed to. On clause 8, Mr. AYRTON moved as an amendment that this Act remain in force for a period of five years. The amendment was rejected, and the clause agreed to. [Left sitting.]

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 89⅝ to ¾, both for Money and the 10th inst.; Three per Cents. Reduced, 88¾ to ⅞; New Three per Cents., 88⅞ to ¾; Thirty Years' Annuities, 1885, 15⅝; India Five per Cent. Stock, 98⅝ to ½, ex div.; Ditto for Acct., 98½, ex div.; Ditto Four per Cent. Debentures, 1863, 96; Ditto, 1859, 95⅝; Five and a Half per Cent. Enfaced Rupee Paper, 100¾; Exchequer Bills, June, 5*s.* dis.—FOREIGN: Dutch Two and a Half per Cents., 63½ ex div.; Greek, 7¾ to ½; Mexican Three per Cents., for Acct., 22⅛ to ¼; New Granada Active, 15; Ditto Deferred, 5½; Portuguese Three per Cents., 1853, 46⅜ to ⅛, ex div.; Russian Three per Cents., 1859, 61⅝ to ⅞; Turkish Six per Cents., 1854, for Acct., 74¼; Ditto, 1858, for Acct., 60 to 60½.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,696,910	Government Debt	£11,015,100
		Other Securities	3,459,900
		Gold Coin and Bullion ..	11,149,946
		Silver Bullion	71,964
	£25,696,910		£25,696,910

BANKING DEPARTMENT.

Proprietors' Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£9,989,202
Rest	3,307,315	Other Securities	21,401,660
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	7,291,844	Notes	5,633,830
Other Deposits..	12,092,482	Gold and Silver Coin ..	849,862
Seven day and other bills	620,913		
	£37,865,554		£37,865,554

4th day of July, 1861. M. MARSHALL, Chief Cashier

Gazette of the Week.

TUESDAY—BANKRUPTS—R. BATLEY, Park Village East, Regent's Park, Timber Dealer—H. DONLEVY, New York Brinsworth, Yorkshire, Glass Manufacturer—J. GEARNS and F. A. TARRANT, Bucklersbury, Auctioneers—W. GREEN, Liverpool, Licensed Victualler—M. GRIFFIN, Liverpool, Leather Dealer—J. JESSOP, Preston, Brockhurst, Shropshire, Innkeeper—J. JOSEPH, Houndsditch, City, Importer of Foreign Goods—N. KIMBERLEY, Lloyd, Birmingham, Grocer—J. LEGGE, Willenhall, Staffordshire, Draper and Haberdasher—W. G. MARTIN, Risca, Monmouthshire, Innkeeper—J. MOSSOP, Liverpool, Provision Dealer—J. A. MOWATT, Crawford Street, Marylebone, Boot and Shoemaker—J. PRESTON, Kingsland Road, Tobacconist—J. SUGDEN, Sydenham, Kent, Builder.

SCOTCH SEQUESTRATION—J. FRASER, Glasgow, Restaurant Keeper.

FRIDAY—BANKRUPTS—J. DENNIS, Sneinton, Nottinghamshire, Draper and Milliner—S. FLEET, Audlem, Cheshire, Mercer and Draper—R. HALL, Great Warley, Essex, Army Clothier and Tailor—C. HARDEN, Fenchurch Street, City, Warehouseman—G. HILLIER, Trowbridge, Wiltshire, Marine Store Dealer—J. LAWS, New Church Street, Marylebone, Chemist and Druggist and Omnibus Proprietor—H. LENOX, Liverpool, Merchant—J. MARTIN, Faversham, Watchmaker and Jeweller—H. F. OVENDEN, Maidstone, Kent, Dealer—S. VAGG, commonly known as SAM COLLINS, late of Hyde, Hendon, Middlesex, now of Gower Place, Bedford Square, Licensed Victualler.

Metropolis and its Vicinity.

THE GREAT FIRE.—During the whole week the fire at London Bridge has been burning without cessation among the oil and tallow in the vaults. The land and floating engines have been continuously pouring water into the ruins, and fresh outbursts of flame have occurred daily at intervals owing to the bursting of the tallow casks. On Sunday afternoon and again on Monday night the flames rose above the highest walls of the ruins, and dense volumes of black smoke were carried over the railway and Bermondsey, filling the atmosphere with the smell of burning tallow. It is now admitted that the tallow in the vaults must burn itself out, and that it will probably take another week to do so. The water having no effect upon this mass of floating grease, Phillipps' patent fire annihilators were tried on Saturday, but with only partial success, and it appears that London is at present without the means of suppressing a conflagration of such vast magnitude as that which has raged in Tooley Street for the past week. The operations of shoring up the dangerous walls next Tooley Street have commenced, as have also those for the recovery of salvage, the amount of which it is now admitted will ultimately be much larger than was at first anticipated, although many weeks—several months, in fact—must elapse before those goods which are uninjured either wholly or in part can be entirely disinterred from the superincumbent mass of fallen brickwork and rubbish. Yesterday afternoon the men employed in searching for the body of Mr. Scott discovered among the ruins a gold watch, a gold chain, several half sovereigns, and some silver, all very much burnt, and some small bones, which have been examined by the district medical officer, who pronounces them to be those of a human being. The chain has been identified as that of Mr. Scott.

THE FUNERAL OF MR. BRAIDWOOD took place on Saturday in Abney Park Cemetery in the presence of an immense concourse of spectators. Seldom, if ever before in London, has such a marked tribute of public respect been paid to any private individual. The London Rifle Brigade, the Tower Hamlets Volunteers, all the public and private fire brigades, with a large number of the city and metropolitan police, and the representatives of the great fire companies, attended on the occasion, and formed part of the procession, which extended upwards of a mile in length. The hour fixed for the departure of the *cortége* was 3 o'clock, but long before that time every avenue leading to Watling Street was blocked by a dense and almost impenetrable crowd, while throughout the entire length of the route along which it was to pass, every path was thronged, and the windows and even roofs of the houses were crowded. Before 3 nearly all the shops were shut up, and at some houses the shutters were closed and the blinds drawn. Every bell from the city churches rang out a funeral peal, excepting only St. Paul's, which only tolls on the death of some member of the Royal family, and of the Lord Mayor during office. The funeral was attended by the Duke of Sutherland, the Earl of Caithness, and the Rev. Dr. Cumming, who read the service on arriving at the cemetery. The body was buried in the grave of Mr. Jackson, Mr. Braidwood's son-in-law, who was killed by a similar accident in 1855.—A public meeting was held on Thursday at the Mansion House, Alderman Salomons in the chair, at which it was resolved to raise a fund by public subscription as a testimonial to Mr. Braidwood's family.

ANNIVERSARY OF AMERICAN INDEPENDENCE.—The 85th anniversary of American independence was commemorated on Thursday by a public breakfast at the Opera Colonnade Hotel in Charles Street, St. James's. The Rev. Dr. Patten, of New York, presided, and was supported by about 120 American gentlemen resident or staying in the metropolis, by a few Englishmen chiefly ministers of religion, and several ladies. The speeches delivered were strongly in favour of the Union and expressive of unabated attachment to the mother country, coupled with disappointment that England did not respond so sympathetically as they had expected.

SIR BENJAMIN BRODIE.—Within the last few days an operation for cataract has been performed on Sir B. Brodie, the result of which is said to have been most favourable.

MR. SPURGEON.—During the service on Sunday last Mr. Spurgeon stated that the excitement of a visit to Swansea and Merthyr Tydvil, where he had during the past week addressed large multitudes, had brought on a tremulous feeling, accompanied by indisposition, from which he was still suffering. His medical advisers had informed him that unless he abstained from all labour beyond that connected with his own chapel he might lose his voice for ever. He had resolved, therefore, to preach nowhere but in his own chapel, and he begged his friends not to countenance any attempt to induce him to break through his determination.

CLOSE OF THE WESTMINSTER ABBEY SPECIAL SERVICES.—On Sunday evening the series of 26 special services at Westminster Abbey for the present year were brought to a close, having been successful throughout in drawing immense congregations, principally composed of members of the working classes.

THE BUILDERS' STRIKE.—On Monday the unionists who are out on strike sustained a defeat which shows that their case is altogether hopeless. It was the first day of the general system of hour payments, and [illegible] were entertained by the advocates of the strike that [illegible] masters would not receive sufficient assistance [illegible] them to carry on their works. This, however, [illegible] mistake, for when the yards were opened nearly the [illegible] complement of men was obtained. This was especially the case at the yards of Messrs. Lucas, Messrs. Myers, [illegible] Messrs. Kelk, at all of which the men expressed [illegible] selves thoroughly satisfied with the new arrange[illegible] which enable them to work as many hours as [illegible] please, and to earn an increased amount of [illegible] at the end of the week if they are inclined to work as long as they have hitherto done. The men [illegible] were subjected to a great deal of persecution [illegible] hands of the unionists, who placed members of [illegible] body at the different yards to entice away those [illegible] had entered, and in a very few cases succeeded [illegible] doing so.

THE PUBLIC HEALTH.—The Registrar-General's Weekly Return states that the deaths from all [illegible] registered in London in the week that ended Saturday, June 29, were 1092. The average number obtained from the returns of the corresponding weeks of the previous years 1851-60, corrected for increase of population, was 1220. The present return is therefore 12[illegible] below the average. During the week the births of [illegible] boys and 941 girls, in all 1904 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1662.

Provincial.

CHIPPENHAM.—On Tuesday evening, as the family of Mr. West Awdry, Under Sheriff of Wilts and [illegible] of Sir John Awdry of Notton Hall, were [illegible] themselves in boats on the river Avon, accompanied [illegible] the Misses Lowther, of Derry Hill, one of the boats containing Mr. W. S. Awdry and the Misses [illegible] accidentally upset and threw its occupants [illegible] river. The elder Miss Lowther clung to Mr. [illegible] who made a desperate effort to carry her [illegible] Although a good swimmer, the young lady [illegible] him so tightly that all his attempts to save her [illegible] himself were unavailing, and they were both [illegible] The younger Miss Lowther was rescued by [illegible] Mr. Clarke, who happening to be near boldly [illegible] into the water, and brought her to land just as [illegible] on the point of sinking.

COVENTRY.—On Thursday night, the [illegible] rectory-house of Bagington, near this city, was the scene of a shocking accident, which has resulted in the death of Mrs. Gooch, the wife of the rector of the parish, the Rev. F. Gooch, and daughter of the Right Hon. W. Yates Peel, brother of the late [illegible] Robert Peel. It appears that the unfortunate [illegible] retired to her chamber about half-past 10 o'clock [illegible] the purpose of going to bed. Previous to [illegible] had resort to a bottle of Rimmel's toilet vinegar [illegible] purpose of fumigating the apartment, [illegible] pouring some of the liquid into the small [illegible] which it was to be heated before exposing it to the [illegible] of the fire, she seems to have incautiously made [illegible] hot first, by holding it over the candle, and [illegible] in the vinegar. The liquid consequently at once [illegible] and overflowed the vessel upon her dress, which [illegible] muslin, was in a blaze in a moment. [illegible] loudly for help, and, with unusual presence [illegible] unloosed the skirt of her dress, but finding her garments aflame also, she ran down the stairs [illegible] drawing-room to her husband, who succeeded [illegible] of the hearthrug in subduing the flames, by which [illegible] at that time become almost wholly enveloped. [illegible] aid was obtained as speedily as possible, [illegible] avail. The unfortunate lady was so badly [illegible] she expired in the afternoon of the following [illegible] inquest was held on Saturday morning, and a [illegible] Accidental Death returned.

HULL.—The screw steamer Baltic, on her [illegible] from Hull to Cronstadt has been wrecked on [illegible] Ground, near Dagoe, not far from the Gulf of [illegible] Dagoe is noted for its powerful magnetic [illegible] and this steamer and several other Hull [illegible] been wrecked in its vicinity, from no other [illegible] the derangement of the ship's compasses.

REIGATE.—On Monday the German [illegible] the name of August Salzmann, but [illegible] to be Johann Carl Franz, one of the [illegible] the murder of Mrs. Holliday, was [illegible] magistrates in this town. Several [illegible] examined, who proved that the prisoner [illegible] seen in the town with another foreigner [illegible] 10th ult.; that they had been seen [illegible] the Cricketers' Arms, in Reigate, [illegible] and that some cord which they had [illegible] Mrs. Pitcher, in Reigate, was exactly [illegible] with which the prisoner's bundle was tied [illegible] with which the legs of Mrs. Holliday [illegible] Mr. Coward, superintendent of police, [illegible] showing the prisoner the book which had [illegible] the room in which the murder was [illegible] looked at it for a moment, turned pale, [illegible] down his head, and seemed absorbed in [illegible] now said that the book had no reference [illegible] there were many Germans about the [illegible] description given in the book of the owner [illegible] to any other German as well as to him. [illegible] in denying any knowledge of the murder. [illegible] then applied for a remand, saying he had [illegible]

[illegible] that by the next examination he should be [illegible] the identity of the prisoner with the [illegible] of the book. The magistrates remanded the prisoner, and he was taken back to prison.

Ireland.

THE PRINCE OF WALES'S VISIT TO IRELAND.—His Royal Highness landed at Kingstown about half-past [illegible] on Saturday afternoon, under Royal salutes from the ships of war and the forts, and amidst the most enthusiastic cheers of the vast crowd which had assembled to greet him. His Royal Highness was met at Kingstown by the Lord-Lieutenant, and after receiving an address from the commissioners, proceeded to the Viceregal Lodge. On Sunday morning the Prince attended the Chapel Royal, where the Dean of Down preached. His Royal Highness afterwards honoured [illegible] White, of Woodlands, with his company at a [illegible], and planted a tree in the park. In the evening the Prince dined with the Duke of Leinster at [illegible]. On Monday the Prince drove to the Castle in an open carriage and four, accompanied by the Lord [illegible], and received an address from the Corporation of Dublin in St. Patrick's Hall, to which he [illegible] the following reply:—

"My Lord Mayor and Gentlemen,—I receive with most [illegible] the cordial address, which, emanating as it does from the Corporation and citizens of the Irish metropolis, [illegible] as expressing sentiments entertained by the [illegible]. Although, in compliance with my own [illegible] were in a great measure dispensed with on the occasion of my landing, the enthusiastic welcome [illegible] tendered to me by the vast and important community [illegible] you represent was not only grateful to myself, but afforded the most unequivocal evidence of their affectionate [illegible] to the Queen, my mother, and to her family. That you [illegible] in me any promise of the virtues and exalted [illegible] have so endeared her Majesty to her subjects is, I fear, due rather to your generous partiality than to my own [illegible]; but you may be assured, at least, that I am profoundly sensible of their inestimable value, and that to learn [illegible] them is my earnest study and fondest desire. I [illegible] I have visited other parts of the country, for the [illegible] improvement, and specially on this occasion to [illegible] the great advantages which the plains of the Curragh [illegible] as a school for practical military instruction. My time [illegible] occupied in this pursuit; but I am most anxious [illegible] a more full acquaintance with the material and [illegible] resources of Ireland, and yield to no one in my [illegible] of their importance and in earnest desire for their [illegible] development."

At the conclusion of this ceremony the Prince proceeded to the Art Exhibition in Kildare Street, accompanied by the Lord-Lieutenant and suite. Dame Street, College Green, Nassau Street, Dawson Street, Molesworth Street, and Kildare Street were thronged with spectators, and the enthusiasm was extraordinary. On [illegible] his Royal Highness proceeded by special train to the Curragh camp, where it is supposed he will [illegible] for about six weeks. The quarters occupied by the late commander-in-chief, Lord Seaton, have been fitted up for the reception of his Royal Highness. On his arrival at the Curragh the Prince was received by the Commander-in-chief, Sir George Browne, and a Royal salute was fired by a field battery of Horse Artillery as he rode to his quarters. On Wednesday his Royal Highness was present at a grand review and sham fight, in which about 10,000 of the troops in camp were engaged. The Prince was loudly cheered by the crowd of spectators.

Scotland.

FUNERAL OF LORD CHANCELLOR CAMPBELL.—The body of the late Lord Campbell was removed from [illegible] Lodge on Friday the 28th ult, to Hartrigge, [illegible] in Roxburghshire, and the funeral took place on [illegible] in Jedburgh Abbey in the most unostentatious [illegible], and without any of the pomp usually attendant on the funeral of a person of such high dignity. The Church of England service was performed by the Rev. W. Spranger White, his lordship's son-in-law.

Railways.

[illegible] OF A TUNNEL.—On Tuesday evening the stone [illegible] of the tunnel which is in course of construction near Haddon Hall, on the new line between Buxton and the Rowsley terminus of the Manchester, Buxton, Matlock, and Midland Junction fell in, by which five [illegible] and a horse were killed, and several others received [illegible] injuries.

Sporting.

NEWMARKET JULY MEETING.

[illegible].—*Handicap Plate* Mr. H. Jones's Eastern Princess beat Boabdil, Predictor, and 5 others.—The *Plate*. Lord [illegible] Malta beat Kildonan, Pastime, Brother to Spanish [illegible] and La Vapeur.—The *July Stakes*. Mr. T. Parr's [illegible] Costa, Sir William Armstrong, and 7 others. [illegible].—*Sweeps*. Mr. Merry's Chieftain's Daughter beat [illegible].—[illegible]. Mr. Barnard's Wolsey beat Bayonet.—*Handicap* [illegible]. Mr. French's Leontes beat Jacintha, The Prophet, [illegible].—*Sweeps*. Mr. R. Ten Broeck's Reporter beat [illegible] Lass, Evangeline, and Twinkle.—*Sweeps*. Baron [illegible] Janus beat Walloon and Begonia.—The *Stamford* [illegible]. Mr. Alexander's Thunderbolt beat Stampede, [illegible] and [illegible] others.—*Sweeps*. Lord Clifden's Barb Pigeon [illegible].—The *Town Plate*. Mr. H. Jones's Eastern [illegible] beat Malta and Dreat.—*Plate*. Lord Stamford's Diana [illegible] Night Revel, Baron Rothschild's [illegible], and [illegible] others. [illegible].—*Handicap Sweeps*. Lord Stamford's Little Lady [illegible] Derby, Apollo, Bayard, and Herman.—*Sweeps*. Mr. [illegible] walked over.—*Handicap Sweeps*. Baron [illegible] beat Boabdil and Jacintha.—*Handicap Plate*. [illegible] Cosmopolite beat Waterwitch. Mr Golding's [illegible] others.—The *Midsummer Stakes*. Lord Stamford's [illegible] beat Russley and Grouse.—The *Chesterfield Stakes*. Mr. Merry's Costa beat Xurullo, Sister to Fravola, and 4 others. —*Plate*. Mr. Greville's Rosalind beat Mr Hawkins's [illegible], Snake, and 6 others.

Obituary.

THE RIGHT HON. SIR J. PATTESON died on the 28th ult., at his seat, Feniton Court, near Honiton, Devon, in his 71st year. He was the second son of the Rev. Henry Patteson, of Drinkstone, Suffolk, by the daughter of Mr. Richard Ayton Lee, a banker of London, and was born in 17[illegible], at Coney Weston, Suffolk. He was educated at King's College, Cambridge, where he graduated M.A. in 1816, and was called to the Bar at the Middle Temple in 18[illegible]. In 18[illegible] he was appointed one of the Judges of the Court of King's Bench, and received the honour of knighthood. In 18[illegible] he resigned the judgeship, and was then made a Privy Councillor. In the following year he was made a commissioner to inquire into the corporation of the city of London. He was twice married; first to the third daughter of Mr. George Lee of Dickleburg, Norfolk; and secondly to a daughter of Mr James Coleridge, of Ottery St. Mary, Devon.

SIR WILLIAM OGILVIE, BART., of Carnousie, in the county of Banff, died recently at Christchurch, New Zealand, in which colony he had for some time resided. He was born in 1810, succeeded his father in 1824, and married, in 1838, the daughter of Mr. James Grange, of the Treasury. He was a claimant of the barony of Banff and the earldom of Findlater.

Miscellaneous.

A NEW COMET.—A brilliant comet of enormous magnitude, even exceeding that which made its appearance three years ago, was discovered on Sunday. Its nucleus is well defined, much larger and brighter than a star of the first magnitude, and its tail extends nearly 30° in length. Its position when discovered was directly under the pole star, about 20° from the horizon, and the tail extended faintly to near the pole star itself. It was at first supposed to be the great comet of 1556, which induced the Emperor Charles V. to abdicate, and which has been expected by astronomers for three years past; but Mr. Hind, who calculated the motion of that comet, has written to the *Times* stating that it is certainly not the comet of Charles V. He adds, that "its distance from the earth on Sunday evening was rather over 13,000,000 miles, and a little less than 15,000,000 at 11 o'clock last evening. It is therefore receding slowly from us, as well as from the sun. The apparent length of the tail on Monday night was 70°, corresponding to a true length of 16,000,000 miles. The nucleus, which is extremely brilliant, is about 400 miles in diameter."

BIRTHS.—On the 2d inst., at 1[illegible], Park Road, Regent's Park, the Princess VICTORIA GOURAMMA, the wife of Lieut.-Col. J. CAMPBELL, of a daughter—25th ult., at Holly Lodge, Campden Hill, the Countess of AIRLIE, of a son—27th ult., at Rutland Gate, Lady EDWARD FITZALAN HOWARD, of a daughter—28th ult., at 38, Upper Grosvenor Street, the Lady MARY HERBERT, of a son—27th ult., at 42, Belgrave Square, Lady OCTAVIA SHAW STEWART, of a son—[illegible], at [illegible] Park, Kent, Lady SCOTT DOUGLAS, of a daughter—30th ult., at Sutton Vicarage, Isle of Ely, the Hon. Mrs. CHARLES SPENCER, of a son—1st inst., at 35, Eaton Place, the Hon. Mrs. Adderley, of a son—29th ult., at Duffryn, Aberdare, the wife of H. A. BRUCE, Esq., M.P., of a daughter—20th ult., the wife of WILLIAM BOVILL, Esq., M.P., of a daughter, stillborn—28th ult., at Swarcliffe Hall, Yorkshire, the wife of JOHN GREENWOOD, Esq., M.P., of a son.

MARRIAGES.—On the 4th inst., at St. Peter's, Eaton Square, the Right Hon. Lord RENDLESHAM to Lady EGIDIA MONTGOMERIE, daughter of the Earl of EGLINTOUN—26th ult., by special licence, at the Royal Chapel, Windsor Great Park, DAVID ERSKINE, Esq., of Cardross, Perthshire, to HORATIA ELIZABETH, eldest daughter of Major General and Lady EMILY SEYMOUR—26th ult., at St. James's Church, Paddington, ALEXANDER YOUNG SINCLAIR, Esq., Captain H. M.'s Bombay Army, eldest son of Sir John Sinclair, Bart., of Dunbeath, to MARGARET CRICHTON, eldest daughter of the late JAMES ALSTON, Esq., of Bryanston Square—1st inst., at Bishop's Lydeard Church, Somerset, EDWARD RALEIGH KING, Esq., late Captain 1[illegible] Light Dragoons, eldest son of Bolton King, Esq., of Chadshunt, Warwickshire, late M.P. for that county, to SUSANNA OCTAVIA, youngest daughter of Sir JOHN HESKETH LETHBRIDGE, Bart., of Sandhill Park, Somerset—27th ult., at the parish church, Dromore, EDMUND YATES PEEL, second son of the late Jonathan Peel, Esq., of Culham, Oxfordshire, to LOUISE LONGRIDGE, eldest daughter of the late HENRY PALMER, Esq., of [illegible], in the county of Leitrim—5th inst., at Halifax, Nova Scotia, Major RICHARD M. POULDEN, late of the Royal Artillery, son of the late Rear-Admiral Poulden, to ELIZABETH, youngest daughter of the late Chief Justice the Hon. Sir BRENTON HALLIBURTON—15th of May, at Singapore, J. BROOKE BROOKE, Esq., of Sarawak, to JULIA CAROLINE, second daughter of the late BENJAMIN WELSTEAD, Esq., of Kimbolton, Huntingdonshire.

DEATHS.—On the [illegible] ult., at Kenmare, the Lady GEORGIANA BOURKE, widow of the Rev. [illegible] Bourke, and daughter of the late Earl of [illegible]—27th ult., in Park Crescent, MARY, widow of the late Right Rev. WILLIAM CAREY, Lord Bishop of St. Asaph, aged [illegible]—[illegible], MABEL BEATRICE, youngest daughter of Lieut. [illegible] and Lady [illegible] CAVENDISH—27th ult., at Bruges, CATHERINE, eldest daughter of the late Lieut.-General Sir JAMES BATHURST, K.C.B., and of Lady Caroline Bathurst—28th ult., at Debdale Grove, Finedon, FRANCES JULIANA, eldest daughter of the late Sir DIGBY MACKWORTH, Bart., of Cavendish Hall, Suffolk, aged 71—26th ult., at Dover, EMILIA, wife of Major-General WILLIAM NEPEAN, and daughter of the late Colonel JOHN YORKE, aged 65—30th ult., at Caversham Hill, Reading, ELLEN ANN [illegible], relict of the late Major General [illegible], aged [illegible]—13th May, at Hazareebagh, of dysentery, GEORGE [illegible] BARNES, Esq., C.B., late Foreign Secretary to the Government of India—5th May, at Thayet Myo, Pegue, from exposure to the sun in the discharge of his duties, Lieut. [illegible] HUTCHINS, M.N.I., formerly of H.M.'s [illegible], the son of [illegible] HUTCHINS, Madras Retired List—[illegible], at [illegible] Wells, GERTRUDE HOLDEN ROSE, second daughter of Lieut.-Col. Holden Rose, late 1[illegible]th Lancers, and of The Ferns, [illegible]—1st inst., at [illegible], near [illegible], [illegible] Esq., of Eastwick Park, Surrey, aged [illegible]—[illegible] Place, LLOYD H. [illegible] Castle, [illegible], aged [illegible] CHARLES KYNASTON MAINWARING, Esq. [illegible] MARY, [illegible], aged [illegible]—[illegible] ult., at Dundas Castle, [illegible] daughter of JAMES DUNDAS, Esq., of Dundas—[illegible] ult., at Southend, Essex, CATHERINE, widow of the late Dr. [illegible], Dean of [illegible] WRIGHT, Esq., and daughter of the late [illegible], Henley-on-Thames, Wells, aged 56—[illegible] ult., at Fingest House, Henley-on-Thames, JOHN JONES DYER, Esq., late of the Admiralty, Whitehall, aged 61—1st inst., WILLIAM WHITAKER MAITLAND, Esq., of [illegible] Hall and Woodford, Essex, aged [illegible]—[illegible] ult., at his residence, in the Cathedral Close, Hereford, the Rev. HUGH HANMER MORGAN, B.D., canon residentiary of the cathedral church of Hereford, aged 7[illegible].

Markets.

COVENT GARDEN, July 6.

The supply of most things continues to improve, and that of Vegetables is now sufficient for the demand. Good samples of Endive and Artichokes come from the Continent; also Apricots and Green Figs, Greengages in large quantities, and new Apples and Pears; the latter come from Lisbon and Oporto. Several cargoes of West India Pines have also arrived. Peas are plentiful. Grapes are still realising good prices. Of Strawberries there is still a good supply. Cherries are also everywhere plentiful; also Asparagus, French and Broad Beans, young Carrots, and new Potatoes; the latter fetch 1d per lb. Cucumbers are coming in more plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Chinese Primulas, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., [illegible] to [illegible]	Cherries, English, p. lb., 6d to 1s
Grapes, per lb., 2s to 7s	Pears, per doz., [illegible] to 8s
Strawberries, p. pun., 6d to 1s	Apples, per doz., 6d to 1s 6d
Melons, each, 2s to 4s	Oranges, per 100, 6s to 14s
Peaches, per doz., 15s to 24s	Lemons, per 100, 6s to 10s
Nectarines, do., 12s to 20s	Nuts, Cob, per lb., 1s to 1s 6d
Apricots, do., 1s to 2s	

VEGETABLES.

Cauliflowers, each, 6d to [illegible]	Beet, per doz., 1s 6d to 6s
French Beans, p. 1[illegible], [illegible] to 1s[illegible]	Celery, p. bundle, 1s 6d to 2s 6d
Green Peas, p. quart, 1s to 1s 6d	Onions, p. ½ sieve, 4s 6d
Greens, per doz., 2s to [illegible]	Asparagus, p. bundle, [illegible] to 7s
Cabbages, do., 1s [illegible] to 1s [illegible]	Rhubarb, p. bundle, [illegible] to 9d
Potatoes, p. ton, [illegible] to 1[illegible]	Tomatoes, p. doz., [illegible]
— new, per lb., 2d to 6d	Shallots, per lb., [illegible] 6d
— — per cwt., 6s to [illegible]s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 4d to 6d	Endive, p. [illegible], 3s to 4s
Carrots, new, do., 1s to 1s [illegible]d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., 1s [illegible]d to 1s 6d
Cucumbers, each, 6d to 9d	Parsley, p. 12 bunches, 4s to 6s
Artichokes, each, 4d to 6d	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, July 4.

Prime Meadow Hay	75s to	84s	Clover	90s to	120s
Superior do. (old) ..	88	100	New Clover ..	.. —	—
Inferior do.	36	50	Do. second cut	.. —	—
New do.	50	80	Straw	.. 30	40
Rowen	—	—		DAVIS & Co.	

WHITECHAPEL, THURSDAY, July 4.

Fine old Hay	97s to	105s	Fine old Clover	..110s to	120s
Inferior do.	60	80	Inferior do ..	.. 90	100
Very inferior	—	—	Fine 2d cut ..	.. 90	108
Prime New Hay ..	—	—	Inferior do. ..	.. —	—
Straw	37	40	Fine New Clover ..	—	—

HOPS.—BOROUGH MARKET, FRIDAY, July 5.

Messrs. Pattenden & Smith report no improvement in the plantation accounts, except a portion of the Worcester district. There is a fair trade doing in Hops of all descriptions at firm rates. Duty 60,000*l*. to 70,000*l*.

BUTTER MARKET.—July [illegible].

Best Fresh Butter . .. 14s per dozen lbs.
Second do. do. .. .. 1[illegible]s .. ..
Pork, 4s [illegible] to [illegible]s [illegible] per 8 lbs.

COAL MARKET.—July 3.

Bell's Primrose, 13s.; Hastings Hartley, 15s. 3d.; Tanfield Moor, 12s. 6d.; Tanfield Moor Butes, 12s. 6d.; Walker Primrose, 12s. 3d.; Wylam, 15s. 6d.; Walls End Acorn Close, 16s. 3d.; Walls End Bradyll's Hetton, 17s. 6d.; Walls End Haswell, 18s. 6d.; Walls End Hetton, 18s. 6d.; Walls End South Hetton, 18s. 6d.; Walls End Hartlepool, 18s. 3d.; Walls End Hough Hall, 16s. [illegible]; Walls End Kelloe, 18s.; Walls End South Hartlepool, 17s. [illegible]; Walls End South Kelloe, 17s. 6d.; Walls End Thornley, 15s.; Walls End Trimdon Hartlepool, 18s.; Walls End Trimdon Thornley, 15s. 3d.; Walls End Pearse's West, 14s. [illegible]; Carway and Duffryn Anthracite, [illegible]s. 6d.; Carway and Duffryn Malting, 24s.—76 ships at market.

BRITISH WOOLS.—LONDON, FRIDAY, July 5.

The present clip of wool has begun to arrive from the farmers, but not in sufficient quantities to establish any price. The general tone of the trade is not worse than last week and deep grown wool is rather more inquired for.

METROPOLITAN CATTLE MARKET.

MONDAY, July 1.

We have a larger supply of Beasts, but the demand for choice qualities is good, and the price is not lower. Trade is not quite so brisk for inferior kinds. The number of Sheep and Lambs is about the same as on Monday last. Trade is dull, and on the average quotations are lower. Calves are selling about the same as on Thursday. From Germany and Holland there are 750 Beasts, 3770 Sheep, and 256 Calves; from France, 26 Calves; from Scotland, 500 Beasts; from Norfolk and Suffolk, 1500; from Ireland, 70; and 250 from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 10 to 5 2	Best Long-wools ..	to ..
Best Short-horns	4 8 — 5 0	Do. Shorn ..	4 8 — 4 10
2d quality Beasts	3 8 — 4 4	Ewes & 2d quality	.. — ..
Best Downs and Half-breds ..	to ..	Do. Shorn ..	4 0 — 4 6
Do. Shorn ..	4 10 to [illegible] [illegible]	Lambs	[illegible] 4 — [illegible] 4
		Calves	3 [illegible] — 4 8
		Pigs	3 8 — 4 6

Beasts, 3550; Sheep & Lambs, 27,260; Calves, 341; Pigs, 510.

THURSDAY, July 4.

We have a fair supply of Beasts, and the trade for them is about the same as on Monday. Sheep and Lambs are more plentiful than on Thursday last. Trade is exceedingly dull, and prices are lower. A clearance cannot be effected. Calves are selling about the same as on Monday. From Germany and Holland there are [illegible] Beasts, [illegible] Sheep, [illegible] Calves, and [illegible] Pigs; from Spain, 2[illegible] Beasts. Milch Cows, [illegible].

	s d s d		s d s d
Best Scots, Herefords, &c.	4 10 to [illegible] [illegible]	Best Long-wools	to ..
Best Short-horns	4 [illegible] — [illegible] [illegible]	Do. Shorn	4 [illegible] — 4 8
2d quality Beasts	3 [illegible] — 4 [illegible]	Ewes & 2d quality	— ..
Best Downs and Half-breds ..	— ..	Do. Shorn ..	4 0 — 4 4
Do. Shorn	4 10 — 5 [illegible]	Lambs ..	5 0 — 6 0
		Calves ..	4 [illegible] — 4 8
		Pigs ..	[illegible] [illegible] — 4 6

Beasts, 1[illegible]; Sheep & Lambs, [illegible]; Calves, 5[illegible]; Pigs, 145.

MARK LANE.—MONDAY, July 1.

The supply of Wheat from Essex and Kent to this morning's market was small, [illegible] for the season, and taken off at the prices of this day se'nnight. The attendance was not large, and business in foreign Wheat was chiefly confined to retail purchasers from the country at late rates. Barley and Beans are each 1s. and Peas 2s. per qr. cheaper. The Oat trade is quiet, but sweet Corn brings last week's rates.

but out-of-conditioned parcels are very unsaleable and cheaper. Flour sells slowly at about last week's prices.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk..White	46—63	Red	46—60
— — fine selected runs..ditto	50—76	Red	50—65
— — Talavera	51—67		
— Norfolk	—	Red	—
— Foreign	40—74		
Barley, grind. & dist., 26s to 27s.. Chev.	36—40	Malting.	34—36
— Foreign..grinding and distilling	27—30	Malting.	33—36
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign........Poland and Brew	20—23	Feed ..	19—21
Rye	35—37	Foreign.	—
Rye-meal, foreign..................	—		
Beans, Mazagan....37s to 40s....Tick	40—43	Harrow.	40—43
— Pigeon ......41s — 45s..Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
Peas, white, Essex and Kent..Boilers	34—37	Suffolk .	38—39
— Maple .... —s to —s ...... Grey	40—42	Foreign.	35—38
Maize .... White	—	Yellow..	—
Flour, best marks delivered..per sack	50—55		
— 2d do.................. ditto	34—50	Country.	34—50
— Foreign ....per barrel	26—32	Per sack	43—58

Friday, July 5.

The weather during the last eight days has been fine with occasional showers and a somewhat lower temperature, on the whole very genial for the growing crops, which improve in appearance. The wind was N.W. until yesterday, when it changed to S.W., with heavy showers, which continue. Business in Wheat has been inactive, but no further decline in prices has been submitted to; indeed, in a few markets a slight improvement upon fine qualities has been established. Purchases of some extent continue to be made for export to France. Little variation in value has occurred in Spring Corn, but where such was the case it was in favour of buyers, and the same may be said of Flour. Although the arrivals off the coast have been small during the past 8 days (amounting in all to 20), an active inquiry has been experienced, chiefly for the Continent. The arrivals of English grain this week have been small, of foreign large, and good of Flour. The attendance at this morning's market was moderate; nevertheless, an increased disposition to purchase Wheat was evinced. English met a ready sale at the extreme prices of Monday last, and fine qualities of foreign commanded in many instances an advance of 1s. per qr. upon the rates of that day, as did also American. Barley, Beans, and Peas are unaltered in value. The Oat trade is quiet at about Monday's quotations.

Arrivals from July 1 to July 5.

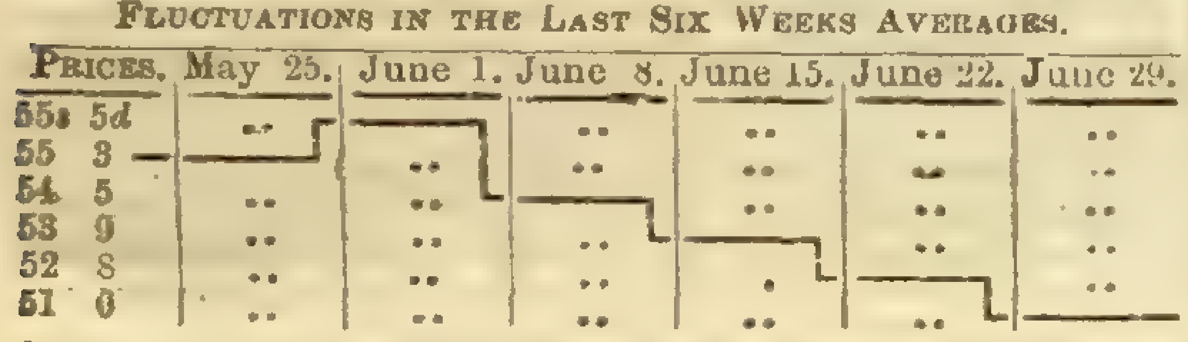
	Wheat.	Barley.	Oats.	Flour.
English ..	940 qrs.	— qrs.	760 qrs.	1120 sks.
Irish	— „	— „	20 „	— „
Foreign ..	24520 „	5610 „	38930 „	1770 „ 10970 brls.

Liverpool, Tuesday, July 2.—With a good attendance at this morning's market a healthy consumptive demand has been experienced for both Wheat and Flour at the rates current on Friday. Indian Corn was mostly held for a trifling advance, which was difficult to obtain; at previous rates, however, a fair quantity found buyers; Egyptian being scarce at the moment commands from 6d. to 1s. per qr. more money. Oats and Oatmeal were not much inquired for. Egyptian Beans, Peas, and Barley were each held firmly at Friday's prices. The market closed steady.

Friday, July 5.—The market was moderately attended. Wheat in better demand at the extreme rates of Tuesday. Better qualities of Flour more steady; inferior dull at Tuesday's rates. Indian Corn: mixed in good demand, at 28s. 6d. to 29s.; yellow, 29s.; Beans a shade firmer; Saidi, 32s.; Dahera, 30s. 6d. Oats and Oatmeal dull.

Averages	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
May 25..	55s 3d	34s 11d	25s 1d	33s 8d	44s 6d	39s 9d
June 1..	55 5	34 3	25 2	33 1	45 1	40 7
— 8..	54 5	32 8	26 0	30 6	44 10	39 10
— 15..	53 9	34 3	25 2	41 2	44 3	44 1
— 22..	52 8	32 6	25 2	35 5	44 0	38 8
— 29..	51 0	31 3	25 0	39 4	43 3	37 1
Agg. Aver.	54 0	33 10	25 4	34 11	44 4	39 10

Fluctuations in the Last Six Weeks Averages.



Private Tuition.—The Rev. G. Henslow, Son of the late Professor Henslow, and M.A. of Cambridge, who took Honours in three triposes, Mathematical, Divinity, and Natural Science, has VACANCIES for TWO PUPILS preparing for the Public Schools, &c., or for the Universities. N.B. Geology and Botany form a part of his system of education. Further particulars on application.—Address, Rev. G. Henslow, Steyning, Sussex.

Vancouver and British Columbia.

To Farmers.—A gentleman about to settle in this thriving and important Colony is desirous of meeting with a practical FARMER who would join him in the working of a large Farm. Respectable References given and required.—Address Vancouver, care of Mr. G. Street, Colonial Newspaper Office, 30, Cornhill, E.C.

Wanted, 6 or 8 first-rate BUDDERS and GRAFTERS.—Liberal Wages will be given. Applicants must state how many years' practice they have had, and in whose Nurseries.—Address B. U. D., Messrs. Hurst & M'Mullen, 6, Leadenhall Street, London, E.C.

Wanted, a Gardener and his Wife, without incumbrance; the Man about 30 to 40 years old, strong, and a practical Gardener. The Wife will have the Washing and Cooking for a small family.—Apply at 4, Strand, near Charing Cross, S.W.

Wanted, as Garden Labourer, a middle-aged Man. Must be a good Mower of short Grass, and understand the management of Shanks' Mowing Machine.—Apply by letter, stating particulars of former service and wages expected, to Mr. Cooper, Stationer, Hounslow, W.

To Parents and Guardians.

Wanted, in the North of England, a respectable Youth, about 17 years of age, to assist in the SEED SHOP, Work in the NURSERY, &c. He will be treated as one of the family; one with little experience preferred.—State terms expected, &c., to Messrs. Jacob Wrench & Sons, London Bridge, S.E.

Wanted, as an Apprentice to the Seed Trade, a respectable well-educated Youth. Can reside in the house or otherwise.—For terms apply to Henry Brown, Seedsman, 4, Commutation Row, Liverpool.

WANT PLACES.—Letters to be Post Paid.

Gardener (Head).—Age 32, single; has a thorough practical knowledge of his profession. No single-handed place accepted.—J. Clews, the Royal Horticultural Society's Gardens, Kensington, S.W.

Gardener (Head).—Age 30, married, one child; perfectly understands his profession in all its branches; can have five years' excellent character. Wife a good Needlewoman.—A. Z., Mr. Ward's, Stationer, Camberwell, S.

Gardener (Head, or Single-handed).—Age 40, married, no incumbrance; understands his profession in all its branches. Three years' good character.—E. T., Protheroe & Morris, American Nursery, Leytonstone, Essex, N.E.

Gardener (Head).—Age 33, married, no incumbrance; practical knowledge of Early and Late Forcing, Flower and Kitchen Gardens.—J. R., 2, Queen's Place, Queen's Street, Hammersmith, S.W.

Gardener (Head).—Age 34, married, native of Scotland; has a thorough practical knowledge of his profession in all its branches. Good references produced.—G. H., 83, Portland Road West, Notting Hill, London, W.

Gardener (Head), to any gentleman requiring a good Gardener.—Age 28; has been engaged in one of the largest establishments in England. Can be highly recommended.—T. A., Bloomfield Hall, Norwood, S.

Gardener (Head).—Age 41, married; has had 20 years' practical experience in a Garden where Flowers, Fruits, and Vegetables have been successfully grown. Three years' good character.—E. F., 3, Bloomfield Place, Crouch End, Hornsey, N.

Gardener (Head).—Age 26, married; has a good practical knowledge of his profession from his boyhood. No objection to a single-handed place. A native of the North of England. Three years and nine months' good character.—A. B., South Bar Street, Banbury.

Gardener (Head), to any nobleman or gentleman in want of a thoroughly practical Working Man.—Age 30; good character. Highly recommended. Wages 60*l.* per annum, with Cottage.—A. B., 24, Cochrane Terrace, St. John's Wood, London, N.W.

Gardener (Head, Single-handed or Otherwise).—Age 28, single; 11 years' experience; accustomed to Gardening in all its branches. Has lived two years with present employers. Good character.—A. B., Mr. J. Moat, Bookseller, 9, Nelson Street, Newcastle-on-Tyne.

Gardener (Head).—Middle age; industrious and thorough practical. Has had great experience in Forcing and the general routine of Flower and Kitchen Gardens. Can be highly recommended.—A. B., Mr. John McHutcheon, 30, Southampton Street, Strand, London, W.C.

Gardener (Head).—Age 31, married; thoroughly practical; well understands the modern branches of Horticulture and Floriculture, and in particular well versed in Pine and Grape Culture. Will be shortly disengaged from a situation he now holds in the County of Essex.—Hortus, Mr. Smith, Tollington Nursery, Hornsey Road, Holloway, N.

Gardener (Head).—Aged 40, married; has a thorough knowledge of the Cultivation of Fruits of all kinds, and the Management of Stove and Greenhouse Plants, Flower and Kitchen Gardens. Can have three years' good character from his late employer.—A. B., Lodge, Hanley Road, Hornsey Road, Holloway, N.

Gardener (Head).—Single; age 33. W. Howard is desirous of entering into an engagement with any nobleman or gentleman requiring the services of an experienced practical working Gardener, thoroughly understanding every branch of the profession.—W. Howard, "Roselands," Waltham Cross, N.

Gardener (Head).—Age 34, married; steady, industrious, and well skilled in every department, having had several years' practical experience with families that required all kinds of Early and Late Forced choice Fruit, Flowers, and Vegetables. Unexceptionable character.—C. B., Mr. Barnes, Camden Nursery, Camberwell, S.

Gardener (Head, or Single-Handed).—Age 36, single; thoroughly experienced in Early Forcing Pines, Vines, Cucumbers, Melons, &c., the Management of Stove and Greenhouse Plants, Kitchen and Flower Gardens. Good character.—C. B., Mr. Neal, Nurseryman, High Street, Wandsworth, Surrey, S.

Gardener (Head).—An Employer who is declining Horticulture, wishes to recommend his Head Gardener to any nobleman or gentleman in want of a really trustworthy competent Gardener. He has lived with him 6 years, and thoroughly understands his profession in all its branches.—X. Y. Z., 43, Corn Market, Oxford.

Gardener (Head).—Aged 40, married; wishes to engage with any nobleman or gentleman who may require the services of a thorough Practical Gardener. Has had great experience in the Early and Late Forcing of Fruit, Flowers, and Vegetables; also the management of Stove and Greenhouse Plants. Three years' good character.—C. D., Post Office, Crouch End, Hornsey, N.

Gardener (Head).—Age 30, married, one child; thorough working practical Gardener; understands the Management of Greenhouse and Stove Plants; Forcing Vines, Pines, Strawberries, &c., Orchard House. Growing Specimen Plants if required. A good Kitchen Gardener, Wall Trees, &c.—W. W., Mr. Wm. Young's, Milford Nursery, near Godalming, Surrey.

Gardener (Head), to any nobleman or gentleman.—Age 29, single; has had considerable experience in some of the largest places in England, and perfectly understands the Early Forcing of Cucumbers, Pines, Grapes, Peaches, Melons, and other Fruits; also all kinds of Vegetables, the Cultivation of Stove and Greenhouse Plants, having had extensive collections under his charge; also a thorough knowledge of Fruit, Vegetable, and Flower Gardens. An excellent character.—A. B. C., Mr. J. Veitch, Royal Exotic Nursery, King's Road, Chelsea, S.W.

Gardener (Head).—I can recommend to any nobleman, lady, or gentleman, who may require his services, a thoroughly practical Gardener, who has had long and good experience in Forcing of Fruits, Flowers, and Vegetables, at all seasons of the year, in large Establishments; also the Management of Stove and Greenhouse Plants, the general routine, good keeping, and cropping of Kitchen and Flower Gardens, &c., and if required, will form, construct, and complete on good practical approved principles, a New Garden or Gardens. Can be well recommended. Character and abilities will prove all that can be desired.—John Butcher, Nurseryman and Seedsman, Stratford-on-Avon, Warwickshire.

Gardener (Head).—Age 31, married; ... understands Flower and Kitchen Gardens, ... Late Forcing, also the Management of Peach ... Houses. Can Manage Land. Satisfactory reasons for ... his present employer, by whom he can be highly ... —E. White, The Gardens, Manor House, Ham, Surrey.

Gardener (Head).—Age 34, married, ... brance; has had great practical experience in all ... of the profession. Disengaged in consequence of ... successful Gardens being broken up, which were ... Forcing of Pines, Grapes, &c. Excellent references as to ... and ability from late employer, whom he served ... T. G., Mr. Veitch, Royal Exotic Nursery, King's Road ...

Gardener (Head, where one or more are kept). Married, one son; good Kitchen Gardener; can ... Greenhouse, Vines, and Fruit Trees of every description ... years' good character; family gone abroad and services no longer required. Can be highly recommended for ... sobriety, honesty, and trustworthiness. Wages 20*l.* per ... with Cottage, &c.—Mr. Wm. Young's Nursery, Milford, Godalming, Surrey.

Gardener (Head), or Forester ... Bailiff.—Age 40; a first-rate Gardener ... unexceptionable character from late employer ... Wife ... Dairywoman.—A. B., 29, Princess Street, Edgware Road.

Gardener.—Age 28, single; thoroughly understands Vines, Stove and Greenhouse Plants, and Gardening in all its branches. Three years' character.—A. ... 3, Rose Terrace, High Road, Lee, Kent, S.E.

Gardener.—Married, no incumbrance; understands Pines, Vines, Peaches, Melons, Cucumbers, ... and Greenhouse Plants, also Flower and Kitchen ... Lived in noblemen's and gentlemen's places ... testimonials.—L. M., Post Office, Roehampton, Surrey.

Gardener (Single-handed).—Age 26, married; has a thorough knowledge of Vines, Cucumbers, Me... Greenhouse Plants, and Flower and Kitchen Gardens. ... character from last place.—T. M., Post Office, Kingsland ... N.E.

To Noblemen and Gentlemen.

Gardener (Age 35, married, three children, youngest 5 years old).—Charles Grant, now ... the last 8 years Gardener to Robert Fellowes, Esq., Shottisham Park, Norfolk, will be disengaged on the 1st of October and is now at liberty to treat with any nobleman or gentleman who is in want of a thorough practical Gardener. ... had great experience in the general routine of Gardening, including the Forcing of Fruits and Vegetables. Is a ... class Grower of Plants, and has been a successful competitor at the London and other Horticultural Exhibitions. Is a ... Kitchen and Flower Gardener, and has had considerable experience in the Planning and Erection of Horticultural Buildings of various and approved descriptions. Satisfactory reference may be obtained on application to his present employer, R. Fellowes, Esq., Shottisham Park, Norwich; R. Fellowes, Jun., Esq., Bitteswell Hall, Lutterworth, Leicestershire; Mr. Turner, Royal Nursery, Slough; ... E. G. Henderson & Son, Wellington Road, St. John's Wood, London.—Shottisham Park, Norwich.

Gardener (Under).—Age 23, single; three years' good character.—S. Gibson, 5, Down Street, Piccadilly.

Gardener (Under).—Age 24, single; has ... six years' experience in the general routine of Gardening. Good references. Willing to pay a Premium by instalments.—W. D., 92, Hall Park, Maida Hill, W.

To Gardeners.

Gardener (Under).—Age 22; well up in the general routine of his profession; has had great experience in some of the best Establishments. Character and Testimonials highly satisfactory.—R. F., The Gardens, Hatton House, Hounslow, W.

To Noblemen and Gentlemen.

Gardener, or Gardener and Bailiff.—Scotch, married, no incumbrance; is a good ... Grower either for market or private use; has had the ... and Planting of Vineries in different parts of the ... which have given the greatest satisfaction. Understands the London Market Garden System of Growing Asparagus, Seakale, and Cropping in general. Is highly recommended by the gentleman where he lived five years.—A. B., ... Royal Botanic Gardens, Regent's Park, N.W.

Gardener, or Gardener and Groom.—Can Drive a Horse and Trap, or Milk, or attend to ... Land. Four years' good character. Left for no fault ... Post Office, Wokingham, Berks.

General Nursery Foreman and Propagator.—A first-class Man; understands Laying ... Improving Gardens, &c.—J. B. W., Post Office, Chester ...

Propagator, or Propagator and Foreman.—An industrious, middle-aged Man. Good character; first-class references.—J. M., J. Veitch, Jun., ... Exotic Nursery, King's Road, Chelsea, S.W.

To Noblemen and Gentlemen.

Manager, &c.—A Person of considerable experience in Farming, Building, Draining, Planting, ... and Thinning of Plantations, Sale of Timber, &c., ... Managing a large Landed Property. The most ... references, and security if required.—M., Gardeners' Chronicle Office, W.C.

Land Steward.—Age 35; thoroughly understands his profession, and has been ... kinds of Stock, Machinery, and Hops. Good references ... given.—G. L., Post Office, Edenbridge, Kent.

Land Steward or Bailiff.—Has had ... practical experience in the Management, Draining, ... proving of Land; Rearing, Feeding, Buying and Selling ... kinds of Farm Stock; also the Erecting and Repairing ... Farm Buildings, the Surveying of Land, and the Measurement and Value of Timber. Unexceptionable references as to ... given.—F. S., 47, Wellington Street, Strand, W.C.

Bailiff.—No incumbrance; has had great experience in the Management of Lands and Woods, the Erecting ... Buildings, &c., Purchasing and Selling Stock. Would ... take Dairy or Poultry. The highest testimonials ... &c.—T. Y., Burgess & Key, 95, Newgate Street, London ...

Improver, in a nobleman's Garden or Nursery ... Age 19.—J. X. P., Post Office, Chesterfield.

To Seedsmen.

Shopman.—Has had great experience ... Wholesale and Retail Trade, and is thoroughly acquainted with every branch. Unexceptionable reference from a ... House.—P. P., *Gardeners' Chronicle* Office, W.C.

The Gardeners' Chronicle Newspaper.

SATURDAY, JULY 13, 1861.

Government Security Life Policies.

THE CONSOLS ASSOCIATION, 429, Strand, London, W.C.

1. Provides the Security of Consols for its Policies.
2. It lends, or returns to Insurers ON DEMAND at any time, about One-Half of all Premiums Paid.

Undoubted Security for Money with a liberal Rate of Interest. The Association possesses a large Capital, subscribed by several Hundreds of Shareholders.

Full information may be obtained on application to
THOMAS H. BAYLIS, Managing Director.

LIFE ASSURANCE.—SPECIAL NOTICE.—The next investigation into the profits of the Life Department of the SCOTTISH UNION INSURANCE COMPANY will be made at August 1, 1861, and parties taking out Policies before that date will participate in the division.

625 New Policies, for 304,705*l.*, yielding 9828*l.* 6*s.* 2*d.* of new premiums, were issued during the year ending August 1, 1860.

Thirty days' grace allowed to renew Life Insurances and 15 days to renew Fire Insurances, during which time, on payment of the premium, the Company hold themselves liable.

No extra premium charged for members of Volunteer or Rifle Corps within the United Kingdom.

LONDON BOARD.

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A copy of the last report, forms of proposals, and prospectuses, may be had at the Offices, 37, Cornhill, London, E.C.; and of the Agents throughout the Kingdom.

FREDK. G. SMITH, Secretary to the London Board.
No. 37, Cornhill, London, E.C.

GLENFIELD PATENT STARCH, used in the Royal Laundry. The ladies are respectfully informed that this Starch is exclusively used in the Royal Laundry, and Her Majesty's Laundress says, that although she has tried Wheaten, Rice, and other Powder Starches, she has found none of them equal to the Glenfield, which is the finest Starch she ever used.

WOTHERSPOON & Co., Glasgow and London.

DINNEFORD'S PURE FLUID MAGNESIA has been, during 25 years, emphatically sanctioned by the Medical Profession, and universally accepted by the Public, as the best Remedy for Acidity of the Stomach, Heartburn, Headache, Gout, and Indigestion, and as a Mild Aperient for delicate constitutions, more especially for Ladies and Children. Combined with the Acidulated Lemon Syrup, it forms an agreeable Effervescing Draught, in which its Aperient qualities are much increased. During Hot Seasons and in Hot Climates, the REGULAR use of this simple and elegant remedy has been found highly beneficial.

Manufactured (with the utmost attention to strength and purity) by DINNEFORD & Co., 172, New Bond Street, London, W.; and sold by all respectable Chemists throughout the Empire.

ALL AFFLICTED WITH WEAK EYES may obtain instant relief by using Dr. WARNER'S EYE WATER, which removes all inflammation arising from cold, dust, or constitutional causes.—Sold in bottles, 2*s.* 9*d.* and 4*s.* 6*d.*, by HANNAY, Oxford Street, W.; SANGER, Oxford Street, W.; EDWARDS, St. Paul's Churchyard, E.C.; HOOPER, King William Street, City, E.C., and all Chemists. Of whom may also be had, Dr. WARNER'S LOTION, a certain cure for sore and ulcerated legs, burns, and scalds, and bites of insects, and in cases of inflammation is invaluable. In bottles, 1*s.* 1½*d* and 2*s.* 9*d.*

NEW METHOD OF CURING DISEASE without the aid of doctors and their drugs, by studying the laws of Health in Nature.—Invalids cannot too carefully avoid pills, pretended "Life Drops," "concocted" for gain, and other dangerous medicines, as they all contain mineral poisons which act on the delicate fibres or coating of the stomach, and thus destroy the receptacle of our daily sustenance. The Advertiser was pronounced incurable, but, acting in accordance with the advice he now offers, has, by "God's Blessing," been restored to health and strength; and with sympathy for like sufferers, the Means of Cure will be sent on receipt of name, address, and stamped envelope.—Address Capt. CHARLES, 3, James Cottage, New Road, Hammersmith, London, W.

Dr. de Jongh's
(KNIGHT OF THE ORDER OF LEOPOLD OF BELGIUM)

LIGHT BROWN COD LIVER OIL, prescribed by the most eminent Medical Men throughout the world as the safest, speediest, and most effectual remedy for CONSUMPTION, CHRONIC BRONCHITIS, ASTHMA, COUGHS, RHEUMATISM, GOUT, GENERAL DEBILITY, DISEASES of the SKIN, RICKETS, INFANTILE WASTING, and all SCROFULOUS AFFECTIONS. Is incomparably superior to every other variety.

SELECT MEDICAL OPINIONS.

SIR HENRY MARSH, BART., M.D., Physician in Ordinary to the Queen in Ireland.—"I consider Dr. de Jongh's Cod Liver Oil to be a very pure Oil, not likely to create disgust, and a therapeutic agent of great value."

DR. GRANVILLE, F.R.S.—"Dr. Granville has found that Dr. de Jongh's Light Brown Cod Liver Oil produces the desired effect in a shorter time than other kinds, and that it does not cause the nausea and indigestion too often consequent on the administration of the Pale Oil."

DR. LANKESTER, F.R.S.—"I deem the Cod Liver Oil sold under Dr de Jongh's guarantee to be preferable to any other kind as regards genuineness and medicinal efficacy."

DR. LAWRANCE, Physician to H.R.H. the Duke of Saxe-Coburg and Gotha.—"I invariably prescribe Dr. de Jongh's Oil in preference to any other, feeling assured that I am recommending a genuine article, and not a manufactured compound, in which the efficacy of this invaluable medicine is destroyed."

DR. DE JONGH'S LIGHT BROWN COD LIVER OIL is sold only in IMPERIAL half-pints, 2*s.* 6*d.*; pints, 4*s.* 9*d.*; quarts, 9*s.*; capsuled and labelled with his stamp and signature, WITHOUT WHICH NONE CAN POSSIBLY BE GENUINE, by respectable Chemists.

SOLE CONSIGNEES:
ANSAR, HARFORD, & Co., 77, Strand, London, W.C.

CAUTION.—Beware of Proposed S bstitutions.

SAUCE.—LEA AND PERRINS beg to caution the Public against Spurious Imitations of their world-renowned WORCESTERSHIRE SAUCE. Purchasers should ASK FOR LEA & PERRINS' SAUCE, Pronounced by Connoisseurs to be "THE ONLY GOOD SAUCE."

*** Sold Wholesale and for Export, by the Proprietors, Worcester; Messrs. CROSSE & BLACKWELL, London, &c., &c., and by Grocers and Oilmen universally.

WHITE AND SOUND TEETH are indispensable to personal attraction, and to health and longevity, by the proper mastication of food. ROWLANDS' ODONTO, or Pearl Dentifrice, compounded of Oriental ingredients, is of inestimable value in preserving and beautifying the Teeth, strengthening the Gums, and in giving a delicate fragrance to the Breath. It eradicates Tartar from the Teeth, removes spots of incipient decay, and polishes and preserves the enamel, to which it imparts a pearl-like whiteness. Price 2*s.* 9*d.* per box.

Sold at 20, Hatton Garden, E.C.; and by Chemists and Perfumers. Ask for "ROWLANDS' Odonto."

BATHS AND TOILETTE WARE.—WILLIAM S. BURTON has ONE LARGE SHOW ROOM devoted exclusively to the display of Baths and Toilette Ware. The stock of each is at once the largest, newest, and most varied ever submitted to the public, and marked at prices proportionate with those that have tended to make his establishment the most distinguished in this country. Portable Showers, 7*s.* 6*d.*; Pillar Showers, 3*l.* to 5*l.*; Nursery, 15*s.* to 32*s.*; Sponging, 14*s.* to 32*s.*; Hip, 14*s.* to 31*s.* 6*d.* A large assortment of Gas Furnace, Hot and Cold Plunge, Vapour, and Camp Shower Baths. Toilette Ware in great variety, from 15*s.* 6*d.* to 45*s.* the set of three.

THE BEST SHOW OF IRON BEDSTEADS IN THE KINGDOM IS WILLIAM S. BURTON'S.—He has FOUR LARGE ROOMS devoted to the exclusive show of Iron and Brass Bedsteads and Children's Cots, with appropriate Bedding and Bed Hangings. Portable Folding Bedsteads, from 11*s.*; Patent Iron Bedsteads, fitted with dovetail joints and patent sacking from 14*s.* 6*d.*; and Cots, from 15*s.* 6*d.* each; handsome Ornamental Iron and Brass Bedsteads, in great variety, from 2*l.* 13*s.* 6*d.* to 20*l.*

WILLIAM S. BURTON'S GENERAL FURNISHING IRONMONGERY CATALOGUE may be had gratis, and free by post. It contains upwards of 500 Illustrations of his illimited Stock of Sterling Silver and Electro Plate, Nickel Silver, and Britannia Metal Goods, Dish Covers, Hot Water Dishes, Stoves, Fenders, Marble Chimneypieces, Kitchen Ranges, Lamps, Gaseliers, Tea Trays, Urns, and Kettles, Clocks, Table Cutlery, Baths, Toilet Ware, Turnery, Iron and Brass Bedsteads, Bedding, Bed Room and Cabinet Furniture, &c., with Lists of Prices, and Plans of the 20 large Show Rooms, at 39, Oxford Street, W.; 1, 1A, 2, 3, and 4, Newman Street; 4, 5, and 6, Perry's Place; and 1, Newman Mews, London.

THE QUARTERLY REVIEW, No. CCXIX., will be published NEXT WEEK.

CONTENTS:—
I. DE QUINCEY AND HIS WORKS.
II. MONTALEMBERT'S MONKS OF THE WEST.
III. TRANSLATORS OF VIRGIL.
IV. MAINE ON ANCIENT LAW.
V. SCOTTISH CHARACTER.
VI. RUSSIA ON THE AMOOR.
VII. CAVOUR.
VIII. DEMOCRACY ON ITS TRIAL.

JOHN MURRAY, Albemarle Street, W.

THE EDINBURGH REVIEW, No. CCXXXI., is published THIS DAY, July 13.

CONTENTS:—
I. POPULAR EDUCATION IN ENGLAND
II. LITERARY REMAINS OF ALBERT DÜRER
III. CARTHAGE
IV. NOVELS OF FERNAN CABALLERO
V. WATSON'S LIFE OF PORSON
VI. THE COUNTESS OF ALBANY, THE LAST STUARTS, AND ALFIERI
VII. BUCKLE ON CIVILISATION IN SPAIN AND SCOTLAND
VIII. DU CHAILLU'S EQUATORIAL ADVENTURES
IX. CHURCH REFORMATION IN ITALY.

London: LONGMAN & Co.; Edinburgh: A. & C. BLACK.

On Friday next, in 8vo, with Woodcuts and 5 Plates,
A POPULAR TREATISE ON COMETS. By FRANÇOIS ARAGO. Reprinted from ARAGO'S "Popular Astronomy."
London: LONGMAN, GREEN, LONGMAN & ROBERTS.

Now ready, with Coloured Frontispiece, fcp. 8vo, price 2*s.* 6. cloth.
IN-DOOR PLANTS, and How to Grow Them for the Drawing-room, Balcony, and Greenhouse: containing clear Instructions by which Ladies may obtain at a small expense a constant supply of Flowers. By E. A. MALING.
SMITH, ELDER, & Co., 65, Cornhill, E.C.

INTERNATIONAL EXHIBITION, 1862. — Preparing for publication. Some Account of the Buildings designed by Capt. FOWKE, R.E., for the International Exhibition, 1862, with Illustrations.
London: CHAPMAN & HALL; and of all Booksellers, and at Railway Stations.

Just Published, No. 14, price 2*s.* 6*d.*, of
THE FLORAL MAGAZINE, by the Secretary of the Floral Committee of the Royal Horticultural Society, containing highly finished Coloured Drawings and Descriptions of the newest varieties of Flowers that have become established favourites in the Garden, Hothouse, and Conservatory.
LOVELL REEVE, 5, Henrietta Street, Covent Garden, W.C.

This day is published, in Crown Octavo, price 6*s.*,
THE PAST AND PRESENT LIFE OF THE GLOBE: Being a sketch in Outline of the World's Life-System. By DAVID PAGE, F.G.S., Author of "Text-Books of Geology," &c. With 50 illustrations, Drawn and Engraved expressly for this Work.
WILLIAM BLACKWOOD & SONS, Edinburgh and London.

New General Atlas.
This day is published, in Imperial Folio, half-bound in russia or morocco, price 5*l.* 15*s.* 6*d.*,
THE ROYAL ATLAS OF MODERN GEOGRAPHY: in a Series of Entirely Original and Authentic Maps. By ALEX KEITH JOHNSTON, F.R.S.E., F.R.G.S., Geographer to the Queen for Scotland; Author of the "Physical Atlas," the "Dictionary of Geography," &c. Beautifully Engraved and Coloured by W. & A. K. JOHNSTON. With a Complete Index to each Map, containing references to nearly 150,000 places in this Atlas.
WILLIAM BLACKWOOD & SONS, Edinburgh and London.
Sold by all Booksellers.

A Lady's Travels in Egypt, Turkey, and Asia Minor.
On Friday Next will be published in 2 Vols. post 8vo, with Illustrations in Chromo-lithography and on Wood, from Drawings by the Author, and a Map,
EGYPTIAN SEPULCHRES AND SYRIAN SHRINES: including some Stay in the Lebanon, at Palmyra, and in Western Turkey. By EMILY A. BEAUFORT.
London: LONGMAN, GREEN, LONGMAN, & ROBERTS.

The Rev. F. Metcalfe's Travels in Iceland.
On Friday Next will be published in One Volume, post 8vo, with Map and Illustrations,
THE OXONIAN IN ICELAND; or Notes of Travel in that Island in the Summer of 1860, over ground not visited by any English Traveller for Fifty Years; with Glances at Icelandic Folk-Lore and Sagas. By the Rev FREDERICK METCALFE, M.A., Fellow of Lincoln College, Oxford; Author of "The Oxonian in Norway," &c.
London: LONGMAN, GREEN, LONGMAN, & ROBERTS.

News of the Week.

IN the House of Lords on Friday the Earl of SHAFTESBURY moved an address to the Crown in favour of extending public works in India, with a view to the promotion of irrigation, the growth of cotton, and internal navigation. Earl DE GREY AND RIPON said that the Government had allotted large sums in the Indian budget for railways and public works, and the financial condition of India made it inexpedient to incur any larger expenditure at present. Lord OVERSTONE moved the previous question, which was agreed to. On Monday, in answer to Lord LYTTELTON, Earl GRANVILLE said that a minute of Council would shortly be drawn up in pursuance of those recommendations of the Education Commissioners which were of an administrative nature, and that other measures which would require legislation to carry them out were under consideration. On Tuesday, the Poor Assessment (Scotland) Bill), the East India Council Bill, and the Courts of Justice Building Bill were read a second time. The Railway Companies Transfer (Scotland) Bill and the Landed Property Improvement (Ireland) Bill were read a third time and passed. On Thursday the Tramways (Scotland) Bill, the Tramway (Ireland) Bill, the Industrial Schools (Scotland) Bill, and the Metropolitan Police Force (Pensions) Bill were read a second time. The Poor Assessments (Scotland) Bill, the Inclosure Bill, the Local Government Supplemental Bill, and the Transfer of Stocks and Annuities Bill passed through committee. The boundaries of Burghs Extension (Scotland) Act Amendment Bill was read a third time and passed.

In the Commons on Friday the Irremovable Poor Bill was considered in committee, and progress made as far as the 8th clause. Mr. M'MAHON moved for a Select Committee to inquire into the evictions from the estates of Lord PLUNKET at Partry. On a division, the motion was negatived by 66 to 15. Mr. KINGLAKE called attention to the danger arising from the continued occupation by France of territories which had been declared to form part of the neutrality of Switzerland. Lord J. RUSSELL said that her Majesty's Government had declined to recognise the cession of Savoy and Nice as a part of the public law of Europe, and that the neutrality and independence of Switzerland, having been guaranteed by the Treaty of Vienna, remained as it was before the cession. The adjourned debate on Major EDWARDS's motion for the issue of a new writ for Wakefield was resumed. After considerable discussion, the motion was negatived on a division by 173 to 123. On Monday Lord ELCHO moved a resolution declaring the opinion of the House that it was not desirable that the new Foreign Office should be erected according to the Palladian design now exhibited in a committee room of the House. Lord PALMERSTON opposed the motion, and after a long discussion it was negatived, on a division, by 188 to 95. The House then went into Committee of Supply, and agreed to several votes of the Civil Service Estimates. The East India (Civil Service) Bill, as amended, was considered and agreed to. On the order for the consideration of the Appropriation of Seats (Sudbury and St. Alban's) Bill as amended, Mr. COLLINS moved to substitute Wakefield for Pontefract as the place of election for the Southern Division of the West Riding. On a division, the motion was carried by 107 to 94. The Durham University Bill passed through committee. On Tuesday the Irremovable Poor Bill was further

considered in committee, when some verbal amendments were disposed of. Mr. COCHRANE moved that the case of the Naval captains placed on the reserved list by Order of Council in 1851 be referred to the Attorney-General for his opinion. On a division the motion was negatived by 60 to 33. The County Voters (Scotland) Bill passed through Committee. The House then went into committee of Supply on the Civil Service Estimates, and agreed to numerous votes. The East India Civil Service Bill, and the Appropriation of Seats (Sudbury and St. Alban's) Bill were read a third time and passed. The Municipal Corporations Act Amendment Bill passed through committee, after an amendment moved by Mr. NEWDEGATE, for the omission of the second clause had been negatived by 91 to 21. The Turnpike Acts Continuance Bill, the Turnpike Trusts Arrangement Bill, and the Local Government Act Amendment Bill passed through committee. The County Surveyors (Ireland) Bill and the Copyright of Designs Bill were read a third time and passed. On Wednesday Sir F. BARING moved that the House go into committee on the Fictitious Savings Banks Bill. Mr. W. FORSTER moved as an amendment that the Bill be committed that day three months. Sir G. LEWIS supported the amendment, and after a short discussion the Bill was withdrawn. Mr. HUBBARD withdrew the Church-rates Law Amendment Bill for the present session. The Vaccination Bill passed through committee. Mr. TITE moved the second reading of the Metropolitan Local Management Act Amendment Bill. Mr. LOCKE opposed the Bill, and was speaking when the hour arrived for the adjournment of the House. On Thursday the House went into Committee of Supply on the Civil Service Estimates, and agreed to the remaining votes, including that for public education in Great Britain and that for the Royal Dublin Society, the latter being voted on the understanding that the Society has consented to open the Glasnevin Gardens to the public on Sundays. The Salmon and Trout Fisheries Bill passed through committee.

The *Moniteur* publishes a letter addressed by the EMPEROR to the Minister of Marine, putting an end to the engagement of negroes on the African coast for the French colonies. HIS MAJESTY announces that he has signed a treaty with England authorising the French Government to engage labourers in India for the French colonies. He therefore orders the Minister to take measures for prohibiting the introduction of negroes into the French colonies after July, 1862.

The two Houses of the Hungarian Diet unanimously adopted on Friday the Address originally proposed by Mr. DEAK. The Presidents of the two Houses have since presented the Address o the EMPEROR at Vienna. HIS MAJESTY replied in a conciliatory speech, thanking the States for the readiness with which they had met his desires, and promising an early answer, which he trusted would be received in a similar spirit.

A despatch from Madrid announces that the republican insurrection has been suppressed, and that the principal leaders of the party are in the hands of the Royal troops. It is understood that an interview will take place between the EMPEROR OF THE FRENCH and the QUEEN OF SPAIN during the stay of HIS MAJESTY at Vichy.

The Italian Chamber of Deputies on Saturday voted a fresh levy of 24,000 men, to be taken from the different provinces. It is reported that KING VICTOR EMMANUEL will shortly proceed to Naples, and reside there for some time.

From the United States we learn that there is no truth in the report that the Secessionists have made propositions for peace; on the contrary, the Federal Government is said to have received information that the Confederated States intend to prosecute the war with vigour. Skirmishes occur daily between the outposts of the contending armies, but no serious movement has yet taken place.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family, with the Crown Prince and Princess of Prussia continue at Osborne. On Friday afternoon the Queen and Prince Consort, accompanied by the Crown Prince and Princess of Prussia, Princess Alice, and Princess Louisa, drove out. On Sunday morning the Queen, Prince Consort, the Crown Prince and Princess of Prussia, and the Royal family, attended Divine service in the private chapel. The Rev. G. Prothero officiated. On Monday morning the Queen, the Crown Princess of Prussia, and the Royal family, walked in the grounds. The Prince Consort and the Crown Prince rode on horseback. In the afternoon the Queen, Prince Consort, the Crown Prince and Princess of Prussia, Princesses Alice, Helena, and Louisa, drove to Carisbrook. On Tuesday the Queen, with the Princesses Helena and Louisa, and Prince Leopold, drove out. The Prince Consort, the Crown Prince and Princess of Prussia, and Princess Alice, rode on horseback. Prince Arthur also rode on horseback. On Wednesday the Queen and Prince Consort, the Crown Prince and Princess of Prussia, Princess Alice and Princess Helena, drove to St. Clare, near Ryde.

PRINCE ALFRED arrived at Toronto, Canada, on the 24th ult., and was enthusiastically received by 9000 people. His Royal Highness was at Lachine on the 27th and Montreal on the 28th, and was expected to reach Quebec on the 29th. On the 1st inst. he was expected to embark in the steamer Victoria for Mingan.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of the First Lord of the Treasury in Downing Street. Another Council was held on Wednesday.

PARLIAMENTARY MOVEMENTS. — Sir William Atherton, the Attorney-General, has been re-elected for Durham without opposition. Mr. Roundell Palmer, the Solicitor-General, was elected for Richmond on Tuesday without opposition. It is understood that Mr. Gladstone will retire from the University of Oxford and become a candidate for South Lancashire, as soon as the bill creating a new seat for that county becomes law, and that Mr. Roundell Palmer will offer himself to the University as his successor. The Conservative electors have determined to bring forward Sir Stafford Northcote in opposition to Mr. Palmer, if the result of the preliminary canvass which is now in progress should justify their doing so.

CONVOCATION.—The two Houses of Convocation for the province of Canterbury re-assembled on Tuesday. The Upper House at once proceeded to take into consideration the resolution of the Lower House, affirming that there were sufficient grounds for proceeding to synodical action on the book entitled "Essays and Reviews." The Bishop of Chichester pointed out that the Bishop of Salisbury had lately instituted a suit against Dr. Rowland Williams, one of the writers of the book in question; and that as the Archbishop of Canterbury and the Bishop of London would most probably be called on to act judicially in that suit, it was not expedient that their lordships should proceed, under these circumstances, to discuss the resolutions of the Lower House. His lordship accordingly moved a resolution to that effect, which was carried unanimously, and communicated to the Lower House. Convocation was then adjourned to the 13th of August.

INDIAN COUNCIL.—Colonel Durand, C.B., has resigned his seat as a member of the Indian Council. The election to fill the vacancy thus created will take place in about a week.

THE VOLUNTEER MOVEMENT.—At the prize meeting of the National Rifle Association on Friday the conclusion of the firing for the Queen's prize at 200 yards, which had been interrupted by the rain on the previous day, was got through before the regular business commenced. In consequence of the more favourable weather the average of the shooting was decidedly higher. There were no numbers made as high as that of Mr. Dickens, marking 13; but there was one of 12 and several of 9 and 10, while all below those numbers showed good averages. After this the competitors proceeded to shoot for the second stage of the same prize at 500 yards, and for the first stage of the Prince of Wales's prize at 200 yards. At 500 yards there was one of 19, and several of 17. For the Prince of Wales's prize 290 competitors entered. Mr. Ross made 12 points (the highest possible number in his five shots being 15. On Saturday the first stage of the competition for the Queen's prize (with the exception of shooting off the ties) was brought to a close. Sergeant Duggan, of the 26th Lancashire, gained 23 points; his five nearest competitors, Messrs. Hendrie, Ayrshire Rifles; Moir, Stirling; Kirkwood, 2d Renfrew; Brooks, 12th Middlesex; and Jopling, South Middlesex, making 20 each. The score at the close stood thus:—1 competitor with 23 points, 5 of 20, 5 of 19, 14 of 18, and 18 who have marked 17, or 43 competitors in all. The 11 competitors who marked from 19 to 23 therefore secured their right to a Whitworth rifle and a place in the contest for the Queen's prize, Sergeant Duggan taking the silver medal as the best shot in the first stage. Mr. Ross, the champion of last year, only made 16 points, which was not high enough to make him one of the 40 qualified to shoot for the 250*l.* or Queen's prize. The preliminary shooting for the Prince of Wales's prize was also continued on Saturday. For the extra prizes (all comers) there were 230 competitors. The best shooting for these on Saturday was Leece, Manchester Rifles, 9 points (with one shot more to fire at the same range); Captain Eaton, 3d Manchester, 8; Ingram, 1st Lanark, 7; Wylbie, Royal Artillery, 7; W. Grutt, 1st Berks, 7; and Colour-sergeant Hall, 7. On Monday the contest for the Queen's Prize was resumed by shooting off the ties at 18 and 17 at 600 yards' range, in order to decide which of the competitors that had not scored more than 19 were entitled to the preliminary prize of the Whitworth rifle, and to claim a place among the first 40 who on Wednesday were to shoot for the Queen's Prize. The competition for the Prince of Wales' prize was then brought to a close. Mr. Ross missed four of his five shots at the 600 yards' range, and only marked 1 at the fifth, thus reducing his score to 18. The winner was Captain Robertson, of the 10th Perth Rifles, who marked 21 points. There were five at 20, five of 19, four of 18, and 16 of 17. On Tuesday the contests were commenced for the Duke of Cambridge's prize and that given by Lord Ashburton, to be competed for by such public schools as have enrolled corps. Nothing decisive was done towards winning the Duke's prize, and the score was therefore not published. The match between the public schools, however, was brought to a definite conclusion, and after a most exciting contest between Eton, Rugby, and Harrow, resulted in Rugby winning the prize by 2 points over Harrow, and 6 over Eton—the difference between Eton and Harrow being however only 4. At the close of the shooting Earl Spencer offered a prize cup worth 20*l.*, to be competed for at 500 yards by the best shot of each of the three schools. Three gentlemen—Mr. Amwyll of Rugby, Mr. Harley of Harrow, and Mr. J. Howard of Eton were accordingly selected, and competed with [illegible] shots each, when Mr. Howard of Eton won by 9 points, beating Rugby by 5 and Harrow by 4. On Wednesday the 40 competitors for the Queen's prize shot with Whitworth rifles at 800, 900, and 1000 yards' range. One of the competitors being absent, the remaining [illegible] were formed into two squads and fired at different targets. Five of the candidates retired during the contest, and the interest of the match lay practically with the following—Mr. Jopling (2d South Middlesex), Mr. Bingham (Bristol), Lord Bury (Civil Service), Mr. Brooks (12th Middlesex), and Mr. Rowe (1st [illegible]). In the last round Mr. Brooks and Mr. Rowe each [illegible] point, and were thereby reduced to the second [illegible], but time after time the signal flags responded to the shots of Mr. Jopling, Mr. Bingham, and Lord Bury, and at the close of the match their scores exhibited a triple "tie" of 18. According to the rules of the Association, Mr. Jopling, having distanced the other competitors at the previous ranges, was the declared the winner, his total score amounting to [illegible], while Mr. Bingham, the next highest, had scored [illegible]. Mr. Jopling, in gaining the Queen's Prize, received with it the Gold Medal of the association, and has thus become the champion shot of England. He is a clerk in the office of the Adjutant-General, and belongs to the 10th (War-office) Company of the 2d South Middlesex. On Thursday the prizes given to the All-comers were competed for. They consisted of six prizes of [illegible], seven [illegible] 35*l.*, and seven of 50*l.* Those who shot next in order to the prize-takers received copies of engravings presented to the value of 250*l.*, by Mr. Garle Brown. Yesterday the prizes given by the Duke of Cambridge, the Duke of Wellington, and the Prince Consort, and the Earl of Derby were finally competed for, with a new prize given by Lord Dudley to be shot for by prize-winners only; but the results were not known when we went to press. The Volunteer Ball, which was announced to take place at the Royal Italian Opera last evening, was countermanded in consequence of the small number of applications for tickets. The distribution of prizes will take place on Wimbledon Common this afternoon, after which a review of the Metropolitan and other Volunteer Corps will be held by his Royal Highness the Commander-in-Chief. It is probable that the aggregate strength of the corps on the ground will exceed 10,000 men.

Foreign.

FRANCE.—The *Moniteur* of Tuesday contains the following letter addressed by the Emperor to the Minister of Marine and Colonies:—

"Fontainebleau, July 1, 18[illegible].

"Monsieur le Ministre,—Since the emancipation of the slaves our colonies have tried to procure labourers on the coast of Africa by way of redemption or by means of contracts engagements which assure to the negroes a salary for the work which they may perform. These engagements are made for five or seven years, after which the labourers are to be taken to their own country, unless they prefer to remain in the colony, and in this case they [illegible] reside there by the same right as [illegible] Nevertheless doubts have been raised respecting the [illegible] quences which these engagements may have [illegible] African population. It is asked whether the price of redemption does not constitute a premium on slavery. [illegible] I gave orders for the cessation of all recruiting on the east coast of Africa, from which some inconveniences had resulted. I afterwards directed that all operations of this kind should be prevented on the west coast also. In fine, I wished that the questions which might arise relative to African emigration should be examined with the greatest care. This day I [illegible] signed a treaty with the Queen of Great Britain, by which Britannic Majesty consents to authorise the engagement of labourers for our colonies in the provinces of India subject to the Crown, on the same conditions as those observed with regard to the English colonies. We ought then to find in India, the French possessions of Africa, and in countries where [illegible] is proscribed, all the free labourers of whom we are in want. In such circumstances I desire that the African recruiting by way of redemption shall be completely abandoned by French traders from the day when the treaty concluded with Her Majesty shall come into execution, and during the whole of its duration. If this treaty should cease to exist [illegible] only be in virtue of an express authorisation that [illegible] without [illegible] ing, if it be recognised as indispensable [illegible]

violence, can be resorted to. You will, therefore, take the necessary measures in order that this decision may receive effect, commencing from the 1st of July, 1862, and that the introduction of negroes recruited after that period on the coast of Africa may be interdicted into our colonies. In conclusion, I pray God to have you in his holy keeping.

"NAPOLEON."

The *Moniteur* says that the Emperor has been received with the greatest enthusiasm by the peasants of the country surrounding Vichy, and that his Majesty makes excursions daily in the environs of the town. The Emperor's physician, Dr. Rayer has been summoned from Paris, but it is affirmed that his Majesty's illness affords no ground for uneasiness. It is understood that the Emperor and Empress will meet the Queen of Spain somewhere on the frontiers of Spain towards the close of the summer. The Empress presided on Tuesday at a Council of State at Fontainebleau. It is announced that Prince Napoleon is about to sail from Lisbon for the United States, and that the Princess Clotilde will accompany him. The *Moniteur* contains a decree nominating the Marquis de Lavalette Grand Cross of the Legion of Honour; and another decree appointing M. de Laguerronière, late director general of the press, a member of the Senate. General Beaufort d'Hautpoul has arrived in Paris from Syria, and the Duke de Gramont has arrived from Rome, and proceeded to join the Emperor at Vichy. Count Arese left Paris on Thursday evening for Turin. It has become doubtful whether the King of Prussia will visit the camp at Chalons.—The *Moniteur* announces that the subscription to the 300,000 bonds, repayable in 30 years, will be opened at the Bank of France on the 11th, and is to be closed on the 16th inst. The bonds will be issued at 440f. each, bearing an annual interest of 20f., and redeemable at 500f. The amount realised is to be applied to the construction of railways.—The scarcity of gold in France having obliged the banks to pay in silver, the old-fashioned five-franc piece is again in circulation. —The Emperor is said to have decided on the foundation of a second school for marine artillerymen. It is to be established at Brest on board the steam line-of-battle ship Louis XIV., in which a school for midshipmen already exists.—Judgment was given on Thursday in the affair of MM. Mirès and Solar. Both were condemned to five years' imprisonment and a fine of 3000 francs. Count Simeon, member of the Council of Surveillance of the Caisse des Chemins de Fer, was declared civilly responsible for the losses of the depositors. M. de Chassepot, M. de Pontalba, and Count de Poret, also members of the Council of Surveillance, were acquitted, as not having acted with knowledge of the frauds committed by MM. Mirès and Solar.

SPAIN.—A Ministerial circular has been addressed to the Governors of the provinces, recommending severe measures for the maintenance of public order. The Queen has invited the diplomatic corps to accompany her to Santander. The insurgents last week fled from Loja, and dispersed themselves in the neighbouring mountains, where the Royal troops have since captured nearly all the chiefs of the insurrection, and it is almost certain that none of them will escape. A letter from Cordova states that a republican movement has taken place in the city of Iznar in that province, and that a battalion had been sent to the spot from Seville. The English Consul at Tangier has gone to Fez to offer the Emperor the mediation of England for the definitive settlement of the difficulties between Spain and Morocco.

SWITZERLAND.—The Federal Assembly has elected M. Stæmpfli as President, and Dr. Furrer, Federal Councillor, Vice-President of the Swiss Confederation for 1862. 130 deputies were present at the election, of whom 94 voted for M. Stæmpfli and 71 for Dr. Furrer. The Federal Council has received another note from the French Government, asserting the rights of sovereignty of France over the valley of the Dappen, but declining to enter into any further discussion of the question.

PRUSSIA.—The official *Staatsanzeiger* of Friday publishes a Royal Manifesto, countersigned by all the Ministers, according to which the coronation of the King and Queen of Prussia will take place at Königsberg in October next. The ceremony will be performed in presence of the members of both Houses of the Diet, and of those personages who will be summoned from all the provinces of the kingdom as witnesses.

AUSTRIA.—The Presidents of the Upper and Lower Houses of the Hungarian Diet reached Vienna on Monday. A Cabinet Council was held the same evening, and on Tuesday evening both Presidents were received by the Emperor, to whom they presented the address. The following is the Emperor's reply:—

"I have observed with satisfaction the dutiful readiness with which the Estates and the representatives of Hungary have met the desire I lately expressed. Entertaining the hope that the Estates and the representatives of the country will receive in the same spirit the reply which I am about to give to the Address of the Diet, solely in the interest of the country, and for the general good of my people, I will give my reply as soon as possible."

It is understood that Baron Vay demands the recognition of the laws of 1848, with a view to their being afterwards revised; and that Count Szecsen, the other Hungarian Minister, proposes that negotiations should be opened with the deputation from the Hungarian Diet.

HUNGARY.—The result of the Conferences which took place last week between the principal members of the Diet, was the adoption of the Address, as originally proposed by Mr. Deak, by both Houses, which also resolved to present it to the Emperor in the same manner as the Address of 1790. Both Houses assembled on Saturday evening for the purpose of signing the Address, after which the Presidents of the two Chambers left with it for Vienna. The Vice-President of the Hungarian Chancellery has tendered his resignation because the proposal submitted by him to the Austrian Government at Vienna, to postpone the military execution for the recovery of the taxes until the termination of the harvest, has not been agreed to by the Ministry.

VENETIA.—The Austrian Government has ordered all the Venetians who, for political reasons, are imprisoned in Moravia, Bohemia, and Styria, to be set at liberty and allowed to return to their own country.

ITALY.—The Italian Chamber of Deputies on Saturday voted a fresh levy of 24,000 men, to be taken from the different provinces. On Monday the Chamber passed the Ravenna, Bologna, and Ancona Railway Bill, and the Bill relating to the reorganisation of the Roman Railway Company. It is asserted that King Victor Emmanuel will shortly proceed to Naples, and reside there for some time; and that Baron Ricasoli will proceed to Vichy to meet the Emperor Napoleon, in order to become more perfectly acquainted with his Majesty's views, and to establish a complete accord between the Cabinets of Paris and Turin, as was the case during Count Cavour's ministry. M. Kossuth arrived at Turin on Friday. —There is no truth in the statement that General Lamoricière will again take the command of the Papal troops. The Italian papers still assert that the Pope's state of health is very serious.—Despatches from Naples state that a Bourbon officer had been arrested. He was the bearer of several lists of persons in the pay of Francis II. The sums paid daily to these persons were also specified in the lists. A strike of workmen had taken place at Naples, and some arrests had been made in consequence. General Cialdini will replace General Durando in the command of the army of the Southern Provinces.

RUSSIA.—The financial and commercial crisis in Russia has become so serious that the great manufacturers are beginning to close their works. The largest distilleries and many industrial establishments are either sinking or have already suspended business; and several companies are winding up their affairs.

POLAND.—No disturbance has taken place at Warsaw, but the agitation which prevails in various parts has caused the Russian Government to take precautionary measures.

TURKEY.—A despatch from Constantinople announces that the Sultan has dismissed his seraglio, and has ordered all the diamonds, jewels, gold and silver ornaments to be sold to pay the debts left by Abd-ul-Medjid. It is thought the amount realised will cover all the liabilities. The Sultanas who have children will be allowed to remain in the Palace. His Highness only retains one wife. A similar reform is ordered in the Court; the expenses are to be reduced, and the functionaries changed. The Sultan is making a tour of inspection of all the public establishments, and has declared that all new European improvements are to be immediately introduced.

THE PRINCIPALITIES.—The Legislative Chamber, in its sitting of Friday, passed by 32 against 23 votes a vote of want of confidence in the Ministry for having permitted the circulation of a petition advocating electoral reform and the union of Moldavia and Wallachia; because, also, they had not presented the Budget to the Chamber, and had done nothing to accelerate public business. This attitude of the Chamber has produced general dissatisfaction. The capital and the surrounding districts are preparing an address to the Government, congratulating the Ministry on their firmness and on their having everywhere maintained order and tranquillity, notwithstanding the intrigues of the old political parties. The Metropolitan has refused to vote against the Government.

COAST OF AFRICA.—Mr. Foote, her Majesty's Consul at Lagos, died of fever at that place on the 27th May, after the attack on Porto Novo. Eyo Honesty II., King of Old Calabar, died on the 22d May. Her Majesty's ship Falcon had captured the American slaver Flight, of Boston, with 554 slaves on board. The prize was at Sierra Leone on the 8th June. The Sunbeam, belonging to the Niger expedition, was at Nun River.

INDIA.—The Calcutta mail has arrived with news to June 12. The following are the details:—

Calcutta.—Mr. Laing sailed for England in the Colombo on the 9th inst.

Bhawulpore.—A rupture took place between the Nawab of Bhawulpore and his minister Ahmed Khan, on May 25th. The minister garrisoned his house with 250 men and two guns. The Nawab's troops attacked the house and overpowered the minister, who, with two brothers, was killed fighting sword in hand. Measures will be taken to look after the ex Nawab of Bhawulpore, and to secure the frontier and prevent interference.

Hyderabad.—The Nizam of Hyderabad expressed to the Resident his determination to dismiss his minister, Salar Jung. He has since been reconciled to the minister.

Burmah.—An insurrection is said to have broken out in the Southern part of the province of Tonkin, in Annam, and the inhabitants had refused the extraordinary levy for continuing the war.

Delhi.—A little child, evidently of European parentage, and about five years old, has been discovered in the Delhi poor-house. She is supposed to be one of the survivors of the massacres of 1857, but as yet she has not been traced.

North West Provinces.—Copious rain has fallen in the famine-stricken provinces, and the prospects of the harvest are hopeful.

CHINA.—Accounts have reached St. Petersburgh from Pekin, stating that everything was tranquil in that city on the 12th May, but the rebels were rapidly approaching. The death of the Emperor was daily expected, and the Chinese authorities had already sent the carriages necessary for the imperial funeral to Sching-Yang (Moukden).

UNITED STATES.—The Secretary of State has authorised a denial of the statement published by the *New York Tribune* to the effect that the Secessionists had made two propositions of peace to the administration on the basis of perpetuation of slavery, the recognition of the Southern Confederacy, and an annual subsidy of 5,000,000 dollars from the United States for giving them protection against foreign and domestic enemies. The semi-official journals also deny that there is any prospect of a compromise like that of Mr. Crittenden, and assert that on the contrary the Government has received information that the Secessionists intend to prosecute the war with great vigour. The Federal Government had resolved to defer all offensive movements till after the meeting of Congress, when preparations will be perfected along the whole line from the Potomac to the Mississippi. It is reported that Lord Lyons and the other foreign ambassadors at Washington intend to remove their head quarters to Baltimore, until the national troubles have been settled. The police have seized, at the office of a merchant of New York, a petition with numerous signatures, praying the Federal Administration to suspend hostilities. The *New York Herald*, in its late issues, urges an armistice, and a coalition of the Northern and Southern forces for the purpose of invading Canada. The case of the British ship Hiawatha, seized by the Federal navy for an alleged infringement of the blockade at City Point, Virginia, is still pending in the District Court at New York, and is regarded with considerable interest, as involving the whole question of the blockade. Skirmishes daily occur between the outposts of the contending armies, but no serious movement has yet taken place. It is reported that Colonel Stone has entered Harper's Ferry, and is prepared to hold it; and that the President will repudiate General M'Clellan's treaty of alliance with Governor Magoffin, of Kentucky. The Secessionists are erecting defensive works in the immediate neighbourhood of Fairfax Court House, and are felling trees in order to render the roads impassable to the Federal troops. The fortifications round Alexandria have assumed a very formidable character. There are no indications of immediate movements further into Virginia. Since the arrest of Marshal Kane, of Baltimore, by General Banks, martial law has been virtually established in that city. A letter dated Fort Monroe, June 25, gives an account of an engagement between the Federal steamship Monticello and a body of Confederates, in which several were killed and wounded. A movement is on foot in the southern portion of California to join the Southern Confederation. It is reported from Cairo that large bodies of Missourians are concentrated on the Arkansas frontier, where they are receiving arms from the South, and awaiting troops from Arkansas, Mississippi, and Tennessee, for the purpose of making an incursion into Missouri.

CANADA.—The elections in Canada are progressing without disturbance. The returns generally are favourable to the Government candidates.

NEW BRUNSWICK.—The elections are also progressing in New Brunswick, and so far as known have resulted in a decided victory for the late Government.

SAN DOMINGO.—The Madrid papers of Saturday publish a telegram from Cadiz, stating that the Haytians had invaded the territory of San Domingo. Santana, Pelaez, and Alfau were marching in haste to the frontiers. Great armaments were being made in San Domingo. Enthusiasm prevailed among the Spanish troops. A squadron of 16 vessels, with troops, had been despatched from Havannah. Financial affairs at Havannah were in a bad condition.

Parliament.

HOUSE OF LORDS.

FRIDAY.—*Public Works in India.*—The Earl of SHAFTESBURY moved an address to her Majesty, assuring her that their lordships had regarded with great satisfaction the progress of public works in various parts of India, and beseeching her Majesty that, with a view to confer further benefits on that country, she would be pleased to take into her immediate and serious consideration the means of extending throughout it as widely as possible the best systems of irrigation and internal navigation. He pointed out the obvious advantages which must result from the construction of works of irrigation in a country like India, and argued that, in the present juncture of a probable falling-off in the cotton supply, the necessity was even more than usually urgent for adopting measures to open up new and reliable markets for that commodity. In whatever light the question was viewed, whether financially, politically, socially, or morally, it was one of vital importance alike to the interests of India and of England.—Earl DE GREY and RIPON said that her Majesty's Government fully agreed in the importance of improving the irrigation and the water communication of India. The late mutiny had interfered with the progress of these works, but last year the Indian budget appropriated considerable sums for their resumption, and this year it had been determined to devote as large an amount for the same purpose as the finances of India permitted. A sum of 8,000,000*l.* had been raised for the construction of railways under an Imperial guarantee; and he did not think that either the existing state of the money market of this country or the financial position of India itself would sustain any further outlay on public works in that country at present. —Lord OVERSTONE moved the previous question, and the Duke

of ARGYLL urged the noble earl to withdraw his motion.—Lord HARRIS instanced the success of works of irrigation in India by reference to those with which he himself was acquainted, and whose completion he predicted would yield immense returns upon the capital invested in them.—The Earl of SHAFTESBURY expressed his satisfaction at the admissions which had been made in the course of the debate with regard to the importance of the question, and intimated that under these circumstances he had no objection to withdraw his motion. The previous question was then agreed to.

MONDAY.—The Marquis of CLANRICARDE withdrew the *Galway Harbour Bill*, the packet contract having terminated.—Lord LYTTELTON called attention to the report of the *Education Commissioners*, and asked whether the Government intended to propose any measures, or to issue any minutes in pursuance of the recommendations of the Commissioners in their able and luminous report.—Earl GRANVILLE replied that those portions of the recommendations which required legislation to carry them out had not yet been sufficiently considered by the Government; consequently they were not prepared with any measure upon the subject. A minute of council on education would, however, be shortly drawn up, in reference to such of the recommendations as were of an administrative nature.—Lord BROUGHAM expressed his approval of the report, and urged the propriety of establishing a town and borough educational rate, and an extension of the system of inspection of middle-class schools.—The Duke of NEWCASTLE said that the Commissioners had not dealt with the question of middle-class education, in consequence of having been appointed chiefly to consider the best means of extending and improving elementary instruction. After commenting upon various portions of the recommendations of the Commissioners, he denied that those gentlemen had been indifferent to religious education. On the contrary, they were of opinion that religion not only formed a material element, but lay at the basis of all sound education.—The Marquis of NORMANBY announced his intention to postpone until a future day the motion of which he had given notice relative to the affairs of the *Duchy of Modena*.—Lord BROUGHAM expressed his gratification at hearing this announcement, and added the hope that ultimately the marquis would drop the matter altogether.—The *Boundaries of Burghs Extension (Scotland) Bill*, the *Volunteers Tolls Exemption Bill*, and the *Annoyance Jurors (Westminster) Bill* were read a second time.

TUESDAY.—The *Poor Assessments (Scotland) Bill* was read a second time, after a short discussion, in which the Earl of CAMPERDOWN, the Earl of EGLINTON, and other lords took part. The *Railway Companies Transfer (Scotland) Bill* was read a third time and passed.—Earl DE GREY and RIPON moved the second reading of the *East India Council Bill*, which had come from the House of Commons, and the objects and provisions of which he briefly explained.—The Earl of ELLENBOROUGH expressed himself adverse to these frequent changes in the government of India, and argued that the Bill went beyond what was required by the necessity of the case. India ought to be governed through and for the people of India, and therefore he was of opinion that the Bill was in its very principle defective and objectionable.—The Duke of ARGYLL contended that the Bill effected such immaterial alterations in the government of India that the animadversions of the noble lord were altogether unnecessary. It made no change whatever in the relations of the Governor General and his council, except so far as it went to strengthen the hands of the former in the event of any emergency arising to require vigorous and sudden action on his part. In short, the principle of the Bill was the simplification of governmental functions and the establishment [illegible] of the Governor-General's supremacy.—Lord LYVEDEN admitted the necessity of improving the working of the Legislative Council, but thought it would have been sufficient to pass a declaratory Act defining the powers of the Legislative Council, without altering its constitution.—The Earl of DERBY doubted the propriety of giving the proposed increase of power to the local Councils. The present Council needed reforming, as a little more Parliament was [illegible] to the requirements of India.—Earl GRANVILLE stated that it was not intended to give any publicity to the proceedings of the Council in its executive capacity. The Bill was then read a second time.

THURSDAY.—The *Royal Assent* was given by Commission to several Bills. *The Naval Reserve*.—Lord HARDWICKE stated that an expression which he had used in a recent debate, to the effect that "merchant seamen were not true sailors," had been misunderstood, and said that he had a high opinion of officers in the merchant service. The *Lunacy (Scotland) Bill*, the *Tramways (Ireland) Bill*, the *Industrial Schools (Scotland) Bill*, and the *Metropolitan Police Force Pensions Bill*, were read a second time. The *Poor Assessments (Scotland) Bill*, the *Ports and Harbours Bill*, the *Inclosure Bill*, the *Local Government Supplemental Bill*, and the *Transfer of Stocks and Annuities Bill*, passed through committee. The *Boundaries of Burghs Extension (Scotland) Act Amendment Bill* was read a third time and passed.—Lord REDESDALE called attention to the state of *Leicester Square*, and to the necessity of preserving it as an open space, according to the wishes expressed by its inhabitants.—Lords [illegible] and GRANVILLE expressed their concurrence with these views.

FRIDAY.—*Standing Orders*.—Lord REDESDALE moved an alteration in the standing order referring to the authority by which a company subscribes or guarantees money to another company. Lord PORTMAN moved a long amendment. After some discussion, Earl GRANVILLE suggested that it would be advisable to refer the subject to a select committee.—Lord REDESDALE said he had no objection to accede to the proposition of the noble lord in referring the subject to a select committee.

[Left sitting.]

HOUSE OF COMMONS

FRIDAY.—*The Partry Evictions*.—On the order for going into Committee of Supply, Mr. M'MAHON called attention to the recent evictions from the estates of Lord Plunket at Partry, and moved the appointment of a select committee to inquire into the circumstances and the expediency of devising some means to prevent the recurrence of such scenes.—Mr. MAGUIRE seconded the motion.—Mr. LEFROY said that he himself was disposed in the first instance to second it, because there was nothing which Lord Plunket desired so much as an inquiry, for the purpose of putting an end to the senseless and unfounded clamour that had been raised by certain parties against him. But upon consideration of all the circumstances of the case he had arrived at the conclusion that there was not a single fact to warrant the appointment of a committee.—Mr. WHALLEY complained of the time of the House being occupied with these disputes between landlord and tenant.—Mr. WHITESIDE defended the conduct of Lord Plunket, and said that the charge against him was totally destitute of foundation.—Mr. CARDWELL said that Lord Plunket had denied the charge upon oath, and to call him before a committee to repeat there the declaration he had solemnly made in a court of justice would not elevate the character of the House, but be a desertion of its proper functions. On a division the motion was negatived by 66 to 15. *Savoy and Switzerland*.—Mr. KINGLAKE called attention to the danger which seemed to be threatening the integrity and independence of Switzerland by the French occupation of territories which had been declared to form part of the neutrality of that country, and asked what progress had been made towards effecting those "full and adequate arrangements" which, in her Majesty's Speech in August last, were expressed to be confidently looked forward to as the means for "securing the neutrality and independence of the Swiss Confederation;" and whether, pending the negociations referred to in that Speech, the continued occupation by France of those territories is sanctioned by any provisional agreement or understanding between the guaranteeing Powers.—Sir R. PEEL said he considered the annexation of Savoy to France as a *fait accompli*; but, as regarded Switzerland, we were bound to consider the question of the neutralised territory in a public point of view. He was bound to admit that in treating this subject with Switzerland Her Majesty's Government had acted with ability and spirit, and he trusted they would never consent to the annexation by France of the whole of Savoy until the rights of Switzerland had been acknowledged by the great Powers of Europe. If it were Louis Napoleon's desire to attack any part of Switzerland he would find it a much more difficult task than he had experienced in dealing with the Italians, for there were leaders in Switzerland who were banded together by the most solemn pledges, and who, if the necessity arose, would know how to inspire every man's heart to spurn the smiles and the flattery of a despot.—Lord JOHN RUSSELL said that it was now clear that, before the Italian war, in 1858, an agreement had been come to between the Emperor of the French and the Prime Minister of the King of Sardinia, by which a hope was held out that, if the King of Sardinia should be attacked by Austria, and the result should be to give Lombardy and Venetia to Sardinia, Savoy and Nice were to be ceded to France. The result of the war, however, was not the conquest of Lombardy and Venetia, but ultimately Sardinia obtained Tuscany, Modena, and Parma. Negociations subsequently took place on the subject of the annexation of Savoy and Nice to France, the other great Powers declined to be parties to a conference, and the British Government then declared that as no sufficient guarantee had been provided for Switzerland they could not regard the cession of Savoy and Nice as a part of the public law of Europe. The question of the neutrality and independence of Switzerland, as guaranteed by the Treaty of Vienna, remained as before; and it was for Switzerland herself to assert her own independence. In the Italian question the Emperor of the French had fulfilled his engagements with fidelity and had now recognised the kingdom of Italy. Other questions were still pending on the Continent of Europe and in America, in all of which the British Government was acting in concert with that of France, which had manifested a right spirit, and he trusted that, by this community of views, the peace of the world would be maintained undisturbed.—Lord NAAS called attention to the recent changes in the Board of Directors of *Irish Convict Prisons*.—Mr. CARDWELL explained the extent and reasons of the alterations, and said that he was engaged in further inquiry upon the subject.—The SPEAKER was at length allowed to leave the Chair, and the House went into a Committee of Supply; but, it being then 12 o'clock, the Chairman was ordered to report progress. The adjourned debate on the motion for a new *Writ for Wakefield* was then resumed.—Mr. Serjeant PIGOTT (Chairman of the Commission of Inquiry) opposed the motion, which was supported by Mr. KNIGHTLEY, Mr. HENLEY, Colonel SMYTH, Mr. HENNESSY, Mr. DISRAELI, Sir W. JOLLIFFE, and other members, and opposed by Sir G. GREY, Lord PALMERSTON, the CHANCELLOR of the EXCHEQUER, and Sir G. LEWIS, who stated that his observations on a preceding night had been misunderstood. After a reply from Major EDWARDS, the House divided, when the motion was negatived by 1[illegible] to 1[illegible]. Certain Bills were forwarded, and the remaining orders having been disposed of, the House adjourned to Monday.

MONDAY.—*The New Foreign Office*.—On the order for going into Committee of Supply, Lord FERMOY moved, that in the opinion of this House, it is not desirable that the new Foreign Office should be erected according to the Palladian design now exhibited in a committee room of the House. He contrasted the merits of what he termed the Palmerstonian style of architecture with the Lombardo-Gothic, and contended that Mr. Scott's design, which was based upon the former, was unsuited alike to the country, the climate, and the purpose for which it was intended, and that even architects who differed upon both the Palladian and the Gothic united in condemning it. He also commented at some length upon the meanness of our street architecture, and argued that, as the new building would form the type of numerous others, and the Gothic admitted of the greatest variety and play of fancy, and the use of brick, the Gothic would be the preferable style for the projected Government offices.—Mr. DARBY seconded the motion.—Mr. COWPER said he had obtained the opinion of eminent architects, who concurred in thinking that the design of Mr. Scott, though he was a Gothic architect, was the best in the Italian style, and he insisted that this was the only style which in this country could be called national, London, as a city, being built in the Italian style. In a building like the Foreign Office they should look to convenience, light, and ventilation, and [illegible] to association, and the horizontal associated more with the objects of the building than the pointed style.—Mr. LAYARD said that what was wanted was something suited to our exigencies. As to light, no style of architecture was more adapted to its admission than the Gothic. He objected to the Palladian style for the new building, and considered the design a mean one. Mr. Scott was a Gothic architect, and it was not fair to take a design in the way his had been taken.—Mr. TITE highly approved of the design of Mr. Scott, and said that a well-informed architect could plan a building in one style as well as in another. He thought the Italian style gave all the conveniences which the Foreign Office would require, and that the design would produce a very handsome building.—Mr. OSBORNE expressed his conviction that the House of Commons was not the proper arbiter to decide a question of architectural taste.—Lord J. MANNERS enumerated an extensive list of public buildings both in England and Scotland which were now in course of erection to show that where the designs were thrown open for competition the preference was given to the Gothic style. Mr. Scott was the greatest living master of the Gothic, yet the noble lord had set aside the designs which had been submitted to and received the approval of his predecessors in the Government, and insisted upon Mr. Scott designing a structure in the Palladian style.—Lord PALMERSTON said that if he had to award the palm of victory in this battle of styles he should say that the Gothic had been entirely defeated. He hoped that as a Foreign Office was urgently wanted, and the Colonial Office was tumbling down, whilst premises were also required for the Indian Department, the Government would not be called upon to delay providing the necessary buildings until a new order of architecture had been invented and approved by the House of Commons. It was true that he had objected to the first plan of Mr. Scott, which was in the Gothic style, suited for a church, but unfit for street architecture in a large town. Mr. Scott then brought an amended design, and then a third, Saracenic in its character. At last he said, "Mr. Scott, go and bring me one in the Italian style." He did so, and produced a design which the House had been told was admired by the best judges. It would harmonise with the surrounding buildings, it combined in itself great beauty with moderation of cost, and it would be perfectly suitable to the purposes for which it was required. He disapproved of the Gothic for such structures, and although it might be argued that it was capable of being adapted to the admission of light, he had heard of large windows that admitted of no light, and passages that led to nowhere. On a division the motion was negatived by 188 to 95. The House then went into Committee of Supply on the Civil Service Estimates, and the discussion on the new Foreign Office was continued for some time longer on the vote of 30,000*l.* being proposed on account of the works. Ultimately the vote was agreed to without a division. Several other votes having been agreed to, the House resumed. On the order of the day for considering the *Appropriation of Seats (Sudbury and St. Alban's) Bill* as amended, Mr. COLLINS moved as an amendment to substitute Wakefield for Pontefract as the place of election for the southern division of the West Riding.—Mr. MILNES said that Wakefield would be most inconvenient as the place of election for the southern division.—Major EDWARDS supported the claims of Wakefield, on the ground that the head-quarters of the county constabulary and all the public offices were there.—Mr. HADFIELD urged that Sheffield was more central than either Pomfret or Wakefield.—Sir G. LEWIS supported the clause as it stood. On a division the amendment was carried by 107 to 94. The word "Wakefield" was then ordered to be inserted, and the Bill, as amended, was agreed to. The *Municipal Corporation Act Amendment (No. 2) Bill* and the *Durham University Bill* passed through committee.

TUESDAY.—*Irremovable Poor Bill*.—The consideration of this Bill was resumed in Committee, commencing with the [illegible] rating clause, the discussion of which and of the proposed amendments occupied the whole of the sitting. *Gloucester and Wakefield*.—Sir G. LEWIS stated, in reply to Mr. H. BERKELEY, that when the Election Law Amendment Bill came on for discussion, in the event of the House agreeing to the clause relating to the mode of dealing with boroughs in which systematic corruption had been reported by a commission, he intended to propose that that clause should be extended to Gloucester and Wakefield. The period during which the writs had already been suspended would be included in the time for which they would continue suspended under the Bill. *Light Dues*.—In answer to Mr. CRAWFORD, Mr. M. GIBSON stated that it was proposed to apply the annual surplus arising from the light dues, amounting to 68,400*l.*, to the reduction of the dues in the proportion of 15 per cent off coasting voyages, and 10 per cent. [illegible] of both coasting and sea voyages. The relief thus given to the shipping interest would be in round numbers 70,000*l.* a year. *Naval Captains*.—Mr. B. COCHRANE moved that the case of the Captains placed on the Reserved List by Order of Council in 1851 be referred to the Attorney-General for his opinion. He urged the strong claims of these officers, and called upon the Government to do them justice. The motion was seconded by Admiral WALCOTT and supported by Sir J. ELPHINSTONE.—Lord C. PAGET repeated the opinion he had before expressed, and suggested that it was unadvisable to press the motion, the general question of retirement being under the consideration of a Select Committee. On a division, the motion was negatived by [illegible] to [illegible].—Sir G. C. LEWIS obtained leave to bring in a Bill to amend the Acts relating to the *Payment of the Expenses of Prosecutions*, and Mr. CARDWELL obtained leave to bring in two Continuance Bills relating to *County Courts* and *Private Lunatic Asylums in Ireland*. The *Dealers in Old Metals Bill* passed through committee. The House then, in committee, resumed the consideration of the *County Voters (Scotland) Bill*, the clauses of which were agreed to, with amendments. The *Queensland Government Bill* passed through committee. The Report of the Committee of Supply was brought up and agreed to. The House then went into a Committee of Supply upon the remaining Civil Service Estimates, when a large number of votes was agreed to, but that for convict establishments in the colonies was reduced by [illegible] on the motion of the Treasury bench. The *East Indian (Civil Service) Bill* and the *Appropriation of Seats (Sudbury and St. Alban's) Bill* were read a third time and passed.—The House having gone into committee on the *Municipal Corporations Act Amendment Bill*, Mr. [illegible] moved the omission of the second clause, on the ground that it would give the mayor of every borough, [illegible] whether [illegible] by education or not, precedence of the other justices [illegible] in petty sessions.—Mr. SCHOLEFIELD and Mr. BAINES supported the clause; Mr. AYRTON opposed it. On a division, the clause was agreed to by 91 to 22. The Bill then passed through committee, as did also the *Turnpike Acts Continuance Bill*, the *Turnpike Trusts Arrangements Bill*, and the *Local Government Act Amendment Bill*. The *County Surveyors (Ireland) Bill* and the *Copyright of Designs Bill* were read a third time and passed.

WEDNESDAY.—*Fictitious Savings Banks Bill*.—Sir F. BARING moved that the House go into committee on this Bill, which had come down from the Lords. Its object was to prevent persons who opened a bank for their own advantage from assuming the title of savings banks, which led ignorant depositors to believe that they were like the genuine savings banks under the control of the Government.—Mr. W. J. FOX moved as an amendment that the Bill be committed that day three months. The Bill would inflict great injury on many benevolent institutions, including the penny savings banks, which had conferred great benefit on the working classes.—Mr. BAINES, Mr. HENLEY, Mr. BAXTER, and [illegible] opposed the Bill, Mr. HUBBARD supported it.—Sir G. LEWIS said that the Bill tended to increase penal legislation, and [illegible] an act which might be done, and was often done, without fraudulent intentions.—Sir F. BARING said in the [illegible] this opposition, he would not persevere with the Bill.—Mr. S. ESTCOURT thought the right hon. baronet had exercised a wise discretion in withdrawing the Bill. At the same time he thought much good would be done if the banks in question would consent to an independent audit. After some further conversation the Bill was withdrawn.—On the order for the second reading of the *Church-rates Law Amendment Bill*, Mr. HUBBARD said he felt it impossible to proceed farther with the Bill at that period of the session. He adverted to the fact that even in that House the opposition to Church-rates, which was once so strong, had dwindled down till the two parties stood on an equality. In this situation he thought the time had come for a compromise. He believed that the feeling of the Church of England was to make any concession on this subject short of abolishing her position as the National Church of the country.—Mr. TRELAWNY said that many compromises had been brought forward, and he hoped by next session that Churchmen would agree as to the compromise they intended to support.—Mr. B. STANHOPE said that if the position of the Church as the national establishment were conceded, no opposition would be offered to any form of exemption which the dissenters might claim.—Mr. NEWDEGATE was satisfied that the revival of a compulsory rate was impossible. He was in favour of exempting dissenters by a plan that would tax no one, and would work through a private arrangement between the owners and the occupiers of property.—Mr. DUNCOMBE strongly censured Sir J. Trelawny for listening to proposals of compromise.—SIR J. PAKINGTON expressed his belief that there was no small proportion of the nonconformists who would be glad of an amicable settlement. There was no real difference between the Bills of Mr. Hubbard and Mr. Cross, and he hoped that at the beginning of next session a measure would be brought forward that would unite in its favour the support of all moderate men.—After some remarks by Mr. J. EWART, Sir F. HEYGATE, Mr. PUGH, and Mr. C. DOUGLAS in favour of a compromise, the Bill was withdrawn.—The House then went into committee on the *Vaccination Bill*, and after some opposition from Mr. DUNCOMBE agreed to the various clauses.—Mr. TITE moved the second reading of the *Metropolis Local Management Act Amendment Bill*.—

LOCKE spoke in opposition to the Bill till the hour of adjournment. The *Drunkenness (Ireland) Bill* was read a third time and passed.

THURSDAY.—*The Iron Plated Ships.*—In answer to Mr HORSFALL, Lord C. PAGET said that the penalties for delay against the builders of these ships had not been enforced, because many alterations had been made at the suggestion of the Admiralty, but they reserved full powers to impose fines for imperfect work or improper materials. *National Education.*—On the order of the day for going into Committee of Supply, Sir J. PAKINGTON at some length called attention to the report of the Education Commissioners, and to the valuable information and sound conclusions which it afforded on the important subject of education. It was the Commissioners' opinion that a supplemental system, in aid of the public grants should be adopted, and they recommended for that purpose a resort to a county rate, and the establishment, in combination therewith, of local inspection and control. The deficiencies of the present system worked by a committee sitting in London, unassisted by local effort and local superintendence, could not be disputed; and he therefore asked whether the Government were prepared to take the report of the Commissioners into consideration during the recess, with a view to legislating upon the subject in the next session.—Mr. HENLEY recommended the Government to take this subject into their serious consideration during the recess; but he warned them that if they proceeded to legislate upon the basis of the Commissioners' recommendations they would find the task a most difficult one. The report stated that, of 900,000 children, one-fourth only received a satisfactory education; that the instruction was too ambitious, and too exclusively adapted to the elder scholars, to the neglect of the others. The House then went into Committee of Supply, when Mr. LOWE moved a vote of 643,000*l.*, the remainder of the educational grant. He explained that the estimate last year was 798,000*l.*, and the number of children, 880,000; and this year the estimate was 803,000*l.*, and the number of children 962,000. He then reviewed the criticisms of the Commissioners upon the existing system, and said that, notwithstanding the faults they had found with it, they nevertheless recommended its continuance. Having given the question the utmost consideration in their power, the Government had determined on adopting certain alterations in details, with a view to the improvement of the system, part of which would be shortly embodied in a minute of the Privy Council, and the remainder in the draft of a Bill to be laid on the table of the House.—Mr. ADDERLEY expressed his satisfaction with this statement, and after a discussion in which Sir G. LEWIS, Mr. PULLER, Mr. BAINES, and Mr BRUCE took part, the vote was agreed to. Among the other votes, that for the *Royal Dublin Society* raised a short discussion, in which it was stated by Mr. CARDWELL that the Society had signified its desire to comply with the wish of Parliament to admit the public to the Glasnevin gardens on Sundays, and the money would be paid on that condition.—Lord W. GRAHAM moved the omission of 15,000*l.* in the vote for *Schools and Residences at South Kensington*; but on an explanation from Mr. LOWE he withdrew the motion.—Mr. CARDWELL in moving the vote for *Public Education in Ireland*, gave full details of the number of schools and of scholars (amounting to 804,000, of which 668,000 were Roman Catholics), the classes of which they consisted, and the nature of the instruction the pupils received, explaining the principles of mixed education in the schools. He insisted that the results of the system had established a just claim to the confidence of the people of Ireland and to the support of Parliament. An animated discussion followed, which was interrupted by the CHAIRMAN being ordered to report progress. The House then went into Committee upon the *Salmon and Trout Fisheries Bill*, the clauses of which were agreed to after a long discussion.

FRIDAY.—*Parochial and Burgh Schools (Scotland) Bill.*—The House went into Committee on this Bill, the clauses of which were agreed to with some verbal amendments. *Irremovable Poor Bill.*—The Committee resumed the consideration of this Bill, and the provision moved on a previous occasion by Sir J. PAKINGTON to be added to clause 9.—Mr. HENLEY moved that the chairman report progress. On a division, the motion was negatived by 115 to 33.—Mr. PEACOCKE moved that the chairman leave the chair. On a division, the motion was negatived by 104 to 24. [Left sitting.]

City Intelligence.

MEXICAN BONDHOLDERS.—A deputation of Mexican bondholders had an interview with Lord John Russell on Monday at the Foreign Office, on the subject of the Mexican debt. The deputation was introduced by Mr. Robertson, M.P., who stated that there were three points the deputation wished to urge on his lordship; first, the restoration of the 660,000 dollars which had been abstracted; second, the enforcement of the arrangements made with Capt. Dunlop and Capt. Aldhous; and third, the appointment of interventors to receive the Customs dues which were assigned for the payment of the debt. Lord John Russell, in reply, stated that the Mexican Government admitted that the owners of the 660,000 dollars were robbed of it, and it must make the sum good. As to the arrangements with the English officers they must be adhered to, and he had received a despatch from the French Government expressive of their intention of insisting on their observance, which was the course the Government of this country intended to adopt. As to the appointment of interventors, he was not in possession of sufficient information to enable him to speak definitely on that point at present.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consol closed at 90 to ⅛ for Money, and 90¼ to 5-16 for the 7th of August; Three per Cents. Reduced, 89⅞ to ⅛; New Three per Cents., 89⅞ to ⅛; Thirty Years' Annuities, 1885, 15 11-16; Indian Five per Cent. Stock, 99 to 99¼; Ditto for Acct., 99 to ⅛; Ditto Four per Cent. Debentures, 1864, 96½.—FOREIGN: Austrian Five per Cents., 49; Brazilian Old Five per Cents., 99; Buenos Ayres Six per Cents., for Acct., 88; Dutch Two and a Half per Cents., 63½, ex div.; Ditto Four per Cent. Certificates, 100; Mexican Three per Cents., 22¼; Ditto, for Acct., 22⅜ to ½; Portuguese Three per Cents., 1853, 46⅜ to ½, ex div.; Ditto, for Acct., 46⅞, ex div.; Spanish New Deferred Three per Cents., for Acct., 41, ex div.; Committee's Certificates, 5½ to ⅞; Turkish Six per Cents., 1858, for Acct., 61⅛ to ¾; Ditto, 100*l.* Bonds, 62½; Ditto Guaranteed Four per Cents., 100¼; Ditto, for Acct., 101.

Gazette of the Week.

TUESDAY—BANKRUPTS—T. C. BARBER, Gravesend, Kent; Grays' Essex; and Enfield, Middlesex, Currier and Leather Seller—M. W. BRITTON, Shoreditch, Wholesale Milliner—J. CRESSEY, Wakefield, Yorkshire, Grocer—G. DAVIS, Southampton, Builder, Plumber, and Brass Founder—G. GOODWIN, Manchester, Auctioneer and General Dealer—J. GREEN, Swansea, Glamorganshire, Licensed Victualler—G. HORNSBY, West Front, Kingsland Place, Southampton, Gasfitter and Engineer—J. IABOTT, Somersham, Huntingdonshire, Builder—T. LEEKS, Norwood, Surrey, Contractor—T. J. MOSS, Edgware Road, Jeweller—H. F. OVENDEN, Maidstone, Kent, Draper (and not Dealer and Chapman only, as before advertised)—W. PARNHAM, Nottingham, Licensed Victualler and Dealer in Tobacco—C. ROSS, Walsall, Staffordshire, Butcher—J. E. SHELLARD, Bristol, British Wine Manufacturer—W. B. SHREEVE and C. SHREEVE, Burton-upon-Trent, Builders—L. SOLOMON, London Wall, City, Cap Manufacturer and Trimming Seller—T. WILSON, Claverley, Shropshire, Saddler—R. WILSON, Leeds, Flax Spinner.

BANKRUPTCY ANNULLED—J. COLLIER, Menston, Yorkshire, Top Maker.

FRIDAY—BANKRUPTS—J. G. ANDREWS, Charles Street, Hatton Garden, Middlesex, Licensed Victualler—J. W. BENTON, Sun Street, Bishopsgate, Picture Frame Maker—J. BRAIME, Methley, Yorkshire, Grocer, Joiner, and Farmer—I. BROWN, late of Brabant Court, Philpot Lane, City, Wine Merchant—P. BROWN, Paddington Green, and West Place, Islington Green, Middlesex, Lead and Glass Merchant—J. BRUTON, Hereford, Dealer in Corn, Chandler, Wood and Manure Dealer—C. COCKAYNE, Cannock Chase Burntwood, Staffordshire, Builder and Licensed Victualler—E. DEFRIES, Euston Road, and Gordon Square, Gas Metre, Stove, and Bath Manufacturer—R. HALL, Great Warley, Essex, Army Clothier and Tailor—J. F. INGLEDEW, Brighton, Coal Merchant and Furniture Dealer—A. P. JONES, Buckingham Street, Strand, Widow, Licensed Victualler—J. G. MASON, Stamford, Ironmonger—H. MONK, Shoeburyness, Essex, Furniture Dealer—W. ROBERTS, East Stonehouse, Devonshire, Builder—S. S. SMITHSON, Kingston-upon-Hull, Provision Merchant and Shipowner—J. WORSLEY, Witton, Cheshire, Draper.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,421,435	Government Debt	£11,016,100
		Other Securities	3,634,900
		Gold Coin and Bullion ..	10,771,435
		Silver Bullion	—
	£25,421,435		£25,421,435

BANKING DEPARTMENT.

Proprietors' Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£9,616,292
Rest	3,344,194	Other Securities	19,900,501
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	3,255,613	Notes	5,263,940
Other Deposits..	13,914,598	Gold and Silver Coin ..	902,864
Seven day and other bills	616,192		
	£35,683,597		£35,683,597

11th day of July, 1861. M. MARSHALL, Chief Cashier.

Metropolis and its Vicinity.

THE QUEEN'S BIRTHDAY.—Wednesday being the day appointed for the celebration of her Majesty's birthday, was observed as a general holiday in the metropolis and the outports, and with the usual military and naval salutes. In the evening her Majesty's Ministers and the great officers of State gave the usual full-dress banquets in honour of the day; the Duchess of Wellington gave a grand reception as Mistress of the Robes; and the club-houses and other public buildings were brilliantly illuminated.

ATTEMPTED MURDER BY A FRENCH NOBLEMAN.—The *Morning Post* of Thursday contained the following paragraph:—"A very painful story is current, which we trust is not well founded. A foreigner, well known in English society, is said to have attempted to murder his son, a young man nearly of age, who, upon attaining his 21st year, would be entitled in right of his late mother to a large sum of money, which his father is supposed to have been unable to pay over to him. We withhold the name, in the hope that a speedy contradiction may be given to this almost impossible statement." The same journal yesterday gave full details of the attempt, stating that the nobleman in question was Baron de Vidil, who married in 1835 Miss Susannah Jackson, co-heiress of a wealthy Hertfordshire gentleman; and that the attempt on his son's life was made in a lane near Orleans House, Twickenham, as they were returning on horseback from a visit to the ex-Queen of the French at Claremont. The *Morning Post* adds that the Baron has fled to France, and that several detective officers are on his track.

PUBLIC LIBRARY FOR THE CITY.—A meeting was held on Thursday in Guildhall, under the presidency of the Lord Mayor, for the purpose of determining whether the Public Libraries and Museum Act should be adopted in the City of London. After a long discussion the motion for the adoption of the Act was negatived by a large majority.

ROYAL NAVAL RESERVE.—A public meeting of shipowners, commanders, officers, and others of the mercantile service was held on Tuesday at the London Tavern, to consider the regulations issued by the Government under which masters and mates of merchant vessels may be enrolled as officers of the Royal naval reserve, and also how owners, masters, and others can most effectually assist the Government in procuring the number of seamen required for the same force. Mr. W. S. Lindsay, M.P., presided, and the meeting was addressed by Captains Height, Congleton, Kyle, Evans, Mangles, Wright, Irwell, and Thatcher, Mr. Jackson, Mr. Green, Mr. Bramley Moore, and Admiral Hamilton, all of whom expressed the feeling that the officers in the merchant service should co-operate with the Government, but that they ought to be equal and not rank after the lieutenants and sub-lieutenants, and that many proposed restrictions as to qualifications must be abolished. The first resolution asserted that it was important to form a national reserve, and that 400 officers could be easily raised if there was an offer to place them on a proper footing. The next resolution expressed an opinion that the ranks of lieutenant and sub-lieutenant will be accepted by masters and mates if they imply equality with the corresponding ranks in the Royal Navy, and that they shall not have to serve under any officer of inferior rank to a commander. The third proposed that the naval reserve should be, as far as possible, on the same footing as the Volunteers. These resolutions were unanimously adopted, and will be embodied in a memorial to be presented by the chairman to the Duke of Somerset.

INTERNATIONAL EXHIBITION OF 1862.—Mr. Maclise R.A., has received instructions from the Royal Commissioners to prepare a design for a prize medal. The Commissioners have applied to MM. Auber, Meyerbeer, and Rossini for three new musical compositions, destined to represent France, Germany, and Italy, to be performed at the opening of the Exhibition. M. Rossini has declined the invitation on the ground that he no longer belongs to the musical world, but M.M. Auber and Meyerbeer have accepted it. The Commissioners have requested the following gentlemen to act as a committee in connection with the Class of Agricultural and Horticultural Machines and Implements:—the Earl of Clancarty, the Earl of Erne, Lord Talbot de Malahide, Lord Portman, James Easton, Esq.; Brandreth Gibbs, Esq.; John Gibson, Esq.; Chandos Wren Hoskyns, Esq.; Charles Lee, Esq.; John Hall Maxwell, Esq., C.E.; James Stirling, Esq., C.E.; H. S. Thompson, Esq., M.P.; and Professor Wilson. The Commissioners have requested the following gentlemen to act as a committee in connection with Educational Works and Appliances:—The Right Hon. C. B. Adderley, M.P.; Right Hon. W. Cowper, M.P.; Sir John Acton, Bart., M.P.; R. W. Lingen, Esq.; the Dean of Hereford, the Dean of Christ Church, the Master of Trinity, Rev. Dr. Temple, Rugby; the Rev. B. M. Cowie, Harry Chester, Esq.; Rev. S. Clark, Rev. F. C. Cook, J. G. Fitch, Esq.; E. Hamilton, Esq.; Dr. Hooker, Rev. M. Mitchell, W. Portal, Esq.; J. S. Reynolds, Esq.; Rev. W. Rogers, Philip L. Sclater, Esq.; and the Rev. A. Wilson. The Commissioners have requested the following gentlemen to act as a committee for sanitary appliances in connection with the Class of Civil Engineering, Architectural Machines, and Building Contrivances:—The Earl of Shaftesbury, Viscount Ebrington, the Lord Bishop of Bath and Wells, the Lord Mayor, Sir Morton Peto, Bart., M.P.; John F. Campbell, Esq.; E. Chadwick, Esq.; B. C. W. Fairbairn, Esq., LL.D.; Captain D. Galton, R.E.; G. Godwin, Esq., F.R.S.; Philip Holland, Esq.; Owen Jones, Esq.; Dr. Letheby, John Simon, Esq., F.R.S.; R. Rawlinson, Esq., C.E.; A. Strutt, Esq.; Dr. Sutherland, M.D.; and T. Twining, Esq., jun. The Commissioners have requested the following gentlemen to act on a committee in connection with the Class of Chemical Substances and Products:—W. T. Brande, Esq., F.R.S.; Warren De la Rue, Esq., LL.D.; Professor Faraday; Thos. Graham, Esq., F.R.S.; Dr. A. W. Hofmann, LL.D.; Dr. W. A. Miller, M.D.; Dr. Lyon Playfair, C.B.; Dr. Theophilus Redwood, LL.D.; and Dr. J. Stenhouse, LL.D.

M. BLONDIN made his tenth appearance at the Crystal Palace on Saturday and his eleventh ascent on Wednesday. On Saturday he went through some of his most extraordinary feats, turning summersaults backwards and forwards, walking in a sack, and wheeling a barrow filled with a figure of "Mr. Punch," which by an ingenious arrangement of strings was made to bow and wave its hands, so that from the floor of the Palace it actually seemed a living figure. In addition to this he gave some displays which taxed the spectators' nerves even to look at them, such as dropping on his stomach on the rope, striking out as if swimming, hooking his foot over the cord, and so hanging down from the giddy height, head foremost. As a wind-up he ran swiftly backwards along the rope, and then crossed it on stilts amid tremendous cheers. On Wednesday after running along the rope from the centre to the south mast, he bandaged his eyes and enveloped himself in a sack, and thus accoutred started back, making many feints of slipping on his way. On arriving opposite the centre transept he placed his feet in baskets, and his legs and arms in chains, and in this condition made his way to the north mast. He there took off his shackles, and seizing his pole ran swiftly back, stopping at intervals to stand on his head, or to turn a somersault or two for a rest; then fastening his pole to the rope he performed some of his most perilous feats, such as hanging by his legs and arms, or by one leg, turning over and over on the rope many times. He will give a special performance this afternoon.—Since our last notice he has made four ascents at Liverpool from the gardens of the Zoological Society, where in addition to his other extraordinary performances, he wheeled a young lion belonging to the Society, weighing upwards of 60 lbs., across the rope, the wind blowing a complete tempest the whole of the time. On the 3d inst. he appeared at Cheltenham; on Monday and Tuesday last he exhibited at Aston Park, Birmingham, in the presence of 80,000 persons, and on Thursday appeared at the Malvern Hills.

THE KENSINGTON RIDE.—A deputation on the subject of the horse ride in Kensington Gardens had an interview with Lord Palmerston on Monday to present the resolutions agreed to at a numerously attended meeting held in the Vestry Hall, Kensington, on the 1st inst., Mr. Russell Gurney, Q.C., Recorder of London, in the chair. These resolutions expressed the regret and surprise of the meeting at a renewal of the horse ride in Kensington Gardens, Mr. Cowper, the First Commissioner of Works, having stated last year that he should be guided by public opinion as to the maintenance or removal of the ride, and public opinion having answered this chal-

lenge by a petition against the innovation, signed by upwards of 43,000 persons of all classes.

INDIAN FAMINE RELIEF FUND.—At the last meeting of the Committee held at the Mansion House it was reported that the total amount received had been 107,585*l.* 7*s.* 6*d.*, of which 104,500*l.* had been remitted to India. It was resolved that the subscription list should be closed, and that if any amounts should hereafter be received they should be sent out, always leaving a balance of 150*l.* in hand. A vote of thanks was given to the Lord Mayor, sub-committee, and officers for the efficient manner in which they had discharged the duties imposed upon them.

MURDEROUS AFFRAY IN NORTHUMBERLAND STREET.—Yesterday morning, shortly before 12 o'clock, some consternation was occasioned in Northumberland Street, Strand, by the report of pistols, and a loud outcry on the first floor of No. 16, occupied by Mr. Roberts, army agent. It appears that Major Murray had called upon Mr. Roberts respecting some money transactions which had passed between them, when an altercation took place, in which Mr. Roberts fired two pistols at Major Murray, and inflicted two bullet wounds in the neck. Major Murray, although thus wounded, finding that Mr. Roberts had locked the door and was in possession of another pistol, seized, it is said, the poker and tongs, and commenced a fierce onslaught on his assailant, inflicting the most fearful blows over the head and face, so as to thoroughly disarm him, and render him insensible. Both gentlemen are now in Charing Cross Hospital in charge of the police.

THE GREAT FIRE.—A public announcement was made on Saturday by the officials of the Fire Brigade that the great fire in Tooley Street had at last been extinguished, and that nothing but smoke and steam arising from the water poured on the heated ruins remained. Unfortunately the announcement was premature, for between Saturday night and Sunday morning a sudden outbreak of the flames took place in the immense vaults under the wharves. Some explosions also occurred in the course of the day, but the flames in the course of Monday were so effectually extinguished that the floating engines were removed after having been at work without cessation for more than a fortnight.—On Monday afternoon Mr. Serjeant Payne held an inquest on the few charred bones of Mr. Scott, which were found under the ruins on Friday. Mr. O'Connor, partner of the unfortunate gentleman, identified the watch and chain, and a surgeon identified the bones as those of a human being recently killed. The jury found that the remains were those of Mr. Scott, and that he came to his death accidentally by the falling of a wall at the fire.

BAYSWATER ROAD TRAMWAY.—At the adjourned meeting of the Metropolis Road Commissioners in reference to this tramway on Friday, it was resolved, by a large majority, that the present tramway should be removed and the road restored to its original state. The Commissioners gave Mr. Train to the 4th of October to carry out their directions.

CHURCH-RATES IN CAMBERWELL.—A hard-fought contest on the subject of a church-rate has just been decided in the parish of Camberwell, where party feeling among Churchmen and Dissenters runs unusually high. A rate of 2*d.* in the pound was asked to repair the parish church, in accordance with a report of Mr. Gilbert Scott, the architect. A poll of the parish, excepting certain districts which had become separate parishes by the operation of law, was begun on Monday, and continued without intermission from 8 o'clock in the morning till 8 in the evening, when the senior churchwarden declared the result to be,—For the rate, 981; against it, 873; majority in favour of the rate, 108.

THE JOURNEYMEN BAKERS.—The Secretary of State having appointed Mr. Seymour Tremenhere as a Commissioner to inquire into the condition of the operative journeymen bakers, the commission was opened on Monday. Five delegates attended from London, with others from Bath, Bristol, Salford, Manchester, and Liverpool. After the petition to the House of Commons praying for the redress of their grievances, and complaining of the number of hours they were obliged to work, had been read, evidence was given of the number of hours worked in the trade, varying from 18 to 22 daily, while in many shops the working hours were from Thursday night till Saturday night without intermission, the average wages being from 16*s.* to 18*s.* per week. A list of about 20 bakehouses, in a most frightful condition, having been handed in, the Commissioner said, that before proceeding with the inquiry, he should personally visit the bakehouses named, and should also get the number of youths employed under 18 years of age.

MR. EDWIN JAMES.—It was reported a few days since that Mr. Edwin James embarked for Quebec last week in the Great Eastern, on his way to New York, to seek a new fortune in the United States. It appears that there was no foundation for the rumour. He was married on Tuesday at the British Embassy in Paris to Mrs. Hilliard, a rich widow, whose income is settled to her own use; and after the wedding they left Paris, but not for America.

SCAFFOLD ACCIDENT.—A serious accident took place on Monday in Great Cumberland Street, immediately opposite the Marble Arch. A house taken by General Sir De Lacy Evans was undergoing thorough repair, a scaffold, consisting of six stages and 50 feet in height, having been erected in front of it. The old parapet had been removed, and a new and very heavy cornice erected in its place. The materials consisted of bricks, tiles, and cement. It is supposed that the rain of Saturday and Sunday soaked into the mass and destroyed the binding qualities of the cement. On Monday morning shortly before 11 the coping fell forward upon the scaffold and carried all before it, the poles snapping under the weight. A man named William Moore and his two sons were precipitated to the ground with its fragments. Moore fell upon the spikes of the railing below, which entered his side below the ribs, and causing blood to flow profusely. He was released from his horrible position and conveyed to the hospital, where it was ascertained that he had also fractured his leg. His eldest son, 20 years of age, has a dislocated collarbone and a broken leg, besides other injuries. The other son, who is a boy of 10, has sustained injuries still more severe, and lies at the hospital in a perfectly insensible state. The father died on Thursday, and little hope is entertained of the recovery of the two sons.

FATAL BOILER EXPLOSIONS.—Shortly before 6 o'clock on Thursday the 4th inst., the boiler of the engine at the factory of Messrs. Tubbs, Lewis & Co., manufacturers of india-rubber webbing, &c., Wilmer Gardens, Hoxton, suddenly exploded. About 50 persons, men, women, and children, are employed at the works, and the time of commencing their work is 6 o'clock. Only seven of them had assembled when the explosion took place, all of whom were seriously scalded, one of them so severely that he died in six hours. At the inquest on Saturday after a long sitting the jury signified their wish to hear some person who was present when the occurrence took place; and also that some scientific gentleman should examine the boiler, and make a report on the cause of the accident. The proceedings were accordingly adjourned. On Wednesday morning a large boiler connected with the manufactory of Mr. Minchin, near Victoria Park, exploded, causing a great destruction of property, and in one instance loss of life, with serious injury to a number of persons. Unfortunately the people were all at work when the disaster occurred, and were with difficulty rescued from their perilous situation. An adjoining factory, the property of Mr. Spill, was also much damaged.

THE PUBLIC HEALTH.—The Registrar-General's Weekly Return states that the total number of deaths in the week that ended Saturday, July 6, was 1043. The average number in the corresponding weeks of the 10 years 1851-60, corrected for increase of population, was 1129; the present return is therefore 86 below the average. During the week the births of 870 boys and 877 girls—in all, 1747 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1509.

Provincial.

BRADFORD.—At the Court House on Monday Mr. William Randall Mackley, surgeon, of Great Horton, was charged before the borough magistrates with having wilfully made and uttered a false certificate of the cause of the death of Martha Curtis, his housekeeper, who died at his house on the morning of the 25th ult. under circumstances of suspicion. It appeared that Mr. Mackley is 32 years of age and unmarried, and that the deceased, who was 30 years old, had for a long time lived with him as his housekeeper. No third person dwelt in his house. On the morning of the 26th ult. deceased died after an illness of four days. Mr. Mackley was her only medical attendant; but her mother and sister were present when she expired, and they deposed to the kindness with which she was treated by the prisoner. The parents of deceased living at Wilsden, near Bingley, a few miles from Bradford, her corpse was removed there in a coffin at night by desire of her family, and interred in the Wesleyan Chapel burial-ground in that village. The prisoner gave a certificate that death was caused by enteritis after four days' illness. Private communications were subsequently made to the Home Secretary, the result of which was a coroner's inquest, followed by the exhumation of the body and its inspection by the surgeons, who found that deceased had died from peritonitis, and that from four to six days before her death she had been delivered of a child of five or six months' growth. It also appeared on inquiry that the prisoner, in the certificate he had given prior to her interment, had represented her to have died on the 23d of June, whereas her death, as previously stated, did not take place until the 26th. A portmanteau belonging to the prisoner was found in a garret of his house containing the under clothing worn by deceased at the time of her confinement. There was, however, no proof that the prisoner was aware of her having had a child, and the surgeons for the prosecution admitted that in that case he might have mistaken peritonitis for enteritis. For the defence Dr. Macturk, of Bradford, deposed that if the disease progressed to death, whether it commenced with enteritis or peritonitis, the one would pass into the other both ways. He did not think it possible for a person to die of either disease without both being present. He should not blame any one for giving this certificate. Some evidence was given for the defence as to the deceased having suffered from a stomach complaint and constipation. Ultimately the magistrates determined to commit Mr. Mackley for trial, but consented to accept bail for his appearance.—On Tuesday an inquest, held by order of the Secretary of State, when [illegible] light was thrown upon the affair by the evidence of James Field, surgeon, of Dudley Hill, who deposed [illegible] on the 17th June Mr. Mackley consulted him as to [the] best mode of procuring abortion, telling him at [the] same time that he had made various experiments [on a] young woman he had with child. After this and [other] evidence in corroboration, the jury returned a [verdict] that deceased died from the effects of the [illegible] which Mr. Mackley used to procure abortion. [The] Coroner said that the verdict amounted to [one of] Wilful Murder. The chief constable of Bradford [took] the accused into custody about midnight on [illegible] on the authority of the Coroner's warrant.

CHATHAM.—The launch of the screw corvette [Rattle]snake, 21 guns, took place at this dockyard on [illegible] afternoon, with complete success. The Rattle[snake is] one of the largest of the class of 21-gun scr[ew cor]vettes, and is 1623 tons.

REIGATE.—On Monday the German who [was ap]prehended on suspicion of being one of the [murderers] of Mrs. Holliday, at Kingswood, was brought [before] the magistrates of this town for *further examin[ation].* Although he had given the name of *August Saltz[illegible]* his real name was believed to be Johann Carl F[ranz], and it was supposed that he was the owner of the [illegible] and papers which were found in the room where [the] crime was committed. Witnesses were examined [who] identified him as one of the men who were seen in [the] neighbourhood on the day before the murder, and [the] cord with which his bundle was fastened was identified [by] the maker as part of the same ball from which the [cord] was taken with which the legs of the murdered [woman] were tied. The prisoner then made a long statement [to] the effect that the property in possession of the p[olice is] his property, that he is the person described in the [illegible] document, and that his name is in reality [illegible] Franz. He further stated that, while travelling [in] the company of two German sailors, they [illegible] of a bundle containing his clothes and the papers [in] question, that the men who robbed him must [be the] murderers of the unfortunate woman, and in that [way] the articles referred to were taken to the house, [thus] leading to suspicion being fastened upon him, who was entirely innocent. This statement was signed [by] the prisoner, after which he was again remanded. On Wednesday a communication was received at [the] Foreign Office from Dresden to the effect that he left Konigstein, in Saxony, in April last, since [which] time nothing has been heard of him there; that he [is] an indifferent character; and that he had been [in] custody before. Another person suspected of be[ing] concerned in the murder has been arrested at Gre[at] Driffield, in the East Riding of Yorkshire, but on being seen by persons from Reigate, he was found not to be [the] man wanted.

TRENTHAM.—On Monday morning a large party [of] excursionists left Crewe for Trentham Park, the [seat of] the Duke of Sutherland, where they engaged in [a] variety of sports until 4 o'clock, when a violent [thunder]storm came on, accompanied by torrents of rain and showers of hailstones, which in a few moments [covered] the entire surface of the park. When the storm [began] a number of persons ran for shelter under one of [the] noble elms which stud the park. They had only [been] there a few minutes when a flash of lightning [struck] seven of the party senseless to the earth. [The] remainder of those who were under the tree [illegible] fied from the spot, and a considerable time [elapsed] before any one would venture near. At last [some of] the least timid approached, and, on exam[ining the] unfortunate people who were lying on the [ground], discovered that one of them, a young man [from] Crewe, named Roe, was quite dead, and [the] remainder were perfectly insensible. [They were] removed with all the expedition possible [to] Trentham Inn, and medical aid, after [considerable] delay, was procured. Some of the survivors [have sus]tained serious injuries, but it is hoped that they [will] recover.

Ireland.

THE ROYAL VISIT TO IRELAND.—It is stated [that] the Queen will arrive in Dublin on the 15th August, and will remain for a week at the Viceregal Lodge, the Lord-Lieutenant removing to the Castle during the sojourn of her Majesty. It is also stated that [illegible] will proceed from Dublin to Carton, where she [will be] the guest of the Duke of Leinster for a week. [Her] Majesty will visit the camp every day during her [stay] in the neighbourhood. It is expected that her Majesty will arrive in Killarney on Monday, the 26th of August. During two of the four days stay of the Royal party [at] the Lakes, they will be the guests of the R[ight Hon.] Colonel Herbert, M.P., at Muckross, and on the [other] two days they will be the guests of Lord Castlerosse at Kenmare House.

THE ORANGE ANNIVERSARIES.—The anniversary of the battle of the Boyne, 1690, passed off in Armagh with[out] any party display. Acting under orders from Government the police took steps to guard against [a] breach of the Emblems Act, their surveillance [extend]ing to all the neighbouring churches. Acc[ord]ing to all [illegible], the 1st of July, 1861, will be remembered as [an excep]tion in the annals of the County Armagh, all [party] displays having been abandoned. Lord D[illegible]

Grand Master of the County, has also published an address enjoining the brethren not to have any demonstrations on the 12th.

Murder by Poisoning.—A brother and sister, Bartholomew and Bridget Griffin, have been fully committed for trial at the ensuing assizes of Clonmel for the crime of administering poison to their late brother, James Griffin, of Cullen, in that county. Dr. Geoghegan, of Dublin, has deposed that the stomach of deceased contained arsenic in sufficient quantity to cause death.

Railways.

The Atherstone Accident.—Two actions were brought on the 29th ult. against the London and North-Western Company for damages for injuries received in the accident at Atherstone on the 16th November last, owing to a cattle train being shunted at the time when the Post Office and passenger train was due at that station, which resulted in the deaths of several persons and in serious injuries to many others. Among the latter were Mr. Hill and Mr. Laughton, both clerks in the Post Office, and plaintiffs in the present actions. The former, whose case was tried in the Court of Exchequer, obtained a verdict with 150*l.* damages; and the latter in the Court of Common Pleas obtained a verdict with 275*l.* damages. Two other actions by gentlemen in the service of the Post Office, arising out of the same circumstances, were settled without the intervention of a jury. On the 2d inst. another action was brought against the Company in the Court of Exchequer by Mr. Collins Ray Brown, a gentleman 39 years of age, and a partner in the firm of Brown and Mackendol, auctioneers at Glasgow, for injuries received by him in the same accident, when the jury by consent returned a verdict for the plaintiff with 1300*l.* damages.

Law.

Court of Chancery.—*Cubitt* v. *The Victoria Station and Pimlico Railway Company.*—The suit was instituted by the trustees of the will of the late Mr. Thomas Cubitt, for the purpose of obtaining the declaration of the Court that, according to the true construction of the Victoria Station and Pimlico Railway Act, 1858, the defendants, the Victoria Company and the Brighton Company, are respectively bound to cover in the railway with a roof on the north east or station side of Eccleston bridge to the extent of at least 30 yards from that side of the bridge, and to enclose the railways so as to prevent the escape of smoke, vapour, and noise, on the said bridge and the approaches thereto from the railway passing thereunder. The arguments in the case turned entirely upon the construction of the company's act. The Vice-Chancellor gave judgment substantially in favour of the plaintiffs, but without costs on either side.

Court of Queen's Bench.—Sittings in Banco at Westminster.—Before Lord Chief Justice Cockburn and Justices Wightman, Crompton, and Blackburn). —*The Queen* v. *Charlesworth.*—In this case the defendant was indicted at the York assizes, before Mr. Justice Hill, for bribery at the Wakefield election. An important witness, named Fernandez, refused to answer the questions put to him, and was committed for contempt of court. The Solicitor-General then stated that he was unable to make out the case for the prosecution, and applied to have the jury discharged. The judge acceded to the application, and accordingly discharged the jury. On the part of the defence, it was contended that under the circumstances the judge had no power to discharge the jury, and ought to have directed a verdict of acquittal to be entered. The case had been argued at considerable length upon a rule to enter final judgment for the defendant, and the court had deferred judgment. The Lord Chief Justice now gave judgment to the effect that the rule must be discharged. He did not consider that Mr. Justice Hill, in discharging the jury, had exceeded the limits of his judicial authority, or that the discharge of the jury operated virtually as an acquittal of the defendant. He thought the Court ought not to interfere in the present stage of the proceedings, and if on the second trial the defendant should unfortunately be found guilty, he could move in arrest of judgment or bring his writ of error. The other Judges concurring, the rule was discharged. *Queen* v. *The Inhabitants of* [illegible] *(Marriage with a Deceased Wife's Niece).*—This was a case as to the settlement of a pauper, and involved the question whether marriage with a deceased wife's niece, the daughter of an illegitimate sister, was a lawful marriage. The Lord Chief Justice, in delivering judgment, said that the united opinion of the court was that the marriage was not lawful, and consequently that the settlement failed. The illegitimacy of the sister did not affect the question, and they thought it would be a great public scandal if it were supposed that the court entertained for a moment the opinion that legal consanguinity, in addition to natural consanguinity, was necessary to make a marriage within the prohibited degrees bad. There were abundant authorities upon the point; but it was sufficient to say that the court repudiated the doctrine that the illegitimacy affected the invalidity of a marriage within the prohibited degrees. Judgment against the settlement.

Court of Common Pleas.—(Before Lord Chief Justice Erle and a Special Jury.)—*Turnbull* v. *Bird.*—*Mr. Turnbull and the Protestant Alliance.*—This was an action brought by Mr. Turnbull, late one of the calendarers in the State Paper Office, against Mr Bird, secretary to the Protestant Alliance, to recover damages for two alleged libels, contained in a memorial presented by a deputation to Lord Palmerston against Mr. Turnbull's appointment. The details of the case are already familiar to our readers. The trial lasted three days and terminated on Wednesday, when the Chief Justice summed up strongly in favour of the plaintiff, leaving it to the jury to determine whether defendant's comments upon the plaintiff were fairly and honestly made. The jury after nearly three hours' deliberation returned a verdict for the defendant.

Court of Probate.—*Smethurst* v. *Tomlins and Others.*—*Dr. Smethurst and the Will of Miss Banks.*—Sir C. Cresswell on Thursday delivered judgment on the question relating to the will of Isabella Banks, which had been argued at considerable length. Dr. Smethurst propounded the will, but probate was opposed by two sisters of the testatrix, on the ground that Smethurst had been convicted of felony, and sentenced to twelve months' imprisonment, and had thereby forfeited his claim. The judge decided that the plaintiff was not deprived of his rights as legatee, but was fully entitled to prove the will.

Central Criminal Court.—*The Islington Outrage.*—*Frederick Strugnell*, 17, was indicted for feloniously cutting and wounding Mary Anne Redkinson, with intent to murder her. The prisoner and two other men, it will be remembered, went to the house of Mr. Higgins, a butcher, at Islington, where the prosecutrix was employed as a domestic servant, for the purpose of robbery, and on the prosecutrix attempting to give an alarm, the prisoner made a most savage attack upon her with a knife and a chopper, and inflicted injuries from which it was almost miraculous that she recovered. The jury found the prisoner *Guilty*, and Mr. Justice Wightman ordered sentence of Death to be recorded, with an intimation that the extreme sentence would be commuted to one of penal servitude for life. *George Quilter*, 24, *William Liney*, 21, and *Frederick Strugnell*, the prisoner who had just been convicted, were then placed at the bar to take their trial for the robbery committed in the house of Mr. Higgins. The jury found all the prisoners *Guilty*. Mr. Justice Wightman, after observing upon the very grave character of the offence, sentenced Quilter and Liney to five years' penal servitude. No further sentence was passed upon the other prisoner. *The Alleged Murder at King's Cross.*—*Jane Palethorpe*, 37, was indicted for the wilful murder of her child Thomas Palethorpe, by poisoning it with laudanum. The circumstances of this case will be fresh in the recollection of our readers. The prisoner, who had been deserted by her husband, had vainly endeavoured to support herself and family by needlework, and having become utterly destitute, had purchased laudanum and administered some of it to each child and taken the remainder herself. When discovered she was in a state of unconsciousness; one of the children died soon afterwards, and the rest recovered. It was suggested for the defence that, as there was no evidence of malice, the probability was that she merely administered the laudanum with a view to induce sleep. The judge, in summing up, said that they must either convict the prisoner of wilful murder or acquit her altogether, and if they had any doubt as to the intention with which the laudanum was administered, they would be justified in acquitting the prisoner. The jury, after a short deliberation, returned a verdict of *Not Guilty*. *Attempted Child Murder.*—*Ellen Connor*, 24, married woman, was indicted for feloniously attempting to suffocate her infant child, with the intent to kill and murder him. The prisoner was lodging in the Caledonian Road, Islington, and moans of a child being heard, some women in the house went into the room, and found the child with a piece of rag stuffed into its mouth; its life, however, was fortunately saved. The Jury found her *Guilty*, and recommended her to mercy. His lordship, in passing sentence, told the prisoner she had had a very narrow escape of being tried for her life; and after some remarks on the enormity of the crime, ordered her to be kept in penal servitude for 15 years. *Fraudulent Bankruptcy.*—*James Denny Chapman*, warehouseman, pleaded guilty to two indictments, one charging him with not surrendering to pass his examination at the Bankruptcy Court, and the other with embezzling and secreting a portion of his goods. He was sentenced to four years' penal servitude. *David Bassett*, corn-merchant, of Uxbridge, was charged with unlawfully obtaining goods within three months of his bankruptcy, and also with obtaining money by false pretences. The latter counts, however, were withdrawn, the judge having expressed an opinion that they were unsupported by evidence. The prisoner was acquitted, and verdicts of *Not Guilty* were taken upon several other indictments. *The Commercial Bank Frauds.*—*John Durden* and *James Holcroft* were indicted for stealing several sums of money the property of the Commercial Bank. The jury were unable to agree to a verdict on the first indictment, and on the second the Crown consented to a verdict of acquittal for Holcroft. *Post-Office Robberies.*—*Harry Lock*, *William George Bunting*, and *Thomas George Smith*, three post-office letter carriers, were convicted of stealing letters containing valuable property. The two former were sentenced to three, and the latter to four years' penal servitude.

Obituary.

Sir Charles Ibbetson, Bart., died on the 7th inst., at Denton Park, his seat in Yorkshire. He was born in 1814, and succeeded to the baronetcy on the death of his father, the fourth baronet, in 1839. He was formerly in the army, and held commissions in the Yorkshire Hussars, and the West York Militia. In 1847, he married the widow of Mr. R Perkins, of Ashworth, Durham. In default of issue the baronetcy devolves on his uncle, Mr. J. T. Ibbetson Selwyn, of Down Hall, Essex.

Sir Francis Palgrave, K.H., deputy-keeper of her Majesty's Records, died on Saturday last in his 73rd year. He was of Jewish origin, and assumed the name of Palgrave in lieu of Cohen. He was born in London in 1788, and was called to the bar at the Inner Temple in 1827, and was one of the Municipal Corporation Commissioners. In 1832 he received the honour of knighthood for his general services and attention to constitutional and Parliamentary literature. He married the daughter of the late Mr. Dawson Turner, of Great Yarmouth.

Mr. Richard Grainger, of Newcastle-on-Tyne, the architect and builder of all its newest and most magnificent streets and public buildings, died on the 4th inst. in his 63d year, after half-an-hour's illness. Of Mr. Grainger it may truly be said that he found his native town brick and left it stone. Through his energy and genius the range of streets comprehending Grey Street, Clayton Street, Market, Grainger, Nelson, Hood, and Shakespeare Streets, with the theatre, Central Exchange, the new markets, which are among the finest covered markets in England, the branch Bank of England, Messrs. Lambton's bank, the Arcade, and innumerable public buildings were erected. Like the elder Stephenson, and other eminent Newcastle men, Mr. Grainger was self made. His father was a porter on the quayside, and died shortly after the son was born. His mother followed the employment of laundress to maintain her children, and Mr. Grainger received what education he got in the St. Andrew's Charity School. He served his time as a house carpenter, but from early youth he appears to have been fired with an ambition to effect great improvements in his native town, and the magnificent streets and noble public buildings that grace it are wonderful monuments of his genius and indomitable perseverance. Some years ago the immense magnitude of his transactions temporarily embarrassed his affairs, but the progress of trade greatly improved his property afterwards, and in recent years he reaped the more substantial results of his energy and intelligence.

Wills.—The will of the Duke of Sutherland has been sworn under 1,000,000*l.* personalty in England; that of the Dowager Countess of Strathmore, 40,000*l.*; the Dowager Lady Kinloch, 140,000*l.*; Lady De Lacy Evans, 6000*l.*; Vice-Admiral Moorsom, 14,000*l.*; the Hon. and Rev. George Brodrick, 40,000*l.*

Miscellaneous.

The Comet.—From a discussion in the Paris Academy of Sciences, the French astronomers appear to agree with Mr. Hind that the comet now visible is not the comet of 1556 which caused the abdication of Charles V. According to M. Chacornac it is composed of a very brilliant nucleus, a luminous aureola of considerable breadth, a tuft on the side turned towards the sun, and a large straight tail in the opposite direction. The nucleus, instead of being hollow like the half of an egg-shell, like most of the comets already observed, presents the appearance of a sun composed of fireworks, the bent rays of which burn in the same sense. The tuft is eccentric, and composed of six curved and radiant branches, each not more than a minute in length. The comet in these and other particulars resembles none hitherto observed, and it is not yet determined whether it is periodical or not. It is rapidly moving away from the earth, and astronomers will only be able to follow it for a month longer. Mr. Hind expresses his belief that in the course of Sunday week the earth passed through the tail of the comet at a distance of perhaps two-thirds of its length from the nucleus.

BIRTHS.—On the 5th inst, at 120, George Street, Edinburgh, Lady Louisa Brooke, of a son—4th inst, at Trabolgan, county Cork, the Lady Fermoy, of a daughter—4th inst, at Felton Grange, Shrewsbury, the Lady Frances Lloyd, of a daughter—3d inst, at the Norest, near Malvern, the Hon. Mrs Norbury, of a daughter—10th inst, at 73, Eaton Place, the Hon. Mrs. Pakenham, of a son—8th inst, at 16, Portland Place, W., Mrs. Herbert Crichton Stuart, of a daughter.

MARRIAGES.—On the 2d inst, at Affane Church, co. Waterford, Sir Charles Wheeler Cuffe, Bart., of co. Kilkenny, to the Hon. Pauline Stuart, daughter of the Right Hon. Lord Stuart de Decies, of Dromana, co. Waterford—3d inst, at Walesby, Nottinghamshire, Sir George Macpherson Grant, Bart., of Ballindalloch Castle, Morayshire, to Frances Elizabeth, younger daughter of the Rev. Roger Pocklington, vicar of Walesby, Notts—2d inst, at St. Peter's, Notting Hill, Mr. Archibald Lewis Playfair, H.M.'s Bengal Army, youngest son of the late Lieut.-Colonel Sir Hugh Lyon Playfair, LL.D., of St. Leonards, St. Andrews, to Isabella, eldest surviving daughter of the late George Huntley Ord, Esq., Manchester—9th inst, at the parish church, Clapham, Frederick Pollock, Esq., formerly of the Bengal Engineers, eldest son of General Sir George Pollock, G.C.B., to Laura Caroline, only surviving daughter of the late Henry Seymour Montagu, Esq., of Westleton Grange, Suffolk, and Thurlow Lodge, Clapham—9th inst, at St. George's, Hanover Square, Thomas William Booker, Esq., of Pelindra, near Cardiff, Glamorganshire, eldest surviving son of the late Thomas William Booker Blakemore, Esq., M.P., to Caroline Emily, youngest daughter of the late Robert Lindsay, Esq., of Glan Afon, in the same county.

DEATHS.—On the 8th inst, at Arundel Castle, Charles Bernard, son of Lord and Lady Edward Fitzalan Howard, aged 10—27th May, at Calcutta, Richard Trench, eldest surviving son of the Dean of Westminster, aged 25—5th inst, in London, George Fergusson Fullerton, Madras Civil Service, second son of the late Lord Fullerton, Edinburgh—7th inst, at Upton House, Alresford, the Hon. Thomas Crawley Onslow, late Colonel of the 2d Surrey Militia, and Lieutenant-Colonel in the Scots Fusilier Guards, aged 82—1st inst, at Maisonnette, Devonshire, Arthur William Olive Holdsworth, Esq., aged 52—8th inst, in London, Edward Hobson, Esq., of Stoke Park, Gloucestershire, aged 60—6th inst, at Cuddesdon Palace, the residence of her son-in-law, the Bishop of Oxford, Mary, widow of the late Rev. John Sargent, of Lavington, aged 82—29th May, at Bombay, whilst waiting for embarkation to England, Nathaniel Gould, Esq., of H.M.'s 3d Dragoon Guards, only son of Nathaniel Gould, Esq., of Tavistock Square.

Markets.

COVENT GARDEN, July 13.

The supply of most things continues to improve, and that of Vegetables is now sufficient for the demand. Good samples of Endive and Artichokes come from the Continent; also Apricots and Green Figs, Greengages in large quantities, and new Apples and Pears; the latter come from Lisbon and Oporto. Several cargoes of West India Pines have also arrived. Peas are plentiful. Grapes are still realising good prices. Of Strawberries there is still a good supply. Cherries are also everywhere plentiful; also Asparagus, French and Broad Beans, young Carrots, and new Potatoes; the latter fetch 1d. per lb. Cucumbers are coming in more plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Pelargoniums, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 4s to 7s	Cherries, English, p. lb., 6d to 1s
Grapes, per lb., 2s to 7s	Pears, per doz., 1s to 1s 6d
Strawberries, p. pun., 6d to 1s	Apples, per doz., 6d to 1s
Melons, each, 2s to 4s	Oranges, per 100, 6s to 14s
Peaches, per doz., 15s to 24s	Lemons, per 100, 6s to 10s
Nectarines, do., 12s to 20s	Nuts, Cob, per lb., 1s to 1s 6d
Apricots, do., 1s to 3s	

VEGETABLES.

Cauliflowers, each, 2d to 6d	Beet, per doz., 1s 6d to 6s
French Beans, p. 100, 9d to 1s 6d	Celery, p. bundle, 1s 6d to 2s 6d
Green Peas, p. quart, 1s to 1s 6d	Onions, p. ½ sieve, 4s 6d
Greens, per doz., 2s to 4s	Asparagus, p. bundle, 3s to 7s
Broad Beans, p. bush, 3s 6d to 4s	Rhubarb, p. bundle, 6d to 9d
Cabbages, do., 1s 3d to 1s 6d	Tomatoes, p. doz., 6s
Potatoes, p. ton, 80s to 120s	Shallots, per lb., 1s 6d
— per lb., 1d to 4d	Garlic, per lb., 6d to 8d
— — per cwt., 4s to 8s	Endive, p. doz., 3s to 4s
Turnips, per bunch, 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Carrots, new, do., 1s to 1s 3d	Mushrooms, p. pott., 1s 3d to 1s 6d
Spinach, p. sieve, 1s to 2s	Parsley, p. 12 bunches, 4s to 6s
Cucumbers, each, 6d to 9d	Savory, per bunch, 2d to 4d
Artichokes, each, 4d to 6d	

HAY.—Per Load of Thirty-six Trusses.

Smithfield, Thursday, July 11.

Prime Meadow Hay	75s to	84s	Clover	90s to	120s
Superior do. (old) ..	88	100	New Clover ..	—	—
Inferior do.	36	50	Do. second cut ..	—	—
New do.	50	80	Straw	30	40
Rowen	—	—			

Davis & Co.

Whitechapel, Thursday, July 11.

Fine old Hay	100s to	105s	Fine old Clover ..	118s to	123s
Inferior do.	75	90	Inferior do	90	96
Very inferior	—	—	Fine 2d cut	—	—
Prime New Hay ..	72	88	Inferior do.	—	—
Straw	39	42	Fine New Clover ..	78	96

HOPS.—Borough Market, Friday, July 12.

Messrs. Pattenden & Smith report the plantation accounts for the most parts worse. Some improvement is going on in parts of Mid and East Kent and Worcester. There is a fair trade doing, at firm rates. Duty 70,000*l.* to 80,000*l.*

COAL MARKET.—July 10.

Bell's Primrose, 13s.; Craghead Steam, 14s. 6d.; Tanfield Moor, 12s. 6d.; Tanfield Moor Butes, 12s. 6d.; Walker Primrose, 12s. 3d.; Wylam, 15s. 6d.; Walls End Byron, 16s. 6d.; Walls End Braddyle Hetton, 17s. 9d.; Walls End Haswell, 18s. 9d.; Walls End Hetton, 18s. 9d.

Walls End Kepier Grange, 17s. 6d.; Walls End South Hetton, 18s. 9d.; Walls End Heugh Hall, 17s.; Walls End South Hartlepool, 17s. 3d.; Walls End South Durham, 16s. 9d; Walls End South Kelloe, 18s.; Walls End Thorpe, 17s.; Walls End Trimdon Hartlepool, 18s. 3d.; Walls End Trimdon Thornley, 15s. 9d.; Carway and Duffryn Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.—30 ships at market.

BUTTER MARKET.—July 12.

Best Fresh Butter	.. ..	14s. per dozen lbs.
Second do. do.	.. ..	12s. „ „

Pork. 4s. 0d. to 4s. 8d. per 8 lbs.

BRITISH WOOLS.—London, Friday, July 12.

The present clip of wool has begun to arrive from the farmers, but not in sufficient quantities to establish any price. The general tone of the trade is not worse than last week and deep grown wool is rather more inquired for.

	s. d. s. d.		
South-down Hoggets..	1 3 to 1 3½	Leicest. Wethers	1 2 to ..
Half-bred ditto..	1 3 — 1 3½	Ditto Hoggs ..	1 3 — ..
Down Ewes ..	1 2 — 1 3	Combing Skins	0 10 — 1 5
Kent Fleeces ..	.. — ..	Flannel Wool ..	1 0 — 1 5
		Blanket ditto ..	0 6 — ..

METROPOLITAN CATTLE MARKET.

Monday, July 8.

There is considerable increase in the supply of Beasts from Monday last. Trade is dull, and prices are lower. Several remain unsold. The supply of Sheep is about the same as on Monday last. The demand is smaller, and it is difficult to clear out at our quotations. Trade remains unaltered for Lambs and Calves. From Germany and Holland there are 1080 Beasts, 4640 Sheep, and 236 Calves; from Spain, 90 Beasts; from Scotland, 700 Beasts; from Norfolk and Suffolk, 1000; from Ireland, 105 Beasts and 18 Calves; and 500 Beasts from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 8 to 5 0	Best Long-wools.	.. to ..
Best Short-horns	4 6 — 4 10	Do. Shorn ..	4 6 — 4 8
2d quality Beasts	3 6 — 4 2	Ewes & 2d quality	.. — ..
Best Downs and Half-breds	to ..	Do. Shorn ..	4 0 — 4 4
Do. Shorn ..	4 10 to 5 0	Lambs	5 0 — 6 0
		Calves	4 0 — 4 8
		Pigs	3 8 — 4 6

Beasts, 4170; Sheep & Lambs, 26,510; Calves, 322; Pigs, 330.

Thursday, July 11.

We have a short supply of Beasts, but the demand is not great, and it is therefore difficult to maintain Thursday's quotations. The number of Sheep and Lambs is smaller than of late, but quite equal to the demand. There is a pretty good clearance at Monday's prices. The Calf trade is without alteration. Our foreign supply consists of 290 Beasts, 2280 Sheep, and 461 Calves; from Ireland we have 57 Calves and 200 Lambs; the number of Milch Cows is 95.

Best Scots, Herefords, &c. ..	4 8 to 5 0	Best Long-wools . ..	to ..
Best Short-horns	4 6 — 4 10	Do. Shorn ..	4 6 — 4 8
2d quality Beasts	3 6 — 4 2	Ewes & 2d quality ..	— ..
Best Downs and Half-breds	— ..	Do. Shorn ..	4 0 — 4 4
Do. Shorn ..	4 10 — 5 0	Lambs .. .	5 0 — 6 0
		Calves	4 0 — 4 8
		Pigs	3 8 — 4 6

Beasts, 1015; Sheep & Lambs, 11,130; Calves, 716; Pigs, 140.

MARK LANE.—Monday, July 8.

The supply of Wheat from Essex to this morning's market was small, from Kent we did not see any; the former was taken freely at an advance of 1s. per qr. upon the prices of this day se'nnight. The attendance was tolerable, and a good retail business transacted in foreign at the extreme rates of Monday last, and on several descriptions an improvement of 1s. per qr. was realised. For Barley, Beans, and Peas there is rather more demand at last week's prices. Good Oats bring fully late rates, but inferior and out-of-conditioned parcels are very unsaleable. For Flour there is rather more inquiry, and in some instances American barrels bring a trifling advance.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk..White	46—63	Red	46—60
— — fine selected runs..ditto	50—76	Red	50—65
— — Talavera	51—67		
— Norfolk	—	Red	—
— Foreign	40—74		
Barley, grind. & dist., 26s to 27s.. Chev.	36—40	Malting.	34—36
— Foreign..grinding and distilling	27—30	Malting.	33—36
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign........Poland and Brew	20—23	Feed ..	19—21
Rye	35—37	Foreign.	—
Rye-meal, foreign	—		
Beans, Mazagan....37s to 40s.... Tick	40—43	Harrow.	40—43
— Pigeon ......41s — 45s..Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
Peas, white, Essex and Kent ..Boilers	34—37	Suffolk .	38—39
— Maple .... —s to —s ...... Grey	40—42	Foreign.	35—38
Maize .... White	—	Yellow..	—
Flour, best marks delivered..per sack	50—55		
— 2d do. .... ditto	34—50	Country.	34—50
— Foreign ....per barrel	26—32	Per sack	42—58

Friday, July 12.

Previous to the 8th inst. we continued to be daily visited with thunder showers, but since that date the weather has been finer, with summer temperature; the wind chiefly from the S.W. The crops are reported to be progressing favourably towards maturity, with the exception of Beans, which in some localities appear to be much blighted. In the markets held during the earlier part of the week an improved demand was experienced for Wheat, and an advance of 1s. per qr. was generally realised. No quotable alteration is observable in the value of Spring Corn. Here and in Liverpool full prices have been realised for American Flour, in Glasgow previous rates were difficult to realise. During the past 8 days 37 cargoes have arrived off the coast. The floating trade has been inactive, but not lower. In Paris (July 11) there is very little doing in both Wheat and Flour, buyers confining their purchases to their immediate wants, as holders show no disposition to accept lower prices. The arrivals of English grain during the week have been small, of foreign Wheat and Barley large, and moderate of Oats. This morning's market was tolerably attended by country millers; nevertheless the amount of business transacted was limited, and both English and foreign Wheat are unaltered in value from Monday. Barley is a slow sale. For fine Oats there is rather more inquiry at full prices.

Arrivals from July 8 to July 12.

	Wheat.	Barley.	Oats.	Flour.
English ..	870 qrs.	— qrs.	— qrs.	1230 sks.
Irish	— „	— „	20 „	— „
Foreign ..	29440 „	1290 „	16710 „	40 „ / 27890 brls.

Liverpool, Tuesday, July 9.—This morning's market has been well attended both by local and country buyers, and Wheat has had a healthy consumptive demand at the extreme rates of Friday, whilst the medium qualities of American red have in some instances brought 1d. to 2d. per cental improvement. Flour is 6d. per barrel and sack dearer, with a fair retail business passing. Indian Corn is still offered quite sparingly, and is difficult to buy except at an advance of 6d. per qr.; the late arrivals are not fairly in the market yet. Oats and Oatmeal slow sale. Beans are 6d. per qr. dearer. Peas and Barley command full prices. The market closes with much steadiness, and holders show no anxiety about getting clear of the late heavy arrivals.

Friday, July 12.—The market was rather firm; Wheat sells quietly at full rates of Tuesday. Flour steady at late quotations. Beans, Indian Corn, Oats, and Oatmeal in moderate consumptive inquiry at current prices.

Averages	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
June 1..	55s 5d	34s 3d	25s 2d	33s 1d	45s 1d	40s 7d
— 8..	54 5	32 8	26 0	30 6	44 10	39 10
— 15..	53 9	34 3	25 2	41 2	44 3	44 1
— 22..	52 8	32 6	25 2	35 5	44 0	38 8
— 29..	51 0	31 3	25 0	39 4	43 3	37 1
July 6..	50 10	31 9	26 0	35 9	43 11	39 11
Agg. Aver.	53 5	33 2	25 6	35 7	44 4	39 9

Fluctuations in the Last Six Weeks Averages.

Private Tuition.—The Rev. G. Henslow, Son of the late Professor Henslow, and M.A. of Cambridge, who took Honours in three triposes, Mathematical, Divinity, and Natural Science, has VACANCIES for TWO PUPILS preparing for the Public Schools, &c., or for the Universities. N.B. Geology and Botany form a part of his system of education. Further particulars on application.—Address, Rev. G. Henslow, Steyning, Sussex.

To Parents and Guardians.—An excellent opportunity now occurs for placing a YOUTH in a large Forcing Horticultural Establishment, where he would have a comfortable home, be kindly treated, and taught practically all the various branches of the profession.—Address Y. Z., *Gardeners' Chronicle* Office, W.C.

Wanted, a married GARDENER, where a second is kept. He must be under 40 years of age, and without children—the Wife to attend to the Entrance Gate. He must well understand the Management of American and other Hardy Evergreens, Kitchen and Flower Gardens, a Small Vinery and Orchard House, and be a successful Grower of Melons and Mushrooms. Wages 20s. a week, with Cottage and Vegetables. An unexceptionable character for industry, honesty, and sobriety will be required.—Particulars of qualifications and former services to be addressed B. G., Post Office, Sunning Hill, Staines.

Wanted, a Working Gardener, to take charge of Stove, Greenhouse, and Pits; Flower Beds also which he will have to supply with Bedding Plants. Assistance given him when required. Wages, 18s. per week, with House and Fire.—Apply, by letter, to P. E. P., Post Office, Cardiff.

Wanted, a Propagator, that can strike Rose and Conifer Cuttings in quantities. First Class references of his capabilities will be required. State what wages expected.—Address to Geo. Jackman & Son, Woking Nurseries, Surrey.

Wanted, a Bailiff, to manage a Home Farm of 250 acres, and Superintend the Buildings and Repairs on an estate of 3000 acres. Salary 90l. a-year, with a House rent free.—Address, stating full particulars as to age and qualifications, to B. & N., Blagdon's News Office, Court House Place, Marylebone Lane, London, W.

Wanted, as an Apprentice to the Seed Trade, a respectable well-educated Youth. Can reside in the house or otherwise.—For terms apply to Henry Brown, Seedsman, 4, Commutation Row, Liverpool.

WANT PLACES.—Letters to be Post Paid.

Gardener (Head).—Age 26, married, one child; understands the Management of Vines, Pines, Melons, and Cucumbers, &c. Good character.—A. B. C., General Post Office, Clapham Common, S.

Gardener (Head).—Age 28, married; capable of taking charge of Stove and Greenhouse; Farm, or Meadow Land if required. Good character.—Gardener, Post Office, Bromley, near Guildford, Surrey, S.

Gardener (Head).—Age 33, married; has a thorough practical knowledge of his profession. First-class Fuchsia and Geranium grower. Good character.—The Gardener, at the Cottage, St. Julian's Road, Streatham, Surrey, S.

Gardener (Head).—Age 28, single; thoroughly understands the Management of Pines, Vines, and Flower, Fruit, and Kitchen Gardens. Unexceptionable references given.—A. B., Royal Botanic Gardens, Regent's Park, N.W.

Gardener (Head).—Age 35, married, active, industrious; has had extensive experience in all branches, and has made the production of fine Fruits his special duty. Can take charge of Grass Land and Plantations if required.—J. B., Mr. J. Veitch, Royal Exotic Nursery, King's Road, Chelsea, London, S.W.

Gardener (Head), age 33, single.—W. Howard is desirous of entering into an engagement with any nobleman or gentleman requiring the services of an experienced practical working Gardener, thoroughly understanding every branch of the profession.—W. Howard, "Roselands," Waltham Cross, N.

Gardener (Head).—Age 41, married; has for 20 years upon the most improved principles successfully cultivated Pines, Vines, Peaches, Hothouse and Greenhouse Plants, with General Forcing, Fruit, Flower, and Kitchen Gardens. Three years' good character.—A. B., No. 3, Bloomfield Place, Crouch End, Hornsey, N.

Gardener (Head).—Age 30; has had great experience in Fruit, Flower, and Kitchen Gardens; is a first-rate Forcer of Pines, Grapes, Peaches, Melons, &c.; also the management of Stove, Greenhouse, and Orchideous plants. Would also undertake the Laying Out of New Gardens, Hothouses, &c.—D. G., Mr. J. Veitch, Royal Exotic Nursery, King's Road, Chelsea, London, S.W.

Gardener (Head, Working).—Age 30, married, no incumbrance; has had good experience in Growing Pines, Vines, Melons, Cucumbers, Stove and Greenhouse Plants, &c. Understands the Management of Flower and Kitchen Gardens. Unexceptionable character.—F. H., Mr. Steel, Post Office, Clapham Common, Surrey, S.

Gardener (Head).—Age 34, married, [illegible] industrious, and well skilled in every [illegible] having had several years' experience with [illegible] quired all kinds of Early and Late Choice Fruit, [illegible] Vegetables. Unexceptionable character.—C. B., [illegible] Camden Nursery, Camberwell, S.

Gardener.—Age 30, single; has had [illegible] experience in Gardening in all its branches, [illegible] Fruit Growing, &c. Can have the best [illegible] efficiency, industry, and integrity.—F. B., Messrs. [illegible] & Co., King's Road, Chelsea, S.W.

Gardener.—Can Lay out Gardens from P[illegible] experienced in Laying out Grounds, and in [illegible] Planting. Can complete the work in every [illegible] Understands the Management of Land.—A. B., [illegible] Bookseller, Maida Hill, N.

Gardener, age 32, married.—Thomas [illegible] Nurseryman, &c., Tunbridge Wells, has great [illegible] in recommending to the notice of any lady or gentleman [illegible] good, plain, practical, persevering, sober, and [illegible] man. Four years' excellent character from the situation [illegible] about leaving. A single-handed place would not be [illegible]

To Noblemen and Gentlemen.

Gardener (Age 35, married, three [illegible] youngest 5 years old).—Charles Grant, now [illegible] the last 8 years Gardener to Robert Fellowes, Esq., Sh[illegible] Park, Norfolk, will be disengaged on the 1st of October, and is now at liberty to treat with any nobleman or [illegible] man who is in want of a thorough practical Gardener. H[illegible] had great experience in the general routine of Gar[illegible] including the Forcing of Fruits and Vegetables [illegible] class Grower of Plants, and has been a s[illegible] at the London and other Horticultural Exhib[illegible] Kitchen and Flower Gardener, and has had [illegible] experience in the Planning and Erection of H[illegible] Buildings of various and approved descriptions [illegible] reference may be obtained on application to his [illegible] employer, R. Fellowes, Esq., Shottisham Park, N[illegible] R. Fellowes, Jun., Esq., Bitteswell Hall, L[illegible] Leicestershire; Mr. Turner, Royal Nursery, [illegible] E. G. Henderson & Son, Wellington Road, St. John's [illegible] London.—Shottisham Park, Norwich.

Gardener or Bailiff.—Age 34, [illegible] incumbrance; Light or Heavy Land, [illegible] Flowers, &c. Good references.—D. Roads, Hor[illegible] Oxford.

Bailiff.—Can have an excellent character [illegible] gentleman whom he served as Woodreeve and [illegible] Bailiff for 16 years. The Wife understands Dairy [illegible] and Care of Poultry.—Reference can be made to [illegible] Brown, Land Agent, Tring.

Bailiff.—Age 25, married; a Farmer's Son, [illegible] understands the Breeding and Rearing of Stock [illegible] capable of taking the whole Management of a Farm, [illegible] keeping of Accounts. Good reference as to character [illegible] ability.—F. W. F., Mr. Gough, Windmill Lane, Bren[illegible]

Bailiff.—Age 40, married, no incumbrance [illegible] Lincolnshire man; is a good judge and manager [illegible] and a good Accountant; has been accustomed to Ste[illegible] vation and the use of all Agricultural Machinery.—Bailiff, Down Place, Guildford, Surrey.

Steward or Bailiff.—Having had [illegible] ample practice in the East, South, and West of Eng[illegible] where Machinery was extensively [illegible] Planning and Erecting Buildings, Under-Draining [illegible] and Woods. Character first-class.—A. B., [illegible] Hampstead Road, N.W.

Land Steward and Bailiff.—Age [illegible] thoroughly and practically experienced in the [illegible] systems of Farming, Fattening of large quantities of [illegible] Buying and Selling, Breaking-up Land, &c. W[illegible] disengaged. First-class Testimonials from the [illegible] now with, and with whom he has lived 10 years [illegible] Pall Mall, London, S.W.

Land Steward.—Age 35; thoroughly [illegible] stands his profession, and has been accustomed [illegible] kinds of Stock, Machinery, and Hops. Good references [illegible] given.—G. L., Post Office, Edenbridge, Kent.

To Noblemen and Gentlemen.

Manager, &c.—A Person of considerable [illegible] ence in Farming, Building, Draining, Planting, [illegible] and Thinning of Plantations, Sale of Timber, &c., [illegible] Managing a large Landed Property. The most [illegible] references, and security if required.—M., Gardeners' [illegible] Office, W.C.

A Young Man, who has just completed [illegible] at one of the leading Agricultural Colleges, [illegible] good testimonials from the same, is desirous of [illegible] situation in this country or to go abroad. Spea[illegible] fluently.—B. D., H. Greenwood, Advertising Agent, [illegible]

To Noblemen's Stewards and Agents.—A young Man of the highest respect[illegible] accustomed to business, a good Accountant and Draug[illegible] practically acquainted with Engines and Machinery, [illegible] carrying out of Improvements and Alterations, &c. [illegible] references.—A. B., Post Office, Birmingham.

Gamekeeper (Head), age 38, married.—A [illegible] man is desirous of obtaining a permanent situation [illegible] any part) for a strong, active, and intelligent Man, of [illegible] sober and industrious habits. He is an experienced Keeper, [illegible] particularly good Dog Breaker, and understands the Management of a Deer Park.—Address Mr. A. Bee, [illegible] Exeter, Devon.

To Noblemen and Gentlemen.

Master Carpenter on a Gentleman's Est[illegible]—Age 32; formerly used to Estate Works, Farm B[illegible] ings, Labourers' Cottages, &c., latterly five years [illegible] most eminent Horticultural Builders of the day, and [illegible] understands Horticultural Building, Heating with [illegible] &c.—Satisfactory reference as to character and [illegible] A. B. C., 20, Chelsea Villas, West Brompton, S.W.

Shopman, or Clerk and Shopman.—[illegible] son of a country Nurseryman; has been accustomed [illegible] take an active part in the various departments of the [illegible] —A. B., Messrs. Wood & Sons, Seedsmen, &c., Old K[illegible]

Seed Trade.

Shopman, Traveller, &c.—Has a th[illegible] practical knowledge of the Trade, and is [illegible] acquainted with the Nursery Business. Has just left [illegible] class House. Unexceptionable references.—B. B., Post [illegible] Norwood, Surrey, S.

Shopman.—A young man of good address [illegible] experience at Counter and Office work. Can be [illegible] recommended.—H. D., Messrs. Hurst & McMullen, Lead[illegible] Street, London, E.C.

The Gardeners' Chronicle Newspaper.

SATURDAY, JULY 20, 1861.

THE QUARTERLY REVIEW, No. CCXIX., is published THIS DAY.
CONTENTS:—
I. DE QUINCEY AND HIS WORKS.
II. MONTALEMBERT'S MONKS OF THE WEST.
III. TRANSLATORS OF VIRGIL.
IV. MAINE ON ANCIENT LAW.
V. SCOTTISH CHARACTER.
VI. RUSSIA ON THE AMOOR.
VII. CAVOUR.
VIII. DEMOCRACY ON ITS TRIAL.
JOHN MURRAY, Albemarle Street, W.

Will be ready on the 1st of August, Part I. of
THE USEFUL PLANTS OF GREAT BRITAIN. Illustrated by JOHN E. SOWERBY, Described by C. P. JOHNSON. To be completed in 12 Parts, Coloured, at 3*s.* per Part. Each Part will contain 24 Figures and Descriptions.
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Orchard Houses.
Just published, price, 3*s.* 6*d.*, the 9th Edition of
THE ORCHARD HOUSE. By THOMAS RIVERS. Also by the same Author, the 10th Edition of "The Miniature Fruit Garden."
London: LONGMAN & Co., or free per post from the Author, Sawbridgeworth.

News of the Week.

IN the House of Lords on Friday, in answer to Lord STRATFORD DE REDCLIFFE, Lord WODEHOUSE said that HER MAJESTY'S Government did not intend to offer any advice to the new SULTAN in regard to the administrative reforms which he has commenced, believing that any interference at the present moment would deprive him of the credit to which he might be entitled in the eyes of his own subjects. The London Coal and Wine Duties Bill was read a second time. The Labourers' Cottages Bill was lost on the question of the second reading by 16 to 13. The Book Unions Bill was lost without a division on the question of the second reading. On Monday, on the motion of the Marquis of CLANRICARDE, an address to the Crown praying for a Royal commission to inquire into the constitution, practice, procedure, and fees of the superior Courts of Law in Ireland was agreed to. Lord STRATHEDEN moved a resolution in favour of the re-establishment of a British consul at Mozambique, in order to assist the Portuguese Government in repressing the slave-trade on the east coast of Africa. The motion was opposed by Government, and was ultimately withdrawn. On the motion of Earl GRANVILLE a select committee was appointed to consider the proper measures to be taken respecting the Turner and Vernon bequests. The Industrial Schools Bill was read a second time. The Poor Assessment (Scotland) Bill was read a third time and passed. On Tuesday the House went into Committee on the East India Council Bill, and agreed to all its clauses without amendment. The Public Works (Ireland) Advance Repayments of Moneys Bill, the Attorneys and Solicitors (Ireland) Bill, and the Piers and Harbours Bill were read a second time. On Thursday the East India (High Court of Judicature) Bill, the East India (Civil Service) Bill, the County Voters (Scotland) Bill, the Turnpike Trusts Arrangement Bill, the White Herring Fishery (Scotland) Bill, and the Vaccination Bill, were read a second time. The Chatham Dockyard Enlargement Bill, and the London Corn and Wine Dues Bill, were read a third time and passed.

In the Commons on Friday Mr. CROSS withdrew his Bill on the subject of Church-rates. Mr. SLANEY withdrew the Industrial and Provident Societies Bill for the present session. Sir H. VERNEY called attention to the affairs of Schleswig and Holstein. Lord J. RUSSELL in reply said that the KING OF DENMARK had consented to further negotiations, which he trusted would end in a satisfactory solution of the question in dispute. Mr. MACAULAY called attention to the Danish claims of 1807, and contended that the public faith was pledged to satisfy them. The claims were opposed by the ATTORNEY-GENERAL and the CHANCELLOR of the EXCHEQUER, and after a short discussion the subject dropped. On the order for the third reading of the University Elections Bill, Mr. CONINGHAM moved, as an amendment, that the Bill be recommitted. On a division, the amendment was negatived by 165 to 80. The Bill was then read a third time and passed. The Conjugal Rights (Scotland) Bill was read a second time, and the Vaccination Bill and the County Voters (Scotland) Bill were read a third time and passed. On Monday Mr. BUTT moved a resolution to the effect that it was inexpedient, in distributing the grant for Irish education, to enforce the rule of refusing aid to all schools in which religious teaching is made a part of the general instruction. The motion was opposed by the Government, and negatived on a division by 36 to 6. The House then went into Committee of Supply, and resumed the adjourned debate on the Irish Education vote. Mr. WILLIAMS moved to reduce the vote by 13,000*l.*, being the estimate for agricultural colleges, with the view to apply the amount to the augmentation of teachers' salaries. On a division the motion was negatived by 98 to 8. The vote was then agreed to. The vote for the extinction of the Stade Dues and various votes of the Civil Service Estimates were also agreed to. On the report on the Offences against the Person Bill, Mr. HENLEY moved to amend the 4th clause by making the offence of conspiring to commit murder a felony instead of a misdemeanour. The amendment was agreed to, and on the motion of the ATTORNEY-GENERAL the punishment for the offence was reduced to a minimum period of three years. On the report on the Municipal Corporations Acts Amendment (No. 2) Bill, Mr. NEWDEGATE moved the insertion of a clause limiting the right of a mayor to take the chair at meetings of justices. On a division, the amendment was negatived by 137 to 32, and the report was agreed to. On Tuesday the Irremovable Poor Bill passed through committee. Mr. CONINGHAM presented a petition from Mr. G. O'MALLEY IRWIN, containing a brief history of the Royal Atlantic Mail Navigation Company, and charging Mr. JOHN ORRELL LEVER, the member for Galway, with gross fraud in connection therewith. Mr. ROEBUCK moved that the petition be rejected. On a division the motion was negatived by 84 to 75. The petition was then withdrawn. The Crown Suits Limitation Bill passed through committee. The Metropolis Local Management Acts Amendment Bill was read a second time. The Metropolis Local Management Acts Amendment Bill (No. 2) was withdrawn. The House then went into Committee of Supply on the Miscellaneous Estimates, and agreed to several votes, including those for the National Gallery and the National Portrait Gallery, both of which were discussed at some length. The Offences against the Person Bill, the Municipal Corporations Act Amendment (No. 2) Bill, the Salmon Fisheries Bill, and the Parochial and Burghs (Scotland) Bill) were read a third time and passed. On Wednesday Mr. SHERIDAN moved the second reading of the Mines Trespasses Bill, but after some discussion the measure was withdrawn. The Criminal Proceedings Oath Relief Bill and the Metropolis Acts Amendment Bill passed through committee. The reports on the Local Government Act Amendment Bill and on the Removal of Scotch and Irish Poor Bill were received. The Irremovable Poor Bill, the Turnpike Acts Continuance Bill, and the Public Works and Harbours Bill, were read a third time and passed. On Thursday the Trade Marks Bill was withdrawn. On the order for considering the Lords amendments to the Bankruptcy and Insolvency Bill, the ATTORNEY-GENERAL moved that the clause appointing a chief judge in bankruptcy be restored to the Bill. On a division the motion was carried by 173 to 129. The consideration of the remaining amendments was adjourned to Monday. The motion for going into committee on the Durham University Bill was opposed, but was carried, on a division, by 116 to 21. A long discussion ensued, which led to no practical result, and the Chairman ultimately reported progress.

An attempt to assassinate the KING OF PRUSSIA was made on Sunday morning at Baden-Baden. As HIS MAJESTY was walking on the promenade, a native of Odessa, at present a student at Leipsig, fired a pistol at the KING, but the shot fortunately inflicted no injury beyond a slight contusion on the neck. The assassin was immediately arrested, and is supposed to be a political lunatic.

A despatch from Vienna announces that Baron VAY and Count SZECHEN, the two Hungarian Ministers, have tendered their resignations, which have been accepted by the EMPEROR. These resignations have been caused by the determination of the Government to maintain the constitution of February. The Imperial rescript in reply to the Address was to be despatched to Pesth yesterday.

The United States Congress met in Special Session on the 4th inst., and the PRESIDENT'S Message was delivered on the following day. The Message is of a very warlike character, and asks for 400,000 men and 400,000,000 dollars to suppress the rebellion. The Secretary of the Treasury, in his report, recommends a heavy duty on coffee, sugar, and molasses; a light direct taxation, and loans to the amount of 240,000,000 dollars. General PATTERSON, with his division, crossed the Potomac on the 2d, and came up to the Southern forces, said to be 10,000 strong, near Martinsburg. An engagement immediately ensued, which terminated in the defeat of the Secessionists and their consequent retreat, with considerable loss. The Federal army has since crossed the Potomac, and commenced its advance on the Secessionist lines in several directions. An early engagement may therefore be expected unless the Secessionists should retreat and make their ultimate stand at Richmond.

A despatch from New Zealand, received by way of Calcutta, announces that the natives were preparing to renew hostilities, and that a general native insurrection in the neighbourhood of Auckland was anticipated.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family, with the Crown Prince and Princess of Prussia, continue at Osborne. On Thursday, the 11th, the Prince Consort, the Crown Prince and Princess of Prussia, and Princess Alice, drove to Ventnor and the Undercliff. The Queen drove out, accompanied by Princess Helena, Princess Louisa, and Princess Beatrice. Prince Leopold walked and drove in the grounds. On Friday morning the Prince Consort, accompanied by the Crown Prince of Prussia, left Osborne for the Wellington College, where his Royal Highness laid the foundation stone of a new chapel. The Queen and Crown Princess of Prussia walked in the grounds. On Saturday the Queen drove out, accompanied by Prince Leopold. The Prince Consort, the Crown Prince and Princess of Prussia, and Princess Alice, rode on horseback. Prince and Princess Augustus of Saxe-Coburg, accompanied by the Princesses Clotilde and Amelie, arrived on a visit to her Majesty. On Sunday morning the Queen and Prince Consort, the Crown Prince and Princess of Prussia, Princesses Alice, Helena, and Louisa, Princes Arthur and Leopold, attended Divine service in the private chapel. The Rev. G. Prothero officiated. The Crown Prince of Prussia afterwards left Osborne for Baden Baden, on the receipt of a telegram announcing the attempt on the life of his father. On Monday morning Prince and Princess Augustus of Saxe Coburg, with the Princesses Clotilde and Amelie, left Osborne. In the afternoon the Queen and Prince Consort, the Crown Princess of Prussia, and Princess Alice, drove out. Princess Helena and Prince Arthur rode on horseback. On Tuesday the Queen, Prince Consort, the Crown Princess of Prussia and Princess Helena drove out. On Wednesday afternoon the Queen, the Crown Princess of Prussia, Princess Alice, and Prince Arthur drove out. The Prince Consort, Princess Helena, and Princess Louisa rode on horseback. On Thursday the Duke and Duchess de Montpensier arrived at Osborne on a visit to the Queen. In the evening the Crown Prince of Prussia arrived on his return from Baden.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of the First Lord of the Treasury in Downing Street.

MINISTERIAL MOVEMENTS.—It is understood that Lord Herbert has been obliged by continued ill health to resign the office of Minister of War, and that Lord John Russell will shortly be summoned to the House of Peers, and be appointed a Knight of the Garter.

PARLIAMENTARY MOVEMENTS.—In anticipation of

the vacancy in the representation of the City of London, caused by the elevation of Lord John Russell to the peerage, a requisition is in course of signature inviting the Lord Mayor to allow himself to be put in nomination in the Conservative interest. It is also announced that Mr. Western Wood, son of the late Sir Matthew Wood, and brother of Vice-Chancellor Wood, will become a candidate in the Liberal interest.—The Conservatives of South Lancashire have determined to bring forward Mr. Charles Turner as a candidate for the third seat for that division, in opposition to the Chancellor of the Exchequer.

INDIAN COUNCIL.—At a special meeting of the Council of India, held on Thursday, Colonel W. E. Baker, of the Bengal Engineers, was elected to the seat in the Council vacated by the resignation of Colonel Durand.

THE BISHOP OF DURHAM.—The Hon. and Right Rev. Dr. Villiers, Bishop of Durham, is alarmingly ill at Auckland Castle. Dr. White and Sir John Fife, from Newcastle-on-Tyne, have been in attendance on him, and on Thursday Mr. Fergusson was telegraphed from London.

THE BAR.—On Thursday evening at a Parliament held, after many adjournments, Mr. Edwin James, Q.C., was disbarred by the Benchers of the Inner Temple, and the fact was ordered to be communicated to all the Judges of Law and Equity, and the other three Inns of Court.

THE VOLUNTEER MOVEMENT.—On Friday the contest for the Rifle Derby took place at Wimbledon, for which important prize there were nearly 300 entries and upwards of 170 competitors. At one time it seemed certain that Mr. Ross had carried off this great prize, having scored as high as 26. Sergeant Gibbs, of Bristol, however, not only attained the same score, but when the ties were shot off beat Mr. Ross, and thus became the winner of the prize. There were two scores of 25 each, 2 of 24, 4 of 23, and 7 of 22. The Association Cup was won by Capt. Ross, 6th Kincardine, father of Mr. Ross, after a spirited competition, which was more evenly fought than any of the matches. Captain Ross scored 14; Capt. Wigram, Coldstream Guards, and Col. Lindsay, St. George's, scored 13 each; and there were 10 scores of 12 each and 8 of 11. The Prince Consort's prize, which was shot for at 800, 900, and 1000 yards, was won by Major Moir, Stirling, who scored 21; there were 2 scores of 20, 3 of 18, 2 of 17, 1 of 15, 2 of 14, and 3 of 13. The Duke of Cambridge's prize at 500 and 800 yards, was won by Captain Ross, by one point, and after a very close contest. Captain Ross scored 16, there were 2 scores of 15, 1 of 14, 2 of 13, and 3 of 12. The Dudley prize at 800 yards, was won by Mr. Rowe, 1st Devon, beating Lord Feilding, 4th Flint, and Mr. Simons, Victoria Rifles, by 1; there were 3 scores of 8, 5 of 7, 1 of 6, and 4 of 5. The Duke of Wellington's prize was won by Sergeant Potter, of Hythe, by a score as low as 7 points. The Volunteer Ball, which was announced to take place at the Royal Italian Opera on Friday evening, was countermanded in consequence of the small number of applications for tickets. On Saturday his Royal Highness the Commander-in-Chief distributed the prizes to the successful competitors, in the presence of an immense concourse of spectators, estimated at from 60,000 to 70,000 persons. Previous to this a private challenge match between the Universities of Oxford and Cambridge was shot off, the ex-champion, Mr. Ross, and Mr. Peterkin representing Cambridge, Mr. Norsworthy and Mr. Owen representing Oxford. The ranges were at 800, 900, and 1000 yards, and so utterly was Oxford beaten, that the lowest score made by Mr. Ross for Cambridge was better by two points than that of both the Oxford men united: while the total score was Cambridge, 60; Oxford, 27. The proceedings of the meeting were then brought to a conclusion with a grand review of upwards of 11,000 of the metropolitan Volunteers by the Commander-in-Chief. The rain fell heavily; but despite this disadvantage the whole affair passed off successfully, and is said to have been one of the best managed and most brilliant Volunteer reviews which have yet taken place. At the close of the manœuvres all the regiments marched past the Duke of Cambridge, and were loudly cheered. The 10th Company of the South Middlesex had laurels in the cap of each member, in honour of their comrade, Mr. Jopling, the hero of this year's meeting.

Foreign.

FRANCE.—The *Moniteur* of Monday says that there is no truth in the report that Dr. Rayer had been summoned in all haste to Vichy. Dr. Rayer has not left Paris, and the Emperor continues to derive much benefit from the waters of Vichy. The Emperor has addressed a letter to the King of Prussia on account of the attempted assassination of his Majesty. It is said that the Emperor on his return from Vichy will pass some days at Fontainebleau, and afterwards proceed to the Camp of Chalons, whilst the Empress will proceed to Eaux-Bonnes, and thence to Biarritz, where the Emperor will rejoin her in the beginning of September. The Court will close the season by a residence at Compiègne, for which place numerous invitations will be given. Prince Napoleon and the Princess Clotilde, after visiting the fortress of Gibraltar, have embarked in the Jerome Napoleon for New York. Prince Adam Czartoriski died at Montfermeil, near Paris, on Monday. The *Moniteur* announces that General Fleury left Paris on Sunday for Turin, for the purpose of delivering to the King of Italy an autograph letter from the Emperor, replying to the notification made by Count Arese. The Siamese Ambassadors will make an excursion to London. M. d'Artom has been appointed Officer of the Legion of Honour.—Orders were received at Toulon on the 12th by telegraph from Paris, directing the first division of the squadron under the command of Admiral La Capelle to be in readiness for departure. The iron-plated frigate La Gloire will accompany the squadron, the destination of which is Cherbourg and other ports of the Channel for instructions in naval evolutions.—The *Moniteur* of yesterday contains a report, addressed by the Minister of Marine to the Emperor, which is followed by an Imperial decree, approving the conclusions of the report, and ordering the levy of men for the navy to be as follows:—1. From among those sailors who have not yet served the state. 2. In case of an insufficiency, from among the class who have served the shortest time of their period of service. Another decree establishes bounties for those sailors who re-enter the navy after their period of service has expired. The official journal also contains Imperial decrees modifying the import duties on foreign sugar, coffee, and Swedish iron, and suppressing the export duties on soap.—The *Moniteur* publishes the correspondence that passed between the President of the French Academy and M. Thiers on the subject of the prize of 20,000f., founded by the Emperor for the most remarkable work appearing during the space of 10 years. Among the competitors were M. Jules Simon and Madame George Sand, and the votes were nearly balanced. Then came a dead lock, as neither party would give way. A sufficient majority, however, declared for M. Thiers, and the decision of the Academy was approved by the Academy at its general assembly of the 29th May last. M. Thiers however has declined to receive the money, requesting that it be offered to the Academy to be applied for the encouragement of letters in any way it may think proper.—M. Mirès has appealed to the Cour Impériale from the sentence pronounced against him in the Police Correctionnelle. The sentence was the *maximum* prescribed by the Code for the offences of which he was found guilty. The Cour Impériale may see reason to diminish the punishment, but it cannot increase it. Should it merely confirm the sentence, M. Mirès, it is thought, may be provoked to make disclosures as to the facilities afforded him for carrying on his gigantic projects. Count Simeon has declined the jurisdiction of the Court, which pronounced him civilly responsible for the losses of the depositors, and has claimed his privilege as a Senator of being tried by the High Court of Justice. M. Solar, the partner of M. Mirès, is, it is said, about to publish at Brussels a pamphlet containing the most complete details of everything connected with the affairs of the Caisse des Chemins de Fer. M. de St. George, formerly director of the Imperial Printing Office, has been appointed Consul in Australia.

SPAIN.—The Queen received on Monday the new Ambassadors of England and America, and afterwards left for Santander. Rumours continue to circulate that fresh disturbances have taken place in the provinces. The Ministerial journals in reply state that full guarantees have been taken for the maintenance of tranquillity. Judgment will soon be given on the prisoners taken at Loja. The result of the census which has just been taken in Spain is that the population numbers only 15 millions.

PORTUGAL.—It is said that there is no truth in the report that the republican insurrection in Spain had ramifications in Portugal.

HOLLAND.—It is asserted that the Dutch Government has decided on recognising the Kingdom of Italy.

DENMARK.—The Copenhagen papers contain an official denial of the statement of some German journals that the Danish Government had issued a circular note announcing that it was not their intention to incorporate Schleswig with Denmark.

WURTEMBURG.—The King of Wurtemburg has had an attack of apoplexy, which, though slight, has caused uneasiness on account of his Majesty's advanced age.

PRUSSIA.—On Sunday morning an attempt was made on the life of the King of Prussia at Baden-Baden. His Majesty was taking exercise in the Lichtenthal Avenue when a young man went behind him and fired two shots in quick succession. Fortunately the weapon was overcharged, and the shots took an oblique direction. His Majesty received a slight contusion in the neck, one bullet having penetrated the collar of his coat and torn his cravat. His Majesty continued his walk to Lichtenthal, and was the first person to communicate the fact to the Queen. The contusion on the neck has not affected his general health, and his Majesty is progressing favourably. The assassin was immediately arrested, and proved to be a student from Leipsic, named Becker, who is said to be a native of Odessa, and is supposed to be a political lunatic. A letter was found upon him, in which he says that he esteems the King of Prussia personally, but does not consider him competent to deal with the German question. He declares that he has no accomplices, and that he does not belong to any society. Seals have, however, been affixed to the doors of his residence at Leipsic. The Crown Prince of Prussia arrived at Baden on Monday night. It is said to be certain that Baron Schleinitz, Prussian Minister for Foreign Affairs, is about to tender his resignation, and that Count Bernstorff, now Minister in London, will succeed him.

AUSTRIA.—The Archduke Charles Louis has at his own request been relieved of his functions as Governor of the Tyrol and Voralberg, and Prince Charles Lobkowitz has been appointed in his place. The official *Wiener Zeitung* publishes an account of the revenue and expenditure in 1860, according to which there was an increase in the former of 40,760,259 florins, and a decrease in the latter of 172,913,317 florins, as compared with 1859. The deficit in the year 1860 amounted to 65,062,810 florins, against 280,939,[illegible] florins in 1859.

HUNGARY.—Baron Vay and Count Szechen have tendered their resignations, which have been accepted by the Emperor. Count Forgach has been appointed Chancellor of Hungary. The Constitution contained in the Imperial decrees of February is to be maintained, and the Imperial rescript in reply to the Address is to be despatched to Hungary yesterday.

CROATIA.—The extreme Croatian national party has triumphed; the Diet having in its sitting of Saturday adopted the proposal for the separation of Croatia from Hungary by 120 to 3 votes.

ITALY.—In the sitting of the Chamber of Deputies on Friday, Signor Minghetti, in reply to questions put by Signori Donato and Romano, acknowledged that public security was seriously compromised in the Neapolitan provinces, but said he was confident that the patriotic sentiments of the people, together with the firmness and good intentions of the Government and the support of Parliament, would lead to a solution of the difficulties. The Chamber then adopted the following order of the day:—"The Chamber having heard the declarations of the Ministry, is confident that they will employ all legitimate means to re-establish public security in the southern provinces." In the sitting of the Senate on Wednesday, Baron Ricasoli gave some explanations in reference to the changes which have been made in the Lieutenancy of Naples. He declared that the Ministry had been unanimous in all the resolutions recently taken. The resignation of Count San Martino had been accepted, and General Cialdini had been appointed his successor, but with no exceptional powers, his position being identical with that of General Rovere, the Lieutenant of Sicily. The Bill for the construction of a naval and military arsenal at Spezzia, and several railway Bills, passed the Chamber of Deputies on Saturday. In the Senate the national loan was voted by 65 against 3 votes. Count Arese has arrived at Turin, and has been appointed by the Emperor Grand Cross of the Legion of Honour. Count Fleury has arrived from Paris and has been received by Baron Ricasoli. On Thursday the King received the Count in solemn audience at Turin. The Minister [illegible] expected to arrive yesterday.—Accounts from Naples state that General Cialdini has published an order of the day, in which he expresses a hope of being able to re-establish tranquillity in the Neapolitan provinces by purging them of the bands of assassins. He reckons on the co-operation of the army and the liberal and popular sections of the country. Some persons who had excited the peasants near Naples to revolt have been arrested. Several conflicts have taken place between the Royal troops and the brigands, in which the latter have suffered great losses. The provinces of Avellino and Basilicata are tranquil, and flying columns have been despatched to the district of Larino. The Governor of Catanzaro has demanded reinforcements. Many officers formerly belonging to the Bourbon army, who had been acknowledged by the Italian Government, are gravely compromised.—Accounts from Rome to the 11th inst. state that Francis II. has had a secret conference with Chiavone, the brigand leader. The arms of the ex-Bourbon army, which were stored in the Castel Sant' Angelo, have been distributed among the reactionary bands. It is said that there is no truth in the report that the French army at Rome is to be increased.

RUSSIA.—The National Bank has raised its rate of discount to 7 per cent. Orders have been given for the issue of small silver money to the amount of 6,000,000 roubles, the standard of which is to be 72 per cent.; of silver and copper money to the amount of 3,000,000 roubles.

POLAND.—The Russian General Ouchakoff, [illegible] of the regiments of Volhynia, addressed a warlike speech to the officers, in which he said that a campaign was near at hand, and though he did not know for the present when and where they would be summoned, it was not the less his duty to warn them, in order that they might be ready at the first call.

TURKEY.—A despatch from Constantinople of the 16th inst., announces that the Sultan had commuted a great number of punishments, and that great economies had been effected in the War Budget. Aali Pasha had been appointed Minister for Foreign Affairs, and Fuad Pasha, President of the Councils of Justice and of the Tanzimat, for the elaboration of laws, for the administration of the Interior, and the revision of judicial sentences. Saffeti Pasha and Hassib Pasha, Ministers of the Civil List and Mint, had been dismissed. Marloum Bey had been appointed Minister of the Civil List, in place of Hassib Pasha. Signor Durando and the Marquis de Lavalette had left Constantinople. The Marquis de Lavalette had previously obtained for Riza Pasha a pension of 40,000 piastres a month. The inquiry into the accounts of the late Seraskier has been

abandoned. The Viceroy of Egypt and Prince Couza are expected at Constantinople. The Sultan, among other reforms, is turning his attention to a new organisation of the Ottoman fleet, and has decided on sending two superior officers to England and France to examine all the latest improvements in shipbuilding. He has also given an instance of his liberal views by appointing two Christians to important offices at Constantinople.

INDIA.—A telegraphic despatch has been received in anticipation of the Calcutta mail of the 15th ult. The following are the details:—

Calcutta.—Mr. Laing returned to Calcutta on the 7th June, but he was so very ill that it was found necessary that he should leave immediately for England. Heavy rains had fallen in Bengal, and the young indigo plants were suffering in consequence.

North-West Provinces.—The papers confirm the telegraphic messages as to the copious fall of rain throughout the North Western Provinces. The further progress of the famine had thus been fortunately stopped.

Madras.—An uncontradicted rumour had been in circulation for some time, that Sir William Denison had resigned the governorship of Madras.

CHINA.—Advices from Shanghai, to the 18th May, state that there is no truth in the report that Hankow had been taken by the rebels. The people were returning and the prospects of trade were good. Mr. Gingell, her Majesty's Consul, had taken up his residence in Hankow. At Tien-tsin great confidence prevails as to the future prosperity of that port and Chefoo.

JAPAN.—Admiral Sir James Hope has returned to Hong Kong from Nagasaki. The relations of the Consuls with the Japanese Government were satisfactory.

NEW ZEALAND.—A despatch from Auckland, dated May 11, states that the natives are preparing to renew hostilities, and that a general native insurrection is anticipated. William Kingi and his followers have retired from Taranaki, and no further hostilities are anticipated in that quarter at present; but there are very threatening accounts from the north of the island, and it is generally supposed that the next scene of operations by the insurgent natives will be Auckland.

UNITED STATES.—Congress met in Special Session on the 4th inst., when Mr. Grow, of Pennsylvania, was elected Speaker. On taking his seat Mr. Grow made a strong Union address, and affirmed that not one foot of American soil can be rescued from the jurisdiction of the United States till it is baptised in fire and blood. The President's Message was delivered on the 5th. It is strongly warlike, and calls on Congress for 400,000 men, and 400,000,000 dols. to suppress the rebellion. It is, as usual, a very lengthy document, filling nearly four columns of the daily papers. The following is a summary of its contents:—

The greater part of the Message consists of a review of the state of affairs when Mr. Lincoln entered on the duties of the Presidency, followed by a vindication of the long forbearance of the Government, and of the measures subsequently taken by the President on his own responsibility, such as the deliberate abandonment of Fort Sumter, the organisation of the volunteer army, the orders establishing a blockade of the Southern ports, and the suspension in proper cases of the writ of *habeas corpus*. It then discusses the measures taken to preserve the Union, the course of Virginia, the neutrality question, the declarations of the Southern President, the sovereignty of the States not in the Constitution, and the distinction between "Secession" and "Rebellion." He doubts whether there is a majority of the legally qualified voters of any State, except, perhaps, South Carolina, in favour of disunion, and says it is worthy of note that while in the Government's hour of trial large numbers of officers in the army and navy have resigned, and proved false to the hand which pampered them, not one common soldier or common sailor is known to have deserted his flag. The forbearance of the Government had been so extraordinary and so long continued as to lead some foreign nations to shape their action as if they supposed the early destruction of the National Union probable. While this, on discovery, gave the Executive some concern, he is now happy to say that the sovereignty and rights of the United States are now everywhere practically respected by Foreign Powers, and a general sympathy with the country is manifested throughout the world. In regard to the course of the Government towards the Southern States after the rebellion shall have been suppressed, he deems it proper to say it will be his purpose then, as ever, to be guided by the Constitution and the laws, and that he desires to preserve the Government, that it may be administered for all as it was administered by the men who made it. He calls upon Congress to place at the control of the Government at least 400,000 men and 400,000,000 dollars. That number of men, he says, is about one-tenth of those of proper age within the regions where, apparently, all are willing to engage, and the sum is less than a twenty-third part of the money value owned by the men who seem ready to devote the whole.

The Secretary of the Treasury, in his report, recommends a heavy duty on coffee, sugar, and molasses, a light direct taxation, and loans to the amount of 240,000,000 dols. The expected movement of General Patterson's column of the grand army across the Potomac took place on the morning of the 2d, and was followed by a battle with General Johnston's forces, 10,000 strong, near Martinsburg, which resulted in the defeat of the Secessionists and their precipitate retreat, with considerable loss, while the loss on the side of the Federal troops was but 3 killed and wounded, according to the despatch from General Patterson to the War Department. Other large bodies of Federal troops are still crossing the Potomac, and a battle is imminent, unless the Secessionists retreat. The Bank statement shows the amount of specie held to be over 42,000,000 dols., the largest sum ever held by the New York banks. The stagnation of trade is increasing. All the Baltimore Police Commissioners have been arrested, and the military remain posted throughout the city. The Tennessee Secession troops have left Knoxville in order to prevent the advance of Federal troops into East Tennessee.—A great fire has taken place at Nickerson's Wharf, Boston. A salt warehouse, salt mills, 10 vessels, 400 hhds. of molasses, a large quantity of marine stores, and 70 dwelling-houses were destroyed. The loss is estimated at 1,000,000 dollars.

CANADA.—The elections at Montreal and Toronto have terminated in favour of the Ministry. The Great Eastern arrived at Quebec on the 6th July.

Parliament.

HOUS OF LORDS.

FRIDAY.—*State of Turkey.*—Lord STRATFORD DE REDCLIFFE moved for copies or extracts of correspondence between the Foreign Department and her Majesty's Embassy at Constantinople on the subject of financial or administrative reforms in Turkey, since the late Sultan's Hatt-i-hoomayoon of 1856, and more particularly since the accession of the reigning Sultan. He urged the necessity of this country persevering in the same line of policy that had hitherto marked our relations with Turkey, especially in reference to our manufacturing and commercial interests, and said that we were bound by every tie of honour to give her our full and vigorous support in case of need, and to help her to carry out the reforms which she had undertaken.—Lord WODEHOUSE said that as the Sultan had inaugurated his reign with salutary reforms, it would be better to wait and see whether he persevered in the course he had commenced, than for the British Government to deprive him of the credit due to him by tendering premature advice. Important economical changes had already been made, and he thought it would be wiser to allow the subjects of the Sultan to understand that the reforms inaugurated were not pressed on him by foreign Powers, but were his own spontaneous acts. He would not object to the motion if modified so as not to include the correspondence with the present Sultan.—The Earl of HARDWICKE expressed his pleasure at hearing this statement. The motion being modified as suggested, was agreed to. The *London Coal and Wine Duties Bill* was read a second time. The *Labourers' Cottages Bill* was lost on a division on the question of the second reading, the numbers being for the Bill, 12; against it 16.—Lord BROUGHAM moved the second reading of the *Book Unions Bill*, and briefly explained its objects.—Earl GREY moved, as an amendment, that the Bill be read a second time that day six months.—Earl GRANVILLE supported the amendment, which was carried without a division. The Bill was therefore lost.

MONDAY.—*Treasure Trove.*—Lord TALBOT DE MALAHIDE called the attention of the House to the present state of the law of Treasure Trove, in the hope of facilitating the preservation of ancient articles of gold and silver as works of art. He asked whether the Government had taken any steps on the subject, and moved for correspondence upon the matter.—The LORD CHANCELLOR said the subject was full of difficulty, owing to the fact that this particular prerogative right of the Crown had been made the subject in former times of a variety of grants. He was not aware that any steps had been taken by the Government in the matter; if anything could be done he would bring it before the Government. After a few words from the Duke of ARGYLL in reference to Treasure Trove in Scotland, the motion was agreed to. *Irish Law Courts.*—The Marquis of CLANRICARDE moved an address to the Crown praying for a Royal Commission to inquire into the constitution, establishment, practice, procedure, and fees of the Superior Courts of Common Law in Ireland. He complained that the result of not extending the reforms of the English Courts to Ireland had led to a great waste of money and time to Irish suitors, and to an extravagant expenditure for the judicial establishment.—Lords WENSLEYDALE, GRANVILLE, and BROUGHAM expressed their opinions that a clear case had been made out for inquiry. The motion, slightly modified, was then agreed to. *Slave Trade.*—Lord STRATHEDEN moved a resolution for the re-appointment of a British Consul at Mozambique, in order to assist the Portuguese Government in repressing the Slave Trade on the east coast of Africa.—Lord WODEHOUSE stated that this motion last year had been carried by surprise, but the Government were of opinion that the appointment of a Consul on the east coast of Africa would be useless without a large squadron, and would probably lead to much correspondence and useless exasperation. The Portuguese Government earnestly desired to suppress the Slave Trade on the east as effectually as they had already done on the west coast, and he hoped the House would leave the matter to the discretion of the Government.—Lord BROUGHAM believed the Portuguese sincere in their desire to suppress the Slave Trade, but they complained that they had not sufficient authority on the east coast, and that they were not supported, as they expected, by the appointment of a British Consul.—Earl GRANVILLE hoped the motion would not be persevered in, as he feared it would lead to no practical result. The consul would have no real authority unless there was a squadron stationed on the coast to support him.—The Bishop of OXFORD recommended Lord Stratheden not to press his motion against the wish of the Government, who, he admitted, had ever shown themselves hostile to the slave trade. But, in his own opinion, no greater blow could be aimed at that accursed traffic than the establishment of a consul at Mozambique.—Lord STRATHEDEN, in deference to these opinions, withdrew his motion.—On the motion of Earl GRANVILLE a select committee was appointed to consider and report what provision ought to be made for the *Turner and Vernon Pictures.* The *Industrial Schools Bill* was read a second time. The *Poor Assessment (Scotland) Bill* was read a third time and passed.

TUESDAY.—*The Public Works (Ireland) Advances and Repayment of Moneys Bill* was read a second time. On the motion for going into Committee on the *East India Council, &c., Bill,* the Marquis of CLANRICARDE asked for copies of all reports, minutes, or other recorded opinions of members or committees of the Indian Council relating to the Indian Bills now before Parliament.—Earl DE GREY and RIPON said that there must be some misapprehension as to the functions of the Indian Council and the mode in which their business was conducted, or a request would not have been made with which, in the interests of the public service, he must decline to comply.—The Earl of ELLENBOROUGH regretted that the Indian Council transacted business in such a way as to have no record of its proceedings to produce. The House then went into Committee on the Bill. On clause 10, Earl GREY moved an amendment to the effect that, in addition to the Governor-General in Council, there shall be appointed also a Council of State to assist in the preparation and consideration of laws and regulations, the members of which shall consist of different races and professions, and shall be appointed and removable at the will of the Governor-General, subject to the confirmation of the Secretary of State for India in Council.—Earl DE GREY and RIPON opposed the amendment, because instead of guarding against the evils apprehended from the Bill, it would create others of greater magnitude.—The Earl of ELLENBOROUGH gave the amendment his hearty support, as its tendency would be to create a better feeling between the natives and ourselves.—The Duke of ARGYLL opposed the amendment. Lord DENMAN supported it. Ultimately the clause as it stood was agreed to.—The other clauses were agreed to after a short discussion, and the House resumed. The *Attorneys and Solicitors (Ireland) Bill* and the *Piers and Harbours Bill* were read a second time. Several other Bills were advanced a stage.

THURSDAY.—*East India (High Court of Judicature) Bill.*—Earl DE GREY and RIPON moved the second reading of this Bill, which had received the sanction of the House of Commons, and the provisions of which he briefly explained.—The Earl of ELLENBOROUGH was of opinion that the Bill went far beyond the necessities of the case, and was well adapted for producing discontent from one end of India to another, for it proposed to appoint English barristers as judges, who would know nothing of the laws, languages, caste, and customs of the country. It would also entail an additional cost of no less than 262,000*l.*—The Bishop of LONDON said that as the Bill stood the courts would have jurisdiction in ecclesiastical matters, some of the judges of which would be Mahommedans.—The LORD CHANCELLOR said that the Government, in order to remove all fears upon that point, intended to substitute the word "testamentary" in place of "ecclesiastical." The Bill was then read a second time.—Earl DE GREY and RIPON moved the second reading of the *East India Civil Service Bill*, and said that the object was to legalise appointments already made and to define the powers of the Governor-General in making future appointments either from the covenanted or uncovenanted service.—The Earl of ELLENBOROUGH did not think the Bill just to the present civil service, interfering as it did with their rights and privileges.—Lord LYVEDEN objected that uncovenanted servants were not required on appointment to submit to the same examination as the covenanted service, nor was any provision made for the employment of natives.—The Duke of ARGYLL and Lord CLANRICARDE supported the Bill, which was read a second time. The *County Voters (Scotland) Bill*, the *Turnpike Trusts Arrangement Bill*, the *White Herring Fishery (Scotland) Bill*, and the *Vaccination Bill* were read a second time. The *Chatham Dockyard Enlargement Bill*, and the *London Coal and Wine Dues Continuance Bill* were read a third time and passed.

FRIDAY.—*Public Statues.*—In answer to a question by Lord TAUNTON respecting the reported intention to place the statues of Brunel and Locke in the vicinity of the House, Earl GRANVILLE said that the Commissioner for Public Works intended to reserve spaces round St. Margaret Square for 28 statues. On the side facing the Houses of Parliament none but men who had become famous in the Legislature would be placed. On the other side, however, statues of other persons would be allowed. *Poland.*—The Earl of HARROWBY moved an address to the Crown for the correspondence between this country and Russia, or other countries, in the years 1831 and 1832, with reference to the affairs of Poland. [Left sitting.]

HOUSE OF COMMONS.

FRIDAY.—Mr. S. ESTCOURT stated that it was not the intention of Mr. Cross to persevere in moving the second reading of his Bill for the *Amendment of Church-rates*, which he proposed to withdraw.—Mr. SLANEY withdrew the *Industrial and Provident Societies Bill*, which stood for second reading. *The Belgian Tariff.*—In answer to Mr. W. FORSTER and Mr. HEYGATE, Lord J. RUSSELL said that the Belgian Government had assured that of her Majesty that whatever terms were granted to French manufactures under the new tariff would be granted to British. *Denmark and the Duchies.*—In answer to Sir H. VERNEY and Lord H. VANE, Lord J. RUSSELL said that the King of Denmark had consented to an arrangement by which further negotiations would be entered upon, which he hoped would issue in a solution of the question, though he could not say what terms would be deemed reasonable by both the parties. *The Danish Claims.*—Mr. MACAULAY called attention to the addresses to the Crown by this House, and the Treasury minutes issued thereon, empowering the Commissioners for Danish Claims to examine and judicially determine the claims of certain British subjects for losses arising out of the Confiscation by the Danish Government of ships and cargoes in 1807. He contended that the public faith was pledged to the satisfaction of these claims, and no excuse had ever been alleged for the non-fulfilment of the pledge.—The ATTORNEY-GENERAL contended that after an interval of 57 years it was unreasonable to expect that the House of Commons would take up the question, more especially as it had repeatedly been inquired into on former occasions with results unfavourable to the claimants.—Mr. LOCKE supported the claims, which were opposed by the CHANCELLOR of the EXCHEQUER, on the ground that no injustice had been done, and that all power of tracing property rights had ceased long ago. The subject then dropped.—On the motion for the third reading of the *Universities Elections Bill*, the CHANCELLOR of the EXCHEQUER stated his objections to the Bill, which he said would introduce a strange and startling innovation in our electoral law. It was no longer a Bill to enable non-resident voters to vote by means of voting papers (a principle to which he was not friendly), but it was a measure to authorise all electors, resident or non-resident, to depute to proxies, who are to be the bearers of authority, to vote or not just as they please.—Mr DODSON supported the Bill, and argued that the very essence of a proxy was that the person holding it should represent the views of the person giving it.—Mr. HUNT supported, and Lord PALMERSTON opposed the Bill.—Mr. CONINGHAM moved that it be recommitted, but the motion was, on a division, negatived by 165 to 86. The Bill was then read a third time and passed. The *Conveyancers' Relief (Scotland) Bill* was read a second time. The *Vaccination Bill* was read a third time and passed. The House then adjourned to Monday.

MONDAY.—*The Civil War in America.*—Lord J. RUSSELL stated, in reply to Mr. DUNCOMBE, that he had not received any fresh complaints of outrages inflicted upon British subjects in the Secession States of America. *National Education in Ireland.*—Mr. BUTT moved a resolution that it is inexpedient, in distributing the grant for the purposes of Irish education, to enforce the rule of refusing aid to all schools in which religious teaching is made a part of the general instruction of the school. He contended that, as a system of united education, the National system had utterly failed, and, if so, and if Protestants and Roman Catholics were receiving education in distinct schools, he asked what justification there was for imposing this restriction? By rescinding the rule education would be made more advantageous to the recipients,—for it could not be an advantage to exclude religion,—and the grant would be a real boon to the country.—Mr. LEFROY was of opinion that the present system did not satisfy either the Protestant or the Roman Catholic portion of the population, and pressed upon the House and the Government the importance of making the Bible the foundation of secular education.—Mr. MAGUIRE supported the resolution, and hoped Parliament would not continue to sanction the faults of the National system.—Mr CARDWELL thought the House did not desire that this question should be discussed at any length, and briefly replied to the arguments in support of the resolution. He insisted that, whatever might be said to the contrary, the National system had been a success, and had imparted to a large number of the people of Ireland a good, sound Christian education.—Sir H. CAIRNS said the only question with him was whether, by certain changes it was not possible to induce those who had hitherto objected to receive aid to come in and accept it, so as to make the system of education really national. Recent alterations had, in his opinion, thrown back the prospects of such a system for a quarter of a century.—Mr. M. O'FERRALL supported the resolution, and said that he had withdrawn his confidence from the National system, which

he had at first supported.—Lord John Russell was in favour of religious instruction as it was given in England. But in England, among all their differences, there was a general agreement in favour of the Bible being the basis of all religious instruction. Was that the case in Ireland? So far from it, that if it were adopted in Ireland, it would lead to continual bickerings and contentions in that House. Of the 280,000*l.* now voted for Irish education, at least 200,000*l.* must be given to the Roman Catholics, and if that were so the opposition now given to Maynooth would be increased tenfold.—Mr. Monsell complained that the same principle, with reference to the grant, was not applied to the Ireland and England.—Sir G. Lewis, on the contrary, maintained that, in respect to the administration of the grant, there was not the smallest difference.—Mr. Butt expressed his wish to withdraw his resolution, but as Mr. Hennessy objected to that course, the House divided, when the resolution was negatived by 36 to 6. The House then went into Committee of Supply, when the adjourned debate on the *Irish Educational Vote* was resumed.—Mr. Maguire called attention to the inadequate salaries of the national schoolmasters, which did not amount, on an average, to more than 9*s.* a week.—Mr. Williams moved that the sum of 13,000*l.* be taken from the Agricultural Colleges, with a view to add it to the salaries of the schoolmasters.—Mr. Cardwell said that the Government were aware of the hardship to the masters, and were doing their best to remedy it. On a division Mr. Williams's motion was negatived by 98 to 9. The vote was then agreed to.—The vote for the *Theological College of Belfast* was opposed by Mr. Hadfield, but was carried on a division by 120 to 20. *The Stade Dues.*—Mr. Peel, in moving a vote of 155,000*l.* for the redemption of the Stade Dues, stated the foundation of the claim of Hanover to this toll. The amount received by Hanover from the toll was 30,000*l.* a year, which, capitalised at 15½ years' purchase, amounted to 465,000*l.*, and the proportion to be paid by England for its redemption was one-third, or 155,000*l.* The vote was agreed to. The House then went into Committee on the remaining *Civil Service Estimates*, and the resolutions were ordered to be reported.—On the Report upon the *Offences against the Person Bill*, Mr Henley moved to amend the 4th clause by making the offence of conspiracy and solicitation to commit murder a misdemeanour instead of a felony. He did not object to the punishment assigned to the offence; but in cases of felony the police had power to enter an accused person's house and ransack his drawers for papers, &c., whereas in cases of misdemeanour they had no such power.—The Attorney General defended the clause as it stood, and insisted that the punishment assigned to the crime was not too severe.—Mr. Walpole said there was no dispute about the punishment; the question was whether the police should be armed with extraordinary powers to get up the cases, which were extremely liable to abuse.—Mr. Ayrton and Mr. Coningham opposed the clause, and Sir G. Lewis said, as it was not proposed to alter the nature of the punishment, he should not object to the amendment. The amendment was then agreed to.—On the motion of the Attorney General, the punishment of the offence was reduced to a minimum period of three years.—Lord Raynham moved to increase the punishment for aggravated assaults upon women and children. The amendment was opposed by the Attorney-General and negatived. Another amendment, proposed by Lord Raynham, met with the same fate. On the report of the *Municipal Corporations Act Amendment Bill* being brought up, Mr. Newdegate moved a clause to the effect that no mayor should of right take the chair at a meeting of justices unless he had acted as justice for three years before his election as mayor. All he contended for was that the same security should be taken for the administration of justice in other boroughs as existed in the City of London, where a man must have acted as an alderman and a magistrate for some time before he was elected Lord Mayor.—Sir G. Lewis opposed the amendment as opposed to the whole spirit of the Bill. On a division, the clause was rejected by 137 to 32. On the report of the *Salmon and Trout Fisheries Bill* being brought up, Mr. Henley objected to inspectors for the preservation of salmon being paid out of the public purse. The House divided, when the clause was retained by 85 to 47. The other business was then disposed of.

Tuesday.—*Irremovable Poor Bill.*—The House went into Committee on this Bill, recommencing with the 9th clause, which had been already under discussion in two morning sittings, and which raised questions connected with some of the most difficult problems of Poor Law administration,—settlement, removal, and area of chargeability. Ultimately, the Bill passed through Committee. The *Removal of Scotch and Irish Poor Bill* likewise passed through Committee, all reference to Scotland being omitted from the Bill. *The Galway Contract.*—Mr. Coningham presented a petition from Mr. George O'Malley Irwin, relating to the origin of the Royal Atlantic Steam Navigation Company, and charging Mr. John Orrell Lever, the member for Galway, and other persons, with gross frauds in connection therewith, stating that Mr. Lever had announced the existence of a fictitious fleet of ships, with fictitious names, captains, and tonnages, and that his proceedings in regard to the company were of such a flagitious nature as to call for the fullest inquiry by the House.—Mr. Roebuck objected to the reception of a petition which contained a gross libel upon a member of the House from a man of the notorious character of the petitioner. He moved as an amendment that the petition be rejected—Sir J. Trollope recommended that the petition should be withdrawn until the select committee now sitting on the Galway contract had completed their labours and made their report to the House.—Mr. Gregory pointed attention to the fact that a committee had already gone into the question of the formation of the company, and had examined the petitioner himself at great length respecting it.—Lord Dunkellin declared the readiness of Mr. Lever to meet any charge that might be brought against him.—Mr. T. Duncombe said, that in permitting the reception of the petition the House would be constituting itself a grand jury to investigate charges which had already formed a subject of inquiry before a select committee of the House and in a court of law.—Lord Palmerston, whilst anxious to preserve in all its integrity the right of the subject to petition the House, or to appeal against what he might consider an act of injustice or impropriety committed by one of its members, still thought that Mr. Coningham ought to have given notice of his intention to bring this subject under the consideration of the House. After some remarks from Lord J. Russell, Sir F. Baring, and other members in favour of the freedom of petitioning, Mr. Coningham expressed his willingness to withdraw the petition; but Mr. Roebuck objecting and persisting with his amendment the House divided, when the amendment for rejecting the petition was negatived by 84 to 75. The petition was then, by leave, withdrawn.—Lord Palmerston stated the course which the Government intended pursuing on the *Bankruptcy and Insolvency Bill*. The House of Lords had struck out the clause relating to the appointment of a chief judge; had substituted the official for the creditors' assignees; and had struck out the retrospective clause. The Government intended to propose to disagree to the Lords' amendment respecting the chief judge, and to reinstate the creditors' assignees for the official assignees. On the third point they had no proposal to make.—Colonel North moved an address to her Majesty, that she would be graciously pleased to take into her consideration the *Case of Lieut.-Colonel Henry*, Royal Artillery, who lost his arm when in command of an important battery before Sebastopol, holding at the time the rank of brevet-major, conferred upon him for distinguished conduct in the field.—Sir D. L. Evans seconded the motion.—Mr. T. G. Baring admitted that Colonel Henry was entitled to every consideration as an officer who had been wounded in the service of his country. That consideration had been shown to him, he had received a year's pay as gratuity, a pension of 100*l.* a year for the loss of a limb, full pay as colonel in the Royal Artillery, and 100*l.* a year allowance for commanding the riding establishment.—Lord Palmerston said that great inconvenience would result if constant exceptions and departures from their regulations were forced upon the War Department by motions in that House. On a division the motion was negatived by 63 to 34. *Consulate at Pesth.*—Mr. T. Duncombe moved an address to the Crown praying that a consul might be established at Pesth. He complained of the recent withdrawal of Mr. Dunlop from that city, seeing that the nearest British consulate was 300 miles off, at Galatz, at the mouth of the Danube.—Mr. White seconded the motion.—Lord J. Russell said there was no present necessity for the appointment of a consul at Pesth; but if peace continued, and the internal prosperity of Hungary advanced, there would be no objection to making such an appointment hereafter. The motion was eventually withdrawn. The *Crown Suits Limitation Bill* passed through committee. The *Metropolis Local Management Acts Amendment Bill* was read a second time.—Mr. Tite moved the second reading of the *Metropolis Local Management Act Amendment (No. 2) Bill*, explaining that its object was to apportion the debts incurred under the Main Drainage Act more equitably towards the parishes of Camberwell and Wandsworth.—Mr. Ayrton opposed the Bill, and Mr. Layard moved to defer the second reading for six months. This amendment was seconded by Mr. T. Duncombe, and the Bill was ultimately withdrawn. The report of the *Committee of Supply* was brought up and agreed to. The House then went into a Committee of Supply on the remaining *Civil Service Estimates*. On the vote for the *National Gallery*, Lord H. Lennox called attention to the unsatisfactory nature of the present arrangements for the reception of national pictures; and Lord Palmerston explained that the intentions of the Government in regard to the removal of the Royal Academy to Burlington House had undergone no change, but he wished to provide accommodation for science as well as art. The vote was discussed at much length, with reference to various topics connected with it,—the proper site for a National Gallery; the alterations made in the building in Trafalgar Square; the resources for the enlargement of the space for the reception of pictures; the Vernon and Turner Collections, the removal of the Royal Academy, &c. The vote was ultimately agreed to. The next vote, of 2000*l.* for the *National Portrait Gallery*, was objected to by Mr. Spooner, who thought that too much was spent upon pictures and the promotion of art, and moved that this vote should be disallowed. He did not propose to divide the Committee on the motion, but only to protest, he said, against the continuance of such tomfoolery. Several members complained that the collection was not properly exhibited. The vote with others were ultimately agreed to. In a discussion on the *Colonial Estimates*, Mr. Adderley called attention to the large portion of this expenditure which, in his opinion, might be advantageously discontinued. He considered it anomalous and mischievous, throwing a burden upon the resources of this country in relief of the taxation of the colonies for purposes of their own.—Mr. C. Fortescue pointed out the difficulty of establishing by any exact rule a distinction between Imperial and colonial objects, especially in military expenditure. Of the civil expenditure, many of the charges were temporary and expiring. The vote was then agreed to and ordered to be reported. The *Offences against the Person Bill*, the *Municipal Corporation Act Amendment Bill*, the *Salmon Fisheries Bill*, and the *Parochial and Burgh Schools' (Scotland) Bill* were read a third time and passed. The other business was then disposed of.

Wednesday.—*Mines Trespasses Prevention Bill.*—Mr. H. Sheridan moved the second reading of this Bill, the object of which was to give a judge at chambers the power to issue an order to inspect mines in cases in which it might appear to him that surface property was endangered by excavations underground.—Mr. Paull opposed the Bill, explaining that he had unadvisedly allowed his name to be placed on the back of it.—Mr. Clive characterised the Bill as a measure to authorise the issue of "underground warrants," and recommended that it should be withdrawn.—Mr. Sheridan withdrew the Bill.—The adjourned debate on the *Criminal Proceedings Oath Relief Bill*, and the amendment to defer the committee for three months, was resumed by Mr. Denman, who stated that justice was often defeated in consequence of the unwillingness of conscientious persons to take an oath. The amendment was negatived, and the Bill then passed through Committee.—The order for the second reading of the *Sheriffs' Courts (Scotland) (No. 2) Bill* was read and discharged, Mr. Caird stating that in consequence of the late period of the session he could not hope to carry it. The *Irremovable Poor Bill* was read a third time and passed. The *Metropolis Local Management Acts Amendment Bill* passed through Committee. The *Public Works and Harbours Bill*, and the *Turnpike Acts Continuance Bill* were read a third time and passed. The *Leases, &c., by Incumbents Restriction Bill* passed through Committee.—Mr. Clive obtained leave to bring in a Bill to continue the Act further to amend the Acts relating to the *Ecclesiastical Commissioners* and the management of episcopal and capitular estates in England; and a Bill for amending an Act passed in the last Session to amend the law concerning the *Making, Keeping, and Carriage of Gunpowder*, and the manufacture, sale, and use of fireworks.

Thursday.—*Consular Service.*—The House went into Committee of Supply on the *Civil Service Estimates*, when several items in the vote for consuls abroad underwent considerable discussion, and it was suggested that the consular service, especially in Germany, should be subjected to a thorough revision with a view to the reduction of expenditure.—Lord J. Russell stated that some of the consulates in Germany would cease altogether on the death of their present occupants; and referring to the *Embassy in China*, announced that he had by the last mail received accounts from Mr. Bruce of a most satisfactory nature; that our mission at Pekin were received and treated without the strangeness which had characterised their earlier communications with the native authorities; and that there was every prospect of establishing commercial relations with China on a better footing than they had ever hitherto been placed. The order for committing the *Trades Marks Bill* was discharged, and the Bill withdrawn for the session. On the order for considering the Lords' amendments to the *Bankruptcy and Insolvency Bill*, the Attorney-General, in a speech of great length, moved that the clause providing for the appointment of a chief judge, struck out by the Lords, should be restored to the Bill. He contended that there was an almost universal concurrence on the part of the mercantile community in favour of the institution of a chief judgeship—Mr. Bovill supported the Lords' amendments, and said that the appointment of a chief judge would be simply a waste of the public money.—Mr. Collier, Mr. Malins, Mr. Crawford, Mr. Turner, and the Solicitor-General supported the appointment of a chief judge; Mr. Rolt, Mr. Horsfall, Mr. Henley, Mr. Walpole, and Sir Hugh Cairns opposed it. On a division, the motion for disagreeing to the Lords' amendment, and restoring the clause for the appointment of a chief judge, was carried by 173 to 129. The consideration of the remaining amendments was postponed to Monday.—On the order for going into Committee upon the *Durham University Bill*, Mr. H. Seymour moved as an amendment that the Committee be deferred for three months.—Mr. Deedes moved the adjournment of the debate, but this motion was negatived on a division by 116 to 21. Mr. Seymour's amendment was then negatived, and the House went into Committee on the Bill, the Chairman reporting progress. Certain Bills were advanced a stage, and the remaining orders were disposed of.

Friday.—*Inland Revenue Bill.*—On the order for going into committee on this Bill, Mr. Wykeham Martin moved that it be an instruction to the committee to divide the Bill into two or more Bills.—The Chancellor of the Exchequer assented to the motion, which was agreed to.—Mr. Hennessy moved that the House go into committee that day three months. On a division the motion was negatived by 82 to 49. The House then went into committee, and agreed to several clauses. Other clauses were withdrawn, and others postponed to Tuesday next. The *Factories Bill.*—The House went into committee on this Bill pro forma, when its further consideration was postponed to Tuesday.

[Left sitting.]

City Intelligence.

The New Indian Loan.—The tenders for the Indian loan of 4,000,000*l.*, in a 5 per cent. stock, were received and opened at the Bank of England on Friday. The tenders represented a total of 21,500,000*l.*; those who tendered at 98*l.* 18*s.* 6*d.* will secure the entire amount they applied for, and those who tendered at 98*l.* 18*s.* will obtain about one-third. The highest bidding was 99*l.* 8*s.*

Money Market, Friday.—British Funds: Consols closed at 89⅝ for Money, and 89¾ to ⅞ for the 7th of August; Three per Cents. Reduced, 89⅜ to ½; New Three per Cents., 89½ to ¼; Thirty Years' Annuities 1885, 15¾; India Five per Cent. Stock, 99⅜ to ½; Ditto for Acct., 99⅝; Ditto Scrip, 100⅛; Ditto Bonds, 13s. dis.; Exchequer Bills, June, 3s. dis. par.—Foreign: Brazilian Four and a Half per Cents., 1860, 87; Buenos Ayres Six per Cents., for Acct., 83, ex div.; Dutch Two and a Half per Cents., 63½, ex div.; Danish Three per Cents., 82¾ to 83⅛; Russian Five per Cents., 102; Sardinian Five per Cents., for Acct., 78¼; Spanish Three per Cents., 48⅜, ex div.; Turkish Six per Cents., 1854, for Acct., 79⅜ to ⅛; Ditto, 1858, 65¾; Ditto for Acct., 66⅛ to 66.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,361,795	Government Debt	£11,0[illegible]
		Other Securities	[illegible]
		Gold Coin and Bullion ..	[illegible]
		Silver Bullion	—
	£25,361,795		£25,3[illegible]

BANKING DEPARTMENT.

Proprietors' Capital	£14,553,000	Government Securities (including Dead Weight Annuity)	£[illegible]
Rest	3,383,112	Other Securities	[illegible]
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	2,946,205	Notes	[illegible]
Other Deposits	13,317,958	Gold and Silver Coin ..	[illegible]
Seven day and other bills	649,500		
	£34,849,775		£[illegible]

18th day of July, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY.—BANKRUPTS—N. Ballard, Faringdon, Berkshire, Wool-stapler—J. Balls, Salcot, Essex, Grocer, Tea Dealer, and Draper—[illegible] Carter, Fen Stanton, near St. Ives, Huntingdonshire, Corn Merchant—W. Cash, High Street, Portland Town, and Peterborough, Northamptonshire, Grocer—G. Glazebrook, Birmingham, Plumber and Glazier—[illegible] Martin, A. P. Youle, and W. R. Roebuck, Doncaster, Iron Manufacturers—W. Newsham, Blackburn, Lancashire, Innkeeper—W. Ronald, Manchester, Warehouseman—G. Scott, Alpha Works, Cubitt Town, Isle of Dogs, Engineer—J. S. Walker, Hill Top, West Bromwich, Staffordshire, Licensed Victualler—W. J. Windram and E. S. Tessier, Leeds, Elastic Web Manufacturer—J. Yates, Berry Street, Clerkenwell, Hat Manufacturer and Drysalter.

BANKRUPTCIES ANNULLED—J. Crossley, the younger, Manchester and Hebden Bridge, Yorkshire, Cotton Spinner, Merchant, and Broker—J. Parkes, Birmingham, Coal and Brick Merchant.

FRIDAY—BANKRUPTS—W. T. Ashwin, Burslem, Staffordshire, [illegible] and Spirit Merchant—W. Ballard, Faringdon, Berkshire, Woolstapler—[illegible] Fellmonger—S. Bannister, Leominster, Herefordshire, Wool [illegible]—E. J. Heard and J. J. Walter, both of Norway Wharf, Wapping, Middlesex, Packing Case Manufacturers—W. Malkin, Macclesfield, Cheshire, Wine and Spirit Merchant—J. G. Mason, Lincoln, Ironmonger—E. Maw, Birmingham, Engineer—T. F. Perry and J. E. Wilson, [illegible]north and Claverley, Salop, Timber Merchants and Farmers—[illegible] Guildford, Surrey, Builder and Innkeeper—J. Smith, Hope [illegible] Macclesfield Street, City Road, Carman and Contractor—W. W. [illegible] late of St. John's, New Brunswick, but now in the city of London, Timber, and Commission Merchant.

Metropolis and its Vicinity.

The Charge against Baron de Vidil.—Baron de Vidil was arrested on Friday in Paris, and after some deliberation on the question whether his case came within the provisions of the extradition treaty, the French authorities decided on giving him up to the English officers. On Monday afternoon he was placed at the bar of the Bow Street Police Court before Mr. Corrie, charged with having, on the 28th of June last, attempted to murder his son Alfred. The prisoner, a very gentlemanly-looking man of about 54 and rather above the average stature, was in the custody of two French officers, attended by two of the detective police. He appeared calm and collected before entering the dock, but when the charge contained in the warrant was read over he buried his face in his hands, and became so tremulous that he could hardly support himself at the bar. Considerable delay occurred after the prisoner's arrival from Scotland Yard, the cause of which was not understood, but it is believed that the son of the accused declined to take any part in the proceedings, and positively refused to go into court as a witness against his father, although he was present when the warrant was applied for, and supplied the information upon which it was issued. It also appeared that another difficulty had arisen through the sudden and serious illness of Rivers, the labourer who saw part of the encounter in the lane near Twickenham. At length the Chief Clerk read the charge, previously asking the prisoner if he was the Baron de Vidil; to which he replied, "I am." Mr. Parker, a county magistrate, of Ware Park, Herts, identified the prisoner as the Baron de Vidil

with whom he had been acquainted for many years. The prisoner was then remanded till Wednesday. On Tuesday morning an application was made to the magistrate to take the depositions of Rivers at Twickenham, as he had broken a bloodvessel and his life was despaired of. Mr. Corrie said that it would be sufficient if the depositions were taken by some local magistrate, but it would be necessary that the Baron and his son should be present when the deposition was made. He therefore gave orders for removing the Baron from the House of Detention to Twickenham, and for summoning the son by telegraph from Ware Park, Herts, where he has been staying with his mother's family since the occurrence. In the meantime, the Baron's solicitor applied for a copy of the son's information upon which the warrant was granted, and which, in the interests of justice had not hitherto been made public. This document, which contains the only authentic statement of the affair which has yet been published, is as follows:—

"The deposition of Alfred John de Vidil:—I live at No. 40, Duke Street, Westminster. I am the lawful son of Alfred Louis Pons de Vidil, commonly called the Baron de Vidil. On Friday, the 28th of June last, I was invited by my father to go with him on that day to Claremont to visit the ex-Queen of the French. I went on the said 28th of June to the Clarendon Hotel, in Bond Street, where I met my father, and thence proceeded with him to the Waterloo Railway Station, and arrived by train at Twickenham, where two saddle-horses were awaiting us. We went and made the call at Claremont. On our return, just before we came to a public house where a side road leads to the left, he said, 'I shall ask which will be the best road,' which astonished me, as he knew the road perfectly well. He did not ask, but, without saying a word, took the left. I said, 'I can't understand your coming here.' He gave me to understand that he was suffering from bowel complaint. I said, 'Won't you turn back and go to the inn?' The lane was quite empty when we entered it, but afterwards a woman appeared at the end. He said, 'Will you hold my horse?' I said, 'How shall I hold it'—meaning, was I to remain on my horse or get down? He said, 'Oh, never mind!' The woman was at the end of the lane. We walked back into the main road. In passing the inn I urged him to take some brandy there. He said, 'No, no, thank you; it does not look a very nice place.' When in the lane he told me of his stomach-ache. I said, 'If I had known that I would have dined at Hampton, as you asked me to.' He said, 'That is very kind.' On returning to the main road he said he should go to the Duke d'Aumale's, which astonished me after his saying that he had the stomach-ache. The road to the Duke d'Aumale's is by a lane leading to the river side. There are several other lanes also leading to the river. The Baron took me down the first of these, and on my expressing some surprise he said he did not know whether there was a road at the end of it or not. There was no road at the end of it. We returned to the main road. The Baron took me down the second lane, which we both knew did not lead to the Duke d'Aumale's. We then went on to the lane leading down to the Duke d'Aumale's, but to my great surprise he did not go into the house, but went on along the lane which turns to the left, the end of which is parallel to the road. It turns again to the left into the main road. I made some remark as to his not going into the Duke d'Aumale's. I had just got a little way up the lane leading to the main road, when he said we had made a mistake and must turn back. I turned back without saying a word. It is very shady in that corner. I saw no one near. I got a little ahead of the Baron, he being on the right. I had gone a pace or two when I felt a violent blow on my head. I turned round, being all right on the saddle, and saw the Baron's hand uplifted with something in it. With this he struck me another blow, and again raised his arm, when I hurried on my horse, and having got on a little way, I got down quietly—putting my leg over as usual, and ran on to where a woman and man were standing. I caught hold of the woman's dress, and clung to her, praying her to protect me. The Baron soon arrived on foot, very red. He got over a gate on the left, and, as I afterwards discovered, hurt his hand in doing so. The man who was standing with the woman took me by the hand to lead me to a public-house. He would not let me take his hand, as he was dripping with blood. I said to the woman I had knocked my head against the wall, which was not true, and which I said out of fear of my father. I dared not say he had done it. When I got to the publichouse I was taken in, and my head bathed with water. The Baron offered to bathe me, and often asked how I was. I could not answer him, and begged him not to touch me, for I was very tender. Mr. Clarke came and saw me with his assistant. He tied up the two wounds, one on the front of my forehead and the other on the side of my head. The Baron occasionally left the room. In some of these intervals I managed to tell Mr. Clarke that I had not fallen or knocked against a wall, but that he had done it. I intreated him to go with me to town. He sent his assistant, who accompanied me. I mentioned in the public-house that my money would have gone to my aunts and cousin. I have never been married. If I were to die without lawful issue and without making a will my father would succeed to about 30,000*l.* I believe that my father wounded me in the intent to murder me. "ALFRED JOHN DE VIDIL."

After the closing of the court the son of Baron de Vidil arrived in London, and proceeded at once to Twickenham, where the prisoner had been already lodged by Inspectors Thornton and Williamson. The counsel for the prosecution and the defence were also present, but it was 7 o'clock before a local magistrate could be found to take the deposition of Rivers. Eventually the statement was made before Colonel Donnethorne, and the prisoner and his son were both identified by Rivers, who deposed that he saw the Baron strike the son a backhanded blow with the handle of a whip, and heard the latter cry out, apparently severely hurt. It was at the corner of the lane leading to the Duke d'Aumale's, and about 7 o'clock in the evening. Rivers gave his evidence very clearly, and a large crowd assembled to see the arrival and departure of the baron and his son from the cottage. On Wednesday Baron de Vidil was again brought up at Bow Street Police-court, but the investigation could not be entered upon in consequence of the son positively refusing to give evidence. Mr. Corrie informed him that the ends of justice demanded that he should not withhold the necessary proof in support of so grave a charge, but on his still adhering to his first resolution, and persisting in his refusal, the magistrate ordered him into custody till yesterday, and remanded the prisoner to the same day. Afterwards, on the intercession of counsel, and the representation of a medical man that confinement was likely to prove prejudicial to his health, young Mr. De Vidil was handed over to his friends, who became responsible for his appearance. An application to admit the baron to bail was refused. The further consideration of the case was resumed yesterday, when Mr. De Vidil again refused to give evidence. Mr. Pollock and Mr. Ellis consequently withdrew from the prosecution, leaving the magistrate to deal with the case in the ordinary way. Mr. Corrie then remanded the case to Monday, with an intimation that he should in the meantime refer the matter to the Secretary of State, and leave it to him to take what course he pleases. Mr. De Vidil was then bound over in his own surety of 1000*l.* to appear again on Monday, and the Baron was remanded to prison.

THE AFFRAY IN NORTHUMBERLAND STREET.—Mr. Roberts, one of the principals in this mysterious encounter died of his injuries at Charing Cross Hospital on Thursday evening. He was unconscious for many hours before his death, so that the expectations entertained that he might, in his last moments, throw some light on this extraordinary affair were not realised. It remains, therefore, with Major Murray, if he recovers, to disclose the mystery enveloping the circumstances of the affray. The police are incessant in their efforts to clear it up, and are said to have discovered a clue which is likely to lead to important disclosures, and to explain much of what now appears incomprehensible, and it is said that a woman will be found to be the true cause of quarrel on one side or the other. Major Murray has made a statement that he never knew Mr. Roberts before; that the latter accosted him on Hungerford Bridge, and offered to advance him money for the Grosvenor Hotel Company of which the major was a director; that on this offer he accompanied Mr. Roberts to his chambers, and was there shot in the back of his neck; and that on recovering his senses he seized the tongs, struck down his assailant, and made his escape by jumping from the back window. Mr. Roberts also made a statement some days ago in which he admits that he had never before Friday last spoken to Major Murray, that his conversation with that gentleman was commenced by himself in Hungerford market, and that it bore reference to a loan which was required for the Grosvenor Hotel Company, which he was anxious to arrange on behalf of a client. When questioned as to the identity of his client he gave the name of a gentleman named Anstruther, whom he described as anxious to advance the money. He admitted having invited Major Murray to his chambers, and stated that on his arrival there the major first shot himself in the back of his neck, and then attacked him with the tongs. On being asked whether any altercation had occurred previously to Major Murray shooting himself, he replied distinctly "No." Both of these statements are considered extraordinary and improbable, and they appear to be contradicted by the state in which Mr. Roberts's chambers were found when the police effected an entry. The chambers are on the first floor, and consist of a front and back drawing-room, communicating by folding doors. A description of them reads almost like a chapter from a French novel. The front room has been furnished in the most luxurious and costly style, decorated with watercolour drawings, statuettes, copies from the antique, costly buhl cabinets and inlaid tables, on which are all sorts of ornaments under large glass shades. The whole of this rich furniture, glasses, pictures, statuettes, and vases—even the very cabinets themselves, are almost concealed under the accumulated dust of years, the room having evidently never been cleaned or dusted since the things were first placed there many years ago. The back drawing-room was as richly furnished and as dirty as the front, but as it was the scene of the affray it bears evidence of the deadly struggle which took place in it. The furniture is broken and overturned in hideous confusion; the walls, the gilded tables, backs of chairs, and sides of inlaid cabinets are streaked and smeared with bloody fingers. The walls are splashed with blood, while over the glass shades and doors of the cabinets it has fallen like rain, as if from a bloody mop. One escritoire had apparently been forced, for a contest seemed to have taken place for the possession of some of the papers that lay clutched and crumpled about. All these are now in the possession of the police, and the contents of some have given the clue already mentioned. Beneath the window from which Major Murray made his escape there are, on the inner side, several irregular pools of blood among a pile of scattered papers, which are smeared and saturated with blood and wine. In the corner there are some bottles of wine, one or two of which have been broken among the papers, which, however, appear to have lain there some time. In this corner of the room, close to the window, the traces of the conflict are more visible than in any other part. There is an ornamental table and buhl cabinet sideboard, which only leave a passage wide enough to enable a person to approach the window. It is evident that Major Murray here made his final struggle to escape, for the blood is thrown in long drops, like heavy driving rain, over everything around, far and near. Such fearful violence was used there that it almost seems as if Mr. Roberts had been trying to throw his antagonist out of window, or endeavouring madly to prevent his escape. The last blows on either side were evidently given on this spot, though Mr. Roberts was not found there, but huddled up in a heap in a corner of the room. Notwithstanding the appalling injuries he had received, he was conscious when the police came, and though unable to answer questions, kept waving them away with his hand. In a few minutes, however, he became insensible. Not the least of Major Murray's risks appears to have been his jump from the window. Though assisted by the water-pipe, he had still 18 feet to fall to a narrow strip of pavement between two areas and rows of iron railings, and how he escaped appears a miracle. Mr. Roberts, on his removal to the hospital, was found to have sustained three distinct fractures of the skull and a bad fracture of the cheek bone, as well as terrible lacerated face and scalp wounds. His life was quite despaired of from the first, but after a time he regained his consciousness, and though still in the most imminent danger he continued to progress favourably until Thursday, when a change took place which speedily proved fatal. Major Murray, though going on well, is still in such a critical state that it was not thought advisable on Thursday night to inform him of the death of Mr. Roberts. The worst and most dangerous wound he received was from a bullet which entered the back of the neck, and which therefore must have been fired from behind. This bullet was extracted after his removal to the hospital, where he still remains in the custody of the police.

DINNER TO MR. COBDEN AT THE MANSION HOUSE.—On Wednesday evening the Lord Mayor and Lady Mayoress gave a complimentary entertainment to Mr. Cobden, M.P., and a number of his personal and political friends, to celebrate his recent presentation with the freedom of the city of London. The dinner was to have taken place several weeks ago, but was postponed in consequence of Mr. Cobden's delicate state of health. After the usual loyal toasts, the Lord Mayor said that on the present occasion he should introduce an innovation and propose a toast to the Emperor of the French. The toast was received with loud cheers, and was drunk with all the honours. Mr. Cobden, in returning thanks for the toast of his health, spoke at great length on the subject of Free Trade, and said that the recent Treaty is but an extension in a modified form of the principle of Free Trade which this country adopted in the case of the Corn Laws. He expressed his conviction that if peace be preserved for five or 10 years, the treaty will have opened the door to such a commerce between France and England as will surpass the commerce existing between any other two countries of the world. M. Michel Chevalier, and Mr. Bright, M.P., subsequently addressed the meeting, and were loudly cheered.

HARROW SCHOOL.—The foundation stone of the Vaughan Library, commemorative of the head mastership of Dr. Vaughan, was laid on the 4th inst. by Lord Palmerston in the presence of a distinguished company, including a large assemblage of old Harrovians. Lord Palmerston afterwards addressed the meeting on the eminent claims of Dr. Vaughan to the memorial which they had determined on, and on the success with which Harrow has held its place in public estimation and public service by furnishing men distinguished in all the careers which they may have chosen for their future life.

THAMES EMBANKMENT. — The Commissioners recently held a meeting for the purpose of ascertaining the views of the railway companies which intend to carry their lines across the river by bridges abutting on the intended embankment, as well as to take the views of the Benchers of the Inner and Middle Temple on the matter. The Lord Mayor said it was important that the railway companies and other interests should know the extent to which the intended embankment would be carried out into the river. The Commissioners had fully discussed the matter, and had come to the conclusion that the outer edge of the embankment would be 130 feet from the face of the existing abutment of Blackfriars Bridge. The Bridge House Estates Committee were now having designs made for the new bridge at Blackfriars, and would consequently have to adopt this datum line in connection with the engineering designs for that structure. With regard to the level at which the embankment and the railways would have to join, it would have to be determined and governed by the level of the new Blackfriars Bridge itself. That as regarded the embankment at Hungerford Bridge, the idea of the Commissioners was to expel all the water there and to carry a solid embankment over its whole width, as far out into the river as the existing pier at Hungerford Bridge, between which and the general line of the shore there would be something like 300 feet.—Mr. Hawkshaw, on behalf of the Charing Cross Railway Company, said that he had, as regarded the bridge and proposed station at Hungerford, been acting on the supposition that the embankment would be extended to the pier. If the proposed embankment could only be made simultaneously with the railways and bridges over the Thames it would be a great advantage and convenience, but he was afraid the embankment would be so long about that this could not be accomplished. The railway company was at work now. In carrying out the Railway Bridge, he proposed to give three spans or openings of 100 feet over that portion of the river to be devoted to the embankment. He was of opinion that there would be an objection to making an inclined road from the embankment, terminating on the edge of the bridge, as it would prevent the road from being extended under th

bridge, and would disfigure Blackfriars Bridge. —Mr. Cubitt, on the part of the London, Chatham, and Dover Railway, intimated that the points adverted to by the Commissioners should receive consideration in connection with the works of that railway.—Mr. Nelson and Mr. Yeates, for the Benchers of the Middle Temple, said that, while objecting to any embankment, the Templars, if it were an unavoidable public necessity, would wish it to be on as low a level as possible, without a railway or docks in front of the Temple, and not to rise above the level of the gardens.—The Lord Mayor said the probability was that the embankment would begin to rise before it left the Temple Gardens, but not for any great distance, possibly 100 yards, or it might be 30 or 40 yards, so as to give as much headway as could be conveniently obtained for the wharves, City Gasworks, and other establishments.—Mr. Gray, for the City Gas Company, said that the proposed embankment would not be objectionable, provided their works had a waterway of 70 feet and a 7-feet headway for access in and out.

The Brunel and Stephenson Statues.—The committee have determined that the statues to the memory of these eminent engineers shall be placed near the statue of Pitt, in the gardens of St. Margaret's, Westminster, facing the House of Commons, in Old Palace Yard. They are to be executed in bronze by Baron Marochetti.

Greenwich Hospital.—In accordance with the recent Act measures have been taken for improving the condition of the pensioners. New clothing has been made up within the establishment, and is a great improvement, both as respects quality and pattern. The ugly cocked hat, universally disliked by the inmates, has been superseded. The allowance known as "tobacco money" has been much increased. Many minor details have been arranged, under the superintendence of the Governor, which have given the utmost satisfaction to the inmates.

Murder in Woolwich Garrison.—An inquest was held on Tuesday at Woolwich on the body of Sergeant Martin Murphy, Royal Artillery, who died on Saturday from the effects of blows inflicted by Gunner Peter Masterson, of the 6th battery depôt brigade, with the barrack poker, while deceased was in the act of entering the charge of Masterson absenting himself from the garrison without leave. The jury, without hesitation, found the prisoner "Guilty of Wilful Murder," and he was committed for trial at the ensuing assizes.

The Public Health.—The Registrar-General's weekly return states that the deaths in London in the week that ended Saturday, July 13 were 1106. The average number in the corresponding weeks of the 10 years 1851-60, corrected for increase of population, was 1130. The present return is therefore 24 below the average. During the week the births of 945 boys and 957 girls, in all 1902 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1532.

Provincial.

Aldershott.—A grand military rifle match commenced at Aldershott on Tuesday morning, and was continued on Wednesday and Thursday. The prizes were shot for by officers and soldiers of the Line, except the Rifle Derby, which was open to all comers. This contest is intended to be annual, and to be for the regular troops what the contest at Wimbledon is to the Volunteers.

Bedford.—Mr. Simon, the medical-officer of the Privy Council, in his annual report on the proceedings of the year 1860, calls attention to the typhoid fever and diarrhœal diseases which prevail in this town every autumn. Mr. Simon states that the cause of this visitation is not at all difficult to ascertain. In the valley of the Ouse, which flows through the town, there is a considerable deposit of porous alluvium, which contains soakage water—land water on its passage to the river; and it is this water that fills the wells of the town. But cesspools unfortunately are almost universal, and they are constructed so that the liquid may soak away from them rapidly into the surrounding soil, a local Act "forbidding the drainage of any cesspool matter into the sewers." The wells from which the inhabitants drink, mostly shallow, are frequently in close proximity to these cesspools. The sewers and drains, also, are not properly constructed, and in some instances of sewers at little depth foul liquid filters through them into the cellars of houses. In short, almost the entire system of sewers, drains, and cesspools is one of percolation and saturation of the subsoil; and it is almost impossible, with the liquid refuse of 13,000 people constantly passing into such a limited body of water as is in these few feet of gravel, that any portion of the supply can escape more or less pollution. Specimens taken from three different wells were examined by Professor Miller, who reported that they must have been derived "from a source largely contaminated with decaying animal matter." Mr. Simon remarks that, to any one conversant with medical science, it can only be matter of surprise that Bedford has not suffered more severely from the diseases which depend on excremental infection of air and water; but the importance of the case depends less upon the amount of illness that has been actually undergone than upon the danger still hanging over the population that, under not improbable circumstances, Bedford may suddenly become the seat of some very violent outbreak of disease. As a striking example of the distance to which foul matter will travel through this porous subsoil, it is mentioned that the water in some wells 500 feet from the gas works has been found so impregnated with soakage from gas-tar refuse as to be unfit for use; and attention is called to the fact that injurious matters in solution in the liquid of cesspools are not removed by filtration through gravel, however bright the water may become, and that typhoid fever, like malignant cholera, is one of the great group of diseases which infect the ground. Mr. Austin, the principal engineer of the Local Government Act Office, reports that nothing but a new and complete system of drainage and water supply will bring the town into a proper state, but that there will be no difficulty whatever in the execution of the works. Mr. Simon states that at Christmas last the Town Council determined to appoint a committee of their body to report on the drainage of Bedford, but that no information has been received of the results of that measure.

Bulcote.—A violent thunderstorm passed over this part of Nottinghamshire last week, during which the lightning struck the church of this parish, and brought the whole building to the ground.

Cambridge.—On the night of Sunday, the 30th ult., a youth named Rumbelow, the son of a labourer, did not return home, and his parents commenced an anxious search for him in all directions. These were continued without avail until the morning of Friday, July 5, when the body was discovered in the river Cam. An inquest was held, and after 30 witnesses had been examined, the jury returned a verdict that deceased came to his death by violence; but by whom inflicted there was no evidence to show. The statements of the witnesses were so contradictory that, coupled with the medical evidence, the jury had no resource but to return this verdict, which was come to on the 9th inst. Public excitement, however, went on increasing, and the police, who took the matter in hand at the conclusion of the inquest, have been since indefatigable in their endeavours to bring the guilt home to the proper parties. On Monday the Mayor and a large bench of magistrates were engaged for some hours in inspecting the depositions taken before the coroner, and finally they issued a warrant for the apprehension of a young man of 17, named Pilson, who was immediately taken into custody, and brought before the Mayor and a large bench of magistrates on Tuesday. It was then proved by several witnesses that the prisoner was in company with deceased on the night of the murder, and a woman deposed that she heard them quarrelling as if about to fight, after which the prisoner threatened to throw deceased into the river. The magistrates ultimately remanded the prisoner for a week, refusing to accept bail.

Diss.—A man named Charles Sheldrake recently shot himself at Walcot Green in this parish, to evade apprehension on a charge of murder. He was only 26 years of age, was married and had two children. He was a returned convict, and was taken by his master with a ticket of leave which expired about a year ago. His brother, who lives at a neighbouring village, kept company with Susan Garrod, his master's servant girl, and the affair had only been broken off on the Monday before, in consequence of the objections made by the girl's parents and by her master and mistress. It is supposed that the deceased, Charles Sheldrake, though a married man, had himself some designs on the girl, and that he felt provoked at his own disappointment as well as his brother's. In the afternoon, during the master's absence, deceased began to take liberties with the girl, who resented the attempt, and threatened to tell her master. She went out soon after into the orchard, and Sheldrake, who had taken his master's gun from the chaise-house, fired at her and shot her in the left breast and face. She rushed into an outhouse and bolted herself in, when he followed and threatened to break open the door with an axe. After some time he went away, and she then made her escape into the house, where she was found, covered with blood, by her master and mistress on their return three hours afterwards. A warrant was obtained for the apprehension of Sheldrake, who was found on the following morning in a wheat field, having concealed himself in a ditch all the previous night. When he saw the two policemen approach he slightly raised a double-barrelled gun which he had in his hands. The officers, supposing he intended to fire at them, jumped over the hedge and made a rush at him, but he instantly put the muzzle of the gun into his mouth and blew his brains out on the spot without saying a word. The jury at the inquest considered that he had deliberately shot himself, while in a sound state of mind, to escape the consequences of the crime he had committed; and they therefore returned a verdict of *Felo-de-se*. Susan Garrod, who is only 20 years of age, and a good-looking and intelligent girl, was for some time in a very dangerous state, but is now in a fair way towards recovery.

Epworth.—A dreadful tragedy was perpetrated at Westwood Side, a village in the Isle of Axholme, near this town, on the 9th inst., a woman named Wilson having murdered her three children in a shocking manner. The woman, it appears, had got up in the night, and, and, taking the three sleeping children from their bed, had forced them through the man-hole into the cistern. She then calmly looked on, with their death-cries ringing in her ears, until life was extinct. The husband was away from home on business when the occurrence took place, and his wife was the first [illegible] municate the intelligence to him. She had [illegible] before the commission of the deed had [illegible] left the house and made her way to Wheatley [illegible] hamshire, where her husband was, [illegible] question from him as soon as she made her [illegible] as to how she had got there and what [illegible] with the children, she said "they were safe [illegible] Alarmed at her language and manner, he [illegible] what she meant, and, after a little hesitation, [illegible] fessed that with her own hands she had [illegible] death. The husband, half broken-hearted, [illegible] home, only to find his wife's tale too true. The [illegible] tunate woman was immediately taken into [illegible] at the inquest on the 11th the jury returned [illegible] of Wilful Murder against her, at the [illegible] expressing the opinion that the woman was [illegible] mind at the time. She was then fully [illegible] take her trial at the ensuing Lincoln assizes.

Hexham.—It will be remembered that [illegible] of Threepwood, who was at one time a [illegible] trate, and is a gentleman of extensive landed [illegible] in the county, was convicted at the Northumberland Spring Assizes of shooting at two sheriff's officers [illegible] sentenced to four years' penal *servitude*. [illegible] Quarter Sessions held in this town last week, [illegible] was read, stating that Mr. Bewick had been [illegible] on the 6th of June to a criminal lunatic asylum.

Newstead.—The various effects formerly [illegible] perty of Lord Byron have recently been [illegible] at Newstead Abbey. Four *papier mâché* [illegible] stands were sold at 15*s*., the positive value of [illegible] about 4*d*. The model of a frigate sold at [illegible] value being less than half the sum. A [illegible] portrait of Lord Byron, realised 10*s*. A [illegible] of a Sleeping Cupid, sold at 15*s*. The [illegible] copy of his early poems, with autograph, [illegible] vigorous competition brought only 6*l*., and [illegible] brass candlesticks used by his lordship in [illegible] for 3*l*. 10*s*. His lordship's punch-bowl, [illegible] repaired, and not, perhaps, worth 1*s*., was sold [illegible] A marble bust, life size, of Charles I., on [illegible] column, chiselled with great delicacy, sold for [illegible] a bust, in the same size and style, of William [illegible] the same price. Musical instruments and [illegible] music, the former including flutes, guitars, [illegible] musical boxes and harps, and the latter [illegible] best operas and standard classical music, [illegible] prices. There were pipes of every design and [illegible] in which cost became paramount to utility, and [illegible] cases the articles were disposed of [illegible] prices. Some curious articles in Dresden china [illegible] and plated goods sold well, and the wine, [illegible] some small lots of Hock of 1818, a few dozens [illegible] same wine "from Lord Byron's cellar," and a [illegible] quantity of various wines of later vintages, [illegible] large prices.

Portsmouth.—At the Quarter Sessions [illegible] inst., before Mr. Coleridge, Q.C., the Recorder, [illegible] topher Edwin Theakston, late cashier of the [illegible] Bank of England, was charged with embezzling [illegible] sum of 100*l*. There was another charge [illegible] for embezzling 1000*l*., but that was not [illegible] prisoner was carried into court by the [illegible] gaol in a state of extreme ill-health [illegible] pleaded "Guilty," his counsel made an [illegible] Court on his behalf, calling attention [illegible] services, having been a clerk in the Bank [illegible] for 30 years, and cashier in the branch bank [illegible] mouth for 20 years. Mr. Coleridge in passing [illegible] referred to the enormity of the offence, [illegible] position to which the prisoner had reduced [illegible] his children, and sentenced him to [illegible] servitude.

Reigate.—On Monday morning Johann [illegible] the German who has been in custody for [illegible] suspicion of being concerned in the murder [illegible] Holliday, at Kingswood parsonage, was brought [illegible] the borough magistrates, and fully committed [illegible] at the assizes on the charge of Wilful Murder.

Windsor.—In a few days the body [illegible] Duchess of Kent will be transferred to the [illegible] in the grounds at Frogmore. This building, [illegible] designed by Mr. A. J. Humbert, of [illegible] circular in plan, with an inner diameter of [illegible] is built of Portland stone, rusticated, and is [illegible] by an Ionic peristyle of 16 columns of polished [illegible] marble, 10 feet 4 inches high. The capitals [illegible] are of gun-metal. The gates [illegible] enriched by Scriptural bas-reliefs [illegible] frieze is of polished red Aberdeen [illegible] with bronze festoons. The temple [illegible] copper dome, with a balustrade at the [illegible] sarcophagus of polished blue granite weighing [illegible] slab, nearly 10 tons, is constructing at [illegible] receive the body. At one end there is a [illegible] the letters Alpha and Omega encircled by [illegible] the early Christian style—and on the [illegible] on one side an inscription in English, [illegible] Royal Highness's age and titles, while on the [illegible] side there is an inscription in German. [illegible] engaged upon a statue of the Duchess, which [illegible] placed in the interior over her grave.

Ireland.

The Census.—The abstracts of the Census [illegible] land for 1861 were issued to the press [illegible]

The total population of Ireland on the 7th April was 5,764,543, less by 787,842 than it was in [illegible], which is a decrease of 12.02 per cent. on the last [illegible] period. On the previous decade there was a [illegible] of 19.85 per cent. The diminution has been [illegible] in Munster, where it is 19.08 per cent., the [illegible] riding of Tipperary showing 26.32; the South [illegible], 21.39; Leinster, 13.94; the city of Kilkenny, [illegible]; Kilkenny county, 21.11; Connaught, 9.77; [illegible] of Galway, 29.43; Galway county, 14.65. [illegible] decrease in the population of Ulster has been [illegible] per cent. All the cities show a considerable [illegible], except a slight increase in the suburban [illegible] of Dublin, and a large one in the city of Belfast.—the only noticeable increase in all Ireland. [illegible] were 39,972 uninhabited houses in Ireland, and [illegible] 2,247 houses in the process of building. The Commissioners ascribe the decrease to emigration, as there [illegible] been no other powerful cause in operation, such [illegible] famine, pestilence, or war. From the Report of [illegible] Emigration Commissioners it appears that [illegible] emigrants left Ireland during the last [illegible] years; and from the returns obtained by the [illegible] General, it is found that of these 1,174,179 [illegible] as "permanent emigrants." There is, [illegible], no registration of births and deaths, so [illegible] it cannot be ascertained what efforts nature has [illegible] to fill the void created by the famine. The [illegible] of the returns expected with most anxiety is [illegible] which relates to the religious denominations, of which there has been no return since 1834. In obtaining these returns the enumerators met with every [illegible] from the clergy and people, and as the Commissioners have had only 15 complaints about them, [illegible] infer that they are nearly correct. The following are the results:—Roman Catholics, [illegible]; members of the Established Church, [illegible]; Presbyterians, 528,992; Methodists, 44,532; [illegible], 5062; Baptists, 4165; Quakers, 3812; [illegible] other Christian sects, 8414; Jews, 322. The [illegible] number of Protestants in Ireland is [illegible], giving the Roman Catholics a majority [illegible] 3,246,623; or about 3½ Roman Catholics to one Protestant. In Ulster the proportions are—Established Church, 390,130; Presbyterians, 511,371; Roman Catholics, 963,687. The *Morning News* points in [illegible] to the majority of Roman Catholics in the old [illegible] of Protestantism. For instance, in [illegible] "Protestant Ulster" there is a Roman Catholic majority [illegible] of 16,966, and in Derry of 3415. In Enniskillen, Dun[illegible] and Bandon, they have also got a majority. [illegible] these returns with those of 1834 we obtain [illegible] results:—During the generation that [illegible] since that census, the population of [illegible] has diminished by 2,190,217; the Roman Catholic population by 1,945,217; the Church of England (including the Methodists) by 129,967; the Presbyterians by 114,666. The other Protestant denominations have been diminished about one-half.

The Orange Anniversaries.—The 12th of July [illegible] off without disturbance in Belfast, Armagh, [illegible], Newtownards, Ballygawley, Clough, Down[illegible], Portadown, Lurgan, Coleraine, and other [illegible], though there was some rioting in the country districts.

Railways.

Accident on the North Kent.—On Saturday evening a goods train, consisting of 30 trucks, ran off the rails in the tunnel between Strood and Maidstone. The destruction of property was very considerable; and a young man called Whitehead who was travelling in the break van, contrary to the company's rules, was killed on the spot.

Law.

[illegible] Committee of Privy Council.—*The Case of the Rev. [illegible].*—On Thursday Sir John T. Coleridge gave the [illegible] of their lordships in the appeal of the Rev. Mr. Bon[illegible] against the decision of the Court of Arches, whereby, on [illegible] of immoral conduct in regard to a young lady called [illegible], he had been deprived of his benefice and condemned [illegible]. Their lordships unanimously dismissed the appeal [illegible] the sentence of the Court below. It may be mentioned [illegible] the proceedings in this case commenced just two [illegible], and that the costs of the Bishop of London, the [illegible] of the suit, have reached 2000*l*.

Obituary.

Sir Godfrey John Thomas, Bart., died on the 13th inst. [illegible] suddenly at his seat, Whitehall, Essex, in his 37th [illegible] was the eighth baronet, and was born at Bodiam, in [illegible] succeeded by his son, now 8 years old. The first [illegible] the title with remainder to the issue male of [illegible], in consequence of which his brother succeeded him, [illegible] of the late and present baronets.

Mrs. Elizabeth Barrett Browning, the poetess, one of the [illegible] women of our own or of any other age, [illegible] at Florence on the 29th ult. She was born in London, [illegible] was the daughter of Mr. Barrett, of Wimpole Street, a [illegible] in affluent circumstances. While still under [illegible] an intimate knowledge of ancient and [illegible] languages; at 10 years of age she wrote a tragedy, and [illegible] became a frequent contributor to the periodical [illegible] the day, and published a metrical translation of the [illegible] Vinctus." In the literary circles in which she moved [illegible] regarded as one of the most learned women this [illegible] has ever produced. She was equally at home in [illegible] classic literature; and it would have been difficult [illegible] mentioned any remarkable work either in prose or [illegible] our own literature or that of France, which had not, at some period or other, formed the subject of her inquiry. While still young she broke a blood vessel in the lungs, and was ordered to spend a winter or two at Torquay, where she lost her only brother, who was drowned almost under her own eyes. This shock had such an effect upon her system that for months she was confined to her room, but she devoted the whole of that time to reading through and mastering the ancient classical poets, and thoroughly imbuing her mind with their spirit. In 1844 she published the first collected edition of her poems, and soon afterwards married Mr. Robert Browning, the poet, and accompanied him to Pisa. In 1850 she published a new and enlarged edition of her poems; in 1851 she published her "Casa Guidi Windows;" in 1856 she published her "Aurora Leigh," and in 18[illegible] her "Poems before Congress," all of them remarkable for their generous impulses, fine imagination and attachment to all that dignifies an English wife and mother, coupled with a social and political wisdom in regard to public questions, and a spirit of sarcastic indignation against tyranny and oppression. Her ideas were at times clothed in fantastic and rugged language, but there was an earnestness and truth about all she wrote which made them immediately appreciated by all who knew the depth and character of her intellect. She was engaged, shortly before her death, in preparing for the press a volume of hitherto unpublished pieces, which the public will now anxiously look for at the hands of her husband. She has left one child, a son about 8 years old, who is said to inherit much of her genius.

Wills.—The will of the Hon. T. E. M Lloyd Mostyn, M.P. for Flintshire, has been proved under 16,000*l*. personalty; Mr Thomas Farmer, of Gunnersbury House, Ealing, 120,000*l*.; Rev. Dr. Edward Cardwell, Principal of St. Alban's Hall, Oxford, 45,000*l*.

BIRTHS.—On the 16th inst, Lady Somerville, of a daughter—15th inst, 9, Herbert Street, Dublin, Mrs. William Pakenham, of a son—11th inst, at Beccles, Suffolk, the wife of Lieut.-Colonel W. Cross, late of H.M.'s 38th Regiment Madras Native Infantry, of a son—9th inst, at Kyrewood House, Worcestershire, the wife of E. V. Wheeler, Esq., of a son—15th inst, at the Dane John, Canterbury, the wife of Captain Withington, 7th Royal Dragoon Guards, of a son—15th inst, at Sunday's Well, Killarney, Co. Kerry, the wife of Alexander Morphy, Esq., of a son—16th inst, at Appleton Hall, Cheshire, Mrs. Henry Lyon, of a son, stillborn.

MARRIAGES.—On the 18th inst., at St. Martin's-in-the-Fields, Captain Egerton, of the Coldstream Guards, eldest son of Sir Philip de Malpas Grey-Egerton, Bart., of Oulton Park, Chester, to the Hon. Henrietta Denison, eldest daughter of the late, and sister of the present Lord Londesborough; and at the same time the Hon. Arthur Wrottesley, eldest son of Lord Wrottesley, to the Hon. Augusta Denison, second daughter of the late, and sister of the present, Lord Londesborough.—18th inst., at St. George's, Hanover Square, Theodore Henry Brinckman, Esq., eldest son of Sir Theodore Brinckman, of St. Leonards, Windsor, to the Lady Cecilia Augusta, youngest daughter of the Marquis of Conyngham.—11th inst, at St. George's, Hanover Square, the Rev. John R. Ffeilden, rector of Baconsthorpe, Norfolk, to the Hon. Fanny Blanche Anne, second daughter of Lord Calthorpe—10th inst, at St. George's, Hanover Square, Major Dickson, of the 13th Light Dragoons, of Belchester House, near Coldstream, to Charlotte Maria, daughter of Lady Grey de Ruthvyn and the late Hon and Rev. William Eden, and widow of Dudley Lord North—16th inst, at Trefnant, Lieutenant-Colonel Wilbraham Oates Lennox, Royal Engineers, second son of Lord George Lennox, to Mary Harriett, daughter of Robert Harrison, Esq., of Plâs Clough, Denbigh—10th inst, at St. James's Church, Piccadilly, Charles Sutton, Esq., to Alice Dixie, eldest daughter of the late Sir Wolstan Dixie, Bart., of Bosworth Park, Leicestershire—10th inst, at St. Matthew's Church, Guernsey, Jonas Watson, Esq., of Fairwater, Glamorganshire, to Emily, youngest daughter of the late Major General Sir Octavius Carey, C.B., K.C.H.—11th inst, at All Soul's Church, Marylebone, William S. W. Vaux, Esq., M.A., of the British Museum, to Louisa, eldest daughter of Francis Rivington, Esq., of Harley Street—11th inst, at Sawbridgeworth, Herts, William Henry Bubb, Esq., M.A., Wadham College, Oxford, of Cheltenham, to Annie Sarah, youngest daughter of Thos. Rivers, Esq., of Sawbridgeworth.

DEATHS.—On the 16th inst., at Broome Park, Betchworth, Surrey, Anne, wife of Sir Benjamin Collins Brodie, Bart., and third daughter of the late Mr Serjeant Sellon, aged 64—17th inst., at Appleton Hall, Cheshire, Vanda, wife of Thomas Henry Lyon, Esq., and daughter of Colonel Wilson Patten, M.P.—12th inst., at Putney, Stair Douglas, Esq., third son of General Sir James Douglas, G.C.B., aged 33—15th inst., at Taplow, Hardinge Giffard Follett, Lieutenant 7th Royal Fusiliers, second son of the late Sir William Webb Follett, aged 22—11th inst., in London, after severe illness, Johnson Thorp, Esq., second son of the late R. Disney Thorp, M.D., and brother of the Archdeacon of Bristol—13th inst., at 34, Spring Gardens, George, eldest son of Lieut.-General R. H. Wynyard, C.B., Commanding Division, and Lieut.-Governor of the Cape of Good Hope, late Major 58th Regiment, aged 34—13th inst., at his house in St. John's Wood, Fletcher Wilson, Esq., Danish Consul General and Knight of the Royal Danish Order of the Dannebrog, aged 72—14th inst, at 1, Chandos Place, Clifton, Colonel Gwynne, of Monachty, Cardiganshire, magistrate and deputy-lieutenant of that county, aged 77—12th inst, at his residence, Burley Hill, near Leeds, James Holdforth, Esq., J.P., aged 83—At Lagos, West Coast of Africa, Henry Grant Foote, Esq., H.B.M.'s Consul, of fever, brought on by over exertion and exposure at the attack on Porto Novo, aged 39—12th inst, at Torquay, Captain Edward John Lees, 86th Royal Regiment, eldest son of George Lees, Esq., of Werneth, in the county of Lancaster, and Lansdowne House, Cheltenham, aged 26—12th inst, at 19, Great King Street, Edinburgh, John Schank More, Esq., Advocate, LL.D., Professor of the Law of Scotland in the University of Edinburgh.

Markets.

BRITISH WOOLS.—London, Friday, July 19.

There has been a fair business doing at our quotations.

	s. d.		s. d.		s. d.		s. d.
South-down Hoggets ..	..	to	1 4	Leicest. Wethers	1 2	to	1 3
Half-bred ditto ..	1 4	—	..	Ditto Hoggs ..	1 3	—	1 4
Down Ewes ..	1 3	—	..	Combing Skins	0 10	—	1 5
Kent Fleeces ..	1 4	—	1 5	Flannel Wool .	1 0	—	1 5
				Blanket ditto ..	0 6	—	..

Colonial Wool Sales.—These sales commenced last night with a good attendance at about 1½d decline on the last series.

BUTTER MARKET.—July 19.

Best Fresh Butter .. .. 14s. per dozen lbs.
Second do. do. .. .. 12s. " "
Pork, 4s. 4d. to 5s. 0d. per 8 lbs.

COVENT GARDEN, July 20.

The supply of all descriptions of goods is now quite equal to the demand. Endive and Artichokes still come from the Continent; also Apricots and Green Figs, excellent Greengages in large quantities, and new Apples and Pears. Several cargoes of West India Pines have also arrived. Peas are plentiful. Grapes are much cheaper. Of Strawberries there is still a moderate supply. Cherries may be had; also French and Broad Beans, young Carrots, and new Potatoes; the latter fetch 1d per lb. Cucumbers are coming in more plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Pelargoniums, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 4s to 6s	Currants, p. ½ sieve, 5s
Grapes, per lb., 2s to 5s	Gooseberries, do., 5s
Strawberries, p. pun., 6d to 1s	Pears, per doz., 1s to 1s 6d
Melons, each, 2s to 4s	Apples, per doz., 6d to 1s
Peaches, per doz., 12s to 21s	Oranges, per 100, 6s to 14s
Nectarines, do., 10s to 15s	Lemons, per 100, 6s to 10s
Apricots, do., 1s to 3s	Nuts, Cob, per lb., 1s to 1s 6d
Cherries, English, p. lb., 6d t 1s	

VEGETABLES.

Cauliflowers, each, 2d to 6d	Beet, per doz., 1s 6d to 6s
French Beans, p. pun. 9d to 1s 6d	Celery, p. bundle, 1s 6d to 2s 6d
Green Peas, p. quart, 1s to 1s 6d	Onions, p. ½ sieve, 4s 6d
Broad Beans, p. bush, 3s 6d to 4s	Asparagus, p. bundle, 3s to 7s
Cabbages, do., 1s 3d to 1s 6d	Rhubarb, p. bundle, 6d to 9d
Potatoes, p. ton, 60s to 90s	Tomatoes, p. doz., 4s to 6s
— per lb., 1d to 4d	Shallots, per lb., 1s 6d
— — per cwt., 4s to 8s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 4d to 6d	Endive, p. doz., 3s to 4s
Carrots, new, do., 1s to 1s 3d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., 1s 6d to 2s 6d
Cucumbers, each, 6d to 2d	Parsley, p. 12 bunches, 4s to 6s
Artichokes, each, 4d to 6d	Savory, per bunch, 2d to 4d

HAY.—Per Load of Thirty-six Trusses.

Smithfield, Thursday, July 18.

Prime Meadow Hay	75s to	84s	Clover	90s to	120s
Superior do. (old) ..	88	100	New Clover ..	—	—
Inferior do. ..	36	50	Do. second cut	—	—
New do. ..	50	80	Straw ..	30	40
Rowen ..	—	—	Davis & Co.		

Cumberland Market, Thursday, July 18.

Sup. Meadow Hay ..	108s to	115s	Inferior Clover ..	84s	105s
Inferior do. ..	65	98	New do. ..	70	100
New do. ..	65	95	Straw ..	40	45
Superior Clover ..	114	120	Joshua Baker.		

Whitechapel, Thursday, July 18.

Fine old Hay ..	100s to	105s	Fine old Clover ..	118s to	124s
Inferior do. ..	70	85	Inferior do. ..	60	90
Very inferior ..	—	—	Fine 2d cut ..	—	—
Prime New Hay ..	72	88	Inferior do. ..	—	—
Straw ..	39	42	Fine New Clover ..	80	98

HOPS.—Borough Market, Friday, July 19.

Messrs. Pattenden & Smith report the accounts from Mid and East Kent, Worcester, a small portion of Weald of Kent, and Farnham are rather more favourable, but the other portions of the plantations are completely blighted. The market remains quiet. Duty 100,000*l*.

METROPOLITAN CATTLE MARKET.

Monday, July 15.

Although the number of Beasts is nearly as large as on Monday last, there is a considerable deficiency in weight. Consequently choicest descriptions are dearer. The supply of Sheep and Lambs is small for the time of year; trade is slow and prices without alteration. Calves are selling about the same as on Thursday. From Germany and Holland there are 720 Beasts, 4600 Sheep, 205 Calves, and 40 Pigs; from Scotland, 280 Beasts; from France, 37 Calves; from Ireland, 200 Beasts; from Norfolk and Suffolk, 1100 Beasts; and 800 Beasts from the northern and midland counties.

	s d		s d		s d		s d
Best Scots, Herefords, &c. ..	4 10	to	5 2	Best Long-wools ..	..	to	..
Best Short-horns	4 8	—	5 0	Do. Shorn ..	4 6	—	4 8
2d quality Beasts	3 8	—	4 2	Ewes & 2d quality	..	—	..
Best Downs and Half-breds ..	..	to	..	Do. Shorn ..	4 0	—	4 4
Do. Shorn ..	4 10	to	5 0	Lambs ..	5 0	—	6 0
				Calves ..	4 0	—	4 10
				Pigs ..	3 8	—	4 6

Beasts, 4140; Sheep & Lambs, 25,490; Calves, 323; Pigs, 390.

Thursday, July 18.

We are moderately supplied with Beasts and the demand is good. Monday's quotations are well supported. The trade is brisk for best descriptions of Sheep, at rather higher rates. Good Lambs are in demand, but the supply generally is of inferior quality, and with difficulty cleared off. The Calf trade is about the same as on Monday. Our foreign supply consists of 390 Beasts, 17,611 Sheep, and 408 Calves. The number of Milch Cows is 90.

	s d		s d		s d		s d
Best Scots, Herefords, &c. ..	4 10	to	5 2	Best Long-wools ..	..	to	..
Best Short-horns	4 8	—	5 0	Do. Shorn ..	4 10	—	5 0
2d quality Beasts	3 8	—	4 2	Ewes & 2d quality	..	—	..
Best Downs and Half-breds ..	..	—	..	Do. Shorn ..	4 0	—	4 6
Do. Shorn ..	5 0	—	5 2	Lambs ..	5 0	—	6 0
				Calves ..	4 0	—	4 10
				Pigs ..	3 6	—	4 6

Beasts, 1060; Sheep & Lambs, 13,040; Calves, 650; Pigs, 170.

MARK LANE.—Monday, July 15.

The supply of Wheat from Essex and Kent to this morning's market was very small, and taken off at the full prices of this day se'nnight. The market was well attended, but holders of foreign being very firm in their demands, only a small business resulted at previous rates. Barley, Beans, and Peas bring last week's prices. The Oat trade is steady, and good sweet corn 6d. per qr. dearer. The little business doing in barrel Flour is at the extreme prices of this day week.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk .. White	48—63	Red	46—60
— — fine selected runs .. ditto	50—76	Red	50—65
— — Talavera	51—67		
— Norfolk	—	Red	—
— Foreign	40—74		
Barley, grind. & dist., 26s to 27s .. Chev.	30—40	Malting	34—36
— Foreign .. grinding and distilling	[illegible]—30	Malting	33—36
Oats, Essex and Suffolk	—		
— Scotch and Lincolnshire .. Potato	26—28	Feed	20—24
— Irish .... Potato	26—28	Feed	20—24
— Foreign .... Poland and Brew	20—23	Feed	19—21
Rye	35—37	Foreign ..	—
Rye-meal, foreign ..			
Beans, Mazagan .... 37s to 40s .. Tick	40—41	Harrow ..	40—43
— Pigeon .... 41s — 45s .. Winds	—	Longpod	—
— Foreign		Egyptian	—
Peas, white, Essex and Kent .. Boilers	34—37	Suffolk	35—39
— Maple .... —s to —s .. Grey	40—41	Foreign ..	35—38
Maize ...... White	—	Yellow ..	—
Flour, best marks delivered .. per sack	50—5[illegible]		
— 2d do. ...... ditto	—	Country	34—40
— Foreign ...... per barrel	28—31	Per sack	40—53

Friday, July 19.

Since the 12th inst. we have had a summer temperature and fine weather with partial showers, which in some districts

were very heavy, but do not appear to have damaged the crops; they are favourably spoken of with the exception of the Wheat plant being thin. The wind was south-easterly till the 16th, and has since been S.W. and S. The Wheat trade has been dull throughout the kingdom, and full prices were only obtainable upon fine qualities, inferior or out-of-conditioned parcels being very difficult to realise. A few sales continued to be made for export to France, notwithstanding which the supplies of American here, as well as in Liverpool and Glasgow, continue to exceed the demand, and on these a decline of 1s. to 2s. per qr. has been submitted to. Barley is attracting rather more attention, and late prices were well supported. Fine sweet qualities of Oats have brought rather more money here, but were generally a dull sale. This was also the case with Beans and Peas. Business in Flour was inactive at barely last week's rates. During the past 8 days 72 cargoes have arrived off the coast. The floating trade has been steady at about previous rates. The arrivals of English grain during the week have been small, and of foreign moderate. The attendance included a few small buyers from the country. Wheat, both English and foreign, is unaltered in value, with the exception of American, upon which, where necessary to force sales from the ship, a reduction of 1s. to 2s. per qr. is required, the demand being limited. Barley, Beans, and Peas remain as last quoted. The Oat trade is steady, and good sweet corn brings the extreme quotations of Monday. In Flour there is very little doing.

ARRIVALS FROM JULY 15 TO JULY 19.

	Wheat.	Barley.	Oats.	Flour.
English ..	830 qrs.	— qrs.	— qrs.	870 sks.
Irish	— „	— „	100 „	— „
Foreign ..	15970 „	720 „	14580 „	{ 20 „ 7920 brls.

LIVERPOOL, Tuesday, July 16.—This morning's market has had a fair attendance of both millers and dealers, but the demand for Wheat has been chiefly confined to retail requirements; prices ruled fully as high for fine old samples, but the new American being short of condition was found a little difficult of disposal. Barrel Flour was more pressed for sale ex quay; sacks firm. Indian Corn had a fair consumptive inquiry at the full prices of Friday for old; new is however irregular in value, according to condition. Oats and Oatmeal are without change. Beans 6d. per qr. dearer. Peas and Barley maintain previous quotations. The market closes with a quiet feeling.

FRIDAY, July 19.—There was a moderate attendance. Fine qualities of Wheat maintain Tuesday's prices; inferior sorts are 1d. to 2d. cheaper, with fair amount of business doing. Flour a shade easier, and limited demand. Rather more inquiry for Indian Corn; prices slightly in favour of buyers. Beans, Saide, 31s. 6d. to 32s.; Beheira, 30s. 6d. to 31s.; moderate sale. Oats and Oatmeal dull.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
June 8..	54s 5d	32s 8d	26s 0d	30s 6d	44s 10d	39s 10d
— 15..	53 9	34 3	25 2	41 2	44 3	44 1
— 22..	52 8	32 6	25 2	35 5	44 0	38 8
— 29..	51 0	31 3	25 0	39 4	43 3	37 1
July 6..	50 10	31 9	26 0	35 9	43 11	39 11
— 13..	50 0	30 4	24 6	33 0	42 4	42 0
Agg. Aver.	52 7	32 5	25 5	35 5	43 11	40 1

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.

PRICES.	June 8.	June 15.	June 22.	June 29.	July 6.	July 13.
54s 5d	——	..	..	..	..	..
53 9	..	——	..	..	..	..
52 8	..	..	——	..	..	..
51 0	..	..	..	——	..	..
50 10	..	..	..	..	——	..
50 0	..	..	..	..	..	——

COAL MARKET.—July 17.

Walls End Tees, 19s.; Walls End Trimdon Hartlepool, 18s. 9d.; Walls End Hartlepool, 19s.; Walls End South Kelloe, 18s. 6d.; Walls End Heugh Hall, 17s. 6d.; Walls End Kelloe, 18s. 6d.; Walls End Thorpe, 16s. 3d; Bell's, 16s. 6d.; Wylam, 15s. 6d.; Tanfield Moor Butes, 13s.; Buddle's Hartley, 16s. 6d.; West Riding Hartley, 15s.—26 ships at market.

PRIVATE TUITION.—The Rev. G. HENSLOW, Son of the late Professor HENSLOW, and M.A. of Cambridge, who took HONOURS in three triposes, Mathematical, Divinity, and Natural Science, has VACANCIES for TWO PUPILS preparing for the Public Schools, &c., or for the Universities. N.B. Geology and Botany form a part of his system of education. Further particulars on application.—Address, Rev. G. HENSLOW, Steyning, Sussex.

WANTED, A FOREMAN, to undertake the Stove, Greenhouse, and Bedding Plant department. One who is versed in Growing and Training Plants for Exhibition will be preferred. Wages 18s. per week, and if successful will receive encouragement.—Address, stating references, &c., to G. C., Post Office, Swansea.

WANTED, A GARDENER who understands the general routine of gardening, and will make himself generally useful.—Apply to 15, Hatton Garden, from 10 to 4.

WANTED, AS GARDENER, at the Sussex Lunatic Asylum, Hayward's Heath, a young married man; one who has lived as Under Gardener at a gentleman's seat preferred. Wages 17s. a week, with good House, Coals, Milk, and Vegetables.—Apply, with reference, by letter to Dr. ROBERTSON, at the Asylum.

WANTED, two young Men in the FRUIT FORCING DEPARTMENT; one at 14s. per week, of not less than five or six years' experience, and can be trusted with Airing, Watering, and the necessary requirements of several Vineries and Pine Pits; the other at 12s., to be immediately under the Foreman, of not less than three years' experience, and 19 or 20 years of age. Must be strong and active, and both with satisfactory characters.—Apply in own writing to C. F. E., Post Office, Cardiff.

WANTED, A PROPAGATOR, that can strike Rose and Conifer Cuttings in quantities. First Class references as to his capabilities will be required. State what wages expected.—Address to GEO. JACKMAN & SON, Woking Nurseries, Surrey.

WANTED, A BAILIFF, between 25 and 40 years of age, to take the entire Management of a Farm of 160 acres, principally Heavy Land. He must be thoroughly competent and understand the management of Stock, and produce testimonials of his ability and steadiness from his last employer. Situation 50 miles north of London. Applications by letter only, stating salary required and other particulars, to be addressed F. S., Post Office, St. Neot's.

WANTED, A WORKING BAILIFF, whose Wife can manage a Dairy of 10 Cows. None need apply unless the strictest investigation can be gone into.—Application to be made to H. E., Post Office, Havant.

WANTED, AS AN APPRENTICE to the Seed Trade, a respectable well-educated Youth. Can reside in the house or otherwise.—For terms apply to HENRY BROWN, Seedsman 4, Commutation Row, Liverpool.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 30, single; has a thorough practical knowledge of his profession in all its branches. Can be highly recommended.—W. D., Ward's Post Office, Lower Clapton, N.E.

GARDENER (HEAD).—Age 26, married, one child; understands the Management of Vines, Pines, Melons, and Cucumbers, &c.; good Character.—A. B. C., General Post Office, Clapham Common, Surrey, S.

GARDENER (HEAD).—Age 38, married; has a good knowledge of his profession in all its branches; Early and Late Forcing, also Land and Stock. Two-and-a-half years' good character.—G. G., 9, Benham's Place, Hampstead, N.W.

GARDENER (HEAD).—Age 40, married; thorough knowledge of his profession; can manage Land, &c., to any extent. Testimonials of the highest order.—A. B., Messrs. DOBSON, Seedsmen and Florists, Isleworth, W.

GARDENER (HEAD).—Age 30, married; has a thorough practical knowledge of his profession. No single-handed place accepted.—H. CLARK, Royal Horticultural Gardens, Kensington, S.W.

GARDENER (HEAD).—Married, no incumbrance; has a practical and scientific knowledge of his business in all its branches. Four and a-half years' character.—T. E., Mr. Coleman's, Melbourne Terrace, Claines, Worcester.

GARDENER (HEAD), married.—J. SMITH, at Bromley Palace, will shortly be disengaged, and will be glad to meet with any lady or gentleman in want of a thorough practical Gardener.—3, Park Place, New Bromley, Kent, S.E.

GARDENER (HEAD).—Age 28; thoroughly understands Early and Late Forcing, and the Management of Kitchen and Flower Gardens. Good references.—W. B., Messrs. Lee, Nurserymen, Hammersmith, W.

GARDENER (HEAD), or FLOWER GARDENER.—Age 33, single; competent to undertake the above in all its branches. Leaving present situation to better himself.—C. A., Post Office, Witney, Oxon.

GARDENER (HEAD).—Age 36, married, one child; thoroughly experienced in his profession; has a practical knowledge in Laying-out and Re-arranging Pleasure Grounds, Gardens, and Horticultural Buildings. References of the highest order.—G., Mr. Wyatt, Castle Street Nursery, Salisbury, Wilts.

GARDENER (HEAD, to any nobleman or gentleman).—Age 32, married; thoroughly practical; has had great practical experience in every branch connected with Gardening. Testimonials from late and previous employers, which will not fail to give every satisfaction.—A. B., Mr. J. Veitch, Royal Exotic Nursery, King's Road, Chelsea, S.W.

GAMEKEEPER (HEAD), age 38, married.—A gentleman is desirous of obtaining a permanent situation (in any part) for a strong, active, and intelligent Man, of strictly sober and industrious habits. He is an experienced Keeper, and a particularly good Dog Breaker, and understands the Management of a Deer Park.—Address Mr. A. BEE, Exwick, Exeter, Devon.

GARDENER (HEAD).—Age 34, married, one child; is a most successful grower of Orchard House Fruit; understands Early and Late Forcing Grapes in pots; Pines, Peaches, Melons, Cucumbers, Strawberries, Mushrooms; also the Management of Flower, Fruit, and Kitchen Gardens. Unexceptionable character for industry and sobriety.—D. E., Mr. Barnes, Camden Nursery, Camberwell, S.

GARDENER (HEAD).—Age 33, married; has a thorough practical knowledge, especially of the Forcing of Fruits, Flowers, and Vegetables; the Culture and Propagation of Stove and Greenhouse Plants; Management of Fruit, Flower, and Kitchen Gardens, and the General Management of an establishment where energy and order are required. Unexceptionable character from the gentleman he last lived with.—R. S., Mr. Veitch, Royal Exotic Nursery, King's Road, Chelsea, London, S.W.

GARDENER.—Married, no incumbrance. Wife can undertake a Dairy. Can have good recommendation.—G. M., Post Office, Speen, Newbury, Berks.

GARDENER (SINGLE-HANDED).—Age 38, married, one child. No objection to a cow. Can be well recommended.—A. B., Post Office, West Wickham, Bromley, Kent.

GARDENER.—Age 36, married, no incumbrance; has a practical knowledge of his profession in all its branches.—Seven years' character.—G. L., Collett's Library, Sunbury, S.W.

GARDENER.—Age 33, married; where Early and Late Forcing is carried on; thoroughly understands his profession. Five years' good character from present employer. State terms.—R. K., Port Vale Lodge, Hertford, Herts.

GARDENER.—Age 27, single; thoroughly understands his profession. Four years' good character. No objection to a Cow.—C. B., Mr. Ashwell, 1, Jones Mews, Queen Street, Golden Square, W.

GARDENER (SECOND or SINGLE-HANDED).—Would not object to Cows, or make himself otherwise useful. Good reference.—J. L., Mr. Hayles, Post Office, Ealing, W.

GARDENER (UNDER, or SINGLE-HANDED).—Age 25; a steady industrious young Man. Can have good character from present employer.—T. K., The Moat, Charing, near Ashford, Kent.

GARDENER (UNDER), to a Head Gardener.—Age 20, single; has some knowledge of the profession.—J. R., Post Office, Willesden, Middlesex, N.W.

To Gardeners.

GARDENER (UNDER).—Young; steady, active, and industrious. Can be recommended by F. W. DURRANT, Waresby Park, St. Neots, Hunts.

GARDENER (UNDER).—Age 26, single; wishes to improve himself. No objection to a small premium. Four years' good character.—A. Z., Mr. Brown, Gardener, East End Finchley.

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GARDENER, OR GARDENER AND BAILIFF.—Married; understands his profession in all its ... and been used to look to a Farm. Six years' ... R. DAW, Crayford, Kent, S.E.

GARDENER (FOREMAN), age 24.—Mr. J. ... can with confidence recommend his Foreman ... first-class establishment. He has a knowledge of ... Orchid Plants, Ferns, &c. A trial at any part of ... the Continent will prove his abilities equal to any ... profession.—PINE, Post Office, Battersea Rise, L...

FOREMAN.—Age 25, single; thoroughly understands his profession; has a thorough knowledge of Stove and ... house Plants, Fine Foliage Plants, Ferns, Forcing, &c. ... class references.—J. T., Mr. Wm. Bull's New and Rare ... Establishment, Chelsea, S.W.

PROPAGATOR, OR PROPAGATOR AND ... MAN.—First class references.—A. B., Mr. Wm. Bull's New and Rare Plant Establishment, Chelsea, S.W.

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GENERAL FOREMAN OR SALESMAN.— ... married; practically acquainted with his ... First-class references.—T. E. B., Cook's Cottages, Cam... cester.

LAYING OUT GARDENS.—Can Lay out ... from Plans; is experienced in Laying out Grounds ... in Ornamental Planting. Can complete the ... Department. Understands the Management of ... Mr. Davies, Bookseller, Maida Hill, N.

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MANAGER, &c.—A young Man of high ... bility is desirous of obtaining a situation as ... Manager of an Estate or of Farms in hand. He ... accustomed to Business, and is at present with ... acquiring a practical knowledge of Engineering and ... —Mr. FREDERICK MURTON, Land Agent, Smeeth, A...

LAND STEWARD AND BAILIFF.— ... thoroughly and practically experienced in ... systems of Farming, Fattening of large quantities ... Buying and Selling, Breaking-up Land, &c. Will ... disengaged. First-class Testimonials from the nobleman ... now with, and with whom he has lived 10 years.— ... Pall Mall, London, S.W.

LAND STEWARD OR BAILIFF, to a nobleman or gentleman.—Age 37, married; has had practical ... ence in the Management of Draining and Improving of ... Rearing, Feeding, Buying and Selling of all kinds ... Stock; also Machinery and Repairing of Farm B... Unexceptionable references as to character can be ... C. H., Post Office, Edenbridge, Kent.

BAILIFF.—Age 40, married, no incumbrance; ... Lincolnshire man; is a good judge and manager of ... and a good Accountant; has been accustomed ... vation and the use of all Agricultural ... BAILIFF, Down Place, Guildford, Surrey

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MASTER CARPENTER on a Gentleman's Es... —Age 32; formerly used to Estate Works, Farm ... ings, Labourers' Cottages, &c., latterly five years ... most eminent Horticultural Builders of the day, and ... understands Horticultural Building, Heating ... &c.—Satisfactory reference as to character and ... A. B. C., 20, Chelsea Villas, West Brompton, S.W.

SHOPMAN, OR CLERK AND SHOPMAN.— ... son of a country Nurseryman; has been ... take an active part in the various departments ... and can be well recommended.—A. B., Messrs. ... Seedsmen, &c., Old Kent Road, London, S.E.

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Dr. de Jongh's

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LIGHT BROWN COD LIVER ...

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DR. DE JONGH'S LIGHT BROWN COD LIVER OIL ... IMPERIAL half-pints, 2s. 6d.; pints, 4s. 9d.; quarts ... and labelled with his stamp and signature, ... NONE CAN POSSIBLY BE GENUINE, by respectable ...

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CAUTION.—Beware of Proposed Substitutions.

The Gardeners' Chronicle Newspaper.

SATURDAY, JULY 27, 1861.

SHOOTING.—Wanted, in the Western part of Kent or Sussex, Surrey, or the Eastern part of Hampshire, from ... to ... Acres of Shooting; a fair proportion of Wood Covers required. A small house would not be objected to as ...—Address E., *Gardeners' Chronicle* Office, 41, Wellington Street, London, W.C.

KEATING'S PERSIAN INSECT DESTROYING POWDER.—Poultry, Dogs, and Plants, are effectually freed from Fleas and all other Vermin with which they are infested, by the above Powder, which is quite harmless to animal life. The Farmer, the Gardener, or the Sportsman, will therefore find it invaluable. Bugs, Cockroaches, Beetles, Moths in Furs, and every other species of Insect are also instantly destroyed.

Sold in Packets, 1s., 2s. 6d., and 4s. 6d. each, or post free for 14, or treble size for 36 postage stamps, by THOMAS KEATING, Chemist, 79, St. Paul's Churchyard, London, E.C.

CHASE'S BEETLE POISON.—The most effectual Destroyer of Black Beetles and Cockroaches, also Rats and Mice. Testimonials from the Rev. Edwin Sidney, Cornard Parva Rectory, near Sudbury, Suffolk; James Veitch, Jun., Esq., of the Royal Exotic Nursery, Chelsea; Lucombe, Pince, & Co., of Exeter; E. G. Henderson & Son, Wellington Nursery, St. John's Wood; C. Loddiges, Esq., of Hackney, and many others. Sold in boxes at 1s. each, or free by post for 20 stamps.

"Royal Horticultural Society, South Kensington, June 17, 1861.

"Dear Sir,—Your 'Beetle Poison' is an excellent remedy for the destruction of this troublesome pest. It cleared all the Beetles from the Plant-houses at Chiswick in a few days; it really does all that you profess.—Yours truly,

"Mr. CHASE." "GEO. EYLES."

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LIGHT BROWN COD LIVER OIL, prescribed by the most eminent Medical Men throughout the world as the safest, speediest, and most effectual remedy for CONSUMPTION, CHRONIC BRONCHITIS, ASTHMA, COUGHS, RHEUMATISM, GOUT, GENERAL DEBILITY, DISEASES of the SKIN, RICKETS, INFANTILE WASTING, and all SCROFULOUS AFFECTIONS. Is incomparably superior to every other variety.

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SIR HENRY MARSH, BART., M.D., Physician in Ordinary to the Queen in Ireland.—"I consider Dr. de Jongh's Cod Liver Oil to be a very pure Oil, not likely to create disgust, and a therapeutic agent of great value."

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DR. DE JONGH'S LIGHT BROWN COD LIVER OIL is sold only in IMPERIAL half-pints, 2s. 6d.; pints, 4s. 9d.; quarts, 9s.; capsuled and labelled with his stamp and signature, WITHOUT WHICH NONE CAN POSSIBLY BE GENUINE, by respectable Chemists.

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NEW METHOD OF CURING DISEASE without the aid of doctors and their drugs, by studying the laws of Health in Nature.—Invalids cannot too carefully avoid pills, pretended "Life Drops," "concocted" for gain, and other dangerous medicines, as they all contain mineral poisons which act on the delicate fibres or coating of the stomach, and thus destroy the receptacle of our daily sustenance. The Advertiser was pronounced incurable, but, acting in accordance with the advice he now offers, has, by "God's Blessing," been restored to health and strength; and with sympathy for like sufferers, the Means of Cure will be sent on receipt of name, address, and stamped envelope.—Address Capt. CHARLES, 3, James Cottage, New Road, Hammersmith, London, W.

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Manufactured (with the utmost attention to strength and purity) by DINNEFORD & Co., 172, New Bond Street, London, W.; and sold by all respectable Chemists throughout the Empire.

NO MORE PILLS NOR ANY OTHER MEDICINE.—We find DU BARRY'S delicious health-restoring REVALENTA ARABICA FOOD the safest remedy for habitual constipation, indigestion (dyspepsia), acidity, heartburn, flatulency, distension, debility, atrophy, hæmorrhoids, consumption, coughs, colds, asthma, bronchitis, diarrhœa, nervousness, biliousness, torpidity of the liver, &c. Andrew Ure, M.D., F.R.S.; Dr. Harvey, Dr. Shorland, Dr. Campbell, Dr. Wurzer. Packed in tins with full instructions, 1 lb., 2s. 9d.; 2 lbs., 4s. 6d.; 5 lbs., 11s.; 12 lbs., 22s.; 24 lbs., free of carriage, 40s. BARRY DU BARRY & Co., 77, Regent Street, London, W.; also at 60, Gracechurch Street, E.C.; 4, Cheapside, E.C.; 63 & 150, Oxford Street, W.; 229 & 330, Strand, W.C.; and through all respectable Grocers and Chymists.

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A List of prices free on application. Orders by post with a remittance or reference punctually attended to.

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WORCESTERSHIRE SAUCE.

Purchasers should
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News of the Week.

IN the House of Lords on Friday, on the motion of the Earl of HARROWBY, an address to the Crown for copies of correspondence between the Governments of Great Britain and Russia in 1831 and 1832 on the subject of Poland was agreed to. The Appropriation of Seats (Sudbury and St. Albans) Bill was read a second time. The Industrial Schools (Scotland) Bill, and the Industrial Schools Bill, were, at the suggestion of the Earl of DERBY, referred to a select committee. On Monday, on the motion of the Marquis of NORMANBY, an address to the Crown for copies or extracts of despatches relating to the affairs of the Duchy of Modena from HER MAJESTY'S Ministers accredited to the Courts of Central Italy, between the years 1855 and 1858, was agreed to. Lord EBURY gave notice of his intention to move, in the next session, that the terms of subscription to the Thirty-nine Articles should be relaxed. The Locomotive Bill passed through Committee. The East India Council Bill, the Piers and Harbours Bill, and the Turnpike Trusts Arrangements Bill were read a third time and passed. On Tuesday Lord WODEHOUSE moved the second reading of the Irremovable Poor Bill. Lord LIFFORD moved as an amendment that the Bill be read a second time that day six months. On a division the amendment was negatived by 40 to 31, and the Bill was read a second time. The Annoyance Juries (Westminster) Bill and the Landlord and Tenant Law Amendment (Ireland) Act Proceedings Bill passed through Committee. The Voters (Ireland) Bill, the University Elections Bill, the Salmon Fisheries Bill, the Dublin Revising Barristers' Bill, the Lunatic Asylums (Ireland) Bill, the County Cess (Ireland) Act Amendment Bill, the Naval Supplemental Fund Society Bill, and the Local Government Act Amendment Bill, were read a second time. The Vaccination Bill was read a third time and passed. The Bishop of LONDON laid upon the table a Bill providing for the repair of the residences of incumbents. On Thursday the House went into committee on the East India (High Court of Judicature) Bill, when the Earl of ELLENBOROUGH moved an amendment, reserving to the Governor-General the power of appointing some of the judges. On a division the amendment was negatived by 48 to 42. The clauses were then agreed to. The East India (Civil Service) Bill, the County Voters (Scotland) Bill, the Universities Election Bill, and the Irremovable Poor Bill passed through committee. The Copyright of Designs Bill was read a second time. The Public Works (Ireland) Advances and Repayments of Moneys Bill and the White Herring Fisheries (Scotland) Bill were read a third time and passed.

In the Commons on Friday Mr. CONINGHAM again presented the petition of Mr. G. O. Irwin, complaining of the conduct of Mr. LEVER, the member for Galway, in connection with the Atlantic Royal Mail Navigation Company. After some discussion a motion that the petition lie on the table was carried by 98 to 78. Mr. KINGLAKE moved an address for copies of any further correspondence which might have passed respecting the cession to France of the Island of Sardinia. Sir R. PEEL seconded the motion. Lord JOHN RUSSELL in reply said that he could not at present produce the papers, but he believed that the EMPEROR of the FRENCH would not attempt so serious an act of aggression as the annexation of Sardinia, which would at once put an end to the alliance between this country and France. The Pensions (British Forces) India Bill was read a second time. The House then went into committee on the Scotch Salmon Fisheries Bill, but was immediately counted out. On Monday Mr. CONINGHAM moved that the petition of Mr. Irwin, relating to the Royal Atlantic Mail Steam Navigation Company, be referred to a Select Committee. After a short discussion the motion was negatived without a division. The Marriages (Ireland) Bill and the Markets and Fairs (Ireland) Bill were withdrawn. On the order for the further consideration of the Lords' amendments to the Bankruptcy and Insolvency Bill, the ATTORNEY-GENERAL moved to disagree to the Lords' amendment substituting official for trade assignees. The motion was agreed to. The Lords' amendment striking out the retrospective clause was agreed to. The House then went into Committee of Supply on the Civil Service Estimates, and agreed to the annual vote for the British Museum after considerable discussion on the management of the Museum, and the arrangement of the different collections. The Durham University Bill passed through Committee. On Tuesday the Inland Revenue Bill passed through committee with amendments. Colonel SYKES moved a resolution in favour of admitting native Indian surgeons to employment in the British Army, but after a short discussion the motion was withdrawn. Mr. H. SEYMOUR moved a resolution to the effect that it was the duty of the Government to introduce a measure for the amendment and reform of the ecclesiastical law. After some discussion the motion was withdrawn. Mr. HANKEY called attention to the present state of the law respecting the prevention of fires in the metropolis, and Mr. STIRLING called attention to the return of civil list pensions, and more especially of the pensions conferred for literary and scientific services. The Gunpowder, &c., Act Amendment Bill and the Pensions British Forces (India) Bill passed through committee. On Wednesday Mr. CROSS

formally withdrew the Church-rate Law Amendment Bill for the present Session. The Church-rates Commutation Bill, the Votes for Disqualified Candidates Bill, and the Grand Juries (Ireland) Bill, were also withdrawn. The Indemnity Bill passed through committee. The Lunacy Regulation Bill was read a second time. The House went into committee on the Lace Factories Bill, when Lord H. Lennox moved an amendment limiting the age of children employed during full hours to 13 instead of 11 years. After some discussion, the amendment was carried by 60 to 56. Some other amendments of minor importance were also carried, and the Bill passed through committee. The Episcopal and Capitular Estates Act Continuance, &c., Bill, and the Newspapers, &c., Bill, were read a second time. The Durham University Bill, the Metropolitan Gas Act Amendment Bill, the Passengers' (Australian Colonies) Bill, the Trustees (Scotland) Bill, the Conjugal Rights (Scotland) Bill, and the Metropolitan Building Act Amendment Bill were read a third time and passed. On Thursday the House went into committee on the East India Loan, when Sir C. Wood made a statement on the financial condition of India, and moved a resolution, giving power to the Secretary of State and Council of India to raise 5,000,000*l.* by way of loan for railway works. After a long discussion the resolution was agreed to. The House then went into Committee of Supply. On the vote for 25,000*l.* for Civil Contingencies Mr. Osborne objected to the vote for the Fine Arts Commission, and to the charge for the patent extending the Brougham peerage. Mr. Collins moved an amendment that both thes items be omitted from the vote. On a division the amendment was negatived by 76 to 50. Mr. G. Bentinck then moved to reduce the vote by the charge for Lord Brougham's patent. On a division the amendment was negatived by 62 to 48. The vote was then agreed to.

The Imperial rescript, in reply to the address of the Hungarian Diet, was read in both Chambers on Monday. It commences by stating that the relation of Hungary to the whole monarchy has been for three centuries a real union as far as war, finance, and foreign affairs are concerned; and that when the constitution was granted to the country the constitutional necessities of the whole monarchy were taken into consideration. It says that the laws of 1848 cannot be wholly re-established, because in many respects they are incompatible with the present constitution. The Diet is requested to proceed to a revision of these laws, to send representatives to the Council of the Empire, to come to an understanding with the Croatian Diet in reference to the relation of Croatia to Hungary, and finally to draw up a law relative to the use of the national language and the development of the non-Hungarian inhabitants. The rescript declares the union of Hungary with Transylvania to be for the present impracticable, and in conclusion, promises an amnesty on the occasion of the Emperor's coronation as King of Hungary.

Despatches from Naples state that the Bourbon party are making the most desperate efforts to overthrow the new Government, and, with the assistance of the brigands, are actively organising insurrectionary movements in various parts of the kingdom. General Cialdini has given orders for the mobilisation of 15,000 volunteers from the National Guard, and is adopting other vigorous measures for the suppression of the insurrection.

From the United States we learn that General M'Clellan has attacked the entrenched camp of the Secessionists at Rich Mountain, in Western Virginia, and completely routed them, capturing all their guns and camp equipage. On the 5th the Federal troops, to the number of 1200, attacked 4000 Secessionists at Carthage in Missouri. The Federalists finally retired with the loss of 8 killed and 45 wounded, while the loss of the Secessionists is said to have been 250. Congress has passed a Bill for the employment of 500,000 volunteers, and appropriating 500,000,000 dollars for the war; and the House of Representatives has passed a Bill authorising a loan for 250,000,000 dollars.

Home News.

The Court.—The Queen, Prince Consort, and the Royal family, with the Crown Prince and Princess of Prussia, continue at Osborne. On Friday evening the Crown Prince of Prussia arrived on his return from Baden. On Saturday the Duke and Duchess of Montpensier and Princess Isabella left Osborne. The Queen drove out, accompanied by Princess Helena, Princess Louisa, and Prince Leopold. The Prince Consort, the Crown Prince and Princess of Prussia, and Princess Alice visited the Royal Military Hospital at Netley. On Sunday morning the Queen, Prince Consort, the Crown Prince and Princess of Prussia, the Princesses Alice, Helena, and Louisa, Prince Arthur, and Prince Leopold, attended Divine service at Osborne. The Rev. G. Prothero officiated. On Monday morning the Queen and Royal family walked in the grounds. In the afternoon her Majesty, accompanied by the Crown Princess of Prussia and Princess Helena, drove to Ryde. The Prince Consort, the Crown Prince, and Prince Arthur, crossed to Gosport in the Royal yacht Fairy, and went over the lines. On Tuesday the Queen and Prince Consort, the Crown Prince and Princess of Prussia, and Princess Alice drove to Newport. On Thursday the Queen held a Privy Council at Osborne, at which Sir Robert Peel, Bart., was sworn a Privy Councillor, and took his seat at the Board. Sir George Cornewall Lewis received from the Queen the seals of the War Department, and delivered up the seals of the Home Department. Sir George Grey gave up the seals of the Duchy of Lancaster, and was then sworn as Secretary of State for the Home Department, and received the seals of office. The Right Hon. Edward Cardwell received from the Queen the Seals of the Duchy of Lancaster. Lord Palmerston and Earl Granville had audiences of her Majesty.

Ministerial Movements.—Lord Herbert having definitively retired from the office of Minister of War, Sir George Lewis has been transferred from the Home Office to the War Office; Sir George Grey, resigning the Chancellorship of the Duchy of Lancaster, has resumed the office of Home Secretary; Mr. Cardwell has succeeded Sir G. Grey as Chancellor of the Duchy of Lancaster; and Sir Robert Peel, without a seat in the Cabinet, has succeeded Mr. Cardwell as Chief Secretary for Ireland.

Lord John Russell's Peerage.—It is said that Lord John Russell will be raised to the House of Lords by the title of Earl Russell, and that the second title, to be borne by his son, will be Lord Ampthill.

The Berkeley Peerage.—It is understood that it is the intention of her Majesty, by the advice of her responsible Ministers, to create Admiral the Right Hon. Sir Maurice Fitzhardinge Berkeley a Peer, by the title of Baron Berkeley of Berkeley Castle.

Parliamentary Movements.—The Ministerial whitebait dinner will take place on Wednesday next, the 31st inst., at the Trafalgar, Greenwich; and it is expected that Parliament will be prorogued by commission on Tuesday, the 6th of August.—The Ministerial changes which have taken place this week have created vacancies for Radnor, Morpeth, Oxford, and Tamworth, but there is at present no sign of any opposition to the re-election of the Ministers.—The election for the City of London will commence on Monday, when the Lord Mayor and Mr. Western Wood will be put in nomination; the former in the Conservative, the latter in the Liberal interest. In the event of a poll being demanded, it will be taken on the following day.—Mr. Coles, of Middleton House, Longparish, is a candidate for Andover in the Conservative interest in the room of the Lord Mayor, now a candidate for London. It is not expected that there will be any opposition.—The Chancellor of the Exchequer has declined to offer himself for the third seat for South Lancashire, in compliance with a requisition signed by upwards of 7000 electors, on the ground that if he were to surrender his present trust it would be under circumstances unfavourable to the constituency of the University of Oxford, and at the present moment especially prejudicial to their interests. The Conservatives of South Lancashire have determined to bring forward Mr. Charles Turner as a candidate, and Mr. Cheetham has accepted the invitation of the Liberal electors to become a candidate in the Ministerial interest.

The Bishop of Durham is said by the latest accounts to be progressing satisfactorily towards recovery.

Public Schools Commission.—The Queen has directed letters patent to be passed under the Great Seal, appointing the Earl of Clarendon, K.G.; the Earl of Devon, Lord Lyttelton, the Hon. Edward R. Twisleton, Sir Stafford Northcote, Bart., M.P.; the Rev. Professor W. H. Thompson, M.A.; and Henry Halford Vaughan, Esq., M.A., to be her Majesty's Commissioners for inquiring into the endowments, management, and system of studies at Eton, Winchester, Westminster, the Charterhouse, St. Paul's, Merchant Taylor's, Harrow, Rugby, and Shrewsbury Schools.

Foreign.

France.—The French Minister of Finance has issued his report on the subscription to the Thirty Years' Loan, from which it appears that 4,693,814 bonds have been subscribed for. The *Moniteur* adduces the magnitude of the amount, and the eagerness displayed by the public to subscribe, as a proof both of the financial power of the country and of the confidence reposed in the Government of the Emperor. The Emperor is expected to leave Vichy to-day, and will immediately proceed, it is thought, to the camp at Chalons. The course of treatment adopted by his Majesty at Vichy has had the best effects. An approaching visit of the King of Prussia to the Camp of Chalons becomes more and more probable.—The French Government has lodged a complaint with the Papal Government against the Bishop of Poitiers for having, in the Allocution which he pronounced in his church on St. Peter's Day, made offensive allusions to the Emperor Napoleon, designating him Herod III.—The *Moniteur* of Thursday publishes a decree, appointing commanders for 10 [illegible]. It also contains a decree declaring the works for the improvement of the port of Dunkirk to be of public utility, and opening a credit of 15 millions francs for this purpose.—The *Pays* announces that France is about to establish a "corps of occupation in China," and that 1200 men are to be stationed in China, and a smaller force at Tien-tsin.—The *Constitutionnel* publishes an article from M. Grandguillot, which, whilst attacking the speech of Lord John Russell on Friday night, denies in the most explicit terms that the French Government has the slightest intention of annexing the island of Sardinia. The appeal of M. Mirès and Count Simeon will be heard on the 12th of August. The Duke de Broglie has dropped the action which he had commenced against the Prefect of Police, all the copies of his pamphlet seized by the police having been restored. The Monthyon prize (which takes its name from the Baron de Monthyon, who founded it in 1782), for the most useful work published within the year, has been awarded to M. Xavier Marmier, author of several important works on Scandinavian history and literature, for his new work entitled "Gazida," containing some graphic sketches of Canadian life. There were upwards of 100 competitors.—On Friday a fire broke out in the property-room of the Grand Opera, and destroyed scenery and other effects to the value of a million francs.

Spain.—The Queen has arrived at Valladolid and has been warmly received. The daughter of the Duc de Montpensier has died at San Lucar. It is announced that Senor Bermudez, formerly Spanish Ambassador at Naples, will return to Francis II. The chief of the Loja insurgents has been strangled. He is the only person who has been condemned to death. Two others have been condemned to 20 years' hard labour in the galleys, another to 15, and a fourth acquitted. Two warehouses at the Madrid station of the Northern Railway were destroyed by fire on Tuesday. The Royal train and a great number of carriages were also burnt. The loss is considerable, but the warehouses and *matériel* were insured.

Switzerland.—Dr. Furrer, Vice-President of the Swiss Confederation, died on Wednesday night at Ragatz. He was President of the Confederation in 1849, 1852, 1855, and 1858. The negotiations for a treaty of commerce between France and Switzerland will be opened before October next. The Council of the States has voted 275,000f. for the construction of military roads.

Hungary.—The royal Rescript in reply to the Address of the Hungarian Diet was read on Monday in the Lower House, and was listened to with extreme impatience. The House was crowded with members. In the Upper House on the contrary very few members were present, and the royal Rescript was read amid profound silence. A resolution was passed ordering the Rescript to be printed. The following is the text of the most important part of this document:—

"The Pragmatic Sanction formerly sought to promote union and good understanding between Hungary and the other countries of the monarchy. The patent of October extends the constitutional influence over a large number of questions. Hungary henceforth will be governed according to its ancient constitution, alike in form, system, and men. The Emperor rejects the idea of an amalgamation, but grants an extensive autonomous administration, and, at the same time, demands military, diplomatic, and financial unity with the rest of the empire. A purely personal unity was the idea of [illegible]. Six months after the promulgation of these laws [illegible] broke out, and led to the total overthrow of the [illegible]. The Emperor will spontaneously restore the Hungarian constitution of the 20th of October under the conditions necessary for the development of the whole empire. The King recognises the laws of 1848 concerning the abolition of the privileges of the nobles, of *corvées*, and feudal burdens, general admissibility to public employments and to the [illegible] session of landed property, that relating to the equality of taxation and recruiting, and, lastly, that relating to the electoral rights of the lower classes; but he cannot maintain the laws of 1848 hostile to the rights of the non-Magyar population of the Hungarian countries and to the Pragmatic Sanction, which must be modified before negotiations are entered into for the coronation diploma. The Diet is requested to bestow its attention upon this revision. It is besides requested to direct its attention upon the mode of electing deputies to the Council of the Empire, according to the fundamental law of the [illegible] February, and to send provisionally Deputies to the present sittings of the Council of the Empire, in order to [illegible] influence of the country upon the general affairs which are to be debated and settled in the course of [illegible]. The union of Hungary and of Transylvania, determined upon in 1848 without the consent of the Roumans and of the Saxons, and in opposition to their wishes, fell to pieces almost immediately. It is necessary, therefore, now to re-establish in the first place the [illegible] representation of Transylvania. The relations of Croatia with Hungary can only be resolved by an understanding with the Croatian Diet. The Hungarian Diet is summoned to [illegible]

its attention to those conditions, the basis of which are the internal self-government of Croatia, and its position towards the general Empire, in accordance with the Federal union between it and Hungary. It is summoned to take the initiative of a law guaranteeing the rights of the non Magyar inhabitants of Hungary. The Emperor reserves the initiative concerning the rights of the Serbs on the basis of the wishes of their National Congress. The abdication of the Emperor Ferdinand having alluded distinctly to 'all the kingdoms comprised in the Empire of Austria,' any further document would be superfluous. On the occasion of the coronation the King will keep in view the wish expressed that he should pardon political offenders. He awaits the assembling of the Diet for the legal settlement of the points indicated. In the meanwhile the laws connected with finance will remain in force."

Istria.—An Imperial decree was published on Thursday dissolving the Diet of Istria, on account of its refusal to send representatives to the Council of the Empire, notwithstanding the repeated request of the Government. The same decree orders new elections for the Diet.

Italy.—Accounts from Turin state that when the King had read the Emperor's letter, brought by Count Fleury, he said:—"I am happy to see that my august ally approves the line of policy which my Government has followed. The good news that you bring will fill all true friends of Italy with joy." The *Official Gazette* says that two individuals, named Groeben and Austeritz, have been arrested at Turin on a charge of enlisting recruits for the pontifical army. They had Papal and Austrian passports. Lists of men enrolled since 1860, and a quantity of Bourbon and Papal portraits and decorations, were also found on them. They were about to enter the Italian army in order to attempt to corrupt the soldiers. The *Official Gazette* also publishes a Royal decree establishing a great book of the Public Debt of Italy. A decree has been published fixing the terms of the National Loan. The bankers have subscribed for a considerable portion of the loan, and it is said that it will be necessary to reduce the amounts they have applied for, before the public subscription is opened. The confessor of the late Count Cavour has been summoned to Rome by the Pope, who desires to learn details of his last moments.—A Consistory was held by the Pope on Tuesday, at which he pronounced a short Allocution, expressing his satisfaction with the conduct of the episcopacy and the Italian clergy. He deplored the aberration of some ecclesiastics of Milan, Modena, and the kingdom of Naples, and lamented the spiritual loss caused by the vacancies in certain dioceses. The Pope also intimated that he was grateful for the occupation of Rome by the French army, without, however, dissimulating the abuse which, he said, the enemies of order have made, and will make, of the painful act of France in recognising the Kingdom of Italy. The Pope has received fresh assurances that the French army will remain at Rome. General Goyon has broken off all official relations with Monsignor de Merode. It is stated at Rome that the brigands who are ravaging the Abruzzi have been armed by Francis II. with the 30,000 stand of arms seized by General Goyon, when the Neapolitan army fled to the Papal territory after their defeat at Capua and Gaeta.—Accounts from Naples state that General Cialdini has issued a proclamation expressing his confidence in the people and the National Guard, and appealing to the whole Liberal party to assist in dispersing the Reactionary bands, and thereby defeat the man who pays them and directs their movements from a distance. He has ordered 15,000 volunteers from the National Guard to be enrolled for mobilisation. Several Garibaldian officers have accepted appointments in this force. Brigandage has recommenced around Naples, and a Bourbon committee, presided over by Monsignore Cienatempo, has been discovered at Posilippo. Letters and registers containing the names of the confederation and a large sum of money have been seized. The Monsignore and five accomplices have been arrested. Several communes in the Terra di Lavoro have been attacked but the brigands have been repulsed, and their leader Chiavone has been beaten by the Italian troops near Liri. A band of brigands invaded the town of Zigarise a few days since, and forced the inhabitants to join them. They burned the national flag, killed the captain, the Syndic, and several Liberals; and, after plundering and devastating the place, advanced on other parts of the country, where, however, they met with strong resistance from the troops and the National Guard. The brigands who were concentrated at Montefalcone have been beaten, and their chief, who was the author of the massacre at Mileto, has been arrested and shot. Several persons belonging to the Reactionary party, and the chief of the Reactionists at Monte Silvano, have been arrested. Nearly 500 brigands still threaten Avellino. About 50 have been made prisoners. General Cialdini has ordered the troops to shoot only those insurgents who are taken with arms in their hands. A reactionary band has been formed at Toscanella in the Papal States, and troops will be despatched to prevent them from crossing the frontiers. The journals *Il Popolo* and *L'Italia* announce that the brigands have given a banquet within eight miles of Naples to celebrate the approaching return of Francis II. The *Nazional* says that the Minister of War has ordered the distribution of 30,000 rifles among the National Guard of the province of Naples.

Turkey.—Safetti Pacha, President of the Grand Council, has been dismissed. Fuad Pacha succeeds him. Ali Pacha has been definitively appointed Minister for Foreign Affairs. The Sultan continues to effect reforms. It is proposed to purify the personnel of the Mudirs, and to diminish their privileges and salaries. The Council of Justice has been purged and reorganised.

India.—By the arrival of the Bombay mail we have news from that Presidency to the 27th and from Calcutta to the 16th June. The following are the only items of public interest:—

Bombay.—The amount of income tax collected by the commissioner for the town and island of Bombay is 3½ lacs; that collected by the special commissioner is 3 lacs; making in all 6½ lacs, about 65,000*l.*, which is half the estimated sum for Bombay.

Calcutta.—Mr. Laing left Calcutta on the 9th inst. in the mail steamer for England, and is not expected to return to India.

North West Provinces.—The accounts from the famine districts continue favourable. The famine relief committee at Lahore have resolved to remit 1½ lac of rupees in equal proportions to Delhi, Hissar, and Cis-Sutlej, for the purchase of cattle and seed grain. Colonel Baird Smith has published his report on the famine, from which it appears that by relief houses, relief works, and ordinary public works, half a million of the population have been directly benefited; that the spontaneous relief sought in emigration has influenced nearly half a million more, and that the whole body of sufferers can scarcely be less than from one and a quarter to one and a half millions.

Furrackabad.—The Nawab of Furrackabad, who was exiled to Mecca for his share in the rebellion, is producing a great impression on the pilgrims by prophesying that in five years the empire of India will be regained by the Moslem.

China.—Accounts from Shanghae of June 2 state that affairs are tranquil in Pekin and Japan. At Tientsin trade is progressing. According to the latest accounts Blakiston's (?) overland party were 1203 miles from Shanghae. The natives are returning to Hankow, and trade is being resumed.

Singapore.—The *Free Press* states that a "seaquake" has caused great devastation on the island of Simo; 778 persons perished.

Australia.—A splendid sword for Garibaldi, subscribed for in Melbourne, arrived from Australia by the last mail, and has been transmitted to him at Caprera.

United States.—We have accounts from New York to the 9th inst. The President's Message and the report of the Secretary of the Treasury are generally approved in New York. Congress has passed a resolution to consider business concerning naval and military appropriations only. All private Bills are to be referred for consideration to next Congress. Bills have been introduced for the repeal of the tariff of 1861 and the adoption of the 1857 tariff, and also for abolishing all ports of entry below Baltimore. The Senate and the House of Representatives have passed a Bill authorising the employment of 500,000 volunteers, and appropriating 500,000,000 dollars for the war. The House of Representatives has also passed a Bill authorising a loan for 250,000,000 dollars. In the Senate Mr. Saulsbury, of Delaware, offered a resolution for the amendment of the Constitution on a plan similar to the Crittenden compromise. The Senate has expelled the members from the seceded States. The House has passed a resolution asking the President for the correspondence with Spain relative to the incorporation of St. Domingo, and what protest, if any, the Federal Administration had made against "the insolent and aggressive conduct" of Spain. The President has replied that it was not advisable to produce the correspondence at present. Colonel Taylor has arrived in Washington with a flag of truce, bearing despatches from President Davis to President Lincoln, but has been sent back without any answer. The contents of the despatches have not transpired, but are reported to be frivolous, and the sending of the despatches is supposed to have been only a *ruse* to gain information respecting the Federal army. On the 9th a mutiny broke out among the Garibaldi Guard because they received muskets instead of rifles. They remained under arrest when the despatch left Washington. A battle occurred at Carthage, Missouri, on the 5th inst., by 1200 Federal troops attacking 4000 Confederates. The Federalists finally retired with the loss of eight men killed and 45 wounded, while the Confederates, it is said, lost more than 250 men. General M'Clellan's division has attacked the entrenched camp of the Confederates, numbering 2000 men, at Rich Mountain, Western Virginia. The Confederates were routed, and all their guns, camp equipage, and waggons were captured. Sixty Confederates and 20 Union men are reported to have been killed. General M'Clellan has occupied the entrenched camp of the Confederates and is now moving forward. There was some brisk skirmishing on the 10th near Laurel Hill, Western Virginia, between the Federal troops and the rebels, and Colonel Smith has been reinforced at Monroe, Missouri, and has routed the Confederates, who had surrounded him. General Patterson has been reinforced at Martinsburg. The advanced skirmishers of his force were fired upon by their comrades in mistake during a skirmish with the Confederates, near Martinsburg, but the casualties were trifling. On the same day a party of 40 men of the 15th Pennsylvania Regiment were captured by the Confederates. The Federal commander is charged with carelessness. Large bodies of Secessionists are reported to be joining Governor Jackson in the neighbourhood of Martinsburg, but the Federal troops are endeavouring to intercept them. By order of General Lyon, Federal troops have entered the office of a Secession journal in St. Louis, seized the type, and prohibited the publication of the paper. The Secessionists have attempted to destroy the steamers of the Potomac squadron at Aquia by means of infernal machines. The Charleston papers contain a telegraphic despatch, dated Richmond, July 5, which states that the blockade of the Chesapeake had been broken by private persons, by permission of President Lincoln and General Butler; that the facts were known to Lord Lyons, and that trouble between the United States and England might soon be expected in consequence. The corporation of New Orleans had offered a reward of 500 dollars for the detection and conviction of any person who might be engaged in furnishing provisions to the blockading squadron. The brig Amy Warwick has been captured off Fort Monroe. The brig John Welch from Cuba to England has been captured by the privateer Jeff Davis off Cape Hatteras. The same privateer has captured five vessels, and sent them to Southern ports. Three revenue cutters have left New York and two cutters have sailed from Boston to endeavour to capture her. Mrs. Longfellow, wife of the poet, died at Cambridge on the 9th from severe burns. The Professor was much injured in trying to save her life.

Canada.—The elections for the Canadian Parliament are nearly over. Parties are very equally balanced, but the Ministers have a slight majority. The Hon. Maurice B. Portman, son of Lord Portman, has been elected for the East Riding of the county of Middlesex in Canada West, defeating the anti-British candidate by a large majority. The central part of the province was visited by a sharp shock of earthquake on the 11th inst. It was felt severely at Montreal and at Ottawa, in which city chimneys were shaken down and walls split.

Parliament.

HOUSE OF LORDS.

Friday.—*Poland.*—The Earl of Harrowby moved an address to the Crown for the correspondence between this country and Russia, or other countries, in the years 1831 and 1832, with reference to the affairs of Poland. He said that recent events in Poland had caused people to ask whether the state of affairs in that country was such as was contemplated by the Powers who signed the Treaty of Vienna, and the publication of the papers might tend to check the tyranny under which the Poles suffered.—Lord Wodehouse acceded to the motion, so far as the correspondence with Russia was concerned. He expressed his sympathy with the Polish cause and said he looked upon the recovery of Polish independence as an impossibility, considering the overwhelming forces which could be brought against Poland by three powerful nations. The attitude of the Poles during the late events at Warsaw had shown great moderation and gave promise of better days. Russia would, doubtless, as liberal ideas progressed, give the Poles greater liberty of action as well as those institutions to which they were entitled by the Treaty of Vienna.—The Earl of Ellenborough expressed his astonishment that Russia should not have done her utmost to conciliate so great and noble a people. It was for the interest of Russia to conciliate the Poles, for as long as they were discontented the action of Russia was paralysed in Central Europe—a circumstance almost as injurious to Europe as to Russia itself. How could Russia extricate herself from such a position? By a frank reconciliation, and by restoring to the Poles self-government.—The Earl of Malmesbury said if the Poles contrasted their present position with their position seven or eight years ago, they had every reason to congratulate themselves. He hoped nothing said in this House would encourage the Poles to attempt impossibilities. After some remarks from Lord Breadalbane, Lord Stratford de Redcliffe, and Lord Talbot de Malahide, the motion, as modified, was agreed to. The *Appropriation of Seats (Sudbury and St. Albans) Bill* and other Bills were read a second time. The *Industrial School (Scotland) Bill*, and the *Industrial Schools Bill*, were referred to a select committee. The *White Herring Fishery Bill*, the *Vaccination Bill*, and several other Bills, passed through committee.

Monday.—*The Duchy of Modena.*—The Marquis of Normanby moved an address for copies or extracts of any despatches relating to the affairs of the Duchy of Modena from her Majesty's ministers accredited to the Courts of Central Italy, between the years 1855 and 1858. In a speech of considerable length he replied to the charges of cruelty recently brought by the Chancellor of the Exchequer in the House of Commons against the administration of the ex-Duke of Modena, and declared that he was armed with abundant authority to prove that they were utterly fallacious, more particularly the one referring to the execution of a youth named Granai, under 17 years of age by an *ex post facto* law.—Lord Wodehouse protested against the conduct of Lord Normanby in bringing charges against Mr. Gladstone in a place where it was impossible for the object of them to repel them. He justified the charges which Mr. Gladstone had made, and contended that they were drawn from documents of which the genuineness had never been questioned.—The Earl of Derby thought the conduct of Mr. Gladstone as a Minister of the Crown highly improper in bringing charges against the Duke of Modena not justified by the evidence, and which the accused party was precluded from answering. There was no proof that the papers on which the charges were founded were genuine, and, even if they were, they were insufficient to establish the charges made by Mr. Gladstone. If the papers were not produced, the inference would be that they would not bear out the accusations which had been brought forward by Mr. Gladstone.—Earl Granville said that the documents in question were published in 1860 by the *de facto* Government of Modena, and he could not understand how the Duke of Modena could be deemed ignorant of their contents. If the House thought the papers worth printing, there was no objection on the part of the Government to produce them.—Lord Brougham thought Mr. Gladstone had made out his case if the documents were not forgeries. The motion was then agreed to.—Lord Ebury, in presenting a petition in favour of a *Revision of the Book of Common Prayer*, said that next year would be the 200th anniversary of the Act of Uniformity, and he hoped then that the terms of subscription would be modified. He intended next year to propose that the terms of subscription to the Thirty nine Articles should be relaxed.—The Bishop of London was glad that Lord Ebury had confined himself to the question of relaxing the terms of subscription. With regard to the general revision of the Liturgy, no such revision, in his opinion, ought to take place at the present time. Such changes had been always confined to periods of great revolutions, and if any such changes were now desired Lord Ebury ought to specify the exact reforms he wished to see introduced. He thought the terms of subscription were not

so rigid as generally supposed. If it were desired, the services of the Church might be considerably shortened, but to this course the laity, and not the clergy, were the chief obstacle. The *Locomotives Bill* passed through committee. The amendments to the *Tramways (Ireland) Act Amendment Bill* and the amendments to the *Attorneys and Solicitors (Ireland) Bill* were reported. The *East India Council Bill*, the *Piers and Harbours Bill*, and the *Turnpike Trusts Management Bills* were read a third time and passed.

TUESDAY.—The *Annoyance Juries (Westminster) Bill* passed through committee. The *Voters (Ireland) Bill*, the *University Election Bill*, and the *Salmon Fisheries Bill*, were read a second time.—Lord WODEHOUSE moved the second reading of the *Irremovable Poor Bill*, the objects of which were to diminish the period within which a settlement could be acquired from five to three years' continuous residence in any particular union, and to effect a change in the mode of raising the fund by which relief was to be afforded.—Lord LIFFORD moved as an amendment that the Bill be read a second time that day six months. He regarded the measure as a first step to the destruction of the English parochial system, and a considerable advance towards the establishment of a union or national system of rating.—The Earl of DEVON supported the Bill on the ground that it would promote the freedom of labour, and any measure that accomplished such an object was worthy the encouragement of the Legislature.—The Earl of STRADBROKE objected that the Bill would produce a vast increase in the number of irremovable poor. So far as union rating was concerned, it might be advantageous in towns; but he did not approve of its being engrafted upon parishes in rural districts.—Lord REDESDALE and the Earl of CARNARVON opposed the Bill, and the Duke of NEWCASTLE supported it. On a division, the amendment was negatived by 40 to 31. The Bill was then read a second time. The *Dublin Revising Barristers Bill*, the *Lunatic Asylums (Ireland) Bill*, the *County Cess (Ireland) Act Amendment Bill*, the *Naval Medical Supplemental Fund Society Bill*, and the *Local Government Act Amendment Bill* were read a second time. The *Drunkenness (Ireland) Bill*, and the *Landlord and Tenant Law Amendment (Ireland) Act Proceedings Bill* passed through committee. The *Vaccination Bill* and the *Attorneys' and Solicitors' (Ireland) Bill* were read a third time and passed.—The Bishop of LONDON laid upon the table a Bill providing for the repair of the *Residences of Incumbents*, and explained that it would enable an incumbent to borrow from Queen Anne's Bounty a sum of money to repair his residence, on condition that a rent charge should be laid upon his life interest in the benefice. The Bill also contemplated raising a common fund in each diocese, under the charge of the archdeacons and deans, for the necessary expenses. His lordship added that the Bill had received the approval of both Houses of Convocation.

THURSDAY.—*East India (High Court of Judicature) Bill.*—On the motion for going into committee on this Bill, the Earl of ELLENBOROUGH expressed doubts of the wisdom of amalgamating, as the Bill proposed to do, the Suddar and the Supreme Courts.—Earl DE GREY and RIPON defended the Bill, and explained at length the intentions of the Government in proposing it.—Lord KINGSDOWN apprehended that the Bill in its present shape would not work satisfactorily, and said that it did not supply a remedy for the present system of appeals from India.—The LORD CHANCELLOR believed that the amalgamation of the courts would be accompanied by the better administration of justice, and would thereby diminish the number of appeals.—The House having gone into committee, the Earl of ELLENBOROUGH moved an amendment reserving to the Governor-General the power of appointing some of the judges.—Earl DE GREY and RIPON and the LORD CHANCELLOR opposed the amendment, which was negatived on a division by 48 to 42. The Bill then passed through Committee. The *East India Civil Service Bill* passed through Committee, and was reported. The *Parochial Schools (Scotland) Bill* was read a second time. On the order to go into Committee on the *University Election Bill*, the Bishop of OXFORD said that by the present Bill the resident members who were the special life of the University would be swamped by the numerical majority of country voters, a great number of whom would be thrown into the hands of certain resident members, who would then sway the election as they chose.—The Earl of DERBY supported the Bill, and said that if the principles of voting-papers, as applied to the Universities, were successful, he should be glad to see it extended.—The Bishop of LONDON thought the Bill would inflict great evils on the University of Oxford.—The Bishop of CARLISLE on the other hand thought it would elicit the real opinions of the University.—Lord DUNGANNON and Earl FORTESCUE supported the Bill.—Earl GRANVILLE said that though the Government did not oppose the Bill, they agreed with the opinions of the Bishop of Oxford.—The Duke of NEWCASTLE moved as an amendment that the Bill should be considered an experiment, and that its operation be limited to three years. At the request of the Earl of DERBY the amendment was withdrawn, and the Bill passed through committee. The *County Voters (Scotland) Bill*, the *Volunteer Tolls Exemption Bill*, the *Irremovable Poor Bill*, and the *Salmon Fisheries Bill* passed through committee. The *Dealers in Old Metals Bill*, the *Parochial and Burgh Schools (Scotland) Bill*, and the *Copyright of Designs Bill* were read a second time. The *Public Works (Ireland) Advances and Repayments of Moneys Bill* and the *White Herring Fisheries (Scotland) Bill* were read a third time and passed.

FRIDAY.—*Business of the House.*—The Earl of DERBY called attention to the present state of public business, and asked what was to be done with the mass of Bills now before Parliament. Before Whitsuntide 68 Bills were introduced into the House of Commons, and since then 80 more, making a total of 148. Of these Bills 78 had been passed, five had been rejected, 23 withdrawn, and there now remained 44 Bills awaiting the consideration of the Lower House. In their Lordships' House there were 48 Bills awaiting attention, for 18 of which no day had been fixed. [Left sitting.]

HOUSE OF COMMONS.

FRIDAY.—Mr. CONINGHAM pursuant to notice, presented a petition from Mr. G. O'Malley Irwin, with reference to the *Atlantic Royal Mail Steam Navigation Company*, gravely inculpating the conduct of Mr. LEVER, the member for Galway, whom it charged with fraud in relation to the company. The petition having been read, Mr. BOUVERIE suggested, as a point of order, that Mr. Lever being present ought to be heard before the petition was received.—Mr. CONINGHAM moved that it be laid on the table.—Mr. LEVER then rose, and declared, most emphatically, that there was not the slightest foundation for a single allegation contained in the petition, and invited the House, as a matter of justice to himself, and for the sake of his own character, to appoint a committee to investigate the charges imputed against him.—Lord J. MANNERS recommended that the matter of the petition should be referred to a select committee. After some discussion, the House divided, when the motion that the petition lie on the table was carried by 99 to 78.—Mr. HOPE inquired whether Mr. CONINGHAM was prepared to follow up the petition by moving for an inquiry.—Mr. CONINGHAM desired time to consider, and moved that the petition be printed for the use of members only. This motion was ultimately agreed to. *The Island of Sardinia.*—On the order for going into a Committee of Supply, Mr. KINGLAKE asked whether the Governments of Italy and France continue to deny that the King of Italy has entertained a project for ceding to France the Island of Sardinia; and whether the truth of any such denials is confirmed or shaken by the information which her Majesty's Government may have received from other quarters. He pointed out the vast importance and value of the island to France, since the possession of it would give her a commanding influence in the Mediterranean, which it was the object of the First Napoleon to make a French lake. He referred to the communications which had taken place between the English and French Governments on the subject, to the grounds of suspicion furnished by the conduct of France and Piedmont in regard to Savoy and Nice, to the symptoms of an agitation in Sardinia itself by committees of annexation, and to private information he had received from Turin and Paris. Putting all these indications together, he thought most serious grounds existed for great anxiety. He suggested reasons why we should not trust to the moderation of the Emperor of the French or to the firmness of Baron Ricasoli, the successor of Count Cavour, who might not possess his knowledge of the matter. He moved for copies of any further correspondence which may have passed respecting the cession of the island of Sardinia to France.—Sir R. PEEL seconded the motion, and insisted that there must be some grounds for the rumours and apprehensions regarding this cession, which would strike a severe blow at our commercial interests and the maritime supremacy of this country.—Mr. COCHRANE and Mr. G. C. BENTINCK contended that if her Majesty's Government had pursued a more vigorous and straightforward course with regard to Savoy and Nice we should have heard nothing more about these annexations.—Mr. STIRLING said it was the duty of the Government to declare in courteous terms that the cession of Sardinia to France could not be allowed under any circumstances. He believed he should be understating the amount if he said that the existence of a despotic government in France cost this country not less than from 15,000,000*l.* to 20,000,000*l.* a year.—Lord J. RUSSELL said that the subject of debate was a very important one. He admitted the importance of Sardinia, and he had repeatedly declared in despatches that the cession of the island to France would be a great disturbance of the distribution of power in Europe and especially in the Mediterranean. The transaction was not one that could take place between France and Sardinia; it would involve the interests of other nations, and put an end to the alliance between this country and France. But it was not his opinion that the Government of the Emperor of the French would consent to annex Sardinia and brave the consequences that would follow. He did not believe that Baron Ricasoli, a man of the highest honour, intended to give up the island to France, and M. Thouvenel had not only contradicted the rumour, but had disavowed the proceedings of French agents in the island. He believed it was the desire of the Emperor of the French to preserve the peace of Europe, but he was not sure that the public opinion of France, or of the French chambers or the French army, might not alter his whole policy. He therefore readily admitted that we ought to be watchful in regard to the events occurring in Europe, for great movements were going on in different parts of Europe of popular bodies and of whole nations aspiring to better Government. There must, therefore, be uneasiness leading to civil disturbances; and this alone was a reason why the Government of this country should be vigilant. He trusted their eyes would not be shut; but to be always expressing suspicion would be not only a very puerile but a very mischievous policy, and it had been the endeavour of the Government to reconcile those among whom discord had arisen. He trusted that no narrow spirit of saving would induce this country, in the present state of Europe, to maintain an armament inferior to the position it should occupy, in which policy, not only the greatness, but the safety of the country was concerned. So far from this policy bringing on a war, he believed it was, on the contrary, a strong weapon in the hands of this and of every Power that sought for independence and liberty, and a great security for the peace of Europe. In conclusion he said he could not consent to produce the papers moved for at present.—Mr. STANSFELD eulogised the party of Young Italy, and said that the policy which, in his opinion, the kingdom of Italy should pursue was a national policy, apart from any foreign alliance.—Sir G. BOWYER condemned the foreign policy of the Government, which he considered was accommodated to the state of parties in this country and to the securing of votes, and that its effect had been to lay Italy at the feet of France. He gave a fearful picture of what he represented to be the present condition of Southern Italy.—The CHANCELLOR of the EXCHEQUER, in reply, said that Sir G. Bowyer, who had charged the Government with promoting revolutionary movements in Italy, was himself the chief agent of the revolutionary party in that House. He entered into an explanation, which he had imperfectly made on a preceding day, of the charge he had brought against the administration of criminal justice by the Duke of Modena, stating facts and circumstances in justification of the charge, as explained.—Mr. LAYARD defended Count Cavour in relation to the cession of Savoy and Nice, and denied that he intended to deceive the English Government. He knew that the Count pertinaciously refused to assent to the cession, and only yielded at last to a pressure which it would have been imprudent to resist. After some remarks by Mr. GRIFFITH, Mr. HENNESSY, and Mr. KINNAIRD, the motion was negatived without a division. The *Pensions (British Forces) India Bill* was read a second time. The House went into committee on the Scotch *Salmon Fisheries Bill*, but was counted out at 20 minutes past 2 o'clock.

MONDAY.—*The Galway Contract.*—Mr. CONINGHAM moved that Mr. Irwin's petition relating to the Royal Atlantic Mail Steam Navigation Company be referred to a select committee to inquire into the allegations contained therein.—Alderman SALOMONS seconded the motion.—Sir G. GREY suggested that the House should adhere to the course pursued in those cases, and, having heard Mr. Lever in his place and his denial of the charges, should proceed no further in the matter.—Mr. LEVER having read the petition paragraph by paragraph, and given explanations, replies, and denials as he proceeded, adding some particulars of the antecedents of Mr. Irwin, said he confidently left his case in the hands of the House, and then retired.—After some discussion in which Sir J. PAKINGTON, Colonel DUNNE, Sir G. LEWIS, and Sir J. GRAHAM expressed their opinion that the charges did not concern Mr. Lever's conduct as a member of the House, the motion to refer the petition to a Select Committe was negatived without a division. The House then resumed the consideration of the Lords' amendments of the *Bankruptcy and Insolvency Bill.*—The ATTORNEY-GENERAL moved that the House should disagree to the Lords' amendment substituting official for trade assignees, and should restore the clause to its original form. The motion was agreed to after a short discussion.—Mr. MALINS moved that the House should disagree to the Lords' amendment depriving the Bill of its retrospective operation in the case of non-traders.—Mr. HENLEY supported the amendment, protesting against the application of the retrospective principle, especially in relation to marriage and other settlements.—The ATTORNEY-GENERAL and Mr. M. SMITH recommended Mr. Malins to withdraw his motion. The motion was subsequently negatived without a division, and the Lords' amendment agreed to. A new clause (inserted by the Lords), providing that the debt of the petitioning creditor of a non-trader debtor must be contracted after the passing of the Act was, with certain qualifications suggested by the SOLICITOR-GENERAL, agreed to. So much of a new clause introduced by the Lords as enabled a debtor to petition for an adjudication of bankruptcy against himself, was agreed to. The House disagreed to the Lords' amendment of the clause specifying the rules to be observed in granting orders of discharge, and a proviso was ad[illegible] clause, on the motion of the SOLICITOR-GENERAL, that [illegible] should be liable to any criminal proceeding for [illegible] occurring before the passing of the Act, to which he [illegible] have been liable if the Act had not passed. A com[illegible] then appointed to draw up the reasons for disagre[illegible] amendments of the Lords.—*British Museum.*—The [illegible] went into a Committee of Supply, when Mr. WALPOLE [illegible] grant of 100,414*l.*, the remainder of the vote for the [illegible] Museum. He reviewed the management of the past [illegible] pointed out the necessity for providing more adequate [illegible] modation for the several collections. The trustees [illegible] the subject of opening the building in the [illegible] under consideration; but after taking the [illegible] the architect and the late Mr. Braidwood, they [illegible] at the conclusion that, with such an agent of [illegible] as gas, it would not be safe to adopt such a [illegible] Mr. GREGORY had hoped that the Government would [illegible] prepared with a scheme for the enlargement of the [illegible] and urged the necessity of carrying out the recommen[illegible] of the select committee of last year, to purchase the [illegible] in Montague Place, with the view of providing the [illegible] accommodation. He also advocated the remo[illegible] mediæval collection, with the exception of objects [illegible] illustrative of British history, whether Pagan o[illegible] The remainder he would distribute amongst the [illegible] museums of the metropolis, where they should b[illegible] control of the national trustees. He understood [illegible] Government intended to propose next year the sepa[illegible] the natural history collection, and its transference [illegible] sington. Against this he earnestly protested, and calle[illegible] them to adopt some plan that would at once reflect cre[illegible] the national institution and make it the just pride [illegible] country.—Mr. LAYARD made severe comments [illegible] arrangements of the British Museum and upon the [illegible] outlay of money with disproportionate results. He [illegible] opinion that there should be separate [illegible] for science and art, with distinct establishments [illegible] staffs.—Mr. MILNES advocated separation and [illegible] the Government to meet the difficulty at [illegible] The CHANCELLOR of the EXCHEQUER said that the vie[illegible] of the administration and arrangements of the British [illegible] was rather disheartening. The Government were [illegible] that the case of the Museum called for consideration [illegible] they were embarrassed by the differences of opinion [illegible] that debate exhibited examples. They were not pre[illegible] act upon the report of the committee. They thought [illegible] Museum admitted of great structural improvement [illegible] portions of ground might be occupied so as to [illegible] dimensions. Besides these two sources of increas[illegible] modation, certain classes of the collections, it wa[illegible] agreed, might be removed. During the recess the Gov[illegible] would take the whole subject into consideration, [illegible] tion with the trustees.—After some remarks by [illegible] JERVIS, Mr. TITE, Mr. H. SEYMOUR, Mr. CONINGHAM, [illegible] KINNAIRD, Mr. WALPOLE said that when the Government [illegible] a recommendation to the trustees, it would be their [illegible] object to take the matter into their earliest consi[illegible] examine all the plans, and on their responsibility [illegible] the House the conclusion at which they had arrive[illegible] was then agreed to, and ordered to be reported. [illegible] *University Bill* passed through Committee. Seven [illegible] were advanced a stage.

TUESDAY.—*The Inland Revenue Bill* was further [illegible] committee, when the 40th clause referring to the [illegible] duties was abandoned, and the 15th clause [illegible] licenses was postponed. *National Gallery.*—In [illegible] H. LENNOX, Mr. COWPER stated that plans [illegible] sion for erecting a building at the rear of the [illegible] for the reception of all pictures that were [illegible] after be placed in the custody of the tru[illegible] however, to give an assurance that none of [illegible] be executed without previously submitting [illegible] *Isthmus of Suez.*—Lord J. RUSSELL stated, in reply to [illegible] FITH, that he had read an article in a foreign [illegible] effect that Mr. Colquhoun, the English consul-general [illegible] with the English consul in Alexandria and other [illegible] had visited the works of the Suez Canal, and [illegible] satisfaction with what he had seen and heard [illegible] was unable to say whether the statement was corre[illegible] *Employment of Native Indians.*—Colonel SYKES mo[illegible] candidates were invited to compete for employment [illegible] Crown, British subjects born in India should be [illegible] compete on the same footing as other British [illegible] that the recent prohibition of Indian medical men [illegible] peting for the office of assistant surgeon in the B[illegible] was unjust, impolitic, and uncalled for.—Mr. LAYARD [illegible] the motion.—Mr. T. G. BARING opposed the motion [illegible] veying a censure upon the Secretary of State for [illegible] explained that the prohibition of the natives of [illegible] competing for the office of assistant surgeon in the B[illegible] was founded upon the opinion of the Secretary of [illegible] India in Council and the reports of the most emine[illegible] authorities who had examined these gentlemen, [illegible] that although they had no defect that should exc[illegible] from employment in tropical climates, they were [illegible] ally unfit for service in the various northern [illegible] in which the British army was required [illegible] Mr. J. B. SMITH supported the motion; Capt. JERVIS [illegible] it. The motion was then withdrawn. *Church Rates*[illegible] the order for going into Committee of Supply, Mr. [illegible] moved that, in the opinion of the House, the [illegible] ecclesiastical law in England and Ireland, and [illegible] which it was administered, and especially the act [illegible] called the Clergy Discipline Act, required to be [illegible] reformed, and that it was incumbent on the [illegible] direct a measure to be prepared for that purpose.—[illegible] LAND seconded the motion.—Sir G. LEWIS was not [illegible] maintain that the ecclesiastical courts were [illegible] state. If the Government had brought in [illegible] session it would have had to be abandoned, [illegible] present say when he should be able to bring [illegible] subject.—After some remarks by Mr. NEW[illegible] FIELD the motion was withdrawn.—Mr. H[illegible] to the present state of the law respecting the [illegible] *in the Metropolis*, and complained of there being [illegible] arrangements for the extinction of fire, and [illegible] well as moveable property to the value of [illegible] exposed to serious risk without any adequate [illegible] tection.—Sir G. LEWIS, whilst admitting that the [illegible] one of great social importance, explained the diffi[illegible] stood in the way of carrying out any efficient [illegible] —Major PARKER called attention to the heavy [illegible] the Peruvian Government upon the *Export of* [illegible] urged the necessity of the British Government [illegible] to obtain its reduction.—Mr. STIRLING, in calling [illegible] the return of *Civil List Pensions*, and more [illegible] pensions conferred for literary and scientific labours, [illegible] the manner in which the Royal bounty was dist[illegible] some cases pensions appeared to have been grante[illegible] inquiry, whilst in others the only claim seemed to [illegible] favoured individuals were allied to some wealthy and [illegible] family. He also offered various suggestions with [illegible] more satisfactory administration of the fund hereafter [illegible] PALMERSTON was not aware that during his pre[illegible] pensions had been granted to members of wealthy [illegible] and, in general, the amount was so small as not to [illegible] tance to persons connected with the aristocracy, but [illegible] was the assistance it afforded relieved much suffering [illegible]

[illegible] the "Poet Close," to whom 100*l.* had been granted [illegible] compensation for recalling his pension, he had recommended that person to the Royal favour under the impression that he was a deserving object. The House then went into [committee] of supply, and agreed to several votes of the *Civil* [Service] *Estimates*. The *Gunpowder &c. Act Amendment Bill* and the *Pensions British Forces (India) Bill* passed through committee.

Wednesday.—*Church-rates Law Amendment Bill.*—On the order for the second reading of this Bill, Mr. Cross moved that the order be discharged, on the ground of the impossibility of [passing] it in the short interval remaining before the prorogation.—Sir M. Peto said that nothing could be more objectionable than this Bill; for its inevitable effect must be to render the state of the law of church-rates more widely oppressive than it was at present.—Sir G. Lewis deprecated further [debate] on the subject, and advised the House to proceed with the [other] orders of the day already on the paper. After some further discussion the order was discharged and the Bill withdrawn. The *Church Rates Commutation Bill* of Mr. Alcock, the *[Fees for] Unqualified Candidates Bill*, and the *Grand Juries [Ireland] Bill* were also withdrawn. The *Indemnity Bill* passed through committee. The Attorney-General moved [the] second reading of the *Lunacy Regulation Bill*, which had come down from the Lords, and the objects of which were to secure the better visitation of Chancery lunatics and to diminish the expenses of procedure.—Mr. Henley requested that the Bill should be postponed for a week, in consequence of the absence, through domestic affliction, of Mr. Walpole, chairman of the select committee on lunatics, who entertained strong [objections] to the Bill, believing that it would prevent the consolidation of the laws relating to Chancery lunatics, recommended by the select committee. He moved that the debate be adjourned.—The Attorney-General consented to defer the committee for a week, and upon this understanding the amendment was withdrawn, and the Bill was read a second time. The House went into committee on the *Lace Factories Bill*, when Lord H. Lennox moved an amendment limiting the age of children employed during full hours to 13 instead of 11 years. After some discussion, the amendment which was warmly opposed by Ministers, was carried by 60 to 56. Some other amendments were also carried in opposition to the Government, and the Bill passed through committee. On the motion for reading the *Episcopal and Capitular Estates Act Continuance, &c., Bill*, Mr. Henley said that the measure contained clauses relating to matters that were not of a continuance character, and intimated that he should divide against the Bill unless the Government agreed to strike out these clauses.—Sir G. C. Lewis acceded to the suggestion, and the Bill was read a second time. On the order for the second reading of the *Prosecutions Expenses Bill*, Mr. Henley objected to the principle of the Bill. —Sir G. Lewis said the Bill was intended to obviate complaints made of the insufficiency, in some of the counties of England, of the scale of allowances to witnesses in prosecution, causing a failure of justice; and it permitted the magistrates to supplement the allowances out of the county rate.—Mr. S. Estcourt suggested that the Bill should be confined to Yorkshire and Lancashire, the only counties, as he understood, where complaints existed.—Sir W. Miles said that the complaints were general, but argued against the principle of the proposed remedy. The debate was ultimately adjourned. The *Newspapers, &c., Bill* was read a second time. The *Durham University Bill*, the *Metropolitan Gas Act Amendment Bill*, the *Passengers (Australian Colonies) Bill*, the *Trustees (Scotland) Bill*, the *Conjugal Rights (Scotland) Bill*, and the *Metropolitan Building Act Amendment Bill* were read a third time and passed.

Thursday.—*Army Expenditure.* On the order for going into committee of supply General Peel called attention to the excess of army expenditure over the grant for the year ended on the 31st March, 1860, and which he stated amounted to 1,161,481*l.*—Sir H. Willoughby also called attention to the fact that a much larger number of men had been maintained for the army than was voted by the House.—The Chancellor of the Exchequer said that at the time the estimates were prepared it was not within the knowledge of the War Office what would be the expense of the troops on service in India and China, and how much was due from the Indian Government on that account. *China.*—Mr. T. G. Baring stated in reply to Colonel Sykes, that by the last despatch from Mr. Bruce, our minister in China, it appeared that he had deemed it necessary to retain one regiment of British troops at Tien-tsin. The House then went into committee on the *East India Loan*, when Sir C. Wood moved a resolution empowering him to raise money by loan for the service of railroads in India. He stated the amount of railroad expenditure during the past year, and the probability that the same sum would be required for the present year—namely, about 5,000,000*l.* The sum which he expected the railroad companies would be able to raise was about 3,000,000*l.*, and he proposed to ask for a discretionary power to raise by loan the sum of 5,000,000*l.*, not one sixpence of which would be borrowed except for railway purposes, and unless the companies should require the aid. He then proceeded to give an exposition of the finances of India, expressing his opinion that Mr. Laing's estimate for the year 1861-62 showing a surplus of revenue of [illegible] was founded on too favourable a view, and that there would be a deficit of about 1,000,000*l.*, but that this deficit would disappear in the following year when a surplus might be expected. He reviewed the prospects of the chief sources of Indian revenue, observing that the increased salt duty had been most productive, and that 620,000 bales of cotton had been shipped to this country, and 400,000 more might be expected. The retrenchment of expenditure in the military branch had been carried to a very great extent, the number of troops having been reduced by 200,000 men, who had been absorbed into the police force or by the increased demand for labour in the country. The military expenditure, which in 1858-59 amounted to 24,750,000*l.*, was now only 15,500,000*l.*, being a diminution of charge to the extent of 9,000,000*l.* Passing to the political state of India he eulogised the policy pursued by Lord Canning towards the native Princes and great landholders, which was calculated, in his opinion, to establish more firmly the foundations of British power in India. After a desultory debate on Indian affairs, the resolution was agreed to. *Easter Offerings.*—In answer to Mr. Dillwyn, Sir G. Lewis stated that the goods of 13 persons in the town of Accrington had been seized and sold by auction to enforce the payment of small sums of money claimed by the vicar of Whalley for Easter offerings, but there was no breach of the peace, and therefore no ground which would justify the interference of the Executive Government. The question of the legality of the seizure might be tried by the parties bringing an action of trespass; and his own impression was that Easter offerings were a voluntary gift, not enforceable by law. The House then went into Committee of Supply. On the vote of 25,000*l.*, the balance of the charge for the *Brougham Patent of Peerage*, Mr. Osborne objected to the item for the *Brougham Patent of Peerage*, and to that for the *Fine Arts Commission*, whose proceedings he criticised with much severity, and described their frescoes and statues in the Houses of Parliament as failures, involving a profligate waste of public money.—Mr. Cowper defended the commission, and argued that the statues and frescoes of the two Houses were highly creditable to the artistic taste of the country.—The Chancellor of the Exchequer justified the charge for the Brougham Patent by reference to various precedents; but admitted that the item for the Fine Arts Commission ought to have been made the subject of previous estimate, and promised that next year that course should be followed.—Mr. Gregory and Sir G. Bowyer expressed their concurrence with Mr. Osborne's opinion that the statues and frescoes in the Painted Chamber and the Royal Gallery were discreditable to the art of the country.—Mr. Collins moved to reduce the vote by 1456*l.* 16*s.*, being 512*l.* 16*s.* for the Brougham patent, and 244*l.* for the Fine Arts Commission. On a division the amendment was negatived by 76 to 50.—Mr. G. Bentinck then moved to reduce the vote by 512*l.* 16*s.*, the charge for the Brougham patent. On a division the amendment was negatived by 62 to 48. The vote was then agreed to.

Friday.—*Supply.*—The House went into a Committee of Supply, and agreed to the vote of 669,154*l.* for the expenses of the packet service. On the vote of credit of 1,000,000*l.* to pay the expenses of the China war, in regard to both naval and military operations, Sir H. Willoughby objected to the large sum voted on account of the war.—The Chancellor of the Exchequer agreed that the war had been very costly, but believed that this vote would be more than sufficient to meet the extra expenses. The vote was ultimately agreed to. The vote of 60,692*l.* for Westminster Bridge was agreed to. The vote of 250,000*l.* for iron cased ships was postponed. The *Drainage of Land Bill* passed through committee. [Left sitting.]

City Intelligence.

Money Market, Friday.—British Funds: Consols closed at 89¾ to ⅞ for Money, and 89⅞ to 90 for the 7th of August; Bank Stock, 232 to 230; Three per Cents. Reduced, 89¾ to ⅞; New Three per Cents., 89¾ to ⅞; Thirty Years' Annuities, 1885, 15½; India Stock, 219; Ditto Five per Cent. Stock, 99⅞ to ⅛; Ditto Scrip, 100 to ⅛; Ditto Four per Cent. Debentures, 1863, 96⅜; Ditto Bonds, 11*s.* to 10*s.* dis.; Five per Cent. Enfaced Rupee Paper, 94¼; Exchequer Bills, March, 10*s.* dis.; Ditto June, 3*s.* dis., par.—Foreign: Austrian Five per Cents., 1859, 65, ex div.; Brazilian Old Five per Cents., 98¾ to 99¼; Ditto Four and a Half per Cents., 1852, 87; Chilian Six per Cents., 102½; Ditto Four and a Half per Cents., 81½ to ¾; Dutch Two and a Half per Cents., 63½, ex div.; Ditto Four per Cent. Certificates, 99¾; Mexican Three per Cents., for Acct., 22½ to ⅝; New Granada Deferred, 5½ to ⅝; Peruvian Uribarren Four and a Half per Cents., 85¼ to 86, ex div.; Portuguese Three per Cents., 1853, for Acct., 47, ex div.; Russian Four and a Half per Cents., 90 to 89½, ex div.; Sardinian Five per Cents., 79; Ditto for Acct., 78; Spanish Three per Cents., 48⅝, ex div.; Turkish Six per Cents., 1854, 78½; Ditto, 1858, for Acct., 67½ to ¾.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£25,517,480	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion	10,667,480
		Silver Bullion	—
	£25,517,480		£25,517,480

BANKING DEPARTMENT.

Proprietors' Capital	£14,553,000	Government Securities (including Dead Weight Annuity)	£9,606,279
Rest	3,401,174	Other Securities	18,854,783
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	4,123,460	Notes	5,374,715
Other Deposits	[illegible]	Gold and Silver Coin	852,610
Seven day and other bills	626,526		
	£34,688,387		£34,688,387

25th day of July, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY — BANKRUPTS — W. Gibb, Southampton, Fishmonger— G. Hill, South Milford, Yorkshire, Grocer and Tea Dealer—W. Porter, Walton, Kingston-upon-Hull, Corn and Seed Merchant—W. Proctor, New Wortley, Leeds, Yorkshire, Joiner and Builder—J. Siddell, Wath-upon-Dearne, Yorkshire, Auctioneer — J. W. Stourbridge, Victualler — G. Turner, New Radford, Nottinghamshire, Brewer and Maltster — T. Wilkins, New Wortley, Yorkshire, Stonemason and Builder.

SCOTCH SEQUESTRATIONS—J. H. Bedgar, Glasgow, Corn Merchant—A. Finlayson, sen., Thornliebank, Renfrewshire, Spirit Dealer—L. Freedman, Glasgow, General Outfitter—R. Milne and W. Y. Hodge, Dundee, Merchants — J. Reid, Ayr, Grocer and Spirit Dealer — M. F. Stewart, Lennoxtown, Stirlingshire, Saddler — A. Walker, Inverness Hotel Keeper.

FRIDAY—BANKRUPTS—D. Appleyard, T. Wigglesworth, J. Egerton, and E. Clegg, Leeds, Machine Makers—A. Arnet, Tudor Street, Blackfriars, Drysalter and Colourman—A. Astill, Loughborough, Leicestershire, Ale and Porter Merchant—W. S. Bousfield, late of Dogs, late of Grove Lane, Dulwich, Engineer and Trader—D. Bryce, late of Amen Corner, Paternoster Row, Bookseller and Publisher — J. Caldwell, Southwell, Nottinghamshire, Coal and Coke Merchant—H. Cockman, late of Aldersgate, Oilman, but now of Bexley New Town, Kent, Shopkeeper—T. Gourlay, Bradford, Yorkshire, Draper—R. Harrison and J. Sherratt, St. Helen's, Lancaster, Builders and Timber Merchants—W. T. Hudson, Brigstock, Northamptonshire, Surgeon and Apothecary — J. Ibbott, Somersham, Huntingdonshire, Builder—J. Large, Ufton, Berkshire, Cattle and Sheep Salesman—C. Lowell, Great Marlborough Street, Regent Street, Glass Merchant and Dealer — A. Pilgrim, Stanley Road, St. Thomas's Square, Hackney, Builder and Contractor—J. Rhodes, Birkenhead, Cheshire, Dealer in Coal—F. J. Russell, Salisbury, Wilts, Linendraper—J. Stevens, Derby, Jeweller and Silversmith—J. Titchmarsh, Royston, Cambridgeshire, Miller and Seed Merchant — J. Whitehead, Sheffield, Joiner and Builder—J. Wright, Redditch, Worcestershire, Grocer, Butcher, and Timber Dealer.

Metropolis and its Vicinity.

Lord John Russell's Farewell to the City.—A meeting of the electors of the City of London was held on Tuesday in Guildhall, at the invitation of Lord John Russell, who wished to bid them a public farewell on his retirement from the position of one of their representatives which he has held for the last 20 years. The hall was filled in every part with an audience composed of citizens of all classes. On the motion of Sir J. Duke, seconded by Mr. R. Hanbury, M.P., Mr. Thomson Hankey, M.P., was called to the chair. Lord John Russell, on presenting himself to the meeting, was received with enthusiastic and prolonged cheering. Silence having been restored, his lordship addressed the electors in a long speech, from which the following are extracts:—

"Gentlemen, I come to this place, where I have so long and so often been accustomed to address you in the view of impending struggles, or to return thanks for a single election. I now come to return thanks to you for 20 years of support, during which 20 years, in arduous times, I have had the honour to represent this great city. Believe me, I would gladly have continued to enjoy that honour and to discharge the duties which belong to it. But after 20 years of representing this city, and 47 years spent in the House of Commons, with all its cares and anxieties, it appeared to me that I could not perform those labours any longer consistently with that care which every man is bound to take that he should not break down in a hopeless attempt. Her Majesty has been pleased, upon the intimation of my wish to retire from the city, to signify her intention to elevate me to the peerage. I feel deeply that honour, but I also feel that it is a painful moment when I come to bid adieu to those who have supported me, through good report and through evil report, for so long a time. And I should hardly be acting fairly by you or by myself if I did not take some retrospect of the period that has gone by, and consider whether it has been usefully or uselessly spent. You will remember that the first time I appeared before you was in the beginning of the great struggle between Free Trade and Protection; and you gave me your support on the principles of Free Trade. We were then defeated as a party, but in principle we were triumphant. That which we then proposed, and which was thought too bold for those times—that which was resisted as a dangerous and almost destructive innovation—was that there should be a fixed duty on corn, a considerable differential duty in favour of colonial sugar, and another differential duty in favour of colonial timber. But, although we triumphed, those propositions did not triumph, but larger and better propositions than the compromise which we recommended met with success. We have had the total abolition of the duties on corn; we have had the duties on foreign and colonial sugar reduced and made equal; we have likewise had the duties on colonial and foreign timber equalised. Thus we have had once more the lesson, so often repeated, and so often repeated in vain, that those who resist moderate proposals of reform do not thereby prevent innovation. Well, there is another topic on which I then addressed you, and it was that the great work of religious liberty ought to be completed. Upon that question, again, we had a serious struggle, and it was not till after many years that my friend and colleague, Baron Rothschild, was able to take his seat in the Commons House of Parliament. But that cause, too, triumphed; and as the Dissenters from the Church had before been, so likewise then were the Jews admitted to the privilege of a constitution which ought to take no notice of differences of religious belief, which the greatest King who ever ruled in this country truly declared to be God's province. There is another subject upon which there are still endeavours to be made, still improvements to be accomplished—I mean the amendment of the representation of the people. Upon that subject we introduced a Bill last year, which was thought to be a dangerous innovation, because it proposed to extend the suffrage to householders paying 6*l.* of yearly rental. Great alarm was felt by some, and affected by many, at that proposition. But it was a proposal in itself exceedingly moderate—a proposal which ought not to alarm any of the lovers of the constitution, because it is not among the ratepayers—it is not among the householders of this country that are to be found those who wish to destroy any of the essential parts of that constitution. You do find here and there a philosophical theorist who conceives that we might be better off with some new form of government. But it is not among the people, not among the householders of this country, that that notion prevails. They are as loyal to the Throne, as much attached to the constitution of this realm, as any other class of persons within it. But it is a matter of fact that there exists considerable indifference on the subject of further improvement in the representation of the people. The reason, I believe, is that when Reform was undertaken 30 years ago there were abuses so flagrant that they made every one indignant, and produced that general and enthusiastic feeling which then prevailed throughout the kingdom. At that time Lord Grey having formed his Administration, one of his colleagues, Lord Durham, sent to me and said that the Premier had commissioned him to bring together some of the members of his Government in order to draw up the heads of a measure of Reform. The men were soon chosen—viz., Lord Durham, myself, Lord Bessborough, and Sir James Graham, who still happily sits in the House of Commons. To the meeting of these four persons I proposed that there should be a change with regard to the places entitled to representation. At that time grass mounds, a very beautiful park, and a town which had been destroyed some 10 centuries ago returned members to Parliament, while Manchester, Leeds, Birmingham, and Sheffield returned none. I proposed to that meeting that 50 boroughs should be disfranchised, that 50 other boroughs should return only one member, and that Manchester, Birmingham, and Leeds should be represented in Parliament. That was a great change. The proposition, though not exactly in the form in which I suggested it, was agreed to, and afterwards drawn up as a Bill and proposed by Lord Grey to the Cabinet. And when the nation heard that there were 150 seats to be distributed, that the nomination boroughs were to be disfranchised, and the great seats of riches, of manufactures, and of commerce were to be enfranchised, there prevailed that universal enthusiasm throughout the country that there was no force in either House of Parliament able successfully to oppose the measure, and it accordingly became law. There are no such abuses now, and the questions to be considered are questions which require to be weighed nicely in the balance, to be paused upon, and to be modified, and therefore, although the prospect is still fair, yet, until the people themselves show a strong feeling upon the subject, it will be of no use for the Ministers of the Crown to come forward with a proposition. With regard to other questions which still require the attention of Parliament, and which still require the support of the popular voice—I mean the questions of the improvement of the law—I have had occasion just lately in the House of Commons to vote in favour of a proposal with respect to which all the best informed of the principal firms of bankers and merchants in London have given their unequivocal assent. There are also other labours still to be undergone, other triumphs still to be achieved, and I hope that I may bear some share, however humble, in those triumphs and those achievements. When we look back at the great improvements which have been made in legislation, we see that men of very different tempers and of very different political parties have contributed to them. The names of such men as Mr. Canning, Mr. Huskisson, Sir Robert Peel, Lord Grey, Mr. Cobden, and Mr. Bright belong to very different political parties, but they are men who at different times have worked for these great ends, who have either built a trophy to religious liberty or raised the standard of free trade and carried it through the land, or have reformed abuses in our representative system. Why, then, should there be any intolerance on these subjects? Why should not men, though there may be degrees of difference between them, co-operate when there is a great cause before them and a great battle to be won? We may all receive a lesson in this respect from our Volunteers. You may find among them one man who would like to march a little faster, and another who would like to march a little slower, but they are told that without order and without discipline, unless they all march in line, and at the same pace, they will be useless to their country, and by no means formidable to the enemy. So it should be with regard to Reformers. Some are in a hurry, and would wish to march at the quickest pace possible, others are more cautious and would like to pick their way through the stones and the other obstacles they may meet with. But all should act with union and discipline, and in that way, and that way alone, will they present a front which cannot be broken, and with which they may march from triumph to triumph. I have to thank you all for the support you have given me for so many

years. I shall watch the proceedings of the city of London with the greatest interest. I shall expect to see you act in the same spirit of free trade and in the same spirit of liberty which has animated your ancestors and yourselves, which has built up the great fabric of this constitution, and which has destroyed all the strongholds of monopoly, of restriction, and of protection. I shall expect to see you going on in the same spirit; cheering those who are prepared to advance, and to display that flag of freedom which I am sure will ever be held aloft in your hands. Whatever may be the chances of those combats, I can assure you that deeply in my heart will rest engraved the feeling of gratitude for the support I have received from you, and for the means of boasting that I represented London in the Parliament of the United Kingdom. It was that which strengthened my voice and animated my exertions, and to the last day of my life I shall remember your benefits, and be grateful for the support you have always extended to me."

THE CHARGE AGAINST BARON DE VIDIL.—The final examination of Baron de Vidil on the charge of having attempted to murder his son, Alfred John de Vidil, took place on Monday at the Bow Street Police Court, which was again crowded to excess. An intimation had previously been received by the magistrate from the Home Office to the effect that the case must be dealt with in the ordinary way, and that it was not the intention of the Government to take any unusua step, by coming forward as prosecutors. The son wa in attendance, and looked much better than at eithe of the previous examinations. The prisoner, as before kept his face covered by his hands throughout the inquiry. Several persons from the neighbourhood of Twickenham, who were on the spot immediately after the attack, were now examined, and corroborated the evidence given at the former sitting. At the close of their examination the son was sworn, but he again expressed his determination not to utter a word in evidence against his father. Mr. Corrie then said that he had resolved to commit the prisoner for trial. With regard to bail it was necessary to consider the nature of the punishment to which the prisoner was liable in the event of his conviction, and then ask if he was likely to forfeit any sum of money rather than expose himself to the risk of such punishment. Looking at the question in that point of view, he thought it his duty to decline accepting bail. He felt the less hesitation in coming to that decision, because there was an immediate appeal from his judgment if the prisoner's counsel liked to avail himself of it. There was a judge in town to whom he could apply, and who could reverse the decision within 24 hours if he were disposed to do so. The witnesses were then bound over in the usual form, and the prisoner was committed to Newgate for trial. On Wednesday an application was made to the Lord Chief Justice sitting at chambers for the release of Baron de Vidil from custody, on bail. Two sureties were tendered in a large amount for the Baron's appearance to take his trial at the ensuing sessions of the Central Criminal Court; but after hearing the arguments in support of the application, the Chief Justice declined to interfere with the decision of the police magistrate. The baron therefore will remain in Newgate to await his trial.

THE FATAL AFFRAY IN NORTHUMBERLAND STREET.—A coroner's inquest was opened on Monday at Charing Cross Hospital, on the body of Mr. William John Roberts, who died in consequence of the injuries received in the contest with Major Murray on Friday, the 12th inst. The jury having been sworn proceeded to view the body, which was laid out in one of the rooms of the hospital. It presented an awful appearance, the head apparently being almost cut to pieces. The marvel seemed to be that death had not followed instantaneously on the infliction of such fearful injuries. The surgeons of the hospital described the nature of these injuries as ascertained by the *post mortem* examination. They stated that there were 13 wounds on the head, each caused by a distinct blow with some blunt weapon; the temporal bone was fractured into several pieces, the frontal bone and the roof of both orbits were fractured into three or four pieces, the cheek bone was broken, the right temporal muscle was reduced to a mere pulp, the forefinger of the right hand was fractured, the hand itself was much lacerated, and the right shoulder blade and left arm were much bruised. Death was caused entirely by the injuries on the head. Several witnesses who were on the premises or in the neighbourhood where the affray took place were then examined, but their evidence added nothing to the facts already known, except that Mr. Roberts was a bill-discounter by profession, and that he introduced himself to Major Murray under the assumed name of Gray, by which name Major Murray continued to speak of him after the affray, until put right by those who knew Mr. Roberts's real name. The inquiry was then adjourned to Tuesday, when it was proved that a lady bearing the name of Mrs. Murray, of Elm Lodge, Talbot Road, Tottenham, had been in the habit of calling at Mr. Roberts's office and of accompanying him to the Crystal Palace and the Surrey Music Hall, but it was not proved that she was any connection of Major Murray. It was also proved that though Mr. Roberts ostensibly carried on the business of a bill-discounter in his own office, he was connected with a person called Walker who had an office in the same house, with a person called Hill, an accountant, who last week petitioned the Insolvent Debtors Court, and with two persons called Stocqueler and Eicke, who became notorious some months ago in connection with a trial relating to the sale of commissions in the army, and who have lately been carrying on business in the same house with Mr. Roberts under the assumed name of Nicholson & Co. It appeared that Mr. Roberts was in the habit of writing letters in the names of these parties, and of sharing with them the profits of the transactions in which they were engaged. There was a conflict of testimony on the question whether there was a previous acquaintance between Major Murray and the deceased. It was asserted on one hand that they had frequently met, and that business transactions had taken place between them, while the statements of other witnesses went altogether to establish a contrary conclusion. The son of Mr. Roberts swore that he had seen Major Murray call frequently at his father's office, that he had posted letters to him from his father, and had frequently heard his father talk about him to Mrs. Murray. On the other hand two witnesses deposed that young Mr. Roberts, when at the bedside of Major Murray at the hospital, had distinctly declared that he had never seen Major Murray before he saw him in the hospital. Two police constables were also called to prove that young Roberts had denied knowing Major Murray. One of them, however, said that after the young man returned from the hospital he stated to witness that he knew Major Murray well, that he and his father and Mrs. Murray had dined together at an hotel some three months previous, and that there were money transactions between his father and the Major to a considerable amount. After a sitting of nearly nine hours the inquest was adjourned to Thursday. On that day Miss Anna Maria Moody, the person described as Mrs. Murray by the previous witnesses, was examined. She stated that she has lived with Major Murray, by whom she has one child, for about seven or eight years, and has known Mr. Roberts three or four. Her acquaintance with the latter was made through a trifling pecuniary embarrassment, and by the advice of a female friend she applied to Mr. Roberts as a money lender for a loan of 15*l.*, for which she gave her acceptance for 20*l.* at three months. Before the time elapsed Miss Moody finding herself unable to meet the bill, called on Mr. Roberts and made an appeal for time. He was touched by her beauty, if not by her supplications, and offered to cancel the bill if she would leave Major Murray and become his mistress. This proposal Miss Moody, knowing that he was a married man with a family, said that she indignantly refused; but, notwithstanding, she continued to visit him frequently up to the very week in which the tragedy took place, and wrote and received from him the most affectionate letters. She declared that in pursuing this course she was acting under awe of him, and that though pretending to entertain an affection for him she was far from feeling it, or willingly playing false to her protector, but adopted that course as a piece of "craft," being afraid to inform Major Murray of what had occurred. She represented Roberts as madly in love with her, and said that he had shown her his pistols and intimated that he was ready to commit any act to possess her. When asked whether Roberts had any motive in killing Major Murray, she said "Yes," and when pressed for a reason answered, "He wanted me." It was during these frequent interviews that Roberts acquired a knowledge of Major Murray and his affairs, but Miss Moody emphatically denied the statement of young Roberts that there was any acquaintance between the Major and Roberts, who was not even known to the Major by sight, though she admitted that Roberts had taken her to the Crystal Palace and other places, and had introduced her to his wife as Mrs. Murray. Major Murray was next examined and repeated upon oath his narrative of the affair, substantiating his previous voluntary account of what took place. He stated that Roberts having accosted him in the street and invited him into his office on the pretence of negotiating a loan for the Grosvenor Hotel Company, he took a seat at a table in the back room, to which he was in the first instance admitted, with his face towards the window and his back to the folding doors. Having asked Roberts for his card of address, the latter proceeded, as he thought, to search in the drawer of a table behind his back to find one. Immediately afterwards he felt a slight touch on the back of his neck, heard the report of a pistol, and fell paralysed to the ground. Roberts, he believes, then went into the other room. Presently feeling his strength returning, he raised himself on one arm, when Roberts returned and shot him a second time, wounding his temple. The bleeding from this second wound was considerable, and had the effect of removing the paralysis caused by the first. He then simulated death, and when Roberts had walked away a few paces he sprang to his feet and attacked him with the tongs, but finding that he could not overpower him, he seized a wine bottle and beat him over the head until he was sufficiently disabled to allow him to escape. He then found that the doors were locked and that his only means of escape was by the window, as already related. He added that what he did was in self-defence, and that he should certainly have been murdered if he had not succeeded in disabling his assailant. The jury immediately returned a verdict of Justifiable Homicide, with the expression of their opinion that Major Murray acted as he did in defence of his own life, and with a full belief that he was in the utmost jeopardy. Considerable clapping of hands followed the announcement of the verdict.

FATAL ACCIDENT.—On Saturday a frightful accident occurred in Eaton Square, resulting in the death of an unmarried female named Jane Ann Cooper, 19 years of age, residing at 114, Warwick Street, P[illegible] day she was riding through the [illegible] ran away with her, and soon [illegible] her control. On approaching the [illegible] outlets from the square, the [illegible] round and threw her from her seat. [illegible] iron palisades of the square and re[illegible] wound in the left groin, and other[illegible] just over the left eye, and on the [illegible] besides a fracture of the collar bone and [illegible] rupture of the pulmonary artery. [illegible] had seen the accident had her [illegible] in a cab to St. George's Hospital, [illegible] died before arriving there. At the [illegible] day it was proved that the horse was [illegible] and in great request as a lady's horse [illegible] bear a spur. The deceased was a [illegible] she wore a spur on this occasion with[illegible] of the owner of the horse, and there was [illegible] the spur was the sole cause of the a[illegible] returned a verdict that deceased died from [illegible] of the pulmonary artery, caused by an [illegible] from a horse.

THE PUBLIC HEALTH.—The Registrar[illegible] weekly report states that the number of [illegible] London in the week that ended [illegible] was 1171. The average number [illegible] ing weeks of the ten years 1851-60, [illegible] of population, was 1161. The pres[illegible] fore 10 above the average. [illegible] births of 905 boys and 914 girls, in [illegible] were registered in London. In the [illegible] weeks of the years 1851-60 the [illegible] was 1574.

Provincial.

MIDDLESBOROUGH. — A police [illegible] Richard Buckle has been arrested in [illegible] charged before the magistrates with [illegible] poison his wife. Complaining of [illegible] received from the prisoner some med[illegible] his peculiar demeanour, excited susp[illegible] her to take it to a chemist, who [illegible] discovered a considerable quantity [illegible] prisoner was remanded for further inq[illegible]

SHEERNESS.—Her Majesty's ship [illegible] been removed to Shoeburyness to [illegible] experimental purposes, was consumed [illegible] since. A detachment of Royal Artillery [illegible] shot and shell during the day, and [illegible] about 9 P.M. the vessel was in one [illegible] stem to stern, and continued to burn [illegible] until destroyed. A large number [illegible] on the beach at Southend and Sheer[illegible] spectacle.

TOWN MALLING.—On Friday [illegible] labourer named Atkins, employed on [illegible] James Graham, at New Barnes, mur[illegible] stabbing her in the neck and after[illegible] throat in a field to which she had [illegible] appears that for years he had treat[illegible] manner, in consequence of his ext[illegible] jealousy. He was immediately ap[illegible] Wednesday afternoon the jury at the [illegible] a verdict of Wilful Murder against [illegible] accordingly committed for trial at the [illegible]

Ireland.

THE DERRYMACASH AFFRAY.—The [illegible] the Orangemen of the fatal affray at [illegible] brought to a close on Tuesday. The [illegible] guilty to the minor charges against [illegible] Attorney-General consented to aban[illegible] on the more serious charges. The judge [illegible] them to various terms of imprisonment [illegible] two to eight months.

MURDER IN KING'S COUNTY.—[illegible] a police sergeant named Lawlor was [illegible] in a field, having been shot through [illegible] posed by some person whom he atte[illegible] carrying unlicensed arms, or, perhaps [illegible] serious charge. An inquest was [illegible] when the jury returned a verdict [illegible] against some person or persons unknown.

THE GLASNEVIN GARDENS.—[illegible] Society held a meeting on Thursday, [illegible] majority of 125 to 111 on accepting [illegible] Botanic Gardens, with the condition [illegible] Government, viz., the free opening of [illegible] public on Sundays.

GREAT LIBEL CASE.—At the [illegible] action was brought by Father La[illegible] Oranmore for libel in publishing a [illegible] his conduct, as having tended to [illegible] crime. His lordship pleaded a justi[illegible] lasted several days, and at its close [illegible] Lord Oranmore had justified his [illegible] letter of Father Lavelle had a [illegible] agrarian crime, and that his cond[illegible] proper, disorderly, and disrespect[illegible] however, that Lord Oranmore had [illegible] statement that Mr. Lavelle's letter [illegible] murder of Harrison, and on that issue [illegible] verdict of 6*d.* damages and costs.

Sporting.

ASCOT JULY MEETING.

[illegible] Mr Wm. Day's Anxiety beat [illegible] —*Plate.* Mr R. [illegible] Master [illegible], and 6 others.— [illegible] Gulliver's Dr. Nichol beat Woman in [illegible] Mr [illegible] Chirper, Sycophant, and Convivialist.— [illegible] Mr B. Land's [illegible] and Lord of the [illegible]

[illegible] Count Batthyany's Prince [illegible] and 3 others.—*Plate.* Lord [illegible] Lotty Long, True-blue, [illegible] Mr [illegible]'s Her beat Eben, Brown [illegible] Mr W. G. Craven's Pixie beat [illegible] 5 others.—*Plate.* Mr F. Bradley's [illegible] 3 others.—*Plate.* Mr Smith's [illegible] and 2 others.—Sweeps. [illegible]

Law.

[illegible] —Home Circuit: Chelmsford.—*Child Murder.* [illegible], 42, was charged with the wilful murder [illegible] a half old, by strangling [illegible]. The murder was committed in the month [illegible] where the prisoner resided [illegible] with the mother [illegible] having got the poor child [illegible] strangled him with a shawl. [illegible] motive for the crime, [illegible] the most friendly terms. [illegible] that the prisoner was in the constant [illegible] and that she was at the time of [illegible] and unconscious state and [illegible] what she was about. The jury, after [illegible] returned a verdict of *Guilty.* [illegible] put on the black cap and passed [illegible] in the usual form. [illegible] was charged with setting fire to [illegible] The prisoner [illegible] set them on fire, although there [illegible] any motive except sheer love of [illegible] to be imprisoned and kept to [illegible] and then to be sent to a reformatory [illegible]

[illegible] —*The Queen v. J. C. D. Charlesworth.* [illegible] *Bribery Prosecutions.*—This was a criminal [illegible] Attorney-General against John [illegible] Charlesworth, for certain acts of [illegible] parliamentary election at [illegible] The defendant pleaded not guilty. [illegible] Mr J. B. Charlesworth [illegible] certificate from the Commissioners [illegible] not guilty. [illegible] that counts alleging specific acts of bribery [illegible] not agree, and they were discharged [illegible] a verdict. At the next sitting of the Court [illegible] the Attorney-General had abandoned [illegible] of the information, and that a finding [illegible] "Guilty" would be entered on [illegible] 6th and 7th counts, and [illegible] giving their verdict on the other [illegible] for bribery and other [illegible] election for Wakefield, in April, [illegible] in support of the charge, [illegible] the jury *Acquitted* the [illegible] —William Randall [illegible] and also on the coroner's [illegible] wilful murder of Martha Curtis, his [illegible] on the 24th of June last. [illegible] guilty to the charge, and also to [illegible] The deceased had lived with the prisoner [illegible] and it was [illegible] for the purpose of [illegible] birth of an illegitimate child, and [illegible] the medical evidence failed to prove [illegible] means, or that any such [illegible] the prisoner. The counsel for the [illegible] The jury, after a [illegible] the medical evidence had [illegible] of death, and *Acquitted* the [illegible] charge of making a false certificate [illegible] the prisoner was discharged.

[illegible] —*The Wisbeach Murder.* [illegible] charged with the wilful murder of [illegible] March, and whose trial, on the application [illegible] postponed from the Spring [illegible] at Wisbeach [illegible] years ago, she being then [illegible] of respectable parents, [illegible] The house in which the prisoner and [illegible] her father, and together with a [illegible] was occupied by them rent free, the [illegible] to keep his accounts and to [illegible] On the 22d of March, the prisoner and [illegible] to Wisbeach Market [illegible] They had been disputing [illegible] that his wife had not given [illegible] some wheat. This dispute continued [illegible] to tea, and their maid-servant, who [illegible] ask her for another cup of tea, as [illegible] "I've been considering me all the time; I was at [illegible]" He replied, "I'll do for [illegible] on his asking her to get [illegible] for the wheat. [illegible] She then went upstairs to put on her [illegible] the prisoner followed her, first closing the kitchen [illegible] screams and scuffling [illegible] and the man who had come with the pig [illegible] to force the door, but could not. The prisoner shortly afterwards walked out of his house, and the boy going up stairs found deceased [illegible] alive, but died in about 20 minutes. The prisoner said to the boy "I've done it. [illegible] done the job." He then went to his father's house, a short distance off, and was [illegible] that evening, the prisoner [illegible] fire, smoking and drinking brandy-and-water. On seeing the constable the prisoner said, "[illegible] you? I've done it, haven't I? Is she dead?" On being told that she was, he [illegible] "[illegible]" When in the cell he said to the superintendent, "When shall I be hanged? I want to die." On being placed at the bar and called upon to plead, he [illegible] Mr Justice Wightman then said—I am not quite sure you understand the nature of your plea. By it you confess that you are guilty of killing Charlotte Hunton [illegible] I would earnestly recommend you to [illegible] your plea and to take your trial. Prisoner: I won't alter it [illegible] I am guilty, my lord. Mr [illegible] my lord, by his friends, to defend him. I had an interview with him on Saturday, and he was then quite fixed in his determination to plead guilty. His Lordship, upon this, having put on the black cap, passed sentence of *Death* upon the prisoner in the usual form, expressing his opinion that the evidence of the witnesses, as returned on the depositions, left no reasonable doubt that he was indeed guilty, and that there were no such circumstances of provocation or of excuse as could in any way reduce the crime below that of wilful murder. The prisoner, who throughout the proceedings had shown no sign either of indifference or distress, listened attentively to the sentence, and when it was concluded stepped down from the dock apparently with perfect composure.

Midland Circuit: Nottingham.—*The Nottingham Forgeries.*—*William Langham* pleaded *Guilty* to the charge of forging a bill of exchange for 160*l.* 12*s.*, and *William Tait*, a watchmaker, charged with uttering the same knowing it to be forged, pleaded *Not Guilty.* The jury acquitted Tait, and Langham was sentenced to five years' penal servitude.

Obituary.

Prince Adam Czartoryski, whose death has just taken place at Paris, was born at Warsaw in January, 17[illegible], and had consequently exceeded his 91st year. At an early age he was sent to the University of Edinburgh [illegible] commenced in the house of his father [illegible] were ultimately [illegible] his own country he took an active [illegible] but, after the partition of Poland, was sent to St. Petersburg with his brother in the quality of hostage, and from that time entered upon a new phase of his career. In the Court of Catherine II., he at once established himself as a favourite with the Grand Duke Alexander, owing to whose influence he was sent, in 1797, by the Czar Paul I. on an embassy to Turin. After Alexander ascended the throne the Prince returned, in 1802, to the Russian capital, and was nominated Minister of Foreign Affairs by the new Emperor, despite the Court cabals caused by an appointment of such an unusual character. The Prince, nevertheless, weathered the storm of opposition and continued at his post. In 1805 he signed the treaty concluded between Russia and England, but shortly afterwards [illegible] After visiting the French and Austrian capitals with Alexander [illegible] signed, in consequence of some arbitrary measures by the Russian police against a number of students. When the revolution of 1830 commenced, he felt that it was no longer time for him to remain idle, and that his name and influence should be at the disposal of the patriotic cause. He became in the first place a member of the Administrative Council, and afterwards named President of the Provisional Government, and was subsequently placed at the head of affairs [illegible] Assembly. When, by the progress of events, his services were no longer demanded [illegible] soldier, and fought for the cause of Poland until Poland was no longer able to send an army into the field. He then retired to Paris, where he has resided ever since [illegible] for his political integrity and high-minded patriotism.

Lord Walter [illegible] was found dead in his bed on the 15th inst. at his residence [illegible] Street, Dublin. He had but recently returned from England and had been complaining of weariness. [illegible] epileptic fits, and that epilepsy was the cause of his death. The jury returned a verdict accordingly.

Sir James Cosmo Melvill, K.C.B., died on the [illegible] inst. in his [illegible] year. He was the son of the late Capt. Philip Melvill [illegible] Mr Peter Dobree, of Guernsey [illegible] India Company at [illegible] Knight of the Bath, and in 1858, on the transfer of the government [illegible] of the East India Company, received the thanks of the Court of Proprietors and the Court of Directors of that body for "the distinguished ability, zeal [illegible]" He was the brother of Mr Philip Melvill, late Military Secretary at the India House, the Rev. Henry Melvill, late Principal of Haileybury and Canon of St. Paul's, and General Sir P. M. Melvill, K.C.B., late Military Secretary at Bombay.

The Right Hon. Charles Tennyson D'Eyncourt, who for 20 years represented Lambeth in the House of Commons, died on the 21st inst. at the residence of his [illegible] Palmer, Esq., Gloucester Place, Portman Square [illegible] year. He was the eldest [illegible] of Bayons Manor, Lincolnshire [illegible] Turner, of Caistor, and was the uncle of Alfred Tennyson, the Poet Laureate. [illegible] a Commander of St. Michael and St. George and [illegible] subjects and to science, and was a Fellow of the Royal and Antiquarian Societies.

BIRTHS.—On the [illegible] inst., at [illegible] Park, Suffolk, Lady [illegible] —[illegible] Square, the Hon. Mrs. W. Arthur Duckworth, of a daughter—22d inst., the Hon. Mrs. [illegible] of a son—[illegible] inst., at 46, [illegible] the wife of the Hon. [illegible] W. Warner, C.B., H.B.M.'s [illegible] of a son—[illegible] inst. at 4, [illegible] of a [illegible] inst., at 41, Queen's Gardens, Hyde Park, the [illegible]

MARRIAGES.—On the [illegible] inst., at St. George's, Hanover Square, [illegible] second son of the Earl and Countess of Haddington, to Miss Pringle, eldest daughter of Sir John and Lady Elizabeth Pringle, and [illegible] inst., at St. George's, Hanover Square, the Hon. Henry Coke, brother of the Earl of Leicester, to the Lady Katharine [illegible] daughter of the Earl of Wilton—11th inst., at Marylebone Church, William Wybrow Robertson, youngest son of the late Major-General Robertson, to [illegible] daughter of the Right Hon. Thomas Milner Gibson [illegible] St. John's Church, Keswick, Charles G. F. Knowles, Lieutenant R.N., eldest son of Sir Francis C. Knowles, Bart., to Elizabeth, [illegible] of John Chapman, Esq., of Cleveland Square, Hyde Park—20th inst., at St. John's, Richmond, [illegible] Scott, Esq., of the 7th Dragoon Guards, eldest son of Sir Claude Scott, Bart., to Maria [illegible], second daughter of Dr. Henry C. Burney, LL.D., of Richmond, formerly of Gosport, and granddaughter of the late Admiral Searle, C.B.—[illegible] inst., at St. John's Church, Paddington, the Rev. Robert Gregory, to Charlotte Anne, youngest daughter of the late Admiral the Hon. Sir R. Stopford—18th inst., at Trinity Church, Tunbridge Wells, the Rev. [illegible] Way, vicar of Henbury, [illegible] to Caroline, second daughter of the late Admiral [illegible] inst., at the Chapel Royal, Dublin, Captain Farmer, Grenadier Guards, of Nonsuch Park, Surrey, to Charlotte Maria, second daughter of Robert Williams, Esq., of Dublin Castle, and niece of Sir R. Williams [illegible], Bart., [illegible], Anglesea.

DEATHS.—On the 22d inst., at her residence, Green Park, [illegible] Countess of Belmont, aged 77—[illegible] inst., at [illegible] the Hon. Mrs. [illegible] widow of the Rev. [illegible] Hatfield, Yorkshire—[illegible] Australia, John [illegible] Murray, Esq., eldest son of Sir John Digby Murray, Bart.—20th inst., at Frome, Miss Mary Jane Ouseley, sister of the Rev. Sir Frederick Ouseley, Bart., and eldest daughter of the late Sir Gore Ouseley [illegible] Edwardes, Bart., aged [illegible] Mary Leveson Gower, the [illegible] daughter of the late General Leveson Gower [illegible] inst., at St. Leonard's-on-Sea, Caroline Jemima, widow of John Ross Hutchinson, Esq., [illegible] Annie Martha, wife of [illegible] John [illegible] Neilgherry [illegible] daughter of Lieutenant-Colonel A. C. [illegible] inst., at [illegible] Maria Theresa [illegible] widow of the late John Walker, Esq., of Purbrook Park, in the county of Hants, the daughter of the late Henry [illegible], Esq., of Hamsterly, in the county of Durham—20th inst., in Upper Brook Street, Grosvenor Square, Anne, wife of John Ireland Blackburne, Esq., of Hale, Warrington—21st inst., in Wimpole Street, Miss Louisa Fireboid Lake, of Burleigh Hall, Leicestershire, aged 8[illegible].

Markets.

COVENT GARDEN, July 27.

Both Vegetables and Fruit are now nearly equal to the demand. Endive and Artichokes still come from the Continent, also Apricots and Green Figs, excellent Greengages, and new Apples and Pears. West India Pines continue [illegible]. Peaches plentiful and cheap. Grapes are abundant. Of Strawberries the supply is now rapidly decreasing, and the same may be said of Cherries. Broad Beans, young Carrots, and new Potatoes of excellent quality may be had in quantity. [illegible] Cucumbers are [illegible]. Cut flowers chiefly consist of [illegible], Lily of the Valley, Pelargoniums, Violets, Mignonette, Heaths and Roses.

FRUIT.

Pine Apples, per lb., 4s to 6s	Currants, p. ½ sieve, 5s
[illegible], per lb., [illegible] to 5s	Gooseberries, do., 5s
Strawberries, p. pottle, 6d to 1s	Pears, per doz., [illegible] to 1s 6d
[illegible], each, [illegible] to 4s	Apples, per doz., 6d to 1s
[illegible], per doz., [illegible] to [illegible]	Greengages, per 100, 6s to 14s
[illegible], do., [illegible]	Lemons, per [illegible], 6s to 10s
[illegible], do., 1s to [illegible]	Nuts, Cob, per [illegible], 1s to 1s 6d
[illegible]	

VEGETABLES.

[illegible], each, [illegible]	Beet, per doz., 1s 6d to 6s
[illegible]	Celery, p. bundle, 1s 6d to 2s 6d
[illegible]	Onions, p. ½ sieve, 4s 6d
[illegible]	Asparagus, p. bundle, [illegible]
[illegible], 1s 6d to 1s 6d	[illegible], p. bundle, [illegible]
Potatoes, p. ton, [illegible]	[illegible], p. [illegible], 1s to 1s
— per lb., [illegible]	Shallots, per lb., 1s 6d
— — per cwt., 4s to 5s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 4d to 6d	Endive, p. doz., 1s to 2s
Carrots, new, do., 1s to 1s 6d	Horse Radish, p. bun., 1s 6d to [illegible]
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., [illegible]
Cucumbers, each, [illegible]	Parsley, p. [illegible] bunches, [illegible]
[illegible]	Savory, per bunch, 2d to 4d
Artichokes, each, 4d to 6d	

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, Thursday, July 25.

Prime Meadow Hay	[illegible]	[illegible]	Clover	80s to 120s	
[illegible]	[illegible]	[illegible]	New Clover	—	—
[illegible]	[illegible]	[illegible]	Do. second cut	—	—
[illegible]	[illegible]	[illegible]	Straw	30	40
[illegible]	[illegible]	[illegible]		Dunn & Co.	

CUMBERLAND MARKET, Thursday, July 25.

Sup. Meadow Hay	[illegible]	[illegible]	Inferior Clover	70s	[illegible]
Inferior do.	[illegible]	[illegible]	New do.	80	100
New do.	[illegible]	[illegible]	Straw	40	44
Superior Clover	[illegible]	[illegible]		Joshua Baker.	

WHITECHAPEL, Thursday, July 25.

Fine old Hay	[illegible]	[illegible]	Fine old Clover	115s to 120s	
Inferior do.	50	[illegible]	Inferior do.	[illegible]	95
Low Inferior	—	—	Fine 2d cut	100	105
Prime New Hay	72	[illegible]	Inferior do.	—	—
Straw	[illegible]	[illegible]	Fine New Clover	[illegible]	100

BUTTER MARKET.—July 26.

Best Fresh Butter .. .. 14s. per dozen lbs.
Second do. do. .. .. 12s. „ „

Pork, 4s. 0d. to 4s. 8d. per 8 lbs.

HOPS.—Borough Market, Friday, July 26.

Messrs. Pattenden & Smith report that although the account from the plantations are anything but satisfactory, there is but little business doing. Where sales are effected full prices are obtained. Duty 110,000*l*.

BRITISH WOOLS.—London, Friday, July 26.

There has been considerable activity in our business since our last report, and advances have been made on all descriptions of wool. This has been brought about by the fact of a deficiency of the present clip in the Down wool districts having become evident to the buyers, as well as to the present prices being considered a safe investment, as the quantity on hand is by no means so large as might have been expected, considering the falling off in our trade with America, and with any favourable occurrences in that direction the price of wool would no doubt advance considerably, as the general trade of the country continues on a large scale.

	s. d.	s. d.		s. d.	s. d.
South-down Hoggets..	.. ..	to 1 5	Leicest. Wethers	1 2	to 1 3
Half-bred ditto..	1 5	— 1 6	Ditto Hoggs ..	1 3	— 1 4
Down Ewes ..	1 4	— 1 5	Combing Skins	1 0	— 1 5
Kent Fleeces ..	1 5	— ..	Flannel Wool .	1 0	— 1 5
			Blanket ditto ..	0 6	— ..

The Colonial Wool Sales continue at about the opening rates.

COAL MARKET.—July 26.

Walls End Trimdon Hartlepool, 19s. 9d.; Walls End Russell Hettons, 19s. 6d.; Walls End South Kelloe, 19s. 6d.; Walls End Heugh Hall, 19s.; Walls End Eden Main, 18s. 6d.; Walls End Thorpe, 17s. 9d; Walls End Whitworth, 15s. 6d.; Wylam, 15s. 6d.; Tanfield Moor Butes, 13s. 3d.—22 ships at market.

METROPOLITAN CATTLE MARKET.

Monday, July 22.

We have a few more Beasts than on Monday last, and consequently there is on the average a small reduction in price. The number of Sheep and Lambs is about the same as on Monday last. Trade is brisk at Thursday's quotations. There is no alteration in the Calf trade. From Germany and Holland there are 1450 Beasts, 6520 Sheep, 246 Calves, and 120 Pigs; from Scotland, 200 Beasts; from France, 38 Calves; from Ireland, 145 Beasts; from Norfolk and Suffolk, 600; and 1100 Beasts from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 10	to 5 0	Best Long-wools.	..	to ..
Best Short-horns	4 8	— 4 10	Do. Shorn ..	4 10	— 5 0
2d quality Beasts	3 6	— 4 0	Ewes & 2d quality	..	— ..
Best Downs and Half-breds	.. ..	to ..	Do. Shorn ..	4 4	— 4 8
Do. Shorn ..	5 0	to 5 2	Lambs	5 0	— 6 0
			Calves	4 0	— 4 10
			Pigs	3 8	— 4 6

Beasts, 4360; Sheep & Lambs, 25,290; Calves, 357; Pigs, 350.

Thursday, July 25.

We are very scantily supplied with good Beasts, consequently Monday's quotations are well supported, and in a few instances exceeded. The supply of Sheep is shorter; trade is lively at rather higher rates. The demand for Lamb has decreased, a clearance cannot be effected. Trade is worse for Calves. Inferior quality is scarcely saleable. Our foreign supply consists of 290 Beasts, 2600 Sheep, and 515 Calves. The number of Milch Cows is 95.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 10	to 5 0	Best Long-wools.	..	to ..
Best Short-horns	4 8	— 4 10	Do. Shorn ..	4 10	— 5 2
2d quality Beasts	3 6	— 4 0	Ewes & 2d quality	..	— ..
Best Downs and Half-breds	.. ..	— ..	Do. Shorn ..	4 4	— 4 8
Do. Shorn ..	5 0	— 5 4	Lambs .. .	5 0	— 6 0
			Calves	3 8	— 4 8
			Pigs	3 8	— 4 6

Beasts, 975; Sheep & Lambs, 12,320; Calves, 735; Pigs, 120.

MARK LANE.—Monday, July 22.

The supply of Wheat from Essex and Kent to this morning's market was very small, and commanded the full prices of Monday last. The market was tolerably attended, and a moderate business was transacted in foreign in retail at late rates. Barley, Beans, and Peas are firm at the prices of this day se'nnight. The Oat trade is steady, and fine qualities bring an advance of 6d. per qr. Flour is quiet, without alteration in value.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk..White	46—63	Red	46—60
— — fine selected runs..ditto	50—76	Red	50—65
— — Talavera	51—67		
— Norfolk	—	Red	—
— Foreign	40—74		
Barley, grind. & dist., 26s to 27s.. Chev.	36—40	Malting .	34—36
— Foreign..grinding and distilling	27—30	Malting .	33—36
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign........Poland and Brew	20—23	Feed ..	19—21
Rye	35—37	Foreign.	—
Rye-meal, foreign	—		
Beans, Mazagan....37s to 40s.... Tick	40—43	Harrow .	40—43
— Pigeon ......41s — 45s.. Winds	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
Peas, white, Essex and Kent ..Boilers	34—37	Suffolk .	38—39
— Maple .... —s to —s ...... Grey	40—42	Foreign .	35—38
Maize .... White	—	Yellow..	—
Flour, best marks delivered..per sack	50—55		
— 2d do. .... ditto	34—50	Country.	34—50
— Foreign ....per barrel	26—32	Per sack	43—53

Friday, July 26.

Since the 19th inst. the temperature has been summer-like, the weather has continued changeable with more or less rain daily, without, however doing any serious injury to the crops. The wind blew mostly from the S. and S.W., yesterday heavily. In the markets of the interior the Wheat trade was generally dull in the earlier part of the week owing to the large arrivals principally from America, and to effect sales ex ship in many cases an allowance of 1s. to 2s. per qr. was necessary, varying according to condition of the bulks, but during the last few days no further decline seems to have been submitted to, as the inquiry for export to France and Belgium is again on the increase. Barley supported late rates, but Oats were easier to buy in the outports, while the prices stiffened in London; good sweet heavy corn is scarce everywhere. Beans and Peas continue to attract but little notice, though they are less pressed for sale. Flour has sympathised with the Wheat trade, and the value receded 6d per barrel and 1s. per sack, particularly in Scotland and Liverpool, where the American supplies are most felt. Since Friday last 56 cargoes have been reported off the coast. The floating trade has been very quiet, without any material alteration in prices. The arrivals of grain and Flour this week have been moderate. To-day's market was not largely attended. English Wheat was inquired after at the extreme rates of Monday; foreign was also held more firmly, particularly the spring American qualities, which are chiefly taken for export, but the amount of business transacted continues to be limited. Barley, Beans, and Peas are unaltered in value. The Oat trade is firm, and fine qualities are scarce and fully as dear. For Flour there is rather more demand, and in some instances a trifling advance was obtained.

Arrivals from July 22 to July 26.

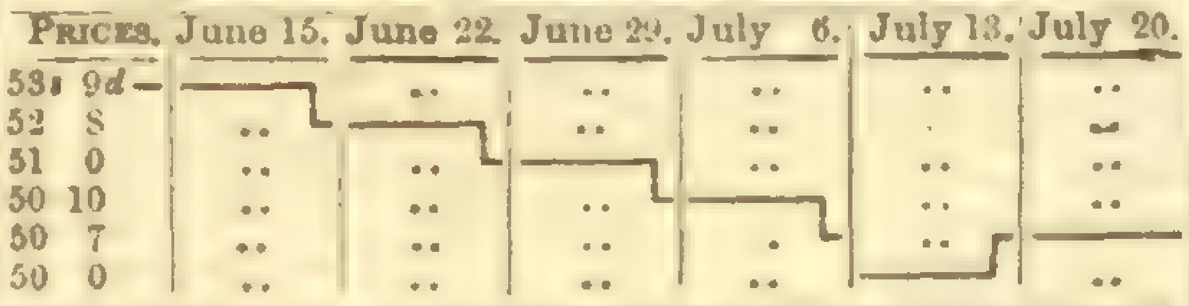
	Wheat.	Barley.	Oats.	Flour.
English ..	880 qrs.	— qrs.	70 qrs.	830 sks.
Irish	— „	— „	120 „	— „
Foreign ..	11260 „	3730 „	6840 „	— „ / 6350 brls.

Liverpool, Tuesday, July 23.—Prices have remained firm in the interval since Friday, though the business passing has been quiet in retail, and buyers shy to operate. We had a fair attendance of millers and dealers at this morning's market, and a good consumptive demand was experienced for Wheat, the finer qualities bringing fully Friday's prices, but new and red, such as Canadian and Milwaukee, declining about 2d. per cental. Flour was not much dealt in, and no change in value occurred. Indian Corn had a good inquiry at previous rates for all qualities. Oats and Oatmeal dull of sale. Beans steady at Friday's quotations, with buyers for forward delivery. Peas and Barley unchanged. The day is showery, the barometer standing at a low point, and holders not in the least anxious to press sales.

Friday, July 26.—In consequence of the unfavourable state of the weather there is a general opinion prevalent that the harvest in this district cannot be ready before the 15th of next month; the trade, however, continues without excitement. The transactions in all articles being on a moderate scale, no material alteration is reported in prices.

Averages	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
June 15..	53s 9d	34s 3d	25s 2d	31s 2d	44s 3d	44s 1d
— 22..	52 8	32 6	25 2	45 5	44 0	38 8
— 29..	51 0	31 3	25 0	39 4	43 3	37 1
July 6..	50 10	31 9	26 0	35 9	43 11	39 11
— 13..	50 0	30 4	24 6	33 0	42 4	42 0
— 20..	50 7	30 3	25 9	38 3	42 8	37 10
Agg. Aver.	51 9	31 9	25 5	36 4	43 5	39 7

Fluctuations in the Last Six Weeks Averages.



Three Counties Lunatic Asylum, near Arlsey, Bedfordshire.

WANTED, a FARM BAILIFF to manage the Farm attached to this Institution. Salary 80*l*., with an Unfurnished House and Gas, and 1½ rood of Garden Ground. The duties to commence on the 29th of September next. Applications in the handwriting of Candidates, accompanied by Testimonials, to be transmitted to the Clerk to the Committee of Visitors, St. Cuthbert Street, Bedford, on or before SATURDAY, August 17, of whom further particulars may be obtained.—Bedford, July 27.

WANTED, a WORKING GARDENER.—Wages 20s. per week. No cottage.—Apply A. B., 23, Bishopsgate Within, E.C.

WANTED, an experienced TRAVELLER for the Nursery and Seed Trade.—Apply by letter only to Messrs. Milne & Co., Camellia Nursery, London, S.

WANTED, as GARDENER and COOK, a Man and Wife, without incumbrance.—Apply by letter or personally at Priestwood House, Bracknell.

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GARDENER (Head).—Age 36, married; has had great experience in all kinds of Early and Late Forcing, including Pines, Grapes, Peaches, &c., and the General Routine of Gardening; the Laying out and Improvement of Pleasure Grounds, &c. Five years' good character.—S. S., Mr. J. Veitch, Exotic Nursery, King's Road, Chelsea, S.W.

GARDENER (Head, to any nobleman or gentleman).—Age 42, married, no incumbrance; good practical knowledge and experience; is thoroughly acquainted with Early and Late Forcing, and a good Kitchen and Flower Gardener. Can have two years' good character from the place he is now leaving.—J. B., Wood Lodge, Shooter's Hill Castle, Kent, S.E.

GARDENER (Head, to any nobleman or gentleman).—Age 39, married; thoroughly practical; 25 years' experience in Cultivating Fruits, Flowers, and Vegetables. Can take the care of Plantations, and can have a most unexceptionable character of 14 years' standing from the place he is about leaving. The reason for leaving is death of employer.—A. Halyburton, the Gardens, Barrock Park, near Carlisle.

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GARDENER (Head).—Age 26, single; thoro... understands Early and Late Forcing, and Flow... Kitchen Gardens. Six years' unexceptionable chara... G. G., Post Office, Chiselhurst, Kent, S.E.

GARDENER (Head).—Single; thoroughly ... stands his profession; having passed 11 years in ... establishments. Four years' character.—13, Union ... New North Road, Islington, N.E.

GARDENER (Head).—Age 31, married, ... has had 20 years' practical experience of his profe... Excellent character.—F. Willgress, Heath La... Twickenham, S.W.

GARDENER (Head).—Age 28, single ... understands Forcing Flowers, Fruit, ... and Gardening in all its branches.—N. P., ... Cheshunt, Herts.

GARDENER (Head).—Age 26; has a ... tical knowledge of Pines, Vines, Peaches, ... Melons, and Flower and Kitchen Gardens.—A. B., ... Nurseryman, King's Road, Chelsea, S.W.

GARDENER (Head).—Age 30, married, ... brance; well understands his profession. Wi... charge of Poultry if required. Can be well recomm... A. X., Cutbush, News Agent, Highgate, N.

GARDENER (Head, Working).—Age 45, no ... brance: understands Vines, Strawberries, For... Two years' character.—A. A. Davis, 2, Albion Pla... Court, Old Brompton, Middlesex, S.W.

GARDENER (Head, Working).—Unde... Gardening in all its Branches and Management ... Wife understands Dairy. Eight years' good cha... A. B., Mr. Goddard, High Cross, Tottenham, N.

GARDENER (Head, Working).—Thor... understands Pines, Vines, Stove and Greenho... Flower and Kitchen Gardens, &c. Character unex... from present and previous employers.—G. C., ... News Office, Bromell's Road, Clapham Common, S.

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The Gardeners' Chronicle Newspaper.

SATURDAY, AUGUST 3, 1861.

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5 feet ,, ,, ...	3	5	0
5 feet 6 in. ,, ,, ...	3	10	0

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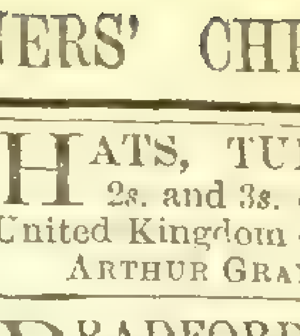

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LABELS FOR THE HERBARIUM, consisting of the Names of the Classes, Alliances, Orders, and Sub-Orders, of Professor LINDLEY'S "Vegetable Kingdom."
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J. MATTHEWS, 41, Wellington Street, Covent Garden, W.C.

News of the Week.

IN the House of Lords on Friday, on the order for considering the Commons' reasons for disagreeing to their Lordships' amendments on the Bankruptcy and Insolvency Bill, the LORD CHANCELLOR moved that the House should accept the reasons of the Commons for their disagreement, and consent to allow certain of their Lordships' amendments to be struck out. Lords CRANWORTH, CHELMSFORD, and WENSLEYDALE opposed the motion, and on a division the House resolved to insist on their amendment negativing the appointment of a chief judge by 80 to 46. Their Lordships' amendment relating to the official and creditors' assignees was not insisted on. On Monday Earl GRANVILLE moved that the House resolve itself into committee on the Appropriation of Seats (Sudbury and St. Albans) Bill. Lord STRATHEDEN moved as an amendment that the Bill be referred to a select committee. The Earl of DERBY and Earl GRANVILLE opposed the amendment, which was ultimately withdrawn. The House then went into committee on the Bill and agreed to all the clauses. On the motion for the second reading of the Municipal Corporations Act Amendment Bill, Lord WENSLEYDALE moved that the Bill be read a second time that day three months. On a division the amendment was negatived by 44 to 27, and the Bill was read a second time. The Enlistment in India Bill was read a second time. The East India Civil Service Bill, the Irremovable Poor Bill, the East India (High Court of Judicature) Bill, the Volunteer Tolls Exemption Bill, the Copyright of Designs Bill, and the Crown Suits Limitation Bill, were read a third time and passed. On Tuesday the Accessories and Abettors Bill, the Criminal Statutes Repeal Bill, the Malicious Injuries to Property Bill, the Offences against the Person Bill, the Public Works and Harbours Bill, and the Durham University Bill, were read a second time. The Enlistment in India Bill, and the Municipal Corporations Act Amendment Bill, passed through committee. On Thursday the Royal Assent was given by Commission to several Bills. The Commons' amendments to the Leases by Incumbents Restriction Bill, and to the Portpatrick Harbour (Scotland) Bill were considered and agreed to. The Metropolis Gas Act Amendment Bill, the Lace Factories Bill, the Gunpowder Act Amendment Bill, and the Episcopal and Capitular Estates Act Continuance Bill were read a second time. The Industrial Schools (Scotland) Bill, the Industrial Schools Bill, and the Enlistment in India Bill were read a third time and passed. The seven Bills introduced by the Government for the Consolidation of the Criminal Law, the Public Works and Harbours Bill, the Durham University Bill, the Conjugal Rights (Scotland) Bill, and the Metropolitan Buildings Act Amendment Bill passed through committee. The Consolidated Fund (Appropriation) Bill was brought up from the Commons, and read a first time.

In the Commons on Friday the House went into committee of supply on the Supplemental Estimates. On the vote for iron-cased ships, an important statement was made by Lord PALMERSTON and Lord C. PAGET in regard to the efforts making by France and other nations to increase their iron navy, the result of which was that the opposition to the vote was withdrawn, and the vote was unanimously agreed to. The Drainage of Land Bill passed through committee. The report on the East India loan was brought up and leave given to introduce a bill founded upon it. On Saturday the Appropriation Bill was brought in and read a first time. The Windsor Suspended Canonries Bill, the Gunpowder, &c., Act Amendment Bill, the Episcopal and Capitular Estates Acts Continuance Bill, the Edinburgh University Bill, and the Revenue Departments Accounts Bill, were read a third time and passed. On Monday, on the order for the second reading of the Consolidated Fund (Appropriation) Bill, Lord R. MONTAGU moved as an amendment that the second reading be deferred until the Bill had been printed and delivered to members. After some discussion the amendment was negatived without a division, and the Bill was read a second time. The East India Loan (No. 2) Bill, the Militia Pay Bill, the Militia Billets Suspension Bill, and the East India Council, &c., Bill, were read a second time. The Drainage of Land Bill, the Public Offices Site Bill, and the Pensions British Forces (India) Bill, were read a third time and passed. On the motion for going into committee on the Wills and Domicile of British Subjects Abroad, &c., Bill, Sir G. BOWYER moved, as an amendment, that the Bill be committed that day three months

After some discussion on the relative merits of this Bill and of the Wills of Personalty by British Subjects Bill (prepared in the other House by Lord KINGSDOWN), Mr. MALINS suggested that the better course would be to compromise matters by passing both Bills through committee. Lord PALMERSTON assented to this suggestion, and the amendment having been withdrawn, both Bills passed through committee. The Officers of Reserve (Royal Navy) Bill was read a second time. The Government of the Navy Bill and the Corrupt Practices Prevention Act (1854) Continuance Bill passed through committee. On Tuesday Lord PALMERSTON stated, in answer to Mr. GREGORY, that her Majesty's Government had considered it their duty to observe a policy of strict neutrality in the differences between Austria and Hungary; but they attached due weight to the maintenance of the Austrian empire as a great Power in the centre of Europe, holding a balance between opposite and conflicting interests, and should consider it a great evil to Europe if that empire were dissolved by any internal convulsions. The Consolidated Fund (Appropriation) Bill, the East India Loan (No. 2) Bill, the Militia Pay Bill, the Militia Ballot Suspension Bill, the Statute Law Revision Bill, the Parochial Offices Bill, the Local Government Supplemental (No. 2) Bill, and the Officers of Reserve (Royal Navy) Bill, passed through committee. The Treasury Chest Fund Bill was read a third time and passed. The Lunatics (Scotland) Bill was withdrawn. On Wednesday, on the motion for going into committee on the Lunacy Bill, Mr. WALPOLE stated various objections to the measure, and Colonel FRENCH moved as an amendment that the Bill be committed that day three months. On a division the amendment was carried without a division, and the Bill was consequently lost. The Consolidated Fund (Appropriation) Bill, the East India Loan (No. 2) Bill, the Militia Pay Bill, the Militia Ballots Suspension Bill, the Wills and Domicile of British Subjects Abroad Bill, the Wills of Personalty by British Subjects Bill, the Statute Law Revision Bill, the Corrupt Practices Act (1854) Continuance Bill, the Landed Estates (Ireland) Act (1858) Amendment Bill, the Metropolitan Police District Receiver Bill, the Parochial Offices Bill, the Local Government Supplemental (No. 2) Bill, and the Government of the Navy Bill, were read a third time and passed. The Indictable Offences (Metropolitan District) Bill was withdrawn. On the order for considering the Lords' reasons for insisting on their amendments in the Bankruptcy and Insolvency Bill, the ATTORNEY-GENERAL moved that the House should not insist upon its disagreement to the amendment made by the Lords, as far as related to the appointment of a chief judge The motion was agreed to. The Volunteers Toll Exemption (No. 3) Bill passed through committee. On Thursday, on the order for the third reading of the Officers of Reserve (Royal Navy) Bill, Mr. LINDSAY and other members expressed a hope that some understanding would be come to between the Governments of France and England for the purpose of limiting the naval forces of the two countries. Lord PALMERSTON in reply said that he did not think it consistent with the dignity or honour of a country like England to enter into negotiations with any foreign Power as to what should be her force either by land or sea. The nature and extent of that force must depend upon peculiar circumstances, and he could not therefore hold out any hope of the suggested proposal being made. The Bill was then read a third time and passed. The Probate and Letters of Administration Act (Ireland) Amendment Bill was read a second time. The Lords' amendments to the Naval Medical Supplemental Fund Society Bill, the Salmon Fisheries Bill, and the Dealers in Old Metal Bill were considered and agreed to.

From the United States we learn that General M'CLELLAN, since his defeat of the Secessionists at Rich Mountain, has occupied Beverley, where Colonel POGRAM surrendered with 900 or 1000 prisoners. Another Federal force has routed the Secessionists under General GARNETT, who was killed while rallying his men. The main body of the Federal army under General M'DOWELL left Arlington on the 16th ult. for Manasses Junction with a view to bring about a general engagement. It met with no serious resistance until it reached Dulbram, a fortified position three miles from Manassas Junction, which it attacked on the 18th, when the advanced guard was repulsed by the Confederates. The position, however, was afterwards carried by the Federal troops. On the 16th another division of the Federal army entered Fairfax without resistance, the Confederates having fled at its approach. On the 20th the contending armies were within a mile of each other near Manassas Junction, and a battle was hourly expected.

Home News.

THE COURT.—The Queen, Prince Consort, the Crown Prince and Princess of Prussia, and the Royal family continue at Osborne. On Friday the Queen, the Crown Prince and Princess of Prussia, and Princess Alice drove out. On Saturday the Crown Prince and Princess of Prussia and Princess Alice crossed to Southampton in the Royal yacht Fairy, and went by special train to Winchester to see the Cathedral and the Hospital of St. Cross. The Royal party returned to Osborne in the evening. Prince Philip and Prince Augustus of Saxe-Coburg visited her Majesty from Worthing, and returned in the evening. On Sunday morning the Queen and Prince Consort, the Crown Prince and Princess of Prussia, Princesses Alice, Helena and Louisa, Prince Arthur, and Prince Leopold, attended Divine service at Osborne. The Rev. G. Prothero officiated. The Queen, Prince Consort, and Royal family afterwards walked out. On Monday morning the Crown Prince and Princess of Prussia and Princess Helena crossed to Southampton in the Fairy, and went thence by railway to Salisbury, to see the Cathedral. The Queen, Prince Consort, and Princess Louisa drove out. On Tuesday the Queen, the Crown Prince and Princess of Prussia, and Princess Helena drove out. On Wednesday morning the Prince Consort came to town, and presided at a meeting of the Council of the Duchy of Cornwall and at a meeting of the Royal Agricultural Society. His Royal Highness afterwards visited the Horticultural Gardens at South Kensington, and returned to Osborne in the evening. The Queen and Princess Helena drove out. The Crown Prince and Princess of Prussia, and Princess Alice rode on horseback.

THE ARCHDUKE AND ARCHDUCHESS MAXIMILIAN OF AUSTRIA were expected to arrive at Osborne yesterday on a visit to her Majesty. On Thursday evening their Imperial Highnesses paid a visit to the Horticultural Gardens at South Kensington.

THE LATE DUCHESS OF KENT.—The mausoleum of the Duchess of Kent in the grounds of Frogmore Lodge was consecrated on Monday by the Bishop of Oxford, and the remains of her Royal Highness were removed on Thursday from St. George's Chapel to the mausoleum in the strictest privacy.

MINISTERIAL MOVEMENTS.—Mr. Layard, who was for a short time Under-Secretary for Foreign Affairs in Lord John Russell's Government, has succeeded Lord Wodehouse in that office. Earl de Grey has resumed the office of Under-Secretary for War, and Mr. T. G. Baring has returned to the India Office as Under-Secretary of State.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of the First Lord of the Treasury, in Downing Street.

THE PEERAGE.—The Queen has directed letters patent to be passed under the Great Seal, granting the dignities of Viscount and Earl of the United Kingdom to Lord John Russell and the heirs male of his body lawfully begotten, by the titles of Viscount Amberley, of Amberley, in the county of Gloucester, and of Ardsalla, in the county of Meath, and Earl Russell, of Kingston-Russell, in the county of Dorset.

LORD HERBERT.—The benefit which Lord Herbert was expected to receive from a sojourn at Spa has not been realised, and in consequence of increasing feebleness his lordship has returned to England. He landed at Dover on Sunday from Calais, and has since left town for Wilton House, near Salisbury.

THE GOVERNOR-GENERALSHIP OF INDIA.—The Earl of Elgin has been appointed to succeed Lord Canning as Governor-General of India.

THE INDIAN ORDER OF KNIGHTHOOD.—Her Majesty has conferred the Knighthood of this new Order upon Lord Combermere and Sir George Pollock.

PARLIAMENTARY MOVEMENTS.—The Ministerial whitebait dinner which precedes the prorogation of Parliament took place on Wednesday at the Trafalgar, Greenwich.—The City of London election terminated on Tuesday in the return of Mr. Western Wood, the Liberal candidate, by a majority of 506 over Alderman Cubitt, the Lord Mayor, the numbers being 5747 to 5241. Sir George Grey has been re-elected for Morpeth, Sir Robert Peel has been re-elected for Tamworth, and Mr. Cardwell has been re-elected for Oxford all without opposition. Mr. Coles has been elected for, Andover, in the room of the Lord Mayor, without opposition. The election for Selkirkshire, [illegible] the retirement of Mr. Lockhart, terminated [illegible] nesday in the return of Lord Henry Scott, the [illegible] vative candidate, by a majority of 22 over [illegible] William Napier, the numbers being 158 to 136.

THE CHANNEL FLEET has been recalled [illegible] North Coast of Ireland. It sailed so sud[illegible] Lough Swilly on Sunday morning that some [illegible] crews who were ashore on leave were left [illegible] On Tuesday morning the fleet was compelled [illegible] of weather to put into Belfast Lough, but [illegible] again on the same evening for Plymouth.

INDIAN COUNCIL.—Colonel Thomas Townsend [illegible] C.B., of the Madras Engineers, has been ap[illegible] Military Secretary to the Secretary of State for [illegible] in the room of Colonel Baker, appointed [illegible] the Indian Council. Mr. Danvers, of the [illegible] has been appointed to succeed the late [illegible] Melvill as Government Director of the Indian [illegible] Companies.

COLONIAL APPOINTMENTS.—The Queen [illegible] pointed J. S. Bushe, Esq., to be Colonial Secret[illegible] Trinidad; James Coleman Fitzpatrick, Esq., Bar[illegible] at-Law, to be Judge of British Caffraria; Fre[illegible] Saunders, Esq., to be Treasurer of Ceylon; [illegible] Jacobs, Esq., to be Attorney-General for [illegible] Caffraria; and Henry Pering Pellew Crease, Esq., Attorney-General for British Columbia.

THE VOLUNTEERS.—The London Rifle Brig[illegible] accordance with a suggestion made a short time [illegible] his Royal Highness the Commander-in-Chief [illegible] public meeting, resolved last week to undergo [illegible] encampment at Aldershott for the purpose of [illegible] the practical duties of military life in connec[illegible] the regular troops. The War Office, however [illegible] refused to furnish the Brigade with camp [illegible] ments for their proposed encampment, the [illegible] notified to the corps that all orders relating [illegible] cancelled.

Foreign.

FRANCE.—The Emperor arrived at Fontainebleau [illegible] Wednesday evening from Vichy, having postpone[illegible] to Chalons in order to stay some days with the Em[illegible] before proceeding to the Camp. His Majesty [illegible] by St. Germain-des-Fossés and inaugurated the [illegible] branch railway from Nevers to Montargis. The [illegible] of Prussia has accepted the invitation of the Emperor [illegible] visit him at the Camp about the 19th inst., [illegible] grand review and manœuvres will take place. [illegible] expected that the King will visit [illegible] returns to Berlin, and it is stated that [illegible] the King the Emperor will go to Brühl to [illegible] Prussian military manœuvres. The King of Sweden [illegible] expected to arrive in Paris on the 7th inst. [illegible] Fleury arrived at Vichy on Sunday night from [illegible] and the Chevalier Nigra arrived in Paris on We[illegible] to represent the King of Italy at the court of the T[illegible] The rumour of the recall of General Goyon from [illegible] unfounded. The Siamese Ambassadors are [illegible] ports of France. It is stated that the ratific[illegible] the treaty relating to the coolies was exch[illegible] Tuesday, and that the publication in the M[illegible] shortly follow.—The dissatisfaction caused [illegible] speeches of Mr. Kinglake and Lord John R[illegible] the "Sardinian question" is greatly increas[illegible] debate on the armaments, by the avowal of [illegible] say that he had been misled by the French [illegible] authorities, and, above all, by the unanim[illegible] which the money was voted. The *Patrie* says:—

"The extension of the maritime power of France [illegible] other limits than her resources and her interests [illegible] no other, and never will we allow the will or the [illegible] foreigners to fix any. France is far from [illegible] maritime superiority of England, but she is under [illegible] tion to make the development and progress of [illegible] subordinate to the jealous caprices of her ally. [illegible] endeavoured to make up for lost time. The best [illegible] English can do is to follow our example. Let them [illegible] whatever credits they deem necessary; let them [illegible] multiply their arsenals, if they so please; but let them [illegible] arrogate to themselves the pretension to stop us in our [illegible] to wait for them. The use of iron-cased vessels has not [illegible] adopted in France only. Russia, Italy, and Spain are [illegible] building on that system. If the noise of the hammers [illegible] dockyards prevent Mr. Lindsay from [illegible] cannot help it."

The *Moniteur* declares that the speech of Lord John Russell on Sardinia, and the debate on the [illegible] armament of France, have met with disappro[illegible] throughout England, and that the country and [illegible] House of Commons share largely in the desire [illegible] Mr. Disraeli that the Governments of the [illegible] countries might come to an understanding [illegible] their respective maritime establishments [illegible] hostility of the Government to the members of [illegible] Orleans family has reached such lengths as to [illegible] Count Walewski to forbid the Sèvres manufactory [illegible] complying with an order sent from Claremont [illegible] ex-Queen of the French. The Civil Tribunal [illegible] Seine on Saturday dismissed the action brought [illegible] M. Leon Masson against MM. Dumineray and [illegible] heim for refusing to fulfil their engagement [illegible] and publish a translation of the Duc d'Aumale's [illegible] at the Literary Fund Dinner, and condemned [illegible] Masson in the costs. M. Gautier, tutor of the D[illegible] Nemours' sons, was tried on Saturday before the [illegible] of Correctional Police, on the charge of hawking [illegible] Duke d'Aumale's pamphlet. It was proved that [illegible] had three copies of the pamphlet in his portman[illegible]

among several other books which he was taking to Segovia in Spain. The Court gave judgment to the effect that M. Gautier was not carrying those copies for the purpose of hawking, in the legal meaning of the word, and dismissed the charge, but ordered the three copies to be confiscated.

Spain.—Another of the Loja insurgents named Mellado, has been condemned to death and executed, and two others have been sentenced to 20 years' and three to 12 years' hard labour. New arrests of persons accused of having taken part in the insurrection have been made at Fuenta-Serna and Alhama, and consequently the number of individuals in the prison of Loja awaiting trial is not fewer than 413. The powder magazine at Villa Feliche, Arragon, has been blown up. One hundred mills were burned down. Twenty workmen were killed or severely injured.

Portugal.—Disturbances have broken out in the province of Algarve respecting the new law of taxation, and the insurgents have been in collision with the military. The corvette Estephania sailed from Lisbon on the 20th ult. for Tavira with troops. It is said that Viana is also disturbed.

Switzerland.—The President of the Federal Council has received a despatch from the Swiss Minister at Turin, stating that the Italian Government has withdrawn the permission accorded to the Swiss troops, formerly in the service of Francis II., to remain at Naples, on the ground that the people regard them as the agents of the ex-King. The Federal Assembly has elected M. Dubs a member of the Federal Council by a majority of 90 to 34. M. Dubs declared that his policy with respect to internal affairs would be the liberal development of Switzerland in a Federal sense, and in regard to foreign questions, neutrality. M. Fornerod has been elected Vice-President of the Confederation. On Friday the National Council agreed to the resolution of the Council of the States in reference to the construction of military roads over the Alps by 44 against 32 votes, whereby it became a Federal resolution.

Denmark.—On Saturday evening 500 inhabitants of Schleswig, chiefly from the German portion of the Duchy, arrived at Copenhagen and met with an enthusiastic reception, in which the Choral Societies took part, and the Mayor of Copenhagen delivered an address. On Tuesday evening the inhabitants of Copenhagen gave a grand banquet in the neighbouring forest to the visitors from Schleswig, at which 2000 persons sat down. The King placed his hunting castle at the disposal of the guests. Several Schleswigians made speeches in favour of the rights of Denmark over Schleswig, which were received with great cheering. The Marquis de Torrearsa, the Italian Envoy, arrived at Copenhagen at 4 P.M. on Sunday, and was received with great enthusiasm. He was conveyed to his hotel in a Court carriage. He afterwards visited the President of the Council. In the evening there was a grand torchlight procession in his honour. The Marquis will visit the King at Sonderburg.

Austria.—A stormy discussion on the question of the nationalities took place on Friday in the Lower House of the Reichsrath. All the members of the Right, with the exception of three, left the House; previously, however, reserving to themselves the right of expressing their views on a future occasion. In the sitting of Saturday the President declared that the retirement of the members of the Right on the previous day arose from a misapprehension of his words. The members of the Right thereupon resumed their seats. The official journals contradict the rumour of a new loan, and state that the revenue is sufficient to cover the expenses of the state, while the military expenditure is decreasing.

Italy.—The *Official Gazette* contains a report from the Minister of Finance to the King on the result of the subscription among the bankers to the national loan. The report is followed by a Royal decree. Tenders amounting to 564,000,000f. have been accepted, but will be reduced 42 per cent. One hundred and fifty millions are to be offered to the public at the price of 70f. 50c. Bankers and subscribers for 100,000f. and upwards will be allowed a commission of ½ per cent. on the nominal amount of their subscriptions. The public subscription will be closed on the 5th inst. At the Consistory held by the Pope on the 22d ult., his Highness proclaimed 22 new Bishops, including 2 Irish, 6 French, 2 Spanish, and 7 South American. The Irish prelates were Dr. Patrick F. Cruice, Diocesan of Clonfert, in Ireland, Superior of the Carmelite College in Paris, appointed Bishop of Marseilles; and Dr. George Butler, Vicar-General of Limerick, appointed to the See of Cidonia *in partibus*, and named coadjutor and successor of Monsignor Ryan, Bishop of Limerick. The French journals give the following particulars of an incident which lately occurred at Rome, in consequence of the refusal of Monsignor de Merode, notwithstanding the orders of the Pope and Cardinal Antonelli, to give up to a French court-martial a Papal soldier who had wounded a French soldier. M. de Merode, much irritated, hastened to General Goyon, and, with threatening gestures, made use of insulting expressions against the Emperor Napoleon. General Goyon imposed silence, and gave the Monsignore to understand that it was solely on account of his wearing a priest's gown that he could not box his ears. He said, however, he did so morally, and added that if Monsignore de Merode would divest himself of his gown he would take off his uniform as a General and fight a duel with him. Monsignore de Merode sheltered himself behind his ecclesiastical character. General Goyon replied that in any case the Monsignore would retain the stigma inflicted by his words. He then ordered a search for the Papal soldier, who was at length given up. The French Government has bought the Farnese Gardens at Rome from the ex-King of Naples for the sum of 90,000 crowns (about 500,000f.). They are situated on the Palatine, where the Palace of the Cæsars formerly stood. The French Government is about to make further excavations on the spot.—The news from Naples respecting the suppression of brigandage is more satisfactory. A despatch from General Cialdini announces that during the last three days the Reactionists have attempted a combined and simultaneous movement in several provinces, but have been everywhere defeated. In the provinces of Terra di Bari, Otranto, and in the Basilicata and Capitanata many Reactionists were killed. An attempted invasion at Sora, on the Roman frontier, has been repulsed. General Cialdini says, "Our losses are insignificant. The *morale* of the National Guard has been raised, they having sustained the brunt of the engagements. The disbanded soldiers are returning by hundreds. Two days more of good fortune and we are masters of the situation." The Archbishop of Naples has not been publicly arrested, but is under arrest in his own house. Two French officers of the Papal army, M. Quatrebarbes and Colonel Devillani, and the Abbé Quais, a Roman priest, were arrested on Monday.

Syria.—The *Patrie* says that the French and English squadrons will remain off the coasts of Syria until next winter.

Cape of Good Hope.—The Cape Parliament had rejected the Bill for the separation of the provinces. Sir George Grey had not left for New Zealand. The Finance Committee had recommended a loan of 200,000*l.* for the service of the present year. It was proposed to increase the revenue by 100,000*l.* by reimposing transfer duties, by an increase of the Customs' duties, a percentage on Bank paper, a stamp tariff, and legacy and succession duties. A Bill had been introduced for the establishment of the voluntary principle in regard to Church-rates, and for the withdrawal of the State grant for religious purposes. This measure was progressing in public favour. The winter, though late, had set in with great severity. There was a frequency of stormy weather. The stocks of wine were low. The losses sustained by the wool speculations in the Eastern Provinces were very considerable. Plans were afloat for training schools for masters and mistresses within the colony. Nothing further had been heard from Bishop Mackenzie. The barque Berenicia, which left England on the 25th of March, was wrecked on Roeben Island on the 16th June. Mrs. O'Liff, Mr. Van Boork, four children, and one sailor were drowned. The Bishop of Cape Town had held an ordination in St. George's Cathedral. An English brewing company had been established in the colony. The Volunteers continued to increase in proficiency.

United States.—The Senate has expelled five members "as conspirators" against the Union, and the House of Representatives by a majority of 121 to 5 has agreed to a resolution pledging itself "to vote any amount of money and any number of men which may be necessary to insure the speedy and effectual suppression of the rebellion and the permanent restoration of the Federal authority everywhere within the limits and jurisdiction of the United States." Bills have also been reported, voting 3,000,000 dollars for a temporary increase of the navy, and for the more efficient suppression of privateering. The House has adopted a resolution authorising Mr. Van Wyck's Committee to inquire into every contract made during this war by any department of the Government. The Committee is to remain in session during the interim of the meetings of Congress. The Tariff Bill is meeting with unexpected opposition in the House, and the duties recommended by the Committee of Ways and Means on sugar, coffee, and tea will probably be reduced. Senator Simmons is reported to have prepared an entirely new Tariff Bill, which he proposes to offer as a substitute for the House Bill raising the duties 10 per cent. on all articles where the duty will not exceed 50 per cent. A resolution has been offered providing for a national convention for the restoration of peace, but it was lost by a vote of 92 to 51. Mr. Sumner has presented a petition for the abolition of slavery, which proposes that slave owners shall be remunerated from the United States Treasury. During the discussion on the Bill, Mr. Sumner approved the President's acts. Mr. Breckenridge made a strong speech, declaring the acts of President Lincoln, especially the suspension of the *Habeas Corpus*, to be an unconstitutional usurpation of power. He said the country was rushing with rapid strides from constitutional government to military despotism, yet so great on one side was the passion of the hour, and so astonishing the stupid amazement of the other, that these things were taken as natural and right. He referred to the refusal to adopt the Crittenden compromise, and wished the country to know that Congress had deliberately refused a last effort to avert the horrors of internal warfare. Pennsylvania has offered 15 additional regiments for the Federal service. On the 15th ult. the Federal army, 15,000 strong, moved towards Winchester, and encamped on Bunker's Hill for the night, after a slight skirmish with a small body of the Confederate cavalry. On the 16th the advanced guard entered Fairfax, after removing a number of trees with which the Confederates had blocked up the road. An embankment which the Confederates had thrown up was found abandoned. The people of Fairfax stated that the Confederates drew up in order of battle as if prepared to defend the town, but suddenly retreated with considerable hurry. The main body of the Federal army, under General MacDowell, commenced its march on Richmond on the morning of the 17th. It met with no serious resistance until it reached Dulbram, a fortified position, three miles from Manassas Junction, which it attacked on the following day, when the advanced guard was repulsed by the Confederates. The position, however, was afterwards carried by the Federal troops. It is reported that the Confederate force at Richmond numbered 10,000, and at Manassas Junction 60,000. On the 20th the contending armies were within a mile of each other, near Manassas Junction, and a battle was daily expected. General M'Clellan had previously reported officially to the War Department that Colonel Pogram has surrendered with 600 Confederates at Beverley; and that General Morris has pursued and routed a large body of Confederates at St. George. General Garnett, commanding the Confederates, was killed. The Federal loss is reported as 13 killed. The loss of the Confederates was 200 killed. Seven guns and 1000 prisoners were captured. General M'Clellan's despatch concludes thus:—"Our success is complete, and I firmly believe Secession is killed in Western Virginia." On the 16th 800 Federal troops went up ahead of the passenger train as far as Millville, 30 miles above St. Charles, on the North Missouri Railroad, where the track was torn up. The Federal troops were fired into, when an engagement ensued, resulting in the loss of seven Confederates killed and several taken prisoners. One man who was caught with a gun in his hand was immediately hung, and another who attempted to escape was riddled with balls. The fighting still continued when the passenger train passed. The Federals had lost three killed, seven wounded, and 30 of their horses had been captured. General Patterson has been superseded by Major-General Banks, who is to be succeeded by General Dix. The Government has decided that no more fugitive slaves shall be allowed in or to follow the army. The steamer York Town has been seized by the Confederates, who have iron-cased and mounted her with eight 64-pounders. Advices from Fort Monroe to the 17th state that two Confederate steamers had landed troops at Sewell's Point, where formidable preparations were apparently making to annoy the Federal shipping, and perhaps the fortress itself. The Quaker City had captured the brig Amy Warwick, from Rio Janiero for Hampton Roads, and taken her into Boston. The captured vessel was laden with coffee. According to a despatch from Memphis of the 17th, the Confederate cruiser Sumter had entered Beswick Bay, with a cargo of 55,000 Enfield rifles and rifled cannon, taken from an English ship bound to New Orleans, which had been ordered away from the Belize by the blockading squadron. The Cuba, one of the vessels captured by the privateer Sumter, has got free; the prize crew put on board having laid down their arms, preferring to go anywhere rather than to rejoin the Sumter. Two of them are Englishmen. Accounts from Charleston announce the singular appointment of Bishop Polk to a major-generalship in the provisional army of the Confederate States. They also state that the British Consul at Charleston has forwarded to Lord Lyons documents on the breaking of the blockade of the Chesapeake by private persons, including passes signed by General Buller permitting vessels to pass the blockade. The news of the death of Mrs. Longfellow so deeply affected her father, the Hon. Nathan Appleton, aged 83, that he died the next day.

Parliament.

HOUSE OF LORDS.

Friday.—*Business of the House.*—The Earl of Derby in calling attention to the present state of public business expressed his opinion that it was impossible to deal with the Bills before the House in a satisfactory manner, and recommended that such of them as were not of positive urgency should be withdrawn.—Earl Granville replied that several of the Bills were continuance Bills, and would not require any deliberation; and with regard to the rest he could not then say which of them would be abandoned. The *Vaccination Bill* was read a third time and passed. On the Order for considering the Commons' reasons for disagreeing to their lordships' amendments on the *Bankruptcy and Insolvency Bill*, the Lord Chancellor moved the House to accept the reasons of the Commons for their disagreement with the amendment of their lordships which had struck out the clause for the appointment of a chief judge. He complained that the opposition to the Bill in that House had been founded on party motives and not on the intrinsic merits or demerits of the measure.—Lord Cranworth moved that their lordships should insist upon their amendment striking out the clause creating the chief judge. Lord Chelmsford and Lord Wensleydale also spoke in support of the amendment.—The Lord Chancellor, in reply, said that seeing the small knowledge of the law of bankruptcy exhibited by the noble and learned lords, it was not surprising that they opposed the proposition. On a division the House insisted upon its amendment as to the chief judge by 80 to 46. On the amendment referring to the creditors' assignees, Lord Chelmsford announced that he should not ask their lordships to insist upon their amendment on this point. The motion for not insisting upon their amendment was then agreed to. Several Bills were advanced a stage.

Monday.—*Appropriation of Seats (Sudbury and St. Alban's*

Bill.—Earl GRANVILLE moved the committal of the Appropriation of Seats (Sudbury and St. Alban's) Bill, and briefly explained that the object of the Bill was to transfer two of the forfeited seats to the West Riding of Yorkshire, one to South Lancashire, and one to Birkenhead.—Lord STRATHEDEN thought that so important a measure should not be discussed at this late period of the session, and moved that it be referred to a Select Committee.—The Earl of DERBY did not see the necessity of referring the Bill to a Select Committee, as it was a very plain and straightforward measure. He thought the Government had done right in conferring a seat on Birkenhead, and that in distributing the other seats, they had acted [illegible]. He trusted hereafter that her Majesty's Ministers would not [illegible] her Majesty to pledge herself in the Speech from the Throne to a measure of reform, unless they had full confidence that they would be able to carry the measure they brought forward. He also wished it to be clearly understood that neither this nor any future Government was under any pledges to introduce the reform question, unless they in their discretion determined so to do.—Earl GRANVILLE opposed the amendment, and stated that the Government, though dissenting from the notion of finality, thought it would be wrong to pledge themselves to the introduction of any measure of reform which they did not feel perfectly assured of carrying out. The amendment was then withdrawn, and the House went into Committee on the Bill. [illegible] Lord STRATHEDEN moved the omission of the [illegible] in order to give an additional seat to South Lancashire. The amendment was negatived without a division. The other clauses were agreed to, and the House resumed.—Lord STANLEY of ALDERLEY moved the second reading of the *Municipal Corporations Act Amendment Bill*, and briefly explained its object.—Lord WENSLEYDALE opposed the Bill, and moved that it be read a second time that day three months.—Lord CHELMSFORD supported the amendment.—Lord DERBY stated that in a future stage of the Bill he should oppose the clause which gave precedence to the Mayors. On a division the numbers were for the second reading 44; against it, 27. The Bill was then read a second time. The *East India Civil Service Bill* was read a third time, after an amendment proposed by Lord MONTEAGLE against the limited character of the Bill had been negatived without a division. The *Enlistment in India Bill* was read a second time. The [illegible] *Bill*, the *East India (High Court of Judicature) Bill*, the *Volunteer Tax Exemption Bill*, the *Copyright of Designs Bill*, and the [illegible] *Limitations Bill*, were read a third time and passed. Several other Bills were advanced a stage.

TUESDAY.—Earl [illegible] took the oaths and his seat as a Peer of the United Kingdom. His lordship was introduced by the Earl of [illegible] and Earl Granville. The [illegible] *and Abettors Bill*, the [illegible] *Bill*, the *Larceny, &c., Bill*, the *Malicious Injuries to Property Bill*, the *Forgery Bill*, the *Coinage Offences Bill*, the *Offences Against the Person Bill*, the *Public Works and Harbours Bill* and the *Durham University Bill* were read a second time. The report of amendments on the *Appropriation of Seats (Sudbury and St. Alban's) Bill* was agreed to. The *Enlistment in India Bill* and the *Municipal Corporations Act Amendment Bill* passed through committee. Several other measures were advanced a stage.

THURSDAY.—*The Royal Assent* was given by commission to several Bills.—Lord [illegible] brought in a Bill defining the rights of inhabitants of towns and cities in *Public Gardens and Parks*. The Bill was read a first time. The Commons' amendments to the *Leases by Incumbents' Restriction Bill* and to the *Portpatrick Harbour (Scotland) Bill*, were considered and agreed to. The *Metropolis Gas Act Amendment Bill*, the *Lace Factories Bill*, the *Gunpowder Act Amendment Bill*, and the *Episcopal and Capitular Estates Act Continuance Bill*, were read a second time. The *Appropriation of Seats (Sudbury and St. Albans) Bill* was reported with amendments. The *Industrial Schools (Scotland) Bill*, and the *Industrial Schools Bill*, were read a third time and passed. The seven Bills introduced by the Government for the *Consolidation of the Criminal Law*, the *Public Works and Harbours Bill*, the *Durham University Bill*, the [illegible] *Rights (Scotland) Bill*, and the *Metropolitan Building Act Amendment Bill*, passed through committee. The *Enlistment in India Bill* was read a third time and passed. The *Consolidated Fund (Appropriation) Bill* was brought up from the Commons and read a first time. Several other Bills were advanced a stage.

FRIDAY.—The *Municipal Corporation Act's Amendment Bill*, the *Removal of Irish Poor Bill*, *Public Works (Ireland) Bill*, the *Windsor Suspended Canonries Bill*, and the *Trustees (Scotland) Bill*, were read a third time and passed.—The LORD CHANCELLOR laid on the table a Bill for the further *Consolidation of the Statute Laws*, which was read a first time.—The Marquis of NORMANBY withdrew his motion for papers relating to the *Duchy of Modena*. [Left sitting.]

HOUSE OF COMMONS.

FRIDAY.—*Slave Trade.*—Mr. BUXTON called attention to the increase of the Slave Trade now carried on in Cuba, and to the importance of supplementing the exertions of the naval force on the African coast by other measures, especially by the re-appointment of a Consul at Mozambique.—Sir J. PAKINGTON said he had lately seen a naval officer returned from Africa, who stated that the Slave Trade was flourishing on the Mozambique coast. After some remarks by Mr. CAVE, Mr. H. BERKELEY, Mr. [illegible], Mr. GREGORY, and other members, Lord PALMERSTON said the subject was one of the deepest interest, and that it was impossible that the House could too often or too strongly express its disapproval of the continuance of this abominable traffic. The employment of force had operated as a check to a certain extent, but the trade could never be entirely extinguished except by the progress of opinion among the nations of the world. Her Majesty's Government had urged upon Portugal the necessity of exerting herself in the matter, and she had done all she could; but it should be remembered that her sea board in Africa was enormous, and that it would be impossible to watch every portion of it. It was to the interest of Portugal herself to suppress the slave trade. Not so, however, with Spain, in whose Island of Cuba, he regretted to say, the trade still flourished in all its horrors. With regard to the proposition for a British consul at Mozambique, the climate was most unhealthy, and he did not think any practical good would result from such an appointment, but the subject should not escape the attention of the Government.—Mr. LINDSAY called attention to the report of the *Merchant Shipping Committee* of 1859-60, and, having expressed his regret that the Government had not introduced any measure in the present session to give effect to the recommendations of the committee, urged that steps should be taken to induce foreign Governments to reciprocate the immunities and privileges which this country has granted to the vessels of foreign nations.—Mr. M. GIBSON explained the nature of the measures which had been adopted to remove the burdens from British shipping, and said that the pressure of other business had prevented the Government from giving their attention to the other recommendations of the committee. The House then went into committee of supply on the vote for 250,000*l.* for *Iron Clad Ships.*—Mr. LINDSAY opposed the vote on political and economical grounds, and denied that the increase in the French navy was such as to warrant this enormous outlay.—Lord PALMERSTON said he had distinct and positive information that the French Government had 6 iron-cased vessels (two of which were three-deckers) afloat, 10 building, and 11 floating batteries, making altogether 27 powerful vessels, which might be made fit for sea before the expiration of two years.—Mr. HENLEY thought that after this announcement we had no alternative but to proceed with the construction of iron [illegible]. He should therefore support the proposition of the Government.—Lord C. PAGET expressed his surprise at the incredulity of Mr. Lindsay. France was not the only power which was increasing her iron navy. Russia, Austria, Italy, and Spain were all building ships of that class.—Mr. DISRAELI said that, notwithstanding the rumours to the contrary, his own belief was that the good understanding between England and France would continue to be maintained; for upon it depended the cause of progress and civilisation and the happiness of the world. He regretted that questions of this [illegible] nature were mixed up with the discussion of mere business [illegible]. It might be the duty of the two countries to [illegible] their naval power, but it was for Ministers and Cabinets to declare that in doing so they had not entered into a reckless competition, but that they had arrived previously at some understanding that when the reconstruction had taken place the superiority of the naval force of England should no more be a subject of jealousy to France than her own great and equally necessary military power should be to England.—Mr. LINDSAY said, after these statements, differing so much from the information he had received from the highest authority in France, he should offer no opposition to the vote. The vote was then agreed to.—Mr. WILLIAMS next moved that the [illegible] (Dockyards) be reduced by the sum of [illegible]; but, on a division, the amendment was rejected by 52 to 43. The vote was then agreed to. Votes of 537,000*l.* for the *Disembodied Militia* and of 30,000*l.* for the *Volunteer Corps*, were also agreed to. The report on the *East India Loan* was brought up, and leave given to bring in a Bill founded thereon. In a Committee of *Ways and Means* a sum was voted out of the Consolidated Fund and the surplus of Ways and Means. The Report upon the *Windsor Suspended Canonries Bill* underwent discussion. The other orders were then disposed of.

SATURDAY.—The amendments on the *Drainage of Lands Bill* were considered and agreed to. The *Metropolitan Police District Receiver Bill* was read a second time. The *Newspapers, &c., Bill* passed through committee. *National Gallery.*—Lord H. LENNOX asked if it was true that plans had been prepared for erecting a room for the Turner pictures at the back of the National Gallery. There was no necessity for incurring this expense; and he asked the Government to give a pledge that no step would be taken in the matter without the sanction of the House.—Mr. VANSITTART urged that nothing should be done until Parliament had decided on a permanent plan for all our national buildings.—Mr. COWPER admitted that plans had been prepared, but the Government had come to no decision on the subject. The works would be of a cheap and temporary character, the estimate being only 25,[illegible]. He should not attempt any expenditure of public money without obtaining proper authority. As to the Turner pictures it would be possible to find room for them in the present building of the National Gallery.—On the vote for the *Volunteer Corps*, Mr. [illegible] complained of the niggardly assistance given by the Government to the volunteer forces, and stated that they had refused to grant a site for rifle ranges at Hampton Court, on the ground that it would interfere with the game of the rabbits in the park. [illegible] ground.—Mr. J. SHELLEY said that the great difficulty of volunteers was in obtaining rifle grounds, and he urged on the Government the necessity of giving every assistance in that way.—Mr. T. G. BARING said that unless more would be granted to the volunteers next year, he did not think that the Government could be considered liberal. He thought all matters of detail with regard to the volunteers might safely be left in the hands of Earl de Grey and Ripon, who was about to return to the office of Under Secretary for War. *Ways and Means.*—In answer to Sir H. Willoughby, the CHANCELLOR of the EXCHEQUER said that the supplementary estimates which had been introduced since his financial calculations were made, had reduced his surplus of 408,000*l.* to 49,000*l.*; but he had practical reasons for feeling the utmost confidence in the sufficiency of the ways and means for the year. *The Ministerial Appointments.*—Mr. WHITE called attention to the appointment of Sir R. Peel to the Chief Secretaryship for Ireland, and of Mr. Layard to the office of Under Secretary for Foreign Affairs. After some remarks from Sir J. [illegible] and Mr. HUNT deprecating the discussion the subject dropped. The *Report of Supply* was then agreed to. The *Public Offices Site Bill* passed through committee. The *Windsor Canonries Bill*, the *Gunpowder Act Amendment Bill*, the *Episcopal and Capitular Estates Act Continuance Bill*, the *Edinburgh University Bill*, and the *Revenue Departments Accounts Bill* were read a third time and passed. The *Appropriation Bill*, the *Militia Ballots Suspension Bill*, the *Parochial Offices Bill*, and the *Local Government Supplemental (No. 2) Bill* were read a first time. Mr. B. OSBORNE again called attention to the decay of the *Frescoes in the Houses of Parliament.*—Mr. COWPER said that some of the frescoes were undoubtedly in a bad state, but he did not see how he could usefully institute any inquiry on the subject.

MONDAY.—*The Galway Contract.*—In answer to Mr. GREGORY, Lord PALMERSTON stated that the Government had not yet examined the evidence taken before the Galway committee; and it was therefore out of their power to come to any definite conclusion as to the policy of renewing the contract. He might state, however, that the Government were impressed with the importance of a rapid postal communication across the Atlantic, and that the west coast of Ireland appeared to him to be the most convenient starting point for such communication. *The Civil War in America.*—In answer to another question from Mr. GREGORY, Lord PALMERSTON said he had no personal knowledge of the circumstance that a battery of rifled cannon had been shipped on board the Kangaroo for the use of the Federal Government of the United States, or that it was the intention of that Government to offer their loan in this country.—On the order for the second reading of the *Consolidated Fund (Appropriation) Bill*, Lord R. MONTAGU moved as an amendment that the second reading be deferred until the Bill had been printed and was in the hands of members. He thought the House should insist upon seeing the Bill before it passed this stage, in order that every member should be satisfied that it carried out the intentions of the Committee of Supply.—The CHANCELLOR of the EXCHEQUER said that as the Appropriation Bill contained little more than a summary of the votes granted by the Committee of Supply, the proposal of Lord R. Montagu, and the object he had in making it, would cause considerable delay and add to the length of the Session.—Sir G. BOWYER, Mr. SPOONER, Mr. [illegible], Mr. HENLEY, and Mr. HANKEY maintained that, till the Appropriation Bill had passed, the votes in Supply were not out of the control of the House.—Sir G. LEWIS said that the Appropriation Bill was a mere reduction into a legislative form of the [illegible] votes in Supply.—Lord PALMERSTON said that the negativing any part of the Bill would be rescinding a resolution of the House. After some further discussion the motion was negatived without a division, and the Bill was read a second time. The *East India Loan (No. 2) Bill*, the *Militia Pay Bill*, and the *Militia Ballots Suspension Bill* were severally read a second time. The *Drainage of Land Bill*, the *Public Offices Site Bill*, and the *Pensions, British Forces (India) Bill* were read a third time and passed.—On the order for going into committee on the *Wills and Domicile of British Subjects Abroad, &c., Bill*, the ATTORNEY GENERAL explained the nature of the Bill, and said it was intended to endeavour to come to an agreement with foreign governments as to the vexed question of domicile.—Sir F. KELLY pointed out the superiority of Lord Kingsdown's Bill on the same subject over the present Bill, which was originated by the present Lord Chancellor.—Sir G. BOWYER denied that there was any need for a convention with foreign countries on the subject. He contended that domicile had nothing to do with the validity of a will. He moved that the House go into committee that day three months.—The SOLICITOR GENERAL contended that this Bill was directed to a different purpose from that of Lord Kingsdown's, and both Bills might very well stand together on the statute book. He urged the advantages of coming to an agreement with foreign countries on this subject, that there might be one uniform and reciprocal action among different Governments on this subject, but he admitted that if foreign Governments declined a convention this act would be inoperative.—Mr. ROLT, Mr. MALINS, and Sir H. CAIRNS urged objections to the Bill; and, after a short reply by the ATTORNEY-GENERAL, Lord PALMERSTON suggested that both Bills, that of Lord Westbury and that of Lord Kingsdown, should be passed through committee.—Sir G. BOWYER on this suggestion withdrew his amendment and both Bills passed through committee. The [illegible] *Expenses Bill*, which stood for second reading, was [illegible]. The [illegible] *and Fraudulent Prevention Act (1854) Continuance Bill*, the *Landed Estates (Ireland) Act (1858) Amendment Bill*, the *Treasury Chest Fund Bill*, and the *Metropolitan Police District Receiver Bill* passed through committee. The *Parochial Offices Bill* was read a second time.—Lord C. PAGET, in moving the second reading of the *Officers of Reserve (Royal Navy) Bill*, said there was no intention by this Bill to interfere with the promotion of officers in the Royal navy. He stated that the regulations of the Admiralty had been modified to meet the objections of the officers of the mercantile marine; and though the officers of the Royal navy must in all cases take precedence of the officers of the reserve, yet matters would be so arranged as that an old and experienced mercantile officer would scarcely ever be placed under the orders of a young lieutenant. He looked to this measure as one of the greatest importance to the future of the navy.—Admiral WALCOTT and Admiral DUNCOMBE objected to the Bill as inadequate for its object, and unjust to the officers of the Royal navy.—Mr. HANKEY, as a shipowner, thanked the Government for introducing the Bill. After some further conversation, in which Mr. SMITH, Mr. CAVE, Mr. HENLEY, and other members joined, the Bill was read a second time. The *Government of the Navy Bill* passed through committee.

TUESDAY.—*Austria and Hungary.*—Mr. GRIFFITH moved for copies of the despatches of Mr. Dunlop, from Pesth, when acting as diplomatic agent of her Majesty's Government in Hungary, and called upon Ministers to state the nature of the policy they had adopted in reference to the disputes between Austria and the Hungarians.—Lord PALMERSTON declined to produce the papers, on the ground that their publication would be detrimental to the public service. Mr. Dunlop had been employed at Pesth simply for the purpose of furnishing the English Government with confidential reports, on a variety of matters which it would be useful for the Government to be acquainted with, but which it would be altogether wrong to make public. He had the deepest sense of the importance of the events which were passing between Hungary and Austria. He also attached the weight to the maintenance of the Austrian empire as a great power in the centre of Europe, holding the balance between opposite and conflicting interests, and he should consider it a great evil to Europe if that empire were [illegible] by any internal convulsions. On the other hand, her Majesty's Government had not considered it their duty to take part in the discussions [illegible] between the Austrian Government and [illegible] of Hungary. These were matters in which they [illegible] to interfere, or even to express an opinion as to which of the parties was right or wrong; they therefore confined themselves to the expression of a hope that those differences might be amicably adjusted in such a manner as to leave Austria [illegible] powerful, and prosperous state; and they should pursue the same course that they had followed in the case of the struggle on the other side of the Atlantic—namely, a policy [illegible] neutrality.—Mr. GRIFFITH expressed his satisfaction at the assurance of the Premier that the English Government [illegible] solved upon preserving a neutral policy, and withdrew the motion. The House went into Committee on the [illegible] *Bill*, when Mr. HENNESSY moved that the [illegible] Act should be included in the schedule of the Bill as [illegible] list of useless measures.—Sir G. LEWIS thought the [illegible] must be intended as a practical joke.—Mr. HENNESSY said [illegible] the Act was a practical joke for the Archbishop of [illegible] when examined before a Committee of that House, [illegible] [illegible] was, [illegible] by his [illegible] [illegible]. On a division the motion was negatived by [illegible] [illegible]. The Bill then passed through committee. The amendments to the [illegible] *Justices (Westminster) Bill* [illegible] agreed to. The *Consolidated Fund (Appropriation) Bill*, and *East India Loan (No. 2) Bill*, the *Militia Pay Bill*, and the *Militia Ballot Suspension Bill*, passed through committee. The *Treasury Chest Fund Bill* was read a third time and passed. The *Parochial* [illegible] *Lunatics (Scotland) Bill* was withdrawn. The [illegible] *Bill* and the *Bill*, the *Local Government Supplemental (No. 2) Bill* passed through committee. *Officers of Reserve (Royal Navy) Bill* passed the [illegible] committee.

WEDNESDAY.—*Embankment of the Thames.*—In answer to Mr. J. SHELLEY, Mr. COWPER stated that the Government intended to adopt the plan for the embankment of the Thames recommended in the commissioners' report, but [illegible] the recommendation that the plan should be superintended by a special commission. They thought the work had better be entrusted to the Metropolitan Board of Works, and next session he would introduce a Bill for the purpose.—Mr. J. SHELLEY expressed his surprise that the Government intended to take upon themselves the [illegible] of a Bill which [illegible] property to the Metropolitan Board of Works.—Mr. [illegible] considered it [illegible] work being entrusted to the Metropolitan Board [illegible] [illegible] might to be carried out under the [illegible] [illegible] next Mr. COWPER [illegible] before the [illegible] as the [illegible] Session in the form of a Bill. The [illegible] *Metropolitan District Bill* was withdrawn.—On the order for going into Committee on the [illegible] Bill, Mr. WALPOLE stated the objections which he entertained to the measure, and protested against proceeding with a Bill of such importance at so late a period of the session, and in the absence of those members who were most competent to advise the House on the subject.—Colonel FRENCH moved, as an amendment, that the Committee should be postponed for three months.—Sir G. LEWIS and the SOLICITOR-GENERAL opposed the amendment, and called upon the House to proceed with the Bill. After some conversation, the amendment was consequently carried without a division. The Bill was [illegible]. The Lords' amendments to the *Copyright of Designs Bill* were agreed to. The *East India High Court of Judicature Bill* [illegible] *Fund Bill* [illegible]. On the motion for reading the [illegible] *Bill* a third time, Lord [illegible] asked in what way the supplemental vote for the Volunteers was to be provided, and whether ample drill instruction would be provided for [illegible] grant.—Sir G. C. LEWIS said that [illegible] for a half year. The regulations for drill serjeants was only taken for a half year under consideration, and a general order would shortly be issued on the subject. The *East India Loan* was then read a third time and passed. The *Militia Ballots Suspension (No. 2) Bill*, the *Militia Pay Bill*, the

Bill, the *Wills and Domicile of British Subjects Abroad Bill*, the *Wills of Personalty by British Subjects Bill*, the *Statute Law Revision Bill*, the *Corrupt Practices Act* (1854) *Continuance Bill*, the *Landed Estates (Ireland) Act* (1858) *Amendment Bill*, the *Metropolitan Police District Receiver Bill*, the *Parochial Offices Bill*, the *Local Government Supplemental (No. 2) Bill*, and the *Government of the Navy Bill*, were read a third time and passed. On the order for considering the Lords' reasons for insisting upon their amendment in the *Bankruptcy and Insolvency Bill* negativing the appointment of a chief judge in bankruptcy, the Attorney-General said that although the Government adhered to their opinion that the Lords' amendment mutilated the Bill, yet, as the measure would be lost if the amendment were now rejected, it was his duty to declare the readiness of the Government to accept it. He therefore moved that the House should not insist upon their opposition to the amendment of the Lords with reference to the appointment of a chief judge.—After some observations from Mr. Crawford and Mr. Bovill, the motion was agreed to. The *Volunteers' Toll Exemption (No. 3) Bill* passed through committee.

Thursday.—*Suez Canal.*—In answer to Mr. Griffith, Lord Palmerston said that no forced labour was employed on the works of the Suez canal, and that the labourers were paid by the company.—In answer to Lord Fermoy, Lord Palmerston said that there was no intention on the part of the Government to propose any revision of the *Ecclesiastical Titles Act*, which would be enforced in such cases as might be deemed advisable. The Lords' amendments to the *Parochial and Burgh Schools (Scotland, No. 2) Bill* were agreed to.—On the order of the day for the third reading of the *Officers of Reserve (Royal Navy) Bill*, Mr. Lindsay, Mr. Staniland, and Mr. White called upon Lord Palmerston to state his opinion as to the practicability of coming to an understanding with the French Government as to the relative amount of the naval armaments of the two countries.—Lord Palmerston said that the question was one of great difficulty and importance. Though such a course might, at the first blush, appear practicable, he thought that any British Government should pause long before entering into an agreement for limiting the amount of our naval or military forces. The agreement suggested could not be with France alone, but must include other naval Powers, such as Russia and the United States, and even Spain, whose navy was growing into importance. The limitation of our navy must therefore be made, if made at all, not with reference to any one Power, but to a possible combination of all. Such an arrangement would lead to interminable disputes and questions of breach of faith, and, instead of tending to peace, it would, he believed, provoke war. He feared, therefore, he could hold out no hope of such a proposal being made. The Bill was then read a third time and passed. The *Probate and Letters of Administration Act (Ireland) Amendment Bill* was read a second time. The Lords' amendments to the *Tramways (Ireland) Act Amendment Bill*, the *Naval Medical Supplemental Fund Society Bill*, the *Salmon Fisheries Bill*, and the *Dealers in Old Metals Bill*, were considered and agreed to.

Friday.—*Spain and Morocco.*—In answer to Mr. Griffith, Lord Palmerston detailed the causes which had prevented the Emperor of Morocco from paying the indemnity due to Spain, and had thereby led to the lengthened occupation of Tetuan. Her Majesty's Government were endeavouring by their good offices to bring about an amicable settlement. *Convocation.*—In answer to Mr. H. Seymour, Sir G. Grey said that Government had no knowledge of the proceedings of the Convocation of York, in regard to the 29th Canon. Nothing could be done until the two provinces make a representation to the Crown. No application had been made from Ireland. *The Strike.*—In answer to Mr. Ayrton, Sir G. Lewis said that as the men considered the employment of Sappers on the barracks at Chelsea an interference on the part of the Government in the struggle now going on, he had given notice that from the 1st of September this assistance should be withdrawn.—Mr. Ewart moved a series of resolutions relating to the *Business of the House*, but at the suggestion of Sir G. Grey, the motion was ultimately withdrawn.

City Intelligence.

Bank Rate of Discount.—The Bank of England on Thursday reduced the rate of discount from 6 per cent., at which it has stood since the 16th May, to 5 per cent.

Money Market, Friday.—British Funds: Consols closed at 90⅛ to ¼ both for Money and the 7th inst.; Bank Stock, 234; Three per Cents. Reduced, 90⅛ to 90; New Three per Cents., 90⅛ to ¼; India Five per Cent. Stock, 99⅜ to ½; Ditto for Acct., 99⅜; Ditto Scrip, 100¼; Ditto Four per Cent. Debentures, April, 1864, 96½; Five per Cent. Enfaced Rupee Paper, 94½; Ditto Five and a Half per Cent., 101½; Exchequer Bills, March, 8*s.* dis.; Ditto Small, 14*s.* to 8*s.* dis.; Ditto June, 1*s.* to 4*s.* dis.; Ditto Small, par, 4*s.* dis.—Foreign: Danish Three per Cents., 82½ to 83; Dutch Four per Cent. Certificates, 100; Russian Five per Cents., for Acct., 102½; Sardinian Five per Cents., for Acct., 79¼; Turkish Six per Cents., 1858, for Acct., 69 to 70; Ditto 100*l.* Bonds, 72 to 71; Ditto Guaranteed Four per Cents., 100⅛ ex div.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£26,004,700	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion ..	11,354,700
		Silver Bullion	—
	£26,004,700		£26,004,700

BANKING DEPARTMENT.

Proprietors' Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£9,466,279
Rest	3,412,974	Other Securities	18,547,711
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	3,701,952	Notes	5,706,760
Other Deposits..	12,194,650	Gold and Silver Coin ..	842,006
Seven day and other bills	700,182		
	£34,562,758		£34,562,758

1st day of August, 1861.

M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY—BANKRUPTS—T. Bache, Bridgnorth, Timber Dealer—T. Bannister, Hereford, Builder—A. Chamberlain, Exeter and Stoke Canon, Devonshire, Butcher and Cattle Dealer—A. Hughes, Aylesbury and Ivinghoe, Buckinghamshire, Saddler, Collar and Harness Maker—J. Belman, Upper Baker Street, Portman Square, Tailor—J. Shipway and H. Mander, Great Malvern, Worcestershire, Surveyors and Builders—H. Sivter, Woodall Place, Brixton Road, Grocer and Dealer.—T. Wagstaff, Sheffield, Cattle Salesman.

SCOTCH SEQUESTRATIONS—W. Abbott, Glasgow, Spirit Merchant—D. Bain, Glasgow, Cabinetmaker—C. Bannatyne, Ardrossan, Ayrshire, Blockmaker—A. Cohen, Glasgow, Cigar Importer—J. Combie, Burghead, Elginshire, Sailor—R. Fraser and W. Bruce, Helmsdale, Sutherlandshire, Fish Curers—A. Gordon, Banffshire, Cabinet Maker—G. Hunter, Edinburgh, Grocer—J. Love, Glasgow, Baker—J. Marshall, Motherwell, Dalziel, Blacksmith.

FRIDAY—BANKRUPTS—J. Armitage, Woolwich, Cheesemonger and Butterman—E. C. Baldock, Aylesbury Street, Clerkenwell, Chemist and Druggist—J. Earnshaw and G. Earnshaw, Halifax, Yorkshire, Dyers—J. Fisher, Lupus Street, and Charlwood Street, Pimlico, Cheesemonger, and Cheapside, Licensed Victualler—E. P. Hollingshead, Cheltenham, Tailor and Draper—E. P. Jones, Crawley Street, Oakley Square, Hosier—W. Kerr, Bath, Hosier and Haberdasher—J. Levy, Finsbury Pavement, General Dealer—J. Mantua, Luton, Bedfordshire, Jeweller and Cutler—G. Smeeton, Batley, Yorkshire, Rag Merchant.

BANKRUPTCY ANNULLED—J. Oates and B. Oates, Dewsbury, Yorkshire, Woollen Manufacturers.

Metropolis and its Vicinity.

The Thames Embankment.—The commissioners appointed to examine into plans for embanking the River Thames within the metropolis, so as to "provide with the greatest efficiency and economy for the relief of the most crowded streets, by the establishment of a new and spacious thoroughfare, for the improvement of the navigation of the river, and which will afford an opportunity of making the low level sewer without disturbing the Strand or Fleet Street, and also to report upon the cost and means of carrying the same into execution," have submitted to her Majesty the following conclusions and recommendations:—

"The nature of the inquiry entrusted to us was made known to the public by advertisement in the newspapers, and more than 50 designs were presented for our consideration. The main features of the majority of the plans are an embanked roadway on the north side of the river, and the formation of docks with the view to retain all the existing wharves; in others, railways in addition to the roadway and docks have been proposed; whilst in a few, a solid embankment and roadway without either docks or railways have been suggested. Amongst the latter is a plan submitted by Mr Sheilds, some of whose suggestions appear to us to afford in a greater degree than any of the other designs the basis upon which an efficient and economical scheme may be founded. We highly appreciate, however, the great engineering skill and ability that has been displayed in many of those designs which contemplated the construction of docks and railways. The wharf property between Westminster Bridge and the Temple Gardens is for the most part devoted to the coal trade. We find that great facilities are now afforded for the distribution of coal by the new system of unshipping in the docks into railway waggons, and by various depots on the railways in and near the metropolis. We are of opinion that public convenience no longer necessitates the continuance either of the coal or any other trade in this immediate locality. We, therefore, think that it would not be expedient to construct and maintain docks for the sake of preserving the existing wharves between the points we have mentioned; whilst their removal will greatly simplify the formation of the embankment and add to the beauty of the river. The wharf property, however, between the Temple Gardens and Blackfriars Bridge cannot in our opinion be so treated; and that eastward of Blackfriars Bridge is so important in a commercial point of view, that we do not recommend any interference with it. Having regard to these and other considerations, we are of opinion that we shall best fulfil your Majesty's instructions and provide for the requirements of the public by establishing a spacious thoroughfare between Westminster Bridge and Blackfriars Bridge, by means of an embankment and roadway; and that the new thoroughfare thus created should be continued on eastward from Blackfriars Bridge by a new street, according to the line formerly laid down by Mr. Bunning, the City's architect, from the west end of Earl Street across Cannon Street, to the Mansion House. Without such a street no relief whatever would be given to the crowded thoroughfares of Ludgate Hill, St. Paul's Churchyard, and Cheapside. The line of embankment at Westminster would coincide with the terrace of the Houses of Parliament, and from thence to Blackfriars Bridge would nearly follow the line laid down for the corporation of the City of London in 1841 by Mr. Walker, Captain Bullock, Mr. Saunders, and Mr. Leach. The general level of the embankment and road would be 4 feet above Trinity high water. The road would commence at Westminster by an easy descent opposite the clock tower, and be continued on, 100 feet in width, to the eastern boundary of the Temple Gardens; from this point the road would be reduced to 70 feet in width, and carried on a viaduct supported by piers of masonry, rising to the level of Blackfriars Bridge, so constructed as to leave a breadth of water for the convenience of the City gas-works and the adjoining wharves of about 70 or 80 feet. The spaces between the piers under the ascending road would be left available for barges to lie, and afford easy access to the water between this structure and the wharves. From Westminster Bridge to the eastern boundary of the Temple Gardens the embankment—sustained by a river wall—would be solid in its whole breadth; which breadth opposite Richmond Terrace would be 220 feet from the existing river wall. At Hungerford it would be 320 feet from the existing wharf; at Somerset House about 120 feet; and at the Temple about 220 feet. The plan accompanying this report sets forth the entire scheme. With respect to the appropriation of the reclaimed land, we would recommend that so much of it as shall be in front of the Crown property—which will be about 120 feet in width in its narrowest part—should be laid out in ornamental gardens for the accommodation of the occupiers of the houses, and that the portion in front of the Temple Gardens, also about 120 feet wide, be placed at the disposal of the Society to be dealt with in a similar manner. The other portions of the reclaimed land may either be kept open for the health and recreation of the public, or be applied to building purposes. We propose that communications should be made with the intended roadway from Whitehall, opposite the Horse Guards, and also from some of the streets in the Strand; and that a new street should be formed passing through the Savoy to Wellington Street. The frontages on these streets would offer eligible sites for building, as would also the inner frontage of the new road, if it should hereafter be thought fit so to utilise the ground. We, however, feel it our duty to recommend that while economy and utility in laying out and disposing of the ground should be kept in view, endeavours should be made to invest this new and conspicuous work with some elements of interest and beauty. For the improvement of the navigation we recommend that the existing shoals between Waterloo and Westminster Bridges should be removed, due regard being had to the foundations of the former. Also that an uniform low-water channel of 6 feet in depth at ordinary spring tides, and 500 feet in width from the embankment wall, be secured, and thus the stream be more equalised in velocity. If at any future time any effect should be produced on the river from the diminution of its capacity for tidal water by reason of the embankment, arrangements may be made higher up the river by dredging, or by a tidal reservoir to compensate for the loss. The consideration, however, of this matter would naturally devolve on the conservators of the River Thames. The embankment and street we have proposed will afford an opportunity of making the low level sewer without disturbing the Strand or Fleet Street, and at the same time facilitate the construction of the sewer eastward of the embankment. We are not prepared to recommend the construction of an embankment on the Surrey shore at present; but if hereafter it should be thought desirable or necessary to embank any portion of it, the scheme we have proposed for the Middlesex side will not in any way interfere with it. With regard to that part of our instructions in which we are commanded by your Majesty to 'report on the costs and means of carrying the same into execution,' we beg to report that we estimate the cost of the land, making compensations, constructing the embankment and roadways, and also acquiring the property in the City for and forming the new street to the Mansion House at 1,500,000*l.* This amount, however, would be reduced should it be thought right to dispose of any of the reclaimed land on the bank of the river for building purposes. Parliament having appropriated the coal dues to provide for the outlay necessary for this great work, it only remains for us to express our opinion as to the means 'of carrying the same into execution.' Looking at the magnitude of the work, the important and varied interests, both public and private, which will be affected, and the urgent necessity for its early completion, we are of opinion that the control and management of the undertaking should be entrusted to a special commission, appointed by your Majesty, in order to ensure speedy and economical attainment of an object so much needed by the public, and affording so favourable an opportunity for the improvement of the river and adornment of the metropolis. Witness our hands and seals, this 22d day of July, 1861.—William Cubitt, Joshua Jebb, Douglas Galton, Edward Burstall, Henry A. Hunt, John Robinson M'Clean."

Another Fire at London Bridge.—On Thursday morning another great fire broke out on the premises of Messrs. Curling at Davis's Wharf running from Tooley Street into Dockhead, near the scene of the former fire. The flames were not entirely extinguished at 9 o'clock at night, and the loss of property was very large, two of the land-side warehouses, containing, it is said, nearly 10,000 bales of jute, having been burnt down, and the adjoining premises of Messrs. Johnson & Co. and Messrs. Raible Brothers having been nearly destroyed. There are 24 warehouses forming the wharf, the bulk of the merchandise stowed in them consisting of palm oil, tallow, jute, hemp, hides, provisions, saltpetre and turpentine, all of which for a time was in imminent danger. It is believed that the fire was the work of an incendiary.

The Wesleyan Conference.—The 118th annual Conference of the Methodist ministers has just been held at Newcastle-upon-Tyne, when the Rev. John Rattenbury was elected President, and the Rev. John Farrar, Secretary for the year 1861-2. The votes were as follows:—For President, Rev. John Rattenbury, 145; Rev. Charles Prest, 122; Rev. Dr. Osborn, 5. For Secretary, Rev. John Farrar, 235; Rev. W. L. Thornton, 18.

Forgery of a Will.—On Monday Dr. Griffiths Jones, a hydropathic doctor, was brought up on remand at Guildhall, charged with forging and uttering what purported to be the will of Mrs. Sophia Bellis, a lady who had been under his care as a patient. The prosecution was directed by the Crown in consequence of what transpired in the Probate Court, when the defendant sought to prove the will. It was then sworn that the signature to the will was not in the handwriting of the deceased lady, and that she was mentally incapable of acting for herself or of disposing of her property. It was also ascertained from Dr. Jones himself on cross examination, that although he had stated on oath that he obtained his diploma at Aberdeen, he never was at Aberdeen in his life, and that somebody else obtained the diploma for him by personating him at that University, while he was living at Chipping Norton. After the examination of several witnesses, Alderman Hale committed the prisoner for trial on the two charges of forgery and perjury.

Public Offices Extension.—The work of demolition for the new public offices has been commenced, and workmen are busily engaged in pulling down the houses in Duke Street, Charles Street, and Crown Street, Westminster. This will open a large space of ground south of the present Foreign Office for the new buildings.

Blackfriars Bridge.—The Bridge House Estates Committee of the Corporation of London, in consequence of the increasing settlement of the principal arches of Blackfriars Bridge, recently called upon the principal engineers in England for designs for a new bridge, leaving them quite unfettered in their arrangements and designs. Twelve designs, many of them most elaborately drawn, with details of construction, were sent in by the following engineers:—Mr. Barlow, Mr. Brereton, Mr. Goodchild, Mr. Brunlees, Mr. Joseph Cubitt, Messrs. Bidder and Clarke, Mr. R. W. Mylne (grandson of the engineer of the present bridge), Mr. Fowler, Mr. Hawkshaw, Mr. G. Rennie, Sir John Rennie, and Mr. Page, the engineer of New Westminster Bridge, now rapidly approaching its completion. Of these designs the committee have finally decided to select the design of Mr. Page, and have appointed him the engineer for its construction.

Alleged Murder and Suicide.—Rumours have for some days past been circulated in the neighbourhood of Clapham that Mrs. Amelia Littleton, the wife of a gentleman of independent fortune, residing in Foster Place, whose body was found in the Long Pond at Clapham Common, had been murdered by her husband. It was reported that they had been seen near the spot quarrelling with each other at an early hour in the morning, and that cries of "Murder!" had been heard on the same night by the inhabitants living near the common. These rumours were considerably strengthened in consequence of the husband having subsequently committed suicide pending the inquiry as to the cause

of the death of his wife. The evidence given at the inquest on the first day (the body not then having been identified), proved that it was found in the Long Pond about 5 o'clock on the morning of the 22d by a gentleman who went there for the purpose of fishing. Two witnesses deposed that they heard cries of murder in the direction of the common. According to the evidence of a surgeon, there were no marks of violence on the body. It was elegantly dressed, with several rings on the fingers, but the flesh having greatly swollen by being in the water, the rings had to be filed before they could be removed. An adjournment of the inquiry then took place, and on the following day Mr. Littleton identified the body as that of his wife, and it was interred on Saturday, Mr. Littleton following it to the grave. On Monday, on the re-assembling of the jury, it was announced that Mr. Littleton had committed suicide by cutting his throat on the previous afternoon. It appeared from the evidence of the housekeeper and other witnesses that there had been a quarrel in the afternoon of Sunday week, and again at night; and that Mr. Littleton about midnight called up the housekeeper and said that her mistress had left the house in a passion, and that he had followed her without finding which way she had gone. He went out again to look for her, but could not find her, and returned at 2 o'clock. A witness deposed to having seen a man and a woman quarrelling violently under the trees near the pond, and another witness deposed to hearing screams of a woman in distress about half-past 12 on the night in question, but there was no proof that the cries and quarrelling proceeded from the deceased. It was also proved that Mr. Littleton had expressed great dread of the adjourned inquest to be resumed on Monday, and that he committed suicide on Sunday afternoon by cutting his throat. After a short consultation, the jury in the case of Mrs. Littleton returned a verdict that she came to her death by drowning, but there was no evidence to show how she got into the water. A subsequent inquest was held on the body of the husband, when the jury returned a verdict that he destroyed himself while in a state of temporary derangement.

Fatal Affray in New Cavendish Street.—At Marlborough Street Police Court on Friday Mr. Richard Austwick Westbroke, solicitor, was charged with causing the death of Mrs. Cathray, with whom he had been living for some time at 3, New Cavendish Street. It appeared from the evidence of the persons present at the affray that the parties, who were old friends, had been to the opera with other members of their family, and that on their return a dispute arose at the supper-table, when a knife was thrown by the prisoner, which wounded the deceased lady in the stomach, and soon afterwards caused her death. The defence was that the affair was the result of accident, but the magistrate remanded the case till the coroner's inquest had been held, accepting bail in one surety for 250*l.* At the inquest on Monday several witnesses were examined whose evidence was contradictory. The immediate friends of the parties appeared anxious to show that the affair was an accident, the knife having slipped from Mr. Westbroke's hand, as he was throwing it about, while others deposed that Mr. Westbroke and deceased were frequently quarrelling, and that the former did not throw the knife as alleged, but had it in his hand when the blow was struck. The jury after some deliberation returned a verdict of Manslaughter. On Tuesday, Mr. Westbroke was again brought before the magistrate, when the son of deceased deposed that the prisoner had a habit of swinging his hands about when speaking, and that the conversation had been going on for about a quarter of an hour before the accident happened. The magistrate ultimately committed Mr. Westbroke for trial, but agreed to take two sureties in 250*l.* each. The necessary bail was at once obtained.

Murder and Attempted Suicide in St. Giles's.—At an early hour yesterday morning a man called Cogan, a dealer in poultry residing in Newton Street, Holborn, abutting upon the end of New Oxford Street, murdered his wife by cutting her throat, and then attempting his own life. They had both been drinking on the previous night, and quarrelled about a sovereign which the man accused his wife of taking. He then went out and obtained more drink, and on his return committed the murder. After attempting to cut his own throat he ran into the street and was there met by a policeman who took him to King's College Hospital, where he is said to be going on favourably.

The Public Health.—The Registrar-General's weekly return states that the deaths in London in the week that ended Saturday, July 27th, were 1207. The average number in the corresponding weeks of the 10 years 1851-60, corrected for increase of population, was 1214. The present return is therefore seven below the average. During the week the births of 926 boys and 878 girls, in all 1804 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1578.

Provincial.

Beverley.—A severe thunderstorm visited the East Riding on Saturday. At Esk, a village three miles from this town, a man named Patrick and three of his children were engaged in a field hoeing turnips. They sought refuge from the rain under a wide-spreading tree, where the whole party were struck by lightning. The man and two of the children were killed on the spot. The third child was stunned, and lay in a state of insensibility for some time. On recovering her senses she crawled on her hands and knees to a neighbouring house and informed the inmates of what had happened. An inquest was held on Tuesday, when a verdict of "Accidental death" was returned.

Chelmsford.—The sentence of death passed at the recent assizes on Martha Weaver for the murder of a neighbour's child at Danbury, by strangling it with a shawl, has been respited during her Majesty's pleasure. It is understood that the sentence will be commuted to penal servitude for life.

Dewsbury.—At the Petty Sessions last week Alfred Shepley, labourer, of Roberttown, near this town, was charged with brutally kicking his child, a girl not six years old, on Saturday, the 20th ult., whereby he had caused a wound which had entirely penetrated the left cheek. The child was brought into court by its mother, and it was evident to all that it had suffered from gross ill-usage for a length of time. Its face was bound up with linen cloth, and the appearance of the little sufferer was that of a child not three years old, it being much stunted in growth. The evidence showed that Shepley went home on the afternoon of the 20th ult., in a state of partial intoxication, and seeing the child playing on the floor of the kitchen, deliberately kicked it on the face with his iron-shod boot. The mother, who was in the house at the time, hastened to the child, and having rescued it from her husband endeavoured to stanch the blood which flowed copiously from the wound, but being unable to do so she took it to a neighbouring surgeon, who found its left cheek entirely cut through, and on examining the body ascertained that both its right arm and left thigh had been broken and crippled in consequence of having never received surgical attention. A police-sergeant said the child was the offspring of the prisoner and his wife, but it had been born before their marriage. The prisoner had often ill-treated it, and had caused the injuries not only to its arm and thigh, but to its cheek, though the former had been done some time since. The child did not weigh more than 18 lb. There was proof to show, if necessary, that it had been grossly neglected by its mother also. The mother, who behaved in a very flippant and unfeeling manner in court, was severely censured by the Bench; and her husband, the prisoner, who pleaded "Guilty" to the charge against him, was committed to the Wakefield House of Correction for six calendar months with hard labour, and ordered, at the expiration of that term, to find sureties for his good behaviour for another six months.

Exeter.—At the sessions on Friday, Mr. William Dawton, paper manufacturer, of Erwick, was charged with defrauding the revenue by altering the writing on certain parcels of paper, and introducing other paper into them not charged with duty. The indictment contained 11 counts, charging frauds to the amount of 18,800*l.* Defendant pleaded guilty to the first count, under which it had been agreed by the Inland Revenue to accept a judgment for 1400*l.*

Liverpool.—At the borough police-court, on Friday, Captain Wilson of the American ship Express and Severn was brought up for final examination on a charge of having caused the death of a man named Henderson, who acted as steward on board one of the vessels commanded by the prisoner. It was proved that deceased had been cruelly beat and kicked by the prisoner while he was suffering from disease, and that his death was accelerated in consequence. The defence was that the man died from yellow fever. The magistrate said there were undoubtedly discrepancies in the evidence, but he should leave the case to a jury, and commit the prisoner for trial at the assizes on a charge of murder. The case of a seaman named John Evans was then brought forward, when several witnesses deposed that Evans was so brutally abused by the captain for his steering, that he said frequently he would jump overboard, and one evening, on the 13th April, when it came to his turn to go to the wheel, he was missing, and was never afterwards seen. It was stated that there were several other charges of violence against Captain Wilson, but the magistrate said there was no necessity to hear any further evidence. Captain Wilson was then formally committed for trial.

Winchester.—The Crown Prince and Princess of Prussia and the Princess Alice paid a visit to this city on Saturday afternoon, and, after a full inspection of the Cathedral, drove to St. Cross Hospital, where they partook of the time-honoured hospitality there tendered to travellers, in the shape of bread and cheese and ale. —A committee, consisting of Viscount Eversley, Vice-Chancellor Sir W. Page Wood, Sir William Heathcote, Bart., M.P., Sir J. W. Awdry, Bart., Mr. Sclater Booth, M.P., and other gentlemen, have reported upon the best form of testimonial to be raised to the memory of the late wardens of Winchester College. They recommend the restoration of the tower of the college, to be called "The Tower of the Two Wardens."

Ireland.

The Prince of Wales in Ireland.—On Saturday the Prince of Wales, accompanied by General Bruce, Mrs. Bruce, and Colonel Keppel, paid a visit to the Duke of Leinster, proceeding from the Camp [illegible] carriage to Newbridge, thence by the railway [illegible] hatch, where he was met by the Duke, whose [illegible] were waiting to convey his Royal Highness [illegible] Carton. Shortly after his arrival he planted [illegible] on the Prince of Wales's Island, in the [illegible] demesne. In the evening the front [illegible] nooth College and most of the respectable [illegible] town were illuminated, and by the liberality [illegible] habitants a grand display of fireworks [illegible] Sunday morning the Prince attended [illegible] in the parish church of Maynooth, [illegible] news of his presence attracted a great [illegible] The sermon was preached by the Rev. Mr. [illegible] the rector of the parish. After service [illegible] Highness visited Maynooth College in a [illegible] carriage, accompanied by the Marchioness of [illegible] dare, Mrs. Colonel White, and Mrs. [illegible] party attending his Royal Highness [illegible] Duke of Leinster, the Marquis of Kildare, [illegible] curry, Lord William Fitzgerald, General [illegible] Colonel Keppel, Colonel White, Mr. Henry, [illegible] Mr. Blacker, the Rev. Mr. Keenan, P.P., [illegible] Otho Fitzgerald. The carriages occupied by [illegible] Highness and the ladies who accompanied him [illegible] driven up to the principal entrance of the [illegible] he was received by Archbishop Cullen, who [illegible] diately recognised by the Prince as having [illegible] the Irish College at Rome, the Very Rev. Dr. [illegible] President, and the Very Rev. Dr. White[illegible] President. The Prince was then conducted by [illegible] through every part of the establishment, [illegible] arrangements of which he expressed himself [illegible] Among those who had the honour of being [illegible] to his Royal Highness was Dr. O'Kelly, [illegible] medical attendant to the hospital for more [illegible] century. This being the long vacation there [illegible] students in the college. Having courteously [illegible] leave of the Archbishop, the President, and [illegible] President, the Prince returned to Carton, [illegible] number of the nobility and gentry of the [illegible] country were invited to meet his Royal Highness [illegible] dinner. The president of the college, the rector [illegible] parish, and the parish priest were among [illegible] honoured with invitations. The Prince returned [illegible] Curragh on Monday.

The Galway Contract.—The report of the [illegible] Committee on the Atlantic (Galway) Mail Steam [illegible] pany contract has been published. It justifies the [illegible] master-General in putting an end to the service [illegible] ground of inefficiency, but recommends the [illegible] favourable consideration in case it should be [illegible] re-establish a postal communication [illegible] of Ireland and America. This recom[illegible] partly on a belief that the company [illegible] of a fleet of efficient steamships in the [illegible] present year, and partly on the consideration [illegible] "misfortunes" they have hitherto encountered.

Law.

Midland Circuit: Derby.—*The Ilkeston P[illegible]* *Smith* was indicted for the wilful murder of his [illegible] Smith, at Ilkeston, on the 1st of May last. There [illegible] disputes between father and son, caused by the [illegible] habits of the latter, who had held conversations [illegible] persons previous to this occurrence, showing that [illegible] templated his father's untimely death, and had [illegible] as to the property he would himself acquire in the [illegible] dying intestate. On the night in question he went [illegible] and shortly afterwards his brothers who had gone [illegible] the sound of a pistol shot, and on running down [illegible] their father lying on the ground quite dead with a [illegible] the head, which it was next to impossible for [illegible] inflicted on himself. The pistol with which he had [illegible] as well as the powder and shot, were proved [illegible] purchased by the prisoner a few days before this [illegible] The jury after a short deliberation, returned a [illegible] *Guilty*, and Mr. Justice Willes having put on the [illegible] proceeded to pass sentence of *Death*. The prisoner [illegible] the sentence by making a long statement [illegible] innocence, after which he turned to the people [illegible] the seats behind him, and told them that if they [illegible] on the scaffold they would see him happy and [illegible] shouting out that he spoke like an English son and [illegible] blood of his father on his hands, though he had [illegible] in part the cause of his death, and was willing to be [illegible] by imprisonment if his Lordship thought fit to [illegible] sentence. When he was silent his Lordship [illegible] there was no wish to add to the misery of the [illegible] which he was placed, but the statement he had made [illegible] that of a guiltless man, who grieved for the death of [illegible] but the bravado of one whose conscience [illegible] thoughts which had ended in his father's [illegible] him that there was no hope, his Lordship [illegible] the sentence of death. Lincoln.—*The Child [illegible]* *Ann Wilson*, a married woman, was indicted for the [illegible] der of her three children. The prisoner resided at [illegible] during her husband's absence from home she put the [illegible] dren into a cistern of water, where they were drowned [illegible] she said, was in order that they might go to heaven [illegible] up to suffer from the contamination of the world. [illegible] satisfactorily proved that the prisoner was suffering [illegible] religious mania. The jury therefore *Acquitted* her [illegible] ground of insanity and she was ordered to be kept in [illegible] ment during her Majesty's pleasure.

Home Circuit: Maidstone.—*Arson.—Henry S[illegible]* [illegible] charged with setting fire to a dwelling house. [illegible] showed that the prisoner's father and sister lived [illegible] thatched house at Stourmouth, and that while they [illegible] bed the house was set fire to and burned to the [illegible] the previous day the prisoner had threatened to [illegible] account of his father reproving him for spending [illegible] in the public-house. The jury returned a verdict of [illegible] Mr. Justice Blackburn directed that sentence of [illegible] be recorded against him, but at the same time [illegible] tions that the state of his mind should be inquired [illegible] that a report should be made to the Home Office [illegible] before the fate of the prisoner was finally decided upon.

Northern Circuit: York.—*The Keighley Wife Murder.—* [illegible] *Holdsworth*, 37, keeper of Hawkcliffe toll-bar, was charged [illegible]

[illegible] murder of his wife, on the 10th of June last; and also [illegible] Snowden, his wife's brother, with intent to [illegible]. The facts of this case were noticed at the time [illegible] News, and they were now established by the [illegible] brother. The defence set up for the [illegible] insanity, and witnesses were called in support of [illegible] lordship's direction the jury returned a [illegible] on the ground of insanity, and the [illegible] ordered to be kept in safe custody during her Majesty's pleasure. *The Attempt to Poison at Sheffield.*—James [illegible], was charged with attempting to administer five [illegible] to Sarah Liversedge, a widow, [illegible] to murder her, at Sheffield, on the 27th [illegible]. He was found *Guilty*, and sentenced to [illegible] penal servitude for life. *The Attempted [illegible].*—George Smith, 30, private in the [illegible], was charged with shooting Sergeant William [illegible], of the same regiment, with intent to murder him, at [illegible], on the 5th March last. The prisoner had been imprisoned through the interference of the sergeant for ill-treating his wife, and on being discharged from prison he [illegible] sergeant's room while he was taking tea with his wife, and shot him in the neck with a rifle bullet. The wounded man was conveyed to the hospital, where he remained in great danger, but gradually recovered, and is [illegible] to resume his duty. The prisoner was found *Guilty*, and judgment of Death was recorded against him. *Burglary.*—[illegible], 28, was charged with burglary, accompanied by violence, in the dwelling-house of George Storey, and stealing therein a promissory note, some bottles of spirits, and other articles, at Stanghow, in the North Riding, on the 11th March, 1861. The jury found the prisoner *Guilty*, and judgment of Death was recorded against him.

Theatres.

FAREWELL OF MADAME GRISI.— Seven years ago, on the 7th of August, 1854, Madame Grisi took a deliberate farewell of the London public, but in spite of her decaying powers she subsequently returned to the scene of her former triumphs, and has since continued to be the prima donna of the Royal Italian Opera. Last week she took her final farewell of the opera public in two of her greatest characters—the Priestess, in "Norma," and Valentina, in "the Huguenots"—and on Wednesday she had a "farewell festival" in the great Handel Orchestra of the Crystal Palace, in which about 300 of the principal performers now in London, led by Mr. Costa in person, took part. She sang on this occasion with Signor Mario and Madame Didiée, the duets "Un tenero core," from Donizetti, and "Ebben à te ferisci," from Rossini, and the aria, "O mio Fernando," from "La Favorita." She was received with great enthusiasm by thousands of visitors, and retired amidst the most tumultuous applause.

Sporting.

GOODWOOD RACES.

TUESDAY.—The *Craven Stakes.* Lord Portsmouth's Buccaneer beat [illegible] de Chantilly, and 5 others.—The *Gratwicke Stakes.* Mr. Merry's Starlight beat Knight of St. Patrick, East Stanley, Jingling Johnny, and Lady Blanche.—The *Lavant Stakes.* Mr. Merry's Express beat Peignoir, Tarragona, and [illegible] others.—*Fifty Pounds* added to a *Sweepstakes.* Baron Nivière's Surprise beat Sir Philip and Diadem.—The *Stewards' Cup.* Mr. Murphy's Croagh Patrick beat Man-at-Arms, Knight of St. Patrick, and 42 others. Won cleverly by a neck, Man-at-Arms second by half a length from Knight of St. Patrick. Rising Sun fourth, Cosmopolite and Sir William fifth and sixth, side by side, Lava and La Vapeur finishing the next two.—The *Ham Stakes.* Mr. Alexander's Lorelei beat Hubert, Coalition, and 3 others.—*Sweeps.* Mr. E. Hall's Seclusion beat Gazelle, Pupil, and Ellerton.—*Sweeps.* Mr. A. Nichol's The Wizard walked over.

WEDNESDAY.—*Post Sweeps.* Lord Stamford's Adrasta beat Sweet Hawthorn and Conspiracy.—The *Hurstbourne Stakes.* Lord Stamford's Bertha beat Lorelei, Ace of Clubs, and Gorse.—*Handicap Plate.* Mr. W. S. Crawfurd's Winton beat Wombat, Shangle, and 7 others.—The *Goodwood Derby.* Mr. T. Parr's Haldenan beat Snapshot.—The *Goodwood Stakes.* Lord Coventry's Elcho beat Starke, Balham, and 8 others.—The *Drawing-room Stakes.* Lord Ailesbury's c. beat Vinegar Hill, Conqueror, and 4 others.—The *Findon Stakes.* Mr. Naylor's Caterer beat Wingrave, Alvediston, and 12 others. The *Cowdray Stakes.* Mr. T. Hughes's Trovatore beat Diana, Gaberdine, and 6 others. *Handicap Plate.* Mrs. Osbaldeston's Camerino beat Maggiore, Ellen, Miss Julia, and 12 others.—*Sweeps.* Lord Stamford's Diophantus walked over.

THURSDAY.—The *Racing Stakes.* Mr. Payne's Copernicus beat Wallace.—Third Year of the *Ninth Bentinck Memorial Stakes.* Lord Ailesbury's Plumper beat Roeisa, Ebony, Ellen, and Rupee.—The Second Year of the *Tenth Bentinck Memorial Stakes.* Lord Exeter's Knight of St. Patrick beat Camerino and Lord Ailesbury's c.—*Sweeps.* Lord Stamford's Malta walked over.—The *Goodwood Cup.* Mr. R. Ten Broeck's Starke beat The Wizard, Optimist, and 6 others. Won by a head only, Wizard defeating Optimist by three lengths for the second money; Thormanby a bad fourth; Mon Etoile fifth, Wallace sixth, Dulcimer next, and Royallieu and Lady Clifden the two last. Run in 4 minutes 50 seconds.—The *Molecomb Stakes.* Lord Annesley's Ace of Clubs beat Villette, Master Fenton, Costa, and Sir H. Des Voeux's f.—The *Chichester Handicap Stakes.* Captain Christie's Spicebox beat Asteroid, Gibraltar, and 10 others.—The First Year of the *Eleventh Bentinck Memorial Stakes.* Mr. J. Wyatt's Bertha beat Margery, Otho, Deceptive, Lord Clyde, and Mr. W. S. Crawfurd's b. f.—The *Sussex Stakes.* Mr. John Wyatt's Bertha walked over.

FRIDAY.—(By Electric Telegraph).—*Nassau Stakes.* Pardalote beat Adrasta, Lady Chesterfield, and Vapour.—*Duke of Richmond's Plate.* Audrey beat Furious and Black Lily.—*Nursery Handicap.* Spite beat Lord Stanley, Cantiniere, and 15 others.—*Chesterfield Cup.* Croagh Patrick beat Rising Sun, Man-at-Arms, and 15 others.—*March Stakes.* Confidence beat Lopcatcher, Long Shot, and 5 others.—*Sweeps.* Pupil won.—*Queen's Plate.* Bivouac beat 3 others.

Obituary.

THE DUKE OF BUCKINGHAM, K.G., died on the 29th ult. at the Great Western Hotel, in his 64th year, after a short illness. His Grace Richard Plantagenet Temple-Nugent-Brydges-Chandos-Grenville, Duke and Marquis of Buckingham and Chandos, Earl Temple of Stowe, and Viscount and Baron Cobham of Kent, in the peerage of the United Kingdom, Earl Nugent in Ireland, and co-heir with the Marquis Townshend of the barony of Bourchier, was the only child of the first Duke of Buckingham, by Lady Anne Eliza Brydges, daughter and heir of the third and last Duke of Chandos, and sole representative of Henry Grey, Duke of Suffolk, and of Frances his wife, eldest daughter and co-heir of Charles Brandon, Duke of Suffolk, by Mary, Queen Dowager of France, and daughter of King Henry VII. He was born in 1797, and married, in 1819, Lady Mary Campbell, second sister of the present Marquis of Breadalbane, by whom he has surviving issue the Marquis of Chandos, and Lady Anne, born in 1820, and married to Mr. W. H. Gore Langton. The Duchess obtained a legal separation from the Duke in 1850. The late Duke was educated under a private tutor, and subsequently pursued his studies at Oxford. After he had attained his majority he was elected for Buckinghamshire in the Conservative interest. To his strenuous opposition to the Reform Bill the country owes the "Chandos clause," which extends the country franchise to tenancies of 50*l.*; and he shared with the late Duke of Richmond the honour of having been the chief advocate of the agricultural interest. In 1836, his lordship, as Marquis of Chandos, obtained a select committee of the House of Commons "for the consideration of the grievances and depressed state of the agriculturists." He remained an active member of the Commons until the death of his father in 1839. On the late Sir Robert Peel taking office in 1841 he was appointed Lord Privy Seal, and held that office until the dissension in the Cabinet on the question of the repeal of the corn laws, when the Earl of Derby (then Lord Stanley) also left the Administration. Soon after he quitted office, the incumbrances which had been weighing on the family estates for three generations reached their climax, and the mansion and estates at Stowe, with all the priceless heirlooms which had been accumulating through many generations, was scattered to the wind under the auctioneer's hammer, and the Duke of Buckingham found himself stripped of his heritage, the owner of little more than the titles of his ancestors. After this disaster he entirely withdrew from public life. He was made a Knight of the Garter in 1842, having previously in 1835 been created by the late King William IV. a Knight Grand Cross of the Hanoverian Guelphic Order. He was also a Vice Lieutenant of the county of Bucks, and Colonel of the Bucks Yeomanry Cavalry. He was the author of "Memoirs of the Courts and Cabinets of George III.," and was engaged on another work of the same historical character, when he was seized by his fatal illness. His Grace is succeeded in the family honours by his only son, Richard Plantagenet Campbell, Marquis of Chandos, who was born in 1823, and married in 1851 the only daughter of Mr. Robert Harvey, of Langley Park, Bucks. The present Peer was from February to December, 1852, a Lord of the Treasury in the Earl of Derby's Government, and was for a period Keeper of the Privy Seal to the Prince of Wales and Special Deputy Warden of the Stannaries, and has held the post of chairman of the London and North-Western Railway since 1853. He represented Buckingham in Parliament from February, 1846, to April, 1857.

ADMIRAL THE HON. SIR FLEETWOOD BROUGHTON REYNOLDS PELLEW died at Marseilles on Monday last, in his 70th year. He was the second son of the first Viscount Exmouth by the second daughter of Mr. James Frowd, and was born in 1789. Entering the navy at an early age, he was engaged at the destruction of the Dutch naval force in the Indian seas, and continued to serve on the East India station till the reduction of Java in 1811, especially distinguishing himself at Samanep, in the Batavia Roads, and near Samarang. In 1813 he assisted at the capture of a French convoy in Porto d'Anzo. He served from 1818 to 1822 on the Mediterranean station. In 1852 he was appointed to command the Indian station, but was recalled in 1854, and became an Admiral of the Blue in 1858. In recognition of his services he was created a Companion of the Bath in 1815, and a Knight Commander of the Guelphic Order in 1836. He was twice married, first in 1816 to the only daughter of the late Sir Godfrey Webster, who died in 1849; and secondly, in 1851, to the daughter of the late Comte Edouard de Melfort, from whom he was divorced in 1855. He was appointed Naval Aide-de-Camp to the Queen in 1842.

THE HON. COLONEL MANNERING ONSLOW, son of the late Earl Onslow and brother of the present earl, died at his residence, Woodbridge, near Guildford, on Tuesday night. He served in the Scots Fusilier Guards in several engagements in Egypt under Sir Ralph Abercrombie, and in the Peninsular war. He was born in 1779, and was consequently in his 82d year.

MAJOR-GENERAL SWINBURNE died on the 27th ult. at Upton, near Southampton, in his 73d year. He served at the siege of Copenhagen and the campaign of 1808 in Portugal, and was wounded in the head on the retreat to Vigo. He was in the campaigns of the Peninsula until 1812, including the battles of Coa, Fuentes d'Onor, Sabugal, Busaco, Torres Vedras, the subsequent advance in pursuit of Massena, and the actions of Pombal and Redinha, where he was wounded. He subsequently joined the Duke of Wellington's army at Brussels, and was present at the capture of Paris, and remained with the army of occupation until the end of 1818. He had received the war medal and two clasps.

BIRTHS.—On the 25th ult, at Sudbury Rectory, Derbyshire, the Hon. Mrs. ANSON, wife of the Rev. Frederick Anson, of a son—26th ult, at Abbot's Moss, Cheshire, the Hon. Mrs. CHOLMONDELEY, of a daughter—19th June, at Madras, Lady BITTLESTON, wife of Sir Adam Bittleston, of a daughter—29th ult, at Surbiton, the wife of Rear-Admiral NIAS, C.B., of a daughter—6th June, at Madras, the wife of Colonel HUBERT MARSHALL, Military Secretary to the Government, of a daughter—25th ult, at 19, Gloucester Crescent North, Hyde Park, the wife of Lieutenant-Colonel C. A. ORR, Madras Engineers, prematurely, of a son, stillborn.

MARRIAGES.—On the 27th ult, at St. Mary's, Bryanston Square, the Earl of MEXBOROUGH, to AGNES LOUISA ELIZABETH, youngest daughter of the late JOHN RAPHAEL, Esq.—30th ult, at St. George's, Hanover Square, Lord AUGUSTUS H. C. HERVEY, second son of the Marquis of Bristol, to MARIANA, youngest daughter of the late H. P. HODNETT, Esq., and widow of Ashton Benyon, Esq., 63d Regt., of Stetchworth Park—27th ult, at St. James's Church, WILLIAM, eldest son of WILLIAM DEEDES, Esq., M.P., of Sandling Park, Kent, to SARAH MARY SOPHIA HARCOURT, eldest daughter of the late William Bernard Harcourt, Esq., and niece to the Marquis d'Harcourt—25th ult. at St. George's, Hanover Square, JOHN WINGFIELD MALCOLM, Esq., M.P., to the Hon. ALICE FREDERICA, youngest daughter of the Right Hon. Lord BOSTON—18th ult, at St. George's, Hanover Square, Major the Hon. R. BAILLIE-HAMILTON, to MARY GAVIN, eldest daughter of Sir JOHN and Lady ELIZABETH PRINGLE—30th ult, at St. Peter's Church, Eaton Square, WILLIAM HICKS, son of the late Sir JOHN SLADE, Bart., to CECILIA LOUISA, daughter of the late Sir CHARLES DES VOEUX, Bart., and niece to the Marquis of Winchester—26th ult, at St. George's, Hanover Square, ROBERT TEMPEST RICKETTS, Esq., eldest son of Sir Cornwallis Ricketts, Bart., to AMELIA HELEN, eldest surviving daughter of JOHN STEUART, Esq., of Dalguise, Perthshire, and niece of the Right Hon. Lord Elibank—24th ult, at the Grosvenor Square Church, Manchester, Capt. RICHARD MOLESWORTH, Royal Dragoons, eldest son of the late Hon. Capt. Molesworth, R.A., and nephew of the present Viscount Molesworth, to MARY LOUISA, eldest daughter of CHARLES AUGUSTUS STEWART, Esq., of Whalley Range, near Manchester—24th ult, at St. Andrew's Church, Kelso, JAMES HENRY, eldest son of Sir GEORGE RAMSAY, Bart., of Bamff, in the county of Perth, and Student of Christ Church, Oxford, to ELIZABETH MARY CHARLOTTE, eldest daughter of WILLIAM SCOTT KERR, Esq., of Chatto and Sunlaws, in the county of Roxburgh—24th ult, at Chiselhurst, Kent, THOMAS SALT, jun., Esq., M.P., to HELEN, youngest daughter of JOHN ANDERDON, Esq., of Chiselhurst.

DEATHS.—On the 22d ult, at Solihull, Warwickshire, FREDERICK JAMES PERCEVAL, Esq., second son of the late Right Hon. Spencer Perceval, aged 63—24th ult, at Coley Park, Reading, Lady WALLER, wife of Sir THOMAS WATHEN WALLER, Bart.—28th ult, at Baldovan House, Dundee, the Lady JANE OGILVY—24th ult, in Beaumont Street, ELIZABETH, relict of the late Rear-Admiral WILLIAM FISHER—20th ult, at Llandulass, North Wales, Major-General JOHN LAWRIE, H.M.'s Madras Army, aged 69—23d ult, at Apsley House, FRANCES DALE, widow of the late Colonel C. HERVEY SMITH, of Apsley House, near Woburn, Beds, aged 78—27th ult, at 3, Norfolk Square, Hyde Park, JOHANNA MARTINA (Van Renen), wife of the Hon. JOSEPH BARRY, Esq., M.L.C., Cape of Good Hope—30th May, at St. Helena, HARRIET, the wife of W. WILDE, Esq., Chief Justice of the colony—27th ult, at Southampton, GEORGE ABERCROMBY, Esq., Member of the Council of the Island of Grenada—24th ult, at Ramsgate, ROBERT DENBY WOODIFIELD, of 24, Connaught Square, London, late Inspector General of her Majesty's Customs, aged 74—22d ult, after a few days' illness, JAMES NEYNOE VIVIAN WILLYAMS, Esq., a magistrate for the county of Cornwall, and late a Lieutenant in the Royal Miners Artillery, eldest son of HUMPHRY WILLYAMS, Esq., of Carnanton, in the same county, aged 38—20th ult, at Whitburn West House, in the county of Durham, JOSEPH SIMPSON, Esq., J.P., aged 76—24th ult, at 20, Grosvenor Street, Grosvenor Square, from accidental injuries by fire, ELIZABETH, wife of BERNARD EDWARD BRODHURST, Esq., aged 32—26th ult, at Brighton, the Rev. JOHN HENRY YOUNG, rector of Kirby Mallory, Leicestershire, aged 41—25th ult, at 5, Randolph Road, Maida Hill West, ANNA MARIA TREE, relict of the late Cornelius Tree, and mother of Mrs. Bradshaw, Mrs. Charles Kean, and Mrs. Chapman, aged 90.

Markets.

COVENT GARDEN, Aug. 3.

Both Vegetables and Fruit continue equal to the demand. Apricots, Figs, and excellent Greengage Plums, new Apples and Pears, still come from the Continent. West India Pines may also be had in great abundance. Peas are plentiful and cheap. Grapes are abundant. Of Strawberries the supply is now rapidly decreasing, and the same may be said of Cherries. Broad Beans, young Carrots, and new Potatoes may be had in quantity. Of the latter, many samples are, however, diseased. Prices for them are 10s. a ton lower than last week. Cucumbers are coming in plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Pelargoniums, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Currants, p. ½ sieve, 5s
Grapes, per lb., 2s to 5s	Gooseberries, do., 5s
Strawberries, p. pun., 6d to 1s	Pears, per doz., 1s to 1s 6d
Melons, each, 1s to 4s	Apples, per doz., 6d to 1s
Peaches, per doz., 10s to 15s	Oranges, per 100, 6s to 14s
Nectarines, do., 6s to 12s	Lemons, per 100, 6s to 10s
Apricots, do., 1s to 3s	Nuts, Cob, per lb., 1s to 1s 6d
Cherries, English, p. lb., 6d to 1s	

VEGETABLES.

Cauliflowers, each, 2d to 6d	Beet, per doz., 1s 6d to 6s
French Beans, p. pun, 9d to 1s 6d	Celery, p. bundle, 1s 6d to 2s 6d
Green Peas, p. quart, 1s to 1s 6d	Onions, p. ½ sieve, 4s 6d
Broad Beans, p. bush, 3s 6d to 4s	Asparagus, p. bundle, 3s to 7s
Cabbages, do., 1s 3d to 1s 6d	Rhubarb, p. bundle, 6d to 9d
Potatoes, p. ton, 60s to 80s	Tomatoes, p. doz., 4s to 6s
— per lb., 1d to 4d	Shallots, per lb., 1s 6d
— — per cwt., 4s to 8s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 4d to 6d	Endive, p. doz., 3s to 4s
Carrots, new, do., 1s to 1s 3d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., 1s 3d to 1s 6d
Cucumbers, each, 6d to 9d	Parsley, p. 12 bunches, 4s to 6s
Veg. Marrows, p. doz, 1s to 1s 6d	Savory, per bunch, 2d to 4d
Artichokes, each, 4d to 6d	

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, Aug. 1.

Prime Meadow Hay	75s to	84s	Clover	90s to	120s
Superior do. (old) ..	88	100	New Clover ..	.. —	—
Inferior do.	36	50	Do. second cut	.. —	—
New do.	50	80	Straw	.. 30	40
Rowen	—	—			

DAVIS & Co.

WHITECHAPEL, THURSDAY, Aug. 1.

Fine old Hay	100s to	105s	Fine old Clover ..	115s to	123s
Inferior do.	80	90	Inferior do	80	95
Very inferior	—	—	Fine 2d cut	100	105
Prime New Hay ..	78	88	Inferior do.	—	—
Straw	40	40	Fine New Clover ..	80	100

BUTTER MARKET.—Aug. 2.

Best Fresh Butter .. .. 14s. per dozen lbs.
Second do. do. .. .. 12s. „ „

Pork, 4s. 4d. to 5s. 0d. per 8 lbs.

BRITISH WOOLS.—LONDON, FRIDAY, Aug. 2.

The state of our trade continues buoyant, the fine harvest weather imparting confidence to all holders of wool.

	s. d.	s. d.		s. d.	s. d.
South-down Hoggets	to	1 5	Leicest. Wethers	1 3 to	1 4
Half-bred ditto ..	1 5 —	1 6	Ditto Hoggs ..	1 4 —	1 5
Down Ewes ..	1 4 —	1 5	Combing Skins	1 0 —	1 5
Kent Fleeces ..	1 5 —	..	Flannel Wool ..	1 0 —	1 5
			Blanket ditto ..	0 6 —	..

COLONIAL WOOL SALES.—These sales continue to go off fully as well, and there is a talk of shortening the sales a week, unless the prices should improve.

COAL MARKET.—July 31.

Craghead Steam, 15s.; Hasting's Hartley, 17s. 0d.; Tanfield Moor, 13s. 3d.; Wylam, 15s. 6d.; Walls End Byron, 18s. 6d.; Walls End Braddyls Hetton, 18s. 9d.; Walls End Durham, 16s.; Walls End Hetton, 20s.; Walls End Russel's Hetton, 18s. 9d.; Walls End South Hetton, 19s. 6d.; Walls End Stewarts, 19s. 6d.; Walls End Hartlepool, 19s. 3d.; Walls End South Durham, 18s.; Walls End Trimdon Thornley, 15s.; Carway and Duffryn Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.—87 ships at market.

METROPOLITAN CATTLE MARKET.

MONDAY, July 29.

We have a much larger supply of Beasts than for some time past, consequently prices are lower, and a clearance cannot be effected. The number of Sheep and Lambs is also rather larger than of late; choice qualities, however, are not very plentiful, and prices are about the same as on Monday last. The Calf trade is about the same as on Thursday. From Germany and Holland there are 1885 Beasts, 6470 Sheep, 264 Calves, and 140 Pigs; from Scotland, 180 Beasts; from France, 37 Calves; from Ireland, 230 Beasts; from Norfolk and Suffolk, 300; and 2060 Beasts from the northern and midland counties.

	s. d.	s. d.		s. d.	s. d.
Best Scots, Herefords, &c. ..	4 8 to	4 10	Best Long-wools ..	to	..
Best Short-horns	4 6 —	4 8	Do. Shorn ..	4 10 —	5 0
2d quality Beasts	3 6 —	4 0	Ewes & 2d quality	.. —	..
Best Downs and Half-breds ..	.. to	..	Do. Shorn ..	4 4 —	4 8
Do. Shorn ..	5 0 to	5 2	Lambs	5 0 —	6 0
			Calves	3 8 —	4 8
			Pigs	3 6 —	4 6

Beasts, 5220; Sheep & Lambs, 27,140; Calves, 367; Pigs, 180.

THURSDAY, Aug. 2.

We have a fair supply of Beasts; trade is slow, and they cannot all be sold. Prices are almost the same as on Monday. We are moderately supplied with Sheep, and choice qualities are readily disposed of at full rates. Lambs and Calves are plentiful. The demand is small, and prices are low. Our foreign supply consists of 420 Beasts, 2780 Sheep, and 411 Calves. The number of Milch Cows is 90. From Ireland, 35 Calves.

Best Scots, Herefords, &c.	.. 4 8 to 5 10	Best Long-wools	.. .. to ..
Best Short-horns	4 6 — 4 8	Do. Shorn	.. 4 10 — 5 2
2d quality Beasts	3 4 — 4 0	Ewes & 2d quality	.. — ..
Best Downs and Half-breds	.. .. — ..	Do. Shorn	.. 4 4 — 4 8
Do. Shorn	.. 5 0 — 5 4	Lambs ..	. 5 0 — 5 10
		Calves ..	.. 3 6 — 4 6
		Pigs ..	.. 3 6 — 4 8

Beasts, 1160; Sheep & Lambs, 12,140; Calves, 631; Pigs, 130.

MARK LANE.—MONDAY, July 29.

There was only a limited supply of Wheat from Essex and Kent to this morning's market. The weather being fine the trade assumed a more quiet tone, sales being slowly effected at last week's currencies. The imports of foreign Wheat were 20,292 qrs., but there was only a retail inquiry at previous rates. Barley for grinding purposes maintained its value, but the demand was not by any means large. The arrivals of Oats were 8687 quarters from abroad, and the trade remained brisk, fully last week's quotations being readily obtainable. Beans and Peas were unaltered in value. The floating cargo trade remains quiet, but holders are firm, there being still an inquiry for the Continent.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk..White	46—63	Red	46—60
— — fine selected runs..ditto	50—76	Red	50—65
— — Talavera	51—67		
— Norfolk	—	Red	—
— Foreign	40—74		
BARLEY, grind. & dist., 26s to 27s..Chev.	36—40	Malting.	34—36
— Foreign..grinding and distilling	27—30	Malting.	33—36
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign.......Poland and Brew	20—23	Feed ..	19—21
RYE	35—37	Foreign.	—
RYE-MEAL, foreign	—		
BEANS, Mazagan....37s to 40s....Tick	40—43	Harrow.	40—43
— Pigeon ......41s — 45s..Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
PEAS, white, Essex and Kent ..Boilers	34—37	Suffolk .	38—39
— Maple .... —s to —s ...... Grey	40—42	Foreign.	35—38
MAIZE ....White	—	Yellow..	—
FLOUR, best marks delivered..per sack	50—55		
— 2d do. ....ditto	34—50	Country.	34—50
— Foreign ....per barrel	26—32	Per sack	43—58

FRIDAY, Aug. 2.

The weather since the 26th ult. has continued to bear the same character as of late; the heat has increased, but less rain has fallen during the last few days; the wind continues principally in the S. and S.W. The crops seem to mature quickly, and Wheat cutting in the South of England is likely to be general in 8 or 10 days; Potatoes are less favourably spoken of. The Wheat trade in the principal ports of the country has been languid, and but little relieved by the continued export demand for France and Belgium. The supplies generally from America being considerable and partly in poor condition (heated), prices were barely maintained for such, whilst in the markets held in the agricultural districts the supply of Wheat having been fair and the demand good, prices for best were in sellers' favour. Flour remained a slow sale. Barley the same as last week. Peas and Beans found buyers at fully former rates, while Oats met with more attention and a slight improvement in value. During the past seven days 34 vessels have been reported off the coast. The floating trade has been firm, and higher prices obtained for Wheat. The arrivals of English Wheat this week have been comparatively good, of other grain small; of foreign Wheat and Flour and Oats the supplies are large, of Barley small. To-day's market was thinly attended, and with the exception of some sales of American Wheat for export to France business in either English or foreign was very limited; prices are nominally the same as on Monday. Spring Corn of all descriptions is quiet at our late quotations. Flour is dull and more difficult of sale.

ARRIVALS FROM July 29 TO Aug. 2.

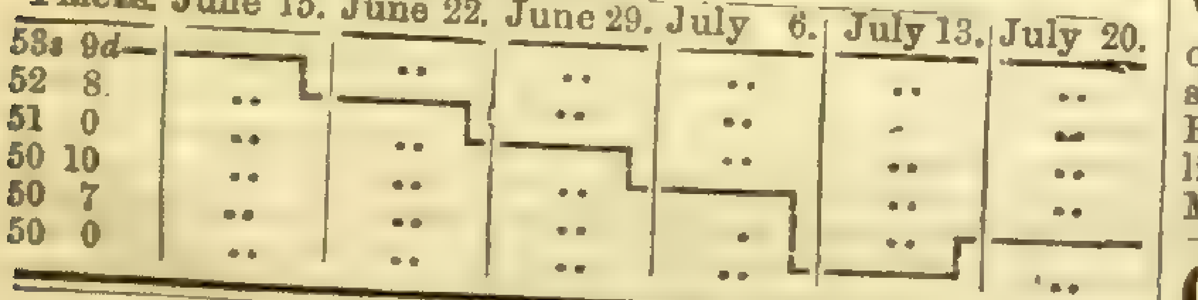
	Wheat.	Barley.	Oats.	Flour.
English ..	3190 qrs.	160 qrs.	30 qrs.	1610 sks.
Irish	— ,,	— ,,	1500 ,,	— ,,
Foreign ..	42500 ,,	1600 ,,	32750 ,,	— ,, / 34120 brls.

LIVERPOOL, Tuesday, July 30.—This morning's market was well attended, and Wheat had a healthy consumptive demand at the full rates of Friday for fine sorts, and an advance of 1d. per cental on such as were previously so much depressed. Flour had a better inquiry, but could not be called dearer. Indian Corn was held for an advance of 6d. per qr., which checked business. Oats and Oatmeal without alteration. Beans in moderate request at previous rates. Peas fully 6d. per qr. dearer. Barley as last quoted. The market did not close quite so brisk as it opened.

FRIDAY, Aug. 2.—Market fairly attended. Wheat in fair request at late prices. Flour meets a steady demand at full prices. Oats and Oatmeal dull. Beans open firmer. Indian Corn mostly held for an advance, and sound parcels not fully offered.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
June 15..	53s 9d	34s 3d	25s 2d	31s 2d	44s 3d	44s 1d
— 22..	52 8	32 6	25 2	45 5	44 0	38 8
— 29..	51 0	31 3	25 0	39 4	43 3	37 1
July 6..	50 10	31 9	26 0	35 9	43 11	39 11
— 13..	50 0	30 4	24 6	33 0	42 4	42 0
— 20..	50 7	30 3	25 9	38 8	42 8	37 10
Agg. Aver.	51 9	31 9	25 5	36 4	43 5	39 7

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



Three Counties Lunatic Asylum, near Arlsey, Bedfordshire.

WANTED, a FARM BAILIFF to manage the Farm attached to this Institution. Salary 80*l.*, with an Unfurnished House and Gas, and 1½ rood of Garden Ground. The duties to commence on the 29th of September next. Applications in the handwriting of Candidates, accompanied by Testimonials, to be transmitted to the Clerk to the Committee of Visitors, St. Cuthbert Street, Bedford, on or before SATURDAY, August 17, of whom further particulars may be obtained.—Bedford, Aug. 3.

WANTED, a married MAN, with good address, to attend Customers, to put up Orders in a Small Seed and Nursery Business, and to make himself generally useful in Growing a small Collection of Greenhouse Plants.—Apply by letter to Messrs. PAMPLIN & SON, Nurserymen, Lea Bridge Road, Leyton, Essex, N.E.

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WANTED, A WORKING GARDENER without incumbrance, who can Milk. Wife to attend to Poultry and Laundry.—F. W., Post Office, Battle.

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News of the Week.

PARLIAMENT was prorogued on Tuesday by commission. The QUEEN'S Speech announced that HER MAJESTY'S relations with foreign Powers are friendly and satisfactory, and expressed the hope that there is no danger of any disturbance of the peace of Europe. It alluded to the union of the greater part of the Italian peninsula under the monarchy of KING VICTOR EMMANUEL, and expressed an earnest wish that the affairs of that country may be settled in the manner best suited to the welfare and happiness of the Italian people. It briefly stated that "the dissensions which arose, some months ago, in the United States of North America, have, unfortunately, assumed the character of open war," and while lamenting this calamitous result, declared HER MAJESTY'S determination, in common with the other Powers of Europe, to preserve a strict neutrality between the contending parties. After announcing the restoration of order and tranquillity in Syria, and the withdrawal of the French troops, it noticed with satisfaction the rapid improvement in the internal condition of India, and the progress which has been made towards equalising the revenue and expenditure in that part of the empire. It thanked the House of Commons for the liberal supplies granted for the public service, notwithstanding the sensible reduction of taxes which has been effected during the session. It expressed HER MAJESTY'S deep gratification at the devoted patriotism which continues to animate the Volunteers, and her admiration of their rapid progress in discipline and military efficiency. It then alluded to the principal measures of the Session, and stated that HER MAJESTY had given her cordial assent to the Act allotting the forfeited seats of Sudbury and St. Albans, to the Act for the Amendment of the Law of Bankruptcy and Insolvency, the Acts for consolidating the Criminal Law and promoting the revision of the Statute Law, the Acts relating to India, the Act for the Improvement of Harbours and for relieving Merchant Shipping from Passing Tolls, the Act relating to the Relief and Removal of the Poor, and the Act for facilitating arrangements connected with the Drainage of Land. The Speech expressed HER MAJEST'S heartfelt satisfaction at the spirit of loyalty, order, and obedience to the law, which prevails throughout all her dominions, and her hope that by wise legislation, and a just administration of the law, the continuance of this happy state of things will be secured. It concluded with a fervent prayer that the blessing of Almighty God may attend the exertions of Parliament and guide them to the attainment of the objects of HER MAJEST'S constant solicitude —the welfare and happiness of her people. Parliament was then formally prorogued to Tuesday the 22nd of October.

In the House of Lords on Monday, on the motion of the Earl of SHAFTESBURY, an address to the Crown, praying for an inquiry into the employment of women and young persons in trades and manufactures not already regulated by law, was agreed to. On Tuesday, in answer to the Marquis of CLANRICARDE, Lord STANLEY OF ALDERLEY said that though the Committee had reported that the Government were justified in rescinding the Galway contract, they were prepared, in the event of the Atlantic Mail Company being next year in a condition to carry out the contract, to give any proposals they might make the most serious consideration.

In the Commons on Friday, in answer to Sir G. BOWYER, Lord PALMERSTON expressed his hope

that General CIALDINI and the Italian Government would succeed in freeing the Neapolitan provinces from the revolutionary agents "worse than brigands" who had been sent across the frontier with arms and money from Rome to disturb the tranquillity of the country and to "perpetrate every description of atrocity." On Tuesday, in answer to Mr. BRADY, Lord PALMERSTON made a statement similar to that made in the House of Lords by Lord STANLEY OF ALDERLEY, to the effect that when the Atlantic Mail Company were in a position to show that they had capital and ships to enable them to renew the service, the Government would give a favourable consideration to any application they might make for a renewal of the contract. In answer to Mr. WYLD, Lord PALMERSTON stated that the Federal Congress had passed a law empowering the PRESIDENT of the United States to station vessels off the ports of the Southern States for the purpose of collecting customs duties upon foreign merchandise. That proceeding, if carried out, would be a practical supercession of the blockade, because customs duties could only be levied upon the assumption that the ships were to enter. No official information, however, had yet been received as to the intentions of the PRESIDENT.

The first great battle in America between the North and South was fought on Sunday the 21st of July at Bull's Run, about 5 miles from Manassas Junction, and with the most disastrous results to the Federal army. On that day, with a view of retrieving the reverse sustained on the 18th by General TYLER's division, the whole army, under General M'DOWELL, advanced on the Confederate position, and after nine hours' hard fighting succeeded in capturing three of the batteries. During these operations General BEAUREGARD, the Confederate commander, was opportunely reinforced by General JOHNSTONE with 25,000 men, while Mr. JEFFERSON DAVIS, the President of the Southern Confederacy, arrived from Richmond, and took command of the centre in person, General BEAUREGARD commanding the right, and General JOHNSTONE the left wing. The Confederate army now assumed the offensive, and advancing upon the Federal army on all points, drove them in disorder from the field. The Federal troops were completely panic-stricken, and fled tumultuously towards Washington, notwithstanding the utmost efforts of General M'DOWELL to rally them at Centreville and Fairfax Court House. The Confederates pursued them as far as Fairfax and captured the whole of the Federal artillery of rifled cannon, with large quantities of other arms. The loss on each side is widely estimated at between 2000 and 4000. The repulse had created a deep sensation at Washington and New York. The New York press and the Union Defence Committee attribute the disaster to the incapacity of the Cabinet, and General SCOTT has admitted that he was forced into battle contrary to his judgment and before he was prepared. General M'DOWELL has been superseded by General M'CLELLAN, who recently distinguished himself by his operations against the Secessionists in Western Virginia. An additional army of 80,000 men has been voted, and Congress and the people of the North have declared their readiness to make any sacrifice of men and money for the purpose of retrieving the disgrace of this defeat. The latest news states that the War Department has received information that the Confederates are advancing to attack Harper's Ferry, and that an attack on Washington is apprehended.

THE KING OF SWEDEN and PRINCE OSCAR have arrived at St. Cloud this week on a visit to the EMPEROR. It is now announced that the visit of the KING OF PRUSSIA to the camp at Châlons will not take place, but that an interview between HIS MAJESTY and the EMPEROR will take place at Strasburg on the 6th October. The Minister of the Kingdom of Italy was officially received by the EMPEROR on Thursday.

A despatch from Pesth announces that in the sitting of the Lower House on Thursday, the draft of an address from the Diet in answer to the recent rescript of the EMPEROR was proposed by M. DEAK, and unanimously and enthusiastically adopted. This address does not differ materially from the first address. It refutes the imperial rescript, declines to send deputies to the Council of the Empire, declares that the Diet must cease to transact any Parliamentary business, and concludes by stating that further negotiations are broken off. The Croatian and Sclavonian Diet has resolved not to send representatives to the Council of the Empire.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family continue at Osborne. On Thursday the 1st, the Queen, Prince Consort, and the Royal Family passed the day in complete retirement, in consequence of the solemn event which took place privately at Frogmore. On Friday the Archduke and Archduchess Maximilian of Austria arrived from London on a visit to her Majesty. The Judge-Advocate-General had an audience of the Queen. In the afternoon the Queen and Prince Consort drove out, accompanied by the Archduke and Archduchess Maximilian, the Crown Prince and Princess of Prussia, Princess Alice, and Princess Helena. On Saturday afternoon the Queen, Prince Consort, Princess Louisa, and the Royal visitors drove out. On Sunday morning the Queen, Prince Consort, the Crown Prince and Princess of Prussia, Princesses Alice, Helena, and Louisa, Prince Arthur, and Prince Leopold, attended Divine service at Osborne. The Rev. G. Prothero officiated. On Monday morning the Queen and Prince Consort, accompanied by the Archduke and Archduchess Maximilian, the Crown Prince and Princess of Prussia, Princesses Alice, Helena, and Louisa, embarked in the Fairy and steamed towards Cowes. Her Majesty afterwards held a Privy Council, at which the Royal Speech, on closing the Session of Parliament, was submitted and approved. His Excellency M. Musurus, the Turkish Ambassador, had an audience, and delivered his credentials. Mr. Roundell Palmer, Solicitor-General, was presented to the Queen at an audience, and received from the Queen the honour of knighthood. Lord Palmerston, Earl Russell, the Chancellor of the Exchequer and Earl Granville had audiences of the Queen. In the afternoon the Archduke and Archduchess Maximilian left Osborne for Worthing on a visit to the ex-Queen of the French. The Prince Consort and the Crown Prince of Prussia accompanied their Imperial Highnesses to Portsmouth, where they visited the forts. Her Majesty, accompanied by the Crown Princess, Princess Alice, and Prince Leopold, crossed over in the Fairy at a quarter before 6, and met the Prince Consort at Portsmouth. The Royal party returned to Osborne about 8 o'clock. On Tuesday morning the Prince Consort, with the Crown Prince and Princess of Prussia, Prince Arthur and Prince Leopold, embarked in the Royal yacht Victoria and Albert for Portland. In the afternoon, the Queen, accompanied by the Princesses Alice, Helena, and Beatrice, Prince William and Princess Charlotte of Prussia, embarked in the Fairy, and steamed towards the Needles, to meet the Prince Consort and the Crown Prince and Princess of Prussia on their return. In the evening the Princess Charles and Princess Anne of Hesse arrived from the Continent on a visit to her Majesty. On Wednesday the Queen and Prince Consort, accompanied by the Crown Prince and Princess of Prussia, Princess Charles and Princess Anne of Hesse, Princess Alice, and Princess Helena, drove out. On Thursday morning the Prince Consort and the Crown Prince of Prussia went to the camp at Aldershott, and were present at a review of the troops, returning to Osborne in the evening. The Duke of Oporto arrived on a visit to her Majesty.

PRINCE ALFRED was expected to arrive at Prince Edward's Island on the 13th of July. The Prince was to visit Lieutenant-Governor Dundas and Mrs. Dundas at Government House, where the Countess of Mulgrave and Lady Laura Phipps had arrived to meet his Royal Highness.

THE ARCHDUKE AND ARCHDUCHESS MAXIMILIAN OF AUSTRIA left Claridge's Hotel on Thursday for Belgium.

THE DUKE OF OPORTO.—The Portuguese steam frigate Bartholomew Dias, commanded by his Royal Highness the Duke of Oporto, arrived at Southampton on Thursday, for the purpose of conveying to Lisbon the Prince of Hohenzollern, who is about to marry the sister of the King of Portugal. In the afternoon the Duke of Oporto proceeded to Osborne, on a visit to her Majesty.

THE CABINET.—A Cabinet Council was held on Saturday at the official residence of the First Lord of the Treasury, in Downing Street. Another Council was held on Monday.

THE PEERAGE.—The Queen has directed letters patent to be passed under the Great Seal, granting the dignity of a Baron of the United Kingdom to Vice-Admiral the Right Hon. Sir Maurice Frederick Fitzhardinge Berkeley, G.C.B., and the heirs male of his body lawfully begotten, by the title of Baron Fitzhardinge, of the city and county of the city of Bristol.

PARLIAMENTARY MOVEMENTS.—Mr. H. A. Herbert has written to the local papers, contradicting, as entirely without foundation, the rumour that he was about to be elevated to the peerage, and that there would consequently be a vacancy in the representation of the county of Kerry.—Sir William Miles is about to retire from East Somerset. Sir Henry [illegible] Arthur Elton have announced their [illegible] the seat in the Liberal interest, and [illegible] Q.C., will be brought forward by [illegible]

GOVERNORSHIP OF NEW ZEALAND.—[illegible] last evening announces that the [illegible] Sir George Grey, K.C.B. (now administering the Government of New Zealand), to be [illegible] Commander-in-Chief of New Zealand [illegible] pendencies.

NEW BISHOPRIC FOR THE SANDWICH [illegible] Some time since a committee, consisting of [illegible] of Oxford, Lord Robert Cecil, M.P., M[illegible] M.P., Archdeacon Grant, Archdeacon [illegible] Beresford Hope, Mr. Manley Hopkins, [illegible] Consul-General, the Hon. Douglas [illegible] gentlemen, was appointed for the [illegible] sidering a despatch from the [illegible] the King of Hawaii, expressing [illegible] to receive a mission from the Church [illegible] headed by a bishop, with a view of [illegible] in the Hawaiian islands. The result of [illegible] been the appointment, with the consent of the [illegible] Canterbury, of the Rev. Thos. N[illegible] of Queen's College, Cambridge, principal of the [illegible] School at Wandsworth, to the bishopric. [illegible] the bishopric will be at Honolulu, a [illegible] besides its native population, about [illegible] American residents. The French [illegible] possess a cathedral there, with a bishop [illegible] the American Congregationalists have [illegible] worship. The King offers, on his [illegible] of his subjects and residents who [illegible] ment of the English Episcopal Church, [illegible] ment of 200*l*., with a site for a church [illegible] The authorities of the American Church [illegible] undertaken to select and maintain [illegible] assist the bishop, who will also hold [illegible] to the Crown Prince. The opinion of the [illegible] of the Crown has removed any apprehension [illegible] legality of consecrating the new bishop.

THE CHURCH.—The Bishop of Rochester [illegible] pointed the Rev. Carew Anthony St. John [illegible] many years rector of St. Mary's, [illegible] archdeaconry of Essex, vacant by the [illegible] Venerable Hugh Chambres Jones, [illegible] Paul's.—The Rev. John Mee, M.A., of the [illegible] Foreign Bible Society, has been appointed [illegible] of Grahamstown, South Africa.

THE NAVY.—Rear-Admiral J. J. [illegible] appointed Conservator of the Thames.

THE CHANNEL FLEET.—Rear-Admiral [illegible] division of the Channel fleet, consisting [illegible] 91; Trafalgar, 91; and Hero, [illegible] harbour on Sunday. Rear-Admiral [illegible] consisting of the Revenge, 89; [illegible] rion, 80; and Conqueror, 99, anchored [illegible] Sound on Wednesday afternoon.

THE IRON-CLAD FRIGATES.—Capt. the [illegible] Cochrane, C.B. has been appointed to the [illegible] the Warrior, and Capt. Richard Ashmore [illegible] been appointed to command the Defence. [illegible] hoisted her pennant for the first time [illegible] made her first voyage from Blackwall [illegible] She had the assistance of three [illegible] under steam herself, and answered her [illegible] as to be always completely in hand. [illegible] notwithstanding the very strong wind [illegible] in the river, she proved as manageable [illegible] steamboat, and within two hours of [illegible] leaving the Victoria Docks was quietly [illegible] anchor a little above Gravesend. [illegible] the river she answered her helm [illegible] though the wheel worked stiff and was [illegible] yet a very few turns did all that was [illegible] Keppel, Sir F. Nicolson, Commodore [illegible] modore Eden, who were on board, [illegible] the perfect ease with which [illegible] times held in hand. The engines [illegible] ease which, considering their immense [illegible] was almost marvellous. Not a single [illegible] alteration, easing, or even adjustment [illegible] whatever. The highest speed attained [illegible] passing Woolwich, when the tide [illegible] height, though on the whole slightly [illegible] Going at rather less than 50 revolutions [illegible] the rate of 11½ knots. At no time, [illegible] was changed from slow ahead to full [illegible] the vibration of the screw more [illegible] practically speaking, either in the [illegible] quarter-deck. With a wooden vessel [illegible] length and power, the shake of the [illegible] been excessive, but the iron frame and [illegible] the Warrior have made it as rigid [illegible] that now remains to be done to the [illegible] way of internal fittings, her rigging [illegible] complete. The outside is the very [illegible] workmanship, the plates fitting in [illegible] ness of a coat of varnish, and [illegible] to detect with the eye where [illegible] After taking in her heavy stores and [illegible] Warrior will, early next month, make her [illegible] by going round under steam to [illegible] armament, with the exception of two [illegible] strongs on the upper deck, will, for the [illegible] entirely of solid smooth-bore 68-pounders [illegible] but it is intended eventually to arm her [illegible] 100-pounders, except only the two [illegible]

[illegible] deck, which will be 40-pounder Armstrongs. [illegible] morning notices were sent round from [illegible] Admiralty to the Thames Iron Works, Messrs. [illegible], Mr. Mare, Mr. Wigram, Mr. Laird, Messrs. [illegible], Mr. Napier and Messrs. Westwood & Baillie, [illegible] tenders for building three more iron frigates. [illegible] vessels are to be 20 feet longer and 15½ inches [illegible] than the Warrior—viz., 400 feet long by [illegible] beam. Their depth is to be the [illegible] as the Warrior; their tonnage 6620, with [illegible] horse-power, nominal. They are to [illegible] a flatter floor, though with the same draught of [illegible]. Each is to be entirely coated from stem [illegible] with armour-plates of 5½ instead of 4½ inches [illegible]. [illegible] as at present arranged, is to be a [illegible] of 9 [illegible] of solid teak. The Admiralty, however, reserve to themselves the right of altering this portion of the contract within the next three months, and either increasing the thickness of the iron to 6½ inches and doing away with the teak altogether, or leaving the proportions as mentioned. In fact, the Admiralty are waiting to see the results of the experiments on Mr. [illegible]'s plan of iron only for [illegible] and also to see how the target which is now [illegible] on the same plan as the Warrior's side will stand [illegible] it will shortly receive at Shoeburyness. [illegible] the armour of these new vessels, whether of wood and iron, or iron only, is to weigh 2,100 [illegible]—the armour alone of the Warrior being very [illegible] 1300 tons. The spar deck is to be of [illegible], instead of, as with our present ships, only quarter-inch, and all the lower decks are to be of wood, laid on iron beams, and strengthened across with diagonal stringers and braces of iron, in the usual manner. Neither bows nor stern are to overhang. The bows are to be sharp and wedge-shaped, rising straight from the water, like that of the Great Eastern. The stern is to be quite round and almost straighter than La Gloire's. Tenders are required at the Admiralty from the firms mentioned for three such vessels to be begun at once; and tenders for three more will be [illegible], it is said, in the course of the autumn.

Foreign.

FRANCE.—The *Moniteur* of Sunday publishes a circular addressed by M. Rouland, Minister for Public Worship, to the bishops of France, relating to the celebration of the Emperor's *fête* on the 15th inst., of which the following is a summary:—

"[illegible] reminds the bishops that his Majesty firmly maintains the glorious tradition of France, which opened a [illegible] [illegible] at the extremity of the East, and [illegible] [illegible] the Christians in Syria. The Pope, in a solemn act, thanks our army for the support and the security which it gives him. Undoubtedly there still remain grave difficulties to overcome, but their solution must be the work of a patient, loyal, and circumspect policy. This solution belongs principally to Providence. Let us loudly pray that the Divine aid may be continued to their Majesties, to assist them [illegible] thoughts for the peace of nations, and the [illegible] and dignity of France."

A [illegible] circular has been addressed to the Presidents of the Directory of the Church of the Confession of [illegible], of the Central Jewish Consistory, and of [illegible] of the Reformed Churches. The Emperor, [illegible] and the Prince Imperial arrived at the [illegible] on Saturday from Fontainebleau and proceeded [illegible] St. Cloud in the evening. The Empress left Paris [illegible] Tuesday evening for Eaux Bonnes. The King of [illegible], accompanied by Prince Oscar, landed at Havre [illegible] Tuesday morning, and arrived at St. Cloud by special [illegible] in the afternoon. The Emperor, attended by the [illegible] of the Crown and his Military Staff, [illegible] his royal guests at the gates of the park, where [illegible]. His Majesty cordially embraced the [illegible] and Prince Oscar, and escorted them to the [illegible]. On Wednesday the King paid a visit to the [illegible], and in the evening accompanied the [illegible] to the Opera. In honour of his Majesty's visit [illegible] was to hold a grand review of the [illegible] Guard and of the garrison of Paris [illegible] afternoon in the Champ de Mars. The [illegible] will return by way of Cherbourg, where the [illegible] squadron is to assemble in a few days, [illegible] review is to take place. The Gloire and two [illegible] frigates, the Normandie and the [illegible], lately built at Lorient and Brest, are to form [illegible] division of the squadron. It is now [illegible] the King of Prussia's visit to the Camp [illegible] will not take place. General Willisen on [illegible] delivered to the Emperor an autograph [illegible] the King, and it is now asserted that the interview between the Emperor and his Majesty will [illegible] at Strasburg on the 6th of October. It is [illegible] that the intended interview of the [illegible] and Empress with the Queen of Spain this [illegible] will not take place, the Queen having [illegible] her unwillingness to go to St. Sebastian [illegible] purpose. It is understood that the [illegible] will take up his residence at the Camp [illegible] on the 13th or 14th inst., and will remain [illegible] during the national *fête* on the 15th. On [illegible] morning the Emperor officially received [illegible] Minister of the Kingdom of Italy. His Excellency and suite were conveyed to the Tuileries [illegible] three state carriages. The ratification of the [illegible] between England and France respecting [illegible] took place on the 30th of July. The Minister of War has just published a circular commanding that the second portion of the conscripts of the year 1860 are to be assembled at the depôts formed for the instruction of young soldiers during the months of October, November, and December of the present year. Special instructions have been addressed by the Minister to the military authorities whose duty it is to carry the circular into execution.—The Imperial Appeal Court of Amiens has given judgment in the great will case of the Marquis de Villette. The marquis left his large landed property to the Bishop of Moulins, Mgr. de Dreux Brézé, a member of an aristocratic family closely allied with the Legitimist party. The validity of the will was contested by the Crown on the ground that the bishop was in reality intended to be a trustee for the Count de Chambord, who, by a special statute, is incapable of taking property in France. The bishop solemnly pledged himself that he was not a trustee, and the Tribunal of the First Instance at Clermont decided, contrary to the pleading of the minister, that there was no sufficient proof of the trust. This decision has now been reversed. The Appeal Court, admitting the good faith of the bishop, was of opinion that the testator meant him to be a trustee for the Count de Chambord, and that the devise is therefore void. It further decided that a subsidiary devise to M. Alfred de Montreuil, who produced evidence against the bishop in the hope of getting the estate for himself, is also void, as tainted with an illegal trust, and that the right heirs are entitled to the property. The Bishop of Moulins and M. Montreuil were therefore declared trustees, and condemned in the costs.—An elderly woman, named Gouvernear, the wife of the Duc d'Aumale's valet, was tried on Saturday before the Court of Correctional Police, for "introducing" the celebrated pamphlet into France. It appears that she arrived from England a few weeks ago—and the police, having probably had due notice of her connection with Twickenham, searched her luggage with great minuteness. One of her boxes contained a number of empty jam pots, and in one of these 10 copies of the pamphlet were discovered. Madame Gouvernear was sentenced to 25f. fine.—Padre Ventura, the celebrated Italian orator, died at Versailles on Friday, in his 69th year. His funeral took place on Monday, but only three or four persons followed him to the grave.—M. Thiers, who has been taking salt water baths at Puys, near Dieppe, narrowly escaped a fatal accident on Friday. He had left Dieppe in a boat, with some members of his family and friends, to take a sail. The wind having suddenly risen, the boat, which was light, was in some danger of capsizing, but the steamer from Dieppe to Newhaven fell in with it, and towed it safely into port. M. Thiers has since returned to Paris.—A new and unexpected incident has arisen in the Mirès affair. M. Solar, his former partner, who was sentenced by default to imprisonment for five years, and to a fine of 3000f., has appealed from that judgment, but as he did not appear on Thursday before the Tribunal his appeal was dismissed. M. Caley was condemned in a fine of 3000f. for having participated in the distribution of a false dividend.—The opening of the French National Rifle Match took place on Sunday at Vincennes. The regiments stationed in the interior of France each sent 5 of their best men to compete for the prizes, and the regiments in garrison in Paris each sent 100 men. Numerous first-rate shots were present from Switzerland, Germany, England, and Belgium, the latter of whom have already especially distinguished themselves.

SPAIN.—The Military Tribunal at Loja has condemned a number of other persons to 12 and 15 years' hard labour in the galleys, for participation in the recent insurrection. The Granada journals state that three poor persons—one a hatter, another a charcoal dealer, and a third a public letter writer—had been lodged in prison on the charge of having distributed Protestant works and defended Protestant doctrines at Alhama, Trigo, Lano, and Matamoras. It is added that the English at Granada were liberally providing for their wants.

PORTUGAL.—The Cortes have commenced the discussion on the budget. It is said that Prince Napoleon, during his recent visit to Lisbon, proposed to the Portuguese government to build a line of docks on the banks of the Tagus, providing a French company with sufficient capital for the purpose, but the proposal was rejected. The Patriotic Society continues to hold meetings for the purpose of political agitation. The recent rains and damp weather have done considerable damage to the grapes throughout Portugal.

SWEDEN.—The King left Stockholm on the 30th ult. for Gothenburg, on his way to Havre. The squadron which accompanied his Majesty assembled in the Cattegat. It is believed that his Majesty will visit London on his return from France.

HOLLAND.—The Second Chamber, in its sitting of the 23d ult., unanimously agreed to the Bill authorising the Government to pay Hanover the sum of [illegible] German thalers for the redemption of the Stade Dues.

BELGIUM.—It is officially announced that in consequence of an incident which recently occurred on the subject of the commercial relations between Belgium and England, explanations have been entered into between the Belgian Minister in London and her Majesty's Minister for Foreign Affairs, and there will be no delay in reopening the negotiations to bring about the conclusion of a new treaty in conformity with the interests of both countries.

SAXONY.—In the last sitting of the Second Chamber of Saxony the new Civil Code was adopted by a majority of 62 to 4.

SWITZERLAND.—The Count of Chambord arrived at Wartegg, in the vicinity of Rorschach, on the 1st inst., accompanied by his sister, the Duchess Louisa of Parma. Their Royal Highnesses will remain for a short time in the interior of Switzerland to confer there on family affairs with some members of their family.

AUSTRIA.—According to recent news from Corfu the health of the Empress of Austria is improving daily. The air of Corfu is said to agree well with her constitution. Count Forgach, on assuming office as Chancellor of Hungary, has declared to the Councillors of the Aulic Court his determination to act according to the constitution and the wishes of the nation.

HUNGARY.—In the sitting of the Lower House on Thursday, the draught of an Address from the Diet to the Emperor was proposed by M. Deak. The demands made in this Address do not differ from those contained in the first Address. It refutes the Imperial Rescript, mentions the rights of the Bohemian and Galician crowns, decidedly declines to send deputies from the Hungarian Diet to the Council of the Empire, states that the Hungarian Diet must cease transacting any Parliamentary business, and declares in conclusion that further negotiations are broken off. This Address was unanimously and enthusiastically adopted, and it was resolved to send it to the Upper House. An ordinance from the Minister of Finance orders that, at present and during harvest-time, Hungarian taxpayers who are really indigent are to be treated with indulgence, but that the most energetic measures of severity are to be employed against solvent persons who refuse to pay the taxes.

TRANSYLVANIA.—The official *Wiener Zeitung* of Wednesday publishes an autograph letter addressed by the Emperor to the Aulic Chancellery for Transylvania, ordering the necessary proposals in reference to the assembling of the Transylvanian Diet to be made before the 10th August.

BOHEMIA.—On the night of the 30th ult. the Jewish quarter of Prague was the scene of disturbances, in which several people were wounded. The Synagogue and some houses were damaged, and much property was carried off. More than 100 persons were arrested. On the following day no serious disturbance occurred. The mob only smashed a few windows of the houses in the immediate neighbourhood of the Jews' market. At 10 P.M. the streets were wholly deserted. Of the persons arrested 24 have been ordered for trial on the charges of cutting and wounding, exciting to revolt, committing acts of violence on public authorities, &c., and 82 have been summarily punished by the police magistrates.

CROATIA.—The Croatian and Slavonian Diet has resolved by a formal vote not to send any representatives to the Council of the Empire.

ITALY.—The subscriptions to the National Loan on the part of the public amount to 900 millions, and will probably be subject to a reduction of 7 per cent. The Pope is said to have declined to dismiss Monsignor de Mérode on account of his recent quarrel with General Goyon. The Père Giacomo, who attended Count Cavour in his last moments, having been summoned to Rome to explain to the Pope what had taken place in the last moments of the Minister, has had an audience, during which the Pope endeavoured to elicit from him what had taken place. The priest declined to divulge the confession, on the plea that such secret communications are never divulged. On the following day the confessor was handed over to the Holy Office to give an account of his conduct, and was confined in the apartments of the Inquisition. He was afterwards released, and on Monday he arrived at Orvieto on his return to Turin. The Court of Rome has deprived him of his benefice. The *Unita Italiana*, the Mazzinian organ of Milan, publishes a circular addressed by M. Minghetti, Minister of the Interior, to the governors of the various provinces, instructing them to hinder the signature of a protest against the occupation of Rome by the French, on the ground that it is originated by the Mazzinian party, who having in vain endeavoured to excite the public mind by spreading the "calumnious rumour" of an alleged cession of Italian territories, is now propagating "another piece of false news, to the effect that the King of Italy has recognised the integrity of the Papal States." The news from Naples is more satisfactory. General Cialdini having succeeded in his measures against the reactionary party and the brigands. The Archbishop of Naples has been requested to leave Naples and is now at Civita Vecchia. [illegible], the murderer of M. M[illegible], inspector of police, has been arrested by the National Guard. His arrest was not effected without considerable difficulty. A commission composed of Generals [illegible] and [illegible], and Rear Admirals [illegible] and [illegible], has been charged by the Minister of War to make a tour through the Neapolitan and Sicilian provinces to fix on the points which ought to be fortified both in the interior and along the coast.

RUSSIA.—The Russian Government has sent an order to the Thames Ironworks Company for an iron steam ram of [illegible] tons. She is to carry a heavy armament of 40 guns, and is to have a "beak" projecting under water more than 20 feet in advance of the upper and bows.

POLAND.—It is asserted that General Lambert's

appointment as Governor of the Kingdom of Poland has arrived at Warsaw, and that M. Wielopolski has in consequence determined to resign. It is reported that the peasants in the environs of Mlawa, to avenge a pretended violation of the church, have entered that town armed with scythes and axes, and have driven away the garrison. Great crowds of people assembled on Sunday week before the residence of the English Consul at Warsaw, and deposited bouquets of flowers, amidst shouts of "Long live Queen Victoria!" These bouquets were offered to the British nation as a grateful acknowledgment of its sympathy for Poland. The police made their appearance after the crowds had dispersed. A funeral service was afterwards celebrated in all the churches of Warsaw in honour of the late Prince Adam Czartoryski. All business was suspended. The Archbishop officiated in the cathedral. On entering he carriage the people unharnessed the horses, and then dragged it to his residence. A great crowd followed.

TURKEY.—General Ignatieff has had an audience of the Sultan, and presented to his Majesty an autograph letter of congratulation on his accession from the Emperor of Russia. On the 31st ult. Sir Henry Bulwer had an audience of the Sultan. His reception was most warm. In replying to the congratulations of Sir H. Bulwer, the Sultan expressed his deep sense of the friendship of England, and his determination to effect large reforms. Pensions have been granted to the recently dismissed members of the Grand Council. A forthcoming general circulation of kaimés is announced. Aali Pasha has been appointed Grand Vizier. The Imperial Hatt, dated the 5th inst., in announcing this appointment to Aali Pasha, states that it had been deemed necessary to relieve Mehemet Pasha of his functions, and says:—"We are convinced that by fidelity, intelligence, and prudence you will be able to worthily fulfil my instructions relative to the great affairs of Europe." Fuad Pasha has been appointed Minister for Foreign Affairs, and Kiamil Pasha President of the Council of Justice. Fuad Pasha will return from Syria immediately to enter upon his new office. Halil Bey has been appointed Turkish Minister at St. Petersburg. The Sultan has again ordered several reforms in the army, and is about to remodel the uniform of the troops on the costume of the French Zouaves and Spahis. His Majesty is also personally superintending the reconstruction of the Navy. He has ordered the keels of two new line-of-battle-ships to be laid down, and is about to be present at the exercises of the naval school, in order to satisfy himself of the progress made by the pupils. He rises every morning at daybreak, and at a very early hour leaves his palace to inspect the different public administrations. He has none of the ordinary habits of the Turks. He never tastes spirituous liquors, and does not smoke, which is consequently beginning to get out of fashion at Constantinople. Officers have been sent into the provinces on a tour of inspection. A treaty of commerce has been signed between Turkey and Italy. The emigration of Circassians and Tartars continues.

MONTENEGRO.—The Paris papers state that, in consequence of a rupture of negotiations between Omar Pasha and the Prince of Montenegro, the former has received orders from his Government to reassume the offensive against the insurgents. He has consequently addressed an *ultimatum* to the Montenegrin Chiefs. The Pacha's army now numbers 30,000 men, and is concentrating with the intention of vigorously carrying on operations, which will, it is said, be pushed as far as Cettigne. The conference between the European Commissioners and the chiefs of the insurgents at Sutorina has led to no result, and the Commission has therefore been dissolved.

UNITED STATES.—Accounts from New York to the 25th July, announce that the Federal army, under General M'Dowell, has experienced a disastrous defeat. Early on the morning of the 21st the whole army advanced on the Confederate batteries at Bull's Run. Great bravery was displayed by the Federal troops, and after nine hours' fighting they succeeded in capturing three of the Confederate batteries, but with heavy loss on both sides. At this time General Beauregard was reinforced by General Johnstone with 25,000 men. The Confederates then attacked the Union army, and drove them in disorder from the field. A panic, from some cause, seized the Federal troops, and the whole army fled in open disorder towards Washington. General M'Dowell endeavoured to rally his troops at Centreville and Fairfax Court House, but found it impossible to check their retreat. The road from Centreville to Alexandria was strewn with men, wounded or fallen from exhaustion. The Confederates pursued as far as Fairfax. The whole of the Federal artillery of rifled cannon and the Rhode Island battery, with large quantities of arms, stores and small arms, were captured by the Confederates. The Federal loss is estimated at from 500 to 2000 men. Another account estimates it at less than 1000, while another declares that it does not exceed 150. Many colonels and officers of all grades were killed. The loss of the Confederates is estimated by the Federal party at between 3000 and 4000, including a great number of officers, but the official accounts of the Confederate Government states that their loss was only 137 killed, wounded, and missing, which has since been reduced, by the return of the missing, to 60. The following account, condensed from the voluminous reports of the different papers, contains all the leading incidents of the battle:—

On the morning of Sunday, the 21st of July, the whole of the Federal army, supported by their artillery, rifled cannon, and the Rhode Island battery, advanced upon the Confederate position at Bull's Run. Their course lay along the level country between the Orange and Alexandria Railway and the high road, having the railway upon their left and the road upon their right. Three miles from the Manassas Junction is the Bull Run Station, where there are some mills, and where also a stream falling from the Bullrun Mountain crosses the country, intersecting both the road and the railroad. General Beauregard, the Confederate commander, having this stream in front, and a road and a railroad on his flanks, had used these facilities to their utmost, and had converted the place into a very formidable position, protected in front by a series of detached batteries. The battle commenced at dawn with an attack upon these advanced batteries by the Federal army. Three of the batteries were won and lost by each side three or four times in the course of 11 hours' hard and bloody fight, but at 4 P.M. the Federalists held them. At this time Mr. Jefferson Davis, President of the Southern Confederacy, came up by rail from Richmond, and took the command in person of the Confederate army. General Johnstone also joined with a force of 25,000 men, having left a strong rear-guard to deceive and occupy General Patterson, the Federal commander, who had been sent with a detached corps to prevent his leaving his former position. President Davis took the command of the centre, while Gen. Beauregard commanded the right and Gen. Johnstone the left wing. The Federal army, like the English and French at the battle of the Alma, forded a small river, and were advancing up the slopes which led to the higher ground, when the Confederate generals changed their position from that of defence to one of attack. They suddenly opened, from their centre, a whole line of batteries which had been hitherto masked, while their whole army made a forward movement on all points. After an instant of desperate effort to make a stand, the Federal centre gave way—the left soon followed—the right for a time held its ground but in vain, and at length the whole Northern army turned and fled. Some of the New York papers assert that the flight was originated by the teamsters of the waggon train galloping off, but other accounts say that the panic first seized the three months volunteer levies, who fled saying that their time was up, and that the teams were three miles in the rear at the time the flight began, and that in fact they were ridden over by the fugitives. Never was such a sight seen on a road after a flying army. They left standards, baggage, ammunition waggons, rifle cannon, all their batteries, their commissariat, havresacks, blankets, tents, &c. In fact, one paper states that the men threw away 28,000 stand of arms in their flight. The wounded also were abandoned by hundreds along the roadside, and were, with stagglers and camp followers, ridden over by the streams of flying thousands. The whole army participated in the panic, and fled in utter disorder back to Centreville and to Fairfax Court House, where General M'Dowell in vain attempted to rally it. General Beauregard here recalled his troops, but the Federal army, seeing their pursuers still in view, fled from the town and started again on their disastrous flight, finally retiring within the entrenched defences at Alexandria and Arlington Heights, which cover Washington, more than 20 miles away. The Confederates took an immense number of prisoners, including the Hon. A. B. Ely, one of the numerous Northern senators and members of Congress, who had gone out to see what had been boldly proclaimed as the approaching victory of the Federalists. The battle was probably the heaviest ever fought in America; whether as regards the number engaged, the number killed, wounded, and taken, or the ferocity of the fight. There were in all about 140,000 men engaged. The Northerns had exactly 65,000 men on the field, and the Southerns probably at least as strong a force. The loss of life on both sides is represented to have been frightful, the number being placed at between 4000 and 5000 on the side of the Federal army. But intelligence from the war department states that this report is greatly exaggerated, and that the troops that reached Washington returned in much better condition than could have been expected under the circumstances. The *New York Herald* in fact states that the total loss of the Union army in killed does not exceed 150. The attack is said to have been premature, and contrary to the programme laid down by General Scott, who did not intend that any engagement should take place until General Patterson had come up with his forces. But General M'Dowell supposed that General Patterson would make his junction at the time expected, and as he failed to do so, the plans of General Scott were thus frustrated. Two Irish notorieties served with the Federal troops in the battle. The one was Thomas Meagher, of '48 celebrity; the other Col. Corcoran, the individual who refused to parade his men when the Prince of Wales visited New York. The latter was badly wounded, and is said to be a prisoner; Mr. Meagher was reported among the killed, but it appears that he escaped unhurt. The 69th (Irish) regiment was awfully cut up. Captain Haggerty was killed, and the Rev. Father O'Reilly, chaplain, fell on the field. Young John Mitchel served in the Southern army, and has been publicly commended for valour, and promoted to a captaincy in the South Carolina Irish Volunteers.

The latest accounts state that this defeat has created a profound sensation in the Northern States, and that vigorous preparations are making by the Federal Government for a renewal of offensive operations. The disaster had reanimated the volunteer spirit, and thousands of fresh troops had offered their services to the Government, which has already accepted 80,000 men. The defences round Washington have been reinforced, and are stated to be strong enough to resist any attack by the Confederates. General M'Dowell has been superseded by General M'Clellan, whose management of the campaign in Western Virginia has been marked with great success. General M'Clellan has arrived at Washington to take the command and to superintend the reinforcement of the Federal army. Congress has passed an Act enabling the Federal Government to station vessels off the Southern ports, and to collect import duties. In the Senate, on the 22d, a Bill was passed to provide for iron-clad ships and floating batteries. In connection with this subject the Senate passed a joint resolution providing for an examination in regard to Mr. Stevens's Hoboken floating battery. A discussion then took place on the Bill authorising the confiscation of the property of persons in rebellion against the Government. On taking up this Bill an amendment was moved to include slaves in the category of confiscated property, which gave rise to a spirited debate. The amendment was agreed to by 32 to 6, and the Bill passed. A resolution was then referred to the Military Committee, to the effect that it is the policy of the Govern[illegible] nise a regular army of 150,000 men. The Senate [illegible] to concur in the House amendments to the Bill [illegible] the military establishments. On the 23d a Bill [illegible] priating 2,000,000 dollars to supply the loyal [illegible] the rebel states with arms, and a Bill [illegible] duties on imported arms, were passed. On the [illegible] the Bill to promote the efficiency of the [illegible] forces was taken up for the second time. [illegible] allws the President to discharge officers [illegible] capable or inefficient, or violate their office. Mr. Wilson said that this was a most [illegible] measure. Many regiments were utterly [illegible] by the incompetency of their officers. The [illegible] other day showed the effect of their conduct, [illegible] officers ran several miles before they [illegible] thought the time had come when attention [illegible] called to these things. Mr. Sherman thought [illegible] time to complain of any one. There never [illegible] army than the one repulsed. They [illegible] perform for the future, and should [illegible] thought the repulse of the army would [illegible] rousing up the spirit all over the country. [illegible] was discussed at considerable length, but [illegible] was arrived at. On the 25th a motion to [illegible] a select committee to inquire into the circum[illegible] of the surrender of the Federal yards at [illegible] Pensacola, and Harper's Ferry was agree[illegible] Among the Bills passed was one providing for the [illegible] ing of an iron bridge over the Potomac at W[illegible] one ordering a Board of Commissioners to exam[illegible] compensation of all the officers of the Governm[illegible] to punish fraud in Government contracts, one [illegible] and punish conspiracy, and one to provide [illegible] suppression of rebellion; besides a joint [illegible] declaring that the supremacy and integrity [illegible] must be maintained. The resolution for [illegible] nance of the supremacy of the Union [illegible] with only one dissenting vote—that [illegible] Breckinridge, who denounced the proceeding [illegible] Government in regard to the South. In the [illegible] Representatives on the 22d Mr. Crittenden [illegible] Kentucky, moved resolutions to the effect [illegible] the present war has been forced on the [illegible] by the Southern Disunionists; but that [illegible] theless the only object of the Government [illegible] prosecuting it is to maintain its integrity and [illegible] unity of the entire country, and that when these [illegible] shall have been accomplished the war shall terminate. These resolutions were adopted with only two dissen[illegible] votes. A resolution in reference to the disaster [illegible] national forces at Bull's Run, declaring [illegible] confidence in ultimate success, was [illegible] referred. Following this, a resolu[illegible] the effect that the preservation of the [illegible] is a sacred trust, and that no disasters, howe[illegible] rently overwhelming, must deter the nation [illegible] representatives from the performance of this [illegible] A bill was passed for reimbursing the govern[illegible] states for expenses incurred in fitting out regi[illegible] the support of the national Government in [illegible] gency. On the 24th the Senate Bill, authorising [illegible] President to accept the services of 500,000 [illegible] was agreed to. In the course of the debate Mr. [illegible] son described a conversation at which he was [illegible] between the President, General Scott, and [illegible] which General Scott declared that he had allowed [illegible] battle to be fought against his judgment, and [illegible] ought to be removed for doing so. The President having observed that the General's remarks [illegible] that he had forced him to battle, General Scott [illegible] "I have never served under a President who [illegible] kinder to me than you have been." But [illegible] Scott did not relieve the President from [illegible] fact of the latter having forced him to fight [illegible] battle. General Banks, in command at Baltimore, found it necessary to arrest several persons of [illegible] sionist tendencies, so great was the rejoicing [illegible] Federal defeat in that city. The War Department [illegible] received information that the Confederates are [illegible] vancing to attack Harper's Ferry. At Pensacola [illegible] Confederates were actively engaged throwing up [illegible] batteries. The Missouri Convention on the 30th by [illegible] to 21, declared the Presidency vacant, and [illegible] Robert Wilson, the former Vice-President, [illegible] President unanimously. A large body of Confederates from south-east Missouri, were marching on [illegible] Knob, the southern terminus of the Iron Mountain Railroad, and Colonel Bland, stationed at that [illegible] had sent for reinforcements. Three Federal regiments have returned to New York, and met with an [illegible] siastic reception. The New York press and the [illegible] Defence Committee attribute the disaster at Bull Run to the incapacity of the Federal Cabinet, and accuse the President and his Cabinet of having forced General Scott into action before the army was properly prepared for an advance against the enemy. The *New York Times'* correspondent at [illegible] Pickens states that Admiral Milne has [illegible] informed the British Government that the blockade is totally insufficient. The New York papers in [illegible] moment of disaster continue to vilify England, and declare that the acquisition of Canada, according to the programme of Mr. Seward, will compensate for the [illegible] of the South, and that Cuba is also to be annexed [illegible] the first convenient opportunity. President Davis [illegible] delivered another Message in the Southern Congress, calling attention to the unconstitutional proceedings [illegible]

President Lincoln, and to the events which have occurred during the recess, and expressing continued confidence in the success of the struggle. "We may well rejoice," he says, "that we have for ever severed our connection with a government that tramples upon all principles of constitutional liberty, and with a people in whose presence such avowals could be paraded." Southern accounts of the battle at Bull's Run report that five Confederate generals were killed—viz., Barton, of Georgia; Bee, of South Carolina; Kirkby and Smith, of Florida; and also Colonel Johnson, of Hampton's Legion. General Beauregard had his horse shot under him. President Davis sent the following bulletin to the Congress assembled at Richmond:—

"Manassas Junction, Sunday night.

"Night has closed upon a hard-fought field. Our forces were victorious. The enemy was routed and fled precipitately, abandoning a large amount of arms, ammunition, knapsacks, and baggage. The ground was strewed for miles with those killed, and the farmhouses and the ground around were filled with wounded. Pursuit was continued along several routes, towards Leesburg and Centreville, until darkness covered the fugitives. We have captured several field batteries, stands of arms, and Union and State flags; many prisoners have been taken. Too high praise cannot be bestowed, whether for the skill of the principal officers or for the gallantry of all our troops. The battle was mainly fought on our left; our force was [illegible] that of the enemy estimated at 35,000.

"JEFFERSON DAVIS."

General Beauregard had refused to permit flags of truce to enter his lines for any purpose. Balloon explorations are said to have shown that at latest dates the Secessionists had a considerable force at Fairfax Court House, and for a mile on the Washington side of that place, while large numbers extended from Fairfax to Manassas Junction. The Secessionists had pushed their pickets up close to the Federal lines; and were nearer Washington than they have been for the previous four weeks. Several vessels which had put into northern ports reported having been chased or overhauled by privateers. On the 7th July the schooner S. J. Waring was seized by the Jefferson Davis, which put a prize crew of five men on board, after taking the captain, mate, and two seamen of the schooner on board the privateer. On the 16th July, when off Charleston, the steward, a coloured man, named Tilman, taking advantage of the prize crew being asleep, killed three of them with a hatchet and threw them overboard, and, having intimidated the other two, managed to navigate the schooner to New York. The brig Cuba from Trinidad for London, captured by the Sumter, had been recaptured by the captain and taken into New York. Prince Napoleon arrived at New York in his yacht on the 27th ult.

CUBA.—Advices have been received from Havannah to the 10th inst. The privateer steamer Sumter had captured eight American ships laden with sugar on the south side of Cuba. One was burnt, and the other seven were taken by prize crews into Cienfuegos. One of the prizes had been released by the Captain-General of Cuba. The remainder were detained to await instructions from Madrid.

MEXICO.—According to advices from Mexico, Juarez had been elected President. His reactionary advisers were triumphant. A state of siege had been proclaimed. General Degollado was dead.

SAN DOMINGO AND HAYTI.—The Commander of the Spanish squadron before Port-au-Prince, granted the Haytian Government a delay of 48 hours in order to obtain compliance with his demand for a salute and a pecuniary indemnity. Both were granted, and the difficulties between Spain and Hayti are now satisfactorily settled.

Parliament.

HOUSE OF LORDS.

FRIDAY.—The *Consolidated Fund Appropriation Bill* was read a second time.—The LORD CHANCELLOR, on the third reading of the *Bankruptcy and Insolvency Bill*, said he regarded it, even in its altered shape, as a great benefit to the commercial world. Although, in compliance with the directions of their lordships, he had buried his Chief Judge in Bankruptcy, he had done so in sure hope of his speedy resurrection. The Commons' amendments on the *Wills of Personalty by British Subjects Abroad Bill*, *Statute Law Revision Bill*, and *Government of the Navy Bill*, were agreed to. The *Metropolis Gas Act Amendment Bill*, *Lace Factories Bill*, *Gunpowder Act Amendment Bill*, and *Episcopal and Capitular Estates Act Continuance Bill*, passed through committee. The *Accessories and Abettors Bill*, *Criminal Statutes Repeal Bill*, *Larceny Bill.*, *Malicious Injuries to Property Bill*, *Forgery Bill*, *Coinage Offences Bill*, *Offences against the Person Bill*, *Public Works and Harbours Bill*, *Lord Clerk Register (Scotland) Salary Abolition Bill*, *Durham University Bill*, *Metropolitan Building Act Amendment Bill*, *Drainage of Land Bill*, *Public Offices Site Bill*, *Pensions of British Forces (India) Bill*, *Edinburgh University Bill*, *Inland Revenue Bill*, *Stamp Duties on Probate Bill*, *Revenue Department Accounts Bill*, *East India Loan (No. 2) Bill*, *Militia Pay Bill*, *Militia Ballot Suspensions Bill*, *Wills and Domicile of British Subjects Abroad Bill*, *Corrupt Practices Prevention Act Continuance Bill*, *Landed Estates (Ireland) Act Amendment Bill*, *Metropolitan Police District Receiver Bill*, *Parochial Offices Bill*, *Local Government Supplemental (2) Bill*, *Volunteer Tolls Exemption (2) Bill*, and *Treasury Chest Fund Bill*, were read a third time and passed. The *Newspaper, &c., Bill* was withdrawn.

MONDAY.—The *Metropolis Gas Act Amendment Bill*, *Lace Factories Bill*, *Gunpowder Act Amendment Bill*, *Episcopal and Capitular Estates Act Continuance Bill*, *Consolidated Fund (Appropriation) Bill*, *East India Loan Bill*, *Militia Pay Bill*, *Militia Ballot Suspension Bill*, *Wills and Domiciles of British Subjects Abroad Bill*, *Corrupt Practices Prevention Act Continuance Bill*, *Landed Estates (Ireland) Act Amendment Bill*, *Metropolitan Police District Receiver Bill*, *Parochial Offices Bill*, *Volunteer Tolls Exemption Bill*, *Treasury Chest Fund Bill*, and the *Local Government Supplemental Bill* were read a third time and passed. The Commons' amendments to the *Officers of Reserve (Royal Navy) Bill* were considered and agreed to.—In answer to the Marquis of CLANRICARDE, Lord STANLEY of ALDERLEY said that it was the intention of the Government to institute an inquiry into the condition of the office for the *Registry of Deeds* in Ireland.—The Earl of SHAFTESBURY moved an address to her Majesty, praying for an inquiry into the *Employment of Children and Young Persons in Trades and Manufactures* not already regulated by law. The measures which had been already passed had done much to mitigate the evils pointed out by the Commission in 1842, but abuses still existed of so aggravated a character as to demand the closest investigation. Quoting from the report of the Commission of 1840, he showed the terrible effects of too long hours of work, of defective workshops and factories, of night work, and of the treatment of the children by their employers, on their physical and social and moral condition, and concluded by stating that, in the opinion of Mr. Senior, the treatment of some of these children so employed was infinitely worse than that of the slave children on the worst managed plantation of America.—Lord STANLEY OF ALDERLEY assented to the motion; and admitted that his former apprehension that legislation on such a subject was dangerous, had not been fulfilled. After a few words from Lord MONTEAGLE the motion was agreed to.

TUESDAY.—*New Peer.*—Sir Maurice Berkeley was introduced and took the oaths and his seat as Lord Fitzhardinge.—*The Galway Contract.*—The Marquis of CLANRICARDE asked what were the intentions of her Majesty's Government in respect to the Galway Contract.—Lord STANLEY OF ALDERLEY said that the result of the investigations of the Committee was that the Government were justified in the course they had taken in rescinding the contract with the Atlantic Steam Navigation Company. At the same time, should the company be prepared next year to carry out the contract, the Government were prepared to give any proposals they might make the most serious consideration.—The *Royal Assent* was given by commission to several Bills.—*The Prorogation.*—The Commons having been summoned to the Bar, the LORD CHANCELLOR read the Royal Speech proroguing Parliament, as follows:—

"MY LORDS AND GENTLEMEN,

"We are commanded by her Majesty to release you from further attendance in Parliament, and at the same time to convey to you her Majesty's acknowledgments for the zeal and assiduity with which you have applied yourselves to the performance of your duties during the Session of Parliament now brought to a close.

"Her Majesty commands us to inform you that her relations with foreign Powers are friendly and satisfactory, and her Majesty trusts that there is no danger of any disturbance of the peace of Europe.

"The progress of events in Italy has led to the union of the greater part of that peninsula in one monarchy under King Victor Emmanuel. Her Majesty has throughout abstained from any active interference in the transactions which have led to this result, and her earnest wish as to these affairs is that they may be settled in the manner best suited to the welfare and happiness of the Italian people.

"The dissensions which arose some months ago in the United States of North America, have unfortunately assumed the character of open war. Her Majesty, deeply lamenting this calamitous result, has determined, in common with the other Powers of Europe, to preserve a strict neutrality between the contending parties.

"Her Majesty commands us to inform you that the measures adopted for the restoration of order and tranquillity in Syria, in virtue of Conventions between her Majesty, the Emperor of Austria, the Emperor of the French, the King of Prussia, the Emperor of Russia, and the Sultan, having accomplished their purpose, the European troops which, in pursuance of those Conventions, were for a time stationed in Syria to co-operate with the troops and authorities of the Sultan, have been withdrawn; and her Majesty trusts that the arrangements which have been made for the administration of the districts which had been disturbed will henceforward secure their internal tranquillity.

"Her Majesty has seen with satisfaction the rapid improvement in the internal condition of her East Indian territories, and the progress which has been made towards equalizing the revenue and expenditure of that part of her empire.

"GENTLEMEN OF THE HOUSE OF COMMONS,

"Her Majesty commands us to convey to you her warm acknowledgements for the liberal supplies which you have granted for the service of the present year; and her Majesty has seen with satisfaction that, after amply providing for the wants of the public service, you have been able to make a sensible diminution in the taxes levied upon her people.

"MY LORDS AND GENTLEMEN,

"Her Majesty commands us to express to you the deep gratification with which she has witnessed the spirit of devoted patriotism which continues to animate her Volunteer forces; and the admiration with which she has observed their rapid progress in discipline and military efficiency.

"Her Majesty has given her cordial assent to the Act for completing the number of the members of the House of Commons by allotting the forfeited seats of Sudbury and St. Albans.

"Her Majesty trusts that the Act for improving the laws relating to Bankruptcy and Insolvency will be productive of important advantage to the trade and commerce of her subjects.

"Her Majesty has given her ready assent to Acts for consolidating and assimilating the criminal law of England and Ireland, and for promoting the revision of the statute law.

"Her Majesty has given her assent to important Acts which she trusts will have the effect of opening more largely employment in the public service to the European and native inhabitants of India, of improving the means of legislation, of furthering the ends of justice, and of promoting the contentment and well-being of all classes of her Majesty's Indian subjects.

"Her Majesty has assented with pleasure to the Act for the Improvement of Harbours on the Coast of the United Kingdom and for Relieving Merchant Shipping from Passing Tolls, and also to the Act for improving the Administration of the Law relating to the Relief and the Removal of the Poor.

"Her Majesty trusts that the Act for rendering more easy arrangements connected with the Drainage of Land will assist agricultural improvements in many parts of the United Kingdom.

"Her Majesty has gladly given her assent to many other measures of public usefulness, the results of your labours during the Session now brought to its close.

"Her Majesty has observed, with heartfelt satisfaction, the spirit of loyalty, of order, and of obedience to the law, which prevails throughout all her dominions, and she trusts that by wise legislation, and a just administration of the law, the continuance of this happy state of things will be secured.

"On returning to your respective counties you will still have important public duties to perform; and Her Majesty fervently prays that the blessing of Almighty God may attend your exertions, and may guide them to the attainment of the objects of her Majesty's constant solicitude—the welfare and happiness of her people."

The LORD CHANCELLOR then formally declared Parliament to stand prorogued to Tuesday, the 22d October.

HOUSE OF COMMONS.

FRIDAY.—*State of Italy.*—Sir G. BOWYER called attention to the state of Naples and to the expulsion of the Swiss troops, and asked if the Government intended to interfere, with a view to check the military despotism now in the ascendant in that country.—Lord PALMERSTON said that with the exception of that of Rome, the late Government of Naples was the worst on the face of the earth. The disturbances in the Neapolitan provinces had been created by revolutionary agents worse than brigands, who were sent across the frontier and furnished with arms and money from the Holy City for the commission of most unholy acts, to disturb the tranquillity of the country, to murder, to rob, to burn alive, and to perpetrate every description of atrocity. The Government was determined not to extend any sympathy or assistance towards these men, for whom the hon. baronet desired impunity. On the contrary, he trusted that Generals Cialdini and Pianelli, by the vigorous use of their movable columns, would mete out just punishment to these wretches; and that the population of the Neapolitan States would be freed from the misfortunes which they had brought upon them. The Neapolitan people, he was sure, were fully sensible of the benefits likely to accrue to them from forming part of a new kingdom of Italy constitutionally governed, instead of being subjected to the iron despotism under which they had so long groaned.

MONDAY.—The House sat for about an hour and transacted some business of a formal character. The Lords' amendments to the *Industrial Schools (Scotland) Bill* were considered and agreed to.

TUESDAY.—*The Galway Contract.*—Mr. BRADY asked what were the intentions of the Government with respect to the renewal of the Galway Contract.—Lord PALMERSTON repeated the opinion he had previously expressed, that a speedy postal communication between Ireland and the American States would be productive of great advantage to the mercantile interests of the whole empire, while, at the same time, it would tend to develope the industrial resources of Ireland. The application of public money to such a purpose, therefore, was in every way justifiable. If postal communication was to be established between the two countries, Galway appeared naturally to be the best point of departure. Under these circumstances, and looking to the report of the Committee on the subject, the Government was disposed to give a favourable consideration to the claims of the Galway Packet Company whenever they were in a condition to show by the capital they possessed or could command, and by the shipping in their service, that there was a reasonable prospect of their being able to fulfil their engagements. Under all the circumstances of the case the Government was of opinion that it would not be fair to throw this contract open to general competition, but no contract would be entered into which would not be subject to the revision of the House of Commons. *The Civil War in America.*—Mr. WYLD asked if any communication had been received from the President of the United States, or from the British Ambassador at Washington, that it was the intention of the Federal Government to station vessels off the ports of the Southern States to collect and levy duties on foreign merchandise.—Lord PALMERSTON said that Congress had passed a law to enable the President to do so; but, if done, it would be practically a supercession of the blockade. It was evident that a Power could not blockade ports to prevent ships entering them and at the same time levy duties on the assumption that the ships did enter. The British Government had not yet been informed of the intentions of the President on the subject. *State of Naples.*—In answer to Mr. GRIFFITH, Lord PALMERSTON stated his belief that a large number of the muskets surrendered at Gaeta and stored in Rome had been given by the Roman Government to persons who had proceeded with them to the Neapolitan territory and committed acts of atrocity there. The French Government had nothing to do with the matter.—Sir G. LEWIS stated, in reply to Colonel DUNNE, that on a trial the *Breach-loading Rifle* had not proved as successful as had been anticipated. Some improvements in it were at present under consideration. *Review of the Session.*—Mr. SCULLY called attention to the acts and omissions of the Government during the session, especially as regarded Ireland, and was proceeding with his speech when the sitting was cut short by the appearance of Black Rod, who summoned the House to the House of Peers to take part in the ceremony of prorogation. On their return the SPEAKER read the Royal Speech, and declared the House adjourned to the 22d of October.

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at $90\frac{1}{4}$ for Money, and $90\frac{1}{2}$ to $\frac{5}{8}$ for the 10th of September; Bank Stock, $234\frac{1}{2}$ to 236; Three per Cents. Reduced, $90\frac{3}{8}$; New Three per Cents., $90\frac{1}{4}$ to $\frac{3}{8}$; India Stock, 219; Ditto Five per Cent. Stock, $99\frac{7}{8}$ to 100; Ditto for Acct., $100\frac{1}{4}$; Ditto Scrip, $100\frac{1}{4}$ to $\frac{3}{8}$; Ditto Four per Cent. Debentures, 1863, $96\frac{3}{8}$; Ditto, 1859, $96\frac{1}{4}$; Ditto Bonds, 4*s*. dis.; Five per Cent. Enfaced Rupee Paper, $94\frac{3}{4}$ to $\frac{7}{8}$; Ditto Five and a Half per Cent., 102; Exchequer Bills, March, 11*s*. to 16*s*. dis.; Ditto Small, 11*s*. to 16*s*. dis.; Ditto June, 3*s*. dis.; Ditto Small, par.—FOREIGN: Mexican Three per Cents., for Acct., $22\frac{1}{8}$; Peruvian Four and a Half per Cents., for Acct., $98\frac{1}{4}$; Ditto Uribarren Four and a Half per Cents., $88\frac{1}{2}$ to $89\frac{1}{2}$; Ditto Four and a Half per Cent. Dollar Bonds, $82\frac{3}{4}$; Portuguese Three per Cents., 1853, for Acct., $46\frac{3}{4}$ to $\frac{1}{2}$; Russian Three per Cents., 1859, $60\frac{1}{2}$ to 61; Spanish New Deferred Three per Cents. for Acct., $41\frac{3}{8}$; Turkish Six per Cents., 1854, for Acct., $79\frac{5}{8}$ to 80; Ditto, 1858, $71\frac{3}{8}$; Ditto for Acct., $71\frac{1}{2}$ to $\frac{1}{4}$; Ditto 100*l*. Bonds, $72\frac{1}{2}$.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£26,131,675	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion ..	11,481,675
		Silver Bullion	—
	£26,131,675		£26,131,675

BANKING DEPARTMENT.

Proprietors' Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£ 9,900,809
Rest	3,520,452	Other Securities	17,909,660
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat Debt, and Dividend Accts.)	3,943,763	Notes	5,794,730
Other Deposits..	11,818,980	Gold and Silver Coin ..	878,780
Seven day and other bills	737,755		
	£34,473,950		£34,473,950

8th day of August, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY.—BANKRUPTS.—T. H. BENNETT and J. H. BENNETT, Leckhampton, Gloucestershire, Builders—T. COATES, Sunderland, Publican—C. W. ELLIS and J. F. WALLACE, Old Broad Street, City, Merchants—C. GIBBS, Droitwich, Baker—E. LYON and J. GREENWOOD, Huyton Quarry, Lancashire, Builders—J. MOSS, Houndsditch, Clothier—J. FRANCE, Kidderminster, Chemist—J. PORTER, Birmingham, Boot and Shoemaker—C. M. SOUTHARD, Exeter, Plumber—G. WILSON and J. WILSON, Heckmondwike, Yorkshire, Carpet Manufacturers.

SCOTCH SEQUESTRATIONS.—H. DOBBIE, Glasgow, Flesher—J. DUNNET, Stromness Grocer—A. FORBES, Dunfermline, Flesher—M. MACAULAY, Island of Lewis, Ross-shire, Farmer—J. SCOTT and J. P HAMILTON, Glasgow, Biscuit Manufacturers.

FRIDAY—BANKRUPTS—G. BARNETT, Felix Terrace, Liverpool Road, Islington, Middlesex, Butcher—F. W. FITT, Selborne, Hampshire, Machinist—F. F. FOX, Fenchurch Street, City, Tailor—J. GARTON, Nottingham, and D. BROWN, Manchester, Hardware and Fancy Goods Dealers—J. HAIGH, Wakefield Yorkshire, Common Brewer—R. H. HARTLEY, Halifax, Yorkshire, Merchant—N. A. JOSEPH, Vine Street, Minories, City, Importer of Foreign Goods—G. K. LEE, Sunderland, Linen and Woollen Draper, and Hosier—T. J. NICKS, Tower Hill, City, Provision Merchant—W. PASSLEY, Martock, Somersetshire, Builder and Cabinet Maker—T. RAGLAND, Wigan, Lancashire, Stationer—G. WILKINSON, Swinton, Yorkshire, Butcher.

Metropolis and its Vicinity.

NEW DRINKING FOUNTAIN.—A drinking fountain, which for some months has been in course of erection in front of the Royal Exchange, was dedicated a few days since to public use by Mr. Samuel Gurney, M.P., at whose cost it has been erected. It consists of a pedestal and a circular basin 5 feet in diameter, composed of polished granite, supported by three dolphins in bronze. Upon the basin is a circular plinth of white marble, forming a base for a half-draped female figure in bronze, representing Temperance, in the act of pouring water from a vase. There are four streams of water, one from the base of the figure and three from the plinth upon which it stands, with as many drinking cups of white metal and gilt inside, chained to the masonry. The fountain, erected at a cost of about 300*l*., is placed in the centre of the area, between the portico of the Exchange and the statue of the Duke of Wellington.

NEW BLACKFRIARS BRIDGE.—The bridge which Mr. Page has undertaken to carry across the Thames at Blackfriars will be built of mixed granite and iron, but so arranged in its architectural features as to be most graceful in outline though enormously massive in its details. Such colossal proportions were never attempted in any bridge before, though the slight curve and enormous span of the arches give to the whole a light and graceful effect. It will consist of only three arches, the centre one being of the gigantic span of 280 feet, or 40 feet wider than the centre arch of Southwark Bridge, and the two side arches being 220 feet each. From the springing of the arch to the crown the rise will only be 20 feet, which in a span of such extent only amounts to the most gentle curve, and, in fact, when seen from the river the outline will appear to be almost straight. The spandrills of the outer rib on each side will be closed, but filled up with figures in bas-relief and rich ornamental scrollwork. The cornice beneath the parapet is of an exceedingly bold and handsome design, with a parapet above of solid granite. The piers however, will form the most massive features of the whole. These will be four in number, all of granite, of immense size, width, and depth. Each on its extremity will be surmounted with a column of polished red granite, for which in size and massiveness we must look for parallels among the rock-hewn temples of Egypt. They will be Doric columns, 40 feet in height, 23 feet in diameter at base and capital, 18 feet diameter in the column, and though built hollow, weighing upwards of 500 tons each. Their capitals will reach to the summit of the bridge, and it is intended hereafter to surmount them with colossal groups of statuary. The whole structure will only be a few feet longer than the present bridge, but its width will be nearly double, namely, 76 feet against 42. There will be two footways of 14 feet each, instead of as now two of 7. There will be two tramways of 8½ feet each, in the centre of the bridge, leaving two roadways of 16 feet each, for the light traffic and omnibuses. The area of road and footway will be nearly 78,000 feet, instead of 41,000, the area of the present bridge, which cost per square foot of surface 3*l*. 15*s*. 6*d*. The cost of the new bridge is estimated at from 245,000*l*. to 250,000*l*., which is at the rate of rather less than 3*l*. 6*s*. a foot, or size for size, nearly half the price of the old one.

BUCKINGHAM PALACE.—The Chapel in Buckingham Palace is to be pulled down and entirely reconstructed on a larger scale. The fitting up of the Chapel Royal, St. James's, for the marriage of the Princess Royal was found to be very expensive and inconvenient, and the rebuilding of the chapel at Buckingham Palace is supposed to have reference to the arrangements for the marriage of the Princess Alice.

THE CITY WELLS.—The Sanitary Report for the City of London states that the new Census has brought to light the fact that the population of the City has decreased 9 per cent. since 1841, and 12 per cent. since 1851, having been at the latter date nearly 130,000, and being now only a little more than 113,000. The houses also have diminished 15 per cent. since 1841, showing that the present reduced population is more crowded than was the larger population of former years. The Report dwells at some length on the bad quality of the City water, which, instead of only an average of 19 grains of solid matter, which is found in the water from the New River, exhibits from 20 to 127 grains, the pump of Bishopsgate Street Without ranking highest, and the pump of Glovers' Hall Court lowest "in the order of foulness." The City pumps, says the Report, "are not only charged with decaying organic matter, but also with the saline products of its oxidation":—

"Most of their waters are bright and sparkling, and they have a cool and agreeable taste. They are therefore much sought after for drinking purposes; but the coolness of the beverage and the briskness of its appearance are dangerous fascinations, for they are both derived from organic decay. This has given to the water the agreeable qualities which are so deceptive. In reality, the water from the City pumps is far worse than that from the muddy river. Many of the pumps are in close proximity to the fat graveyards of the City, and it is more than probable that they all of them derive their water chiefly from those sources. The ammonia is a sign of present putrefaction, and the alkaline nitrates of a past, besides which the existence of so large a quantity of common salt is suggestive of the filthiest impurities."

POST-OFFICE SAVINGS BANKS.—The Postmaster General has taken the first public step towards the establishment of the Post-office Savings Banks, under the recent Act, by the appointment of the comptroller of that department. The gentleman selected to fill this office is Mr. Chetwynd, who for more than 20 years has been engaged in the Money Order Office, and who has taken a very active part, in conjunction with Mr. Scudamore, the accountant-general of the Post Office, in arranging the details of the plan on which these banks are to be conducted.

CASE OF THE BARON DE BODE.—On Friday the select committee of the House of Commons, appointed, on the motion of the Hon. George Denman, to inquire into the claims of Baron de Bode, brought their labours to a close for the session. It was expected that they would have made their report as to the validity of his claim, but after considerable discussion it was determined not to offer any opinion as to the merits of the case, but merely to report the evidence, and ask to be reappointed next session to renew the inquiry.

ST. PHILIP'S, STEPNEY.—The Queen has confirmed the decision of the Judicial Committee of the Privy Council depriving the Rev. James Bonwell of his benefice, and the Rectory of St. Philip's, Stepney, has been declared vacant. It is worth about 300*l*. a-year, and is in the gift of the Principal and Fellows of Brasenose College, Oxford.

ST. BARNABAS, PIMLICO.—The long-pending suit between the Bishop of London and the Rev. Alfred Poole, formerly curate of St. Barnabas, Pimlico, has at last been brought to a close. After the Bishop had withdrawn his licence on the ground that he had encouraged confession in the vestry-room of the church, an appeal was made to the Judicial Committee of the Privy Council on a point of law raised for the first time, whether stipendiary curates have any appeal to the Queen from the Archbishop's Court. The Council decreed in the negative, and the Bishop of London's taxed costs amounted to 322*l*. His lordship issued an attachment against the person of Mr. Poole, and in order to prevent him from being sent to gaol, Mr. C. F. Trower, the barrister, took the debt upon himself, and paid the money in person to the bishop. A subscription has been set on foot among the High Church party, in order to repay Mr. Trower. Mr. Poole is at present assistant-master in Harlow Grammar School, in the diocese of Rochester.

REGISTRATION OF BIRTHS.—The Registrar-General stated the other day, in his evidence before a parliamentary committee, that the number of births in England which every year escaped registration is probably 20,000, or 3 per cent. of the whole number of births—a large omission, sufficient to affect considerably calculations based upon the returns. At the recent census the number of persons in England and Wales was less by 126,460 than the number that might have been expected to be found, from the mere excess of registered births over the deaths since the census of 1851; but of course allowance has also to be made for the 200,000 births that are estimated to have escaped registration in the interval since that census, making altogether a deficiency of no less than 326,000—apparently the 10 years' excess of emigration over immigration in this part of the United Kingdom. The chief part of these 20,000 births which annually escape registration in England are illegitimate births in London and other towns, the parties wishing for secresy. There are streets noted for such cases, and in 10 days or a fortnight after the birth the parties have disappeared.

THE LATE FATAL AFFRAY IN NORTHUMBERLAND STREET.—Major Murray, who left the Charing-cross Hospital in the early part of last week, and was conveyed to the residence of his mother and brother at No. 35, Harley-street, Cavendish-square, where he is still constantly attended by Dr. Canton, is fast recovering from the effect of the pistol-shot wounds in the neck, inflicted previous to the fatal encounter between him and Mr. Roberts. Mrs. Roberts, the widow, has taken possession of all the furniture and other property in Northumberland-street belonging to Mr. Roberts, as administratrix.

EDUCATION OF DESTITUTE CHILDREN.—The select committee appointed to inquire how the education of destitute and neglected children may be most efficiently and economically assisted by any public funds, have agreed to the following report by a majority of 6 to 4, the majority consisting of Mr. Lowe, Sir J. Graham, Sir B. Leighton, Mr. Liddell, Mr. Adderley, and Mr. Bruce; the minority including Sir J. Pakington, Mr. Hanbury, Mr. Black, and Mr. Cave. Sir Stafford Northcote, being in the chair, did not vote. The report is dated the 23d of July:—

"Your committee were appointed at an advanced period of the session: but they have prosecuted the inquiry with diligence, and have examined witnesses most competent to elucidate the entire subject, and sufficient in the opinion of your committee to support the conclusions which they submit without further delay to the judgment of the House. No child should be encouraged to go to a ragged school fo[r] whose education provision can be made elsewhere. [illegible] children who have acquired criminal or vagrant habits [illegible] vision is made by the Industrial Schools Bill. [illegible] measure has been tried no other provision at the [illegible] the State should be made for this class. The children [illegible] door paupers, destitute orphans, and deserted children receiving out-door relief, ought to be provided for under Denison's Act by the guardians of the poor; but it [illegible] to be the opinion of those who have paid attention [illegible] subject that they are not likely to be so generally [illegible] Act be so altered as to make it compulsory upon the guardians to enforce the child's being sent to school as a [illegible] relief. The difficulties which would have to be encountered in the introduction of a system of compulsory education [illegible] as this are great. Some questions of detail which are [illegible] upon in the evidence are worthy of attention with reference [to] this subject. It has been suggested to your committee [illegible] Committee of Council on Education might provide [illegible] admission of children of out-door paupers into schools [illegible] Government aid; but your committee have [illegible] evidence on the subject of this suggestion, and [illegible] refrain from expressing an opinion upon it. Children [illegible] indoor relief are provided for in union district [illegible] schools. Provision, however, ought to be made [illegible] boards of guardians to maintain workhouse schools [illegible] efficient state than they are generally in at present [illegible] erect district schools. After all these reductions [illegible] remains a residue to be dwelt with, though of its amount [illegible] committee have no evidence. Aid to ragged schools [illegible] other institutions where children are fed, or fed and [illegible] is really aid in relief of the poor rate, and this is [illegible] when the aid is given as a salary to the master, [illegible] payment sets at liberty an equal sum to be employed [illegible] feeding or lodging. The only ragged schools, therefore [illegible] which relief can be given, are those which neither [illegible] clothe, and the only children requiring their aid [illegible] residue which remain after all the above deductions [illegible] evidence of Mr. Rogers shows 'that where strenuous exertions are made,' the poorest and lowest [illegible] towns are capable of supporting schools under the [illegible] Council; and that the poorest parents may be induced [illegible] small fees towards their children's education. Still a [illegible] exists which has not yet been reached by any other [illegible] than a ragged school; and the question remains [illegible] ragged schools, which have undoubtedly been of [illegible] benefit, ought to receive further assistance from [illegible] than at present. The London Ragged School Union [illegible] Lord Shaftesbury at their head, are opposed [illegible] government grants being made to ragged schools [illegible] that such grants would interfere with their [illegible] missionary character, and relax the interest now [illegible] them. Much difference of opinion, however, prevails [illegible] this subject among the managers of the schools [illegible] and the managers of refuges, which are likewise [illegible] of a religious and missionary character, take a wholly [illegible] view of the question. The withdrawal of the Government grant to schools capable of being certified under the [illegible] Acts touches refuges, but not ordinary ragged schools. [illegible] ordinary ragged schools, if they give industrial training [illegible] have certain allowances from the Privy Council for [illegible] raw materials, and are permitted, even without giving [illegible] trial training, to earn any grant from the Council, [illegible] pliance with the conditions prescribed to other schools. [illegible] rules have yet been suggested on which further grants [illegible] public money could safely be made; and the present grant [illegible] raw materials has been grossly abused, and should be discontinued. Ragged schools closely resemble Sunday schools. They are strongly impressed with a missionary and [illegible] character. Their primary object is to reclaim and [illegible] child, and then to place it in some honest [illegible] objects instruction is secondary and subordinate. [illegible] vernment inspection must be chiefly based [illegible] The grants made upon that inspection would tend [illegible] the school from its main object. Infant schools, which [illegible] the child before it has been contaminated, appear [illegible] the root of the evil which ragged schools only attack [illegible] more advanced stage. They are comparatively cheap, [illegible] they require only female teachers; are very acceptable [illegible] parents, whom they relieve of the care of children [illegible] age, and not only keep them from evil, but lay the [illegible] of order, industry, and attention. Your committee [illegible] recommend that one or other of the measures to which [illegible] ence has been made in the third paragraph of this [illegible] adopted, whereby admission into Government schools [illegible] be secured to destitute orphans, deserted children, [illegible] children of outdoor paupers; and that whatever [illegible] not reached by the Industrial Schools Bill now passing [illegible] Parliament, or by the proposed measures, be left [illegible] sionary exertions of the ragged school managers, [illegible] further interference by the Government than exists at present."

BRITISH MUSEUM.—On the recommendation [illegible] Professor Owen, the trustees of the British Museum have purchased the principal objects in M. Du Chaillu's collection for 500*l*. They include the "King of Gorillas," the large specimen which has lately [illegible] exhibited at the rooms of the Geographical Society; the younger specimen, called "Joe" in M. Du Chaillu's lecture, and another skin; the skin of the Bald-headed Ape, the new Antelope and the African Manatee [illegible] their skeletons, and the skins of some smaller [illegible] The valuation of these specimens was made by Mr. Stevens. The purchase of M. Du Chaillu's collection of birds is still under the consideration of the trustees.

INDIA MUSEUM.—This Museum, which has been removed from the City, and rearranged in Fife House, Whitehall Yard under the superintendence of Dr. Forbes Watson and Mr. Digby Wyatt, is now open to the public on Mondays, Wednesdays, and Fridays, by order [illegible] Secretary of State for India.

SALE OF THE GREAT GLOBE.—The collection [illegible] curiosities, relics, models, &c., gathered together [illegible] Mr. Wyld at the Great Globe, in Leicester Square, [illegible] sold a few days since by public auction. The building was erected in 1851, at a cost of nearly 13,000*l*., [illegible] at first contained only a model of the earth; subsequently dioramas and other attractions were added, each [illegible] things forming a gallery of itself. The reason assigned for the sale is the expiration of the time granted for [illegible] use of the ground, so that the building must be [illegible] down and the square restored to its former condition. Mr. Wyld stated that his expenditure had been [illegible] 50,000*l*., irrespective of the cost of the erection. [illegible] sale comprised the collection of relics and [illegible] trophies of the Russian war from the Crimea, Sebastopol, and the Baltic, the curious Oriental [illegible] the Arctic collection found in the search for Sir [illegible] Franklin, and other small matters. The prices [illegible]

for most of the articles were absolutely ridiculous, and directors added to their museums at a trifling cost. A collection of 165 life-size figures in Turkish and other Eastern costumes, described as "the Oriental Museum," was sold for 220*l*. The dioramas of the Rhine, Italy, China, and India, brought respectively 55*l*., 55*l*., 150*l*., and 155*l*. The great model of the Earth, 60 feet in diameter and 188 in circumference, sold for 900*l*. The building, comprising the leaden dome, the iron stairs, and fittings, exclusive of brickwork, fetched 880*l*. The Duke of Marlborough and the Crystal Palace Company were among the purchasers, and the fine models of Stonehenge were bought for the Copenhagen Museum.

The late Fire at London Bridge.—In consequence of the heavy losses sustained at the recent fire the leading insurance offices have given notice of their intention to raise the rates of insurance on all property stored in wharfs, docks, &c., to three times the former amount. In consequence of this determination the leading merchants and brokers connected with the colonial produce markets presented a requisition to the Lord Mayor requesting him to call a public meeting to protest against the proposed increase in the rates of insurance. This meeting was held on the 25th ult, when resolutions were adopted to the effect that the proposed rates are unjust and excessive; that they will tempt persons to abstain from insuring, and will lead to a degree of imprudence hurtful to the mercantile community; that the market value of the shares of the leading fire offices proves that the previous rates were amply sufficient; that the meeting will use all lawful means, by the formation of a new company or otherwise, to oppose the new charges, and, finally, a committee was appointed to consider the best course to be pursued towards that end.

The Late Mr. Braidwood.—The fire insurance offices in London have decided to subscribe among themselves the sum of 7000*l*., to be invested in the names of trustees, for the benefit of the widow and children of the late Mr. Braidwood. The amount is to be contributed by each in proportion to its London business.

Monument to Lord Melbourne.—By permission of the Dean and Chapter of St. Paul's, preparations are in progress for the erection of a marble monument on the north side of the cathedral, midway between the north and west entrances, to the memory of the late Lord Melbourne.

Metropolitan Local Taxation and Government.—The Commons' Select Committee on the Local Taxation and Government of the Metropolis, whose report has just been issued, have had to deal with an area of 78,029 acres, on which stand 360,237 inhabited houses, with a population of 2,803,034 souls; the assessment is 12,450,416*l*.; 7000 persons are employed, entirely or partially, in duties connected with the local government of this vast body. Schemes were suggested to the committee for a comprehensive system of municipal Government of the whole metropolis under one head, with minor local affairs administered by the authorities of the several wards or districts, and the report as framed by Mr. Ayrton pointed to an enlargement of the city corporation, or "an improvement of the constitution of the Metropolitan Board of Works," but the committee struck out these clauses, and, averring that the question involved Imperial as well as local interests of vast magnitude, reported that they conceived the discussion of these plans should form the subject of future inquiry, and they therefore wished to express no opinion as to the comparative merits of the schemes suggested in the evidence taken. Of the Board of Works the committee content themselves with saying that the tendency of the evidence leads to the conclusion that though this body, as now constituted, is fully competent to discharge the duties imposed upon it, greater authority would attach to its deliberations were its members elected directly by the rate-payers, and not by the vestrymen. The committee, after recalling, among other things, the suggestion made years ago that the railway termini should be connected with each other by railway, so as to take all through traffic off the streets, recommend that the Metropolitan Board of Works should be empowered to appear before railway committees, when necessary, to watch over metropolitan schemes and protect the interests of the inhabitants. A clause recommending that the planning and execution of the Thames embankment be intrusted to this Board was rejected on a division. The question of the equalisation of the poor-rates is not touched, because another committee was considering the Poor Laws; and the coal and wine duties were also regarded as taken out of the hands of the committee by Parliament in passing the Bill to continue them for 10 years and appropriate them to metropolitan improvements. Therefore, on the subject of taxation, the committee have only to recommend that so far as the tax on hackney-carriages exceeds that of the country, it should be remitted or applied in aid of the rates levied for local purposes (the object for which it was imposed); that the duty or corn ought either to be abolished, or, being levied on all the inhabitants, applied for their general benefit; that, as railways and omnibuses will now compete, the taxation ought to be on the same principle, in both instances on the miles run, or in both on the gross receipts; and that the unappropriated part of the duties the city was authorised to raise, now constituting the London Bridge Approaches Fund, ought to be applied for the benefit of the inhabitants of the whole metropolis, whose taxation has redeemed the permanent annuity which the city was to pay in discharge of its own debt. With regard to the administration of justice, the Committee think it deserves consideration whether the Central Criminal Court should not sit as often as might be requisite for the trial of minor cases, reserving the more important for the monthly attendance of the judges. They see no reason why the county court system should not extend to the city; and they think it matter for consideration whether it would not be advantageous to the inhabitants if arrangements were made for the trial of all metropolitan causes (not cognizable by the County Courts) at a central court of Nisi Prius, analogous to the Central Criminal Court, instead of some being tried at Guildhall, some at Westminster, and some at the Surrey and Kent Assizes. The Committee advert to the subject of public property in the metropolis, which is connected with that of local taxation in so far as such property can be justly applied to purposes otherwise to be provided for out of local taxes; but they did not inquire into the varied interests in all the public property belonging to local bodies in the metropolis, as it would involve many complicated questions. They content themselves with observing that it is a subject worthy of the most careful investigation.

Thames Embankment and Deodorisation of the Sewage.—A public meeting of the ratepayers of the metropolis was held on Wednesday evening in the lower room of Exeter Hall, to consider a resolution relating to the Thames embankment, and also to consider resolutions condemning the plans at present contemplated by the Metropolitan Board of Works, with regard to the deodorisation of sewage. Mr. Henry Hoare presided and said that the deodorisation of the sewage was the main question for discussion; and, although its utilisation was a subject of extreme importance, yet there would be no time for remarks upon liquid manure, or upon the details of the embankment, to which, in some form or other, he hoped that necessity would drive them. With every disposition to place a general confidence in the Board of Works, they felt the board was, like other people, not infallible; and if a mistake had occurred, or even was thought to have occurred, it was better that a friendly and public discussion should take place than to wait till further progress had been made, involving as it would a further expenditure of valuable resources. Mr. Churchwarden Marshall then moved the following resolution:—

"That the grateful thanks of this meeting are due to her Majesty the Queen and to both Houses of Parliament for securing by recent enactment the continuance of the coal and wine dues, with a view to some embankment on the north side of the river, between Westminster and Blackfriars Bridges, the construction of which the ratepayers would naturally wish to see entrusted to the Board of Works elected by themselves. That in the opinion of this meeting the additional space so required should, if possible, be appropriated to purposes of utility and trade as well as to those of recreation and ornament; and that possibly such portion thereof as lies to the west of the Temple Gardens may be, in part at least, beneficially allotted to the use of barges and other craft on the river."

The motion having been seconded, Mr. Delany moved an amendment to the effect that the embankment of the Thames ought not to be entrusted to the Metropolitan Board of Works. The amendment did not find a seconder, and the resolution, after having been supported by various gentlemen, was unanimously adopted. Mr. Petter then moved the following resolution:—

"That this meeting prays the said board immediately to direct its impartial attention to the leading plans for deodorising the sewage, taking more care than heretofore to promote adequate demonstrations of such plans, in order that their feasibility or otherwise may be fairly ascertained and become publicly known; the comparative merits of the several chemical agents having been satisfactorily tested by competent authority. That the attention of the said board be likewise solicited to the circumstances of the flat localities which are found to exist on both sides of the river above Westminster Bridge; and that in the opinion of this meeting the processes of deodorisation and filtration, if adopted anywhere, should not be disregarded in this particular locality, it being considered that both those processes in combination should be made to precede the action of the pump, in all cases where such action is required."

Mr. Parsons seconded the motion. A long discussion ensued, in the course of which several speakers maintained that the resolution cast an unwarranted censure on the Metropolitan Board of Works. The Chairman said the object of the resolution was to bring public feeling to bear on the board, in order that it might be induced to institute further experiments with the view of ascertaining what was the best system of deodorisation. Mr. Pedler moved, as an amendment, "That, in the opinion of this meeting, the deodorisation of the sewage of London is impracticable in London; and that the only plan to be adopted is to remove the sewage to the country, where it will become of the greatest value." Mr. Ellis seconded the amendment, which, on being put, obtained eight or nine votes. The Chairman, on taking the show of hands against it, declared that it was lost by at least two to one. The resolution was then put and carried. Mr. Latchford proposed the third resolution as follows:—

"That this meeting cannot but regard with the greatest repugnance the proposal to pump up the contents of a low level north sewer or elongated cesspool; and to propel the volume so pumped up, in its most noxious form, at all hours of the day, in a tunnel through the heart of the City, from Queenhithe or elsewhere to West Ham; and deprecates in the strongest manner the formation on each side of the river of open tanks, or reservoirs, from which the sewage, having been a second time pumped up, shall, at ebb tide, be discharged into the river; considering that since the specific gravity of sea-water greatly exceeds that of sewage, the inevitable result must be, that the latter will never commingle with the former, but will continually ebb and flow on the surface, whilst the silt and other settlement matters not lifted by the pumps will necessarily accumulate at the bottom; and that, there being no longer the ancient direct outfalls into the river, the sewer itself along the foreshore being nearly on a dead level may soon become inconveniently, if not in places entirely, choked up—a result, the consequences of which would be of a malignant character too horrible to describe."

Mr. Some seconded the motion. Another long discussion followed, and several speakers maintained that the language of the resolution was very strong against the Metropolitan Board of Works. The Chairman said the conduct of the board had, as regarded the matters to which the resolution related, been very bad. He was, however, willing to modify the terms of the resolution if the meeting desired it. No amendment was proposed, and the resolution was carried with a few dissentients.

The Public Health.—The Registrar-General's weekly return states that the deaths in London in the week that ended Saturday, August 3, were 1225. The average number in the corresponding weeks of the 10 previous years, 1851-60, corrected for increase of population, was 1251. The present return is therefore 26 below the average. During the week the births of 898 boys and 779 girls, in all 1677 children, were registered in London. In the 10 corresponding weeks of the years 1851-60, the average number was 1590.

Provincial.

Buckingham.—The body of the late Duke of Buckingham and Chandos, K.G., was removed on Monday morning from the residence of Mr. and Lady Ann Gore Langton, in Grosvenor Square, and conveyed by railway to Wotton Underwood, in this county, where it was deposited in the family vault in the presence of a numerous assemblage of relatives, friends, tenantry, and Bucks Yeomanry Cavalry. The coffin was covered with crimson silk velvet, with silver gilt handles and ornaments, and an inscription plate bearing the name and titles of the deceased, with the dates of his birth and death.

Bideford.—A few days since Miss Frances Ann Rowland, 41 years of age, who had been governess in the family of Lord Clinton, at Huish, for upwards of 20 years, came to this town to spend a few days with Mrs. Wilcocks, with whom in early life she had been at school. Soon after her arrival she complained of indisposition, when Mrs. Wilcocks went to the shop of Mr. Thomas Griffiths, chemist, and asked for three penny worth of tincture of rhubarb, and three drops of laudanum, stating at the time that it was a prescription which had been given her by a nurse. Miss Rowland took the draught and died in the course of the afternoon, exhibiting all the symptoms of narcotic poisoning. The evidence at the inquest, founded on the results of the post-mortem examination, clearly proved that the unfortunate lady had been the victim of a strong narcotic poison, and the jury returned a verdict that she died from the effects of laudanum, inadvertently supplied by Mr. Griffiths instead of tincture of rhubarb.

Clay Cross.—The adjourned inquest on the 23 men and boys who lost their lives in the Clay Cross pits on the 11th of June, was brought to a conclusion, after a protracted investigation, on Friday evening, when the jury returned a verdict to the following effect:—

"That the death of the deceased was caused by the water accumulated in an old pit breaking into the workings, in consequence of the coal in the old pit having been worked for a distance of 42 yards beyond the proper boundary, but there was no evidence to prove by whom or under what circumstances such coal was worked beyond such boundary. The jury recommend that in all cases where workings are approaching to a distance where a barrier is proposed to be left, notice should be given by the owner of the collieries to the inspector, with a view to provide for the safety of the mine; and they consider it desirable in all such cases for coalowners to drain the old workings on the property they are working. The jury are of opinion that several of the workmen were blameable for neglecting their duty under the colliery rules, and they recommend that in the absence of any ordinary deputy, a well qualified person shall be appointed to fulfil the duties of such deputy."

Cambridge.—The inquiry into the circumstances attendant upon the death of Harvey Rumbelow has been twice resumed since our last notice, but the numerous witnesses who have been examined have thrown little new light on the circumstances of the murder. A surgeon stated his belief that deceased was alive when he fell into the water. Other persons deposed that a quarrel took place on the night when deceased lost his life between him and a woman about some money, of which he accused her of having robbed him, and that the prisoner and another man was seen ill-using the deceased on the common. This man has been put under surveillance, and has been ascertained to be the friend of the woman who was charged by deceased with robbing him. The other prisoner was remanded.

Cowes.—The annual regatta of the Royal Yacht Squadron commenced on Tuesday with the contest for the Prince Consort's Cup for cutters of the squadron. The prize was won by the Arrow, 102 tons, belonging to Mr. Chamberlain, beating the Osprey and the Brunette. On the same day there was a match for 100*l*. between the Alarm and Camilla schooners, the latter being the present name of the celebrated America, which caused so much astonishment by her sailing powers on her arrival from the United States in 1851. The Alarm, which belongs to Mr. Weld, of Lulworth, and has won almost every prize for which she has contended, was the victor on this occasion, beating the Camilla by 37 minutes. The Queen and Prince Consort,

with several members of the Royal Family, left Osborne in the Fairy shortly before the start, and witnessed the commencement of the contest. On Wednesday the annual dinner of the squadron took place, the Earl of Wilton in the chair; and on Thursday the Queen's Cup was sailed for by schooners of the squadron only above 100 tons burden. After one of the finest contests ever seen, run in a shorter time than has been known for years, the cup was won by Mr. Wild's Alarm beating the Aline, Albertine, and the Galley of Lorn.

DERBY.—George Smith, who was sentenced last week to be hanged for the murder of his father at Ilkeston on the 1st of May, has made a full confession of his guilt. He states that he went to Nottingham on the day of the murder for the express purpose of purchasing a pistol with which to shoot his father; that he took the pistol home loaded, and found his father lying on the sofa; that he could not summon resolution to shoot him, although he measured the distance of his head with the pistol. He put the loaded pistol into the drawer, left the house, and went to a public-house and got a quantity of drink. He then returned home for the purpose of shooting his father, but the latter had gone out. He again went back to the public-house, partook of more drink, and had a quarrel with a man. He then returned home for the last time, and found his father sitting on a chair, with his head resting on his hand. His father complained of his coming in at all hours of the night, and said he did not believe he got any better, but worse. The prisoner then thought he would make an end of the matter, and with the loaded pistol in his hand went behind his father's chair and shot him through the head. The confession was a written one, and signed by the murderer. He was very calm and penitent after he had made his confession.

EXETER.—The local Board of St. Thomas's in this city have succeeded, principally through the exertions of Mr. Pince, the nurseryman, and the surveyor, Mr. Ellis, in deodorising the sewage of that parish by the use of M'Dougall's disinfectant, which has been in successful operation for some time at Carlisle. At a meeting of the Board on Monday, Mr. J. W. Buller, M.P., in the chair, Mr. Pince spoke in favourable terms of the fertilising qualities of the sewage after deodorisation, and gave a practical example of its effects.

LISKEARD.—On Wednesday night Mr. Bernal Osborne, M.P., paid a visit to his constituents in this town, and delivered a long speech on public affairs, from which the following are extracts:—

"Finance is the question upon which everything turns, not only in this country, but in all other countries,—the pivot upon which all affairs of national welfare turn. I wish therefore, to say a few words upon it, though I am not a Chancellor of the Exchequer. Now, the public expenditure of this country is becoming most alarming. The public expenditure for the year 1861-2, this current year, equals 76 millions; and I find, by a parliamentary paper, which is confessedly incomplete, and which, therefore, does not give the real and right figures, that the local taxation is laid at 15 millions; making a total of 91 millions. Now, that is a most alarming sum. And here you will remember that year by year that sum has been increasing. In fact it has been increasing so much since the year 1853, that I may quote to you the very remarkable opinion expressed by the Chancellor of the Exchequer in 1859 upon that subject. And, observe, it is not now an independent member of parliament giving you his views; but the Chancellor of the Exchequer, in his place in parliament, expounding to the country the state of the national revenue. And what does he say? Since the year 1848, the miscellaneous civil expenditure had increased to 2,225,000*l.*, and he told the committee how it had increased, namely, the vote for education, science, and art, 930,000*l.* per annum. Now I don't object to education grants, but we know of science and art, that there are a few gentlemen called the commissioners of the fine arts, who put their hands into our pockets to spend on matters of taste, but which are really disgraceful to taste, and that is one of the ways in which the miscellaneous expenditure is swollen. Then for those extraordinary buildings, the Houses of Parliament, 660,000*l.* per annum, which were to have been completed for 750,000*l.*, but which have ended in costing two millions of money, besides the Bill for keeping them up. Not only that, gentlemen, the outside is falling to pieces, and really, I think, it would be a happy thing if the House of Commons, as at present constituted, would follow its example. Then for ordinary works there is 157,000*l.* per annum; for law, justice, and police, 382,000*l.*,; superannuations, 19,000*l*; and the cost of collection of revenue increased 300,000*l.* In seven years the expenditure has increased 20 millions. Select committees are sitting and evidence is given, yet there is nothing done, and nothing will be done until the country and the constituencies take up the subject, and insist on a retrenchment of public expenditure. There are also the votes for Aldershott and Alderney, and as I sat in my place I had a brush with the Prime Minister, saying that the money for Aldershott was shamefully misspent, but it was denied, yet no proofs were given, and I consider the same of Alderney; and if you only turn to that you will consider that has been a shameful extravagance. Well, then, we are going on with fortifications, and I have a word to say about them. We have been called upon, and they don't dare to put it in the annual expenses, for a loan of 11 millions for fortifications. I quote no opinion of my own, but the opinions of official men; and what is Mr. Gladstone's opinion of their necessity, and it is really very curious, for it is the opinion of a man in office, and behind the scenes. Remember this, there is a loan of 11 millions for fortifying Portsmouth, not only on the sea side, but on the country side, and a great deal of money is to be laid out at Plymouth, I am told. On the 18th August, 1860, he said the public voice was in favour of augmentation rather than reduction of expenditure, and he could not help thinking there was a great deal of exaggeration in the public mind as to the necessity that existed for increased expenditure on this head. He tells the House of Commons and the country these things, and the House of Commons goes on and votes the money, and the country is perfectly satisfied to pay it. Therefore I say this, it is no use quarrelling about it, if you constituents of Cornwall and all boroughs are satisfied your members should enter into this wild, rash, and improvident expenditure—you can't think the members themselves will take any very great interest in resisting the ministry, unless backed up by their constituents. Lord Palmerston has undertaken to reconstruct the ministry and I may certainly say that the united ages of those in the cabinet would puzzle the oldest inhabitant to state. He is most active in mind, and most energetic; and the fault I find in him is not his age, but 'the follies of youth' He has turned extravagant, laying out all his money in firearms, guns, drums, and fortifications, and these are 'the errors of youth.' The fault that I find in him is not that he is too old, but that he is too young; he is never satisfied unless he is squandering the public money. That's the fault I find with him; and I think he is a most expensive minister. He is a most able man; but the country is paying very dear for him. There is no doubt that as long as he lives he will not listen to the remonstrances of Mr. Gladstone, but will go on spending money as long as you are content to pay it. It is called a 're-construction,' a sort of hocus-pocus—one man jumping into another man's place—*a presto pass.* I am not surprised at it in a muster of 77, with rising young men who are between 60 and 70. Rising young men have been put into cabinet places. Now the government, I think, should have formed their cabinet on a younger and a less expensive basis; but it is the aboriginal sin of Whiggery, which I am not surprised at. The fair vacancies have not been filled by the supporters of the government. Contrast the conduct of Sir R. Peel with the small coterie of Whigs. He found a school of statesmen who have handed his name down to this day; and he took them without reference to rank, fortune, or connection—a school, the members of which the present Prime Minister is very proud to adopt. What is the case with the Whig coterie? They are unable to propagate their principles or creed, and have not the properties acceded to the phœnix—too timid of defence, and too fond of power to resign. What have they done? Reconstructed the old family party we thought we should never hear of again; and we have got these old gentlemen shifting from place to place, and, like the bishops, living much longer than other people. Well, the worst of this is, that the party have got rather dissatisfied, and have rather an idea that this policy is preparing the way, slowly but surely, for the advent of the Tory party to power. Let us look at the recent appointments. In appointing a war minister, I think it was the bounden duty of the government to take the best man, whoever he was, whether in the House of Lords or in the House of Commons; because the office of Minister of War is a most important office, and only half organised in consequence of the lamented death of Lord Herbert. It requires the best man the country has to retrench the expenditure in that office. I have no doubt who the best man would have been. If I am asked I should say it would be Lord Grey, who has an intimate acquaintance with the office, and who is one of the cleverest men going; but to whom I don't think Lord Palmerston will ever give a chance, because he is so clever. If they don't like to take him, let them take Lord de Grey and Ripon, who is a rising young man. If they tell me it is necessary to have the War Minister in the House of Commons, there is a man with whom I have had the honour of serving once, and who, I am satisfied, is the best man in the House. That is Sir Charles Wood. He is an excellent administrator. But they take one of the most able and accomplished men, Sir George C. Lewis, from the Home Secretaryship, and turn him into uniform, and make him the War Minister. By universal consent every one will tell you it is a most unlucky appointment, because he has no connection with the god of war. I can only account for his selection on the same principle on which the American corps have made generals from most amiable and excellent lawyers; and you see with what success. Sir G. Lewis is like Michael Cassio, 'Forsooth: a great arithmetician, that never set a squadron in the field, nor the division of a battle knows more than a spinster; unless the bookish theoric, wherein the toged consuls can propose as masterly as he; mere prattle, without practice, is all his soldiership.' They have lifted him into this position because he is a good Whig, and must be provided for; and no one objects to him. But accordingly he is removed from the Home Office, and the control of the new police, to the control of the army of Great Britain. Well, directly he left the Home Office, we expected to have a little young stuff. But Sir George Grey is dug back again—resurrectioned into public life. He is an amiable man, but he retired from public life seven years ago on account of ill-health, and he is put into the Home Office; while Mr. Cardwell, who is a glutton for work, and who is a most exemplary man, is consigned to the genteel seclusion of the Duchy of Lancaster, with nothing to do. He was in office as Secretary of State for Ireland—a country with which I am connected; and I think it is a very great misfortune to remove him from that post, because he is a safe man, and offered no violence to people's prejudices—a very difficult thing to avoid doing in Ireland. He was to be depended on, and he surmounted all difficulties; and after doing so is consigned to private life. I have nothing to say against the appointment of Sir Robert Peel—and I think it is a great thing even to get a man bearing that name—and he is undoubtedly a clever man—back into public life. Some objection may be raised that it is not fair to take adversaries and put them into office. But that has always been the present Prime Minister's policy. I remember Mr. Hutt, who was afterwards made the Vice President of the Board of Trade, always moving for the abolition of the slave squadron, which cost us a million a year. He run the minister hard once or twice, but he put salt on his tail, and put him into the Board of Trade. Mr. Gibson, who was opposed to the China war, he treated like a poor relation. He has recently taken Mr. Roundell Palmer, who also opposed the Chinese war, and put him into office; and he offered to make Lord Stanley Secretary for the Colonies, but Lord Stanley refused it. I don't object to it; but it is for the people who sit behind to say whether it repudiates the ties of party. The Liberals will stand a good deal, but I think the day will come when even they will have had too much of it. With reference to Sir Robert Peel, I believe him to be an able man, and I am of opinion that the responsibility of the great office he has undertaken will restrain and check his impulses; and that when he has fully studied the country to which he has gone, he will become more Irish than the Irish themselves. And I believe this is the best compliment I can pay him." The hon. gentleman, after some few further observations on the appointment of Sir Robert Peel, and congratulatory reference to that of Mr. Layard, thus resumed and concluded:—"What is the state of the Liberal party? It is becoming somewhat of a mongrel nature. We have now got into a state of confusion, and if you ask one man what he is in politics he will tell you Liberal-Conservative; and if you ask another, he will say he is Conservative-Liberal. What is to be the end of all these political differences? Unless some energetic measures are taken by her Majesty's government to meet parliament with measures entitled to public approbation, not only about spending money, but cutting down and reforming the expenditure, I believe that question will be taken out of their hands, and they will be consigned to the outer darkness of opposition. I do not despair of the Liberal cause. If the old Liberal banner be unfurled, which was unfurled in Lord Grey's time, with the words 'Peace, retrenchment and reform;' whenever that banner is unfurled, I shall be found at my post, and I hope you will be found at yours, and will send me again to do my duty in the House of Commons."

OXFORD.—The Earl of Derby, Chancellor of the University has appointed the Rev. William Charles Salter, M.A., Vice-Principal of St. Alban's Hall, and Fellow of Balliol, to the Principalship of the Hall, in the room of the late Dr. Cardwell.

PLYMOUTH.—The new fort at Picklecombe, [illegible] the most important of the new coast defences [illegible] port, was formally commenced last week, [illegible] first stone above high water mark was formally [illegible] the Hon. Mrs. George Edgcumbe, sister-in-law [illegible] Earl of Mount Edgcumbe, on whose ground [illegible] to be erected. The fort will be a curved [illegible] work of 560 feet in length, and it is expected [illegible] mount 60 heavy guns.

PORTSMOUTH.—A court-martial has been [illegible] board the flag-ship Victory, to try James [illegible] ship's steward on board the Mermaid, tender [illegible] Dauntless, for having two loaded pistols in his [illegible] and for advancing towards his commanding [illegible] Lieut. Tracy, in a threatening manner, with [illegible] apparently with the intention of firing at [illegible] Court found the prisoner guilty of both charges [illegible] sentenced him to seven years' penal servitude.

SALISBURY.—On Thursday morning the [illegible] Salisbury commenced the triennial visitation [illegible] diocese. In consequence of the prosecution [illegible] lordship has commenced against the Rev. Dr. [illegible] Williams, vicar of Broad Chalk, on account of [illegible] 'Bunsen's Biblical Researches," in "[illegible] Reviews," there was a very large attendance [illegible] clergy and laity, in the expectation that [illegible] would be adverted to in the charge. This expectation was not disappointed, his lordship having [illegible] the subject in the following terms:—

There was one matter which he had passed [illegible] different considerations. He had felt precluded [illegible] proceedings in which he was then engaged from [illegible] a subject which would lie closer to all their hearts [illegible] those upon which he had touched, and one far [illegible] their deepest attention. They would all understand [illegible] was alluding to a book, professing to be the [illegible] clergymen and one layman, called "Essays and Reviews" [illegible] though he was not going, however much he might [illegible] to do so, to break the rule of silence which circumstances [illegible] imposed upon him, still he felt that he owed it [illegible] both to the clergy and laity, to explain to them, [illegible] words, the reasons which had led him to adopt the [illegible] which he had now entered. He had instituted [illegible] against the reputed writer of one of those essays [illegible] much to dissuade him from acting as he had done. [illegible] was that there was not sufficient power in either of [illegible] to exercise any permanent influence over the minds [illegible] This was one cause of hesitation. Again, he was not [illegible] fear that legal proceedings would extend and [illegible] the influence, whatever it might be, and further [illegible] think that the constitution of our courts of judicature [illegible] as well fitted as one could desire to weigh the [illegible] truth on many of the questions which must necessarily [illegible] submitted to them. Then there was another cause [illegible] tation; the dictates of a righteous caution, lest [illegible] against a reckless and ruthless attempt to pull down [illegible] fabric of Christianity to its foundation might [illegible] forget the claims of charity and justice. There were [illegible] difficulties in the way of instituting legal proceedings. [illegible] on the other side, there were preponderating [illegible] for formally submitting the "Essays" to the [illegible] bishop's Court, and to show that [illegible] proved it. The Church allowed great [illegible] there must be a limit somewhere. At the time [illegible] consecration he (the bishop) accepted the responsibility [illegible] keeping the teaching of his clergy within these [illegible] Again, the archbishops and bishops of the [illegible] England had testified by a public record that [illegible] the limits allowed by the church had been transgressed [illegible] while the Lower House of Convocation and his own [illegible] given in their adhesion to that testimony. Such [illegible] helped to force the conclusion upon his mind that [illegible] beyond the bounds of toleration, and had quickened [illegible] sibilities upon it. Upon the writers of the "Essays and Reviews" this record had had no effect. On the [illegible] frequent publications they had challenged the bishops [illegible] that their views were inconsistent with the law of the [illegible] England and her ministry. He might almost say [illegible] writers had protested against informal acts, and had [illegible] in the name of justice a decision from those courts [illegible] decision on such points belonged. The matter had [illegible] burden upon him, but loyalty to his Church compelled [illegible] adopt the course he had taken. Any other course [illegible] shown him to be cowardly and unfaithful to his [illegible] lordship proceeded to speak at some length on the [illegible] justification by faith, and the other doctrines [illegible] "Essay and Reviews," contending that upon them [illegible] whole Christian system.

SHEFFIELD.—The monument to James Montgomery the poet, was unveiled on the 28th ult. in this town [illegible] the presence of a large concourse of spectators. [illegible] died in April, 1854, and was buried on the 11th [illegible] amidst such demonstrations of respect as were [illegible] paid to any individual in Sheffield before. A [illegible] desire was expressed that a monument should [illegible] erected to his memory, a subscription was opened [illegible] Mr. Bell the sculptor was commissioned to execute [illegible] monument. But the subscription flagged, and for [illegible] or seven years the matter seemed to have been forgotten [illegible] until the Sunday school teachers of the town [illegible] the question; the result of their exertions being [illegible] erection of a monument at the cost of [illegible] was a large procession through the town to the [illegible] the statue, and the day was kept as a holiday by [illegible] whole town. The mayor delivered the inaugural address.

TRURO.—The celebrated Colonel Peard, who [illegible] obtained such world-wide renown as "Garibaldi's Englishman," in consequence of the daring feats [illegible] he performed with his rifle while accompanying [illegible] army of General Garibaldi, was entertained at a [illegible] quet at Tywardreath, by his brother Cornishmen [illegible] Monday evening. 190 gentlemen sat down to [illegible] Mr. Kendall, M.P., in the chair. The gallant [illegible] in responding to the toast of his health, made a [illegible] speech on the past, the present, and the future [illegible] Italy, from which the following are extracts:—

Since he left England a great movement had taken [illegible] he meant the Volunteer movement. That, they might [illegible] sured, was a movement they all, as Englishmen, ought [illegible]

[illegible] hand to, and support with heart and soul. Cornwall was one of the best countries that could possibly be for Volunteer [illegible]. In it the Volunteers might defy any army that could [illegible]. They would defy any army to pass [illegible] against them. He did not care how strong they might [illegible] such a country. Volunteer Rifles who knew how to [illegible] cavalry or artillery. Volunteer Rifles, together in fours, sixes, tens, or dozens, with the Artillery [illegible] occupying the passes, would defy any army to go through that county. He had himself been a Volunteer with [illegible] since 1859. At that date, as the worthy chairman [illegible] he went as a Volunteer with General Garibaldi in Italy. [illegible] was opposed to them the oldest veterans of the Austrian [illegible]. Garibaldi's corps crossed the Ticino with 3600 men. They threw themselves across the river into the enemy's country. In about two days after they fell in with about 6000 of the enemy with artillery and cavalry. Well, what did they do? They went at them. They attacked their artillery with their bayonets, and put them to flight. They heard no more of them that day. Of the cavalry they saw but very little. None of Garibaldi's men had been enrolled two months, and some not more than three weeks! They devoured these 6000 foes. They pursued them more than [illegible] miles, and some of them retreated as far as twenty miles. The following day they fell in with 10,000 of the enemy, whom they likewise put to flight. Why? The volunteer was fighting for his home, wife, child, mother, and sister. The others were the paid soldiers of a tyrannous house. How would they, Englishmen, like to have this country parcelled out, and foreign soldiers put in possession? How would they like to be tortured and [illegible]—not only they themselves tortured, but those nearest and dearest to them tortured? That was the case with the Austrians in North Italy. But there was a certain excuse for them—they were foreigners, and did not care what they did with the inhabitants. They made the Italians pay for the sticks with which they beat them! After they had flogged them, they sent in the bill to the family. But when they came to Southern Italy, under what was called the Italian stock, the House of Bourbon, they exercised the most abominable tyranny. With one exception—the Pope's Government of Rome—they were the worst governors in the world. They would be shocked if he were to tell them of the horrible barbarities which they practised. At Palermo they had iron caps and screws with which they tortured. People were bound in iron chains, and pans of heated charcoal were put to their feet! This was to extort confession. One act of torture was specially savage. It was performed by Maniscalchi, the head of the police at Palermo. He wanted to get some information with regard to the males of the family. He took the mother and a child, put one on one side of the room, and the other on the other side of the room, and then told the mother that if she would not confess she should see the child die before her eyes. Yet when Garibaldi got possession of Palermo, this Maniscalchi actually came to him and begged of him that he would protect him. He thought the General was too good a man. He did protect his life. This Maniscalchi put on a red shirt to screen him, and he was taken to the fortress. He (Col. Peard) was no admirer of revolution, though he had done his best to dethrone a monarch; nay, he had done his best to dethrone more than one. But they were such monarchs that he was proud to do his best to dethrone them. He might be wrong. There was a lawyer sitting by his side, and he would set him right if he was. He thought there was a mutual compact between prince and people. They had done the same thing in England. Therefore they could not blame the Italians. England did it in 1688. What was the result? Why, they had a Government and a Queen of whom they might justly be proud. They had their laws duly administered, without favour and without affection. The law was supreme. Therefore they were free! In Southern Italy, in the greater part of Italy, in every part of Italy except Sardinia, there was no law, there was no freedom. What did they think the salaries of the judges in [illegible] were? The judges of the second class—he didn't know what they would call them—got 36*l.* a-year, paid quarterly. He didn't know, it might be paid monthly. Could they expect a judge to support himself and his family as he ought? But he kept his carriage and horses. He lived as a judge ought to do. Could he do it out of 36*l.* a-year? No, he did it by taking bribes from his clients. He went to the district where he was appointed. He called on the butcher, and said, "Very glad to see you. I am come here as judge." He says, "Signor, I am very happy to see you." "You may be engaged in some quarrel with those who deal with you." "Yes," says the butcher, "very probable, Signor Judge." "Well," says Signor the Judge, "I shall deal with you—I shall have my meat of you." "A very high honour, Signor Judge," replies the butcher. The judge walks away and pays nothing for his meat, but he always gives his decisions in favour of the butcher. So the judge goes through every department of trade. Such was the effect of appointing such officials upon such stipends. The Government wished to show that they were carrying on the Government in a very economical way. But they pocketed immense sums. That was a sample of the Government they had in Italy. There was no communication throughout the country, with the exception of the great posting roads. He would give them an instance of how they made roads. In Sicily they commenced a road between Palermo and Messina. It was to be 250 miles long, but of this 60 miles yet remained to be completed. Yet they began it in 1822, and Government had drawn, in taxes, for the purpose of making it, 18,000,000*l.* sterling! That was for making 250 miles, 60 of which were still to be made, or at least over which wheels could not go. That was one instance of the paternal Government of the late King of Naples and his family. As to the brigandage which was carried on in Italy, and of which they saw so much in the papers, they were not the regular brigands, into whose hands he believed a former M.P. for this country, Mr. Pendarves, once fell. The present brigands were the miserable creatures of Francisco. They were cowardly assassins, equal to any cruel work, guilty of every enormity, and pillaged and destroyed what they could. But a finer, honester set of brigands than those of Calabria could not exist! It had been stated that the King's Government was unpopular. He said that it was no such thing. He had not been out of Italy two months, and he said that it was not at all unpopular except in the case of a few discontented men who had lost their employment because they were dishonest. These were the only men interested in keeping up disturbances. He had only one observation to make about the popularity of the late King of Naples, Francis II. Garibaldi came a distance of 150 miles to Naples, and he was only accompanied by eight followers. He had no soldiers within 100 miles of him. The whole city rose as one man to receive and welcome him. The troops of the fallen dynasty were in the fortress, looking through the embrasures. Garibaldi went through the city, under the very guns of the fortress, but there was no hostile shot. All that was heard was the cry of "Liberty!" He thought that by means of trade they would be able to cultivate the most intimate relations and understanding with Italy. There was a great nation—France—that went to war for an "idea." But this idea was rather a solid one. Their idea was a couple of nice provinces. He thought England might assist Italy with an "idea." They would take their produce instead of their provinces. He didn't know any produce of Italy that wouldn't be of use to us. Did they want hemp for their cordage and sails for their ships? Italy would supply them with it, and that of finer quality than Russia. He had seen it seven or eight feet high. After enumerating other articles, he said, Did they want silk? They had hundreds of square miles planted with the mulberry tree for the silkworm. Did they want cotton? In South Italy they might grow any amount they wanted. At present there was quite a little family quarrel going on on the other side of the Atlantic. It might be found rather unpleasant to us in getting our supply of cotton. But if they turned to Italy he thought that with three or four years' cultivation they would get as much as they wanted. It was said to be a short fibre cotton; but that was nothing, as doubtless it could be improved as we wanted it. Did we want timber for ship-building? Well, we could not get finer oak anywhere. It was the oak which was most valued in ship-building. Did they want corn? Under the beautiful sky of Italy the husbandman could cultivate his fields, and depend upon the weather. He could look forward to three months' fine weather, with the exception of an occasional thunder shower or storm. They could get corn, oats, barley. As to wines, the wines of Italy equalled, and in some instances surpassed, those of France, and it was not much further than France to bring them. Therefore, as a nation of shopkeepers, they might look to the Italians to give us an immense deal of what we wanted. But Italy, they must recollect, was not a manufacturing country. She again, therefore, would take our manufactures in return for the produce which we should take from her. That, as a nation of shopkeepers, Englishmen had a right to look to. Talking about education in Italy, he would give them another instance, and that was with respect to the Government which was supposed to be the most paternal in the Peninsula. He alluded to that of the Grand Duke of Tuscany. He was a good old sleepy man. He did what the Austrians told him, but never did anything for himself. His Government was supposed to be the best in the Peninsula. The head of the college at Pisa sent in a memorial to Government proposing that Government should educate men according to the respective talent they displayed. They thought that if a man displayed any particular talent for painting, sculpture, &c., just as his natural talent seemed to point out, that he should be so trained. This memorial was sent in through the Minister to the Grand Duke. Well, the Grand Duke sent back an answer to say that "the Grand Duke was astonished to hear that any officer of the Government should propose for a moment that the people were to be educated beyond their sphere!" Therefore, according to the Grand Duke's theory of man, it was that he should remain in precisely the same situation in which he was born, and, although he might be the son of a goatherd or a shepherd, yet he must still continue a goatherd or a shepherd, though he might have the genius for painting of a Giotto. It was thought by some it was a great pity that the Italians did not at once get Venetia—that they had not yet got the Venetian territory. He held it a great thing for Italy that she had not yet got Venice. He looked at it very much in the light of the injunction that was given to the Israelites of old, that they should not at once drive the Canaanites out of the Promised Land. Having the enemy before them they were not likely to be identified among them. Colonel Peard then referred to Villafranca and Solferino, and the effect of the Villafranca Treaty. For too many years Italy had been split up into petty States. It had always been the policy of her masters to keep her divided. He held it as the great safety of Italy for the next three or four years that they should not get the Venetian territory. They did not like it, of course, nor would they to have half of England, say, from the west of the Thames, overrun by foreign invaders, and the rest free. Still he firmly believed that that country being in the hands of the Austrians was one great means they had of consolidating the kingdom of Italy. They did not want at present to fight. That was not the object of Italy. They wanted peace, that they might organise. They wanted, as he said, to have schools, to have roads, that they might communicate, to make the people acquainted with each other. They wanted to develope the resources of the country and to improve the people by bringing forward and carrying into effect good measures.

Wakefield.—It will be remembered that at the Yorkshire Assizes, in March last, Mr. J. L. Fernandes, of this town, was called as a witness for the Crown in the case of "The Queen *v.* Charlesworth"—one of the prosecutions for bribery at the last election for Wakefield—and that, as he refused to give evidence, he was fined by Mr. Justice Hill 500*l.*, and sentenced to six months' imprisonment. Various steps were subsequently taken on his behalf before the Court of Queen's Bench to get a remission of the sentence, but they all failed. At the recent assizes for the county Mr. Fernandes, who was imprisoned in York Castle, was brought up by *habeas* as a witness on behalf of the Crown in another prosecution for bribery at the same election. He then gave evidence, and at the close of his examination Baron Martin, considering that he had purged his contempt, intimated that he would support any application that might be made to the Home Secretary for a remission of the remainder of his imprisonment. Mr. Fernandes acted on the suggestion, and on Sunday last a free pardon was received at York Castle from the Home Office, and Mr. Fernandes was at once liberated. He had suffered nearly five out of the six months' imprisonment, besides paying the fine of 500*l.*

Ireland.

The Queen's Visit.—It is understood that her Majesty and the Prince Consort will leave Osborne on the 20th, and land at Kingstown on the 22d inst. The Lord Mayor of Dublin has received a communication from the Lord Lieutenant stating that as the Queen's visit on this occasion is strictly private, her Majesty cannot receive the address from the Corporation on the throne; but the address must either be sent to the Secretary of State, or handed to the Queen by the Lord Mayor personally at Kingstown, or at the Vice-regal Lodge, no answer being made at the time of presentation. This course will also be adopted with the address to be presented by the commissioners at Kingstown. The Corporation have appointed a committee to draw up an address to her Majesty, and another to the Prince Consort. A Tralee journal states that there will be two stag hunts during the Queen's stay at Killarney.

New Pastoral of Dr. Cullen.—A pastoral letter from Dr. Cullen was read on Sunday in all the chapels of Dublin. The troubles of the Pope and the flourishing condition of Catholicity in Ireland are the leading topics of the letter, but a new grievance is discovered in the arrangement of the Missionary Museum of the London Protestant Dissenters in Bloomfield Street, Finsbury, where the image of the Virgin and Child are placed in the same case with the figures of Juggernaut and Krishnu. He begins with recommending prayers for the Pope, who, though violently assailed by all the enemies of God and of religion, "steers with a firm hand the bark of Peter." While other princes and statesmen present a lamentable picture of weakness and perfidy, and are tossed about like fragile reeds, he upholds the principles of eternal justice and the rights of the Church and of society with undaunted courage, at the same time edifying the world with the example of his meekness and all the virtues that adorn Christ's Vicar on earth. "What a happiness," he exclaims, "that God has given to the Church so holy a Pontiff to guide her in these troubled times!" He enlarges upon the evils of the poor law, and upon the shortcomings of the Church of England—upon the "sterility of Protestantism and the vitality of Catholicity," as shown by the census returns; and rejoices in the fact that all the persecutions of centuries have not impaired the "vitality of Catholicity!" The practical conclusion which Dr. Cullen draws from the Census is that the Established Church ought to be abolished. "Were such an institution," he says, "discovered in Naples or Modena, with what accents of fiery indignation would it not be denounced by the very men who defend it here in Ireland! Let us hope that the liberal spirit of the age will not tolerate the continuance of so frightful an abuse, and that the overwhelming majority of Catholics in Ireland will no longer be compelled, in despite of justice and common sense, to support an establishment the existence of which is an insult to their feelings and their religion." Dr. Cullen hopes that the Census will open the eyes of the subscribers to the Protestant Missionary Societies, and "teach them to put little trust in the stories fabricated by missionaries, sent certainly not by God, who is a lover of truth, but by the father of lies; fabricated undoubtedly for the purpose of promoting their own interest, and concealing the signal failure of all their efforts."

Scotland.

The Yelverton Case.—On the 20th ult. the First Division of the Court of Session gave judgment in the reclaiming notes against Lord Ardmillan's interlocutor in the case of "Yelverton *v.* Yelverton." The Lord President said that a certain relaxation of the rule in regard to the exclusion of hearsay evidence was made where the statements made were truly part of the *res gestæ*, but the relaxation must be carefully watched, otherwise the rule would be entirely broken down. In the present case he thought the pursuer had got the full benefit of the relaxation. Indeed there were one or two of the evidences in her favour which the Lord Ordinary had erroneously admitted. The Lord Ordinary was quite right in allowing proof as to the footing on which the parties were living. The declaration of marriage was partly laid on the ground of habit and repute, and therefore evidence of the footing on which the parties were living was quite admissible. As to the competency of examining the pursuer in order to prove the loss of certain documents, his opinion was clearly against it. It was settled law that a party to a consistorial action could not be examined as a witness. In regard to the question proposed to be put by the defender to the pursuer as to an alleged certificate of marriage shown by her to the priest, that could not be allowed. The question was plainly pointed at the certificate being a forgery, and for that no foundation had been laid by the defender. As to the documents in the possession of Mr. Parker, solicitor, in Ireland, who declined to give them up, he thought the Court should oblige them to be produced, so far as concerned the objection that they had not been produced before the record was closed. In regard to the other documents the Court reserved its opinion.

Murder at Glasgow.—On Sunday night Robert Pattison, aged 48, an assistant-inspector of poor in the city parish, residing at 3, Caithness Street, Port Dundas, murdered his infant child by cutting her throat, as she lay asleep in bed. He had been left a widower about three weeks since with four children, two of whom were his wife's by a former marriage, and has since been drinking hard. After the murder he went to the Police-office in such a state of intoxication that he could not state what he had come for, and was accordingly locked up till he became sober. During the night the officers heard of the murder, and on examining the prisoner found his clothes stained with blood. When charged with the deed he had committed, he pretended to show ignorance of the whole matter.

A Coal-Pit on Fire.—A fearful coal-pit accident occurred on Wednesday at the Summerlee coal-pit, situated on the farm of Dykehead, about three miles from Hamilton, belonging to Messrs. Wilsons and Co. The pit is upwards of 40 fathoms in depth, and some hours before the accident, at least 45 men descended the shaft for the purpose of commencing work. About one o'clock in the afternoon smoke was observed issuing from the shaft, and was shortly afterwards followed by flames, which speedily reduced the framework at the pit-head to a heap of ashes. As soon as the flames could be got under, measures were taken to extricate the men in the pit. Two miners descended at great personal risk, and other volunteers followed, and by nine o'clock at night 28 workmen were brought up, but in such an exhausted state that one of them almost immediately expired. The majority of these

men were working at a considerable distance from the bottom of the shaft, and none of the survivors can account for the accident. From the appearance of the men who were last brought out, it is feared that those who were still in the pit must have perished from the effects of the choke-damp.

Law.

COURT OF CHANCERY.—*The Bankruptcy of Lawrence, Streatfeild, & Co.*—This was an appeal to the Lords Justices from a decision of Mr. Commissioner Holroyd, refusing to the bankrupt, Mr. Thomas Laurence, of the firm of Streatfeild & Co., of London, and Laurence, Mortimore, & Co., of Liverpool, leather and hide factors, any certificate, and directing, in effect, that if he should be taken in execution he should not be discharged until he should have been in prison for the period of six months. The appeal was argued at great length a short time since, judgment being reserved. Their lordships now gave judgment to the effect that the bankrupt's conduct in drawing bills upon insolvent persons and obtaining discounts under the pretence that the bills were accepted for value in the ordinary course of trade, was tantamount to a fraudulent misrepresentation, and constituted an offence which it was impossible for the court to treat with leniency. It would, therefore, be a departure from the principles on which the court acted, and from the duty which the public interest required at its hands, if it acceded to any extent to the prayer of this petition of appeal. The petition was consequently dismissed.

THE ASSIZES: HOME CIRCUIT: CROYDON.—*The Kingston Murder.—Martha Bradish*, 42, married, was charged with the wilful murder of her step-sister, a young woman 20 years of age, by cutting her throat with a razor. The prisoner, who is a tall powerful woman, is the wife of a serjeant-major in the 3d Surrey Militia, and lived with him in the barracks at Kingston. In March last deceased, on the prisoner's invitation, was on a visit of a few days to her and her husband at the barracks, and on the morning of the 26th the prisoner rose from her bed, and going to where the young woman lay asleep, deliberately cut her throat with a razor. The facts were not disputed; the only question raised was as to the state of the prisoner's mind at the time of committing the act. On this point it was proved by medical and other evidence that insanity existed in the family, and had manifested itself in the form of suicide in several instances; that the prisoner had been in India and was affected by the climate, and that, from her period of life, combined with her state of health, she was extremely likely to be seized with a sudden mania. It was also proved that there was a total absence of assignable motive for the murder. The jury at once returned a verdict of *Acquittal* on the ground of insanity, and the prisoner was ordered to be kept in custody during her Majesty's pleasure. The prisoner, who appeared perfectly calm and composed, and who exhibited no emotion during during any portion of the trial, was then removed from the bar. — *The Kingswood Murder.* — *John Charles Franz*, 24, a German, described as a shoemaker, was indicted for the wilful murder of Martha Halliday. This trial occupied the Court two days, but, as the facts were all very fully noticed in our Provincial News at the time, it will be unnecessary to give the evidence in detail. The deceased was an elderly woman, the wife of a labouring man, in the service of Mr. Alcock, M.P., and during the absence of the rector was employed to take charge of the rectory at Kingswood, and was so engaged at the time she met her death on the 10th of June last. There appeared to be no doubt that by whomsoever the crime was committed the object in the first instance was plunder, and though in carrying out that object the life of deceased was sacrificed, all the facts went to show that this event was not contemplated by them. The murder appeared to have been committed on the evening of the 10th of June, but no discovery took place until the following morning, when some of the neighbours found deceased dead. She was in her bedroom in her nightclothes, and had evidently been disturbed in her sleep by the intruders. The cause of death was suffocation; a stocking had been forced down her throat so violently as to carry her tongue with it, so that death must have taken place almost immediately; and it appeared that, in order to avoid the possibility of her giving any alarm, her hands and feet had been tied with a piece of strong cord. Only some articles of trifling value had been removed from the premises, and to account for this it was suggested either that the robbers were disturbed, or that, finding the woman was dead, they became alarmed, and precipitately retreated without carrying their original object into effect; but upon the room where the body was found being searched there was found a pocketbook containing papers which had belonged to a foreigner, named John Charles Franz, and also a letter showing that he had made an application to Mademoiselle Tietjens, the eminent vocalist, for assistance to enable him to return to his own country, and that she had very kindly directed him to make an application to the proprietor of an hotel in London, who, on her behalf, would have assisted him to carry out his wishes. The evidence in support of the charge was entirely circumstantial, and consisted of a number of minute circumstances, tending to show that on the day the murder was committed the prisoner and another foreigner were seen in the neighbourhood, that they went to the shop of a tradesman at Reigate, which is about four miles from Kingswood, and purchased a ball of string, and that the string with which the hands and feet of the unfortunate woman had been tied corresponded exactly with the string so purchased, and with the string with which the prisoner's clothes were tied up. The evidence then went to show that the prisoner and his companion had wandered to London, where they took up their abode at a lodging-house at the east end of the town, the prisoner giving a false name. Here they seemed to have separated, and nothing more was heard of the prisoner until several days afterwards, when he was taken into custody by a constable of the city of London, on the charge of being secreted in a house in Old Broad Street, with intent to commit felony, when he gave the name of Saltzmann. By this time the subject of the murder had become matter of notoriety; a reward had been offered for the discovery of the murderers, a description was given of their persons, and a suspicion at once arose that the prisoner was one of the men concerned in the murder, and after one or two examinations the witnesses were brought from Reigate, and he was identified and committed for trial. After the prisoner had been removed to Reigate, in consequence of information received by the police, inquiries were made by them with regard to the pocketbook found in the room of the murdered woman, when the prisoner admitted that he had given a false name when he was first taken into custody, and that his real name was Franz, at the same time stating that his papers had been stolen from him by two foreign sailors; and it also appeared that he had made the same statement previously to his being given into custody. He did not seem to have at any time made an admission that the papers found in the pocketbook belonged to him; and he accounted for having given a false name when he was first arrested by stating that he had heard that a reward had been offered for the apprehension of a man of the same name as his own, and he was afraid that he should be supposed to be the guilty party. There were a variety of other little circumstances that were relied upon by the prosecution as showing the guilt of the prisoner, and Mademoiselle Tietjens was called to prove the circumstances under which the application for relief was made to her, and to identify the document found in the bedroom of the deceased; but she was unable to prove anything that tended to show that the prisoner was the person by whom the application was made, and the probability appeared to be that if the prisoner was really concerned in the murder, it was his companion who applied to this lady. For the defence the Hon. George Denman, Q C., who was specially retained by the Saxon Embassy, in a speech which occupied four hours in the delivery, contended that there was nothing whatever to show that he was ever in the house or near it, except from the pocketbook and the papers contained in it, and that there was nothing to show that the statement of the prisoner that he had been robbed of this pocketbook was not true, while there were many facts in the case which tended to show that it was so. The prisoner was not only deeply steeped in poverty, but entirely ignorant of our language, and though suspicion might be created by the evidence against him, it was not sufficiently cogent to justify the jury in saying upon their oaths that the prisoner was guilty of a crime for which his life must undoubtedly be forfeited. Mr. Justice Blackburn having summed up, the jury, after deliberating about an hour, returned a verdict of *Not Guilty*. There was some applause when the verdict was pronounced. It was said that when the jury retired 10 of them had made up their minds to return a verdict of guilty. The prisoner was immediately discharged from custody, and it was stated that means were afforded him by the Saxon Embassy to return at once to his native country. *The Chertsey Murder.*—*Henry Hasell*, 26, labourer, was indicted for the wilful murder of Emily Martyr. This case was postponed from the spring assizes in consequence of the illness of a witness. The child whose death was the subject of inquiry was illegitimate, and about 14 months old, and the mother, a young woman 22 years old, the daughter of a labouring man residing in the neighbourhood of Chertsey, was confined with it at her father's house in November, 1859. When her health enabled her to do so she went into a situation at Chertsey, where she became acquainted with the prisoner, who offered to marry her. He was well aware that she had had a child, and had stated that he would "own" it. The marriage took place in October, 1860, and for a short time afterwards the prisoner and his wife lived at the old man's cottage, and then removed to a cottage of their own near Chertsey. Shortly after the marriage, owing to the severity of the weather and other causes, the prisoner became reduced to a state of very great poverty, and felt very much the burden of having to support the child. The prisoner's wife was in the habit of going out to work every Tuesday, and it was usual to send the child to the house of its grandfather, but on Tuesday, the 15th January, the day of its death, the prisoner kept it at home. No one but the prisoner and the child were in the cottage, and no cries or any alarm were heard during the day, but towards the afternoon the prisoner went to the house of a female neighbour, taking the child with him, and asked her what was the matter with it. She looked at it and saw that it was in convulsions, and apparently dying, and she told the prisoner so, and requested him to carry the child home and go and fetch a doctor. The prisoner did as suggested, and procured the attendance of Dr. Eady, a medical gentleman residing at Chertsey, who, upon seeing the child, observed at once that it was in a very dangerous state, and it died the same night about half-past eleven o'clock. Some marks of violence were observed upon the head and face of the child, and when the prisoner was asked to account for them he said that the child, which he had left upon the bed while he went out to cut some wood, had fallen upon the ground, and that it was by this fall that the injuries had been received. A coroner's inquest was held and adjourned, the injuries received by the child having been found to be of far too serious a nature to have been caused in the way the prisoner represented. He then stated that after he had picked up the child from the floor he was very much frightened, and let the child fall a second time, and he said it was to this second fall that the fatal injuries were no doubt to be attributed. These were the principal points of the evidence against the prisoner; but it also appeared that he had been "chaffed" by some of his companions about marrying a woman who had a child, and that this made him very angry, and he was repeatedly seen to slap the child, and to utter exclamations of ill-will to it. The cause of death was stated by Dr. Eady to be an extensive fracture of the skull, caused either by a blow with some blunt instrument, or a violent fall; but, in answer to a question put by the judge, this gentleman said he would not take upon himself to state positively that the fatal injury might not, in so young a child, have been caused by a fall from a bed or from a man's arms. The prisoner's counsel on this evidence submitted that there was no case to go to the jury. Mr. Justice Blackburn said he could not take upon himself to say that there was no case at all against the prisoner, but it appeared to him that after the evidence that had been given by Dr. Eady the jury were not likely to convict the prisoner of having wilfully caused the death of the child. The jury said they considered the evidence was not sufficient to justify them in coming to that conclusion, and therefore at once returned a verdict of *Not Guilty*.

NORTH WALES CIRCUIT: MOLD.—*The Holywell Murder and attempted Suicide.—Sarah Edwards*, 77, was charged with the wilful murder of her husband, Thomas Edwards, aged 80, at Holywell, on the 22d of May. The facts of the case were very extraordinary. It appeared that the husband of the prisoner had been ill about four months, that they had always been on good terms and had had no quarrels, but, on the contrary, so far as was known, had lived comfortably together. Latterly in their old age they fell into indigent circumstances, and received relief from the parish. On the 22d May they were both found in bed with their throats cut. The man died, but the prisoner survived, and confessed that she had done the deed, alleging as her reason that she was tired of waiting upon her husband, and thought it was better for them both to be dead. The jury, after five minutes' deliberation, returned a verdict of *Guilty*, recommending the prisoner to mercy on account of her great age, an announcement which was followed by murmurs from several in court. Baron Bramwell then passed sentence of *Death* in the usual form. The prisoner remained cool and unmoved during the whole trial.

WESTERN CIRCUIT: BODMIN.—*Child Murder.—Charity Hoskin* was indicted for the wilful murder of her illegitimate child at Truro, on the 5th of June. The prisoner was a person in very humble life, and had passed most of her days in extreme poverty. A few years ago she married a person named Hoskin, by whom she had three children, two of whom were dead, and the other lived chiefly with the prisoner's mother. Four or five years since her husband deserted her, and since that time she had been in the very depths of poverty, generally living in different workhouses. In April last she went into the workhouse at Truro, where she was soon afterwards delivered of a female child. She remained in the workhouse until the 4th of June, when, by her own desire, she quitted it, taking her child with her. At a quarter before 12 o'clock on that night she was seen with the child in a street in Truro. On the following morning at an early hour a bargeman discovered the body of a child in the river, having a piece of tape tied to the arm, and a piece of culm tied to the other end of the tape, as if to sink the body. The body was identified as that of the prisoner's child, and a surgeon who examined the body, stated that death was caused by drowning. The jury found the prisoner *Guilty*, but most strongly recommended her to mercy on the ground of her extreme poverty. Mr. Baron Channell passed sentence of *Death* upon the prisoner, but said he would take care that the recommendation of the jury sh[illegible] proper quarter.—EXETER.—*The Alleged* [illegible] *John Hart*, a sailor, aged 25, was charged [illegible] inquisition with the wilful murder of [illegible] East Stonehouse, but the grand jury [illegible] the prisoner was indicted for manslaughter. [illegible] deceased were seamen on board the P[illegible] was lying at Millbay, Plymouth, on the [illegible] evening of that day some of the crew [illegible] ensued, during which the prisoner [illegible] the heart with a knife, causing almost imme[illegible] jury returned a verdict of *Guilty*, and [illegible] sentenced to 10 years' penal servitude.

NORFOLK CIRCUIT: IPSWICH.—*A*[illegible] *Train.—Alfred Lord*, a young man 1[illegible] of a farmer at Wotherden, surrendered [illegible] wilfully placing a piece of wood across the [illegible] Counties Railway on the 10th of July, [illegible] certain carriages, and to endanger the [illegible] travelling in them. This case excited [illegible] the grave nature of the charge and the [illegible] prisoner. It appeared that, on the [illegible] the 7 P.M. train from Cambridge was [illegible] when, between Elmswell and Haughley, [illegible] an obstruction on the line. The engine [illegible] breaks put on, but, notwithstanding [illegible] guard irons came in contact with some heavy [illegible] completely through it. On the driver [illegible] getting down, they found that a heavy [illegible] had been placed across the rails, and [illegible] cut it through, scattering the [illegible] the moment of the discovery of the obstr[illegible] going at a rate of 35 miles an hour, the [illegible] incline at that spot, with an embankment [illegible] feet. These facts coming to the knowledge [illegible] in London, a detective, named Jackson, [illegible] after numerous inquiries ascertained from [illegible] that the prisoner was the culprit. The jury [illegible] of nearly an hour returned a verdict of [illegible] mended the prisoner to mercy on account of [illegible] Chief Justice Erle in passing sentence said, [illegible] convicted of a most serious crime, accomp[illegible] malignity. The purpose, if carried out, w[illegible] great many deaths. It seems that you [illegible] infest the lines of railway to procure these [illegible] are too young, but you are old enough to [illegible] quences. I follow the recommendation of [illegible] cannot help thinking you have displayed unusu[illegible] this affair. You are liable to be kept in pena[illegible] life, but the sentence will be that you be kept [illegible] tude for four years."

Obituary.

THE EARL OF TRAQUAIR died on Friday, at [illegible] Peebleshire, in his 81st year. His lordship, [illegible] adherent of the Roman Catholic faith, had been [illegible] in feeble health, and since the death of his [illegible] almost continuously resided in seclusion at [illegible] which is believed to be one of the oldest [illegible] Scotland. The magnificent avenue leading [illegible] mained entirely grass-grown and unused [illegible] Earl's father, the late peer having made a [illegible] pass through it after it had been traversed by the [illegible] cession. The great staircase and entrance [illegible] for the same reason kept religiously closed. [illegible] the 8th earl, and is the last in his line of [illegible] the Royal House of Stuart. He has died [illegible] title becomes extinct. He has beque[illegible] was not entailed, to Lady Louisa Stuart, [illegible] ladyship's death to a Roman Catholic family [illegible]

THE DOWAGER COUNTESS OF NEWBURGH [illegible] her seat Slindon, near Arundel, at the [illegible] She was the only daughter of Joseph Webb, [illegible] House, Wilts, and married, in 17[illegible], the [illegible] burgh, who died in 1814. By her death a [illegible] reverts to Greenwich Hospital. She received [illegible] death of her husband, the late earl, who, [illegible] Charles Ratcliffe, third brother of the E[illegible] who was executed in 1715 for high treason. [illegible] 2500*l.* as a rent charge upon the estates of the [illegible] parliament to Greenwich Hospital in 17[illegible]

THE BISHOP OF DURHAM died yesterday [illegible] quarter past 7 o'clock. His lordship had been [illegible] suffering from suppressed gout, but it was supposed [illegible] that he was recovering. On Sunday m[illegible] despatch was received from Auckland Castle [illegible] Lady Theresa Lewis, stating that he had [illegible] for the worse, and that very faint hopes [illegible] of his recovery. His lordship, the Hon. [illegible] Montague Villiers, D.D., was born in 1813, and [illegible] quently in his 48th year. He was educated at [illegible] School, and elected to a scholarship at Christ Church, [illegible] where he graduated B.A. in 1834, and M.A. [illegible] taking holy orders, he became Vicar of [illegible] 1841 he was presented by the Crown to the [illegible] George's, Bloomsbury. While rector of [illegible] became well-known throughout the metr[illegible] of whose pulpits he appeared fr[illegible] as an extempore preacher. He was [illegible] able time Canon Residentiary of St Paul's [illegible] crated Bishop of Carlisle in 1856, and tra[illegible] Durham in 1860. He belonged to the ev[illegible] Church, with whom he was extremely p[illegible] bent of a populous metropolitan parish [illegible] earnestness and activity, and in the educ[illegible] lent local organisations of his district he [illegible] influential leader. He was the [illegible] Clarendon, the Right Hon. C. P. Villiers, [illegible] Lewis, wife of Sir George Lewis, Minister of [illegible] son married a short time since the daughter [illegible]

LORD HERBERT OF LEA died on Friday [illegible] near Salisbury, in his 51st year. The [illegible] Herbert, Lord Herbert of Lea, was the son [illegible] Pembroke, by his second wife, the only daughter [illegible] Woronzow of Russia. He was consequently [illegible] presumptive of the present Earl of Pem[illegible] was born at Richmond in 1810, and after [illegible] at Harrow, proceeded to Oriel College, [illegible] in the fourth class in classics in 1831. In [illegible] entered the House of Commons as me[illegible] which he represented from the date of the [illegible] present Session. In 1841 he was app[illegible] Admiralty, a position which he he[illegible] 1845, when he assumed the then newly [illegible] tary at War, in which his efficient p[illegible] demonstrated that ministerial ability [illegible] in the front rank as a statesman. On [illegible] 1846 he vacated this office to be re[illegible] miership of the Earl of Aberdeen in [illegible] cially distinguished by his advocacy [illegible] education among officers of the army [illegible] dergo a course of examination as to the [illegible] obtaining promotion. The breaking out [illegible] prevented this system being carried [illegible] when the administrative system of the [illegible] down under that war the advantages [illegible] suggested became self-evident. After a [illegible]

[illegible] in the latter part of 1855, he retired with [illegible] Administration. In 1859, when Lord Palmerston [illegible] Cabinet, Mr. Sidney Herbert resumed the [illegible] Secretary of State for War, and discharged the arduous [illegible] until his failing health obliged him to retire [illegible] House of Commons, when his services were rewarded [illegible] with a peerage. Lord Herbert was the possessor [illegible] landed property in Wiltshire and in Ireland, in the [illegible] of which he was distinguished by an enlightened [illegible] and sound judgment. He married in 1846 the [illegible] of the late Lieut. General Charles Ashe a'Court, by [illegible] he leaves six children, four sons and two daughters, his [illegible] George Robert Charles (now Lord Herbert), having [illegible] his eleventh year last month.

[illegible] Sir Hertford Larpent, Bart., died on [illegible] during his passage from Calcutta to England, in [illegible]. He was the only son of the first baronet, by [illegible] wife, the third daughter of Mr. W. Cracroft, of the [illegible] and was born at East Sheen, in 1816. He married [illegible] daughter of Captain Shaw, of the Bengal army, [illegible] succeeded his father in 1855.

[illegible] Sir Barrington Reynolds, K.C.B., died on the 3d [illegible] at his residence near Truro, in his 76th year. He [illegible] Rear-Admiral Reynolds, who was lost in the St [illegible] on returning home from the Baltic in December, [illegible] and was born in 1785. He entered the Navy as a first-class [illegible] soon after he had completed his 10th year. He saw a [illegible] of service during the French war, and from 1848 to [illegible] Commander-in-Chief of the Cape of Good Hope [illegible]. Shortly after his return home he was [illegible] Commander-in-Chief at Devonport, which appointment [illegible] in October last. In 1838 he was made a [illegible] of the Bath, and in 1856 was made a Knight Commander of the order.

[illegible] Admiral Sir Thomas Herbert, K.C.B., died on [illegible] at his residence in Cadogan Place, after a protracted illness. He was the second son of Mr. R. T. Herbert, of the county of Kerry, (a collateral member of the noble house of Pembroke, and was born at [illegible] in 1793. He entered the navy in 1803, and saw good service on the coasts of Naples, the West Indies, and the United States to the close of the American war. He afterwards commanded the naval force for the protection of British interests at Buenos Ayres and Monte Video, and in 1840 was sent to China in temporary command of the blockading squadron. In the following year while in command of the advanced squadron, off the Bocca Tigris, he conducted the attack on the [illegible] forts, and subsequently headed the operations against the Bogue Forts, the Chinese position near Whampoa, and the city of Canton. In the same year he assisted at the capture of Amoy, the retaking of Chusan, the reduction of Chinghae, and the surrender of Ningpo. For these services in China he was nominated a Knight Commander of the Bath. In 1847 he was appointed commodore on the Brazil station. In 1852 he was one of the junior lords of the Admiralty under the Duke of Northumberland. He represented Dartmouth in the House of Commons from 1852 to 1857, but contested that borough unsuccessfully in 1859. He attained the rank of rear admiral in 1852, and that of vice admiral in 1857.

[illegible] Franklyn, C.B., died on the 5th inst., in his 59th year. He entered the army in 1823, and commanded the [illegible] Brigade at the Alumbagh, in 1858, and subsequently the First Division, when the enemy attacked the position in great force under the Moulvie, and was successfully repulsed. He attained the rank of colonel in 1854; and that of general [illegible].

The Rev. Prebendary Henderson, M.A., Prebendary of St. Paul's, Rector of Messing, Essex, and Rural Dean of [illegible], died suddenly on Sunday, being struck with [illegible] while in the act of administering the Sacrament in Messing Church. He was admitted a Queen's scholar at Westminster in 1816, and was elected from that school student of Christ Church, Oxford, in 1820, graduating B.A. in 1824, and M.A. in [illegible]. He was presented to the Vicarage of Messing, by the Earl of Verulam, in 1828, and from 1831 to [illegible] he held also the Rectory of Colne Wake, near Halstead. In [illegible] the late Bishop Blomfield appointed him to the prebend of Chamberlainswood in St. Paul's Cathedral. He was held in high repute among the clergy of his district as a man of high scholastic attainments.

Wills.—The will of Lord Chancellor Campbell has been sworn under [illegible] personalty; Vice-Admiral the Hon. Sir Richard Saunders Dundas, K.C.B., 16,000*l.*; General de la Motte, C.B., 8000*l.*; Rev. Canon Ottley, 6000*l.*; Mr. James Braidwood, chief of the London Fire Brigade, 5000*l.*

Miscellaneous.

Fall of an Aerolite.—The Rev. A. H. Denham, of Chorley Rectory, near Lancaster, has addressed a letter to the *Times*, under date August 1, from which the following are extracts:—"As I was driving my wife and children to-day in the vicinity of my house, a whizzing sound, gradually increasing in intensity, made itself heard, until at last, with a roar and a scream, which still seem to ring in my ears, a flaming mass plunged itself into the road at the distance of a few yards from my pony's head. My wife and two children were naturally much alarmed, so I directed some haymakers who were at work in an adjoining field to dig for it, while I drove to a friend's house close by. The pony broke out into a profuse perspiration, trembled all over, and showed every sign of the greatest terror. On my return to the spot, after an absence of about 20 minutes, I found that the labourers had succeeded in unearthing what proved a most magnificent aërolite. Its shape is an irregular ellipse, the major axis being 11½ inches, the minor axis 7¾ inches; the weight is 63½ lb. The men who dug it up informed me that it had buried itself nearly 6 ft. in the ground, and was red hot when they reached it. Indeed, when I returned it was too hot to be touched with impunity by the naked hand. While cooling, the crystals assumed, while constantly changing, the most beautiful prismatic hues. Its specific gravity I have satisfactorily ascertained to be greater than that of iron. At the moment of its fall the sky was perfectly cloudless. A strong smell of sulphur was diffused immediately after the descent, and I have found several crystals of that element in the cavities on the upper surface, which have escaped abrasion from the soil."

Overland Expedition from China to India.—Intelligence has just been received from Captain Blakiston, of the Royal Artillery, one of an exploring party now engaged in examining the routes from China through Thibet and the passes of the Himalayas into India. The expedition started from Shanghai, and proceeded 700 miles up the Yang-tse river in the vessels of the squadron of Admiral Hope. Beyond this point they proceeded in one gunboat and a small iron steamer to Foo-chow, 140 miles above Hankow, where the vessels will remain until the return of the party. Captain Blakiston is of opinion that the objects of the expedition will not be accomplished until the summer of 1862. At present the party has penetrated to a point beyond any hitherto reached by European travellers. The district around Nankin is wasted by the civil war, which has stopped all trade; but higher up the Yang-tse river there were indications of great contentment and prosperity, the stream being crowded with junks, and the adjacent country being thickly populated. Captain Blakiston has forwarded to Mr. Whiteley, of Woolwich, cases containing birds shot on the upper reaches of the river, including the eagle, harier, cormorant, kite, grebe, pheasant, &c., which will be deposited in the Royal Artillery Institution.

BIRTHS.—On the 3d inst., at Harewood House, Hanover Square, the Countess of Harewood, of a son—4th inst., at Bedgebury Park, Cranbrook, Lady Eustace Cecil, of a son, stillborn—30th ult., at Blithfield, Staffordshire, the Lady Bagot, of a daughter—5th inst, at No. 1, Montagu Square, the Hon. Mrs. Edgar Drummond, of a daughter—2d inst, at Emma Place, Stonehouse, Devon, the wife of Captain the Hon. L. Addington, Royal Artillery, of a son—1st inst, at 25, Elgin Road, the wife of Major-General W. R. Corfield, of a daughter—3d inst, at Osborne Cottage, the wife of Captain F. Sayer, of a son.

MARRIAGES.—On the 6th inst, at Leamington, Ralph Smyth, Esq., late Captain 17th Foot, eldest son of Robert Smyth, Esq., of Graybrook, county Westmeath, Ireland, to the Hon. Selina Constance, fourth daughter of Vice-Admiral Lord Somerville—30th ult, at St. Margaret's Church, Horsmonden, Kent, the Rev. Pierce Butler, rector of Ulcombe, Kent, son of the late Hon. General Butler, and nephew of the third Earl of Carrick, to Catherine Twisden, second daughter of the Rev. Wm. M. Smith Marriott, rector of Horsmonden, granddaughter of the late Sir J. Wyldbore Smith, Bart., of Sydling and the Down House, Dorset, and of Thomas Law Hodges, Esq., late of Hemsted, Kent—30th ult, at St. Peter's Church, Eaton Square, William Hicks, son of the late Sir John Slade, Bart., to Cecilia Louisa, daughter of the late Sir Charles Des Vœux, Bart., and niece to the Marquis of Winchester—24th ult, at Lowton Church, Capt. John Charles Sheffield, 21st Fusiliers, third son of Sir R. Sheffield, Bt., Normanby Park, Lincolnshire, to Mary Sarah Butler, eldest daughter of Thos. Butler Stoney, Esq., of Portland, county Tipperary—30th ult, at Skipton, near Much Wenlock, Richard Orlebar, Esq., eldest son of Richard Orlebar, Esq., of Hinwick House, Bedfordshire, to Frederica St. John, youngest daughter of the late Sir W. E. Rouse Boughton, Bart.—6th inst, at Trinity Church, Paddington, Francis G. A. Fuller, Esq., Royal Horse Guards (Blue), to Elizabeth, only daughter of the late Sir Robert A. Douglas, Bart., of Glenbervie, Scotland—1st inst, at St. John's, Paddington, Clement T. Swanston, Jun., Esq., only son of Clement T. Swanston, Esq., Q.C., to Anne, eldest daughter of Sir John Romilly, Master of the Rolls.

DEATHS.—On the 5th inst, in London, Francis Ulysses, third son of the Earl of Clonmell, aged 11—4th inst, at Ospringe House, Faversham, Lady Montresor, relict of the late General Sir Thos. Gage Montresor, K.C.H., &c., aged 80—22d ult, at Branches Park, Henry, infant son of Sir Henry and Lady Pigot—29th ult, at New Cross, of consumption, Charles Anstruther Wilkinson, youngest son of the late Thos. Wilkinson, Esq., of Ely Lodge, Gravesend, and grandson of the Hon. Colonel David Leslie Anstruther, aged 22—4th inst, at 7, India Street, Edinburgh, Mrs. Margaret Caroline Lindesay, relict of Patrick Orr, Esq., W.S., and last surviving sister of the late Major-General Sir Henry Lindesay Bethune, Bart., of Kilconquhar—3d inst, at Harrow School, William Edward Parry, youngest son of the late Rear Admiral Sir W. Edward Parry, aged 15—30th ult, at Paris, Emma, widow of the late Henry Matthews, Esq., Puisne Justice of the Supreme Court of Ceylon—27th ult, very suddenly, at 10, Portland Terrace, Southsea, Commander John Aldershaw Bathurst, R.N., youngest son of the late Commodore Walter Bathurst, R.N.—2d inst, at Dublin, Colonel Mylius, Commandant of the Royal Hibernian Military School—27th ult, at 34, Northumberland Place, Bayswater, Frances Cecilia, widow of the late Edward Leveson Gower, Captain Rifle Brigade, and daughter of the late William Powell, Esq., Waterloo, Hants—29th ult, at Henley-on-Thames, Fanny, wife of Colonel George Talbot, 43d Light Infantry—1st inst, John Frederick Leary, Esq., Librarian of the House of Lords—1st inst, at his residence, Upper Terrace, Hampstead Heath, after long illness, Edward Magrath, Esq., late Secretary of the Athenæum, Pall Mall, F.R.G.S., F.Z.S.—31st ult, at Fairfield Cottage, Sunning Hill, Robert Mangles, Esq., of Sunningdale, aged 80—31st ult, at The Hall, Bedale, Yorkshire, the Rev. John J. T. Monson, rector of Bedale, aged 70—1st inst, at The Park, Nottingham, the Rev. Cuthbert Orlebar, B.A., second son of the late Richard Orlebar, Esq., of Hinwick House, Bedfordshire, and some time vicar of Podington, in the same county, aged 7[illegible]—2d inst, at Sevenoaks, Kent, the Rev. Thomas Curteis, rector of the parish, aged 73—30th ult, at Somerton Rectory, Oxfordshire, the Rev. R. C. Clifton, rector of Somerton and canon of Manchester, aged 51—1st inst, at 5, Wilton Place, the Rev. John Hollier Stephenson, rector of Corringham, Essex, aged 6[illegible].

Markets.

HAY.—Per Load of Thirty-six Trusses.

SMITHFIELD, THURSDAY, Aug. 8.

Prime Meadow Hay	75s to 84s		Clover	90s to 120s	
Superior do. (old)	88	100	New Clover	—	—
Inferior do.	36	50	Do second cut	—	—
New do.	50	80	Straw	30	40
Rowen	—	—			

Davis & Co.

CUMBERLAND MARKET, THURSDAY, Aug. 8.

Sup. Meadow Hay	105s to 115s		Inferior Clover	84s	105s
Inferior do.	70	95	New do.	70	100
New do.	60	98	Straw	38	44
Superior Clover	114	120			

Joshua Baker.

WHITECHAPEL, THURSDAY, Aug. 8.

Fine old Hay	95s to 100s		Fine old Clover	115s to 120s	
Inferior do.	56	80	Inferior do.	80	90
Prime New Hay	80	88	Fine 2d cut	—	—
Inferior	55	75	Inferior do.	—	—
Straw	30	40	Fine New Clover	—	—

COVENT GARDEN, Aug. 10.

Vegetables and Fruit of most kinds continue equal to the demand. Apricots, Figs, Greengage Plums, and Apples and Pears, still come from the Continent. West India Pines may also still be had in great abundance. Peas are plentiful and cheap. Grapes are abundant. Of Strawberries the supply is now over, and with the exception of Morellos, the same may be said of Cherries. Broad Beans, young Carrots, and new Potatoes may be had in quantity. Of the latter, many samples are, however, diseased. Cucumbers are coming in plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Pelargoniums, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Currants, p. ½ sieve, 5s
Grapes, per lb., 2s to 5s	Gooseberries, do., 5s
Strawberries, p. pun., 6d to 1s	Pears, per doz., [illegible] to 1s 6d
Melons, each, 1s to 4s	Apples, per doz., 6d to 1s
Peaches, per doz., 10s to 15s	Oranges, per 100, 6s to 14s
Nectarines, do., 6s to 12s	Lemons, per 100, 6s to 10s
Apricots, do., 1s to 3s	Nuts, Cob, per lb., 1s to 1s 6d
Cherries, English, p. lb., 6d to 1s	

VEGETABLES.

Cauliflowers, each, 2d to 6d	Beet, per doz., 1s 6d to 6s
French Beans, p. punnet 3d to 1s 6d	Celery, p. bundle, 1s 6d to 2s 6d
Green Peas, p. quart, 1s to 1s 6d	Onions, p. ½ sieve, 4s 6d
Broad Beans, p. bush., 3s 6d to 4s	Asparagus, p. bundle, 5s to 7s
Cabbages, do., 1s 3d to 1s 6d	Rhubarb, p. bundle, 6d to 9d
Potatoes, p. ton, 60s to 80s	Tomatoes, p. doz., 4s to 6s
— per lb., 1d to 4d	Shallots, per lb., 1s 6d
— — per cwt., 4s to 8s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 4d to 6d	Endive, p. doz., 3s to 4s
Carrots, new, do., 1s to 1s 3d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., 1s to 1s 6d
Cucumbers, each, 6d to 9d	Parsley, p. 12 bunches, 4s to 6s
Veg. Marrows, p. doz., 1s to 1s 6d	Savory, per bunch, 2d to 4d
Artichokes, each, 4d to 6d	

BRITISH WOOLS.—London, Friday, Aug. 9.

Our trade continues about the same. Prices unaltered; perhaps hardly as much activity.

	s. d.	s. d.		s. d.	s. d.
South-down Hoggets	..	to 1 5	Leicest. Wethers	1 3	to 1 4
Half-bred ditto	1 5	— 1 6	Ditto Hoggs	1 4	— 1 5
Down Ewes	1 4	— 1 5	Combing Skins	1 0	— 1 5
Kent Fleeces	1 5	— ..	Flannel Wool	1 0	— 1 5
			Blanket ditto	0 6	— ..

Colonial Wool Sales.—Those sales progress on the whole at about the same rates.

COAL MARKET.—Aug. 7.

Craghead Steam, 15s.; Hasting's Hartley, 16s. 9d.; Haswell Gas, 12s. 9d.; Holywell, 15s. 6d.; Lambert's West Hartley, 16s. 6d.; Walker Primrose, 12s. 9d.; Walls End Acorn Close, 17s. 3d.; Walls End Eden, 17s. 3*d.*; Walls End Hedley, 16s. 6d.; Eden Main, 17s. [illegible]d.; Walls End Haswell, 19s.; Walls End Tunstall, 17s.; Walls End Cassop, 18s. 6d.; Walls End Heugh Hall, 17s. 3d.; Walls End Kelloe, 18s.; Carway and Duffryn Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.

METROPOLITAN CATTLE MARKET.

MONDAY, Aug. 5.

The number of Beasts is considerably less than on Monday last. Choice qualities are readily disposed of at advanced rates. The supply of Sheep is about the same as on Monday last; and prices remain unaltered. Lambs and Calves, the average quality of which is very middling, meet with a heavy sale. From Germany and Holland there are 1510 Beasts, 7300 Sheep, and 210 Calves; from France, 23 Calves; from Scotland, 160; from Ireland, 270 Beasts; and 2050 from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c.	4 10	to 5 0	Best Long-wools	..	to ..
Best Short-horns	4 8	— 4 10	Do. Shorn	4 10	— 5 0
2d quality Beasts	3 4	— 4 2	Ewes & 2d quality	..	— ..
Best Downs and Half-breds	..	to ..	Do. Shorn	4 4	— 4 8
Do. Shorn	5 0	to 5 4	Lambs	5 0	— 5 10
			Calves	3 6	— 4 6
			Pigs	3 6	— 4 6

Beasts, 4720; Sheep & Lambs, 27,190; Calves, 294; Pigs, 410.

THURSDAY, Aug. 8.

The number of Beasts is about the same as on Thursday last. The demand is by no means active, and it is difficult to maintain Monday's quotations. The supply of Sheep is rather shorter; quite sufficient, however, for the demand. Prices are scarcely as good as on Monday. Lambs and Calves met with a very dull sale at late rates. Our foreign supply consists of 320 Beasts, 2550 Sheep, and 355 Calves. From Ireland, 52 Calves. The number of Milch Cows is 90.

	s d	s d		s d	s d
Best Scots, Herefords, &c.	4 8	to 5 0	Best Long-wools	..	to ..
Best Short-horns	4 6	— 4 8	Do. Shorn	4 8	— 5 0
2d quality Beasts	3 4	— 4 0	Ewes & 2d quality	..	— ..
Best Downs and Half-breds	..	— ..	Do. Shorn	4 2	— 4 6
Do. Shorn	5 0	— 5 2	Lambs	5 0	— 5 8
			Calves	3 6	— 4 6
			Pigs	3 6	— 4 6

Beasts, 1100; Sheep & Lambs, 12,020; Calves, 657; Pigs, 220.

MARK LANE.—Monday, Aug. 5.

The supply of Wheat from Essex and Kent to this morning's market was small. The former was cleared at the prices of this day se'nnight, while on the latter a decline of fully 1s. per qr. was accepted. Business in foreign was almost confined to American descriptions in bond for export to France, upon which an advance of 1s. per qr. was realised; the value of all other kinds continues to be nominally the same as of late. There were a few samples of new Kentish Barley at market, quality and weight good; and it was sold at about 46s. per qr.; old Barley rather cheaper. Beans and Peas are unaltered in value. Oats are a slow sale, and 6d. to 1s. per qr. lower in price. The Flour trade is quiet.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk.. White	46—63	Red	46—60
— — fine selected runs.. ditto	50—76	Red	50—63
— — Talavera	51—67		
— Norfolk	—	Red	—
— Foreign	40—74		
Barley, grind. & dist., 26s to 27s .. Chev.	[illegible]—40	Malting	34—38
— Foreign, grinding and distilling	[illegible]	Malting	33—36
Oats, Essex and Suffolk	[illegible]—24		
— Scotch and Lincolnshire .. Potato	[illegible]	Feed	20—24
— Irish .. Potato	[illegible]	Feed	20—24
— Foreign .. Poland and Brew	[illegible]	Feed	19—21
Rye	[illegible]	Foreign	—
Rye meal, foreign	—		
Beans, Mazagan .. [illegible] .. Tick	[illegible]	Harrow	40—43
— Pigeon .. 41s — [illegible] .. Winds.	—	Longpod	—
— Foreign .. Small	[illegible]	Egyptian	—
Peas, white, Essex and Kent .. Boilers	[illegible]	Suffolk	38—39
— Maple .. —s to —s .. Grey	[illegible]	Foreign	35—38
Maize .. White	—	Yellow	—
Flour, best marks delivered.. per sack	[illegible]		
— 2d do. .. ditto	34—[illegible]	[illegible]	34—50
— Foreign .. per barrel	26—[illegible]	Per sack	[illegible]—58

FRIDAY, Aug. 9.

Since the [illegible] inst. we enjoyed splendid weather for maturing the crops until the evening of the [illegible], when [illegible] rain fell. There have been a few samples of new Essex Wheat, Kentish Barley, and Dun Peas at market, quality and weight of all good. The first weighed 65 lbs. to 66 lbs., rough chaff, made [illegible]

62s. to 66s.; Talavera up to 72s.; Barley, 40s. to 42s.; Peas, 36s. The yield of the Wheat is represented as about one-fifth to one-eighth below what had been anticipated. The Potato crop is worse reported of daily. The Wheat trade during the above interim in the majority of the provincial markets has been dull, and in several sales were made at a decline of 1s. per qr., buyers being doubtless assisted by the weather. Here, however, as well as in Liverpool, Glasgow, Manchester, and Bristol, owing to considerable purchases of American Wheat and Flour for France, former prices have been fully maintained for Wheat, and an improvement of 1s. to 2s. per qr. realised upon these descriptions. Old Barley has been less easy of sale, and rather cheaper. No alteration occurred in the value of Beans and Peas. Flour has attracted more attention at late rates, and Indian Corn afloat has met an improved inquiry at extreme prices. The arrivals of English Wheat this week have been moderate, of other grain small, of foreign Wheat and Flour large, and of Barley and Oats small. To-day's market was thinly attended, and there being little inquiry for France, a limited business only was transacted in Wheat at Monday's prices. Barley, Beans, and Peas bring that day's quotations. The Oat trade is dull, and Russians are 6d. per qr. cheaper. In Flour there is no alteration.

ARRIVALS FROM Aug. 5 TO Aug. 9.

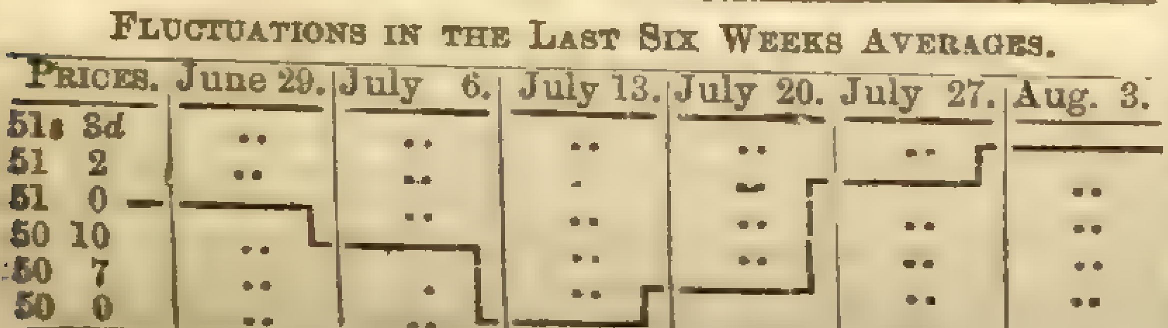
	Wheat.	Barley.	Oats.	Flour.
English ..	1830 qrs.	120 qrs.	80 qrs.	140 sks.
Irish	— „	— „	490 „	— „
Foreign ..	27290 „	2430 „	12320 „	250 „ / 23630 brls.

LIVERPOOL, Tuesday, Aug. 6.—There was a good attendance of millers and dealers at this morning's market, but the weather being bright and fine they seemed more inclined to hold off than pay the advanced rates at first asked; at Friday's extreme prices, however, a fair consumptive business subsequently took place, and several parcels of common American were bought for French account. Flour had a moderate inquiry at previous rates. Indian Corn was offered sparingly, and there being plenty of buyers an advance of 1s. per qr. was obtained. Beans, Peas, and Barley were each 1s. per qr. dearer than on Friday. The market closes with a very steady feeling.

FRIDAY, Aug. 2.—Fair attendance at to-day's market. Wheat: moderate consumptive demand at full prices of Tuesday. Demand for France still continues for low qualities. Flour a shade firmer; rather more doing. Indian Corn in fair request; 30s. 6d. to 31s. for old mixed. Beans steady at the late advance. Oats and Oatmeal dull.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
June 29..	51s 0d	31s 3d	25s 0d	39s 4d	43s 3d	37s 1d
July 6..	50 10	31 9	26 0	35 9	43 11	39 11½
— 13..	50 0	30 4	24 6	33 0	42 4	42 0½
— 20..	50 7	30 3	25 9	38 3	42 8	37 10½
— 27..	51 2	30 8	26 10	38 5	42 10	40 1
Aug. 3..	51 3	28 3	24 11	39 3	42 1	39 0
Agg. Aver.	50 10	30 5	25 6	37 4	42 10	39 4

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



HOPS.—BOROUGH MARKET, FRIDAY, Aug. 9.

Messrs. Pattenden & Smith report that the accounts from the plantations continue to come very conflicting, and the duty is estimated as likely to fall between 100,000l. and 110,000l. Market quiet.

Notice.

MESSRS. E. G. HENDERSON AND SON hereby give public notice that Mr. JOHN EDWARDS, their late Traveller, is *no longer in their Employ;* and their customers are respectfully warned against paying the said John Edwards any accounts or moneys on their behalf from the date of this notice, from which time they will not acknowledge any business transactions which may be carried on by him in their name. Wellington Nursery, St. John's Wood, London, N. W., August 10, 1861.

AGRICULTURAL IMPROVEMENTS. — Landowners and others interested in the welfare of the Labouring Agricultural Class, may find Places for Young Men of good character, by applying by letter to Mr. BAILEY DENTON, 52, Parliament Street, Westminster, S.W.

General Land Drainage and Improvement Company.

WANTED, FOREMAN OF DRAINAGE WORKS. —Written applications, with references as to character for ability, integrity, and sobriety, to be addressed to Mr. BAILEY DENTON, the Company's Engineer, at No. 52, Parliament Street, Westminster, S.W.

Three Counties Lunatic Asylum, near Arlsey, Bedfordshire.

WANTED, a FARM BAILIFF to manage the Farm attached to this Institution. Salary 80l., with an Unfurnished House and Gas, and 1½ rood of Garden Ground. The duties to commence on the 29th of September next. Applications in the handwriting of Candidates, accompanied by Testimonials, to be transmitted to the Clerk to the Committee of Visitors, St. Cuthbert Street, Bedford, on or before SATURDAY, August 17, of whom further particulars may be obtained. —Bedford, Aug. 8.

WANTED, a GARDENER, who understands the Cultivation and Management of Hothouse and Greenhouse Plants, and Gardening generally. References for character and ability required.—Apply to Mr. GEO. WOOD, Solicitor, Rochford, Essex.

WANTED, a respectable LAD or YOUNG MAN, conversant with the Names and Cultivation of Hardy Ferns, Herbaceous and Bedding Plants, and desirous of improving himself, to work in the private Garden and Nursery about the residence of the Advertiser, who would be willing to agree for a term after trial. Testimonials as to character and abilities will be required.—Apply to JOHN YOUNG, Nurseryman, Taunton.

WANTED, AN ASSISTANT, in a retail Florist and Seed Shop in London. One of good address, regular and sober in habits, and well acquainted with the several departments of the business. Age not below 22.—Apply by letter, stating where and what were previous engagements, to X. X., *Gardeners' Chronicle* Office, W.C.

WANTED, A GARDENER AND GROOM, by a gentleman residing about ten miles from London. Married man without children preferred. Cottage adjoining stables to live in, and Wages 20s. per week. Good references as to time in last employ, also as to honesty and sobriety required. —Address by letter to A. B., 9, East India Chambers, Leadenhall Street, London, E.C.

WANTED, A PRACTICAL GARDENER; first-rate reference. Wages 24s. per week.—Apply B. C., 25, Bishopsgate Within, E.C.

To Seedsmen.

WANTED, for a Seed Establishment in a large town, a SEEDSMAN, of ability, experience, and energy, to take the principal charge of the Retail Department. He would require to have a thorough knowledge of the business in all its branches; to be acquainted with Book-keeping and Accounts, and to be a person of good Address. Satisfactory evidence as to character is indispensable.—Apply with testimonials, stating salary required, to B. D. F., *Gardeners' Chronicle* Office, W.C.

WANTED, an experienced SHOPMAN.—Apply to E. P. DIXON, Yorkshire Seed Establishment, 57, Queen Street, Hull.

WANTED, A GARDENER AND GROOM, in the Suburbs of Liverpool. — Must be fully acquainted with the duties of a Gardener, and the care of Horses; one who can ride and drive. The duties will be light, the situation a permanent one, and a Cottage Residence provided in case of need, and Clothes.—Address, stating wages expected, either with or without residence, age, and whether married, and with references, HORTENSIS, Mr. Greenwood, Advertising Agent, Castle Street, Liverpool.

WANTED IMMEDIATELY, in a gentleman's family, a strong active GIRL, about 25, who thoroughly understands the Dairy and care of Poultry. A person brought up in a Farm House would suit. Good wages given to a competent person.—Apply to Mrs. LITTLEDALE, at Scarlet's, two miles from the Twyford Station, Great Western Railway.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 26, single; thoroughly understands Early and Late Forcing, Flower and Kitchen Gardens. Six years' unexceptionable character.—G. G., Post Office, Chislehurst, Kent, S.E.

GARDENER (HEAD, or SINGLE-HANDED).—Married, one child; understands his business in all its branches. Stock if required. Good character.—A. B., 21, Leverton Street, Kentish Town, N.W.

GARDENER (HEAD).—Married; has a practical knowledge of Forcing Fruits and Flowers, &c., and Gardening in general; also Land if required. Wife understands Dairy and Baking.—M. Y., Post Office, Guildford.

GARDENER (HEAD).—Age 27, single; thoroughly understands his profession in all its various branches. Three years' good character from last employer.—A. B., Mr. Veitch, Royal Exotic Nursery, King's Road, Chelsea, S.W.

GARDENER (HEAD).—Age 44, married, no incumbrance; thoroughly practical in all branches of his profession. No Single-handed place accepted. Wages, 60l. with Cottage. 18 years' first class character.—J. B., James Carter & Co.' Seed Merchants, Nurserymen, &c., 237 and 238, High Holborn'

GARDENER (HEAD).—Age 38, married; understands the Stove and Greenhouse, Pits, Frames, Flower and Kitchen Gardens; can manage Land and Stock in all branches. Three years' good character.—G. G., 9, Benham's Place, Hampstead, N.W.

GARDENER (HEAD).—Age 43, married, small family; thoroughly understands his profession in all its branches. Two years' unexceptionable character. Good references.—T. E., Mr. Willmer, Auctioneer, Sunbury, Middlesex

GARDENER (HEAD).—Age 40, married; thoroughly practical and industrious. Can manage Land, &c. Five years in last situation; can produce the highest testimonials. —A. B., J. Dobson & Son, Nurserymen, Isleworth, W.

GARDENER (HEAD).—Single; has a thorough knowledge of Ferns, Stove and Greenhouse Plants, Vines, Melons, Kitchen, Fruit and Flower Gardens. Can be well recommended.—E. R., Post Office, Chorley.

GARDENER (HEAD) to any nobleman or gentleman. Age 25, single; 12 years' practice, and highly recommended.—A. B., 32, Crown Square, Crown Street, Liverpool.

GARDENER (HEAD) to any nobleman or gentleman.—Age 29, single; has had the benefit of 12 year's practical experience in the culture of Pines, Grapes, Peaches, Melons, early Vegetables, Stove and Greenhouse Plants, and has a thorough knowledge of Fruit, Flower, and Kitchen Gardens. Highly recommended.—P. P., Mr. Veitch, Royal Exotic Nursery, King's Road, Chelsea, S.W.

To Noblemen and Gentlemen.

GARDENER (HEAD).—Age 30, married, a native of Scotland; thoroughly experienced and practical in every branch of his profession. Unexceptionable references. No single-handed place accepted.—THE GARDENER, Wanstead Hall, Essex, N.E.

GARDENER (HEAD).—Age 37, married, small incumbrance; is a thorough practical and experienced working Gardener; has good taste for the Decoration of Flower Gardens and Pleasure Grounds, together with the Fruit and Kitchen Gardens.—A.B., Mr. Shenton, Hendon Park Nursery, Hendon, N.W.

GARDENER (HEAD).—Age 30, married, no incumbrance; thorough working; experienced in the Cultivation of Pines, Vines, Melons, Cucumbers, Stove and Greenhouse Plants, Early and Late Forcing, &c.; Flower and Kitchen Gardens. No objection to a single-handed place where a little Forcing is carried on. Six years' good character. —G. C., Mr. Reed's, News Office, Bromell's Road, Clapham Common. S.

GARDENER (HEAD).—A respectable married man, no incumbrance; has a thorough knowledge of the Cultivation of Fruits of all kinds, and the Management of Stove and Greenhouse Plants, Flower and Kitchen Gardens. Has lived several years as Head Gardener in a Nobleman's establishment, and leaves owing to the death of his employer. Can be highly recommended by several noblemen and gentlemen of distinction.—B. E. W. 3, St. Nicholas Street, Worcester.

GARDENER (HEAD) to any nobleman or gentleman.—Age 30, married, one child; has a thorough practical knowledge of his profession in all its branches, including the Forcing of all kinds of Fruit, Flowers, and Vegetables, and Management of Fruit, Flower, and Kitchen Gardens. Has four years' first-rate character from last employer, and can give first-rate references if required.— A. B., Knepp Castle Gardens, near Horsham, Sussex.

GARDENER (SECOND, or GOOD SINGLE-HANDED).— Death of Master cause of leaving present situation. Seven years' excellent character.—M. W., 1, Charlotte Terrace, Lyham Road, Clapham, S.

GARDENER.—Married, without [illegible] understands Vines, Pines, and Forcing [illegible] Greenhouses, Propagating, Bedding-out [illegible] manage a Laundry, or take charge of a [illegible] Good reference.—T. W., Hopwood Hall, Middlesex [illegible]

GARDENER.—Age 35, married [illegible] Kitchen and Flower Gardens, and [illegible] perienced in Land and all kinds of Stock [illegible] himself generally useful. Good reference can [illegible] understands Dairy and Poultry.—W. Y., [illegible] Albion Road, Hammersmith, Middlesex, W.

GARDENER, in a Small Family.—Age [illegible] without incumbrance; has been accus[illegible] Stove and Greenhouse, Framing, &c., also Kitchen [illegible] Gardens; and has a good character of upwards [illegible] Wages about 24s. per week.—Mr. W. ANNETT, [illegible] Andover, Hants.

GARDENER (SINGLE-HANDED or SECOND [illegible] stands Forcing and Kitchen and Flower [illegible] be well recommended.—H. H., Post Office [illegible]

GARDENER (UNDER).—Age 20 [illegible] —J. C., Stockwell House, Bedford [illegible] well, S.

GARDENER (UNDER or SINGLE-[illegible] Age 25; understands Flower and K[illegible] Eighteen months' character.—A. A., Post Office [illegible]

GARDENER (UNDER).—Age 26, single [illegible] to Cows. Five years' good character.—[illegible] Terrace, Malden Road, Kentish Town, N.W.

GARDENER (UNDER).—Age 24, single [illegible] Man of good experience; three years' [illegible] E. B., Brown's Nursery, Hendon, N.W.

GARDENER (UNDER).—Age 26; [illegible] experience in first-class establishment [illegible] Fruits, Flowers, and Vegetables. Can be [illegible] by his late employer.—A. B., 9, St. Mark's [illegible] Brompton, S.W.

GARDENER (UNDER).—Age 26, single [illegible] knowledge of his profession, and willing [illegible] useful. Eighteen months' good character.—[illegible] Nurseryman, Plaistow, Essex, E.

GARDENER (UNDER), OR IMPROVER.—[illegible] has been under an experienced Gardener [illegible] three years. Can have a good character from [illegible] —W.E., Bodorgan Gardens, Anglesey.

GARDENER, and GENERAL MANAGER [illegible] small property.—WM. HARDIE, late Gardener [illegible] Marquis of Northampton more than 12 years, [illegible] extensive experience in all the different parts of [illegible] including Woods, Grass Land, Roads, &c.—[illegible] Veitch's, Royal Exotic Nursery, King's Road, Chelsea [illegible]

GARDENER, OR GARDENER AND [illegible] Age 36, married; thoroughly understands [illegible] Late Forcing, Flower and Kitchen Gardens [illegible] Land and Stock. Two years' character.—H. E., [illegible] Street, Lewisham, Kent, S.E.

FOREMAN, PROPAGATOR, SALESMAN [illegible] Age 38; thoroughly proficient in the [illegible] formance of every branch of the Trade [illegible] Beaufort Street, Chelsea, S.W.

FOREMAN, PROPAGATOR, &c.—[illegible] in his profession, good Salesman, [illegible] business. First-class references.—E. J., Mr. [illegible] and Rare Plant Establishment, King's Road, Chelsea [illegible]

FORESTER OR WOODMAN to any [illegible] gentleman.—A Man, of 12 or 15 years' [illegible] perfectly understands his profession in [illegible] Fencing of any sort made of Wood or Iron [illegible] Hedges, &c., done in first class style; can make [illegible] where one is kept for the use of his department [illegible] references will be given.—J. M., Post Office, [illegible] Glasgow.

NURSERYMAN (IN and OUT-DOOR).—[illegible] Propagate and Grow Plants for Exhibition [illegible] Mr. WILLIAMS, 21, South Molton Street, Grosvenor [illegible] London, W.

To Landowners.

MANAGER OF AN ESTATE, either [illegible] Owner or a principal Agent.—Age [illegible] many years' experience in the Management [illegible] Breeding and Fattening Stock, Marketing, [illegible] routine of Country Business. His present employer [illegible] man with whom he has lived many years [illegible] testimonials of the highest class.—G. C., 14, Brompton [illegible] London, S.W.

To Noblemen and Gentlemen.

MANAGER, &c.—A Person of considerable [illegible] ence in Farming, Building, Draining, Planting [illegible] and Thinning of Plantations, Sale of Timber, &c. [illegible] Managing a large Landed Property. The most [illegible] references, and security if required.—M., Gardeners' [illegible] Office, W.C.

To Noblemen, Gentlemen, Estate Agents, &

MASTER CARPENTER or an ESTATE [illegible] Used to Farm Buildings, Labourers' Cottages, &c. [illegible] acquainted with Horticultural Building, Heating [illegible] Water, &c. Unexceptionable testimonials from [illegible] Builders, &c.—A. B. C., 20, Chelsea Villas, West Brompton [illegible]

BAILIFF.—No incumbrance; has had great [illegible] perience in the Management of Arable and Pasture [illegible] Woods and Plantations, Drainage, &c.; Purchasing [illegible] of Stock. The highest reference.—Z. Z., Mr. George [illegible] Seedsman, Down Street, Piccadilly, W.

BAILIFF.—Thoroughly practical in [illegible] Farming, both Heavy and Light Lands; a [illegible] and Manager of Stock, and a good Accountant.—[illegible] Pentonville Road, Islington, London, N.

BAILIFF, OR BAILIFF AND GARDENER [illegible] Thirty years' experience, no incumbrance.—[illegible] Stevens, 13, High Street, Stoke Newington, N.

BAILIFF.—Age 40, married; has had great [illegible] rience in the Midland and Southern Counties [illegible] thoroughly practical in the most modern style [illegible] Heavy and Light Land, and a good Judge of Stock.— [illegible] Deacon's, Leadenhall Street, London, E.C.

TO WHOLESALE SEEDSMEN.—A young [illegible] aged 21, of several years' experience, the [illegible] cedents, and all the requisite qualifications, wishes for [illegible] ment in a London Warehouse.—D., Charles Turner [illegible] The Royal Nursery, Slough.

The Gardeners' Chronicle Newspaper.

SATURDAY, AUGUST 17, 1861.

GREEN'S PATENT LAWN MOWERS have proved to be the best, and have carried off every prize that has been given in all cases of competition. They are noiseless in working, self-sharpening, self-cleaning, simple in construction, and easier to work and less liable to get out of order than any other Lawn Mowers extant.

Illustrated Price Lists may be had of THOMAS GREEN, Smithfield Iron Works, Leeds; or 2, Victoria Street, Holborn Hill, London, E.C.

N.B. Old Machines repaired and made as good as new.

WIRE NETTING, 1*d.* per yard; Galvanised do., 2*d.*—**Quantities of 100 yards and upwards delivered** free at all Railway Stations; also Garden Arches, Flower Stands, Trainers, Hanging Flower Baskets in great variety, and every kind of Ornamental and Plain Wire-work for Horticultural and other purposes, at Fox's East Central Wire Works, 105, Holborn Hill, E.C., 2 doors East of Hatton Garden.

Illustrated Catalogues forwarded on application.

Wind Power.

J. R. PEILL, 17, New Park Street, Southwark, S.E., begs to inform intending purchasers that he has now increased facilities for Manufacturing the Patent Wind Engines for Pumping, Grinding, Chaffcutting, Pulping, &c.

Prospectuses and all information may be obtained by enclosing one postage stamp, and a Wind Engine in full work may be inspected on the premises daily.

Gutta Percha Tubing for Watering Gardens.

THE GUTTA PERCHA COMPANY have the pleasure to acknowledge the receipt of the following *Testimonial from* MR. J. FARRAH, *Gr. to* BOSWELL MIDDLETON JALLAND, Esq., *of Holderness House, near Hull.*

"I have had 400 feet of your Gutta Percha Tubing, in lengths of 100 feet each, with union joint, in use for the last 12 months for watering these gardens, and I find it to answer better than anything I have ever yet tried. The pressure of the water is very considerable, but this has not the slightest effect on the tubing. I consider this tubing to be a most valuable invention for Gardeners, inasmuch as it enables us to water our gardens in about one-half the time, and with one-half the labour required."

Manufactured by the GUTTA PERCHA COMPANY, Patentees, 18, Wharf Road, City Road, London, E.C., and sold by their Wholesale Dealers in town and country.

"FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, and — Collier, Esq., of Dartford.

PROTECTION FROM THE COLD WINDS & MORNING FROST.

"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.

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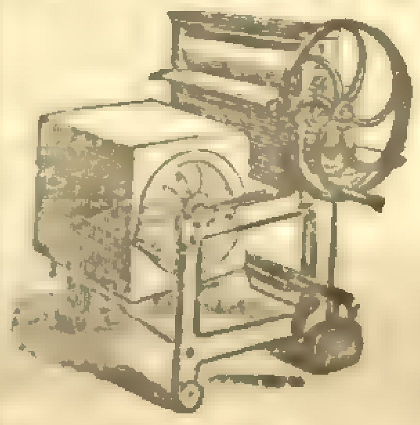

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News of the Week.

THE KING OF SWEDEN AND NORWAY, **accompanied** by his brother Prince OSCAR, **arrived at Osborne on Monday from Paris,** on his first visit **to this country.** HIS MAJESTY has since visited **Portsmouth dockyard,** the camp at Aldershott, **Woolwich Arsenal, and** the Crystal Palace, and is **expected to remain in** London for a few days for the purpose of visiting other public establishments.

The EMPEROR OF THE FRENCH, on the occasion

of his *fête* on Thursday last, remitted or commuted the punishments of 1236 prisoners, of different categories, who had been condemned for civil crimes. On Tuesday the EMPEROR inaugurated the new Boulevard de Malesherbes, and delivered a speech on the occasion, in which he expressed his satisfaction with the embellishments of the capital. HIS MAJESTY said that certain interests necessarily suffered by the execution of great works, but it was "the duty of the public administration to have as much regard for these interests as possible, to infuse activity into labour, to protect the less favoured classes, and to oppose an increase in the price of articles of the first necessity." The EMPEROR added, that "since the treaty of commerce the exportation of articles of Paris had nearly doubled," and he recommended the municipality to "reduce, as much as their finances would permit, the town dues on goods of the first necessity." HIS MAJESTY left Paris on Wednesday for the camp of Châlons.

Baron RICASOLI has addressed a despatch to the representatives of Italy abroad, in which he reviews the history of the recent Parliamentary session, and states that Italy has constituted herself, although a portion of Italian territory is still in the hands of others. He says that Europe, seeing the strength and fitness of the Italians for constitutional government, must be convinced of their right to possess the entire peninsula, and will find a guarantee of repose and peace by favouring the restoration of the part that is wanting to them; while at the same time it will be persuaded that the Italians, as a people essentially Catholic, understand better than any other the true interests of the Church when they ask her to divest herself of the feudal rights given to her by a barbarous age. The enrolment of brigands continues in Rome, and the action of the French authorities is paralysed by the Papal Government, which maintains that the French police has encroached upon the authority of the Pope.

The Address of the Hungarian Diet to the EMPEROR OF AUSTRIA, as proposed by M. DEAK, was adopted by the Upper House on Saturday by acclamation and without amendment, and was presented to HIS MAJESTY on Wednesday by the Presidents of the two Houses. The EMPEROR replied by a short speech couched in general terms, and his formal resolution is expected to be made public to-day. The Cabinet Council demands that the Hungarian Diet shall be dissolved, and that an imperial manifesto shall be addressed to the different peoples of the Austrian empire. The Hungarian Ministers are strongly opposed to the latter proposition.

Another collision between the people and the military occurred at Warsaw on the 8th inst., in which one person was wounded, and several were arrested. On Friday Warsaw continued in a very disturbed state, and troops and artillery were placed in all the public gardens and squares of the city. On Sunday the Governor caused placards to be posted in the city, warning the public to abstain from making any demonstrations at the national *fête* on the following day, and prohibiting, under severe penalties, all festivities and the closing of shops. Notwithstanding this prohibition, the *fête* was celebrated on Monday in the usual manner. The Bourse, counting-houses, and shops were closed; the churches were filled by large congregations; and in the evening the city was illuminated. An imposing military force, with artillery, was stationed in the streets, but though some arrests took place, there was no collision with the people. On the same day an important popular demonstration took place at Lublin in Russian Poland, in which several persons were wounded, but it was suppressed by the military commander without any loss of life.

The Danish Government has made an important concession to the German Diet in regard to the affairs of Holstein. It has consented to allow the contribution of Holstein from its special revenues to the common budget of the monarchy to be provisionally limited for the current year to the quota allotted to Holstein by the normal budget of 1856. In consequence of this concession the German Diet, on the report of the Committee on the Schleswig-Holstein question, has resolved to take no further measures in reference to the execution of the Federal resolution of the 7th February last.

From the United States we learn that General M'CLELLAN has taken the command of the Federal army, and has already infused a new spirit into the disorganised corps. Congress has passed the Tariff and Direct Tax Bills—the former increasing by 10 per cent. all the duties to be levied under the Morrill Tariff, and the latter imposing a tax of 3 per cent. on all incomes above 800 dollars. Bills have also been passed levying increased duties on tea, coffee, sugar, cocoa, chicory, brandy, and other spirits, and imposing an *ad valorem* duty of 50 per cent. on wines, and 40 per cent. on silks. A Bill ordering the confiscation of property used for insurrectionary purposes has also been passed. The Federal prisoners who have escaped from the Confederate camp state that General BEAUREGARD intends to remain on the defensive, and is fortifying Fairfax. Governor WISE has retired with his force from Western Virginia, leaving 1000 muskets and kegs of powder in the hands of the Federals. General PILLOW has issued a proclamation, stating that he will drive the Federals from Missouri, and has promised Governor JACKSON to send 20,000 Confederates into that State. The Federal troops have evacuated Hampton in the neighbourhood of Fort Monroe. Prince NAPOLEON has arrived at Washington.

By the Overland Mail we have news from Calcutta to the 15th July, and from Hong Kong to the 28th June. A deficit in the Indian revenue is apprehended in consequence of the fall in the price of opium. The indigo plantations in the Tirhoot district and in Bengal generally have suffered seriously from the excessive fall of rain. A good understanding prevails between the foreign representatives and the Chinese at Pekin. Mr. BRUCE has relaxed the prohibition to visit Pekin, but how far the restriction has been taken off is not yet known.

Affairs in New Zealand continue in a threatening state. Sedition is rapidly spreading among the natives, and the Governor has found it necessary to issue a proclamation demanding universal submission to the QUEEN's sovereignty and the authority of the law, the restoration of all plunder, and compensation to HER MAJESTY's subjects, European or native, for the losses they have sustained.

Home News.

THE COURT.—The Queen and Prince Consort, accompanied by the Princess Alice, arrived at Windsor yesterday from Osborne. The Royal party intended to dine and sleep at Frogmore Lodge last evening. To-day, after luncheon, her Majesty and the Prince Consort, with the Princess Alice, will return to the Isle of Wight. On Friday, the 10th inst., Count Brandenburg, Earl Russell, and Count Goërtz arrived on a visit to her Majesty. Count Goërtz, on a special mission from the Grand Duke of Hesse, was presented to the Queen at an audience by Earl Russell, Secretary of State for Foreign Affairs. In the afternoon the Queen and Prince Consort, accompanied by the Crown Prince and Princess of Prussia, the Duke of Oporto, Princess Charles and Princess Anne of Hesse, Princesses Alice, Helena, and Louisa, and Prince Arthur, took a cruise in the Royal yacht Victoria and Albert, returning to Osborne at a quarter before 8 o'clock. On Saturday morning the Duke of Oporto took leave of her Majesty and returned to Southampton. Earl Russell and Count Goërtz returned to London. Princess Charles and Princess Anne of Hesse left Osborne on their return to the Continent. In the afternoon the Queen and Prince Consort, the Crown Prince and Princess, and Princess Alice, drove out. On Sunday morning the Queen and Prince Consort, the Crown Prince and Princess of Prussia, Princesses Alice, Helena, and Louisa, Prince Arthur and Prince Leopold, attended Divine Service at Osborne. The Rev. W. R. Jolley officiated. On Monday morning the Queen, Prince Consort, and Royal family walked in the grounds. In the afternoon the Queen and Prince Consort, accompanied by the Crown Prince and Princess of Prussia, Princesses Alice, Helena, and Louisa, Prince Arthur, and Prince Leopold, embarked in the Royal yacht Victoria and Albert, and steamed to the eastward. At about half-past 6 her Majesty met the Swedish corvette conveying the King of Sweden and Prince Oscar towards Osborne. The Prince Consort immediately went off in the barge and proceeded on board the corvette, and invited the King to accompany him on board her Majesty's yacht. A Royal salute was fired by the Emerald frigate, which was in attendance on her Majesty. The King of Sweden and Prince Oscar, with their suite, were received by the Queen on the deck of the Victoria and Albert, which immediately returned to Osborne. Lord Palmerston, Earl Russell, Viscount Sidney, and Baron Beck-Früs, Secretary to the Swedish Legation in London, arrived on a visit. In the evening her Majesty had a dinner party. On Tuesday the Duke of Oporto arrived on a visit to her Majesty. In the afternoon the King of Sweden and Prince Oscar, accompanied by the Prince Consort, the Crown Prince of Prussia, and the Duke of Oporto, visited Portsmouth dockyard, the Victory, and the Royal Clarence Victualling Yard. At half-past 5 o'clock her Majesty, accompanied by the Crown Princess of Prussia, Princess Alice, Prince Arthur, Lord Palmerston, and Earl Russell, embarked in the Royal yacht Victoria and Albert, and went to meet the King of Sweden on his return from Portsmouth. The King, Prince Consort, and Royal party went on board her Majesty's yacht at 7 o'clock, and returned to Osborne. In the evening the Queen had a dinner party. On Wednesday the King of Sweden and Prince Oscar took leave of her Majesty and left Osborne. The King, accompanied by the Prince Consort and the Crown Prince of Prussia, went to Aldershott Camp to witness the review of the division stationed there. Prince Oscar crossed over to Portsmouth to go through the dockyard. After the review at Aldershott the King proceeded to London, where his Majesty was joined by Prince Oscar. In the afternoon the Queen, accompanied by the Crown Princess of Prussia, Princesses Alice, Helena, and Louisa, and the Duke of Oporto, embarked in the Fairy, and met the Prince Consort and the Crown Prince on their return from Aldershott. The Queen and Royal party accompanied the Duke of Oporto on board the Portuguese corvette Bartolomeo Diaz in Southampton Water, where the Duke took leave of her Majesty. The Queen and Prince Consort, with the Crown Prince and Princess, and the Princesses, returned to Osborne at half-past 8 o'clock.

THE CROWN PRINCE AND PRINCESS OF PRUSSIA, with Prince William and the Princess Charlotte, closed their visit to her Majesty on Thursday, and embarked in the Osborne, Admiralty yacht, for Ostend, on their way to Berlin.

THE KING OF SWEDEN, accompanied by his brother Prince Oscar, arrived at Osborne on Monday evening from Havre on a visit to the Queen. On approaching Spithead, his Majesty was met by the Queen, in the Royal yacht, and returned with her Majesty to Osborne. On Tuesday the King and Prince Oscar visited Portsmouth Dockyard. On Wednesday his Majesty and Prince Oscar left Osborne, the former for Aldershott to witness a review of the troops, the latter for Portsmouth to pay another visit to the dockyard. In the evening the King arrived in London, and proceeded with his suite in several of the Queen's carriages, which were in attendance, direct to the residence of the Swedish Embassy, in Grosvenor Place, where he passed the night. After his arrival the King honoured with an interview Chevalier Tottie, his Consul-General in London. On Thursday morning Prince Oscar visited Messrs. Maudslay's extensive engineering establishment. The King, accompanied by Prince Oscar, afterwards proceeded by special train on the Great Western Railway to Windsor, where his Majesty visited the Queen's apartments and the state-rooms in the Castle, the Round Tower, St. George's Chapel, and the Home Farm, in which his Majesty took particular interest. Before returning to London, the King paid a visit to Eton College. After luncheon the King proceeded in the Queen's carriages to the Crystal Palace, where his Majesty was received by the directors, and by Mr. Bowley, the general manager, by whom its various attractions were pointed out. His Majesty was greatly pleased with the Palace, and passed more than two hours in inspecting the building and its contents. In the evening his Majesty honoured the performances at the Haymarket Theatre with his presence, while Prince Oscar and suite attended the performances at the Adelphi. Yesterday the King and Prince Oscar visited the Bank of England, the Mint, the Tower, and Woolwich Arsenal.

THE QUEEN-MOTHER OF SPAIN.—Queen Maria Christina arrived at Folkestone from Boulogne on the 7th inst., and proceeded by the afternoon train to Redhill, on her way to the Royal Crescent Hotel, Brighton. Her Majesty is accompanied by her husband, the Duke de Rianzares; her son-in-law and daughter, the Duke and Duchess de Montpensier; and a suite of 15 persons. The ex-Queen of the French and the Prince de Joinville, who are staying at Worthing, visited Donna Christina on the 9th; and on Monday her Majesty and her family dined with the ex-Queen at Worthing. Queen Christina and her suite will leave Brighton for Rome in a few days.

THE ARCHDUKE MAXIMILIAN OF AUSTRIA visited the Royal Arsenal at Woolwich on Friday. The Prince having expressed his desire to see the manufacture of the Armstrong guns, was conducted through the smiths' shops, where the process of forming the various parts of the gun is carried out under the agency of the huge Nasmyth's hammers. He visited in detail the remaining branches of the rifled ordnance department, and his Imperial Highness stated his intention of being present

at Shoeburyness in a few days to witness the firing of one of the guns. The Archduchess Maximilian on Friday visited, among other places of note, the Tower, the Bank of England, Guildhall, and the Mansion House over which she was conducted by the Lord Mayor. On Wednesday the Archduke paid a special visit to Southampton, and was entertained at a déjeûner by the Mayor and Corporation of that town, the details of which will be found in our Provincial news.

Parliamentary Movements.—The nomination for South Lancashire took place on Wednesday. The show of hands was in favour of Mr. Turner the Conservative candidate, and a poll was demanded on behalf of Mr. Cheetham. The polling will take place to-day.

The Channel Fleet. — Rear-Admiral Smart's division of the Channel Fleet, consisting of the screw steam ships Revenge, 89; Donegal, 99; Conqueror, 101; and Centurion, 80, were under orders to leave Plymouth Sound on Wednesday for Holyhead, to join the port division of the fleet, for the purpose of escorting the Queen to Ireland.

Income and Property Tax.—A Parliamentary return has been issued showing the number of persons charged to the income tax for the years ending on the 5th day of April, 1859 and 1860, under schedules D and E, the amount of income charged, &c., distinguishing the number charged in each of the various classes. As regards Schedule D, it appears that in 1858-59 the number of persons in Great Britain with incomes under 100*l.* a year was 41,928, and the amount of income charged against them 2,225,649*l.*; in 1859-60 the number of persons was 16,978, and the amount of income 1,082,651*l.* In 1858-59 the number of persons with incomes of 100*l.* and under 150*l.* was 100,968, the amount of income charged 11,126,100*l.*; in 1859-60 the number of persons was 128,570, the amount of income 12,607,998*l.* In 1858-59 the number of persons with incomes from 150*l.* to 200*l.* a year was 41,276, the amount of income 6,478,655*l.* In 1859-60 the number of persons was 41,687, the amount of income 6,566,480. In 1858-59 the number of persons with incomes from 200*l.* to 300*l.* was 35,553, the amount of income 7,877,513*l.*; in 1859-60 the number of persons was 36,535, the amount of income 8,067,090*l.* In 1858-59 the number of persons with incomes from 300*l.* to 400*l.* was 15,867, the amount of income 5,062,145*l.*; in 1859-60 the number of persons was 16,608, the amount of income 5,278,639*l.* In 1858-59 the number of persons with incomes from 400*l.* to 500*l.* was 7829, the amount of income 3,283,706*l.*; in 1859-60 the number of persons was 8130, the amount of income 3,399,038*l.* In 1858-59 the number of persons with incomes from 900*l.* to 1000*l.* was 889, the amount of income 826,432*l.*; in 1859-60 the number of persons was 901, the amount of income 886,251*l.* In 1858-59 the number of persons with incomes from 1000*l.* to 2000*l.* was 5556, the amount of income 3,677,570*l.*; in 1859-60 the number of persons was 5932, the amount of income 7,646,382*l.* In 1858-59 the number of persons with incomes from 5000*l.* to 10,000*l.* was 816, the amount of income 5,421,796*l.*; in 1859-60 the number of persons was 887, the amount of income 5,962,739*l.* In 1858-59 the number of persons with incomes from 10,000*l.* to 50,000*l.* was 489, the amount of income 9,266,873*l.*; in 1859-60 the number of persons was 512, the amount of income 9,909,842*l.* In 1858-59 the number of persons with incomes of 50,000*l.* and upwards was 54, the amount of income 4,969,359*l.*; in 1859-60 the number of persons was 59, the amount of income 5,379,722*l.* The number of persons of all classes charged in 1858-59 was 267,173, and the gross amount of income 80,224,419*l.*; in 1859 the total number of persons charged was 273,745, and of income 84,373,090*l.* As respects schedule E, it is stated that the number of persons in Great Britain with incomes under 100*l.* a year who were charged with the income tax was in 1858-59, 29,891, and the amount of income 1,595,611*l.*; while in 1859-60 the number of persons was 22,121, and the amount of income 1,241,743*l.* In 1858-59 the number of persons under this schedule with incomes of 100*l.* and under 150*l.* was 29,219, the amount of income 3,296,950*l.*; in 1859-60 the number of persons was 38,519, the amount of income 3,832,000*l.* In 1858-59 the number of persons with incomes from 150*l.* to 200*l.* was 42,892, the amount of income 2,958,769*l.*; in 1859-60 the number of persons was 12,917, the amount of income 2,111,411*l.* In 1858-59 the number of persons with incomes from 200*l.* to 300*l.* was 11,412*l.*, the amount of income 2,780,905*l.*; in 1850-60 the number of persons was 12,037, the amount of income 2,811,430*l.* In 1858-59 the number of persons with incomes from 300*l.* to 400*l.* was 5124, the amount of income 1,750,201*l.*; in 1859-60 the number of persons was 5271, the amount of income 1,756,027*l.* In 1858-59 the number of persons with incomes from 400*l.* to 500*l.* was 2381, the amount of income 1,065,968*l.*; in 1859-60 the number of persons was 1475, the amount of income 1,065,563*l.* In 1858-59 the number of persons with incomes from 900*l.* to 1000*l.* was 231, the amount of income 232,877*l.*; in 1859-60 the number of persons was 234, the amount of income 227,759*l.* In 1858-59 the number of persons with incomes from 1000*l.* to 2000*l.* was 1307, the amount of income 391,568*l.*; in 1859-60 the number of persons was 151, the amount of income 353,916*l.* In 1858-59 the number of persons with incomes of 5000*l.* and upwards was 70, the amount of income 549,572*l.*; in 1859-60 the number of persons was 71, the amount of income 535,765*l.* In 1858-59 the total number of persons of all classes charged was 95,063, the gross amount of income 17,720,229; in 1859-60 the number of persons was 98,437, the amount of income 17,820,413*l.*

Births, Deaths, and Marriages.—The Registrar-General's Report for 1859 has just been published. It supplies the latest summary of the great facts of human life in England and Wales, and exhibits some interesting results. During the year to which the report applies, upwards of 335,000 men and women married. Of these, 137,000 bachelors married as many spinsters, and 8161 widowers married as many widows. Upwards of 7000 bachelors married widows, and 15,493 spinsters married widowers. Fourteen per cent. of the men marrying were widowers, and 9 per cent. of the women marrying were widows. Six out of every 100 men, and 19 out of every 100 women, who married were under 21 years of age. Out of the whole 335,446 persons who were married, nearly 108,000, or about a third of the whole, signed the registers with marks—a number which is not equally divided between the two sexes—the women who did not write being to the men in the proportion of 37 to 26 per cent. This is an improvement, however, upon the marriage registers of 20 years ago, when 32 per cent. of the men and 48 per cent. of the women were unable to sign their names. The births registered during the year 1859 were nearly 690,000, exceeding by upwards of 34,000 those registered in the preceding year. Of these about 350,000 were boys, and about 340,000 girls, giving a proportion of about 22 boys to 21 girls. About 45,000 were registered as illegitimate, which would give a per centage on the entire number of births of about 6½. The correctness of this conclusion is, however, open to doubt, owing to the temptation of the parents not to confess the irregularity of their connection, and also owing to the fact that they are not legally obliged to register the birth at all. However, as the statistics stand, 1 in every 15 children born during the year in England and Wales was confessedly illegitimate. The deaths registered were upwards of 440,000, which was less by nearly 9000 than in the previous year, and the rate of mortality was slightly below the average. The mortality of the male sex slightly exceeded that of the female, and the winter, as usual, proved the most fatal season of the year. The general results show that the deaths were 1 in 45 of the population, the births were 1 to every 29, and the marriages 1 to every 59, persons living. The report also contrasts the statistics of disease, so far as we are possessed of them, of two centuries back with those of the present day. It takes London as an example, and says that the destruction of life, like everything else in London, is upon a scale of grandeur; and that if its dead of a single year could be brought to life they would people a large city. Yet the rate of mortality in London is very different from what it was 200 years since. In 1660—1680, out of 100,000 persons, 357 died annually from smallpox; the deaths from the same disease are now 42. The mortality then by fever and ague, with scarlatina, quinsey, and croup, was 759; it is now 227. Eight in the 100,000 die now of dysentery; then, out of the same number, 763 died annually of that disease; by diarrhœa, however, a milder form of disease, 120 die now, 11 died then. Women are not yet exempt from peril in child-bearing; the mortality is 17, but it was then 86. Consumption and diseases of the breathing organs were very fatal; the deaths were 1079; they are 611 now. Children were rapidly cut down; of convulsions and teething, 1175 died then, 136 now. Dropsy, a result and sign of scurvy and fever, was exceedingly fatal; 829 died then, 26 now. Scurvy and purpura bear testimony to the imperfect nutrition of the population; the annual deaths in 100,000 were 142 then, and are now 2. In addition, London was then ravaged by the plague. On the other hand, apoplexy, paralysis, epilepsy, affections of the brain, and suicide are more fatal now—151 now, to 57 then; and of the violent deaths some are now more frequent, as the forces by which they are occasioned are greater. Poison is more accessible, fires are probably more common, and dresses more inflammable, but drowning and suffocation were then twice as fatal as they are in the present day. The Registrar-General reminds us that the diseases would revive if the same causes came again into action. The supply of food, and particularly of vegetables and fresh meat, was defective in the winter, so that a large portion of the population became scorbutic. The houses were nearly as close and dirty as the houses now are in Constantinople and Cairo; the water supply was imperfect, and parasitic insects and diseases of the skin betrayed its impurity. The dirt of the houses struck foreigners. The sewers were defective, the soil gave off marsh malaria in some parts, and in others was saturated with the filth of successive generations. One by one these evils have more or less disappeared, and with this change the health of London has improved. The nation, adds the Registrar-General, exults justly in the progress of its manufactures, but it is surpassed by the progress of the health of its capital; and further progress is in the hands of the people. They can work out their own salvation, with the blessing of Providence, and as science succeeds in bringing to light the causes of unnatural diseases still existing, we may hope confidently that those diseases will be mitigated or averted. To this report is appended, as usual, an instructive paper by Dr. Farr on the causes of death in England. The year 1859 was the first in which diphtheria obtained a distinct line in the tables; it had previously been confounded with cynanche, and when the two are put together the rapid progress of this great epidemic becomes evident; the deaths in 1855 having been 385; in 1856, 603; in 1857, 1583; in 1858, 6606; in 1859, 10,184. Epidemics of diphtheria are clearly described in the 17th century by Italian and Spanish writers, and its frequent association with scarlatina justifies the inference that the diphtherine, its *materies morbi*, is some modification of scarlatinine. Of the whole deaths of the year one-fourth were referred to zymotic diseases. Smallpox destroyed 3848 persons, chiefly children who had not been vaccinated, an instance, as Dr. Farr remarks, of the rigour with which the infringement of sanitary laws is visited, for the children perish and the parents lose their offspring by the neglect of a precaution of the simplest kind. A fatal outbreak of erysipelas at the Winchester Infirmary was traced to a cesspool. Of the parasitic diseases it is remarked that the ova of worms must be derived generally from impure river waters, into which the refuse of towns is poured. We have but an imperfect conception of the number of deaths from excessive drinking; but 345 were directly ascribed to intemperance and 545 to *delirium tremens*, 890 in all from the two forms of alcoholism. Passing next to constitutional diseases, gout is described as nearly stationary; it is considered that, thanks to the more intelligent system of dining which the wealthier classes, wearied of this racking disease, will probably introduce, we may hope to see gout rapidly decline. The deaths from tuberculous disease have decreased since 1853; those from bronchitis have increased very greatly of late years. Among local diseases affections of the three vital organs—the brain, the heart, and the lungs—caused nearly a third of all the deaths of the year. Fright was the cause of seven deaths (not all children), grief of eight, including seven women, rage of five, including four infants, anxiety of one, a man; mental shock of one, a woman; melancholy, of 21 men and 26 women. Above 25,000, chiefly infants, died of convulsions. 27,104 deaths are referred to the decay of old age without any disease. 14,649 persons were killed: a sad confession, says Dr. Farr, for a nation humane, civilised, and skilled in all the arts, to have to make. Annually 75 persons in 100,000 thus die a violent death. 13,056 of these deaths in 1859 are ascribed to accident or negligence; among them were 279 by poison. 1,248 deaths were declared by coroners' juries to be suicides; 338 murder or manslaughter. 18 persons were killed by lightning, nearly all persons of outdoor occupations, for the house is safer than the field. Of the total deaths in the year no less than 184,264—two in every five—were of children under five years of age; and above half of these—105,629—had scarcely seen the light, and never saw one return of their birthday. A very large number of these early deaths were from debility and causes which prove that the children never had much chance of life, but many were suffocated, or otherwise killed, accidentally, carelessly, or worse. In the last five years, within the metropolitan district alone, at least 278 infants were murdered; above 60 were found dead in the Thames, or the canals or ponds about London, and many more than 100, at all events, were found dead under railway arches, on doorsteps, in dustholes, cellars, and the like. It is a proof of the healthiness of England that the list of deaths included 25 men and 56 women who had attained 100 years. The oldest man in the year died at Sunderland, aged 107; but a woman in Wokingham district, Berks, was 108, and two women, one in Monmouthshire and one in South Wales, reached the age of 110. Of these centenarians 8 were found in London; the county that could boast the largest number is Somersetshire, in which there were seven.

The Volunteer Movement.—A scheme has been proposed, under the title of "The Nation's Gift," or Volunteer Camp and Club House, for the purpose of providing adequate facilities for enabling the volunteers of the United Kingdom to attain efficiency in rifle practice and for being brigaded with the regular troops. It is proposed to purchase a piece of land, in the immediate neighbourhood of the camp at Aldershot, sufficiently extensive for rifle practice, and to erect on it a club-house with a thousand chambers, for the volunteers, with a library, baths, and butts for rifle practice at all ranges up to 1200 yards, and to make similar purchases near Wimbledon and Wanstead—these different properties to be all vested in trustees, and to be presented by the ladies of the United Kingdom to the volunteers, as a tribute of their approval of the self-sacrificing efforts which have led them to arm and to train themselves for the national defence. It is understood that the financial arrangements connected with the scheme will be attended with no great difficulty, in consequence of the readiness of the proprietor at Aldershot to dispose of the required land on most favourable terms. For the convenience of professional men in London, to whom the expenditure of money is often a much less serious consideration than the expenditure of time, it is proposed to connect the volunteer camp and club-house by telegraphic wires both with the City and the West-end, so that they can be instantly summoned back to town should any necessity arise for their return. The project comes before the public recommended not merely by its own merits, but by a numerous and influential list of patrons, including the names of Lord Com-

bermere, Lord Clarence Paget, Lord Raglan, General Sir Howard Douglas, and Lieut.-General Fox.—Colonel M'Murdo, Inspector-General of Volunteers, after an inspection of the Durham and Northumberland Volunteers, held at Newcastle-on-Tyne last week, made the following remarks on Volunteer marching:—

"I have noticed, and other general officers have noticed, that a great difference of cadence in the time of marching is perceptible with corps. Now, I cannot too strongly impress upon all these corps, and especially upon smaller corps, that have not the opportunity of meeting together for constant marching out, how necessary it is to have one uniform cadence step. The reason is this—I have found as much as 20 paces a minute difference between the marching of corps. Now, just consider what 20 paces a minute will do in six hours; my own calculation is that it would cause a difference in the marching of bodies of men of three miles and upwards—of three miles and a-half—in six hours, or half a day's march. Read the papers of to-day, and you will see in all great battles, in all great operations, an army cannot follow one line or road. An army must have several roads in order to come in front of the enemy and deploy there. Therefore it is necessary that the bodies of men marching along these different lines towards the enemy should march exactly with the same pace, or else if there is a difference, which I have perceived of 20 paces in a minute, one column would reach the enemy, while the other column would be some 3½ miles short of reaching the front where the battle should begin. An active enemy would not be slow in taking advantage of such circumstances by falling in and crushing the first enemy that showed front in his presence. He would have an enemy to throw back of superior force, and even beat that enemy in detail. Therefore I hope that I have shown the necessity of having one uniform step throughout the force, and that is the regulation step of 108 paces in the minute. Now, most of you have bands; and I hope that you will make your bandmasters have a plummet, and that plummet going at the rate of 108 strokes per minute. You must exercise your bands throughout the winter in marching at that time; and so it will take the ears, and so come to the feet of the men. Autumn, as you know, is now approaching, and with it will come the marching out. I have seen a great deal of Volunteers in this country; and I am delighted with what I have seen this day, because I see you are on the high road to efficiency. I hope that in your marching out for the winter you will not assume it to be a mere promenade, but try to knock a little use out of it. When you march along the road, always form your advance and your rearguard. This is laid down in a section of the book, and it will be extremely useful not only for the officers commanding battalions, but for the officers commanding the sections or companies of men. Both of these might consider as they march along the road, 'What shall I do if the enemy were supposed to be in the neighbourhood? How shall I approach the turn of the road? How shall I enter the village in front?' All these questions should pass through the mind of the officer as he walks along the road in his marching out. It would be of great benefit to himself and to the service, because there is nothing more important in the marches of great bodies of men than the advance guard and rearguard being intelligent men, and the officers knowing their duty."

Foreign.

France.—The Emperor on Tuesday performed the ceremony of inaugurating the new Boulevard de Malesherbes in the presence of an immense number of persons. The weather was magnificent, and the inauguration was performed with much military and civic pomp. The Emperor, attended by the grand officers of state, the members of his household, and the civic functionaries, entered a tent prepared for his reception, when M. Haussman, Prefect of the Seine, delivered a long speech, to which the Emperor returned the following reply:—

"Messieurs,—The inauguration of a new medium of communication is not extraordinary at this day, and I should not have marked it by a public ceremony if I had not wished to testify my sympathy to the municipal council, which occupies itself with constant zeal in the interests of the city; my satisfaction to the Prefect of the Seine for his indefatigable perseverance in the pursuit of a grand object, and my approbation to all who have so well seconded their efforts. The embellishments of the capital, once completed, excite general admiration, but during their execution they always give rise to criticisms and complaints. It is impossible in such enterprises not to affect for the moment certain interests; the duty of the Administration is to consider them without departing from the path to be followed. That path you know—to give activity to labour, and a new life to the industry and the commerce of Paris, by freeing them from the trammels which impede their development; to protect the least favoured classes; and to oppose an increase in the price of articles of first necessity. In order to obtain the first of these results the Government made a great step, and you will learn with pleasure that since the conclusion of the treaty of commerce with England the exportation of articles of Paris has nearly doubled. In all that concerns the administration of the city in carrying the octroi wall up to the fortifications, and making large roads to the extremities from the centre, there is a tendency to equalise in this vast metropolis the price of everything; giving vitality, light, and value to the deprived quarters, occupation to a number of trades, and movement to commerce. On the other hand, I felicitate the city on the measures taken or adopted to ameliorate the fate of the most numerous classes. Thus the city is engaged in bringing to Paris water, for which a less price will be paid, with a view of exonerating from the impost those who pay a less rent than 250f. The baking trade has been organised in such a manner that in case of scarcity the price of bread cannot exceed a certain rate. It has also been sought to diminish the price of meat, not only by giving liberty of action to the butchers, but still more by the creation of one market only, which will guarantee in the best manner the interests of the consumer. In fine, churches, schools, and charitable establishments are multiplied everywhere. In order to labour in the same order of ideas, I recommend to you, above all things, the examination of your budget, and to reduce as much as your finances will permit the duties which press upon articles of first necessity. By this you will acquire new titles to my gratitude, for if the capital of a great empire confers honour on herself by erecting monuments which recall the glory of our arms, and attest the genius shown in science and arts, she does not less honour herself by creating institutions which bear witness to the incessant solicitude felt for those who suffer, and to an enlightened zeal for the general interests of this immense agglomeration of people who form the real heart of France, which beats with her for her glory and prosperity."

On Wednesday Prince Metternich had an audience of the Emperor to take leave on his return to Vienna. The Emperor afterwards set out for Châlons. The statement that the Emperor will accompany the King of Prussia into Germany is without foundation. On Friday, in honour of the visit of the King of Sweden, the Emperor held a grand review of the Imperial Guard and of the garrison of Paris in the Champ de Mars. On Saturday the King of Sweden and Prince Oscar went to Châlons and were present at a review of the troops in camp, returning to Paris in the evening. His Majesty was received by Marshal M'Mahon, on whom he conferred the Grand Cordon of the Royal Order of Sweden. On Monday the King and Prince Oscar embarked at Cherbourg for the Isle of Wight, but the intended naval review did not take place on account of the non-arrival of the Mediterranean squadron. Before their departure the Emperor conferred the military medal on his Majesty and Prince Oscar. The Empress arrived at Tarbes on the 5th, accompanied by the Marquis de Lagrange and a lady of honour. Her Majesty was received by General de Bourjolly, but there was no official ceremony. The Empress left again on the same day, on her way to Eaux-Bonnes by Ossun and Pontacq. Some surprise has been expressed in Paris at the departure of her Majesty at the moment when a friendly Sovereign was about to visit the French capital. General Fanti has arrived in Paris from Turin, and will shortly proceed to Châlons. The Emperor's fête took place on Thursday in Paris, and was a brilliant affair. The illuminations were very fine. The *Moniteur* of Wednesday announced that, on account of the fête, the Emperor has either remitted or commuted the punishments of 1236 prisoners, of different categories, who had been condemned for civil crimes. It also published a numerous list of appointments to the Legion of Honour, and announced the following nominations to the post of Envoy Extraordinary:—M. Benedetti to Italy, M. Reculot to Bavaria, and M. Damremont to Wurtemberg. It also announced numerous promotions in the navy in honour of the Emperor's fête, comprising three Vice-Admirals, six Rear-Admirals, 15 Captains of the first class, 20 Captains of the second class, and 120 Lieutenants. Wednesday being the fête of the Assumption, the Bourse was closed.—The hearing of the appeal of M. Mirès has been postponed to the 19th inst.

Spain.—The Madrid journals of the 6th publish a long address to the Queen from the Archbishop of Tarragona, in the name of himself and his suffragans, entreating her Majesty to take measures for preventing the spread of the errors of Protestants. The Ministers of Finance and of Grace and Justice had left Madrid to join the Queen at Santander.

Portugal.—Disturbances have taken place at St. Ubes on account of the imposition of fresh taxes and the introduction of new weights and measures. Troops were despatched there on Tuesday. The disturbances in the Algarve have been quelled for the present. The ecclesiastical authorities still refuse to allow the Italians to celebrate a mass for the repose of the soul of Count Cavour in any of the public churches. The English nuns of the ancient sisterhood of Sion House, who have been established in Portugal for more than two centuries, are about to return to England, where they have purchased a convent. The recent rains and damp weather have done considerable damage to the grapes throughout Portugal.

Switzerland.—A few days since, as the Baroness d'Harlincourt, aged 23, sister of M. de Maupus, Senator of France and Prefect of Marseilles, was with her husband crossing the Gemmi, one of the highest mountains in the Oberland, the mule suddenly fell on the brink of a precipice from 200 to 250 yards deep, and the unfortunate lady was hurled into the abyss. She uttered one piercing cry, and when some persons hastened to the bottom of the precipice they found her dashed to pieces. The Baron d'Harlincourt was so dreadfully affected at the spectacle that he almost lost his reason, and would have thrown himself down the precipice had he not been prevented by the guides.

Denmark.—The Danish Government, in compliance with the demand of Germany, has agreed that for the current financial year the contribution of Holstein from its special revenues to the common Budget of the Monarchy, shall be provisionally limited to the quota allotted to Holstein by the normal Budget of 1856.

Frankfort.—The Federal Diet held an extraordinary sitting on Monday, in which the last communication from the Danish Government was discussed. The Committee on the Schleswig Holstein question declared that, in consequence of this communication, there was no reason for proposing further measures in reference to the execution of the Federal resolution of the 7th of February last.—Herr Passavant, the celebrated writer on Art, has died at Frankfort, in his 74th year.

Prussia.—The King of Prussia has authorised the acceptance of voluntary contributions for the formation of a Prussian navy. The coronation is fixed for the 15th of October, and the entry into Berlin will take place three days after.

Hanover.—The Crown Prince of Hanover nearly lost his life a few days since, while bathing at the island of Norderey. The Prince's attendant was thrown down by a wave, and before he could recover himself the Prince ventured too far out to sea, and could not hear the cry of warning uttered by the attendant. In a few seconds the Prince was also overpowered by the waves, and lost the ground from under his feet. The attendant struggled hard to reach the Prince, and at last succeeded in seizing and supporting him until another attendant was able to reach him. Both were handsomely rewarded by the King; and the attendant who first swam to the Prince received on the spot medals for saving life from danger. A thanksgiving service was held on the island on Sunday.

Austria.—A despatch from Vienna states that the address of the Hungarian Diet in answer to the royal rescript, was presented to the Emperor on Wednesday by the Presidents of the two Houses. The Emperor replied to the address in a short speech, couched in general terms. His Majesty's resolution may be expected to-day (Saturday). The Cabinet Council insists that the Hungarian Diet shall be dissolved, and an Imperial manifesto shall be addressed to the different peoples of the Austrian empire. The Hungarian Ministers violently opposed the latter proposition.

Hungary.—In the sitting of the Upper House of the Diet on Saturday the draught Address proposed by M. Deak was read, and on the motion of M. Szapary was unanimously adopted by acclamation without any amendment. The Address was despatched to Vienna on Monday. The dissolution of the Diet is considered quite certain. The Moderate party and the party of action are now united. Many deputies, expecting a dissolution, are already preparing for departure. On Friday deputations from the magistrates and electors congratulated M. Deak on his late conduct, but he refused a serenade which they offered him.

Italy.—The *Official Gazette* of Saturday publishes a despatch addressed by Baron Ricasoli to the representatives of Italy abroad. This despatch reviews the history of the recent Parliamentary Session, and mentions the absence of those deputies representing opinions favourable to the former Government. It concludes by saying:—

"Italy has constituted herself, notwithstanding that a portion of Italian territory is in the hands of others, who, beholding us armed and strong, will become persuaded of our right to the entire possession of our territory, and will give a guarantee of repose and rest by favouring the restoration of the part of which is wanting to us. It will also become persuaded that we, a people essentially Catholic, understand better than any other the true interests of the Church when we ask her to divest herself of the feudal rights which a barbarous age gave her."

It is reported that General Della Rovere will enter the Cabinet as Minister for War. Signor Bastogi, Minister of Finance, has been raised by the King to the rank of Count, and appointed Grand Officer of the Order of St. Maurice and Lazarus, on account of the services rendered by him in the conclusion of the loan. General Fanti has left for Châlons in order to be present at the military movements. A religious ceremony took place at Turin on Thursday in the Church of the Lazzarists, in honour of the Fête Napoléon, and was attended by many Frenchmen. The report that General Goyon is about to leave Rome is without foundation. Notwithstanding the arrest of Giorgi, the bandit chief, by General Goyon, the enrolment of brigands continues in Rome, and the action of the French Gendarmerie is paralysed by the Papal Government, which maintains that the French Government has encroached upon the authority of the Pope. The Archbishop of Chambery, the Papal Nuncio at Paris, two Spanish prelates, and Monsignori Quaglia and Bedini, will be made Cardinals in the Consistory to be held on the 16th of September. Prince Chigi has been appointed Papal Nuncio at Paris. Cardinal Andrea, President of the Congregation of the Index, has tendered his resignation on account of having declared Monsignor Liverani's work to be heretical without the concurrence of the Congregation. Rome is tranquil, and the Neapolitan reaction is diminishing.

Russia.—A letter from St. Petersburg, of the 5th inst., states that the unexpected visit of the King of Sweden to the Emperor of the French has produced some sensation in the political circles in that city. It is the more remarked because the King of Sweden, some months since, was to have paid a visit to the Emperor Alexander, but has not yet done so. M. Bismark-Schonhausen has exerted himself to tranquilise the susceptibilities of the Court of Russia. The postponement of the visit of the King of Prussia to the Emperor of the French is attributed to the desire of the Cabinet of Berlin not to offend the Emperor of Russia. The resignation of M. de Schleinitz is explained by the same reason. The character of the reception given to M. Torrearsa, the Italian Minister, in Denmark and in Sweden, is regarded as implying that the King of Sweden is looked upon as the representative of Scandinavian unity, as the King of Prussia is the representative of German unity. The Muscovite Russians, being conscious of holding possession of Scandinavian and German provinces, regard with suspicion an interview which might lead to arrangements by no means agreeable to them.

Poland.—On Thursday the 8th inst. a conflict took place at Warsaw between the people and the military, in consequence of the latter having interfered to prevent an illumination of the city. One person was wounded and several were arrested. On Friday Warsaw continued in a very disturbed state. A great concourse of people assembled in the Methstrasse, notwithstanding the request made to them to disperse. The military marched up, but were afterwards withdrawn. Great agitation prevailed. Troops and artillery were subsequently placed in all the public gardens and squares of Warsaw. On Sunday the Governor caused placards to be posted up in the city, warning the public to abstain

... making any demonstrations on the following day, ... anniversary of the former union of Poland with ..., and prohibiting, under severe penalties, all ... and the closing of shops. Notwithstanding ... prohibition the national fête was celebrated at Warsaw on Monday. The Bourse and all the counting-houses and shops were closed; the churches were filled with large congregations; and in the evening the city was illuminated. An imposing military force, with artillery, was stationed in the streets, and some arrests took place. Popular feeling at Warsaw is very much excited. The people hope that a national Polish government will soon be established. A newspaper under the title of the *Phare* has for some time past been secretly circulating in Warsaw. On Monday last an important popular demonstration took place at Lublin in Russian Poland. The military commander, however, by his energy, suppressed the conflict without any more serious consequences than that a certain number of persons were wounded. A circular has been recently distributed, warning the judges not to yield to the influence of the Government in trying the persons arrested during the late disturbances at Mödlin. It is said that M. Lambert's appointment as Governor of Poland will be cancelled, and that M. de Kisseleff will be appointed in his stead,

TURKEY.—The fall of the Minister of Finance is expected very shortly. The contemplated change in the uniform of the military officers has been ordered, and important army reforms are in progress. The arrears of the garrison of the capital are about to be paid in ... A commission has been named to reconsider the scheme for a general Kaimé circulation. In consequence of the state of things in the Herzegovina, Servia, and the Principalities, the Porte has decided to send all the available troops of the army into Roumelia. A large number of persons were present at the mass celebrated on Thursday at the French Embassy on account of the Fête Napoléon. The Sultan has given the deputation from Moldavia and Wallachia a very kind reception. The international commission has decided in favour of the Porte on the question of the settlement of the boundaries of the mouths of the Danube, pending between the Porte and Moldavia. The Turkish government is actively progressing with financial reforms, and is making preparations for the establishment of a national bank. A great fire has taken place in the Turkish quarter of the town of Smyrna. The Porte has sent assistance to the inhabitants. The cholera has broken out at Tebiemi (?).

MONTENEGRO.—The Paris papers state that the Prince of Montenegro had demanded of Omar Pasha that the Porte should recognise his independence, and the right of inheritance in his family. He also demanded the concession of a port on the Adriatic, and a fresh settlement of the frontiers. The Porte refused to accede to these demands, and had sent orders to Omar Pacha to reassume the offensive against the insurgents. The Pasha is indisposed, and is now at Mostar.

SYRIA.—The *Presse* asserts that at the end of July great agitation prevailed in Damascus and in some of the other towns of Syria. The Ulemas endeavoured to excite the people to rise against the Maronites, but the agitation ceased when the arrest of the Ulemas was ordered by Daoud Effendi.

EGYPT.—The Pasha of Egypt is following the example of the Sultan in effecting retrenchments in various branches of the administration. It appears that his Highness owes about 7,000,000*l*., and is liable for nearly 3,000,000*l*. more in connection with the Suez Canal Company, in addition to which the revenue of the country has already been anticipated to the extent of an entire quarter. Having failed in obtaining a loan from Messrs. Laffitte of Paris on satisfactory terms, the Pasha has determined to cut down all branches of expenditure, private as well as public. The army has been reduced at a few days' notice to 5000 men, and even the police constables have been disbanded in great numbers. The Viceregal household has also been subjected to retrenchment. All the horses in the Pasha's stable have been sold, except about a dozen for his own use. Even the plate from his own table has been disposed of, and the silver helmets of the Life Guards have been despatched to the Mint, to be turned into money.

ABYSSINIA.—The *Pays* of Saturday states that a new pretender disputes the throne of Abyssinia with the Emperor Theodore.

WEST COAST OF AFRICA.—Her Majesty's ship Prometheus has captured two vessels fitted for slaves in the Congo river; and a Spanish schooner—the Jacinto. The Wrangler has taken an American barque, supposed to be the Ardennes, with 495 slaves on board. The notorious slaver Storm King had come into Mango Grande with the American flag and papers, but hearing there were slaves to be had, threw her cargo overboard, shipped a large number of slaves, and got away. The steamer General Miramon (formerly the Greenock) had shipped a cargo at Kasinda in four hours, using American, Portuguese, and Spanish colours to suit the cruisers she happened to meet.

INDIA.—By the arrival of the overland mail, we have advices from Bombay to July 12, and from Calcutta to July 15. The following are the details:—

Bombay.—Rain has fallen in great abundance all over India. The present season bids fair in this respect to form a parallel to that which succeeded the famine of 1837-38. In some places the young rice plants, the sugar cane, and the indigo plants have suffered severely.

Calcutta.—A deficit of 1,400,000*l*. in the revenue is apprehended in consequence of the fall in the price of opium. The indigo plantations in the Tirhoot district are in a bad condition in consequence of the excessive fall of rain. The indigo produce in Bengal is also bad. The cotton movement in England has given rise to great exertions on the part of the officials to make India an efficient substitute for the Southern States of America. The new staff corps has been formed, but the majority of Indian officers of 25 years' standing hang back from the amalgamation till the decision as to the amount of pension to be offered for their retirement is made known. There is but little prospect of the Commander-in-Chief in India and the Head Quarters Staff of the Army leaving Calcutta for the hills this year.

Madras.—Sir William Denison returned from the district of the Godavery on the 8th July. It is reported that the Supreme Government has ordered the Godavery works to be proceeded with immediately.

North West Provinces.—The Famine Relief Committees are continuing their labours in the North-West. Nearly 10,000 people are daily fed with cooked food in Delhi alone, and fully that number in the district are relieved in the same way. About 1000 poor widows obtain weekly relief in money, at the Delhi Gate. One thousand rupees a month are distributed to families of respectability now reduced to poverty, but ashamed to be seen seeking charity. About 10,000 persons are employed daily in some kind of work by the Relief Society and government. At Agra about 2000 are daily employed on the relief works, and on the Futteghur branch of the Ganges Canal about 4000. Great and increasing distress prevails in Peshawur. Villages are depopulated. Famine is said to exist in Cabul.

Bokhara.—The King of Bokhara, worsted in an encounter with the rebels, applied to the Russians for aid, and the Russian general directed a large force to proceed to Bokhara. The opportunity has thus occurred for the active interference of the Russians in the political affairs of the states of Central Asia. Dost Mahomed has given orders to his lieutenant, Ufzul Khan, to give all possible aid to the rebels in the event of the Russians assisting the other party.

CHINA.—Accounts from Hong Kong to June 28th state that a good understanding prevails between the foreign representatives and the Chinese at Pekin. The river Yang-tse has risen above Nankin. The country about Hankow is under water, and the inhabitants are becoming alarmed. Mr. Bruce has to some extent relaxed the prohibition to visit Pekin, but how far the restriction has been taken off is not yet known. The Imperialists and rebels continue their struggles with varying results; but otherwise the political atmosphere is calm, though the Emperor still absents himself from Pekin.

AUSTRALIA.—In the colony of Victoria Mr. Heale's Ministry has been defeated, and has appealed to the country. The shipments of gold since last mail amount to 89,645 ounces. Nothing had been heard of the exploring expedition into the interior of the continent, and serious fears were entertained for the safety of the gentlemen composing it. Great floods visited New South Wales in May, but at the end of the month the waters had pretty generally subsided, after having caused very extensive disasters.

NEW ZEALAND.—The intelligence from New Zealand is most gloomy. Sedition is spreading among the natives, and it is asserted that the insurgents schemed for the temporary cessation of hostilities in order that they might gain strength by a reorganisation of their forces. A complicity has been established between the Waikatos and the Ngatiruanhia tribes, by which the former have transferred to the latter an immense amount of plunder, which they will not surrender, including a large quantity of settlers' stock, carts, farming instruments, and plunder of all descriptions. The Taranaki and Ngatiruanhia tribes are also leagued together in support of the native king movement, and they have all resolved to make no terms with the "Pakehas," the proposal being seriously debated of making, once for all, a clean sweep of the Europeans. The Governor has issued the following proclamation to the chiefs and people assembled at Ngatiruanhia:—

I can now only look with sorrow and displeasure on what has been done in the name and by the adherents of the native King. 1. An authority has been set up inconsistent with allegiance to the Queen, and in violation of the treaty of Waikangi. 2. A large number of the adherents of the native King have interfered between the governor and other native tribes in matters in which they had no concern; they have levied war against the Queen, fought against her troops, and burned and destroyed the property of peaceful subjects. 3. Other adherents of the King have assisted, encouraged, and harboured men who have committed these outrages. 4. A war party of several hundred men some time since assembled, and advanced within 40 miles of Auckland, for the purpose of interfering with the due course of administration of justice. 5. Her Majesty's mail has been stopped, jurisdiction been usurped over her Majesty's European subjects, and other offences have been committed, to the subversion of her Majesty's sovereignty, and of the authority of law; at this very time the adherents of the native King are using most strenuous efforts to possess themselves of arms and ammunition, for the purpose of effecting their objects by intimidation and violence." The governor proceeds to say that he cannot permit the present state of things to continue. No option now rests with him; he has been commanded by her Majesty the Queen to suppress unlawful combinations and to establish beyond question her Majesty's sovereignty in New Zealand. The governor states specifically what his demands are:—1. From all submission without reserve to the Queen's sovereignty and the authority of the law. 2. From those who are in possession of plunder taken from her Majesty's European or native subjects, restoration of that plunder. 3. From those who have destroyed or made away with property belonging to her Majesty's subjects, European or native, compensation for the losses sustained.

UNITED STATES.—General M'Clellan has taken command of the army in the place of General M'Dowell, and is said to be already infusing a new spirit into the disorganised corps. He is reported to have refused the command except as Dictator, stating that he must be master and have the entire control of the army, subject to no war department or superior officer. This power, it is said, has been conceded to him. In his first general order he announces the appointment of his staff, comprising, it is said, a body of excellent and efficient officers; in his second order he commands the instant return to their several camps of the officers and soldiers scattered round Washington at hotels and boarding-houses, reminding them that duty requires their presence at the head-quarters of their regiments to restore order and discipline among the men. Colonel Porter has been appointed Provost Marshal to carry out this order, and he has already begun his work by closing up the liquor saloons in the capital, around which much drunkenness and riotous conduct has existed. General M'Clellan has made a requisition on the Government for as many batteries as possible, being of the opinion that it will be an artillery war. A regiment has been sent to him to extend the line of pickets along the Potomac to Harper's Ferry, and several additional regiments have been sent to Chain Bridge, where some Secessionist engineers had been observed making observations. The Sanitary Commissioners have made their first report, stating that they found the Federal camps in a wretched condition, the troops and their clothing shamefully dirty and infested with vermin, no conveniences for washing, bathing, or cleansing, and the whole neighbourhood of the camps undrained and pestilential. Congress has passed the Tariff and Direct Tax Bills. The former increases by 10 per cent. all the duties to be levied under the Morrill Tariff, and is expected to raise 45,000,000 dols. of additional revenue. The Direct Tax, or Income Tax Bill, imposes a tax of 3 per cent. on all incomes above 800 dollars, and is expected to realise 40,000,000. Congress has also passed a Bill levying a tax upon carriages varying from 1 dollar to 50 dollars, a tax upon watches, an Excise duty of 3 c. on cocoa, 2 c. on chicory, 1 dollar 25 c. per gallon on brandy, 50 c. per gallon on other spirits, an *ad valorem* duty of 50 per cent. on wine, and a duty of 60 cents a barrel on fermented liquors. The *ad valorem* duty on silks has been raised to 40 per cent. Bills have also been passed levying a duty of 15 c. on tea, 4 c. on coffee, and 2 c. on sugar. A Bill ordering the confiscation of property used for insurrectionary purposes has likewise been passed, which, without using the word "slave" strikes a severe blow at that species of property. Apprehensions of a Confederate attack on Washington are still entertained. The Federals have evacuated Hampton, near Fort Monroe; and Governor Wise and his force have retired from Western Virginia, leaving behind them 1000 muskets and kegs of powder in the hands of the Federals. The Missouri Convention has appointed a provisional Governor and State officers. General Pillow has issued a proclamation stating that he will drive the Federals from Missouri. He has promised Governor Jackson to send 20,000 Confederates into that State. The Marshal and Police Commissioners of Baltimore have been removed as prisoners to Fort Monroe. Several European officers are said to have arrived at New York, for the purpose of offering their services to the United States Government.—A writ of habeas corpus has been taken out by the British consul in New York for the United States authorities to produce Purcell M'Quillan, a British subject from Charleston, who took his passport, issued by the British consul at Charleston, to be visèd by the Secretary of State at Washington, so that he might return to Charleston. He was, however, arrested on the 28th June, examined by a commissioner in Washington, and then, by order of Secretary Seward, sent manacled to New York. Since his arrest, however, he has had no hearing before the authorities. The military Commissioner of Fort Lafayette has refused to obey the writ, and the Judges of the United States Supreme Court have refused to order its execution on the ground that it has been disobeyed by order of General Scott—the judges, in the present condition of the country, not being inclined to urge a conflict with the civil and military authorities.—The statement that Admiral Milne had reported the blockade of the Southern ports to be ineffective is entirely without foundation.—Prince Napoleon has arrived at Washington from New York. He will make a tour through the West, and return in a few weeks to New York, where the imperial yacht will await his return.—A Federal officer who was taken prisoner at Bull's Run, and made his escape into Washington, reports that the Confederates have not less than 240,000 men in Virginia. He reports further, that there is no intention to attack Washington, and that General Beauregard is in favour of acting entirely on the defensive. He represents Fairfax as being rapidly put into a state of defence by the construction of fortifications and entrenchments. These reports have since been confirmed by other escaped prisoners, who state that General Beauregard intends to remain on the defensive, and is fortifying Fairfax. The *Montgomery Mail* asserts that the Confederate government has 250,000 soldiers, well drilled and armed, and judiciously disposed for defensive operations. As the editor of that journal is secretary of the Southern Congress, this information is supposed to be derived from official sources. The *New Orleans True Delta* incidentally states that three-fourths of the men who had left that city in defence of Southern rights are Irishmen. A correspondence between Mr. Mure, British consul at New Orleans, and Colonel Manning, aide-de-camp to the governor of Louisiana, relating to the illegal enlistment of British subjects by the Confederate recruiting parties has been published. A number of cases in which British subjects

had been improperly seized are mentioned by the consul and acknowledged on behalf of the Confederate government. Efforts appear to have been made, however, to procure the immediate release of such persons when their cases were made known. Mr. Stephens, Vice-President of the Confederate States, made a speech on the 11th ult., on the College Green in Augusta, before 3000 persons, from which the following are extracts:—

"This is a fanatical war, and whenever fanaticism gets control of reason you can make no speculations in regard to it. This is a war against reason in every sense of the term. In the first place, many of those engaged in it are engaged in a crusade nominally to ameliorate the condition of a portion of our population. They are engaged in a crusade to make things better than the Creator made them, or to make things equal which he made unequal. It is impious; in that a great deal of the fanaticism of the war springs. Were they to overrun us and drive us away, these very people would do as some are now reported to be doing in Virginia (of which I neither affirm nor deny the truth), capture the black population and send them to Cuba for sale. But there is one thing certain, that they can no more carry out their fanatical designs than they can make the Savannah run to the mountains; for the great Creator, the Ruler of the heavens and the earth, He that made man and fashioned him, made one inferior to the other, and made some to differ from others, as one star differs from others. This fanatical sentiment of the North will no more make the negro equal to the white man than it will make the leopard change his spots or the Ethiopian his skin. It is a war against the interest of those who wage it; and of all the people who will suffer by it the New England States will suffer the most. We wished to continue to trade with them, but they would not perform their part of the compact, and I cannot account for it except on the old Roman maxim, that 'him whom the gods want to destroy they first make mad.' This is a war against the principles which their fathers and our fathers fought for, that every state government derives its power from the consent of the governed. These were the principles of Hancock, Jackson, Madison, Randolph, Pinckney, and others. The enemy rely upon numbers, and they have got them; we rely upon the justice of our cause, upon the valour of our men, fighting for their homes, fireside, children, and everything dear to them; and in such a cause we have no doubt the God of Battles will smile upon us."

CANADA.—The Canadian crops are reported to be satisfactory.

WEST INDIES.—A report was received on Monday by way of New York, stating that Antigua had been destroyed by an earthquake, with the loss of 2000 lives. The Atrato has since arrived with advices from Antigua to the 27th ult., but they do not contain the slightest mention of any catastrophe of the sort.

City Intelligence.

BANK RATE OF DISCOUNT.—The Bank of England on Thursday reduced their rate of discount from 5 per cent., at which it was fixed on the 2d inst., to $4\frac{1}{2}$ per cent

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at $90\frac{1}{2}$ to $\frac{5}{8}$ for Money, and $90\frac{3}{4}$ to $\frac{7}{8}$ for the 10th Sept.; Bank Stock, 233 to 235; Three per Cents. Reduced, $90\frac{5}{8}$; New Three per Cents., $90\frac{1}{2}$ to $\frac{5}{8}$; India Five per Cent. Stock, $100\frac{5}{8}$ to $\frac{3}{4}$; Ditto for Acct., $100\frac{7}{8}$; Ditto Four per Cent. Debentures, 1863, $96\frac{5}{8}$; Five per Cent. Enfaced Rupee Paper, $94\frac{3}{4}$; Ditto Five and a Half per Cent., $101\frac{3}{4}$; Exchequer Bills, March, 14*s.* to 8*s.* dis.; Ditto June, 2*s.* to 3*s.* dis.—FOREIGN: Brazilian Old Five per Cents., 99; Ditto Four and a Half per Cents., 1852, 88; Equador New Consolidated, $13\frac{1}{4}$; French Four and a Half per Cent. Rentes, 95fr. 50c.; Ditto Three per Cent. Rentes, 67f.; Peruvian Four and a Half per Cents., $98\frac{1}{2}$; Ditto Three per Cents., $75\frac{1}{8}$; Spanish Passive, 16; Turkish Six per Cents., 1854, $77\frac{5}{8}$; Ditto for Acct., 78; Ditto, 1858, for Acct., $68\frac{3}{4}$ to $\frac{1}{4}$; Ditto 100*l.* Bonds, $69\frac{1}{2}$; Ditto Guaranteed Four per Cents., $100\frac{1}{8}$ to 100 ex div.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£26,391,980	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion ..	11,741,980
		Silver Bullion	—
	£26,391,980		£26,391,980

BANKING DEPARTMENT.

Proprietors' Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£10,(00 800
Rest	3,528,877	Other Securities	17,632,471
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	3,926,855	Notes	6,788,460
Other Deposits..	12,092,801	Gold and Silver Coin ..	905,678
Seven day and other bills	725,776		
	£34,827,409		£34,827,409

14th day of August, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY—BANKRUPTS—E. H. COGSWELL and G. DAY, Peterborough, Builders—S. HORSWELL, Padstow, Cornwall, Draper—C. HUMFREY and C. HUMFREY the younger, Great Suffolk Street, Southwark, Oil Refiners—C. MOODY, Queen Street, Portsea, Edge Tool Manufacturer—C. F. ROBINSON, Sussex Street, Warwick Square, Pimlico, Boarding House Keeper—T. WILLS, Newtown, Brewer.

SCOTCH SEQUESTRATIONS—J. COCKBURN and SON, Eyemouth, Merchants; and D. COCKBURN, Burnmouth, at the White Swan Hotel, Dunse, Merchant—J. CORMIE, Burghead, at the Gordon Arms Hotel, Elgin, Sailor and Fisherman—W. LONGWILL, Nether Meadow, Dalry, Farmer, at the Black Bull Inn, Kilmarnock.

FRIDAY—BANKRUPTS—T. BELL and J. WISEMAN, Sunderland, Grocers and Provision Merchants—C. BRITTAIN, Dacre Hill, Bebington, Cheshire, Builder and Brick Maker—J. E. ELFORD, Cumberland Place, Bayswater, Grocer—W. J. EPPS, Maidstone, Kent, Nursery Seedsman and Hotel Keeper—R. GRIFFITHS, Llantrissant, Glamorganshire, Innkeeper—J. HAMMERTON, Dam Head Mill, Shibden, Yorkshire, Worsted Manufacturer—H. A. HOPE, West Smithfield, City, and Oxford Road, Downham Road, Islington, Hay and Straw Salesman and Dealer—J. MILHENCH, F. WROE, B. TAYLOR, and J. HOPKIN, Oldham, Lancashire, Cotton Spinners—G. SCRIVENER, Wigan, Lancashire, Provision Dealer—E. SIMONS, Newgate Street, City, and Birmingham, Lamp Dealer and Italian Warehouseman—E. H. SPARK, formerly of Houndsditch, but now of Great Coram Street, Russell Square, Wholesale Jeweller—D. TERRY, Dover, Smith and Engineer—E. WEVILL, Liverpool, Broker and Commission and Insurance Agent—J. C. B. WILD, St. Mary Axe, City, Licensed Victualler.

BANKRUPTCY ANNULLED—W. P. WALTON, Kingston-upon-Hull, Corn and Seed Merchant.

Metropolis and its Vicinity.

THE GREAT EXHIBITION OF 1862.—The Exhibition building at South Kensington is advancing with great rapidity, and every day adds visibly to its growth. Of the thousands of columns, girders, brackets, and railings of cast iron, nearly one-fourth are already actually in their places. The remainder are rapidly arriving, and all are to be delivered on the ground before the 30th of September, at which time the delivery of the iron-work for the Exhibition of 1851 was only just commencing. In all about 4000 tons of cast iron will be required. Mr. Barrow, of Staveley, has been intrusted with this portion of the works, and has been enabled to complete all these castings of first-rate quality in an exceedingly short time. The columns are of unusual size and strength. There are 1100 of them, and if laid end to end they would reach from South Kensington to the Crystal Palace at Norwood. Early in October the Picture Gallery will be roofed in, so that the walls will have ample time to dry before the grand opening on Thursday, the 1st of May next. By the 12th of February the building will be completed and formally handed over to the Royal Commissioners, when the event will be duly celebrated by the contractors, Messrs. Kelk and Lucas, with a fête in the centre nave. After the 30th of next month no further applications for space will be received by the Commissioners, from whatever quarter they may come. In the Exhibition of 1851 the classes of exhibitors were arranged under the heads of animal, mineral, and vegetable manufactures, &c. The same rule was followed at Paris in 1855, and led to numerous mistakes, to avoid which the classes of next year's Exhibition will be arranged under *trades*, irrespective of the materials used in manufacture. Her Majesty's Commissioners have requested the following gentlemen to act as a committee in connection with the class of mining, quarrying, metallurgy, and mineral products:—Sir R. Murchison, D.C.L., F.R.S.; Prof. Warrington Smyth, F.R.S.; Prof. Percy, M.D., F.R.S.; Prof. Ramsay, F.R.S.; Prof. Maskelyne, F.R.S.; Hussey Vivian, Esq., M.P.; Samuel Blackwell, Esq.; Nicholas Wood, Esq.; Thomas Sopwith, Esq., F.R.S.; R. B. Grantham, Esq.; and J. Rawson Barker, Esq. The following general announcement relative to the catalogues in connection with the forthcoming Exhibition has been officially published:—"Her Majesty's Commissioners intend to issue three catalogues; two relating to the Industrial Sections of the Exhibition, and one to the Fine Arts Section. Advertisements as well from exhibitors as from the general public will be received for all three catalogues. The catalogues which have reference to the industrial sections will be called respectively 'The Industrial Catalogue,' and 'The Illustrated Catalogue;' the third will be 'The Fine Arts Catalogue.' All matter which is intended for insertion in the body of the catalogues must be sent in to the Secretary of her Majesty's Commissioners, F. R. Sandford, Esq., 454, West Strand, before the 1st of February, 1862, after which date no alterations or fresh insertions can be guaranteed. Advertisements will be admitted if received before the 1st of March; the rate of charge will be doubled between the 1st of March and the 1st of April, after which day no further advertisements will be received for the first editions. The insertion of all advertisements is subject to the approval of her Majesty's Commissioners. All communications relating to the catalogues should be addressed to the secretary, and be legibly endorsed on the outside of the envelope, 'Catalogues.' 'The Industrial Catalogue' will be a list containing the name and address of each exhibitor, and a very brief description of his goods. It will be in one volume demy 8vo, will be sold for one shilling (in the Exhibition building), and will be produced wholly at the cost of her Majesty's Commissioners. 'The Fine Arts Catalogue' will be the same as the Industrial Catalogue in size of page, print, and price, and will also be produced at the cost of her Majesty's Commissioners. 'Advertisements' will be inserted in double columns, printed in ruby type, in both these catalogues, of each of which her Majesty's Commissioners guarantee an issue of 250,000 copies. 'The Illustrated Catalogue' will be an extended form of the (Shilling) Industrial Catalogue, containing in addition matter which especially affects the interests of the exhibitors. It will be printed in super-royal 8vo, so that it may range with the catalogues of 1851 and 1855, and will be published in parts. The name, address, and business of every exhibitor will be printed in large type (small pica), with a brief general description of the objects exhibited by each. The printing and paper of this portion will be provided at the cost of her Majesty's Commissioners. One or more classes will form a part, and each part will be sold for one shilling (in the building). Editions of 10,000 of each part will be printed off from time to time. The exhibitors may insert any minute descriptions of the articles they exhibit, with prices or otherwise as they may think fit, also a notice if they have obtained medals at previous exhibitions, at a fixed tariff of charges. Exhibitors who wish to illustrate their descriptions must provide their own woodcuts or engravings, which will be inserted on the conditions that they do not extend beyond [illegible] scribed margins, and are first approved by [illegible] missioners."

SALE OF THE SULTAN'S JEWELS.—A valuable [illegible] blage of mounted jewels, in various ornaments, [illegible] stantinople, the property of the late Sultan, [illegible] sold by public auction by Messrs. Blogg & [illegible] Bucklersbury. These jewels comprised a [illegible] of necklaces, ear-rings, bracelets, brooches, [illegible] and head-dresses, many of them of great [illegible] and splendour, and of exquisite designs, [illegible] wreaths and groups of flowers, of natural [illegible] entirely of fine brilliants and rose diamonds, [illegible] some cases surmounted with diamond birds; [illegible] tion boxes of gold, beautifully enamelled, and [illegible] with brilliants and rose diamonds, in clusters [illegible] and other designs; watches and châtelaines, [illegible] to the eye masses of diamonds of the greatest [illegible] beauty; the whole forming a more splendid [illegible] of jewels than has ever before been offered [illegible] competition. The sale lasted two days, and [illegible] 137 lots. The first day's sale realised 876[illegible] second day's sale 10,880*l.*, making a total of [illegible]

ARRIVAL OF THE GREAT EASTERN.—The [illegible] Eastern arrived at her moorings in the Mersey [illegible] on Thursday evening. She left Quebec at 4 [illegible] the morning of the 6th inst., and was detained [illegible] 12 hours crossing the bars in the river St. Lawrence. She had 366 passengers—241 cabin and 125 [illegible]

THE EXPERIMENTS AT SHOEBURYNESS.—[illegible] stated last week that the Admiralty had determined [illegible] ascertain the exact amount of resistance [illegible] broadside of the Warrior will offer to 68 [illegible] pounders. The experiments at Shoeburyness [illegible] hitherto been almost exclusively conducted [illegible] fancy targets, which are not likely to be used [illegible] ship's side; but it is now intended to try the [illegible] shot and shell on a broadside manufactured [illegible] Warrior. For this purpose the Thames Iron [illegible] are building a target 20 feet long by 10 high, [illegible] port-hole in the centre, of precisely the same [illegible] tion of plates, teak, and all other materials [illegible] Warrior itself. This will be sent to Shoeburyness [illegible] the course of five or six weeks, and will then be [illegible] at till destroyed, when the country and the Government will know exactly how much or how [illegible] present class of iron ships can be depended on.

LAMBETH BRIDGE.—The report of the directors [illegible] this bridge states that the working plans have been approved by the Admiralty and the Conservators of the Thames, and that the deposit required by the Act to insure the completion of the work has been paid. Contracts with Messrs. Newall & Co. for the cables, and with Messrs. Porter & Co. for the [illegible] works, have been duly signed, at prices [illegible] complete the works for less than 28,000[illegible] tractors taking payment of 12,000*l.* of this [illegible] paid-up shares. Arrangements have also been made for the purchase of nearly the whole of the [illegible] required. The directors state that the capital of [illegible] will be more than sufficient to meet every [illegible] and express their hope that the bridge will be [illegible] sufficiently early in 1862 to benefit by the traffic [illegible] International Exhibition. The report of Mr. B[illegible] the engineer, states that the bridge will have [illegible] equal spans of wire cables, made with [illegible] each span being 280 feet in the clear, supporting [illegible] wrought iron platform, with rigid lattice sides, [illegible] to a girder. The river piers will consist each [illegible] cast iron cylinders 12 feet in diameter, driven [illegible] into the bed of the river, and filled with concrete [illegible] brickwork. The bridge will have a double carriage [illegible] and two foot ways, the total width being 32 feet.

THE OUTRAM TESTIMONIAL.—A sum of nearly [illegible] has been subscribed towards a testimonial in recognition of the great public services and eminent character of Sir James Outram. The accounts are to be [illegible] forthwith, and the form of memorial finally decided upon.

INDIAN FAMINE RELIEF FUND.—On Saturday evening an additional sum of 1000*l.* was sent by the Calcutta mail from the Mansion House to the [illegible] committee in that city. This makes the total sum transmitted to India by the central committee in London 107,500*l.* exclusive of the large contributions amounting to nearly 50,000*l.*, which have been sent direct from Liverpool, Dublin, Manchester, [illegible] and Glasgow. Since the subject was last [illegible] tional sums, amounting in the whole to 213[illegible] have been received at the Mansion House, [illegible] 412*l.* from Oldham, 834*l.* from British Guiana, [illegible] from Paris, 23*l.* from Geneva, 23*l.* from Malaga, [illegible] 448*l.* from Rio de Janeiro.

UNION OF CITY BENEFICES.—A special Court [illegible] Common Council was held a few days since at Guildhall, for the purpose of fixing the City's seal to certain revised commissions for the union of benefices within the city. The Lord Mayor, on taking the chair, said that in March last the Bishop of London issued commissions for the union of 21 benefices in the City. Two or three meetings had been held weekly at the Mansion House, and the work was proceeding in a satisfactory manner, that there were already 13 groups ripe for reporting favourably upon. With regard to the five, however, there were certain difficulties in the way, and the Bishop had been recommended to issue fresh commissions for these unions, which were as follows, viz.— The perpetual curacy of Allhallows Staining, and the

... St. Catherine Coleman; the perpetual curacy ... St. Catherine Cree, and the donative perpetual ... of St. James, Duke's Place; the rectory of St. ... Backchurch, and the rectory of St. Margaret ... with St. Gabriel Fenchurch; the rectory of St. ... Botolph Lane, with St. Botolph, Billingsgate, ... the rectory of St. Mary-at-Hill, with St. Andrew ...; the rectory of Allhallows, Lombard Street, ... the rectory of St. Benet, Gracechurch Street, ... St. Leonard's, Eastcheap. The corporate seal was ... affixed to these commissions.

Widening of Great Turnstile, Holborn.—At ... last meeting of the Metropolitan Board of Works a ... was brought up from the superintendent-... architect, proposing, for the accomplishment of this ..., that the whole of the houses on the west side ... Great Turnstile, and two printing warehouses in Tichborne Court, should be removed. The width of the new street would be 47 feet 6 inches at the northern end, gradually increasing to 50 feet in the centre. He also stated that on the west side of the new street, and south end of the Robin Hood public-house, there will ... a piece of building land with a frontage of 80 feet, and an average depth of 36 feet, which he proposed to ... into plots for five houses for a set of offices, ... for solicitors and barristers. He considered ... the cost, together with the expense of forming ... carriage and footways, and lamps, would be 28,080*l.*, including the return which might be obtained from the sale of vacant building ground and old materials. He further considered that a more complete improvement would be effected by clearing away the five houses and two shops on the west side of Newman's Row, by doing which the width of the new street would be equal along its whole length. The report and plan were referred to the Works and Improvements Committee for consideration.

The Braidwood Testimonial.—In consideration of the Insurance Offices having made the handsome donation of 7000*l.* to the widow of Mr. Braidwood, and ... the property left by him having been sworn ... 5000*l.*, the public subscription which was opened for the benefit of his widow and children has been suspended, and it is to be hereafter decided whether the ... which has been subscribed shall be given to his ... sisters or returned to the subscribers.

The Coinage.—In the New Coinage Act, which will take effect on 1st November, there is a clause making it a misdemeanour to deface coin by stamping words thereon, under which an offender can be kept at hard labour for one year. Further, it is declared that the ... of coin so defaced is not a legal tender, and a penalty of 40*s.* can be recovered on conviction of any ... uttering the same. The prosecution is to be with the consent of the Attorney-General.

The Merchant Service.—It appears from an official return, that in the year 1860 there were ...119 British vessels, exclusive of river steamers, employed in our home and foreign trade, the aggregate tonnage of which was 4,251,739. They were manned by 191,888 persons. The masters were 20,296 in number; the mates, 21,069; petty officers, 13,264; A. B. seamen, 62,787; O. S. seamen, 17,514; apprentices and boys, 23,041.

M. Blondin, who during the last ten days has ...fully fulfilled engagements at Nottingham, Manchester, Cambridge, Oxford, Norwich, Bristol, ..., Liverpool, and Selby, made his 17th ascent on Monday at the Crystal Palace, when, in addition to his ... on the long rope over the fountains, he repeated ... performances on the slack rope suspended in mid .... This was his last ascent at the Palace for some ..., as he left town on Tuesday to fulfil engagements in Ireland and Scotland.

The Female Blondin.—Considerable excitement ... on Monday afternoon in the vicinity of Cremorne Gardens on account of the announcement ... a lady calling herself the "Female Blondin" was ... to cross the river on a tightrope extending from the gardens to a wharf at Battersea. Through some ... in the guide-ropes, the feat was not completely accomplished, and when the lady, who had started from Battersea, had performed about four-fifths of her perilous journey, she was compelled to sit down, and to lower herself into a boat. The courage displayed under these trying circumstances created almost ... greater amount of admiration than would have been ... had she walked all the way from Battersea to Cremorne, and of her ability to perform the feat there ... the slightest doubt. Both sides of the river ... densely thronged, and, though the performance ... at half-past 7, the roads leading to Cremorne ... scarcely passable at 9 o'clock on account of the ... crowds. The experiment will be repeated Monday next and the four following Mondays, when ... E. T. Smith will give as many special fêtes.

Bank Robbery.—Serjeant Spittal, of the City of ... detective force (who recently effected a clever ... of an absconded bankrupt in South Africa), has ... selected by the Prussian Government to investigate an important bank robbery which has just been committed at Dusseldorf. A confidential porter of a ... of the Bank of Prussia in that town, having ... sent to the post-office for a parcel of bank-notes, ...ed, and is believed to be at present in London. ... name of the delinquent is John William Rishnow, ... the value of the notes is 16,000*l.* A reward of ... dollars has been offered for his apprehension.

Fatal Occurrence at Notting Hill.—Mr. Charles Routledge, residing at 13, Elgin Crescent, Notting Hill, was brought before the magistrate at Hammersmith Police Court on Monday, charged with causing the death of his son, a lad 17 years of age. The evidence in support of the charge showed that on Saturday night, in his own house, the prisoner had a quarrel with his son, which terminated in a scuffle, when the son was seized with a fit and almost immediately expired. Mr. Routledge was remanded till Wednesday, and bail accepted for his appearance. On Tuesday a coroner's inquest was held, when a surgeon deposed that he had examined the body of the deceased, and could find no external marks of violence, but there was a thickening of the left ventricle of the heart, and the brain had the appearance of congestion, and he was of opinion that deceased died from congestion of the brain, which as he was subject to fits might have been brought on by excitement. The jury on this evidence returned a verdict of death by apoplexy. On Wednesday Mr. Routledge was again brought before the magistrate, when the surgeon repeated the evidence given before the jury, and stated his opinion that death was caused from excitement, and not from violence. The magistrate under these circumstances ordered the prisoner to be discharged.

The Public Health.—The Registrar-General's Weekly Return states that the deaths in London in the week ending Saturday, the 10th of August, were 1172. The average number in the corresponding weeks of the 10 years 1851-60, excluding the deaths from the cholera of 1854, and allowing for increase of population, was 1232. The present return is therefore 60 below the average. During the week the births of 881 boys and 878 girls, in all 1759 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1577.

Provincial.

Beaconsfield.—Mr. Frederick Charsley, of Great Missenden, a solicitor, and one of the coroners for the county of Bucks, went on the 4th inst. to the White Hart Inn at Beaconsfield, where there were at the time several labouring men, and offered to give any person half-a-crown who would remove the wire of the telegraphic post erected in the public highway opposite to the inn by the United Kingdom Electric Telegraph Company. As they would not do so for the sum offered, he said he would give 10*s.* 6*d.* to any one who would fetch an axe and saw and cut down the post. The post was accordingly cut down, and the effect was that all communication was interrupted. On Monday last a Petty Session was held at Beaconsfield for the trial of the labourers who had cut down the post, and of Mr. Charsley, who was charged with aiding and abetting them. For the latter it was maintained that the post was a dangerous nuisance, and that he had a right to remove it as such. The magistrates, after hearing the evidence on both sides, were of opinion that there was not sufficient danger caused by the post to justify its being removed as a nuisance, instead of waiting until the next assizes to get rid of it by indictment. The prosecutors having stated that they wished a nominal verdict merely, the defendants were convicted in the penalty of 1*s.*, and ordered to pay the damage, estimated at 5*l.*, and the costs, amounting to 2*l.* 3*s.*

Bishop Stortford.—At the last meeting of the County Court in this town, a tallyman named Carruthers brought several actions against labourers for arrears of debts. In reply to an inquiry by the judge, he admitted that in the course of the past year he had taken out hundreds of summonses, while his cousin had no less than 150 cases at one sitting of the court at Hertford. In commenting upon the numerous actions brought by tallymen, the Judge stated that at his last court at Sudbury there were 13 cases, and "the aggregate sum of the whole amount sued for was 1*l.* 3*s.*; and as the creditor in these cases has the power of throwing the legal expenses for the recovery of the debts on the state, these summonses cost the country no less a sum than 3*l.* 9*s.*!" The judge denounced this as a "profligate expenditure" of the money of the country; and said that "this system of giving credit to poor creatures like those brought before him demanded serious inquiry, in order that it might be remedied."

Cambridge.—The execution of Augustus Hilton, the farmer, who pleaded guilty at the recent assizes of murdering his wife at Parson Drove, a village near Wisbech, by cutting her throat, took place on Saturday in front of the county gaol, in the presence of many thousand persons, including many women and children. The convict met his fate with fortitude and resignation, and from the time of the murder expressed great penitence and a desire to die.—About six years ago a Mr. Howard, residing at Hawxton, in this county, was robbed of 850*l.* in gold. He was at the time so severely injured by a severe beating with a bludgeon that his life was for some days despaired of. The perpetrators of the outrage were discovered, and two of them were transported. A part of the money was also recovered, and 100*l.* of it restored to Mr. Howard. He was advised to deposit the sum in a place of safety, but instead of doing so he put it with some other funds in the very chest from which the 850*l.* had been taken. He is 78 years of age, and as he is bedridden he had the chest placed at his bedside, and kept the key in the pocket of his trousers, which were generally put under his pillow. The only person living in the house with him was his housekeeper, Jane Groom, a middle-aged woman, of dashing appearance, whom he had engaged on the recommendation of a relative who had met her accidentally in a public-house. Some time ago Mr. Howard counted over his money, with the assistance of Groom, when 100 sovereigns were put back into the chest, the key being restored to its place under the pillow. At the end of last month the housekeeper left without having given any notice. It was then found that Mr. Howard's pockets had been emptied of the money they contained, and the chest robbed of its contents. Mrs. Groom was apprehended after a sharp chase at Balsham, where she had a clarence in waiting, hired for the day at an expense of 15*s.* It has been ascertained that she was previously known as Mrs. Harrington, and that she suffered imprisonment in Bury Gaol for robbing a clergyman, to whom she was housekeeper in Suffolk. On Monday the deposition of Mr. Howard was taken, the allegation being made in cross-examination by the prisoner's counsel that the relations or visitors of Mr. Howard have robbed him. The prisoner was remanded for a week.

Derby.—The execution of George Smith for the murder of his father at Ilkeston took place yesterday in front of the county gaol, in the presence of a large number of persons, the greater part of whom were women. The culprit had previously made a full confession of his guilt.

Erith.—The Archbishop of Canterbury consecrated the Church of All Saints, Erith, a few days since under peculiar circumstances, several dissenting ministers having been connected with the performance of the ceremony. The Belvidere estate, on which the church has been erected, belongs to Sir Culling Eardley, Bart. The church itself was erected as a dissenting meeting-house, and during the time of the Great Exhibition sermons were preached there by the Rev. Adolphe Monod, the Rev. Dr. Krummacher, the Rev. Thomas Binney, and other gentlemen. In May, 1856, the building became connected with the Church of England, and the Rev. J. H. Bernau, formerly a missionary in connection with the Church Missionary Society, was appointed its minister. Lately it has been made over to the Earl of Shaftesbury, president of the British and Foreign Bible Society, the Earl of Chichester, president of the Church Missionary Society, and Sir Culling Eardley, chairman of the Evangelical Alliance; with whom the patronage will henceforth rest. Under these circumstances the archbishop undertook to consecrate the church. Among those present at the ceremony were Lord Cranworth, the Dean of Canterbury, the Rev. Prebendary Burgess, the Rev. Thos. Binney (Independent), the Rev. W. M. Bunting (Wesleyan), the Rev. C. Money, M.A., incumbent of St. John's, Deptford; the Rev. W. H. Fremantle, chaplain to the Bishop of London; the Rev. S. March (Independent), the Rev. Mesac Thomas, and several other clergymen and dissenting ministers. The consecration service having been performed, a sermon was preached by the Dean of Canterbury. A dinner party afterwards took place, at which Sir Culling Eardley, who presided, proposed "The Health of his guest, the Archbishop of Canterbury," and expressed his hope that the interests of the Church of England would always be under a presidency animated by the Christian spirit which marked his Grace in all the duties of his responsible position, a desire in which he felt assured not only members of the Church of England but his Nonconformist brethren would unite. His Grace having replied, other toasts were given, among them being that of the Rev. T. Binney, the Independent Minister, who, in acknowledging the compliment, expressed the gratification he had derived from being present at the solemnity of the morning, and said that he had been deeply impressed with the great simplicity and beauty of certain portions of the prayers in the consecration service. There was, he said, nothing in those prayers which could give offence to any individual. His feeling with respect to the Liturgy was well known; he seldom attended Church without a deep feeling which often found its expression in tears.

Frome.—A dreadful murder was committed at a short distance from this town on Saturday last. Three labourers, who were on their return home from an engagement as reapers at Warminster, had a quarrel about the division of the money they had made. One of them, Byard Greenland, drew his knife and stabbed one of his companions, a distant relative called Uriah Greenland. The third labourer went to the assistance of the fallen man, and having placed him against the bank on the road-side, returned to Frome and procured the assistance of a surgeon, who, on his arrival at the scene of the attack, found the unfortunate man quite dead. The prisoner has a wife and eight children, while the deceased had one child, and his widow is in expectation of being soon confined. The prisoner was taken before a bench of magistrates on Monday, and remanded till Saturday. Meanwhile the coroner's jury have returned a verdict of Wilful Murder against him.

Grimsby.—An extraordinary attempt at parricide formed the subject of magisterial investigation in this town on the 8th inst. A young shoemaker, named Benjamin Betts, living with his father, John Betts, the sexton of the parish, having received some religious "impression," laboured under a high state of excitement, betraying evident symptoms of insanity. A few

nights ago he told his father that he would not sleep in the same chamber with Hollingshead, a lodger, for he was a "fiend," but would sleep with him, to which the father assented, and about 11 o'clock the son retired to his father's chamber, leaving the latter up reading. At 1 o'clock the son came down stairs and said he was hungry. After eating something they both went to bed, the son taking with him two of his shoemaker's knives. After a short time the son got out of bed, locked the chamber door, and returned to bed. He afterwards got out twice, and on getting into bed the last time, he attacked the old man with one of the knives. A struggle ensued, in which both fell out of bed, and the struggle continued on the floor, the son making the stabs at random. The father at last obtained possession of the knife, and ran to a neighbour for assistance. The room presented the appearance of a slaughter-house, and the old man was covered with blood, which was running down from several severe wounds in his side and legs. Seeing that he was fainting from loss of blood, the neighbour asked for some brandy, which the son, who had come down stairs, obtained, and gave to his father, showing every anxiety to render him assistance. A surgeon who was called in found several stabs in the side, which, taking an oblique direction along the ribs, were not of a dangerous character, and also several stabs in the thighs and legs. The old man is in a very weak condition, but is progressing favourably. The son, while attending to his father, said that he had let the devil out of him, and if he had not done so he would have gone to hell, but if he had only killed that "fiend," pointing to the cat, he would have been saved. He was shortly afterwards taken into custody, and on being locked up he commenced whistling and singing hymns. He was remanded for a few days.

HULL.—Mr. Travis, the stipendiary magistrate with the concurrence of Capt. Harris, the Nautical Assessor, having reported to the Board of Trade that the fine steamship Baltic was lost in open day through the default of the master, Captain Buchanan, who had left the ship in charge of a common seaman in a well known dangerous locality, called Nickman's Ground, in the Baltic, the Board of Trade have cancelled the master's certificate without naming any time at which application may be made for its return.—The screw steamer Z. C. Pearson has been lost on her voyage from Riga to Hull by collision with another vessel, and it is feared that 27 persons have perished with her. This is the third steamer belonging to the firm of Pearson & Co. that has been lost since November last, and the eighth Hull steamer which has been lost since that time, with not less than 100 lives.

NARBERTH.—A singular case has recently been heard in the Court of Arches, before Dr. Lushington, the dean, in which the Bishop of St. David's was the plaintiff and the Baron de Rutzen the defendant. The suit was instituted by the bishop against Baron de Rutzen, of Slebeck Park, near Narberth, Pembrokeshire, for having, in 1844, desecrated the parish church of Minwere, by causing it to be unroofed and portions of the fabric to be taken down and removed, and by applying to profane uses the materials of the fabric and the fittings and ornaments without lawful authority. The baron was a Russian by birth, and his late wife had owned the greater part of Minwere parish. He was charged with having, in 1844, ordered his gardener, John Lewis, and others, to unroof and dismantle the church, and in accordance with that order it was alleged that the roof had been taken off, the bell removed to another parish, the freestone window frames removed, the floor taken up, and all the pews, ornaments, and fittings stripped from it. It was further alleged that the freestone window frames had been put up in a lodge at the entrance of the grounds attached to Slebeck Hall, that the tiles taken from the floor had been used to repair flues and hothouses, that the communion table and the font had been placed in a house attached to a farm belonging to the baron, and that the font had been used as a trough for pigs. In consequence of this proceeding there had been no public baptism in the parish for many years, the incumbent being compelled to baptise in private houses. It was charged against the baron that he had failed to erect a new church as he had promised to do, and which was more than ever required, as part of the church of the adjacent parish of Newton, also belonging to the baron, had been blown down, and the remainder used as a cow-house. The answer of the baron to these charges was that his late wife was the tenant for life of the Slebeck estates, and also of the three perpetual curacies of Newton, Slebeck, and Minwere; that subsequently to an order in council of 1844, whereby those perpetual curacies were united into one benefice, he had ordered John Lewis, his gardener, to remove a portion of the roof of Minwere Church, the roof being then in a dilapidated and dangerous state, by reason whereof Divine service had not been performed in the church for two years previously; that he had not ordered that the church should be pulled to pieces or dismantled, or that the fittings and ornaments should be removed; but subsequently to the union of the three parishes he and the baroness, with the tacit assent of the inhabitants of Minwere parish, in number about 46, determined that the new Slebeck Church, which was consecrated by the Bishop of St. David's in 1848, should for the benefit and convenience of all concerned be the only church for the inhabitants of the united parishes, and that since the consecration of the new church the parishioners of Minwere had had convenient sittings and accommodation therein. The baron also denied that any of the materials of the old church had been applied to the profane purposes mentioned with his knowledge or sanction. In delivering judgment, Dr. Lushington said it was clear to him that the Baron de Rutzen had removed the church without lawful authority of any kind, and had thus for many years past deprived the parishioners of the opportunity of public worship. He censured the archdeacon on account of his having made no personal visitation of the parish, and the incumbent for having so long maintained silence instead of reporting the state of the parish to the bishop. The order of the Court would be that the Baron de Rutzen be ordered at his own cost, within six months, to rebuild, restore, and re-instate the parish church of Minwere, with its fittings and ornaments, and that he be condemned in the costs of the proceedings.

NEWCASTLE-ON-TYNE.—A young man called William Atkinson shot his brother dead in the village of Dewley, about seven miles from this town, on Saturday last. The facts of the case are very painful. The father of the brothers is bordering upon extreme old age. He has occupied a cottage and about 5 acres of land, under the Duke of Northumberland at Dewley on the edge of Throckley Fell, above 38 years; and at the time of the tragedy there were living with him, in one room, the deceased, his wife, and three young children, and the elder son William, who has been an invalid for 12 months, and is apparently dying of consumption. William has the character of being a steady and industrious man. The deceased was a powerful man, of violent temper, especially when in drink, and of a somewhat disreputable character. He was a small horse-jobber, cadging on with old cart-horses at fairs and markets, and very often in the hands of the police for drunkenness. On Saturday last he came to this town to sell potatoes, and, after purchasing some meal, returned home drunk about 7 o'clock at night. When he reached home he found his brother William sitting near the fire, and without a word of provocation went up to him and struck him a violent blow on the head, and then with his fist knocked the poor invalid off his chair. He then went towards the door apparently to go out of the cottage, when William got up from the floor and seized a loaded gun which hung on the rafters. His brother turned towards him on the threshold of the door, when he discharged the contents of the gun into his breast, and he fell dead. The fratricide is suffering great remorse, and from the condition he is in it is not probable that he will survive to take his trial at the winter assizes. He is at present in the custody of the county magistrates, but in the meantime the coroner's jury have returned a verdict of Manslaughter against him.

NOTTINGHAM.—On the 7th inst. a young man named Francis Fretwell was brought before the sitting magistrates at the Shire Hall, charged with the wilful murder of Elizabeth Bradley, at the village of Bilborough, in this county. From the evidence it appeared that the prisoner and deceased were servants to neighbouring farmers and resided in the same parish. An intimacy commenced between them, which resulted in the woman becoming *enceinte*, and to avoid exposure he gave her some corrosive sublimate for the purpose of procuring abortion. Immediately after she had swallowed the poison she was seized with violent fits of vomiting and convulsions, and a few days afterwards she expired. A *post mortem* examination proved that death had ensued from irritant poison. The prisoner reserved his defence, and was committed for trial at the next assizes on the capital charge.

SOUTHAMPTON.—The Archduke Maximilian, Lord High Admiral of Austria, accompanied by the Archduchess, who is a daughter of King Leopold of Belgium, paid an official visit to this town on Wednesday, and experienced a most cordial reception from all classes of the inhabitants. On their arrival by special train from London, their Imperial Highnesses were received by the Mayor and Corporation, who presented an address to the Archduke congratulating him on his visit to her Majesty, and expressing a hope that the commercial relations of England and Austria will be largely extended for the permanent benefit of both countries. The Archduke replied in English as follows:—

"Mr. Mayor and Gentlemen,—I thank you cordially for the flattering words in which you have been pleased to address me; but, above all, I thank you for the way in which you have welcomed me, associating me, as you have done, with your own beloved and honoured Queen. It has, indeed, been a source of boundless gratification to the Archduchess and myself to feel that close ties of relationship unite us to a Sovereign more exalted even by her own private virtues than by the almost unexampled greatness of the nation over whom she reigns. I rejoice, too, that in me you should do honour to that noble profession to which England owes so much glory. I am proud, very proud, of being a sailor, and the object of my utmost ambition and constant efforts will be to contribute as much as in me lies to the development and prosperity of the Austrian navy. My country is now a constitutional one like your own, and as it is full of aptitudes for freedom, and as it in many respects resembles England more than any other European land, I live in the conviction that each day will see stronger sympathies spring up between Great Britain and Austria, and that therefore the two empires will be politically and commercially drawn towards each other. It is always with the most heartfelt delight that I revisit England, for no one admires more sincerely than I do her greatness and its causes, and nothing could afford me more genuine satisfaction than the warm greeting that I have this day received from the representatives of so important a community as Southampton."

Loud cheers followed the delivery of the Archduke's speech, and the Imperial party, accompanied [illegible] Mayor and other officials, immediately [illegible] riages which were in waiting, and proceeded [illegible] docks, where they visited the principal [illegible] steamships of the great mercantile [illegible] other objects of interest. They then [illegible] steamer and took a cruise down the [illegible] Water as far as the new hospital at Netley [illegible] return to the town, their Imperial Highnesses [illegible] entertained by the Mayor at a grand [illegible] Victoria Rooms. There was a distinguished [illegible] and the town clerk read letters from [illegible] and Earl Granville, stating they were unable [illegible] in consequence of their presence being necessary [illegible] signing of the marriage contract of the Princess [illegible] After the toasts of "The Queen," "The [illegible] Austria," and "The Royal Family," had been [illegible] honoured, the Mayor proposed "The Archduke [illegible] nand Maximilian, Lord High Admiral of Austria [illegible] expressing his hope that their illustrious [illegible] enjoy as happy and serene a life as our [illegible] and her Consort had done, and wishing [illegible] prosperity, and happiness. The Archduke [illegible] in reply, said he was deeply moved at the [illegible] in which they had received the toast, [illegible] "The Prosperity, the Power, and the [illegible] England, the elevated model of all free [illegible] industrious nations." His Imperial Highness [illegible] wards proposed the health of the Mayor. [illegible] other toasts was one in honour of "the House [illegible] mons," which Mr. Roebuck acknowledged [illegible]

"If ever he felt diffident of his powers it was [illegible] to reply in return for this toast in the presence [illegible] the near relative of a great monarch who has [illegible] bring about in his own dominions constitutional [illegible] in doing which he would have to meet all [illegible] those ignorances, and those mistakes that [illegible] men who endeavoured to do good to their [illegible] had not attempted to make any one part of the [illegible] over the rest, but to render all alike, and to [illegible] the Imperial Parliament of Austria. Though [illegible] would be thrown in his way, he would be [illegible] his path by all well-conducted and well thinking [illegible] who would endeavour to do all they could [illegible] great and magnificent work. Their Imperial [illegible] inspected the Southampton Docks, which were [illegible] individual enterprise, and that had been allowed [illegible] end because of the good government here [illegible] government attained simply by enabling the [illegible] their own laws, and it was owing to this that [illegible] pied the position she did among the nations [illegible] was not the magnificent fleets or the manufactures [illegible] which rendered her great, but it was the [illegible] people to the laws, and that obedience arose [illegible] the people themselves made the laws through [illegible] Commons. He expressed his congratulations [illegible] guests on constitutional government being [illegible] and assured them of the warm support of [illegible] It was true that sometimes our House of [illegible] mistakes; but he would ask, when 650 [illegible] would there not be a fool among them? [illegible] among them nobody was more willing [illegible] He underwent that from day to day. Nevertheless [illegible] of Commons was a great assembly, and [illegible] England worthily. He believed, as one who [illegible] there for 30 years, that if they got rid of it [illegible] of the distinguishing mark of Englishmen [illegible] people, free to speak that which they felt, and [illegible] they made mistakes, that was a failing to which [illegible] nature was liable, and none were so ready as [illegible] them when they did it. Grumbling was, [illegible] great business of life, and whereas in despotic [illegible] were coerced till they felt tempted to take up arms [illegible] Government, it was not so in England. There [illegible] felt he had a grievance wrote to his member, [illegible] ber. He only wished they knew the letters [illegible] he did not find a voice it was very remarkable [illegible] and the fool had always found a representative [illegible] always found a voice in that House of Commons [illegible] therefore, he returned thanks, and he hoped [illegible] would be of the same value to the rest of mankind [illegible] government had been to England."

Count Apponyi, the Austrian Ambassador [illegible] to the toast of "The Commerce of Austria [illegible] in the following terms:—

"I find it very difficult, I assure you, to express [illegible] sense of the honour you have done me. The [illegible] Englishmen for Austria go straight to every [illegible] And it is not only the many struggles borne [illegible] past which should attach the two countries to [illegible] also a certain undeniable resemblance in [illegible] and pursuits. Whilst I am called upon to [illegible] Emperor, my master, at the Court of your [illegible] Queen, I have happily often had the occasion [illegible] various classes of society all that is so good [illegible] England; and it is with sincere pride that [illegible] towards Austria, I recognise in her many [illegible] capacities for goodness and greatness, and I [illegible] freedom. It is the fond belief of those Austrians [illegible] this country well that their own must one [illegible] formed upon her model than can be any [illegible] For my own part, gentlemen, I confess that [illegible] the ever-stronger union of our two countries [illegible] fact that all their interests are the same. [illegible] possible to conceive any case in which the interests [illegible] and Austria could clash. They are allies [illegible] Again permit me to tender my heartfelt thanks [illegible] you have done me by coupling my name with [illegible] expressed for the welfare of Austria by so [illegible] community as this."

TRURO.—The sentence of death passed [illegible] assizes on Charity Hoskin, for the murder [illegible] child, has been respited during her Majesty's [illegible]

WALMER.—The ceremony of inducting [illegible] merston as Lord Warden of the Cinque Ports [illegible] place on the 28th inst., when it is proposed [illegible] much of the ancient state and pageantry [illegible] to the ceremony. The detailed programme [illegible] occasion has not yet been definitively settled [illegible] understood that the magistracy and [illegible] Dover, together with representatives [illegible] ports (Dover, Sandwich, Hythe, Romney, [illegible] tings), the two ancient towns of Winchelsea [illegible] and their outlying members, will assemble [illegible]

[illegible] at noon on the 28th, for the purpose of receiving [illegible]. A procession will there be formed, in [illegible] various volunteer corps of the ports are expected to take part, and by which the new Lord Warden [illegible] to the Drop Redoubt on the Western Heights, where a Court of Shipway will be constituted [illegible] manner by the suitors who attend in [illegible] his lordship's mandate. Here the Premier will [illegible] inducted, taking the usual engagements on [illegible] of his high office, with this single exception, [illegible] bind himself to conserve and maintain the [illegible] privileges and immunities of the Cinque Ports, [illegible] very sufficient reason that those peculiar [illegible] and immunities have no longer any substantial existence. This part of the proceedings being concluded, a banquet will be given to his lordship in the [illegible] Hall, which has recently undergone extensive [illegible]. It is thought that, though capable of seating [illegible] or 500 guests, the hall will not suffice to accommodate all the applicants for tickets. The [illegible] of Tenterden, in their eagerness to do honour to the Premier, threaten, it is said, to move upon Dover [illegible] and claim for themselves alone the lion's share of the [illegible] available space. A meeting of the [illegible] of Dover was held on Thursday, the Mayor [illegible], to make the arrangements for the banquet. A proposal was made for holding the dinner in a large tent to be specially erected for the purpose; but after a [illegible] debate it was determined to adhere to the [illegible] plan, which offers this advantage, that it will afford an opportunity of inaugurating the newly-[illegible] hall—a matter to which the desire of some to [illegible] a more popular character to the banquet would [illegible]rily have to give way. Lady Palmerston and the Right Hon. W. Cowper are now staying at Walmer Castle, the official residence of the Lord Warden, where it is expected that Lord Palmerston will shortly join them.

Wilton.—The funeral of Lord Herbert of Lea took place on Friday, in the family vault beneath the chancel of the Romanesque church at Wilton, erected by his munificence. In accordance with a wish expressed by his Lordship a short time before his death, the funeral was conducted as privately as possible. Notwithstanding this, a considerable crowd assembled near the church some time before the hour appointed for the ceremony; all the shops in the town were shut, while at Salisbury most of the tradesmen testified their respect for his Lordship's memory by partially closing their establishments, and the bell of the Cathedral was tolled for some time in the course of the day. The funeral procession left Wilton House about half-past 12 o'clock, the body being borne by bearers in relays of eight each. The mourners were Lady Herbert, her three sons and two daughters; Lord Clanwilliam, Lady Dunmore, Lord and Lady Ailesbury, Lord and Lady De Vesci, Lord Normanton, Lord Shel[illegible], Mr. and Mrs. A'Court, Lord Gilford, Lady Selina V[illegible], Lord Dunmore, Lady Constance Murray, Mr. [illegible] Meade, Lady Adine Murray, Mr. George Vesey, Miss Vesey, Miss G. Vesey, Mr. E. Vesey, Miss B. Vesey, Lord [illegible], Mr. Agar, Lord and Lady Nelson, Lord Carnarvon, Lord Bath, Admiral Gowen, Miss Montgomery, and Miss Parodi. After these came the [illegible] friends of the deceased:—The Bishop of [illegible], Mr. Edward Hamilton, Hon. and Rev. C. H[illegible], Rev. F. Lear, The Duke of Newcastle, Lord H[illegible], Sir James Graham, Mr. Gladstone, Lord L[illegible], Count Strzelecki, Lord Clyde, Sir E. L[illegible], Mr. Jacob, Mr. Hinxman, Captain Hozier, Mr. M[illegible], Mr. Wyatt, Mr. Hewett, Mr. Nicholl, Mr. Vernon, Mr. Robson, and Mr. French. Then came the domestics, followed by a large number of the Wiltshire tenantry and tradesmen from Salisbury. On arriving at the church, the body was deposited at the upper end of the aisle, while the service was read by the rector, assisted by the Rev. T. B. Buchanan, [illegible] to the family of the deceased. The body was then conveyed to the entrance of the vault in the [illegible]yard, where the remainder of the ceremony was [illegible]. The coffin was of foreign oak, without [illegible], French polished, with a solid oak cross upon the lid. At the foot was the following inscription on a brass plate:—"Sidney Herbert, first Lord Herbert of Lea, born the 16th of September, 1810; died the 2d of August, 1861." At the head was another brass plate, with the text:—"Blessed are the dead, &c." On the [illegible] leaden coffin were inscribed the words, "Sidney Herbert, founder of this church; died the 2d of August, 1861."

Ireland.

Her Majesty's Visit to Ireland.—The *Freeman's Journal* gives the following programme of the Queen's approaching visit:—"The Queen, the Prince Consort, and other members of the royal family will arrive at the Warrington Junction of the London and North-Western Railway about noon on Thursday, the 22d, where they will be received by the chairman and other officials of the company. Her Majesty and suite will proceed thence by special train to Holyhead, where the royal yacht Victoria and Albert will be waiting to convey the royal party to Ireland. It is anticipated that the Queen will arrive at Kingstown on the evening of the same day, proceeding by special train to Dublin, and thence to the Viceregal Lodge. The suite of apartments intended for her Majesty are now complete. The Queen will remain in Dublin until Friday, the 23d; and on Saturday she will proceed by special train to the Curragh, to be present at a grand review. On this occasion her Majesty will be accompanied by the Prince Consort, the royal princes and princesses, the Lord-Lieutenant, Earl Granville, and the lords and ladies in waiting. After the review, the royal party will take luncheon at the quarters of the Prince of Wales, and return to Dublin by special train. It is stated that her Majesty will attend Divine service in the Chapel Royal on Sunday, the 24th, and that she will leave Dublin for Killarney, by special train, at noon on Monday the 25th. It is expected that the royal party will arrive at Killarney about half-past five o'clock. A large section of the Lake Hotel has been taken by Lord Castlerosse for the accommodation of her Majesty's suite; and a state barge, purchased in London by his lordship, for the purpose of conveying her Majesty and the royal party through the Lakes, has arrived safe at its destination. Her Majesty will return to Dublin on Wednesday, the 28th; and on the following evening will leave Kingstown for Holyhead, and proceed by a night train to the Warrington Junction, and thence to Edinburgh, where the royal party is expected to arrive on the evening of the 30th. Her Majesty will remain two days at Holyrood, and will go on to Balmoral on Monday, the 2d September."

The Corporation Address to Her Majesty.—A special meeting of the corporation of Dublin was held on Tuesday, to receive and consider the drafts of the addresses to the Queen and the Prince Consort, to be presented on their approaching visit. The addresses, as prepared by the committee, were read, and were not disfigured by any objectionable topic, the proposed allusion to the Galway contract having been omitted. Mr. Plunket, however, proposed the insertion of a paragraph calling her Majesty's attention to "the decrease in the population of Ireland," which he attributed to the operation of bad laws, and requesting her Majesty to direct the attention of Parliament to the subject, with a view to devise such measures as would remedy the evil. The mayor begged Mr. Plunket not to persevere in a motion of such questionable taste; but the proposition was pressed to a division, when the addresses, as proposed by the committee, were carried by a majority of 24 to 6.

The Duke of Cambridge at the Curragh.—The Duke of Cambridge arrived in Dublin on Sunday and inspected the troops at the Curragh at a grand review on Monday. His Royal Highness was accompanied by Sir George Brown, Commander-in-Chief in Ireland, Sir Richard Airey, the Adjutant-General, and other officers. The Prince of Wales was present at the review at the head of a company. The Duke of Cambridge, during his stay at the Curragh, resided in the Prince's quarters. On his return to Dublin his Royal Highness visited the barracks, the military hospital, and prison, but was unable to inspect the troops on account of the unfavourable weather. During his stay in Dublin his Royal Highness is the guest of Sir George Brown.

The Social Science Association held its first meeting in Dublin on Wednesday, under the presidency of Lord Brougham. His lordship, accompanied by the Duke of Wellington, landed at Kingstown on Monday night. They proceeded to Dublin by train and immediately drove to the Viceregal Lodge, where they joined a large party of distinguished visitors at present staying with the Lord-Lieutenant. On Tuesday morning Lord Brougham drove into town early, and visited the Lord Mayor at the Mansion House. He next proceeded to the Bank of Ireland, and inspected carefully the several departments of the Bank. He remained a considerable time in the chamber once occupied by the House of Peers, and then proceeded to Trinity College, where he was received by several distinguished Fellows of the University, who accompanied him through the library, the museum, the examination-hall, and the new building. He subsequently went to the Royal Irish Academy, which has been placed at the service of the Social Science Congress for offices during the meetings. His Lordship having been conducted through the building by the secretary of the institution, returned to the Viceregal Lodge. On Wednesday evening his Lordship delivered his inaugural address as President of the Association. It occupied upwards of two hours in the delivery, and entered in detail into the various social, legal, and public questions which will be brought before the Association at this congress, concluding with the following reference to the condition of the country as contrasted with the present state of North America:—

"The friends of Social Science, indissolubly bound up as it is in peace, must exult in contemplating the position of our country, and in reflecting that the security of society cannot be shaken by any politician's scheme, or any general's ambition, or any monarch's caprice—by the speculations of avarice, whether in traders or soldiers; the military genius of one, or the restless intrigue of another. Against all we are, heaven be thanked, prepared, for the people of our empire have shown that they must be not merely subdued, but extirpated, before an invasion of them can succeed. Would that we had a like consolation in casting our eyes across the Atlantic, and regarding the conflict which now shakes the great union of our kinsmen! On this most unhappy subject it becomes us to abstain from whatever might be deemed to indicate an opinion upon the merits of the controversy. But we should ill represent the friends of the science we cultivate, if we did not breathe an earnest hope for the termination of a civil war, the real origin of which has been the disappointment of faction in the thirst for places, and which, as if to make it more respectable and more amiable, has assumed as its avowed principle the perpetuation and extension of slavery, now for the first time declared to be good in itself. Surely, without offence to either party in this lamentable contest, we may breathe a wish that the least of the war's evils—its heavy expense—were best well upon the redemption of the coloured race, upon the amicable removal of the greatest obstruction that exists to American prosperity, the greatest blot that rests on the American name. Humbly, but deeply, may we be thankful for the blessings we enjoy under our free and well-poised constitution, which leaves us towards other nations without 'hatred and all uncharitableness,' and certainly without envy; the blessings of being able to continue our labours in secure possession of freedom from all tyranny, whether of one or of the multitude—of individual caprice, so galling to our pride, or of the more insupportable domination of the mob, so omnipresent that nothing is too high for it to reach, nothing so humble and obscure as to escape. We have been surveying the progress of the past year, and have only had time to touch the higher points in the outline, leaving of necessity much that is of importance untouched. The past lends encouragement to the future. Let us then persevere to the end. But let us not forget that all our efforts to improve the condition of our fellow-creatures, and make them worthy of their destiny, are as nothing compared with the progress in higher things. These are the great aim and end of our being. In all our pursuits, in our whole existence, an instinctive sense attends us that we are unsatisfied. The want of somewhat permanent ever haunts us. Whatever exertions we have made, whatever success had, whatever gratification received, only makes us feel how hollow it all is—how much we desire that which endures. The scenes of early days, which we revisit, now become dim from time, peopled with the forms of those whose memory they sadly recall, make us long for the bright scenes that can never fade, and for rejoining friends to part no more. The present doubt, and the struggle, and the darkness, is for the hour; the prospect is cheering, and it is for ever—and so it is with our National Association, which commands our allegiance, and justifies the hopes it inspires. Undaunted by resistance—undisturbed by faction—undismayed by real coldness or affected contempt, we persevere in our course of social labour; but we lift our views higher, to scenes far above the darkness of ignorance that shrouds one region, the mists of doubt that obscure, the storms of passion that vex another, and behold the lofty summit shining in the faith and adoration of God, glowing with universal benevolence to man."

The Lord Lieutenant then moved a vote of thanks to Lord Brougham for his speech, observing, in the course of his address, that no great cause has triumphed within the memory of the present century which is not associated with the name, the labours, and the triumphs of Henry Brougham and of Lord Brougham. The Right Hon. Mr. Justice Fitzgerald seconded the motion, which was supported by the Duke of Wellington, and carried by acclamation. Lord Currichill then moved a vote of thanks to the Lord Mayor, who had kindly put the hall at the service of the Association. Mr. Recorder Hill, of Birmingham, seconded the motion, which was carried unanimously. On Thursday morning the sectional meetings commenced in the Law Courts, when the Right Hon. Joseph Napier delivered an address to the Jurisprudence Department. Yesterday morning Sir John Shaw Lefevre was to deliver an address to the Education Department; and to-day the Attorney-General will deliver an address to the Reformatories Department, and Lord Talbot de Malahide will deliver an address to the Public Health Department. On Monday Judge Longfield will deliver an address to the Social Economy Department. On Tuesday and Wednesday Mons. Michel Chevalier will deliver an address to the Department of Trade and International Law, after which the concluding meeting of the Association will take place. On Thursday, the day fixed for the arrival of her Majesty in Dublin, excursions in connexion with the Association have been announced—namely, to Lusk-common and Malahide, to see the Irish convict system; to Delgany, to see the Protestant orphans reared on the family system; to Powerscourt and Bray; to Glencree Roman Catholic Reformatory; to Enniskerry, the Vale of Avoca, and the mines in County Wicklow. On Thursday evening a *conversazione* was held by the Royal Dublin Society; and on Tuesday next the Dublin Statistical Society will hold a *conversazione* at the Museum of Irish Industry. Promenades will be held at the Zoological Gardens and Art Exhibition; and on Monday evening the Lord-Lieutenant will receive members and associates, ladies as well as gentlemen, at the Castle.

The Irish Church.—A petition signed by the archbishops and bishops of the Irish branch of the United Church of England and Ireland, has been presented to her Majesty, stating that the Convocation of Canterbury and York have received a license to repeal the 29th canon and prepare new special services and praying that the advice not of one or of two provincial synods only, but of a general synod of the United Church of England and Ireland may be obtained, before any change is made in the doctrine, worship, discipline, or government of the Church.

The Orange Anniversaries.—Monday, being the 12th of August, the anniversary of the relief of Derry, the apprentice boys celebrated it by walking in procession, wearing crimson sashes, and firing cannon. Flags were also hoisted on Walker's monument and the cathedral, and bells were rung at intervals during the day. The authorities did not interfere, and everything passed off quietly.

The Sligo Murder.—A man named Phibbs was found guilty, at the recent assizes, of the murder of three persons in Sligo—Mr. Callaghan, his wife, and their servant. He all along asserted his innocence; but a few days since he confessed the crime, and told his gaoler where he had hidden the plate and a sum of money taken from the premises of the murdered people. The plate and other articles have been found in the place indicated, but the money, amounting to 14*l.*, has not been discovered.

Scotland.

The Summerlea Coal Pit Accident.—The whole of the men, to the number of 50, who were ascertained to have gone down the pit on the morning of the fire were brought to the surface on the next day. Eleven were then found to be dead, making with the man who had previously died a loss of 12 lives. There were therefore 38 workmen rescued; but many of them are now lying in a very precarious state, and some not expected to survive.

Railways.

Accident on the North Eastern.—On Saturday evening as the mail train from the south was approaching the Gateshead station of the North-Eastern, and slackening speed for the purpose of putting down some passengers at the station, the fore axle of the engine gave way about 50 yards from the station. The engine though thus disabled continued on its way, tearing up the rails and chairs until it reached the bridge across Hill Street, a stone structure of great strength and at a considerable height from the ground. Adjoining this part of the line is the station, a flat-roofed building, covered with lead, and between five and six feet from the level of the rails. Grazing the wall as it passed along, the train rushed violently against the bridge, knocking down a portion of the parapet, and scattering the stones into the street beneath. Checked in its further progress by the luggage line of rails which intersect the passenger ones, the engine then dashed upon the roof of the first-class waiting-room, and there stuck fast in a partially inverted position. The shock to the building was immense. One of the chimneys was completely demolished, and thrown into the luggage-room on the basement. Two of the broken wheels fell into the street, but with all this damage to property there was no sacrifice of life. The engine-driver and fireman stuck to their post, and kept the carriages on the line, so that they and the passengers escaped uninjured.

The Dividends.—The Great Western dividend is at the rate of $2\frac{1}{4}$ per cent. per annum for the past six months. The London and North-Western is $3\frac{3}{4}$ per cent.; the Brighton and South Coast, 5 per cent.; the Great Northern, $3\frac{3}{4}$ per cent.; the London and South-Western, 4 per cent.; the North London, 5 per cent.; the London and Blackwall, 2*l.* 15*s.* per cent.; and the Midland, $6\frac{1}{4}$ per cent.

Law.

Chester Circuit: Chester.—*Attempted Murder.—Martin Doyle* was indicted for wounding Jane Brogine with intent to murder her and to do her grievous bodily harm. The prosecutrix was a married woman, but had been for about a year living with the prisoner. They were both tramping on the 30th of May, on the road from Holmes Chapel to Newcastle-under-Lyne, in Staffordshire. Soon after passing through the Linley Lane tollgate they sat down to rest, and the prosecutrix complained of a headache. The prisoner drew her head on his lap, and there she went to sleep. According to her statement she slept about an hour, and then she woke and found the prisoner's hand on her head was lying pressing against her head. She told him to take his hand off, as it made her head ache with its weight, and, moreover, her bonnet would be broken to pieces. He then got up and said he would go and see whether it had left off raining. In about three minutes he returned and threw a great stone at the right side of her head, and rendered her senseless. He then jumped on her breast and tried to strangle her round the neck, and forced her tongue out of her head. She implored him to spare her life, or to give her a different death. While she was praying for mercy the ruffian battered her head with a stone, and she said she felt the stone cutting into her head and face like an oyster shell. He then got off her chest, and perceiving that she still breathed, he got on her as before, and hammered away again on her head until she was suffocated in her own blood. When she appeared dead he got off her chest and went away, and the woman fainted. When she came to again she heard a cart coming by, and shouted as loud as she could. The man did not hear her, but she crawled up the bank on her hands and knees, when the man in the cart saw her and took her up. At the termination of the examination in chief of the prosecutrix, who fainted frequently, and whose moans of pains were perfectly heartrending, the prisoner, who displayed the most callous indifference, cross-examined her at great length as to the origin of their acquaintance, as to her conduct to her husband, insulting her in such a manner that at last she fainted dead away and had to be taken out of court. The stones with which the wounds were inflicted were produced in court, and were great, sharp-edged jagged stones, fit to fell an ox with. The surgeon under whose care the unhappy woman had been, stated that he examined her immediately after the occurrence, and found her in a state of dreadful exhaustion from excessive loss of blood. At that time he thought she would die. He found a great number of cuts and bruises on her head, face, neck, and hands, and all those on the head went through the entire skin, all the integuments, and laid bare the bone. There were 14 of these dreadful cuts penetrating to the bone on the head, and seven or eight on the face. The lower jawbone was fractured. The most serious wound was one three inches long on the back of the head, which had fractured the skull. The jury, after a few minutes' deliberation, found the prisoner *Guilty* of wounding with intent to murder. He was then called upon in due form, and Baron Bramwell proceeded to pass sentence. He said, "Martin Doyle, you have been found guilty of the most atrocious crime I ever knew. It is with great sorrow, but not without anxious deliberation, that I have come to the conclusion that I should not be doing my duty to the public if I did not pass sentence of death upon you. With the greatest deliberation you planned and committed the fearful act for which your life is now forfeited. You have awfully injured, and probably even yet fatally, the woman with whom you lived as your wife. With her head reclining on your lap you meditated this crime; you inflicted 21 awful wounds with those fearful instruments—the stones you picked up for that purpose. I must now do my duty, and my duty is to sentence you to be hanged by the neck until you be dead, and may the Lord have mercy on your soul." *The Stockport Murder.—Peter Henry Barratt* and *James Bradley*, two little boys 8 years of age, were indicted on the charge of the wilful murder of George Burgess, on the 11th April last, at Stockport. The prisoners lived in Stockport, and were utterly neglected and uneducated, and accustomed to brutal sports and habits. The parents of the deceased child, who was only two years and nine months of age, were working people at Stockport, and, as they were all day occupied at a cotton-mill, they were in the habit of sending the child out at nurse. The last time the father saw his child alive was shortly before 2 on the 11th of April, when he was playing with another boy on some waste land near the Star Inn. The nurse a little later saw deceased playing on the same spot with a little boy. There were several other boys near. The nurse missed the child half an hour afterwards, and ineffectually searched and made inquiry for him. She never saw him alive again. A little before 3 o'clock the two prisoners and the deceased were seen in Love Lane, going in a direction from the place where the father and nurse had seen the child, towards Hempshaw Lane, near where the body was found. Soon afterwards one of the prisoners was observed striking deceased with a stick, and going towards a brook in the fields; the deceased was then naked and crying. On the following day he was found in the brook lying on his face, with his nose flattened, and bruises and scratches upon his head, body, and legs. The prisoners were apprehended, when they said to the policeman—"We went up Love Lane to Ford's fields, we saw Geo. Burgess in the lane; we took him with us until we came to a hole with some water in Ford's fields." Then Bradley added—"Peter said we must undress it. We did so, and then pushed it in the water. Bradley then said he took his clogs off and fetched the child out again. Peter said it must have another dip in the water, and we put it in again. Peter got a stick out of the hedge and hit it," and Baratt answered "Thou hit it too." We then hit it with the stick until it was dead, and we left it in the water. We beat it over the head, back, and legs. For the defence it was argued that the prisoners were mere babies, and that it was impossible for the jury to find a verdict of wilful murder, unless they thought the children were actuated by malice. The jury returned a verdict of *Manslaughter*, and Mr. Justice Crompton sentenced the prisoners to one month's hard labour, and five years in a reformatory.

Oxford Circuit: Gloucester.—*Arson.—William Willey*, 40, beerhouse keeper, was charged with the capital offence of feloniously setting fire to his own dwelling-house, his wife and six children then being therein, on the 15th of April last at Bristol. There was a second count charging him with setting fire to the same house with intent to defraud the Sun Insurance Company; and a third count charging the same offence, with intent to injure the landlord of the house. It appeared that the prisoner had effected an insurance with the Sun office, through their Bristol agent, for the sum of 200*l.*—viz., 100*l.* upon the house, 75*l.* upon his furniture, 5*l.* upon engravings and pictures, 10*l.* upon china and glass, and 10*l.* upon stock in trade. In the early part of the present year he attempted to effect another insurance upon the same property for 300*l.* with the Royal Insurance Office, but as the agent of the latter company took the precaution to examine the property, he refused to insure it, and told the prisoner there was not 5*l.* worth of property to be insured. On the night of the 15th of April the house was found to be on fire, the street door wide open, and the prisoner dressed, and with his hat on, in front of the house. The fire was extinguished, and it was then found that there was fire in a cupboard in the front parlour, in the cellar, in the bedrooms upstairs, and in short in every part of the house, which it was stated was burnt in as many as 14 different places. There was scarcely an article of furniture in the whole house, except one bedstead and a flock bed and mattress, and every room in the house seemed to have been prepared for a rapid conflagration. Boards had been taken up from the floors, and sticks and shavings stuffed underneath. On the stairs, in corners, in boxes, and cupboards an immense quantity of shavings and sticks had been skilfully arranged so as to catch fire and burn with rapidity, and a large quantity of tar had been thrown upon the shavings and floor, apparently with the same object. The prisoner was found *Guilty* and sentenced to 20 years' penal servitude. As soon as the sentence was pronounced, a scene took place in court which is not often equalled. The wife and daughter of the prisoner uttered the most piercing screams, and, although they were soon removed to an adjoining room, it was some time before the roofs of both courts ceased to echo with their cries. *Child Murder.—Catherine Oliver*, 47, tailoress, was charged with the wilful murder of her little girl, Matilda Oliver, aged 3 years, on the 25th of May, at Bristol. When the prisoner was called upon to plead she pleaded *Guilty*, and added that she was guilty before God, and justly deserved death, and that she had signed herself guilty. This plea entirely took the friends of the prisoner by surprise, as they had instructed counsel to defend her, and it was understood that the defence was that when she did the act she was insane. The prisoner, however, refused to alter her plea, and repeated that she justly deserved death, and hoped that might be the case. Mr. Justice Keating thereupon adjourned the case till the next day, and directed that the surgeon of the gaol should be in attendance. At the sitting of the Court on the next day the prisoner, when called upon to plead, pleaded "Not Guilty," and the trial proceded. It was then proved that she had had 12 children, six of whom had died, and that she had murdered her youngest child, a little girl three years of age, by hanging her to a bedstead, on the 25th of May, and had then gone to the police station and given herself into custody, stating that she had committed the murder in consequence of the ill treatment of her husband, that she was weary of her life and had rather die than live. Evidence was given to show that she was a religious but eccentric person, and subject to epileptic fits, and that she had really suffered from the ill treatment of her husband, and had latterly been regarded as a person of unsound mind. The jury *Acquitted* the prisoner on the ground of insanity.—*Ann Walker*, 23, was convicted of the Wilful Murder of her infant child on the 1st of July, at Cromhall, and was sentenced to 18 calendar months' imprisonment with hard labour.—*Eliza Rodgers*, 22, servant, was convicted of the Wilful Murder of her infant child at Pauntley, and was sentenced to 18 months' imprisonment with hard labour.

Northern Circuit: Liverpool.—*William Seebrook Chalkley*, late secretary to the Liverpool Tradesmen's Loan Company (Limited), was arraigned upon four indictments, the first charging him with embezzling the sums of 10*l.* and 100*l.*; the second and third with having forged and uttered two promissory notes for the payment of 200*l.* and 350*l.* respectively; and the fourth with having obtained by false pretences two orders, each for the payment of 185*l.* 5*s.*, and a third for the payment of 320*l.* 10*s.* The prisoner has for many years held a high position in Liverpool, not only by his business talents, but by reputed piety and philanthropy. He was considered as one of the great local "lights" of the methodist body, and as the manager of the Tradesmen's Loan Society he enjoyed the unlimited confidence of the numerous shareholders. About twelve months ago he suddenly decamped, leaving a deficiency of several thousands of pounds in his accounts. He went to the United States, but returned in disguise to Southampton, where he was at once accidentally recognised in the street by a Liverpool lady, one of the victims of his frauds. He now pleaded Not Guilty to the charge of forgery and embezzlement, but Guilty to the minor charge of obtaining money under false pretences. The prisoner was then tried upon the charge of having forged and uttered a promissory note for 200*l.*, and was found *Guilty* of feloniously uttering the note. Baron Martin, after severely censuring the conduct of [illegible] him to 15 years' penal servitude. *Shooting* [illegible] *Crosby*, 25, and *Matthew Gibney*, 32, were ar[illegible] for shooting a coloured seaman named [illegible] board the ship Panama, on the 10th M[illegible] concealing and harbouring Crosby after [illegible] offence. At the time mentioned the [illegible] Mersey prepared to sail for San Francisco. [illegible] was the mate of the Panama, and the [illegible] number of coloured seamen who ha[illegible] board her. It appeared that some disp[illegible] the black men and the officers, and the[illegible] plained that the provisions were unfit [illegible] ordered to leave the ship. The men declared [illegible] to do so, but insisted on going below [illegible] clothes. Some white seamen having [illegible] alongside, the black men were peremp[illegible] into the boats, the officers telling them [illegible] would be sent after them. As the men [illegible] encounter took place; and while the pr[illegible] ing himself into one of the boats, and [illegible] hand which grasped a rope, the prison[illegible] pistol. Johnson immediately fell into [illegible] rescued and conveyed on shore. The [illegible] complaints as to the provisioning of the [illegible] that the black sailors outnumbered the [illegible] conduct was very violent, and that from [illegible] with knives the prisoner was led to extreme [illegible] defence. The refusal to allow the men t[illegible] clothes arose, it was contended, from the [illegible] men had each received 5*l.* in advance on [illegible] that the detention of the luggage was mere[illegible] at least part of that money. The prisoner [illegible] *Guilty* of unlawful wounding, and was sente[illegible] imprisonment. The other was discharged. [illegible] *Insurance Forgeries.—Edward Williamson*, late [illegible] chester of the Royal Exchange Insurance [illegible] arraigned on four indictments charging him [illegible] that company of very large sums of money by [illegible] documents representing fictitious claims. He [illegible] dejected, and in a low and almost inaudible [illegible] *Guilty* to all the indictments. Sentence deferred.

Western Circuit: Wells.—*Destruction* [illegible] *Machinery.—John Berryman* was charged [illegible] malicious libel with intent to excite labourers [illegible] property of such of the inhabitants of the paris[illegible] and its neighbourhood as should use mowing [illegible] Newton, parish clerk of Portbury, proved [illegible] ing placard affixed to the church door on Sunday [illegible] 22d of June:—"Caution,—In consequence [illegible] machinery brought into the agricultural distr[illegible] known has deprived many honest famil[illegible] necessaries. The threshing machine, for instance, [illegible] to work. Well, this took two men's labour [illegible] winter on every farm of very few acres. [illegible] approaches so many men are not wanted. [illegible] I have worked for you all the summer. Oh, [illegible] will give you work on the roads. You can [illegible] day cracking stones; and that a man can do, [illegible] work, all weathers, and break up his constitu[illegible] there is an order for the union workhouse. [illegible] off quiet. For why? If I get a little behind [illegible] able to make it up in summer reaping and mowing, [illegible] work 18 hours instead of 12 to get myself out [illegible] now this piece of machinery known as the mowing [illegible] brought to work, and it is high time to [illegible] going to live winter and summer. But [illegible] work on their farm must look out. We [illegible] have his premises burnt, or lose his ca[illegible] He must write to the office, state the a[illegible] then the money is forthcoming, gener[illegible] claimed as the property destroyed. But the [illegible] are not too strong, if there is a great pul[illegible] give way. So do not all depend on insurance [illegible] Three officers of the Somerset county constab[illegible] the prisoner was formerly in the force, and ide[illegible] writing of the placard as that of the pris[illegible] produced a half-sheet of paper found at the [illegible] which corresponded with the half-sheet [illegible] written. On cross-examination it was elicited [illegible] on leaving the force entered the service of [illegible] merchant, of Bristol, residing at Portbury, and [illegible] employ. Mr. Abraham Parnell, a farmer, of P[illegible] that he had used a mowing machine on his [illegible] before the placard was exhibited, and that [illegible] understood it as a threat to set fire to his [illegible] Prideaux, on behalf of the prisoner, urged that [illegible] had not made out the case. It was not [illegible] that the placard in question was in his handwr[illegible] clearly not a seditious or blasphemous libel [illegible] any individual; and if it were a mere ou[illegible] kindly but mistaken feeling which some pers[illegible] to the effect of the introduction of machinery [illegible] classes, it would not sustain the charge in [illegible] The learned counsel also relied strongly upon [illegible] position the prisoner had held and still held [illegible] Mr. Beloe, as strong presumptive proof that [illegible] jeopardise the character he had hitherto held [illegible] libel in a matter in which he was totally un[illegible] Channel having summed up, the jury almost [illegible] returned a verdict of *Guilty*, and the prisoner was [illegible] six months' imprisonment with hard labour.

Sporting.

Cricket.—The second annual Cricket Match [illegible] employés of the firm of Thomas Gibbs & Co., [illegible] Moon Street, and Miner, Nash & Co., [illegible] took place on Saturday, the 10th inst., [illegible] Putney. The game commenced at 12 o'clock [illegible] on till the finish, when the firm of Messrs. [illegible] declared the winners by 16 runs. The [illegible] was much less than last year, when the firm [illegible] were the winners. The players dined together [illegible]

Miscellaneous.

Boat Building by Machinery.—Mr. Thompson, marine engineer of New York, [illegible] erected in the outskirts of London, near [illegible] Park, a factory for building boats by steam [illegible] under several patents which he has secure[illegible] country, and for working which a company [illegible] formed. Mr. Thompson claims for his [illegible] special advantages. The first is greater [illegible] and accuracy of construction, so that perfect [illegible] is not only attained, but any particular [illegible] furnished in duplicate at a moderate ex[illegible] second is the expedition secured by the [illegible] much as a boat 30 feet long and of correspo[illegible] may be delivered to a person ordering it [illegible] the same day, but even within a few hours [illegible]

[illegible] order. The third is the economy of the [illegible] Mr. Thompson affirming that the amount of [illegible] which when performed manually in a government [illegible] yard would cost 16*l*., can under his system [illegible] for 1*l*. 15*s*. or 2*l*.; and so rapid and [illegible] is his facility of construction that it [illegible] that by extended application of this [illegible] boats could, on an emergency, be [illegible] in 30 days. Sir John Pakington, Sir Francis [illegible] Admiral Walcott, M.P., Admiral Elliot, Captain [illegible] Captain Sherard Osborn, Mr. Lindsay, M.P., [illegible] Green, Mr. Scott Russell, Mr. Trotman, [illegible], Mr. John Penn, F.R.S., and Mr. T. Chap[illegible] F.R.S., have seen the system in operation, and [illegible] favourable testimony to its success; and [illegible], master shipwright of Woolwich Dock[illegible] also reported to the Admiralty that both the [illegible] and strength of the boats built by the new [illegible] would be superior to that obtained by the [illegible] method.

[illegible] William Armstrong on Implements of War. —At the recent annual meeting of the members of [illegible] of Mechanical Engineers at Sheffield, [illegible] William Armstrong, the President, delivered an address of which the following is an abstract:—

"In glancing at the history of mechanical science during the last eighty years, we see how entirely our successes have been based upon the possession of that metal (iron) with which the Author of Nature has supplied us in the greatest abundance. I have hitherto spoken only of the mechanical arts as applied to the purposes of peace, but I have yet to refer to the darker side of the picture in speaking of their application to the purposes of war. Our warlike neighbours, the French, always forward in everything appertaining to war, have of late years directed their energies to two most important subjects—the [illegible] ordnance and the application of defensive armour to ships. Their advances have necessitated similar steps on our part, and we have certainly no reason to suppose that we are behind them in the race. With the first of these subjects I have been personally much concerned, and I have also had opportunities of observing the merits and defects of the various kinds of armour plates with which experiments have been made by the direction of her Majesty's Government. I need scarcely say that up to the present time cast-iron has been almost exclusively used in the construction of heavy ordnance; but guns made of that material have not been found adequate to resist the more severe strain incident to the use of elongated rifled projectiles. This inadequacy of strength becomes the more decided as we increase the magnitude of the gun, and since a growing demand exists for more powerful artillery, the use of cast iron for its construction seems to be entirely precluded. It is said, and I believe with truth, that in America the manufacture of cast iron ordnance has been so far improved by applying water to cool the casting from the interior as to enable serviceable guns of this material to be produced of much larger bore than have been made in England. But it appears that these guns have not been rifled, and are only intended to be used with hollow projectiles. This success, therefore, affords no reason for coming to a different conclusion as to the unfitness of cast iron for the construction of rifled guns designed to project solid shot, especially when the dimensions are large. Even when strengthened by wrought iron hoops, the tendency of cast iron in a gun is to become weaker by every succeeding discharge. This is owing to minute fractures occurring in the bore, generally in the vicinity of the vent, and gradually extending until they terminate in the rupture of the gun. If, therefore, cast iron guns are to be utilised at all as rifled ordnance, it can only be by confining their use to hollow projectiles and light charges; but, if the same indulgence were extended to wrought iron guns, equal efficiency would be obtained with half the weight of metal, and on this ground alone the superiority of the latter is decisive." After stating the difficulties with regard to wrought iron, Sir W. Armstrong said—"It will be a great era in metallurgy when a material possessing the toughness and [illegible] of wrought iron, combined with the homogeneous character of a cast metal, can be economically supplied in large [illegible]. But whatever the march of improvement may effect, I doubt whether such blocks can yet be produced at a cost which would admit of their extensive application. I am glad, however, to see that papers are to be read at this meeting which may be expected to bear upon this important subject. With regard to the great question of the ultimate effect of artillery against ships protected by defensive armour, I believe that whatever thickness of iron may be adopted, guns will be constructed capable of destroying it. At the same time I am of opinion that iron-plated ships will be infinitely more secure against artillery than timber ships. The former will effectually resist every species of explosive or incendiary projectile, as well as solid shot from all but the heaviest guns, which can never be used in large numbers against them. In short, it appears to me to be a question between plated ships or none at all, at any rate so far as line-of-battle ships are concerned. With respect to the quality of the material best adapted to resist the impact of shot, this subject is engaging much attention in the town of Sheffield and the iron districts generally. So far as my own observation and experience go, I may say that [illegible] and lamination are the conditions most essential to [illegible]. In striking a plate the tendency of the shot is to [illegible] rather than to pierce the material. When penetration is effected, the hole is of a broken character, and not such as would be made by the cutting action of a punch. The softer, therefore, the iron, the less injury it will sustain, and I apprehend that steel in every form, will, from its greater hardness, be [illegible] less effective than wrought iron, while its cost would be very much greater. As regards lamination, it has been clearly ascertained that a given thickness of iron made up of successive layers of thin plates is very much weaker for the purpose of armour than the same thickness in the solid form. For a laminated plate, by which I mean a plate having the layers composing it imperfectly united, must be regarded as an aggregation of separate plates, so that the strength derived from [illegible] is wanting. If this tendency to lamination could be [illegible], rolled plates would, in my opinion, be preferable to forged, since the iron would acquire a more fibrous [illegible]; but the existence of this liability appears to turn the scale in favour of forging. I hope the time is far distant when these great questions concerning attack and defence may receive practical elucidation in actual warfare; but I trust that in the course of our efforts to solve them, discoveries may be made which will be as useful for the purposes of peace as for those of war. I am tempted to advert, before I conclude, to a subject [illegible] connected with mechanical progress, but upon which [illegible] difference of opinion may exist. That dauntless spirit [illegible] in matters of commerce has led this country to cast off the trammels of protection, has resulted in augmented prosperity to the nation, showing the injurious tendencies of class legislation when opposed to general freedom of action. Would that the [illegible] and enlightened policy were extended, in some degree at least, to matters of invention. Under our present patent laws we are borne down with an excess of protection. We are obstructed in every direction by patented inventions which will never be reduced to practice by those who hold them, but which embrace ideas capable of useful application if freed from monopoly. The merit of invention seldom lies in the fundamental conception, but is to be found in the subsequent elaboration, and in the successful struggle with difficulties, unknown to the mere theorist, and often requiring years of labour, blended with disappointment, for their removal. Nothing can be more irrational, therefore, than to give equal privileges to the mere schemer and to the man who gives actual effect to an invention. Primary ideas ought to be the common property of all inventors, and protection, if we are to have it at all, should be sparingly awarded to those persons alone who by their labour and intellect give available reality to ideas. Apart from the impolicy of our present indiscriminate system, its operation is unjust. Philosophers who furnish the light of science to guide to useful discovery, go altogether unrewarded and unrecognised. Practical men, who, like Watt and George Stephenson, devote the best part of their lives to perfecting inventions of immense importance to the world, seldom derive from patents any greater emolument than would flow to them without the aid of a restrictive system, while they are frequently involved in tormenting litigation about priority of idea. On the other hand we see numerous cases of disproportionate wealth realised by persons whose only merit has been promptitude in seizing upon and monopolising some expedient which lay upon the very surface of things, and required no forcing atmosphere of protection for its discovery. Finally, injustice is done by the existing law to those men who have no desire for monopoly, but who are compelled to become patentees for no other purpose than to prevent their being excluded from carrying their own ideas into practice. For my part, I incline to think that the *prestige* of successful invention would, as a rule, bring with it sufficient reward, and that protection might be entirely dispensed with. On this point, however, I speak with hesitation; but it is at all events certain that extensive reform is urgently required in this branch of legislation, and that the advance of practical science is now grievously obstructed by those very laws which were intended to encourage its progress. Having now called to your remembrance the triumphs which have already been accomplished in mechanical science, and having directed your attention to some of the subjects which at the present time merit your consideration, it only remains to express my hope that the genius, enterprise, and intelligence which have hitherto distinguished your profession may continue to bear fruits worthy of the past, and that the proceedings of this institution may serve to guide and stimulate the efforts of its members."

Obituary.

Madame Catherine Hayes-Bushnell died on Sunday night at Roocles, Sydenham, at the early age of 40 years. She was born at Limerick of parents in a respectable station in life. Her musical abilities were very early developed, and Dr. Knox, the then Bishop of Limerick, took a great interest in her, and assisted in supplying the funds to procure for her the necessary instruction. She went to Dublin to study under Signor Sapio, thence to Paris, where she studied under Signor Emmanuel Garcia, the master of Malibran and Jenny Lind; thence she went to Milan, and ultimately to Marseilles, where she made her first appearance in "Puritani" in 1845. Her appearance was hailed as a success, and afterwards she appeared at La Scala, as *prima donna*, in the character of Linda di Chamouni. From Milan she went to Vienna, thence to Venice and to all the principal Italian cities. In 1849 she made her appearance at Covent Garden with great success, also in the part of Linda. Her countrymen, the Irish, were especially enthusiastic, and when she subsequently visited Dublin and the principal cities and towns of Ireland their admiration knew no bounds, and they repeatedly took the horses from her carriage in order to enjoy the privilege of drawing it themselves. In 1851 she entered into an arrangement with a London music publisher to take a journey to America, but owing to some disagreement, arising out of the conduct of the agent who was deputed to accompany her, she resolved to perform the journey at her own risk, and accordingly paid a large sum in forfeit to the publisher to enable her to do so. The journey was most successful in every point of view. In the United States, California, the Sandwich Islands, Australia, Calcutta, Bombay, Ceylon, Java—wherever she went, she gained fame and fortune. As with Madame Lind, her charitable disposition, as much as her sweet voice, won for her the hearts of every one, and it is the most striking proof of the consideration in which she was held from a social as well as from an artistic point of view that, since she has returned to London, her house has been resorted to by the most distinguished colonists who have visited England. It was on her return from this great musical tour that she married Mr. Bushnell, who had been her secretary in her travels round the world. Her domestic happiness, however, was not of long duration, for Mr. Bushnell died shortly afterwards in the Pyrenees of a rapid consumption. Since that event she has avoided rather than courted the popularity which she never sought for in vain. The great fatigues of the professional tour round the world had borne heavily on a constitution never very strong, and a severe accident which happened to her in America, when a horse fell with and rolled over her, produced effects from which she never thoroughly recovered. She died on Sunday night after a short illness, resulting from the breaking of a blood-vessel.

Wills.—The will of the Duke of Bedford has been sworn under 600,000*l*. personalty; Sir George Maclean, K.C.B., 16,000*l*.; Robert Forest, Esq., 45,000*l*.

BIRTHS.—On the 8th inst, at Bedgebury Park, Kent, Lady Mildred Beresford-Hope, prematurely, of a son—5th inst, at Canford, the Lady Louisa Ponsonby, of a daughter—8th inst, at Southgate, Lady Lawrence, wife of Sir John Lawrence, of a son—12th inst, at 5, Oxford Square, Hyde Park, the residence of her mother, Lady Grant, the wife of Clinton Henshaw, Esq., Rifle Brigade, of a son and heir—7th inst, at Blythe Hall, Coleshill, Warwickshire, the wife of J. D. Wingfield Digby, Esq., of a daughter—8th inst, the wife of the Rev. Dr. Bateson, Master of St. John's College, Cambridge, of a son.

MARRIAGES.—On the 7th inst, at the Cathedral, Salisbury, Major Philip Arthur, fourth son of the late Hon and Rev. Frederick Pleydell Bouverie, to Caroline Mary, only child of Richard Hetley, Esq., of The Close, Salisbury—8th inst, at Trinity Church, Marylebone, Arthur James, eldest son of the late James Balfour Ogilvy, Esq., of the Bengal Civil Service, and grandson of the late Rear-Admiral Sir Walter Ogilvy, Bart., of Inverquharity, to Lady Camilla Lætitia, eldest daughter of William Needham, Esq., of Lenton House, Nottinghamshire—7th inst, at Trinity Church, Southport, Captain W. M. C. Acton, second son of the late Lieut.-Colonel Acton, of Westaston, M.P. and V.L., county Wicklow, to Elizabeth Frances, only child of the late Captain F. A. Robinson, 5th Fusiliers—8th inst, at the parish church of Kingswinford, George William Moore, Esq., of Abbeyland, Weston upon Trent, only son of William Moore, Esq., of Wyendon Lodge near Stafford, to Eliza Jane, only daughter of Thomas William Fletcher, Esq., M.A., F.R.S., of Lawneswood House, Kingswinford, Staffordshire—6th inst, at Child Okeford, Edmond Warre, Esq., M.A., Fellow of All Souls' College, Oxford, second son of Henry Warre, Esq., of Fyne Court, Somerset, to Florence Dora, eldest surviving daughter of Lieutenant-Colonel C. St. Lo Malet, of Little Fontmel House, county of Dorset—1st inst, at Norham Church, Ralph Nicholson Wornum, Esq., National Gallery, London, to Harriet Agnes, youngest daughter of the late Captain Nicholson, Thornton Park, Northumberland—6th inst, at St. James's, Paddington, Reginald Stuart Poole, Esq., of the British Museum, to Eliza Christina, eldest daughter of William Forlonge, Esq., of Melbourne, Victoria.

DEATHS.—On the 9th inst, at the house of Major Pearce, Portishead, Lady Whish, relict of the late Lieut.-General Sir W. S. Whish, K.C.B., of the Bengal Artillery, aged 71—8th inst, at Honiton, Devonshire, after a severe and protracted illness, the Ven. E. J. Burrow, D.D., F.R.S., Archdeacon of Gibraltar, aged 76—8th inst, at 4, Champion Terrace, Old Charlton, Major-Gen. John Forbes—11th inst, at 29, Imperial Square, Cheltenham, Sarah, relict of Rear-Admiral Richard Byron, C.B., aged 78—24th ult, at Aylesford, Nova Scotia, Charles Inglis, Esq., eldest son of the late Right Rev. John Inglis, D.D., Lord Bishop of Nova Scotia—9th inst, at Beechfield, Doncaster, John William Sturges, Esq., J.P., and a Deputy-Lieutenant for the West Riding—5th inst, at his residence, Oakfield Court, Tunbridge Wells, Demetrius Grevis James, Esq., J.P. and D.L. for the county of Kent, aged 85—7th inst, at Morley Hall, Wymondham, Norfolk, John Turner Graver-Browne, magistrate for the county of Norfolk, aged 55—7th inst, at Wilburton, Cambridgeshire, Mr. Read Tansley Camps, youngest son of the late William Camps, Esq., High Sheriff of Cambridgeshire and Huntingdonshire—1st inst, at Worthing, Charles Hill, Esq., of Wollaston House, Second Major of the Northamptonshire Militia, aged 50—9th inst, at Nice, Signor Vincent Novello, of London, aged 81—7th inst, A. A. T. Cassamajor, of aneurism of the heart, aged 25—8th inst, at Deal, the Rev. Charles C. Christie, incumbent of Sidcup, Kent, aged 52—6th inst, at the Rectory, Sedlescombe, Sussex, the Rev. John Pratt, rector of that parish, aged 88—4th inst, suddenly, at Messing Vicarage, the Rev. Thomas Henderson, 34 years vicar of that parish, and formerly student of Christ Church, Oxford, aged 62—6th inst, at Charlton-next-Woolwich, at the house of his youngest son, the Rev. Thomas Boulton, late of Graham's Town, South Africa, aged 67.

Markets.

COVENT GARDEN, Aug. 17.

Vegetables and Fruit of most kinds continue equal to the demand. Apricots, Figs, Greengage Plums, and Apples and Pears, still come from the Continent. West India Pines are getting scarcer. Peas and Beans are plentiful and cheap. Grapes are abundant. Strawberries now consist of only the very latest sorts; and with the exception of Morello, Cherries are nearly over for the season. French Beans, young Carrots, and new Potatoes may be had in quantity. Of the latter many samples are, however, diseased. Cucumbers are coming in plentifully. Cut flowers chiefly consist of Orchids, Lily of the Valley, Pelargoniums, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Currants, p. ½ sieve, 5s
Grapes, per lb., 2s to 5s	Gooseberries, do., 5s
Strawberries, p. pun., 6d to 1s	Pears, per doz., 1s to 4s
Melons, each, 1s to 4s	Apples, per doz., 6d to 1s
Peaches, per doz., 10s to 15s	Oranges, per 100, 6s to 14s
Nectarines, do., 6s to 12s	Lemons, per 100, 6s to 10s
Apricots, do., 1s to 3s	Nuts, Cob, per lb., 1s to 1s 6d
Cherries, English, p. lb., 1s to 2s	

VEGETABLES.

Cauliflowers, each, 2d to 6d	Beet, per doz., 1s 6d to 6s
French Beans, p. pun., 9d to 1s 6d	Celery, p. bundle, 1s 6d to 2s
Green Peas, p. quart, 1s to 1s 6d	Onions, p. ½ sieve, 4s 6d
Broad Beans, p. bush, 2s 6d to 3s	Asparagus, p. bundle, 3s to 7s
Cabbages, do., 1s 3d to 1s 6d	Rhubarb, p. bundle, 6d to 9d
Potatoes, p. ton, 60s to 80s	Tomatoes, p. doz., 4s to 6s
— per lb., 1d to 4d	Shallots, per lb., 1s 6d
— — per cwt., 4s to 8s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 4d to 6d	Endive, p. doz., 3s to 4s
Carrots, new, do., 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., 2s to 3s
Cucumbers, each, 6d to 9d	Parsley, p. 12 bunches, 4s to 6s
Veg. Marrows, p. doz, 1s to 1s 6d	Savory, per bunch, 2d to 4d
Artichokes, each, 4d to 6d	

BRITISH WOOLS.—London, Friday, Aug. 16.

We have no change to report in price. Our transactions are on a restricted scale, and merely to supply immediate demands. Stocks are lighter than usual at this season of the year.

	s. d.	s. d.		s. d.	s. d.
South-down Hoggets	.. ..	to 1 5	Leicest. Wethers	1 3	to 1 4
Half-bred ditto	1 5	— 1 6	Ditto Hoggs	1 4	— 1 5
Down Ewes	1 4	— 1 5	Combing Skins	1 0	— 1 5
Kent Fleeces	1 5	— ..	Flannel Wool	1 0	— 1 5
			Blanket ditto	0 6	— ..

HAY.—Per Load of Thirty-six Trusses.

Smithfield, Thursday, Aug. 15.

Prime Meadow Hay	75s to	84s	Clover	90s to	120s
Superior do. (old)	88	100	New Clover	—	—
Inferior do.	36	50	Do. second cut	—	—
New do.	50	80	Straw	28	34
Rowen	—	—			

Davis & Co.

Whitechapel, Thursday, Aug. 15.

Fine old Hay	95s to	100s	Fine old Clover	115s to	120s
Inferior do.	50	80	Inferior do	80	90
Prime New Hay	80	88	Fine 2d cut	—	—
Inferior	55	75	Inferior do.	—	—
Straw	30	40	Fine New Clover	—	—

BUTTER MARKET.—Aug. 16.

Best Fresh Butter .. .. 14s. per dozen lbs.
Second do. do. .. .. 12s. „ „

Pork, 4s. 4d. to 5s. 4d. per 8 lbs.

HOPS.—Borough Market, Friday, Aug. 16.

Messrs. Pattenden & Smith report that the accounts on the whole are rather more favourable. Market dull. Duty 110,000*l*. to 120,000*l*.

METROPOLITAN CATTLE MARKET.

Monday, Aug 12.

The number of Beasts is nearly the same as on Monday last, and the demand has decreased. Prices are lower for all descriptions of Beasts. We have a large supply of Sheep; choicest descriptions, however, are not very plentiful. Prices are lower on the average, and a clearance cannot be effected. Trade is very heavy for Lambs and Calves. From Germany and Holland there are 1650 Beasts, 9440 Sheep, and 212 Calves; from France 22 Calves; from Ireland, 11 Calves; from Scotland, 147 Beasts; and 2400 from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c.	4 8	to 4 10	Best Long-wools	..	to ..
Best Short-horns	4 4	— 4 8	Do. Shorn	4 8	— 4 10
2d quality Beasts	3 0	— 3 10	Ewes & 2d quality	..	— ..
Best Downs and Half-breds	..	to ..	Do. Shorn	4 2	— 4 4
Do. Shorn	4 10	to 5 [illegible]	Lambs	5 0	— 5 8
			Calves	3 6	— 4 6
			Pigs	3 4	— 4 4

Beasts, 995; Sheep & Lambs, 20,280; Calves, 288; Pigs, 520.

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THURSDAY, Aug 15.

The number of Beasts is smaller than on Thursday last. Choice qualities are in demand at fully Monday's quotations, and in some instances they realise rather higher prices. The supply of Sheep and Lambs is rather shorter. Trade is active, especially for Lambs, and prices are a little better. Trade is very heavy for Calves, at low rates. Our foreign supply consists of 266 Beasts, 2240 Sheep, and 410 Calves. From Ireland, 47 Beasts and 120 Lambs. The number of Milch Cows is 105.

Best Scots, Herefords, &c.	.. 4 8 to 5 0	Best Long-wools	.. .. to ..
Best Short-horns	4 4 — 4 8	Do. Shorn	.. 4 8 — 5 0
2d quality Beasts	3 4 — 3 10	Ewes & 2d quality	.. — ..
Best Downs and Half-breds	.. .. — ..	Do. Shorn	.. 4 2 — 4 6
		Lambs	.. . 5 4 — 6 0
		Calves	.. .. 3 4 — 4 4
Do. Shorn	.. 5 0 — 5 2	Pigs	.. .. 3 4 — 4 4

Beasts, 995; Sheep & Lambs, 11,260; Calves, 641; Pigs, 190.

MARK LANE.—MONDAY, Aug. 12.

The supply of Wheat to this morning's market from Essex was moderate, from Kent small. The total quantity of new may be estimated at between 1000 and 1200 qrs., quality generally very fine, weight ranging from 61 to 67 lbs., and the prices from 58s. to 66s. per qr.; one extraordinary parcel of Talavera, warranted 66 lbs., realised 70s. per qr. The attendance was unusually limited, and the few sales effected of foreign, either for consumption or export, were at barely the rates of last week. There is no alteration in the value of old Barley, Beans, or Peas; new Barley was sold at 32s. to 40s. per qr., and new Dun Peas (quality very fine) at 34s. per qr. The Oat trade continues heavy, and Russians must be quoted 6d. to 1s. per qr. lower than on this day se'nnight. Flour is a dull sale.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk..White	56—63	Red	56—60
— — fine selected runs..ditto	60—76	Red	60—65
— — Talavera	60—67		
— Norfolk	—	Red	—
— Foreign	40—74		
BARLEY, grind. & dist., 26s to 27s.. Chev.	36—40	Malting .	34—36
— Foreign..grinding and distilling	27—30	Malting .	33—36
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign........Poland and Brew	20—23	Feed ..	19—21
RYE	35—37	Foreign.	—
RYE-MEAL, foreign....................	—		
BEANS, Mazagan....37s to 40s....Tick	40—43	Harrow.	40—43
— Pigeon ......41s — 45s..Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
PEAS, white, Essex and Kent ..Boilers	34—37	Suffolk .	38—39
— Maple .... —s to —s ...... Grey	40—42	Foreign.	35—38
MAIZE .... White	—	Yellow..	—
FLOUR, best marks delivered..per sack	50—55		
— 2d do.................... ditto	34—50	Country.	34—50
— Foreign ....per barrel	26—32	Per sack	43—58

FRIDAY, Aug. 16.

With the exception of a few slight driving showers on the 14th and yesterday, the weather during the last eight days has been highly favourable for securing the crops, with which rapid progress is being made; to-day, however, is wet. The Wheat trade has been dull throughout the kingdom, and a decline of 1s. to 2s. per quarter (in some instances more) was general. Here on Wednesday a portion of Essex old Wheat (nearly the whole was left over from Monday) was disposed of at a decline of fully 2s. per qr. upon the rates of last week, and for American descriptions in [illegible] lower prices were accepted in order to realise ex ship. No material alteration has occurred in the value of spring corn, excepting on the spot, where the forced sales of Russian Oats for the account of insolvent houses have reduced prices 1s. to 1s. 3d. per qr. Flour continues to be neglected at late rates. Since Friday last 42 cargoes have been reported off the coast. The floating trade has been inactive, excepting Maize, which fully maintains previous rates, and continues in good demand. The arrivals of English Wheat this week have been comparatively large, of other English grain small, of foreign grain and Flour good. To-day's market was thinly attended; good new English Wheat was inquired after at the extreme rates of Monday. Old must be written 2s. to 3s. per qr. lower than last week. Business in foreign was extremely limited, and sales of American from ship difficult to effect, even at a slight abatement upon former prices. Spring Corn is unaltered in value.

ARRIVALS FROM AUG. 12 TO AUG. 16.

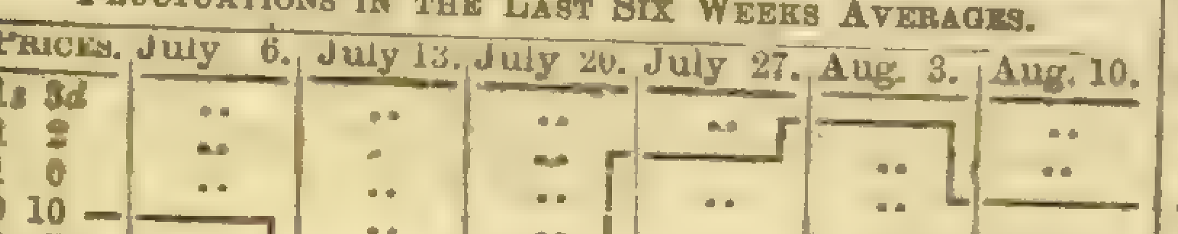
	Wheat.	Barley.	Oats.	Flour.
English ..	3170 qrs.	80 qrs.	960 qrs.	1490 sks.
Irish	— "	— "	690 "	— "
Foreign ..	13990 "	2280 "	33130 "	— " / 20100 brls.

LIVERPOOL, Tuesday, Aug. 13.—There was a good attendance of millers and dealers at this morning's market, but with a fine bright sunny day they showed little disposition for business, and in the small amount passing holders had to make a concession of about 2d. per cental from Friday's prices. Flour was slow of sale, but not quotably lower. Indian Corn met only a moderate consumptive inquiry, and if any change at all occurred it was in favour of the buyer. Oats and Oatmeal are without alteration. Beans and Peas steadily maintain the late advance. Barley firm. The marked closed quiet. Wheat: moderate consumptive demand at full prices of Tuesday. Demand for France still continues for low qualities. Flour a shade firmer; rather more doing. Indian Corn in fair request; 30s. 6d. to 31s. for old mixed. Beans steady at the late advance. Oats and Oatmeal dull.

FRIDAY, Aug. 16.—There was a thin attendance at to-day's market; Wheat in moderate requst at 1d. decline. The demand for France continues. Flour slow sale at Tuesday's prices. Indian Corn, mixed, 36s. 6d. Beans unaltered. Oats and Oatmeal dull.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
July 6..	50s 10d	31s 9d	26s 0d	35s 9d	43s 11d	39s 11d
— 13..	50 0	30 4	24 6	33 0	42 4	42 0
— 20..	50 7	30 3	25 9	38 3	42 8	37 10
— 27..	51 2	30 8	26 10	38 5	42 10	40 1
Aug. 3..	51 3	28 3	24 11	39 3	42 1	39 0
— 10..	51 0	30 1	25 4	36 7	43 8	38 0
Agg. Aver.	50 9	30 3	25 7	37 11	43 11	39 6

FLUCTUATIONS IN THE LAST SIX WEEKS AVERAGES.



COAL MARKET.—Aug. 14.

Holywell, 15s. 6d.; Lambert's West Hartley, 16s. 6d.; Tanfield Moor, 12s. 9d.; West Hartley, 16s. 9d.; Walls End Acorn Close, 17s.; Walls End Eden, 17s.; Walls End Hedley, 16s. 6d.; Eden Main, 17s.; Walls End Framwellgate, 17s.; Walls End Hetton, 18s. 9d.; Walls End South Hetton, 18s. 6d.; Walls End Stewarts, 18s. 6d.; Walls End Cassop, 17s. 9d.; Walls End Hartlepool, 18s. 3d.; Walls End South Durham, 17s.; Walls End South Kelloe, 17s. 6d; Walls End Trimdon Hartlepool, 18s.; Walls End Trimdon Thornley, 16s.; Walls End Whitworth, 15s. 6d.; Walls End Peases West, 14s. 6d.; Carway and Duffryn Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.—Ships at market, 91.

Notice.

MESSRS. E. G. HENDERSON AND SON hereby give public notice that Mr. JOHN EDWARDS, their late Traveller, is *no longer in their Employ*; and their customers are respectfully warned against paying the said John Edwards any accounts or moneys on their behalf from the date of this notice, from which time they will not acknowledge any business transactions which may be carried on by him in their name.
Wellington Nursery, St. John's Wood, London, N. W., August 17, 1861.

FARM PUPIL.—At or before Michaelmas next a Farmer in Derbyshire, occupying a Farm of upwards of 300 acres, is anxious to take the Son of a Clergyman or Gentleman as a Farming Pupil. References will be given and required.—For further particulars address R. B. H., Post Office, Burton-on-Trent.

WANTED, at Michaelmas, a GARDENER, fully equal to the charge of a Greenhouse, Flower Garden, and large Vegetable and Fruit Garden. About 30 miles from London. Also a LAUNDRESS Wanted.—Apply by letter, stating wages, to A. L. C., Messrs. Pottle, 14 and 15, Royal Exchange, London, E.C.

WANTED, AN EXPERIENCED FLOWER GARDENER.—A thorough Practical Working Man, about 35, married, and who has lived as Head Gardener. Must understand Early and Late Forcing, and all the duties of his profession. Wages 20s., with Cottage, &c. The strictest inquiries will be made as to character and general qualifications. —Apply to C. L., Esq., Scarlet's, near the Twyford Station, Great Western Railway.

WANTED, a thoroughly practical Man to take the management of one of the oldest Nurseries in the Kingdom. He must know how to manage men, as well as be able to superintend both in and out-door Propagation of all that appertains to hardy Stock.—Apply to DONALD & SON, Goldsworth Nursery, Woking, Surrey.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 31, married; thoroughly understands his profession; also Land and Cows. Three and a-half years' good character.—F. W., 3, Albert Street, Wandsworth Road, near Clapham, Surrey, S.

GARDENER (HEAD).—Age 38, married; thoroughly practical in Early and Late Forcing, Flower and Kitchen Gardens, &c. Good character.—J. S., 3, Park Place, New Bromley, Kent, S.E.

GARDENER (HEAD).—Age 36, married, one child; thoroughly experienced in every branch of Gardening; has also a practical knowledge of Ground Work. First-class references.—G., Mr. Wyatt, Castle Street Nursery, Salisbury, Wilts.

GARDENER (HEAD).—Age 38, married, two children; thoroughly understands Forcing of Fruits, Flowers, and Choice Vegetables, with general Management of Flower and Kitchen Gardens.—H. CLARK, Royal Horticultural Gardens, S. Kensington, London, S.

GARDENER (HEAD).—Age 29, married, no incumbrance; many years' experience in Flower and Kitchen Gardens, and perfectly understands every branch in his profession. Good character can be given by his present employer. —E. TOUGH, 5, Park Place, Sheet Street, Windsor.

GARDENER (HEAD).—Age 35, married, native of Scotland; thoroughly practical in Forcing Fruits and Flowers; the Management of Kitchen and Flower Gardens, &c. Excellent reference from the employer he has lately left.—B. C., 83, Portland Road West, Notting Hill, London, W.

To Noblemen and Gentlemen.

GARDENER (HEAD).—Age 30, married, a native of Scotland; thoroughly experienced and practical in every branch of his profession. Unexceptionable references. No single-handed place accepted.—THE GARDENER, Wanstead Hall, Essex, N.E.

GARDENER (HEAD).—Age 37, married, small incumbrance; is a thorough practical and experienced working Gardener; has good taste for the Decoration of Flower Gardens and Pleasure Grounds, together with the Fruit and Kitchen Gardens.—A.B., Mr. Shenton, Hendon Park Nursery, Hendon, N.W.

GARDENER (HEAD). — Married, age 40; thoroughly practical; understands the Forcing of Fruits of all classes, and the Management of Stove and Orchidaceous Plants; also Flower and Kitchen Gardens. Two years' good character. Testimonials from two gentlemen. Wages, 1*l*. per week, with Cottage.—Z. Y., Post Office, Crouch End, Hornsey.

GARDENER (HEAD).—Age 45, married, without incumbrance; has a thorough knowledge of his profession in all its branches, with good experience in the Management of Pines, Vines, Early and Late Forcing, Stove and Greenhouse Plants, Ferns, &c.; Flower and Kitchen Gardens. Seven years' good character.—A. B, Mr. William Bull's Establishment for New and Rare Plants, King's Road, Chelsea, S.W.

GARDENER (HEAD).—Age 34, married, one child; is a thorough practical and successful Grower of Orchard-house Fruit; also Early and Late Forcing Grapes in Pots, &c., Pines, Peaches, Melons, Cucumbers, Strawberries, Mushrooms; Management of Fruit, Flower, and Kitchen Gardens. Unexceptionable character for industry and sobriety.—D. E., Mr. Barnes, Camden Nursery, Camberwell, S.

To the Nobility and Gentry.

GARDENER (HEAD).—Has a general and extensive knowledge of Gardening, either in Fruit, Forcing, Floral, Shrubbery, or Kitchen departments; has the best of references from those by whom he has been meritoriously employed, and in the meantime begs to refer them to Messrs. JOHN WEEKS & Co., King's Road, Chelsea, S.W., who will be happy to answer any application addressed to D. J.

To Noblemen or Gentlemen.

GARDENER (HEAD).—Age 36, married; has had great experience in all kinds of Early and Late Forcing, Fruits, Flowers, &c., the general routine of Gardening, Laying Out and Improvement of Pleasure Grounds, Erectings and Heating Hothouses on the most improved principles. Five years' good character.—S. S., Mr. Veitch, Exotic Nursery, King's Road, Chelsea, S.W.

GARDENER (HEAD). — Age 3[illegible] served as Head Gardener many [illegible] thorough knowledge of Horticulture [illegible] is particularly well versed in Pine a[illegible] had great experience in carrying ou[illegible] Work connected with the Pleasure [illegible] the Erection and Heating of Hort[illegible] best scientific principles. Can be [illegible] RODGERS, Elsenham, near Bishopstor[illegible]

GARDENER (HEAD WORKING[illegible] no incumbrance; well qualified [illegible] can command high testimonials.—E [illegible] son, Sons & Co., Nurserymen, Manchester[illegible]

GARDENER (FOREMAN), in a[illegible] gentleman's Garden.—A young Ma[illegible] years' experience in several first class p[illegible] recommended.—Letters addressed E. [illegible] Belfast, will be attended to.

GARDENER (age 37, married).—[illegible] for the last three years Gardener [illegible] ford Hesketh, Esq., Gwrych Castle, [illegible] engage with any gentleman in the [illegible] MITCHELL, Gwrych Castle, Abergele, [illegible]

GARDENER, where a Man or B[illegible] single; thoroughly understands [illegible] branches. Twelve months' good chara[illegible] nedy's Post Office, Blackheath Hill, S.E.

GARDENER.—Middle age, marr[illegible] his profession in all its branches. [illegible] Land and Stock. Wife would take charge [illegible] First-rate recommendations. Wages [illegible] House, &c.—J. F., H. Davies, Seedsman, [illegible] more, N.W.

GARDENER (UNDER).—Age 21; [illegible] ledge of Plants; would prefer a pl[illegible] carried on to some extent. Two years go[illegible] Gardener he is now leaving.—W. B., The [illegible] Castle, Tetsworth, Oxon.

GARDENER, OR GARDENER A[illegible] Age 38, married, two children; unde[illegible] ment of Plants, Forcing Vines, Pines, Peac[illegible] Grapes, &c., also the Flower and Kitchen [illegible] branches. He likewise understands the Man[illegible] and Land. Testimonials will bear strictest [illegible] gentleman he is about to leave, with whom [illegible] years.—R. E., William Bull's Establishment [illegible] Plants, King's Road, Chelsea, S.W.

PROPAGATOR, FOREMAN, or [illegible] aged; energetic and industrious. [illegible] mended; three years' good character—[illegible] Royal Exotic Nursery, Chelsea, S.W.

FOREMAN, PROPAGATOR, SALES[illegible] Age 38; thoroughly proficient in the [illegible] formance of every branch of the Trade—[illegible] Beaufort Street, Chelsea, S.W.

To Landowners.

MANAGER OF AN ESTATE, either [illegible] Owner or a principal Agent—Age [illegible] many years' experience in the Managemen[illegible] Breeding and Fattening Stock, Marketing [illegible] routine of Country Business. His present employ[illegible] man with whom he has lived many years [illegible] testimonials of the highest class.—[illegible] London, S.W.

To Noblemen and Gentlemen.

LAND STEWARD OR AGENT.—[illegible] experience in the Management of Land[illegible] perty, and has also a thorough knowledge [illegible] has himself held a large Stock Farm for [illegible] be happy to devote his practical knowledge [illegible] any gentleman requiring his services. T[illegible] can be given.—Rev. A. C., M A, Mr. E. [illegible] Cross, London, E.C.

LAND STEWARD OR BAILIFF [illegible] gentleman.—Age 37, married; has [illegible] rience in the Management of Draining and [illegible] Rearing, Feeding, Buying and Selling [illegible] Stock; also Machinery and Repairing [illegible] Unexceptionable references as to character [illegible] C. H., Post Office, Edenbridge, Kent.

To Gentlemen Wanting Farm B[illegible]

FARM BAILIFF (at Michaelmas.—[illegible] had considerable experience in the E[illegible] Counties, and is thoroughly acquainted wi[illegible] of Farming, the Rearing and Feeding of S[illegible] stands the Management of Woodlands. [illegible] sible Management. Leaves his present s[illegible] quence of his employer declining Farmin[illegible] take Dairy and Poultry. Highest reference [illegible] J. W., Henry Curtis, Post Office, Stratf[illegible]

BAILIFF.—Age 42, married; has [illegible] Steam Cultivation and the use of [illegible] nery. A good Judge and Manager of [illegible] Accountant.—C. D., 13, Pentonville Road [illegible]

BAILIFF.—Age 39, single; good [illegible] be highly recommended, and can [illegible] of honesty, sobriety, and capability for [illegible] to Ireland if required.—P. T., 34, G[illegible] Street, London, W.C.

SHOPMAN, &c., in a London Seed [illegible] Has had 5 years' experience in all [illegible] and Seed Trades. Can Correspond in Fr[illegible] 18 months' in the London Trade.—W. K., [illegible] Office, W.C.

KITCHENMAID in the Kitchen [illegible] nobleman or gentleman requiring a [illegible] respectful Servant.—Age 19; brought up [illegible] —L., Post Office, Highgate, N.

DINNEFORD'S PURE FLUID M[illegible] been, during 25 years, emphatically [illegible] Medical Profession, and universally accepted [illegible] the best Remedy for Acidity of the Stom[illegible] Headache, Gout, and Indigestion, and as a [illegible] delicate constitutions, more especially for [illegible] Combined with the Acidulated Lemon [illegible] agreeable Effervescing Draught, in which [illegible] are much increased. During Hot Seasons and [illegible] the REGULAR use of this simple and elegant [illegible] found highly beneficial.
Manufactured (with the utmost attention [illegible] purity) by DINNEFORD & Co., 172, New [illegible] London, W.; and sold by all respectable Chemists [illegible] the Empire.

The Gardeners' Chronicle Newspaper.

SATURDAY, AUGUST 24, 1861.

PRIVATE TUITION.—The Rev. G. Henslow, Son of the late Professor Henslow, and M.A. of Cambridge, who took Honours in three triposes, Mathematical, Divinity, and Natural Science, has VACANCIES for TWO PUPILS preparing for the Public Schools, &c., or for the Universities. N.B. Geology and Botany form a part of his system of education. Further particulars on application.—Address, Rev. G. Henslow, Steyning, Sussex.

FARM PUPIL.—At or before Michaelmas next a Farmer in Derbyshire, occupying a Farm of upwards of 300 acres, is anxious to take the Son of a Clergyman or Gentleman as a Farming Pupil. References will be given and required.—For further particulars address R. B. H., Post Office, Burton-on-Trent.

Government Security Life Policies.

THE CONSOLS ASSOCIATION,
429, Strand, London, W.C.

1. Provides the Security of Consols for its Policies.
2. It lends, or returns to Insurers On Demand at any time, about One-Half of all Premiums Paid.

Undoubted Security for Money with a liberal Rate of Interest.
The Association possesses a large Capital, subscribed by several Hundreds of Shareholders.
Full information may be obtained on application to
Thomas H. Baylis, Managing Director.

GOVERNMENT SCHOOL OF MINES.—
Director.
Sir Roderick Impey Murchison, D.C.L., M.A., F.R.S., &c.

During the Session, 1861–2, which will Commence on OCTOBER 7, the following COURSES of LECTURES and PRACTICAL DEMONSTRATIONS will be given:—

1. Chemistry—By A. W. Hofmann, L.L.D., F.R.S., &c.
2. Metallurgy—By John Percy, M.A., F.R.S.
3. Natural History—By T. H. Huxley, F.R.S.
4. Mineralogy } By Warington W. Smyth, M.A., F.R.S.
5. Mining }
6. Geology—By A. C. Ramsay, F.R.S.
7. Applied Mechanics—By Robert Willis, M.A., F.R.S.
8. Physics—By J. Tyndall, F.R.S.

Instructions in Mechanical Drawing, by Mr. Binns.

The Fee for Students desirous of becoming Associates, is 30l. in one sum, on entrance, or two annual payments of 20l., exclusive of the Laboratories.

Pupils are received in the Royal College of Chemistry (the Laboratory of the School), under the direction of Dr. Hofmann, and in the Metallurgical Laboratory, under the direction of Dr. Percy.

Tickets to separate Courses of Lectures are issued at 1l. 10s. and 2l. each.

Officers in the Queen's Service, Her Majesty's Consuls, acting Mining Agents and Managers, may obtain Tickets at reduced prices.

Certificated Schoolmasters, Pupil Teachers, and others engaged in Education, are also admitted to the Lectures at reduced fees.

His Royal Highness the Prince of Wales has granted two Exhibitions, and others have also been established.

For a Prospectus and Information, apply at the Museum of Practical Geology, Jermyn Street, London, W.

Trenham Reeks, Registrar.

News of the Week.

The Queen, accompanied by the Prince Consort, Prince Alfred, the Princess Alice and Princess Helena, landed at Kingstown on Thursday morning, and was received by her Irish subjects with the most loyal and considerate sympathy. Her Majesty is said to have fully appreciated the deportment of the people, and their respectful deference to the motives which had induced her to bespeak as much privacy as possible throughout her Irish tour.

The Emperor of Austria has dissolved the Hungarian Diet. The Royal Rescript was read to both Houses of the Diet by Count Haller, the Royal Commissioner, on Thursday. It stated, that as the Diet had not obeyed the requests which had been addressed to it, and as no further beneficial action could be expected from a Diet which so entirely misunderstood its mission as to declare the way absolutely closed against any possible arrangement, His Majesty had considered it necessary to dissolve the Diet, reserving to himself the right of assembling a new Diet, "possibly within six months from this time." On the previous day the Lower House had adopted by acclamation a resolution moved by M. Deak, calling upon the House, in the event of the Diet being dissolved, to enter an energetic protest against the violation of the constitution and the arbitrary acts committed by the Government. On Thursday the Upper House concurred in the resolution of the Lower House, declaring that the dissolution of the Diet was an illegal act. It is feared that the dissolution will be the precursor of grave events, and this apprehension is increased by the announcement that the collection of taxes by military execution has already commenced at Pesth.

Accounts from Naples inform us that the Royal troops under General Cialdini are rapidly dispersing the brigands who had been sent from Rome by the Bourbon party to support the reactionary movement. The brigands are flying towards the Papal frontier, where the French troops appear to be co-operating against them. The rumour of General Cialdini's resignation is unfounded, and it is now said that he will remain at his post until the accomplishment of his mission. The English fleet has arrived at Naples from Malta.

A despatch from Constantinople announces that the Sultan has resolved on displaying a conciliatory spirit in Servia and the Herzegovina. The French papers state that Omar Pasha, after defeating the insurgents in three engagements, has issued a proclamation declaring that the Sultan has accorded all the demands made by the Montenegrins.

From the United States we learn that General Lyon has defeated a body of Confederates, under General M'Culloch, at Dug Springs in Missouri; and that a party of 1000 Confederates has been repulsed with loss in an attack on Athens in the same State. The Confederates have burnt the town of Hampton, near Fort Monroe, and are concentrating in great force at Fairfax, which they are strengthening by entrenchments. General M'Clellan is actively occupied in reorganising the Federal army, and withholds from the press all information concerning his intended movements. The privateer Petrel has been sunk by the Federal frigate St. Lawrence, off Charleston. Prince Napoleon visited President Lincoln at Washington on the 3d inst., and has since visited the Confederate camps at Fairfax and Manassas.

The *Moniteur* of Monday published the text of the convention between France and England for regulating the immigration of Indian labourers into the French colonies.

Home News.

The Queen's Visit to Ireland.—Her Majesty and the Prince Consort, accompanied by Prince Alfred, Princess Alice, and Princess Helena, left Osborne on Wednesday morning at a quarter before 9 o'clock, for Holyhead. The Royal party crossed in the Fairy to the Clarence Victualling Yard at Gosport, and proceeded thence in the royal train belonging to the London and North Western Railway Company, who had prepared a superb new saloon carriage for the use of her Majesty. On leaving Gosport the train proceeded by the South Western line to Basingstoke, where Viscount Sydney, Lord Chamberlain of her Majesty's Household joined the train. The Queen left Basingtoke at 10 minutes after 11, and proceeded by the Great Western line to Oxford, where Earl Granville joined the train as Secretary of State in attendance on her Majesty. At Leamington her Majesty alighted for 20 minutes and took luncheon in a suite of rooms which had been fitted up for the purpose by the railway company. The Royal train passed through Birmingham without stopping, and arrived at Bushbury Junction near Wolverhampton at 40 minutes after 2. The line had been kept perfectly clear for 15 minutes before the approach of the train, an arrangement which rendered unnecessary the use of a pilot engine over the Great Western. The train now proceeded on the London and North Western line to Whitmore where it stopped to take in water. At 25 minutes to 4 it passed through Chester without stopping, and proceeded on its way to Holywell, where it stopped to take in water, and arrived at Holyhead at a quarter before 7, five minutes before the appointed time. During the whole journey there were no official receptions, and by the Queen's desire the public were not admitted to the platforms of the stations at which she stopped, and no cheering or other demonstrations on the part of the companies' servants was allowed, the object being that her Majesty should be perfectly undisturbed during the journey. The directors and principal officers of the different railways, however, received her Majesty on her arrival, and accompanied the Royal train in its passage over their respective lines. On arriving at Holyhead her Majesty was saluted by the ships of the Channel fleet assembled in the harbour. The Queen walked from the railway carriage across the pier, alongside which the Victoria and Albert was moored. The Royal yacht sailed for Kingstown at a quarter past 7, and arrived safely in Kingstown Harbour shortly after half-past 10, having made the voyage from Holyhead in little over three hours. The men-of-war in the harbour were all most beautifully illuminated, and notwithstanding the lateness of the hour the crowds on the piers were excessive. The Queen passed the night on board the Royal yacht, and landed on the Carlisle Pier at Kingston at 11 o'clock on Thursday morning in the presence of vast numbers of people, who, in spite of the rain which fell at intervals, had assembled to welcome her. There was a disposition to cheer, but it was soon checked in respectful sympathy with the motive which had induced her Majesty to request as much privacy as possible during her Irish tour. Her Majesty and the Royal family immediately entered the State carriage on the railway, attended by the Lord Lieutenant and a numerous staff of officers, civil and military. The train proceeded at a rapid pace, and reached Westland Row terminus at a few minutes past 11. Her Majesty, leaning on the arm of the Prince Consort, proceeded along the platform of the station, and ascended the steps of the Royal carriage, which was in waiting outside. A guard of honour of the 87th Regiment, flanked right and left by a troop of the 15th Hussars, was stationed in front of the station, and was the only appearance of military display in attendance on her Majesty. When the Queen entered the carriage, the crowd, which filled every available spot from the street to the house-tops, could not restrain a cheer, and a numerous array of flags and banners, formed a very imposing sight along the line. On her Majesty's arrival at the Viceregal Lodge she was received by the Lord-Lieutenant and the Prince of Wales, his Excellency having preceded her Majesty for that purpose. The Prince of Wales afterwards returned to the camp at the Curragh, accompanied by Prince Alfred, who intended to remain at the camp till to-day. On Thursday evening the Queen drove along the Lucan Road, but in so unostentatious a manner that it was almost in the strictest *incognito*. The Prince Consort, accompanied by the Lord-Lieutenant, Sir Robert Peel, and General Grey, visited the Art Exhibition, Trinity College, and the Albert model farm at Glasnevin; but these visits were of the most private character. On Friday the Prince Consort went to the Curragh camp, returning to Dublin in the afternoon. The Princesses Alice and Helena, and Prince Alfred visited the Castle, Trinity College, and the National Education Board. It was expected that the Queen would visit the Art Exhibition in the afternoon.

The Court at Osborne.—On Friday morning the Crown Prince and Princess of Prussia, with Prince William and Princess Charlotte, left Osborne for the Continent. In the afternoon the Queen, Prince Consort, and Princess Alice left Osborne for Frogmore House, where her Majesty passed the night. On Saturday, being the birthday of the late Duchess of Kent, her Majesty passed the day in retirement at Frogmore House, and visited the mausoleum in which the body of her Royal Highness has lately been deposited. In the evening the Queen, Prince Consort, and Princess Alice returned to Osborne. On Sunday morning the Queen and Prince Consort, Princesses Alice, Helena, and Louisa, Prince Arthur, and Prince Leopold attended Divine service at Osborne. The Rev. W. R. Jolley officiated. In the afternoon Prince Alfred arrived at Osborne from North America. On Monday Count Gleichen arrived on a visit to her Majesty. On Tuesday afternoon the Queen, with the Princesses Louisa and Beatrice, drove out. The Prince Consort, Princess Alice, and Prince Alfred rode on horseback. The Duke of Oporto visited her Majesty. On Wednesday morning the Queen and Prince Consort, accompanied by Prince Alfred, Princess Alice, and Princess Helena, left Osborne for Dublin. In the afternoon Prince Arthur, Prince Leopold, Princess Louisa and Princess Beatrice, left for Buckingham Palace, and on Thursday morning left town for Holyrood Palace on their way to Balmoral, where they will await her Majesty's arrival.

Arrival of Prince Alfred.—On Saturday afternoon a telegram from Queenstown announced that Prince Alfred was one of the passengers on board the Mail steamship Arabia, which would arrive in Liverpool in the course of that evening. As soon as it was known that the Arabia had passed Holyhead, the Mayor of Liverpool, accompanied by Mr. M'Iver and Captain Luckcraft, R.N., embarked in the steam tender Satellite, and proceeded seaward in search of the packet, which they met a little beyond the bar. His Royal Highness immediately went on board the Satellite, and landed at St. George's pier at half-past 10 o'clock P.M. His Royal Highness then proceeded in the Mayor's state carriage to the Lime Street station of the London and North Western Railway, where he entered the saloon carriage which was waiting for him, and started for London at a quarter past 11 o'clock. His Royal Highness arrived at Osborne at 1 o'clock on Sunday afternoon.

The Crown Prince and Princess of Prussia, with their two children, left Osborne on Friday for Berlin, and not on Thursday, as stated last week. The Queen and Prince Consort, the Princesses Alice, Helena, and Louisa, Prince Arthur, and Prince Leopold, accompanied their Royal Highnesses on board the Osborne. After remaining a short time on board, the Queen, Prince Consort, and Royal family re-embarked in the barge and returned to the pier. The Osborne immediately started for Antwerp.

The King of Sweden.—On Friday morning the Duke of Cambridge, the Grand Duke Maximilian of Austria, and the Duke of Oporto visited his Majesty. The King and Prince Oscar afterwards visited the British Museum and St. Paul's Cathedral, and proceeded thence in the Queen's carriages to Woolwich Arsenal, where the commandant of the garrison and a

staff of Artillery officers were in attendance to receive them. The arrival of his Majesty was announced by a Royal salute fired from a field battery; and a guard of honour, composed of a company of Foot Artillery, was drawn up in front of the barracks to receive the Royal party. After partaking of luncheon in the officers' mess-room, the King was conducted through the laboratory and over the various departments of the Arsenal, including the Armstrong gun factory, where his Majesty spent a long time in thoroughly examining the mode of manufacturing that weapon. Before taking his departure the King complimented the commandant and the officers of the Artillery upon the soldierly appearance of their corps. His Majesty left under a second Royal salute, the band of the Royal Artillery playing the Swedish national anthem. From the Arsenal the King proceeded to the dockyard, where he embarked in a river steamboat, and proceeded up the Thames to Greenwich, where the Royal party landed and inspected the College and Chapel. Again embarking, the King steamed up the river to Waterloo Bridge, where the Queen's carriages were in attendance to convey his Majesty to Grosvenor Place. In the evening the King entertained Chevalier Tottie, the Swedish Consul-General, and a party of Swedish gentlemen at dinner. On Saturday morning, at an early hour, the King visited the new Houses of Parliament, Westminster Hall, and Westminster Abbey. His Majesty afterwards visited the Duke of Cambridge and the Duke of Oporto. At half-past 3 the King left the residence of the Embassy for the Bricklayers' Arms station of the South-Eastern Railway, and proceeded thence to Dover, where he was received with the usual military honours. Prince Oscar left the Victoria Station, Pimlico, by the 10 A.M. express train for Sheerness, to take leave of the Swedish squadron, which, after disembarking his Majesty at the Isle of Wight, had proceeded to the Nore, where the ships have since remained at anchor. His Royal Highness proceeded on board the screw steam-frigate Stockholm, and, having hauled down his vice-admiral's flag, took leave of his officers and continued his journey by railway to Dover, where his Royal Highness arrived shortly before the King. His Majesty and Prince Oscar proceeded from the station to the pier, and embarked immediately for Calais. The King proceeds to Lubeck direct, and will embark thence on his return to Sweden. Prince Oscar goes to the baths of Pyrmont, where his princess is taking the waters.

The Queen Mother of Spain. — On Saturday Queen Christina, accompanied by the Duke and Duchess of Montpensier and their suite, visited the Crystal Palace, and afterwards had a banquet *à la Russe* in the new rooms. On Monday the Queen, with her husband the Duke de Rianzares, left London for Folkestone, where they embarked on Tuesday for Boulogne.

The Duke and Duchess of Montpensier.—The Spanish war-steamer Ulloa, commanded by Don Fernando Guarro, has arrived at Southamptor from Ferrol, to receive the Duke and Duchess of Montpensier, on their return to Spain.

The Duke of Oporto sailed from Southampton on Thursday evening on his return to Lisbon.

The Bishopric of Durham.—Dr. Baring, Bishop of Gloucester and Bristol, has been selected to succeed Bishop Villiers in the See of Durham.

The Bishop of London held a confirmation at Calais on Tuesday morning, another at Dunkirk on the same afternoon, and another at Bonn yesterday.

Parliamentary Movements.—The election for South Lancashire terminated on Saturday in the return of Mr. Turner, the Conservative candidate, by a majority of 837 over Mr. Cheetham, the numbers being 9680 to 8843.

The Volunteer Movement.—Messrs. Cook, Son, & Co., the Manchester warehousemen of St. Paul's Churchyard, have issued the following notice to the persons in their employ:—"It is requested that all young men in this establishment (holding situations under that of first salesmen) who have joined the Volunteer corps will at once send in their resignations to the brigade, or leave this establishment." In consequence of this notice some efficient members of the Irish and other corps have been compelled, very unwillingly, to send in their resignations.—A volunteer brigade field day took place on the 3d inst. upon Wanstead Flats, and proved so instructive and effective, the whole of the troops for the day being under the command of a general officer, that Lieut.-Colonel Palmer purposes, with the concurrence and approbation of the Commander-in-Chief and the Secretary at War, to form a volunteer encampment, and brigade for one day on Nazing Common, on Monday, 23d September. The commanding officers of Volunteers who may desire any portion of their corps to take a part in the proceedings are requested to make their wishes known to Colonel Palmer, Nazing Park, Essex.—Sir George Cornewall Lewis, Secretary of State for War, has caused the following communication to be addressed to the officers commanding Volunteer corps, upon the subject of what constitutes an effective volunteer, according to the provisions of the Act of Parliament:—

"With a view to the better understanding of the conditions which constitute an effective Volunteer according to the provisions of the Volunteer Act, the Secretary of State for War thinks it desirable to point out to officers commanding Volunteer corps that no member should be returned effective unless he has attended at the annual general inspection of the corps, or is accounted for as absent with the leave of the officer commanding. Officers commanding Volunteer corps may rely that every care will be taken that the general inspection ordered by the Act shall be held each year at the time best suited to meet the convenience of the Volunteers."

Foreign.

France.—The *Moniteur* on Monday published the text of the treaty concluded between Great Britain and France for the free emigration of coolies from India into the French colonies. It also published a letter from the Emperor, directing M. Persigny to prepare a Bill for the Corps Legislatif next session, sanctioning the expenditure of one million sterling for the improvement of country roads, and in the meantime to come to an understanding with M. de Forcade for the immediate appropriation of a "first credit" to the improvement of such roads. Prince William of Baden arrived at the camp of Chalons on Monday on a visit to the Emperor. Among the other visitors are Nalim Pacha, brother of the Viceroy of Egypt, an Arab chief from Algeria, several foreign officers, Prince and Princess Murat, the Princess Anna and Prince Achille Murat, General Fanti, and two other Italians, who arrived on a special mission from Turin. The latter have been received with great distinction, and are residing at the Imperial head-quarters. The Arab chief has also been honoured with especial notice, and has received from the Emperor the Cross of the Legion of Honour. Since his arrival in camp the Emperor has been actively occupied in superintending experiments with rifled cannon, and various reviews and sham fights in which the troops have been engaged. The Prince Imperial has accompanied his Majesty on these occasions, and is extremely popular with the troops, who are delighted with the interest he takes in their manœuvres. It is understood that the Emperor will rejoin the Empress at Eaux-Bonnes about the 26th inst., when their Majesties will proceed together to Biarritz. A letter from Eaux-Bonnes of the 11th says that on the previous day the Empress went to the English garden, accompanied by her Majesty's gardener at Biarritz, in order to give her last instructions for the completion of the promenade. Seats are to be placed near the different shrubberies; flower-beds will be arranged at intervals to improve the aspect of the place, and a fountain will complete the decorations. Her Majesty has ordered the works to be completed as rapidly as possible, in order that she may see the effect of them before her departure. The Empress leads a very retired life, and appears to be in the enjoyment of excellent health. The *Pays* says that the reported intention of the Sultan to visit Paris and London, and the rumour that the French Embassy at Rome is to be reduced to a Legation, are without foundation. The Abbé Bordeaux was tried on Saturday on the charge of delivering a seditious speech at Chinon, near Tours, in which he attacked the campaign in Italy, and spoke of the Emperor and King Victor Emmanuel as "Cæsars out of place, surrounded by soldiers armed with swords, lances, and rifled guns." He was found guilty, and sentenced to three months' imprisonment and 500f. fine, and to be imprisoned until the fine be paid. It is said that the Government has determined to punish the Bishop of Poitiers by dividing his diocese into two, and appointing a new bishop to the new and better half. The *Moniteur* denies the report that M. Saint George had been superseded in his post of director of the imperial printing establishment for embezzlement in the finance department, and says—"The reasons for this change have nothing to do with M. Saint George's management of the establishment, upon the honourable character of which no imputation is cast."—The Court of Cassation has pronounced judgment in favour of the French Protestants of the department of the Haute Vienne in their appeal against the sentence of the local courts, by which they were forbidden to employ a private tutor for the education of their children. It appears that in 1848, when the Roman Catholic hierarchy began to have great power in France, the Sous-Préfet of Bellac shut up all the Protestant places of worship in that arrondissement. In 1852 all the Protestant schools of the arrondissement were shut up. In 1856 the places of worship were re-opened, as a concession to some diplomatic interest made for them, but the schools remained closed. The Protestants then resorted to private tuition, and M. Jusnel, the deprived schoolmaster, went about from house to house, giving lessons as a daily tutor. The bishop and clergy determined to stop this system, and M. Jusnel was visited by a Juge de Paix, accompanied by gendarmes, to whom he at once admitted that he went to people's houses to teach children, to one house where he taught four children, to another where he taught three, to a third where he taught three, &c. The tribunal of Bellac, upon this, fined him 50 francs. He appealed to the Imperial Court of Limoges, but the sentence was confirmed. He then appealed to the Court of Cassation, which after hearing the arguments of M. Jules Delaborde on the distinction between public and private education, and on the right of Protestants to have private tutors for their children, reversed the sentence of the Court below, thereby affirming the right of Protestants to educate their own children, and to have, if they please, the assistance of a Protestant tutor for that purpose.—The appeal of M. Mirès came before the Court on Monday. He appeared at the bar looking very pale and fatigued, by the side of M. Cremieux, his counsel. After the usual formalities he read a note, applying for permission to postpone his defence till the 26th inst. The Court, after deliberating on the application, decided that the case should [illegible] that the pleadings of the prisoner's counsel [illegible] postponed to the 26th, as requested.

Spain.—The Queen has arrived at V[illegible]. Infanta Christina has been safely d[illegible] Prince. Don Joaquim Narvaez, one of the [illegible] chiefs of the rebellion of Loja, was [illegible] Iznajar on the 6th inst. A retired col[illegible] nicated to the Captain-General of Grenada, [illegible] dition of his life being spared, a list of [illegible] in the rebellion, numbering upwards of 900, [illegible] consequence of which numerous arrests have [illegible] place. A deputation of Catalonian Volunteers [illegible] about to leave Barcelona for Madrid to [illegible] Generals Prim, Cervina, and Ros de Olano [illegible] honour in acknowledgment of their milit[illegible] Africa. At Cordova the police had [illegible] booksellers' shops to seize prohibited [illegible] especially those of a Protestant character.

Switzerland.—The proposals of the Italian [illegible] ment in reference to the Ticino Bishopric [illegible] acceptable to the Federal Council, the [illegible] resolved upon the temporary suspension [illegible] conferences on this question.

Belgium.—A congress of artists was opened [illegible] 17th inst. at Antwerp, the object of which [illegible] adoption of measures for securing to the artist [illegible] perty in his own works, and to prevent the [illegible] counterfeits or forgeries which robs him of [illegible] of his own industry. The Congress, which was [illegible] ded by several English artists, took place [illegible] the patronage of the King; but, owing to his [illegible] absence, the proceedings were conducted [illegible] auspices of M. Rogier, the Prime Minister, [illegible] sident.

Saxe-Coburg.—An official letter from Gotha [illegible] that the statement published by some French [illegible] asserting that the princes of the male branch [illegible] House of Saxe-Coburg Gotha had refused to [illegible] the incorporation of the army of Gotha with [illegible] Prussia, is a mere invention.

Austria.—The Empress of Austria continues [illegible] derive great benefit from her residence at Corfu [illegible] the Emperor has left Vienna to join her Majesty [illegible] that island. It is said that orders have been [illegible] place two more *corps d'armée* on a war footing [illegible] which is to occupy Austrian Poland.

Hungary.—Field-Marshal Count Haller arrived [illegible] Pesth on Wednesday with the order for the dissolution of the Hungarian Diet, and on Thursday, in the [illegible] of Royal Commissioner, read to *both H*[illegible] ing Royal Rescript in reply to their recent [illegible]

"Seeing that the Hungarian Diet has not obeyed [illegible] which have been addressed to it, and that we [illegible] expect any further beneficial action from a Diet [illegible] great disadvantage of all concerned, so entirely [illegible] its highly important mission in such difficult [illegible] to declare the way to be absolutely closed against [illegible] arrangement, because its demands, which in [illegible] exceed the bounds of admissibility could not be [illegible] we find it necessary to dissolve the present Diet. [illegible] same time reserve to ourselves the right of assembling [illegible] Diet, possibly within six months from this time."

The Lower House assembled on Tuesday and Wednesday in secret sitting, to discuss their future [illegible] conduct, and in the sitting of Wednesday [illegible] acclamation a motion proposed by M. Deak, calling [illegible] the House, in case of the dissolution of the Diet [illegible] enter an energetic protest against the violation [illegible] Constitution and the arbitrary acts committed [illegible] Government. Baron Vay afterwards entered the [illegible] and was enthusiastically received. The Deputies [illegible] braced each other before separating. On the following day the Upper House concurred in the declaration passed by the Lower House, that the dissolution [illegible] Diet is an illegal act. It is generally thought [illegible] dissolution of the Diet will be the precursor of [illegible] events. The collection of taxes by military [illegible] has commenced at Pesth. A collision between [illegible] military and civilians took place at Arad on the evening of St. Stephen's Day, on account of national airs having been sung by the populace. Five of the people [illegible] wounded on the occasion.

Italy.—The Government of Italy has determined to abandon the passport system throughout the [illegible] of Victor Emmanuel. The exceptional condition [illegible] Neapolitan States will oblige the Lieutenant-Governor of those provinces to require travellers for a [illegible] period to be provided with a regular passport; [illegible] Northern and Central Italy the traveller henceforward will be only called upon to give his card, or verbally [illegible] name and nationality. It was reported on Friday [illegible] General Cialdini had resigned the office of the King's Lieutenant in Naples, and had called upon the Government to appoint his successor. It is now said [illegible] the rumour of his resignation was unfounded [illegible] that he will remain at his post until the accomplishment of his mission. Signor Cantelli and Signor [illegible] have resigned, but will remain in office until [illegible] Government has provided substitutes. It is reported that the Marquis di Villamarina has been appointed Governor of Naples, in place of the Marquis d'A[illegible] General Cialdini on Monday, in reply to an address [illegible] the Municipal Council of Naples, recalled the words [illegible] King Victor Emmanuel, who said that he wishes [illegible]

the King of the whole Italian nation, and not the King of a party. He said:—

"The King desires that concord should exist among all the members of the Liberal party, which all have the same end in view, the unity of Italy, the maintenance of the dynasty of Savoy, the deliverance of Venice, and the obtainment of Rome as the capital of Italy. All should aid and concur in the pacification of Naples."

The latest news from Naples by the official telegraph mentions the capture of about 300 brigands. The Bourbon bands are rapidly flying to the Roman frontier. A few days since a band of brigands were surprised by some French troops in a house on the Papal frontier. One brigand was killed and five taken prisoners. The rest fled into Italian territory. Several officers of the old Bourbon army have been arrested and conveyed to Genoa, whence they will be at liberty to proceed to any foreign country. Accounts from the province of Avellino state that the Reactionists had been everywhere beaten or were in flight. Twenty-nine priests and three monks have been arrested at Castellammare. At Sorrento, Riano, and Amalfi several reactionary preachers have been arrested, among whom is the Vicar-General of Sorrento. The Royal troops have surrounded and made prisoners the reactionary bands on the mountains near Cancello. The town of Cipriano has been taken after a short resistance. The Royal troops have also taken from the insurgents the village of Ponte Landolfo, in the province of Sannio, and that of Casalduni, in the province of Molise. The *Nazione* publishes the following details to show that the outrages committed by the Neapolitan brigands increase rather than diminish in horror:—

"New atrocities have been committed by the brigands. At Vietri they barbarously killed nine gentlemen of the Liberal party, and perpetrated similar murders in other villages. In the commune of San Paolo, in the district of Molise, on the morning of the 4th the brigands, all dressed in the uniform of the old Bourbon gendarmes, surprised the town, and, after having sacked the houses without exception, took the curate, Giovanni Rogati, who had the reputation of being an honest priest and a good Liberal, his brother, the syndic of the village, Signor Antonio Capra, and having brought them out naked on the public square, exposed them to the derision and insults of the vilest of the populace, who made common cause with the brigands, and after this spectacle had lasted several hours murdered them with their bayonets. They then took the wife of the syndic, and, after having stripped her naked, committed on her person every imaginable outrage, leaving her half dead. Having learnt that a certain Giuseppe Cavarrano, a respectable man, was trying to escape in order to alarm the neighbouring villages, they arrested him, and, having dressed him up as a woman, in the middle of the public square they set fire to his dress and burnt him alive. Hearing of the approach of a detachment of troops from Barano and of National Guards from the neighbouring village, they betook themselves to a precipitate retreat. The Carabineers have the greatest difficulty to defend the brigands from the fury of the people when they are taking them to prison. They are in consequence obliged to bring them into Naples in the night. Some of the brigands were followed by their wives."

The King of Italy has arrived at Florence. At a hunting banquet on Tuesday in the neighbourhood of Turin the King proposed a toast in honour of Garibaldi and his companions. It is believed that Garibaldi will go to Naples on the 7th of September, the anniversary of the day on which he entered that city. The Government is preparing grand fêtes for the occasion. The Government have resolved to hold an Italian Exhibition of Art and Industry at Florence in the ensuing months of September and October. It is announced that the railway contract with Talabot has been broken, and that the works will be commenced on account of the State. The Minister of Public Works left Turin for Naples on Saturday. The English squadron has arrived at Naples from Malta. The French papers describe their arrival as a breach of the principle of non-intervention, and assert that the crews of the vessels composing the squadron continue to go on shore by detachments for drill. At Rome, on the occasion of the Emperor's *fête*, which is also the festival of the Assumption, the Pope gave his solemn benediction, and a brilliant entertainment took place at the French Embassy. The Military Club and the national establishments were illuminated. General Goyon gave a grand dinner. Monsignor Chigi has been appointed Papal Nuncio at Paris. It is said that the Duke de Gramont will return to Rome. Tranquillity and perfect order prevail at Rome. The subscription to the Cavour monument continues at Rome in spite of the efforts of the police to prevent it. The Arch Confraternity of St. Peter's Pence at Rome has just celebrated the first anniversary of its foundation. On this occasion Monsignore Nardi delivered an address, in which he said that in the space of two years it had given to the Pope more than 4,000,000 crowns, of which 8,000,000f. came from France; 1,775,000f. from Ireland; 2,000,000f. from the German provinces of Austria; 100,000 florins from Hungary; and 1,500,000f. from the Catholic dioceses in the United States of America.

RUSSIA.—A telegraphic despatch from St. Petersburg states that the Empress of Russia set out on the 14th on a visit to the Crimea, and that the Emperor was to leave on the 18th to join her Majesty. The Grand Duke Constantine had also taken his departure for that part of the empire.

POLAND.—Instructions for the proper carrying out of the provisions of the new electoral law, and an explanation of the manner in which the electoral lists have been compiled, were published at Warsaw on Monday in reply to complaints from several citizens. M. Wielopolski has been appointed a Privy Councillor of the first rank, and Vice-President of the Council of State. He also retains the two Ministerial portfolios which he already holds. The Emperor, in an autograph letter, has expressed his thanks to M. Wielopolski for the zeal which he has displayed in the public service. General Suchozanet, Governor of Warsaw, left that city on Monday night. Serious disturbances broke out at Kalisch on Saturday, in consequence of the arrest of an apothecary. Crowds of people assembled and insulted the patrols. A great number of women wearing the national colours surrounded the Colonel and demanded the release of the prisoner, which was thereupon granted. The number of people, however, gradually increased, and their attitude became more threatening, until the whole garrison assembled under arms and threatened to fire on the people. Numerous arrests have been made.

CIRCASSIA.—According to news received at Constantinople on Friday, the Russians have sustained another defeat from the Circassians, who have proclaimed a republic.

TURKEY.—His Excellency Sir William Codrington arrived at Constantinople on Thursday to congratulate the Sultan on his accession in the name of Queen Victoria. Orders have been despatched to the Pachas of Tunis, Tripoli, and Egypt, to send officers to congratulate the Sultan on his accession. The Prince of Servia has refused to send a deputation. Mehemet Djemal Bey has gone to Odessa to congratulate the Czar. The dismissal of Mehemet Kiprisli Pasha from the office of Grand Vizier is said to have been caused by the discovery that he was implicated in certain acts of corruption connected with the lighthouse service and other matters. It is said that he will be appointed either Governor of Bagdad or Commissioner of Anatolia. Fuad Pasha will be promoted to a rank equivalent to that of Grand Vizier. Mehemed Djemil Pasha will be Minister for Foreign Affairs. Active French intrigues are carried on to effect the return of Riza Pacha to the Seraskieriat. The merchants have signed a petition praying that Ethem Pasha may re-enter the Ministry. The Sultan continues to effect reforms, and has resolved upon displaying a conciliatory spirit in Servia and the Herzegovina.

MONTENEGRO.—Three engagements have recently taken place in the Herzegovina, in which the Turks were victorious. Omar Pacha has, however, issued a proclamation declaring that the Sultan grants all the demands made by the Montenegrins. Ten Turkish war steamers, with troops on board, have arrived at Antivari.

SERVIA.—Prince Michael opened the Skuptskina at Belgrade on Monday. In his speech he announced to the Assembly the preparation of interior legislative measures and the organisation of a national militia. He also spoke of Prince Garatschinin's mission to Constantinople, to attain the object of which, he said, nothing would be neglected. With regard to the emigration of Christians from the neighbouring Turkish provinces the Prince said:—"The Servians, united to the Christians of Turkey by the ties of race and religion, could not remain indifferent to their fate. Servia was therefore open to them. The security of the frontiers of the Principalities and of Turkey is thus assured."

SYRIA.—Accounts from Beyrout state that the organization of native tribunals, a measure prepared by Daoud Pasha, has produced a favourable effect.

INDIA.—We have accounts from Bombay to July 27. The following are the details:—

Bombay.—Considerable changes are about to be made in the Bombay Native Army, which is to consist of thirty regiments of infantry of six companies each: The regular line army is to be augmented by the two Belooch battalions, Jacob's Rifle Regiment, and the Marine Battalion. A large number of Indian officers have been recently elected for the staff corps. Camps of exercise, or larger assemblages of troops, are to be formed at different stations of the Upper Provinces in the cold season. Extensive portions of both lines of the Great Indian Peninsula Railway have been washed away by the heavy rains. Loud complaints are made by the public against the engineers.

Hyderabad.—The Finance Commission appointed to examine the state expenditure of the Nizam, have commenced their operations at Hyderabad. Considerable reductions, both civil and military, are to be effected.

North West Provinces.—Cholera is now ravaging the famine district, and threatening to decimate the population. Deaths from starvation only occur in those villages to which it has been found impossible to extend relief.

AUSTRALIA.—The clipper ship Marco Polo, from Port Phillip, arrived in the Mersey on Wednesday, after a long and hazardous voyage of 173 days, caused by her having been in contact with an immense iceberg in the South Pacific, on the 4th of March. The ship's bowsprit was knocked out, her bows greatly damaged, and the foremast sprung. Such was the nature of the damage sustained, that all hopes of saving the vessel were at one time given up; but owing to the intrepidity of the captain, and the brave conduct of the crew, the Marco Polo was taken into Valparaiso on the 2d of April. After undergoing a thorough overhaul, the ship sailed for Liverpool towards the end of May, with all her passengers, 242 in number, and 6570 ounces of gold dust on board.

UNITED STATES.—Immense supplies of warlike stores have been despatched to the camp on the Potomac, and in order to avoid the beat, all movements of troops have taken place at night. General M'Clellan is very energetic in organizing the army, but nothing is known as to the plan of his intended campaign, as he has determined to withhold all information of his movements from the press. A Washington despatch says that some of the newspapers there, having disregarded the agreement with General M'Clellan as to the publication of army movements, were to be subjected to stringent rules, as he was determined to enforce his policy. General M'Dowell's official report of the battle at Bull's Run has been published. It states that on the eve of the battle the 4th Pennsylvanian Regiment of Volunteers and the battery of Volunteer Artillery of the York 8th Militia, whose term of service expired, insisted on their discharge, and that on the next morning, when the army moved forward to the battle, these troops moved to the rear, to the sound of the enemies' cannon. It says that the battle was won by the Federal troops at half-past 3 in the afternoon, but the arrival of General Johnstone with reinforcements of Confederate troops at this time converted the victory into a disastrous rout, the Union troops being worn out by fatigue. The report gives a total list of 19 officers and 462 men killed, 64 officers and 947 men wounded, 40 officers and 1176 men missing, a loss of 8 rifled cannon, 6 Parrott 10-pounders, 2 howitzers, 1 cannon, 1 30-pounder Parrott gun, 5 pieces of Rhode Island battery, 100 boxes cartridges, 87 boxes rifled cannon ammunition, 30 boxes old firearms, 13 loaded provision waggons, 3000 bushels of oats, 2500 muskets, 8000 knapsacks and blankets. A flag of truce with two despatches arrived at Washington on the 1st. One despatch was for General M'Dowell, and had a reference to a rumour prevalent in the Confederate camp that some of their officers captured at Bull's Run were to be hanged. The other despatch was addressed to General Scott, and the purport of it has not transpired. It was however thought that the Confederates were anxious to come to an understanding on the subject of pickets, who were continually being shot. Congress finished its special session on the 6th inst., and adjourned until the first Monday in December, without passing the act approving and confirming the measures taken by President Lincoln before the assembling of the special session. Previous to the adjournment both Houses passed a Bill increasing the pay of the soldiers and sailors by two dollars a month, and the Senate in executive session confirmed a large number of appointments in both services. The President approved all the Bills which passed both Houses, but yielded a very reluctant approval to the Bill providing for the confiscation of property used for rebellious purposes. The Secretary of the Treasury visited New York on the 9th, and had a conference with the leading bankers. He explained his financial programme to them, and elicited their views with regard to the disposal of the various classes of Treasury notes which he is authorised to issue by the recent Act of Congress. The conference broke up without any formal understanding having been arrived at. Another meeting was to take place. On the night of the 7th General Magruder, with 7000 or 8000 Confederate troops, including artillery and cavalry, took possession of Hampton and burnt it to the ground. General Butler, on hearing of the advance of the Confederates, moved a body of the New York 20th Rifles, under Colonel Weber, to the lower side of Hampton Bridge, in order to protect Camp Hamilton and Newport News, upon which it was supposed the Confederates were about to make an attack. He remained there until 11 o'clock, and had barricades erected, and strong guards posted at various points on the line of the creek. A portion of the Confederates attempted to force a passage over the bridge, but they were driven back. During the night several shots were exchanged between the Confederates in the town and the pickets of Colonel Weber's troops across the bridge. From Missouri we have advices to the 5th. A body of Confederates, under the command of General M'Culloch, has been defeated at Dug Springs (Missouri) by General Lyon. During the fight a force of 270 United States cavalry cut their way through 1000 Confederate infantry. A thousand Secessionists have attacked the Union camp at Athens (Missouri), and were defeated with loss. On the 3d General Lyon, with a Federal force, followed up the Confederates and attacked them, when they again retreated. On the 5th he returned to Springfield, on account of the exposed condition of that place. The Confederates were advancing from different points, and General Lyon had called in 2500 Home Guards from the surrounding country. It was supposed that the Confederates were concentrating their forces at the various points on their side of the river from the Point of Rocks to Alexandria. There were 8000 or 10,000 at Fairfax Court House, a considerable force in the vicinity of Edward's Ferry, large bodies at other crossings, and several thousand at Leesburg. As yet they have only made minute reconnaissances in the neighbourhood of the Chain Bridge. It is stated that the Union majority in legislative election in Kentucky is 60,000. The Confederate privateer M'Rae managed to run the blockade of the Mississippi on the 30th, and got to sea. The privateer Petrel has been sunk by the United States' frigate St. Lawrence, off Charleston. Five men were drowned, and the remaining 36 of her crew were taken prisoners. The coast of North Carolina is swarming with privateers, which are reported to be very active. Several vessels have been captured. Prince Napoleon was presented to the President on the 3d by the Secretary of State. In the evening he dined at the White House, in company with most of the cabinet, Generals Scott and M'Clellan, and the British and French ministers. On the 4th he attended service at Dr. Pyne's church, accompanied by the French minister, and in the afternoon visited the chain bridge. The Prince crossed and inspected the entrenchments and camps as far as the *tête de pont* of the Long

Bridge, and has since visited Fairfax and Manassas. Lady Franklin and her niece had arrived at San Francisco from the Sandwich Islands.

CUBA.—Advices from Cienfuegos, Cuba, state that the seven vessels taken by the privateer Sumter into that port had been released by the Spanish authorities, and had sailed under convoy of the United States steamer Crusader.

MEXICO.—President Juarez is still unable to form a cabinet, and the priest party are daily growing in numbers and in strength. On the 25th June a band of 2000 rebel cavalry, under the command of Gen. Marqueza, penetrated to the very heart of the city, but were compelled to retreat with loss. On their retreat they committed the most barbarous outrages; but next day Gen. Ortega was on their track, and another battle was expected. Meanwhile the Mexican Congress was occupied in discussing the propriety of abolishing the title of Don. On the night of the 6th July Mr. H. Beale, an English merchant, was murdered at his own house, and the greatest alarm prevailed amongst the foreign residents, Marqueza having raised the cry of "Death to all foreigners, especially to the French."

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 91½ to ⅝ for Money, and 91¾ to ⅞ for the 10th September; Three per Cents. Reduced, 91⅜ to ⅝: New Three per Cents., 91¾; India Stock, 220; Ditto Five per Cent. Stock, 102⅝ to ½; Ditto for Acct., 102⅝; Ditto Scrip, 102⅞ to ⅞; Ditto Four per Cent. Debentures, April, 1864, 97½; Five per Cent. Enfaced Rupee Paper, 95½ to ⅛; Exchequer Bills, March, 6s. to 10s. dis.; Ditto June, 1s. dis., 2s. prem.—FOREIGN: Brazilian Old Five per Cents., 99⅞; Ditto Four and a Half per Cents., 1860, 88⅞; Dutch Two and a Half per Cents. for Acct., 63⅞; Ditto Four per Cent. Certificates, 100½; Equador New Consolidated, 14½; Mexican Three per Cents., for Acct., 21⅛ to 22; Sardinian Five per Cents., for Acct., 78¾; Spanish New Deferred Three per Cents., for Acct., 42; Ditto Passive, 16¾; Committee's Certificates, 5¼; Turkish Six per Cents., 1858, for Acct., 69⅞ to ⅞.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£26,640,365	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion ..	11,990,365
		Silver Bullion	—
	£26,640,365		£26,640,365

BANKING DEPARTMENT.

Proprietors' Capital.. ..	£14,553,000	Government Securities (including Dead Weight Annuity)..	£10,135,800
Rest	[illegible]	Other Securities	17,742,006
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	4,703,562	Notes	6,677,280
Other Deposits..	11,340,743	Gold and Silver Coin ..	842,916
Seven day and other bills	715,736		
	£35,348,002		£35,318,002

22d day of August, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY—BANKRUPTS—W. H. BATCHELAR, Leatherhead, Surrey, Builder and Undertaker—J. CHAPMAN and G. GRANGER, Oldbury, Worcestershire, Ironmasters—W. FAWKNER, Kidderminster, Worcestershire, Victualler and Car Proprietor—J. W. GARRETT, Liverpool, Corn Merchant—W. HARRISON, Barnsley, Yorkshire, Tailor and Draper—J. RANDALL, Byfleet, Surrey, Licensed Victualler—E. SIMONS, Newgate Street, City, and Birmingham, Lamp Dealer and Italian Warehouseman—H. W. STEAR, Bread Street, City, Lace Warehouseman and Commission Agent—J. A. TALKEN, Whitley Villas, Caledonian Road, Islington, late of Fenchurch Street, Ship and Insurance Broker—C. WEBB, Drury Lane, and Crisp Street, Poplar, General Salesman.

SCOTCH SEQUESTRATIONS—R. B. PENMAN, Dundee, General Merchant—A. CROSBIE, Dumfries, Draper—W. KELLY, Edinburgh—J. SHAW, Calderbank, Lanarkshire, Grocer.

FRIDAY—BANKRUPTS—R. COLLENS, Mark Lane, City, Dealer in Hops—J. J. CONNIHAN and M. LINDT, Fenchurch Street, Merchants—T. DODDINGTON, Falcon Square, Aldersgate Street, and Forest Gate, Stratford, Manufacturer of Fancy Drapery Goods and Commission Agent—E. H. GREGORY and L. A. GREGORY, Great St. Helen's, African Merchants and Ship Brokers—J. HETHERINGTON, Gordon Lane, Kentish Town, Licensed Victualler—J. LIVERSIDGE, Tabernacle Walk, Shoreditch, and Devon Villas, Buckingham Road, De Beauvoir Town, Wheelwright—R. D'ARCY NEWTON, Warwick Square, City, Advertising Agent and Dealer in Newspapers—O. F. OWENS, Sussex Terrace, Westbourne Grove, Paddington, Bookseller and Stationer—J. S. PARSONS, Brentford and Uxbridge, Watchmaker and Leather Seller—R. PATCH, Lewisham, Kent, Grocer, Wine, Ale, and Stout Merchant—S. RENAUT, St. James's Street, Hanover Square, Innkeeper—J. C. SMITH, King William Street, City, Jeweller.

BANKRUPTCIES ANNULLED—J. H. BROWN, Liverpool, Draper—J. HAIGH, Wakefield, Yorkshire, Common Brewer—E. J. PICKSLAY, Wakefield, Yorkshire, Scrivener.

Metropolis and its Vicinity.

THE GENERAL POST OFFICE.—The new scale of salaries in the "minor" department of the Post Office has been issued. This department consists officially of five sections, namely, porters, messengers, stampers, letter-carriers, and labourers. Each of these sections is divided into two classes, first and second; but, in the case of the messengers and stampers, whose duties closely assimilate, it has been found more convenient to place them under a single head in the classification, as will be hereafter seen. The new scheme is as follows:—Sorters, first class, 100, wages 40s. to 50s. per week; second class, 450, wages, 21s. to 38s.; messengers and stampers, first class, 60, wages 28s. to 35s. per week; second class, 204, wages, 21s. to 27s.; letter-carriers, first class 350, wages 26s to 30s. per week; second class, 960, wages 20s. to 25s. In all the above cases each officer will be entitled (whatever may be his fixture in the classes) to rise by an annual increase of 1s. per week per annum in his own class to the maximum of such class, where he must remain, unless by "merit and qualification" he may be promoted to any other of the classes above him. In the case of the letter-carriers, however, it should be borne in mind that there is yet another class of a still more subordinate character, their denomination being "auxiliary" or "supplementary" carriers. These men hold no direct appointment, but they are provisionally engaged to assist the service in cases of emergency. Any one, or the whole, of this body may be removed by the authorities at a week's notice. Heretofore the amount of pay to this class was only 10s. per week, but, under the new regulations, they are to receive 18s. per week, no "extras" being in future allowed to any one. These men, moreover, will, under the new arrangements, obtain the additional advantage of obtaining appointments "upon the establishment," should they be found trustworthy and active in the service. The following is the new scale for labourers:—First class, 2 at 30s. per week; second class, 82 at 20s. The letter carriers and the labourers receive the additional advantage of clothing. From the new scale the following statistical facts may be gleaned, namely:—That there are at present employed in the "minor branch" of the metropolitan Post Office service, 550 sorters, 264 messengers and stampers, 1310 letter carriers (exclusive of auxiliaries), and 84 labourers. Total number of persons employed (with the above exclusion), 2208. On Wednesday evening a general meeting of the letter-carriers and other servants of the Post Office was held, when a resolution was unanimously adopted to the effect that the new scale of wages falls far short of the requirements of the men, more especially the letter-carriers, and that such a trifling concession is not calculated to allay the discord that exists throughout the service. It was also resolved to persevere in obtaining a Parliamentary inquiry into the system of management at the Post Office.—In connection with these details, we may quote the following remarks made by the Common Serjeant in his charge to the Grand Jury at the Central Criminal Court on Monday, in reference to the temptation to which the Post Office servants are exposed by the practice of sending money and other valuables in letters:—

"He was sorry to see that no less than eight Post-office letter-carriers were charged with stealing letters containing money and other property; and he did not allude to them because they were likely to present any difficulties, but in order that he might publicly express a hope that the public themselves would do as much as they could, by refraining from enclosing money or other valuables in letters transmitted through the post, to prevent exposing the Post-office servants to temptation. Money could now be readily sent by post-office order, and by registering a letter, also, its security was effected; and if the public were to avail themselves of these modes of sending money, he was of opinion that it would greatly tend to prevent these offences from being committed, and thus many of the Post-office servants, men previously of good character and respectability, would be spared from the ruin and disgrace that was entailed upon themselves and their families by the commission of offences of this description. He hoped that the public would consider these observations; and he was glad to see that recently there had been a revised scale of wages for persons in the employ of the Post-office, and that these wages had been increased, so that a low amount of salary was not now one of the inducements for the commission of this offence. The Government therefore had done all in its power to put a stop to this description of offence, and if the public would assist in this object, by refraining from sending money and articles of value in post letters, except where they were actually obliged to do so, he had no doubt that the number of these offences, which were so painful to them all, would be greatly diminished."

THE FORESTERS AT THE CRYSTAL PALACE.—On Tuesday the Crystal Palace and its grounds were the scene of the seventh annual festival of the Ancient Order of Foresters,—a body which, like the Druids, the Odd Fellows, and other kindred fraternities, consists of an organization of affiliated benefit clubs, having its centre in the metropolis and its ramifications in all parts of the kingdom. In 1855 it occurred to the managers of the association that a fête would be an admirable means of helping their finances, and of at the same time affording themselves a day's pleasure. In that year, accordingly, the first festival was held in aid of the widows' and orphans' fund of the London United District; and on that and subsequent occasions so much success attended the project, and so warmly have the country brotherhood entered into the spirit of the festivals, that Foresters' day at the Palace has now become a recognised popular institution. Last year 68,000 persons took part in the fête, a larger concourse than had ever before visited the Palace. On this occasion, in consequence of the South London branch having determined to hold a separate fête on its own account, the total number was not quite 60,000. All the railway companies having termini in London ran excursion trains, which brought swarms of Foresters and their families from all parts of the country. Many of them travelled in the full costume and insignia of the order—a velvet cap, with plumes of variously-coloured feathers, a green tunic, broad sash, huntsman's horn, &c., but by far the majority of the brotherhood wore a plain sash or simple rosette, the pattern of which indicated to the initiated the offices the bearer had filled. Besides the multitudes brought by rail and steamboat from a distance, many thousands from London and its suburbs went to Sydenham by the road. For their conveyance every description of vehicle, omnibus, cab, van, waggon, donkey-cart, and costermonger's cart, was put into requisition; and from an early hour the route by Brixton, Clapham, and Dulwich was almost as bustling and animated as the road to Epsom on a Derby-day. The stream of holyday folks, accompanied by bands of music and flags and banners, flowed on without interruption till far in the afternoon, and choked up the [illegible] the Palace. The weather was magni[illegible] the interior of the building was [illegible] the day, the open air entertainment[illegible] most patrons. The amusements [illegible] provided on the most liberal and [illegible] cluding a double display of the [illegible] the green, concerts, archery, quoits [illegible] sports, and a grand procession of the [illegible] regalia and decorations, preceded by [illegible] banners. The arrangements of the [illegible] were such as to obviate all avoidable [illegible] with so enormous a press of passengers [illegible] journey by the road was attended with [illegible] ment and hilarity of a "Derby" night.

THE NEW AGRICULTURAL HALL [illegible] The directors of the company formed [illegible] at Islington for holding the shows of [illegible] and other purposes, have accepted the [illegible] Hill & Co., builders, of Whitechapel [illegible] 24,980*l*. The contract provides that [illegible] be completed by the end of June next [illegible] will be constructed from the design of [illegible] Pack, of Maidstone.

IMPROVEMENT IN STREET LIGHTING.—[illegible] ascertained that by placing near the [illegible] gas burners a receptacle containing [illegible] brilliancy of the light is much increased [illegible] based upon this principle is already [illegible] patent vested in a public company. [illegible] state that by the use of their process [illegible] one-half may be made in the expense [illegible] gas. To test the accuracy of this assertion [illegible] have just been made in London, under [illegible] of the Commissioners of Sewers. Moorgate [illegible] selected for the trial, there being in it [illegible] only one or two private lamps. The lamps [illegible] upon were 12 in number, six upon the [illegible] fitted in the ordinary way with burners [illegible] upon the average 5 cubic feet of gas [illegible] upon the eastern side, fitted with [illegible] attached to them the apparatus of the [illegible] consuming 2½ cubic feet an hour. The [illegible] tended over 30 nights. The burners [illegible] ratus consumed about 4.39 cubic feet per [illegible] the burners with the apparatus [illegible] 2.09 cubic feet per hour. The district [illegible] commission, who saw the lamps nightly [illegible] opinion that the light given was perfect[illegible] opinion in which he is supported by [illegible] neighbourhood. Mr. Heywood, the [illegible] commission, who principally conducted the [illegible] is, however, inclined to think that the [illegible] quite equal in intensity. He states that [illegible] of gas, carburetted by means of the [illegible] 5 cubic feet of gas not carburetted. On [illegible] tion he shows that by the adoption of [illegible] the reduction of the cost of each lamp [illegible] 20*s*., and that there being 2825 lamps [illegible] annual saving of 2825*l*. might be effected.

POST OFFICE SAVINGS BANKS.—According [illegible] culations made at the General Post Office [illegible] mated that when these savings banks [illegible] full operation the cost for management [illegible] transactions—that is, deposits and withdrawals [illegible] 2915*l*., or nearly 7*d*. for every deposit and [illegible] drawal.

THE FEMALE BLONDIN AT CREMORNE.—[illegible] attempt of the "Female Blondin" to [illegible] from Cremorne Gardens to the opposite [illegible] cessful on Monday evening. The errors [illegible] failure in the first instance was mainly [illegible] were rectified by a careful attention [illegible] rope was extended over two supports [illegible] the stream, and was steadied by a proper [illegible] weights suspended 6 feet apart along its [illegible] From these, guy lines stretched on either [illegible] tened firmly to barges moored on both [illegible] middle of the river, so that during the [illegible] of the rope was reduced to a minimum [illegible] culty was however anticipated from the [illegible] the rope between the two supports. [illegible] made to overcome it; but, notwithstanding [illegible] strain exerted over the whole length [illegible] chanical appliances at both ends, little effect [illegible] The general steadiness of the apparatus [illegible] siderably to inspire confidence in the [illegible] regards the result of the experiment: [illegible] few among them had come with the [illegible] witnessing a catastrophe. At 10 minutes [illegible] "Female Blondin" appeared on the Surrey [illegible] river. She was in an Albanian costume [illegible] former occasion. She was rather pale [illegible] herself certain of success, though the [illegible] blowing down the river was calculated [illegible] great an effect on her dress as materially [illegible] the steadiness of her movements. Precisely [illegible] gun was fired from the gardens she stepped [illegible] The cheering which had greeted her [illegible] not to break forth again until she had [illegible] first support. Having rested there for [illegible] she recommenced the descent of the [illegible] most difficult part of her task; but no sooner [illegible] passed it than she stepped forward up [illegible] incline with apparently increased confidence [illegible] difficulties of the feat were now surmounted [illegible] remaining distance was taken at a run. [illegible]

[illegible] in the ascent scarcely exceeded seven [illegible].

[illegible].—The committee for managing the [illegible] London Fire Brigade have appointed [illegible] Massey Shaw, the chief of the Belfast [illegible] and fire brigade, the superintendent of their fire [illegible] vacant by the death of the late Mr. Braidwood. The salary is 400*l.* per annum, with a [illegible] of the head station in Watling Street, ex[illegible] of the [illegible]ments attached to the office in [illegible] with the inspection of the Government [illegible] and public institutions.

[illegible].—On Saturday afternoon a boiler [illegible] at the steam saw works of Mr. Grove, [illegible] Dover Road, by which the stoker and [illegible] were killed. A boy who was in some stables [illegible] and a girl who was playing in one of the [illegible] neighbouring houses, were also severely [illegible]. A fire broke out on the premises shortly after the explosion, but was soon extinguished. Much damage has been done, not only to Mr. Grove's works, but also to the houses near them. The jury at the [illegible] on Tuesday returned a verdict of Accidental Death.

Fatal Explosion of a Paraffin Lamp.—Two inquests have been held at Paddington on the bodies of Mr. and Mrs. Montmorency Durant Stokes, residing at [illegible] Place, Harrow Road, who recently [illegible] by the explosion of a paraffin oil lamp. It appeared from the evidence of several witnesses that on [illegible] Mrs. Stokes, while in the act of trimming a paraffin lamp, accidentally dropped a lighted [illegible] into the fluid, which immediately exploded, [illegible] to the ceiling, floor, and some of the furniture, breaking the glass in the window, burning the [illegible] and charring the ceiling, besides causing such [illegible] injuries to Mr. and Mrs. Stokes that they were removed to St. Mary's Hospital, where they both died. It was appeared, from the evidence of Dr. Odling and other witnesses, that the oil in question was not paraffin manufactured under Young's patent, but a dangerous substitute, apparently a petroleum oil, of [illegible] specific gravity, which gave off an explosive vapour at the ordinary temperature, and lighted readily with a match, while the real oil gave off no explosive vapour and would only burn slowly with a wick. The jury returned the following special verdict:—"That on the [illegible] of August deceased and his wife died from the effects of burns and other injuries, occasioned by their having become burnt by an explosion of the vapour of a certain substance called paraffin oil, but which was not the paraffin oil sold by the Paraffin Light Company; and that the explosion was caused accidentally and by [illegible]."

The [illegible].—The Registrar-General's Weekly Return states that the deaths registered in the week ended Saturday August 17th were 1257. The average number in the corresponding weeks of the [illegible] years 1851-60, excluding the deaths from cholera in 1854, and allowing for increase of population, was 1218. The present return is therefore 39 above the average. During the week the birth of 839 boys and 810 girls, [illegible] children, were registered in London. In the ten corresponding weeks of the years 1851-60 the average number was 1621.

Provincial.

Auckland.—The funeral of the late Bishop of Durham took place in the chapel of Auckland Castle on Friday. The pall-bearers were the Archbishop of York, the Bishop of London, Bishop of Carlisle, Archdeacon [illegible], Archdeacon Thorp, Archdeacon Coxe, Mr. [illegible] C. L. Bacon, and Mr. Tollemache, M.P. The chief mourners were the Rev. H. M. Villiers, Mr. F. E. Villiers, Mr. E. Cheese, the Right Hon. C. P. Villiers, [illegible], Lord Hyde, Mr. W. Hulton, and Mr. H. [illegible]. The Duke of Cleveland and other gentlemen followed the body to the grave. The service was read by the Rev. E. W. Freemantle, rector of Claydon, Bucks. The shops in the city of Durham and in Auckland were closed for the greater part of the day, and the bells of the Cathedral and of the churches in the principal towns in the diocese tolled during the forenoon.

[illegible].—On Friday evening, two boys named [illegible] Davis, aged respectively 9 and 11 years, [illegible] at play upon the sands at New Brighton, when Davis pulled out a knife and stabbed the other in the neck, causing instant death. The jury at the inquest returned a verdict of Manslaughter against Davis, who was accordingly committed for trial at the Chester assizes.

[illegible].—On Monday evening Mr. Coxwell, the [illegible] made an ascent from this town, accompanied by two young gentlemen, Messrs. Alfred and Thos. Pearson, of Bagleston. The wind was blowing [illegible] at the time, and at length became so boisterous that Mr. Coxwell found it impossible to effect a landing. The car was dashed against three stone walls, and shortly afterwards the balloon burst. Mr. Coxwell escaped with superficial bruises, but Mr. T. Pearson was dangerously hurt, and the other young gentleman had his arm broken.

Fen Ditton.—A horrible murder was perpetrated at this village, about three miles from Cambridge, on Saturday night, when Mrs. Harvey, the widow of a publican at Ditton, who for years kept the Plough, at the riverside, an inn well known to boating members of the University, was murdered by her eldest son. She had retired from the inn and taken a house immediately facing the church, where a Mrs. Witts lived with her in the double capacity of lodger and friend. It appears from the evidence at the coroner's inquest that there had been quarrelling between the son and his mother about the will of his father. The latter left a piece of garden ground to his widow for life, at her death to be sold, the proceeds to be then divided between all his eight children except the eldest, Thomas, who had his share left specially under the will. He however occupied a piece of the land, and had taken forcible possession of it, and dared any one to take it from him. His mother was willing to let him have it, but his brothers refused. He had frequently threatened to murder his mother and brothers, and in consequence of these threats his mother's doors had been kept locked. On Saturday evening the mother went down into the cellar to put away a ham, followed by her friend Mrs. Witts with a candle. The son Thomas, who had evidently been watching his mother's movements, immediately rushed into the cellar from the back garden, and with a fearful yell which was heard in the upper part of the house, exclaimed, "Oh! I've got you now," sprung upon his mother and hit her a blow upon the back of her head, fracturing her skull in a shocking manner, and inflicting other wounds which must have caused almost instant death. Mrs. Witts appears to have run to her assistance, for she was knocked down by the murderer, and so seriously injured that she is not expected to recover. Mr. Jacobs, brother of Mrs. Harvey, who was in the house at the time, heard the yell of the murderer, and recognising the voice ran down into the cellar and seized his nephew by the arm, when he turned round and struck him a heavy blow with some weapon on the head, which rendered him senseless. Mrs. Louisa Harvey, wife of another son of the deceased, who was also in the house and heard the cry, ran into the street and called murder. Several neighbours and a surgeon immediately proceeded to the house and found that Mrs. Harvey was quite dead, and that Mrs. Witts was fearfully injured. The murderer escaped and was not heard of until Thursday afternoon, when his body was discovered hanging on a lofty and wide-spreading tree, hardly 100 yards from the back of the premises where the murder was committed. The tree is situate in a field in the occupation of Mr Stephen Smith, and a threshing machine has been at work in the field all the week. On Thursday afternoon Mr. Smith thought he saw one of his men in the tree. On closer inspection he detected the body of the murderer hanging among the foliage on a bough nearly 40 feet from the ground. Every precaution was taken to get down the body without injuring it. It was lowered by a rope to the ground, and conveyed to the inn to await an inquest.

Grimsby.—The young man, Benjamin Betts, who made such an extraordinary attempt to murder his father, while labouring under certain religious impressions, has been committed to take his trial at the next assizes at Lincoln. At the final hearing of the case, the chief witness as well as the father refused to give any evidence. The prisoner persisted for some time in attempting to make a statement, but he was prevented from doing so by his legal adviser.

Salisbury.—On Sunday the retired village of Everleigh, which is situate in the midst of the plain, 14 miles from Devizes, 15 from Salisbury, and 12 from Andover, Hungerford, and Marlborough, was the scene of a frightful murder. The whole parish is the property of Sir Francis Dugdale Astley, who is at present non-resident; and the manor-house is let, with the shooting, to Mr. C. J. Monk, chancellor of the diocese of Glocester, and only son of the late Bishop. It appears that there are two keepers' lodges, the first distant about half-a-mile from the manor-house and from any other dwelling, the second about half-a-mile from the first. They are both embosomed in the woods, and remote from all usual thoroughfares. Early on Saturday last Mr. John Hill, the head gamekeeper, occupying the first lodge, left home for a few days' visit into Worcestershire, and, in consequence of the solitude of the situation, Esther Stocker, the wife of the under-keeper, came up from the farthest lodge to sleep that night with Mrs. Hill, in her husband's absence. Mrs. Stocker returned to her own lodge at 8 o'clock on Sunday morning, and about half-past 11 her husband, John Stocker, walked over to Hill's, and saw Mrs. Hill seated in a chair in the back kitchen, reading a newspaper, out of which she communicated some particulars to him through the window, which was open. She also mentioned her intention of going to church in the afternoon. This made it Stocker's duty to attend to the reared birds during her absence, and accordingly he went home to dinner, returning about 2.30 P.M. It would seem that Ann Hill, immediately after Stocker left, went up to a boiling-house, about 200 yards in the rear of her lodge, and adjoining the kennels, in which were several dogs, to prepare some food for them. On Stocker's return he had to pass the boiling-house, and observing, as he says, the door open, he looked in, and saw the unfortunate woman lying on the ground in a pool of blood, with her throat frightfully cut from ear to ear, already dead and stiffening. Stocker hastened to the manor-house to acquaint his master with the occurrence, and by 4 P.M. Mr. Carter, surgeon, of Pewsey, the Rev. Dr. Bartlett, the rector of the parish, and the police, were on the spot. At first it was thought that it was a case of suicide, but a more minute investigation showed that the unfortunate woman had been first garotted with a small rope, the livid rings of which were traceable in three circles round the neck and under the chin, as in a punctured wound, apparently made in cutting the cord away, in the side of the neck, and that afterwards the throat was cut by a strong decided stroke, inflicted probably from behind, from left to right. Neither cord nor cutting instrument has been found. On examining the house, the window in the rear and the door in front were found open, the key being in the lock inside; the key of the back door, which was locked, with other keys, was found in the pocket of deceased. The drawers in the bed-room had been partially ransacked, and letters and other articles scattered about the floor. Only one room was in any way disturbed. It is observable that a shepherd, tending his flock at no great distance off, did not hear any of the dogs bark. On Monday the underkeeper, John Stocker, was arrested on suspicion of being concerned in the murder. On Tuesday and Wednesday the magistrates of the division held a private investigation, and have remanded the prisoner. On Wednesday an inquest was held, when the jury returned a verdict of Wilful Murder against some person or persons unknown.

Scarborough.—On Monday morning a boat accident occurred off this town by which the lives of 10 gentlemen, all visitors to Scarborough, were lost. It appears that in the morning, about 10 o'clock, a miscellaneous party assembled on the sands, determined to take a boat to Flamborough for a shooting excursion. The party comprised 13 persons—viz., the master of the boat and a boy and 11 gentlemen. The wind was blowing strongly from the west, in squalls or gusts. The boatman, however, did not think he was overcrowding his boat, which was one of 18 feet keel; and the party accordingly set off. All went well in the voyage up, and though the wind blew smartly the boatman saw no danger. Having arrived at Flamborough, the party landed and proceeded to the Star Inn, where they stayed some time. Twelve of the party re-embarked for Scarborough at about 5 o'clock in the afternoon, one of the original party, Mr. George Wike, of Barnsley, having remained at Flamborough, in order to return to Scarborough by rail, partly from a nervous dislike to the rough weather, and partly from a slight indisposition which he thought might be increased if he took cold by getting wet. The boatman (who is one of the three survivors) states that some of the party were rather unduly excited after leaving Flamborough, in consequence of which, and of the increasing strength of the wind, he determined when about three-quarters of a mile from Flamborough to stand in more under the cliffs. About this time they were passed by two Flamborough fishing vessels, the master of one of which states that he saw nothing peculiarly dangerous in the condition or appearance of the boat, while the other says he thought she was overcrowded, but did not seem to be in any danger. Shortly afterwards the fishermen saw the boat lying with the sail half under water, and in an instant she filled and went down. The fishermen hastened to the spot, where they arrived in time only to save the master and the boy, who were both expert swimmers. They beckoned the other fishing vessel to their aid, and its crew picked up two bodies, which proved to be Mr. John Bradshaw and Mr. James Street, both of Ashton-under-Lyne. They waited about for a considerable time, but nothing came to the surface but a few walking-sticks. The bodies of the drowned men were quite lifeless when picked up, and the master and boy were much exhausted and were taken to Scarborough by the fishermen. An inquest was held on Tuesday, when the evidence showed that as the boat was put about a sudden squall caught her, upon which the gentlemen, who had been previously rather unruly, made a rush to the wrong side, when she instantly swamped. The jury returned a verdict of Accidental Death, acquitting the boatman of blame, but remonstrating with him for overcrowding his boat. The names of seven of the gentlemen lost are,—John Bradshaw, James Street, of Ashton-under Lyne; John Asquith, Barnsley; James Ogden and Aaron Ogden, jun., Dewsnop, Dukinfield, Manchester; Joseph Hobson, Hyde, Cheshire; James Batty, Ashton-under-Lyne. The names of the other three have not yet been ascertained.

York.—The primary visitation of the Archbishop of York took place on Tuesday in this city. His Grace's charge occupied above an hour in its delivery, and the topics of public interest which he touched upon were the evils of the system of statute hirings in agricultural districts; the success of elementary education in Yorkshire; the objectionable agitation in favour of marriage with a deceased wife's sister, the total abolition of church rates, which he opposed; the abridgment of the services of the Church; alteration of the Prayer Book; and "Essays and Reviews." With regard to the latter points, his Grace argued in favour of the doctrines and discipline of the Church being maintained, urging that, as an antidote to the dangerous theories which had been propounded, it would be well for them to try the foundation on which their faith rested. He paid a tribute to the memory of the late archbishop, and whilst exhorting the clergy to devotedness and consistency, he said his desire was to give himself wholly to the work committed to him.

Ireland.

The Social Science Association.—On Thursday the 15th the Right Hon. Joseph Napier delivered an address to the Jurisprudence Department. Mr. Arthur Ryland read a paper by Mr. J. Napier Higgins, on "The Machinery of Legislation." Mr. Whiteside, M.P., read a paper on the Criminal Law, and the Recorder of Birmingham addressed the meeting on the subject of the Improvement of the Criminal Law. In the Department of Education, under the presidency of Sir J. G. Shaw Lefevre, Miss Mary Carpenter, of Bristol, read a paper on "The Application of the Principles of Education to Schools for the Lower Classes." The Rev. Alexander Pollock read a paper on "The Educational Position of the Established Church in Ireland," which led to an interesting discussion on the Church system compared with the National system. In the Department of Reformatories, over which the Attorney-General presided, papers were read by the Rev. J. Hunter Monaghan on "Protestant Reformatories;" by the Rev. Mr. Fish, from Yorkshire, on "The Disposal of Boys from Reformatories," and by the Recorder of Birmingham, on the part of his daughter, Miss Hill, on "The Present Position of Mettray." In the Department of Public Health, presided over by Lord Talbot de Malahide, Dr. Moore read a paper on infant mortality, in which he dwelt particularly on the prevalent neglect of vaccination by parents among the poorer classes in Ireland. Dr. Harken read a paper on births, deaths, and marriages, urging the necessity of registration. In the Department of Social Economy, over which Judge Longfield presided, papers were read by Mr. H. R. Reid on strikes, and by Dr. Hancock on bakers' night-work. In the Department of Trade and International Law, under the presidency of M. Michel Chevalier, papers were read on gold discoveries, the rights of aliens, weights and measures, &c. In the evening the Lord Mayor entertained the Lord-Lieutenant, Lord Brougham, and a party of about 130 in the Mansion House. The day's proceedings were brought to a close by a *conversazione* given to the members by the Royal Dublin Society. The assemblage numbered about 2500 persons. On Friday morning Sir John Shaw Lefevre delivered an address to the Education Department; after which a paper was read by the Rev. Dr. Willock on the failure of education in the junior classes of elementary schools, and Mr. Ross read a paper "On the Advantages of the Non-Vested System under the National Board." In the Department of Jurisprudence, where Lord Brougham occupied the chair, Mr. Ryland, secretary, read a paper by Mr. Edward Webster on the establishment of a Law Registration Court for the voluntary registration of titles to freehold land in England and Wales; Baron Holtzendorff read a paper "On Public Prosecutions in Prussia;" Mr. Dix read a paper on the registry of deeds in Ireland; the Solicitor-General read a paper on the history of the Landed Estates Court; Mr. Whiteside, M.P., read a paper on the same subject; and Captain Crofton read a paper on the question "Why the Community should take an Active Interest in the Treatment of Adult Convicts." In the Department of Public Health, presided over by Lord Talbot de Malahide, papers were read by Dr. Lankester, on the "Registration of Diseases;" by Dr. Makessy, on "Dipsomania, or Uncontrollable Drunkenness;" by Dr. H. Kennedy, on "The Influence of the Food on the Intellect;" by Dr. M'William, on "The Health of Merchant Seamen;" and by Dr. Fitzpatrick, on "The Social and Sanitary Condition of the Labouring Classes in Ireland." In the Department of Social Economy, Miss Bessie Parkes read a paper on the "Condition of the Working Women of England and France;" Miss Emily Faithful read a paper on "Women Compositors," in which she described the Victoria Printing-press, of which she is the conductor; and Mrs. Overend read a paper on "Remunerative Employment for Educated Women in their own Homes." In the Department of International Law and Trade papers were read on the linen trade and on the growth of flax. In the evening Lord Brougham presided at an immense meeting in the Round Room of the Mansion House, consisting of the members of Young Men's Christian Societies, Protestant and Roman Catholic. After a brief address from his lordship, the Solicitor-General addressed the meeting, and explained the objects of the Jurisprudence Department. Mr. Hastings, the General Secretary, spoke on Education; the Rev. Mr. Lynch, of Glencree, on Reformatories; Dr. Lankester, on Public Health; Dr. Hancock, on Social Economy; and M. Desmaret, of the French bar, on the Department of International Law. On Saturday morning, at half-past 10 o'clock, M. Michel Chevalier, President of the Department of Trade and International Law, delivered an address in French on Free Trade and its effects on the commercial and social relations of nations. When he had concluded, Lord Brougham rose and said he was sure he only expressed the sentiments of the whole meeting when he stated they were deeply indebted to M. Chevalier for his address, which was distinguished by the soundest principles and the greatest felicity of illustration. He quite agreed with a saying of Voltaire, that "a war between the nations of Europe is a civil war." Alas, there is a civil war now raging in America. If he were called upon to arbitrate between the combatants, he would at once require them to lay down their arms and make mutual concessions, without which there cannot be peace. If they refused compliance with this demand, he would, if he had the power, issue in this case a commission *de lunatico inquirendo*. After the address the sections met in the several Courts. In the Department of Legislation Dr. Lloyd read a paper on the Admiralty Court and its defects, and Judge Lynch read a paper on the Operation of the Irish Bankruptcy Act. In the Department of Education, the Rev. J. Hall read a paper on the subject, written by the Rev. Dr. M'Cork, of Queen's College, Belfast, pointing out the necessity of a superior class of State schools between the primary schools of the Board and the Queen's Colleges. In the Department of Public Health, Mrs. Frison, an English lady, read a paper on Sanitary Work in Town and Country among the Poor. In the Department of Reformatories Mr. Tooke read a paper, after which the Department closed, the members who could not stay till the next week proceeding to Lusk, on the invitation of Captain Crofton, to inspect the convict establishment there. After the business of the day, a Commencement was held at the University, when the honorary degree of LL.D. was conferred on Lord Brougham, Sir J. C. Shaw Lefevre, Sir Emerson Tennent, and M. Michel Chevalier. The Association then attended a promenade in the Zoological Gardens, Phœnix Park, at which the Lord Lieutenant was present. In the evening there was a *conversazione* at the Royal Irish Academy, which was attended by about 700 persons. On Monday the proceedings commenced with an address on "Punishment and Reformatories," by the Attorney-General, as President of the Department of Reformatories. In the Department of Jurisprudence Mr. D. C. Heron, Q.C., read a paper on "Frauds on Joint-Stock Companies;" and Mr. James Haughton read papers on "Death Punishment," and on "Intemperance as a Source of Crime." In the Department of Education, Miss L. Twining read a paper on "The Education of Pauper Children;" Mr. Alfred Hill read a paper by Miss Corbett, on the "Introduction of the District Pauper School System in Ireland;" Mr. Rakhol Das Haldar, a native of Bengal, read a paper on "Education in Bengal and its Results;" the Rev. Dr. Gibson, of the Presbyterian College, Belfast, read a paper on Erasmus Smith's Schools; and Mr. Senior, Poor Law Commissioner, read a paper on the education of pauper children. In the Department of Public Health, Dr. D. Phelan read a paper entitled "Suggestions for the Prevention of Small-pox;" Mr. Nugent Robinson read an essay entitled "A Glance at the Dwellings of the Poor in Dublin, including lodging-houses, model and otherwise;" and Dr. Lankester read a paper on the Turkish bath, by a lady. In the Department of Social Economy papers were read by Mr. Henry Hennessy, F.R.S., on "The Law of Fluctuation of Wages;" by Dr. Robert Elliott on working-men's reading-rooms as an important modification of Mechanics' Institutes; by the Rev. J. Banks Robinson on the condition of the working classes and their dwellings; by Miss Corbett on the homes of female servants; by Mrs. Catherine Brougham "On Woman's Work among the Female Peasantry," by the Rev. William Hickey, M.A., Rector of Mulrankin, Wexford, "On the Condition of the Working Classes;" and by Miss Sarah P. Remond on "American Slavery, and its influence in Great Britain." In the Department of International Law and Trade, Mr. Bazley, M.P. for Manchester, read a paper entitled, "With Cotton, Employment and Food; without, Famine and Expatriation;" the Solicitor-General read a paper on the Irish Provision Trade; Mr. George Clarke, of Worcester, read a paper on "The Extension of Bonding Privileges," and Mr. James Martin, M.D., read "An Account of Mayfield Factory, Portlaw." A meeting of the ladies of Dublin, called by the Ladies' Reception Committee, on the subject of the employment of women, was held in the afternoon and was addressed by Miss Bessie Parkes and Miss Emily Faithful. After some discussion as to the employments of women, it was resolved, on the motion of Lord Talbot de Malahide, seconded by Lord Brougham:—

"That this meeting, recognising the importance of the movement, is willing to assist in forming a branch society in Dublin, in connection with the London Society for Promoting the Employment of Women."

In the evening the Lord-Lieutenant entertained Lord Brougham, the Lord Mayor, and about 100 gentlemen at dinner at St. Patrick's Hall, after which his Excellency held a reception, when not less than 1800 ladies and gentlemen were presented. In the course of the day the Lord-Lieutenant, accompanied by Lord Brougham and several of the distinguished strangers in Dublin, paid a visit to the Model Schools of the National Board of Education. On Tuesday the proceedings commenced with an address from Lord Talbot de Malahide, as president of the Department of Public Health. In the Jurisprudence Department papers on the Marriage Law were read by Mr. M. J. O'Shaughnessy, Mr. J. C. Smith, a Scotch lawyer, and Mr. W. O'Connor Morris; and Mr. P. J. M'Kenna read a paper on the law of evidence in criminal cases. There was not much that was interesting in the other departments, except in that of Social Economy, where several papers were read, including one by Miss Carpenter and Mrs. Woodlock on the "Education of Pauper Children," which gave rise to a good deal of discussion and difference of opinion, some mem… Poor Law system and others defend… Bianconi read a paper on "Car-trav… its Rise, progress, and Social Re… there was a ladies' meeting to prom… at which Lord Talbot de Malahide t… which was addressed by Dr. Lankester… Miss Twining, Mrs. Bell, Dr. Kirkp… Dickerson, and others. In the even… and members of the Dublin Statistica… *conversazione* in the Museum of Ir… Stephen's Green, to which Lord B… dent, and the principal members… were invited. On Wednesday Judge L… President of the section of Social E… an address on the material prosperity of Ire… of the series of addresses by presidents… In the Department of Jurisprudence… sion on the Marriage Law, commenced… previous day, was resumed. In the… Education Professor Kavanagh, of the… versity, read a paper on "the Present… Position of Roman Catholics in Relation to… in Ireland," and Sir Robert Kane, Pres… Queen's College, Cork, read a paper… advantage of Denominational Education… Ireland." The general meeting was then… the usual votes of thanks were agreed… agreed to hold the next meeting in L… evening Lord Brougham presided at a… attended meeting for the promotion of t…

The Glasnevin Gardens were opened… time to the public on Sunday last. About… of all classes attended and behaved remarkably…

Execution at Sligo.—The convict Ph… found at the assizes guilty of a triple… executed at Sligo on Monday in the presence… 10,000 persons. As stated last week he ha… confessed his crime. The inhabitants of S… memorial to the Lord-Lieutenant praying f… tation of the sentence, but after due deliber… decided that the law must take its course.

Scotland.

A Moving Moss.—On Monday week a … about two miles from the Slamannan Railw… and measuring in extent about 30 acres, … the "spate," and carried to the distance of… It speedily blocked up the road, and has … an easterly course in the direction of … covering up a large portion of the … filling up a freestone quarry about 30 feet … burying the trees, hedges, and crops … It has already covered a quarter of a … present passing through a burn, and threat… number of dwelling houses near it.

Railways.

The Queen's Railway Carriage.—… and North-Western Company having been … the Queen to convey her Majesty and … Ireland, and also through their subsequent … season to Scotland, have constructed, for the … dation of her Majesty, an entirely new … the cost of which will exceed 3000*l.* The … the exception of its carving and decoration … differ much in shape from the new first-class … now in use on the line; it is, however, larger … way. The framework upon which its body … solid oak, handsomely carved and … resting upon wheels of Mansell's patent; the … are also composed of the strongest solid … tires of which have been put on cold … mered, as affording a greater amount … than those manufactured under the … cess. The carriage body has three floors … of the usual material, secondly a flooring … thirdly a flooring of cork, which has … reducing vibration and of destroying or … a great extent the noise of the wheels … At each corner of the solid oak frame … are projecting shoulders consisting of … carved and gilded leaves. The body of the … has its panels painted of dark or Royal … bearing in the centre the Royal arms … panels the orders of the Garter, the Bath … Thistle, the upper portions of the … windows being picked out in white and … roofs, for there are three, are divided by … composed of festoons of flowers carved … upon a white ground, the projections of the … upper one of which is circular, having their … edges elaborately gilt. The interval between … roofs is also perforated for ventilation. The … lined with silver gray moire antique … fluted, the same material covering the roof … panels marked out by a cord of the same … the apex of the roof hangs a lamp of … encircled by a carving of satin-wood, in … the whole of the carvings are executed. … the saloon is a sofa, covered with the same … the lining of the carriage, and two easy chairs … a revolving axis, so that, while they cannot … they can be moved in any direction with the … ease at the will of the party occupying them …

[illegible] already described is a thick drugget, [illegible] a rich velvet-pile carpet, the ground [illegible] the Royal purple, with a handsomely [illegible] manufactured expressly for the saloon. [illegible] end is a retiring room, fitted with [illegible] stand, and all the appliances of a [illegible] the carvings of the furniture being in unison [illegible] the carriage, and executed in satin wood, [illegible] tulip wood. A fixed table, of the same [illegible] stands in the centre of the saloon, with a [illegible] There are appliances for converting the sitting [illegible] a sleeping apartment by means of a very [illegible] Beds are introduced, which can be [illegible] with great facility, and it is understood they [illegible] by her Majesty and the Prince Consort [illegible] journey on their return from Ireland to [illegible] avoiding the necessity of staying a night [illegible] on the route. The whole carriage is [illegible] to be the most elegant and complete that has [illegible] been constructed; and, on the designs being submitted to her Majesty, it is understood that she expressed her cordial approval of them.

Law.

[illegible] Criminal Court.—*Case of the Baron de Vidil.*—[illegible] *de Vidil* commenced yesterday before [illegible] and Mr Justice Blackburn. The indictment charged [illegible] with feloniously and maliciously wounding [illegible] John de Vidil, with intent of his malice [illegible] kill and murder him. In a second [illegible] the intent of the prisoner was laid to [illegible] disable the prosecutor or to do him [illegible] harm. In answer to the question whether [illegible] guilty or not guilty to the charge, [illegible] in a low tone of voice, "I am not guilty." [illegible] was then asked whether he desired to be [illegible] a jury composed entirely of Englishmen, or one [illegible] composed of Englishmen and partly of foreigners. [illegible] to be tried by a jury composed entirely of Englishmen. The evidence for the prosecution was given at great [illegible] but all the facts are so familiar to our readers that [illegible] unnecessary to repeat the details. The jury found [illegible] unlawfully wounding. Mr. Justice Blackburn said that the prisoner had been found guilty of unlawfully wounding his son upon evidence of which there could be no [illegible] The jury had given the prisoner the benefit of any [illegible] might have arisen and did not think upon the [illegible] that they were justified in finding him guilty of [illegible] with intent to kill, or, undoubtedly, judgment of [illegible] have been recorded against him. It was quite [illegible] however, that he had unlawfully wounded his son, and [illegible] the more a heinous offence because the [illegible] been inflicted by the heavy end of a weapon, [illegible] for that circumstance the sentence would not have [illegible] heavy. As it was, however, he felt it his duty to visit [illegible] offence with a very heavy sentence, namely, that he be [illegible] and kept to hard labour for 12 calendar months. The [illegible] turned from the dock, but did not exhibit any [illegible] at the sentence allotted. *The Affray in New [illegible] Street.* *Richard Austwick Westbrook*, solicitor, surrendered to take his trial on the coroner's inquisition, for the [illegible] of Jane Janet Cathey. In this case it will be [illegible] the prisoner has all along asserted that the [illegible] the result of accident, and the grand jury [illegible] the bill for manslaughter that was presented to them. [illegible] for the prosecution now said that the charge against the prisoner was undoubtedly one of a very peculiar character, [illegible] decision that had been arrived at by the grand [illegible] himself called upon to offer any evidence [illegible] the coroner's inquisition. The jury consequently, [illegible] direction, returned a verdict of *Not Guilty.* [illegible] *Jones.*—Mr. Serjeant Ballantine made an [illegible] to the Court to postpone the trial of David Griffith [illegible] session. He said that the prosecution was [illegible] the authority of the Attorney-General, and the [illegible] with the offence of forging a will, and [illegible] and corrupt perjury. The ground upon [illegible] the postponement of the trial was that a [illegible] papers were found in the possession of the [illegible] was considered absolutely necessary for the [illegible] that further inquiries should be made with [illegible] those documents before the trial was proceeded with. Mr. Serjeant Parry, who is specially retained [illegible] defence, opposed the application, but the learned Judge [illegible] opinion that it was a reasonable one, and [illegible] An application was made on behalf of the [illegible] that he should be admitted to bail, but it was refused. [illegible] The Rev. *James Roe*, 42, a gentlemanly-looking man, [illegible] of the Church of England, was indicted for [illegible] forging and uttering a warrant or order for the payment of [illegible] with intent to defraud. The prisoner is the [illegible] of the late Mr Edward Roe, a person of considerable [illegible] residing at Macclesfield, and this gentleman had [illegible] nephews, Mr George Hartwell Roe and Mr. John [illegible] Roe. Mr Edward Roe died on the 1st of January, 1859, [illegible] made a will and codicil on the previous 25th and 30th [illegible] by which he bequeathed a legacy of 500*l.* to the [illegible] and made his other two nephews his residuary legatees. The prisoner was exceedingly dissatisfied with this will, [illegible] proceedings in Chancery to have it set aside, on the [illegible] the incompetence of the testator, and an issue was [illegible] to be tried by the Court of Chancery. In all these [illegible] the prisoner was defeated, and the validity of the [illegible] About the middle of last year, the prisoner [illegible] which he represented to have been written [illegible] on the 30th of December, 1858, enclosing a check [illegible] at Macclesfield, for 6000*l.*, and he then [illegible] in Chancery to endeavour to obtain that [illegible] of the estate of the testator. The evidence [illegible] proved that not only were the letter and the check [illegible] but that the prisoner had also forged the Post [illegible] stamp that appeared upon the envelope of the letter. [illegible] days' trial the jury found him guilty, and Mr. [illegible] sentenced him to 10 years penal servitude. [illegible] *at Woolwich.*—*Peter Masterson*, 22, a private in the [illegible] was charged with the wilful murder of Martin [illegible] a sergeant in the same corps. It will be remembered [illegible] had been engaged in a riot at Woolwich, and [illegible] to the guard room, made use of threatening [illegible] deceased for having him tried and punished by a [illegible] martial for throwing a quart pot at him. On being [illegible] custody he went to deceased's room and inflicted [illegible] blow on his head with a poker, causing concussion of the brain, which proved fatal in three days. The jury [illegible] *Guilty*, but recommended him to mercy on the [illegible] he was under the influence of liquor at the time [illegible] committed. Mr. Justice Blackburn at once [illegible] black cap, and passed sentence of *Death* upon the prisoner, holding out no hope that the recommendation of the [illegible] would be of any avail. The prisoner turned round and [illegible] when the judge concluded, and left the bar apparently [illegible] unconcerned.

Obituary.

Professor Quekett, F R S., the distinguished microscopist, died on the 20th inst. at Pangbourne, Berkshire, to which place he had been removed a few weeks since in the hope that the change might be productive of benefit to his health. He was the fourth son of the late Mr Quekett, Head master of Langport Grammar School, at which institution he received his elementary education. At the early age of 16 he gave a course of lectures on microscopic science, illustrated by diagrams and a microscope of his own manufacture, made up of materials furnished by a common [illegible], a lady's old fashioned parasol, and pieces of brass purchased at a neighbouring marine store dealer's and hammered out by himself. With this instrument, Mr Quekett made some important discoveries. On the completion of his lectures he came to London, and was apprenticed to his brother, the late Edwin Quekett, lecturer on Botany to the London Hospital, at which institution he entered as a student. On the completion of his studies he became a licentiate of the Apothecaries' Company, and a member of the College of Surgeons. This institution having just then established a studentship in Human and Comparative Anatomy, Mr. Quekett competed for the appointment and was unanimously elected, immediately after which he formed an elaborate collection of microscopic preparations, injected by himself with so much skill as to excite the admiration of all able to form any opinion of their value. This collection the Council of the College purchased. At the conclusion of the three years for which the studentship was tenable he was appointed Assistant-Conservator of the Hunterian Museum. On the retirement of Professor Owen he was elected his successor, and also Professor of Histology, an appointment which he held at the time of his death. Professor Quekett was only 46 years of age, and leaves a widow and four children.

Commander R. B. Bowden, R N., died at Herne Bay a few days since in his 69th year. He entered the navy in 1803, and served as midshipman of the Britannia at the battle of Trafalgar. He afterwards served throughout the operations of 1807 against Copenhagen, and continued actively employed until 1814, when he joined the Orlando, and served in Chesapeake Bay during the American war. He received on several occasions thanks and a testimonial for saving lives, and was author of a plan very similar to that now adopted for forming a Naval Reserve in the merchant service.

Mr. Richard Oastler died on the 22d inst. at Harrogate, in his 73d year. He was born at Leeds in 1789, and was prominently associated for many years in the efforts made in Yorkshire and Lancashire to reduce the hours of labour of women and children in factories. He was also at one period an active leader of an agitation in opposition to the new poor-law.

Wills.—The will of Rear Admiral the Hon. F. T. Pelham has been sworn under 14,000*l.* personalty; Lady Forbes, of Newe and Edinglassie, 14,000*l.*; Lieut.-General Harris, 10,000*l.*

BIRTHS.—On the 14th inst, at 36, South Street, Viscountess Hardinge, of a daughter—20th inst, at 55, Rutland Gate, Lady Naas, of a daughter—16th inst. at 29, Curzon Street, Lady Jane Repton, of a son—15th inst, at Whitehill, Midlothian, the Lady Louisa Wardlaw Ramsay, of a daughter—14th inst, at 38, Lowndes Street, Lady Henniker, wife of Sir Brydges Henniker, Bart., of a daughter—21st inst, at The Chauntry, Suffolk, Lady Kelly, wife of Sir Fitzroy Kelly, M.P., of a daughter—15th inst, at Teddington, the Hon. Mrs. Frederick Peel, of a son—11th inst, at Wichnor Park, Staffordshire, the Hon. Mrs. George Legge, of a daughter—18th inst. at Scarthingwell, the Hon. Mrs. Henry Maxwell, of a son—15th inst, at Brampton Ash Rectory, Northamptonshire, the Hon. Mrs. Sidney Smith, of a son.

MARRIAGES.—On the 20th inst, at St. James's, Piccadilly, the Marquis of Bath, to the Hon. Fanny Vesey, eldest daughter of Viscount de Vesci—22d inst, at St. George's, Hanover Square, the Earl of Belmore, to Honoria, second daughter of Captain Gladstone, R N., M.P.—17th inst. at St John's, Oxford Square, the Hon. William F. Byng, brother of the Earl of Strafford, to Flora Fox, only daughter of Major Quintus Vivian, of 15 Hyde Park Square, and Wellingborough, Northamptonshire—20th inst, at St. George's, Hanover Square, Francis Houlton Hartwell, Esq., eldest son of Sir Broderick Hartwell, Bart., to Emma Jane, only child of Sir Henry Dymoke, Bart.—20th inst, at Hovingham, Edward Robert Harman, Esq., eldest son of the Hon Laurence H. King Harman, of Newcastle, county Longford, to Emma Frances, youngest daughter of Sir William Worsley, Bart., of Hovingham, Yorkshire—15th inst, at St Stephen's, Paddington, Andrew Bonar, Esq., Hamilton House, Leamington, to Louisa, widow of Lieut.-Colonel Robert Anstruther, of Thirdpart, county Fife, and youngest daughter of the late Major-General Sir Howard Elphinstone, Bart., C.B., Royal Engineers—3d ult, at the Cathedral, Gibraltar, John Evans Freke Aylmer, Esq., 8th King's Reg., son of Arthur Percy Aylmer, Esq., J.P. for the county of Cork, and grandson of the late Sir Fenton Aylmer, Bart, of Donadea Castle, county Kildare, to Frances Margarita, daughter of Jas Thomson, Esq., Hanseatic Consul—20th inst, at Leckhampton, Gloucestershire, Charles Christopher Carleton Baynes, Esq., son of the late Major-General Baynes, of Woolbrook Glen, Sidmouth, Devon, to Anna Maria, daughter of the late Lieut.-Colonel Grey, Royal Scots Greys—15th inst, at Warkworth, Major-General W. J. Browne, C.B., of her Majesty's Indian Army, to Susan Harriet, third daughter of the late Major Clutterbuck, of Warkworth, and grand-daughter of the late Hon. Thomas Lyon, of Hetton House, Durham—15th inst, at St. John's, Paddington, Ralph Disraeli, Esq., son of the late Isaac Disraeli, Esq., of Bradenham, Bucks, and brother of the Right Hon. B. Disraeli, M.P., to Katharine, daughter of J. Trevor, Esq., Norfolk Crescent—14th inst, at West Kirby, Captain W. Gray, M.P., to Magdalene, daughter of the late John Robin, Esq., of Grove Hill, West Kirby, Cheshire.

DEATHS.—On the 7th inst, at Paris, Louise Catherine, Princesse de Montléart, daughter of the late General Sir William Keir Grant—21st inst, in Albemarle Street, the Dowager Lady Musgrave, relict of the late Sir Philip Musgrave, Bart., of Edenhall, Cumberland, aged 66—9th inst, at 102, Rue St. Lazare, Paris, Ann Amelia Turing, daughter of the late Sir Robert Turing, Bart., of Foveran, Aberdeenshire, aged 77—15th inst, at [illegible], Biggar, N.B., of acute diphtheria, Honoria, youngest daughter of the late Major-General Sir Henry Havelock, aged [illegible]—7th ult, on his passage down the river from Abbeokuta to Lagos, from fever, Captain Arthur Tregenna Jones, 2d West India Regiment, second son of Lieut.-General Sir Harry Jones, G.C.B., aged 30—15th inst, at Auchlyne House, the residence of H.H. the Prince Dhuleep Singh, J. W. Cawood, Esq., Secretary to his Highness, aged 29—15th inst, at 19, Gloucester Terrace, Hyde Park, Lieut.-Colonel Charles Rogers, late of the Bengal Army, aged 71—12th inst, at [illegible] House, [illegible], N. B., Major Gregory Park, late of H.M.'s 57th Regiment—16th inst, at Chelston Manor House, Torquay, Devon, Benjamin Parham, Esq., late Judge of the Worcestershire County Courts, aged [illegible]—[illegible] inst, at his residence, [illegible] Grave House, Gargrave, John Nicholas Coulthurst, Esq., a deputy lieutenant and magistrate for the West Riding of York, aged 62—14th inst, at Llayngwern, Montgomeryshire, Francis Johnson Ford, Esq., second son of the late John Ford, Esq., of Abbeyfield, Cheshire, and a magistrate for the counties of Chester, Montgomery, and Merioneth, aged 62.

Markets.

COVENT GARDEN, Aug. 24.

Vegetables and Fruit [illegible] equal to the demand. [illegible] Figs, Greengages, Plums, Apples and Pears, still come from the Continent, but, of the last two [illegible] a good supply of English-grown produce. Peas and Beans are plentiful and cheap. Grapes are abundant. [illegible] are at [illegible] for the season. French Beans, [illegible], Carrots, and New Potatoes may be had in quantity. Of [illegible] many samples are, however, diseased. Cucumbers are very abundant. Cut flowers chiefly consist of Orchids, Lily of the Valley, Pelargoniums, Violets, Mignonette, Heaths, and Roses.

FRUIT

Pine Apples, per lb., 3s to 5s	Cherries English, p. lb., 1s to 2s
Grapes, per lb., 2s to 5s	Pears, per doz., [illegible] to 4s
Melons, each, 1s to 4s	Apples, per doz., 6d to 1s
Peaches, per doz., 10s to 1[illegible]s	Oranges, per 100, 6s to 14s
Nectarines, do., 6s to 12s	Lemons, per 100, 6s to 10s
Apricots, do., 1s to 3s	Nuts, Cob, per lb., 1s to 1s 6d

VEGETABLES.

Cauliflowers, each, 2d to 6d	Artichokes, each, 4d to 6d
Green Peas, p. quart, 1s to 1s 6d	Beet, per doz., 1s 6d to 6s
French Beans, per sieve, 2s 6d to 3s 6d	Celery, p. bundle, 1s 6d to 2s
Broad Beans, p. bush, 2s 6d to [illegible]s	Onions, p. sieve, 4s 6d
Cabbages, do., 1s 3d to 1s 6d	Rhubarb, p. bundle, 6d to 9d
Potatoes, p. ton, 60s to 80s	Tomatoes, p. doz., 1s to 3s
— per lb., 1d to 4d	Shallots, per lb., 1s 6d
— — per cwt., 4s to 8s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 4d to 6d	Endive, p. [illegible], [illegible] to 4s
Carrots, new, do., 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., 2s to 3s
Cucumbers, each, 6d to 3d	Parsley, p. 12 bunches, 4s to 6s
Veg. Marrows, p. doz., 1s to 1s 6d	Savory, per bunch, 2d to 4d

BRITISH WOOLS.—London, Friday, Aug. 23.

The favourable harvest weather has imparted some spirit to the trade, and a fair amount of business has been transacted at full rates.

	s. d.	s. d.		s. d.	s. d.
South-down Hoggets..		to 1 5	Leicest. Wethers	1 3	to 1 4
Half-bred ditto..	1 5	— 1 6	Ditto Hoggs ..	1 4	— 1 5
Down Ewes ..	1 4	— 1 5	Combing Skins	1 0	— 1 5
Kent Fleeces ..	1 5	— ..	Flannel Wool ..	1 0	— 1 5
			Blanket ditto ..	0 6	— ..

Colonial Wool Sales.—These sales are going off with spirit, and at rather hardening rates. This, considering the quality, is a full demonstration of the soundness of the trade.

HAY.—Per Load of Thirty-six Trusses.

Smithfield, Thursday, Aug. 22.

Prime Meadow Hay	75s to	84s	Clover	90s to	120s
Superior do. (old)..	88	100	New Clover	—	—
Inferior do.	36	50	Do. second cut ..	—	—
New do.	50	60	Straw	28	34
Rowen	—	—			

Davis & Co.

Whitechapel, Thursday, Aug. 22.

Fine old Hay	90s to	100s	Fine old Clover ..	110s to	118s
Inferior do.	60	75	Inferior do	80	90
Prime New Hay ..	75	86	Fine 2d cut	80	90
Inferior	—	—	Inferior do.	—	—
Straw	34	37	Fine New Clover ..	90	105

BUTTER MARKET.—Aug. 23.

Best Fresh Butter .. .. 14s. per dozen lbs.
Second do. do. .. .. 12s. " "
Pork, 4s. 4d. to 5s. 4d. per 8 lbs.

HOPS.—Borough Market, Friday, Aug. 23.

Messrs. Pattenden & Smith report that the market is quiet, with a retail trade. Duty, 130,000*l.*

COAL MARKET.—Aug. 21.

Hartlepool West Hartley, 16s.; Hastings Hartley, 16s. 9d.; Holywell, 15s. 6d.; Tanfield Moor, 13s. 3d.; West Wylam, 15s. 6d.; Walls End Gosforth, 16s. 6d.; Eden Main, 17s.; Walls End Framwellgate, 17s.; Walls End Hetton, 18s. 9d.; Walls End South Hetton, 18s. 6d.; Walls End Stewarts, 18s. 6d.; Walls End Cassop, 17s. 6d.; Walls End Hartlepool, 18s. 3d.; Walls End Heugh Hall, 17s.; Walls End Kelloe, 17s. 9d.; Walls End South Hartlepool, 17s.; Walls End South Kelloe, 17s. 6d.; Walls End Thornley, 15s. 6d.; Walls End Trimdon Hartlepool, 18s.; Walls End Trimdon Thornley, 16s.; Walls End Whitworth, 15s. 6d.; Birchgrove Graigola, 20s.; Carway and Duffryn Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.—Ships at market, 83.

METROPOLITAN CATTLE MARKET.

Monday, Aug. 19.

We have a few more Beasts than on Monday last; the demand however is good, and prices are on the average rather better that on that day. The supply of Sheep is not quite so large; trade is active at rather higher rates. Lambs and Calves have also realised a small advance. From Germany and Holland there are 1585 Beasts, 8410 Sheep, and 185 Calves; from Scotland, 70 Beasts; from Ireland, 300; from Norfolk and Suffolk, 100; and 2400 from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 10 to	5 0	Best Long-wools ..	to	..
Best Short-horns	4 6 —	4 10	Do. Shorn ..	4 10 —	5 0
2d quality Beasts	3 6 —	4 0	Ewes & 2d quality ..	—	..
Best Downs and Half-breds	to	..	Do. Shorn ..	4 4 —	4 8
Do. Shorn ..	5 0 to	5 4	Lambs	5 4 —	6 0
			Calves	3 8 —	4 6
			Pigs	3 8 —	4 6

Beasts, 4770; Sheep & Lambs, 28,330; Calves, 1[illegible]; Pigs, 330.

Thursday, Aug. 22.

We are moderately supplied with Beasts. Good qualities are in demand, and on the average Monday's quotations are well maintained. The supply of Sheep and Lambs is quite equal to the demand. Prices are not much altered, but it is difficult to effect a clearance. Good Calves are rather dearer. From Germany and Holland there are 190 Beasts, 1690 Sheep, and 290 Calves; from Ireland, 47 Calves. The number of Milch Cows is 110.

Best Scots, Herefords, &c ..	4 10 to	5 0	Best Long-wools ..	to	..
Best Short-horns	4 6 —	4 10	Do Shorn ..	4 8 —	5 0
2d quality Beasts	3 4 —	4 0	Ewes & 2d quality ..	—	..
Best Downs and Half-breds ..	—	.	Do. Shorn ..	4 0 —	4 6
Do Shorn ..	5 0 —	5 4	Lambs ..	5 6 —	6 0
			Calves ..	3 10 —	4 8
			Pigs ..	3 4 —	4 6

Beasts, 1060; Sheep & Lambs, 1[illegible]; Calves, 453; Pigs, 250.

MARK LANE.—Monday, Aug. 19.

The supply of Wheat from Essex and Kent to this morning's market consisted almost entirely of the new crop; the quantity from Essex was small, but from Kent large, and little progress could be made with a reduction of [illegible] per qr. upon the prices of this day se'nnight [illegible] submitted to. [illegible] is unaltered from Friday. The attendance was only tolerable, and with the exception of some sales of American for export to France at barely the rates of last week, very little business was transacted. Prices of other descriptions remained nominally unaltered. The value of Barley, Beans,

and Peas is the same as last week. The Oat trade is firm, and in some instances late quotations are rather exceeded. The top price of town-made Flour is 51s., being a reduction of 4s. per sack. American is dull, and its value lowering. There were a few samples of new white Mustard Seed at market this morning, quality fine, and sold at 12s. per bushel.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk..White	50—56	Red	50—56
— — fine selected runs..ditto	60—62	Red	50—60
— — Talavera	55—64		
— Norfolk..............	—	Red	—
— Foreign..............	40—74		
Barley, grind. & dist., 26s to 27s.. Chev.	36—40	Malting.	34—36
— Foreign..grinding and distilling	27—30	Malting.	33—36
Oats, Essex and Suffolk..............	20—24		
— Scotch and Lincolnshire..Potato	26—28	Feed ..	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign........Poland and Brew	20—23	Feed ..	19—21
Rye	35—37	Foreign.	—
Rye-meal, foreign..............	—		
Beans, Mazagan....37s to 40s.... Tick	40—43	Harrow.	40—43
— Pigeon ......41s — 45s.. Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
Peas, white, Essex and Kent ..Boilers	34—37	Suffolk .	38—39
— Maple .... —s to —s ...... Grey	40—42	Foreign.	35—38
Maize .... White	—	Yellow..	—
Flour, best marks delivered..per sack	46—51		
— 2d do.............. ditto	30—46	Country.	30—46
— Foreign ....per barrel	26—32	Per sack	43—58

Friday, Aug. 23.

The weather during the past week has been highly favourable for securing the crops; the harvest is now general throughout England, and in some localities the fields already present a very bare appearance. The grain of all kinds hitherto brought to market has been of fine quality; the accounts of the Potato crop are rather worse. In Germany and the Austrian dominions, as well as America, the crops appear to be generally well spoken of, with the exception of Potatoes in the former country. The Wheat trade of the United Kingdom has been unusually dull, and in the sales effected a decline of fully 2s. per qr. upon English Wheat, in some instances 3s. to 4s. has been accepted. The top price of town-made Flour was reduced 4s. per sack here on Monday, and foreign has in consequence been purchaseable on somewhat easier terms. During the past eight days 86 cargoes have been reported off the coast. The floating trade has been quiet, and very few transactions are recorded during the week. The arrivals of all grain, English and foreign, this week have been to a moderate extent. On Wednesday the new English Wheat left over from Monday was disposed of at a decline of 1s. per qr. upon the prices of that day; but this morning, in consequence of a renewed demand for France, Monday's prices were obtainable. There being scarcely any inquiry for foreign, our quotations are entirely nominal. There is no alteration in the value of Barley, Beans, and Peas. Oats are held firmly at the rates of Monday, but there is very little doing.

Arrivals from Aug. 19 to Aug. 23.

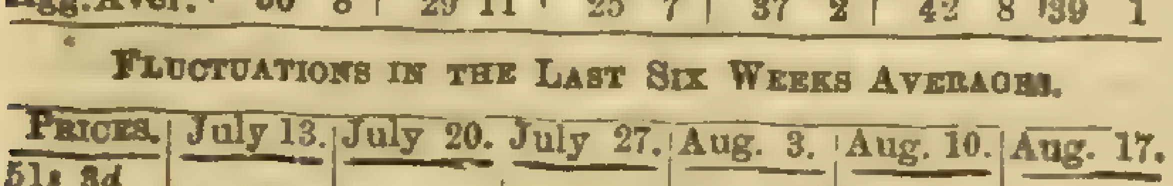
	Wheat.	Barley.	Oats.	Flour.
[E]nglish ..	1660 qrs.	60 qrs.	50 qrs.	550 sks.
Irish	— „	— „	1310 „	— „
Foreign ..	15,940 „	990 „	23810 „	560 „ 16310 brls.

Liverpool. Tuesday, Aug. 20.—There was only a limited attendance of millers and dealers at this morning's market. Wheat was in moderate demand, at a decline of 1d. to 2d. per cental. Flour dull, and prices unchanged. Indian Corn steady: mixed 30s. to 30s. 6d. Beans slow of sale, at 32s. 9d. to 33s. Oats and Oatmeal unchanged.

Friday, Aug. 23.—Though the trade has been generally quiet during the week, there has been a moderate or steady business done in Wheat and Flour to-day at a little under Tuesday's rates. Indian Corn and Egyptian Beans are likewise a little cheaper. In other articles no change.

Averages	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
July 13..	50s 0d	30s 4d	24s 6d	33s 0d	42s 4d	42s 0d
— 20..	50 7	30 3	25 9	38 3	42 8	37 10
— 27..	51 2	30 8	26 10	38 5	42 10	40 1
Aug. 3..	51 3	28 3	24 11	39 3	42 1	39 0
— 10..	51 0	30 1	25 4	36 7	43 8	38 0
— 17..	50 3	30 0	25 11	37 5	42 7	37 5
Agg. Aver.	50 8	29 11	25 7	37 2	42 8	39 1

Fluctuations in the Last Six Weeks Averages.



Nursery and Seed Trade.

PARTNER WANTED, in the neighbourhood of London.—The facilities are great for making this Business one of the best of its kind. Capital required, 800l.—A. Z., Mr. W. Willat's, Estate Agent, 2, Short Street, Pavement, Finsbury, London, E C.

WILLIAM HOLMES has VACANCIES for two thoroughly practical WORKING GARDENERS. Good characters indispensable. Wages in neither case less than 25s. per week.—W. Holmes, Frampton Park Nursery, Hackney, London, N.E.

AGRICULTURAL IMPROVEMENTS. — Landowners and others interested in the welfare of the Labouring Agricultural Class, may find Places for Young Men of good character, by applying by letter to Mr. Bailey Denton, 52, Parliament Street, Westminster, S.W.

General Land Drainage and Improvement Company.

WANTED, FOREMAN of DRAINAGE WORKS.—Written applications, with references as to character for ability, integrity, and sobriety, to be addressed to Mr. Bailey Denton, the Company's Engineer, at No. 52, Parliament Street, Westminster, S.W.

WANTED, as GENERAL FOREMAN, a Man well qualified to assist in the formation of a new Nursery establishment, and competent to take charge of the Propagation and Cultivation of choice Exotic Plants. To a competent person a liberal Salary will be given.—Address in own handwriting, stating name, age, and reference, to Robert Parker, Exotic Nursery, Tooting, Surrey, S. All communications will be treated as confidential.

Working Gardener Wanted.

WANTED, near Chester, a thorough practical WORKING GARDENER, who understands Early and Late Forcing, and all the duties of his profession. Age about 40, married, but without family. The Wife must be capable of taking charge of Laundry, and understand clear Starching. Scotch preferred. Wages 21s. per week and a cottage. —References as to character can be addressed to Mr. Leckenby, 24, Duke Street, Westminster, S.W.

WANTED, A CLERK and SHOPMAN.—A Man who has had experience in a similar capacity, and has a good knowledge of the Seed Business.—Address in own handwriting, stating name, age, and reference, to Robert Parker, Exotic Nursery, Tooting, Surrey, S.

WANTED, A SHOPMAN in a Retail Seed Shop.—Apply, stating age, experience, reference, and wages required, to Edward Carpenter, Seedsman, 96, St. James's Street, Brighton.

WANTED, an ASSISTANT in the Seed Trade; none need apply whose character will not bear the strictest investigation.—Apply to E. P. Dixon, Yorkshire Seed Establishment, Hull.

WANTED, an ASSISTANT in a London Seed Business. Board and Lodging can be provided. Apply by letter in own handwriting, stating age and other particulars, to F. B., Seed Warehouse, 86, High Street, Borough, London, S.E.

WANT PLACES.—Letters to be Post Paid.

GARDENER (Head).—Age 26, single; thoroughly understands his profession in all its branches. Six years' good character.—H. H., Post Office, Orpington, Kent.

GARDENER (Head).—Age 40, single; perfectly understands his profession. Good testimonials to character.—Dunger, C., Mr. Howel, Muswell Hill, Hornsey, N.

GARDENER (Head). — Age 30, single; has a thorough knowledge of his profession in all its branches. Highly recommended. — S. A., Mr. Weeks, King's Road, Chelsea, S.W.

GARDENER (Head.) — Age 30, married, two children; has a thorough practical knowledge of his profession. Wife can manage Dairy if required.—A. B., Royal Horticultural Gardens, South Kensington, London.

GARDENER (Head).—Age 36, married, no incumbrance; thoroughly understands Forcing Fruit, Flowers, and Vegetables; also the Management of Kitchen and Flower Gardens. Five years' good character.—A. B., Mr. Durrant, Reigate, Surrey.

GARDENER (Head).—Age 30, single; understands the Stove and Greenhouse, Pits, Frames, Flower and Kitchen Gardens. Two years' good character, and other references if required.—A. B., Mr. Barnes, Camden Nursery, Camberwell, S.E.

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To Noblemen and Gentlemen.

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The Gardeners' Chronicle Newspaper.

SATURDAY, AUGUST 31, 1861.

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12 Tea Spoons	0	16	0	1	2	0	1	5	0	1	7	0
6 Egg Spoons, gilt bowls..	0	10	0	0	13	6	0	15	0	0	15	0
2 Sauce Ladles	0	6	0	0	8	0	0	9	0	0	9	6
1 Gravy Spoon	0	6	6	0	10	0	0	11	0	0	12	0
2 Salt Spoons, gilt bowls..	0	3	4	0	4	6	0	5	0	0	5	0
1 Mustard Spoon, gilt bowl	0	1	8	0	2	3	0	2	0	0	2	6
1 Pair of Sugar Tongs ..	0	2	6	0	3	6	0	4	0	0	4	6
1 Pair of Fish Carvers ..	1	4	0	1	7	6	1	10	0	1	12	0
1 Butter Knife	0	2	6	0	5	6	0	6	0	0	7	0
1 Soup Ladle	0	10	0	0	17	0	0	17	0	1	0	0
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News of the Week.

THE COUNT DE MORNY on Monday delivered a speech at the opening of the Council General of the Department of the Puy de Dome, in which he said that the interior embarrassments of almost all the Powers, and above all the language of the EMPEROR NAPOLEON, removed all apprehension of any war breaking out in which France could be engaged. The *Moniteur* of Wednesday contained a report from the Minister of Marine to the EMPEROR, calling attention to the insufficiency of officers in the Imperial Navy, and proposing to increase the number of officers within the current year by 10 captains of line of battle ships, 20 captains of frigates, 50 lieutenants, and 25 midshipmen. The Minister adds that this increase will not be sufficient, and declares his conviction that a similar increase will have to be made next year. The EMPEROR has approved the proposition of the Minister. The *Moniteur* has also published an article in reply to the recent assertion of Mr. ROEBUCK at Sheffield, that he knew of the existence of a convention by which the Island of Sardinia would be eventually ceded to France. It gives a formal denial to this assertion, and declares that "not only does such a convention not exist, but even the thought of entering into negotiations on this subject with the Cabinet of Turin has never occurred to the EMPEROR'S Government."

The EMPEROR OF AUSTRIA has sent a message to the Reichsrath at Vienna, explaining his reasons for dissolving the Hungarian Diet, and declaring that instructions have been despatched to Hungary for the maintenance of order, but that moderation will be used in carrying them out, unless the employment of rigorous measures be forced upon the Executive. An Address in reply to this message has been moved in both Houses of the Reichsrath, thanking the EMPEROR in loyal and grateful terms for his intention to persevere in the constitutional path upon which he has entered, and for his policy in protecting the interests of the non-Hungarian provinces, without neglecting the means of bringing about an understanding with Hungary. In the sitting of the Upper House on Tuesday Count LEO THUN and M. PALACKI opposed the Address on the ground that it showed disregard to the demands of Hungary; and in the Lower House on Wednesday Dr. SMOLKA, a Galician deputy, denied that the communication which had been made to the Reichsrath emanated from the EMPEROR, and declared that the Ministry deserved a vote of want of confidence for their policy in regard to Hungary. Count CLAM proposed a counter Address, favourable to decentralisation. On Thursday a very violent debate took place in the Lower House, in which the speakers against the Address, especially the Poles and Czechs, demanded the modification of the Constitution. The latest news from Pesth states that the Stadtholder published an ordinance on Thursday declaring that the Comitat of Pesth, by its protest against the dissolution of the Diet, had attacked the rights of the King, and ordering the immediate discontinuance of its sittings. Count APPONYI and Count MAILATH have received leave

of absence for three weeks, and the resignation of the latter is considered imminent.

A despatch from Agram announces that it was moved in the Croatian Diet on Monday that the Diet should protest against that part of the communication made in the name of the EMPEROR to the Reichsrath, which declared the latter competent to pass resolutions which should be binding on the provinces not represented therein as a violation of the Pragmatic Sanction.

The EMPEROR OF RUSSIA has addressed an imperial rescript to General LAMBERT, the new Governor of Poland, instructing him to take measures for the pacification of the kingdom with the co-operation of the intelligent citizens, and promising that Poland shall in future enjoy greater independence. HIS MAJESTY also declares that he will entirely forget the events of the past.

Baron RICASOLI has addressed a circular note to the diplomatic agents of Italy abroad, explaining the state of affairs in the Neapolitan provinces. He states that the brigandage in Naples is the hope of the European reactionary party, which has its head-quarters in Rome; and that the arms, ammunition, and pay of the brigands are supplied from Rome with the connivance of the Papal Court. He expresses a hope that these facts will show that the temporal power of the Pope "is not only condemned by the irresistible logic of national unity, but is become incompatible with the civilisation of mankind;" and he concludes by declaring that this universal conviction will materially assist the Italian Government in the task of rendering to Italy, and at the same time of restoring to the Church, liberty and dignity.

From the United States we learn that the Federal army has been again defeated by the Confederates. The battle was fought at Springfield in Missouri between 8000 Federals under General LYON, and 23,000 Confederates under Generals PRICE and M'CULLOCH. General LYON was killed, and the Federal loss is officially reported at 800 killed and wounded. The loss of the Confederates is also said to have been heavy, but the rumour that their two generals were among the killed is not confirmed. The Federals retired in good order to Rolla. President LINCOLN has issued a proclamation, suspending all intercourse with the seceded States, and has appointed the last Thursday in September for a national fast. Mr. FAULKNER, late Minister of the United States in Paris, has been arrested on a charge of treason and committed to gaol.

Accounts from Calcutta of the 29th July state that incessant rains have prevailed in the interior of India, and that the prospects of the indigo crop are unfavourable. The Calcutta journals have received information that five cities in Tartary and China have been made over to the Russians by the EMPEROR OF CHINA, and that a new insurrection has broken out near Pekin. The friendly relations of the European Government with Japan appear likely to be disturbed. The houses of the foreign merchants have been entered and robbed in open day, and the Japanese Government is believed to sanction these proceedings.

Home News.

THE QUEEN'S VISIT TO IRELAND.—On Friday afternoon the 23d inst., her Majesty walked out in the grounds of the Viceregal Lodge with the Princesses Alice and Helena, when several trees were planted by the Royal party. On the return of the Prince Consort from the Curragh, the Queen and his Royal Highness, accompanied by the Princesses Alice and Louisa, Prince Alfred, and the Lord-Lieutenant, drove through the principal thoroughfares of the city, and paid a private visit to the Exhibition. Her Majesty was everywhere received with the most loyal demonstrations by the spectators, who in some parts of the city had assembled in considerable numbers. In the evening the Queen had a dinner party. On Saturday morning her Majesty and the Prince Consort, accompanied by Princess Alice, Princess Helena, Prince Alfred, the Lord-Lieutenant, and a numerous suite, went to the Curragh camp, and were received on their arrival with a royal salute of 21 guns. A review and sham fight then ensued, and occupied several hours, the manœuvres being on a most extensive scale. The Prince Consort, in a Field Marshal's uniform, and Prince Alfred, in his midshipman's dress, rode on horseback by the side of the Queen's carriage. The Prince of Wales was on duty at the head of his company of the Grenadier Guards throughout the day. In spite of the drenching rain which fell uninterruptedly for an hour and completely saturated everybody on the ground except the Queen, who escaped by ordering her carriage to be closed, the review was witnessed by about 60,000 persons. The Royal *cortége* in its movements over the plain was followed by a vast crowd of spectators from Dublin, Kilkenny, Carlow, and the surrounding country, who frequently cheered her Majesty. At the conclusion of the sham fight, her Majesty and the Prince Consort proceeded to the quarters of the Prince of Wales, where they took luncheon, and then returned to Dublin, arriving at the Viceregal Lodge shortly before 6 o'clock, amid the reiterated cheering of those who lined the route. Prince Alfred remained at the Camp on a visit to the Prince of Wales. In the evening the Queen had a dinner party, to which the general officers and colonels commanding regiments at the Curragh were invited. On Sunday morning the Queen, Prince Consort, and the Royal family attended Divine service in the private chapel of the Viceregal Lodge. The Dean of the Chapel Royal officiated. In the afternoon the Queen and Prince Consort, with the Princesses, walked in the garden of the Viceregal Lodge. The Prince of Wales, accompanied by Prince Alfred, arrived from the Curragh on a visit to her Majesty during her stay in Ireland. The Prince Consort, accompanied by the Prince of Wales, Prince Alfred, and the Lord-Lieutenant, afterwards drove in an open carriage to the Mountjoy and Smithfield Prisons, and inspected both establishments. The heavy rain prevented her Majesty driving out during the day, but at 6 o'clock, during a fine interval, the Queen, accompanied by the Princesses Alice and Helena, left the Lodge in an open carriage, and honoured General Sir George Brown with a visit at Kilmainham Hospital. On leaving the hospital her Majesty took a drive through the Phœnix Park, and returned to the Viceregal Lodge at 7 o'clock. On Monday, the Queen and Prince Consort accompanied by the Prince of Wales, Prince Alfred, and the Princesses, left Dublin for Killarney by a special train on the Great Southern and Western Railway. The Royal train left Dublin at five minutes before 1. At all the stations along the line great crowds assembled, who greeted the Royal party with loud cheers as the train passed. At Portarlington, where the train stopped for five minutes, a guard of honour of constabulary was drawn up to receive her Majesty, who was loudly and repeatedly cheered. At Thurles the station was crowded to suffocation by the tenantry of the surrounding districts of Tipperary, who welcomed her Majesty with loud cheers. The station was tastefully decorated with evergreens, and each engine in reserve and all the switches were also decorated. The train reached the Limerick junction at 4.12 and left at 4.22. A guard of honour of constabulary was drawn up on the platform. The station was adorned with evergreens, and the utmost loyalty was manifested by those present. The train arrived at Killmallock at 4.50, but stopped only a few moments, and at 5.20 arrived at Mallow. The station at this place was filled with a large assembly of gentlemen and ladies, by whom the Queen was enthusiastically cheered. The town council of Mallow presented an address of welcome. At 6.30 the train arrived at the Killarney station, where her Majesty was received by Lord Castlerosse, and a large number of the resident gentry. The Queen then entered her carriage and proceeded to Killarney House, escorted by a guard of honour of the 18th Royal Irish and the 1st Dragoons, Lord Castlerosse riding on the right of the carriage, and the Right Hon. H. A. Herbert, as Lord lieutenant of the county, on the left. Flags waved on every side, and when the Queen passed down the road leading to the town where the people had congregated in thousands, the cheering was most enthusiastic. The royal procession passed the grand entrance of Killarney House, and went down the picturesque road towards Rosse Island, when they entered Killarney demesne by the keeper's gate under a triumphal arch. At Presgate Valing, the Kintore tenantry, with their families, were congregated, and were loud in their acclamations. In about three-quarters of an hour the Queen arrived at the terrace in front of Killarney House, where she shook hands warmly with her host and hostess amid great cheering. She entered the mansion, leaning on Lord Castlerosse's arm, and the Prince Consort followed with Lady Castlerosse. The Royal standard was immediately hoisted on the flag-staff on the top of the house. During the progress of the *cortége* there were three special cheers for the Prince of Wales, who promptly acknowledged the compliment. At the dinner party in the evening Dr. Griffin, the Protestant Bishop of Limerick, and Dr. Moriarty, the Roman Catholic Bishop of Kerry, were both present. At night the town was illuminated. On Tuesday at 12 o'clock the Royal party embarked at Ross Castle, amidst the cheers of thousands, and in the presence of an immense flotilla of boats, that formed the train of the Queen's barge during the day. In the State barge were the Queen, the Prince Consort, Prince of Wales, Prince Alfred, the Princesses Alice and Helena, Lady Churchill, Earl Granville, and Lord and Lady Castlerosse. Pillane, the celebrated guide, steered. After rowing round Innisfallen, and coasting under the Toomies and Glana Mountains, the Royal party [illegible] at 1 o'clock at Glana. After a short excursion [illegible] the demesne they sat down to a magnificent [illegible] at Glana Cottage. After remaining at Glana [illegible] hour and a half the Queen re-embarked, [illegible] cession of boats, the Royal boat leading, [illegible] the middle of the Torc Lake, threaded the [illegible] and passed the Eagle's Nest into the upper lake [illegible] way to Derry Cunnihy, which was reached at [illegible] when the Queen and party landed and took [illegible] return the boats passed through the Muckross [illegible] under the old Weir Bridge through the lower [illegible] Ross Island, where they landed amid renewed [illegible]tions. On her return to Killarney House, [illegible] Majesty planted a "Wellingtonia gigantea" [illegible] lawn in front of the mansion, and then [illegible] leave of her host and hostess. The Royal [illegible] entered the carriages in waiting, and [illegible] the 1st Dragoons, started at 6.30 to [illegible] the seat of the Right Hon. H. A. Herbert, [illegible] there was an immense assemblage of ladies [illegible] men, who welcomed the Queen with the [illegible] and enthusiasm. In the evening there was a [illegible] party, to which Mr. James O'Connell, the [illegible] Mr. Daniel O'Connell, was invited. On [illegible] morning the Royal party, attended by [illegible] drove round Dinis Island and other portions [illegible] ross demesne, and visited Torc Lake, to witness [illegible] hunt. There was a great assemblage of boats [illegible] by respectable people, by whom the Queen [illegible] cheered. Her Majesty remained on the lake [illegible] the State barge went repeatedly through the [illegible] boats. The Prince of Wales and Prince Alfred [illegible] rowed about in a race gig. A stag was started [illegible] the efforts Mr. Maurice O'Connell's pack of hounds [illegible] their whippers in failed to drive it into the [illegible] Shortly after 6 o'clock the Queen returned to [illegible]ross House. On Thursday morning her Majesty [illegible] her departure for Dublin. The Royal [illegible] left Killarney at 12.54 P.M., and [illegible] Kingsbridge station at 5.59, having performed [illegible] journey, a distance of 186 miles, in 5 hours [illegible] minutes. At all the stations on the route [illegible] honour of constabulary were assembled on the [illegible] which was crowded with peasantry and a large [illegible] of the principal people of the neighbourhood, [illegible] received the Queen with enthusiastic cheers. [illegible] Lord-Lieutenant and a numerous party of the [illegible] regal household was in attendance at the station [illegible] receive her Majesty and the Royal party, who [illegible] a slow pace, escorted by the usual guard [illegible] honour, through the principal streets of the [illegible] to the terminus of the Kingstown Railway. [illegible] tion of her Majesty throughout this [illegible] hearty and enthusiastic. The streets [illegible] masses of people, and every window, house, [illegible] was occupied. The Queen left Dublin by special [illegible] at half-past 6 P.M., and arrived at Kingstown [illegible] Her Majesty immediately went on board [illegible] yacht, which remained at her moorings until [illegible] yesterday morning, when she left for Holyhead. [illegible] Majesty remained at Holyhead yesterday to [illegible] new harbour and breakwater, and intended [illegible] Holyhead at 9 o'clock last night, and, avoiding [illegible]burgh, proceed direct to Balmoral, where she [illegible] to arrive at 2 o'clock this afternoon.

THE ROYAL FAMILY IN SCOTLAND.—On [illegible] morning the Princes Arthur and Leopold, and [illegible] cesses Louisa and Beatrice, with their attendant [illegible] suite, left Edinburgh by special train for Balmoral. [illegible] Royal party reached the Ferryhill station at [illegible] where the Lord Provost and council were in [illegible] few minutes before 2 o'clock. After a [illegible] during which the carriages were changed [illegible] Scottish North-Eastern Railway to the Deeside [illegible] Royal children proceeded by the latter line [illegible] stopping, to Aboyne, and posted thence to [illegible] where they arrived at half-past 5 o'clock.

PRINCE LEOPOLD.—It has been recommended [illegible] Prince Leopold shall pass the ensuing winter [illegible] climate, and his Royal Highness will accordingly [illegible]ceed to Italy in October. It is understood [illegible] Prince will travel incognito, his suite consisting [illegible] his governor, physician, and tutor.

GOVERNOR GENERALSHIP OF CANADA.—[illegible] of last evening states that Viscount Monck [illegible] succeed Sir Edmund W. Head as Governor [illegible] Canada.

THE BISHOPRIC OF GLOUCESTER AND [illegible] The Rev. William Thomson, D.D., Provost [illegible] College, Oxford, Chaplain in Ordinary to the [illegible] and preacher of Lincoln's Inn, has been [illegible] the Bishopric of Gloucester and Bristol, vacant [illegible] translation of Dr. Baring to the See of Durham.

THE CHANNEL FLEET. — The Hero, 91, [illegible] Trafalgar, 90, a portion of the eastern division [illegible] Channel Fleet, anchored in Dublin Bay on [illegible] morning. The Edgar, 91, bearing the flag of [illegible] Admiral Erskine, has arrived at Holyhead, [illegible] remainder of the fleet, consisting of the Revenge [illegible] bearing the flag of Admiral Smart, K.H.; [illegible] 80, Conqueror, 90, and Donegal, 101, arrived [illegible] Clyde on Tuesday night.

THE IRON-CASED FRIGATES.—The iron-clad [illegible] frigate Defence, 22, will leave the Tyne for [illegible] the 7th of September, and may therefore be expected [illegible] arrive in the Medway on the following or the [illegible]ing day. Immediately on her arrival she [illegible]

docked and fitted in order that she may be got ready for sea with the least possible delay. Her armament has already arrived from Woolwich, the following being the number of Armstrong guns she is intended to mount:—Main deck, 16 100-pounders, and 4 40-pounders; upper deck, 2 100-pounders, pivot-guns. The Defence, on her arrival at Chatham, will be commissioned by Capt. Richard A. Powell, C.B., late of the Boscawen, 70.

Foreign.

FRANCE.—The Emperor left the Camp on Friday for Plombières, and returned to Paris on Saturday, when he presided at a Cabinet Council at the Tuileries. On Wednesday morning his Majesty left Paris for Biarritz, starting at the early hour of 5 o'clock, in order to arrive at Bordeaux at 6 o'clock for dinner. The *Pays* of Thursday says that the interview between the Emperor and the King of Prussia will not take place until after the latter's coronation. Lord Clyde is expected at the Camp of Châlons, after visiting which he will proceed to Germany.—The *Moniteur* of Wednesday contains a report from the Minister of Marine to the Emperor on the insufficiency of the number of officers in the Imperial navy. The Minister proposes to the Emperor to increase the number of officers within the current year by 10 captains of men-of-war, 20 captains of frigates, 50 lieutenants, and 25 midshipmen. The Minister adds that this increase will not be sufficient, and declares his conviction that a similar increase will have to be made next year. The Emperor approves the proposition of the Minister.—The opening of the Conseil General for the department of the Puy de Dome took place on Tuesday, under the Presidency of Count de Morny, who in his opening speech, which treated only of home questions, said:—

"The internal embarrassments of almost all the Powers, and, above all, the words of the Emperor Napoleon, remove all apprehension of any war breaking out in which France will be engaged. France must direct her efforts towards peace. For my part, I sincerely rejoice when I see my country endowed by its Sovereign with new liberty, because I consider that liberties accorded will establish themselves better among us than the liberties which were achieved by conquest."

The Count de Persigny remains at Vichy, and does not therefore preside at the Conseil General for the Department of the Loire.—The *Moniteur* of Monday contained the following:—

"Mr Roebuck has recently affirmed that he knew of the existence of a convention by which the island of Sardinia would be eventually ceded to France. We give a formal denial to this assertion. Not only does such a convention not exist, but even the thought of entering into negotiations on this subject with the Cabinet of Turin has never occurred to the Emperor's Government."

The *Opinion Nationale* publishes the following remarks on Mr. Roebuck's speech.—

"Our neighbours and allies on the other side of the Channel have found out something new to frighten themselves with. It is Mr. Roebuck who has torn away the veil; it is the member for Sheffield who has just revealed to his constituents the secret of the Cabinet of the Tuileries, the imminent danger not now of a descent on the coasts of Albion, but of the annexation to France of the island of Sardinia. We are surprised that Mr. Roebuck should persevere in such statements after the formal and energetic contradictions of the semi-official journals of Paris, not to speak of that of Baron Ricasoli. For our part, we declare in the most positive manner that we have no knowledge of the treaty to which the hon. gentleman alludes. Mr. Roebuck has in this case been the victim of his well-known tendency to mistake appearances for realities. He has, perhaps, formed his opinion from some of those well informed correspondents, who, of course, derive their news from the most authentic sources. One thing astonishes us, and that is, that in the midst of those panics which periodically break out in England no notice should have been taken of an article lately published by the *Gazette de France*, which represented as the most legitimate of all annexations that of the island of Mauritius the old Isle of France, the population of which are almost entirely French."

The *Temps* says that Lord Cowley had a long interview with M. Thouvenel on Tuesday. M. Benedetti, the new Minister-Plenipotentiary to Turin, left Paris for his post on Monday evening. The *Pays* says it is not true that the French Government had given the ambassadors an assurance that it would maintain the occupation of Rome.—The *Moniteur* of yesterday contained an imperial decree, according to which foreign wheat and corn, no matter of what kind or whence exported, may be temporarily imported free of duty, for grinding, under the conditions of the law of July 5, 1836. This decree also determines the conditions of re-exportation.—The Imperial Court delivered judgment on Thursday on the appeal of M. Mirès. The Court expunged from the former judgment the charge of fraud, and also the charge of fraudulently appropriating 21,247 shares of the Caisse des Chemins de Fer, because M. Mirès restored them in time. As regards the other charges, the Court concurred in the view of the Court below, and, as the acts on which these charges were founded had been frequently repeated by M. Mirès, and had caused a great scandal and enormous loss to private individuals, it affirmed the sentence already pronounced. M. Mirès was moreover condemned in the costs of the appeal. As regards the appeal of Count Siméon, the decision of the Court below was confirmed. — A priest named Vidal has just been tried on the charge of embezzlement and fraud. He had founded a savings-bank for the clergy, promising 5 per cent and a volume of one of his two religious reviews, 20f. and 15f. a-year, for each 100f. The clergy thought it a good investment, and afterwards found that the prisoner had spent a great portion of the money. In the progress of the case some curious revelations were made about a great mass traffic which seems to be going on in conjunction with the booksellers' trade. A church in Paris which originally belonged to a society became afterwards the property of the State, when on investigation it was found that the church was under the obligation of saying 30,000 masses, which had been paid for but never said. This gave rise to a new industry. Several booksellers shops in Paris have become the middlemen between the priests who receive the orders for masses too numerous to be said by themselves and others who have no such orders. There are priests, for instance, who take orders for many thousands, for each of which they have to get one franc. The bookseller takes these masses off their hands, receives the money, and gives the priest a portion of it back in books; he then gives away these masses to other priests who have no such extensive orders, and pays them likewise in books, on which he gains 50 or more per cent. In the present case the accused joined this trade to his other, and, in order to save his books, falsified the returns of the masses said. He had taken money for 30,000, and had only performed 6639. He put for one priest who said 60, 360; for another who said 35, 335, and so on. He was condemned to three years' imprisonment, 500f. fine, and five years' suspension.

PORTUGAL.—The Government has authorised the admission of foreign grain into Portugal. It is expected that the Cortes will grant the assistance sought by the steam company Uniao Mercantil, although great opposition continues against the measure. The marriage of the Infanta Donna Antonia with the Prince of Hohenzollern is fixed for the 12th September. One of the Royal Palaces is preparing for their reception. The Marquis di Bella, representative of the Kingdom of Italy, has arrived in Lisbon, and was to be received by the King in public audience on the 17th inst. The main clauses of the Bill authorising the purchase of the Southern Railway are under discussion in the Cortes.

BELGIUM.—A large deputation, representing the chief manufacturing interests of Ghent, Verviers, St. Nicolas, Brussels, and other towns, had an audience of the Ministers of the Interior and Foreign Affairs, on the 24th inst, for the purpose of submitting a memorial to them against the negotiation of a commercial treaty with England. They urged that such a treaty would have a ruinous effect upon many of the interests of Belgium, including the manufacturers of flaxen and woollen goods, of delf ware, of paper, hosiery, &c.; that it would raise the price of wages, and produce an unfair competition with England. They also alleged that the Anglo-French treaty had already inflicted considerable injury upon many of the manufacturing industries of France, and that when it came into full operation in October next those industries would suffer still more. They therefore prayed the Government not to enter into any such treaty with England, at all events until they had had sufficient experience of the working of the Anglo-French treaty, as well as that of the Franco-Belge treaty which had been recently signed. M. Rogier, Minister of the Interior, admitted that the question was a serious one, and would receive the gravest consideration of the Cabinet. He desired however further evidence to induce him to believe that the negotiation of a commercial treaty with England, upon a similar basis to that recently entered into with France, would prove injurious to the manufacturing interests of Belgium. Baron De Vriere, Minister of Foreign Affairs, in reply to a question put to him by one of the members of the deputation, stated that up to that time no instructions had been given to M. Van de Weyer, the Belgian Minister in London, to negotiate a commercial treaty with the British Government.

SWITZERLAND.—The Federal Council is now negotiating with the Belgian Government for the conclusion of a treaty of commerce with every prospect of success.

BAVARIA.—King Maximilian of Bavaria will pay a visit to the King of Prussia at Ostend.

AUSTRIA.—The Emperor of Austria on Friday sent an Imperial Message to the Reichsrath on the Hungarian crisis, of which the following is a summary:—

"The Emperor deplores the state of anarchy which prevails in Hungary, and the ingratitude for the concessions of the 20th October, by which he threw a veil of oblivion over the crime of the 14th April, 1849, committed against the dynasty and Pragmatic Sanction, — the abolition of the dynasty proclaimed by the Diet at Debreczin. By making the broadest concessions the Emperor has re-established the Hungarian Constitution, with all its liberal institutions, as also its national independence, under the sole condition that the control over military matters and the finances should be exercised in common with the Reichsrath, to which the Emperor was authorized by the fact that the ancient Hungarian Constitution was abolished by a revolutionary power, and to which it is bound by Austria's position as one of the great Powers. Instead of revising the laws of 1848, and elaborating the diploma of regeneration, the Hungarian Diet has exacted the recognition, *pur et simple*, of that one law which is an attack upon the general rights of the monarchy as a great Power, as also upon the interests and nationalities non-Magyar, and which thereby constitute violent measures against Croatia, Slavonia, and Transylvania. Although the Diet has refused all concession and broken off negotiations, the Emperor nevertheless has endeavoured to maintain also in Hungary constitutional principles. His Majesty declares:—1. To maintain the Diploma of the 20th of October, as also that of the 26th February. Not to compel the return of deputies to the Reichsrath, but always to leave it open to them to send members. The non-participation of a portion of the empire in the Reichsrath cannot be hurtful to the rights of the other portions of the monarchy. No change can be made in the constitution of the empire without the consent of the Reichsrath. 2. Those laws of 1848 which are in accordance with the constitution of the monarchy will be recognised, those which are contrary to it will be rejected. 3. Dissolution of the present Hungarian Diet, which is only of a negative nature. A new Diet shall be convoked as soon as possible. Orders have been issued to maintain and re-establish order in Hungary. The Emperor maintains the unity of the empire, the autonomy of the different countries, and constitutional liberty. The Emperor expresses his hope in the future."

In both Houses of the Reichsrath, an Address in reply to this message has been moved, acknowledging in loyal and grateful terms the firmness of the Emperor in maintaining the historical rights of the Crown, and thanking him also for his intention of persevering in the constitutional path upon which he has entered, and for his policy in protecting the interests of the non-Hungarian provinces, without, however, neglecting the means of bringing about some understanding with Hungary. In the sitting of the Upper House on Tuesday Count Leo Thun and M. Palaki blamed the proposed Address for the disregard it showed to the demands of Hungary. The majority of the members, however, pronounced themselves in favour of the unity of the Empire. On Wednesday an animated discussion took place in the Lower House in reference to the Address. Dr. Smolka, a Galician deputy, denied that the communication which had been made to the Reichsrath emanated from the Emperor, and declared that the Ministry deserved a vote of want of confidence for their policy in regard to Hungary. Count Clam proposed a counter Address, favourable to decentralization. On Thursday a very violent debate on the Address took place in the Chamber of Deputies. The speakers against the Address, especially the Poles and Czechs, demanded the modification of the Constitution. The *Donau Zeitung* of Saturday gives a denial to the news published by some Belgian journals, that M. Brentano, Ministerial Councillor, is now in London in order to negotiate the conclusion of a loan of six millions.

HUNGARY.—Two circulars, addressed by the Hungarian Chancellery at Vienna to the Obergespans of Hungary, arrived at Pesth on Saturday. One of these circulars contained the assurance of the Emperor's intention to maintain the Hungarian Constitution intact. In the other hopes were expressed that the public mind would remain tranquil until the assembling of the new Diet, and that the attitude of the people would be such as to render a reconciliation possible. The Emperor also solemnly declared that he has no intention of incorporating the Hungarian Crown lands with the Crown lands of the Austrian Empire, but that he wished to maintain the self-government and independence guaranteed to Hungary by the Imperial Rescript of 1790. On Sunday a great popular demonstration took place at Pesth. The people shouted "Deak for ever!" "Hungary for ever!" Order was not, however, disturbed. On Monday the Assembly of the Comitat of Pesth declared its determination to cease to collect the taxes, considering that they are illegally imposed by the Government. The functionaries of the Comitat consented to a reduction of their salaries. The expenses of the Comitat will be covered by voluntary contributions, and by the issuing of bonds. The Stadtholder, in an ordinance published on Thursday, declares that the Comitat, by its protest against the dissolution of the Diet, had attacked the rights of the King, and orders the immediate discontinuance of the sittings of the Assembly of the Comitat. The conscripts have been ordered to assemble on the 9th of September. Any person preventing the soldiers from obeying the order will be tried by court-martial and severely punished. Count Apponyi, Judex Curiæ, and Count Mailath, have received leave of absence for three weeks. The resignation of the latter is considered imminent. The Duchess of Sutherland was present at the recent debate on M. Deak's Address, and has become highly popular by her sympathy with the Hungarian cause.

CROATIA.—The Croatian Diet has passed a Bill abolishing the exceptional laws on the organisation of the military frontier. A proposition was submitted to the Croatian Diet on Tuesday, to the effect that it should protest against that part of the communication made in the name of the Emperor to the Reichsrath which declared the latter competent to pass resolutions which should be binding on the provinces not represented therein, as a violation of the Pragmatic Sanction.

RUSSIA.—The Emperor left Tsarskoé-Sélo on the evening of the 18th, and arrived at Moscow on the following morning. At Toula on the 20th his Majesty received the principal civil and military authorities, the marshals of the nobility, and the commercial community. After having visited the cathedral, inspected the corps of cadets, and reviewed the troops in garrison at Toula, the Emperor left for Odessa on his way to Sebastopol.

POLAND.—By an Imperial rescript, dated on the day of the Emperor's departure for Sebastopol, the insignia of the order of St. Andrew, in diamonds, has been granted to General Suchozanet, who has been replaced in the Governorship of Poland by General Lambert. The decoration was accompanied by an autograph letter, in which his Majesty expressed his sincerest and heartiest thanks for the services General Suchozanet had rendered. General Lambert, the new Governor, has arrived at Warsaw. He presided on Saturday at the Council of State in his quality of Governor of Poland and Commander-in-Chief of

the Army. The Warsaw journals of Wednesday publish an Imperial Rescript, addressed to General Lambert, the tone of which is conciliatory. The Emperor gives orders to General Lambert for the pacification of the kingdom, with the co-operation of intelligent citizens, and promises that Poland shall in future enjoy greater independence. His Majesty also declares that he will entirely forget the events of the past.—It is said that the Polish ladies, not wishing to be behind-hand with their husbands and brothers in manifesting their gratitude for the expressions uttered in the English Parliament in favour of the Poles, have executed a beautiful piece of embroidery for Queen Victoria, which they have delivered to the English Consul-General, to be forwarded to its destination.

ITALY.—A circular note, dated August 24, has been addressed by Baron Ricasoli to the diplomatic agents of Italy abroad, explaining the state of affairs in the Neapolitan provinces, and replying to those who counsel him to renounce the union "that the Italian nation is constituted, and that all that is Italy belongs to it." The following is a summary of this circular:—

Baron Ricasoli compares the present troubles in the Neapolitan provinces to those which occurred in France, England, and Spain at different periods of transition. He declares the movement in Naples to be in no way a political one, but simply an affair of brigandage and pillage. Of the 15 Neapolitan provinces five only he says, namely, those which are near to the Papal frontier, are given up to brigandage. He gives a history of the brigandage which at different periods has desolated the kingdom of Naples. He speaks in severe terms of the former Neapolitan army, which, although composed of 180,000 men, well armed and equipped, fell back before a handful of heroes, and who since have abandoned themselves to brigandage, sometimes carrying the Bourbon flag, which they have dishonoured by not defending, as they now dishonour it by making it the emblem of assassination and rapine. He regrets to state that the brigandage in Naples is the hope of the European reactionary party which has placed its citadel in Rome. The ex-king of Naples coins money at Rome for the payment of the brigands. The Peter's pence serve to enroll brigands in all parts of Europe. Their arms and ammunition come from Rome. The late perquisitions and arrests made by the French troops leave no doubt on the subject. The connivance of the Roman Court with the Neapolitan brigandage is evident. He hopes that these facts will furnish a powerful argument, and will demonstrate that the temporal power is not only condemned by the irresistible logic of national unity, but is become incompatible with the civilisation of mankind, which cannot tolerate acts of brigandage to be prepared in the very centre of the Catholic Church, with the connivance and encouragement of the Ministers of him who represents God on earth. Rome, by advancing on this path, compromises her religious interests without saving her worldly interests. This universal conviction will materially assist the Italian Government in the task which it cannot decline—viz., to render to Italy, and at the same time to restore to the Church, liberty and dignity."

A letter from Turin in the *Times* states that no official advances whatever have been made at any time, and up to this present moment, to convey even the shadow of a wish on the part of France to gain possession of the island of Sardinia. The Chevalier Visoni, Intendant-General of Piacenza, will temporarily replace Signor Cantelli at Naples. A despatch from Arezzo announces that 500 Papal Zouaves had assembled on the Tuscan frontier near Perugia, apparently with the intention of penetrating into the Italian territory. General Brignone has therefore reinforced the troops on the frontiers. The French troops have arrested 150 Reactionists at Pedece, in the Roman States. The brother of the ex-Grand Duke of Tuscany was expected at Rome on Tuesday, in order to marry the second sister of Francis II. It is rumoured that General Cialdini has demanded fresh troops, in order that he may be enabled to make a simultaneous attack on the insurgents. On Sunday the reactionary band in the mountain of Somma was dispersed. The brigands at Matese, having been surrounded by 24 battalions, have all been killed or taken prisoners; 400 who endeavoured to cross the frontiers were taken by the French troops. Colonel Loren has attacked Chiavone's band on the mountains near Sellia, in concert with the French, and it was rumoured that some French troops had arrived at Castanvita, in order to prevent Chiavone from entering Roman territory. On the 22d some Reactionists made their appearance off the coast at Ascoli, but the vessel conveying them sailed off without any attempt having been made to disembark, on account of the alarm having been immediately spread among the inhabitants. General Pinelli has defeated a band of brigands in the environs of Avellino. A short time since a band of Bourbonists entered the city of Pontelandolfo and were welcomed by the inhabitants, headed by a procession of priests in their sacerdotal robes. Soon afterwards a body of 41 soldiers of the 36th Italian Regiment entered the city. They were well received, invited to a public banquet, and there treacherously murdered. As a punishment for this treachery the Italian army burnt the city with the neighbouring town of Casteluducci, containing, with their suburbs, 6000 inhabitants, and put to the sword all the inhabitants who had not escaped to the mountains. The Paris papers state that the English squadron left Naples and returned to Malta on the 26th inst.

TURKEY.—Sir William Codrington had an interview with the Sultan on Friday, when his reception was particularly complimentary. The Sultan afterwards detained Sir Henry Bulwer for a long private interview. The Duke de Montebello arrived at Constantinople on Sunday, and was received by the Sultan on Monday. His Excellency has visited the Ministers. M. de Willissen has also arrived, and was to be received by the Sultan on Wednesday. The Viceroy of Egypt arrived on Monday, in order to do homage to his Sovereign. The Russian, Italian, and Belgian Ministers on Monday presented new credentials to the Sultan. On Thursday his Majesty was to hold a grand review of the Imperial Guard and the Line. Fuad Pacha is to be raised to a co-ordinate rank with Ali Pacha the Grand Vizier. It is likely that Riza Pasha will be appointed to a remote Pashalic. A European Conference will be held at Constantinople on the question of the Principalities. Russia has proposed to the Porte to defer its decision on the question of the union of Moldavia and Wallachia for three years. The Syrian Commissioners held a Conference on Sunday last upon the question of the indemnity to be paid by the Porte. It was decided to send another Commission to Beyrout, which would be more competent to settle the question. The Sultan has resolved upon displaying a conciliatory spirit in Servia and the Herzegovina. The town of Peristi, near Gallipoli, has been half destroyed by fire.

MONTENEGRO.—Omar Pasha has signed an armistice for 10 days with the insurgents of Montenegro. A fire broke out in the city of Mostar on Friday night, and destroyed 22 houses and several of the largest warehouses. After having lasted five hours it was subdued by the aid of the military.

INDIA.—We have accounts from Calcutta to July 29. The following is a summary:—

Calcutta.—The indigo prospects are bad. Incessant rains have prevailed in the interior. The License-tax has been imposed, the Currency Bill has been passed, and income-taxpayers have been allowed the option of paying at the same rate in the coming as in the expiring financial year, without further returns. The Rev. James Long, of the Church Missionary Society, has been tried for the publication of a pamphlet entitled "Nil Durpan." The indictment charged him with a libel against the editor of the *Englishman* newspaper, and secondly with a libel on the whole body of indigo planters. It was proved that Mr. Long had caused the "Nil Durpan" to be printed, and that he had made over 500 copies to the secretary to the Government of Bengal, with a list of some persons to whom he wished it to be sent; that this list had been added to in the secretariat; and that copies had been circulated by order of the secretary. The only point left for the jury to decide was whether or not the publication was libellous, both as against the editor of the "Englishman" individually, and against the planters as a body. On both these counts the jury found Mr. Long Guilty. Sentence was deferred till the 22d, when application was made for a new trial on the ground of misdirection. The hearing of the arguments in support of this application was adjourned. A large number of English and native honorary magistrates have been appointed in Calcutta.

North West Provinces.—The first symptoms of any mitigation in the severity of the famine have appeared in Meerut. The relief committee report that the destitution in the district is greatly ameliorated, and that the people who deserted their villages had begun to return in great numbers.

Bombay.—The Government continues to publish reports from the officials all over the country on the cotton-producing capabilities of each province and district. The general result is that, but for the want of roads and a steady demand at a fair price, India would produce any amount of cotton.

CHINA.—The Calcutta journals assert that five cities in Tartary and China have been made over to the Russians by the Emperor of China. The Hong-Kong journals of July 12 state that San-ko-lin-sin has captured Teng-hsein, and that Tao-tai of Chitung has been degraded for cowardice, having retreated from the rebels without striking a blow. It is also reported on Chinese authority that 13 successive victories have been achieved by Tseng-kwo-fan over the rebels, 20,000 of whom were slain. At Shanghae much trouble had been caused by the plunder of valuable silk cargoes belonging to Europeans by people supposed to belong to the insurgent party.

JAPAN.—The friendly relations of the European Governments with Japan appear likely to be disturbed. The houses of the foreign merchants have been entered and robbed in open day. The Japanese Government is believed to sanction these proceedings. It is reported that the Governor of Kanawaya had informed Mr. Alcock, who contemplated travelling overland from Nagasaki to Jeddo, that he could give him no assurance of being unmolested on his journey.

CAPE OF GOOD HOPE.—The deficient condition of the finances has formed the chief subject of discussion in the Cape Parliament. A loan for 200,000*l.* has been determined on, and, to meet future recurrences, 100,000*l.* a year increased taxation. The annual estimate will now be over 600,000*l.* The Customs tariff for wines, spirits, and tobacco is doubled. Transfers, legacies, bank notes, &c., make up the balance. The offices of Colonial Engineer and of Commissioner of Roads are to be abolished. The question of separation has lost ground. A Bill to give the members of the Dutch Reformed Church power to elect ministers, wardens, &c., was withdrawn. The Assembly has authorised a survey for the construction of a branch railroad from Wellington to Malmesbury, and the erection of a telegraph from Cape Town, *viâ* Port Elizabeth, to Graham's Town. The first vote for annexing the whole of independent Caffraria, from the Kei to Natal, was carried by 12 to 10. The country beyond the Kei is half the size of England and Wales united. It possesses, according to Sir Walter Currie, who recently inspected it, about 35,000 warriors. The chiefs seek a union with England. The island of Ichaboe was annexed to the Cape on June 19, by Captain Jones, of the Furious. Other islands in the neighbourhood will probably be also annexed. Some modifications of the plans of the breakwater are under consideration. It is possible that the docks may be available within four years. Sir George Grey had announced to the House of Assembly his approaching removal to New Zealand.

UNITED STATES.—A great battle has been fought near Springfield in Missouri, between 8000 Federals and 23,000 Confederates, resulting in the defeat of the Federals and the death of General Lyon, their Commander. Th Federal loss is officially reported at 800 killed and wounded. The Federals retired in good order to Rolla. The Confederates are said to have lost 2000 killed and wounded, with about 100 horses, and all their tents and camp equipage; but the rumour that Generals Price and M'Culloch were among their killed is not confirmed. Nothing important has occurred since this battle, but according to Federal accounts, the Confederate troops, with the exception of pickets, have retired to Fairfax Court House. President Lincoln has issued an important proclamation, interdicting all commercial intercourse by sea or land henceforth with the States in rebellion against the government, with the exception of Eastern Virginia, and such portions of the other recusant States as may be loyal to the government. The carriage of goods, chattels, wares, merchandise, or persons, is strictly forbidden, and the officials of the government are ordered to forfeit all vessels and other conveyances that may be employed in transporting such prescribed articles from any of the States in arms against the government, without permission from the President through the Secretary of the Treasury. President Lincoln has also appointed the last Thursday in September for a national fast. Mr. Faulkner, the late American Minister at Paris, has been arrested on a charge of treason and lodged in Washington Gaol. The charge is based on acts committed at Paris, "in purchasing arms for the rebel States whilst representing the United States Government, and endeavouring to procure the recognition of the Southern Confederacy by the Government of France." It is reported that the blockade question is under the consideration of the Cabinet. A despatch from Washington states that Mr. Seward intends to inform Lord Lyons immediately that British subjects are engaged in furnishing aid to the Confederates in violation of the Queen's proclamation. Shortly before the Royal mail steamer African left New York she was boarded by some police, who, exhibiting a warrant, arrested and carried off Mr. Robert Muir, formerly a highly respectable merchant at Charleston. Mr. Muir was, it is said, the bearer of important despatches to Earl Russell from Mr. Bunch, British Consul at New Orleans, who had furnished him with a passport. Mr. Muir is a naturalised American citizen, and consequently can make no claim on the British Government for protection. A passenger from Liverpool by the Persia, named Serrell, who boasted while on the voyage that he was the bearer of a large sum of money for the use of the Confederate Government, was arrested by the United States Custom House officers, on information received from the other passengers, and on searching his baggage the sum of 200,000 dols. in Bank of England notes was found therein. He was taken to the District Attorney's office, and admitted to bail in the sum of 40,000 dols. On the intervention of Lord Lyons, Powell M'Quillan, the British subject, whose release from Fort Lafayette was refused by Judge Betts, of the United States district court, has been released by order of the Secretary of State. The King's County Court has issued an order to arrest the Commander of Fort Lafayette for refusing to obey the writ of *habeas corpus* to produce the Baltimore Police Commissioners. Symptoms of insubordination have been manifested among a portion of the troops at Washington, which is said to be full of traitors and spies. It is stated on good authority that there are no less than 148 known Secessionists in the service of the government at Washington, and 75 others strongly suspected of entertaining treasonable sentiments. Some of them are employed in the arsenal on the manufacture of shells to be used against the Confederates, which may account for the fact that many of these projectiles used at Bull's Run did not explode. The 79th Scotch regiment has been in a state of insubordination, because General M'Clellan would not allow it to go in a body on a visit to New York. General M'Clellan ordered it to be surrounded by other regiments, took the colours from it, and ordered the men to lay down their arms and return to duty. All obeyed the order except a few, who are to be tried by court-martial. Twenty-three Federal prisoners have been released and have returned from Richmond, where 1200 prisoners remain; they all state that they and the other prisoners were well treated by the Confederate authorities. General Wool will take the command of Fort Monroe. The New York, Boston, and Philadelphia Banks have agreed to take 50,000,000 dols. of the Federal Loan, and the remaining 120,000,000 dols. in instalments by December. Thomas Francis Meagher has refused a captaincy in the regular army. Prince Napoleon has returned to New York from Washington. On the 16th he left on a tour to Niagara and the West, the Princess Clotilde remaining at the New York Hotel until his return. From Richmond we learn that the Confederate Congress has called for 400,000 men. An Act has been passed exiling all persons who declined to take the oath of allegiance. A doubtful report was current at Charleston that the Federal cruiser Crusade had been captured. By arrivals from South American ports we learn that the Southern privateers are actively engaged in that quarter, as well as about the West India Islands. Several of them haye recently been seen off [illegible]

[illegible] and Rio Janeiro. The Jeff. Davis ran into San Juan, Porto Rico, on the 26th ult., for provisions and water. She had been overhauling American vessels in that neighbourhood for some time previously. The Sumter privateer had visited Trinidad and the Dutch colony of Curaçoa for coals. She is reported to have taken and sunk 40 merchant vessels in different parts of the West Indies and the Spanish main.

South America.—Intelligence from Carthagena states that General Mosquera had obtained a decisive triumph over the Centralist army, and had occupied the city of Bogota, destroying entirely the intrenched army which defended it. Generals Espina, Posada, and Paris were taken prisoners. Marino, Ospina, and their President were also prisoners. Two shocks of earthquake were experienced at Panama on the 5th.

Public Addresses.

Mr. Roebuck, M.P., attended the Corporation dinner at Sheffield on the 21st inst., and spoke as follows on our Foreign Relations:—

"[illegible] countries had been attempting to come closer together by commercial union, and that mainly by the attempts and labours of Mr. Cobden. Between the people of France and the people of England an alliance could not be too [illegible]. Great they were both, and mighty in their influence [illegible], and, as far as he was concerned, he might [illegible] would not object to a commercial union of that kind. He [illegible] France and her people, and he believed that any [illegible] would unite us to them would be a benefit to both and a benefit to mankind at large. Whether the attempt would be successful he would not attempt to say. For himself he was an ardent admirer of Mr. Cobden, but he feared the commercial treaty would not bear the fruits that gentleman anticipated. He hoped he might be mistaken. Nobody would feel more than he did the advantages which were anticipated in the treaty with France if this commercial treaty was the only circumstance of unison with France. He should like however to know why it was that in a time of peace we in England were taxed as if it were a time of war. The person who now headed the great country of France was not able to follow all the amicable desires that we had in our minds at present. He would not allude to the circumstances which placed him upon the throne of France, but these circumstances made him, he would not say the slave, but they made him the servant of the army of France. That army now amounted to 600,000 men, and there was a great fleet around the coast. Why were they there? They were there to threaten England, and he, as an Englishman, was not born to be threatened with impunity. The dragon's teeth have been bound. The Volunteers have started up, and we are now safe; and, besides this, there is at the head of the Administration—I say it in the hearing of men who don't believe in that Administration—there is at the head of the Administration now one who cares for the honour and the safety of England. And so long as we have him there we are safe. He had said that he was not first in the language of compliment, but this he said from his very heart,—he felt the danger in which England was placed, and looked with respect upon the man to whom he looked for the safety of the country; and depend upon it, as soon as we got rid of this man we should get rid of one of our great defences. He had never been a party man. He had, he believed, done his utmost on one occasion to turn this very man out of office, and he thought he had succeeded, but still he said that Lord J. Russell, on making his farewell speech to the House of Commons, made use of words which ought to sink deep into the hearts of Englishmen. Lord John said there were things in the conduct of the Emperor of the French that created great doubt and suspicion in the minds of the people of England. He (Mr. Roebuck) would now make known a secret to the whole meeting. He knew there had been a compact entered into with the King of Italy that the Emperor of the French should have the island of Sardinia so soon as he withdrew from Rome. He was stating a fact—not what he thought, but what he knew; and he knew also that the people of England would not allow that. There was hanging over us now a cloud threatening war, and the man at the head of the Administration was ready to battle against such aggrandisement on the part of France. What he had said he reminded his hearers would be verified before many months had elapsed. Such was the condition of England with regard to France; and in such a position should we not look abroad for what means of defence there is against the Emperor of the French making the Mediterranean a French lake? Where are we to expect him to stop? He knew he should be met with all sorts of imputations. But he said we must look to Austria. Taught by adversity and by experience, the Emperor of Austria was endeavouring to make his hitherto despotically-ruled dominions a constitutional government. Now, he did not believe that experience made fools wiser, but he did believe that it made wise men wiser; and, experience acting upon the young Emperor of Austria made him determined to translate his government into a constitutional government. Some documents had been given to him, from which he had made a few extracts. The Emperor of Austria had endeavoured to make the constitution of that country as nearly like that of England as possible. He had made a House of Lords and a House of Commons, and had even gone beyond our constitution. He had given every distinct nation in his country a constitutional and a municipal Government, and when it was said that the Emperor of Austria had only yielded to pressure he (Mr Roebuck) knew what we yielded to when we gave Catholic emancipation and the Corn Laws. Should it then be said that the Emperor of Austria, taught wisdom by Solferino, was about to go from his word, after having given a Constitution to his people? Looking to the past, then, looking to the future, and looking to ourselves, we ought to believe that he, as an honest and a wise man, would act up to his word, which he not only said, but printed. The Constitution of Austria would consist of a House of Commons and a House of Lords; that was like ourselves. The members of the House of Lords would consist of princes of the Imperial Houses; that was like ourselves; the landed hereditary nobility, and those archbishops and bishops whose noble rank entitled them to a seat: these also were like ourselves. The Emperor also ordains that he shall call up those persons to life peerages who have distinguished themselves by their abilities either in Church, State, Literature, or Arts. This was not like ourselves. The House of Commons would consist of 343 members taken from the following places:—Hungary, 85 members; Bohemia, 54; Lombardy, 20; Dalmatia, 5; Croatia, Slavonia, 9; Galicia, Lodomeria, the Duchy of Auschwitz and Zator, and the Duchy of Cracow, 38; Upper Austria, 18; Lower Austria, 10; Duchy of Saltzburg, 3; Striermark, 13; Carinthia, 5; Agram, 6; Bukowina, 5; Sieenburgen, 26; Moravia, 22; Tyrol, 12; Istria (containing Sorz, Gradiska and city of Trieste), 6, in all 343. Now, then, it will be asked, can Hungary be swamped by the Duchy of Austria, seeing that Upper Austria has 18 and Lower 10 members? Austria desires under her present Emperor to be emancipated. Foreign nations only know Austria as Austria. They did not allow of its component parts, like the United States which we used to speak of; we know nothing of New York, Pennsylvania, Massachusetts, but we know about the United States. The Emperor of Austria wants an empire in the midst of Europe to communicate with other nations. It had hitherto been united by the golden link of the Crown, but he would have it united by a constitutional Government, an Imperial Parliament, a House of Lords, and a House of Commons representing each and every one of the separate nationalities composing the empire. This the Emperor considered would enable him to meet antagonistic Powers upon a great and fair field. He would ask whether in this Hungary was wise—to enter into competition with her Sovereign—to impede him in so great a work, because it gave to each and every one the power of governing themselves, and of sending their own members to Parliament, of putting upon themselves taxation, and gave them the power of enabling the Emperor to meet the opposition Power of Europe upon an equality which he desired, and which they also desired. Under such circumstances he would ask his countrymen whether in what he had stated there was anything to condemn, and whether they believed the Emperor of Austria was a sham. He had now travelled over Europe, and for a few moments would cross the Atlantic, and would ask what should be the conduct of Englishmen with regard to the great contest going on in America. He owned that with regard to that country his early anticipations had been shaken. He believed in the great men—the Washingtons, the Jeffersons, and others of past times, and that there was about to be shown to mankind a new era in the government of man—that this people, instructed and well-to-do in the world—many of them men of rank—would have governed themselves as men ought to do. He had been miserably disappointed. If we were to say to an American, "We give you every virtue under Heaven, we believe you to be the greatest people on the earth, but still it seems to me you don't speak English as it should be spoken—this you speak through the nose'—fire and fury will be the answer. He will say, with a mighty indignation, 'Sir, I grant you the imputation that we snaffle in our speech,' and then all we have stated on behalf of this nation will be forgot, because we have said that they snaffled in their speech. That, unfortunately, he believed to be a true statement of the present case. The unspeakable audacity, the overbearing insolence of Americans, had withdrawn from them all sympathy on the part of the people of England. Looking at the great contest now going on, was there a man in this country who did not in his heart desire that the slave might be free? These are with the North, our commercial interests are with the South, but still we have acted throughout with complete neutrality, and what has been the consequence? We have been visited with abuse as was never before heaped upon us, and we have borne it with a magnanimity and carelessness which showed our superiority. We must still, however, pursue our course of strict neutrality with regard to the affair. Our hearts and our wishes were with the oppressed."

Lord Robert Montagu, in reply to an invitation to attend a meeting at Leeds a few days ago, wrote as follows on the frequent "count-outs" in the House of Commons:—

"A count-out does not overtake a dull and stupid speech. I have heard many such speeches, when no one dreamt of counting the House. I have always seen the House nearly empty when the fate of millions of our Indian fellow-subjects has been discussed; but no one tried to count out the House. I have seen the benches deserted while millions sterling of English people's money were being voted away; but if any one had moved 'that the House be counted,' he would have been deemed no better than a fool or a madman. A 'count out' is always preconcerted or arranged between the leaders on each side of the House. It is attempted only when a subject, which is inconvenient to a Government, either has been broached, or is about to come on. It takes place when a case has been made out which cannot be satisfactorily answered, or when there is on the paper for subsequent discussion a notice of motion which is likely to bring awkward facts to light. Sometimes a 'count out' is resorted to when, in an impending division, to vote one way would be a scandal, and would give just offence to constituents; and to vote the other way would imply a censure on their accomplices, or would commit the Government to a course which would militate against their schemes. A 'count out,' in fact, is quite in accordance with a tendency that has predominated in modern legislation—it carries out the determination to conceal things from the nation, and even to take the supervision and control of affairs out of the hands of parliament itself. The Cabinet have thus virtually constituted themselves the rulers of the empire. Their deeds are kept secret from the people, and even concealed and shrouded from the inquiring gaze of parliament. The Queen herself is generally shut out from the secret deliberations of the Cabinet, and dispatches have been written in her name without her sanction. The Cabinet feel that they rule the empire, and do not blush to affirm it when they say, 'We sent the army there;' 'We made such an arrangement with that foreign despot;' 'We propose to take such and such a course.' The Queen is nothing now in her own kingdom. Similarly the people talk of 'the government of Lord John Russell,' 'the government of Lord Palmerston.' But no one thinks of the government of the Queen. When any one gets impatient under this tyranny of a cabal, and wishes to return to the ancient order of things, and pay, to the best Sovereign who ever adorned the throne of England, the honest allegiance which they owe—then the cabal on the right of the Speaker agrees with the ex-cabal on the other side to smother these endeavours by a count-out. It is thus that the country is crucified between two thieves. Then, again, the effect of these 'counts' is to accumulate a great mass of business for the end of the session. Every one then is fagged and ill, from doing a lot of work which should never have been put upon him: the accumulation of business is hurried through in the most unseemly manner; and no one challenges any misdeed or extravagance. Thus the same independence of parliamentary supervision, the same immunity from scrutiny, is secured by the press of business at the end of the session as by the 'counts-out' at the beginning."

City Intelligence.

Bank Rate of Discount.—The Bank of England, at the weekly court on Thursday, reduced the rate of discount from 4½ per cent., at which it has stood since the 15th inst., to 4 per cent.

Money Market, Friday.—British Funds: Consols closed at 92¾ to ⅞ for Money, and 93¼ for Acct. (Sept. 10); Three per Cents. Reduced, 92¾ to ¼; New Three per Cents., 92¾ to ⅞; Bank Stock, 233; India Stock, 221 to 219; Ditto Five per Cent. Stock, 104 to 103¾; Ditto for Acct., 103¾ to ¾; India Bonds, 7s. to 3s. prem.; Exchequer Bills, March, par; Ditto June, 7s. prem.—Foreign: Brazilian Four and a Half per Cents., 1860, 89¾; Danish Three per Cents., 1825, 83½; Mexican Three per Cents., for Acct. (Sept. 16), 21¼ to 21; Peruvian Four and a Half per Cents., for Acct. (Sept. 16), 99; Portuguese Three per Cents., 1853, 46[illegible]; Russian Four and a Half per Cents., 90¾ to ⅞; Ditto Three per Cents., 1859, 61[illegible]; Spanish Three per Cents., for Acct. (Sept. 16), 42; Turkish Six per Cents., 1858, 69½; Ditto for Acct. (Sept. 16), 69½ to ¾.

Bank of England.

ISSUE DEPARTMENT

Notes issued	£26,891,955	Government Debt ..	£11,015,100
		Other Securities ..	3,634,900
		Gold Coin and Bullion ..	12,241,955
		Silver Bullion	—
	£26,891,955		£26,891,955

BANKING DEPARTMENT

Proprietors' Capital ..	£14,553,000	Government Securities (including Dead Weight Annuity)	£10,135,800
Rest	3,476,271	Other Securities	17,401,285
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts. ..	4,064,709	Notes	7,137,875
Other Deposits	12,774,391	Gold and Silver Coin ..	862,367
Seven day and other bills	669,066		
	£35,537,437		£35,537,437

29th day of August, 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY—BANKRUPTS—T. [illegible] and W. [illegible], Great Winchester Street, City, Upholsterers and Cabinet Makers—T. Corbett, Birmingham, Licensed Victualler—J. J. [illegible] and [illegible], as advertised in last Friday's "Gazette" and M. [illegible], late of Fenchurch Street, Merchants—T. Culleton, Cranbourne Street, Leicester Square, Engraver and Stationer—H. H. Henson, Watford, Hertfordshire, Contractor and Builder—W. [illegible], Birmingham, Glass Manufacturer—L. W. [illegible], Duke Street, Bloomsbury, Manufacturing Jeweller—J. Patterson, Combe Bissett, Wilts, Licensed Victualler—W. R. Taylor, Norwich, Tobacconist and Tea Dealer—J. Whitford, Bristol, Draper—S. Wilkes, Cardiff, Glamorganshire, Wine Merchant.

BANKRUPTCIES ANNULLED—S. [illegible], Audlem, Cheshire, Mercer and Draper—T. Gibbs, Liverpool, Draper.

SCOTCH SEQUESTRATIONS—W. [illegible], Girvan, Ayrshire, Tailor—F. Quilter, Borrowstounness, Merchant—A. [illegible], Barrhead, Renfrewshire, Bleacher.

FRIDAY—BANKRUPTS—H. Beardmore, Burslem, Staffordshire, Joiner and Builder—J. [illegible], Coventry, Watch Manufacturer and Licensed Victualler—J. Everett, late of Rainham, and now of Green Hill Grove, Little Ilford, Essex, Carpenter—M. [illegible], West Winch, Norfolk, Miller—T. Ferris, Ashburton, Devonshire, Tailor and Draper—T. R. Harrison and W. Watson, Sunderland, Ironmongers—G. H. Hopkins, Belper, Derbyshire, Auctioneer—J. Knight, Honiton, Devon, Baker, Flour Dealer and Brewer—C. W. Leete, Liverpool, Furniture Dealer—G. H. Ogden, Bangor, Carnarvonshire, Toy Dealer and Ale and Porter Dealer—M. D. Robinson, Oldbury, Worcestershire, Grocer and Confectioner—J. Sandiford, Accrington, Lancashire, Contractor—J. Shattock, Long Ashton, Somersetshire, Farmer, Hay Dealer, Innkeeper, and letter out of a Steam Thrashing Machine—L. [illegible], High Street, Whitechapel, Eating House Keeper—J. [illegible], Paternoster Row, Bookseller and Publisher—W. White, Woburn Terrace, Kentish Town, Builder.

Metropolis and its Vicinity.

The New Post Office Savings Banks.—The "official regulations" for the management of the new Post Office savings banks have been certified by Mr. Tidd Pratt, and have received the official sanction of the Treasury. Though only 300 money-order offices will be first opened on the 16th of September, the privileges will be gradually extended to all offices, which now number 2500, and are continually increasing. Deposits of not less than 1s., and not more than 30*l*., will be taken at all offices open for the purpose, from 10 to 4, and at many from 9 to 6 daily; and on Saturday evenings till 8 o'clock. This will be an immense improvement on what must now be called the "old" savings banks, which were open at rare and often inconvenient intervals. Not more than 30*l*. in any one year, or 150*l*. in all, will be taken from any depositor. On the 31st of December in each year the interest at 2½ per cent., which will be easily reckoned, being at the rate of ½*d*. per month for every complete pound, will be calculated and added to the principal sum, with which it will thenceforth bear interest at the same rate. When the interest so added shall bring the principal sum up to 200*l*. no further interest will be added; it will be, therefore, necessary to withdraw a portion of it, or to allow the whole to remain without further interest. Deposits are taken as low as a shilling, but no fractional part of a shilling will be accepted, nor will any odd shillings bear interest. When, however, by further deposits, the odd shillings are made up to a complete pound, the pound so completed will also bear interest at 2½ per cent. from the first day of the calendar month next ensuing after the pound is so completed. The depositor will be required to fill up a form, stating the amount he deposits, his Christian name, surname, occupation, and residence. He will sign a "declaration," in the presence of the postmaster, that he has no other deposit in that or any other savings bank in Great Britain or Ireland (except as a member of some friendly or other similar society), and if this declaration be found false the deposit is forfeited. The depositor will be furnished with a numbered deposit book, in which all particulars will be entered by the postmaster, and the depositor will also affix his or her signature. The postmaster will also sign his name, and affix the dated stamp of his office. The depositor, the moment he possesses this book, duly filled in with the amount deposited, the dated stamp, and other particulars, possesses the "security of government," as the act says, for the "due repayment" of the principal and interest. But certain other forms are necessary to prevent mistakes and delays and as a check upon the postmasters, which we shall now explain. The postmaster, having received the deposit, is bound by the act, and by the official regulations, to report the same, with full particulars, to the chief office the same day; and by return of post, or the next day, the de-

positor will receive from the chief office, direct to his own address, an official acknowledgment, of no value to any one but himself, and only of value to him as a certificate that the postmaster has done his duty in reporting accurately and promptly the amount of the deposit. Should this "acknowledgment" fail to arrive within 10 days, or should it on arriving be found inaccurate, the depositor must notify the same to "The Comptroller, Savings Bank Department, General Post Office, London." All mistakes will, on such application, be promptly rectified, and no action at law can be had by either the comptroller or the depositor, all disputes being referable to Mr. Tidd Pratt, as arbitrator, whose decision will be final and binding on comptroller, depositor, postmaster, and all concerned in any matter in dispute arising out of these transactions. Deposits may be made in the joint names of two parties; but the signatures of both parties will be required on withdrawing. Youths of 14 years of age and upwards may enter into these joint deposits; and youths of seven years may deposit on their own account, and their receipt on withdrawal will be a sufficient discharge to the postmaster. Married women, or single women who may afterwards marry, may deposit and withdraw, unless after such marriage the husband shall give notice in writing to the Postmaster General that the repayment must be made to him. Certified friendly societies, charitable institutes, provident societies, penny banks, &c., approved by the National Debt Commissioners, may deposit their funds without restriction. They will have to sign a declaration in the usual way, and forfeit the deposits in case of false declarations. Every depositor, on each anniversary of his first deposit, must send up his depositor's book to the chief office, where it will be compared with the account there standing in his name, the interest will be added, and the book returned to him. All these transactions are free of postal or other charges, but if the depositor's book be lost a shilling may be charged for the supply of a new one from the chief office. The 12 stamps must be inclosed with the application for a new book. Depositors' books pass and repass post free, and all *bonâ fide* applications to the department are likewise free of postage. A person having an account in an existing savings bank must, previous to depositing in a post-office bank, apply to the trustees of the said savings bank for a certificate of the amount with interest standing to his account with them. They will furnish this certificate free of charge, and on taking it to the post-office bank in which he desires to open an account it will be received as so much cash. He will be furnished with a depositor's book, and the amount entered just as if he had paid it in money. Any person wishing to withdraw from a post-office bank must apply at that bank for a "withdrawal" form, which will be furnished free of charge. This he must fill up and forward to the chief office. The next day he will receive, by post, to his own address, "a warrant" for the whole amount of his deposit, with interest, or for such sum, being a portion of it, as he may desire to withdraw. The postmaster will have been advised of the proposed withdrawal in the interim, and will be prepared to pay the amount on the production of the "warrant," duly signed by the depositor, who must take his deposit book with him. Provision is also made for depositors unable to attend personally, for depositors dying intestate, becoming insane, or otherwise incapacitated or going abroad. In fact, the regulations are marked by singular simplicity, and a "handy-book," with the "Act," the "official regulations" complete, and full instructions for both postmasters and the public, is already advertised to appear on the 2d of September.

REMOVAL OF THE FOREIGN OFFICE.—The business of the Foreign Office was removed on Tuesday to No. 7, Whitehall Gardens, where it will be carried on in future.

THE BARON DE VIDIL.—On Tuesday Baron de Vidil was removed from Newgate to the House of Correction, where he will undergo the term of 12 months' imprisonment with hard labour imposed upon him by Mr. Justice Blackburn. He was removed in the usual way in the van with other prisoners, and no deviation from the usual course of prison treatment will be made in his case. M. Alfred de Vidil, the son, is at present in Newgate, and will remain there until his term of imprisonment has expired. His case is merely one of confinement, no labour being imposed upon him. Previous to the Revolution of 1830 the father of Baron de Vidil carried on the business of a glove manufacturer in the Rue Richelieu, Paris, while his son fulfilled the duties of *commis voyageur* to the establishment. In this capacity the latter made frequent visits to England, and became known to the principals of several commercial houses in London. Having secured the patronage of Marshal Soult by some important service rendered to a member of his family, he was appointed by that Minister Attaché to the French Embassy at Vienna. Subsequently, on the Marshal's appointment as Ambassador Extraordinary to England, on Her Majesty' Coronation, the Baron having been previously ennobled by Louis Philippe, accompanied his patron as Attaché, and from that period has resided alternately in London and Paris, a recognized member of the distinguished circles of both capitals.

THE INLAND REVENUE.—The Commissioners of Inland Revenue have recently published a report from which it appears that there was a decrease of 693,546*l.* in the net receipts of the year ending in March last, as compared with the year ending in March 1860. The Commissioners after investigating the causes of this decrease state that there was a diminution in the consumption of spirits to the extent of nearly five millions of gallons, and they attribute this diminution not so much to the effect of the increased duty, as to the badness of the harvest of last year, which in Ireland seriously affected the amount of sales in spirits, and in England and Scotland the sales in beer. They state that the increased duty on chicory, which is chiefly used for the adulteration of coffee, has checked its consumption and is likely still further to diminish it. The income and property tax for the past year shows an increase of about a million and a quarter over those of the preceding one, caused by the increased rate of taxation in that year; but as a slight remission has been made this year, a corresponding decrease must be anticipated. The revenue from licenses for refreshment houses and for retailing wine under the Act of 1860, has greatly disappointed expectation. The total number of refreshment-house licenses is 5798. The amount of duty is 3366*l.*; the number of wine licenses for consumption on the premises is 686, that for consumption off the premises is 740; the total being 1426, and the amount of duty 2639*l.* Only 38 licenses for the sale of wine to be consumed on the premises have been taken in Liverpool, 9 at Leeds, 1 at Huddersfield, 3 at Brighton, 4 at Cheltenham, 1 at Scarborough; none at Bath, Bury, Blackburn, Cambridge, Oxford, Preston, Rochdale, or Wakefield. Portsmouth and Southampton have 6 apiece, Bristol and Bradford 12, Plymouth 7, Sheffield 14, Birmingham 29, and Manchester 91. The Commissioners state that the disappointment in the anticipated amount is partly owing to the terms of the act imposing the duty on refreshment houses binding them to a more limited application of it than they had anticipated. So small an annual payment as 10*s.* 6*d.* or 1*l.* 1*s.*, according as the house is valued under or above 20*l.*, might, they think, not unreasonably be exacted from every person keeping open a shop in which refreshments are sold after a certain hour at night, the simple test of liability being the sale and the time. When it is necessary, as at present, to prove that the house is one "of public resort and entertainment," in order to bring it within the operation of the act, it is evident that very difficult questions may arise, and that a vast number of shops, in consequence, avoid the license altogether. The Commissioners state that the trifling revenue of 15,000*l.* derived from the duty on cards and dice is secured by enactments nearly as complicated and restrictive as in the case of the most important contributories to the Exchequer. Several of the regulations have recently been much complained of by the card manufacturers (most especially by the exporters), and not without reason; but the Commissioners are bound by the act of parliament, and they would scarcely think it worth while to recommend the introduction of a new code of laws on this subject. "The repeal of the duty," they add, "would sweep away a mass of legislation which looks strange indeed in the present day, and which it is very unlikely that the legislature would now permit to be placed upon the statute-book. We apprehend that few persons are aware of the existence of such provisions in restraint of trade as the enactment that no cards or dice shall be made in any place in Great Britain except London, Westminster, and Southwark; nor in Ireland except in Dublin. The duty on dice produced only 44*l.* last year. Some of the evils of this duty were noticed in our first annual report."

THE TURNER PICTURES.—The Select Committee of the House of Lords appointed to consider in what manner the conditions annexed by Mr. Turner's will to the bequest of his pictures to the National Gallery can best be carried out, and also to consider the measures proper to be taken with respect to the Vernon Gallery, and any future gifts of the same kind, have made the following report:—

"That the late Mr. Turner, R.A., by his will gave to the trustees of the National Gallery his picture of Dido building Carthage, and his picture formerly in the De Tabley Collection, for ever, subject to the direction that they should be kept and placed always between the two pictures painted by Claude, the 'Seaport' and the 'Mill;' and the right of the trustees to these pictures was declared by the decree after mentioned; and the two pictures have ever since been, and now are, placed in the National Gallery between the two Claudes, according to Turner's will. That Mr. Turner made several codicils in his will; by the first codicil, which was superseded by the later ones, he desired a gallery to be erected for his pictures (except the two given by his will), and that they should be maintained and exhibited as a separate collection, to be called 'Turner's Gallery;' by the second codicil he gave his finished pictures (except the 'Dido' and the 'De Tabley' pictures) to the trustees of the National Gallery, provided that a room or rooms were added to the National Gallery, to be entitled 'Turner's Gallery;' in the meantime they were not to be removed until rooms were built; the trustees of the National Gallery were not to have any power over the pictures unless his wish was fully carried out by them; it was his will that either such pictures should remain and be called 'Turner's Gallery,' and be the property of the nation, or to remain at his house as one entire gallery, to be viewed gratuitously; if the lease could not be renewed the pictures were to be sold; by the third codicil, if the National Gallery should not carry out the provisions in the second codicil within five years, on or before the expiration of the lease of his present gallery, then he declared his bequest to the National Gallery to be void, and in that case his gallery to be continued upon the terms mentioned in his last codicil. By the fourth and last codicil he limited 10 years for offering his finished pictures to the National Gallery; if rooms were not built, the pictures were to be exhibited gratuitously during the existence of the lease of his Queen Anne Street house, except the last two years, and then the pictures were to be sold; by the decree of the Court of Chancery, made in M[illegible] the Court declared that all the pictures, drawings [illegible] wholly or partially by the testator's hand, with[illegible] tion of finished or unfinished, were to be deem[illegible] for the benefit of the public, and were to be re[illegible] trustees for the time being of the National [illegible] under the above testamentary dispositions and [illegible] the Court of Chancery, the nation is now [illegible] 362 pictures painted by Turner, and of a very [illegible] water-colour drawings of the highest excel[illegible] nation ought, in the opinion of this House, to [illegible] conditions annexed to the gift in like manner as [illegible] annexed to the gift of the two pictures now betw[illegible] Claudes have been complied with. That, for w[illegible] to receive them at the National Gallery, the p[illegible] at Kensington, but the power of the trustees [illegible] Gallery has been preserved over them; and [illegible] announced that they were removed to Kensing[illegible] temporary measure. That Turner died in D[illegible] and, in the opinion of this House, no further de[illegible] place in providing a room or rooms for the [illegible] exhibition of his pictures and drawings, now the [illegible] the nation, in connection with the National Ga[illegible] called 'Turner's Gallery.' That it is expedient that [illegible] pictures by Turner should be forthwith depos[illegible] hung in one of the rooms of the present N[illegible] according to the plan which Mr. Wornum, [illegible] stated in his evidence that he is prepared to [illegible] this arrangement, as it will necessarily involve [illegible] inconvenience in the exhibition of the pictures [illegible] National Gallery, must be considered as of a strictly [illegible] character, pending the execution of some more [illegible] comprehensive plan. That, with a view to [illegible] accommodation, Mr. Pennethorne, the architect, [illegible] his evidence that he can undertake to erect rooms [illegible] cient for the reception of the Turner pictures at the [illegible] the present National Gallery, within a period of [illegible] exceeding 12 months, and at a cost not to exceed 25,00[illegible] unless some reasonable prospect of seeing a [illegible] worthy of the fine collection of pictures by the an[illegible] and British artists which the country now possesses [illegible] which is, year by year, receiving additions of great [illegible] ance, erected upon a comprehensive plan on the present [illegible] other site, it appears desirable that steps should [illegible] taken for making the limited addition to the present [illegible] suggested by Mr. Pennethorne. That with regard [illegible] second portion of the order of reference, viz., 'And [illegible] completed such inquiry, then to consider and report [illegible] sures proper to be taken with respect to the Vernon Gal[illegible] and the prospective measures proper to be taken with [illegible] to any future gifts of the same kind,' the late period [illegible] Session making it impossible for the committee [illegible] sider the important questions involved, the committee [illegible] recommend to the House that the subject be again [illegible] early in the ensuing Session. And the committee have [illegible] the minutes of evidence taken before them, together with [illegible] appendix, to be laid before your lordships."

BRITISH MUSEUM.—During the autumn recess, which will commence to-day and extend to the 7th Septem[illegible] several important alterations will be carried into effect. In the Ethnological Department an improved arrange[illegible] ment and to some extent a new classification has been undertaken by Professor Owen, in order to include [illegible] additional specimens comprised in M. Du Chaillu's African collection, and the contributions of other recent discoverers in natural history. The mosaics from Carthage, which have hitherto been only partially displayed in one of the basement rooms, are [illegible] exhibited to the public; and further alterations [illegible] effected in the disposition of the casts and sculptures in the Greek galleries. Increased facility is to be provided in the reading-room for reference to the volumes of the old catalogue which have not hitherto been labelled and arranged in divisions, and additional [illegible] of the printed catalogue are to be supplied for the [illegible] of readers.

ELECTRIC POSTAGE.—The United Kingdom Telegraph Company, taking as the basis of their calculations [illegible] fact that the number of letters conveyed by post at [illegible] 9*d.*, and 1*s.*, previous to the reduction in 1837, exceeded 1,000,000 weekly, have determined to charge a uniform rate of a shilling for telegraph messages throughout the country. Their lines are spreading rapidly northward and will, within a few days, be opened as far as Man[illegible] chester and Liverpool.

THE GREAT METROPOLIS.—A return recently [illegible] from the metropolitan police office states that within a radius of six miles from Charing Cross there are [illegible] miles of streets. Since 1849 the number of houses [illegible] increased by upwards of 60,000, and the length [illegible] streets by nearly 900 miles.

THE DRINKING FOUNTAINS.—On Wednesday last, between 6 A.M. and 6 P.M., 4133 persons made use [illegible] the Royal Exchange Fountain for drinking purposes.

THE PAPER-DUTY DRAWBACK.—Mr. Black, M.P. lately wrote to the Chancellor of the Exchequer [illegible] quiring if he considered it would be justifiable in pub[illegible] lishers who hold quantities of printed stock in sheets [illegible] export it, with the view of getting the drawback on the paper, and re-importing it after the duty was repealed, and he has just received the following answer:—

"Liverpool, Aug. [illegible]

"My dear Sir,—Being desirous to send an answer as [illegible] and full as possible to your letter of the 5th of August, I referred the subject of it to the Board of Inland Revenue, and I [illegible] this day received a reply. You are aware that neither [illegible] Board nor I have any authority to interpret the law, [illegible] while disclaiming such authority, it is often the duty [illegible] Minister of Finance or of a revenue department to give [illegible] best information in his or its power. On this occasion we [illegible] advised that books exported for the purpose of claiming [illegible] drawback of Excise thereon, and with a view to re-importation [illegible] after the date when the Paper Duty ceases, are not exp[illegible] as merchandise within the Act the 2d and 3d of Victoria [illegible] 23, and consequently there is no title to drawback upon [illegible] We are further advised that any person having [illegible] drawback under such circumstances might be [illegible] information in the Court of Exchequer, to refund it [illegible] only to add that I highly appreciate the motive which prompted your letter, and that you are at full liberty [illegible] make any use of this reply which you may think proper. [illegible] remain, very faithfully yours, W. GLADSTONE."

"A. Black, Esq., M.P."

Love and Fraud.—A few days since Signor Vincent [illegible], an Italian artist, was charged at Marlborough Street Police Court with fraudulently obtaining 1900*l.* from Miss Frederica Johnstone, a lady upwards of 40 years of age, residing at Twickenham. It appeared that they had met accidentally at the house of a nobleman related to the lady, when an acquaintance commenced, which resulted in a declaration of affection on the part of the artist, and a correspondence extending to a considerable number of letters. Having, however, had suspicions aroused by frequent demands for money on the part of Signor Collucci, accompanied in some instances by threats, the lady requested him to return the letters. This he refused to do, unless upon payment of [illegible]. To this Miss Johnstone ultimately consented. A meeting took place, when parcels were exchanged, the one containing bank notes, the other professing to be the letters stipulated for. Before reaching home, however, the lady found she had been deceived, her parcel consisting of bits of old newspapers. The prisoner was remanded until Monday, the lady being too ill to attend the court. On that day he was again brought up for examination, when Miss Johnstone gave evidence, in which she stated that at various times during their three years' acquaintance Signor Collucci had obtained from her sums of money amounting to nearly 2000*l.* Translations of several letters which he had addressed to Miss Johnstone and her guardian were produced, from which it appeared that as the lady had refused to marry him he required her to allow him sufficient to support himself in a proper manner, and this requisition in the course of time assumed the form of a demand, enforced by threats. The investigation was again adjourned for a week.

Explosion at Woolwich Arsenal.—On Monday afternoon as a man called Pickering was filling a rocket in one of the detached sheds, the missile exploded in his hand, shaking the building to its foundation, and passing completely through the iron roof. Pickering, and a man named Munden, were much burnt, and were conveyed to the infirmary, where it was found necessary to amputate the former's left arm.

The Public Health. — The Registrar-General's Weekly Return states that the deaths in London in the week that ended on Saturday, August 24, were 1159. The average number in the corresponding weeks of the 10 years 1851-60, excluding the deaths from cholera in 1854, and allowing for increase of population, was 1178. The present return is therefore 19 below the average. During the week the births of 909 boys and 844 girls, in all 1753 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1582.

Provincial.

Birmingham.—The triennial musical festival in aid of the Birmingham Hospital commenced on Tuesday under the presidency of the Earl of Shrewsbury and Talbot. The festival opened with the performance of "Elijah;" on Wednesday morning the oratorio was "Samson," on Thursday the "Messiah," and yesterday Beethoven's grand service in D and "Israel in Egypt." On the Tuesday and Thursday evenings concerts of miscellaneous music, on Wednesday the "Creation," and yesterday "Judas Maccabeus" were performed. The principal vocalists engaged included Mademoiselle Patti, Mademoiselle Titiens, Madame Rudersdorff, Madame Sherrington, Madame Sainton-Dolby, Miss Arabella Goddard, Mr. Sims Reeves, Signor Giuglini, Mr. Santley, Signor Belletti, and Mr. Montem Smith. Mr. Costa was the conductor.

Chester.—The execution of Martin Doyle, aged 26, who was convicted at the recent assizes of attempting to murder Jane Brogine, at Church Lawton, near Holmes Chapel, in this county, on his 30th May last, under circumstances of extreme brutality, took place on Tuesday morning in front of the county gaol in the presence of about 1700 persons. Since his sentence the convict had to a certain extent exhibited symptoms of penitence and submission, but about 10 days ago a decided change occurred in his demeanour, and with the greatest contrition he frequently admitted the justice of his sentence. When he mounted the scaffold he wished to address a few words to the crowd. He was dissuaded however by the Roman Catholic priests who attended him and by his executioner. While Calcraft was adjusting the rope he uttered a few supplications, and on the bolt being withdrawn he expired without a struggle. A petition was signed by a number of the Chester citizens, praying for a commutation of the sentence to penal servitude for life, but a reply was received from the Home Office on Monday stating that the law must take its course.

Coventry. — On Saturday, William Beamish, a weaver, Emma Strathern, and Jane Stokes, were brought before the borough magistrates charged with murdering Betsey Beamish by administering poison. The male prisoner was husband of the deceased, and Emma Strathern worked in his house, Jane Stokes having been in attendance upon deceased a short time before her death. It appears that Beamish, who resides in the district called Hillfields, had four children by deceased. The week before last, immediately after breakfast the whole family except the man himself, who went to the mill to breakfast, were seized with violent vomiting, and the wife and youngest child became so ill that they died. The neighbours entertaining grave suspicions of foul play against the husband and the girl Strathern, communicated with the authorities, when the bodies of the wife and child were exhumed and a *post mortem* examination made, the result of which showed that there was no disease to account for the sudden death, but there were appearances consistent with death from arsenical poisoning. It was ascertained that the prisoner had recently purchased arsenic for the alleged purpose of killing rats. The stomachs and some other portions were then sent to Dr. Wrightson, of Birmingham, for analysis, and the inquest was adjourned till the completion of the medical testimony. The prisoners however were apprehended on Friday evening, and remanded for a week, the females being admitted to bail. The prisoner was afterwards removed to the police station in a cab, amidst the groans and yells of about 2000 people who were in the street at the time of his departure, and the police had great difficulty in preventing him from being roughly handled.

Dover.—On Wednesday, Lord Palmerston was formally installed in this town as Lord Warden of the Cinque Ports, with much pomp and circumstance, and amid every demonstration of popular enthusiasm. The festivities commenced with a review of the various corps of Cinque Ports Rifle and Artillery Volunteers, which was held on a fine *plateau* behind the Castle. The corps on the ground were the Margate Rifles and Artillery; the Deal Rifles; the Ramsgate Rifles and Artillery; the Dover Rifles and Artillery; the Hastings Coast and Marine Artillery and Rifles; the Tenterden Rifles; the Folkestone Artillery and Rifles; the Hythe Artillery and Rifles, numbering altogether nearly 1000 men. After the review Lord Palmerston and his suite proceeded to the Castle to luncheon, and on entering under the Governor's archway was received with a salute of 19 guns. A procession was then formed, in which the barons and other officials of the Cinque Ports and Admiralty took part, and proceeded in the presence of an immense concourse of spectators to Bredenstone Hill, where a Court of Shipway was held in a tent, within the Drop Redoubt. His lordship sat on a raised dais, covered with crimson carpet, with the mayors of Dover, Hastings, Hythe, Rye, Feversham, Folkestone, Deal, Sandwich, New Romney, and Winchelsea, the bailiffs of Lydd and Pevensey, the mayors of Seaford, Tenterden, and Margate, ranged in a semi-circle around him, bearing their wands of office. The officers of the Court in their official robes were placed in order at the extremities of the semi-circle, the general body of delegates from the Ports occupying seats ranged along the whole length of the tent within the bar, beyond which a considerable number of ladies and gentlemen were accommodated as spectators. The Lord Warden having taken his seat, the Seneschal (the Town-clerk of Dover) conducted the formalities for duly constituting the Court. The mandate requiring in quaint and antique phraseology the ports, towns, and their limits to send representatives to the Court was first read, after which the returns to the writ were made, from which it appeared that 14 different corporations had sent delegates. The Seneschal then called over the roll, when the barons summoned answered to their names in the order of the precedence belonging to the different ports. He then reported to his Lordship that returns had been made from all the towns within the liberties of the Cinque Ports excepting Fordwich. Lord Palmerston then said:—

"The Court having been formed, I have now to declare that having been nominated by Her Most Gracious Majesty to the office of Constable of the Castle of Dover, Lord Warden, Admiral, and Chancellor of the Cinque Ports, two ancient towns and their members, an office vacant by the lamented death of the Most Noble the Marquis of Dalhousie, I have summoned the Grand Court of Shipway, pursuant to ancient usage and custom, on entering upon the office aforesaid, and in testimony of my nomination thereto I request that my patent of office may be read by the Seneschal."

The patent was read accordingly, conferring on his lordship the remnant of the ancient jurisdiction attached to his office, together with the right to all wrecks of flotsam, jetsam, and lagen, or lost merchandise, and all things taken up, gotten, or recovered from the sea, either by himself, his deputies, or agents of all the ports or creeks, as well by land as water, within the precincts and liberties of the Cinque Ports, the office to continue for life. The Mayor of Hythe, the Speaker of the Ports for this year, then requested his lordship to take charge of the Ports, waiving the usual request that he would take the oath binding him to maintain their special rights and immunities, which no longer exist. Lord Palmerston said:—"I have great pleasure in accepting the office conferred upon me by the Queen, and ratified by this Court. I shall feel it my duty to fulfil all that belongs to that ancient and honourable office." This announcement was received with loud applause, instantaneously followed by a salute of 19 guns from the adjacent battery. Dr. Phillimore, Judge of the Chancery and Admiralty Courts, then addressed the Lord Warden at some length on the high antiquity and dignity of the office of Lord Warden, regretting at the same time that "the ruthless hand of an unromantic legislature" had shorn it of all its substantial advantages. Lord Palmerston replied as follows:—

"Gentlemen, I need not say that I have heard with the greatest delight, with feelings of gratitude as well as of pride, the eloquent address just delivered to us by a person distinguished in his learned profession as well as in other walks of life; for I well remember his eminence as a member of the Legislature. It is peculiarly gratifying to me that that well-known voice should upon this occasion have complimented and congratulated me on my accession to this ancient and honourable post. I quite concur with my learned friend, that we ought to respect ancient traditions, because, although they have a value which to a superficial observer may not at first be apparent, yet if any one will look at the hearts of men and into his own feelings, he will be convinced that the knowledge that the town or the county, the corporation or the community, to which he belongs has been famous in history, has been loyal to the Sovereign and done good service to the country—that sentiment in his mind is a guarantee for good conduct in whatever circumstances he may be placed, because, independently of his own sense of what is right and what is wrong, he would feel ashamed of lowering the character of that community in connexion with which his ancestors for generations and centuries past have done credit to their country and rendered themselves useful to the Crown and the State of which they formed part. Gentlemen, I respect this corporation of the Cinque Ports. It is true, as my learned friend has said, that the progress of general improvement has visited the Cinque Ports, as well as the other institutions of the land; but the progress of true improvement is not to demolish, but to amend; not to destroy ancient institutions, but to adapt them to the times in which we live,—to make them a part of a harmonious whole, instead of foreign excrescences upon the general fabric. Why, that which we are now doing in this neighbourhood is an example of this. We are increasing and improving those ancient works which in former ages were sufficient for the defence of this part of the realm. We are adding to them modern improvements; we are removing those parts which are no longer suited to the exigencies of our times; and just in the same way, without destroying those venerable institutions of the Cinque Ports, we have removed from them those functions which might be better exercised by other parts of the constitution, with advantage not only to themselves but to the community at large. Gentlemen, I will not detain you any longer. I will simply return you my sincere thanks for the hearty welcome you have given me, and assure you that, if it were my lot as a much younger man to live for many years to come, the recollection of the reception I have met with this day would survive in my bosom to the latest hour of my existence."

The members of the Court then did formal obeisance to his Lordship; and the Mayor of Dover having invited his Lordship to a banquet in the evening, the delegates were dismissed and the Court dissolved.—The banquet in the evening took place in the Maison Dieu, formerly a religious house of the Knights Templars, and now used as a Town hall, the very edifice in which, according to local tradition, King John delivered his kingdom to the Papal Legate Pandulf, and undertook to do homage for it as a vassal of the Pope, paying 1000 marks as annual tribute. The Mayor of Dover presided, having on his right the Lord Warden, the Right Hon. W. Cowper, and Lord Elcho; on his left Sir J. Burgoyne, Inspector-General of Fortifications, Lord Clarence Paget, M.P. for Sandwich, and the Hon. Captain Waldegrave. Among the other guests were Mr. Nicol, M.P. for Dover, General Garvoch, commandant of the garrison, Colonel Cuppage, commandant of artillery, Mr. Bodkin, recorder of Dover, Dr. Phillimore, judge of the Admiralty Court, all the officers of the Court of Shipway, and the representatives of the Ports present at the morning's ceremony. About 350 gentlemen in all sat down to dinner. Lady Palmerston and many other ladies occupied seats in the gallery. After the usual loyal toasts, Sir John Burgoyne, in responding to the toast of the Army, said that no Minister had shown so much justice and firmness in the consideration of military affairs as their distinguished guest, adding, amidst great laughter and cheers, that he could not help thinking what an able General the country had lost through the noble lord not having been brought up as a soldier.—Lord Clarence Paget in responding for the Navy said he could not agree with Sir J. Burgoyne that their excellent Premier ought to have been brought up a soldier, but thought that, judging from the great knowledge and experience which the noble lord displayed in all discussions on naval matters, he would have made a first-rate sailor.—Colonel M'Murdo also, in returning thanks for the Volunteers, said that, as preceding speakers had claimed their Lord Warden for the Navy and the regular Army, he must also put in a claim to rank the noble lord among the Volunteers, among whom, indeed, he might now be considered to be enrolled.—The Mayor then gave the health of Lord Palmerston, their new Lord Warden. The toast was received with vehement and prolonged cheering. Lord Palmerston in reply said:—

"Mr. Mayor and Gentlemen,—It is really not one of those commonplace expressions which are usual on these occasions, if I say that no words can adequately express the smallest portion of the gratitude which I feel for the kind, the warm, the cordial reception which I have met with, not only in this hall, but in every part of the precincts of Dover through which I have passed during the proceedings of to-day. It were indeed the saddest heart—as cold and as hard as the chalk and flint on which your Castle stands—that could remain insensible to the warm and heartfelt demonstrations I have had the pleasure this day to receive from so large a number of my fellow countrymen. I feel indeed that the only claim I can have to that good-will so frankly and cordially displayed must be my good intentions to serve my country, my attachment and respect for the institutions of that country, and the opinion—it may be by some considered a prejudice—imbibed from my earliest years and strengthened and confirmed as years have rolled on, that my fellow countrymen, taken as a nation, have not their equal on the face of the earth. You will have the kindness, gentlemen, to receive this as a confidential communication, for I fear that if it got abroad it might do harm. I feel that having accepted an office of high antiquity, of great honour and distinction, which has been held before me, I believe, by [illegible] distinguished men, and some of them the most [illegible] this country has produced—I feel that some explanation may be due on my part for the temporary delay which took place in the filling up of the office. The fact is, that when the vacancy occurred her Majesty was graciously pleased to signify to me her intention to confer that office on me. I deemed it my duty respectfully to state that I thought myself bound in the first place to ascertain whether it

was an office it was expedient to keep up, or whether, under the altered circumstances under which it was placed, it might be abolished. I therefore took time to inquire. I soon found that, although undoubtedly the office had been shorn of many of its former attributes and powers, it was nevertheless so interwoven with the organisation of the ancient Cinque Ports that to abolish it would have been tantamount to altering altogether, if not destroying that ancient constitution, and knowing, as I did, the deep-rooted and honourable attachment the people of the Cinque Ports feel for their ancient institutions, I concluded it was right that the office should be continued, and therefore I availed myself of the gracious invitation of her Majesty by occupying it as had been proposed. There was, therefore, some delay, for although the salary has disappeared, there are in the patent, as those who heard it read this morning must remember, certain words about *flotsam* and *jetsam*, and similar matters, which imply some possibility of profit, and consequently, as the acceptance of the office necessarily vacated my seat in the House of Commons, it was not expedient that I should offer myself to my constituents for re-election until the Easter recess arrived. I beg, therefore, to state that no disparagement of the dignity of the office, no under-valuing of the honour which it confers, was the cause of my apparent hesitation in accepting it. Gentlemen, I honour the people of the Cinque Ports for their attachment to this ancient constitution. There is nothing which more dignifies a man than a clinging to ancient and honourable traditions. Our patriotism, like our charity, ought to begin at home. A man should begin by loving his home and his family; he should then love his town and his district; he should love his county, and then he will love his country. So far from these local attachments narrowing the human mind or cramping and debasing its sympathies, they are the real, the true, and stable foundation for the enlarged and honourable feelings that bind men to the nation and country to which they belong. In former times, as has been well said, the Cinque Ports furnished materials for the defence of the realm. They were required to put afloat 57 vessels and their crews when our shores were in danger. As my noble friend Lord Clarence Paget observed, you are now relieved from that special burden, and have only to put your shoulders to the wheel in common with the rest of your fellow countrymen. We have now as magnificent a fleet which, as my noble friend justly said, is equal and, I may say, superior to anything in the world. We have seen to-day that although you do not put sailors on board ship you put soldiers on the turf, and you still furnish as many men for the service of the State as formerly manned your ships. And there was this gratifying circumstance noticeable in the scene we witnessed to-day, that along with the red and gray coats of the infantry and the darker colours of the artillery, the blue jackets were seen performing field evolutions with as much regularity and precision as the land troops. We beheld the brave seamen and fishermen of the coast who have enrolled themselves for the service of their country, and qualifying themselves for any duty in defence of our shores should they ever be assailed by any enemy. Colonel M'Murdo has truly observed that recent events in America should teach us a valuable lesson. The example of what has happened across the Atlantic shows that you may collect thousands of men together and put uniforms on their backs and muskets in their hands, but you do not thereby convert them into soldiers or into an army; there must be discipline. It is not enough that there should be individual bravery. Why, our cousins in America as individual men are as brave as any that tread the earth. They are of the same stock as ourselves, they are descended from the same parents, are animated by the same spirit, and prepared to encounter equal dangers. But when thousands of men as personally courageous as any race in existence get together, each man wanting that confidence in his comrades which discipline and training can alone supply, they exhibited to the world that unfortunate rapidity of movement which took place at Bull's Run. That, I say, is no disparagement to the valour of the Americans, but affords, I repeat, a lesson which we ourselves may usefully ponder and remember — viz, that discipline and organisation are indispensable to make any army efficient in the field. But, although we may profit by the experience of others, I do not think the lesson is specially needed by the Volunteers of England, because those Volunteers having by their sagacity submitted themselves to military instruction and training, are rapidly acquiring all that knowledge which is essential to military organisation. Some months ago I heard Colonel M'Murdo at a public dinner, at which we were both present, state that either 30,000 or 40,000, I forget which, out of a force of 150,000 Volunteers, were fitted to take part with troops of the line. Since that time that 150,000 has, I believe, mounted to 170,000, and there can be no doubt that if their services were needed, that number would be speedily increased to any extent to which arms, ammunition, and officers could be found for them. I think the Volunteer movement is the most honourable event recorded in the history of any nation. If we had had—as was the case in former times — a large army and a great fleet collected on a neighbouring coast, threatening the invasion of this country, it was not surprising — indeed, it would have been surprising had the fact been otherwise—if hundreds and thousands of men should have started up and asked for instruction and organisation as Volunteers. But there was no such case in this instance. There was, however, a feeling on the part of the people of this country—a kind of sagacious instinct—that our means of defence were not such as they ought to be. There was a general indisposition to go beyond a certain standard in time of peace in regard to the numerical strength of our standing army, and a conviction that we could not expect to rival those Powers which have hundreds of thousands of armed men constantly arrayed within their limits. The nation, on the other hand, felt that our regular army and militia, however excellent and efficient in themselves, were still short of what might by possibility be required, and by a spontaneous and almost instantaneous effort, not suggested by the Government, but emanating from the independent action and public spirit of the people, there sprang into life that magnificent force of which we have an admirable sample to-day. I trust that that organisation is so engrained in the minds of Englishmen—has so entirely become one of the familiar sports and exercises of the nation, that no circumstances will ever induce them to give it up, and that no considerations, whether of economy or otherwise, will cause any Government to refuse the aid and encouragement necessary to give due effect to the movement. We cannot, as I have said before, attempt to cope with those great States which maintain hundreds of thousands of regular soldiers. We accept with frankness the right hand of friendship wherever it is tendered to us. We do not distrust that proffered right hand, because we see the left hand grasping the hilt of the sword. But when that left plainly does so grasp the hilt of the sword it would be extreme folly in us to throw away our shield of defence. There are, gentlemen, two securities for peace. The one consists in a state of perfect insignificance, the other in a state of perfect defence. The security arising from perfect insignificance England, I think, will never enjoy. The security for peace which arises from a perfect state of defence, unconnected with any notions of aggression, not coupled with hostility towards any one, but confined solely to a manly determination to protect and maintain what we have, is a security which I trust this country will long continue to possess. And so far from that being a reason why the most friendly relations should not be kept up with foreign Powers, in my opinion it is the only true, solid, and stable foundation upon which those friendly relations and the hope of a durable peace can permanently rest. Mr. Mayor, my lords, and gentlemen, I beg to return you my most sincere and heartfelt thanks for the honour you have done me, and I can assure you that I shall ever consider the day now drawing to a close one of the proudest in the whole course of my life."

Several minor toasts followed, after which Lord and Lady Palmerston left the hall, and drove off amid the acclamations of the multitude to Walmer Castle.

HALIFAX.—At the West Riding Court House on the 17th inst., Mr. Joseph Bairstow, architect, of Queenshead, was brought up on remand charged with committing a rape on Miss Mary Marples, aged 15 years, the daughter of the Rev. J. Marples, Independent minister of Union Croft, on the night of the 9th inst. It appeared that Mr. Marples had a visitor, a minister from a distance, and that it had been arranged that his daughter should sleep that night at the house of a friend, Mr. Holgate, a deacon of the church. She left home about 11 o'clock, and on her way was met by Bairstow, who accosted her, and forcibly carried her out of the road and committed the crime. He afterwards called at the house of Mr. Holgate, who is a relative of his, while Miss Marples was there, and conducted himself in so irregular a manner that he was ordered out of the house. The magistrates fully committed him for trial at the assizes, but admitted him to bail in the sum of 400*l*.

ISLE OF MAN.—On Monday last Miss Gertrude Powys, daughter of the Bishop of Sodor and Man, was drowned while bathing near her father's palace at Bishopscourt. It appears that while bathing with her elder sister she went beyond her depth, and no aid being near was drowned. She was 14 years of age.

LEICESTER.—William Betton, a railway labourer, of Sheepshead, Leicestershire, in a fit of jealousy made a murderous assault upon his wife on the 8th inst. It appears that a man named Morgan, who has resided with him as a lodger for some time past, was suspected by him to have an improper intimacy with his wife. He saw some occurrence on Saturday week which confirmed his suspicions, and he determined to remove his family from Claycross. He accordingly sold his household effects, and took his family into Leicestershire. During his absence at his work his wife set off, leaving her two children behind. Betton, on return from work, found she had gone. He spent the greater part of the night in search of her, but without success. He set off by rail to Claycross, where he found his wife in a house occupied by a friend of Morgan. He attacked her with a large pocket-knife, cutting her neck, throat, face, and hands in a frightful manner. Three surgeons were promptly in attendance, and dressed the wounds. Betton was apprehended and taken before a magistrate, who remanded him to Alfreton until the wife should be declared free from danger.

MARGATE.—This town has been so densely packed with visitors during the past week or two that many who made no provision for obtaining accommodation before arriving at the place have had to make the most curious shifts with regard to lodgings. On Saturday nights visitors have poured in by boat and railway by hundreds, and almost every house being crammed with lodgers, the greatest difficulty has been found in getting shelter. Many who would willingly have paid any amount of money for accommodation of any sort have been obliged to sleep in stables, in bathing machines, under shop counters, and not unfrequently in the corn fields. A single room, in the least eligible neighbourhood, whenever such a thing was to be let, could not be obtained for less than 25*s*. to 30*s*. a week; while the amount demanded for accommodating a family in anything like a decent part of the town, or commanding a view of the sea, was almost fabulous. Such a season as the present has not been known for many years in Margate, and those who are dependent upon the annual summer visitors have turned their chances to the best possible account.

PORTSMOUTH.—It will be remembered that about three weeks since James Mahaln, steward of her Majesty's ship Mermaid, was tried by court-martial on the two following charges:—1st. For having had, on or about the 8th of July, two loaded pistols in his possession, such pistols corresponding with those kept unloaded in the armoury under lock and key, and from which place two pistols were missing on the said day, the same being to the prejudice of good order, and a breach of the 24th article of war. 2. That the said James Mahaln did offer to use violence towards Lieutenant Tracey, commander of the Mermaid, his superior officer, and in the execution of his office, by having on or about the 8th of July, stepped forward towards Lieut. Tracey, and followed him with loaded pistols, on his arrival on board the Mermaid, the same being a breach of the 16th article of war. These charges were found by the court fully proved, and the man was sentenced to be "imprisoned and kept in penal servitude for seven years." The decision of the court was forwarded to the Admiralty in due course, and as in all cases where sentence of death or penal servitude is recorded, the judgment must be confirmed by a judge of a superior court, it was submitted to the Judge Advocate, who pronounced the finding to be an illegal one, and the Admiralty therefore ordered the man to be liberated from custody and dismissed her Majesty's service. The grounds on which the prisoner was released from ... were, that in the opinion of the Judge ... although the words of the statute ... person subject to the act who shall ... strike, or use any violence towards a ... the execution of his duty," &c., should ... and such penalties, yet the enactment ... one, must be construed literally, and ... "use violence" did not mean the ... intention to use violence, but to come ... ing of the act actual violence must ... Mahaln's case, he did not actually comm... his superior officer, but possessed him... and held it in such a position and unde... stances as would leave no doubt of his ... but that was not sufficient to render h... penalties provided by the clauses of the ... he was charged. There was also an ... in the wording of the sentence "impr... in penal servitude;" but the objection ... to was in itself considered to be fatal ... bar to the execution of the judgment ... martial.

SOUTHAMPTON.—Arrangements have ... the establishment of a new line of stea... this port and Trieste, and three large ... daily expected to take up their stations ... commencement of their regular voyages.

WOBURN.—On Thursday the 22d inst. ... hay, the produce of more than 90 acres ... Bedford's Park Farm at Woburn, ... between 100 and 200 tons of this year ... valued at from 500*l*. to 600*l*., was found ... The flames spead with great rapidity ... much other valuable property belonging ... The rick was ultimately cut through, ... the fire was got under. The fire is a... hay having been stacked too early after ... causing spontaneous combustion.

WORCESTER.—The mayor and magistr... city on the 20th inst. were occupied some ... gating a charge of attempted murder ... a young man named Charles Pugh, who ... an attempt on his own life. The escape ... parties from death was somewhat extra... appeared from the evidence of a numbe... that Pugh had become desperately ena... woman named Dinah Mason, who had liv... for a short time, but had left him and gone ... another man. He made several attempts ... to return to him, but she refused, and ... new paramour to beat him. This so ... that he took to drinking, and accordingly ... had been in a state of intoxication ... On going to see the woman ... question he found her alone in he... her how she was. She ordered h... room, and threatened to send for a p... did not. He asked her to speak one ... she only abused him. Immediately after... were heard, and on some women going up... the prisoner in the act of cutting her thro... The prisoner immediately drew the razor ... throat, ran downstairs, and fell into the ... were taken to the Infirmary, where they ... dressed. The woman had two cuts acro... one round the neck, reaching from ear to ... vital parts were missed, and she has ... recovered. The man's windpipe was comp... and all hope of his recovery was given up. ... however were sewed up, and the prisoner ... recovered as to be able to be removed to the ... he was brought up in a fly for examination. ... deeply distressed, and hid his face in his ... during the whole of the examination. He ... ded for the present, in order to complete the ...

Ireland.

FRAUDS ON THE WAR DEPARTMENT.— ... police office last week Mr. Hamilton Conn... in the War Department, Lower Castle ... John M'Ilwain, ordnance contractor, Naas ... dare, were brought up on remand, charged ... sive frauds on the War Department. ... the greatest interest, and the court was ... It appeared from the evidence for ... Hamilton Connolly, who was chief cl... was in the habit, for a number of years, ... figures in the accounts of M'Ilwain, ... after they had been certified by ... ford, and that cheques for the forged ... given on the office in London, which ... regularly paid without suspicion, the ... sums thus fraudulently obtained being ... between the two prisoners. For example ... was paid, containing the sum of 50... purporting to be the amount certified by ... but he produced the duplicate, in which ... were 268*l*. 9*s*. 3½*d*. In one instance the ... was converted into "7," and the parties ... instead of 100*l*. The prisoners offered ... were committed, "for conspiring to comm... for committing fraud, by obtaining money ... pretences." In addition, Connolly was ... the crime of forgery. The prisoners lived ... great respectability, nothing about their ... indicating that they were likely to be ...

[illegible] It is supposed that the Government has [illegible] to the extent of 12,000*l.* at least.

Prosecution of the Apprentice Boys.—A prosecution has been commenced, by order of the Government, against 38 of the Apprentice Boys of [illegible], for a breach of the Party Emblems Act upon [illegible] the recent celebration of the anniversary of the shutting of the gates. This proceeding is [illegible] regarded as uncalled for.

[illegible] of Portlich Castle.—This magnificent [illegible] was burnt to the ground a few weeks since by [illegible], a supposed lunatic, and brother to the [illegible]. The incendiary escaped, but was arrested [illegible] on Saturday night, after a severe conflict with the constabulary, in which he inflicted and received some [illegible] being armed with a sword.

Railways.

Terrible Accident on the London and Brighton.—A frightful accident took place on Sunday [illegible] the Clayton tunnel, about five miles from [illegible] terminus. Three trains, two of which were excursion trains, left the Brighton station within 14 minutes of each other. The first was an excursion train from Portsmouth to London which ought to have left Brighton at 8.5, but did not leave till 8.22. The second was an excursion train from Brighton to London, which ought to have left at 8.15, but did not leave till 8.27, and the third was the regular Parliamentary train which left at 8.36, 6 minutes after time. The second train arrived at the entrance of the tunnel before the signal man who is there stationed had received the usual telegraphic signal from the other side that the first train had passed out of the tunnel towards London. He therefore attempted to put on the "stop signal," but it would not act. He then showed a red flag, indicating danger, to the driver of the second train, who concluding that the train which had preceded him had not got clear, immediately reversed his engine. The impetus, however, with which he had been travelling prevented the train being pulled up before it had proceeded some distance into the tunnel. The signalman perceiving that, in spite of the red flag, the second train did not stop, imagined that the driver had not seen it, and immediately telegraphed to the other end of the tunnel to know whether the train had passed through. The man at the other end supposing the question to refer to the first train, replied that it had passed. Neither of the signalmen knew that the driver of the second train had seen the red signal, and had reversed his engine, and that the train was in backward motion towards the Brighton end of the tunnel. Meanwhile the Parliamentary train came in sight, and the signalman, having received the answer above referred to, gave the signal for the train to proceed, which it did at its ordinary speed. Within a very short distance of the mouth of the tunnel a fearful crash ensued, the second train backing having come into violent collision with the other train, which was rushing forward. The shrieks and cries are described as being most fearful and heartrending, the darkness tending to heighten the terror of those who were uninjured, and leaving them powerless to aid the wounded. After a short time some passengers in the first-class carriages procured lights from the roofs, and proceeded to render every assistance in their power. The extent of the catastrophe then became apparent. The engine of the Parliamentary train had smashed the last carriage in the excursion train, which had mixed compartments for luggage at one end, passenger seats in the middle, and a guard's break at the other end. It had then dashed into the next carriage, and shivered it into fragments. This carriage comprised four compartments, each containing [illegible] passengers, who were scattered and mutilated in all directions; several were scalded with the steam from the engine, it having been found necessary to let off the steam to prevent the engine from bursting, and their cries of agony were pitiable in the extreme. The telegraph was immediately set to work, communicating the terrible nature of the calamity to Brighton. As speedily as possible Mr. Hawkins, the traffic manager, and several other officers, with a numerous body of workmen and nearly a dozen medical men, proceeded by special engine to the spot. On the fragments of the carriages being removed upwards of 20 persons were found to be dead. The engine had literally sunk upon the second carriage, and the bodies of several of the sufferers were underneath. They had either been smashed or scalded to death. One woman had both her legs cut off just above the knees, and was quite black in the face. Another woman had her scalp torn completely off and both her arms broken. One man had his face crushed in such a manner as to force his eyeballs from his head. A strong body of men proceeded to clear the line, which was comparatively uninjured, and Mr. Hawkins despatched the uninjured part of the train to London. The bodies of the dead, 22 in number, were carefully placed in carriages which had followed the special engine from Brighton, and the wounded received the most careful attention from the medical gentlemen who were in attendance. As soon as possible the wounded, the dying, and the dead were conveyed to Brighton, where those who were killed were placed on tables and forms in the library at the company's offices, where they have all been identified by their friends. The following are their names:—

Mrs. Ellen Lower, 1, Liverpool Street, Brighton; Mr. Ingledew, sen., 58, St. James's Street, Brighton; Mr. George Westcott, 44, Lewes Street, Brighton; An infant child of the above; Mr. Edward Charlwood, otherwise known as Simpson, bird-dealer, London Road, Brighton; Mrs. Catherine Barnard, 22, Charles Street, Brighton; Mrs. Tillett (hitherto described as Mrs. Coomber), Weavers' Almshouses, Wanstead, Essex; Mrs. Christiana Mainstone, Lennox Arms, Richmond Street, Brighton; Mr. John Greenfield, 5, Montpelier Place, Brighton; Mr. John Wheeler, 21, London Street, Brighton; Elizabeth Wheeler, wife of the above; David Wheeler (18 months old), son of the above; Mr. George Gardener, 2, Baron Street, Pentonville; Miss Barclay, recently staying at 15, College Street, Brighton; Mrs. Maria Edwin, 15, White Lion Street, Norton-Folgate, London; Mrs. Jane Elizabeth Beden (hitherto described as Mary Temple), 16, Sussex Road, Cliftonville, Brighton; John Lockstead, 32, Adelphi Terrace, Victoria Park Road, London; Agnes Parker, 35, Oriental Place, Brighton; Mary Ann Parker, sister of the above; Mr. William Hubbard, lately staying at 17, Viaduct Terrace, Brighton; Henry Hayward Hubbard, grandson of the above; Mrs. Wright, 5, Matilda Street, Caledonian Road, Islington.

The wounded were taken in carriages and flies to the Brighton hospital, where two of the cases were at once found to require amputation; the first was a man named Anthony Kean, a tailor, residing at 54, Goswell Road, London, who had his left leg amputated; the second was William Arnold, of New England Farm, near Brighton, who had his right leg amputated, the left leg being also fractured. Kean was sinking when the operation was performed, and died on Tuesday, the state of the femoral artery, which was diseased, having rendered recovery impossible. Of the other patients at the Hospital, Thomas Noble, of No. 5, Richardson Street, Bermondsey, had a severe wound on the right temple; George Noble, of No. 8, Frederick's Place, Brighton, several severe wounds on the head; Timothy Tester, of 15, Frederick's Place, Brighton, several bruises; a child about two and a half years old, name unknown (supposed to be a child of one of the deceased), severe scalds; Thomas Parker, 26, Brunswick Place, Brighton, severe injury to the knee and right arm; Elizabeth Edwin, 18 months old, both legs fractured and very much scalded and bruised; Elizabeth Westcott, a leg broken in two places, and her daughter, contusions on both sides, and also some scalds on her legs. Besides the above, other wounded persons were conveyed to their own residences in Brighton. Among these were Mr. Surman, a visitor from London, living at Webb's County Terrace, New Kent Road, whose hands and legs were much bruised. Miss Atkinson, who also lives at Webb's County Terrace, received severe injuries on the head. Two other ladies who were of the same party, suffered much from the effect of fright and being severely shaken. Signor Giuglini, the celebrated Italian tenor, had a contused hand and a considerable shock to the nervous system, and narrowly escaped with his life, two persons having been crushed to death close to him. Mr. James D. Child had his his face much bruised; Mr. James Parson, of 32, Mighill Street, Brighton, mouth and chin much cut and several teeth knocked out; Mrs. Dickenson, internal injuries; Mrs. Hodges, Brunswick Place, Brighton, knee much hurt; Thomas Bedford, Orchard Terrace, Kensington, thigh severely lacerated; Mr. William Hislop, a smith employed at the railway works, and living at 21, Belgrave Street, seriously injured about the legs and lower part of the body; Mrs. Bish, of 34, Vine Street, severe contusions on the face, and injuries to the right side and legs; Mr. Drewitt, a workman employed at the Hove gasworks, and residing in Hove Street, much cut about the head and arms; Mr. Fowler, 84, North Street, two ribs fractured on the right side; Mr. Giffin, of 19, West Hill Street, contusions on lower part of the face, and a great deal shaken; Mrs. Humphrey, of 33, Vine Street, cut over left eye, and injuries to the right side and knees; Mr. Maynard, confectioner, West Street, serious internal injuries; Mr. Mercer, an upholsterer, of Queen's Gardens, back of neck and knees much injured; Mr. O'Hara, North Street, much bruised and shaken; Mrs. Pelton and her niece, of Alfred Villas, Rose Hill, severe contusions about the face and temples; Mr. Parsons, of 32, Miles Street, severely wounded in the jaw by a knife in the hand of a man sitting opposite to him; Mr. Potter, grocer of Trafalgar Street, a severe blow on his head, and a cut on the upper lip; Mrs. Potter and family, who were in the same carriage, escaped with only a few buises; Mr. Smith, draper of Weston Road, cut over the eye, and much shaken; Mr. Swaisland, a naturalist of Queen's Road, very severely shaken, Mrs. Swaisland, wife of the above, knee-cap broken, and generally bruised; Mr. Thomas Tugwell, foreman to Messrs. Weston, clothiers, 79, North Lane, contusions on the head and legs; Mr. Washer, leather seller, 98, North Lane, back part of neck much injured and several teeth knocked out; Mr. Watkins, of the Montpelier, Montpelier Place, much bruised and shaken; Mrs. Watkins, wife of the above, sustained similar injuries. Coleman, one of the guards in charge of the train which met with the accident, had four of his ribs fractured, and his internal injuries are of such a serious nature that he is not expected to live. As soon as the intelligence of the accident became known in Brighton the greatest excitement prevailed, as it was not then ascertained to which train the disaster had occurred, and many hundreds besieged the railway station, either to learn whether their friends who had gone by one of the trains were the sufferers, or those who were expected from London. The railway officials could not for a time afford any satisfactory information, and the excitement was increased when the London excursion trains did not arrive until considerably after they were due, caused, it was ascertained, by being compelled to branch off at Hayward's Heath, and come by way of Lewes. This, at all events, set at rest the minds of those who expected friends from the metropolis, and increased the anxiety for the safety of the Brighton excursionists to London. When the bodies of the dead had been properly arranged the police constables were instructed to admit such persons as stated they had relatives or friends who had gone by either of the trains from the town that morning, and they were allowed to pass through the room in which the unfortunate deceased lay, with a view to ascertain who might be among them. The recognition in many cases was of the most melancholy character. The intelligence of the accident first reached the metropolis when the uninjured portion of the train arrived at London Bridge. About 30 passengers came up by this means, several of whom had sustained injuries more or less severe. The news soon circulated, and throughout the day so many anxious inquiries were made at the terminus, that the superintendent was obliged to telegraph continually to Brighton for the names of killed and wounded. On Sunday night, towards the time the excursion trains were expected to return, the crowd was very great at the station, and knots of persons listened with painful interest to the details supplied by eye-witnesses of the accident, and by others who had gathered the particulars during their visit to Brighton. A similar scene took place at the Victoria Station. It does not appear that the passengers of the second Brighton train suffered much injury. The engine-driver and stoker escaped by jumping off, and the carriages were so little damaged that some of them were immediately sent back to Brighton with the wounded. The inquest was opened on Monday and is still in progress.

Another Accident on the London and Brighton.—On Thursday afternoon a portion of the pick-up goods train fell from an embankment near Caterham Junction. Several of the trucks were smashed to pieces, and a delay of two hours was the result to most of the trains subsequent. No person was injured. The line was clear yesterday morning.

Compensation for Injuries by Railway Accidents.—A meeting of a number of shareholders interested in the principal Metropolitan Railway Companies was held on Tuesday to consider the subject of the awards of juries in cases of railway accidents, with a view of taking preliminary steps to petition the Legislature to restrict the compensation within certain limits commensurate with the injuries actually inflicted on person or property. It was stated that one of the great companies had disbursed last year no less a sum than 80,000*l.* by way of compensation for accidents on their line, exclusive of law expenses and the cost arising from damage to the rolling stock and the permanent way. In connection with this subject it may be stated that at the recent assizes Mr. M'Carthy, a clerk in the Post Office, recovered 500*l.* damages against the London and North Western Company for injuries sustained in the collision near Edgehill on the 23d January; Mr. Smith and Mr. Clements, clerks in the Post Office, recovered, the first 150*l.*, and the second 275*l.* from the same company for injuries sustained in the collision at Atherstone; Mr. Jackson, a wholesale teadealer at Manchester, recovered 700*l.* from the same company for injuries sustained in the collision near Crewe on the 31st May, 1860; Mr. Appleby, a partner in the Seedly Printing Company, recovered 1000*l.* from the same company for injuries sustained by the overturning of a carriage between Manchester and London on the 4th January last; Mr. Thornely, son of a timber merchant at Stockport, recovered 1500*l.* from the Shrewsbury and Hereford for injuries received while travelling on their line in August last year; the Rev. Robert Elmhirst, curate of Woodside, near Leeds, recovered 350*l.* from the Lancashire and Yorkshire for injuries sustained in the collision at Ince on the 1st November last; and Mrs. Davis, the widow of a naval officer, recovered 500*l.* from the London and Brighton Company for injuries sustained in falling down the staircase leading to their station at New Cross.

Law.

Northern Circuit: Liverpool.—*The Charge of Murder at Rochdale.—John Warburton*, 35, was indicted for the wilful murder of Ellen Garside, at Castleton, on the 1st of April last. The deceased was the wife of Joseph Garside, and lived with her husband at the house of his mother in Rochdale. She was married in 18[illegible], and had two children, the eldest a girl of nine years of age, by her husband. The prisoner is also a married man, having three children, and was a foreman mason at the works of Mr. Davenport, at Rochdale. The prisoner and the husband of deceased were acquainted with each other, and their families used to be on friendly terms. Deceased and her husband had lived happily together till September last, when she suddenly, and without apparent reason, left her home with her eldest child, and was not heard of for some time, and was then found to be living in Manchester. Her husband, after she had left him, went to live with his mother. On the 4th February deceased, having written to her husband, returned home with her child, and he received her, and apparently forgave her. It appeared that he had received some letters respecting her and the prisoner, in consequence of which he spoke to the latter, and his suspicion regarding him seemed to have been aroused. It appeared from the evidence of a woman named Parkinson, and from

the evidence of Eliza Garside, the child of deceased, that the prisoner and deceased went in September last to lodge at Parkinson's house at Manchester, and there passed by the name of Roberts, and deceased told the child to call the prisoner father. They appeared to live together on affectionate terms. On Sunday night, the last day of March, after she had returned to her husband at Rochdale, the prisoner called at deceased's house when her husband was out, and saw her for a short time, and on the next night, April 1, deceased dressed herself and went out about 8 o'clock. It was a rainy night. She called on her sister about a quarter past 8 o'clock, and said she felt sickly. At a little before 9 that night the prisoner and a woman, believed to be deceased, called at a public-house and ordered a glass of something, which they drank. The prisoner had an umbrella. They left almost immediately, and shortly afterwards the wife of a captain of a barge in the canal close to the lock bridge heard two screams as of a woman in distress. She caused her husband to go on deck and look out. She also went and saw a man struggling in the middle of the canal; a shaft or pole was thrown to him and he got out at last at the side of the canal, with the assistance of a boatman and some men who ran up, attracted by a cry of "Help!" "Murder!" The prisoner was the man and said "Thank God for that! I was nearly done for." He was asked how it happened, and said his foot had slipped in. He was asked if any one else was in the water, and he made no answer. He was then asked if he would go into a neighbouring cottage and dry himself. He said he lived only five minutes' walk down the Oldham Road, and declined going. The prisoner did live there. On the Friday after this the hauling lines of two boats crossed each other on the canal where the prisoner was got out, and pulled up the body of a woman, who was proved to be deceased. There were marks of violence on the knees and arms, and the neck was swollen. At the coroner's inquest it came out that the prisoner had been seen with a woman shortly before he was in the canal at a public-house near the place where the body was found, and, from the circumstance of a woman's scream having been heard when he was in the water, he was questioned where he was on the night of the 1st of April. He then denied that he had been out of his house that night, or that he had been in the canal. It also appeared that the prisoner was seen looking over the parapet of the bridge into the canal where he had been got out, with an umbrella up over his head, it being fine. His manner excited suspicion, as he walked off across the fields afterwards. It was shown from the appearance of the body of deceased that death had been caused by asphyxia, and the lungs were entirely free from air. The surgeon who examined the body was of opinion that she must have screamed the lungs empty, and that instant have been immersed in water. He thought if she had merely fallen in she would have gasped for breath in the act of falling into the water. The case for the prosecution having been closed, the prisoner's counsel submitted that there was no case to go to the jury. Mr. Baron Martin thought that there was not. Assuming that the woman seen in the public-house was the deceased, of which there was no evidence, and assuming that the prisoner was in the water with deceased, there was no evidence that he had pushed her in. It might well be that the prisoner had gone from the road over the bridge down to the canal side for the purpose of going under the archway with the woman, and fallen in. He had been of this opinion on reading the depositions, and had told the grand jury they had better throw out the bill, as there were circumstances of suspicion about the case regarding which further evidence might possibly be found than was now known, and the man might then have been put upon his trial; and he was sorry the grand jury did not adopt that course. In his judgment there was no evidence now to go to the jury, and they would therefore by his direction find the prisoner *Not Guilty*. The jury found their verdict accordingly. *Attempted Murder of a Wife.—William Poulton*, residing at Manchester, was indicted for having on the 6th of May attempted to murder his wife. On the day in question, the prisoner, who had been drinking, quarrelled with his wife, and after striking her he drew a knife across her throat, inflicting a slight wound. The prisoner was found *Guilty* of unlawfully wounding. Sentence deferred. *The Insurance Forgeries.—Edward Williamson* pleaded guilty to four indictments for forgery and defrauding the Royal Exchange Insurance Company. Before sentence was passed his counsel pleaded that the prisoner had a wife and eight children, that he had from the first determined to plead guilty, and that he was suffering the keenest pangs of remorse. Baron Martin said that these considerations could not be allowed to interfere with the course of justice, or no criminal would be punished. It was unfortunate that in such cases the innocent were forced to share the misery and disgrace of the guilty, but still, in a county like Lancashire it was particularly important that such flagrant crimes should be repressed. The sentence was 15 years' penal servitude. *Murder on the High Seas.—Captain William Wilson*, late commander of the British ship Express in the African trade, was indicted for the murder of William Henderson, a steward on board that vessel. Captain Wilson, being a native of Memel, in Prussia, claimed to be tried by a jury half composed of foreigners. The Express sailed from Liverpool on 22d Sept. of last year, and deceased (who was about 30 years of age) had joined some short time before, being then in good health and strength. When the ship had been some time at sea the acts of violence on the part of the prisoner commenced. The first was the throwing of a handspike at deceased, who was wounded in the ankle. This was done as a punishment for his not being quick enough in bringing the captain a clean towel, or some slight affair of that kind. On the same day the prisoner threw a knife at deceased, and wounded him in the temple. Deceased picked up the knife, gave it to the prisoner, and a second and third time the captain threw it at him, and in the course of the same day also beat him with his fists, knocked him down, and kicked him. From this time to deceased's death a series of acts of violence was perpetrated, to three of which, however, as the most remarkable, counsel for the prosecution called particular attention. On the 4th of November, just before entering Brass River, the prisoner followed deceased out of the cabin, beat him with his fists, kicked him four or five times with strong boots, and with a doubled rope gave him 20 or 30 blows with great severity. Deceased then became silent and insensible, and that night when he was seen by some of the crew it was noticed that his head and shoulders were covered with bruises and discolorations. Shortly after entering Brass River the fever broke out on board, the carpenter being first attacked, and then deceased. A doctor attended, prescribed rest and generous diet, and though deceased recovered from the fever, it left him so weak and prostrate that he was unfit for duty. While he was in this state, however, the prisoner ordered him to pick oakum, but he could not do it. On the 22d December the doctor found him in such a bruised condition that he asked the deceased who had been striking him. The deceased was unwilling to tell, but the doctor insisted, and the deceased then mentioned some name, which induced the doctor to go at once to the captain, who denied that he had done it, saying that the man had fallen down upon deck, and had hurt himself in that way. The last act of violence was shortly before his death, and there was some difficulty and contradiction as to whether it took place on a Wednesday or a Saturday. The deceased was lying in his berth, and the prisoner came to him and asked him why he did not cook his sago. Deceased said he could not stand so near the fire. The prisoner then took a can and struck deceased under the chin and nose and made them bleed. He then ordered deceased to come down to the deck to pick oakum. Deceased said he could not do it, and the prisoner replied that it was all laziness, and seizing deceased by the shirt he threw him upon deck, jumped with both feet upon his chest, kicked him on the sides and head, and beat him. Deceased at first cried out, but at last he became silent and partly insensible. The prisoner then ordered buckets of water to be thrown over the deceased, which was done, after which he was lifted up and dry clothes put upon him. The prisoner then left him for some time, and then returned and asked deceased "if he was satisfied." The deceased said, "You had better kill me at once than treat me so;" upon which the prisoner again beat and kicked him, renewed his threats, and said that "he had better jump overboard," and "that he never should see England again." Deceased sank under this continued ill-treatment, and died shortly afterwards. The prisoner was afterwards transferred to a vessel called the Severn, in which part of the crew of the Express returned to Liverpool, when the proceedings which had led to the present trial were instituted. Several witnesses were then called in support of the above statement. Baron Martin in summing up, confined the attention of the jury to the violence which occurred on the Saturday specified. Notwithstanding the conflict of opinion and statement as to the time which elapsed between the last act of violence and the death of deceased, the offence more resembled manslaughter from the fact that the violence was that of abuse, inflicted from time to time in fits of passion, but probably without the expectation that death would immediately follow, nor did it immediately follow. His lordship having pointed out the legal distinctions between murder and manslaughter, carefully went through the evidence, after which the jury retired to consider their verdict. They were absent two hours without agreeing to a verdict, when one of the jurymen being very ill they were discharged. The trial of the prisoner on the other indictments was postponed to the next assizes, and he is, of course, liable to be tried again on this charge of murder. There is also a still further charge against him of an assault upon a third seaman. LANCASTER: *The Oswaldtwhistle Murder.—John Marra*, 19, *Patrick Walsh*, 21, *Edward Connor*, 23, and *Con Maher*, 28, were indicted for the Wilful Murder of James Riley, at Oswaldtwhistle. On the 2d of April last, the prisoners and a man named Quin entered a public house at Oswaldtwhistle about 11 at night, and called for half a gallon of ale. For this they tendered 6*d*., the price being 1*s*. The landlady, however, trusted them. In a few minutes she heard a noise as of the jug breaking, and entering the room found the jug broken and told them this was bad behaviour. They spoke in Irish and she could not understand them. A few minutes after she and her husband heard them dragging the table about the room, and Mr. Broadley, the landlord, went to them and asked them if they intended to break the table as well as the jug. At this time Quin had left the room. The prisoner Marra then seized Broadley by the coat collar and pulled him into the room, and all the men set upon him and threw him on the floor, hitting him with their fists and kicking him, and making his nose bleed. He called out to deceased, James Riley, who was in the kitchen, to come to his assistance, and Riley entered the bar and asked the prisoners if they intended to kill the man. Broadley was then on his back on the floor, and the men about and upon him. The prisoners immediately got hold of Riley, dragged him into the room, and began beating him in a similar manner, putting out the lights. Mrs. Broadley, being much alarmed, called out "Murder," and a police-constable named Singleton, who was passing at the time, entered the bar, turning on his lamp, and saw all the prisoners kicking and beating Riley. They then got hold of Singleton, dragged him into the room, and almost choked him. The prisoners then left the room, followed by the landlord, deceased, and Singleton, into the kitchen, where the prisoners flung at them all the glasses, candlesticks, and jugs they could get hold of. The prisoners Marra and Walsh then left the house and were followed by Singleton. Connor was then seen by another man in the kitchen to knock Riley down with the kitchen poker, and the prisoner Maher beat him about the head with the kitchen fender. They then left the house, and Riley, having got into a chair, was found bleeding and helpless. A surgeon was sent for, who found that he had received several severe scalp wounds, and that his skull was fractured. He died eight days afterwards from inflammation caused by a spicula of bone penetrating the brain, from the fracture in his skull. Baron Martin directed the jury that as to the two men who had left the house before the blows with the poker and fender were struck, they ought to acquit them. His Lordship then summed up the evidence as to the other two, telling the jury that there were circumstances of want of premeditation and of hot blood in this outrage which would warrant them in finding a verdict of manslaughter. The jury found a verdict of manslaughter of a very aggravated character against Maher and Connor, and acquitted the other two prisoners. The same prisoners were again indicted on a second charge of wounding the constable Singleton with intent to murder him, to do him some grievous bodily harm, and to prevent their lawful apprehension. It appeared that after Marra and Walsh had left Broadley's house, they were followed by Singleton, the policeman, who attempted to take them into custody. They were violently resisting him when he heard the other men leave the house. He turned his head to look, and saw the prisoner Connor having a large and heavy poker "on the swing," with both hands, aiming a blow at him. The blow struck him across the eye and left temple before he could ward it off, and knocked him down insensible. He remained insensible for 10 days. The cheek bone and the orbital bone were fractured, the left eye ball was burst and the eye destroyed. He remained in great danger for several weeks. The jury found Marra and Walsh *Guilty* of wounding with intent to resist their lawful apprehension, and Connor *Guilty* of wounding with intent to do grievous bodily harm. Maher was *Acquitted* of this charge. His Lordship, after commenting in severe terms on the brutal and savage conduct of the prisoners, said they were all equally guilty morally, and he should make no distinction in their punishment. He then sentenced each of the prisoners to penal servitude for life. A number of women, the prisoners' friends, made a great outcry in court on hearing this sentence. His Lordship afterwards awarded 20*l*. to Singleton, who has lost an eye in doing his duty.

WESTERN CIRCUIT: BRISTOL.—*The Queen* v. *Matthias*.—This was an indictment charging the defendant, William Matthias, with having unlawfully assaulted Elizabeth Ann Mars. It was originally preferred at the quarter sessions, but defendant having sued out a writ of certiorari, it was removed, and now came on for trial before the superior tribunal. Involving, as the cause did, a question of right of way, there was much local interest felt in it, but the facts, so far as their public importance is concerned, may be briefly stated. The defendant, a gentleman of considerable eccentricity of manner, owns among other properties some large houses called Boyce's Buildings, at Clifton. In the rear of these premises a handsome square has been built, called Victoria Square, and it has been a question for a long time between Mr. Matthias and the Society of Merchant Venturers, who are owners of the land on which the square is built, as to what rights of way the public have over a thoroughfare which was by the side of Boyce's Buildings, and communicates with the square. Mr. Matthias contends that there is only a right of footway, and that the carriage-road communicates [illegible] stables attached to his houses, and he has [illegible] asserting this view, building up walls, which [illegible] been thrown down; digging trenches, which [illegible] often refilled; and driving stakes and posts, [illegible] razed to the ground. On the 12th of April, [illegible] Mrs. Mars, attempted to pass with a perambulator [illegible] was her infant, but was interrupted by [illegible] resistance constituted the assault complained [illegible] expected that the whole question of title [illegible] tried, but the issues on the trial were very [illegible] Mr. Justice Byles leaving it to the jury [illegible] perambulators were the usual accompaniment [illegible] of foot passengers? Second, was this perambulator [illegible] and so light as not to inconvenience other [illegible] was it an injury to the soil? The jury were [illegible] several hours, and had two or three interviews [illegible] who told them that the parties were entitled [illegible] and he should not discharge them till they had [illegible] An appeal by the foreman, that they might [illegible] engage beds at some inn was refused, but the [illegible] to a subsequent application for some water, [illegible] the late Mr. Baron Maule, that it was [illegible] "drink." The jury were locked up till [illegible] they informed the Judge that they had [illegible] general verdict, but were of opinion that [illegible] a usual accompaniment of a class of foot [illegible] Judge said he agreed with them in that. The [illegible] there was no probability of their agreeing [illegible] points. They were then discharged by consent [illegible]

CENTRAL CRIMINAL COURT.—*Trial of Baron* [illegible] briefly in our last Number the result of this [illegible] tence passed upon Baron Vidil by Mr. Justice B[illegible] of the remarkable incidents of the case, which [illegible] to notice in detail from want of space, was the [illegible] son, Alfred John de Vidil, to give evidence, and the [illegible] of that refusal by the counsel for the defence [illegible] de Vidil was one of the first witnesses called [illegible] clined to be sworn. The Testament was tendered [illegible] in the usual form, amidst great excitement [illegible] but instead of taking the oath he proceeded [illegible] the judge in a voice so weak and tremulous [illegible] be heard only by those who sat close by him [illegible] understood to say, "Am I called by the counsel [illegible] defence?" Mr. Justice Blackburne: You are now [illegible] to give such evidence as it is in your power to [illegible] ing this case. The facts to which you may depose [illegible] either one way or the other, either in your father's [illegible] or against him, but with that you have nothing [illegible] are bound to state what you know, and before [illegible] must be sworn to the truth of what you say. M. [illegible] object to be sworn for the prosecution. Mr. [illegible] Blackburn: Can you assign any reason for this [illegible] M. de Vidil: I must leave myself in the hands [illegible] Court, but must decline to give evidence against [illegible] The two Judges then had a short consultation, [illegible] Mr. Justice Blackburn (addressing the witness) said [illegible] bound by the laws of your country and by the [illegible] which you owe as a subject of the Queen to give the [illegible] which is required in order to serve the ends of justice [illegible] case. In this duty you must not fail. M. de Vidil: I [illegible] it will be in the power of the counsel for the defence [illegible] me. Mr. Justice Blackburn (to Mr. Clark): What [illegible] counsel for the prosecution require to have done? Mr. [illegible] Hill: Do you require that the witness should be sworn? [illegible] Clark: I think it is necessary for the ends of justice that [illegible] witness should be sworn. Mr. Justice Blackburn (to witness) [illegible] I now require you to take the oath and to give the evidence [illegible] which it is in your power to give touching this matter [illegible] M. de Vidil (with much emotion): I feel that your Lordship [illegible] in the right, but I am not able to give evidence [illegible] father. Mr. Justice Hill: You owe it as a [illegible] Sovereign, to society, and to the laws of your [illegible] were framed for the protection of society, that you [illegible] evidence in this case. M. de Vidil: My mind is [illegible] I have had seven weeks to consider the course I [illegible] and I must still decline to give evidence. I can [illegible] myself in your Lordship's hands. Mr. Justice [illegible] There remains, then, nothing for the Court but [illegible] paramount though a painful duty. You have declined [illegible] evidence in a case of great moment, and have [illegible] mitted an offence against the law. I cannot but see [illegible] is much to be said in your behalf. Your wish, no [illegible] screen your father; but at the same time I must [illegible] you such a sentence as shall prevent other persons from [illegible] themselves of an objection which, in their case, may be [illegible] idle and futile. The duty of giving testimony in cases [illegible] come before the criminal courts is one which must be [illegible] and where a corrupt motive appears it will be [illegible] enforce it by means of a severe punishment. [illegible] doubt, actuated in your refusal by motives which [illegible] themselves corrupt and improper; but still it is [illegible] necessary, if only as an example, that you should be [illegible] with some punishment. Her Majesty's Judges [illegible] selves frequently called upon to insist that persons [illegible] to the poorer classes shall give evidence against their [illegible] relatives. They can admit of no other rule here. [illegible] this is an uncommon case, and I am not myself [illegible] any instance in which a person has persisted in refusing [illegible] be sworn under similar circumstances. There is [illegible] least wish on the part of the Court to press hardly on [illegible] you, considering the position in which you stand, [illegible] we should fail in our duty if we did not adjudge [illegible] suffer some punishment, and the sentence of the [illegible] therefore, is that you be imprisoned for one month [illegible] sation.) If this punishment has not the effect of [illegible] others from following an example so mischievous to the [illegible] administration of the law and so prejudicial to society [illegible] be necessary to increase it in any future cases which may [illegible] until the desired result is produced, and justice is duly [illegible] cated. M. de Vidil was then removed in custody. [illegible] refusal of the son to give evidence against the father, [illegible] he expressed a readiness to appear as a witness [illegible] was made the subject of a severe attack upon [illegible] Serjeant Ballantine, the baron's counsel. "The [illegible] "was the only person who could speak as to the [illegible] given, or the character of the injuries inflicted; how they were [illegible] inflicted, and where they were inflicted. The [illegible] himself had his mouth closed on the subject, and was [illegible] to tell them how it occurred, and the person who received [illegible] blows declined to give evidence against him. If he had wished [illegible] to spare his father he need not to have appeared at all. [illegible] not wish to give evidence. It was true he was under [illegible] nisance, but 40*l*. would have settled the matter. [illegible] time when such an accusation was launched against [illegible] prisoner by him or by some other persons for [illegible] appeared from some motive—he had a right to [illegible] it was a bad one—and refused to give his evidence." [illegible] *Betting in the Streets.*—Four well-dressed men, named [illegible] *Newcombe*, *Philip Powle*, *Charles Wales*, and *Alfred* [illegible] rendered to take their trial for misdemeanour. The [illegible] was instituted by the Corporation of the City of London [illegible] view of putting a stop to the nuisance caused by a [illegible] persons assembling in Bride Lane, Fleet Street, for the [illegible] of betting. It was proved that the four defendants had [illegible] seen standing in Bride Lane nearly every day since May [illegible] books in their hands for the purpose of entering bets, and the [illegible] the crowd round them was so great towards the middle of the day that it was almost impossible for any person to pass

... for any business to be transacted. It was understood that it was not a vindictive prosecution, and that the corporation merely wanted a decision in order to warn others. The Judge said, in that case it would be better that the jury should find defendants guilty, and that they should be bound over in their own recognizances not to offend again. The jury upon that found the defendants *Guilty*, and they were accordingly bound over in their own recognizance in the sum of [illegible] each to appear at the court to receive judgment if called upon to do so. *Post Office Robberies.—John Smith, Peter* [illegible], *Andrew Townson, Alfred Chapman, George B. Wright,* [illegible] *Wright, Thomas Quilter*, and *William Pearce*, Post Office letter carriers, were convicted of stealing letters, and sentenced each to 4 years' penal servitude. *Arson and Robbery.—Philippa* [illegible], a servant girl aged 18, was charged with setting fire to a dwelling-house. The prisoner had been servant to a gentleman in Kentish Town, and one day last month was left alone in the house, when on the return of the family it was found that the place was on fire, a quantity of property missing, and that the girl had absconded. The defence was that the fire was the result of accident. The jury returned a verdict of *Not Guilty*. To a second indictment, charging her with robbery, the prisoner pleaded *Guilty*, and she was sentenced to twelve months' hard labour. *Burglary.—John Leonard* and *Alfred Simson* were indicted for a burglary committed in the house of Lady Caroline Lascelles, in Eaton Square. One of the prisoners was taken in the house with a quantity of property in his possession, his capture being due to the presence of mind of a young lady. The jury found them *Guilty* and they were sentenced to 15 years' penal servitude.

Sporting.

Visit of the All England Eleven to Australia.—By the last mail from Australia a special agent was sent over by the gentlemen and players of Victoria to invite the All England Eleven to visit the antipodes. The colonists offered to pay their expenses, remunerate them for loss of time, treat them hospitably, and frank them back to England. The invitation has been cordially responded to, and the preparations for the departure are nearly completed. The party will consist of 13 of our most eminent cricketers, selected from the "All England Eleven" and the "United Eleven." As the colonial players have attained a high degree of proficiency, great interest is evinced in both countries as to the results of the projected games. The list of the players chosen to represent the "Old Country," in which, probably, some changes may be made before the final selection is determined on, comprises the names of A. Diver, R. Daft, T. Hayward, G. Anderson, H. Stephenson, J. Cæsar, J. Jackson, T. Hearne, R. Carpenter, J. Grundy, W. Caffyn, G. Griffith, and T. Lockyer. H. H. Stephenson has the management of the trip, in the place of G. Parr, who is reluctantly compelled to decline accompanying the expedition.

The Championship of the Prize Ring.—Heenan, the antagonist of Sayers in the Farnborough contest, has just put forth a challenge, in which he offers to fight any man in England for 1000*l.* aside, and to give 400*l.* to defray expenses to Canada, to which he says no Englishman can object, as it would be fighting in his own country, and 600 miles from Heenan's friends. Mace, the present holder of the "belt," has stated in reply that Heenan is perfectly aware that the rules of the prize ring are such that no champion of England can fight for the belt out of England. To accommodate Heenan, Mace, having no wish to take odds, has increased the amount of the stakes from [illegible]*l.* to 500*l.*; he can therefore be either on or off before or after the approaching contest with King.—On the 2[illegible]th inst. the last scene of the Sayers and Heenan fight was brought to a close. It will be remembered that a few weeks after the fight two belts were presented to the combatants at the Alhambra Palace—Sayers receiving his at the hands of the editor of *Wilkes' Spirit of the Times*, and Heenan at the hands of the editor of *Bell's Life*. As the belts were not paid for at the time of presentation, Heenan went home without his trophy, refusing to accept it on that account; and although some talk took place about it at the time, it died away till Tuesday, when a large number of the sporting public assembled at Messrs. Debenham & Storr's auction rooms, in Covent Garden, in consequence of its being announced that the belt would be sold by auction, among a stock of unredeemed pledges. The belt was contained in a morocco case, and the shield bore the following inscription:—"Presented to J. C. Heenan by F. S. Dowling, Esq., referee and editor of *Bell's Life in London*, May 30, 1860." On the auctioneer asking for a bidding, a representative of a sporting paper made an offer of 10*l.*, which was quickly run up by two other newspaper proprietors and the ex-champion, Ben Caunt, to [illegible] guineas; the present champion, Mace, then went on to [illegible] guineas, the proprietor of a cheap sporting paper left off at [illegible] guineas, Mr G. Newbold left off at 50 guineas, and it was knocked down to Ben Caunt at 51 guineas. There was also a party from Ireland; but their commission was outbid. The original value of the belt was 100 guineas, and it weighs between [illegible]0 and 60 ounces.

Cricket.—A match was played in Battersea Park on Saturday the 2[illegible]th inst., between two elevens selected from the [illegible] Establishments of Messrs. Minier, Nash & Nash, 60, Strand; and Messrs. Beck, Anderson, & Child, of the Middle Wharf, Adelphi, which resulted in an easy victory for the latter, their opponents having scored but eleven runs, while their score amounted to 75 runs. But one innings each was played for want of time. The party afterwards dined together under the presidency of Mr. Child.

Obituary.

The Marchioness of Breadalbane died at her husband's town residence, in Park Lane, on Wednesday. Her ladyship had been ill for six weeks, but it was not till about a fortnight ago that danger was apprehended. Her ladyship was the eldest daughter of Mr. George Baillie, of Jerviswood, by the youngest daughter of the late Sir James Pringle. She was born in 1803 and married in 1821, the Marquis of Breadalbane. She was sister of the Earl of Haddington, the Countess of Aberdeen, Lady Polwarth, and the Countess of Ashburnham.

Miscellaneous.

The Glaciers of Mont Blanc.—The English Consul at Geneva has addressed the following letter to the *Times*, announcing the discovery at the lower part of the Glacier des Bossons of the remains of the three guides who lost their lives on the Grand Plateau during Dr. Hamel's ascent of Mont Blanc in August 1820:—

"Chamounix, Aug. 15.

"A most interesting event has taken place here this morning, and most especially to some of your scientific readers, who have for many years studied the movement of the great glaciers of Switzerland and Savoy; affording them, as it will, an additional proof of their slow but constant action in their weary course into the valleys of their wonderful neighbourhood. Your readers will all remember the tragic end of Auguste Tairaz, Pierre Balmat, and Pierre Carrier, the three Chamounix guides, who were swept from the Grand Plateau by an avalanche on the 20th of August, 1820, while making, or attempting, the ascent of Mont Blanc with Dr. Hamel, and, I believe, some Genevese gentlemen. No traces whatever of these poor fellows had ever been discovered from the moment of their destruction till this morning, when the following fragments were found on the lower part of the Glacier des Bossons, entering the valley, and which circumstance, I need hardly add, has caused the most intense excitement in the village of Chamounix and the whole valley. The fragments found consist of,—1. An arm in the most perfect state of preservation, with the hand, fingers, nails, skin, and dried frozen flesh intact, in noways discoloured; part of little finger only gone. The length of this limb extends to the elbow. 2. Parts of two different skulls, with a good deal of hair remaining with the skin on both; one belonging to a fair man the other to a dark one. The hair most wonderfully preserved in colour, &c. One of these fragments was recognized by Julian Devoussoux (a survivor of the 1820 ascent) as being that of Pierre Balmat. 3. Part of a guide's knapsack, with sundry portions of a lantern attached to it. 4. An iron crampon, which the guides at that time strapped on their shoes when they crossed the glaciers, &c., to prevent slipping. 5. Several portions of guides' dress—cravats, hats, torn portions of linen, portions of cloth coats, &c., all easily distinguishable as belonging to men of the guide class. The fragments were found by a guide and an English gentleman, who wished to visit the lower Glacier des Bossons, about two hours' walk from Chamounix, and they came quite unexpectedly upon these most interesting remains. Two of the guides who formed part of this memorable ascent are still alive—Julian Devoussoux and Jacques Coutel—and I understand from an English friend of mine that Dr. Hamel still lives in England, and no doubt he will be much interested in this discovery. Professor Forbes has repeatedly told the Chamounix guides that they might look out for traces of their deceased comrades in the Lower Bossons in about 40 or 45 years after the catastrophe; he told Auguste Balmat in 1858 to keep a look out. Bearing all this in mind, what a satisfactory event this finding of the fragments, within the period calculated by the Professor, becomes to men of science, studious of the laws of nature, who seem thus, apparently, almost able to calculate by outward signs what is going on in the depths of the earth! A body of 15 guides have proceeded to the glacier to make fresh searches, and no doubt other fragments will recompense their labours. You may depend upon my furnishing you with any fresh particulars which may come to my knowledge. I have just returned from the "Mayor's Court Room," where a *procès verbal* of the whole occurrence has been drawn up. I have suggested to his worship the preservation of the arm, hair, &c., in spirits; it would be exceedingly to be regretted were these relics allowed to remain without an effort to retain them, since this morning, in fact, the arm has discoloured a little. What the glacier has retained 40 odd years perfectly preserved will putrefy in as many hours in the valley below. Aug. 16.—P.S. I understand that part of a thigh, also some large bones, have been brought back by the guides who made the renewed search yesterday afternoon."

BIRTHS.—On the 26th inst, at The Bury, near Leamington, the Countess of Aylesford, of a son—21st inst, at Knockin, Shropshire, Lady Corbet, of a daughter—24th inst, at Eastbourne, Lady M'Mahon, wife of Colonel Sir Thomas M'Mahon, Bart., C.B., of a son, who survived his birth but an hour—25th inst, in The Close, Winchester, the Hon. Mrs. William Warburton, of a daughter—24th June, at Shajehanpore, India, the Hon. Mrs. Robert Drummond, prematurely, of a son—25th inst, at Headley, Surrey, the wife of George Lyall, Esq., M.P., of a daughter—23d inst, at Heath House, near Wakefield, the wife of E. A. Leatham, Esq., M.P., of a son—22d inst, at The Cottage, Crowcombe, Somerset, the wife of Coventry Warrington Carew, Esq., of a daughter.

MARRIAGES.—On the 27th inst, at St. George's, Hanover Square, Stanlake Ricketts Batson, Esq. of Horseheath, Cambridgeshire, to Gertrude, eldest daughter of the Right Hon Henry Corry, M.P., and Lady Harriet Corry—27th inst, at Essendon Church, Captain John Walter Tarleton, C.B., A.D.C., R.N., eldest surviving son of the late Thomas Tarleton, Esq., of the county of Chester, and grandnephew of the late General Sir Banastre Tarleton, Bart., G.C.B., to Finetta Esther, twin daughter of the Hon Baron Dimsdale, of Camfield Place, Herts—21st inst, at the Manor House, Mapperton, Dorset, Captain Charles Hamilton Malan, 75th Regiment, eldest son of the Rev S. C. Malan, vicar of Broadwindsor, to Edith Mary Josephine, second daughter of Lieut.-Col George Marryat—22d inst, at Stirling, Duncan Campbell, Esq., MacIver of Asknish, Loch Gair House, Argyleshire, to Elizabeth Ewart, second daughter of the late Captain James Ewart, H.M.'s 93d Highlanders, and granddaughter of the late John Ewart, Esq., of Mulloch, Kirkcudbrightshire—27th inst, at the parish church, Brighton, Francis Swanson, Captain Bombay Artillery, eldest son of Colonel J. Swanson, 19th Regiment B.N.I., to Anne Blanche, youngest daughter of William Harrison Ainsworth, Esq., of Arundel Terrace, Kemp Town, Brighton—22d inst, at St Saviour's, Westerleigh, Gloucestershire, Thomas Francis, eldest son of Thomas Rivers, Esq., of Sawbridgeworth, Herts, to Elizabeth Roskilly, eldest daughter of Henry Hewitt, Esq., Serridge House, near Bristol.

DEATHS.—On the 18th inst, at Fleury, near Paris, after a short illness, Henry John, third son of Sir John and the Lady Eleanor Cathcart—17th ult, at Malabar Hill, Bombay, Robert Trevelyan, only child of Sir Alexander and Lady Grant, aged five months—21st inst., in Albemarle Street, the Dowager Lady Musgrave, relict of the late Sir Philip Musgrave, Bart., of Edenhall, county of Cumberland, aged 66—27th inst., at Jersey, Miss Catharine Graham, youngest daughter of the late Sir James Graham, Bart., of Netherby—24th inst, at Cheltenham, Laura, Lady Smyrke, wife of Sir Robert Smyrke, aged 72—22d inst, at his residence, in Bath, General Francis Moore, Senior General of the British Army, aged 95—6th ult, at Dinapore, after 36 years' service in India, Lieut.-Colonel John Minshull Drake, commanding her Majesty's 10th Regiment of Bengal Native Infantry, eldest son of Commissary-General John Drake, aged 54—22d inst, at 22, Burton Street, Eaton Square, Major Charles Henry Montresor Smith, late of Auckland, New Zealand, eldest son of the late Lieut.-Colonel John Charles Smith, Assistant Adjutant-General, Athlone, aged 40—19th inst, at his residence, Point House, Castle Townsend, John Townsend Somerville, Esq., J.P. for the county of Cork, and Major on the Retired List of her Majesty's Bengal Army—8th ult, at Bhooj, after three months' suffering from the bursting of a blood vessel, Lestock St. John Bell, Ensign of H.M.'s 1st Grenadiers, Bombay N.I., son of the late Hon Alexander Bell, Bombay Civil Service, Member of Council, aged 20—25th inst, at Pembroke, Sarah Maria, widow of the late Colonel St. John Browne, R.A., aged 82—[illegible] inst, at 60, Gloucester Place, Portman Square, J. Helbert Helbert, Esq., aged 76—22d inst, at St Nicholas, Guildford, Thomas Haydon, Esq., banker, aged 82—1[illegible]th inst, at Ancaster Vicarage, the Rev Z. S. Warren, vicar of Ancaster and Dorrington, aged 64—26th inst, at Feltham, Mr George Charlwood, of 14, Tavistock Row, Covent Garden, aged 77.

Markets.

COVENT GARDEN, Aug. 31.

Of both Vegetables and Fruit there is now a good supply. Figs, Greengage Plums, Apples, and Pears, still come from the Continent and Channel Islands, but of the last two there is also a large supply of English grown produce. Peas and Beans are plentiful. Grapes and Melons abundant. French Beans, Carrots, and new Potatoes may be had in quantity. Of the latter many samples are still, however, diseased. Cucumbers are very abundant. Cut flowers chiefly consist of Orchids, Lily of the Valley, Pelargoniums, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Pears, per doz., 1s to 4s
Grapes, per lb., 1s 6d to 4s	Apples, per doz., 6d to 1s
Melons, each, 1s to 3s	Oranges, per 100, 6s to 14s
Peaches, per doz., 4s to 10s	Lemons, per 100, 6s to 14s
Nectarines, do., 3s to 6s	Nuts, Cob, per lb., 1s to 1s 6d
Apricots, do., 1s to 3s	

VEGETABLES.

Cauliflowers, each, 2d to 6d	Artichokes, each, 4d to 6d
Green Peas, p. quart, 1s to 1s 6d	Beet, per doz., 1s 6d
French Beans, per sieve, 2s 6d to 3s 6d	Celery, p. bundle, 1s 6d to 2s
Broad Beans, p. bush, 2s 6d to 3s	Onions, p. ½ sieve, 4s 6d
Cabbages, do., 1s 3d to 1s 6d	Rhubarb, p. bundle, 6d to 9d
Potatoes, p. ton, 60s to 80s	Tomatoes, p. doz., 1s to 3s
— per lb., 1d to 4d	Shallots, per lb., 8d to 10d
— per cwt., 4s to 8s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 4d to 6d	Endive, p. score, 1s 6d
Carrots, new, do., 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., 2s to 3s
Cucumbers, each, 6d to 9d	Parsley, p. 12 bunches, 3s to 4s
Veg. Marrows, p. doz, 1s to 1s 6d	Savory, per bunch, 2d to 4d

HAY.—Per Load of 36 Trusses.

Smithfield, Thursday, August 29.

Prime Meadow Hay	75s to	84s	Clover	90s to	120s
Superior do. (old)	88	100	New Clover	—	—
Inferior do.	36	50	Do. second cut	—	—
New do.	50	80	Straw	28	34
Rowen	—	—			

Davis & Co.

Cumberland Market, Thursday, Aug. 29.

Sup. Meadow Hay	98s to	108s	Inferior Clover	84s to	100s
Inferior do.	65	90	New do.	—	—
New do.	—	—	Straw	34	40
Superior Clover	112	120			

Joshua Baker.

Whitechapel, Thursday, Aug. 29.

Fine Meadow Hay	90s to	98s	Fine 1st cut Clover	110s to	118s
Inferior do.	60	80	Inferior do.	90	100
Prime New Hay	70	88	Fine 2d cut	—	—
Inferior	—	—	Inferior do.	—	—
Straw	30	36	Fine New Clover	90	105

COAL MARKET.—Aug. 30.

Walls End Hetton, 18s.; Walls End Haswell, 18s.; Walls End South Hetton, 18s.; Walls End Trimdon Hartlepool, 17s. 9d.; Walls End Hartlepool, 17s. 9d.; Walls End Braddyls Hetton, 17s.; Walls End South Hartlepool 16s. 6d.; Walls End Keepier Grange, 16s. 9d.; Walls End Kelloe, 17s. 3d.; Wharncliffe, 16s.; Walker Primrose, 12s. 6d.; Hastings Hartley, 16s. 6d.; Lambert's Hartley, 16s. 3*d.*—Ships at market, 64.

BUTTER MARKET.—Aug. 30.

Best Fresh Butter	14s. per dozen lbs.
Second do. do.	13s. " "

Pork, 5*s.* 0*d.* to 5*s.* 4*d.* per 8 lbs.

BRITISH WOOLS.—London, Friday, Aug. 30.

There has been a fair amount of business doing at full rates, the fineness of the weather and the good reports of the harvest having imparted confidence to those who had been holding off from making their usual purchases.

	s. d.	s. d.		s. d.	s. d.
South-down Hoggets	..	to 1 5	Leicest. Wethers	1 3	to 1 4
Half-bred ditto	1 5	— 1 6	Ditto Hoggs	1 4	— 1 5
Down Ewes	1 4	— 1 5	Combing Skins	1 0	— 1 5
Kent Fleeces	1 5	— ..	Flannel Wool	1 0	— 1 5
			Blanket ditto	0 6	— ..

Colonial Wool Sales.—The present series of sales terminated yesterday; the fine wool portion on Tuesday at rates in advance of the commencement for good descriptions of wool; low and inferior sorts having sold very badly all through. The decline in good wool may be stated at about 1d. to 2d. per lb., but badly got up parcels were a complete drug, and 3d. to 4d. per lb. less was taken. At the Low Wool Sales East Indian has sold at full quotations. Finer qualities of Buenos Ayres and unwashed Spanish did not satisfy the holders, and were in many instances withdrawn.

METROPOLITAN CATTLE MARKET.

Monday, Aug. 26.

The supply of Beasts is larger than for some weeks past; consequently prices are rather lower than on Thursday, and a clearance cannot be effected. There are a few more Sheep. The demand has decreased, and prices, especially for fat big Sheep, are rather lower. Calves and Lambs are not selling quite so well as on Thursday last. From Germany and Holland there are 1400 Beasts, 8170 Sheep, and 192 Calves; from Scotland, 107 Beasts; from Ireland, 600; and 2700 from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c.	4 8	to 4 10	Best Long-wools	..	to ..
Best Short-horns	4 6	— 4 8	Do. Shorn	4 6	— 4 10
2d quality Beasts	3 4	— 3 10	Ewes & 2d quality	..	— ..
Best Downs and Half breds	..	to ..	Do. Shorn	4 0	— 4 4
Do. Shorn	5 0	to 5 2	Lambs	5 0	— 5 10
			Calves	3 10	— 4 6
			Pigs	3 4	— 4 6

Beasts, 5380; Sheep & Lambs, 29,250; Calves, 245; Pigs, 570.

Thursday, Aug. 29.

The number of Beasts is large, but a considerable proportion were left over from Monday. Trade is very dull, and prices are on the average lower. The supply of Sheep and Lambs is about the same as of late, but there is very little demand for them; prices are lower, and a considerable number remain unsold. Calves are selling about the same as on Monday. Our foreign supply consists of 475 Beasts, 3010 Sheep, 480 Calves, and 15 Pigs; from Ireland, 52 Calves. The number of Milch Cows is 115.

	s d	s d		s d	s d
Best Scots, Herefords, &c.	4 6	to 4 10	Best Long-wools	..	to ..
Best Short-horns	4 4	— 4 8	Do. Shorn	4 6	— 4 8
2d quality Beasts	3 4	— 3 8	Ewes & 2d quality	..	— ..
Best Downs and Half breds	..	— ..	Do. Shorn	4 0	— 4 4
Do. Shorn	4 10	— 5 2	Lambs	5 0	— 5 8
			Calves	3 10	— 4 6
			Pigs	3 4	— 4 6

Beasts, 1255; Sheep & Lambs, 16,890; Calves, 670; Pigs, 230.

MARK LANE.—Monday, Aug. 26.

The supply of Wheat from Essex and Kent to this morning's market was only moderate, and being in demand for France was disposed of at the prices of this day se'nnight. The value of foreign Wheat is unaltered, but with the exception of some inquiry for export, the sale is very limited. There is no alteration in the prices of spring corn, excepting Oats, which are

that there will be a contest for the vacant seat, but the names of the candidates have not yet been published.

CONVOCATION.—The Convocation of the province of Canterbury was prorogued on Friday, by commission, pursuant to the Royal writ, to the 23d October.

THE BISHOP OF LONDON visited Basle last week, and held a confirmation at Lucerne on Sunday, the 1st inst. His lordship was next to visit Thun. The Bishop's Continental tour is expected to extend over some weeks.

THE ARMY.—Lord Clyde accompanied by Major-General Eyre and Major Alison, left London on Monday for Berlin, to attend the great Prussian reviews. The following memorandum has been issued from the Horse Guards:—

"It has been decided by the General Commanding-in-Chief with the concurrence of the Secretary of State for War, that henceforward all candidates for commissions without purchase shall be required to pass through the Royal Military College; but the claims of those gentlemen who have already been noted prior to this date as applicants for appointments without purchase will be recognised and considered so far as the very limited means at his Royal Highness's disposal will allow."

INCREASE OF THE ARMY IN CANADA.—Her Majesty's Government has determined to make an important increase in the strength of our military force in North America. Three regiments of infantry are about to be placed under immediate orders for Canada, and will probably embark before the middle of next month. It is considered probable that the 1st Battalion of the Rifle Brigade, the 1st Battalions of the 15th and the 96th Regiments, all at present at the Curragh, will be chosen for this service.

THE DOCKYARDS.—The arrangements for the introduction of the new Audit Department into the dockyards are now completed. Mr. H. W. R. Walker, from the office of the Accountant-General of the Navy, has been appointed Principal of the Department, and will visit the various dockyards in succession, a staff of clerks and writers for performing the necessary duties being appointed at each yard. The entire control of the Audit Department is vested in Sir Richard Bromley, K.C.B., the accountant-general.

THE NEW IRON FRIGATES.—At the close of the Session the Admiralty got a vote of 2,500,000*l.* for new iron frigates, which in round numbers is just the price of five of these costly vessels, according to the new scale of dimensions on which they are in future to be built. The authorities issued their plans, and called upon the leading firms for tenders. These tenders were duly sent in to Somerset House on Saturday, and on Wednesday it was notified to Mr. Mare, of Millwall; Mr. Laird, of Birkenhead; and to the Thames Iron Works, where the Warrior was built, that their offers were accepted, and that they were to commence the construction of the vessels forthwith. It is rumoured that five or six months hence orders will be given for the remaining two frigates. In three points the proposed vessels will be great improvements. In the first place, each will be built to carry 60 guns; secondly, they will not only be as fast and handsome as the Warrior, but they also are to be specially built to be used as steam rams, having their bows beneath the water projecting far in advance of the apparent bows above; and, thirdly, by the addition of 700 tons to their size each will be able to carry a complete coating of armour from end to end, so that every part of the ship will be as invulnerable as masses of iron and beams of teak can make it. The length of the new ships is to be 400 feet on the low-water line; extreme breadth, 59 ft. 4 in.; depth, 21 ft. below the gun-deck; tonnage, 6815. The length of the Warrior class is 380 feet, breadth 58 feet, and tonnage 6170. The breadth of deck, however, in the proposed frigates will not be greater than the Warrior, as the Admiralty have decided on giving the sides of the new vessels a greater incline towards the deck, which will not only increase the chances of the shot glancing off, but will have the more important advantage of getting the weight more to the centre, and diminishing the tendency to roll. In the same way the floors of all the ships are to be made fuller and flatter, which will give them increased stability in a seaway, while from the extreme fineness of the lines fore and aft even the great speed of the Warrior will, it is said, be exceeded by at least half a knot an hour. The engines of all are to be 1250-horse power, and are to be made by Penn & Sons, and the increase of tonnage will allow them to carry coals for from 11 to 12 days' full steaming, instead of nine days, which is all the Warrior or Black Prince can carry. The plates of the new vessels are to be larger and thicker than the Warrior's. The broadside of the latter is coated with 4½ inches of iron, 22 inches of teak, with half an inch of iron inside that again. The new ships are to have 5½ inches of iron, 11 inches of teak, and half an inch of iron inside all. The Admiralty, however, reserve to themselves the right of altering this part of the plan, and substituting plates of 6½ inches thick and doing away with the teak altogether. But no decision will be arrived at on this point until the important experiments which are about to be made at Shoeburyness have proved that the change will be for the better. As at present arranged, even with the 5½-inch plates, it will require nearly 2000 tons of armour to cover the new ships, while the entire weight of the plates on the Warrior is only 950. Up to the present the cost of the Warrior in hull, engines, and rigging has amounted to no less a sum than 360,000*l.* With all her stores, fitting, and guns on board, when ready for sea she will have cost from first to last rather over 400,000*l.* The new vessels, for their hull, engines, and rigging alone, will require an outlay of no less than 430,000*l.*, so that at the lowest estimate each vessel is certain to cost upwards of half a million sterling before she is fairly at sea. The shape of the bows in order to fit them for steam-rams will be very peculiar. Viewed in outline, the profile will present the curved line made by a swan when swimming. The beak will thus be below the water-line, and project about 20 feet at least in advance of the apparent bows above. A space of 30 feet long by 9 feet deep of these apparent bows is to be without armour plates, and is only to be defended from the spar deck line upwards with teak bulwarks, which can be lowered down like the bulwarks of ordinary gun-boats. Inside this slight defence, however, is to be a semicircular shield of armour plates 7 feet high, spreading completely across the vessel from side to side. In this there will be portholes for two immense Armstrong guns. On the main deck below will be a similar shield, reaching up to the iron spar deck, but no guns will be on this, as it is simply intended to protect the crew from a raking fire. By these means no top-heavy weight will be incurred at the bows, as the semicircular shields will be more than 40ft. within the water-borne line of the vessel forward. The bowsprit will be of iron, and is to have a powerful hinge where it springs from the deck, so that before going into action it can be turned back, that there may be nothing to deaden the force with which the ships will strike when used as steam-rams. On all the new ships there is to be an iron tower on the spar deck, crenelated for rifled musketry, in case of an enemy boarding. The sterns of the new vessels, instead of being round and full, like that of the Warrior, will have a fine wedge-shaped point, almost similar to the bows of a fast-going iron packet. By adopting this shape the number of armour plates required to coat it is reduced by at least a third, while the angle will be such that all shots must glance off, unless fired point blank at the broadside. The internal subdivisions as to water-tight compartments, will be almost precisely similar to those of the Warrior. The main decks are to be armed with 36 100-pounder Armstrongs, and the spar deck with 21 guns of a similar calibre. Two forward guns through the shield already mentioned, and the pivot-gun at the stern will, it is said, be 200-pounders. The Defence, built by Messrs. Palmer, at Jarrow, has left the Tyne for Chatham, to take on board her armament, and to be commissioned by Captain Powell. Her masts have just been completed at the Thames Ironworks, and are said to be splendid samples of wrought-iron work. Each is 115 feet long by 32 inches wide, and though only a ton heavier than a wooden spar of the same size, is more than 10 times as strong. The Warrior is not expected to leave her moorings at Greenhithe for her trial trip to Portsmouth until Tuesday, October 1.

Foreign.

FRANCE.—The Emperor, accompanied by the Prince Imperial, arrived at Biarritz on the 30th and was joined by the Empress from Eaux Bonnes on Friday. On reaching Bordeaux the Emperor was received at the station by M. de Forcade, Minister of Finance, and M. Emile Pereire, one of the directors of the Southern Railway Company. After taking a cup of chocolate, his Majesty and the Prince continued their journey. The stay of the Emperor at Biarritz will be about three weeks. Their Majesties, on returning, will pass one day at Bordeaux, and also, it is said, one at Bourges, the Emperor wishing to inspect the arrangements which have been made for the artillery establishment at that place. It is rumoured that their Majesties during their visit to Biarritz will make an excursion to Artega, in Biscay, where the Empress possesses a palace. Her Majesty has again ordered preparations to be made for the continuation of bull fighting at Bayonne. It is now reported that the King of Prussia, instead of meeting the Emperor at Strasburg in October, will visit him at Compiègne before the end of the present month. The *Moniteur* of Saturday publishes a decree extending the provisions of the decree of the 13th February, 1861, to woollen piece goods, and those containing a mixture of cotton, silk, and hair. Mr. Odo Russell arrived in Paris on Sunday from Germany, and left on Monday for London. The *Moniteur* announces the following changes in the diplomatic corps:—The Marquis de Lavalette is appointed ambassador at Rome, replacing the Duke de Gramont, who goes to Vienna. The Marquis de Moustier is appointed to replace the Marquis de Lavalette at Constantinople.—At the banquet given by the Prefect of the Department of the Herault, on the occasion of the meeting of the Council General, M. Michel Chevalier delivered a speech, in which he made the following allusion to Lord Palmerston's recent speeches at Dover:—

"France is honoured and respected abroad. She is only feared by the enemies of progress and the adversaries of civilisation. France is considered in the world as the chief representative and the principal champion of social and political progress. She inspires admiration and sympathy in the peoples who hope for a happier destiny, and receives marks of the hatred and distrust of the men who still entertain the passions of another age. I regret that speeches recently delivered oblige me to range on the side of the latter some Ministers of a great nation—our nearest [illegible] for its love of liberty and progress, towards which [illegible] has made advances, honourable to both parties, [illegible] merited a better welcome and a more sympathetic [illegible]

The *Constitutionnel* makes the following [illegible] Lord Palmerston's address:—

"The speech delivered by Lord Palmerston [illegible] a sad contrast with those of the different [illegible] Councils General. Whilst the French statesmen [illegible] selves confident in the future, and solely [illegible] internal improvements, and with the ideas [illegible] Lord Palmerston endeavours to revive feelings of [illegible] mistrust, to perpetuate old jealousies and hatreds, [illegible] up out of season a badly directed patriotism. [illegible] that a mind formerly of such marked originality [illegible] brilliant in its sallies, should be reduced by the [illegible] the monomania of old age to beat over a [illegible] decried. It is to be regretted that the [illegible] nation does not reflect on the inconvenience of [illegible] tune and unjustifiable manifestations; and [illegible] the name and authority of Lord Palmerston, [illegible] duty it ought to be to calm down popular [illegible] they threatened to be agitated (thank God [illegible] the case), should neglect no opportunity of [illegible] exciting them, and that without object [illegible] certainly do not attach any importance to [illegible] and warlike eruption of Lord Palmerston. [illegible] that the English are a serious people, [illegible] their own interests and mission, and respects [illegible] of others. They do not allow themselves to [illegible] phrases; do not derive their principles [illegible] figures of rhetoric, and regulate their views [illegible] ments by ministerial harangues. The ministers [illegible] houses of parliament deliberate and vote, [illegible] open; the English people lead both ministers [illegible] and can dispense as well with the advice of [illegible] approbation of the other. Whatever therefore [illegible] done by the English ministers either at banquets [illegible] ment, England and France will never cease [illegible] peace between them is desirable for their [illegible] that if they are divided by reminiscences they [illegible] interests, and we must always remember [illegible] just expression of Sir C. Wood—'It is impossible [illegible] accident can affect the interests of France without [illegible] own in danger.' The converse is equally true, [illegible] well as English have all a deep feeling of it."

A new pamphlet, entitled "The Emperor, [illegible] the King of Italy," appeared on Friday, [illegible] once attributed to the Emperor himself or [illegible] high in his confidence. The *Moniteur* [illegible] however says that the comments made [illegible] pamphlet by several foreign journals are [illegible] foundation, and that the Government [illegible] denial to them. The following are extracts [illegible] pamphlet:—

"The proclamations spread in the ancient kingdom [illegible] Two Sicilies are all to one effect—the [illegible] Francis II., must be restored, Italy must be [illegible] grasp of French influence, and another 1815 [illegible] against the Bonapartes. In Rome the clergy [illegible] the formation of the coalition and for a general [illegible] And from Verona Austria replies—'Courage! [illegible] Francis II. against Victor Emmanuel is that [illegible] against Napoleon—it is the struggle of [illegible] usurpation.' Every one remembers how the [illegible] treated the Napoleons as '*baraque* [illegible] flattered himself to camp with the [illegible] Montmartre. The thoughts and dreams of [illegible] little different. The Italian nation [illegible] capital, and the capital of Italy is Rome. [illegible] discuss here the principle of nationality. [illegible] his senses will now contest this principle. [illegible] the corner-stones of the new public law [illegible] ligious liberty is the first, as national sovereignty [illegible] We must have done at once with that [illegible] epoch, that France has to fear a strong [illegible] Ministerial tradition under Louis Philippe, [illegible] the strong. To-day it would be an anachronism. [illegible] would France be weakened if the principles of [illegible] of 1789 receive their consecration in Rome, and [illegible] from the Eternal City, *urbi et orbi?* On the [illegible] be for us a subject of legitimate pride. There are [illegible] great questions—Rome and Venetia. The day [illegible] the liberation of Venetia was in the foreground; [illegible] peace of Villafranca, above all, after the entry of [illegible] Naples, and since the annexation of the Marches [illegible] the most urgent question is to have Rome as [illegible] without Venetia is like France without Belgium. [illegible] Rome she seems only tolerated among nations. [illegible] then at present is for Italy, Rome. Venetia [illegible] afterwards. We remember that Venetia, given [illegible] by the Treaty of Campo Formio, was delivered [illegible] Who knows if in our days, similarly, Venetia [illegible] to Austria by the Peace of Villafranca, will not [illegible] in spite of the Quadrilateral, by a new European [illegible] without any effusion of blood in Italy? Italy [illegible] her capital, and the duty of France is to [illegible] surrender it to her. We have the sad and [illegible] the centre of Europe, in the midst of the [illegible] seeing a Power which says, 'This people is mine [illegible] perty.' And if one thinks that the Power which [illegible] language is an ideal Power, half sacred, which [illegible] name of God, is this not a double and triple [illegible] them show the lease which God gave [illegible] General Bonaparte to the Mamelukes, who [illegible] they had a lease of the land of Egypt, [illegible] Egyptians were for them like farm cattle. [illegible] adduces against Italy the principle of [illegible] religious utility. But where has this [illegible] ever heard of? In what code of laws is it [illegible] what moral principle does it repose? The [illegible] of Italy have come from the temporal power [illegible] Italy could not live being cut in two by the [illegible] Church. It is the temporal power of the Papacy [illegible] impeded Italy from becoming a nation like France. [illegible] argument, the great principle of civilisation, [illegible] the spiritual and temporal power, finds a [illegible] in the power of the Pope, and yet Christ has [illegible] which has not always been understood in all its [illegible] 'Give to Cæsar what is Cæsar's,' &c. The [illegible] when he took the place of the Emperors, became [illegible] Pontifex and King. Thus the old tyranny has [illegible] itself in Rome in spite of the word of Christ. [illegible] power may have an end as it had a beginning: [illegible] Divine origin. Jesus said to the Apostles, 'Go [illegible] not 'Go and conquer.' The Pope declares his [illegible] thrones. If he means thrones according to the [illegible] considered peoples as the patrimony of a family, [illegible] himself in opposition with the new law of [illegible] civilisation, according to which the only legitimate [illegible] power is the national will. Charlemagne gave [illegible] retook the estates of the Church; the [illegible] Powers who gave them back in 1815 have recognised [illegible] of Italy. The question is not to assist the temporal [illegible]

[illegible] Pope. It is dead in the spirit of the populations. It would [illegible] be resuscitated, and God has not allowed this miracle. [illegible] great attempt has been made, every one knows with what [illegible]. A better Pope than has been seen for centuries was [illegible] the Church, and the abuses were the same as under Gregory XVI. The most disinterested advice was constantly [illegible] the Court of Rome. A military protection, which [illegible] him of all care for his safety, and allowed him to [illegible] any reforms, was given to him by the most liberal nation [illegible] the world, and nothing has been obtained. No improvement could be obtained. The trial was decisive. The temporal power is in its last hour. With regard to the pretensions of the [illegible] Government that Rome is the capital of Catholicism, [illegible] stated that this is not the opinion of the Spanish [illegible]. As to the idea that the garrison of Rome [illegible] maintained with a view to a possible new war, the [illegible], who are surely the best judges, think differently. It is nearer from Chambery to Verona than from Rome to the Mincio. The motive for which the Emperor [illegible], in spite of his own inclinations, an army of occupation [illegible], was his desire to conciliate the two great social forces [illegible] and nationality. He thought the Papacy and Italy would make mutual concessions, which are in their common interest. He is obliged to confess that Italy alone has shown [illegible] disposed to make them. If the Pope has not constituted that limited liberal government which would have [illegible] many animosities and spared many sufferings, Victor Emmanuel has established it. Constitutional liberty has spread its rays from Turin all over the Peninsula. It is this which has attracted all Italy towards him, and has made it a nation. Now, the Romans, on whom the reflex of this liberty has fallen from afar at first, but drawing nearer by degrees, will likewise enter into possession of the law which gives it. The Romans are in the right; and the Powers which were so frightened in 1849 by the power of the Triumvirs will find now that the constitutional authority of Victor Emmanuel will be a greater guarantee for political order and religious liberty than that given at present by the reactionary authority of the cardinals. All we can say to-day is that there is no guarantee, material or moral, which has not been offered by the Italian Ministers to secure the independence of the Sovereign Pontiff. Every one will be able to convince himself of this as soon as the moment shall have come to publish these important documents. In the days of reflection which are still remaining to the Holy Father will truth appear to him! We have seen kings abdicate to avoid useless effusion of blood; why should the common Father of the Faithful, the vicar of Him who died for the salvation of mankind, not abdicate spontaneously a temporal power with which he can do no more good and which is the cause of so much misery? Let Pius IX. remember the enthusiasm which he excited by pronouncing the word Italy. Oh! if by an *élan* of his heart he could return to those glorious days he would recover in a moment all the popularity of his first years. No doubt it is vain to abandon one's self to these visions. It will be at least a great consolation for Italy as well as for France that nothing has been neglected to establish concord and conciliation. If the Court of Rome remains obstinate, then nothing remains but an appeal to the Roman people. The plebiscité will take place under the eyes of the French army. Who will suspect it? And the morning after, if Victor Emmanuel is called upon to reign in Rome, the French troops will be successively relieved by Italian troops, so that nothing should be left to chance, and that no disorder should happen. The King of Italy will [illegible] then the convention between him and the Catholic Powers with a view of insuring the independence of the Holy See and the splendour of the Catholic religion. The Pope then may do as he pleases. He will remain or depart. On him be the responsibility of religious division. It is hoped that the Pope will not take refuge in the camp of the reaction, by which he would lose his spiritual power also, but that, on the contrary, he will put himself at the head of all grand and noble ideas and purify them by his patronage. Then the Papacy will act according to its own inspiration. But it will have no cause of complaint, for who will see a martyr in the Pope? If the Pope blesses Italy, then a new day will dawn for the Church; if not, let destiny be accomplished. But Rome will not be less the capital of Italy."

Spain.—General Marchesi has been sent to Biarritz to compliment the Emperor in the name of Queen Isabella. The Cortes will open on the 25th October. It is said that the speech from the Throne will announce constitutional reforms, in accordance with the political views of the Liberal Union party. The *Epoca* of Wednesday contains a remarkable article, in which it says:—"In view of the present state of things in Europe it is necessary to evacuate Tetuan on honourable conditions, in order to allow of the concentration of the Spanish forces." The *Correspondencia Autografa*, in alluding to this article, declares that no resolution has yet been taken on the question, but that it is not impossible that the Government entertains those views. Several of the Opposition papers have been seized. The authorities of Granada having reason to believe that Perez, the chief of the insurrection at Loja, is secreted in their province, notwithstanding the report that he had succeeded in escaping to Portugal or England, the most skilful police officers of Madrid have been sent down to assist the local authorities in making an active search for him. The formation of a camp in the environs of Carabancheles, not far from Madrid, has been resolved on. In Catalonia the drought has been excessive, and in several places the crops of maize and vegetables had been completely burnt up. In all parts of the province prayers for rain have been offered up.

Denmark.—General Soloroli, of the Italian army, was expected to arrive at Copenhagen on Tuesday, with the insignia of the Order of the Annunziata for the King of Denmark. The Danish Diet is convoked for the 5th of October. The King was present on Monday at a rifle society festival at Copenhagen, and in answer to a patriotic toast, proposed by the chairman, delivered a speech from which the following is an extract:—

"When I became King I wished that the tree of liberty of which we have here spoken should flourish over my whole kingdom, but the time was not come, the fruit was not everywhere equally ripe: not in Schleswig Holstein and Lauenburg, as in Denmark. What can I therefore do since the sun has ripened the fruit more in Denmark than in the other parts of the country? So long as the fruit is not ripe there we must let it hang, but I hope that it will soon be equally ripe over my entire kingdom."

Belgium.—The Chambers of Commerce throughout Belgium have no sympathy with the Ghent manufacturers in their opposition to the treaty of commerce with England. The Chambers of Antwerp, Liege, Nevilles, and Brussels, have emphatically pronounced in favour of a commercial treaty with England on precisely the same footing as that of France; and the Free Trade Association of Belgium has summoned a great meeting to be held in Brussels on the 23d inst., for the purpose of refuting the allegations made by the Ghent manufacturers, and has challenged the latter to attend the meeting and to discuss the questions at issue fairly and openly in the face of the world.

Switzerland.—The Federal Council has received a note from the French Government, stating that it considers the scandalous affair which took place on the frontiers of the canton of Geneva on the 25th of August, when the Swiss officials attempted to levy tolls on an itinerant French pastrycook who had set up his stall within their jurisdiction, as a violation of the French territory. The note of the French Government demands satisfaction on this account, and an indemnity to be paid to those wounded and arrested on that occasion. The Federal Council is now negotiating with the Belgian Government for the conclusion of a treaty of commerce with every prospect of success.

Austria.—In the Lower House of the Reichsrath on Friday Baron Schmerling, the Minister of State, spoke in support of the proposed Address, and defended the policy of the Government in regard to Hungary. The following are the principal passages of his speech:—

"The attacks directed against the Ministry bear on two principal points. The conduct of the Ministry in transmitting the communication to the Chamber has been condemned as unconstitutional, and the Ministry has been further reproached with having made this communication solely with a view to obtain a vote of confidence. In the name of the Ministry I formally protest against this double accusation. The course it has taken in making this communication to the Reichsrath is nowise unconstitutional. In calling upon the Hungarian Diet to acknowledge the constitution the Ministry was in the right. We Ministers, who were in the exercise of our functions on the 20th October, and for whom the 20th October was an accomplished fact, were indisputably in a position to acknowledge that on the 20th October the men whom his Majesty had charged to draw up the diploma ought to have formed an opinion of the attitude which his Majesty had to take with regard to the Diet and the Hungarian constitution. Allow me now to discuss the motives which decided the Hungarian Diet against the constitution of the 26th February. It is now especially objected against this constitution that it created a representation, an authority differing from those of the October diploma. I grant the first point, but I absolutely deny the second. The diploma of October contains no provision as to the number of deputies, fixes for the moment the number of members of the Reichsrath at 100; there is nothing definitive, therefore, on that point. If I now consider that perhaps 25 deputies elected by the Hungarian Diet had taken their places in the Reichsrath, and if that Reichsrath had comprised 100 members, according to the original arrangement, I think the proportion would have been nearly the same as at present if 85 Hungarians take their places among 343 deputies. If you examine with impartiality the situation in which Hungary was when, after the catastrophes of Temeswar, Komorn, and Vilagos, it fell into the power of Austria, and in what a situation she was, as well as a great part of her functionaries, who had devoted their activity to the administration of the country, when 20th Oct. arrived, I think that the balance-sheet will not be to the prejudice of the Austrian Government. What is required to make a nation happy? Two things, I grant—first, forms which respond to its liberty; and next, that which satisfies its material wants. I admit that a country such as Hungary, which has for centuries, and still longer, enjoyed a political constitutional existence, must strongly regret the absence of it; but we must nevertheless agree that if the Austrian Government has, on the one hand, suppressed liberty in Hungary, it has on the other done much for the welfare of the country. Yes, gentlemen, I loudly repeat, it has done much. As to the situation in which the administration of justice was when the Austrian Government retook the country, you will excuse my not entering into more ample details. As regards instruction the path of progress has also been entered on. The torch of science has been carried by this abominable Austrian Government, as it has been called, into countries where Christianity was previously scarcely known. If the Minister, Count Thun, had created nothing more than the schools of the Puestus, he would have merited the gratitude of every Hungarian patriot. The Deputy Smolka says that, in order to come to an understanding with Hungary, we must concede without reserve to that country the position in which it stood in 1848—must complete the Hungarian Diet, and wait to see what portion of its constitutional prerogatives that Diet will voluntarily sacrifice to the central constitution. I however, confess that I should hesitate greatly to employ that plan. I say that the man who is in possession of his house is happy, and that no one has even been advised to give up possession so long as he could maintain it. I affirm that a general would be blamed by all soldiers if he were to abandon an excellent position with the prospect of being obliged to retake it the next day at perhaps the cost of 10,000 dead; he would do better to remain in the position, and to incur the risk of being attacked and expelled. Such is the point of view which the Austrian Government adopts, and must adopt; and the Government will not abandon it voluntarily to obtain perhaps part of its prerogatives as a concession and a gift of the Hungarian Diet. The second plan recommended to us is to abandon spontaneously our constitution and establish a new one. It has often been proved in this Chamber that what has brought Austria to the brink of ruin, as is said, was the frequent making of political experiments. And yet a new experiment is recommended! I regret, both in my own name and that of my colleagues, not to be able to declare that we are disposed to make one, especially as no guarantee can be given that it would cause us to attain the object at which we aim. From all that precedes, gentlemen, I think it right to declare explicitly that the Government intends to maintain the constitution; that if a portion of the inhabitants of Austria has not yet accepted it, the designs of the Government will not be in any respect changed on that account, and that it will appeal from a nation ill informed to one which will be more enlightened; waiting with calm for the moment at which the conviction that there is a place in the Austrian Parliament for all the nations and all the tribes of the empire shall have penetrated every Austrian heart. Such is the profession of political views which I frankly make for myself and my colleagues."

On Tuesday the address was passed in the Lower House; the Polish members abstained from voting. The Emperor left Vienna on Wednesday evening, for Ischl, and is expected to return on Sunday, in order to receive the address of the Lower House. His Majesty, in his reply to the Address of the Upper House, expresses sincere satisfaction at the magnanimous sentiments of the House and the fidelity to the Constitution which it displays. His Majesty is gratified that the Upper House acknowledges the necessity for firmness in conducting his work to a conclusion. The Emperor trusts also in the people becoming conscious that the emulation springing from common exertions is more adapted for the development of nations in equal rights than for each to act independently. The Government Bill for the reform of the administration of justice has been rejected by the Lower House.

Hungary.—A despatch from Pesth, dated Wednesday last, states that the Cardinal Archbishop of Gran has pronounced against the dissolution of the Hungarian Diet, and defends the resolutions adopted by it. The committees of eight Comitats, as well as the Municipality of Pesth, have been dissolved by order of the Government. The Municipality of Pesth on Saturday resolved that in the event of its dissolution by the Government the Municipal officers shall continue to perform their functions until coercive measures are employed against them. The Comitat of Miskolcz has passed a resolution concurring in the protest of the Comitat of Pesth against the dissolution of the Diet. It is expected that similar resolutions will also be passed by the other Comitats of Hungary. The Royal Commissioner has been authorised by the Hungarian Chancellor to appoint and to dismiss municipal functionaries, to himself assume the administration of the Comitat and the city of Pesth in case of need, and to employ military force if necessary. The Hungarian Chancellor, however, declares that the Emperor has no intention of suspending the Constitutional institutions. An insurrectionary movement has broken out among the Roumains at Lugos. No details are yet known.

Croatia.—In the sitting of the Croatian Diet on Tuesday a proposition was made by one of the members that the Diet should enter on the minutes the expression of its regret on account of the dissolution of the Hungarian Diet.

Russia.—The Emperor of Russia, accompanied by the Empress, is making a tour through his dominions. After visiting Odessa their Majesties will proceed to Nicolaieff, to attend the launch of the two steam corvettes the Wiepo and Woin, and will then inspect the great canal works on the Boug and Ingoul. Their Majesties will then successively visit Basthi-Sarai, Simpheropol, Sebastopol, and the Castle of Orianda, on the southern shore of the Crimea, which the Emperor Nicholas built for the Empress Alexandrowna, mother of the present Emperor. On leaving Orianda their Majesties will visit Kaffa, Taganrog, and the Sea of Azoff.

Poland.—A solemn funeral service for those who fell in the recent disturbances at Wilna was held on Tuesday in all the churches and synagogues of Warsaw. The people wore mourning bands on their hats, and the shops were closed. At Cracow there was also a funeral service for those who fell at Wilna, but the police interfered and compelled the tradespeople to re-open their shops. Many persons were arrested.

Finland.—The deputies sent from Finland to Stockholm to demand its separation from Russia are said to have been arrested by the Russian authorities on a charge of treason.

Italy.—The King received M. Benedetti, the new French Minister, on Saturday. The nomination of General Della Rovere to the office of Minister of War appears to have been definitively determined on. Signor Borromeo, Secretary-General to the Ministry of the Interior, has resigned. Signor Minghetti has tendered his resignation, which has not yet been accepted. Baron Ricasoli will assume the portfolio of Minister of the Interior, retaining also that of Foreign Affairs until the solution of the Roman question. It is asserted that the retirement of Signor Minghetti has been caused by a difference of opinion with the majority upon the means and the period for the suppression of the Lieutenancy of Naples. Signor Brignone has not accepted the Lieutenancy of Sicily, which, it is rumoured, will be offered to General Pellinengo. The Minister of Finance has authorised Messrs. Rothschild, of Paris, to receive the instalment of the second tenth of the Italian loan on presentation of the certificates. The army of the ex-Duke of Modena, numbering 7000 men, has received a piece of ordnance from Austria, and is about to be concentrated at Mantua. A despatch from Naples announces that the concession for the railways from Tronto to Foggia and from Salerno to Eboli has been granted to a company, which, according to the conditions of the contract, will immediately commence the works. It was reputed at Naples that General Cialdini was making the necessary preparations for crossing the Roman frontier and pursuing the brigands even into the courtyards of the Quirinal, where they are trained in military manœuvres. On the other hand the French papers say that formal instructions have been sent to the French officers to allow no detachments of Piedmontese troops to penetrate into the Roman territory. Reinforcements to the extent of 900 men have landed at Civita Vecchia from France. Fresh Italian troops have also been sent to Naples, but the official papers state that their despatch is caused solely by the fatigue which the troops now at Naples have to undergo, and not

by the increase of brigandage, which is almost entirely eradicated. A disembarcation of Reactionists was effected during the night near San Elpidio, in the province of Ascoli. A troop of National Guards hastened to the spot, and pursued them. The brigands have been beaten and dispersed at several points, and their numbers were sensibly diminishing. A band of 400 brigands has set out from the Roman town of Velletri, in the direction of the Terra di Lavoro. On Monday 50 Piedmontese soldiers attacked Epitaffio, on the Neapolitan frontier, but were repulsed by the Papal gendarmes. A company of French troops has since occupied Epitaffio. An encounter has also taken place between some Papal gendarmes and Piedmontese troops on the road between Orvieto and Bolsena. The Piedmontese troops suffered no loss. A despatch from Perugia states that the French were actively watching the frontiers, and that several encounters had taken place between the French troops and the brigands who wished to penetrate into Italian territory. The report in the French papers that the English fleet left Naples and returned to Malta on the 26th ult., was premature. Accounts from Naples direct announce that it had simply gone for a cruise, and was not finally to leave Naples till Thursday the 5th. inst.

TURKEY.—The Pasha of Egypt, who is now at Constantinople, is said to be seeking permission to raise another loan, to guaranteed by the Egyptian revenue. The collection of the forced loan has been begun in the provinces. Strong reinforcements have been despatched to the Herzegovina.

SYRIA.—It is stated that the French squadron will return from Syria in the early part of October, calling on its way home at the different stations in the Levant and on the coasts of Italy.

UNITED STATES.—It is reported from Washington that the Confederates have organised a plan to cross the Potomac in a few days into Maryland and below Washington with a large force, and that for this purpose they have erected heavy batteries at Aquia Creek and Mathias Point. The plan includes the capture of Annapolis and an attack on Washington from the northern side. A proclamation has been issued ordering all the volunteer regiments and parts of regiments which have been accepted by the War Department to proceed to Washington forthwith, with or without uniforms or arms. The volunteers are leaving as fast as possible. In consequence of a report that the Confederates had crossed the Potomac, a thorough examination of the river has been made by order of the Navy Department, but no signs of a hostile force have been found. President Lincoln has issued a proclamation notifying that all persons leaving or going to a suspected State must be provided with passports from the Secretary of State, or an American Minister abroad; and that no person will be allowed to land in the United States without a passport after this regulation shall become known abroad. This new passport system does not necessitate passports for travellers between Canada and the United States. It is reported that the President is about to issue a proclamation declaring all the Southern ports to be no longer ports of entry. An order has been issued by General Scott, uniting the military departments of Washington and North-Eastern Virginia, including Maryland as far as Bladensburgh, into one department, to be called the Department of the Potomac, and to be under the control of General M'Clellan, who is ordered to proceed to organise the troops in the Department in divisions and independent brigades. Since the battle of Bull's Run 161 commissioned officers of the three years' volunteers in the Federal army have resigned. A mutiny has occurred in the 21st Buffalo Regiment, and 40 of the men have been imprisoned in Fort Tortugas. Symptoms of insubordination have exhibited themselves in the New York 12th and 21st Regiments. Numerous petitions from the Federal prisoners at Richmond have been forwarded to President Lincoln, praying for a recognition of the Confederate government as belligerent, so far as an exchange of prisoners is concerned. It has been determined that the uniform of the Federal army shall be blue. The latest advices from Fairfax Court House report that the Confederates have withdrawn precipitately a mile beyond Fairfax Court House, leaving only the pickets in the village; and that they are concentrating at Leesburg, where they have already several thousand, supported by artillery. Another report says that the Confederate forces have retired to Centreville. It is said that General Beauregard has been reinforced by 15,000 or 20,000 men since the battle of Bull's Run. Major Lynd, of the 7th Infantry, has surrendered with 500 troops, in New Mexico, without firing a gun. He abandoned Fort Fillmore on the 26th July, and marched towards Fort Staunton, 18 miles distant, where he surrendered his whole command. The Federal troops, under General Siegel, in Missouri, who were lately engaged in the battle at Springfield, are at present encamped at Rolla. The report that General M'Culloch, the Confederate general, was killed in the battle was without foundation. It now appears that on Thursday after the fight he pursued General Siegel with 8000 cavalry and nine pieces of artillery, but ultimately gave up the pursuit and went towards Jefferson city. General Price, the other Confederate general whom the Federals returned as killed, has recently issued a proclamation to the Missourians in which he claims the victory at Springfield as a glorious one, and denounces President Lincoln as a usurper. It was reported that the Confederates were preparing to invade Missouri, and intended to commence a movement on the Cheat Mountain Pass. Great excitement prevailed throughout Missouri, on account of the active movements of the Confederate troops, who had occupied many towns of South-Western Missouri. The Wheeling Convention has passed an ordinance for the division of Virginia and the establishment of a new State, to be called Kanamha. It is stated that General Banks has advanced to take possession of Winchester, Virginia, in face of 4000 Confederates. A skirmish has occurred in Western Virginia between 4000 Confederates and the 71st Ohio Regiment. The Confederates were repulsed with the loss of 50 killed and many wounded. On the the Federal side none were killed and two wounded. A despatch, dated Washington, the 22d, states that a slave insurrection had occurred in Orange County, Virginia, instigated by a negro preacher. Several negroes were hung. General Wool assumed the command at Fort Monroe on the 19th ult. The official account of the vote on the question of secession in Tennessee shows a majority of 54,936 in favour of secession. The Secessionists in Kansas are actively engaged in organising their forces. Rumours of an attack on Kansas City were current on the 22d ult. It is reported that the Federal Government will no longer allow Kentucky to maintain a neutral position. The Mayor of Washington has refused to take the oath of allegiance to the Federal Government. Numerous arrests for treason continue to take place, and the number of prisoners at Fort Lafayette is increasing daily. Among those recently arrested and sent there as state prisoners, is Mr. Pierce Butler, the gentleman who married Miss Fanny Kemble. His arrest was caused by the seizure of a parcel of letters on their way across the Potomac, addressed by him to Generals Beauregard, Johnstone, Jefferson Davis, and other prominent men among the Secessionists. It was followed by the arrests of Mr. Wm. B. Beard, late minister to China; Mr. George M. Wharton, late United States District Attorney; Mr. Charles Brown, ex-collector of the port, and Mr. David Solomon. On the arrival of the New York train at Philadelphia, on the 22d ult., the United States' Marshal seized every copy of the *New York Daily News*, including upwards of 1000 copies for the South and West. The sale office at Philadelphia was also totally suppressed. The *Christian Observer* has also been seized in consequence of a virulent article on the war. Mr. Everett has published an article in favour of arresting every editor, writer, or speaker in the North who aids the cause of the rebellion. The editor of the *Essex County Democrat*, a journal opposed to the war, had been taken from his house by a mob of several hundred citizens, led down to the centre of the town, made to strip himself, and then tarred and feathered. He was then placed astride a rail, ridden round the town, and made to kneel before the crowd and promise on oath that he would print no more articles against the North. The editor of the *Eastern Sentinel*, a Pennsylvanian paper, had shared a somewhat similar, though not so severe a fate. Mr. Serrill, who was seized on board the Persia, and Mr. Mure, who was taken from the Africa, are still confined in Fort Lafayette. The friends of the latter gentleman had failed in their endeavours to obtain his release. The case of the Baltimore police commissioners has been disposed of, Judge Garrison submitting to the inevitable necessity of dismissing the prisoners. The Confederate Congress has forbidden the overland exportation of sugar, rice, molasses, and syrups. The *New York Times* states that rumours are current of dissensions amongst the Confederate leaders at Richmond on the State question. A report was current, founded on doubtful authority, that the Confederate privateer Sumter had been captured off Curaçoa by the Niagara. It appears that she is still at liberty. A Curaçoa letter, dated the 7th of August, states that she had captured the schooner Abbey Bradford, and the bark Joseph Maxwell, off Laguayra. The Venezuela Government refused her admittance into port, and despatched a vessel to the north of Laguayra to retake the Joseph Maxwell, which was anchored among the reefs, by order of the War Department. The privateer Jeff. Davis was at St. John's, Porto Rico, on the 27th of July, and was allowed to water. The privateer Echo was cruising on the Turks Island Passage. Her Majesty's ship Gladiator has arrived at New York. The journals of that city are indignant at the conduct of Captain Hickley in refusing the assistance of an American pilot to take the ship into port, and declare that this circumstance is a proof that the English sailors are making themselves acquainted with the channels and soundings, with a view to future contingencies. Captain Hickley is reported to have remonstrated with Commodore Stringham on the laxity of the blockade at the entrance of Cape Fear river, Wilmington, Beaufort, and Ocracoke Inlet to Pamlico Sound.

MEXICO.—Accounts from Mexico state that M. Dubois de Saligny, the French minister at Mexico, has broken off relations with the Government. The English minister has adopted the same line of conduct. Several ships of war have arrived at Vera Cruz.

SAN DOMINGO.—President Geffrard, of Hayti, paid the indemnity demanded by Spain.

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 93 to ⅛ both for Money and Account; Three per Cents. Reduced, 91⅜ to ¼; New Three per Cents., 91½ to ⅜; India Five per Cent. Stock, ...; Ditto for Acct., 103⅝; Ditto Scrip, 104...; Ditto Bonds, 7s. prem.; Five per Cent. Enfaced Rupee Paper, ... to 96½; Ditto Five and a Half per Cent., 104 ...; Exchequer Bills, 2s. dis. to 2s. prem.; Ditto June, ... —FOREIGN: Brazilian Old Five per Cents, ... 100¼; Buenos Ayres Six per Cents., for Acct., ...; Ditto Deferred, 29; Danish Three per Cents., ...; Equador New Consolidated, 15⅜, ex div.; ... Three per Cents., for Acct., 21⅜; Peruvian Four and a Half per Cent. Dollar Bonds, 86; Russian Four and a Half per Cents., 90⅞; Spanish Three per Cents., for Acct., 49⅞; Committee's Certificates, 5½ to ...; ... Six per Cents., 1854, for Acct., 81½ to ...; ... 67½; Ditto for Acct., 67½ to 68⅛ ex div.; ... Bonds, 70¼.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£26,973,300	Government Debt ..	[illegible]
		Other Securities	[illegible]
		Gold Coin and Bullion	[illegible]
		Silver Bullion ..	[illegible]
	£26,973,300		[illegible]

BANKING DEPARTMENT.

Proprietors' Capital ..	£14,553,000	Government Securities (including Dead Weight Annuity)	[illegible]
Rest	3,783,761	Other Securities ..	[illegible]
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	4,284,485	Notes	[illegible]
Other Deposits	12,196,813	Gold and Silver Coin	[illegible]
Seven day and other bills	714,017		
	£35,532,076		[illegible]

5th day of Sept., 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY — BANKRUPTS — E. ALSTON, Ashton under Lyne, and Accrington, Lancashire, Grocer and Tea Dealer—S. H. BECK, ... Milliner—S. BESS, Meltham, Almondbury, Yorkshire, Grocer ... —J. CARTER, West Hartlepool, Builder and Timber Merchant— ... West Hartlepool, Ship Chandler and Provision Dealer— ... Cowper's Court, Cornhill, Tavern Keeper—E. FONTANA, ... City, Merchant—H. J. HALL, Chapel Close, Berkshire, ... Farrier and Shoeing Smith—T. HIND, Burnley, Lancashire, ... Merchant and Builder—F. N. C. JARDINE, Tottenham Court Road ... Winchester Place, Bayswater, Wine and Spirit Merchant— ... Newport, Monmouthshire, Travelling Draper—T. R. OSMAN, ... Shipbuilder—J. READER, Birmingham, Galvanised Iron Roof Manufacturer —G. SELIG, North Buildings, Finsbury Circus, Dealer in ... Jewellery, formerly of Manchester—J. T. SHELDERS ... Poplar, and Woodbridge Street, Clerkenwell, Timber Merchant— ... SPARK, Great Coram Street, Russell Square, Watchmaker and Jeweller— W. TERRY, Birmingham, Plater and Spur Manufacturer— ... Lyme Regis, Dorsetshire, Innkeeper—C. TURNER, ...

SCOTCH SEQUESTRATIONS — D. KIRK ... — ... MASON, jun., Fisherrow, Edinburgh, Timber Merchant— ... nethan, Lanarkshire, Builder.

FRIDAY — BANKRUPTS — W. CAMERON, Bristol, Draper— ... CANNON, Croydon, Auctioneer—J. COOPER, Manchester, ... Merchant—J. L. FUGGLE, Gutter Lane, Cheapside, ... —H. M. RADLOFF, Chicksand Street, Whitechapel, ... Place, Limehouse, Seed Crusher, Oil Refiner, and Soap ... RUDGARD, Lincoln, Maltster and Brewer—T. SMITH, ... Finisher and Hot Presser—D. W. TAYLOR, Glamorganshire, ...

Metropolis and its Vicinity.

LOSS OF HER MAJESTY'S STEAM-SLOOP D...—Intelligence was received on Thursday at the Admiralty of the loss of Her Majesty's steam-sloop D..., Commander Horatio Nelson, on one of the numerous ... which surround the Bahama Islands. All the ... and crew were saved, and it is expected that the ... and other public stores will be recovered. The ... was only commissioned at Woolwich in May last ... was a fine roomy vessel of her class. She mounted ... guns, was 1056 tons burden, had a nominal ... power of 280 horses, and had a complement of ... officers and men.

INTERNATIONAL EXHIBITION OF 1862.—Her Majesty's Commissioners have received a communication from Herr Meyerbeer, stating that, in compliance with their request, he will compose a march for the opening ceremony.—It has been decided that prizes ... wards of merit, in the form of medals, ... given in Sections I., II., III. These medals ... be of one class, for merit, without any distinction of degree. No exhibitor will receive more than one medal in any class or sub-class. An international jury will be formed for each class and sub-class ... Exhibition, by whom the medals will be ... Each foreign commission will be at liberty to ... one member of the jury for each class and sub-class ... which staple industries of their country and its ... dencies are represented. The names of the ... jurors must be sent to her Majesty's Commissioners before the 28th of February, 1862. The British ... will be chosen in the following manner:—Every exhibitor will name three persons to act on the jury ... each class or sub-class in which he exhibits, and from ... persons so named, her Majesty's Commissioners will ... three members of the jury for each such class or sub-class. Her Majesty's Commissioners reserve to themselves ... power of modifying these arrangements in any ... case where it may appear to them that the ... cation of the principles of these decisions ... attended with injustice. The names of the jurors ... be published in March, 1862. The juries ... required to submit their awards, with a brief ...

of the grounds of each, to her Majesty's Commissioners before the last day of May, 1862. Should the reasons assigned for any award appear insufficient, or should no reason be given, her Majesty's Commissioners reserve to themselves the right of confirming or rejecting it. The awards will be published in the Exhibition Building, at a public ceremony early in the month of June, 1862. They will immediately afterwards be conspicuously attached to the counters of the successful exhibitors, and the grounds of each award will be very briefly stated. If an exhibitor accepts the office of juror, no medal can be awarded in the class or subclass to which he is appointed either to himself individually or to the firm in which he may be a partner. The medals will be delivered to the exhibitors on the last day of the Exhibition.

The Income Tax.—The following report of the Select Committee of the House of Commons, appointed on the motion of Mr. Hubbard to consider the Property and Income Tax, was issued on Saturday:—

"The select committee appointed to inquire into the present mode of assessing and collecting the Income and Property Tax, and whether any mode of levying the same, so as to render the tax more equitable, can be adopted, have considered the matters to them referred, and have agreed to the following report: Your committee have proceeded in this inquiry, and having examined witnesses thereon, have agreed to report the following observations to the House:—The question submitted to your committee was very fully investigated by a select committee appointed in the year 1851, and re-appointed in 1852, on the motion of the late Mr. Hume, who laid before it a scheme for the conversion of the present Income and Property Tax into a tax to be adjusted in accordance with—1st, The value of the property; 2d, The tenure of the owner; 3d, The age of the owner. The chief officers of the Inland Revenue Department, to whom this scheme was at that time communicated, expressed a strong opinion that its administration would be attended with insurmountable difficulties; and your committee see no reason for questioning the correctness of this opinion. The attention of your committee, on the present occasion, has been mainly directed to another scheme, proposed by their chairman, and explained by him both in written memoranda and in oral evidence, the principal features of which appear to be as follows:—1st. A proposal to make net, instead of gross, income the basis of assessment to the tax; not ascertaining the net income by an account of actual outgoings, but assuming it by a deduction founded on an average, from certain classes of gross income. 2nd. A proposal to divide all incomes into two classes, of which the one should comprise incomes called spontaneous, the other incomes called industrial; and to tax the former upon the full amount of the net income, and the latter upon two-thirds of that amount. 3rd. A proposal to distinguish in certain cases between the interest of invested capital and the repayment by instalments of the invested capital itself, and to levy the tax upon the interest only, and not upon the repaid portions of capital. These three proposals are addressed to three complaints which are popularly made against the income-tax in its present form; viz., that it taxes the owners of property in respect of income which they do not get; that it presses too hardly upon skill and industry as compared with property; and that it deals with capital in certain cases as if it were income, and taxes it accordingly. The proposals which your committee have had under consideration are framed upon the assumption that the complaints to which your committee have adverted are well founded, and they are contrived with much ingenuity with a view to meeting them. Your committee, however, after full consideration, have arrived at the conclusion that the plan proposed by their chairman does not afford a basis for a practicable and equitable readjustment of the Income-tax; and they feel so strongly the dangers and ill consequences to be apprehended from an attempt to unsettle the present basis of the tax, without a clear perception of the mode in which it is to be reconstructed, that they are not prepared to offer to your honourable House any suggestions for its amendments. This tax having now been made the subject of investigation before two committees, and no proposal for its amendment having been found satisfactory, your committee are brought to the conclusion that the objections which are urged against it, are objections to its nature and essence rather than to the particular shape which has been given to it. Your committee also feel that it would be unjust to make any alteration in the present incidence of the Income Tax without, at the same time, taking into consideration the pressure of other taxation upon the various interests of the country, some of it imposed by recent legislation, and in one case especially, that of the succession duty, to some extent by way of compensation."

New Minute on Education.—A new minute has been issued by the Committee of the Privy Council on Education, establishing a revised code of regulations for the distribution of the Parliamentary grant. It provides that the managers of schools may claim annually per scholar 1*d.* for every attendance (morning or afternoon) after the first 100 attendances, and for scholars over 13 years old after the first 12 in the evening, but no third attendance on the same day is to be counted; attendances under the half-time acts to be multiplied by two. The Royal Commissioners estimated the cost of education at 30*s.* a-year, and recommended that the average grant obtainable should be about 10*s.* per child, but never exceeding 15*s.* Now 15*s.* may be earned, according to this scale, by an attendance for 140 days twice a-day. But the calculation is this:—taking a school of 100 children, 20 might make less than 100 attendances, and so count for nothing, 20 between 100 and 200 attendances, 20 between 200 and 300, 20 between 300 and 400, and 20 between 400 and 440, making the grant 64*l.* 3*s.* 4*d.*, but it is reckoned that including the evening scholars the average would not exceed 10*s.* a-head; for the grant is subject to reduction on examination; one-third is to be forfeited where a child fails to satisfy the inspector in reading, one-third if in writing, one-third if in arithmetic, the nature of the examination to be regulated by the age of the scholar. The grant is also to be reduced for faults of instruction or discipline on the part of the teacher, or for continued neglect of the managers to remedy serious deficiencies, whether in the school or in the number of qualified teachers. A reduction is to be made also if necessary, so that the grant do not exceed the amount of school fees and subscriptions, and do not exceed the rate of 15*s.* per scholar in average attendance. But, besides securing that the children have attended a proper number of times, and that some result has come of it, it is required that in every school assisted the principal teacher be certificated. There is, however, to be a fourth, or lower class of certificates, which will include special certificates for teachers of infants. A teacher cannot be certificated without being examined; but he need not go to a normal school if, being 22 years old, he has obtained at least two favourable reports, with an interval of a year between them, upon the school in which he is still employed. A pupil teacher completing his apprenticeship may become an assistant or may be provisionally certified (until 25) for immediate service in charge of a small rural school. The minute and code are to come into force after the next annual grant falls due, and immediately as to new apprenticeships; but where the next payment of annual grants falls due later than next March the managers may have that payment under this revised code if they take upon them the charge of the now current apprenticeships.

St. Thomas's Hospital.—The Charing Cross Railway Company, after a large amount of litigation, have been compelled to purchase the whole of St. Thomas's Hospital. It will be remembered that when the Railway Bill was first before Parliament the Governors of the Hospital opposed it in both Houses, showing by the evidence of their medical officers that if the railway were constructed as proposed it would destroy the hospital. Both Houses admitted this view of the case to a considerable extent, and the Lords passed the preamble of the Bill with a resolution to that effect. Early in the present year the Railway Company gave notice to take the portion of the hospital they required. The Governors called upon the Company to take the whole hospital. This led to an appeal to the Court of Chancery, when Vice-Chancellor Wood granted an injunction restraining the Company from taking a portion, and compelling them to buy the whole. The Company did not appeal against this decision, but applied to the House of Commons for a Bill to enable them to take the portion only. The House of Commons refused to suspend the Standing Orders, and the attempt failed. A few days before the last half-yearly meeting the railway company abandoned all further efforts, and gave notice of their intention to buy the whole hospital and its appurtenances. The question of value will now, therefore, be determined under the powers of the Lands Clauses Acts, by arbitration. The land occupied by the hospital is said to be 3½ acres, and, with the buildings, is reported to be valued in round figures at nearly half a million. The hospital will consequently be removed and rebuilt, but at present no site is even suggested. By a clause in the Act no part of the hospital can be touched for 12 months after the notice is given.

New Entrance to the Temple.—A new entrance to the Temple from the bottom of Essex Street, Strand, was completed on Tuesday. It opens opposite the New Library Chambers, and is built of Portland stone in the same style of architecture.

Adulteration of Articles Liable to Duty.—The report of Mr. Phillips, the head of the laboratory department of the Inland Revenue, has just been published for the year ending the 31st of March. He states that the analyses made during the 12 months amounted to nearly 11,000, and that the officers have become so efficient that although some of these analyses had to be sustained in courts of justice, not an instance has occurred of any one of them having been shown to be wrong. The articles on which Mr. Phillips specially reports are tobacco, snuff, pepper, coffee, beer and hops, and malt. With regard to tobacco, it is stated, that although it would be absurd to suppose that the smuggling and adulteration of an article subject to a duty of about 700 per cent. upon its cost can be entirely prevented, there is reason to believe that frauds are rare, and that the revenue from this article is comparatively well secured. An inspection of most of the tobacco manufactories in Ireland, and of many of those in England, during the year, has taken place without the discovery of a single practice that could be deemed illicit. Of five adulterated samples purchased, it is to be presumed, of retail dealers, the illicit materials consisted of burdock, coltsfoot, and cabbage leaves, sugar, common salt, and oil. Of snuff it is stated that owing to the great diminution which has taken place during the last four or five years in the adulteration of this article, it has been found necessary to examine only ten samples. Of these, three, which all came from Ireland, proved to have been sophisticated with peat-moss and ground Pine-wood. Pepper, it is believed, is still extensively sold in an adulterated state, and Mr. Phillips considers that the prevalence of the fraud is mainly due to the practices of some wholesale dealers in and grinders of the commodity. "The skilful and almost scientific manner in which pepper was so adulterated," he says, "and the care which is taken to render detection difficult and conviction doubtful, are alone sufficient to point out the source, as it is always easy on analysis to distinguish between the highly-finished article of the wholesale delinquent and the bungled production of the unscrupulous retailer." The illicit materials detected in the samples examined during the past year were rice, husks of red and white mustard, sago starch, and the starch of cereals. Coffee also continues to be extensively adulterated, and it is to this that the fact of the consumption not having increased during the last 14 years, in face of a reduction of duty, is supposed to be attributable. Chicory is the material almost universally employed, and within the past 12 months numerous samples which had been purchased as pure coffee have been analysed in the laboratory, and found to contain from 30 to 86 per cent. of chicory. From Glasgow and some other towns in Scotland many samples which were bought at the rate of 1*s.* 8*d.* per lb. have been found to contain from 50 to 70 per cent., and in one instance 84 per cent. of chicory. In samples sold at 1*s.* 4*d.* avowedly as mixtures of coffee and chicory, there is really, it is said, no limit to the proportion of the latter, and instances occur in localities chiefly inhabited by the very poor, where the samples prove to be composed of it entirely. Out of many thousand analyses, it has been found that, on an average, more than 29 per cent. of samples sold as pure coffee were adulterated with chicory, while of those sold as "mixtures of coffee and chicory," the proportion of chicory was more than 30 per cent. This is greater than in previous years, and Mr. Phillips remarks that it "at once gives the clue to the causes which are in operation in keeping down the importation of coffee."

Sale of Addiscombe and Haileybury.—On Friday the sale of these well-known military and civil institutions, which produced so many distinguished men in the service of the old East India Company, took place at the Auction Mart. It was stated that the property consisted of 90 acres, with the well-known residence of Lord Liverpool at Addiscombe, and its College, and 70 acres at Haileybury, with the barracks and other appurtenances. After considerable bidding both properties were knocked down to the British Land Company, Addiscombe, for 33,600*l.*, and Haileybridge for 15,200*l.* It is understood that both estates will be converted into freehold land allotments.

The Havelock Statue.—Although the statue to the memory of General Havelock in Trafalgar Square has been up some time, the inscription has only just been placed upon the pedestal. On the front it is as follows:—"To Major-General Sir Henry Havelock, K.C.B., and his brave companions during the campaign in India. 'Soldiers,—Your labours, your privations, your sufferings, and your valour will not be forgotten by a grateful country!—H. Havelock.'" The inscription on the back of the pedestal is as follows:—"The force commanded by Havelock consisted of the Staff, cavalry, Volunteers, 12th and 13th Irregulars, 3d Oude Irregulars; Royal Artillery—3d Company, 8th Battalion; Bengal Artillery—2d Company, 3d Battalion; 1st Company, 5th Battalion; 6th Company, 9th Battalion; Bengal Engineers; Infantry—5th Fusileers, 84th Regiment, 64th Regiment, 90th Light Infantry, 78th Highlanders, 1st Madras Fusileers, Ferozepore Regiment of Sikhs.—Behnes, sculpsit." The bronze of which the statue is composed, which has hitherto been as bright as when it left the furnace, is gradually turning black from exposure to the atmosphere, like the other statues in Trafalgar Square.

Statue to Sir Charles Barry.—A meeting of the subscribers to this memorial was held on the 12th ult., when the committee reported that the subscription amounted to 946*l.*; that they had applied to the Chief Commissioner of Works to be permitted to erect a marble statue in Westminster Hall, at the top of the steps leading to St. Stephen's Hall; that the Right Hon. W. Cowper expressed his willingness to grant this site, or one outside in Palace Yard, where the statues of Stephenson, Brunel, and Locke were to be erected; that the Committee on the Decoration of the Palace of Westminster had, however, refused the site in Westminster Hall, but offered the landing at the foot of the staircase in the inner lobby, leading to the committee rooms, commonly called the 'witnesses' lobby;' that the committee recommended the acceptance of this site, and that a marble statue by Mr. Foley, R.A., should be erected there. After discussion these recommendations were all adopted, and a subcommittee was appointed to carry them into effect. The statue, it is supposed, will be erected in the course of 12 months from this time.

The Strand Traffic.—For the last fortnight all traffic between Wellington Street and Chancery Lane has been suspended, in consequence of the pavement from St. Mary-le-Strand and Temple Bar having been taken up for the purpose of laying down an entirely new roadway of granite blocks on a solid concrete foundation. All omnibuses, carriages, and vehicles of every description, proceeding eastward towards the City, have therefore been obliged to take a circuitous route from the Strand to the City by passing through the narrow streets south of Lincoln's Inn Fields. Simultaneously with the repair of the road, the footway on the south side of the Strand to Temple Bar is to be widened upwards of 12 inches.

Life Annuities.—The life annuities payable at the National Debt Office are as many as 12,063 in number, and the annual payment is 929,336*l.* Nearly two-thirds of these annuities are under 60*l.* a year, and annuities to the amount of 110,476*l.* are altogether exempt from income-tax. Fifty-three of the annuities are of 1000*l.* or more, and eight persons have purchased 2000*l.* a year or upwards.

Value of Life Policies.—Extraordinary prices have recently been obtained at auction for policies of insurance, ranging as high as 85 per cent. above the

office value. At a sale of this description of property at the Mart on Wednesday week, the following prices were realised:—A policy in the Atlas for 2000*l.*, life aged 77, premium extinguished by bonuses, sold for 1560*l.*; office value, 1133*l.* A policy in the London Life for 2000*l.* on the same life, annual premium 10*l.* 2*s.* 4*d.*, sold for 1500*l.* A policy in the Guardian for 2000*l.*, life aged 62, annual premium 47*l.* 6*s.* 8*d.*, sold for 800*l.*; office value, 657*l.* A policy in the Crown for 500*l.*, life aged 68, annual premium 27*l.* 7*s.* 6*d.*, office value 133*l.*, sold for 180*l.* A policy in the Rock for 1000*l.*, life aged 67, annual premium 28*l.* 10*s.* 10*d.*, sold for 600*l.*, office value 435*l.*

LONDON SHOEBLACKS AND THEIR EARNINGS.—Nine years have elapsed since this branch of labour was introduced, and these boys, it is said, have earned about 11,950*l.* Their united earnings for the last financial year amounted to 4548*l.*—a sum representing the blacking and polishing of no less than 1,119,320 pairs of boots.

INCREASE IN THE PRICE OF GAS.—The three gas companies supplying the city of London with gas have issued a joint circular, stating that in consequence of the recent Act for regulating the supply of gas to the metropolis requiring, under heavy penalties, a greatly increased standard of illuminating power and purity, which will necessarily involve an increased cost of production, the Chartered, Great Central, and City of London Companies will in future charge 4*s.* 6*d.* per 1000 feet for the ordinary coal gas.

THE BUILDERS' STRIKE.—On Saturday the detachment of Sappers and Miners were withdrawn by the Government from Chelsea, where they have been employed ever since the strike in the erection of the new barracks, and the men have been ordered to return to their respective stations at Chatham, Portsmouth, and Woolwich. The authorities at the War Office determined on their withdrawal in consequence of the strong feeling entertained against any interference by the Government in the questions now at issue between the masters and the men in the building trade.

FACTORY CHILDREN. — By order of the House of Lords, on the motion of the Earl of Shaftesbury, some papers have just been printed relative to the transference of pauper children to the factory districts to be apprenticed to manufacturers. The children are commonly taken at about 13 years of age, and bound until they are 17, being during that period clothed, fed, and housed at the expense of the employer, and taught an occupation in which they may gain a livelihood. The industrial schools belonging to the parish of Liverpool having been nearly cleared, the spinners and manufacturers of Burnley have been making applications in London, being in great want both of boys and girls; and among this correspondence is a report made early this year to the directors of the poor of St. Pancras by their settlement officer, whom they sent down to Burnley to see with his own eyes the condition of such apprentices. He gives, apparently, a very exact account of what he saw and what he thought, describing with all honesty his astonishment at "the contrast which a manufacturing town gives to a Londoner;' the machinery propelled at an enormous speed and kept in order by hundreds of men, women, and children, "who are indeed busy bees from morning to night," working often without shoes or stockings, and the clatter of the factory clogs in the streets—indeed, "the whole," he says, "was a novelty." However, he executed his commission carefully, and took nothing for granted He found the Liverpool children thoroughly contented; they liked their employment, and "one and all said they preferred being there." Their appearance was healthy, he adds, in speaking of one mill, "in my opinion, fat to repletion, the girls looking decidedly better than the boys." The masters are "very particular in requiring that the children are of sound bodily health and fitted for their occupation." The hours of work are, however, much too long, from six to six, allowing half an hour for breakfast and an hour for dinner. The children are well taken care of in the evening. His visit was in the winter, and he found the boys going to school and the girls sitting round the fire knitting. They are required to attend on Sunday a church or chapel of the persuasion in which they have been brought up. The independent operatives are described as lodging with respectable families, and the wages of young men and women enable them to marry early. The settlement officer reports that his own observation and the information he received, "to a great extent satisfactorily solved the question, can a factory community be as moral, intellectual, and religious as other states of society generally?" He adds at the end of his report, "It does not appear that the obligation cast upon the manufacturers as a body as to the moral condition of their workpeople, is in the main neglected."

THE FEMALE BLONDIN on Monday evening made what was announced as her last ascent from Cremorne Gardens. The crowd on the banks of the river, in boats, and on the bridge was more than equal to that which had assembled to witness her previous performances, whilst the gardens were crowded to excess. The lady accomplished her feat with perfect success, and was greeted with deafening cheers.

DESTRUCTION OF MANOR HOUSE, CAMBERWELL.—Besides the old mansions of London which have been destroyed by fire, or have perished from the effects of age or decay, others are disappearing before the advance of the suburban railways into the centre of the metropolis. The Manor House at Camberwell is now in process of removal, its site being required for the extension of the London, Chatham, and Dover Railway. This mansion is situated in the Camberwell Road, at a short distance from the Green, and is built entirely of red brick, with stone facings, being the work of Inigo Jones. The Bowyer family, lords of the manor of Camberwell, resided in it; and it was also occupied at one time by Sir Christopher Wren. On its walls are some fine carvings and oak and cedar panelling, and the chimney-pieces are very elaborate. It contains a spacious picture-gallery.

GREAT FIRE NEAR THE LONDON DOCKS.—On Friday evening between five and six o'clock, a fire broke out in the premises of Messrs. Harrison and Wilson, sugar-refiners, in Dock Street, near the St. Katharine and London Docks, by which a vast amount of property was destroyed, and several persons were so seriously injured that one of them has since died. The premises were more than 70 feet high from the basement, and comprised 10 floors, each fitted up with refining-rooms, mould-rooms, and drying compartments, and being filled with such an inflammable article as sugar, the fire made the most rapid progress and extended from floor to floor with astonishing rapidity, cutting off the escape of the workmen, and driving them finally to the roof. At the south-west angle of the building there was a short ladder which communicated with the store, a building which adjoined, and the roof of which was 25 feet or 30 feet below. The workmen made a rush to descend to it. Some got down in safety, others slid down the water-pipe, and three fell over in the scramble to escape, and were so shockingly injured that they had to be immediately lowered and conveyed to the London Hospital, where one of them, a man called Baddle, died on Saturday morning. By 8 o'clock the main building was gutted, and all the floors and roof had fallen, but the flames in the warehouse raged furiously until near midnight. The loss of property is estimated at 30,000*l.*, which will fall on several offices.

MORE GREAT FIRES.—On Wednesday night, shortly after midnight, a fire broke out in a stable adjoining the Goose and Gridiron Publichouse, London House Yard, St. Paul's, which rapidly extended to Paternoster Row. The fire-engines had scarcely time to get to the spot when the flames gained the warehouse of Messrs. Knight & Son, the tallow chandlers of Paternoster Row, and spread thence with great rapidity to the publishing establishments of Messrs. Blackie, Messrs. Longman, and others. The premises of Messrs. Knight, Messrs. Blackie, Mr. Benton, Mr. Lemare, and the private residence of Mr. Brown, one of the late partners in Longman's house, were entirely destroyed, while the stock and premises of Messrs. Hitchcock & Rogers, Mr. Piper, Messrs. Ward & Co., Mr. Heylin, and Mr. Pattie were seriously damaged. The damage done to the publishing establishment of Messrs. Longman & Co. is said to be comparatively trifling, and the business will be carried on as usual in the adjoining premises without interruption.—On Wednesday morning a fire broke out in the premises of Mr. J. Seaton, cooper and packing-case maker, in Oak Lane, Limehouse, and soon spread to the cooperage of Mr. Woodley in Church Row. Both establishments with their stock were burnt down, and some of the houses severely damaged. The property destroyed is valued at many thousand pounds sterling.—On the same morning a fire broke out in the shop and warehouse of Messrs. Batten, wholesale tea-dealers in Lower Thames Street, near London Bridge, and soon ignited the premises of Mr. Knott in Fish Street Hill; the coffee and refreshment rooms of Mrs. Puddick, and the warehouses of Messrs. Keeling & Hunt, fruit merchants, in King's Head Court, behind Monument Yard. The warehouse in which it originated was destroyed, and the other houses severely damaged. This is the third time that this warehouse has been destroyed by fire within a few years. —Yesterday morning the extensive premises of Mr. G. Green, a builder and joiner, at No. 1, Paul Street, Finsbury, were destroyed by fire. The flames spread rapidly to a number of houses in Providence Row and Hill Street, occupied by working people, and to the premises of the London General Omnibus Company, and were not subdued before an enormous amount of property was destroyed.

MURDER IN WESTMINSTER.—William Maloney, a bricklayer's labourer, was brought before the magistrate of Westminster Police Court on Monday charged with the wilful murder of Mary, his wife, a young woman aged about 30. It appeared that a policeman had gone to the house, Leg Court, Peter Street, and found the woman lying dead on the bed with a stab in her neck, and the prisoner sitting on a chair in the room. The prisoner stated that he had just finished eating dinner when his wife, who had been drinking, snatched up the knife and stabbed herself. It was proved however by the evidence of a neighbour that the woman was quite sober, that the prisoner's clothes were covered with blood, that the knife with which the wound had been inflicted was found behind a tea board on the floor, in a position in which she could not have placed it after inflicting such a wound; and that it was wet with blood and had the appearance of having been recently wiped. As there was no one present when the occurrence took place, and none of the Irish neighbours would give any information as to the habits of the prisoner and deceased, the prisoner was remanded until [illegible] On that day the father and mother [illegible] deposed that there had been frequent quarrels [illegible] the parties, that they had both latterly taken [illegible] and that when intoxicated the prisoner had [illegible] used deceased. On the present occasion, however, [illegible] appeared from the evidence of several witnesses [illegible] she was perfectly sober. A surgeon proved that [illegible] wound had divided the subclavian artery, and [illegible] have proved fatal in two or three minutes, [illegible] a wound which might have been inflicted either [illegible] the prisoner or by herself. The prisoner was remanded to Saturday. About an hour afterwards [illegible] labouring man called Saunders, who stated that [illegible] was a perfect stranger to all the parties, appeared in court, and deposed that on Monday he was looking for a lodging in Leg Court, and [illegible] the prisoner's door to make inquiry, [illegible] saw him in the act of striking the knife into [illegible] neck. He was so frightened that he went [illegible] to some Irish people in the court that there [illegible] in the house. He had since mentioned what [illegible] seen to his friends, who had obliged him [illegible] court and give information. He identified [illegible] as the man he had seen stabbing the [illegible] described minutely the dress he had on [illegible] The prisoner said the statement was false, [illegible] not suppose the man was there at all. He was remanded to Saturday (to-day). At the inquest [illegible] day the jury returned a verdict of Wilful [illegible] against the prisoner.

EMBEZZLEMENT.—Ernest Tilley Ward, who [illegible] last 18 years has been in the employ of Messrs. Coster, Beater, Dennant, & Russ, wholesale [illegible] housemen of Aldermanbury, and recently [illegible] responsible position of principal cashier in the establishment, at a salary of 300*l.* a year, was charged a few days since at Guildhall with embezzling [illegible] sums amounting to upwards of 5000*l.*; and [illegible] Richard Thoms, a cashier in the same employ, [illegible] charged with embezzling five separate sums [illegible] each, and other amounts not specified, making [illegible] of about 700*l.* It appeared from the evidence [illegible] prisoner Ward, being regarded by the firm as [illegible] fidential servant, not only received all sums [illegible] paid to the firm, but balanced all the cash transactions with customers, and had the power even [illegible] advancing money to them. The amount of [illegible] thus passing through his hands in the course of a single year was as much as [illegible]. The embezzlements with which he was charged were committed by taking credit for payments which [illegible] never been made, and failing to carry to account money which he had received. The books were ostensibly balanced by the principals of the firm, but the "balancing" extended only to a comparison [illegible] figures on the two sides of the sheet. For instance, [illegible] the 22d July the "balance-book" showed a "statement" of the cashier's account up to that date, the "balance" representing the sum due from Ward as 1,056*l.* 5*s.* 3*d.*; but he had taken credit for [illegible] which he had never paid, so that the balance should [illegible] 1556*l.* 5*s.* 3*d.* In other words, though the [illegible] compared, the items were taken for granted. [illegible] tampering with the books eventually so complicated [illegible] accounts as to shake an old-established and [illegible] wealthy firm, and has rendered it necessary for the [illegible] stop payment until the whole of their affairs shall [illegible] been thoroughly investigated. The prisoners [illegible] their defence, and were fully committed for trial.

THE CASE OF LOVE AND FRAUD.—Vincent [illegible] the Italian artist, charged with obtaining [illegible] pretences the sum of 1900*l.* from Miss [illegible] Johnstone, of York House, Twickenham, was [illegible] up at Marlborough Police Court on Tuesday [illegible] examination. Miss Johnstone was again examined [illegible] great length, and deposed that before the [illegible] received the 2000*l.* for her letters, she had lent [illegible] him money to the extent of 2000*l.* or more. [illegible] made her an offer of marriage, and she had [illegible] led him to believe that his offer would be accepted, but in May in 1859 all intention of [illegible] had been abandoned by her. The prisoner's [illegible] demanded to have the letters written by the prosecutrix in 1859 and 1860 returned to him for the purposes [illegible] the defence. Mr. Serjeant Parry opposed the application and also refused to have them read, referring [illegible] the magistrate to decide on perusing the letters [illegible] portions, in his judgment, were relevant, [illegible] be made evidence. After a lengthy argument [illegible] question the magistrate decided that the prosecutrix had a right to retain the letters, and committed [illegible] prisoner for trial at the Central Criminal Court. [illegible] application to admit the prisoner to bail was opposed [illegible] Serjeant Parry, on the ground that the prisoner [illegible] use the advantage to defeat the ends of justice [illegible] quitting England. Mr. Mansfield thought it was [illegible] a needless hardship on the prisoner to refuse bail. [illegible] substantial sureties, two in 1000*l.* each, were [illegible] he would accept them.

THE PUBLIC HEALTH. — The Registrar-General's Weekly Return states that the deaths registered in London in the week that ended on Saturday, August [illegible] were 1127. The average number in the corresponding weeks of the 10 years 1851-60, excluding the [illegible] from cholera in 1854, and allowing for increase of population, was 1164. The present return is therefore 37 below the average. During the week the [illegible]

... boys and 851 girls, in all 1725 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1625.

Provincial.

BIRMINGHAM.—The result of the recent Musical Festival was a total receipt of 10,513*l.*, being an increase of about 400*l.* over the receipts of 1858. This sum is likely to be increased to the extent of nearly ... by additional donations, and as the expenditure of the meeting has been less than usual, the General Hospital will derive an increase of profits.—A frightful murder was committed on Thursday the 29th ult. at Small-heath, near this town. The victim was a young woman who possessed considerable personal attractions, named Elizabeth Brookes, and the murderer was her master and intended husband, John Grayson Farquhar. He is a man of independent means, aged 38, and is a widower. He resided in the Grange Road, near Birmingham, and deceased lived with him nominally as housekeeper, but in reality a more intimate relationship existed between them, and they were about to be married. Farquhar appears to have been passionately fond of the young woman, and, being of a jealous disposition, he occasionally quarrelled with her on account of her presumed familiarity with other men. On Thursday he drew 50*l.* from the bank and went with her to Birmingham for the purpose of attending the Musical Festival and of afterwards buying some articles for the wedding. Shortly after their return home, in a supposed fit of jealousy he took up an old flint pistol and shot the young woman in the left breast. She fell down and instantly expired, the charge having entered her heart. A daughter of Farquhar was in the room, and witnessed the deed. Farquhar was arrested at his own house, and on his way to the station told the crowd who followed him that he "did it through jealousy." The jury at the inquest returned a verdict of Wilful Murder against the prisoner, who was committed for trial at the next assizes. He buried his face in his hands and cried bitterly, exclaiming, "Oh, my poor Betty!" as he was removed in custody. On Monday the prisoner was brought before the borough magistrates, when Mr. Motteram, of the Oxford Circuit, appeared for him, and stated that for some time past he had manifested signs of insanity, which was hereditary in his family, but in this instance he had positively declared that the pistol went off by accident. The inquiry occupied several hours, but the evidence of the witnesses which was not shaken in any material respect, went to prove that the crime was committed in a fit of uncontrollable excitement, produced by jealousy. The servant girl deposed that she was in the adjoining room immediately before the fatal occurrence, and heard nothing but "words of kindness" between the prisoner and deceased. On cross-examination by the prisoner's counsel, she stated that "the prisoner was not sober, that he could not walk straight, and from what she saw she thought he was not in a fit state to handle fire-arms." The result was that the prisoner was fully committed to take his trial for Wilful Murder at the ensuing assizes for Warwickshire. The local papers state that the prisoner has an income of 500*l.* a year, derived from house property, and that he is allied to a family in a high commercial position at Liverpool.

BISHOPSWEARMOUTH.—The strike in the iron trade still continues, and 7000 men are reported to be off work in one concern alone—the Consett and Derwent Ironworks. At Consett the reduction proposed is in the case of puddlers 6*d.* per ton, and in the case of rollers 10 per cent. These terms have been accepted in Scotland, and are higher than the wages paid in Wales. The conduct of the men is further aggravated in connection with the Consett works, as the creditors of the Northumberland and Durham District Bank are pressing the shareholders of the ironworks, who held shares in the banking company, for a large payment due in October, which they are unable to meet, and there is therefore a prospect that their works will be closed. The effects of the strike are severely felt in the district, not only by the workmen, but by the tradesmen and provision dealers. The system of trading is by fortnightly credits, and if the strike continues a few weeks longer most of the traders will be brought to the verge of bankruptcy.

CAMBRIDGE.—In reference to the recent murder of a youth named Harvey Rumbelow, in this town, a reward of 100*l.* has been offered by the Government to any person who shall give such information as shall lead to the conviction of the murderer or murderers, with the grant of her Majesty's pardon to any accomplice not guilty of personal violence. Elizabeth Clark, the girl who figured so prominently in the case, has since died at the age of 23, debauchery and intemperate habits having brought her to an early grave.

DEAL.—By order of the Trinity Board, the lime light was substituted for the ordinary Fresnel oil light at the South Foreland lighthouse on the 26th ult.

EVERLEIGH.—On Friday morning John Stockley was again brought before the magistrates, charged with the murder of Ann Hill, wife of the head gamekeeper to Mr. Monk. After a lengthened inquiry, in the course of which it was shown that the knots in the thong of prisoner's whip precisely corresponded with the marks in the neck of deceased, and that the clothes which he wore on the day of the murder were spotted with blood, the prisoner was committed for trial at the assizes on the charge of Wilful Murder.

FOLKESTONE.—A detachment of Royal Artillery has been recently engaged in testing the condition of the martello towers on the coast of Kent and Sussex. The majority of these towers have been reported as capable of bearing the firing from a battery of heavy ordnance, and others are ordered to undergo repairs.

LEEDS.—A shocking attempt to commit murder and suicide was made on Tuesday night by a man named Anthony Rayner, residing in Holmes's Yard, York Street, in this town. He had been in the habit of treating his wife, who bore the character of an honest industrious woman, with great brutality. As she lay in bed on Tuesday night, he assailed her with the foulest abuse, and then, announcing his intention of murdering her, plunged a knife into her right temple. The poor woman called loudly for assistance, and struggled as well as she could with her husband, who in the meantime got hold of a razor, and attacked her with that instrument. The daughter, hearing her mother's screams, ran down stairs and let in some of the neighbours, who had been aroused by the noise, and who succeeded in rescuing the unfortunate woman from her husband's clutches. She was taken into an adjoining house, and shortly afterwards removed to the infirmary, where it was found that she had received a deep wound on the right temple, another on the right side of the nose, and a very deep gash right across the palm of the left hand. The police immediately went to Rayner's house, but found that he had locked the door. They broke open the door, and found the man lying on the bed with his throat cut. He expressed regret that his wife was not dead and himself also, adding that he had been to Goole to get a knife on purpose to do the job, but found it was too weak, and then he got a razor. The razor was found under the bed open, and smeared with blood. A bloody knife was also found in the room, and the bed and bedclothes were saturated with blood. Another razor, closed, and not marked with blood, was found in a hat on a chair in the room. The prisoner was taken to the infirmary, when he again expressed his regret that he had not completed the deed. He stated that he had got the wrong razor by mistake; and that if he had got the one which he had in his hat, and which he had sharpened for the purpose, he would have done for his wife and himself too. The woman is the more seriously injured; but neither husband nor wife is in immediate danger. The only reason the prisoner gives for the deed is that he was suffering from hunger.

LIVERPOOL.—The wreck of the Royal Charter was put up to auction in this town on Friday. It consisted of the iron hull containing 700 to 800 tons of iron; the engines, 250-horse power, without boilers, containing about 5 tons of metal and 70 tons of iron; the donkey engine; 12 iron tanks of 12,000 gallons each; the chains in the vessel, about 90 fathoms $1\frac{1}{2}$ inch; the chains in the bay, about 235 fathoms $2\frac{1}{4}$ inch; the 2 anchors in the bay, weighing 48 cwt. each; the entire interest and right of property in about 930 ounces of gold and gold dust; about 7684 sovereigns, about $5\frac{1}{2}$ tons of copper, 70 packages of wool; the ship's money, amounting to about 1000*l.*, and the ship's plate, which is electro. The upset price was 5000*l.*, but as only 400*l.* was offered the wreck was bought in.

MANCHESTER.—The 31st annual meeting of the British Association commenced on Wednesday in this city under the presidency of Mr. William Fairbairn, F.R.S. The reports of the Council and Committees having been read and adopted, Mr. Hopkins, F.R.S., was appointed General Secretary in the room of Professor Phillips, who had retired from ill health. At the evening meeting in the Free Trade Hall, Lord Wrottesley, the retiring President, resigned the chair to Mr. Fairbairn, who proceeded to deliver his inaugural address, which fills five columns of the daily papers. The following is a an abstract of its more important portions:—

"At no former period did science contribute so much to the wants of society. Not only have the stars been mapped out, and their motions ascertained with a precision that cannot be attained in the calculation of human affairs, but the sun's luminous envelopes have been counted, his rays analysed, and his portrait taken in various attitudes by the "photoheliograph" of Sir John Herschel. Observers have succeeded in tracing magnetic disturbances, which have for their respective periods the solar day, the solar year, and, still more remarkably, an until lately unsuspected solar cycle of about ten of our terrestrial years. Chemistry also has enabled us to extract from the hidden properties of iron more profit than was ever expected from the hidden properties of gold; and to discover in the commonest substances, such as coal tar, the basis of the most exquisite dyes, thereby giving increased value to our own coal districts. Geology has shown that the changes which have taken place on the face of the globe, from the earliest times to the present, are the result of agencies still at work, but has not yet indicated any traces of its beginning, nor afforded evidence of the time of its future duration. The experiments instituted to ascertain the increase of temperature in descending to the earth's crust had shown a mean increase of about 1 deg. in 71 feet. If this ratio were assumed to extend to much greater depths, we should reach at $2\frac{1}{2}$ miles from the surface strata at the temperature of boiling water; and at depths of about 50 or 60 miles the temperature would be sufficient to melt, under the ordinary pressure of the atmosphere, the hardest rocks. Reasoning from these facts, it would appear that the mass of the globe, at no great depth, must be in a fluid state. But this deduction required to be modified by other considerations, namely, the influence of pressure on the fusing point, and the relative conductivity of the rocks which form the earth's crust. To solve these questions a series of important experiments had been instituted by Mr. Hopkins, in the prosecution of which Dr. Joule and himself took part; and until they have been completed they could only make a partial use of them in forming an opinion of the thickness of the earth's solid crust. Judging however alone from the greater conductivity of the igneous rocks, they might calculate that the thickness cannot possibly be less than nearly three times as great as that calculated on the usual suppositions of the conductive power of the terrestrial mass at enormous depths being no greater than that of the superficial sedimentary beds. Other modes of investigation which Mr. Hopkins has brought to bear on this question appear to lead to the conclusion that the thickness of the earth's crust is much greater even than that he had stated. This would require them to assume that a part of the heat in the crust is due to superficial and external rather than central causes. This does not bear directly against the doctrine of central heat, but shows that only a part of the increase of temperature observed in mines and deep wells is due to the outward flow of that heat. After a brief reference to recent discoveries in Botany and Zoology, the President described the progress made in Geography, referring particularly to the discovery of the North-West Passage, to the explorations of Mr. M'Donald Stuart in Australia, and to the successful labours of Livingstone, Burton, Speke, and Grant in Southern and Central Africa, who had ascertained that the interior is a land of wood and water, penetrated by rivers, and opening a new field to commerce. Mr. Fairbairn then proceeded to describe the gigantic strides made by Applied Mechanics, and gave a succinct history of these improvements, as an instance of the influence of scientific progress on the well-being of society. He reviewed in succession the three chief aids which engineering science had afforded to national progress—namely, canals, steam navigation, and railways; and showed the effects of each in promoting an incalculable extension of the industrial resources of the country. With regard to steam vessels, he said that the paddlewheel system of propulsion has maintained its superiority over every other method yet adopted for the attainment of speed, as by it the best results are obtained with the least expenditure of power. In ships of war the screw is indispensable, on account of the security it affords to the engines and machinery, from their position in the hold below the water line, and because of the facility it offers in the use of sails, when the screw is raised from its position in the well to a recess in the stern prepared for that purpose; and it is also preferable in ships which require auxiliary power in calms and adverse winds, so as to expedite the voyage and affect a considerable saving upon the freight. As to railways he well remembered the competition at Rainhill in 1830, and the incredulity everywhere evinced at the proposal to run locomotives at 20 miles an hour. Neither George Stephenson himself, nor any one else, had at that time the most distant idea of the capabilities of the railway system. On the contrary, it was generally considered impossible to exceed 10 or 12 miles an hour; and our present high velocities, due to high pressure steam and the tubular system of boilers, have surpassed the most sanguine expectations of engineers. The sagacity of George Stephenson at once seized upon the suggestion of Henry Booth, to employ tubular boilers; and that, united to the blast pipe, previously known, has been the means of effecting all the wonders we now witness in a system that has done more for the development of practical science and the civilisation of man than any discovery since the days of Adam. Previously to the invention of Henry Cort, the manufacture of wrought iron was of the most crude and primitive description. A hearth and a pair of bellows was all that was employed. But since the introduction of puddling, the iron masters have increased the production to an extraordinary extent, down to the present time, when processes for the direct conversion of wrought iron on a large scale are being attempted. A consecutive series of chemical researches into the different processes, from the calcining of the ore to the production of the bar, carried on by Dr Percy and others, has led to a revolution in the manufacture of iron; and although it is at the present moment in a state of transition, it nevertheless requires no very great discernment to perceive that steel and iron of any required tenacity will be made in the same furnace, with a facility and certainty never before attained. This has been effected to some extent, by improvements in puddling; but the process of Mr. Bessemer—first made known at the meeting of this association at Cheltenham—affords the highest promise of certainty and perfection in the operation of converting the melted pig direct into steel or iron, and is likely to lead to the most important developments in this manufacture. These improvements in the production of the material must, in their turn, stimulate its application on a larger scale and lead to new constructions. In iron shipbuilding an immense field is opening before us. Our wooden walls have to all appearance seen their last days; and as one of the early pioneers in iron construction, as applied to shipbuilding, I am highly gratified to witness a change of opinion that augurs well for the security of the liberties of the country. From the commencement of iron ship-building in 1830 to the present time, there could be only one opinion among those best acquainted with the subject—namely, that iron must eventually supersede timber in every form of naval construction. The large ocean steamers, the Himalaya, the Persia, and the Great Eastern, abundantly show what can be done with iron, and we have only to look at the new system of casing ships with armour plates, to be convinced that we can no longer build wooden vessels of war with safety to our naval superiority and the best interests of the country. I give no opinion as to the details of the reconstruction of the navy—that is reserved for another place—but I may state that I am fully persuaded that the whole of our ships of war must be rebuilt of iron, and defended with iron armour calculated to resist projectiles of the heaviest description at high velocities. In the early stages of iron shipbuilding, I believe I was the first to show, by a long series of experiments, the superiority of wrought iron over every other description of material in security and strength, when judiciously applied in the construction of ships of every class. Other considerations, however, affect the question of vessels of war; and although numerous experiments were made, yet none of the targets were on a scale sufficient to resist more than a 6-pounder shot. It was reserved for our scientific neighbours, the French, to introduce thick iron plates as a defensive armour for ships. The success which has attended the adoption of this new system of defence affords the prospect of invulnerable ships of war, and hence the desire of the Government to remodel the navy on an entirely new principle of construction, in order that we may retain its superiority as the great bulwark of the nation. A committee has been appointed by the War Office and the Admiralty for the purpose of carrying out a scientific investigation of the subject, so as to determine—first, the best description of material to resist projectiles; secondly, the best method of fastening and applying that material to the sides of ships and land fortifications; and, lastly, the thickness necessary to resist the different descriptions of ordnance. It is asserted, probably with truth, that whatever thickness of plates is adopted for casing ships, guns will be constructed capable of destroying them. But their destruction will even then be a work of time, and I believe, from what I have seen in recent experiments, that with proper armour it will require, not only the most powerful ordnance, but also a great concentration of fire, before fracture will ensue. If this be the case, a well-constructed iron ship, covered with sound plates of the proper thickness, firmly attached to its sides, will, for a considerable time, resist the heaviest guns which can be brought to bear against it, and be practically shot proof. But our present means are inadequate

for the production of large masses of iron, and we may trust that, with new tools and machinery, and the skill, energy, and perseverance of our manufacturers, every difficulty will be overcome, and armour plates produced which will resist the heaviest existing ordnance. The rifling of heavy ordnance, the introduction of wrought iron, and the new principle of construction with strained hoops, have given to all countries the means of increasing enormously the destructive power of their ordnance. One of the results of this introduction of wrought iron, and correct principles of manufacture, is the reduction of the weight of the new guns to about two-thirds the weight of the older cast-iron ordnance. Hence follows the facility with which guns of much greater power can be worked, while the range and precision of fire are at the same time increased. But these improvements cannot be confined to ourselves. Other nations are increasing the power and range of their artillery in a similar degree, and the energies of the nation must, therefore, be directed to maintain the superiority of our navy in armour as well as in armament. We have already seen a new era in the history of the construction of bridges, resulting from the use of iron; and we have only to examine those of the tubular form over the Conway and Menai Straits to be convinced of the durability, strength, and lightness of tubular constructions applied to the support of railways or common roads in spans which 10 years ago were considered beyond the reach of human skill. When it is considered that stone bridges do not exceed 150 feet in span, nor cast-iron bridges 250 feet, we can estimate the progress which has been made in crossing rivers 400 or 500 feet in width, without any support at the middle of the stream. Even spans greatly in excess of this may be bridged over with safety provided we do not exceed 1800 to 2000 feet, when the structure would be destroyed by its own weight. Among the changes which have largely contributed to the comfort and enjoyment of life, are the improvements in the sanitary condition of towns. These belong probably to the province of social rather than mechanical science; but I cannot omit to notice some of the great works that have of late years been constructed for the supply of water and for the drainage of towns. In former days 10 gallons of water to each person per day was considered an ample allowance. Now, 30 gallons is much nearer the rate of consumption. I may instance the water-works of this city and of Liverpool, each of which yield a supply of from 20 to 30 gallons of water to each inhabitant. In the former case the water is collected from the Cheshire and Derbyshire hills, and, after being conveyed in tunnels and aqueducts a distance of 10 miles to a reservoir, where it is strained and purified, it is ultimately taken a further distance of eight miles in pipes, in a perfectly pure state, ready for distribution. The greatest undertaking of this kind, however, yet accomplished is that by which the pure waters of Loch Katrine are distributed to the city of Glasgow. This work, recently completed by Mr. Bateman, who was also the constructor of the waterworks of this city, is of the most gigantic character, the water being conveyed in a covered tunnel a distance of 27 miles through an almost impassable country to the service reservoir, about eight miles from Glasgow. By this means 40 million gallons of water per day are conveyed through the hills which flank Ben Lomond, and after traversing the sides of Loch Chon and Loch Aird, are finally discharged into the Mudgdock Basin, where the water is impounded for distribution. We may reasonably look forward to an extension of similar benefits to the metropolis, by the same engineer, whose energies are now directed to an examination of the pure fountains of Wales, from whence the future supply of water to the great city is likely to be derived. A work of so gigantic a character may be looked upon as problematical, but when it is known that six or seven millions of money would be sufficient for its execution, I can see no reason why an undertaking of so much consequence to the health of London should not ultimately be accomplished. A brief allusion must be made to that marvellous discovery which has given to the present generation the power to turn the spark of heaven to the uses of speech; to transmit along the slender wire for a thousand miles a current of electricity that renders intelligible words and thoughts. This wonderful discovery, so familiar to us, and so useful in our communications to every part of the globe, we owe to Wheatstone, Thomson, De la Rive, and others. In land telegraphy the chief difficulties have been surmounted, but in submarine telegraphy much remains to be accomplished. Failures have been repeated so often as to call for a commission on the part of the Government to inquire into the causes, and the best means of overcoming the difficulties which present themselves. I had the honour to serve on that commission, and I believe that from the report, and mass of evidence and experimental research accumulated, the public will derive very important information. It is well known that three conditions are essential to success in the construction of ocean telegraphs—perfect insulation, external protection, and appropriate apparatus for laying the cable safely on its ocean bed. That we are far from having succeeded in fulfilling these conditions is evident from the fact that out of 12,000 miles of submarine cable which have been laid since 1851, only 3000 miles are actually in working order; so that three-fourths may be considered as a failure and loss to the country. The insulators hitherto employed are subject to deterioration from mechanical violence, from chemical decomposition or decay, and from the absorption of water; but the last circumstance does not appear to influence seriously the durability of cables. Electrically, india-rubber possesses higher advantages, and, next to it, Wray's compound and pure gutta percha far surpass the commercial gutta percha hitherto employed; but it remains to be seen whether the mechanical and commercial difficulties in the employment of these new materials can be successfully overcome. The external projecting covering is still a subject of anxious consideration. The objections to iron wire are its weight and liability to corrosion. Hemp has been substituted, but at present with no satisfactory result. All these difficulties, together with those connected with the coiling and paying out of the cable, will no doubt yield to careful experiment and employment of proper instruments in its construction, and its final deposit on the bed of the ocean. Irrespective of inland and international telegraphy, a new system of communication has been introduced by Professor Wheatstone, whereby intercourse can be carried on between private families, public offices, and the works of merchants and manufacturers. This application of electric currents cannot be too highly appreciated, from its great efficiency and comparatively small expense. To show to what an extent this improvement has been carried, I may state that 1000 wires, in a perfect state of insulation, may be formed into a rope not exceeding half-an-inch in diameter. I must not sit down without directing attention to a subject of deep importance to all classes,—namely, the amount of protection inventors should receive from the laws of the country. It is the opinion of many that patent laws are injurious rather than beneficial, and that no legal protection of this kind ought to be granted; in fact, that a free-trade in inventions, as in everything else, should be established. I confess I am not of that opinion. Doubtless there are abuses in the working of the patent law as it at present exists, and protection is often granted to pirates and impostors, to the detriment of real inventors. This, however, does not contravene the principle of protection, but rather calls for reform and amendment. It is asserted by those who have done the least to benefit their country by inventions, that a monopoly is injurious, and that if the patent laws are defended, it should be, not on the ground of their benefit to the inventor, but on that of their utility to the nation. I believe this to be a dangerous doctrine, and I hope it will never be acted upon. I cannot see the right of the nation to appropriate the labours of a lifetime, without awarding any remuneration. The nation, in this case, receives a benefit; and assuredly the labourer is worthy of his hire. I am no friend of monopoly, but neither am I a friend of injustice; and I think that before the public are benefited by an invention, the inventor should be rewarded either by a 14 years' monopoly, or in some other way. Our patent laws are defective, so far as they protect pretended inventions; but they are essential to the best interests of the State in stimulating the exertions of a class of eminent men, such as Arkwright, Watt, and Crompton, whose inventions have entailed upon all countries invaluable benefits, and have done honour to the human race. To this Association is committed the task of correcting the abuses of the present system, and establishing such legal provisions as shall deal out equal justice to the inventor and the nation at large. I must not forget that we owe very much to an entirely new and most attractive method of diffusing knowledge, admirably exemplified in the Great Exhibition of 1851, and its successors in France, Ireland, and America. Most of us remember the gems of art which were accumulated in this city during the summer of 1857, and the wonderful result they produced on all classes of the community. The improvement of taste, and the increase of practical knowledge which followed these Exhibitions, have been deeply felt; and hence the prospects which are now opening before us in regard to the Exhibition of the next year cannot be too highly appreciated. That Exhibition will embrace the whole circle of the sciences, and is likely to elevate the general culture of the public to a higher standard than we have ever before attained. There will be unfolded almost every known production of art, every ingenious contrivance in machinery, and the results of discoveries in science from the earliest period. The fine arts, which constituted no part of the Exhibition of 1851, and which were only partially represented at Paris and Dublin, will be illustrated by new creations from the most distinguished masters of the modern school. Looking forwards, I venture to hope for a great success and a further development of the principle advocated by this Association, the union of science and art."

The address was loudly applauded. Lord Stanley moved the thanks of the meeting to the President, observing that Mr. Fairbairn himself was entitled to take an honourable place among the pioneers of science. Mr. Aspinall Turner, M.P., in seconding the motion, expressed his gratification, not only that the Association had honoured Manchester with a visit, but still further by appointing one of its most distinguished citizens a President for the year. The Mayor of Manchester having put the motion, it was passed amid loud cheering. Mr. Fairbairn briefly acknowledged the compliment, after which Dr. Phillips announced that the total number of tickets issued up to 8 o'clock this evening was 2388, and the sum received 2916*l*., showing an unprecedentedly rapid application for admission.

ROCHDALE.—On the 16th ult. a parcel containing the dead body of a new-born child was found in the canal at Littleborough, and from some writing on the paper in which the parcel was wrapt up, the child was found to be that of a respectable young woman called Margaret Hill. Her brother subsequently committed suicide in consequence of the disgrace brought upon the family, and on Saturday morning the reputed father of the child, a person named Barker, the local surveyor, was found hanging from a tree in a field adjoining the agricultural show-ground, on the Armley Road, at Leeds. The young woman has been committed for trial on a charge of concealment of birth, but has been admitted to bail, herself in 50*l*., and two sureties of 25*l*. each.

RYDE.—The well-known cutter yacht Amazon, the property of Mr. H. F. Smith, Vice-Commodore of the Royal Yacht Club, was sunk off Ryde pier-head on Monday evening. Fortunately, the accident was unattended with any loss of life, although Mrs. Smith, her child, and servant, in addition to the crew, were on board at the time. The United Steam Company's packet Prince Consort left Portsmouth at 8 10 P.M. for Ryde. The night was excessively dark, and every precaution appears to have been taken to guard against accident. The light on Ryde pier-head had just been made out, when the steamer came in violent collision with the Amazon lying at her moorings. The injuries inflicted by the iron bow of the steamer allowed the Amazon to float until all on board were taken out in safety, the yacht's moorings slipped, and the vessel herself towed by the Prince Consort into shallower water before she finally sank. Divers and apparatus were forwarded over to Ryde from Portsmouth on Tuesday and Wednesday, to endeavour to raise the yacht from her sunken position, but without success. Mr. Smith has made her over to the steampacket company whose boat ran into and sunk her, and claims 2500*l*. as compensation for her loss. The Amazon had a light at her masthead, but it is supposed that the unusual darkness of the night prevented it being seen.

SCARBOROUGH.—None of the bodies of the gentlemen who were drowned between Flamborough and this town on the 19th ult. have yet been found, although frequent efforts have been made. Rewards have been offered; and it is said that in one case considerable sums have been offered for the recovery of the body of a young gentleman whose identification is necessary for the legal settlement of his affairs.

SHEFFIELD.—The annual Cutler's Feast took place on Thursday in the Cutler's Hall, and was attended by Earl Manners, Lord Teynham, Lord Denman, the Right Hon. James Stuart Wortley, Sir J. W. Ramsden, M.P.; Mr. Roebuck, M.P.; Sir W. Armstrong, and other gentlemen of influence, several of whom addressed the meeting and alluded to Mr. Roebuck's foreign politics. In replying to the toast of the borough members Mr. Roebuck spoke as follows:—

"The Emperor of Austria had given to his various subjects constitutional government; where there was absolute government before he had introduced constitutional [illegible]. For that he praised Austria, and for that [illegible]. Now, what could he get for praising that? [illegible] in *Punch* bandied about that day, in which [illegible] Austria was represented as having run away [illegible] 'Tear'em;' but had he run away with [illegible] he not here, and what had the Emperor done to make him follow him away? [illegible] only done what every Constitutional Monarch [illegible] had given his people constitutional government; but he was told there were countries [illegible] of the Emperor of Austria that would not [illegible] had been made. This, he said, was exactly [illegible] England fell into in 1800 with respect to Ireland. [illegible] had turned round upon him and said that [illegible] not adopted the rule that was adopted when [illegible] to Ireland. The Emperor of Austria had [illegible] thing. He said, "I am here. There is [illegible] I have no constitution to consider, and will [illegible] And what did he give? He gave an [illegible] England when he appealed to Hungary that [illegible] representatives to the Reichsrath. The Emperor [illegible] he gave that Constitution to his whole [illegible] not a Constitution before him to consider [illegible] allowed, he would define his position, and [illegible] as if he were a man devoid of any possible [illegible] humanity. We were told that the press [illegible] where no politics were talked, but he had [illegible] nothing talked but politics from all speakers [illegible] presume upon the patience of the company [illegible] had spoken upon the subject a great deal on [illegible] and from that time to this he heard the [illegible] *Times* against him, and also the whistle of [illegible] but there he was again, nevertheless, and he [illegible] his honest countrymen when they saw a man [illegible] with the opinion that he was in the right [illegible] would not desert him."

SHORNCLIFFE.—Lord Palmerston paid [illegible] Tuesday to Shorncliffe Camp, and to the [illegible] ground of the Hythe School of Musketry. [illegible] ship posted at an early hour from Walmer [illegible] Dover, where he took horse, and with the [illegible] W. Cowper rode along the heights to Folkestone [illegible] was there met by Captain Dalzell, aide-de-camp [illegible] General Dalzell, who is in command at [illegible] Camp, and by Lord Elcho. The party passed [illegible] nised by Folkestone harbour along the road [illegible] of the cliffs to Sandgate, and then, striking [illegible] military road, ascended to the camp, where [illegible] was received with a salute of 19 guns. After [illegible] the troops in camp, consisting of a squadron of the [illegible] Hussars, four batteries of Artillery, the Military [illegible] the Royal Engineers, 1st battalion 10th Regiment, [illegible] Battalion 25th Regiment, and the 2d Battalion [illegible] Fusiliers, Lord Palmerston rode up to one of the [illegible] strong guns, and, dismounting, examined for a quarter [illegible] an hour, and with much minuteness, the mechanism of the gun and its shell and shot. His lordship then [illegible] the back of the camp, and examined the ground towards the railway, 296 acres of which are desired [illegible] the enlargement of the camp. His lordship expressed [illegible] approval of the enlargement, and also said that he thought stone barracks should be constructed with a view to permanent occupation. Lord Elcho next [illegible] the attention of Lord Palmerston to the [illegible] married men, his lordship entering one that was occupied by six men, six women, and 15 children, and made himself acquainted with the minutiæ of [illegible] examining the stoves, beds, means of ventilation, &c. The hut in compartments was inspected, [illegible] ship at length rode off to General Dalzell's [illegible] After luncheon his lordship proceeded to Hythe, [illegible] he visited the practice ground, accompanied by [illegible] Hay, and witnessed the shooting of parties of [illegible] at the butts. He afterwards witnessed experiments with Captain Norton's rifle shells for exploding [illegible] of gunpowder, and then rode back to Dover, [illegible] return to Walmer Castle.

WINCHFIELD.—A serious accident has been [illegible] by Lady Mildmay, who, with Sir Henry, [illegible] temporarily residing at Heckfield, the mansion [illegible] mersfield being in course of rebuilding. On [illegible] week, her ladyship entered the stables, thinking Sir [illegible] had gone thither, and it is supposed that a [illegible] her dress touched one of the horses, which [illegible] kicked violently, broke her ladyship's jaw and [illegible] other serious injuries. Assistance was [illegible] rendered by Sir Henry Mildmay and the groom [illegible] they were also knocked down by the animal, [illegible] they escaped with comparatively trifling injuries.

Ireland.

THE YELVERTON CASE.—A commission from the Court of Session was opened on Tuesday in Dublin [illegible] Mr. Crichton, of the Scotch Bar, as Commissioner [illegible] take proof in the action of declaration of marriage in the Scotch Courts by Mrs. Yelverton against Major Yelverton. Proof was adduced by Major Yelverton [illegible] establish that he had been a Protestant, or [illegible] professed to be a Protestant, 12 months before [illegible] marriage ceremony by Father Mooney at Rostrevor, which, if proved, would render the Irish marriage [illegible] Four witnesses were examined the first day—[illegible] deacon Knox, of Lorrha; the Hon. Letitia Yelverton, sister of the Major; Mrs. Colonel Lloyd, [illegible] Mr. Dwyer, residing at Ballyquirk Castle, [illegible] gave evidence that the Major, when [illegible] with his family at Belle Isle, sometimes went [illegible] them to the parish church. The commission was proceeded with at Newry and Rostrevor. It [illegible] objected on behalf of Mrs. Yelverton, in the course of the proof taken on Tuesday, that the question "whether the Major was a Protestant" could not and ought not to be put to the witness without first defining what "Protestant" is, and a definition of the word "[illegible]

... was given by Archdeacon Knox to the effect ... every person who protested against ... The evidence in this case is all taken down in ... because there is an appeal upon the facts from ... Court of Session to the House of Lords, where the ... may ultimately terminate.

MUTINY AT DUNCANNON.—There has been a mutiny at the Duncannon Fort, which commands the mouth of the Suir. The local papers state that on Tuesday week a party of the Royal Artillery arrived in Waterford by the Duncannon steamer, with 15 of the mutineers—14 gunners and 1 bombardier—on their way to Cork, where they are to be tried by court-martial, with 15 of ... battery, who had been previously sent there under an escort of 50 men.

STEAM COMMUNICATION WITH AMERICA.—It is understood that Mr. Dorning, of Liverpool, has purchased the three screw ships Leopard, Princess Charlotte, and Southampton, known as the sister ships of the screw ship Prince Albert, of the Galway line. A few years ago these ships, built for the Belgian Royal Mail Company, cost about 220,000*l.*, and it is stated they have been secured at the low price of about ...,000*l.* It is believed that these vessels are intended to ply from either Liverpool or Southampton *viâ* Galway to New York.

Scotland.

SCOTTISH INDUSTRIAL MUSEUM.—The Lord Provost of Edinburgh has received intimation that the Prince Consort had consented to lay the foundation stones of the Industrial Museum and of the new General Post-office, at Edinburgh, on or about Wednesday, the 23d of October, on the return of the Court from Balmoral. The Industrial Museum is from plans by Captain Fowke, and contracts have been entered into for the immediate construction of one-third of the contemplated building. The site is immediately behind the University, and will, when the whole plan is executed, cover the greater part of Argyll Square. The Post-office is from plans by Mr. Matheson, architect of the Board of Works at Edinburgh, and is to occupy the site at the foot of the North Bridge, recently cleared by the removal of the Theatre Royal and other buildings.

SUSPECTED WIFE MURDER.—On Sunday evening a man named James Shaw was taken into custody by the county police at Falkirk on the charge of drowning his wife. The prisoner, who is about 30 years of age, resided with deceased, his reputed wife, at Falkirk. Her name was Catherine Morrison, and she was about 25 years of age. It appears that the prisoner is owner of two horses, which he employs in hauling vessels along the Forth and Clyde Canal, the woman driving one of the horses. They had delivered a vessel at Bowling on Saturday night, and commenced their return homewards to Falkirk along the bank of the canal, and when last seen together, near Dalmuir, about two miles from Kilpatrick, between 11 and 12 o'clock that night, they were both much the worse for drink. Between 9 and 10 o'clock on Sunday morning some men observed a whip and a penny piece lying on the brink of the canal, on which a man's cap was floating, and observed the prisoner's horses feeding in the neighbourhood. Suspecting that something was wrong they dragged the canal and found the body of deceased. The prisoner was found in the neighbourhood, and was promptly taken into custody. On his person were found deceased's pocket and some money. She was in the habit of carrying their earnings. When apprehended he was asleep in a stable, and could give no rational account of his proceedings the previous night and on Sunday morning.

Railways.

FEARFUL ACCIDENT ON THE NORTH LONDON.—On Monday evening a terrible collision occurred on the Hampstead Junction between an excursion train and a ballast train. The Hampstead Junction is a line which has been opened within the last two years. It joins the North London at Camden Road Station, and passes thence through Camden Town and Kentish Town, by Hampstead, and so on to Kew, where it runs close to the South-Western line, over which passengers wishing to proceed to Richmond are conveyed without change of carriages. The Hampstead Junction is much used by persons going from the city to Kew, Richmond, and Twickenham; and on Sundays and Mondays throughout the summer season there are excursions constantly. On Monday the servants of the North London Railway had organised an excursion for the purpose of augmenting the common fund set apart for injured members and their families. Two trains were allotted to the excursionists, and it was on the return of the first of these, at about half-past 7 in the evening, that the accident occurred. The train consisted of 14 carriages, some of them of unusual size, and all crowded with passengers. After passing the Kentish Town station, where it made no stoppage, it was proceeding at a rapid rate along an embankment and bridge 35 feet high, at the back of the Carlton Road, when a ballast train of 19 trucks was seen slowly shunting across the line. The driver of the latter train expected that the passenger train, in accordance with the general rule, would stop at Kentish Town station, and that there was ample time for him to cross. He had lighted his lamps, and when he saw the other train approaching he waved a red light and shouted. The driver of the excursion train also in his turn blew his whistle, but the precaution was too late. It was not yet dark. There were many people in the windows of the houses in Carlton Road and a great number walking in the fields; and from several of them shrieks were heard before the trains met; for it was but too evident to any one who saw their respective positions that in a few seconds after the red light was waved and the up engine blew a succession of awfully shrill screeches a violent concussion was inevitable. It has been before observed that the ballast train consisted of 19 trucks. About half these had crossed to the down line, and about mid-way it was struck by the passenger train. The scene, as witnessed from the fields below, was terrific. Immediately the engine had struck the trucks, and shivered them into atoms, it leaped from the rails with a sort of half-puff, half-bellow, which was heard to a distance of fully half a mile, and rolled down the embankment on its own side of the line with a hideous dull sound and one or two frightful screeches. The carriages which followed ran on a few feet; but just at the spring of the arch of the bridge the break bounded right over, and was followed by four carriages, in which were a number of passengers. The first two carriages jumped clean into the field, where they lay on their sides, one over the other. The next fell with its end upon the second of the carriages, which had broken off from the train in their bound; and when the train came to a standstill this third carriage remained poised in the position in which it had fallen upon the others. Its coupling irons not having broken, it dragged the fourth carriage half over the side wall of the bridge, in which position it remained half suspended, but with its hind wheels stuck in the embankment. The inhabitants of the neighbourhood instantly ran to the spot. The moans of the dying, the cries of the wounded, and the lamentations of those who missed their relatives, were to be heard on every side. The ends of the first two carriages had been broken by the fall, and several of the passengers were at once pulled out. They were lacerated and bleeding to a frightful extent. In some instances it was impossible to recognise a single feature, and the unfortunate victims were unable to utter a word. There were a great many young children and babies in the train, and the screams of several of them were heartrending in the extreme. Many women, on being released from the carriages, dropped down in an apparently lifeless swoon. All this time the passengers who had escaped altogether, or escaped with slight injuries, were rushing frantically down the embankment; and terrified women and men were throwing themselves over the fencing and into the fields, regardless of what might occur to them so that they got out of reach of the ill-fated train. The engine lay on its side, still puffing, and with steam rushing forth at all points. Near it was stretched the fireman, who had fallen with it. He seemed much injured, and was carried off to an hospital. By this time it was getting quite dark, and necessarily there was the additional element of confusion added to those others that contributed to make up a scene such as has been rarely witnessed even after railway collisions. The families residing in the neighbourhood sent for doctors and conveyances for the wounded. Many of the latter were at once carried off to the residences of medical men, but others requested to be allowed to lie in the fields, if only a drop of water could be procured for them. Within about 20 minutes after the accident a strong body of police from the Kentish Town and Camden Town stations arrived, and a number of cabs and waggons were on the ground; but at 8 o'clock it was dark and no gas near. Light was all important, and the remains of the break which had fallen over and been shivered into a thousand fragments, were set fire to. When the pieces were in a blaze the spectacle was still more awful than it had hitherto been. The glare discovered the wounded men, women, and children that lay about, surrounded by little groups, who rendered them such assistance as could be procured on the instant. There was the engine on its side, puffing out its hot steam; carriages were hanging in a position that made them appear as if they were just about to fall to the earth; and from under the first carriage that had fallen over the bridge there were visible the head of one man and the legs and arms of another. The police and others at once set about attempting to extricate those who remained inside; but it is almost unnecessary to add that only lifeless bodies were taken out. They had already been half an hour in a carriage that had fallen some 35 or 40 feet, and over which lay another that had come down with its full weight from the same height. Much anxiety was expressed about the fate of the driver of the passenger train, of whom up to this there had been heard nothing. A search was made for him up and down the embankment, and in a few minutes after it was commenced a man in the employment of the company stated that his dead body had been found near the engine. The stoker was much scalded and otherwise injured. The engine of the ballast trucks remained on the line uninjured after the collision, and none of the men in charge of it appear to have been injured. At about a quarter past 8 there were some thousands of people collected in the fields and up the embankment at each side of the bridge. Two or three of the smashed carriages formed one monster fire that shot up its flames to an immense height. The wounded lay here and there writhing in agony. Men were engaged in dragging corpses from under the wheels and axle-trees, and out of carriages that had been crushed like pasteboard. Gentlemen and ladies carried water-cans, bottles, and other vessels, and were constantly giving those drinks which the mangled so greedily asked for. Many ladies ran about with linen for the doctors to bandage the wounded; and themselves assisted in the kind office. The policemen with lanterns kept a path for those who were carrying the injured to the cabs, vans, and carts, which were now drawn up in a line to the by-road leading out to Kentish Town; and from all sides men, women, and children were running with lamps and lighted candles to what, without the slightest exaggeration, may be termed a field of slaughter. Long after midnight thousands of people were still on the ground, and the various hospitals and the stations of the line were surrounded by anxious crowds inquiring after relatives and friends. The following is the official list of killed and injured:—

University College Hospital.—The total number of victims received into this hospital is 35; eight lie dead, three of whom were dead before admission. *Killed.*—Mary Sellis—Frightfully bruised; brought in dead. Eroda Bowby—Pelvis smashed and separated, and a severe [illegible]; brought in dead. John Yeoman—Head terribly smashed in [illegible]; brought in dead. Edward Hills—Ruptured diaphragm, and two fractures in pelvis; died the same night. Eve Stacey—The flesh torn immediately off the left leg, from the knee to the foot, and compound comminuted fracture of the left leg. This limb was immediately and carefully amputated, but she sank, and died soon after admission. Richard Saunders—Compound comminuted fracture of the skull, from which he died on Tuesday morning. Sarah Clements, cook, of 34, Gordon Square—Comminuted fracture of right clavicle; fracture of several of the upper ribs; considerable ecchymosis over seat of fracture; died on Wednesday morning. George Holten (the stoker), aged 22—Large scalp wound over the left frontal region, bone exposed; severe but superficial scalp from left hip to back of left thigh; large lacerated wound on the back of the left thigh, from which fragments of coal were extracted; died on Thursday. *Injured.*—Charles Cox, aged 43—Fractured sternum; fracture of 5th and 6th ribs on the left side, and a severe contusion over the back and loins. He is better, but still in a very serious condition. Isaac Coxall, aged 26—Fracture of scapula, with contusions of the soft parts; scalp wound over the left parietal bone. Seriously but not dangerously injured. Edward Essex, aged 30—Dislocation of the cartilage of the 7th rib; contused wound over left temple; ecchymosis of left eye; severe bruises of muscles of neck and back. He is going on on favourably. George Woodley—Severe contusion over lower part of left chest. Going on very favourably. William Woodley—Fracture of left clavicle and slight contusion of forehead. Going on very favourably. Barry Johnson—Large scalp wound over right parietal occipital region, exposing the bone; slight contusion of forehead; ecchymosis of left eye. He is improving, but in a very doubtful state. — Rushbrook, aged about 50—Severe wound over left forehead, also back of the head, in both places exposing the bone; another on left side of lower jaw; ecchymosis of left eye; fracture of fifth rib on right side, with emphysema; severe bruise over sternum. Seriously injured; result very doubtful. William Stewart—Scald on back and front of both arms and fore part of legs. He is doing very well. John Wm. Hewitt, aged 10—Large scalp wound over the forehead, over left parietal region; lacerated wound over nose; fracture of nasal bones; ecchymosis of left eye; contusions of upper lip. Doing well. Joseph Bridges (the guard)—Contusion of back and front part of chest. Going on very favourably. Jane Greenwood, aged 47—Fracture of left clavicle in two places; contusion over left hip. Doing very favourably. Susannah Finnis, aged 12—Fracture of left fibula (leg); lacerated wound on outer border of left foot; fracture and impaction of right clavicle; extensive bruise over right cheek and left forehead; and ecchymosis of both eyes. She is in a doubtful state. Ann Ward, aged 30—Wound in right temple; slight wound at outer angle of right eye; contusion of ear and cheek; slight discharge from right ear. She is going on favourably. Alice Hewitt, aged 30—Lacerated wound of right eyebrow; ecchymosis of both eyes; lacerated wound across nose; contusion of upper lip. Going on favourably. Jane Drake, aged 11—Slight abrasion of face; wounds on the top of head, with exposure of bone; contusion across loins, especially on left side; passed blood with her urine. Very doubtful state. Elizabeth Ward—Large scalp wound over right parietal regions; contusion of right cheek and right lip; lacerated wound of shin; severe contusion of top of the foot and over great toe. Going on favourably. Mary Ann Matthews—Slight wound of scalp; slightly injured. John Bailey, aged 36—Slight contusion about forehead, root of nose, and upper lip; lacerated wound of both lips; slight contusion of upper part of left leg, and bruises of left shoulder. Going on favourably. Charles Albert Hewitt, aged 2 years—Concussion of brain. Recovering. George Thomas Hewitt, aged 12—Slightly shaken, but quite recovered. Eliza Holt, aged 15—Scalp wound over left eyebrow; bruising of left side of face; contusion of left cheek. Going on very favourably. Mary Woodley, aged 33—Slight ecchymosis of right eye and cheek; bruising of left ear; abrasion of left chin. Going on very favourably. Joseph Cox, aged 23—Abrasion of skin over forehead; contusion of face and right hip. Will be recovered in a day or two. John Stacey, aged 13—Scalp wound over back of head. Very favourable case. Henry Stacey (brother), aged 17—Four small scalp wounds; contusion above left ankle and over right shin. Very favourable case. Mrs. Drake—Bruising of forehead; ecchymosis of right eye; probable internal bruising. Going on favourably as yet.

Royal Free Hospital.—Dead: Sarah English, aged 41, late of 24, St. John's Street, Clerkenwell—Died one hour after admission. Injuries to the spine, laceration of the left foot, and congestion of the brain. *Wounded:* James English, husband of the above—Scalp wounds and general contusions; several wounds over the forehead, under the chin, and top of the right side of the temple. Going on favourably, but not out of danger. Infant child of the above, 6 months old—Bruises and contusions, but so far recovered as to be removed to a friend's house. Seen on Tuesday night, and going on satisfactorily. Sarah Cox, aged [illegible], residing at Leland Road, Old Ford—Fracture of ribs and scalp wounds, and injuries to chest. Going on satisfactorily, but not out of danger.

Middlesex Hospital.—In this hospital there are five persons, three of whom were found dead on their arrival. *Dead:* Two brothers of the name of Greenwood, identified by their father, one of the officials of the North London Railway. The elder has his legs broken and other injuries; the younger bruises on the side of the head. Charles Standing, aged [illegible], of [illegible], Roman Road, Old Ford, Bow—Much crushed. *Wounded.* George Terry, aged 29, of Liverpool Street, King's Cross—When brought in he was able with assistance to walk to the ward, but in the course of the night delirium ensued, in which he continues. In a precarious state. Ann Philpott, aged 60—One leg broken;

contusions about the face and other parts of body. Going on favourably.

St. Pancras Workhouse.—*Dead:* Mrs. Elizabeth Allen, aged 60, of New Stratford—A dislocated neck, and other injuries. Identified by her husband and family on Tuesday morning.

From the foregoing statements it will be perceived that the number of actual deaths accounted for are 13, but there are several other cases which are likely to prove fatal. There are 27 wounded in University College, 3 at the Royal Free Hospital, and 2 at the Middlesex Hospital, making 32 in the whole. The coroner's inquest was opened on Wednesday, when the jury, on being empanelled, proceeded to view the bodies of those lying dead, and thence to the scene of the accident. Several bodies were then identified, after which the inquiry was adjourned to yesterday, when the remaining bodies were identified, and some evidence was taken as to the cause of the accident. The inquest was then again adjourned. Yesterday morning the engine, which has been since Monday lying at the bottom of the embankment, was raised to the main line without any accident.

THE FATAL ACCIDENT ON THE LONDON AND BRIGHTON.—The inquest on the persons killed in the recent collision in the Clayton tunnel commenced on Monday week, and was continued almost daily until Wednesday last at great length. The evidence left no doubt that the accident was caused by a misunderstanding relative to the signals between the signalmen at each end of the tunnel, caused by the want of clearness in describing the trains. The signalman at the Brighton end declared that upon the second train entering the tunnel he sent the usual signal, "Train in;" and that in reply he received the answer, "Train out." The signalman at the London end admits having given the answer "Train out," but declared that the answer was not given upon the receipt of the first and usual telegram, to which he sent no answer, waiting for the announced train to come out some six or seven minutes, but on the receipt of a second and extraordinary one, put in an unusual form—"The train is not out;" and he affirmed that this extraordinary telegram was only the immediate prelude to the telegraphic announcement of the crash itself. The message was that the train was "not out." He answered "Yes;" and received the answer, "No, the trains have run into each other." Captain Tyler, official inspector of railways for the Board of Trade, endeavoured in vain to make the men reconcile these contradictions, but the result only tended to prove that both signalmen were evidently so flurried, and so little knew what they were doing at the time, that the evidence of neither can be strictly set against the other's. The southern signalman confessed to a most complete state of confusion. In answer to a juryman, who asked why, even taking his account of the matter, he let a third train enter the tunnel within only six minutes' distance of a second, and that second having its steam off, he said—"Well, I was put out so much at the time that I thought she (the second train) had gone through. The other train was coming. I hardly knew what I was doing." He further stated that the duty of attending to the signal was divided between himself and another man, the men relieving one another day and night; and that in order to alternate the day and night attendance, one man had to remain on duty once a week for 24 hours continuously! It does not appear that the defectiveness of the distance signal (if it was really out of order) was altogether chargeable with the catastrophe. If it had been turned on to "danger" there would still have been the white flag shown by Killick to mislead the third train, and lead the driver to believe the second train had cleared the tunnel. Mr. Hawkins, the traffic manager, admitted his responsibility for the arrangements regarding the number of trains, and the time of their starting; but expressed his opinion that an interval of five minutes is sufficient time to elapse between the starting of two trains on the same route, and that even a shorter period than that is allowed at some stations. It was also proved that it was not the duty of the driver to back the train, and that if the guard had jumped down when the train stopped and run towards the south end of the tunnel the signalman would not have supposed the train had cleared the tunnel, and might have shown his red flag in time to stop the third train. This guard, it will be remembered, was severely injured, and is now lying at Hassock's Gate, but he gave his evidence on Tuesday with great clearness, stating that he called out to the driver not to stop but to go on, but was unable to make him hear, that when he found the train was backing he put on his break for the purpose of checking the speed of the retreating train, and that this duty made it impossible for him to leave his post and run back to the end of the tunnel as he should have done if the train had remained stationary, in accordance with the Company's regulations. On Wednesday Mr. Slight the Secretary was examined in reference chiefly to the reports officially made to him by the guards and others, and which Mr. Faithful the Company's solicitor refused to give up. The coroner had previously endeavoured in vain to obtain possession of them from Mr. Faithful, and he now threatened to commit the secretary to prison if he did not obey his order for their production. The secretary stated that he could not produce what was not in his possession, and that he had handed over the reports to the company's solicitor in the discharge of what was strictly a ministerial duty. The coroner then asked the solicitor if he would produce the documents. Mr. Faithful refused to do so, on the ground that they were privileged communications. After some further threats on the part of the coroner, the deputy chairman, who had come down express from London on hearing that the secretary was about to be committed, undertook to bring the question before the Board of Directors at their next meeting. As an illustration of the effects of the disaster, it may be mentioned that the excursion traffic last Sunday diminished, it is asserted, to the extent of more than one-fifth. The leading clergymen in Brighton made special reference to the calamity in their discourses on Sunday, and all the places of worship were more than usually crowded. New cases of injury continue to transpire. Some of the claims have been found to be of a fictitious character, while others are of a trifling description. Altogether up to this time the directors have received 174 claims for compensation, and have settled with several of them. Many of these, however, are only for damage to dress and loss of property.

THE RAILWAY STRIKE.—The strike of carters, lurrymen, and porters in the employ of the London and North-Western and Lancashire and Yorkshire Railways at Manchester is at an end. The Lancashire and Yorkshire sent out traffic managers and assistants last week to scour the country for men to fill up the places of those on strike, and they worked so energetically that on Friday they had brought together between 200 and 300 new men, whose presence had the effect of inducing the turnouts to resume work at once. The London and North-Western, acting in a similar manner, have also put an end to this strike for the present.

Obituary.

THE EARL OF MOUNT-EDGCUMBE died on Tuesday evening, on board his yacht, off Erith. His lordship has been an invalid for many years past, and was in his 65th year. The Right Hon. Ernest Augustus Edgcumbe, third Earl of Mount-Edgcumbe, Viscount Edgcumbe, and Viscount Valletort and Baron Edgcumbe of Edgcumbe, Devon, was the eldest son of the second earl, and was born at Richmond in 1797. He married in 1831 the eldest daughter of Rear-Admiral Charles Fielding, R.N. (a lady of the bedchamber up to 1854, since which time she has been extra lady of the bedchamber), by whom he leaves two sons and a daughter. He succeeded his father in 1839, was aide-de-camp to the Queen, colonel of the 1st Cornwall Rifle Militia up to 1857, captain of the 16th Devon Rifles, and special deputy warden of the Stannaries. He took no part in politics, but was a Conservative. In 18:9 he published "Extracts from a Journal kept during the Revolution at Rome and Palermo." He is succeeded in the title and estates by his eldest son, Lord Valletort, M.P., who was born in 1832; and married in 1858 Lady Katherine Hamilton, daughter of the Marquis of Abercorn. His lordship has been M.P. for Plymouth since 1859. He was appointed captain in the Cornwall Rifles in 1855, Colonel of the 3d Devon Rifles in 1860, and is extra equerry to the Prince of Wales, and deputy-lieutenant of Cornwall. The late Earl's other children are the Hon. Ernest Charles Edgcumbe, born in 1838, and appointed lieutenant and captain in the Grenadier Guards in 1860; and Lady Ernestine Edgcumbe, born in 1843.

LADY MARY ASHLEY, second daughter of the Earl and Countess of Shaftesbury, died on Tuesday, at Torquay. Her ladyship, with the earl and countess, had only left Brocket Hall, Lady Palmerston's seat in Hertfordshire, a few days previously. Her ladyship had been long ill, and passed last winter at Torquay with so much benefit, it was deemed advisable to try again the effect of change of air and scene on her weakened constitution. She was in her 19th year.

WILLS.—The will of Sir James Cosmo Melvill, K.C.B., late Secretary to the Hon. East India Company, has been sworn under 60,000*l.*; the Hon. and Rev. Henry Cockayne Cust, M.A., Canon of Windsor, 12,000*l.*; Miss Mary Leveson-Gower, of Down Hall, near Harlow, Essex, 12,000*l.*; Commander Bathurst, R.N., 7000*l.*

Miscellaneous.

THE NORMAN CONQUEST OF ENGLAND.—On Sunday, the 18th ult., the ceremony of uncovering a granite column took place at Dives, in Normandy, to commemorate the fact that the fleet and army of Duke William the Conqueror assembled at that port in 1066 before sailing for the conquest of England. The inauguration was attended by delegations from the learned societies of Caen, Falaise, Lisieux, Pont L'Evêque, of the Eure, of La Manche, of the Orne, and of the Seine Inférieure, and by large assemblages from the neighbourhood. M. de Caumont, who has erected the monument at his own cost, delivered the following speech on the occasion:—

"Gentlemen,—When, 26 years ago, at Formigny, I inaugurated a monument in commemoration of the battle given in 1450 to the remnants of the English army, I announced the another column should be erected on the heights of Dives to commemorate the departure of Duke William the Bastard for the conquest of England. Various circumstances have delayed the execution of that project; we can now realise it, thanks to the concurrence of Count Fouchere de Careil, member of the Council General, who has kindly granted us ground upon this eminence. The modest column which we erect here will inform the inhabitants, travellers, and sailors that at the foot of the hill, at the mouth of the Dives, Duke William assembled the fleet which conveyed his powerful army to the coast of England, having first touched at St. Valery. It will remind you that his army encamped for a month on this beach before embarking. The sojourn of the troops of Duke William at Dives becomes a considerable fact when we consider the boldness of the enterprise, the immense results of the conquest, the powerful feudal organisation which assured the duration of the Norman rule on the other side of the Channel. 'Remember,' said the great historian of modern times, our learned and illustrious master, M. Guizot, in his address at Falaise in 1851—remember a fact which has been accomplished in our own days, before our own eyes, the expedition [illegible]. The task to be performed was to embark [illegible] opposite shores of the Mediterranean an army [illegible] exact a just reparation from a barbarian. [illegible] parations! What care, what energy, [illegible] employed by our powerful civilisation [illegible] deemed necessary. And when the day [illegible] of all this was found superfluous. Well, [illegible] almost on the outskirts of barbarism, [illegible] means which civilisation and science [illegible] assembled, embarked, and transported [illegible] and landed on an enemy's soil 50,000 men [illegible] landing gained battles and conquered a [illegible] gentlemen, is the greatest fact in our Norman [illegible] glorious for the hamlet of Dives to have [illegible] assemblage of that powerful army—an army [illegible] to the testimony of contemporary authors, [illegible] of Poictiers, archbishop of Lisieux, was [illegible] severe discipline during the month it was [illegible] banks of the river, that the peasants lived [illegible] happily among the soldiers without the slightest [illegible] flocks and property. It is glorious for the [illegible] have assembled the numerous vessels which [illegible] conquering army. Dives was then one of the [illegible] Duchy; it was the natural port of that [illegible] rates us from Falaise, the cradle of the Conqueror [illegible] port of Hiémois, Séoz, and of the county [illegible] the plains of Falaise and Hiémois the duke [illegible] out to his captains the eminence upon which [illegible] for it is visible 15 leagues in the round; [illegible] them—I give you rendezvous on that eminence [illegible] which you will find my fleet. But what is [illegible] The great fact I have just mentioned, and [illegible] turies ago startled the world, is almost ignored [illegible] fact, there is no monument to record it—not one [illegible] our resources to embellish great cities, to [illegible] construct wide streets; but no heed is taken of [illegible] inferior order, even if they possess a glorious past [illegible] proof of this. Memories of the past are lost [illegible] Yet the French Archæological Society is about [illegible] this forgetfulness; the monument which I this day [illegible] country is only the precursor of a more lasting [illegible] monument—'The Golden Book of the Conquest' [illegible] by our care in the church of Dives; the French [illegible] Society will have engraved on tablets of marble [illegible] the church the names of the families that accompanied William in his perilous and audacious expedition. [illegible] this is what I am happy to announce to you, [illegible] next year to another ceremony, at which [illegible] attend to render homage to the memory of their [illegible] All the towns, hamlets, and communes of Upper [illegible] Normandy will wish to be represented at that [illegible] pious ceremony. Then, gentlemen, when we [illegible] immense concourse assembled at our call to pay [illegible] tracted to the past; when we shall see artisans [illegible] banners, communes with their flags, warriors, [illegible] magistrates, the whole population, in fact, [illegible] to the illustrious Normans of the 11th century, [illegible] with confidence—'Patriotism is not extinct in France [illegible] been asserted, and though it may smoulder, it will [illegible] always when the proper moment arrives.'"

The following is the inscription on the monument:—"Au souvenir du plus grand evènement historique [illegible] annales Normandes, le départ du Duc Guillaume [illegible] Bâtard pour la conquête de l'Angleterre [illegible] Pendant un mois la flotte du Duc Guillaume [illegible] dans le port de Dives, et son armée, composée de cinquante mille hommes, campa dans le voisinage [illegible] de mettre à la voile." From the eminence upon which the column has been erected there is a wide [illegible] embracing on the north the sea and Havre, [illegible] south-west the priory of Plessis-Grimoult [illegible] and the hills of Vire; on the south, Falaise and the church of Guibrog; and farther on, the [illegible] Courbe, in the department of the Orne. [illegible] perhaps, one of the most extensive in Normandy.

ALLEGED PLAGIARISMS OF MILTON.—At [illegible] Art Congress in Brussels, the Abbé Brouwers, [illegible] priest from Holland, delivered an oration in which [illegible] charged Milton with plagiarism from Vondel. [illegible] said:—"I have just touched a sensitive cord. [illegible] was a great genius, and yet I shall dare to prove [illegible] all the genius of Milton is due to one of Antwerp [illegible] to whom Holland, France, and Belgium have [illegible] monuments—I mean Vondel. All the ideas of 'Paradise Lost,' of 'Paradise Regained,' and of 'Samson Agonistes' were beautifully expressed by Vondel 25 years [illegible] the time of Milton. And not only has Milton [illegible] those subjects from Vondel, but he also borrowed [illegible] developments and translated whole verses from [illegible] original author. It is remarked that the weakest [illegible] Milton's works are those in which he has not [illegible] from Vondel. I claim for our country the [illegible] for Antwerp this brilliant glory. You see [illegible] Christian mind has expressed the same ideas at different intervals of time. The world, however, has not [illegible] rendered homage to really great men. I hope [illegible] the day will come when it will do so."

PHYSICAL TRAINING.—Among the Parliamentary Papers recently issued are two small volumes containing some information collected by Mr. Edwin Chadwick during the recent education inquiry. Mr. Chadwick shows in these papers that the present practice [illegible] hours of teaching is a wide cause of enervation [illegible] disposition to disease, and induces also habits of [illegible] lessness and dawdling. The half-time system is [illegible] to give nearly, if not quite, as good education [illegible] whole time; and common sense tells us that a boy [illegible] has acquired the same amount of knowledge in half [illegible] time of another boy must have obtained a proportionately superior habit of mental activity. It is [illegible] alertness, combined with the bodily aptitudes [illegible] by drill, that gives the comparatively stunted [illegible] the town a preference over the strong robust lads [illegible] the coast. Good schoolmasters say that about three [illegible] a day are as long as a bright, voluntary attention [illegible] part of children can be secured, and that in that [illegible] they may really be taught as much as they can receive [illegible] beyond the profitable limit is waste. Hence it is [illegible] that part of the present long school hours be devoted [illegible] gymnastic exercises or drill, as part of the system [illegible]

...tion, or that the half-time system be more ...ed. It is a frequent complaint by runaway apprentices and vagrant children, that the work to which they were first put was really very painful to them; but children, while at school, might be gradually inured and accustomed to labour and exertion. Early physical training would remove or diminish congenital defects or bodily weakness. It is estimated that an addition of at least a fifth might be made to the efficiency and value of a boy as a labourer in after life—an addition equivalent, in the mass, to the produce of the labour of one-fifth more of population, without the expense of additional food, clothes, or shelter, to maintain them. Drill is very strongly recommended by many eminent men, who give their testimony in these papers. It improves the health, the carriage, the manners, even the character; sharpens the attention, gives habits of obedience, promptness, regularity, and self-restraint. Sir F. B. Head writes:—"No animal, whether on four legs or two, can be of any use in the workshop of man until he has been sufficiently divested of that portion of his natural inheritance called 'a will of his own.' What's the use of a cow if she won't allow either man or maid to milk her? What's the use of a horse if he won't put his head into a collar or suffer a saddle on his back? A system of military drill in our schools would prove so beneficial that, if once adopted, an undrilled young man, like a raw unbroken horse, would be considered unserviceable." "I should consider a youth of double value," says Mr. Whitworth, "who has had the training of the nature of a drill; he attends to commands; he keeps everything he has to do with in a high state of cleanliness; defects are corrected, and special qualifications brought out." "We find the drilled men very superior," says Mr. Fairbairn. "They are constantly in readiness for the protection of the country," writes Lieut.-General Shaw Kennedy. "Men are frequently required," says Mr. R. Rawlinson, C.E., "to use their strength in concert, for which they must have confidence in one another; I have frequently seen trained men weed out unskilled men where heavy lifting has been required, because they dare not risk the danger arising from unskilled strength." Here, therefore, is a special advantage over and above the uses of education generally. "I would not," said an eminent manufacturer, "take less than 7000*l.* for my whole set of workmen in exchange for the uneducated, ill-trained, and ill-conditioned workmen of the manufacturer opposite. The steadiness of the educated men induces steadiness of work, and comparative certainty in the quality and quantity of the produce." "Why do you bespeak children from the infant school in preference to others?" an operative was asked: "Because they require less beating, and they are sooner taught," was the expressive answer. It is maintained in the papers that much more might be made of the existing means of education by a system of union and consolidation and gradation of schools, and a division of educational labour; and with improvements of this nature, and contemplating the striking results of education in the district half-time industrial schools for paupers—schools which are emancipating children from hereditary pauperism and crime by methods of training which might be so much more widely adopted—"Men like us, past the middle period of life," writes Mr. Chadwick, addressing Mr. Senior, "might expect to see in a few years a change in the whole moral and intellectual condition of the population, as great as any change produced by improvements in physical science and art in our time."

THE TRIANGULATION OF GREAT BRITAIN, FRANCE AND BELGIUM.—A detachment of officers and men connected with the Ordnance Survey, consisting of the Hon. Lieutenant Delaporte Trench, a corporal and six sappers of the Royal Engineers, left Southampton a few days since for Boulogne, for the purpose of connecting the triangulation of Great Britain with that of France and Belgium, in co-operation with a commission appointed by the French Minister of War. The object of this convention is to substitute one meridional line for the three lines of Greenwich, Paris, and St. Petersburgh at present in use in different countries, and thus to harmonise the maps of all countries. The party took over camp equipage for six men, consisting of observatories, marquees, &c., packed in two ambulance waggons; and are expected to be absent from England about eight months. The connection of the French and Russian systems will be carried out by the officers of those countries.

BIRTHS.—On the 4th inst, in Grosvenor Square, the Lady PORTMORE, of a daughter—30th ult, at Merton Hall, Thetford, the Lady WALSINGHAM, of a daughter—17th July, at Angus, the Hon. Mrs. HAMILTON FORBES, of a daughter—3d inst, the wife of Brigadier-General GARNOCK, commanding at Dover, of a daughter—31st ult, at Charles Street, Eastbourne Terrace, Hyde Park, the wife of Lieutenant-Colonel A. T. ALLAN, 2d Battalion 25th Regiment (King's Own Borderers) of a daughter—27th ult, at Ivy House, Charlbury, Oxon, the wife of Lieut.-Colonel E. V. P. HOLLOWAY, late Madras Army, of a son.

MARRIAGES.—On the 5th inst, in Westminster Abbey, the Earl of CARNARVON to the Lady EVELYN STANHOPE, only daughter of the Earl and Countess of Chesterfield—5th inst, at All Saints' Church, Knightsbridge, Captain the Hon. HENRY WARRENDER FITZMAURICE, late 72d Highlanders, second son of the Earl and Countess of Orkney, to SARAH JANE, only child of the late WILLIAM ROOSE, Esq., of Bryntirion, Anglesey—3d inst, at St. Peter's, Eaton Square, Sir GEORGE WOMBWELL, Bart., to Lady JULIA VILLIERS, eldest daughter of the late Earl of Jersey, and grand-daughter of the late Sir Robert Peel—22d ult, at the Church of Holy Trinity, Walton Breck, and afterwards at St. Patrick's Catholic Church, EMILE JUVENAL LEROY DE SERANCOURT, Esq., of Arras, France, and grandson of the late Marquis de Serancourt, to LETITIA BINGHAM, eldest daughter of the late J. GUNNING PLUNKETT, Esq., J.P., county Roscommon, Ireland, and grandniece of the late Duchesses of Argyll and Hamilton, Lady Coventry, and the late Lord Clanmorris—4th inst, at St. Peter's, Pimlico, Captain GEORGE HENRY SEYMOUR, R.N., C.B., second son of Admiral Sir George Seymour, G.C.B., to SOPHIA MARGARET, eldest daughter of the late DERICK HOSTE, Esq., of Barwick House, Norfolk—29th ult, at All Saints, St. John's Wood, the Rev. JOHN SANSOM, rector of Buslingthorpe, Lincolnshire, to HANNAH JANE, daughter of the late Hon. and Right Rev. Dr. E. GREY, Lord Bishop of Hereford—29th ult, at St. Matthias's, Richmond, ARTHUR HENRY, fourth son of the late JOHN BATHER, Esq., Recorder of Shrewsbury, to LUCY ELIZABETH, fourth daughter of the late Right Rev. Dr. BLOMFIELD, Lord Bishop of London—3d inst, at Christchurch, Hampstead, SAMUEL GURNEY, second son of the late Sir EDWARD BUXTON, to CAROLINE LOUISA, second daughter of J. GURNEY HOARE, Esq., of Hampstead—29th June, at Trinity Church, King William's Town, Cape of Good Hope, Captain J. C. TYRWHITT DRAKE, A.D.C., 2d Queen's Royal, eldest son of the late Rev. J. Tyrwhitt Drake, of Amersham, Bucks, to EMILY HARRIET ANNA, only daughter of Major-General D'URBAN, of Newport, near Exeter, commanding in British Kaffraria—27th ult, at Christchurch, Bayswater, ROBERT ARTHUR WHITTING, Esq., third son of William Whitting, Esq., of Thorney Abbey, Cambridgeshire, to ISABELLA CATHERINE GREGORY, younger daughter of the late Dr. Gregory, of London.

DEATHS.—On the 27th ult, suddenly, in London, THOMAS JAMES THOMSON, Esq., formerly of her Majesty's 54th Regt., and uncle to the present Lord Viscount Ranelagh—28th ult, at the Heath, Salop, HENRY CARR, youngest child of Sir WILLIAM HENRY CLERKE, Bart., of 15, Eaton Place South, aged 10 months—27th ult, at Wickham Court, ELIZA, widow of the late Rev. Sir CHARLES FRANCIS FARNABY, Bart., and youngest daughter of the late Thomas Morland, Esq., aged 79—29th ult, at Ockbrook House, the residence of his father-in-law, EDMUND YATES PEEL, Esq., of Fern Hill, Laugharne, Carmarthenshire, youngest son of the late Rev. G. H. Peel, aged 35—29th ult, at Laurel House, Putney, the wife of Major SOUTHWELL GREVILLE, aged 31—23d ult, at her residence, Ventnor, AMELIA CAROLINE, widow of the late JOSEPH HADFIELD, Esq., of Bonchurch, Isle of Wight, and second daughter of Major-General WHITE, aged 85—28th ult, at 18, Dorset Square, ANN LETITIA, wife of Lieutenant-Colonel GEORGE DE SAUSMAREZ, 21st Madras Native Infantry, and youngest daughter of the late Frederick De Lisle, Esq., aged 39—2d inst, at Willoughby Hall, Lincolnshire, MARY ELIZABETH, the beloved wife of CHARLES ALLIX, Esq., and second daughter of Wm. Hammond, Esq., of St. Alban's Court, Kent, aged 73—28th ult, Major THOMAS ARMSTRONG, late of the 16th Lancers and 46th Foot, aged 64—28th ult, at The Park, Bath, WILLIAM M'ADAM, Esq., of Ballochmorrie House, Ayrshire, Surveyor-General of Roads, aged 58—1st inst, at Rochester, JAMES SMITH, Esq., for 25 years an active magistrate of the county of Kent, aged 85; also, on the same day, eleven hours previously, ISABELLA, his wife, aged 74—26th ult, at his residence, Clarence Street, Gloucester, GEORGE HYMENEUS LOVEGROVE, Esq., Justice of the Peace for the city of Gloucester, and Senior Surgeon to the Gloucester County Hospital, aged 34—3d inst, at his residence, 4, Dorset Square, after a severe illness, JOHN OLIVER HANSON, Esq., aged 70—31st ult, at his residence in the Palace Green, Ely, the Rev. J. GRIFFITHS, B.D., formerly Fellow of Emmanuel College, Cambridge, and for 61 years Minor Canon of Ely, aged 89—27th ult, at Bath, the Rev. JOHN ROGERS PITMAN, M.A., Domestic Chaplain to her late Royal Highness the Duchess of Kent, aged 79—24th ult, the Rev. THOMAS PADDON, 40 years vicar of Mattishall with Pattesley, county of Norfolk—29th ult, at The Grove, Godmanchester, the Rev. WILLIAM PEARSE, rector of Hanwell, Oxfordshire, aged 75—31st ult, at the Rectory, Gosforth, Cumberland, the Rev. FRANCIS FORD PINDER, for 26 years rector of that parish, aged 57—30th ult, at his residence in Albany Street, Regent's Park, JOHN FRANCIS, Esq., the sculptor, aged 81.

Markets.

COVENT GARDEN, Sept. 7.

Of both Vegetables and Fruit there is now a good supply. Figs, Greengage Plums, Apples, and Pears, still come from the Continent and Channel Islands, but of the last two there is also a large supply of English grown produce. Peas and Beans are plentiful. Grapes and Melons abundant. French Beans may be had in quantity. For Potatoes markets are very heavy, and prices about the same as last week. Of the latter many samples are still, however, diseased. Cucumbers are very abundant. Cut flowers chiefly consist of Orchids, Lily of the Valley, Pelargoniums, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Apples, per doz., 6d to 1s
Grapes, per lb., 1s 6d to 4s	Oranges, per 100, 6s to 14s
Melons, each, 1s to 3s	Lemons, per 100, 6s to 10s
Peaches, per doz., 4s to 10s	Nuts, Cob, per pound, 1s to 1s 6d
Nectarines, do., 3s to 6s	
Pears, per doz., 1s to 4s	

VEGETABLES.

Cauliflowers, each, 2d to 6d	Artichokes, each, 4d to 6d
Green Peas, p. quart, 1s to 1s 6d	Beet, per doz., 1s 6d
French Beans, per sieve, 2s 6d to 3s 6d	Celery, p. bundle, 1s 6d to 2s
Broad Beans, p. bush, 2s 6d to 3s	Onions, p. ½ sieve, 4s 6d
Cabbages, do., 1s 3d to 1s 6d	Rhubarb, p. bundle, 6d to 9d
Potatoes, p. ton, 60s to 80s	Tomatoes, p. doz., 1s to 3s
— per lb., 1d to 4d	Shallots, per lb., 8d to 10d
— per cwt., 4s to 8s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 4d to 6d	Endive, p. score, 1s 6d
Carrots, new, do., 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., 2s to 3s
Cucumbers, each, 6d to 9d	Parsley, p. 12 bunches, 3s to 4s
Veg. Marrows, p. doz, 1s to 1s 6d	Savory, per bunch, 2d to 4d

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HAY.—Per Load of 36 Trusses.

SMITHFIELD, THURSDAY, Sept 5.

Prime Meadow Hay	75s to 84s		Clover, old	90s to 120s	
Superior do. (old)	88	100	New Clover	—	—
Inferior do.	36	50	Do second cut ..	—	—
New do.	50	80	Straw	28	34
Rowen	—	—			

DAVIS & Co.

CUMBERLAND MARKET, THURSDAY, Sept. 5.

Sup. Meadow Hay..	100s to 112s		Inferior Clover ..	78s to 100s	
Inferior do.	65	90	New do.	—	—
New do.	—	—	Straw	36	42
Superior Clover ..	110	120			

JOSHUA BAKER.

WHITECHAPEL, THURSDAY, Sept. 5.

Fine Meadow Hay	95s to 100s		Fine 1st cut Clover	100s to 118s	
Inferior do.	70	85	Inferior do.	80	95
Prime New Hay ..	80	88	New 2d cut	90	105
Inferior	—	—	Inferior do.	—	—
Straw	32	36	New 1st cut ..	100	105

COAL MARKET.—Sept. 4.

Holywell, 15s. 6d.; North Pelton Gas, 12s.; Tanfield Moor Butes, 12s. 9d.; Walls End Acorn Close, 16s.; Walls End Eden, 16s.; Walls End Sheriff Hill, 14s. 6d.; Walls End Framwellgate, 16s.; Walls End Hetton, 18s.; Walls End Pittington, 15s. 6d.; Walls End Russell's Hetton, 16s. 9d.; Walls End Kelloe, 17s. 3d.; Walls End South Hartlepool, 16s. 6d.; Walls End South Kelloe, 16s. 9d.; Walls End Trimdon Thornley, 15s. 6d.; Walls End Woodhouse Close, 14s. 9d.; Carway and Duffryn Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.—Ships at market, 51.

BUTTER MARKET.—Sept. 6.

Best Fresh Butter	14s. per dozen lbs.
Second do. do.	12s. " "

Pork, 4s. 4d. to 5s. 4d. per 8 lbs.

BRITISH WOOLS.—LONDON, FRIDAY, Sept. 6.

Our trade continues healthy, and a fair business is transacted at former rates.

	s. d.	s. d.		s. d.	s. d.
South-down Hogges ..	.. to	1 5	Leicest. Wethers	1 3 to	1 4
Half-bred ditto ..	1 5 —	1 6	Ditto Hoggs .	1 4 —	1 5
Down Ewes ..	1 4 —	1 5	Combing Skins	1 0 —	1 5
Kent Fleeces ..	1 5 —	..	Flannel Wool ..	1 0 —	1 5
			Blanket ditto ..	0 6 —	..

HOPS.—BOROUGH MARKET, FRIDAY, Sept. 6.

Messrs. Pattenden & Smith report a steady consumptive trade doing for Hops of all descriptions at firm rates. Where picking has commenced the yield has proved one-third less than was expected; both red and white mould is spreading through Middle Kent, and the colour of the samples for the most part will be low. Duty, 140,000*l.*

METROPOLITAN CATTLE MARKET.

MONDAY, Sept. 2.

The number of Beasts is about the same as on Monday last: trade is, however, very slack, and prices on the average rather lower. We have a large supply of Sheep and a small demand; several remained unsold, notwithstanding a disposition to take lower prices. Lamb trade is worse. Calves are selling about the same as on Thursday. From Germany and Holland there are 1150 Beasts, 9140 Sheep, and 257 Calves; from Scotland, 55 Beasts: from Ireland, 600; and 3200 from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 6 to	4 8	Best Long-wools. ..	to	..
Best Short-horns	4 4 —	4 6	Do. Shorn ..	4 6 —	4 8
2d quality Beasts	3 0 —	3 6	Ewes & 2d quality ..	—	..
Best Downs and Half-breds ..	.. to	..	Do. Shorn ..	4 0 —	4 4
Do. Shorn ..	4 10 to	5 0	Lambs	5 0 —	5 8
			Calves	3 10 —	4 6
			Pigs	3 4 —	4 6

Beasts, 5370; Sheep & Lambs, 30,350; Calves, 297: Pigs, 570.

THURSDAY, Sept. 9.

We have a shorter supply of Beasts than on Thursday last. Trade is slow, but some of the choicest kinds are making rather more money. Sheep and Lambs are not quite so plentiful. Trade is more active, but prices are not much higher. A better clearance is effected. The Calf trade is rather better. From Germany and Holland there are 70 Beasts, 1750 Sheep, and 164 Calves; from Spain, 120 Beasts; and 105 Milch Cows from the home counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 6 to	4 10	Best Long-wools. ..	to	..
Best Short-horns	4 4 —	4 8	Do. Shorn ..	4 8 —	4 10
2d quality Beasts	3 0 —	3 8	Ewes & 2d quality ..	—	..
Best Downs and Half-breds ..	.. —	..	Do. Shorn ..	4 0 —	4 6
Do. Shorn ..	4 10 —	5 0	Lambs	5 0 —	5 10
			Calves	4 0 —	4 8
			Pigs	4 0 —	4 8

Beasts, 1055; Sheep & Lambs, 7790; Calves, 265; Pigs, 180.

MARK LANE.—MONDAY, Sept. 2.

The supply of Wheat from Essex to this morning's market was very small, and almost entirely of the new crop; that from Kent moderate, and the whole must be quoted 2s. to 3s. per qr. dearer than on this day se'nnight. The demand for foreign was chiefly confined to American descriptions for export to France, and these must be quoted fully 1s. to 2s. per qr. higher. The demand for other qualities was limited, and we are unable to alter our quotations. Malting Barley brings last week's rates, grinding qualities are rather dearer. Beans and Peas unaltered in value. The Oat trade is quiet, and prices remain the same as before. For barrel Flour there is a fair demand, and bonded parcels bring an advance of 6d. to 1s. per barrel.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk..White	50—59	Red	50—56
— — fine selected runs..ditto	62—65	Red	50—63
— — Talavera	55—67		
— Norfolk	—	Red	—
— Foreign	40—70		
BARLEY, grind. & dist., 26s to 27s..Chev.	37—40	Malting .	36—38
— Foreign..grinding and distilling	27—30	Malting .	33—36
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire—Potato	26—28	Feed ..	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign........Poland and Brew	20—23	Feed ..	19—21
RYE	36—38	Foreign .	—
RYE-MEAL, foreign..................	—		
BEANS, Mazagan....34s to 35s ...Tick	35—37	Harrow .	35—37
— Pigeon ......35s — 40s..Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
PEAS, white, Essex and Kent..Boilers	31—36	Suffolk .	35—37
— Maple .... —s to —s ......Grey	34—36	Foreign .	35—38
MAIZE ....White	—	Yellow ..	—
FLOUR, best marks delivered..per sack	46—51		
— 2d do ....ditto	30—46	Country	30—46
— Foreign ....per barrel	26—32	Per sack	43—58

FRIDAY, Sept. 6.

Since the 30th inst. the weather has continued to be fine and hot. In those districts where the harvest has not been finished, great progress has been made towards its completion, and the reports are generally very satisfactory, the yield of Wheat excepted. The demand for new English Wheat during the week has been very active, both on the part of millers and exporters, and a rise in prices of 2s to 3s. per qr. has been general. American descriptions have also been in request at an improvement of 1s to 2s. per qr., but Baltic qualities were comparatively neglected, and upon these it has been difficult here to realise an advance. Spring Corn of all kinds comes sparingly to market, and its value remains much the same as last week. Barrel Flour has been in good demand for France

and an advance of 6d. to 1s. per barrel has been obtained here, as well as in Liverpool and Glasgow. Since Friday last 68 vessels have been reported off the coast. The floating trade has been firm, and better prices have been obtained for Maize and Bar[illegible] the former is wanted for the Continent. The arrivals [illegible] Wheat, foreign Oats, and American Flour this [illegible] been to a moderate extent, of all other grain small [illegible] et was tolerably attended. English and fine [illegible] Wheat continues to be in active demand for [illegible] improvement of 1s. to 2s. per qr., but other, and p[illegible] sale, qualities are neglected, and upon these it is di[illegible] to obtain any advance. Barley, Beans, and Peas bring Monday's quotations. The Oat trade is very firm, and in some instances a trifling advance is obtained.

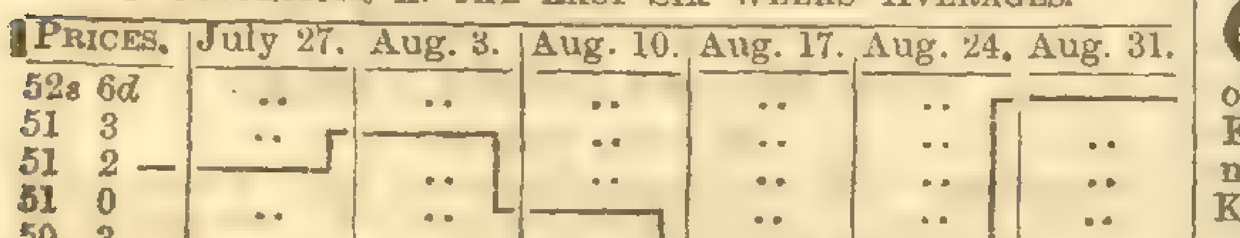
ARRIVALS FROM Aug. 30 to Sept. 6.

	Wheat.	Barley.	Oats.	Flour.
English ..	2440 qrs.	130 qrs.	450 qrs.	880 sks.
Irish	— ,,	— ,,	10 ,,	— ,,
Foreign ..	3880 ,,	310 ,,	21500 ,,	150 ,, 13610 brls.

LIVERPOOL, Tuesday, Sept. 3.—This morning's market has been well attended both by local and country buyers, and a good demand has been experienced both for the interior and for France at an improvement of about 2d. per cental on Wheat, and 6d. per barrel on Flour since Friday. Indian Corn was in active request, and an advance of 9d. per qr. was paid readily. Oats and Oatmeal dull of sale. Beans and Peas were each 6d. per qr. dearer. Barley unaltered in value. The market closes strong.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
July 27..	51s 2d	30s 8d	26s10d	38s 5d	42s10d	40s 1d
Aug. 3..	51 3	28 3	24 11	39 3	42 1	39 0
— 10..	51 0	30 1	25 4	36 7	43 8	38 0
— 17..	50 3	30 0	25 11	37 5	42 7	37 5
— 24..	50 3	32 10	26 1	35 10	43 5	35 5
— 31..	52 6	34 1	24 5	37 5	44 0	34 10
Agg. Aver.	51 1	31 0	25 7	37 6	43 1	37 6

FLUCTUATIONS IN THE LAST SIX WEEKS' AVERAGES.



AGRICULTURAL IMPROVEMENTS. — Land-owners and others interested in the welfare of the Labouring Agricultural Class, may find Places for Young Men of good character, by applying by letter to Mr. BAILEY DENTON, 52, Parliament Street, Westminster, S.W.

General Land Drainage and Improvement Company.

WANTED, FOREMAN OF DRAINAGE WORKS. —Written applications, with references as to character for ability, integrity, and sobriety, to be addressed to Mr. BAILEY DENTON, the Company's Engineer, at No. 52, Parliament Street, Westminster, S.W.

WANTED, a good practical WORKING HEAD GARDENER in Shropshire, age about 30, married, without family. He must thoroughly understand the duties of the Kitchen Garden, and have a fair knowledge of Flowers. Garden about 2 acres. Cottage within the walls. Coal and Vegetables allowed. Wages 40l. per annum. None but those holding the highest characters need apply.—References as to character may be addressed to J. C., Mr. Thompson, Fishmonger, Newport, Shropshire.

WANTED, an active, industrious young Man, to take the In-door Department of a Nursery in the North of England. He must have had experience in the Propagation of Hard and Soft-wooded Greenhouse Plants, Roses, Rhododendrons, Conifers, &c.—Address (not later than Thursday morning), giving reference as to ability and character, and at same time salary expected, to X. Y., 7, Falcon Street, City, E.C.

WANTED, AS WORKING GARDENER, about 12 miles from London, a quiet industrious Man, who thoroughly understands Kitchen, Fruit, and Flower Gardens (no Greenhouse). He would be expected to look after a Pony and Chaise in the summer months, and make himself generally useful. He would be provided with rooms in the winter only, and would take charge of the Cottage. Must be married, and with small or no family. Wages, 1l. per week.—Apply by letter only to H., care of Mr. Shaw, 27, Southampton Row, W.C.

WANTED, A SALESMAN AND PROPAGATOR in a Provincial Nursery.—A steady, married, middle-aged Man preferred. No one need apply who has not a general knowledge of the business.—L. O., Messrs. Hurst & McMullen, 6, Leadenhall Street, E.C.

WANTED, A PACKER.—Apply at WILLIAM BULL'S Establishment for New and Rare Plants, King's Road, Chelsea, S.W.

WANTED, as SHOPMAN in a London house, one well accustomed to the Wholesale and Retail Counter Trade.—Apply by letter only to F., 48 A, Moorgate Street, E.C.

WANTED, A GENERAL SHOPMAN willing to make himself useful. Must have a good character and thoroughly understand the Retail Seed Trade.—Address by letter, stating salary, &c., X. X., *Gardeners' Chronicle* Office.

WANT PLACES.—Letters to be Post Paid.

J. EDWARDS begs to inform Nurserymen and Seedsmen that (independent of the recent Advertisement of E. G. Henderson and Son's) after an engagement with that firm for the last ten years, he is now open to receive an offer from any house in the Trade (excepting theirs), and that he will be able to give ample and satisfactory reasons for having left them.—J. EDWARDS, *Gardeners' Chronicle* Office, W.C.

To Noblemen and Gentlemen.

GARDENER (FIRST-CLASS), age 42, married, with a large family.—RODERICK ELPHINSTONE, for 11 years Gardener to Sir R. Shafto Adair, Bart., at Flixton Hall, Bungay, is now at liberty to engage with any nobleman or gentleman in want of a thorough practical man. Has had upwards of 20 years' constant practice in Early and Late Forcing, Flower, Fruit, and Kitchen Gardens; Nursery and Plantations; the Erection and Heating of Horticultural Buildings for the different requirements on economical principles; Laying Out new Grounds, &c. Can be highly recommended by the most eminent Horticulturists of the day.—Apply as above.

GARDENER (HEAD).—Middle-aged, single; practical knowledge of Early Forcing, Fruit, Flower, and Kitchen Gardens. Good character. — A. B., 7, Queen's Road West, Chelsea, S.W.

GARDENER (HEAD).—Age 40, married; thoroughly practical in every department. Can manage Land, &c. to any extent. Five years in last situation.—A. B., Messrs. Dobson & Sons, Nurserymen, Isleworth, W.

GARDENER (HEAD).—Age 36, married, one child. Can be highly recommended to any lady or gentlemen requiring a thorough practical working Gardener; has had 16 years' experience in first-class situations.—D., Mr. Nash, 4, Upper Weymouth Street, Portland Place, London, W.

GARDENER (HEAD).—Age 28; understands the Forcing of Grapes, Melons, Cucumbers, &c., and the various branches of his profession. Can have an excellent character. A single-handed place accepted.—A. G., Post Office, Hertford, Herts.

GARDENER (HEAD), age 31.—Mr. WACKRILL, of Bowling Brock Farm, Wandsworth Common, S.W., can with confidence recommend a thorough practical and confidential Gardener to any nobleman or gentleman.—Address as above.

GARDENER (HEAD).—Age 39, married; understands Early and Late Forcing, Plant Houses, Flower and Kitchen Gardens, Pits, Frames, in all branches. Three years' good character.—E. F. G., W. Cutbush & Sons, Highgate, N.

GARDENER (HEAD).—Age 40, married, no incumbrance; thoroughly practical; first-rate testimonials. Three years' character from present and five from previous situation.—W. MOORE, High Elms Garden, Farnborough, Kent, S.E.

GARDENER (HEAD).—Age 42, married; has a thorough practical knowledge of Early and Late Forcing of Fruits, Flowers, and Vegetables, also the management of Kitchen and Flower Gardens. Good character from the gentleman he is about leaving.—J. W., Southborough Park, Surbiton, Kingston, Surrey, S.W.

GARDENER (HEAD).—Age 36, married; has had great experience in Forcing all kinds of Fruits, Flowers, and Vegetables, the routine of Kitchen and Flower Gardens, the Erection and Heating of Hothouses, the improvement of Pleasure Grounds, &c. Five years' good character.—S. S., Mr. Veitch, Exotic Nursery, King's Road, Chelsea, S.W.

GARDENER (HEAD), where several men are kept. —Middle aged; has given great satisfaction in Forcing Grapes and Peaches in Pots, Melons, Cucumbers, Strawberries, French Beans, Mushrooms, &c. High testimonials from a lady who kept six men in the gardens.—A. Z., Mr. Batchelor's Library, Dover, Kent.

GARDENER (HEAD).—Age 33, married, without incumbrance; understands his business in all its branches, a good Accountant, and has a knowledge of Land and Plantations. High wages not so much an object as a comfortable situation. Well recommended.—R. A, Post Office, Bilbrough, near York.

GARDENER (HEAD).—Scotch; age 30, married, no family. Has had much practical experience in Growing and Forcing Fruit, both in England and Scotland. Practically understands his profession. Can be well recommended. —D. B., *Gardeners' Chronicle* Office, W.C.

GARDENER (HEAD), and Wife as COOK and HOUSEKEEPER.—Has a thorough practical knowledge of his profession in all its branches; can manage Land and Stock. No single-handed place accepted. Five years' good character.—A. B., Gould's Coffee Rooms, 77, Waterloo Road, London, S.

GARDENER (HEAD).—Age 35, married; thorough practical knowledge of Gardening, having had extensive experience in all kinds of Forcing, the successful cultivation of Stove and Greenhouse Plants, Ferns and Orchids. Highly recommended by present employer, who will give satisfactory reasons for leaving his service.—JOHN ROBINSON, Gardener, Thomas Butler, Esq., Burley, near Leeds.

GARDENER (HEAD), to any nobleman or gentleman.—Age 35, married, no incumbrance; a thorough good Gardener, and understands the Management of Pines, Vines, Peaches, Exotic, Stove and Greenhouse Plants, Kitchen and Flower Gardens, and Replanting, Altering, and Laying out New Gardens. Twenty-three years' experience. The highest reference can be obtained from his apprenticeship.—W. R., Gardener, Hatchlands, near Guildford, Surrey.

GARDENER (HEAD).—Age 32, married; is a first-rate Grower of Pines, Grapes, Peaches, Melons, &c., and has obtained many Prizes at the London Exhibitions; thoroughly practical in all branches of Fruit, Flower, and Kitchen Gardening. Fifteen years' practice. Has lived 10 years in some of the first Gardens in England, and five years in the situation he is now leaving. Can be highly recommended.—Messrs. CUTBUSH, Highgate Nursery, London, N.

To Noblemen and Gentlemen.

GARDENER (HEAD).—An intelligent and practical Man is desirous to meet with an engagement as above, or combined with the entire charge of an Estate, being acquainted with the Agricultural and Horticultural departments; is also a competent Surveyor, Valuer, and Designer.—Any gentleman or extensive proprietor requiring such, will meet with due references on application to Messrs. E. G. HENDERSON & SON, Wellington Road Nursery, St. John's Wood, London, N.W.

GARDENER (HEAD, OR SINGLE-HANDED).—Age 28, single; has a thorough knowledge of Vines, Stove, and Greenhouse Plants and Gardening in all its branches. Three years' character.—H. M., 3, Rose Terrace, Lee, Kent, S.E.

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News of the Week.

THE *Moniteur* of yesterday contains an article contradicting the statements of the German journals in regard to the increase of the French

fleet. It declares that no extraordinary credit has been opened for naval armaments and the building of ships, which are, it says, continued this year on the usual scale and within the limits of the regular budget.

A despatch from Madrid states that Spain, in conjunction with England and France, is about to intervene in Mexico by sending troops into that country from Cuba. The negotiations between Spain and Morocco are still without any result.

The EMPEROR OF AUSTRIA on Sunday received the deputation bearing the address of the Lower House. HIS MAJESTY in his reply said that he was faithful to the Constitution, and that the Lower House, in adopting his principle that the provinces should possess legal autonomy, but should be bound together in a natural unity, had likewise conceived that such an autonomy should only be limited by a conscientious fulfilment of the common duties towards a powerful integral monarchy. To carry out these principles against those who did not respect them was certainly a necessity, which he hoped, however, to confine within the narrowest possible limits. It is reported at Vienna, that the Archduke REGNIER has accepted the mission of going through Hungary in order to communicate to the EMPEROR the wishes of the population. The CARDINAL PRIMATE of Hungary arrived at Vienna on Monday, and had an interview with the EMPEROR with a view of effecting a reconciliation between the Government and the Hungarians. As he returned to Pesth on Wednesday it was reported that his mission had been unsuccessful, but it is now said that his visit will result in the early convocation of the Hungarian Diet on the same basis as before, and that the Government will take the diploma of October last as the basis of future negotiations with Hungary.

The anniversary of the coronation of the EMPEROR OF RUSSIA was celebrated on Saturday at Warsaw without any disturbance. At Kalisch, on the contrary, the people broke the windows of the few houses that were illuminated, and hissed the troops sent to disperse them. The official accounts state that 18 persons were arrested, 12 of whom were released on the following day.

The official organ of the Papal Government declares the passage relative to Rome in Baron RICASOLI's note to be calumnious, and that it is unworthy of the dignity of the Holy See to make any reply demonstrating the falsity of its assertions contained therein. The Papal Government, it says, has made an appeal to the representatives of the Foreign Powers at Rome, and to the loyalty of the French army, to testify to the falsity of the insinuations contained in Baron RICASOLI's note. The Turin papers announce that CHRISTEN, one of the leaders of the brigands, has been arrested at Naples travelling with a false English passport, and that MARACCO, the notorious bandit of Calabria, has made his submission. On Tuesday the brigand CHIAVONE, having received reinforcements from Rome, attacked Castelluccio, near Sora, with 200 men, but was repulsed with great loss, and retreated into the Papal territory. A meeting of theologians at Palermo has adopted a resolution declaring the temporal power of the POPE to be incompatible with and contrary to the mission of the Catholic Church.

Accounts from Ragusa announce that the Turkish troops crossed the Montenegrin frontier on the 4th inst., and that the Montenegrins have since boldly taken the initiative and entered the Turkish territory near Lecche. A battle between OMAR PASHA and the Montenegrin chiefs was daily expected.

The United States troops under Colonel TYLER have been surprised and defeated by a Confederate force, supposed to be commanded by General FLOYD, the late Secretary at War, at Summersville in Western Virginia. The Federal loss, which fell chiefly on the 7th Ohio Regiment, is officially represented at 15 killed and 40 wounded. Fort Stanton in Texas and Fort Fillmore in Arigona have been surrendered to the Confederates, and it is reported from Tennessee, that a battle took place at Cape Girardeau, on the 27th, in which the Confederates were victorious. The Federal troops are retiring in great numbers from Harper's Ferry; the Confederates are in full possession of Bailly's Cross Roads, and are concentrating upon Washington from so many points, that a battle on the Potomac is considered imminent. A report from St. Louis states positively that General M'CULLOCH is marching on Jefferson city with 10,000 men, while the Washington papers intimate that an onward movement will shortly be made by General M'CLELLAN, who appears to have succeeded in restoring the discipline of the Federal army. A powerful naval armament, including numerous gun boats, manned by 4000 men, and mounting 100 guns, quitted Old Point on the 26th ult., under the orders of Commodore STRINGHAM, the troops being commanded by General BUTLER. Its destination was kept a profound secret, but it is understood that it is intended to close the numerous inlets on the coast of North Carolina which have hitherto afforded a secure shelter to the privateers. Martial law has been proclaimed in Missouri, and the slaves of insurrectionists in that State are to be freed. It is understood that President LINCOLN will not recognise the neutrality of Kentucky, but is willing to await the action of the Kentucky Legislature before forcing the State to declare its position. President LINCOLN's recent proclamation forbidding any person to land in the United States without a passport is not to affect travellers between Canada and the United States.

A telegraphhic despatch in anticipation of the Calcutta mail of the 8th August informs us that the cholera is committing dreadful ravages in Agra and Meerut, and that very bad accounts of the indigo crops have been received from Benares and Tirhoot. The Prussian Minister at Pekin is making ineffectual efforts to negotiate a treaty with the Chinese Government. SAN-KO-LIN-SIN has been victorious over the Shantung rebels. Affairs in Japan continue stationary, and Mr. ALCOCK has not been molested on his overland journey.

A renewal of the war in New Zealand is imminent, peace with the natives being considered hopeless. All the ships of war have been ordered to assemble at Auckland, but General CAMERON will await reinforcements before he takes the field.

The territory of Lagos, on the west coast of Africa, was ceded by the KING to the British Crown on the 5th of August; and a commercial treaty, favourable to British and French interests, has been negotiated with the KING OF BODABOO.

Home News.

THE COURT IN SCOTLAND.—On Wednesday the 4th the Queen went out driving, accompanied by the Prince Consort and Prince Arthur. Prince Alfred went out deer stalking. In the evening Prince Louis of Hesse arrived on a visit. On Thursday the Princess of Hohenlohe Langenburg arrived on a visit to her Majesty. In the afternoon Prince Alfred, Prince Arthur, and Prince Leopold, with Prince Louis of Hesse, honoured the Highland gathering at Braemar with their presence. On Friday the Queen and Prince Consort, accompanied by Princess Alice and Prince Louis of Hesse, drove to Aberarder, where ponies were awaiting the Royal party, who rode round by the Ballock Derg road to Invercauld, where they honoured Mr. and Mrs. Farquharson with a visit, and drove back to Balmoral. Prince Alfred went out deer stalking. Prince Arthur went to fish in Loch Muick. The Princess of Hohenlohe, accompanied by Prince Leopold, went out driving. On Saturday the Queen, accompanied by Princess Alice and Princess Helena, drove to Alt-na-Guithesack, and rode up to the Glassalt Sheel, at the head of Loch Muich, returning in the evening. The Prince Consort went out deer stalking. Prince Alfred and Prince Louis of Hesse went out grouse shooting. On Sunday the Queen and Prince Consort, with the Princess of Hohenlohe, Princess Alice, Prince Alfred, and Prince Louis of Hesse, attended Divine service in the parish church of Crathie. The Rev. Dr. M'Leod officiated. On Monday afternoon the Queen and Prince Consort went out riding. Prince Alfred went out grouse shooting. Prince Louis of Hesse went out deer stalking. The Princess of Hohenlohe, accompanied by Princess Alice, Princess Helena, and Prince Leopold, took a drive in the afternoon. On Tuesday the Queen, accompanied by Princess Alice and Prince Louis of Hesse, drove to Alt-na-Guithesack, and rode to the Dhu Loch, taking luncheon [illegible] the head of Loch Muich. The Prince Consort and Prince Alfred accompanied her Majesty as far as Alt-na-Guithesack, where their Royal Highnesses [illegible] for deer.

THE PRINCE OF WALES on the 3rd inst. honoured Russborough Park, the seat of the Earl of [illegible] with a visit, and on Thursday, the 5th, dined with the officers of the 3rd Light Dragoons, at their quarters [illegible] the Curragh. On Tuesday last his Royal Highness performed the ceremony of presenting new colours to the 36th Regiment. On Wednesday the Prince took his departure from the Curragh, and dined with General Sir George Brown, at the Royal Hospital, Kilmainham. In the evening his Royal Highness was present at the grand ball of the Lord Mayor at the Mansion House. On Thursday morning his Royal Highness, accompanied by the Lord Lieutenant, proceeded by special train to Bray, and from thence to Kil[illegible] House, where his Royal Highness honoured [illegible] Meath with a visit. The Prince afterwards paid a visit to Lord Powerscourt, and viewed his demesne [illegible] well-known waterfall, returning after [illegible] Dublin. In the afternoon the Prince left the Viceregal Lodge for Kingstown, where he embarked for Holyhead on his way to the Rhine to witness the manœuvres of the Prussian army. The rumour mentioned by the French papers that a marriage is arranged between the Prince of Wales and the Princess, the daughter of Prince Christian of [illegible] Glücksburg, is said to be without any foundation.

PRINCE ALFRED.—According to present arrangements, it is expected that Prince Alfred will leave England for Halifax about the 20th inst., to rejoin his ship, the St. George, on the conclusion of his leave of absence.

THE DUKE AND DUCHESS OF MONTPENSIER.—The Duke and Duchess of Montpensier embarked on [illegible] at Falmouth, on board the Don Antonio Ulloa [illegible] and sailed a second time for Santander on [illegible] morning, with light winds and very fine [illegible]. During their stay at Falmouth, their Royal Highnesses took a trip up the Fal, and the Duke paid [illegible] Kynance Cove, the Lizard, Penzance, and the Land's End.

THE CHANNEL FLEET.—Admiral Smart's squadron, consisting of the Trafalgar, Donegal, Hero, Centaur, Edgar, Conqueror, Aboukir, and Revenge, left the Clyde last week for Belfast Lough, where it [illegible] remains.

THE IRON-PLATED SHIPS.—The Defence, [illegible] arrived at Chatham, but in consequence [illegible] draught of 25 feet, it is found necessary [illegible] portion of the stonework in the dock in which she [illegible] be placed in order that depth enough may be [illegible] to float her. She will therefore remain [illegible] floating shears until the next spring tides. The rigging also will be delayed for about a [illegible] topmasts, yards, and other gear, which have [illegible] time ready, cannot be fitted until the arrival [illegible] masts, which are of iron, from the Thames [illegible]. The first portion of the keel plates of the [illegible] were laid upon the blocks last week. As this is [illegible] iron ship built at Chatham, it has been necessary [illegible] new workshops and machinery. The work will [illegible] carried on uninterruptedly until the vessel is [illegible] which it is expected will be in less than two years [illegible] many as 1,000 hands are to be employed on [illegible] as fast as good mechanics offer themselves at the [illegible] yard they are engaged. Several of the [illegible] Armstrong guns selected for the Warrior have [illegible] shipped on board that vessel at Greenhithe. The[illegible] will be mounted on carriages manufactured [illegible] proved principle, so as to obviate as far as possible [illegible] powerful recoil resulting from the firing of [illegible] nance. The rifle tower on the upper deck of the [illegible] is nearly completed, and a large party of [illegible] are employed to get her ready for removal to [illegible] mouth, which is expected to take place on the [illegible] October.

THE ARMY.—The Commission for the reorganisation of the Cavalry have completed the classification of [illegible] force, and fixed the Cavalry establishment on a [illegible] footing for the future. With the three new regiments to be formed out of the Bengal European [illegible] there will be henceforth 28 regiments of Cavalry [illegible] Line. These will be divided into four [illegible] 12 of Medium, and 12 of Light Cavalry [illegible] Heavy will consist of the 4th and 5th [illegible] Guards, and 1st and 2d Dragoons; the Medium [illegible] consist of the 1st, 2d, 3d, 6th and 7th Dragoon [illegible] 5th Lancers; 6th Dragoons, 9th, 12th, 16th, [illegible] Lancers, and the Light will consist of the 3d, 4th [illegible] and 14th Hussars, all which were formerly Light Dragoons, 7th, 8th, 10th, 11th, 15th, 18th, 19th, [illegible] 21st Hussars, the three latter being the new regiments. The Heavy are to be of sufficient weight to [illegible] with powerful effect in a charge; the Medium [illegible] also available for this purpose, will not be [illegible] with a view to their employment in outpost [illegible] and orderly duty; and the Light will be more particularly reserved for this latter kind of employment, and the Medium will be available for service in India [illegible] result of the inquiry of the second commission [illegible] to weight has been of a negative character [illegible] reduction in weight amounts to a very few [illegible]

although the employment of a cart with each squadron [illegible]. The Light Cavalry will therefore remain nearly as heavy as ever. Mr. Westley Richards's breech-loading rifled-carbine is henceforward to be adopted in all cavalry regiments. It weighs 6 lbs. 1½oz.; is sighted to 700 yards; and carries a cylindro-conoidal bullet with hollow base.

House of Lords.—Mr. James Heard Pulman, late assistant-librarian, has been appointed librarian to the House of Lords, in place of the late Mr. John Frederick Leary.

Passports in the United States.—The *Gazette* of Tuesday contained the following extract of a despatch from Lord Lyons to Earl Russell, dated Washington, August 19th, 1861:—

"I have the honour to transmit to your lordship herewith a [illegible] notice from the State Department which has appeared in the newspapers this morning. It declares that no person will be allowed to go abroad from a port in the United States without a passport from the State Department or a passport countersigned by the Secretary of State; and that no person will be allowed to land in the United States without a passport from a minister or consul of the United States, or (if a foreigner) from his own Government, counter-signed by a United States minister or consul. This notice has been issued without any previous communication on the part of the Secretary of State, either with me, or, so far as I know, with any of my colleagues, nor has it as yet been officially communicated to me."

"To all whom it may concern.

"Department of State, Washington, August 19, 1861. Until further notice, no person will be allowed to go abroad from a port in the United States without a passport either from this department or countersigned by the Secretary of State; nor will any person be allowed to land in the United States without a passport from a minister or consul of the United States, or, if a foreigner, from his own Government, countersigned by such minister or consul. This regulation, however, is not to take effect in regard to persons coming from abroad until a reasonable time shall have elapsed for it to become known in the country from which they may proceed."

The Volunteer Movement.—A series of regulations has been issued from the War Office with a view to aid Volunteer corps in obtaining properly qualified drill instructors. Under these new regulations drill instructors, taken from the line, from pensioners, or from the disembodied militia staff, will be provided at the public expense, in the proportion of one to every two battalions of Volunteers. The drill instructors, in addition to their pension, are to receive 2s. 4d. a-day, and if they have no pension 2s. 7d. They will be subject to military law, and act under the immediate direction of the adjutant, but no one will be qualified to fill the post who is above 50 years of age, nor will he be permitted to engage in any trade or business.—The review of the Volunteer Cadet Corps took place on Wednesday at the Crystal Palace, and attracted a vast number of visitors. The number of cadets was 872, belonging to the Queen's Westminster, London Rifle Brigade, South Middlesex, 1st Surrey, 33d Middlesex, 7th Middlesex, 13th Kent, 21st Kent, 3d Kent, 2d, 4th, and 6th Tower Hamlets, 20th, 29th, and 40th Middlesex, and Douro House Academy, St. John's Wood. The evolutions were performed under the command of Major Mayne, adjutant of the Queen's Westminster, who, at the conclusion of the review, addressed the boys, and assured them that he knew some Volunteer regiments who could not have gone through such a drill so creditably as they had done. At the same time their sergeants had not been accustomed to exercise them in battalions or large numbers; they had not had the opportunity of doing so, and it was a very difficult thing to bring such evolutions to perfection; but they had done themselves great credit. The brass bands of the 1st Surrey and South Middlesex Rifles, the brass band of the cadets of Douro House, St. John's Wood, and the Cadet drum and fife bands were present during the review.

Foreign.

France.—A letter from Biarritz of the 4th states that the Emperor and Empress, since their arrival, have lived in a very retired manner. The Countess of Montijo has arrived from Madrid, and the Countess Walewski and Duchess of Berwick, with the children of the Duchess d'Albe, are also at the Villa Eugenie. General Marchesi, who had been sent by the Queen of Spain to offer her congratulations, has been received by their Majesties. The Emperor on the 4th transacted business with the Minister of State, who had just arrived, and is to remain during the stay of their Majesties. The Emperor was present at a bullfight on Sunday, but the Empress did not leave the villa, as the day was the anniversary of her sister's death. The rumour of an approaching journey of the Empress into Spain is said to be without foundation. The election at Avignon has resulted in the return of the Government candidate, who obtained 18,053 votes against [illegible] votes polled for the candidate of the Catholic party. The *Moniteur*, in its bulletin of yesterday, in contradiction to the assertions of the Vienna journals, affirms that no extraordinary credit has been opened for naval armaments and the building of ships, which, it says, are this year continued on the usual scale and within the limits of the normal budget. The *Pays* denies the existence of any note from Earl Russell promising Italy the support of England in case of a disagreement with France. The *Patrie* says that it is authorised to declare that "all the powers without exception have acknowledged the truth of the allegations made by the Roman Government in protesting against the assertions contained in the last circular note of Baron Ricasoli." The *Constitutionnel*, in an article signed by its secretary, M. Boniface, explains the mission assumed by France in the Papal States, which, it says, is to leave her mistress of her own destinies, independent of Austria, and at the same time to make the integrity of the territory of the Holy See respected, and to maintain the neutrality of that territory by barring the frontier to the passage of any armed band. The treaty of commerce between France and Spain is as yet only in a preliminary state. It is not true that a deputation from the French party in Canada has arrived in Paris. It is not even known that such a deputation has been appointed. The Paris correspondent of the *Indépendance Belge* says that explanations have been demanded by the Imperial Government from that of England respecting a lecture in defence of tyrannicide recently delivered at Birmingham by Rudio, who was concerned in Orsini's attempt to assassinate the Emperor, and that the English Government replied that it would do everything which the constitution and the law allowed to give satisfaction to the Emperor. Rear-Admiral Bonnard has been appointed Governor and Commander-in-Chief of the Military and Naval Forces in Cochin-China. Marshal Magnan is about to leave for Italy, charged by the Emperor with a military mission to Piedmont, Lombardy, Venetia, and the Romagna. The Marshal is to be accompanied by his son, Captain Magnan, attached to the general staff of the army of Paris. The camp of Chalons is to be broken up to-morrow, when all the generals commanding divisions and brigades will leave for their respective destinations. The departure of the troops is to commence on Monday, and will take place in columns by three different roads—Suippes, Châlons-sur-Marne, and Rheims. From four to six battalions of infantry, with a proportionate number of squadrons of cavalry and batteries of artillery, are to be despatched daily. The *Pays* announces that an increase in the artillery of the marine will shortly take place. It appears that active preparations are making in the ports of France to fit out ships of war for sea. Among them are the Invincible and the iron-cased frigates Normandie, Couronne, Magenta, and Solferino. On Friday a decisive trial took place at Toulon with newly invented incendiary cannon shot, with complete success. The Dromadaire, which served as a target, presented the appearance of one immense blazing furnace. The heat was so great that it was impossible to approach the ship within 100 yards, and it was consequently impossible to ascertain the effect of the shot on the interior of the ship. During the night a vast quantity of fish were harpooned which had been attracted by the blaze of light. By a decree, dated the 25th of August, the sum of 24,800*l.* has been granted by the Government for deepening the entrance and fairway of the Port of Boulogne, so as to permit steamers to enter at nearly all times of the tide. Among the numerous improvements to be undertaken in Paris, the Municipal Council propose to build a model square in the Faubourg St. Antoine to lodge operatives. This square is to occupy a superficies of 20,000 yards, with a façade of 240 feet. The building is to consist of single rooms, to be furnished with a bed, a table, and two chairs, and to be let at 10f. a month. There are likewise to be 88 houses built for operative families. The houses are to be four stories high, and each house will accommodate four families. It is calculated that the entire building will lodge 4000 persons. A bathing establishment is to be constructed in the centre of the building, by which means every lodger may procure a hot bath at any hour of the day or night for the small sum of 25c. (2½*d.*). Each floor is to be supplied with river water free of expense to the lodgers; and, to complete the establishment, the entire building is to be heated by steam. Attached to the lodging-house there are to be 14 workshops for apprentices in cabinet-making, sculpture, carpenters' work, mechanics, all descriptions of smiths' work, and carpet manufacture.—At the assize court of the Charente Intérieure a monk belonging to the "Brethren of Christian Doctrine," called Brother Catulle, but whose real name is Philemon Delaurier, has been convicted, with every circumstance of aggravation, of no less than 25 criminal assaults upon females of tender age, committed to the care of the Brethren for instruction. He was sentenced to imprisonment, with hard labour, for life. It was stated at the trial that it was by mere accident that the doings of the brethren were brought to the notice of the authorities, and a searching inquiry has now been made, which implicates many brethren who have absconded. A priest named Barbin, vicar of Haute Goulaine, in Brittany, was tried at Rennes on the 7th inst., on a charge of indecent assaults upon two young girls, whom he visited in the absence of their parents, under pretence of confessing them. In this case the jury acquitted the prisoner, but the presiding judge, M. Baudoin, was so dissatisfied with the verdict that he told the priest after the trial that he was a disgrace to his cloth, and ordered the gendarmes in an indignant voice to "turn that man out of court."—Two cases relative to the will of the late Lord Henry Seymour have recently been submitted to the Civil Tribunal. By a will made the 19th June, 1856, he "gave and bequeathed to Frederick Seymour 200,000f., and in the event of his death to his eldest daughter, Mary Seymour," and all his property not otherwise specified to the hospitals of London and Paris. He made another will, dated the 22d June, 1858, which was almost the literal reproduction of the first one, but which made no mention of the bequest to Frederick Seymour or his daughter. Mr. Frederick Seymour being dead, his daughter, now Mrs. Biddulph, and her husband, brought an action against the executors, and also against the hospitals of Paris and London, his residuary legatees, to obtain payment of the 200,000f., and they based it on the ground that, as the legacy was not expressly revoked in the second will, it must take effect. But on the part of the hospitals it was contended that the omission must by law be held to prove that the testator did not mean the legacy to take effect; and further, that he had left a written declaration stating that he annulled all bequests made previously to the 22d of June, 1858. The tribunal decided that the suit of Mr. and Mrs. Biddulph must be dismissed with costs. In the second case it appeared that the late Marchioness of Hertford left all her property to her sons, the present Marquis and Lord Henry Seymour, and that part of it was the large house at the corner of the Boulevard des Italiens and the Rue Taitbout. In the division which was made by the two brothers the house was awarded to Lord Henry, at the value of 2,000,000f., but subject to the condition that, in the event of himself or his heirs wishing to sell it during the lifetime of the Marquis of Hertford, the latter should have the right of buying it for the said sum, with, in addition, what might be disbursed for repairs and embellishments, after the 1st April, 1856. Lord Henry Seymour having made the hospitals of Paris and London his residuary legatees, the house in question was among the property which came to them. The administration of the hospitals having recently manifested the intention of selling the house, the Marquis of Hertford declared that he would take it for the 2,000,000f. When, however, his architect and the architect of the hospitals proceeded to make an estimate of the sum to be paid for the repairs effected since the 1st April, 1856, they differed to the amount of about 150,000f. In consequence, an application was made to the Tribunal to charge an architect *ex officio* to fix the sum. The Court intrusted M. Dorumey with the duty.

Spain.—It is said that the negotiations between Spain and Morocco are still without any result. The *Correspondencia Autografa* of Monday says that Spain, in conjunction with England and France, will intervene in Mexico by sending troops into that country from Cuba. The Government has decided upon challenging ample discussion in the Cortes on home and foreign questions, and will modify the law on stamped paper. The return of the Queen Dowager of Spain to Madrid is said to have been arranged through the friendly intervention of the French Government. The persecution of the opposition press continues unabated. 268 of the insurgents of Loja have been condemned to different periods of hard labour by the military tribunal in that town, and several others have been sentenced to death. The *Official Gazette* publishes a complete list of the Spanish navy, from which it appears that there are 115 sailing ships of war, carrying 515 guns, including 2 line-of-battle ships; 10 sailing transports, 24 paddle steamers, carrying 123 guns, 1 paddle transport, 38 screw steamers, carrying 254 guns, and 9 screw transports. There are also in course of construction 1 screw ship-of-the-line of 100 guns and 1000 horse-power, 6 frigates, and 7 galliots.

Portugal.—The King of Portugal arrived at Lisbon from Oporto on the 5th inst. A marriage is said to be in contemplation between his Majesty and the Princess Marie Pie, youngest daughter of King Victor Emmanuel, who is now in her 14th year. The tumults throughout the country appear to have subsided. This summer has been the hottest on record in Portugal. The vines are in decidedly better condition than last year, and there is no doubt that the yield will be much larger than heretofore.

Belgium.—The King of Prussia arrived at Brussels from Ostend by express train on Monday, on a visit to King Leopold. His Majesty was received at the station by the Duke de Brabant, the Count de Flandre, the Prussian Ambassador, and the chief officers of the household. The King proceeded in the Court carriages to the Prussian Embassy previously to the exchange of visits between the Sovereigns. There was a grand dinner at the Palace of Laeken in the evening.

Denmark.—The Danish Government, after a Cabinet Council held on the King's return, has decided on convoking the Chambers for the 5th October.

Saxe-Coburg Gotha.—A letter from Gotha of the 28th ult. states that the Princes Auguste and Philippe, sons of Prince Auguste of Saxe-Coburg, and grandsons of Louis Philippe, have been appointed sub-lieutenants in the regiment of infantry of Coburg-Gotha.

Brunswick.—The question of the succession is exciting great interest among the inhabitants of Brunswick, who are averse to pass under the sway of the Hanoverian Government on the extinction of the present reigning family, and are in favour of annexation to Prussia. The King of Hanover has summoned to Norderney the distinguished jurisconsult, Professor Zimmerman, to consult him on the question of the succession, and has charged him to draw up a memoir in favour of the rights of the house of Hanover.

Hanover.—Some disturbances took place a few days since among the mining population at Klausthal and Zellerfeld, caused partly by the enormous price of all kinds of food, and partly by the desire of the work-people to have a holiday on Saturdays as well as Sundays

without any diminution of wages. The people attacked the officers, one of whom in endeavouring to appease the people was badly wounded. About 250 soldiers were sent from Northeim, and it is hoped that no further outbreak will take place.

PRUSSIA.—The coronation of the King of Prussia will take place at Konigsberg on Friday the 18th October, and will in its ceremonial forms follow exactly the precedent of the coronation of the first King of Prussia in 1701. On the following day their Majesties will be entertained at a grand banquet by the city of Konigsberg. On Sunday, the 20th, there will be a religious service and thanksgiving, after which their Majesties will leave for Dantzic. On Tuesday, the 22nd, their Majesties will enter Berlin in great state. An amnesty will be proclaimed on the occasion of the coronation, and a summons will be issued for the assembling of the Upper House of the Legislature. The Prince of Wales, the Duke of Cambridge, the Grand Duke Constantine of Russia, and the Duke of Ostgothland are to attend the approaching manœuvres of the Prussian army on the Rhine. The agitation for the German fleet is spreading widely. In all parts of Germany collections are making for the formation of the fleet, which is to be commanded by Prussia. The five principal cities of Prussia — Berlin, Breslau, Konigsberg, Dantzic, and Cologne—intend to contribute 100,000 thalers each, which is to be placed at the disposal of the Minister of Marine. Prince Adalbert, the Grand Admiral, left Hamburg on the 5th with the Prussian flotilla for Bremen and Jahde. During his stay at Hamburg his Royal Highness was entertained at a dinner by the steamboat company of Hamburg and New York, at which M. Geffroy, one of the directors, proposed a toast to the Prince, and in doing so dwelt on the importance of the Hansa, of the commerce of Hamburg, and of her merchant navy; concluding by expressing regret that the northern coasts and the merchant shipping of Germany were without protection and without defence, especially at a moment at which the political horizon was cloudy. The Prince, in reply, eulogised the commerce of Hamburg, and expressed a hope that the German provinces on the coast would join in attaining the object to which the German population aspired.—The trial of Oscar Becker for the attempt on the King's life will take place at the Assizes of Burchsal on the 23d. The process against M. Twesten, for the duel with General von Manteuffel, is fixed for the 24th inst. at Berlin.

AUSTRIA.—Accounts from Corfu state that the climate of that island has produced the most beneficial effect on the health of the Empress of Austria. Her appetite has returned, her respiration is free and regular, and her cough has so completely disappeared that hopes are entertained that her Majesty will return to Vienna in the spring completely recovered. The address of the Lower House was presented to the Emperor on Sunday. After receiving the deputation bearing the Address, his Majesty said in his reply:—

"The Address to which I have just listened strengthens my glad conviction that you place confidence in me, who myself am faithful to the Constitution. The Lower House in entirely adopting my principle that the provinces should possess legal self-government, but that they should be bound together in a natural unity, has likewise conceived that such a government shall only be limited by a conscientious fulfilment of the common duties towards a powerful united monarchy. To carry out these principles against those who do not respect them is certainly a necessity, which I hope, however, to confine within the narrowest possible limits. The result will prove the overpowering might of the truth and justice of the principle which I have stated."

In conclusion, the Emperor thanked the deputation for the loyal manifestation of their sentiments. On Tuesday the Ministers agreed upon the manner in which the Diet of Transylvania should be convoked and constituted. Baron Forgach, Count Apponyi, and other Hungarian magnates are continually conferring together with the view of rendering a speedy convocation of the Hungarian Diet possible.

HUNGARY.—The Cardinal Archbishop of Gran, Primate of Hungary, whose recent speech as Palatine of the Comitat of Gran produced so great a sensation, went to Vienna last week in the hope of bringing about a reconciliation. He returned to Hungary on Wednesday, and it was reported at Pesth that his mission had been unsuccessful. A despatch dated yesterday, however, asserts that his visit will result in the early convocation of the Hungarian Diet, on the same electoral basis as hitherto, and that the Government will take the diploma of October last as the basis of future negotiations with Hungary. The cardinal had previously acted as mediator in the conflict between the Austrian Government and the Hungarians, and it is asserted that he recently presented to the Deak party a proposition for conciliation to the effect that the diploma of October should be revised on the basis of the situation of 1847. A despatch from Vienna states that the Archduke Regnier has accepted the mission of going through Hungary, in order to communicate to the Emperor the wishes of the majority of the population.

ISTRIA.—The elections to the Diet which took place in the communes of the district of Istria have resulted favourably to the Government.

VENETIA.—The *Official Gazette* of Friday publishes an Address from the Central Venetian Congregation to the Emperor of Austria, praying for the diminution of the insupportable burden of the military billeting system, to which 700 communes had been subjected, instead of 36, as was originally ordered. The Address also states that the demands of the military were very exorbitant, and that several communal authorities had been compelled to tender their resignation.

ITALY.—The King will leave Turin to-day for Florence, and will open the Exhibition in that city to-morrow. The Ambassador of Portugal has been invited to follow the King. The Emperor of the Brazils, whose sister married Prince Louis, brother of the late King Ferdinand of Naples, has recognised the Kingdom of Italy. General Moltke arrived at Turin on Tuesday on an extraordinary mission from the King of Denmark. It is rumoured that the Minister of the United States at Brussels, in passing through Turin, addressed a proposal to Garibaldi to take an important command in the Federal army, and that Garibaldi has accepted the offer "under certain reservations;" but there is at present no confirmation of the statement. The official *Gazette* of Turin contains the nominations of General Della Rovere as Minister of War, and General Pettinengo as Lieutenant of Sicily, and the nomination of four senators—Commander Serra, First President of the Court of Appeal of Cagliari; the Chevalier Piraino, ex-Governor of the province of Messina; Chevalier Pernati di Momo, Councillor of State; and Commander Baron Natoli, Governor of the province of Brescia. The *Gazette* also contains an important decree signed by General Fanti as his last act, conferring recompenses on the old army of Garibaldi. Several battalions of the National Guard have been mobilised in order to relieve the garrisons of various places. The official papers publish copies of authentic documents, proving the existence and organisation of a permanent Bourbon conspiracy at Rome. They also state that Bavarians, Spaniards, and Irishmen are among the brigands in Naples. With regard to the attitude of France in Italy, they say—"An independent policy is a necessity for France and Italy, and will be a guarantee of their alliance. Italy wishes to possess Rome. But it is not necessary to increase the garrison of Rome in order to prevent us from going there. A strong garrison can only be necessary to defend the Pope against his own subjects." The Duke de Gramont arrived at Rome on Saturday. He presented his letters of recall to the Pope on Monday, and will return to Paris in a few days. The official *Giornale di Roma* of Saturday, in its official part, declares the passage relative to Rome in Baron Ricasoli's note to be calumnious, and that it is unworthy of the dignity of the Holy See to make any reply demonstrating the falsity of the assertions contained therein. It says:—

"The Pontifical Government has made an appeal to the representatives of the foreign Powers at Rome and to the loyalty of the French army to testify to the falsity of the insinuations contained in Baron Ricasoli's note."

The Pope went in state to Santa Maria di Popolo, on the 8th, and is said by the official journals to have been everywhere saluted with enthusiastic cheering. Other accounts say that the Roman police received orders to get up a demonstration, and that many foreigners were engaged to cheer his Holiness. A despatch from Naples states that Christen, the leader of the brigands, has been arrested at Naples, travelling with a false English passport, and that Maracco, the notorious bandit of Calabria, has made his submission. This event insures the tranquillity of Calabria. The brigand Chiavone having received reinforcements from Rome, attacked Castelluccio, near Sora, on Tuesday, with 200 men. He was, however, repulsed with great loss, and retreated into the Roman territory. General Cialdini has caused all the southern frontier of the Papal States to be surrounded by Italian troops, and has thereby stopped all the roads by which the brigands were accustomed to seek refuge on the Roman territory. General Goyon has given orders that any attempt at invasion by Piedmontese of the localities occupied by the French troops shall be repulsed by force, and has reinforced the French posts in the direction of the Tuscan frontier. The anniversary of Garibaldi's entry into Naples has been celebrated at Milan, Genoa, Naples, and other cities of Italy with great enthusiasm. General Cialdini has reviewed the National Guard of Naples at Piedigrotta, and was enthusiastically cheered. On Monday evening General Cialdini gave a grand dinner in honour of Admiral Mundy. The two sons of Kossuth are now employed as engineers on the Genoa railway.

RUSSIA.—The Emperor of Russia arrived at Nicolaieff on the 28th ult. On the following day, after receiving a number of persons, his Majesty visited the cathedral, the Admiralty, the Asylum for Invalids, and the Constantine fortress, and reviewed the troops of the garrison. The Empress and her children arrived at Nicolaieff in the evening of the 30th. Their Majesties left together on the 31st for Odessa in the steam-ship Tiger. It is reported that the Empress will proceed from the Crimea on a pilgrimage to Jerusalem.

POLAND.—On Saturday, being the anniversary of the coronation of the Emperor Alexander, a *Te Deum* was sung in the Catholic Cathedral at Warsaw, where the suffragan Bishop officiated. Order prevailed in all the churches. At Kalisch no general illumination took place in celebration of the anniversary. The people smashed the windows of the few houses that were illuminated, and hissed the troops sent to disperse them. An official statement declares that the disturbances have been exaggerated, and says that the troops were without arms, that 18 persons were arrested, 12 of whom were [illegible] on the following day, and that no citizen was maltreated. Nearly 200 ladies of the upper and [illegible] classes have left Posen, in one party, to walk [illegible] as pilgrims, to Czenstochau, near Warsaw, there to implore the intercession of the Virgin in favour of Poland. The place is more than 60 leagues distant from Posen; and many of the lady pilgrims had obtained ecclesiastical permission to be followed by the carriages, to be used if their strength should fail. Several priests were to have accompanied the procession, but the Archbishop would not give his sanction.

SICILY.—A meeting of theologians has been held at Palermo. It has adopted a resolution declaring the temporal power of the Pope to be incompatible with and contrary to the mission of the Catholic Church.

TURKEY.—Kiprisli Pasha has been named Governor of Adrianople. The provincial loan is coming [illegible] million sterling is expected. The project of giving a new uniform to the army has been abandoned. The Imperial Guard only, numbering 1500 [illegible], [illegible] receive a new uniform. Sir Henry Bulwer had an audience of the Sultan on Monday, and presented his new credentials. A series of official despatches and papers, extending over the last three years, relating to administrative and financial reforms in Turkey, has lately been issued by order of Parliament. The following is an abstract of their contents:—

"Sir H. Bulwer, the British Ambassador, describes as the great want of Turkey that it needs to be Europeanised. [illegible] public spirit and the general notions of Europe must find their way into it. If the Turks would freely employ Europeans in the different departments where their knowledge, energy, and habits of business are required, they might educate a race which would hereafter dispense with European assistance, and the Ottoman Empire would be a reality. But to this, it seems, there is an insuperable repugnance. The Turks [illegible] take European practices and improvements without the aid and instruction of Europeans. At the same time, while they are told to take their place among the great Governments of Europe, and to adopt its civilization, they are denied the ordinary attributes of the smallest republic in South America by constant and irritating European interference in matters which are [illegible] properly subject to local experience. In short, there is a [illegible] jumble of conflicting ideas and customs. A Pasha said to Sir H. Bulwer, "What am I to do? I govern a province. The Grand Vizier sends me an order which is framed on the [illegible] ideas that we profess; the Sheikh-ul-Islam complains against me, because I do not act upon the old laws, which [illegible] are still sacred. I say the two things are incompatible, [illegible] am told I must follow our old usages, but I must [illegible] new dress. I don't know what I am about." Neither, [illegible] Sir H. Bulwer, did the Ottoman Government clearly understand what it was about when it undertook to place the empire on a new foundation; it was done not so much with a sincere desire to re-invigorate Turkey, as to gain and satisfy Europe. The former system was very simple; great individual power was given, and if a man was thought to exercise it well he rose; if ill, his head went off. The object of [illegible] to destroy this personal responsibility, but the corruption remains, and in abolishing old usages, without adequately framing or enforcing new institutions, the governmental power has been lost. Sir H. Bulwer would be glad to see a Grand Council organised, members of which—the most capable and honest men that can be selected—should visit the provinces as special commissioners, restore the governmental power, [illegible] duce or enforce the two or three practical reforms [illegible] most needed in the tribunals—police and taxation. [illegible] should also be some Christian authority in provinces [illegible] there is a large Christian population—an authority under the Pasha, but reporting to the Grand Council periodically [illegible] state of the Christians; it would discipline the race, [illegible] respected, and attach it to the governing power. The [illegible] patronage of the Porte could do the rest. There has been a great social advance and tacit suppression of our customs [illegible] what are required are institutions and laws corresponding with the advance which has taken place in manners. It [illegible] be of great advantage if all foreigners resident in Turkey [illegible] but one common law for themselves and the same [illegible] that common law would soon become the legislation [illegible] Turks also. Finance, it is well known, needs entire reorganisation, but there are large sources of revenue [illegible] though too much must not be expected of Turkey, [illegible] despair of a country where there has been such a marked improvement within the last 30 years. In the latest [illegible] in these papers Earl Russell writes, on the 4th of July, [illegible] H. Bulwer:—"The accession of a new Sultan appears to [illegible] Majesty's Government to furnish a fit occasion for the [illegible] Government to make a vigorous effort to relieve the [illegible] from that financial embarrassment to which all the [illegible] the Porte have pointed as the sure and proximate cause [illegible] fall of the Ottoman power. There are ample means in [illegible] for falsifying this prediction. The empire has [illegible] great fertility, and is inhabited by races some of which [illegible] industry and a genius for trade, while others furnish brave and obedient soldiers—the fit materials for a strong and [illegible] army. Integrity, order, energy, and impartial justice would soon redress the most flagrant evils; economy would in a few months furnish a surplus beyond the ordinary expenditure. Upon these means her Majesty's Government [illegible] Sultan Aziz ought to rely. Her Majesty's Government [illegible] consider they were worthless friends to the Porte [illegible] out any prospect of the guarantee of a loan; it would [illegible] But [illegible] ing water into a cask with a hole in its bottom. [illegible] order and economy, with the publicity of accounts, shall have restored confidence to capitalists, the Sultan will find that the credit of his Government will stand as high as that of any State on the Continent of Europe. It is the anxious desire of her Majesty's Government to see the Ottoman race combine with its ancient virtues of courage and fidelity, the improvements and the arts which modern civilisation has spread over Europe."

BLACK SEA.—It having been reported from Odessa that several cases of cholera had appeared at Constantinople, the Russian Government has ordered a quarantine of five days to be enforced for all ships coming through the Dardanelles to the ports on the Black Sea.

MONTENEGRO.—A despatch from Ragusa announces that Dervisch Pasha, with 5000 Turkish troops, crossed the Montenegrin frontier on the 4th inst., and that Omar Pasha was preparing to follow with another division. On the same day about 6000 Montenegrins crossed the frontier and occupied the town of Vanina, on the Lake of Scutari, where they were joined by the inhabitants. The Turkish garrison

refused to surrender, and, in order not to fall into the hands of the Montenegrins, blew up the tower and perished in the explosion. The town of Zubzi was occupied by the Turkish troops on the following day. On Friday the Montenegrins evacuated Vanina, accompanied by 50 Christian families from the environs; but they have since entered the Turkish territory near Levin. On Sunday Dervisch Pasha and Mehemet Pasha, with the troops under their command, marched against Zubzi and Trebigne, two places in the Herzegovina. On the same day a meeting of all the Montenegrin chiefs was held at Cettigne, the capital of Montenegro. Guns have been sent by them to Grahovo. An attack by the Montenegrins on the Turkish troops is expected.

Coast of Africa.—The territory of Lagos was ceded to the British Crown on the 5th of August, the King signing a treaty to that effect. A commercial treaty favourable to British and French interests had been negotiated with the King of Bodaboo. Fever was prevalent at Bathurst.

India.—By the arrival of the Bombay mail and a telegraphic despatch from Calcutta, we have news from Bombay to the 12th of August, and from Calcutta to the 8th of August. The following are the details:—

Calcutta.—The Government has instituted extensive inquiries into the capability of the soil and climate for the production of the Cotton plant. The answers resulting from experiments with Egyptian and American seed are unanimous in the opinion that India is capable of growing an unlimited supply of Cotton, that the natives like the cultivation, and are desirous to engage in it. The Licence Act, for imposing a duty on arts, trades, and dealings, received the assent of the Viceroy on the 16th of July. The Paper Currency Act, to provide for a Government paper currency, received the assent of the Viceroy on the 16th of July. The Government of India has determined to reorganise entirely the Electric Telegraph Department. The Government has also called for an expression of opinion from the experienced civilians of the various presidencies and provinces as to the merit of the civil servants who have come out under the competitive system compared with those of the old close service. The Amalgamation Commission has been dissolved. The Rev. James Long, who was found guilty of publishing a libel on the Indigo planters, has been sentenced to one month's imprisonment, and a fine of 1000r. The Hon. Seton Carr, who was implicated in the circulation of the libel, has averted a probably similar punishment by a timely apology. Very bad accounts of the indigo crops are received from Tirhoot and Benares.

Bombay.—The Government of Bombay has finally decided upon Warree Bunder as the terminus of the Great Indian Peninsula Railway, and Colaba as the terminus of the Bomba and Baroda Railway. The European and native residents of Bombay are memorialising Government for the abolition of the ramparts of the fort, and the dedication of the space thus obtained to the use of the public.

North-West Provinces.—The Committee of the Punjaub Famine Fund have announced to the subscribers that there is no longer any need for the continuance of their subscriptions, but the cholera is committing great ravages throughout that part of the empire. Its ravages at Agra and Meerut are said to be frightful. A terrible storm swept over Peshawur on the 1st July, which destroyed about 1400 houses in the city. Many houses in the neighbouring villages were carried away by the flood, and property of all sorts was destroyed. Similar accounts have been received from the Khyber.

China.—A despatch from Canton, dated July 27, states that the Prussian Minister at Pekin is making ineffectual efforts to negotiate a treaty with the Chinese Government. Sankolinsin has been victorious over the Shantung rebels.

Japan.—Affairs in Japan are stationary. Mr. Alcock has not been molested on his overland journey.

Australia.—Disturbances resulting in a fatal collision with the police have taken place at Lambing Flat diggings. Most of Burke's exploring party have returned, but Burke himself and three of his companions are missing.

New Zealand.—A renewal of the war in New Zealand is imminent. Peace with the natives is considered hopeless. General Cameron will await reinforcements before taking the field. All the men-of-war have been ordered to assemble at Auckland.

United States.—Colonel Tyler's Federal force in the Kanawha valley has been defeated at Summersville by the Confederates under General Floyd. The *New York Tribune* publishes the following details:—

"On the 26th the 7th Ohio Regiment, Colonel Tyler, while quietly breakfasting, their baggage train being about three miles in the rear, were suddenly surrounded by a force af rebels, supposed to be commanded by General Floyd, numbering 3000 infantry, 400 cavalry, and having 10 guns. The attack on the Ohio boys was made on both flanks and in front simultaneously. After a brave fight, lasting some time, Colonel Tyler, finding the enemy too strong for him, ordered the approaching baggage train to be turned back towards Ganty Bridge. The regiment, numbering only 900 men, then fought their way out of the force."

The official returns state that 15 Federals were killed, and about 40 wounded, and that a large number of the 7th Ohio Regiment were scattered during the fight, and are missing, but it is hoped that most of them will escape. A battle is reported to have taken place at Cape Girardeau, Tennessee, on the 27th, in which the Federalists were worsted. The Confederates have captured 100,000 dollars at Fayette, Missouri. The opinion still prevails that the Confederates will shortly attack Washington on some point. There were indications of a general advance of their army, and they were dexterously seizing many unoccupied points that would be of great importance in the event of an attack. They are in full possession of Bailey's Crossroads, where they are making a strong intrenched position, and are bringing up their baggage from Springfield Station. On the night of the 25th the four New York regiments composing General Franklin's Brigade were ordered to advance, and marched to within two-and-a-half miles of the cross-roads. Several picket skirmishes took place, in which many were killed on both sides. A rumour from St. Louis states positively that General M'Culloch is marching on Jefferson City with 10,000 men. It is believed that the Federal forces are well disposed to repel the attack. Information has been received that the Federalists are leaving Harper's Ferry in great numbers. Firing between the pickets has been very general between Conrads and Harper's Ferry. The Confederate encampment has been moved back some distance from the river. All the large craft, schooners, sloops, row-boats, and skiffs on the Potomac have been seized by the Federal authorities to prevent communication between the Maryland and Virginia shores. General Fremont, in a despatch from St. Louis, Aug. 20, has officially informed the War Department at Washington that Colonel Dougherty with 300 men had attacked the Confederate troops at Charleston, Missouri, 1200 strong; that the Confederates were driven back with a loss of 40 men killed, 17 prisoners, and 15 horses captured. The Federal loss is stated to be one man killed and six wounded. The city of Galveston in Texas has been bombarded by two Federal ships of war. The city was shelled for half an hour, doing much damage; the batteries on shore responded, and are supposed to have done some hurt to the South Carolina. The citizens are said to have sent a protest on board under a flag of truce against the alleged violation of the rules of war in shelling the city without giving notice to remove the women and children. Fort Staunton in Texas has been abandoned and fired by the Union forces. 700 Federal troops have surrendered Fort Fillmore to 280 Texan Rangers, with their cannon, equipments, horses and cattle, and have since been released on parole. A secret expedition sailed from Fort Monroe on the 27th, under the command of General Butler and Commodore Stringham. It consisted of the frigates Minnesota and Wabash, a sloop of war, 2 gunboats, 2 steamers, and 2 propellers, with a large number of schooners, barges, &c. The Quaker City would follow. The vessels carried over 100 guns and about 4000 men. It was at first reported that the expedition was destined for Cape Hatteras, but the impression is now general that it is intended to blockade and close the inlets in North Carolina which afford shelter to the privateers. The Secession party in Kentucky is making great efforts, and is reported to be rapidly gaining ground. The Kentucky Commissioners have reported that President Lincoln is willing to await the action of the Kentucky Legislature before forcing the State to declare its position. The Secretary of War has ordered the stoppage of telegraphic despatches to points south of Kentucky; and the Post-office, in consequence of a violation of the mails, has discontinued the postal service to offices in Kentucky West and Tennessee river. Correspondence carried by the express companies to the seceded States has been prohibited by the Federal Government. Martial law has been proclaimed in Missouri, and the slaves of insurrectionists in that State are to be freed. Accounts from Washington state that an onward movement is likely to be soon made by General M'Clellan, and that a series of victories are sure to be the result. General M'Clellan was actively engaged, with his Staff, in reviewing portions of his troops daily, and dividing them into brigades and divisions. The discipline of the whole force was expected to be perfected in a few days. More than 100 men of the refractory 19th New York Regiment had returned to their duty. The refractory men of the 2d Marine and 13th New York Regiments had been despatched to Fort Tortugas, where they will be confined. The place of their imprisonment is reported to be very unhealthy. A grand review of the army by General M'Clellan took place at Washington on the 21st ult., at which President Lincoln and the leading members of the Cabinet were present. The policy of President Lincoln has been the object of severe censure at several meetings held in the Northern States. At a meeting held at West Chester, Pennsylvania, on the 13th ult. the war was denounced as the fruit of the "irrepressible conflict" sentiments of Mr. Lincoln and Mr. Seward, and of the principles of the Chicago platform; and President Lincoln was censured for "his bold assumption and unauthorised and arbitrary exercise of power in making war, establishing blockades, raising an army, increasing the navy, expending money, suspending the privilege of the writ of habeas corpus—shortcomings and wrongdoings prejudicial to and violative of the rights and interests of the states and the people, and which prove him unfit to be the President of the United States." Similar meetings have been held at Ellsworth and Danbury, Connecticut, and in President Lincoln's own state Illinois, at which resolutions framed in the same spirit were unanimously adopted. At a meeting of the citizens of Union, Van Buren county, Iowa, on the 3d ult., it was resolved, "That we have no sympathy, aid, or comfort for Northern abolitionists or their fanatical sympathisers; and that we witness with dismay the constitution violated in many of its plainest provisions; the military power over-riding the civil; the liberty of speech and of the press, the writ of habeas corpus, all swept away under the specious plea of military 'necessity.'" A list has been published of no less than *eighty-one* newspapers circulating in the cities of the Northern States which are against the war. The Secretary of the Treasury has issued a circular to the officers of Customs, containing the instructions necessary to insure a strict observance of the non-intercourse ordered by the President's late proclamation. Passes have been refused to the representatives of the press, and they are consequently unable to visit the camps on the Potomac. The authorities at New York are very zealous in endeavouring to suppress the Secessionist newspapers. Every mail which leaves the city conveys a detective officer, whose duty it is to search all packages and baggage. The Grand Jury at New York has presented four very important newspapers, circulating in that city as being peace papers, "for indictment and condign punishment." The circulation of these papers has been prohibited in St. Louis by the provost marshal. The spies of the Federal Government are on board every steamer which arrives at New York or Boston. Mr. Berrett, Mayor of Washington, had been sent to Fort Lafayette for refusing to take the oath of allegiance. Mr. D. C. Lowber, of New Orleans, a bearer of despatches from President Davis, has been arrested on his way to embark for England. M. de Bebiau, a Frenchman, a passenger on board the British ship Adelso, from Wilmington, North Carolina, which fell into the hands of the revenue cutter Henrietta in the roadstead of Newport, Rhode Island, during a gale of wind, has also been sent to Fort Lafayette, because on overhauling his trunk, "enough transpired to show that he was tinged with the secession heresy." Mrs. Phillips, wife of a Washington counsellor, and Mrs. Greenhow, have been arrested on a charge of holding treasonable communication with the enemy. A lady of some literary notoriety, Miss Windle, was arrested as a spy at Alexandria on the 22d ult., and taken to Washington for safe keeping. She openly avowed her correspondence with the Southern leaders. Several other ladies have been arrested and imprisoned in their own homes, a sentry being posted at the door and their parole taken. The Governor of the State of New York, Mr. Edwin D. Morgan, had issued a proclamation calling upon the citizens of the State to respond to the critical necessity of the times by sending 25,000 more men to defend the national capital, but not more than half of that number have as yet enlisted. It is rumoured that the Secretary of the Treasury will shortly issue an appeal to the people in behalf of the "Popular Loan." Most of the officers of the United States frigate Congress, which has arrived at New York, have resigned their commissions. Two vessels have arrived at Matanzas from Charleston, having succeeded in running the blockade. It is mentioned in Washington letters that the Government contemplated encouraging privateering ventures by waiving their claim to a share in prizes captured. With the sanction of the Federal Government the foreign Ministers at Washington have opened a correspondence with their respective Consuls at Southern ports, requesting them to obtain the release of foreigners captured by Southern vessels. On the representation of Lord Lyons several soldiers claiming to be British subjects have been discharged from the army. Mr. Seward has officially contradicted the rumour that the Minister to England, Mr. Adams, had informed the State Department of the intention of the English Government to recognise the Confederate States immediately. The Confederate Congress has voted 800,000 dollars for a floating flotilla for the defence of New Orleans, and 160,000 dollars for two iron-clad boats for the defence of the Mississippi. It is reported that the Governor of Georgia has recalled the troops of that State on the ground that President Davis and his Cabinet have interfered with State rights and organised forces in Georgia for the war without the authority of the Governor, in derogation of the sovereignty of the State, and in opposition to the Constitution and the principles of the Revolution of 1776. It is said that a large quantity of cotton has arrived at New York from Providence for shipment to Europe; the majority of the factories at Lowell, the Manchester of America, being now closed. Mrs. Edwin James has been robbed of her jewellery, valued at 1400*l*., at an hotel at Long Branch, a fashionable watering place in the neighbourhood of New York, where Mr. and Mrs. Edwin James have been sojourning since their arrival in America.

Mexico.—It is understood that a combined English, French, and Spanish naval and military expedition is to be immediately organised, to obtain redress for the indignities and injuries inflicted on British and French interests in Mexico. The Congress of Mexico has rejected the amnesty scheme, and General Ortega will follow up the Reactionists.

San Domingo.—President Geffrard, of Hayti, has paid the indemnity demanded by Spain. The Madrid journals state that the principal difficulties in the way of the reorganisation of San Domingo have been removed.

Cuba.—The Madrid journals publish news from Havannah to the 10th ult., announcing that General Serrano had been received with enthusiasm.

Public Addresses.

M. Michel Chevalier at the recent meeting of the Social Science Association at Dublin delivered the following address on Free Trade and its effects on the commercial and social relations of nations:—

"It is an opinion which in these times has passed into the condition of an accepted rule, that international commerce

ought to be encouraged because it augments the wealth and prosperity not of one only of two contracting parties, but of both equally—as well of the party who buys as of the one who sells. This opinion, which has acquired so much authority to-day, which is about to introduce itself into the practice of states after having remained so long buried in books as a lucubration of theory destined for the amusement of learned men—this opinion, I say, has not raised itself and become powerful, but in consequence of the circumstance that the nations are changing their mutual sentiments, are abjuring their ancient animosities and the jealousies of other ages, and are preparing themselves to become sincere friends of each other. Free trade would have remained in the recess of philosophical treatises as a Utopia if the influential classes of different nations had not actually begun to think that which our philosopher Voltaire used frequently to say, that every European war is a civil war. It is thus that the thought of mutual approximation of harmony between the most civilised peoples has been the origin of the recent progress of free trade. But in its turn free trade in proportion as it is itself established tends to draw the peoples more closely together, for it shows them in the most visible and the most tangible manner that they are mutually necessary, that every one of them contributes to the happiness and prosperity of its neighbours, and receives from its neighbours part of its own prosperity and of its own happiness. Thus there is happily manifested that general law of action and re-action in virtue of which the same fact is in its turn first an effect and then a cause. Thus there reveals itself the other still more important law, which forms a part of the moral condition of the human race, the law of the universal solidarity of nations. In this point of view we have cause to rejoice, for the treaty of commerce between the two great nations of the west which are divided by the English Channel—England and France—will do much more than benefit France and the United Kingdom. It will be advantageous to a very great number of states, for it is destined to metamorphose the custom-houses of the whole world. Thus the treaty of commerce between the United Kingdom and France has already given occasion to a treaty of commerce between Belgium and France. In a few weeks probably it will have determined the signature of a treaty of commerce between France and the Zollverein, or at least between France and Prussia, for that treaty has already been for several months under negotiation. In a short time, I think I can assure you of it, we shall see concluded a treaty between France and the young kingdom, called to so glorious a future, which the noble and intelligent sword of the Emperor Napoleon III. and the patriotic perseverance of Count Cavour, have raised from the tomb in Italy. Each one of the states which has thus signed a treaty of commerce with France, in consequence of the English treaty, or which will sign one, becomes a focus of propagation for free trade; and in treating itself with other states it determines them to propagate it around themselves. It is thus that the number of labourers in the vineyard of the Lord is continually increasing. As you are all here practical men, seeing with pleasure and thankfulness the good which appears, but not shutting your eyes to avoid perceiving the evil, by the side of those happy changes which are under accomplishment or in preparation, you will not fail to observe the facts which are taken place in the opposite direction. It is thus that by the side of the treaty of commerce between France and England, your glance is arrested with pain by the Morrill tariff, which the Northern United States have recently adopted. But the Morrill tariff is born of the war. It is the child of discord. It will not live. The atmosphere of the 19th century will stifle it, for the atmosphere of the 19th century only suits products of another nature, of a more regular character, more conformable to the laws of harmony, and to the unconquerable want which the nations feel to interchange the fruits of their labour. One of the finest sciences that man has formed, geology, teaches and proves to us that in proportion as, during the series of the ages of the earth, the atmosphere purified itself and was tempered, there were seen to appear more perfect creatures. The animals of the first times, those monstrous and hideous beings of which the forms, recovered and described by learned men, astonish and terrify us, gave place to animals less strange and more beautiful, of an organisation more elegant and more refined. The Morrill tariff is like one of those ugly beasts, such as the Anoplotherium, or the Plesiosaurus, which one should attempt to rear upon the earth such as it is to-day. Vain attempt! Powerless effort! The Morrill tariff is destined soon to perish in the midst of the confusion of its authors. In order that commerce may be really free between the different peoples, it is not sufficient that the tariffs and customs duties should be remodelled in a liberal spirit. To substitute a liberal tariff for a restrictive one is, without doubt, an excellent work. It is not I who would wish to diminish the share of honour and glory which belongs to the government of the United Kingdom, as also to that of France, for the treaty of commerce which has marked the year 1860. In the United Kingdom a Cobden and a Gladstone, in France his Majesty the Emperor, and after him the able and courageous ministers who signed the treaty, or who facilitated it, M. Rouher, M. Baroche, M. Fould, have the right to a tribute of praise which posterity will not fail to decree to them, and which already the present generation offers them with eagerness. But after such palms so well merited there yet remains glory to be reaped, for there are new services to be rendered to the cause of facility of commerce and liberty of exchange. There are new efforts to make, in order that the different productions of the various parts of the planet may at all times reach easily the hands of their consumers in all countries and of all races, and subserve their happiness in the most efficacious manner possible. In order that commerce shall be really easy and free between the different peoples, there are changes to make in the laws, regulations, and usages which each people adopted in other times, for in many circumstances those laws, regulations, and usages are obstacles to commercial transactions. They are like walls which separate men, or better still, like ditches sown with pitfalls and with calthrops. Thus, for example, it is very plain that international transactions would be free from serious difficulties if associations formed for commerce were planned upon models differing less from one another; if the associations recognised and authorised in one state possessed legal existence in other states, with the faculty of enforcing their rights and supporting their interests before the tribunals of foreign countries; if the legislation upon bankruptcies was more uniform; if the regulations relating to trade marks and the copyright of designs were in better agreement, and if the protection which they assure was extended to all the world without distinction of nationality—in other words, in order that international commerce should be really and positively free and easy, it would be necessary that the character of foreigner should cease to carry with it a sort of interdict which belongs no longer to our time, and from which each people suffers in its turn, with the consolation little Christian or gainful though it be, of making its neighbour suffer afterwards from the same interdict. The legislation of the different nations ought to be subjected to a calm and conscientious examination, setting out with the principle that the foreigner ceases to be an enemy; that he is a client who consumes our productions, while offering us in return the right of consuming his; that he is a fellow-citizen of that great country of which Cicero spoke so long ago, and which has no other limits than those of the planet itself. Thus, that which I have taken the liberty to recommend to you, has not the character of a dissolving cosmopolitanism. It is the practice of a generous sentiment, which by no means excludes those other generous and noble sentiments which are the motives of so many great actions, and which are united under the respectable name of patriotism. If you enter into the thought which I indicate to you, you will immediately perceive how many modifications there have to be made in the laws, regulations, and usages existing in different states; what additions to them ought to be introduced either by legislation or by judicial practice; what negotiations states, both great and small, have occasion immediately to enter upon with one another; what new career may shortly be opened to diplomatists who, as malicious tongues pretend, have too much leisure in proportion to the high salaries which they receive. It is, for example, not doubtful but that the *droit d'aubaine*, in virtue of which the property of a man who died in a foreign country, after having acquired possessions there, was torn from his children, is now everywhere renounced. But in the same manner we must cease to refuse to the subjects of a foreign state the right of possessing land: we have in respect of real property to make a complete assimilation between foreigners and members of the nation, always with the reservation of political rights. In the same manner we shall simplify the law of neutralisation, which in many instances still bristles with difficulties, and fixes an excessive duration for the preliminary residence and for the apprenticeship to the new nationality. In the same series of ideas we shall come to adopt uniform regulations for those affairs in which variety has no utility, and where no explanation can be given for its continuance, but by attributing it either to the ignorance in which people were formerly steeped on the subject of what other nations had done, or to the prevalence of a puerile spirit of contradiction. Under this head we must class the necessity of establishing harmony between the different laws and customs concerning assurances, and especially marine assurances, and also the needful uniformity in the regulations which must be made to prevent the accidental collision of ships on the high seas. There is a question which the different states are about to be brought to the discussion of by the force of circumstances, and for the solution of which one is entitled to say that everything is already ripe. I allude to the uniformity of weights and measures, with which one ought to connect the uniformity of coins, for a coin is a measure. To name this question is sufficient to make you understand in what degree it interests international commerce, what facility it is capable of giving to it, what loss of time, without speaking of various other charges, as, for example, the cost of exchange, it must save it You remember the story which has been often told of the traveller who entered Italy or Germany by one extremity, and who, getting his money changed at each frontier he passed, had not yet made his escape at the opposite extremity when already the whole value of his money had been devoured by the exchanges. The uniformity of weights and measures is a corollary of free trade. It follows from it by the most natural and the most direct process of deduction. On this subject there is this happy circumstance, that if one leaves out of consideration an ill-founded self-love, and the spirit of routine, which is often infinitely less commendable, one does not see what motive most nations can have for remaining attached to their old systems of weights and measures. Almost everywhere, in fact, the old system is complicated, inconvenient, and absurd. It would appear to have been invented in order to oblige men to make long and tedious calculations—so much so that it seems one ought everywhere to desire the adoption of a system which should be simple and logical, founded on the decimal proportion for its divisions, its subdivisions, and its multiples, and which should derive all its units of measures alike, whether of length, area, volume, solidity, or weight, from a single standard by means of decimal relations. Nay, more, to this day, most states are afflicted with the scourge of a diversity of systems of weights and measures, not only in their relations with other states, but just as much in their relations with themselves; for their measures change from province to province, sometimes from district to district. If I am not deceived, this case is presented in each of the three kingdoms which compose the British empire. Such a state of things is too inconvenient to be prolonged indefinitely. Then, consequently, the larger part, say, for example, of the British public must necessarily renounce the measures for the use of which it has been brought up. But when one must in any case change, it is better to adopt a system the convenience of which is perfect, than to take another quite as complicated and troublesome as that which one quits, and of which the only title to preference would consist in its having been employed in neighbouring provinces. When such new habits have in any case to be constructed it is better to contract them in order to ally oneself to a system which shall be uniform for the civilised world, than to another which shall serve for the exclusive use of a nation, and suffer a troublesome diversity still to subsist for the purposes of international commerce. I will not raise here the question whether the system to which it is better that the whole world should ally itself has already been discovered, and whether the metrical system actually in use in France, and among a certain number of other peoples, and which there produces complete satisfaction, does not reunite in a sufficient degree all the conditions which are desirable for becoming universal. Different reasons prohibit me from taking the initiative in such a proposition, and above all others, my character as a Frenchman. We are in an age of free examination and free inquiry. The question of a uniform system of weights and measures for the civilised world must, if it is to be well resolved, be voted upon in its widest possible extent, and consequently in terms which shall not imply any preference already formed for the metrical system, but which, however, shall leave to that system all the chances of adoption which may belong to it in virtue of its own merit. On this occasion one may raise a question which appears to be only one of detail, but which has a considerable practical bearing. I allude to the convenience of reckoning from the same meridian in geographical maps and nautical books. In this manner the maps and nautical tables of one nation would be easily used throughout the world. For navigation this would be a veritable benefit. Formerly there had, up to a certain point, been an agreement upon one meridian. They took that of the Isle of Ferrol; afterwards by national pride each state wished to have its own. There is then the meridian of Greenwich, that of the observatory of Paris, that of Washington, and many others. I do not see what each state has gained thereby. I only see distinctly what it has lost—the power of using the maps and tables of its neighbours. How many other questions would still present themselves if one tried to exhaust the subject! There are some which are not only opportune at present, but which are even pressing. I will cite as an example the question of the right of belligerents at sea. Up to what point ought the right of seizing or destroying merchandise belonging to private persons at sea to be any longer recognised in time of war, even when those private persons belong to the enemy's nation? Can the respect for private property which is admitted in war by land, remain without security in the case of a maritime war? Why should there be this contradiction? The treaty of Paris of 1856 sought to establish in this respect a doctrine more respectful to the right of property than that which had up to that time been admitted, but the question has remained in suspense. Has the treaty of Paris gone too far, or did it not stop short of its object? Upon this point, if the war which an incredible fatality has caused to break out in North America should continue, it will be necessary that the gre[illegible] ments shall deliberate. The confusion of ideas w[illegible] at present on the subject of rights of belligerent[illegible] permitted to remain longer without comprom[illegible] peace of the world. Another aspect of the su[illegible] presents itself to the mind, and which serves [illegible] the intelligent and generous men who are [illegible] cause of progress, as all the members of the as[illegible] this. By the force of circumstance there has [illegible] outside the sovereignty of particular states a [illegible] domain of civilisation, which the most solemn [illegible] recognised. It is thus that the free navigation [illegible] rivers has been proclaimed, such as the Rhine a[illegible] It is thus that conventions between the most p[illegible] ments have declared neutral the ways of [illegible] which are being or to be constructed across [illegible] isthmuses of universal interest, such as the Isthmus [illegible] the effect of which will be to place every railway [illegible] structed on so important a line of passage on the [illegible] universal property, of which the whole world sh[illegible] have the use upon conditions the same for all. [illegible] the payment established formerly by feudalism [illegible] quented passes, as the strait called the Sound, has [illegible] deemed at their common charge by the combined [illegible] commercial peoples, through the payment, once [illegible] certain sum. The character of these pieces of [illegible] new class, placed under the ægis of universal [illegible] even, at need, of the military forces of all nations [illegible] a peculiar legislation. What extent ought [illegible] domain of civilised nations to acquire! Ther[illegible] matter for reflection; and for the association [illegible] doubt, give occasion to useful labours, which wi[illegible] renown and influence. Your Department of Inter[illegible] national Law has then a vast field before it—[illegible] would be impossible to explore it even very im[illegible] single year. But if the work abounds, very [illegible] proves what a proper step it was to establish the [illegible] It will have to employ the zeal, the learning, an[illegible] rience of its members, and to draw upon all the [illegible] at the command of the Association for an unlim[illegible] From this time forward we have a good compass [illegible] to proceed to the explanation of these little know[illegible] That compass is the principle that the foreigner has [illegible] be an enemy—that he becomes, and must more [illegible] become, a friend and an auxiliary, and that the [illegible] each state is to treat him as such. That compass [illegible] tinually increasing strength of the sentiment of [illegible] between all civilised peoples—a sentiment wh[illegible] philosophy recommends, and which religion claims [illegible] of her own principles."

City Intelligence.

FAILURES ON THE STOCK EXCHANGE.—A tempor[illegible] panic was caused on the Stock Exchange on [illegible] by the failure of Mr. Augustus Cooper. Seven [illegible] members of the house were declared, but their lia[illegible] were comparatively unimportant. The differences [illegible] Mr. Cooper on 500,000*l*. Consols will represent [illegible] 25,000*l*. Other suspensions, it is feared, will hav[illegible] take place.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at $93\frac{1}{2}$ to $\frac{5}{8}$ for Money, and $93\frac{3}{4}$ to $\frac{7}{8}$ for [illegible] 10th October; Three per Cents. Reduced, 9[illegible] to [illegible]; New Three per Cents., 91 to $91\frac{5}{8}$; India Five per Cent. Stock, $103\frac{7}{8}$ to $\frac{5}{8}$; Five per Cent. Enfaced Rupee Paper, $96\frac{1}{2}$ to $\frac{1}{4}$; Exchequer Bills, March, 2*s*. dis., [illegible] June, 4*s*. prem.—FOREIGN: Belgian Four [illegible] per Cents., $98\frac{1}{2}$; Chilian Four and a Half per Cents., $82\frac{7}{8}$; Dutch Two and a Half per Cents., 64[illegible]; Mexican Three per Cents., 23; New Grenada Active, 1[illegible] to [illegible]; Peruvian Four and a Half per Cents., 97; Ditto Three per Cents., $78\frac{3}{4}$ to 79; Ditto Four and a Half [illegible] Dollar Bonds, $86\frac{1}{2}$; Russian Four and a Half per [illegible] $91\frac{3}{4}$; Spanish New Deferred Three per Cents., [illegible] to $41\frac{7}{8}$; Ditto Passive, $16\frac{3}{4}$; Committee's Certificates [illegible] 6; Turkish Six per Cents., 1854, $82\frac{1}{4}$; Ditto, 185[illegible] ex div.; Ditto for Acct., $68\frac{1}{4}$, ex div.; Ditto [illegible] Bonds, $70\frac{3}{4}$ to $69\frac{3}{4}$.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£27,479,715	Government Debt ..	[illegible]
		Other Securities	[illegible]
		Gold Coin and Bullion ..	[illegible]
		Silver Bullion ..	[illegible]
	£27,479,715		[illegible]

BANKING DEPARTMENT.

Proprietors' Capital ..	£11,553,000	Government Securities (including Dead Weight Annuity)	[illegible]
Rest	3,788,270	Other Securities	[illegible]
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	4,868,009	Notes	[illegible]
Other Deposits	12,357,680	Gold and Silver Coin	[illegible]
Seven day and other bills	702,958		
	£36,269,917		[illegible]

12th day of Sept., 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY — BANKRUPTS — E. BARSTOW, Bradfo[illegible] Grocer—T. CARTER, Windsor Road, Upper Holloway, Builder[illegible] Devons Road, Bromley, Middlesex, Licensed Victualler[illegible] St. Peter's Hill, Doctors' Commons, Merchant—J. C[illegible] Bridge, Isle of Wight—J. DRAKE, Lansdowne Place, [illegible] Builder—J. GRAY, Leeds, Builder—E. HARTMANN, Martin[illegible] Street, General Merchant—D. MUNDY, Westbourne Grove [illegible] —T. PRINCE, Beckford Row, Walworth, Dealer in [illegible] SHARPLES, Ardwick, near Manchester, Soft Soap Manufacturer[illegible] Abbey Wood, Kent, Beer Shopkeeper — J. SMITH, [illegible] Manchester, Manufacturer—M. THEOFILICI, Manchester Merchant[illegible]

SCOTCH SEQUESTRATIONS — R. BARBOUR, Glasgow, [illegible] J. BOAK and Co., Dundee, Tanners.

FRIDAY—BANKRUPTS — R. EDBROOKE, Bristol, Brick[illegible] Bellhanger—J. GOODWIN, Tunstall, Staffordshire, Earthenware [illegible] facturer—T. HALL, North End, Fulham, Licensed Victualler[illegible] Faversham, Kent, Baker and Flour Dealer—J. T. MEEK and [illegible] LOFF, Chicksand Street, Whitechapel, Oil Refiners—M. J. [illegible] A. SOARES, Mark Lane, General and Commission Merchants[illegible] COMBE, Cloth Fair, City, Woollen Draper.

BANKRUPTCIES ANNULLED—W. B. CHORLEY, late of [illegible] Ormond Street, and 37, Hart Street Bloomsbury, and [illegible] Merionethshire, Slate and Slab Merchant—F. HOW, Whitstable [illegible] Butcher.

Metropolis and its Vicinity.

ELECTION OF LORD MAYOR.—On Saturday the 2[illegible] inst. (Michaelmas Day this year falling on a Sunday) there will be an election of a Lord Mayor in successi[illegible]

to Alderman Cubitt. The two aldermen who stand next in rotation to the Lord Mayor are usually presented by the livery to the Court of Aldermen, who generally elect the senior for the mayoralty. In the event of this course being adopted this year, Alderman Sir Henry Muggeridge, who was elected in 1854, and Alderman Rose, who was elected in 1855, will be presented, and Sir H. Muggeridge will be the Lord Mayor for 1861-62. The other aldermen who are "below the chair," and who having served the office of Sheriff are eligible, are Aldermen Lawrence, Hale, Phillips, Gabriel, Mechi, Conder, and Abbiss. As the Lord Mayor is expected to be created a baronet on the coming of age of the Prince of Wales, it is rumoured that there will be a departure from the usual course, and that the present Lord Mayor will be put in nomination, in spite of his expressed wish not to interfere with the Alderman next in rotation to the chair.

The Diplomatic Service.—The select committee of the House of Commons appointed to inquire into the constitution and efficiency of the present diplomatic service of the country, have considered the matters to them referred, and agreed to the following report:—

"Having examined witnesses of all ranks in the diplomatic service, and several persons who have filled high office in connection with the administration of the department of Foreign Affairs, and having had the advantage of the reports on the diplomatic services of other countries, and of the opinions of the principal agents of the Government abroad, transmitted to the Foreign Office in answer to the circular dispatch of the 25th August, 1860, your committee have agreed to make the following recommendations to the House: 1. That there be two classes of examination previous to admission into the service—a first and second—the candidate selecting which he will undergo; if he pass the first he will be exempted from any further examination. 2. That the attachéship shall, for the future, be regarded as a probationary period of four years at the most, six months of which shall be spent in the duties of the Foreign Office. 3. That at the expiration of his attachéship, if his character and conduct are approved by the minister under whom he has been placed, the attaché shall be nominated secretary of a certain class, and be paid as such. It is understood that a commission be issued to every member of the diplomatic service on his first appointment as secretary, so as to give him a claim to calculate his pension from that date. 4. That exchanges between members of the diplomatic body and clerks in the Foreign Office should be allowed, under the sanction of the Secretary of State. 5. That the present regulations, with regard to leave of absence of ambassadors and ministers, appear to press upon them with undue severity, and that the attention of the Secretary of State may be advantageously directed to this subject. 6. That whenever it is practicable and fit, a residence for a term of years should be secured for the British embassy or mission. The rent and repairs to be charged at the public expense. 7. That the attention of the Secretary of State be directed to the salaries and allowances of the larger missions, with the view of considering whether they are adequate to meet the greatly increased expenditure of living at the principal European capitals."

The late Lord Herbert.—A general order was issued on Saturday from the Horse Guards, stating that the Queen has directed that the new general hospital at Woolwich shall be called the Herbert Hospital, out of respect to the memory of the late Lord Herbert, by whom the building was established.

Road across Hyde Park.—A movement is now in progress in the parish of Paddington for the formation of a road across the park, so as to bring the districts of Tyburnia and Bayswater in direct communication with South Kensington. It is proposed to hold a parish meeting to consider the question, and discuss the line of route.

Re-opening of Temple Bar.—The carriage way from the Strand through Temple Bar into the City, which had been closed for nearly three weeks for repairs, was re-opened for traffic on Monday.

Prize Medal of the Great Exhibition of 1862.—Mr. Maclise's design for the obverse of this medal has been completed and approved, and Mr. L. C. Wyon the engraver is preparing the die. The work is of a more elaborate character than that of the medal of 1851. It represents in the centre Britannia seated on a throne, holding in her right hand a wreath, and in her left an olive branch; while emblematical figures, representing Manufactures, Raw Produce, and Machinery, exhibit to her their several productions in the presence of Painting, Sculpture, and Architecture—who are to receive no reward beyond the admiration which their works will produce. At the feet of the central figure, and occupying the whole foreground of the group, is the British lion. The medal, which is to be of bronze, will be identical in dimensions with that given in 1851. The design for the reverse is not yet determined on, but it will probably consist of a wreath surrounding an appropriate inscription.

An Amateur Blondin.—Considerable excitement was caused on Saturday in the neighbourhood of Hampton, by the announcement that John Snell, the well-known waterman and boatbuilder there, intended to walk across the river on a tight rope at 6 o'clock. Many hundred spectators flocked to the spot towards the time announced; Lord Kilmorey, and a large number of ladies and gentlemen, being present. After the regatta, in which Snell had been engaged, he had the rope chalked, and commenced walking on it from the Middlesex side, balancing himself with a large pole. The rope was a common line, used in towing barges, one inch in diameter, and, having been broken in one of the trials, and the guy-ropes besides being in a very insecure state, as the whole of the expense of preparing the rope had been defrayed by Snell himself, it swayed up and down in a very dangerous manner, and was, in effect, a slack rope. Notwithstanding the disadvantages under which Snell laboured, he walked the rope with the utmost coolness and courage, and accomplished his task amid the cheers of those assembled.

The Nuns of Sion House.—Among the passengers by the last packet from Lisbon were twelve nuns of the ancient convent of Sion House, who have returned to England, having purchased an establishment at Spitisbury, in Dorsetshire. The sisters have brought with them the antique stone cross which formerly stood over the gateway of Sion House, at Isleworth, several ancient statues which adorned their original church, and a portrait of Henry V. of England, their founder, which is said to have been painted during the monarch's lifetime. This order of Bridgettins has been settled in Lisbon since the year 1595; but there being now more religious liberty in England than in Portugal, the sisterhood have determined to return to their native land. It is said that the Duke of Northumberland, to whose ancestors Sion House, with its lands, was granted by Henry VIII., has given the nuns a handsome donation to assist them in defraying the expenses of their journey and change of establishment.

The Late Fire in Paternoster Row.—At the last meeting of the Court of Sewers a memorial, signed by 50 of the principal inhabitants of the neighbourhood, was presented, praying the Court to prohibit the tallow warehouse in Paternoster Row from being restored and used for its former purpose of tallow melting, on the ground that it is both a subject of nuisance and of danger. The memorial was referred to the improvement committee.

Fatal Accident at Pimlico.—On Wednesday evening a fatal accident occurred to Mr. Thomas Earle, a contractor, carrying on business in Castle Street, Long Acre. It appears that between 6 and 7 o'clock Mr. Earle was driving Mrs. Earle in a chaise along the bank of the Thames, having just crossed the Chelsea new bridge, and was proceeding homewards, when, as he reached the corner of Westmoreland Street, Grosvenor Road, a dog started out into the road and barked furiously. The horse shied, and dashed towards the palings which protect the road from the river, and leaped at them as he would have done at a fence. Mr. and Mrs. Earle were thrown from their seats into the river, but the chaise having become entangled in the palings the horse could proceed no further. A person who witnessed the occurrence jumped in, and a waterman who was at hand with his boat, assisted by other persons, succeded in getting Mrs. Earle out of the water, when it was found that though much excited and alarmed she had not sustained any serious injuries. There was great difficulty in getting Mr. Earle out of the water, as he was a heavy man, but after many efforts he was got into the boat, and conveyed to the Stanley Arms, where four medical gentlemen visited him. Before their arrival, however, he had expired and it was found that he had received a severe wound on the head by the kick of the horse, inflicted, no doubt, as he was falling from the chaise. His clothes were torn and his thighs pierced and lacerated by the sharp points of the palings. The horse was but slightly injured.

The Woolwich Murder.—The execution of Peter Masterson, who was convicted at the last session of the Central Criminal Court of murder, has been fixed to take place on Thursday, the 19th inst., at Maidstone. The prisoner, who is only 22 years old, is an Irish Roman Catholic, and has been visited constantly by a priest of his Church. For a long time he appeared very hardened; but since the day was fixed for his execution he has become more sensible of his position.

The Holborn Murder.—On Tuesday afternoon the adjourned inquest on Mary Anne Cogan was resumed in Newton Street, Holborn. It will be recollected that the husband William Cogan was alleged to have cut his wife's throat in such a frightful manner as to cause instantaneous death, that he afterwards cut his own throat, and has been in King's College Hospital ever since from the effects of the wound. On the previous occasion the inquest was adjourned in order to have the accused present, so that he might hear the evidence against him, and make any statement he might think proper in his defence. He was now brought up in custody from the hospital, and the evidence taken on the former occasion having been read over to him, fresh evidence was taken at great length, but few new facts were added to those elicited at previous examinations. The prisoner made a statement to the effect that his wife attempted to cut his throat as he lay sleeping on the floor, and that he rushed into the street, and made signs to the police to take her into custody for the injury he had received, not knowing that she was dead. His wife, he said, had exhibited violence to him on former occasions, and about 12 months ago stabbed him in the arm with a knife, for which she was taken to Bow Street, but he did not appear against her. This appeared to be true, and the prisoner exhibited the marks of the injury he had received. The coroner in summing up, expressed his opinion that the medical evidence had clearly proved that the wound in deceased's throat could not have been inflicted by herself, and that the only question was whether it was a case of manslaughter or murder. The jury after consulting with closed doors for one hour and a quarter returned a verdict of "Wilful Murder" against the prisoner, who was therefore committed for trial at the Central Criminal Court. On Wednesday the prisoner was taken before the magistrate at Bow Street, and was fully committed for trial on the capital charge.

Murder on Board an American Ship.—John Spiller, aged 19, a seaman on board the American ship Bosphorus, now lying in the Commercial Docks, was charged at the Greenwich Police Court on Saturday with stabbing and causing the death of William Dixon, and also with cutting and wounding Thomas Porter. It appeared from the evidence of the wounded man and other seamen, that the crime, which was perpetrated on the previous day, was altogether without provocation. The prisoner had been desired by his messmate Porter to come on deck and work, but he refused to do so, whereupon a scuffle ensued, in which the prisoner stabbed Porter in the arm with a knife, and afterwards plunged it into the side of Dixon, who attempted to take the knife from him. The knife cut through the artery, and the man died in a few minutes. The magistrate committed the prisoner for trial for the Wilful Murder of Dixon, and also for cutting and wounding the other man. At the inquest on Thursday the jury returned a verdict of Wilful Murder against the prisoner.

The Public Health.—The Registrar-General's Weekly Return states that the deaths registered in London in the week that ended Saturday, Sept. 7, were 1121. The average number in the corresponding weeks of the 10 years 1851-60, excluding the deaths from cholera in 1854, and allowing for increase of population, was 1162. The present return is therefore 41 below the average. During the week the births of 871 boys and 897 girls, in all 1768 children, were registered in London. In the corresponding weeks of the 10 years 1851-60, the average number was 1598.

Provincial.

Blisworth.—For some weeks past several of the boats on the Grand Junction Canal have been propelled by steam instead of being drawn by horses, and with proper adaptations of the tunnels, there is no doubt that the difficulties hitherto experienced in navigating canals with steamboats are in a fair way of being overcome. There are several tunnels on the canal, one of them being at Agar Town, and another close to the Blisworth station on the London and North-Western Railway. The canal tunnels are made of brick, and are little, if at all, larger than a sewer. The tunnels are so constructed that horse-power is of no use, the boats previous to the introduction of steam having been propelled by a process called "legging." This process consists in placing a board on either side of the boat, on which lies a man who places his feet against the wall of the tunnel and thus pushes the boat along. This system still prevails on boats to which the steam-engine has not yet been applied, and as the labour of thus "legging" the boat is both arduous and disagreeable the steam-engine is welcomed as a very agreeable substitute. The engine, however, is not without its disadvantages, for, as the tunnels are long, and, as we have said, no larger than sewers, the boatmen are half-stifled by the volumes of carbon emitted from the low funnel; coal being burnt instead of coke. On Friday night two steamboats entered the Blisworth tunnel, and before they emerged from it the people in them were rendered insensible by the fumes from the engines, two of the men being quite dead, and one of them fearfully burnt by falling, while insensible, on the engine. The tunnel is a mile or more in length, and has but one shaft in it, and that one shaft it is said is covered over. The jury at the inquest returned a verdict that deceased were accidentally suffocated by the smoke in the tunnel. They also recommended the company to sink additional ventilating shafts.

Coventry.—There is now no longer any doubt that a double murder has been committed in this city by arsenical poisoning, the suspicions entertained a fortnight since against William Beamish of poisoning his wife and child having been confirmed on Saturday by the verdict of the coroner's jury. The following are the facts of the case as disclosed by the evidence at the inquest. The prisoner, who for several years was a Sunday-school teacher, carried on the business of a riband weaver in a domestic factory at Hill Fields, and on the morning of the 14th August the whole of the family, consisting of the wife and three children, took their breakfast together, with the exception of the prisoner himself, who took his breakfast with him to the factory. Before the meal was finished the mother and children were seized with vomiting. Jane Stokes, a sister, was then engaged to wait upon deceased, who were also attended occasionally by a young woman named Emma Statham, who worked in the riband trade for the prisoner. The child fell into convulsions on the following day, and died at night. The wife, however, lingered for several days. On the 17th she was so much better that recovery appeared possible; but she had a relapse, and on the 20th she died. Dr. Goate, a local practitioner, had been called in by the prisoner to see "a woman and child with the bowel complaint," but no suspicions were raised in his mind as to the cause of the sickness, and he gave a certificate of death from diarrhoea. A post mortem examination of the bodies revealed excoriations of the lining membranes of the mouth, and an inflamed state of the stomach, as well as

other symptoms of acrid poisoning. The contents of the stomach, as well as the viscera, were forwarded in a jar to Dr. Wrightson, an analytical chymist of some repute at Birmingham. He made an analysis, and found arsenic in a small quantity in the stomach, and evidence of the poison in the liver, the blood of the heart, and the transverse colon. Inquiries were made which showed that the prisoner had made repeated endeavours to purchase arsenic immediately prior to the sickness of the deceased. He first of all went to the shop of a Mr. Parkes, chemist, Hill Fields, and asked for a pennyworth of arsenic, remarking that he had obtained some previously to mix with soft soap, to destroy bugs. Mr. Parkes could not, or would not, sell the arsenic. Three days afterwards he called upon Mr. Jenkins, chemist, Smithford Street, and asked for three pennyworth of arsenic to poison rats, with which he said he was very much annoyed, but being informed that it could not be sold without a witness as to what it was required for, he went away for one. He subsequently returned with a person who stated that the arsenic was required to poison rats, and an ounce and a half was given to him accordingly. He called again the same day, and asked the assistant for arsenic, but the latter said they did not keep it. He recommended "Battle's vermin killer" and phosphor paste as efficacious in killing rats, but the prisoner said he had tried them both and they would not do. He was then recommended to try the ordinary cloe-fig. On the following Monday he called again and purchased one-pennyworth of cloe-fig, stating that he had not obtained any arsenic. When taken into custody he stated that he had used the arsenic for the purpose of destroying the rats which infested the beans and peas in his garden, where he said there was a quantity scattered, but none was found. The cloe-fig not used, and the empty arsenic paper labelled "poison," were on his person. A considerable quantity of the arsenic taken by the deceased, and especially the woman, must have passed in the matter ejected from the stomach whenever she vomited. The question of the possibility of the poison having accidentally got into the food, or that the wife had committed suicide, was set aside by the prisoner having created suspicion of the commission of murder by his own acts. Shortly after the death of his wife he manifested considerable anxiety that some one should be present while he searched the pockets of her dress. Jane Stokes was present, and her statement is that the prisoner took out of his wife's pocket a purse, and opening it pulled forth a note, written on a small slip of paper, purporting to be in his wife's handwriting, stating that she had poisoned the child and committed suicide afterwards. Attention was at once drawn to this note, and endeavours were made to ascertain how it came into the pocket, and whose handwriting it was. The jury were almost baffled in this inquiry until Saturday, when a link was added to the chain of evidence by the prisoner's son identifying a book produced as that used by his father. The paper on which the note was written appears to have been torn from this book. Evidence was still wanting as to the handwriting, and the inquiry was adjourned until an "expert" could be obtained. Mr. Joseph Nethercliff, of the British Museum, was accordingly telegraphed for. He arrived in Coventry late on Saturday evening. Seven documents were given to him for examination and comparison, one being the note found in the wife's pocket, and the others being letters proved to have been written by the prisoner. Mr. Nethercliff was absent half an hour, and on returning into court gave his decided opinion that the note was written by the same person who wrote the letters signed "Wm. Beamish." He explained the reasons why he came to this opinion, and although subjected to a long cross-examination he did not vary in the least from the statements he had made. His evidence created great sensation, as it made the prisoner guilty of forgery, and the inference was that he forged the note to avert suspicion from himself. Circumstantial evidence against the prisoner having thus been found, a motive was assigned for committing the murder. There was abundant evidence to prove that he had many months prior to the poisoning been on terms of improper intimacy with Emma Statham, who worked in the riband trade for him, as already stated. They had been seen drinking together at various public-houses, kissing and embracing. He had also been heard to say he had sworn to have her. It was therefore suggested that he desired to put his wife out of the way in order to have more complete opportunities for intercourse with this girl, who, with Jane Stokes, had been apprehended on a charge of poisoning, but had since been released on promising to re-appear whenever called upon to do so. Mr. Powell, of Birmingham, and Mr. Griffin, of Leamington, appeared for the prisoner, and their cross-examinations were chiefly directed to show that for many years he had borne an unblemished character, and had led a most exemplary life, which, with the exception of his connection with Statham, certainly appeared to be the case; that bugs infested the house, to destroy which arsenic mixed with soft soap had been used; that rats and mice abounded in the garden; arsenic also had been employed to get rid of them; and that he was in no way mixed up with the administration of the poison. The coroner in summing up said that after the evidence of Mr. Nethercliff they must either come to the conclusion that Mrs. Beamish poisoned the child first and herself afterwards, or that that note had been placed in her pocket by some person or persons with the desire to avert suspicion from the real author or authors of the crime. The supposition that she wrote the note was very improbable, because there was every likelihood that at the time the note was written the child was dead, and a person prostrated by sickness, as she was, would not be likely to undergo the mental exertion of writing a note. The Coroner expressed his regret at being constrained to say that Dr. Goate had acted very wrongly in giving a certificate of death from diarrhœa. He understood that it was a common practice for the medical men of Coventry to give certificates of death, when they knew nothing whatever of the cause; and in this case if the doctor had had the moral courage to perform his duty, it was very probable that it would have led to inquiry and that the mother's life would have been saved. The jury after a brief absence returned a verdict to the effect that the deceased died from arsenic, purchased and administered by the prisoner Beamish, and that Emma Statham was accessory to the fact. The Coroner said he did not think he could receive that portion of the verdict in reference to Emma Statham. If she was accessory at all she was indictable for murder, and that question had better be left to the prosecution. A Juryman.—We believe that Emma Statham had a direct or indirect guilty knowledge. The jury retired to reconsider their verdict, and on returning, the foreman read the following verdict:—

"As to Betsy Beamish, we find that William Beamish is guilty of her wilful murder; as to Emily Beamish, we find him guilty of wilful murder. The jury cannot separate without expressing their sympathy for Mrs. Jane Stokes, whose name has appeared as implicated with the murder. They think there never was any cause for suspicion against her, and that she had been most kind to the deceased."

On Monday the prisoner was brought before the borough magistrates in the County Hall, when the evidence of the witnesses previously examined before the coroner was taken, and ultimately he was fully committed to take his trial on the capital charge.

DOVER.—Lord Palmerston last week attended the first meeting of the new Board of Harbour Commissioners, appointed under the Act of last Session, by which the management of Dover Harbour undergoes considerable change. His Lordship rode over from Walmer Castle, accompanied by Lady Palmerston, the Right Hon. W. Cowper, M.P., and Mrs. Cowper, who remained at the Lord Warden Hotel while Lord Palmerston attended at the Harbour House to preside over the meeting above referred to. The new commission consists of seven members, all of whom were present, viz., the Lord Warden, President; Captain Noble, R.N., representing the Admiralty; Mr. S. M. Latham, the Board of Trade; Mr. Gordon Thompson, the South-Eastern Railway Company; Mr. Holroyd, the London, Chatham and Dover Railway Company; and the Mayor of Dover and the Deputy Mayor on behalf of the burgesses. The principal business transacted was the appointment of officials, as follows:—Mr. James Stillwell, registrar; Mr. Richard Irons, harbour master; Mr. Richard Atherden, deputy harbour master, Mr. Saunders, collector of dues; and Mr. L. Stride, treasurer. Applications were sent in by Mr. R. Rees and Mr. Druce for the appointment of receiver of rents, surveyor, and resident engineers; but the Commissioners postponed the election, and it appeared to be the general impression that it would be desirable to divide these offices. At the conclusion of the meeting the Lord Warden rejoined Lady Palmerston and Mr. and Mrs. Cowper, and proceeded from the Lord Warden Hotel to the Admiralty Pier, for the purpose of inspecting the works in connection with that undertaking. The more local operations in the inner harbour were afterwards inspected by his lordship, who then returned to Walmer. The usual salutes from the Castle were dispensed with, at the express wish of his lordship, both on his arrival and departure.

HEREFORD.—The 138th meeting of the three choirs of Hereford, Gloucester, and Worcester commenced in this city on Tuesday, under the presidency of Lord Bateman, the Lord-Lieutenant of Herefordshire, and a committee consisting of several of the principal noblemen and gentlemen of influence in the county. On the first day there was a full choral service in Hereford Cathedral, when a sermon was preached by the Rev. Wm. Peete Musgrave, M.A. of Trinity College, Cambridge, one of the Canons Residentiary, after which the "Elijah" of Mendelssohn was performed. On Wednesday Spohr's "Last Judgment" and Handel's "Samson" were performed; on Thursday Mozart's "Requiem," Haydn's 'Spring," and Mendelssohn's Lobgesang were performed, and on Friday the festival closed with the "Messiah." Concerts were given on the evenings of the several days in the shire and college halls, and a ball took place on Friday evening. The principal vocalists were Mdlle. Tietjens, Madame Weiss, Miss Louisa Pyne, Madame Sainton Dolby, Miss Susan Pyne, Signor Giuglini, Mr. Montem Smith, Mr. Sims Reeves, Mr. Winn, and Mr. Weiss.

LIVERPOOL.—The Great Eastern sailed from this port on Tuesday afternoon for New York, with upwards of 400 passengers and a general cargo. The chairman and directors of the Great Ship Company, with a number of the leading gentlemen of the port, including the Mayor, accompanied the ship as far as the Bell Buoy. She was in excellent order, and her departure was witnessed by many thousands who lined the [illegible] of the Mersey.

MANCHESTER.—After the delivery of the P[illegible] address the various sections met at the R[illegible] tion, the Free Trade Hall, Owen's C[illegible] Mechanics' Institution, and the Sweden[illegible] under their respective presidents, who deli[illegible] ductory addresses. The section of Mat[illegible] Physical Sciences was presided over by P[illegible] that of Chemical Science by Professor M[illegible] Geology by Sir Roderick Murchison; that [illegible] and Botany by Professor Babington; that of P[illegible] by Dr. Sharpey; that of Geography and E[illegible] Mr. John Crawford; that of Economic [illegible] Statistics by Mr. Newmarch; and that of M[illegible] Science by Mr. Bateman, C.E. Numerous papers [illegible] length and interest were read daily in each se[illegible] Monday a meeting of the general committee [illegible] the Town Hall, Mr. Fairbairn, President, in [illegible] first business was to fix the place of meeting [illegible] year. Invitations had been received from [illegible] Newcastle-upon-Tyne, Birmingham, Bath, and [illegible] ham. The claims of Cambridge were [illegible] by Professor Sedgwick, who said there [illegible] accommodation for the sectional business, [illegible] were no such great halls as in Manchester [illegible] meetings. He begged his hearers also [illegible] that the academical body had anything of [illegible] feeling prevalent among them, even if their [illegible] might be supposed to be rather of a m[illegible] They could provide for the reception of [illegible] and were always glad to see them. I[illegible] philosophers should grace the meeting [illegible] presence it would not be the first instance [illegible] kind. He recollected on one occasion he [illegible] honour of receiving Mrs. Somerville, the eminent [illegible] matician, at his own chambers, and he believe[illegible] the first time a four-post bedstead was ever [illegible] the University. Professor Babington [illegible] invitation to Cambridge. Alderman Bell [illegible] Potter, on behalf of the Northern Institute [illegible] Engineers, supported the invitation from N[illegible] The Mayor of Birmingham and the Rev. W[illegible] supported the invitation from that place. M[illegible] Dawson said there was more to be seen in Birm[illegible] than in any other town, at least for those w[illegible] to see the largest possible application of [illegible] cleverness to works of utility. Moreover, [illegible] was much more central and accessible than those [illegible] the-way places in the North. Mr. Tite, M.P., [illegible] that although he would be glad if he lived [illegible] Cambridge for the 10th time, he would earnestly [illegible] on the meeting their acceptance of the invitation [illegible] Bath, at all events for the year 1863. There [illegible] Roman antiquities to be seen, unrivalled out of R[illegible] itself; and Bristol was almost within a [illegible] with its interesting glass manufactures and [illegible] The Mayor of Bath and Mr. Moore supported the [illegible] tation from Bath. The invitation from Nottingham [illegible] was supported by the Mayor and Town Clerk of the [illegible] borough. The Rev. Dr. Robinson then moved that the next meeting be held at Cambridge. The Mayor of Manchester seconded the motion, which was [illegible] Professor Willis was nominated President for the [illegible] year, and the following gentlemen were requested [illegible] the office of vice-presidents:—The Dean of [illegible] Whewell, Professor Sedgwick, Professor Airy, Pro[illegible] Adams, and Professor Stokes. On Thursday the [illegible] ceedings of the Association were brought to a c[illegible] excursions to the copper-mines at Alderley, the [illegible] Marston salt mine, the Astley Deep coal pits at [illegible] field, the Manchester Waterworks, the St. H[illegible] works, the Worsley coal mines, and the Wor[illegible] grounds, which were kindly thrown open by the [illegible] of Ellesmere.

NOTTINGHAM.—A very painful occurrence [illegible] at the village of Bulwell on Monday evening [illegible] man named Christopher Williamson having been [illegible] by his sister, a young woman 17 years of age. [illegible] pears that deceased was at work in his father's [illegible] as a framework knitter, when a dispute took [illegible] tween him and his sister. Very high words [illegible] and ultimately deceased, in the heat of passion [illegible] his sister several severe blows, when she seized a [illegible] bobbin, and threw it at him with considerable [illegible] Unfortunately the bobbin struck him just behind [illegible] ear, on the jugular vein, and after being [illegible] few minutes, he fell into a chair and expired before [illegible] assistance could be obtained. The sister then [illegible] much excited, and went into such violent [illegible] surgeon had to be called in, and it was not [illegible] several hours afterwards that she could be removed [illegible] the county gaol. She was taken before the magistrates on Wednesday, and remanded until to-day. [illegible] peared much distressed, and wept bitterly. The [illegible] was opened on Tuesday, and adjourned. Much sympathy is evinced on behalf of the young woman, on account of the great provocation she received, but there [illegible] doubt that she will be committed for manslaughter.

PLYMOUTH.—The paddlewheel steam sloop [illegible] brand, 6, Commander Bruce, the crew of which [illegible] suffered so fatally in the West Indies from yellow [illegible] arrived on Tuesday in the Sound. She lost altogether by yellow fever one assistant-paymaster, two assistant engineers, a boatswain, and 47 petty officers [illegible] seamen. Her crew are now in good health. [illegible] reports that the paddlewheel steamsloop Sp[illegible] 6, Commander Wilson, had lost 24 men by yellow fever.

[illegible]GATE.—The police authorities of Surrey have [illegible]ived information which leads them to believe that [illegible] remains of Adolphe Krohn, one of the suspected [illegible] of Mrs. Halliday, of Kingswood, were dis[illegible] a few days ago at High Leigh, near Warrington, [illegible] The dead body of a young man, apparently [illegible], between 25 and 30 years old, was found in [illegible] the high road from the south to [illegible]. Decomposition had proceeded so far that [illegible] of features could be discerned, but in dress, [illegible] and every other ascertainable particular the [illegible] corresponded with the published description of [illegible] Krohn. No marks of violence were discovered; [illegible] whatever was found in the pockets of deceased's [illegible], and it is supposed that the man must have [illegible] in the field and died from exhaustion shortly [illegible] the Kingswood murder was committed.

Ireland.

THE PRINCE OF WALES AT THE CURRAGH.—On [illegible] the Prince of Wales presented the 36th Regi[illegible] with a new stand of colours, as a reminiscence of [illegible], on the Curragh, to the brigade of which [illegible] a part. There was a large concourse of spec[illegible] to witness the ceremony, including the Lord-[illegible], Sir George Brown, the Commander-in-[illegible], the Generals of division with their staff, the [illegible] of the various regiments quartered at the Cur[illegible], many ladies, and the gentry from the surrounding [illegible]hood. The colours having been consecrated [illegible] senior chaplain of the camp, the two senior [illegible] bearing the old colours, which told a tale of [illegible] and faithful service, approached his Royal High[illegible] and knelt. The Prince of Wales then presented [illegible] colours in due form, and having received them at his hands, the ensigns rose, and rested the staves of the colours on the ground. His Royal Highness then addressed the regiment as follows:—

"[illegible] Hort, officers, non-commissioned officers, and [illegible] of the 36th Regiment, it affords me very sincere gratification, after having served for some months in the brigade to which you belong, to present these colours to you. Be assured that I shall ever look back to my intercourse with [illegible] and the various corps composing the fine division assembled in this camp with feelings of unmingled pleasure, [illegible] I gladly avail myself of this opportunity of expressing my thanks for the cordial welcome given me on my joining the [illegible] for the purpose of obtaining a practical acquaintance [illegible] duties of your noble profession. Time will not admit of entering into a detailed narrative of all the valuable services rendered by your regiment to their Sovereigns and country. From the year 1700, when it was raised in Ireland, the birth-[illegible] many gallant soldiers, until the close of the war in 1815, [illegible] records might almost form an epitome of the military [illegible] of the empire. During that period the 36th served with [illegible] distinction in Europe, Asia, and America, through[illegible] many of the most brilliant campaigns in which our armies have been engaged. It was repeatedly named in very honour[illegible] Cornwallis, Wellington, and other eminent com[illegible], and has on all occasions nobly vindicated its title to [illegible] on your banners, and of which you are so [illegible] proud. To a regiment that has already achieved such a [illegible], and is now in so high a state of efficiency under the command of Colonel Hort, these colours may, indeed, be [illegible] entrusted; and I feel convinced that whenever the [illegible] shall arise you will show yourselves worthy of the [illegible] eulogy once pronounced by Lord Cornwallis upon [illegible] gallant corps—that they "furnished a conspicuous proof [illegible] and valour in soldiers, when directed by zeal [illegible] officers, are irresistible."

Colonel Hort returned thanks in an appropriate speech, and the regiment having saluted the colours in the [illegible] manner, the ceremony terminated with a royal [illegible]. His Royal Highness, with the Lord Lieutenant, the Commander of the Forces, and a large company, [illegible] luncheon with the officers of the regiment, and the [illegible] of the 36th entertained the sergeants of the [illegible] Guards, the Prince's regiment, at dinner.

THE INCOME TAX IN IRELAND.—The *Freeman*, in [illegible] commercial summary, publishes a *resumé* of a Parliamentary paper which has just been issued, giving [illegible] of the persons who pay income tax in Ireland under Schedule D, including trades and professions, [illegible], merchants, manufacturers, doctors, [illegible], engineers, attorneys, &c. It appears from [illegible] that the number who confess to making more than [illegible] a year under all these heads is only 14,532, that [illegible] return their incomes as from 100*l.* to 150*l.* is [illegible]; at 300*l.* a year, 3165; 600*l.* a year, 1116; 2000*l.* a year, 197; 3000*l.* to 10,000*l.* 81; 10,000*l.* to 50,000*l.*, [illegible]; above 100,000*l.* 1, said to be a trader, who returns his income as 120,661*l.* in 1859, and 115,099*l.* in 1860.

Scotland.

THE BRAEMAR GATHERING.—This imposing High[illegible] gathering took place in front of Braemar Castle [illegible] the 5th inst. For a number of years back a great attraction to the gathering has been the presence of Her Majesty, Balmoral Castle being within an easy [illegible] of the place of meeting. Tourists also generally contrive to make their route include Braemar during [illegible] week of the games, availing themselves of the facilities afforded by a run for a greater portion of the journey from Aberdeen by one of the most beautiful lines of railway in the kingdom—the Dee Side. This year, however, the numerous spectators had to regret the absence of the Queen and Prince Consort, but the Princess Alice, Prince Alfred, Prince Leopold, and Prince Arthur, were present, as were also Prince Louis of Hesse, General Grey, Sir Charles Wood, Sir Charles and Miss Phipps, Lady Churchill, &c. The usual games of tossing the caber, putting the stone, throwing the hammer, racing and dancing, were duly performed by Highlanders—though, strange enough, a comparatively small, but firmly knit Lowlander, Donald Dinnie of Aboyne, holds the champion medal of Deeside. It is said that he is quite a model athlete, being as like Blondin in build as it is possible to conceive. On the terrace, beside the Royal visitors, were distinguished parties from Mar Lodge and Invercauld House, including the Earl and Countess of Fife, Lord Macduff, Lord and Lady Braybrooke, Lord Powerscroft, Lord Huntingfield, Lady Staplefield, Mr. and Mrs. Farquharson, Earl and Countess of Camperdown, Lord and Lady Tredegar, Sir Thomas and Lady Gladstone, &c. The day was favourable for the meeting and everything passed off well.

SUPPOSED MURDER NEAR GLASGOW.—On Thursday, the 5th inst., Mr. William Simpson, coalmaster, Larkhall, Lanarkshire, proceeded to Airdrie for the purpose of drawing some money from the bank, in order to pay his men at the colliery, which he does once a month. When he left Airdrie he had in his possession 138*l.* in notes. He walked to Motherwell, where he took refreshments at the Inn, and left about half past 8 P.M. to resume his journey by a narrow footpath on the bank of the railway. Since that time nothing has been seen of him, but his hat, pocketbook, letters, and some silver money have been found on the footpath, about 200 yards from the village. The hat had two long cuts in it, but no marks of blood, and the ground appeared to show that a struggle had taken place. The body could not be found, and was at first supposed to have been thrown into the Clyde. After a reward of 200*l.* had been offered for the apprehension of the murderer or murderers, an impression became general in the district that Mr. Simpson, instead of being murdered, had absconded, and that he mutilated and placed his hat and documents in the position in which they were found, in order to encourage the idea that he had been made away with. It was also rumoured that, in addition to the sum which he drew from the bank at Airdrie, he had taken with him a considerable sum of money, but at present there is no confirmation of these rumours, and the affair is involved in mystery. Mr. Simpson was a young man of 23 or 24 years of age, and has left a wife and child. It is said that his life was very heavily insured.

Railways.

THE FATAL ACCIDENT ON THE BRIGHTON.—The inquest upon the bodies of the 23 persons killed by the recent accident in the Clayton tunnel, was resumed on Tuesday in the Town Hall, Brighton. It will be remembered that the inquiry had been adjourned to afford an opportunity to the deputy chairman of the railway company, to bring before the board of directors the demand of the court for the production of certain documents which the secretary had, under the advice of Mr. Faithfull, the company's solicitor, declined to produce on the ground that they were privileged communications made by the servants of the company to their employers. The documents in question were the report made by Scott, the driver of the excursion train, of the journey from Brighton to London, on the morning of Sunday, 25th August, and detailing the circumstances of the accident; Scott's daily return; the verbal statement made by Boynett, head guard of the train, taken down in writing by one of the clerks in the office; a statement made by Butcher, the guard, and the report made by Hackman, the driver of the Portsmouth excursion, and handed to the officer at the Brighton station. On the re-opening of the court, Mr. Slight, the secretary, stated that the Board of Directors on Monday passed a resolution to the effect that they had been advised by counsel that they were not bound to produce the documents required by the coroner, and that the documents, if produced, could not be legally received as evidence—but, being desirous of assisting the investigation by every means in their power, they were unwilling to stand on the legal rights of the company, and had therefore authorised their secretary to produce the documents required. The reports in question were then handed in and read, but they did not appear to be of the importance expected. The coroner then proceeded to sum up the evidence as follows:—

"If the jury directed their attention to the locality at which the accident took place, it would be seen that the line between Brighton and Hassock's Gate was full of tunnels, cuttings, and curves, and that with one or two exceptions the driver of a train could not see more than about a quarter of a mile ahead. The distance signals had been explained to them, and it had been proved that in more than one instance, and especially on the morning of the accident, the distance signal failed to work by the ordinary means of the passing of the trains. With regard to the duties of the signalmen and the specialties of their post at the Clayton tunnel, it was obvious that if the duties of those men had been properly performed, and no difficulty had arisen in the working of the machinery, any accident at the Clayton tunnel was apparently impossible. On the morning in question three trains were advertised to start from Brighton, the Portsmouth excursion at 8.5, the Brighton excursion at 8.15, and the ordinary Brighton train at 8.30. It was obvious that if these times had been kept no accident would have happened, because there would have been ample time to communicate by the ordinary means had any break-down occurred. But from some cause or other these times were not kept, and it would be the province of the jury to determine how far they varied, and also what was the cause of such divergences. The jury would further have to look whether there was any conflict of evidence between the officers of the company and passengers, whose statements were above suspicion, and it would be only right to assume that as the officers of the company might be criminated by the cause of the accident, the weight of evidence lay with the independent witnesses. They would perceive as he narrated the facts, that the cause of the delay of the Portsmouth train on arriving at Brighton was not very material to this inquiry, as if the rules of the company had been properly observed the accident would not have happened notwithstanding that delay. The Portsmouth train left Brighton station, according to the evidence of Legge, the station-master, at 8·22. But that evidence was contradicted by all the other testimony, which went to show that it did not leave Brighton until 8.28 or 8.30. The excursion train was stated by the officers of the company to have left the station at 8.30 or 8.31. Legge's evidence on that point was also contradicted by the other testimony. According to him the train left two or three minutes earlier. The evidence of Holmes, the pointsman at the junction, was that the trains passed him at 8.28, 8.31, and 8.36. The evidence of Kellick, the signalman at the south end of the tunnel, was very important, and it appeared to him that Kellick was justified in believing that the answer he received to his message referred to the second train. The signalman at the north end gave a somewhat different account of the transaction, but judging between the two he was of opinion that the account given by Kellick was the more credible one of the two. Brown admitted that he mistook the message to refer to the first train instead of to the second, which it actually did refer to, and his version of the affair was in other respects unintelligible. Kellick appeared to have done his duty as well as he was able under the trying circumstances he had to meet of three trains succeeding each other with such rapidity, and the distance signal not working. If the jury believed the evidence of the passengers respecting the time at which the trains left Brighton, the conduct of Legge in starting those trains clearly came within the definition of manslaughter by negligence. It was the neglect of the ordinary precaution—a precaution which, according to the evidence of the officials of the company, was clearly pointed out in the rules—of not starting the trains till an interval of five minutes had elapsed. A question might arise as to how far Mr. Hawkins, traffic manager, contributed to the accident by the way in which he managed the traffic. There was no definite rule as to an interval of five minutes being allowed to elapse between two trains, but it appeared that the ordinary rule observed on the various railway lines in the kingdom was well known to railway officials; and he did not think blame could be attributed for adopting what was the general rule, and expecting that it would be acted upon. The general rule, excepting at terminal stations, was to allow intervals of five minutes. A question might arise as to the sufficiency or insufficiency of the means adopted at the tunnel. The jury would have to consider whether the railway, by its traffic manager, had fairly adopted all the ordinary improved modes in common use for regulating the traffic. If they had, it was no imputation on them to say that there were other new modes partially adopted on some lines, which would be better than those in use on the Brighton line. No doubt there had been a great increase of traffic, but if the means in use were sufficient to regulate that traffic, there could be no blame to the company. In reference to the suggestion of Captain Tyler, that the intervals on the line between Brighton and Hassock's Gate should be regulated by distance instead of time, it could not be urged against the company that they had adopted the latter method, as they did so clearly to regulate the distance at which the trains should be apart from one another. The questions for the jury to consider were these—whether they believed that Legge started the trains at less intervals than he should have done, and if so whether that circumstance contributed to the accident. If that should be their opinion his neglect of duty would amount to manslaughter, and would be an offence which it would be for another jury to try. The second question was whether the jury believed the evidence of Kellick, the signalman. If so, all he had been guilty of was a trifling error of judgment—hardly an error at all in fact—arising from his hurry and not from neglect of duty. He was not asleep or away from his post, and there was no evidence to show that in any other way he had been guilty of negligence. The third point was as to the working of the distance signal, whether that in any way contributed to the accident, and whether, if it did not work properly, Kellick, or any other person whose duty it was to oil and attend to it, properly performed his work. It did not appear to him that the conduct of Scott, the driver of the excursion train, was at all to be blamed; if there was an error at all it was only one of judgment. No doubt the weight of evidence was that the train backed for a greater distance than Scott alleged; but on the other hand, he did not appear to have been guilty of any such conduct as would implicate him in a criminal charge. His life was equally imperilled with the rest, and he did not seem to have left his post, or been guilty of any negligence in not attending to the signals. The questions for the jury to consider were, therefore, whether the general regulations of the company were such that the accident did or did not happen through them; whether Legge's conduct in starting the trains at such intervals was criminally at fault; whether Kellick or Brown were in any way contributory to the accident, or whether they did that which could be expected from them under the circumstances. If the jury were of opinion that Kellick and Brown had done the best they could, even if they committed a slight error with the signals, he did not think it would be such gross negligence as would implicate them; nor did he think that Scott's conduct, even supposing he did back his train, was such as would make him guilty. There was one other observation he would make with regard to the interval of five minutes. That was quite the minimum interval for safety on that part of the Brighton line, but it appeared to him that a rule of this kind was likely in time to be infringed upon, so that trains would be started at less intervals than five minutes. He thought it very desirable on that account that the minimum interval should be longer, even though five minutes might be considered sufficient, as a minimum, by practical men, to ensure the safety of successive trains."

The summing up occupied three-quarters of an hour, and the jury retired at its close to consider their verdict. After a deliberation of upwards of four hours, they returned a special verdict to the following effect:—

"That deceased died from the injuries sustained in the collision in the Clayton Tunnel; and that Charles Legge, assistant station-master at Brighton, by his negligence, and want of common ordinary caution in starting three trains, one at 8.28, one at 8.31, and one at 8.35 in breach of one of the express rules of the company, and of the usual practice, did in an essential degree contribute to, and indirectly cause the death of the persons so killed; and that John Scott, engine-driver, by mistake, but not carelessly, contributed in some degree to the violence of the collision by backing the excursion train for a distance of 100 yards at least in the tunnel; and that by reason of the hurry arising from the arrival in unusually rapid succession at the south end of the tunnel of the three trains mentioned, and the temporary failure of the distance signal to act on the arrival of the first train, a mistake or misunderstanding arose, but without negligence in working the telegraph signal, by Henry Kellick and John Brown between the two ends of the tunnel, which also materially contributed to the collision; and that the system on the 25th of August, and for a considerable time previously, of conducting the traffic of the railway between Brighton and Hassock's Gate was defective,

in not bringing immediately to the knowledge of the traffic manager such departures as happened from the said rule as to the starting of trains; and the jury find that Charles Legge did, on the 25th August, at the place aforesaid, feloniously kill and slay the persons upon whom the inquest was holden."

The Coroner intimated that the verdict was, in effect, one of Manslaughter against Charles Legge, the assistant station master, with a special finding. The proceedings then terminated, having occupied the attention of the coroner and jury for nine days.

THE FATAL ACCIDENT ON THE NORTH LONDON.—The adjourned inquest on the persons killed in the recent accident on the Hampstead Junction terminated on Tuesday. It appeared from the evidence that there had been considerable laxity of arrangement on the part of the three companies as to the return of the excursion trains. The orders from the manager's office of the North and South Western were that the excursion trains were to return from Kew from 8 P.M. to 9.30, when there was reason to believe that the line would be clear. But leave had been given to the excursionists to return by the ordinary trains, which of course, created a considerable pressure on the Kew station. The station master at Kew was also allowed so much latitude as to the starting of excursion trains that he did not think an hour sooner or later made any difference, and "The Drum and Fife Band," the originators of the excursion, were permitted to put on the excursionists' tickets the words, "To leave Kew at 7," though it was alleged that the companies do not hold themselves responsible for what is put on an excursionist's ticket. The natural result of these arrangements was, that before 7 o'clock the station-master at Kew, having despatched as many excursionists as he could find room for in the ordinary 6·30 passenger train, found himself besieged by an impatient crowd who were anxious to get home, and who actually saw in the station the empty train sent to take them back, and had on their tickets the words, "To leave Kew at 7." As therefore his own line was clear at that hour, the station master, under the pressure of the excursionists, though in the very face of his only direct order, started the 8 o'clock excursion train a little before 7. The train proceeded along the continuous lines of three companies, through numerous stations and junctions, and with unusually sharp gradients and curves, at a pace variously estimated by competent witnesses at 30 or 40 miles an hour, and finally dashed through Kentish Town station, while the ballast train was slowly crossing the line without any signals of danger at the station. The driver of the excursion train swore most positively, and was confirmed by the guard and other persons, that the signals, both auxiliary and main, were down, signifying that all was right. The driver of the ballast train believed that the line was clear, inasmuch as a regular passenger train had just passed, the next passenger train was not due for an hour, and the return excursion train was not due till some time after that. He signalled however to the man in charge at Kentish Town for permission to shunt, and receive permission to do so. The signalman, whose name is Rayner, gave the permission by holding up his hands. He is a young man only 19 years of age, who stated that he had been in the employ of the company since January at a salary of 14s. a week, his hours of duty being 15½ hours one day, and 10 hours the next. No time was allowed for his meals, which he got when he could; his duties being to attend to the passengers' luggage, the signals, and the telegraphs. He positively swore that the up danger signals had been left up by his predecessor, and that he had not interfered with them. He professed himself, however, unable to recollect whether he had given leave to the driver of the ballast train to come out of the siding; and his evidence generally exhibited many discrepancies with a statement he had made immediately after the accident. The coroner in summing up the evidence proceeded to point out its bearing on the case. He said:—

They had the evidence of the driver, the guard, and the fireman of the ballast train as to the signals being right for them to come out, and that they received the signals to come out from Rayner. It appears that the excursion train was dispatched from Kew before its time, and notice was given from station to station as it went along. It was quite clear that it passed through the Kentish Town station without stopping. It was also manifest that either the engine driver was responsible for running through when the danger-signals were up, or the signalman was responsible for not having those signals up. They had the evidence of the ballast men that Rayner gave them the signal to come out; there was also the evidence of a disinterested witness, who was lying on the grass smoking his pipe at the time, as to hearing the whistle for leave to come out. The ballast men stated that the signals protected the line up and down. At the time the shunting commenced, their other business occupying their attention, they did not afterwards notice the signals. They had the evidence of the driver of the excursion train, of the guard and two railway servants who travelled in the guard's break, stating most positively that the danger signals were down at the up-auxiliary and the main when the excursion train came up. It really resolved itself into this—to which would they give credence? He must say that the evidence of the four men coincided remarkably, even as to the peculiar expressions used at the time. He now came to Rayner. As he said before, the responsibility was either with him or the driver of the excursion train. Now, Rayner had not given his evidence in that straightforward manner one would wish to have seen him exhibit. He said he did not give the ballast train leave to come out, and that the danger-signals were up. On these points he was contradicted by four witnesses. He admitted that he gave a statement on the night of the accident which he repeated on Tuesday, and he now made a different statement, and said he could not remember what he said on the former occasion. Now it was difficult to believe that a man could not remember what statement he made on Tuesday last, and yet know it was different from the one he had made to-day. On these points all turned on the credibility of the witnesses; if, therefore, the excursion train ran through the station when the signals were up he would be amenable to the law; if the signalman was negligent of his duty, in the like course by law he was responsible for having caused the deaths of these people, and such negligence amounted to the crime of manslaughter. There was one other view in which he must put the matter to the jury. If they thought the occurrence was the result of some accident over which neither of these parties had any control, then they would return a verdict of accidental death.

The jury after a consultation of about an hour and a half returned a written verdict, of which the following is a copy:—

"The Jury regret that there is no alternative from the weight of evidence but to return a verdict of *Guilty* against Rayner. At the same time they cannot separate without expressing a strong opinion that the directors and managers are most to be blamed, in not employing more experienced persons to fill such important situations as signalmen. They also wish to add that it is highly improper for a station-master to start any special train either before or after the specified time in his instructions from the secretary of his railway. That when the line is obstructed by shunting or otherwise the line should be blocked both by telegraph as well as by outdoor signals."

The Coroner said that the verdict amounted to a verdict of Manslaughter against Rayner. The Foreman said it did, but the jury desired to recommend him to mercy on account of his youth. The Coroner said that that was a matter for a jury elsewhere. The Coroner then directed his warrant to issue for the committal of Rayner on the charge of manslaughter. He was not then present, and was therefore not apprehended, but it is understood that bail for his appearance to stand his trial will be tendered, and the Coroner intimated that he should be prepared favourably to consider an application to admit him to bail when he was arrested.

ACCIDENT IN THE CHARLTON TUNNEL OF THE NORTH KENT.—On Wednesday evening an accident occurred in the Charlton Tunnel, between Woolwich and Blackheath. In the place where a shaft had been cut in making the tunnel, the timber roofing placed over it had rotted, and while the 6.50 P.M. train from London to Dartford was passing through the earth above fell, letting down about two truck loads of sand upon the carriages, but without injury to them or the passengers. The driver, observing what had happened, pushed on to the Woolwich station, where the station-master signalled up and down to stop all trains. The express which followed was detained an hour and a quarter at Blackheath, until a body of labourers had removed the obstruction, when the regular traffic was resumed.

Obituary.

LIEUT.-COLONEL HENRY NOOTH died a few days since at his residence in Albemarle Villas, Stoke, Devonport. He entered the army in 1799, and became captain in 1804. He served with the 7th Fusiliers in the expedition against Copenhagen in 1807; with the 2d battalion of the 14th, under Sir David Baird, and was in the retreat and battle of Corunna, for which he has received the war medal with one clasp. He also accompanied the battalion to Walcheren, and was present at the siege of Flushing. He became lieutenant-colonel in 1837. He had reached the advanced age of 85.

CAPTAIN WILLIAM DU VERNET, late of the 84th Regiment, died at Brighton on the 8th inst., at the age of 36 years. He entered the army as an ensign in 1844, and was on board the Runnymede when she was lost in November, 1844, with detachments of the 10th and 50th Regiments on board, on the Andaman Isles, near Humaon, where he remained for 54 days, surrounded by cannibals, and suffering great privations. He served afterwards with the 50th Regiment in the campaign on the Sutlej, for which he received a medal; and was present at Buddiwal and Alliwal, when he received a slight wound on the right knee from a grape shot; after which he was severely wounded in the left foot by the bursting of a shell.

The REV. SAMUEL WIX, M.A., F.R.S., the oldest beneficed clergyman in London, died on the 4th inst. at the Vicarage of St. Bartholomew-the-Less, Smithfield. He was a member of Christ College, Cambridge, where he graduated in 1793. He was ordained in 1798, in 1802 he was presented to the rectory of Inworth, near Kelvedon, and in 1808 was presented by the governors of St. Bartholomew's Hospital to the rectory of St. Bartholomew-the-Less, a very small parish consisting of little more than the hospital and its precincts. He held both benefices up to the time of his death. He was a Fellow of the Royal Society, and served in due course the office of president of Sion College. He was the author of "Reflections concerning the Expediency of a Council of the Church of England and the Church of Rome being holden with a view to accommodate Religious Differences," published in 1819, and of many other works on the essential characteristics of the Church of England.

Miscellaneous.

MRS. STOWE ON THE AMERICAN QUESTION.—The following letter from Mrs. Harriet Beecher Stowe to Lord Shaftesbury on this subject has been published:—

"My lord,—The very pleasant acquaintance which I had with your lordship, my remembrance of your life of Christian and philanthropic labour, and especially the part which you took in originating that address of the women of England to the women of America on the subject of slavery, which first reached this country through me, have moved me to address you as the fit representative of that portion of the Christian public in England on whom we have most relied for moral support during our long and desperate conflict with slavery. It is not to be disguised that one unfortunate result of our American crisis has been a weakening of national confidence in England, and a feeling of great sensitiveness and soreness in our relations with the country. Did this exist alone in the minds of politicians, it would be less to be regretted, but I am sorry to be constrained to say that it probably lies deepest in the minds of that Christian and philanthropic class who have hitherto been the closest affiliating bond between the two countries. In this class the feeling has the intensity of wounded friendship and disappointed confidence, so that they were little prepared to act the part they have for years pursued of peacemakers. It is not to be disguised that they regard themselves as suddenly abandoned in the very crisis of a battle by the moral forces of those brethren [illegible] had relied as undoubtedly as on [illegible] the possibility of whose failure had never entered [illegible] distant calculations. It is also most unfortunate [illegible] failure of moral support comes at a moment when [illegible] interests of England appear to be threatened [illegible] and therefore the impression is most liable [illegible] financial interests have prevailed over moral [illegible] not principally by the Governmental course [illegible] nation that this class among us feel aggrieved [illegible] that that they principally concern themselves [illegible] action, as your experience, my Lord, must have [illegible] fully aware, is the last expression of that [illegible] training which the national conscience receives [illegible] getic labour of men whose lives are directed by [illegible] Christian aims. It is the power that lies [illegible] ment in the minds and opinions of the Christian [illegible] England that is the subject of our chief anxiety [illegible] that all this class in England, fresh in the traditions [illegible] son and Wilberforce, so high in moral position [illegible] so various and rich in their contributions [illegible] Christian civilisation, has suddenly become [illegible] on a great vital question relating to the [illegible] humanity, is not possible. Such a supposition [illegible] near to a general bankruptcy in all faith [illegible] We have, therefore, but one alternative [illegible] have been misunderstood. By false [illegible] false issues our friends in England have [illegible] the real significance of the sublime movement [illegible] American nation has just commenced. [illegible] my lord, through you, to define to [illegible] England what we, the Christian men [illegible] America, understand by this war. We consider [illegible] to be the direct result of the conscientious agitation [illegible] been carried on during the course of the last [illegible] united forces of the anti slavery people [illegible] America. We consider it as the great [illegible] slavery question in the civilised world. The [illegible] brought on this war first began to work when [illegible] to give up all earthly prospects, and devote [illegible] ing the conscience of the world on the slave trade [illegible] set in motion a stream of activities that first [illegible] and the slave trade in England, and then in the [illegible] the North, and that since has been acting with [illegible] creasing force on the slave institutions of the [illegible] till at last they have been driven to endeavour to [illegible] national organisation as the only means of preserving [illegible] this institution. We consider that this war is [illegible] slavery war, not in form, but in fact; not [illegible] mation, but in the intense conviction and [illegible] each of the contending parties, and still [illegible] inevitable overruling indications of Divine Providence [illegible] distinct issue made in President Lincoln's [illegible] 'no more slave territory.' This was confessed [illegible] North and South, and, whatever the North [illegible] it, the South certainly considered it as equ[illegible] destruction of slavery. Accordingly, in the Southern [illegible] the success of Lincoln was always spoken of as the [illegible] of the slave power. Not all the tranquillizing [illegible] conciliating politicians, not even the pledge of the [illegible] Administration to respect all the constitutional [illegible] slaveowners, for one moment blinded them [illegible] that if this election were carried the doom of their [illegible] institution was sealed. In view of this issue every [illegible] without exception, voted against him. It was the [illegible] in our national history that such a division ever [illegible] it was a decisive indication of what was understood [illegible] movement on both sides. As soon as Lincoln's election [illegible] proclaimed the conspiracy, long secretly [illegible] waiting for this moment to devolve itself [illegible] The slave-party, finding that they could [illegible] Union for their purposes, resolved to [illegible] formed their Confederacy, and Vice-President [illegible] clared to the world in bold unequivocal terms that [illegible] the first Government in the history of the world [illegible] upon the right to enslave the weaker races. [illegible] with a blasphemous adaptation of words [illegible] great Liberator of the oppressed, 'This [illegible] rejected by the builders has become unto [illegible] corner." The confederacy which thus commenced [illegible] claiming in the face of Christendom the right [illegible] of robbery and piracy, was carried on by [illegible] During the time that elapsed between the election [illegible] and its inauguration, officers of this Confederation [illegible] Treasury, forts, and arsenals of the United States [illegible] property which, by oaths of office, they were sworn [illegible] and subsequently they have repudiated [illegible] of commercial honesty to Northern creditors. [illegible] Confederacy fired upon our national flag, and [illegible] the dust, boasted that they had humbled the [illegible] Union, then the Free States rose as one man. [illegible] uprising of such masses, in such a cause, I will [illegible] the world has never seen before. The issue was [illegible] liberation of any specific number of men. It was [illegible] principles of free society to endure to all generations [illegible] two Confederacies sent their armies to the field. [illegible] founded on the right of the strong to enslave the [illegible] claiming the right of out-voted minorities to secede [illegible] authority of Governments whenever it so suited [illegible] Freedom of speech, freedom of the press, and [illegible] great privileges of the Anglo-Saxon liberty, [illegible] tically repudiated and denied by this party. On the [illegible] hand stood the American Union, founded on the [illegible] that all men have equal rights to life, liberty, and [illegible] of happiness, resting Government on the [illegible] majority, and allowing to the minority the right [illegible] such redress of grievances as they could gain from [illegible] free press, and the general liberty of [illegible] That this war has not been proclaimed a war for the [illegible] cipation of the negro specifically was because the [illegible] magnitude of the issue transcended the wants [illegible] race, and had to do with the very existence of [illegible] deep thinker and popular lecturer well [illegible] the issue in a lecture delivered at the time, [illegible] 'Civilisation at a Pinch.' Such was what we [illegible] issue to be. It is no fiction, my Lord, when we [illegible] Government is the government of the people; and [illegible] of the North are a sober and thoughtful one, and [illegible] least given to demonstrative enthusiasm and [illegible] expenditure. Yet so well did every man in the [illegible] understand this to be the issue that the Government [illegible] literally flooded with men and money. The [illegible] that usually wages at Washington was nothing to the [illegible] regiments pressing their claims to be called [illegible] every regiment was in like manner embarrassed with [illegible] pleading to be enrolled. All parties were united [illegible] Though national existence, and not negro emancipation [illegible] the announced battle cry—yet existence in this [illegible] to mean the extinction of slavery. The [illegible] robber's pistol at his throat must think of his life [illegible] means to help the poor, and a nation threatened with [illegible] extinction must live if she means to emancipate [illegible] There is one party in this country, my Lord, who [illegible] the abolition of slavery the sole thought and purpose of [illegible] lives. They are distinguished from all other anti-slavery [illegible] in America by the fact that they have confined themselves [illegible] this one single idea, and for its sake given up every [illegible] interest, political or ecclesiastical. They have abandoned [illegible] connection both with Church and State, that they might [illegible]

[illegible] themselves to this alone. This party, represented [illegible] well-known names of Garrison and Wendell Phillips, [illegible] their peculiarities on some points may have been, [illegible] the confidence given to men who have [illegible] things for a cause which they love better than [illegible]. Their instincts have always been an unerring [illegible] of what made for the anti slavery interest in this [illegible]. For 30 years this small party has met every movement [illegible] Church and State with what often has appeared to be [illegible] criticism, on account of alleged deficiencies [illegible] the slavery cause. For the first time since the anti-[illegible] struggle began this body of men at last stands shoulder [illegible] with their whole country in a popular [illegible]. In a late speech at an anti-slavery gathering [illegible] thus defends their position:—'I feel [illegible] that the end of the slave system has come. [illegible] that we begin to touch the end. My [illegible]—The age of discussion is over. We have [illegible] more or less, of what is called agitation, dis-[illegible] and party divisions. Now a new act has opened. It [illegible]—the age of bullets. That never lasts very [illegible] does not take as much time for a nation to fight [illegible] it does to talk itself clear, only it is necessary [illegible] should precede such a fight. It is only necessary [illegible] the substratum of purpose, should be delibe-[illegible]. I think it has been. I do not mean to say [illegible] the whole North is antislavery, much less for abolition; [illegible] to say this, that the South has fully come to the [illegible], unless she can use the Union to support [illegible] system is gone; and I think the North has come [illegible], that the Union never shall be used to [illegible] slavery. I think, so far, the public mind is made up. [illegible] that the popular mind objects specifically to [illegible] Constitutional provisions, that men have made up their [illegible] to return fugitive slaves; but I think there is a [illegible] and unconscious, perhaps, but assured sentiment [illegible] of the North that the Union neither does nor [illegible] liberty in the end. Some friends criticise me [illegible] I seem to them to have surrendered my favourite plea [illegible] and welcomed this war. But let such remember [illegible] should flatter himself he can mould the world [illegible] his method. He must consider it rare success if [illegible] contemporaries adopt substantially his purpose. I have [illegible] for 15 years, because I thought it a [illegible] and peaceable method of freeing the North from [illegible] of slavery, and of planting at the South the [illegible] of early and entire emancipation, wringing justice [illegible] a weak and bankrupt South. But it has pleased the [illegible] to seek the result in a different way. The majority [illegible], starting with the principle that this was a nation, [illegible] partnership, have constantly claimed that the corner-[illegible] our government, the spirit of '76, was the full liberty [illegible] every human being. They waited with what they [illegible] brotherly patience, with what the South fancied was [illegible] for the whole nation to acknowledge this theory. [illegible] success of Fremont, the election of Lincoln, were the [illegible] writing on the wall. The North replies—"We should [illegible] preferred debate—a free press—education—ballots; but if [illegible] those bullets, agreed! The stars and stripes meant [illegible] in '76, and shall now." I myself should have preferred [illegible] and argument, but the 20,000,000 have chosen other-[illegible]. I have only to accept the Red Sea through which God [illegible] to lead His people, and I rejoice still that Canaan is [illegible]. If we are to serve our age, we must serve it in the [illegible] it chooses. When the people, thoroughly awake, and as [illegible] taught as the times allow, deliberately choose any honour-[illegible] way of reaching an object of pressing importance, the duty [illegible] honest man is to aid them all he can in their effort. Hence I bow to the masses, and welcome emancipation by war.'

In opposition to such a mighty tide of influence, all sweeping in one direction, it seems to the friends of the anti-slavery [illegible] but a slight abatement that individual Generals have [illegible] to put down slave insurrections, and that slaves have [illegible], in isolated instances, returned from Federal camps. Such [illegible] have always met with a prompt and energetic rebuke [illegible] the part of the Northern people, and already the number of [illegible] liberated by our army is counted by hundreds, while the [illegible] returned have been the rare exceptions. The refusal [illegible] the North to enlist negro regiments has also been criticised [illegible] England, as showing a want of proper feeling to the race. [illegible], my lord, it has been the desire of our Northern States, [illegible] brothers, as Christians, as men of humanity, to avoid as [illegible] as possible raising the awful whirlwind of conflicting [illegible]. While we hold in our hand the match which might [illegible] that powder magazine, an awful pity and fear stays us. [illegible] other way is better for the slave himself than the way [illegible] blood; and if once this deadly strife is precipitated, this war will become one of barbarities hitherto unknown in [illegible]. It has been the object of our Government to [illegible] our army free from all impulses of vindictive passion, [illegible] to make it the instrument of preserving order and [illegible] in all the region where it moves. A negro in-[illegible] would be the most unfortunate thing possible for [illegible] injured race whose freedom is coming on the wings of [illegible] hour. Untaught and furious, they would perpetrate [illegible] which would check the rising sympathies of the world, [illegible] needlessly complicate the majestic movement which we [illegible] is destined at last to humble and destroy the power of [illegible] oppressors. Our army is followed by the prayers of [illegible] who find no difficulty in understanding that our success [illegible] good to them. Let our friends in England, who gallantly [illegible] with us in the moral struggle which brought on this crisis, now understand its high significance, and aid us with their prayers. Even as I write, my lord, the great decisive battle is waging, our troops are leading the assault, the telegraph brings hourly report, and we know not who among our bravest and dearest may be offering their lives this moment in this holy cause. Yet no heart faints, no voice falters, there is not a thought or shadow of regret at the sacrifice we are making; for now, if ever, we have a country that is worth dying for, and a cause in which we count nothing too dear. My lord, I am yours in the great fellowship of Christian freedom,

"H. B. STOWE."

BIRTHS.—On the 6th inst, at 13, Belgrave Square, the Lady ISABELLA STEWART, of a son—3d inst, at Uffington House, Stamford, the Hon. Mrs BERTIE, of a son—5th inst, at Whit-[illegible], Leeds, the Hon. Mrs. EDWARD WAND, of a daughter—8th inst, at 53, Lower Grosvenor Street, the Hon. Mrs. HUSSEY, of a daughter—6th inst, at West Harling Rectory, Thetford, Norfolk, the wife of the Hon. and Rev. JOHN HARBORD, of a son—[illegible] inst, at Hendon, Middlesex, the wife of Rear-Admiral EDWARD STANLEY, of a son.

MARRIAGES.—On the 7th inst, at the Roman Catholic Church of our Lady, Grove Road, St. John's Wood, the CAVALIERE VIGLIANI, Senator of the kingdom of Italy and Attorney-General at Turin, to SARAH CORINNA, elder daughter of the late William Harcourt Boys, Esq., of Elfords, Kent, widow of AMBROSE CRAWLEY, Esq., E.I.C.S., and niece of the late Sir Joshua Meredyth, Bart—10th inst, at Roehampton, Surrey, FREDERICK MYTTON HALLIDAY, Esq., H M.'s Bengal Civil Service, eldest son of Sir Frederick Halliday, K.C.B., to ANNE MARGARET, eldest daughter of the late THOMAS COUTTS [illegible], Esq., Bengal Civil Service—5th inst, at St. James's, Westminster, the Rev. WILLIAM MARRINER, eldest son of the Rev John Marriner, Vicar of Clapham, Yorkshire, and rural dean, to JANE CAROLINE, only surviving daughter of the Rev. WILLIAM WILSON, D.D., canon of Winchester, and niece of the Archbishop of Canterbury—5th inst, at the Church of Our Lady, Grove Road, GEORGE HERBERT, of the Middle Temple, Esq., barrister at law, to CONSTANTIA, only daughter of the late Sir CHARLES WITHAM, Lieut. R.N., of Higham, Suffolk—10th inst, at the parish church of Meldon, HENRY FENWICK, Esq., M.P., of Southill, county of Durham, to JANE LUTWIDGE, eldest daughter of JOHN COOKSON, Esq., of Meldon Park, Northumberland—5th inst, at St. Mary's Church, Leicester, ANDREW WHYTE BARCLAY, Esq., M.D., of 23 A, Bruton Street, Berkeley Square, to MARGARET, daughter of the late J. W. NOBLE, Esq., M.P., of Danett's Hall, Leicester—4th inst, at Kilve, Somersetshire, HENRY ANSTEY BOSANQUET, Esq., of 9, Lower Berkeley Street and Inner Temple, Barrister-at-law, to MARY ANNE, youngest daughter of Colonel LUTTRELL, of Kilve Court—5th inst, at Hordle Church, near Lymington, Hants, Major FRANCIS EDWARD COX, R.E., to ZEPHA HELEN EMILIA, youngest daughter of Admiral SYMONDS, of Yeatton, Lymington, Hants—4th inst, at St Mary-de-Castro Church, Guernsey, BROWNLOW POULTER, Esq., of Lincoln's Inn, Barrister-at-law, and late Fellow of New College, Oxford, to HARRIET AMELIA, youngest daughter of Rear-Admiral M'CREA—5th inst, at St George's, Hanover Square, Major HUGH ROBERT HIBBERT, 7th Royal Fusiliers, eldest son of Thos. Hibbert, Esq., of Birtles Hall, Cheshire, to SARAH CATHERINE AUGUSTA, daughter of FREDERICK LEE, Esq., of Broadgate House, Devon.

DEATHS.—11th inst, at St. Leonard's-on-Sea, AUGUSTA PEEL, wife of the Very Rev. the Dean of Worcester—27th July, at Simla, Colonel Sir GEORGE ROBERT BARKER, K.C.B., Brigadier Commanding the Royal Artillery in Bengal, aged [illegible]—[illegible] ult, of yellow fever, at Nassau, New Providence Island, CHARLES JAMES CHISHOLME ST CLAIR, second son of the Hon. Captain St. Clair, R.N., aged 17—8th inst, at Brighton, at an advanced age, ELIZA CLARK, of Belfield, Westmeath, and 2, Spring Garden Terrace, relict of the late George Clark, of Hyde Hall, Cheshire, and daughter of General Rochfort, R.A., nephew of the second Earl of Belvidere—9th inst, at Canterbury, Mrs. BENTHAM, widow of the late Lieut.-General Bentham, Royal Artillery—10th inst, at Dover, ALFRED EDMUND CAMPBELL, infant son of Colonel JOHN ALFRED STREET, C.B., aged 7 months and 3 weeks—4th inst, at Worthing, Sussex, CHRISTIANA CUNINGHAME, eldest daughter of the late Colonel John Cuninghame, of Caddell and Thornton, Ayrshire—7th inst, at Norwood, AMELIA, relict of the late Alderman THOMPSON, M.P., of Underley Hall, Westmoreland, and 5, Park St., Westminster—22d June, at Calcutta, CATHERINE, widow of CHARLES MAY LUSHINGTON, Esq., formerly of the Madras Civil Service, aged 66—1st inst, at Hemingford Abbotts, Hunts, THOMAS SKEELS FRYER, Esq., late of Chatteris, Cambs, and formerly High Sheriff for the counties of Cambridge and Huntingdon, aged 86—7th inst, PAULINE ANNE, widow of the late Rev. FREDERICK GREEN, vicar of Ellingham, Hants, and eldest daughter of the late H. F. Horneman, Esq., Consul-General for the kingdom of Denmark—6th inst, at Windsor, Mrs. GOULD, the mother of John Gould, Esq., F.R.S., &c., aged 88—26th ult, the Rev. EDWARD GOULD MONK, M.A., vicar of Much-Cowarne, Herefordshire, aged 62—7th inst, at 6, Wilton Villas, Shepherd's Bush, the Rev Maximilian Nunes, aged 30—5th inst, HANNAH, the wife of Mr. JOHN EDWARD LANE, of the Nurseries and Brewery, Great Berkhamsted, Herts, aged 50—6th inst, at South Grove, Highgate, SARAH, widow of the late Mr. WILLIAM CUTBUSH, for upwards of 40 years proprietor of the Highgate Nurseries, aged 66.

Markets.

COVENT GARDEN, Sept. 14.

Of both Vegetables and Fruit there is now an ample supply. Figs, Greengage Plums, Apples, and Pears are plentiful, and the same may be said of Grapes and Melons. Peas are not so good as they have been; but of Beans there is still a fair supply. For Potatoes markets are heavy; prices about the same as last week. Cucumbers are abundant. Cut flowers chiefly consist of Orchids, Lily of the Valley, Dahlias, Asters, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Apples, per doz., 6d to 1s
Grapes, per lb., 1s 6d to 4s	Oranges, per 100, 6s to 14s
Melons, each, 1s to 3s	Lemons, per 100, 6s to 10s
Peaches, per doz., 4s to 10s	Nuts, Cob, per pound., 1s to 1s 6d
Nectarines, do., 4s to 10s	Walnuts, per 100, 2s
Pears, per doz., 1s to 4s	

VEGETABLES.

Cauliflowers, each, 2d to 6d	Veg. Marrows, p. doz, 1s to 1s 6d
Green Peas, p. quart, 1s to 1s 6d	Artichokes, each, 6d to 10d
Broccoli, p. bundle, 1s to 1s 3d	Beet, per doz., 1s 6d
French Beans, per sieve, 2s 6d to 3s 6d	Celery, p. bundle, 1s 6d to 2s
Broad Beans, p. bush, 2s 6d to 3s	Onions, p. ½ sieve, 4s 6d
Cabbages, do., 1s 3d to 1s 6d	Rhubarb, p. bundle, 6d to 9d
Potatoes, p. ton, 60s to 80s	Tomatoes, p. doz., 1s to 3s
— per lb., 1d to 4d	Shallots, per lb., 8d to 10d
— per cwt., 4s to 8s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 4d to 6d	Endive, p. score, 1s 6d
Carrots, new, do., 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., 2s to 3s
Cucumbers, each, 6d to 9d	Parsley, p. 12 bunches, 3s to 4s
	Savory, per bunch, 2d to 4d

HAY.—Per Load of 36 Trusses.

SMITHFIELD, THURSDAY, Sept 12.

Prime Meadow Hay	75s to	84s	Clover, old	90s to	120s
Superior do. (old) ..	88	100	New Clover	—	—
Inferior do.	36	50	Do second cut ..	—	—
New do.	50	80	Straw	28	34
Rowen	—	—			

DAVIS & Co.

WHITECHAPEL, THURSDAY, Sept. 12.

Fine Meadow Hay	90s to	100s	Fine 1st cut Clover	112s to	118s
Inferior do.	75	85	Inferior do.	80	95
Prime New Hay ..	80	88	New 2d cut	90	105
Inferior	—	—	Inferior do. ..	—	—
Straw	28	32	New 1st cut ..	—	—

COAL MARKET.—Sept. 11.

Hastings Hartley, 1[illegible]s.; Holywell, 15s. [illegible]d.; Lambert's West Hartley, 15s 6d.; North Pelton Gas, 1[illegible]s.; Tanfield Moor Butes, 12s. 9d.; Walker Primrose 12s.; Wylam, 15s. [illegible]d.; Walls End Byron, 16s. 3d.; Walls End Harton, 15s. 9d.; Walls End Sheriff Hill, 14s.; Walls End Belmont, 1[illegible]s. 9d.; Walls End Braddyll's Hetton, 17s.; Walls End Durham 14s. 6d.; Walls End Haswell, 18s.; Walls End Hetton, 18s.; Walls End Pittington, 15s. 6d.; Walls End Russell's Hetton, 16s. 9d.; Walls End Hartlepool, 17s. 6d.; Walls End Kelloe, 17s.; Walls End South Hartlepool, 1[illegible]s. 6d.; Walls End Thorpe, 16s.; Walls End Trimdon Thornley, 15s. 3d.; Carway and Duffryn Malting. Duffryn Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.—Ships at market, 99.

BRITISH WOOLS.—LONDON, FRIDAY, Sept. 13.

Our trade continues healthy, and a fair business is transacted at former rates.

	s.	d.		s.	d.		s.	d.		s.	d.
South-down Hoggets			to 1	5		Leicest. Wethers	1	3	to 1	4
Half-bred ditto ..	1	5	— 1	6		Ditto Hoggs ..	1	4	— 1	5
Down Ewes ..	1	4	— 1	5		Combing Skins	1	0	— 1	[illegible]
Kent Fleeces ..	1	5	— ..			Flannel Wool ..	1	0	— 1	5
						Blanket ditto ..	0	6	— ..	

BUTTER MARKET.—Sept. [illegible]

Best Fresh Butter	..	14s. per dozen lbs.
Second do. do.	..	1[illegible]s. "

Pork, 4s 4d to [illegible]s 4d per 8 lbs.

HOPS.—BOROUGH MARKET, FRIDAY, Sept. 13.

Messrs. Pattenden & Smith report that the plantation accounts all speak of the crop coming down much short of expectation, and it is now thought the duty will not exceed 120,000. There is a good consumptive demand for [illegible], and 1860's, at firm rates. Very few pockets of the new growth at market. Prices for these range from [illegible] to [illegible].

METROPOLITAN CATTLE MARKET

MONDAY, Sept. 9.

We have a large supply of Beasts and trade is dull. Prices are about the same as on Thursday. The number of Sheep is considerably smaller, and consequently prices have rather improved. A large proportion are of inferior quality, and it is difficult to effect a clearance. Lambs and Calves are selling about the same as on Thursday. From Germany and Holland there are 1178 Beasts, 8[illegible]70 Sheep, and 1[illegible] Calves; from Spain 129 Beasts; from Scotland, [illegible]; from Ireland, 5[illegible] Beasts and 17 Calves; and 2000 Beasts from the northern and midland counties.

	s. d. s. d.		s. d. s. d.
Best Scots, Herefords, &c.	[illegible]	Best Long-wools	to
Best Short-horns	4 [illegible] — 4 8	Do. Shorn	4 [illegible]
2d quality Beasts	3 4 — 4 [illegible]	Ewes & 2d quality	—
Best Downs and Half-breds	.. to ..	Do. Shorn	4 [illegible]
Do. Shorn	5 0 to 5 4	Lambs	[illegible]
		Calves	4 0 — [illegible]
		Pigs	4 [illegible] — 4 8

Beasts, 5440; Sheep & Lambs, [illegible]; Calves, [illegible]; Pigs, 450.

THURSDAY, Sept. 12.

We are rather largely supplied with Beasts; trade is dull, and it is with difficulty that Monday's quotations are realised for choicest kinds. The number of Sheep considerably exceeds the demand, but prices are not much altered in business done. Calves are rather lower on the average. From Germany and Holland there are 1[illegible] Beasts, [illegible] Sheep, and [illegible] Calves; from Spain, 40 Beasts; from Ireland, 38 Calves; and [illegible] Milch Cows from the home counties.

	s. d. s. d.		s. d. s. d.
Best Scots, Herefords, &c. ..	4 8 to 4 10	Best Long-wools.	to
Best Short-horns	4 4 — 4 8	Do. Shorn ..	4 8 — 5 0
2d quality Beasts	3 4 — 4 6	Ewes & 2d quality ..	—
Best Downs and Half-breds	— ..	Do. Shorn ..	4 0 — 4 6
Do. Shorn ..	5 0 — 5 4	Lambs	5 0 — 5 8
		Calves	4 0 — 4 8
		Pigs	4 0 — 4 8

Beasts, 1110; Sheep & Lambs, 9040; Calves, 41[illegible]; Pigs, 80.

MARK LANE.—MONDAY, Sept. 9.

The supply of Wheat from Essex to this morning's market was small, but from Kent good; for the former factors commenced by asking exorbitant prices, and consequently little progress was made with the disposal at the time of writing; the latter was sold at an advance of 2s. per qr. upon the prices of this day se'nnight. American red is very scarce and eagerly taken for export, at an improvement of 2s. per qr. over the rates of Monday. Baltic was held firmly for 1s. per qr. advance, but the sale was limited. Malting Barley brings fully last week's rates. Grinding is 1s. per qr dearer. Beans and Peas are unaltered in value. Oats bring an advance of 6d. per qr. Flour is in good demand, and American barrels are 2s. dearer.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk .. White	50—62	Red	50—60
— — fine selected runs ditto	62—66	Red	59—62
— — Talavera	[illegible]—68		
— Norfolk	—	Red	—
— Foreign	40—70		
BARLEY, grind. & dist., 26s to 27s. .Chev.	37—40	Malting .	36—38
— Foreign. .grinding and distilling	27—30	Malting .	33—36
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire—Potato	26—28	Feed ..	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign........Poland and Brew	20—24	Feed ..	19—24
RYE	36—38	Foreign ..	—
RYE-MEAL, foreign..........	—		
BEANS, Mazagan....34s to 35s ...Tick	35—37	Harrow .	35—37
— Pigeon ......35s — 40s. .Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
PEAS, white, Essex and Kent. .Boilers	34—36	Suffolk .	35—37
— Maple .... —s to —s ..... Grey	34—36	Foreign .	35—38
MAIZE ....White	—	Yellow ..	—
FLOUR, best marks delivered. .per sack	46—51		
— 2d do .... ditto	50—46	Country	30—46
— Foreign ....per barrel	26—32	Per sack	43—58

FRIDAY, Sept. 13.

The weather has been very fine and hot during the past eight days, with the exception of some heavy rain during the evening and night of the 8th inst; to-day is showery. The reports of the crops continue to be very satisfactory, both as regards the quality and quantity of spring corn, Beans in places proving an exception. The yield of Wheat is generally complained of. From several important districts in Germany, where a fine crop of Wheat has been expected, we are now informed it yields badly, and varies in weight from 56 lbs. to 62 lbs. per bushel. Business in Wheat at the close of last week was exceedingly active throughout the kingdom, caused chiefly by great excitement in France, and a considerable rise in the price of Flour there inducing large orders to be sent to this country. This week, however, a more subdued tone has prevailed; nevertheless a rise of 1s. to 2s. per qr. has been general, excepting in some of the provincial markets held yesterday. The value of spring corn has been well supported, with rather an upward tendency in many markets, particularly for Oats. Barrel Flour has improved about 2s. and Spanish risen about 5s. per sack in a fortnight. The arrivals of English grain, foreign Wheat, and Barley during the week have been small, of foreign Oats and Flour good. To-day's market was only thinly attended. English and foreign Wheat commanded the full prices of Monday, but the extent of sales was not large, although there continues to be some demand for export. Spring Corn of all descriptions brings rather more money than on Monday. American Flour in bond sells at an advance of 6d. per barrel.

ARRIVALS FROM Sept. 9 to Sept. 13.

	Wheat.	Barley.	Oats.	Flour.
English ..	990 qrs.	10 qrs.	2[illegible] qrs.	830 sks.
Irish	— "	— "	10 "	— "
Foreign ..	6640 "	2080 "	2,090 "	[illegible] brls.

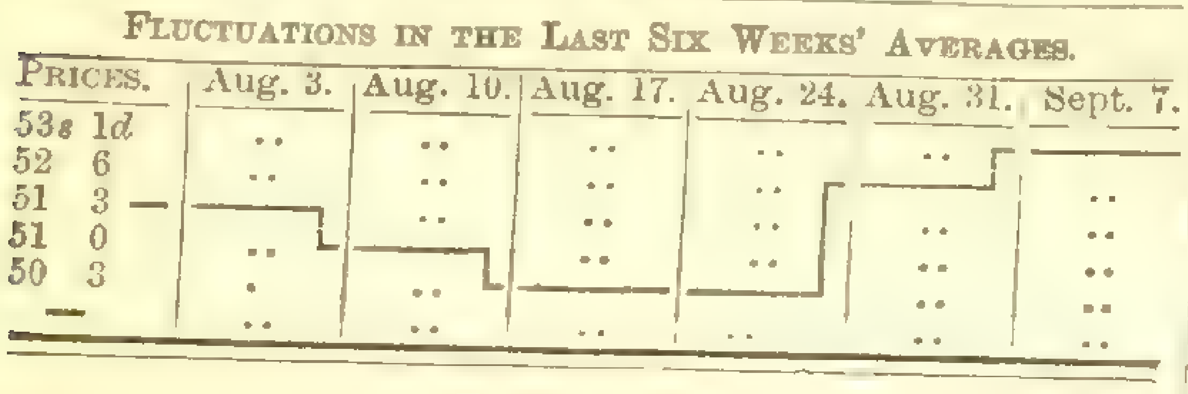
LIVERPOOL, Tuesday, Sept. 10.—The attendance at this morning's market was good both of local and country buyers, but in consequence of the very small quantity of good sound Wheat on the stands, business was restricted; where transactions took place, however, an advance of [illegible] to [illegible] per 100 lbs. was obtained on the prices of this day se'nnight. Flour was in good demand, and 1s. per barrel dearer. Oats and Oatmeal neglected. Barley steady. Beans advanced 6d. per qr. Indian Corn was in improved inquiry at 1s. 6d. to [illegible]

2s. per qr. over last week's prices, say 31s. 6d. to 32s. for mixed, 32s. 3d. for yellow, and 36s. to 37s. for white.

FRIDAY, Sept. 13.—Fair attendance at to-day's market, with moderate consumptive demand, at full prices of Tuesday. Flour, very little offering, barrels 6d. dearer, with good demand. Indian Corn more freely offered at 1s. decline; mixed 31s. Beans without change. Oats and Oatmeal: fair business in new at full prices.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Aug. 3..	51s 3d	28s 3d	24s 11d	39s 3d	42s 1d	39s 0d
— 10..	51 0	30 1	25 4	36 7	43 8	38 0
— 17..	50 3	30 0	25 11	37 5	42 7	37 5
— 24..	50 3	32 10	26 1	35 10	48 5	35 5
— 31..	52 6	34 1	24 5	37 5	44 0	34 10
Sept. 7..	53 1	35 11	23 7	37 2	44 4	35 3
Agg. Aver.	51 5	31 10	25 1	37 3	43 4	36 8

FLUCTUATIONS IN THE LAST SIX WEEKS' AVERAGES.



Partnership.

WANTED, A PARTNER, in a Nursery of about 4 acres, in the neighbourhood of Tottenham. Capital required about 200*l*., to be spent in the erection of Glass. Good connection already established. Apply by letter to A. B., Mr. Bemson, Post Office, Marsh Lane, Tottenham.

Nursery Foreman.

WANTED, an active Man as FOREMAN for the Outdoor Department of a Nursery in the North of England. He must be qualified to take the sole charge, a good Budder and Grafter; if with a knowledge of Laying-out Grounds the better.—Apply by letter, stating age, with reference as to character and abilities, and salary expected, addressed to Z. A., *Gardeners' Chronicle* Office, W.C.

WANTED, A GARDENER (HEAD WORKING), married, with a complete knowledge of his profession in all its branches. One used to manage Woodland preferred. —Apply by letter, stating salary expected, and if with a family the number and ages, to D. P., Post Office, Arundel, Sussex.

WANTED, A WORKING FARM BAILIFF (age between 30 and 40), to take charge, under the proprietor, of an Arable Farm of about 300 acres, with some Meadow Land and a like extent of Down Pasture. A Breeding Flock of about 350 Ewes is kept, and some Beasts are Fattened. He must understand Buying and Selling, be a good Judge of Stock, and a good Accountant. Wife to manage Dairy and Poultry.—Apply by letter, stating salary expected, and if with a family the number and ages, to D. P., Post Office, Arundel, Sussex.

WANTED, in a Farm House, a Man and his Wife as In-door-Servants, the Man as GROOM and GARDENER, the Woman as COOK and to take a small Dairy.—Address A. B. C., Wingrove's Royal Hotel, Purfleet, Essex.

WANTED, A MAN AND WIFE (without incumbrance preferred).—The Man to look after the Stock, and to act as general head man on a small farm. The Woman to assist in the house when required. None need apply unless they can have thorough recommendation from a practical farmer.—Address Letter Box, Oatlands Park, Walton-on-Thames.

WANT PLACES.—Letters to be Post Paid.

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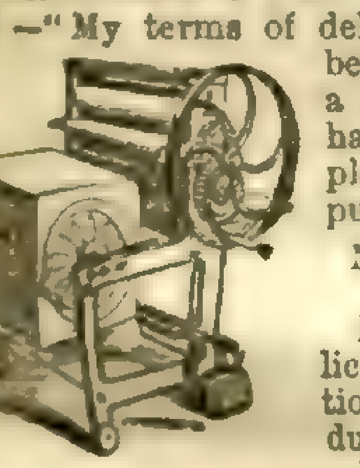

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ADVERTISEMENTS for this widely circulated Annual should be sent to the Publisher not later than October 10.

JAMES RIDGWAY, 169, Piccadilly, W.

Notice to Subscribers of the Florist, Fruitist, and Garden Miscellany.

THE OFFICE OF THE *FLORIST* is now REMOVED from Southampton Street, Strand, to the Office of the *Journal of Horticulture*, 162, Fleet Street, E.C., where all Subscriptions, Orders, Advertisements, and Communications for the Editors are in future to be addressed.

Mr. CHARLES TURNER, in retiring from his connection with the *Florist*, takes this opportunity of tendering his thanks to his friends and the public for the liberal support they have given to that Journal during the period he was connected with it. He has now the pleasure of announcing that he has disposed of his share to Dr. ROBERT HOGG, Co-Editor of the *Journal of Horticulture*, with whom, and his late Coadjutor Mr. JOHN SPENCER, he feels assured the *Florist* will maintain the high reputation it has hitherto enjoyed.

☞ The *Florist* is published Monthly, price 1*s.*

Office: 162, Fleet Street, London, E.C.

Horticultural Periodicals.—Repeal of the Paper Duty.

S. WHITWELL, HORTICULTURAL PRINTER, 10, Northumberland Terrace, Bagnigge Wells Road, London, W.C., begs to inform those who may contemplate starting any New Horticultural Periodical, either Weekly or Monthly, that he will be happy to furnish them with Estimates (free of charge) for Printing the same at the lowest possible price; and from his long experience (upwards of 20 years) in the printing of Gardening Publications, &c., he is enabled to offer the greatest facilities. The highest testimonials from the proprietors of the *Florist* can be produced.

Nurserymen's Catalogues of every description carefully and correctly printed. Those who are about to print their Autumn Catalogues would do well to send for an Estimate.

News of the Week.

THE *Moniteur* publishes an Imperial decree opening various Custom Houses and ports of France for the importation of English and Belgian goods, in accordance with the stipulations of the late commercial treaties. The *Patrie*, which boasts of its semi-official character, recently published an article on the necessity of Italy giving pledges of her friendship to France, by a "system of guarantees spontaneously offered and loyally carried out." The *Pays* and the *Constitutionnel*, in articles signed by their chief editors, declare that such views are totally at variance with the policy of the Imperial Government. The former asserts that "France has no guarantees to demand of Italy," and the latter says that "France will never ask for a single inch of Italian soil. The island of Sardinia is Italian ground, and for us to take it would not be an annexation but a conquest."

Accounts from Madrid state that the Spanish expedition is organising at Havannah for the intended intervention in Mexico. It will comprise 5000 infantry, and will disembark early in October at Vera Cruz, and march direct upon the city of Mexico. MULEY ABBAS is expected at Madrid on a mission from his brother, the EMPEROR OF MOROCCO, for the purpose of giving guarantees for the payment of the indemnity.

Despatches from Vienna announce that the Transylvanian Diet has been convened for the end of October, and the Istrian Diet for the 25th September. In consequence of the convocation of the Transylvanian Diet, Baron KEMENEY, Aulic Chancellor of Transylvania, has tendered his resignation, which has been accepted by the EMPEROR.

Disturbances have again occurred at Warsaw. The Polish mob has committed various acts of violence against the German residents in that city, demolishing their shops and destroying their furniture and other property. The latest accounts state that the situation of the Germans is full of danger, and that no measures for their protection are taken by the authorities.

The KING OF ITALY arrived at Florence on Saturday, and opened the Exhibition of Italian Industry in that city on Sunday. HIS MAJESTY was received with the greatest enthusiasm, not only in Florence but at all the stations on his route. In opening the Exhibition HIS MAJESTY delivered a speech in which he said that his principal care was to establish the unity of Italy and

to develop the elements of her prosperity. "Our great national work," he said, "is not yet completed, but on this occasion Italy, which is completely represented at this Exhibition, again manifests her wish to be one united nation." The American Minister went last week to Caprera for the purpose of offering to GARIBALDI, in the name of President LINCOLN, the command in chief of the Federal army. A despatch from Turin, dated Saturday, announced that GARIBALDI had refused the offer, chiefly on account of the unsatisfactory state of his health. Notwithstanding this announcement, the Turin journals express considerable doubt of its authenticity, and some of them confidently assert that GARIBALDI has consented to go to America. The latest news positively denies that he has accepted the offer.

The Turkish Government has addressed a circular to its Ministers at the European Courts, justifying its proceedings against the Montenegrins. It states that, having exhausted every means of concession in endeavouring to prevent the grievances caused by this little Principality, and being bound to protect its subjects from the continual disorders arising from the attacks and incursions of the Montenegrins, it is now under the necessity of having recourse to arms. The latest accounts from Ragusa state that OMAR PACHA, who has 32,000 men under his command, has not yet crossed the frontier, but is completing the investment of the territory on the east, and operating by movable columns against the insurgents of the Herzegovine.

From Washington we have a report that President JEFFERSON DAVIS is dead and that Vice-President STEPHENS is ill at Manassas, but the report of Mr. DAVIS's death has not yet been confirmed. The EMPEROR OF RUSSIA has addressed a letter to the Federal Government in favour of the Union and recommending peace. The naval expedition under the command of Commodore STRINGHAM and General BUTLER commenced the bombardment of the Confederate forts at the entrance of Hatteras Inlet on the 28th ult. On the following day the garrison, consisting of 45 officers and 600 men, surrendered conditionally, and will be treated as prisoners of war. The Federals captured 25 cannon, 1000 stand of arms, and three vessels, and now occupy Hatteras. Since this engagement the North Carolina troops have been withdrawn from Virginia. The Confederate force opposite Washington is estimated at 125,000 men, and an immediate attack is said to be intended. The privateer Jefferson Davis has been wrecked off the coast of Florida, and under the new Confiscation Law 50 vessels have been seized in the Northern ports as property owned by the South. Mr. CHASE, the Secretary of the Treasury, has issued an appeal to the people on behalf of the national loan.

The Great Eastern has met with another disaster, more calamitous than any of the misfortunes which had previously marked her unlucky career. On the 12th inst., two days after leaving Liverpool with 400 passengers and a crew of nearly 100 men, she encountered a heavy gale about 280 miles west of Cape Clear. Both her paddle-wheels were washed away; her rudder-post, a bar of iron ten inches in diameter, was wrenched off; and for three days she lay rolling, an unmanageable log, in the trough of the sea, her bulwarks almost touching the water. The rolling of the vessel displaced and destroyed the furniture of the cabin and saloons; the greater part of the passengers' luggage was destroyed by the water which forced its way into the hold; and between 20 and 30 of the passengers and crew had their limbs fractured or were seriously bruised and maimed. The engines and screw were fortunately uninjured, and a temporary steering gear having been fitted, she steamed back with her screw to Cork, and anchored off that harbour on Tuesday evening.

Home News.

THE COURT IN SCOTLAND.—On Wednesday, the 11th inst., the Queen and Prince Consort, accompanied by Princess Alice and Prince Louis of Hesse, drove to Birkhall, and honoured Mrs. Gordon with a visit. Prince Alfred went out deer-stalking. Prince Arthur rode to Loch Bulig, and round by Invercauld. Prince Louis of Hesse, having this day completed his 24th year, received the congratulations of her Majesty and of the Royal family. The Duke of Newcastle arrived at Balmoral, in succession to Sir Charles Wood as Secretary of State in attendance on her Majesty. On Thursday the Queen, accompanied by Princess Alice, Princess Helena, and Prince Louis of Hesse, drove to Mar Lodge, and honoured the Countess of Fife with a visit. The Prince Consort and Prince Alfred went out deer stalking. On Friday her Majesty did not leave the Castle in consequence of the unfavourable state of the weather. On Saturday afternoon the Queen and Prince Consort, accompanied by Princess Helena and Prince Arthur, went out driving. Prince Louis of Hesse went out deer-stalking. On Sunday morning the Queen and Prince Consort, with Prince Alfred and Prince Louis of Hesse, attended Divine service in the parish church of Crathie. The Rev. Dr. Pirrie, Professor of Divinity in Aberdeen University, officiated. On Monday the Queen, accompanied by Princess Helena, took a drive. The Prince Consort, with Prince Alfred, Prince Louis of Hesse, and the Duke of Newcastle, had the Balmoral woods driven for deer. The Earl and Countess Russell and Viscount Amberley were invited to dinner, and the Countess Russell was presented to the Queen on Earl Russell's elevation to the peerage. On Tuesday morning the Queen, accompanied by Princess Alice and Prince Louis of Hesse, drove to Loch Bulig, where the Royal party took luncheon, and then rode across the hills by Glen Gairn, returning by Invercauld in the afternoon. The Prince Consort and Prince Alfred went out deer-stalking. The Princess of Hohenlohe, accompanied by Princess Helena, Princess Louisa, and Prince Leopold, drove in the afternoon and honoured Lady Phipps with a visit.

THE PRINCE OF WALES arrived at Buckingham Palace about half-past 7 o'clock on Friday morning, and left London in the afternoon for Dover, where he embarked for Ostend on his way to Prussia. His Royal Highness passed through Belgium on Saturday, and was met at Malines by the Duke of Brabant, who accompanied his cousin as far as the Landen station. On Sunday the Prince arrived at Cologne and visited the exhibition of pictures in the new Museum, accompanied by Prince Charles, the brother of the King of Prussia, the Crown Prince Frederick William, the Grand Duke of Saxe Weimar, the Duke of Wellington, and several of the Prussian and English nobility. His Royal Highness afterwards proceeded by railway to Bruhl, on a visit to the King of Prussia. On Monday evening the Prince accompanied the King and Queen of Prussia to a grand concert at Cologne, and was received by the crowd with loud cheers, the band playing "God Save the Queen."

RETURN OF PRINCE ALFRED TO CANADA.—His Royal Highness will embark at Liverpool to-day in the Royal Mail steamship Canada for Halifax, where he will rejoin his ship the St. George, on the expiration of his leave. His Royal Highness will be accompanied by Major Cowell and a servant.

THE SIAMESE AMBASSADORS, one of whom is Lord High Admiral of the Siamese Fleet, paid a private visit to England last week. They stayed at Morley's Hotel for two days and visited many of the chief objects of interest, including Woolwich Arsenal and the Armstrong gun factories.

PARLIAMENTARY MOVEMENTS.—It was reported on Monday that Mr. Ralph Earle, who was secretary to Mr. Disraeli when Chancellor of the Exchequer, would come forward for Plymouth in the Conservative interest, in opposition to Mr. Morrison, the Liberal candidate. It is now announced that Mr. Earle has declined to offer himself on this occasion, and that Captain Dalrymple Hay, R.N., or Mr. Graves, the Mayor of Liverpool, will be invited to come forward as the Conservative candidate.

THE CHANNEL FLEET.—Admiral Smart's squadron, consisting of the Trafalgar, Donegal, Hero, Centurion, Edgar, Conqueror, Aboukir, and Revenge, left Belfast Lough on the 12th inst. for Lough Foyle. The division under the command of Admiral Erskine has been ordered to join Admiral Smart's squadron at Berehaven.

ARRIVAL OF THE WARRIOR AT PORTSMOUTH.—Her Majesty's iron clad frigate Warrior, which left her moorings at Greenhithe on Thursday arrived safely at Portsmouth at 9 o'clock yesterday morning.

Foreign.

FRANCE.—The Emperor is expected to return to Paris next week from Biarritz. It is said that the Empress has lately bought property in Spain, and that the circumstance has given rise to a variety of conjectures. Count de Persigny, Minister of the Interior, has returned to Paris, and the report of his resignation has been revived. It is said that in the event of his resignation being accepted M. Rouher will succeed him at the Home Office, and that M. Michel Chevalier will accept the portfolio of Minister of Commerce. The Marquis de Moustier, the new ambassador at Constantinople, will leave for his post on the 25th inst. The Duke de Gramont, who replaces M. de Moustier at Vienna, will remain at Rome till [illegible] month. The Marquis de Lavalette left Paris for [illegible] yesterday. The wife of a French statesman [illegible] very high office, and well known in English [illegible] said to have eloped under very peculiar [illegible] but the details are not known with any [illegible] precision. The *Moniteur* of Saturday [illegible] Imperial decree opening the Custom House [illegible] for the importation of cotton yarn of and above [illegible] 143, and for long-stapled and twisted [illegible] The ports of Marseilles, Bordeaux, Nantes, Rouen [illegible] Havre, and the Custom Houses of Lille, Mulhouse, and Lyons are opened under the same regulations [illegible] Custom House of Paris for the direct importation [illegible] clearing of English and Belgian textures [illegible] duty *ad valorem*. The other ports of France and [illegible] other Custom Houses on the Belgian frontier, [illegible] are already open for the transit of unprohibited goods, may also in future receive the textures of English and Belgian manufacture, but only for transit. The [illegible] ment of the import duties of Belgian and English textures imported into Algeria can only be effected [illegible] the port of Algiers. The *Patrie*, which [illegible] semi-official character, recently published an article contrasting Baron Ricasoli, "whose Government knows of no transactions," with the late Count Cavour, [illegible] hinting the necessity of Italy giving pledges of [illegible] friendship to France, by a system "of [illegible] spontaneously offered and loyally carried out." The *Pays* and the *Constitutionnel*, in articles signed by [illegible] chief editors, declare that such views are totally [illegible] variance with the policy of the Imperial Government. "France," says the *Pays*, "with her 40 millions of souls and her genius, has no guarantees to demand [illegible] Italy. Neither distrust nor conquest—such [illegible] programme which all generous hearts applaud, [illegible] liberal Europe applauds, and which posterity will applaud." The *Constitutionnel* says, "France [illegible] never ask for a single inch of Italian soil. The [illegible] of Sardinia is Italian ground, and for us [illegible] it would not be an annexation but a [illegible] The *Moniteur* contradicts a statement published [illegible] some foreign journals, to the effect that orders [illegible] been given to the French fleet on the coast of Syria [illegible] proceed into the Italian waters, and that several [illegible] ships of war were cruising in the Gulf of Naples. [illegible] reply to this assertion the *Moniteur* states that no [illegible] orders have been given to the fleet off Syria, [illegible] France any vessel of the Imperial navy in the Gulf [illegible] Naples with the exception of the cutter Mouette, [illegible] has been stationed there for more than a year [illegible] The official papers contradict the report that the [illegible] Fontenoy had been cast ashore near Salonica, in Roumelia. Accounts from Toulon state that the steel-cased steam-frigate Gloire sailed thence on the 11th inst., to make a second trial with the newly-invented cannon called "the mysterious cannon," [illegible] secrecy observed with respect to its construction. While in port the cannon remains enveloped in a covering, which is sealed with an official seal not to be broken until the ship is at sea.—The Abbé [illegible], who was recently nominated Bishop of [illegible] taking possession of his see a few days since [illegible] a pastoral letter, in which he declared [illegible] that the choice of a bishop by the Chief of the State could not give any mission in the Church, and [illegible] there could not be any Catholic bishop unless he was confirmed in his appointment by the successor of St. Peter. The *Opinione Nationale* directs attention [illegible] the doctrine so laid down, and denounces [illegible] variance not only with the liberties of the [illegible] Church but with those established by the [illegible] Christians.

SPAIN.—Accounts from Madrid state that a Spanish expedition is organising at Havannah. It will comprise 5000 infantry and will disembark early in October [illegible] Vera Cruz, and thence march direct on the city of Mexico. The Ministers in Council have resolved that the opening [illegible] the Cortes shall take place between the 20th and [illegible] of next month; and that, if the Cortes offer any [illegible] tious opposition to the Cabinet, a dissolution will be resorted to. The Government, in reply to an [illegible] tion made by Baron Tecco, the Italian Minister, [illegible] declared that it has decided upon retaining the [illegible] of the Neapolitan Consulate. The *Epoca* of Saturday contradicts the statement of a Belgian paper that M. Claret had attacked the Emperor Napoleon from the pulpit. "The preachers of the Queen," it says, "never introduce political matters into their sermons, and her Majesty would not allow any Sovereign or any [illegible] ment to be abused in her presence." 200 prisoners sentenced to banishment for having taken part in the [illegible] insurrection at Loja, have left Granada for the [illegible] settlement on the coast of Africa. The long-continued drought has done great injury to the vines in the neighbourhood of Palencia in the province of Leon, [illegible] consequence of which the price of wine has risen considerably. A prospectus relative to a loan, in the name of the Infante Don Juan de Bourbon, has been distributed in Paris.

HOLLAND.—The King of Holland opened the Session of the Chambers on the 16th, at the Hague. His Majesty's speech contains but few references to general politics, but announces the presentation of a large number of measures effecting changes and improvements, social and material, including a project of law relative to the abolition of slavery in the West India Colonies. The King specially congratulates the Chambers

bers on the favourable state of the finances, and says that while the other nations of Europe have been compelled to contract loans, Holland has been able to continue the reduction of her public debt.

BAVARIA.—The Bavarian Chamber has adopted laws for the reform of the penal code and criminal procedure, and has sent a deputation to his Majesty, thanking him for introducing them. The general meeting of the Catholic associations of Germany, held at Munich, closed its sittings on the 10th, and before separating adopted a series of resolutions in favour of the temporal power of the Pope.

FRANKFORT.—The Catholic Society at Frankfort, in a general meeting of that body, has called on M. Dollinger, the Professor of Canon Law, to retract the opinions he expressed in some of his recent lectures on the temporal power of the Pope. The Professor has been compelled to made a full recantation, and to declare the temporal power essential to the spiritual supremacy of the Holy See.

SAXONY.—It is stated that the obstinacy of Saxony is not to be allowed to delay any longer the signature of the Franco-Prussian treaty, which will be concluded with those German states which elect to accept it. This is equivalent to a disruption of the Zollverein.

PRUSSIA.—The King and Queen remain at the palace of Bruhl, a few miles from Cologne, where they are entertaining the foreign princes and officers who have been present at the recent military reviews. Since the arrival of the Prince of Wales his Royal Highness has attracted much attention. He usually rides by the side of the King, and as he dresses in a simple black coat and trousers, his presence in the midst of a group of princes and officers wearing gorgeous uniforms of all countries is the more conspicuous. On Monday their Majesties visited Cologne, and were present at a concert in the evening, accompanied by the Crown Prince and Princess, the Prince of Wales, and many other German princes. The greatest enthusiasm was displayed by the inhabitants, who loudly cheered the King from the railway station to the Gurzenich Hall, where the concert took place. At the conclusion of the concert the King and Queen, with their distinguished guests, returned to Bruhl by railway. The streets through which they passed were brilliantly illuminated. There was an immense procession ot torch-bearers, in which the members of many of the societies and guilds took part.

AUSTRIA.—The Archduke Ferdinand Maximilian will be present at the coronation of the King of Prussia at Königsberg. The report that the Grand Duke Constantine of Russia is expected in Vienna is said to be unfounded. The Committee of the Lower House of the Reichsrath on religious matters has adopted a series of resolutions in favour of guaranteeing full freedom of creed and conscience to every man, and of assuring to every recognised Church and religious society the right of public worship, subject only to the rules necessary for the security of public order. These resolutions are at direct variance with the Concordat, and it remains to be seen whether they will be adopted by the Chambers. Dr. Wessely has been appointed Ordinary Professor of Criminal Law in the Prague University. Dr. Wessely is a Jew, and is the first Israelite who has been named Ordinary Professor in an Austrian University. A Jew's hotel has just been opened at Vienna, the first of the kind in that city. All the persons employed in it belong to the Hebrew persuasion.

TRANSYLVANIA AND ISTRIA.—The Transylvanian Diet has been convened for the end of October at Carlsburg. Baron Kemeney, Aulic Chancellor of Transylvania, has tendered his resignation, which has been accepted by the Emperor. An Imperial patent convenes the new Istrian Diet for the 25th of September. Two Istrian Deputies of the Nessuno party and six others have resigned their seats. The elections in Istria so far are favourable to the Government, and it appears certain that deputies will be sent to the Reichsrath.

VENETIA.—The Government has decided on not granting any new constitutional organisation to Venetia. The privileges of the existing Central Congregation will, however, be extended.

ITALY.—King Victor Emmanuel arrived at Florence on Saturday evening, accompanied by Baron Ricasoli, President of the Council, and the Chevalier de Cordova, Minister of Commerce and Agriculture. His Majesty was received with the greatest enthusiasm at Leghorn, and also at all the railway stations on his route. At Florence large crowds of people assembled at the places and in the streets which his Majesty passed. On his arrival at the Pitti Palace, the King, visibly affected by the warm and incessant cheering of the immense crowd which filled the square, appeared several times on the balcony and thanked the people for the loyal and enthusiastic reception they had given him. On Sunday his Majesty opened the Exhibition of Italian Industry, and replied as follows to a speech delivered by the President of the Commission:—

"After expressing the pleasure he felt in inaugurating the first Italian Exhibition in the city which might be called the cradle of the arts and sciences, his Majesty said his principal care was to establish the unity of Italy and to develope the elements of her prosperity. He thanked the Commissioners for the assiduity they had shown in the performance of their duties, and concluded by saying that the great national work is not yet completed, but on this occasion Italy, which is completely represented at this Exhibition, again manifests her wish to be one united nation."

His Majesty left the Exhibition amid the vociferous cheers of the audience. The King subsequently gave an audience to the municipality of Florence, in which it is said he did not concea the difficulties of the Neapolitan question, but expressed his hope that he would solve them by firmness and honesty. "As to Rome," he said, "there are people who wish us to cut the Gordian knot, but we prefer to untie it. Venice can only be obtained by war. The first thing to do is to organise a strong army. After that, and when we are ready, reasons for attacking Austria will not be wanting." A deputation from the National Guard of Palermo, which arrived at Florence in order to be present at the opening of the Exhibition, was warmly received by the population. The American Minister went to Caprera last week and had an interview with Garibaldi, for the purpose of offering to him officially on the part of President Lincoln the command-in-chief of the Federal army. It has since been announced that Garibaldi refused the offer, chiefly on account of the unsatisfactory state of his health. Notwithstanding this announcement, the latest Italian journals express considerable uncertainty as to Garibaldi's decision. A letter in the *Opinione Nazionale* hints that he has accepted the offer, or has reserved his acceptance. The *Opinione* is unwilling to believe the rumour, asserting that the Liberator of the Two Sicilies owes his services, before all, to his country. The *Armonia* of Turin states that Garibaldi and several of his old companions in arms will actually proceed to America; and, in that case, asks "What is to become of Italy?" Since these articles appeared his acceptance of the offer has been again positively denied.—The ex-King Francis II. has addressed a memorandum to his representatives at foreign courts, in reply to the circular of Baron Ricasoli, in which he denies the charge of having employed brigands, and declares that Piedmont alone is responsible for the bloodshed in Southern Italy. He concludes by saying:—

"Has such an epoch of destruction, ruin, and murder ever existed under the government of the Bourbons! Does the last half century show a number of capital executions approaching that of the persons shot in a single day by the Piedmontese? The times of Attila are thrown into the shade by those of Piedmont. The brutal force of the most monstrous conquest aims at subjecting the intelligence of a nation which upholds its dignity, which struggles to shake off the yoke of a tyranny introduced under the mask of liberty, and afterwards developed with the ferocity of the assassin. The people of the Two Sicilies, rich in all social resources, proud of those geniuses who were the glory of Italy—a people numbering about 10 millions of souls, possessing great and powerful cities—could not, cannot, and never will become a province of Piedmont, deprived of everything which constitutes the grandeur of nations. The people of the Two Sicilies, therefore, combat spontaneously, and hitherto without impulse from without, in order to recover their former greatness; they claim the return of that splendour imparted to their country by the immortal Charles III., who raised it from the state of a province to a kingdom; they demand the preservation of the religion of their fathers in all its purity, of which intrigues, cowardice, and treason have sought to deprive them."

The official *Gazette* of Turin contains a royal decree of the 8th, ordering a general census of the kingdom of Italy to be taken simultaneously on the 31st December of the present year. Messrs. Robinson & Co., the contractors for the establishment of a mail service for the Adriatic and the Mediterranean, have withdrawn from their contract with the Italian Government, and forfeited the caution-money which they had deposited. General Türr was married to Madlle. Wyse-Bonaparte a few days since at Mondovi. The Archduke Charles of Tuscany was married on the 19th inst. at Rome to a sister of King Francis II. of Naples, in the presence of the ex-King and Queen and the whole of the royal family. The Pope pronounced the nuptial benediction in the Vatican. A religious service has been celebrated at Rome in commemoration of the affair at Castelfidardo. Monsignor de Merode, several Cardinals, and the staff officers of both armies were present at the ceremony. The total amount of "Peter's pence" paid into the Papal treasury, up to the present date, is said to be 2,280,000*l*. General de Montebello will first proceed to Rome, and will afterwards repair to Florence, in order to have an interview of the King of Italy. The *Nazione* of Florence publishes a letter from Rome stating that the demonstration which the Papal party had prepared for the 8th proved a failure, the national party having during the preceding night hoisted tricoloured flags on all the public monuments. Similar demonstrations took place at Tivoli, Velletri, Frascati, Albano, and Grotoferrata, and numerous arrests have been made in consequence. The free importation of wheat, maize, oil, and of all articles of consumption, has been authorised in the Pontifical provinces. The exportation of these articles is prohibited. General Goyon has sent nearly all his troops, even those which occupied Viterbo, to take up positions along the Northern and Southern frontiers of the Papal territory. The police have seized the list of Roman subscriptions to the Cavour monument. During the night between the 12th and 13th inst. a band of 100 Bourbon brigands landed in Calabria, between Breizzano and Brancaleone. They are now surrounded by the troops and the National Guard. The rumour that General Cabrera had disembarked on the Neapolitan coast is contradicted. Order has been re-established in the provinces of Avellino, Terra di Bari, and Benevento. General Pinelli, with 8000 men, has explored the wood of Monte Cochio. The village of Cipriario is surrounded by the Italian troops. Generals Cambrera and Zongone have driven the brigands from the mountains between Aquila and Teramo. General Tupati, the Commander of the National Guard at Naples, has issued an order of the day, in which he says that the *fête* of the 7th inst. was a fresh avowal before Europe of the wish of the Neapolitan people for an united Italy. A letter from General Cialdini to the Commander of the National Guard has also been published, in which he congratulates the people and the National Guard, and says the latter rival the best troops.

SICILY.—A meeting of theologians has been held at Palermo. It has adopted a resolution declaring the temporal power of the Pope to be incompatible with and contrary to the mission of the Catholic Church. General Della Rovere, the new Lieutenant-General of Sicily, has issued a proclamation to the Sicilians, recommending them not to sign the protest of the party of action against the French occupation of Rome, "which," he says, "will only do harm to the Italian cause and to the evacuation of Rome, by sowing distrust between our Government and that of France, which has been so faithful an ally. Confide in the loyalty of the King, in the firmness of the Government, and in the tranquillity of Garibaldi himself."

RUSSIA.—On the 4th inst. the Emperor and Empress arrived at Sebastopol from Odessa, and were present at the laying of the first stone of the new Church of St. Vladimir. His Majesty afterwards went on horseback to visit the old line of fortifications and the ruins of the bastions. In the afternoon their Majesties proceeded to the cemetery situate in the northern part of the town, where a funeral service was performed for General Gortschakoff, and for all those who fell in the defence of the town. In the evening the Emperor and Empress went to Bakhtchiserai, where they remained for the night. Their Majesties also visited the cloister of the Assumption, and Tschulut Kaleh, and in returning to Sebastopol passed over the field of battle of Inkerman. On the morning of the 6th the Emperor left Odessa for Bessarabia. It is reported that the Empress will proceed from the Crimea on a pilgrimage to Jerusalem, and that the Emperor will extend his tour to the Caucasus. The two Russian ships of war that composed the squadron of observation on the coast of Syria, have been recalled to the Baltic.

POLAND.—The state of things at Warsaw is still gloomy. Popular excesses continue to take place. On the 16th the shop of a glover in the Neuwelt quarter of the city was demolished. On the 17th the plate glass windows of a German confectioner's shop were smashed, and the fixtures and furniture broken to pieces by the mob, without any interference on the part of the police, who were present. The mob then proceeded to commit acts of violence against other German residents, and demolished several of their shops. The situation of the Germans is said to be full of danger, no measures for their protection having been taken by the authorities.

TURKEY.—The Viceroy of Egypt left Constantinople on the 15th inst. to return to Cairo. The Government of the Sultan has addressed a circular to its Ministers at the different European Courts, justifying its proceedings against the Montenegrins. It states that it has exhausted every means of concession and moderation in endeavouring to prevent the grievances caused among its subjects by this little Principality. The Porte is bound to protect those subjects against violence, and the continual disorders arising from the attacks and incursions of the Montenegrins. It is now under the necessity of having recourse to arms, and Omar Pasha has received orders to commence operations, and press them vigorously. Finally, Turkey appeals to the justice of Europe, and expects its approval of the course adopted.

MONTENEGRO.—Omar Pasha proceeded on Sunday to join the Turkish army at Gatzkoe. He has now 32,000 soldiers under his command, and occupies good positions and the paths leading to the mountains on the east side. In the south Abdi Pasha has attacked the Christians at Branina on the Lake of Scutari. It is said that the Turks have made common cause with the Christian mountaineers, and demand the dismissal of Abdi Pasha. The contingents from Buda have joined the Montenegrin army, which numbers about 16,000 men. Letters from Ragusa state that the Russian fleet is expected there. Five Turkish war steamers, with troops, are on the way to Albania.

BOSNIA.—The Agram papers announce that great resistance is manifested by the Turkish population of Bosnia against the calling out of the Bashi-Bazouks for military service.

BULGARIA.—M. Sokolski, the Bulgarian Bishop whose recent conduct at Rome produced such deplorable results, has died in a convent near Kherson, to which he had retired on leaving the Turkish capital.

INDIA.—By the arrival of the Overland mail we we have news from Calcutta to the 8th of August. The following are the details:—

Calcutta.—There is no news of any importance from Calcutta. The Viceroy, it was understood, had determined on leaving for the upper provinces a month earlier than he had intended; and his lordship intended starting in September and would make Agra his head quarters. The notorious Bala Rao, the brother of the Nana, is said to have offered to come in, and has asked what terms will be allowed him.

North West Provinces.—The cholera is committing dreadful ravages at Delhi, Meerut, and Agra, and appears to be showing

itself at other stations. Among the deaths at Meerut are Captain Dewinton, 8th Hussars, Lieut. Elliott, Bengal Artillery, and Captain Glubb, district superintendent of police.

China.—Commodore Stribling, acting also as American Envoy in China, being a Southerner, has been superseded in the command of the American squadron, and his successor, Flag-officer Edgeley, has been ordered home with all his ships. The exploring party that proceeded up the Yangtze some time back, in the hope of reaching India overland, has been obliged to retrace its steps, and has arrived at Shanghai. As they advanced passive resistance was changed into active opposition, and the travellers found that the Treaty of Pekin was unknown, and some faint rumours of foreign successes utterly disbelieved. Sir James Hope, in the Impérieuse, left for Japan and Tien-tsin on the 17th July, accompanied by the governor of the colony.

Japan.—Mr. Alcock's overland journey from Nagasaki to Jeddo was a complete success, the party having been perfectly well received by the population of the districts through which they passed. Enthusiastic accounts are given of the large city of Osako and its port Hiogo.

Australia.—The first reformed Parliament of Victoria had been dissolved, and a new Parliament summoned to meet on the 26th August. The cause of the dissolution was a provision added to the Appropriation Bill by the Assembly, limiting the supplies to the end of the month of August, which they refused to withdraw, though the Governor, in a message, suggested its omission, as being an infringement of the Royal prerogative.

United States.—The Emperor of Russia has addressed a letter to the Federal Government in favour of the Union, and recommending peace. This letter has created a great sensation in diplomatic circles. A report has reached Washington by way of Louisville from Richmond, stating that President Jefferson Davis was dead, but the report is at present unconfirmed. The previous accounts were to the effect that he was very ill, and that the Confederate Congress had adjourned to await his recovery. Mr. Stephens, the Vice President, is also reported to be sick at Manassas. It appears that the Confederate flags within sight of the Union lines were observed to be flying at half-mast on the 2d inst. The expedition which sailed from Fort Monroe on the 27th ult., under the joint command of General Butler and Commodore Stringham, commenced the bombardment of the Confederate forts at the entrance of Hatteras Inlet on the 28th August. On the following day the garrison, consisting of 45 officers and 600 men, surrendered conditionally as prisoners of war. The Federals captured 25 cannon, 1000 stand of arms, and three vessels. The Confederates had abandoned a strongly fortified fort at Olerake Inlet, carrying away their guns. Numbers of North Carolinians have since arrived at Fort Hatteras to take the oath of allegiance. Between 200 and 300 had done so in a day, some offering to take service in the army. The white flag was everywhere visible. Since the engagement at Hatteras, the North Carolina troops have been withdrawn from Virginia. The prisoners have arrived at New York. General Butler has arrived at Washington, and been serenaded. He made a speech on the occasion, in which he declared that at the commencement of the frost the Federal army would move southward. Heavy firing was heard on the 3d at Washington, from the Virginia side of the Potomac, and again at George Heights, on the morning of the 6th. It appeared to be partly in the vicinity of Munson's Hill, and above the Chain Bridge, but the cause had not been ascertained. The Confederates have advanced their outposts within three miles of Arlington, and a battle on the Potomac is considered imminent. Despatches from Maryland estimate the aggregate Confederate force opposite Washington at 125,000 men. The same despatches state that they are well provisioned, and that an immediate attack is intended. The energy and activity of the army inspires the Government with confidence as to the successful maintenance of the Union. Vigorous efforts are making in Washington to obtain the release of Mayor Berrett. Messages have passed between General Grant and the Kentucky Legislature with respect to the Confederates from Tennessee having entered Kentucky and fortified strong positions at Hickman and Chalk Bluffs. Governor Harris, of Tennessee, has telegraphed that the troops had landed without his knowledge, and that he had telegraphed to President Davis respecting their immediate withdrawal. Peduca in Kentucky has been occupied by the Federal troops. The Confederates have torn up the railway tracks between Hamilton and Selbina. A collision took place at Boone Court House, in Western Virginia, on the 1st inst., between the Federal and Confederate forces, in which the latter were badly beaten, losing 30 killed, 40 prisoners, and a large number wounded. The Federal troops, it is said, burned the town. From St. Louis it is reported that 430 Federal troops have repulsed as many thousands of Confederates at Lexington, Missouri, leaving 60 dead on the spot, besides a number wounded. General Fremont is preparing to descend the Mississippi with a powerful force, designed to operate both upon the river and its banks. A strong flotilla, carrying rifled guns, is to descend the stream from Missouri to Louisiana, while each bank will be cleared of enemies by a formidable column of troops. This expedition is to be aided, it is said, by another fighting its way up from New Orleans, and its object is to cut off the Border States of Missouri, Arkansas, and Louisiana from the Confederacy, and to bring the great highway of the Mississippi under Federal command. It is reported on good authority from Washington that the Administration will not at present avail itself of the permission of Congress to collect duties on shipboard at the Southern ports. Fifty vessels have been seized in the Northern ports, under the Confiscation Law, as property owned by the South; and further seizures of Southern property have taken place on an extensive scale in the Northern States. Mr. Chase, the Secretary to the Treasury, has issued an appeal to the people on behalf of the national loan, showing that it is the interest as well as the duty of every one who has money to invest to place it at this crisis in the hands of the Government. The applications from the people to subscribe to the Loan continue numerous. The New York Democratic State Convention has passed resolutions recommending the vigorous prosecution of the war. Prince Napoleon and suite arrived at St. Louis on the 4th. It is said that the privateer Jeff Davis has been wrecked on the bar while trying to get into St. Augustine, Florida. The United States steamer Powhattan has gone in search of the privateer Sumter.

City Intelligence.

Bank Rate of Discount.—The Bank of England on Thursday reduced their rate of discount from 4 per cent., at which it was fixed three weeks back, to 3½ per cent.

Money Market, Friday.—British Funds: Consols closed at 93⅝ to ¾ for Money, and 93⅞ for the 10th of October; Reduced and New Three per Cents., 91¾ to ⅞; India Stock, 233; Ditto Five per Cent. Stock, 104 to 103⅞; Ditto Four per Cent. Debentures, 1859, 98⅞; Five per Cent. Enfaced Rupee Paper, 96¼ to ½; Ditto, Five and a Half per Cent., 103¾ to ⅞; Exchequer Bills, March, 2s. prem.; Ditto June, 4s. to 7s. prem.—Foreign: Austrian Five per Cents., 51½; Brazilian Four and a Half per Cents., 1860, 91½ to 91; Italian Five per Cents., 70¼ to ½; Buenos Ayres Deferred, 28½; Mexican Three per Cents., 23⅞; Ditto for Acct., 23⅞ to 23¾; New Granada Active, 16½ to ⅞; Ditto Deferred, 5⅞; Russian Five per Cents., 99⅞, ex div.; Spanish Three per Cents., for Acct., 49¾ to 50; Turkish Six per Cents., 1858, for Acct., 68½ to 69, ex div.; Ditto 100l. Bonds, 71¼.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£27,823,445	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion ..	13,173,445
		Silver Bullion	—
	£27,823,445		£27,823,445

BANKING DEPARTMENT.

Proprietors' Capital ..	£14,553,000	Government Securities (including Dead Weight Annuity) ..	£10,450,800
Rest	3,790,874	Other Securities	17,289,032
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	5,061,928	Notes	7,987,265
Other Deposits	12,442,850	Gold and Silver Coin ..	826,347
Seven day and other bills	704,792		
	£36,553,444		£36,553,444

19th day of Sept., 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY — BANKRUPTS—C. E. Alforth, Barnes, Surrey, Timber Dealer—S. Bacon, Northampton Place, Old Kent Road, Corn and Coal Merchant—J. Banfield, Handsworth, Organ Builder—A. Blow, Birmingham, Mill Band Maker—W. Farbon, Horncastle, Miller—A. Fielding, Glossop, Grocer—W. Greatorex, Leicester, Boot and Shoe Manufacturer—W. Green, Bear Lane, Blackfriars Road, Carman and Carrier—J. M. Hassall, Huddersfield, Cloth Finisher—H. C. Heard, Bridgwater, Newspaper Proprietor—W. C. James, Pontnewydd Tin Works, Tinplate Manufacturer—J. Massey, Newcastle-under Lyme, Grocer—H. J. Mayes, Stoke Ferry, Cattle Dealer — G. Penton, Basingstoke, Maltster — J. Platt, Oldham, Furniture Dealer—D. Ramsay, Forest Hill, Merchant.

SCOTCH SEQUESTRATIONS — J. Chadwick, Glasgow, Grocer—J. Christie, Edinburgh, Grocer—W. S. Gilchrist, Glasgow, Hosier—Jackson and Co., and M. Lurje, Glasgow, Importers of Foreign Goods—D. M'Callum, Glasgow, Grocer — J. F. Maclaren, Glasgow, Insurance Broker—W. M'Vicar, Bridgeton, Glasgow, Grocer.

FRIDAY—BANKRUPTS—M. A. Belford, late of Freemantle, Hampshire, now of Southampton, Innkeeper—R. Jeffries, Chapel en-le-Frith, Derbyshire, Bleacher—W. Jepson and D. Pickup, Blackburn, Cotton Manufacturers — F. Maitland, Newcastle-upon Tyne, Grocer and Tea Dealer—J. Morgan, Upper Marylebone Street, Portland Place, Printer, Stationer, and Bookseller—T. Shackell, Bristol, Woollen Merchant—J. Tall, Kingston-upon Hull, Tar and Turpentine Distiller.

BANKRUPTCY ANNULLED—J. Sugden, Charles Terrace, Paxton Park, Sydenham, Builder.

Metropolis and its Vicinity.

Breakdown of the Great Eastern.—The great ship arrived off Cork harbour on Tuesday evening, in a very damaged state, having lost both her paddle-wheels, and the top of her rudder post, in a heavy gale about 280 miles west of Cape Clear on the 12th inst. She left Liverpool on the 10th inst., with 400 passengers and a large general cargo, a complement both of passengers and freight considerably larger, indeed, than she has carried on any previous voyage, arising from the feeling of confidence and security that had been established by her previous successful voyages, and more particularly by her last from New York to Liverpool. On the present occasion every berth was taken. There were between 100 and 200 passengers in the principal cabin, saloons, and state rooms, at passage rates of from 20l. to 28l., the remainder of the passengers occupying the intermediate and steerage cabins at from 7l. to 10l. respectively. All went well till on Thursday the 12th, as she was under full steam and sail, she encountered a terrific gale which swept away both her paddles, and wrenched off the top of the rudder-post, a bar of iron of immense size, 10 inches in diameter, so that the vessel was no longer able to answer her helm. Her steering gear was also shattered, so that she lay like a huge log in the trough of the sea from Thursday evening until 2 o'clock on Sunday, her bulwarks almost touching the water as she rolled, and the passengers expecting that she would every moment go down, and offering up prayers for their deliverance. The rolling of the vessel displaced and destroyed the furniture of the cabin and saloons, throwing the passengers pell-mell about the cabin. Everything that occupied the upper deck was washed away, and the greater part of the passengers' luggage was destroyed by the water which found its way into the hold; while between 20 and 30 of the passengers and crew, including several ladies, had their limbs fractured or were otherwise bruised and maimed. No lives however were lost. One of the cowsheds, with two cows in it, was washed into the ladies' cabin, and caused indescribable confusion; both cows were killed. Two oil tanks were so much damaged by another concussion that the 200 gallons of fish oil which they contained ran into the hold and caused, during the rest of the voyage, a most intolerable odour. On Saturday evening a vessel hove in sight; she proved to be the brig Magnet, of Nova Scotia. The captain, on seeing the position of the Great Eastern, promptly declared his willingness to lie by her as long as might be necessary, and to render any assistance in his power. Up to this time the passengers were panic stricken, but on the arrival of the Magnet, and the announcement of the captain that he would lie by her, their spirits revived, and they began to have some hope of safety. The gale still continued, and the vessel was completely unmanageable; her head could not be got up to the wind, she would not answer her helm, and she was in a most perilous position. In this way she remained until about 5 o'clock on Sunday evening, when a temporary steering gear contrived by Mr. Hamilton Towle, of Boston, Civil Engineer, was fitted, and the ship made for Cork harbour, running with her screw at nine knots an hour. On Monday morning the Persia was met on her passage for America, and offered assistance, but as the Great Eastern was then going on very well, there was no necessity for it, and the Persia proceeded on her way. Her flag of distress was sighted at about 3 o'clock on Tuesday afternoon off the Old Head of Kinsale, and her Majesty's ship Advice at once steamed out to her assistance, and towed her to within one mile of the lighthouse off Cork harbour, where she anchored; her passengers disembarking at that harbour. She will, on clearing out, be towed forthwith to Liverpool or Milford, where she will be laid upon the gridiron and repaired. The passengers have since held a general meeting and adopted a series of resolutions expressing their opinion that but for the strength with which the vessel had been built she would have gone to pieces in the gale, and severely censuring the directors for sending her to sea thoroughly unprepared for her voyage, in regard to the ballasting, the state of her paddlewheels, the position of the boats, the insecure and most perilous character of her internal fittings, and the careless way in which she was stowed. The passengers commend the conduct and skill of the captain, and record their gratitude to Mr. Towle, to whom they resolved to present a suitable testimonial. They condemn the "confusion and mismanagement evident in every arrangement relating to the comfort and convenience of the passengers of all classes," and conclude by calling upon the Board of Trade to institute an immediate inquiry into the condition of the ship when she was sent to sea.

Release of Alfred de Vidil.—On Wednesday M. Alfred de Vidil, who was sentenced at his father's trial at the Central Criminal Court to a month's imprisonment for contempt of court, was released from Newgate. Several relatives were in attendance to receive him on his discharge. He looked pale and in ill-health. The Baron is still an inmate of the House of Correction, and is employed daily in picking oakum.

The Post Office Savings Banks.—The amount of business transacted on Monday at the Post Office Savings Banks far exceeded the most sanguine expectations of those who arranged the details of the scheme, a very large number of persons, male and female, of all ages and classes, having become depositors. The money collected has already been transferred to the Commissioners for the Reduction of the National Debt for investment according to law.

Price of Beer.—The leading brewers of Burton have issued circulars to their customers, informing them that on and after the 1st of October the prices of ale will be reduced 6s. per barrel, "the prospects of the harvest happily enabling them" to make the reduction.

The Drawback on Paper.—The Chancellor of the Exchequer has refused the request contained in a memorial on behalf of the letterpress printers, publishers, lithographers, and copperplate printers, to be allowed drawbacks on their stocks of paper, on the ground that the Act of Parliament was passed after much deliberation and its terms were during two Sessions known to the public, and that the Act gives no authority to her Majesty's Government enabling them to pay drawback to the trades in question. At the

same time he is not able to subscribe to the propriety of the claim itself, which, if granted, would produce a number of other claims, which it would be difficult to refuse and exceptionable to concede.

THE EXPORT DUTY ON RAGS.—The report of the select committee appointed by the House of Commons to inquire into this duty, with the evidence heard by them, was issued a few days since. The committee refer to the evidence of several paper makers, to show that the portion of their trade which is engaged in the manufacture of white paper for printing is in a state of unprecedented depression—mainly due to the competition with foreign paper—the cheapness of the latter being due to the prohibitions on the export of rags from the countries exporting the paper. The committee think there are serious obstacles to obtaining supplies of rags from more distant sources where these export duties do not exist; and the inquiries for a new fibre have met as yet with little success. The disadvantage as to the cost of his material under which the British paper maker labours when brought into competition with his continental rivals, appears, in the opinion of the committee, to be permanent, so long as there are restrictions upon the trade in his raw materials, and a free exportation of his material to America; and the most disastrous consequences must ensue to the British paper manufacturer unless some steps are speedily taken to place him on terms of fair competition with those of the Continent. Even before our reduction of the import duty upon foreign paper, foreign paper makers were able to compete in the English market with our own manufacturers, while the effect of the reduction of the duty was, of course, a very large influx of foreign paper. The committee further report "that at the present time the British paper manufacturer is paying a price for rags and other paper-making materials enhanced by means of foreign export duties, while he is called upon at the same time to compete with paper manufactured in countries that prohibit or tax the export of rags. That during the last session of Parliament, when it was proposed to assimilate the customs and excise duties upon paper, it was announced to the House by her Majesty's Secretary of State for Foreign Affairs, that the Emperor of the French was willing to remove the prohibition upon the export of French rags, but instead of a removal of the prohibition there has been substituted for it a duty of 4*l.* 17*s.* 2*d.* per ton, which is stated to be equivalent to a bounty of about 7*l.* per ton on French paper exported to this country. That the removal of the excise duty on paper will not place the English manufacturer in a position of equality with his continental rivals, so long as the export duties on rags remain in force abroad. The committee, therefore, recommend that the British Government should continue strenuous exertions to effect the removal of all restrictions abroad upon the export of all paper making materials."

FATAL COLLISION ON THE RIVER.—An inquest was opened on Saturday at Erith on Mr. and Mrs. Dunn, who were killed on the 6th inst. in a collision that took place near Erith between the steamer Metis, on her way to Harwich with about 100 passengers, and a heavily laden brig called the Hertha. The steamer had her stern, bulwarks, and funnel carried away, and as she was completely disabled all the passengers were transferred to another steamer. The deceased were sitting on the side of the vessel, and were swept overboard by the force of the collision. Evidence having been taken as to the identification of the bodies, the inquest was adjourned.

THE LATE ACCIDENT AT PIMLICO.—The Jury at the inquest on the body of Mr. Earle returned the following verdict:—

"That the deceased was found in the Thames, occasioned by his being accidentally thrown out of his chaise; but whether death was occasioned by drowning or from injuries caused by his fall, there is not sufficient evidence to show; and the jury cannot separate without expressing their opinion that the railings at that part of the embankment are not sufficiently high to act as security against accident."

BOILER EXPLOSIONS.—A boiler explosion occurred on Monday in Bath Street, a narrow thoroughfare running out of Newgate Street, by which three or four persons were severely injured. The premises were in the joint occupation of Mr. D. A. Jones, a carpenter, builder, and packingcase-maker, and Mr. Gadenne, a machine-ruler. The basement floor of the building contained a two-horse steam-engine and gear for cutting wood, the ground floor being used as a warehouse and the first floor as the counting-house and stores. The second floor was used by Mr. Gadenne for his ruling rooms. The explosion occurred while 25 boys and other hands were at work on the premises, many of whom were injured in making their escape. The premises were set on fire and were otherwise greatly damaged.—On Monday evening another boiler explosion of a more serious character took place at the Lower Ordnance Wharf, Rotherhithe Street, near the Commercial Docks, in the occupation of Messrs. François and Joseph Bedart, oilcake manufacturers, by which 10 persons lost their lives. The premises comprised several buildings wherein the process of grinding linseed, extracting and refining the oil, and compressing the oilcakes was carried on. The boiler and engine-house stood on the river side, parallel with the wharf, and contained two long boilers of 50-horse power each, laid in massive brick-work. Some defect had been noticed in the feed pipe of the engine, and while the men were engaged in rectifying it, the boiler, in consequence of the driver omitting to draw the furnace, suddenly exploded. Of the 10 men who were in the engine room at the time not one escaped. Two or three were dashed against the brick wall and killed on the spot, their skulls being driven in by the iron bars and pieces of boiler which were scattered by the explosion. Others were so frightfully burnt and scalded, that they died in the course of the night. The inquest was held on Wednesday, but as no one who was present at the accident was left alive to tell the tale, the evidence was necessarily confined to those who had seen the boiler a short time before the explosion. The jury returned a verdict of Accidental Death, at the same time expressing their opinion that the weights to the safety-valve were not properly constructed.

THE PUBLIC HEALTH.—The Registrar-General's Weekly Return states that in the week ending Saturday, September 14, the deaths registered in London were 1110. The average number in the corresponding week of the 10 years, 1851-60, excluding the deaths from cholera in 1854, and allowing for increase of population, was 1137. The present return is therefore 27 below the average. During the week the births of 916 boys and 879 girls, in all 1795 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1568.

Provincial.

BARNARD CASTLE. — A shocking occurrence took place at a farmhouse in a hamlet called Marwood, about a mile and a half from this town, on Sunday afternoon. Mr. Gibson, a farmer, had gone from home for the day, leaving in the house a servant-man named Kidd, a youth about 14 named Little, and a servant-girl named Middleton. A loaded gun was hung up in the kitchen, as is very usual in farmhouses about that part of the country, and the boy had got it down and pointed it at Kidd, who threatened to thrash him if he did not put it away at once. The boy went as if to put it in its proper place; but instead of doing so, he renewed the cap on the gun, and went out into the yard where the girl Middleton was standing. He then deliberately pointed the gun at her and fired, the shot entering her side, and killing her on the spot. Kidd, on hearing the report, ran out, and found the girl lying in her blood, and immediately rode off to Barnard Castle for the police and surgeons. On their arrival they found that the girl was dead, and that the boy had fled. Steps were immediately taken for his capture, but he has not yet been apprehended.

BIRKENHEAD. — The Mersey Docks and Harbour Board, at their weekly meeting on the 5th inst., agreed to construct new corn warehouses at Birkenhead at an estimated cost of about 60,000*l.*, exclusive of the internal machinery. These warehouses when completed will provide storage for 100,000 quarters of grain. A proposal of a similar character for the Liverpool side of the Mersey was deferred for further consideration.—It is understood that Messrs. Laird, Sons, & Co., of Birkenhead, who have been commissioned by the Admiralty to construct one of the new iron-clad ships, intend to build her in one of their large graving docks, which will be covered over with a glass roof, to protect the ship and workmen from the weather. It is stated that the vessel will require two years to build, employing during that period 1000 to 1500 workmen.

BIRMINGHAM.—About 20,000 persons of the better class assembled at Aston Park on Monday evening to witness Blondin's second ascent. He was advertised to cook an omelette on the rope, and to carry a man over. The former feat he was unable to accomplish, as his cooking apparatus was lost on the way, but the second he accomplished safely, and with it terminated a performance of an hour's duration. Order was well preserved within the enclosure of the park, but there was a tremendous crush outside the entrance, which the police were utterly inadequate to quell. A mob of "roughs" attempted to force a passage through the turnstiles at the gates just as it was growing dark, and being repulsed by the police, who were mounted, they broke down the palings and fences and set fire to them, and, arming themselves with stones and bludgeons, commenced a violent attack upon the police. Several of the constables were severely wounded on their faces by the contact of sharp stones, and a valuable horse, ridden by a policeman, had its leg broken, and was obliged to be shot. Finding his force utterly incompetent to suppress the riot, the officer in charge despatched a messenger into the town for reinforcements, and a large number of men was sent down by omnibus and train to the scene of the riot. Several of the ringleaders were subsequently captured, and the injuries of the wounded policemen were promptly attended to; four of them are very seriously hurt. Seven of the leaders in the riot were taken before the county magistrates at Aston on Tuesday and remanded to Thursday, when two of them were fined 10*l.* each or two months' imprisonment; one was fined 5*l.* or 14 days hard labour, and the others were discharged.

BLACKBURN.—In consequence of the civil war in the United States the cotton spinners of this town have decided to reduce the wages of their workpeople as well as to work short time. A large meeting of delegates of the associated operative spinners of Lancashire and the adjoining counties was held in Manchester on Sunday to consider this decision. A resolution was adopted to the effect that the employers be earnestly and respectfully requested to reconsider their decision, "because, while all admit that the present scarcity of cotton affords a well grounded reason for the diminution of its consumption, and of the production of yarns and goods, by running short time, this meeting of delegates cannot understand how a reduction of wages can be the means of procuring an adequate supply of the raw material or of finding a profitable market for yarns, &c."

FROME.—In September 1851 a young woman called Susan Watts was murdered under very shocking circumstances, at the Woodlands, near this town. All that could be learnt of the bloody deed was that the young woman, who was only 16 years of age, was left in the house alone, her father proceeding to Frome market. When he returned home he found the mangled body of his daughter in the dairy, and that the house had been ransacked. Subsequent examination showed that the ill fated girl had been outraged and probably drowned in a milk pail. Suspicion fell upon many, and three bad characters named Maggs, Sparrow, and Hurd were apprehended, and the circumstantial evidence against them appeared so strong that they were committed for trial on the capital charge, but the jury acquitted them. Suspicion also fell upon a young man named Joseph Sears, who lived near the Woodlands, but shortly after the murder he left the neighbourhood, and enlisted in the army. Within the last few days he has returned to Frome invalided. On Tuesday morning he went to the magistrate's office in order to get his remittance form filled up, and while there he appeared so unhappy that the magistrate's clerk asked if anything was the matter. He said he was very unhappy, and was told if he had anything on his mind he had better tell it, and then, no doubt, he would feel more comfortable. He said he thought he should, and then went with the clerk to the office of the superintendent of police, when he made a statement to the effect that he was the murderer of Sarah Watts, and that he "did it for love." He said that he first wanted her to rob the house and go with him to America, when he would marry her, but on her refusing to do so he struck her on the head with a poker and then dragged her into the dairy and put her head into the milk pail. He had violated her before he struck her with the poker. He then robbed the house and went to sea, afterwards enlisting as a soldier to get out of the way. The statement was taken down in writing, and was then signed by the prisoner. After some further evidence the prisoner was remanded for a week, and in the meantime will be confined in Shepton gaol.

HULL.—The Colonist screw steamer, from Konigsberg for Hull, with a cargo of grain, was totally lost on the Doggerbank, on the 16th inst. Seven of the crew and six passengers are supposed to be drowned; the remainder, 12 in number, were picked up by a brig. This is the ninth Hull steamer in the Baltic trade which has been totally lost within the last ten months.

MAIDSTONE.—The execution of Peter Masterson, late a private in the Royal Artillery, for the Wilful Murder of Sergeant Murphy of the same service, took place on Thursday in front of the County prison in this town. There was a crowd around the gallows of about 4000 persons, many of whom were children. The prisoner died in a very penitent state of mind and without a struggle.

MANCHESTER. — The Right Hon. S. Laing, the Finance Minister to India, had an interview with the Chamber of Commerce, the Cotton Supply Association, and the Cotton Company, on Thursday, with the view of ascertaining their opinions as to the best means her Majesty's Government in India can adopt to meet the wishes and promote the interests of the cotton trade under existing circumstances, and to confer with them generally on the position of our commercial relations with that country. Mr. Laing addressed the meeting at some length on the state and prospects of Indian finance, and stated that if the Indian Government were left to itself it would do everything in its power to promote the production of cotton, and to develope the resources of the country by means of railways and water communication.

NOTTINGHAM.—The inquest on Christopher Williamson, who was killed at Bulwell by his sister on the 9th inst., terminated in a verdict of Manslaughter against her, and she was committed for trial at the next assizes. On hearing the verdict she burst into a fit of hysterical sobbing, and nearly fainted. Eventually she was removed to the county gaol at Nottingham. On Saturday she was taken before Lord Belper and the sitting magistrates at the Shire Hall, but no evidence was gone into, and the bench having deliberated a short time, his lordship said that they had decided to discharge her so far as that court was concerned. The case was a very sad one, but it was not of that serious nature as to require the depositions to be again taken against her. She already stood committed on the coroner's warrant, and would be liberated on bail until the assizes. Much sympathy is evinced on behalf of the young woman, on account of the great provocation she received.

PRESTON.—A dreadful crime was committed at Fullwood Barracks on Saturday. A young soldier named M'Cafferay, of the 32d Regiment, having been guilty of neglecting some regimental duties, was ordered to be confined within barracks for a fortnight. On returning to his own room the man secretly loaded his rifle, and, watching his opportunity, fired at his commanding

officer, Lieut.-Colonel Crofton, as he was walking across the barrack square in company with Captain Hanham, the adjutant of the regiment. The ball struck Col. Crofton on his left side, passed through the left lung, and passed out at his right side. It then struck Captain Hanham on the upper part of the left arm and lodged near the spine. Major Colls, who was writing in his quarters at the time, heard the report of the rifle, and knowing by the sound that it was loaded with ball, ran to the window of his room and saw Colonel Crofton throw up his hands, and cry out "Oh! I am shot!" The major immediately ran to his assistance, and then saw that Captain Hanham was bleeding from the left side. He placed one arm round Colonel Crofton's waist and assisted him to his quarters, and Captain Hanham was assisted by another officer. The ball which had lodged in Captain Hanham's back was extracted about an hour afterwards, and hopes were at first entertained that his life might be spared. Colonel Crofton's case however was from the first hopeless; he died about half-past 9 on Sunday evening, and Captain Hanham died at half-past 11 on Monday morning. M'Cafferay was arrested immediately after firing the shot. He gave up his rifle to a sergeant, remarking that he had not intended to hit the Colonel. He was subsequently handed over to the civil authorities, and was removed in charge of the county constabulary to the House of Correction. In a conversation with Colonel Martin, the governor of the gaol, he remarked that he did not intend to hit Colonel Crofton, but only to injure Captain Hanham. He expressed a hope that, as he had no intention of shooting the Colonel, they would let him go, or he would not mind being transported. On Monday the prisoner, who is a light-complexioned and slightly-built young man, was brought before the magistrate. He once or twice during the examination exhibited some little emotion, but scarcely seemed to be sensible of the enormity of his offence. As the principal witnesses were detained at the barracks, in consequence of Captain Hanham being then in a dying state, the magistrate after taking the evidence of Major Colls remanded the prisoner to Wednesday, when he was committed for trial on the charge of Wilful Murder. The inquest was opened on Monday evening, when several witnesses were examined. It appeared from their statements that several squares of glass in the barracks had been broken by children, and the officers had had to pay for them. Captain Hanham ordered the prisoner to find out who the children were. He found out the name of one, but there were two others which he was told to find out. He moved in a slovenly manner, and came back and said he could not find them. Captain Hanham then ordered him into custody for not obeying orders. The inquest was then adjourned to Tuesday, when the jury, after hearing the medical evidence as to the cause of death, returned a verdict of Wilful Murder against the prisoner, Patrick M'Cafferay, who was at once committed on the coroner's warrant for trial at the next assizes. The prisoner behaved with great levity during the inquest, and heard the verdict with apparent apathy. Both the deceased officers were heirs to baronetcies. Their bodies were removed from the barracks with military honours, and sent by railway to the residences of their families for interment, that of Colonel Crofton to Leamington, and that of Captain Hanham to Wimborne, Dorset.

RUGBY.—On Monday afternoon Mr. Richard Guinness Hill, nephew of the celebrated banker and stout brewer of Dublin, was brought before the county magistrates in this town, charged on a warrant with having wilfully made to the registrar of births of the district certain false statements respecting the birth of his male child. The prisoner is about 32 years of age, and of aristocratic bearing. He wore a large moustache, but his whiskers had recently been shaven, although when apprehended he had on a large pair of false whiskers and moustache. He was dressed in a fashionable manner, but presented a careworn and dissipated appearance. It appeared from the evidence that the mother of the child was the grand-daughter of Sir Francis Burdett, and was some years ago adopted by Miss Burdett Coutts, who took the greatest interest in her welfare. Everything that wealth could procure was placed at her disposal, and in course of time her accomplishments became of a high order, while her personal attractions formed the theme of general conversation in the higher circles. Her mother (Lady Burdett), while staying at Brussels, received various offers for her daughter's hand. Among these was one made by the prisoner, who, being a member of one of the wealthiest families in Ireland, was at first regarded with considerable favour, and was ultimately accepted. After the marriage the prisoner and his wife, who was then only 16 years of age, lived together happily for several years, passing a considerable portion of their time in travelling. A life interest in the lady's fortune, which was very considerable, with the exception of 100*l.* a-year which was placed at her disposal, was settled on the prisoner at the marriage, and subsequently she made a will devising the whole of her property, including, it is understood, a valuable estate, absolutely to him in the event of her leaving no issue. In the beginning of 1859 Mrs. Hill, then residing at St. Stephen's Green, Dublin, and expecting daily to be confined, and being desirous that her accouchement should take place in London, left Ireland with that view. While on her journey, accompanied by her husband, she was taken unwell, and was unable to proceed beyond Rugby. There she was taken from the carriage and conveyed to the nearest place where accommodation could be afforded, a small beerhouse called the Globe, about half a mile from the station, and where she was delivered within two hours after of the child involved in the present inquiry. A few days afterwards the prisoner adopted a course to destroy the identity of the child, with the presumed object of possessing himself of the property devised by the will. He went to the registrar, since deceased, and registered his child as "Robert Hill, son of Robert Hill and Mary Hill, maiden name Seymour;" the true description being, as far as the parents were concerned, "Richard Guinness Hill and Amy Georgina Hill, maiden name Burdett." A week after the birth of the child the prisoner induced his wife to consent to put the child out to nurse, and came to London for the purpose of making the necessary arrangements. The day after his arrival in town he informed his wife that he had made arrangements that would be satisfactory to her, and requested her to forward the child to London by a train which he indicated. This train was not due in London until nearly midnight. The mother, believing his representations, entrusted her child, then only 10 days old, to Catherine Parsons, a girl 14 years of age, the daughter of the woman who was then nursing her, and they left by the train mentioned by the prisoner. The child was wrapped in a shawl prized for particular reasons by the mother, and which, as will hereafter be seen, forms an important ingredient in the case, and a box containing baby linen was also sent with the child. Catherine Parsons states that on arriving at the Euston Square station she was met by the prisoner. He took her in a cab to some part of the metropolis, with which as a country girl she was unacquainted, and having deposited the box, returned with her and the child to the vicinity of the Euston station, where they were met by two women, one of whom she describes as a black woman, and both of them as being drunk. By Mr. Hill's direction she handed the child to one of these women, who asked if it was alive and clean, to which Parsons replied that she hoped it would be taken as much care of and kept as clean as it had been at Rugby. Parsons had received strict injunctions from Mrs. Hill to bring back the shawl in which the child was enveloped, but when she endeavoured to do so the woman replied that if she took the child she would take the shawl and all with it, and accordingly retained possession of it. Mr. Hill then took the girl to the Queen's Dining Rooms in Great Portland Street, Oxford Street, where she remained, the prisoner occupying a room in the same house. On the following day the prisoner and the girl returned to Rugby, where she intimated to her mistress that the child had been placed in improper hands. The prisoner, however, assured his wife that the girl was entirely mistaken. From time to time Mrs. Hill expressed the greatest anxiety regarding her child, but her husband always asserted that it was in proper hands, and was progressing satisfactorily. This state of things continued for about two years, and at length Mrs. Hill told her husband that she insisted upon seeing her child. He refused to comply with her request, a serious altercation took place, and he ultimately subjected her to gross ill-usage. Upon this a separation took place; but a short time subsequently he made overtures to his wife to live with him again. She indignantly repelled his offers for a time, but at length promised to consider them favourably, providing he satisfied her as to what became of her infant. He informed her in return that it was dead; and she then demanded the register of its death, and pressed him upon this point. Being thus placed in a difficulty he altered his story, stating that the nurse in whose care he had placed the child had left England for Australia, he providing the passage money. Mrs. Hill, who had been acting all through with the advice and cognisance of her mother, still doubted the truth of his statement, and placed the matter in the hands of Mr. Cooke, the solicitor, who at once applied to Inspector Hamilton, of the City of London detective force, for assistance. Mr. Hamilton selected Mr. Brett, who, after much labour, having obtained certain information, issued a hand-bill, which was posted in great numbers in St. Giles's and every other low neighbourhood in London, offering a reward of 20*l.* for information which should lead to the discovery of the child. A woman named Mackay, living in St. Giles's, saw the offer, and had an interview with the solicitor and the officer. She stated that about 18 months previously when lodging in a house in the Seven Dials, a woman who occupied a room on the same floor, and who had no children of her own, one or two nights consecutively had a child in her room. She spoke to the woman about it, asking her to whom the child belonged. She replied that she had received it from a woman who had obtained it from another woman named Andrews, who informed her that she had received it from a gentleman at a railway station. Mackay added that the female in question left the house a few days afterwards, and she then knew nothing about her. Slight as this clue appeared, Mr. Brett worked upon it, and by extraordinary perseverance discovered by its aid that the child was the one sought after. Mr. Brett now directed his attention to the discovery of the woman indicated by Mackay. He travelled from court to court throughout St. Giles's, and at length, in a filthy alley called Lincoln's Court in Drury Lane, discovered the woman Andrews, with the [illegible] possession. In one corner of the room, a small [illegible] on the second floor, lay a man nearly naked, [illegible] in a dying state; and squatting all over the [illegible] several women in a ragged, miserable condition. [illegible] whole place was in a dreadful state, the stench [illegible] filth being almost overpowering. On the floor [illegible] horrible den Mr. Brett discovered the heir to [illegible] year—almost in a state of nudity, and covered [illegible] vermin and filth. No shoes were on his feet, and [illegible] one dirty rag enveloped his entire body. He [illegible] severely scarred with the impressions of wounds [illegible] by walking barefooted on stones; while the [illegible] body showed unmistakeable marks of negligence [illegible] ill-usage. The house from bottom to top appeared [illegible] be occupied by prostitutes and beggars, and the [illegible] only escaped with the child in safety by literally [illegible] his way through the swarm of people who [illegible] every means of egress. Having at length reached [illegible] street Mr. Brett placed the child and Mrs. Andrews [illegible] a cab and conveyed them to Mr. Cooke's office. [illegible] Brett was afterwards informed by Mrs. Andrews [illegible] on one wet Saturday she was standing in [illegible] Street, Haymarket, apparently selling [illegible] laces, but in reality begging with her two children, [illegible] in arms and the other in the gutter by her side, [illegible] the prisoner passed her, and slipped a [illegible] hand. Having passed and repassed several [illegible] beckoned her to follow him to a dark part of the [illegible] She did so; and he then asked her if she [illegible] a child to nurse, telling her that she need [illegible] it as her own, and that she might, if able, dispose [illegible] by placing it in some workhouse or asylum. [illegible] promised to procure the advice of a friend, and made an appointment for the following night in the [illegible] place. The prisoner kept the appointment, and [illegible] meeting he agreed to give her 16*l.* a year for taking charge of the child, and told her to meet him [illegible] same spot on the following Wednesday night, [illegible] would take her to a place where she should [illegible] child. This appointment was also kept, [illegible] Andrews was accompanied on this occasion by a [illegible] named Scott, *alias* Idle, who is at present under[illegible] 12 months' imprisonment in Tothill Fields for [illegible] a gentleman in the street. She added that [illegible] went in a cab to the Euston Square Station [illegible] Wednesday night, where they received the child [illegible] stated by the girl Parsons. Mrs. Andrews related [illegible] conversation she had with the girl as to how the child [illegible] been treated at Rugby, and stated that her friend [illegible] *alias* Idle, went with the prisoner to a beer-shop [illegible] the station, and there received 15*l.* from him [illegible] the child away. Being afraid of losing the [illegible] they placed 5*l.* in each of their names in the [illegible] Martin's Savings Bank, the books of which on being examined confirmed the fact. She also stated that when she received the child it was wrapped in a shawl, which [illegible] afterwards pledged. Mr. Brett had redeemed the shawl, which had been identified by Mrs. Hill. The officer had also obtained possession from Mrs. Andrews of a box, which Mrs. Hill also identified as being the one sent by her with the child, filled with baby linen; and [illegible] tained that the prisoner had, with the object [illegible] further destroying identity, cut out all the [illegible] had been inserted upon the infant's clothing. Mrs. Andrews further stated that when the prisoner [illegible] her the child he told her that the mother was [illegible] that he was a clerk going to travel on the Continent, but he gave her neither name nor address. [illegible] not believe "all was right," and ultimately [illegible] child registered in her maiden name, which [illegible] brother. Mr. Brett tested the truth of that [illegible] and found an entry in the book of the registrar [illegible] Giles's to the effect that on the 28th February [illegible] child five weeks old had been registered [illegible] of Albert Farebrother—the name given by the [illegible] to the woman when she received the child. To [illegible] prove the identity of the child, Mr. Brett [illegible] every house where Mrs. Andrews had lived [illegible] Giles's from the time the child left Rugby [illegible] the hour of its recovery, and he found her [illegible] ment true in every particular. He ascertained [illegible] on one occasion when Mrs. Andrews was sent [illegible] for begging, the child, with her own, was [illegible] St. Giles's Workhouse, where it remained [illegible] regained her liberty, when she used it, as before, [illegible] the purpose of exciting the commiseration of the [illegible] in her begging expeditions. Scott, *alias* Idle, [illegible] sequently visited in prison, and corroborated [illegible] features of the case as detailed by Andrews. [illegible] recovery the child was restored to its [illegible] who was then residing in Brussels, but [illegible] neglect from starvation and cold, it was necessary [illegible] place it under the care of eminent medical men, [illegible] ultimate recovery is by no means certain. [illegible] above facts being established, Mr. Cooke and Mr. [illegible] applied to the magistrates in this town for a warrant for the apprehension of the prisoner. The warrant [illegible] granted, but it could not be executed, inasmuch as [illegible] prisoner was not in England. He was known [illegible] Brussels, but as no treaty of extradition ex[illegible] could not be demanded. Mrs. Hill was a [illegible] ceed to London, in the hope that the prisoner, [illegible] privately renewed his entreaties for [illegible] would follow her. The *ruse* ultimately succeeded, [illegible] Saturday afternoon last, the prisoner, having [illegible] off a large pair of red whiskers, and in their place substituted a pair of false black ones, [illegible]

[illegible] Belgian authorities, who were watching [illegible] movements, and succeeded in reaching London. The address of his wife in the metropolis had been [illegible] to him, and about 10 days since while [illegible] a visit, the prisoner called at her lodgings. [illegible] immediately gave information to Mr. Brett, who [illegible] the neighbourhood, and at last succeeded [illegible] the prisoner at a house a few doors from [illegible] wife's residence, where he had taken apartments. When taken into custody he said it was a bad job, but he must make the best of it. He was taken to Bow Street station, where he remained until Monday morning, when he was conveyed by Brett to this town. At the conclusion of the evidence Mr. Cooke applied for a remand in order to produce witnesses from Brussels, including the British Vice-consul and other persons necessary to complete the case. The prisoner expressed [illegible] wish that his brother and Colonel Burdett should [illegible] present at the next examination. He was then remanded to the 24th inst., the magistrates consenting to accept bail, the prisoner in 500*l.*, and two sureties in 300*l.* each, with 24 hours' notice. The required bail had not been procured up to Wednesday night, and the prisoner accordingly remains in custody in a cell at the police station.

Sporting.

DONCASTER RACES.

TUESDAY.—*Fitzwilliam Stakes.* Baron Nivière's Cosmopolite beat Tim Whiffler, Lady Clifden, and 11 others.—*Glasgow Stakes.* Lord Stamford's King of Hearts beat The Knight of St. Michael, Costa, and Lord Albert.—*Filly Stakes.* Mr. Greville's Victrix beat Hippodamia, Zambomba, and 3 others.—*Revival Plate.* Mr H. H. O'Hara's Tattoo beat Birdhill, the Knave, and [illegible] others.—*Selling Stakes.* Mr. Payne's Nunnery beat Lady Peel, Haddington, and 5 others.—*Great Yorkshire Handicap.* Mr Fitzwilliam's Wallace beat Underhand, Wynnstay, Blue Jacket, and 9 others.—*Champagne Stakes.* Mr. [illegible] Hawke's The Marquis beat Imperatrice, Tolurno, and [illegible] others.—*Doncaster Plate (Handicap).* Mr. John Newman's Ladybird beat Lady Blanche, Charing Cross, and [illegible] others.—*Match.* Mr. H. F. Beaumont's Lapidist received forfeit from Mr. H. Coverdale's Surbiton.

WEDNESDAY.—*Sweeps.* Mr. H. Williamson's Virgilius beat North Pole, Spark, and Patriot.—*Stand Plate Handicap.* Lord Chesterfield's Black Lily beat Maid of the Mist, Bernice, and 9 others.—*St. Leger Stakes.* Mr. W. I'Anson's Caller Ou beat Kettledrum, Kildonan, and 15 others. Betting—11 to 8 against Kettledrum, 7 to 1 against Kildonan, 500 to 6 against Caller Ou. Won by a head, Kettledrum defeating Kildonan by [illegible] lengths for second; the latter passing the post a head in advance of Janus, who was fourth, Russley fifth, Dictator sixth, Imaus seventh, Camerino eighth, and Aurelian next. The last four were Clarissa Colt, Yorkminster, Billy Dwindles, and Brown Stout. Run in 3 minutes 14 seconds, the fastest St. Leger ever known, and it is not a little remarkable that the winner of it was offered for sale on Tuesday evening at [illegible] guineas. Her owner did not back her, and the jockey who was engaged to ride her begged to be allowed to change his mount, and rode Camerino.—*Handicap Sweeps.* Captain Christie's My Partner beat Généalogie, Humphrey, Morocco, and 11 others.—*Her Majesty's Plate.* Mr. T. Parr's Avalanche beat Crusade and Bivouac.—*Corporation Plate.* Baron Nivière's Cosmopolite beat Brilliant, Longshot, and 6 others.—[illegible] Lord Glasgow's Brown Bess walked over.

THURSDAY.—*Zetland Stakes.* Lord Stamford's Adrasta beat Blue Stocking and Zingaro.—*Sweeps.* Mr. Gordon's Johnny Armstrong beat Zetland, Neptunus, and 6 others.—*Juvenile Selling Stakes.* Mr. Nicholson's Miss Pennill beat Gazelle, Jackal, and 6 others.—*Portland Plate.* Captain Christie's Lady Clifden beat Brahmin, Knight of St. Patrick, and 26 others.—*Cleveland Handicap.* Mr. W. I'Anson's Caller Ou beat Flash in the Pan, King of Diamonds, and 6 others.—[illegible] *Stakes.* Admiral Rous's Asteroid beat [illegible], Zetland, and 6 others.—*Scarborough Stakes.* Lord Stamford's Imaus beat Conjuror.

FRIDAY.—*Match.* Shooting Star beat Flutter colt.—*Sweeps.* Knight of St. Patrick beat Nautilus.—*Don Stakes.* Dictator walked over.—*Park Hill Stakes.* Brown Duchess beat Lady Blanche and Adrasta.—*Town Plate.* King of Diamonds beat Lord of the Manor, Shillelagh, and 13 others.—*Doncaster Cup.* A dead heat between Kettledrum and Brown Duchess, beating Sawyer and 4 others. On the deciding heat Kettledrum walked over and divided the stakes with Brown Duchess.—[illegible] *Stakes.* Dead heat with Gauntlet and Miss Emma, beating 7 others.—*Doncaster Stakes.* Camerino beat Lady Clifden, Lady Blanche, and 4 others.—*Nursery Plate.* Silkstone beat Salamanca, My Partner, and 21 others.

Obituary.

EARL FORTESCUE died at Exeter on Saturday afternoon in his [illegible] year. He had been in a delicate state of health for some weeks past, but, being better, he went from London to Exeter on Friday, accompanied by his medical man, on his way to Castle Hill, his family residence in North Devon. His lordship slept at the house of Mr. Ford, the Clerk of the Peace for the county of Devon, on Friday night. On Saturday, however, alarming symptoms were visible, and his lordship gradually sank, and died about 4 P.M. The deceased, Hugh Fortescue, Earl Fortescue, Viscount Ebrington, county Gloucester, and Baron Fortescue, was the eldest son of the 1st Earl, by the third daughter of the Right Hon. George Granville. He was born in 178[illegible], and married first, in 1817, Lady Susan Ryder, eldest daughter of the 1st Earl of Harrowby, who died [illegible], by whom he had issue, Viscount Ebrington (now Earl Fortescue), and two sons. His lordship married secondly in 1841 the eldest daughter of the late Mr. Piers Geale, and widow of Sir Marcus Somerville, Bart. The deceased nobleman had for many years been a zealous supporter of the Whig party. He first entered the House of Commons as member for Barnstaple, which he represented from 1804 to 1807. In [illegible] he was returned for Tavistock, which he represented up to 1831. In that year he was elected for North Devon, which he represented till 1839, when he was summoned to the House of Peers in his father's barony of Fortescue. He succeeded to the family honours in 1841. From 1831 [illegible] Sir Robert Peel's accession to power in 1841, he [illegible] the office of Lord Lieutenant of Ireland; and from [illegible] the return of his party to office, to 1850, was Lord Steward of Her Majesty's Household. On the resignation of his father, about 20 years back, he was appointed Lord-Lieutenant and Vice-Admiral of the county of Devon. For some years he was colonel of the 1st Devon Militia, which he resigned in 18[illegible]. He was created a Knight of the Garter in [illegible], he was Lord High Steward of Barnstaple and South Molton, Vice-President of University College, London, an LL.D. of Oxford, and a Fellow of the Royal Society. He is succeeded in his titles by his eldest son Viscount Ebrington, who was born in 1818, and married in 1847 the eldest daughter of the late Right Hon. Colonel Dawson Damer, by whom he has a youthful family. He was educated at Harrow, was M.P. for Plymouth from 1841 to 1852, and represented Marylebone from 1854 to 1859. He was a Lord of the Treasury from July, 1846, to December 1847, and was for some years Secretary to the Poor-law Board, an office which he resigned in 1851. He was summoned to the House of Peers in 1859, in his father's barony of Fortescue. In 1842 he was appointed Major of the North Devon Yeomanry Cavalry, of which corps he became Colonel in 1851.

COLONEL SIR GEORGE ROBERT BARKER, K.C.B., commanding the Royal Artillery in Bengal, died recently in India. He distinguished himself in the Crimean campaign, and attracted the especial notice of Sir Colin Campbell, by whom he was appointed to command the Royal Artillery in the expedition to Kertch. He subsequently commanded the same corps in the left attack on the fall of Sebastopol. In India, during the late mutiny, he again served under Lord Clyde; and as a Brigadier-General commanded the siege artillery at the siege and capture of Lucknow. He likewise defeated the rebels in force at Jamo, and captured the fortress of Birwa, for which services he was made a Knight of the Bath.

COLONEL HUGH DENNIS CROFTON, late of the 20th Regiment, who was shot on Saturday at Preston by a private of the 32d Regiment, was the eldest son and heir of Sir Morgan George Crofton, Bart., of Mohill House, Leitrim, and a cousin of Lord Dunsandle. He entered the army in 1835, and served for 20 years in the 20th Regiment. He embarked with that regiment to the Crimea, and was present at the battle of the Alma, siege of Sebastopol, and battle of Inkermann, where he was seriously wounded, and had a horse shot. At Alma he commanded the 20th, and at Inkermann he commanded a wing. For his services he received the medal and clasp, and obtained promotion. He went on half-pay in 1855, and in 1859 was appointed to his present command of the depôt battalion at Preston. He married in 1849 the daughter of the Hon. Peter de Blaquiere, by whom he leaves a family of three children, the eldest of whom is in his 8th year.

CAPTAIN HANHAM, who was shot with Colonel Crofton last week at Preston Barracks, was the third son of the late Rev. Sir James Hanham, of Dean's Court, Dorset, and brother and heir presumptive to the present Baronet, Sir William Hanham. He entered the army in 1843, and received the appointment of Adjutant of the 11th Depôt Battalion in 1856. He leaves a wife and four children.

GENERAL KEMP died on the 16th inst., after a short illness, at his residence, Spring Lodge, East Hoathly, Sussex, in his 82nd year. He had seen much service in the Indian army, and was colonel of the 22nd Regiment of Bombay Native Infantry.

CAPTAIN LITTLEDALE, well known in aristocratic and sporting circles, died a few days since at his residence in St. James's Street after a protracted illness.

WILLS.—The will of Lord Abinger has been sworn under 30,000*l.*; Madame Catherine Hayes Bushnell, 16,000*l.*; Mr. W. H. Poyntz Sadgrove, 12,000*l.*

BIRTHS.—On the 17th inst, at 8, Ely Place, Dublin, the Lady FRANCES TREMAYNE, of a son—At Stanford Cot, Worcestershire, the Lady WINNINGTON, of a daughter, stillborn—15th inst, at 5, Eaton Place South, the wife of Lieutenant-Colonel ROBERT BRUCE, Unattached (late 23d R. W. Fusiliers, of a daughter—16th inst, the wife of KINGSMILL MANLEY POWER, Esq., of the Hill Court, Herefordshire, of a son—15th inst, at the residence of her father, Peter Maze, Esq., No 12, Portland Place, the wife of WILLIAM IRELAND BLACKBURNE-MAZE, Esq., of Southborough, Tunbridge Wells, of a daughter—16th inst, at 19, Berkeley Square, the wife of WILLIAM WHITE COOPER, Esq., of a son.

MARRIAGES.—In August, at St. Stephen's Church, Upper Mount Street, Dublin, the Hon. RICHARD MONCK, Coldstream Guards, youngest son of the late Viscount Monck, to FRANCES ELIZABETH OWEN, eldest daughter of OWEN BLANEY COLE, Esq., and the Lady Fanny Cole—17th inst, at the parish church of Yazor, Herefordshire, HENRY LONGLEY, Esq., eldest son of the Archbishop of York, to DIANA ELIZA, second daughter of JOHN DAVENPORT, Esq., of Foxley, Herefordshire, and of Westwood Hall, Staffordshire—19th inst, at St. Mary Abbot's Church, Kensington, AUGUSTUS WENTWORTH GORE, only son of the late Charles Arthur Gore, 1st Life Guards, to Miss EMILY ANNE CURZON, third daughter of the Hon. Edward and Mrs. Curzon, of Scarsdale House, Kensington—11th inst, in Freshwater Church, Isle of Wight, WILLIAM GEORGE SHEDDEN, Esq., of Spring Hill, East Cowes, Isle of Wight, to CAROLINE, youngest daughter of Admiral Sir GRAHAM EDEN HAMOND, of Norton Lodge, Bart., G.C.B., and Rear-Admiral of the United Kingdom—10th inst, at Tyringham, Bucks, SIDMOUTH STOWELL SKIPWITH, Commander R.N., younger son of the late Sir Gray Skipwith, Bart., to CHARLOTTE, youngest daughter of the late JAMES BACKWELL PRAED, Esq., of Tyringham—17th inst, at Maxton, Roxburghshire, JAMES LIEBIG GREGORY, Esq., only child of the late William Gregory, Esq., to ELIZABETH MARY SOMERVILLE, only daughter of the late Colonel Sir HENRY FAIRFAX, Bart.—11th inst, at Barton-under-Needwood, the Rev. WILLIAM DOUGLAS, M.A., son of Gen. Sir James Douglas, G.C.B., to EMILY, eldest daughter of the late JOHN WILSON, of Barton-under-Needwood, in the county of Stafford, Esq.—14th inst, at West Moulsey Church, SEPTIMUS WILLIAM SIBLEY, Esq., of New Burlington Street, to CLARA FANNY, second daughter of Sir R. W. CARDEN, of Wimpole Street, and West Moulsey, Surrey—12th inst, at Trinity Church, Chelsea, J. A. FROUDE, Esq., to HENRIETTA, daughter of the late JOHN ASHLEY WARRE, Esq., M.P.—10th inst, at Iffley Church, Rev. MARK PATTISON, rector of Lincoln College, to EMILY FRANCES STRONG, daughter of Captain Henry Strong, Indian Army, of Iffley, near Oxford.

DEATHS.—On the 25th ult, at sea, on board Her Majesty's ship Jason, REGINALD M. WODEHOUSE, midshipman, second son of the late Hon. and Rev. Alfred Wodehouse, aged 17—12th inst., at Dunstable House, Richmond, Lady BAKER, widow of the late Vice-Admiral Sir Henry Lorraine Baker, Bart., aged 60—16th inst, in Charlotte Square, Edinburgh, the Lady JANE WALKER, wife of Major-General Edward Walker, C.B., Commanding in North Britain—9th inst, at Bildeston, Suffolk, of decline, CLARISSA CATHARINE, the wife of the Rev. ACLAND JAMES, M.A., curate of Wattisham, near Bildeston, and eldest daughter of the late Baron de H. Larpent, of Holmwood House, Dorking, aged 31—14th inst, at Turnastone, Herefordshire, MARY ANNE, widow of the late General HORSFORD, aged 8[illegible]—[illegible] inst, at 2, Alloway Place, Ayr, Major HENRY CARMICHAEL SMYTH, formerly of the H.E.I.C. Bengal Engineers—21st June, on board the Earl of Balcarres, off the Cape of Good Hope, Lieutenant SHAKESPEAR CAMPBELL CRAWFORD, of the Artillery, son of J. H. Crawford, late of the Bengal Civil Service—18th inst, at North End House, Twickenham, EMILY SIMPKIN, youngest daughter of HENRY G. BOHN, Esq., aged 1[illegible]—14th inst, at 13, St. George's Terrace, Herne Bay, ROBERT O'BYRNE, Esq., aged 72—6th inst, at Staveley Rectory, the Rev. RICHARD HARTLEY, late rector of Staveley, Yorkshire, aged 78—15th inst, the Rev. THOMAS BURROW, incumbent of Pinner, Middlesex, aged 57.—14th inst, after a few days of severe illness, Mr. ALFRED KENDALL, Florist, of Stoke Newington, aged 65.

Markets.

COVENT GARDEN, Sept. 21.

Of both Vegetables and Fruit there is now an ample supply. Figs, Greengage Plums, Apples, and Pears are plentiful, and the same may be said of Grapes and Melons. Peas are not so good as they have been, but of Beans there is still a fair supply. For Potatoes markets are heavy; prices about the same as last week. Cucumbers are abundant, and the same may be said of Tomatoes, which are large and well ripened. Cut flowers chiefly consist of Orchids, Dahlias, Asters, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Apples, per doz., 6d to 1s
Grapes, per lb., 1s 6d to 4s	Oranges, per 100, 6s to 14s
Melons, each, 1s to 3s	Lemons, per 100, 6s to 10s
Peaches, per doz., 4s to 10s	Nuts, Cob, per pound., 1s to 1s 6d
Nectarines, do., 4s to 10s	Walnuts, per 100, 2s
Pears, per doz., 1s to 4s	

VEGETABLES.

Cauliflowers, each, 2d to 6d	Veg. Marrows, p. doz., 1s to 1s 6d
Green Peas, p. quart, 1s to 1s 6d	Artichokes, each, 6d to [illegible]d
Broccoli, p. bundle, 1s to 1s 3d	Beet, per doz., 1s 6d
French Beans, per sieve, 2s 6d to 3s 6d	Celery, p. bundle, 1s 6d to 2s
Broad Beans, p. bush, 2s 6d to 3s	Onions, p. ½ sieve, 4s 6d
Cabbages, do., 1s 3d to 1s 6d	Rhubarb, p. bundle, 6d to 9d
Potatoes, p. ton, 60s to 80s	Tomatoes, p. doz., 1s to 3s
— per lb., 1d to 4d	Shallots, per lb., 8d to 10d
— per cwt., 4s to 8s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 4d to 6d	Endive, p. score, 1s 6d
Carrots, new, do., 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., 1s to 3s
Cucumbers, each, 6d to 9d	Parsley, p. 12 bunches, 3s to 4s
	Savory, per bunch, 2d to 4d

HAY.—Per Load of 36 Trusses.

SMITHFIELD, THURSDAY, Sept. 19.

Prime Meadow Hay	80s to	90s	Clover, old	90s to	125s
Superior do. (old) ..	95	105	New Clover	—	—
Inferior do.	40	55	Do. second cut ..	90	105
New do.	—	—	Straw	26	34
Rowen	—	—			

DAVIS & Co.

CUMBERLAND MARKET, THURSDAY, Sept. 19.

Sup. Meadow Hay ..	105s to	112s	Inferior Clover ..	84s to	100s
Inferior do.	65	95	New do.	—	—
New do.	—	—	Straw ..	34	40
Superior Clover ..	114	120			

JOSHUA BAKER.

WHITECHAPEL, THURSDAY, Sept. 19.

Fine Meadow Hay	90s to	100s	Fine 1st cut Clover	112s to	118s
Inferior do.	75	85	Inferior do.	80	95
Prime New Hay ..	80	88	New 2d cut	90	105
Inferior	—	—	Inferior do.	—	—
Straw	28	32	New 1st cut ..	—	—

COAL MARKET.—Sept. 18.

Hastings Hartley, 15s.; Holywell, 15s. 6d.; Lambert's West Hartley, 15s.; North Pelton Gas, 13s. 3d.; Tanfield Moor Butes, 12s. 9d.; Walker Primrose, 12s.; Wylam, 15s. 6d.; Walls End Byron, 15s. 9d.; Walls End Hetton, 17s.; Walls End Riddell, 16s. 9d.; Walls End Sheriff Hill, 14s.; Walls End Braddyll's Hetton, 18s. 3d.; Walls End Durham, 15s.; Walls End Haswell, 19s.; Walls End Hetton, 19s.; Walls End Pittington, 16s.; Walls End Russel's Hetton, 17s. 9d.; Walls End Hartlepool, 18s. 9d.; Walls End Kelloe, 18s. 6d.; Walls End South Hartlepool, 17s. 9d.; Walls End Tees, 19s.; Walls End Thornley, 18s. 6d.; Walls End Trimdon Thornley, 18s.; Carway and Duffryn Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.—Ships at market, 162.

BRITISH WOOLS.—LONDON, FRIDAY, Sept. 20.

Our trade continues healthy, and a fair business is transacted at former rates.

	s. d.	s. d.		s. d.	s. d.
South-down Hoggets	.. to	1 5	Leicest. Wethers	1 3 to	1 4
Half-bred ditto ..	1 5 —	1 6	Ditto Hoggs ..	1 4 —	1 5
Down Ewes ..	1 4 —	1 5	Combing Skins	1 0 —	1 5
Kent Fleeces ..	1 5 —	..	Flannel Wool ..	1 0 —	1 5
			Blanket ditto ..	0 6 —	..

BUTTER MARKET.—Sept. 20.

Best Fresh Butter	15s. per dozen lbs.
Second do. do.	13s. " "

Pork, 4*s.* 4*d.* to 5*s.* 4*d.* per 8 lbs.

HOPS.—BOROUGH MARKET, FRIDAY, Sept. 20.

Messrs. Pattenden & Smith report an active demand for the new growth at the following currency:—

Mid and East Kent	£9 9 to	£12 12
Weald Kent	8 10 —	10 10
Sussex	8 8 —	9 0

Duty, 110,000*l.*

METROPOLITAN CATTLE MARKET.

MONDAY, Sept. 16.

We have a larger supply of Beasts and a dull trade, consequently prices are rather lower. We are but moderately supplied with Sheep; there is a fair demand, and late rates are fully supported. Lambs are not much in request, the season is nearly over. Good Calves are rather dearer. From Germany and Holland there are 1700 Beasts, 5590 Sheep, and 190 Calves; from Spain, 16 Beasts; from Scotland, 15; from Ireland, 750; and 3000 Beasts from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 6 to	4 8	Best Long-wools ..	.. to	..
Best Short-horns	4 4 —	4 6	Do. Shorn	4 8 —	5 0
2d quality Beasts	3 4 —	4 0	Ewes & 2d quality	.. —	..
Best Downs and Half breds	.. to	..	Do. Shorn ..	4 0 —	4 6
Do. Shorn ..	5 0 to	5 4	Lambs	5 0 —	5 8
			Calves	4 0 —	5 0
			Pigs	4 0 —	4 8

Beasts, 5750; Sheep & Lambs, 25,350; Calves, 218; Pigs, 510.

THURSDAY, Sept. 19.

Although the number of Beasts is not large, it exceeds the demand. Quotations are not altered from Monday, but a clearance cannot be effected. We have a fair supply of Sheep for the time of year; trade is very dull, and Monday's quotations are barely supported. There is no alteration in the Calf trade. Lambs we cease to quote, the season being over. Our foreign supply consists of [illegible] Beasts, [illegible] Sheep, and 325 Calves; Milch Cows, 90.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 6 to	4 8	Best Long-wools.	4 8 —	5 0
Best Short-horns	4 4 —	4 6	Do. Shorn	.. —	..
2d quality Beasts	3 4 —	4 0	Ewes & 2d quality	4 0 —	4 6
Best Downs and Half breds ..	5 0 —	5 4	Do. Shorn ..	.. to	..
Do. Shorn ..	.. —	..	Lambs	.. —	..
			Calves	4 0 —	5 0
			Pigs	4 0 —	5 0

Beasts, 860; Sheep & Lambs, [illegible]; Calves, 41[illegible]; Pigs, 270.

MARK LANE.—MONDAY, Sept. 16.

The supply of Wheat from Essex to this morning's market was small, but from Kent good; the bulk of the former was

taken for export to France, at fully 1s. per qr. over the rates of this day se'nnight, but the latter was disposed of at that day's prices. Foreign was in moderate request, at an improvement of 1s. per qr. Barley and Beans are each 1s. per qr., and Peas 2s. per qr. dearer. The Oat trade is steady at last week's quotations. There is no alteration in the top price of town-made Flour, but American barrels bring an advance of 1s. to 2s. per qr.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk..White	50—63	Red	50—60
— — fine selected runs..ditto	62—66	Red	50—62
— — Talavera	55—69		
— Norfolk	—	Red	—
— Foreign	42—72		
BARLEY, grind. & dist., 26s to 28s..Chev.	37—42	Malting .	36—39
— Foreign..grinding and distilling	27—30	Malting .	36—40
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire—Potato	26—28	Feed ..	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign........Poland and Brew	20—24	Feed ..	19—24
RYE	36—38	Foreign .	—
RYE-MEAL, foreign.................	—		
BEANS, Mazagan....34s to 36s ...Tick	35—38	Harrow .	35—38
— Pigeon ......35s — 42s..Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
PEAS, white, Essex and Kent..Boilers	34—38	Suffolk .	35—39
— Maple .... —s to —s ...... Grey	37—39	Foreign .	35—38
MAIZE..........................White	—	Yellow ..	—
FLOUR, best marks delivered..per sack	46—51		
— 2d do ....ditto	30—46	Country	30—46
— Foreign ....per barrel	28—34	Per sack	43—58

FRIDAY, Sept. 20.

The weather between the 13th and 17th inst. was stormy with a few showers, but has since been very fine, wind northerly and westerly until Wednesday afternoon, when it changed to S.W., and has so remained. During the past se'nnight Wheat, both English and foreign, has been in fair request at an improvement of fully 1s. per qr. English continues to be freely taken for France. The value of spring corn was well supported, with rather an upward tendency in prices. American and Spanish Flour has become very scarce, and must be written 1s. per barrel and sack dearer. During the past eight days 108 vessels have been reported off the coast. The floating trade has been very firm at rising prices, in which Maize, after having been neglected at the beginning of the week, fully participates. The arrivals of English grain and foreign Barley during the week have been small, fair of foreign Wheat and Flour, and large of Oats. At this morning's market there was an increased quantity of English Wheat offered, which, in the absence of any active demand for France, was taken slowly at Monday's quotations. The attendance was small, and business in foreign very limited. We observe no alteration in prices. Barley, Beans, and Peas are unaltered in value. Oats are a very slow sale, and 6d. per qr. cheaper. Flour brings the rates of Monday last.

ARRIVALS FROM Sept. 16 to Sept. 20.

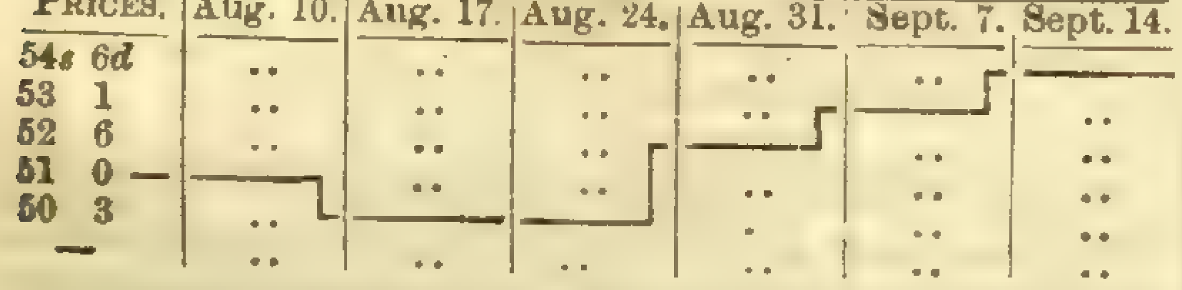
	Wheat.	Barley.	Oats.	Flour.
English ..	2410 qrs.	290 qrs.	190 qrs.	910 sks.
Irish	— „	— „	160 „	— „
Foreign ..	14280 „	120 „	40390 „	— „ / 9430 brls.

LIVERPOOL, Tuesday, Sept. 17.—Notwithstanding only a moderate attendance of country buyers at this morning's market, a fair amount of business has been done in both Wheat and Flour, at an improvement of about 2d. per cental, and from 6d. to 1s. per barrel and sack, on the rates of last market. Indian Corn had a good consumptive inquiry, and the advance established may be quoted at fully 6d. per qr. Oats were the turn dearer. Oatmeal unchanged. Beans and Peas steady at extreme rates. Barley brought a shade more money. The market closes with a healthy tone.

FRIDAY, Sept. 20.—There was a moderate attendance at our corn market to-day, with a good healthy trade in Wheat at the extreme rates of Tuesday. Flour was in fair request at late rates. Indian Corn in good demand at 30s. 6d. to 31s. for mixed. Egyptian Beans unaltered. Oats and Oatmeal dull.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Aug. 10..	51s 0d	30s 1d	25s 4d	36s 7d	43s 8d	38s 0d
— 17..	50 3	30 0	25 11	37 5	42 7	37 5
— 24..	50 3	32 10	26 1	35 10	43 5	35 5
— 31..	52 6	34 1	24 5	37 5	44 0	34 10
Sept. 7..	53 1	35 11	23 7	37 2	44 4	35 3
— 14..	54 6	36 4	22 11	33 4	41 11	38 0
Agg. Aver.	51 11	33 3	24 9	36 3	43 4	36 6

FLUCTUATIONS IN THE LAST SIX WEEKS' AVERAGES.



AGRICULTURAL IMPROVEMENTS. — Landowners and others interested in the welfare of the Labouring Agricultural Class, may find Places for Young Men of good character, by applying by letter to Mr. BAILEY DENTON, 52, Parliament Street, Westminster, S.W.

General Land Drainage and Improvement Company.

WANTED, FOREMAN OF DRAINAGE WORKS. —Written applications, with references as to character for ability, integrity, and sobriety, to be addressed to Mr. BAILEY DENTON, the Company's Engineer, at No. 52, Parliament Street, Westminster, S.W.

Nursery Foreman.

WANTED, an active Man as FOREMAN for the Outdoor Department of a Nursery in the North of England. He must be qualified to take the sole charge, a good Budder and Grafter; if with a knowledge of Laying-out Grounds the better.—Apply by letter, stating age, with reference as to character and abilities, and salary expected, addressed to Z. A., *Gardeners' Chronicle* Office, W.C.

WANTED, a PROPAGATOR and FOREMAN, well experienced, active, and industrious. None need apply whose character will not bear the strictest scrutiny.—Apply, M., Hurst & M'Mullen, Leadenhall Street, E.C.

WANTED, a steady WORKING GARDENER (married and without incumbrance), for a family requiring a good and continual supply of Vegetables and Fruit. A knowledge of Forcing and of the Management of Vines indispensable. He must be well recommended for sobriety, honesty, and industry. Age about 35 years. Wages 21s. per week, with a good Cottage.—Apply by letter to B., Post Office, Maida Hill, W.

WANTED, at the Surrey County Lunatic Asylum, near Tooting, S., a good PLAIN GARDENER, from 25 to 30 years of age. A married Man, without children, would be preferred.—For farther particulars apply to the Steward of the Asylum.

WANTED, a young Man as UNDER GARDENER and to look after two Cows, Pigs, and Poultry. A person from the country would be preferred.—Apply by letter to W. HOWARD, 5, Falcon Lane, Battersea, S.W.

To Seedsmen.

WANTED, at the term, an experienced SHOPMAN.—Apply, stating experience, references, and salary expected, to JAMES DICKSON & SONS, Hanover Street, Edinburgh.

WANTED, AS SHOPMAN, &c., in the SEED TRADE, a middle-aged steady man, who thoroughly understands the Counter and Warehouse Business.—Direct, with age, salary, &c., to A. B., Messrs. Barnett & Float, 11, Queen Street, Cheapside, E.C.

WANTED IMMEDIATELY, A LAD, about 14 years of age, to assist in the Stable and other Outdoor work. Must be accustomed to Horses.—Address G. S. B., Ibstone, Tetsworth.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 28, single; thoroughly understands his profession in all its branches. First-class recommendation.—G. F., Post Office, Chislehurst, Kent.

GARDENER (HEAD).—Age 40, married; thoroughly understands his profession in all its branches. Wife is a first-rate Dairy-woman. Can be highly recommended.—J. T. P., 2, Grove Road, West Kent Park, Forest Hill, S.E.

GARDENER (HEAD).—Age 28, single; thoroughly understands his profession in all its branches. Satisfactory references as to character and ability. — Y. Z., G. Stanly's, Manor Lane Nursery, Lee, S.E.

GARDENER (HEAD).—Age 30, married, no incumbrance; thoroughly proficient in all departments. Unexceptionable reference.—Please state particulars.—ALBA, Post Office, Brixton Hill, Surrey, S.

GARDENER (HEAD).—Age 40, married; thoroughly practical in every department. Can manage Land, &c. Five years in last situation. First-class references.—A. W., Dobson & Sons, Nurserymen, Isleworth, W.

GARDENER (HEAD OR SINGLE-HANDED).—Perfectly understands his profession. Can manage Land and Stock. Good character.—A. B. PEAKE, 8, Stratford Green, Stratford, Essex.

GARDENER (HEAD).—Age 25, married, one child; thoroughly practical and energetic. First-class character will be given by the nobleman's Gardener whom he is now serving under as Foreman.—State particulars to G. ELLIS, The Gardens, Euston Hall, Thetford, Norfolk.

GARDENER (HEAD). — Age 36, married, one child; thoroughly practical in his profession; is also well experienced in Laying Out and Re-arranging Pleasure Grounds and Flower Gardens, if required. Good character. —D., Mr. Nash, 4, Upper Weymouth Street, Portland Place, London, W.

GARDENER (HEAD).—Perfectly understands his business in all its branches, the Hot-water System included; has had 3000 feet of pipes under his charge for the last 12 years. Will be highly recommended by the nobleman he is leaving, and with whom he has been for 15 years.—L. D., Gargrave, near Leeds, Yorkshire.

GARDENER (HEAD).—Age 33, single; thoroughly understands his profession in all its branches, Early and Late Forcing, Kitchen, Fruit, and Flower Gardens. Six years' character from last place.—P. D., Mr. Wm. Bull's Establishment for New and Rare Plants, King's Road, Chelsea, S.W.

GARDENER (HEAD).—Age 40, married, no incumbrance; thoroughly practical; first-rate testimonials. Three years' character from present and five from previous situation.—W. MOORE, High Elms Garden, Farnborough, Kent, S.E.

GARDENER (HEAD).—Married, no incumbrance; is thoroughly acquainted with the Forcing of all kinds of Fruit, Flowers, and Vegetables; the Culture of Stove and Greenhouse Plants, Management of Fruit, Flower, and Kitchen Gardens. Four years' good character from the nobleman he is now leaving, and 20 years' previous recommendation.—M. A., Mr. Williams, Westerham, Kent.

GARDENER (HEAD).— Age 37, married; has a thorough practical knowledge of his profession in all its branches; has been a successful exhibitor, takes a great interest, and devotes the whole of his time to the Garden. Would be glad to meet with a situation where gardening could be carried out in the highest style.—T. P., Attwell's Yard, Uxbridge.

GARDENER OR FOREMAN.—Age 20; well up in Forcing Fruits and Flowers. No objection to any part of Great Britain. Good character from previous employers.—J. MAYO, Aynhoe, Northamptonshire.

GARDENER (FOREMAN).—Age 27, single; has had good experience in the various branches of the profession; would be glad to meet with any nobleman's or gentleman's Gardener in want of a confidential servant. Can be well recommended.—I. J., Messrs. J. Saltmarsh & Son, Nursery and Seedsmen, Chelmsford, Essex.

GARDENER.—Age 21; four years' good character from a Clergyman. — G. P., Mr. Verrell, Stationer, Bromley, Kent, S.E.

GARDENER.—Age 37; good, practical, and hard-working; can manage Land, &c. Seven years' character. —Particulars can be learned from CHARLES NOBLE, Bagshot.

GARDENER to any nobleman or gentleman.—Reference as to professional acquirements, &c., given on application to A. B., Drumlanrig Castle Gardens, Thornhill, Dumfriesshire.

GARDENER (WORKING, OR SINGLE-HANDED).—Age 38, married, one child; can manage Kitchen and small Flower Garden. No objection to a Cow. Good character. J. H., Stanstead Park Nurseries, Forest Hill, London, S.E.

GARDENER.—Age 29; has a thorough and general knowledge of Early and Late Forcing of Pines, Vines, Melons, Cucumbers, &c.; in fact, Forcing in all its branches; has had nearly three years' extensive experience in Flower and Kitchen Gardening in one of the largest Horticultural establishments in England, and can give unexceptionable references as to ability, morality, and assiduity.—Address J. T., Messrs. Weeks & Co., King's Road, Chelsea, S.W.

GARDENER.—Age 30, single; practical k[illegible] of Gardening in all its branches; Forcing [illegible] Growing, Fruit, Flower, and Kitchen Gardening [illegible] class reference.—B. F., Vine Cottage, Strand [illegible] Chiswick, S.W.

GARDENER (in a nobleman's or gentleman's family)—Age 30; has a practical knowledge of Forcing [illegible] Peaches, Strawberries, Melons, Cucumbers, &c., [illegible] Management of Kitchen, Fruit, and Flower Gardens; single-handed place accepted. Can be highly recommended; 10 years' character.—J. P., Flixton Hall Gardens, Bungay, Suffolk.

To Noblemen and Gentlemen.

GARDENER.—J. PARR, for several years Gardener to J. Jarrett, Esq., late of Camerton Court, near Bath, and upwards of nine years to J. R. Raymond Barker, Esq., [illegible] offer his services to any nobleman or gentleman [illegible] thorough practical Gardener. Good testimonials as to character and ability can be produced from his late and present [illegible] J. PARR, The Gardens, Fairford Park, Fairford, Gloucestershire.

To Noblemen and Gentlemen.

GARDENER.—A highly practical and experienced Man is now completing his present engagement, and will be at liberty to enter upon a new one the latter end of the present month. He has extensive knowledge in the general routine of Gardening, including the Forcing of Fruits and Vegetables. He is also a first-class Grower of Plants, and has been a successful competitor at the London and other Horticultural Exhibitions, and is also a very efficient Kitchen and Flower Gardener, having had considerable experience in the Forma[illegible] and Erection of Horticultural Buildings of various [illegible] descriptions.—Highly respectable recommendations and references will be given by Messrs. E. G. HENDERSON & SON, Wellington Nursery, St. John's Wood, London, N.W.

GARDENER (SECOND OR UNDER).—Age [illegible], single; four years' good character.—J. B., 20, Grange [illegible] Hampstead Road, Kentish Town, N.

GARDENER (UNDER).—Single; understands his profession in all its branches. Unexceptionable references.—A. B., Mrs. Wood, 24, Brunswick Place, [illegible]bury Road, Islington, N.

GARDENER (UNDER).—Age 23; has a good knowledge of both Early and Late Forcing, Flower and Kitchen Gardens.—Y. Z., Newbury Cottage, [illegible] Highgate, N.

GARDENER (UNDER).—Mr. CHARD, [illegible] Clarendon Park, Salisbury, Wilts, can with confidence recommend as above a young Man, aged 20, who has been with him five years, to any gentlemen or Gardener requiring such.

GARDENER (UNDER).—Age 23, single; 5 years in one of the best Nurseries in the West of England, [illegible] years as Foreman under good Gardeners. Good character.—E. C., Post Office, Alpington, Exeter.

GARDENER (UNDER).—Age 21; active and steady. Wishes to improve himself under a Head Gardener or Foreman in any gentleman's Garden where Forcing is carried on to some extent. One and a half year's good character.—G. H., Post Office, Colney Hatch Park, London, N.

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BAILIFF.—Middle-aged; understands the Management of Stock and the Suffolk and Essex system of Farming. No objection to Gardening and seeing after [illegible] and Chaise. Good references given.—J. RAYNER, [illegible] Street, Spitalfields, E.

BAILIFF.—Age 42; had great experience in Lincolnshire and the Southern Counties; is a good judge of Stock, Buying, Selling, &c., and a good Accountant. [illegible] knowledge of Steam Cultivation, Management of Woods, &c.—C. D., 13, Pentonville Road, Islington, London, N.

FARM BAILIFF (WORKING).—Age 3[illegible], married; is well acquainted with Stock, and has been accustomed to Agriculture all his life. Can keep Accounts. [illegible] character from his employer.—J. C., Mr. [illegible] Swaffham, Norfolk.

CLERKSHIP.—Age 26; accustomed to the [illegible] Trade. Good references. — H., 9, Vincent Terrace, Islington, N.

TO LONDON SEEDSMEN.—Age 21; well educated, and experienced at the Counter and in the [illegible] House, wishes for employment in a London Warehouse. The highest references.—D. R., Charles Turner, Esq., The [illegible] Nursery, Slough.

TO THE SEED AND NURSERY TRADE.—Advertiser, who is experienced in both Wholesale and Retail, and can be highly recommended by last employer, wishes for a permanent situation. — H. W. G., Post Office, Newcastle-on-Tyne.

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The Gardeners' Chronicle Newspaper.

SATURDAY, SEPTEMBER 28, 1861.

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EXAMINATIONS FOR SCIENCE CERTIFICATES OF THE COMMITTEE OF COUNCIL ON EDUCATION.—The ANNUAL EXAMINATION of the Department of Science and Art, for Certificates as Science Teachers, will commence at South Kensington, on MONDAY, November 4.

Candidates wishing to present themselves, must forward their names to the Secretary, Science and Art Department, South Kensington, London, W., on or before October 15, except those coming up in Mechanical and Machine Drawing and Building Construction, who must send in their names by October 5.

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News of the Week.

IT is officially announced that the KING OF PRUSSIA will arrive at Compiègne on the 6th of October on a visit to the EMPEROR OF THE FRENCH, and that the KING OF HOLLAND will leave the Hague for Compiègne on the 3d of the month. The report that the KING OF DENMARK would visit Compiègne at the same time as the KING OF PRUSSIA, is said to be without foundation, but a visit from KING LEOPOLD OF BELGIUM is mentioned as probable.

The trial of BECKER for attempting to assassinate the KING OF PRUSSIA took place on Monday at Bruchsal. The jury found him guilty, rejecting the plea of insanity, and the Court sentenced him to be imprisoned for 20 years, and to be banished the kingdom at the expiration of his imprisonment.

An attempt was made on the evening of the 18th to assassinate the QUEEN OF GREECE. A student fired upon HER MAJESTY in the Palace Square at Athens with a revolver, but the weapon missed fire. The assassin was arrested, and declared that he had no accomplices. A proclamation has since been issued by the Ministry declaring that he is insane.

In the sitting of the Upper House of the Reichsrath on Tuesday the Austrian Government withdrew the Bill on compromises in civil cases, both Houses of the Reichsrath having dissented from the views of the Ministry on the subject. An imperial ordinance was published on Wednesday, prohibiting the meeting of the general assembly of the Comitat of Pesth, which was to take place on the 30th September, and threatening to employ force should the prohibition be disregarded. The Comitat of Bahal has declared its adhesion to the protest of the Comitat of Pesth against the dissolution of the Hungarian Diet.

Accounts from Warsaw state that the Administrative Council, on the proposition of the Governor of Poland, has resolved to declare the city in a state of siege should the disturbances be renewed. The clergy, in their sermons, have condemned the recent excesses of the people, and the maintenance of order is now probable.

Baron RICASOLI has addressed a circular to the Italian Consuls on the natural resources of Italy, in which he says that the Government, in aiming at the independence and unity of Italy, wishes to strengthen the peace of Europe; and in disengaging the Church from its temporal pre-occupations, wishes nevertheless to remain devoted to the Catholic religion, and to insure its spiritual independence. It is stated that the first act of General DELLA ROVERE, on entering upon his duties as Minister of War, will be the amalgamation of the Southern army with that of Italy. It is rumoured

that the KING will go to Naples on the 1st January, and will commemorate his visit by a general amnesty. COZZETTO, one of the brigand chiefs, has surrendered himself to the authorities at Naples.

The latest news from Ragusa informs us that the vanguard of the Turkish army, which had pushed on towards Grahovo, had fallen back on Trebigne and Klobuck, in consequence of a bold move of the Montenegrins under the command of VUCALOVITCH. The Porte has since sent fresh instructions to OMAR PASHA, ordering him immediately to commence operations against the Montenegrins.

The first conference on the union of the Danubian Principalities took place at Constantinople on Sunday and was without result, the Porte, England, and France, being in favour of the union, and Russia, Austria, and Prussia against it.

From the United States we learn that the report of President JEFFERSON DAVIS's death is totally discredited. An action was fought on the 10th inst. near Summerville in Western Virginia, between 5000 Confederates, under General FLOYD, and a body of Federal troops, under General ROSENCRANZ. The former held their ground during the contest, but retreated during the night, abandoning a portion of their baggage and ammunition. It is reported that General ROSENCRANZ is advancing against the Confederates, and that Generals FLOYD and WISE are still retreating. General LEE has attacked the Federal entrenchments at Cheat Mountain, but has been repulsed with heavy loss. The Kentucky Legislature has resolved on ordering the Confederate troops out of the State, but has refused to adopt a similar course with regard to the Federal troops. In accordance with this resolution the Governor of Kentucky has issued a proclamation ordering the unconditional withdrawal of the Confederate troops from that state. It is reported that ten Confederate regiments have been withdrawn from Virginia for the protection of the North Carolina coast, to which the Federal Government is about to despatch another naval expedition.

A telegraphic despatch in anticipation of the China Mail announces very grave intelligence from Japan. During the night of the 5th of July a murderous attack was made on the members of the British Legation at Kanagawa. Mr. MORISON and Mr. OLIPHANT were seriously wounded, but the rest of the Legation escaped unhurt, and took refuge at Yakohama. In consequence of these events the English vessels on the China station have been ordered to Jeddo.

Home News.

THE COURT IN SCOTLAND.—On Wednesday the 18th the Queen and Prince Consort, accompanied by Prince Alfred, drove through the Balloch Buie wood, and round by Castletown. The Princess Alice, Princess Helena, and Prince Louis of Hesse, went out riding. On Thursday morning Prince Alfred left the Castle for Liverpool to embark for Canada. In the afternoon the Queen, accompanied by Princess Helena and Princess Louisa, went out riding. The Prince Consort and Prince Louis of Hesse went out deer-stalking. On Friday morning the Queen, Prince Consort, Princess Alice, and Prince Louis of Hesse, left Balmoral on an excursion by Invermark to the Valley of North Esk and Fettercairn, crossing the Grampians into Kincardineshire. From the bridge of Muich the Royal party rode on ponies past Mount Keen, by the Ladder Burn to Glen Mark, where they lunched with Lord Dalhousie. After luncheon her Majesty visited Invermark, and thence drove down the North Esk to Fettercairn, where the Royal party passed the night in Durward's Eagle Inn. On Saturday morning the Queen and Royal family left Fettercairn and returned to Balmoral by the Cairn o'Mount road, the Bridge of Dye and Ballogie; proceeding from Aboyne through Glen Tanar to the Bridge of Muich. In the evening Prince Arthur returned to Balmoral, after having made a tour through the Highlands, visiting Stirling, Loch Lomond, Loch Katrine, Loch Tay, and Blair Atholl, where his Royal Highness honoured the Duke and Duchess of Atholl with a visit. Lord Stanley of Alderley arrived at Balmoral, and succeeded the Duke of Newcastle as Secretary of State in attendance on her Majesty. On Sunday morning the Queen and Prince Consort, with Princess Alice and Prince Louis of Hesse, attended Divine service in the parish church of Crathie. The Rev. Dr. Fowler officiated. On Monday the Queen and Prince Consort, accompanied by Princess Alice and Prince Louis of Hesse, went out driving, and walked home through the Balmoral woods. On Tuesday morning the Queen, accompanied by the Princess of Hohenlohe, Princess Alice, Princess Helena, and Princess Louisa, drove to Alt-na-Guithseack, and rode up to the head of Loch Muich, where her Majesty lunched. The Queen and the Princesses rode back to Balmoral in the evening. The Prince Consort and Prince Louis of Hesse, accompanied by Lord Stanley of Alderley, went out deer-stalking. Prince Arthur went to Loch Callater, and returned in the afternoon. The Right Hon. John Headlam, M.P., Judge-Advocate-General, arrived at the Castle and transacted business with her Majesty.

THE PRINCE OF WALES.—The French and German papers state that a matrimonial alliance is probable between the Prince of Wales and the Princess Alexandrina of Glucksburg, eldest daughter of Prince Christian, heir presumptive of the throne of Denmark, and grand-daughter of the Landgrave of Hesse, the brother of the Duchess of Cambridge. The Prince, it is said, met the Princess at Ostend, and afterwards visited her at the Castle of Rumpenheim, on his way to Prussia. His Royal Highness is now at Coblentz with the King and Royal family of Prussia.

RETURN OF PRINCE ALFRED TO CANADA.—On Friday morning, at 6 o'clock, Prince Alfred arrived at Liverpool from Balmoral by the London and North-Western Railway. His Royal Highness at once proceeded to the Adelphi Hotel, and was shortly afterwards waited on by the Mayor, Mr. S. R. Graves. After breakfast the Prince, with Major Cowell and the Mayor, embarked in the Cunard tender Satellite, and proceeded along the side of the Northern Docks to the great landing stage, where they landed and proceeded in the Mayor's carriage to visit the Docks and warehouses, the School frigate Conway, the Mersey Steel and Iron Works, the Great Float, the Observatory, and other objects of interest on the river. His Royal Highness then returned to Liverpool and visited the Exchange, St. George's Hall, and the Free Library; and in the evening dined with the Mayor at the Town Hall. On Saturday the Mayor breakfasted with the Prince, and shortly after 10 o'clock his Royal Highness embarked in the Royal mail steamer Niagara for Halifax, where he will rejoin his ship the St. George, on the expiration of his leave. His Royal Highness was accompanied by Major Cowell and a servant.

ARRIVAL OF THE GRAND DUKE CONSTANTINE.—Their Imperial Highnesses the Grand Duke and Duchess Constantine of Russia, accompanied by their youthful daughter, arrived at Dover on Tuesday from Calais. Their Imperial Highnesses were received on landing by Baron Brunnow, the Russian Minister; but as the Grand Duke was travelling *incognito* as Admiral Romanoff, there were none of the official marks of honour usually displayed on such occasions. Their Imperial Highnesses remained for the night at the Lord Warden Hotel, and on Wednesday morning left Dover by railway for the Isle of Wight. On arriving at Hastings, the Grand Duke and Duchess alighted at the terminus, and, entering a carriage which had been ordered for them, took a drive along the beach of St. Leonard's and other places in the neighbourhood. From Hastings their Imperial Highnesses proceeded by railway to Portsmouth, where they embarked for Ryde, where carriages were in waiting to convey them to the marine seat of Lord Downes, at Binstead, which the Grand Duke has taken for a term of 14 years.

THE PRINCE AND PRINCESS OF HOHENZOLLERN-SIGMARINGEN.—The Portuguese steam-frigate Bartholomew Diaz, commanded by the Duke of Oporto, with the newly married Prince and Princess of Hohenzollern-Sigmaringen and suite, arrived at Southampton on Sunday afternoon from Lisbon. The royal party left in the evening for London. They were met on board the frigate by the Portuguese Minister, Count Lavradio; the Portuguese Consul-General; the Prussian Chargé d'Affaires and the Secretary of Legation, and the Prussian and Portuguese Consuls at Southampton. The Bartholomew Diaz left on Monday for Gravesend, where their Royal Highnesses embarked on Thursday on their way to Antwerp.

THE LORD-LIEUTENANCY OF DEVON.—It is rumoured that the Lord-Lieutenancy of Devonshire, which has become vacant by the death of the Earl of Fortescue, will be conferred by her Majesty upon Earl Russell.

THE CHURCH.—The Bishop of Rochester has issued a notice requiring from each candidate for ordination a certificate that he has power of voice sufficient for his public ministrations; that he has no impediment or hesitation; and that his manner of reading is not heavy or monotonous, but such as is well fitted for the sacred functions which he will have to discharge. His lordship also requires every candidate to read before him previous to the ordination. This notice was at first stated to be a new qualification for Holy Orders, but it appears that the Archbishop of Canterbury has for many years enforced a similar rule by requiring every candidate to read and preach before him, and that the Bishop of London requires every candidate for deacon's orders to preach a written, and, for priest's, an *extempore* sermon in the chapel of Fulham Palace, before himself, his chaplains, and the assembled candidates. The sermon is from a given text and composed during the hours of examination, and the style and manner of the candidates are freely commented on by his Lordship during the delivery. The Bishop of Salisbury also has always required all candidates to read before himself and chaplains, assembled in his private chapel, some portion of the Liturgy, in order that he may judge for himself whether they are so far qualified for the ministry.

THE IRON-CASED FRIGATES.—The Warrior made an excellent run from the Thames to Portsmouth last week, her average speed having exceeded 11 knots, though her launching gear was still on her bottom. Her engines worked admirably, and the ship herself answered her helm like a yacht. On arriving at Spithead she saluted the Admiral with 15 guns, and the smoke from the guns was scarcely perceptible on her main deck, contrary to the predictions of the alarmists who thought that her narrow ports would keep in the smoke and almost suffocate the men. On Saturday afternoon she was successfully placed in dock at Portsmouth, the operation being carried out with as much ease and regularity as attends the docking of an ordinary frigate. For the next fortnight she will remain in the dry dock for the purpose of removing her launching cleats and cleaning her bottom, and will then start on a cruise to try her qualities in a rough sea. The Black Prince is now in such a forward state that it is expected she will be able to leave the Clyde for Portsmouth in about 6 weeks. The iron-cased ships recently ordered from Messrs. Napier, Laird, and the Thames Shipbuilding Company, are to be named the Northumberland, the Captain, and the Elephant—names once famous in British naval history.

THE CHANNEL FLEET.—Admiral Smart's division arrived at Berehaven on Monday evening from Lough Foyle, and it is rumoured that it will again visit Queenstown. The Trafalgar parted from the fleet in a gale, and on Saturday anchored off Buncrana, in Lough Swilly, to repair damages.

ABOLITION OF PASSPORTS.—Her Majesty's Ministers have received an intimation from the Government of the King of the Netherlands that in future no passport will be required from any subject of Great Britain passing through Holland, any more than is required for any one of the King of the Netherlands' subjects travelling in Great Britain.

Foreign.

FRANCE.—The *Moniteur* of Monday announces in its political bulletin that the King of Prussia will arrive at Compiègne on the 6th of October, and says it appears certain that, almost at the same period, there will be another Royal visit to France. The *Patrie* of Monday evening publishes a despatch from the Hague, announcing that the King of Holland will leave for Compiègne on the 3d of October. It was asserted on Monday that the King of Denmark would be at Compiègne on the 6th of October, to meet the King of Prussia, but the *Pays* says there is no truth in the statement. It is now rumoured that King Leopold of Belgium will pay a visit to the French Court in the course of the month. The Emperor and Empress, with the Prince Imperial, are expected to leave Biarritz for Paris on Monday. It is expected that his Majesty will remain a few days at St. Cloud, and that the Court will immediately after proceed to Compiègne to receive the King of Prussia. During the King's stay at Compiègne there will be grand hunting parties and fêtes, as there were last year, but they will of course be more brilliant, owing to the presence of his Majesty. The *Pays* asserts that the Duke de Magenta will represent the Emperor at the King of Prussia's coronation at Königsberg. The report that M. de Montebello is intrusted with a mission to Rome is contradicted. Count de Persigny has just issued a circular to the various prefects requesting a return stating the name of every writer in the provincial press, the place of his birth, the number and position of his children, the amount of his salary, what degree he took at the university, what are his antecedents, and what his scientific and literary works and honorary distinctions. Several of the editors, when summoned before the police at Marseilles, Bordeaux, and Lyons, refused to answer the questions which related to their private affairs, on the ground that these were questions wholly beyond the province of the Minister of the Interior and his agents. The circular has caused a great sensation in Paris, and the *Siècle*, commenting upon it, remarked that if such questions were put to it, it would have no objection to reply to them, on condition of being allowed to put the same questions to the members of the Government, and obtaining complete answers. "We should be curious to know," says the *Siècle*, "what has been the previous life of these gentlemen, how many opinions they have held, what oaths, how many Governments they have served, &c. Their confessions would be, at least, as edifying as those of the journalists." The *Constitutionnel* now announces on authority that the measures taken by the prefects and the police to obtain the information required were but the "most lamentable result of an error of the bureaux." The Minister of the Interior, in his solicitude for the press of the departments, wished to present to the Emperor some of the most eminent members of it for the decoration of the Legion of Honour, and applied to the prefects for information as to the position and respectability of the principal journalists, but he could not expect that "his benevolent intention would be so badly understood and so strangely acted upon." The *Constitutionnel*, in an article on the speech of the

King of Italy at the opening of the Italian Exhibition, says:—

"It is only the revolutionary and reactionary parties, the Mazzinian on the one hand, and the party of Austria on the other, that demand the immediate evacuation of Rome. Everything will be unravelled in time. France will not have made a useless sacrifice. The unity of Italy will be long-lived and strong, because it is the will of Italy which alone accomplishes it. France solely makes the stranger respect this Italian work. Italy, free from the Austrian yoke, will work out alone the modification of her national existence. France has neither seconded nor hindered the manifestation of the will of Italy. This will has overturned the throne of Naples; and that very respect for the will of Italy renders it imperative on us to wish that the subverted throne may remain in the dust, and that the grand edifice of a united Italy may rise upon its ruins."

M. Dupin, the Procureur Impérial at the Cour de Cassation, presided at the recent meeting of the Agricultural Committee of Clamecy, held at Lormes, and discussed not only agricultural, but political subjects. Referring to the corn law passed during the last Session of the Corps Legislatif, abolishing the sliding scale, he said that it gave the English a facility of supplying themselves with corn from France, but that fortunately for France she was not bound on that question by a treaty of commerce, and that should the price of corn be raised excessively by its exportation, the French Government would find means to remedy the evil. It was not sufficient that the price of bread in Paris was moderate. It must not be too dear in the provinces. Alluding to the Exhibition to be held in London next year, he told the farmers of Clamecy that they are expected to supply their contingent. He had no doubt that they would meet a most cordial reception in London. The English, he added, when they wish to be so, are courteous and even coaxing, and he was certain that everything would be cordial on each side. Nevertheless, he was not satisfied that the English should repeat toasts in which it was proposed to conclude some kind of compromise which would condemn France to have for ever a navy inferior by one-half as compared with the English navy. Frenchmen would never hear such words coolly. He did not know how many ships England would require in order to believe herself in safety—that was her affair. He did not know how many were necessary to maintain the honour and solidity of the French flag, but he feared not to assert that the English should never force the French to adopt a "*formula*" to fix limits to the national independence and sovereignty of France. He added:—

"What! when we saw the English after the Crimean war parade in the Channel and boast of having a navy capable of defying all the navies in Europe united, is it not ridiculous on their part to show themselves incessantly uneasy, timid, and full of pretended terror at the idea that we might, on a sudden, land an army on their coast and place their existence in danger? But if on our part we were accessible to such fear, what should we not apprehend from that fleet double of ours, mounted by their incomparable Volunteers, particularly if it was backed by one of those Continental coalitions which the English have not to dread for themselves and which they excel in preparing against us?"

M. Michel Chevalier has addressed a letter to M. Dupin in reply to this speech, in which he says:—

"If the assertions and the insinuations contained in your speech have any meaning—and all you say always has—they signify that the change of the commercial system of France was desired by England, and that the Imperial Government yielded to the entreaties of that Power, although the result of it must be the disturbance of our national industry; because it has met with French theoricians who have lent their assistance to English practicians. You have forgotten to say what talisman those theoricians possessed in order to make the Emperor's Government do what it did not wish. Your manner of representing facts, is not, it appears to me, very flattering for the Imperial Government, and if it were well founded would do away with the praises which you give it in the same speech for its firmness, its intelligence for the public interest, and its patriotism. The change of the commercial system of France—that is to say, the passage from the most prohibited *régime* that has ever existed under the sun to one already liberal—had been frequently called for prior to 1848, but a strong coalition of private interests had always succeeded in having it adjourned. In a few days hence, on the 1st of October, there will disappear from our tariff the innumerable prohibitions which had been established as a measure of war during the hostile days of the republic and of the first empire, and which manœuvres, not foreign but domestic, had perpetuated unto the present day. A man of good faith, as you are, cannot say that there is anything else in this more than the accomplishment of a measure of public interest, announced years beforehand by the Government in the plenitude of its spontaneity. It is to make a not very patriotic romance of it to represent this important act as the effect of foreign interference. You have, in your speech at Clamecy, pointed out with energy the malevolent words against France made use of by the Prime Minister of England—Lord Palmerston. It is not I who can find fault with this, since I did the same at Montpelier under a different form. From his youth, which dates back half a century, Lord Palmerston has preserved vivacity, activity, and intelligence; but he has also retained a certain number of notions and sentiments with which he too frequently judges the political affairs of the present day, and judges them wrongfully. His lordship is a consummate statesman, who has only one defect, that of being inclined to mix up with the policy of to-day the ideas and passions of 1810 or of 1812. Nothing more is wanting to render him liable to envenom the relations of the two great nations formerly violent rivals, but whose good accord is now as essential for the peace and progress of the world as for their own prosperity and glory. A warning emanating from such an authority as yours may cause Lord Palmerston to reflect; but in order that your speeches may produce that salutary effect, it is necessary to avoid giving to Lord Palmerston the right to reply to you that you have no reason for reproaching him with being actuated by the prejudices and errors of another age, since your political economy is only a reminiscence of the continental blockade."

SPAIN.—The Madrid journals of the 19th inst. state that the Emperor of the French, in order to put an end to the conflict which has arisen between the Cabinets of Madrid and Turin about the diplomatic and consular archives of the ex-kingdom of Naples, has suggested that they shall be placed in the care of the French Ambassador and the French Consuls. The Moorish embassy, headed by Muley-el-Abbas, brother of the Emperor of Morocco, has arrived at Madrid. The *Gazette* publishes a letter addressed by Marshal O'Donnell, Minister of War and the Colonies, to the Captain General of Porto Rico, declaring, in principle, that a slave who has touched the soil of Spain must be considered as emancipated, even without the consent of his former master. The frigate Patrocinio has been launched, and two other frigates will be launched shortly. The annual bull fights have commenced. The concourse of people was very great, and 70 persons were wounded in the arena.

PORTUGAL.—The marriage of the Princess Antonia of Portugal, with Prince Leopold of Hohenzollern-Sigmaringen, was celebrated on the 12th inst. with great pomp and ceremony. The nuptial service took place in the Chapel Royal, where there was a family banquet in the evening. On the 17th inst. the prince and princess embarked for Southampton on their way to Germany.

HOLLAND.—The Minister of Finance has submitted to the Chamber of Deputies the draught of the Budget for 1862. The redemption of the public debt is postponed until the proposed junction of the rivers with the sea, by means of canals, and the emancipation of the slaves in the Dutch colonies have been carried out. On Friday, during the discussion on the Address in reply to the King's Speech, the Minister for Foreign Affairs stated that the Government had recognised Victor Emmanuel as King of Italy, and had already announced this act in the official *Gazette*, in the same manner as when Holland recognised the present Emperor of the French. The Minister further said,—"If in the Speech from the Throne the King was silent on this point, it was only because he wished, in case of difference of opinion, to avoid wounding the susceptibilities of some of the members of the House."

SWITZERLAND.—M. de Turgot, the French Minister, has handed to the Federal Council another note from his Government in reference to the affair at Ville la Grand, wherein the latter adheres to the statements contained in its previous note, the accuracy of which had been contested by the Federal Council.

SAXONY.—The official *Dresden Journal* of Saturday says that the assertion of an English morning paper that Saxony had objected to the commercial treaty with France is false and one-sided. Saxony agrees perfectly with Prussia on this question.

NASSAU.—Three young Englishmen have just experienced at Wiesbaden a denial of justice somewhat similar to that which occurred to Captain Macdonald and others at Bonn last year. On Sunday, the 1st inst., three young Etonians who had lately arrived from England, and who wore their English dresses, when taking a walk in the neighbourhood of Wiesbaden, were followed by some boys of the place, who hooted and "chaffed" them because they wore hats, and ended by attacking them with stones. After being pelted for some time one of the younger English boys returned the fire. Just at this time a portly German passing by seized the eldest of the English boys, who had taken no part whatever in the affair, and beat him so violently with a thick cane over the head and shoulders that his hat was completely destroyed. The boy desired his youngest companion (a mere child) to return and fetch the police, telling his assailant at the same time that he and his brother would follow him wherever he went. They did so for five miles into the country, though repeatedly threatened, until they ran him to ground at a *restaurant*. They then returned to Wiesbaden, and, having procured the assistance of the police, the German was at once identified as a person named Ritzel, a grocer and wine merchant of Wiesbaden. The father of the boys having then lodged a formal complaint with the authorities, M. Ritzel was summoned to appear at the Palais de Justice on the following Saturday, and the complainant was directed to appear and substantiate his charge. The father accordingly attended at the appointed hour, but on being shown into a small room he found that the case had been commenced before his arrival, and the defendant was at that moment in the act of making a statement, which was taken down in writing, and which turned out to be at the same time a denial of his having been the aggressor, and an allegation that in striking the blows he had merely inflicted a well-merited punishment. The complainant recounted the actual circumstances of the case, showing that the assault was unjustifiable and unprovoked, and besides producing the battered hat, brought forward the boy himself, whose back and arms still afforded ample evidence of the savage nature of the attack made upon him. The magistrate said that it appeared to him that there was no evidence upon which he could convict, as it was simply statement against statement. This remark led to a rather irregular conversation, in the course of which the father, having observed it was a cowardly act on the part of a man like the defendant to beat a young boy who had given no offence, and was unable to defend himself, the defendant demanded that a note should be made of the observation, and appealed to the magistrate to give him redress for the insult. The judge retired to deliberate on the whole case, and presently returned with a sentence that the German should pay seven florins for the assault, and the Englishman six florins and a half for designating the conduct of the German as cowardly.

BADEN.—The trial of Becker for attempting the life of the King of Prussia took place at Bruchsal on Monday. The prisoner, on being interrogated, declared that the pistol was not loaded with ball, and that it was the wadding only which injured his Majesty. His intention was only to frighten the King and to provoke a movement favourable to German unity, and it was quite by mistake that he took a loaded pistol. On being pressed by the Judge, he admitted that his ideal was Orsini, and that he hoped the consequences of his deed would have been similar to those which followed the attempt on the Emperor Napoleon. The whole speech of Becker was very confused. The jury found him Guilty, and denied that his state of mind was such as to render him irresponsible for his actions. The Tribunal then sentenced the prisoner to 20 years' imprisonment in the House of Correction, and at the expiration of that time to be banished the kingdom. The prisoner merely smiled when this sentence was pronounced. Some of the German papers deny that the prisoner is a German, and assert that he is a Russian, being the son of M. Paul Adam Becker, Director of the Lyceum of Odessa, and State Councillor of the Emperor of Russia. They state that he was born at Odessa in 1839, and only entered the University of Leipsic in 1859. His chief employment during his residence in that city was translating Russian works into German.

PRUSSIA.—The Municipal Council of Berlin has voted the sum of 100,000 thalers to be presented to the King of Prussia on his solemn entry into the capital after his coronation. The money is to be applied to the construction of a sloop of war.—Councillor Twesten was sentenced on Tuesday to three months' imprisonment, the *minimum* punishment allowed by law, on account of his duel with General Manteuffel.

AUSTRIA.—In the sitting of the Upper House of the Reichsrath on Tuesday, the Government withdrew the Bill on compromises in civil cases because both houses of the Reichsrath dissented from the views of the Government on the subject. The state of things daily becomes more critical, and a crisis seems imminent. The Municipal Councils have neither power nor confidence, and the citizens are full of apprehensions for the future. A ministerial crisis is said to be probable, and it is currently reported that Baron Forgach, Aulic Chancellor for Hungary, has resigned. The report of a proposed meeting of some members of the Reichsrath with the leading members of the Hungarian Diet is said to be without foundation. The Archduke Maximilian took part in the last Ministerial Council in reference to the War Marine, a considerable increase in which may be anticipated.

HUNGARY.—An Imperial ordinance was published on Wednesday prohibiting the meeting of the General Assembly of the Comitat of Pesth, which was to take place on the 30th of September, and threatening to employ force should the prohibition be disregarded. The Comitat of Bahal has declared its adhesion to the protest of the Comitat of Pesth against the dissolution of the Hungarian Diet. On Thursday the Custom-house officers of Pesth, having seized some smuggled tobacco, the informer (a woman) was furiously pursued by the people. The gendarmes and military, who afterwards came up, were received with hisses and derisive cries. The military made use of their arms, and several people were wounded.

RUSSIA.—It is reported that the Emperor will extend his tour to the Caucasus. The two Russian ships of war that composed the squadron of observation on the coast of Syria, have been recalled to the Baltic.

POLAND.—A letter from Warsaw of the 14th announces that the state of siege had been proclaimed at Wilna, Grodno, Bielsk, and Brzec-Litewski; and in the Government of Kowno. On the proposition of the Governor of Poland, the Administrative Council of Warsaw has resolved to declare the city in a state of siege should the disturbances be renewed. On the 19th the clergy in their sermons condemned the recent excesses committed in Warsaw. The maintenance of order is now probable. The municipal elections commenced on Wednesday. In two of the electoral districts of Warsaw they resulted in the return of M. Andre Zamoiski, canon; M. Vysynski, shoemaker; M. Hiszpanski, and General Lewinski, as councillors: and Dr. Hallubinski, M. Otto, Protestant minister; M. Szpadkowki, master mason; and M. Grabowski, merchant, as vice councillors. Much excitement prevailed during the elections; but order was not disturbed. The inhabitants of Warsaw have published an address to their brethren in the Russian, Austrian, and Prussian provinces, giving a detailed statement of Polish grievances, and insisting on the duty of self-reliance and moral control, as there is no hope whatever from the Government. It says:—

"Let us reject luxurious and dissolute living and all useless gaiety. Let us dress in black as a sign of the affliction in which we are plunged; let us dress in Polish costumes, but without persecuting those who wear other costumes. Let those who understand foreign languages, especially German and Muscovite, speak them to no German or Muscovite on Polish soil. You must avoid bad men, and all such as pollute themselves by taking service under the Government. Drive them away from your circle; nobody must abase himself and injure his country unpunished. Instead of seeking for bread in the army, or in any vile service, seek it in industry, agriculture, commerce, and other honest occupations. Let us not spend our money uselessly; but let us give it willingly for patriotic purposes, for supporting the poor, for arms, and for Polish books and pictures."

GREECE.—On Wednesday evening the 18th, at 9 o'clock, a student fired at the Queen of Greece in the Palace Square. The weapon, however, missed its aim. The assassin was arrested, and is a young man named Durios, 17 years of age. The weapon he used was a revolver. On being arrested, he declared that he had no accomplices. The Queen displayed great coolness, and visited the Arsenal on the following day. General indignation is felt at this attempt. A proclamation was issued by the Ministry on Wednesday declaring that the assassin is insane.—The official journal says the state of trade at Athens is far from satisfactory, owing to the numerous heavy failures which have lately taken place. It states that several of the bankruptcies were premeditated, and promises that the guilty parties shall be punished in an exemplary manner.

ITALY.—The King will prolong his stay at Florence, and will not return to Turin until the 12th of October. It is rumoured that his Majesty will go to Naples on the 1st of January, and will commemorate his stay there by a general amnesty. It is believed that the first act of General Della Rovere, on entering upon his duties as Minister of War, will be the amalgamation of the Southern Army with that of Italy. The Official *Gazette* of Wednesday publishes a circular addressed by Baron Ricasoli to the Italian Consular agents, in reference to the natural resources of Italy, of which the following is an abstract:—

> "The national flag, to which Venice is still wanting, covers 800,000 tons of shipping, manned by 100,000 sailors. The international engagements of Sardinia are the only ones which are valid in Italy, and the treaties of the former Italian States are to be considered as abolished. The Consuls have no political duties. They must nevertheless endeavour to exercise their influence according to the views of the Government. They must support the policy of the Government, which, in aiming at the independence and the unity of Italy, wishes to strengthen the peace of Europe; and which, in disengaging the Church from its temporal pre-occupations, wishes nevertheless to remain devoted to the Catholic religion and to insure its spiritual independence."

An address has been presented to Garibaldi numerously signed by Italian citizens, conjuring him not to quit Italy, and representing that the unity of the kingdom is not yet accomplished, and that he alone can complete the work. The address asks him to believe that the people of Italy would not show themselves unworthy of him, expecting to be led by him to Rome. The rumour that General Cialdini will be replaced at Naples by General Fanti as military governor, and the Marquis di Villamarina as civil governor, is not confirmed, but the *Opinione* states that a new law on the internal administration of the country, shortly to be published, will abolish the office of Lieutenant-General, when the functions of General Cialdini will naturally cease. General della Rocca will represent King Victor Emmanuel at the coronation of the King of Prussia. The *Opinione* anticipates the recall of Baron Tecco, on receipt of an official intimation from him of the fresh refusal of the Spanish Government to deliver up the archives of the Neapolitan Consulate. The celebrated tragic poet Nicolini died last week at Florence, and was buried on the 21st by torchlight in Santa Croce, the funeral being attended by some of the most eminent men from every corner of Italy. On Tuesday and Wednesday some turbulent demonstrations took place at Bologna, caused by the high price of provisions. Several of the ringleaders were arrested. The authorities have taken precautionary measures. The streets are traversed by strong patrols, and tranquillity is now re-established. The railway between Bologna and Rimini will be inaugurated at the commencement of October.—A ship laden with arms has been seized. It is believed that the arms were destined to fit out an expedition in Umbria against the Papal provinces. The Sacred Consulta at Rome last week condemned to death a man called Lucatelli, charged with the murder of the Papal gendarme whose death gave rise to the Merode-Goyon squabble. The Consulta recommended Lucatelli to the clemency of the Pope, on the ground that the trial had not furnished complete proofs of his guilt. The Pope declined to attend to the recommendation, and the man, who declared himself innocent, was executed at Rome on the 21st inst. A Roman emigrant at Florence called Castrucci, has now given himself up as the real author of the crime, of which he says Lucatelli had been wrongly convicted. This statement was at once forwarded to Rome, but unfortunately it arrived too late. Accounts from Naples state that the French troops at Veroli have surprised a band of brigands who were about to convey arms and money to Chiavone. They arrested the chief of the band, who was wounded. The band of brigands commanded by Capriano has regained the mountains of Avella. Cozzetto, one of the brigand chiefs, has surrendered himself to the authorities at Naples. The Bishop of Mileto, in Calabria, has been convicted of conspiracy with the brigands, and condemned to six months' imprisonment and a fine of 1000f. The news of the landing of Borghese in Calabria is contradicted. It is asserted that the disturbances in the Neapolitan provinces have caused a loss to the revenue in the last six months of 14,000,000 ducats. General Cialdini has addressed a letter to the Provincial Council of Aquila, in which he says, that "when he came to Naples to assume the lieutenancy a mischievous faction had plotted the ruin of the unity of Italy, and it was necessary to repress its movements by vigorous measures. But now that this faction is vanquished, confidence revives, and it becomes possible to inaugurate an epoch favourable to the free development of the strength of the nation." General Cialdini has also addressed a letter to the Municipality of Naples, rebuking them for wasting time in useless debates, and neglecting the real work required of them. After stating the many wants of the city, particularly a system of cleaning the streets, the General says:—

> "Naples has need of nightly scavengers and carters for the cleanliness of its streets; it has need of water, of easier communications, and of more convenient and open thoroughfares. Though these things may appear novelties at Naples they have all been accomplished elsewhere; we are not proceeding in the dark; you have only to imitate examples that have been set you on every side. My character and the uniform I wear compel me to speak with the utmost frankness, and consequently I must inform you that it is generally believed in the city that you have occupied several of your meetings by mere questions of words. It would be well if the situation of the country permitted such an employment of time; Italy would wear the aspect of a happy Arcadia. But, under present circumstances, discussions on language and grammar have little interest. It appears to me that there are graver questions to be considered. The treasure of the epoch is time; the nation is a jealous guardian of it, and demands a strict account from the Government, from the Municipalities, from all the authorities, of this its precious capital, which must not be frittered away or lost It is not sufficient to do, but to do at the moment. To-day the progress of facts must follow close upon ideas: to-day the impatience of the public is imperatively great; the generation which created the locomotive and electric telegraph cannot, will not, proceed slowly. Action, if it appears new here, is old elsewhere."

TURKEY.—The *Moniteur* says that the negotiations between the Porte and several other Powers, for the conclusion of treaties of commerce in conformity with those which have been signed between it and England, France, and Italy, not yet having been terminated, the Porte has requested that the application of the treaties of commerce with the latter Powers, which had been fixed for the 1st of October next, should be postponed until the 13th of March, 1862. France has acceded to this proposition.

THE PRINCIPALITIES.—The first conference on the union of the Danubian Principalities took place on Sunday at Constantinople. The Porte, England, and France were in favour of, and Russia, Austria, and Prussia opposed to the union. The conference thus remains without any result.

MONTENEGRO.—The vanguard of the Turkish army, which was at Zaslap, and extended towards Grahovo, fell back on the night between the 16th and 17th inst upon Trebigne and Klobuck. This appears to have been caused by a bold movement of the insurgents, under the command of Vucalovitch. Omar Pasha made a strong reconnaissance from Trebigne on the 21st inst., and ascertained that the Montenegrins had thrown up redoubts before Grahovo, but had made no preparations for assuming the offensive. The Porte has since sent fresh instructions to Omar Pasha, ordering him immediately to commence operations against the Montenegrins. The Porte is about to send a reinforcement of 2000 men to the Pasha. The Russian corvette Soyal arrived off Ragusa on the 22d inst. A conference was to be held on Tuesday at Cettigne on the subject of a suspension of the blockade. The Prussian and French Consuls had left Ragusa for Cettigne, in order to take part in the conference.

ALBANIA.—Five Turkish war steamers, with troops, are on the way to Albania. A meeting has been held by the principal Albanian chiefs in order to decide on their course of action in the struggle between the Turks and the Montenegrins. It is believed that they will proclaim a neutrality.

SYRIA.—A despatch from Beyrout to the 15th inst. states that the claims of indemnity to the Christians for their losses during the massacres are being rapidly decided. The Turkish Commissioner, who at first estimated the compensation at 75,000,000 piastres, has consented to increase the sum to 100,000,000.

EGYPT.—The Viceroy of Egypt arrived at Alexandria on the 22d inst., and immediately on his arrival ordered preparations to be made for another voyage, which he intends to undertake in the course of next month. It is rumoured that he will visit France and England.

INDIA.—By the Overland Mail we have accounts from Bombay to the 27th ult. The following is a summary of the news:—

Calcutta.—A resolution of the Governor General in Council on the *Nil Durpan* case has been published. Mr. Seton-Karr is dismissed from the secretaryship to the government of Bengal for abuse of the office and power entrusted to him; and has resigned his seat in the Legislative Council under circumstances which are a virtual dismissal. The lieutenant governor is severely censured for not animadverting in proper terms on Mr. Seton-Karr's abuse of office. The Governor General in Council has offered prizes for the production of cotton during the two next years, and has authorised an expenditure of a lakh of rupees for the purchase of articles for the International Exhibition in 1862.

Bombay.—The Bombay, Baroda, and Central India Railway is open from Surat to Bulsar, a distance of 45 miles.

Cabul.—The Ameer of Cabul is reported to be very ill. There has been some fighting between the chiefs in his territories, and Central Asia may ere long be involved in conflict and confusion.

Agra.—The investiture of the Knights of the Star of India is to be held by the Governor General at Agra next October. The entire distance from Calcutta to Agra may now be travelled by railway.

North West Provinces.—The cholera, which has been raging in the north-west, and with special virulence and fatality at Delhi, Meerut, and other large towns, has now abated.

CHINA.—Accounts from Canton of the 12th August state that the Prussian Minister has failed to obtain a treaty from the Chinese Government. The rebels are reported to be approaching Shanghai with an army of 100,000 men. Nankin is still closely invested by the Imperial troops. The port of Tai-Wan-Foo in Formosa has been opened under the treaty. Mr. Swinhoe has been appointed British Vice-Consul there. The Chinese Customs and the working of the new treaty cause great dissatisfaction to the whole mercantile community, and the Chamber of Commerce has summoned a meeting to consider the question. The Emma is reported lost. The Manila, Rajali (?), Drusan, and Cosmopolitan are aground in the Yangtze River. The neighbourhood of Canton is flooded.

COCHIN CHINA.—The neighbourhood of Mitho has been devastated by pirates, who were, however, afterwards attacked and beaten by Admiral Charner. Tranquillity has now been re-established.

JAPAN.—An attempt was made at Kanagawa by a band of armed assassins, on the night of the 5th of July, to murder all the inmates of the British Legation. Messrs. Oliphant and Morison received severe wounds, the rest escaped unhurt, and took refuge at Yokohama. All was quiet on the 21st of July, but the foreign community were very uneasy. Mr. Alcock was still at Jeddo. The Reindeer was at that place, and the Actæon, the Algerine, and two gunboats were at Yokohama. In consequence of these events, the English vessels on the China station have been ordered to Jeddo. The Japanese Government affect great anxiety for the foreign residents at Kanagawa. The Russian line-of-battle ship Swellana, of 100 guns and 800 men, has been lost on the coast of Japan. All the crew are said to have perished.

UNITED STATES.—Baron Stoecke, the Russian Minister at Washington, has had an audience of President Lincoln, to whom he read a long despatch transmitted to him by Prince Gortschakoff, of which the following is a summary:—

> "The Emperor of Russia regrets that his hope of a peaceful solution of the differences between North and South has not been realised, and considers that the struggle may be indefinitely prolonged. The American nation would give proof of high political wisdom by seeking a settlement before a useless effusion of blood takes place, and the abyss between the contending parties is deepened, all ending definitely in mutual exhaustion, and probably in the irreparable ruin of commercial and political power. In conclusion, the Emperor urges Baron Stoecke to use his influence for a reconciliation, not only because the Union is, in the views of Russia, an essential element in the general Balance of Power, but because Russia and America, placed at the extremities of two worlds, appear called to a natural community of interests and sympathies."

Mr. Seward has sent a short despatch in reply to the above, expressing the satisfaction felt by the Federal Government at this new guarantee of the friendship between America and Russia. The Emperor's letter has caused a great sensation in diplomatic circles. The reported death of President Davis is totally discredited. An action was fought on the 10th inst., near Summerville, Western Virginia, between 5000 Confederates, under General Floyd, and a body of Northern troops, under General Rosencranz. The former were strongly posted, and held their ground during the contest, but during the night retreated, abandoning a portion of their baggage and ammunition. The loss of the Federals is reported to be slight; that of the Confederates could not be ascertained, as they removed their killed and wounded. It is reported that General Rosencranz is advancing against the Confederates, and that Generals Floyd and Wise are retreating. The Federal entrenchments at Cheat Mountain have been attacked by General Lee who was however repulsed with heavy loss. The Confederates are slowly advancing on the Federal lines in Virginia. This strengthens the belief that a great battle will soon be fought. An impression however is gaining ground at Washington that the Confederates will await an attack from the Federals. It is reported that ten Confederate regiments have been withdrawn from Virginia for the protection of the North Carolina coast. It is rumoured, but the rumour is discredited, that General Fremont has been superseded on the ground, it is supposed, of having exceeded his authority in issuing the proclamation respecting the slaves owned by insurrectionists in Missouri. During a skirmish near Elk-water Colonel John Washington, of Mount Vernon, was killed, fighting on the Southern side. The Kentucky Legislature has decided on ordering the Confederate troops out of the State, but has refused to adopt a similar course with regard to the Federal troops. The Governor has issued a proclamation ordering the unconditional withdrawal of the Confederates, who appear on the other hand determined to hold their position in the State, as by the last accounts there were 15,000 at Columbus and 50,000 (5000?) at Hickman. Large numbers of persons continue to be arrested. Mr. A. S. Sullivan, a New York lawyer, was one of the latest victims. On the 13th, at daybreak, the Provost-Marshal of Baltimore arrested Mayor Brown, Messrs. Ross Winan, C. H. Pitts, S. Sanger, S. T. Wallis, and D. Scott, members of the Maryland Legislature; F. K. Howard, editor of the *Exchange*; Messrs. Dennison, Quinlin, and Dr. Lynch, members of the Legislature from Baltimore county; H. M. Harris, Dr. J. H. Anson, Thomas and J. C. Brune, members of the Legislature for Baltimore city; and T. J. Hall, jun., editor of the Baltimore *South*. Mr. Thomas S. Serrill, who was arrested a few weeks back on suspicion of active sympathy with the Secessionists, had been released under bonds, the testimony against him having been deemed insufficient. The crew of the United

States revenue cutter Jackson have refused to take the oath of allegiance to the United States Government, and have been arrested. The greatest activity prevails in the Federal navy departments, and it is rumoured that an additional expedition to the Southern coast will be inaugurated immediately. The Federal Government has forbidden the transfer agents of the New York Central Railway to transfer dividends on stock to owners in the South. A Mississippi regiment at Leesburgh had revolted, broken their muskets, and started home. One company of the New York Rifle Regiment has attempted to desert. They were fired upon, and two men were killed; the remainder were arrested. A soldier declared guilty by court-martial of having been found asleep on his post, and sentenced to death, had been pardoned by General M'Clellan, on the intercession of the President. General M'Clellan has issued a special order for the observance of the Sabbath among the military forces around Washington, and requesting that no unnecessary movements should be made on that day. The intended despatch of further troops from England to Canada had excited considerable comment. By a telegraphic error in the despatch the announcement that the troops would number 2500 men was printed in the New York papers 22,500. A report that the privateer Sumter had been permitted to coal at Trinidad with the approval of the Attorney-General has also caused a great outcry against England. The late General Lyon, of the Federal army, has bequeathed all his property, worth 30,000 dollars, to the Government of the United States. An outrage was perpetrated upon the Hannibal and St. Joseph Railroad, in Missouri, on the 3d inst. The timbers of one end of the bridge over the Platte River were burnt in such a manner that when the passenger express train bound west was passing over it, it fell through, the engine turning over it, and the baggage, freight, mail, and two passenger cars being piled on top. Every person in the train was more or less injured, and several were killed. The perpetrators of this outrage had not been detected. Another attempt to destroy the Union troops travelling in Northern Missouri had been made at Mexico, by partially burning the timbers of a bridge. The design was discovered, and the train was stopped. The Prince de Joinville has arrived. He has declined the reception which was offered him by the Government.

CANADA.—Prince Napoleon had paid a visit to Canada, and met with an enthusiastic reception in Quebec and Montreal.

CUBA.—Vessels sailing under the Confederate flag are admitted into the port of Cuba on the same footing as the vessels of other nations, but without their nationality being recognised.

MEXICO.—It is announced that the terms of a treaty between the Queen of England, the Emperor of the French, and the Queen of Spain, are in course of arrangement for an immediate intervention by the combined forces of the three Sovereigns in the affairs of Mexico. The intention of the Allies is to send a combined naval force into the Gulf of Mexico to blockade and sequestrate the customs revenues of the ports of Vera Cruz, Tampico, and other places on the Gulf. It is understood that the consuls of the three Powers will collect the customs duties at each port, and after setting aside about 50 per cent. to meet the claims of their respective nations, will pay over the balance to the Mexican Government. This arrangement will continue until all claims shall have been discharged. It is stated that the Government of the United States has been informed of the intended intervention, and will not oppose the plans of the European Powers.

Public Addresses.

THE EARL OF ELLENBOROUGH presided at a dinner given on Friday last by the Gloucestershire County Rifle Association to Earl Ducie, the Lord Lieutenant of the County, in recognition of his services to the Volunteer cause, and in proposing the toast of the Volunteers, made the following remarks on National Defence:—

"When we speak of the Volunteers as a body, let us recollect how they were originated. They originated not with the Government, but with the people. They originated in the intuitive perception of a coming danger entertained by the people, in which they were not led by the Government, a danger which might possibly have been unseen by the Government, but against which the Government had certainly taken no precautions—perhaps they could not. That movement, begun by the people, has been continued by the people. It is at the present moment unimpaired, and I most earnestly trust that the whole country will show in the maintenance of that force that perseverance which is one of the first of public virtues, and also the first of military virtues. Without that perseverance in its support—if there be any lukewarmness or any falling back, depend upon it we shall make things worse than they were when that force was established, and bring on at an accelerated pace the very evil it was formed to avert. We have met here this week to bestow honours and prizes on persons of the Volunteer force who have distinguished themselves in shooting, and a most excellent object it is; but I think my gallant friend, Col. M'Murdo, will tell you that troops disciplined—discipline even with inferior accuracy of aim on the field—are of more value than the most perfect accuracy of aim without discipline. No troops are of real value to a general unless he can move them where he pleases; unless he can place them in positions which he knows they will defend without assistance; unless he can rely on them entirely; and my gallant friend also knows that no man could do this if his troops have not discipline. I recollect the gallant Sir Charles Napier, who knew better than any man of his day, saying 'Enthusiasm runs away.' This is rather a strong expression, although we have seen something of it in America. But at the same time it occurred where the men possessed great courage, and had the greatest possible accuracy of aim; and yet they ran away because they had no discipline. Now, I speak to soldiers, and you know it; you are perfectly well aware that the great and improved range of artillery and rifles, and the greater accuracy in the use of those weapons of destruction, make great changes necessary in the movements of the troops in the presence of the enemy. It is impossible to bring them near to the enemy in masses without being destroyed if exposed to the fire of their rifled guns. The victory is won if you bring the enemy near enough to pound him with your rifled guns. It is therefore absolutely necessary in future warfare, partly by taking every possible advantage which genius points out—for books of practice don't teach—of every peculiarity, of every accident of ground, but above all, to cover the advance of the masses which are to strike the decisive blow by the bayonet by an impenetrable line of fire that conceals their movements. If you do not do that, you may fight well, but you cannot win the victory. That must be obtained not by assembling in companies, but in battalions, and even brigades, and it is only, I fear, by the assistance of the Government that the Volunteers can obtain a proficiency of movement in the field that will make them of use to a general. I do trust, therefore, that the Government, aware of the fact, will in the next Session of Parliament take measures for the purpose of giving the Volunteers that efficiency. Gentlemen, I cannot express in terms sufficiently strong how absolutely essential I think it is to give the greatest possible efficiency to the Volunteers in masses. It is idle, however, to conceal it from ourselves that we have no certain superiority at sea. More than that, even if we had, the discovery of steam and its application to navigation renders the calculation in the movement of fleets nearly as certain as combinations in the movements of troops, and this will give power to a foreign nation to effect an invasion if it is determined to do so, running all risks. We must consider, then, that not only is invasion at all times possible, but that under certain circumstances it will take place, and the battle will be decided by fighting on the soil of England. Now, it is not enough that we have a force able to repel any enemy that may attack us, but we ought to have a force able to deter an enemy from making an attack. You see detailed in the newspapers what three months of war has produced in America. We see how all commercial transactions have been paralysed, how all the relations of society have been destroyed, and how complete is the disruption throughout that country. What would the effects of war be in England, where we are in a more artificial state? What would be the effect here of the presence of a foreign army even for a fortnight? The cost of the presence of a foreign army, even for a fortnight, would be greater even than the amount of a year's revenue. I assume that it is absolutely necessary to be prepared, be the cost what it may, and I know that any honest man who applies his mind to the purpose of the reduction of useless and crotchetty expenditure may find the means of paying for the preparations necessary to our existence, without imposing any further taxes. I say that, cost what it may, there must be found means of giving efficiency to the Volunteer force; it must be given, for without it the country is not safe. I rejoice in the existence of this force, and I rejoice also in the revival of that ancient spirit which prevailed in distant times throughout this country. The rifle has taken the place of the bow. There are butts in every town and in every village; and, more than that, you see the companies and battalions now formed, as in ancient times, composed of the men who gained the great victories to which we look back with so much pride. The country gentlemen are now at the head of the movement, as they were, and as they should be, and the men in the ranks know these gentlemen not only as their officers, but also as individuals. The Volunteer force is a band of brothers which must succeed under any difficulty to which it may be exposed. I do hope that the country gentlemen, and every one of those who have assumed the military dress, and have taken on themselves the responsibility of commanding men in the field, will adhere to their first determination, and endeavour to make themselves capable of performing all the duties of their position, and so return the confidence of all who serve under them. I feel that I am speaking in the language of the constitution of this country, and I assure you I speak the language dictated by the feeling of every gentleman engaged in this movement, when I say in all times, and in all circumstances, but more especially in the circumstances which portend danger, the proper position of every gentleman is in the front of the battle. You understand, therefore, what your mission is as Volunteers. It is so to perfect yourself in discipline as to be able to throw an impenetrable veil of fire before the movements of the regular troops by whom you are supported, to enable them by acting with the decisive bayonet, the favourite weapon of your country, on the ranks of the enemy, to obtain the victory. Gentlemen, I congratulate you on your adoption of the military profession. It is the first of all professions. The first profession I have always considered is that of the soldier, and the first of all rewards is military honour."

THE RIGHT HON. SIR GEORGE GREY, the Home Secretary, attended a meeting at Bedlington on Friday, to assist the purchase of a piano for the use of the school of the parish, and spoke as follows on the state of the country:—

"We lived in an age which gave us much cause for thankfulness that we did live in it. We lived in an age in which comforts and enjoyments were greatly multiplied, and in which science had made such rapid strides as to add greatly, not only to the national wealth, but to the enjoyment and comfort of the humblest families in this kingdom. He alluded to the security of the country, to which the most useful branch of industry connected with their coal mining so largely conduced; and he alluded in that to our great navy, which had been the strength of this country, and which, he trusted, would always continue to be its strength and defence, keeping far from our shores any invading foe. That navy was propelled almost exclusively by steam, coal being the means by which they were enabled to produce that mighty power, which carried not only our merchant ships all over the ocean, conveying the produce of our country to the most distant lands, and bringing back the products of those lands, but propelling our magnificent line-of-battle ships, which were destined, he hoped, in case of need, to be that defence to our shores which they had ever been. He had never been more struck than when looking into the hold of one of those magnificent ships, and seeing the enormous and beautifully constructed machinery, and seeing that enormous mass floating idly at the moment in the water, but capable of being propelled at a most rapid speed, and sailing in the most tempestuous seas with that mighty power to which they, who were engaged in the production of coal, were contributing by their daily industry. He alluded to that, because those who were living in that village—he could hardly call it very secluded, but still, if that term was to be applied to it, those who lived in it and were occupied in the daily routine, might sometimes not be aware how much they were fulfilling their duties in the sphere in which they were placed, not only by the discharge of their duties to their families, providing them with the means of an honest subsistence, obtaining those comforts and enjoyments which he hoped many of them were able to possess as the results of their industry, but how they were component parts of the nation's greatness, and what reason they had to be thankful for those mercies and shows which God had given them, and which they were enabled to use so as to enable that nation of which they were a part to occupy the proud position which it did occupy among the nations of the earth. And those were only material advantages. They had a higher existence than that which they were leading here on earth; and it was highly pleasing to witness them within that room, devoted to the most important object of secular and religious education, without looking higher than those mortal interests which came home to them at every moment of their lives, and remembering that they were immortal beings, and appreciating—as he trusted the large assemblage he then addressed did—those advantages which they possessed in the moral and religious privileges which were afforded to them through the institutions which existed in that parish, and, he trusted, in every parish which existed throughout the kingdom. Again, he said, they had reason to be thankful that they lived in this day, because, contrasting the present period with that of 100 years ago, they possessed advantages infinitely greater than their ancestors then possessed. They saw schools arising throughout the land, and not empty schools, to be merely permitted to say, "There's a school in the parish," but schools thronged with children of industrious parents, who were anxious to give their children a good sound education, which would enable them not only to make their way in this world, but to understand and fulfil their duties not only to their fellow-men, but to God himself, and to prepare themselves, as immortal beings, for that future world to which they were all hastening. The chairman had alluded to the intemperance which prevailed, in bad one, but not so many years ago. It was a most gratifying circumstance that that habit of intemperance had greatly, he hoped, diminished; and he had a hearty sympathy for those who, by any means which they thought were likely to effect their object, were endeavouring to wage a war against a habit—he would call it sin—which was the fruitful parent of misery and crime. But he must say that he had much more faith in the counter attraction of good schools, of meetings like the present, of reading rooms, and of innocent, useful, and instructive amusements and occupations, placed within reach of the masses of the community, than he had in any legislative restrictions and prohibitions. He believed there was a marked difference in the rising generation compared with former times, and he hoped they would have shown to their children good examples, and those examples would be improved upon; and the sin of intemperance would be counteracted by those means which were now made use of generally for the moral, religious, and social improvement of the country. Another thing which he thought they had reason to be thankful for was the improved homes of the people. Now it was impossible to travel through the mining districts of this country without seeing the great improvement in the new houses of the pitmen as compared with the old ones. With reference to himself, there were a great many Northumbrian men, and he believed there were some present, who would cover more ground than he did. But a word must be said for the Northumbrian women. He believed it had been well said that many of the greatest men in this country had owed their greatness, as far as their natural talent, education, and training were concerned, in a great degree to their mother; and he believed it was to the women of England that they were to look chiefly for the improved character of the rising generation. Now, he was reminded of this by alluding to the homes of the people, because if they gave a woman a good home to live in, he believed she would take care that it should be made a comfortable home for her husband and for her family; and the number who were present on that occasion showed the interest they had in the proceedings of that evening, and how much they were disposed to appreciate the advantages which were held out to them in that place. He could only say that he sympathized most cordially and earnestly with all the efforts that were made for the good of those who dwelt in that district; and he was delighted to know and to feel that the improvement that was going on was effected in a great measure through their own doings. There was an admirable book, published not long ago by the author of the "Life of George Stephenson," called "Self Help." It was by helping themselves and using their own exertions that they must look for their improvement; and he must say that from the advantages held out to them, and their evident appreciation of those advantages, they might look with hope to the future parish of Bedlington and the district in which they were assembled. The chairman had spoken of the usefulness of cultivating music, and had expressed a hope that it might be successfully cultivated within these walls. From the specimens they had had there that evening, he could not shut his eyes to the conviction that it had been already successfully cultivated to a great degree in that parish, and he only hoped that number would be greatly multiplied who were charming their ears with those sweet sounds which they had already heard with such satisfaction. With regard to his coming there on that occasion, he could only say he had had greater pleasure in addressing such an assemblage as he then saw before him than he had in addressing many assemblages which he had been bound to address on former occasions on other subjects of a political nature, which, however important in their place, did not afford so much satisfaction as a social gathering of that kind. And while there always must be distinctions in classes, he believed any distance, any estrangement between those classes of society, would be best removed by meetings of that description, in which they all met on a level, all uttering the same sentiments, and met together as friends and neighbours, anxious only to promote each other's comfort, social enjoyment, and religious improvement."

THE RIGHT HON. J. W. HENLEY, at the annual dinner of the Thame Agricultural Association, made the following remarks on the objects and results of agricultural societies:—

"The special occasion on which we have met to-day needs no word of mine to say how much the usefulness of these societies is appreciated. I see around me men of the first eminence in their professions in this neighbourhood. I am glad to find that this meeting does not dwindle down. It is supported with the same spirit now as it was when it was originated, although it has now been many years on foot; and this assures me that those who are much better judges of the matter than I can be feel that these associations are of great use to the neighbourhood. What is it that these meetings do? They do not confer any pecuniar advantage upon the occupiers of land, but the whole efforts either of agricultural or horticultural associations are directed towards endeavouring to induce agricultural labourers to improve themselves in that calling in which they have been placed by Providence. Such associations must, therefore, surely be for their advantage. No doubt, indirectly, they act beneficially upon the employers of agricultural labour; but, at all events, their establishment in any particular district evinces a kindly feeling upon the part of landlords and tenant farmers towards those who are engaged in the actual tilling of the soil. Associations of this character have spread throughout the length and breadth of the land. They are not situated here and there only, but, taking the county of Oxfordshire as an example, we can scarcely find any considerable market town which has not its flourishing agricul-

tural society. I cannot believe that my countrymen, noted as they generally are for their good sense, would take upon themselves all the trouble of organising and conducting such associations, the labour of acting upon committees, and the general performance of arduous duties in order to secure fair play to all—I can never believe that intelligent men like Englishmen would undertake all this unless they were thoroughly convinced that such associations conferred very great benefits upon the various districts in which agricultural societies are situated. So far as my limited means of forming an opinion is concerned, I can unhesitatingly say that they do great good. I am therefore always glad to give my countenance and support to them. I was asked by a gentleman to-day, in the garden in which your flower show was held, if I did not think it was a great bore to come to a place of this sort. Now, for the life of me, I cannot understand what bore it can be to a country gentleman to visit an agricultural association at its annual display, and at the close of the proceedings eat a good dinner. At these gatherings I find myself among a number of friends whom I have not the opportunity of meeting, perhaps at any other period of the year. Besides, it is always said that nothing goes on well in England unless it is supplemented by a good dinner. Even our public charities do not get on very well unless there is an annual banquet. In point of fact, nothing can be well done in this country without a good dinner. Why, then, should not agricultural associations celebrate their anniversary meetings with a dinner? When men dine together publicly they have an opportunity of seeing and conversing with those whom they do not often meet. Old friendships are revived, and we hear a good deal that stirs us up. We get to know something more of each other than we knew before, and we often hear statements that convey valuable information to our minds. For my own part, I never could understand the notion that Englishmen should not come together on any legitimate occasion and enjoy a good dinner. I shall always be happy, in my individual capacity, to assist and countenance these associations. I trust that on many future occasions I shall have the pleasure of meeting my Oxfordshire friends at these gatherings, and of marking the general advancement of agriculture and the spread of agricultural knowledge among all classes of the community who are more deeply interested in its prosperity."

MR. NEWDEGATE, M.P., at the annual dinner of the Sparkenhoe Farmers' Club at Market Bosworth, spoke as follows on Family Life in England:—

"The success of these meetings has been said, and truly said, to be attributable to the presence of the ladies. Your meetings are patriarchal and constitutional. We may appeal to the show-yards to-day as showing the state of agriculture around us, whether we are not moving with the spirit of the times. And yet we feel the strength which this association derives from your being assembled by families around this board. It always struck me that this is our feast of tabernacles. We are not assembled as the Jews of old, each family in its own leafy bower, but we are assembled here in gratitude to the Great Giver of all good, forasmuch as He has thought fit this year to extend to us His bounty in the yield of the earth more fully than we deserved last year. This is a patriarchal meeting. But we are met at Bosworth, where there are many associations. I see many brother sportsmen around me whom I have greeted on many a first Monday in November. We think of Bosworth and think of new red coats and the cheerful cry of the merry hounds—aye and the more than constant hospitality of the representative of the ancient family whose noble mansion crowns the head. Bosworth has other associations more ancient. Its name is identified with a great victory. A mighty contest between great principles was here decided. What were those principles? In the Battle of Bosworth the true English moral love of family overthrew a man—a mighty spirit—one endowed with all the qualities that should make eminent the soldier, the statesman, and the monarch. But all this greatness was marred in his character as a man by a most direct invasion of all sacred ties, or what the French have learned to term *en famille*. And perhaps we attach more opprobrium to his name than to the name of any other man who has so disgraced himself in the annals of history. The triumph of Bosworth was the triumph of family over a mighty spirit who had usurped the supreme power of the state in defiance of those sacred ties which constitute your home and the organisation of your families—that social order, that constant means of safety, that national stamina that has rendered England pre-eminent among the nations of the world. I rejoice at the patriarchal character of your meetings. It is a recognition of that love of family, of that reverence for those sacred ties which have made England what it is, and have rendered England capable of enjoying the freedom which other nations are striving, and too many in vain, to imitate. Think not there is anything antiquated in these principles. Look around. What is the real reason that France for 70 years, that those gallant Frenchmen, have proved their incapacity for freedom? It is that because in the madness of their revolution they imperilled the great principle of home. They endangered that great principle of family in their madness, and now in their saner moments they would recall its glories. Look, again, at the United States and the contest going on there. Our kindred, forgetting the basis of the constitution under which their forefathers had risen to eminence, and which they had enjoyed, accepted the false principles of the first French Revolution. But it is attributable to the force of their own character that institutions upon that sandy basis have existed so long. And now you see the Union is shattered. What is the instruction to be derived from the contest that is going on? Why is it that the South, a minority, withstand the power of the North? I say it is for this reason—that, although polluted by the stain of slavery, although corrupted by the means of supplying the demand of that insatiate system, still the patriarchal system is stronger in the South than in the North, where the abolition of the laws of primogeniture, where the habit of casting early upon the world, to seek their own fortunes with such means as their parents can at the time command, the children of the nation, has loosened the great principles of the family. Why have they succumbed to the South hitherto? Because the South has preserved the patriarchal principles which induce men to submit to a just authority, while the North, with all its power, all its majority of population, all its means, all its command of the ocean, has proved weak when brought into collision. Because the elements of disorganisation which the constitution of their society has generated render all indispensable discipline impossible which should give effect to the courage of that great people. Depend upon it you have nothing to be ashamed of in the patriarchal character of your assembly. It is the recognition of that respect for family which is and has been the strength of England. You show you will not lag behind the times, yet still retaining this element of strength, thanks to the presence of the ladies, you are in a position to look forward to the continued prosperity of this well-deserving association."

MR. LAING, the Finance Minister for India, at the recent meeting of the Commercial and Cotton Associations of Manchester made the following remarks on the prospects of India:—

"It had been said in the addresses which had been presented to him that good government and finance lay at the bottom of all our connection with and the development of the resources of India. He heartily agreed with them that the government of India was a most important subject, and that a great responsibility rested upon the shoulders of those who had been elected of that Council. He was satisfied that they were now entering upon a new era in connection with India, and he believed that there was nothing in the past history of the world so wonderful as that of our connection with India. Only some hundred years ago we had a few settlers there for trading purposes, but ultimately this little island, 10,000 miles from India, had subjugated that people. Now the rebellion had been quelled, he hoped for and looked forward to a time when peace and harmony would reign supreme in that country, and that too at no distant day. At any rate, should such another outbreak occur, he hoped and believed it would not be nearly so disastrous as the last, seeing that the native troops had been reduced from something like 300,000 to about 120,000, whilst our European troops had been increased from 30,000 to 70,000. He was glad to say that owing to this and other reductions in the expenditure of India, as well as owing to what might be termed good fortune in the opium trade, &c., the financial crisis which on his arrival there threatened India, had been averted. The deficit of 5,000,000*l*. by what had been done had not only been met, but 500,000*l*. had been expended in roads and public works. All the hopes set forth in an Indian budget could not however, as in our own country, be realised at all times, but he had the strongest faith that the Indian one would. Since the reduction of expenses in connection with the government of India the cash balances had certainly increased some two or three millions; so that they need not fear, as they might have done at one time, that they would stop payment perhaps next month. He thought the limit of taxation in India had been reached, and they now must turn their attention to economy, as a first condition, for the prosperity of India was a good government and energetic government, and a wise government. With that we should have material progress. One point was whether India should be governed by a government in England (10,000 miles away) or by a government in India. Although his experience in India had been short, on one point he had formed a strong opinion—that India should be governed in India, and not in Downing Street. He was satisfied with the composition of the Indian government in India, and was glad to say that centralisation was being done away with. Indeed, to centralise the government of India in Downing Street would be no better than centralising it in Calcutta. If India was left to itself, and was not too much governed in detail in this country, it would be well, and India would prosper. It was in vain to hope that Europeans would settle in India, and spend their capital and skill on what could be of no good to them, owing to the want of improved means of communication with markets. An inducement now opening up was the railway system which was being established, and it would be of great advantage to commerce. Water carriage would be cheaper, but water carriage, owing to the character of the streams or rivers, which were mainly mountain torrents, could not be had. Touching the railways, very little could be said against the Indian government a tthis moment. The old Indian government discouraged railways in its time; indeed, they were discouraged by it so lately as 1845 and 1846, when the late Sir J. Melvill was one of the Board. Lord Dalhousie was the Governor General who inaugurated the great system of railways, which he hoped would be in active operation by about the end of two years from now. However, he would not say whether it would not have been better if Government had spent some 10,000,000*l*. or 20,000,000*l*. of the money they were spending in railways on the rivers and roads to them, and the stations, to facilitate by that means the transport of produce to the market. If water conveyance could be had it would be preferable to railway carriage. The most promising river was the Godavery, and works were rapidly going on for making it useful for trade and commerce. They had devoted 500,000*l*. more this year than last to works of this kind; and they hoped to devote a larger sum next year to similar purposes, and to making roads in the cotton districts, bridging over small streams, &c. As to the production of cotton, for the present he had more faith in the European capitalists making advances to the native growers than to clearing and cultivating tracts of land, which it would take a time to do. With that view the Council had passed the contract bill, which had been looked upon in England with such disfavour. The chief difficulty in getting speedy results in India from a fee simple tenure by Europeans was the distance of the waste lands from the population. Ceylon and the Mauritius were more favourably situated in this respect for the supply of Coolies. Wherever there were efforts of enterprising Europeans in India it was the desire as well as the duty of the Government to encourage them; in the Bengal Presidency a great deal had been already effected as to the land settlement, but they could not pass exceptional or special laws, inconsistent with equal rights and justice to the natives."

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 93⅛ for Money, and 93¼ for the 10th of October; Reduced and New Three per Cents., 91 to 91⅛; India Five per Cent. Stock, 103⅝ to ½; Ditto Four per Cent. Debentures, April, 1864, 98⅛; Ditto Scrip, 103⅝; Exchequer Bills, March, 2*s*. dis. to 2*s*. prem.; Ditto June, 5*s*. prem.—FOREIGN: Frazilian Four and a Half per Cents., 1860, 91; Mexican Three per Cents., 27; Ditto for Acct., 26¾ to 27; Russian Five per Cents., 99½; Spanish Passive, 17⅛; Turkish Six per Cents., 1854, 86 to 85; Ditto, 1858, 69 to 69¼; Venezuela Three per Cents., 20; Ditto, for Acct., 20¼.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£28,081,495	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion ..	13,431,495
		Silver Bullion	—
	£28,081,495		£28,081,495

BANKING DEPARTMENT.

Proprietors' Capital ..	£14,553,000	Government Securities (including Dead Weight Annuity) ..	£10,450,800
Rest	3,796,020	Other Securities	17,439,259
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	5,810,424	Notes	8,107,915
Other Deposits	11,957,808	Gold and Silver Coin ..	,810,746
Seven day and other bills	691,468		
	£36,808,720		£36,808,720

26th day of Sept., 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY — BANKRUPTS—M. R. ASHWIN, 27, Islington, Birmingham, Factor—W. BROWN, Somersham and Earith, Huntingdonshire, Apothecary—J. CROSTHWAITE, Liverpool, Merchant—A. HOLDEN, G. HOLDEN, R. HOLDEN, and A. HOLDEN, Blackburn, Lancashire, Cotton Manufacturers—G. H. KENT, Stratford-upon-Avon, Warwickshire, Timber Merchant—J. NIXON, Liverpool and elsewhere, Merchant and Commission Agent—T. SHERWOOD, Southsea, Portsea, Hampshire [illegible] WHITESIDE and G. SIMMONS, 34, Great Queen Street [illegible] Engineers and Brass Finishers.

BANKRUPTCIES ANNULLED — W. C. COOPER [illegible] Doctors' Commons, City and elsewhere, Merchant—J. [illegible] Pavement, City, General Dealer.

SCOTCH SEQUESTRATIONS—P. H. HERRIOT and [illegible] Buteshire, Grocers—E. M'IVER, Scourie, Sutherlandshire [illegible]

FRIDAY—BANKRUPTS—R. BINNEY and J. W. B[illegible] and Share Brokers—H. CHURCHILL, Washington [illegible] Brickmaker—E. DAVID, Bridgend, Glamorganshire [illegible] and Cattle Dealer—S. FRANKAU, Bishopsgate Street [illegible] Street, Westminster, Importer of Meerschaum P[illegible] J. HART, Framlingham and Dennington, Suffolk, Draper [illegible] W. HENLEY, Gloucester, Printer, Bookseller, and Sta[illegible] Kingston-upon-Hull, Commission Agent—G. I. M[illegible] Grove, Bayswater, Corn Dealer—J. J. RIDGE, Forest [illegible] of Freeschool Street, St. John's, Southwark—J. SOUTHE[illegible] ham, Joiner and Builder—F. WEATHERLEY, Old Chap[illegible] Town, Draper—J. WHITLEY, Leeds, Brass Founder—[illegible] Buckinghamshire, Cowkeeper and Dairyman.

BANKRUPTCY ANNULLED — J. SHARPLES, Ardwick [illegible] Soft Soap Manufacturer and Manufacturing Chemist.

Metropolis and its Vicinity.

THE FORTHCOMING ELECTION OF LORD MAYOR.— A deputation of Liverymen attended at the [illegible] House on Wednesday and presented a requisition [illegible] the Lord Mayor, signed by 1672 citizens, requesting that he would allow himself to be put in nomination for the office of Lord Mayor for the ensuing year. The Lord Mayor in reply said that he had [illegible] months ago written a letter stating that [illegible] enough of the toils and anxieties of office, [illegible] wish to disappoint the just expectations of [illegible] who would follow in succession. He had now [illegible] that statement, but if his fellow-citizens were [illegible] opinion that his serving another year would be [illegible] portance, and if the Court of Aldermen by an [illegible] takeable vote in the hall and in the Court should [illegible] in that opinion, he would forego all personal [illegible] tions and place himself in their hands. It is [illegible] that the Lord Mayor's friends will recommend [illegible] Livery to return to the Court of Aldermen [illegible] Lord Mayor and Sir Peter Laurie, the senior [illegible] of the Court, who served the office so far back [illegible] In this case the Court of Aldermen will [illegible] return the Lord Mayor, as it is well known [illegible] Peter Laurie, on account of age and infirmities, [illegible] decline to serve. It was announced yesterday [illegible] Alderman Hale intends to come forward as a candidate.

THE GREAT EASTERN.—On Wednesday the [illegible] fresh gale again drove the Great Eastern to sea, and [illegible] the following afternoon she was reported to be still [illegible] offing at Queenstown, but out of sight of land. [illegible] wind was heavy from the south. The steamship Edinburgh was sent in search of her, and on Friday the great ship returned to the harbour. It is reported on good authority that notwithstanding all the tossing and tumbling she has sustained, she has not given indications of the slightest strain in her hull. Every door continues on its hinges, and works as freely as the day she started on her voyage. She is to be [illegible] taken to Milford to be refitted, and as soon as [illegible] repairs are completed, she will resume her position between this country and America. The passengers will either be provided with berths by other ships, or have their passage money returned.

THE EDUCATIONAL MINUTE.—A numerous [illegible] meeting of the clergy from all parts of the country [illegible] held a few days since at the Caledonian Hotel, [illegible] to consider what steps it was necessary to take in [illegible] to procure the suspension of the operation of the recently issued educational minute. The Rev. Charles Lane was called to the chair, and, having stated the object of the meeting, letters were read from the Bishop of Bath and Wells, Lord Cholmondeley, Mr. [illegible] M.P., the Bishop of Winchester, the Dean of [illegible] the Archbishop of York, and other prelates and [illegible] dignitaries, expressing their willingness to co[illegible] in the movement against the educational minute. [illegible] Reynolds then moved the first resolution, to the effect that after what had been said on the subject [illegible] House of Commons, the meeting viewed with [illegible] the issuing on the last day of the Session of a minute not merely of an administrative character, but a [illegible] code of education, making fundamental alterations [illegible] the Privy Council system, and which would [illegible] thousands of schools to accept its provisions [illegible] the only condition on which they could [illegible] heavy pecuniary responsibilities before the [illegible] could be discussed in Parliament. Archdeacon Hone seconded the resolution, which was carried. The Rev. Mr. Martin then moved a resolution declaring that the meeting regarded the revised [illegible] as a very objectionable and pernicious measure, [illegible] calculated to be directly or indirectly injurious to the progress of popular education in Great Britain—first, upon elementary schools, religiously, intellectually, and financially; second, upon the pupil teacher system, [illegible] tending to impair its efficiency, and ultimately to destroy it; third, upon training schools, as crippling their resources and practically discouraging students from availing themselves of their advantages; [illegible] addition to which the meeting regretted the repudiation of engagements with teachers in training schools and certificated teachers as an act of injustice without precedent in this country. The resolution was carried unanimously. It was also resolved to appoint a deputation to wait upon Earl Granville, as president of the Council, and request the suspension of the order until the meeting of Parliament. An aggregate meeting of the Masters of Church and British Schools in the metropolitan district was held on Saturday at the Whittington Club, when resolutions were adopted con-

...ing the revised code as likely to be productive of ... injury to the labouring classes by lowering the standard of education, and declaring that the withdrawal of the augmentation grants paid to certified teachers is not only an injustice to the profession, but also a violation of the principles upon which public engagements should be based. Similar meetings of the clergy and schoolmasters have been held in different parts of the country with the same results; and the Wesleyan Committee of Education have memorialised Lord Granville, declining to accept the new code until Parliament pronounces its decision. In consequence of these demonstrations it is now announced that the Minute will not be put into operation till after the 31st of March, 1862.

The International Exhibition.—The number of French manufacturers who have applied to be permitted to send specimens of their produce to the London Exhibition of next year is much more numerous than those who exhibited their manufactures in London in 1851. There were but 1700 French exhibitors at the Exhibition of 1851, and only 2500 English exhibitors at the Paris Exhibition of 1855. There are now 4425 applications from French manufacturers for places at the Exhibition of next year—a striking proof of the increase of international relations between Great Britain and France. In consequence of this large number France has asked for more space than the total allotted to foreign nations; the Austrians claiming the next largest share of the number of feet appropriated to foreign exhibitors. Belgium, Russia, and Sweden have also made large demands.—The Commissioners have directed Mr. Benson, of Ludgate Hill, to construct a clock for the Exhibition building. It will be second in size only to the great Westminster clock. The dial is to be from 15 to 20 feet in diameter, and will be placed immediately over the centre arch of the grand entrance in Cromwell Road. The movement at the base will measure 12 feet by 8, or nearly 100 square feet, and will be about 25 feet in height. It will chime the quarters on four bells, and strike on a fifth, weighing about 45 cwt. The whole will be enclosed in a glass case.

Calling in the Copper Coinage.—On Saturday the authorities at the Mint commenced the exchange of the old copper pence, halfpence, and farthings, for the new bronze coinage. No quantity of the old coin less than 20*l.* worth will be taken, but a bonus of 2*l.* per cent. will be given for the trouble of collecting.

Indian Famine Relief Fund.—A meeting of the general committee charged with the administration of this fund was held at the Mansion House on Tuesday, when the secretaries reported that the aggregate amount of subscriptions received at the Mansion House was 114,428*l.*; of which they had remitted 108,500*l.*; while 2562*l.* had been expended in collecting and administering the fund, and 3366*l.* remained in hand, consisting of bills which had not arrived at maturity. In addition to the 108,500*l.* sent from London, 6400*l.* had been sent to Calcutta from Manchester, 6500*l.* from Glasgow, and 3500*l.* from Dublin.

Greenwich Hospital.—The Marchioness of Westminster has presented to the Commissioners of Greenwich Hospital the gold watch worn by Lord Nelson at Trafalgar. It has been placed in the Painted Hall, in the case containing the coat and waistcoat worn by the admiral in the same battle. Among other recent additions to the Painted Hall is an oil portrait of the late Captain Sir William Peel, presented by his brother officers and other friends.

British Museum.—Recent advices from Cyrene announce the discovery of another collection of valuable ancient marbles by Lieutenant Smith, R.E., and Lieutenant Porcher, R.N., who received a short time ago a second and more liberal grant from the trustees of the British Museum to enable them to prosecute their labours. A man-of-war is to be sent to the port of Marsa Susa to embark these sculptures.—A vessel arrived a few days since in the St. Katharine's Docks from Bussorah, with a large number of bricks, portions of statues in black marble, basalt, and granite, covered with inscribed characters, and several large cases of Oriental manuscripts, all of which are intended for the British Museum.

The Temple Church, which has been for some time closed, is to be reopened on Sunday, the 6th of October, with a full choral service and a sermon by the Master, Archdeacon Robinson. The buildings which have hitherto almost entirely hidden the view of the south side, and the elaborate Norman porch, have been removed during the recess.

New Churches.—The foundation stone of a new missionary church and school has recently been laid in the parish of St. Leonard's, Bromley, of which Mr. John Walter, M.P., is the patron. The church is to be 78 feet in length by 35 in width, of the geometric style of architecture, with open timbered roof. On the south side of the mission church is the site reserved for the permanent church which it is proposed to erect. In the course of the proceedings the vicar stated that the idea of the movement emanated from the Bishop of London, who, in his anxiety to overtake the spiritual necessities of his diocese, had matured a plan for the combination of church missions and schools in poor and overcrowded parishes. A clergyman will be provided by the London Diocesan Home Mission.—The foundation stone of a new church for the Crouch End district of Hornsey, was laid a few days since by Mr. C. S. Dickens, who gave the site. An ecclesiastical district has been assigned to the church, which will be built from the designs of Mr. A. W. Blomfield, architect, a son of the late Bishop of London.—Two new churches are about to be built at Islington, one in the Glocester Road, in the district of St. Paul, and the other at the corner of Shepperton Street, New North Road, the freeholds for both being given by Mr. J. W. Scott, of Rotherfield Park. The population of Islington has increased so rapidly during the last few years that, although within the last 10 or 12 years two additional churches have been erected, there is not at present anything like sufficient accommodation for the inhabitants. The site selected for the new church in the Glocester Road is now becoming entirely covered with houses, though but a short time ago it consisted of fields; and that for the other church, in Shepperton Street, is in the midst of a district which comprises a population of 4000 of the poorest class, including a colony of costermongers. Three houses with long leaseholds have been purchased on the site of the proposed church at a cost of 1700*l.*, and nearly 1000*l.* has been raised towards the building fund, contributed in a great measure by the poor in the district themselves, assisted by their more wealthy neighbours. The new churches will be built in an attractive but not costly style, and will be commenced as soon as sufficient funds have been raised.—Arrangements are in progress for erecting a new church in Penn Street, Hoxton, as soon as the district is formally constituted. The district will be formed from St. John's, containing about 25,000 inhabitants, with one church and three clergymen, and Christ Church, Hoxton, containing 10,000 people, with one church and two clergymen.

Communication with the Continent.—With a view to the enlarged continental traffic of the approaching Exhibition year, the South-Eastern Railway Company are developing their communications with France and Germany. At the commencement of this month they began to run a boat on week days between Dover and Ostend, leaving Dover at 11.15 A.M., and Ostend in the reverse direction at 11.45 A.M. The boats are in connection with the train from London Bridge at 8.30 A.M., arriving at Brussels at 9.25 P.M., and Cologne at 4.40 A.M.; and on the inward journey, with the train due at London at 8.35 P.M., from Brussels at 7.35 A.M., and from Cologne the previous evening. This new service therefore supplies a want in the means of quick communication with Belgium, Germany, and the north of Europe, without entering French territory, and is also available for the transport to London from Holland and the Netherlands of fruit, vegetables, poultry, and other articles which require only rapidity of transit to develop a large and useful trade. The new arrangements complete six daily services to and from the Continent in connection with the South-Eastern Railway —viz., one by day and one by night by each of the three routes of Folkestone and Boulogne, Dover and Calais, and Dover and Ostend, making 12 voyages per day between the two countries. The South-Eastern fleet of steamers numbers at present 10 first-class vessels, including the new boats lately launched, which are expected to shorten the time hitherto occupied in crossing the Channel by at least one-fourth. The new pier at Folkestone is sufficiently complete for use, and affords the means of landing and embarking at all times of the tide, and as soon as the harbour works now in progress on the French side are completed, the tidal services can be performed at fixed hours. The South-Eastern Company have also devised a new system of through parcel conveyance at a reduced scale of rates. The parcels will be forwarded every evening from London Bridge Station and are delivered in Paris the next day. The rate for a 2 lb. parcel between London and Paris, including all charges except duty or entry, is 1*s.* 4*d.*

General Post Office Robbery.—On Tuesday Edward William Pullen, a Post-office letter carrier, who has for some time been employed in delivering letters on the Lombard Street beat, was charged with stealing 35 letters, several of which had contained money or valuables, including one in which a sum of 153*l.* 10*s.* had been remitted by Messrs. Harvey and Hudson, bankers, of Thetford, Norfolk, addressed to Messrs. Hankey and Co.'s bank in Lombard Street. The prisoner had been summoned to the assistants' office at the General Post Office for the purpose of some inquiry, when the officer Smee being ordered to search him, found in the pocket of his official coat the 35 letters in question, and in his trousers pocket a purse containing two 5*l.* notes alleged to be part of the 153*l.* 10*s.* He then stated that he picked up the notes with their enclosure a few days previously in Lombard Street, and that he had neglected or had been unable to deliver the other letters. On making a further search in the prisoner's cupboard at the General Post Office, bundles of letters were found secreted in it, containing not fewer than 1500 in all, with dates and postmarks from all parts of the country, as far back as April and May, and extending over subsequent months up to within the last week, all of which were addressed to commercial firms in the City. The prisoner was remanded until Thursday, when he was fully committed for trial.

Destructive Storm.—The metropolis and suburbs were visited with a great storm of wind and rain between 1 and 2 on Monday morning, which occasioned serious damage to houses, the shipping in the river, and the trees in the parks. The tide also rose above its usual height and inundated the houses and cellars in the lower districts. The storm was severely felt in various parts of the country, and in Scotland was accompanied by destructive floods. On the south coast the gale lasted until Wednesday, and ships which were driven back for shelter reported that a tremendous sea had been running in the Channel.

Highway Robbery at Walthamstow.—On Thursday the 19th inst. the neighbourhood of Walthamstow was thrown into a state of unusual excitement by one of the most daring acts of highway robbery and attempted murder that has been perpetrated for some years. About 9 o'clock in the evening a gentleman, whose name has not transpired, was passing through some fields belonging to Mr. Burrell, a wealthy farmer, between Lea Bridge station and Walthamstow station, when he was stopped by a man who presented a cocked pistol at him and demanded his money. He did not want his life, he said, but he must have either that or his money. The gentleman surrendered his money, amounting to only 39*s.*, and was allowed to depart, while the successful highwayman pursued his avocation in the same locality. The next person he met was a Miss Atkinson, residing with her parents at Walthamstow, and from her he demanded money, at the same time saying that he did not wish to hurt her if she would comply with his demand. Miss Atkinson said she had none, and if she had she would not give it to him, and while they were arguing the matter Miss Atkinson's sister came up with Mr. Wm. Chevers. The highwayman then left Miss Atkinson, and addressing himself to Mr. Chevers, demanded his gold watch and chain, as well as his money. Mr. Chevers positively declined to comply with this demand, and the highwayman immediately presented a pistol at his head, and threatened to shoot him unless he immediately surrendered his valuables. Mr. Chevers, however, was not disposed to be robbed without a struggle, and therefore made a dash at his opponent to secure him. The highwayman perceived his object and discharged his weapon at him, but fortunately the ball missed the head of Mr. Chevers, who escaped with his right cheek being much scorched with powder. As soon as he recovered himself he again endeavoured to secure his antagonist, but it appeared the highwayman was well armed, for he discharged a second pistol at Mr. Chevers's head, the ball from which struck him on the left cheek, and passing through his left ear laid him senseless on the grass. The assassin then made off, when, assistance having been procured, Mr. Chevers was conveyed to Walthamstow, where medical aid was at once obtained, and it was discovered that the wounds were not likely to prove dangerous. The police were immediately communicated with, and commenced an active search for the delinquent, but he has not yet been traced.

The Public Health.—The Registrar-General's weekly return states that the deaths registered in London in the week that ended Saturday, Sept. 21, were 1126. The average number in the corresponding weeks of the 10 previous years 1851-60, allowing for increase of population, was 1284; but if the deaths from cholera in 1854 are excluded from the calculation, it appears that the mortality of last week differs little from the estimated amount. During the week the births of 944 boys and 886 girls, in all 1830 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1637.

Provincial.

Barnard Castle.—The boy Little, who absconded after shooting a servant girl at Marwood, near this town, was apprehended on Saturday evening at Durham. He admitted the crime, and was conveyed to the county prison for examination before the magistrates.

Birmingham.—The net result of the recent Musical Festival in aid of the General Festival is about 3000*l.*—A meeting was held in the Theatre of the Midland Institute on Tuesday, the Mayor in the chair, to receive a report from a committee appointed some time since to consider the most practicable mode of carrying out a resolution for the establishment of a merchants' and manufacturers' Exchange. The proposal made by the Council of the Midland Institute for connecting the Exchange with that Institution was regarded as the most eligible, and the report of the committee was in that respect adopted. It was further resolved to commence the Exchange with 100 members, and very nearly that number of names was received at the meeting.

Bradford.—On Thursday the 19th inst. a young woman named Nancy Wood, daughter of Mr. Jacob Wood, a respectable dairy farmer living at Bolton Fold, near this town, was brought before the county magistrates on a charge of Manslaughter. The prisoner, who is described as an industrious and well-conducted person, 22 years of age, lived with her father and mother, and besides assisting in household duties worked as a dressmaker. On Wednesday evening the 18th, between 5 and 6 o'clock, she was at home with some children, when a youth of weak intellect named John Henry Fieldhouse, a pertinacious beggar from Bradford, entered the kitchen and asked for drink. Some coffee was given to him by the prisoner's brother, after which the boy demanded bread. The prisoner ordered him to go away, but as he did not do so, she

took down a gun belonging to an elder brother, and pointed it towards him. At that moment Mrs. Wood, the prisoner's mother, entered the house, and seeing her daughter holding the gun gave it a slight push with one of her hands, when it went off, and the contents, which proved to be No. 8 shot, entered the right side of the beggar boy's chest, over the region of the heart, causing instantaneous death. The prisoner it appeared did not know that the gun was loaded, and seemed greatly distressed. She was committed for trial at the assizes, but admitted to bail in two sureties of 50*l.* each. The inquest was held on Friday, when the jury, after conferring for an hour and a quarter, returned a verdict, "That deceased came to his death by the accidental discharge of a gun which Nancy Wood had in her hand, not knowing it was loaded."

BRISTOL.—A shocking catastrophe occurred at St. Vincent's Rocks on Sunday morning. About half-past 8 o'clock a man on board a packet which was steaming down the river observed a man falling from the rocks near the pier. He raised an alarm, and on the police going to the spot they found the man quite dead, his skull frightfully fractured, and the brains scattered on the grass. His clothes were not torn in the fall, but one of his boots, probably from having come in contact with a projecting piece of rock in the descent, was ripped several inches near the ankle. He was subsequently identified as a shoemaker of Bristol, named Crocker. The cause of his falling from the rock was involved in so much mystery that the jury at the inquest returned an open verdict. There was no reason to suspect that it was a case of suicide, and on the other hand it was proved that he could not have fallen from that particular spot except by crossing the rails which the Merchant Venturers have erected for the safety of the public.—The Freemasons of this city having undertaken the restoration of the north-east corner of Redcliff Church, the ceremony of laying the last stone in connection with this portion of the work was recently performed with Masonic honours. In the morning the Grand Lodge assembled at the Freemasons' Hall, Bridge Street, while the members of the other district and visiting lodges met at the Exchange, altogether to the number of about 500. There a procession was formed, which, accompanied by the Mayor of Bristol, the P.G.M. of Bristol, Major H. Shute, the D.P.G.M., Brother Powell, the D.P.G.M. of Somerset, Brother Randolph, and the Masters and brethren of various lodges, and headed by the band of the Bristol Volunteer Rifle Corps, marched to St. Mary Redcliff. The church was thronged. Divine service was performed by the Rev. Brother Watson, rector of Spaulding and Grand Chaplain of Bristol; the Rev. Brother Thomas, of Yeovil, P.G. Chaplain for Somersetshire; and the Rev. Canon Madan, vicar of St. Mary Redcliff. The cathedral choir lent their aid in the musical portion of the service. The sermon was preached by the Rev. Brother Watson, and at its close the procession was re-formed, and the ceremony of laying the stone, which bore an appropriate inscription and the names of the principal dignitaries of the Masonic body, was performed in the customary style by the P.G.M. and D.P.G.M. of Bristol. The 100th Psalm was sung, after which the procession marched back to Bristol, and in the evening a public dinner took place at the White Lion Hotel.

BUXTON.—On Saturday Mr. G. Flint, surgeon of this town, was brought before the magistrates on remand charged with shooting his wife with intent to murder her. The prisoner was formerly in a highly respectable position in society, but has latterly taken to drink, and has brought on *delirium tremens* by his intemperate habits. Most of the witnesses gave evidence against him with reluctance, and one or two refused to appear unless they were summoned. It appeared from the evidence that on the previous Thursday morning, between 11 and 12 o'clock, the prisoner was seen standing at his own door very drunk, with a gun in his hand, and that he stated to the witnesses that he was going to shoot his wife. Mrs. Flint was shortly afterwards seen running away from the house, holding a child by the hand, when the prisoner fired and shot her on the right side of her back, near the shoulder blade, on the back of her right arm, and on the outer side of the jaw, while her arm was bruised by the wadding. None of the wounds, however, were of a dangerous character. Mrs. Flint afterwards concealed herself to avoid giving evidence against her husband. The case, however, was established by the other witnesses, and the prisoner, who declined to say anything in his defence, was committed for trial at the assizes.

FARNHAM.—On Sunday night a destructive fire broke out in a large barn on the premises of Messrs. Andrews, Court Farm, the largest homestead in the county of Hants, in which a party of hop pickers were sleeping during the hopping. The barn and its contents were entirely destroyed, including five valuable horses, 122 sacks of dressed wheat, 400 quarters of barley in the mow, 300 bushels of potatoes, a large quantity of straw, two waggons, all the harness, and a pig. Four of the horses were burnt to cinders in their stalls, and the fifth, which was severely burnt in the throat, dropped down dead on the road as it was led from the stable to an adjoining field. The damage is estimated at 3000*l.*

FROME.—Joseph Sears the soldier, who last week made a statement that he was the murderer of Sarah Watts, at Woodbridge, was re-examined before the magistrates on Monday and again remanded for further inquiry. It has been ascertained that he was recently discharged from the military lunatic hospital at Chatham as incurable, and there are discrepancies in his statement as to dates which throw grave doubts upon its truth.

HASTINGS.—A volunteer fire brigade, the first it is believed which has been established in England, has recently been formed in this town. The corporation has placed the borough engines at the disposal of the brigade, which consists of a superintendent and three sections, each section comprising a foreman, engineer, sub-engineer, and 10 firemen. The uniforms are purchased for the members by public subscription, to which the townsmen are contributing liberally. The drills are not very frequent, and take place generally early in the morning, so that the men's working hours are not interfered with.

KINGSTON.—Martha Bradish, the woman who was tried at the last Surrey Assizes, at Croydon, for murdering her step sister in Kingston Barracks, and was acquitted on the plea of insanity, has been removed from Horsemonger Lane Gaol to the Fisherton House Asylum, near Salisbury, pursuant to an order from the Home Office.

MANCHESTER.—Mrs. Booth, wife of Mr. Booth, surgeon, of Swinton, was brought before the magistrates on the 12th inst. charged with concealment of birth. It appeared that Mr. Booth and his wife have slept in different rooms for nearly two years, the former having for some time suspected that she was unfaithful to him. On the 12th inst. from facts which came to his knowledge, he had an interview with the superintendent of police, who requested Mr. Roe, surgeon of Beccles, to accompany him to Mr. Booth's house. They were there joined by Mr. Booth and Police-sergeant Lee. Mr. Booth requested them to go to his wife's room, which they did, but found the door fastened. Sergeant Lee, at the request of Mr. Booth, broke open the door, and found Mrs. Booth in bed. They told her that she was suspected of having given birth to a child, and that if she did not tell the truth a strict investigation must take place. She requested the officers to withdraw, her husband and Mr. Roe remaining in the room. She then confessed that she had given birth to a child, and showed it lying under the pillow on her bed. She said that the child was born on the previous night, that she had to get out of bed, and fainted, and when she recovered she found that the child was born, and was lying dead with its head in the chamber utensil. On Saturday Mr. Roe made a *post mortem* examination, and ascertained that it had been born alive and had lived some time. It had not died from hæmorrhage, nor were there any external marks of violence. He believed that death had resulted through exposure and suffocation. It was quite possible that the mother might have fainted, and that the child had been born under the circumstances detailed by her. The husband had suspected for some time that all was not right, and other evidence was given. The prisoner had referred to a middle-aged man as the father of her child, but had mentioned no names. The magistrates considered the evidence conclusive, and committed the prisoner for trial at the next assizes, but consented to accept bail in two sureties of 100*l.* each. An inquest was held on the body of the child on Saturday, when the jury returned a verdict of "Concealment of birth, and accidental death from exposure and suffocation."

MOLD.—An important seam of Cannel coal, 3 feet 4 inches in thickness, and of quality equal to the celebrated Wigan and Leeswood seams, was reached on Monday in the new borings of the Broncold Colliery Company near this town.

NEWCASTLE-UNDER-LYME.—Mr. Johnston, landlord of the Mill House Inn, about a mile from this town, on the road to Chesterton, has been apprehended on the charge of having murdered a young man named Pickstone. It appears that his daughter, who was keeping company with a young man named Cooper, contrary to her father's will, was returning home from Newcastle on Sunday night in company with Cooper, when they were met near the house by Mr. Johnston, who ordered his daughter to go into the house, and then abused and struck her lover. Two other young men were standing near the spot, and in a few minutes the prisoner returned, armed with a poker, and mistaking one of them for Cooper, dealt him a blow on the left side of the head, which caused his death on Monday morning. The deceased was a native of Middlewich, in Cheshire, was 19 years of age, and had just completed his apprenticeship with a builder at Chesterton.

NEWCASTLE-ON-TYNE.—The Liberal party of the North have determined to entertain Earl Russell, who will shortly be the guest of Mr. Hutt of Gibside, at a public dinner in this town on the 12th October, under the presidency of the Earl of Durham.

PORTSMOUTH.—A court-martial was held on the 16th inst. on board the Victory, for the trial of John Greer, able seaman on board the Excellent, gunnery ship, on the following charges: 1st, for having on the 9th inst. made a blow at, and struck Lieutenant Kennedy, his superior officer, whilst in the execution of his duty; 2d, for having made use of threatening language to Lieutenant Singer, at the time commanding officer of the said ship, such conduct being a breach of the 16th article of war. It appeared from the evidence that Lieutenant Kennedy was passing a number of men, among whom was the prisoner, in the third instruction in gunnery, and finding on trial that the prisoner was very deficient in his work, he [illegible] and went on with his duty in passing [illegible] men. A few minutes afterwards [illegible] violent language, and on turning round [illegible] struck him with his clenched fist [illegible] and on the back of the neck. The [illegible] defence, stated that he had been suffering [illegible] time from rheumatism in the head, and [illegible] too much to drink before he went on [illegible] his head that he did not know anything [illegible] place. He expressed his sorrow for [illegible] place, declared that he had no animosity [illegible] officer of the ship, and threw himself [illegible] of the Court. The Court was then cleared [illegible] some time had elapsed was again opened [illegible] president asked the prisoner if he had [illegible] to produce. The prisoner replied that [illegible] at Bombay. The Court was again closed, [illegible] members had been in deliberation for a [illegible] time the public were again admitted, [illegible] ing Deputy-Judge-Advocate read the [illegible] Court, who found that both charges were [illegible] and therefore adjudged the prisoner [illegible] servitude for the term of 10 years. The prisoner [illegible] into laughter on hearing the sentence.

ROCHDALE.—Some of the Rochdale [illegible] commenced running four days a week. [illegible] were the first to take the step. Their [illegible] limited to four days per week for nearly [illegible]

ROCHESTER.—A considerable portion [illegible] walls of this city is now in course of demolition [illegible] room for the enlargement of Sir Joseph [illegible] Free Mathematical School, near the [illegible] It is of enormous thickness, and every attempt [illegible] it down by ordinary means having failed, [illegible] of the Sappers and Miners has been called [illegible] up by means of heavy charges of gunpowder [illegible] siderable dissatisfaction is felt by the inhabitants [illegible] city, as well as by several eminent antiquaries [illegible] is deemed the unnecessary destruction of [illegible] relic.

RUABON.—About 1200 members of the [illegible] Orange societies in Liverpool and the [illegible] had a grand demonstration at Plas Madoc [illegible] seat of Mr. George Hammond Whalley, M.P. [illegible] borough, on the 17th inst. The party, [illegible] an excellent band, and by the usual insignia [illegible] spective lodges, left the Birkenhead terminus [illegible] special trains at an early hour, and reached [illegible] about half-past 10 o'clock. Most of those present [illegible] orange sashes or orange rosettes, and a [illegible] having been formed, the excursionists proceeded [illegible] Madoc Park, where they were joined by members [illegible] different Welsh Orange societies, and by the [illegible] Madoc band. The procession having [illegible] front of the house the party formed [illegible] sort of semi-circle, when the Rev. Dr. [illegible] expressed the pleasure he and those present [illegible] accepting Mr. Whalley's invitation. Mr. [illegible] Deputy Provincial Grand Master, then presented Mr. Whalley with an address, signed by [illegible] Grand Master, on behalf of the Orange [illegible] Liverpool and the neighbourhood, [illegible] Whalley for the stand he had taken in the [illegible] Commons, by succeeding Mr. Spooner as [illegible] opposition to the Maynooth Grant, and [illegible] his efforts might be crowned with success. Mr. [illegible] replied in a speech of some length, from which [illegible] following are extracts:—

"I thank you most especially for your expression [illegible] that you are neither disappointed nor disheartened [illegible] sent want of success. Be sure of this, that [illegible] the Maynooth Grant shall be repealed—and I [illegible] from any sense of my own strength on the [illegible] can impute to me), nor do I rely alone upon [illegible] see before me to-day, or in your Protestant [illegible] ing, as I trust they will be, throughout the [illegible] every man, whatever may be his religious [illegible] nises as worth defending our Queen and C[illegible] not even upon this so much as I do upon the [illegible] tion that seems to have seized the priests [illegible] Rome in this country. So long as these [illegible] cilable enemies of our civil and religious [illegible] natural rights and liberties of mankind [illegible] tent to carry on their practices under the [illegible] it appeared almost hopeless to arouse our [illegible] recollection of those periods of our history [illegible] every priest was a captain of rebellion, [illegible] banner, as far as he could, those who [illegible] and hounding them on at their will to massacre [illegible] restrained by nothing but their want of [illegible] I say, to detect in the soft and stealthy step [illegible] it has crept in subdued spirit among us [illegible] the insatiable ferocity of its character and [illegible] claws—for Englishmen are not suspicious [illegible] and great has been the fear among thoughtful [illegible] should again become, as so often before in [illegible] victims of our own credulity and good nature [illegible] ever has, happily for us, thrown off its mask [illegible] 1851 the Pope declared England again to be un[illegible] tion; and you remember the demonstration [illegible] that event elicited. But what do we see now [illegible] chapels have increased about fourfold, and their [illegible] tell us, have multiplied in like proportion, [illegible] Government grants of money taken from the [illegible] this country, we see springing up in all directions [illegible] and nunneries and institutions of all kinds for [illegible] the wide-spread nets of their priestcraft [illegible] country—some of them openly avowing [illegible] object, while others, far more numerous [illegible] concealed from ordinary observation under [illegible] mantles of some of the bishops and clergy of [illegible] lished Church. Still people go about their [illegible] Protestantism was perfectly safe, or if not, [illegible] serving, and excuse themselves by affecting [illegible] the principles of civil and religious liberty [illegible] precaution against the most inveterate enemy of the [illegible] liberties of mankind that has ever disgraced [illegible] gion. But, while such persons mean tolerating [illegible]

[illegible] as they have always meant but now happily [illegible] supremacy. They claim one-half of [illegible] at least as their own, they parade their [illegible] most wealthy and distinguished in the [illegible] even to enter the precincts of Royalty itself; [illegible] they dog the footsteps of the Prince of Wales, [illegible] other day, and recently on a world-wide [illegible]. All this, as may be fully read in their [illegible] to have turned their heads, and will surely [illegible] the old adage, 'That the Almighty first [illegible] he dooms to destruction.' For what is [illegible] in the conduct of this Papal power?—[illegible] witness in the conduct of this Papal power?— [illegible] they arrayed in arms and military equipment [illegible] for the re-subjugation of Italy, thus sub[illegible] the double degradation—first, of sending [illegible]; and second, of being powerless to protect [illegible] disgrace by enforcing against them the exist[illegible] the priests openly and boastingly defied; [illegible] of Commons itself is heard from night to [illegible] that is ventured throughout Europe [illegible] atrocities which this Papal power, aided for [illegible] money and men from this country, is still [illegible] perpetrate; and in that House is also repeatedly [illegible] scorn and defiance, the challenge to vindi[illegible] violated by the bishops of Rome in respect [illegible] Titles Act. Even since Parliament broke [illegible] intelligence from one of our colonies that [illegible] supremacy is practically asserted and extended to [illegible] there is reason to believe that the full [illegible] so-called toleration which has taken [illegible] will aid us in the course of next Session [illegible] attention to the subject. My business [illegible] you to-day is as to Maynooth: that is the [illegible] system, and that flag must be hauled down. [illegible] this is simple and obvious. You and [illegible] has a vote for a member of Parliament, should [illegible] his representative requesting him to support [illegible] the repeal of this grant, and that his doing so [illegible] ground for confidence at the next election. This [illegible] necessary, and demands the simplest of organisa[illegible] constituency. If there be any constituency in the [illegible] sufficient Protestantism is not to be found to [illegible] a movement, then among that people a meeting [illegible] held, and, if necessary, the whole history of Rome, [illegible] its practices, and its present position in regard [illegible] must be thoroughly gone into and brought [illegible] the mind of the people, until the sense of duty to [illegible] their country, too long dormant in this matter, [illegible] effectually aroused to the necessary action. For my [illegible] part, though I have hitherto declined to attend such [illegible] I shall in future, after your recognition of me this [illegible] to present myself to any audience in any part [illegible], and claim in your name, as well as my own, a [illegible] heard on this subject. Further than this, on this [illegible] to institute an experiment as to the manner in [illegible] agitation may be conducted. I propose to devote to [illegible] and advocacy of Protestantism a building which [illegible] suitable for the purpose. It is a building [illegible] over yonder hill, and has been hitherto used for [illegible] purposes, and it has been considered in point of [illegible] and otherwise well adapted for the purpose. I will [illegible] further detain you beyond again assuring you of my deep [illegible] of the honour and the compliment of this visit, [illegible] that it will contribute essentially to the object [illegible] I have devoted myself—the repeal of the grant to Maynooth."

The company then dispersed about the park until 1 o'clock, when they were entertained by Mr. Whalley [illegible] substantial dinner in two large tents, after which, headed by their bands, they proceeded to Trem Tower, [illegible] between two and three miles from Plas Madoc. The tower is situate on a hill, and overlooks one of those [illegible] spots for which Wales is celebrated. After [illegible] had viewed the building, Mr. Whalley said he had consulted with several gentlemen, and had determined to set apart the tower as a place in which lectures could be delivered, or any steps taken for the furtherance of the cause of Protestantism. In future the building would be called "King William Tower" and he only hoped that the friends present and other good and true Protestants would make such use of it as they might think proper for the purposes for which it would henceforth be devoted. A committee of management had been formed, and he trusted their [illegible] would be crowned with success. A vote of thanks having been given to Mr. Whalley for his gift, the [illegible] returned to Plas Madoc, and in the evening [illegible] Ruabon for Liverpool.

RUGBY.—On Saturday afternoon Mr. Richard Guinness Hill, who, it appears, is not related to Mr. Guinness the great brewer of Dublin, but is the nephew of the late Mr. Darley, head of the brewery firm of Messrs. [illegible] & Nicholson, at Stillorgan, was again brought before the county magistrates for re-examination. The prisoner was on this occasion represented for the first time by counsel, and the depositions taken at the previous examinations were accordingly read over before the additional evidence was taken, all the witnesses on both sides being ordered out of court. It now appeared that the marriage of the prisoner to Miss Amy Georgiana Burdett took place in August, 1852, at the [illegible] of her Majesty's minister at Brussels, and that the lady was then 19 years of age. On the marriage [illegible] of the young lady was settled, and by the [illegible] a certain life-interest was given to the [illegible]. The property consisted of about 14,000*l.*, of which [illegible]*l.* were in possession and 9000*l.* in reversion, on the demise of the tenant for life, with reservation of [illegible] a year to the wife free from her husband's control, and, in the absence of any issue of the marriage, power was given to the wife to appoint by will. The parties lived together continuously, and yet had no [illegible] until January, 1859; but during the six years and a half the prisoner had for a con[illegible] time been afflicted with illness. At the time Mrs. Hill was pregnant she was residing with her husband at Dublin, and the prisoner expressed a wish that her accouchement should take place in London, to which place they were on their way on the 5th of January, 1859. The lady was taken unwell while travelling to town by the London and North-Western Railway, and was unable to proceed beyond Rugby. She was removed to the nearest house that could be found open—a small inn called the Globe, where she was soon after her arrival delivered of a fine male child by Mr. Sadd, surgeon and accoucheur at Rugby. One of the first duties of the prisoner was to register the birth of the child under the statute; and at this point the offence charged against him was committed with the view, it was suggested, to conceal the fact of there being a child of the marriage at all. Evidence was now adduced to prove the marriage, as well as the birth of the child, who was produced in court, and caused a great sensation by his appearance. The surgeon and nurse who attended Mrs. Hill in her confinement, the servant girl who took the child to London, the two women who received him from the prisoner on his arrival, were also produced and examined at great length, and their testimony was considered to establish his identity with the child taken from Mrs. Hill two years ago. The case was again adjourned, the prisoner's counsel stating that at the proper time a full and complete refutation of the charge would be forthcoming. On Wednesday the prisoner was again brought up, when Mr. Collis, record keeper in the Bishop of London's Registry, adduced proof of the marriage, and Mr. Maltby, British Vice-Consul at Brussels, who was present at the ceremony, identified the signature of the clergyman and proved that the parties married were the prisoner and his wife, who came into court with her child for the purpose of being identified by the witness. After some further examination of the nurse, Mr. Brett, the detective officer, was called to give evidence on various conversations which had taken place with the prisoner in Mr. Cooke's office; but this was objected to by the prisoner's counsel, and the questions were withdrawn. It was then proposed to put in evidence a letter written by the prisoner to his wife stating that the child was dead, and that he had paid for its funeral; but this was also objected to, and it was decided that the letter should not be read. Mr. Cooke then said he had closed the case for the prosecution, and expressed his belief that he had produced sufficient evidence to justify the committal of the prisoner. On being asked whether he had anything to say in answer to the charge, the prisoner in a low tone replied, "I will leave it to my counsel." Mr. Philbrick then addressed the magistrates as follows:—

"It was now his duty, he said, to make some observations on the part of Mr. Hill in answer to the charge preferred against him. The extraordinary public interest which had attached to the circumstance of this case, the romantic details with which the newspapers had teemed, and the excitement which even the presence of a court of justice had been unable to restrain, conspired to render the performance of that duty a task of no ordinary difficulty. There could be no doubt that the prosecution had been instituted from motives of personal revenge and malignity towards Mr. Hill, and the course which had been adopted in the conduct of the case that day—first seeking to divulge confidential communications between attorney and client, and then attempting to produce in evidence communications between husband and wife—clearly proved that those motives were of the strongest and most violent kind. No one could hesitate to believe that it was the wife and her advisers who had instituted and who were conducting this prosecution. The contest was a contest between the husband and wife, although strenuous efforts had been made to give it a different complexion. The charge against Mr. Hill was that he had falsified the register of births for the Rugby district, and in order to prove that allegation the prosecution, in defiance of the rules of evidence, had imported a great deal of irrelevant matter into the case with the view of showing an alleged motive. It was said that, a child having been born to him by his wife, Mr. Hill wilfully falsified the register of births for the purpose of concealing the existence of the child, and thereby securing to himself some pecuniary benefit under a certain trust. What were the facts? Under the trusts of the marriage settlement Mr. Hill had a life interest, of which no children, however numerous, could deprive him, in the whole of the fund; so that any interest which he might have in concealing the birth of a child must be some ulterior interest to arise after his death. If there were no children of the marriage, and the wife survived, the property was to go to her absolutely; whereas if Mr. Hill outlived her he was to take half of the fund, and the other half was to go to her next of kin. There remained the very material fact that the right of Mr. Hill, in case he survived, to take half of the settled fund, was subject to an absolute power of appointment on the part of the wife. If she survived she had the fund absolutely, while, if Mr. Hill survived, by a single stroke of her pen she could prevent him from touching one penny without her consent. It followed that all attempts to suppress the child must be useless. Mr. Hill must have known that unless his wife consented to the suppression of the child—unless she became a partner in his guilt—he would never get a single shilling of the settled property. Thus the prosecution recoiled with a fearful rebound upon the wife and her advisers, because if Mr. Hill were to profit by the suppression of the child he could only do so, under the terms of the marriage settlement, with the full knowledge and consent of his wife. It was worthy of remark that the 14,000*l.* a-year of the first published account had dwindled down to 14,000*l.* in bulk. The fact was, however, that the capital did not amount to 14,000*l.*, for the stamp on the marriage settlement would not cover a larger sum than [illegible]*l.* But he had shown that Mr. Hill could have no pecuniary motive without full complicity on the part of his wife. A noticeable circumstance was that, though both young persons, seven years elapsed after their marriage before there was any hope of issue. At length Mrs. Hill became pregnant, and then it was said that she came over from the Continent to London to be confined. That statement was not quite accurate, because she went, not to London, but to Ireland, to visit Mr. Hill's friends. It was surprising that a young woman, about to give birth to her first born, instead of staying among the friends of her husband in Ireland, where she was known and where she might reckon upon every attention in the hour of peril, should have hurried off to London under circumstances of such pressure that she was obliged to leave the train before it arrived at its destination, and to take refuge in a small public-house in a country town. Not a single friend or acquaintance had been called to prove that she ever said she was in the familyway. Not a word was ever heard of this child. Suddenly, and without any assignable reason, she left her home in Ireland, and the only conclusion to which an impartial man could come was that she had some purpose of secrecy to serve. He did not intend to follow Mr. Hill into London after the confinement, but one thing was quite clear, that it was the mother who, in the dead of winter, by a late train reaching Euston Station at 11 o'clock at night, and in the charge of a young girl totally unfitted for such a trust, sent her first-born child up to London, a distance of nearly [illegible] miles. He appealed to the honest instincts of every mother whether it was credible that without her knowledge and consent the unhappy child could have been so consigned. A mother who consented to part with her first-born immediately after its birth, and who for two whole years abstained from making any inquiry after her own offspring, must have the strongest possible motive for concealment—a motive sufficiently strong to overcome the yearnings of maternal love. What the motive was in this case he did not care to inquire at the present moment. Whether the wife was actuated by a desire to conceal her own shame—to hide a dishonour done to the nuptial bed—was a question which he had no wish to discuss. If those who represented the unhappy woman expected to elicit from him a knowledge of the strength of the allegations and facts upon which Mr. Hill would rely in a charge of adultery against his wife, which must be investigated before Sir Cresswell Cresswell, he could tell them they were mistaken, for he assuredly would not enter into that subject until he appeared before the proper tribunal. The learned gentleman, turning to the charge before the magistrates, maintained that the very fact that Mr. Hill went to the registrar long before there was any legal obligation on him to do so, showed that he had no intention to make a false statement. No man in his senses would perpetrate against himself in the pages of an official record the proof of a misdemeanour when there was not the smallest necessity for doing so. There could be no doubt, too, that Mr. Hill signed the register in his genuine hand, and with his proper name. It was true he left out 'Guinness,' and gave only the initial letter of his first Christian name; but it was well known that three judges now on the bench, of whom Baron Bramwell might be mentioned as one, were in the habit of omitting some of their Christian names when putting their signatures to documents. There was no proof that the inaccuracies in the entry were attributable to Mr. Hill. The death of Herbert, the registrar, was to be regretted. When he was relieving officer there were defalcations and irregularities in his accounts, and in this very register there were inaccuracies of so grave a character that the superintendent registrar was obliged to report him as incompetent, the result of which was that he resigned—to use the words of Mr. Hefford—"under compulsion." In short, the authenticity of the register was completely destroyed, and no criminal proceeding could be founded upon it. He hoped the magistrates would not shrink from the responsibility of saying that the defendant ought not to be committed for trial. No harm would be done, because it would still be open to the prosecution to present a bill to a grand jury if they pleased, while a great injustice would be avoided. He had shown that the alleged pecuniary motive on the part of Mr. Hill had no existence; that Mrs. Hill herself must have been from first to last cognizant of what was going on with the child, especially since the girl Parsons must have told her of the two women whom she saw in London, and that there was not the slightest reason for supposing that the mistakes which appeared on the face of the register-book were the work of Mr. Hill, whose own signature was in all respects genuine. For these reasons he trusted the magistrates would spare Mr. Hill the inconvenience, anxiety, and expense which a trial must entail upon him."

The magistrates then retired. On their return, after the lapse of about five minutes, the Chairman said,—The magistrates, having considered this case, are unanimously of opinion that the defendant should be sent to take his trial for the offence with which he is charged. I have also to state that bail, if offered, will be accepted, the defendant himself in 500*l.*, and two sureties in 500*l.* each. Mr. Cooke was bound over to prosecute. The prisoner, who began writing a letter as soon as he heard the decision of the magistrates, was removed by the police, in the first instance to the station-house in Rugby, where he has hitherto been confined, but afterwards to the county gaol. It may here be mentioned that in the reports which were first published, it was incorrectly stated that Mrs. Hill was a granddaughter of the late Sir Francis Burdett. She is a daughter of of the late Mr. William Jones Burdett, and her mother, therefore, is not Lady Burdett. It is equally untrue that Mrs. Hill was adopted by Miss Burdett Coutts.

SALISBURY.—A large and influential meeting of noblemen and gentlemen connected with the county of Wilts was held in the Town Hall of this city on Thursday to consider the propriety of contributing to some public and permanent record of the esteem and respect borne by the inhabitants of the county to the person and character of the late Lord Herbert of Lea. The Right Hon. Sotheron Estcourt, M.P., presided, and the meeting was addressed by the Bishop of Salisbury, Mr. Baring, M.P.; Mr. Danby Seymour, M.P.; General Buckley, M.P.; Mr. Ewart, M.P.; and other gentlemen. Resolutions were unanimously adopted for the erection of a statue of Lord Herbert in Salisbury, as the capital town of the county, and for the establishment of a convalescent hospital in some place deemed best adapted for that purpose, under the name of the Herbert Convalescent Hospital; and a committee was appointed to carry the resolutions into effect.

Ireland.

LETTER FROM DR. M'HALE TO THE PREMIER.—The *Freeman* of Friday publishes another letter signed "John, Archbishop of Tuam," to Lord Palmerston, in which he predicts the early downfall of the Whig administration, because, "besides the energy of the chief, the adhesion of the subordinate members is essential to stability; and in the falling away of its old supporters there are evident symptoms of the early doom of the present government." He also predicts that the "fiery spirit" of Earl Russell "will soon subside to the placid level" of the House of Lords, which assembly he denounces for many shortcomings. He vehemently comments on "the evils of the Established Church," and on the misrepresentations published by the "prosperity of Ireland writers" of the English press. The

position of the Pope and the misdeeds and wickedness of the enemies of the Holy See occupy a large portion of the letter.

ATTEMPT TO BURN KILKENNY COLLEGE.—A mysterious attempt was made on the 9th inst. to burn this institution. One of the masters was awakened in the middle of the night by a noise like the smashing of sticks, and on getting up to ascertain the cause he found the school-room in flames. The pupils were at once alarmed and brought out to the lawn in front of the college. Prompt assistance and a good supply of water eventually overcame the flames before any serious damage was done. The masters then proceeded through the other apartments of the college, when they found another fire in the usher's room, on the ground floor, which could not have been caused by the one in the school-room. On further investigation another fire was found smouldering under a staircase, where a quantity of matches, half-consumed pieces of paper, and ignited sticks, showed how deliberately the incendiary had set to work. As soon as the school-room was in a state to be examined, it was found that the fire had broken out at both extremities of the room, and that in the two desks, in other portions of the apartment, half-consumed matches and paper had been placed to aid the conflagration. Altogether in five places there were found preparations for effecting the destruction of the building and its inmates. The magistrates have instituted an inquiry into this extraordinary affair, but though the closest scrutiny has been made into everything calculated to throw light on it, no facts have yet been elicited calculated to bring the crime home to any individual.

THE APPRENTICE BOYS OF DERRY.—Twenty persons were summoned at Londonderry on the 19th inst., at petty sessions, by order of the Government, for an alleged violation of the Party Emblems Act on the anniversary of the relief of Derry. The bench unanimously decided that no case had been established, and refused the information.

Scotland.

PRESENTATION OF THE FREEDOM OF PERTH TO SIR HOPE GRANT.—On Thursday, the 12th inst., the freedom of the city of Perth was conferred on General Sir James Hope Grant, in the City Hall, "as a mark of their warm admiration and their gratitude for his eminent services to his country in the late campaigns in India and China," and in the evening the General was entertained at dinner in the County rooms by the gentlemen of the county and city. The Earl of Mansfield presided, and the company included the Duke of Athole, the Earl of Airlie, Viscount Strathallan, Viscount Stormont, Lord Kinnaird, Lord Dupplin, Lord Charles Kerr, Lord Gray of Kinfauns, Sir R. Menzies, Sir G. Ramsay, General Lindsay, M.P., Mr. Stanhope, M.P., the Lord Provost of Perth, Mr. E. T. Gordon, Sheriff of Perthshire; Mr. Grant, of Kilgraston, and Mr. Frank Grant, brothers of the guest, &c. On both occasions Sir Hope Grant addressed the company at some length, in the morning on the Indian mutiny, and in the evening on the war in China. The following is the substance of his remarks:—

"The great honour you have conferred in presenting me with the freedom of the city, I feel as a particular compliment from the fair city of Perth, which I am proud to own as my native county town. During the two last campaigns I have indeed seen much service; and in the commencement of the mutiny in India it was truly marvellous and providential how the British nation was carried through the dangers and difficulties with which it was surrounded. I never shall forget the 1st August, at Delhi, 1857, during the rebellion, when it was at its height. The 2d of that month was the Burru-ede, a great Mahometan festival, on which day the King of Delhi used to proceed to a large serai or courtyard, about three miles from the town, where a camel was sacrificed in honour of Ishmael, who was supposed to have been offered in sacrifice in place of Isaac, and on that day the rebels determined to make a grand attack, and annihilate the Feringhee force. Our numbers from the first were only about 5000 men, but from the heat of the season, sickness, and fighting, our strength was greatly reduced. Independent of the trenches, we could only turn out about 1000 men to resist any attack made on our flank and rear. It was in the midst of the rainy season, when usually the country becomes so swampy that it is rendered quite impassable; there had, however, not been a drop of rain for a fortnight, a most unusual circumstance, and the rebels on this day determined to make a grand attack, which was skilfully planned. A large force with guns was to go up the left bank of the Jumna, which covered one of our flanks; they were to proceed up the river 20 miles, cross at a bridge of boats called Bagput, and occupy a town in the rear through which all our supplies came. Another force of some 6000 men, and some 18 guns, was to cross the canal about three miles to our right flank, and attack us there; and the remainder of the troops were to attack our position and batteries in front. We had blown up the bridges which crossed the canal, but were unable to hold the position where they had been built, as we had not a man to spare from the defence of the camp. Accordingly, on the 1st August, the day before their festival, they sent out their troops, built a bridge across the canal, some of their cavalry had crossed, and their guns were just preparing to get over, when a black cloud appeared overhead, and torrents of rain fell with such violence that the bridge broke away, and the whole country around was so completely swamped they could not move through it. I was at this time talking to Sir A. Wilson in his tent, and, as you may conceive, not in the most cheery manner, when the late Major Hodson, whose gallantry is well known, and who had been sent to reconnoitre, rode into camp with a waterproof coat on, drenched with rain, and gave us this account, for though so much rain had fallen at the bridge we had scarcely a drop with us. It was the most wonderful interposition of Providence; without which, in all probability, not one of us would have lived to tell the tale. In about a week afterwards we had a strong reinforcement of upwards of 3000 men, which rendered us comparatively secure. Well, gentlemen, the China war has also ended satisfactorily, and I trust commerce will increase greatly. If the Chinese nation were well governed, great trade might be expected from it. They are a fine, manly, civil, industrious people, strong, well made men, and had they been better versed in the science of war we should not have beaten them so easily. In the last campaign, amid all the horrors and dangers of war, there was much to interest and amuse, and I cannot help remembering the day we landed at Pehtang. The country around was a large salt marsh, and before we were enabled to set foot on shore the tide had risen and covered the whole country round for miles with water. There was a raised causeway or road, which ran from the Taku Forts to Kohtung, and General de Montauban and myself determined to make for this position. There was a large Tartar cavalry picket on this road, but they seemed struck with surprise and terror at our amphibious appearance, and at two such fine armies marching up to their knees in water, with their trousers tucked up, carrying shoes and stockings in one hand, and in the other their weapons of destruction, and they never waited for an attack. Our first day's fight was upon the 12th of August—grouse shooting day. But we had, unhappily, other game to destroy. The Tartars were well licked; and in the house where San-ko-lin-sin, the famous Tartar general, had resided, a despatch was found written by him to the Emperor, in which he said—'English newspapers have been put into my hands, which I have had translated, and in them it is stated that the English mean to land at Pehtang, and take our forts in reverse. We know very well this is not likely to be the case. No nation would ever be so foolish as to state publicly the tactics they intended to pursue. Besides which, the country is quite impracticable, and I have troops all along the road which will soon annihilate them.' So, the candour with which this was stated, and the way in which we tried to forewarn the Tartar general, had the effect of putting him off his guard, as he could not believe in the truthfulness of our public prints. Well, the Taku Forts fell, and we marched up to Pekin, after two sharp actions along the road. Batteries were formed by the French and ourselves to blow down the walls, which would have been no easy matter, as they were 50 feet high and 60 in breadth. We have read in ancient history of the walls of Babylon being so broad that a number of chariots could be driven abreast along the top of them, and on the walls of Pekin I am convinced that six or eight coaches-and-four could have gone easily in the same manner. However, just five minutes before our guns were to open, one of the city gates was given up to us, which we took possession of. A day was fixed for signing the treaty, and as I had been informed by Roman Catholic missionaries—who had heard it from Chinese converts, of whom there are a great number in that city—that infernal machines and guns were to be turned against us when we got into the intricacies of the town, I sent a large force to be prepared for any little *contretemps* we might meet with. Lord Elgin accordingly started at the hour appointed, and I accompanied him. We proceeded to the hall of audience, where we were received by the Prince Kung and about 400 or 500 Mandarins, dressed in splendid robes. The terror displayed in the Prince's countenance was truly amusing. His eyes kept turning about without moving his head, first towards Lord Elgin and then towards me, and he was as pale as death. The ceremony was just commencing, when Mr. Berto, a photographer who had accompanied me to China, being anxious to obtain a good view of the signing of the treaty, placed his large apparatus within 20 yards of Prince Kung, the large lens presented at his breast and at the other Mandarins, who, like ourselves, poor fellows, were just as frightened at infernal machines as we were. They thought this was some terrible species of mortar with which we intended to blow them all into the next world, and their looks of consternation were truly amusing. The treaty was soon signed, and we were bowed out much more pleasantly than we were bowed in. You are aware, gentlemen, everything ended satisfactorily. In a few days we marched down the country, and got away just as the severe frosts commenced. The river closed up, and snow fell, and I was obliged to march the cavalry 32 miles in one day to the mouth of the river Peiho to enable them to embark. Shortly after the frost became so severe that the sea froze over 40 miles from land. Well, gentlemen, we got safely home to our native country, and I trust we shall have no more war with China. In conclusion I must express my delight at seeing that we are not behind other counties in showing a fine body of volunteers. As long as such a fine spirit of emulation continues, foreign countries will not call us a nation of shopkeepers, and they will be of the greatest service to our nation when called upon to act. The present American war proves to us how useless are numbers without discipline, and I trust it will be an inducement to our Volunteers to carry this out to the fullest extent."

Railways.

COLLISION ON THE MIDLAND.—On Monday evening as a goods train from Bristol was shunting from the up line at Mangotsfield to a siding on the down line to enable the Parliamentary train from Bristol to pass, one of Marcus's excursion trains from Bath to Liverpool, consisting of 14 carriages, arrived, and before it could be stopped ran into the goods train as it was crossing the line. About a dozen passengers received contusions, and one of them, Mr. Williams, house decorator, of Bath, sustained some severe injuries of the spine and concussion of the brain. Medical assistance was obtained in the neighbourhood, and in a few hours all the passengers were enabled to proceed on their journey, except Mr. Williams, who remains at the station in a precarious state.

COLLISION ON THE WEST MIDLAND. — On Wednesday evening, as the Midland train from Birmingham to Worcester was approaching Droitwich station, it ran into a goods train which had been stopped by a coal train at the station in consequence of the moveable bottom of one of the trucks having fallen out upon the rails while shunting. Every attempt was made to stop the train by signal and otherwise, but the slippery state of the rails prevented the action of the breaks. Just before the collision the stoker of the passenger train jumped off the engine, but the driver stuck to it, and was uninjured. Fortunately all the carriages kept the rails, for had they run off the road the consequences must have been frightful, as the line runs at this place along a high embankment, with a small river passing under it immediately below the spot where the collision took place. Several of the passengers were severely cut and bruised, but most of them were sufficiently recovered in the evening to resume their journey. The others, including Mr. Gerina, the Misses Gilpin, Mr. Cole, butcher; Mr. Thomas Richards of Lichfield, and Miss Procter of Gloucester, remain at Droitwich and are doing well.

THROWING STONES AT RAILWAY TRAINS.—At the Croydon Police Court, on Saturday, W[illegible] a boy about nine years of age, was con[illegible] on the 5th inst., wilfully thrown a [illegible] train at Anerley bridge on the B[illegible] inflicted a violent blow on the head [illegible] driver in charge of the express train [illegible] Ramsgate. It appeared that the practice of throwing stones at railway trains was [illegible] serious, and that seven or eight carriages [illegible] recently been broken at Anerley Bridge [illegible] engine-driver on another part of the [illegible] severely hurt by a stone thrown at [illegible] perpetrators had not been discovered. T[illegible] sentenced the prisoner to pay the mi[illegible] 3*l*. and 13*s*. costs, and in default to be [illegible] four days, and after that to be sent to a [illegible] two years. The prisoner's father promised [illegible] in three weeks, the magistrates having [illegible] him that time.

Law.

CENTRAL CRIMINAL COURT.—*The Holborn* [illegible] *Cogan*, a powerful man, aged 30, was charged [illegible] ment, and also on the coroner's inquisition [illegible] murder of his wife, Mary Anne Stokes C[illegible] membered that the prisoner and his wife ha[illegible] funeral and returned home late at night [illegible] and that in the course of the night, after [illegible] quarrelling, the prisoner ran out of the h[illegible] cut in a shocking manner, and was taken [illegible] Hospital, where he remained for some days [illegible] state. On examining his lodgings the police [illegible] quite dead, with her throat cut and with other [illegible] seemed to show that the prisoner had k[illegible] attempted to commit suicide. He declared [illegible] wife had cut his throat while he was sleeping [illegible] rug, and that she must afterwards have des[illegible] medical evidence, however, showed the extreme [illegible] of the woman having been able to inflict [illegible] self, though Mr. Painter, the principal medi[illegible] he should be sorry to swear that it was im[illegible] so. It was also proved that there was no blood [illegible] rug on which the prisoner said he was sleeping [illegible] attacked him. The defence was that the evidence [illegible] strong in favour of the prisoner's statement [illegible] there was too much uncertainty to convict [illegible] after deliberating about half an hour, returned [illegible] *Guilty*. The prisoner, who had exhibited a g[illegible] ness and effrontery during the trial, clasped [illegible] and said he never did it, and that Mr. Painter [illegible] was a wicked man, and had caused an inn[illegible] murdered. Mr. Justice Byles put on the black [illegible] sentence of *Death*, expressing his opinion that [illegible] heard the evidence could come to any [illegible] than that he was guilty. *The Westminster* [illegible] *Maloney*, a bricklayer's labourer, was tried [illegible] indictment charging him with the wilful m[illegible] on September 2. The details of this case ar[illegible] to our readers. The case depended chiefly [illegible] the man Saunders, who called accidentally at the [illegible] the prisoner strike the blow. The jury were a long [illegible] ration, and were at first disposed to return a verdict of Man[illegible] slaughter, but the Judge told them there was n[illegible] rant such a verdict. Ultimately they fo[illegible] murder, recommending him to mercy on the [illegible] home without malice, and that something [illegible] provoke him. The prisoner said—"I am [illegible] Mr. Justice Byles then sentenced him [illegible] that the recommendation of the jury w[illegible] to the proper quarter. *The Case of* [illegible] *David Griffiths Jones*, 36, calling himself a [illegible] was charged on two indictments with felonious[illegible] uttering a will purporting to be the will of an elderly [illegible] who had been one of his patients, called Sophia [illegible] with committing wilful and corrupt perjury [illegible] a judicial inquiry in the Court of Probate [illegible] same will, when the prisoner falsely swore [illegible] doctor of medicine, and that he had duly o[illegible] at Aberdeen. It will be remembered that [illegible] which was made by the prisoner on oath, was [illegible] on cross-examination to be entirely false; [illegible] son had personated the prisoner at Aberdeen, [illegible] degree, to which the prisoner had no right [illegible] pleaded guilty to the perjury, and Mr. Se[illegible] who appeared for the prosecution, stated [illegible] circumstances, he was of opinion that [illegible] forging a will could not be established [illegible] and he should therefore withdraw [illegible] evidence in support of that charge. Mr. Justice [illegible] that he had read the depositions himself, [illegible] opinion that the evidence was not sufficient [illegible] in convicting the prisoner upon the charge [illegible] verdict of *Not Guilty* was then formally taken [illegible] ment for forging a will, and on the indictment [illegible] was sentenced to 12 months imprisonment [illegible] *The Alleged Murder in the River.—John S*[illegible] charged with the wilful murder of William D[illegible] American ship Bosphorus, now lying in the [illegible] On the arrival of the vessel in the river a [illegible] between the prisoner and a seaman called P[illegible] the prisoner in a very brutal manner. During [illegible] prisoner wounded Porter with a knife, upon [illegible] hearing the alarm, ran into the forecastle and [illegible] knife from the prisoner. The latter imme[illegible] deceased, inflicting such injuries that he [illegible] The jury returned a verdict of *Manslaughter*, [illegible] the prisoner to mercy, on account of the p[illegible] received. Mr. Justice Byles said he was always [illegible] to give effect to a recommendation to mercy [illegible] use of a knife was a very serious matter, w[illegible] lutely necessary to repress by the law, and [illegible] sult Mr. Justice Keating before he passed sentence [illegible] prisoner. On Thursday the prisoner was [illegible] judgment, when Mr. Justice Byles said that it [illegible] case of manslaughter, and he had considered [illegible] carefully, and had consulted Mr. Justice Keating [illegible] to the punishment that should be inflicted [illegible] learned judge had concurred with him as to [illegible] the sentence he was about to pass upon the [illegible] was that he be kept in penal servitude for [illegible]

Sporting.

TEN-MILE FOOT RACE.—A great match to run [illegible] the Champion Ten-mile Cup and 50*l*., with [illegible] man, took place on Monday at the White Lion, H[illegible] in the presence of between 3000 and 4000 spe[illegible] match was made between John White, of Gateshead, [illegible] of Norwich, E. Mills, of Bethnal Green, and a N[illegible] Indian of the Seneca tribe, surnamed "Deerfoot," [illegible]

[illegible] The competitors were all well-known runners. [illegible] the fastest runner of the day; Mills was [illegible], and J. Brighton, of Norwich, the four-[illegible] champion. Mills defeated the Seneca Indian by a few [illegible] in a six mile race at the same grounds a few weeks since, [illegible] last week defeated White at Salford in a four-[illegible] had to go 68 times round the ground [illegible] 10 miles. When the word was given for the [illegible] places, Deerfoot appeared in a wolf-skin, [illegible] his headband, and tinkling bells round his [illegible] rang for the start, Brighton was found [illegible] and both Mills and White appeared very [illegible] comparison to the Indian. When the start took [illegible] the lead, Mills second, Deerfoot last, and so [illegible] half a mile, when Mills took the lead, which [illegible] mile and a half, when the Indian went to the [illegible]. White then tried to recover the lead, [illegible] but failed to retain, and at three miles had to [illegible]. The remainder of the race between Mills and the [illegible] was of an exciting character. Mills struggled hard to [illegible], but the Indian occasionally shot a-head [illegible] astonished the spectators. There was not a [illegible] the two at the seventh mile, when the Indian [illegible], and on commencing the eighth went right [illegible] Mills, who was evidently in pain, gave in. The [illegible] in 54 minutes 25 seconds. Deer-[illegible] finished at his leisure, in [illegible] has since entered into agreements to run 10 miles with [illegible] a well-known pedestrian, and to allow him a [illegible] inst., at the Rotunda Gardens, [illegible], known as the "American Deer," for a [illegible], at the Brompton running grounds, on [illegible] and with a man named Jones, living in Islington, [illegible] same place, on October 21.

Obituary.

[illegible] DASHWOOD, BART., died at his seat, Kirtlington [illegible], on the 22d inst., in his 75th year. He was [illegible] Kirtlington Park in 1786; married in 1815 the eldest [illegible] of Sir W. Rowley, and succeeded his father in 1828. The [illegible] Baronet was son of Alderman Dashwood, of London, [illegible] in farming the revenues of Ireland in the reign of [illegible].

[illegible] WHITE, a member of the London Stock [illegible] suddenly while shooting at Caragh Lake, [illegible] the 17th inst., from disease of the heart. He [illegible] honour of knighthood in 1835, while High Sheriff [illegible] Cork.

[illegible] MERCER, late Colonel-commandant of the [illegible] of Royal Marines, died on the 17th inst. at [illegible], Southsea. He entered the service in 1803, and [illegible] the destruction of the French squadron in the [illegible]. In 1810 he repeatedly landed on the north [illegible], co-operating with the patriots. In 1812, while [illegible] Her Majesty's ship Java, he was engaged with and [illegible] the United States' frigate Constitution. In recog-[illegible] services he received the war medal with one clasp. [illegible] the rank of Major-General in 1856.

[illegible] DENNIS HERBERT, one of the senior Generals in the [illegible] the 19th inst. at Exeter. He served on the [illegible] with the army under Lord Moira and the Duke of [illegible] he was engaged during the Carib war in St. Vincent's, [illegible] Prince, in St. Domingo, and at Fort Irois during the [illegible] siege, and also at the siege of Copenhagen in [illegible] He attained the rank of Major-General in 1825, and that [illegible] in 1854.

[illegible] H. HOME STIRLING, Bart., died at his seat, Glora, [illegible] on the 19th inst., at the early age of 31. He was [illegible] son of Captain George Stirling (second son of the [illegible] baronet), and was born in 1830. He married in 1854 the [illegible] daughter of Colonel Begbie, of the 44th Regiment, [illegible] in 1858, and was appointed in 1860 to a [illegible] in the Linlithgow Militia Artillery.

[illegible] FRANCIS, the Sculptor, whose death took place [illegible] was very eminent in his day as a sculptor, and also [illegible] of some of our most rising sculptors. He was [illegible] instance of self-teaching, although his choice of a [illegible] might almost be said to have been accidental. Mr. [illegible], who was a native of Lincoln, became, at an early age, [illegible] farmer in that county, but with a natural talent for sculpture. His wife was a near relative of the great Lord Nelson, and when he died Mr. Francis conceived the notion, which he carried out, of carving in jet a funeral car of the hero. This, and more especially a figure-head of Victory, attracted the notice of Mr. Coke of Norfolk, afterwards Earl of Leicester, who [illegible] to London, and became and continued his [illegible]. Mr. Francis became a pupil of Chantrey, and [illegible] introduced by Mr. Coke to the leading men [illegible] party, of whom he was during the whole of his [illegible] sculptor. He was a great favourite with [illegible] IV., and was patronised by the Duke of Sussex, [illegible] Bedford, Norfolk, Sunderland, the Vernon family, [illegible] Lord J. Russell, and the leading men of the [illegible]. The patronage of the late King was continued by [illegible] Victoria and the Prince Consort. When the late Duke [illegible] died Mr. Francis was commissioned to execute [illegible] the most inadequate materials. He had, in fact, [illegible] likeness, and he executed his task with such [illegible] as to have commanded the warmest approval [illegible] judgments from both the Queen and the Prince. [illegible], who died at the age of 81, lived to see his favourite [illegible] eminence. His daughter, Mrs. Thornycroft, is [illegible] by her figures of the Royal children, which [illegible] not only for the fidelity of the portraits, but [illegible] artistic execution. Mr. Thornycroft, her husband, [illegible] Matthew Noble, and Mr. Joseph Durham were also favourite [illegible] of Mr. Francis.

Miscellaneous.

MURDER OF A MISSIONARY AND HIS WIFE.—By [illegible] from Sydney (says the *Melbourne Age*) we [illegible] intelligence of the brutal murder of the Rev. Mr. and Mrs. Gordon, of the Nova Scotia Mission, by the [illegible] at Erromanga—the same island in which, it will be remembered, John Williams was killed in 1839. The [illegible] was conveyed to the Rev. Mr. Cuthbertson, [illegible], by letters from Lifu. The particulars are as [illegible]:—It appears that in consequence of the measles, which had been raging among the islands with fearful [illegible], the natives of Erromanga determined to kill all the white people on that island, looking on them as the cause of the disease. Gordon was aware that [illegible] intended taking life, but thought that [illegible] time would change their purpose. About noon on the 20th of May nine Bunkill natives, of whom the [illegible] Lova was the leader, called at the mission-house, and inquired for Gordon. They were informed that he was working at a house which he was building as a winter residence. They then went towards that place. Eight of the men concealed themselves, while the ninth went further down, to inveigle Mr. Gordon into the trap thus laid for his destruction. He had unfortunately sent all the boys away to gather grass for the roof of the new house, and was unattended, when Narabu Leet walked up to him and asked for some calico for himself and others of the party, who, he said, were waiting at the mission house. Mr. Gordon took up a piece of board, and wrote with charcoal, "Give those men a yard of cotton each." This he gave to the savage, and told him to take it to Mrs. Gordon, who would give him what he wanted. The savage then induced Gordon to go with him, and he started up the hill, followed by the native. On arriving at the ambush Narabu Leet buried his tomahawk in Mr. Gordon's spine. He immediately fell, uttering a loud cry. Narabu Leet then gave another stroke on the right side of the neck, which almost severed the head from the body, and others, rushing from their concealment, quickly cut the poor victim to pieces. While this tragedy was being enacted another native ran towards the mission house, and Mrs. Gordon, who had been alarmed by the fiendish yells and laughter of the savages, ran out, and, standing near the outhouse, she asked Ouben what all the noise was about. He laughed and said, "Nothing; it is only boys amusing themselves." She said, "Where are the boys?" and turned. Ouben, who had his tomahawk concealed behind his back, then struck her a blow below the shoulder-blade. She fell on the grass, and he then nearly cut her head off and otherwise mutilated her body. Both bodies were recovered and buried.

BIRTHS.—On the 21st inst, at 23, Grosvenor Street, the Lady FREDERICK FITZROY, prematurely, of a daughter—24th inst, at 91, Princes Street, Edinburgh, Lady HARRIET VERNON WENTWORTH, of a daughter—13th inst, at Barton Mills, Suffolk, the Hon. Mrs. ABRAHAM, of a daughter—22d inst, at Auchenbowie House, Stirlingshire, Mrs. BULLER ELPHINSTONE, of a daughter—19th inst, at Tythegson Court, Glamorganshire, the wife of ARTHUR OWEN LORD, Esq., of a daughter—21st inst, at Cambridge, the wife of Professor STOKES, of a daughter.

MARRIAGES.—On the 23d inst, at St. James's, Piccadilly, Viscount CLIFDEN, to ELIZA HORATIA FREDERICKA, eldest daughter of Lady AUGUSTA SEYMOUR and the late Mr. FREDERICK SEYMOUR, and sister of the Countess Spencer—24th inst, at Withecombe Raleigh, Devon, Viscount CHETWYND, to MARY, sole surviving daughter of the late JOHN HUSSEY, Esq., of Lyme Regis, Dorset—19th inst. at Albury, Surrey, DAVID SCOT DICKSON, Esq., W.S., of Edinburgh, to the Hon FRANCIS SOPHIA ADDINGTON, fourth daughter of the Rev. Viscount SIDMOUTH—24th inst, at Cheddar, Somerset, the Hon. WILLIAM LEONARD HOLMES A'COURT, eldest son of the Lord HEYTESBURY, to ISABELLA SOPHIA, eldest daughter of the Rev. RICHARD A'COURT BEADON—19th inst, at St. Mary Abbot's Church, Kensington, AUGUSTUS WENTWORTH GORE, only son of the late Charles Arthur Gore, 1st Life Guards, to Miss EMILY ANNE CURZON, third daughter of the Hon. Edward and Mrs. Curzon, of Scarsdale House, Kensington—18th inst, at Abbeyleix Church, Lieut.-Col. JOHN GUISE, V.C., 90th Light Infantry, youngest son of General Sir John Guise, Bart., K.C.B., to ISABELLA, only surviving child of the late Rev. ARTHUR and Hon. CATHERINE NEWCOMBE—17th inst, at Maxton, JAMES LIEBIG GREGORY, Esq., only child of the late William Gregory, Esq., Professor of Chemistry in the University of Edinburgh, to ELIZABETH MARY SOMERVILLE, only daughter of the late Colonel Sir HENRY FAIRFAX, Bart, of St Boswell's Bank, and sister of Captain Sir William Fairfax, Bart., aide-de-camp to the Governor of Malta—24th inst, at St. Peter's Church, Eaton Square, HENRY GILLETT, Esq., Captain East Kent Reg. of Militia, son of the late Cyrus Gillett, Esq., of Halvergate Hall, Norfolk, to SARAH MARIA, elder daughter of W. J. LYSLEY, Esq., M.P. of Mimwood, Herts—19th inst, at Sarisbury, Titchfield, ROBERT, eldest son of ROBERT GOSLING, Esq., of Botleys Park, Surrey, and Hassobury, Essex, to ELEANOR, eldest daughter of SPENCER SMITH, Esq., of Brooklands, Hants.

DEATHS.—At 23, Grosvenor Street, HELEN, infant daughter of Lord and Lady FREDERICK FITZROY—19th inst, at Cliburn Rectory, of consumption, SOPHIA PORTIA, wife of the Rev. C. W. BURTON, rector of Cliburn, Westmoreland, and second daughter of the late Sir William Pilkington, Bart., of Chevet—20th inst, at Charleywood House, near Rickmansworth, Lieut.-Colonel HENRY CONNOP, late 55th Regiment, aged 66—22d inst, at 2, Montague Place, Cheltenham, Lieut.-Colonel GREENWOOD, C.B., of the Royal Artillery, aged 67—20th inst, at Exeter, Colonel JOHN GRAHAM, H.E.I.C.S., of Ellerslie, Fremington, son of the late Captain Charles Graham, H.E.I.C.'s Maritime Service, aged 54—14th inst, at Stoke Newington, Lieut.-Colonel EDWARD OSBORN, late of the Madras Army, aged 76—19th inst, at his residence, 31, Grove End Road, St. John's Wood, Colonel WILLIAM WHITE MOORE, late of the H.E.I.C.'s Bengal Establishment—18th inst, at 21, York Place, Brompton, MARIA, widow of the late Lieut.-Colonel HENRY ROSS GORE, C.B.—21st inst, at Cambridge Terrace, Hyde Park, MELESINA, daughter of the late Lieut.-Colonel STAPLETON, of Thorpe Lee, Surrey—20th inst, at his residence, 39, Grosvenor Place, Bath, Major HENRY MARSH, aged 78—15th inst, in Upper Baker Street, Regent's Park, Major HAWKES, formerly of the 21st Light Dragoons, aged 75—13th inst, at his residence, Ellinthorp Hall, near Boroughbridge, Yorkshire, HEATON CLARK, Esq., aged 71—17th inst, at the Vicarage, Chepstow, SARAH ATKINS, the wife of the Rev. S. F. MORGAN, and eldest daugther of the late George Milward, Esq., of Lechlade Manor, Gloucestershire—15th inst, at 10, Grove Place, Hammersmith, ELISHA NAYLOR, Esq., solicitor, late Assistant Record Reeper of the Inland Revenue Record Office, Spring Gardens—9th inst, at Chambéry, Switzerland, after a few days' illness, ARTHUR GREY MAUDE, Esq., of Great George Street, Westminster, and of the Sessions House, Clerkenwell—19th inst, at Bradmore House, Hammersmith, WILLIAM RAWLINGS, Esq., for upwards of 52 years in the firm of Lambert & Rawlings, Coventry Street, Haymarket, aged 76—22d inst, at 8, Walton Villas, Brompton, CHRISTINA CAMERON, wife of J. A. GOLDINGHAM, Esq., Madras Infantry, and only child of the Rev. Francis Garden, Sub-Dean of H.M.'s Chapel Royal—17th inst, at Foot's Cray, Kent, the Rev. E. H. WARRINER, for many years rector of that parish, aged 77—7th inst, at Boulogne, the Rev. DAVID PIPER, M.A., incumbent of Sadberge, in the county of Durham, aged 64—16th inst, at the Royal Military College, Sandhurst, the Rev. SAMUEL HOWLETT, aged 28—24th inst, at his residence, 23, Brompton Square, WILLIAM FARREN, Esq., the comedian, aged 74.

Markets.

COVENT GARDEN, Sept. 28.

The supply of both Vegetables and Fruit continues good. Apples and Pears are plentiful, and the same may be said of Grapes, Pine Apples, and Melons. Peas are getting scarce. Of Beans there is still a fair supply. For Potatoes markets are heavy; prices rather lower than last week. Cucumbers are abundant, and the same may be said of Tomatoes, which are large and excellent. Cut flowers chiefly consist of Orchids, Dahlias, Asters, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Apples, per doz., 6d to 1s
Grapes, per lb., 1s 6d to 4s	Oranges, per 100, 6s to 14s
Melons, each, 1s to 3s	Lemons, per 100, 6s to 10s
Peaches, per doz., 6s to 12s	Nuts, Cob, per pound, 2s to 2s 6d
Nectarines, do., 4s to 10s	
Pears, per doz., 1s to 4s	Walnuts, per 100, 2s

VEGETABLES.

Cauliflowers, each, 2d to 6d	Artichokes, each, 6d to 10d
Peas, p. quart, 1s to 1s 6d	Beet, per doz., 1s 6d
Broccoli, p. bundle, 1s to 1s 3d	Celery, p. bundle, 1s 6d to 2s
French Beans, per sieve, 2s 6d to 3s 6d	Onions, p. ½ sieve, 4s 6d
	Rhubarb, p. bundle, 6d to 9d
Broad Beans, p. bush, 2s 6d to 3s	Tomatoes, p. doz., 1s to 3s
Cabbages, do., 1s 3d to 1s 6d	Shallots, per lb., 8d to 10d
Potatoes, p. ton, 60s to 75s	Garlic, per lb., 6d to 8d
— per cwt., 4s to 8s	Endive, p. score, 1s 6d
Turnips, per bunch, 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Carrots, do., 4d to 6d	Mushrooms, p. pott., 2s to 3s
Spinach, p. sieve, 1s to 2s	Parsley, p. 12 bunches, 3s to 4s
Cucumbers, each, 6d to 9d	Savory, per bunch, 2d to 4d
Veg. Marrows, p. doz, 1s to 1s 6d	

MARK LANE.—MONDAY, Sept. 23.

The supply of Wheat from Essex and Kent to this morning's market was good, and some portion of it was disposed of for export to France at a decline of 1s. to 2s. per qr upon the prices of this day se'nnight. There was a tolerable attendance, but holders of foreign Wheat not being inclined to accept any abatement in price, very few sales were effected. Malting Barley is 1s. per qr cheaper, grinding unaltered in value. Beans and Peas bring last week's rates. The Oat trade is dull, and we reduce our quotations 1s. per qr. for all descriptions excepting fine Russian. Flour is a steady sale at last week's rates.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk ..White	50—62	Red	50—59
— — fine selected runs..ditto	60—64	Red ...	50—61
— — Talavera	55—66		
— Norfolk	—	Red	—
— Foreign	42—72		
BARLEY, grind. & dist., 26s to 28s..Chev	37—42	Malting .	36—39
— Foreign..grinding and distilling	27—30	Malting .	36—40
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire—Potato	26—28	Feed .	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign........Poland and Brew	20—24	Feed ..	19—24
RYE	36—38	Foreign	—
RYE-MEAL, foreign............	—		
BEANS, Mazagan....34s to 36s ...Tick	35—38	Harrow .	35—38
— Pigeon ......35s—42s..Winds	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
PEAS, white, Essex and Kent..Boilers	31—38	Suffolk .	35—39
— Maple .... —s to —s ......Grey	37—39	Foreign .	35—38
MAIZE............White	—	Yellow ..	—
FLOUR, best marks delivered..per sack	46—51		
— 2d do............ditto	30—46	Country	30—46
— Foreign ....per barrel	28—34	Per sack	43—58

FRIDAY, Sept. 27.

Since the 20th inst. until yesterday we have had a constant succession of very heavy showers, which were much wanted for the country. The Wheat trade this week, owing to a falling off of French orders, has been less active, and a decline varying in the several markets of the kingdom from 1s. to 2s. per qr. has been general. The tendency in the value of Barley and Oats has also been downwards, but for Beans and Peas former prices, and in some places a slight improvement, has been realised. The price of Flour has been steadily maintained, excepting in Liverpool, Manchester, and Glasgow, where a slight reduction was submitted to. Since Friday last 88 vessels have been reported off the coast. The floating trade has been less active, and the sales effected during the week are in favour of the buyer. In Paris, on the 26th, we have to quote a reduction of 1fr to 2fr on the prices of both Wheat and Flour, and the market closed without much activity. The four marks, delivery this month, are quoted equal to 58s. per 280 lbs. The arrivals of foreign Barley during the week have been large, good of Oats, and fair of Wheat, moderate of English Wheat, and small of other grain. A portion of the English Wheat left over from last day was disposed of at the same prices, but some remained unsold at a late hour, factors being indisposed to submit to a reduction; business in foreign was unusually quiet, and Monday's quotations nominal. Barley, Beans and Peas bring late rates. The Oat trade is quiet, and prices unaltered.

ARRIVALS FROM Sept. 23 to Sept. 27.

	Wheat.	Barley.	Oats.	Flour.
English ..	2350 qrs.	680 qrs	310 qrs.	860 sks.
Irish	— „	— „	810 „	— „
Foreign ..	13020 „	11650 „	28210 „	— „ 11030 brls.

LIVERPOOL, Tuesday, Sept. 24.—The transactions in Wheat and Flour since Friday have been on a smaller scale than of late, but full prices have been obtained in all instances. For Indian Corn a good demand continues at previous rates. At Mark Lane yesterday, there being few orders for France and a good supply of English Wheat on offer, a decline of 1s. to 2s was established, while foreign gave way 1s. per qr. The cessation of the French demand produced a dull feeling at this day's market, and only a moderate extent of business resulted, Wheat giving way 2d. per cental, and Flour 6d. per barrel and sack on the rates of Friday. Indian Corn found buyers at a concession of 6d. per qr., which importers were glad to make to effect sales ex ship. Oats and Oatmeal dull of sale. Beans were 6d. per qr. cheaper. Peas and Barley unchanged. The market closes without animation.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Aug. 17..	50s 3d	30s 0d	25s 11d	37s 5d	42s 7d	37s 5d
— 24..	50 3	32 10	26 1	35 10	43 5	35 5
— 31..	52 6	34 1	24 5	37 5	44 0	34 10
Sept. 7..	53 1	35 11	23 7	37 2	44 4	35 3
— 14..	54 6	36 4	22 11	33 4	41 11	[illegible] 0
— 21..	55 11	36 9	22 10	34 11	41 11	38 9
Agg. Aver.	52 9	34 4	24 8	36 0	42 0	36 0

FLUCTUATIONS IN THE LAST SIX WEEKS' AVERAGES.

COAL MARKET.—Sept. 25.

Craghead Steam, 14s.; North Pelton Gas, 13s; Tanfield Moor Butes, 13s.; Walker Primrose, 12s.; Walls End Harton, 18s. 3d.; Walls End Braddyll's Hetton, 19s.; Walls End Framwellgate, 18s. 6d.; Walls End Hetton, 20s.; Walls End Kepier Grange, 18s. 9d.; Walls End Russel's Hetton, 18s. 9d.

Walls End Stewarts, 19s. 6d.; Walls End Caradoc, 19s.; Walls End Hugh Hall, 18s. 9d.; Walls End Whitworth, 15s.; Carway and Duffryn Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.—Ships at market, 25.

HAY.—Per Load of 36 Trusses.

SMITHFIELD, THURSDAY, Sept. 26.

Prime Meadow Hay	80s to	90s	Clover, old	90s to	120s
Superior do.	95	105	New Clover	—	—
Inferior do.	40	55	Do. second cut ..	80	105
New do.	—	—	Straw	28	34
Rowen	—	—			

DAVIS & Co.

WHITECHAPEL, THURSDAY, Sept. 26.

Fine Meadow Hay	90s to	98s	Fine 1st cut Clover	110s to	117s
Inferior do.	80	90	Inferior do.	80	95
Prime New Hay ..	—	—	New 2d cut	84	100
Inferior	—	—	Inferior do.	—	—
Straw	80	84	New 1st cut ..	—	—

BUTTER MARKET.—Sept. 27.

Best Fresh Butter .. .. 15s. per dozen lbs.
Second do. do. .. .. 13s. " "
Pork, 5s. 0d. to 5s. 4d. per 8 lbs.

HOPS.—BOROUGH MARKET, FRIDAY, Sept. 27.

Messrs. Pattenden & Smith report an active demand for the new growth at very firm prices. Currency:—

Mid and East Kent	£9 0 to	£15 0
Weald Kent	8 10 —	10 0
Sussex	8 0 —	9 0

Duty, 110,000l. to 120,000l.

METROPOLITAN CATTLE MARKET.

MONDAY, Sept. 23.

We have an unusually large supply of Beasts, but a considerable number are of very inferior quality, consequently the choicest kinds cannot be quoted lower. The number of Sheep is rather larger than on Monday last; trade is dull, but prices are not much altered. Calves are selling about the same as on Thursday. From Germany and Holland there are 1950 Beasts, 8360 Sheep, 270 Calves, and 160 Pigs; from Scotland, 30 Beasts; from Ireland, 1000; and 3200 Beasts from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 6 to 4 8	Best Long-wools.	4 8 to 5 0
Best Short-horns	4 4 — 4 6	Do. Shorn	— ..
2d quality Beasts	3 0 — 4 0	Ewes & 2d quality	4 0 — 4 6
Best Downs and Half-breds ..	5 0 to 5 4	Do. Shorn	— ..
		Lambs	5 0 — 5 8
Do. Shorn	to ..	Calves	4 0 — 5 0
		Pigs	4 0 — 5 0

Beasts, 6470; Sheep & Lambs, 26,340; Calves, 294; Pigs, 660.

THURSDAY, Sept. 26.

The supply of Beasts much exceeds the demand. The small amount of business transacted is at about the rates of Monday last. The number of Sheep fresh up to this day's market is by no means large. The supply consists chiefly of these left over from Monday, and inferior qualities. Trade is very dull, and quotations remain unaltered. There is no alteration in the Calf trade. Our foreign supply consists of 240 Beasts, 1740 Sheep, and 339 Calves; Milch Cows, 95.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 6 to 4 8	Best Long-wools.	4 8 — 5 0
Best Short-horns	4 4 — 4 6	Do. Shorn	— ..
2d quality Beasts	3 0 — 4 0	Ewes & 2d quality	4 0 — 4 6
Best Downs and Half-breds ..	5 0 — 5 4	Do. Shorn	to ..
		Lambs	— ..
		Calves	4 0 — 5 0
Do. Shorn	— ..	Pigs	4 0 — 5 0

Beasts, 1145; Sheep & Lambs, 6210; Calves, 442; Pigs, 290.

WANTED, a GARDENER (HEAD WORKING) with a complete knowledge of his profession in all its branches, especially he must be a good Flower Gardener; one who thoroughly understands the Management of Plantations preferred.—Apply by letter, stating salary expected, and if with a family the number and ages, to L. C., Post Office, Bude, Cornwall.

WANTED, A SHEPHERD who understands the Management of Sheep, Cows, and Pigs. He will be required to Milk, and Kill the Meat for the house.—Apply to Mr. PAYN, Langley, near Slough.

WANTED, A GROOM, to Ride and Drive, Milk, take care of Stock, and be useful and assist; Wife to manage Laundry. To live on the premises. Middle-age preferred; children objected to.—Apply by letter, with particulars as to ability, &c., to F. H., 104, Hatton Garden, London, E.C.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Married, small family; has great practical experience in Early and Late Forcing, and a successful Exhibitor. Good character from last situation.—S. H., 20, St. Peter's Place, Hammersmith. W.

GARDENER (HEAD).—Age 38, married; well versed in every branch of his profession, including Forcing Pines, Grapes, and other Fruits, and has a practical knowledge of Plants and their Cultivation. Can be highly recommended by the nobleman he is about to leave.—C. T., Phillipson's Library, Kingston, S.W.

GARDENER (HEAD).—Middle age, married, no incumbrance; thoroughly competent in all the branches of Forcing, Plants, Kitchen, Fruit, and Flower Gardens. Wages 60l. per annum, with Cottage. Twenty years' first-class character.—J. B., 30, Stanley Place, New Street, Altrincham, Cheshire.

GARDENER (HEAD).—Married, no incumbrance; is thoroughly acquainted with the Forcing of all kinds of Fruit, Flowers, and Vegetables; the Culture of Stove and Greenhouse Plants, Management of Fruit, Flower, and Kitchen Gardens. Four years' good character from the nobleman he is now leaving, and 20 years' previous recommendation.—M. A., Mr. Williams, Westerham, Kent.

GARDENER (HEAD).—Age 37, married; has a thorough practical knowledge of his profession in all its branches; has been a successful exhibitor, takes a great interest, and devotes the whole of his time to the Garden. Would be glad to meet with a situation where gardening could be carried out in the highest style.—T. P., Attwell's Yard, Uxbridge.

GARDENER (HEAD).—WILLIAM REEMES is at liberty to engage with any nobleman or gentleman in want of a thorough practical Gardener. Could take the Management of the Home Farm; has also had considerable experience in the Management of Woods and Plantations. Liberal salary expected. Six years' good character from present employer, whom he is leaving in consequence of some alteration in the establishment. Can also procure six years' character from previous employer.—Rangemoor Hall, Burton-on-Trent.

GARDENER (HEAD).—Single; understands the Management of Stove and Greenhouse Plants, Early Forcing of Fruits and Vegetables, Flower and Kitchen Gardens. Good character.—A. Z., Post Office, Brasted, Sevenoaks, Kent.

GARDENER (HEAD).—Age 31, married, one child; 16 years' practical experience. Character will bear the strictest investigation.—A. D., 3, Albert Street, Lavender Hill, Wandsworth Road, Surrey, S.

GARDENER (HEAD).—Age 27, married, no incumbrance; thoroughly practical in every department. Two years' good character.—A. B., Mr. G. Roll's, Orleans Road, Twickenham, Middlesex.

GARDENER (HEAD, OR GOOD SINGLE-HANDED).—Age 30, married, no incumbrance; 18 years' experience in all the departments. Undeniable character. Please state particulars.—A. A., Post Office, Brixton Hill, Surrey, S.

GARDENER (HEAD).—Age 37, married, one child; has a practical knowledge of Forcing; also the Management of Kitchen and Flower Gardens. A first-class Grower of Grapes and Plants. Good references.—F., 29, New Church Street, Edgeware Road, London, W.

GARDENER (HEAD).—Married, no incumbrance; understands Pines, Vines, Peaches, Melons, Cucumbers, Stove and Greenhouse Plants, and Kitchen and Flower Gardens. Has lived in noblemen's and gentlemen's establishments. Good character.—A. B., Post Office, Upper Clapton, N.E.

GARDENER (HEAD).—Middle age, married; a most successful Grower and Exhibitor of Fruits, and thoroughly master of his profession in every department. Wages moderate.—C. L., care of Mr. Turner, Royal Nursery, Slough, by whom, as well as his last employer (in whose service he has been several years) he will be highly recommended.

GARDENER (HEAD).—Age 36, married; has had great experience in Forcing Fruit, Flowers, and Vegetables, the Routine of Kitchen and Flower Gardens, Erecting and Heating Hothouses, Improvement of Pleasure Grounds, &c. Five years' good character.—S. S., Mr. Veitch, Exotic Nursery, King's Road, Chelsea, S.W.

GARDENER (HEAD).—Age 36, married, no incumbrance; thoroughly understands Forcing Fruits, Flowers, &c., also the Management of Kitchen and Flower Gardens, Land, &c. Wife can manage Dairy and Poultry. Five years' good character.—C. H., Mr. Baker, American Nursery, Bagshot, Surrey.

GARDENER (HEAD OR UNDER).—Age 25; has a good knowledge of both Early and Late Forcing, and Flower and Kitchen Gardens.—S. W., 56, Queen's Road, Notting Hill, W.

GARDENER (SINGLE-HANDED, or where a Lad is kept).—Age 26, married; thoroughly experienced in his profession. No objection to attend to a Horse and Chaise. Good character.—G. L., 4, Augur's New Cottages, Plaistow, E.

GARDENER to any nobleman or gentleman.—Reference as to professional acquirements, &c., given on application to A. B., Drumlanrig Castle Gardens, Thornhill, Dumfriesshire.

GARDENER.—Age 29; understands Forcing Pines, Vines, Melons, Cucumbers, &c.; Flower and Kitchen gardening. Good character.—A. B., 9, Strewan Place, King's Road, Chelsea, S.W.

GARDENER.—Age 30, single; understands the Management of Stove and Greenhouse Plants, Flower and Kitchen Gardens. Good character.—F. A., Messrs. Weeks, King's Road, Chelsea, S.W.

GARDENER.—A gentleman can highly recommend his late Gardener, age 36, single; understands Fruit, Flower and Kitchen Garden and Forcing, Land and Stock. He has filled his situation for the last 12 years, death being the cause of leaving.—A. B., Post Office, Church Street, Chelsea.

GARDENER.—Age 30, married; understands Early and Late Forcing, the Management of Plant-houses, Flower and Kitchen Gardens, and Pits, Frames, &c., in all branches. Three years' good character.—J. H., Post Office, Beckley, Oxford.

GARDENER.—Middle age, married, without incumbrance; has a thorough knowledge of his profession in the Kitchen and Flower Departments, also has had under his care Green and Hothouses.—Can be highly recommended by Rev. C. DEEDES, Bengor, Hertford.

GARDENER.—Age 28, married, no incumbrance; thoroughly understands Forcing of Early and Late Grapes, Pines, Melons, Cucumbers, &c.; Kitchen and Flower Gardener. Wife an experienced Laundress.—D., Mr. William Bull's Establishment for New and Rare Plants, King's Road, Chelsea, S.W.

To Noblemen and Gentlemen.

GARDENER.—W. MOORE is desirous of meeting with any gentleman requiring the services of a Gardener proficient in all departments. Will be highly recommended as capable of managing a first-class situation. Liberal wages expected.—High Elms Park, Farnborough, Kent, S.E.

GARDENER (SINGLE-HANDED).—Age 25, single; good knowledge of his profession. No objection to Cows Two years and three months' good character.—W. M., Post Office, Feltham, Middlesex.

GARDENER (UNDER OR SINGLE-HANDED).—Age 23; has been in a nursery five years; can prune Fruit Trees and grow Melons and Cucumbers. Good reference given.—A. B. C., *Gardeners' Chronicle* Office, W.C.

GARDENER (UNDER).—Age 21; good experience in the Management of Orchard, Stove, and Greenhouse Plants, &c. Can have a good recommendation.—H. H., Post Office, Hawkhurst, Kent.

GARDENER (UNDER).—Age 21, single; has a good knowledge of Kitchen and Flower Gardens, Forcing Vines, Cucumbers, and Melons, Propagating and Growing Greenhouse and Bedding Plants, but wishes to improve in the higher branches of Gardening. Three years' good character.—A. E., Mr. W. Baker's, Milverton, Somerset.

GARDENER, OR GARDENER AND LAND STEWARD.—Of great experience in every branch of his profession.—Mr. WHITING, The Deepdene, Dorking, Surrey.

GARDENER AND GROOM.—Married; can drive a Brougham and Milk Cows. Good character.—J. R., Post Office, Hillingdon, Middlesex.

To Nurserymen.

NURSERY FOREMAN AND PROPAGATOR.—Age 35; of extensive practice. Good references as to character and ability.—For particulars, address A. R., Hurst & M'Mullen, Seedsmen, 6, Leadenhall Street, London, E.C.

FOREMAN.—A Young Man is [illegible] himself to any nobleman's or [illegible] has lived in some of the first gardens [illegible] land, and can be well recommended.—[illegible] man, Sloane Street, Chelsea.

FOREMAN, in a nobleman's or [illegible] —Age 25, single; has lived in the [illegible] of Sutherland and the Duke of Bu[illegible] of engaging under a first-class Garden[illegible] character and testimonials.—J. S., Mr. W[illegible] blishment for New and Rare Plants, King's [illegible]

To Nurserymen.

PROPAGATOR, OR FOREMAN and [illegible] —Perfectly understands his profession [illegible] practice in some of the leading London [illegible] series. Unexceptionable references.—C. W., [illegible] Wandsworth Road, London, S.

ORCHID GROWER.—W. BASSET[illegible] ried, without incumbrance; is desirous [illegible] any nobleman or gentleman in want of a [illegible] Stove, Greenhouse, Fern and Fruit Grower. [illegible] Foreman and had charge of the well-known [illegible] Collection of Orchids, with the Forcing Departments [illegible] Holford's, Esq., M.P., for 10 years. Can [illegible] character.—Weston Birt, Tetbury, Gloucestershire.

BAILIFF (WORKING) OR FOREMAN.—[illegible] Man who has a practical knowledge of [illegible] Steam Machinery. The highest references [illegible] Post Office, West Wickham, Kent.

FARM BAILIFF.—Farmer's son, [illegible] roughly understands his profession, [illegible] take charge of Dairy.—F. F., Morley's [illegible]

BAILIFF.—Age 42; had great [illegible] colnshire and the Southern Counties [illegible] Stock. Buying, Selling, &c., and a good [illegible] knowledge of Steam Cultivation, Management [illegible] C. D., 13, Pentonville Road, Islington, London [illegible]

To Noblemen and Gentlemen.

FARM BAILIFF.—Age 33, married [illegible] experience in the Practical Management [illegible] Pasture Land (Light and Heavy); a good [illegible] Buying, Selling, &c.; and qualified to [illegible] duties of a Home Farm. First-class references [illegible] A. HOGG, Nazing, Waltham Abbey, Essex.

To Noblemen and Gentlemen.

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News of the Week.

THE EMPEROR and EMPRESS of the FRENCH arrived at St. Cloud on Tuesday morning from Biarritz, and have since left for Compiègne to receive the KING of PRUSSIA, who will arrive there to-morrow evening. The *Prussian Gazette* of Sunday officially announces the intention of the KING to visit the EMPEROR, in order to return the visit which the EMPEROR paid his Majesty last year at Baden. The treaties of commerce

with England and Belgium came into operation on Tuesday.

The negotiations between France, England, and Spain for a joint intervention in the affairs of Mexico are not yet concluded, some of the leading members of the Spanish Government considering that it would be derogatory to the dignity of Spain not to act alone. The Ministerial journals of Wednesday announce on authority that the Spanish expedition will leave shortly, "without prejudice to the co-operation which Spain will afterwards afford to France and England."

From Hungary we have accounts of the measures taken by the Austrian Government to carry out its decree prohibiting the intended session of the Comitat of Pesth. On Sunday night the building in which the sittings of the Comitat are held was occupied by the military, and the members were prevented from assembling by force. On the following day all the public functionaries of the Comitat, from the Palatine down to the lowest *employé*, tendered their resignations, thus leaving 600,000 inhabitants without any administration. The seal of the Comitat was deposited in the National Museum, and Count KAROLYI returned unopened the despatch of the Government requesting him to remain in office. An Imperial Commissioner has since been nominated for the Comitat, and it is asserted that military auditors will provisionally try civil causes in the Comitat, and that a military court will administer the penal law. The Comitat of Bahal has declared its adhesion to the protest of the Comitat of Pesth against the dissolution of the Diet.

A pamphlet by the Abbé PASSAGLIA, one of the most eminent theologians of the Roman Catholic Church, condemnatory of the temporal power of the Papacy, has appeared at Florence, and has produced an immense sensation in all parts of Italy. It is addressed to the bishops of the Catholic world, and warns them that if the POPE does not come to terms with Italy, Italy will renounce the Papacy and become a Protestant. The band of Reactionists commanded by BORGES, the Spanish leader in the pay of FRANCIS II., has been defeated by the Italian troops, and it is expected that BORGES himself will soon be apprehended. The brigand chief MITTAGA has been killed at Reggio, and his band destroyed. The trial of CHRISTEN has commenced at Naples. Letters from Rome announce that further brigand expeditions are in preparation at the Papal ports of Civita Vecchia and Porto d'Anzo.

Accounts from Constantinople state that the Porte has consented to the raising of the blockade of Montenegro, provided Prince NICHOLAS and his senators sign an engagement to respect the Turkish territory in future. MEHEMED RUSCHDI PACHA has been appointed Minister of War, in the room of NAMIK PACHA, who has been appointed Governor of Bagdad.

From the United States we learn that Lexington in Missouri has capitulated to the Confederates, after a series of battles extending over three days between the Confederate troops under General PRICE and the Federal force under Colonel MULLIGAN. The main body of the Confederate army, comprising about 100,000 men, is at Fairfax and Centreville, where it was reviewed on the 17th ult. by President JEFFERSON DAVIS in person. The Maryland Secession Legislature has been suppressed by the Federal Government, and several of its members, with some of the principal citizens, have been arrested. President LINCOLN has ordered General FREMONT to modify the clause in his proclamation respecting the liberation of the slaves in Missouri, on the ground that it exceeds the power given him by Congress. It is expected that General FREMONT will immediately resign his command. The Spanish Minister has contradicted the report that the Captain-General of Cuba had issued a proclamation recognising the Confederate flag. The COMTE DE PARIS and the DUC DE CHARTRES have been appointed officers in the Federal army.

By the Cape mail we learn that Sir GEORGE GREY left for New Zealand on the 15th August. A disturbance among the Zulu Kaffirs about the succession to their Government had nearly involved the colony in a frontier war with the natives. The troops were sent up from Cape Town to prevent the threatened inroad of the Zulus into Natal, and the Volunteer corps did garrison duty in Cape Town during their absence.

The Revenue Returns for the year and quarter ended the 30th ult. were published on Tuesday. They show a decrease of 1,003,817*l.* on the year, and a decrease of 2,056,934*l.* on the quarter.

Home News.

THE COURT IN SCOTLAND.—On Wednesday the 25th ult., the Queen, accompanied by Princess Helena, Princess Beatrice, and Prince Arthur, drove to the Linn of Muich. The Prince Consort and Prince Louis of Hesse went out deer-stalking. On Thursday the Queen, accompanied by Princess Alice and Prince Louis of Hesse, drove to Loch Bulg, and rode thence on ponies to Inchrory, and round by Don-side to Tornahash, at which place the carriage was in readiness, and the Royal party returned in the evening to Balmoral. Princess Hohenlohe accompanied Her Majesty as far as Loch Bulg. The Prince Consort went out deer-stalking. On Friday the Queen and Prince Consort walked and drove in the grounds of the Castle. Princess Alice drove to Birk Hall, and honoured Mrs. Gordon with a visit. Prince Louis of Hesse went out deer-stalking. On Saturday morning the Queen and Prince Consort, accompanied by the Princess Alice and Prince Louis of Hesse, left the Castle at half-past 8 o'clock, and drove by Castleton to the Derry Shiel, at which place ponies were in waiting. The Royal party rode thence up Glen Derry, by Loch Dulochan and Beinn na Main, to Loch Aven. Her Majesty returned in the same manner and reached the Castle at a quarter-past 8 in the evening. Princess Louisa rode out. Prince Arthur and Prince Leopold drove to Loch Bulg. The Earl of Dalhousie arrived at the Castle on a visit to her Majesty. On Sunday the Queen and Prince Consort, Princess Hohenlohe, Princess Alice, and Prince Louis of Hesse attended Divine service in the parish church of Crathie. The Rev. Mr. Muir officiated. On Monday the Queen, accompanied by the Princess Alice and Prince Arthur, drove up Glen Muick, where ponies were in waiting, and afterwards drove over the Coils home. Princess Hohenlohe accompanied the Queen to Glen Muick. The Prince Consort and Prince Louis of Hesse went out deer-stalking. On Tuesday the Queen and the Prince Consort, accompanied by the Princess of Hohenlohe, drove to Castleton. Princess Alice, the Prince of Wales, and Prince Louis of Hesse, went out riding. The Princesses Helena and Louisa drove to Mar Lodge, and honoured the Countess of Fife with a visit. Prince Arthur rode to the Linn of Muick. The Duke of Argyle arrived, and succeeded Lord Stanley of Alderley as Secretary of State in attendance upon her Majesty.

THE RETURN OF THE COURT FROM BALMORAL.—It is expected that the Queen will leave Balmoral for Holyrood Palace on Tuesday, the 22d inst., and that on the following day the Prince Consort will lay the foundation stones of the new General Post Office and the new Industrial Museum in Edinburgh. The Court will leave Holyrood for Windsor Castle early on Thursday morning the 24th inst.

THE PRINCE OF WALES arrived at Buckingham Palace from the Continent shortly before 5 o'clock on Sunday morning. His Royal Highness left London in the evening for Balmoral, where he arrived at half-past 5 on Monday evening.

THE GRAND DUKE CONSTANTINE OF RUSSIA visited Portsmouth Dockyard on Wednesday, and spent some time in minutely inspecting the iron-cased frigate Warrior. His Imperial Highness is about to visit Chatham and Plymouth for the purpose of inspecting the garrisons, dockyards, and other naval establishments, and preparations are making to receive him with all the honours due to his rank.

DIPLOMATIC APPOINTMENT.—The Queen has appointed the Earl of Clarendon, K.G. and G.C.B., to be her Majesty's Ambassador Extraordinary to the King of Prussia, on the occasion of his Majesty's Coronation.

THE REVENUE.—The Revenue Returns for the Year and Quarter ended the 30th September show a decrease of 1,003,817*l.* on the year, and a decrease of 2,056,934*l.* on the quarter. The year's account shows an increase in the Customs of 91,605*l.*; Stamps, 158,912*l.*; Property Tax, 823,184*l.*; Post Office, 100,000*l.*; Crown Lands, 2911*l.*; and a decrease in the Excise of 1,446,000*l.*; Taxes, 127,000*l.*; Miscellaneous, 607,429*l.* The Quarter's Account shows an increase in the Customs of 94,000*l.*; Post Office, 70,000*l.*; Crown Lands, 911*l.*; and a decrease in the Excise of 868,000*l.*; Stamps, 40,000*l.*; Taxes, 6000*l.*; Property Tax, 1,290,000*l.*; Miscellaneous, 17,845*l.*

THE IRON-CASED FRIGATES.—The Warrior is having the necessary works completed with all possible despatch, in order if possible that she may leave her dock at Portsmouth to-day, the tide being favourable for her being undocked. She will then without delay run her trial trip. For some days there have been upwards of 300 shipwrights and from 400 to 500 blacksmiths, joiners, and other artisans employed on her. These men have been working over time, and had short meal hours in order to complete [illegible] Several hundred visitors have inspected her. Among them have been the Grand Duke Constantine, the Duke of Cambridge, Lord Palmerston, and several members of Parliament. Her [illegible] are objects of peculiar interest, and the [illegible] artisans speak in terms of unequivocal praise [illegible] build. A general opinion prevails among [illegible] she will roll greatly when at sea. Several of her [illegible] ways have been enlarged for purposes of accommodation and to give more air. Orders were received on [illegible] at Chatham for the Defence to be furnished with [illegible] side 100-pounder Armstrong guns on her main deck, [illegible] two 100-pounder Armstrong pivot guns on the [illegible] deck. The dock at Chatham, in which she [illegible] placed, is now ready for her reception, the [illegible] having been cut away in order to give her an increased depth of water in the operation of docking. [illegible] arrangement has been made for fixing her iron [illegible] board as soon as they have been received from the Thames Iron Company. Progress is also making in Chatham yard with the Achilles, a large portion of her [illegible] having been already laid. The Admiralty [illegible] estimates to be prepared for the conversion of the 91 gun screw line-of-battle ship, Bulwark, now building at Chatham, into a 51-gun iron-clad frigate [illegible] same class as the Royal Oak, under construction [illegible] adjoining slip. The Bulwark, which is a sister [illegible] the Hero and Orion, is one of the largest of the [illegible] ships, her extreme length being 266 feet, her [illegible] 55 feet, and her burden 3094 tons. The [illegible] alterations will necessitate her being cut asunder [illegible] an addition of 20 feet made to her length [illegible] besides which her decks must be raised, and [illegible] other important alterations made to increase [illegible] strength, and enable her to sustain the enormous weight of the slabs of iron with which her sides [illegible] covered.

Foreign.

FRANCE.—The Emperor and Empress with the Prince Imperial passed Sunday night at Bordeaux, and arrived at St. Cloud on Tuesday morning. Soon after [illegible] arrival the Emperor presided at a Cabinet Council which sat three hours. The King of Prussia will arrive at Compiègne to-morrow evening, and will stay till Tuesday. Marshal Vaillant will meet his Majesty at the frontier. Count and Countess Persigny, Count Walewski, Minister of State, and M. Thouvenel, Minister of Foreign Affairs, will remain at Compiègne during the King's visit. His Prussian Majesty will be accompanied by his Ambassador, *M. Pourtalès, and* 15 officials, among whom are several military men. The *Constitutionnel* publishes an article signed by the chief editor, M. Grandguillot, entitled "The Visit of the King of Prussia," of which the following is a summary:—

"In the course of the last 10 years, almost all the Sovereigns of Europe have visited France, and we may hope that these meetings of the Sovereigns will lead the peoples to esteem and understand each other. France sees nothing else in the visit of the King of Prussia. In regard to the construction put on the visit by the German press, which considers it as an act of courtesy in exchange for the visit of the Emperor of the French last year, it is difficult for us to admit that the Sovereigns of the two most influential and solidly established Continental Powers should meet solely to exchange a few commonplace courtesies. We consider the treaty of commerce now negotiated between the two countries to be of immense importance, because political treaties only reconcile Sovereigns, while commercial treaties reconcile nations. King William of Prussia is one of those Princes who are able to understand their country and their age. The firmness and uprightness of his character are proverbial. He comes of the race of those Princes who, boldly declaring to their people that they trample under foot unjust prejudices and [illegible] and that they disdain the favour of an ephemeral popularity, only seek the impartial approbation of posterity."

The *Débats* also publishes an article on the subject of a Franco-Prussian alliance, which derives peculiar interest from the approaching visit of the King to Compiègne. The article is based upon a rumour that the Count [illegible] Bernstorff is desirous of establishing a French alliance for Prussia. It says:—

"M. de Bernstorff, while sincerely in favour of the alliance with England, is thoroughly acquainted with all the inconveniences and worry connected with it, and he is [illegible] that Prussia should have that alliance alone to fall back on. M. de Bernstorff has views which favour an alliance between Prussia and France. That alliance, in his eyes, would [illegible] quite as many advantages for Prussia, without having [illegible] the drawbacks of the English alliance. An alliance which sincerely united Prussia with France, on conditions [illegible] favourable for both, would dissipate, as it were, by magic, the very real distrust and anxiety of Germany, and would [illegible] the German Governments to set about those reforms the necessity of which has been acknowledged once more. [illegible] Bernstorff has no preconceived ideas on this grave question; he is entirely free, entirely unfettered by prejudice and [illegible] he rejects nothing, and is prepared to accept all that [illegible] offered to him.'

The *Moniteur* of Friday says that the French military officers who were present at the manœuvres of the Prussian army have returned to Paris delighted with the reception given them by the royal family and the Prussian officers, and strongly impressed with the fine bearing, discipline, and instruction of the Prussian army. The treaties of commerce with England and Belgium came into operation on Tuesday, and on the following day an Imperial decree was published on the [illegible] specifying the ports and custom-houses that are opened for the importation of woollen and cotton goods of all kinds of English or Belgian manufacture. The ports are—Marseilles, Bordeaux, Nantes, Rouen, Havre, Dieppe, Boulogne, Calais, and Dunkirk; the

Custom-houses are those of Tourcoing, Roubaix, Lille, Valenciennes, Mulhouse, and Lyons. The same decree gives a list of the articles of English or Belgian manufacture that can be imported only through the Custom Houses inland or at seaports regularly appointed for their introduction. The *Constitutionnel,* in calling attention to the treaty of commerce, explains the causes which have led to the diminution in French exports during the present year, and ascribes to the civil war in America the general decline of business in France, the trade with the United States having almost ceased. The *Debats* in referring to the same subject, says that there is still another cause for the slackness of business and the weakness of commercial credit, and that is fear; but this will prove as transient as it seems unreasonable. It reminds the manufacturers that a good share of protection is still assured to them, and that the time is fully come when French industry ought no longer to live a factitious existence, but to live a life of its own on the real resources which it cannot fail to find in its own energy and powers, of which it has already given brilliant proofs in London and in Paris, in 1851 and in 1855, and of which there are good reasons for expecting still more signal proofs at the Universal Exhibition of 1862.—The iron-plated frigate Formidable built for the Italian Government was launched at Toulon on Tuesday. The iron-cased frigate Gloire returned to Toulon on Sunday last from Nice, having on board the maritime Prefect of Toulon, General Froissard, and Colonel Bichot of the Engineers, with their staff. During the passage the usual manœuvres performed during a naval action were practised, and her guns, shotted, were fired under steam, her speed being 12 knots an hour. The iron-cased frigate Couronne is fitting for sea at Lorient with all possible despatch. It is expected that, with her machinery of 900-horse power, she will have a speed of at least 13 or 14 knots an hour. Captain Moullac, of the Imperial navy, has been appointed to the command of a flotilla, with which he is to sail along the coast of France, to examine the fortifications lately constructed, and to suggest any further defences he may deem necessary.—Another prosecution has been instituted against the Bishop of Poitiers for a sermon delivered in his cathedral a few Sundays ago, in which he dwelt on the persecutions undergone by St. Peter, and told his congregation that it was "neither Herod the First, nor Herod the Second, but *Herod the Third,* who had cast Peter into prison."—At the Court of Assize of Vosges, on the 6th ult. a brother of the order of Mary, Francois-Joseph Wilmann, aged 22, the regular teacher of the communal school at Rambervilliers, was tried for a series of criminal assaults on 18 poor boys, of whom 13 had not reached the age of 11. Forty-three separate questions respecting his guilt were submitted to the jury; forty-one were at once answered in the affirmative; and he was sentenced to imprisonment with hard labour for life.—The Bank of France on Tuesday raised its rate of discount from 5½ to 6 per cent.—The Parisians were surprised on Saturday by the appearance of the English steam yacht Penelope off the Tuileries gardens, after having successfully navigated the Seine from Havre to Paris. The yacht belongs to Mr. Watkin Edwards, who was accompanied by Mr. Harrison Ainsworth, Mr. Lyster O'Beirne, and other friends. She belongs to the Royal Victoria Yacht Club, at Ryde, and as she is the first English yacht that has ever been moored off the Tuileries she is an object of great curiosity to the Parisians.—The police at Marseilles have instituted a search in the houses of several persons inculpated in enrolments for the Neapolitan reaction. Two arrests have taken place in consequence.—On Thursday night, the 26th ult., a terrible accident occurred on the Northern Railway, near the Paris station. Five passengers were killed, three were wounded, and four received contusions. The *Patrie* publishes the following details of the accident:—

"The express train from Amiens to Paris ran into another train coming from Dammartin, at the junction of the two lines. Five carriages of the Dammartin train were overturned. The driver was blown into the air by the explosion of the engine boiler, and fell on the rail without sustaining any serious injury. The Amiens train was not much damaged by the collision. Some of the wounded passengers were brought to Paris, others were taken to the Lariboissière Hospital, and the remainder returned to their own homes. At present the number of the dead does not exceed five, but the reports of the surgeons give reason to fear that this number will be augmented. A judicial inquiry has been opened."

SPAIN.—The Queen has returned to Madrid. A Council was held at the Escurial on Sunday, under the presidency of her Majesty, when a decree was issued convoking the Cortes for the 30th of October. It is said that Marshal O'Donnel is opposed to a common action with France and England in the affairs of Mexico, and considers that it would be derogatory to the dignity of Spain not to act alone. He is supported in his opposition by the King, who is averse to co-operate with heretics and doubtful supporters of the Holy See. The opposition is, however, by no means shared by the rest of the Cabinet; who consider that the expense of the expedition to Morocco should moderate the desire for further military triumphs. The *Correspondencia Autografa* of Wednesday however says that the expedition of Spain will leave very shortly without prejudice to the co-operation which she will afterwards afford to France and England. The *Espana* publishes an article recommending the re-establishment of a monarchy in Mexico. It is believed that Spain has accepted the intervention of France in the dispute with Italy, and the Government papers express a hope that Baron Tecco, the Italian Minister, will not receive orders to break off diplomatic relations with the Spanish Government.

PORTUGAL.—It is again confidently asserted that a marriage has been arranged between the King of Portugal and the Princess of Savoy. It is rumoured that the Portuguese Government has notified to England a desire to bring the existing treaty to a close. The vintage has been gathered in many parts of Portugal, and the yield of grapes has proved much greater than last year. A rumour is prevalent that the Government will shortly open the ports for the admission of foreign grain, the crop of this year being decidedly scanty. The Italian Legation in Lisbon has opened a subscription in aid of the funds for erecting a monument to the memory of Count Cavour in Turin.

HOLLAND.—The day of the King of Holland's departure for France does not appear to be yet fixed. His Majesty, on leaving the Hague, will proceed to the château of Loo, and will thence go to Zutphen, to be present at the laying of the first stone of the railway bridge over the Yssel. The present belief is that the King's arrival at Compiègne will take place on the 12th.

BADEN.—After the trial of Becker for the attempted assassination of the King of Prussia the little town of Bruchsal was again thrown into excitement by the trial of a lady of high rank, the Baroness de Baumbach, on a charge of attempting to poison her husband, who is Grand Marshal of the Court. The trial occupied the sittings of the court during the 26th, 27th, and 28th ult. Madame de Baumbach is a lady 42 years of age, and is described as of a distinguished and noble mien, with a pale handsome face. She was accompanied to the court by her daughter. The charge against her was, that she had attempted to take the life of her husband by mingling quantities of phosphorus with the sugar usually put into warmed beer which he was in the habit of having served to him. A singular peculiarity of the case was that it was only the servants of the baroness who had set suspicion on foot and taken the steps which led to the proceedings. Baron Baumbach himself had never believed the charge, and in his examination before the court repelled all idea of suspicion of his wife's innocence with the utmost emotion. Various reasons, one of which was jealousy, were assigned as the baroness's motives for poisoning her husband, but they proved to be idle and malicious inventions, and were warmly denied by the baroness herself, by the baron, and by several witnesses. On the other hand it was proved that phosphorus was found in so many places about the house that the charge of poisoning seemed a conspiracy on the part of the servants, some of whom had received notice to leave. The jury only deliberated five minutes, and then returned a verdict of Not Guilty, which was received with loud applause in a densely crowded court. The Baron de Baumbach and the daughter immediately rushed to the baroness and embraced her, and the scene which took place is described as singularly affecting.

WURTEMBURG.—On Saturday, the 80th birthday of the King of Wurtemburg, who is the oldest sovereign in Europe, was celebrated at Cannstadt with extraordinary festivity. His Majesty's daughter, the Queen of Holland; his grandson, the Prince of Orange; Prince Peter of Oldenburg, his son-in-law; and Duke Philip of Wurtemburg, Louis Philippe's grandson, were present on the occasion, and the Emperor of Austria, the King of Bavaria, the Grand Duke of Hesse-Darmstadt, and other German sovereigns sent special ambassadors with autograph letters of congratulation.

PRUSSIA.—The *Prussian Gazette* of Sunday says:—

"The King will proceed to Compiègne on the 6th of October, in order to return the visit which the Emperor of the French last year paid his Majesty at Baden. Among the persons who are to accompany the King is Count Pourtales, the Prussian Ambassador at Paris."

A Royal proclamation has been issued announcing that the Prussian Court will go to Königsberg on the 14th of October, that the coronation will take place on the 18th, the departure from Königsberg on the 20th, and the solemn entry into Berlin on the 22d. The Earl of Clarendon will represent Queen Victoria at the coronation. It is positively stated that an interview will take place between the Emperor of Austria and the King of Prussia after the coronation, and that the kings of Bavaria and Wurtemberg will be present at the interview. It is rumoured that Count Bismark Schönhausen will replace Count Pourtales as Ambassador at Paris, the latter succeeding Count Bernstorff in London, and that Count Goltz will go to St. Petersburg. The *Official Gazette* says that the latest reports received from the Prussian Minister at Tien-tsin relative to the negotiations for the conclusion of a treaty of commerce between Prussia and China permit the hope of a speedy and favourable result.

AUSTRIA.—The report that Austria was about to effect a large reduction in her army is said to be unfounded. The Vienna papers of Tuesday morning published a telegram from Trieste announcing that 70 boxes, containing 3000 rifles, which had been declared at the Custom House as bar iron, had been seized on board an English steamer. The evening papers contain a later telegram from Trieste, stating that only one box full of rifles had been seized, and that this had been despatched to Trieste on board the steamer by mistake.

HUNGARY.—The building in which the sittings of the Assembly of the Comitat of Pesth are held was occupied on Sunday night by the military, and the members were prevented from assembling by force. During Sunday and Monday large crowds assembled before the building; the surrounding streets were occupied by troops, and a lieutenant, with his sword drawn, forbade the Deputies to enter the building. On Monday the magistrate of the Comitat of Pesth tendered his resignation. On leaving the Hall of Assembly more than 5000 persons assembled to accompany him home. They were followed by military patrols. When the people reached the Palace of the Obergespan the Magistrate delivered a speech, to which the Obergespan replied. The crowd then voluntarily dispersed without committing any disturbances. All the public functionaries of the Comitat of Pesth, from the Palatine down to the lowest *employés,* subsequently tendered their resignations, thus leaving 600,000 inhabitants without any administration. Count Karoly has returned unopened the order of the Government requesting him to remain in office. The seal of the Comitat has been deposited in the National Museum. A Commissioner has been nominated for the Comitat of Pesth, and it is asserted that the military auditors will provisionally try civil causes in the Comitat, and that a military Court will administer the penal laws. A denial has been given to the report from Vienna that General Klapka, M. Kossuth, and General Turr were to have a conference with M. Deak and other Hungarians relative to the affairs of Hungary. Numerous arrests have been made in consequence of the recent disturbances. Among the cries raised by the people who endeavoured to prevent the removal of the confiscated tobacco was "*Eljen Garibaldi!*" or "Long live Garibaldi!" The Minister of Finance has issued a decree ordering the collection of the taxes by military execution to be vigorously proceeded with in those parts of the country where it had been suspended on account of the harvest. No more forbearance will be shown.

TRANSYLVANIA.—The royal rescript relative to the convocation of the Transylvanian Diet has been despatched to Klausenburg, where it was published on Saturday. The Diet is to assemble at Karlsburg on the 4th of November.

RUSSIA.—The Russian journals contain the official notification that a committee has been appointed at Pernau to superintend the demolition of the ramparts of the fortress. The old fortifications of Riga and Reval have been given up by the Government to the civic authorities of these towns, and are forthwith to be dismantled.

WHITE SEA.—The Russian naval papers publish an account of an expedition undertaken at the expense of a commercial house at Archangel in search of guano among the islands and on the coasts of the White Sea and the Northern Ocean. A light schooner was dispatched in July, under the command of a Russian named Daughine, to examine the island of Kolgonieff, situate about 120 versts from the peninsula of Kanine, the resting place of enormous flocks of sea fowl and birds of passage. The expedition was however a failure; the schooner was driven from her anchorage by a storm, leaving M. Daughine, who had landed, on the island. He was rescued, when nearly dead from hunger and exposure, by a party of bird hunters.

POLAND.—Accounts from Warsaw state that the Polish Bishops have addressed a memorandum to the Governor of Poland, demanding the re-establishment of the former rights of the Catholic Church in that country. The Governor, however, refused to accept it. The Bishops then met, and were addressed by the Archbishop, who, in his speech, said, "Let us always stand by the people and defend the cause of the Fatherland, and not forget that we are Poles." Bills have been posted up, and are privately circulated in Warsaw, containing an address to the Poles, Lithuanians, and Roumans, calling upon them to send deputations from all the towns and places of the former kingdom of Poland, as constituted in the year 1772, to a solemn meeting, to be held on the 10th inst. at Haradla, near Lublin.

ITALY.—The *Opinione* of Wednesday gives a denial to the reports circulated by some Belgian papers that an *ultimatum* for the settlement of the Roman question had been sent by Baron Ricasoli to the Pope. These reports are supposed to have been caused by the publication of a pamphlet setting forth the guarantees which the Italian government is prepared to give for insuring the independence of the Holy See. It is entitled "Garanties donnés par le Roi de l'Italie pour l'Indépendance du Saint Siège," and was supposed to emanate from the Cabinet of Turin, because the guarantees are essentially those laid down by Count Cavour. They propose that the personal security and official independence of the Pope shall be secured by the collective guarantee of the Catholic Powers; that he shall remain in possession of the quarter of the city around St. Peter's; that the Catholic States, from their revenues, shall contribute in proportion to their populations to maintain the dignity of the Pope and the Cardinals; that a fair proportion shall henceforth be observed in electing members of the Sacred College, between Italians and foreigners, to be determined by the population of the several Catholic States; and that entire freedom shall be accorded to the Church in matters connected with the nomination to bishoprics, religious foundations, promulgation of decrees, education, &c.—The ex-Jesuit father, Don Carlo Passaglia, who, at the command of the Pope, wrote three large

volumes to establish the dogma of the Immaculate Conception, and is regarded on the continent as one of the first living theologians of the Roman Catholic Church, has published at Florence a pamphlet addressed to the prelates of Catholic Christendom on the imminent danger of a great religious revolution in Italy arising from the temporal power of the Papacy. The pamphlet is written in Latin, and is entitled "Pro causâ Italianâ ad Episcopos Catholicos, auctore Presbytero Catholico." The Abbé Passaglia contends, 1st, that the temporal power of the Pope is not a dogma; 2d, that if the Pope does not come to terms with Italy, Italy will do without the Pope, and a schism will be inevitable. He implores the episcopacy to open their eyes, and to discard the illusions to which they so fondly cling. He tells them that the schism is already thundering at the gates of the Vatican, and that unless the Papacy saves itself by bowing to the blast it will force an entrance. He concludes that if the Papacy still continues to oppose the wishes of the people, then Italy will renounce the Catholic Church and turn Protestant. He says:—

"Who can be so blind not to see that the Italians are reduced to that deplorable extremity that there is not distant but imminent danger of the greater number among them seceding either openly or in their hearts from the communion of the Church, and that that affectionate mother runs the risk of losing those of her children who are most dear to her. See what is now taking place. The greater portion of the clergy stand out in violent opposition to the greater portion of the laity; several bishops have abandoned their flocks, and the pastor of pastors himself—the successor of Peter, the august Vicar of Christ upon earth—hurls censure and excommunication on the Italian nation. One might think that of the double faculty of punishing and forgiving the shepherd of souls retains only the power to punish; thus we see all the priests busily engaged in blaming, in opposing, in execrating that all in Italy ardently desire and embrace—all, both the great and the lowly."

This pamphlet has created a profound sensation at Rome, and has greatly irritated the Pope. The Jesuits are now occupied in endeavouring to refute it. The Abbé Passaglia has arrived at Rome with a foreign passport. The Pope is said to be again seriously ill; he has attacks of fever, and is suffering still from erysipelas. His state is said to be aggravated by his unwillingness to obey the injunctions of the medical men. A Consistory was held on Friday morning, when the following prelates were elevated to the rank of Cardinals:—The Archbishops of Chambery, Burgos, and Compostella; the Bishop of Viterbo, Bishop Quaglia, the Papal Nuncio, Monsignor Sacconi, and Father Panebianco. The death of the Patriarch of Venice, who was also to have been appointed a Cardinal, was announced in the Consistory. These appointments to the dignity of Cardinal have produced a bad impression in Rome. On Monday the Pope held a secret Consistory, in which five Bishops were appointed. His Holiness pronounced an allocution on the events in Italy, and alluded to the violent expulsion of the Archbishop of Naples. He also spoke of the religious situation of Mexico and New Granada, which he said had been still further aggravated by the expulsion of the Apostolic Delegate. He then spoke of the enemies of the Church in the following terms:—

"In these times of confusion and disorder, it is not unfrequent to see Christians, Catholics, who always have upon their lips—a middle course, conciliation, compromise. Well, I do not hesitate to declare that these men are in error, and I do not regard them as the least dangerous enemies of the church. Be firm, then; no conciliation, no compromise, with impious men. I commend these words to all Catholics, but specially to the members of the clergy who may be in danger of being seduced by perverse doctrines contrary to the just interests of this Holy See and of the church."

Monsignor Chigi has been appointed Papal Nuncio to Paris, Monsignor Gonella to Munich, and Monsieur Ledochowski to Brussels. Monsignor Granalli is appointed Provisional Secretary to the Council, and Monsignor Falloux, Regent of the Apostolic Chancery. It is said that the Papal Government experiences difficulty in meeting the expenses of the Administration.—The first sitting f the Congress of the Workmen's Societies at Florence was held on the 28th ult. Signor Mordini proposed a declaration for adoption by the societies to the effect that they should occupy themselves with politics, in order to acquire strength to resist the Government if it attempted anything contrary to the welfare of the nation, such as the cession of Sardinia, which, he said, had been universally rumoured. The majority of the deputies protested against this proposition. The motion however, after having been sensibly modified, was adopted by 72 against 30 votes. Several members abstained from voting, under a protest that the societies were departing from the fundamental principle of their institution, which was to afford mutual aid. The *Nazione* of Florence has since published a protest signed by 44 deputies against the vote.—The Royal Princes, children of King Victor Emmanuel, are now making a journey through the towns of the Campagna, and have been welcomed with great enthusiasm by the inhabitants. On Monday they laid the first stone of a monument in commemoration of the victory of Castelfidardo. The report that Prince Carignan will represent King Victor Emmanuel at the coronation of the King of Prussia is contradicted. General Rocca will shortly proceed to Constantinople to deliver to the Sultan the Collar of the Order of the Annunziata. The *Opinione* says that France having interposed her good offices to prevent a rupture between Italy and Spain, the Government has suspended all further discussion in reference to the recall of its representative at Madrid.—Accounts from Naples state that the trial of Christen has commenced. The small band of Reactionists commanded by Borgès, the Spanish chief in the pay of Francis II., has been beaten by the Italian troops. The greater number of them were afterwards made prisoners by the peasants. Borgès himself, with a few men, is still at large, but it is hoped that their arrest will soon be effected. He had issued a proclamation to the Calabrians and Neapolitans, urging them to expel the "foreigners" in the name of religion and Francis II. Mittaga, a bandit chief, has been killed at Reggio, and his band destroyed. Brigandage has now terminated in the province of Calabria Ultra. A band of 20 Spaniards and Bavarians which had disembarked near Agropoli, in the Principato-Ultra, has been arrested. A letter from Rome announces that brigand expeditions are in preparation at Civita Vecchia, Fiumicino, and Porto d'Anzo, and it is reported that similar expeditions will likewise set out from Malta and Marseilles. It is asserted that the disturbances in the Neapolitan provinces have caused a loss to the revenue in the last six months of 14,000,000 ducats. General Cialdini has dissolved the National Guards of several towns in the Neapolitan provinces for having failed to act with energy against the disturbers of public order. Handbills were circulated in Naples on Tuesday bearing the words "Italy! Emmanuel at Rome with Garibaldi." Several groups of people assembled in the Strada di Toledo, but no further demonstration took place. A Royal decree has been issued at Naples, declaring the commerce of grain between Italy and foreign countries free in the whole kingdom (the Neapolitan provinces included), both as regards exportation and importation. Three more English ships of war have arrived at Naples. The number now lying off the harbour is 11.

Venetia.—Letters from Venice state that a strong naval expedition, with troops on board, had left that port for the coasts of Dalmatia and Fiume. The *Movimento* states that a protest against the occupation of Rome by the French troops has been signed in Venetia amid great enthusiasm. The *Sentinelle* of Brescia says:—"On the 3d of October Austria will set at liberty the Modenese political prisoners who have been incarcerated in the dungeons of Mantua since 1859."

Sicily.—The anniversary of the battle of the Volturno has been celebrated with great enthusiasm in Sicily. Perfect order prevailed. A popular demonstration was to have taken place at Palermo to express the popular wish that the Italian army should proceed to Rome. In consequence, however, of the precautionary measures adopted by the authorities the intention was abandoned.

Montenegro.—Letters from Ragusa state that symptoms of insubordination had appeared among the Turkish troops in the camp at Balecia, on account of the non-payment of the arrears due to them by the Government. Omar Pasha thereupon paid up the arrears. The Prince of Montenegro is said to be using his influence to restrain the impetuosity of the population and prevent them from assuming the offensive, in order that Europe may see that the Turks, and not the Montenegrins, are the aggressors. The Pesth journals of Tuesday state that the Bosnians and Servians have declared themselves in favour of the Montenegrins, and that the mountain defiles leading to the interior of Montenegro will be defended to the last, in order to gain time, as it is expected that a diversion will be made by a Hungarian legion under the command of General Turr. Omar Pasha still remains at Gatzko. On the 30th ult. 300 Turks attempted to drive away the Kaimikan of Trebigne, because, in administering justice, he made no distinction between Mahomedans and Christians. The latest news states that the Porte has consented to raise the blockade of Montenegro, provided that Prince Nicholas and his senators sign an engagement henceforth to respect the Turkish territory.

Servia. — The Prince and Princess of Servia returned to Belgrade on the 27th, and were welcomed with extraordinary enthusiasm by the inhabitants. Their journey through the provinces has been a real triumphal march. Colonel Borowitska, the Austrian Consul, having shown disrespect to the Prince of Servia at a ball, the whole body of Servian officers have drawn lots, in order to decide which of their number shall challenge the Consul to a duel.

India.—By the Overland Mail we have accounts from Calcutta to the 22d ult. The following is a summary of the news:—

Calcutta.—The 26th August, Prince Albert's birthday, had been appointed for a levee to be held for the purpose of investing Sir Hugh Rose with the Order of the Star of India. The rains all over India have done much damage to the roads and railways.

North-West Provinces.—The pestilence is decreasing, so far, at least, as regards the European troops. Sickness, however, was still prevalent in many places, but the Agra central committee for the Famine Relief Fund have intimated that they require no further subscriptions.

The Punjaub.—The season for sowing cotton has passed, and more cotton has been sown now than in any former year.

Japan.—The following details of the attempt to murder the members of the British Legation at Kanagawa have been received by the Overland Mail. A band of armed assassins, numbering about 20, spent the day at a teahouse in the vicinity of the Legation, and between 9 and 10 o'clock, when all hands were in bed, drove in the door of the grounds and entered the house. Two of them, one in armour, then approached the quarters of Mr. Consul Morrison, but being seen by his servant he was warned in time to get a sword and pistol before the assassins came up. Mr. Oliphant [illegible] heard the noise, rushed out of his room with a [illegible] whip only, and was immediately assailed by [illegible] two, who gave him a severe gash on the right [illegible] Hearing Mr. Oliphant cry out, Mr. Morrison [illegible] aside the screen of his room, and found himself face to face with the miscreants, one of whom he shot dead; the other he fired at, but the ball glanced off the armour; the Japanese, in return, cutting Mr. Morrison across the head, and again wounding Mr. Oliphant in the wrist. At this juncture Mr. Wirgman and Mr. Reginald Russell approached, and though they were unarmed, their appearance had the effect, it would seem, of inducing the band to retreat, bearing with them the body of the Japanese shot by Mr. Morrison, which, however, they only took into the garden, where they were met by Japanese soldiers and driven away, five being killed in the affray, and seven of the Japanese soldiers wounded. It is said that Mr. Oliphant's injuries are so serious that he is on his way home invalided, and that he will probably lose the use of his left hand.

Cape of Good Hope.—Sir George Grey left for New Zealand on the 15th of August. A disturbance among the Zulu Caffres about the succession to the [illegible] ment has nearly involved the colony in a [illegible] with the natives. The Zulus had planned [illegible] a large scale into Natal, in order to seize [illegible] Zulu chiefs, who had taken refuge there. Timely information, however, reached the colonial authorities, and the troops at Cape Town were at once sent up. This movement intimidated the natives, who now say that an inroad was never intended. The Volunteer corps did garrison duty in Cape Town during the absence of the regular troops. Parliament was prorogued on the 14th of August. A proposed vote of 10,000*l.* towards the support of the troops had been rejected by the Legislative Council. An indignation meeting had been held in consequence, at which resolutions were passed expressing the desire of the colony to make some contribution towards its defences. An Act had been passed for the establishment of a telegraph between Cape Town and the frontier, to be subsidized by the Government. The Assembly had unanimously decided in favour of a fortnightly mail, *viâ* the Mauritius. The occupation of No-man's-Land by Adam Koks had been the subject of debate in Parliament. Nothing definite, however, resulted from the debate, and the question is set aside for the present. This was considered very injurious to the interests of the country. The drought had terminated, and copious rains had fallen.

United States.— President Lincoln has ordered General Fremont to modify the clause in his proclamation respecting the liberation of slaves owned by insurrectionists in Missouri, on the ground that it transcends the power given him by Congress. Before the receipt of this order General Fremont had acted upon his proclamation by giving their freedom to two slaves of Mr. T. A. Snead, of St. Louis, who had been "convicted of taking treasonable action against the government." It is now supposed that he will immediately resign his command. Several negroes in full uniform having entered Washington with a New York regiment, Mr. Secretary Cameron has prohibited coloured people from wearing the Federal uniform. A battle was fought on the 16th ult. at Lexington, Missouri, in which General Price, who attacked Colonel Mulligan in his intrenchments, was defeated. The loss of the Confederates is represented to be 4000, that of the Federals 800 men. The battle was renewed on the 18th ult., when General Price attacked the Federals with 30,000 men. The Federals numbered 3500. The Confederates were scattered by a bayonet charge of the Irish brigade. The attack was renewed on the following day, and though the Federals had received reinforcements, the result, as communicated by telegraph, was the capitulation of Lexington to the Confederates. It is said that 600 Confederates have been routed, with heavy loss, at Rice Mills Landing, Missouri, by 1500 Federals. Jefferson Thomson's force of 23,000 men has moved to New Madrid, Missouri. A deserter from the Confederates at Munson's Hill reports that Generals Beauregard and Johnson were there, and states that the main body of the Confederate troops, comprising about 100,000 men, are at Fairfax and Centreville, which points, according to the same authority, were visited by President Jefferson Davis on the 17th ult., when he reviewed the troops in person. It is reported that 11,000 Confederates have taken possession of Mayfield, Kentucky, and are fortifying it. General Mitchell, of the United States' Volunteers, has received the command of the military depot of Ohio, comprising Ohio, Indiana, and as much of Kentucky as lies within 15 miles of Cincinnati. The head-quarters at the latter place, and as much of Virginia as lies west of the Blue Ridge Mountains, constitutes a separate command, under General Rosencranz, and will in future be called the Department of Western Virginia. The office of the *Louisville Courier* has been seized, and one of its proprietors arrested. Mr. M'Masters, the editor of the *Freeman's Journal* (Catholic and Irish), and ex-Governor Morehead have also been arrested. The Maryland Secession Legislature has been suppressed by the Federal Government. Several of the members and all the officers of the Legislature with several inhabitants of Frederick City have been arrested. Similar arrests have been made in Baltimore, including Mr. Henry

[illegible] elected to Congress two months ago; Mr. [illegible] Wyman, the richest man in the State; and numerous other influential citizens. The *New York Herald* announces that numerous regiments encamped round New York, to the estimated number of 6000 men, have quitted their camps under sealed instructions, and embarked on transports. They are, it is stated, destined for the naval expedition to act against the Southern coasts. The Spanish Minister has declared the report, originating with the *Charleston Mercury*, that the Captain-General of Cuba had issued a proclamation recognising the Confederate flag, to be untrue. It is reported that, notwithstanding the Spanish Minister's denial, this subject still occupies the attention of the State Department. Unconfirmed rumours from Washington state that the European Powers refuse the offer of the Federal Government to accept the proposition made by the Paris Conference in regard to privateering. The *New York Times* says that the British Government will hereafter communicate with its Consuls at the seceded ports by means of the British war vessels. Accounts from the Southern States mention that President Davis on the 6th of September, the day that he was reported to have died, was at his office at Richmond, attending to his official duties. On the 17th ult. he reviewed the main body of the Confederate army at Fairfax and Centreville. General Beauregard has published an official report of the battle of Manasses, which he calls an artillery duel, and estimates the Federal loss at 15,000 in killed, wounded, and prisoners. The cotton picking season had commenced, and the planters were storing their crops away in the seed on their estates, there to remain at the disposal of Government until the raising of the blockade. —A shocking accident by fire occurred on the 14th ult. at the Continental Theatre, in Philadelphia. There was to be a ballet during the performance of the "Tempest," in which four sisters, English girls, called Gale, who had only been in America two years, were to have appeared. The girls were dressing for the ballet, when Miss Cecilia Gale, in standing on a settle to reach her dress, touched the gas jet, which set it on fire, and communicated to her clothes. Her sisters rushed up, and their dresses caught. In a moment the light gauze dresses of a dozen other girls were on fire, and several others leapt from the windows into the street. The result was awful. The four Misses Gale were all so seriously burnt that they have since died, and 14 other girls were badly burnt, 12 of whom have already died. The jury at the inquest returned a verdict exonerating the manager from all blame, as he had used all precautions to prevent accidents.—An accident has occurred to a train on the Ohio and Mississippi Railway, caused by the breaking of a bridge, which is said to have been cut through by traitors. The train was filled with soldiers, of whom 40 or 50 were killed and 92 wounded.—The Prince de Joinville, his son, nephews, and suite were presented to the President on the 20th ult. by the Secretary of State. He declined the reception which was offered him by the Government. It is said that the object of his visit is to place his son at one of the United States naval Colleges. The Count de Paris and the Duc de Chartres have been appointed officers in the Federal army. Prince Napoleon returned to New York on the 18th ult., after an absence of about three weeks, during which he visited the Western prairies, the Falls of Niagara, and the Canadas. The Princess Clothilde met the Prince at Buffalo, and accompanied him to Niagara, after which she returned to New York. Their Imperial Highnesses were to leave for Boston on the 21st ult.

British Columbia.—The survey of the boundary line between Washington Territory and British Columbia has been completed, and the United States Commissioners have arrived at San Francisco on their way to Washington to report.

Mexico.—The state of things in Mexico is becoming worse. The fall of Juarez is expected to take place shortly. Comonfort has entered Mexico on the northern frontier.

Public Addresses.

Lord Wodehouse, late Under Secretary of State for Foreign Affairs, entertained on the 26th ult. the Wymondham Volunteers at his seat at Kimberley, and in proposing "Prosperity to the Corps," made the following remarks on National Defences:—

"I dare say most of you who take sufficient interest in Volunteer topics to have read the various speeches which are made at reviews in different parts of the country have probably noticed a recent speech, reported in the papers, and delivered by no less a person than Lord Ellenborough. No person in the kingdom speaks with greater eloquence than Lord Ellenborough, and no man, I am convinced, is animated by a more earnest, patriotic spirit; and although I do not agree in all he said, still I think his remarks ought to be taken seriously to heart by the Volunteer body. I don't go quite so far as Lord Ellenborough when he says that the military profession is the first profession, and that the first reward is military honour. For my part, I have still some affection for the arts of peace, and therefore I am not sure that I could go with Lord Ellenborough in that part of his remarks; still I will say that the arts of peace, unless you also cultivate the arts of war, are of no use. The history of the world, depend upon it, shows that no nation ever prospered which had not the military spirit. Unless you, as a nation, show that you possess the military spirit, and that you are ready to defend yourselves, the arts of peace, which grow, as it were, under the shadow of such a protection, can never flourish. But that public spirit has never been wanting in England. If any supposed—although, for my part, I never entertained such an opinion—that a long peace had in any degree diminished the public spirit of this country, they must have been entirely undeceived by what has taken place during the last few years. We have not wished for war. God forbid it! but we have entertained the feeling that it is one of the first duties of every citizen of a free country to be prepared to make any necessary personal sacrifice to defend that country in which all that is dear to him is surrounded by all that makes a nation grand in its historical recollections, and all that makes an empire worth living for. I will not say that boasting well becomes us. I will not say that we excel the other nations of the world in patriotism; but of this I am quite certain, that we make no idle boast when we say that we come behind no nation in the world in patriotic spirit; and this is the case because we are, and have been for ages, a free people. Being a free people, we know how to take care of ourselves. We respect the laws, we look up to our Queen and our Government, but we rely on ourselves and that self-supporting spirit which has always distinguished the inhabitants of this country, and brought us through every difficulty, whether it be in peace or war. The Volunteer force has especially illustrated the existence of this spirit. Lord Ellenborough said that military honour was the highest reward, but I think the greatest reward of all is the consciousness of having done our duty; and we may be certain that we in this district—in common with gentlemen in other parts of England, who are making considerable sacrifices of time, and taking much trouble for the purpose of promoting this defensive movement—are doing our duty in the most effectual and conspicuous manner. But, while we take credit to ourselves for what we have done, let us not forget to look forward to what still remains to be done. We have seen in another and very great country how signally volunteers may fail. I should be the last person to say one word in disparagement of the courage or public spirit of the North American nation; but this I must say—I think they have boasted too much, and the old saying that "Pride comes before a fall," was well exemplified in what took place at the battle of Manassas. What has occurred will not, however, prevent the volunteers of North America, possessing as they do a pluck and public spirit derived from this country, from recovering their high position, which has certainly been somewhat diminished by recent events. As regards the fatal war in which the Americans are engaged, I will only say that while we should grieve to see any diminution of their military spirit, for no man can look with satisfaction on the decline of a great—still less a kindred—nation, yet we must all wish that this fratricidal war may end as soon as possible. Gentlemen, we in this country are not likely to be called upon to take part in such an unhappy contest, and I think we may also congratulate ourselves that we have, at the present time at all events, a good prospect that this country will remain at peace. The feeling of every man in this country, although he wishes that we should be ready to defend ourselves, is for peace. We echo the old French saying, 'Gare à qui me touche;' but we desire that while nations should respect each other, and be prepared to defend their independence and position in the world, they should remain in a state of repose to cultivate those great arts of peace which distinguish this century—that the shield and spear (or rather in these days the rifle, the great weapon of our Volunteers and of modern warfare) should remain hung up in sight and ready, but still not be used unless in self-defence."

Earl Spencer, at the annual dinner of the Northamptonshire Agricultural Society, spoke as follows on the Education of Labourers:—

"I do not want to trench upon politics, which is a forbidden subject at this meeting; but thus much I may say without infringing the rule, that a bill passed last session which will very much increase the free trade in labour, and is a step in the right direction, because it will give labourers more scope in finding a market for their labour. I feel that this is a most important point, and that what it must lead to is the increased comfort of our labouring population in villages. The next most important thing to a farmer after good labourers is to have them at hand, and not only is it good for the farmers to have the labourers at hand, it is equally good for the labourers themselves. It is, indeed, of the greatest importance to farmers to have their labourers near at hand, always ready. And although I admit it is a difficult question, yet it is one which concerns proprietors so deeply that I think they must be led to increase the accommodation in the villages. The next thing is to give, as far as possible, a good education to their labourers. I believe that all classes in England are now fully alive to the value of education, and especially of giving improved education to our labouring population. The recent report of the Education Commissioners shows that considerable steps have been already taken towards improving their education. Nothing can excite more interest among all classes at the present moment than questions of education; and, in my opinion, the chief thing is to give to labourers a good rudimentary education, not to give them an education which would set them up above their class, but to give them such a knowledge of the rudiments of education—reading, writing, and arithmetic—as would enable any among them, if they possessed more than ordinary talent or application, to rise in life. I believe that up to the present too much attention has been paid to the higher classes of education, and too little to rudimentary education among the humbler classes; and the more the elements only of education are taught the labourers, the better and more valuable will be the results."

The Right Hon. Sir E. B. Lytton, at the annual meeting of the Herts Agricultural Society at Hitchin, spoke as follows on Public Affairs:—

"Since I last addressed you in our annual meetings great changes have passed over the Old World and the New. Great changes have come over Europe. When I last met you here what was Italy?—a discordant variety of petty States, in which the friends of order were the puppets of Austria, and in which the friends of liberty seemed wild conspirators who could use no other weapon against tyrants but the dagger of the miserable assassin. Now what is Italy? A great nation, a constitutional monarchy; the tyrant is gone, and let us hope that the assassin is disarmed. Like the enchanted princess in the old story books, who was thrown into a death-like slumber till the walls that confined her fell down before the trumpet of her destined deliverer, Italy has risen out from the sleep of ages restored to the bloom, but exposed also to the passions and struggles of youth. Heaven guard and Heaven bless her! It is for the interest of England that Italy should enter into the great community of constitutional nations. Foreigners misunderstand the foreign policy of England. I will endeavour to explain what it is. England is a free nation, and its statesmen must consult popular opinion; the popular opinion of a free State goes with the free. England is a commercial and a manufacturing nation. It is the interest of England that good government, with the elements of progressive prosperity, should be established everywhere, because it is only in good governments that the interchange of her commerce is secure, and in proportion as the foreigner prospers the probability is that he will widen the market for our English manufactures. We have no interest in tyrannies, where all progress is arrested. We have no interest in revolutions, where all property is insecure. But we have an interest in the rise and prosperity of every people who adopt that temperate form of constitutional freedom which our own experience has proved to be the best for the development of human energies; and, if to that good feeling we must seek a selfish motive, it is because every people so rising would naturally become our ally through the sympathy of freedom, and our customers through that increasing prosperity which is the usual result of political freedom. In these few words, if foreigners would condescend to reflect, they will find the true key to the foreign policy of England. We have an interest in the regeneration of Italy. We have also an interest, certainly not less, in the success of that great experiment in which Austria has passed from the haughty representative of hereditary despotism to the ranks—still, unhappily, few—of constitutional monarchies. No politician worthy the name of statesman, no educated man, who will cast his eye over the map of Europe, but what must acknowledge the immense importance to freedom, and to England of establishing, midway between Russia and France, midway between the two great military and absolute empires of Europe, a constitutional monarchy of immense resources both in territory and in population; resources that have utterly failed to Austria while her Government was despotic, but which may develop, as our resources have developed, under a system precisely analogous to our own. Kings, Lords, and Commons, with Ministers and representatives responsible to the people, and defended in safety by a free press,—such is the Constitution of England; such is now the Constitution of Austria. But whatever interest we may have in the prosperity and freedom of other nations is seldom an interest that admits of armed interference. Some of us may doubt whether Sardinia has been either prudent or honourable in her annexation of Naples. Some of us may doubt whether Hungary or Austria be right in the [illegible] between them, but no Englishman of common sense can doubt that these are questions which Italy and Austria should settle for themselves. On the grand principle that we should refrain from armed intervention, except where the direct and immediate safety and honour of Great Britain are concerned—both the great parties in the country are agreed. On this my Lord Russell can offer his generous compliment to his predecessor, the Earl of Malmesbury. And I in turn can say with sincere pleasure, that on the whole—without approving every word in every despatch—but on the whole, in a time of great and anxious difficulty, Lord Russell had, in my humble judgment, wisely maintained the interests, fearlessly upheld the honour, and faithfully represented the general opinion of the British nation. But it is not in the Old World alone that great changes have passed since I last addressed you. Many of you will remember that when I took the chair at our meeting in this town, there came with me, as my guest and as yours, Mr. Dallas, the distinguished diplomatic Minister of the then United States of America. You will remember the enthusiasm with which he was deservedly greeted, and the applause that followed every affectionate allusion to our Republican kinsfolk, with whom nevertheless there was at that moment, as there has been often before, one of those irritating questions in which much was sternly asked by young Brother Jonathan and mildly conceded by old John Bull. Well, we Englishmen respected the giant Republic in its apparent unity and its fancied strength, and no true Englishman will be mean enough to exult in the pangs of its separation and the horrors of its civil war. But even then, when Mr. Dallas was our guest, I never conceived, nor do I understand how any farthinking statesman could conceive, that a fourth part of the earth could long be held under one imperial form of government. That separation between North and South America which is now being brought about by civil war I have long foreseen and foretold to be inevitable; and I venture to predict that the younger men here present will live to see not two, but at least four, and probably more than four separate and sovereign commonwealths arising out of those populations which a year ago united their Legislature under one President, and carried their merchandise under a single flag. And so far from thinking that these separations will be injurious to the future destinies of America, or inflict a blow on that grand principle of self-government in which the substance of liberty consists, I believe that such separations will be attended with happy results to the safety of Europe and the development of American civilisation. If it could have been possible that, as population and wealth increased, all the vast continent of America, with her mighty seaboard and the fleets which her increasing ambition as well as her extending commerce would have formed and armed, could have remained under one form of government, in which the Executive has little or no control over a populace exceedingly adventurous and excitable, why then America would have hung over Europe like a gathering and destructive thundercloud. No single kingdom in Europe could have been strong enough to maintain itself against a nation that had once consolidated the gigantic resources of a quarter of the globe. And this unwieldy extent of empire would have been as fatal to the permanent safety and development of America herself as the experience of all history tells us an empire too vast to maintain the healthy circulation of its own lifeblood ever has been, since the world began, to the races over which it spread. By their own weight the old colossal empires of the East fell to ruin. It was by her own vast extent of dominion that Rome first lost her liberties, under the very armies which that extent of dominion compelled her to maintain, and finally rendered up her dominion itself to the revenge of the barbarians she had invaded. The immense monarchy founded by the genius of Charlemagne fell to pieces soon after his death, and those pieces are now the kingdoms of Europe. But neither the empires of the East, nor the commonwealth of Rome, nor the monarchy of Charlemagne could compare in extent and resources with the continent of America; and you will remember that the United States claimed a right to the whole of that continent, and the ultimate fate of America under one feeble Executive—the feeblest Executive perhaps ever known in a civilised community—would have been no exception to the truths of history and the laws of nature. But in proportion as America shall become subdivided into different States, each of which is large enough for greatness—larger than an European kingdom—her ambition will be less formidable to the rest of the world, and I do not doubt that the action of emulation and rivalry between one free State and another, speaking the same language and enjoying that educated culture which inspires an affection for all that enlightens and exalts humanity will produce the same effects upon art and commerce, and the improvements in practical government which the same kind of competition produced in the old commonwealths of Greece. Heaven grant that my convictions may not be erroneous. I am not, then, one of those who say that the impending separation of the American States proves the failure of her experiment of Democracy. Any other form of Government would have equally failed in keeping together sections of a community so geographically cast, with interests antagonistic to each other. But this I may say, that when we see liberty and law alike suspended in the moment of danger, printing presses destroyed by an unresisted mob, or the opinions of public writers stifled by a Democratic Government,—when we see an American President so bewildered by his own armies, or so despairing of the skill of his own generals, that he offers to the Italian Garibaldi the command of American patriots,—I think, without vanity, we may say that in those acts of good government

which can preserve freedom in the hour of danger, and enable a nation to right itself by the brains and the hearts of its own children, America has more to learn from England than England to learn from America. Let us, then, turn our eyes back to our own country, humbly grateful for the blessings we enjoy, and manfully resolved to defend and maintain them. While our august but inscrutable ally stands armed to the teeth, with one hand so resting on the gates of war that they open or close at his touch, England has not been unmindful of her safety, but has not departed from her wise constitutional abhorrence of vast and costly armaments in a time of peace. She has, indeed, strengthened her navy, and I do not doubt that the present Government has in this worthily maintained the same policy of precaution which occupied the unceasing and anxious care of the Government of Lord Derby. But there is this distinction between a navy and an army. A navy never can threaten the liberties it is intended to guard. For our military defence we have raised, without cost, without danger to constitutional principle, a force which is not aggressive against other countries, but which quietly proves our determination to defend our own. Relying on the loyalty of its subjects, the Crown of England encourages the use and discipline of arms—not as an habitual profession, but as a citizen's duty, whenever the signs of the times warn him that he may have to defend his own hearth from a foreign invader. Thus have sprung up our Volunteers—not mere raw undisciplined, unskilful pretenders, like the old city Train Bands ridiculed in our popular farces, but patiently learning the use of their weapons; so that a wasp could not more safely enter a beehive than an invader could brave all the stings in the rifles of England. But England has done more than defend her shores. Her moral influence has been felt in every step that has advanced the condition of the world. It was my task when in office, conjointly with Lord Malmesbury—though to him belongs the far greater share of the merit—to aid and to stimulate France in what to her was a difficult experiment, the substitute of free labour for negro slavery in her colonial possessions. Here, what encouraged France? It was the example of England. We have not assisted Italy with our arms, it is true, but then we have not asked from Italy the cession of Savoy and Nice. And, if the Government of Sardinia should preserve the courage to refuse further concessions of Italian territory, what can so maintain their resolution as the earnest dignity with which England has already protested against the terrible doctrine that the recognized boundaries of European kingdoms are to be altered by secret compacts and family arrangements? We have morally opposed ourselves to the domination of Austria in her old Italian possessions. But when Austria, dismayed at her own feebleness under despotic forms of Government, seeks to invigorate her system by constitutional changes, she looks neither to Russia nor to France for a model. She looks to England, and the Constitution she gives is copied from our own. Thus, wherever we look, not the arms, but the example of England has advanced the condition of the world. Nor have we arrested even the progress of an empire which, as its object is commerce and not conquest, may possibly be more durable than the empires to which I have before referred. While France was premeditating the petty acquisition of Savoy and Nice, which will cost her treasury more than they can ever give to her commerce, we have been laying the foundations of a new and mighty colony, which every year will more and more enrich our trade by the wants of its spreading population, and maintain the rewards of our agriculture by the influx of gold from the richest mines which have yet been discovered. Pardon me if I speak of the colony it was my duty to advise my Sovereign to found, with the assent and the aid of my colleagues in office—I mean British Columbia. That colony, with its neighbour Vancouver, taken from the Hudson's Bay Company, gives to England her only possession on the Pacific Ocean. But that possession is the key to the Pacific, and had I still been in office, long before this, I venture to think, one line of British settlements would have sprang up to connect the Pacific with the Atlantic. Quietly, inoffensively, with no alarm to Europe, no threat to the civilised laws of nations, England has thus annexed from the wilderness—annexed to her Crown—a country larger than England itself, and which before a quarter of a century is over will add millions to our national industry in support of the profits of agriculture, the wages of labour, and the interchange of commerce."

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 92⅞ to 93 for Money, and 93 for the 10th inst.; Reduced and New Three per Cents., 90⅞ to 91; Thirty Years' Annuities, 1885, 15½; India Five per Cent. Stock, 103½ to ¼; Ditto Bonds, 11s. to 13s. prem.; Five per Cent. Enfaced Rupee Paper, 96½ to ¼; Ditto Five and a Half per Cent., 103¾; Exchequer Bills, March, par to 3s. prem.; Ditto June, 7s. prem.—FOREIGN: Brazilian Old Five per Cents., 99¾, ex div.; Ditto Four and a Half per Cents., 1860, 91½; Buenos Ayres Six per Cents., for Acct., 86; Chilian Four and a Half per Cents., 84½; Equador New Consolidated, 15½; Mexican Three per Cents., for Acct., 26½ to ⅝; Spanish Three per Cents., for Acct., 49⅞; Committee's Certificates, 6; Turkish Six per Cents., 1858, for Acct., 69 to 68½; Ditto 100l. Bonds, 70½; Venezuela Three per Cents., 20¾.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£28,010,520	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion	13,360,520
		Silver Bullion	—
	£28,010,520		£28,010,520

BANKING DEPARTMENT.

Proprietors' Capital	£14,553,000	Government Securities (including Dead Weight Annuity)	£10,733,123
Rest	3,809,537	Other Securities	17,717,494
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	4,909,918	Notes	6,922,565
Other Deposits	12,115,942	Gold and Silver Coin	764,106
Seven day and other bills	748,891		
	£36,137,288		£36,137,288

3d day of Oct., 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY — BANKRUPTS—R. BRADLEY, Handsworth, Staffordshire, Broker—W. and J. BUTTERFIELD, Tunstall, Earthenware Manufacturers—J. EMINGTON, Salisbury, Leather Seller—J. FAIDLINGTON, Southorpe Mill, Northamptonshire, Miller—T. GOLDSMITH, Norwich, Baker—C. HARRIS, Stratford-le-Bow, Ironmonger—T. and H. LEAVESLEY, Coventry, Silk Dyers—T. LORD, Todmorden, Cotton Spinner—W. ROBINSON, Bradford, Yorkshire, Grocer—W. and B. SPENCER, Bury, Lancashire, Stage Carriage Proprietors — J. WORRALL, Briersill Head, near Rochdale, Licensed Victualler.

SCOTCH SEQUESTRATIONS—J. ESPLIN, Forfar, Cabinet Maker—W. INGLIS, Elgin, Cabinet Maker—W. KING, Kilmarnock, Victualler.

FRIDAY—BANKRUPTS—C. W. BANKS, Chapter House Court, City, and Dover Road, Printer and Publisher—C. BUTTERY, York, Draper—C. DUFF, Park Road, Peckham, and Crane Court, Fleet Street, Printer—J. B. GRAY, Bromley, Middlesex, Draper and Milliner—H. KELLY, Dale Place, Wandsworth, Builder and Contractor—W. B. LEA, Leek, Staffordshire, Brewer—R. MANDERS, Exeter, Tailor—J. NUTT, Cheapside, Silversmith and Jeweller—J. PETERS, Lee, Kent, Builder—W. WILLIUS, Norwich, Scrivener.

BANKRUPTCIES—ANNULLED—W. C. JAMES, Llanvrechva Lower, Monmouthshire, Tin Plate Manufacturer—E. P. ROBERTSON, Gloucester, Innholder and Vintner.

Metropolis and its Vicinity.

ELECTION OF LORD MAYOR.—A Common Hall was held on Saturday in Guildhall, for the purpose of electing a Lord Mayor for the ensuing year. It has been the practice for many years past to return to the Court of Aldermen for their selection the names of the Alderman next in rotation and some other Alderman below the chair, but on this occasion the functions of the Liverymen became a reality, from the proposal to elect the present Lord Mayor, Alderman Cubitt, for a second year of office, postponing the claims of Sir H. Muggeridge, who stands first in the list of Aldermen below the chair. On the one side it was determined to return the names of the Lord Mayor and Sir Peter Laurie, whereby the choice of the Court of Aldermen would be restricted to Alderman Cubitt, as Sir Peter, having once served the office, was not obliged to serve again, and had written a letter protesting against the unfair use made of his name; on the other it was resolved to put forward the names of Sir H. Muggeridge and Alderman Hale. The hall was filled with the partisans of the respective candidates, and to judge from the strength of the cheering, popular feeling among the Livery was decidedly in favour of Sir H. Muggeridge. The Lord Mayor, attended by the Aldermen, Sheriffs, Recorder, Common Serjeant, and other officials of the Corporation, having entered the hall, and the usual proclamation having been made, the Lord Mayor and Sir Peter Laurie were put in nomination by the friends of the former, and Sir H. Muggeridge and Alderman Hale were put in nomination by the friends of Sir H. Muggeridge. On a show of hands not more than one-third of those present held up their hands for the Lord Mayor and about the same number for Sir Peter Laurie. Sir H. Muggeridge had a very large majority. Alderman Hale ran the Lord Mayor very close, but no hands were held up for the other Aldermen. The Common Serjeant then announced that, in the opinion of the Sheriffs, the choice of the Liverymen had fallen on Sir H. Muggeridge and the Lord Mayor. A poll was demanded on behalf of the Lord Mayor and Sir Peter Laurie, which opened on Saturday afternoon. At 4 o'clock, when the poll closed for the day, the numbers were, for the Lord Mayor, 125; Sir Peter Laurie, 104; Sir Henry Muggeridge, 87. The poll was resumed on Monday, and at its close the numbers were, for the Lord Mayor 550, Sir P. Laurie 395, Sir H. Muggeridge 258. On Tuesday the numbers at the close of the poll were, for the Lord Mayor 1022, Sir P. Laurie 750, Sir H. Muggeridge, 420. On Wednesday the Lord Mayor increased his lead considerably, and polled 302 votes, while only 96 votes were recorded for Sir H. Muggeridge, being a majority of 3 to 1. At the close of the day's poll the numbers were, for the Lord Mayor, 1325; Sir P. Laurie, 984; Sir H. Muggeridge, 524; giving the Lord Mayor a total majority of 801. In these circumstances the Chairman of Sir H. Muggeridge's committee issued an address to the Livery announcing that Sir Henry withdrew from the contest. The address says "he was most unwillingly involved in this election, but felt himself bound to uphold not only his own fair pretensions to the high and honourable office of Chief Magistrate of the City of London, but also that of his junior brethren of the Court of Aldermen to the regular succession to that municipal dignity. It is therefore without hesitation that he bows to the decision of the Livery, relying upon their unanimous support the ensuing year." Though this resignation virtually decides the election in favour of the Lord Mayor, it is necessary, as a matter of form, that the poll should be kept open until the expiration of the legal term. About 200 voters polled in the course of Thursday, and at the close the Lord Mayor had a majority of 940. The poll reopened yesterday morning, but not more than 20 votes were polled. The poll will be kept open until 4 o'clock to-day, and the official report will be made to the Court of Aldermen on Tuesday.

SWEARING IN THE NEW SHERIFFS.—On Saturday Mr. George Joseph Cockerell and Mr. William Holme Twentyman, who were recently elected Sheriffs of London and Middlesex for the ensuing year, took the customary oaths in Guildhall, and were invested with the insignia of office in the presence of the Lord Mayor, Aldermen, and principal officers of the Corporation.

INTERNATIONAL EXHIBITION OF 1862.—The *Gazette* of Tuesday contains a notice from her Majesty's Commissioners stating that no further applications for space can be entertained. From the returns made up to Thursday night it appears that the number of applications is about 10,000. In 1851 the number was 8213; the increase in the present as compared with the previous Exhibition is, in British exhibitors at least, 1500. The amount of space applied for greatly exceeds that at the disposal of the commissioners, the exhibitors of machinery alone applying for a space much larger than that of the whole building an[d] annexe.

THE THAMES EMBANKMENT.—A correspondence recently passed between the Right Hon. W. Cowper, First Commissioner of Works and Public Buildings, and Mr. Thwaites, Chairman of the Metropolitan Board of Works, touching a claim advanced by the latter to initiate and carry out the embankment of the Thames. At a previous interview Mr. Cowper stated to Mr. Thwaites that he by no means desired to take the construction of the work out of the hands of the Metropolitan Board, but that there were questions involved which rendered it the duty of the Government to legislate in the matter. There were, for example, certain Crown rights, which might involve controversies between different departments, and which admitted of more facile adjustment by the Administration than by any other parties. Again, that a private member would experience much difficulty in carrying a measure of such magnitude through the House of Commons, which, unless promoted by the Government, Ministers did not feel it incumbent on them to support. That, for these and other reasons, her Majesty's Government were of opinion that they should take the necessary steps for complying with the Standing Orders by preparing and depositing plans and serving notices. Mr. Thwaites urged the claim of his Board to initiate as well as to carry out this important work, there being no precedent for any interference on the part of her Majesty's Government in the case of a local operation, executed by a local authority and defrayed wholly by a local taxation; although he felt sure the Board would have no desire to enter into any unseemly controversy with the Government, but were most anxious, while defending what they conceived to be a public right, to do all that lay within their power, consistently with the discharge of their duty to their constituents, to promote this great undertaking. Mr. Cowper explained that the course it was intended to pursue was in no way opposed to, or calculated to infringe, the Board's rights; that he would prepare a Bill for carrying out the plan recommended in the report of the Royal Commission, and would take all the steps prescribed by the Standing Orders; that the Bill would empower the Board to execute the works and authorise the Treasury to pay over to them the fund in course of accumulation from the coal dues, to defray the cost of the embankment; that powers would be given the Board to open a line of street from Blackfriars Bridge to the Mansion House, the cost of which he suggested might be defrayed out of the [...] dues, at present applicable to improvements within the city of London. That Bill would of course be referred to a Select Committee, and would be supported by the Government in its passage through the House; after which, should it succeed in obtaining legislative sanction, the whole further conduct of the matter would be confided to the Metropolitan Board of Works, the Government having no desire to retain any control or exercise any veto upon their acts. Meanwhile, if they wished the insertion of clauses, he was willing to receive and consider whatever suggestions they might be desirous of offering. Mr. Thwaites referred to the amendment introduced into the Coal and Wine Duties Continuance Bill, on the motion of Sir H. Willoughby, whereby the new account was to be opened in the name of the Treasury instead of the Metropolitan Board, and requested an assurance that the Government intended to make such provisions in the new Bill as should secure to the Board the execution of the work. Mr. Cowper, in reply, assured him that the clear intentions of the Government were to carry a measure giving full powers to the Board, and that on its part every effort would be made in support of that intention, but that it would be impossible to say what it might be necessary to do in the case of opposition to any particular clauses. Mr. Thwaites reported this conversation to the Metropolitan Board, and then, on their authority, addressed a letter, on the 10th of August, to the First Commissioner, in which he stated that "the Board, while anxious to defend what they believe to be their rights, were too deeply impressed with the importance of the subject and the difficulties surrounding it to wish in any way to increase them by raising controversial questions, and at once adopted the suggestion submitted to them, to suspend the instructions they had already given the engineer for the preparation of drawings and documents required to comply with the Standing Orders, feeling that, after the assurance [...] had enabled me to convey to them of the intention of her Majesty's Government to assume all legislative responsibility, any present action on their part would necessarily be either antagonistic or superfluous." To that communication Mr. Cowper replied as follows:—

"Office of Works, Aug. [...]

"Sir,—I have to acknowledge the receipt of your letter of the 10th inst., informing me of the communication you [...] made to the Board over which you preside with respect to the views I had the honour of expressing to you at our interview. Of course those views are subject to modification when the time comes for the preparation of the Bill and for consulting members of the Government as to its provisions; but I think it right now to make a few observations with a view of preventing misunderstanding as to an expression which [...] your letter. You speak of your Board being anxious to defend what they conceive to be their rights, and as I am one of the last men who would wish to infringe, even inadvertently, any of their rights, I am anxious to ascertain what those rights can be. In considering whether the Metropolitan Board of Works possess any right to construct an embankment of the

... of the funds accruing from the coal duties, I am ... by the following circumstances:—1. The Metropolitan Board has no right or authority, except that which it derives from the Act of 1855 and subsequent Acts; and the Act which empowered it to raise rates gave it no authority over the coal and wine duties. 2. These duties are levied, not by them, but by the Corporation of London. 3. These duties are not received by them, but by the Corporation and by her Majesty's Treasury. 4. The area over which the coal duties are levied is larger than that which is represented by the Metropolitan Board. 5. The application of these duties to metropolitan improvements has been entrusted to the Corporation and to my predecessors in office. 6. The foreshore and bed of the Thames are under the jurisdiction of the Board of Conservancy. As, therefore, your Board has now no power over the coal and wine duties, and no power over the foreshore of the Thames except in regard to their especial business, the main drainage, I cannot understand how the introduction of a Bill to confer upon them such powers could be treated as an aggression upon their rights. I do not see any force in the argument that because such a work would have to be authorised in a provincial town by a local Act, promoted by local commissioners or by the corporation, a similar course should be followed in respect of the metropolis. In every civilised country the metropolis receives aid, protection, and co-operation from the National Government which is not extended to other towns; and I am sure that Londoners cannot wish that their town should in this respect cease to be treated as a metropolis, and be reduced to the level of a provincial town. I am on principle an advocate for extending more fully and satisfactorily in the metropolis the action of municipal representative institutions, and the Bill which I propose to introduce will have a tendency to promote that object, and I am quite sure that it will not in any respect infringe a right now possessed by the Metropolitan Board of Works.—I have, &c.,

W. Cowper."

"J. Thwaites, Esq."

In a subsequent letter to Mr. Thwaites, dated the 20th of September, Mr. Cowper states he considers the proposed Bill should be one to empower the Metropolitan Board of Works to make such purchases of property and to execute such works as may be necessary for an embankment, with a roadway upon it, from Westminster to Blackfriars Bridge, and for a new street thence to the Mansion House, in accordance with the plan recommended by the Royal Commission, and out of the fund provided for that purpose out of the proceeds of the coal dues by the Act of last Session. No control or interference with the Metropolitan Board of Works will be created by the Bill in regard to the powers conferred upon them by its provisions. He adds that, inasmuch as the foreshore to be reclaimed from the river is vested in the Crown, or the Board of Conservancy, and the surplus land along the shore may be required for public improvements, or for a public promenade, or as sites for public buildings, he thinks it should be so vested as to secure for Parliament a control over its future destination; and he believes the best course would be to vest it in the Commissioners of Works and Public Buildings, on behalf of the Crown and the public, but to provide that the proceeds of the sale of such surplus land shall be paid into the Embankment and Metropolitan Improvement Fund, *from which the* purchase was made. This, he states, *should apply only* to surplus land on the shore of the river not required for works on the roadway, and should not apply to surplus land obtained in making the street from Blackfriars Bridge to the Mansion House. The correspondence has since been referred to the Main Drainage Committee of the Metropolitan Board for consideration as to the course to be pursued, and there the matter rests for the present.

The Palace of Westminster.—The report of the committee appointed by the First Commissioner of Works to inquire into the decay of the stone at the Houses of Parliament was issued on Saturday. The committee recommend that the architect of the Palace, assisted by scientific chemists, should examine and record the actual state of the stonework of the building at the present moment; that experiments should be made by their direction, under various conditions of height, exposure, and aspect, with such preventive materials and agents as the chemists may suggest from time to time, and that researches should be continued into the effects of the various alkaline silicates, phosphates, and other substances which have been brought under the notice of the committee, or suggested in Germany, France, or elsewhere; that where decay arises from damp, means should be taken to protect the stone, as has been before suggested; that any stone extensively decayed should be removed and replaced; but that in particular the earliest symptoms of decay should be carefully watched and examined, with the view to the application of some immediate remedy. The committee believe that a very large portion of the stone in the Palace is of a very durable nature, and they entertain a confident expectation that a remedy will soon be found to arrest or control the decay where it has unfortunately begun to appear.

The National Gallery closed on Saturday, the 28th ult. In consequence of some further alterations it is not expected to be re-opened before the first week in November.

The New Educational Minute.—The Committee of Council on Education, in answer to an inquiry from the Finance Committee of the National Society, state that the Order in Council of the 10th of August, 1840, making the inspectors of Church Schools subject to the Archbishops, is in no way affected by the Minute of the 29th of July last. Archdeacon Sinclair, Treasurer of the National Society, has addressed a circular to the councils of all the training institutions in union with the society, submitting the following questions:—"1. What change in the studies of the college will be rendered necessary in case the revised code is brought into operation? 2. To what extent is the income of the college likely to be diminished? 3. From what sources, if any, does the council expect the deficiency to be supplied?" The Archdeacon adds, — "The Finance Committee are desirous to obtain full information as to the probable effect of the new code on the training institutions in union with the society preparatory to the meeting of the general committee on the 6th of November."

Mr. Spurgeon on the "Gorilla."—On Tuesday evening the Rev. C. H. Spurgeon delivered a lecture on the "Gorilla," with the accessories of vocal music and dissolving views, in his great Tabernacle, at Newington, to an audience which completely filled the whole building, and must have numbered over 5000 persons. The doors, although opened an hour before the time appointed for the lecture, were besieged by an immense crowd, who struggled hard to get places. The admission was by payment, varying from 6*d*. to 1*s*., and the proceeds, which must have amounted to a very considerable sum, were devoted to the funds of the Band of Hope Union, a society whose object is to promote total abstinence from spirituous liquors among children and young persons. Mr. Layard, M.P., presided, and M. Du Chaillu, who was present, lent a specimen of a full grown gorilla for the occasion. Mr. Spurgeon on presenting himself was received with most enthusiastic cheers. He then proceeded to deliver his lecture, of which the following is a summary:—

"He commenced by saying that it was a growing opinion in his mind, that the human animal needed one sort of amusement or another, and that if you did not give him the right sort he would certainly seek the wrong. God so adapted man's nature that he should not only attend to the necessities of existence, but seek for the enjoyment of some pleasures. It was no use his constantly saying in the pulpit that people must not go to the public-house or the theatre, for the reply would be, 'We want something of the sort, and if you do not give us the right thing we will certainly take to the wrong.' The best way to elevate the people was to preach the Gospel of Christ, but that did not prevent his using other means beside. Lectures on scientific or other subjects, in which he was able to throw out useful hints upon dress, cleanliness, economy, and temperance, did good service as well as preaching the Gospel. These were his reasons for giving the lecture, and if they were not satisfactory to his audience they were to him, and that was generally enough for him. He then entered upon the question whether M. Du Chaillu's book on the gorilla was true or not? He admitted that when he first read it he thought it a very wonderful book and full of strange stories, but he had carefully examined it in order to form an impartial opinion, and had come to the conclusion that the narrative of M. Du Chaillu was not more incredible than the stories related in bygone days, which now turned out to be quite true. He was however convinced that the pictures were the ruin of the book, because, though well engraved, they were not correct and were inconsistent with the letterpress, but this was the fault of the artist and not of the author, who did not profess to be an artist. The work also contained numerous typographical errors, and altogether it appeared to have been brought out in a hurry. Still the pictures were unfortunate, although he admitted they were no proof against the merits or truth of the book. With regard to Mr. Walker's letter, all he could say was that there was nothing in it. That writer made M. Du Chaillu say what he did not say, and then he refuted him. If nothing stronger than that could be brought against M. Du Chaillu, his name would live and not die, and it would not be said that he had deceived the people. If the book were an invention, it was the most wonderful one ever written. If De Foe wrote 'Robinson Crusoe,' it would take 10 De Foes to write 'Du Chaillu's Discoveries in Africa.' Certainly if it were a fiction, no other man possessed genius enough to compose such another work entirely out of his own head. The 22 gorillas he supposed were matters of fact, as well as the hundreds of specimens of other animals and birds which M. Du Chaillu had brought over from Africa. He verily believed, in spite of all that had been said, that M. Du Chaillu's book was matter of fact, and that the author was entitled to all praise as one of the greatest of modern discoverers—as one who had done more for science and for religion than most men of his time, if not than any man. Now, what was the gorilla? He was an enormous ape, which claimed to approach nearer to man than any other creature. How near he approached he would leave them to judge. A claim to be considered their first cousins had been put in on behalf of the chimpanzee and other animals, but these were matters to be settled by learned scientific men. Mr. Darwin might also assert that his great grandfather's great grandfather's father was a guinea pig, and that he originally descended from an oyster, or something of that kind. Now, he demurred to that, and he did so upon his own account. Many of his friends might choose to claim relationship to the oyster, and if any Chinese were present, whose pigtails had not been cut off, they might claim to be related to guinea pigs; but for his own part he said that (turning to the gorilla) 'there is a great gulf between you and me, and neither can I pass to you, nor you to me.' There was the story of the man with the bad 5*l*. note. He laid it down, and ran away from it as hard as he could. He (Mr. Spurgeon) wished to run away as fast as he could from the gorilla, and to leave relationship out of the question. Still, after all, there was wonderful likeness, and it was most humiliating; but even if an exact *fac simile* of man could be discovered, if it were destitute of a living soul, the difference between the two would be infinite. The gorilla was enormously strong, and very courageous. M. Du Chaillu said he never saw the male gorilla run away, and that the males invariably threw their protection around the females. The worst gorillas were bachelor gorillas. He hoped he addressed none of that class. From this subject Mr. Spurgeon digressed to the softening influence of female society, and said that the best thing every bachelor could do was to take under his sheltering wing one who could give him more than he could give her. With regard to the country inhabited by the gorilla, he said it was inhabited by a great many tribes whose names he could not pretend to pronounce, as they could only be correctly given by a Welchman standing upon his head. Many of them were great traders, but the rule among them appeared to be that "honesty was the worst policy." These people had a firm belief in witchcraft, which rendered their existence miserable, as they suspected even their wives and children of evil arts with the intention of depriving them of health and life. The most diabolical cruelties were consequently practised, and if a man wanted to get rid of another he had only to say he was suspected of cruelty, and his life was forfeited. If any one in that meeting thought that it was unlucky to spill salt, or to give a friend a pair of scissors, or to begin work on Friday, he would say to him, 'Away with such ideas,' as they were derogatory to God, and only fit for heathens and brutes. He next adverted to the subject of slavery, which he said was the most abject, iniquitous, infamous, and devilish of all crimes, and that it was better that the hurricane of war should sweep away the pestilence than that it should be suffered to destroy the souls of men any longer. After thanking M. Du Chaillu for the great services he had rendered in paving the way for missionary efforts in Central Africa, he concluded by repeating that he believed in the book and in the man, and in the good which his discoveries would do in years yet to come."

Abolition of Annoyance Juries.—On Saturday expired the Annoyance Juries of Westminster, which were instituted in the reign of Queen Elizabeth, and were abolished by an Act of last Session. The Dean and Court of Burgesses are now to appoint inspectors to act in the place of householders, who formerly paraded the streets and inspected the weights and measures of the shopkeepers. The Act provides that "every person who shall abuse or insult any such inspector when in the execution of his office, or shall in any way obstruct the execution of the said office, shall be liable to a penalty not exceeding 40*s*."

The Middle Temple Library.—The Benchers of the Middle Temple are making preparations for the inaugural ceremonies on the public opening of their new Library, which is intended to take place in the early portion of the month. It is stated that the Prince of Wales will take a leading part in the ceremonial, and that it is intended to make his Royal Highness an honorary bencher on the occasion.

The Builders' Strike.—It is stated to be the intention of the masters in the building trade to form a general union, with the object of enforcing the hourly system of payment throughout the country. At the last meeting of the Master Builders' Association several letters were received from large provincial firms, proposing that a general association of master builders should be formed throughout the country with the express object of enforcing the hour system on their workmen. This course has also been recommended by masters in London. It is understood that the question is to be taken into consideration at a meeting of the Masters' Association on Monday next, the 7th October, and in the present temper of the employers there is every probability of the resolution being adopted. It is supposed that a strike on a gigantic scale will be the result.

The Public Accounts.—The report of the committees appointed by the House of Commons to examine the audited accounts of the public expenditure has just been issued. It reminds the House that it resolved on the 9th of August, 1860, "that the appropriation and audit of the moneys voted for the Civil Service Estimates are insufficient and unsatisfactory, and require early amendment;" and the committee are obliged to add that that insufficient and unsatisfactory state of audit to a great extent still continues. In some cases the accounts are only partially audited by the Audit Office, and above a hundred accounts are not submitted to the office at all; some of these are for small sums, and in most cases they are subjected to an examination usually in the department on whose authority the expenditure has been incurred, but the committee consider this local examination unchecked by any independent authority to be objectionable on principle. They state that it is impossible to discover grounds for the different course followed with respect to votes of a similar character. For example, the accounts for Kingstown Harbour are audited by the auditors, but those for Holyhead and Portpatrick go to the Admiralty. The Registrar of the Court of Admiralty in England submits his accounts to the auditors; but not the Registrar of the Admiralty in Ireland. The vote for Irish education is audited by the Audit Board, but not that for English education. The expenses for the prosecutions of the Mint are audited by the auditors; those for criminal prosecutions are not. The accounts for the Marshalsea Prison in Ireland come before the auditors; those of the Queen's Bench and Queen's Prison in England do not. The accounts of the Insolvent Court are audited, but the accounts of the Probate Courts in England and Ireland are only partially audited, and the accounts of the courts of justice in Ireland not at all. The votes for the convict establishment in Ireland and the colonies are audited; in England only partially. The accounts of the Controller of the Exchequer are only partially audited; the small vote for the expenses of his office is audited by the auditors, but the account of the receipts into the Exchequer and the payments from it is never audited by any department whatever. The Exchequer accounts are actually forwarded to Somerset House by direction of an Act of Parliament, but when they get there they are not audited; the Treasury have by law the power to direct their audit. On another important subject the committee remind the House that the balances unexpended at the close of the financial year in the Civil Service Estimates are carried over in aid of the same votes in the following year. In the opinion of the committee these balances ought to be repaid into the Exchequer, and the supply for the year ought to be covered by the votes for the year. The committee observed with satisfaction the introduction of Bills giving effect to their recommendations respecting the Treasury chest and the vote for the revenue departments, and they express their hope that another year may not pass without the application of an efficient remedy to a system which the House has declared "insufficient, unsatisfactory, and requiring early amendment." The committee add that as they were not nominated until the 18th of April, they were able to perform but a small part of their task. The Army and Navy accounts, those of the Paymaster-General, and of a large portion of the Civil Service, remain untouched. They therefore suggest

that a committee should be appointed earlier next Session, and time be allowed for the inquiry.

Proposed College for the City of London.—A public meeting, convened on a requisition to the Lord Mayor, and most numerously attended, was held on Wednesday at the Mansion House, for the purpose of bringing under the notice of the community, and procuring public countenance and support for, a proposal to establish a collegiate institution; in other words, to reconstitute on a more permanent basis and on a self-supporting plan the Metropolitan Evening Classes, with the title of "The City of London College for Young Men." The Lord Mayor took the chair, and briefly stated the object of the meeting. The Bishop of London, in moving the first resolution, affirming the expediency of consolidating the Evening Classes into a College, said:—

"He had no doubt that the proposed college, once fairly started, would pay its own expenses. If there were 10,000 young men employed in warehouses, countinghouses, and shops in the city of London, surely a sufficient number of them would be ready to contribute from their earnings towards the great benefits they might receive at such an institution. If it was to be self-supporting it was right also that it should be self-governing, for, on the whole, we had long since come to the conclusion in this country that people governed their own affairs better than anybody else. It was proposed therefore that there should be a governing body consisting of the friends of the institution from without, and of young men selected from amongst the past and present students. He had had some experience of young men in this day; and he believed it had been found, both in the Universities and in our great public schools, that the more young people were instructed with responsibility the more would they answer to that responsibility. When he thought of the vast number of young men in this great city, many of them far away from their homes, and all exposed to innumerable temptations, how great was the responsibility to help them to resist those temptations and to train them to be really useful citizens. Many efforts had been made from time to time to provide useful and wholesome amusement for young men, but, after all, we as a people were so practical, that we found our greatest amusement in promoting or taking part in something that had the character of real business. That was strikingly exemplified in the Volunteer movement, which he regarded as one of the most useful within living memory, as tending to promote a feeling of national security, while it showed what an amount of latent power and spirit there was in England ready to resist any aggression that might be made on our liberties. Valuable as was the discipline to which it submitted young men, none of the old efforts to furnish means and facilities for mental culture must be relaxed. To him it had been a most gratifying sight year after year to witness young men, after a hard day's work, of their own motion attending the evening classes at King's College. But incalculable as was the benefit resulting from those classes, they did not exhaust anything like the whole available material; there were hundreds of young men who could not be absorbed into King's College, and who were sufficient in number and energy to justify an effort to perpetuate an older institution in a new form. Such an institution would prosper if its management were intrusted to a certain degree to the young men themselves, and if the college itself were of a thoroughly practical character. Some of the efforts made at the beginning of the century to disseminate useful information failed from not having a distinctly practical bearing on the character of the persons for whom they were intended; but in these days, when young men were tested at every stage by competitive examinations, there need be no apprehension of such a result. Whoever wished to attain to a position of usefulness or influence must have a cultivated intellect, and the education to be given in the proposed college would be such as to adapt a young man to the career for which he was destined. In such a country as this, where men were constantly rising from the most subordinate to the highest positions, every one was entitled at the outset of life to look forward with hope, and it was for the public advantage that facilities should be placed within the reach of the youth of all classes for cultivating their minds, so that in whatever positions they might be placed in after life they might discharge the duties devolving upon them with credit. Never was there a time in which a London apprentice had not before him a great career if he was steady, self-denying, and anxious to turn all his opportunities to good account. But true as that had been of past generations, it was now more so than ever. The prize was within the reach of every man of vigorous mind; let him only use the opportunities presented to him from time to time, and no one could say to what honour and consideration he might not attain in his day and generation, or estimate the advantages he might be the means of conferring on his fellow men. No one could rise to an important sphere in this country without having the interests of others committed to his trust, and without exercising great influence on their immortal destinies. The kind of instruction to be given in the proposed college would, it was hoped, have the effect of stimulating young men who might afterwards be placed in positions of influence to act up to their responsibilities to those placed under their authority. The college would be founded on Church of England principles, but no narrow restrictions or religious tests would be imposed on the students. At the same time its promoters had reason to be thankful to God that they belonged to a church which advanced its influence the more that education was extended and truth developed."

The motion, after being seconded by Mr. R. N. Fowler, was put and carried unanimously. Mr. Marshall Carpenter read a paper to the effect that the college would consist of a patron, vice-patrons, a president and vice-presidents—selected from among persons eminent in station and friends of education—and members, associates, and students. The members are to be divided into two classes—affiliated members, who are studying at the college, and student members, who are attending some class or classes. On certain conditions, small scholarships are to be conferred by the Council on those who do best in the annual examinations of the college; and the title of associate will be conferred by the Council, subject to certain rules. It also prescribed the mode of government, as indicated in the speech of the Bishop of London. On the motion of Mr. Henry Hoare, seconded by Mr. Clarke, formerly a student at the evening classes, a resolution was passed sanctioning the scheme of government. Mr. Cole, C.B., moved and the Rev. Mr. Statham seconded a resolution authorizing the opening of a subscription to afford the necessary aid to the class of persons for whose benefit the college is to be established, to render it rent-free, and to found the necessary scholarships and prizes. The Lord Mayor consented to act as treasurer to the institution during his year of office. The meeting was also addressed by Mr. Bolton and Mr. Atkinson, and at the conclusion of the proceedings it was announced that nearly 400*l.* had been subscribed.

Robberies at Railway Stations.—At the Westminster Police Court on Thursday the Rev. Henry Holloway, late chaplain of St. Cross Hospital, Winchester, and formerly rector of a parish in Norfolk, was brought before the magistrate on remand for the seventh time on various charges of robbery of portmanteaus and other articles from the Brighton, South-Western, and other railway stations in the metropolis. Several cases were proved, and the prisoner was committed for trial.

Great Exhibition of Dogs.—An exhibition of sporting and other dogs has been opened this week at the new Horse Repository in Holborn. There were upwards of 300 entries, representing most of the breeds except fox and other hounds, which did not produce a single specimen. About 300*l.* were given in prizes for the best dogs in the various classes, which consisted of 43. Some of the prices attached to the animals were of enormous amount. There were two or three at 2000*l.* and 1000*l.* each, and others of 500*l.* Several of the animals were sold at almost fabulous prices.

The Boiler Explosion in Rotherhithe.—Another inquest was held on the 25th ult. on the four persons who died on board the Dreadnought Hospital ship from injuries received by the boiler explosion which occurred on the 16th inst. at the premises of Messrs. Bedart & Co., seed crushers, at Rotherhithe. Several engineers and others were examined, who expressed their opinion that the explosion was caused by the boiler being overheated and short of water. One of them however, Mr. John Knowelden, of Park Street, Southwark, attributed the accident to the portion of metal which gave way having become red hot, and not to want of water in the boiler. He was of opinion that since the Smoke Consuming Act came into operation, boiler explosions had increased tenfold, the reason being that in order to destroy the smoke the whole heat of the fire is directed to a surface of 1 or 2 feet, which has consequently a tendency to become red hot. The jury returned a verdict to the effect that deceased lost their lives by the explosion of the steam boiler, which was overheated and wanting a sufficient supply of water; and that this arose from an absence of proper care and attention on the part of those in charge.

The Fatal Collision off Erith.—The adjourned inquest on Mr. and Mrs. Dunn of Southampton Street, Bloomsbury, who were drowned on the 6th ult. in the river, in the collision between the Ipswich steam-vessel Metis and the brig, Bertha, of Guernsey, was concluded on the 26th ult. The different witnesses, as on the former occasion, gave the most conflicting evidence as to the cause of the accident. Towards the conclusion of the inquiry, however, several pilots well acquainted with the navigation of the river asserted that the blame lay with the steamer. The jury accordingly, after a long consultation and much division of opinion, returned a verdict to the effect—"That the deceased were drowned in the Thames by a collision between the steamer and the brig; that the accident arose from the want of a proper lookout on the part of the steamer; and that neglect, although not amounting to criminality, is attributable to Henry Forss, captain of the Metis." The coroner was instructed to request the Board of Trade to institute an inquiry into the whole case.

Murder in the Channel.—Capt. W. H. Adams, captain of the American ship Lammagier, which sailed from the Thames for South America about 10 days ago, was murdered off the Start by the steward of the vessel, a black man, called Hawkins, on Sunday morning. The mate immediately put back to the river, and the murderer was brought before the magistrate at Thames Police Court on Thursday. It appeared from the evidence that deceased was a tyrannical man, of hasty temper, and that on the 14th ult. he was fined 5*l.* by Mr. Selfe for assaulting and wounding a Chinaman who was then acting as his steward. On Saturday last the captain struck the prisoner in his face and eyes, upon which the prisoner told the rest of the crew that he would give them a chance of getting back to London. On the next morning the captain ordered the mate to turn out the prisoner every morning at 5 o'clock. A few hours afterwards he was found murdered in his cabin with blood oozing from his head, which had been cut open with a hatchet. The steward was immediately secured and put in irons. Mr. Selfe decided that he must have the Secretary of State's warrant before he could proceed further with the case, and remanded the prisoner.

The Great Letter Robbery.—An inquiry has been instituted by the solicitor of the Post Office in reference to the wholesale suppression of letters by the letter carrier Pullen, and new cases of inquiries for valuable letters, long since regarded as lost, are constantly springing up. It is mentioned as an extraordinary fact, showing the neglect of the most simple precautions on the part of the commercial class, that of all the letters containing valuable enclosures, not one had been registered. It is probable that as soon as an approximate estimate has been formed of the losses sustained, a meeting of the bankers, [illegible] others will be held for the purpose of [illegible] Postmaster General and the Lords of [illegible] a full inquiry into the present method of [illegible] the details of the Post Office, with a view [illegible] protection of property passing through it.

The Public Health.—The Registrar[illegible] Weekly Return states that the total [illegible] registered in London in the week that [illegible] September 28, was 1108. The average [illegible] deaths in the corresponding weeks of [illegible] 1851-60, corrected for increase of population [illegible] and if the deaths from cholera in 185[illegible] from the returns, it appears that the [illegible] week is still comparatively low. During [illegible] the births of 925 boys and 923 girls, [illegible] children, were registered in London. In the [illegible] responding weeks of the years 1851-60 the [illegible] number was 1659.

Provincial.

Bilston.—Mr. John Bagott, a clothier [illegible] in Church Street in this town, was [illegible] dered in his own house on Sunday morning, [illegible] being plundered and set on fire. [illegible] the family of Mr. Beard, a neighbour, [illegible] by hearing voices in the side passage [illegible] Miss Beard, thinking it was her [illegible] home, went down stairs with a light. [illegible] she discovered some bundles of cloth and [illegible] men's clothes. Her brother happened to be [illegible] down the street at the same time, and saw [illegible] carrying a bundle, running away from [illegible] Information was at once given at the [illegible] and it was soon discovered that Mr. Bagott's [illegible] situate opposite to that of Mr. Beard, [illegible] entered. The officers found the gas [illegible] sitting-room, numerous bottles and drinking [illegible] the table, and the body of Mr. Bagott lying [illegible] head on the fender in front of the fire [illegible] coloured with soot, and the poker lying [illegible] throat. Mr. Bagott was a bachelor, 45 years [illegible] though possessed of considerable property [illegible] vant, a married woman in his employ [illegible] house twice a day to attend to his domestic [illegible] ments. He was accustomed to drink heavily [illegible] home. On Saturday he dined out and returned [illegible] evening quite drunk. He sent his housekeeper [illegible] more drink, and on her leaving the house [illegible] he locked the doors after her. He was in the [illegible] locking all his rooms up stairs, and carrying [illegible] about him. The day's receipts of his shop [illegible] in his pockets. The burglars seem to have [illegible] acquainted with his habits, for they proceeded to [illegible] bed-room and store-room up stairs, and, having [illegible] the doors and cash box, they took as [illegible] as they could lay their hands on. The [illegible] on fire, and a piece of new cloth had been [illegible] the evident object of setting the house on fire. [illegible] examining the premises the police discovered a [illegible] knife, footprints in the yard, and in the [illegible] cellar leading from the grating, by which [illegible] had been effected, impressions of a [illegible] corduroy trousers of a small pattern. The [illegible] who were seen by Mr. Beard running from [illegible] with a bundle were shortly afterwards stopped [illegible] police near Bradley, which adjoins Bilston. [illegible] challenged by the policeman they threw [illegible] bundle and decamped. The officer pursued [illegible] way, but wisely returned to the spot [illegible] property fell. While watching there [illegible] William Jones, aged 20, of Canal Street [illegible] has previously been transported for burglary [illegible] and fell into the officer's hands. Knowing [illegible] haunt, the officers proceeded to a house in [illegible] where they found that Thomas Jukes, and [illegible] well-known to the police, had just come in, [illegible] the front of his shirt and greatly agitated. [illegible] lord of the house; Thomas Lilley, aged 2[illegible] Birmingham; and Ezekiah Webb were [illegible] hended. On Tuesday evening a sixth man, [illegible] docks, a returned convict, was apprehended. [illegible] Wednesday the police succeeded in arresting [illegible] the gang, a man named David Brandrick, [illegible] aged about 21, who formerly lived in a [illegible] Mr. Bagott's premises. Five of the [illegible] brought before the magistrates on Tuesday [illegible] conducted themselves with great violence, [illegible] Lilley making desperate efforts to escape. [illegible] the police who had to remove them from [illegible] being formally remanded for further examination. [illegible] inquest was also opened on Tuesday and [illegible] a week. A *post mortem* examination has [illegible] and the result leaves no doubt that death [illegible] the pressure of the poker on the throat [illegible] strangulation, and that deceased offered [illegible] resistance before he died, for there are [illegible] injury to the spine which could not have [illegible] existed. This is the third murder which has [illegible] in the Bilston police district during the past [illegible] months. The last culprit who was hanged [illegible] murdered his wife in Bilston.

Birmingham.—A shocking murder was [illegible] in this town on Sunday afternoon, in a house in [illegible] Street, well known as the resort of the lowest [illegible] It appears that a man named John Thomson, [illegible]

[illegible] ago, a wire-drawer residing at Sutton Coldfield, some [illegible] months ago became acquainted with a woman named Ann Walker, *alias* Lines, *alias* Nancy Dawson, who had been separated from her husband, a glass [illegible] at Manchester, some years, in consequence of her dissipated habits. Since that time she has lived with [illegible] men, and has latterly been living with Thomson at Sutton Coldfield. On Saturday Thomson and the deceased came from Sutton to Birmingham fair, and, having stayed in the town till a very late hour, obtained a bed at the house in Tanter Street, where the woman had previously lodged while on the streets of the town. On Sunday morning they had breakfast, and shortly afterwards left the house. The woman returned at 3 o'clock in a state of intoxication, having while out met with a man with whom she formerly lived, and with whom she had [illegible]. On entering the house she went upstairs [illegible] down, and shortly afterwards Thomson returned and went up to the room after her. A noise [illegible] was directly afterwards heard, and [illegible] deceased had refused to go home to Sutton, a [illegible] scream was heard, upon which a woman named [illegible] went up and saw Thompson stab the woman with a pocket-knife and then drag her off the bed. [illegible] ran downstairs and gave the alarm. The keeper of the house, followed by two men, went upstairs and saw Thomson, who appeared to be quite cool, deliberately cutting the throat of his victim as she lay on the floor. One of the men took the knife out of his hand, and on being asked why he murdered the woman he said, "It was all through drink." He appeared sober at the time. On being taken to the station two new pocket-knives and two handkerchiefs, apparently bought at the fair, were found in his possession. The knife with which the murder was committed was a common pocket-knife with one blade, such as is generally used by labourers to cut their victuals. On the arrival of medical assistance the unfortunate woman was found quite dead, the jugular vein being cut through and the windpipe completely severed. The inquest was held on Tuesday, when the jury returned a verdict of Wilful Murder against John Thompson, who was committed on the coroner's warrant for trial at the next Warwick assizes.

Cardiff.—Mr. Capel Hanbury Leigh, of Pontypool Park, Lord-Lieutenant of the county of Monmouth, died on Saturday evening from the effects of poison given him by mistake at his residence, Plymouth House, Penarth, near this town. Mr. Leigh, who had reached his 80th year, met with a slight accident by falling down part of the staircase. A bottle of medicine was prescribed for him, with an embrocation to be applied to his back. On Friday night the valet was requested to give his master a portion of the medicine. The two bottles, one containing the medicine and the other the embrocation, lay upon the mantelpiece. The valet gave deceased the embrocation instead of the medicine. The fatal mistake was instantly discovered; medical assistance applied the usual remedies with the stomach pump, but Mr. Leigh died the following evening. Before his death he called his household around him, shook hands with them, and more than once begged they would not hurt his valet, who had been with him for nearly 30 years. The jury at the inquest on Monday returned a verdict of death from the effects of poison accidentally administered. After the inquest the body was removed in a hearse to Pontypool for interment. At Penarth and Newport all the shops were partially closed as a mark of respect to the Lord-Lieutenant's memory.

Hull.—The new Baltic steamer Neva of 550 tons was run down on Saturday morning by a Danish steamer off Niddigens, while on her fifth voyage from Hull to St. Petersburg. She sank almost immediately, but the crew were saved. This is the tenth Hull steamer which has been lost within a few months.

Ipswich.—The members of the Suffolk Agricultural Association presented to the Earl of Stradbroke, lord-lieutenant of the county, last week, in the Town Hall of this borough, a portrait of his lordship, painted by Mr. Grant, R.A., in commemoration of his having been their president for nearly 30 years. Lord Stradbroke, in reply, acknowledged the gift as a gratifying proof of the respect and regard in which he is held. The portrait was to have been presented to his lordship early in July, at the annual show of the Association, but from unavoidable circumstances the ceremony was deferred.

Macclesfield.—The stately mansion of Capesthorne [illegible] the seat of Mr. Arthur H. Davenport was on Saturday night the scene of a terrible fire, which has completely gutted the building, and resulted in damage amounting to 20,000*l.* The only inmates of the hall when the catastrophe occurred were Mr. Davenport, a guest, and the servants. The fire made its appearance on the top of the building, and must have been in existence some time before discovered by the footman, who first saw it on the staircase leading to the bell turret. He raised the alarm, and every person on the premises was rendering what assistance he could, but the fire continued to make headway, till within an hour or two flames issued forth from almost every window in [illegible] the mansion, and from the roof. Through the [illegible] of the night the fire was visible for many miles around, and from Macclesfield and Congleton hundreds flocked to the spot. The burning contents of one room fell on the flooring of the next room underneath, setting fire to everything in it; and in this manner the flames worked their way downwards to the very cellars of the building. Two huge water tanks on the top of the hall, containing many thousand feet of water, must have emptied their contents on the burning mass, but so little effect had even this upon the flames that the precise moment of their falling was unknown. The furniture of the drawing room, the paintings, articles of vertu, the books and silver plate, were fortunately removed before the fire reached the body of the hall, and were deposited on the lawn in front of the mansion. The conservatory, built under the superintendence of Sir Joseph Paxton, and stocked with the most valuable English and foreign plants, and the wine cellars, have escaped. Colonel Peel, who had been a guest of Mr. Davenport, and left Capesthorne for Manchester on Saturday morning, has lost a considerable amount of luggage, and many of the inmates have been sufferers by the catastrophe. The cause of the fire has not been ascertained.—On the previous Sunday night a desperate poaching affray took place on the Capesthorne estate, when three of Mr. Davenport's watchers were set upon by 10 poachers and severely maltreated, after which the whole gang made their escape. Three of them, however, being known to the watchers, were afterwards apprehended, and have since been committed for trial.

Mostyn.—On Thursday morning, the 26th ult., a fatal explosion took place in the South Mostyn Coalpit, belonging to Mr. Adam Eyton. At the time of the explosion there were 10 men and a boy at work in the pit, all of whom have perished. Five bodies were recovered in the course of the day, but the attempts made to recover the others were unavailing on account of the accumulation of gas. At present nothing has been ascertained as to the cause of the catastrophe, as the men who were taken out were quite dead. Had the explosion taken place a few hours later the results would have been very dreadful, as upwards of 100 men would have been at work. Eight of the men were married, and have left widows with large families.

Newcastle-on-Tyne.—Mr. Frater, the collector of income-tax for this borough, was murdered on Tuesday morning, as he was proceeding to his office in Blackett Street. He had just reached his office when a man ran up to him, with a long bright knife in his hand, and deliberately stabbed him in the face. The blade touched the right cheek near the mouth, then, slanting off from the bone, plunged into the neck, where it severed the jugular vein. Mr. Frater did not seem at first to comprehend the fatal nature of his injuries. He walked upstairs to his room, when he suddenly exclaimed, "I fear I'm done for," and fell upon the floor, and in a few minutes expired. Medical attendance was at once sent for, but life was quite extinct, a great quantity of blood having flowed from the wound in the neck. The murderer, George Clark, 45 years of age, a cabinet-maker, was immediately secured, and the knife with which the fatal deed was committed was found on his person. It is a common table knife, ground down to a very sharp point, and rather jagged at the sides. Upon being seized Clark exclaimed, "He sold me off, and now I'll be tried for murder;" and a few minutes afterwards he said, "This will be a grand business for the penny papers." It appears that about three months ago a seizure was made upon Clark's premises, under Mr. Frater's direction, for a dog tax, which he would not pay. He seems ever since to have cherished a feeling of deadly revenge against the deceased. The murderer was subsequently examined at the police-court and remanded for a week. He did not seem to be excited, and his hand was still stained with blood. When arrested he was searched, and a document relating to the seizure of his goods was found upon him. The inquest was held on Wednesday, when the jury returned a verdict of Wilful Murder against him. During the inquiry the prisoner was quite calm and collected, and did not seem to attach the least importance to what was going on.

Newcastle-under-Lyme.—The jury at the inquest on the young man who was killed on Sunday week by Mr. Johnston of the Mill House Inn returned a verdict of Manslaughter against Mr. Johnston, who was committed for trial at the assizes, but admitted to bail.

Norwich.—A young man, named Martin Pearce, attempted to murder his mother at Toft Monks, in this county, on the 26th ult. He is a single man, and resides with his mother at her farm. Having had some altercation with her upon family matters, he vowed with an imprecation that he would murder her and destroy the premises. He left the room and his mother immediately locked the door. Pearce then fetched his gun, and proceeded to the apartment where his mother had secured herself, but finding the door fastened, he fired through the key-hole. Fortunately a female servant observing his conduct, warned her mistress of his intentions, by which means Mrs. Pearce was enabled, by shifting her position, to escape uninjured. A policeman was immediately sent for, but Pearce absconded, and proceeded to Yarmouth. In the afternoon he returned by train to Beccles, and was apprehended at the station.

Solihull.—An inquest was held on the 24th ult. in this place on the body of a boy, the infant son of a young woman named Louisa Hoddin, who was murdered by being first nearly burned to death, and then killed by strangulation. Mr. Lowe, surgeon to the Solihull Union, deposed that he had made a *post-mortem* examination of the child, and found that the skin on the left side of the head, face, and neck was severely burned, as was also the outer side of the left arm, from the elbow to the fingers. The front and outside of the left leg and thigh were also much burnt. From the appearance of the burns he felt satisfied that they had been inflicted during life. The head, face, and part of the neck presented a livid appearance, the tongue protruding. The child was a perfectly mature and well-grown child, and the lungs were well filled. On opening the head he found the brain much congested. The other organs presented a healthy appearance. In his opinion the cause of death was strangulation, immediately following the infliction of the burns, which were in themselves sufficient to cause death, but not instantaneously. Inspector Smith said he went to prisoner's house, and upon asking to see the child, the mother at once went up-stairs, and took the body of a child out of a small box. He noticed that the head and feet were burnt very much, and on asking how that had happened, the woman said that a cinder had fallen upon the child. After further evidence the jury returned a verdict of "Wilful Murder" against Sarah and Louisa Hoddin, who were committed to the next Warwick assizes for trial.

York.—A fatal accident occurred on Friday in this city. In order to connect the railway station with the opposite bank of the river, an iron bridge was in course of erection, consisting of four girders of iron, two to support a carriage way, and two outer and lighter ones to support a footpath on each side. The two carriage girders were in their places; the two footpath girders were also brought to the spot, and while one was on Friday in the act of being lowered down to its proper position, it toppled over, and fell on the inner girder, which, after a few seconds of suspense fell on the next, till the whole mass was precipitated into the river. Seven men were killed and three severely wounded.

Ireland.

Outrage near Dublin.—On Friday evening a ruffianly assault was made on a young lady of the highest respectability while going home in a cab from a place of worship. On leaving a friend's house she was put into a cab by her brother, and the driver was told to take her to her residence in the vicinity of Rathmines. When the ruffian had got the length of the old Rathmines Road he turned his horse in the direction of Milltown, and into an adjoining field, where he made a desperate attempt to commit a felonious assault. The treatment she received was fearful, her eyes were blackened, a quantity of hair was pulled out of her head, and her bonnet, dress, and underclothing were torn to pieces. After resisting for a long time the lady at length got away, and ran across the field into a stream of water, which almost reached her armpits. She was, however, pursued and captured by her assailant, who again failed in effecting his purpose. Again she succeeded in escaping, and fled toward Milltown quarry, her assailant again pursuing. She reached the edge of the quarry, and in her resolve to escape, leaped over the edge of the bank. She, however, escaped injury, as the spot from which she leaped was a sloping bank, down which she rolled to the bottom. A few yards further on the bank is precipitous, and the young lady must have been dashed to pieces had she run a few steps further. Seeing a light at a distance she ran on in its direction, and it turned out to be Milltown Railway station, where one of the servants gave her a lodging for the night, paying her every attention until the following morning, when her brother, to whom she had sent a communication informing him of what had befallen her, came and took her home. She is now ill from the usage she received, and is under medical treatment. The cardriver fled when he found she had escaped, and has not yet been arrested. A large sum of money has already been collected, in the shape of a reward for the ruffian's detection, and the Government intends to second these efforts by offering 100*l.* for his arrest.

The Partry Riots.—Mr. F. Lavelle, a student at the Roman Catholic College at Drumcondra, was arrested a few days since on a warrant issued by the resident magistrate at Ballinrobe, in the county of Mayo, charged with having been engaged in a riot at Partry, near the chapel of his brother, Father Lavelle. He was sent to Ballinrobe in custody.

Recruiting in Ireland for America.—The *Dublin Evening Post* asserts that there are persons at present in Ireland, agents of President Lincoln, who are endeavouring to enlist men for the Federal service. It is unable, however, to say how far they have been successful; but it is inclined to think that they have met with little encouragement.

Scotland.

The Cowcaddens Murders.—At the Glasgow circuit, on the 26th ult., Daniel Fraser was charged with having, on Sunday, April 14, assaulted Patrick M'Kenney, iron moulder, with a knife, whereby he was mortally wounded, and immediately thereafter died. The prisoner pleaded Not Guilty. The evidence showed that prisoner had been to a public-house with deceased, and that deceased had given him a little slap on his face in fun. Fraser did not strike him again, but said "he would see him outside." Other witnesses afterwards heard two men quarrelling in the street, one of

whom said, "I'll stab you in the breast." The deceased was afterwards found dead. When Fraser was arrested, he let fall a knife, on which was blood. Professor Penny deposed that he made a chemical and microscopic examination of the knife, and found that the blood was not perfectly hardened, which showed that the stains had been but recently made—not many days old. He had no doubt whatever that the stains on the knife were those of human blood. Other scientific evidence to the same effect was given. The prisoner's declaration was then read. He acknowledged possessing the knife, and that it was his property. He accounted for the blood being on it by stating that it must have got there from a bruise on his thumb, which he got at his work. He denied that he committed the murder. The Lord Justice Clerk thought the present case was one of no common difficulty. The prisoner's account of the blood on his knife was one that would not stand investigation, and his behaviour when being apprehended was very suspicious. If the jury could not reconcile the innocence of the prisoner with the evidence which had been laid before them, then he need hardly tell them that they had the imperative duty to perform of convicting the prisoner. They must never take refuge in mere doubt or timidity. They should make up their minds boldly, for they had a very important duty to discharge. They equally failed to perform their duty when they acquitted the guilty as when they convicted the innocent. He therefore left the case in their hands, in the hope and firm belief that they would not convict if the evidence were not satisfactory to their minds; but if they were satisfied that guilt had been brought home to the prisoner, they would not hesitate to convict. The jury, after an absence of 23 minutes, returned to the box, when the Foreman said—The jury, by a majority, find the prisoner guilty as libelled, but recommend him to mercy. The Lord Justice Clerk assumed the black cap, and sentenced the prisoner to be executed at Glasgow, on Thursday, the 17th of October.—Robert Pattison was charged before Lord Ivory with having on the 4th of August assaulted Magdalene Pattison, his daughter, a child aged 10 months, and cut her on the throat, whereby she was mortally wounded and immediately thereafter she died. The prisoner was Acquitted on the ground of insanity.

The Supposed Murder at Motherwell.—Mr. Dundas Simpson, father of the young man whose mysterious disappearance was mentioned last week, has written to the local papers stating that he has received authentic information that his son is still alive, and expressing indignation at his conduct. He had previously written to the papers complaining of the manner in which his son's name has been mentioned in connection with money matters, and giving his "unqualified denial" to the allusions tending to give colour to the supposition that for some time past his son had been in embarrassed circumstances.

Railways.

Progress of the Metropolitan.—This new line is fast making its way into the heart of the City. From the Great Western at Paddington to the Yorkshire Stingo the line is completed. From that point to Marylebone Church the tunnel is in a very forward state, and from the church to Harley Street it is perfectly finished. Owing to the bend in the road in front of Trinity Church, the works have to be a little diverged, and are brought under the ornamental grounds at Park Crescent and thence into the Euston Road. This will occasion the removal of one or two of the mansions in the crescent, and considerably mar its architectural beauties. Between Portland Road and Euston Square the navvies are busily at work, and from thence to King's Cross, with the exception of the short distance between St. Pancras Church and the gate entrance to Burton Crescent, the tunnel is complete. At King's Cross the line runs into the valley of the Fleet, which it traverses for a short distance until it reaches Clerkenwell. On this section of the line a large quantity of house property has been taken down, and others are to be removed in Acton Street and the other streets branching off Gray's Inn Road, which stand in the way of the line. The heaviest portion of the works is that between the Bagnigge Wells Road and Victoria Street, Holborn, where it has been necessary to tunnel through a bill of stiff clay.

The Late Collision on the North London.—On Tuesday an inquest was held on Mrs. Sarah Essex, aged 37, the wife of Mr. William Essex, of Maryland Point, Stratford, who died on Saturday last in University College Hospital from the effects of the injuries she received in the recent accident at Kentish Town, making the tenth victim of that catastrophe. The jury returned a verdict of Manslaughter against the signalman, Rayner. The other passengers who were admitted to the University College Hospital, are going on favourably, and some of them have left the hospital.

A "Travelling Porter."—A circular has just been issued by the London, Brighton, and South Coast Company stating that a man to be called the "travelling porter" will accompany every train. His business will be to travel on the seat placed for him on the tenders, and to keep a vigilant look out on both sides and along the top of the trains, so that in case of any accident to any of the carriages on the train, or of any signal from the guard, or any apparently sufficient cause that may come to his observation, he may at once communicate with the engineman, and if necessary, stop the train. Further, it will be his business, generally, to have charge of the carriages forming the train, to see that in every respect they are in good condition, and properly coupled up. He will be required to observe carefully the running of the different carriages, and to take note of the number of any one that may appear to run unsteady, or have any other defect, and to enter a note of this and of any other circumstance requiring to be remedied in a report book to be made up each journey.

Sporting.

NEWMARKET FIRST OCTOBER MEETING.

Tuesday.—*Trial Plate.* Lord Uxbridge's General Hesse beat Satellite, Constantine, and Spark.—*Handicap Sweeps.* Captain Coates' Libellous beat Queen of the Vale, Neophyte, Rockley, Hagar, and Lady Derby.—*Buckenham Stakes.* Mr. Saville's c. beat Chieftain's Daughter and Thorpe Langton.—*Swe ps.* Baron Nivière's Shingle beat Mr. Nevill's b f, Broad Arrow, Lord Clifden's c, Belleisle, and Twinkle.—*Eastern Counties Handicap.* Baron Nivière's Cosmopolite beat Maggiore, Lava, and 17 others.—*Match.* Mr. Greville's Tarragona beat Struggler. —*Hopeful Stakes.* Colonel Towneley's Imperatrice beat Exchequer, Deceptive, and 5 others.—*Match.* Mr. Hawksley's Nutbush beat Little Lady.

Wednesday.—*Granby Stakes.* Mr. Greville's Queen Elizabeth beat King of Hearts and Lord Lonsdale's b g—*Handicap Sweeps.* Mr. W. G. Craven's Callipyge beat Antonelli, Allez y Rondement, and 3 others.—*Sweeps.* Mr. Angell's Entomologist beat Tubal Cain, Fantasia, and 6 others. *Handicap Sweeps.* Lord Coventry's Flitch beat Mdlle. de Chantilly and Woman in Red.—*Second Year of the Thirteenth Triennial Produce Stakes.* Mrs. Osbaldistone's Camerino beat Prince Plausible, Will o' the Wisp, and 3 others.—*Fifty Pounds.* Mr. Rayner's Conundrum beat Mr. Godding's c, Hagar, and Lancaster.—*St. Leger Stakes.* Lord Stamford's Imaus beat Grouse, Oberon, and 4 others.

Thursday.—*Sweeps.* Mr. Hudson's Nunnery beat Mr. C. Rayner's f., Guilder, and 7 others.—*Rutland Stakes.* Lord Uxbridge's Master Fenton beat Exchequer, Carisbrook, and Breechloader.—*Handicap Sweeps.* Mr. Hawksley's Nutbush beat Confidence, Little Lady, Mayfield, and 7 others.—*Triennial Produce Stakes.* Sir R. Bulkeley's Old Calabar beat Lorelei, Hurricane, and 6 others.—*Handicap Plate.* Mr. Wybrow Robertson's Boabdil beat Solferino, Prince Imperial, and 6 others.—*Queen's Plate.* Mr. R. Ten Broeck's Optimist beat Dulcibella, Avalanche, Conundrum, and Bevis.

Friday.—(By Electric Telegraph.)—*Sweeps.* Arab beat Estrelda.—*Match.* Colares beat St. Bernard.—*Handicap Sweeps.* Allez y Rondement beat Blackcock and Picnic.—*October Handicap.* Monk beat Roesia, Waterwitch, and 16 others.—*Maiden Plate.* Fig beat Jack in the Box and Ninette filly.—*Handicap, R.M.* Flitch.

The Champion Ten Mile Foot Race.—The contest between Levett, the champion runner of Ireland, and the North American Indian, "Deerfoot," to run 10 miles for 50*l.*, took place in the Rotunda Gardens, Dublin, on Monday, in the presence of upwards of 5000 persons. Levett got a minute's start, but was overtaken after a few rounds. At the 30th round, which made five miles, Levett dropped out of the race, having received some internal hurt, and the Indian was left to pursue his course alone, which he did at the same pace, doing the 10 miles in 53 minutes and 35 seconds.

Obituary.

Sir James Milles Riddell, Bart., died on the 28th ult., at Leamington. He was the son of Mr. T. M. Riddell (eldest son of the first baronet), by the daughter of Colonel Dugald Campbell, of Argyllshire, and was born at Shaw Park, Clackmannanshire, in 1787. He married in 1822 the youngest daughter of the late Sir R. Brooke, Bart., and granddaughter maternally of Sir Robert Cunliffe. He succeeded his grandfather when 10 years of age, and was educated at Christ Church, Oxford, where he graduated B.A. in 1807. He was a deputy-lieutenant of Argyllshire. He is succeeded by his son, Thomas Milles, who was born in Edinburgh, in 1822, and is twin with his sister. He married in 1851 the daughter of Mr. John Hodgson, of St. Petersburg.

Lady Williams, widow of Sir John Williams, justice of the Queen's Bench, died on the 28th ult. at La Rocherville, France. Her ladyship was the only daughter of Mr. Davies Davenport, of Woodford Calvelley and Capesthorne, Cheshire, and was in her 71st year.

Sir Thomas Blaikie, who was for several years lord provost of Aberdeen, died suddenly in that city on the 25th ult. He had gone into the shop of a friend in Union Street, and was talking with him when his head was observed to drop, and he immediately fell down and never spoke again. He had been in indifferent health recently from disease of the heart. His family has long been of local standing, and they have carried on an extensive business as plumbers and founders. He was provost of Aberdeen from 1839 to 1847, and again from 1853 to 1856. In 1856 the Queen conferred the honour of knighthood on him, in recognition, it was understood, of his public services.

Mr. Loftus Otway, C.B., Consul General at Milan, died on the 26th ult. He was the only son of the late General Sir Loftus W. Otway, and had been in the diplomatic service for above 30 years, having been attached to the mission at Stockholm in November, 1830. In 1833 he was attached to the British embassy at St. Petersburg, and in the following year was removed as attaché to the legation at Madrid. In 1843, he was appointed second paid attaché at Vienna, but did not proceed to that capital. He shortly afterwards proceeded to Lisbon, and in 1845 returned to Madrid, where he was appointed secretary of legation in 1850. He acted as chargé d'affaires in that city from May to December, 1852; and acted in the same capacity from May to December the next year, and repeatedly in the absence of the British Minister up to December, 1857. In 1854 for his diplomatic services he was made a Companion of the Bath. In 1858 he was appointed Minister Plenipotentiary to the Mexican republic, and was presented by the bondholders with a testimonial for his exertions in protecting the interests of his countrymen in that country. He was recalled by Lord John Russell for some "errors in judgment" and was shortly afterwards appointed Consul-General at Milan.

Major Duncan Grahame, of Glenny, died at Edinburgh on the 21st ult., in his 86th year. He had seen much service, and was present in the battles of Roleia, Vimiera, Corunna, Busaco, Fuentes d'Onor, and Badajoz, for which he received the Peninsular war medal and six clasps.

The Rev. Dr. Foord-Bowes, D.D., died at Folkestone on the 27th ult. in his 85th year. He was educated at St. John's College, Cambridge, and obtained his degree of D.D. in 1803. In 1802 he was appointed to the rectory of Cowlam, Yorkshire; in 1803 to the vicarage of Oake, Somerset; and in 1820 to the rectory of Barton-in-the-Clay, in the diocese of Ely. He was Chaplain in Ordinary to the Queen, and Deputy Clerk of the Closet to his late Majesty William IV.

The Rev. John William Cunningham, M.A., vicar of Harrow-on-the-Hill, and the oldest beneficed clergyman in the diocese of London, died at Harrow on the [illegible] year. He was educated at St. John's College, Cambridge, graduated in 1802, when he was fifth wrangler. [illegible] various preferments in the Church, he was [illegible] late Lord Northwick to the vicarage of Harrow [illegible] held for the last half century. The [illegible] known as an active member of the [illegible] Church. All the shops in Harrow were [illegible] respect to his memory.

Surgeon Cusack, of Dublin, died last week at his [illegible] in Merrion Square, in his 74th year. He was the [illegible] profession of surgeons in Ireland, and for many years [illegible] the most distinguished positions connected [illegible] He was a fellow of the Royal College of Surgeons [illegible] had been more than once president [illegible] Stephen's Hospital, and of Swift's H[illegible] Board of Superintendence of Hospitals [illegible] Sir Philip Crampton was appointed [illegible] to the Queen. He was also Regius Professor [illegible] Trinity College.

Mr. William Farren, the eminent [illegible] the 24th ult. at his residence in Brompton [illegible] towards the close of 1786, and was consequently [illegible] year. While he was playing Old Parr at the [illegible] May, 1845, he was seized with a fit which, [illegible] treatment, culminated in a severe stroke [illegible] some time it was thought that he would [illegible] the stage. He recovered however su[illegible] his articulation was so indistinct, and [illegible] powers were so materially impaired [illegible] constitution had sustained, that th[illegible] the closing portion of his career [illegible] powers when in his prime. He re[illegible] before the public as an actor at the Ha[illegible] and actor at the Strand and the Olympic [illegible] was at the Haymarket, on the 16th [illegible] played Lord Ogleby on the occasion of [illegible]

Mr. Arthur Smith, brother of the late [illegible] died on the 1st inst. at 24, Wilton Street, [illegible] was well known in literary and theatrical [illegible] management of his brother's entertainment [illegible] ness arrangements of Mr. Charles Dickens's Readings, [illegible] one of the Committee of the Thames [illegible] Society, and the author of a little book called "The [illegible] Angler."

Miscellaneous.

The Imperial Crown of England.—[illegible] Pole has reprinted, for private circulation, [illegible] on diamonds. Mr. Tennant has added [illegible] postscript on the Imperial state crown [illegible] Professor Tennant thus describes the [illegible] Imperial state crown of Her Majesty Q[illegible] was made by Messrs. Rundell and Bridge [illegible] 1838, with jewels taken from old cr[illegible] furnished by command of Her Majesty. [illegible] diamonds, pearls, rubies, sapphires, and [illegible] silver and gold; it has a crimson [illegible] ermine border, and is lined with white [illegible] weight is 39oz. 5dwts. troy. The lower part [illegible] band, above the ermine border, consists [illegible] 129 pearls, and the upper part of the band [illegible] pearls, between which, in front of the crown, [illegible] sapphire (partly drilled), purchased for the crown [illegible] Majesty King George IV. At the back [illegible] smaller size, and 6 other sapphires [illegible] between which are 8 emeralds. A[illegible] 7 sapphires are 14 diamonds, and [illegible] emeralds 128 diamonds. Between the [illegible] sapphires are 16 trefoil ornaments containing [illegible] diamonds. Above the band are 8 sapphires [illegible] by 8 diamonds, between which [illegible] sisting of 148 diamonds. In the [illegible] and in the centre of a diamond Maltese [illegible] famous ruby said to have been given to [illegible] of Wales, son of Edward III., called the [illegible] by Don Pedro, King of Castile, after [illegible] Najera, near Vittoria, A.D. 1367. This [illegible] in the helmet of Henry V. at the battle [illegible] A.D. 1415. It is pierced quite th[illegible] Eastern custom, the upper part of [illegible] filled up by a small ruby. Around [illegible] the cross, are 75 brilliant diamonds. [illegible] Maltese crosses, forming the two sides [illegible] crown, have emerald centres, and contain [illegible] 132, 124, and 130 brilliant diamonds [illegible] four Maltese crosses are four ornaments [illegible] of the French fleur-de-lis, with [illegible] centres, and surrounded by rose [illegible] taining respectively 85, 86, 86, and [illegible] From the Maltese crosses issue 4 [illegible] composed of oak leaves and acorns, the [illegible] 728 rose, table, and brilliant diamonds [illegible] ing the acorns, set in cups containing [illegible] and one table diamond. The total [illegible] in the arches and acorns is 108 brilliants [illegible] 559 rose diamonds. From the upper [illegible] are suspended four large pendent [illegible] with rose diamond caps, containing [illegible] and stems containing 24 very small [illegible] Above the arch stands the mound, [illegible] lower hemisphere 304 brilliants, and in [illegible] brilliants; the zone and arc being com[illegible] diamonds. The cross on the summit [illegible] sapphire in the centre, surrounded [illegible] brilliants, and 108 smaller brilliants. [illegible] jewels comprised in the crown.—1 large [illegible] polished, 1 large broad-spread sapphire, [illegible] 11 emeralds, 4 rubies, 1363 brilliant [illegible] rose diamonds, 147 table diamonds, 4 [illegible] 273 pearls."

The Language of Diplomacy.—[illegible] Committee of the House of Commons [illegible] Service, Mr. Hammond, of the Foreign [illegible] committee an account of the resolution [illegible] British Government in 1800, when [illegible] Under-Secretary, to address foreign Ministers [illegible] in the English instead of the French language

[illegible] the language of diplomacy." The alterations was settled between Lord Grenville, then Secretary of State for Foreign Affairs, and George III. They [illegible] it was not dignified for this country to be de[illegible] upon France for the language of its diplomatic communications. It is doubtful whether the new practice was then extended to communications from British Ministers abroad to the Ministers of foreign Courts; but Lord Castlereagh, when with the army in 1812, wrote in English to foreign Sovereigns and Ministers. In 1823 Mr. Canning directed the British Minister at [illegible] to use the English language, and he gave the same direction in 1826 to the British Minister at [illegible], though he allowed the English notes to be accompanied by a translation. The question was again revived in Prussia and Austria in 1831 [illegible] was again [illegible] 1834 and ruled the same way; and it was again [illegible] by Lord Aberdeen in 1844; and in 1851 it was [illegible] ruled that translations should not be sent with notes in English, as in that case foreign governments would deal with the translation as the original document, [illegible] we are not bound by a translation. The [illegible] of the Queen's Ministers are liable to be [illegible] in Parliament, and they ought to be composed in the language in which they are produced. Accordingly, the British Ministers abroad are not now allowed to write any official document except in English; and the German Courts have adopted a like rule. But though formal public notes are written in English, the [illegible] communications may be in French, and in reality the business with foreign Governments is [illegible] transacted in French. Still, it is not [illegible] so. The Earl of Clarendon, when Minister at Madrid, finding that very few of the Spanish Ministers spoke French well, and that they did not like to speak it at all, himself acquired a knowledge of Spanish, and found much greater facility in transacting business with the Spanish Government by conversing in their own tongue. Most European statesmen now possess some knowledge of English; and Sir G. H. Seymour has stated that with Count Nesselrode his conversations took place more [illegible] in English, for he thought the Count spoke English better than he himself spoke French; the Russians have a wonderful aptitude for acquiring languages. When asked whether he would advise a diplomatist to speak English with a foreign Minister acquainted with our language, Sir G. H. Seymour said, "I hold it to be an advantage; I would rather fight with my own sword, and converse in my own language."

[illegible]ARY DISCOVERIES IN ASIA MINOR. — The *Moniteur* publishes the following report to the Minister [illegible] from M. Perrot, formerly a pupil of the French [illegible] at Athens, who has been charged with a scientific mission in Asia Minor. He states—"Angora ([illegible] Ancyra), Aug. 28.—I have made a valuable [illegible] discovery. We found, in visiting the vicinity of the temple, all the first part of the Greek translation of the Testament of Augustus, of which Hamilton copied [illegible]. Having ascertained that it existed in a good state of preservation behind a wall of bricks, forming the back of a Turk's house, we purchased the wall and pulled it down. By labouring from morning to evening during five days I have made a copy of the inscription. I have eight columns complete—not like those of Hamilton—for at least several of them are the beginnings or ends [illegible]—and that brings me down to the middle of the third column of the Latin, and fills up many blanks in the original text, which is much more mutilated than has been believed from the copies hitherto used. The first four columns of my Greek text also contain [illegible], but in the fourth and the three following [illegible] only a word here and there is wanting. I cannot [illegible] all the new facts that my discovery makes known respecting the life of Augustus, the honours which he received, &c. At the end of the first column of the Latin is a blank which is made up by the columns of the Greek text. They speak of the 'absolute power' ([illegible] ἀρχήν) which he refused, the 'prefecture' which he exercised, the 'consulate for life' which he would not accept, the 'prefecture of morals,' and his title of 'Prince of the Senate,' all of which are wanting in the Latin. The date also of his testament is given. By means of these supplements I can add much more than I had dared to hope to the knowledge and true interpretation of this important epigraphic monument. I am at this moment in negotiation for the purchase of the adjacent house, which contains the [illegible] part of the inscription. That which Hamilton [illegible] partially pulled down only contains one end. The text which he gives begins Table IV. of the Latin. There are [illegible], therefore, two columns of Greek to find in order to re-establish the text of this important inscription, and I hope that I shall succeed in discovering [illegible]. As to the Latin text it is more damaged than I expected. Nevertheless, in spite of all it has suffered, there is much to gain from an attentive [illegible] of it. The great defect of the copies which have hitherto served appears to me to be not so much their inexactness, the errors being easy to correct, as the absence of any precise indication of the length of the blanks. Those persons who have endeavoured to fill up the vacancies, however great their sagacity, thus run the risk of putting a phrase where there were two words, and two words where there was a phrase. To remedy that defect, this is what we have resolved on, as the taking of a general stamped impression is impossible—first, for the Latin inscription, on account of the deep holes which have been made in several places, so that the surface sinks to a depth of several centimetres (the centimetre is about one-third of an inch); and second, for the Greek inscription, on account of the props which we have been obliged to lean against the wall, in order to support the roof of the house. But we shall bring back in addition to the stamped portions, which will give the form of the characters, something which will permit the voids to be measured with almost mathematical exactness. M. Guillaume has had the patience to reduce to a scale, stone by stone, at the same time indicating the slightest cracks and the true width of them, all the surfaces which bear inscriptions—that is to say, the two faces of the pronaos and the external wall of the cella. On his sheets I will put the two inscriptions, measured by a compass, making thereby as it were, a true copy, a real photograph of them."

BIRTHS.—On the 24th ult, at 91, Princes Street, Edinburgh, Lady HARRIET VERNON WENTWORTH, of a daughter—26th ult, at Lamport Hall, Northamptonshire, Lady ISHAM, wife of Sir Charles Isham, of a daughter—23d ult, at Strathallan Castle, N. B., the Hon. Mrs. GREENHILL, of a daughter—15th ult, at Bronwylfa, Exmouth, the residence of Vice-Admiral Sir FAIRFAX MORESBY, the wife of M. Fortescue Moresby, Esq., R.N., of a son—27th ult, at 36, Molesworth Street, Dublin, the wife of Lieutenant-Colonel SCUDAMORE, C.B., 14th (King's Hussars), of a son—28th ult, at 44, Rutland Gate, Mrs. OSWALD AUGUSTUS SMITH, of a son—29th ult, at 19, Hereford Street, Park Lane, the wife of HARRY THORNTON, Esq., of a son.

MARRIAGES.—On the 3d inst, at St. George's, Hanover Square, DUDLEY VISCOUNT SANDON, eldest son of the Earl of Harrowby, K.G., to Lady MARY FRANCES CECIL, eldest daughter of the Marquis of Exeter, K.G., and the Marchioness of Exeter—2d inst, at St. Mary's, Chelsea, Sir JOHN SIMEON, Bart., of Swainston, Isle of Wight, to the Hon. CATHERINE DOROTHEA COLVILLE, second daughter of the late General the Hon. Sir Charles Colville, G.C.B.—1st inst, at the Cathedral, Llandaff, the Rev. WALTER HUGH EARLE WELBY, third son of Sir GLYNNE EARLE WELBY-GREGORY, Bart., of Denton Hall, in the county of Lincoln, to FRANCES OLLIVANT, youngest daughter of the Lord Bishop of Llandaff—26th ult, at Trinity Church, Marylebone, WALTER OGILVY, Esq., late Major Unattached, second son of the late Sir William Ogilvy, Bart., of Inverquharity, to CAROLINE, eldest surviving daughter of the late Rev. G. T. PRETYMAN, Chancellor of Lincoln Cathedral, and canon of Winchester—19th ult, at Repton, ION TURNER, Esq., 16th Lancers, only son of Dr. Turner, of Kensington, to LOUISA HARPUR CREWE, only daughter of Edmund Crewe, Esq., of Repton Park, Derbyshire, and niece of the late Sir George Crewe, Bart., of Caulke Abbey, Staffordshire—1st inst, at St. George's, Hanover Square, GEORGE PALMER, Esq., eldest son of Lieut.-Colonel Palmer, of Nazing Park, Essex, to EMILY EDEN, eldest daughter of W. VANSITTART, Esq., M.P.—26th ult., at the parish church of Hope, HENRY CECIL, eldest son of HENRY RAIKES, Esq., of Llwynegrin Hall, Flintshire, to CHARLOTTE BLANCHE, fourth daughter of CHARLES BLAYNEY TREVOR ROPER, Esq., of Plas Teg Park, Flintshire—30th ult., at Kensington parish church, ALEXANDER MUNRO, Esq., sculptor, of Upper Belgrave Place, to MARY, daughter of R. CARRUTHERS, Esq., Inverness.

DEATHS.—On the 30th ult, at Seaton House, Aberdeenshire, Lady ELIZABETH HAY, wife of Lieut.-General the Lord James Hay—28th ult, at Baden Baden, EVELYN ANNA FRANCES, eldest daughter of Lord and Lady AUGUSTUS LOFTUS, aged 13 years and 9 months—30th ult, at Hastings, Lady LAMBERT, wife of Vice-Admiral Sir George Lambert, K.C.B.—19th ult, at Clifton, near Bristol, the Rev. RICHARD THOS PALMER, son of Sir J. H. Palmer, Bart., of Carlton Park, Northamptonshire, aged 34—15th of June, at Christchurch, Canterbury, New Zealand, MARY ANNE, wife of HERBERT E. ALPORT, Esq., and niece of Major General Sir W. F. Williams of Kars, K.C.B.—24th ult, at Bouth House, Nairnshire, Major-General ÆNEAS SHIRREFF, Madras Artillery—16th ult, at his residence, Radnor Terrace, Stoke Newington, JOHN BERNARD LOCKE, Esq., eldest brother of the late Joseph Locke, Esq., M.P., aged 67—24th ult, at Falmouth, CHARLOTTE ELIZA, wife of JAMES LUDGATER, Esq., fourth daughter of the late Edmund Turner, Esq., formerly M.P. for Truro, aged 37—28th ult, at Leckhampton, near Cheltenham, ELIZABETH, relict of the late Colonel BUCK, formerly of the 8th or King's Own Regiment, and eldest daughter of the late Edwin Sandys Lechmere, Esq., of the city of Hereford, aged 73—27th ult, from the effects of sun stroke, contracted in India, Lieutenant Colonel SAMUEL CLEAVELAND, Royal Artillery, aged 39—21st July, at Tien Tsin, North of China, of confluent small-pox, aggravated by the intense heat, Captain GEORGE TURNOUR HORTON ATCHISON, H.M.'s 67th Regim. Depy. Asst. Quartermaster-General, eldest son of Captain Atchison, Rose Hill, Dorking, aged 27—23d ult, at 8, Clarence Cottages, Cambridge Road, Hammersmith, after a short illness, Captain WILLIAM WELSH, aged 6[illegible]—29th ult, at Rock Ferry, Cheshire, the residence of his son-in-law, Dr. Nihill, R.N., Commander ROBERT BARCLAY, R.N., of 1, Belmont Terrace, Lewisham—1st inst, at Bath, Capt. H. HAMILTON CONOLLY, K.L.H., Royal Artillery—23d ult., at St. Jean de Luz, Basses Pyrenees, Captain WILLIAM FORBES LEITH, R.N., third son of the late Theodore Forbes Leith, Esq., of Whitehaugh, Aberdeenshire—22d July, at Taku, North China, of fever, Lieutenant HENRY BOND, of the Royal Artillery, only son of Henry J. H. Bond, M.D., Regius Professor of Medicine, Cambridge, aged 21—24th ult, at 2, Brunswick Villas, South Norwood, ALEXANDER JOHN COLVIN, Esq., of 64, Gloucester Place, Portman Square, and late of the Bengal Civil Service, aged 74—19th ult, very suddenly of apoplexy, at his residence, Finnartmore, Argyleshire, ALEX. MACKENZIE KIRKLAND, Esq., of Glasgow, one of her Majesty's Justices of the Peace for the county of Lanark, aged 63—29th ult, at The Crescent, Buxton, Derbyshire, BENJAMIN BADGER, Esq., J.P., late of Eastwood, near Rotherham, Yorkshire—25th ult, JOSEPH MAUDSLAY, engineer, of Lambeth, at his residence, 21, Hyde Park Square, aged 60—28th ult, at her residence, Landour, Torquay, ANNA MARIA, widow of the late W. BROCKEDON, Esq., F.R.S., aged 65—28th ult, at 28, Pembridge Gardens, Bayswater, CHARLES TILT, Esq., formerly publisher in Fleet Street, aged 64—27th ult, the Rev. HENRY THOMAS DAY, LL.D., vicar of Mendlesham, Suffolk, aged 62—24th ult, at Coulesby Vicarage, Lincoln, the Rev. JOHN SEFFORTH SCHOLFIELD, eldest son of the late William Scholfield, Esq., of Sand Hall, Howden, Yorkshire, aged 63—28th ult, at Hardwick Priors, Warwickshire, the Rev. JAMES MONKHOUSE KNOTT, vicar of Hardwick Priors, aged 67—25th ult, at Boston, the Rev. RICHARD CONINGTON, aged 65—28th ult, at Atherstone, Warwickshire, the Rev. RICHARD HENRY MILLINGTON, M.A., aged 61.

Markets.

COVENT GARDEN, Oct. 5.

The supply of both Vegetables and Fruit continues good. Apples and Pears are plentiful, and the same may be said of Grapes, Pine Apples, and Melons. Peas are very scarce. Of Beans there is still a fair supply. For Potatoes markets are heavy; prices about the same as last week. Cucumbers are abundant, and the same may be said of Tomatoes which are large and excellent. Cut flowers chiefly consist of Orchids, Dahlias, Asters, Violets, Mignonette, Heaths and Roses.

FRUIT.

Pine Apples, per lb., 2s to 5s	Apples, per doz., 6d to 2s
Grapes, per lb., 1s 6d to 4s	Oranges, per 100, 6s to 14s
Melons, each, 1s to 3s	Lemons, per 100, 6s to 10s
Peaches, per doz., 6s to 12s	Nuts, Cob, per pound, 2s to 2s 6d
Nectarines, do., 4s to 10s	
Pears, per doz., 1s to 4s	Walnuts, per 100, 2s

VEGETABLES.

Cauliflowers, each, 2d to 6d	Artichokes, each, 6d to 1od
Peas, p. quart, 1s to 1s 6d	Beet, per doz., 1s 6d
Broccoli, p. bundle, 1s to 1s 3d	Celery, p. bundle, 1s 6d to 2s
French Beans, per sieve, 2s 6d to 3s 6d	Onions, p. ½ sieve, 4s 6d
	Rhubarb, p. bundle, 6d to 9d
Broad Beans, p. bush, 2s6d to 3s	Tomatoes, p. doz., 1s to 3s
Cabbages, do., 1s 3d to 1s 6d	Shalots, per lb., 8d to 10d
Potatoes, p. ton, 60s to 75s	Garlic, per lb., 6d to 8d
— per cwt., 4s to 8s	Endive, p. score, 1s 6d
Turnips, per bunch, 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Carrots, do., 4d to 6d	Mushrooms, p. pott., 2s to 3s
Spinach, p. sieve, 1s to 2s	Parsley, p. 12 bunches, 3s to 4s
Cucumbers, each, 6d to 9d	Savory, per bunch, 2d to 6d
Veg. Marrows, p. doz., 1s to 1s 6d	

HAY.—Per Load of 36 Trusses.

SMITHFIELD, THURSDAY, Oct. 3.

Prime Meadow Hay	80s to	90s	Clover, old	90s to	110s
Superior do.	95	105	New Clover	—	—
Inferior do.	40	55	Do. second cut	90	104
New do.	—	—	Straw	28	34
Rowen	—	—			

DAVIS & CO.

CUMBERLAND MARKET, THURSDAY, Oct. 3.

Sup. Meadow Hay	105s to	112s	Inferior Clover	80s to	105s
Inferior do.	70	95	New do.	—	—
New do.	—	—	Straw	34	40
Superior Clover	112	120			

JOSHUA BAKER.

WHITECHAPEL, THURSDAY, Oct. 3.

Fine Meadow Hay	90s to	95s	Fine 1st cut Clover	110s to	118s
Inferior do.	78	88	Inferior do.	90	100
Prime New Hay	—	—	New 2d cut	96	105
Inferior	—	—	Inferior do.	—	—
Straw	28	32	New 1st cut	—	—

BRITISH WOOLS.—LONDON, FRIDAY, Oct. 4.

There has been scarcely so much business doing the past week, the Yorkshire trade having been very listless as far as south country wool has been concerned, whilst for longht haired descriptions the demand has been tolerably active.

	s. d.		s. d.					
South-down Hoggs		to	1 5	Leicest. Wethers	1 3	to	1	[illegible]
Half-bred ditto	1 5	—	1 6	Ditto Hoggs	1 4	—	1	4
Down Ewes	1 4	—	1 5	Combing Skins	1 0	—	1	[illegible]
Kent Fleeces	1 5	—		Flannel Wool	1 0	—	1	
				Blanket ditto	0 6	—		

BUTTER MARKET.—Oct. 4.

Best Fresh Butter	15s. per dozen lbs.
Second do. do.	13s. " "

Pork, 4s. 8d. to 5s. 4d. per 8 lbs.

HOPS.—BOROUGH MARKET, FRIDAY, Oct. 4.

Messrs. Pattenden & Smith report a steady demand for the new growth, as well as 1859's and 1860's, at firm rates. Currency:—

Mid and East Kent	£9 0	to	£12 1[illegible]
Weald Kent	8 0	—	9 9
Sussex	7 10	—	8 8

Duty, 110,000*l.* to 115,000*l.*

COAL MARKET.—Oct. 2.

Carr's Original Hartley, 17s. 9d.; Holywell, 15s. 6d.; Walker Primrose, 12s.; Wylam, 15s. 6d.; Walls End Acorn Close, 18s.; Walls End Gosforth, 17s. 6d.; Walls End Hedley, 17s. 3d.; Walls End Hetton, 19s. 6d.; Walls End Kepier Grange, 18s. 3d.; Walls End South Hetton, 19s. 6d.; Walls End Stewarts, 19s. 3d.; Walls End South Hartlepool, 18s. 3d.; Carway and Duffryn Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.—Ships at market, 32.

MARK LANE.—MONDAY, Sept. 30.

At this morning's market there was a fair show of Wheat from Essex and Kent, which was pretty well cleared off by the local millers at a reduction of 2s. per qr. upon the prices of this day se'nnight. In foreign a limited business only was transacted, and prices remain unaltered. Choice samples of malting Barley brought late rates; other descriptions were 1s. to 2s. per qr. cheaper. Beans and Peas sell at late prices. The Oat trade is dull, and prices must be quoted 6d. per qr. lower. In the absence of any French demand barrel Flour must be quoted 1s. cheaper.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk..White	50—61	Red	50—56
— — fine selected runs..ditto	61—64	Red	59—60
— — Talavera	55—66		
— Norfolk	—	Red	—
— Foreign	42—72		
BARLEY, grind. & dist., 26s to 28s..Chev.	37—42	Malting .	36—38
— Foreign..grinding and distilling	27—30	Malting .	36—40
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire—Potato	26—28	Feed ..	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign........Poland and Brew	20—24	Feed ..	19—24
RYE	26—28	Foreign	—
RYE MEAL, foreign	—		
BEANS, Mazagan....24s to 36s ...Tick	35—38	Harrow .	35—38
— Pigeon ......35s — 42s..Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
PEAS, white, Essex and Kent ..Boilers	34—36	Suffolk .	35—39
— Maple .... —s to —s ......Grey	37—39	Foreign .	35—38
MAIZE..............................White	—	Yellow ..	—
FLOUR, best marks delivered..per sack	46—[illegible]		
— 2d do.......................ditto	39—46	Country	39—46
— Foreign ....per barrel	28—34	Per sack	43—48

FRIDAY, Oct. 4.

Although some heavy rain fell during the close of last and early part of this week, the weather during the day time has been for the most part very fine and hot. The Wheat trade for the same period has been very inactive, and a decline of 1s. to 2s. per qr. on English Wheat general. Sales of foreign have been very limited, holders having confidence in the future, and not being inclined to accept an abatement. The quantities of Wheat sold in the 290 towns from which the returns are taken for the last two weeks ending the 27th and 28th Sept. respectively, amount this year to 318,373 qrs. against 122,103 qrs. of the last, and are by far the largest we remember; considering the deficiency of the crop, this must afford good proof of the rapid manner in which the new Wheat is being consumed. Barley in the majority of markets has been quoted 1s. per qr. lower. New Oats are dull, and in many places 6d. per qr. cheaper. Beans and Peas are firm.

American Flour must be written 6d. to 1s. per barrel down. During the past eight days 39 vessels have been reported off the coast. The floating trade has been inactive, and for Wheat less money has been taken. The arrivals of all grain, English and foreign, during the week have been moderate. The attendance at market this morning, although small, included several country buyers, causing a somewhat better inquiry for Wheat at Monday's prices. Barley, Beans, and Peas bring late quotations. The Oat trade is slow, and new Corn rather cheaper.

ARRIVALS FROM Sept. 30 to Oct. 4.

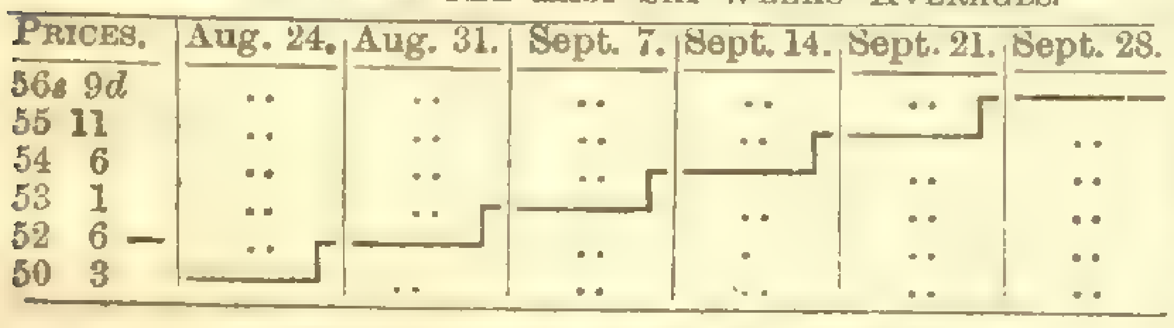
	Wheat.	Barley.	Oats.	Flour.
English ..	1810 qrs.	1290 qrs.	280 qrs.	1620 sks.
Irish	— ,,	— ,,	800 ,,	— ,,
Foreign ..	13300 ,,	1050 ,,	14120 ,,	— ,, 2100 brls.

LIVERPOOL, Tuesday, Oct. 1.—There was a fair attendance of millers and dealers at this morning's market, and a better inquiry was experienced for both Wheat and Flour than had been anticipated, good sound qualities commanding the prices of Friday, but all other very unsaleable. Notwithstanding the late heavy arrivals of Indian Corn the market opened firm at Friday's price of 31s. for mixed, and plenty of buyers appearing it quickly advanced to 31s. 6d., and now 32s. is asked. Oats and Oatmeal are without change. Beans and Barley steady at full rates. Peas 6d. to 1s. dearer. The market closes with a stronger feeling than it opened, and corn is much sought after, the only obstacle to business being the advance demanded.

FRIDAY.—The market was steady, with a firmer feeling for Wheat. Unaltered prices. Low qualities of Flour in good request at full rates. Indian Corn 6d. dearer; the advance checks business. Peas 6d. higher.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Aug. 24..	50s 3d	32s10d	26s 1d	35s10d	43s 5d	35s 5d
— 31..	52 6	34 1	24 5	37 5	44 0	34 10
Sept. 7..	53 1	35 11	23 7	37 2	44 4	35 3
— 14..	54 6	36 4	22 11	33 4	41 11	38 0
— 21..	55 11	36 9	22 10	34 11	41 11	38 9
— 28..	56 9	37 4	22 10	35 9	42 4	40 10
Agg. Aver.	53 10	35 6	23 9	35 9	43 0	37 2

FLUCTUATIONS IN THE LAST SIX WEEKS' AVERAGES.



METROPOLITAN CATTLE MARKET.

MONDAY, Sept. 30.

The number of Beasts is smaller than last week, yet it is large. The quality is not improved. Trade is dull, and quotations are much altered. The supply of Sheep is short, especially of good qualities. The demand is, however, very limited, and it is difficult to obtain higher rates. Calves are selling about the same as on Thursday. Our foreign supply consists of 1800 Beasts, 7210 Sheep, and 138 Calves.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 6 to 4 8	Best Long-wools.	4 8 to 5 0
Best Short-horns	4 4 — 4 6	Do. Shorn	.. .. — ..
2d quality Beasts	3 0 — 4 0	Ewes & 2d quality	4 0 — 4 6
Best Downs and Half-breds ..	5 2 to 5 4	Do. Shorn	.. .. — ..
Do. Shorn	.. .. to ..	Lambs ..	.. .. — ..
		Calves ..	.. 4 0 — 5 0
		Pigs ..	.. 4 0 — 5 0

Beasts, 6080; Sheep & Lambs, 23,680; Calves, 169; Pigs, 570.

THURSDAY, Oct. 3.

We are but moderately supplied with Beasts; the trade is however very dull, and Monday's quotations are with difficulty realised. The number of Sheep is small, but it exceeds the demand. There are very few buyers to-day for any kind of stock. Calves are lower. Our foreign supply consists of 217 Beasts, 2260 Sheep, 288 Calves, and 120 Pigs. Milch Cows, 90.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 6 to 4 8	Best Long-wools.	4 8 — 4 10
Best Short-horns	4 4 — 4 6	Do. Shorn	.. .. — ..
2d quality Beasts	3 0 — 4 0	Ewes & 2d quality	4 0 — 4 4
Best Downs and Half-breds ..	5 0 — 5 2	Do. Shorn	.. .. to ..
Do. Shorn	.. .. — ..	Lambs ..	.. .. — ..
		Calves ..	.. 4 0 — 4 8
		Pigs ..	.. 4 0 — 5 0

Beasts, 980; Sheep & Lambs, 5510; Calves, 365; Pigs, 280.

WANTED, A FOREMAN AND MANAGER of the House Plant Department at the Wellington Road Nursery. Messrs. E. G. HENDERSON & SON request that applicants for the above situation will state their age, the situations previously filled, and their terms. N.B. None need apply who have not previously held a similar responsible situation.

WANTED, a GARDENER (HEAD WORKING) with a complete knowledge of his profession in all its branches, especially he must be a good Flower Gardener; one who thoroughly understands the Management of Plantations preferred.—Apply by letter, stating salary expected, and if with a family the number and ages, to L. C., Post Office, Bude, Cornwall.

WANTED, a young WORKING MAN, accustomed to the Management of American Plants and Seedlings, to take charge of a small branch Nursery.—Apply personally or by letter to Mr. R. LAING, Twickenham Nursery, Middlesex, S.W.

WANTED, in a gentleman's family near London, an active steady young Man as SECOND GARDENER. A furnished bed-room on the premises.—Apply by letter in own handwriting, stating previous service, age, and wages required, to T. H., Mr. W. Hopcraft, No. 1, Mincing Lane, London, E.C.

Packer.

WANTED, an Experienced PACKER.—Apply to WM. PAUL, Cheshunt Nurseries, Waltham Cross, N.

WANTED, as UNDER SHOPMAN in a Retail Seed and Corn Trade, an energetic young Man, with good address. Must be strictly honest, and references required. To live on the premises.—Apply, stating salary expected, to THOS. B. THOMSON, 20, High Street, Birmingham.

WANTED, by a London Florist, a YOUNG MAN, from 18 to 25 years of age. No personal application attended to.—Address J. M., Mr. Ormerod, 15, Owen's Row, Goswell Road, E.C.

WANTED, an intelligent YOUNG MAN, who wishes to improve himself in the Retail Seed Trade; must be respectably connected, and to live with Employer on the Premises.—Apply by letter, addressed B. P. R., Messrs. Noble, Cooper, and Bolton, Seed Merchants, Fleet Street, London, E.C.

WANTED, AS GARDENER AND LAUNDRESS, a Man and his Wife, without incumbrance; must be thoroughly acquainted with their duties. Man must be capable of taking charge of a Horse, and make himself useful. Cottage, coals, &c., and 23s. per week.—Apply by letter, H. B., Post Office, Southend, Essex.

WANTED, a respectable Man and his Wife, without incumbrance: the former as UNDER GARDENER, and his Wife to take charge of one of the Lodges. The Man will require to have a good practical knowledge of Plants generally. Wages 18s. per week. Both must bear good characters. Five gardeners are kept on the establishment.—Letters addressed A. B., Post Office, Balham, Surrey.

To Carpenters.

WANTED, A WORKING CARPENTER, on a Gentleman's Estate, 8 miles from London, who is willing to make himself generally useful. Wages, 17s. per week, and a House to live in rent free. A good reference required, stating age, &c. — Apply personally, or by letter, prepaid, to Mr. TUCK, Steward to J. D. Taylor, Esq., Southgate, Middlesex, N.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 28, single; thoroughly understands Early and Late Forcing, Flower and Kitchen Gardens. Can be highly recommended.—G. F., Post Office, Chislehurst, Kent.

GARDENER (HEAD).—Thoroughly understands his profession in all its branches, Flower, Fruit, and Kitchen Gardens, Laying Out Plantations, &c.—A. B., Atherstone Nursery, Warwickshire.

GARDENER (HEAD). — A gentleman wishes to recommend the above; has a practical knowledge of his profession, Early and Late Forcing Vines, Pines, &c. No single place accepted. — A. B., Mr. Dickenson, Florist, Surbiton Hill, Surrey, S.W.

GARDENER (HEAD).—Age 37, married, one child; has had 18 years' experience in every branch of his profession, and can be well recommended as a thorough practical Gardener.—G., 3, New Church Street, Edgeware Road, London, N.

GARDENER (HEAD).—Age 24, single; has had six years' experience as Foreman. Understands the Management of Vines, Greenhouse, and Early Forcing; Kitchen and Flower Gardens. Would prefer a situation where a little help is allowed. Can be highly recommended by the Head Gardener.—S. P., Post Office, Buntingford, Herts.

GARDENER (HEAD).—The Advertiser, at present Gardener to P. Arkwright, Esq., Willersley Castle, is at liberty to engage with any nobleman or gentleman requiring a person in the above capacity. Salary expected 75l. per annum, with House, &c. Satisfactory reasons for leaving, and good character from present and former employers.—J. GADD, Willersley Castle, Matlock, Derbyshire.

GARDENER (HEAD).—Age 39, married; perfectly understands his profession in its various branches, including Early and Late Forcing both Flowers and Fruit, and Flower and Kitchen Gardens; also Pits and Frames. Can manage Land and Stock if required. Three years' good character.—Y. Z., Messrs. W. Cutbush & Son, Highgate Nurseries, N.

GARDENER (HEAD).—Age 36, married, without incumbrance; has a thorough practical knowledge of his profession, the Cultivation of Stove and Greenhouse Plants, Early Forcing of Peaches, Grapes, Melons, &c.; is a good Kitchen and Flower Gardener. Above two years' good character with present employer. Seven years in previous situation.—J. GUMM, Woodgate, Beckley, Sussex.

GARDENER (HEAD) in a medium-sized establishment.—Married, one child; has an excellent general knowledge of his profession, and is highly recommended by his present employer, with whom he has served a period of four years, and whom he is leaving in consequence of that gentleman being about to reside in Italy. He is a native of North Britain. The wages expected will be 60l. per annum, with a house, coals, &c.—G. L., care of Messrs. Peter Lawson & Son, 27, Great George Street, Westminster, S.W.

GARDENER (HEAD).—Age 35, married, no incumbrance; thoroughly understands his profession, and a successful Grower of Grapes, Pines, Peaches, Stove and Greenhouse Plants, understands the Management of Kitchen and Flower Gardens, Re-planting, Altering, and Laying Out New Gardens, Land and Stock, Woods and Plantations. The highest reference can be obtained from his present employers. —W. R., Hatchlands, Guildford, Surrey.

GARDENER (HEAD).—A lady can with confidence recommend a middle-aged married Scotchman, no incumbrance, who has given her great satisfaction in Forcing Peaches, Grapes, French Beans, Melons, Cucumbers, Strawberries, Mushrooms, and Asparagus; also Peaches and Grapes in Pots. He has taken many prizes for Plants, Fruits, and Vegetables. Four years' high testimonials.—A. Z., Mr. Clarke, 25, Bishopsgate Within, E.C.

GARDENER (HEAD), in a nobleman's or gentleman's family.—Age 45, single; has a thorough knowledge of his profession in all its branches, with good experience in the Management of Pines, Vines, Early and Late Forcing, Stove and Greenhouse Plants, Ferns, &c., Flower and Kitchen Gardens. Twenty-five years' good character.—W., Mr. William Bull's Establishment for New and Rare Plants, King's Road, Chelsea, London, S.W.

GARDENER (HEAD) or FOREMAN to a Forcing Market Gardener.—Age 28, married, no incumbrance. Has been in the employment of Mr. Davis, late of Oak Hill, East Barnet, eight years; part of the time at Oak Hill, and the remainder at Mr. Davis's Forcing Gardens, Mogden, Isleworth, Middlesex, where he is at present. Reference may be had from Mr. Davis.—Address J. F., as above.

GARDENER (HEAD, or SINGLE-HANDED).—Age 28, married, one child; thoroughly understands the Management of Plants, Forcing, and is a good Kitchen Gardener. Five years' good character.—A. B., 62, Henry Street, Portland Town, St. John's Wood, N.W.

GARDENER (HEAD, or good SINGLE-HANDED).—Age 29, single; understands Flower, Fruit, and Kitchen Gardens; also Early and Late Forcing of Flowers, Fruits, and Vegetables. Two-and-a-half years' character.—C. D., Mr. Todmans, Nurseryman, Eltham, Kent.

To Noblemen and Gentlemen.

GARDENER.—W. MOORE is desirous of meeting with any gentleman requiring the services of a Gardener proficient in all departments. Will be highly recommended as capable of managing a first-class situation. Liberal wages expected.—High Elms Park, Farnborough, Kent, S.E.

GARDENER.—Age 29; understands [illegible] Late Forcing of Fruit, and Flower and [illegible] Good character. — A. B., 9, Strewan [illegible] Chelsea, S.W.

GARDENER.—Age 28; understands [illegible] ment of Orchard-house, Greenhouse, [illegible] Cucumbers. Good character. Wife as [illegible] a kitchen maid is kept, or to attend [illegible] Office, St. Mary's Cray, Kent.

To Noblemen and Gentlemen.

GARDENER.—A highly practical [illegible] Man is now completing his present engagement [illegible] at liberty to enter upon a new one the latter [illegible] month. He has extensive knowledge in [illegible] of Gardening, including the Forcing of Fruits [illegible] He is also a first-class Grower of Plants, [illegible] cessful competitor at the London and [illegible] Exhibitions, and is also a very efficient Kitchen [illegible] Gardener, having had considerable experience [illegible] and Erection of Horticultural Buildings [illegible] descriptions.—Highly respectable recommendations [illegible] ferences will be given by Messrs. E. G. Henderson [illegible] Wellington Nursery, St. John's Wood, London, [illegible]

GARDENER (UNDER).—Age 21. [illegible] will be given.—EDWARD RAYMENT, [illegible]

GARDENER (UNDER).—Age 2[illegible] [illegible] good character.—G. R., Post Office, [illegible]

GARDENER (UNDER, or UNDER [illegible] Age 21.—Mr. KAILE, Horsley [illegible] Ripley, Surrey.

GARDENER (UNDER).—Age 20, [illegible] no objection to look after Pony [illegible] character from present and previous employers [illegible] man Finnis, Wansted Park Gate, Essex, N.E.

GARDENER (UNDER).—Age 20; [illegible] Management of Fruits and Flowers [illegible] from previous employers. No objection [illegible] Britain.—M. J. M., Post Office, Aynhoe, near [illegible]

GARDENER, OR GARDENER [illegible] STEWARD. — Great experience in every [illegible] profession.—Mr. WHITING, The Deepdene, [illegible]

GARDENER AND BAILIFF.—The [illegible] first-class in all matters of Altering, [illegible] Buildings, Drainage, and also Laying Out Ornamental [illegible] —S. N., 25, Bishopsgate Within, E.C.

GARDENER, OR GARDENER AND BAILIFF [illegible] Age 40, married, no incumbrance; thorough [illegible] in every branch of his profession; has been [illegible] exhibitor at the Metropolitan and other [illegible] obtained upwards of 100 prizes; also well acquainted [illegible] Management of Land, Stock, &c., of which [illegible] charge for the last 10 years. Leaving on account [illegible] of his late employer.—A. B., Post Office, Ley[illegible]

GARDENER OR FOREMAN.—A Young Man [illegible] varied experience, who has served in several [illegible] and for some time under Mr. W. P. Ayres, [illegible] engagement, either as Gardener or Foreman [illegible] lishment.—W. J., Glanrafon, Droygyfylchi, Conway, N. W.

GENERAL NURSERY FOREMAN, OR SALESMAN.—Age 31, married; has a practical knowledge [illegible] his profession. First-class references as to abilities, [illegible] character, &c. will be given.—A. B. C., [illegible] Brentwood, Essex, N.E.

PROPAGATOR, OR FOREMAN AND PROPAGATOR.—Perfectly understands his profession [illegible] its branches. Good references given.—A. B., [illegible] Nursery, Tunbridge Wells, Kent.

To Nurserymen.

FOREMAN, OR FOREMAN AND PROPAGATOR —Well practised in his profession. [illegible] of good address. First-class reference.—M [illegible] Terrace, Circus Road, St. John's Wood, London, N.W.

PROPAGATOR, OR PROPAGATOR AND [illegible] MAN.—Extensive practical experience in the Propagation and Cultivation of Stove, Greenhouse, Cape and [illegible] plants; a most proficient Graftsman of Conifers, [illegible] Azaleas, Rhododendrons, Roses (on a most [illegible] ciple), Ornamental Trees, Shrubs, &c. Upwards [illegible] in a first-class London and Provincial Nursery, [illegible] years in a first-class Scotch establishment. Experienced [illegible] general routine of Nursery operations. Liberal [illegible] Satisfactory testimonials.—W. R., Gardeners' [illegible]

ORCHID GROWER. — W. BASSETT, [illegible] ried, without incumbrance; is desirous [illegible] any nobleman or gentleman in want of a thorough [illegible] Stove, Greenhouse, Fern and Fruit Grower. [illegible] Foreman and had charge of the well-known [illegible] Collection of Orchids, with the Forcing Department, [illegible] Holford's, Esq., M.P., for 10 years. Can have [illegible] character.—Weston Birt, Tetbury, Gloucestershire.

STEWARD OR BAILIFF.—Age 34; [illegible] sively engaged in the Management of Arable [illegible] Land, Timber, Woods and Land Drainage, [illegible] economical system has been observed, and [illegible] take the entire Management of an Estate; [illegible] Dairy or Poultry. The highest reference and [illegible] A., Mr. Thos. Gibbs, 26, Down Street, Piccadilly, [illegible]

BAILIFF, OR BAILIFF AND GARDENER.—[illegible] 40, married, no incumbrance; has [illegible] experience in both Farm and Garden Management [illegible] shortly disengaged, and would be happy to [illegible] or gentleman requiring a trustworthy servant [illegible] capacity.—A. B., Mr. Cheyne, Seedsman, &c. [illegible]

BAILIFF.—Age 42; has had great [illegible] the Midland and Southern Counties Farming, [illegible] judge in Stock, Buying and Selling, &c., and a [illegible] Has a knowledge of Steam Cultivation.—C. [illegible] Street, New North Road, Hoxton, N.

TO THE SEED AND NURSERY TRADE.—[illegible] Advertiser, who is experienced in both [illegible] Retail, and can be highly recommended by [illegible] wishes for a permanent situation. —H. W. G., [illegible] Newcastle-on-Tyne.

To the Seed Trade.

SHOPMAN.—Aged 20; desires employment [illegible] either in Town or Country. Has had experience [illegible] capacities. Salary not so much an object as a [illegible] situation.—L., 3, Alpha Place, Alpha Road, New [illegible]

GROOM AND VALET, or in a Single-handed [illegible] in Town or Country.—Age 28, single. A [illegible] having no further use for a Servant wishes to recommend [illegible] as above.—H. H., Woodlynch, Bonchurch, Isle of Wight.

The Gardeners' Chronicle Newspaper.

SATURDAY, OCTOBER 12, 1861.

EVENING LECTURES at the GOVERNMENT SCHOOL of MINES, Jermyn Street. Professor HUXLEY, F.R.S., will COMMENCE a COURSE of TEN LECTURES, "On the First Principles of PHYSIOLOGY," on SATURDAY, the 19th October, at 7 o'Clock. To be continued on each succeeding Saturday evening.
Tickets for the whole Course, price 5s., may be had at the Museum of Practical Geology.

TRENHAM REEKS, Registrar.

THE QUARTERLY REVIEW, No. CCXX., is published THIS DAY.

CONTENTS :—

I. SHELLEY'S LIFE AND CHARACTER.
II. LIFE, ENTERPRISE, AND PERIL IN COAL MINES.
III. THE IMMUTABILITY OF THE LAWS OF NATURE.
IV. NEWTON AS A SCIENTIFIC DISCOVERER.
V. GROWTH OF ENGLISH POETRY.
VI. PLUTARCH.
VII. EDUCATION OF THE POOR.
VIII. ALEXIS DE TOCQUEVILLE.
IX. ADJUSTMENT OF THE CHURCH-RATE QUESTION.

JOHN MURRAY, Albemarle Street, W.

THE EDINBURGH REVIEW, No. CCXXXII., will be published on WEDNESDAY NEXT.

CONTENTS :—

I. LORD MACAULAY'S HISTORY OF ENGLAND, VOL. V.
II. MONTALEMBERT'S MONKS OF THE WEST.
III. LAVERGNE'S AGRICULTURE OF FRANCE.
IV. O'DONOGHUE'S MEMOIRS OF THE O'BRIENS.
V. CUNNINGHAM'S CHURCH HISTORY OF SCOTLAND.
VI. THE STORY OF BURNT NJAL.
VII. ENGLISH JURISPRUDENCE.
VIII. THIERS' REVOLUTION OF THE HUNDRED DAYS.
IX. THE WORKS OF ELIZABETH BROWNING BARRETT.
X. DR. HESSEY'S BAMPTON LECTURES.
XI. THE DISUNION OF AMERICA.
NOTE ON EDUCATION MINUTE.

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From "THE TIMES," Oct. 4.

"As regards the contents of this Cyclopædia, it is, however, impossible to give any sufficient impression of an aggregate which includes somewhere or other all the information generally required upon every conceivable topic. A good Encyclopædia, as every one knows, is a compendious library, and though students may require further information upon some points than its summaries contain, even students will be surprised in this instance to find the materials at their disposal when they once adopt the habit of resorting to its pages. For all practical purposes a large proportion of the articles may be said to be exhaustive; they are accurate to a degree which will strike even those who know what pains have been taken to render them so; and, as they are concise as well as full, every column being rammed like a sky-rocket, the owner has a reservoir out of all proportion to the library shelves it will occupy."

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News of the Week.

THE KING OF PRUSSIA arrived at Compiègne on Sunday evening on a visit to the EMPEROR OF THE FRENCH, and was received by the EMPEROR and

Empress with distinguished honours. The Emperor met the King at the railway station, and as their Majesties proceeded thence to the Palace in an open carriage without any escort, the people shouted, "Long live the King! Long live the Emperor!" His Majesty left Compiègne on Tuesday on his return to Germany, and is said to have been delighted with the cordiality of his reception. It is announced that the King of Holland will arrive in France to-day, and will remain until Saturday next. The rise in the price of bread in France has caused so much agitation among the labouring classes that the Government have thought it necessary to allay the excitement by announcing in the *Moniteur* that, owing to the large importations of corn from abroad, there is every probability that the present prices will not be maintained; and that in any case the price of bread will not exceed 50 centimes the kilogramme, as the Caisse de Boulangerie will cover the difference. As a further means of relieving the existing distress, the Emperor has given orders to continue without interruption all works during the winter, and to begin even those which have been only projected.

A despatch from Pesth announces that the Assemblies and Municipal Councils of the Comitats of Gran, Arad and Bacs have been dissolved by the Austrian Government for having passed resolutions concurring in the protest of the Comitat of Pesth against the dissolution of the Hungarian Diet. The Assembly of the Comitat of Zalo has resolved to ignore any illegal ordinance of the Government, and has declared that it will only yield to force. The majority of the members of the Provincial Government of Transylvania have determined not to publish the Imperial decree for the convocation of the Transylvanian Diet, on the ground that the laws of the country confer on them the right of protesting against all illegal demands, and that a separate Transylvanian Diet would be opposed to the union of Transylvania with Hungary. The deputation with the address of the Croatian Diet was received by the Emperor on Wednesday. His Majesty's reply was almost verbally the same as that which he gave to the Hungarian Diet, and was to the effect that he would consider the claims of the Croatians, and afterwards give his decision.

A telegram from Thorn states that on the night of the 4th inst. an insurrection broke out in the town of Czeladz, in Russian Poland, during which the mayor was killed and the people tore down the Russian eagle from the public buildings, and substituted the Polish eagle in its stead. At Lemberg, in Austrian Poland, on the celebration of the Emperor of Austria's birthday, the scholars of the Preparatory College made a national demonstration in the Cathedral during the performance of the Austrian National Anthem. Some of the scholars were arrested, but in consequence of a popular demonstration they were afterwards set at liberty.

Accounts from Italy announce that Signor Ratazzi will very probably soon enter the Ministry, and that Garibaldi has quitted Caprera, but his destination is unknown. General Borges, the Spanish leader, has been captured and shot, and it is rumoured that his 45 confederates have been made prisoners. One of his aides-de-camp, on being arrested, was found to be the bearer of important documents, including letters signed by General Bosco and General Lamoricière.

The Montenegrins have refused the conditions offered them by the Porte, and the blockade will therefore be strictly enforced. The Turkish troops were attacked last week by the Montenegrins on their return march from Nicksich, and after a fight which lasted four hours, were compelled to take to flight, with the loss of 80 killed and 20 wounded.

From the United States we learn that the loss of Lexington, in which the Confederates captured nearly a million of dollars, has caused much consternation in the Northern States, and loud complaints are made by the New York journals against General Fremont, for not having sent reinforcements to its relief. It is reported, however, that he is now about to take the field with a large force, to oppose the march of the Confederates on St. Joseph, where it was feared that they would capture General Prentis's command, whose communications had been cut off by General Price. On the 21st ult. General Lane surprised and routed a body of Confederates at Papensville, near Lexington, capturing their baggage and supplies. The Federal Government are preparing naval expeditions against Galveston and New Orleans, to the relief of which it is supposed the Confederates will be obliged to despatch a portion of their forces before Washington. It has been explained that the Confiscation Act applies only to property used in aid of the rebellion, and not to deposits of Southern funds. The national fast was observed on the 26th ult. with due solemnity in all the Northern States. The Comte de Paris and the Duc de Chartres have been appointed officers in the Federal army.

The Bombay mail has arrived with news to the 12th September. The cholera is abating in the Punjaub, but has been making great ravages in the North-west provinces, where her Majesty's 51st and 94th Regiments have suffered severely. Sir Hugh Rose was invested by the Governor-General with the insignia of the new Order of the Star of India on the 26th August at Calcutta with extraordinary ceremony. The latest news from Pekin, received by way of St. Petersburg, announces the death of the Emperor of China.

Earl Russell has addressed a letter to the Mexican Bondholders explaining the principles and objects of the intended intervention. His lordship says that it is not the intention of her Majesty's Government to interfere in the internal Government of Mexico, or to attempt the task of restoring the tranquillity of the country by means of a protecting force. He sees no proof of the existence of any party in Mexico prepared to avail itself of foreign aid, and therefore the action of her Majesty's Government must be confined to the clear and legitimate purpose of demanding from the *de facto* Government of Mexico respect for the persons and property of British subjects, and the fulfilment of recorded obligations.

Home News.

The Court in Scotland.—On Wednesday the 2d inst., the Queen, accompanied by Princess Alice and Prince Louis of Hesse, drove to Alt-na-Guithesack, where ponies were in waiting, and rode to Clovar, returning home the same way in the evening. The Prince Consort and the Prince of Wales went out deer-stalking. The Princess Hohenlohe and Princesses Helena and Louisa drove out. On Thursday the Queen, accompanied by the Princess Hohenlohe, Princess Louisa, and Prince Leopold, drove to the Linn of Quoich. The Prince Consort, accompanied by Prince Arthur, went out deer-stalking. The Prince of Wales and Prince Louis of Hesse went out deer-stalking. Princess Alice went out riding. On Friday the Queen, accompanied by the Princess Helena, drove to Loch Calater. The Prince Consort, the Prince of Wales, and Prince Louis of Hesse went to the Balloch Buie Woods, which were driven for deer. Prince Arthur went out riding. On Saturday the Queen, accompanied by Princess Alice, Prince Louis of Hesse, and Prince Arthur, drove to Alt-na-Guithesack, and then proceeded on ponies to ascend Lochnagar, and returned in the same way in the evening. The Prince Consort and the Prince of Wales went out deer-stalking. The Princess of Hohenlohe, with the Princesses Helena and Louisa and Prince Leopold, drove out. On Sunday the Queen and Prince Consort, the Princess Alice, the Princess Hohenlohe, the Prince of Wales, the Prince Louis of Hesse, attended Divine service in the parish church of Crathie. The Rev. Mr. Stuart officiated. On Monday the Queen, accompanied by the Princess Hohenlohe, and the Princesses Helena and Louisa, drove out. The Prince Consort and Prince Louis of Hesse went out deer-stalking. The Prince of Wales went out grouse shooting.

The Prince of Wales will leave Balmoral early in the ensuing week for Madingley Hall, to resume his studies at the University of Cambridge. On his way south, his Royal Highness will honour the Duke of Newcastle with a visit at Clumber Park in Nottinghamshire, where great preparations are making for his reception. The Prince is expected to arrive at Retford Station on Wednesday evening, and will be escorted to Clumber by the Clumber troop of Yeomanry Cavalry. His Royal Highness will remain at Clumber until Saturday.

Prorogation of Parliament.—The Queen held a Privy Council at Balmoral yesterday, at which Parliament was to be further prorogued from the 22d inst.

Diplomatic Movements.—The Earl of [illegible] left London for Berlin on Tuesday to attend the coronation of the King of Prussia as Ambassador Extraordinary. His Excellency was accompanied by Mr. [illegible] Lister, Precis-writer to the Foreign Office, [illegible] private secretary; Mr. Cowell Stepney, of the Foreign Office; Lord Schomberg Kerr, Attaché to her Majesty's Mission at Frankfort; and Lords Dangan and [illegible]brook, of the Guards.

New Colonial Bishopric.—Arrangements are in progress for the erection of a new bishopric in New South Wales. The seat of the new diocese will be Goulburn, from which place it will take its name.

The Mediterranean Command.—It is rumoured that Vice-Admiral the Hon. Sir F. W. Grey, K.C.B., Senior Naval Lord of the Admiralty, is to command the Mediterranean fleet, in the room of Admiral Martin, who will take his seat at the Admiralty.

The Channel Fleet.—The starboard division of the Channel fleet, under the command of Rear-Admiral Stuart, K.H., consisting of the Revenge, [illegible] 90; Conqueror, 101; and Centurion, 90, [illegible] Plymouth on Tuesday morning from Berehaven, which they left on the 1st. The port division under the command of Rear-Admiral Erskine, consisting of the Edgar, 89; Hero, 89; and Trafalgar, 86, [illegible] company with Admiral Stuart's division [illegible] Plymouth, and arrived at Spithead on Wednesday. Both divisions of the squadron [illegible] damage, estimated at 10,000*l.* in the late storm, [illegible] will have to go into harbour to repair. The Conqueror, Centurion, and Aboukir lost all their [illegible] boats. The Aboukir rolled excessively. The Hero [illegible] her mainyard. The Trafalgar suffered severely. [illegible] Conqueror also lost her three topsails; and so much canvas was blown away from the whole fleet, that when Admiral Stuart signalled some of the ships to hoist certain sails, the reply given was "that they had none." It is reported at Plymouth that the Centurion and Aboukir are to be sent to the West Indies.

The Iron-cased Frigates.—The Warrior was undocked at Portsmouth on Saturday, and on Thursday afternoon she steamed out of the harbour to Spithead, where she anchored. She will now be swung for the adjustment of her compasses, and it is expected that she will make a preliminary trial on Monday next, which will probably be a run to the Nab and back. If all goes well with the ship's machinery, of which there is little doubt, the speed of the ship will be tested at the measured mile as quickly as possible afterwards. After these trials, she will be despatched on her sea-trial trip as soon as she can be made ready for the purpose. On Saturday afternoon the iron-plated steam ram Defence was floated into the third dock at Chatham with complete success, in the presence of a large number of spectators, including several officers of the army, navy, and engineers. Every effort is now making to fit her for sea immediately.

The Volunteer Movement.—The riflemen of France having conveyed a hint, through the secretary of their Tir National, that they would like to try their skill against the riflemen of Scotland, Mr. Edward Ross, the ex-champion of Wimbledon, has come forward and challenged the best shot in France to a match at various distances.—A case of some importance to Volunteers in reference to tolls was decided at Bristol on Saturday. On the 23d ult. the collector of tolls at the White Ladies turnpike gate in that city was summoned before the magistrates by Mr. F. Shipton, [illegible] a member of the Bristol Volunteer Artillery, for having demanded toll of him, while in the uniform of a Volunteer Artilleryman, and while on his way to the practice ground of the corps, near the mouth of the Avon. Mr. Shipton was accompanied by [illegible] Volunteers, but there was a civilian in the carriage with them, and owing to his presence the defendant insisted on the toll being paid. On [illegible] day the magistrates delivered a lengthened judgment, in which, after having reviewed the points raised in the information, they came to the conclusion that exemption from toll for carriages conveying [illegible] could be claimed for carriages employed [illegible] or conveying Volunteers only, and that for [illegible] the exemption claimed in the case before them [illegible] not be allowed. Judgment was therefore given for the defendant.—At a review of the Liverpool Volunteers on Saturday, Colonel M'Murdo spoke as follows on the subject of drill and the reported reduction of the [illegible]

"I have seen a great deal of the Volunteer service. [illegible] corps in large towns are brought together as [illegible] corps; those in the country are scattered corps, [illegible] 80 miles apart, but I have seen them work very steadily [illegible] gether. What I have seen to-day of your working [illegible] satisfactory, so far as it has gone; but I must say what [illegible] here last night I did not know what I should do. In the [illegible] place, I did not know the ground, and in the next I [illegible] know what the corps to be under my command [illegible] Now, gentlemen, there are many things that I wanted [illegible] but I was told by the officers that although the corps [illegible] them, yet on those occasions the ranks were filled by [illegible] usually do not come to drill, and therefore a failure was [illegible] hended. It is a very lamentable thing, gentlemen, that [illegible] should be brought down in drill to the level of the [illegible] efficient man amongst us. That must not be. I am [illegible] aware of the great difficulties which the corps in Liverpool [illegible] contend with; I know that the battalions consist of [illegible] scattered companies, I will say, though I wish you to [illegible]

[illegible] own judgment, I think it a pity that in a large town like Liverpool there should not be large battalions, like those in London, Glasgow, and other great towns; still, if you prefer [illegible] organisation of separate companies, Government has no [illegible] and as I said before, I have seen separate com[panies] [illegible] together from a distance of 80 miles, act equally [illegible] together and better, and who could do the things [illegible] I wanted you to do to-day. Now I hope you will give [illegible] credit for being a Volunteer at heart, and for my desire [illegible] the Volunteers in a state of efficiency, and I have a [illegible] regard for Liverpool. I saw your Volunteers last [illegible] very creditable circumstances, and I do not mean [illegible] that what you did to-day was not equally creditable. [illegible] clever Irishmen dance a jig upon a shutter, and, [illegible] the limited space of ground, you have danced your [illegible] well; but I expected, from what I saw last year, that [illegible] have done more. Now, if you wish to keep your [illegible] companies—and I think it a mistake, because if [illegible] country should be attacked, you could only work in war [illegible] battalions—all you have to do is to keep up your [illegible] above all, your company drill. I am an old [illegible]—I have seen something of war; and I consider the [illegible] the most important officers in the army. A company is the unit of an army, and if the companies be well drilled, the army will be efficient. It is very little an adjutant has to do if the companies are all right. If an army has to change front, it has to change front upon a company. If an army has to deploy, it has to deploy upon a company; if an army has to lock up, it depends upon the movement [illegible] of which it is composed that there shall be [illegible] cavalry to ride through. You see then how im[portant] it is that companies should know their drill, and what [an im]portant officer the captain is. I am quite sure that you [will] exert yourselves at all events to attain perfection in com[pany] drill. I fancy all your companies have more or less of [illegible] drill, which can be carried on in a room, or even upon [illegible] street, and through the winter your company drill can [illegible] at perfection. I have read with a deal of regret and [illegible] in the newspapers, and I dare say you have read too, [illegible] idea which has gone abroad, and which was actually [illegible] gravely discussed in the newspapers, namely, that the regular army was about to be reduced, in consequence of the [illegible] and efficiency of the Volunteer service. Now there [is not] one of you but knows that this is the greatest rubbish, and I will add, the most mischievous rubbish, which could be [put] into the newspapers. You know of the difficulty which [your] men have to come together for drill, in consequence of [the] usual occupations of the several companies. You know, [and] I can tell you, that most of my inspections of Volunteer [corps] have taken place at this time in the evening—sometimes as late as 9 o'clock—sometimes by gaslight. Could such men, [having] their occupations to attend to—could such men do a single day's duty in place of the regular army? Certainly not. We all know the act under which they are enrolled; that act states plainly that the force is intended to be called on only in case of the country being invaded. Volunteers can never do anything else than supplement the army, except under such a grave contingency, and I think you will agree with me in laughing at and condemning those foolish people who have started such a discussion in the papers, and in regretting that they should make so little of one of the most important institutions of the country. I can only repeat that I have been [illegible] pleased with what I have seen. What you did to-day was very difficult—and we had all arms of the service—cavalry, artillery, and infantry. I should like to have done more, that [is] all. Remember, I am talking to you as captains of independent companies. Don't, I pray you, weaken the service by [individual]—*what should I call it?*—by individuality in your proceedings. You remember the fable of the bundle of faggots—as long as they were in pieces they were weak, but combined they were strong, and would remain so. Therefore take my advice and be united; and I hope that next year I shall have the honour and pleasure of seeing you again upon a larger space of ground."

Foreign.

FRANCE.—The King of Prussia arrived at Compiègne on Sunday evening at 6 o'clock, and was received by the Emperor at the terminus. Both sovereigns wore plain clothes. The Emperor was accompanied by the Duke de Montebello and General Fleury. Their Majesties proceeded from the terminus to the Palace in an open carriage, without any escort, the people shouting by the way, "Long live the King!" "Long live the Emperor!" In the courtyard of the Palace the Zouaves formed a double line. The Empress, with the Prince Impérial and her Ladies of Honour, awaited the Emperor and the King of Prussia in the vestibule at the foot of the grand staircase. On their arrival the Empress advanced to the threshold. The king graciously kissed her hand, caressed the Prince Impérial, and afterwards offered the Empress his arm. Their Majesties then ascended to the Imperial apartments. The staircase was lined on both sides by the Cent Gardes. In the evening there was a grand dinner, and a *curée* (killing of the stag) by torchlight in the Court of Honour. On Monday their Majesties went shooting in the park, after which there was a promenade in the forest. In the evening there was a performance in the theatre. On Tuesday the King left Compiègne about noon, and was accompanied to the railway station by the Emperor. The parting of the two Sovereigns was most cordial, and it is said that the King was highly gratified with his visit. The *Moniteur* in its bulletin of Thursday says:—

"The visit of the King of Prussia, which has given rise to so many commentaries, cannot but exercise a happy influence on the relations of the two Governments. Everything leads it to be presumed that it has left an impression equally favourable in the minds of both Sovereigns."

The *Moniteur* had previously published the following article on the effect of this visit in England:—

"By the enlightened public of England, the visit of the King of Prussia to the Emperor Napoleon is viewed without either suspicion or jealousy. It is, on the contrary, considered a new proof of the desire of the Sovereign of France to maintain friendly and intimate relations with his neighbours, a desire which is the best guarantee for the maintenance of general peace. A certain portion of the British press has, it is true, attempted to ascribe to the visit a disquieting signification, but its observations have found no echo in public opinion."

The *Pays* has an article advocating the advantages for Prussia of an alliance with France, as compared with the alliance with England and Austria:—

"France has noble sympathies for nationalities in distress. Prussia has no quarrel with a variety of peoples claiming their autonomy, and aspires to no conquests that we know of in the Mediterranean or the Atlantic. She wishes to increase her navy, but France is not jealous of the efforts of foreign Powers: she finds them legitimate and applauds them, instead of opposing and laughing at them. It is not in selfishness and mockery that the strength of France lies—she derives it from her greatness and generosity."

The King of Holland will arrive in France on the 12th, and will remain until the 19th inst. Prince Napoleon and the Princess Clotilde arrived at Brest from the United States on Monday evening, after a passage of seven days, from Boston.—In the Ministerial Council which took place last week at St. Cloud, it is said that grain and bread were the objects of discussion. Since the last rise in the price of bread great agitation has prevailed among the labouring classes, especially in the Faubourgs St. Jacques and St. Antoine. To relieve this distress the Emperor has given positive orders to continue without interruption all works during the winter, and begin even those which have been only projected. The *Constitutionnel* of Saturday, in an article signed by M. Boniface, says that the Caisse de la Boulangerie has taken measures to keep bread at the present price of 50 centimes per kilogramme, and likewise mentions great arrivals of grain, and the existence of large and cheap stores in England, in order to show that there is no cause for apprehension. The *Moniteur* of Tuesday in an official article on the same subject says.—

"In view of the arrivals of corn and other provisions from the North of Europe, it is likely that the rise in prices, which has already made a retrograde movement, will not be maintained. In any case the price of a kilogramme of bread will not exceed 50 centimes, as the Caisse de la Boulangerie will cover the difference, if, contrary to all expectation, no fall in the prices takes place."

Several arrivals of grain from Liverpool are reported at Marseilles, and it is hoped that this supply will tend to keep down the price, which has fallen on an average 2 francs per hectolitre at various markets in the departments. The *Moniteur* of yesterday publishes a decree, according to which all cargoes of grain, flour, rice, potatoes, and dry vegetables are exempted, until September, 1862, from interior navigation dues collected for the State on rivers or canals not conceded to public companies. By the same decree, foreign vessels will enjoy the same privileges as French ships. The *Moniteur* publishes a table of the imports into Paris and in the principal towns of France from the 1st to the 5th of October, together with the duties received for them under the Treaty of Commerce. The total amounts to a declared value of 4,188,778 francs, for which a duty of 909,579 francs has been received. The duties received in Paris on this importation amounted to 759,903 francs, on a declared value of 3,474,235 francs.—Troops have embarked at Toulon for Rome, to replace two regiments of the French garrison in that city. It is asserted that the Syrian squadron will re-enter Toulon on the 15th inst., and that orders have been despatched to the French ports for the organisation of the squadron destined for Mexico. It will consist of three steam frigates, a steam corvette, and a cutter, under the command of Rear-Admiral Jurien Lagravière. In a letter addressed to the *Siècle* by the private secretary of Prince Napoleon, the latter renounces his claims to being elected Grand Master of the Freemasons of France.—At the provincial conference of the Society of St. Vincent de Paul at Lusignan, the Bishop of Poictiers has delivered a violent harangue, denouncing the present state of society as an enemy of the Church, showing religion in danger, and complaining of the persecutions of the clergy.—The Emperor on the 2d inst. visited the artesian well at Passy, in the success of which he has taken a great interest. From the time the water appeared above the surface, on the 24th September, telegraphic messages were sent almost every hour in the day to inform the Emperor of the state of things, and when he returned the first thing he did was to go himself and see the works. His Majesty expressed himself highly gratified with the success of the undertaking, and complimented M. Kind, the engineer, and his son on the happy result of their six years' labour. To show his Majesty the ascensional force of the spring, M. Kind closed the issue near the surface, and the water immediately rushed up the tube and gushed over the top in the shape of a mushroom. From the analysis of the water submitted to the Emperor it appeared to contain all the qualities necessary for general use.—The French cod-fishing in North America has been very unproductive this year. The most fortunate fishermen have returned with two-thirds of their usual complement, and others with less than one-third.—The *Moniteur Vinicole* states that the vintage throughout France has been favoured by magnificent weather, and is progressing admirably. The Grapes are all gathered in the southern departments, and the accounts received thence are unanimous in describing the quality of the wine as very superior, and the quantity greater than was expected.—The steam-frigate Labrador, which has arrived at Toulon from China, has brought home a Chinese, who is commissioned to deliver to the Minister of Commerce in Paris 4000 or 5000 young fish, selected from the scarcest and most delicate of those bred in the Imperial fish-ponds of China. This Chinese has travelled 6000 leagues with his cargo, contained in three large jars, of which he changed the water on arriving at each port. When the voyage was long between each port he broke the yolk of an egg into each jar, and with this slight nourishment was so fortunate as to arrive in France without losing any of his fish. During his stay at Toulon he was struck with the bad quality and scarcity of fish in that port. When he was informed that the miserable fish served at the hotel cost 30 sous the pound weight, he requested to see the President of the Society for the Encouragement of Fisheries, and explained to him his theory for the production and propagation of fish. According to his system, which was reduced to writing under his dictation, and translated by the interpreter attached to the scientific mission, the spawn of fish is produced in prodigious quantities, and everybody having a few acres of land and fresh water who will take the trouble of making an excavation a few yards square may acquire a good income without any further additional expense than that of a dozen eggs at the period and during the two months of the spawn arriving at maturity. The Society, at the suggestion of their president, voted that this little treatise should be printed, and, in order that it may be distributed throughout the rural communes, they have adopted measures to have it inserted in the popular almanacks.

SPAIN.—The Queen has returned to Madrid. The Queen's daughter the Infanta Dona Maria de la Concepçion has been seized with convulsions, which leave no hope of her recovery. Her Majesty has caused the Princess to be treated according to the homœopathic system. In consequence of this decision Dr. Corral, the principal physician of her Majesty, at once resigned his office, and the second, Dr. Drument, left the palace.—The baptism of the child of the Infante Don Sebastien and the Infanta Dona Christina, which had been delayed on account of the Queen's absence, has taken place with great pomp in the chapel of the palace. Not fewer than 88 Christian names were conferred on the Prince.—A Council was held at the Escurial on Sunday, under the presidency of her Majesty, when a decree was issued convening the Cortes for the 30th of October. It is said that the speech from the Crown will recommend a constitutional reform of a perfectly liberal and Parliamentary spirit, and that the majority of the Progressista members of the Senate will support the Cabinet. The Ministerial papers state that the Neapolitan archives are to be given up to the Sardinian Government by order of the ex-King Franncis II; but the *Opinione* of Turin declines to accept the statement on the ground that the arrangement would exclude the mediation of France. It also states that M. Thouvenel is said to have signified to M. Mon, the Spanish Ambassador at Paris, that should Spain not accept the proposition of France he foresaw an interruption of diplomatic relations between France and Spain. The screw frigate Carmen was successfully launched on Friday. The Madrid official *Gazette* states that 47,000 Spanish troops, of whom 25,000 consist of regiments of the line, are now in the Spanish Antilles.

PORTUGAL.—A despatch from Lisbon, dated Monday, says that the ports have not yet been opened for the admission of foreign grain, but it is expected that the decree will soon be published, as there is a decided scarcity of grain.

SWITZERLAND.—The Paris *Constitutionnel* published a few days ago an article which has created a profound sensation in Switzerland. It stated that Geneva had become a hotbed of assassination; that corpses, awfully disfigured and mutilated, tied up in sacks, were every night cast up by the water of the lake; and that for 5f. nothing was easier than to find a bravo who would expeditiously rid one of a troublesome friend or an enemy. At the request of the Government of the Canton of Geneva the Federal Council has demanded satisfaction from the French Government for these calumnious assertions. M. Thouvenel, in reply, has referred M. Kern to the French tribunals, on the ground that the *Moniteur* is the only organ of the French Government.

PRUSSIA.—The King of Prussia left Baden on Saturday morning for Compiègne on his visit to the Emperor of the French. His Majesty slept on Saturday night at Cologne, and passed through Aix-la-Chapelle on Sunday morning on his way to Compiègne. He returned to Baden on Tuesday. A dreadful murder was committed at Berlin on Sunday week, on the person of a widow lady, named Uphoff. She missed a bank note of 100 thalers, and, as her charwoman had not come as usual, she suspected her of the theft, and went to her lodgings to make inquiries. She was seen no more alive, but in the course of the morning a waiter in a coffee house on the canal bank saw the charwoman throwing into the water a large package which she had wheeled down to the canal in a hand cart in open day. The man gave notice to the police, the package was got up, and found to contain the still warm body of Madame Uphoff, who had been strangled. The charwoman, whose name is Ammon, was arrested, and after much search the missing note was discovered concealed in her hair, and Mrs. Uphoff's hat and veil were also found at her lodgings.

BADEN.—Oscar Becker, since his imprisonment in the house of correction at Bruchsal, has declared that his statement when before the criminal court, that he only intended to frighten the King, and did not really attempt his Majesty's life, was not correct, and was only made in the hope of misleading the judges.

Mecklenburg.—An accident occurred last week to the Grand Duke of Mecklenburg-Schwerin while out shooting, by the awkwardness of one of his suite, who shot the duke in the leg. His Royal Highness was carried on a litter to a chateau. It is not thought that the accident will lead to serious results.

Frankfort.—The principal members of the German National Association have held another meeting at Frankfort, at which the creation of a German fleet was the subject of discussion. Dr. Metz, who represented the Committee of Coburg Gotha, proposed that the money raised by subscription should be given to the Prussian Government and placed at the disposal of its Marine Department. Other speakers, however, contended that the present Prussian Ministry did not sufficiently possess the confidence of the German Liberals to justify their giving the control of the future German fleet to Prussia; and that the nation itself ought to direct the construction and arming of the fleet, which should afterwards be entrusted to the central power of Germany. The motion of M. Metz was ultimately carried by a small majority.

Austria.—The Emperor left Vienna on Thursday for Trieste, on his way to Corfu. The *Oesterreichische Zeitung* announces that the Austro-Italian regiments were on Friday to be reduced from 100 to 60 men per company, and that further changes are contemplated. The Archduke Charles Louis, brother of the Emperor of Austria, will represent his Imperial Majesty at the coronation of the King of Prussia, at Königsberg.

Hungary.—The Assemblies and Municipal Councils of the Comitats of Gran, Arad and Bacs have been dissolved by the Government for having passed resolutions concurring in the protest of the Comitat of Pesth against the dissolution of the Hungarian Diet. A Royal Commissioner has already been appointed at Gran. The Assembly of the Comitat of Zalo has resolved to ignore any illegal ordinance of the Government. It protests against the nomination of a Commissioner and the proposed new organization of the Comitats, and declares that it will only yield to force. A funeral service was held at Pesth on Saturday in memory of the Generals of the Hungarian army who were executed by order of the Austrian Government on the 5th October, 1859. The officers of the former national Honved Regiments commanded by those Generals were present at the ceremony. It is affirmed that a pamphlet is preparing at Vienna, by order of the Government, stating its beneficent intentions, and setting forth its reasons for dissolving the Hungarian Diet. This pamphlet is to be distributed among the Roumans, Slavonians, and Ruthens of Hungary.

Transylvania.—The majority of the members of the Provincial Government of Transylvania have determined not to publish the edict for the convocation of the Transylvanian Diet, on the ground that the laws of the country confer on them the right of protesting against all illegal demands, and that a separate Transylvanian Diet would be opposed to the union of Transylvania with Hungary. Count Maylath will henceforth renounce all participation in the administrative affairs of Hungary.

Croatia.—The deputation with the address of the Diet was received on Wednesday by the Emperor, whose reply was almost verbally the same as that which he gave to the Hungarian Diet. His Majesty said he would consider the claims of the Croatians, and afterwards give his decision.

Russia.—The Emperor of Russia left Livadia in the Crimea on the 9th ult., in the Tiger, and arrived at Theodosia on the following morning. Having heard mass in the Cathedral his Majesty inspected the Military Hospital, the Museum, and the Arsenal, and left for Kertch, where he arrived the same evening. He inspected the Government establishments there during the morning of the 11th, and re-embarked at noon for Taman, for the purpose of making a tour through part of the Caucasus. His Majesty arrived on the 12th at Ekaterinodar; on the 13th inspected the forts Dmitrievskoi and Grigorievskoi; passed the night of the 13th at Fort West-Labinskoi, and on the 14th arrived at Fort Maikop. On the 15th the Emperor, with an escort, rode to a point beyond the river Belaia, arriving that evening at Abadzok, where he remained for a day. On the 17th, after hearing mass, his Majesty continued his route along the line of the Laba. The Grand Duke Nicholas, brother of the Emperor, is to represent Russia at the coronation of the King of Prussia. Lieut.-General Todtleben, Director of the Department of Engineers in the Ministry of War, has been presented with the Grand Cross of the Second Class of the Order of St. Vladimir.

Poland.—At the opening of the Council of State at Warsaw on the 1st inst. Count Lambert, the governor, made the following speech:—

"I feel myself happy at being enabled to open the first sitting of the Council of State on the day consecrated to this important act of the new order of things in the kingdom. The short space of time since the organisation of the Council of State, the changes in the chief administration, especially the interference of the Government at each moment for the restoration of peace, required by the condition of the country, has delayed the execution of the projected laws, as well as their extension to the divisions of the Royal Council of State. However, the reports of the chiefs of the different branches of the administration of the year 1860, as well as the budget for 1862, and many bills already prepared by the Government Commission, are awaiting your deliberations. I particularly direct your attention to the very important project respecting the tributes by the peasants, which has such an important influence on the permanence of the peace and the happiness of the country. I conclude with the expression of the hope that our best exertions will be unanimously devoted to learning the real wants of the country, in order that I may be able to lay them at the foot of the throne as the true expressions of our maturely considered wishes.'

The members of the council then took the prescribed oath at the hands of the Sandomir Bishop. On Friday night an insurrection took place in the town of Czeladz in Russian Poland, district of Olkusz. The people tore down the Russian eagle from the public buildings, and affixed the Polish eagle in its place. The Mayor of the town was killed. The intended meeting on the 10th, at Horodla, has been forbidden by the Government as dangerous to the public peace. The Archbishop of Warsaw, Anton Melchior Fialkowski, died in that city on the 5th inst.—At Lemberg, in Austrian Poland, on the celebration of the Emperor of Austria's birthday, the scholars of the preparatory colleges and commercial schools sang the National Polish Song in the cathedral of that city while the organ was playing the Austrian National Anthem. A commissioner of police, who rebuked the students for their proceedings, was insulted. Some of the scholars were then arrested, but, in consequence of a popular demonstration, were afterwards set at liberty. The editor of the *Gros* having been found guilty of high treason and inciting the people to sedition, has been sentenced to five years' hard labour, loss of nobility, forfeiture of half his caution money, and deprivation of the faculty of exercising the editorial profession. The city of Cracow is to be raised to the rank of a first-class fortress. The municipal authorities have been informed that two new lines of fortifications are to be traced, and that one of them will necessitate the demolition of all the buildings on Mount Macal, one of which is a church of the 12th century.

Italy.—The King of Italy reviewed the garrison and National Guard of Bologna on Tuesday. His reception was most enthusiastic. His Majesty left on Tuesday night for Turin. Explanations having taken place between the courts of Turin and Berlin in reference to the report that the ex-King Francis II. intended to send Prince Statella as his representative to Königsberg, it results that Francis II. will not be represented at the coronation, and that the Italian representative will be received simply in the quality of a representative of King Victor Emmanuel. The report that the present Minister of Prussia at Turin would be sent by his Government to Frankfort is variously commented on by the Italian journals. It is said that Signor Ratazzi will very probably enter the Ministry. Letters from Genoa affirm that Garibaldi has quitted Caprera. His destination is unknown. The Society of Workmen at Turin has determined upon convening another congress of all the workmen's societies at Asti, in November, in order to declare the resolutions of the Congress lately held at Florence in reference to political matters to be illegal. The *Nazione* of Florence has published a protest signed by 44 deputies against the resolutions.—Accounts from Rome state that the Duke de Gramont has been decorated by the Pope with the Grand Cross of the Order of Pius IX., and has left Rome for France. At the recent reception of the Siamese Ambassadors by the Pope, the Ambassadors, in a speech addressed to his Holiness through an interpreter, said that they had been sent by their Sovereign to express his veneration for the head of the religion which was preached in Siam by zealous missionaries, and to assure his Holiness that the Catholic religion would always be protected in that country. The Pope, in his reply, desired the Ambassadors to thank their Sovereign for the protection he had granted to the Catholics in Siam, where he was happy to learn the missions were making progress. The Ambassadors then offered the presents which had been sent to his Holiness by the King of Siam.—Accounts from Naples state that the Spanish leader Borges has been taken, tried, and shot. It is also rumoured that his 45 confederates have been made prisoners. One of his aides-de-camp on being arrested was discovered to be the bearer of important documents, among which were letters signed by General Bosco and General Lamoricière. Mittaga, a bandit chief, has been killed at Reggio, and his band destroyed. Brigandage has now terminated in the province of Calabria Ultra. Cypriano and Crisenzio, two brigand chiefs, are wandering about, half-starved, in the mountains near Nola. Orders have been given to surround their band in the mountains, and many troops have already left for that destination. An important encounter has taken place near Sora between some brigands and the National Guard. A collision has taken place at Veroli on the Neapolitan frontier between a Bourbonist convoy and a French outpost, in which one of the French soldiers was shot dead. The French pursued the fugitives, and caught their leader, concealed behind a hedge, and found that he was a young captain of the late royal army, named Ricci. The convoy consisted of 40 muskets and 3000fr. in French silver and gold, supposed to have come direct from the Legitimist Committee. A duel has been fought at Naples with sabres between Baron Nicotera and Signor Petruccelli, in consequence of the latter having published a letter ridiculing the party of action. M. Alexandre Dumas acted as one of the seconds. Both combatants were wounded, but no reconciliation took place.

Venetia.—The *Sentinelle* of Brescia publishes a letter from Vicenza, dated the 7th inst., which states that while the Austrian troops were manœuvring on the Champ de Mars a mine exploded in the middle of their camp.

Malta.—The submarine cable from Alexandria to Malta has been successfully laid, and is working well throughout the whole line.

Montenegro.—The Montenegrins have rejected the conditions offered by the Porte. The blockade will therefore be rigorously maintained. Six battalions of Turkish regular troops while on their return march from Niksich were attacked on the 7th inst. by the insurgents and Montenegrins. After a fight, which lasted four hours, the Turks were compelled to take to flight, with the loss of 80 killed and 20 wounded. The reported intervention of General Turr and the Hungarian Legion in favour of the Montenegrins is said to be a pure fiction.

The Principalities.—At the second conference of the European Commission on the subject of the union of the Danubian Principalities, great differences of opinion prevailed among the representatives respecting the reserves made by the Porte in acceding to the union. It is said that the Porte has submitted a proposal to the Commission to the effect that the former should issue a firman, acceding to the union of the Principalities during the life of Prince Couza.

Servia.—In accordance with the recent resolution of the officers of the Servian army a Servian officer last week sent a challenge to the Austrian Consul.

Syria.—A levy has been ordered in Syria for the purpose of forming a Militia.

Egypt.—A telegraphic despatch from Alexandria, dated Sunday last, announces an extraordinary rise of the Nile, to the extent of 243 feet. Three leagues of railway and telegraph have been destroyed; and one of the Pasha's palaces is under water.—The excavations which are making for the Suez canal have led to the discovery of three temples, one at Gizeh as vast as the Louvre; one at Karnac, the circuit of which is stated to be 2½ miles; and another at Edfou, containing 20 saloons. The walls of the two latter edifices are decorated with sculptures, hieroglyphics, and paintings, still fresh.

Madagascar.—A letter from Réunion announces the death of the Queen of Madagascar on the 18th August in her 70th year, from a cancerous disease for which she had recently suffered a severe operation. Her son Rakoto was proclaimed King after he had murdered his cousin, the competitor for the throne, and the Minister who was the chief of the old Malagache party. The new King before his accession formally demanded a French protectorate, and his first measure was to publish an amnesty and to cancel the edicts of the late Queen forbidding foreigners to enter the country. The entire change of policy is attributed to French influence. The majority of the French merchants have presented their congratulations to the King. The country is said to be tranquil.

India.—By the arrival of the Overland Mail we have accounts from Bombay to the 12th September, and Calcutta to the 31st August. The following are the details:—

Calcutta.—The first investiture of the new Order of the Star of India took place in Calcutta with extraordinary pomp and ceremony on the 26th August, when the Governor-General formally invested Sir Hugh Rose with the insignia of the Order. In the evening the Viceroy gave a grand dinner and reception, which was better attended than any during the past four years. The Rev. Mr. Long, who was sentenced to a month's imprisonment for publishing the *Nil Darpan* drama, was liberated on the 24th August. Mr. Seton Karr had a second time tendered his resignation as a member of the Legislative Council, but the Governor General had declined to accept it. A meeting of the native gentlemen of Calcutta had been held, at which resolutions were passed calling upon the Government to censure Sir Mordaunt Wells, one of the Judges of the Supreme Court, for his denunciations from the bench of the crimes of forgery and perjury. It is stated in Calcutta that the Indian Government are making preparations to despatch troops to New Zealand, should they be required. The graduated scale of retiring allowances for field-officers in the Indian Army, which was received by last mail, has given general satisfaction. In consequence of the explanation of the terms of the Amalgamation Order, published by Sir Charles Wood, the opponents of the amalgamation now regard the Staff Corps as everything that could be desired.

North West Provinces.—The cholera is making terrible ravages in the North West. The 51st King's Own Light Infantry, forming a part of the Meean Meer Brigade, had up to the 28th of August lost its commander Lieut.-Col. Irby, and one man out of every five of its original strength, and the wing of the 94th Regiment one out of every four. The Royal Artillery, Bengal Artillery, and 5th Cavalry had also suffered severely. The local papers calculate that an unexpended balance of 10 lacs of rupees, or 100,000*l.* (less the refund to be made to Government), is in the possession of the Famine Relief Committees.

Punjab.—More cotton has been sown in the Punjab during the last sowing season than in any former year.

Madras.—It is rumoured that 12 regiments of Native Infantry are immediately to be removed from the Madras Army List.

Sumbulpore.—On the recommendation of the local authorities the Government of Bengal has sent out instructions to the Commissioner of this division to issue a proclamation, offering an amnesty or free pardon to some of the few surviving rebels who have been perambulating the jungles there, provided they surrender themselves to the local authorities within a certain date, and give up their leaders and chiefs, who have no claim to mercy.

China.—Accounts have been received from China through St. Petersburg, announcing the death of the Emperor of China.

Japan.—By the latest official communications received in Paris from Japan, the Japanese Government had no share whatever in the recent outrage and attack on the British Legation. By the exertions of the Japanese authorities three of the criminals had already been arrested.

United States.—The New York journals give fuller details of the capture of Lexington. The fight lasted four days, and it was not till the fort was completely surrounded and the garrison exhausted by having been without water for 59 hours, that Colonel Mulligan surrendered. The Confederates, aware of the approach of reinforcements, pushed the siege with great rapidity, availed themselves of a large number of hemp bales, which they rolled before them as they advanced, and thus gained a position in the rear of the Federal garrison, which enabled them to cut off the supply of water, and so forced the fort to capitulate. The value of the gold captured is said to have amounted to nearly a million dollars. According to the Northern accounts the loss of the Confederates was 1400 killed and wounded, while that of the Federals was only 39 killed and 120 wounded. Affairs at Washington and along the lines of the army across the Potomac continue quiet, with the exception of a few unimportant skirmishes. The Confederates were keeping remarkably still, not even showing themselves at any point. It had recently been discovered by the Potomac flotilla that new batteries had been erected by the Confederates at Freestone Point, and at the mouth of the Occoquan Creek on the Lower Potomac, both of which are fortified with rifled cannon. The New York press complain loudly of General Fremont in not having reinforced Lexington, which would have prevented the necessity of capitulating. It is said that the Confederates captured a quarter of a million of dollars in the fort at Lexington, and that they lost least killed in the capture of the town. On the 21st inst. General Lane surprised and routed a body of Confederates at Papensville, near Lexington, capturing their tents, waggons, and supplies. General M'Culloch, with 15,000 men, is within 15 miles of Fort Scott. A deserter from their army states that they have 10,000 men at Freestone Point, 30,000 between there and Manassas, and a large force along the river to Mathias. The force on the Potomac is said to be about 180,000, and the plan of the Confederate general is to cross above and below Washington, simultaneously attacking in front and rear. It is reported that General Fremont will take the field immediately with a large force. Strong fears are entertained that the Confederates will capture General Prentiss's command, as it is reported that his communications have been cut off by General Price. On the morning of the 24th the Federal troops advanced on the town of Romney, in Western Virginia, stormed the town, and compelled the Confederate forces, numbering 1400, to retreat to the mountains, with a loss of 35 killed and a large number wounded. It is reported from Louisville that the Confederate general, Buckner, with about 10,000 troops, is a few miles north of Bowling Green, Kentucky. Drafting for the Federal army has commenced at Iowa, but the Secretary of War has since sent a despatch to the Governor, forbidding the drafting of troops, and expressing his confidence in the patriotism of the people to supply men to carry on the war.—The Confederates were reported from Fortress Monroe to have assembled in force at Washington and Newbern, North Carolina. Commodore Sherman's expedition to the Southern coast is expected to sail within three weeks. The national fast was observed in New York on the 26th inst. with due solemnity, business being unanimously suspended, and all the churches thronged. Mr. J. B. Clay, son of Henry Clay, has been arrested, with 16 of his men, while on his way to join Zollicoffer in Kentucky. Mr. J. C. Breckinridge was with the party, but succeeded in effecting his escape. Messrs. J. W. Wall, of Burlington, New Jersey; G. L. Browne, of Cooperstown, New York; Pierce Butler, of Philadelphia; and Ross Winans, of Baltimore, have been released from Fort Lafayette, through the influence of friends. Their places in the fort have been taken by ex-Governor Morehead, of Kentucky; H. E. Johnston, of Baltimore; and Mr. John Bateman, who had arrived at Portland from Liverpool and Quebec. The Federal Government has issued an order for accommodation to be prepared for 100 political prisoners on George Island, Boston Harbour. It is announced that Secretary Chase's proclamation on the Confiscation Act refers only to property used in aid of the rebellion, and not to deposits of Southern funds. A memorial has been presented to Mr. Seward, requesting the attention of the Government to the letters of Mr. Russell, the *Times* correspondent, as tending "to bring the credit and fame of the Government into disrepute." Mr. Seward, in reply, has refused to interfere in the matter. The Federal Government having accepted the military services of the Count de Paris and the Duke de Chartres, they have joined General M'Clelland's Staff, their names being registered in the army list as Captain Louis Philip Orleans and Captain Robert Orleans. When they received their commissions as captains they stipulated that they were to receive no pay. The *New York Herald* gives the following list of persons from foreign countries who have taken service in the Federal army besides the Orleans princes:—Prince Salm-Salm, Prussia; Count Liebenhoff, Prussia; Lieutenant Oscar Brendeuer, Prussia; Lord Adolphus Vane Tempest, England; Lieut.-Colonel Fitzroy De Courcy, England; Captain Vegesach, Sweden; Captain Holtmann, Sweden; Major Kirk, Canada; Colonel Rankin, Canada, and Major Bausenwein, late Aide-de-Camp to Garibaldi. The Prince de Joinville and suite, accompanied by General M'Clellan, attended a review of the Pennsylvania Volunteers at Washington on the 21st September. The Imperial yacht Jerome Napoleon, with Prince Napoleon and the Princess Clotilde on board, left New York on the 21st September, and arrived in Boston on the following afternoon. On the 26th the Prince sailed from Boston St. John's, and on the 30th took his departure from Newfoundland for France.

Nova Scotia.—The advices from Halifax continue to report the gold discoveries in Nova Scotia, and dwell on the extent and richness of the deposits, and their probable influence on the future of the colony.

Mexico.—The Juarez Government was endeavouring to farm the customs. Marquez had taken Queretaro, and was marching on the capital, where anarchy was at its height. Several of the principal inhabitants of the city of Mexico had been arrested on a charge of having signed addresses demanding a Spanish protectorate. The following is the answer of Earl Russell to the memorial on Mexican affairs lately presented on behalf of the mercantile community:—

"Foreign Office, Oct. 8, 1861.

"Gentlemen,—I have received and considered with the greatest attention the memorial you have addressed to me. You have described truly the evils which afflict Mexico—the robbery and the bloodshed, the impunity of crime, and the absence of any controlling authority in what is called the Government. Her Majesty's Government have a right by treaty, and by all the laws which govern international relations, to require security for the persons and property of British subjects, and the performance of specific engagements on the part of Mexico. Her Majesty's Government will exercise this right. But Her Majesty's Government cannot think it wise to interfere in the internal government of Mexico. You seem to think that a protecting force thrown into Mexico for the simple purpose of maintaining public tranquillity would succeed in attaining that object, and that even a small force might suffice for the purpose. I am sorry to say that I think a very large force would be insufficient to restore public tranquillity. This is a task which the Mexicans must accomplish for themselves. There are very few cases in which foreign interference can be beneficial, and in those few cases there must be a large and numerous party in the country prepared to avail itself of foreign aid. I am concerned to say that I see no proof of the existence of such a party in Mexico. Her Majesty's Government, therefore, must confine their action to the clear and legitimate purpose of demanding from the *de facto* Government of Mexico, however constituted, respect for the persons and property of British subjects, and the fulfilment of recorded obligations. I have the honour to be, gentlemen, your most obedient humble servant, "Russell.

"To Messrs. Rothschild & Sons, Messrs. Finlay, Hodgson, & Co., and others."

Public Addresses.

The Archbishop of Canterbury presided at the recent anniversary of the Canterbury Diocesan Education Society at Maidstone, and made the following remarks on the new Minute of the Committee of Council on Education:—

"The great additional interest which was felt in the cause of education was one of the very greatest importance, and recent circumstances had brought it before them more prominently than usual. It had been, as they were aware, proposed to revise the system of national grants. He did not say whether to some extent such revisal was not necessary, for he did not believe the country would be able to employ the vast number of pupil teachers which had been produced of late years, and he knew instances in which persons trained as pupil teachers had been draughted to other situations. No doubt they had benefited by the education which they had received; but it was not the intention of the State to train them for their own private advantage. In other points also, perhaps, some revision of the regulations was desirable, for those who had attended to some of the publications which had been recently issued would agree with him that the sort of education which had been given to masters of country schools was something more than that which fitted them for the occupation they were to pursue. The character of the examinations was such as to show that their education was carried to an unnecessary extent, but he trusted that the feeling of the country was such that nothing that was really useful would be suffered to be changed. What had transpired during the last few weeks showed that there was a great desire to mitigate what might appear severe in the Minute, and to argue the question on principles of common sense. He was sure that none of them would be sorry to see the whole matter tested and determined on such principles, and he was quite of opinion that great good would ensue to the cause of education from the subject being thoroughly discussed.'

Lord Auckland, Bishop of Bath and Wells, presided at the recent meeting of the Diocesan Societies at Wells, and spoke as follows on the new Minute:—

"You are no doubt all aware that education just now is under difficulties. A minute has been issued by the Committee of Council on Education, which minute in my humble opinion, goes almost to the destruction of elementary schools, and quite to the destruction of training schools. It is necessary to say a few words upon the objectionable parts of that minute. I will take first of all the case of certificated masters. I know very well that some very good friends, in whose judgment I have the greatest possible confidence, say that faith has not been broken with the certificated masters. I own that I cannot go that length. I think faith has been broken with them, and I will give you my reasons why I think so. A schoolmaster, by placing himself in a training school for two years, was much in the same position as a man wishing to enter the army, say the artillery; he gave up every other profession, and worked almost like a slave for two years in order to become a teacher. When he gets a certificate, that certificate has a money value. It has been stated that he has no vested interest in it, because the votes of money for education are votes of money made every year; but the votes are made every year for the army, and no one dreams of mulcting the officers of the army of their incomes. I do maintain that the certificated master has a vested interest, which by the minute is in a great degree taken away. Another objectionable part of the minute is that with reference to infant schools. I really believe that the gentlemen who drew up this minute do not in the least know a child is. I believe they never could have had children of their own, or, if they had, their sons and daughters could never have performed what they wish these poor children to do. The minute groups children into four classes; the first class is the infant-school class, ranging from three years old to seven. We will just see what the Committee of Council requires from a child three years of age before he can get a farthing. The child is to read [illegible] is, in writing, to form on a black board or slate, from dictation, letters, capital and small [illegible] to form on a black board or slate from dictation [illegible] and to name at sight, add, and subtract figures up to [illegible]. I can only say that my children were never able to reach the black board at the age of three years. There is another objection I have to this minute, and it is that the children must leave after they attain the age of 11 years, or if they attend they must pass out of group 4, and the Government payment to them ceases altogether. Now, during many years of my life I worked very hard in an elementary school, and my great object was to induce the parents to let their children remain until they were 14 years of age, because I felt that practically we could not give a child a good education until he had good understanding enough to embrace it. Now, by this minute all payments cease at the age of 11, and there are no pennyworths of learning for children after that age. Taking off all children below five and all children above 11, I contend that it is death to all our infant schools and destruction almost to our elementary schools. For that reason I am hostile to this minute. The greatest objection, however, that I have to the minute is that religious training is almost utterly and totally neglected. The minute of 1846 authorised the inspectors to see that there is religious instruction given. If the clergyman did not like the inspector to examine the children, he or the schoolmaster was to examine the children before the inspector in religious knowledge, and there is a column in the inspector's report to the Council of Education for him to state what the religious learning of a particular school is. How stands the matter now? Religious learning by this code is utterly ignored; there is no mention of it whatever. The only way in which the teacher can get money for his pupils is by the penny paid for a certain period for every child that can read, write, and [illegible] in arithmetic. The consequence will be that the schoolmaster will devote all his energies to teaching the mechanical parts of reading and writing, whilst that which concerns the immortal part of man—that which teaches the child there is a God above to whom he is answerable after death for what he has done in this world, is wholly ignored. Therefore I say this minute ought not to pass. A pamphlet on the subject has been put into my hands this day, and I have marked the following passage:—'The marketable value of secular knowledge is made everything and religious knowledge nil. The school which most neglects religion will have the most time to devote to the subjects which will tend to produce pecuniary results.' That most perfectly expresses my views. There are two or three more objections, I am sorry to say, and a very formidable one is its effects on the poorer schools. It is a great object of the friends of education to start schools in impoverished districts. How does this minute help that? The minute says that no schools shall receive any aid unless they have a certificated teacher, and unless the children can do certain things in reading, writing, and arithmetic. It further goes on to say that no grant will be made to subscriptions for building a school unless it appears to the Committee of Council that those subscriptions are for the [illegible] in the place. That completely rides over and does away with the denominational system, which has kept us all so harmoniously together. How can a new and impoverished district get money to build its schools, get a certificated teacher, at a considerable salary, and get children to attend, so as to get the Government aid? A new district has not the means for securing these things, and must consequently remain a poor and uneducated district. Another objection is the grouping of the children together according to age. It is monstrous to suppose that a quick clever child is to be kept back waiting until some stupid dull lad, his superior in age, makes the same progress that he has made, and yet this will be the effect if the minute is adopted. The working of such a plan would retard the precocious child, lest he should pass group 4 too soon, and so be disqualified, and would force backward children on to things for which they had not been properly grounded and prepared. Both the stupid fellows and the clever fellows are to have nothing more done to them after passing group 4. I have still another objection, and that a most material and important one. The present excellent inspectors go all over the country, are the friends of the clergy, are admitted into their houses, and take a great interest in the schools, and give the clergy advice as to their management. It is impossible that these highly intellectual and literary gentlemen can pass their time in seeing how many children in every school can spell certain words. The effect of the minute will be to do away with these literary inspectors, who are most valuable for the aid they give the clergy, and to put in their place persons who, though well qualified as schoolmasters, are not of the calibre to occupy such positions and institute examinations. In fact, it is the thin end of the wedge to put in schoolmasters and put out the examiners we now have. We should do what we can to prevent this passing into law. As yet it is only a minute, and has never been discussed in Parliament. Memorials against the new project should be sent from all parts of the diocese to the President of the Privy Council, stating as practical men our opinion that the minute is really subversive of education. Such a proceeding will strengthen our hands in working hostilely to this minute."

Lord Robert Montagu, M.P., presided at the recent dinner of the St. Neot's Agricultural Society, and made the following remarks on Government by Party:—

"He was convinced that party feeling and factious spirit was the ruin of the country. It was the bane of the members of the House of Commons, of the constituencies, and of the nation at large. What was its effect on the House of Commons? One party proposed a measure. The other party opposed it, not because it was a bad measure, but because they did not like the other party to have the credit of proposing it. Then, what did the first party do? They did not say, 'This is right—this is necessary—this must be done.' They did not stand to their principles, they did not stand to their colours. They resorted to compromises—the resource of all unsteady minds. Every party had done wrong. There was no party that had ever acted rightly. They were always doing something to gain power—something which could not be justified—something which they dared not tell the country. There were many things kept secret because they knew there was a strong sense of right and wrong in Englishmen that would not justify any Government that acted in a dishonourable manner. But what happened then? Some one found out some secret transaction, and what was the course pursued? Party spirit, faction, divided those who were striving after something good; but faction also united people when they were disposed to do something evil. If something was found out which it was the duty of Englishmen to know and judge—if any one person attempted to bring it before the House and the country, and to appeal to his brother Englishmen, 'Is this right or wrong?' one party agreed with the other that the country must know nothing of the matter, because such knowledge would weaken their power, and they left the House to be counted. That was the effect of party spirit in the House of Commons. And what was its effect on constituencies? In certain constituencies there were parties very much animated by this party spirit.

They slurred over the falsehoods uttered by their party. They justified the evil deeds committed by their party. They invented calumnies to blacken the opposite party. Did not such a course blind their sense of what was right and wrong? Rome itself was mighty until shattered by party spirit, and then it sank under the sceptre of a tyrant, and fell into the arms of a tyrant. Why not app'y these things to our own case? A great political writer once said that "party is the madness of many for the gain of the few." The people were nothing but the dupes of party. Faction lived entirely upon hatred. It was the hatred of the opposite party that kept its members together. Government by party was a thing of modern days. It was an innovation. It meant nothing but tyranny and oligarchy. It was said that it was impossible to have politics without party. Now, he denied that, and believed it impossible to have any true system of politics whilst the passions of party intervened. What was the case in England in former times—in the times of our forefathers? It might be said they were rude, but at least they were honest. What was the course pursued in those days? The King called to his counsels every one who was known for his abilities and distinguished for his integrity. At the Privy Council the peer met the commoner and the merchant, and discussed affairs of State together. They all met in secret council, and whatever their political biases, they gave their united counsel to the Sovereign. The course which they adopted was founded on the union of every political creed, and could not become the war-cry of any party. Such days as these might perhaps never occur again. But on such occasions as the present all might be friends, and might set aside all party rancour and live in harmony."

LORD ENFIELD, M.P., presided over the festival of the South-west Middlesex Agricultural Society on Wednesday at Hounslow, and delivered a speech on Public Affairs, from which the following are extracts:—

"At the close of every session of Parliament they generally had one pleasant and one dark side of the picture—one of what had been done and one of what had been left undone. On the dark side were endless speeches and personal interruptions to disturb the general harmony; and the longer he sat in the House of Commons the more he was impressed with the belief that those who spoke the most seldom were those who were not the least attended to. He would mention, for instance, on financial questions, the hon. member for Huntingdon and the hon. member for Kendal were eagerly and respectfully listened to. If it was a commercial subject, the members for Liverpool, Manchester, and Stockport were listened to with the greatest attention. When the subject of the navy came under discussion there was no member in the House of Commons who was listened to with greater respect than the hon. and gallant member for Devonport. If it was the army the hon. and gallant member for Huntingdon, who had practical experience of the subject upon which he spoke, was always listened to; and therefore he said it was not necessary that a member of that House should be continually on his legs and jumping up on every occasion to secure the attention of the House, or to be esteemed by his constituents out of doors. He had not selected names, but had taken them at random from the list who were always listened to in their place in parliament; and therefore it was not necessary for a man, to do his duties to his constituents, that he should be constantly occupying the time of the House by speaking upon every question. Although the press had done something in respect to these endless speeches, yet there had not been much legislation, and they should take care that a proper and salutary remedy was applied; but what that remedy was to be he was not prepared to say. They had heard of the "collective wisdom" of parliament, and although some people were inclined to carp at the expression, yet this year he was struck with it when it was proposed that the unhappy dissolution of the States of America should come under discussion. It was the united sense of the House of Commons that declared unanimously that so delicate a subject should not come under discussion, which spoke well for the wisdom of parliament and the good sense of its members, whatever their feelings might be in regard to America. And although they had been ostentatiously told that they ought to assimilate the institutions of this country with those of America, springing from the same stock as ourselves, yet there was but one feeling that it was their duty if possible to put an end to such a melancholy, fratricidal, and iniquitous war. It was to him a matter of congratulation that the House of Commons had preserved a discreet silence. At the risk of offending some who were then in that room, he looked with satisfaction at the liberation of Italy, and he hoped by prudent, sensible, and constitutional institutions, that liberty would be consolidated, and that the liberty of England and Italy should be synoymous, because, whatever were their party feelings, whatever were their imperfections, their institutions possessed the elements of happiness, not only to those who enjoyed them, but to those who came within their magic influence. Therefore they might well look to them with pride and satisfaction, for he believed at home they had all the aspects of a united and happy people. They had a parliament that fully and freely represented the people; and although he was not one who would put back the hand of the clock, yet there was not a more zealous Conservative in his respect for their institutions, and although he would go as far as any one to ameliorate them he would do so with a gentle hand. Let them look at America. There liberty had collapsed. He there found liberty under the hands of despotism; and when it was said that wars were entered into by this country as a sort of outdoor relief for the aristocracy, those who made that assertion were ignorant of the genius of this country. He trusted the honour and dignity of this country would never be tarnished, and assured them that he would never be backward in supporting their local interests, or in coming forward whenever the honour or dignity of he country was imperilled.'

THE RIGHT HON. SIR JOHN TROLLOPE, M.P., at the annual meeting of the Lincolnshire Association at Grantham made the following remarks on the Mexican Intervention and general politics:—

"We have a very large and imposing power governed by a being of so mysterious a character that no man can fathom his views, which of itself has given rise to that extraordinary movement which has taken place throughout England, and which has banded a large number of the middle classes together in the Volunteer movement. There is one of the great States of Europe with which we have always been at amity that has had its finest province torn from it—I allude to the great Austrian Empire; and Hungary, another portion of her dominions, is ripe for revolt, ready to throw off the yoke of her Empire. The Poles, too, are struggling in the chains that bind them to a great and powerful empire. We see them, like birds in a cage, struggling to be free, but unhappily struggling in vain. These are matters which must occupy attention, and I think that it is to the credit of the Parliament and of the whole country that in the present juncture of affairs it is doing all it can to strengthen the hands of Government in order to enable it to preserve the position of this country among the nations of the world. But I must say that I viewed with astonishment that after the Government, thus supported, had avowed as its principle non-intervention in foreign countries, after having levied a ninepenny income tax to pay for the Chinese war, which I always thought was commenced on the most frivolous pretences, after having spent many millions of money, the Government are now about to send a fleet for the purpose of interfering in the affairs of Mexico, a country with which, although it may be, and I believe is, the worst governed, and has the most degraded population in the world, we have nothing whatever to do, thus directly ignoring its principle of non-intervention. No doubt, years ago, when that country threw off the yoke of Spain, individuals in England supplied a large sum of money to that Government the accruing interest of which has amounted to a vast sum; but is that a reason why we should interfere and take the revenues of that country to meet the claims of the bondholders in Mexico? I never knew the military and naval force of this country employed to collect bad debts; but that seems to be the case now, for we are going to send forth the forces of England to collect the debts of the bondholders. I think if Parliament had been sitting no such expedition would be sent out for that purpose, for the matter would be too well ventilated. One word more. I cannot say that I can bear out the favourable reports which I have seen in the newspapers respecting the state of Ireland, for on a recent visit to that country I saw that the crops of wheat were next to nothing, the oats and barley miserably bad, and the Potatoes altogether rotten; and there is every reason to believe that that unfortunate country in the coming winter will again experience a scarcity of food. Nor are the accounts from Scotland at all favourable, so that I am sorry that the same congratulations cannot be made with respect to other parts of the United Kingdom as have been made with regard to the harvest in England. I feel however that I am trespassing too long on your attention, and I will therefore conclude by assuring you that at all times my efforts and energies will be used to the utmost for your benefit and advantage."

THE RIGHT HON. SIR JOHN COLERIDGE, at the annual meeting of the Honiton Church Association, made the following remarks on the new Education Minute:—

"I think that in the present year the claims of the National Society stand prominently open to support, and call for any assistance that you may have to give. I will, however, abstain from going into the general merits of the National Society, or the mode in which its affairs are conducted, or the great object which it has in view; but I suppose that every one of you has heard of—I am sure the parochial clergy will go along with me in saying that they have heard of—with some degree of alarm a certain official minute, so called, of the Privy Council, lately promulgated, which there is no doubt will have a very considerable—I feel I may say a very alarming effect upon the spread of education through the country, and upon the operations of the National Society. I don't mean to enter into the particular merits or demerits of that minute. It may be perfectly wise, and founded upon perfectly good principles, for all I know. I am only speaking, according to the simplest mode of calculation, of what will probably be the effect upon different societies and the parochial associations which are assisted by the National Society. I happened this morning to have a letter from the Principal of St. Mark's College, Chelsea. He tells me, as a matter of fact, without reflection one way or the other, that the effect of the minute will be to diminish the grant from the public to his college between 800*l.* and 900*l.* a year. Only consider what the effect of that is upon one institution—upon a college that is at present educating more than 100 masters for parochial schools throughout the country, and that has done and is doing incalculable good. If you look back upon the state of things before the college was in existence, you will see what masters generally were at that time, and their operation upon the community. That is a fair way of looking at it, for you must try a great question in a broad way. If you find that that which was bad, and negligent, and indolent before, is now founded on a well-known principle that is active in its operation, and that the spread of good teaching through the country has very much increased, you are bound in justice to say that it is attributable to an agent that came into force at that time, and that the operation of that agent has tended to produce this good effect. Now, I have given you one instance, and if I should not be troublesome I will give you another, as to the effect of this minute upon the parochial schools throughout the country; and I have the opportunity of stating what a careful, kind, and dispassionate man has said will be the effect upon his school. We find that, instead of receiving in his parish help from the country to the extent of 40*l.* a year, he will for his small school only receive about 9*l.* a year. Now, let us bring to our mind what the effect is on this particular parish. It is probable that in that parish the clergyman is the person to make up all deficiencies in the expense. It constantly happens—and I desire to speak from my personal knowledge of what the clergy generally throughout the country are called upon to do—that, in addition to all his other labours, the country clergyman may be described as being the mainstay of the national school; that is to say, he has to answer for all expenses in carrying on the school; and when the question is put, 'Is your school in debt or not?' and they get the answer 'No,' it is only that the clergyman has paid off the debt. Now, if this is the effect of the minute upon the training college in one case, and on the parochial school in the other, the question is, 'How is this to be met?' By the unaided assistance of the National Society? Not unless we, the public, and the country at large, come forward to assist it more liberally than we have hitherto done. It received, as other societies did, what appeared to be a great shock by the withdrawal of the Queen's letter, which used to produce 9000*l.* a-year, and which was at once taken away. I never complained of that, nor ever shall. Let us stand upon our own merits and upon our own exertions, and let us remember this, that the money which came from the Queen's letter came out of the pockets of the public. Well, is it very much to ask, if if you think the object good, that you should give? The Society for the Propagation of the Gospel in Foreign Parts by vigorous exertions has met its loss, and I think the public ought to take care that the National Society and the other societies should not suffer by the loss of the Queen's letters or the diminished grants of the Privy Council. Let it come in a gracious stream of charity; let it come in the shape of voluntary contributions from ourselves, instead of being taken from us as a portion of our taxes. I do, therefore, hope that by-and-by you will think that the National Society is entitled to very great consideration. I look forward, under the peculiar circumstances of the case, to the new code of law which has been promulgated by the Government having this serious and distressing effect upon us. Will you forgive me—as reference has been made to me in the report—in saying that I took part in framing what is called the "Education Report?" I was one of the Commissioners, and I have heard it put forward that, with the view to carry out the recommendations of their report, this step with respect to the minute has been taken. I think that this is most unfair. Those who take the trouble to read the report will find several recommendations, all of which will go to form a part of the whole. It is therefore unfair to take one and omit the others, and then say that you are acting on the recommendations of the Commissioners. I disclaim it entirely. I, for one, am ready to stand by them—subject, of course, to having our errors pointed out. We do not suppose that we are infallible, or that it has been impossible to make mistakes. This I say, "Don't attribute to the Education Commissioners anything that you do. If you take one part, don't omit the other [illegible] consideration."

MR. LINDSAY, M.P., at Sunderland last [illegible] as follows on Admiralty Management and the [illegible] Reserve:—

"The expenditure upon the army and navy [illegible] two years he estimated at sixty-one millions [illegible] had spent upon the army and navy alone, during a [illegible] peace, more than the value of all the ships which the [illegible] maritime nation and all her colonial possessions [illegible] had been importing corn to an enormous extent [illegible] two years; yet they had spent more money [illegible] and navy than the value of all the corn they had [illegible] the same period, and of all the wine, and all [illegible] the provisions, and all the tobacco put together. [illegible] ever, must be an end put to this. If there had been [illegible] sity for it then the people of this country might [illegible] objected to it. With regard to economy and [illegible] asked what had the government of this country [illegible] the people value for their money? Just before [illegible] rose, besides the vote of 12,000,500*l*, they [illegible] 250,000*l.*, being the instalment of 2,000,000*l.* [illegible] six more Warriors. He said, at all hazards we [illegible] our maritime superiority. But it was a [illegible] that as we spent, France spent—as France [illegible] spent; and when we, perhaps, had got 10 Warriors, [illegible] might have got 75, and the relative position [illegible] was exactly the same as it was then and was now. [illegible] the value of our Foreign Office, or our ambassadors abroad, [illegible] they did not endeavour to come to some understanding [illegible] put a stop to that tomfoolery? But was it [illegible] France was marching onwards at such rates [illegible] intentions of invading England? Why, it was [illegible] a cry got up to tax them for the benefit of others. [illegible] were spending 13,000,000*l.* on our army and navy, the expen-diture of France upon her army and navy, in [illegible] did not exceed 5,000,000*l.* How then, he asked, [illegible] be marching ahead of us in maritime superiority [illegible] spending more than double what she was doing? [illegible] national questions, no government had given the [illegible] amount of attention. The terrible civil war in America [illegible] delayed the settlement of maritime affairs between [illegible] country and the States, but he had no [illegible] order was restored, the matters discussed during [illegible] visit to America would be satisfactorily dealt [illegible] If cotton could not be got down from the plantations [illegible] depots before the rainy season came on they would [illegible] in England next season, and until the blockade was [illegible] cotton certainly could not leave the plantations. [illegible] would be some time before cotton was received from [illegible] Jamaica, and elsewhere, he considered it the [illegible] Government to endeavour to induce the Federal Government in the cause of humanity to remove the blockade. [illegible] ing the bold stand made by the Confederates, and the [illegible] of the South, he thought it almost time that the Governments of England and France thought of recognising the [illegible] ence of so numerous a body of people. It was evident the North was not sincerely anxious to abolish slavery, [illegible] would never be removed by a servile war. The separation [illegible] North and South was much more likely to accomplish [illegible] object. With regard to the Naval Reserve his heart [illegible] within him when he saw so many fine fellows, after a [illegible] drill of a month, work the guns so well and systematically. Our great strength had ever been ships-of-war, and [illegible] defence British seamen. He did not know how [illegible] more effectually or more economically carry out any [illegible] than that of the Naval Reserve. It was unlike the old scheme of a system of bounties, and, he was sorry to say, of drunkenness and debauchery. Soldiers required training [illegible] long series of years, but, the Reserve required [illegible] training, for the simple reason that no [illegible] could surpass them, for the hardy men who manned [illegible] colliers and Baltic ships were superior to any seamen [illegible] the world. He meant no disparagement to their friends [illegible] the water. The last men he saw working guns were Frenchmen, but the men of the Reserve went about their work [illegible] such a different style that he believed the old [illegible] "One British tar is as good as three Frenchmen," [illegible] true. It struck him that day that if ever the necessity [illegible] arise—though his prayer was that the two nations [illegible] continue on friendly terms—he would back one of the [illegible] saw below against any three Frenchmen in the [illegible] handling of a gun. The fact was, it was natural [illegible] Englishmen in their boyhood turned as naturally to the [illegible] and sail as the French to their drums and fifes. [illegible] great folly for France to attempt to become a great [illegible] Power as it would be for us to become a great [illegible] Power. We were essentially a seafaring people. [illegible] so from generation to generation, and would continue [illegible] our strength had ever been on the water, and our [illegible] must ever be on it. Let each man, then, go [illegible] shipmates to join. They now numbered nearly [illegible] port; he should like to see them number 2000. [illegible] took the lead in the ports of the world with their [illegible] in the ports of Great Britain none stood so high as the [illegible] he had the honour to represent in Parliament. [illegible] take an opportunity to mention in Parliament that [illegible] saw guns so scientifically handled as he had that day [illegible] that while the country had such men as they [illegible] of a foreign foe."

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: [illegible] sols closed at $92\frac{3}{8}$ to $\frac{3}{4}$ for Money, and $92\frac{7}{8}$ to 93 for the 7th November; Bank Stock, 231 to 233, ex div.; [illegible] duced and New Three per Cents., $90\frac{5}{8}$ to $\frac{3}{4}$; India Five per Cent. Stock, $103\frac{5}{8}$ to $\frac{3}{4}$; Ditto for Acct. [illegible] Ditto Scrip, $103\frac{5}{8}$; Ditto Bonds, 14*s.* to [illegible] Five and a Half per Cent. Enfaced Rupee Paper, [illegible] Exchequer Bills, March, 3*s.* prem. to par; Ditto [illegible] 9*s.* to 6*s.* prem.—FOREIGN: Chilian Four and a Half per Cents., 85; Equador New Consolidated, $15\frac{1}{4}$; Mexican Three per Cents., for Acct., 26 to $26\frac{1}{4}$; Russian Three per Cents., 1859, $61\frac{3}{8}$; Turkish Six per Cents., 1854, for Acct., $79\frac{1}{2}$ to 80 ex div.; Ditto, 1858, for Acct., $68\frac{1}{8}$ to 68.

Gazette of the Week.

TUESDAY — BANKRUPTS—R. CASE, Bethnal Green Road, [illegible] Draper—H. [illegible] W. CLOUGH, Birkenhead, Cheshire, Tailor and Draper—[illegible] bridge Wells, Tailor and Clothier—I. N. DAVIS, [illegible] W. ELLISDON, Bradford, Stuff Merchant—T. HOWARD, [illegible] shire, Earthenware Dealer—W. O. HULBERT, Gloucester, [illegible] Draper — H. W. JONES, Wrexham, Denbighshire, Draper — [illegible] MARRIOTT, Swaffham, Norfolk, Tailor—E. NELSON, Birmingham, [illegible] Dealer—J. H. PAICE, Fenchurch Street, Hosier and Shirt [illegible] TAYLOR, Manchester, Grocer and Tea Dealer—W. E. [illegible] Hill, Wine Broker—B. J. WEBBER, Newton Abbot, Devonshire, [illegible] and Engineer.

BANKRUPTCY — ANNULLED — W. RONALD, Manchester, [illegible] houseman.

[illegible]SERATIONS.—W. DALLAS, Newton of Cawdor, [illegible]—P. GARDNER and A. LINDSAY, Stirling, Mill-[illegible], Clothier—J. NICOLSON, Skye, Inverness-[illegible], Dumbarton, Joiner.

[illegible]—W. BOND, Bristol, Victualler, Engineer, and [illegible] Brighton, Builder—W. H. CULVERHOUSE, [illegible] Manufacturing Joiner—F. JUDD, Charing Cross, [illegible] Russell, Denbighshire, Brewer and Maltster—[illegible] Lane, City, Warehouseman—R. WADE, Devon-[illegible] Hill, Grocer and Tea Dealer.

[illegible] ANNULLED—E. W. CANNON, Croydon, Auctioneer.

Bank of England.

ISSUE DEPARTMENT.

[illegible]	£28,027,770	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion ..	13,377,770
		Silver Bullion	—
	£28,027,770		£28,027,770

BANKING DEPARTMENT.

[illegible]	£14,553,000	Government Securities (including Dead Weight Annuity) ..	£10,733,123
[illegible]	3,814,693	Other Securities	17,440,363
[illegible]		Notes	7,095,885
[illegible]	4,893,914	Gold and Silver Coin ..	763,749
[illegible]	12,028,835		
[illegible] and other Bills	742,678		
	£36,033,120		£36,033,120

[illegible] 1861. W. MILLER, Deputy Cashier.

Metropolis and its Vicinity.

ELECTION OF LORD MAYOR.—A Common Hall of [illegible] Livery of the City of London was held on Tuesday [illegible] Guildhall to receive the official declaration of the [illegible] for the election of Lord Mayor for the ensuing [illegible]. After the usual proclamation, the Sheriffs [announ]ced that the number of votes taken was as [follows]:—The Lord Mayor, 1623; Alderman Sir P. Laurie, 1168; Alderman Sir H. Muggeridge, 573; Alderman Hale, 9; Alderman Mechi, 3. The Sheriffs [there]fore declared that the Lord Mayor and Sir Peter Laurie had been duly elected to be returned to the [Court] of Aldermen for them to choose a fit and able [person] to be Lord Mayor for the year ensuing. The [Sheriffs] then left the hall to make their report to the Aldermen, and after a brief delay the Lord Mayor and [Aldermen], attended by the Sheriffs and the Recorder, [and other] officers of the Corporation, entered the hall, [and the] Recorder announced that the choice of the [Aldermen] had fallen upon Alderman Cubitt, the present Lord Mayor. The Lord Mayor then came forward amid [loud] cheers, and returned thanks for his re-election, [assuring] the Livery that he would exert himself during the year of the coming mayoralty to fulfil their expectations, to uphold the ancient dignity of the office, to [preserve] intact *the valuable privileges* of all his fellow-[citizens], and to justify to public opinion the great favour with which they had been pleased to regard him, and the great honour they had done him in again [electing] him to be Lord Mayor of London. Mr. [illegible] then presented a protest against the election, [on the] ground that it was unjust to Sir H. Muggeridge, and contrary to law and to the charter of Edward II. A letter was read from Sir H. Muggeridge, thanking his friends for their support, and, while admitting his [disap]pointment, stating that he could scarcely have [hoped] for any other result when he looked to his [opp]onent, whose conduct had been beyond all praise. At the same time he expressed his hope that next year he might again appear before them with every reasonable expectation of being elected.

INSPECTION OF THE MAIN DRAINAGE WORKS.—On Tuesday the Metropolitan Board of Works invited a large number of official persons and the editors of the [pri]ncipal papers to inspect the progress of their works; and on Wednesday about 1500 vestrymen were invited [to in]spect them in the same manner. The company on Tuesday met at the office of the Board in Spring [Gardens] at 10 o'clock, and proceeded thence in three omnibuses to the Main Drainage Works at Old Ford, Bow. The works had been lighted up for the occasion, and the party on their arrival proceeded along the high-[level] sewer for several hundred yards, until they arrived at the outfall of the sewerage of the northern districts, which here falls into a temporary sewer for conveyance [to] the river Lea. After a thorough inspection of this portion of the works, the party proceeded to Abbey Mills, where the low level sewers join the others, and where there will be a pumping establishment, by which the sewerage from the low will be raised to the high level and carried on [to] the final outfall. They next went along the line to Barking Creek, where will be the immense reservoir [des]tined to hold the sewage until the time arrives for its distribution into the Thames. Having carefully [exam]ined the arrangements at this point, which is the [term]ination of the northern system, the party crossed the river in a steamer and landed at the south outfall, [on] Plumstead Marshes. Following the course of the [sewer] to Woolwich the visitors descended at Beresford [Squ]are into a circular tunnel, which is completed for the distance of a mile, where Mr. Thwaites, the chair-[man], laid the keystone of the last arch amid the cheers of his colleagues. The party then proceeded, in vehicles provided for the purpose, to the pumping station at Deptford Creek, where the low joins the high-level [sou]thern sewerage, and where a considerable time was [spe]nt in examining the foundations, composed of eight [lay]ers of bricks, for the engine-houses, and the works [in] progress for the junction. This closed the business of the day. The works inspected on this occasion form part of Mr. Bazalgette's great drainage scheme, and were sufficient to show that the scheme itself is one of unexampled magnitude. It provides for the drainage of a total area of 101 square miles, involving the construction of more than 50 miles of intercepting sewers, nearly all underground; of upwards of 12 miles of colossal outfall sewers, and of a large number of bridges, pumping-stations, and reservoirs, themselves works of no ordinary kind. The original estimate was about 3,000,000*l.*, divided between the northern and southern districts in the proportion of two to one, and the construction of the works was expected to occupy about five years. It is satisfactory to know that in both respects the estimates will, in all likelihood, be realised. Notwithstanding many adverse and unforeseen circumstances, such as the rise in the price of bricks and other building materials, the continued and violent rains of last year, and the unsettled state of the labour market—not to mention some considerable difficulties of a purely physical nature encountered during the progress of the undertaking—it is said that the works will not cost more than the estimated sum; and that they will be completed within the stipulated period. They were commenced in the beginning of 1859, and Mr. Bazalgette believes they will be finished in less than two years from the present time. About 1,000,000*l.*, or one-third of the total estimated cost, has already been expended, and contracts to the amount of the remaining 2,000,000*l.* are now, or will soon be, in course of execution. On the north side of the Thames, the high-level sewer has been completed for some time, and is now in partial operation; a little army of navvies and bricklayers is employed on the middle-level sewer at Old Ford, in the Bayswater Road, and under Oxford Street; the Ranelagh storm overflow, across Hyde Park and Kensington Gardens, will soon be finished; the Acton line of sewer in the western division is already accomplished, and considerable progress has been made with the northern outfall sewer from Old Ford to Barking. On the south side, between six and seven miles of the high-level sewer have been constructed; a beginning has been made with the low-level sewer at Deptford, while the southern outfall sewer, including a deep tunnel one mile long under Woolwich, has been completed from Halfway Reach up as far as Greenwich Lower Road. At the present moment there are no fewer than 6000 men engaged on the works, and if we add to these the persons employed in making bricks, quarrying stones, and otherwise producing materials for the undertaking, in all probability the total number will not fall short of 10,000. The following is a brief sketch of the entire scheme:—

"In preparing his plans Mr. Bazalgette had two great objects in view—to relieve the low lying districts from floods and from the evils incident to a tide locked drainage, and to purify the Thames to the greatest practicable extent. Another important object, which he kept steadily in sight, was to provide for the conveyance of the sewage to the final outfall by gravitation, making the drainage self-acting, and avoiding as far as possible the use of artificial means. Accordingly, he has divided the north side of the river into three distinct drainage areas, called respectively the high level area, the middle-level area, and the low-level area. Each district is separated from the one below it by a gigantic conduit, which, running generally from west to east, and cutting all existing sewers at right angles, intercepts the sewage in its flow to the Thames, and carries it away far below the city. The high level sewer is 9 miles in length, and its diameter, which commences at 4 ft., is gradually increased to 12 ft., as the intercepted waters require a wider channel. The average depth below ground is from 30 ft. to 50 ft., and the inclination is such as to secure a velocity of about 3 miles an hour, which is considered by the best authorities as more than sufficient to make the drain self-cleansing. The head of the sewer is at Hampstead, whence it runs due east through the fields to Stoke Newington, intercepting both the Fleet and the Hackney Brook, and it then proceeds in a south-easterly direction to Old Ford on the River Lea. At that point, after draining an area of 10 square miles, it forms a junction with the middle-level sewer. The latter extends from Kensal Green, passing along the Uxbridge Road and Oxford Street, and thence through Clerkenwell and Bethnal Green to Old Ford, and with its branches is upwards of 12 miles in length, draining an area of 17 square miles. It varies in size from 4ft. to 12 ft. diameter, its average depth is from 50ft. to 60ft., and the rate of inclination ranges from 2ft. to 18ft. per mile. It is almost all tunnelled. From Old Ford the combined sewage of the high and middle level areas is carried downward in a conduit to Abbey Mills, which is the point of junction with the low-level sewer. The precise course of the low-level sewer has not yet been determined upon, but the probability is that along a portion of its length the main drain will be constructed in connection with the projected embankment from Westminster to Blackfriars. In any case it will follow as closely as possible the course of the river from Chelsea to Blackwall, and will then be turned towards the north-east in a direct line to Abbey Mills. There its waters, collected from an area of 11 square miles, will be raised by pumping to the upper levels, and from that point the whole sewage of London north of the Thames, will flow by gravitation through three parallel drains, each 12 feet in diameter, to the final outfall at Barking Creek, about 14 miles below London Bridge. This outfall sewer, unlike the rest of the works, is almost entirely above ground. A more costly or a more difficult work of the kind has never tried the skill and ingenuity of engineer or contractor. The sewer crosses by iron aqueducts no fewer than seven branches of the Lea, and passes over and under several railways. It is constructed entirely of brick, except over the Lea and its branches, where the sewage is carried through iron pipes. Eventually the outfall sewer will terminate in a reservoir at Barking Creek, which will contain 7,000,000 cubic feet of sewage, far more than the average amount which accumulates in the eight hours during which the outlet will remain closed from the river, and it will be covered with brick arches and earth in order to prevent the escape of the noxious gases. From the bottom of the reservoir several outfall pipes will pass along the bed of the river to the centre of the stream. These pipes will be opened near high water, and the whole mass let off into the Thames at a depth of 60 feet below the surface. It is expected that the sewage, thus discharged in the two hours after high tide, will not only be purified and diluted by a volume of water twenty times greater than that which now acts upon it at London Bridge, but will be swept away into salt water before the tide has ebbed. At London Bridge the proportion of sewage to river water is as 1 to 50; at Barking Creek it will be as 1 to 1000, or, in other words, there will be one drop of sewage to every pailful of clear water. In this scheme adequate provision has been made for storms and sudden falls of rain. Under ordinary circumstances the rainwater will be carried off mixed with the sewage by the intercepting drains, but when it rises above a certain height the surplus will run into the existing sewers, which will thus act as safety valves, and so find its way to the river. A separate arrangement has been made for what is called the western division of the metropolis. The sewage of a district of 21 square miles, including Acton, Hammersmith, Chiswick, and Fulham, will be conveyed by independent lines, or drains, to a point on the Thames near Chelsea, and, after purification, will there be discharged into the river. On the south side of the Thames works of a similar character are in rapid progress. The only difference is that the southern district has been divided into two areas of drainage, a high-level area and a low-level area, instead of three; but, on the other hand, what is called the high-level sewer consists of two lines—one from Clapham to New Cross, and the other from Dulwich to New Cross. From that point they are carried in the same trench, but at different levels, to Deptford. Here they will discharge their storm waters through two sewers, each 11 feet in diameter, and the sewage will be conveyed by four lines of iron pipes under the Creek into the outfall sewer by gravitation. The high-level sewer drains an area of 20 square miles, embracing Clapham, Dulwich, Camberwell, and Peckham; and it has an inclination varying from nine to 12 feet per mile. The low-level sewer takes its rise near Wandsworth [illegible]; it runs through Battersea Fields to the Brixton Road, and so on through the low-level districts to Deptford, where its waters will be raised to the high-level sewer. It drains an area of 22 square miles. From the pumping station at Deptford the entire sewage of London south of the Thames will be carried in a conduit of about 12 feet diameter by Greenwich to Woolwich, and thence over the Erith marshes to Halfway Reach, where it will be discharged into the river. This conduit is entirely underground, and has an inclination of 2 feet per mile. In carrying it through the Plumstead marshes the contractor encountered a formidable and unexpected difficulty in the vast quantities of water which deluged the works, and the flow of which appeared to be regulated by the rise and fall of the tide. With the help of four 20-horse steam-engines, the bricklayers were able to maintain their ground, and so the work proceeded without interruption, though at a considerable loss to the contractor. But the most important and interesting portion of the southern outfall sewer is the tunnel underneath Woolwich. It is upwards of a mile in length, and contains 6,352,230 bricks, which, if laid end to end, would extend 1000 miles. It is 11 feet 6 inches in diameter, has an inclination of 2 feet per mile, and is carried through the Woolwich chalk at a depth of between 60 and 70 feet below the surface. It was worked with little inconvenience to the public from four shafts, and so accurately had the plans been drawn that when the different bodies of workmen approached one another the deviation was found not to exceed a quarter of an inch."

THE GREAT EASTERN anchored at Milford on Sunday morning, and will be forthwith placed on the "gridiron" for the necessary repairs. She made an average speed of 10½ knots per hour with her screw from Queenstown, and steered extremely well. It is supposed she will not go to sea again this winter. The marine department of the Board of Trade have called upon the owners and commander of the vessel to forward, under the requirements of the Mercantile Marine Act, an official account of the recent casualty and amount of damage occasioned, prior to directing a local inquiry into all the circumstances by Captain Robertson, the head of the department, in conjunction with the Local Marine Board at Cork. It is reported in naval circles that the Emperor of the French has made overtures for the purchase of the ship as a transport; and Captain de Roussell, of the Imperial navy, has been sent to England to inspect her.

CAUSES OF PAUPERISM.—A return has just been issued by the Poor Law Board respecting adult paupers (more than 16 years old) who have been for above five years constant inmates of the workhouses of England and Wales. The object of the return is to show why these persons are unable to maintain themselves, and are obliged to make the workhouse their permanent home. The period taken is the last half of the year 1859, at which time the number of these persons was 14,216, nearly 21 per cent. of the entire number of indoor paupers. The reasons assigned are, in the instance of 5932, old age and infirmity; 4989 mental disease; 924, bodily disease; 1619, bodily defects, such as blindness and lameness; 182, moral defects, as unchastity and intemperance; 25, desertion by husband; 45, orphanage; 67, widowhood; 54, want of work; 4, laziness; 375, no cause assigned. 31 had been workhouse inmates for upwards of half a century; 10 of these were stated to be idiots, 6 of weak mind, 5 imbecile, 1 insane, 1 deaf and dumb, 4 blind, 3 infirm, and 1 lame. An attempt was made to ascertain how many had been brought up in a district or workhouse school, but the former term was misunderstood, and all that can be made out is that of 11,279 of these paupers 552 were brought up in workhouse schools, and 10,727 not.

NEW CHURCHES.—On Monday week the Bishop of London consecrated the new church of St. Michael, which has been erected in Market Street, Paddington, through the exertions of the Rev. Dr. Goulburn, incumbent of Paddington, and Mr. R. Gibbs, a city merchant. The church consists of nave and side aisles, with a few seats behind the chancel on the south side, the organ being on the north. The chancel is raised four steps above the nave, and the communion table again rises three steps. There is a marble reredos, with a large white cross, sedilia, and credence tables. The seats are all free, and are all to be appropriated for the use of the poorer parishioners.—The new church which has lately been erected on the site of the notorious "Thieves' Kitchen" in Gray's-inn Lane, at the sole expense of Mr. J. G. Hubbard, M.P., is nearly completed, and will be consecrated by the Bishop of London in the course of a few weeks. It is a splendid building, with a Narthex

or Galilee porch, and many of its details partake of the earliest and best forms of ecclesiastical architecture.

THE TURNER GALLERY.—The collection of pictures and works of art bequeathed to the nation by Mr. Turner, R.A., have been removed from South Kensington to the National Gallery, in Trafalgar Square. The collection consists of about 125 pictures, exclusive of water-colour drawings and unfinished studies, of which there is a large number. Alterations are now making in the Gallery with the view of forming a permanent depository for the reception and exhibition of the pictures, in accordance with the will of the testator.

THE TEMPLE.—On Sunday morning the Temple church, which has been closed since the commencement of the long vacation, was reopened for Divine service. The new range of chambers, built on the site of the row of houses which formed the eastern side of Temple Lane, and included the chamber of Oliver Goldsmith, is now completed. The nine houses opposite Dr. Johnson's buildings have been pulled down, and, facing the north wall of the church, a large open terrace has been retained, opening a good north-west view of the church. A wheel window, of rare beauty, has also been exposed to view over the church porch.

SPECIAL RELIGIOUS SERVICES.—On Sunday the Church of England clergy and the Dissenters commenced their autumnal and winter campaign of religious services in theatres and halls, for the benefit of the poorer classes. The service in St. James's Hall was conducted by the Rev. William Landells, minister of the Baptist Church, Regent's Park. The Standard, Sadler's Wells, and Pavilion Theatres were opened in the evening, and were densely crowded. The committee intend instituting a series of tent services as soon as their funds will admit their doing so.

BRITISH MUSEUM LIBRARY.—A re-arrangement and transcription of the catalogues of the library of the Museum, which has been long under consideration, is to be commenced forthwith. The catalogues now comprise—1. The King's Catalogue, in five volumes; 2. The Grenville Catalogue, in seven volumes; 3. The Old interleaved catalogue, in 82 volumes, partly printed and partly in manuscript; 4. Mr. Panizzi's Catalogue, in 300 volumes. A staff of clerks has been appointed to transcribe the contents of the four catalogues into one general catalogue, alphabetically arranged. The transcript to be made at once in triplicate, and to be placed in the library from time to time as completed.

EXTRAORDINARY CHESS MATCH.—On Monday afternoon a chess match took place at the Cigar Divan, in the Strand, in which Mr. Poulson, a German gentleman 24 years of age, played blindfolded against 10 antagonists of high reputation, carrying on a game with each simultaneously. The match commenced at 2 o'clock in the afternoon, and terminated at 20 minutes to 2 on Tuesday morning, when Mr. Burden was declared the victor. The games lasted continuously and without break for more than 12 hours.

THE COLONNADE, CLARE MARKET.—About a year since, an undertaking which had several objects of a benevolent and philanthropic character was commenced in Clare Market. A range of small houses at the back of the market was fitted up and applied to various uses, the cost of which was defrayed by subscription, to which Mr. H. Hoare and Miss Burdett Coutts were munificent contributors. The report of the first year's proceedings has just been published. It states that the home for destitute boys, for whom employment is obtained, has been of great use, several lads having been sent from it to sea, and others, now resident in the home, are in permanent situations. An effort is about to be made to extend the benefits of the home to six boys in addition to the 12 present inmates. During the winter a soup kitchen was established, which was self supporting until the intense frost set in, when the soup was given away in large quantities. The medical comfort, beef tea, was also provided for the benefit of the sick poor. A club for working men, well supplied with newspapers and periodicals, chess, &c., together with a smoking room, has been joined by more than 200 members during the past year, and extended accommodation has become necessary. Educational classes have been formed in connexion with the club, and Mr. Ruskin has kindly furnished the drawing class with models and materials. A Youth's Club has also been formed, and has proved equally successful. A night school for lads and young men, and a Bible class for women, have been well attended. A home for needle women, which is self-supporting, notwithstanding the almost nominal charge imposed upon its inmates, has been so well appreciated by the class of poor women for whom it was intended that it has always been full, and it is now in contemplation to increase the accommodation, in order to admit some who are now excluded from want of room. A laundry is about to be established in which girls will be instructed in that necessary domestic operation. The whole cost for these varied undertakings for the next year, to be met by subscriptions, is estimated at 150*l*., and in future years that amount is expected to be much reduced.

THE CORONERSHIP OF WEST MIDDLESEX.—Mr. Wakley, whose health has recently been in an unsatisfactory state, is about to leave England for Madeira, and Mr. Humphreys, the City coroner, will assist the Deputy Coroner in discharging the duties of the office.

THE CONDEMNED CULPRITS.—Great exertions have been made to obtain a respite for William Malony and William Cogan, who were condemned to death at the recent session of the Central Criminal Court for the murder of their wives. In the case of Malony an application was made on Saturday to the magistrate at the Westminster Police Court for a warrant against Saunders, the principal witness, on the charge of perjury. The magistrate refused to interfere, but recommended an immediate application to the Secretary of State. An application was accordingly made, and on Wednesday a respite during her Majesty's pleasure was sent to Newgate for Malony. In the case of Cogan, the application was founded on the supposition that the wife committed suicide, as stated by the prisoner at the trial; but the evidence was considered insufficient to disturb the sentence, and the law therefore will take its course.

COMMITTAL OF A SURGEON FOR MURDER.—On Tuesday an inquest was held at Bethnal Green on a married woman called Eliza Garrett, aged 34 years. The evidence was of a very painful character, and went to show that instruments had been used on the deceased by Mr. Benjamin Vale, surgeon, of Henry Street, Limehouse Fields, with a view to procure abortion. Her husband was examined at considerable length, and admitted that he was aware of the practice to which his wife had resorted; and a lodger stated that deceased had told him that she had been to Mr. Vale, through the interference of her husband. The jury unanimously returned a verdict of Wilful Murder against Benjamin Vale and William Garrett, and they were committed to Newgate for trial.

THIRTY PERSONS INJURED BY A MAD BULL.—On Tuesday evening a mad bull escaped from the yard of the Nine Elms station of the South-Western Railway, and ran across the bridge and through the streets of Little Chelsea, where he tossed, gored, or trampled on no less than 30 men, women, and childen, some of whom were so severely wounded that they are at present in a precarious condition, though none of the cases are expected to prove fatal. Several butchers and others, numbering about 300 persons, armed with pole-axes, cleavers, and other weapons, endeavoured to stop the animal, and ultimately hemmed him in in Park Road, Little Chelsea, where they secured him by ropes fastened to the railing, but he tore down the rails and escaped into the fields, and it was not until past 9 o'clock that he was slaughtered by a man in the employ of Mr. Gardiner, butcher, of Chelsea, by means of a pole-axe.

THE ALLEGED MURDER ON THE HIGH SEAS.—On Tuesday William Henry Hawkins, the black steward of the American ship Lammergier, was brought before the magistrate at Bow Street under a warrant issued by the Secretary of State under the Extradition Act, charged with the murder of his captain on the high seas on Sunday the 29th ult. The chief clerk of the American Consulate attended to conduct the case. After hearing the evidence the magistrate ordered him to be given up for the purpose of being taken to the United States to be tried there. He was then committed to the House of Detention, where he will be kept till the American authorities remove him to New York. On Thursday the second mate was taken before the magistrate, charged by the American Consul with having stolen the watch, money, and clothes of the murdered captain. He was remanded, and will probably be tried in this country, the property having been stolen in English waters.

THE PUBLIC HEALTH.—The Registrar-General's Weekly Return states that in the week that ended Saturday, October 5, 1147 deaths were registered in London. The average number for the corresponding weeks in 10 previous years, corrected for increase of population, was 1167; but if 411 deaths from cholera in October, 1854 are excluded from the calculation, it appears that the rate of mortality was not below the average. During the week the births of 923 boys and 895 girls, in all 1818 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1506.

Provincial.

ABERGAVENNY.—A meeting of proprietors of fisheries on the river Usk was recently held in this town for the purpose of adopting such measures as may insure the efficient working of the new Salmon Fisheries Bill in that river. The chair was taken by Lord Llanover, and among the proprietors of fisheries present were the Hon. G. C. Morgan, M.P., Major Herbert, Captain Parkinson, Mr. W. R. Stretton, Mr. J. Lloyd, &c. The chairman, in stating the object of the meeting, expressed an opinion that the new Act, although it did not go far enough to give all that was required to protect the fisheries, contained many very useful provisions, and was a step in the right direction. He therefore recommended that they should not at present seek any additional powers, but that they should give the new Act a fair trial. There was no doubt that one great want in it was that no funds were provided for enforcing its provisions; and, that being the case, he suggested that all the fishery proprietors on the Usk, to make the Act really operative, should pay a rate at so much per mile of river into a common fund for the purposes of preservation. He then called the attention of the meeting to the existence of serious injuries to the river fisheries. The cinders of the Clydack Ironworks were regularly "tipped" into the bed of the stream, and the refuse of the Abergavenny Gasworks was allowed to flow in[illegible] companies was daily incurring [illegible] acts. The following resolution [illegible] discussion, proposed by the H[illegible], seconded by Mr. W. R. Stret[illegible], adopted:—"That all owners of [illegible] Usk be invited to agree to pay a [illegible] mile of river frontage for the purp[illegible] provisions of the Fisheries Act, [illegible] promoting the improvement of [illegible] tributaries." On the motion of M[illegible] mittee was appointed to carry the [illegible]

BERWICK.—An extraordinary [illegible] within the last few days, made [illegible] Berwick Bay, and have been fou[illegible] near the shore that they have [illegible] warn all bathers of the great da[illegible] attempting to bathe.

BILSTON.—The adjourned inquest [illegible] resumed on Tuesday, when evide[illegible] show that six of the prisoners we[illegible] vaults of a public house, in the [illegible] which Mr. Bagott was drinking [illegible] murder; that three of them were [illegible] deceased's premises, and that on [illegible] to the house where they were app[illegible] was carrying a bundle of clothes [illegible] identified as deceased's property. [illegible] deposed that while examining the [illegible] of deceased's premises he perceived [illegible] a man's knee that the trousers whi[illegible] been repaired by a piece of cordur[illegible] the garment. He remarked in the cel[illegible] would be found so repaired. He was [illegible] a pair of trousers that had been take[illegible] *alias* Jones, and those trousers bore [illegible] which he referred. The surgeon w[illegible] on the discovery of the murder was [illegible] great length. He stated that death wa[illegible] with the poker on the throat, for th[illegible] bruised, but that deceased was "bur[illegible]" by pressure on the mouth and chest. [illegible] been held forcibly down, and produced [illegible] After a sitting of eight hours the inqu[illegible] journed. On Wednesday morning [illegible] engaged for about three hours in pr[illegible] confession of four of the prisoners. T[illegible] was made by Maddocks, who was [illegible] said, by Bills, Webb, and Lilley. The [illegible] by Maddocks occupied 18 brief sheets, [illegible] trates declined to allow it to be publi[illegible] produced in public court. The subst[illegible] ment is understood to be that Mullig[illegible] only entered deceased's house; that Maddock[illegible] the house for them, and that the other [illegible] had nothing to do with the [illegible] be the purport of the con[illegible] tally with the statements of [illegible] nesses, and denies the statement that [illegible] three men upon the premises on the [illegible] murder, of which, however, there [illegible] evidence. The solicitors of the pris[illegible] appeared in Court and asked to [illegible] complaining that they were not al[illegible] when the confession was made, and [illegible] cussion, Mr. Sheldon, who said that [illegible] adviser of Maddocks, was called into the [illegible] retiring-room, where he was shown [illegible] Maddocks had just made, alleging that [illegible] had spoken to him in the dock, recom[illegible] deny the accuracy of the first statement [illegible] that he had not employed Mr. Shel[illegible] and did not wish to be defended [illegible] magistrates therefore declined to let M[illegible] the statement.

CHELTENHAM.—On Tuesday evening [illegible] seven young men were apprehended [illegible] charged with a most brutal and cowa[illegible] girl, 16 years of age, on the high road [illegible] town to Gloucester. The girl, whose [illegible] Davis, resides at the village of Ch[illegible] respectably connected. She was passing [illegible] on her way home, on the previous [illegible] company of two friends, when a party [illegible] nine in number, who were returning [illegible] Gloucester, drove away her friends, [illegible] and committed a capital assault und[illegible] of great cruelty. One of the young [illegible] her throat while two or three of his com[illegible] their purpose. The poor girl, it appea[illegible] the utmost of her power, and in the [illegible] clothing was torn into shreds, and her pers[illegible] bruised, so much so that it is rumoured [illegible] in danger. Her assailants effected their [illegible] time, but from information conveyed to the [illegible] of them were apprehended the same nig[illegible] ham; and on Saturday last were c[illegible] magistrates for trial on the capital charge, [illegible] of them are known to the police, and [illegible] between 15 and 20 years of age.

CHESTER.—On the right-hand side of [illegible] leading from Denton to Hyde, and [illegible] 200 yards of the toll bar, there is an [illegible] pit, about 40 yards long and 20 to 25 [illegible] and from 10 to 12 feet deep. The children [illegible] the neighbourhood are in the habit of p[illegible] this pit, and about 6 o'clock on We[illegible] the 2d inst., a child unfortunately got into the [illegible]

[illegible] been seen by a neighbour an alarm was [illegible] large number of persons soon assembled [illegible]. The scene was most exciting, and two [illegible] Jackson and Tatton, without pulling off [illegible] clothes, immediately sprung into the [illegible] of the child. These brave fellows, [illegible] were unable to swim, and it was soon seen [illegible] were drowning. The excitement was [illegible] and five men sprang into the pit simul-[illegible]. As is nearly always the consequence [illegible] those unable to swim seized [illegible] and a death struggle took place among [illegible] the face of hundreds of persons, it [illegible] that the whole of the men would [illegible] Mr. Howarth, hat manufacturer, had the [illegible] to throw a small rope into the pit. [illegible] of them was enabled to seize it, and [illegible] having seized him, the three were [illegible] of the pit much exhausted. Afterwards [illegible] were got, and the other men were got [illegible] after much exertion. They were all so exhausted [illegible] was at first little hope of any of them being [illegible] Tatton, who first jumped into the [illegible] of the child, shortly afterwards died. [illegible] was aged 37, and was a small hat manufacturer [illegible]. He leaves a wife and seven small [illegible]. Tatton was a hatter, unmarried, and aged [illegible] strange to say the child was saved, it having [illegible] having been pushed by one of the men to [illegible] of the pit was pulled out by a gentleman [illegible].

[illegible].—Joseph Seer, the self-accused murderer of [illegible] Watts, at the Woodlands, near this town, in Sep-[illegible] 1851, was brought up on Tuesday for re-[illegible]. The first witness was an old man called [illegible] had known the prisoner from his childhood, [illegible] that he was in a public-house in this town [illegible] days after the murder with his wife and a girl [illegible] Staff; that the prisoner came into the [illegible] drunken state; and that on his wife and the [illegible] of the murder, the prisoner stood up and [illegible] had done all he could do with the woman, and [illegible] murdered her because he should never be found [illegible] would have told this at the time, but his wife [illegible] him that he should be murdered if ever he [illegible] tell of it. His wife was now dead, and [illegible] not know what had become of the girl [illegible] present at this conversation. Mrs. [illegible] of Bath, deposed that a person who said [illegible] from Frome, and had sustained some injury [illegible] thumb, applied to her for help at the time of the [illegible] stating that he was going to enlist. She [illegible] the prisoner to be the man, but could not [illegible] that he was so. He was in a state of such [illegible] that if she had heard of the murder she cer-[illegible] would have had him taken up on suspicion. The [illegible] of police explained to the magis-[illegible] regard to the thumb, that at the time of [illegible] a thumb-mark was found upon the wall. [illegible] Hind, *alias* "Frome Bob," who was arrested [illegible] for the murder, here volunteered to give [illegible], and at the suggestion of the clerk communi-[illegible] to the superintendent what he had to say. The [illegible] said that what Hind had to say would [illegible] now, but it might lead to important results. After some other witnesses had been examined the prisoner was again remanded.

Gloucester.—Viscount Forth, the only son of the Earl of Perth, committed suicide in this city on Tuesday [illegible]. It will be remembered that Lord Forth, who was [illegible] at Naples in 1834, figured conspicuously in a [illegible] some months ago, in which some sad reve-[illegible] habits of life were disclosed by Viscountess [illegible] examination before Sir Cresswell Cresswell. [illegible] came to Gloucester in July last, and took [illegible] at the Spa Hotel, under the name of [illegible] Drummond. He was accompanied by a lady [illegible] his own age, who passed as his wife. On the 19th ult. the lady gave birth to a female child, but afterwards became very ill, and was attended by Dr. Evans and Dr. Greaves. For three weeks, she continued very ill, and was anxiously attended by Lord Forth, who remained with her night and day, and for the whole three weeks had not been in bed. The lady died on the 8th inst. Lord Forth was with her at her death, and was very much grieved, and wept bitterly. Soon afterwards he commenced [illegible] brandy, and appeared like a madman. In [illegible] distracted state he continued for several hours, [illegible] he commenced packing his own and the [illegible] lady's clothes, and said he must take the [illegible] to London. He then left the room in which were [illegible] nurse and landlady and proceeded to another oppo-[illegible], followed by the nurse, whose suspicions were excited by his conduct. He asked what was the [illegible], at the same time putting a bottle to his mouth. [illegible] nurse exclaimed that he had got the laudanum [illegible] had been prescribed for the deceased lady during [illegible]. The landlady seized the bottle and suc-[illegible] wresting it from him, but not until he had [illegible] nearly half. He said, "It's only a little port" and went down to the sitting-room. A doctor [illegible] sent for and soon arrived; he found his lordship [illegible] up and down the room, and was just in time [illegible] prevent him from cutting his throat with a knife. [illegible] lordship continued to walk up and down the room, [illegible] at last he became insensible. The stomach-pump was used, but without success; it was found impossible to restore him. An inquest on the body was commenced on Thursday, when the body was identified by the family solicitor, and the landlady, the nurses, and the surgeon gave evidence of the facts stated above. It appeared that since he had been in the hotel he had drunk a great deal of brandy, but had never been seen intoxicated, and that after the lady died he threw himself upon her and sobbed bitterly, and after kneeling at her bedside and crying for some time, he rushed to a table on which was a bottle of brandy, and drank nearly half a pint. On the arrival of the surgeon he was exceedingly excited from grief and excess of stimulant, and was perfectly insane for a time. The surgeon induced him to leave the room, when he went into the drawing-room, and seizing a knife on the chimneypiece attempted to make a gash across his throat; but the surgeon seized his hand and took the knife from him. He then sat down and said, "What have I done?" The surgeon told him he had done a very cowardly act. He said he did not intend to do it. The surgeon then told him it was useless for him to preserve his *incognito*, as it was known he was Lord Forth, and reasoned with him for some time, and on leaving gave directions for him not to be left alone. The inquiry was proceeding when these particulars were despatched.

Hull.—An association has been formed in this town, under the auspices of the clergy and ministers of various denominations, and of leading gentlemen in the town and neighbourhood, for "obtaining a legislative enactment to prohibit the sale of intoxicating liquors between the hours of 11 on Saturday night and 6 on Monday morning;" and, in order to secure unity of action, branch associations are to be formed in every town. Clergymen and ministers of every denomination, and gentlemen of every creed, political and religious, are invited to join the movement, the object of which is to promote the abolition of Sunday drinking, while the qualification of membership is an annual subscription of 1s. and upwards.

Lincoln.—The Bishop of Lincoln has commenced his triennial visitation of his diocese in the cathedral of this city. The charge was very long, touching upon a great variety of topics. The following is a summary:—

"His Lordship commenced by congratulating the diocese generally on its freedom from all uncharitable and party feeling, and the jealousy and evil suspicion which such feeling so often engendered. He then referred to the 29th canon. That canon as amended was now waiting the royal confirmation, and had been communicated to the presidents of the convocations of York, Armagh, and Dublin. An unexpected objection had been taken by the Irish prelates, the result of which could not yet be foreseen; and for the present, therefore, the matter was in abeyance. With regard to church rates, his lordship observed that the question was [illegible] on [illegible] grounds. It was no longer a demand made by an organised minority, who had persuaded the country that they were a majority, to be released from payments to which conscientious objections were made. It was avowedly the first great step towards the secularisation of the endowments of the Church of England. It was the duty of every churchman, however anxious for peace and to forego the rate rather than prolong the contest, to take care not to assent to any compromise which, whilst it conceded the principle of the establishment, would fail to conciliate its assailants. To any measure that would satisfy the objectors without weakening the basis of the National Church they would willingly assent. He did not see what conscientious objections could be entertained to church rates which might not be urged against any other tax the payment of which was agreed to by the majority. To grant exemption on the ground of personal objection would be to concede a principle which would render constitutional Government impossible. Referring to the "Essays and Reviews," his lordship said, the history of opinion was a history of reactions; and showed that the volume in question was a symptom rather than a cause of a great reaction in the public mind from the overstrained teaching of the Tractarian movement. He bore testimony to much good that had been effected by that movement in bringing back into prominence our privileges and duties as members of Christ's mystical body, the Church; in teaching more widely the significance and value of the sacraments; in fixing the eye and grasp of faith more on the objective facts of revelation: and in putting distinctly forth the cardinal truths of the Trinity, the Incarnation, and the Atonement, and shedding on them a flood of light from the previously neglected stores of Patristic theology. But he condemned, in emphatic terms, the tendency of the same school not only to carry ritualism into formality or superstition, and to overlay the essential verities of justification, conversion, and personal sanctification, by an exaggerated sacramental system and human mediation, but also to substitute authority for evidence; to check the exercise, and almost to deny the right, of private judgment: to repress rationalism by chiding reason into silence before the decisions of the church, rather than by tracing out the bounds of reason's domain; to encourage credulity rather than to elevate faith; and to lead men to think that to believe because they were told, was a higher virtue than to believe because they were convinced. He then showed how this substitution of credulity for reason and of authority for evidence was at once preparing for, and inviting, a terrible reaction; and how the destructive scepticism which had resulted from the metaphysics of Germany, combining with the ebb of opinion and the receding tide of the previous movement, by exalting the subjective above the objective, and making the thinking self the measure of truth and falsehood, set intuitions above revelation, and the verifying faculty of the individual man above authority, testimony, and all the evidence of history. Faith overstrained has relaxed into doubt; and we have around us a spreading scepticism arising from a habit of mind which rejects the law of evidence, and accepts as sufficient proof or disproof its own prepossessions and sentiments, and its own conceptions of truth and falsehood, of right and wrong. While acknowledging the cause for anxiety which existed, his lordship concluded by denying that there was any real ground of alarm. He pointed out that there never was a time when the church was free from danger, and Christianity without its special though ever-varying trials; and he exhorted the clergy to prayer, to fidelity, to earnest study of the Holy Scriptures, and of the too much neglected divines of our own church; and to a faithful inculcation among their flocks of the great and distinctive truths of the Gospel, avoiding on the one hand concession or compromise of any revealed verity, and on the other all overstatements and unsupported systems of doctrine.'

Liverpool.—On Thursday Earl Granville, Lord President of the Council, Mr Gladstone, Chancellor of the Exchequer, and a number of other gentlemen eminent in politics and science visited Liverpool for the purpose of taking part in the inauguration of a new school of science and art attached to the Free Public Library and Museum. In the early part of the day Earl Granville and a number of other gentlemen were conducted by the mayor, Mr. W. Brown, over the principal public buildings in Liverpool, including the Free Library and Museum, the Collegiate Institution, the Liverpool Institute, the Queen's College, the Roman Catholic Training School, the Albert Dock warehouses, &c. After the presentations of addresses from some of these institutions, the party proceeded on board the Cunard steam tender Satellite and took a trip on the river to inspect the Liverpool Docks, the progress of the Birkenhead Dock works, and other objects of interest on the Mersey. On their return the visitors dined with the mayor at the Town Hall, and afterwards attended a public meeting in St. George's Hall, at which the new School of Science was inaugurated. Lord Granville moved, and Mr. Fairbairn, President of the British Association, seconded, the first resolution, declaring that it is highly desirable that the means of obtaining instruction in the leading branches of science should be extended in Liverpool; and the Chancellor of the Exchequer moved, and the Hon. Algernon Egerton, M.P., seconded the second resolution, declaring that the School of Science about to be established is eminently calculated to promote the beneficial objects enumerated in the report. Earl Granville said:—

"The Exhibition of 1851 showed that, however eminent we were in certain branches of science, other nations were fast competing, and some even almost distancing us. It was impossible but that some present should have been across the Atlantic, and remarked the progress made in the application of science to art by that great nation, at a time when they were happily engaged in the arts of peace, and not, as now, suffering some of the worst calamities of war. Having alluded to the progress of science on the Continent, his lordship expressed his satisfaction at the movement in favour of increased scientific education on the part of the universities, particularly that of Cambridge. He paid a high tribute to the generosity of the Chancellor of the Exchequer, who, rigidly careful of the country's money in other matters, was just, if not generous, in his support of education and the cause of science. His lordship believed that the exertions of the Department of Science and Art had been most useful in the diffusion of sound scientific instruction throughout the country, and had immensely improved the character and capabilities of scientific teachers. The result of this extension of scientific knowledge must, in his opinion, tend in an enormous degree to promote the welfare and prosperity of the country. His lordship, in conclusion, drew attention to the local advantages which the pupils of a school of science had in a town and port like Liverpool, where the products from all parts of the world were collected, and where some of the highest engineering illustrations were also to be found."

The Chancellor of the Exchequer spoke as follows:—

"The munificence of Mr. W. Brown, in addition to the erection of a free library and museum, had given a building also for the School of Science. Touching upon the subject of science generally, he noticed the effect of chemistry upon manufactures and of geology upon mining industry, the increase of the supply of gold, and the general advancement of the wealth and comfort of mankind. The most scientific works had been frequently suggested by the contemplation of the most humble objects. Watt had gathered his idea of constructing a pipe of peculiar strength from scientifically examining the shell of a lobster; to Sir I. Brunel the common earthworm suggested the Thames Tunnel, and Wedgwood derived his most beautiful designs from a contemplation of natural objects. Following out this train of thought, the speaker, in tracing the origin of the oar, the wheel, and the plough, ascribed the first to the motion of the bird's wings in cleaving the air, the second to the gyrations of a peculiar kind of hawk, and the third to an intelligent observation of the habits of that very humble but useful animal the pig. This contemplation of natural objects and the application of the experience so gained had brought men from the humblest stations to the foremost positions—for example, George Stephenson and Hugh Miller. The right hon. gentleman denied that the cultivation of science tended to foster intellectual pride, and contended that though the truths of science did not lie in that highest region of our nature which was reserved for Gospel revelation, they were yet subsidiary to that revelation, and that the founder of the Liverpool School of Science was entitled to cheer himself with the belief that he had not only been contributing to the intellectual advancement, material progress, and innocent recreation of his fellows, but had been subserving a high moral purpose, and aiding the work of the Teacher of religion. In conclusion Mr. Gladston expressed a hope that the institution would progress in a manner worthy of the town of Liverpool."

The Rev. John Macnaught, incumbent of St. Chrysostom, Everton, has issued an address to his congregation announcing his intention to resign his incumbency. A short time since the Rev. Bristowe Wilson, one of the authors of "Essays and Reviews," was advertised to preach in Mr. Macnaught's church. The Bishop of Chester immediately inhibited him from officiating in his diocese, and Mr. Macnaught thereupon read to the congregation the sermon which Mr. Wilson had intended to preach. Mr. Macnaught now states that he can no longer conform to the Church of England Prayer Book, that there are points in which his opinions fail to harmonise with the dogmas of the Church, and that though the "suppression of a few truths" now recognised by him would, doubtless, allow him legally and safely to retain his pulpit, he feels it necessary to resign in order to retain his self-respect. He says:—

"With many of the Prayer-book's teachings, for example on the clergyman's supposed power to remit or retain sins as expressed in the Ordination Service, on the subject of confession as contained in the Service for the Visitation of the Sick, on the doctrine of 'Regeneration' as treated of in the Baptismal Service, on the Athanasian Creed, on vicarious punishment—with the teaching, I say, of the English Prayer book on these and other points, I can no longer express 'unfeigned

assent and consent' if these words and the Church formularies are to bear any natural and grammatical signification. Under these circumstances what am I to do? I know no other communion which is as tolerant as the Church of England, or whose ministers are as free as hers. Hence I do not see my way to enter any other Church or its ministry. One thing only is clear, that my duty, as a conscientious Christian Englishman, is to resign my ministry and its emoluments and its dignity, and to take my place among the laymen of England's Established Church."

Newcastle-on-Tyne.—On Tuesday, George Clark, the murderer of Mr. Frater, in Blacket Street, was brought up at the police-court on remand. Very little additional evidence has been obtained since the coroner's inquest was held. The facts of the case were so conclusive, that the only question to be decided was whether the prisoner was sane at the time that he committed the deed. When first apprehended his demeanour betokened nothing more than an imperturbable coolness. Since his apprehension, however, he has conducted himself in such a manner as to prove that he is either a madman or desires to be supposed so. His conduct during the examination on Tuesday was characterised by excessive levity. He was exceedingly abusive, calling the mayor and the bench a set of old women, and telling them that if he had an Irish face he had English brains as well as they, and had, besides, a friend in court that they did not know of. The evidence given was a mere repetition of that offered at the inquest, but the prisoner continually made interruptions, and ejaculated "Hear, hear," repeatedly. At the close of the examination the magistrates fully committed the prisoner for trial at the assizes on the charge of Wilful Murder.

Portsmouth.—On Tuesday evening as a party of Naval cadets from Her Majesty's ship Britannia were bathing on the beach between the harbour's mouth and Haslar Hospital a huge shark was observed with his head towards the bathers, apparently engaged in watching their proceedings with great interest. The approach of a boat from one of the ships of war at Spithead made him sheer off at great speed into deep water, and shortly afterwards he was seen cruising off the bathing machines at Southsea. Measures have been taken to effect his capture if possible. During the recent fine weather sharks have also been seen off Ventnor and other places on the south side of the Isle of Wight.

Salisbury.—On the 3rd inst. George Matthews, a carpenter in the employ of Mr. Fisher, builder, of the High Street in this city, performed the perilous feat of ascending to the summit of Salisbury Cathedral spire, for the purpose of ascertaining what repairs and painting were necessary to be done. After he had reached the top he climbed up and got astride the vane, which he turned round. He subsequently mounted the iron cross above the vane, and waving his cap to the spectators stood upon the bar at that giddy height perfectly upright. The ascent to the top of the spire is accomplished on the outside by means of small iron handles securely fixed to the spire. The height of Salisbury spire has been stated in some accounts to be as much as 410 feet. Mr. Fisher, clerk of the works of the Cathedral, says the height of the spire is nearly 399 feet 10 inches, being about 34 feet 10 inches higher than St. Paul's.

Scarborough.—In February of last year, the directors of the Eastern Counties Railway Company announced that Algernon Sydney Lumby, a clerk in their employ, had absconded; and in the warrant issued for his apprehension he was charged with taking with him 100*l.*, the property of his employers. From the very earnest manner in which he has been hunted for by the company's police-superintendent, Mr. Kent, it is thought that the amount appropriated is much more than 100*l.* Mr. Kent has visited the Continent in search of the delinquent; and after many a fruitless journey, during which he travelled some thousands of miles during the period of a year and eight months, he has at length succeeded in apprehending the defaulter at this fashionable watering place, where he has been resident during the summer season. He is a musical man, and at an early part of the summer he took an engagement as pianist at a music-room attached to the Old Spa Inn, and known as the St. George's Hall. He was announced as "Mr. Sydney Staples, pupil of Professor Sterndale Bennett." The company with whom he was associated have been chiefly buffo singers and dancers, rather above the vulgar stamp of similar artists. While in Scarborough he has been living in a quiet, orderly, and respectable manner, his wife residing with him in a small cottage in the upper part of the town. His apprehension was brought about as follows:—A few days ago, a gentleman who was personally acquainted with Lumby, and was acquainted with the fact of his having absconded, was visiting Scarborough; and amongst other "lions" of the place, he went to the Casino or music-room for an evening's entertainment. He was at once struck with the resemblance the pianist bore to the missing clerk, Lumby. The only difference appeared to be, that really Lumby's forehead was rather bald, but the pianist's cranium was covered all over. However, on his return home he saw Mr. Kent, the officer, and mentioned his suspicions. Mr. Kent at once came down to Scarborough, and on Saturday evening, in company with the superintendent of the Scarborough force, went to the casino. After satisfying himself that he had at last secured the man he was in search of, Mr. Kent went up to him, at the end of one of the songs, so as not to disturb the audience, and introduced himself in a familiar but respectful manner, the two shaking hands together apparently very cordially. Mr. Kent told him he had "come for him;" and though he allowed him to finish the evening's performance, he never lost sight of him. He was brought to the police-office at a late hour on Saturday night, and on Sunday night was removed to London, in the custody of Mr. Kent. Lumby is understood to have been one of the wages clerks of the Eastern Counties Railway Company, and consequently had frequently opportunities for embezzling the money of the company.

Sheffield.—An inquiry took place on Tuesday, before the West Riding bench and a court-martial of the officers of the 58th Foot, at the Barracks in this town, into a very serious charge preferred against a sergeant of that corps and another man, a civilian. It appeared that on the evening of the 23d ult. Sergeant Nolan and two other privates left the barracks for Newcastle in charge of a portion of the baggage-train of the regiment. On the road near Hollow Meadows, a few miles from the barracks, they met a youth named Frudd, the son of a farmer, who was riding home upon a pony. The sergeant assaulted him, broke a large bottle the youth was carrying with the butt of his rifle, and forced him to dismount. The boy ran off to inform his father, who was haymaking in an adjacent field, and Mr. Frudd, with some of his neighbours, went to meet the soldiers. The sergeant became very abusive, ran off to the ammunition waggon, and got upon it. He then fixed a bayonet on his rifle and called out to Mr. Frudd that "he was ready for them; he was a soldier, and could die." He then handed a rifle to the driver of the ammunition waggon, a labourer named Mason, and the two then deliberately took aim and fired at Mr. Frudd and his party, who were standing near a gate about 80 yards off. The flight of the bullets was distinctly heard, and Mr. Frudd and his friends then took refuge behind a wall. Several shots were afterwards fired by the sergeant and Mason, and they were heard to use fearful threats towards the persons in the road. One of the bullets entered the house of a man named Peacocke, and lodged in the ceiling of his bedroom. The Colonel and officers of the regiment had the sergeant and his party brought back from Newcastle to Sheffield. The court-martial on Tuesday found the sergeant guilty of drunkenness and shooting, and the finding and sentence were forwarded to the General commanding the district, Sir George Wetherall. Mason was remanded by the magistrates to await the result of the court-martial, when he will be brought up with the sergeant.

Winchester.—On Saturday an inquest was held at Liphook, on the body of William Trussler, a sawyer, residing at Cornford, in the parish of Bramshot, whose death had resulted from injuries inflicted by his son. From the evidence it appeared that a man named Windebank, also a sawyer, went to work with the son George Trussler on Thursday morning at 7 o'clock, when deceased upbraided them for being so late, telling them they ought to have done half a day's work. George Trussler said to his father, "It's no difference to you if we do our work." Deceased said to him, "You are spending my money," and then turned to his son's wife, who was standing about three yards from him in the garden in front of the cottage, and made a remark which seemed to put the son in a great passion. He took up an oven-peel lying on the bank which formed the fence in front of the cottage, and running towards deceased struck him a blow behind the left ear with the blade of the peel. Deceased fell to the ground, and blood immediately flowed from his mouth and nostrils. In falling deceased struck his head against a paving stone. He never recovered consciousness, and died in about 12 hours after the blow had been struck. The jury returned a verdict of "Wilful Murder against George Trussler," who was committed for trial at the assizes.

York.—For some weeks past the villages along the base of the Yorkshire moorlands have been kept in a state of ferment by a series of burglaries which have been committed in several farmhouses. So daring were some of these proceedings that the thieves actually took the money out of the pockets of the servants in their bedrooms without awakening the owners. At length one of the gang has been secured. Early on the morning of the 27th ult. the house of Mr. Skelton, of Mount Pleasant, Lebberston, was forcibly entered by two men, armed with guns, who ransacked the house, securing 24*l.* in money and a quantity of plate, chiefly spoons. The burglars, with the most audacious coolness, walked through the house with lighted torches, their persons being neither masked nor disguised in any way, thus rendering identification easy. They continually threatened Mr. Skelton's life if he did not give up to them all the valuables he had in the house. Mr. and Mrs. Skelton, and two servants, were the inmates of the house, and their terror was such that Mrs. Skelton, who was in delicate health, died in the morning, death being hastened by the fright caused during the commission of the burglary. In the evening, a police constable met a man idling about, who seemed to answer the description of one of the ruffians. This man seemed restless and anxious to avoid observation. The constable called another officer of the force, and they traced the man from place to place, until at length he made for an old part of the town of Scarborough, where he tried to hide himself in a dark alley. Here the officers accosted him, but he refused to give any account of himself, and was arrested. On his person were found some percussion [illegible] money. On being brought before the [illegible] he gave the name of Thomas C[illegible] previously placed among six other [illegible] appearance, and was at once identified as one of the burglars. The prisoner [illegible] In the meantime the police obtained [illegible] implicated the prisoner in several burglaries [illegible] Lebberston affair, the two men had [illegible] of dress at a Scarborough slopshop; [illegible] exchanged the boots he wore, which [illegible] identified as part of the plunder from [illegible] Baker, of Wilton, where a burglary was [illegible] the night of the 20th ult. A neckerchief [illegible] person of the prisoner was identified as [illegible] been stolen from the house of Mr. St[illegible] near Bridlington, on the 24th ult. [illegible] then stolen, which are presumed to be [illegible] used in subsequent burglaries. The officers [illegible] Northallerton, Pickering, Ayton, and other [illegible] towns are on the alert, and it is confidently [illegible] that the accomplices of the prisoner cannot any [illegible] detection.

Ireland.

Pastoral of Archbishop Cullen.—On [illegible] last a pastoral from Archbishop Cullen was read [illegible] the churches and chapels of his diocese. It [illegible] by stating that, "amidst the manifold [illegible] are daily befalling the world, it is a [illegible] consolation to witness the splendid manifest[illegible] devotion to the Holy See, and unshaken [illegible] great centre of Catholic unity, the chair of [illegible] The Pope, however, has been persecuted and [illegible] by lawless and violent men; and Dr. Cullen [illegible] an anti-Catholic and infidel press at home [illegible] not only defends what has been done in [illegible] without ceasing "fulminated and poured forth [illegible] the vilest as well as the most baseless against [illegible] Father, his Government, and all his most [illegible] most devoted servants; while for the scenes of [illegible] lege, of incendiarism, and bloodshed which [illegible] enacted in the invaded provinces of the [illegible] the neighbouring kingdom of Naples—[illegible] paralleled save in our own sad records of [illegible] barbarity—these same apostles, as they [illegible] have us believe them, of humanity, liberty, [illegible] government, have not a solitary word of reproach. Against the captivity or exile of 58 Neapolitan [illegible] forcibly removed from their sees—against the almost daily perpetrated and cold-blooded murders [illegible] unoffending priests—against the burning of [illegible] towns, with their defenceless populations [illegible] infirm, women and children, not a word [illegible] heard on the part of these self-constituted and [illegible] styled sympathizers of oppressed nationalities all over the world." After this preamble the Archbishop [illegible] "the pious Sodality or Confraternity of Peter's Pence in our Pro-Cathedral Church;" and invites [illegible] and those in particular of the parishes [illegible] church, to associate themselves to it. He [illegible] heads of religious houses, priests, &c., to establish [illegible] associations, the members of which are to recite [illegible] three times the "Our Father," the "Hail Mary," the "Glory be to the Father,"—to implore [illegible] Almighty to put an end to the calamities of the [illegible] and to restore the Sovereign Pontiff to the [illegible] ment of his sacred rights. Boxes are to be [illegible] receive Peter's Pence; a monthly return is to [illegible] of the sums collected, and there is to be a centre of administration in Dublin. The members are [illegible] the same privileges as the Arch-confraternity of Peter's Pence at Rome, which has been enriched by [illegible] dulgences.

Mr. Smith O'Brien on Hungary.—The [illegible] *Examiner* of Saturday contains a letter from Smith O'Brien, written to a friend in Paris, [illegible] he gives the impressions produced on his mind [illegible] visit to Hungary, expressing the strongest [illegible] with the Hungarian cause, and admiration [illegible] Hungarian people. He found that the H[illegible] possessed in an eminent degree the characteristics [illegible] are expressed by the word "gentleman." He [illegible]

"I expected to find in the Hungarians a [illegible] rous spirit, but I was not disposed to expect [illegible] degree of intellectual cultivation. To my [illegible] covered an extent of intellectual culture which [illegible] passed in any part of Europe. Not only at Pesth [illegible] remote parts of Northern Hungary, I met with [illegible] who could speak Latin with as much fluency as [illegible] their mother tongue. A knowledge of French [illegible] universal among the educated classes, and in travelling [illegible] Continent I have nowhere found so many that [illegible] English as in Hungary."

The Recent Outrage in Dublin.—A [illegible] meeting of the cab proprietors of Dublin was [illegible] Friday, "to give expression to their indignant [illegible] at this atrocious outrage, and to devise means to [illegible] the authorities to bring the villainous perpetrator [illegible] justice." The attendance was large, and it was [illegible] mously resolved to offer a reward of 25*l.*, in addition [illegible] that advertised by the authorities, for such information as shall lead to the arrest and conviction [illegible] the perpetrator. Several cabmen were brought [illegible] the lady's brother on Friday, but he failed to identify any of them as the party he had engaged. The [illegible] cushion remains unclaimed, and it is now believed [illegible] the offender is not a cab-driver. A telegraphic message

[illegible] was received in Dublin on Monday stating that [illegible] had been arrested at Ashton-under-Lyne, who [illegible] to be the person who was guilty of the [illegible] the greatest excitement throughout the [illegible] announcement proved without foundation, [illegible] impression is that the ruffian is in Dublin, [illegible] never been out of it since the perpetration of [illegible]

[illegible] Riots.—The case against the Rev. [illegible] Lavelle, Mr. Francis Lavelle, his brother, and [illegible] unlawfully assembling and riotously and [illegible] injuring a pound, to the terror of her [illegible] subjects," was brought before the magistrates [illegible] sessions at Ballinrobe, on Tuesday. A [illegible] was raised on behalf of the defen[illegible] that the charge as it appeared on the sheet was [illegible] mentioned in the summons. The bench were [illegible] as on the former day, and the case was [illegible] A charge against Mr. Francis Lavelle for [illegible] threatening language to a man named Holmes, [illegible] a cross charge against Holmes, were then pro[illegible] with, and resulted in each case being dismissed [illegible] the merits.

The Employment of Women.—A society has been formed in Dublin to promote the employment of women [illegible] industrial pursuits. It is established as a [illegible] of the London society formed for similar objects, [illegible] with the National Association for the [illegible] of Social Science. The employment which [illegible] wishes to introduce will be as far as [illegible] adapted to the needs of the workers and the [illegible] market for labour.

Sporting.

The Great Twelve Mile Race at Dublin.—On Monday [illegible] exciting 12-mile handicap race took place in the [illegible] Gardens, in the presence of several thousands of [illegible] between the North American Indian Deerfoot, [illegible] of England, Levett the ex-champion, and [illegible] champion. At 4·17 o'clock Levett bounded [illegible] three minutes start of the others, during which [illegible] four rounds of the course, which being accomp[illegible] and Mills ran off together, the Indian taking [illegible] which he held for a considerable time, Mills following [illegible] heels. At the sixth mile Mills took the lead, [illegible] cheering, and gained materially on Levett. He [illegible] run midway between Levett and Deerfoot for [illegible] and finally passed Levett. It was quite [illegible] that Levett was becoming exhausted. After having [illegible] over seven miles he dropped out, having run the [illegible] in 54m 27s. The contest now lay between Deer[illegible] Mills, who frequently passed and repassed each other, [illegible] applauded by the crowd. On the 66th round—within [illegible] the completion of the race, 74 times round making [illegible] Mills made a desperate effort to pass Deerfoot, [illegible] than a yard in advance of him, and just [illegible] fell down in a faint from exhaustion, and had [illegible] carried into a tent, but he was soon restored under the [illegible] of a medical gentleman on the ground. The Indian finished the race in gallant style in 1h. 5m. 6s. The running [illegible] Mills, who is only 19 years of age, was the admiration of all [illegible] witnessed it.

Railways.

The late Accident on the Hampstead Junc[illegible].—On Wednesday, a third inquest was held on the death of Charles Cox, another of the sufferers from this [illegible] who died in the hospital a few days since, [illegible] the number of lives sacrificed up to the present [illegible] 16. The jury, after a brief deliberation, returned the same verdict as before, of Manslaughter against [illegible], the signalman.

Obituary.

The Earl of Eglinton, K.T., died on Friday morning at Mr White Melville's seat, St. Andrew's, Fifeshire. It appears that he was engaged during the afternoon of Tuesday last in playing at golf, apparently in robust health. He dined with Mr Melville and company in the evening at St. Andrew's, and exhibited his usual cheerfulness. Before the party separated his lordship was seized with a fit of apoplexy, which at once rendered him unconscious, and in that state he continued until his death. The Right Hon. Archibald William Montgomerie, Earl of Eglinton and Lord Montgomerie in the peerage of Scotland, and Baron Ardrossan in the United Kingdom, was the only son of Lord Montgomerie, eldest son of the 12th Earl of Eglinton, by Lady Mary, daughter and heir of the 11th Earl of March. He was born in 1812, so that he had only recently completed his 49th year. In 1840 his lordship was served as heir male general of the 6th Earl of Winton, George, the 6th Earl, who was attained in 1716, having left no issue. His lordship's mother afterwards married, in 1815, the late Sir Charles Montolieu Lamb, Knight Marshal. On the death of his grandfather, the 12th Earl, in 1819, he succeeded to the honours of the family and extensive ancestral domains in Scotland, being then only in his 8th year. For a long series of years Lord Eglinton was an honourable supporter of the turf, and had at one period one of the largest and best racing studs in the country. His success on the turf was considerable. In 1842 he won the St. Leger with Blue Bonnet, in 1847 with Van Tromp, and again in 1849 with the Flying Dutchman. In 1849 he won the Derby with the same horse; and in 1848 won the Goodwood Cup with Van Tromp. Shortly after he had won the celebrated match for 1000 guineas at the York Spring Meeting, when his celebrated Flying Dutchman defeated the Earl of Zetland's Voltigeur, his lordship gave up the turf, and very seldom after attended the chief race meetings, of which he had been formerly such a consistent supporter. The name of the Earl of Eglinton will always be associated with the pageant he held in 1839 at his Castle in Ayrshire, [illegible] known as the Eglinton Tournament, at which the [illegible] Emperor of the French was one of the Knights, and at which the Duchess of Somerset, then Lady Seymour, was the "Queen of Beauty." His lordship married first in 1841, Theresa, widow of Captain Richard H. Cockerell, R.N., and daughter of Mr. Charles Newcomen, by whom he leaves surviving issue Archibald William Lord Montgomerie, Lady Egidia, born in 1843, and married a few months back to Lord [illegible]ham; the Hon. Seton Montolieu, born 1846; and the Hon. George E. Montgomerie, born in 1848. His lordship married, secondly, in 1858 (his first Countess having died in 1853), Lady Adela Capel, only daughter of the Earl of Essex, who died suddenly in Edinburgh on the 31st of last December. The Earl of Eglinton was a firm supporter of the Conservative party. The late Sir R. Peel, on the death of the Earl of Glasgow, appointed him Lord-Lieutenant of Ayrshire, and when the Earl of Derby became First Lord of the Treasury in 1852, he appointed him Lord-Lieutenant of Ireland, a post which he filled in a princely style. He was again appointed Lord Lieutenant in February, 1858, and maintained the dignity until Lord Derby left office in June, 1859. In the early part of Lord Aberdeen's Ministry Lord Eglinton was created a Knight of the Thistle. His lordship was elected Lord Rector of Glasgow University in 1852; and was colonel of the Ayrshire Militia from 1836 to 1852, when he resigned. He is succeeded in the earldom by his eldest son, Lord Montgomerie, born in 1841. His Lordship has been some years in the Royal Navy as midshipman, but is said to have relinquished the idea of adopting it as a profession.

Lord Ponsonby died on the 2d inst. at Rottach Tegernsee, in Bavaria, in his 45th year. He was a posthumous son of the late Major-General the Hon. Sir William Ponsonby, K.C.B., by the sixth daughter of the first Lord Southampton. He was born at Hampstead in 1816, and succeeded as third baron on the death of his uncle, in 1855. The second baron, a distinguished diplomatist, was her Majesty's Ambassador at Constantinople from 1832 to 1837, and at Vienna from 1846 to 1851. He obtained a viscounty, which became extinct at his death, while the barony reverted to the deceased peer. His lordship is succeeded in the title by his uncle, the Hon. Geo. Ponsonby.

The Hon. Edward Gardner, [illegible] son of Alan, first Lord Gardner, died at his apartments in King Street, St. James's, on Saturday last, in his 77th year. He had been for many years in the service of the East India Company, and was for a lengthened period resident at the Court of Nepaul.

Lady Murray, widow of the late Lord Murray, died suddenly at her residence, Strachur Park, Argyleshire, on the 2d inst. She was apparently in her usual health till within a few minutes of her death, and had taken her accustomed walk and drive in the earlier part of the day. Lady Murray was the daughter and co-heiress of Mr. William Rigby, of Oldfield Hall, Cheshire. She was an excellent Greek and Latin scholar, and thoroughly read in almost all departments of English literature, besides being highly accomplished in music. She was also well known for her munificent and unostentatious charities, for her support of Industrial Schools, and for her recent establishment of a life-boat in Cantyre.

Admiral George Le Geyt died recently at St. Helier's, Jersey, at the advanced age of 84. He entered the Navy in 1791 as captain's servant, and was subsequently appointed master's mate of the Prince Edward, in which vessel in 1795 he witnessed the capture of two French vessels; in the following year he was present at the capture of a French frigate, and was shortly afterwards appointed acting-lieutenant of the Rover, in which he assisted at the taking of Le Jean Bart privateer. In 1799 he was appointed Second Lieutenant of the Tamar, and was present at the reduction of Surinam and the capture of several French ships. In 1803 he was promoted to the command of the Stork, in which vessel he remained nine years, effecting the capture of several vessels, and subsequently assisting in the blockade of Martinique until its surrender. He was nominated a Companion of the Bath in 1840.

Rear-Admiral William Pearce Stanley died at Bath on the 2d inst., in his 77th year. He entered the navy in 1798, assisted at the capture of three French vessels, and was present in Sir R. Calder's action on the 22d of July, 1805. He took part in the battle off St. Domingo, and afterwards served as lieutenant in several vessels on the coast of France where he took several French prizes. In 1819, while in command of the Swallow revenue cutter, he captured the Idas smuggling cutter, after a long chase. For his conduct on this occasion he was promoted to the rank of commander. He attained post rank in 1838.

Mr. Vandenhoff, the celebrated actor, died on Friday evening at his residence, 34, North Bank, Regent's Park, in his 72nd year. He had been for some time suffering from gout, but not so as to confine him to the house. On Friday morning he walked to his physician and back for the purpose of consulting him. After dinner he was seized with premonitory symptoms of paralysis, but was still able to retire to his bedroom and lie down without assistance. A medical man in the neighbourhood was at once sent for, but on his arrival Mr. Vandenhoff was speechless, and shortly afterwards expired.

Wills.—The will of Lieut.-Colonel Turbervill, K.B., of Ewenny Abbey, Glamorganshire, has been sworn under 45,000*l.*; the Hon. Mrs. Jane Macdonald, 14,000*l.*; Mr. Richard Frankum, surgeon, of Burlington Gardens, 12,000*l.*; Mr. C. J. Paglians of Hammersmith, 20,000*l.*

BIRTHS.—On the 5th inst, at Palazzo Serlupi, Rome Cecilia Marchesa Serlupi, daughter of the late Sir James Fitzgerald, Bart., of a son and heir—30th ult, at 12, Herbert Street, Dublin, the Hon. Mrs. Joshua MacEvoy, of a daughter—2d inst, at 68, Park Street, Grosvenor Square, the Hon. Mrs. Hervey St. John Mildmay, of a daughter—7th inst, at Eastdon, Starcross, Exeter, S. Devon, the Hon. Mrs. Byron Cary, of a daughter—3d inst, at 62, Lansdowne Crescent, Brighton, the wife of Major-General Clark, K. H., of a daughter—1st ult., at Bush Hill, Barbadoes, the wife of Colonel J. Ramsey Stuart, C.B., 21st R.N.B. Fusiliers, of a son—23d ult, at Corfu, the wife of Major T. de Courcy Hamilton, V.C., of a son.

MARRIAGES.—On the 26th ult, at Twickenham Church, R. B. D. Morier, Attaché to her Majesty's Legation at Berlin, to Alice, second daughter of Lieut.-General the Right Hon. J. and Lady Alice Peel—5th inst, at St. Mary's Roman Catholic Church and afterwards at St. Paul's Episcopal Church, Edinburgh, Major the Hon. James C. Dormer, second son of the Lord Dormer, to Ella Frances Catherine, only daughter of Sir Archibald Alison, Bart., and widow of the late Robert Cutlar Fergusson, Esq., of Craigdarroch and Orroland, N.B.—30th ult, at the parish church, Brighton, Samuel Skey Burton, Esq., son of the late William Burton, Esq., and grandson of the late Sir Charles Burton, Bart., and the Hon. Lady Burton, of Pollerton, co. Carlow, to Susan Bristowe, widow of Thomas Miller, Esq., of Leicester—8th inst. at Kensington, Charles Henry, third son of Daniel Gurney, Esq., of North Runcton, Norfolk, and of the late Lady Harriet Gurney, to Alice, daughter of H. T. Prinsep, Esq., Member of the Indian Council—2d inst, at Saint Mary's, Edinburgh, John Allen Allen, Esq., of Errol, to Barbara Julianna Augusta, daughter of Major the Hon. Augustus George Frederick Jocelyn—3d inst, at St. Andrew's, Kingswood, Surrey, the Rev. William R. Astley Cooper, second son of Sir Astley Paston Cooper, Bart., to Elizabeth, second daughter of Captain Evan Nepean, R.N.—2d inst, at the parish church, Farnham Royal, Bucks, the Rev. Henry Phillpotts, to Jane Maria, eldest daughter of Sir Ranald Martin, M.D., C.B., Salt Hill, near Slough—1st inst, at St. Mary Magdelen's, Hastings, the Rev. G. W. Pennethorne, of St. Andrew's, Chichester, second son of James Pennethorne, Esq., to Catherine Anne MacGregor, third daughter of the late James Macgregor, Esq., M.P. for Sandwich—3d inst, at Dingestow, Monmouthshire, the Rev. John Lloyd, rector of Llanvapley, to Emily Letitia, eldest daughter of Samuel Bosanquet, Esq., of Forest House, Essex, and Dingestow Court, Monmouthshire—5th inst, at St. Mary's Church, Woolwich, Captain William Booth, Royal Horse Artillery, son of the late Lieutenant-Colonel Henry Booth, K.H., 43d Light Infantry, to Eliza Emma, eldest daughter of the late Major-General Russel, of the Royal Artillery.

DEATHS.—On the 4th inst, at [illegible], Queen's County, Major Edw. Butler, eldest and only surviving son of the late Major-General Sir Edw. Butler—5th inst, at Dieppe, John Elliot Boileau, Esq., eldest son of Sir John and Lady Catherine Boileau, of Ketteringham, Norfolk, aged [illegible]—1st inst, John Buller Hulse, youngest surviving son of the late Sir Charles Hulse, Bart., of Breamore, in the county of Hants, aged 4[illegible]—[illegible] inst, at Merton College, Oxford, Mary Anna Frances, elder daughter of Dr. Robert Bullock Marsham, D.C.L., Warden of Merton College, and Lady Carmichael Anstruther—27th July, at the Royal Observatory, near Cape Town, Lady Maclear, wife of Sir Thomas Maclear, F.R.S., Astronomer Royal, Cape of Good Hope—25th Aug., at St. Kitt's, West Indies, the Ven. Archdeacon Poore, aged 4[illegible]—[illegible]th ult, at Nairn, Major-General John Grant, late Inspector-General of Ordnance at Bombay, aged 56—22d Aug., at Muttra, Lieut.-Colonel Remmington, C.B., her Majesty's Bengal Horse Artillery, aged [illegible]—1st inst, at Melfort Cottage, Argyleshire, Col. Campbell, of Melfort, aged 63—4th inst, at Portobello, N.B., Anne, widow of Lieutenant-Colonel Andrew Hamilton, 10th Regiment, and sister of the late William Ord, Esq., of Whitfield, Northumberland, aged 7[illegible]—5th inst, at Babbicombe, near Torquay, from the effects of wounds received at Cawnpore in action with the Gwalior rebels, when Adjutant of the 88th Regiment Connaught Rangers, Captain John Evans, unattached, eldest son of Captain John Evans, of Bath, and late of the Bengal Army, aged 23—16th ult, at Woolwich, Captain Edmund Charles Barnes, youngest son of Lieutenant-Colonel G. A. Barnes, R.F.P., aged 29—5th inst, at Meldrum, Aberdeenshire, Beauchamp Colclough Urquhart, Esq., of Meldrum and Byth, aged 70—4th inst, suddenly, of angina pectoris, at his residence, Boxlands, Dorking, John Gilbert Hammack, Esq., a magistrate for the county of Middlesex, and Deputy-Lieutenant for the Tower Hamlets, aged 70—7th inst, Mrs. Mary Johnson, relict of the late Alderman John Johnson, of Millbank, aged 80—27th ult, at Woburn, Miss Elizabeth Formby, of Formby Hall, Lancashire—4th inst, Mr. Deputy Hoby, for many years deputy of the Ward of Farringdon Within—2d inst, at her residence 3, Paragon Buildings, Bath, Louisa Grace Anne, relict of the late Rev. Hewitt O'Bryen, of Edgefield Rectory, Norfolk, and eldest daughter of the late Rev. John Hoare, Chancellor of the Diocese of Limerick, Ireland—5th inst, after a few days' illness, the Rev. Wm. Henry Hart, M.A., Demy of Magdalen College, Oxford, and Chaplain to the Hon. Society of Gray's Inn, the only son of William Hart, Esq., of Brighton, formerly of Dorking, aged 30—3d inst, after a lingering illness, Rev. Edward Priest, perpetual curate of Cringleford, near Norwich, aged 52—28th ult, at Oak Bank, Weston-super-Mare, the Rev. William Henry Priestley, curate of Otley, Yorkshire, aged 31—28th ult, at Atherstone, the Rev. R. H. Millington, M.A., aged 60.

Markets.

COVENT GARDEN, Oct. 12.

Owing to the favourable weather we have lately experienced, the supply of both Vegetables and Fruit continues good. Apples and Pears are plentiful, and the same may be said of Grapes, Pine Apples, and Melons. Nectarines are now over, and late Peaches realise good prices. Peas are very scarce. Of Beans there is still a fair supply. Potatoes markets are heavy; prices about the same as last week. Cucumbers are abundant, and the same may be said of Tomatoes, which are large and excellent. Cut flowers chiefly consist of Orchids, Dahlias, Asters, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Oranges, per 100, 6s to 14s
Grapes, per lb., 1s 6d to 4s	Lemons, per 100, 6s to 10s
Melons, each, 1s to 3s	Nuts, Cob, per pound., 2s to 2s 6d
Peaches, per doz., 12s to 18s	Walnuts, per 100, 2s
Pears, per doz., 1s to 6s	
Apples, per doz., 6d to 1s	

VEGETABLES.

Cauliflowers, each, 2d to 6d	Artichokes, each, 6d to 8d
Peas, p. quart, 1s to 1s 6d	Beet, per doz., 1s 6d
Broccoli, p. bundle, 1s to 1s 3d	Celery, p. bundle, 1s 6d to 2s
French Beans, per sieve, 2s 6d to 3s 6d	Onions, pickling, p. ½ sieve, 4s 6d
Cabbages, do., 1s 3d to 1s 6d	Tomatoes, p. doz., 1s to 6s
Potatoes, p. ton, 60s to 75s	Shallots, per lb., 8d to 10d
— per cwt., 4s to 8s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 2d to 4d	Endive, p. score, 1s 6d
Carrots, do., 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., 2s to 3s
Cucumbers, each, 6d to 9d	Parsley, p. 12 bunches, 3s to 4s
Veg. Marrows, p. doz, 1s to 1s 6d	Savory, per bunch, 2d to 4d

HAY.—Per Load of 36 Trusses.

Smithfield, Thursday, Oct. 10.

Prime Meadow Hay	80s to	90s	Clover, old	90s to	120s
Superior do. ..	95	105	New Clover	—	—
Inferior do.	40	55	Do second cut ..	80	105
New do.	—	—	Straw	28	34
Rowen	—	—			

Davis & Co.

Cumberland Market, Thursday, Oct. 10.

Sup. Meadow Hay ..	100s to	110s	Inferior Clover ..	80s to	95s
Inferior do.	70	90	New do.	—	—
New do.	—	—	Straw	36	40
Superior Clover ..	105	115			

Joshua Baker.

Whitechapel, Thursday, Oct. 10.

Fine Meadow Hay	90s to	98s	Fine 1st cut Clover	110s to	116s
Inferior do.	70	85	Inferior do.	80	95
Prime New Hay ..	—	—	New 2d cut	90	105
Inferior	—	—	Inferior do.	—	—
Straw	28	32	New 1st cut ..	—	—

BRITISH WOOLS.—London, Friday, Oct. 11.

Our trade can only be reported dull at late rates.

	s. d.	s. d.		s. d.	s. d.
South-down Hogges		to 1 5	Leicest Wethers	1 3 to	1 5
Half-bred ditto ..	1 5 —	1 6	Ditto Hoggs ..	1 4 —	1 4
Down Ewes ..	1 4 —	1 5	Combing Skins	1 0 —	1 5
Kent Fleeces ..	1 5 —	..	Flannel Wool	1 0 —	1 5
			Blanket ditto ..	0 6 —	..

Low Wool Sales, Liverpool.—These sales are maintaining late rates for good Wool, but are selling at a considerable advance for any very low qualities suitable for American manufacture.

BUTTER MARKET.—Oct. 11.

Best Fresh Butter	..	15s. per dozen lbs.
Second do. do.	..	13s. " "

Pork, 5*s.* 0*d.* to 5*s.* 8*d.* per 8 lbs.

HOPS.—Borough Market, Friday, Oct. 11.

Messrs. Pattenden & Smith report a fair demand for Hops of the best quality, both of English and foreign, at late quotations. Old Hops are also in better request. Duty, 115,000*l.*

COAL MARKET.—Oct. 9.

Carr's Hartley, 18s. 3d.; Holywell, 15s. 6d.; North Pelton Gas, 13s. 6d.; Tanfield Moor Butes, 13s. 6d.; Walker

Primrose, 12s. ; Walls End Acorn Close, 16s. 9d. ; Walls End Eden, 16s. 9d. ; Walls End Hedley, 16s. 6d ; Walls End Riddell, 16s. 6d. ; Walls End Haswell, 18s. 6d. ; Walls End Kepier Grange, 17s. 3d. ; Walls End Stewarts, 18s. 6d. ; Walls End Tunstall, 17s. ; Walls End Kelloe, 17s. 9d. ; Walls End South Hartlepool, 17s. 3d. ; Walls End Trimdon Hartlepool, 18s. 3d. ; Walls End Trimdon Thornley, 16s. 6d. ; Walls End Whitworth, 15s. ; Carway and Duffryn Anthracite, 21s. 6d. ; Carway and Duffryn Malting, 24s.—Ships at market, 56.

METROPOLITAN CATTLE MARKET.

MONDAY, Oct. 7.

We have a shorter supply of Beasts and a fair demand, consequently prices have rather advanced. The number of Sheep is smaller. Trade is not very brisk, but higher prices are realised. We have a fair supply of Calves, and quotations are not much altered. From Germany and Holland there are 1650 Beasts, 9010 Sheep, 129 Calves, and 170 Pigs; from Spain, 100 Beasts; from Ireland, 800; and 2800 Beasts from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 6 to	4 10	Best Long-wools.	4 10 to	5 0
Best Short-horns	4 4 —	4 6	Do. Shorn	.. .. —	..
2d quality Beasts	3 4 —	4 0	Ewes & 2d quality	4 0 —	4 8
Best Downs and Half-breds ..	5 2 to	5 4	Do. Shorn	.. .. —	..
Do. Shorn	.. .. to	..	Lambs ..	.. .. —	..
			Calves ..	.. 4 0 —	4 8
			Pigs ..	.. 4 0 —	5 0

Beasts, 5790 ; Sheep & Lambs, 22,170 ; Calves, 154 ; Pigs, 630.

THURSDAY, Oct. 10.

The number of Beasts is nearly the same as on Thursday last; the demand has increased, and prices consequently are better. The supply of Sheep is very short to-day. Monday's quotations are readily realised, and in a few instances exceeded. Calves are rather dearer. Our foreign supply consists of 180 Beasts, 1600 Sheep, 219 Calves, and 80 Pigs. Milch Cows, 95.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 8 to	4 10	Best Long-wools.	4 10 —	5 0
Best Short-horns	4 4 —	4 8	Do. Shorn	.. .. —	..
2d quality Beasts	3 4 —	4 0	Ewes & 2d quality	4 0 —	4 8
Best Downs and Half-breds ..	5 2 —	5 4	Do. Shorn	.. .. to	..
Do. Shorn	.. .. —	..	Lambs ..	.. .. —	..
			Calves ..	.. 4 0 —	4 10
			Pigs ..	.. 4 4 —	5 4

Beasts, 955 ; Sheep & Lambs, 4680 ; Calves, 274 ; Pigs, 290.

MARK LANE.—MONDAY, Oct. 7.

The supply of Wheat from Essex and Kent to this morning's market was small—the Essex and white Kent were sold at an improvement of fully 1s. per qr., but for red we cannot alter our quotations. The market was well attended by country buyers, but foreign Wheat being generally held for an advance, the sale was limited, and principally confined to medium-priced qualities, as Russian and American. Malting Barley is 1s. per qr. cheaper, grinding unaltered in value. Beans are 1s. per qr., and Peas 1s to 2s. per qr. dearer. The Oat trade is dull, and we reduce our quotations 1s. per qr. excepting on Russian. Flour remains as last quoted.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk..White	50—63	Red	50—60
— — fine selected runs..ditto	61—65	Red	50—62
— — Talavera	55—67		
— Norfolk	—	Red	—
— Foreign	42—72		
BARLEY, grind. & dist., 26s to 28s..Chev.	36—41	Malting .	35—38
— Foreign..grinding and distilling	27—30	Malting .	36—40
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire—Potato	26—28	Feed ..	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign........Poland and Brew	20—24	Feed ..	19—24
RYE	36—38	Foreign .	—
RYE-MEAL, foreign..................	—		
BEANS, Mazagan....35s to 37s ...Tick	36—39	Harrow .	36—39
— Pigeon ......38s — 42s..Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
PEAS, white, Essex and Kent..Boilers	40—44	Suffolk .	40—46
— Maple .... —s to —s ...... Grey	37—40	Foreign .	35—38
MAIZE..............................White	—	Yellow ..	—
FLOUR, best marks delivered..per sack	46—51		
— 2d do.........................ditto	30—46	Country	30—46
— Foreign ....per barrel	28—34	Per sack	43—58

FRIDAY, Oct. 11.

With the exception of a few showers and some heavy fogs in the mornings, the weather this week has been fine, with a mild temperature. The arrivals of foreign Wheat and Flour in the principal parts of this kingdom having fallen off considerably, and being likely to continue small, as the September shipments from America alone are nearly 300,000 qrs. short of those of last year, more firmness was evinced by holders, and the millers generally being buyers of strong Wheats, wanted for mixing with the new English, a large business was done throughout the country, at an advance of 1s. to 2s. per qr. upon Wheat, and 1s. per barrel and sack upon Flour. Malting Barley was in many markets the turn cheaper, grinding maintains its value. Oats are still tending downwards, the supply from our own crop being expected to be very large for some time to come, which would prevent our inland consumers from appearing as buyers at the ports. Beans and Peas having lately advanced considerably, the inquiry at the improvement is less lively, particularly for the former, and we write the trade slow at 2s. per qr. more money. Peas may take a further start if the export demand continues During the past eight days 39 vessels have been reported off the coast. The floating trade has been inactive, in consequence of the limited number of cargoes off the coast; in the business done fully late prices have been made. The arrivals of English grain and foreign Oats are moderate, of Barley good, and Wheat very small. The English Wheat left over from last day has been sold at 1s. per qr. over the rates of Monday; foreign was held for a similar advance, which was in some instances realised. The attendance at this morning's market was small. Spring Corn of all descriptions is steady at Monday's prices. The little barrel Flour on offer is held for extreme rates.

ARRIVALS FROM Oct. 7 to Oct. 11.

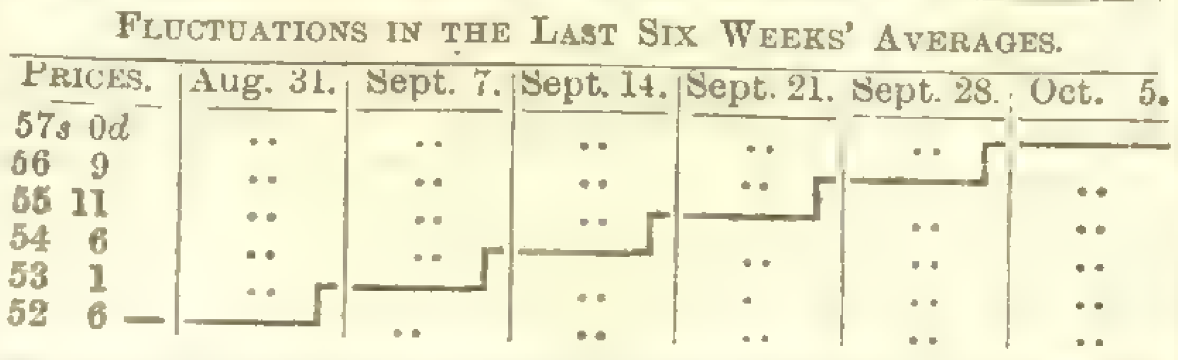
	Wheat.	Barley.	Oats.	Flour.
English ..	1960 qrs.	1150 qrs.	370 qrs.	740 sks.
Irish	— "	— "	1150 "	— "
Foreign ..	7720 "	4280 "	17860 "	— " / 3440 brls.

LIVERPOOL, Tuesday, Oct. 8.—There was a fair attendance of millers and dealers at this morning's market, and the advance of 3d. per cental on Wheat was firmly maintained, with a moderate amount of business passing. Flour commanded a good inquiry, and brought from 9d. to 1s. per barrel more money than was obtainable on Friday. Indian Corn was in less favour than of late, and to effect sales ex quay it was necessary to make a reduction of fully 3d. per qr. Oats and Oatmeal steady. Beans, Peas, and Barley are each again fully 6d. per qr. higher. The market closes with less briskness than it opened, but the small quantity of Wheat and Flour offering negatives the probability of prices going back at all.

FRIDAY, Oct. 11.—A fair attendance at to-day's market. Wheat in good demand, at an advance of 2d. to 3d. per cental. Flour, good qualities scarce and 6d. per barrel dearer. Indian Corn in good request; mixed, 31s. 6d. to 31s. 9d.; Egyptian Beans, 34s. 6d. to 35s.; very little offering. Other articles unchanged.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Aug. 31..	52s 6d	34s 1d	24s 5d	37s 5d	44s 0d	34s10d
Sept. 7..	53 1	35 11	23 7	37 2	44 4	35 3
— 14..	54 6	36 4	22 11	33 4	41 11	38 0
— 21..	55 11	36 9	22 10	34 11	41 11	38 9
— 28..	56 9	37 4	22 10	35 9	42 4	40 10
Oct. 5..	57 0	37 4	22 6	35 4	42 0	40 4
Agg. Aver.	55 0	36 3	23 2	35 8	42 9	38 0

FLUCTUATIONS IN THE LAST SIX WEEKS' AVERAGES.



WANTED, in Worcestershire, a GARDENER who thoroughly understands his profession, including the Management of Vines and Peach Houses. Wages 20s. per week, and House. Wife to take charge of Laundry. Also a YOUNG MAN to assist in the Garden.—Address L. M., Box 361, Post Office, Bristol.

WANTED, a young WORKING MAN, accustomed to the Management of American Plants and Seedlings, to take charge of a small branch Nursery. A young man from the Surrey Nurseries would be preferred.—Apply personally or by letter to Mr. R. LAING, Twickenham Nursery, Middlesex.

WANTED, a WORKING FARM BAILIFF.—The Man to look after the Farm, and Wife to attend to Dairy and Poultry. House found, and wages 18s. per week.—H. N. R., Andrew's Library, Cheltenham.

WANTED, at Martinmas next, a Single Man, from 30 to 40 years of age, as FARM BAILIFF, for about 250 acres. He will be expected to work with the labourers employed and to keep the Farm Accounts. Testimonials of sobriety and general character will be required.—Apply by letter to A. Z., Post Office, York.

WANTED, a MAN and WIFE without incumbrance.—The Man must be able to take the lead in any kind of Farm or Market Garden work (set up the stacks, feed thrashing machine, &c.; must be under 40 years of age. His Wife to give all her time and attention to Poultry. Wages 21s. per week, with Cottage, Garden, and Bush-firing.—Send references to H. G. K. BREAVINGTON, Vicarage Farm, Hounslow, Middlesex, W.

WANTED, an experienced COWMAN.—Married, to live in a Lodge; his Wife to attend to the Gate. Good reference required.—J. OLIVER, Bailiff, Grove House, Roehampton, Surrey.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Thoroughly understands his profession in all its branches, Flower, Fruit, and Kitchen Gardens, Laying Out Plantations, &c.—A. B., Atherstone Nursery, Warwickshire.

GARDENER (HEAD).—Age 40, married; good practical knowledge of his profession in all its branches. Two years' good character from last employer.—A. B., Mr. Weston, Grocer, West Kent Park, Forest Hill, S.E.

GARDENER (HEAD WORKING).—Married; understands Forcing, and general Kitchen Garden. Can have upwards of six years' good character from his late master.—W. C., 11, Butter Market, Bury St. Edmund's.

GARDENER (HEAD WORKING).—Age 33, married, small family; understands Early and Late Forcing, Kitchen and Flower Gardens; good Plant Grower. Good character.—E. W. P., Post Office, Upper Tooting, Surrey, S.

GARDENER (HEAD).—Age 30, single; practically versed in Flower and Kitchen Gardening, and thoroughly understands Forcing. Possesses first-class testimonials, and can be well recommended by J. Weeks & Co., King's Road, Chelsea, S W.—Address R. C., at the above Firm.

GARDENER (HEAD).—Age 36, married, no incumbrance; has a good practical knowledge of Pits, Frames, Greenhouse, Vinery, and Kitchen and Flower Gardens. Two years' good character.—G. W., 8, Britten Terrace, King's Road, Chelsea, S.W.

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GARDENER (FIRST-CLASS), with ... tleman in want of a thorough pra... four years' good character from a no... class references.—M., 3, New Church St...

GARDENER to any nobleman ... Reference as to professional acqu... application to A. B., Drumlanrig Castle ... Dumfriesshire.

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The Gardeners' Chronicle Newspaper.

SATURDAY, OCTOBER 19, 1861.

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News of the Week.

THE KING and QUEEN OF PRUSSIA made their solemn entry into Konigsberg on Monday preparatory to their Coronation, which was to take place yesterday. On arriving at the Castle the KING received the civil and military authorities, to whom he expressed his thanks for the cordiality of his reception, and said that he was full of confidence in the future development of all interests under the free action of all classes of the people. On Thursday at the reception of the deputies and public functionaries invited to witness the Coronation, HIS MAJESTY said to the members of the Diet that the Crown had been surrounded by new institutions by virtue of which they were destined to give it the benefit of their counsel, and he would listen to their advice.

The KING OF HOLLAND arrived at Compiègne on Saturday evening, and was received by the EMPEROR and EMPRESS with the same honours which were shown to the KING OF PRUSSIA. On Tuesday the KING paid a visit to Paris, and it is expected that he will leave Compiègne to-day on his return to the Hague. The *Moniteur* of Sunday announced that the letter contained in a recent pamphlet, and alleged to have been addressed by the EMPEROR NAPOLEON to the KING OF PRUSSIA is a pure invention. The *Moniteur* of Friday published a decree, exempting all cargoes of grain, flour, rice, potatoes, and dry vegetables until September, 1862, from interior navigation dues collected for the State on rivers or canals not conceded to public companies. By the same decree, foreign vessels will enjoy the same privileges as French ships.

Despatches from Warsaw state that in consequence of a patriotic banquet given by the Polish nobility to the peasants who attended the funeral of the Archbishop of that city, a proclamation was published on Monday declaring the kingdom of Poland to be in a state of siege. The military pitched their tents in the public squares and places of Warsaw, and the wearing of mourning or of mourning insignia was prohibited. On Wednesday, in spite of the state of siege, the Kosciusko anniversary was formally celebrated by the citizens with great solemnity. The shops and the Bourse were closed notwithstanding the severe prohibition of the authorities, and all the churches were thronged with people. The military surrounded the churches, and made numerous arrests, without distinction of age or sex; and the crowds were ultimately dispersed by a charge of cavalry, but without bloodshed.

Accounts from Pesth state that the magistrates

of that city have resolved on sending an address to the EMPEROR, stating that they intend to set aside several recent illegal ordinances, and in the event of the Government persisting in carrying those ordinances into execution, to tender their resignations *en masse*. It is also said that the members of the Hungarian Chancellery intend to tender their resignations should the Government continue to demand the execution of unconstitutional decrees. In consequence of the representations made to the Ministry by the Transylvanian Government, the opening of the Transylvanian Diet has been adjourned to the 15th November.

General CIALDINI has definitively resigned the Lieutenancy of Naples, on the ground that brigandage has been suppressed and order re-established in the southern provinces. The command of the forces in the Neapolitan provinces has been conferred on General DELLA MARMORA. The official papers contradict the report that GARIBALDI has quitted Caprera, but state that he has received a visit from General MIEROSLAWSKI, who is said to be about to organise an expedition in aid of Montenegro. The Congregation of the Index at Rome has condemned the pamphlet of the Abbé PASSAGLIA against the temporal power of the POPE. The Abbé wished to defend his work, but the Congregation would not permit him to do so.

From the United States we learn that the Confederates have evacuated Munson's Hill and other positions before Washington, which are now occupied by the Federal troops. In their advance the Federals again betrayed the want of proper discipline among the troops, by firing on each other by mistake. In Missouri General PRICE has evacuated Lexington for the purpose of uniting his forces to those of General M'CULLOCH, and then giving battle to General FREMONT. The report of General FREMONT's recall has caused so much excitement at St. Louis, that Mr. SEWARD has thought it necessary to telegraph to General FREMONT contradicting the report. General WOOL has arrived at Washington from Fort Monroe, for the purpose of consulting the Cabinet. The New York banks have taken up the second 50 millions of the Federal Loan. The Federal Government has chartered all the Vanderbilt steamers, which are to be fitted out as transports.

By the Overland Mail we learn that the state of affairs in Japan has not improved. The British Consulate at Kanagawa has been turned into a stockade which is guarded by armed Yacunins, and alarms are of daily occurrence. The general election in Victoria has resulted in an accession of strength to the HEALES Ministry; and the disturbances between the Europeans and Chinese in New South Wales, have been suppressed by the intervention of the military; but in both colonies there are indications of further difficulties from the ultra democratic party. In New Zealand the STAFFORD Ministry have been defeated on their war policy, and a new administration has been formed under the premiership of Mr. FOX, who has declared the policy of his Cabinet to be aversion to war, and opposition to the purchase of land from the natives, unless by their clearly ascertained consent. These declarations, coupled with the news of Sir GEORGE GREY's appointment, have so far tranquillised the natives, that the preparations for military operations have been entirely suspended.

Home News.

THE COURT IN SCOTLAND.—On Tuesday morning the 8th inst. the Queen and Prince Consort, accompanied by the Princess Alice and Prince Louis of Hesse, left the Castle at 9 o'clock, and drove by Castleton and the Linn of Dee to the Shepherds' huts on the Geanley Water, at which place ponies were in readiness. The Royal party then rode across to Glen Fishie, where they re-entered the carriages and drove by Kingussie to Dalwhinnie, where they arrived at half-past 8 in the evening. Her Majesty and the Royal party passed the night at the inn of Dalwhinnie. At half-past 9 o'clock on Wednesday morning the Royal party left Dalwhinnie and drove by Dalna Cardoch to Blair Castle. They were received by the Duke of Athole at the entrance of the new approach and escorted to the Castle, where the Duchess of Athole was in waiting to receive her Majesty. The Royal party remained for half an hour at the Castle, and then drove in the Duke's carriages to the Forest Lodge, where ponies were in waiting. They then rode up Glen Tilt to Bynock Lodge, at which place the Duke of Athole took leave of her Majesty. The Countess of Fife received the Queen at Bynock, where the Royal party took tea, after which carriages being in readiness, the Royal party returned home, arriving at the Castle at 8 o'clock in the evening. The Prince of Wales went out deer-stalking on Tuesday, and in the evening proceeded to Alt-na-Guithsack, and passed the night. On Wednesday his Royal Highness went out deer-stalking again, and returned to the Castle in the evening. The Princess of Hohenlohe and the Princesses Helena and Louisa, and Prince Leopold, drove out. Prince Arthur went to the Dhu Loch. On Thursday the Queen, accompanied by the Princess of Hohenlohe, the Princesses Alice and Helena, Prince Louis of Hesse, and Prince Arthur, drove to the falls of the Garivalt. The Prince Consort went out deer-stalking. The Prince of Wales drove to Birk Hall, and honoured Mrs. Gordon by a visit. Sir George Grey arrived at the Castle and succeeded the Duke of Argyll as Minister in attendance upon her Majesty. Mr. Arthur Helps, Clerk of the Council, arrived at the Castle. On Friday the Queen held a Privy Council for the further prorogation of Parliament. In the afternoon the Queen went out riding, accompanied by the Princess Alice, the Princess Helena, and Princess Louisa. The Prince Consort and Prince Louis of Hesse went out deer-stalking. The Prince of Wales drove to Mar Lodge, and paid a visit to the Countess of Fife, and also to Invercauld, and paid a visit to Mr. Farquharson. The Duke of Argyll left the Castle. In the evening the members of the Crathie Musical Association had the honour of performing before her Majesty and the Prince Consort. On Saturday the Queen, accompanied by the Princess Alice, went out riding. The Prince Consort and the Prince of Wales went out deer-stalking. Princess Hohenlohe and the Princesses Helena and Louisa drove out. On Sunday the Queen, Prince Consort, the Prince of Wales, Princess Hohenlohe, Princess Alice, and Prince Louis of Hesse, attended Divine service in the parish church of Crathie. The Rev. Mr. M'Duff officiated. On Monday morning the Prince of Wales left the Castle for Clumber Park. The Queen, accompanied by Princess Helena and Princess Louisa, drove out and rode to the top of Craig Guish. The Prince Consort, the Prince of Wales, and Prince Louis of Hesse, went to the Abergeldie Woods, which were driven for deer. Princess Hohenlohe, Princess Alice, and Princess Beatrice drove out. On Tuesday the Queen, accompanied by Princess Alice and Prince Louis of Hesse, drove to the Balloch Buie Woods, and then rode. Princess Hohenlohe accompanied her Majesty to the woods, and then drove home. The Prince Consort went out deer-stalking.

RETURN OF THE COURT.—The Court will return to Windsor from Scotland on Thursday next, the 24th inst., at 8 o'clock in the morning, her Majesty having signified her intention to travel in the night. She will consequently leave Edinburgh on the previous evening. The Court will remain at the Castle until a fortnight before Christmas, and then proceed to the Isle of Wight; but at present it is not determined whether her Majesty will return to the Castle before Christmas or remain at Osborne until New Year's Day.

THE PRINCE OF WALES left Balmoral on Monday morning at a quarter before 8 o'clock. On Wednesday morning the Prince breakfasted at Shrewsbury, and then proceeded by ordinary train to Ludlow, in order to see the mansion and grounds of Moor Park, which his Royal Highness has some idea of taking as a shooting-box. The Prince's visit to Shrewsbury was wholly unexpected, and remained unknown to the town until the Royal train arrived from Crewe to bring his Royal Highness back from Ludlow. On his return he was warmly received by an immense number of the inhabitants, the 1st and 17th companies of Shropshire Rifles, and the cadet company of Shrewsbury School forming a guard of honour. His Royal Highness alighted from his carriage and inspected the corps, and after a few minutes' delay proceeded to Crewe, on his way to Clumber Park, the seat of the Duke of Newcastle. The Prince arrived at Worksop shortly before 7 in the evening, and was received at the station by the Duke of Newcastle and the Earl of Lincoln. The Volunteers acted as a guard of honour, and the Clumber troop of Yeomanry Cavalry escorted the Royal party to Clumber. A large number of persons was congregated outside the station, and cheered loudly as the Prince was handed into the carriage by the Duke of Newcastle. General Bruce rode in the carriage with his Royal Highness, the Duke of Newcastle and Lord Lincoln being on horseback. In the evening there was a dinner party to which a large number of the neighbouring nobility and gentry and the mayors of Nottingham, Newark, and Retford were invited. On Thursday his Royal Highness, accompanied by the Duke of Newcastle and the guests, sailed down the lake to Hardwicke, where the Prince went over the farm premises, and visited the model village in course of erection. The Prince will leave Clumber for Cambridge about noon to-day. During the whole day the park will be thrown open to the public.

PRINCE ARTHUR arrived at Buckingham Palace soon after 10 o'clock on Sunday morning from Balmoral. His Royal Highness left town in the afternoon for Windsor Castle.

PRINCE LEOPOLD, accompanied by [illegible] Edward Bowater, will leave Buckingham [illegible] to-day for Cannes, where he will spend the [illegible] the benefit of his health. It was originally [illegible] that his Royal Highness should pass the [illegible] Southern Italy, but a house has now been taken [illegible] at Cannes, close to the villa of Lord Brougham.

THE CABINET.—A Cabinet Council was [illegible] Wednesday at the official residence of the First [illegible] the Treasury in Downing Street. It was attended [illegible] all the Ministers, except the Duke of Argyll [illegible] George Grey, who have been in attendance on the [illegible] in Scotland.

THE PEERAGE.—The Queen has directed [illegible] patent to be passed under the Great Seal, granting [illegible] dignities of Baroness, Viscountess, and Countess [illegible] United Kingdom to Anne, Duchess of Sutherland [illegible] of George Granville William, Duke of Sutherland [illegible] by the names, styles, and titles of Baroness Macleod, of Castle Leod; Baroness Castlehaven [illegible] Castlehaven; Viscountess Tarbat, of Tarbat [illegible] Countess of Cromartie, in the county of Cromartie; and further granting, after her decease, the [illegible] Baron Macleod, Baron Castlehaven, Viscount Tarbat and Earl of Cromartie, to Lord Francis Sutherland Leveson Gower, the second surviving son of the said Anne, Duchess of Sutherland, and the heirs male of his body lawfully begotten, with remainders [illegible]

PARLIAMENTARY MOVEMENTS.—At the Privy Council at Balmoral on Friday, Parliament was [illegible] to be further prorogued from the 22d inst. to [illegible] the 17th December.—There is a vacancy at [illegible] caused by the death of Major Sibthorp. There are [illegible] candidates in the field—Mr. Hinde Palmer, Q.C., [illegible] Liberal, and Mr. Bramley Moore, of Liverpool, [illegible] Conservative interest.

THE CHURCH.—The announcement that the consecration of the bishops of Gloucester, Nassau, [illegible] Honolulu will take place in Westminster Abbey [illegible] been contradicted on authority; and it is now [illegible] that the consecration will take place in [illegible] Church or in the private chapel of Lambeth Palace. It is said that the confirmation of Dr. Baring's election to the bishopric of Durham cannot take place [illegible] November, and until that ceremony is accomplished Dr. Thomson cannot be formally recommended [illegible] dean and chapter of Gloucester for election.

COLONIAL BISHOPRICS.—The Right Rev. Dr. [illegible]man, Bishop of Colombo, has returned to England [illegible] resigned his see, after having held it during a period [illegible] 16 years. He was the first bishop of the diocese, which comprises the whole island of Ceylon, and was founded in 1845.—The Society for the Propagation of the Gospel have granted a sum of 300*l*. per annum [illegible] applied to the maintenance of three clergymen [illegible] new diocese of Honolulu, for the purpose of ministering specially to the British subjects and British [illegible] frequenting the ports of the Sandwich [illegible]—The Bishop of Columbia has appointed the Rev. Henry [illegible] Wright, M.A., of St. Peter's College, Cambridge, chaplain to her Majesty's forces, to the archdeaconry of that diocese, and the Society for the Propagation of the Gospel has contributed a sum of 100*l*. a year [illegible] stipend in consideration of the missionary [illegible] he will be called upon to perform.

THE EAST INDIA AND CHINA COMMAND.—[illegible] said that Rear-Admiral the Hon. Sir Henry [illegible] will shortly rehoist his flag and proceed to China [illegible] relieve Rear-Admiral Sir James Hope, whose period of service expires in January next.

DIPLOMATIC APPOINTMENTS.—The Queen has appointed Edward Herries, Esq., now Secretary [illegible] Legation at Brussels, to be Secretary of Legation at Lisbon, and Henry Page Turner Barron, Esq., now Secretary of Legation at Lisbon, to be Secretary [illegible] Legation at Brussels.

TRIAL OF THE WARRIOR.—On Monday morning the Warrior, ironcased frigate, Captain the Hon. [illegible] Cochrane, C.B., weighed her anchor at Spithead [illegible] made a trip outside the Isle of Wight, preliminary [illegible] her trial of speed at the measured mile on [illegible] The company on board, official and otherwise, [illegible] Rear-Admiral Robinson, Controller of the Navy; [illegible] Admiral Eden, C.B.; Vice-Admiral Sir Michael [illegible] K.C.B.; Rear-Admiral the Hon. George Grey [illegible] Admiral Erskine, Captain Moore, R.N., [illegible] Secretary to the First Lord; Captain Broadhead, commanding the Steam Reserve; Captain [illegible] Excellent, and other officers; Messrs. [illegible] Miller, heads of the engineering department [illegible] dockyard, and Messrs. Matthews and Halliday [illegible] ing Messrs. Penn & Sons, the builders of the [illegible] machinery. On leaving her anchorage she steamed [illegible] the eastward a short distance from St. Helen's [illegible] when she altered her course, and proceeded round [illegible] east end of the Isle of Wight, steering down [illegible] After a run of about six hours, during which [illegible] engines were tried in a variety of ways, she returned [illegible] Spithead. The result of the day's trial was considered highly satisfactory. The engines made 51 and 52 [illegible]tions, and an average speed of $13\frac{1}{2}$ knots was obtained. The ship made a complete circle at full speed in [illegible] and 30 seconds. From a dead stop, with an interval [illegible] time, the engines were started ahead to full speed [illegible] 11 seconds, and from full speed were stopped dead [illegible] 31 seconds. When going full speed ahead they were stopped and put on at full speed astern in 49 seconds. The ship both rose and rolled with the swell of the

[illegible], and showed not only that she will roll in a [illegible] but that she will possess very great buoyancy in [illegible]. On Tuesday she was swung at Spithead [illegible] adjustment of her compasses, and on Thursday [illegible] made her official trial of speed at the measured mile. [illegible] occasion she was in charge of Captain Broad-[illegible], commanding the steam reserve, and under the [illegible] of Mr. Lloyd, engineer-in-chief to the [illegible]; Messrs. Murray and Miller, heads of the [illegible] department of the dockyard; and Mr. [illegible], acting inspector afloat. Messrs. Matthew and [illegible] represented the builders of the machinery, [illegible] Penn and Sons. Sir John Pakington arrived [illegible] Portsmouth the previous night, in order to be [illegible] at the trial of the ship, for the construction of [illegible] he had given the order when in office. Among [illegible] other visitors on board were Mr. Isaac Watts, the [illegible] of the ship, and Chief-Constructor of the Navy; Admiral Collier; Mr. Peter Rolt and Captain [illegible] of the Thames Iron Shipbuilding Company; Mr. Craddock, master builder of Portsmouth Dockyard; Commander Herbert, her Majesty's ship Excellent; and other officers. The ship weighed anchor and [illegible] ahead from her moorings at Spithead at [illegible] A.M., and first steamed out towards the Nab Light [illegible]. Between the two light-ships, her head was turned round and laid for the trial ground in Stokes Bay, through which two runs were made before fairly entering on the mile, owing to the boilers partially [illegible]. She then made six runs, the result of which gave the maximum revolutions of the engines at 56, and her average speed at 14.354 knots—the greatest rate that has as yet been obtained from any ship of heavy burthen. She had 760 tons of coal on board, and four months' provisions under hatches, together with all her sea stores; and during the whole trial there was a total absence of vibration in the ship, so that she could fire her 100-pounder guns, fore and aft, when at full speed, with a certainty of hitting the object fired at if within reasonable distance. At the conclusion of the trial Captain Cochrane entertained Sir John Pakington and his other guests at luncheon. After the usual loyal toasts had been duly honoured, Captain Cochrane proposed "The Health of Sir John Pakington, and Success to the Warrior." Sir John, in replying, said that it was one of the most gratifying days of his life. He had been anxious to see the Warrior in her seagoing condition, and what he had seen that day had far exceeded his warmest expectations. He congratulated Captain Cochrane upon the great success of the day's trial and the triumph of the ship. He was also glad to congratulate Mr. Watts, as the designer of the ship, Mr. Lloyd on the arrangements connected with his most important department, Mr. Peter Rolt and Captain Ford, representing as they did the builders of the ship—the Thames Iron Ship-building Company, and also Mr. Matthew, who was present on behalf of Messrs. Penn, the builders of the ship's machinery. He hoped in the gale of wind [illegible] it was understood the ship was going in search [illegible] that she would acquit herself as creditably as she had that day done. He and his colleagues had felt great anxiety at the time in ordering a ship to be built of so novel a construction, and in proportion to that anxiety were his pride and gratification on the present occasion. Success must depend in a great measure upon the hands to which the ship was intrusted. The duty of appointment by a change of Government had fallen upon his successors, the present Board, but it was impossible for them to have placed the Warrior in better hands than in those of Captain Cochrane, whose good health he begged to propose. Captain Cochrane replied in suitable terms, expressing the pride he felt in commanding so noble a vessel. Mr. Peter Rolt, in replying on behalf of the Thames Iron Ship-building Company, said that in their construction of the Warrior he trusted they had satisfied the country, and that the ship, by her doings that day, had satisfied the world. The ship anchored at Spithead shortly before 1 P.M., and the visitors and officers on board afterwards returned on shore in three steam tenders. In the course of a few days, the ship will make her experimental sea trip, accompanied by some of the Lords of the Admiralty and other distinguished persons.

The Volunteer Movement.—The National Rifle Association's annual competitive trial of small bore rifles will take place at Hythe early in February. Minimum bore, .451; maximum weight, $9\frac{1}{2}$ lbs.; minimum pull of trigger, 6 lbs. Each gunmaker competing will have to bring six rifles of the same description and quality. The rifles will be fired from fixed mechanical rests, and the one that gives the best figure will be selected as the description of rifle with which the Queen's prize will be competed for, subject to the condition of the manufacturer undertaking to supply the number of rifles required by the Council within a time specified, and of their being in every respect equal to the one chosen. The mean figure of merit of all the rifles of each set that may be tried will decide the position to be assigned to the particular description of rifle. Although it may be found desirable to try the shooting of the rifles from the shoulder, to test to a certain extent the amount of recoil, the shooting to determine the figure of merit will be made from the fixed rest. A rest will be provided by the association which is capable of being adapted to any description of rifle without previous preparation; but any competitor may, if he prefers it, bring his own mechanical rest. The day fixed for the trial will be duly announced.

Foreign.

France.—Another pamphlet, entitled *L'Empereur Napoleon et le Roi Guillaume*, was published last week claiming the Rhine frontier, and containing a letter purporting to have been addressed by the Emperor to the King of Prussia after the Baden interview. The letter professes the greatest friendship for Prussia and for German unity, which is to be achieved at the expense of Austria. It invites Prussia to enter into the Western alliance, to recognise the kingdom of Italy, to vote for the union of the Danubian Principalities, to make a treaty of commerce with France as a bulwark against the commercial despotism of England, to break with Russia as well as Austria, and to inscribe on the national flag, "Germany free and united from the Rhine to the Oder." To accomplish this it assures Prussia of the aid of the Emperor; but at the same time says that France must resume her natural frontiers, which are those of Gaul in the time of Cæsar, within the two seas, the Pyrenees, the Alps, and the Rhine. The letter concludes by pointing to the consequences that followed to Prussia by detaching herself from the alliance of the First Napoleon, and hints at a similar result should she pursue a similar course at the present time; and to add significance to the hint, it is dated October the 6th, the anniversary of the battle of Jena. The pamphlet created a great sensation in Paris, and was regarded as an official manifesto, but the *Moniteur* of Sunday states that the letter is "a pure invention," while the *Prussian Gazette* declares that it is altogether apocryphal. The *Moniteur* in its bulletin of Wednesday further says, that the reports caused by certain recent publications have excited the attention of the Government, which will take into consideration the adoption of measures against anonymous pamphlets. This announcement was followed up by the seizure of all the copies of the pamphlet in question at the publishers. The King of Holland arrived at Compiègne on Saturday afternoon. His Majesty was received by the Emperor at the railway station, and by the Empress at the foot of the grand staircase of the Palace. On Sunday morning the King visited the Imperial stables and kennels. In the afternoon the Emperor and Empress, and the King of Holland paid a visit to the ruins of Pierrefonds, which are in course of repair, after which there was a *bal champêtre*. In the evening there was a great dinner, followed by a theatrical performance. On Monday there was a staghunt, at which the Prince Impérial figured for the first time in full costume on his pony. In the evening there was a grand dinner at 7 o'clock, the *curée* by torch-light at 9, and afterwards a theatrical representation. On Tuesday the King accompanied the Emperor to Paris. Their Majesties dined at the Tuileries, and visited the Théâtre Italien in the evening. On Wednesday their Majesties hunted at Versailles, and had a breakfast in the forest. The Emperor returned to Compiègne in the evening, and the King went to the Opera. It is expected that his Majesty will remain two days in Paris. Prince Napoleon and the Princess Clotilde arrived at Brest from the United States on Monday evening, after a passage of seven days, from Boston. Their Imperial Majesties went to Compiègne on Sunday morning, and returned to Paris the same evening. The reception of the Prince by the Emperor was most cordial, and the account he gave of the state of things in America excited great interest on the part of the Emperor. —M. Ratazzi arrived in Paris on Wednesday. His visit is supposed to have a political meaning, as he is about to enter the Cabinet of the King of Italy, and before doing so seeks this interview with the Emperor Napoleon. The price of bread in Paris is now reduced to 49c. the kilogramme. Orders have been given to construct six mortar vessels according to a new plan, said to have been devised by the Emperor himself.—A terrible storm has caused great devastation in the department of Gard. The Lalle Mine, near Montpelier, was flooded by water, in consequence of which the sides fell in, burying 117, or as some accounts say nearly 300 workmen. Cries, and the sound of blows from a pickaxe, were heard proceeding from the interior of the mine, showing that some of them were alive. Working parties were immediately employed, under the superintendence of the Prefect, for the purpose of making excavations for the rescue of the miners. One of these excavations had on Tuesday morning reached a depth of 150 centimètres, and some of the workmen buried in the mine stated in reply to the questions addressed to them, that they were in good condition. The rescue of four of the miners, still alive, is assured. A dead body was got out from the mine on Monday.—The Orleanist party is discussing the policy of the Count de Paris and the Duc de Chartres in taking service in the American army, and considerable difference of opinion is said to prevail as to the wisdom of the step. Some members of the party say that the princes did not leave England to join the Federal army, but the martial spirit by which they were surrounded impelled them, with the permission of the Prince de Joinville, to become actors in the great events which are impending, and to offer their services to the Government of the North. It is also argued that the cause at stake is the Government of the great American Union, which the blood of France contributed to found nearly 100 years ago, and that "the names of the sons of the Duke of Orleans, of the grandsons of King Louis Philippe, may figure with honour upon the glorious list where shine already those of Rochambeau, of Mathieu Dumas, of Ségur, and of Lafayette." On the other hand there are others of the Orleanist party who think the step a false one, and say that it is like interfering in a family quarrel, in which the princes will not be thanked by either party.

Spain.—It is hoped that the affair of the Neapolitan archives will be satisfactorily arranged without foreign intervention. The Infanta Donna Maria de la Concepcion has had a relapse. The preparations for the expedition against Mexico are actively carried on. The city of Gerona, in the province of Catalonia, has been visited by great inundations, whereby immense damage was done to property. The ecclesiastical authorities of Spain have commenced a prosecution of the modern form of Spiritualism. All rappers and table turners are placed under the ban. All books and periodicals on the subject are seized and destroyed. On the 9th of October, by an order from the Bishop of Barcelona, 300 volumes of Spiritualist literature were burned on the esplanade where criminals are executed. The *auto-da-fé* was under the direction of a priest in full canonicals, carrying a cross in one hand and a torch in the other. He was hooted by the crowd when he retired, and during the ceremony the spectators frequently shouted "Down with the Inquisition."

Portugal.—A Royal decree has been issued, opening the ports for the admission of foreign grain until April, 1862. The King is making a tour through the provinces. His Majesty has decorated Baron Ricasoli with the Cross of the Order of the Conception of Villa Viciosa. The Italians in Lisbon, seeing that there is no possibility of overcoming the obstacles which the Cardinal Patriarch has placed in the way of the mass intended to have been said for the repose of the soul of Count Cavour, have transferred the amount of the subscriptions to the fund for erecting a monument to his memory. The vintage has now been completed throughout Portugal, and the quantity of wine is much larger than last year.

Switzerland.—The Council of State of Geneva has formally denied that there is a syllable of truth in the recent allegations of the *Constitutionnel*, which has published another article signed by its chief editor, M. Grandguillot, persisting in maintaining its assertions that disturbances and assassinations had taken place at Geneva without having been repressed. The article concludes by expressing interest and sympathy for the independence of the Swiss Republic, and recalls that the French Government at the time of the annexation of Savoy strongly manifested its wish for the complete and absolute preservation of that independence.

Italy.—General Cialdini has definitively resigned the Lieutenancy of Naples. It is asserted that he will immediately publish a declaration of his reasons for so doing, which are said to be the cessation of brigandage and the re-establishment of public security in the Southern provinces. The Chamber of Commerce at Naples has presented a sword of honour to General Cialdini for his services. The command of the forces in the Neapolitan provinces has been offered to General Della Marmora, who has accepted it. The statement that Garibaldi has left Caprera for some destination unknown is unfounded. He has never left Caprera, but has received a visit from General Mieroslawski. A letter written by Garibaldi, in reply to the address sent to him by the French workmen in Italy, has been published. A letter has also been published, written to Mr. Cobden last month by Signor Minghetti, while Minister of the Interior at Turin, in answer to an inquiry respecting the alleged engagement for the surrender of Sardinia to France. Signor Minghetti says:—

> "I can positively assure you that the Italian Government never had any agreement, and never entered into any negotiation, for the cession of Sardinia, or any other part of the national territory. I can affirm this, not only from having myself occupied a post in the Government, but also from the intimate confidence I enjoyed with the lamented Count Cavour; and I am certain he would have spurned any project of the kind if it had been submitted to him."

The King of Italy reviewed the garrison and National Guard of Bologna on Tuesday. His reception was most enthusiastic. His Majesty left on Tuesday night for Turin. His Majesty has signed a decree reorganising the different departments of the Ministry of the Interior. A Royal decree has also been issued ordering that all Italians who have deserved well of their country shall henceforth be buried in the Church of Santa Croce at Florence.—Accounts from Rome state that the Congregation of the Index has condemned the pamphlet of the Abbé Passaglia. The Abbé wished to defend his work, but the Congregation would not permit him. A domiciliary visit has since been made by the police to the house of the Abbé Passaglia. Another letter, addressed by Monsignor Liverani to Cardinal Mancini, requesting him to bring the Pope to a conciliatory spirit towards Italy, has been published. The French military authorities at Rome have contracted for the supply of provisions to the French garrison for another year. The enrolments for the brigandage in the Neapolitan provinces have recommenced in Rome. It was rumoured that the brigands would execute a plan of attack at several points in the Southern provinces. The Bourbon Committees at Marseilles and Trieste are said to be displaying great activity. The following are extracts from the Pope's recent allocution:—

"Each of you may remember with what heartfelt grie

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we have frequently deplored before you the numerous and lamentable evils caused to the Apostolic Church, to the Apostolic See, and to ourselves, to the great detriment of civil society, by the Piedmontese government and by the authors and abettors of that disastrous rebellion, particularly in the unfortunate provinces of Italy, which the same government has usurped with as much injustice as violence. At the present time, among the innumerable and still more serious wounds inflicted incessantly on our holy religion by that same government, and by the men who form part of a detestable conspiracy, we have to weep over one dear son, your illustrious colleague, the vigilant Archbishop of Naples, renowned for his piety and his virtue, whom you now see here present, and who, seized by soldiers, was torn from his flock to the great grief of all right-minded men. Every one knows how the satellites of that government and that rebellion, full of ignorance and deceit, have renewed the attacks and the fury of the ancient heretics, and, giving way to all their rage against holy things, endeavour to completely overthrow, if it were possible, the Church of God and the Catholic religion; to wrest from every soul its salutary doctrine, and to excite and inflame every bad passion. All laws, human and divine, have been trampled under foot; all ecclesiastical censures set at nought; the bishops, with an audacity which every day increases, expelled from their dioceses and even thrown into prison; the majority of the faithful have been deprived of their pastors; the regular and secular priests borne down by bad treatment, and subjected to all kinds of injustice; religious congregations destroyed; their members expelled from their houses and reduced to the most complete indigence; virgins devoted to God obliged to beg their bread; the most venerated temples despoiled, profaned, and changed into dens of robbery; sacred property pillaged; ecclesiastical authority and jurisdiction violated and usurped, and the laws of the Church despised and trampled under foot. Schools of false doctrine have been established; libels and infamous journals, the offspring of darkness, have been distributed in every place at an enormous expense by a criminal conspiracy. Pernicious and abominable writings attack our holy faith, religion, piety, honesty, modesty, honour, and virtue, and overthrow the true and unshakable rules of eternal and natural law of public and private rights; the legitimate liberty and property of every one is attacked; the foundations of family ties and of civil society are ruined; the reputation of every virtuous person is blackened by false accusations, and the impunity of all vices and of all error is every day more and more nourished, propagated, and increased. There is no one who has not seen what a deplorable suite of calamities, crimes, and misfortunes have been scattered over unfortunate Italy by this great and criminal rebellion, for, to use the words of the Prophet, 'By swearing and lying, and killing and committing adultery, they break out, and blood toucheth blood.' (Hosea iv. 2). Yes! the sad heart is seized with horror; words are wanting to depict the greater part of the towns of the kingdom of Naples burnt and destroyed; a considerable number of virtuous priests, monks, and citizens of every age, sex, and condition, without excepting even those consumed by disease, charged with the most shameful outrages, thrown into prison or put to death in the most barbarous manner, without even the form of a trial. And who would not be filled with the most profound sadness at seeing these men, these frantic rebels, without any respect for sacred ministers, for the dignity of bishop or cardinal, without any respect for us, for this Apostolic See, for the sacred temples, and for justice and humanity, spread everywhere ruin and devastation. And who are those who act thus? Men who do not blush to affirm with the most brazen impudence that they wish to give liberty to the Church, and to restore the moral sense of Italy. Nay, they are not even ashamed to demand ot the Roman Pontiff to acquiesce in their unjust desires, in order to prevent greater evils from falling on the Church! But what causes us the greatest sorrow, venerable brethren, is that several members of the secular and regular clergy, some of whom hold ecclesiastical dignities, being miserably led away by a fatal spirit of error and rebellion, and, forgetful of their vocation and their duties, have gone astray from the path of truth, having given their assent to the designs of the impious, and have become, to the great regret of well-conducted people, a stumbling-block and a scandal. * * * And here, venerable brethren, we cannot pass over in silence the constant testimonies of real affection, of unflinching fidelity, of devoted submission, of a generous liberality which the Roman people have lavished on us; and we wish also to point out how much they remain firmly attached to us, to this Apostolic See, and to the temporal power which belongs to us, and with what warmth they repel and condemn the guilty attempts of those who seek to spread disturbance among them. Have not you yourselves, venerable brethren, frequently witnessed the sincere and cordial manifestations by which this Roman people, whom we so much love, have shown the sentiments of their traditional faith, of that faith which so justly merits the highest praises? As we have the Divine promise that our Saviour Jesus Christ will be with his Church to the end of time, and that the gates of Hell shall not prevail against it, we are assured that God will not fail in his word, and that a day of wonders will arrive when God will show that this formidable tempest has not been raised to sink the vessel of the Church, but to raise her still higher."

PRUSSIA.—The King and Queen of Prussia arrived at the gates of Königsberg at 12 o'clock on Monday, and were received by the Royal Princes, the Generals, the Presidents, and the civic authorities. The procession through the town took place according to the published programme. The King was on horseback, surrounded by the Princes of the Royal House. The Queen rode in a State carriage drawn by eight horses. Their Majesties were cheered by the crowds on their way through the streets. Their passage through the Brandenburg Gate was announced by a discharge of cannon and the ringing of bells. The procession marched through the lines formed by the corporations, guilds, and companies, the people continually cheering, and the crowds being everywhere very great. All the houses were richly decorated, and were filled with spectators to the roofs. At the Castle their Majesties were received by the Princesses of the Royal House and the body of the officers and clergy. In the afternoon the King received the civil and military authorities at the Castle. His Majesty expressed to them his thanks, and said that he was full of confidence in the future development of all interests under the free action of all classes of the people. In the evening their Majesties and the whole Court visited the theatre, where they met with an enthusiastic reception. At 9 P.M. the whole of the military bands and drummers traversed the city, playing simultaneously. The city was splendidly illuminated, and the streets were thronged with great crowds until midnight. The weather during the whole day was magnificent, and the greatest order prevailed. The number of strangers who had arrived in the city was enormous. On Thursday, at the reception of the functionaries, deputies, and other persons invited to witness the coronation, the King, addressing the members of the Prussian Diet, said:—

"I desired to summon the representatives of the chambers to my presence even before the coronation, and I thank you for having complied with my wish. The rulers of Prussia receive their crown from God. To-morrow, therefore, I shall take the crown from the Lord's table and place it on my head. This is the signification of the expression, 'King by the grace of God,' and therein lies the sanctity of the crown, which is inviolable. I know that you will thus understand the meaning of the act which I have summoned you to witness. The crown has been surrounded by new institutions, by virtue of which you are destined to afford it the benefit of your counsel. You will advise me, and I shall listen to your advice."

It is stated that the King and Queen of Prussia will be present at a fête to be given by the Duke de Magenta, representative of the Emperor of the French at the coronation, and that their Majesties will also be present at a ball to be given by the Earl of Clarendon. The semi-official *Prussian Gazette*, in a leading article on the visit of the King to the Emperor Napoleon, says that the cordial meeting of the two Sovereigns affords the country good prospects of an increase of the peaceful and friendly relations existing between Prussia and France, and that the cordial reception of the Royal guest by the French people justifies the supposition that France, no less than Germany, appreciates the value of these friendly relations, and regards them as a valuable token of a satisfactory future. The same journal says:—

"The assurance is hardly needed that the letter from the Emperor of the French to the King of Prussia contained in the pamphlet recently published in Paris, entitled *L'Empereur et le Roi Guillaume*, is apocryphal."

HANSE TOWNS.—The question of the formation of a German fleet was discussed by the Burgerschaft of Hamburg in its sitting of Wednesday evening. It was resolved that the Senate should be again earnestly requested to act in conformity with the views of Bremen in the negotiations now pending for the protection of the German coasts, and to bring forward a proposition to that effect for the consideration of the citizens as soon as possible. The *Weser Zeitung* publishes the plan submitted by Bremen for the formation of a German fleet, according to which Prussia would undertake to construct a fleet sufficiently strong to guard the coasts against any attack by Denmark, and to protect the German flag in Eastern Asia. This fleet would also have to comply with the requisitions of the Consular agents of all the German States. The amount to be contributed by the people of the different German Governments towards the cost of constructing and maintaining the fleet would be fixed according to the following scale:—In the States in the interior of Germany the people would pay two silber groschen per head; in the States bordering on the sea, three silber groschen per head; in the Hanse Towns, 12 silber groschen per head.

AUSTRIA.—The Emperor of Austria has arrived in the strictest *incognito* at Miramore, where three ships of war were ready for sea, to convey his Majesty and suite to Corfu on a visit to the Empress. The Archduke Rainer has undertaken the conduct of the Government during his Majesty's absence. The Emperor is expected to return to Vienna to-day. The official *Gazette* contradicts the report that his Majesty would make a journey to Berlin after his return from Corfu.

HUNGARY.—The magistrates of Pesth have resolved on sending an address to the Emperor, stating that they intend to set aside several recent illegal ordinances, and, in case the execution of those ordinances should be persisted in by the Government, to tender their resignation *en masse*. M. Kappy, who had been appointed Obergespan of the Comitat of Pesth, and had already taken the oath of allegiance, has tendered his resignation, stating as a reason the impossibility of carrying on the administration under present circumstances. The functionaries forming the Assembly of the Comitat of Arad, lately dissolved, will remain in office until the 1st of November next, in order to prevent anarchy.

TRANSYLVANIA.—In consequence of the representations made to the Ministry by the Transylvanian Government, the opening of the Transylvanian Diet has been adjourned to the 15th of November next. Several magistrates of Transylvania have prohibited the public functionaries from accepting any election as deputies to the Transylvanian Diet.

RUSSIA.—Letters from St. Petersburg state that a good deal of discontent had been excited by the appointment of Count Putiatin, a rear admiral, as Minister of Instruction, and of General Philipson as his deputy. The first acts of the new Minister were to establish the office of Proctor, to abolish the academical costume, which was a military uniform, and to require every student to pay 50 roubles, or about 8*l.* 5*s.*, per annum, instead of receiving, as heretofore, a gratuitous education. The students opposed these innovations and held meetings for the discussion of their grievances, whereupon the Minister closed the University altogether. On the 7th a deputation of about 400 students had an interview with General Philipson on the subject, when the General told them that the University was closed by order of the Emperor on account of their insubordinate spirit, but that it would be reopened on the 14th. The streets through which the deputation passed were lined with troops, to whom the students called out to retire, saying, 'We are not rioters; this is not an insurrection.' At the close of the interview the students were desired to withdraw, when several [illegible] requested General Philipson to order the troops to withdraw first. This request was complied with, and the students then also left the ground.

THE CAUCASUS.—A telegram from the [illegible] station in the Don Cossack territory, dated the [illegible], states that the Emperor of Russia had arrived there, and on the same day intended to travel by the Adagumskoe and Krimskoe to Fort Constantine, in order to take ship thence to Suchum Kalé, and whence his Majesty would travel to Kutais, partly by steam-boat on the Rion, and partly by the new constructed road.

POLAND.—Letters from Warsaw state that the Polish nobility gave a grand parting banquet at the Hôtel de l'Europe to the peasants who had come to attend the funeral of the Archbishop of Warsaw. The Princes and Counts joined with the peasants in drinking the toast of "The Fatherland." The noblemen then rode with the peasants in omnibuses and cabs to the railway station, in the garden opposite to which the noblemen finally regaled their guests previous to their departure. More than 10,000 persons were present. The peasants were conveyed home by a special train. Before their departure spirited national songs were sung. An extempore sermon was delivered on the occasion by the clergyman of the district. The [illegible] gendarmes who were present remained passive spectators of the proceedings. On Monday a proclamation was published declaring the kingdom of Poland in a state of siege. The military pitched their tents in the public squares and places of Warsaw, and the wearing of mourning or of mourning insignia was prohibited. On Tuesday, being the anniversary of the battle of Macziewice, in which the Poles, led by Kosciusko, fought against the Russians, all the shops were closed in Warsaw, notwithstanding the severe prohibition of the authorities. The military surrounded the churches, while they were thronged by the inhabitants, and in two of them which the congregations refused to leave, they made numerous arrests, without distinction as to age or sex, paying however due respect to the sanctity of the places. The crowds of people were ultimately dispersed by a charge of cavalry, but without bloodshed.

GREECE.—The session of the Legislative Chamber has been opened by commission. The King has not yet returned from Bavaria. The indictment against the student Dusios for attempting to assassinate the Queen has been completed, and transmitted to the public prosecutor. Considerable agitation prevails in Athens and other towns; menacing placards have been posted, demanding a settlement of the question of the succession to the throne, and the re-establishment of the National Guard.

TURKEY.—The Sultan goes to Ismid, on the Sea of Marmora, on Monday next, to lay the keel of a new steam frigate. It is rumoured at the Porte that his Imperial Majesty will visit Egypt in January next. The treaty of commerce between Turkey and Belgium was signed on the 11th inst. There is a rumour that Mehemet Ali will definitively become Seraskier, and his son Ethem, Capitan Pasha. Riza Pasha was to leave for Smyrna on the 13th. Mehemet Kiprisli Pasha has set out for his Pashalic. The Sultan has ordered the re-organisation of the Imperial Guard, which is to consist of 25,000 men. The Count de Chambord has arrived at Constantinople from Vienna on his way to Palestine and Egypt, accompanied by a numerous suite.

MONTENEGRO.—The Turks invaded Montenegro on the 13th. They have also attacked [illegible], killing and mutilating several of the inhabitants. The Prince of Montenegro has demanded satisfaction from the Porte through the International Commissioners. Letters from Ragusa announce that the insurgents from [illegible], together with some Montenegrin volunteers, attacked Cincevo and Bioro, but withdrew after a fight of three hours. 2000 insurgents had [illegible] Korienielin and advanced as far as the suburbs of [illegible]. The whole of Montenegro is in arms, and the country is being fortified. Continual desertions, caused by insufficient rations and deficiency of billeting accommodation, have reduced the number of irregular Turkish troops at Gatzko by two-thirds. It is asserted that General Mieroslawski had been summoned to [illegible] in order to organise an expedition to aid Montenegro, [illegible] exciting insurrection in the Slavonian provinces of Turkey, and by afterwards revolutionising the Danubian provinces as far as Galicia. It is likewise asserted that the Governments of Servia, Montenegro, and the Danubian Principalities concur with General Mieroslawski on this project. Letters from Paris state that a secret treaty has been concluded between Servia and Montenegro.

SERVIA.—The Servian deputation has left Constantinople, having failed in their negotiations. It is said that the Deputation, before leaving Constantinople, broke off all negotiations with the Porte.

THE PRINCIPALITIES.—The Moldavian Ministry under the presidency of M. Pano, has resigned. A decree of Prince Couza provisionally intrusts the directors of the different Ministerial departments with the administration of public affairs.

EGYPT.—The inundations of the Nile have caused a loss of cotton, estimated at one-third of the whole crop.

The damage done to the sugar, oil, and grain crops is [illegible], but difficult to estimate precisely.

INDIA.—By the overland mail we have news from Calcutta to September 9. The cholera continues among the English troops at Lahore, and has made its appearance at Benares and Nusserabad. The memorial of the [illegible] gentlemen of Calcutta condemning the conduct of Sir Mordaunt Wells, has called forth a counter address to the judge from the Maharajah of Burdwan and the leading merchants and tradesmen of Calcutta. A bill to tax the cultivation of tobacco in Bengal has been introduced into the Legislative Council.

CHINA.—The *Gazette de St. Petersburg*, of October 11, publishes the Russian despatch from Pekin announcing the death of the Emperor of China, which took place on the 24th August. On the morning of that day two decrees appeared in the *Official Gazette* of Pekin, containing the last orders of his Imperial Majesty. By the first decree his eldest son was named heir to the Celestial Empire; by the second a council, consisting of eight high Chinese dignitaries, was appointed to assist him in the duties of the Government. The name of Prince Kung does not appear in this list. All public business was suspended for twenty days, the official period of mourning. Pekin continues tranquil, and the state of things in China generally remains unchanged. Prince Kung governs the empire with the title of Regent.

JAPAN.—The state of affairs in Japan has not improved. There is, however, no important event to note, although alarms are of daily occurrence at Jeddo, Kanagawa, and Yokuhama. The British Consulate at Kanagawa has been turned into a regular stockade, and is guarded by armed Yacunins. The wounds inflicted on Mr. Oliphant in the late murderous attack on the British Legation are not dangerous, but it was considered desirable that he should return to England for surgical advice.

UNITED STATES.—The Confederates have evacuated Munson's Hill and other positions before Washington. It is stated that General M'Clellan never had a thought that such a retreat was contemplated, and did not know it had taken place until several hours after the last Confederate pickets had strolled away; and until the main force had been gone for two days. Early on the 29th the pickets from General Smith's division advanced, and occupied Falls Church. The works of the Confederates at the places they had evacuated were in a military view almost worthless, and the appearance of the ground indicated that they were deficient in those arrangements which serve to make a camp life comfortable, having no tents, but merely wigwams rudely constructed. There were no signs to show that they ever mounted any guns. What had appeared from the Federal side to be guns turned out to be painted logs of wood and a stove pipe. The advance of General Smith was accompanied by events of the most deplorable character. When about half a mile from Falls Church, by some unaccountable blunder Colonel Owen's (Irish) Philadelphia Regiment, in the darkness of the night, mistaking the rest of the force for Confederates, fired a full volley into Captain Mott's battery, which was in advance, sustained by General Baker's California Regiment, Baxter's Philadelphia Zouaves, and Colonel Friedman's Cavalry, killing and wounding a large number. The California regiment, not knowing whence the firing came, returned it with marked effect. The horses attached to Mott's battery became unmanageable, and the tongues of the caissons were broken, owing to the narrowness of the road. Lieutenant Bryant, having command of the first section, ordered the guns to be loaded with grape and canister, and soon had them in range to rake the supposed enemy, when word was sent to him that he was in the company of friends. All was excitement, and a long time elapsed before the actual condition of affairs was ascertained and confidence re-established. Since this occurred the Confederate General Price has evacuated Lexington and gone southward to join General M'Culloch, intending, after effecting this junction, to give battle to General Fremont. It was thought he would endeavour to place himself between Jefferson City and the Federal forces under the command of Generals Davis and Siegel, thus cutting off the latter, who intended to join General Fremont at Jefferson City. Lexington is now occupied by the Federal troops under Major Sturgis. The rumour of General Fremont's removal has created great excitement at St. Louis. Mr. Seward has telegraphed to General Fremont that he is not ordered to Washington, and that no court martial has been ordered on him. General Reynolds reports to the War Department that he had a successful engagement with the Confederates under General Lee during a reconnaissance at Cheat Mountain. A large number of Confederates were killed, and many horses and cattle were captured by the Federals. A report from Western Virginia says that 10 companies of Kentucky, Ohio, and Virginia troops, on a day not specified, attacked and routed the Confederates at Chapmansville, killing 10 and taking 50 prisoners. From the same unreliable source it is reported that a battle was going on between General [illegible] and the Confederate Generals Wise and Floyd. Reports are in circulation that the Confederate General Buckner, with 5000 troops, threatens an attack on Spottisville, Missouri. General Buckner is said to be advancing further into Kentucky, and collecting arms on the way. General Sharman has superseded General Anderson in Kentucky. General Anderson had previously telegraphed to Cincinnati for reinforcements, having received advice of the advance of a considerable Confederate force into Kentucky. Thirteen Federal schooners have left Fortress Monroe for Hatteras, and General Wool has arrived at Washington for the purpose of consulting the Federal Cabinet. It is reported that he will proceed on a tour of inspection through the Western department. It was reported by letter from St. Louis, that 70 Federal vessels were going up the Balize to capture New Orleans. Mr. Buchanan, the ex-president, had published a patriotic letter in favour of the vigorous prosecution of the war. The Richmond papers say that 250 Federal prisoners were sent to New Orleans on the 24th ult. The Richmond hospitals are reported to contain over 12,000 patients. Southern parties confirm this report. The Confederates have abandoned Ship Island, and have captured the Federal chartered gunboat Fanny inside Hatteras, near Roanoke Island. Several vessels are loading ammunition at Havannah for the Confederates. The Federal Government has chartered all the Vanderbilt steamers, which are now fitting out at New York as transports. It is reported on good authority that the British steamer Bermuda has run the blockade at Savannah. The latest news reports that the Confederates have withdrawn behind Manassas, and that there are unmistakable indications that a battle will be fought on the Potomac within the next two days. General M'Clellan has issued an order according to which the penalty of death will be inflicted on all soldiers committing depredations. A number of French officers, partisans of the Orleans family, were at Washington soliciting commissions in the Federal army. Several of them took part in General Lamoricière's campaign in Italy.

MEXICO.—It has at length been resolved that there shall be common action by the three Powers in the affairs of Mexico. England will confine her intervention to the coast in conjunction with the two other Powers; while an expeditionary force of 6000 men, composed of French and Spaniards, is to penetrate into the heart of the country. The proceeds of the Customs are to be divided among the claimants, an appeal is to be made to the people to govern the country under the joint protectorate, and a mixed commission is to be established in Mexico itself, to regulate the indemnities due to Europeans.

SOUTH AMERICA.—The Government of Peru has protested against the annexation of St. Domingo by Spain. The Spanish Cabinet is accused by the Peruvian authorities of creating and encouraging disorders in most of the States of South America. During the public celebration of the fête of General Castilla a band of robbers made a descent on the province of Pisco, and levied a contribution of 90,000 piastres on the inhabitants. The bandits were pursued, and most of the money recovered.

AUSTRALIA.—Advices from Melbourne to August 24 state that the general election had resulted in the return of a majority for the Minister, Mr. Heales, who obtained the Governor's assent to the dissolution. The Ministry appealed to the people on a programme containing among other things protection to native industry, payment of members (300*l.* a-year each), and a repeal of the gold export duty; and one of their local organs hints at the possibility of the Legislature repudiating the seven millions which the Victorian Government owes in London for the railway loan. In New South Wales, by the intervention of English soldiers, the disgraceful riots and outrages practised on the Chinese have terminated, but it is said that an Act is sure to be passed prohibiting, in defiance of treaties, the immigration of Chinese into New South Wales.

NEW ZEALAND.—The relations between the natives and the settlers have changed for the better. The news of Sir George Grey's appointment had reached the natives and diffused great satisfaction among them. The House of Representatives had met at Auckland, when the Stafford ministry were defeated on their war policy, and Mr. Fox, who took the lead in the opposition, was called upon to form a new ministry. In attempting this, he at first found some difficulty, but he afterwards succeeded, and met the House on the 16th of July, and made a statement of the policy the new government proposed to pursue. He declared their aversion of war, and their opposition to the purchase of land from the natives, unless by their clearly ascertained consent. These declarations had still further tended to tranquillize the natives. A board of inquiry, under Colonel Chute, 70th, and Colonel Warre, 57th, had assembled at Taranaki to inquire into the Waireka skirmish 16 months ago.

Public Addresses.

THE RIGHT HON. J. W. HENLEY at the annual dinner given by the Mayor of Oxford made the following remarks on Foreign Politics:—

"The state of this country, contrasted with that of our less fortunate foreign neighbours, teaches us that we should be doubly thankful for the constitution and institutions under which it is our privilege to live. With regard to the recent establishment of the States of Italy into one united kingdom, I believe there breathes not a man in this country, whatever his politics may be, who does not hope that that great but hitherto oppressed people may hereafter enjoy all the blessings which we have reaped from an enlightened form of self-government. There is no Englishman, whatever his political feelings may be, who would deny to any other nation a participation in those blessings which this happy country now enjoys. Now that Italy has a prospect of obtaining a better and more united government, let us hope that she will thoroughly appreciate the boon placed at her disposal, and exhibit hereafter that patience, forbearance, and consideration for the rights of others which after all is the best means of securing those of themselves. What Italy is now endeavouring to obtain is simply that which this country has always sought after. We are never found, in our political squabbles, hankering after anything new, but all our chops and changes have resulted from a striving to obtain rights which somehow or other have fallen into abeyance. We have not attempted to obtain something which we never had before, but something which we think we ought to have had preserved to us, which by some means or other has been taken from us. It is this which, as our great historian Lord Macaulay tells us, more than anything else, gives stability to the institutions of the country. All that we can hope and pray is that in the turmoil of the revolution which has taken place in Italy men will not seek to rule by the mere strength of power; that, having once obtained it, they will not seek to maintain and keep it for themselves alone, but that they may devise some form of self-government which will prevent them from running into excesses, and will induce them to make a sound and good use of the blessings now conferred upon them. I will not at this moment touch at any length upon what is now going on at the other side of the Atlantic. We can only view the civil war now raging with regret, and regard it with the deepest pain. I am not sufficiently well informed to express to you any opinion upon the merits of the quarrel, and all I can hope is that the right will ultimately prevail, and that that great nation of our countrymen will soon see the folly of the contest in which they are now engaged. No doubt, it is a struggle in which this country must feel deep interest from the ties of friendship and relationship which bind us to America. It was only this morning that I heard from one of my poorer neighbours that his son is now busily employed in fighting in one army or the other, but as to the one in which he was particularly engaged he had not been able to learn. I myself saw the boy grow up, and all that his parent now knows of him is that he is fighting with the American army. None of us, my friends, are strangers in this quarrel; and may it please God soon to terminate it, for of all the horrors which could afflict the world civil war is the worst! At such times men forget almost that they are human beings, and the longer such a contest lasts the greater is the ferocity displayed. Indeed, it is not too much to say that in such a war everything that can possibly have a tendency to disgrace and degrade human nature takes place. In the coming winter, unless America can reconcile her difficulties and give us cotton, we must have failure in the supply, and the cessation of supply must lead to the most disastrous consequences to our industrious population. I sincerely trust that our good friend over the water will get rid of some of the legions which he now possesses, so as to enable us, without unnecessarily alarming the country, to curtail our warlike expenditure. At present we are simply spending money because we have neighbours who are supposed to delight in keeping us in a perpetual state of alarm. Our armament is therefore great, and consequently requires great taxation to support it. Englishmen, however, don't care one farthing what they pay, provided they have only got money to pay it with. If they are called upon to pay heavily when the breeches pocket is empty, then it becomes a serious matter. But strong as these reflections may be, I trust that circumstances may arise which may enable whatever Government may be at the head of affairs in the country to reduce taxation before any lengthened period rolls over our heads. At present I believe that any reduction would be a sheer impossibility. The country, from one end to the other, has pressed the Government to arm, and, taking into consideration all the circumstances, I do not think that any Government would have declined to respond to the call. On the contrary, great as our armaments now are, I believe they are behind rather than in excess of the wants and the wishes of the country. The country has said with one voice 'We will be protected;' and it has not only said that, but some 100,000 or 200,000 have said 'With arms in our hands we will help to afford that protection.' That being the case the rest of the community could not help saying, 'We will also do our part.' The consequence is that we have heavy taxes to pay. I wish it could have been otherwise, but I do not see how we could have avoided taking the steps we have taken. We must not forget that we have a neighbour on the other side of the water who might render himself extremely disagreeable. I have no reason to suppose that he means anything but what is right, but if he does not mean what is right he certainly is in a position to make himself very unpleasant. Our best course, then, is to keep on terms of amity with him so long as we can in honour do so, but at the same time to be prepared for any emergency. We all know very well that no man is ready to pull the gloves off and attack another man for the mere pleasure of the transaction if he knows that his antagonist is not only his equal in strength, but has just as good fists as he has. If it were not for the suspicion we have of our neighbour, and he of us, I believe we should always be the best of friends, but as it is we are each tempting the other to do that which he would otherwise never dream of."

THE RIGHT HON. GENERAL PEEL, at the annual dinner of the Huntingdonshire Agricultural Society on Tuesday, spoke as follows on Military Affairs:—

"Since this time twelvemonth the British army has had no opportunity of distinguishing itself. Do not think I regret that. There is nothing which, in my opinion, is more to be lamented than war; and I know of no kind of war that is more to be deprecated than a war such as that which is now going on at the other side of the Atlantic. I am sure that there is no Englishman who does not regret that war—not from any selfish feeling, but in the interests of our common humanity. And I think that the Government of this country has most wisely expressed its determination to preserve the strictest neutrality. But although we may not interfere in it we have a good deal to learn from it. None of us can have read those graphic accounts which Mr. Russell has so fearlessly given of what is going on in America and not have noticed that without discipline no personal valour will be of any avail, and that if soldiers—and I believe the American Volunteers are second to none—be not put under officers in whom they place confidence, the best army is but a rabble. On reading those accounts another thing struck me. We have all heard of troops who never know when they are beaten. I have read elaborate essays written for the purpose of showing that the Duke of Wellington was beaten at Waterloo, but could not be induced to believe it; but it appears that with the American officers it is exactly the reverse. They know when they are whipped well enough, but it appears to me that they do not know when they win. At least, if they do, their greatest victories have never been attended with any results. What the war is all about I do not very well know. If the object of the North were to put down slavery, they would have my sympathy; but, as far as we can learn, that does not appear to be their object. However, be that as it may, I, for one, must express my hope that this American war may soon be put an end to. I now wish to allude to a rumour which has been spread in some quarters; and I do so, not from any belief that it is well-founded, but in the hope that it may be met by an official

contradiction. The press has referred to a report that, in consequence of the perfection at which the Volunteers have arrived, a reduction of the regular forces of the country is about to take place. Now, I must express my opinion that this is not the case. No doubt, there may be some reduction of the army, which has nothing to do with the Volunteers, and I hope the impression that it has will not be suffered to go abroad, for, if it did it might create a very ill feeling between the army and the Volunteers. I am sure that no such feeling will ever arise if proper precaution be taken to prevent mistakes; but a sense of disappointment would be engendered in the minds of our soldiers if they thought that their services were about to be dispensed with on account of the Volunteers; and the Volunteers themselves would be equally displeased. Indeed, I have been told that many of them have said they would retire from the movement if it were to have such an effect. There is no doubt of this, that if it were not for the Volunteers a larger standing army, and as a consequence a greater expenditure, would be required. In that way the country is much indebted to the Volunteers; but the strength of the regular army must always be depended on for distant garrisons and foreign service. A large number of our troops must be kept in distant places, and a large number must be constantly kept up at home with a view of relieving them. I do not know any more than any other gentleman here what may be the intention of the Government; but I say it is probable that some reduction may be necessary in order to bring down the army establishment to the number voted by Parliament. At the commencement of the present financial year there were 15,000 more men in India than there were on the Indian establishment. So long as they remained there they were paid by the Indian Government; but I, for one, always knew that when they did not require those troops the Indian Government would send them home. I am sure that the army will not be reduced below the numbers voted by Parliament. This is not a time when our army could be diminished. We see Continental nations keeping up great armies on a war footing. We ourselves are raising fortifications of great magnitude. Those on the south side of the Thames alone will require 61,000 men to garrison them; and therefore I am perfectly sure that there is no intention of lowering the number of our troops below that voted by Parliament. I place the greatest confidence in the noble lord at the head of the Government, and feel no doubt that he will uphold the power of the country and defend its honour." In returning thanks for the borough members, General Peel amused the company by a description of the difficulties of a non-agricultural member who was forbidden to talk politics:—"Here you say that politics are excluded; but allow me to tell you that some of the speakers have entered on two of the most important of political subjects. A gentleman has spoken of tenant right. If that gentleman had had as much experience of the discussion of tenant right as I have had, he would know that the question is a most difficult one. And I would say more—that any question between landlord and tenant ought to be discussed between the two parties themselves. Something has been said about the want of labourers in the rural districts. Are the proprietors sure that they have not to answer for that themselves? Are you sure you have paid that attention to the labourer's comforts which ought to induce him to remain? These subjects have been ably handled in other places by my friends Sir J. Pakington and Sir Laurence Palk—men who have taken an active part in promoting agricultural interests; and again I say depend upon it that they are subjects which you would do better to discuss among yourselves. There was another agricultural meeting, attended by a noble lady who goes over every year to be present at a similar gathering. I refer to the meeting at which the Marchioness of Londonderry addressed her tenantry. An hon. and learned friend of mine, Sir Hugh Cairns, was also present. He said that it did not require that a man should be a farmer in order that he might have a sincere wish for the prosperity of the agricultural interest. I concur in that, for I am not a farmer; I am, nevertheless, a sincere well-wisher of that interest; but the subsequent part of my hon. and learned friend's speech almost made me afraid to say even one word about farming. My hon. friend said that a farmer would require a knowledge of chemistry, mechanics, and various other sciences; so that I fully expected, when another farm became vacant, to see a competitive examination of the proposing tenants. I mentioned the matter to a practical farmer, and asked him whether he thought a knowledge of mechanics and chemistry was necessary. He told me he thought there was one thing more necessary, and that it was 'capital.'"

MR. THOMAS BARING, M.P., at the Huntingdon meeting, made the following remarks on the abundant harvest and on the national energy:—

"If you look to the past—if you look to the changes forced upon the people by legislation—if you look to the application of science and machinery in commerce and agriculture—you will see that there is an energy in the people of this country which enables them to triumph over every trial. We all know the stereotyped form of expressing that energy. You have all heard of the 'elasticity of the resources of the country.' It is a phrase made use of by the Chancellor of the Exchequer. In times of monetary difficulty, or when an increase of taxation is necessary, you find the Chancellor of the Exchequer saying that he relies on the elasticity of the resources of the country. What is that elasticity? It is that characteristic of Englishmen which enables them under any altered circumstances to retrieve lost ground and still advance their country in that forward course of prosperity in which for so many centuries she has been proceeding. That it is which makes the resources of this country elastic; and I am sure that not only in the competition in which I am most interested—not only in the competition of commerce and manufactures, but also in that of agriculture, the elasticity of our resources affords us two securities. First, a security against foreign invasion or foreign interference of any kind; and next, a security against our property being jeopardised by unjust legislation. Looking at the present aspect of affairs, I think there is a career of continued and increasing prosperity opened to those engaged in agriculture, which I do not say will surpass, but will certainly equal that which they have enjoyed during the last 10 years. Allusion has been made to the diminution in the number of agricultural labourers. I think that that has been in some measure produced by economy of production; but I am of opinion that by the application of machinery—by the application of steam—by such economy of labour as that—agriculture has not suffered, while manufacture has gained. We are now so situated in this country that manufacture depends very much upon agricultural prosperity; and, on the other hand, agriculture is so much concerned in the success of manufacture that anything which tends to suspend labour in towns, or decrease the earnings of the operatives engaged in manufactures, must have an injurious tendency in the rural districts."

LORD OVERSTONE, at the Berkshire Sessions at Abingdon, on Tuesday, spoke as follows on the subject of collecting Agricultural Statistics throughout the country:—

"The subject under consideration was a most important one. He feared they must acknowledge that the anticipated difficulty in collecting these statistics arose from a feeling of jealousy on the part of the tenant-farmers, and he thought it highly important that the farmers, so far as was possible, should be convinced that such an apprehension on their part was an entire mistake. Certainly the object for which the statistics were to be collected was one of the deepest interest to the farmers. They were necessarily the victims of uncertainty in the markets and the speculative action arising out of it. If, therefore, they were put in possession of accurate information respecting the state of agriculture and the produce, they would obtain a substantial and sound basis upon which to settle agreements with their landlords, and to guide them safely through all the natural transactions of their farms. It was important that the magistrates, in their individual capacities in the agricultural circles around them, should try to impress the farmers that these statistics, if obtained, would be more valuable for legislative purposes, more important in protecting them from the casualties to which they were now exposed, and in guiding them with confidence in all their transactions, than anything he could conceive. With respect to the means to be employed for collecting these statistics, there seemed to be grave doubt whether the county constabulary should be the parties. There certainly did appear upon the surface ground for hesitating as to the propriety of bringing the constabulary into contact with the prejudice of the farmers. On the other hand, they found it not to be an insuperable or serious difficulty, as proved in the case of Ireland; and surely they could not think that the difficulty which arose out of a prejudice would be more formidable in England than in Ireland. It would be a reflection upon the character of the English farmers to imagine that they would be determined upon withholding information which farmers in the sister isle furnished without even hesitation. Then, if steps were not taken to obtain these statistics, the consideration would arise—what reply would the court make to the Secretary of State? If other counties acceded to the request made, it would be an unfortunate thing if Berkshire stood aloof. He thought it desirable that a private communication should be made with the chairmen of quarter sessions of other counties, and they would then arrive at some general view of the thing throughout the country." [It was ultimately determined, on the motion of Lord Overstone, and by a narrow majority, to postpone the consideration of the question, with the view of ascertaining what other counties had done or intended to do.]

MISS NIGHTINGALE a few days since addressed the following letters to her brother-in-law Sir Harry Verney, M.P., to be read at an entertainment given by him to the Winslow and Buckingham Volunteers at Haydon House:—

"My dear Sir Harry,—I like to hear of your Volunteers. I wish I could be with you. But my heart is with you all. At the beginning of this year we had 150,000 Volunteers. And already we hear from the best military authorities that they are capable of manœuvring and executing movements with regular troops. To those who know the stuff of which the Anglo-Saxon is made (no man knows him better than I do), this is not surprising. These Volunteers are of the same race with that handful of men who defended their trenches at Sebastopol—as the Greeks held the position of Thermopylæ—and who, when dying of slow torture in hospitals, drew their blankets over their heads and died without a word, like the heroes of old. Thank God, our Volunteers have not to undergo these slow agonies in the defence of their country. But I for one (and I speak notwithstanding an experience of the horrors of war which no man has had) was not at all sorry to see the spirit of war brought home to our people's lives in the glorious rising of the Volunteers. A country needs re-tempering sometimes. England, from her grand mercantile and commercial successes, has been called sordid. God knows she is not! The simple courage, the enduring patience, the good sense, the strength to suffer in silence—what nation shows more of this in war than is shown by her commonest soldier? I have seen men dying of dysentery, but scorning to report themselves sick, lest they should thereby throw more labour on their comrades, go down to the trenches and make the trenches their death-bed. There is nothing in history to compare with it. Other nations may do it for glory, but we for duty, as the Duke of Wellington said. I say no one has seen the horrors of war as I have, yet I was glad to see the spirit of war arising in our Volunteers. If both English and French statesmen have recorded upon their own observations that the most intelligent, the most well-doing, the most respectable in the best sense of the word, in any French village or district, are always those returned from serving out their time on conscription; and if this is the case with those who have given a compulsory service for a government which we English cannot respect, what ought not the men to become who give a free service for a free country, like our Volunteers? Say what men will, there is something more truly Christian in the man who gives his time, his strength, his life if need be, for something not himself—whether he call it his Queen, his country, or his colours—than in all the asceticism, the fasts, the humiliations, and confessions that have ever been made. And this spirit of giving one's life, without calling it a sacrifice, is found nowhere so truly as in England. This is a spirit which animates our armies and our Volunteers. But there must be more drill, more discipline in the sense of teaching how orders are to be obeyed, more acting in concert to make our Volunteers perfect. And our Volunteers mean to be quite perfect. It is wonderful how much they have done already in precision. On the saddest night of all my life, two months ago, when my dear chief Sidney Herbert lay dying, and I knew that with him died much of the welfare of the British army—he was, too, so proud, so justly proud, of his Volunteers—on that night I lay listening to the bands of the Volunteers as they came marching in successively—it had been a review day—and I said to myself, 'The nation can never go back which is capable of such a movement as this: not the spirit of an hour; these are men who have all something to give up; all men whose time is valuable for money, which is not their god, as other nations sometimes say of us.' One of the best appointments my dear chief made was Colonel M'Murdo, the inspector general of Volunteers. I knew him in the Crimea, where he executed the most difficult service, that of organising the land transport corps, with the utmost success. No doubt the Volunteers have full confidence in him. It was whispered to me, in Sidney Herbert's time, that Buckinghamshire had been behindhand in her tribute of Volunteers. Is that the case now? I hope not. But if so, it makes those who have volunteered all the more worthy. If I might venture to do so, I would gladly ask you to offer them from me a pair of colours. Probably, however, they have them. If so I can only offer them from the bottom of my heart the best wishes of one who has 'fought the good fight' for the army, seven years this very month, without the intermission of one single waking hour." * * * "Oct. 9. I should have thought it a presumption to write to the Volunteers if not desired by you. My point, if there was one, was to tell them that one who has seen more than any man what a horrible thing war is, yet feels more than any man that a military spirit in a good cause—that of one's country—is the finest leaven which exists for the national spirit. I have known intimately the Sardinian soldier, the French soldier, the British soldier. The Sardinian was much better appointed than we were. The French were both more numerous and more accustomed to war than we were; yet I have no hesitation in saying that we had the better military spirit, the true Volunteer spirit, to endure hardship for our country's sake [illegible] a sergeant who was on picket, the rest [illegible] killed, and himself battered about the head, [illegible] to camp, and on his way picked up a [illegible] brought him in on his shoulders to the [illegible] down insensible. When, after many hours he [illegible] senses, I believe after trepanning, his first [illegible] after his comrade, 'Is he alive?' 'Comrade, [illegible] alive; it is the general.' At that moment the [illegible] badly wounded, appeared at the bedside [illegible] you. is it, I brought in, I'm so glad. I [illegible] honour, but if I'd known it was you I'd have [illegible] the same.' This is the true soldier's spirit. [illegible] impress on the Volunteers the necessity of [illegible] exercise, brigade movements. Garibaldi's V[illegible] excellently in guerilla movements, they failed [illegible] rate regular army. We trust that our Volunteers [illegible] know what real war is. But they must [illegible] reputation to be feared by the enemy in order [illegible] enemy ever at their own hearthstones.

"FLORENCE NIGHT[illegible]"

MR. ROEBUCK, M.P., attended a déjeuner [illegible] in Gatcombe Park, the seat of Mr. Kinnaird, [illegible] the Isle of Wight, in honour of the distribution [illegible] prizes to the Newport and Cowes Rifles, and [illegible] follows on the Volunteer Movement:—

"I have seen to-day the spirit of England [illegible] itself in a way which has struck dumb the persons [illegible] who wished injury to her. I asked myself the question, 'Why is it these men thus rise up, armed to the [illegible] defend their country?' My answer was, because their country is well governed. I then asked myself, [illegible] governed?' and my answer was—it is through [illegible] House of Commons you are well-governed. [illegible] fashion to speak ill of the House of Commons [illegible] fashion, and it is the fashion to speak ill of that House [illegible] write novels against it, men compose poems against [illegible] when they go into that House they feel their own [illegible] and they take their places with the ciphers they [illegible] sent. I cannot presume to represent the House [illegible] but there is one feeling I have in common with [illegible] members, and that is in admiration of the [illegible] corps that have arisen throughout the length and [illegible] of the land. Those corps represent the [illegible] England, and, therefore, we have sympathy with [illegible] Why do I look with complacency upon the appearance [illegible] Volunteers of England? It is this that makes [illegible] Some years ago I felt—I knew—that there was a feeling [illegible] that England was defenceless; that she could be assailed [illegible] that there were people ready to assail her. But [illegible] teeth of Cadmus there has arisen this body of Volunteers [illegible] that feeling that said it would dare to invade England [illegible] away, and gone down to the shoes of those who [illegible] do not now talk of any invasion of England. We are England defending itself. The Volunteers of this country have [illegible] that for us which no army could do. And why? [illegible] armies are compelled to appear, and an army [illegible] here what it is there. None of them have any [illegible] they knew that when you rose up it was England [illegible] you were confident against the world in arms. There [illegible] that you now need fear, and I tell you—and I [illegible] hereby speak the feeling of the House of Commons [illegible] as we are volunteers on your behalf, so you, the Volunteers of England, are ready to fight the battles of the people of England on behalf of the people of England, and [illegible] you do it with a spirit, and with a feeling, and with a consciousness that belongs to you as Englishmen. I beg you [illegible] remember that when you are fighting for England, the greatest, the most important thing that you ought to fight for is for a complete representation of the people of England. [illegible] there be one thing that distinguishes the [illegible] from all others, it is that each man in [illegible] speak out that which he believes. He requires no censor [illegible] canvass the book that he publishes. I am not afraid now that there is a spy behind the door listening to what I say. I [illegible] an Englishman, speaking out that which I believe, and [illegible] believe that we exhibit to the world a spectacle that the world ought to be glad to uphold—a free people governing themselves with wisdom, with justice, and with honour."

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 92¼ to ⅜ for Money, and 92⅜ to ½ for the 7th November; Bank Stock, 233 to 232; Three per Cents. Reduced, 90½ to ⅝; New Three per Cents. [illegible] to ¾; Thirty Years' Annuities, 1885, 15⅜; India Stock, 224; Ditto Five per Cent. Stock, 104¼ to [illegible] Acct., 104⅛; Ditto Scrip, 104; Ditto Four [illegible] Debentures, 1863, 98⅜; Ditto, 1859, 98; D[illegible] 14s. pm.; Five per Cent. Enfaced Rupee Paper [illegible] Ditto Five and a Half per Cent., 103¼ to ½; Exchequer Bills, March, 4s. to 1s. pm.; Ditto Small, [illegible] Ditto June, 10s. to 7s. pm.—FOREIGN: Chilian [illegible] and a Half per Cents., 84⅞; Dutch Four per Cent. Certificates, 99¼ ex div.; Equador New Consolidated [illegible] Mexican Three per Cents., for Acct., 26; New [illegible] Active, 16; Ditto Deferred, 5½; Portuguese Three per Cents., 1853, for Acct., 47¼; Russian Three per [illegible] 1859, 61⅜; Turkish Six per Cents., 1854, 81½, [illegible] Ditto for Acct., 81½, ex div.; Ditto, 1858, for Acct., 69½; Ditto Guaranteed Four per Cents., 101½.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£27,754,755	Government Debt ..	[illegible]
		Other Securities	[illegible]
		Gold Coin and Bullion	[illegible]
		Silver Bullion ..	[illegible]
	£27,754,755		[illegible]

BANKING DEPARTMENT.

Proprietors' Capital ..	£14,553,000	Government Securities (including Dead Weight Annuity)	[illegible]
Rest	3,119,329	Other Securities .	[illegible]
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	3,568,765	Notes	[illegible]
Other Deposits	14,411,153	Gold and Silver Coin ..	[illegible]
Seven day and other bills	808,592		
	£36,460,839		[illegible]

17th day of Oct., 1861. M. MARSHALL, Chief [illegible]

Gazette of the Week.

TUESDAY — BANKRUPTS—W. CURTIS, late of Great Berkhamstead, Rag Cutter—J. EUSDEN, Ely, Cambridgeshire, Builder—G. [illegible] Birmingham, Fruiterer—T. P. HESKETH, Newman's Row, Lincoln's Inn Fields—R. HICKS, Mortimer Street, Cavendish Square, and [illegible] Lewisham House Agent—W. HIRST, Huddersfield, Woollen [illegible]

[illegible] Street, Pimlico, Merchant—[illegible] Jenkins, [illegible] Outfitter—W. Lamb, Tunstall, Grocer—J. Mason, [illegible] Cornhill, Stockbroker—F. Ormond, [illegible] Cattle Jobber—F. R. Partridge and H. Edwards, [illegible]—F. Rauch, Huggin Lane, Wood Street, Warehouseman [illegible] Great Russell Street, Bloomsbury, and Walbrook, [illegible]

[illegible]—H. Alcaster, Stratford New Town, Essex, [illegible] Iron and Steel Merchant and Grease Manufacturer [illegible] Eastcheap, Dealer in Colonial Produce—F. W. [illegible] Schoolmaster and Agent—A. Black, [illegible] Road, Bethnal Green, Dry Fishmonger—S [illegible] Yorkshire, Yarn Spinner and Manufacturer—J. [illegible] Corn and Corn Dealer—J. O. Clarke, [illegible] and Dorset Street, Fleet Street, Printer—W. [illegible] Essex, formerly of Brentwood, Essex, Licensed [illegible] Caledonian Road, Grocer—I. N. [illegible] Victualler—R. Cowtan, Lyon Street, Caledonian Road, Grocer—F. H. Deakins, Feathers Hotel, Ledbury, [illegible] Stratford, Distiller—F. H. Deakins [illegible] Victualler—W. Diezman, Three Colt Lane, Cam [illegible]—W. Dobson, Old Gravel Lane, Builder—W. E. Dod, [illegible] Road, and Great James Street, Bedford Row, [illegible] Poplar, Corn Dealer—J. Finlay, Henry Street, [illegible] and Cheesemonger—N. W. Gibson, Austin Friars, [illegible]—G. M. Glass, sen., Brandon Street, Walworth, [illegible] Manufacturer—J. Goodchild, High Street, Shore- [illegible]—W. Gormley, Manchester, Screw, Bolt, and [illegible] Ham and Beef Dealer—C. Green, Brighton, Gas Fitter—T. Griffiths, Golden [illegible] Park Street, Southwark, Grocer, Cheesemonger, [illegible] Great Portland Street, Boot Maker—J. [illegible] Liverpool—G. Ingram, Tottenham Court Road, [illegible] Strand, Manager to a Printer, and late of [illegible] Gray's Inn Road, Printer—G. Jury and F. Jury, Maid- [illegible]—J. Kelley, Birmingham, Coal Merchant [illegible] Builder—J. C. Leaver, Briar Villas, Shepherd's [illegible] and Shipowner—J. Lockwood, Stowmarket, Suffolk, [illegible] Newton House, Vicarage Place, Kensington, [illegible] M'Namard, North Woolwich, Hotel Keeper— [illegible] Terrace, Wandsworth Road, Flour Factor—J. [illegible] Road, Tobacconist—T. Reynolds, Henry Street, [illegible] Shirt Maker—L. B. Rigby and F. E. Hetdos, [illegible] Commission Agents—J. D. Saysell, Islington, [illegible] Gillingham, Dorsetshire, Corn Dealer—W. T. [illegible] Sedgley, Staffordshire, Mine Drainers—H. Sells, [illegible] Licensed Victualler—F. R. Steadman, King Street, [illegible] Boot and Shoe Warehouseman—R. C. Stearks, Lam- [illegible] T. Taylor, Hanlith, Kirkby, Malhamdale [illegible] and Dealer in Cattle—W. Willing, Clipstone Terrace, [illegible]—L. West, Hitchin, Draper—H. Weston, East- [illegible]—Dealer in Small Wares and Millinery—E. W. [illegible] Sloane Street, and Erith—now of Old Charlton, Kent— [illegible], Polisher and Greengrocer.

Metropolis and its Vicinity.

The Memorial to Lord Herbert.—A public meeting will be held in the metropolis in the course of the ensuing month, under the presidency of the Duke of Cambridge, for the purpose of taking such steps as will result in a worthy memorial to the late Lord Herbert.

Middle Temple Library.—The new Library of the Middle Temple will be opened for public use on Thursday, the 31st inst. The ceremonial of inauguration will be performed by the Prince of Wales, and it is intended to celebrate the occasion by a banquet to his Royal Highness, to which all the members of the society will be invited.

The Thames Embankment.—At the meeting of the Metropolitan Board of Works, on Friday, Mr. Doulton moved that the chairman be requested to represent to the first commissioner, in his conferences on the Thames Embankment Bill, that this board is strongly of opinion that no plan will be complete or satisfactory which does not make provision for a roadway and embankment on the south side, and to use every effort to procure insertion in the bill of the necessary powers for enabling the Board to construct such a work. In supporting the resolution he maintained that the inhabitants on the south side of the river had grounds for expecting that they would reap the advantages of an embankment to which they so largely contributed. The amount of coal dues collected from the industrial establishments in the immediate vicinity of the Thames between Vauxhall and Westminster bridges, exclusive of the large engineering works more inland in the borough of Lambeth, and the ironworks, breweries, and distilleries in the borough of Southwark, was from 8000*l.* to 9000*l.* a year, and therefore on that ground the south side of the river ought to reap some of the advantages from the tax. Mr. Carmael seconded the motion, and said that the scheme of a Thames embankment would be very imperfect if it was not extended to the south side of the river. Mr. D'Iffanger thought it most unwise to agitate the question at the present time. Mr. R. Taylor supported the motion. Mr. Dixon was opposed to a rate of 6*d.* in the pound on the poor of the metropolis for such a purpose. The work would cost [illegible]*l.*, and it would require rates amounting to [illegible]*l.* a year to pay the interest of the money. Mr. Denner said that it would be unjustifiable, when they contributed so much to the work, if nothing was done for the south. At the present time Lambeth was flooded at spring tides, and he knew not what it would be when they reduced the width of the river. Mr. Phillips agreed that it was desirable that both sides of the river should be embanked, but if they insisted on both works being carried out simultaneously, he feared that it would lead to insurmountable difficulties, and there would be a great difficulty in getting such a measure through Parliament. Mr. Robinson was of opinion that the motion ought to end with "roadway and embankment on the south side." Mr. Deputy Harrison concurred in this view, and urged that they could not go to the First Commissioner and ask him to embank the south side until they were prepared with a plan. Mr. Freeman strongly supported the question of an embankment on the south side, and wished to add to the resolution the words, "and that the southern embankment be the second charge on the coal duties." After a few words from Mr. Le Breton and Mr. Wilkinson, Mr. Doulton said he was willing to omit from the motion the words, "insertion in the Bill," so as to meet the views of some of the members. The motion as amended was then put, and agreed to with but one dissentient.

Agricultural Hall.—The directors of this Company have published their first report, in which they state that satisfactory progress has been made towards the attainment of all the objects for which the company was formed. Of the capital of 30,000*l.*, upwards of 27,700*l.* has already been subscribed, and no difficulty is anticipated in disposing of the remaining shares. The agreement with the Smithfield Club for leasing to the company their annual exhibition for 21 years, from December, 1862, has been completed and signed. In order to secure a suitable design for their building, the directors invited six architects of established reputation to compete, limiting the cost of the building to 25,000*l.* From the designs sent in the directors selected one by Mr. F. Peck, of Maidstone, which appeared to be in every respect admirably adapted for the purposes of the company. Six eminent contractors were invited to send in tenders for the execution of Mr. Peck's designs; the directors selected the lowest tender, that of Messrs. Hill, Keddall, and Robinson, of Whitechapel, who have agreed to execute the work by the end of June, 1862, for 24,980*l.*, and have commenced operations.

The Braidwood Testimonial Fund.—The committee appointed to collect subscriptions for the Braidwood Testimonial Fund resolved at a meeting held at the Mansion House a few days ago to apply the amount subscribed, 526*l.* 11*s.* 6*d.*, to the purchase of annuities for the two aged sisters of Mr. Braidwood, who by his death were deprived of the income on which they depended for support.

The Middlesex Registration.—At the sitting of the revising barristers at Islington on Saturday, Mr. John Anthony Coates, who had signed the Conservative objections for Middlesex, amounting in number to 4000, was subjected to an examination of two hours. He said that he resided at Buckingham, and was on the register of Middlesex for the parish of Tottenham, for a house. He signed the notices produced. He commenced on Tuesday, the 20th August, at the offices of the Conservative Land Society in Norfolk Street, Strand, where he signed from half-past 10 till between 5 and 6, and then took home with him a parcel of notices, and continued his work. At 5 next morning he resumed his work, and continued till about 6 o'clock, when he took other notices and worked as before. The next day he pursued the same course, finishing at noon on Saturday. Several of the notices were signed in blank, and when they were again put before him, he passed his hand and pen over the signature, so as to revive the signatures after the blanks had been filled in. The barristers decided that this system was an abuse of the powers of the act of parliament, and that objectors were bound to see that they had some ground of objection when they signed the notices. They therefore disallowed the whole of the objections and ordered the objectors to pay costs.

Fatal Case of Accidental Poisoning.—A few nights since while a policeman was passing along Oxford Street, he heard cries of "Police," and on proceeding to No. 315, Mr. Reilly's, gunmaker, he saw a female in her night-dress at the door, who stated that her husband, Mr. Baker, foreman to Mr. Reilly, had been poisoned by mistake. On entering the shop with another policeman they found her husband lying on the lower steps of a staircase leading to the shop, with his head hanging down. They immediately sent for medical assistance. Two physicians arrived shortly afterwards, but he died soon after their arrival. Mrs. Baker stated that her husband being taken ill had sent her down to a safe in the shop for a black draught, and immediately on taking it exclaimed, "This is the wrong bottle—this is 'aquafortis.' It appears that a bottle containing poison, used in the business, was kept in the safe. The deceased as soon as he found the mistake took an emetic, but without effect. The post mortem examination showed that deceased had suffered from a serious internal complaint, and that the poison which he had swallowed was a weak solution of cyanide of potassium. The jury returned a verdict of "Death from taking poison by mistake."

Execution at Newgate.—On Monday morning William Cogan, who was convicted at the recent sessions of the Central Criminal Court of the murder of his wife in Newton Street, Oxford Street, under circumstances still fresh in the public recollection, was hanged in front of Newgate, in the presence of a disorderly crowd of people, estimated at from 10,000 to 12,000. Great numbers of these had taken up their position in front of the scaffold on Sunday afternoon, and throughout the night the continual hum of the crowd was heard all over the neighbourhood. To the last the convict maintained that he was innocent, and asserted that his wife first cut his throat and then committed suicide. Various efforts were made to obtain a commutation of the sentence; but Sir George Grey, the Home Secretary, in reply to the petitions presented, stated that the whole circumstances adduced in evidence on the trial had undergone careful consideration, and that nothing appeared to him to justify his recommending the exercise of the clemency of the Crown. When the criminal ascended the scaffold the vast crowd surged about and shouted in awful excitement. After the rope was adjusted he prayed most earnestly with the ordinary for a short time, and almost the last words he uttered were a prayer for forgiveness. The drop fell almost at the same moment, and after one or two convulsive struggles he ceased to exist. The body was removed after being suspended the usual time. An application was afterwards made for permission to take a cast of the head and face, but, acting on the advice of the prison surgeon, that in his opinion such a proceeding was unnecessary for any purpose of science, the Sheriffs declined to assent to it.

The Westminster Murder.—The sentence of death passed on Maloney for the murder of his wife has been respited during her Majesty's pleasure, in order that further inquiries may be made into his case. At the Westminster Police Court on Tuesday several witnesses were examined in support of the application for an indictment for perjury against the man Saunders. After a long inquiry the magistrate decided that the case had not been made out, and that no weight could be attached to the evidence impugning that given by Saunders at the trial.

Murder on the High Seas.—Capt. William Burwood Baldry, master of the ship Shantung, was brought before the magistrate at the Thames Police Court on Monday for final examination charged with the wilful murder of one of his seamen by ill-usage, and particularly by his having savagely beaten him with a rope, in September last, while the ship was on the high seas. The charge was preferred by two other seamen, who gave circumstantial details of the beating and of the subsequent death of the victim. The prisoner's solicitor urged the magistrate to commit the prisoner for manslaughter only. The magistrate said he did not feel justified in altering the nature of the charge. He should commit the prisoner for trial for wilful murder, and a jury, acting under the direction of one of the judges, might reduce the crime to manslaughter. The prisoner was then formally committed for trial.

The Public Health.—The Registrar-General's Weekly Return states that the deaths in London in the week ending Saturday, October 12th, were 1113. The average number in the corresponding week of ten years, when corrected for increase of population, was 1139, but if the deaths from cholera in 1854 are excluded from the calculation, it appears that the present return is a very close approximation to the average. During the week the births of 865 boys and 818 girls, in all 1683 children, were registered in London. In the ten corresponding weeks of the years 1851-60 the average number was 1611.

Provincial.

Ashford.—On Saturday evening a great deal of excitement was created among all classes of people in this town and neighbourhood by a deplorable accident by which Sergeant Whorley, drill-instructor to the 29th Kent Rifles, was killed. It appears that a few members of the corps were practising firing at 500 yards' range, and the drill-instructor was acting as marker. Private Williams, son of Mr. Williams, wine and spirit merchant, was in the act of firing at the target, when the sergeant left his hut carrying the red or danger flag. Unfortunately, however, he did not emerge sufficiently from the line of the huts, and was consequently not seen when Williams discharged his rifle, but immediately afterwards was observed to fall. As soon as possible several Volunteers proceeded to the spot, when it was discovered that the ball had passed through his head, and that he was quite dead. The practice ground is only a mile from the town, and one of the Volunteers immediately ran for a surgeon, but his services were o no avail. The deceased was a married man, and wa much esteemed by all the members of the corps.

Bilston.—On Friday the confession of Maddocks was read in Court, and after a long examination extending to 7 o'clock in the evening, the magistrates committed Jones, Brandrick, Maddocks, Jukes, Lilley, Webb, and Bills for trial on the charge of Wilful Murder. The prisoners were conveyed on Saturday to the county gaol at Stafford, to await their trial. They showed great violence and quarrelled among themselves, and some of them were detected in an attempt to make their escape.

Cambridge.—The Rev. Charles Kirkby Robinson, M.A., Fellow of St. Catharine's, was on Wednesday elected Master of the College, vacant by the resignation of the Bishop of Worcester. The Rev. Joseph Romilly, of Trinity, has announced his intention to resign his office of Registrar of the University at Christmas.

Chichester.—On Wednesday, shortly before midnight, a fine young man, named Outon, a student of Bishop Otter's Training College, was shot in this city by a soldier. A police constable on duty in Somers Town, hearing the report of a rifle, followed by fearful screams, which he thought proceeded from the direction of the barracks in the north part of the city, went immediately in that direction, returning by Oaklands, the seat of Mr. Freeland, M.P., when, shortly after passing Bishop Otter's College, he heard groans proceeding from an adjoining field, in which he found Outon lying on the ground in the greatest agony. The inmates of the College, some of whom had heard the report of the rifle, were shortly on the spot, and several persons who were passing rendered every assistance to convey the sufferer to the College, where he shortly afterwards expired, but not before he had made the statement that "he had been shot by a soldier, who sat on the gate, as he approached to get over the stile, and that after he had done it he ran off down the lane towards Deer Hole." No provocation was given by the young man, who was on his return from spending the evening with a respectable family in the city. The ball of the rifle passed through

the abdomen and out at the back, but little blood escaped from the wounds. On the discovery of the murder, Superintendent Everett communicated the fact to the commanding-officer of the garrison, Colonel Wright, who immediately sent out a body of soldiers in search of the murderer, for it was well known that a soldier named Cleary was at large and in the possession of his rifle and ball cartridge. The grounds of Mr. Freeland, M.P., were surrounded and scoured by detached parties without avail; every house of bad repute in the city was searched without effect. The number of military was now increased to 200 men, with a dozen cavalry, who were sent to scour the woods at Goodwood, Captain Valentine, the steward of the estate, lending the aid of the gamekeepers in the search, which continued without avail until 12 o'clock, when Mr. Henry Sadler, jun., of Hampnett, found Cleary's rifle loaded, and with a cap on, which he had evidently thrown away on getting clear of the city. This was found in the ditch of a water meadow, through which a pathway runs to join the main road leading to Arundel and Littlehampton. The man is still at large, but hopes are entertained of his speedy capture. Outon is the son of a tradesman at Rowlands Castle, near Havant. Cleary, the soldier who shot him, is 21 years of age, and is a native of Ireland. He bears a bad character in the 50th Regiment, to the depôt of which he was attached. In October, 1860, he deserted, and was afterwards tried and convicted for stealing property belonging to an officer. Very recently he has had six days' extra drill given him for bad conduct, for which it is conjectured he meant to have his revenge, but shot the wrong man.

Darlington.—A meeting of landowners and anglers interested in securing to the river Tees the full benefit of the Salmon Fishery Act, 1861, was convened by circular in the Town Hall, a few days since, Mr. W. J. S. Moritt, of Rokeby, in the chair, when it was resolved to circulate and placard very extensively along the banks of the river, hand-bills setting forth the provisions and penalties comprised in the Act. It was also resolved to make application to the quarter sessions, at Durham and Northallerton, to appoint the police-officers and others special conservators; and a subscription was opened to meet the expenses. It was mentioned that in the event of the landowners giving their consent for parties belonging to an association to fish on their property, an angling association would be organised. Those anglers, the chairman remarked, would be the best conservators they could obtain, and, as one of the landowners, he should gladly concede the privilege of fishing on his property to such persons. From what he had gathered of the sentiments of other landowners, he believed all, or most of them, would be favourable to such an association. A similar meeting has been held at Barnard Castle, where similar resolutions were adopted.

Gloucester.—The inquest on Lord Forth was concluded on Thursday week, when the surgeon who attended him was examined at some length. He said that when he was sent for he found that Lord Forth had taken the laudanum, and was apparently asleep. He aroused him, when he said, "I have not taken so much as they say." He then became drowsy, and did not speak again. Another surgeon was sent for, and they applied the stomach-pump. They also applied an electro-magnetic battery to the nerves, spine, &c., but the deceased never recovered consciousness, and died in the evening. The laudanum he had taken had been ordered for the lady as a fomentation. The deceased was very intemperate in his habits. This doubtless had a great effect upon his mind, particularly as he did not take his usual exercise. During the lady's illness he confined himself almost wholly to her room, and waited upon her night and day. His brain suffered immensely from his excesses and confinement. He promised the witness that he would go to London, his intention being to join his father at Brussels. He said he was afraid he should be arrested in London, as he was much in debt. The witness then described the result of a *post mortem* examination, and said that the cerebellum was much softened, and thereby self-control was lost. He never saw so much attention lavished upon a lady by a gentleman in his life. He did not believe he had an hour's sleep during the whole of the three weeks the lady was ill. The jury returned a verdict that Lord Forth died from poison, taken while labouring under temporary insanity. During the inquiry it transpired that the lady's death was not caused by her confinement, but by disease induced by her intemperance. Her name was Mrs. Lloyd. She was the only child and heiress of a wealthy gentleman in Herefordshire, and married when in her 19th year Captain Lloyd, then an officer in one of Her Majesty's regiments. She deserted him to live with the nephew of an Irish marquis, and only left him when he in his turn transferred his attentions to somebody else's wife, whom a decree of the Divorce Court enabled him to marry. Captain Lloyd failed in obtaining a divorce in consequence of collusion in the conduct of the suit with his father-in-law; and the lady soon afterwards formed her acquaintance with Lord Forth. Her body has been removed to Herefordshire to be interred in the family vault at her father's residence, and the Earl of Perth has sent orders that the body of his son should be decently interred at Gloucester.

Leeds.—At the Town Hall on the 10th inst. Mr. Thomas Stead was summoned to show cause why he refused to support his wife, Christiana Stead. The relieving officer stated that a fortnight ago the wife made an application for relief, stating that her husband refused to maintain her, though they had been married upwards of 15 years. Mr. Stead was ordered to appear before the guardians, but when he did so he refused to support his wife, on the ground that she was his deceased wife's sister, and that by law be was not bound to support her. The guardians ordered relief to the extent of 6*s.* to be afforded to the wife, and the present proceedings were taken to compel Stead to refund the money. It appeared that the wife was not the sister of his deceased wife, her maiden name being Bolton, whilst that of the dead wife was Greenwood. In fact, the women were the children of the same mother, but not the same father. The solicitor for the husband contended that according to the decision in the now celebrated case of Brock *v.* Brock, Stead could not be held to have married this woman. The solicitor for the guardians did not dispute the decision in the case of Brock, but he wished the Bench to decide as to whether the law applied to a half-sister as well as to a sister in the ordinary sense of the term. The magistrates' clerk said that a marriage with a deceased wife's sister was undoubtedly void in law, *ab initio*, and that, therefore, her husband could not be called upon to maintain her. There was a case of settlement lately argued, in which it was settled that the law applied equally to the half-sister as to the proper sister. After some discussion the magistrates decided that the summons against Stead must be discharged.

Newcastle-on-Tyne.—The long-expected demonstration in honour of Earl Russell took place in "the metropolis of the north" on Monday. His lordship, who was the guest of Mr. Hutt, M.P., at Gibside, arrived in the town on Monday afternoon, and met with the most enthusiastic reception. He then attended a meeting of nearly 2000 inhabitants in the Music Hall, and was presented with an address congratulating him on his accession to the Peerage, thanking him for his past services in the cause of civil and religious liberty, and praying that he might be long spared to render in the House of Peers further services to his country. Earl Russell in reply said that the reforms in which he had taken part were necessarily slow. The nature of our institutions and the genius of our people, while they sanctioned and promoted the utmost freedom of discussion, were adverse to needless change, and therefore it behoved every friend of progress to wait with patience, and to argue with calmness till public opinion was fully convinced, and the national mind put its seal on the measures introduced into the Legislature. From this maturity of deliberation, it followed as a consequence that our steps in the direction of popular privileges were seldom or never retraced, and that path, which had been painful and arduous in the ascent, was easy and tranquil on the summit. In the evening there was a grand banquet in the new Town Hall under the presidency of the Earl of Durham, supported by Lord Hastings; the Right Hon. W. Hutt, M.P.; the Right Hon. T. E. Headlam, M.P.; Mr. Beaumont, M.P.; Sir W. Atherton, M.P., Attorney-General; Mr. Pease, M.P.; Mr. W. D. Seymour, M.P.; Mr. Shafto, M.P.; Mr. Adams, M.P.; Sir Hedworth Williamson, M.P.; General Beckwith, General Hutt, &c. After the usual loyal toasts, the chairman gave the health of Earl Russell, which was received with great enthusiasm. In returning thanks his lordship spoke as follows:—

"It has been my fate to have taken part in many political measures during a tolerably long political life, and I take this approbation of yours, of a set of men so enlightened, as a testimony that I have not dishonoured those my principles—that I have done nothing to impair the honour or injure the interests of my country. If I have been successful in any of the measures that I have proposed it has been that I have proposed in more fortunate times measures which had the approbation of men who have gone before me, that I have endeavoured to follow in the footsteps of Lord Grey, Lord Holland, Sir Samuel Romilly, and Lord Durham. It was my happiness to have been associated in the work of Reform with Earl Grey, Lord Durham, Lord Dungannon, and a statesman who would have been here to-day if his health had allowed him, and whose talents have been of the greatest service to this country—I mean Sir J. Graham. We planned the scheme of Reform, and that Reform as you all know, was not only carried, but has now been nearly 30 years in operation; that it has operated beneficially I cannot doubt, that it has led the way to many other great measures which never could have been carried in an unreformed Parliament. And, let me say, when I embarked in public life I embarked with the view of carrying great measures into effect, and having great public objects before me. It appears to me that public life is only honourable when it is directed to such measures, and that the pedlar who sells his pins and pincushions for 6*d*. has a better, because an honester, trade than the man who devotes his talents to public life merely for the sake of seeking his own emolument. There is one point which, perhaps, I may refer to because it respects a principle which I think runs through many of our measures of later times. All our measures in favour of religious liberty, relieving first the Protestant Dissenters, then the Roman Catholics, and lastly and recently, the Jews, and all our measures with regard to Free Trade, have been measures not introducing new plans, not founded upon skilfully devised schemes, but have been merely unloosing the fetters which statutes and laws had placed on the due liberty of the subject. It is the business of Government to maintain internal peace, to settle the civil relations which should prevail among the community, to defend the independence of the country abroad, but Governments have sought more than this; they have sought to lay down rules of faith to which they have asked men, under pain and penalty of punishment, to adhere, quite ignorant that Governments were utterly unable to frame rules of faith which should fetter the conscience. To take the other instance to which I am alluding—viz., that of free trade, what struggles we have had now going on for nearly 40 years in order to enable men to do that which is perfectly innocent in itself, to extend the products of their industry against the products of the industry of others which were objects of use, of comfort, or of enjoyment! I remember in the beginning [illegible] when certainly the principles of Free Trade [illegible] as they now are, a petition being presented [illegible] Commons, suggesting that your petitioners [illegible] they were gloves which were very inferior [illegible] and they were very much dearer than the [illegible] therefore they prayed,—what do you suppose [illegible] might be allowed to wear the gloves of [illegible] cheaper and better, but that the gloves [illegible] utterly excluded in order that they might [illegible] gloves. Why, gentlemen, this is the [illegible] tion and Free Trade. Governments and Le[illegible] sumed that they should be profitable, by [illegible] the country at large, not seeing that if you [illegible] freedom they would find out themselves [illegible] pations which would be most profitable, [illegible] goods which they thought they could manufacture [illegible] the article of commerce which they could [illegible] best advantage. It is, therefore, not [illegible] have passed some very excellent measures [illegible] have enlarged and enlightened the whole [illegible] Government, when we say that there are [illegible] in which Government ought not to interfere [illegible] the man himself, the subject, is the best [illegible] must be left the choice of his occupation. [illegible] happy to say we have it not in this country [illegible] countries people consider that it is a part [illegible] Government to fetter and to bind the talents [illegible] men; and that upon no subject of politics [illegible] morals, upon no subject of literature, even, [illegible] talents with which God has endowed them [illegible] control and permission of the officers of the Government. Such, then, have been the general principles [illegible] measures to which I allude have been [illegible] been sound principles, and, as I have said, [illegible] apply in future times to many other cases. [illegible] Now, let me allude to two questions in which [illegible] now immediately concerned, and upon which [illegible] this country is naturally interested, because [illegible] cases in foreign countries that most deeply [illegible] world. I will allude in a few words to what has [illegible] since I have been intrusted with the seals of the [illegible] ment; that course has been to respect the independence [illegible] nations, and to endeavour to induce others [illegible] There is one of those countries with which we [illegible] to do, and of which we have heard much of late [illegible] Italy. We have seen—we have all seen with [illegible] that a very distinguished man, Mr. Henley, [illegible] one in the country who has not seen with [illegible] Italians casting off their old chains, and exercising [illegible] of government for themselves, and putting themselves [illegible] way of gaining that distinction which of old times [illegible] it only. We all rejoice to see them assert that [illegible] We shall all rejoice if they establish a free Government [illegible] thus effect the happiness, the self-respect, and [illegible] of the finest countries and one of the most talented [illegible] the globe. But of late a difficulty has arisen [illegible] attention has been given. The Italians say, [illegible] great apparent justice, that the independence of [illegible] be fully consummated unless Rome, the capital, [illegible] hands. I may say that I am sure they will be [illegible] in that city an Italian Government, and that in a [illegible] associated with ancient glory and with ancient [illegible] but then, as Italy has not Rome, they cannot [illegible] Well, on the other hand, the Roman Catholics of Europe [illegible] they require that the independence of the Pope [illegible] pected, and many say that it cannot be respected with[illegible] torial Government. That is a discussion which has [illegible] for some time, and I observed in what I was reading [illegible] morning, an Essay by one of the most learned ecclesiastics [illegible] Italy, that the opinion is now gaining ground that whether [illegible] temporal power ought to become the right of the King [illegible] the spiritual power will be more felt, will be [illegible] and will be exercised more fairly if the [illegible] from the temporal. In the conclusion [illegible] which I have alluded he says that is what [illegible] in Italy, and that is what is wished in most [illegible] the world. This, as I have said, is not a question [illegible] we can take the initiative, but this I will say, [illegible] that what that learned ecclesiastic has [illegible] is in consonance with the opinions given [illegible] now so much regretted, Count Cavour [illegible] solution to the Italian difficulty, and that it [illegible] means of securing the after independence [illegible] of Italy. Let us look for a moment at another part [illegible] world; at another country, which, for my part, [illegible] observed with the greatest interest—the United States [illegible] America. It appears to me that it would be a great [illegible] tune to the world if that experiment in free [illegible] which, though not carried on in exactly the same [illegible] those of our own, was conducted on principles [illegible] devised with great wisdom—it would be, I say, [illegible] misfortune if anything were to happen to that [illegible] sorry to say that those events have happened. [illegible] two parties contending together, not upon the [illegible] slavery—though that, I believe, is the original [illegible] conflict—not contending with respect to Free Trade [illegible] tection, but contending as so many States of the [illegible] have contended, the one side for empire and [illegible] power. Far be it from us to set ourselves up as [illegible] matter, but I cannot help asking myself, as [illegible] the contest, to what good end can it lead? [illegible] contest ended, by the reunion of its different [illegible] the South should agree to enter again with all the [illegible] constitution, should we not again have that [illegible] slavery brought in along with them? That subject [illegible] which caused, no doubt, the disruption, we [illegible] sooner or later, cease from the face of the earth. [illegible] as you will see, if this quarrel could be made up [illegible] we not have those who differed from Mr. Lincoln [illegible] election carried back into the Union, and thus [illegible] the quarrel would recommence, and, perhaps, [illegible] follow? On the other hand, supposing the [illegible] completely to conquer and subdue the Southern [illegible] posing that should be the result of a long [illegible] supposing that should be the result of some years [illegible] should we not have the material prosperity of [illegible] a great degree destroyed, should we see that [illegible] liberty which has so long distinguished our [illegible] brethren, and should we not see those Southern [illegible] to force, and would not the North be necessitated [illegible] subjection those who had been conquered, and would [illegible] very materially interfere with the freedom of [illegible] that should be the unhappy result to which we at present [illegible] forward, if by means such as these the reunion [illegible] should be brought about, is it not the duty of [illegible] have embraced the precepts of Christianity to see [illegible] conflict cannot be avoided? I have made these [illegible] to you upon matters, as I have said, deeply [illegible] but not upon matters in which the Government [illegible] country has any immediate power, or, indeed, any [illegible] interest. Had they been cases of that [illegible] not have been consistent with my duty [illegible] Secretary to speak to you in detail upon such [illegible] with regard to these duties, I can only point out [illegible] is at all necessary to point out—that the world is [illegible] assertions of nationality, by assertions of authority [illegible] other side, by conflicts and disturbances occurring [illegible] in some parts of Europe as well as in America—in these [illegible]

[illegible] the Foreign Minister of this country, it is the [illegible] of the Government of this country, to watch [illegible] to respect the independence of all [illegible] not to let go any part of that prudence [illegible] becomes Ministers of England at this [illegible] any part of the influence of this country, [illegible] may be used in the cause of freedom [illegible] lower in any respect the power of [illegible] that power may be absolutely necessary [illegible] of Europe, to vindicate the independence [illegible] and to guard her own dignity and [illegible] has been said on the Continent of Europe [illegible] of my noble friend who is now at [illegible] Government; but on examining those [illegible] never been able to make out more than [illegible] reckoned to be too susceptible with regard [illegible] of his country. I shall be at little pains to [illegible] from such an attack. On the contrary, I own [illegible] has constantly devoted his attention to [illegible] the honour of England; to keep unimpaired the interests of England; and it is my [illegible] that great task. I do feel that to be [illegible] such a task by the people of so great and [illegible] this is something that makes public life [illegible] relieves its labour, that lightens its [illegible] And while that task is thus rendered [illegible] while it is one which a man may be proud [illegible] small addition that if he has acted, upon [illegible] the benefit of this country, whatever errors and [illegible] he may have made at times, he will meet from such [illegible] present a kind and indulgent acceptance [illegible] at all events, they will give him credit [illegible] to do for 'Old England' all that [illegible]

[illegible] Russell subsequently returned thanks for the [illegible] of Lord Palmerston and her Majesty's Ministers, and [illegible] eldest son, Viscount Amberley, responded to the [illegible] Countess Russell. Lord Hastings responded [illegible] toast of the House of Lords; the Attorney-General [illegible] the Bar, and Messrs. W. B. Beaumont, J. Beaumont, Pease, Headlam, Hutt, Fenwick, and Ingram, [illegible] Members of Parliament, returned thanks for the [illegible] of the Members for the local boroughs.

OXFORD.—The erection of a new Corn Exchange, from the design of Mr. S. L. Seckham, architect and surveyor to the Corporation, was commenced on Monday. The building will be of an ornamental character and suitable for concerts, entertainments, and public dinners, and will be 100 feet long by 50 feet wide. It is expected to cost about 2400*l*. The foundation-stone will be laid in the course of a fortnight, and the building is to be completed by Lady-day next.

PORTLAND.—Lord Palmerston, accompanied by [illegible] Jervois, paid a visit to the Government works at Portland on Thursday week. His Lordship went on the inner breakwater, and inspected the new fort at its outer extremity, which commands the southern entrance to the harbour. On returning to the shore he proceeded to the citadel on the Verne Hill. Major [illegible], commanding Royal Engineer in the district, Mr. Beaufort, in the absence of Mr. Coode, Engineer-in-Chief of the breakwater, and other officials, were in attendance upon his Lordship. Lord Palmerston afterwards visited the convict establishment, and returned to Weymouth late in the afternoon.

PRESTON.—All the trout and salmon in the river Ribble, from Settle, in Craven, nearly to its mouth at Preston, were destroyed about 10 days since in a single night. The gas company at Settle emptied the contents of their gasometer into the river, and within 24 hours every fish in the river downwards, a course of nearly [illegible] miles, died. Hundreds of pounds' weight of salmon and trout were taken out dead, their flesh reeking of the poisonous gas, which unfitted them even for the purpose of manure, while the river itself was rendered unfit for the use of cattle, which for many miles depend upon it for their supply of water.

RIPON.—The Bishop of Ripon on Saturday commenced his triennial visitation of the clergy of the diocese at the cathedral church in this city. His charge was a long one, occupying nearly two hours in the reading. The following are extracts:—

"After a sketch of the present position of the church in his diocese, his lordship adverted to the injustice of the new [illegible] minute to the certificated teachers, and to the effect which, in his opinion, it would have in thrusting the religious element into the background and secularing the system of national education. It remained to be seen how far the opinions so widely felt and plainly expressed in condemnation of the new minute would be entertained by those with whom the ultimate decision must rest; but whatever [illegible] he thought they must be prepared for a considerable reduction in the amount of aid contributed by the State to the cause of education. They would be obliged to depend more than hitherto upon voluntary effort, and they despair of the consequences. He then commented at some length on the disproportionate amount contributed for religious objects in the diocese, when the amount of the population was considered, and suggested, where practicable, the establishment in each parish of a weekly offering, to which he had no doubt 100,000 persons would contribute on the average 1*d*., producing 21,000*l*., or more than was now contributed towards every religious [illegible]. He would not detain them by any lengthy allusion to church rates, but he thought they might congratulate themselves upon the appearance of a more equitable feeling upon the question than it not long since prevailed. The difficulty of effecting any compromise had greatly increased by the fact that some of the leaders of the opposition had clearly avowed that their ulterior design was the separation of Church and State and the assimilation of the Established Church to the position of sects which were supported by voluntaryism alone. At the same time he earnestly hoped that ere long there would be such a settlement of this vexed question as would tend to the peace and prosperity of the Church, and at the same time quiet the scruples of those who were conscientiously adverse to the present law. There was another question which would not apparently be allowed to sleep—the revision of the Book of Common Prayer. His judgment was altogether opposed to any attempt of this kind. That there were imperfections in the Prayer Book he did not deny—there might be phrases, obsolete terms, and dogmatic statements which, as an individual, he might desire to see altered or modified, but he believed that any advantage which might possibly ensue would be as nothing to the evil which would arise from the unsettlement of men's minds, and their disturbance of confidence from the almost inevitable introduction of new words and sentences, to which exception would most certainly be taken. He believed, therefore, that any attempt to alter the Book of Common Prayer would be attended with great danger to the peace and unity of the Church. But unfortunate as these difficulties were, they were trifling in comparison with the dangers by which they were threatened from a different quarter—he referred to the dissemination, on the part of eminently learned and distinguished members of their own church, of opinions which went to unsettle all the grand fundamentals of the Christian faith—which scoff at the idea of a direct inspiration from God, exalt the human intellect to the position of sitting in judgment on revealed truth, discard the doctrine of the atonement, discredit the truth of prophecy, and disparage the evidence of miracles. They had surely fallen on perilous times when ordained ministers, who had professed to subscribe willingly to the Thirty-nine Articles, could reconcile it with their duty to their Church to propagate opinions which avowed infidels claimed in confirmation of their sceptical theories. It was not his intention to attempt any refutation of the pernicious views to which he referred, still less to indulge in any harsh expressions concerning the authors; but he should be unfaithful to his office were he not to deliver a warning against them. They would find it common to all these writings to call in question the authority of the Bible as the inspired word of God, to overlook the fundamental doctrine of the corruption of human nature, and to invalidate the doctrine of the atonement of their blessed Lord and Saviour. Be it their constant endeavour to set these doctrines plainly forward, and the rather because of the attack which had been directed against them. Uphold the doctrine of inspiration, not because they believed the Bible to be the production of men of genius, but because they believed it to have been written by men who 'spoke as they were moved by the Holy Spirit.' The distinction between the inspiration of Scripture and that of any other human production was not a difference of degree, it was a difference in kind. In the imagery of Homer and the rapturous flights of Milton he recognised the play of a marvellous intellect, but this was as different as possible from the inspiration of the Bible; in the one case the production was human, in the other divine; in the one case they might criticise, censure, or approve, in the other they heard the voice of the ever-living Jehovah, which it must be at their peril to disregard. They could not too carefully point out that whilst it came lawfully within the province of reason to calculate and weigh the evidence upon which the truth of inspiration depended, yet that having once established the point that the Bible was divinely inspired, the only attitude with regard to its statements must ever be that of reverential solemnity."

RUGBY.—The *Medical Times and Gazette* contains the following account of the unfortunate child of Mr. and Mrs. Guinness Hill:—"It has been a matter of surprise to us from the very commencement of the proceedings known as the 'Rugby Romance,' that little or no allusion was made to the child's state of health. After reading of the sensation created in court by the appearance of the poor little sufferer, with his head enveloped in lint and bandages, and his leg in splints, the public naturally looked for some medical testimony or report of the case; but nothing more was heard of the little fellow. Having recently received some information as to his state, we feel called upon to lay before our readers the following facts:—It appears that notwithstanding the statement at first put forth, to the effect that the child was a 'fine healthy child,' this soon turned out to be incorrect; on the contrary, shortly after its discovery such a train of symptoms began to manifest themselves as clearly to show that the child's constitution had suffered materially, in consequence of the poverty, neglect, and injurious influences to which it had been so long subjected. The child was brought back from Brussels, and placed under the care of Dr. Scott, of Upper Woburn Place, Russell Square. It appears that this gentleman found the little fellow much emaciated and debilitated, and with marked indications of tuberculosis or scrofulosis. There were disordered bowels, tympanitic abdomen, signs of an enlarged mesentery, enlarged glands of the neck, pustular eruptions behind the ears, blotches on different parts of the body, and animal and vegetable parasites infesting the scalp. One of the lower limbs was found in a very weakly and deformed condition, and was placed in bandages and splints. It since turns out that the poor little fellow got his femur fractured. Although much improved since first placed under Dr. Scott's care, he may still be said to be in a precarious condition, as might naturally be expected from the complication of evils to which this poor child was exposed. Scanty food and imperfect nourishment, scanty clothing, exposure to wet and cold, miserable lodgings, where it shared the bare boards with other wretched inmates—the ill-fed, half-starved, ill-clad and unwashed—its skin food for parasites, while its young lungs and blood were contaminated by the putrid emanations of the bodies huddled together in a dark, ill-drained, unwholesome dwelling, ventilated only by the stagnant atmosphere of the dark alley below."

SOUTHAMPTON.—The distribution of certificates to the successful candidates in the recent Oxford Middle-class Examinations took place on Friday afternoon in the Carlton rooms. Lord Palmerston officiated on the occasion, and was supported by the Bishop of Rochester, the Mayor and Corporation, and a large number of the principal inhabitants of the town and neighbourhood, including clergymen and ministers of all denominations. After the distribution of the certificates Lord Palmerston spoke as follows on Competitive Examinations:—

"The advancement of education has for many years past been an object of the most earnest solicitude to almost all the public men who have risen to eminence in this country. We are glad to see that the Universities have started forth in that honourable career; and it is peculiarly gratifying to me, a member of the University of Cambridge, to be permitted to distribute certificates arising out of examinations by the sister University of Oxford. There was a time, now long by, when envious critics, who wanted to run down the Universities of the land, said they might be likened to hulks moored in a rapid current, where they served only to mark the rapidity of the stream. That has long since ceased to be a true representation of our Universities. They have improved the course, the object, and the direction of their studies, and they may now fearlessly vie with the academical institutions of any country in the world. Certain objections have been made to the system of competitive examinations. Some people say it leads to cramming. It often happens that when individuals seize upon a word they imagine that would be an argument, and go on repeating it, thinking they have arrived at some great and irresistible conclusion. So, when they pronounce the word 'cramming,' they think they have utterly discredited the system to which that word is by them applied. Some people seem to imagine that the human mind is like a bottle, and that when you have filled it with anything you pour it out again and it becomes as empty as it was before. That is not the nature of the human mind. The boy who has been crammed, to use the popular word, has in point of fact, learned a great deal, and that learning has accomplished two objects. In the first place the boy has exercised the faculties of his mind in being crammed, and in the next place there remains in his mind a great portion of the knowledge so acquired, and which probably forms the basis of future attainments in different branches of education. Let nobody, therefore, run away with the notion that competitive examinations are not of great and infinite value, because there are men who instruct the candidates in those branches of knowledge respecting which the examinations have to take place. Depend upon it that the boy who is crammed, if he is crammed successfully, not only may succeed in the examination for which he is preparing, but is from that time forward more intellectual, better informed, and more disposed to push further the knowledge which by that cramming he has acquired. It is also said that you are teaching young men a great variety of things which will be of no use to them in the career which they are destined to pursue, and that you are pandering to their vanity by making them believe they are wiser than they really are. These objections, also, are in my opinion utterly futile. As to vanity and conceit, those are most vain and conceited who know the least. The more a man knows, the more he acquires a conviction of the extent of that which he does not know. A man ought to know a great deal to acquire a knowledge of the immensity of his ignorance. There was a very sharp, shrewd gentleman, well known in former times, named Mr Harvey Coombe. He was conversing one day with a friend, of whose attainments he had no very high opinion, and having made some observation, his friend said, "Well, I am sure I don't know." "You don't know!" said Mr. Harvey Coombe. "I tell you what, my friend, what you don't know would make a very large book." The same may be said of the great mass of mankind; and let no parent be deterred from sending his son for competitive examination by the notion that he would get much beyond the title page of that great book. If competitive examination is not liable to objection upon the score that it tends to raise undue notions of superiority on the part of those who go through it, so also it is a great mistake to imagine that a range of knowledge disqualifies a man for the particular career and profession to which he is destined. Nothing can be more proper than that a young man, having selected a particular profession, should devote the utmost vigour of his mind to qualify himself for it by acquiring the knowledge which is necessary for distinction in that line of life; but it would be a great mistake for him to confine himself to that study alone, and you may be sure that the more a young man knows of a great variety of subjects, and the more he exercises his faculties in acquiring a great range of knowledge, the better he will perform the duties of his particular profession. That sort of general knowledge may be likened to the gymnastic exercises to which soldiers are accustomed. It is not that it can be expected that these particular movements would be of any use to them on the day of battle; but these gymnastic exercises render their muscles flexible, strengthen their limbs, invigorate their health, and make them better able to undergo fatigue, and to adapt themselves to all circumstances. So with a wide range of study; it sharpens the wits; it infuses general knowledge into the mind; it sets a young man thinking; it strengthens the memory and stores it with facts; and in this way makes him a better and more able man in the particular profession which he is intended to pursue. It has been well said that in this happy land there is no barrier between classes, and that the highest positions are attainable by persons starting from the most humble origin. If he has only talent, if he has only acquirements, if he has only perseverance and good conduct, there is nothing within the range of the institutions of the country to which any man may not aspire, and which any man may not obtain. I trust that among those to whom it has been my good fortune this day to give certificates there are young men who will rise far above the position from which they start. It is the peculiar character of this country as distinguished from many others, that whereas in some countries, unfortunately for them, men strive to raise the level on which they stand by pulling others down, in England men try to raise the level on which they stand, not by pulling others down, but by elevating themselves. I trust, therefore, that the number of candidates for competitive examination in Southampton and its neighbourhood will continue to increase from year to year. Such examinations will produce among the rising generation a spirit of emulation, which is one of the noblest feelings of the human heart, and upon which depends the rising of individuals and the prosperity and greatness of nations—a spirit wholly distinct from that of jealousy or of envy—a spirit which is compatible with the utmost kindness and goodwill to those with respect to whom the emulation is felt—a spirit which ennobles the individual and does not lead to any unfriendly sentiments towards others. But this system of competitive examination will not only inspire that generous spirit of emulation in the minds of the rising generation; it must also act powerfully upon those who are the instructors of youth—a most valuable class of society, men upon whose exertions depends the whole success of the nation, because, unless the people have their minds cultivated and stored with knowledge, it is plain that for all great purposes they are almost as if they were not. I say, then, that the system of competitive examination tends to excite emulation among the instructors as well as among the instructed, and that it, therefore, has a double effect in advancing the intellectual progress of the country. Having stated the advantages which the system of competitive examination confers upon those who are successful, I would take leave to say a word of encouragement to those who may have failed to obtain certificates. Let not these young men, and let not their parents, think that they, the unsuccessful competitors, have gained nothing by the struggle in which they have engaged. Depend upon it, that although they may not have succeeded in obtaining the distinction at which they aimed, they have succeeded in acquiring a great deal of useful knowledge; they have succeeded in acquiring habits of mind and powers of thought, and of application, which will be of use to them during the rest of their lives. You all know the old story of the father who upon his deathbed told his sons that he had a treasure buried in a certain field, and that if they dug the whole field through they would find it. The sons, acting upon this advice, dug the field, but no gold was there. In the next year, however, there was that which was to them a treasure—a most abundant and valuable harvest. That was the treasure which the father wished them to seek for and which they found. So it is with the unsuccessful competitors. They have not found the treasure which they sought for—namely, a certificate of attainments from the examiners—but

they have gained a treasure which to them will be of infinite value—those habits of mind, those powers of thought, and that amount of knowledge upon which a larger building may be erected; and they therefore will have reason to thank their parents for having sent them to a competitive examination, thus rendering them better able to struggle through life in whatever career they may choose to pursue."

—A very large seizure of tobacco was made on Sunday morning on board the Peninsular and Oriental Company's steamship Delta, lying in the graving-dock. The Delta arrived on the previous Thursday from Alexandria, and the whole of her cargo having been disembarked, the vessel was freed from Custom House surveillance, and taken into the graving dock on Saturday, to have her bottom cleaned. It appears, however, that information was subsequently given which induced one of the Custom House officers to go on board the Delta on Sunday morning, and his visit resulted in the discovery of no less than 206 lbs. weight (1¾ cwt. 10 lbs.) of manufactured tobacco and a box of cigars. The contraband goods were stowed away in a hollow iron beam in the engine-room, access to which is obtained by a manhole door; the officer went direct to the spot, and on unscrewing the iron plates found the booty. The tobacco was all done up in pound parcels. The ship was at once seized, and all the engineers were suspended by the company. Five of them and three of the crew who had access to the engine-room were taken into custody, and remanded to await further instructions from the Board of Customs. Three of the firemen absconded from the town on Sunday, after sending in a written letter stating that the tobacco belonged to them, and that a desire to free their employers from blame and their comrades from unjust punishment induced them to volunteer the confession, but little importance was attached to the statement. On Thursday the eight defendants were brought before the magistrates, when it was announced that the Board of Customs withdrew from the prosecution against all the defendants except Kelly and Allen, the leading fireman and principal storekeeper, believing that they were the persons who had introduced the tobacco on board the ship. They were accordingly charged on an information exhibited by the collector of customs; and the facts having been formally substantiated, the magistrates sentenced them to a penalty of 100*l.* each, or six months' imprisonment. The ship was restored to her owners.

WEEDON.—A frightful accident occurred on the 9th inst. at the Heyford Iron Works, in the occupation of Mr. George Pell, about one mile and a half from this place. The works are situated on a narrow strip of land between the railway and the old turnpike road from Daventry to London. They consist of three furnaces, but owing to the depression of the iron trade in Staffordshire and Northamptonshire only one furnace has been at work for some time past. Owing to the intense heat of the furnace when at work the blast cannot be sent through a single tube of naked iron. Two tubes are therefore used, one of which is placed within the other, and between them a stream of cold water is kept constantly flowing. On the 9th inst. one of these "tuyeres" suddenly became leaky, and before the work could be stopped or any repair made a large quantity of water was forced into the furnace, and the body of steam which was immediately generated caused a most violent explosion. One man was killed on the spot, another was so fearfully injured that he is not expected to survive, and a third narrowly escaped meeting the same fate. The jury at the inquest returned a verdict of "Accidental death."

WEST BROMWICH.—An extraordinary occurrence took place on Tuesday in this town. The engineer at the Foundry had scarcely entered the works in the morning when he saw a peculiar movement of the earth beneath his feet, and almost instantly observed that the land on which the engine and works were placed was about to fall into an abyss created by some old workings in an adjoining coalpit. His first impulse was to save himself, and he had no sooner run out of the engine-house than the earth gave way with a fearful sound, swallowing up in its downward course the steam-engine and machinery. A large boiler attached to the engine was left behind among the ruins, where it remained for some time in an insecure position. The engineer was fortunately the only man on the premises.

WORCESTER.—The railways are gradually pushing the last of the coaches off the road. The opening of the Worcester and Hereford Railway, besides superseding numberless carriers' carts, has caused three mail coaches to be discontinued—viz., the Worcester and Hereford Mail, Cheltenham and Malvern Mail, and the Worcester and Leominster Mail. All these were doing fairly before the opening of the railway, but have now ceased to run for want of passengers. The Leominster Mail, the last of the three, succumbed last week. Before the Worcester and Hereford line was opened to Malvern, about 20 coaches ran daily between Malvern and Worcester, every one of which is now put down.

Ireland.

DEPARTURE OF THE LORD-LIEUTENANT FOR ENGLAND.—His Excellency the Lord-Lieutenant left for England on Wednesday night, by the mail boat from Kingstown Harbour. Her Majesty's ship Ajax fired the usual salute and illuminated her rigging as the Viceregal party left the harbour. A Privy Council was held on Thursday, when Lords Justices during his Excellency's absence were sworn in.

THE QUEEN'S UNIVERSITY IN DUBLIN.—On Friday week a meeting of the senate of the Queen's University was held in St. Patrick's Hall, Dublin, when degrees were conferred upon the students. The Lord Chancellor, as Vice-Chancellor of the University, delivered the annual address, and the Lord Lieutenant subsequently addressed the senate on the late visit of her Majesty, and on the presence of Sir Robert Peel, whose father's memory, he said, was intimately associated with the marvellous work of Irish improvement and progress. Sir Robert Peel then delivered an animated speech, in which he announced his intention of establishing three Exhibitions of the annual value of 40*l.* each, in the Queen's University. The following is an extract:—

"If I may be permitted to allude to the originator of this scheme of the Queen's Colleges as to a public man, I can say, what has been very truly said, that the welfare of Ireland—I bear testimony to the career of 40 years—was ever foremost in his thoughts; and the words 'welfare of Ireland' stand conspicuous in bold characters of relief upon the bright pedestal of his political fame. And what is the criterion of the success of this institution? Not mere numbers. They would be very significant if it were only that. But the proof of its success is the great political gain which has been derived by the establishment of a system in Ireland which has opened to men of different religious denominations combined secular instruction upon the broad basis of religious equality. That was what mainly interested Sir Robert Peel when he introduced and originated in Parliament this plan. Sir Robert Peel, I well recollect, said in the House of Commons—'You may have the opinions that you desire, but I shall relinquish with the greatest regret the hopes of an education for Ireland which will give combined instruction to the youth of the Protestant, Roman Catholic, and Presbyterian creeds.' Sir James Graham, who was one of Sir Robert Peel's warmest supporters in the establishment of these colleges, said, 'Grant this system of education to Ireland, and you will give her an education equal to that of the Universities of Scotland or of Trinity College, Dublin;' and I ask you, by the ceremony of to-day, whether the result has not corresponded with the expectations those men formed. But even still more remarkable, I can point to the late Prime Minister, Lord Derby. Lord Derby, when, as Lord Stanley, he introduced that measure of Sir Robert Peel's in the House of Lords, most strenuously advocated this system. Now, I have pondered it for these 11 years, and it does appear to me that, notwithstanding its progressive development, notwithstanding the benefits it has conferred upon Ireland, there are wanting two things to place this institution upon that footing of comprehensive utility which it is calculated and able to enjoy. It appears to me that an arrangement might be made which, by extending this liberal system of education into all the provinces, would be carrying out the original plan of the men who founded these colleges, but which plan at the moment was only temporarily adjourned for the purpose of subsequent adjustment. The other point to which I may be permitted to refer is one which relates to the placing of this University on a par with the Universities of Scotland and with Trinity College. It is more easily dealt with, and why? Because we do not want to go to the Government for grants in order to effect it. It can be dealt with by a proper exercise and display of the public spirit of this country; and I believe there is in Ireland as much public spirit as there is in England or Scotland. What is it to which I allude? I find that the youth of the Queen's University cannot compensate themselves with those scholarships, and exhibitions, and prizes, as the older universities do. I find, by reading over the memorandum of the Queen's Colleges, that there are only 10 exhibitions for graduates connected with each college, of 40*l.* a year each, tenable for one year, and the sum at the disposal of the authorities for the purpose of giving prizes to undergraduates is extremely small. It is given away in prizes of books, and in affording means, I believe, for the purpose of maintaining students in the course of the University. Compare this with what we find in the older Universities, and it will appear most inefficient; and I say the public spirit of the country ought to come forward and endeavour to place the Queen's University on the footing of other academic institutions. If you allow me I wish to take this opportunity of saying that, as I am so firmly convinced of the immense advantage which would accrue to the youth of this country by offering exhibitions for competition, I will myself, with the permission of the senate, establish three scholarships of 40*l.* a-year each—one for each of those colleges—for the space of ten years. I only hope the example which I set may be followed by those who have a more direct interest in the welfare of this country. I hope that others will come forward and assist in establishing ten or twelve scholarships, exhibitions, or what you please to call them, for the undergraduates of this University."

THE DERRYMACASH RIOTS.—The charges against certain Roman Catholics for assaulting Protestants at Derrymacash on the 12th July, 1860, were brought before the magistrates at quarter sessions at Lurgan on Monday. Indictments were sent up against 18 parties, and true bills were found in all the cases. The trials will take place next quarter sessions.

THE LATE OUTRAGE IN DUBLIN.—On Friday all the cabmen of Dublin were paraded by the police, when one of them, called John Curran, 26 years of age, a married man with two children, was arrested. The young lady and her brother are said to have identified him, as did also a girl who saw the brother hand his sister into the cab on the night of the outrage. The prisoner was remanded until Wednesday, and the police are said to be in possession of other evidence that will then complete their case.

Railways.

ACCIDENT AT THE BRIGHTON STATION.—On Wednesday morning the roof of the new works which the London and Brighton Company have been for some weeks erecting as an enlargement of their terminus at Brighton, fell in with a tremendous crash, which was heard over half Brighton. Fifteen of the iron columns gave way, carrying with them about 50 yards of the iron roof. The iron bars of the roof were broken, twisted, and bent in a variety of shapes, while a railing formed of ordinary scaffold poles, erected to protect the workmen, was shattered into splinters. The ends of some of the iron supports in falling injured the brickwork to such an extent that a large [illegible] the walls will have to be rebuilt. [illegible] happened at half-past 5 in the morning, before [illegible] came to work, and there was fortun[illegible] the line at that early hour, or [illegible] great loss of life. The scene of the [illegible] distance removed from the rails, the [illegible] was in no way affected.

Sporting.

NEWMARKET SECOND OCTOBER M[illegible]

MONDAY.—*Handicap Sweeps.* Lord [illegible] Duchess, and Libellous.—*Selling H*[illegible] Strathmore's Cantab beat Sacerdos, New[illegible] 6 others.—*Match.* Lord Chesterfield's [illegible] beat Voltella.—*Handicap Sweeps.* Lord [illegible] beat Absinthe, Mr. Godding's b. c. [illegible] Mr. A. Williams's Moula beat Notting[illegible] and 11 others.—*Renewal of the Sweeps.* Mr. E. [illegible] Blanche beat Cantatrice.—*Handicap P*[illegible] Chère Amie beat King of Diamonds, [illegible] *Match.* Lord Glasgow's The Drake [illegible] *Sweeps.* Lord Stamford's Bertha walked [illegible]

TUESDAY.—*Sweeps.* Mr. Fleming's [illegible] Arab, and 5 others.—*Selling Handicap* [illegible] f. by Hesperus beat Maid of Honour, [illegible] —*Handicap Sweeps.* Was off by consent.—[illegible] Mr. W. Bevell's Audrey beat Paste, [illegible] Betting.—10 to 1 agst Asteroid, 100 [illegible] agst Audrey. Won by a length, Paste [illegible] neck for second. Ivanhoff fourth, [illegible] ixth, Tattler seventh, Bally Edmond [illegible] heading the next division.—*Royal* [illegible] Brother to Teddington walked over, and [illegible] with Janus.—*Clearwell Stakes.* Sir R. B[illegible] beat Wingrave, Clementi, Knight of St. M[illegible] *Sweeps.* Lord Westmoreland's Pupil beat [illegible]

WEDNESDAY.—*Oatlands Plate.* Mr. H[illegible] Imaus, Gibraltar, and 10 others.—[illegible] Valentine's Q.E.D. beat Xurullo, Marble Hill, [illegible] —*Handicap Sweeps.* Colonel Towneley's [illegible] Crawfurd's f., Morocco, and 12 others.—[illegible] Hawksley's Nutbush beat Hesper, Lava, and [illegible] Mr. J. Osborne's Lancelin beat Mr. [illegible] Acrobat, Sacerdos, Venerator, and [illegible] *Sweeps.* Mr. Barne's Oberon beat Miss [illegible] Fortibus, and Flash in the Pan.—*Tow*[illegible] Roesia beat Borderer, Millionaire, and 4 others.—[illegible] Colonel Towneley's Kettledrum walked [illegible] Towneley and Mr. Lincoln, the owner of [illegible] the forfeits.—*Maiden Plate.* Count F. de La[illegible] beat Mr. Rogers's b. f. by Stockwell, [illegible] *Sweeps.* Mr. T. Valentine's Q.E.D. beat [illegible]

THURSDAY.—*Sweeps.* Lord Stamford's F[illegible] —*Plate.* Mr. Saville's Reveille beat Madge W[illegible] Incitatus, and 3 others.—*Match.* Lord W[illegible] Lord Chesterfield's c.—*Sweeps.* Mr. E. [illegible] Absinthe and Filosel.—*Sweeps.* Mr. Sa[illegible] beat Hesper, Pupil, Mdlle. de Champ[illegible] *Sweeps.* Mr. Bland's Maid of Honour beat [illegible] and 5 others.—*Handicap Plate.* Mr. G. [illegible] beat Gibraltar, Cantine, and 9 others.—[illegible] *Stakes.* Lord Stamford's Bertha beat [illegible] Stamford's Walloon beat Evenhand.—*Mat*[illegible] St. Bernard beat Chiffonniere.

FRIDAY.—*Handicap Sweeps.* Penalty beat [illegible] —*Sweeps.* Pupil beat Bandage.—[illegible] beat Carisbrooke and 3 others.—*Sweeps.* [illegible] Pupil, and 7 others.—*Handicap Sweeps.* [illegible] bush, Jacintha, and 10 others.—50*l.* [illegible] Reveille, Dulcibella, and 3 others.—*Sel*[illegible] lote beat Weasel, and 3 others.—*Post* [illegible] over.

THE ENGLISH CRICKETERS FOR AUSTRALIA.—[illegible] guished players who have undertaken [illegible] of English cricketers among our kinsmen [illegible] were entertained at a dinner by the Surr[illegible] evening at the Bridge House Hotel, L[illegible] their departure for Australia. The eleven [illegible] phenson (Captain), Mudie, Griffith, Sewe[illegible] son, G. Bennett, Mortlock, Iddison, Lawre[illegible] Wells, the last of whom is already on [illegible] where he proposes permanently to re[illegible] engaged to make the journey by Mr. B. W. M[illegible] presentative of Messrs. Spiers and Pond, [illegible] each man is to receive 150*l.* with all [illegible] commence their voyage to-day in the [illegible] ship, from Liverpool, and expect to r[illegible] fore or about Christmas Day, the midsummer [illegible] colonies. After playing in Melbourne the A[illegible] will play at Bendigo, Ballarat, Marybo[illegible] or two other large towns, terminating [illegible] Sydney. Thence they will return to M[illegible] annual intercolonial match between the [illegible] Wales and Victoria is fixed next year [illegible] city, the opportunity will be seized to te[illegible] English Eleven against the combined S[illegible] Melbourne Clubs. After spending about [illegible] great southern colonies, the Eleven are t[illegible] the overland mail about the end of Marc[illegible] England in May, in time for the home [illegible] insuring the unwonted advantage of a [illegible] of three summers and three cricketing se[illegible] of a year and a half.

GREAT FOOT RACE.—The contest betwe[illegible] American Deer, and Deerfoot, the North A[illegible] over a distance of four miles, for a stake [illegible] Old Brompton on Monday afternoon in the [illegible] immense number of spectators. Since [illegible] country on the 8th August Deerfoot has [illegible] in all but the first has been successful [illegible] much smaller man than his opponent, [illegible] 24 years, run in both continents of Europe [illegible] miles than the distance once round the [illegible] money changed hands on the result, at [illegible] The course being a square quarter [illegible] traversed 16 times to complete the d[illegible] 4 o'clock the competitors made their appearan[illegible] Deerfoot being attended by Mills, and J[illegible] the word "Off" they bounded away at [illegible] with a slight lead, which he maintained [illegible] third lap, when Jackson put on a terrific [illegible] in wresting the lead from his opponent, [illegible] tinue in that position long, for at the end of the [illegible] Indian was again in the front. From th[illegible] struggled on manfully in the rear, but des[illegible] he could not succeed in catching the Indian [illegible] of the 13th lap he retired from the course, [illegible] to finish at his leisure.

Obituary.

[illegible] Conyngham died on the 10th inst., [illegible] near Canterbury, at the age of 92. [illegible] and heiress of Mr. Joseph Denison, of [illegible] up to the age of 27 she resided with her [illegible] merchant and banker, carrying on [illegible]. In 1794 she married the Hon. [illegible] years old, and eldest son of [illegible] of Bantry, who succeeded [illegible] after the death of her two brothers, to [illegible] the Conynghams, won at the battle [illegible] Conyngham, Lieutenant-General [illegible] aggrandised by many fur[illegible] Captain Burton carried [illegible] England in his 42d [illegible] his promotion to a major-[illegible] to his father's title and estates, [illegible] improve the condition of the [illegible] benefactors of his country. [illegible] was increased to an earldom as a reward [illegible] lordship's father, which led to a [illegible] Ireland and England. Upon the [illegible] France, George IV., as is well [illegible], and was hospitably entertained [illegible] Conyngham at Slane Castle. On his [illegible] invited the whole family to Court, [illegible] the invitation, retained them in [illegible] his lordship was created Viscount [illegible] of an ancient title forfeited in the [illegible], and Marquis Conyngham. [illegible] was enrolled in the British peerage as Baron [illegible] Kent. The Marchioness was left a [illegible] to see both her sons peers of [illegible] succession to his father; the second, [illegible] heir to her own father's great fortune [illegible] title of Lord Londesborough, whose [illegible] cousin, Lady Cecilia Conyngham, [illegible] of the Marchioness, were married on the [illegible].

[illegible] Williams, Bart., for some years M.P. [illegible] died at his residence, Clovelly Court, [illegible] inst. He was born in 1790, and mar-[illegible] Mary, daughter of the first Earl of Fortescue, [illegible] brother-in-law of the late and uncle of the [illegible]. The first Baronet was James Hammett, Esq., [illegible] name of Hamlyn, and the second Baronet [illegible] surname of Williams.

[illegible], F.R.S., died on the 13th inst., after an [illegible] prevented him for some years from following [illegible]. He was a very early member of the [illegible], and had filled the office of its Pre-[illegible] he made some useful inventions in [illegible] mechanics, and when the Great Exhibition [illegible] the construction of the building was [illegible] superintendence, and on the successful ter-[illegible] work he received the honour of knighthood. [illegible] upon which he was engaged were the [illegible] landing stages in the Mersey at Liverpool, [illegible] bridge across the Medway at Rochester.

[illegible] widow of the late Right Hon. Sir George Rose, [illegible] after a brief illness, on the 12th inst., at Home [illegible]. She was the daughter and co-heiress of Mr. [illegible], of Duncombe Park, Yorkshire. She [illegible], and has left surviving issue General Sir Hugh [illegible] the forces in India, Mr. William Rose, and [illegible] of Morton.

[illegible], M.P., died on Sunday morning at the [illegible] St. Leonard's, at the comparatively early age [illegible] excursion a few months since in [illegible] with paralysis, from which he soon [illegible] recovered. On Wednesday the [illegible] his seat at Canwick, near Lincoln, for a short [illegible] the south, in comparatively good health. He [illegible] a few days in London, and on Saturday morning pro-[illegible]. In the course of the following day he [illegible] from compression of the brain, and died [illegible]. Major Sibthorp had represented Lincoln [illegible] interest since the death of his father, [illegible] December, 1856. He owned extensive [illegible], Oxfordshire, Hertfordshire, Middlesex, [illegible] Nottinghamshire. He is succeeded in these [illegible] eldest son, Mr. Coningsby Charles Waldo [illegible] year.

[illegible] died on Thursday at his seat, [illegible]. He sat in parliament at various [illegible] Dundalk, and was long prominent in [illegible] as an advocate of tenant right.

[illegible] Murray, Bart., of Ochtertyre, near [illegible] morning, after a brief illness from [illegible] years of age. He was twice married [illegible] of Sir Alexander Keith of Ravelston [illegible] to Lady Adelaide, daughter of [illegible] Hastings, who died in December last. He [illegible] sons and five daughters, and is succeeded [illegible] Patrick Keith Murray. The deceased [illegible] Colonel of the Perthshire Rifles, until [illegible] before his death; and for several years [illegible] commencement of the Volunteer movement, he [illegible] time to the science of astronomy. He [illegible] expense a large observatory at Ochtertyre, to [illegible] the inhabitants of the district.

[illegible] Hutton died at Vizianagram in India, [illegible] August last, where he had served for a period [illegible]. He received a cadetcy in the Madras Army in [illegible] against the rebels in Rajahmundry in [illegible] the Pindaree inroads in 1815-16; served with [illegible] the Mahratta campaign, with the light field [illegible] the ex-Rajah of Nagpore in 1819, and in the [illegible] Burmah in 1825-26. He held command of [illegible] years. In 1839-40 he was appointed one of [illegible] to investigate the charges against the [illegible] the Nizam, and was Assistant-Adjutant-[illegible] Hyderabad subsidiary force. He commanded [illegible] Fort St. George, Madras, and the commands of [illegible] and Southern divisions. General Hutton had [illegible] medal for Ava, and was colonel of the 22d [illegible] Her Majesty's Madras Army.

[illegible]—On the 11th inst, at Newcastle-on-Tyne, the [illegible], of a daughter—12th inst, at Ottershaw Park, [illegible] Wibbroke, of a son—15th inst, at 53, Mount-[illegible], the Lady Victoria Mary Kirwan, of a [illegible], at Ferres Street, Edinburgh, Lady [illegible] of Gairloch, of a son—14th inst, at Paris, the [illegible] de Rothschild, of a son—11th inst, at [illegible] Rectory, Yorkshire, the Hon. Mrs. T. J. [illegible] daughter—9th inst, at 15, Eccleston Square, the [illegible] Frederic Hobart, of a daughter—10th inst, at [illegible] Street, Mayfair, the Hon. Mrs. Francis Stoner, [illegible] inst, in Hertford Street, Mrs. Henry Cust, [illegible].

[illegible]—On the 15th inst, at the British Embassy, [illegible] the Hon. Edward Brownlow, second son of the late [illegible], to Helene Clementina, second daughter of the [illegible] Harry, jun., Esq., formerly H.M.'s Consul at St. [illegible] Cuto—15th inst, at Hampstead, Arthur Fellows, Esq., of Victoria, Vancouver's Island, to Elizabeth Caroline, second daughter of Sir Rowland Hill, K.C.B.—15th inst, at St. Mary's Cathedral, Hamilton, C.W., John George Daly, Esq., son of Sir Dominick Daly, Governor of South Australia, to Mary Stuart, daughter of Sir Alan M'Nab, Bart., of Dundurn—10th inst, at the parish church, Leamington, John Illidge Fraser, Esq., late of the 11th Lancers, eldest son of the late Alexander Fraser, Esq., Gatwick House, Surrey, J.P. and deputy-lieutenant, to Eliza, second daughter of J. S. Brown, Esq., Comber House, Leamington—12th inst., at Leckhampton Church, Cheltenham, Vice-Admiral Arthur P. Hamilton, of 45, Wimpole Street, Cavendish Square, and The Mount, Chingford, Essex, to Ellen Gertrude, youngest daughter of the late Rev. J. Schofield, rector of Barton-on-the-Heath, Warwickshire—15th inst., Captain H. Trollope, Royal Navy, son of the late Rear-Admiral G. B. Trollope, C.B., to Mary, daughter of the Rev. John Hopkins, of Canon-frome Court, near Ledbury, Herefordshire—10th inst, at the English Church, Geneva, Scholes Birch, Esq., eldest son of Lea Birch, Esq., Loxley Park, Staffordshire, to Jane, third daughter of the late Randall Hatfield, Esq., of Thorp Arch Hall, Yorkshire—15th inst, at Great Berkhampstead, the Rev. James Hutchinson, M.A., Chaplain to H.R.H. the Duke of Cambridge, and rector of Great Berkhampstead, to Sophia Jane, eldest daughter of James Gordon Murdoch, Esq., of Whitehill, Herts.

DEATHS.—On the 7th inst, at Richmond, Surrey, Miss Mary Purves, daughter of the late Sir Alexander Purves, of Purves, Bart., aged 81—11th inst, at 5, Sussex Place, Hyde Park, Mary, daughter of the late Sir James Gordon, Bart., of Gordons Town and Letterfourie, and wife of Mr Serjeant Shee, aged 45—10th inst, at Turin, Emily, widow of Count Adrien Thaon de Revel, Sardinian Minister at the Court of Vienna, and daughter of the late Basil Montagu, Esq., Q.C.—13th inst, at Broadgate, North Devon, Anne Catherine, widow of Lieut.-General Desborough, aged 81—12th inst, at Bath, Lieut.-Colonel D. R. Smith, late of H.M.'s 7[illegible] Regiment, aged 56—22d Aug., at Muttra, Lieutenant-Colonel Frederick Freeman Remmington, C.B., of H.M.'s Bengal Horse Artillery, aged 58—27th Aug., at Calcutta, John Robert Macpherson, Esq., H.M.'s Bengal Army, eldest son of the late Lieut.-General Duncan Macpherson—13th inst, at Norwich, Kenneth Mackenzie Atkin, son of Lieut.-Colonel Wm. Atkin, Canadian Rifles, Prescot, Canada, aged 41—8th inst, at Bruges, Henrietta, widow of the late Lieut.-Colonel Campbell, of Newcastle-on-Tyne, aged 75—24th Aug., at Nusseerabad, of cholera, Lieutenant Frederick Courthope Irwin, H.M.'s 28th Regiment, eldest son of the late Colonel Frederick Chidley Irwin, K.H., aged 2[illegible]—12th inst, at Bathwick Villa, Bath, Major John Watson Pringle, R.E., aged 70—11th inst, at Chudleigh, Devon, Leopold Alfred Henry, second surviving son of Rear-Admiral Kuper, C.B., aged 11—8th inst, at his residence, Villa, Quorndon, Jno. Cartwright, Esq., J.P. for Leicestershire, aged 68—9th inst, at The Hollies, Little Ealing, Henry Austin, Esq., C.E., chief engineer under the Local Government Act, aged 49—6th inst, at Bath, Mary, relict of Ayshford Wise, Esq., and youngest daughter of the late Rev. Thomas Whitby, of Creswell Hall, in the county of Stafford, aged 75—3d inst, at 49, Green Street, Grosvenor Square, Charlotte, widow of the Rev. Thomas Bisse, of Portnall Park, Surrey—11th inst, at Broadwas Court, Worcestershire, Margery, relict of the Rev. E. Freeman, late rector of Felton, Herefordshire—4th inst, at Leicester, Thomas Macaulay, Esq., F.R.C.S., third son of the late Rev. Aulay Macaulay, formerly vicar of Rothley, Leicestershire, aged 60—12th inst, at Newport Pagnell, the Rev. Joseph William England, eldest son of the late William Henry England, rector of Ellesborough, Bucks, aged 30—6th inst, at his residence, Freshford, Somerset, the Rev. C. W. Baker, rector of Tellisford, aged 89—10th inst, at Hinstead Hall, Suffolk, the Rev. T. Sheriffe, rector of that parish, aged 7[illegible]—6th inst, at 14, Park Street, Bath, the Rev. W. A[illegible], aged 71.

Markets.

COVENT GARDEN, Oct. 19.

Notwithstanding that the weather has suddenly become colder, the supply of both Vegetables and Fruit continues good. Apples and Pears are plentiful, and the same may be said of Grapes, Pine Apples, and even Melons. Late Peaches realise good prices. Peas are very scarce. Of Cauliflowers there is a fair supply. Potato markets are brisker; prices a trifle higher than those of last week. Cucumbers are abundant, and the same may be said of Tomatoes, which are large and excellent. Cut flowers chiefly consist of Orchids, Dahlias, Asters, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Oranges, per 100, 6s to 14s
Grapes, per lb., 1s 6d to 4s	Lemons, per 100, 6s to 10s
Melons, each, 1s to 3s	Nuts, Cob, per pound, 2s to 2s 6d
Peaches, per doz., 12s to 18s	Walnuts, per 100, 2s
Pears, per doz., 1s to 6s	
Apples, per doz., 6d to 1s	

VEGETABLES.

Cauliflowers, each, 2d to 6d	Artichokes, each, 6d to 8d
Peas, p. quart, 1s to 1s 6d	Beet, per doz., 1s 6d
Broccoli, p. bundle, 1s to 1s 3d	Celery, p. bundle, 1s 6d to 2s
French Beans, per sieve, 2s 6d to 3s 6d	Onions, pickling, p. ½ sieve, 4s6d
Cabbages, do., 1s 3d to 1s 6d	Tomatoes, p. doz., 1s to 6s
Potatoes, p. ton, 60s to 75s	Shallots, per lb., 8d to 1s1
— per cwt., 4s to 8s	Garlic, per lb., 6d to 8d
Turnips, per bunch, 2d to 4d	Endive, p. score, 1s 6d
Carrots, do., 4d to 6d	Horse Radish, p. bun., 1s 6d to 4s
Spinach, p. sieve, 1s to 2s	Mushrooms, p. pott., 2s to 3s
Cucumbers, each, 6d to 9d	Parsley, p. 12 bunches, 3s to 4s
Veg. Marrows, p. doz, 1s to 1s 6d	Savory, per bunch, 2d to 4d

HAY.—Per Load of 36 Trusses.

SMITHFIELD, THURSDAY, Oct. 17.

Prime Meadow Hay	80s to 90s		Clover, old	96s to 120s	
Superior do.	95	105	New Clover	—	—
Inferior do.	40	55	Do. second cut	80	105
New do.	—	—	Straw	28	34
Rowen	—	—			

Davis & Co.

CUMBERLAND MARKET, THURSDAY, Oct. 17.

Sup. Meadow Hay	100s to 110s		Inferior Clover	86s to 100s	
Inferior do.	70	92	New do.	—	—
New do.	—	—	Straw	35	40
Superior Clover	108	116			

Joshua Baker.

WHITECHAPEL, THURSDAY, Oct. 17.

Fine Meadow Hay	90s to 96s		Fine 1st cut Clover	110s to 116s	
Inferior do.	60	75	Inferior do.	84	95
Prime New Hay	—	—	New 2d cut	95	100
Inferior	—	—	Inferior do.	80	90
Straw	28	32	New 1st cut	—	—

MARK LANE.—Monday, Oct. 14.

The supply of Wheat from Essex and Kent to this morning's market was very moderate, and cleared at an improvement of 1s. to 2s. per qr. upon the prices of Monday last. Foreign, early in the morning, was held for a considerable advance, which checked business, and on the sales ultimately effected 1s. per qr. on Baltic and 2s. to 3s. per qr. upon Russian and American was realised. Barley is a steady sale at the rates of [illegible] day se'nnight. Beans are rather dearer and Grey Peas bring an advance of 1s. per qr. The Oat trade is firm at late rates. The top price of town-made Flour is raised 1s. per sack, and barrels are 1s. dearer.

PER IMPERIAL QUARTER.

	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk ... White	[illegible]—62	Red	50—60
— — fine selected runs	[illegible]—62	Red	[illegible]—62
— — Talavera	[illegible]—6[illegible]		
— Norfolk	—	Red	—
— Foreign	63—[illegible]		
Barley grind. & dist. 26s to 28s ... Chev.	[illegible]	Malting	[illegible]
— Foreign grinding and distilling	27—30	Malting	36—40
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire—Potato	[illegible]	Feed	20—24
— Irish ... Potato	[illegible]	Feed	[illegible]—24
— Foreign ... Poland and Brew	[illegible]	Feed	[illegible]—24
Rye	[illegible]—[illegible]	Foreign	—
Rye-meal, foreign	—		
Beans, Mazagan ... 2[illegible]s to 2[illegible]s ... Tick	[illegible]—[illegible]	Harrow	3[illegible]—39
— Pigeon ... 38s—42s ... Winds.	—	Longpod	—
— Foreign ... Small	42—52	Egyptian	—
Peas, white, Essex and Kent ... Boilers	[illegible]	Suffolk	40—46
— Maple ... 43s to 4[illegible]s ... Grey	[illegible]	Foreign	[illegible]
Maize ... White	—	Yellow	—
Flour, best marks delivered ... per sack	[illegible]		
— 2d do. ...	[illegible]	Country	40—[illegible]
— Foreign ... per barrel	[illegible]	Per sack	4[illegible]—[illegible]

FRIDAY, Oct. 18.

From the 11th to the 16th (inclusive) the weather continued very fine and hot, with S.W. and S.E. winds; on the 16th the wind changed to N.E., with a dull foggy atmosphere; yesterday and to-day bright, but cooler. During the above interval the Wheat trade has been active and somewhat excited, prices having generally advanced 1s. to 2s., and in some markets 2s. to 3s. per qr., with an extensive business. Barley and Oats were [illegible], Beans and Peas realised an improvement of 1s. per qr. Flour has met a free sale at 1s. to 1s. 6d. per barrel advance, and 1s. to 2s. per sack; here the top price was raised to 55s. on Monday, or 1s. per sack. Since Friday last 30 vessels have been reported off the coast. The floating trade has been very firm, and for Wheat and Maize more money has been obtained; Beans are quoted 1s. to 2s. per qr. dearer. In Paris (October 17) there was more firmness in the Wheat and Flour trade, and holders have been enabled to make the prices of last week, which at the beginning of the present were unobtainable. The four marks, delivery [illegible] the next four months, are quoted equal to 57s. 8d. per [illegible]. The arrivals of all descriptions of grain, English and foreign, this week have been moderate. The market was not largely attended; nevertheless the English Wheat was disposed of at 1s. per qr. over Monday's prices. Foreign was generally held for a greater advance, which checked business, but on the sales effected a similar improvement was not generally exceeded. Barley, Beans, and Peas are unaltered in value. Old Oats bring fully Monday's quotations, new are a slow sale and rather cheaper. American Flour is scarce, and held for rather more money.

ARRIVALS FROM Oct. 14 to Oct. 18.

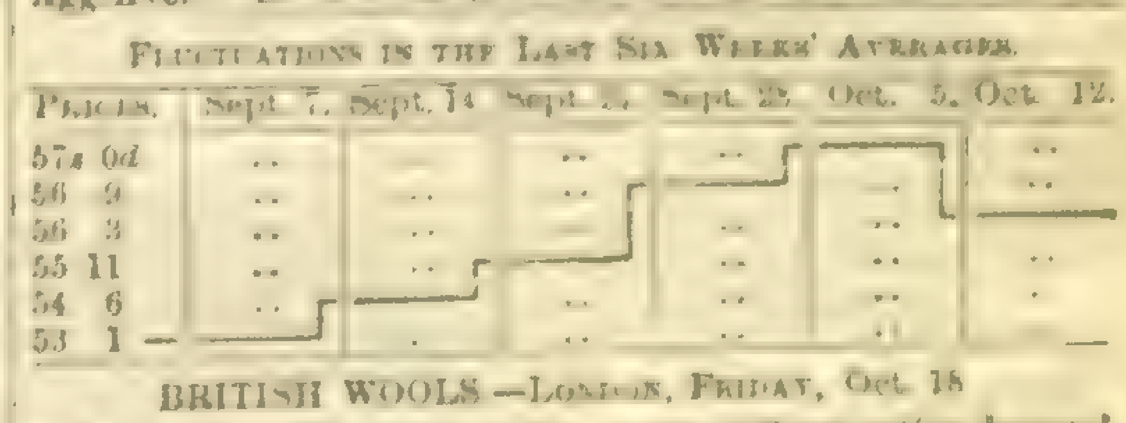
	Wheat.	Barley.	Oats.	Flour.
English	1010 qrs	720 qrs	[illegible] qrs	1070 sks.
Irish	— „	— „	400 „	— „
Foreign	11990 „	750 „	7970 „	— „ 1480 brls.

LIVERPOOL, Tuesday, Oct. 15.—This morning's market opened with a brisk demand for Wheat at the advance of 2d. per cental, which was obtained without difficulty throughout, and in some instances another 1d. was realised. Flour had a ready sale at from 6d. to 1s. per barrel and sack over Friday's rates. There was only a small quantity of Indian Corn on offer, and the market was quickly cleared of mixed American at [illegible]s. per 480 lbs., ex quay, which is an improvement of fully 1s. per qr. Oats and Oatmeal are without change. Beans, Peas, and Barley are each 1s. per quarter higher. Some purchases of Wheat are reported for Portugal, and the market closes with a strong feeling.

FRIDAY, Oct. 18.—There was a good attendance at to-day's market. Wheat in good consumptive demand, at the extreme rates of Friday. Flour 6d. per barrel and sack dearer, with a free sale. Indian Corn in healthy demand, mixed, 34s. to 34s. 3d.; For Egyptian Beans we had a good inquiry; Saidis, 37s. No change in other articles.

Averages	Wheat	Barley	Oats	Rye	Beans	Peas
Sept. 7	53s 1d	35s 11d	23s 7d	37s 2d	44s 0d	35s 3d
— 14	54 6	36 4	22 11	33 4	41 11	38 0
— 21	55 11	36 9	22 10	34 11	41 11	38 9
— 28	56 9	37 4	22 10	35 9	42 4	40 10
Oct. 5	57 0	37 4	22 6	35 4	42 0	40 4
— 12	56 3	37 4	21 10	37 2	44 8	42 11
Agg. Aver.	55 9	3[illegible] 10	22 9	35 7	42 4	39 4

FLUCTUATIONS IN THE LAST SIX WEEKS' AVERAGES.



BRITISH WOOLS.—London, Friday, Oct. 18.

Our trade continues about the same, without active demand for fleece wool, especially of the Southdown description. Bright-haired wool continues to command high rates. Skin wool is now getting of fair length, and sells at rates enhancing in proportion to the increase of value weekly.

	s. d.	s. d.		s. d.	s. d.
Southdown Hoggets	[illegible]	to 1 5	Leicester Wethers	1 5	to 1 5
Half-bred ditto	1 5	— 1 6	Ditto Hoggs	1 4	— 1 4
Down Ewes	1 4	— 1 5	Combing Skins	1 0	— 1 5
Kent Fleeces	1 5	— ..	Flannel Wool	1 0	— 1 5
			Blanket ditto	0 6	— ..

BUTTER MARKET.—Oct. 16.

Best Fresh Butter	..	16s. per dozen lbs.
Second do. do.	..	14s. „

Pork, 5s. 0d. to 5s. 8d. per 8lbs.

HOPS.—Borough Market, Friday, Oct. 18.

Messrs. Pattenden & Smith report that there has been a better demand during the week for the best class of Mid and East Kents, as also for choice Weald of Kents at the following currency:—

Mid and East Kent	£5 0 to £13 0	
Weald Kent	7 10 —	8 10
Sussex	6 10 —	7 10

Very choice higher. Duty, 115,000*l*.

COAL MARKET.—Oct. 16.

Byass's Bebside West Hartley, 18s. 3d.; Lambert's West Hartley 18s.; Walls End Riddell, 17s.; Walls End Belmont, 17s.; Walls End Hetton, 19s.; Walls End South Durham, 17s. 3d.; Walls End Thorpe, 17s. 2d.; Carway and Dufryn [illegible].

Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.—Ships at market, 12.

METROPOLITAN CATTLE MARKET.

MONDAY, Oct. 14.

The supply of Beasts is shorter, and prices for best qualities are rather higher; but trade is not very brisk. The number of Sheep is very small; they are readily disposed of at rather higher rates. Calves also are rather dearer. From Germany and Holland there are 1400 Beasts, 7950 Sheep, and 145 Calves; from Ireland, 700 Beasts; and 2700 from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 8 to	5 0	Best Long-wools.	4 10 to	5 2
Best Short-horns	4 6 —	4 10	Do. Shorn	.. .. —	..
2d quality Beasts	3 4 —	4 0	Ewes & 2d quality	4 4 —	4 8
Best Downs and Half-breds ..	5 2 to	5 4	Do. Shorn	.. .. —	..
Do. Shorn	.. .. to	..	Lambs ..	.. .. —	..
			Calves ..	.. 4 2 —	5 0
			Pigs ..	.. 4 4 —	5 4

Beasts, 4940; Sheep & Lambs, 20,790; Calves, 170; Pigs, 520.

THURSDAY, Oct. 17.

We have a few more Beasts than on Thursday last. The weather and the demand are good, consequently prices are quite as good as on Monday last. The supply of Sheep is small; they are readily disposed of at advanced rates. Choice Calves are rather dearer. Our foreign supply consists of 310 Beasts, 1300 Sheep, and 148 Calves. The number of Milch Cows is 105.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 8 to	5 0	Best Long-wools.	5 0 —	5 4
Best Short-horns	4 6 —	4 10	Do. Shorn	.. .. —	..
2d quality Beasts	3 4 —	4 0	Ewes & 2d quality	4 6 —	4 10
Best Downs and Half-breds ..	5 4 —	5 6	Do. Shorn	.. .. to	..
Do. Shorn	.. .. —	..	Lambs ..	.. .. —	..
			Calves ..	.. 4 4 —	5 2
			Pigs ..	.. 4 4 —	5 4

Beasts, 1345; Sheep & Lambs, 4430; Calves, 225; Pigs, 270.

BUSINESS WANTED.—Any party retiring from the SEED BUSINESS (England preferred) would find a Successor willing to take a respectable one at its positive value.
Apply by letter only, SEEDSMAN, Gye's, 62, Basinghall Street, City, London, E.C.

WANTED, as HEAD GARDENER, in Devonshire, an experienced, active Man, who thoroughly understands and has had the Management of good Kitchen and Flower Gardens, Vines, Pines, Conservatory, Orchard House, &c. He should have some knowledge of Laying-out Grounds, Shrubberies, &c. A married Man without incumbrance preferred. Age from 35 to 45. Wages from 60l. to 70l., with excellent House, Fuel, and Vegetables.—Applications, with references and full particulars of previous service, age, wages, &c., to be directed to A. Z., Post Office, Plymouth.

WANTED, at Martinmas next, a Single Man, from 30 to 40 years of age, as FARM BAILIFF, for about 250 acres. He will be expected to work with the labourers employed and to keep the Farm Accounts. Testimonials of sobriety and general character will be required.—Apply by letter to A. Z., Post Office, York.

WANTED, an INVOICE CLERK in a Wholesale Seed Establishment.—Apply by letter in own handwriting to A. B., 181, High Holborn, London, W.C.

WANTED, a YOUTH or YOUNG MAN to take charge of a Small Garden, the produce of which (Bedding Plants, &c.) will be grown for Sale. State age, wages, &c. —X. Y., 12, Barker Street, Loyells, Birmingham.

WANTED, a MAN and WIFE, under 40 years of age, without Children. The Man must be able to lead in any kind of Farm and Market Garden work; his Wife to attend to Dairy and Poultry.—Address R., Post-Office, Orpington, Kent.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 31, married, no incumbrance; thoroughly experienced in his profession, and no objection to Land. Highly recommended.—B., 1, Crown Terrace, Coburg Road, Old Kent Road, S.E.

GARDENER (HEAD).—Middle aged, single; has a thorough practical knowledge of his profession in all its branches, and has had a great deal of practice in new work.—G. G., Bedford Nursery, Haverstock Hill, London, N.

GARDENER (HEAD).—Thoroughly understands his profession in all its branches, Flower, Fruit, and Kitchen Gardens, Laying Out Plantations, &c.—A. B., Atherstone Nursery, Warwickshire.

GARDENER (HEAD).—Age 38, married; thorough practical knowledge of his profession in all its branches. Character and ability will bear the strictest investigation.—D. D., Royal Horticultural Gardens, Kensington, W.

GARDENER (HEAD).—Age 38, married, without incumbrance; thoroughly versed in all branches of Gardening. First-class reference as to character and capabilities.—S. C., Messrs. Arthur Henderson & Co., Pine Apple Place, Edgeware Road, W.

GARDENER (HEAD).—Age 28, single; has had practical experience in Forcing Pines, Vines, Melons, and the Management of the Orchard-house and Flower and Kitchen Gardens. Can be highly recommended.—W. B., Post Office, Wantage, Berks.

GARDENER (HEAD).—Middle-aged, single; has a practical knowledge of the Management of Kitchen Garden, Early and Late Forcing of Grapes, and Hothouse and Greenhouse Plants. Five years' character.—E. L., Mr. Kennedy, Seedsman and Florist, Covent Garden, W.C.

GARDENER (HEAD).—Age 30, single; practically versed in Flower and Kitchen Gardening, and thoroughly understands Forcing. Possesses first-class testimonials, and can be well recommended by J. Weeks & Co., King's Road, Chelsea, S.W.—Address R. C., at the above Firm.

GARDENER (HEAD).—Age 25, married, one child; thoroughly practical and energetic. A most excellent character both as to abilities and conduct will be given by the nobleman's Gardener under whom he has served as Foreman for the last four years.—G. ELLIS, The Gardens, Euston Hall, Thetford, Norfolk.

GARDENER (HEAD), to any nobleman or gentleman —Age 39, married; thorough practical Gardener of 23 years' experience in Cultivating Fruits, Flowers, and Vegetables. Can take the care of Plantations, Measuring and Selling of Timber, &c. Can have a most unexceptionable character of 14 years' standing from the place he is now leaving. The reason for leaving is death of employer.—A. HALYBURTON, The Gardens, Barrock Park, near Carlisle.

GARDENER (HEAD).—Age 25, single; understands the Propagation and Growing of Stove and Greenhouse plants, Vines, Melons, and the Management of Kitchen, Fruit, and Flower Gardens. Good character.—R. E., Post Office, Buxton.

GARDENER (HEAD).—Age 36, married, no incumbrance; well understands his profession in all its branches; is a good Kitchen and Flower Gardener. Sole cause of leaving is through present employer leaving his estate. Unexceptionable character.—J. GUMM, Woodgate, Beckley, Sussex.

GARDENER (HEAD).—Middle-aged, married, steady, active; of industrious habits and great practical experience. A first-rate Fruit and Plant Grower, and thoroughly master of his profession in every department. Several years' excellent character from his last situation. Wages moderate.—A. B., Charles Turner, Esq., The Royal Nurseries, Slough.

GARDENER (HEAD, or good SINGLE-HANDED).—Age 25, married, no incumbrance; understands Vines and Forcing Fruit and Vegetables, and has a general practical knowledge of Flower and Kitchen Gardens. Excellent character and references.—ALPHA, 7, Nile Place, Nelson Street West, Birmingham.

GARDENER (HEAD), or FOREMAN.—Age 27, single; has had good practical experience in the various branches of the profession, and is now open to an engagement in either capacity as above, with any person requiring a thoroughly conscientious Servant.—I. J., Messrs. J. Saltmarsh & Son, Nurserymen, Chelmsford, Essex.

GARDENER.—Age 29; thorough knowledge of Early and Late Forcing of Fruits, Flower and Kitchen Gardens. Good character.—J. T., J. Weeks & Co., Horticultural Builders, &c., King's Road, Chelsea, London, S.W.

GARDENER to any nobleman or gentleman.—Reference as to professional acquirements, &c., given on application to A. B., Drumlanrig Castle Gardens, Thornhill, Dumfriesshire.

GARDENER (UNDER) or FOREMAN.—Age 20; has had five years' good practice in the general routine of Gardening. Can be highly recommended.—I. K. L., Post Office, Salisbury, Wilts.

GARDENER (UNDER).—Age 21; can be well recommended. Seven years' experience. A premium given.—Mr. KAILE, Gardener, East Horsley Towers, Ripley, Surrey.

GARDENER (UNDER).—Age 26, single; has had the care of a small place, single-handed, two-and-a-half years. Character good.—J. F., Welland, Upton-on-Severn.

GARDENER (UNDER), in a gentleman's family.—Age 21. Good recommendation.—W. S., Mr. W. Bull's Establishment for New and Rare Plants, King's Road, Chelsea, S.W.

GARDENER, or GARDENER and BAILIFF.—Middle-aged; married, with two children. Will leave his present situation the first week in November, where he has lived 15 years in the above capacity; where neatness and order were strictly attended to, and where Fruits and Flowers were grown to perfection.—A. M. G., Messrs. Lawson & Son, 27, Great George Street, Westminster, W.C.

PROPAGATOR, or PROPAGATOR and FOREMAN.—Age 41; extensive practical experience in the Propagation and Cultivation of Stove and Greenhouse, Cape, New Holland Plants, &c. A most proficient Graftsman of Conifers, Camellias, Azaleas, Rhododendrons, Roses (on a most improved principle), Ornamental Trees, Shrubs, &c. Upwards of 20 years in a first-class London and Provincial Nursery. The last six years in a first-class Scotch establishment. Experienced in the general routine of Nursery operations. Satisfactory testimonials.—W. R., *Gardeners' Chronicle* Office, W.C.

IMPROVER.—A person is desirous to obtain for a stout healthy youth, age 20, a situation; he can Milk, and has some knowledge of Horse and Carriage; has been used to work in the Garden. To any gentleman's Gardener he would be useful. Can have a good character.—A. B., Post Office, Harrold, Bedfordshire.

BAILIFF.—Has had great experience in the Midland and Southern Counties; is a good Judge and Manager of Stock and a good Accountant.—C. D., 66, Herbert Street, Hoxton, London. N

SHOPMAN or SALESMAN.—Age 23; has had 10 years' experience in the Retail Nursery and Seed Trade. —M. C. R., Mr. Miles, News Agent, High Street, Islington, N.

SHOPMAN.—A Person of mature experience in both the Wholesale and Retail Trade, will shortly close an engagement in London.—O. B., Mr. Philpot, 13, Rutland Street, Pimlico, S.W.

To Gentlemen, Nurserymen, and Others.

CARPENTER and JOINER.—Steady, and of industrious habits. Can do Painting and Glazing, and is willing to make himself generally useful. Town or Country.—A. B., 12, Townshend Cottages, St. John's Wood, London, N.W.

GROOM and GARDENER.—Age 35, married, without incumbrance; has a thorough practical knowledge of his profession in both departments, and has given the highest satisfaction to the gentleman with whom he has lived two years, with an unexceptionable character for morals, punctuality, industry, and trustworthiness. The highest reference can be obtained from the gentleman he is about leaving. A situation within 20 miles of London preferred.—A. B., 22, Market Place, Westbury, Wilts.

HOW TO AVOID MEDICINE, its Uncertainty, Inconvenience, and Expense.—Certificate No. 36,413.—"We find DU BARRY'S delicious health-restoring REVALENTA ARABICA FOOD the safest remedy for habitual constipation, indigestion (dyspepsia), acidity, heartburn, palpitation, irritability, sleeplessness, distension, flatulency, phlegm, hæmorrhoids, coughs, colds, asthma, bronchitis, consumption, sore throats, diphtheria, diarrhœa, dysentery, nervousness, biliousness, torpidity of the liver, debility, scrofula, atrophy."—Andrew Ure, M.D., F.R.S. Dr. Harvey, Dr. Shorland, Dr. Campbell, Dr. Rud. Wurzer. Less expensive but far more pleasant and strengthening than Cod Liver Oil, Cocoa, Chocolate, Tea or Coffee, it saves 50 times its cost in medicine and doctor's bills, and has effected 58,000 cures where all other remedies had failed, restoring perfect digestion, strong nerves, sound lungs, healthy liver, refreshing sleep, and energy to the most disordered or enfeebled, old or young.
BARRY DU BARRY & Co., 77, Regent Street, W.; also at 60, Gracechurch Street, E.C.; 4, Cheapside, E.C.; 63 and 150, Oxford Street, W.; 330, Strand, London, W.C.; and all grocers and chymists.

FENDERS, STOVES, [illegible] CHIMNEY PIECES.—Buyers [illegible] before finally deciding, to visit [illegible] SHOW-ROOMS. They contain [illegible] FENDERS, STOVES, RANGES, CHIMNEY [illegible] IRONS, and GENERAL IRONMONGERY [illegible] approached elsewhere, either for variety [illegible] design, or exquisiteness of workmanship [illegible] ormolu ornaments and two sets of [illegible] Bronzed Fenders, with standards, [illegible] 2l. 15s. to 11l.; ditto, with rich ormolu [illegible] 18l.; Chimney-pieces, from 1l. 8s. [illegible] 2s. 3d. the set to 4l. 4s. The BURTON [illegible] STOVES, with radiating hearth-plates.

BEDSTEADS, BATHS, and LAMPS [illegible] S. BURTON has SIX LARGE SHOW [illegible] exclusively to the SEPARATE DISPLAY [illegible] and METALLIC BEDSTEADS. The stock [illegible] largest, newest, and most varied ever [illegible] and marked at prices proportionate with [illegible] to make his establishment the most [illegible] country.

Bedsteads, from .. .. 12s. 6d. [illegible]
Shower Baths, from .. 8 0 [illegible]
Lamps (Moderateur), from 6 0 [illegible]
(All other kinds at the same rate.)
Pure Colza Oil .. .. .. [illegible]

CUTLERY, WARRANTED.—The [illegible] assortment of TABLE CUTLERY [illegible] ranted, is on sale at WILLIAM S. BURTON'S [illegible] remunerative only because of the largeness of the [illegible] and a half inch Ivory-handled Table Knives [illegible] shoulders, 12s. 6d. per dozen; Desserts [illegible] balance, 6d. per dozen extra; Carvers [illegible] sizes from 20s. to 27s. 6d. per dozen; [illegible] with Silver Ferrules, 30s. to 50s.; [illegible] 6s. per dozen; Desserts, 5s.; Carvers, [illegible] horn Table Knives, 7s. 4d. per dozen; [illegible] 2s. 6d.; Black-wood handled Table Knives [illegible] dozen; Table Steels from 1s. each. The largest [illegible] ence of Plated Dessert Knives and Forks [illegible] wise, and of the new plated Fish Carvers.

WILLIAM S. BURTON'S GENERAL [illegible] NISHING IRONMONGERY CATALOGUE [illegible] had gratis, and free by post. It contains [illegible] Illustrations of his illimited Stock of [illegible] Electro Plated, Nickel Silver, and Britannia [illegible] Dish Covers, Hot Water Dishes, Stoves, [illegible] Chimneypieces, Kitchen Ranges, Lamps, [illegible] Urns, and Kettles, Clocks, Table Cutlery, Baths [illegible] Turnery, Iron and Brass Bedsteads, Bedding, [illegible] Cabinet Furniture, &c., with Lists of Prices [illegible] 20 large Show Rooms, at 39, Oxford Street, [illegible] and 4, Newman Street; 4, 5, and 6, Perry's Place, Newman Mews, London.

HAIR RESTORED, improved, and [illegible] the use of ROWLAND'S MACASSAR OIL [illegible] hair from falling off or turning grey, strengthens [illegible] cleanses it from scurf and dandriff, and [illegible] soft, pliable, and glossy. For children it is especially [illegible] mended, as forming the basis of a beautiful head of [illegible] 3s. 6d., 7s., 10s. 6d. (equal to four small), and [illegible]
Caution.—Ask for ROWLAND'S Macassar Oil [illegible] ton Garden, E.C., and by Chemists and Perfumers.

METCALFE, BINGLEY, AND CO. [illegible] PATTERN TOOTH BRUSHES, [illegible] Hair Brushes, genuine Smyrna Sponges, and every [illegible] of Brush and Comb and Perfumery for the toilet. [illegible] celebrated Alkaline Tooth Powder, 2s. per box.

THE FAIRY BOUQUET.—T[illegible] fume was originally discovered by [illegible] attendants. It is made from wild flowers [illegible] hands from "the bank whereon the wild Thyme grows [illegible] authenticity of the recipe is vouched for with the same [illegible] of certainty as is the existence of [illegible] now prepared solely by METCALFE, BINGLEY & CO. [illegible] fumers, &c., 130 B and 131, Oxford Street [illegible] bottles, 2s., 3s. 6d., and 5s. each.

Dr. de Jongh's
(KNIGHT OF THE ORDER OF LEOPOLD [illegible])

LIGHT BROWN COD LIVER [illegible] prescribed by the most eminent Medical [illegible] the world as the safest, speediest, and most effectual [illegible]
CONSUMPTION, CHRONIC BRONCHITIS, [illegible] RHEUMATISM, GOUT, GENERAL DEBILITY, [illegible] RICKETS, INFANTILE WASTING, and all SCROFULOUS [illegible]
Is incomparably superior to every other [illegible]

SELECT MEDICAL OPINIONS.

SIR JOSEPH OLLIFFE, M.D., Physician [illegible] Embassy at Paris.—"I have frequently [illegible] Jongh's Light Brown Cod Liver Oil, and [illegible] to be satisfied with its beneficial and salutary [illegible]

SIR HENRY MARSH, BART., M.D., Physician [illegible] to the Queen in Ireland.—"I consider Dr. [illegible] Brown Cod Liver Oil to be a very pure Oil, [illegible] disgust, and a therapeutic agent of great value."

DR. LAWRANCE, Physician to H.R.H. [illegible] Coburg and Gotha.—"I invariably prescribe [illegible] Oil in preference to any other, feeling assured [illegible] mending a genuine article, and not a manufactured [illegible] in which the efficacy of this invaluable medicine [illegible]

Dr. LANKESTER, F.R.S., Superintendent [illegible] Collection, South Kensington Museum.—"[illegible] Liver Oil sold under Dr. de Jongh's guarantee [illegible] to any other kind as regards genuineness [illegible] efficacy."

DR. DE JONGH'S LIGHT BROWN COD LIVER [illegible] IMPERIAL half-pints, 2s. 6d.; pints, 4s. 9d.; [illegible] and labelled with his stamp and signature, [illegible] NONE CAN POSSIBLY BE GENUINE, by respectable [illegible]
SOLE CONSIGNEES:
ANSAR, HARFORD, & Co., 77, Strand, London, [illegible]

CAUTION.—Beware of Proposed Substitutions.

DINNEFORD'S PURE FLUID MAGNESIA [illegible] been, during 25 years, emphatically sanctioned [illegible] medical profession, and universally accepted [illegible] the best remedy for acidity of the stomach, [illegible] headache, gout, and indigestion, and as a mild [illegible] delicate constitutions, more especially for ladies [illegible] Combined with the Acidulated Lemon Syrup [illegible] agreeable Effervescing Draught, in which its aperient [illegible] are much increased. During hot seasons and [illegible] the REGULAR use of this simple and elegant [illegible] found highly beneficial.
Manufactured (with the utmost attention to [illegible] purity) by DINNEFORD & Co., 172, New Bond Street, London, W.; and sold by all respectable Chemists [illegible] the Empire.

The Gardeners' Chronicle Newspaper.

SATURDAY, OCTOBER 26, 1861.

MINTON AND CO. have REMOVED from Albion Place, Blackfriars, to 50, Conduit Street, Regent Street, W. ENCAUSTIC and other PAVEMENTS, EARTHENWARE and PLAIN TILES. Designs and Estimates prepared. Manufactory: Stoke-upon-Trent.—Oct. 26.

BENJAMIN EDGINGTON respectfully informs the public that he has REMOVED his Charing Cross business to his OLD ESTABLISHED Marquee, Tent, Rick, Cloth, Sack, and Tarpauling Manufactory, 2, Duke Street, London Bridge, S.E. No other Establishment.

GREEN'S PATENT LAWN MOWERS have proved to be the best, and have carried off every prize that has been given in all cases of competition. They are superior in working, self-sharpening, self-cleaning, simple in construction, and easier to work and less liable to get out of order than any other Lawn Mowers extant.
Illustrated Price Lists may be had of THOMAS GREEN, Smithfield Iron Works, Leeds; or 2, Victoria Street, Holborn Hill, London, E.C.
N.B. Old Machines repaired and made as good as new.

Gutta Percha Tubing for Watering Gardens.

THE GUTTA PERCHA COMPANY have the pleasure to acknowledge the receipt of the following testimonial from Mr. J. FARRAH, *Gr. to* BOSWELL MIDDLETON JALLAND, Esq., *of Holderness House, near Hull.*

"I have had 400 feet of your Gutta Percha Tubing, in lengths of 100 feet each, with union joint, in use for the last 12 months for watering these gardens, and I find it to answer better than anything I have ever yet tried. The pressure of the water is very considerable, but this has not the slightest effect on the tubing. I consider this tubing to be a most valuable invention for Gardeners, inasmuch as it enables us to water our gardens in about one-half the time, and with one-half the labour required."

Manufactured by the GUTTA PERCHA COMPANY, Patentees, 18, Wharf Road, City Road, London, E.C., and sold by their Wholesale Dealers in Town and Country.

GLASS for GREENHOUSES.—
SHEET GLASS, Stock Sizes, 16 oz.

Boxes included.	3rds.	4ths.
11 by 9, 12 by 9, 13 by 9, 14 by 9 ..	14s. 0d.	12s. 6d.
12 „ 10, 13 „ 10, 14 „ 10, 15 „ 10 ..		
13 „ 11, 14 „ 11, 15 „ 11, 16 „ 11 ..	16s. 0d.	13s. 6d. per 100 feet.
14 „ 12, 15 „ 12, 16 „ 12, 17 „ 12 ..		
18 „ 12, 19 „ 12, 20 „ 12		
16 „ 13, 17 „ 13, 18 „ 13		
19 „ 13, 20 „ 13, 21 „ 13		
16 „ 14, 17 „ 14, 18 „ 14		
19 „ 14, 20 „ 14, 21 „ 14		

English Glass of the above sizes, 18s. per 100 feet.

SMALL SHEET SQUARES, IN 100 FEET BOXES.

6 by 4	6½ by 4½	7 by 5	7½ by 5½	11s. 6d.
8 „ 6	8½ „ 6⅜	9 „ 7	9½ „ 7½	
		10 „ 8	10½ „ 8½	12 6

Boxes 2s. each, returnable at full price.

GLASS FOR ORCHARD HOUSES,
As supplied by us to Mr. Rivers.

20 in. by 12 in. / 20 in. by 13 in. / 20 in. by 14 in. / 20 in. by 15 in.	16 oz.	21 oz.
Common	13s. 6d. ..	£0 18s.
Superior do.	16 0 ..	1 3
English Glass	18 0 ..	1 9

The above prices include the Boxes.

Perforated Glass for Ventilation. Patent Plate and Polished Plate Glass. Ornamental and Coloured Glass.
London Agents for Hartley's Improved Patent Rough Plate.
Linseed Oil, Genuine White Lead, Carson's Paints, Paints of various colours ground ready for use.
Milk Pans, Propagating Glasses, and every description of Glass for Horticultural purposes.
JAMES PHILLIPS & Co., 180, Bishopsgate Street Without, London, E.C.

PROTECTED BY THE CUTLERS COMPANY — CORPORATE MARK.

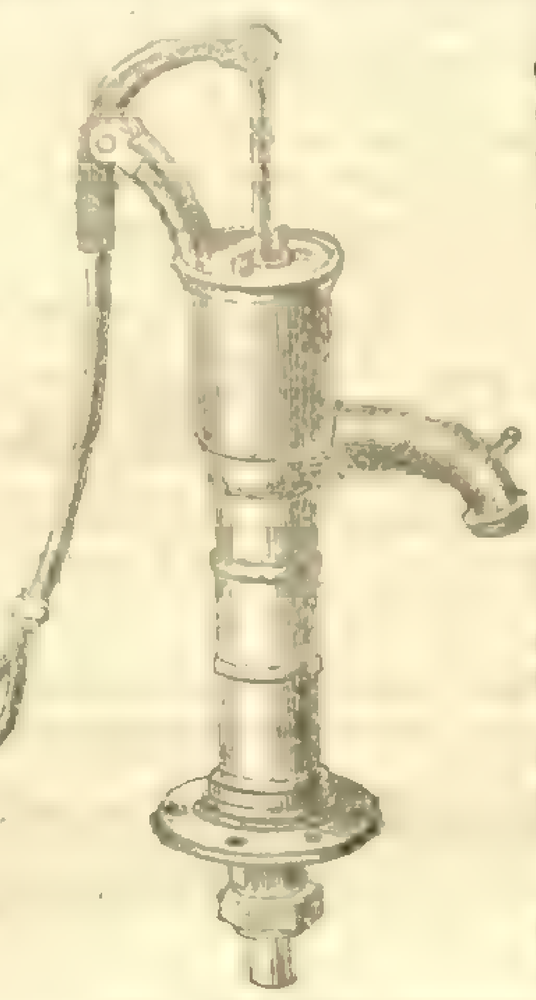
JOSEPH HAYWOOD AND CO., MANUFACTURERS OF PRUNING and BUDDING KNIVES, SPORTSMAN'S, and all kinds of POCKET CUTLERY.

Dealers in Gambia Garden Shears, Scissors, Syringes, &c.

Glamorgan Works, Sheffield.

MUSGRAVE'S PATENT STABLE FITTINGS and HARMLESS LOOSE BOXES, PATENT IRON COW-HOUSE FITTINGS, and IRON PIGGERIES.

These inventions are recommended as possessing numerous advantages not to be found in any other fittings made. At the late Meeting of the Royal Agricultural Society at Leeds, MUSGRAVE BROTHERS received a Silver Medal, and two Awards of "Highly Commended," being the only Prizes conferred on any competitor in this class.
Particulars sent on application to the Inventors and Makers, MUSGRAVE BROTHERS, Ann Street Iron Works, Belfast.



J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25s. 6d. each.

IRON YARD and GARDEN PUMPS
3 feet 6 inches under spout
2½ 3 3½ inch
40s. 53s. 60s. each.

J. TYLOR AND SONS manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.
PUMPS of J. TYLOR & SONS' manufacture to be obtained of Plumbers in all parts of the United Kingdom.
J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

Oil Paint no longer Necessary.

HILL AND SMITH'S PATENT BLACK VARNISH for preserving Iron Work, Wood, or Stone. This Varnish is an excellent substitute for oil paint on all out-door work, and is fully two-thirds cheaper. It may be applied by an ordinary labourer, requires no mixing or thinning, and is used cold. It is used in the grounds at Windsor Castle, Kew Gardens, and at the seats of many hundreds of the nobility and gentry, from whom the most flattering testimonials have been received, which HILL & SMITH will forward on application.
Sold in casks of about 30 gallons each, at 1s. 6d. per gallon, at the Manufactory, or 1s. 8d. per gallon paid to any station in the kingdom.
Apply to HILL & SMITH, Brierley Hill Iron Works, near Dudley, and 76, Cannon Street, E.C., from whom only it can be obtained.

VASES and BALUSTRADING for GARDENS executed in AUSTIN'S ARTIFICIAL STONE, which has been extensively used in Scotland for more than 30 years. AUSTIN, SEELEY, & Co., 371—375, Euston Road (formerly New Road), Regent's Park, N.W.

APPARATUS for the MANUFACTURE of COAL GAS, small size, FOR SALE, cheap.
Apply to J. G., 5, James Place, Marlborough Road, Chelsea, S.W.

Garden Border Edging Tiles.

F. AND G. ROSHER, CEMENT, BRICK, and TILE MERCHANTS, beg to invite attention to their varied Stock of Ornamental GARDEN BORDER-EDGING TILES in Terra Cotta, Terro-Metallic ware, and Red ware. They present advantages over Box or Grass-edging in that they afford no harbour for slugs, &c., take up less room, and once laid require no further attention.
They may be had of various patterns at F. & G. R.'s Premises, Ward's Wharf, Upper Ground Street, Blackfriars, S.; and Kingsland Road Wharf, near the Canal Bridge, London, N.E.
N.B. Specimens of Patterns sent by post on application. Garden Vases and Ornamental Flower Boxes for Windows and Balconies in stock.

ORNAMENTAL PAVING TILES for Conservatories, Halls, Corridors, Balconies, &c., as cheap and durable as Stone, in blue, red, and buff colours, and capable of forming a variety of designs.
Also WHITE GLAZED TILES for Lining Walls of Baths, Dairies, Larders, &c. Stable Pavers, Grooved Terro Metallic and other Stable Paving Bricks of great durability, Clinkers, Red and White Wall Copings, Glazed Drain Pipes, &c.
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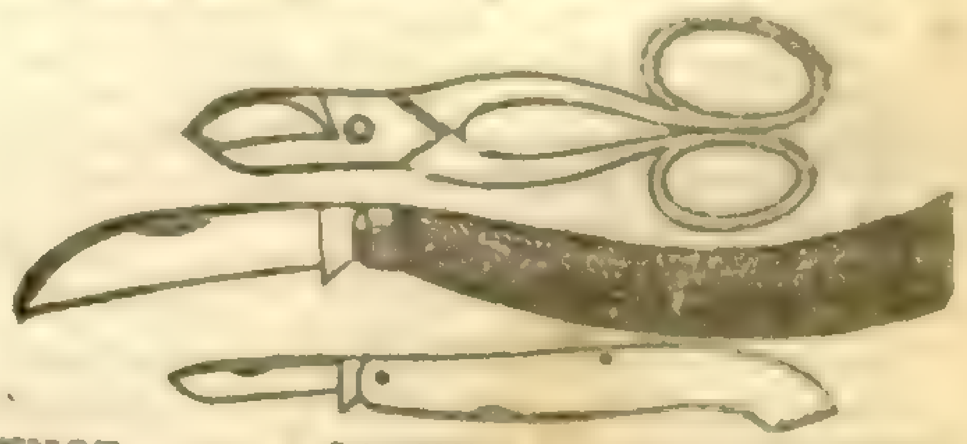

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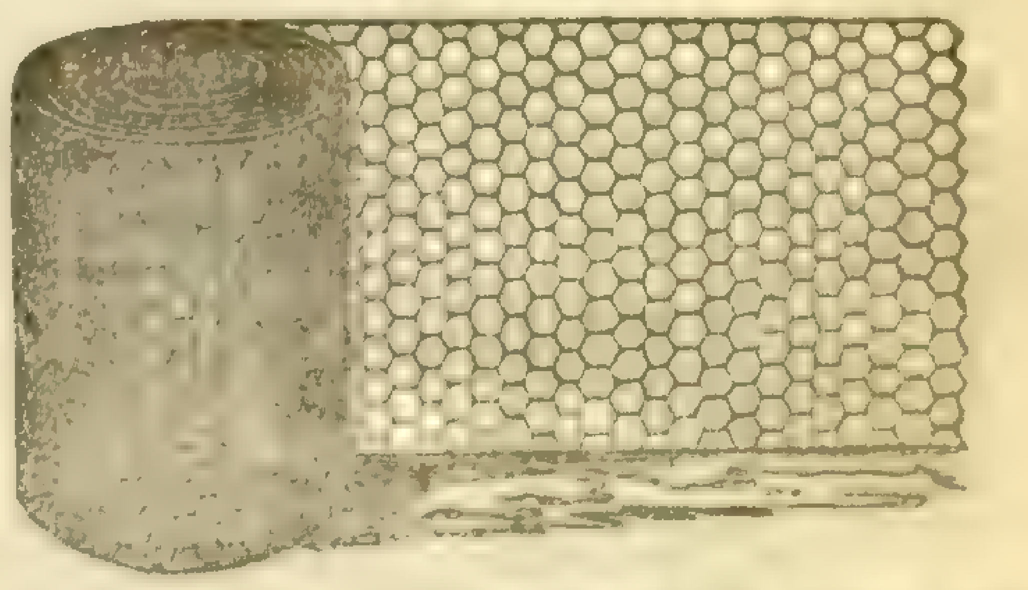

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2-inch „ „ „ ..	„ 18 ..	5 ..	4
2-inch „ „ „ ..	„ 17 ..	6½ ..	5
2 inch „ „ „ ..	„ 16 ..	8 ..	6½
1⅝ inch „ „ „ ..	„ 19 ..	4¾ ..	4
1⅝-inch „ „ „ ..	„ 18 ..	6 ..	4¾
1⅝ inch „ „ „ ..	„ 17 ..	7 ..	5½
1⅝-inch „ „ „ ..	„ 16 ..	9 ..	7

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Fig. A.

Fig. B.

PRESERVE JARS.

Figs. E.

Fig. C.

Fig. F.

Fig G.

Fig D.

Fig. H.

Fig. D.

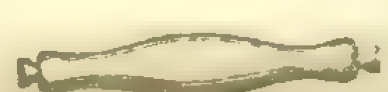

Fig. I.

Fig. A. HAND GLASSES.

12 inches	..	6s. 0d. each
14 „	..	7 0 „
16 „	..	8 0 „
18 „	..	9 0 „
20 „	..	10 0 „
24 „	..	12 0 „

If open top 1s. extra.

Fig. B. PROPAGATING GLASSES.

2 inches	..	0s. 3½d. each.
4 „	..	0 5½ „
6 „	..	0 8 „
10 „	..	1 4 „
12 „	..	1 9 „
16 „	..	3 6 „
18 „	..	5 0 „
20 „	..	7 0 „

Fig. C. MILK PANS.

6 inches	..	0s. 6d. each.
10 „	..	1 0 „
14 „	..	1 9 „
18 „	..	2 9 „
20 „	..	3 3 „
22 „	..	3 9 „
24 „	..	4 6 „
26 „	..	5 6 „

Fig. E. PRESERVE JARS.

	Without Lids.	With Lids.
3 inches	0s. 4½d.	0s. 6½d. each
4 „	0 6	0 9 „
5 „	0 8	0 11 „
6 „	0 10	1 2 „
7 „	1 0	1 4 „
8 „	1 4	1 8 „
9 „	1 8	2 2 „
10 „	2 0	2 8 „

Fig. D. HYACINTH GLASSES.
Common .. 3s. 6d. per dozen,
Improved .. 3 6 „

CROCUS GLASSES.
Common .. 2s. 0d. per dozen.
Improved .. 2 6 „

Fig. F. HYACINTH DISHES.

6 inches	..	1s. 0d. each.
9 „	..	1 6 „
12 „	..	2 6 „

Fig. G. CUCUMBER TUBES.
1d. per running inch.

Fig. I. ROLLING PINS.
1½d. per running inch.

OPAL DITTO.

14 inches	..	3s. 6d. each.
16 „	..	4 0 „
18 „	..	4 6 „

Fig. H. FISH GLOBES.

	With Feet.	Without Feet.
8 inches	1s. 9d.	3s. 6d. each.
10 „	2 3	4 0 „
12 „	3 0	4 6 „
14 „	4 0	6 6 „
16 „	5 0	9 0 „

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News of the Week.

THE Coronation of the KING OF PRUSSIA took place on Friday at Königsberg with the usual solemnities. At the conclusion of the ceremony of the Coronation, the KING received the Presidents of the Chambers and in reply to the addresses which they presented said that he was the first King of Prussia to ascend the Throne since the Crown had been surrounded with institutions in harmony with our times; but remembering that the Crown came from GOD, he had notified by his Coronation in a sacred place that he had received it in humility from His hands. Since his accession to the Throne, he had received many tokens that he might reckon under all circumstances on the fidelity, devotedness, and self-sacrificing spirit of his people; and trusting in these qualities he could renounce the custom of requiring from them an oath of allegiance and fidelity. The providence of God had preserved the blessing of peace to the dear Fatherland. The valiant army would protect it against dangers from without; and as regarded dangers in the interior, Prussia would remain free of them, because the throne of her Kings remained strong in its power and its rights. If the unity between King and people which had made Prussia great continued to exist, they would be enabled on the ground of acknowledged rights to resist the dangers of an agitated period and all the threatening storms. On Tuesday their Majesties returned to Berlin, and were received with great enthusiasm by the inhabitants.

Accounts from Warsaw state, that in consequence of the arrests recently made by the police in the churches of that city, the General Consistory of the Archbishopric has issued a circular letter ordering all the churches to be closed in order to prevent further profanation. The Protestant Churches and the Jewish Synagogues have also been closed. The agitation is increasing, and the authorities have taken more rigorous measures for the maintenance of order.

A despatch from Pesth dated Thursday last, says that the members of the Council of the Hungarian Chancery have sent an address to the EMPEROR, requesting his Majesty to go to Buda; to withdraw himself from the influence of the foreign advisers who surround him; to assemble the Obergespänne of the Comitats, and declare to them that he is resolved to govern in conformity with the Hungarian constitution; and finally, to appoint an archduke as Governor of Hungary. "The country," says the address, "would then place confidence in his Majesty, and hasten to render him homage."

The POPE has held a council of Cardinals at the Vatican to consider what measures should be taken against the Abbé PASSAGLIA for his work against the temporal power of the Papacy. As the result of their deliberations the police on the 15th inst. made an entry into his lodgings for the purpose of arresting the Abbé, but failed to find him. They seized, however, all his letters and papers. The Abbé has escaped to Turin, but has been suspended from the exercise of his priestly functions for having refused to make a retractation of his pamphlet. A Royal decree has been issued at Turin abolishing the Lieutenancy of Naples, and the separate government of Tuscany. The anniversary of the *plebiscite* by which the people of the Two Sicilies declared their adhesion to the Italian kingdom, was celebrated at Naples on Monday with great enthusiasm.

From the United States we have accounts of two naval affairs, one resulting in favour of the Federals, and the other in favour of the Confederates. In the first, on the 7th inst., a Confederate expedition, consisting of six steamers and 3000 men, endeavoured to recapture the forts at Hatteras Inlet. The Federals were at first defeated, but two steam frigates having come to their assistance, the Confederates were ultimately compelled to retreat, with the loss of three of their steamers. Their loss in men is stated by the Northern journals at 700, but there is no doubt that this estimate is greatly exaggerated. In the second affair, on the 15th inst., the Confederate fleet of gun-boats attacked the blockading squadron at New Orleans, and after a sharp fight sunk one Federal vessel and drove the remainder ashore. A naval expedition of 20 ships left New York for the Southern ports on the 11th inst., but its exact destination was not known. The Federal army in front of Washington is now in possession of all the points lately occupied by the Confederates, who are still retiring from the line of the Potomac. It is reported that General PRICE has retreated into Arkansas, and that General FREMONT had left Jefferson City in pursuit of him. On the other hand it is said that General M'CULLOCH is endeavouring to cut off General FREMONT's communication with St. Louis, with the intention of marching upon that city.

By the Overland Mail from India we learn that the cholera has almost ceased in the north-west. A party of 600 rebels had appeared in Rajpootana, but the troops of the Maharajah and the British forces were in search of them. The accounts from China confirm the news received through St. Petersburg of the death of the Emperor HIEN FUNG, and announce that Nanking has been captured by the Imperialists. The state of affairs in Japan is still unsatisfactory. Sir HERCULES ROBINSON has made a trip to Jeddo, but did not land on account of the disturbed state of that city. Mr. OLIPHANT is on his way home with despatches.

Home News.

THE COURT IN SCOTLAND.—On Thursday the 17th the Queen, accompanied by the Princesses Alice and Louisa, and Prince Louis of Hesse, rode up to the Forest and returned by the Balloch Buie Woods. The Prince Consort went out deer-stalking. Princess Hohenlohe and Prince Leopold went out driving. Prince Louis of Hesse left the Castle on his return to Germany. On Friday the Queen, accompanied by the Princesses Alice and Helena, drove to Alt-na-Guithsesack, and then rode on ponies by Loch Muich to above the Falls of the Glassalt, and returned home the same way. Princess Hohenlohe, Princess Beatrice, and Prince Leopold accompanied her Majesty as far as Alt-na-Guithesack. The Prince Consort went out deer-stalking. On Saturday the Queen, accompanied by Princess Hohenlohe, Princess Alice, and Prince Leopold, drove to Loch Calater. Princess Helena went to Loch Bulig, and rode back by Aberarder. On Sunday the Queen, Prince Consort, Princess Alice, and Princess Hohenlohe, attended Divine Service in the parish church of Crathie. The Rev. A. Anderson officiated.

THE QUEEN'S RETURN FROM SCOTLAND.—The Queen, Prince Consort, and the Royal Family left Balmoral at half-past 9 on Tuesday morning for Edinburgh. The Royal party travelled post by Ballater to Aboyne, and thence by railway through Aberdeen, Stonehaven, Forfar, and Perth to Edinburgh. On arriving at St. Margaret's Station her Majesty was received by the Duke of Buccleuch, the Right. Hon. W. Cowper, the Lord Provost, the Lord Advocate, the Solicitor-General of Scotland, Mr. Sheriff Gordon, General Walker, commanding the forces in Scotland; Sir John Douglas, K.C.B.; and other military and civil authorities. From the railway station to the Palace her Majesty and the Royal party proceeded in a line of carriages and four, attended by an escort of the Scots Greys, the route through the Park being guarded by the Scots Greys, the 26th (Cameronians), and a battery of Royal Artillery. Though the night was very dark, and the ground was in a moist condition from recent rains, the whole way to the Palace was lined with spectators, who, in the darkness, could see little of the pageant and nothing of the Royal party, their carriages being closed. As her Majesty arrived at the station a Royal salute was fired from the Castle. The Royal party reached Holyrood Palace about a quarter to 7 o'clock. In the evening her Majesty had a dinner party. On Wednesday morning the Queen, Prince Consort, and Princess Hohenlohe visited the Botanical Gardens in Inverleith Row. The Princess Alice visited the New Town, and made some purchases in the German Bazaar and other places. In the afternoon the Queen, accompanied by Princess Alice, drove out, and walked on Arthur's Seat. The Prince Consort and his suite went in two dress carriages, escorted by the Scots Greys, to Princes Street, and laid the "Foundation Stone of the New Post Office," and afterwards of the "New Industrial Museum." Shortly after 8 o'clock in the evening her Majesty, the Prince Consort, and the Royal family left Holyrood for Windsor. The route to St. Margaret's station along the Queen's Park was lined by a large body of Volunteers, carrying torchlights. The Queen travelled by the North-Eastern, Great Northern, and South-Western Railways, and arrived at Windsor Castle at half-past 8 on Thursday morning.

THE PRINCE OF WALES on Friday morning drove from Clumber to Birklands, which is a portion of the old Sherwood Forest, and afterwards drove to Worksop Manor, the seat of Lord Foley, where he took luncheon. The Royal party next proceeded to the village of Shireoaks, where the Prince visited the Duke of Newcastle's colliery, and afterwards laid the foundation stone of a church, to be endowed and built at the sole cost of the Duke of Newcastle for the workpeople employed at the colliery. On Saturday morning his Royal Highness left Clumber for Huntingdon by the Great Northern Railway, and travelled thence by the Eastern Counties to Cambridge. At Huntingdon one of the Royal carriages was in attendance to convey the Prince from the Great Northern to the Eastern Counties Station, the stations being at opposite ends of the town. His Royal Highness, on his arrival in Cambridge, drove from the station direct to Madingly Hall.

PRINCE LEOPOLD, accompanied by Colonel Bowater, arrived at Marseilles on Saturday, on his way to Cannes.

PRINCE LOUIS OF HESSE took leave of the Court on the 17th inst., and left Balmoral for London on his return to Germany.

THE GRAND DUKE CONSTANTINE on Friday paid a visit to the Warrior at Spithead, and on Thursday visited Portsmouth dockyard. His Imperial Highness on both occasions was conveyed to and from Ryde in the Fire Queen steam yacht, which had been placed at his disposal by the Admiral commanding at the port.

LORD LIEUTENANCY.—The Lord Lieutenancy of Devon, vacant by the death of Earl Fortescue, has been conferred on the Duke of Somerset.

KNIGHTHOOD.—The Queen has offered to confer the dignity of Knighthood upon Mr. Fairbairn, of Manchester, President of the British Association, in consideration of the eminent services he has rendered to science. It is understood that Mr. Fairbairn has declined the honour.

CONVOCATION.—The Convocation of the province of Canterbury was prorogued on Wednesday by the Vicar-General, under a commission from the Archbishop, to Wednesday the 18th December.

THE ARMSTRONG GUNS.—It is said that in consequence of the reported failure of the Armstrong guns in several recent trials, Sir Cornewall Lewis has suspended for the present the issue of 100-pounder Armstrong guns, and has directed such experiments to be made as will bring the efficiency of the new ordnance to a decisive proof.

CONSULAR APPOINTMENTS.—The Queen has appointed John David Hay Hill, Esq., now Consul at Maranham, to be Consul in the Island of Réunion; and Thomas Joseph Hutchinson, Esq., late Consul at Fernando Po, to be Consul at Rosario. The Consul-Generalship at Milan, vacant by the death of Mr. Loftus Otway, will be either reduced to a lower rank, or, as is more probable, will be abolished, by which a saving of 800*l.* per annum will be effected.

ABOLITION OF PASSPORTS.—Earl Russell has received from her Majesty's Minister at the Hague, an intimation that in future British subjects travelling in the territories of the King of Holland will not require a passport. His lordship has also received information from the British Minister at Copenhagen, that the Danish Minister of Justice has submitted a bill to the Standthing for the abolition of passports in favour of all nations who allow similar facilities to Danish subjects. The Government has also made a similar proposal to the States of Sweden through their Foreign Secretary.

THE VOLUNTEER MOVEMENT.—On Saturday the ceremony of presenting the set of colours voted by the City of London to the City Rifle Brigade, took place in the Crystal Palace in the presence of the Lord Mayor, Aldermen, and Sheriffs, and an immense crowd of spectators, including Lord Clyde, Lord F. Paulet, and other military officers. The colours were presented by Lady Olliffe, acting as Lady Mayoress, who subsequently presented a set of silver bugles, which had been subscribed for by the ladies of London, the Lord Mayor presenting the prizes which had been won at the various rifle competitions.

Foreign.

FRANCE.—The King of Holland spent two days last week in Paris, for the purpose of visiting without state or ceremony the principal objects of interest in the capital, and then returned to Compiègne. On Saturday afternoon his Majesty left Compiègne for Liège, on his return to the Hague, and is reported to be delighted with his visit. It is asserted that Signor Rattazzi had an audience of the Emperor on Tuesday. The Corps Législatif is summoned to meet on the 9th January, about five weeks before the usual time. The *Constitutionnel*, in an article signed by its present political director, Dr. Veron, calls attention to the promise made last session by M. Magne, Minister of Finance, that the right of voting the budget of each Ministry by chapters would be granted to the Corps Législatif, and says:—"It appears certain that the Government will submit a *Senatus Consultum* on this subject to the Senate in November next." The *Gazette de France* has received, and publishes in its impression of Sunday, an official *communiqué*, which gives a denial to its assertions concerning a pretended warm discussion between Count Persigny and M. Thouvenel on the Italian question, and says:—"No such discussion took place, and no difference of opinion exists between the two Ministers." The *Patrie* says that "the English Admiralty has decided upon iron plating the ships which are already built. Should the experiment prove successful, England could in one year have 20 iron-plated ships. The Admiralty has also determined to execute numerous defensive works in the English possessions in India, China, the Red Sea, and the Straits of Malacca, and on the island of Heligoland." Several cases of yellow fever have occurred on board a ship at Bordeaux. Every measure of precaution has been taken by the authorities. M. Grandguillot has been dismissed from the *Constitutionnel*, on account, it is supposed, of the difficulty into which he has brought the Government by his attack on Geneva. The "political direction" of that journal has been confided to Dr. Veron and M. Paulin Limayrac, while M. Grandguillot succeeds the latter as chief editor of the *Pays*. On Friday the *Moniteur* contained an order from the Minister of the Interior inflicting a first warning on the *Revue des Deux Mondes*, and on the following day it published two orders, one inflicting a first warning on the *Courrier des Alpes*, for "an ignominious outrage on the Sovereign of a State, the friend of France;" the other on the *Journal de Rennes*, for "a recital purely imaginary of a fact odiously invented with the object of outraging the French army." The reason alleged by Count de Persigny for his measure against the *Revue des Deux Mondes* is an article by M. Forcade, one of the most eminent financial writers of France, containing the usual summary of foreign and domestic intelligence for the past fortnight. A considerable portion of this summary was occupied with the financial crisis, the scarcity of the harvest, the lavish expenditure in street demolitions, &c., which M. de Persigny describes as an "endeavour by the most false assertions, to propagate alarm in the country and to excite to the hatred and contempt of the Government." The following is an extract from the article:—

"Our argument, that the two millions borrowed by the Bank are insufficient, is, it must be understood, founded on the supposition that we shall find ourselves deceived in the favourable hopes we expressed two months ago, and that events will justify the alarm evinced by the Bank of France during the last fortnight. If, notwithstanding our persevering hopes, the crisis cannot be averted, the very facts would cause the financial and economical policy of the government to be very seriously discussed. The three principal points which would come under discussion can be easily pointed out—1st, the excessive expenditure of the state; 2d, the injudicious impulse given to public works, to demolition and building in large towns; and 3d, the absence of any co-ordinate views in the direction of our political economy. No doubt the accident of a bad harvest, giving rise to a commercial and financial crisis, is an effect of the laws of nature, and cannot be ascribed to any human responsibility; but an accident of this description invariably brings to light the faults and errors which aggravate its consequences. The evil brought about by the accident is aggravated or diminished accordingly as these faults and errors have been committed or avoided. The natural and immediate result of a crisis is to bring about a scarcity or deficiency of capital. Now if the crisis occurs in a country where capital has been prodigally destroyed by unproductive expenses, the perturbation is deeper, and leads to more painful disturbances. If it occurs at a moment when excessive encouragement has been given to undertakings which lock up capital, that is to say, which acts so as to prevent its being made readily available, it rages with greater intensity. Lastly, if it be the government that has not had the prudence to moderate its unproductive expenditure, if it be the Government which has itself excited instead of restraining speculation, the crisis constitutes a charge of imprudence against the government, and a severe warning that it must change its policy. We wish that the gloomy forebodings now current may be dispelled by facts, we earnestly desire that this time we may be frightened only, but not hurt; but in any case—we hope so at least—the lesson will not be thrown away. A false alarm alone would suffice to teach us how important it is that the continual increase in the budgets should be put an end to, how important it is to cease this wanton destruction of capital by wholesale demolitions which give an artificial impulse to building speculation; how important it is not to falsify the movement of trade and manufactures by means of privileged and fictitious institutions of credit; how urgent it is, finally, to introduce into the government of the economic interests of France that sober singlemindedness which cannot be distracted by incoherent systems, which is fed by the sound theories of financial science, and does not shut its ears to the counsels of experience. Financial and political necessities must one day inevitably lead to that great controversy; we know beforehand what must be its conclusion. Material interests will derive from it the conviction that a sound financial Government cannot exist without political liberty, without the complete and strict control of representative assemblies, and the watchful controversy of a free press."

The *Journal des Débats* has the courage to protest against the warning to the *Revue des Deux Mondes*; it shows that it was utterly uncalled for, and that it is at complete variance with the solemn assurances of Count de Persigny's Circular of Nov. 1860, that with the exception of the principle of the dynasty, and the origin of the Imperial Government, all subjects of discussion would be considered perfectly fair, including the policy of the Government, and the various measures which the Ministers might take. The *Débats* says:—

"The *Revue des Deux Mondes* has received a first warning. The *Revue*, as all the world knows, is a periodical publication which appears every fortnight. Its readers are more sober-minded and less excitable than the average of newspaper readers, and consequently it does not in itself offer the same dangers as regards the public peace as the daily press. Although, according to the terms of Article 13 of the constitution, 'the Ministers are responsible as far as they are personally concerned for the acts of the Government,' and that responsibility involves the supposition that their measures may be discussed, we have not the intention of discussing the warning given yesterday to the *Revue des Deux Mondes* any more than that inflicted on the *France Centrale* of Blois a few days ago. But to seek to enlighten oneself as to the extent of one's rights and the limit of one's obligations, cannot be construed into a disrespectful discussion. According to the terms of a document which has been often quoted, and signed, if our memory do not fail us, by the very Minister whose name is appended to the warning given to the *Revue des Deux Mondes*, the press had acquired the conviction that it might discuss anything provided the principle of the Government were not attacked. On reperusing the incriminated passage we found in it a criticism more or less lively, more or loss borne out by facts (that is not the question) of the financial policy of the Government. There are other things, therefore, besides the principle of the dynasty, which it is dangerous for the press to touch upon. We are compelled once more to bear it in mind, after having for some time been tempted to forget it."

The *Moniteur* of Friday published a circular, addressed by Count Persigny to the Prefects of the Departments, explaining the necessity of bringing the charitable societies established without the formal sanction of the Government under the operation of the law. This circular has created a great sensation in the Catholic world. The Liberal portion of the press in general warmly approve of the decision come to by the Government, while the Legitimist and Ultramontane journals are loud in their expressions of disapprobation. The following is the substance of the circular:—

"After acknowledging the benefits diffused by these associations, the Count speaks of the Freemasons, and says that they 'are animated by a patriotism which has never failed them in great emergencies, and have not for a long time given the public authorities any serious cause of complaint, unless in reference to their central organisation, whose mode of election, tending to excite rivalry between the different lodges and to disturb their good harmony, calls for some modifications. But it is advantageous to authorise Freemasonry and to recognise its existence.' He also acknowledges the good done by the local societies of St. Vincent de Paul; but regrets that the provincial committees, while pretending to afford encouragement to the different charitable societies, deprive them of the right of choosing their dignitaries, thus imposing themselves upon all the societies of a province as if they wished to make them serve as the tool of an idea foreign to charity. In reference to the superior council of the society of St. Vincent de Paul, now sitting in Paris, Count Persigny says:—'The Government cannot approve of the existence of a kind of committee not appointed by the local societies, which fills up its ranks by its own sole authority, assumes the right of governing the local societies, in order to form them into a secret association, whose ramifications extend even beyond France, and collects from the societies a budget respecting the employment of which nothing is known. Such an organisation, inexplicable on the sole ground of charity, is useless. The honourable and charitable people of Lyons, Marseilles, and Bordeaux have been influenced by the committee at Paris. The law interdicting these kinds of associations has been too long violated.' Count Persigny then requests the prefects to authorise these societies, if there be any such in their departments, without delay, according to the legal forms, and to ascertain whether they wish to have a central representation at Paris. The votes of these societies are to be forwarded to the Ministry of the Interior, and the Emperor will determine upon the bases and principles of such central representation. Until then the prefects will prohibit the sittings of any superior central or provincial council, and will order their dissolution."

The *Moniteur* of yesterday states that a judicial investigation has established the fact that the congregation of the ladies of the Sainte Union at Douai have voluntarily abetted in the abduction of young Jewish girls. These facts would have justified the Government in revoking the authorisation of the Society of the Sainte Union, but it has confined itself to withdrawing the acknowledgment of its legal existence. "This measure," it says, "marked by firmness and moderation, will remind the religious congregations that neither their character, their object, nor their rules excuse them from obeying the laws of their country."

SPAIN.—The Infanta Donna Maria de la Concepçion, daughter of the Queen, died on the 21st inst.; her remains were conveyed to the Escurial on Wednesday. The Pope has sent a message to the Queen, condoling with her Majesty on her loss. In consequence of the death of the Infanta, the opening of the Cortes has been adjourned until the 8th of November. All the members of the opposition have agreed to vote for Senor Rios Rosas as President of the Cortes, but it is expected that the majority of the members will remain favourable to the Ministry. The *Correspondencia Autografa* says that "Spain, France, and England will despatch a joint expedition to Mexico, but Spain will make a direct demand for satisfaction for the special insults she has received." The military tribunal at Malaga has condemned another batch of 38 persons for participation in the insurrection at Loja; the sentence on one of them being death, and that on the others different periods of hard labour at the galleys. The Moorish Prince Muley-el-Abbas having expressed a wish to visit the different Royal palaces [illegible] Spain, orders have been given that they [illegible] thrown open to him. A secret printing press [illegible] seized in Madrid.

BELGIUM.—The King of Holland arrived [illegible] on Saturday evening on a visit to the King [illegible] Belgians, who had gone there from Brussels [illegible] him. At 7 P.M. the King of the Belgians [illegible] panied by the Duke of Brabant, proceeded [illegible] erected for the occasion at the Guillemins station [illegible] all the high officials, civil as well as military [illegible] assembled. At a quarter past 7 the cannon [illegible] the arrival of the King of Holland. King [illegible] advanced, with the Duke of Brabant, [illegible] William, and the two monarchs cordially [illegible] amidst the loud cheers of the assembled [illegible]. A procession was then formed, and the two [illegible] proceeded to the Palace, driving along the B[illegible]. In the evening the city of Liège was brilliantly [illegible] nated. During a serenade given in front of the [illegible] the two Kings appeared together at one [illegible] windows of the Palace, when they were [illegible] received with the most deafening cheers. The [illegible] of Holland acknowledged the compliment [illegible] by waving his hat and repeatedly saluting the [illegible]. The festivities of the inhabitants were [illegible] after midnight. On Sunday morning the King [illegible] Holland left Liége for Cologne on his return [illegible] Hague. The Belgian journals announce the [illegible] tion of M. de Vrière, Minister of Foreign [illegible] like his colleague M. Frère Orbin, was unwilling [illegible] present himself before the Chambers as Minister [illegible] the recognition of the kingdom of Italy had [illegible] place.

DENMARK.—Advices from Copenhagen state [illegible] Danish Government has sent a new despatch to [illegible] requesting the Prussian Government to present [illegible] and definitive propositions for bringing about [illegible] ciliation between the Germanic Confederation [illegible] Denmark. It is believed that the Danish Government is disposed to accord to the Duchies of Holstein [illegible] Lauenburg real and durable independence [illegible] concerns their financial, civil, and judicial [illegible] tration.

WURTEMBURG.—In the Upper Chamber, a [illegible] by the Prince Hohenlohe Waldenbourg, inviting [illegible] King, on the rejection of the concordat, to consult [illegible] the Pope in a friendly spirit on the subject, has [illegible] rejected by a majority of 18 votes against [illegible].

SWITZERLAND.—M. Grandguillot, having published another article in the *Constitutionnel* persisting [illegible] assertions that disturbances and assassinations had [illegible] place at Geneva without having been repressed, [illegible] Government of Geneva has determined to bring [illegible] action against him for libel in the French [illegible].

PRUSSIA.—The Coronation of the King [illegible] took place on Friday in the Church of the [illegible] Königsberg. The splendour displayed in the [illegible] processions was very great. After the Coronation ceremony, the royal party went in procession to the Throne Room, where Cardinal Geissel in the name [illegible] Roman Catholic clergy, and Prince Solms[illegible] name of the nobility, addressed the King. His Majesty then proceeded down the grand staircase [illegible] yard, and, surrounded by the whole Court, his Ministers and the invited witnesses of the Coronation, received the addresses of the Presidents of the [illegible] Chambers, and of Count Dohna-Lauck, representative of the Estates. The King, in reply to these addresses, said:—

"The Kings of Prussia have now worn the crown [illegible] years. I am the first King to ascend the throne [illegible] Crown has been surrounded with institutions in [illegible] our time. But, remembering that the Crown comes [illegible] I have notified by my coronation in a sacred place [illegible] received it in humility from His hands. I know [illegible] prayers of my people have accompanied me in this [illegible] and that they also pray that the blessing of the Almighty [illegible] rest on my Government. The love and fidelity which [illegible] been displayed towards me since my accession to the [illegible] and which have just been manifested in so touching [illegible] are tokens that I may reckon, under all circumstances [illegible] fidelity, devotedness, and self-sacrificing spirit [illegible] Trusting in these qualities, I could renounce the [illegible] requiring an oath of allegiance and fidelity from my [illegible] people. The gratifying proofs of affection and [illegible] which were lately afforded me on the occasion [illegible] fatal event have strengthened this confidence. The [illegible] dence of God has preserved the blessing of peace [illegible] dear Fatherland. My valiant army will protect it [illegible] dangers from without. As regards dangers [illegible] Prussia will remain free of them, because [illegible] Kings remains strong in its power and its rights [illegible] between King and people which has made Prussia [illegible] continues to exist, we shall be enabled, on the ground [illegible] ledged rights, to resist the dangers of an agitated [illegible] all the threatening storms. May God so will it."

The King afterwards signed a decree of amnesty [illegible] prising political offences, those of the press, [illegible] infractions of the different administrative [illegible] which are punished by the correctional tribunals. [illegible] King also signed decrees raising Prince H[illegible] Hohenlohe Oehringen to the rank of duke, and [illegible] Gebbard de Blucher Wahlstadt to that of prince. [illegible] Majesty also created two counts and two barons [illegible] conferred titles of nobility on 49 other persons, [illegible] the banker Oppenfeld and the Councillor of [illegible] Carl, of Berlin. Field Marshal Von Wrangel [illegible] General Prince Radzivill received the decoration [illegible] diamonds of the Order of the Black Eagle. 57 [illegible] received the decoration of the first class of the new order of the Crown; 6 of the second [illegible] with the Star; 3 of the second class, and [illegible]

the third class. His Majesty also conferred the Grand Cross of the Order of the Black Eagle on General Della Rocca, the Ambassador of the King of Italy; the Duke of Ossuna, the Spanish Ambassador, and Marshal M'Mahon, the French Ambassador, to whom he is said to have publicly expressed the satisfaction which he derived from his visit to Compiègne. On Sunday evening the King and Queen arrived at Dantsic, on their return to Berlin, and were received by the civil and military authorities. The city was illuminated. Great enthusiasm was displayed towards the King by the inhabitants. A grand banquet was given in the evening in the Artushof. On Tuesday the King and Queen made their entry into Berlin amidst salutes of artillery and the pealing of bells. The streets from the Frankfort Gate to the Royal Palace presented a most festive appearance, all the houses being richly decorated, and the roadway bordered by Venetian masts. The houses were crowded to the roofs and the streets thronged by spectators to witness the entry of the King and Queen, who were welcomed with incessant cheers. Their Majesties were evidently gratified at their reception, and cordially bowed their thanks to the people.

ITALY.—A Royal decree published at Turin on Wednesday authorises the last two-fifths of the national loan which are due in November and January, to be paid in four equal instalments in November, December, January, and February next. Another decree abolishes the Lieutenancy of Naples and the separate Government of Tuscany. It is said that the King has resolved on going to Naples next month to be present at the installation of General Della Marmora, and that he will be accompanied by nearly all the Ministers. On Saturday the 12th the Pope summoned several Cardinals to a Council at the Vatican for the purpose of considering what measures should be taken against the Abbé Passaglia. On Tuesday the 15th the police entered the house of Mrs. Foljambe, where the Abbé was living as her domestic chaplain, with the intention of arresting him, but they failed to find him. Mrs. Foljambe protested against this violation of her dwelling, declaring herself to be a British subject. During their visit the police seized all the Abbé's letters and papers. The Abbé escaped by the aid of some Englishmen, and is now on his way to Turin, but he has been suspended from the exercise of his priestly functions for having refused to make a retractation of his pamphlet. This affair greatly occupies the attention of the public at Rome. It is announced that Cardinal Marini strongly disapproves of the letter addressed to him by Monsignor Liverani requesting him to bring the Pope to a conciliatory spirit towards Italy, and considers it insulting to the dignity of the Pope and his Government. Cardinal Marini had *no* previous connection with Mgr. Liverani, and the letter in question was published before it reached him. Despatches from Naples state that several Bourbon conspirators, among whom is Prince [illegible], have been arrested. The brigands have assaulted the French Vice Consul at Cerignola, in the Capitanata, and pillaged his residence. Rodi and [illegible] are infested with brigands. Reports are current of an approaching reactionary movement, notwithstanding which the city continues tranquil. Four Bersaglieri, who had inadvertently entered the Papal territory near Rieti, have been made prisoners. The anniversary of the *plébiscite* in the Two Sicilies has everywhere been celebrated with enthusiasm. The English fleet in the Bay of Naples was dressed with flags on the occasion. The Neapolitan reactionists have chartered a Maltese vessel through the agency of the former Bourbon Consul at Malta, where some Spanish refugees of the Carlist party have lately arrived.

SICILY.—Several shipwrecks, with the loss of ships and crews, have taken place on the eastern coast of Sicily, as far as Cape Passaro. Two vessels belonging to the Franco-Servian Company have been lost near [illegible]li and Burghaz.

AUSTRIA.—The Emperor will stay in Corfu till the 28th of October, and the Archduke Regnier has undertaken the conduct of the Government during his absence. On leaving Corfu the Emperor will visit the dockyard of Pola, where several frigates of the Austrian navy are at present converting into screw steamers. The official *Gazette* contradicts the report that his Majesty would make a journey to Berlin after his return from Corfu. An Imperial Patent was published on Saturday, ordering the collection of the direct taxes in a similar manner to last year, with the reservation, however, that any changes in the taxation which may be needed by circumstances shall be constitutionally affected.

HUNGARY.—The members of the Council of the Hungarian Chancery have sent an address to the Emperor requesting his Majesty to come to Buda, to withdraw himself from the influence of the foreign advisers who surround him, to assemble the Obergespans of the Comitats, and declare to them that he is resolved to govern in conformity with the Hungarian Constitution, and finally to appoint an Archduke as Governor of Hungary. Then, the address says, the country would place confidence in his Majesty, and would hasten to render him homage. Reports were current at Vienna on Thursday that serious disturbances had taken place in Pesth, but according to authentic information the reports are unfounded. The Royal Commissioner Koller left Vienna on Wednesday for Pesth, with instructions to the Commander Coronini for the strict maintenance of order. A circular has been addressed by the Chancellor of Hungary to the Obergespäne, requesting to know whether it would be possible to reckon on the support of the functionaries of the Comitats in levying the recruits. On the night of the 17th a noisy and offensive mock serenade was executed by the populace before the house of M. Kappy, the Government Commissioner. The police and the military interfered, and some shots were fired, on which the crowd immediately dispersed. No person was wounded. A large number of soldiers occupied the streets, and perfect tranquillity was re-established.

GREECE.—The student Dousios, who lately attempted to assassinate the Queen, has made an unsuccessful attempt to escape from prison. Four persons have been arrested. King Otho of Greece arrived at Vienna on the 17th inst. He was received at the station by the Archdukes William, Rainer, and Charles-Ferdinand, and by the members of the Greek Embassy. On the 18th the King received the visits of the Generals, Diplomatic Corps, &c., and then proceeded to Weilbourg, near Baden. The sojourn of King Otho at Vienna will be short. On his return to Athens he will meet the Emperor of Austria at Trieste.

RUSSIA.—A telegraphic despatch from St. Petersburg states that the Emperor was expected to arrive there on Saturday from his excursion to the south of Russia. By his Majesty's orders the Universities of Moscow and Kazan have been closed.

POLAND.—The General Consistory of the Archbishopric of Warsaw has addressed a circular letter to the vicars of the parish churches in that city, informing them that, in consequence of the recent profanation of the Cathedral and the Church of St. Bernard by the soldiery, the ecclesiastical seal would be affixed to the doors of both buildings on the 17th inst., and that no religious service would be held in them until an expiation had been made. The circular letter then orders that, as other churches are also liable to be similarly profaned, all churches are to remain closed from the 17th inst., until guarantees are given that the edifices will be secured against further profanation. The Protestant churches and the Jewish synagogues have also been closed, and the people now pray before the doors of the churches. The Council of State has resolved, on account of existing circumstances, to suspend its sittings. Half the persons arrested in the churches have since been set at liberty, but it is asserted that 2000 prisoners yet remaining will be draughted into different regiments for military service. Arrests continue to take place. Among them are the son of Count Zamoiski, the banker Toeplitz, and other leading citizens. Five hundred merchants have been fined 100 roubles each for closing their warehouses on the 15th inst. The agitation is increasing, and the authorities have taken still more rigorous measures for the maintenance of order. General Gerstenzweig, the military governor, is dangerously ill.

SERVIA.—The *Official Journal* of Belgrade publishes an article on the mission of Prince Garaschanin to Constantinople, and its results, stating that the misunderstanding with the Porte continues, and that the Servian Government will persist in its demands.

MONTENEGRO.—A Turkish war bulletin announces that a battle has been fought on the frontier of Montenegro, between the Turks and 3000 insurgents and Montenegrins, resulting in the defeat and pursuit of the latter. The Turkish despatch adds that the Montenegrin frontier was respected.

INDIA.—By the overland mail we have news from Bombay to the 27th, and from Calcutta to the 14th of September. Cholera has almost ceased in the North-West; and a commission of medical, civil, and engineer officers has been appointed to visit the places over which it has passed. Her Majesty's 42d Highlanders stationed at Agra, had at latest dates nearly half their strength on the sick list. Accounts from Rajpootana state that a party of 600 rebels are moving about in that quarter, and the British and Maharajah's forces are in search of them. The extension line from Nassick to Challisgaum, adding 86 miles to our railway communication, and bringing the line into Khandish and to the centre of the Taptee Valley, was to be opened on the 1st October. The very heart of Nagpore and the centre of the cotton district has been reached by inland navigation—the steamer Mayflower having ascended the Godavery river as far as Chanda, a distance of 36 miles. The river and the railway will compete for the traffic of Berar and Nagpore. An action for libel has been instituted against the Lieutenant-Governor of Bengal, by an Indigo planter, for the publication of some alleged libellous remarks in a number of the "Selections from the Records of the Government." Dr. Forbes and Mr. Haywood, the mission to India from the Manchester Cotton Company, have entered on their duties.

CHINA.—The death of the Emperor Hien Fung took place at his Palace at Zehol, in Tartary, on the 22d of August. Nganking has been captured by the Imperialists. Trade at Hankow is hourly increasing.

JAPAN.—The state of affairs in Japan is still unsatisfactory. Mr. Oliphant returns home with despatches. Sir Hercules Robinson has made a trip to Japan, but did not land at Jeddo on account of the disturbed state of affairs there.

UNITED STATES.—Accounts from New York state that Commander Chauncey has arrived at Washington from Hatteras Inlet. He reports that on the 7th inst., a Confederate expedition, consisting of six steamers and 3000 men, endeavoured to recapture the forts, but without success. A strong body of Confederates crossed from the mainland and attacked the Federal camp near Hatteras Inlet. The Federals retreated, carrying away their tents and provisions, and leaving 50 prisoners. The Federal steamers Monticello and Susquehannah afterwards arrived with assistance, and shelled the Confederates who had landed, forcing them to return to their steamers with heavy loss. Three of their steamers were sunk with all on board. The loss of the Confederates is estimated at 700 men; but this appears from the despatches to be an exaggeration. On the 15th inst. the Confederate fleet of gunboats attacked the blockading squadron at New Orleans, and, after a sharp fight, sunk one Federal vessel and drove the rest ashore. Further successes have been obtained by the Federals in Western Virginia. The Federals are slowly advancing on the Potomac, while the Confederates are retiring. General M'Clellan is intent on strengthening his position and is constructing formidable works at all the new points taken possession of by the Federal troops. No Confederate force was visible within six miles of Louisville, which has been occupied by the Federal troops. It is reported from Missouri that General Price will await General M'Culloch's forces before marching on Jefferson city. The Federals are constructing fortifications at Head Passes. Recent investigations show that the Confederate fortifications at Acquia Creek consist of three batteries, mounting 20 guns, which are designed to defend the terminus of the Great Southern Railroad. The Governor of Louisiana has forbidden the entry of cotton into New Orleans, whether coming by steamer or railroad. A large naval expedition, consisting of 20 ships, left for the Southern States on the 11th inst. Its destination is unknown. The Richmond papers state that the steamer Nashville, with Messrs. Mason and Sidell, the Confederate Commissioners to England and France, on board, ran the blockade at Charleston on the 12th inst. It is again reported that General M'Culloch was really killed at the battle at Wilson's Creek, near Springfield. General Beauregard is reported to be at Manassas, and President Jefferson Davis is said to have returned to Richmond, in such feeble health that speculation was rife as to his successor. The Confederate Generals A. S. Johnstone, Pillow, Cheatam, and Polk, and 40,400 men, were reported at Columbus, Kentucky. They were said to have fortified the banks of the river Mississippi, for four miles above Columbus, in anticipation of an attack by the Union army. General Rosencranz has forwarded despatches to Washington, assuring the Federal Government that he will be able to sustain himself against the combined forces of Generals Lee and Floyd. A despatch from Cairo reports that the Federal gun boats Tyler and Lexington had encountered, in the Mississippi, the Confederate gunboat Jeff. Davis, and chased her to within two miles of Columbus. The batteries on the Kentucky shore opened upon them, and an engagement took place, but without any result. The privateer Sumter is reported to have taken several prizes under the British flag, and to have used the stars and stripes as a decoy, reversing the union. Colonel Blair had been again placed under arrest by General Fremont, for his attacks on the general's administration of the military department of the West, but has been peremptorily released by order of General Scott. The returns of the Ohio State election show a large majority in favour of the Union party. Twenty thousand muskets are said to have been purchased by the Federal Government from the Prussian Government. A splendid dinner was given on the 6th to the Comte de Paris and Duc de Chartres by the staff of General M'Clellan, all the members of which were present. In the Admiralty Court of Portland, Maine, Judge Ware has delivered judgment condemning the British schooner William Arthur, on the ground that she intended running the blockade. The Sanitary Committee at Washington have appealed to the "loyal women of America" for a supply of old sheets, quilts, knitted woollen socks, flannels, &c., for the soldiers and sailors, and delicacies for the sick. The Bank of Washington refuses to take the Treasury Notes. The New York press generally discredits the report that the Federal Government has acquiesced in the Mexican intervention. The *World* believes that the Government would not consent to proceedings which might eventually embroil America with the allied Powers.

CANADA.—Colonel Rankin, member of the Provincial Parliament in Canada West, has been arrested at Toronto for violating the Enlistment Act. He had been endeavouring to raise a regiment of Lancers for the service of the United States Government.

MEXICO.—It is now announced that, by the intervention of the Emperor of the French, England has adopted the views of France and Spain with regard to Mexico, and that the three Powers are to act in common. The official journals of Madrid say that it is intended to occupy for a time Vera Cruz and Tampico; and that Spain is to supply two-thirds of the land forces which are to be employed, and England and France the other third. They add that England proposes to the three Powers not to allow any Prince of the reigning families to accept the crown of Mexico in

the event of monarchy being re-established in that country.

CUBA.—Advices from Havannah to the 5th inst. state that General Serrano left for Spain on the 20th of September. General Prim was on his way to Cuba to assume the Captain-General ship of that island. He will command the Spanish expedition against Mexico.

Public Addresses.

LORD JOHN MANNERS, M.P., at the annual meeting of the Loughborough Agricultural Association on Friday, made the following remarks on political topics in relation to agriculture:—

"No one who has been in the habit of reading the newspapers for the last six or eight weeks can have failed to have been struck by the remarkable fact that in nearly every paper there appears a column or two headed 'Lord So and So' or 'Mr. So and So on Public Affairs.' If the curiosity of the reader of the journal induces him to cast his eye over these columns in order to see what Lord So and So or Mr. So and So has been saying, he will perceive at once that they are mere agricultural speeches, made at agricultural dinners, which have been dignified and honoured by being treated in the way I have described. Now, though flattering and complimentary to the speakers, I am bound to say that a reflection of that sort is anything but agreeable when one rises to return thanks. At the present moment there is most fortunately a decided lull in everything approaching party politics and party agitation, and I suppose it is in consequence of this complete and decided lull that we have these copious references to the unfortunate speeches of unfortunate agricultural members. Politics, as we have already been told in the course of the evening, are most properly and rigorously excluded from your meetings, and a person like myself, being totally incompetent to address a meeting like this with any effect upon purely agricultural matters, the unpleasant question occurs to my mind, what am I to say in return for the compliment you have been pleased to pay me? With cautious tread I must retrace the dull path which Mr. Hartopp and myself trod during the last session of Parliament, and carefully and gingerly avoiding any references which may savour of pure party politics, I must endeavour to discover, if I can, if there was anything done or attempted to be done in Parliament last session which was calculated to influence in any material degree the agricultural interest of the country. Following that course, in the first place I must congratulate our excellent chairman, Mr. Packe, that no Agricultural Statistics Bill was proposed. Well, gentlemen, it is true we had a Highway Bill, which I suppose would have interested and influenced the fortunes of English farmers considerably; but that Bill was dropped. Therefore I can say nothing about it. Then we had a Bill for facilitating the erection of agricultural cottages—a most admirable and laudable object; but as that Bill did not pass into law, perhaps I may be excused from saying anything about it. Then we had a Bill which did become law—a Bill I have no doubt directed to the best possible object, and an object which I trust will be attained by it—I mean the Bill called the Irremovable Poor Bill. The object of that Bill no doubt was to increase the value of the labour of the poor man, and to raise him in the social condition which he occupies. I sincerely trust that whatever differences of opinion were expressed during the progress of that Bill through Parliament, these great and laudable ends will be carried into effect, and that we shall see year after year the social condition of the English peasant raised and improved. I have said that the Agricultural Statistics Bill was not heard of during the past session; but although that was the case, and although great differences of opinion undoubtedly existed as to the best means for procuring agricultural statistics, I think every one in this room will admit that it is of the greatest importance to farmers, no less than to other classes of the community, but principally the farmers, that they should, if possible, know in time the recourse which may be obliged to be had for the necessary supply of corn. Last year, we are told on the highest authority, that not less than 40 millions of money were sent out of this country in order to purchase corn for the consumption of the people. We are witnessing at the present moment the terribly evil results which follow from a dependence on foreign countries for a supply of the raw material of any one of our great industries. And if, in addition to that slackness of labour, and that diminution, if not cessation of wages in the cotton districts, which I fear we must regard as too probable, during the ensuing winter we should have to add an enormous drain of something like 30 or 40 millions of money for the purchase of corn, I say our prospects would, indeed, be most gloomy and most alarming. But as the chairman has justly and righteously said—thanks to Almighty God, we are not threatened with that second and greatest of dangers; and owing to the harvest having been secured, we may hope to be spared that enormous drain on our resources for foreign corn. I see in Ireland—where agricultural statistics are obtained—I see there with some surprise, that during the last 10 years the breadth of land under wheat cultivation has very greatly diminished; and there are those who are good authorities in that country who take rather a gloomy view of the state of things there, in consequence of the great diminution of the breadth of land under wheat cultivation. But, as I have said, our harvest in these islands has been on the whole a good harvest, though not equal to an average, and I trust we may look forward with hope and confidence as to the future. I cannot sit down without expressing my confidence, derived from past struggles and past difficulties, that it is the good feeling, the sympathy one for another, and the mutual forbearance which has been displayed among all classes, that have carried the agriculturists of Leicestershire safely through their difficulties. As for the future, should dangers arise, then, hand in hand and heart in heart, the different classes who comprise the agricultural interest of this country will manfully face and surmount them; and I sincerely trust that under the good providence of God we may all look forward to the prosperous and happy condition of the farming of what I must, speaking in this room, term the district of Loughboroughshire."

LORD LYTTELTON presided on Monday at the annual meeting of the Worcester Diocesan Training College, and spoke as follows on the new Educational Minute:—

"They were met under circumstances of some, though not very great, anxiety for the future. On that point it would be easy to say a great deal, and the danger was of saying too much, because there was a tendency to speak in violent and exaggerated terms of the new Minute. At the present time, however, the matter was where it ought always to have been—in the hands of Parliament; and if it had always been there no such question as that which agitated the public mind at present would have arisen. In its general features the present Government system of education had been right, and he was still disposed to adhere to that general opinion. Nothing could be more idle than to call for a return to the state of things which existed before that system was adopted. But when the Royal Commissioners had taken such an extraordinary degree of care, and had laboured so much in the performance of their functions—when they had produced so very large and ample a mass of materials for judgment, and so very able and elaborate a report, it could not be expected but that some material steps should have been taken by Government upon that report; and that was still more the case when, with regard to one half of the suggestions in the report, that which related to county rates must have been thrown out. It was not at all strange that Government should feel very anxious to give effect to the other part of that report. He did not think any serious ground for complaint could have been made if that had been done in a proper way, but it had not been done in a proper way, and he could not express too strongly his opinion of the folly and infatuation of Government when in dealing with the report they mixed up the rights of private individuals—namely, the rights of certificated masters—with the strictly abstract question. That mistake had been so strongly impressed upon Government that they had suspended the operation of their Minute to the 31st of March next. That, in his opinion, was what ought to have been done in the first place; for he held that the Council had no right to lay the revised Minute on the table of the House on the last day of the Session, as they had done. His lordship then urged upon the students of the College to abandon all fear that they might have contracted with respect to the operation of the Minute, and to prosecute their studies as if no Minute had ever been adopted, until the time when the matter should come before Parliament, and be thoroughly discussed and decided upon. Government, he remarked, had not regarded the interests of certificated masters as vested interests at all. There was still a danger that they would not do so, and in so far there was a suspicion that they would do the same again; but for all that he advised them to suspend their opinions and judgment until Parliament entered upon the whole question. He expressed his intention of bringing the matter before the House of Lords himself, although he doubted whether that was the proper place to deal with the question. He was, however, confident that the advocates of education—his friends Sir John Pakington, Mr. Adderley, and others—would bring the matter before the House of Commons, which he looked upon as the legitimate body to deal with the subject as it should be dealt with. He, however, feared that the House of Commons would not give the subject that deliberate attention which it deserved. But, whatever might be the result of the deliberations of Parliament, he did not think that the interests of future masters would be affected. Those who were already masters would have their interests affected to a certain degree, but those who in future made bargains with the managers of schools would have an opportunity of making such a bargain as would compensate for the loss of the Government grant."

THE RIGHT HON. SIR JOHN PAKINGTON, M.P., at the Worcester meeting made the following remarks on the new Minute:—

"He had never been an ardent admirer of the present system and had always had his doubts of its efficacy, and on various occasions indulged in prophecies respecting it. He now found himself in the position in which prophets were not always to be found—that of finding his predictions near their fulfilment. The new code of minutes, taken with the report of the Royal Commissioners, went far towards the fulfilment of his prophecies, and he was satisfied they would be much nearer fulfilment at a future day. So little did he agree with the views of Lord Lyttelton that he was much more inclined to agree with the observations made several years ago by Mr. William Cowper, when he declared that in his opinion the system was utterly indefensible, supposing it had been ever laid down and adopted as a whole, and that the only ground on which it could be vindicated was the small beginning from which it had arisen. But he wished it to be understood that he did not deny, and he did not see how it was possible to deny, that the expenditure of so large a sum of money as had been spent on education could be without good results. No doubt a great deal had been effected, but the question with him was whether or not the *maximum* of good had been done. This was a most important question; and another, equally important, was whether the present system could go on much longer. These would be questions for the careful deliberation of Parliament, and he trusted they would receive the attention they merited. With respect to the new code, his present impression was that its primary object was not educational at all, but financial; that it was not to improve the education of the country, but to cut down expenses; but whatever might be the faults of the code, one thing connected with it was utterly indefensible, and that was the way in which it was laid upon the table of Parliament on the last day of the Session. To say the least of it, that was a most unfortunate proceeding, because it was calculated to excite suspicion in itself. Beyond this he would not go into the question, but would leave it and see what course Parliament would take in regard to it. In the meantime he hoped the present aspects of the question would not cause the students to relax in their studies, but that they would go on steadily as heretofore, and add to the good name they already bore."

THE RIGHT HON. C. B. ADDERLEY, M.P, at the opening of the Potteries Mechanics' Institution at Hanley on the 15th inst., made the following remarks on the new Education Minute:—

"The education which the Mechanics' Institution provided was something of a secondary stage to the working classes, who, in common with all classes of educated society, had passed the first part of their education in elementary schools at the age of 10 or 12; but when the other classes were passing the higher schools, the working classes were obliged to go at once to the general business of life. The question was whether general education, which was necessary to fit them to go through life, could be continued in the intervals of the business of life, and who was to provide this education for the working classes? Government could not; the State would not, and he hoped if they showed any inclination to do it, the working classes would reject the offer, and refuse to receive any part of their after education of her Majesty's ministers or metropolitan funds. Could not the people themselves provide this secondary stage of education, and could not the deficiencies in the working man's education be repaired by such means as those offered the working classes of Hanley by Mr. Bromfield's munificence? He feared they would not have had such a building as that, if they looked to their own resources, and that showed that it could be done only by the hearty co-operation of employers and employed. In the old time the feudal lords exercised a sort of parental care of their near neighbours, and the thought of that stirred the best feelings within us, and increased our national pride. But in time the manufacturers of the land took their places among the large capitalists and the princes of our cities, and he thought they could hardly have calculated the effect of their new position. He could recollect the time when manufacturers were acquainted with the number of the hands they employed, but were not acquainted with the hearts and homes of those they employed. It was impossible that in a great country like this such a state of things could long continue. He knew now, what he saw in Yorkshire and Lancashire, that the manufacturer did know that wealth had an influence for good or evil on all around him. They saw that wealth had its responsibilities and its duties, and that labour had its claims upon wealth, apart from the mere question of remuneration. A new feeling had sprung up somewhat resembling that of the old feudal lords of the land, and those around him. A relationship and co-operation had risen up, and they must look to that co-[illegible] employers and employed, for the education and [illegible] of the people of this country. It might be said [illegible] case, why should not the same co-operation, which [illegible] provided altogether for the education of the [illegible] elementary as well as a secondary stage? [illegible] obvious, it would supersede parental res[illegible] would be most unwise. Parents were [illegible] provide an education for their children, and [illegible] state, they were able to do so. If he might [illegible] allude to the new educational minute, [illegible] believed it was most honestly brought f[illegible] Government considered—and he thought the[illegible] to take that view—that the large grants wh[illegible] on year after year at the rate of 10,000*l.* every [illegible] to supersede that self-action, and that [illegible] different classes interested, which ought to [illegible] it was to correct great evils, and to throw up[illegible] of those schools greater responsibility, that [illegible] introduced. He deplored that the publicat[illegible] had produced such an outcry in the country [illegible] that it had not been discussed calmly and [illegible] ought to have been considered. As far as he [illegible] might say that the principle of this change [illegible] touched in any one of those discussions, that [illegible] subjects which were brought into those discussions [illegible] subjects of detail. The more elementary principle [illegible] left untouched. Whether the main principle of the [illegible] practically feasible he did not say. He [illegible] difficulties, but he hoped that those who had been [illegible] of discussing their own affairs, and not leaving [illegible] ministers to discuss for them, would discuss the [illegible] if it was practicable let them correct the [illegible] it. He referred to this question, because [illegible] subject upon which he had been asked to [illegible] trust that the people of England, by co-operat[illegible] class, would do more to advance the education of [illegible] than any amount of money of the public funds [illegible]

MAJOR BERESFORD, M.P., at a Conservative [illegible] at Colchester, made the following remarks [illegible] of parties:—

"There seemed to be a general idea, which [illegible] reflected in the columns of many of the different [illegible] that the distinctions between parties both in [illegible] action were getting magnificently small; that we [illegible] and merging our ideas in one common creed. [illegible] assent to this assertion and he did not believe it. [illegible] upon it, from its own intrinsic absurdity, as a [illegible] and a vain and idle theory which we should not [illegible] because it was not natural. An amalgamation of [illegible] an utter annihilation of party would be a very [illegible] evil in the country, for great benefits had hitherto [illegible] having two distinct parties in the State. If the [illegible] were destroyed these advantages would be destroyed [illegible] and the control which each party had, or [illegible] over the shortcomings and wrongdoings of [illegible] would be lost. If we did annihilate party [illegible] found the natural distinctions between [illegible] Tory—if we acknowledged that Conservatism [illegible] Liberalism were all the same—we should at once [illegible] fathomless depths of nonsense, introduce anarchy [illegible] country, and bring about a relaxed sense of [illegible] But although he heard the assertion that party [illegible] were being lost, and so also observations to the same [illegible] upon many sides, he acknowledged that having a seat [illegible] liament, attending pretty regularly in the House and [illegible] his eyes open, he did not see the new boasted principle [illegible] out in action. On the contrary, he had never witnessed more acrimony in discussion nor more party [illegible] work than he had seen of late. If it were [illegible] that the maintenance of party was not [illegible] ticians, and they yet fought manfully, they [illegible] a heavier and weightier reason, for they would not [illegible] idea, as the Emperor of the French did. Let [illegible] for the loaves and fishes, for that was what they [illegible] but let Conservatism not fight for the small [illegible] place and power, but let them have a higher [illegible] object. Let them rally round the monarchical [illegible] the country; let them stand by the altar of the [illegible] maintain the connection between the Church and [illegible] let them uphold, in its full integrity, the Protestant [illegible] tion of the empire. Let Conservatives not fight [illegible] objects, but for those which were worth their [illegible] them show to the world that the Conservative party [illegible] animated by small party manœuvres, but were anxious [illegible] mote the benefit of their country at large. [illegible] recommended firm party distinctions, he deprecated [illegible] same time any manifestations of anger or rancour [illegible] contests. There was no connection whatever between [illegible] maintenance of principle and the rancour of party. [illegible] might stand like men by that which they had at heart [illegible] show a kind and neighbourly feeling to those around [illegible] precept had been handed down to us in good Latin [illegible] times, *suaviter in modo, fortiter in re*, which, for the [illegible] those who might not have the benefit of the classics [illegible] which the grammar school at Colchester was [illegible] he would translate as follows:—'Use suavity and [illegible] your transactions, but stick to your principles like [illegible]

MR. DUCANE, M.P., at a meeting at Little [illegible] ham on Friday, spoke as follows on the events [illegible] past session of Parliament and the prospects [illegible] Conservative party:—

"The position and prospects of the Conservative [illegible] afforded great subjects of congratulation. He [illegible] that when they met last year he ventured to [illegible] whisper of a Conservative reaction. They were [illegible] ever that they were labouring under a complete [illegible] that they had only to wait till next session [illegible] most effectually of their entire delusion. We [illegible] had come and gone, and what had they seen? [illegible] after measure which had hitherto been rallying [illegible] great Liberal party, defeated or abandoned, and [illegible] where seats had been contested, wrested from the [illegible] while even that slight modicum of reform which the [illegible] Radical ministry grudgingly offered to the House of [illegible] to be scrambled for, had given to South Lancashire [illegible] triumph to the Conservative cause. Drowning [illegible] catch at every straw, and we were now told that [illegible] signify a bit; that these triumphs were just as [illegible] as they were Conservative; that old party landmarks [illegible] being lost; and that it did not matter in the least [illegible] member of parliament sat behind Lord Palmerston [illegible] Disraeli. So far from this being the case, he thought [illegible] events of the last two years—beginning with the [illegible] and anti-Church crusade of Mr. Bright and ending [illegible] sudden collapse of democratic institutions in [illegible] produced a considerable change of feeling in the [illegible] moderate men of more than one shade of [illegible] Thus many who a year or two since were all for [illegible] pace in matters of parliamentary reform, had been [illegible] by more than one recent smash of vaunted institutions [illegible] had began to feel that without proper intervals and [illegible] danger signals being properly attended to, Reform [illegible] trains might be very dangerous things; and it appeared [illegible] that this change of feeling, so far from pointing to [illegible] when party landmarks were to become extinct, [illegible]

[illegible] as a sure indication that these landmarks were [illegible] better defined, and that we were shortly about [illegible] of which we used to read, viz., the [illegible] two parties, and two parties only, in the country. [illegible] those who, while holding fast to the institu[illegible] country, would amend and improve them, and [illegible] be those who would change merely to impair and [illegible] he could not doubt that the time was coming [illegible] but surely—when the issue would have to [illegible] the struggle fought out between these two parties, [illegible] the former would win by a most triumphant [illegible] He would go a little further even than this. He [illegible] to see a Conservative government again pre[illegible] restored to office; but he believed that the country [illegible] weary of a coalition of statesmen who, despite [illegible] ability, were nothing more nor less at the present [illegible] than the discordant representatives of discordant [illegible] masses of political opinion. Great as was [illegible] esteem deservedly felt by all classes in the [illegible] for Lord Palmerston himself, the national feeling [illegible] represented at the present moment by that [illegible] mixture of passive obstruction and Radical asso[illegible] which passed current with the present government for [illegible] and enlightened policy: and when we were told that [illegible] were becoming extinct, and that, in point of [illegible] there was little difference of opinion between the leaders [illegible] of the House of Commons, let us glance for [illegible] moment at some of the leading events of the past session, and [illegible] for ourselves as to the truth of the assertion. We [illegible] to look at the leading features of the financial [illegible] present Government, we had only to remember [illegible] series of democratic and anti-church [illegible] which met with the fate which Sir John Falstaff [illegible] was the peculiar property of a man of honour—"they [illegible] Wednesday"—to see that there was yet some [illegible] difference between the actions and opinions of Con[illegible] and Liberal administrations. He did not think [illegible] that if a Conservative Government had been [illegible] the country would have seen that which was [illegible] at the commencement of the session, viz., the present [illegible] celebrating the obsequies of Parliamentary reform [illegible] the genial joviality of an Irish wake, and yet giving [illegible] some fortnight afterwards to two radical reform [illegible] brought forward by sections of their extreme sup[illegible]. He did not think that if a Conservative Government [illegible] seen in office, that Government would have been seen, like [illegible] present Government, giving their support Wednesday [illegible] Wednesday to a series of measures promoted by the same [illegible] which indirectly, if not directly, had for their object [illegible] of the Established Church. It was true that [illegible] measures did not form any part of the ministerial pro[illegible] at the commencement of the session, and it was, [illegible] true that the veteran Premier chuckled silly in his [illegible] and made merry over their defeat; but one and all of [illegible] received both by vote and voice Ministerial sup[illegible]. If a Conservative Government had been in office the country would not have seen, as was seen every Wednesday last session—a Home Secretary forced upon his legs to address Conservative speeches to his friends about the gangway, and to give Radical votes afterwards in the lobby. It must not be forgotten, that towards the close of the session, a little shuffling of the cards took place in consequence of the death of that most amiable, excellent, and lamented statesman, Lord Herbert, and the H[illegible] Secretary was made War Minister. He could only hope [illegible] in quitting the Home Office for the War Department, Sir [illegible] Lewis had not carried away with him his somewhat [illegible] notions of last session, and that he would not make [illegible] warlike speeches, introducing a series of Manchester estimates. Again, he did not think that if a Con[illegible] government had been in office they would have been [illegible] framing a budget intended merely as a salve for the [illegible] politicians of Manchester and Birmingham. The Conservatives would not have been seen with a very doubtful if not imaginary surplus, and with an income-tax and tea duties maintained on a war footing, throwing away a lucrative and extending source of revenue, such as the paper duties. He should not attempt to weary the meeting by unweaving the somewhat tangled web of Mr. Gladstone's financial policy; but he might observe, that it was a favourite taunt against the Conservatives, that in their opposition to [illegible] they forgot to be consistent. It was said that the [illegible] began first by questioning the existence of [illegible]; that, foiled by Mr. Gladstone's convincing statistics, [illegible] turned round and raised a war cry of tea versus [illegible] and that, beaten on that also, they subsided into the [illegible] again of no surplus. But the course which [illegible] Conservatives pursued was perfectly consistent from [illegible] to end. As for questioning the existence of a [illegible] they had not only a perfect right to question its [illegible] then, but at the present moment also. The surplus [illegible] was caused by anticipating credits, and this in [illegible] of a bad harvest, and under all the circumstances of [illegible] too sanguine estimate of the probable receipts from [illegible] and excise. Although it was impossible to tell what [illegible] financial year might yet bring forth, although Mr. Glad[illegible] was a very wonderful rhetorician and a very lucky [illegible], yet it was only necessary to look at the last quarter's [illegible] returns to see that the Conservatives had some little [illegible] for making the assertions which they put forth. [illegible] upon the Government to redeem their pledges in [illegible] in which they were made, to deal with those taxes [illegible] pressed hardly upon the necessaries of life, and which [illegible] since been condemned by their own unanswerable [illegible], and not to repeal a tax for the repeal of which [illegible] was no actual demand, but which if once repealed, could [illegible] be restored. The course taken by the Conservative [illegible] would, he thought, be admitted to have been [illegible] perfectly consistent one, and it was defeated by a [illegible] narrow majority, assisted at the last moment [illegible] somewhat unexpected absence of some mem[illegible] the Conservative party. No doubt those gentlemen [illegible] perfectly sound and conscientious grounds for absenting [illegible] on that occasion; but he had been told—although [illegible] how whether the tale was true or not—that they [illegible] to do so by a solemn assurance from Mr. Glad[illegible] at the close of the last financial debate that he was no [illegible] to the financial doctrines of the Manchester school. [illegible] remembering as he did certain old standing pledges of [illegible] Gladstone upon the subject of the income-tax and the tea [illegible], he was not inclined to place unlimited confidence or to [illegible] unlimited consolation from Mr. Gladstone's implicit [illegible]. However, the budget of this year was past and [illegible] and if the Conservatives found in the budget of the [illegible] that Mr. Gladstone was really determined to mete out a [illegible] and impartial measure of direct and indirect taxation; [illegible] the income-tax was reduced, *pari passu*, with the tea, [illegible] malt duties, then they would say that it was never [illegible] to mend, and that Mr. Gladstone had seen the error [illegible] ways. But if, on the other hand, they found source [illegible] of indirect taxation trenched upon, while the [illegible] remained in all its deformity and inequality, and [illegible] the excellence and discipline of our Volunteer force [illegible] be made the excuse for a wholesale reduction of the [illegible] army and the estimates, then the Conservative [illegible] who absented themselves on the great budget [illegible] might possibly live to regret the course which they [illegible] taken. In the course of last session, he had once more to [illegible] his old antagonist, Mr. Locke King, who came cantering into the House as if nothing had happened upon his 10*l.* county franchise charger. The poor old hobby seemed, however, to be sadly weak in his limbs, and to be giving way in his wind, and he gave his rider such a fall that it was very doubtful whether he would have the courage to mount him again. With regard to the result of the memorable church-rate division he sincerely hoped that the present position of that question might pave the way to an early and satisfactory settlement. It was a fit and proper question for the government, and the government alone, to deal with; and he most sincerely hoped that a fair and satisfactory measure of settlement and compromise, such as the friends of the Church on both sides of the House could support, would form part of the ministerial programme at the commencement of next session."

City Intelligence.

MONEY MARKET, FRIDAY. — BRITISH FUNDS: Consols closed at $92\frac{3}{4}$ to $\frac{7}{8}$ for Money, and $92\frac{7}{8}$ for the 7th November; Bank Stock, 232; Reduced and New Three per Cents., 91 to $\frac{1}{8}$; Thirty Years' Annuities, 1885, 15 7-16; India Stock, 224; Exchequer Bills, 7*s.* prem.—FOREIGN: Brazilian Four and a Half per Cents., 1860, $91\frac{1}{4}$ to 92; Danish Three per Cents., 84, ex div.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£27,921,435	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion ..	13,271,435
		Silver Bullion	—
	£27,921,435		£27,921,435

BANKING DEPARTMENT

Proprietors' Capital ..	£14,553,000	Government Securities (including Dead Weight Annuity) ..	£12,153,001
Rest	3,123,687	Other Securities	16,736,417
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	3,686,302	Notes	7,106,885
Other Deposits	14,678,264	Gold and Silver Coin ..	835,226
Seven day and other bills	791,076		
	£36,831,529		£36,831,529

24th day of Oct., 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY — BANKRUPTS — J. ATKINS, Archer Street, Kennington Park, Middlesex, Butcher—R B AUSTIN, Tenbury, Worcestershire—G BALDRY, Chesterton, Cambridgeshire, Farmer—E. BARWICK, Old Broad Street, City, Lithographer—W. BOOTY, Worlington, Suffolk, Farmer—C. CARGILL, Bromley, Kent, Widow—R COUTTAN, Lyon Street, Caledonian Road, Grocer—W. CRIBB, Moorgate Street, City—L. J S. DICEY, Strand, Director of a Joint Stock Company—A. DUMMLER, The Grove, Camberwell—J. EVANS, Wimbledon, Builder—S. GOODHEIM, Manchester, Cloth Cap Manufacturer—S. W. HALL, East Dulwich, Gentleman—J. HAWTHORN, Burslem, Staffordshire, Builder—W T HENDRY, Cannon Street West, City, Ironmonger—J. W. HOWELL, Tottenham, Middlesex, Builder—J. IVENS, Bletchley, Bucks, Farmer—L JINKS, Lewisham Hill, Kent, Widow—W KNIGHT, Baker Street, Walworth Road, Hairdresser—J. LEA, Forest Gate, Essex—H. J LEIGH, Leather Lane, Holborn, Draper—M MATTHEWS, Birmingham, Licensed Victualler—J MILLER, Golden Lane, Barbican, Baker—E. MORECRAFT, Burlington Arcade, Piccadilly, Picture Dealer—W. H OSBORN, Broad Street Buildings, Accountant—J. PAULL, Upper Clatford, Hampshire, Farmer—J. PELL, Llanbadarntawn, Cardiganshire, Mining Agent—J SMITH, Lombard Street, City, Tailor and Draper—C. SMITHIES, Leeds, Commercial Agent—J T SOFTLY, Wandsworth, Surrey, Plumber—J. SOWERBY and C. T. TATTON, Regent's Circus, Oxford Street, Drapers—J. STEVENS, Lonsdale Road, Bayswater, Builder—R C STONEHOUSE, Darlington, Durham, Corn Factor—J. SUMPTON, Ealing, Corn Chandler—J. TOMLINSON and J. SHARPLES, Manchester, Joiners—R. URII, Manchester, Joiner—R. WATSON, Gravesend, Kent, Licensed Victualler—J. WILLIAMS, King Street, Bloomsbury, Printer—G. WILMSHURST, Birmingham, Surgeon—J WILSON, Edgware Road, Middlesex, Refreshment House Keeper—G WOOD, Monkwearmouth, and East Boldon, Durham, Timber Merchant.

FRIDAY—BANKRUPTS — J. W. BARNES, Newcastle-on-Tyne, Fire Brick Maker—T. BENNETT, Albert Street, Surrey Gardens, and Poultry, Sewing Machinist—J. BICKNELL, Moorgate Street, City, Merchant—R. BIRD, Ashford, Kent, Plumber and Glazier—G. BOLT, Cirencester Street, Paddington, Tailor—S. BOWEN, West Bromwich, Staffordshire, Glass Dealer—H. J. BRAHAM, Thavies Inn, Holborn, Commission Agent—W. BURROWS the younger, Upper Norwood, Surrey, Furniture Dealer—R. CHAUNCY, Sussex Street, Pimlico, Retired Officer of the Hon East India Company's Service—J CLARK, Princes Street, Lambeth, Carman and Contractor—W. H. CLARKE, Vernon Place, Bloomsbury Square, Engineer—W O. CLARK, Gate Street, Poplar, Baker and Corn Dealer—J. CLARKE, Glossop, Derbyshire, Tailor and Draper—A CRAIG, Tonbridge, Watchmaker—E. CURTEIS, Bloxworth, Dorsetshire, Coal Merchant—R. C DAUBENY, Upper Fitzroy Street, Fitzroy Square, Trader—L. DONT, Manchester, Hessian Dealer—A. DUFAUR, Bedford Row, Holborn, Pauper—J. EDWARDS, Upper North Place, Gray's Inn Road, Tailor—C. FARRAR, Moor Terrace, Old Kent Road, Manufacturing Chemist—C. T. FOSTER, Fashion Street, Spitalfields, Licensed Victualler—T FRANKS, Oak Village, Kentish Town, Baker—R. A. S GREGG, Wooburn Park, Bucks, Schoolmaster—J. GILLER, Little Marylebone Street, Painter—J. GILES, Ringlestone, near Hollingbourne, Kent, Licensed Victualler—G GODFREY, Brompton Terrace, Brompton, Grocer and Tea Dealer—S. GREEN, Wilton Terrace, Park Road, Dalston, Clerk in the Inland Revenue Office—A. J. HEARNE, Nicholl Square, Falcon Square, Printer—G HAMMERSLEY, Gloucester Street, Clerkenwell, Grocer—B. HARRIS, Kingston-upon-Hull, Cabinet Maker—ROGER HOGAN, Upper Marylebone Street, Tailor—BERNHARD HORWITZ, Newgate Street, Importer of Foreign Goods—GEORGE HUTSON, King Street, Regent Street, Licensed Victualler—J. JERRAM, Nottingham, Hosier's Assistant—J JENKINSON, Bethnal Green, Shoemaker—W. JONES, Gloucester Street, Commercial Road East, Builder—W. C. JONES, Queen's Prison—J KNOTT, Emerson Street, Bankside, Glass Manufacturer—J LAWTON, Mount Street, Middlesex, Foreign Agent—B LEVI and G. LEVI, Liverpool, Watchmakers—J LEE, Billiter Square, News Agent and Bookseller—G MCCAUCHIE, Trafalgar Terrace, Mortimer Road, Kingsland, Commercial Traveller—J. MASEY, Weston-super-Mare, Builder—C. MILES, Frome Selwood, Innkeeper—W NEWMAN, Holborn, Attorney-at-Law—O. PARRY, late of Walbrook, City, Mining Agent—R. PLASTER, Bampton, Oxfordshire, Builder—T G POTTER, Granby Street, Hampstead Road, Dealer in Lamps—W PRITCHARD, Acton, Middlesex, Carpenter—W. QUARMBY, Ashton-under-Lyne, Bookseller—J. RADCLIFFE, Liverpool, Ale Merchant—R RENPER, Willington, Durham, Draper—J. R. RICHARDS, West Street, Bermondsey, Grocer—M. A. A RICHARDS, Chester Street, Belgrave Square, Spinster—J R. ROSS, Buccleuch Road West, Dulwich, Commission Agent—S. ROWBOTHAM, Queen's Road, Chelsea, Soap Boiler—H. SALMON, Haymarket, Billiard Maker—J. SAWYER, High Holborn, Licensed Victualler—J. SCHOFIELD, Nottingham, Boot Maker—J SIMISTER, Manchester, Baker and Confectioner—W. G. SNOW, Pomona Place, Hounslow, Out of Business—J STEVENSON and R STEVENSON, Walsden, Lancashire, Cotton Manufacturers—R. TAIT, Skipton, Yorkshire, Clog Maker—T THORN, Highfield Terrace, Kentish Town, Clerk to an Attorney—C. TUNNICLIFF, Tamworth, Draper—G WARHURST, Leigh, Lancashire, Ironmonger and Factor—R WEBBER, Harwich, Essex, Baker—J. WELCH, City Road, and St Mary-at-Hill, Eastcheap, Builder—E. WESTBROOK, Hanley, Staffordshire, Grocer—C. WHITLEY, Manchester, Engineer and Tool Maker—J. WILLIAMSON, Chilvers Coton, Warwickshire, Manager of Iron Works—J. M. YOUNG, Manchester, Merchant.

Metropolis and its Vicinity.

THE EXPERIMENTS AT SHOEBURYNESS.—The important experiments in connection with armour-coated vessels, for which preparations have been making for several weeks past, took place on Monday at Shoeburyness, in the presence of the Duke of Somerset, Admiral the Hon. Sir F. W. Grey, Rear-Admiral C. Eden, and Captain the Hon. J. Drummond, Lords of the Admiralty; Captain Moore, Private Secretary; Rear-Admiral Robinson, Surveyor of the Navy; the members of the Government special committee on iron, headed by Sir J. Hay, the chairman; Mr. Rolt and Captain Ford, of the Thames Iron Works Company, who built the Warrior; Mr. Fairbairn, of Manchester; Sir W. Armstrong, Mr. Scott Russell, and several military and naval officers of eminence. The target erected for the purpose of the experiments, at a cost of about 2000*l.*, represents a perfect section of the Warrior's side in build, thickness, and strength. It is 20 feet long by 10 feet wide, having in the centre a port hole 3 feet 3 inches by 2 feet in dimensions. It stands close to the shore, and faces the battery at a distance of 200 yards. Upon the exterior there are only four armour plates, each $4\frac{1}{2}$ inches thick, and composed of the best scrap iron, hammered by the Nasmyth hammer. The top and the lower ones run the entire length of the target—20 feet—the former being 3 feet 5 inches wide, and the latter 3 feet $1\frac{1}{2}$ inches. The two middle plates, which are shorter in length by the extent of the port-hole, show a width of 3 feet 7 inches. Behind these plates is a "backing" of teak 18 inches thick, and behind that the iron "skin" 5-8ths of an inch, making altogether a thickness of 23 inches. The whole of this solid mass is completely pierced by bolts, screwed to substantial iron ribs or frames in the interior. The target rests against an immense mass of brick and stone, which probably no amount of shot could shake from its base. The battery consisted of six pieces—three 100-pounder Armstrong guns, two 68 pounders, and one of Armstrong's 120-pounder "shunt-guns." First of all, the three 100-pounders and the two 68-pounders were separately fired with shells filled with sand, the spot aimed at being a large white mark on the left side of the target. The first shot was so nicely accurate as to entirely obliterate the mark, but apparently without doing much injury. The other two 100-pounders went very near the same place; the two 68-pounders seemed to do more execution, the parts struck remaining for a few seconds red-hot, and emitting much yellow smoke. A splinter from one of the latter went whistling along the coast, and warned those exposed on the field to retreat further back. At the bugle signal that firing had ceased, every one rushed anxiously to the target. It was found on inspection that the Armstrongs had made only slight indentations on the plates; one of them, however, exhibiting a minute crack. The two 68's had made round holes—one, 1-inch and 6-16ths, and the other, 1 inch and 5-16ths deep; both being 9 and 10 inches broad. This singular disparity between the effect of the guns is accounted for by the fact that at short distances, the 68's go with much greater velocity than the Armstrong's, the full power of which is only seen at ranges of 700 or 900 yards. The only other damage done was, that in one of these two holes a bolt had been slightly started. The whole teak and framework inside was totally untouched, or, rather, scarcely shaken. In the next round live shells, with percussion fuses, were discharged one after another from the same five guns. These, at a distance, seemed to have done little more than blacked the plates; but upon examination it was discovered that one of the 68-pounders had indented considerably the lower side of the upper plate. The hole varied in depth from $1\frac{3}{4}$ to 3 4-8th inches, the side of the plate being turned up like a lip, but the same place had been hit before. The other 68 had made a similar but less jagged hole, about $1\frac{1}{2}$ inch deep. From the three Armstrongs, the plates had again sustained very little injury, the shot having only just stamped the surface. The effect of some of these five blows was to produce cracks in the old wounds, but the framework was still untouched. The other, or right side of the target, was now operated upon with solid cast-iron shot from three 100-pounder Armstrongs, one 120-pounder Armstrong, and two 68-pounders. The first shot missed, and struck the stonework, scattering it about in all directions, and unsettling a heavy mass of brickwork. This, however, was the only shot thrown away, and with this exception the firing was wonderfully accurate, the white mark being frequently obliterated at the first aim. The 120-pounder (the "shunt" gun) gave a fearful blow to the upper corner of the top plate, the indentation being more than 3 inches deep, and the plate being bent and slightly turned outwards at the end from the teak. The other guns made holes varying from 1 inch to 2 7-10 inches deep, some of them exhibiting cracks. Notwithstanding all this pounding the wood had not been penetrated, and the inside of the target was as perfect and firm as ever, and the superior and tough quality of the iron of which the plates were composed was a subject of general comment. The 200 lbs. solid cast-iron shots were now fired from the three 100-pounders with a 10 lb. charge. These were directed against the left side of the target, and struck nearly close together, but did no more than leave a sign of their visit, and had actually less effect upon the iron than shells filled with sand from the 68-pounders. A salvo of cast-iron shot of 200 lbs. was then fired from the three 100-pounders with a 10 lb. charge, but it made little impression, though the side of one of the plates was turned up and a bolt started. At the suggestion of the Duke of Somerset a shot was fired at the port-hole to try the effect on the new iron bearings introduced at the sides of it by the Thames Iron Company, but it hit some distance from the side, and no satisfactory result was obtained. A salvo from the whole battery of six guns was next fired with solid cast-iron shot, and a service-charge of 16 lb. This was the great trial of the day, and the effect was more serious. Two or three of the shots hit the same place, and made a hole or rather gap 6 inches deep and 15 inches long, with two or three large cracks round it, the iron being forced into the teak, which became distinctly visible, and small splinters of which could be taken out by the fingers.

The other holes were also greater than any made before, and showed some ugly cracks, but not so deep as this, nor had the wood, as far as could be seen, been penetrated. In one of them, however, the ball had gone right into the plate, and remained there bodily, although in a very altered shape. The end of one of the plates was also turned outwards from the teak about 1½ inch. Again, however, the starting of two or three bolts, which had come out three or four inches, and had the nuts hanging loosely to their ends, was the only indication of any damage being done to the inside; and supposing the target had been the side of a ship, she was not materially injured. Still there remains the fact that the plates were pierced to the wood; but it must be remembered that the whole six guns converged to one point with the greatest nicety with which skilled artillerymen could point them, and were fired at the same instant, and that the target had already been a good deal knocked about. At the conclusion of these experiments, the effect of cast-iron shot upon three small targets was ascertained by the desire of the Duke of Somerset. They were all of the same size, and covered with a 2½-inch wrought-iron plate, and only differing in construction in regard to the "backing." The first had a "backing," 3 feet 3 inches thick, composed of three blocks of solid cast-iron. The ball, which was fired from a 100-pounder Armstrong, with a 14 lb. charge, at a distance of 200 yards, struck one corner of the plate, and only made a slight indentation, with two cracks, the cracks running from a bolt-head, which had received part of the blow, to the side. A similar ball was sent against the second target, which was "backed" to the same thickness, by alternate layers of fir and cork; and it not only completely pierced the 2½-inch plate, but lodged itself out of sight in the elastic material behind. The remaining target had a "backing" entirely of oak, but again the ball went right through the plate, and buried itself in the wood. These targets were on a very small scale, and had already, during the previous week, been operated upon by shot with a similar result.

The Exhibition of 1862.—The vestry of Chelsea met on Tuesday to take into consideration a letter from Mr. Wentworth Dilke, Chairman of the Commissioners of the Exhibition, urging the importance of widening the street leading from Eaton Square to Sloane Square in anticipation of the traffic which will take place next year between the Victoria station and the Exhibition buildings. It was unanimously resolved that the question be referred to the Committee of Works, and that they be called upon to appoint a sub-committee to consider the best means of carrying out the improvements suggested without delay. A special committee was appointed at the last sitting of the Kensington Vestry to consider and report on the best means of widening the approaches through that parish to the Exhibition building, and of removing at the same time the turnpike bars now placed on these thoroughfares. The Committee is now busily engaged in inquiring what arrangements can be made to effect these objects.

Westminster School.—It is stated that the Dean and Chapter have determined to suspend the performance of the usual Latin play at Westminster School at Christmas, on the ground of the Duchess of Kent's death in the early part of the year.

The Gas Question in the City.—At the weekly meeting of the City Commissioners of Sewers on Tuesday, the question of the supply of gas, which is now exciting public attention and comment, was brought under consideration. A deputation from the ward of Bishopsgate Street presented a memorial agreed to at a public meeting, and signed by about 500 inhabitants, setting forth that the Metropolis Gas Act, about to come into operation, while destroying the protection afforded to the citizens by the Great Central Company's Special Act, does not guarantee to the consumers a supply of gas of the requisite illuminating power and purity; that the mode of testing the gas and the difficulty of proving the supply of bad gas, together with the power given by the new Act to the companies of substituting a more expensive quality of gas than is now used, are detrimental to the interests of the consumers and give facilities for evading the Act. It also stated that the supply of gas to the city having hitherto been satisfactory, the citizens ought to have been exempt from the operation of the Act; and that the Great Central Company, to whom they have looked for protection against former exorbitant charges, had afforded no reason to justify its combination with the other companies to raise the price of gas. Deputy Pilcher charged the Great Central Company with bad faith in raising the price of their gas from 4s., which they had all along held out as their maximum charge, to 5s. 6d. per 1000 feet. He added, that under the new general Act, which overrode their special Act, the companies, the Great Central among the rest, might raise the price to 5s. 6d., and by substituting cannel for ordinary coal gas, even to 7s. 6d. per 1000 feet. He moved that the memorial be referred to the Special Committee on the new Gas Act to consider and report. Dr. Abraham said that the new Act, as originally propounded to Parliament, was meant to protect the interests of the consumers, but it had been converted into one for the exclusive benefit of the companies. He commented upon the anomaly presented by the Great Central Company, which was set on foot in the public interest 10 years ago to break down a monopoly, now uniting themselves with the other metropolitan companies to frustrate the healthy results of competition and the operation of free trade in an article now of almost universal consumption. It had been said by Alderman Dakin, the chairman of the Great Central, that the new Act required the gas companies to supply gas of an illuminating power 20 per cent. above that guaranteed by the existing Act of the Great Central. He contended that this statement was erroneous. The Act of the Great Central bound the company to supply gas equal in illuminating power to 12 wax candles, while the new statute bound them to a light equivalent to 12 sperm candles. Now, Dr. Letheby had shown that the increase of light in 12 sperm, as compared with 12 wax candles, was only from 13 to 14 per cent., and not 20 per cent. Alderman Dakin said he had stated the difference to be 20 per cent. on the authority of Professors Graham and Brande, and, however much he was disposed to defer to Dr. Letheby in such a matter, he still retained that opinion. He was willing, however, to take it at 14 per cent. Dr. Letheby, who was appealed to by the Court, said perhaps no two men had given more, or indeed so much, attention to that subject than Mr. King, of Liverpool, and himself. Mr. King had made at least 1000 experiments upon it, and he (Dr. Letheby) double that number, and they had both arrived at the same result, viz., that the difference between sperm and wax was 14 and not 20 per cent. Alderman Copeland, M.P., said that the Great Central Company was expressly set on foot to ensure competition in the supply of gas, and so to cheapen its price. He believed that the days of chartered gas companies were numbered, and that before 12 months elapsed gas for general consumption would be manufactured at the pit's mouth. Within the last few hours he had seen things connected with gas which proved beyond doubt that before long every man might be able to make gas for his own consumption. He added that the inhabitants of the ward with which he was connected felt that the attempt of the Great Central to raise the price of gas was most oppressive. Alderman Dakin, chairman of the Great Central, in reply, described the financial position of that company, and said that the new Act, which the Great Central was obliged to adopt, limited the future dividends of the companies, bound them under penalties to supply gas of a high degree of purity and illuminating power, and contained other stipulations in the public interest. Any crusade against the new law would waste the funds of the companies in again defending their interests before Parliament, and would only retard the time when they would be able to reduce the price of gas. The discussion was continued by Mr. Saunders, Deputy Pewtress, and Deputy Elliott, the last two of whom defended the Great Central Company, and eventually the motion was agreed to.

Londoners over the Border.—On Tuesday evening Mendelssohn's "Elijah" was performed in Exeter Hall in aid of the funds for the erection of a church and the enlargement of the industrial institutions in the district known as "London over the Border," the principal vocalists being — Madame Lind-Goldschmidt, Miss Palmer, Miss Cote, Miss Eyles, Mr. Lawler, Mr. Cumming, Mr. W. Weiss, and Mr. Sims Reeves. The Hall was crammed to suffocation, and as the prices for admission were doubled a considerable sum must have been realised, as Madame Lind generously gave her services on the occasion. Her singing in the principal soprano part of the oratorio was as fine as ever. Her voice, though occasionally produced with greater apparent effort, has lost none of its charm and scarcely any of its power. The style has become more measured, studied, and deliberate, but it was, as usual, heartfelt, impassioned, and remarkable for its truth of expression. Herr Otto Goldschmidt officiated as conductor. This concert was the preface of a series of performances, which will take place in the principal country towns in aid of the same object.

The Public Health.—The Registrar-General's Weekly Return states that the deaths in London in the week that ended Saturday, October 19, were 1065. After correction for increase of population, and excluding the deaths from cholera in 1854, it appears that the present return is about 50 below the average. During the week the births of 954 boys and 892 girls, in all 1846 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1606.

Provincial.

Ashford.—An inquest has been held on the body of Sergeant Whorley, drill instructor to the 29th Kent Rifles, who was killed while marking at the practice of that corps. All the witnesses exonerated Private Williams, who fired the fatal shot, from all blame, as the red flag was not exhibited in sufficient time when deceased appeared before the butt, to enable Williams to refrain from discharging his rifle. At the conclusion of the evidence, the jury returned a verdict of Accidental Death, coupled with a recommendation that in future no firing practice should be allowed without the use of the signals ordered by the Hythe School of Musketry.

Chichester.—The adjourned inquest on the body of Mr. James Outon was resumed on Tuesday, when the prisoner, John Cleary, was for the first time present at the examination. Several witnesses were [illegible] the result of whose evidence left no [illegible] prisoner's guilt. It also appeared that it was [illegible] intention to have shot Major Bushe, who commanded his depôt, if he had met him, and that he [illegible] wrong man. The jury, after a brief [illegible] returned a verdict of Wilful Murder against the prisoner, who was accordingly committed for trial at the assizes.

Frome.—On Friday the soldier Seers, [illegible] that he committed the Woodlands murder, was again brought up before the Earl of Cork, chairman [illegible] magistrates at Frome, when Superintendent [illegible] stated that the further inquiries he had made [illegible] beyond a doubt that the prisoner was in India at the time the murder was committed. He had [illegible] from the time he had left the Frome Union [illegible] till he was taken into custody. The chairman [illegible] had no alternative but to discharge the prisoner, [illegible] after severely commenting upon his conduct, [illegible] ordered to be released.

Gloucester.—The remains of the late [illegible] Forth were interred at the cemetery at 9 [illegible] Sunday, the 13th inst. The proceedings were [illegible] as possible. Only one mourning coach followed [illegible] hearse; there were no plumes, the [illegible] cloaks, and the undertaker alone wore a [illegible] body was placed in a metal shell enclosed [illegible] coffin. On the breastplate was the following [illegible] tion:—"Malcolm Viscount Forth; born May [illegible] died Oct. 8, 1861." The body was received at [illegible] door by a party of workmen, by whom it was [illegible] into the church and afterwards to a grave [illegible] north-west corner of the building. The burial [illegible] was read by the Rev. Charles Hardwick, and the [illegible] was attended by Major Williams, son-in-law, [illegible] Davis, son of Lady Clementina Davis, sister of [illegible] of Perth, who wore crape sashes and hatbands. [illegible] Graves, surgeon, was also present. The grave was [illegible] up immediately after the service, but it was [illegible] the relatives of deceased that the interment was [illegible] temporary one, as the corpse will shortly be [illegible] to the family vault. The remains of Mrs. [illegible] removed from Gloucester to Kington, Hereford [illegible] by railway, on the previous Tuesday, and [illegible] the same day. The local papers say that Mrs. [illegible] mother of Lady Forth, has visited Gloucester [illegible] purpose of obtaining certificates of the death [illegible] Forth, with a view to the immediate marriage [illegible] Forth and Mr. Dering.—At the Quarter Sessions [illegible] 17th inst. the seven young men in custody were [illegible] the recent outrage on the young woman named [illegible] Davis, on the road leading from Gloucester [illegible] down. The jury were locked up for some time, [illegible] ultimately returned a verdict of Guilty. [illegible] Cox were sentenced to six months, [illegible] Chandler four months, Wheeler three [illegible] and Parker two months.

Leeds.—On Monday the Earl of Carlisle, Lord Lieutenant of Ireland, who has come over from Ireland on a visit to his Yorkshire property, opened a hospital for women and children in this borough. [illegible] lordship was assisted by the Bishop of [illegible] offered an appropriate prayer, after which [illegible] lency formally declared the hospital opened for the treatment of diseases of women and children, [illegible] invoked God's blessing upon the good work. [illegible] this ceremony, the procession re-formed and [illegible] to the Victoria Hall, where the mayor, on behalf of the corporation, presented his Excellency with a [illegible] address. His Excellency in acknowledging the compliment said:—

"The presentation of this address and the terms in [illegible] been drawn up are stamped with no common [illegible] they have produced in me a very full return of [illegible] affection. You have, indeed, not unexpectedly, [illegible] of the connexion which it was formerly my [illegible] establish with you, and which it was my pride [illegible] through a long series of years and [illegible] not here—it is not in Leeds, it is not among [illegible] names, and I am happy to say still, some familiar [illegible] should be in any danger of forgetting that I was [illegible] an unsuccessful, but nine times a successful [illegible] representation of the great county of [illegible] emotions Leeds has ever supplied the most [illegible] pulses. Those were no sluggish times, and they [illegible] their differences of opinion and their [illegible] which it is a happiness, I think, that we [illegible] Indeed, for my part, it seemed to me that [illegible] enemy was the next best thing to a York[illegible] better than the cold friends of most other [illegible] merely the nature of the struggles in which [illegible] taking a common part I need only mention [illegible] earliest and my latest colleagues. The first was [illegible] and the last was Richard Cobden. Those [illegible] those measures which Yorkshire did more, I believe, [illegible] part of the empire to raise from the level of party [illegible] national convictions—the abolition of slavery and [illegible] trade. It is, indeed, most soothing and reassuring [illegible] feeling of my heart to find that, at so long a distance [illegible] when the excitement of contest has died away, [illegible] pression even of great measures has become [illegible] present occupations are remote—when, saddest [illegible] their accustomed places the faces and the smiles [illegible] those who cheered my first appearance and [illegible] early efforts in this crowded scene of public life, [illegible] and generous feelings are still entertained concerning [illegible] have been pleased to make a passing allusion to the [illegible] responsible position which by the favour of my [illegible] hold in the sister kingdom. It so happens that [illegible] 14 years of my public life I was connected with the [illegible] tion of Yorkshire, during 12 years I have been [illegible] the Government of Ireland. As I am willing to [illegible] labours of my Irish office did not materially interfere [illegible] discharge of my duties to my constituents, so I am [illegible] dent that the Irish people will not regard me with [illegible] when they shall learn that besides the honour I [illegible] Crown I have not lost the goodwill of my fellow [illegible]

Ladies and gentlemen, the matter of an address is of so purely personal a character that I feel afraid you will think I have talked too much of myself. But the very air around me is peopled with personal memories, and the circumstances of the occasion preclude all topics of political difference. But it is, at most, open to me to congratulate this great community, not so much on their obvious advance in material prosperity and external splendour as on the honoured place which they have long held, which they still hold, which I pray they may ever continue to hold, in every aim and undertaking which have for their object to assuage human suffering, to promote the physical, the social, the intellectual, and the religious improvement of all classes of the community; to keep bright the lamp of knowledge, to keep steady the light of freedom, and to raise upon the happiness and virtue of man the purest and most abiding temple to the glory of God."

At the conclusion of this ceremony the company retired to the Music Hall, where a cold collation was served, at which his Excellency the Lord Lieutenant presided, supported by the Mayor of Leeds, the Bishop of Ripon, Mr. Baines, M.P., Mr. Crossley, M.P., Mr. Beckett, &c. The usual loyal toasts having been disposed of, His Excellency proposed the "Army, Navy, and Volunteers." He said that he had particular pleasure in proposing the toast, but as lord lieutenant of the county, he wished to make one addition to the toast, which was, the name of the militia. All these respective forces were from their respective qualities entitled to the highest public gratitude, but he hoped the course of events had so altered that the country might not need their services, and if she did not it was only because she had had them at command. Mr. Beckett then, in a speech highly laudatory of the episcopal zeal and Christian character of the Bishop of Ripon, proposed that prelate's health, and thanked him for the part he had taken in the proceedings of the day.—The Bishop in returning thanks said he had been a hard working clergyman, and he wished to prove himself a hard working bishop. It was not work, but worry, which killed.—Mr. Hope Ward then proposed "The Health of the Earl of Carlisle," and said it was only necessary for him to mention his name to secure for his lordship a thorough hearty Yorkshire welcome. In returning thanks his Excellency spoke as follows on the objects of the charity:—

"I do not know if I may appear to owe an apology to you for appearing here, but I certainly do owe one to myself, for I had resolved, on coming to take my holidays in England, not to allow myself to be led into any engagements of a public nature, and I have strengthened myself against many kind provocations; but in this instance, the place being Leeds, and the object the opening of an hospital for the diseases of women and children, I had no choice but to surrender at discretion; and let me assure you that it gives me great pleasure to see so excellent an institution brought to such a point of honour and progress, and being about to be settled into its present new, commodious, and salubrious premises, where it will be able to give additional effect to the object of its benevolent conception. Those whom I have the pleasure to see before me must be well acquainted with the recommendations of an hospital of this distinct and specific character to meet the requirements of such a population as that of Leeds and the West Riding of Yorkshire. The very wealth which adds to the long array of your streets, terraces, squares, crescents, and parks—which glitters in your shops, and piles your markets—and the industry which smokes from 100 chimneys and hums from a thousand looms, make it additionally incumbent on you to consider with the greatest watchfulness the wants and sufferings of those who are the instruments of all this mighty prosperity, and, I grieve to add, too frequently its victims. I must remark further that all the circumstances and accompaniments of this wondrous system of labour and enterprise carry with them this inevitable drawback, that this cannot be attained without the sacrifice of the health and strength of those who are the most laboriously engaged in it. The hardworked *employés* of the factory have not the free draught of air, the open prospect, which those enjoy who live away from towns and cities. Instead of these advantages they have the horrors of the narrow court or pestiferous alley, the heated atmosphere of the work-room, and the ceaseless clank of engines. And who, let me ask you, are the objects for whom this meeting now makes an appeal? The women and children of this labouring population. Their very names make their own appeal to every feeling of chivalry and tenderness in man. It is for their delicate frames, and not less sensitive feelings, that the repose, the quiet, the tranquillity, the soothing care and attention of such an institution are suited and called for. I feel thoroughly that I can add nothing to the force of the appeals made to you from other sources, from sacred lips and in sacred places, as well as from the conviction of your own judgments, and the sympathies of your own hearts; but only just let me ask you, out of all those acquaintances taken from among us whose respect would you most desire, whose memory would you be most willing to make your own? Not his who amassed the greatest amount of wealth, or built the largest mill, and minded the world at large; but his who did his utmost to assuage the sufferings of the afflicted, to guard against the approach of the diseases which assail our common humanity. This lot you may make your own—this blessing you may all purchase by supporting such an hospital as this."

In the evening the Mechanics' Institution was opened by Lord Stanley, M.P., assisted by Mr. F. Crossley, M.P., Mr. Baines, M.P., and other gentlemen. Lord Stanley addressed the meeting at considerable length on the objects, difficulties, and advantages in the way of their studies. The following is an abstract of his address:—

"He congratulated the members of the institution that our educational progress had been something more than a name, and quoted figures which he said showed plainly that the managers and teachers had had their heart in the work, because elementary knowledge had improved and increased in quantity. The need of such institutions was felt more than it used to be, but the great drawback was the ability of children to bring by their labour an annual income of about 10*l.* a-year each, when perhaps the whole family means of subsistence did not exceed 50*l.* a-year. There was also the desire of the boy to begin business on his own account, a feeling strong in this country, stronger perhaps in this than in any other country than America. If they did not look these facts in the face they would be deceiving themselves, because it was so important that there should be an extension of the time passed at school. He believed that a fault of modern teaching was the natural ambition of teachers to crowd a great deal into a limited time. After reading some facts from the last report of the Irish Educational Board, he appealed to every instructor and patron, to every master of a school, and to every clergyman, whether a considerable portion of the children did not pass through the routine of lessons literally without carrying away anything which could be of use to them in after life. Various opinions had been expressed, and various opinions would be expressed on the merits of the new educational code which was exciting so much sensation. He would not go into the matter of pledges given and personal expectations broken, but it appeared to him to be a wise and rational measure so far. What was now wanted was not so much to augment the number of scholars as to utilise the number they had. He particularised the facilities for education which now existed, and observed that in Leeds there was no ground for complaint as to the want of such means, but he especially attached the greatest possible importance to evening classes. He showed the increase of prizemen which had gradually taken place in Leeds, in connection with the Oxford and Durham examinations, and said that, roughly speaking, while three was the average number of candidates who had passed those examinations in other places, the average number who had passed from Leeds was four. In noticing the practical result of education upon our national manners and life, he said no man could doubt the importance of bodily health, and no more real benefit could be conferred upon a people than when they reduced the amount of mortality and lessened the amount of disease, but this was in a great measure prevented by ignorance either on the part of the working man or of society as to the physical laws of our being and the essential importance of pure air, pure water, sufficient drainage, and healthy bodily exercise. People might say the fault of all, except the last, lay with the landlords; but if the people took an interest in those things, and understood their immense public importance there was no danger of landlords not doing do their duty. He rejoiced to see the progress the co-operative movement was making, and he did not say this in the hope of encouraging it, for it would make its own way. He held that such institutions as these would enable the working man to work out that important social problem, and supply a gap in our educational system which could not otherwise be filled up."

OXFORD.—The Rev. Dr. Hawkins, Provost of Oriel, has announced to the Vice-Chancellor his resignation of the office of Dean Ireland's Professor of "the Exegis of Holy Scripture."

STRATFORD-ON-AVON.—New Place, Stratford-on-Avon, the spot on which Shakspeare passed the last 20 years of his life, and where he died, was advertised for peremptory sale on the 25th inst., and the attraction of its "extensive frontage in the centre of the town" was held out invitingly to speculative builders. Mr. J. O. Halliwell immediately published an appeal calling upon the wealthy admirers of Shakspeare to subscribe with the view of raising 1500*l.*, the sum required to purchase the property and preserve it from desecration. The appeal has been successful. The site has been bought and presented to the corporation of Stratford, on the express conditions that the public be always freely admitted, and that no erection of any kind be ever permitted in the gardens.

Ireland.

THE QUEEN'S LATE VISIT TO IRELAND.—Her Majesty, before leaving Ireland, directed, through the Comptroller of her Household, that the railway company should send in their bill, which was paid at the same rate that the English companies receive when her Majesty travels, viz., 7*s.* per mile for the special train, first-class fares for her attendants, and the usual fares for carriages and horses. The whole bill was 400*l.*

SIR R. PEEL AND THE QUEEN'S UNIVERSITY.—A correspondence has taken place between Sir R. Peel and the Secretary of the Queen's University, with respect to his proposition to found three scholarships for 10 years in the Colleges of Belfast, Cork, and Galway. The Chief Secretary explains fully in a memorandum the conditions of the endowment. The exhibitions are to be of the value of 40*l.* each, to be held for one year by the best answerer under 22 years of age, at the previous examination in arts, in each of the colleges, whose name appears in the first class, and who has not attended the lectures or the course for the degree of bachelor of arts for more than two years. Sir Robert Peel guards against the possibility of subsequent indolence on the part of the exhibitioner by apportioning the payment of the prize in four sums—the first 10*l.* to be given immediately on the award being made, and the other three instalments to be contingent on his keeping the two subsequent terms and graduating in the college. In the event of any of the payments being allowed to lapse in any year they are to be applied to increase the exhibitions of the following year. It will be seen that the first examination for the exhibition has already taken place at Galway College.

DR. CULLEN AND THE M'MANUS DEMONSTRATION.—The Irishmen in California having sent the corpse of what Mr. Smith O'Brien calls that "hero, patriot, and martyr," M'Manus, to Ireland for interment, great preparations have been making by the remnant of the Young Ireland party for several anti-British demonstrations in the principal towns through which the body was to be conveyed. A grand cathedral service, with orations, was included in the arrangements for Dublin; but Dr. Cullen has refused to permit the cathedral in his diocese to be used for such a purpose. The promoters then entreated permission to hold the exhibition in the large chapel of Whitefriar Street, but this also was refused. Having thus failed to obtain any religious edifice for the purpose, they appealed to the managers of a large public building in the city, but the managers refused to let the place for such a demonstration.

MR. SMITH O'BRIEN AND THE AMERICANS.—Mr. Smith O'Brien has addressed a letter to Mr. Meagher, from Cahermoyle, upon the question as to what part the Irish in America should play in the civil war, in which he contends that "the Irish in America ought to appear as mediators, instead of being participators in the fratricidal strife which is now desolating the fairest portion of the Western Hemisphere." In order to prove the sincerity of his opinion, he says:—

"I am willing to go to America, at my own expense, to act as internuncio between the contending parties, in case my services be accepted in that capacity. I have been received or invited as a guest by several of the most distinguished statesmen who are now conducting the respective administrations of the Confederate States and of the Federal Republic. I trust, therefore, that I shall not be regarded by them as a stranger, and I venture also to hope that, though I have differed with some of my fellow-countrymen upon important points, I have not forfeited the confidence and affection which they testified towards me when I was in America. I therefore offer to go to America as an unostentatious missionary of peace. During a public life, which now extends over a period of 35 years, I have never solicited office of any kind for myself, from either kings, queens, viceroys, or ministers; but I am now disposed to solicit the situation of unpaid envoy between the contending sections of the American people, and it will be the proudest triumph of my life if I can assist in restoring peace between the disunited members of the great American family, whose most vital interests are so deeply injured by this internecine war."

THE LATE OUTRAGE IN DUBLIN.—John Curran, the cab-driver charged with attempting a criminal assault on Miss Louisa Jolly, at Milltown, on the night of the 27th of September, was brought up on remand at the head police court on Friday. Miss Jolly described the outrage and assault made upon her, and fully identified the prisoner as the man who committed the assault. Although cross-examined at great length, she adhered to her direct testimony, and exhibited a remarkable degree of calmness throughout. The station-master detailed the circumstances under which Miss Jolly came to his place, and also her appearance that night. The solicitor for the prisoner intimated he would reserve his defence, and the prisoner was then fully committed for trial at the next commission. Large crowds collected in the vicinity of the police-court, and every mark of sympathy was shown towards Miss Jolly.

THE PARTRY RIOTS.—The Lord Lieutenant, previous to his departure from Dublin, issued an order, under the hand of his chief secretary, revoking Father Lavelle's licence to carry arms in the district of Ballinrobe, and county of Mayo. The ultramontane organs denounce this order as an "infamous outrage" on "every Catholic heart in Ireland."

EXPLOSION AT BALLINCOLLIG POWDER MILLS.—On Wednesday morning one of the powder mills at Ballincollig blew up. Five men were killed, two of whom of whom are supposed to have been blown into the canal. The explosion was distinctly heard in Cork.

Scotland.

LAYING THE FOUNDATION STONES OF THE POST OFFICE AND MUSEUM.—On Wednesday afternoon the foundation-stones of the new General Post Office and of the Industrial Museum of Scotland were laid by the Prince Consort in the presence of an immense concourse of people. The weather was extremely favourable, and business was completely suspended in the city during the double ceremony. The route from Holyrood Palace to the site of the Post Office was lined by the military and Volunteers, as was also the route along the North and South Bridges to the site of the Industrial Museum, at the back of the University. The principal streets were gaily decorated with flags, and besides the crowds who occupied the two platforms from which a view of the ceremonies could be obtained, the streets were densely thronged with spectators, although thousands could only obtain a view of the carriages forming the procession as they passed along. The Prince Consort left Holyrood at 20 minutes past 1, accompanied by Sir George Grey, the Duke of Buccleuch, Earl Spencer, General Walker, Colonel Maclean, and Major Hyde Page. The Royal *cortége* was preceded by the Lord Provost, and as the carriages passed along the Regent Road and Waterloo Place, accompanied by the band of the Scots Greys, his Royal Highness was received with the utmost enthusiasm by the assembled crowd. On arriving at the Register House his Royal Highness received a number of noblemen and gentlemen who were to take part in the ceremony, and proceeded across the street to the site of the Post Office, accompanied by the Lord Provost, magistrates, and Council, the Lords of Session, the members for the city, and the other gentlemen who had been presented to his Royal Highness. The procession having taken their allotted positions round the stone, the Lord Provost presented an address to the Prince Consort, congratulating his Royal Highness on the safe arrival of her Majesty and the Royal family in the city, and thanking him for his presence on that occasion. The Prince Consort replied as follows:—

"My Lord Provost and Gentlemen.—I thank you very sincerely, in the name of the Queen, and also for myself, for the cordial welcome which has again greeted us on our arrival in Edinburgh. Your fresh assurances of loyal and devoted attachment to her Majesty's person and throne cannot but be deeply gratifying to her. In thanking you more particularly for myself for the very flattering terms in which you have alluded to my presence here on this occasion, let me assure you of the pleasure it has given me to be able to avail myself of your invitation to take the leading part in the ceremony of this day. I congratulate the citizens of Edinburgh, who watch with such jealous and praiseworthy care over all that can tend to the improvement or embellishment of a city already so remarkable for its beauty, on the acquisition of two such important buildings as it is now proposed to erect; and I entirely concur with you in the belief that whatever tends to foster a taste for intellectual enjoyment must also exercise an important influence on the national progress and the national prosperity. I rejoice with you on the increased facilities of communication by letter, which have rendered necessary the erection of a new post-office; that the advantages of speed and

r egularity in such com munications, which were once the exclusive privilege—though to a much ess extent even as regards them—of the higher and middle classes, have now, thanks to the marvellous development of the post-office system, been brought within reach even of the poorest; while another great boon has been conferred upon all lasses by the facilities afforded for he safe transmission of money by means of post-office orders, thus constituting the Post Office as it were an universal banking agency, resting on the security of the state, and brought to every man's very door; and we may hope that the recent act of legislation with regard to savings banks in connection with the Post Office will confer further and most important benefits on the working classes. I must also congratulate you on the extension to Edinburgh of the advantages already possessed by London and Dublin in the erection of an Industrial Museum; and it is particularly gratifying to me to think that in the institution of which I am to-day to lay the first stone the educational object will be kept specially in view—that your museum will not be a mere receptacle of curiosities to excite the wonder or stir the interest of casual visitors, but that by its immediate connection with the University it will afford the means of supplying the student with practical illustrations of what he has been taught in his class-room. The rapid increase in your collections is most satisfactory, and must remind you of all that is due to the energy and exertions of the first director of your museum, Dr. George Wilson, while it must increase your regret that he should not himself have lived to see the result of his early labours, in the development which the collections commenced by him have received under the able and excellent management of his successor Gentlemen, I have further to thank you for the kind manner in which you have alluded to the part I took in the great International Exhibition of 1851. The best acknowledgment which the promoters of that undertaking can receive is the practical proof afforded by its repetition in 1862 that they had correctly understood and appreciated the wants and requirements of the day; and it is most gratifying to them to observe, in the comparative facility with which the preliminary arrangements for holding a second Exhibition of this nature have been effected, the great advance made in such matters by the public mind during the 10 years that have elapsed since the opening of the first. And most warmly does my heart respond to your concluding prayer, that these and similar undertakings may conduce to the diffusion amongst all nations of the blessings of peace and mutual goodwill."

The foundation-stone was then laid in the usual form amid loud cheering, and the proceedings terminated with three cheers for the success of the undertaking and three cheers for her Majesty and the Prince Consort. Prince Leopold and two of the younger Princes occupied a room in the Register House from which a view of the proceedings could be obtained. Immediately after the ceremony the Prince Consort, accompanied as before, proceeded to the University, in the large quadrangle of which the Principal, Sir David Brewster, and the members of the Senatus Academicus were in waiting to receive him. Sir David Brewster presented an address from the Senatus, which his Royal Highness briefly acknowledged. The company then proceeded to the site of the museum through one of the windows of the University, where the ceremony of laying the foundation-stone was gone through, the whole proceedings only occupying a few minutes. The Prince Consort, immediately after the ceremony, returned to the front gate of the University, where the State carriage was in waiting, and proceeded amid loud cheers to Holyrood Palace.

Sporting.

THE PROPOSED SWIMMING RACE.—The match between Beckwith, the champion, and Deerfoot, the Indian, for 25*l*. a-side, to swim 20 lengths of the Westminster Bath, the Indian receiving a quarter of a minute start, which was to have taken place on Wednesday, has terminated in a forfeit by Deerfoot, who objects to swim in a bath. It is expected that a match in the river will shortly be arranged.

FOOT RACE BETWEEN DEERFOOT AND JONES.—On Monday afternoon the four miles running match between Deerfoot, the Seneca Indian, and W. Jones, of Islington, for a stake of 50*l*., took place at Old Brompton in the presence of a vast concourse of spectators. So great was the interest excited on the event, that large sums of money were speculated at odds in favour of Deerfoot, as much as 2 to 1 being laid in some instances. At 20 minutes past 4 the men made their appearance on the ground; and on the signal being given they started away at a clipping pace, the Indian at once dashing to the fore and cutting out the running at a fine pace. On going round the bottom turn Jones wrested the lead from him, but did not hold it long, for at the finish of the first lap Deerfoot was again in the front, leading by barely a yard. In this position they raced round the next lap, at the finish of which they were strictly level. During the next round Deerfoot again got the lead, and maintained it during the 5th and 6th laps. Jones's backers now called upon him to take the lead, which, on rounding for the 7th time, he held by three yards, and held it till nearly the 9th lap, when they passed and repassed each other twice, Deerfoot again getting a slight lead, and so they continued racing to the 15th lap, each alternately having a slight lead, and making the pace as severe as he could, in order to cut down the other. At the end of the 15th lap Jones, who was barely a yard in the rear, fell exhausted in the arms of Mr. Roberts, leaving the Indian to run the last quarter of a mile by himself, which he did at slightly diminished speed, doing the entire distance in 20 minutes 10 seconds. As a proof of the pace at which the match was run it may be added that the first quarter of a mile was run at the rate of 14 miles and 46-100ths per hour, the 15th lap was run at the rate of 15 miles and 51-100ths per hour, and the last quarter of a mile was run at the rate of 9 miles and 47-100ths per hour.

Law.

CENTRAL CRIMINAL COURT.—*Trial of Vincent Collucci.*—On Thursday, *Vincent Collucci*, aged 31, an Italian artist, was indicted before the Lord Chief Baron and Mr. Baron Martin, for misdemeanour in having unlawfully obtained from Frederica Johnstone 19 100*l*. Bank of England notes, by false pretences. Mr. Montagu Chambers, Q.C., and Mr. Serjeant Parry were specially retained, with Mr. F. H. Lewis, to conduct the prosecution; Mr. D. D. Keane, also specially retained with Mr. Sleigh and Mr. Giffard, appeared for the defence. The trial appeared to create very great public interest, and the court was crowded during the proceedings. Mr. Chambers stated the case to the jury, and detailed the circumstances which are already familiar to our readers. It appeared that in the first instance Miss Johnstone was induced by her love of art to patronise the prisoner as a portrait painter, that subsequently finding him in distress at not being able to go abroad to visit his sick mother for want of means, she generously gave him pecuniary assistance. In the meantime an attachment having sprung up between them, a marriage was contemplated and agreed to. While the prisoner was absent in Italy, Miss Johnstone had an illness, which induced her to consider her position and to come to the conclusion that the marriage must be abandoned. The prisoner on his return was very indignant at this resolution, and after making several attempts to frighten the prosecutrix by threats of exposure and personal violence, he agreed to give up the letters she had addressed to him for the sum of 2000*l*. Miss Johnstone paid him 100*l*. down, and afterwards met him at the Pantheon for the purpose of receiving the letters, and handing over the remaining 1900*l*. She received from the prisoner a packet which he said contained all her letters, one of which had been so placed as to be visible through a hole in the cover, so that there was no reason to doubt that the other letters were really in the parcel. She thereupon paid him the 19 notes of 100*l*. each, and requested a receipt, but the prisoner excused himself from giving one and took his leave. Miss Johnstone almost immediately afterwards discovered that the parcel did not contain her letters, but a bundle of old newspapers, the single letter which had been visible through the hole in the paper wrapper having been wilfully placed there for the purpose of deceiving her. She then placed the matter in the hands of her brother and guardian, who had the prisoner apprehended, when 17 of the notes and the lady's letters were found at his lodgings. The case was proved by Miss Johnstone herself, who was put into the witness-box and subjected to a severe cross-examination by the prisoner's counsel, but her direct evidence was in no way shaken. For the defence, Mr. Keane said he was not instructed to cast any imputation on the character of the prosecutrix, but the defendant had insisted on his setting up a defence for which his legal advisers were not responsible. That defence was that the money was given to the prisoner as a compensation for the abandonment of the marriage, and not for the restoration of all the letters, and that the prosecutrix had not only fabricated the parcel in question, but had also stolen the letter out of the prisoner's studio for the purpose of enabling her to carry out her design. The Lord Chief Baron in summing up said that the only question for the consideration of the Jury was whether or not they believed the evidence that had been given by Miss Johnstone, and, after the defence that had been set up by the prisoner's counsel, this was the only issue they had to try. If they thought she was speaking the truth, the prisoner was guilty of the offence imputed to him; but if they had any doubt upon the point the prisoner was entitled to be acquitted. The jury, after consulting two or three minutes in the box, said they should like to retire for a short time, and they accordingly left the court. They returned in about a quarter of an hour, and found the prisoner *Guilty*. Mr. Chambers said there was a second indictment against the prisoner of constructive larceny, but, after the verdict that had just been pronounced, he thought it was unnecessary to proceed with it. The Lord Chief Baron, in passing sentence, said that the prisoner had been found guilty of obtaining money by false pretences, and the case appeared to him to be one of the clearest that had ever been presented to a jury in a court of justice. The evidence of Miss Johnstone, who appeared to him to be altogether worthy of credit, made out the charge distinctly, and all the surrounding circumstances tended strongly to confirm her statement. The defence that had been attempted on behalf of the prisoner was, in his opinion, a very great aggravation in respect of the imputation that the prisoner sought to cast upon Miss Johnstone, that she had fabricated the parcel in question, and stolen the letter that was contained in it, in order to give a colour to the deception, and had used another seal similar to the one that was in the possession of the prisoner, with the same object of doing him an injury. He felt it his duty to allude to this subject, because he was certain that such a defence must be looked upon with indignation by all honest men, and he repeated that it was a great aggravation of the prisoner's conduct that he should have instructed, and, as it appeared, compelled his counsel to make such a defence. The offence of which he had been convicted, although, perhaps, strictly speaking, it might be considered as coming under the description of cheating, had, by a recent alteration of the law, been declared to amount to the offence of larceny, and was put upon the same footing as that offence. By pretending to deliver these letters to the prosecutrix, he had got from her 1900*l*., and he was quite sure that in the eye of every honest man his crime was just the same as if he had gone into Miss Johnstone's own house and had broke open her escritoire, and taken out the money. The crime too was committed under most aggravated circumstances in this respect also,—it was committed against a person who had given him previously large sums of money, who had acted towards him with the greatest generosity, and towards whom he should have been bound by all the ties of gratitude not to have committed such an offence. He looked upon the offence as one of almost an alarming character, and one which called for a very severe punishment. For a much inferior crime persons in humble life and in poverty suffered heavy punishment. It did not require any knowledge of the law to be aware that such an act as he had committed was illegal, and could not be tolerated. Every gentleman—every man at all acquainted with the social arrangements of society, must be perfectly well aware of the serious nature of such an offence, and he felt it his duty, under all the circumstances, to order him to be kept in penal servitude for the space of three years. The prisoner, who did not utter a word throughout the proceedings, but who seemed very much astonished at the result, was then removed from the bar. Upon the application of Mr. Chambers the money and the letters that were in the possession of the police were ordered to be delivered up to the prosecutrix. *The Fatal Railway Accident at Kentish Town.*—*Henry Rayner* surrendered to take his trial for manslaughter. It will be recollected that the coroner's jury returned a verdict of manslaughter against the prisoner, who was the signalman at the Kentish Town railway station, in reference to the fatal accident which occurred at that station to an excursion train about two months since. The grand jury at the last session ignored the bill against the prisoner; but Mr. Metcalfe, who appeared for the prosecution, expressed his opinion that the matter was of such great public importance that a further inquiry ought to take place, and eventually the case was postponed to the present session, when it was said that additional evidence would be brought forward in support of the charge. Another bill was preferred before the grand jury, and this Bill they also ignored. The prisoner, therefore, now surrendered to meet the charge upon the coroner's inquisition. The Lord Chief Baron, who had been made acquainted with the facts, said it was the first time within his experience that, after a grand jury had ignored the bill in reference to such a charge, the coroner's inquisition was proceeded with. Mr. Metcalfe said that after this intimation from his lordship, and particularly after the bill had been ignored by two grand juries, he certainly should not offer any evidence upon the coroner's inquisition. The prisoner, consequently, was *Acquitted*. *The Post Office Robberies in Lombard Street.*—*Edmund William Bullen*, 18, letter-carrier, pleaded Guilty to an indictment charging him with stealing a post letter containing the sum of 25*sl*. 10*s*., the property of her Majesty's Postmaster-General. Mr. Sleigh, who appeared for the prisoner, urged in mitigation of sentence the prisoner's youth and previous good character. Mr. Clerk for the prosecution said that the case against the prisoner was a very bad one. He was the deliverer in the Lombard Street district, and had also been employed as a letter-sorter, and suspicion had been raised ... consequence of a letter containing some ... stolen some time since, and through ... traced to the prisoner he was taken into custody ... letters which ought to have been delivered ... him, and in his cupboard no less than 1400 ... discovered. He was sentenced to six years ... *James Gillman* was convicted on two indictments ... with uttering forged Post-office orders, and ... 18 months' imprisonment with hard labour. ... 22, also a letter carrier, in the Edgware district, ... of stealing a post letter, and sentenced to four ... servitude. *Arson.*—*George Clift*, 27, and *Frederick* ... 24, both described as quill merchants, ... feloniously setting fire to their dwelling ... defraud the Globe Insurance Company. ... effected an insurance on a very large stock ... best quality, which they said were stored in ... house. They were seen to leave the house on ... the fire, and did not return during the remainder ... The house was entirely gutted, and it was ... that it had been set fire to in two places ... exception of a few bundles of the commonest ... trace of the quills could be discovered, ... known that they were most difficult of ... The prisoners put in a claim of 4000*l*. upon ... upon they were given into custody. The ... them *Guilty*, and Baron Wilde sentenced them ... penal servitude, telling them that a few years ... would have been forfeited. *The Alleged Murder ... Seas.*—*William Burwood Baldray*, 38, captain of the ... Shantung, was indicted for the manslaughter ... upon the high seas, the grand jury having ... preferred against him for Wilful Murder. ... of this case were noticed last week in our ... The jury returned a verdict of *Guilty*, and ... sentenced him to 9 months' imprisonment with hard labour.

Obituary.

COLONEL SIR CLAUDE MARTINE WADE, C.B., ... at Bath. He was a son of the late Lieut.-Col. ... the Bengal army, and was born in Bengal in 17.. ... the military service of the East India Company ... 1823 was appointed diplomatic agent at L... ... was placed in charge of our relations with Runjeet ... the States across the Indus; in 1838 was sent ... mission to Peshawur to join the Sikh army ... Timour, and was the first to force the Khyber ... appointed political agent at Malwa in 18.., and ... honour of knighthood for "the tried judgment ... with which he conducted our relations with ... Lahore for 17 years. In recognition of his services ... Cabul, and the capture of Ghuznee, Sir C... ... permission in 1841 to wear the Order of the D... ... and also received the Star of the Punjab. He ... rank of Lieutenant-Colonel in 1839, and rec... ... of Colonel in the East Indies in 1855.

MAJOR FRANCIS FORESTER, brother of the late ... and uncle of the present peer, died on Tuesday ... residence in St. James's Place. He married ... Louisa Vane, eldest daughter of the late Duke ... and by her, who died in 1821, he leaves ... Colonel C. W. Forester, married to a sister of L...

WILLS.—The will of the Hon. Colonel ... Onslow, of Woodbridge House, Guildford, ... under 12,000*l*.; the Dowager Lady Musgrave ... Francis Palgrave, K.H., 4000*l*.; the Rev Thomas ... Rector of Sevenoaks, and Vicar of Seasalter ... Mr. Charles Hoar, of Lenfield, Boxley, near Maidstone ...

BIRTHS.—On the 19th inst, in Dublin, the Lady ... of a daughter—15th inst, at 53, Mountjoy Square, Dublin ... Lady VICTORIA MARY KIRWAN, of a daughter— ... LADY NIGEL KENNEDY, of a daughter—19th ... Court, Horsham, Lady PELLY, wife of Sir J. H... ... of a son—22d inst, at 9, Chesterfield Street, M... ... Mrs. OKEOVER, of a daughter—17th inst, at ... yard, the Hon. Mrs. GEORGE GREY, of a daughter— ... Frankfort-on-the-Maine, the wife of FREDERICK ... Esq., her Britannic Majesty's Chargé d'Affaires to the ... Confederation, of a son.

MARRIAGES—On the 17th inst, at St. Mary's ... Square, the Hon. CHARLES SPENCER BATEMAN HANBURY ... Fellow of All Soul's College, Oxford, late Captain ... Guards, and second son of the late Lord Bateman ... Viscountess STRANGFORD—17th inst, at the ... Trinity, Melrose, HARRY FOLEY VERNON, Esq., ... Hall, Worcestershire, to Lady GEORGINA S... ... HAMILTON, youngest daughter of the EARL OF ... 16th inst, at Old Alresford Church, Hants, ... POLLEXFEN BASTARD, of Kitley, county Devon ... surviving son of the late Edmund Pollexfen Bastard ... for Devon, to FRANCES JANE, youngest dau... ... Hon. MORTIMER RODNEY.—15th inst, at Emm... ... Weston-super-Mare, JOHN BOGER HOLE, Esq., ... Office, only son of Francis Hole, Esq., of ... Tiverton, Devon, to FRANCES JANE, only daughter ... HORATIO DAVIS, Esq., of Mount Beacon House ... granddaughter of the late Sir Walter James, Bart.— ... day last, at Thorpe, near Norwich, Captain ... CUBITT, 5th Regiment Fusiliers, eldest son of the ... William Cubitt, M.A., of Fritton House, Suffolk ... HARRIOT, youngest daughter of the late THOMAS ... Commander Royal Navy, and niece of Sir ... Bart.—17th inst, at Chilbolton, Hants, FREDERICK ... eldest son of the late Dr. EDMUND GOODENOUGH ... to MARY, daughter of the Rev. ANTHONY ... Chilbolton—15th inst, at Wreay, Carlisle, ... HOWE, Esq., Captain North Cork Rifles, youngest ... Randall Howe, Esq., of Arbutus Lodge, county ... RINE NONY, eldest daughter of Rear-Admiral ... Ravenside, near Carlisle—15th inst, at the parish ... JAMES HASTINGS TOONE, Esq., ... ton, Middlesex, ... Bengal Cavalry, grandson of the late Sir William ... to EMMA, second daughter of T. HEALEY, Esq. ... House, Hampton, Middlesex—22d inst, at St. Michael's ... Chester Square, the Rev. BARNARD SMITH, M.A. ... Glaston, Rutlandshire, late Fellow of St. Peter's ... Cambridge, to CLARA, daughter of the late RICHARD ... SHAY, Esq., of Ottershaw Park, Surrey.

DEATHS.—On the 16th inst, at Dresden, after a ... ness, AUGUSTUS, eldest and dearly loved son of Lady ... FITZCLARENCE, and of the late Rev. Lord A... ... Clarence, aged 12 years and 8 months—22d inst, ... Park, near Ludlow, HENRY AUGUSTUS, youngest ... WILLIAM MILMAN, Bart., and Lady Milman, aged ... 21st June, after two days' illness, at ... while in command of her Majesty's gun vessel ... nant JAMES HAWKINS WHITSHED, R.N., eldest ... St. Vincent and the Hon. Lady Whitshed, aged ... at Neemuch, India, LESLIE COPELAND, Esq., ... Service, fourth surviving son of Mr. Alderman Copeland ... aged 22—16th inst, at his residence, Greville House ... ham, Lieut.-Colonel EDWARD FORD HAMILTON, late of the ... bay Army—14th inst, at 1, Trafalgar Terrace, St. Helier's ...

[illegible] BARTLEY, late 54th Regiment—20th inst, at his [illegible] Tavistock, THOMAS GILL, Esq., Deputy-[illegible] for the county of Devon, and formerly M.P. for [illegible]—27th inst, JOHN IRVING GLENNIE, Esq., of [illegible] Doctors' Commons, aged 65—17th inst, [illegible] Ryde, Isle of Wight, MARY ANN, widow of [illegible] DYKE MOLESWORTH MITCHELL, M.A., rector [illegible] Northamptonshire, aged 71—21st inst, at Ilkley [illegible] Rev. JOHN DAVIES, D.D., rector of Gateshead, [illegible] the Rev. WILLIAM LLOYD, rector of Drayton, [illegible] a magistrate for the county of Oxford, aged 74 [illegible] at the Rectory, Dolton, North Devon, the Rev. [illegible], M.A., for 57 years rector of the parish, [illegible] 40 years an active magistrate for the county, [illegible] the Rev. CHARLES MORDAUNT, for upwards [illegible] rector of Badgworth, Somerset—18th inst, at Bury [illegible] the Rev. HENRY CREED, 24 years rector of [illegible] county of Suffolk, aged 62—15th inst, at the [illegible], Cambridgeshire, the Rev. WILLIAM HERBERT [illegible], M.A., rector of that parish, and formerly a master [illegible], aged 78—16th inst, at the Nursery, Upper [illegible], ELIZABETH, wife of Mr. HUGH LOW, aged 71.

Markets.

COVENT GARDEN, Oct. 26.

[illegible] supplies, consisting chiefly of Pears and Apples, [illegible], and those of English Vegetables and Fruit also [illegible] be well kept up. Home-grown Apples and Pears [illegible] and the same may be said of Grapes, Pine [illegible] and even Melons. Peas are now very scarce. Of [illegible] there is a fair supply. Potato markets have [illegible] our last report. Cucumbers are sufficient for [illegible], and the same may be said of Tomatoes, which [illegible] excellent. Cut flowers chiefly consist of Orchids, [illegible], Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Oranges, per 100, 6s to 14s
[illegible], per lb., 1s 6d to 4s	Lemons, per 100, 6s to 10s
[illegible], each, 1s to 3s	Nuts, Cob, per pound., 2s to 2s 6d
[illegible], per doz., 1s to 6s	
Apples, per doz., 6d to 1s	Walnuts, per 100, 2s

VEGETABLES.

[illegible], each, 2d to 6d	Artichokes, each, 6d to 8d
[illegible], per bundle, 1s to [illegible]	Beet, per doz., 1s 6d
	Celery, p. bundle, 1s 6d to 2s
[illegible] Beans, per sieve, 2s 6d	Onions, pickling, p. ½ sieve, 4s 6d
[illegible]	Tomatoes, p. doz., 1s to 6s
[illegible], doz., 1s 3d to 1s 6d	Shallots, per lb., 8d to 10d
[illegible], p. ton, 60s to 75s	Garlic, per lb., 6d to 8d
— per cwt., 4s to 8s	Endive, p. score, 1s 6d
[illegible], per bunch, 2d to 4d	Horse Radish, p. bun., 1s 6d to 4s
[illegible], 4d to 6d	Mushrooms, p. pott., 2s to 3s
[illegible], sieve, 1s to 2s	Parsley, p. 12 bunches, 3s to 4s
[illegible], each, 6d to 9d	Savory, per bunch, 2d to 4d
[illegible] Marrows, p. doz, 1s to 1s 6d	

HAY.—Per Load of 36 Trusses.

SMITHFIELD, THURSDAY, Oct. 24.

[illegible] Meadow Hay	80s to 90s		Clover, old	90s to 120s	
[illegible] do ..	95	105	New Clover	—	—
[illegible] do. ..	40	55	Do. second cut ..	80	105
New do.	—	—	Straw	28	34
[illegible]	—	—			

DAVIS & Co.

WHITECHAPEL, THURSDAY, Oct. 24.

Fine Meadow Hay	92s to 100s		Fine 1st cut Clover	100s to 117s	
[illegible] do.	70	80	Inferior do.	—	—
[illegible] New Hay	—	—	New 2d cut	95	105
[illegible]	—	—	Inferior do. ..	—	—
Straw	28	33	New 1st cut ..	—	—

BUTTER MARKET.—Oct. 25.

Best Fresh Butter .. .. 16*s.* per dozen lbs.
Second do. do. .. .. 14*s.* ,, ,,
Pork, 5*s.* 0*d.* to 5*s.* 4*d.* per 8 lbs.

HOPS.—BOROUGH MARKET, FRIDAY, Oct. 25.

Messrs. Pattenden & Smith report a good demand for Hops of all descriptions at advanced prices, say about 5s. per cwt., since the duty was declared. The old duty for the separate districts is as under:—

DISTRICTS.	1861.		
Rochester	£59,980	14	1
Canterbury	17,992	11	9¼
Kent	77,973	5	10¼
Sussex	8,191	12	4½
Worcester	20,868	9	2¾
Farnham	7,145	6	2¼
Kingdom	522	13	3½
Total	114,701	6	11

BRITISH WOOLS.—LONDON, FRIDAY, Oct. 25

[illegible] trade continues about the same, without active demand [illegible] fleece wool, especially of the South-down description. [illegible] haired wool continues to command high rates. Skin [illegible] is now getting of fair length, and sells at rates enhancing [illegible] proportion to the increase of value weekly.

METROPOLITAN CATTLE MARKET.

MONDAY, Oct. 21.

The supply of Beasts has very largely increased; yet we are [illegible] very done with choice qualities, and they realise Thursday's [illegible]. Inferior kinds are rather lower. There are a few [illegible] Sheep, but the demand is good, and quotations remain [illegible]. Good Calves are readily disposed of at late rates. From Germany and Holland there are 2300 Beasts, 8100 Sheep, [illegible] Calves, and 50 Pigs; from Ireland, 1500 Beasts; and 2500 from the northern and midland counties.

	s	d		s	d		s	d		s	d
Best Scots, Herefords, &c. ..	4	8	to	5	0	Best Long-wools.	5	0	to 5	4
Best Short-horns	4	6	—	4	8	Do. Shorn			—	..
2d quality Beasts	3	0	—	4	0	Ewes & 2d quality	4	6	— 4	10
Best Downs and Half-breds ..	5	4	to	5	6	Do. Shorn			—	..
						Lambs			—	..
Do. Shorn			to		..	Calves	4	4	— 5	2
						Pigs	4	4	— 5	4

Beasts, 6650; Sheep & Lambs, 24,250; Calves, 260; Pigs, 370.

THURSDAY, Oct. 24.

The supply of Beasts is by no means excessive, yet the demand is not so good as on Monday, and consequently the prices of that day are scarcely maintained. There are a few more Sheep than on Thursday last, but the average quality is inferior; best qualities, therefore, are as dear as on Monday. Trade is dull for Calves, and prices are rather lower. From Germany and Holland there are 210 Beasts, 2750 Sheep, and 204 Calves; from Ireland, 80 Calves; from Spain, 80 Beasts; Milch Cows, 110.

	s	d		s	d		s	d		s	d
Best Scots, Herefords, &c. ..	4	8	to	4	10	Best Long-wools.	5	0	— 5	4
Best Short-horns	4	6	—	4	8	Do. Shorn			—	..
2d quality Beasts	3	0	—	3	10	Ewes & 2d quality	4	4	— 4	8
Best Downs and Half breds ..	5	4	—	5	6	Do. Shorn			to	..
						Lambs			—	..
Do. Shorn			—		..	Calves	4	0	— 5	0
						Pigs	4	4	— 5	4

Beasts, 990; Sheep & Lambs, 5050; Calves, 364; Pigs, 250.

COAL MARKET.—Oct. 23.

Carr's Hartley, 16s. 9d.; Carr's Original Hartley, 16s. 6d.; Hastings Hartley, 16s. 9d.; Holywell, 15s. 6d.; Tanfield Moor, 13s. 6d.; Tanfield Moor Butes, 13s 6d Wylam, 15s.; Walls End Gibson, 16s. 6d.; Walls End Thornley, 16s. 3d., Walls End Trimdon Thornley, 17s.; Walls End Peases West, 15s.—Ships at market, 17.

MARK LANE.—MONDAY, Oct. 21.

The supply of Wheat from Essex and Kent to this morning's market was small, and sold at an advance of 1s. to 2s per qr. upon the prices of Monday last. The attendance was large, and included many buyers from Yorkshire and other distant counties; the prices asked for foreign Wheat being high checked business; the sales effected were at an improvement of 1s. to 2s. per qr. upon the general qualities of European, and 2s. per qr. upon American. Barley was in fair demand, at last week's rates. Beans and Peas are unaltered in value. Good old Oats bring rather more money; new grinding are a slow sale and cheaper. Barrel Flour is very scarce, and brings an advance of 6d. to 1s. upon the rates of this day se'nnight.

PER IMPERIAL QUARTER.		s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk	White	50—64	Red	50—60
— — fine selected runs..	ditto	61—66	Red	50—62
— — Talavera		55—70		
— Norfolk		—	Red	—
— Foreign		48—76		
BARLEY, grind. & dist., 26s to 28s	Chev	36—41	Malting	35—38
— Foreign.. grinding and distilling		27—30	Malting	36—40
OATS, Essex and Suffolk		20—24		
— Scotch and Lincolnshire—	Potato	26—28	Feed	20—24
— Irish	Potato	26—28	Feed ..	20—24
— Foreign .... Poland and	Brew	20—24	Feed ..	19—24
RYE		36—38	Foreign ..	—
RYE-MEAL, foreign		—		
BEANS, Mazagan ....35s to 37s ..	Tick	36—39	Harrow ..	36—39
— Pigeon ......38s — 42s..	Winds	—	Longpod	—
— Foreign	Small	42—52	Egyptian	—
PEAS, white, Essex and Kent..	Boilers	40—44	Suffolk .	40—46
— Maple ....43s to 45s	Grey	39—41	Foreign .	35—38
MAIZE	White	—	Yellow ..	—
FLOUR, best marks delivered..	per sack	50—55		
— 2d do	ditto	40—50	Country	40—50
— Foreign	per barrel	28—36	Per sack	43—58

FRIDAY, Oct. 25.

The weather since the 10th inst, has continued to be very mild, with a good deal of fog until the 21st, when we had some showers, which on the 22d were very heavy; last night and this morning showery. The Wheat trade since the above date has been less active than during the preceding week; nevertheless, with the exception of Liverpool, Glasgow, Manchester, Birmingham, and Bristol, a further advance of 1s or 1s to 2s per qr. appears to have been general in the several markets of the kingdom. The value of all kinds of Spring Corn has been well supported. Beans and more particularly Peas being in the majority of markets quoted 1s., and the latter 1s. to 2s. per qr. dearer. Foreign Flour continues to be very scarce, and is readily purchased at our extreme quotations. Amongst the arrivals are a couple of small cargoes of American Flour from France, which have been returned in consequence of their having arrived yonder sour and unfit for the French market. Since Friday last 30 vessels have been reported off the coast. The floating trade has been quiet, and all articles with the exception of Beans, which are dearer, have been purchaseable at rather less money. In Paris (October 24) there was very little doing in Wheat, and prices remain nominally unaltered. The arrivals of both English and foreign Wheat and Barley this week have been to a fair extent, but small of Oats. There was only a thin attendance at this morning's market. English Wheat met a dull sale at Monday's prices, and the demand for foreign was limited, but on the business done fully late rates were realised. For Spring Corn of all descriptions there is a steady sale at Monday's quotations.

ARRIVALS FROM Oct. 21 to Oct. 25.

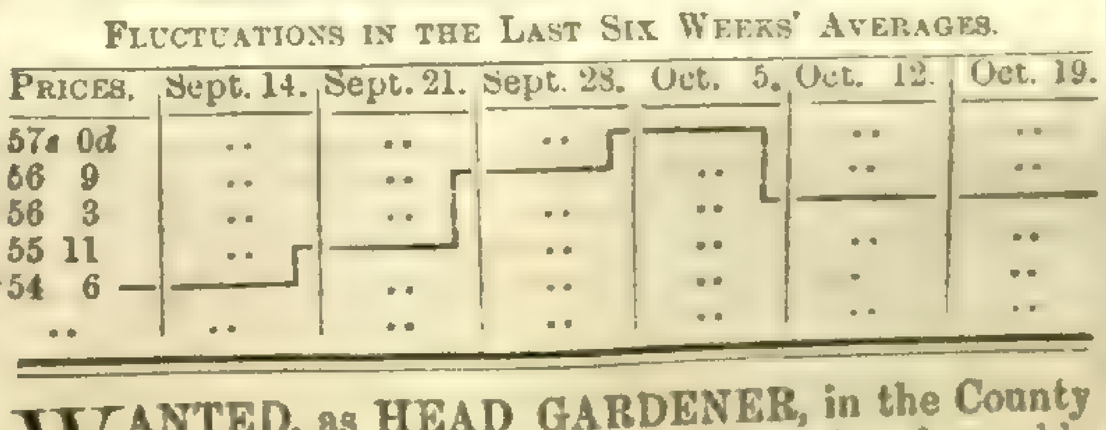
	Wheat.	Barley.	Oats.	Flour.
English ..	2230 qrs.	1270 qrs	69 qrs.	1160 sks.
Irish	— ,,	— ,,	2290 ,,	— ,,
Foreign ..	18430 ,,	3250 ,,	13590 ,,	40 ,, 10750 brls.

LIVERPOOL, Tuesday, Oct. 22.—With a slender attendance of buyers at this morning's market, Wheat met only a slow sale, and a reduction of 1d. to 2d. per cental was accepted in some instances in order to close parcels ex quay. Flour had a moderate consumptive demand at Friday's prices. Indian Corn was offered more freely ex ship, and must be noted 1s. per qr. cheaper than last market day; a fair quantity, however, found buyers at the decline. Oats steady. Oatmeal better sale at full prices. Peas from scarcity brought from 1s. to 2s. per qr. advance. Beans and Barley are without alteration. The market closes steady, but less animated than of late.

FRIDAY, Oct. 25.—The market to-day is rather quieter, and Wheat and Flour are strong sale at about 3d per cental, and 6d. to 9d. per barrel lower; the feeling, however, is better. Indian Corn 1s. 6d. to 1s. 9d. lower.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Sept. 14..	54s 6d	36s 4d	22s 11d	33s 4d	41s 11d	38s 0d
— 21..	55 11	36 9	22 10	34 11	41 11	38 9
— 28..	56 9	37 4	22 10	35 9	42 4	40 10
Oct. 5..	57 0	37 4	22 6	35 4	42 0	40 4
— 12..	56 3	37 6	21 10	37 3	41 8	42 11
— 19..	56 3	36 9	21 6	34 9	41 10	41 10
Agg. Aver.	56 1	37 0	22 5	35 3	41 11	40 5

FLUCTUATIONS IN THE LAST SIX WEEKS' AVERAGES.



WANTED, as HEAD GARDENER, in the County of Durham, an experienced Man, who thoroughly understands the Management of Kitchen and Flower Gardens, Vineries, Pineries, Stove and Conservatory Plants. Age not exceeding 45. Wages 60*l.* per annum, with Vegetables, Fuel, and excellent House.—Applications, with full particulars of previous service, to be addressed A. Z., Post Office, Gateshead.

WANTED, as HEAD GARDENER, in Devonshire, an experienced, active Man, who thoroughly understands and has had the Management of good Kitchen and Flower Gardens, Vines, Pines, Conservatory, Orchard House, &c. He should have some knowledge of Laying-out Grounds, Shrubberies, &c. A married Man without incumbrance preferred. Age from 35 to 45. Wages from 60*l.* to 70*l.*, with excellent House, Fuel, and Vegetables.—Applications, with references and full particulars of previous service, age, wages, &c., to be directed to A. Z., Post Office, Plymouth.

WANTED, a GARDENER, to take charge of a Garden on the north coast of Brittany, belonging to an English family. He must thoroughly understand his profession. An unmarried Man, from the age of [illegible] to 4[illegible], would be preferred. Unexceptional references would be required.—Apply to Mr. PONTEY, Nursery Gardener, Plymouth.

WANTED, a YOUNG MAN of experience, and with a knowledge of Roses, to Manage the Rose Department in a London Nursery.—Apply and state terms to Messrs. J. & C. LEE, Nurserymen, Hammersmith, W.

WANTED, a YOUTH or YOUNG MAN to take charge of a Small Garden, the produce of which (Bedding Plants, &c.) will be grown for Sale. State age, wages, &c. —X. Y., 12, Barker Street, Lozells, Birmingham.

WANT PLACES.—Letters to be Post Paid.

Norfolk Farming.

AGENT or STEWARD.—A gentleman who has been used to both Heavy and Light Land, wishes for an engagement upon a large occupation, as above. He has been used to the Rearing, Buying, and Selling of Stock; has also occupied a Farm under a nobleman, from whom and his agents the highest testimonials can be given.—Address (prepaid) A. B., Messrs. Back & Co., Haymarket, Norwich.

GARDENER (HEAD).—Age 28, single; thoroughly understands Forcing, Flower and Kitchen Gardening.—A. B., Messrs. Paul & Sons, The Old Nurseries, Cheshunt, Herts.

GARDENER (HEAD).—Age 30, married, Scotch; has had much practical experience both in England and Scotland. Practically understands his profession. Can be well recommended.—D. B., *Gardeners' Chronicle* Office, W.C.

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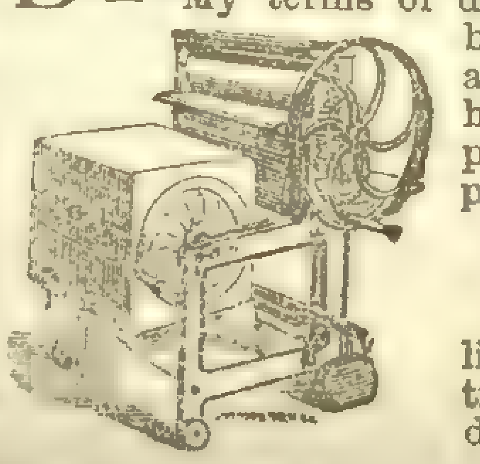

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The Gardeners' Chronicle Newspaper.

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IV. NEWTON AS A SCIENTIFIC DISCOVERER.
V. GROWTH OF ENGLISH POETRY.
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The Volume in hand for 1861, which is now in a forward state, is—

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Those Volumes already issued to the Subscribers for 1859 and previous years, which are still in stock, are now offered to the public at an increased price, and are sold by Mr. ROBERT HARDWICKE, 192, Piccadilly. Many of the earlier Volumes are, however, not now obtainable, being out of print.

H. T. STAINTON, Secretary.

Mountsfield, Lewisham, S.E.

News of the Week.

THE Paris papers announce that England, France, and Spain have arrived at a complete understanding in reference to the expedition against Mexico. A convention will be signed in

the course of a few days laying down the bases of the intervention. The principal of these bases are said to be—1st, redress for the subjects of the intervening Powers; and 2d, the necessity of constituting in Mexico a strong Government capable of maintaining order and security. It is also said that the United States Government will be invited to join the allied expedition, in order to obtain redress for the injuries done to American subjects. The Corps Legislatif has been convened for 8th January, and it is officially announced that the Budget will be presented immediately after the opening. The negotiations for the transfer of silver by the Prussian Bank to the Bank of France are said to be indefinitely postponed. Signor RATTAZZI will leave Paris to-morrow on his return to Turin. There appears to be no doubt that his mission has failed in producing any change in the EMPEROR's views respecting the occupation of Rome.

A despatch from Berne announces that France has accepted the proposal of the Federal Council of Switzerland that a fresh inquiry should be made into the affair at Ville-la-Grand by a mixed commission appointed for that purpose.

The bases of a treaty between Spain and Morocco for the final settlement of the war indemnity were arranged on Monday at Madrid. Morocco will shortly pay 60 millions of reals, which with the Customs duties, will make up the amount of 200 millions of reals still due to Spain; Tetuan will then be restored to Morocco.

It is stated that an interview between the EMPEROR OF AUSTRIA and the KING OF PRUSSIA has been decided on, and that it will take place at Breslau on the 5th inst. A Ministerial Council was held at Vienna on Sunday under the presidency of the EMPEROR, in which it was resolved to establish a Hungarian Administration which will fully carry out the intentions of the Government. HIS MAJESTY has since sent a reply to the CHANCELLOR OF HUNGARY, stating that this is not the moment for him to visit Pesth.

A despatch from Pesth states that the CARDINAL PRIMATE of Hungary, as Obergespan of the Comitat of Gran, has declared that he will forbid the functionaries of the Comitat to co-operate in the levy of recruits for the army, and has denounced the collection of taxes by the military, which, he said, should be immediately stopped. He has also expressed his opinion that the Hungarian constitution is in danger, and that the EMPEROR should go to Buda and dispel their fears. The CARDINAL PRIMATE has been summoned to Vienna by order of the EMPEROR, to justify himself with respect to this speech. Meanwhile the greater number of the Obergespans have followed his example by refusing to concur in the levy of recruits, and the whole of the magistrates in the Comitat of Pesth have tendered their resignation.

Despatches from St. Petersburgh state that fresh conflicts took place between the authorities and the students at the reopening of the University, which resulted in the interference of the military. The students made an active resistance, but 200 of them were arrested, and one was wounded.

Accounts from Warsaw announce the death of General GERSTENZWEIG, Military Governor of Poland, and state that General LAMBERT, the Governor-General, has been succeeded by General LDERS. The Marquis WIELOPOWSKI has tendered his resignation, but it has not yet been accepted. Several of the leading citizens, and several priests and members of the committee who conducted the recent funeral of the Archbishop of WARSAW have been arrested. The Catholic and Protestant churches and the Jewish synagogues still remain closed, and the people continue to pray before the doors.

The official *Gazette* of Turin publishes a circular addressed by the Minister of Justice to the archbishops and clergy, deploring the grave acts of clerical opposition against the laws and the national Government, and stating that though the Government wishes to respect the liberty of the churches, it will take severe measures if the clergy continue to attack the laws and institutions of the country, and endeavour to disturb public order. A telegram has been received from Brussels announcing that the new Belgian Ministry has recognised the Kingdom of Italy.

From the United States we learn that Lord LYONS has protested against the arbitrary confinement of British subjects, on the ground that the authority of Congress is necessary for such measures. Mr. SEWARD has replied to the effect that in the present emergency all classes of society must cheerfully acquiesce in the measures which the safety of the people demand, and that the British Government will hardly expect the President to accept their explanation of the constitution of the United States. General PRICE, with 20,000 Confederate troops, has made a stand in Western Missouri, and General FREMONT is preparing to give him battle. It is reported, however, that the Federal Government has resolved on removing General FREMONT from his command. General STONE crossed the Potomac on the 21st ult., with 1800 men, and marched towards Leesburg, near which he was met and repulsed by a large body of Confederates. A force of 5000 Confederates is said to have been defeated with heavy loss at Fredericktown, Missouri. A naval expedition of from 40 to 50 ships left New York for the Southern ports on the 11th ult., and was to rendezvous at Annapolis for the purpose of embarking troops and artillery before proceeding South. Mr. SEWARD has addressed a circular to those states which remain loyal to the Union, urging them to improve the defences of their sea coasts and lakes, in order to be prepared for the possibility of any differences with foreign Governments arising out of the present state of affairs. He says, that notwithstanding the intrigues of the Southern States to involve the country in disputes with foreign Governments, the prospect of any misunderstanding is now less serious than at any other period, but "it is necessary to take every possible precaution to avoid adding the evils of foreign war to civil commotion." Colonel RANKIN has been committed for trial and dismissed from the Canadian Militia, for violating the Queen's proclamation respecting neutrality.

Home News.

THE COURT.—On Friday the Queen and Prince Consort, accompanied by Princess Alice, rode out on horseback. Princess Helena drove out in an open carriage with the Princess of Hohenlohe. On Saturday morning the Queen and Princess Alice rode out on horseback. The Prince Consort came to London, and presided at a committee of the Council of the Royal Horticultural Society at South Kensington. On Sunday morning the Queen and Prince Consort, Princesses Alice, Helena, and Louisa and Prince Arthur attended Divine service in the private Chapel of the Castle. The Dean of Windsor officiated. On Monday morning the Queen, accompanied by Princess Alice, rode out on horseback. The Prince Consort went out shooting. Princess Louisa rode on horseback. In the afternoon the Queen and Prince Consort, accompanied by Princess Helena and the Princess Hohenlohe, drove out in a carriage and four. Viscount and Viscountess Palmerston arrived on a visit to her Majesty. On Tuesday morning the Queen, with the Princess Alice, Princess Helena, Princess Louisa, and the Princess Hohenlohe, walked in the Home Park. The Prince Consort, accompanied by Lord Palmerston, went out shooting. In the afternoon Queen Marie Amelie, accompanied by the Duke of Nemours and the Princess Marguerite, visited her Majesty. Princess Beatrice drove out in a carriage and four. On Wednesday morning the Queen, accompanied by Lord Palmerston, rode out on horseback. The Prince Consort came to London. His Royal Highness drove from Paddington Station to Buckingham Palace and Marlborough House. Princess Alice rode out on horseback. On Thursday morning the Queen and Prince Consort, accompanied by Princess Alice, rode out on horseback. Lord and Lady Palmerston left the Castle. Prince Arthur went to Richmond Park and honoured Sir Edward Bowater with a visit. The Prince of Wales arrived from London in the evening.

COURT ARRANGEMENTS.—It is understood that the Queen, Prince Consort and Royal Family will leave Windsor for Osborne on the 2d December, and will remain in the Isle of Wight until the 3d January. The Queen will then return to Windsor and remain at the Castle till the latter end of February—a much later period than usual—when the Court will remove to Buckingham Palace.

COLONIAL APPOINTMENTS.—The Queen [illegible] Viscount Monck to be Governor-General [illegible] New Brunswick, Nova Scotia, and [illegible] Island; Philip Edmond Wodehouse, Esq. [illegible] Governor of British Guiana, to be Governor [illegible] Cape of Good Hope and its dependencies, and to be [illegible] Majesty's High Commissioner for settling [illegible] the territories on the eastern frontier; Sir [illegible] Daly, Knt., to be Governor of South Australia [illegible] John Stephen Hampton, Esq., to be Governor [illegible] Western Australia.

PARLIAMENTARY MOVEMENTS.—The [illegible] Plymouth terminated on Thursday in the [illegible] Mr. Morrison, the Liberal candidate, by a [illegible] of 200 over the Hon. W. W. Addington, the [illegible] being 1180 to 980. Mr. Edmund Potter, [illegible] the Manchester Chamber of Commerce, is a [illegible] in the Liberal interest for Carlisle, vacant by the [illegible] of Sir James Graham. Mr. Hodgson, of [illegible] Grange, who formerly represented the [illegible] been invited to come forward in the Conservative interest.

TRIAL OF THE WARRIOR.—The Warrior, [illegible] steam-ship, Captain the Hon. A. Cochrane, [illegible] on Friday morning, and ran the measured [illegible] half speed for some hours, under the superintendence of the officials of the steam reserve [illegible] The results with six of her 10 boilers were [illegible] in the first run, 11.043 knots in the second, [illegible] the third, and 11.077 in the fourth. The [illegible] only four boilers were 12.080 knots in the first [illegible] 10,000 in the second. On Monday morning [illegible] light she left Spithead for Portland, [illegible] embarked on Wednesday two of the Lords [illegible] Admiralty, and was joined by the screw [illegible] ship Revenge, which has been ordered to [illegible] her on her experimental sea trip. On [illegible] afternoon the Warrior and Revenge steamed [illegible] Portland Harbour and proceeded down channel. [illegible] reported that they are going to cruise for [illegible] night on the coast of Ireland, having [illegible] their lee as a harbour of refuge.

THE VOLUNTEER MOVEMENT.—The [illegible] inaugurating the new butt at Cambridge [illegible] formed on Wednesday by the Prince of [illegible] Shortly after 2 o'clock the University [illegible] strong, marched to the parade ground, [illegible] 1st and 8th Cambridgeshire Volunteers. [illegible] before 3 the ground presented a most [illegible] appearance, the target end being supplied with a [illegible] form, on which were grouped the members [illegible] ladies' committee who had obtained [illegible] targets to be afterwards used on the [illegible] round which stood a large number of the [illegible] guished members of the University. The [illegible] streets outside were thronged by an [illegible] Punctually at 3 o'clock his Royal Highness [illegible] mounted on a handsome charger, and [illegible] General Bruce and Captain Grey. A square [illegible] one side of which was occupied by the [illegible] and the ladies, a cup about to be [illegible] the corps was placed on the platform. The [illegible] Wales, uncovering, then said,—"Lieutenant [illegible] Baker, and gentlemen of the Cambridge [illegible] Rifle Volunteers, I have much pleasure in [illegible] this ground opened for the purpose of rifle [illegible] the members of your corps. I beg also to [illegible] petition among your members the cup [illegible] Colonel Baker having made a suitable reply, [illegible] Mrs. Neville came forward and presented, [illegible] of the ladies, three sets of electric targets [illegible] Three cheers were then given for the ladies. [illegible] of Trinity, of Wimbledon celebrity, was [illegible] from the ranks, and proceeded practically [illegible] the butt. He fired five shots at 800 yards [illegible] right; 2, centre; 3. below; 4, centre; and [illegible] He shot from one knee. The indicator [illegible] and exhibited the record of the shot before [illegible] from the target reached the spectators. His [illegible] Highness having congratulated Mr. Ross [illegible] then rode off the ground.—The Council of the [illegible] Rifle Association request that all gunmakers [illegible] to compete at the trial of small bore rifles [illegible] February next, will send their names to the [illegible] the Association, on or before the 1st of [illegible]

Foreign.

FRANCE.—The *Moniteur*, in its bulletin of [illegible] makes the following announcement:—

"The controversy now being carried on [illegible] journals might have the effect of leading the [illegible] wrong ideas respecting the policy of the Emperor [illegible] certain changes to be effected in the internal [illegible] empire. The contents of certain newspapers [illegible] show that the Government remains free [illegible] on account of publications which are [illegible] engage no other responsibility but their own [illegible] once cut short all false commentaries, we [illegible] fact that the *Moniteur* is the sole organ of the [illegible] Government, and that no semi-official journal ex[illegible]

The Paris papers have announced this week that [illegible] France, and Spain have arrived at a complete [illegible] standing in reference to the expedition against [illegible] and that a convention will be signed in a [illegible] The principal bases of the convention are said [illegible] first, to obtain redress for the subjects of the [illegible] Powers; and secondly, the necessity for Europe [illegible] stitute in Mexico a strong Government, capable [illegible]

[illegible] order and security. The *Patrie* states [illegible] it is reported that the conclusion of the convention [illegible] to the United States Government, [illegible] invited to join the allied expedition, in [illegible] redress for the injuries done to American [illegible]. It is asserted that France will send half a [illegible] Mexico, and that the expedition will leave [illegible] of the present month.—Several of [illegible] papers deny the truth of a statement made by [illegible] journal, that negotiations for the cession of [illegible] been entered into between Austria and France. [illegible] however, asks if it be not possible for [illegible] recover her independence without a recourse [illegible] means of a pacific settlement. It says that [illegible] the question will be mooted at the approaching [illegible] at Breslau between the Emperor of [illegible] and the King of Prussia, and adds that, "in [illegible] with the wish of the Emperor Napoleon, the [illegible] monarch will insist upon the abandonment of [illegible] by Austria, and intimate his firm intention [illegible] recognising the Italian kingdom." Reports have been current in financial circles that Messrs. [illegible] have been negotiating with the Prussian Bank for the conclusion of a financial operation, by which [illegible] France would receive 15,000,000 of thalers [illegible]. The *Pays* of Wednesday, however, states [illegible] the negotiations have been indefinitely postponed. [illegible] have been issued by the Minister of Marine [illegible] the wooden ships built or building shall be [illegible] with iron plates. Prince Napoleon and the [illegible] Clotilde go on a visit to Compiègne next week. [illegible] Rattazzi will return to Turin to-morrow. He [illegible] two audiences of the Emperor, but it is said [illegible] mission has not in any way changed the policy [illegible] Emperor towards Rome. General Goyon, the [illegible] Commander at Rome, has arrived in Paris, and [illegible] return to Rome for three weeks. A French [illegible] of Father Passaglia's pamphlet has appeared [illegible] Paris.—The ceremony of presenting the Cardinal's [illegible] to Monsignor Billiet, Archbishop of Chambéry, [illegible] the Pope created a Cardinal at the last Consistory, at his Majesty's request, was performed on Sunday by the Emperor in person. The Pope's delegate opened the proceedings with a Latin speech, in which he said that the Sovereign Pontiff, notwithstanding the grief by which he is overwhelmed [illegible] account of vicissitudes too well known, was happy to respond with eagerness to the wish of the Emperor that the Archbishop of Chambéry should [illegible] to the rank of Cardinal, and he concluded [illegible] expressing a wish that by more and more protecting [illegible] and the Sovereign Pontiff, the Emperor may [illegible] Divine aid. The Emperor in reply said that he should always congratulate himself on the good understanding which ought to exist between the Holy See and the French Government, and that "this good understanding, which is so necessary, could not be [illegible] manifested than by the benevolent adoption of [illegible] maturely considered." His Majesty concluded by reiterating the sincerity of his wishes and [illegible] for the venerated chief of the Church. The [illegible] Cardinal afterwards thanked the Emperor for the [illegible] he had rendered to the Church, not only in [illegible], but in China, Cochin-China, Corea, Oceania, [illegible] Syria, and especially by preserving to the Holy See the city of Rome, and that portion of its estates that still belong to it. "Sire," said the Cardinal, "without having an Empire as extended as that of [illegible], you possess its strength and power. By [illegible] the venerable Pius IX., as that illustrious [illegible] protected Adrian I., you will deserve the approval and the applause of the whole Catholic world; your authority is known and appreciated by all Europe; as soon as your voice is heard it is respected. I also [illegible] your Majesty, Sire, for all that you have done for Savoy since its annexation to France." The Emperor [illegible] as follows:—

"[illegible] happy that the Holy Father has accepted my pro[illegible] and made you a Cardinal; for not only is it a sweet [illegible] for every one to see recompensed by the high [illegible] conferred upon one of the elders of the episcopate a [illegible] by so many virtues, but, by this selection I [illegible] testify my esteem and my sympathy for the clergy [illegible] have given proof of their devotion to France and [illegible] to myself. I have not heard without emotion the [illegible] touching words by which you appreciate my efforts [illegible] of religion and for the prosperity of the newly [illegible]. God, I trust, will for many years preserve [illegible] prelate of so much value to religion, so dear to his [illegible]."

[illegible] a complimentary address to the Empress the [illegible] terminated.—The *Constitutionnel*, in an [illegible] signed by Dr. Veron, calls attention [illegible] fact that until now all important Government [illegible] generally been presented to the Chamber of [illegible] at the end of the Session, and affirms that the [illegible] is determined to remedy this evil. [illegible] Budget will be presented to the Corps Législatif immediately after the opening of the Session, [illegible] will take place at the beginning of January.—[illegible] anonymous pamphlet has appeared in Paris [illegible] the title of *L'Angleterre, L'Autriche, et les Entrevues de Compiègne*. Though consisting of only [illegible] pages, it breathes a very hostile spirit towards England, as may be seen from the following passages:—

"[illegible] every point of the globe we meet with the English flag [illegible] one pretext or another; covering a fortress, an [illegible], a factory, or a territory more or less extensive, but [illegible] commanding a strategic position or an important maritime [illegible]. One would say that the British nation had [illegible] the mission of guarding all the avenues of the earth [illegible] keeping the key of every strait. Europe complains, but she permits the thing to go on when such invasions occur. Let us act like England, and let us not be troubled by interested clamour; let us take our property wheresoever we find it: let our flag be raised in Madagascar; let it protect our efforts to civilise and colonise Algeria. Within a given time let our frontiers to the north and north-west be rectified as our frontiers to the south-east have been, with the assent of the nations which are interested in it, and without asking what our neighbours think of it. There is our right, and there is our duty. Selfish beyond all measure in her extension of territory, in her conquests well or ill acquired, England has no thought but for herself; while, on the contrary, France has always in view progress and the common benefit. France is not the country that will present to the world the afflicting spectacle of a nation pushing to very paroxysm the affectation of liberal sentiments, hunting down the slave trade and condemning slavery—a noble task, if sincere—but confidently bending the principle to circumstances, smothering the political thought by the mercantile thought, and declaring for the South in the secession from the Union merely because she wants cotton for her manufactures. This contradiction is the terrible comment on the spirit which animates England. It is the condemnation of her double-faced and tortuous policy, and it will be her disgrace. And, in fact, if this nation arms as she is arming, it is because she feels that before long she will have to defend herself. People do not with impunity extend their arms throughout the world. The leopard in vain plunges his claws in the entrails of people, but he will soon feel the shudder which precedes resistance. Mercantile England has imitated Carthage. The day will come when, like Carthage, the Colossus, with feet of clay, will fall in pieces beneath a too vast enterprise, or forced to struggle everywhere at the same time her scattered strength will be exhausted. That day is less distant than is believed; and our neighbours, in their insatiable arrogance, will have done everything to hurry on the fatal hour. Then they will understand that the fear of invasion of London was puerile, and that nations, like individuals, fall back into the nothingness into which they are driven by the very abuse they make of their faculties, their strength, and their passions. It is not our fault if Prussia, which has family alliances with England, throws off the yoke which the latter has pressed upon her. King William, who, in fact, governs his kingdom since 1857, has no reason to be pleased with the conduct of England; and England has imprudently forgotten the services of Prussia in other times. She was so much accustomed to consider her as her natural ally on the Continent that she believed in the eternity of her blindness. Most assuredly the English alliance presents less advantages to William I. than the French alliance; and with the political intelligence which distinguishes him this Prince took the road to Compiègne rather than that of Windsor."

A telegraphic message from Bessege, announces that three of the miners who had been buried for 14 days in the ruins of the Lalle mine, were on Friday dug out alive and are in a fair way of recovery. They suffered dreadfully in the pit, and to appease their hunger gnawed their shoes and worsted belts. It has been ascertained that the whole number of men who descended the pit on the day of the disaster was 140. Of these 30 came up again before the disaster occurred. Five have been got out alive, and 22 dead. There consequently still remain 83 below.

SPAIN.—The Madrid journals of the 25th contain an account of the funeral of the Infanta Dona Concepçion in the Royal Vaults of the Escurial. The ceremony was marked with all the pomp of Royal funerals in Spain.—The bases of a treaty with Morocco for the final settlement of the war indemnity were arranged on Monday. Morocco will shortly pay 60,000,000 of reals, which, together with the Customs' duties, will make up the amount due by Morocco to Spain—namely, 200,000,000 of reals. Tetuan will then be restored to Morocco. The majority of the members of the Cortes have agreed to oppose the Coalition Opposition under Messrs. Sartorius and Rios Rosas. The Spanish expedition against Mexico will leave shortly.

PORTUGAL.—The King has had a slight attack of fever. A funeral service has been celebrated at Lisbon in honour of the late Count Cavour. The Ministry and all the public authorities were present. An importation of cotton has been received at Lisbon from the Portuguese possession of Goa. It is stated to be of good quality, and the cost of production moderate. The yield of wine in the province of Alentejo is immense. Throughout Portugal the vintage is more satisfactory than last year. The opening of the Cortes has been postponed until January.

DENMARK.—A Royal decree published on Friday convenes the Council of State and the Legislative Assembly for Denmark and Schleswig for the 25th of January.

BELGIUM.—The *Moniteur Belge* announces the reconstruction of the Ministry. M. Rogier, Minister of the Interior and chief of the Cabinet, has become Minister of Foreign Affairs; M. Vandenpeereboom has become Minister of the Interior, and M. Frere Orban has become once more the Minister of Finance. The new Government has recognised the Kingdom of Italy, and it is expected that the programme of the Cabinet will also include the revision of the law of 1842, the revision of the electoral law, and the immediate presentation of the treaty with England to be discussed at a later date.

SWITZERLAND.—France has accepted the proposal of the Federal Council, that a fresh inquiry should be made into the affair at Ville la Grande by a mixed commission appointed for that purpose. On Thursday French troops occupied the valley of the Dappen. M. Migy, President of the Government of Berne, and Colonel Veillon have left for that place in the character of Federal Commissioners. The statement of a German paper that the Government of Geneva had requested that Swiss Federal troops might be sent to that canton is unfounded. The Government of Geneva has, however, called out the militia of the canton for extraordinary night duty. There is a German Opera now at Geneva with an English prima donna, a Miss Bywater.

HANOVER.—The Hanoverian Government in consequence of the delay and vacillation of the Federal Diet in regard to the question of a German fleet has determined to take the matter, for the moment, altogether out of the hands of the authorities at Frankfort. It has issued a circular stating that it will undertake to build 20 steam gunboats on its own responsibility, trusting, nevertheless, to be eventually indemnified out of the revenues of the Confederation. Meanwhile, it suggests that 50 similar gunboats should be built at the Federal expense, and that the other riverain and littoral States of Germany should contribute the remaining 30, at the cost of the Frankfort Treasury.

PRUSSIA.—It is asserted that an interview between the Emperor of Austria and the King of Prussia will take place on the 5th of November, at Breslau, on the inauguration of the statue of King Frederick William III., father of the present King. It is reported in Berlin that the King and Queen of Prussia, with the Prince and Princess Royal, will visit London next summer at the opening of the Great Exhibition. The elections for the Prussian Chamber of Deputies will take place, in the first degree, on the 19th of this month, and in the second degree on the 6th of December. The King has addressed to the authorities at Potsdam some remarks intended, it is said, to destroy the impression produced by his speech at Königsberg. He said that he would ever remain faithful to the constitution, and he hoped that the people would do the same, and would give him new proofs of it in the result of the approaching elections. Similar language was used by his Majesty to a deputation of students, to whom he observed, "I am for reasonable and moderate progress, and I intend to adhere to it."

AUSTRIA.—The Emperor of Austria left Corfu on the 21st ult. for Vienna, and the Empress left on the 23d for Venice, where she proposes to spend the winter. The Emperor arrived at Vienna on Saturday, and was received by the Archduke Maximilian and the Duke of Modena. Directly afterwards his Majesty received the director of the police, Von Meesèry. On Sunday a Council was held under the presidency of the Emperor, at which it was resolved to establish a Hungarian Administration which would carry out the intentions of the Government in every way. It was not, however, proposed in the Council to proclaim a state of siege in Hungary.

HUNGARY.—The Cardinal Primate of Hungary has delivered a speech in his quality of Obergespan of the comitat of Gran, in which he declared that he would not only refuse to order the functionaries of the comitat to co-operate in the levy of recruits for the army, but he would forbid them to do so. He further said that the Emperor should come to Buda in order to dispel the fears of the Hungarians with regard to their Constitution, which they believed to be in danger, and should convoke the Hungarian Diet as soon as possible. He expressed a desire for the postponement of the questions of the taxes and the levying of troops, and concluded by saying that the collection of the taxes by military execution should be immediately stopped. The Cardinal Primate has been summoned to Vienna by order of the Emperor, in order to justify himself with respect to this speech. The Emperor has replied to the Chancellor of Hungary that this is not the moment for him to visit Pesth. The Tavernicus, Count Majlath, has resigned. All meetings are forbidden in Hungary until further orders. The replies of the greater number of the Obergespans relative to the recruiting have arrived at Vienna. Like the Primate, they all refuse their concurrence. The whole of the magistrates in the Comitat of Pesth have tendered their resignation. A few functionaries only will remain in office a fortnight longer, in order to transact the most urgent public business.

ITALY.—The *Official Gazette* of Wednesday publishes a circular addressed by the Minister of Justice to the Archbishops and clergy, in which the Minister deplores the grave acts of clerical opposition against the laws and the national Government, and says:—

"The Government wishes to respect the liberty of the Church, but will take severe measures if the clergy continue to attack the laws and institutions of the country, and endeavour to disturb public order."

The Government have authorized Messrs. Rothschild, of Paris, to receive the last two-fifths of the National Loan. Gen. Della Marmora left for Naples on Monday. Seventy-four brigands, who have been infesting the country between Cancello and Nola, have made proposals to the authorities to surrender. Cardinal Andrea has formally denied having participated in the publication of the pamphlets which recently appeared at Florence against the temporal power of the Pope. General Cialdini has presented to the city of Naples the sum of 450,000 francs, saved by him from the amount assigned to him for the "expenses of representation," a species of civil list, intended to cover all the incidental charges attached to a public office.—The Turin papers state that the Austrians have just committed an act of great barbarity at Montecchio Maggiore. A postmaster, named Finato, having received orders to take two officers to a neighbouring village, sent his son, a lad of 19, with a carriage to drive them. When the lad got to the place where he was to take up he found that instead of two they were five in number, and as he had been hired but for two he refused to carry them all. Thereupon one of the officers, named Count Buri, struck the young man

violently, and the latter returned the blow. The officer then attempted to draw his sword, but Finato, more active than he, pushed the weapon back into the scabbard. Upon this the other four rushed upon the young man; one of them wounded him mortally in the neck, another cut off one of his arms, the third fractured a kneecap, and all four continued to cut and thrust at him till he fell lifeless under 19 wounds. As many as 30 officers of all ranks are said to have looked on quietly while this assassination was going on.

SICILY.—The King of Italy has issued a decree establishing a junta or committee at Palermo for the purpose of considering the question of improvements to be introduced into the agriculture of Sicily and the working of its mines. The English man-of-war Victor Emmanuel has arrived at Messina. The English fleet, under the command of Admiral Martin, has passed the Straits of Messina on its way to Malta.

RUSSIA.—The Emperor returned to St. Petersburg on Monday from his excursion to the south of Russia. The Empress will prolong her stay in the Crimea. Fresh conflicts have taken place between the authorities and the students at the reopening of the University. Seven hundred students applied for readmission, and on the 24th ult. demanded that those students who had not received a card of admission should, nevertheless, be admitted into the University. Fresh tumults thereupon ensued in the University buildings, resulting in the interference of the military. The students made an active resistance. Two hundred of them were arrested, and one was wounded. It is not thought that this conflict will lead to the reclosing of the University.

POLAND.—It is expected that serious measures will be taken by the Government of Warsaw. General Lambert, the Governor-General of Poland, has resigned his office on account of ill-health, and has been summoned to St. Petersburg by telegraph to make a report on the state of Poland. It is said that he will be succeeded by General Lüders. General Gerstenzweig, Military Governor of Poland, is dead, and it is said that General Abramowitsch has been appointed his successor. The Marquis Wielopolski has tendered his resignation, but it has not been accepted by the Government. The Catholic and Protestant churches and the Jewish synagogues still remain closed, but the negotiations for reopening them continue. The people pray before the doors of the churches. National songs are no longer sung. Several members of the committee which conducted the funeral of the late Archbishop of Warsaw were arrested on the 25th. Among them were two priests, named Wifzynski and Steck. Among the other persons arrested are MM. Schlenker, Beyer, Hispanski, Probst, and Wyssynski, members of the late delegation of citizens of Warsaw, and two Lutheran ministers.

TURKEY.—The Porte is about to address a note to the European Powers, explaining the differences which exist between the Turkish and Servian Governments.

SERVIA.—The *Official Journal* of Belgrade publishes a note stating that the excitement which prevails in Servia is caused by the encroachments of the Porte on the rights granted to the Servians and the presence of a Turkish army on the frontiers of Servia. The note concludes by saying that "The Servian Government only aims at the protection of the rights of the country and the removal of the obstacles which stand in the way of a good understanding between the Porte and Servia."

THE PRINCIPALITIES.—Prince Couza has addressed a note to the Porte, reiterating his demand for the definitive union of Moldavia and Wallachia. Another conference is expected shortly to be held on the subject.

MONTENEGRO.—A despatch from Ragusa, dated the 27th inst., says that the insurrection in the Herzegovina is spreading. The insurgents from Zubzi, with Montenegrins from Grahovo, have invaded Schuma. Fighting has been going on there for several days. The communications between Trebigne and Belgrade are interrupted. The inhabitants are taking refuge in Austrian territory. On the night of the 26th a bloody encounter took place between the insurgents and the Turkish troops, in which the latter sustained heavy losses. The insurgents are advancing against Popovo. Turkish reinforcements have been despatched to Trebigne.

INDIA.—By the overland mail from Calcutta we have news from that Presidency to the 23d September. Lord Canning will not leave India till March. Cholera is disappearing in the Punjaub. The country has been flooded from Benares to Agra. The greater part of Rampore Beauleah, lower down the Ganges, has been washed away. The invalids and pensioners of Chunar have been driven out of their houses by the inundation. Dr. T. Anderson has been sent to Java, to procure specimens of the quinine-yielding Cinchonas for India and Ceylon. In all parts of India the greatest efforts are making by the native growers to supply the demand for cotton. In the districts watered by the Godavery, the area devoted to the growth of cotton has been much increased in consequence of the facilities now offered of conveying the commodity in barges to seaport towns for exportation. Steamers are also established on the river, and cotton can now be conveyed by water from Berar to Coringa. It is stated that Lord Canning will pay a visit to the Godavery. The ex-King of Delhi, Bahadur Shah, is dying at Rangoon.

JAPAN.—The British Legation was still at Yeddo on the 25th of August, but it was understood that Mr. Alcock and M. de Bellecourt were about to take up their temporary residence at Yokuhama, pending the construction of two new residences to be built upon a site in the neighbourhood of the present Legations, but capable of being strongly fortified. The Japanese Government have agreed to construct the works necessary for placing these buildings in a state of defence. In the meantime, the British Legation has worn all the aspect of a place in a state of siege. Five hundred Japanese soldiers and 30 Marines from the flagship Impérieuse form the permanent guard, and three separate lines of palisades have been constructed round the temple which has hitherto formed the abode of the British Legation.

CAPE OF GOOD HOPE.—The territory between the Kei and the Bashee will shortly be annexed. Some terrible massacres have occurred between scattered tribes of Hottentots and Kaffirs in No Man's Land. The Cape will not be represented at the International Exhibition of 1862. The Cape Parliament declined acceding to the governor's proposition for a grant of 5000*l.* in aid. The Government Commission accordingly resigned its functions forthwith. The Natal Council, having taken offence at the conduct of the Governor in granting tribal titles under responsible trustees, Mr. Shepstone has dissolved that body, and appealed to the electors. The slave trade on the east coast is said to be much increased by the Emperor Napoleon's scheme of "free emigration" between Mozambique and Reunion. The Livingstone expedition has in consequence of the lateness of the season failed in ascending the Ruvuma. By last accounts the Pioneer, with the missionaries, was on her way up the Zambesi to the Zamba Mountains to select a site for a future mission station. Mrs. Livingstone is waiting at Cape Town for a ship from England to convey her to the Zambesi.

UNITED STATES.—The Federal Government has arrested two British subjects who were passengers by the Great Eastern on suspicion of Southern tendencies. It appears that every steamer which now crosses the Atlantic has on board some spy who takes notes of the conversation of the passengers. One of those now arrested, Mr. W. Forwood, was arrested on his arrival at New York where his person was searched, and his papers read, but nothing being found which could be construed as treasonable, he was liberated. Another gentleman, who was also a passenger on board the Great Eastern, and continued his voyage in the Niagara, was arrested on landing at Boston. Lord Lyons has protested against these arbitrary arrests of British subjects, alleging that the authority of Congress was necessary for such measures. Mr. Seward has replied to the effect that, in the present emergency, all classes of society alike must cheerfully acquiesce in the measures which the safety of the people demanded, and that the British Government would hardly expect the President to accept their explanation of the Constitution of the United States. The New York Banks have offered for the third 50,000,000 dollars of the Federal Loan, and for 100,000,000 dollars of 7 per Cent. Bonds. The Confederates have evacuated Vienna, destroyed the railroad, and fallen back with their entire column on Fairfax Court House. The navigation of the Potomac is almost closed by the Confederate batteries. General Stone crossed the Potomac on the morning of the 21st ult., at Edward's Ferry and Harrison's Island, with 1800 men, and marched in the direction of Leesburg, near which he was met by a large force of Confederates, who repulsed him. An engagement has been fought between the Federals and the Confederates near Harper's Ferry, resulting in the retreat of the latter, with the loss of one gun. There were no killed on either side. It is reported that the Confederates have renewed the attack, and that the fight still continues. It is reported from Missouri that the Confederates have burnt Big River Bridge, and that a body of 6000 Confederates has been defeated, with heavy loss, at Fredericktown. General Price, with 20,000 Confederate troops, has made a stand 25 miles from Osceola, in Western Missouri. General Fremont was preparing to lay a pontoon bridge across the River Osage, for the purpose of crossing it and encountering General Price. It is stated that the Government has resolved to remove General Fremont, and transfer his command to General Hunter. The Confederate force has attacked Wilson's Zouaves at Santa Rosa Island. A Southern account states that the former spiked the guns of the Federals, destroyed their camp equipage, and took a number of prisoners. On the 16th a detachment of 1000 troops from the 13th Massachusetts, Colonel Geary, and a Pennsylvania regiment, crossed the river at Bolivar and attacked the enemy, 1600 strong, driving them back from the river, and capturing a 32-pounder. It is reported that the Federal troops from Kansas have repulsed the Confederates, with considerable loss, near Greenfield. The Governor of Louisiana has forbidden the entry of cotton into New Orleans, whether coming by steamer or railroad. New Orleans has been illuminated in honour of the victory of the Confederate gun-boats over the blockading squadron. A large naval expedition, consisting of from 40 to 50 ships, left for the Southern States on the 11th inst. It is reported that it will rendezvous at Annapolis and embark infantry, cavalry, and artillery before proceeding South. The transports which form part of the expedition have arrived at Hampstead Roads. The steamer Nashville, with Senators Mason and Slidell, as the Confederate Ministers to England and France, on board, ran the blockade at Charleston on the 12th ult. Three steamers have been sent in pursuit [illegible] the Commander of the blockading squadron [illegible] superseded for allowing her to escape. Messrs. Slidell and Mason are not [illegible] negotiate treaties of extraordinary [illegible] tage with France and England, but to [illegible] Confederacy for a limited period un[illegible] The two Ministers were accompanied [illegible] taries and suites, and had everything [illegible] documents and papers that could in [illegible] influence the Powers to which they [illegible] They were expected to land in the West [illegible] ceed to England by British steamer [illegible] letters report that the order relative to [illegible] of prisoners will shortly lead to the dis[illegible] prisoners held both by the Federals and [illegible] Sie James Ferguson and Mr. Burke [illegible] York on the 16th from Manassas. Large [illegible] Northern property have been confiscated [illegible] including two slave estates owned in N[illegible] Boston. Mr. Seward has addressed [illegible] circular to the Governors of those States [illegible] loyal to the Union:—

"The rebels, taking advantage of the [illegible] the rebellion has caused to the agri[illegible] foreign Powers, continue to make renew[illegible] recognition of their independence by [illegible] involve the Federal Government in [illegible] nations. Notwithstanding these efforts, [illegible] of such disturbances is now less seri[illegible] period, but it is necessary to take every [illegible] avoid adding the evils of foreign war [illegible] The most obvious precaution is to put [illegible] complete defence all the ports, harbours, [illegible] Every nation voluntarily incurs danger [illegible] seasons where it fails to show that it has [illegible] the storms which might be possible to [illegible] to provide amply for the fortification of the [illegible] lakes; therefore the Governors are invited [illegible] ject of improvements in the State defences [illegible] of the Legislatures. These measures [illegible] with the concurrence of the Federal Government [illegible] would reimburse the outlay made by the [illegible] the Legislatures accept these suggestions, the [illegible] appoint agents to confer with the Superintendent [illegible] defences."

CANADA.—The examination of Colonel [illegible] ber of the Provincial Parliament, was brought [illegible] on the 12th ult., when he was bound [illegible] trial at the coming assizes. Meanwhile [illegible] dismissed from the Canadian Militia [illegible] Queen's proclamation of neutrality.

MEXICO.—It is reported from Wash[illegible] Mexico has asked the intervention of [illegible] Government for the settlement of the [illegible] European Powers. It has also requested [illegible] Government to become trustee of the Mexican [illegible] and to pay the interest on the capital of deb[illegible] foreign Powers, the Federal Government [illegible] and collecting a sufficiency of funds [illegible] tions of Mexico. The *New York Times* [illegible] circular of Mr. Seward to the Governors of [illegible] the attitude of the European Powers towards [illegible] and says, "We doubt not that the Federal [illegible] would offer armed assistance against [illegible] Spain at the invasion and conquest of M[illegible]

RIVER PLATE.—A battle has been [illegible] the forces of Buenos Ayres, under General [illegible] those of the Central Government, under [illegible] in which the latter was defeated, with loss of [illegible] baggage, and 1500 prisoners. General [illegible] to Corrientes, and General Mitre was [illegible] besiege Rosario.

Public Addresses

THE DUKE OF ARGYLL on Friday eve[illegible] tained by the tenantry on the Argyll esta[illegible] dinner at Inverary, under the presidency [illegible] Dr. Colin Smith, minister of the parish [illegible] of the General Assembly. In returning [illegible] toast of his health, his Grace spoke as [illegible]

"It was his first duty to assure them that [illegible] much gratified by the feeling which had [illegible] him to meet them on this occasion. He [illegible] gratified from the fact that he believed th[illegible] sion on which any such meeting had been [illegible] He did not, of course, put upon that any [illegible] tation. He was not vain enough to [illegible] more affection and attachment from [illegible] lived than other representatives of the [illegible] done in former times. The truth was that [illegible] form of expressing a very ancient feeling [illegible] long been in a state of profound peace [illegible] time for the old feelings created by [illegible] existed between a Highland chieftain and [illegible] retainers to take the more modified and [illegible] relations which now subsisted between [illegible] There were some writers of the present [illegible] science of political economy—who maintained [illegible] much of the old feudal feeling still remaining [illegible] between landlord and tenant. They maintained [illegible] state of things was that it should be [illegible] arrangement, that the landlord should let [illegible] period, and for a certain rent, and that there [illegible] of any other connection than that [illegible] from this business relation between them [illegible] not the place, nor were they the persons [illegible] this question with entire impartiality. [illegible] was his firm belief that it was one of the [illegible] tages of this country that, while there had [illegible] advance from one generation to another, [illegible] were always modified and took the form of [illegible] associations which had descended from [illegible] believed that the feudal element, which [illegible] remain in the ordinary relation between [illegible] was one of the great strongholds of the [illegible] It gave local attachment, and in the strength [illegible] ment and local feeling there was and there [illegible] best security against the inroads of a centralising [illegible] said this, whether they referred to former or to present [illegible]

[illegible] these were away or not, of this he was quite certain, [illegible] of landlord and tenant was not, and could not [illegible] be, one of a merely and purely pecuniary kind. [illegible] they only took the ordinary case of the leases in [illegible], as they were all aware, were run from 19 to 20 [illegible] was a period which, if a man entered upon in middle [illegible] were that he would not see the end of it. And he [illegible] many of those whom he saw now present that [illegible] the smaller class of tenantry who had not, and [illegible] a lease in this country, their tenure had very often [illegible] more permanent than that of those who had had [illegible] were tenants in that room who had been on this [illegible] for many generations—for some centuries, [illegible] time immemorial. The relation between land[illegible] therefore, whether they looked at it with [illegible] the large tenements under lease, or with reference [illegible], was in its nature an almost permanent [illegible] it was impossible that in such a relation there [illegible], and there ought not to arise, feelings of [illegible], and he might say of mutual dependence which [illegible] different from those which sprang from a [illegible] transaction. At the same time the observa[illegible] made upon this subject in the press, or [illegible] political economy, ought to teach them [illegible] the public had an interest in the relations between the landlord and his tenant. Of course, the public had also an [illegible] in the relations which existed between the master [illegible] and his men; and he need hardly tell them that in the present day some very difficult and awkward [illegible] had actually arisen between those who employed [illegible] and those who laboured. But there was something [illegible] of the connection, and in the univer[illegible] and over the whole area of the country, which [illegible] fixed public attention more upon the relations [illegible] and tenant than in the relations between [illegible] labour and it was right and natural that this [illegible], and he thought, therefore, that on all public [illegible] of this sort—agricultural dinners where tenants and [illegible]—they should not merely meet for the purpose [illegible] each other however natural and right such [illegible] might be, but that they should take that opportunity [illegible] to each other and of explaining to the public how [illegible] contributing to the general welfare of the [illegible] performing the duty which lay upon them both [illegible] and as tenants. From the late census it appeared [illegible] the last 30 years the population of the county had [illegible] nearly 26,000 souls being a decrease of very [illegible] per cent. upon the total amount of population. [illegible] had diminished, but not in the same ratio. [illegible] on the shores of the Frith of Clyde having [illegible] very largely increased, they must come to the [illegible] that the decrease in the purely rural and purely [illegible] part of the county had certainly been not less [illegible] 25 to 30 per cent. That was a very remarkable [illegible] he found that, coincident with this decrease of population, there had been an increase in the valuation of the [illegible] a very much larger extent. In the 16 years from [illegible] increase in the value of the county had been no less [illegible] a year, equal to 30 per cent.; and he could not [illegible] doubt that if they took in the other periods from [illegible] 1844 the increase in the value of the county had been [illegible] 50 per cent. Now, what where the inferences [illegible] they were to draw from those curious facts? Un[illegible] an increase in the valuation of a county did not [illegible] an increase in the rents which were derived by [illegible]; it meant increased profits to the tenants, in[illegible] knowledge, increased industry, increased skill; it [illegible], above all, an increased contribution towards that sur[illegible] of human food which went to support the remaining [illegible] of the country. His Grace then pointed out the [illegible] of the proper drainage of the land, and pro[illegible] to say—I hope, although there are some misgivings in the aspect of public affairs at present, that agricultural pro[illegible] may still maintain such prices as fairly to remunerate the cultivator of the soil. We have now learnt, I think all of us, whatever political party we may have formerly belonged to, that we must look for the prosperity of agriculture to [illegible] of the manufacturing industry of the country. [illegible] they are prosperous and the demand is great, [illegible] question whatever that agricultural industry [illegible] prosper and succeed. Unfortunately, it is too true that there are causes at present in operation which seem to cast some gloom over the prospects of the manufacturers of our country, and it is a very remarkable example of the intimate [illegible] which commerce has established between the most [illegible] of the globe that we are now in considerable [illegible] from events taking place many thousands of [illegible] across the great Atlantic. I see that there has [illegible] expressed lately that the inconvenience which [illegible] arise in this country from the contest in America is [illegible] there will be a pressure put upon the Government [illegible] that contest, or at least to take some steps which [illegible] involve us in it. I have too high an opinion of [illegible] and of the public principle of the people of this [illegible] believe that any such pressure will be put upon the [illegible], and I must add that I have too great confidence [illegible] and public principle of the Government and [illegible] of this country to believe that they will be willing [illegible] such pressure, if it were put upon them. It is [illegible] duty, I need hardly tell you, to remain entirely [illegible] that contest; and not only is it our duty to remain [illegible] as regards action, but I think it is, to a very great [illegible] duty to abstain even from offering advice, though [illegible] conceived in a kind and friendly spirit. No good [illegible] can arise from offering such advice as that, for example, [illegible] was lately offered, I have no doubt with the best inten[illegible] by the Emperor of Russia to the contending parties in America. The answer which the Americans will infallibly give [illegible] interference will, however civilly expressed, [illegible] to this—'We are very much obliged to you [illegible] advice. We have no doubt that it is conceived [illegible] spirit and with the best intentions; but there is a [illegible] in this world that every man should attend to his [illegible]; and there is this additional reason for doing so in [illegible] case, that it is quite evident that you don't under[illegible].' That is the answer which virtually the Americans [illegible] given, and which I am convinced they will [illegible] give to all such counsel. Because, after all, the [illegible], gentlemen, that mere general advice to compose [illegible] differences without any specific suggestion as to the terms upon which those differences are to be adjusted, is always held by the Americans to imply indirectly, even though it be not intended, that the objects for which they are contending are either unworthy or at least trivial and unimportant. Now, whatever we may think of that contest, [illegible] to our American friends we ought to admit [illegible] more tremendous issues were ever submitted to the [illegible] arbitrament of war than those which are now submitted [illegible] the American continent. I do not care whether [illegible] from the Northern or from the Southern point [illegible]. Take the mere question of what is called the right [illegible]. I know of no Government which has ever ex[illegible] the world which could possibly have admitted the right [illegible] from its own allegiance. There is a curious [illegible] Loch Fyne which I have sometimes dredged up [illegible] the bottom of the sea, and which performs the most [illegible] and unaccountable acts of suicide and self-[illegible]. It is a peculiar kind of starfish, which, when brought up from the bottom of the water, and when any attempt is made to take hold of it, immediately throws off all its arms, its very centre breaks up, and nothing remains of one of the most beautiful forms in nature but a thousand wriggling fragments. Such undoubtedly would have been the fate of the American Union if its Government had admitted what is called the right of secession. Gentlemen, I think we ought to admit, in fairness to the Americans, that there are some things worth fighting for, and that national existence is one of these. And then, gentlemen, if we go to the South, if we look at the matter from the Southern point of view, difficult as it may be for us to do so, I must say also that I am not surprised at their conduct. If they believe—as they loudly proclaim that they do believe—that slavery is not an evil which is to be tolerated only and brought to an end as soon as possible, but a Divine institution for the benefit of mankind, to be maintained, and if possible extended, and which if it is assailed, even in a single outpost, must be defended to the death, then, even though the citadel of slavery be not assailed, but only an important outwork, then it is but natural that the South should rise in its defence. But of course in this, as in all other revolutions, those who take part in them must be judged finally by the moral verdict of mankind upon the justice of the cause which they have risen to assert. But whatever may be our private sympathies, we as a nation must take no part whatever in the contest. Most earnestly do we trust and pray that it may be brought to a speedy end; and yet I confess that there is another wish which I think in our mind ought to stand even before this one, and that is the wish that the end of this war, whenever it does come, be it soon or late, may be such as shall be worth the sacrifice and the cost—such as shall tend to the civilisation of the world, and promote the cause of human freedom."

The Bishop of Oxford attended a meeting at Derby last week in aid of the Society for the Propagation of the Gospel in Foreign Parts, and made the following remarks on the Slave Trade:—

"The Society for the Propagation of the Gospel in Foreign Parts was one which had especial claim upon the sympathy and support of Englishmen, because it was itself intimately connected and bound up with the church, for, whereas every other missionary society in this country, whether connected with the church of England or not, selected the missionary publications which their missionaries circulated, by means of a committee, that committee might at any time, being a changing body, cease to represent the church of England; but in the case of this Society every ordained missionary must be examined by a board of clergymen, appointed from year to year by the two Archbishops and the Bishop of London. The greatest care was, therefore, taken to exclude the possibility of this Society becoming separated in any way from the church of England. The only exception to that rule was, that if a colonial bishop wanted to make a selection of clergymen from his own diocese to assist him, he could do so, but not through the agents of this Society. Another reason why this Society was peculiarly deserving of support was that it was one of its essential principles that wherever God in His providence had connected this land of theirs with any distant part of the earth, that connection constituted a claim upon this Society, which must be satisfied before missionaries were sent out to other places having no such connexion. The Society wisely said, 'Let us, in the first place, supply new plantations formed by men with British blood flowing in their veins, with that great boon, the blessed Gospel of Christ, before we attend to the wants of others.' Some might think that missionaries were not required to be sent to colonies of that description; but when our missionaries went forth to North America they found a settlement composed of men of British birth, who being altogether neglected in that wilderness of the world, had so lapsed into heathenism that they had forgotten what day of the week was the Lord's Day, and they had given up altogether the habit of giving Christian names to their children, so swallowed up were they in evil through continued neglect of Christian ceremonies. Remember that a lapsed Christianity was the very worst form of heathenism, and it was better that a man should never have tasted of the waters of the well of truth, than having once done so should have turned aside. It was to be remembered, too, that emigrants were among the poorest class of the population, and of necessity had to go through great struggles when they had reached the land of their adoption. There was the frowning forest to be cut down, those terrible roots to be eradicated from the earth, and the reluctant ground itself required to be conquered, the hostile tribes guarded against, and before the ground began to yield its increase there was that terrible period to be gone through which had been well described as the starving time of the colony. In a state of society like that it was hardly to be expected that there could be much provision made for the preaching of the Gospel and the administration of religious services by the emigrants themselves; besides which, they had not the means to do it, being scattered over a wide extent of country; but just as the mother country sent out the men who carried with them the principles and institutions of Britain and spread them abroad in distant lands, so was the mother country morally bound to send out to them the seed of the Gospel and to spread it abroad in every country in which Englishmen or their descendants were to be found located. It was to be remembered that whenever the people proceeded to a new colony they carried with them the inalienable rights of the old country, and it was one of the most precious of those rights that they should have the Word of God preached, and the Sacraments administered to them. In olden times, when Christianity was instituted, its truth was attested by miracles, for the purpose of forcing it upon the attention of the nations; but at the present time Christian nations have attained the foremost place on the earth, and miracles were no longer required to make the heathen give ear to what the Christians preached, or to add lustre to the preaching of the Word. The evil lives of professing Christians was one of the great drawbacks to the acceptance of the Gospel among savage nations, and therefore above all it was necessary that they should first thoroughly Christianise their own people. We should not however stop there, but having first Christianised our own colonies we should carry the truth into heathen lands; and to no country should our attention be more turned with respect to missionary enterprise than to Africa. It had always seemed to him that Africa possessed paramount claims on British Christians. It might be that he was prejudiced by hereditary considerations—but it did seem so for this reason. The curse of Africa had been the slave trade, in the guilt of which this country had so largely participated. Perhaps that curse did not fall so heavily upon the poor wretches who were taken from their country as upon those who were left behind, for the survivors at least were brought into connection with Christianity, while those who died in the horrors of the middle passage passed from pain and trouble in this world; but it was to Africa itself that the deepest wrong was done by Englishmen, who taught the African savage to look upon his brother, his friend, or his neighbour as a chattel, whom if he could he might enslave and sell in order to furnish himself with luxuries which he coveted, and especially did they teach the chieftains to make war on neighbouring tribes, to go at night and set fire to their villages, and when in their terror the wretched inhabitants ran out to escape the flames, to seize men, women, and children, carry them down to the sea coast, and sell them. He affirmed that it was the Christian English who taught the African chieftains to do that, for the researches of Dr. Livingstone had proved that the further they passed the black line of the African slave trade, and proceeded into the interior of the country, the higher the natives rose in the scale of civilisation, and that the very lowest tribes were those on the slave coast. That then was the work of British Christians, driven by that love of gain which must always more or less distinguish every great commercial country. Thank God, that horrible trade was no longer legalised. All good men long protested against it, and England had spent her money to put an end to it; but something more remained. The effect of the slave trade did not cease with its extinction. If there was any one thing in this world more certain than another it was that national sins entailed national punishment. They were taught that individual sins, if not punished in this world, would be in the next, but as there would be no national existence in the world to come, it followed that there would be no national punishment [illegible]; and accordingly they always found that nations were punished in this. There was but one way of atoning for such sins, and the only way to avoid the entailment of a curse upon the children of those who were guilty of national sin was not only to discontinue it, but to destroy the vicious principles by spreading abroad the truth of the Gospel in the land in which the incitement to sin was created. It was for this reason that Englishmen were bound to send out missionaries to the southern part of Africa; and there was every reason to believe, from the report made by the Governor of the Cape, Sir George Grey, that they would find in Africa a race of men far superior in intellectual capabilities than had ever been known before, and it would indeed be a great and glorious triumph if they could Christianise that portion of the African continent. He pointed out also the large district of the Orange River which afforded so extensive a field for missionary enterprise, and mentioned the fact that an application was recently made by the King of the Sandwich Islands to the Archbishop of Canterbury to establish a central English missionary depôt in those islands for the purpose of Christianising the population of the whole of the islands of the South Pacific, and the application had been made in consequence of the great effect produced by the efforts of the French Roman Catholics in the Sandwich Islands. The Emperor of the French had recently made a present worth 10,000*l* to the King of those islands, and there could be no doubt whatever that unless some additional efforts were made the Roman Catholics would be successful in their efforts to convert the whole population to their church. The Bishop concluded by appealing to the meeting to aid and support the Society in its efforts to disseminate Christianity in connection with Protestantism."

The Right Hon. C. P. Villiers, M.P., at the annual dinner of the Licensed Victuallers Society at Wolverhampton, in returning thanks for the toast of the borough members, spoke as follows on the Temperance question in relation to the interests of the Licensed Victuallers:—

"He had given great attention to the interests of their society, for he was, not of his own choice, deputed to preside over an inquiry having an important bearing upon their business. He did in that capacity what he believed to be his duty—received evidence impartially from all sides, and expressed in the report the opinions of the members of the committee. From that circumstance he obtained considerable insight into the business with which they were connected. He was extremely glad to find that one of the objects of the society was to exercise a sort of watchfulness over the conduct of the members of the trade, which greatly redounded to its credit and which was calculated to raise the character of their business. It was impossible to disguise from themselves that there was a very important movement going on in the country, which he might call not only a great but also a generous movement, and one which would enlist the support of most enlightened and benevolent people, since its object was to improve the habits and elevate the character of the poorer classes. It was impossible to disguise from themselves that there was a great concurrence of testimony in favour of the view that many of the misfortunes of the poor could be traced to intemperance, and he certainly shared that opinion, and, from the office he held, he had constantly brought before him proofs of that fact. He certainly thought those persons did great good who encouraged the humbler classes to be temperate in their habits, and when he said that he was decidedly friendly to these views he had yet to learn that he was saying anything opposed to the views of the assembly. All sorts of things were said against the interests of licensed victuallers, but he must say that he never thought they were otherwise than the enemies of intemperance. He said that from evidence brought before the committee to which he had alluded, and which had placed him to some extent in a position of hostility to that body. It was stated in evidence before the committee that no class had so strong an interest in discouraging excess, intemperance, and disorder as the licensed victuallers themselves, since discredit was thus brought upon their business and their capital jeopardised, and that they were perfectly ready to submit to any regulation which the committee might suggest calculated to prevent excess and disorder. It was further stated that one of the most important regulations passed of late years for the preservation of order and the discouragement of excess proceeded from the Society of Licensed Victuallers in London. That was an Act passed requiring all houses to be closed on Saturday night at 11 o'clock until Sunday afternoon, previous to which they could be kept open during the whole of Saturday night; and a regulation more calculated to promote the good order of towns, and discourage intemperance, was never passed by the Legislature. It was well known that before the passing of that Act, at seaports and in all large towns men went into public-houses on Saturday nights; the publicans could not clear their houses, which were often open for the whole night, and men were lying about the streets the next morning in a state which was the greatest scandal, and scenes the most disgusting were exhibited, and it was highly creditable to the licensed victuallers that they promoted the passing of a law which did so much to prevent intemperance and restore public order by taking away a great temptation to excess. He referred to that to show that the licensed victuallers did not differ from him in desiring to do everything calculated to discourage intemperance. They rather required more power to enforce the law against disorderly customers than they at present possessed, and they were at one with those who desired to discourage intemperance, and the only question which appeared to arise on which any difference of opinion existed among enlightened men was as to the means to be used in order to attain this result. One set of persons desired instant legislation to prevent intemperance; others wished to rely on moral influences to achieve that end rather than legislation, which would probably lead to great differences of opinion, and might ultimately cause considerable reaction. A large section of the community required an Act of Parliament to be passed to stop the traffic in liquor, while those who did not go with them that far said that they would rather trust to the gradual operation of those influences which had done, and were doing, much to improve the character and habits of the population. Although there was such an outcry against drunkenness, there was much less of it than formerly. In the last century, and the first quarter of the present, the power to drink and get drunk was a sort of proof of gentility; and the saying was not yet forgotten, though no longer applicable, 'As drunk as a lord.' When he was at college he

never remembered an instructor who had taken the pledge, but he had heard of many who had taken two bottles of port, and any young man who was not ready to drink and get drunk would have been thought to be a gentleman of very slow tendencies. That state of things was changed. It was no longer genteel to be intemperate; and might they not anticipate that, by the influence of example, the spread of education, and other means, the improvement in the upper classes might descend to the lower? And there were already numbers of artisans who regarded drunkenness as much a disgrace as it was felt to be in the higher classes of society. In speaking on that question he feared he was trespassing on the borders of politics; but as the question was not before Parliament, and so far as he was aware was not likely to be during the next Session, he could not help, in the exclusion of other topics, referring to it. In the middle of the last century an Act was passed prohibiting the sale of spirits, and the result was that 12,000 or 13,000 persons out of the smaller population then in the country were sent to prison for violations of the excise laws—which was an illustration of the failure of laws not supported by public opinion, and which were felt by a part of the community to be unjust and unfair. A violent reaction would not be improbable, and as long as wealthy persons had their cellars stored and their tables loaded with that generous wine of which they were then partaking, they could hardly pass an Act of Parliament to stop the sale of it. When those who advocated abstinence went to the Legislature, they must be prepared to apply the prohibition to the wealthy before they would have much chance of adopting it in reference to the humbler classes. He would not detain them further, as he was happily precluded from indulging on the topics which were at the tips of the tongues of members of Parliament—the Americans, the Italians, the coronation of the King of Prussia, or the new Educational Minute—and would only again thank them for the kind manner in which they had recognised his presence and that of his hon. colleague."

Mr. Murray, M.P., on the 24th ult., at a dinner given by the Mayor of Newcastle-under-Lyme, spoke as follows on the new Bankruptcy Bill, of which Mr. Jackson, M.P., had previously expressed his belief that "it would never have been carried save for the untiring efforts of Mr. Murray":—

"The Bankruptcy and Insolvency Act is not what I should have liked; but there it is—there is an instalment—and we must take it as far as it goes. It was introduced for the purpose of saving expense and giving creditors immediate control over a bankrupt's or insolvent's estate. In point of fact, as I ought to have said at the outset, it abolishes the distinction between traders and non-traders. In Scotland they have abolished that for a long time; it is now abolished in England. It was thought the great fight upon the Bill would be whether non-traders would like to be made bankrupts. It was thought the House of Peers would, in the exercise of their judgment, decide against that doctrine—that they would decide that non-traders ought not to be made liable to bankruptcy. I am very happy to say the House of Lords never discussed or showed any doubt upon it. It was very clear that the country had arrived at the conclusion that there could be no longer any distinction between insolvents who could not pay their debts and the bankrupts who could not. I could never understand myself why there ought to be a distinction. The Bill went up to the House of Lords, and their lordships were pleased to refer it to a select committee. The committee did not think it necessary to call evidence, but they altered the Bill *in toto*. They simply said, "You shall not have a judge, you shall have commissioners, you shall have the official assignees; and the creditors shall do no more than we like." Well, this principle the then Attorney General, now the Lord Chancellor, said was annihilating the Bill. The different Chambers of Commerce, and the various large manufacturing houses in the large towns, were decidedly opposed to this alteration of the Bill, and the result was it came back to the House of Commons, and now the Bill stand just as it originally stood when it went from the Commons, with this exception—the House of Lords would not have one judge and five commissioners in London. Well, the House of Commons being very economical, it was thought a little too much to have five commissioners there and a judge. There was no earthly necessity for it; it was never intended; but when you have five gentlemen with 2000*l*. a year each, how can you get rid of them? There they were, and you could not move them, and so the five commissioners succeeded—the judge was annihilated. I took the liberty of opposing that, and my hon. colleague was also of the same opinion that the judge was necessary; but we were defeated. In the next place I had the misfortune to differ with the Lord Chancellor. In his first Bill he was willing to give official assignees 800*l*. a year; but in the second Bill he introduced the salary was raised to 1200*l*. I opposed this on the simple ground that to give those who were employed to collect debts under 10*l*. a salary of 1200*l*. a year was just the way to prevent them working, and those who would might collect the debts. I do not blame a man for getting 1200*l*. a year for doing nothing, if he can. Very well; this is just the position. They are to have 1200*l*. a year, and are to get in debts under 10*l*. in London; and in the country they are to have 1000*l*. a year to do the same thing. I had the satisfaction of being supported by the hon. member for Cambridge, who was chairman of the Royal commissioners appointed to inquire into the working of the bankruptcy laws eight years ago, but the pressure from without was too powerful, and the Lord Chancellor told the House that he had made his bargain and must adhere to it, and though he perfectly agreed with everything that was said, they must have their pound of flesh, and so they got it. This, I think, is wrong, and cannot last. I think in a short time the trading community will find out that it is not worth their while to pay gentlemen a salary of 1200*l*. and office expenses—whatever they may be no mortal man knows. Well, then, there is another thing with regard to the reduction of expenses. The Lord Chancellor deserves every credit that can be accorded to him for his exertions in this particular. No man has worked harder, and with a more sincere and anxious desire to remove the difficulties, and give the mercantile world a good, cheap bankruptcy law. He has succeeded in abolishing all fees and per-centages. The court fees amounted to something like 30,000*l*. a year. He has reduced the messengers to 500*l*. per annum in London, and 400*l*. in the country. He has on vacancies reduced the official assignees from 18 to 7, and the messengers to one each court. The brokers of the court are abolished, and here is a saving of 5000*l*. yearly. Further, the practice of excepting articles for a bankrupt is set aside, and this is also a saving. Altogether, according to a just estimate, the saving he has effected will amount to something like 100,000*l*. per annum, as near as I can guess. Well, having reduced the expenses as far as possible, the next thing was how to punish fraudulent debtors. There are some clauses very stringent, and I hope these will be of service. It is no uncommon thing—it has been my misfortune to hear of it and know of it—for a man to buy goods and pledge them; to trade upon what is called fictitious capital; to get into debt without prospect of paying, and to be made bankrupt, laughing in the face of his creditors, whom he leaves to make the best of it. There is a clause to prevent this by providing for the punishment of this species of offence three years' imprisonment; and for having been guilty of rash expenditure one year's. Of course, it is right a man should be tried. With all respect to the commissioners in bankruptcy, I was unwilling that a man charged with these offences should be tried without the intervention of a jury. I like a jury to arrive at facts. I think they can assist most materially in the administration of justice. I think a jury of tradesmen and merchants are well able to decide on the transactions of a trader or a merchant who may be suspected of having disposed of his goods to defraud, and to see if he be honest; and on their decision the law should take its course, and the hon. and learned gentlemen who have its administration should simply pass sentence. There are a great many more clauses that I do really and sincerely hope will be of great advantage to the commercial community. I am pleased to say it is now the bounden duty of the commissioner to send into the country, upon application, a registrar to take evidence and proofs of debts. I never could understand why half a dozen men—creditors, assistants, solicitors, shopmen, servants, witnesses—were obliged to go to the district town at an enormous expense simply to go before one individual, and I have struggled hard to remedy this anomalous state of things. It is now pretty well understood that an officer of the district court is bound to send his registrar, upon a proper representation being made, to where the creditors reside, where the witnesses are, where the trader lives, and investigate all the facts. It is most absurd to say that in order to prove a case you must send dozens of men to Birmingham, when one man, one registrar—a man with a good salary—could so much more readily and cheaply come to you. There is another useful thing. Before official assignees were created, it was customary for the creditors to take and keep the money, and do what they pleased with it up to the time they were called on to give an account of it. Well, I thought if you give a man 1200*l*. a year, give him something to do for it; and the best thing is to let him look after the assets, see what becomes of them, and see them properly placed in the bank. It is now arranged that the official assignee shall discharge this duty."

City Intelligence.

Money Market, Friday.—British Funds: The 1st of November, being the day for the half-yearly balance at the Bank of England, the transfer offices were shut to-day, and there was no attendance at the Stock Exchange. On Thursday Consols closed at 93¼ to ⅜ for Money, and 93½ to ⅝ for the Account; Bank Stock, 229 to 231; Reduced and New Three per Cents., 91½ to ⅝; India Stock, 224 to 226; India Five per Cents., 105⅛ to ¼; Rupee Paper, 98 to 105; India Bonds, 11*s*. to 15*s*. pm.; Exchequer Bills, March, 5*s*. to 8*s*.; June, 13*s*. to 16*s*. pm.—Foreign: Belgian Four and a Half per Cents., 92½: Buenos Ayres Deferred, 29; Brazilian, 92½; Mexican Three per Cents., 28; Venezuela Three per Cents., 21 to ⅝; Portuguese Three per Cents., 47¼; Sardinian Five per Cents., 82; Spanish Three per Cents., 50; Turkish Six per Cents., 79¾; Ditto New, 68⅛; 100*l*. Bonds, 69¼ to 70¼; Ditto Four per Cent. Guaranteed, 102 to 101⅝; Italian Five per Cents., 67½.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£28,082,190	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion	13,432,190
		Silver Bullion	—
	£28,082,190		£28,082,190

BANKING DEPARTMENT.

Proprietors' Capital	£14,553,000	Government Securities (including Dead Weight Annuity)	£11,953,001
Rest	3,128,195	Other Securities	16,655,416
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	3,783,625	Notes	7,180,000
Other Deposits	14,329,182	Gold and Silver Coin	786,412
Seven day and other bills	780,827		
	£36,574,829		£36,574,829

31st day of Oct., 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY—BANKRUPTS—J. Abraham, Dunstable, Bedfordshire, Straw Hat Manufacturer—F. W. Astles, Smethwick, Staffordshire, Schoolmaster—J. Austin, Kippay, Yorkshire, Maltster—R. Bacon, Blackmore, Essex, Publican—J. S. Beale, Paddington Green, Surgeon and Apothecary—T. Bell, York, Chemist and Druggist—F. Billington, Cheapside, Keeper of Dining Rooms—W. Burgess, Sussex Street, Pimlico, House Agent—E. A. Colwell, High Holborn, Milliner—M. Copplestone, Barnes, Surrey, Wine Merchant—F. H. Deakins, Ledbury, Herefordshire, Licensed Victualler—N. H. Delamere, Liverpool, Commission Agent—A. S. Denny, Dean Street, Oxford Street, Engineer—I. Dickinson, Bennington, Hertfordshire, Baker—W. J. Dickinson, Friar Street, Blackfriars Road, Coffee House Keeper—G. H. Dixon, Newcastle-upon-Tyne, Coal Merchant—J. Forster, King's College Road, St. John's Wood, Commercial Traveller—S. Froud, otherwise called J. E. Froud, Lansdowne Road North, Notting Hill, Builder—J. Fyffe and W. T. Fyffe, Deptford, Lightermen—M. Hardman, Patricroft, Lancashire, Tailor—G. H. de S. N. P. Harrison, Kensington Gardens Square—J. Hawthorn, Burslem, Staffordshire, Builder—T. Headland, Bermondsey New Road, Leather Seller—R. Hodson, Marlborough Road, St. John's Wood, Secretary to an Insurance Office—W. Howitt, Ravenscourt Cottages, West End, Hammersmith, Carpenter—S. Hulston, Birmingham, Pocket Book Manufacturer—J. Hunter, Kentish Town, Gentleman—T. Hunter, Baring Street, New North Road, Hoxton, Linendraper—T. Isth, Litchurch, Derbyshire, Journeyman Carpenter—J. Jolley, Liverpool, Clothier—H. Kinzett, St. John Street Road, Clerkenwell, Artificial Florist—A. Leman, Liverpool, Ale and Stout Store Keeper—J. B. Mercer, Bath, Carpenter and Builder—A. Newton, Curzon Street, Mayfair—J. Outhwaite, Goole, Yorkshire, Journeyman Joiner and Model Maker—E. Outhwaite, Leeds, Journeyman Plumber and Glazier—S. Outhwaite, Middlesborough, Yorkshire, Butcher—I. Pentecost, Lewisham Street, Westminster, Beershop Keeper—J. Perkins, Angel Court, Skinner Street, City, Journeyman Printer—W. Plimley, Shepherd's Bush, Market Gardener—W. T. Powell, Tenbury, Worcestershire, Draper—John Wood Prentis, Birmingham, Grocer—Thomas W. T. Prescott, Bryanston Street, Portman Square—T. Quinn, Liverpool, Draper—S. Raven, Douglas Road, Islington, Solicitor—T. G. Rider, Albion Place, Camberwell New Road, Leather Merchant—C. Routledge, Lower Sydenham, Kent, Brickmaker—H. P. Simonds, Charles Place, Hertford Road, Kingsland, Goldbeater—W. T. Smith and W. H. Smith, Sedgley, Staffordshire, Mine Drainers—G. H. Smith, North Perrot, Somersetshire, Twine and Web Manufacturer—E. B. Smith, Woodcote, Epsom, Horse Dealer—C. Springmann, Newcastle-upon-Tyne, Shipbroker—S. Stanger, Church Street, Bethnal Green, Grocer—T. Taylor, Darlington, Durham, Miller—J. C. Tingle, Thame, Oxfordshire, Brewer—J. Todd, Exmouth, Devonshire, Gentleman—J. Vickers, Aubrey Road, Notting Hill, Commission Agent—W. Walker, Walsall, Staffordshire, Harness Maker—J. Wilds, Carlton, Yorkshire, Dealer in Flax and Potatoes—H. Worthington, and W. Gillibrand, Guide Lower Darwen, Lancashire, Cotton Manufacturers.

FRIDAY—BANKRUPTS—T. Allwood, now of Nottingham, Farmer—R. Ashbee, Oxford Street, Islington, Metal Merchant and Commission Agent—H. J. Barker, St. Alban's Place, Haymarket—J. Barker, Horsforth, Yorkshire, Cloth Manufacturer—P. Berrell, Moor Place, Kennington Road, Surgeon—A. Bertram, Newcastle upon Tyne [illegible]
R. H. Belson, Norwich, Plumber and Glazier—W. [illegible]
bridge Terrace, Edgware Road, Surgeon—G. Cartwright [illegible]
Butcher—W. H. Chapman, Garway Road, Westbourne [illegible]
Stable Keeper—R. L. Colley, Barnsley, Yorkshire, [illegible]
G. Cox, Barbican, Optician—R. Dickens, Yarwell, [illegible]
Wheelwright—J. Fisher and J. M'Lean, Reigate, [illegible]
Foley, Clifton Crescent, Asylum Road, Old Kent [illegible]
Frearson, Brewer Street, Somers Town, Draper [illegible]
dilly, Eating House Keeper—H. Gosling, [illegible]
—H. Goulder the younger, late of Kimberley [illegible]
aker, Leeds, Woollen Cloth Manufacturer—W. [illegible]
Wine Merchant—T. Harris, Gloucester Street [illegible]
N. Hart, Cransford, Suffolk, Farmer—R. H. [illegible]
Bar, Licensed Victualler—E. Hopewell [illegible]
Agent—J. Howick, Weymouth Terrace, H[illegible]
Hutton, Westbourne Grove Terrace, B[illegible]
Missionary Place, Walworth, Commission A[illegible]
Road, Bermondsey, Baker—J. Lamb, Nottingham [illegible]
Lamprell, Long Lane, City, Carpenter—W. A[illegible]
Stepney, Commercial Traveller—J. L[illegible]
Fuller—B. Levinsohn, Church Street, Sh[illegible]
Hoxton Old Town, Timber Merchant—J. A[illegible]
master—R. Mansfield, Manchester Lith[illegible]
Stafford, Schoolmaster—J. Marshall, C[illegible]
China Dealer—F. M. Mercier, Midhurst, [illegible]
W. Mobbs, Ponsonby Place, Westminster, [illegible]
W. J. Nicholls, Milk Street, City, Trimming [illegible]
Goswell Road, Clerkenwell, Pork Butcher—C. [illegible]
Southwark, Butcher—D. Nutchey, Beverley, [illegible]
veyor—W. Pearson, Manchester, Baker—W. P[illegible]
and Patentee—W. T. Powell, Tenbury, W[illegible]
Rault, Holborn Hill, Yeast Contractor—T. R[illegible]
Yarn Doubler—G. P. Skinner, Peckham Rye, [illegible]
Acton Green, Middlesex, late Grocer—T. S[illegible]
Minories, Licensed Victualler—C. Terry, [illegible]
—L. P. Thomas, St. George's Terrace, Kilburn [illegible]
Dorsetshire, Boot Maker—G. Upton, Manchester, [illegible]
Church, Lancashire, Joiner and Builder—M. [illegible]
Licensed Victualler—W. Wild and J. Bowker, [illegible]
Manufacturers—B. Williamson, Providence St[illegible]
Dealer—W. Willison, Stamford, Printer.

Metropolis and its Vi[illegible]

Opening of the Middle Temple Library.—[illegible] Thursday afternoon the new Library, which [illegible] in course of erection since 1858 on the [illegible] the Middle Temple, was formally opened by [illegible] of Wales, with all the ceremony and [illegible] the Benchers could give to the occasion. The [illegible] courts leading from Fleet Street to the [illegible] covered with tents and awnings, adorned with [illegible] flowers and mirrors, and brilliantly illuminated [illegible] gas pendants. On the arrival of [illegible] which took place punctually at the appointed [illegible] 2 o'clock, his Royal Highness was received [illegible] Treasurer, Mr. Anderson, Q.C., and the [illegible] General of the Duchy of Cornwall, Sir W. [illegible] Q.C., who conducted him to the Parliament [illegible] where the Lord Chancellor, the Vice Chan[illegible] the Judges, and the Benchers, had already [illegible] the guard of honour, consisting of 80 rank [illegible] the Inns of Court Volunteers, presenting arms [illegible] band playing "God save the Queen." The [illegible] were first presented in due form, after which [illegible] representatives of the barristers, Mr. E. F. M[illegible] Mr. H. W. Bush, and two representatives of the stu[illegible] Mr. Wotherspoon and Mr. Bullen, together [illegible] Mr. Abraham, the architect of the [illegible] also the honour of being presented. A [illegible] ment was then formed of the Benchers [illegible] when the Treasurer moved, and the Lord Chan[illegible] seconded, first, "that his Royal Highness [illegible] mitted a member of the Middle Temple;" [illegible] next "that his Royal Highness be called to the [illegible] of the outer Bar, and that the oath, on pub[illegible] the Call, be dispensed with." Both [illegible] carried unanimously, and the Prince was inves[illegible] the Bar gown and subscribed the Call Book [illegible] next moved by the Treasurer, and seconded [illegible] Lord Chancellor, "that his Royal Highness [illegible] to the Bench." This motion was also agreed [illegible] the Prince assumed the Bencher's gown, [illegible] seat as a Master of the Bench, at the right [illegible] Treasurer. The new Bencher then next [illegible] the Parliament do adjourn, and proceed [illegible] Library." A procession was then formed [illegible] Library, the Prince of Wales and the Treasurer [illegible] the way, the Lord Chancellor and the [illegible] Cambridge next, and the other Benchers [illegible] following in their order of precedence. [illegible] the passage down the corridor and along [illegible] terrace was by this time densely crowded [illegible] Library it was with some difficulty that a way [illegible] clear from one end to the other. On arriving [illegible] Library, the Prince took his station on the [illegible] bay window, and the Treasurer read an [illegible] thanking his Royal Highness for the honour [illegible] conferred upon them, and expressing the [illegible] that the enrolment of his Royal Highness [illegible] their body would animate them all with [illegible] to uphold the dignity of the profession [illegible] the high character of their ancient society [illegible] address his Royal Highness read the following [illegible] a clear, firm tone, which, notwithstanding [illegible] state, was audible nearly all over the room:—

"Gentlemen,—I thank you most cordially for [illegible] and for the gratifying terms in which you [illegible] presence here to-day. I have gladly accepted [illegible] and esteem it a high privilege to be enrolled [illegible] Benchers, and permitted to inaugurate the [illegible] beautiful Library, so worthy of your ancient [illegible] society. Although but very imperfectly acquainted [illegible] noble science to the study of which this [illegible] specially devoted, I am deeply sensible of its [illegible] importance, and I value, as they deserve, the [illegible] integrity for which the Bench and Bar of this [illegible] justly celebrated. Your Inn has contributed [illegible] long array of illustrious names which adorn [illegible] and while heartily congratulating you on the [illegible] this great work, I venture to express a fervent [illegible] students within its walls may largely profit by the [illegible] so wisely and liberally provided for them, and may [illegible] emulate the fame of their eminent predecessors."

The Prince then signified his pleasure to the [illegible]

that the Library be opened, and the Treasury said, "By command of his Royal Highness this Library is declared to be opened." This concluded the two ceremonials, which together did not last more than half an hour, and the procession left the Library in the same order, and went to the Temple Church, where there was a special service, drawn up by the Master, Archdeacon [illegible]. The fine choir of the church chanted the [illegible] and 72d Psalms, and Handel's anthem, "Zadok, the Priest," was given with great effect. The church, like the library, was filled in every corner. At 4 o'clock about 750 guests sat down to the *déjeûner*, which was in fact a sumptuous banquet. In the hall there was not room for more than 250, including the guests on the dais; the rest were accommodated in a canvas pavilion adjoining, under the presidency of Sir Lawrence Peel. The Treasurer was in the chair in the Hall, having the Prince on his right and the Duke of Cambridge on his left hand. In addition to the judges and other guests who had been present at the opening of the Library, Lord Brougham and the Bishop of London joined the company at dinner. The gallery over the screen was crowded with ladies. As previously arranged, there were no speeches. The Treasurer gave, in rapid succession, "The Queen," "The Prince Consort," "The Prince of Wales," "The Duke of Cambridge, and the rest of the Royal Family," all of which were duly honoured. The Prince of Wales then rose and said,—Gentlemen, I wish all prosperity to the profession, and I beg leave to give you "Domus." The speech and toast, it is needless to say, were received with great enthusiasm. Shortly afterwards the Prince left the hall, accompanied by the other visitors, and took his departure for Windsor, after expressing to the Master his high gratification at the events of the day. The festivities were brought to a close by an evening *conversazione* in the Library, where there were arranged, under the superintendence of Professor Pepper, a great variety of scientific objects and works of art, which attracted great attention. The little Garden with its fountain, arcades, and masses of pompones, was illuminated by the electric light, and was never without its crowd of promenaders.

THE LOSS OF H.M.S. DRIVER.—A court-martial was held at Halifax on the 30th September, to try Commander Nelson and the officers and crew of the Driver, for the loss of that vessel. It appeared from the evidence that the accident took place just before dusk, in clear weather and calm water, that the sunken coral reef showed no breakers, and that the distance of the land in sight had been misunderstood. The Court sentenced Commander Nelson to be severely reprimanded, and admonished to be more careful for the future; and the master, Mr. Dowling, who had charge of the watch, to lose all seniority in his present rank, and to be severely reprimanded, and admonished to be more careful for the future.

NEW DRINKING FOUNTAINS IN THE EAST.—A new drinking fountain was opened on Monday on Tower Hill, under the name of "Earl Russell's Drinking Fountain," his lordship having mainly contributed the funds for constructing it. His lordship officiated in person at the opening, and make the following remarks on the advantages of such fountains to the working classes:—

"It gives me great pleasure to be present here to open this fountain, and to dedicate it to the service of the public of this district. I do not wish to detain you by a long speech, but there are two or three observations that I wish to make. We all know that wherever workmen can get high wages they will go. Where they congregate they find that there are great wants, and that they cannot have the same conveniences they would have had if they had remained in the country districts. One of the inconveniences they suffer is the want of fresh air; another is the want of pure and wholesome water. Experience has shown that a good supply of water is one of the most important sanitary measures that can be adopted. The eagerness with which the people have seized upon the idea of free drinking fountains has proved how much they appreciate the use of good water. Mr. Melley, a gentleman at Liverpool, the great originator of this movement, energetically exerted himself, and caused several fountains to be erected in that town. It was immediately found that great numbers of persons resorted to those fountains. In London also the question has been taken up, particularly by Mr. Gurney and the Metropolitan Free Drinking Fountains Association, of which he is the head. The society, whose meetings I had the honour and pleasure to attend at the commencement, has been able to erect, by the co-operation of various persons in the one common object, the number of 85 fountains already opened. At one of them, which was opened lately at the Royal Exchange, it has been estimated that the number of people who obtain water is [illegible] daily. Now, if we only take half of that number, we shall see the large proportion of the people who take advantage of these fountains. But it is not only for the purpose that those who are thirsty may drink of this water, which is most refreshing, that these fountains are erected. They have been found most useful in the houses of the poor. Those who have to dress their food find great advantage in sending to these fountains for water, as it is more pure than that which is to be got in the tanks and pumps to which, in this district, they are in the habit of sending. I may say, and I think it may very fairly be said, that this movement ought to be an object of municipal care. Wherever there is a municipal government, or wherever there is a representative form of government elected from the people to represent them and with power to raise money, they ought to establish and maintain fountains of this kind, which are conducive to the health of so many poor people. However, that has not been the case hitherto, and all these fountains have been erected by the Metropolitan Free Drinking Fountains Association, aided by the voluntary contributions of comparatively a few friends. It is therefore the duty of the public to come forward and do everything in their power to aid the society in erecting them. There are 2,000,000 people in this metropolis, and 85 fountains are a very small number to supply the wants of so many; therefore everything that is possible ought to be done to increase the number considerably. As an individual I have done my share in erecting this fountain. It is in the neighbourhood of the docks, and every labourer who leaves them will have the power of taking a glass of pure water, which is very refreshing, before he goes home. I now hand over this fountain to the Chairman of the District Board; I trust it may be a source of health and comfort to the inhabitants of this neighbourhood."

A new drinking fountain has been opened in front of the Roman Catholic Chapel in the Commercial Road East. It has been erected by the Metropolitan Free Drinking Fountains Association in conjunction with Cardinal Wiseman. It is a mural fountain of polished serpentine, and has been erected under the superintendence of Mr. Goldsmith Rolls, C.E., surveyor to the Association.

THE EMBANKMENT OF THE THAMES.—At the meeting of the Metropolitan Board of Works on Friday a letter was received from the St. Olave District Board of Works, expressing their opinion that, considering the necessity and importance of the Thames embankment, the views expressed by the Right Hon. W. Cowper, in the correspondence which has appeared in the public prints, were the correct ones, and that works of such magnitude, if entrusted to that Board to perform, should at least have the supervision of her Majesty's Government. On Friday evening a meeting of delegates from each of the parishes of South London was held at the Horns Tavern, Kennington, Mr. F. Doulton in the chair, to decide on the course to be pursued in order to obtain for the southern bank of the Thames the same privileges as are about to be conferred on the northern shore under the Thames Embankment Bill. Several gentlemen having pointed out the importance of a southern embankment, a resolution was carried unanimously to the effect that the sanitary condition of the districts of London south of the river, and their liability to floods, rendered the protection of an embankment necessary, and that the meeting, while anxious to promote this undertaking, had no desire to delay the progress of the northern embankment. A deputation was appointed to wait upon Lord Palmerston on the subject from each of the parishes in South London.

ARGYLL HOUSE.—It is stated that the dining-room wing of this house, the town residence of the Earl of Aberdeen, and which overlooks the garden at the rear of the premises, is at the present time undergoing the process of conversion into an industrial school for about 60 boys. There will be a class-room, in which the boys will be instructed by Mr. Bean; a dining or mess room; work rooms, in which useful trades, such as shoemaking, tailoring, &c., will be taught; and a lecture-room, in which lectures will be given to the poor of the neighbourhood. The coach-house, in Marlborough Mews, is to be changed into baths and lavatories, and there will be also accommodation for some of the boys to sleep on the premises, the others leaving in the evening and returning in the morning. The arrangements will be carried out on a principle similar to the schools of Dr. Guthrie in Edinburgh. The boys will also be clothed and fed by Lord Aberdeen, and the most destitute will be admitted, the only qualification being that of poverty.

SALE OF THE FOREIGN OFFICE.—On Monday the materials of the Foreign Office in Downing Street were sold by auction preparatory to their removal for the proposed public offices' extension. On the south of Downing Street whole streets have disappeared within the last few weeks, and more are to be forthwith pulled down, in order that there may be as little delay as possible in commencing the new works. The sale on Monday was conducted on the premises, the materials disposed of consisting of 2,000,000 stock bricks, a large quantity of slates, plain tiles, timber in roofs, floors, &c., gilt moulded and other doors, mahogany plate-glass and other sashes and frames, upwards of 20 tons of lead in flats, paving, staircases, stoves, and fixtures and fittings of all kinds. Some of the materials fetched good prices.

THE LAST OF THE INDIA HOUSE.—The most valuable of the contents of the East India House having been either sold or transferred to the new quarters of the Indian Government in Victoria Street, the materials of the building itself are to be sold by auction on Monday. The catalogue includes the new museum, erected about three years since in the Moorish and Indian styles of architecture, from the designs of Mr. Digby Wyatt, 15,000 feet of York and Portland paving, 4000 feet run of Portland coping, stone cills, stringing, cornice, and other stonework, 2000 feet of sheet copper, 200 tons of lead on the roofs, 2000 squares of flooring boards, 1700 doors of all kinds, including some of solid mahogany, and an immense variety of other materials, covering an acre and a half of ground.

NEW BLACKFRIARS BRIDGE.—The levels for the new bridge at Blackfriars, in the room of the present dilapidated structure, have been taken. The bridge will be 6 feet 10 inches lower in the centre and 2 feet 9 inches lower at the side arches than the present bridge, and the incline will therefore be easy. The width of the bridge will be 80 feet within the parapets, being nearly double that of the present bridge. In construction it will be similar to that of Westminster, but with only three spans to cross the river.

MUTINY AT THE ROYAL MILITARY ACADEMY.—On Wednesday the 23d ult. considerable commotion took place among the gentlemen cadets at the Royal Military Academy at Woolwich, the immediate cause of which was a new regulation depriving them of the usual half-holiday on Wednesday afternoon; but the true source of discontent is said to have been the quantity and quality of the provisions. The first symptom of any irregularity was that only 30 cadets, out of 230, presented themselves at the roll-call on parade in the afternoon. When called a second time to one refused to obey. In the evening, however, the old field guns posted in front of the academy were thrown into the ditch of the enclosure, and a number of the drill swords were at the same time cast into the governor's garden, while other guns were loaded with the ¼ lb. loaves recently introduced in the rations. The authorities endeavoured to put a stop to the proceedings by punishing some of the supposed ringleaders, and by removing all traces of the disturbance early on the following morning, but the attempt was without effect. In the course of the day the governor addressed the cadets, informing them that the commandant of the garrison had offered to place 100 artillerymen at his disposal in the event of any further disturbance. In the course of the evening the governor's windows were smashed, and a variety of placards were posted about the barracks. On Friday the mutineers seemed to have obtained what they desired, viz., an investigation into the cause of complaint and dissatisfaction. A board of inquiry has sat daily for that purpose, consisting of Colonel Yorke, R.E., Major Fitzhugh, and Major Williams, R.A. The cadets who were under arrest have, for the present, been allowed to return to their duty. Among the other causes of complaint stated by the cadets, are the unjust manner in which they consider the "special class" to have been promoted over the heads of many gentlemen now at Woolwich; and the new mode of dividing the classes lately introduced by the governor. With regard to matters unconnected with study, they state that the regulations are totally unsuited to the present age of the cadets, and that in various ways they are not treated as gentlemen. A statement of the facts, in a formal and official report, is expected to be forwarded to head quarters.

CRYSTAL PALACE.—At Blondin's performances on Monday a momentary terror was caused by the sudden snapping of the balance-pole, which fell in two parts into the organ. The loss, however, seemed to have no effect upon the performer, for he at once made his way to the end of the rope, where a new pole was brought, and the remainder of the programme proceeded with. Blondin's engagement terminated with his 33d ascent on Thursday. By special permission he repeated on that occasion his benefit performances, and gave two ascents—one on the interior, the other on the exterior rope, at 3 and 6 o'clock. The latter afforded the opportunity for repeating the display of fireworks by Blondin during his passage along the rope, similar to those prepared for his benefit on the 7th ult., the effect of which was marred by the fog which then set in.

BRITISH MUSEUM.—An important addition was made to the collection of ancient marbles in the British Museum on Monday, by the arrival of a further portion of the results of the excavations undertaken at Cyrene by Lieutenants Porcher and Smith. These gentlemen have now, it is understood, completed their researches and finally left that place.

SALE OF CRIMINAL LITERATURE.—A singular library of criminal literature was sold a few days since by Messrs. Southgate & Barrett, when the more scarce and valuable lots realised high prices. Jonathan Wild's autograph, and the scarce print of "Jonathan Unveiled," fetched 7*l.*; a collection of 200 portraits of criminal celebrities realised 13*l.* 5*s.*; and 14 dying speeches, published at a penny each, 2*l.* 18*s.* Some contemporary records of notorious malefactors, such as Mrs. Brownrigg, who beat her female apprentices to death; Jonathan Wild, the thieftaker; John Hall, who murdered his master; Captain Samuel Goodere, who killed his brother, a Somersetshire baronet, on board ship; Miss Blandy, who poisoned her father at the instance of her lover, Captain Cranstoun, &c., fetched 8*l.* Another collection, chiefly referring to Jack Sheppard and Jonathan Wild, realised 8*l.* 15*s.* "The Malefactors' Register," 5 vols., with 160 engravings, mostly insertions, brought 11*l.*; and Howell's "State Trials," 16*l.*

THE MEMORIAL CHURCH AT CAWNPORE.—By letters received from Calcutta it appears that by the good offices of the Bishop an arrangement has been made with respect to the application of the fund collected for the Memorial Church at Cawnpore. The general feeling in India was in favour of erecting it on the site of Sir Hugh Wheeler's entrenchments, but as this was too distant from the city to serve as a mission church, it was agreed that the Government should make over to the Society for the Propagation of the Gospel Christ Church, which is situated in the centre of the town of Cawnpore, and close to the too-celebrated well, for missionary uses, and that in return the Society should pay over the money it had received for a memorial and mission Church to the general fund raised in India for the erection of a Memorial Church on the site referred to. Christ Churst has accordingly been tranferred to the Society, and the Archbishops of Canterbury and York, and the Bishop of London, have appointed the Rev. S. B. Burrell, M.A., senior missionary of the Society in Cawnpore, to be the officiating minister.

MANSLAUGHTER AT PECKHAM.—On Monday evening an adjourned inquest was held on the body of Mr. George Allen, timekeeper of the Camberwell Omnibus Association, who died on the 22d ult. from injuries inflicted on him by Henry Budd, a well known pugilist.

It appeared from the evidence that Allen was sitting quietly on a chair reading a newspaper, when Budd came up drunk and attempted to snatch it out of his hands. A struggle ensued, when Budd seized deceased by the whiskers and hair, and threw him on the pavement with great violence. Deceased was taken up insensible, and died next day. As the result of a *post mortem* examination D . Nind stated that the skull had received a fracture over the right ear, and that there were three ounces of blood extravasated on the surface of the brain. These injuries were the cause of death, and must have been produced by a fall or heavy blow. The jury, after 20 minutes' consultation, returned a verdict of "Manslaughter." Great sympathy is manifested for the family of deceased, who was much respected, and a subscription opened for them already amounts to 100*l*. Budd is now in the gaol infirmary suffering from *delirium tremens*.

THE CASE OF VINCENT COLLUCCI.—Since the conviction of this prisoner he has been in a most melancholy condition, the result of the trial having been unexpected by him, as he entertained a confident opinion that he should either be acquitted, or that Miss Johnstone would not appear against him. It is stated that when the case stood for trial at the last sessions an offer was made to the prisoner, if he would plead "Guilty" and consent to the restoration of the 1600*l*. taken from him at the time of his apprehension by the police, that the prosecution would apply to the Court to allow him to be discharged on entering into recognisances to appear and receive judgment if called upon to do so, but he positively refused to accede to this proposition. Miss Johnstone's friends were desirous that she should be spared the annoyance of appearing in a public court to give her evidence, and the prisoner no doubt calculated that she would not do so, and that he should thus escape the consequences of his fraud; but when it was found that he would not agree to the liberal offer made to him it was determined that the case should proceed. The prisoner, it appeared, lived in the most luxurious and extravagant style at his residence in Ovington Square, and if his career had not been cut short so suddenly, in all probability the whole of the 1900*l*. would very soon have been squandered. In a few days the prisoner will be removed to the Millbank Penitentiary, to undergo his sentence.

DEFALCATIONS OF A POOR RATE COLLECTOR.—Thomas William Nation, of Limehouse, shoemaker and collector of the poor and general rates in the parish of All Saints, Poplar, was summoned before the magistrate of Thames Police Court a few days since on the charge of neglecting to pay the sum of 800*l*., the balance due on the poor rates he had collected. For the defence it was argued that the proceedings were invalid, the summons not having been taken out within six months as required by law. After some discussion the magistrate, decided that the proceedings were commenced within six months after the commission of the offence, that the prosecutor had fully made out his case, and that a distress warrant must issue for 800*l*. On Monday last defendant was again brought before the magistrate, when the officer of the Court stated that he had not recovered a farthing under the distress warrant, as defendant had no goods on which to distrain. Defendant pleaded for mercy on the ground of his age, infirmity, and poverty, and was sentenced by the magistrate to imprisonment for three weeks. It was stated during the inquiry that defendant was also a defaulter on the general rate of the parish to the amount of 600*l*., making in all 1400*l*. His securities are liable for 600*l*., which will reduce the liabilities of the ratepayers to the sum of 800*l*., which they will have to pay a second time.

VOLUNTEER FIRE BRIGADE.—The Surrey Volunteer Engineers have resolved to form within their ranks a company of firemen for active service in the borough of Southwark. A provisional committee has been appointed to make arrangements for embodying the corps, and every endeavour will be made to render it useful and efficient. It is believed that the members of the new brigade, instructed in the duties of military engineers, will make excellent firemen, and powerful military engines will be supplied for their use. The orderly-room of the Volunteer corps has been opened as the temporary office of the brigade. The movement has received the support of the Rev. Hugh Allen, D.D., who has consented to act as chaplain; General Sandham, R.E.; Messrs. Maudslay & Field, Messrs. Apsley Pellatt & Co., and Messrs. Shand & Mason. Captain Shaw, the successor of Mr. Braidwood, is also of opinion that the new company will render material assistance to the firemen of the London Brigade, and has promised to give them all the advice and assistance in his power.

STREET TRAMWAYS.—The grand jury at the Surrey Quarter Sessions at Kingston have returned a true bill against Mr. G. F. Train and several vestrymen of Lambeth for a nuisance committed by obstructing the thoroughfare in the Kennington and Westminster roads. The indictment contains five counts. The first charges the defendants with obstructing the free passage on the said highways by placing thereon iron rails, and thereby rendering the roads unsafe for the passage of vehicles and horses. Other counts charge the defendants with digging large holes and breaking up the roads; while others charge them with conspiring together for the purpose of effecting the said objects.

THE PUBLIC HEALTH.—The Registrar-General's Weekly Return states that the deaths in London in the week ending Saturday, October 26, were 1087. Compared with the ten corresponding weeks of the years 1851-60, the mortality from all causes is considerably below the average. During the week the births of 945 boys and 877 girls, in all 1822 children, were registered in London. In the ten corresponding weeks of the years 1851-60 the average number was 1654.

Provincial.

BRISTOL.—On Friday the magistrates at the Police Court in this city inflicted a fine of 5*l*. and costs upon a Mr. Frederick Layton, of London, stated to be an officer in the army, for kissing a lady, of Cheltenham, named Mrs. Elizabeth Rebecca Martin, as they were travelling from Gloucester to Bristol on the Midland Railway, being the only occupants of one of the compartments of a first-class carriage.

BIRMINGHAM.—A public meeting was held a few nights since in the Music Hall under the presidency of the Mayor, to consider the effects of the cotton "famine" on Manchester and Birmingham industries, the best mode of procuring a supply of cotton, and the opportunity which the crisis affords of annihilating the slave trade, by establishing the cotton industry in Africa. Lord A. Churchill in opening the proceedings described at considerable length the signal success which had already resulted from the appointment of the consul at Abbeokuta. The African Aid Society desired, in the first place, to introduce such an alteration of system into Africa as they believed would bring about a great and beneficial change—physical, political, and social, and they proposed to do that by introducing families from Canada, who by their skill in the various mechanical arts and sciences would be in a condition to raise the African to a higher state of intelligence and usefulness, and lead him on by degrees to a state of civilisation equal to that of any other race. The means to this end were by the extension of consular establishments in the interior of Africa. This would place the country under the protection of Great Britain, and, so protected, all its cotton, sugar, tobacco, and indigo fields would thrive under British enterprise; a deadly blow would be struck at the slave-grown produce of Cuba, Virginia, and New Orleans; the supply of slaves from the African coast would be cut off; the Africans would be brought up to their true position in the human race, and the whole world would soon reap the benefit. Mr. J. Lyon M'Leod, late consul at Mozambique, said that the number of slaves exported per annum had been reduced from 150,000 to 50,000, but more must be done before the trade was extinguished. One squadron was of no use while slavetraders reaped a profit of 1400 per cent. The best means they could adopt was to make the traffic unprofitable; this was to be done by the cultivation of African produce by Africans under British protection. There were two weeds growing there—cotton and indigo—in sufficient quantities to clothe the whole human race, and dye it blue into the bargain; the cultivation of these weeds would not only do good to the country itself, but would give the whole world a cheaper article, inasmuch as cotton from New Orleans, which was being now sold at 9*d*. or 10*d*. per lb. could be made in Africa for 4*d*. All that was required to achieve this was the infusion of the skill of the white races among the negroes of Africa.—Mr. Danby Seymour, M.P., dwelt on the advantages in a commercial point of view which had resulted from British protection in other parts of the world. The Africans had in them, he said, the seeds of civilisation, and only needed cultivation to bring them up to a level with European races. All we had to do was to teach them the requirements of a civilised life, and he was sure they had intelligence enough to gratify them.—Lord Stratheden said a few words in favour of an African nationality.—Lord Calthorpe said that the American war had taught the people of this country that which they ought to have learned before—namely, the uncertainty of the dependence on one field for the supply of cotton; the only remedy was by the cultivation of the plant in other parts of the world. England was to some extent responsible for the introduction of the slave traffic into America, and was bound to do all she could to remedy the evil.—Mr. Campbell (of Canada) said he had just shipped in a vessel from London about 250*l*. worth of cotton machinery, which he intended to follow as fast as he could and take from Lagos up the river Ogou to Abbeokuta; when there he should take in some land, get labourers to plant cotton, and purchase all the cotton from the natives that his means would allow, and ship it to this country. To show that the negroes were a trading race he mentioned the fact that in the interior of Africa he found articles of luxury which had been imported from Europe and by the caravans across the Desert, the trader, not daring, however, to approach the western coast of Africa for fear of the slave dealer. The following resolutions were all unanimously adopted:—

"1. That this meeting emphatically expresses its approval of the appointment by the British Government of an accredited agent at Abbeokuta, and trusts that the policy which dictated this appointment may be extended to the town of Rabba, on the Niger, and to other important places as facilities arise. 2. That this meeting recognises in the special qualities of the African race the promise of an African nationality, and anticipates in that nationality a valuable element in the commonwealth of nations 3. That, while deploring the cotton famine in the manufacturing districts [illegible] meeting cannot but see in the present [illegible] securing our own cotton supply for the [illegible] destroying the African slave-trade by the [illegible] vast natural cotton fields of Western Africa. 4. That [illegible] duction of Christian coloured families from Canada [illegible] is eminently calculated to advance the influence [illegible] and civilisation in that country. 5. That, [illegible] influence of commerce as an associate of [illegible] gion, this meeting recognises in the cultivation [illegible] other natural products of Africa the great [illegible] power for the raising of that Continent, and [illegible] support the African Aid Society in its endeavours [illegible] those enterprises."

CAMBRIDGE.—The Rev. J. B. Lightfoot, A.M., [illegible] and Tutor of Trinity College, has been elected [illegible] Professor of Divinity in the room of Professor [illegible] promoted to the Deanery of Exeter.

CHESTER.—A case of attempted [illegible] occurred in this city on Tuesday. A young man [illegible] Edward Davies, recently an apprentice to a chemist [illegible] druggist at Rhyl, had received a legacy from [illegible] with which he intended to commence business [illegible] own account. Before however carrying out [illegible] tion he resolved to enjoy himself for a few days [illegible] last week he came to this city, having [illegible] 50*l*. to 100*l*. He here fell in with a good-looking [illegible] of loose character, named Jemima Morgan, [illegible] as the daughter of a farmer near Shrewsbury [illegible] spent several days with her in dissipation. On [illegible] they went on a visit to Liverpool, where the young [illegible] began to feel remorse and shame for the [illegible] in which he had squandered his money and [illegible] ducted himself. While under the influence of [illegible] feeling he managed, without the knowledge of [illegible] to purchase a bottle of laudanum; but as they [illegible] returning to Chester on Sunday evening by rail [illegible] the bottle, guessed that he had a fatal intention, [illegible] it from him, and threw it out of the carriage. On [illegible] same evening, however, Davies went out, and, [illegible] written a regular prescription, succeeded in purchasing [illegible] four ounces of laudanum at the shops of two different druggists. He then induced the girl to swallow the contents of one phial while he took the other. [illegible] effects of the laudanum on the girl were such [illegible] induce her to give the alarm. They were both taken [illegible] the infirmary, where the usual remedies were administered—successfully in the case of the girl, but unsuccessfully in the case of the man, who died in the course [illegible] the night. The girl was taken into custody by the police, and was taken before the city magistrates [illegible] Tuesday, and remanded. The jury at the inquest [illegible] Wednesday returned a verdict that deceased died [illegible] taking laudanum while in a sound state of [illegible] administered by his own hand, and that the prisoner was accessory to the act. On hearing the verdict the prisoner fainted away, and was taken out [illegible] in that state. She was committed for trial [illegible] assizes.

DERBY.—The Bishop of Oxford addressed the [illegible] and *employés* connected with the Midland Railway Company, on Saturday, the 19th ult., in the large [illegible] shop of the station in this town. There were 500 [illegible] sent in their working dress, many being without [illegible] coats, having just left work. At 12 o'clock the Bishop, Archdeacon Hill, and many of the local clergy [illegible] the workshop. The service commenced by the singing of a hymn; and, a few prayers from the morning service having been read, the Bishop read a few verses from the 3d chapter of the Book of Daniel, stating [illegible] he had chosen that passage because he thought [illegible] showed to what we all, especially the young, were [illegible] ject—temptation in its strength, and temptation [illegible] weakness, temptation on every side; but God [illegible] strength to those who desired to resist it. His Lordship then read the narrative of Shadrach, Meshach and Abednego, and proceeded to comment on it as follows:—

"Most of you can remember the wonderful history [illegible] this refers. These young men were in the full [illegible] youth—their passions were strong, and yet they [illegible] to resist the unholy decree of Nebuchadnezzar. These [illegible] men had been placed high in the new kingdom but [illegible] the trial came, and the King was persuaded to issue [illegible] to compel them to worship the graven image. They [illegible] to do so. There was wealth, high honour, and the [illegible] of all that youth looked forward to, offered to them [illegible] hand, and a burning fiery furnace on the other. There [illegible] certainty of any deliverance by human power, and [illegible] was no prospect of help from Above. They had no [illegible] of being rescued, but they left all to their God. [illegible] were thrown into the flames, and only at the [illegible] moment was any power put forth for their [illegible] And here I could say to you, my brethren, [illegible] whom I have been permitted to address a few [illegible] name of my Lord,—here is a history of your [illegible] Temptations will come upon us for the most part at [illegible] unlooked for time. These young men, when [illegible] seemed to prosper with them, were brought to a [illegible] it is with you and me. 'Let him that thinketh he standeth take heed lest he fall.' And so the temptation to God's [illegible] servants came when there was no escape from it. [illegible] human being who has reached man's estate has been [illegible] out and separated from every one else; and in the [illegible] of his own being has been subjected to temptation. [illegible] meet it for him, none can meet it for any one but himself. [illegible] must, my brethren, be a warfare against sin, a persevering [illegible] individual strife. Why is this? Why were these [illegible] left to this trial? God was minded to ripen their [illegible] gem their crowns. This was why He suffered them [illegible] tempted. He knew when the temptation was the [illegible] and came and ministered to them, and at their direst [illegible] His help was the greatest. And so it is now. The temptation is suffered to come. The unbelieving man says the reason [illegible] falls is the temptation is so strong that he cannot [illegible] He says he should have been sober if he had not [illegible] thrown among drunkards; he should have been pure if he had not been thrown among the impure. His tongue [illegible] never have uttered those fearful oaths if he had [illegible] learned to blaspheme. He was tempted, and he [illegible]

[illegible] my brethren, you must see the utter falsehood of [illegible]. Temptation was permitted to the three [illegible] not that they might fall but that they might stand. [illegible] that we fall because we are tempted is [illegible] distrust of God, and a mistake of His manner of [illegible]. He means those temptations to be a step [illegible] ladder which is to reach from earth to Heaven. [illegible] God's way of His bringing us to Christ, and so it was [illegible] these men. They were made weaker, in order that they [illegible] strengthened. Mark you, the fire did them no harm. [illegible] will do a man no harm who is really leaning [illegible] for strength; yet the fire did something—it [illegible] the bonds in which earth had bound them—the [illegible] which it could do—the loosening of the bonds [illegible] they were fettered when cast into the fire. But [illegible] no harm. The smell of fire had not passed [illegible] garments. Temptation, my brethren, you must remember, is not sin. If you resist temptation, if when the [illegible] thought comes into your minds you put your foot upon [illegible] will be well. It is no sin to be tempted. St Paul had [illegible] in the flesh, the minister of Satan to buffet [illegible]. The man who resists the temptation of drunkenness, [illegible], malice, or any other sin, escapes without injury. But mark you what temptation does. It strikes away the [illegible] of the earth. The man who has become careless, but when tempted goes to his closet and reads God's Word, and attends his church better, strikes away the bonds which had lately bound him. He is now a respectable man, and is [illegible] up to individually by others—he becomes more [illegible], he goes back to his Bible and to his church, and [illegible] communion with his God—the fire has not burned [illegible], it has merely rent asunder the bonds which bound him to the world. Mark the secret of the deliverance of the three Hebrews. The fourth was like the Son of God. This is the tempted Christian's strength. We have a High Priest such as becomes us. He was once tempted like unto us, but without sin; and never does temptation fall upon any one successfully who looks up to Him for help and guidance. Look up then, thou who art a tempted one, and thou who art afflicted. Is there one among you, my friends, who has some strong temptation to overcome? Some strong trial or affliction assailing you? Look unto God and He will help you. Think not that He has forgotten you—for that is the inward snare of the devil whispering his strong whisperings and telling you that you must yield. Does the fire come upon you; does it seem as though you were left alone; that God does not care for you? If so, think of these three young men; think of the temptation they underwent, and think of their great deliverance. Every one that trusteth in Him will not be abandoned. Do not give up at the first struggle, but go on struggling, and you will in the end gain the victory; for His eye is upon every one of His servants; He forgetteth not one of them. In your loneliness, my brethren, think upon God, that seeth in secret; trust in Him and He will avert the temptation. He will never leave you, and never forsake you. Look here, my friends—you young men, whom my soul yearns over—here we are taught a lesson—trust in Him, confide in Him to the utmost. Fight the battle manfully, and you will ultimately be triumphant. Hear that voice which comes to that young man who is tempted to sin; cling to thy Lord. Him who died for thee. He knows thine infirmities; He will give thee the deliverance of His love. And now, my friends, let us, one and all, lift up our hearts in prayer to Him that He would deliver us in the hour of temptation."

The Bishop then pronounced the Benediction, after which the Doxology was sung.

Exeter.—The somewhat novel circumstance of the erection of a monument to a living worthy has just taken place in this city. The merits of Sir Thomas Acland, of Killerton, have been for many years appreciated not only in his native county of Devon but in other and more distant parts of the world. A committee was therefore formed, with the Earl of Devon as chairman, and subscriptions poured in from all quarters. The result has been the erection of a marble statue on one of the plateaus of Northernhay, in this city, by Mr. E. B. Stephens, the sculptor. The ceremony of inauguration took place on the 22d ult., the Mayor and Corporation of Exeter attending in state, and a large number of county gentlemen being present, including the Earl of Devon, Lord Poltimore, Lord Clifford, Sir S. Northcote, M.P., the Right Hon. M. Adderley, M.P., Sir John Duckworth, Mr. A. Hood, Sir J. Buller East, Sir John Duntze, Sir P. Acland, Sir J. Kennaway, Admiral Sir F. Moresby, the Hon. and Rev. H. Courtenay, Hon and Rev. C. L. Courtenay, Mr. Buller, M.P., Mr. Kekewich, M.P., Mr. Gard, M.P., Rear-Admiral Craigie, General Studd, Colonel Acland, Dr. Acland, the Rev. L. Acland, and Mr. J. B. Acland, four sons of the hon. baronet. At the banquet, which was held in the evening, the Earl of Devon in the chair, letters, regretting their inability to attend, were read from the Earl of Portsmouth, the Bishop of Exeter, Sir H. Davy, M.P., and others. The following motto on the pedestal was suggested by the late Earl Fortescue, who in early life was the political opponent of Sir T. Acland:—"*Præsenti tibi maturos largimur honores.*" The statue contained the following inscription:—"Erected as a tribute of affectionate respect for private worth and public integrity, and in testimony of admiration for the generous heart and open hand, which, without regard to party, race, or creed, have been ever ready to protect the weak, to relieve the needy, and succour the oppressed."—At the Quarter Sessions last week, Sir Stafford Northcote, M.P., in the chair, Mr. Kekewich, M.P., moved for the appointment of a committee of county magistrates interested in the salmon fisheries of Devon. He stated that there were no less than 17 valuable salmon rivers in the county, which were formerly most productive; but from the use of illegal nets, obstructions, &c., they were now comparatively of little value. If the provisions of the recent Act were effectually carried out, he believed these rivers would soon be as productive as in the days of yore. To show the extent to which the practice of destroying fish out of season is carried on in North Devon, where there are two of the most beautiful salmon rivers in the west—the Taw and the Torridge—Mr. Kekewich stated that several hundred weight of salmon had been sent by the North Devon Railway closely packed in boxes, and consigned to a party in London during the last week, and it was understood that these unseasonable fish were to be forwarded to Paris, where they are pickled, and perhaps sent back again to this country for consumption. A committee was unanimously appointed.

Fareham.—About two years since the War Department having resolved to erect a line of fortifications, for the defences of Portsmouth Dockyard and Arsenal, along the foot of Portsdown Hill, extending westward as far as Fareham, notice was given by the Secretary of State, under the Defence Act, to several of the landowners and resident gentry that they would be required to sell their property to the Government. Among those to whom notice was given was Captain Alexander Collingwood Dickson, the owner and occupier of an estate at Wallington, near Fareham, requiring him to relinquish a piece of a paddock in front of his residence, for the purpose of erecting a portion of the fortifications, to be called the "Wallington Forts." Captain Dickson petitioned the Secretary of State to take the whole of the property, as the introduction of the contemplated fort would deteriorate the value of the remainder, in consequence of the annoyance from the bustle at the fort, the discharging of guns and small arms, &c. Eventually notice was given to Captain Dickson that the whole of the property in his occupation would be required with an adjoining property, which was sublet, and a pottery which formed a portion of the estate. Captain Dickson claimed as compensation 22,000*l.* This valuation was disputed, and during last week a jury was empanelled for several days to settle this and other disputed valuations in connection with the fortifications. Mr. Serjeant Hayes was appointed assessor by the sheriff. Sir William Atherton, Q.C., Attorney General, appeared for the Crown, with Mr. Hindmarsh. Mr. J. H. Lloyd and Mr. J. J. Johnson, barristers, appeared on behalf of the claimants. The case of Captain Dickson was taken first, and several valuers deposed to the nature and the value of the property. The Attorney General then addressed the jury at great length, after which Mr. Serjeant Hayes summed up, and the jury, after an hour's consultation, returned, having come to a conclusion that the Government should pay the sum of 13,000*l.* to Captain Dickson. The next case was that of Henry Richard Edwards, Esq., who claimed 4500*l.* as compensation for his estate. The Attorney General agreed to award the amount claimed, and the jury found accordingly, without entering into the evidence. The next case was that of Thomas Hewett, Esq., of Fareham, and James F. Burrell, Esq., of Bursledon, devizees in trust of the late James F. Burrell, Esq., which claimed 28,000*l.* for their estate, comprising 33 acres 9 perches. The Crown surveyor valued the property at 12,000*l.* only. Several witnesses were examined, and after a very long hearing, the jury, on Friday evening, awarded 16,000*l.* compensation.

Gloucester.—The orphan child of Lord Forth and Mrs. Lloyd has been baptised by the names of Ann Cooper Lloyd, and is now at nurse in a village near this city. A lady residing in Ireland, having read the account of the death of its parents, was so greatly interested in the fate of the child that she offered to adopt it as her own. Mrs. Lloyd's parents, however, have provided a liberal maintenance for the child, and the generous offer was therefore declined.

Lichfield.—The formal ceremonial for the re-opening of the cathedral of this city, the restoration of which has been for some time in progress from the designs of Mr. G. G. Scott, R.A., took place on the 22d ult. with all the solemnity suitable to the occasion. After morning service, which was attended by about 4000 persons, luncheon was served in a series of tents erected in a field at the foot of the hill approaching the cathedral, under the presidency of the Earl of Lichfield. In the afternoon the cathedral was again thronged to hear a sermon preached by the Bishop of Oxford. Many persons were unable to obtain admission. Before the commencement of the service in the morning the clergy of the diocese presented an address of congratulation to the Bishop on the restoration and re-opening of the cathedral, and also in affectionate acknowledgment of the kindness and courtesy he has manifested during the 18 years during which he has presided over the diocese. With regard to the restorations it appears that the funds already provided have been sufficient for the restoration of the greater part of the dilapidated or wantonly destroyed stonework; for the removal of the whitewash, of long standing, the completion of the Bishop's throne and stallwork; the pavement of the choir, and substitution of a light and open screen for the former complete separation of the church into two parts, besides the introduction of many costly requisites, including the organ, the font, the lectern with Bible, the Litany desks, lighting standards, and candlesticks, books of service, embroidered altar cloth, poor's box, &c., many of which have been the gifts of individual benefactors. In the progress of the work of restoration many difficulties were encountered, chiefly arising out of the ignorance of those who were engaged in the same work in former ages, but chiefly in the fourteenth century. On some one of these occasions the niches over the pillars, as seen from the aisles, with their statues, had been entirely destroyed; they have now been restored, partly from the old descriptions of them, and partly by reference to the niches remaining in the Lady Chapel. But the great work which has just been completed has been the double one of throwing the choir open to the nave, both which are now united, and of bringing the reredos and altar table to their original position. The stalls, again, as formerly, occupy the first three bays, while the next three bays eastward are devoted to the presbytery and altar space, the two easternmost opening, as at first, into the Lady Chapel, which is to be made use of for early service. The great difference between the present arrangement and that of the ancient church is that the choir is not now severed as formerly from the rest of the church by unperforated screens, but merely by screenwork of the most open description, so as to render every part available for worship. The new choir screen has been wrought in iron and brass by Mr. Skidmore, of Coventry. The pavements are a union of encaustic tiles and marble; that between the stalls has tiles of the same pattern with old ones found in the church; that of the presbytery is to be enriched with subjects in incised stone, illustrative of the history of St Chad, and with busts of kings and bishops historically connected with the cathedral. The whole interior of the church has been cleared from its numerous coatings of yellow and white wash, and the rich colour of the stone exposed, by which a strikingly beautiful effect has been gained. The screenwork has been carefully restored, as has also the woodwork, comprising the throne, pulpit, stalls, and substalls. The carving consists of flowers of great variety, with figures of the Apostles and richly carved poppy-heads on the top of the finials, and beautifully designed and Scriptural subjects on the ends. The six figures restored to the choir are by Mr Farmer, and represent St. Mary, St. Mary Magdalene, St. Peter, St. James, St. Philip, and St. Christopher.

Manchester.—The annual meeting of the United Kingdom Alliance was held in this city last week, under the presidency of Sir Walter Trevelyan, Bart. The report stated that the declaration of the Alliance, as adopted by the ministerial conference in 1857, had received nearly 3000 written adhesions from clergymen and other Christian ministers, several hundred names having been added during the past year. The British Temperance League, the Northern Temperance League, the Western Temperance Association, and the South Wales Temperance Association, all maintained the most cordial relations to the Alliance. The Scottish Permissive Bill Association had also co-operated with the Alliance during the year. The Alliance had now issued nearly 60,000 cards of membership, representing paid subscriptions, and was aided by 130 auxiliary societies, and was directly connected with upwards of 1000 temperance societies pledged to support the permissive veto. The report having been adopted, resolutions bearing upon the operations and progress of the movement were discussed, and a subscription list for the ensuing year was opened. The resolutions had reference to the licensing system, the Permissive Bill agitation, which is to be continued; the wider dissemination of "Meliora," the prize essay, and other Alliance literature; the organisation of deputations to urge on members of parliament the necessity and justice of the Permissive Bill; and the future course of the Alliance in the event of any proposal in the legislature dealing with the question of the sale of intoxicating liquors. The Chairman, in opening the business of the general meeting in the evening, expressed the great regret he felt at the absence of their president Lord Brougham. He hoped, however, that the illness of the noble lord would only be temporary, and that he would be spared for many years to labour in that reform which they were met that evening to promote, as well as in the many other reforms in which he was interested. He congratulated the meeting on the advance made in public opinion, aided by the labours of the United Kingdom Alliance of Manchester, as well as all similar institutions throughout the country. Sir John S. Forbes, Bart, moved the first resolution as follows:—

"That this meeting is fully convinced that the traffic in intoxicating liquors is the prolific cause of drunkenness, pauperism, crime, insanity, and premature death; that it constantly and inevitably tends to depress all legitimate commerce to enhance the burdens of taxation, to reduce the wages of industry, and to augment the price of food; and that, therefore, it is just and expedient that the people be empowered to exclude from their midst a system so disastrous and demoralising."

The Rev. G. T. Fox, M.A., Durham, seconded the resolution, which was supported by the Rev. W. N. Molesworth, Vicar of Rochdale, and by Alderman Harvey, and unanimously agreed to. Mr. H. Cossham, of Bristol, proposed the second resolution:—

"That, as no consideration of gain to the vendors, or of revenue to the state, can justify the community in giving license and sanction to the liquor traffic [illegible] calls earnestly upon the people everywhere to aid the efforts of the United Kingdom Alliance, by earnest communication with their representatives, to secure from the Legislature the speedy enactment of a measure that shall arm public opinion with a direct veto upon the common sale of intoxicating beverages, in every district where two-thirds of the ratepayers so determine.

Mr. Lawson, M.P. for Carlisle, seconded the resolution, which was supported by Mr. Pope and carried. The Chairman then vacated the chair, which was taken by Mr. Bazley, M.P. The Rev. Dr. M'Kerrow proposed a vote of thanks to Sir W. C. Trevelyan for presiding, which was carried unanimously.

Nottingham.—On Saturday Henry Clifford was brought before the magistrates, charged with setting fire to the stacks belonging to Mr. Parr, of Ratcliffe. A few days ago the prisoner had an interview with Mr. Parr, and described to him the exact position of the stacks in the yard, and the manner in which he set

them on fire. The prisoner, however, now denied the charge, and attempted to prove an *alibi*, but was committed to take his trial at the next Assizes. The value of the property destroyed amounted to more than 1500*l.*

PORTSMOUTH.—At the Quarter Sessions on the 19th ult. Morris Harris, a Hebrew marine store dealer, was tried for having in his possession a cask of ship's copper bolts, the property of the Crown. At the conclusion of the evidence, which was apparently of the clearest and strongest description, the Recorder summed up strongly against the prisoner. The jury, however, to the astonishment of a crowded court, acquitted the prisoner. The Recorder, in discharging the jury, said that he should have done so with much greater satisfaction had their verdict been a different one. There was another case, for stealing lead from the dockyard, which had been postponed until the next sessions, but had that case come before him he certainly should have found it necessary to swear in a fresh jury.

ROCHESTER.—The Bishop of Rochester has determined upon carrying out a new Church movement, which he announced immediately after his consecration, and which last year proved highly successful. His lordship has invited the clergy and laity of his diocese to conferences, which he intends to hold according to the following arrangement:—Nov. 7, at Southend; Nov. 11, at Brentwood; Nov. 20, at Rochester; Nov. 25, at Saffron Walden; Nov. 27, at Chelmsford; Nov. 28, at Halstead; Nov. 29, at Colchester; Dec. 2, at Hertford; Dec. 4, at St. Alban's; Dec. 5, at Hitchen; Dec. 6, at Bishops Stortford; Dec. 16, at Maldon. The business of each day is to be conducted according to the plan of the conferences following the visitation. After the Litany at each place the various subjects proposed for discussion will be opened briefly by selected lay and clerical speakers, and the remarks of those who follow will be limited by time. The clergy will not be cited formally to attend, but will be present at the places most convenient for them.

RUGBY.—On Friday, before two of the county magistrates, the Rev. George Hill, of Sacombe Rectory, near Ware, brother of Richard Guinness Hill, entered into recognisances of 500*l.* for the appearance of the latter to take his trial at the next assizes. On Saturday Mr. George Wright Greenwood, solicitor, of 89, Chancery Lane, London, entered into similar recognisances. No objection was offered on the part of the prosecution to these sureties; and therefore Mr. Hill is now at liberty.

STAFFORD.—At the quarter sessions, on the 17th ult., Robert Hales, Thomas Hales, of Wolverhampton; Thomas Hales, of Mow Cop; George Machin, John Hall, Thomas Hales, of Longton; Richard Creswell, and Joseph Hales, were indicted for a riot and assault, at Norton Green Hall, on the 9th and 10th September. Defendants pleaded Not Guilty. From the statements for the prosecution it appeared that defendants, on the 9th of September, went to Norton Green Hall, the residence of Mr. Edward Hales Oldaker, and informed him they were come to take possession of the property. Mr. Oldaker told them that if they had a claim to the property, of which he was only the tenant, they should take the proper course to obtain their right. Notwithstanding this, they conducted themselves in a very riotous manner, and then departed. On the following morning, between 7 and 8 o'clock, they returned, accompanied by about 40 or 50 more persons, and proceeded with hammers and other instruments to break open the doors, and on gaining admission into the house they unceremoniously removed quantities of furniture from the dining and drawing-rooms into the yard, and it was not until a large number of persons arrived, headed by the parish constable, that the defendants and their party were ejected from the house. In consequence of their violence Mr. Oldaker had received such a severe shock to the nervous system that he could not attend as a witness. Counsel for the defence applied for an adjournment of the trial, as the most important part of the defence would probably arise from Mr. Oldaker's cross-examination, the defendants having acted under the impression that they were the rightful owners of the property. It was stated, however, by a surgeon, that there was little probability of Mr. Oldaker's being able to attend next session, and the bench having expressed a rather strong view of the case, counsel for defendants consulted with their clients, and the result was the withdrawal of their former plea, and the whole then pleaded Guilty to the charge. The Earl of Lichfield, the chairman, then told them that if they repeated such an unwarrantable and illegal act they would be far more severely dealt with, and sentenced each of them to three months' imprisonment with hard labour.

WINDSOR.—It is stated that the Waterloo Chamber at Windsor Castle, recently called the Picture Gallery, will henceforth be named the Music Gallery.

WOKING.—On Monday evening an inquest was held at Horsell, on the body of Mr. Richard Francis Norton, aged 43, who committed suicide by drowning himself in the river Bourne, near Mim's Bridge, on the night of the previous Thursday. Deceased's father for some time held the position of chief controller of the kitchen at Buckingham Palace; but, having on one occasion made an attempt on his life with a knife, he was dismissed from his situation, and forfeited his pension in consequence. Deceased was a brushmaker, carrying on business at 1, York Street, St. James's, and had a country residence for about three years at Horsell, close to the Woking station, where he maintained a respectable but not extravagant establishment, keeping three female domestics, and paying a rental of about 60*l.* a year. He had a wife and seven young children, the eldest not being above nine years of age, and the youngest scarce as many weeks. For some time past he had complained of the dulness of trade and of the difficulty which he experienced in obtaining money that was due to him from his aristocratic and other customers. On the day of his death he had been to town, and on his return mentioned to his wife that a check had been returned dishonoured, which very much distressed him. He then left home, stating that he was going to Chobham to consult a friend about his affairs. On leaving the house he kissed his children in a peculiarly impressive manner, and embraced his wife so tenderly that she perceived he was unusually affected. He was never again seen alive, the body having been shortly afterwards found quite dead in the river. It was afterwards found that he had placed his watch, purse containing three sovereigns, shirt studs, and railway ticket under his wife's pillow. After some further evidence the jury returned a verdict of Temporary Insanity.

Ireland.

THE LATE OUTRAGE IN DUBLIN.—On Friday John Curran, the Dublin carman, was put on his trial for the outrage on Miss Jolly. The case for the prosecution lasted all Friday and the greater portion of Saturday, Miss Jolly distinctly swore to the identification of the prisoner, and a girl called Agnes Wyles swore that she saw a gentleman put Miss Jolly into the cab on the night of the outrage, and that the cab was driven by the prisoner, whom she knew from having seen him three or four times previously, and from his "chaffing" her as she passed by. This witness had told the policeman on one of her preliminary examinations that she was in Holyhead on the night of the occurrence. She now admitted on cross-examination that she had said so, but said that in making that statement she had told a falsehood. On Monday, Mr. Sydney, on behalf of the prisoner, proceeded to examine witnesses for the defence. Capt. Priest, of the Chester and Holyhead Company, deposed that Agnes Wyles sailed on board the Admiral Moorsom to Holyhead on the 27th of September, the night previous to the outrage, and returned to Dublin on the following Saturday. His evidence was corroborated by the mate, stewardess, and boatman, all of whom positively identified Wyles as having travelled to and from Holyhead on that occasion. These facts clearly proved the impossibility of the girl being in Sackville Street on the night in question, and that her testimony from beginning to end was a tissue of falsehoods. Judge Ball ordered the girl to be taken into custody; and the Crown counsel announced their determination of prosecuting her for perjury. Serjeant Sullivan intimated that it was not the intention of the Crown to rely on her evidence in support of the prosecution, and wished the jury to disregard her testimony altogether. Several witnesses were examined as to the hour the prisoner returned to his house on the night of the 27th ult., with a view to contradict the statement of his late employer and prove an *alibi*. On Tuesday several other witnesses were examined in support of the *alibi*. They were fellow-lodgers and relatives, who all swore that he was at his lodgings at 10 o'clock, an hour before the outrage was perpetrated. One of them also admitted that the cab owners had subscribed to raise a fund for the prisoner's defence. Mr. Walsh, Q.C., then addressed the jury on behalf of the Crown, and analysed the evidence for the *alibi*, pointing out its weakness and self-contradictions, and arguing that it was fabricated so far as it related to the time in question. At the conclusion of his speech the Court adjourned until Wednesday morning, when Mr. Justice O'Brien commenced his charge to the jury, and occupied nearly three hours and a half in minutely reviewing the evidence. The jury found a verdict of *Guilty* on all the counts of the indictment, and the prisoner was sentenced to two years' penal servitude.

THE ALLEGED FAMINE.—The local journals state that there is danger of an approaching famine in the West, and recommend Government to alleviate its horrors by employing the people at drainage and other public works. A public meeting of the gentry and clergy of Connemara was held a few days since in the Court House of Clifden, Mr. George Robinson, J.P., of Ballinahinch Castle, in the chair, when resolutions were unanimously passed, declaring "that the cereal crops are far below the average;" that "two-thirds of the potato crop are diseased, and the rest unfit for food;" that what grain there is "is seriously damaged by the constant rain," and that already "a scarcity of fuel exists." The meeting decided that these facts should be embodied in a memorial to be laid before the Executive, praying for a timely interposition on the part of Government to prevent the recurrence of famine and the sacrifice of life.

THE CATHOLIC UNIVERSITY.—The liberal aid offered to the Queen's Colleges by Sir Robert Peel has stimulated the zeal of a Roman Catholic gentleman in Dublin, who has given 100*l.* a-year for the next 10 years for five scholarships in the Catholic University. The example has been followed by a Catholic citizen, who has given 20*l.* a year for each of five scholarships for the ensuing 10 years.

Scotland.

THE YELVERTON CASE.—A suit at the instance of Major Yelverton, for a dissolution of his marriage with Maria Theresa Longworth, is now pending in the Court of Session at Edinburgh. On Friday at Judges' Chambers in London, before Baron Martin, an application was made on behalf of the pursuer, or plaintiff, for an order under the 22nd Victoria, cap. 24, to compel the attendance of witnesses on Tuesday at the Palatine Hotel, Manchester, before Mr. Cay, the Commissioner appointed by the Scotch Courts to take evidence. Baron Martin granted the order, stating that it was the first application of the kind which had been made to him under the statute. On Tuesday in accordance with the order four witnesses resident in Manchester—[illegible] Thomas Burton, Richard Stephenson, Thomas [illegible], and George Campbell, sen., were examined before Mr. Cay. Mr. J. Millar, advocate, and Mr. P. Adam, solicitor, were present for Major Yelverton; and Mr. [illegible] Hope, advocate, appeared for Mrs. Yelverton. The proceedings lasted several hours, and were, as usual, conducted privately. It is rumoured that the evidence taken had reference to circumstances connected with Mrs. Yelverton's life before her marriage, [illegible] said to have been passed chiefly in the neighbourhood of Manchester.

Sporting.

NEWMARKET HOUGHTON MEETING.

MONDAY.—*Selling Handicap.* Mr. W. S. Crawfurd's [illegible] beat Absinthe, Baron Rothschild's f., St. Lawrence, and 6 others. —*Sweeps.* Mr. R. M. Stephenson's Vulture beat [illegible], Lady Suffolk, and Plot.—*Match.* Mr. R. Ten Broeck's [illegible] beat Reveille.—*Selling Handicap.* Mr. R. Ten Broeck's [illegible] niere beat Brother to Teddington.—*Match.* Mr. [illegible] Gabardine beat Lord Glasgow's c.—*Maiden Plate.* Mr. W. [illegible] Crawfurd's b. f. by Cannobie beat Carisbrook, Mr. Osborne's b. c. by Fazzoletto, and 7 others.—*Sweeps.* Mr. W. [illegible] King of the Forest beat Gallus, Pardalote, and 4 others.—*Criterion Stakes.* Sir R. Bulkeley's Old Calabar beat [illegible] ham, Wingrave, and 7 others.—*Handicap Plate.* Mr. [illegible] Acco beat Captain Fortibus, Flirtation, Cosmopolite, and 14 others.—*Sweeps.* Mr. Greville's Tarragona walked over.

TUESDAY.—*Fifty Pounds.* Mr. Osborne's c. beat Mr. [illegible] c., Venerator, and 15 others.—*Sweeps.* Baron Rothschild's Restes beat Rover, Maid of the Mist, and [illegible].—*Cambridgeshire Stakes.* Count F. de Lagrange's Palestro beat Gabrielle d'Estrees, Asteroid, and 32 others. Betting at starting: 8 to 1 the Roe, 100 to 8 Asteroid, 100 to 6 Palestro, [illegible] Baron Munchausen, 50 to 1 Gabrielle d'Estrees. Won by half a length, Asteroid a bad third; the Roe fourth, the [illegible] colt fifth, and Baron Munchausen sixth.—*Optional Selling Stakes.* Mr. T. Wadlow's Gazelle beat Tarragona, Tubal Cain, and 11 others.—*Match.* Lord Wilton's West End beat The Drake.—*Sweeps.* Mr. French's Leontes beat Clematis, [illegible], Duplicity, and Hermes.—*Handicap Sweeps.* Duke of Beaufort's East Sheen beat Mahala, Knightbridge, [illegible], and 11 others.—*Match.* Sir H. Des Vœux's [illegible] sauce.—*Selling Handicap Sweeps.* Mr. Gilby's [illegible] beat Pardalote, David Ann, and Evenhand.—[illegible] Mr. W. S. Cartwright's Fairwater beat Costa, Amsterdam, and Sir H. Des Vœux's f.—*Fifty Pound Plate.* Mr. G. Bryan's Waterwitch beat Will o' the Wisp, Virgilius, and 5 others.—*Sweeps.* Lord Stamford's Athlete walked over, the others paying forfeit.—*Match.* Mr. C. Alexander's Lorelei received [illegible].

WEDNESDAY.—*Optional Selling Plate.* Mr. J. [illegible] Weasel beat Nerio, Conundrum, and Rover.—*Match.* Mr. [illegible] Ten Broeck's Amy beat Lady Blanche.—*Fifty Pound Plate.* Mr. G. Bryan's Waterwich beat Carbineer and [illegible].—*Renewal of the Glasgow Stakes.* Sir R. Bulkeley's Old Calabar beat Le Ballerino.—*Match.* Lord Chesterfield's Jacintha beat Lord Glasgow's f. by Weatherbit.—*Handicap Sweeps.* Mr. [illegible] f. by Stockwell beat Paradox, Black Pearl, and 20 others. —*Match.* Mr. Savile's Archeress beat Lord Glasgow's [illegible] Stockwell.—*The Grosvenor Plate Stakes.* Baron Rothschild's Brother to King of Diamonds beat Lord Durham's br. [illegible] West Australian, Lord Glasgow's br. c. by Barbatus, and [illegible] Ailesbury's c. by Windhound.—*Sweeps.* Mr. John [illegible] Vulture beat Lady Derby, Blisworth, and Lisbon.—[illegible] *ton Plate.* Mr. Laing's Birdhill beat Miss Livingstone, [illegible] Wildfire, East Sheen, and 8 others.—*Sweeps.* Lord [illegible] land's Pupil beat Queen Elizabeth, Trust, and 4 others.—[illegible] Mr. C. Alexander's Farfalla beat Cantinière.—*Sweeps.* [illegible] Stamford's King of Hearts beat Lord Lonsdale's [illegible] Kingston.—*Sweeps.* Lord Stamford's Maid of Honour beat Touch-me-not, King of the Forest, and 7 others.

THURSDAY.—*Subscription Handicap Plate.* Mr. [illegible] Roesia beat Stanton, Zodiac, and 8 others.—*Free Handicap Sweeps.* Lord Zetland's Carbineer beat The Roe.—*Free Handicap Sweeps.* Lord Stamford's Lava beat Gauntlet, [illegible] and 5 others.—*Sweeps.* Mr. E. Thomas's Dux beat [illegible] Blacklock, Golden Fleece, and Sacerdos.—*Handicap Sweeps.* [illegible] Hawksley's Nutbush beat Lava, Longshot, Confectioner, and 5 others.—*Handicap Sweeps.* Mr. Hughes's Real Jam beat [illegible] W. Day's c., Black Pearl, and 15 others.—*Handicap* [illegible] Lord Stamford's Walloon beat Queen of the Vale, [illegible] Gallus, and 11 others.—*Sweeps.* Mr. T. Valentine's [illegible] beat Captain Lane's br. f.—*Selling Handicap* [illegible] Mundy's Grey Milton beat Foxhead, Memo, and [illegible] *Sweeps.* Mr. Greville's Tarragona beat Crisis, [illegible] 5 others.—*Optional Selling Plate.* Mr. Merry's [illegible] Mr. Hodgman's f., Miss Emma, Night Revel, and [illegible]

FRIDAY (by Electric Telegraph).—100*l.* *Handicap* [illegible] Gridiron beat Cantine, Virgilius, and 6 others.—*Handicap Sweeps.* [illegible] Birdhill beat Biondella, Staple Oak, and 13 others.—[illegible] *Sweeps of 20 Sovs.* Voltella beat Black Lily, King of Diamonds, and [illegible] *Sweeps.* King of the Forest beat [illegible] and 6 others.—*Sweeps.* Ninette filly beat Mdlle. Champagne, [illegible] others.—*Sweeps.* Lapidist beat [illegible] others.—*Optional Selling Plate.* Salamanca walked over.—[illegible] 13 others.—*Sweeps of 500 Sovs.* Salamanca walked over—*First Class Nursery Stakes of 25 Sovs.* Amy beat Solferino.—*First Class* [illegible] Dead heat with Spark and Malek.—*Match.* Clarissa [illegible] Alchymist.—*Second Class Nursery Stakes.* Gorse beat Buckenham and 9 others.

THE BIRMINGHAM FOOT RACE.—A foot race of [illegible], in which the men were handicapped, took place on Monday, [illegible] the St. Helena Gardens, near Birmingham, in the presence of between 3000 and 4000 persons. The competitors were [illegible] celebrated for his performances at six miles, and who [illegible] at "scratch;" Deerfoot at 50 yards, and Roberts and Richards at 440 yards. The men were started at a few minutes [illegible] four, and ran round a broad path encircling a kind of grass sward. Deerfoot passed Roberts and Richards when about three-fourths of the ground was run over, and maintained the lead. He was once challenged for two or three minutes [illegible]

Mills was approached within a few yards, but never overtook the Indian, who won easily. Mills lost a portion of the ground he had gained and fell out, though it was said that he ran second when the four miles had been completed, but that there was a run over of 205 yards by the Indian, and when the men stopped Richards was in the second place. Roberts had given up earlier. The four miles were run in 21 minutes and 42 seconds.

Obituary.

Sir James Graham, Bart., M.P., died suddenly on Friday ... at Netherby, his seat in Cumberland, from disease of ... He had been in failing health for some years past, ... the sudden termination of his illness was not altogether unexpected. The Right Hon. Sir James Robert George Graham was the eldest son of the first baronet, by Lady Catherine Stewart, the eldest daughter of the seventh Earl of Galloway. He was born in 1792, and was consequently in his 69th year. He married, in 1819, the youngest daughter of Sir James Campbell, of Ardkinglass, by whom he leaves issue Frederic Ulric, married to the eldest daughter of the Duke and Duchess of Somerset, and several sons. Among his daughters two are married, one to the Hon. E. Duncombe, M.P., and the other to ... His political career has extended over a period of more than forty years. He represented Hull in Parliament from 1818 to 1820, and succeeded his father in the baronetcy in 1824. Two years later he was returned for Carlisle, in the Whig interest, of which party he soon became an important member. In 1830 he was elected for the county of Cumberland, and became one of the most strenuous supporters of the Reform Bill, as he had previously been of the repeal of the Test and Corporation Acts and of Catholic Emancipation. On the formation of Earl Grey's Administration, he was nominated First Lord of the Admiralty, with a seat in the Cabinet. In 1832 he was returned for East Cumberland, which he represented up to 1837. In 1834 dissensions in Earl Grey's Cabinet arose on the Irish Church question, which led to his retirement with Lord Stanley, the late Duke of Richmond, and the late Earl of Ripon. The disruption occasioned the early downfall of the Grey Administration. On Sir Robert Peel coming into power, it was expected that Sir James would have joined his Administration; but with other members of the Derby party he declined to do so, though he subsequently supported it by his votes. At the general election in 1837 he was rejected by his former constituents, and remained out of the House of Commons until the following session, when he was returned for Pembroke. In 1841 he was elected for Dorchester. In that year, on Sir Robert Peel being called upon to re-form a Ministry, Sir James took office as Secretary for the Home Department, a post which he held until the dissolution of the Government, in June, 1846. During his tenure of office he was an active supporter of the repeal of the corn laws and of the free trade policy inaugurated by Sir R. Peel. From 1847 to 1852 he sat for Ripon, and in the latter year was re-elected for Carlisle, which city he has since represented in the House of Commons. On the Earl of Aberdeen coming into power in December, 1852, Sir James was reappointed First Lord of the Admiralty, and remained in the Ministry until the adverse vote on Mr. Roebuck's motion for a select committee to inquire into the condition of our army before Sebastopol. From that period he has declined office, though still regarded as one of the ablest administrators of his party. He was a D.C.L. of Cambridge, and was *Lord Rector of Glasgow* University in 1840. He is succeeded in the baronetcy and estates by his eldest son, Frederick Ulric, born in 1820. He was attached to the embassy at Vienna in 1842, and subsequently entered the 1st Life Guards.

Major-General Hely, K.H., died on the 17th inst., at his residence in Norfolk Crescent, Bath, in his 76th year. He was the son of Colonel Hely, who fell in front of his regiment at ..., contending with the forces of Napoleon I. He served in the West Indies with the 69th Regiment in 1801 and 1802, and subsequently with the 57th Regiment on the Coast of Africa, and in Gibraltar during the plague; he joined Lord Hill's division in the Peninsula in 1809, and was present at the battle of Busaco, in the actions of Pombal and Redinha, the first siege of Badajoz, battle of Albuera—where he was twice wounded, and held the command of the regiment after that action; battles of the Pyrenees, Nivelle, Nive, that before Bayonne on the 13th December, 1813, and Orthes; affairs of Garache, Aire, and Tarbes, and battle of Toulouse. He sailed for Canada at the conclusion of the war; returned after the peace with America, landing at Ostend; marched to Paris, and served with the Army of Occupation until the breaking up of that force. He had received the war medal with six clasps.

Miscellaneous.

Statistics of Population in France.—The Bureau of Statistics has just published returns relative to the population in France. It appears from these documents that though from 1851 to 1855 there was a decline in the population, the years 1856, 1857, and 1858 presented an increase. Whilst, however, in the first half of the present century the augmentation was at the rate of 150,000 souls per annum, it was only in these three years 97,400. It further appears from the returns that whilst the average life of the French from 1817 to 1824 was 31.8 years, and rose in 1855 to 40, it fell in 1856, 1857, and 1858 to an average of 37.5 years. This was chiefly owing to greater mortality among children, especially those of illegitimate birth. As to the number of illegitimate children born in France, it appears that whilst from 1817 to 1853 the proportion was 1 illegitimate child for every 12.95 legitimate, the proportion in 1856 was 1 to 12.27, and in 1857 and 1858, 1 to 12.12. This increase in illegitimate births has, strange to say, taken place not in towns but in agricultural districts. In Paris and the Department of the Seine, however, the number of illegitimate births is truly formidable, being for 1858, 15,230 out of 52,793.

The American Polar Expedition.—This expedition, under Dr. Hayes, arrived at Halifax on the ... It was unable to penetrate through Smith's Straits either this summer or last, on account of the heavy ice. By means of dog sledges, however, it succeeded in penetrating as far as latitude 81 deg. 35 min. on the west side of Kennedy Channel. Two of the party died—Mr. August Sontag, the astronomer, and Gibson Carruthers, but the 13 others have returned all well.

BIRTHS.—On the 30th Oct., at Castle Hill, Devonshire, the Countess Fortescue, of a son—23d ult, Lady Robert Cecil, of a son—24th ult, at Chavenage, the Hon. Mrs. Yarde-Buller, of a son—27th ult, at 12, Berkeley Square, the wife of George Glynn Petre, Esq., H. B. Majesty's Secretary of Legation at Hanover, of a son—26th ult, at Kirkmichael House, Dumfriesshire, the wife of Lieut.-Col. Luke White, M.P., of a son—28th ult, at 26, Chesham Place, Mrs. Pakenham Mahon, of a daughter—27th ult, at Woolwich, the wife of Major-General Tuite, R.A., of a son.

MARRIAGES.—On Tuesday, the 29th ult, at Hartshead Church, Yorkshire, Wroth Acland Lethbridge, Esq., second son of Sir John Lethbridge, Bart., of Sandhill Park, Somersetshire, to Ann Williams, second daughter of Thomas Benyon, Esq., of Thorp Arch, Yorkshire—23d ult, at St. James's, Piccadilly, Ambrose Charles, eldest son of Ambrose Lisle Phillipps, Esq., of Gracedieu Manor, Leicestershire, to Frances Amelia Victoria, youngest daughter of the late Sir Richard Sutton, Bart.—20th August, at Boolundshuhur, N.W. Provinces, India, F. E. Elliot, Esq., C.S., son of Rear-Admiral Sir Charles Elliot, K.C.B., to Marcia Cordelia, youngest daughter of the late Lieutenant-Colonel John Ralph Ouseley, of the Bengal Army—9th ult, at the Church of Santa Maria de Corboli, near Florence, Henry Eustace, Esq., of Corbally, in the Queen's County, Ireland, to Albertina, widow of the late Count Foschi, and youngest daughter of the late Lieutenant-General (Marquis Paulucci, Governor-General of Genoa, Knight of the Annunziata, &c.—29th ult, at St. Mary's Church, Cheltenham, John, eldest son of the late Archibald Harvey, Esq., of Caw House, county Londonderry, Ireland, to Emily, youngest daughter of the late Sir Wm. Oldnall Russell, Chief Justice of Bengal—26th ult, at St. Stephen's, Dublin, Thomas Hutchinson Tristram, Esq., D.C.L., Advocate Doctors' Commons, to Flora, daughter of the late Very Rev. Thomas John de Burgh, dean of Cloyne, and of the Lady Anne de Burgh—24th ult, at Kingillie, Inverness-shire, the Rev. Charles Kirkby Robinson, M.A., Master of St. Catherine's College, Cambridge, and Canon of Norwich, to Margaret Clifford Melville, daughter of the late Major Ludovick Stewart, of H.M.'s 24th Regiment.

DEATHS.—On the 27th ult, at North House, Torpoint, the Hon. Mrs. Percy Davison—27th ult, at The Grove, Sidmouth, Sarah Jametta, widow of the late Rev. Henry Hodgkinson, rector of Arborfield, Berks, and only surviving daughter of the Rt. Rev. Claudius Crigan, late Bishop of Sodor and Man, aged 79—25th ult, at Surbiton House, Kingston, Caroline Elizabeth, wife of B. H. Mowbray, Esq., and second and last surviving daughter of the late Hon. Archibald Cochrane, Captain R.N.—22d ult, at Brighton, Robert Edward Eardley, eldest son of Sir Henry S. Wilmot, Bart., of Chaddesden, Derbyshire, aged 31—22d ult, at Tunbridge, George W., son of Sir Woodbine and Lady Parish, aged 15—27th ult, at Pinner, after two days' illness, Mrs. Pye, widow of the late Henry James Pye, Esq., formerly poet laureate and M.P. for Berks, whom she survived forty-eight years, aged 91—23d ult, at Bevere Firs, near Worcester, Matilda Jane, wife of Henry Salusbury Milman, Esq., aged 41—27th ult, at St. George's Hill, in the county of Somerset, after long and very severe suffering, Milly, the wife of the Rev. Henry Mirehouse, and daughter of the late Philip John Miles, Esq., of Leigh Court, Somerset, aged 51—23d ult, at Brussels, Colonel Charles White, aged 69—12th ult., at Poona, Bombay, of dysentery, Captain Robert Maurice Bonnor Maurice, H.M.'s 95th Regiment, eldest son of R. M. Bonnor Maurice, Esq., of Bodynfoel, Montgomeryshire, aged 24—18th August, at Canton, in China, of fever, Edmund Harry Ord, Esq., Captain H.M.'s 3d Regiment, Bombay N.I., third son of the late Harry Gough Ord, Esq., of Bexley, Kent, and formerly Captain in the Royal Artillery—10th August, accidentally drowned in the Canton River while in the discharge of his duties, Frederick Woodward, of the Marine Customs, second son of the late Rev. Charles Woodward, aged 18—24th ult, at Norwich, Wm. Collyer, Esq., Colonel Bengal Infantry, and a magistrate for the county of Norfolk and city of Norwich—21st ult, at Rhiwaedog, near Bala, Henry Richardson, Esq., formerly Lieutenant 67th Regiment and 2d Dragoon Guards, and for many years a magistrate and Deputy-Lieutenant for the county of Merioneth, aged 79—26th ult, at Upper Homerton, after a long illness, Sarah, the wife of J. J. Ronaldson, Esq., sister of Major General Huthwaite, C.B., Bengal Horse Artillery, and niece of the late Lieut.-General Huthwaite, Bengal Army, aged 62—30th Sept., on board the Royal mail steamer Oneida, on her passage from the Brazils to England, Ann, widow of the late George Mortimer, Esq., late of Fonthill Park, Wilts—15th ult, at St. Brelade, William John Johnson, Esq., Fellow of Caius College, Cambridge, aged 49—27th ult, the Rev. W. B. Cosens, for 18 years vicar of Berry Pomeroy, Devon, and formerly, for 18 years rector of Monkton Farleigh, Wilts, aged 69—25th ult, at Bath, Rev. Archibald Paris, rector of Ludgvan, Cornwall, aged 44.

Markets.

COVENT GARDEN, Nov. 2.

Continental supplies, consisting of Pears and Apples, remain heavy, and those of English Vegetables and Fruit also continue to be well kept up. Home-grown Apples and Pears are plentiful, and the same may be said of Grapes and Pine Apples; the latter now fetch fair prices. Of Cauliflowers there is still a good supply. Potato markets have unaltered since our last report. Cucumbers are sufficient for the demand, and the same may be said of Tomatoes, which this season are large and excellent. Cut flowers chiefly consist of Orchids, Dahlias, Chrysanthemums, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Oranges, per 100, 6s to 14s
Grapes, per lb., 1s 6d to 4s	Lemons, per 100, 6s to 10s
Melons, each, 1s to 3s	Nuts, Cob, per pound, 2s to 2s 6d
Pears, per doz., 1s to 6s	Walnuts, per 100, 2s
Apples, per doz., 6d to 1s	

VEGETABLES.

Cauliflowers, each, 2d to 6d	Artichokes, each, 6d to 8d
Broccoli, per bundle, 1s to 1s 3d	Beet, per doz., 1s 6d
French Beans, per sieve, 2s 6d to 3s 6d	Celery, p. bundle, 1s 6d to 2s
Cabbages, do., 1s 3d to 1s 6d	Onions, pickling, p. ½ sieve, 4s 6d
Potatoes, p. ton, 60s to 75s	Tomatoes, p. doz., 1s to 6s
— per cwt., 4s to 8s	Shallots, per lb., 8d to 10d
Turnips, per bunch, 2d to 4d	Garlic, per lb., 6d to 8d
Carrots, do., 4d to 6d	Endive, p. score, 1s 6d
Spinach, p. sieve, 1s to 2s	Horse Radish, p. bun., 1s 6d to 4s
Cucumbers, each, 6d to 9d	Mushrooms, p. pott., 2s to 3s
Veg. Marrows, p. doz, 1s to 1s 6d	Parsley, p. 12 bunches, 3s to 4s
	Savory, per bunch, 2d to 4d

HAY.—Per Load of 36 Trusses.

Smithfield, Thursday, Oct. 31.

Prime Meadow Hay	80s to 90s		Clover, old	90s to 120s	
Superior do. ..	95	105	New Clover ..	—	—
Inferior do. ..	40	55	Do. second cut ..	80	105
New do.	—	—	Straw	28	34
Rowen	—	—			

Davis & Co.

Whitechapel, Thursday, Oct. 31.

Fine Meadow Hay	90s to 98s		Fine 1st cut Clover	110s to 117s	
Inferior do. ..	65	90	Inferior do. ..	90	105
Prime New Hay ..	—	—	New 2d cut ..	80	105
Inferior	—	—	Inferior do. ..	—	—
Straw	27	32	New 1st cut ..	—	—

BUTTER MARKET.—Nov. 1.

Best Fresh Butter .. .. 16s. per dozen lbs.
Second do. do. .. .. 14s. " "
Pork, 5s. 0d. to 5s. 4d. per 8 lbs.

HOPS.—Borough Market, Friday, Nov. 1.

Messrs. Pattenden & Smith report the demand active for the best samples of new growth which are becoming scarce, and prices gradually advancing. There is an improved demand also for foreign Hops, the prices of which are also dearer.

POTATOES, Southwark, Monday, Oct. 28.

During the past week the arrivals coastwise have been very limited, the most of which were inferior in quality, particularly from Scotland, but arrivals by rail have been more plentiful. Prices very various, according to soundness, size, and quality. The following are this day's quotations:—Kent and Essex Regents, per ton, 110s. to 130s.; Yorkshire do., 90s. to 120s.; Lincolnshire do., 90s. to 110s.; Scotch do., 60s. to 95s.; French Whites, 100s. to 110s.

BRITISH WOOLS.—London, Friday, Nov. 1.

Our supplies of fleece wool are very scanty, and higher prices have been realised during each of the last three weeks at the farmers than can be made here: 40s. the tod of 28 lbs. having been given the farmer for various descriptions of wool in the counties round. With us trade is flat, and scarcely any business transacted, except for the present pull of carding skin, which sells at recent prices.

	s. d. s. d.		s. d. s. d.
South-down Hoggets ..	to 1 5	Leicest. Wethers	1 3 to 1 ..
Half-bred ditto ..	1 5 — 1 6	Ditto Hoggs	1 4 — 1 ..
Down Ewes	1 4 — 1 5	Combing Skins	1 0 — 1 ..
Kent Fleeces	1 5 — ..	Flannel Wool	1 0 — 1 ..
		Blanket ditto	0 6 — ..

METROPOLITAN CATTLE MARKET.

Monday, Oct. 28.

The number of Beasts is about the same as on Monday last, and there is not much alteration in the trade. There is a considerable proportion of inferior, and several remain unsold. The supply of Sheep is only a little larger than last week, but the demand is not so good, and prices are rather lower. Trade is dull for Calves; choice ones are not plentiful, and maintain late rates. From Germany and Holland there are ... Beasts, 9200 Sheep, and 112 Calves; from Ireland, 1800 Beasts and 800 Sheep, and 15 Calves; and 2500 from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 8 to 5 0	Best Long-wools	5 0 to 5 4
Best Short-horns	4 6 — 4 8	Ewes & 2d quality	4 6 — 4 10
2d quality Beasts	3 0 — 4 0	Do. Shorn	.. — ..
Best Downs and Half-breds ..	5 4 to 5 6	Lambs	.. — ..
Do. Shorn ..	.. to ..	Calves	4 4 — 5 2
		Pigs ..	4 4 — 5 4

Beasts, 6670; Sheep & Lambs, 24,650; Calves, 153; Pigs, 500.

Thursday, Oct. 31.

The number of Beasts is large; it however includes several left over from Monday last. Trade is dull; on the average Monday's quotations are realised, but a clearance cannot be effected. The supply of Sheep, which is rather large, consists chiefly of foreign and inferior qualities. Good qualities are freely disposed of at fully late rates. Other kinds meet with a slow sale. Calf trade remains unaltered. Our foreign supply consists of 850 Beasts, 5560 Sheep, and 150 Calves. Milch Cows, 90.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 8 to 5 0	Best Long-wools	5 0 — 5 4
Best Short-horns	4 6 — 4 8	Ewes & 2d quality	4 6 — 4 10
2d quality Beasts	3 0 — 4 0	Do. Shorn	.. .. to ..
Best Downs and Half breds ..	5 4 — 5 6	Lambs ..	.. — ..
Do. Shorn	.. ..	Calves ..	4 4 — 5 2
		Pigs ..	4 4 — 5 4

Beasts, 1210; Sheep & Lambs, 6150; Calves, 202; Pigs, 300.

COAL MARKET.—Oct. 30.

Carr's Hartley, 17s. 3d.; Howard's West Hartley, 17s. 3d.; Lambert's West Hartley, 17s. 3d.; Holywell, 15s. 6d.; Tanfield Moor, 13s.; Walker Primrose, 18s.; West Wylam, 15s.; Walls End Gibson, 18s.; Walls End Gosforth, 18s. 3d.; Walls End Hedley, 18s. 3d.; Walls End Braddyll's Hetton, 19s. 9d.; Walls End Durham, 17s.; Walls End Hetton, 20s. 6d.; Walls End Hugh Hall, 19s.; Walls End South Hartlepool, 19s. 3d.; Walls End South Kelloe, 19s. 9d.; Walls End Thornley, 17s. 6d.; Walls End Trimdon Hartlepool, 20s.; Walls End Whitworth, 15s. 9d.; Walls End Thorpe, 17s.; Carway and Duffryn Anthracite, 21s. 6d.; Carway and Duffryn Malting, 24s.—Ships at market, 122.

MARK LANE.—Monday, Oct. 28.

The supply of Wheat from Essex and Kent to this morning's market was small, and the greater part, particularly the red, was sold at a decline of 1s. per qr., which, however, some factors declined to accept; business in foreign was limited, holders insisting upon fully former prices. Barley is a free sale at extreme prices. Beans and Peas are unaltered in value. Old Oats bring late rates; new are difficult of sale and rather cheaper. Flour sells at last week's prices.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk..White	50—64	Red	50—60
— — fine selected runs..ditto	61—66	Red	50—62
— — Talavera	55—70		
— Norfolk	—	Red	—
— Foreign	48—76		
Barley, grind. & dist., 26s to 28s..Chev.	36—41	Malting .	35—38
— Foreign..grinding and distilling	27—30	Malting .	36—40
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire—Potato	26—28	Feed .	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign.... Poland and Brew	20—24	Feed .	19—24
Rye	36—38	Foreign .	—
Rye-meal, foreign	—		
Beans, Mazagan....35s to 37s..Tick	36—38	Harrow	36—39
— Pigeon ....38s—42s..Winds	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
Peas, white, Essex and Kent..Boilers	40—44	Suffolk .	40—46
— Maple ....43s to 45s ......Grey	39—41	Foreign .	35—38
Maize..............White	—	Yellow ..	—
Flour, best marks delivered..per sack	50—55		
— 2d do ....ditto	40—50	Country	40—50
— Foreign ....per barrel	28—36	Per sack	43—58

Friday, Nov. 1.

The weather since the 23d ult. has continued fine and dry, with a lower temperature. During the above period the Wheat trade has been dull, at a decline in price of 1s. per qr., which, in a few markets, was rather exceeded. In Liverpool and Glasgow rather more tone was, however, observable, and here on Wednesday English Wheat fully recovered Monday's decline. The quantity of Wheat afloat for this kingdom appears to be unusually small, both from America and the Baltic. The navigation between Buffalo and New York may be expected to close about the middle of November, and by the last accounts the stock of Wheat in New York was said not to exceed 100,000 bushels, against 2,000,000 last year. These facts

must probably influence future prices, unless a portion of the French purchases should be directed to this country. The previous value of spring corn has been well supported, particularly fine Barley, which has an upward tendency. Flour meets a fair sale at last week's prices. Since Friday last 32 vessels have been reported off the coast. The floating trade has been quiet, and inactive, and to force sales less money would have to be taken. The arrivals of English grain this week have been to a fair extent, of foreign large. The attendance at this morning's market was small, and on English Wheat the decline of Monday was recovered. Foreign was held firmly for full prices, but only a limited business resulted. Barley, Beans and Peas bring Monday's quotations. Old Oats are in good demand, and fully as dear; but new are difficult of sale.

ARRIVALS FROM Oct. 28 to Nov. 1.

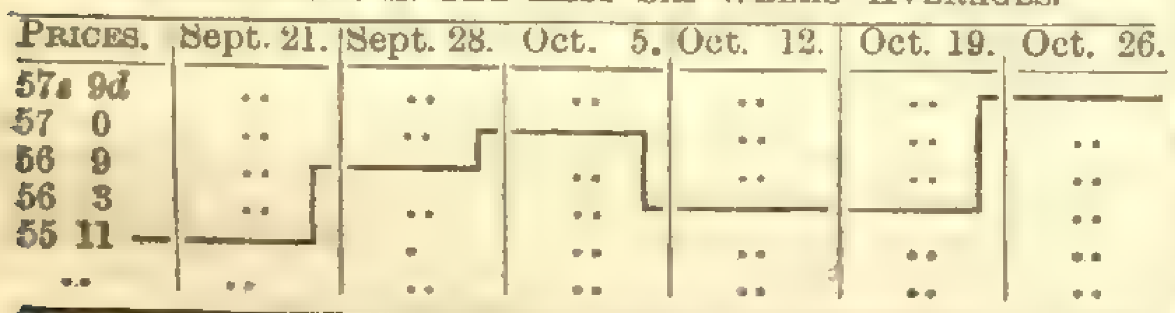
	Wheat.	Barley.	Oats.	Flour.
English ..	2270 qrs.	910 qrs.	250 qrs.	1290 sks.
Irish	— „	— „	2400 „	— „
Foreign ..	25440 „	5460 „	32300 „	{ 500 „ 790 brls.

LIVERPOOL, Tuesday, Oct. 29.—There was a fair attendance at market to-day. Wheat was in better demand than on Friday, and met a moderate sale at a decline of 2d. per 100 lbs. from the rates of this day week. Flour very scarce, and steady at former prices. Oats and Oatmeal dull and neglected. Beans 1s. per qr. lower. Barley firm. Indian Corn in more inquiry, and mixed was difficult to buy at 33s., yellow 33s. 6d., white 36s. to 38s. per 480 lbs.

FRIDAY, Nov. 1.—There was a fair attendance at to-day's market. Wheat in good consumptive request, at an advance of 1d. per cental. Flour scarce and rather dearer. Indian Corn in good request; mixed 33s. 3d. to 33s. 6d. Egyptian Beans, 36s. Oats and Oatmeal unaltered.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Sept. 21..	55s 11d	36s 4d	22s 10d	34s 11d	41s 11d	38s 9d
— 28..	56 9	37 4	22 10	35 9	42 4	40 10
Oct. 5..	57 0	37 4	22 6	35 4	42 0	40 4
— 12..	56 3	37 6	21 10	37 3	41 8	42 11
— 19..	56 3	36 9	21 6	34 9	41 10	41 10
— 26..	57 9	36 7	21 11	35 1	42 3	44 8
Agg. Aver.	56 8	37 1	22 3	35 6	42 0	41 7

FLUCTUATIONS IN THE LAST SIX WEEKS' AVERAGES.



Bucks County Lunatic Asylum.

WANTED, a LODGE PORTER.—The Committee of Visitors of the Pauper Lunatic Asylum at Stone, near Aylesbury, in this County, invite Applications from Persons desirous of becoming Candidates for the office of Lodge Porter in this Asylum. The Person selected must be of good character, a married man of not less than 40 years of age, without incumbrance, and he will be required to devote his whole time and attention to the duties of his office. He must be able to read and write, and comply in all respects with the Rules which will be laid down for his guidance by the Committee of Visitors. He will be required to understand the Management of a Garden, and it will be his duty also to take charge of part of the Garden at the Asylum, and of some of the Patients working therein. Applications and Testimonials, stating age and qualifications, must be sent to me on or before Tuesday the 19th day of November, 1861. Candidates are not to attend personally, until required by the Committee. The Wages will be 12s. per week, with an allowance of Fuel and Gas, but without Rations; and he will have the use of the Entrance Lodge, with a small Garden attached, free of Rent, Rates, and Taxes.

ACTON TINDAL,
Clerk to the Committee of Visitors.
County Hall, Aylesbury, Nov. 2.

WANTED, a GARDENER and his WIFE, no family, to take charge of a small place. Must have a good knowledge of Vinery and Peach Houses. Would be required to attend to Pony, Chaise, &c.; and Wife to do the Washing for the family. Wages 20s. per week, with house, firing, and gas.—Address with reference, to G. B., care of Mr. Stalker, Luton News Office, Luton, Beds.

WANTED IMMEDIATELY, a YOUNG MAN, who thoroughly understands Flower Seeds, and who has been accustomed to the Retail Trade. Wages, 25s. per week.—Apply personally, or by letter, to BARR & SUGDEN, 12, King Street, Covent Garden, W.C.

WANTED, TWO ASSISTANTS in SEED WAREHOUSE. Those used to the Trade preferred.—Apply to HURST & MCMULLEN, Church Street, Minories, E.C.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD), or FOREMAN of WORKS.—Has a good practical knowledge of Horticulture, and is well acquainted with the Laying out of Ground, and making of Plans, &c.—R. H., 51, Edward Street, Albany Street, N.W.

GARDENER (HEAD).—Age 33, married, one child; has had great experience in Gardening in all its branches. Can have five years' character from his present situation.—Y. Z., Post Office, Dunbar, Scotland.

GARDENER (HEAD).—Age 36, married; has had great experience in Forcing all kinds of Fruit, Flowers, and Vegetables, the routine of Kitchen and Flower Gardens, the Erection and Heating of Hothouses, the Improvement of Pleasure Grounds, &c. Five years' good character.—S. S., Mr. Veitch, Exotic Nursery, King's Road, Chelsea, S.W.

GARDENER (HEAD).—Thoroughly practical in Fruit, Flower, and Kitchen Gardening, Forcing, and otherwise. Any nobleman, gentleman, &c., requiring a person as described above, can apply to GEORGE BATLEY, The Nursery, Rugby, who will give all particulars respecting the man whom he so strongly recommends.—Rugby Nursery.

GARDENER (HEAD).—Middle-age, married; steady, active, of industrious habits, and practical experience. A first-rate Fruit and Plant Grower, and thoroughly master of his profession in every department. Several years' excellent character from last situation. Wages moderate.—A. B., Charles Turner, Esq., The Royal Nurseries, Slough.

GARDENER (HEAD).—J. GADD is at liberty to engage as above. Has a practical knowledge of his profession in all its branches. No objection to any part of England. Good character from present and former employers. Could undertake the Management of Park and Woodlands, Draining, &c. Salary expected 75l. per annum, with house, &c.—J. GADD, Willersley, Matlock, Derbyshire.

GARDENER (HEAD).—Aged 44, married, no incumbrance; understands Vines, Pines, Melons, and Cucumbers, and Forcing in all its branches, Propagating, and Bedding out Plants. Wife can undertake a Laundry. Good reference.—W. S. STANCLIFFE, Middleton, Manchester.

GARDENER (HEAD, WORKING).—Age 36, married; a thorough practical business man; has had extensive practice in Laying out Pleasure Grounds, Flower and Kitchen Gardens; the Management of Vineries, Peach and Orchard Houses; also the Care and Management of Stock, and of Meadow Land.—P. L. P., Mr. Cabburn, Post Office, High Street, St. John's Wood, N.W.

GARDENER (HEAD or GOOD SINGLE-HANDED).—Age 24, single; is accustomed to Early and Late Forcing of Vines, Peaches, Cucumbers and Melons, and the Culture of Stove and Greenhouse Plants, Flower and Kitchen Garden. Undeniable good character.—C. P., 2, Brook Place, Lower Edmonton, Middlesex.

GARDENER (HEAD), or GARDENER and BAILIFF.—JOHN COTTERELL (age 34, married, no incumbrance), for some time past in the service of J. E. Jones, Esq., Derry, Ormond Park, by Lampeter. J. C. concludes his engagement with Mr. Jones about November 18, and will be happy to engage with any nobleman or gentleman in want of a thorough practical active steady Man in either of the above capacities. J. C. has had considerable experience in Reclaiming and Planting of Waste Land, and could undertake the Planting and Drainage of Land to any extent. For character and ability apply to above address.—J. COTTERELL, Derry, Ormond Park, Lampeter.

GARDENER (UNDER).—Age 26; well acquainted with his profession; active, steady, and willing, well recommended.—B. B., Mr. Haigh, Nurseryman, Plaistow, Essex.

NURSERY FOREMAN and PROPAGATOR.—Married, age 36; understands the Growth and Propagation of Stove and Bedding Plants, Trees, Shrubs, and Forest Trees, &c.—N. D. J., Messrs. Carter's, Crystal Palace Nursery, Forest Hill, Sydenham, S.E.

FOREMAN (GENERAL or GROUND), in a Nursery.—Thoroughly understands the growth of Fruit and Forest Trees, Shrubs, Roses, and Coniferæ. Good references as to character and ability.—A. B., 16, Upper Winchester Street, Caledonian Road, N.

PROPAGATOR, or PROPAGATOR and FOREMAN.—Age 41; extensive practical experience in the Propagation and Cultivation of Stove and Greenhouse, Cape, New Holland Plants, &c. A most proficient Graftsman of Conifers, Camellias, Azaleas, Rhododendrons, Roses (on a most improved principle), Ornamental Trees, Shrubs, &c. Upwards of 20 years in a first-class London and Provincial Nursery. The last six years in a first-class Scotch Establishment. Experienced in the general routine of Nursery operations. Satisfactory testimonials.—W. R., *Gardeners' Chronicle* Office, W.C.

MANAGER, BOOK-KEEPER, CORRESPONDENT.—A Practical Gardener who has the Management of a considerable Nursery business will be free in some months. 25 years in the Trade. Extensive connections in all parts of the world where Plants and Seeds are sent to.—A. M., *Gardeners' Chronicle* Office, W.C.

A GENTLEMAN of first rate business habits, and of mature experience in the general Wholesale NURSERY and SEED TRADE, purposes going out this Autumn to the United States and British Possessions in America, and would be glad to receive COMMISSIONS from one or two first-class houses in either of the above trades.—COSMOPOLITE, B. Castalotte, Esq., 12, Argyll Square, London, W.C.

STEWARD, or STEWARD and BAILIFF.—Thoroughly qualified, and well versed in all that appertains to the Modern System of Farming, including the Management of both Fowler's and Smith's systems of Steam Cultivation. First-class references.—S. P., Post Office, Leighton, Bedfordshire.

To Noblemen and Gentlemen.

STEWARD or FARM BAILIFF.—Aged 42; a Norfolk Farmer. Has Farmed both Light and Heavy Soils. Good references given.—JAMES BUNN, Uttoxeter Road, Derby.

LAND STEWARD or BAILIFF.—Age 36, single; has had 20 years' experience in the Farming of Heavy and Light Land, is thoroughly acquainted with the best method of Rearing and Feeding of Stock, Drainage, &c., is a first rate judge of Corn and good Salesman. No objection to France or Ireland. First-class references, with security if required.—J. HEFFER, Temple End Farm, Little Thurlow, Suffolk.

BAILIFF or STEWARD.—Has had long experience, and is permitted to refer to former employers and several country gentlemen.—G. L., Post Office, Cambridge.

BAILIFF.—Thoroughly Practical in Modern Farming, Steam Cultivation, &c. A good judge in Stock, and a good Accountant.—C. D., 66, Herbert Street, Hoxton, London, N.

FARM BAILIFF.—Age 40, married, a native of Roxburghshire; well acquainted with the Modern System of Farming, and a good Judge of Stock. Good references.—A. STEWART, Sewardstone, near Woodford, N.E.

FARM BAILIFF (WORKING).—A Farmer's Son, who thoroughly understands the Working of Ground, Managing of Stock and Marketing. Wife can take charge of Dairy.—F. F., Morley's Library, Watford, Herts.

TO LANDOWNERS.—The Advertiser, who has had great experience in Land Improvements, is desirous of taking upon a long term any Estate between 1000 and 2000 acres which is out of order and requires improvement. The owner of a detached property wishing to avoid the trouble and anxiety attending works of Draining, Road-making, and Building of Homesteads, though still willing that they should be carried out for the benefit of the next generation, may effect that object without loss of income upon terms securing the prepayment half-yearly of the present net rental.—Further details of arrangement may be ascertained by application to A. B., 41, Wellington Street, London, W.C.

CLERK or SHOPMAN.—Active, young; has had 10 years' experience in the Nursery and Seed Trade (Wholesale and Retail). Satisfactory references.—G. P., 13, Rutland Street, Pimlico, S.W.

To Seedsmen.

SHOPMAN.—Ten years' experience in all the branches of the Trade.—Y. Z., 8, Warwick Street, Brighton.

To the Seed Trade.

SHOPMAN.—Age 21; has had six years' experience with Messrs. H. Drummond & Sons, of Dublin and Stirling. Will be disengaged in two months, or sooner if required.—G. K., 58, Dawson Street, Dublin.

Evening Lectures to Working Men.

GOVERNMENT SCHOOL of MINES, [illegible] Street, S.W.—The FIRST COURSE [illegible] LECTURES on the METALLURGY of COPPER [illegible] Dr. PERCY, F.R.S., will be COMMENCED [illegible] November 11, at 8 o'Clock.

Tickets may be obtained "by Working Men [illegible] day, the 4th inst., from 10 to 4 o'Clock, [illegible] of 6d. for the whole Course. Each applicant [illegible] bring his name, address, and occupation, [illegible] paper, for which the Ticket will be exchanged.

TRENHAM REEKS, [illegible]

PELICAN LIFE INSURANCE [illegible]
ESTABLISHED IN 1797.
No. 70, Lombard Street, E.C., and 57, Charing Cross [illegible]

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SPECIAL BONUS NOTICE.—Third Septennial [illegible] Division of Profits to July 1, 1861.—The [illegible] from 21l. 6s. 8d. to 32l. 6s. 8d. per cent. on the [illegible] the last seven years on Policies of 7, 14, and [illegible]

The equivalent Addition to each Policy ranges [illegible] to 59l. 13s. 4d. per cent. of such Premiums [illegible] 2l. 7s. per cent. per annum on the Sum assured.

LOANS on Life Interests in possession or [illegible] upon other approved Security in connection [illegible] Assurance.

*** For Prospectuses, Forms of Proposal, &c. [illegible] Offices as above, or to any of the Company's Agents.

HENRY C. LUNN'S popular PIANO[illegible] COMPOSITIONS:—Le Papillon—La [illegible] Adeline (Reverie)—Alicia (Mazurka). "Every [illegible] the accomplished musician."—*Observer.*

Just published, The Mountaineer's Evening Song.

London: LEADER & COCK, 63, New Bond Street.

MOIRES ANTIQU[illegible] magnificent quality, 4½ guineas.
SEWELL & COMPANY, Compton House.

FASHIONABLE PARIS CLOAKS and JA[illegible] All the NOVELTIES for the SEASON at reasonable [illegible] Real SEAL-SKIN MANTLES, from five guineas.
SEWELL & COMPANY, Compton House.

Captain White's

CURRY or MULLIGATAWNY PA[illegible] Curry Powder, Curry Sauce, and Oriental Pickle, may [illegible] obtained from all Sauce Vendors, and Wholesale of
CROSSE & BLACKWELL, Purveyors to the Queen, Soho Square, London, W.C.

SAUCE.—LEA AND PERRINS beg to caution the Public against Spurious [illegible] their world-renowned
WORCESTERSHIRE SAUCE.
Purchasers should
ASK FOR LEA & PERRINS' SAUCE,
Pronounced by Connoisseurs to be
"THE ONLY GOOD SAUCE."

*** Sold Wholesale and for Export, by the P[illegible] Worcester; Messrs. CROSSE & BLACKWELL, London, &c. &c. and by Grocers and Oilmen universally.

METCALFE, BINGLEY, AND CO.'S [illegible] PATTERN TOOTH BRUSHES, Penetrating [illegible] Hair Brushes, genuine Smyrna Sponges, and every [illegible] of Brush and Comb and Perfumery for the toilet. [illegible] celebrated Alkaline Tooth Powder, 2s. per box.

THE FAIRY BOUQUET.—This delicious [illegible] fume was originally discovered by one of Titania's [illegible] attendants. It is made from wild flowers, [illegible] hands from "the bank whereon the wild Thyme [illegible] authenticity of the recipe is vouched for with the [illegible] of certainty as is the existence of Titania [illegible] now prepared solely by METCALFE, BINGLEY [illegible] fumers, &c., 130 B and 131, Oxford Street, [illegible] bottles, 2s., 3s. 6d., and 5s. each.

HAIR RESTORED, improved, and beautified [illegible] the use of ROWLAND'S MACASSAR OIL.—[illegible] hair from falling off or turning grey, strengthens [illegible] cleanses it from scurf and dandriff, and makes it [illegible] soft, pliable, and glossy. For children it is especially [illegible] mended, as forming the basis of a beautiful head [illegible] 3s. 6d., 7s., 10s. 6d. (equal to four small), and [illegible]

Caution.—Ask for ROWLAND'S Macassar Oil. [illegible] ton Garden, E.C., and by Chemists and Perfumers.

DINNEFORD'S PURE FLUID MAGNESIA [illegible] been, during 25 years, emphatically sanctioned [illegible] medical profession, and universally accepted by the public [illegible] the best remedy for acidity of the stomach, [illegible] headache, gout, and indigestion, and as a mild [illegible] delicate constitutions, more especially for ladies [illegible] Combined with the Acidulated Lemon Syrup [illegible] agreeable Effervescing Draught, in which its [illegible] are much increased. During hot seasons and [illegible] the REGULAR use of this simple and elegant remedy [illegible] found highly beneficial.

Manufactured (with the utmost attention to strength [illegible] purity) by DINNEFORD & Co., 172, New Bond Street, London, W.; and sold by all respectable Chemists throughout the Empire.

HOW TO AVOID MEDICINE, its [illegible] Inconvenience, and Expense.—Certificate [illegible] "We find DU BARRY'S delicious health-restoring [illegible] LENTA ARABICA FOOD the safest remedy [illegible] constipation, indigestion (dyspepsia), acidity, [illegible] pitation, irritability, sleeplessness, distension, [illegible] phlegm, hæmorrhoids, coughs, colds, asthma, [illegible] consumption, sore throats, diphtheria, diarrhœa, [illegible] nervousness, biliousness, torpidity of the liver, [illegible] scrofula, atrophy."—Andrew Ure, M.D., F.R.S. [illegible] Dr. Shorland, Dr. Campbell, Dr. Rud. Wurzer, [illegible] sive but far more pleasant and strengthening than [illegible] Oil, Cocoa, Chocolate, Tea or Coffee, it saves [illegible] in medicine and doctor's bills, and has effected [illegible] where all other remedies had failed, restoring [illegible] strong nerves, sound lungs, healthy liver, [illegible] and energy to the most disordered or enfeebled. [illegible]

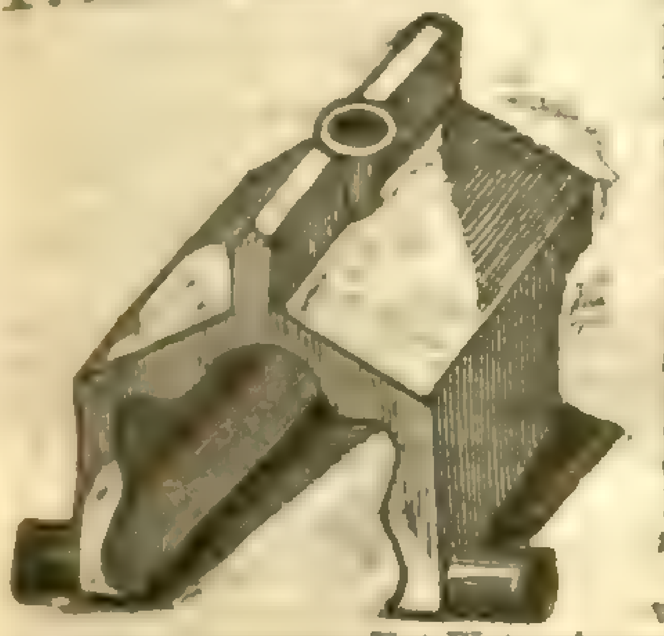
BARRY DU BARRY & Co., 77, Regent Street, W.; [illegible] 60, Gracechurch Street, E.C.; 4, Cheapside, E.C.; [illegible] Oxford Street, W.; 330, Strand, London, W.C.; [illegible] grocers and chymists.

The Gardeners' Chronicle Newspaper.

SATURDAY, NOVEMBER 9, 1861.

JOHN SHEWEN, Sevenoaks, Kent, Manufacturer of all kinds of HOTWATER APPARATUS for Horticultural Purposes, Public Buildings, Dwelling Houses, and Offices, on the most approved principles, and of Rogers's Conical and Corrugated Saddle Boiler.

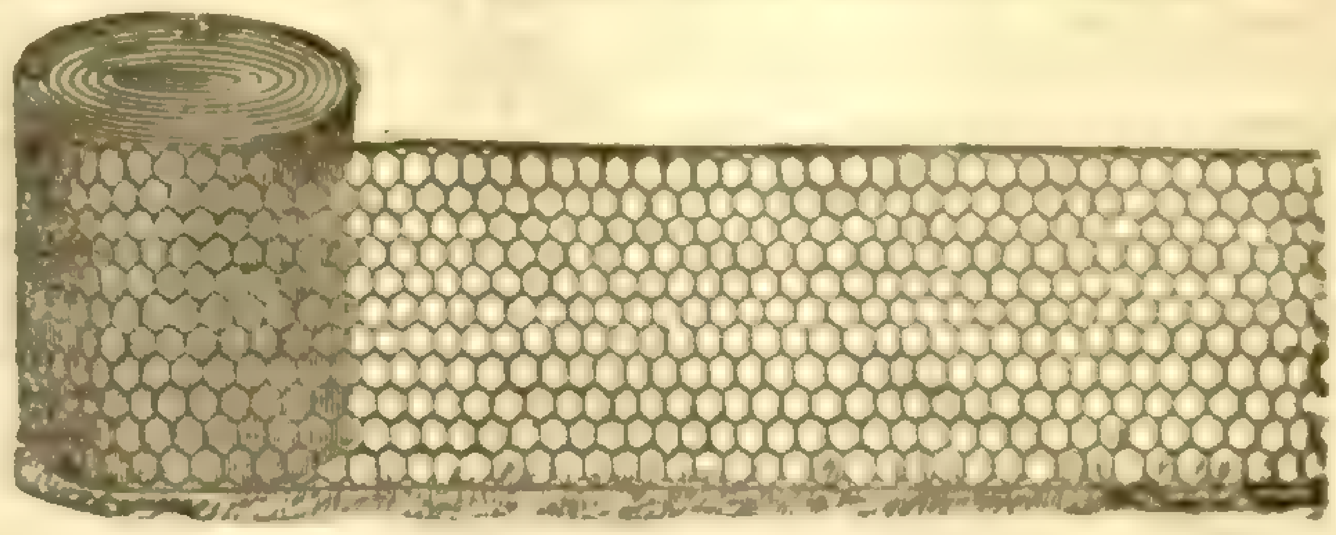
T. M. LOBJOIT'S PATENT HOT-WATER BOILERS are acknowledged by all who have them in use to be the most powerful Boilers now known, and are the most economical requiring less fuel and attention than any other. They are made of various sizes, suitable for heating the smallest Greenhouse to the largest Conservatory, Churches, and Buildings of all descriptions.



Testimonials forwarded on application to THOS. M. LOBJOIT, Hot-Water Apparatus Manufacturer, General Smith, &c., Turnham Green, W., and at Acton, Middlesex, W.

NEW IMPROVED PREMIUM WIRE NETTING.

GREAT IMPROVEMENT WITH REDUCED PRICE.



PRICES PER LINEAL YARD, 24 INCHES HIGH:—

Size of mesh.	Mostly used for	Light.		Medium.		Strong.		Extra Strong.	
		Japanned.	Galvanised.	Japanned.	Galvanised.	Japanned.	Galvanised.	Japanned.	Galvanised.
2½ inch	Hares, Dogs, Poultry	3d.	4d.	3½d.	5d.	4½d.	6d.	5½d.	7d.
2 inch	Game or Poultry Netting	3½d.	4½d.	4d.	5d.	5d.	6½d.	6½d.	8d.
1¾ inch	Small Rabbits, Hares, &c. ...	4d.	4½d.	4½d.	6d.	5½d.	7d.	7d.	9d.
1½ inch	Smallest Rabbits	5d.	6d.	5½d.	7d.	7d.	9d.	9d.	11d.

Quantities of 100 yards or upwards delivered free at nearly all the principal Railway Stations and Shipping Ports in England; and 200 yards or upwards delivered free to most parts of Scotland and Ireland.

J. B. BROWN & CO., 18, CANNON STREET, CITY, LONDON, E.C.

WEEKS'S UPRIGHT TUBULAR BOILER.

SUBJOINED IS THE REASON WHY

WEEKS'S ONE-BOILER SYSTEM

HAS BECOME THE ORDER OF THE DAY FOR HEATING BY HOT-WATER.

WEEKS'S No. 1 BOILERS are heating upwards of			200	feet of Pipe.
WEEKS'S No. 2 BOILERS	„	„	300	„
WEEKS'S No. 3 BOILERS	„	„	600	„
WEEKS'S No. 4 BOILERS	„	„	1500	„
WEEKS'S No. 5 BOILERS	„	„	4000	„
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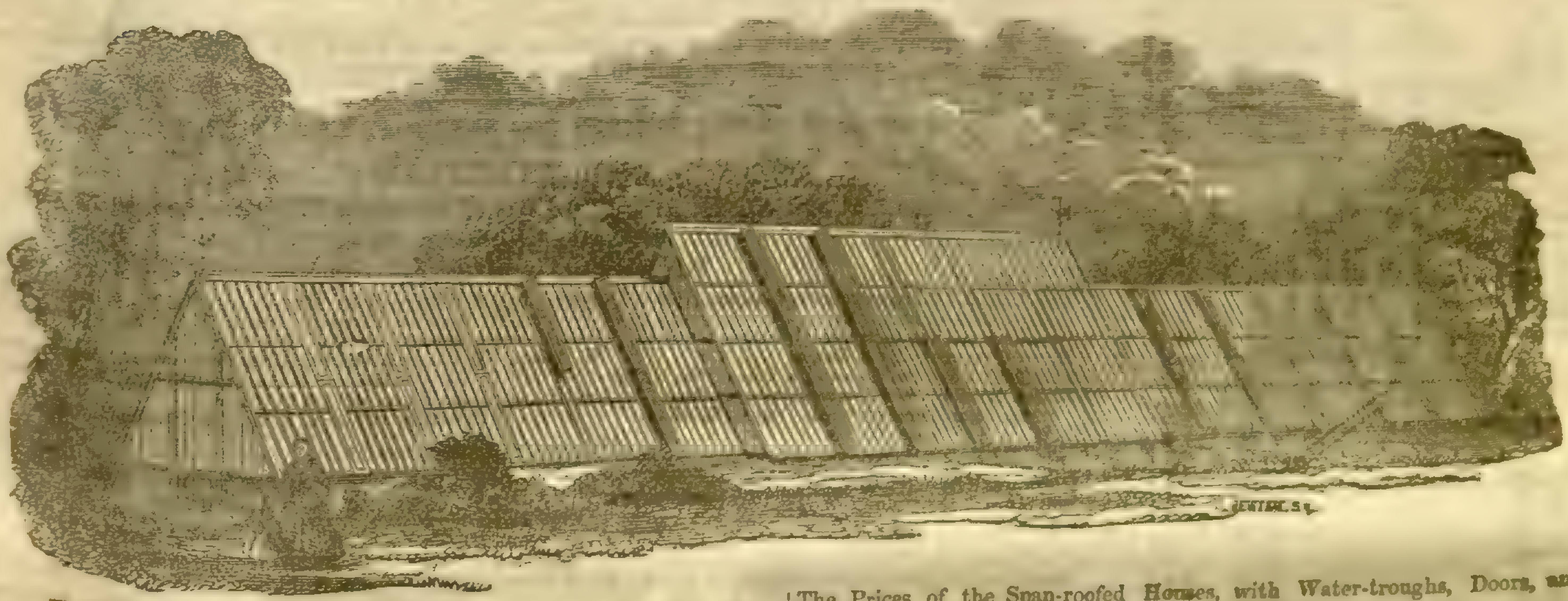

The Prices of Lean-to Houses complete are as follows:—

Ft. In.	8 ft. Lights	10 ft. Lights	12 ft. Lights	14 ft. Lights	16 ft. Lights
20 7 in length	£12 0 0	£16 0 0	£21 0 0	£28 10 0	£34 5 0
31 3 in length	16 10 0	21 2 6	26 10 0	37 12 0	45 16 0
41 11 in length	20 18 0	26 18 6	33 7 6	46 14 0	57 7 0
52 7 in length	25 12 6	32 15 0	40 5 0	55 16 0	68 18 0
63 3 in length	30 6 0	38 10 0	47 2 6	64 18 0	80 10 0
73 11 in length	34 12 6	43 15 0	53 7 6	74 0 0	92 0 0
84 7 in length	39 6 0	49 11 6	60 5 0	83 2 0	103 11 0
95 3 in length	43 19 0	55 10 0	67 2 6	92 5 0	115 2 0
105 11 in length	48 17 6	60 12 6	73 10 0	101 10 0	126 13 0

The Prices of the Span-roofed Houses, with Water-troughs, Doors, and Ends complete, are as follows:—

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31 3 in length	33 0 0	42 5 0	53 0 0	75 4 0	91 14 0
41 11 in length	41 16 0	53 17 0	66 15 0	93 8 0	114 16 0
52 7 in length	51 5 0	65 10 0	80 10 0	111 12 0	137 10 0
63 3 in length	60 12 0	77 0 0	94 5 0	129 16 0	161 0 0
73 11 in length	69 5 0	87 10 0	106 15 0	148 0 0	184 0 0
84 7 in length	78 12 0	99 3 0	120 10 0	166 4 0	207 2 0
95 3 in length	87 18 0	111 0 0	134 5 0	184 10 0	230 4 0
105 11 in length	97 15 0	121 5 0	14[illegible] 0 0	203 0 0	253 6 0

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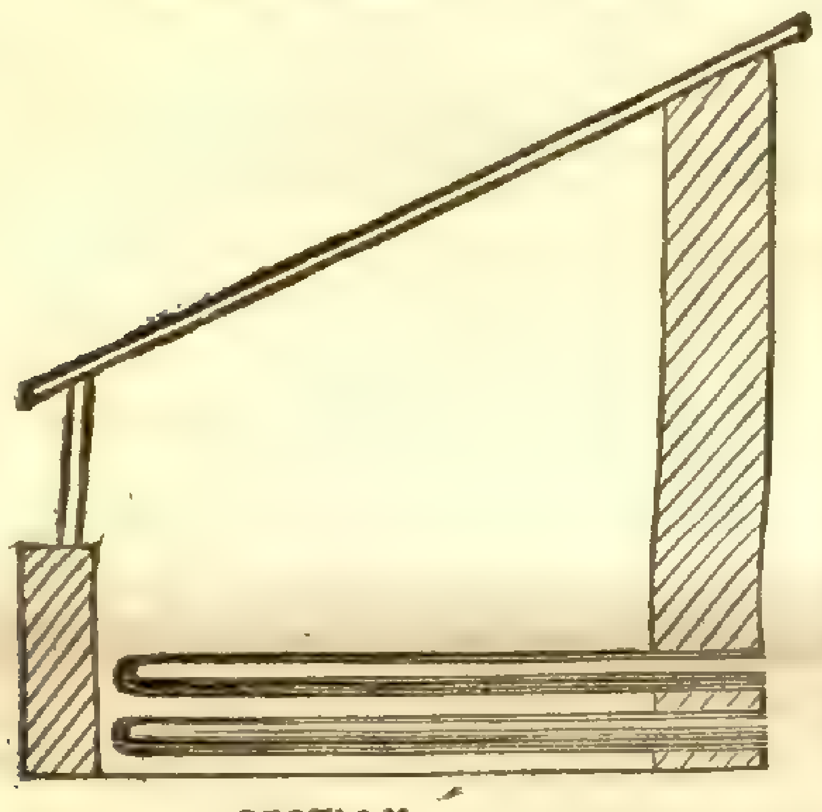
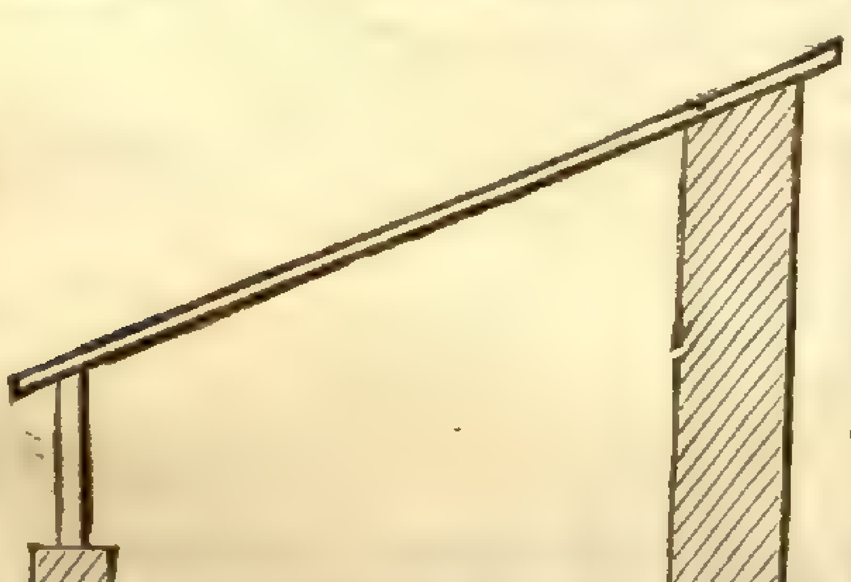


Two 4-inch pipes along front and one end of house.

SECTION

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£8 0 0	£8 12 6
20 feet by 10 feet ..	,,	8 10 0	9 0 0
25 feet by 12 feet ..	,,	10 0 0	10 10 0
30 feet by 12 feet ..	,,	11 10 0	12 0 0
40 feet by 15 feet ..	,,	16 10 0	17 0 0
50 feet by 15 feet ..	,,	18 10 0	20 0 0

PLAN No. 2.

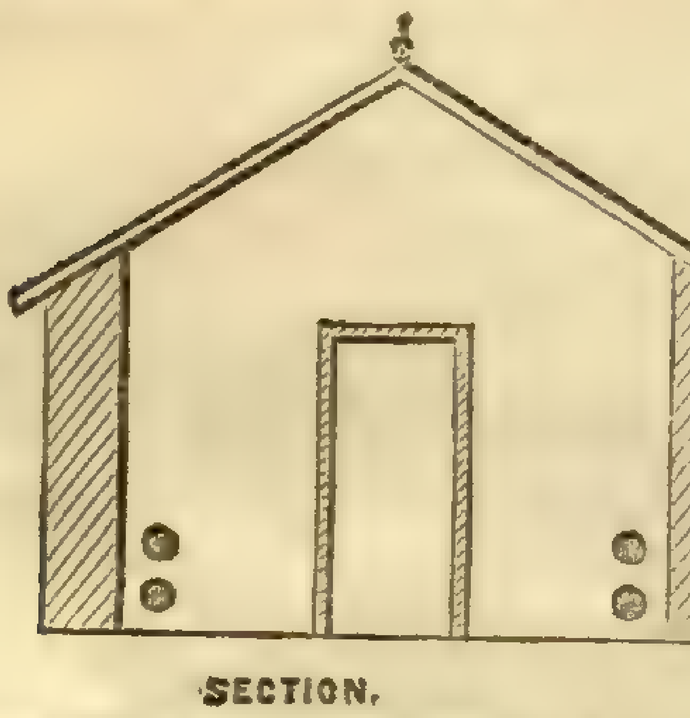


Three 4-inch pipes along front and one end of house.

SECTION

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£11 10 0	£12 0 0
20 feet by 10 feet ..	,,	12 10 0	13 0 0
25 feet by 12 feet ..	,,	14 10 0	15 0 0
30 feet by 12 feet ..	,,	16 10 0	17 0 0
40 feet by 15 feet ..	,,	22 0 0	23 0 0
50 feet by 15 feet ..	,,	24 10 0	26 0 0

PLAN No. 3.



Two 4-inch pipes along each side and one end of house.

SECTION.

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£12 10 0	£13 0 0
20 feet by 10 feet ..	,,	13 10 0	14 0 0
25 feet by 12 feet ..	,,	16 10 0	17 0 0
30 feet by 12 feet ..	,,	19 0 0	20 0 0
40 feet by 15 feet ..	,,	24 10 0	25 10 0
50 feet by 15 feet ..	,,	27 0 0	28 10 0

PLAN No. 4.

Two 4-inch pipes along each side and one end of house, and two 4-inch pipes in pit for bottom heat.

SECTION

Size of House.		With Cylinder Boiler.	Saddle Boiler.
16 feet by 8 feet ..	Price	£16 0 0	£17 0 0
20 feet by 10 feet ..	,,	17 10 0	18 10 0
25 feet by 12 feet ..	,,	21 10 0	22 10 0
30 feet by 12 feet ..	,,	25 0 0	26 0 0
40 feet by 15 feet ..	,,	31 0 0	32 0 0
50 feet by 15 feet ..	,,	33 10 0	35 0 0

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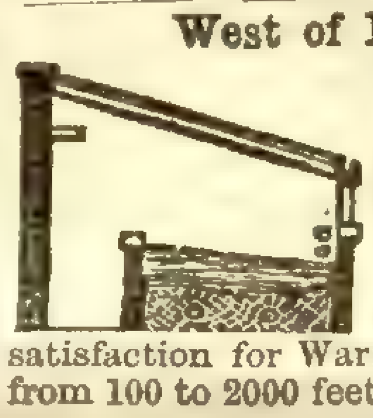

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News of the Week.

The occupation of the Valley of Dappes by French troops has caused a great sensation throughout Switzerland. This valley is a small strip of territory between the French department of Doubs and the Swiss canton of Vaud. By the treaty of Vienna it was assigned to Switzerland, contrary to the remonstrance of the French Plenipotentiary, and for the last 45 years France has made ineffectual overtures for its acquisition. Last week a French patrol from the Fortress of Rousses entered the hamlet of Cressonières, in the valley, in order to prevent the Swiss gendarmes from arresting a French subject, the hamlet being considered neutral ground. The Federal Government immediately despatched commissioners to investigate the facts, and on their report the Federal Council addressed a note to the French Government, demanding satisfaction for the violation of Swiss territory. M. Thouvenel, in reply, has informed the Swiss Ambassador at Paris that the French Government had not the remotest intention of committing an aggression on Switzerland, or of deciding the question of territory by a military occupation; but are ready to enter into negotiations with the Federal Government with a view to effect a definitive settlement of the question, or to take measures that the *status quo* since 1815 shall be maintained.

The Austrian Government has determined upon a series of measures which indefinitely suspend the Hungarian Constitution, and practically place Hungary under military rule. Field Marshal Count Palffy has been appointed Imperial Lieutenant. The Council of the Provincial Government, which recently sent an address to the Emperor, modelled upon the address of the Diet, is to be reorganised; the present Obergespanns are to be superseded, the assemblies of the Comitats dissolved, and military tribunals established to try all offences which partake of the character of resistance to the authorities. The Emperor has addressed a letter to Count Forgach, Aulic Chancellor of Hungary, in reference to these measures, in which he states that the public duty and his own will require that he should raise strong barriers against the excesses of the Hungarians, and restore things to a state of order. The official journals authoritatively contradict the report of an intended meeting between the Emperor of Austria and the King of Prussia at Breslau.

A despatch from St. Petersburg announces the return of the Emperor from the Crimea. An Imperial order of the day has been issued granting Count Lambert, Governor of Poland, leave of absence to travel in foreign countries until his health shall be restored, and appointing General Luders as his successor. The students in Moscow have created such violent disturbances that it has been necessary to employ the military to restore order. Similar disturbances are reported from Kazan and Charkow, and there is no doubt that an understanding has been come to among the students of all the Universities. A petition, praying for the release of the students who had been arrested, and for the grant of a constitution to Russia, has been signed in Moscow by 17,000 persons.

Accounts from New York state that the American journals generally approve of Mr. Seward's reply to Lord Lyons, and denounce any British interpretation of the Federal constitution as an unwarrantable interference. The long expected engagement on the Potomac is said to be really close at hand. The Confederates have effectually closed the Lower Potomac, and their batteries now command every point below Washington. In the recent battle near Leesburg, the Federal troops under General Stone sustained a double defeat. They were first driven back across the Potomac, with the loss of General Baker and 680 men, and on subsequently advancing with reinforcements they were again compelled to retreat into Maryland. Mr. Seward's circular to the loyal States, in reference to the defences of the coasts and lakes, has caused great excitement at New York, under the impression that it is indicative of a foreign war.

Lord Monck was sworn in at Quebec on the 25th ult. as Administrator of Canada, his full powers not having arrived. Colonel Rankin has been committed for trial and dismissed from the Canadian Militia, for violating the Queen's proclamation of neutrality.

The convention between France, England, and Spain, for the intervention in Mexico, was signed at the Foreign Office on the 31st ult. It stipulates that the three Powers will not seek any territorial or special advantages for themselves, nor use their influence in a way to interfere with the right of the people of Mexico to choose their own form of government. It provides also that the Government of the United States shall be invited to join in the expedition.

Home News.

The Court.—On Friday morning the Prince Consort went out shooting, accompanied by the Prince of Wales. In the afternoon the Queen held a Court for the first investiture of the Knights of the Star of India. The Court was attended by the Secretary of State for India, the Officers of the Household, and the Great Officers of State. The Queen was assisted at the investiture by the Prince Consort and the Prince of Wales, and the ceremony was witnessed by the Princesses Alice, Helena, Louisa, and Beatrice, Prince Arthur and the Princess of Hohenlohe. In the evening the Queen had a dinner party. On Saturday morning the Queen, with the Princess Alice, walked in the Home Park. The Prince Consort, accompanied by the Prince of Wales and the Maharajah Dhuleep Singh, went out shooting. In the afternoon the Prince of Wales left Windsor for Madingley Hall, Cambridge. On Sunday morning the Queen and Prince Consort, Prince Arthur, Princesses Alice, Helena, and Louisa, and the Princess of Hohenlohe, attended Divine service in the private chapel. The Dean of Windsor officiated and administered the Sacrament. The Prince of Hohenlohe arrived from the Continent on a visit to her Majesty. On Monday morning the Queen drove out in a carriage and four. The Prince Consort went to the Wellington College. Prince Leopold left the Castle for the Continent. Prince Arthur accompanied the Prince to Folkestone, and returned in the evening to Windsor. Princess Alice, Princess Helena, and Princess Louisa rode in the Riding House. The Prince of Hohenlohe rode out on horseback. On Tuesday morning the Prince Consort, accompanied by the Prince of Hohenlohe, went out shooting. The Princesses Alice, Helena, and Louisa rode in the riding house. On Wednesday morning the Queen drove out in a carriage and four. The Prince Consort came to London, and after visiting the Great Exhibition building and the Horticultural Gardens at Kensington, presided at a meeting of the Council of the Royal Agricultural

Society. The Prince of Hohenlohe took leave of her Majesty, and accompanied the Prince Consort to London. Princess Helena and Princess Louisa rode in the Riding House. On Thursday morning the Queen, accompanied by Princess Alice, drove out in a carriage and four. The Prince Consort rode on horseback. The Prince of Hohenlohe took leave of her Majesty, and left Windsor for London, where the Prince of Hohenlohe joined her Serene Highness. The Grand Duke and Grand Duchess Constantine, with the Grand Duchess Olga, arrived on a visit to her Majesty.

DEPARTURE OF PRINCE LEOPOLD FOR THE CONTINENT.—Prince Leopold, the youngest son of her Majesty, left England on Monday for the Continent, attended by General Sir Edward Bowater, Lady Bowater, the Misses Bowater, and Dr. Gunther. The Prince's health having made it advisable that he should spend the winter in a milder climate than that of England, a residence has been taken for him at Cannes, in the South of France. His Royal Highness travelled by a special train from the London Bridge station of the South-Eastern Railway to Folkestone, where he embarked in the mail steamer John Penn for Boulogne. Prince Arthur accompanied his brother to Folkestone, and after the departure of the steamer proceeded to Shorncliffe Camp, accompanied by the Hon. General Dalzell, the general in command, and spent two hours in visiting the quarters of the officers and men, the hospital, the canteens, stables, &c. His Royal Highness afterwards left Folkestone by the mail train for London on his return to Windsor.

THE GRAND DUKE CONSTANTINE, with the Grand Duchess and the Princess Olga, and their suite, arrived at Claridge's Hotel on Saturday from Binstead House, near Ryde. On Tuesday their Imperial Highnesses visited the British Museum; and on Wednesday visited the Tower of London. On Thursday they left town for Windsor, on a visit to her Majesty. Their Imperial Highnesses were expected to return to town yesterday, and it is understood that they will leave England to-day for St. Petersburg, by way of Rotterdam.

THE DUKE OF OPORTO and the DUKE DE BEJA, brothers of the King of Portugal, arrived at Claridge's Hotel on Thursday evening from Compiègne, where they have been visiting the Emperor of the French.

ORDER OF THE STAR OF INDIA.—On Friday afternoon the Queen held, in Windsor Castle, her first Investiture of the Most Exalted Order of the Star of India. The day was the anniversary of the day on which her Majesty's proclamation was promulgated, notifying to her Indian subjects her resolution to take upon herself the Government of India. The Prince Consort and the Prince of Wales having been nominated Extra Knights of the Order, having been first invested by the Queen with the insignia, the noblemen and gentlemen who had been nominated Knights of the Order were summoned to the Throne Room, where the great officers of State and the officers of the Household were assembled. The Queen, as Sovereign of the Order, wore the mantle, which is of light blue satin, lined with white satin, and fastened with a cordon of white silk, with blue and silver tassels. On the left side was the star of the Order. Over the mantle her Majesty wore the collar of gold and enamel, composed of the lotus of India, of palm branches, and of the united white and red roses. In the centre of the collar was an Imperial crown. All were richly enamelled in their proper colours. From the middle of the front of the collar hung suspended the badge, which consists of an onyx cameo of her Majesty's effigy, set in a perforated and ornamental oval containing the motto of the Order, "Heaven's light our guide," surmounted by a star, all in diamonds. The Queen having taken her seat in a chair of state, having the Prince Consort on her right, and the Prince of Wales on her left hand, Viscount Gough, Lord Harris, the Maharajah Dhuleep Singh, General Lord Clyde, the Right Hon. Sir John M. Lawrence, Bart., and General Sir George Pollock, were separately introduced and invested with the insignia by her Majesty in the usual manner, the honour of knighthood having been first conferred on Lord Harris and the Maharajah. Lieut.-General Sir James Outram, Bart., and Field-Marshal Viscount Combermere, who had been appointed Knights of the Order, were summoned for investiture, but could not obey the Royal command, the former in consequence of his absence from England, and the latter from indisposition. The star is formed of rays of gold issuing from a centre, having thereon a star in diamonds resting upon a light blue circular riband, tied at the ends and inscribed with the motto in diamonds. The badge is the same as that attached to the collar of the Order, and is suspended from a riband of light blue, with a narrow white stripe near either edge. The Queen, accompanied by the Prince Consort and the Prince of Wales, was conducted from the Throne room by the officers of state after the investiture. In the evening her Majesty gave a dinner, to which the Knights of the Order, the Secretary of State for India, and the great officers of State who attended the Court, were honoured with invitations.

THE CABINET.—A Cabinet Council will be held on Wednesday next.

PARLIAMENTARY MOVEMENTS.—The election for Lincoln takes place this morning. Mr. Seely is the only candidate in the field, Mr. Bramley Moore, the Conservative candidate, having withdrawn from the contest. Mr. Hodgson, in compliance with the requisition presented to him, has consented to come forward in the Conservative interest for Carlisle, in opposition to Mr. Potter, the Liberal candidate.

THE CHURCH.—The Right Rev. Dr. Baring, late Bishop of Gloucester and Bristol, was on Wednesday formally confirmed at York in his election to the Bishopric of Durham. By this act of confirmation the see of Gloucester and Bristol becomes vacant, and a *congé d'elire* will be forthwith issued to the Dean and Chapter, empowering them to elect as bishop the Rev. Dr. Thomson, Provost of Queen's.

THE MEXICAN EXPEDITION.—The Conqueror, 99, and Sanspareil, 70, went into Plymouth Sound on Thursday, and will sail to-day with the Royal Marines of the Plymouth division for service in Mexico.

THE WARRIOR has arrived at Queenstown, after a trial trip of six days. She has realised the highest expectations entertained of her. The speed she reached with steam and under canvas is said to have been 17 knots an hour, and she was perfectly steady, although the wind rose to a reefed topsail breeze. Lord C. Paget and Capt. Drummond, of the Admiralty, were on board during the trip. The Revenge, with Admiral Smart on board, accompanied her, but the Warrior had frequently to go half speed so as not to lose sight of her consort. The Warrior will proceed to sea again to-day in search of bad weather, not having as yet encountered severe enough weather to test her sailing qualities.

THE VOLUNTEER MOVEMENT.—An annual rifle contest is in progress of arrangement between English and Scottish volunteers, Lord Bury and Captain Horatio Ross being engaged in settling the preliminary details. It is understood that the project is proceeding favourably; and that there is a general impression that such an annual contest would, to use Lord Bury's own words, "contribute its share towards promoting the permanence and stability of the Volunteer movement, by creating a noble and honourable emulation between the two countries."—A challenge was given a short time since by Earl Ducie, Lord-Lieutenant of Gloucestershire, to compete with the best shots of the Bristol Rifles. Colonel Bush, the commander of the corps, selected as the antagonists of his Lordship Armour-Sergeant Gibbs (winner of the Derby rifle at the last Wimbledon competition), Private Miller, Private Mitford, and Ensign Pinney. The match took place last week at the practice ground of the Bristol Corps in Sneyd Park. The ranges were at 300, 500, and 600 yards, 10 shots each. The Lord-Lieutenant was the victor, having made 48 points, and the scores of his opponents being,—Sergeant Gibbs, 45; Private Miller, 27; Private Mitford, 34; and Ensign Pinney, 47. Lord Ducie did not miss the target once, and at 500 yards scored five centres in succession. His lordship was also a winner in some sweepstakes which followed.

Foreign.

FRANCE.—The Emperor and Empress will remain at Compiègne until the middle of this month, and will then remove to Paris. The Duke of Oporto and the Duke de Beja, brothers of the King of Portugal, arrived at Compiègne on Monday on a visit to the Emperor, and left on Wednesday for London. It is stated that the King of Prussia said to Marshal M'Mahon, before his departure from Berlin, "I hope to see you again next spring, when the Emperor will come and see me at the Chateau of Bruhl." The *Moniteur* of Sunday publishes details of the ball given on the 29th ult. by Marshal M'Mahon to the King and Queen of Prussia, and says that before leaving the King asked for a pen and paper and wrote the following despatch:—

"A quarter past 12.

"THE KING OF PRUSSIA TO THE EMPEROR OF THE FRENCH.

"I thank your Majesties for the magnificent entertainment which the Embassy is now giving us. WILLIAM."

The *Patrie* asserts that the Session of the Senate and the Chamber of Deputies will open on the 15th of January next. It is stated that M. Fould will shortly return to the Ministry of Finance. The *Moniteur*, in its bulletin of Wednesday, contains the following article on the occupation of the Valley of Dappes by French troops:—

"The foreign press having made numerous comments on the subject of the appearance of a few French gendarmes and soldiers in the village of Cressonnières, belonging to the Valley of Dappes, it is of importance to reduce the facts to their real value. We have as yet no exact information with regard to the incident, but we are able to affirm that the Government of the Emperor has never had the idea of determining by force, by means of a military occupation, the territorial question pending between France and Switzerland. Since 1815 there has existed a kind of neutralization of the contested territory, against which the Canton of Vaud recently made an attempt, by proceeding to arrest some persons. The Government of the Emperor protested against this alteration of the *status quo*, intimating that if the gendarmes of Vaud recommenced such proceedings it should be compelled to oppose them. The tribunal of Nyon having pronounced sentence against a Frenchman residing in that territory, the Government of the Emperor simply wished to prevent his arrest. The affair, therefore, has not the importance that some would attribute to it. We do not doubt that frank explanations with the Federal Council will reduce the affair to its real proportions, and, perhaps, lead to the conclusion of an arrangement destined to put an end to the conflicts which could not fail to arise from an ill-defined state of things."

M. Thouvenel has also informed M. Kern, the Swiss Minister at Paris, that France will not prejudice the solution of the question by any act of violence, but demand a definitive arrangement by means of negotiation. Signor Rattazzi has prolonged his stay in Paris for another week. The *Pays* publishes an article signed by M. Dreolfe, criticising the conduct and the policy of the Italian Ministry. It says:—

"Baron Ricasoli's Cabinet has addressed a kind of *ultimatum* to the only ally of Italy in Europe. Signor Rattazzi is the only man who is fit to be at the head of the Italian Ministry. A Cabinet under his presidency would now be the best token of a good understanding between Italy and France, and would, moreover, be a sure guarantee of a cordial renewal of intimate negotiations, the issue of which is so anxiously awaited, not only by Italians, but by all Frenchmen who love Italy."

Accounts from the inundated coal mine at Lalle state that the level of the water has been lowered to 50 metres. Thirteen more bodies have been got out, making the total number of 35. They were in such an advanced state of decomposition that they could only be recognised by the clothes. Immediately on being taken out they were placed in coffins tarred both inside and out, in order to prevent any ill effects from the smell.

SPAIN.—The *Correspondencia Autografa* of Sunday announces that the Queen's speech at the opening of the Cortes will promise constitutional reforms of the most liberal character. An unimportant attempt at insurrection on the part of the Republican party has been made at Medina Cœli. The instigators of the attempt have been arrested. It was not necessary to use military force. A sham fight took place on Tuesday in honour of the Moorish Ambassador.

BELGIUM.—It is announced that Belgium has recognised the Kingdom of Italy on the same conditions as it was recognised by France.

SWITZERLAND.—The occupation of the Valley of Dappes by French troops has created a great sensation throughout Switzerland. The Federal Commissioners who were sent to investigate the facts have returned to Berne and officially confirmed the violation of the neutral territory by French troops. Their report recommends the Federal Government to bring about a solution of the differences with France as speedily as possible. The Federal Council on Friday resolved to address a note to the French Government, protesting against and demanding satisfaction for this violation of Swiss territory.

FRANKFORT.—Baron Beust, the Saxon Minister for Foreign Affairs, is expected shortly in Berlin to make proposals to the King of Prussia in reference to the reorganisation of the Federal Constitution. The Prussian papers state that the proposals are in substance as follows, though the Dresden official journal denies the accuracy of the details:—

"A Directorate, composed of three persons, to be placed at the head of the Federal Diet for the transaction of current affairs. Questions of war or peace and other important matters to be decided on by an assembly of the Ministers of the different German Powers. These assemblies to meet alternately in a town of Northern and Southern Germany. Prussia would have the presidency of the Northern Ministerial Assembly, and Austria that of the Southern. The establishment of a national representation which would be connected with the Ministerial assemblies and meet at the same time and place with them."

PRUSSIA.—The *Preussische Zeitung* of Saturday says that in consequence of the King of Prussia and the Crown Princess being slightly indisposed, the intended journey to Breslau will probably be postponed for a few days. The Duke of Magenta and General Della Rocca left Berlin on Saturday evening. Lord Clarendon was to take his departure on Wednesday. The grand ball given by the Duke of Magenta to their Majesties took place on the 29th ult. with great magnificence. The King has conferred the Order of the Black Eagle on Marshal O'Donnell, President of the Spanish Ministry; and that of the Red Eagle on Abd-el-Kader, in recognition of his protection of the persecuted Christians in the Lebanon. The Prussian *Staats Anzeiger* of Saturday contains the following proclamation by the King:—

"Berlin, Nov. 1, 1861.

"The solemnity which I accomplished on the 18th inst. has given a sacred consecration to my earthly calling. This celebration has been a truly native one, while it has invested the old indissoluble bands of the Royal house and the nation with a pledge of youthful strength. The warm and joyful sentiments which have been so unmistakably manifested in all parts of the country, and by all classes of the people, have most deeply moved me and the Queen, my consort, and have filled us with thankfulness. Such events are most gratifying. The confidence of my people, on whose proved sentiments and devotion I at all times rely, I return by the most devoted love to our country, for whose welfare and power I always strive. True to my vocation, I recognise in the uninterrupted advancement of the lawful development of the people the guarantee of future successes under the guidance of Providence. At the close of the coronation my Ministry of State are commissioned to give universal circulation to these my sentiments of deeply felt thanks, and those of the Queen my consort.—WILLIAM."

The *National Zeitung* of Wednesday, says that the prospects of a favourable conclusion of a treaty of commerce between France and Prussia have diminished to such an extent that the French Commissioner will return to Paris in the course of this week. It is said that France does not appear inclined to agree to the new programme submitted by Prussia.

AUSTRIA.—In the sitting of the Lower House of the Reichsrath on Monday, the Minister of Finance presented the budget of 1862, and announced to the assembly that, pressed by the exigencies of the public service, the Government had anticipated the decision of the chamber by decreasing the assessment and levying of taxes. He, therefore, asked of the chamber a bill of indemnity. His remarks are said to have been received with much coldness. The official journal states that it is authorised to declare that the statement of an approaching meeting between the Emperor of Austria and the King of Prussia at Breslau, is totally unfounded. The official *Wiener Zeitung*, in its evening edition of Saturday, publishes the following:—

"Austria respects the right of other States to settle their own interior affairs, and no foreign Power could therefore think o

making proposals to Austria in reference to Hungary. The news published by some journals that a foreign Power had entered into negotiations with Austria for the cession of Venetia is a pure invention."

Hungary.—An autograph letter addressed by the Emperor to Count Forgach, Aulic Chancellor for Hungary, was published on Thursday. The following is a summary of its contents:—

"The disloyalty of the Hungarian municipalities and the resistance bordering on insurrection to the measures taken by the Government for the maintenance of public order menace that order in a most dangerous manner without the authorities being able safely to administer the penal law. The public duty and the will of the Emperor require that he should raise strong barriers against those excesses and restore things to a state of order. As the convocation of the Hungarian Diet in a constitutional manner appears impracticable until order is re-established, all the existing authorities in the Comitats, districts, and communes are abolished, and Count Forgach is ordered to select persons to replace them, and to take care that the administration of public affairs in Hungary suffers no interruption. All persons charged with crimes against public order and safety shall be tried by military tribunals. In conclusion, the Emperor expresses an earnest wish that he may soon be enabled, by the re-establishment of public order, to proceed to the solution of the pending differences, and in future maintain entire the concessions he has granted to Hungary."

The Vienna papers of Tuesday announce that the administration of Hungary will be delegated to a Governor, in the person of General Count Palffy, whose authority will be subordinate to that of the Aulic Chancery. All the present Obergespäne will be superseded, the Assemblies of the Comitats will be dissolved, and military tribunals established throughout the country. At the interview between the Prince Primate, on the 31st ult, his Majesty signified his displeasure at the contents and publication of the Primate's reply to the circular addressed by the Aulic Chancellery to the Obergespanns of the Comitats. The Primate explained that his letter had been published without his knowledge and much to his regret. The Emperor expressed himself satisfied with this explanation, but feared that the attitude the Primate had assumed might place the other Bishops of Hungary in a position incompatible with their calling of conciliation. The Primate replied that the Hungarian clergy combined devotion to their country with loyalty to the Sovereign and the Crown, and that they would know how to fulfil their duties towards the country and towards his Majesty.

Transylvania.—The Saxon Diet has been convoked for the 20th inst. It is expected that it will pass resolutions in reference to the present state of things, and will send a deputation composed of Saxons to the Emperor. Count Nadasdy, the ex-Minister of Justice, has been appointed Minister without portfolio, and Aulic Chancellor for Transylvania.

Russia.—A despatch from St. Petersburg announces the return of the Emperor from the Crimea, and states that His Majesty has taken up his residence at Zarskoselo. Accounts from Moscow announce that the students in that city had created violent disturbances, which had been quelled by military force. A petition, praying for the release of the students lately arrested, and that a constitution should be granted to Russia, had been signed by 17,000 persons. The University of Kazan had been closed because the students had demolished the rector's house. Student disturbances had also taken place at Charkow. It had been proved that collusion existed between the students of all the universities. The University of Kiew had alone remained quiet. Count Schuwaloff, chief of the political police, had requested his Majesty to relieve him of his functions. The *Preussische Zeitung* also states that a Ministerial secretary had been arrested for having collected signatures to a petition on behalf of the students of St. Petersburg, which was to be presented to the Emperor on his return to that city. Fears are entertained that stormy scenes, attended by great masses of the people, will shortly take place.

Poland.—An Imperial order of the day, dated the 2d inst., grants Count Lambert, Governor of Poland, leave of absence to travel in foreign countries until his health shall be restored. He is replaced by General Luders. The Emperor has sent a despatch to Warsaw, summoning the Marquis Wielopolski to St. Petersburg. An official account of the events which took place on the 15th ult, founded on reports made to the ecclesiastical authorities, will shortly be published by the Government. The Protestant churches in Warsaw are now open.—A despatch from Lemberg says that on Saturday about 10,000 persons went to the cemetery to erect a cross in memory of those who fell in the disturbances at Wilna and Warsaw. The military and police marched out, but nothing occurred to necessitate their interference. The people returned quietly, singing the national Polish song.

Italy.—The *Monarchia Nazionale* of Turin on Thursday published the following article in reference to Garibaldi's views on Rome and Venice:—

"General Türr has announced to the Central Committee in the name of Garibaldi that it is the firm intention of the latter not to provoke any movement in favour of Rome and Venice, and that his sole wish is that every means may be employed to promote the armament of the nation. Garibaldi also recommends concord among all classes of the Italian people, in order to accomplish the unification of Italy under Victor Emmanuel, and requests those who do not accept this determination to leave the Committee and act on their own responsibility."

A letter from Turin, of the 4th, states that General Bixio had returned to Leghorn from an excursion to Caprera. It is said that a Royal decree will shortly be issued convening the Italian Parliament for the 25th inst. General Della Marmora received the Staff of the National Guard at Naples on Tuesday, and addressed them in a speech in which he said he had reason to hope that the Bourbons would soon leave Rome. An expedition, composed of 400 Bourbonites, which was organizing at Malta, has been prevented from proceeding by the arrest of the chief accomplices at Naples. At Salerno some French engineers have fallen victims to the brigands. A grandson of Fra Diavolo, who carried on the business of brigandage in the Abruzzi, has just been captured by the National Guard. He was immediately shot. Heavy rains have caused great destruction on the railway to Civita Vecchia. The traffic has been interrupted in consequence. The locomotive of one train was thrown off the rails, but none of the passengers were hurt. A manuscript of Galileo and a play of Metastasio have been discovered in the archives of Lucca and are to be shortly published.

Turkey.—Advices from Constantinople allege that Aali Pacha has concluded a secret treaty of offensive and defensive alliance with Austria, in view of eventualities which may arise in Montenegro, Servia, and Dalmatia. A riot took place among the Armenians at Constantinople during the election of the Patriarch of Jerusalem. Troops were called out to quell it. The emigration of Bulgarians to Bessarabia is extending.

The Principalities.—The members of the European commission on the union of the Danubian Principalities have received fresh instructions from their Governments. The Moldavian Ministry, under the presidency of M. Pano, which recently resigned, has been succeeded by one composed of members of the ultra national party.

Montenegro.—The Vienna papers publish advices from Trebigne, stating that 2600 Turkish troops, who were marching against Grahovo, were repulsed on the 29th ult. by the insurgents, who pursued them nearly as far as Trebigne.

Syria.—There is no truth in the reports of a massacre of Christians in Palestine. The Governor of Jerusalem has ordered certain towns in Palestine to be militarily occupied, on account of the inhabitants not having paid the taxes.

India.—The overland mail has arrived with accounts from Bombay to the 12th October. Sir George Russell Clerk has resigned the government of Bombay, and his resignation has been accepted. Lord Canning will not leave India till March, 1862. Telegraphic advices from all parts of India confirm the hope that the country will escape the general visitation of cholera which was so much dreaded. In Kandahar 8000 persons are stated to have fallen victims to cholera in 18 days. Her Majesty's 51st Foot, stationed at Meear Mer, lost during the month of August the Lieut.-Colonel and 262 men, including the rifle-instructor, 10 sergeants, 11 corporals, and 3 buglers. The 94th, also stationed at Meear Mer, lost in the same month 158 men, including 9 sergeants and 7 corporals; the 27th, at Morar, lost 142, including 9 sergeants, 10 corporals, and 2 drummers. A report of the Military Department for 1860-61 on the reductions in the native army shows a reduction of more than 64,065 men of all ranks, and a saving equal to one crore of rupees. A large reduction in the native cavalry is under consideration. The report also proposes that the future strength of the European army shall be 73,586, being more 7577 more than Lord Canning recommended, and 3577 more than Mr. Laing promised in his budget speech. It is stated that important changes in the Indian navy will shortly be carried into effect. Orders have been issued for its reduction to four ships for transport service. According to news from Erivan, Dost Mohammed was marching on Bokhara. Cholera is prevalent at Bagdad and Tabreez.

China.—The Berlin journals state that the Government has received through St. Petersburg a despatch from Count Eulenbourg, chief of the Prussian mission in China, announcing that a treaty of commerce between that country and Prussia was signed on the 2d September, at Tien-tsin; and that a Japanese Ambassador is on his way to Berlin with presents from the Emperor of Japan to the King.

United States.—The following are the letters referred to in the telegraphic summary last week as having passed between Lord Lyons and Mr. Seward, in reference to the arrest and imprisonment of British subjects:—

Lord Lyons to Mr. Seward.

"Washington, Oct. 14.

"Sir,—Her Majesty's Government were much concerned to find that two British subjects, Mr. Patrick and Mr. Rahming, had been subjected to arbitrary arrest; and, although they had learnt from a telegraphic despatch from me that Mr. Patrick had been released, they could not but regard the matter as one requiring their very serious consideration. Her Majesty's Government perceive that when British subjects as well as American citizens are arrested they are immediately transferred to a military prison, and that the military authorities refuse to pay obedience to a writ of *habeas corpus*. Her Majesty's Government conceive that this practice is directly opposed to the maxim of the constitution of the United States, 'that no person shall be deprived of life, liberty, or property without due process of law.' Her Majesty's Government are willing, however, to make every allowance for the hard necessities of a time of internal trouble, and they would not have been surprised if the ordinary securities of personal liberty had been temporarily suspended, nor would they have complained if British subjects falling under suspicion had suffered from the consequences of that suspension. But it does not appear that Congress has sanctioned in this respect any departure from the due course of law, and it is in these circumstances that the law officers of the Crown have advised her Majesty's Government that the arbitrary arrests of British subjects are illegal. So far as appears to her Majesty's Government, the Secretary of State of the United States exercises, upon the reports of spies and informers, the power of depriving British subjects of their liberty, of retaining them in prison or liberating them, by his own will and pleasure. Her Majesty's Government cannot but regard this despotic and arbitrary power as inconsistent with the constitution of the United States, as at variance with the treaties of amity subsisting between the two nations and as tending to prevent the resort of British subjects to the United States for purposes of trade and industry. Her Majesty's Government have therefore felt bound to instruct me to remonstrate against such irregular proceedings, and to say that, in their opinion, the authority of Congress is necessary in order to justify the arbitrary arrest and imprisonment of British subjects. I have the honour to be, Sir, with the highest consideration, your most obedient humble servant,

"The Hon. William H. Seward, &c "Lyons."

Mr. Seward's Reply to Lord Lyons.

"Department of State, Washington, Oct. 14.

"My Lord,—I have the honour to acknowledge your lordship's note of the present date. In that paper you inform me that the British Government is much concerned to find that two British subjects, Mr. Patrick and Mr. Rahming, have been brought under arbitrary arrest, and that although her Majesty's Ministers have been advised by you of the release of Mr. Patrick, yet they cannot but regard the matter as requiring the very serious consideration of that Government. You further inform me that her Majesty's Government perceive that when British subjects as well as American citizens are arrested they are transferred to a military prison, and that the military authorities refuse to pay obedience to a writ of *habeas corpus*. You add that her Majesty's Government conceive that this practice is directly opposed to the maxim of the constitution of the United States, that no person shall be deprived of life, liberty, or property without due process of law. You then observe that her Majesty's Government are, nevertheless, willing to make every allowance for the hard necessities of a time of internal trouble, and they would not have been surprised if the ordinary securities of personal liberty had been temporarily suspended, nor would they have complained if British subjects falling under suspicion had suffered from the consequences of that suspension, but that it does not appear that Congress has sanctioned in this respect any departure from the due course of law, and it is in these circumstances that the law officers of the Crown have advised Her Majesty's Government that the arrests of British subjects are illegal. You remark further, that, so far as appears to Her Majesty's Government the Secretary of State for the United States exercises upon the reports of spies, and assumes the power of depriving British subjects of their liberty or liberating them by his own will and pleasure, and you inform me that her Majesty's Government cannot but regard this despotic and arbitrary power as inconsistent with the constitution of the United States, as at variance with the treaties of amity subsisting between the two nations, and as tending to prevent the resort of British subjects to the United States for purposes of trade and industry. You conclude with informing me that upon these grounds Her Majesty's Government have felt bound to instruct you to remonstrate against such irregular proceedings, and to say that, in their opinion, the authority of Congress is necessary in order to justify the arbitrary arrest and imprisonment of British subjects. The facts in regard to the two persons named in your note are as follows:—Communications from the regular police of the country to the Executive at Washington showed that disloyal persons in the State of Alabama were conducting treasonable correspondence with Confederates, British subjects and American citizens in Europe, aimed at the overthrow of the Federal Union by armed forces actually in the field and besieging the capital of the United States. A portion of this correspondence, which was intercepted, was addressed to the firm of Smith and Patrick, brokers, long established and doing business in the city of New York. It appeared that this firm had a branch at Mobile: that the partner Smith is a disloyal citizen of the United States; and that he was in Europe when the treasonable papers were sent from Mobile, addressed through the house of Smith and Patrick in New York. On receiving this information William Patrick was arrested and committed into military custody at Fort Lafayette, by an order of the Secretary of War of the United States, addressed to the police of the city of New York. These proceedings took place on the 28th of August last. Representations were thereupon made to the Secretary of State by friends of Mr. Patrick, to the effect that, notwithstanding his associations, he was personally loyal to the Government, and that he was ignorant of the treasonable nature of the correspondence which was being carried on through the mercantile house of which he was a member. Directions were thereupon given by the Secretary of State to a proper agent to inquire into the correctness of the facts thus presented, and this inquiry resulted in the establishment of their truth. Mr. William Patrick was thereupon promptly released from custody by direction of the Secretary of State. This release occurred on the 13th day of September last. On the 2d day of September the Superintendent of Police in the city of New York informed the Secretary of State, by telegraph, that he had under arrest J. C. Rahming, who had just arrived from Nassau, where he had attempted to induce the owners of the schooner Arctic to take cannon to Wilmington, in North Carolina, for the use of the rebels, and inquired what should he do with the prisoner. J. C. Rahming was thereupon committed into military custody at Fort Lafayette, under a mandate from the Secretary of State. This commitment was made on the 2d day of September. On the 17th day of that month this prisoner, after due inquiry, was released from custody on his executing a bond in the penalty of 2500 dollars, with the condition that he should thereafter bear true allegiance to the United States, and do no act hostile or injurious to them, while remaining under their protection. I have to regret that, after so long an official intercourse between the Governments of the United States and Great Britain, it should be necessary now to inform her Majesty's Ministers that all executive proceedings, whether of the Secretary of War or of the Secretary of State, are, unless disavowed or revoked by the President, proceedings of the President of the United States. Certainly it is not necessary to announce to the British Government now that an insurrection, attended by civil and even social war, was existing in the United States when the proceedings which I have thus related took place. But it does seem necessary to state, for the information of that Government, that Congress is by the constitution invested with no executive power or responsibility whatever, and, on the contrary, that the President of the United States is, by the constitution and laws, invested with the whole executive power of the Government, and charged with the supreme direction of all municipal or Ministerial civil agents, as well as of the whole land and naval forces of the Union, and that, invested with those ample powers, he is charged by the constitution and laws with the absolute duty of suppressing insurrection, as well as preventing and repelling invasion, and that for these purposes he constitutionally exercises the right of suspending the writ of *habeas corpus* whenever and wheresoever and in whatsoever extent the public safety, endangered by treason or invasion in arms, in his judgment requires. The proceedings of which the British Government complain were taken upon information conveyed to the President by legal police authorities of the country, and they were not instituted until after he had suspended the great writ of freedom in just the extent that, in view of the perils of the State, he deemed necessary. For the exercise of

that discretion he, as well as his advisers, among whom are the Secretary of War and the Secretary of State, is responsible by law before the highest judicial tribunal of the Republic, and amenable also to the judgment of his countrymen and the enlightened opinion of the civilised world. A candid admission contained in your letter relieves me of any necessity for showing that the two persons named therein were neither known or supposed to be British subjects when the proceedings occurred, and that in every case subjects of her Majesty residing in the United States, and under their protection, are treated during the present troubles in the same manner and with no greater or less rigour than American citizens. The military prison which was used for the temporary detention of the suspected parties is a fort, constructed and garrisoned for the public defence. The military officer charged with their custody has declined to pay obedience to the writ of *habeas corpus*, but the refusal was made in obedience to an express direction of the President, in the exercise of his functions as Commander-in-Chief of all the land and naval forces of the United States. Although it is not very important, it certainly is not entirely irrelevant, to add that, so far as I am informed, no writ of *habeas corpus* was attempted to be served, or was even sued out or applied for, in behalf of either of the persons named, although in a case not dissimilar the writ of *habeas corpus* was issued out in favour of another British subject, and was disobeyed by direction of the President. The British Government have candidly conceded, in the remonstrance before me, that even in this country, so remarkable for so long an enjoyment by its people of the highest immunities of personal freedom, war, and especially civil war, cannot be conducted exclusively in the forms and with the dilatory remedies provided by municipal laws which are adequate to the preservation of public order in time of peace. Treason always operates, if possible, by surprise, and prudence and humanity therefore equally require that violence concocted in secret shall be prevented, if practicable, by unusual and vigorous precaution. I am fully aware of the inconveniences which result from the practice of such precaution, embarrassing communities in social life, and affecting, perhaps, trade and intercourse with foreign nations. But the American people, after having tried in every way to avert civil war, have accepted it at last as a stern necessity. The chief interest, while it lasts, is not the enjoyments of society or the profits of trade, but the saving of the national life. That life saved, all the other blessings which attend it will speedily return, with greater assurance of continuance than ever before. The safety of the whole people has become, in the present emergency, the supreme law, and so long as the danger shall exist all classes of society equally, the denizen and the citizen, cheerfully acquiesce in the measures which that law prescribes. This Government does not question the learning of the legal advisers of the British Crown, or the justice of the deference which Her Majesty pays to them. Nevertheless, the British Government will hardly expect that the President will accept their explanations of the constitution of the United States, especially when the constitution thus expounded would leave upon him the sole executive responsibility of suppressing the existing insurrection, while it would transfer to Congress the most material and indispensable power to be employed for that purpose. Moreover, these explanations find no real support in the letter, much less in the spirit, of the constitution itself. He must be allowed, therefore, to prefer and be governed by the view of our organic national law, which, while it will enable him to execute his great trust with complete success, receives the sanction of the highest authorities of our own country, and is sustained by the general consent of the people for whom alone that constitution was established. I avail myself of this opportunity to offer to your Lordship a renewed assurance of my very high consideration.

"WILLIAM H. SEWARD.

"The Right Hon. Lord Lyons, &c."

The New York journals generally approve of the language of Mr. Seward's letter, and repudiate, as an unwarrantable interference, any British interpretation of the Federal Constitution. The *New York Tribune*, however, denies the necessity either for confining prisoners in military prisons or for the suspension of the Habeas Corpus Act in the State of New York. It is rumoured in Washington that additional correspondence has passed between Lord Lyons and Mr. Seward. At the battle which was fought near Leesburg on the 21st ult., between the advanced column of the Federal troops under General Stone and a body of Confederates under General Evans, the former were eventually compelled to abandon the field and fall back across the Potomac, with the loss of 680 men, including General Baker, killed. The Confederate loss was unknown. The Federal troops were subsequently reinforced and marched upon Leesburg, but, on the approach of two strong columns of Confederates, they again retreated into Maryland. The movements on the Potomac indicate that a general engagement may be expected almost immediately in that quarter. The Confederate force under General Polk in Kentucky, General Price in Missouri, General Gustavus Smith at Leesburg, and General Beauregard at Fairfax Court House, have all retreated, and the Federal army is slowly advancing to take their positions. The Lower Potomac is considered effectually closed, as the Confederate batteries command the river at every point below Washington, where some alarm is felt with regard to the supplies of forage, &c., which were formerly brought up the river. A despatch from Jefferson City states that on the 16th 150 Federal troops, under Major White, surprised the Confederate garrison at Lexington, and recaptured the place. Two pieces of cannon were captured in the fort. General Zollieffer has attacked the Federals at Camp Wild Cat, Kentucky, and been repulsed. Reinforcements to the extent of 8000 men have been sent by special trains to General Sherman in Kentucky, where stirring events are expected, the Confederates according to the current report having it in contemplation to transfer their main body to Kentucky for winter quarters. The Confederate account of the engagement at New Orleans was exaggerated. The Federals sustained no loss either in ships or men. The Confederates retreated to Santa Rosa, after having suffered heavy loss. A naval expedition, composed of 80 vessels, carrying 500 guns and between 30,000 and 40,000 men, sailed from Hampton on the 27th ult. Messrs. Mason and Slidell, the Confederate Commissioners to England and France, have arrived at the Havannah. General A. S. Johnston has been appointed to the chief command of the Confederate troops in Missouri. He was formerly in the Federal army, and is said to be an experienced and skilful general. Mr. James Chapin, of Albany (New York), and Mr. Muir, of Charleston, who was arrested some time since when on his way to England, have been released from Fort Lafayette; and Mr. F. O. Haskins has been released from Fort Columbus. Two newspaper editors at Franklin, New York, have been arrested and imprisoned in Fort Lafayette on account of their Southern tendencies. The trial of the captain and crew of the privateer Savannah was in progress in the District Court at New York, and excited a deep interest. The jury have returned a verdict of Guilty in the case of William Smith, one of the crew of the Jeff Davis on trial at Philadelphia. The surveyor of New York has seized the ship John Fyfe, lately arrived from Glasgow, on the ground that one-sixteenth of her is owned by Mr. Brigham, of New Orleans. The Charleston blockading squadron has destroyed the ship Thomas Watson, from Liverpool, while she was endeavouring to run the blockade. Sir James Ferguson and Mr. Burke arrived at New York on the 16th from Manassas. The news of the speech of Mr. Lindsay at Sunderland, in which he advocated the propriety of a recognition of the Southern Confederacy by the Governments of France and England, created a sensation in New York, and was freely discussed by the American press. Mr. Seward's circular to the loyal States of the Union urging that active measures should be taken for strengthening the coast and lake defences, caused the greatest excitement on the New York Stock Market, under the impression that a foreign war was about to be added to the present civil commotions. The *New York Times* attributes the issuing of it to the attitude of the leading European Powers towards Mexico, which has excited the anxiety of the Federal Government, as it has little doubt the United States is prepared to extend the utmost aid to Mexico in her extremity, and to offer armed resistance if necessary against the attempts at invasions and conquest which Spain may make, and considers America's prestige and national honour are involved in resisting any effort to plant a hostile flag on the weakest and most exposed frontier of the United States. The New York Banks have offered for the third 50,000,000 dollars of the Federal Loan, and for 100,000,000 dollars of 7 per Cent. Bonds. It is reported from Washington that the Treasury Department denies the statement of the *New York Evening Post* that foreign capitalists had offered to take 100,000,000 dollars of the Federal loan.

CANADA.—Lord Monck was sworn in at Quebec on the 25th ult. as Administrator of Canada, his full powers not having arrived. The ceremony was attended with considerable enthusiasm. Sir E. Head and family were to leave for England by the steamer of the 30th. A despatch from Toronto states that notice has been given of an application to the Court of Chancery for the appointment of a receiver and manager of the Grand Trunk Railway, and for an injunction to restrain the English contractors from seizing the rolling stock under an execution against the company.

MEXICO.—The *Moniteur* of Tuesday announces that the convention between France, England, and Spain, declaring that these Powers unite their forces for a common action in Mexico in order to obtain satisfaction for their grievances, was signed in London on the 31st ult. The following are said to be the chief provisions of the Convention:—

"The three Powers are to send an equal naval strength, but the strength of the troops to be landed is to be in proportion to the number of subjects which each of the Powers has in Mexico, and in this respect Spain claims precedence. The troops will occupy Vera Cruz and the other cities on the coast where Custom-houses are established. If, after a given delay, the Government of General Juarez has not paid up the money it owes, an advance will be made on the capital. Immediately on their arrival, the expeditionary forces are to endeavour to impose a suspension of arms on the belligerent parties in Mexico. The three Powers engage themselves not to occupy permanently any portion of territory, nor to obtain from Mexico any exclusive advantages. They engage to leave Mexico entirely free to choose the form of her government. England has renounced the stipulations which she wished to have inserted in the treaty to the effect binding the three Powers not to accept the throne of Mexico for any of the Princes of their reigning families. If however the monarchical form should prevail, the three Powers undertake not to employ their intervention for the advantage of any Prince in particular. The Convention will be notified to the Cabinet at Washington, which will be invited to join the intervening Powers. It will be left optional to the Government of President Lincoln to send such number of ships and troops as he may deem advisable under the circumstances."

Public Addresses.

THE EARL OF MALMESBURY at the annual dinner of the South Avon Agricultural Society at Christ Church spoke as follows on the Volunteers:—

"I think that there are two dangers apparently before us, and only two. There is no danger of any caprice in this country, and of the noble movement which has taken place failing in its vigour or its usefulness. It is quite evident, after two years have elapsed—and the great mass of Volunteers in this country have increased rather than diminished—that the characteristic spirit of constancy, so well exhibited in Englishmen, has ruled; but there are two difficulties which I see before me, both of which, I think, may act prejudicially. The first is a natural disposition among men who have joined this force, after attending a certain number of drills, and undergoing a certain quantity of labour, to consider that their occupations after all are such—their private occupations—that they can hardly carry on both with credit to themselves. They naturally say to themselves, and justly, 'We are not a truly military nation; we are engaged in trade, in manufactures, in agriculture, in commerce, in the duties of civil life, or as civil officers, and we have not that time in the 24 hours—which no magic can lengthen—to do justice to ourselves and attend long enough and sufficiently to make us as perfect as regular troops, or as we should like to see ourselves and others.' This is a very natural feeling of vanity; but it is an entirely mistaken one. After the first year or year and a half of drill—and that is over—they should know sufficiently to form the nucleus of a body of men who, when the occasion arrives—which God forbid!—in a month or six weeks would make effective soldiers. Let them consider that it is not necessary to have all the bearing and smartness of troops of the line; that they look equally well, and are equally respected, without any ornamental thing of that sort; and that as soon as they know the A B C of their company drill they are perfectly able then, and would be sure to be able to act within a month or six weeks of a given time—and then naturally all their time would be given to it—and to learn as much as it is possible to know. Therefore they should not be discouraged, and those who are not perfect need not wish to withdraw from the corps because they do not think they could give time to it. If they only learn one-half the exercises—if they understand them in their heads—when the time comes they will be able to proceed rapidly with the remainder. I do not wish them to put themselves to personal inconvenience to attend the drill; they should do so only when their business permits them. That is one danger. The other is an opinion, which is not general, but which I have heard advocated by some men, that the institution of the Volunteer force will enable us to reduce our regular army. Depend upon it that is a very great mistake. It would be unfair to the country, and terribly unfair to the Volunteers themselves. Take, for example, the habits of discipline, of life, of the class of men who form the Volunteers, and compare them with those habits and customs of discipline and of order which regulate the Royal army. It is impossible—perfectly impossible—that you should change human nature so completely. If you could transform them into regular troops, and subject them to some such discipline as regular troops are subjected to, yet if they were not always under those regulations they would not be so effective as a regular army. They would be effective in their own way; they would be effective as a supplementary army, relieving the troops, in case of war or invasion, in various toils to which they would otherwise be exposed; and they would be effective, doubling and trebling the amount of the efficiency of the regular troops, by enabling them to act together instead of employing them in duties which the Volunteers are able to perform; but to trust the safety of the country to a body of men whose habits do not accustom them to the stern discipline of the Line would be a most dangerous and fatal thing to the country itself, and to the Volunteers themselves. We have seen what has taken place in America. Those men who fell at the battle of Manassas and at Bull's Run were doubtless as brave as ourselves, or any others descended from our race; but from the inferior quality of the officers—Volunteer officers who had not been in military command opposed to those who had—and the inexperience of the troops themselves, when brought to face dangers to which they were unaccustomed and led by persons not accustomed to lead regular troops, they sustained a disastrous defeat. We as Volunteers must therefore consider ourselves as supplementary to the regular army. Year after year we should improve and be a nucleus, increased in size, and vigour, and strength whenever required; but it would be the greatest mistake, either from economical principles or believing that Volunteer forces are equivalent to regular troops, to take upon ourselves to reduce the army even in a small degree in consequence of the Volunteer movement; in fact, we should be destroying what we have done. We consider ourselves an independent portion of the army. When we enlisted our idea was, not that we should enlist as soldiers, and that so many soldiers should be dismissed in consequence; but we enlisted to assist those soldiers, and to be a reserve to defend the country if attacked. Recollect what this country is. Its safety depends upon its navy, because, although an island is the strongest of all countries so long as its navy maintains its supremacy at sea, if it has no navy it is the weakest of all countries. Take Austria. Surrounded by neutral territories she may have friendly neighbours. But in England, an island, if you have no navy, a powerful military monarchy that possesses a navy—I will at once say France—could land soldiers at different points; and, as we have no neutral territory around us, and our 'friendly neighbour' would have ceased to exist, we cannot number too many men to defend the interior of this country. Our army could not possibly do it. 100,000 regular men could not defend the coast if the French had the superiority at sea; but if we had a Volunteer force of 150,000 or 200,000 men to assist that army, added to all the strength and vigour and advantage with which all soldiers fight upon their own ground, if the navy were overpowered we should still be able to defend our land. What I have said is no conceit of my own, and no dream. England, 800 years ago, was conquered, and by men who came from France. But what was the cause? In those days it had no navy; it had a brave King and a very brave army, but that army, four days before the battle of Hastings, fought a desperate battle against the Danes on the eastern coast. King Harold conquered the Danish army and slew the Danish King and his valiant brother. But in consequence of that battle it was that with a broken army he had to meet the Norman William on the coast of Sussex; and that proves that without a navy this island may be attacked, at one and the same time, at more than one point, and that it requires more than one army to defend our shores, even if we did not lose our supremacy at sea. Let nothing, then, discourage our keeping up the Volunteer force, our keeping up their drill; above all, do not, if you ever entertained it, foster the delusion that, brave as you are, patriotic as you are, you can act alone and without the assistance of the regular force; but consider yourselves supplementary to that regular force, and be ever ready to double its exertions and its usefulness."

THE RIGHT HON. GENERAL PEEL, M.P., attended a meeting of his constituents at Huntingdon on the 30th ult. on the occasion of his portrait being placed in the Town Hall, and spoke as follows on Public Affairs:—

"To have represented the same constituency for 30 years is an honour which few members can live to attain. There are no doubt many more numerous constituencies than yours, but there are none which, for its size, contain a larger number of honest independent gentlemen. It is a great mistake to suppose that small constituencies are more subject to undue influence than larger ones. On the contrary, they are more jealous of their honour, and of being represented by gentlemen whose integrity is the best guarantee of their independence. If I wanted a proof of this, I need only refer to the gentlemen you have given me as colleagues. I should be making a very bad return for your kindness if I went into a review of the great events which have happened during this long period. If I may venture to make a remark on the speech which a distinguished statesman addressed to a large company at Newcastle, I should say he referred more to what he had done than to what he intended to do for the future, and I gather that he intended rather to repose on the laurels he had already won than to seek for any fresh or new

[illegible]. There is one subject connected with the past to which I wish to refer. The great difficulty I feel in addressing you is that it is necessary that I should speak of myself more than I feel inclined to do. It may be a matter of surprise to many that I should have separated myself from those who call themselves, or are called the followers of Sir Robert Peel. It may be imagined that I had seen some reason to doubt the policy that he had adopted, or that I had a less affectionate regard for his memory. It is not my intention to enter into a discussion of that policy, far less to speak of my attachment to the individual. But I have only to say that I acted as I think and feel confident he would have done if his life had been spared. I will only say that when the great Conservative party—I will not say adopted or accepted—but no sooner did they admit that the commercial policy which he introduced was not to be changed, there was no longer any difference between us. Personal feelings might have prevented them from considering themselves his followers, but no personal feeling would have prevented him, and no personal feeling would have prevented me from supporting those Conservative principles in which I was born and bred. It has been said there is no difference in political opinion between parties, and if we look at the composition of the present Cabinet, I should say that was the truth; for it comprises men of all political parties, and I look upon the noble Lord at the head of the Government as the representative of Conservative interests and principles in that Cabinet. As long as he continues to do so he will meet with no factious opposition. In that Cabinet there are Old Whigs and New Whigs, Peelites, and Radicals, and it is astonishing how a Government can be carried on consisting of such conflicting materials. But the good sense of the country has so clearly and so explicitly manifested itself upon all the leading points of government that it is impossible for any Government to vary from them. The country has declared, in a manner not to be disputed, that it will be placed in a state of defence which will prevent it from being attacked by any enemy. The Chancellor of the Exchequer has declared that the Estimates of his colleagues are most wicked and extravagant, but still he is obliged to adopt them and provide for them. But the country has equally declared that although it will be protected from any enemy it will not be drawn into a war on account of others, and is not prepared to carry out an idea. The opinion of the country is explicit on this point—that whatever may be the anomalies of the representative system, upon the whole the House of Commons fairly represents the opinion of the country, and that it is better to bear the ills we have—if there are any—than to fly to those we know not of. Any Government running counter to public opinion would fail to retain the good will of the House of Commons in whatever hands the Government may be placed. I admit that upon the surface there is but little difference of opinion between political parties, but I maintain that there is as deep a difference between Conservative and Radical principles as ever existed. It is not in fair weather that the skill of the pilot or the discipline of the crew is shown. Should foul weather arise, or should there be any breakers ahead, I think there would be at once a mutiny in the crew of the vessel of the State. It is the fashion of the Liberal party to laud to the skies their policy as to foreign affairs, and to make invidious comparisons between Lord Derby's Government and Lord Palmerston's Government. True it is they are obliged to admit that the policy is the same, but they say that Lord Derby's Government was not able to maintain the peace of the country as well as Lord Palmerston's Government. Now, there is a difference between maintaining peace and preventing the first outbreak. I believe that any mediation of Lord Malmesbury would have been as effective as any on the part of Earl Russell. When we are told, 'Look at the proud condition of England, at the moral influence she possesses with regard to other countries,' I believe I should not be wrong if I said she is disliked and detested by every nation under the sun. No doubt she has that respect paid to her which her wealth and power will always command, but it is respect accompanied by dislike and distrust, and not by regard. We were told not long ago that we were not to rely upon the Emperor of the French, but to look to other alliances. Now, I ask you to point out one single country which would not prefer an alliance with France to an alliance with our own, and I will also ask you whence proceeds all that distrust? No man is hated by everybody without some cause. Is it from jealousy, or from being somewhat overbearing with others? I recollect long ago that a gentleman who was notorious for constant meddling and interfering with other people's affairs called upon a distinguished nobleman and judge of the world to act as his friend. The nobleman first said, "Will you fight? Because, if you will not, depend upon it the less you interfere in the affairs of others the better it will be for you.' If we were to follow the admirable advice given on that occasion, we should be far more safe from drifting into another war. Do not imagine that I am less jealous of the honour of England, or less anxious to promote the interests of England, than any other man; but I have yet to learn that honour is maintained or interest is promoted by interfering with everybody on all occasions, and making use of overbearing language. On the contrary, that man who walks the safest and most respected through a crowd is he who avoids treading on the corns of others. If the *suaviter in modo* and *fortiter in re* is to be observed, it is to be observed in dealing with nations as proud as ourselves. This sentiment is in accordance with public opinion, and no Government can safely depart from it. So long as parties are nearly agreed as to the conduct of public affairs, the greater chance there is of their being well conducted. As to the House of Commons, I believe it to be the noblest assembly in the world; and so far from that House being to blame for not bringing forward more Bills and introducing more legislative measures, I think the best way to employ its time would be to repeal many measures and simplify many others. I believe the best and highest state of society was that which did the least legislation, and that public opinion was the best legislator.'

City Intelligence.

BANK RATE OF DISCOUNT.—The Bank of England on Thursday lowered their rate of discount from $3\frac{1}{2}$ per cent., at which it was fixed on the 19th of September, to 3 per cent.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at $93\frac{1}{2}$ to $\frac{5}{8}$ for Money, and $92\frac{1}{8}$ to $\frac{1}{4}$, ex div. for the 5th of Dec.; Bank Stock, 229 to 230; Three per Cents. Reduced, $91\frac{5}{8}$ to $\frac{7}{8}$; New Three per Cents., $91\frac{3}{4}$ to $\frac{7}{8}$; India Stock, 225; Ditto Five per Cent. Stock, $105\frac{5}{8}$ to $106\frac{1}{8}$, *cum* div.; Ditto for Acct., $103\frac{1}{2}$, ex div.; Ditto Bonds, 12*s.* to 15*s.* pm.; Five per Cent. Enfaced Rupee Paper, $97\frac{7}{8}$ to $97\frac{3}{4}$; Ditto Five and a Half per Cent., 105; Exchequer Bills, 7*s.* to 10*s.* pm.; Ditto Small, 10*s.* pm.—FOREIGN: Dutch Two and a Half per Cents., for Acct., $64\frac{1}{4}$; Ditto Four per Cent. Certificates, for Acct., $100\frac{1}{4}$; Equador New Consolidated, $15\frac{1}{4}$; Mexican Three per Cents., for Acct., $27\frac{1}{2}$ to $\frac{3}{4}$; Sardinian Five per Cents., for Acct., $82\frac{3}{4}$; Spanish New Deferred Three per Cents., for Acct., $42\frac{1}{4}$; Committee's Certificates, $6\frac{1}{8}$ to $\frac{1}{4}$; Turkish Six per Cents., 1854, $79\frac{1}{4}$; Ditto, 1858, for Acct., 68; Ditto 100*l.* Bonds, $68\frac{1}{2}$ to $69\frac{1}{2}$; Venezuela Three per Cents., $22\frac{1}{2}$.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£28,053,275	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion ..	13,403,275
		Silver Bullion	—
	£28,053,275		£28,053,275

BANKING DEPARTMENT.

Proprietors' Capital ..	£14,553,000	Government Securities (including Dead Weight Annuity) ..	£11,712,187
Rest	3,149,098	Other Securities	16,460,864
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	4,240,889	Notes	7,279,960
Other Deposits	13,515,241	Gold and Silver Coin ..	807,499
Seven day and other bills	802,282		
	£36,260,510		£36,260,510

7th day of Nov., 1861. M. MARSHALL Chief Cashier.

Gazette of the Week.

TUESDAY—BANKRUPTS—H. ADEANE and W. BAKER, Robert Street, Hampstead Road, Iron Bedstead Makers—T. AUSTWICK, Monk Fryston, Yorkshire, Farmer—W. BAYLINGTON, Lower Walton, Lancashire, Provision Dealer—H. A. BALL, South Island Place, Brixton Road, Surrey, Dairyman—W. BARNES, Newton, Lancashire, Provision Dealer—T. BARKER, Reigate, Surrey, Tailor—T. H. BATES (and not H. BATES, as advertised in last Friday's "Gazette"), Walsall, Staffordshire, Coal Dealer—B. BEHRENZ, Southampton Street, Camberwell, Brush Manufacturer—E. BENDALL, Blaisdon, Gloucestershire, Carrier—T. BENHAM, Brighton Road, Aldershot, Baker—J. BENNETT, Everton, Liverpool, Bricklayer—J. P. BIBB, Lancaster, Inspector of Railway Police—T. T. BINGHAM, Bakewell, Derbyshire, Auctioneer—C. W. BROWN, Morden Grove, Greenwich, Clerk in her Majesty's Dockyard, Deptford—T. BROWN, Manchester, Woollen Warehouseman—W. BURGESS, Hanley, Staffordshire, Wholesale Grocer—W. H. CHAPMAN, Garway Road, Westbourne Grove, Livery Stable Keeper—J. CHAPPELL, Horbury, Yorkshire, Mungo Manufacturer—A. COHEN, New Street, Houndsditch, Marine Store Dealer—T. R. COLES, Brighton, Letter Press Printer—J. COULTER, Salford, Lancashire, Boot and Shoe Manufacturer—J. COX, Higher Broughton, Lancashire, Commission Agent—C. COWDERY, Upper King Street, Bloomsbury, Licensed Victualler—W. L. CROCKFORD, Birmingham, Milliner—W. CROSBY, Manchester, Plumber—E. DAVIES, Townshend Road, St. John's Wood, Boot Maker—C. DAVIS, Bath, Upholsterer—S. DAVIS, St. George's Street, St. George's-in-the-East, Corn Dealer—J. S. DAY, Billericay, Essex, Surgeon—S. DAY and J. T. THACKRAY, Stoke-upon Trent, Plumbers—R. D. DODGE, St. Thomas's Street, Southwark, Commercial Traveller—M. DUFFY, Wapping Wall, Shadwell, Beer House Keeper—J. EVANS, Hulme, Lancashire, Provision Dealer—H. M. FEIST, Sutton, Surrey, Newspaper Reporter—I. FISH, Rutland Street, South Lambeth, Clerk—W. FLETCHER, Liverpool—H. GARRET, Upper North Place, Gray's Inn Road, Attorney's Clerk—J. GEORGE, Providence Buildings, New Kent Road, Baker—J. H. GIBBONS, Chesham, Bucks, Chemist—M. GODDARD, Brighton, Greengrocer—G. GREEN, Hertford, Upholsterer—R. HALL, Walsall, Staffordshire, Builder—W. G. B. HARBORD, Tooley Street, Southwark, Ship Chandler—E. HEALES, Stoke Damerel, Devonshire, Shipwright—F. HEWER, Hereford, Butcher—N. L. HIORNS, Exmouth, Devonshire, Stationer—J. HOLROYD, Basinghall Street, Warehouseman—R. E. HOLE, Mark Lane, Oil Merchant—S. F. HOOPER, Bernard Street, St. George's, Bloomsbury, Commission Agent—J. F. HOPWOOD, Hulme, Lancashire, Book Keeper—W. JESSUP, Ryarsh, Kent, Shoeing and Jobbing Smith—H. JOHNS, Camborne, Cornwall, Shoe Dealer—J. KELLY, Hulme, Lancashire, Journeyman Joiner—R. KELLY, Bootle, near Liverpool, Solicitor for Orders in a Saw Mill—W. KENNEDY, Lancaster, Bricklayer—J. LADD, Turner's Road, Limehouse, Builder—J. LEWIS, Wolverhampton, Coffee House Keeper—I. LEWIS, Langton Place, Camberwell, Baker—C. W. LEWIS, Barnes, Surrey, Barrister-at-law—J. LOVEGROVE, jun., Wolverhampton, Manager to Wine Merchants—E. MECATH, Brighton, Sussex, Teacher of Singing—J. S. MENZIES, Kilburn, Middlesex, Private Tutor—J. NEALE, Doncaster, Yorkshire, Wholesale Druggist—S. NICHOLSON, Leeds, Solicitor—H. NODES, Robert Street, Chelsea, Undertaker—P. B. PEEK, Drummond Street, St. Pancras, Commercial Traveller—J. G. PICKERING, Ridley Road, Dalston—J. REEVES, Willenhall, Staffordshire, Licensed Victualler—G. RICHARDS, Billingsgate Market, Fish Salesman—C. ROE, Roydon, Essex, Schoolmaster—H. [illegible], South Shields, Merchant—J. [illegible], Watford, Hertfordshire, Draper—S. SHICKELL, Blackman Street, Southwark, Licensed Victualler—W. SIMMONDS, Little Peter Street, Westminster, Bricklayer—W. F. SMITH, Coventry Street, Haymarket, Hosier—W. SMITH, jun., Longton, Staffordshire, Grocer—J. SMITH, Longworth, Lancashire, Farmer—C. SMITH, Huddersfield, Commission Agent—C. SMITH, Liverpool, Commission Merchant—J. M. SPERLING, Wertemburg Street, Clapham, no occupation—C. STORRY, Winchester, Mess Master—W. STOTEN, Backchurch Lane, St. George's-in-the-East, Baker—B. SWIFT, Cheetham, Lancashire, Salesman—H. TUSON, Cottage Place, Salmon's Lane, Limehouse, Printer—W. WADE, Wickham Market, Suffolk, Baker—J. H. WELCHMAN, Upper Stamford Street, General Agent—J. F. WILKINSON, Hulme, Lancashire, Traveller on Commission for the Sale of Cards—W. WINNIETT, Chapel Place, Cavendish Square, Captain—W. WOOD, Leeds, Butcher—H. WOSTENHOLM, Sheffield, Cutlery Manufacturer.

BANKRUPTCY ANNULLED—J. MOSS, Houndsditch, Wholesale Clothier.

SCOTCH SEQUESTRATIONS—P. DURNAN, Glasgow, Boot and Shoe Maker—W. FOREST, Brokley, Lanarkshire, Grocer—J. SCOTT and SONS, Greenock, Shipbuilders—W. YOUNG, Bishopmill, Builder.

FRIDAY—BANKRUPTS—J. ALLEN, Liverpool, Detective Officer—W. ARMSTEAD, Deptford, Butcher—J. BAILEY, Huddersfield, Woollen Manufacturer—H. BAKEWELL, Rutland Street, Kingsland Road, Hatter—J. BARLOW, Hyde, Chester, Draper—D. BIRCHENALL, Sheffield, Dyer—J. S. BOTTWOOD and I. BOTTWOOD, Luton, Beds, Straw Hat Manufacturers—M. BRADSHAW, Salford, Greengrocer—G. BROOK, Kingston-upon-Hull, Corn Dealer—H. BROOKES, Hardwicke, Gloucester, Cattle and Sheep Salesman—D. C. BROWNE, Liverpool, Professor of Music—J. CANNING, Dudley, Hats, Market Gardener—J. CHADBOURN, Donington, Lincoln, Potato Dealer—T. CHURCHER, North Stoneham, Hants, Publican—G. CLARK, Cambridge Circus, Cabinet Maker—G. J. COOK, Kingston-upon-Hull, Brewer—W. COOPER, Binstead, Isle of Wight, Builder—W. CORRIE, Old Broad Street, Commission Agent—J. CRANE, Weavers' Hall, Basinghall Street, Mining Agent—T. S. G. DAVIDSON, Westbourne Grove, Paddington, Bookseller—J. DAVIES, Swansea, Grocer—J. DENNY, jun., South Weald, Essex, Pig Dealer—F. DENTON, Huddersfield, Flocker—D. C. DINSMORE, Birmingham, Dealer in Patents—W. EGAN, Sheffield, House Painter—J. EGGINTON, Westbromwich, Brewer—G. ELGAR, Maidstone, Surgeon—H. ELLIS, Northallerton, Deputy Chief Constable—W. E. EMERY, Lincoln, Dyer and Scourer—I. FISK, Rutland Street, South Lambeth, Clerk—R. T. FITCHETT and E. SHAW, Regent Street, Tailors—E. T. FLOOR, Gateshead, Durham, Commercial Agent—M. GRAHAM, sen., Cockermouth, Farmer—W. GRAY, Frostenden, Suffolk, Farmer—A. GREENGRASS, Drake Street, Red Lion Square, Wood Japanner—J. W. GRAY, Sunderland, Hatter and Hosier—J. GRUMMITT, Swinton, York, Market Gardener—T. HADINGHAM, Crescent, Jewin Street, Law Stationer—J. HARTSHORN, Nottingham, Lace Manufacturer—W. T. HEARN, Netley, Hants, Licensed Victualler—H. HEWETT, Rotherfield Street, New North Road, Islington, Haberdasher—J. HOLMES, Lamb's Conduit Street, China and Glass Dealer—EDWARD HOWARD, Swansea, Ship Broker—JOHN HADFIELD, Glossop, Leather Dealer—W. HIGGINS, St. George's Mews, Regent's Park Road, Horse Dealer—J. HOLDEN, Liverpool, Attorney-at-Law—C. HOLLAND, Langley, Bucks—R. INMAN, Huddersfield, General Dealer—S. KNOWLES, Devon, Brewer—E. W. JONES, Upper Kennington Lane, Clerk to a Coal Merchant—C. LANDSDOWNE, I. LANDSDOWNE, jun., and W. C. LANDSDOWNE, Wootton Bassett, Wilts, Builders—C. LEAKE, Framfield, Sussex, Farmer—J. LIGHT, Windsor, Hants, Farmer and Publican—J. LINES, Romford, Essex, Licensed Victualler—E. LOVATT, Kingswinford, Stafford, Auctioneer—M. A. MACKENZIE, Hoyland Common, York, Milliner—W. L. MARTIN, Norwood, Ironmonger—E. MECATH, Brighton, Teacher of Singing—J. H. MILES, Norwich, Draper—C. B. MILLARD, Sheffield, Grocer's Assist.—T. MITCHELL, Scredington, Lincolnshire, Farmer—D. MOREL, Little Tower Street, City, Wholesale Tea Dealer—N. MUST, Sudbury, Suffolk, Butcher—T. NANSCAWEN, Birmingham, Plumber—J. NODES, Leominster, Builder—W. M. NOTTINGHAM, Little Grove Street, Marylebone, Omnibus Conductor—G. OWEN, Gloucester Buildings, Old Kent Road—W. PALMER, Manchester, Salesman—J. PARSONS, Pimlico, Builder—J. N. PEGLOIR, Water Lane, City, Manager to a Commercial House—F. POTTER, Charlesfton, Lancaster, Cotton Spinner—S. RAWLINSON, Caistor, Lincoln, Licensed Victualler—L. REDDY, Noble Street, City, Warehouseman—S. RICHARDS, Stenhack, Cornwall, Yeoman—G. ROCHESTER, Calthorpe Place, Gray's Inn Road, Draper—J. ROEBUCK, Paddock, York, Dyer—H. ROSENBERGEN, Hereford, Jeweller and Clothier—J. SANDERSON, Cheetham, Law Stationer—R. SANDS, Postern Row, Tower Hill, Photographic Artist—T. SOORD, Bishop Wearmouth, Corn Merchant—W. TAYLOR, Ashmore Brook, Lichfield, Farm Labourer—E. TOOTILL, Manchester, Printer—W. WADSWORTH, Hemingborough, York, Cattle Jobber—N. G. WADE, Pall Mall, House Agent—W. R. WAKELEY, Birmingham, Clicker—S. WALL, Stockport, Baker—C. J. A. WALLBACH, Cannon Street West, City, Glove Merchant—J. WEBB, Hoxton, Cowkeeper—M. WELSH, Albert Terrace, Paddington, Carman—R. WILKINS, Sandbach Heath, Chester, Farmer—G. WILKINS, Curry Mallet, Somerset, Beerhouse Keeper—S. WILLIAMS, Cornwall, Innkeeper—E. WILLIAMS, New Brighton—H. WILLIAMSON, Totley, Derby, Travelling Draper—C. WILLIAMS, Hall Place, Kennington, Publican—H. H. WILLIAMS, Tudor Road, Upper Norwood, Clerk in Holy Orders—H. WINTER, Camden Street, Middlesex, Gentleman—G. W. WOOD, Huddersfield, Yorkshire, Grocer—L. WOODARD, Brewer's Lane, Richmond, Licensed Victualler—W. YEELES, North Shields, Builder.

Metropolis and its Vicinity.

NATIONAL GALLERY.—On Saturday the National Gallery was re-opened to the public. The oil pictures of Turner, formerly at South Kensington, with the exception of about half-a-dozen, will be found on the walls of the old large, or west, room, which will now be labelled "Turner Gallery." On the two screens in the centre of the room are exhibited two of his finest water water colours, the "Edinburgh" and the "Battle of Fort Roc," besides smaller ones. This space has been obtained partly by re-arrangement, and partly by the withdrawal from Trafalgar Square of 38 pictures, including the two large Guidos and the series of early German works, the destination of which has not yet been determined by the Trustees. A new Rembrandt, being a portrait of himself, just purchased at Paris, and a new Garofalo, have been added to the collection during the recess.

BRITISH MUSEUM.—The Parliamentary Committee which sat last year to consider the question of separating the collections of the Museum or of retaining them on the present site, resolved by a majority to recommend the retention of all the collections in the present building, by purchasing as much of the adjoining land as may be necessary for its enlargement. This resolution was in accordance with the views of many eminent naturalists, though it was opposed by some of the most important members of the committee. The *Times* has this week announced that it is the intention of Government to act upon the opinion of the minority of the committee, and to remove the Natural History Collections from the present site to one better suited to their exhibition.

SOCIETY OF ARTS.—The Prince Consort, president of this Society, has offered annually to the candidate who, obtaining a certificate of the first class in the current year, shall have obtained in that year and the three years immediately preceding it the greatest number of such certificates, a prize of 25 guineas. This prize cannot be taken more than once by the same candidate. It will be accompanied by a certificate from the Society setting forth the special character of the prizes and the various certificates for which it was granted. The prize will be called "The Prince Consort's Prize," and will be awarded in 1862. The general prizes consist of two amounts—the first 5*l.*, and the second 3*l.*

OPENING OF TERM.—On Saturday, being the first day of Michaelmas Term, the Lord Chancellor, according to custom, received the judges and Queen's Counsel at his private residence in Belgrave Square. The judges then proceeded to Westminster Hall and opened their respective courts.

LORD MAYOR'S DAY.—The civic procession to-day will not essentially differ from that of last year, except in the splendour of the sheriffs' equipages, each of which will be drawn by four horses. The London Rifle Brigade, and the men in armour, will form conspicuous features in the pageant. The procession will start from Guildhall about half-past 11 o'clock, passing along King Street, Cheapside, the Poultry, Cornhill, Leadenhall Street, Billiter Street, Fenchurch and Gracechurch Streets, Cannon Street, Ludgate Hill, Fleet Street, to Temple Bar, and thence by the Strand to Westminster. On returning, it will pass through the Strand, Fleet street, Ludgate Hill, St. Paul's Churchyard, Cheapside, and King Street to Guildhall. On Saturday morning the Lord Mayor, aldermen and other city functionaries assembled at the private residence of the Lord Chancellor, when the Recorder presented the Lord Mayor elect for the approbation of her Majesty. The Lord Chancellor said it gave him great pleasure to be the bearer of the Queen's approbation of the choice which the citizens had made, and cordially congratulated his lordship on his re-election.

THE NEW BANKRUPTCY ACT.—The keepers of the Metropolitan debtors' prisons on Friday made their first returns to the Court of Bankruptcy in pursuance of the new Act. The largest number is in Whitecross Street Prison, which is now under the management of Messrs. Constable and Lay, the principal officers. There are 187 prisoners committed by the superior courts, and 15 committed by the county courts, the latter of whom do not come under the new law. There are upwards of 100 prisoners in the Queen's Prison committed by the Court of Chancery and the superior courts. According to the new law a registrar of the Court of Bankruptcy is to hold a "court" at the prisons, and if he thinks fit, to release the parties, and mention the district in which the estate is to be administered. In the event of any prisoner refusing to submit to examination by the registrar, or declining to make a full discovery of his estate and effects, the registrar is to report the same to the court, and the commissioner has power to commit the insolvent to the county gaol for one month "with or without hard labour;" which imprisonment may, however, be terminated before the time by complying with the direction of the Court. Some of the prisoners in the metropolitan prisons have been a long time in confinement—two for nine years, and two for seven years, in Whitecross Street. A general "gaol delivery" will be made next week, the registrars having appointed Monday for investigating the cases of prisoners returned by the gaolers of the Queen's Prison, Whitecross Street,

and Horsemonger Lane. A registrar will henceforth have to attend not sooner than a week, and not longer than three weeks, after the return, and a monthly return is in future to be made of all prisoners confined for debt.

ALTERATIONS IN THE CRIMINAL LAW.—On Friday last, being the 1st of November, six new Acts of Parliament to consolidate and amend the criminal law in England and Scotland, came into operation; with another statute, repealing 105 Acts on the subjects treated of in the enactments—namely offences against the person, malicious injuries to property, larceny, forgery, coining, and accessories and abettors. In all cases capital punishment has been abolished, except in cases of murder; and although for some time past executions have only taken place for the crime of murder, sentence of death has been recorded for other offences, such as attempt at murder by poison or by wounding, or by setting fire to a dwelling-house to murder a person therein. One of the new Acts contains an important provision with respect to "Conspiracy to murder," a subject which excited a good deal of interest about three years ago, and caused the downfall of Lord Palmerston's first administration. It states that "all persons who shall conspire, confederate, and agree to murder any person, whether he be a subject of her Majesty or not, and whether he be within the Queen's dominions or not; and whosoever shall solicit, encourage, persuade, or endeavour to persuade, or shall propose to any person to murder any other person, whether he be a subject of her Majesty or not, or whether he be within her Majesty's dominions or not, shall be guilty of a misdemeanour, and being convicted thereof shall be liable, at the discretion of the Court, to be kept in penal servitude for any term not more than 10 and not less than three years, or to be imprisoned for any term not exceeding two years with or without hard labour." In future, when "whipping" is resorted to, the quantity and the instrument to be used are to be specified in order to have one uniform mode of punishment. Jurors are not to be made acquainted with former convictions until a verdict of guilty on the second trial has been returned. One of the new Acts also contains a provision respecting furious driving—"Whosoever, having the charge of any carriage or vehicle, shall by wanton or furious driving or neglect, or other wilful misconduct, or by wilful neglect, do, or cause to be done, any bodily harm to any person, shall be guilty of a misdemeanour, and, being convicted thereof, shall be liable, at the discretion of the Court, to be imprisoned for any term not exceeding two years with or without hard labour." By an Act that recently came into operation fireworks are not to be sold without a license, and not to persons apparently under 16 years of age, under a penalty of 5*l*.

THE PUBLIC HEALTH.—The Registrar-General's Weekly Return states that the deaths in London in the week that ended Saturday, November 2, were 1078. This return is more than 100 less than it would have been if the average rate of mortality in the same week of the 10 previous years had prevailed. During the week the births of 947 boys and 889 girls, in all 1836 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1652.

Provincial.

ALDERSHOT.—On Wednesday night, Sergeant-Major Leslie Kennedy of the 3d battalion Military Train, was shot by a private of the same corps, named John Nicholas. An amateur performance of "Whitebait at Greenwich," in which the performers were non-commissioned officers and privates, took place on that evening at the camp theatre. Sergeant-Major Kennedy was acting stage manager; Nicholas was to appear as an actor in the character of *Benjamin Buzzard*. His name had appeared in the handbills, but subsequently to their publication it was discovered that another person was better able to take the part. He was accordingly superseded by a committee of management, of whom the sergeant-major was one. The performance commenced at half-past 8. Nicholas was at the theatre as one of the audience. During the performance he attempted to pick a quarrel with a corporal named Donny. Sergeant-Major Kennedy was a witness of the affair, and ordered him to be removed from the theatre. On being turned out, it is supposed he returned to his quarters. Kennedy went to his hut at about half-past 12, in company with Sergeants Ward and Salter, and Corporal Pierce. He lighted a candle, and began talking with his comrades about the evening's performance, when suddenly the door was opened, and Nicholas, advancing two steps into the hut, said to Kennedy, "What have you to say against me?" and immediately raised his carbine and shot him. The bullet entered the unfortunate man's right breast and passed out of his back. It glanced on the table, making a deep indentation of at least 2 inches in length, and cut a copy of the "Musketry Instructions" to pieces. The sergeant-major threw out his arms, called out, "I am shot," and ran the whole length of the hut to a comrade named Sergeant Fraser, who was in bed. Fraser at once jumped up; but not in time to catch him before he fell to the ground. Dr. Reynolds, of the battalion, was in immediate attendance, and under his charge he was removed to the military hospital, where he now lies without the faintest hope of recovery. Nicholas had no sooner discharged his carbine than he was secured, and marched off under a strong escort to the station house. He has only been in the battalion 12 months, and was in one of the regiments in India disbanded at the time of the Indian mutiny.

BILSTON.—The body of a man named William Lewis, who resided at Hall Green, near this town, was found on Sunday morning lying in the road near Coseley. A large wound was discovered on the back, with bruises on the arms and legs. There was also the appearance of a heavy blow on the left temple, the forehead and other parts of the face. About 3 o'clock in the morning a neighbour, Mrs. Waller, heard some one cry several times "Murder," "Do have mercy upon me," "Don't kill me." She did not get up to raise any alarm, as she was afraid to leave her husband, who was subject to fits. Another woman, Mrs. Solloway, heard similar cries, and went to the window, when she observed an individual with a large stick, whom she took to be a man called Richard Hickman. She heard groans, and some one cry, "Help, help; I am William Lewis." Hickman, who is a watchman employed by a number of tradesmen to guard their property, admitted, on being confronted with Mrs. Solloway, that he threatened to lay a stick about Lewis's back, but did not carry his threat into effect. The pockets of deceased had been turned inside out, and his money abstracted. Being an iron-roll turner at Deepfields ironworks, he was in the receipt of good wages, and was therefore supposed to have a little money. He and the watchman lived in the same yard, but Hickman declares that he did not know him when he threatened to beat him with his stick. When discovered in the road deceased's coat was turned over his face. The case is adjourned for further inquiry.

BIRMINGHAM.—The jubilee of the National Society was celebrated in this town on the 29th ult., when the Bishop of Worcester, Lord Calthorpe, Lord Lyttelton, Sir John Pakington, Sir Stafford Northcote, Mr. Newdegate, and Mr. Adderley, took part in the ceremony. The new minute on education occupied a large share of attention. Sir John Pakington expressed his opinion that the change was not intended to make education more efficient but to diminish the expenditure, and that the plan of testing efficiency by results would prove illusory. Sir Stafford Northcote was glad that religious teaching was to be exempted from this new mode of testing by results; and Mr. Adderley urged that if the Government aid was to be diminished or withdrawn, the Society must look to itself, and it would then have the more claim on private liberality. Mr. Newdegate urged the meeting to support the National Society, not only with their funds, but also in declaring to government that, as the handmaid and representative of the Church of England for educational purposes, it claimed that the Government should acknowledge the performance of the first function, which was the religious education of the people.

CAMBRIDGE.—The election of Vice-Chancellor of the University for the ensuing year took place on Tuesday. Dr. Phillips, President of Queen's, and Dr. Bateson, Master of St. John's, had been put in nomination by the Council of the Senate, in whom the nomination is now vested, instead of being, as under the old statutes, in the hands of the heads of colleges, who made the nomination on the principle of rotation. The voting commenced at 10 o'clock, and the Proctor closed the poll at 11, when the numbers were—for Dr. Phillips, 94, for Dr. Bateson, 36.

COCKERMOUTH.—An influential meeting of the owners of river frontage on the Derwent and its tributaries, and others interested in the preservation of salmon, was held in this town on the 23rd ult, to consider what measures should be taken for the purpose of enforcing the provisions of the new Act relating to the protection of salmon, and for generally improving the Derwent and its tributaries. The Hon. Percy Wyndham, M.P., presided, and in opening the proceedings said that he was one of those who believed that all that scientific men had said about salmon was true if they only gave it fair play—that, as he saw the other day, the salmon was almost the best animal they could make a bargain with, for he took nothing from them and gave himself in return. If once they placed salmon in the state in which nature intended it to be they would have it in great quantities. In reply to Mr. John Steel, M.P., it was stated that three years ago an angling association was formed, and they had met with every support from the landowners. Lord Naas, M.P., remarked that the interest of the upper proprietors would now be much increased, and perhaps they would be likely to combine to preserve the river. A long conversation took place, in the course of which the Hon. Percy Wyndham stated that there was only one weir which would require the erection of a fish ladder. A letter was read from Mr. Lawson, M.P., in which he expressed himself in favour of the system of rating the proprietors, though he was doubtful how such a system would answer in that part of the country. After considerable discussion a committee was appointed to consider what steps should be adopted for the preservation of the fish in the Derwent and its tributaries, and the best means for taking advantage of the new Act.

FROME.—The following inscription has been placed in Coulston Churchyard, on the tombstone raised to the memory of the murdered infant, Saville Kent:—"To the memory of Francis Saville Kent, the dearly-loved son of Samuel Saville and Mary Drewe Kent, who was cruelly murdered at Road, June 30, 1860, aged three years and ten months. 'Shall not God search this out? for He knoweth the secrets of the heart.'"

LUTON.—At the recent Petty Sessions in this town, before Colonel Ames, chairman, and the Rev. H. Smyth, John Whitelock was charged with brutally beating two orphan girls, named Ann Wilkinson, aged 15, and Eliza Darkey, aged 16, who had been apprenticed to him to learn the bonnet trade by the guardians of the poor of Hemel Hempstead. The court was excessively crowded, the inquiry lasting nearly three hours. Ann Wilkinson said she was 15 years of age last birthday, and had lived with Mr. Whitelock nearly three years. On Sunday the 1st of September he asked his children and the two apprentices if they had seen his purse, which he had missed on the previous night. They stated that they had not seen it, upon which he went to the stable and fetched the horsewhip. The witness ran into the sitting-room. Mr. Whitelock followed, and ordered her to kneel down. Being very frightened, she did so. He then put her head between his legs, putting his legs close together, and beat her with the whip behind. He had the thong of the whip doubled down to the end of the handle. She called out as loud as she could. He said the more she halloed the more he would beat her. She was there more than an hour, and he was beating her more than half that time. The rest of the family had gone to the Wesleyan chapel. Mr. Whitelock had flogged her several times on her bare person, and on her head, too. Mr. Whitelock said, "All the devils on earth shall not keep me from beating my girls." Eliza Darkey, the other apprentice, gave confirmatory evidence, and stated that she had been with Mr. Whitelock nearly three years. She had four dozen bonnets given her to paper on Saturday, the 31st of August. Some of them were fancy bonnets. At about half-past 11 o'clock at night she had done only three dozen and nine, and had therefore three bonnets to finish. Mr. Whitelock came in, and said, "Then you have not done your work yet?" She said, "No." He said he should beat her. He then beat her with a rod made from a birch broom, and it was 10 minutes past 12 on Sunday morning when he had finished. The magistrates, after severely rebuking the prisoner for his inhumanity, sentenced him to be imprisoned in Bedford Gaol for one month, with hard labour, for the assault on Ann Wilkinson, and at the expiration of that period to be further imprisoned for one month, with hard labour, for the assault on Eliza Darkey.

NETHERBY.—The funeral of Sir James Graham took place on the 30th ult at Arthuret Church, about 2½ miles from Netherby, and by his special desire it was of a strictly private character. The body was conveyed in a plain two-horse hearse, which was followed by four mourning coaches and six private carriages. The former contained the members of the family:—Mr. (now Sir) Frederick Graham, Mr. Malise Graham, the Misses Graham, the Rev. W. Graham, and Mr. G. Graham, registrar-general; Sir W. Lawson, Mr. Lawson, M.P.; Lord Dufferin, Sir J. Campbell, and other relatives. None of Sir James's political associates were present. Shortly before entering Longtown the procession was met by the tenantry, who uncovered their heads till it passed, and then fell in four deep. These were followed by the friends from Carlisle and the leading inhabitants of Longtown, the shops of which were closed. Though the late Lady Graham was interred in the Isle of Wight, Sir James's father, grandfather, and other members of the family are buried in the vault inside the parish church of Arthuret. The body of Sir James, however, was buried in an ordinary unvaulted grave in the churchyard, among his tenantry and the poorest of his neighbours. The coffin was of plain oak, with a zinc shell, but without covering, with a common plate bearing the inscription, "Sir Jas. R. G. Graham, born June 1, 1792; died Oct. 25, 1861."

SCARBOROUGH.—On Saturday last a severe storm swept over the coasts of Yorkshire, Durham, and Northumberland. Several vessels principally coasters were wrecked at Sunderland, Hartlepool, Revel, Stockton, Shields, and other places; the lower parts of the coast towns were seriously damaged by the tides, and houses and buildings on the higher ground were in many places unroofed. At Scarborough while the new lifeboat was proceeding to the rescue of the crew of a laden schooner then driving towards the shore, she got, when abreast of the Spa, into broken water, and was driven by the waves against the sea-wall, where her sides were stove in. Two of the crew perished; the rest were with great difficulty saved by parties on the Spa. Lord Charles Beauclerk, who was among the number, received such serious injury by being dashed against the rocks that he died on the same night; and Mr. W. Tindall, son of Mr. Tindall, banker of this town, has not since been seen, and it is feared that he is drowned. The crew of the ship were afterwards saved by the mortar and rocket apparatus. On Sunday evening an inquest was held on the body of Lord Charles Beauclerc, when Dr. Lyeett, who attended his Lordship immediately after the accident, stated his opinion that death was caused by the combined effects of a concussion of the brain and the drowning having been accelerated by the concussion of the brain. There were no marks of violence, either internal or external, on the

... beyond a fracture of the humerus of the ... arm. The jury returned the following verdict:—"That the deceased, Lord Charles Beauclerc, lost his life accidentally, while generously and nobly endeavouring to save the imperilled lives of several of his fellow-men."

OTLEY.—On Tuesday morning, William Smith, *alias* [illegible], the head gamekeeper in the service of Mr. Timothy Horsfall, of Hawksworth Hall, one of the magistrates for the West Riding, was going his rounds when he heard the report of a gun in a wood called Hawksworth Springs. He hastened to that place, and saw a well-known poacher, named James Waller, who lives at Low Springs, in the township of Bingley. He followed Waller for some distance, and got within about 150 yards of him, and within a short distance of Waller's house. Seeing that the keeper was fast gaining upon him, he turned round and fired twice from a double-barrelled gun, the first time wounding the gamekeeper in the breast and the second time in the abdomen. The keeper fell to the ground, and died in about three hours. Before he was removed from the spot, Waller, after firing the gun, went into his own house and then returned to the place, and affected much surprise at seeing the gamekeeper bleeding, and inquired who had done it. The gamekeeper instantly replied that he had shot him. Waller declared that he had never been out of the house that morning till just then. He, however, immediately left the place, and though strict search had been made for him he had not been apprehended at a late hour on Tuesday night. He has been frequently fined for poaching, and has been punished for shooting at one of his neighbours. He is also said that before he would submit to be again taken by deceased he would shoot him.

WIGAN.—A colliery explosion took place on Friday at the Prince Albert Pit, at Shevington, near this town, belonging to Messrs. J. Tayleure & Co. The explosion occurred nearer to the pit shaft than the part at which the men were working, and as they were making their way to the shaft, they were met by the after damp, by which 10 of them were suffocated, whilst five more were recovered in so exhausted a state that one of them has since died and the others are not expected to live.

Ireland.

ROYAL COMMISSION ON IRISH LAW COURTS.—The Royal Commissioners appointed to consider and report on the consolidation of the law courts, and the reduction of the number of judges, are Lord Chief Justice Blackburn, Chief Justice Monahan, Baron Hughes, Mr. O'Hagan, Mr. Lawson, Mr. Napier (ex-Chancellor), Mr. Brewster, Sir W. Page Wood (English Vice-Chancellor), Sir W. Atherton, and Mr. Roundell Palmer.

THE M'MANUS DEMONSTRATION.—The M'Manus obsequies commenced on Sunday at Cork, where the body had been landed on its arrival from America. The ceremony was attended by many thousand persons, including many from the rural districts, and also from the counties of Tipperary and Limerick, so that the funeral procession occupied a mile. The hearse was drawn by six horses, accompanied by a band of music, and followed by the trades' societies—shipwrights, painters, bakers, stonecutters, tailors, coachmakers, plasterers, slaters, &c. There were no priests in the procession, except two from the diocess of Cloyne, and no permission could be obtained to deposit the remains in any place of worship. The coffin, accompanied by the American delegates and the members of the Cork committee, arrived in Dublin on Monday morning by the mail train. Some hundreds of people were waiting its arrival at the platform with uncovered heads. A procession was formed, preceded by six torch-bearers, and the coffin was borne to the hall of the Mechanics' Institute, in Abbey Street—all places of worship having been closed to it by order of Archbishop Cullen. Large numbers visited the hall during the day, and continued to crowd in up to 10 o'clock at night. The *Morning News* of Tuesday contains an address of the committee to "the people of Ireland," inviting them to attend the funeral, which will take place to-morrow; and the *Freeman* publishes a letter from Father Lavelle, which has been extensively posted throughout the city as a broadsheet, in which he vehemently attacks Archbishop Cullen for denying to "the Catholic and the patriot, the disinterested, the devoted, and the brave—the honours accorded to every castle-slave, time-serving hypocrite, and Whigling sycophant, whose creed is to sell his creed and his country together to the first buyer for prompt payment."

THE LATE OUTRAGE IN DUBLIN.—It is stated that the convicted cabman, John Curran, suffered two years' imprisonment for a similar offence committed about six years ago in the county of Kildare. He was found guilty at the Naas assizes of the forcible abduction of a young woman, with whom disappeared the sum of 60*l*. Had this fact been known to the Court at the late trial the punishment would, no doubt, have been heavier, and the jury would have had less hesitation in finding him guilty. It has also excited fresh regret that he should have escaped—through the error of Judge O'Brien—the full penalty prescribed by the law, which is seven years' imprisonment.

THE THREATENED FAMINE.—The *Freeman* makes an earnest appeal on behalf of the Connaught districts threatened with famine, calling upon the Government to come to the relief of the suffering people. It is said that Sir Robert Peel has left Dublin for the purpose of visiting the district, and seeing with his own eyes whether the distress is as great as is reported.

Scotland.

MUNIFICENT BEQUESTS.—The late Lady Murray, widow of Lord Murray, has bequeathed to the Royal Institution for Promotion of the Fine Arts in Scotland 20 fine pictures from Lord Murray's collection. They include the portraits of Lord Murray, by Sir John Watson Gordon; of Mr. Francis Horner, by Sir Henry Raeburn; of Mr. David Lindsay, by Sir Joshua Reynolds; a marble bust of Mr. Francis Horner, by Sir F. Chantrey; and the following paintings, &c., by various artists:—Souvarov, artist unknown; Madame de Pompadour, by Boucher; Mrs. Ramsay, by her husband, Allan Ramsay; View of Lyons, by Marlowe; Boy Drinking, by Murillo; Girl with Black Cat, by Mercier; Girl Knitting, by Moreland; Girl Lamenting Dead Canary, by Greuse; Boy with Lesson Book, by Greuse; Girl with Folded Hands, by Greuse; Girl with Broken Jar, holding flowers, by Greuse; Burgomaster and Lady, by Watteau; Girl and Boy, by Watteau; Ladies Bathing, by Potter; three framed water-colour sketches, by Sir D. Wilkie; and a picture of the Resurrection, by an unknown artist. Lady Murray has also left the sum of 5500*l*. to Edinburgh charities, in the following proportions:—To the United Industrial School, 1500*l*; to the Royal Infirmary, 1000*l*.; to the Deaf and Dumb Institution, 1000*l*. (of which 800*l*. is to be apportioned to the establishment in Henderson Row, and 200*l*. to that in John Street); to the Blind Asylum,, 1000*l*.; to the Edinburgh Asylum for Lunatics, 1000*l*. All these bequests are free of legacy duty. Her will also provides that "poor persons at Strachur, who, at her ladyship's death, may be pensioners for money, or meal, or other supplies, are to have them continued to them for life."

Sporting.

DEFEAT OF THE SENECA INDIAN.—On Monday there was an immense assemblage at Hyde Park, Sheffield, to witness a great foot race in which the Seneca Indian, Deerfoot, and several celebrated runners were announced to contend. The race was a handicap got up by Mr. James Darley, the first prize being 30*l*, the second 6*l*., and the third 3*l*. The men ran in heats—distance one mile—the first being as follows:—C. Mower, of London, scratch; Deerfoot, 40 yards start; A. Day, of Brighouse, 70; J. Macdonald, of Cambridge, 80; William Richards, of London, 80. At the word "go" the men got off at a clipping pace, but the speed was not well sustained. Deerfoot never had a chance, a short race not being his forte because it does not call into play his immense power of endurance. The race was won by Day, of Brighouse, the time being four minutes and a half. The second heat was as follows:—E. Mills, of London, 25 yards; James Brighton, of Norwich, 35; Peter Stapleton, of Stalybridge, 38; Job Smith, Hulme, 45; Jem Mace, of Norwich, 90. This was won by Brighton by 2 yards; Mills second, Stapleton third. Time, 4 minutes 31 seconds. The third heat was contested by A. Liversedge, of Wath, 25 yards; W. Jones, of Islington, 70; and Tetlow, 90. W. F. Gilmore, London, did not start. The race was won by Jones so easily that it was not timed. The winners of the heats ran off for the prizes on Tuesday on the same ground.

Law.

ARCHES COURT.—*Burder* v. *Heath*.—Dr. Lushington on Saturday pronounced judgment on this case, which the Bishop of Winchester had instituted against the Rev. D. I. Heath, Vicar of Brading, in the Isle of Wight, who was accused of teaching doctrines repugnant to the Church of England. Dr. Lushington said that the suit was instituted in 1860, by direction of the Bishop of Winchester, against Mr. Heath, a beneficed clergyman of his diocese, for having printed and published a volume of sermons in derogation of the Book of Common Prayer and the Articles of Religion. At the outset he would make some remarks as to the principles which he thought should guide the Court in the consideration and decision of cases of this description. The Court was fully aware of its deep responsibility, inasmuch as questions might arise of the greatest possible interest to the Established Church, and any miscarriage by that Court, even though corrected by the Court above, might be a serious evil. It might be right in the first instance to recapitulate what the clergy were required by law to do. They must declare their assent and consent to the Book of Common Prayer, and sign the Thirty-nine Articles of Religion. He had nothing to do with the internal convictions of any one signing the articles, for no one knew what were the feelings of a person signing the Articles. Much must be left to the conscience of individuals subscribing, and he could not consent to import into this case the views of Paley or other authorities who had been cited by the learned counsel engaged. It was quite beyond his province the *quo animo* with which the Articles were signed. The duty of the Court was to examine the doctrine taught, and to decide whether there was anything in it which was in derogation of the Book of Common Prayer or the Thirty-nine Articles. It was true that there were a multitude of works by most eminent divines as to the meaning of the several articles, but the Court could not consent to make use of them. Those works appealed to the Holy Scriptures, but the Court could not enter into so wide a field as that, inasmuch as all the Court had to do was to ascertain the plain grammatical meaning of the Articles and Book of Common Prayer, and to determine whether the writings of Mr. Heath were or were not in accordance with them. With great anxiety he had endeavoured to ascertain the principles which should govern him, and with this view he had carefully considered the Gorham case, for although he was one of the judges in that case the judgment stood recorded on the authority of Lord Langdale, Lord Campbell, Lord Wensleydale, Lord Kingsdown, and the two archbishops. He was bound, at the same time, to remember that the present was a criminal proceeding, that the evidence must be clearly proved, and if any doubt existed Mr. Heath must have the benefit of it. The charge against Mr. Heath was, that he had published a volume of sermons in which he had taught doctrines repugnant to the Articles of Religion, and in derogation of the Book of Common Prayer. According to the practice of the Court, articles were given in, and it was ordered that they should be reformed. They were reformed, but their admission was again opposed. Leave was given to Mr. Heath to appeal to the Privy Council upon the point, and their lordships so reformed the articles that the precise portion of the Articles said to be contravened were inserted. After that the case came again before the Court. It had been argued that the Court must look to the articles alone, and not to the Book of Common Prayer; but he did not entertain that opinion, and he must look to all that had been remitted to him. The first article set forth passages from Mr. Heath's writings, which were alleged to be in contravention of the 11th Article of Religion. He did not wish to fix any meaning upon the article arising out of his own views of the Holy Scriptures. The first difficulty he had to encounter was in ascertaining what was the plain grammatical meaning of the article. The 11th Article was on justification, and plainly stated that we were accounted righteous before God only for the merit of the Saviour. He held with Burnet, that justification meant being received into the favour of God, and that the merit of our Saviour was the great cause of our reception, and that to be so received a person must have faith in the death of Christ Jesus. In this view he thought he was confirmed by the grammatical construction of the article, for the words were—"and not for our own works and deserving." The 13th Article confirmed that construction, for it stated that "we are justified by faith only"—he meant that without faith we could not be justified—without faith there could be no justification. The charges against Mr. Heath were, that he affirmed that justification meant doing strict justice to all, good and bad, and that by justification was meant that Christ had faith in his own Gospel, and faith in the future. The questions which arose were whether Mr. Heath had taught the doctrines imputed to him, and if so, whether these doctrines were contrary to the Articles of Religion and the Book of Common Prayer. On reading Mr. Heath's works he found that he had misused words, and held erroneous opinions not permitted by law, and not in accordance with the plain grammatical meaning of the Articles. He thought that every clergyman was bound to keep in mind the Articles of Religion in every sermon he preached, and it was no excuse for him to say that he did not bear the Articles in mind when he composed a sermon, and that he had no intention to violate them. He thought that Mr. Heath's doctrines were fanciful and erroneous. There was no reference in Mr. Heath's sermons to the Articles, and he thought that what Mr. Heath really meant was that the Almighty would put everything right at last. If he had only taught his objectionable doctrine in a single passage he should have been reluctant to declare that he had contravened the Articles, but he had maintained the doctrine in many subsequent passages which could not be reconciled with the plain grammatical sense of the Articles. He could not consider Mr. Heath's to be harmless innovations, because he averred doctrines totally different and distinct from those of the Articles, to which he was bound to declare them repugnant and contrariant. With reference to the 2d and 31st Articles, which set forth that Christ was crucified, dead, and buried, and that by his death he had put away the actual sins of men, he found that Mr. Heath by his teaching had denied those doctrines. The plain meaning of those articles was that through the suffering and death of the Saviour his Father was reconciled to man. He knew that much discussion had taken place in reference to the meaning of the word "reconciled." He thought the plain meaning of the word was the removal of that obstacle which the sin of man opposed to their being reconciled to God. In connection with this subject the 31st Article must be considered. The intention of that Article was to condemn the sacrifice of the mass, and stated in clear terms the doctrine of the Church. Any one who denied that Christ's death was sufficient must be declared to hold views contrary and repugnant to the Articles of Religion. Mr. Heath spoke of the forgiveness of sins as a detestable doctrine, and stated, moreover, that "guilt of sin," "going to heaven," "going to hell" were phrases which had vanished from his system. He had no alternative but to condemn Mr. Heath as being guilty of publishing that which was contrary to the Articles of Religion and in depravation of the Book of Common Prayer. The defence had been conducted with great zeal and learning. Many ingenious arguments had been introduced; but what the Court wanted had not been supplied—namely, some kind of exposition of the doctrine taught by Mr. Heath, and its consonance with the doctrines of the Church. He would with pleasure have received any explanation which could have been made. There had been a complete failure in that respect, not from want of learning, diligence, or ability of counsel, but because it was not possible rationally to fix any other meaning than he had indicated upon the doctrines which Mr. Heath had so unfortunately published. He had come to the consideration of this painful case with no disposition to restrict the clergy to any narrow construction of the Articles, but, on the contrary, to allow every possible latitude. To go further would be to abandon the duties of the office he held, to release the clergy from their obligations, and to repeal the provisions which Parliament had thought fit to enact by its authority. The learned judge then gave his judgment against Mr. Heath, and intimated that he should defer the sentence of the Court, as a power of retractation was given under the statute, and he would grant ample time for consideration.

COURT OF EXCHEQUER.—*Hatch* v. *Lewis*.—This was an appeal from a decision of the Lord Chief Baron, who refused to certify that the action brought last term by the Rev. Mr. Hatch against Messrs. Lewis, his attorneys, for negligence, and for which a jury awarded him 40*s*. damages, was a case fit to be tried in the superior courts, thereby excluding Mr. Hatch from obtaining costs. The Court in giving judgment expressed their unanimous opinion that the motion for a new hearing should be refused.

Obituary.

LORD CHARLES BEAUCLERK, who lost his life on Saturday last at Scarborough, in endeavouring to save the lives of the crew of the lifeboat, was son of the eighth and uncle of the present Duke of St. Albans. He was born in 1813, and married, in 1842, the only daughter of Colonel Stopford, by whom he had a numerous family. Lord Charles formerly held a commission in the 1st Royals, and was at the time of his death a major in the Northumberland Light Infantry Militia.

SIR WILLIAM MILLER, BART., of Glenlee, died on the 30th ult., at his residence in Gloucester Place, Portman Square, in his 46th year. He was born in 1815, married in 1839 the daughter of Lieut.-Gen. Sir Thomas M'Mahon, Bart., K.C.B., and succeeded his grandfather in 1846. He was for some years an officer in the 12th Lancers. He was a magistrate and deputy-lieutenant of Ayrshire, and a deputy-lieutenant of Kirkcudbright. He is succeeded in the title by his son, Thomas Macdonald, born in 1846.

SIR HENRY BRIDGES died on the 29th ult., at Beddington House, Surrey, aged 75. He was the son of Alexander Bridges, Esq., of Ewell, and was born in that village in 1786. He married in 1808 the daughter of General Dalrymple. In 1813-14 he filled the office of Sheriff of Surrey, and was knighted by the Prince Regent on presenting an Address during his shrievalty.

THE DEAN OF CLOGHER (the Hon. and Very Rev. Robert William Henry Maude), died a few days since at his residence in Enniskillen. He was an uncle of the present Viscount Hawarden, and was born in 1784. He was therefore in his

78th year. He married in 1827 the Hon. Elizabeth Mary Prettie, eldest daughter of the Hon. Francis Aldborough Prettie, father of the present Lord Dunally. Dean Maude held the living as well as the deanery of Clogher, and was also rector of Enniskillen.

WILLS.—The will of Lady Williams, widow of Mr. Justice Williams, only daughter of the late D. Davenport, Esq., M.P., of Capesthorpe Hall, Cheshire, has been sworn under 90,000*l*.

Miscellaneous.

RECOVERY OF THE JOURNAL OF ADOLPHE SCHLAGINTWEIT.—Sir Roderick Murchison writes as follows to the *Times*:—"I rejoice to have it in my power to make known to geographers and other men of science that Lord William Hay, now employed as civil commissioner in Cashmere, and who has been indefatigable in his endeavours to throw light upon the fate of Adolphe Schlagintweit, has at length succeeded in possessing himself of the journal of that most adventurous explorer. It will be in the recollection of many of your readers that, quitting his brothers Hermann and Robert, who traversed the Karakorum and Kuenlun chains to Eltchi, near Yarkand, Adolphe, pursuing his travels on a more western meridian, succeeded in passing considerably further northward than his brothers, when he was beheaded by a robber chief in front of Kashgar, and on his road to Kokand. Lord William Hay, in a letter dated the 8th of September, thus writes to his brother, Lord Gifford, who has authorised me to make the facts known to the public:—'You will be glad to hear, and please communicate the intelligence to friends and those who are interested, that I have succeeded in recovering, and have now in my possession, Adolphe Schlagintweit's journal, containing 135 pages of closely written notes, accompanied by what is confidently asserted to be the poor fellow's skull. The last entry in the journal is dated the 11th of August (1856), a few days before he was beheaded.' The surviving brothers will thus be enabled to enrich their work, now in the course of publication, by descriptions of a region never visited in modern times by any other scientific traveller."

DR. LIVINGSTONE'S EXPEDITION.—The following letter from Dr. Livingstone to Governor Sir George Grey has been laid before the Cape Town Chamber of Commerce:—

"Mohilla Island, near Comoro, April 4, 1861.

"My dear Sir George,—You will probably have heard ere this reaches you, that we went to Rovuma in February, and made an attempt to ascend that river in March. Our progress was arrested when only some 30 miles from the mouth, by observing that the water was falling at the rate of 7 inches a-day—we had come over some parts not more than 5 or 6 feet deep, and our vessel was drawing 4½ feet—so we had to make up our minds whether to proceed further and remain among a people whom we did not know till the next flood, or come back, and work on our old 'spoor' up the Shire. The detention would have been such a waste of time for those who remained at Johanna, and would not have advanced the object of those who had come to Rovuma more effectually than by spending the same period up the Shire. For the general good therefore we returned, and were favoured by a rise in the river of 3 or 4 feet. This last is said to be the last flood of the year, and made us fully alive to the fact that, from one cause or another, we were quite two months too late for successful exploration. From the little that we saw we are disposed to think favourably of the river as an entrance into Eastern Africa. It has a sandy bottom, three-quarters of a mile broad, and partakes much of the character of the Zambesi. Unlike that river, with its abominable bars, it flows into a magnificent bay. And the only danger in its mile-wide mouth, is a sort of 'bore' formed by the water of the river of a few fathoms meeting the ocean tide of 19 fathoms; at full tide it is all smooth. By keeping near the shore it is quite safe at all periods of the tide. We have a very short delta, and the land rises up from the bank in a gentle slope to 300 or 400 feet. It is well wooded, the ebony attaining a much larger size than it does anywhere on the Zambesi. The country is very beautiful, but there is something wrong among the people. Food seemed scarce in a soil where everything could grow. Half caste Arabs appear to lord it over the general population, and they were inclined to do the same with us. When my brother took the Makololo on shore to cut wood, some of them came and assumed the airs we read of in countries further north. They demanded payment for the wood, and he offered to give it, provided that they should cut it. But no, they would seize that already cut. The Makololo were unarmed, but made a rush to their arms; they would not let their white men be imposed on; the Bastards made a rush the other way, and could scarcely be prevailed on to come back and take up the vegetables they had left behind. But for this little show of pluck we should have had the company of these half-castes at every village, fines levied on every possible pretext, and the word passed on beyond their beat that we were a herd of she-asses to be milked for the public benefit. It is of the utmost importance here, as in Europe, for the people to feel that you are not dependent on them. If they see that you can get on without them they are much more obliging. . . . I have always found that the presence of a trusty band of Makololo, though useless for ship work, was invaluable on land. It was not without considerable regret that we gave up the project of a land journey with them up to Rovuma. It was the worst season for travelling; rain and heavy dews would have cut us up. In fact, the same reasons that prevailed for the postponement of the landing of the mission still continue in force. By the time we reach the Shire we shall be in the healthier season, and a beginning will be made of the general labours from the other end of Nyassa to that which we looked on by the Rovuma. It is curious that all the people declare that Rovuma comes out by Nyassa; this, according to a curious idea that has come over the geographical mind in England, must mean that Nyassa comes out of Rovuma. I wish our friends would only tell us all about it beforehand; it would save us a great deal of trouble, and deliver us from the perplexity of guessing and grumbling. We see, for instance, Shire never discolours in flood, but is always of a dark mossy hue, carries a great deal of mica, has a muddy bottom, and never rises or falls more than a few feet. Rovuma rises some five or six feet, is very brown and muddy, but has a sandy bottom, water carries little or no mica, and tastes of rain rather than moss. Now, anything positive, if given beforehand, will be thankfully received, though it come from the archives of Prester John. P.S. Johanna, at William Sunley's her Majesty's Consul, Comoro Islands.—We require two well trained strong mules, fit for and used to either harness or the saddle, and two good strong Scotch carts with harness, &c., complete, to transport goods past Murchison's Cataract. I propose to submit a spot near the village market, "Chizanze's," not far from the bottom of Zomba, for the bishop's inspection. The head man, called Chibaba, is a fat, frank, jolly fellow, the elevation some 3000 or 4000 feet above the sea, cool in the hottest part of the season, and well watered. This will be a sanatorium, and there stands Zomba's top, a day's journey up, inhabited, and a fine rivulet. Some work will be required to find a good sloping kloof up to the plateau. All have had fever except one. Indeed, but two of the entire expedition have escaped, yet nothing serious occurred.—I am, &c., DAVID LIVINGSTONE."

Letters dated Rovuma, March 23, have been received by the Bishop of Cape Town from Bishop Mackenzie. The mission party appear to have been well and in good spirits. At the close of his letter the missionary bishop says:—"As to the future, Dr. Livingstone is sending up a boat to the Senna for beads, and some other of the things he has left there, and the Pioneer must await their return, which will be on Monday, probably. Then we shall be ready to start up the Shire, having only one other stoppage for wood before we reach the Murchison Cataract. Then, as I think I told you, Livingstone most kindly proposes to come with us to the plateau south of the summit of Zomba, a high table land (from 3000 to 4000 feet above the sea), in some part of which, he thinks, we shall find a desirable site for the mission; after which we shall apply ourselves to making acquaintance with our neighbours, learning their language, getting up our stores, and making ready for our ladies, whom we expect about the end of the year."

BIRTHS.—On the 4th inst, at 13, Hereford Street, Park Lane, the Marchioness of CARMARTHEN, of a son—1st inst, at Rutland Gate, the Lady WILLIAM COMPTON, of a daughter—1st inst, at Aberdeen, the Hon. Lady ABERCROMBY, of Birkenbog and Forglen, of a son—3d inst, at Farnham, Surrey, the Hon. Mrs. HENRY HUGH CLIFFORD, of a daughter—27th ult, at Branston Rectory, Lincoln, the Hon. Mrs. A. S. LESLIE MELVILLE, of a daughter—3d inst, at 8, Grafton Street, the Hon. Mrs. SPENCER PONSONBY, of a daughter—4th inst, at The Vicarage, Barrow-on-Humber, the Hon. Mrs. MACHELL, of a son.

MARRIAGES.—On the 31st, at St. Paul's Church, Knightsbridge, Rear-Admiral the Hon. Sir HENRY KEPPEL, K.C.B., to JANE ELIZABETH, eldest daughter of MARTIN J. WEST, Esq., and the Lady Maria West, of Cadogan Place, Belgrave Square—31st ult, at St. Peter's, Eaton Square, the Rev. JAMES CHICHESTER, rector of Arlington, Devon, and brother of the late Sir J. Palmer Bruce Chichester, Bart., of Arlington Court, to Miss HILDYARD, eldest daughter of the late Colonel Hildyard, of Flintham Hall, Notts, and Winestead Hall, Yorkshire—22d ult, at Butterton Chapel, the Count DE SCHLIPPENBACH, of Berlin, Chamberlain to his Majesty the King of Prussia, to CLARA, only daughter of the late THOMAS HILL, Esq., of Outrington, Cheshire—29th ult, at the parish church, Brighton, LEOPOLD BARON GREMP DE FREUDENSTEIN, to AMELIA MEYRICK DE VISME, daughter of the late JOHN LOUIS GOLDSMID, Esq.—5th inst, at St. Dunstan's, Fleet Street, FRANCIS, eldest son of the late Hon. Mr. Justice TALFOURD, D.C.L., to FRANCES LOUISA MORGAN, second daughter of Joseph [illegible]—6th inst, at All Saints, Knightsbridge, Dr. THOMAS MAYO, M.D., President of the Royal College of Physicians, to LADY SYMONDS, widow of Rear Admiral Sir William Symonds, and youngest daughter of the late Rev. JOHN BRIGGS, Fellow of Eton College.—5th inst, at Roehampton, MARTIN RIDLEY, the eldest son of MARTIN TUCKER SMITH, Esq., M.P., to EMILY CATHERINE, second daughter of HENRY STUART, Esq., of Newton Stewart, N.B.—29th ult, at Ruddington, OLIVER, only son of JOHN PAGET, Esq., of Gyères, Transylvania, to ELLEN, youngest daughter of CHARLES PAGET, Esq., M.P., of Ruddington Grange, Notts—31st Aug., at Christ Church, Victoria, Vancouver's Island, CHARLES, second son of the Rev. HENRY GOOD, LL.B., of Wimborne Minster, Dorsetshire, to ALICE, fourth daughter of his Excellency JAMES DOUGLAS, C.B., Governor of British Columbia and Vancouver's Island—2d Sept., at Victoria, Vancouver's Island, E. GRAHAM ALSTON, Esq., of Lincoln's Inn, Barrister-at-law, Registrar-General of the Colony, to ELIZABETH CAROLINE ABBOTT, the youngest daughter of Edward Abbott, Esq., of Feltwell Lodge, Norfolk.

DEATHS—On the 6th inst, the infant son of the Marchioness and Marquis of CARMARTHEN—3d inst, at Amport Vicarage, Hants, Lady SHIFFNER, wife the Rev. Sir George Shiffner, Bart., aged 69—27th ult, after a few days' illness, while on a visit to John Young, Esq., Galgorm Castle, county Antrim, Ireland, ALEXANDER MACDONALD LOCKHART, Esq., youngest and last surviving son of the late Sir Alexander Macdonald Lockhart, of Largie Lee, and Carnwath, Bart.—27th ult, at Clerk Hill, Whalley, the Rev. J. M. WHALLEY, rector of Slaidburn, and the third son of the late Sir James Whalley Smythe Gardiner, Bart.—25th ult, at her residence, Park Place, Regent's Park, MARTHA, widow of the late THOMAS DEANE PEARSE, Esq., formerly Captain in her Majesty's 14th Regiment of Light Dragoons, and daughter of the late Sir John St. Aubyn, of Clowance, in the county of Cornwall, Bart.—1st inst, at Leamington, ELIZABETH RAE, daughter of the late ANDREW HOUSTOUN, Esq. of Jordan Hill, Renfrewshire, and sister of General Sir Robert Houstoun, K.C.B., and of Clerkington, Haddingtonshire.—23d ult, at Moniack, Inverness-shire, Mrs. JANE FRASER, of Reelick, last surviving daughter of ALEXANDER FRASER TYTLER, Lord Woohouselee, and widow of the late JAS. BAILLIE FRASER, Esq., of Reelick.—28th ult, at the Upper Rectory, Malpas, Cheshire, EDITH EMMA, eldest daughter of the Rev. the Chancellor THURLOW, aged 21—2d inst, at Leaton Knolls, Salop, CHARLOTTE SOPHIA, youngest daughter of the late FRANCIS LLOYD, of Domgay, in the county of Montgomery, and Leaton, in the county of Salop, Esq., and M.P. for the former county—3d inst, at 9, Somers Place, Hyde Park, DIANA ELLIOTT, the wife of Major-General G. J. WILSON, H.M. Indian Army, Bombay, aged 53—30th ult, at Broomhill Bank, Tunbridge Wells, Colonel ARMYTAGE, late Coldstream Guards, aged 65—26th ult, at St. Leonard's-on-Sea, Colonel H. H. BELL, of the Madras Artillery, aged 49—29th ult, after a long illness, at Bonn-on-the-Rhine, ISABELLA, the wife of Lieutenant-Colonel CHARLES JAMES OLDFIELD, Retired List Bengal Army, aged 36—2d inst, at his residence, 26, Westbourne Square, Hyde Park, WILLIAM DAWSON, M.D., Inspector-General of Hospitals, H.M.S. aged 66—31st ult, at Woolwich, OLIVER EVANS, Esq., M.D., R.M., Inspector-General of Hospitals and Fleets, aged 63—3d inst, at 9, Southwick Street, Hyde Park, ANNIE GREGORY, daughter of the late Dr. Olinthus Gregory, of the Royal Military Academy, Woolwich, aged 50—29th ult, at Clapham, JOHN THORNTON, Esq., eldest son of the late Samuel Thornton, Esq., formerly M.P. for Surrey, and upwards of 30 years a Commissioner in succession of the Boards of Audit, Stamps, and Inland Revenue, Treasurer of the Church Missionary, and of the Bible Society, and one of the oldest magistrates for the county of Surrey, aged 77—6th inst, at 35, Adelaide Crescent, Brighton, EDWARD ANKETELL JONES, Esq., late of Wanstead Grove, Essex, in his 70th year.—31 ult JOSEPH BROOKS, Esq., of Brasted H[illegible], Sevenoaks, Kent, aged 67—1st inst, the Rev. [illegible] ELIOT, B.D., vicar of Norton Bavant, Wilts, [illegible] prebendary of Sarum, formerly Fellow and tu[illegible] Exeter College, Oxford, and the first Archdea[illegible] Barbadoes and the Leeward Islands, aged 7[illegible]—[illegible] at Clifton, the Rev. ROBERT LLEWELLYN CALEY, [illegible] of Bristol, and vicar of All Saints, aged 51—[illegible] 5, Clifton Place, Camberwell New Road, the Rev [illegible] TAYLOR HUNT, many years minister of Kennington C[illegible], aged 73.

Markets.

COVENT GARDEN, Nov. 9.

The supply of Fruit, both foreign and home grown, is t[illegible] week greater than the demand; prices are therefore [illegible] lower. Grapes and Pine Apples are abundant. Of C[illegible] there is still a fair supply. Potato markets have [illegible] since our last report. Cucumbers are sufficient for the dem[illegible], and the same may be said of Tomatoes. Cut flowers [illegible] consist of Orchids, Chrysanthemums, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Oranges, per 100, 6s to 14s
Grapes, per lb., 1s 6d to 4s	Lemons, per 100, 6s to 10s
Melons, each, 1s to 3s	Nuts, Cob, per pound, [illegible] to 2s 6d
Pears, per doz., 1s to 6s	
Apples, per doz., 6d to 1s	Walnuts, per 100, 2s

VEGETABLES.

Cauliflowers, each, 2d to 6d	Artichokes, each, 6d to [illegible]
Broccoli, per bundle, 1s to 1s 3d	Beet, per doz., 1s 6d
	Celery, p. bundle, 1s 6d to 2s
French Beans, per sieve, 2s 6d to 3s 6d	Onions, pickling, p ½ sieve, 4s 6d
	Tomatoes, p. doz., 1s to 6s
Cabbages, do., 1s 3d to 1s 6d	Shallots, per lb., 8d to 10d
Potatoes, p. ton, 60s to 75s	Garlic, per lb., 6d to 8d
— per cwt., 4s to 8s	Endive, p. score, 1s 6d
Turnips, per bunch, 2d to 4d	Horse Radish, p. bun., 1s 6d to 4s
Carrots, do., 4d to 6d	Mushrooms, p. pott., 2s to 3s
Spinach, p. sieve, 1s to 2s	Parsley, p. 12 bunches, 3s to 4s
Cucumbers, each, 6d to 9d	Savory, per bunch, 2d to 4d
Veg. Marrows, p. doz, 1s to 1s 6d	

HAY.—Per Load of 36 Trusses.

SMITHFIELD, THURSDAY, Nov. 7.

Prime Meadow Hay	80s to	90s	Clover, old	90s to 1[illegible]	
Superior do. ..	95	105	New Clover	—	—
Inferior do... ..	40	55	Do. second cut ..	80	1[illegible]
New do.	—	—	Straw	28	34
Rowen	—	—			

DAVIS & Co.

CUMBERLAND MARKET, THURSDAY, Nov. 7.

WHITECHAPEL, THURSDAY, Nov. 7.

Fine Meadow Hay	90s to	100s	Fine 1st cut Clover	110s to 11[illegible]	
Inferior do.	60	80	Inferior do.	85	9[illegible]
Prime New Hay ..	—	—	New 2d cut	100	10[illegible]
Inferior	—	—	Inferior do.	92	100
Straw	28	32	New 1st cut ..	—	—

HOPS.—BOROUGH MARKET, FRIDAY, Nov. 8.

Messrs. Pattenden & Smith report the demand good for the new growth, at very firm prices. 1859's and old Hops are also in better request at improved prices.

POTATOES, SOUTHWARK, Monday, Nov. 4.

During the past week, the arrivals coastwise have been small, but more plentiful by rail. The trade rules dull, and the consumption limited, owing to the general inferior quality and condition of Potatoes. The following are this day's quotations:—Kent and Essex Regents, per ton, 110s. to 130s. Yorkshire do., 90s. to 120s.; Lincolnshire do., 90s. to 110s.; Scotch do., 60s. to 95s.; French Whites, 100s. to 110s.

BRITISH WOOLS.—LONDON, FRIDAY, Nov. 8

Our trade continues slow, and only for immediate requirements.

	s. d.	s. d.			
South-down Hoggets	1 4 to	1 5	Leicest. Wethers	1 4 to	..
Half-bred ditto	—	1 6	Ditto Hoggs ..	1 5 —	..
Down Ewes ..	1 4 —	1 4½	Combing Skins	1 0 —	1 [illegible]
Kent Fleeces ..	1 5 —	..	Flannel Wool ..	1 0 —	1 [illegible]
			Blanket ditto ..	0 6 —	.

COLONIAL WOOL SALES.—The November and December series of these sales commenced last night. The quantity to be brought forward is about 59,000 bales. The Cape being a larger proportion, say over 25,000 bales, has commenced at a reduction. The Sydney, Port Phillip, and Van Diemen's have maintained late rates.

BUTTER MARKET.—Nov. 8.

Best Fresh Butter .. .. 16*s*. per dozen lbs.
Second do. do. .. .. 14*s*. " "
Pork, 4*s*. 8*d*. to 5*s*. 4*d*. per 8 lbs.

METROPOLITAN CATTLE MARKET.

MONDAY, Nov. 4.

The number of Beasts is much smaller than on Monday last. Trade is more active, and prices on the average are better. The supply of Sheep is small; they are readily disposed of at advanced rates. In some instances of very choice qualities our top quotations are exceeded. Good Calves fully maintain late rates. From Germany and Holland there are 1750 Beasts, 6800 Sheep, and 182 Calves; from Ireland, 1150 Beasts; from Spain, 150; and 2300 from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 10 to	5 0	Best Long-wools.	5 2 to	5 4
Best Short-horns	4 8 —	4 10	Do. Shorn	—	..
2d quality Beasts	3 4 —	4 2	Ewes & 2d quality	4 6 —	4 10
Best Downs and Half-breds ..	5 6 to	5 8	Do. Shorn	—	..
Do. Shorn	to	..	Lambs	4 4 —	5 [illegible]
			Calves	4 4 —	[illegible]
			Pigs		

Beasts, 5460; Sheep & Lambs, 20,700; Calves, 219; Pigs, 3[illegible].

THURSDAY, Nov. 7.

The supply of Beasts is about the same as on Thursday last. Trade is dull, but choicest kinds realise Monday's quotations. The number of Sheep, although not large, exceeds the demand. Prices on the average are scarcely as good as on Monday; yet there is hardly a quotable difference. Good Calves are in demand. Our foreign supply consists of 390 Beasts, 2600 Sheep, and 161 Calves. Milch Cows, 90.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 10 to	5 0	Best Long-wools.	5 0 —	5 4
Best Short-horns	4 6 —	4 10	Do. Shorn	—	
2d quality Beasts	3 4 —	4 0	Ewes & 2d quality	4 4 —	4 [illegible]
Best Downs and Half breds ..	5 6 —	5 8	Do. Shorn	to	..
Do. Shorn	—	..	Lambs	4 4 —	[illegible]
			Calves	4 4 —	5 4
			Pigs		

Beasts, 1230; Sheep & Lambs, 5140; Calves, 202; Pigs, 290.

COAL MARKET.—Nov. 6.

Grey's West Hartley, 16s. 9d.; Hastings Hartley, 17s. 3d.; Walker Primrose [illegible] Cuthbert's Hartley, 15s.; Tanfield Moor, 13s.;

... 13s. ; West Wylam, 15s. ; Walls End Acorn Close, ... 6d. ; Walls End Byron, 19s. ; Walls End Eden, 18s. 6d ; ... End Sheriff Hill, 15s. 5d. ; Walls End Haswell, 20s. 6d. ; ... End Hartlepool, 19s. 9d. ; Walls End Kelloe, 19s. 6d. ; ... End South Whitworth, 16s. 3d. ; Walls End Thornley, ... ; Walls End Thorpe, 18s. 3d. ; Walls End Trimdon ... Hartlepool, 19s. 9d. ; Carway and Duffryn Anthracite, 21s. 6d. ; Carway and Duffryn Malting, 24s. ; Lambert's West Hartley, ...—Ships at market, 89.

MARK LANE.—Monday, Nov. 4.

The supply of Wheat from Essex and Kent to this morning's market was small, and disposed of at an improvement of 1s. per qr. upon the prices of this day se'nnight. Foreign was held for a similar advance, but it restricted sales, and the business transacted was only to a moderate extent. Malting Barley is rather cheaper, grinding fully as dear. Beans and Peas bring late rates. The Oat trade is dull, and last week's prices barely supported. Flour is firm ; we do not alter our quotations.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk..White	50—64	Red	50—60
— — fine selected runs..ditto	61—66	Red	50—62
— — Talavera	64—72		
— Norfolk	—	Red	—
— Foreign	48—76		
Barley, grind. & dist., 26s to 28s..Chev.	36—41	Malting .	35—38
— Foreign..grinding and distilling	27—30	Malting .	36—40
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire—Potato	26—28	Feed ..	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign........Poland and Brew	20—24	Feed ..	19—24
Rye	36—38	Foreign .	—
Rye-meal, foreign.................	—		
Beans, Mazagan....35s to 37s....Tick	36—39	Harrow .	36—39
— Pigeon ......38s —42s..Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
Peas, white, Essex and Kent..Boilers	40—44	Suffolk .	40—46
— Maple ....43s to 45s ...... Grey	39—41	Foreign .	35—38
Maize..........................White	—	Yellow ..	—
Flour, best marks delivered..per sack	50—55		
— 2d do.......................ditto	40—50	Country	40—50
— Foreign ....per barrel	28—36	Per sack	43—58

Friday, Nov. 8.

During the last eight days we have had much heavy rain and some snow, and strong gales of wind from the S.W. The decline in Wheat prices we had to report last week has been followed by increased confidence, and a reaction to the extent of 1s. per qr. on English has been pretty general, attended with some inquiry for cargoes of new Baltic, c. f. and i. No alteration worth notice has occurred in the value of Spring Corn. Flour has been in request, and commands our extreme quotations. Since Friday last 32 vessels have been reported off the coast. The floating trade has been firm, with an improved feeling. In Paris (Nov. 7), no transaction in Wheat had taken place, although it is said that a considerable reduction has been made in order to quit a lot. The prices of Flour tend further downward, and the business done is very trifling. The four marks delivery this month are quoted equal to 52s. 6d. per 280 lbs. The arrivals of English grain this week have been small, of foreign moderate, and fair of Flour. The attendance at this morning's market was very thin. English Wheat commanded the full prices of Monday last, at which foreign was also fairly held, but business in the latter was limited. Spring Corn of all descriptions is a steady sale at late rates.

Arrivals from Nov. 4 to Nov. 8.

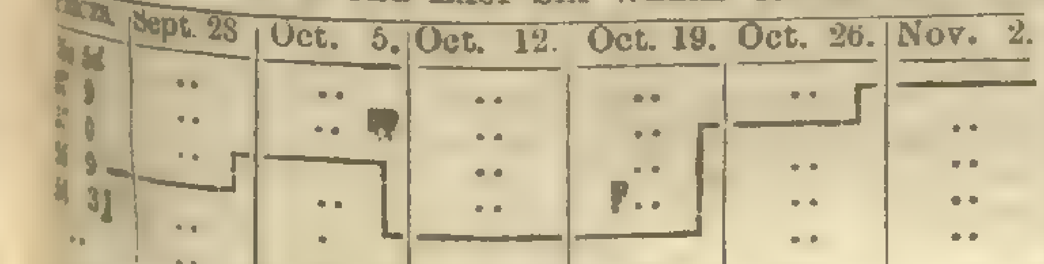
	Wheat.	Barley.	Oats.	Flour.
English ..	850 qrs.	920 qrs.	— qrs.	770 sks.
Irish	— „	50 „	1250 „	— „
Foreign ..	11280 „	3400 „	17720 „	— „ / 11710 brls.

Liverpool, Tuesday, Nov. 5.—With a moderate attendance of millers at this morning's market, Wheat met a fair consumptive inquiry, and an advance of 1d. to 2d. per cental was obtained in most instances. Flour had a better sale at extreme rates. Indian Corn was offered sparingly, and readily commanded the prices of Friday, sellers now looking for a slight advancement. Oats and Oatmeal slow sale without change in value. Beans, Peas, and Barley each brought previous quotations in retail. The market closes with a steady feeling, and the turn in favour of sellers.

Friday, Nov. 8.—There was a fair attendance at to-day's market. Wheat in good consumptive demand, at the dull prices of Tuesday. Flour moderate sale, without change in value. Indian Corn in good request ; mixed 32s. 9d. to 33s. some steady ; Saidi, 36s. 3d. to 36s. 6d. Other articles unaltered.

Averages.	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Sept. 28..	56s 9d	37s 9d	22s 10d	35s 9d	41s 11d	40s 10d
Oct. 5..	57 0	37 4	22 6	35 4	42 4	40 4
— 12..	56 3	37 6	21 10	37 3	41 8	42 11
— 19..	56 3	36 9	21 6	34 9	41 10	41 10
— 26.	57 9	36 7	21 11	35 1	42 3	44 8
Nov. 2..	59 5	37 1	22 7	37 5	42 3	44 4
Agg. Aver.	57 3	37 1	22 2	35 11	42 1	42 6

Fluctuations in the Last Six Weeks' Averages.



£50.—A respectable party requires 50l. to carry out a Profitable Concern, and would willingly pay 10l. for the loan of the same for one month, and deposit security worth 100l.—Address, Mr. Seymour, Post Office, Doctors' Commons.

Seed Trade.

JAMES DICKSON and SONS, Seed Merchants, &c., Chester, are in want of TWO active and steady YOUNG MEN. It is necessary that they have a thorough knowledge of Vegetable and Flower Seeds. State age, how long at the business, Salary expected, references, where at present engaged, where served apprenticeship, and if any knowledge of the Nursery Trade.

To Young Gardeners.

WANTED, in the course of two or three months, a young and enterprising GARDENER, possessing a good practical knowledge of Horticulture, to undertake the charge and management of Plantations in one of the healthiest parts of the Madras Presidency. He must have first-class testimonials both as regards moral character and professional ability. A married man will not be objected to, and the salary will be liberal.—Applications with testimonials to be addressed in the first place by letter only to M. E. C., Mr. Jas. Veitch, jun., Royal Exotic Nursery, Chelsea, S.W.

WANTED, a thorough MARKET GARDENER.—Apply to Mr. Bennion, Bookseller, Market Drayton.

Central London District School.

WANTED, a FARM BAILIFF.—The Board of Management require a Bailiff to Manage their Farm and Garden at Hanwell, Middlesex, comprising about 100 acres. He must be competent to keep Accounts, to entirely Manage the Stock, and to train Boys in Gardening and Farming operations. He will be required to enter on his duties at Christmas next. The salary will be 75l. per annum, with Residence, Gas, and Firing. Applications in the handwriting of the Candidates, stating age (which must be between 30 and 50), and present and previous occupations, are to be sent with Testimonials to me, at 10, Basinghall Street, E.C., before Thursday, Nov. 14, and notice will be sent to approved Candidates when they are to attend the Managers.

Samuel Heath, Jun., Clerk to the Board.

10, Basinghall Street, E.C.—Nov. 9.

Farm Bailiff.

WANTED, a WORKING BAILIFF and his WIFE. The Man to Manage a Small Farm of Clay Soil on modern principles, and to Superintend Road Making, Drainage, Woods, &c. If the Wife can Cook and understands the management of a gentleman's house, it will be an advantage. Young children objected to.—Address, stating ages, and number and ages of children (if any), to B. C., at Messrs. Layton's, 150, Fleet Street, London, E.C.

WANTED, a SHOPMAN.—Must be able and willing to assist at anything, and understand the Retail Trade. State age, wages, qualification, &c.—J. H. Cottrell, 15, Bull Ring, Birmingham.

WANTED, a FIREMAN.—Mr. Jas. Veitch, jun., Royal Exotic Nursery, Chelsea, S.W., is in want of a person in the above capacity to take charge of the Fires in his establishment. A single man preferred, as lodgings can be provided on the premises.—Apply, stating last employment, references, &c., as above.

WANT PLACES.—Letters to be Post Paid.

To Noblemen and Gentlemen contemplating Remodelling their Parks and Gardens.

JOHN GRIBBINS having just completed his engagement at the Royal Horticultural Society's Gardens, South Kensington, where he has been employed for the last 18 months in carrying out Mr. Nesfield's Designs in Embroidery, &c , is desirous of treating with any one requiring thorough practical capability, having had extensive and varied practice for the last 28 years in every branch appertaining to Horticulture. His works may be seen as above, and also at the Earl of Dudley's, Whitley Court ; the Earl of Craven's, Ashdown Park, Farnham; Royal, Slough; at Dorking in Surrey ; the Palace Gardens, Kensington ; besides many other places, executed under Mr. Nesfield, the eminent Landscape Gardener, to whom he is kindly permitted to refer. J. G. having been successful in obtaining the assistance of Mr. Newton, Estate Improver, F.R.H.S., will be enabled to give Estimates for Alterations, &c , &c., on application to Joseph Newton, Estate Improver and Landscape Gardener, 30, Eastbourne Terrace, Hyde Park, W.

A GENTLEMAN of first-rate business habits, and of mature experience in the general Wholesale NURSERY and SEED TRADE, purposes going out next month to the United States and British Possessions in America, and would be glad to receive COMMISSIONS from one or two first-class houses in either of the above trades.—Cosmopolite, B. Castalotte, Esq., 12, Argyll Square, London, W.C.

TO GENTLEMEN, SEEDSMEN, NURSERYMEN, &c.—Middle aged ; is a thorough Seedsman, a good Correspondent, a first-class practical Gardener ; also experienced in making Plans for and Laying-out Grounds, Planting, &c. Is desirous of an engagement, either in the Trade or a Private Establishment. Character for ability and good moral conduct will bear the strictest scrutiny.—D. T., Mr. C. Noble's, Sunningdale Nursery, Bagshot.

GARDENER (Head).—Age 28, single ; understands the Propagation and Growing of Stove and Greenhouse Plants, the Forcing of Fruits, Flowers, and Vegetables, and the management of Kitchen, Fruit, and Flower Gardens, Designing, and Laying out. Good character.—L. M., 70, Western Road, Hove, Brighton, Sussex.

GARDENER (Head), to any lady or gentleman.—Age 30, married ; practically understands his profession in all its branches. Will be at liberty on January 1. Has been under Mr. Hill, Gardener, Keele Hall, Newcastle, Staffordshire, to whom reference is kindly permitted. Is a total abstainer.—M. G., Post Office, Woolton, near Liverpool.

GARDENER (Head or Single-handed).—Age 38, married ; good practical knowledge in growing Orchids, Ferns, Stove and Greenhouse Plants, Pines, Vines, Cucumbers, Melons ; Flower, Fruit and the Kitchen Garden in general. Wife could manage a Laundry if required. Eight years' good character from last place. Good references from former situations.—H. B., Post Office, Rochford, Essex.

GARDENER (Head).—R. Dalrymple, Gardener to the late C. Hanbury Leigh, Esq., wishes to recommend his Foreman (age 30) to any nobleman or gentleman in want of a Head Gardener, as he can give him the highest testimonials as to ability and trustworthiness ; is leaving in consequence of some alteration in the establishment.—Pontypool Park, Monmouthshire.

GARDENER (Head).—Age 36 ; married, without incumbrance. Thorough knowledge of his profession, the culture of Stove and Greenhouse plants, Early Forcing of Peaches, Grapes, Melons, &c. ; is a Good Kitchen and Flower Gardener. Sole cause of leaving is through present employer leaving his estate. Two years and 3 months good character ; 7 years in place before.—J. Gumm, Woodgate, Beckley, Sussex.

GARDENER (Head).—J. Gadd is at liberty to engage as above. Has a practical knowledge of his profession in all its branches. No objection to any part of England. Good character from present and former employers. Could undertake the Management of Park and Woodlands, Draining, &c. Salary expected 75l. per annum, with house, &c.—J. Gadd, Willersley, Matlock, Derbyshire.

GARDENER (Head).—George Breese, late Gardener to Sir John Pakington, Bart., for nearly 5 years, is now at liberty to engage with any nobleman or gentleman requiring a practical Gardener. Has had 17 years' experience in all kinds of Forcing Fruits, Flowers, and Vegetables, Plant Growing, Flower and Kitchen Gardening, &c. Any nobleman or gentleman wishing to engage with the above, by applying to Sir John Pakington, Bart., will receive testimonials as to character, ability, &c.—George Breese, Cranbrook Park, Ilford, Essex.

GARDENER (Head).—Age 42, married, no children ; well experienced in all the branches of his profession. Can be well recommended.—Wm. Allan, Bagshot, Surrey.

GARDENER (Head).—Aged 38, married ; perfectly understands his profession. Unexceptionable character.—D. D., Royal Horticultural Gardens, Kensington, London, S.W.

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GARDENER (Head).—Age 28, single ; thoroughly understands Pines, Vines, &c. ; also the Orchard House, Kitchen and Flower Gardening. Can be highly recommended.—A. B., Mr. Noble, Bagshot, Surrey.

GARDENER (Head Working.)—Age 30, married, no incumbrance ; thorough knowledge of the profession in all its branches. Can be highly recommended.—J. P., J. Pike, Nurseryman, Winchmore Hill, N.

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GARDENER (Head).—Married, no incumbrance ; thoroughly understands his profession in all its branches, also Flower, Fruit, and Kitchen Gardens, Laying-out Plantations, &c.—E. D., Brent Lodge, Nether Street, Finchley, Middlesex.

GARDENER (Head).—Single ; understands the Management of Stove and Greenhouse Plants, Conservatory, Forcing Early and Late Fruits, Vegetables ; also Flower and Kitchen Gardens. Good character given.—W. W., Mr. Dicker's, Westerham, Kent.

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GARDENER.—Middle age, married, without incumbrance ; energetic, thoroughly competent in every branch of Gardening, Growing Hot and Greenhouse Plants and Orchids, Laying out Ground, Early and Late Forcing. Wife first-rate Cook. Good characters.—A. B., Rosebury Cottages, Mount Sion, Tunbridge Wells.

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PROPAGATOR (Soft-wooded), or FOREMAN, in a Small Nursery.—Age 48 ; most successful Propagator and Plant-grower for Market or otherwise. Can be highly recommended.—C. P., Mrs. Conway's Nursery, Old Brompton, S.W.

PROPAGATOR, or PROPAGATOR and FOREMAN—Practical knowledge in the Propagation and Cultivation of Stove, Greenhouse, and Soft-wooded Plants ; a successful Graftsman of Azaleas, Camellias, Coniferæ, Rhododendrons, Roses, &c. Good reference.—A. B., *Gardeners' Chronicle Office.*

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FOREMAN or UNDER-GARDENER.—Young ; offers his services to any nobleman or gentleman's Gardener in the above capacity ; has served in good establishments both in England and Ireland. Three and a half years' character from last situation.—G. B., 24, Cochrane Terrace, St. John's Wood, London, N.W.

BAILIFF.—Age 39 ; fully understands Farming, both Heavy and Light Lands, Management of Stock, &c. T. P., 34 Grafton Street East, Gower Street, London, W.C.

BAILIFF.—Thoroughly practical in Modern Farming, Steam Cultivation, &c. A good judge in Stock, and a good Accountant.—C. D., 66, Herbert Street, Hoxton, London, N.

TO SEEDSMEN.—Married ; thoroughly understands Seeds, and has a good knowledge of Plants.—W. B., *Gardeners' Chronicle* Office, W.C.

TRAVELLER or MANAGER.—Has had great experience in both the Nursery and Seed Trades in every department, and for the last four years as representative of one of the first Irish houses. Is open to an engagement. Reference unexceptionable.—C., Messrs. Hurst & M'Mullen, 6, Leadenhall Street, E.C.

To the Seed Trade.

TRAVELLER or HEAD SHOPMAN.—Has had 20 years' experience in the business. Satisfactory references will be given.—A., Messrs. Dickson & Co., Nurserymen and Seedsmen, Waterloo Place, Edinburgh.

To Nurserymen and Seedsmen.

SHOPMAN.—Young ; has had 8 years' experience.—A. Sprunt, Agent, 6, Overgate, Dundee.

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SHOPMAN.—Aged 20 ; has a good knowledge of the Trade in its various branches. Can furnish first-class references as to character, ability, &c. Salary not so much an object as a comfortable situation.—A. B. C., Saling Post Office, near Braintree, Essex.

WOODEN FENCING. — The cheapest lasting TALLOW STAVES, 5s. per 100, at PRICE'S Patent Candle (Company Limited), Belmont, Vauxhall, London, S.

Agricultural Machinery.

CHAFF-CUTTERS, TURNIP-CUTTERS, PULPERS, MILLS, PLOUGHS, HARROWS, CARTS, &c., delivered carriage free.

BURGESS & KEY, Manufacturers, 95, Newgate Street, London, E.C. Price Lists free per post.

NETTING for SHEEPFOLDS, made of Cocoa Nut Fibre. Price 4d. per yard. COCOA NUT CORD for THATCHING.

WILDEY and Co., Manufacturer of Cocoa Nut Matting and Mats, Holland Street, Blackfriars Road, S.E.

MINTON AND CO. have REMOVED from Albion Place, Blackfriars, to 50, Conduit Street, Regent Street, W. ENCAUSTIC and other PAVEMENTS, EARTHENWARE and PLAIN TILES. Designs and Estimates prepared.

Manufactory: Stoke-upon-Trent.—Nov. 9.

VASES and BALUSTRADING for GARDENS executed in AUSTIN'S ARTIFICIAL STONE, which has been extensively used in Scotland for more than 20 years.

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Garden Border Edging Tiles.

F. AND G. ROSHER, CEMENT, BRICK, and TILE MERCHANTS, beg to invite attention to their varied Stock of Ornamental GARDEN BORDER-EDGING TILES in Terra Cotta, Terro-Metallic ware, and Red ware. They present advantages over Box or Grass-edging in that they afford no harbour for slugs, &c., take up less room, and once laid require no further attention.

They may be had of various patterns at F. & G. R.'s Premises, Ward's Wharf, Upper Ground Street, Blackfriars, S.; and Kingsland Road Wharf, near the Canal Bridge, London, N.E.

N.B. Sketches of Patterns sent by post on application. Garden Vases and Ornamental Flower Boxes for Windows and Balconies in stock.

ORNAMENTAL PAVING TILES for Conservatories, Halls, Corridors, Balconies, &c., as cheap and durable as Stone, in blue, red, and buff colours, and capable of forming a variety of designs.

Also WHITE GLAZED TILES, for Lining Walls of Baths, Dairies, Larders, Kitchen-ranges, &c. Grooved Terro-metallic and other Stable Paving Bricks of great durability, Clinkers, Red and White Wall-Copings, Glazed Drain Pipes, &c.

To be obtained of F. & G. ROSHER, at their Premises as above.

PROTECTED BY THE CUTLERS COMPANY
CORPORATE MARK.

JOSEPH HAYWOOD AND CO.,

MANUFACTURERS OF

PRUNING and BUDDING KNIVES,

SPORTSMAN'S, and all kinds of POCKET CUTLERY.

Dealers in Gambia Garden Shears, Scissors, Syringes, &c.

Glamorgan Works, Sheffield.

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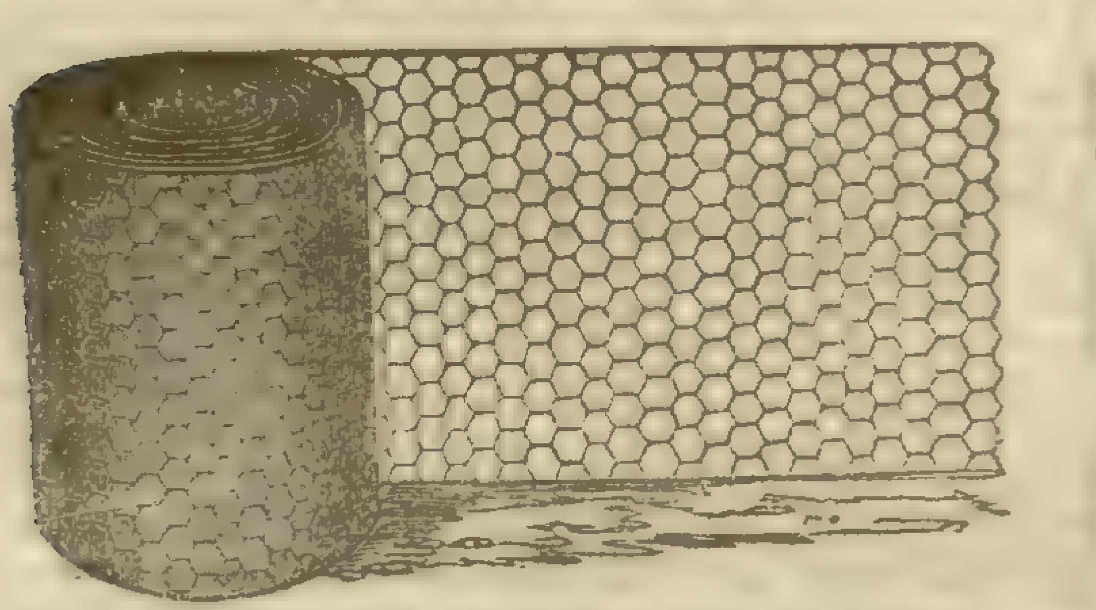
FURTHER REDUCTION in the PRICE of WIRE NETTING.—APRIL, 1861.

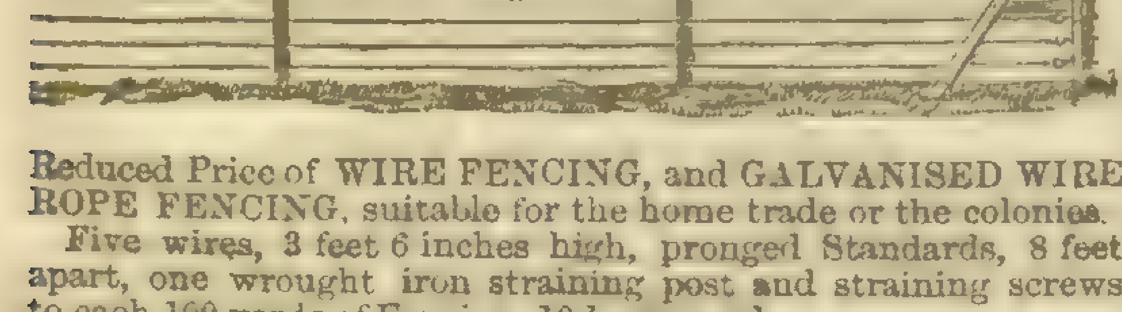


BARNARD, BISHOP, & BARNARDS beg to inform their friends and the public that they have made a further reduction in the prices of Machine made Wire Netting, and also that all their Nettings are now Galvanised after being made, which adds much to their appearance, strength, and durability.

	Gauge.	Galvanised. per yard.	Japanned Iron. per yard.
2-inch mesh, 24 inches wide ..	No. 19 ..	4½d. ..	3½d.
2-inch „ „ „ ..	„ 18 ..	5 ..	4
2-inch „ „ „ ..	„ 17 ..	6½ ..	5
2-inch „ „ „ ..	„ 16 ..	8 ..	6½
1⅝-inch „ „ „ ..	„ 19 ..	4¾ ..	4
1⅝-inch „ „ „ ..	„ 18 ..	6 ..	4¾
1⅝-inch „ „ „ ..	„ 17 ..	7 ..	5½
1⅝-inch „ „ „ ..	„ 16 ..	9 ..	7

All the above kinds can be made any width (under 6 feet), at proportionate prices.

Strong Galvanised Poultry Netting, 7½d. per yard, 3 feet wide. Galvanised Sparrow-proof Netting for Pheasantries, 11d. per yard, 2 feet wide. Wire Netting of every mesh from half an inch to 6 inches.



Reduced Price of WIRE FENCING, and GALVANISED WIRE ROPE FENCING, suitable for the home trade or the colonies.

Five wires, 3 feet 6 inches high, pronged Standards, 8 feet apart, one wrought iron straining post and straining screws to each 100 yards of Fencing, 10d. per yard.

The same with Galvanised Wire Rope, 1s. per yard.

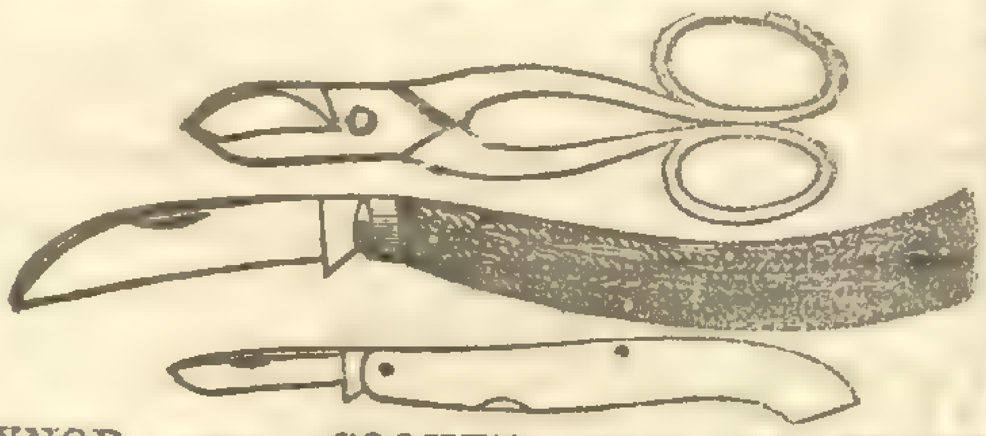
Illustrated Catalogues, with prices of every variety of Wire Fencing and Wire Netting, forwarded free on application.

*** Wire Fencing and Netting delivered Carriage Free at all the principal Railway Stations.

THERMOMETERS by NEGRETTI AND ZAMBRA. —TRADE NOTICE.—As the cold season approaches Messrs. Negretti and Zambra are desirous of appointing AGENTS in all the principal towns for the SALE of their celebrated 3s. 6d. SELF-REGISTERING THERMOMETERS, for ascertaining the greatest cold. These instruments are so well known that no comment on their excellence is necessary.

For particulars address to NEGRETTI and ZAMBRA'S, Central Establishment, 1, Hatton Garden, E.C.

Paxton Works, Sheffield, Established 1738.



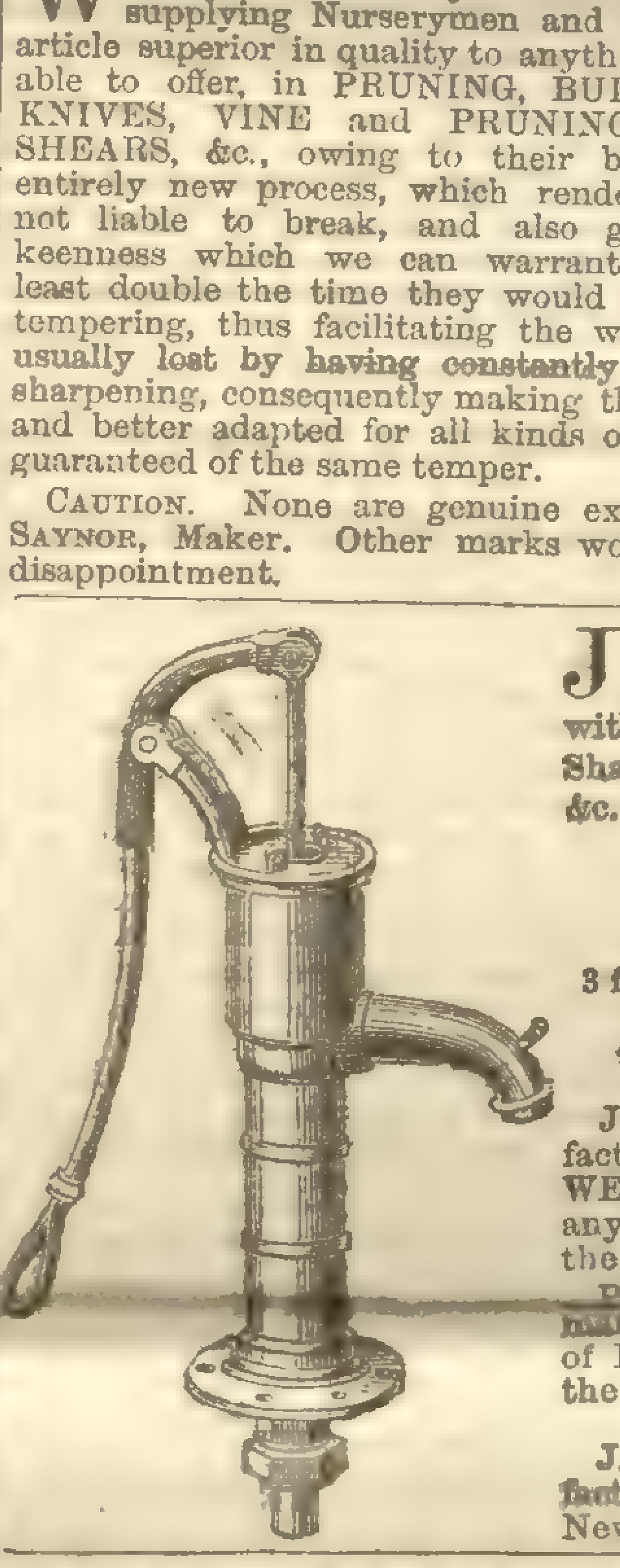
SAYNOR AND COOKE'S warranted PRIZE PRUNING and BUDDING KNIVES, SCISSORS, &c.

Sold by all respectable Nurserymen and Seed Merchants in the three Kingdoms.

Important to Gardeners.

WE beg respectfully to inform you that we are now supplying Nurserymen and Seed Merchants with an article superior in quality to anything we have hitherto been able to offer, in PRUNING, BUDDING, and GRAFTING KNIVES, VINE and PRUNING SCISSORS, GARDEN SHEARS, &c., owing to their being tempered under an entirely new process, which renders the blade tough and not liable to break, and also gives the edge a lasting keenness which we can warrant them to retain for at least double the time they would under the old method of tempering, thus facilitating the work and saving the time usually lost by having constantly to renew the edge by sharpening, consequently making them more durable in wear and better adapted for all kinds of work, every blade being guaranteed of the same temper.

CAUTION. None are genuine except marked SAYNOR, or SAYNOR, Maker. Other marks would cause the purchaser disappointment.



J. TYLOR AND SONS' PATENT IRON PUMP with reversible handle, for Shallow Wells, Hot-Houses, &c. Price 25s. 6d. each.

IRON YARD and GARDEN PUMPS

3 feet 6 inches under spout

2½	3	3½ inch
43s.	53s.	66s. each.

J. TYLOR and SONS manufacture PUMPS for DEEP WELLS which do not require any fixing below the level of the ground.

PUMPS of J. TYLOR & SONS' manufacture to be obtained of Plumbers in all parts of the United Kingdom.

J. TYLOR & SONS, Manufacturers, Warwick Lane, Newgate Street, London, E.C.

JOHN WARNER AND SONS, BELL and BRASS FOUNDERS to HER MAJESTY, HYDRAULIC ENGINEERS, BRAZIERS, &c., 8, Crescent, Cripplegate, London, E.C.

No. 35.

WARNER'S PATENT CAST-IRON PUMP, for raising Water from Wells not exceeding 25 feet in depth.

Diameter of Barrel.	Height.		£ s. d.
2½ in. short	1 ft. 7 in.	Fitted for lead,	1 1 0
2½ „ long	3 „ 3 „	gutta percha	1 10 0
3 „ ditto	3 „ 6 „	or cast iron	2 4 0
3½ „ ditto	3 „ 6 „	flanged pipe	2 9 0
4 „ ditto	3 „ 6 „	as required.	2 18 0
2½ „ short, with 15 feet of Lead Pipe attached, ready for fixing			2 0 0
2½ „ long ditto ditto ditto			2 14 0

This Pump is fitted with J. W. & SONS' Patent Vibrating Standard, Improved Revolving Cap, Metal Bucket, and Brass Suction Valve. By means of the Revolving Cap the handle can be shifted to the right or left hand, or opposite the nose, as desired.

WARNER'S IMPROVED LIQUID MANURE or GENERAL PORTABLE PUMP.

No. 42.

This Pump is fitted with WARNER'S Patent Bucket and Valve, and cannot clog in action. The Barrel is made of Galvanised Iron, not likely to corrode, and can be raised or lowered at pleasure on the stand, the legs of which fold together, and it may be carried with ease by one man.

	£ s. d.
Stand and Pump, with screwed Tail Pipe, fitted with strong Brass Union for Suction Pipe	2 15 0
If fitted with Barrel of Planished Copper	3 4 0
Stand and Pump, with plain Tail Pipe, for tying on Suction Pipe	2 9 0
2-inch India Rubber and Canvas Flexible Suction Pipe, on wires, in either 10, 12, or 15 feet lengths .. per foot	0 2 5

No. 43 is a similar Pump to the above, without stand, but with strong wrought-iron straps, for fixing to water cart or plank, price 2l. 5s.

Every description of Machinery for Raising Water, by means of Wheels, Rams, Deep Well Pumps, &c.; also Fire and Garden Engines, &c.

J. W. & SONS' Illustrated Catalogue forwarded post free on application.

The above may be obtained of any Ironmonger or Plumber in Town or Country, or of the Patentees and Manufacturers,

JOHN WARNER & SONS, 8, Crescent, Cripplegate, London, E.C.

CHUBB'S PATENT SAFES, the most secure against Fire and Thieves.

CHUBB'S FIRE PROOF STRONG ROOM DOORS.

CHUBB'S PATENT DETECTOR LOCKS and STREET DOOR LATCHES.

CHUBB'S CASH and DEED BOXES.

Illustrated Price List gratis and post free.

CHUBB & SON, 57, St. Paul's Churchyard, London, E.C.

HEAL AND SON'S EIDER-DOWN QUILTS, from One Guinea to Ten Guineas. Also GOOSE DOWN QUILTS, from 8s. 6d. to 24s. List of prices and sizes sent free by post. HEAL & SON'S Illustrated Catalogue of Bedsteads and Priced List of Bedding, also sent post free.

196, Tottenham Court Road, W.

FENDERS, STOVES, FIRE-IRONS, and CHIMNEY PIECES.—Buyers of the above are requested, before finally deciding, to visit WILLIAM S. BURTON'S SHOW-ROOMS. They contain such an assortment of FENDERS, STOVES, RANGES, CHIMNEY-PIECES, FIRE-IRONS, and GENERAL IRONMONGERY as cannot be approached elsewhere, either for variety, novelty, beauty of design, or exquisiteness of workmanship. Bright Stoves, with ormolu ornaments and two sets of bars, 3l. 15s. to 33l. 10s.; Bronzed Fenders, with standards, 7s. to 5l. 12s.; Steel Fenders, 2l. 15s. to 11l.; ditto, with rich ormolu ornaments, from 2l. 15s. to 18l.; Chimney-pieces, from 1l. 8s. to 80l.; Fire irons, from 2s. 3d. the set to 4l. 4s. The BURTON and all other PATENT STOVES, with radiating hearth-plates.

GASELIERS in GLASS or METAL.—The increased and increasing use of Gas in private houses has induced WILLIAM S. BURTON to collect from the various manufacturers in metal and glass all that is new and choice in Brackets, Pendants, and Chandeliers, adapted to Offices, Passages, and Dwelling-rooms, as well as to have some designed expressly for him; these are ON SHOW over his SIXTEEN LARGE ROOMS, and present, for novelty, variety, and purity of taste, an unequalled assortment. They are marked in plain figures at prices proportionate with those which have tended to make his Establishment the largest and most remarkable in the kingdom, viz., from 12s. 6d. (2 lights) to 16l. 16s.

WILLIAM S. BURTON'S GENERAL FURNISHING IRONMONGERY CATALOGUE may be had gratis, and free by post. It contains upwards of 500 Illustrations of his illimited Stock of Sterling Silver and Electro Plated, Nickel Silver, and Britannia Metal Goods, Dish Covers, Hot Water Dishes, Stoves, Fenders, Marble Chimneypieces, Kitchen Ranges, Lamps, Gaseliers, Tea Trays, Urns, and Kettles, Clocks, Table Cutlery, Baths, Toilet Ware, Turnery, Iron and Brass Bedsteads, Bedding, Bed Room and Cabinet Furniture, &c., with Lists of Prices, and Plans of the 20 large Show Rooms, at 39, Oxford Street, W.; 1, 1A, 2, 3, and 4, Newman Street; 4, 5, and 6, Perry's Place; and 1, Newman Mews, London.

SAUCE.—LEA AND PERRINS beg to caution the Public against Spurious Imitations of their world-renowned

WORCESTERSHIRE SAUCE.

Purchasers should

ASK FOR LEA & PERRINS' SAUCE,

Pronounced by Connoisseurs to be

"THE ONLY GOOD SAUCE."

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Captain White's

CURRY OR MULLIGATAWNY PASTE, Curry Powder, Curry Sauce, and Oriental Pickle, may be obtained from all Sauce Vendors, and Wholesale of

CROSSE & BLACKWELL, Purveyors to the Queen, Soho Square, London, W.C.

Prize Medal, Paris Exhibition 1855.

METCALFE, BINGLEY, AND CO.'S New Pattern and Penetrating Tooth Brushes, Penetrating unbleached Hair Brushes, Improved Flesh and Clothes Brushes, and genuine Smyrna Sponges; and every description of Brush, Comb, and Perfumery for the Toilet. The Tooth Brushes search thoroughly between the divisions of the Teeth and clean them most effectually—the hairs never come loose.

M., B., & Co.'s new and delicious Perfumes the Fairy Bouquet and the Oxford and Cambridge Bouquet, in bottles 2s., 3s. 6d., and 5s. METCALFE'S celebrated Alkaline Tooth Powder, 2s. per box.

Sole Establishment, 130B and 131, Oxford Street, 2d and 3d doors West from Holles Street, London, W.

WHITE and SOUND TEETH are indispensable to personal attraction, and to health and longevity by the proper mastication of food. ROWLANDS' ODONTO, or Pearl Dentifrice, compounded of Oriental ingredients, is of inestimable value in preserving and beautifying the Teeth, strengthening the Gums, and in giving a delicate fragrance to the Breath. It eradicates Tartar from the Teeth, removes spots of incipient decay, and polishes and preserves the enamel, to which it imparts a pearl-like whiteness. Price 2s. 9d. per box.

Sold at 20, Hatton Garden, E.C.; and by Chemists and Perfumers. Ask for "ROWLANDS' Odonto."

HOW TO AVOID MEDICINE, its Uncertainty, Inconvenience, and Expense.—Certificate No. 36,418.—"We find DU BARRY'S delicious health-restoring REVALENTA ARABICA FOOD the safest remedy for habitual constipation, indigestion (dyspepsia), acidity, heartburn, palpitation, irritability, sleeplessness, distension, flatulency, phlegm, hæmorrhoids, coughs, colds, asthma, bronchitis, consumption, sore throats, diphtheria, diarrhœa, dysentery, nervousness biliousness, torpidity of the liver, debility, scrofula, atrophy."—Andrew Ure, M.D., F.R.S. Dr. Harvey, Dr. Shorland, Dr. Campbell, Dr. Rud. Wurzer. Less expensive but far more pleasant and strengthening than Cod Liver Oil, Cocoa, Chocolate, Tea or Coffee, it saves 50 times its cost in medicine and doctor's bills, and has effected 58,000 cures where all other remedies had failed, restoring perfect digestion, strong nerves, sound lungs, healthy liver, refreshing sleep, and energy to the most disordered or enfeebled, old or young.

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DINNEFORD'S PURE FLUID MAGNESIA has been, during 25 years, emphatically sanctioned by the medical profession, and universally accepted by the public, as the best remedy for acidity of the stomach, heartburn, headache, gout, and indigestion, and as a mild aperient for delicate constitutions, more especially for ladies and children. Combined with the Acidulated Lemon Syrup, it forms an agreeable Effervescing Draught, in which its aperient qualities are much increased. During hot seasons and in hot climates, the REGULAR use of this simple and elegant remedy has been found highly beneficial.

Manufactured (with the utmost attention to strength and purity) by DINNEFORD & Co., 172, New Bond Street, London, W.; and sold by all respectable Chemists throughout the Empire.

The Gardeners' Chronicle Newspaper.

SATURDAY, NOVEMBER 16, 1861.

£1000 UPON the WOOLSTON SYSTEM against any other system of Steam Cultivation. For price of apparatus and particulars apply to Mr. W. SMITH, Woolston, Bletchley Station.

JOHN FOWLER, JUN., 28, Cornhill, London, E.C.—Full particulars of FOWLER'S PATENT STEAM PLOUGH can be obtained by applying at the above address. Catalogues containing Prices and Testimonials sent post free

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BURGESS & KEY, Manufacturers, 95, Newgate Street, London, E.C. Price Lists free per post.

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ORNAMENTAL PAVING TILES for Conservatories, Halls, Corridors, Balconies, &c., as cheap and durable as Stone, in blue, red, and buff colours, and capable of forming a variety of designs.
Also WHITE GLAZED TILES, for Lining Walls of Baths, Dairies, Larders, Kitchen-ranges, &c. Grooved Terro-metallic and other Stable Paving Bricks of great durability, Clinkers, Red and White Wall-Copings, Glazed Drain Pipes, &c. To be obtained of F. & G. ROSHER, at their Premises as above.

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Manufactory: Stoke-upon-Trent.—Nov. 16.

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HEAL AND SON'S EIDER-DOWN QUILTS, from One Guinea to Ten Guineas. Also GOOSE-DOWN QUILTS, from 8s. 6d. to 24s. List of prices and sizes sent free by post. HEAL & SON'S Illustrated Catalogue of Bedsteads and Priced List of Bedding, also sent post free.
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HAIR RESTORED, improved, and beautified, by the use of ROWLAND'S MACASSAR OIL.—It prevents hair from falling off or turning grey, strengthens weak hair, cleanses it from scurf and dandriff, and makes it beautifully soft, pliable, and glossy. For children it is especially recommended, as forming the basis of a beautiful head of hair. Price 3s. 6d., 7s., 10s. 6d. (equal to four small), and 21s. per bottle.
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Soho Square, London, W.C.

SAUCE.—LEA AND PERRINS beg to caution the Public against Spurious Imitations of their world-renowned
WORCESTERSHIRE SAUCE.
Purchasers should
ASK FOR LEA & PERRINS' SAUCE,
Pronounced by Connoisseurs to be
"THE ONLY GOOD SAUCE."
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News of the Week.

THE EMPEROR OF THE FRENCH has issued an Imperial decree appointing M. FOULD Minister of Finance. Before he consented to re-enter office in the present financial crisis, M. FOULD submitted to His Majesty an elaborate programme in which he demonstrated the necessity of suppressing extraordinary credits, and showed that while the

Government has had recourse to credit under all its forms, the deficit has at length reached the enormous amount of forty millions sterling. He pointed out to the EMPEROR that the apprehensions excited among foreign nations by the belief that all the resources of France were at his direct disposal, have obliged the neighbouring Powers to maintain immense armaments; and that by renouncing this power, the EMPEROR will not only give confidence to France but will calm the uneasiness of Europe, and remove all pretext for hostile measures. Even admitting against all probability that Europe may, from a state of complete peace, immediately pass into one of war, the abandonment of these prerogatives will be without danger, as the country and the great bodies of the State will afford HIS MAJESTY their devoted concurrence. The *Moniteur* publishes a letter addressed by the EMPEROR to the Minister of State, in which he approves of this programme and acknowledges the necessity of confining the budget within invariable limits. HIS MAJESTY says that the only efficacious means to attain this end is to resolutely abandon the prerogative which belongs to him of opening a fresh credit in the absence of the Chamber. He therefore renounces a right which equally belonged to the constitutional Sovereigns who have preceded him, and hoped by so doing that he will insure the right administration of the finances. "Faithful to my origin," says the EMPEROR, "I neither regard my prerogatives as a sacred deposit which cannot be touched nor as a heritage from my ancestors which must be transmitted intact to my son. Elected by the people, and representing their interests, I shall always abandon without regret every prerogative useless for the good of the public, as I shall likewise preserve unshaken in my hands all power which is indispensable for the tranquillity and prosperity of the country."

The KING OF PORTUGAL died on Tuesday of typhus fever, in the 25th year of his age, and the 6th year of his reign, affording another instance of the fatality which seems to hang over the royal house of Braganza. HIS MAJESTY'S mother DONNA MARIA died in 1853 in her 34th year; his young Queen STEFANIE died about two years ago of diphtheria, in the first year of their marriage, leaving no issue; the Infante DOM FERNANDO died only a few days ago in his 15th year, and the Infante DOM AUGUSTO is now lying in a critical state. The DUKE OF OPORTO, next brother to the deceased KING, and a captain in the Portuguese navy, succeeds to the throne, by the title of DOM FERNANDO II.

The Spanish Cortes were opened by the QUEEN in person on Friday. HER MAJESTY'S speech announced that measures for constitutional reform would be laid before them, that the revenue covered the expenditure, and that she had induced the Catholic Governments of Europe to unite, with a view to discover the means of enabling the POPE to govern his States in security and peace. On the following day Senor MARTINEZ DE LA ROSA, the ministerial candidate, was elected President of the Cortes by a majority of 214 to 89. General PRIM has been appointed military and political chief of the Spanish expedition to Mexico.

An Imperial rescript, in reply to the address of the Croatian Diet, was communicated to both Houses of the Reichsrath on Wednesday. It expresses regret that Croatia should have forgotten that when the EMPEROR granted her those constitutional institutions which circumstances rendered necessary, it was with the reservation that the unity of the monarchy must be maintained. It therefore declares that the Croatian Diet is dissolved, and that it will be convened hereafter on the basis of the diplomas of October and February. A special Aulic Chancery for Croatia has been established at Vienna.

A telegram from Warsaw announces the arrest of the chief rabbi and the chief of the Jewish community in that city, and the seizure of 15,000 muskets in a convent on an estate belonging to Count ZAMOYSKI. The bailiff of the estate, who, with the prior and several priests, were arrested, declared that he had stored the arms in the convent at the request of the priests and without the Count's knowledge. Several seizures had also been made in other places.

A telegram from Constantinople states that the European conference on the union of the Danubian Principalities has settled all the points which divided the Powers. An official statement declares that the news published by the French papers, that Austria and Turkey had concluded an offensive and defensive alliance, is a pure invention.

Accounts from New York state that the great naval expedition sailed from Hampton Roads on the 29th October. On the previous day General SHERMAN issued a general order stating that the Federal army would make a descent on the Southern States under circumstances requiring great coolness, vigilance, and intrepidity. Instructions were also issued to the naval commander of the expedition in regard to the disposition of the slaves, authorising him to avail himself of their services whenever offered for military or other purposes; and to inform loyal masters of such slaves that Congress will provide just compensation for the loss of their services. General FREMONT has been superseded in his command in Missouri. The Commander-in-Chief's order for the surrender of his command to General HUNTER, was sent by special messenger to General CURTISS, commanding at St. Louis, with directions to deliver it to General FREMONT, unless he was actually in presence of the enemy.

Home News.

THE COURT.—On Friday morning the Queen, accompanied by the Grand Duchess Constantine and Princess Alice, drove out in an open carriage and four. The Prince Consort, with the Grand Duke Constantine and the Duke of Cambridge, went out shooting. The Prince of Wales arrived from Madingley Hall. The Duke of Oporto and the Duke of Beja paid a visit to her Majesty privately, to receive her Majesty's condolence on the death of Prince Ferdinand of Portugal. On Saturday morning the Queen, accompanied by the Grand Duchess Alexandra and Princess Alice, drove out in an open carriage. The Grand Duchess and Princess Alice had previously driven to Frogmore. The Prince Consort, with the Grand Duke Constantine, the Prince of Wales, and the Duke of Cambridge, went out shooting. The Princesses Helena and Louisa, and the Grand Duchess Olga took a drive in a carriage and four. In the afternoon the Grand Duke and Grand Duchess Constantine, with the Grand Duchess Olga, the Duke of Cambridge, and the other visitors took leave of the Queen and left the Castle for London. On Sunday morning the Queen and Prince Consort, the Prince of Wales, the Princess Alice, Prince Arthur, and Princess Helena attended Divine service in the private chapel. The Hon. and Rev. C. L. Courtenay preached the sermon. On Monday morning the Queen, with the Princess Helena, rode out on horseback. The Prince Consort came to London and presided at a meeting of the governors of the Wellington College, and at a meeting of the Council of the Duchy of Cornwall. His Royal Highness afterwards visited the Grand Duke Constantine of Russia, at Claridge's Hotel. The Prince of Wales accompanied the Prince Consort to London, and then proceeded to Madingley Hall, Cambridge. The Earl and Countess of Clarendon arrived on a visit to the Queen. The Duke and Duchess d'Aumale and the Princess of Salerno visited her Majesty. On Tuesday morning the Queen and Prince Consort received a telegraphic message announcing the death of the King of Portugal, first cousin once removed to her Majesty and the Prince. The Court will consequently remain in retirement for some days, and her Majesty's projected visit to the Prince of Wales, at Madingley Hall, near Cambridge, which was to have taken place on Wednesday, has been postponed. The Earl and Countess of Clarendon left the Castle. On Wednesday morning in consequence of the unfavourable state of the weather her Majesty was unable to leave the Castle. On Thursday morning the Queen walked in the Home Park.

THE PRINCE OF WALES.—Saturday being the birthday of the Prince of Wales, his Royal Highness left Cambridge on Friday for Windsor to spend the day with the Queen and Royal family. In consequence of the Court being still in deep mourning the usual military display in honour of the day did not take place at Windsor, but in London and at the naval and military arsenals the usual salutes were fired, and in the evening the principal theatres and some of the public buildings were illuminated. His Royal Highness returned to Cambridge on Monday.

THE GRAND DUKE CONSTANTINE with the Grand Duchess and the Princess Olga returned to town on Saturday from Windsor Castle. On Wednesday his Imperial Highness visited the Museum of Practical Geology in Jermyn Street. On Thursday it was the intention of their Imperial Highnesses to embark at Gravesend for Rotterdam, on their way to St. Petersburg, but in consequence of the unfavourable weather the embarkation was postponed to yesterday, when they left town by the North Kent Railway for Gravesend, and there embarked in the Admiralty yacht Osborne for Rotterdam. The Grand Duke has forwarded through his secretary to the Russian Vice-Consul at Portsmouth a handsome sum, to be divided among the local charities of Ryde and Portsmouth. Their Imperial Highnesses were very much pleased with their late residence at Binstead House, near Ryde, and have intimated that they may possibly again visit it during the summer of 1862.

THE DUKE OF OPORTO and the DUKE DE BEJA, brothers of the King of Portugal, arrived at Claridge's Hotel on the 7th inst. from Compiègne, having been obliged by the death of their brother to cut short their visit to the Emperor of the French. Their Royal Highnesses paid a private visit to the Queen on Friday, and afterwards left England for Lisbon. In consequence of the death of the King since their embarkation, the Duke of Oporto will be proclaimed King of Portugal on his arrival at Lisbon.

COURT MOURNING.—The *Gazette* of last evening contains an order from the Lord Chamberlain's Office for the Court to go into mourning for three weeks from to-morrow the 17th inst., for the late King of Portugal.

THE CABINET.—A Cabinet Council was held on Wednesday at the official residence of the First Lord of the Treasury in Downing Street. Another Council was held yesterday.

PARLIAMENTARY MOVEMENTS.—There is a vacancy for Finsbury, caused by the death of Mr. T. Duncombe. There is a vacancy for East Worcestershire, caused by the death of Mr. Foley. It is rumoured that Mr. Vernon, of Hanbury Hall, will be the Liberal candidate for the vacant seat.

THE MEXICAN EXPEDITION.—The screw steamships Donegal, 99, Conqueror, 99, and Sanspareil, 70, left Plymouth Sound on Wednesday, with the expeditionary battalion of Royal Marines for Mexico. It is understood that the squadron will call at Barbadoes and Jamaica on their way to Vera Cruz.

THE WARRIOR, accompanied by the Revenge, arrived in Plymouth Sound on Tuesday evening from Queenstown, which she left on the previous Saturday. Her trial trip has proved a success in everything but her sailing. Her mean rate of speed under full steam was 16.3 knots, while that of the Revenge was 11. On one occasion, under sail and steam, she made the extraordinary number of 17.2 knots, or about 20 miles an hour. As a sea boat she is stiff, rolling easily in a cross sea, and shipping fewer head seas than the Revenge. A broadside from her formidable armament causes much less vibration on board than is experienced in wooden liners. As a steamer she can run the Revenge out of sight; but under sail alone she is rapidly overhauled by the Revenge, and she does not tack well in beating to windward. She requires 19 minutes to wear, while the Revenge wears in seven minutes. It is suggested that to remedy these defects it will be necessary to give her an additional mast forward and to increase the quantity of her sails, as her rig is not now in proportion to her vast hull. She was expected to leave Plymouth Sound on Thursday for Portland.

THE BISHOPRIC OF HONOLULU.—The consecration of Mr. Staley as Bishop of Honolulu has been delayed, in consequence of the law officers of the Crown having intimated to the Archbishop that they have modified the opinion which they had previously given, and have now come to the conclusion that it will be desirable to procure her Majesty's licence before consecration. The Archbishop has decided to apply for that licence, and it is said that neither his Grace, nor the Hawaiian Consul-General is aware of any obstacle to its being granted.

Foreign.

FRANCE.—The *Moniteur* of Thursday contains Imperial decrees nominating M. Fould Minister of Finance, and M. Forcade de Laroquette, present Minister of Finance, to the post of Senator. It also publishes the following letter addressed by the Emperor to the Minister of State, wherein his Majesty approves the financial programme drawn up by M. Fould, and acknowledges the necessity of confining the Budget within invariable limits:—

"Palace of Compiègne, Nov. 12.

"Monsieur le Ministre,—The opinion expressed this morning in the sitting of the Privy Council and of the Council of Ministers, on our financial situation by M. Fould, has my full approbation. For some time past, as you are aware, my great desire has been to confine the budget within stated limits, and often, when presiding over the Council of State, I have expressed my desire to that effect. Unfortunately, unforeseen circumstances and ever-increasing necessities have prevented me from securing that result. The only effectual means of attaining the end in view is resolutely to abandon the faculty which belongs to me of opening new credits in the absence of the Chambers. That system will work without prejudice to the State, if, after an attentive examination of possible economies, a candid explanation of the real requirements of the administration persuades the Legislative Body of the necessity of properly providing for the different services. I now therefore inform you of my intention to convoke the Senate on the 2d December, to inform it of my determination of relinquishing the power of opening, in the interval between the sessions, supplementary or extraordinary credits. That resolution will form part of a Senatus-Consultum, which, according to my promise, will regulate by great sections the vote of the budget of the different ministries. In renouncing the right, which was also that even

of the constitutional sovereigns who preceded me, I think I am resolving on a course useful to the good management of our finances. Faithful to my origin, I cannot regard the prerogatives of the Crown either as a sacred deposit which cannot be touched, or as an inheritance from my fathers which must be transmitted intact to my son. As the elect of the people, and representing their interests, I shall always abandon without regret any prerogative useless to the public welfare, in the same way as I shall preserve unshakeable in my hands all power indispensable to the tranquillity and prosperity of the country. On this, Monsieur le Ministre, I pray God to have you in His holy keeping.

"Napoleon."

The *Moniteur* also publishes M. Fould's programme, as read in the sitting of the Privy Council and of the Council of Ministers. It is a document of great length, occupying nearly seven columns of the official journal. The following is a summary of its leading features:—

"It demonstrates the necessity for the suppression of extraordinary credits, and examines the financial situation. It states that recourse has been had to credit under all its forms, and calculates that the deficit has reached the amount of 1000 millions of francs. It then says:—'The fears which the power of directly disposing of all the resources of France inspires in all our neighbours obliges them to maintain immense armaments. To renounce this power—more apparent than real, more menacing than efficacious—would not only give confidence to France, but would calm the uneasiness of Europe, and would remove all pretext for hostile measures. Even admitting, against all probability, that Europe might, from a state of complete peace, immediately pass into one of war, the abandonment of these prerogatives of the Emperor would be without danger, as the country and the great bodies of the State would afford him their devoted concurrence.'"

The Emperor presided on Tuesday at a Council of Ministers, and returned to Compiègne in the afternoon, accompanied by Count Walewski. The Senate will assemble on the 10th December. M. Fould went on Wednesday to Compiègne. The *Temps* of Thursday asserts that important changes will shortly be made among the functionaries of the High Administration; that the powers of several Ministries will be modified; and that a reorganisation of the Ministry of State may be expected. The *Moniteur* announces that the Emperor and Empress went into mourning immediately on receiving news of the death of the King of Portugal, in order to testify their strong sympathy with the Royal family of Portugal. The celebration of the Empress's name day, and the projected hunting parties and other court festivities, have been postponed. The Tribunal of Commerce delivered judgment on Monday in the affair of the Neapolitan frigates. The Tribunal admitted the view of the case taken by the defence, which was conducted by M. Berryer, and gave judgment to the effect that as Francis II. was still on his own territory, fighting for the maintenance of his rights, and having his own Ministers and the Ambassadors of the majority of the foreign Powers at his Court; and as the French Government, though not at that time represented at Gaeta, nevertheless treated Francis II. as King, and did not recognise any other sovereign of Naples, the sale must be regarded as valid and the demand of the Consul of Italy must be dismissed. The *Moniteur* of Sunday had the following remarks on the interference of the clergy in political affairs:—

"The Minister for Public Worship has addressed a reply to the letter of the Bishop of Nimes, in which he expresses his regret that the latter should have departed from the rules of propriety and moderation. He entreats the bishop henceforth to abstain from addressing him any letters on religious or political affairs containing insinuations and violent expressions, and concludes by saying that he could not give a suitable reply to such letters without much pain to himself and serious injury to the cause of religion, whose ministers must be respected, even when they deviate from the paths of wisdom and charity."

Signor Rattazzi left Paris on Monday evening for Turin. A public dinner took place on Sunday in Paris in his honour, at which M. Gueroult, editor of the *Opinione Nationale*, proposed "The Independence, Unity, and Liberty of Italy;" M. Peynat, editor of the *Presse*, "The Health of Garibaldi;" and M. Havin, political director of the *Siècle*, "The Health of Signor Rattazzi, Chevalier Nigra (the Italian Minister), and General Della Rocca." Signor Rattazzi, in responding to these toasts, said:—

"I thank you for the words and wishes which you have expressed in favour of Italy, and in so doing my first thought is directed towards the Emperor Napoleon, the illustrious chief of your generous nation. Allow me also to express my thanks for the feelings of sympathy and affection which France entertains towards Italy; feelings which find in return the most complete devotedness on the part of the Italians. Italy will never forget what she owes to your august Emperor, who for her sake has braved so many dangers and who has held out a hand to her in the worst moment of her distress. She will never forget the brave soldiers who fell in her cause, nor the army which made her free. She will never forget the generous political writers and the whole French people, whose wishes accompanied every phase of her emancipation. The future cannot but give more force to these sentiments. In this era of reconstitution of nationalities and rising of sister nations, the union of the Latin race is not a vain word. Fraternally allied, as becomes men of the same origin, equal civilisation, and exactly similar ideas, and having the same interests, our two peoples, supported by the sympathies of other liberal nations, have nothing to fear from the rest of the world. When the crisis comes France will see how well Italy understands her debt of gratitude and her duties as a comrade."

Spain.—The Cortes were opened on Friday by the Queen in person. Her Majesty's speech announced that schemes of constitutional reform would be presented to the Cortes, and that her Government was occupied with improvements in the internal administration of the country. Her Majesty also announced that the revenue covered the expenditure, that the dispute with Morocco had been satisfactorily settled, that Venezuela had made reparation for the ill-treatment of her subjects, that San Domingo had again become subject to her Crown, and that after she had taken steps to obtain reparation from Mexico, France and England had joined her in a convention for the same object. With regard to the Papal question, the speech said:—

"The Holy Father, always the object of the tender and profound veneration of all Catholics, excites my constant interest and filial solicitude. I have obtained from the Governments of the nations placed under his holy direction an assurance that they will unite with the view of finding the means of giving to his states the peace and security necessary for the exercise of his holy ministry. My feelings animate me to continue those efforts; I thus comply with the wishes of my subjects, who nourish in their hearts the religious faith of our ancestors."

The election of the President of the Cortes took place on Saturday. Senor Martinez de la Rosa, the Ministerial candidate, was elected by a majority of 214 votes to 89 over Senor Rios Rosas, the Opposition candidate. General Prim has been appointed military and political chief of the Spanish expedition to Mexico. The question of the delivery of the Neapolitan archives to the Italian Government will be settled shortly.

Portugal.—The King of Portugal died on Tuesday from ague and typhus fever, contracted during his recent excursion to the Alemtejo, which often produces fevers after the first autumnal rains. The youngest brother of the King, Prince Dom Fernando, died on the 6th inst., and Dom Augusto is seriously ill. The Duke of Oporto has succeeded his brother as King of Portugal. The Cortes were opened on the 4th by commission, and on the following day the Session was adjourned to the 2d January. The Paris evening papers contradict the report that typhus fever was prevalent in Lisbon.

Holland.—M. Zuylen Nyevelt, Minister for Foreign Affairs, has tendered his resignation, which has been accepted by the King. He will be provisionally replaced by M. Strens, Minister of Public Worship. The Minister for the Colonies, whose resignation was also expected, will remain in office. It is expected that a Bill, opening a fresh credit for the Ministry for Foreign Affairs, will shortly be presented to the Chambers.

Belgium.—The King opened the Chambers on Tuesday in person. His Majesty's speech expressed great satisfaction in meeting the representatives of the faithful Belgian nation, to which he had been united 30 years by an affection and confidence which had been increased by the lapse of time. The speech promised a commercial treaty with England, upon the same foundation as that with France, but made no allusion to the Italian question. The Belgian *Moniteur* publishes a Royal decree, appointing M. Henri Solvins Envoy Extraordinary and Minister Plenipotentiary to the Court of Turin. M. Solvins was formerly Minister at Lisbon.

Switzerland.—A note addressed by M. Thouvenel to the Swiss Minister in Paris asserts, on the authority of categorical statements made by General Faucheux, that the territory of the Valley of the Dappes has not been even temporarily violated by the French troops. A similar declaration has been made to the Federal Council by M. de Turgot, the French Ambassador at Berne. A commission has been appointed on the affair of Ville-la-Grand, which is to be composed as follows:—On the part of France: M. Heilbard, from a superior tribunal of justice in Paris; and M. Boissard, from the Tribunal of Justice at Dijon. On the part of Switzerland: M. Duplan, Federal Juge d'Instruction; and M. Piaget, President of the Council of State. A despatch from Berne says that the Austrian Government, which after the loss of Lombardy positively refused to bear any portion of the expense of constructing the Bodensee Railway, unexpectedly notified to the Federal Government on Thursday her intention of contributing towards the expenses.

Frankfort.—In the sitting of the Federal Diet on Thursday Prussia made a declaration against the offer of Hanover to build a certain number of gunboats for the defence of the northern coast, and stated that to deal with the question of the German fleet independently of the Federal Diet was impracticable. Prussia also asked for a speedy decision on her proposal for the creation of a Federal fleet for the defence of the German coasts.

Prussia.—The King and Queen of Prussia, accompanied by the Crown Prince, left Berlin for Breslau on Tuesday. The Crown Princess, following the advice of her physicians, renounced her intention of accompanying the Royal party. The *Prussian Moniteur* publishes a Royal decree relative to the long projected modifications in the Chamber of Nobles. By this document the number of the representatives of landed property is reduced from 90 to 41, or five for each of the provinces of Prussia, Brandenburg, Pomerania, Posen, Saxony, and the Rhenish Provinces, seven for Silesia, and four for Westphalia. It is stated that the negotiations for a commercial treaty between France and Prussia have not been broken off, as has been asserted, and that, though the French commissioner has left Berlin, the subject is discussed between the Ministry and the French Embassy. The King has ordered a grand picture of the ceremony of the coronation.

Austria.—In the sitting of the Lower House of the Reichsrath on the 4th inst., the Minister of Finance presented the budget of 1862, and announced to the assembly that, pressed by the exigencies of the public service, the Government had anticipated the decision of the Chamber by decreeing the assessment and levying of taxes. He, therefore, asked of the Chamber a bill of indemnity. His remarks are said to have been received with much coldness. The official journal states that it is authorised to declare that the statement of an approaching meeting between the Emperor of Austria and the King of Prussia at Breslau, is totally unfounded. The resignation of M. Probatavera, Minister of Justice, has been accepted. It is expected that M. Dembowski will be appointed Minister for Public Worship, M. Krusenstern Minister of the Interior, and M. Huhe, Minister of Justice.

Croatia.—The Imperial Rescript, in reply to the Address of the Croatian Diet, was communicated to both Houses of the Reichsrath on Wednesday. The Rescript expresses regret that Croatia should have forgotten that when the Emperor granted constitutional institutions to Croatia, which circumstances rendered necessary, it was with the reservation that the unity of the monarchy must be maintained. "For this reason," continues the Rescript, "the Croatian Diet must now be dissolved. It will be reassembled hereafter on the basis of the diplomas of October and February." A special Aulic Chancery for Croatia has been established at Vienna.

Hungary.—In assuming his office as Lieutenant of Hungary, General Palffy delivered a conciliatory speech to the Members of the Council of Lieutenancy, in which he expressed the hope that under the inspiration of the reasonable spirit in which enactments will be made, they will be able to prepare the ground for the interests of the country to be settled in a durable manner, with the co-operation of the Diet, and that the paternal intentions of his Majesty relative to the constitutional *regime* will be realised.

Italy.—King Victor Emmanuel went on Monday to Ancona, and opened the new railway, amid the enthusiastic cheers of the people. His Majesty returned to Turin on Tuesday. It is said that the Italian Exhibition at Florence will remain open during the current month. Another congress of workmen has been held at Asti, and has expressed its disapproval of the deliberations of the last congress assembled at Florence. A grand popular demonstration was made in the province of Viterbo in the Papal States on Monday. National flags, decorated with the cross of Savoy, were displayed, and the people, taking advantage of its being the anniversary of the Italian *plébiscite*, demanded annexation to Italy. The magnificent bridge at Civita Castellana, 40 miles from Rome, which traversed the ravine at the entry of that town from Narni, at a height of 120 feet above the torrent, was destroyed by the floods on the 30th ult. It was constructed upon more ancient foundations by Cardinal Imperiali in 1712, in the reign of Pope Clement XI. General Carbonelli, a Garibaldian General, has gone to Caprera, in order to present an address to Garibaldi from the Neapolitans, praying him not to leave Italy. The state of the province of Basilicata has improved. The brigands have invaded Castelluccio, near the Roman frontier. They set fire to several houses in the town, and committed many other atrocities. The province of Avellino is again disturbed by brigands, but in other quarters they have been beaten and dispersed in several encounters.

Greece.—The King of Greece, who has just returned from Bavaria to his kingdom, was to have entered Athens from the Piræus last week with a large escort, amidst a general demonstration, with displays of fireworks. His Majesty, however, after disembarking at the Piræus, received a telegraphic message, in consequence of which, instead of waiting to make his entry in the evening with the display announced in the official programme, he started off at once, accompanied only by a very small escort, and reached Athens full a hour before nightfall, and almost without recognition. It is now stated that the telegram which his Majesty received warned him of the discovery of a conspiracy on the part of three officers, who had won over a portion of his escort to their plans. It was intended, in the confusion of the evening, when the people would be shouting and fireworks going off, to fall upon the royal personages and assassinate them.

Russia.—Despatches from St. Petersburg state that the Emperor has given the Marquis Wielopolski a very kind reception. The *Opinione Nationale* and the *Presse* state that the following outrage has been committed by the authorities at St. Petersburg:—

"Three unmarried ladies attended the course of lectures at the University of St. Petersburg. Two of these young ladies, Mdlles Corsini and Blummerl, have been incarcerated in the fortress of St. Petersburg; and the third, Mdlle Bogdarow, has been flogged at the office of the secret police."

Poland.—The Chief Rabbi Meisel, Rabbis Jastrow and Kramstuck, and M. Feinkind, Chief of the Jewish community of Warsaw, were arrested in that city on Monday. The reason of these arrests is not known. 15,000 muskets have been seized in a convent on an estate belonging to Count Zamoyski. The prior of the convent, several priests, and the bailiff of the estate were arrested. The latter declared that the Count had no knowledge of the fact that arms had been stored in the convent, and said that he himself had received them at the request of the priests. Similar seizures have been effected at other places.

Turkey.—Advices from Constantinople state that the Sultan has made a two days' visit to Ismidt, and has laid down the keels of some new ships. A meeting of the foreign representatives has been held at the residence of Sir Henry Bulwer, for the purpose of considering the question of Montenegro. No decision was come to. The Grand Vizier was present at the meeting.

Black Sea.—There has been a severe storm in the Black Sea, attended with loss of life and shipping.

MONTENEGRO.—The Paris papers of Thursday evening publish despatches from the Herzegovina and Bosnia, announcing that the insurrection in those provinces is considerably extending, and that a complete rupture between the Turks and the Montenegrins is considered imminent. The *Pays* asserts that in an engagement which was fought on Wednesday week, between the Turkish troops and the insurgents and Montenegrins, the latter lost 1000 men. The insurgents have occupied the town and custom-house of Zarina, near Ragusa. The Arnauts have fled to Ragusa. On Sunday last insurrectionary movements broke out at five different places in the district of Behac, in Bosnia, having altogether a population of 5000 souls. Letters from Ragusa deny the rumours of a defeat of the Turkish army by the insurgents at Piva. Vukalovich, the chief of the insurgents, has set a price of 1000 sequins on the head of Omar Pasha. Great exultation prevails among the insurgents. The necessary funds for carrying on military operations are supplied to the insurgents from different quarters.

EGYPT.—Count de Chambord disembarked at Alexandria on the 10th inst., and took up his residence at the Palace of the Viceroy of Egypt.

COAST OF AFRICA.—From Lagos we learn that the King of Dahomey was making preparations for another gigantic human sacrifice in celebration of the new yam season. The number of human victims on this occasion was to be 1500.

INDIA.—A telegraph from Bombay, dated Oct. 28, states that the Government resolution on waste lands has been published, and is considered satisfactory. By the Overland Calcutta Mail we have news from that presidency to the 8th October. The Governor-General was to leave on his trip to the North West, to invest the chiefs with the Order of the Star, on the 25th; and the Commander-in-Chief was also about to leave on his tour of inspection. The Lieutenant-Governor had already gone to Darjeeling. The floods had not abated. All India was on the alert to make the most of the cotton opportunity. The failure of Captain Blakiston's expedition appears to have disheartened the Indian Government, and it is now reported that Captain Smyth's party will confine their explorations to Thibet.

JAPAN.—It is reported from New York that the Russians have taken possession of the island of Isles Siuta, after a short engagement with the Japanese. This island is about 30 miles long and 15 miles wide, lying midway in the Straits of Corea, and forming the key of the Japan Sea.

UNITED STATES.—The Secretary of War has issued instructions to the commander of the naval expedition in regard to the disposition of slaves, authorising him to avail himself of the services of any persons, whether fugitives or not, who offer themselves to the national Government, and to assure all loyal masters that Congress will provide just compensation to them for the loss of the services of the persons so employed. The instructions state that this does not mean a general arming of the slaves for military service; but is intended to "avoid all interference with the social systems of local institutions of every State beyond that which insurrection makes unavoidable, and which a restoration of peaceful relations to the Union under the constitution will immediately remove." It is rumoured that General Scott's health would compel him to retire almost immediately. It is said that a letter has been received from Garibaldi promising to go and assist the North if the contest be much further prolonged. On the 26th October the order of the Commander-in-Chief that General Fremont should surrender his command to General Hunter, the officer next below him, accompanied by a letter of instructions to General Hunter, was sent by the President by a special messenger to General Curtiss, in command at St. Louis, with directions to the latter to deliver it to General Fremont, unless he was actually in the presence of the enemy, or preparing for a battle. A despatch has since been received from Major-General Fremont, dated from his head-quarters near Homansville, stating that his guard, headed by Major Seagoyne, made a dashing charge upon a body of Confederates, 2000 strong, in their camp at Springfield, and drove them from the town, and after planting the national flag on the court-house withdrew to a reinforcement which was approaching to join him. General Fremont states that his advance would occupy Springfield on the night of the 26th ult. The great naval expedition which sailed from Hampton Roads on Oct. 29 was composed of 31 transport vessels, 16 steam gun-boats, and eight men-of-war, carrying 383 guns. It took out 30,000 men of both services. Immense quantities of ordnance, a large number of surf-boats, and house frames ready to be put up, 1500 shovels, brick in quantity, and all necessary materials for carrying on a campaign, together with supplies for the artillery and cavalry horses, went in the transports. Gen. Sherman, who commands the expedition, had issued a general order stating that the Federal army will make a descent on the Southern States, under circumstances requiring great coolness, vigilance, and intrepidity. The captains of the transports received sealed orders on the 28th. Brigadier General Kelly attacked Romney, Western Virginia, on the night of the 25th inst., after a march from New Creek, and completely routed the Confederates, taking some prisoners, three pieces of artillery, and all their waggons and camp equipage. The Confederates retreated towards Winchester. San Francisco, California, is now in telegraphic communication with Cape Race, the wires stretching from the Atlantic to the Pacific coast, across the whole North American Continent, a distance of 5000 miles.

MEXICO.—The Paris papers announce that the English, French, and Spanish squadrons, destined to act on the coast of Mexico, will assemble at Havana.

AUSTRALIA.—Advices from Melbourne state that the new Parliament met on the 30th August, barely a week after the conclusion of the general elections. The speech of the Governor General stated that it had been deemed expedient to extend the advantages of the occupation and cultivation licenses on the gold fields to persons who may be desirous of engaging in agricultural pursuits. It was also proposed to amend the law for the transfer of property, to abolish state aids to religion, and to consolidate the systems of public instruction under one board, in order to diminish the cost of tuition, and to secure to the people the advantages of a sound education. It was also proposed to alter the tariff, not only for purposes of revenue, but also for the protection of their own industrial interests. The speech was very badly received, and the address in reply assumed the form of a protest. An amendment to the address was lost by 37 votes against 33, but it was ultimately agreed that business should be suspended for a month to give ministers time to complete their preparations. From Queensland we learn that an expedition in search of Burke's exploring party left Brisbane for the Gulf of Carpentaria, August 24. Another party had started from Rockhampton. Great efforts were making in preparations for the Great Exhibition.

NEW ZEALAND.—There is little news relating to the projected campaign of the forthcoming spring. The arrival of Sir G. Grey was anxiously expected by all parties. All interest, however, about the war at Taranaki, and the threatened war in the neighbourhood of Auckland, was sunk in the discovery of gold at Otago. The diggings were opened early in June, and the yield of gold for three months has been about 27,000 ounces.

Public Addresses.

THE DUKE OF MARLBOROUGH on the 30th ult. presided over a large meeting held in the Londonderry Institute at Seaham Harbour, for the formation of a Church Defence Association on the basis of the various auxiliary societies that have been formed in various parts of the country, and spoke as follows on Church Establishments:—

"From time immemorial the national Church had been supported by large endowments, bestowed by the piety and liberality of their ancestors, and intended for the common benefit of all, that all might partake freely of the ministration of the Gospel and of the advantages which these endowments were calculated to afford. And here there was a great difference to be drawn between the position of the Established Church and the position of the various Dissenting communities. What was the state of the great masses of the population? Were they in a state of religious enlightenment, or in a state of social improvement? or were they not rather in a state of spiritual darkness or social degradation? Was it not a fact that, speaking of those classes which have many noble and excellent qualities, the working classes were unhappily still, as a mass, sunk in a great amount of ignorance and vice? He spoke of their great manufacturing centres of industry and commerce. Was it to be supposed that persons like those would of themselves seek out those ministrations intended for their good both here and hereafter? And here was the difference between the Church and the other religious bodies of the country. Persons did not form themselves into religious communities unless they first had a religious feeling implanted within them, and it was in consequence of that feeling, which sought different modes of development from those guiding the principles of the Established Church, that those persons had formed themselves into societies to seek their own spiritual benefit in the way which might seem most proper to themselves. The action of the Church of England was to seek out—emblematical of our Lord and Master—to seek out and save those that are lost. It was the association of earnest and devoted Christian men who could go forth into the masses of the people, bearing the ministrations of the Gospel in one hand and their endearing sympathies with the temporal wants of the people in the other; and it was for this purpose that the Church of England required her endowments, that she might take an honourable position in the land; she appealed to no one to pay her, but rested upon those endowments provided by the liberality of our ancestors, and was specially enabled to bring the Gospel, without money and without price, to the masses of the lower and most indigent of the population. If these were the purposes for which the endowments of the Church had been given her, those endowments were worth preserving. They were necessary to her very existence—not for her own gratification or exaltation, but that all might benefit thereby—a common property, inheritance, and birthright of every Englishman to enjoy. But the Church had not only her endowments, but her legal and recognised position in the country. She was recognised by law, and her position was known and established in the country. She was in fact the Established Church of the land. This, he was sorry to say, was an object of envy—if he might use so harsh a term—for, though he wished to keep all harsh expressions out of the proceedings of that meeting, yet facts must be stated; and it had in some quarters become an object of envy that the Church should occupy a superior position to other bodies in the country. But he asked them, was not this position, sanctioned by law, shown to be required by the facts of the case? If the Church had those large endowments, that recognised position in the country, that array of ministers under episcopal superintendence, it must be governed by laws and regulations infinitely wider in their range and more important in their results than those agreed upon and observed by other religious bodies. Those endowments must be subject to the control of Parliament, for without that their appropriation might not be as beneficial to the public as it otherwise would be; and her ministers must be subject to a salutary discipline, without which errors and complications would arise in her system, which would be prejudicial to her existence. It was necessary to her existence—not only for the purpose of placing her in a more prominent position than others, for her position was a legal one, handed down from our ancestors until it had become part of the constitution of the country—and, in fact, necessary for the proper administration of her revenues and management of her affairs, that all should be united in one common object, the public benefit. This, then, was the state of things with regard to the established Church, to which in these latter days there had arisen a feeling of enmity and antagonism. Any one who had observed the course of legislation for the last few years could not but admit that it had been characterised by great tolerance and a desire to do away with all obnoxious imposts which appeared to place other persons in a low position and cast a stigma on them for a difference of religious opinion and practice. That had been the tendency of legislation in the present day, and we now lived under a system of the most complete toleration, a system of the greatest possible latitude given to all species of thought, action, and practice in this country—so that no man could now lay his hand upon his heart and say, 'There is a penal law which subjects me to disability in consequence of the religious opinions I profess.' They would agree with him that this was a state of things which ought to be, and that that course of legislation had been dictated by wise political and Christian principles. But he would ask them whether that course of legislation had been met by certain persons and communities in the same spirit in which it had been advocated. Facts answered in the negative. He was sorry to say, and it could not be concealed from any person who observed what was going on, that there were persons in this country at present united in an active organisation having for its end, not simply the enjoyment of those liberties which they have a right to, not only to maintain the enjoyment of their own worship and advantages, but they went further and said, 'We want something more. There is a position of superiority which you occupy; there are positions to which you are entitled at present. There are large endowments which belong to the establishment, and we cannot content ourselves to occupy our own recognised position in this country, we cannot worship our God in peace and quietness, while you are the possessors of these things.' That was the effect of what they said, and though they did not go so far as to say, "We'll take them ourselves," while professing to be actuated by Christian principles they had laid down this broad doctrine—that, as long as endowments belonged to the Church of England, and as long as a superior position was allowed to her by law, they could not rest happily, though enjoying perfect liberty in every other respect. But he would not express any opinion upon that state of things. He had endeavoured to set before them the position of the Church of this country, her constitution, and the objects for which that was accorded to her, and the reasons why those laws had been passed which are supposed to protect and give her a supposed position of superiority, and that while the most free and ample toleration was now given to every religious body in the country, still there were men endeavouring to pull down the Church from her national position, appropriate her resources for secular purposes, and take away those endowments given for the benefit of the poor of England. The object of this meeting, then, was to form an institution in connection with the parent one to stimulate action in contesting all measures of this nature. It was not established with any antagonistic aim, but simply to meet those opponents of the Church by weapons of their own construction. There was a society at present in existence with agents in every part of the country, endeavouring to obtain pledges from candidates at elections, and altogether pursuing a course inimical to the interests of the Church. They were active with their publications, and used every means for diffusing the vast amount of information so called, for their statements were not true but garbled. Their assiduity had secured a certain amount of success, and as it had been con- [illegible] upon the public mind. It was now felt that if this society continued its organization, it must be met by a similar organization on the part of the Church, and, therefore, the object of this institute was that whatever subjects relating to the established Church should come before Parliament, the people should be made to understand them by means of lectures and publications, and that when measures prejudicial to the interests of the Church came before Parliament, petitions should be sent up to show the amount of opposition to such measures, and the affection of the people for their national Church. The object of the institution was, in fact, to diffuse general information relative to the Church, and to make the grounds on which our national institution rests more generally known and appreciated, and its members more capable and willing to defend its position. He would thus leave the matter in their hands. The Church was not only of national and secular origin, but founded by our blessed Lord himself, and the proper use of institutions, sacraments, and teachings, would secure the foundation of benefits which would last, not only here, but in Heaven—enduring reality hereafter."

THE EARL OF SHAFTESBURY presided last week at the jubilee of the West Bromwich Auxiliary of the British and Foreign Bible Society, and spoke as follows on "Essays and Reviews":—

"Since he stood on that platform four years ago there had been an erroneous, singular, and chimerical production, in the form of a volume called 'Essays and Reviews.' Those 'Essays and Reviews' had been drawn up and published by learned men holding high station in the Universities—professors, by men who received, he did not hesitate to say, the bread of the church for the purpose of preaching very different doctrines, and laying down very different principles, from those to be found in that bad book. The 'Essays and Reviews' were directed point blank against the Bible; and if there was a particle of truth in them then the Bible Society was the greatest imposture and piece of charlatanism that had ever existed in this world. Many of the working men of England in the agricultural and mechanical districts had very little time to devote to the study of history and science, but they might have—and many of them had—heard of the triumphs that had been achieved by the Bible at all times, how it had changed barbarism into civilisation, made the savage become mild and gentle, and raised woman from the condition of servitude to that of equality with man; how it had raised us from the appalling subjection in which we were bound heart and mind to the Papacy; how it had introduced the great Reformation, and given us freedom of body, of thought, and of expression, and how it had given us power to walk as Christians and free men. When the working man had seen, by the simple operation of God's truth upon the heart, a bad and drunken husband become a model of conjugal fidelity and kindness—when he had seen a reprobate son and daughter brought to support and love their father and mother—and when he had seen a bad father and mother caused by its working to become kind and good parents—when he had seen these great changes wrought by its effects, would he hesitate to receive it as being sent down from heaven and inspired by God, because some learned professor sitting in his chair said he had some doubt as to whether the world was created in six days or in six generations, or that because ichthyosauri had been found in chalk the fishes could not have been created on the sixth day? Those great practical experiences, those great triumphs the Scriptures had effected; and when science should have produced upon the minds of a millionth part of the human race a millionth part of the good that was done by the Bible every hour in England alone, then and then only could science come into competition even with

the very fringes of the revealed Word of God. There could be no doubt but that a great spirit of infidelity had been of late years developed in this and other countries, but it was a careful and an astute infidelity. No doubt the rage of the unbelievers was excited by the rapid spread of the Scriptures over all the world, by their translation into so many languages and dialects, and by their diffusion over the length and breadth of civilised communities. The question then in their minds was how this spread of the Scriptures was to be checked, and they felt that they could not in the old fashion prevent it; to deny altogether the authenticity of the Scriptures was not suited to the present generation, and they entered therefore into a grand conspiracy, that had no little resemblance to that of Guy Fawkes, and resolved to explode the whole system of Christian religion, and bury it in one great conflagration. In order the better to accomplish this they had enlisted science in their cause, and thus caused the unnatural civil war between science and revelation. They said that revelation could not be brought into harmony with the modern results of science—a revelation that had existed now for 3000 years, had resisted every attack made upon it, had asserted from the first to the present moment the same thing, to be questioned by science that was the thing of a day, altering day by day, as new discoveries might arise, and that could not be said to have an existence longer than the fact that had just been announced. In circulating the Scriptures, the great principle of the Bible Society was that they were the inspired word of God, that they were written under full, unqualified, plenary inspiration. They maintained the right of private judgment, and, moreover, the competence of man to exercise that private judgment upon the Scriptures that were before him. This was directly antagonistic to the Essayists, who, if they do not in its full sense deny inspiration, so qualified it as to reduce it to nothing at all, and left the Bible without any substantial authenticity as from the hands of the Most High. And then came the question of private judgment. How were the tens and hundreds of thousands of working men in this country to get time to learn Greek and Hebrew and natural science, without which they were given to understand by the Essayists that they were not qualified to give an opinion as to the meaning of the Bible? Why, it would be a greater sacerdotal tyranny than had ever been exercised even by the church of Rome, to say that none but those living in learned leisure could be able to comprehend in what degree the book should be received, and when received, in what degree its tenets were to be believed. It had been well said that we lived in a wonderful time, for events were crowding upon us, and numerous inventions were being made for expediting movement, knowledge, and thought. Clearly all things were converging to some great end. He would ask them whether they thought these things had been revealed to man for no other purpose than to create wealth, to minister to luxury, and to elevate man in his own conceptions? It was clear that a great end was coming, and that they ought to avail themselves of the opportunity to hasten that end. And did they suppose that in a work like that there was nothing to be done but by the rich and the men of pleasure, and that the poor and the working man had not their share in this work? Every one of them could give the remainder of his time after his daily labour for the instruction of himself and the instruction of others; and he felt satisfied that every human being now had it in his power to advance the consummation to which they were all hastening, and for which they ought all to pray."

The Bishop of Chester distributed a few days since the prizes won at a rifle match by the 6th Chester Volunteers, and in so doing made the following observations on the Volunteer movement:—

"My friends, the manner in which you have received me sets me quite at ease on one point, and that is that you don't think me out of place in being present on this platform. This is a gathering to give prizes to soldiers, and I am a minister of the Word of Peace, but still I don't think my presence here inconsistent with that character; and I say this because I rejoice in believing that at this time the hearts of all Englishmen are animated by the spirit of peace. Through the blessing of God, we are at peace at home amongst ourselves; we are all united—all classes, all ranks—in cordial goodwill towards each other, and in loyal obedience and attachment to the throne. We are also at peace, and I hope through God's blessing we shall long remain at peace, with all the world. At this very time, when so many nations are distracted by war or by apprehension of war, England is standing in an attitude of friendship and peace to all nations. At this very time England is sending out, not a hostile defiance to any nation, but a friendly invitation to all nations for as many of their people as choose to come and visit this country and to take part in that great International Exhibition of all nations of the world which, if all be well, is intended to be held in London next year. I hope that no untoward circumstance will interrupt that great project. I hope that many foreigners will come to England from every country at that time. They will all have a friendly welcome. I hope, also, they will send us specimens of their arts, and their manufactures, and their industry, to be put in competition with our own. Whatever specimens they send—whether it be of silks and satins or swords and rifles—I am bold to say that every exhibitor will have fair play in the competition, and that the prizes there will be awarded with the same honesty and impartiality with which the prizes distributed amongst yourselves this evening have been—with the one sole desire that the best man and the best article may win. But whilst we are acting in the spirit of peace, and in all sincerity acting thus, we cannot now shut our eyes to the actual state of the political world around us. We see other nations arming, restless, marshalling their armies, increasing their fleets; we hear the note of warlike preparation on every side; and who can say how soon the signal of actual war may sound again throughout the whole of Europe? At such a time as this, England cannot, in common prudence, remain behind the rest of the world in preparation—I will not say for war, but for self-defence. We have no unmanly fears, we have no ungenerous suspicions; but still we have not quite so much simplicity as to be persuaded by those who tell us 'Don't disturb yourselves;' 'Don't be in the least uneasy;' 'Be quiet; nobody is going to meddle with you; nobody is going to touch you.' I trust they are not; but our business is not to let them if they try. Our business is to be prepared, with God's blessing, to defend ourselves if self defence should become necessary; and it was this instinct of self-defence—it was this principle of common sense which produced the Volunteer movement, and which now sustains the Volunteer movement throughout England. Your movement is eminently a free-will movement. It was produced by no act of Parliament, by no order of the Government, although any lawful order of the Government for such a cause would have been promptly and cheerfully obeyed; it was not even an appeal from the aristocracy to the people, although the aristocracy of England have never been backward in fighting for their country—but it was the spontaneous impulse of patriotism and loyalty in the breasts of the people themselves. Enthusiasm however must be sustained by discipline. I recollect having the other day met with a saying attributed to some one of that numerous family of brave soldiers—the Napiers. One of the generals of that family, in speaking of discipline and enthusiasm, said, 'Enthusiasm runs away.' I don't know that I should say that—if I may venture to criticise the saying of a soldier, himself one of the bravest of the brave; but I should say that enthusiasm without discipline is only likely to carry brave men headlong into danger, to fall an unavailing sacrifice. There must be discipline—there must be practice. It is practice that makes us into marksmen; it is regimental discipline that gives united strength; and with these, then, by God's blessing, it is courage that wins the day. That will never be wanting in British hearts whenever they are called upon to meet the day of battle."

The Right Hon. B. Disraeli attended on Thursday the annual meeting of the Oxford Diocesan Board of Education, Church Building and Spiritual Help Societies held in the County Hall, Aylesbury, under the presidency of the Bishop of Oxford, and spoke as follows on the present position of the Church:—

"There is no want of churchmen in the diocess of Oxford, and, even in the presence of my Lord Bishop, I cannot refrain from remembering with pride that of all dioceses in England it is one remarkable principally for the zeal and ability with which it is administered. There is no want of churchmen in the diocess, but that is wanting in the diocess which is wanting in the country generally—namely, union among churchmen. Until union among churchmen is accomplished I feel persuaded that the action of these important societies and the good which they can do—being in themselves, in my opinion, incalculable and illimitable—will be an influence which, unfortunately, can be calculated, and will be limited. This want of union among churchmen appears to me to arise from three feelings, which in different degrees influence different sections of churchmen. I would describe them as a feeling of perplexity, a feeling of distrust, and a feeling of discontent. The feeling of perplexity, I am told, arises from what is usually styled the state of parties in the Church, which, from their apparently opposite courses, distract and enfeeble the efforts of churchmen. This feeling appears to me to be entirely without foundation. Parties have always existed in the Church of England. Nay, more, there never has been a Christian Church, even those which have most affected the character of unity, in which parties have not equally prevailed. But there is this peculiarity in the Church of England, that parties within its pale have been always permitted, nay, recognized and sanctioned. Our Church, always catholic and expansive in its character, has ever felt that the human mind was a manifold quality, and that some men must be governed by enthusiasm, and some controlled by ceremony. Happy the land where there is an institution which prevents the enthusiasm from degenerating into extravagance, and the ceremony from being degraded into superstition. No doubt, during the last 30 years there have been periods of excess on both sides. But in such great matters we cannot draw a general conclusion from so limited an observation, and the aggregate of experience, in my opinion, fully justifies the conviction that parties in the Church are not a sign of its weakness, but rather a symbol of its strength. I come now to the feeling of distrust among churchmen. That I hesitate not to say is mainly attributable to the speculations on sacred things which have been recently published by certain clergymen of our Church. I deeply regret that publication. For the sake of the writers—for no other reason. I am myself in favour of free inquiry on all subjects, civil and religious, with no condition but that it be pursued with learning, argument, and conscience. But then I think we have a right to expect that free inquiry should be pursued by free inquirers. And in my opinion, the authors of 'Essays and Reviews' have entered into engagements with the people of this country quite inconsistent with the views advanced in these prolusions. The evil is not so much that they have created a distrust in things. That might be removed by superior argument and superior learning. The evil is, that they have created a distrust in persons, and that is a sentiment which once engendered is not easily removed, even by reason and erudition. Setting, however, aside the characters of the writers, I am not disposed to evade the question whether the work itself is one which should justify distrust among Churchmen. Perhaps it may not be altogether unsuitable that a layman should make a remark upon this subject, and that the brunt of comment should not always be borne by clergymen. Now, the volume of "Essays and Reviews," generally speaking, is founded on the philosophical theology of Germany. What is German theology? It is of the greatest importance that clearer ideas should exist upon this subject than I find generally prevail in most assemblies of my countrymen. About a century ago German theology, which was mystical, became, by the law of reaction, critical. There gradually arose a school of philosophical theologians, which introduced a new system for the interpretation of Scripture. Accepting the sacred narrative without cavil, they explained all the supernatural incidents by natural causes. This system in time was called Rationalism, and, supported by great learning, and even greater ingenuity, in the course of half a century absorbed the opinion of all the intellect of Germany, and, indeed, greatly influenced that of every Protestant community. But where now is German Rationalism, and where are its results? They are now erased from the intellectual tablets of living opinion. A new school of German theology arose, which with profound learning and inexorable logic proved that Rationalism was irrational, and successfully substituted for it a new scheme of Scriptural interpretation called the Mythical. But, if the mythical theologians triumphantly demonstrated, as they undoubtedly did, that Rationalism was irrational, so the mythical system itself has already become a myth; and its most distinguished votaries, in that spirit of progress which, as we are told, is the characteristic of the 19th century, and which generally brings us back to old ideas, have now found an invincible solution of the mysteries of existence in a revival of Pagan Pantheism. That, I believe, is a literally accurate sketch of the various phases through which the intellect of Germany has passed during the last century. Well, I ask, what has the Church to fear from speculations so over-reaching, so capricious, and so self-destructive? And why is society to be agitated by a volume which is at the best a secondhand medley of these contradictory and discordant theories? No religious creed was ever destroyed by a philosophical theory: philosophers destroy themselves. Epicurus was as great a man, I apprehend, as Hegel; but it was not Epicurus who subverted the religion of Olympus. But, it may be said, are not such lucubrations to be noticed and answered? Both—I reply. Yet, I may observe in passing, that those who answer them should remember that hasty replies always assist well-matured attacks. Let them be answered, then, by men equal to the occasion, and I doubt not that many such will come forward. That a book of that character, written by clergymen of the Church of England, should pass unnoticed by authority, would have been most inconsistent. The conduct of Convocation in this matter appeared to me to be marked by all that discretion and sound judgment which has distinguished its proceedings ever since its revival, and which is gradually, but surely, obtaining for it public confidence. It denounced what it deemed pestilent heresies, but it did not counsel the prosecution of the heretics. And here I am bound to say that I wish this frank and reasonable course had been followed in high places. The wisest of men has said, 'For everything there is a season;' and the 19th century appears to me a season when the Church should confute error, and not punish it. Having touched upon the causes of perplexity and distrust, I will now say a word upon the third cause of the want of union among Churchmen—the feeling of discontent. That is a feeling which prevails among a certain body of our brethren, who entertain what are deemed by some exalted notions respecting ecclesiastical affairs. I know that recent appointments to high places in the Church, and other public circumstances, in their opinion equally opposed to the spread and spirit of sound Church principles, have made some look without any enthusiasm on the connection between Church and State, and even contemplate without alarm the possible disruption of that union. It is impossible to speak of those who hold these opinions without respect, and I would say even affection, for we all of us to a great degree must share in the sentiments of those who entertain these opinions, though we may not be able to sanction their practical conclusions. But I think myself that these opinions rest on a fallacy, and that fallacy consists in assuming that if the dissolution of the tie between Church and State took place, the Church would occupy that somewhat mediæval position which, no doubt, in its time was highly advantageous to Europe, and to no country more than to England. My own opinion differs from theirs. I do not believe that in this age or in this country the civil power would ever submit to a superior authority, or even brook a rival. I foresee, if that were to take place, controversy and contest between Church and State as to their reciprocal rights and duties; possible struggle, probable spoliation. I for one am not prepared to run such hazards. I should grieve to see this great Church of England, this centre of light, learning, and liberty, sink into a position, relative to the nation, similar to that now filled by the Episcopal Church of Scotland, or possibly ever subside into a fastidious, not to say finical, congregation. I hold that the connection between Church and State is one which is to be upheld and vindicated on principles entirely in unison with the spirit of the age, with the circumstances with which we have to deal, and with the soundest principles of political philosophy. The most powerful principle which governs man is the religious principle. It is eternal and indestructible, for it takes its origin in the nature of human intelligence, which will never be content till it penetrates the origin of things and ascertains its relations to the Creator—a knowledge to which all who are here present well know that unaided and alone the human intelligence can never attain. A wise Government, then, would seek to include such an element in its means of influencing man; otherwise it would leave in society a principle stronger than itself, which in due season may assert its supremacy, and even, perhaps, in a destructive manner. A wise Government, allying itself with religion, would, as it were, consecrate society and sanctify the State. But how is this to be done? It is the problem of modern politics which has always most embarrassed statesmen. No solution of the difficulty can be found in salaried priesthoods and in complicated concordats. But by the side of the State of England there has gradually arisen a majestic corporation—wealthy, powerful, independent—with the sanctity of a long tradition, yet sympathising with authority, and full of conciliation, even deference, to the civil power. Broadly and deeply planted in the land, mixed up with all our manners and customs, one of the main guarantees of our local government, and therefore one of the prime securities of our common liberties, the Church of England is part of our history, part of our life, part of England itself. It is said sometimes that the Church of England is hostile to religious liberty. As well might it be said that the monarchy of England is adverse to political freedom. Both are institutions which insure liberty by securing order. It is said sometimes that the Church in this country has proved unequal to its mission, and has failed to secure the spiritual culture of the population. It is perfectly true that within the last [illegible] years there has been a vast and irregular increase of our population, with which the machinery of the Church has been inadequate to cope. But the machinery of the Church in that respect was incomplete only; it was not obsolete. It is said that the Church has lost the great towns; unhappily, the Church has never found the great towns. They are her future, and it will be in the great towns that the greatest triumphs of the Church will be achieved, for the greater the population and the higher the education of the people, the more they will require a refined worship, a learned theology, an independent priesthood, and a sanctuary hallowed by the associations of historic ages. Here, then, is a common ground on which, dismissing all unsubstantial and illusory feelings of perplexity, distrust, and discontent, all sections and parties of Churchmen may unite and act together in maintaining the religious settlement of this realm. Is it unnecessary? Can any one now pretend that the union between Church and State in this country is not assailed and endangered? It is assailed in the chief place of the realm, its Parliament, and it is endangered in an assembly where, if Churchmen were united, the Church would be irresistible. Nothing can exceed the preparation, the perseverance, the ability, and I will willingly admit the conscience, with which the assault upon the Church is now conducted in the House of Commons. Churchmen would do wrong to treat lightly these efforts because they believe that they are only the action of a minority in the country. The history of success is the history of minorities. During the last Session of Parliament alone a series of Bills was introduced, all with various specific objects, but all converging to the same point—an attack upon the authority of the Church and the most precious privileges of Churchmen. Our charities are assailed; even our churchyards are invaded; our law of marriage is to be altered; our public worship, to use the language of our opponents, is to be 'facilitated.' Finally, the sacred fabrics of the Church are no longer to be considered national. It is true that all these efforts were defeated. But how defeated? By a strain upon the vigilance and energy of those who repelled the attack, which cannot be counted on hereafter, unless Churchmen, and the country generally, come forward to assist us. I said that there should not be a subject to-day on which I would make a controversial remark, and I am not going to depart from that rule, though I am going to make a remark on the subject of church-rates. My opinions on church-rates are well known. I hold that the carrying of a measure for the total and unconditional abolition of church-rates would be a signal blow to the alliance between Church and State, and that under no conceivable circumstances—at least, under no circumstances that I can conceive—should it be conceded. But there is a general opinion that legislation on the subject of church-rates is necessary and desirable, and that, without any relinquishment of principle, the law may be improved and adapted to existing circumstances. Be it so; only thus I would venture to impress most earnestly on all Churchmen who may be present—and perhaps I may presume to say on some who are not here—that if there is to be legislation on church-rates, none can be satisfactory which is not introduced with the authority of her Majesty's Government. Sure I am that no member of Parliament, whether he sits in the Lords or the Commons, can with his own resources and on his own responsibility succeed in such an enterprise. It would lead only to renewed defeat and increased disaster. The subject is at present in that position that the Government of this country is most happily placed in regard to it if it wishes to legislate. One half of the House of Commons sitting opposite to them will support any just measure, waving any points of difference on matters of detail among themselves; and therefore it is in the power of the Government to secure a large majority on the subject. I think myself, on the whole, that it is now their duty to deal with it. The question of church-rates is the great domestic question of the day, and it ought not to

be left in the position which it now occupies after what has occurred in the two Houses of Parliament of late years. The very fact that opinion in the House of Commons as against the Government is equally divided, and that in the other House of Parliament there is an overwhelming majority against any rash and unconditional change, indicates that it is the duty of those who are responsible for the good government of the country to come forward, and with all the authority of an Administration, to offer their opinion on the question and to act upon it. The clergy of the Church of England have at this moment one of the greatest and most glorious opportunities for accomplishing a great public service that was probably ever offered to any body of public men. It is in their power to determine and to insure that Church questions in this country shall no longer be party questions. They, and they alone, can effect this **immense result, and that by a simple process—I mean by** being united. Let them upon general public affairs entertain that which I trust they always will entertain as free Englishmen, their own general opinions. Let them be banded in the two great historical parties in the State, Whig or Tory. It would be a very unfortunate thing for this country if in any great body of respectable men there should ever cease to be such differences of political opinion. But let them say that Church questions are not questions which they will permit to enter the province of political party. If the clergy are united in that determination, rest assured that the laity will soon become united too, and we shall be spared hereafter the frightful anomaly of seeing conscientious Churchmen recording their votes and exerting their influence against the Church. Depend upon it that nothing in this country can resist Churchmen when united, and if they are only united on Church questions, they will add immensely to the strength of good government and to the general welfare of the people. Then I believe that these admirable institutions, the object of which is to ameliorate the whole body of society, will assume that catholic and universal character in their action which is so devoutly to be desired—then the great object of the Church, the education of the people, their perfect spiritual supervision, the completion of our parochial system, and above all, the free and decorous worship of the Almighty, will be securely effected."

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at $93\frac{7}{8}$ to 94 for Money, and $92\frac{1}{2}$ to $\frac{5}{8}$ for the Account; Bank Stock, 232 to 230; Three per Cents. Reduced, 92 to $\frac{1}{4}$; New Three per Cents., $92\frac{1}{4}$ to $91\frac{7}{8}$; Thirty Years' Annuities, 1885, 15 9-16; India Stock, 224 to 225; Ditto Five per Cent. Stock, $106\frac{3}{8}$ to $\frac{7}{8}$; Ditto for Acct., $104\frac{1}{2}$ to $\frac{3}{8}$; Ditto Bonds, 17*s.* pm.; Five per Cent. Enfaced Rupee Paper, $98\frac{3}{4}$; Ditto Five and a Half per Cent., 105 to $\frac{1}{2}$; Exchequer Bills, March, 10*s.* to 7*s.* pm.; Ditto Small, 12*s.* pm.; Ditto June, 16*s.* to 15*s.* pm.; Ditto Small, 19*s.* pm.—FOREIGN: Brazilian Four and a Half per Cents., 1860, $92\frac{1}{4}$; Chilian Six per Cents., 102; French Three per Cent. Rentes, 68fr. 50c.; Italian Five per Cents., $68\frac{1}{2}$; Mexican Three per Cents., $28\frac{1}{2}$ to $27\frac{7}{8}$; Ditto, for Acct., $28\frac{1}{4}$ to 28; Peruvian Four and a Half per Cents., for Acct., $97\frac{1}{2}$; Portuguese Three per Cents., 1853, $47\frac{1}{4}$; Russian Four and a Half per Cents., $92\frac{1}{4}$; Spanish Three per Cents., for Acct., $51\frac{1}{2}$; Committee's Certificates, 7 to $6\frac{3}{4}$; Turkish Six per Cents., 1858, $69\frac{7}{8}$; Ditto for Acct., $69\frac{1}{4}$ to $\frac{5}{8}$; Ditto 100*l.* Bonds, $71\frac{1}{2}$ to 72; Venezuela Three per Cents., $23\frac{1}{2}$ to $24\frac{1}{4}$; Ditto for Acct., $23\frac{1}{2}$ to $22\frac{3}{4}$.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£28,206,675	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion ..	13,556,675
		Silver Bullion	—
	£28,206,675		£28,206,675

BANKING DEPARTMENT.

Proprietors' Capital ..	£14,553,000	Government Securities (including Dead Weight Annuity) ..	£10,812,187
Rest	3,164,899	Other Securities	16,392,515
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	3,769,269	Notes	7,477,225
Other Deposits	13,190,306	Gold and Silver Coin ..	805,820
Seven day and other bills	810,273		
	£35,487,747		£35,487,747

14th day of Nov., 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

TUESDAY — BANKRUPTS —G. ALLEN, Brook Street, Kennington Road, Tobacconist—C. ARMSTEAD, Radford, Nottinghamshire, Lace Manufacturer—J. BALY, Victoria Road, Islington, Commission Agent — W. BARRADELL, Nottingham, Baker — R. J. BELL, Burslem, Staffordshire, Grocer—S. BELL, Blossoms Place, Holloway, Tailor—F. BIANCHI, Nottingham, Journeyman Plaster Maker—R. BOWMAN, Abergavenny, Monmouthshire, Coal Merchant—F. BRIDGES, Bury St. Edmunds, Coach Builder—R. BURSALL, Newbon Farm, Cudham, Kent, Farmer — F. W. BUTLER, Alvescott, Oxfordshire, Farmer—H. B. CHALON, North Terrace, Brompton, Accountant—A. C[illegible], Pudsey, Yorkshire, Extractor—J. COOK, Byfleet, Surrey, Licensed Victualler—J. COOMBER, Cliffe, near Rochester, Kent, Labourer—J. C[illegible], Sheepshed, Leicestershire, Grocer—J. CRICK, Desborough, Northamptonshire, Miller—W. CROSBY, Reegate, Lincolnshire, Brewer's Assistant —W. T. DAVIS, Bristol, Undertaker's Assistant — W. DAVIS, Bridgend, Glamorganshire, Ironmaster — H. DAVIES, Glasbury, Brecknockshire, Tailor—W. R. EVITS, Falmouth, Cornwall, Auctioneer—J. A. E[illegible], North Row, Park Lane, Clerk—H. E[illegible], Plumstead, Kent, Tailor—F. F[illegible], Bridgwater, Somersetshire, Beer House Keeper—C. J. FOX, Gotham, Nottinghamshire, Cordwainer—T. M. GEDDES, Warrington, Lancashire, Commission Agent — M. GOULDEN, Elder Street, Norton Folgate, Silk Manufacturer—J. GREVES, York Road, King's Cross, Saddler—W. HALLSWORTH, Godley Green, Cheshire, Nurseryman—A. HANSFORD, Coal Yard, Bloomsbury, General Dealer—H. HARGREAVES, Armley, Yorkshire, Dressmaker—G. HARMAN, Birmingham, Licensed Victualler's Assistant—W. HARTLEY, Hulme, Lancashire, Labourer — F. HARRIS, Upper Bryanston Street, Bryanston Square, Saddler—J. HASKINS, Bristol, Lodging House Keeper—G. HART, Huntingdon Place, Huntingdon Street, Waterproof Composition Manufacturer — W. G. HOWARD, Wellington Road, St John's Wood, Gentleman—C. HUSTLER, Arlington Street, New North Road, Islington, Marble Mason—H. K. JACKSON, St. John's Road, Battersea Rise, Corn Merchant—W. JACQUES, Hyson Green, Nottinghamshire, Plain Cotton Maker—J. JENNINGS and G. JENNINGS, Leeds, Stone Bottle Manufacturers — C. J. JOSLAND, Exeter, Printer—F. F. KIRSOP, Newcastle-upon-Tyne, Grocer—C. B. LEACH, Newnham, Gloucestershire, Writing Clerk—E. LEE, Gedling, Nottinghamshire, Beerhouse Keeper—J. LEETE, Jewin Street, City, Fancy Box Manufacturer—A. LUMB and W. LUMB, Leeds, Millwrights—L. MARSH, Gloucester Street, Clerkenwell, Dealer in Watchmaker's Tools—M. MARSHALL, Leeds, Painter—W. C. MEE, Nottingham, Tobacconist—G. MINTO and A. FAVELL, George Yard, Lombard Street, Advertising Agents — B. MORGAN, North Crescent, Tottenham Court Road, American Shipping Master—W. NORMAN, Peterborough, Northamptonshire, Hatter — E. NOYES, Chester, Carver and Gilder—F. OATES, Cumming Street, Pentonville, Pianoforte Maker—J. PARSONS, Little Britain, City, Tailor—E. PEARSON, Lenton, Nottinghamshire, Lace Maker—J. J. G. POVEY, Handsworth, Staffordshire, Licensed Victualler—R. P. RAWLINGS, Hove Villas, Brighton, Captain in the Army—R. J. ROBINSON, Manchester, Salesman—J. ROOK, Boughton-under-the-Blean, Kent, Brewer—R. ROWLSON, Nottingham, Cabinet Maker—A. SALT, Tutbury, Staffordshire, Butcher—H. SHALDERS, Queen Margaret's Grove, Stoke Newington Green, Auctioneer — R. B. SHERIDAN, jun., Market Harborough, Leicestershire, Gentleman—C. SLATER, Basford, Nottinghamshire, Baker—S. SMITH, Nottingham, Hosier—S. A. SMITH, Leeds, Manager to a Dressmaker — E. SPENCER, Halifax, Yorkshire, Police Constable—F. S[illegible], New Street, Lant Street, New Kent Road, Baker—T. TAYLOR, Bristol, Marine Store Dealer—W. J. S. TIMOTHY, Culford Road, North Kingsland, Furniture Salesman—C. W. TOWNSLEY, Paul Street, Finsbury, Funeral Contractor—J. TURNER, Westbourne Gardens, Bayswater, Hotel Keeper—J. J. TYLER, Lowesmoor, Worcester, Baker—T. VICKERS, Haxey, Lincolnshire, Farming Bailiff—W. WATKINS, Maldon Terrace, Newbury Terrace, Kentish Town, Journeyman Plumber—J. S. WEIGHTMAN, Mansfield, Nottinghamshire, Commission Agent — W. WHITBY, Nottingham, Butcher — H. WHITEHEAD, Knockholt, Kent, Licensed Victualler—T. WILLIAMS, Birmingham, Surgeon—W. WILSON, Handsworth, Staffordshire, Clerk—W. N. WYNN, Greenwich, Saw Mills Proprietor.

SCOTCH SEQUESTRATIONS—J. BAIRD and J. FISHER, Glasgow, Paint and Colour Manufacturers—J. BROWN, Edinburgh, Wine and Spirit Merchant—R. DEY, Findhorn, Elginshire, Merchant—R. FRAME, Larkhall, Lanarkshire, Joiner—R. A. LENNOX, Crieff, Perthshire—A. MACKENZIE, Maryburgh, near Dingwall, Horse Dealer—R. N. MORRISON, Glasgow, Hat and Cap Manufacturer — A. URQUHART, Killearnan, Ross-shire, Innkeeper.

[At the time of our going to press the "London Gazette" had not been published, hence the omission of Friday's Bankrupts.]

Metropolis and its Vicinity.

LORD MAYOR'S DAY.—The civic procession on Saturday did not essentially differ from that of last year, except in the splendour of the sheriffs' equipages, each of which was drawn by four horses. The London Rifle Brigade, and the men in armour, formed conspicuous features in the pageant. The procession started from Guildhall about half-past 11 o'clock, passing along King Street, Cheapside, the Poultry, Cornhill, Leadenhall Street, Billiter Street, Fenchurch and Gracechurch Streets, Cannon Street, Ludgate Hill, Fleet Street, to Temple Bar, and thence by the Strand to Westminster. On returning, it passed through the Strand, Fleet Street, Ludgate Hill, St. Paul's Churchyard, Cheapside, and King Street to Guildhall. The dinner in Guildhall in the evening was attended by her Majesty's Ministers, the Foreign Ambassadors, and a distinguished company. The Duke of Cambridge returned thanks for the Army, and in so doing expressed his belief that neither the Volunteers themselves nor the people of England have any idea of the Volunteers taking the place of the regular army, and that any such attempt would cause the whole system to break down. The American Minister, Mr. Adams, in returning thanks for the Diplomatic body, described at some length the duties of modern diplomacy, and said that his mission here was to continue and perpetuate the friendly relations which have so long existed between America and England. His speech, however, contained no reference, either direct or indirect, to the struggle now raging in his own country. In returning thanks for her Majesty's Ministers, Lord Palmerston spoke as follows:—

"It is always a matter of sincere pleasure to those who are engaged, as we are, in the turmoils and labours of public life, to mix here with those who are employed in laying the foundations for the wealth, the prosperity, and the happiness of the country, by [illegible] of this great commercial metropolis of the world do carry on those commercial transactions of which their countrymen are so justly proud. It is always a great pleasure to those who are engaged in the strife of political life occasionally to be invited to these social boards, where they meet in friendly association those to whom they may be opposed in the more active scenes of their public occupations. And this is, indeed, more easy at the present time than it might have been in former periods of our history. There were periods, not very long distant, when those who were engaged on opposite sides in public life combined with political antagonism the strongest personal antipathies. These days are happily over. Those who differ in public life may sometimes differ in regard to principles of action; they may sometimes differ as to the way in which common principles professed by both are to be carried into operation, but their differences, though they may lead to political antagonism, never lead to personal animosity or dislike. The men who are most distinguished as sitting on either side of those tables which are spread, not in this convivial manner, in the Houses of Parliament, but with drier materials for mental consumption—the men who sit upon opposite sides of those tables have at different periods of their lives been united in personal friendship, and their regards have outlived their political separation. Therefore I say it is more agreeable and far more easy now than it might have been at any former periods of our history for men of different political sentiments to meet, as we are meeting together, in the associations of social harmony, to enjoy the festivities which this great city so magnificently provides on occasions like the present. You have, my Lord Mayor, alluded to the decorations which adorn this hall. I may say that this hall may be assumed as an emblem of the state and feeling of the country. You have pointed out that the interior abounds with emblems of peace, indicating the anxious desire of the country to preserve to it the blessings of peace; but as we entered those walls we saw at the portals armed men—Volunteers; aye, Volunteers, who are an emblem of the resolution of the country to bar the entrance of the land to any who might wish with rude and profane steps to disturb the peace and tranquillity within; and that band of Volunteers was not less emblematical of the feeling of the country, because it consisted of men of mature age and of boys hardly yet able to wield the musket which they had upon their shoulders,—a proof, therefore, that young and old combine in this country in a firm determination to guard the entrance of the land and preserve the peace which we all so anxiously desire to maintain. I may also say that we have here peace and plenty; and I trust that the present condition of the country is not altogether unanalogous to that state; for we have had a harvest which, generally speaking, has been good. The condition of our revenue is altogether satisfactory; and although circumstances beyond our control may threaten for a time to interfere with the full supplies of that article so necessary for the productive industry of the country, yet no doubt that temporary evil will be productive of permanent good; and we shall find in various quarters of the globe sure and certain and ample supplies, which will render us no longer dependent upon one source of production for that which is so necessary for the industry and welfare of the country. When we look without we see, no doubt, in many parts of Europe circumstances which, if not dealt with by prudence and discretion, may lead to local disturbances, which I trust will not at least extend themselves to bring us within their range. On the other side of the Atlantic we witness with the deepest affliction—with an affliction which no words can express—differences of the most lamentable kind among those whom we call our cousins and our relations. It is not for us to pass judgment upon these disputes; it is enough for us to offer a fervent prayer that such differences may not be of long continuance, and that they may speedily be succeeded by the restoration of [illegible] peace. I will not longer detain you. I will [illegible] for myself and for my colleagues that we [illegible] invited to attend upon these occasions; that we [illegible] the manifestation of good will on the part [illegible] powerful a portion of our fellow-countrymen, [illegible] look upon this day, when we are permitted [illegible] this hall, as one of the most agreeable and m[illegible] the year."

THE CONFEDERATE MINISTERS AT FISHM[illegible] HALL.—On Saturday evening the Hon. D[illegible] and the Hon. W. L. Yancey, who have [illegible] this country as the Plenipotentiaries of the [illegible] States of America, were entertained at dinner by the Fishmongers' Company. In returning thanks for the toast of their health proposed by the Prime Warden, Mr. Yancey spoke as follows:—

"Upon the part of the Americans I sincerely [illegible] sentiment just expressed by the Prime Warden [illegible] tion of peace in America. Such a wish proclaimed [illegible] pany of intelligent Englishmen must kindle a [illegible] spirit in the bosom of every enlightened [illegible] American. The name American no longer rep[illegible] people. There exists now two American [illegible] Confederate and the Federal Americans. I—[illegible] haps, be aware—am a Confederate, or—as the [illegible] unmindful of the character of our common [illegible] fully terms me—a rebel. But the justice and the [illegible] of this great Government, promptly coincided [illegible] Spain, speedily wiped out that stigma from our [illegible] countrymen are acknowledged here, at least, [illegible] Though indebted to an enlarged and enlightened [illegible] law, and not to the mere grace or favour of [illegible] acknowledgment of our unquestionable rights [illegible] I must freely express here to-night that deep [illegible] fulness, which I am sure all my countrymen feel, [illegible] public avowal—'*Bis dat qui cito dat.*' From [illegible] could it have come so gracefully. In this—'the [illegible] —the principle of self-government is recognised [illegible] however blended with the prerogatives of the Crown [illegible] rights of the aristocracy. To your institutions A[illegible] indebted for the chief of those vital principles w[illegible] caused them to style their republic—'The land of the [illegible] the home of the oppressed.' Such invaluable rights [illegible] old English writ of habeas corpus, of a speedy trial [illegible] freedom of speech and freedom of the press, are the [illegible] pillars of American constitutional liberty: and I [illegible] happy and proud to say are observed at least [illegible] the Confederate American states as vital and pr[illegible] even during their stern struggles to preserve their [illegible] life.' I feel how unbecoming it would be in me [illegible] upon such an occasion as the present any merely part[illegible] of the causes which have broken up the late Federal [illegible] No matter what they may have been, one thing is [illegible] that is that the contest now going on is upon the part of the people of the Confederate States for the right to govern [illegible] selves and to resist subjugation by the North. They [illegible] territory as large as England, France, Spain, and [illegible] together—they are ten millions in number—they are [illegible] producers of important raw materials, and buyers [illegible] species, of all kinds of manufactured goods. Their p[illegible] soil, climate, and production, are totally different from those of the North. They think it their interest to buy where they can buy cheapest, and to sell where they can sell dearest. In all this the North differs, *toto cœlo*, from them, and [illegible] makes war upon us to enforce the supremacy of [illegible] [illegible] liberties and sovereign independence the Confederate States and people are united and resolute. They are [illegible] power numbering 20,000,000; yet for [illegible] the Confederate government successfully resisted [illegible] pelled—that invasion along a military frontier of [illegible] Though cut off by blockade from all foreign trade, their internal resources have been adequate to the equipment [illegible] maintenance in the field of an army of over [illegible] Can all this be, and yet these 6,000,000 of whites be divided? The idea is preposterous. So much has been said [illegible] efforts to obtain foreign intervention that I may [illegible] to declare emphatically that the Confederate States [illegible] neither sought nor desired it. They can maintain their independence intact by their own strength. As to their recognition by the Powers of the world, that of course they [illegible] They are a people, a nation, exhibiting elements of p[illegible] which few states of the world possess. But they have [illegible] reason to complain, nor do they feel aggrieved, because the great Powers see fit for a season to defer their formal recognition and reception into the family of nations. H[illegible] they may differ with them as to the period when their recognition should take place, they fully understand that [illegible] action is purely a question to be determined by [illegible] countries each for itself and with reference to its [illegible] interests and views of public policy. Other nations having trading relations with us have quite as much interest to send ministers and consuls to us as we have to send such representatives to them. Why, then, shall there not be peace? [illegible] because the North in its pride will not admit that to be a fact—a *fait accompli*—which Old England, followed by the first Powers of Europe, has recognised, and which the Con[illegible] government and armies have repeatedly dem[illegible] stern and bloody fact—the fact that we are a belligerent p[illegible] There can be no basis for negotiations, or for peace prop[illegible] or consultations so long as the Confederates are deemed [illegible] and are treated as rebels. But when our adversary shall come sufficiently calm to treat us as a belligerent power, [illegible] morning of peace will dawn in the horizon. W[illegible] shall arrive I think I may say the Confederate government [illegible] be inflexible upon one point only—its honour and its independence. For the great interests of peace and humanity it w[illegible] yield much that is merely material or of secondary importance."

MEMORIAL TO THE LATE LORD HOLLAND.—The memorial window to the memory of the late Lord Holland was erected last week in St. Philip's Church, Earl's Court, Kensington. The principal s[illegible] illustrated are, "Our Saviour blessing little children," occupying the greater part of the three centre lights, surrounded by a series of smaller subjects illustrat[illegible] the nine beatitudes, viz.:—

"1. (Blessed are the poor in spirit)—The Angels appearing to the Shepherds; 2. (Blessed are they that [illegible])—The Pharisee [illegible] Women at the Tomb; 3. (Blessed are the meek)—[illegible] and Publican; 4. (Blessed are they who hunger and thirst after righteousness)—The Adoration of the Magi; 5. (Blessed are the merciful)—The Good Samaritan; 6. (Blessed are the pure in heart)—The Annunciation; 7. (Blessed are the peacemakers)—Figure of St. John; 8. (Blessed are [illegible] persecuted)—St. John the Baptist Beheaded; 9. (Blessed are ye when men revile)—Figure of St. Peter."

THE SOUTHERN EMBANKMENT OF THE THAMES.—At the last meeting of the Metropolitan Board of Works a memorial was presented from the Bermondsey district board, stating that, as the [illegible]

had under their consideration a proposition for the embankment of the Thames, and as many of the lands on the south side of the river were below high-water mark and subject to inundation, they were of opinion that any embankment for the improvement of the river would be incomplete without an embankment on the south side. It further stated that the inhabitants of the south side were large contributors to the coal and wine dues, out of which Government proposed that the cost of the work should be defrayed, and they hoped that steps would be taken by the board to protect the interests of the inhabitants of the south side in any scheme which might be brought before Parliament or the Metropolitan Board for the embankment of the river. The memorial was referred to the Main Drainage Committee for consideration and report.

The Widening of Great Turnstile.—At the last meeting of the Metropolitan Board of Works a report was brought up from the Works and Improvements Committee, stating that, having considered the plan of the architect for widening Great Turnstile, Holborn, they were of opinion, that it was not expedient at present to proceed with the matter further. Mr. H. L. Taylor moved the adoption of the report. Alderman Lawrence regretted that the committee had come to this conclusion, as the widening of Great Turnstile would form a most important thoroughfare, and would relieve the crowded streets in the neighbourhood. It would be a most desirable improvement if successfully carried out, and it would only take one property in Holborn itself, which was a large newspaper's shop, with some small houses at the back of it, and he had no doubt whatever that the proprietors would be ready to dispose of them. He strongly urged the advantages which would arise from this new communication, and should therefore move as an amendment "That the superintending architect of the Board be instructed to put himself in communication with the owners of the property to see upon what terms they might be disposed to sell it." Mr. Robinson seconded the amendment. A long discussion ensued in which several members expressed their opinion that the removal of Middle Row, Holborn, would be a more desirable improvement, while others were of opinion that they had no funds available for such improvements. On a division the original motion was carried by a large majority.

The Great Eastern.—A special meeting of the Great Ship Company was held on the 8th inst., Mr. S. Baker in the chair, to consider the expediency of authorising the issue of further capital. A detailed report was read, describing the late accident and the present condition of the ship. It appears that a sum of 8000*l.* is required for repairs, which can be provided out of the assets in hand, and that a further sum of 25,000*l.* will be necessary for equipping her for a new voyage. After a protracted discussion a resolution approving the issue of 25,000*l.* in 10 per cent. debentures, constituting a second mortgage on the ship, was carried unanimously. The amount previously borrowed was 35,000*l.*, which with the present loan will make a total charge on the ship of 60,000*l.* Of the 25,000*l.* required on the present occasion 15,800*l.* has been already subscribed.

Proposed Enlargement of Covent Garden Market.—A memorial from the vestry of St. Paul's, Covent Garden, was presented to the Metropolitan Board of Works at their last meeting, stating that they had under consideration the proposal of the Duke of Bedford for the prolongation of Hart Street, Covent Garden, into the new Covent Garden approach. They were of opinion that the adoption of such plan was most desirable on public, social, and sanitary grounds. They believed that the opening up of a further communication in this locality would be of great commercial importance in the present overcrowded state of Covent Garden Market, and could only be viewed as a great metropolitan improvement. They were also of opinion that the offer of the Duke of Bedford to carry out such an improvement without cost to the ratepayers of the metropolis was a most liberal one, and that the present and only opportunity for effecting such an improvement should not be neglected. They therefore entreated the Board to concur in the proposal which had been made, and consent to the sale of the two plots of land required to carry out and complete, as far as existing means render possible, what had long been viewed by the public as a most desirable metropolitan improvement. The subject was referred to the Works and Improvements Committee.

The New River.—Consequent on the discontinuance of their old system of open aqueducts and reservoirs, the New River Company are carrying out some improvements of public interest. On the site of the reservoir in St. John Street Road, which has been altogether removed, a crescent, called Roydon Crescent, containing upwards of 100 houses, has just been completed. The well known water-course that supplied Sadler's Wells Theatre with "real water" has been filled in, together with that which ran under the New Road, past Duncan Terrace, Islington, and onwards. Large iron pipes 8 feet in diameter have been sunk for carrying the water, and the space above them, when not available for building purposes, is to be converted into ornamental gardens. The great reservoir in the Hampstead Road, after four months of continued excavation by the contractors, is now also completely removed, and the foundations of the extensive area are clearing out with the view of constructing on the site a new street and crescent similar to that in St. John Street Road.

The late Tragedy in Northumberland Street.—Major Murray, who after being shot in the neck, was removed to the Charing Cross Hospital, where the bullet was extracted, has at length perfectly recovered. His convalescence has been retarded by an exfoliation from that part of the spine against which the ball struck. The piece of bone has now been extracted, and a complete cure effected.

Training Ship in the River.—It is stated that the Lords of the Admiralty, in compliance with a requisition from Messrs. Green, of Blackwall; Mr. Thomas Baring, M.P.; Mr. Thomson Hankey, M.P.; Mr. Cave, M.P.; and other influential merchants in the City, have placed at their disposal the 50-gun sailing frigate Worcester, as a training ship for the navy. The Worcester was launched some years since at Deptford, after having been on the stocks about 15 years, and has never been to sea.

Greenwich Workhouse.—At the weekly meeting of the Greenwich board of guardians, held on the 7th inst., it was resolved, by a majority of 11 to 2, to erect a range of apartments for the accommodation of married inmates of the workhouse over 60 years of age, who have hitherto been separated.

St. Thomas's Hospital.—The arbitrators and umpire selected for the purpose of settling the amount of purchase money to be paid by the Charing Cross Railway Company to the trustees of St. Thomas's Hospital have held several sittings during the past month at the Westminster Palace Hotel. After the session of 1859, when the railway company obtained their Act, they called on the trustees to send in their claim for compensation, which they did, claiming the sum of 750,000*l.* The railway company thereupon offered 10,000*l.* for a portion of the site, over which they intended to construct the railway upon arches. The hospital then applied to the Court of Chancery, which issued an injunction against the railway company taking only a portion of the premises, holding that if they interfered with the hospital at all they were bound to take the whole. Various meetings took place with a view to a compromise, but without any satisfactory result. The railway company, resorting to the General Railways Act, which is incorporated with their special Act, then appointed as their arbitrator Alderman Bancroft, of Manchester; the hospital trustees appointed Mr. Clifton, surveyor, of Bishopsgate Street, and the Board of Trade appointed Mr. James Stuart as umpire. There was a large array of counsel on both sides. Mr. Curry, surveyor of the hospital, estimated the value of the hospital, the cost of obtaining a new site, and erecting an hospital with modern improvements, at half a million. Mr. H. Hunt, for many years valuer under the Board of Works, produced a plan of the site of the hospital, showing the mode in which he would dispose of it for building purposes, including an arcade, hotel, houses, warehouses, &c., which he calculated would produce a ground rental of 10,000*l.*, which, capitalised at 20 years' purchase, would give a value for the land of 280,000*l.* The hospital buildings he estimated at a total of 106,322*l.* He took the hospital as he found it, affording accommodation for 500 patients, and, adding all the items together, the total amounted to 436,322*l.* Mr. Marrable, who had been superintending architect to the Metropolitan Board of Works, gave similar evidence. He thought the trustees of the hospital were entitled to receive in the aggregate from the directors of the railway company 167,639*l.*, *plus* the value of the fixtures. The case of the railway company in reply occupied three days. Among the witnesses examined on their behalf were Mr. Hawkshaw, Mr. Norton, Mr. Shaw, Mr. Penfold, Mr. Ley, and other architects and surveyors, who contended that the removal of the hospital to a suburban site, free from the noise and other nuisances incidental to one of the busiest portions of the metropolitan railway traffic, must be an advantage to the hospital itself; that, inasmuch as the railway company only required a small portion of the hospital property, and were compelled to take the whole by the action in Chancery of the trustees of the hospital themselves, the compensation on removal ought to be exceedingly small; and that the claim of the hospital ought to be narrowed to the value of the hospital site for building purposes, which would not, at twenty-seven years' purchase on the ground-rents to be obtained for the various houses, offices, shops, and warehouses which could be placed upon it, amount to a greater sum than about 200,000*l.* A curious fact was stated in the course of the proceedings—that the hospital, the value of which is assessed by the hospital witnesses at 500,000*l.*, and by the railway company's witnesses at 200,000*l.*, was valued in the year 1570 at 335*l.* only, as appears by the state documents and the hospital charters. Mr. Lloyd summed up the evidence on behalf of the railway company, after which Mr. Bovill (who, with Mr. Phipson and Mr. Field, represented the hospital), in a speech of five hours' duration, summed up on behalf of the claim. The arbitrators and umpire promised to make an early decision, and it is expected that their award will be ready in about a fortnight.

Sanitary Deficiencies of Fulham.—A deputation from the Fulham district board presented a memorial to the Metropolitan Board of Works at their last meeting, stating that a large portion of that densely-populated parish was entirely undrained by reason of the sewage falling into the Thames and creating an enormous and pestiferous mud-bank, extending from the creek to the suspension bridge. It further stated that the district is riddled with cesspools, which, by percolation, poison many of the wells, rendering them altogether unfit for domestic purposes, whilst the costly works of the Counter's Creek sewer are of no benefit to the parishioners, as they are cut off from them by the West London Railway and the Kensington Canal. They therefore prayed that the main drainage works proposed for this district should be commenced without further delay. The memorial was referred to the Main Drainage Committee for consideration and report.

Violent Storm in London.—On Sunday morning, between 10 and 11 o'clock, the metropolis and the eastern suburbs were visited by a severe storm of lightning, thunder, and hail, which did serious mischief to property in various parts. The trees in the parks were much injured, and a great deal of glass was broken by the hailstones. The storm was scarcely felt in the western districts of the metropolis, but was attended with disastrous consequences on the south coast, and several wrecks are reported in different parts of the Channel.

Murder in Drury Court.—Yesterday afternoon a murder was committed at No. 10, Drury Court, Strand, by a young man named Richard Reeves, a basket-maker, who hung his sister, a little child about 10 years old, in the coal-cellar. The act was perpetrated with singular coolness, as after the deed was done he deliberately walked out of the house, and on meeting his father in the court, told him that he had hanged his sister. The body was immediately cut down, but life was quite extinct. The murderer bears a very bad character in the neighbourhood and absconded after the act, but was closely followed by the detective police, who succeeded in apprehending him yesterday afternoon in Carey Street, Lincoln's-inn-Fields, and took him to the station in Bow Street, where he made an admission of his guilt to the inspector. He was then locked up, and will undergo an examination at the Police Court this morning.

Health of London.—The return of the Registrar-General for the week that ended Saturday Nov. 9 exhibits a great increase in the mortality. The deaths, which were less than 1100 in each of the last three weeks of October, rose to 1251 in the first week of November, exceeding by 41 the number which would have been returned if the average rate of mortality had prevailed. During the week the births of 840 boys and 870 girls, in all 1710 children, were registered in London. In the ten corresponding weeks of the years 1851-60 the average number was 1647.

Provincial.

Alcester.—A few days since Sir Francis Goodricke and his family were placed in imminent peril of their lives by some want of care or knowledge on the part of their domestics. It appears that in consequence of the increasing severity of the weather the servants had commenced heating the apartments of Studley Castle by the hot air flues provided for that purpose. Whether from neglect of the regulating apparatus, or from the apertures being left uncovered, a large quantity of carbonic acid gas was allowed to escape into the several rooms. The first to feel its perilous effects was a lady visiting at the castle. Finding that she was rapidly becoming insensible, Sir Francis instantly set out for Mr. Morris, surgeon, who on his arrival found that Lady Goodricke was also apparently dying. Mr. Morris soon suspected the cause and took his remedies accordingly, but while he was attending to Lady Goodricke and the lady who was first seized, Sir Francis himself and Miss Goodricke also swooned. In spite of every attention the sufferers remained unconscious for hours; but they were all ultimately restored, and are now convalescent.

Anglesea.—On Friday night a murder was perpetrated at Llanfaethly under the following circumstances:—An old man, upwards of 70 years of age, called Richard Williams, occupied a small farm called Garnedd, in that parish. His daughter, a widow, with her four children, resided with him. Recently this daughter married a man named Richard Rowlands, who also went to reside at the farm. The old man left home on Friday night for an adjoining farm, called Gaerwen, to arrange about getting an engine to thresh his corn. He left Gaerwen at 9 o'clock, smoking his pipe, and took the road home, but never returned to it. At daylight on Saturday morning his daughter sent her son to ascertain when he left Gaerwen, and on his way to the farm the boy found the body of his grandfather lying in a ditch. He ran home and gave the alarm. Medical evidence proved that deceased had met a violent death, having four wounds in the head and the skull fractured. Several pools of blood were found on the ground near the body. It was proved at the inquest that Rowlands, the son-in-law, arrived home at 7 that evening, went out again, and returned between 9 and 10 o'clock, asked for water to wash himself, and then went to bed, as did the rest of the family soon after. The blows were believed to be given by a hammer. No inquiry was made about deceased until next morning. Rowlands went to the spot and assisted to convey the body home. He had previously cautioned the servant maid not to say he had been out at all on the Friday night. The old man had given him notice to quit his house, but no quarrel appears to have taken place. Marks were

found on the prisoner's clothes, but the inspector could not say that they were marks of blood. A hammer was found in the dairy, with which the wounds might have been inflicted. Rowlands did not account for his absence from home at the time of the murder. One witness deposed to hearing a loud cry, and another to seeing a light, as from a lantern, near the spot where the body was found. The jury, after half an hour's consideration, returned a verdict of Wilful Murder against Richard Rowlands.

BILSTON.—At the adjourned inquest on the old man Lewis, who was found dead in the street under circumstances which led to the suspicion that he had been murdered, the surgeon who had made a *post-mortem* examination, gave as his opinion that death had been caused by drunkenness and exposure to the cold; and that the slight bruises on his person were to be explained by his falling once or twice while in that condition.

CARLISLE.—The Hon. and Right Rev. Dr. Waldegrave, the new Bishop of Carlisle, has commenced his primary visitation in the principal towns of his diocese. The following extracts from the charge relate to the chief questions of public interest in connection with the church:—

"The report of the Royal Commissioners of Education, and the speech of his Grace of Newcastle in the House of Lords last session, both pointed to the probability of early and vigorous legislation on the subject of education endowments. It was upon the question of religious instruction that the opponents of the establishment took their stand; and it was upon this ground that he could not subscribe to the revised Education Code of the 29th July last. The present system, though not producing universal satisfaction, had been already proved to be of the highest advantage to the country at large. And here he was led to turn for a moment to the proposed abolition of Church rates. By doing so, he would be enabled to explain his opinion, and also to record his protest against the perpetration of what he called a cruel injustice. A cruel injustice, he deliberately said—because, when the charge on property was abrogated, he knew well that even the poorer members of the clerical body would not permit their churches to go down without a struggle, and that struggle could not be maintained, unless in this, as in all other voluntary parochial charges, they taxed themselves at a rate far beyond that of the temporal interest they had in their cures. The enforcement of the new education code would be of similar consequence to the clergy, as they contributed far beyond their measure to the support of parochial schools. Would they suffer those schools to go down without an effort, and could that effort be sustained without a serious increase of self-taxation? He feared not. He also demurred to the revised code, because it gave a heavy blow to infant schools, the most truly valuable of educational appliances—because it would encourage secular to the detriment of religious instruction, and called too much attention to mere intellectual display without spiritual tone, whereby many schools of a high moral standard could probably not maintain their endowment in a trying competition. He dwelt upon the high impolicy and danger of eliminating the religious element from schools—a result, unless he greatly mistook, which would follow in the train of the new code. He also expatiated on the truth they ought to preach to their flocks—the all-sufficiency of the blood of Jesus to meet the wants of a lost world, and that it was by the power of the Holy Ghost alone that the consciences and hearts of men could be stirred to contrition. These truths were imperatively necessary to successful ministry; and were especially necessary now, as some seemed to think that men were not sinners at all, much less lost sinners. Referring to the danger which lay in their way, he pointed to the Puseyite reaction which took place some years ago, and led so many in the direction of Rome. But this was no longer a danger. The unenlightened reason of man was now set up, and Scripture and the truth of God were to be set aside by its high decrees. This diocese had, to be sure, suffered little as yet from the infection; still, if one member suffer, all the members suffer. It was therefore impossible for him to contemplate without serious misgiving the phenomena which had been exhibited in a recent notorious volume ('Essays and Reviews'). The plenary inspiration and supreme authority of the Bible, the total corruption and certain condemnation of man, the miraculous incarnation and vicarious suffering of Christ, the sovereign election and effectual operation of the Spirit in man's regeneration; these were the doctrines of the Church; and how clergymen who had given their solemn and deliberate adhesion to these formulas should write and publish a book which, if interpreted according to the common rules of language, could have no other intention than to sap and destroy all belief in every one of these fundamental verities, was to him a stupendous moral phenomenon. Nor was his amazement diminished or his alarm lessened when he found that the authors of that book neither retracted, nor explained, nor retired. He bade them meet this new danger, as all the old dangers had been met and vanquished, by preaching the pure Gospel of the Lord Jesus in all its fulness—condemnation by sin, redemption by faith, election by the Holy Ghost, and revelation by the Bible."

CHIPPENHAM.—A few days ago an inquest was held on the body of Frances Pearce, the wife of a labourer at Langley Burrell. It appeared that deceased had come into this town to meet her husband. They went to a public-house, and remained drinking for some hours, and when they left, between 8 and 9 o'clock at night, were both drunk, but deceased was the worst of the two. On their way home to Langley Burrell, a man named Bristow met them in a lane called Greenaway. He saw both deceased and her husband fall down, assisted to help deceased up, and afterwards, on hearing her husband tell her that he would cut her head off, he asked the husband what he meant, to which he replied that he would fight any man in England. Next morning, between 4 and 5 o'clock, a cowkeeper, on going to attend his cows in a field not far from the lane, met the husband, but thinking, as he appeared in drink, that he had lost his way, said nothing to him. He soon afterwards saw a woman's bonnet, and further on, not far from the hedge, the body of deceased. She was very much bruised, had several marks on her face and body, and blood on her clothes, and on the back of her head there was a contused lacerated wound. A man who lodged with deceased and her husband, gave evidence to the effect that the husband came home early in the morning, and said, "Get up; my old woman is down in the Ninepin Field, but whether she has had a fit or not I can't tell. She is tearing her bonnet and knocking herself all to pieces." He accordingly went to the field, and, finding deceased could not walk, wheeled her home in a barrow, where she lived about 10 minutes, but did not speak. Two surgeons gave it as their opinion that the cause of death was effusion of blood on the brain, probably the result of the wound on the back of the head. The jury returned a verdict "that deceased came to her death by extreme violence, but by whom that violence was administered there was no evidence to show." The superintendent of police immediately took the prisoner into custody, and he has since been committed by the magistrates for trial on the charge of Manslaughter.

GLOUCESTER.—The final incident in the Forth tragedy took place on Sunday, when the child of Lord Forth and Mrs. Lloyd died at Longford, near Gloucester, where it had been placed at nurse.—The jubilee of the National Society was celebrated in this city on the 30th ult., under the presidency of Mr. T. Gambier Parry. Lord Redesdale described the great assistance the Society had rendered in the promotion of sound religious education in connection with the Church of England, and contended that in the future connection of the Society with the State it should adhere to the principles as to the management of schools upon which that connection was first based. The success of those principles was fully illustrated in the fact that persons unconnected with the Church of England came to the Church of England schools to be educated. While recognising the right of every man to have respect paid to his religious convictions, when those convictions were arrived at after due examination and reflection, he condemned the system of allowing people to "pick up" religion for themselves. Vice-Chancellor Wood thought that the framers of the recent minute had the best possible intentions, and believed it was framed with the sincerest wish to see that where the State paid its money it should take care to secure that with that money, raised as it was from a large body of the community—and upon many the general burden of taxation now pressed heavily—the best possible result should be secured; and therefore they said, if a child had not an elementary education in reading, writing, and arithmetic, it was not properly instructed. He did not think that the framers of the minute had taken the right way to secure their object, but he would not lend ear to the notion that the minute had been framed with any intention to supersede religious education. He did not think there was any other motive but to see that the children were properly educated. Inquiry had been made from the bishopric of Lincoln whether it was the intention to supersede the rule that inspectors should report on the state of religious instruction. The answer was that there was no intention of rescinding the rule, and if the inspectors did not report satisfactorily on the point the grants would be diminished, perhaps to one-tenth, and at all events to one-half.

GUERNSEY.—It is said that M. Drouet, the French sculptor, intends to hew the colossal bust of Victor Hugo out of one of the rocks which surround the Isle of Guernsey.

HEXHAM.—A meeting of gentlemen interested in the salmon fisheries of the Tyne was held a few days since in this town, Mr. W. B. Beaumont, M.P., in the chair, to receive a report from a committee on the preservation of the salmon in the river. Mr. Ffennel and Mr. Eden, two of her Majesty's Commissioners, were present. A set of rules for the guidance of a new association for the protection of salmon in the Tyne and tributaries was read and adopted. Mr. Ffennel, one of the commissioners, addressed the meeting. He had, he said, been encouraged to find throughout England that several associations had been formed to see and put the new Act into force; but the one on the Tyne was the very first. At the request of Mr. Beaumont, Mr. Eden and himself had attended that meeting, and they should, while in the neighbourhood, be glad to give every information and assistance in their power. With respect to the question of rating it would not become him, perhaps, to say a word. But there was one remark he ventured to make, and it was this—that parties concerned in this movement should not be impatient. Up to this time there had existed a great many causes that were clear and palpable why the Tyne was in a very depressed state in regard to the salmon fisheries, and it was known, by practical experience, that when a river was taken up, and measures adopted calculated to improve it, no material benefit could be felt till the fourth year. That was consequent on the nature of the fish. There was one thing that had been operating against the Tyne of which the people had not been fully sensible—that was the operation of the fixed engines on the coast; and another was the obstruction of the Bywell weir. The stake nets had been got rid of, and the Bywell weir that day, to a certain extent, was open. Mr. Beaumont had given directions to have it kept so, although there must be some alterations, which would be made as soon as the water allowed it. The ladder which was proposed would, he had no doubt, be most effective in letting up the fish. With respect to the proceedings of the society, he took the opportunity of suggesting that a most material point for them to attend to when they were organised would be to make a survey of the coast for 20 miles round the mouth of the river, to see that those things were removed that the Act required to be removed. Another very important thing for the people up there was the protection of the river. There were different branches of protection. The first to be observed was to have the fish protected in the spawning-beds, and that would require the largest number of persons. It was most gratifying to him to find that they had entered into that voluntary association to protect the river; for there was no one thing that required co-operation so much as salmon fisheries. The lower men were dependent upon the men above; and if the lower men, by any unfair means, took all the fish, they were injuring themselves, inasmuch as they were not inducing the co-operation of those above. Under any circumstances, those below must derive by far the greatest part of the advantage from the fisheries, while the people above could look to nothing more than angling with their rods; and he said, if there were any gentlemen there connected with the lower fisheries, they ought to deal most liberally with the upper men, and ought not to hesitate to be most liberal in their contributions to that association. It would be money well invested; and it was for their own interest to do it.

HUDDERSFIELD.—A contest has for some time been going on between the ground landlord, Sir John Ramsden, Bart., and the tenants on his estate, which has seriously impeded the development of Huddersfield as a town. It appears that there is no complaint of the rents not having been paid, or of the condition in which the property has been kept, and that there has been no demand for a higher rental, but Sir John demands possession of the property with a view to oblige them to accept a new lease. Last week notices to quit were served upon several of the tenants who have built upon the estate. The Tenant Right Defence Association immediately convened a meeting of the tenant-right owners, when it was unanimously resolved to oppose the attempt to induce them to accept the new lease or to dispossess them of their property. It was also resolved to hold a larger and more public meeting for the vindication of their rights.

LIVERPOOL.—On Monday afternoon the ship Prompt, 717 tons, Captain Whittle, on her homeward voyage from Rangoon to this port, was thrown on her beam ends near the Bell Buoy, at the entrance of the Mersey, and suddenly foundered in eight fathoms of water. Fifteen of the crew perished, and the remainder, consisting of Captain Whittle, the mate, pilot, a seaman, and a boy, were picked up by a steam tug. The ship and cargo were partly insured.—On Friday morning a fire was discovered in the hold of the new iron ship City of Agra, lying in the Albert Dock. She was laden with cotton and other combustible materials from India, and it is supposed that the fire had been smouldering for about three weeks. The third mate was suffocated in the hold while endeavouring to reach the seat of the fire, which was ultimately subdued, without permanent injury to the vessel. The Liverpool ship Sovereign of the Seas was destroyed by fire at Sydney on the 23rd of September.—A large and influential meeting was held in the Town Hall a few days since, for the purpose of taking measures to retain the Conway as a training ship in the Mersey. The mayor presided, and said the success which had attended the great experiment of the training sailors on board the Conway had rendered it of the utmost importance to do all that could be effected to retain her as a training-ship. Having mentioned this to several influential gentlemen, they concurred in the views he had alluded to, and an application had been made to Government to have that vessel retained there. To this the Government had agreed, provided the sum requisite for its maintenance was furnished by the town. Believing, however, that the training of sailors as sailors was not so much a local as a national subject, he had taken means to call the present meeting for the purpose of urging the necessity of the whole cost being defrayed by the nation.—Mr. T. M. Mackay then moved, "That this meeting, taking into consideration the close relationship existing between the navy and the mercantile marine of this country, views with great anxiety the increasing deterioration of our seamen as a class, and considers that their improvement is a subject demanding immediate attention." He said that to keep our place as queen of the seas we must have a strong and a well-constructed fleet, and we must be prepared to man that fleet with real "blue jackets," and to do that in the shortest possible time. To effect this we should require to have an omnipresent body of seamen, and this could only be done by training up a number of boys as sailors.—Captain Sproule, chairman of the Mercantile Marine Service Association, seconded the motion, and drew a vivid picture of the degeneracy which had overtaken the class sailor. Instead of the clean, tidy, and lively individual who used to be the well-known "sailor" of former times, they were now a greasy, dirty, ill-dressed set, more like Birmingham blacksmiths than sailors. The motion was unanimously adopted.—Mr. James Aikin moved the next resolution, which was:—"That in the opinion of this meeting, strengthened by the evidence given before the commissioners appointed to inquire into the best means of manning the navy, the only effectual remedy is to establish additional training ships for educating boys to the sea in our commercial ports." The success which had attended the establishment of the training ship at Portsmouth, was the strongest evidence of the propriety of extending the

system to other ports. By doing so, he said, when the day of trial came we should be saved from the humiliation and cost of resorting to bounties, given to men who would be found, as all experience had proved, ready to desert upon the first practicable opportunity. He advocated the propriety of having numerous training ships and a number of sea going brigs, where the boys would in reality be taught practical seamanship. Mr. Clint seconded the motion, which was carried unanimously. It was also resolved that copies of the resolutions be forwarded to Lord Palmerston, with a request that the subject may receive the earnest attention of her Majesty's Government.

Norwich.—On Saturday, at the Shire Hall, James Blomfield Rush, eldest son of the notorious murderer of that name, was brought up on a charge of breaking into the house of John Curson, a bricklayer, at Hichersett, and stealing a watch and some electro-plated spoons. After some evidence had been taken the prisoner was remanded for a week. It may be remembered that in the spring he was tried at the Norfolk Assizes on a charge of burglary, but acquitted.

Nottingham.—On Saturday last Samuel Thompson and Thomas Cordon were brought before the magistrates on remand charged with a murderous attack on Mr. Thomas Smith, farmer, of Little Halam, and with robbing him of 25*l*. It appeared from the evidence of Mr. Smith, that on the night of the robbery he called at the Barley Mow, in the village of Trowell, about 10 o'clock. In a few minutes after the prisoners came in while the prosecutor was conversing with another person about buying a horse which he went from home to purchase, but did not buy. The prisoners shortly afterwards left the house, and the landlady gave witness a large walking-stick. Witness proceeded about half a mile without meeting anybody, and when at a very lonely spot, between Trowell and Ilkeston, he was met by one of the prisoners, who struck him such a violent blow on the head with a hedgestake that he was felled to the ground. The stake used by the prisoner was broken into several pieces. The robber then took the stick lent witness by the landlady, and beat him on the head most violently, after which he rifled his pockets of a pocketbook, containing 25*l*. The two men then went away, and witness put his hand into another pocket, taking out 19*l*. in gold, which he deposited in his stocking with his watch. Immediately after this the prisoners returned and again searched his pockets, took some papers, again beat him on the head and kicked his ribs, and then left him. Witness's head was beaten almost to a mummy, and one eye was nearly out. He, however, managed to get back to the public-house, where having made himself heard, the landlady took him in. The superintendent of police at Ilkeston received information of the robbery at 12 o'clock the same night, and having collected a force proceeded to the spot, where he found a man's hat lying in a pool of blood, and a very large walking stick, nearly as thick as a man's arm, lying close by, with a hedgestake several inches in diameter, broken into several pieces, and covered with blood and hair. There were also marks of a severe struggle having taken place. After the prisoners were taken into custody Thompson made a voluntary statement to the police to the effect that on the morning after the robbery he met Cordon, who said he had robbed the farmer they had met on the previous evening at the Barley Mow. Cordon then took from his pocket a circular and an envelope directed to the prosecutor, and buried them in the soil. The prisoner further described the place where the envelope could be found, and the police on going to the place, and digging up the soil, found the paper, which the prosecutor identified as having been in his pocket at the time of the robbery. The Bench committed both the prisoners for trial at the assizes.—Mr. Robert Wright, a rate collector for the Nottingham Union, was brought before the Recorder at the recent quarter sessions, charged with embezzling upwards of 300*l*., the property of the Board of Guardians. It appears that the prisoner has for a long time past been defrauding the ratepayers in a most ingenious manner. He had been charging them a greater amount than was due upon the rate granted, and had also put down in the rate book sums as arrears which had been paid. The Recorder said the amount of the frauds showed that the prisoner's accounts had not been properly investiged by the overseers; but this was no excuse for the prisoner's dishonesty, and he would be sentenced to three years' penal servitute. This is the third serious case of fraud committed by Nottingham rate collectors.

Otley.—The jury at the inquest on Mr. Horsfall's gamekeeper, who was shot on the 5th inst. at Hawksworth Springs, returned a verdict of Wilful Murder against the poacher Waller, and the jury recommended the Government to offer a reward for his apprehension.

Oxford.—The library and reading-room, parts of the new Museum at Oxford, which are mainly stocked with scientific books from the Radcliffe Library, have been opened for public use, under similar arrangements to those of the British Museum reading room.

Shields.—The violent storm which swept over the north-east coast with such fearful results on Saturday week has been followed by two others scarcely less disastrous in their effects. The first, which occurred on Sunday last, fell with unprecedented severity on the line of coast from the Humber to Flamborough Head, and the beach in many parts is literally covered with stranded vessels and wreck. The second occurred on Wednesday. In the course of the afternoon a storm signal was hoisted in Shields harbour, warning seamen that dangerous winds might be expected from opposite quarters. The storm burst upon the coast about midnight, and extended as far south as Yarmouth. Three vessels were wrecked at the harbour's mouth, and others went down at sea with all hands on board.

Stockport.—On Tuesday morning an alarming fire broke out in the Mersey Mill, belonging to a firm of which Mr. Kershaw, M.P. for this borough, is the principal partner. The building is a very extensive one, six storeys high, and the fire was first discovered in the centre. The flames continued blazing all day, notwithstanding the efforts of the townspeople, among whom the Volunteers took a conspicuous part. Property to the extent of many thousands of pounds was destroyed, but the premises were insured in various offices. About 1000 hands, who were all working full time, are thrown out of employment by this calamity.

Stratford-on-Avon.—Mr. Halliwell having succeeded in securing Shakespeare's estate of New Place for the sum of 1400*l*., has vested it in the Corporation of Stratford, in perpetuity, on the condition that the ground shall never be built on, but shall be converted into pleasure gardens, to be freely open to the public. He now proposes the establishment of a National Shakespearian Fund, for the purpose of buying up Anne Hathaway's cottage and other existing properties which are associated with the name and the life of the poet. He has already secured for 2000*l*. the Great Garden, as it was called in Shakespeare's time, where stood the celebrated mulberry tree, and which was detached from New Place early in the last century. He also proposes to purchase all that belongs to the memory of Shakespeare in Warwickshire for the use of the nation, and eventually to found a library and museum in this town. This design, if carried out, will involve an expenditure of 8000*l*. or more. The following is a list of the principal donations at present offered for these purposes:—Miss Burdett Coutts, 500*l*., with 100*l*. additional for New Place; Mr. Henry Huth, 100*l*.; Mr. G. L. Prendergast, 100*l*.; Mr. Sheridan, M.P., 100*l*.; Mr. Tite, M.P., 100*l*.; Mr. B. B. Cabbell, 100*l*.; Mr. James Parker, 100*l*.; Mr. Benjamin Webster, 100*l*.; Mr. F. W. Cosens, 100*l*.; a Lady, 100*l*.; Mr. Dugdale, of Wroxhall Abbey, 100*l*.; Mr. Henry Johnson, of Crutched Friars, 100*l*.; Lord Overston, 100*l*.; the Misses Moore, 100*l*.; Mr. C. H. Bracebridge, 100*l*.; Mr. Charles Rawlings, 100*l*.; Sir William Fitz-Herbert, 100*l*.; Mr. Thomas Erskine, 50*l*.; Mr. James Mackenzie, W.S., 50*l*.; Mr. Smollett, M.P., 21*l*.; Miss Howe, 10*l*.; Lord Monson, 5*l*.; Mr. Thomas Tassell, 5*l*.; Mr. Stephen Cave, M.P., 5*l*., &c., making in all 2396*l*.

Tavistock.—On the night of the 30th of October, 1852, an aged woman, named Mary White, was murdered at Buckland Monachorum, and all attempts to trace the murderer proved futile. A man named Corber, who was the first to discover the perpetration of the murder, was apprehended on suspicion, but the evidence against him was not conclusive, and he was discharged. Within the last few days, Mary Corber, the sister of this man, called upon Mr. Superintendent Freeman, of the Stonehouse district, and stated that a man named Holwill, a stoker on board H.M.S. Indus, while at Rio Janeiro, saw a man named Robins, who told him that he was the murderer of Mary White. Mary Corber thought it was only fair towards the character of her brother that this should be inquired into. Mr. Superintendent Freeman accordingly went on board the Indus, and having heard what the man had to say, thought it his duty to take him before the magistrates that he might state on oath what he had said to him. John Holwill said that he is leading stoker in H. M. S. Indus, and was formerly of H. M. S. Leopard; that in August 1860 he accidentally met a man at Rio Janeiro, who said that he came from Tavistock and was called Robins, and on the witness telling him that he also came from the same neighbourhood, Robins said that he was the murderer of Mrs. White. Witness then asked him if he was related to Capt. Batty Robins, upon which he paused abruptly, and said "I don't want to say anything more to you. There is your hotel." I went to the hotel half an hour afterwards, and saw Robins again, but he then pretended that he could not speak English. Witness returned afterwards and asked for the man, but the people told him that he had hung himself. The Chairman said it was quite right for the witness to come forward and make the statement, but there was no evidence of which the magistrates could make any use.

Todmorden.—The committee of the Fielden Memorial Fund have determined to commemorate the services of the late Mr. John Fielden, M.P. for Oldham, in improving the condition of factory children, by the erection of a bronze statue in a public part of this town. The statue will be 7ft. 6in. high, and will cost 1000*l*., independent of the pedestal and expenses of erection. The work has been intrusted to Mr. Foley, R.A.

Ireland.

The M'Manus Demonstration was brought to a close on Sunday morning, when the body was interred in Glasnevin Cemetery. In spite of the inclemency of the weather, from 10,000 to 12,000 persons marched in the procession, which extended over a mile and a half, and surpassed in numbers the funeral of O'Connell. The procession started from Lower Abbey Street at 1 o'clock. There was a large funeral car of a pyramidal form, on the top of which the coffin, not shaped in the usual way, but like a box, was placed, uncovered, resting on a pall with a large white cross on it. The car was drawn by six horses with outriders, preceded by eight stewards on horseback, with wands, to keep the route clear. Then came about 300 citizens, walking eight deep, and wearing crape and white riband on their left arms. Next came a band, consisting of 40 performers. A mourning coach followed, containing the sister of the deceased, Mr. Doheny, the Rev. Mr. Kenyon, P.P. of Templederry, and Mr. John Martin, one of the convicted patriots of 1848. After this coach walked the Rev. Patrick Lavelle, P.P. of Partry, two other priests, and some laymen. Then came the American deputation, and the various committees, wearing scarfs and hatbands. These were followed by "the trades," which mustered in great force. The Kingstown and Bray deputation followed with an old blind harper, with his instrument, clothed in a white "bardic costume," and seated on a chair on the top of an emblematic car, drawn by one horse. The carriage which followed contained Mr. William Smith O'Brien and the O'Donoghue, M.P., after which followed about a dozen carriages and a line of cabs and outside cars. The procession went through Gardiner Street, Great Britain Street, Capel Street, along the quays, to the King's Bridge, then by Stephen's Lane to James's Street, and Thomas Street, and down through Dame Street and Sackville Street, traversing the streets during Divine service, while the band played the "Dead March in Saul" as they passed the various churches. In passing the spot where Emmett was executed in Thomas Street all the processionists took off their hats. It was near 5 o'clock and rather dark when they arrived at Glasnevin. Father Lavelle then delivered the following address:—

"My friends, I do not mean to preach the funeral oration of Terence Bellew M'Manus. I am forestalled by the people; they have preached it by their presence, their attitude, their solemn determination, their secret vows, and unalterable resolves. They regard him as a true patriot who died for his country, and whose country is, therefore, bound, not alone to honour his memory, but to vindicate his blood. And she will—yes, yes, she will—the day of Ireland's regeneration is fast approaching. Yesterday, that sarcophagus was the symbol of Erin's grave. To-morrow it will be of her resurrection. We will not be oppressed for ever. The iron hoof of the intruder, the stranger, the spoliator, and the tyrant, will not for ever tread upon our necks. There is hope for Ireland—yes, strong hope, speedy hope; and I pray you all to return to your homes with this hope, abiding your good time, sure and soon to come, when the ruffian tyrant must cease his oppression, and the patient sufferer will be repaid for years of endurance by centuries of happiness for himself and his country. Once more, men of Dublin and Ireland, I hope you will return as you have come, powerful in your good order and demeanour, and resolved to carry out in reality, in the good time coming, the solemn vows of your hearts."

Mr. Smyth, the chairman of the American Committee next delivered an address, in which he stated that the Irish in America meant to test the feeling of the Irish at home by disinterring the corpse of M'Manus and bringing it across the American Continent and the Atlantic, and, if the Irish at home refused to honour his remains, they resolved to give them up as a doomed race. But they showed themselves still true to the cause for which M'Manus died, as the proceedings of that day proved; and he was proud that the demonstration which proved so gloriously successful was the work of the people and the people alone. The proceedings were not quite concluded till about 6 o'clock. A few members of the Papal brigade were present wearing medals, but the general public seemed to take no very lively interest in the proceedings, and the middle-class citizens kept quite aloof. There was no display of military or muster of police, and the whole affair passed over without any breach of the peace or any serious accident.

Visit of the Chief Secretary to the West.—Sir Robert Peel arrived in Sligo on Saturday, having visited Clifden, Ballina, Westport, and other places on his way. The Mayor waited on him immediately on his arrival, and presented an address from the corporation, to which Sir Robert returned the following reply:

"I am exceedingly touched by the kind manner in which you have welcomed me on the occasion of my visit to this important commercial town, because I am aware that perhaps with respect to Galway it ranks next in importance in the province of Connaught. I was glad to hear from the gentlemen who read the address that the apprehension of distress in your immediate locality is not such as we are led to suppose by certain reports which reached the Executive. Having traversed an extensive range of country within the last three days, about 300 miles on an outside car, with my friend Sir Henry Brownrigg, who, I am sure, is in a condition to know much better than any man the position of the country, and who has given me valuable information, for which I feel deeply indebted to him, besides much that I obtained from persons of the state of things as I came along—I must admit that I have seen in districts through which I passed the effects of the bad harvest and the inclement weather. But I confidently believe—such is the public spirit of those residing in those districts and such the feeling that animates the landed proprietors in the surrounding country—that nothing approaching that serious state of things which afflicted this country and marred its progress some years ago is likely to arise. At the same time whatever may devolve on the Executive of the country fairly and honestly will be treated with so far as it can be consistently with the public interests; and, in fact, so desirous have I been to perceive the exact condition of things that I have, at this very inclement season, traversed the country to see with my own eye and hear with my own ear the state of affairs that prevail. As I have stated, I have gone over a large tract of country, and have witnessed great improvement in some parts, and in some great want—want, I mean, of that

energy which distinguished the district between Ballina and Sligo; and I must say it is with extreme gratification that I have seen during my route the evident progress which is influencing the agricultural interests in general of this part of the country, and which I believe may, in a great degree, be attributed, not to any individual exertion alone, but to the good example of Sir Robert Gore Booth, and that of his illustrious chief, under whom I have the honour to serve, Lord Palmerston. I believe he holds considerable property in this county, and in this town; and it is with pleasure I remarked, notwithstanding what we may have heard, whether in the House of Commons or his own little borough, he is not more beloved than in this town. I must say that in coming to this town I did not anticipate the honour you have done me. I felt it deeply; I did not expect that I had merited it at present, at least the honour you have done me in giving me a welcome to your town; but I will endeavour to do my duty, and hope to merit it in the future. The time is happily gone by when that impassable line, religious feeling, prevented this country from producing that state of things, and holding that position which she is evidently entitled to hold. It is my determination to discharge the duties of my office irrespective of creed. I am sorry to see that there is in Ireland a disposition hostile to her Majesty's present Government, but I can assure you that, as regards Italy, the same course which has been pursued by Lord Palmerston's Government, and the policy of Earl Russell, would be adopted by Lord Derby if he came into power, and I entirely acquiesce in the policy of non-intervention which has been carried out and concluded."

On Wednesday Sir Robert Peel arrived in Londonderry and was presented with an address and the freedom of the city, by the corporation, in the Town Hall. He acknowledged the compliment in a lengthened speech, in which he stated that he had been struck during his tour with the improvements he had witnessed and the general improvement of the country, much of which he attributed to the operation of the Encumbered Estates Court and a resident proprietary. He next made the following remarks on an attack which has recently been made upon him by Archbishop Cullen, who had denounced him as an enemy to Catholicism and the Holy See:—

"On my arrival in Sligo, to my astonishment and regret, I saw a placard, or letter, publicly exhibited through the town, and signed 'Paul Cullen,' denouncing me to the people of this country. For what? Denouncing me who, after all, am, in the sight of God, but a worm like himself, and for what? Because I have ventured to pursue an independent policy, free alike from partisanship or prejudice. When I read this document I almost shed tears of regret, not that he should denounce me—for I don't care two rows of pins for his denunciations—but tears of regret that in this country any man could be found so misleading the people and stirring up among them a spirit of religious animosity. This I will say, however, that though the rev. Archbishop has thought fit to denounce me to the people of Ireland, it shall not cause me to deviate one iota from the path I intend to follow. I regret, I say, to see this attempt to keep alive religious animosity; but I congratulate myself, as the agent of a Government which intends to act straightforwardly with all classes and parties, that when I leave Ireland I shall carry with me, not, indeed, the approval of such men as Paul Cullen, but the affectionate regard of the great majority of the people of Ireland."

AGRICULTURAL EDUCATION.—Mr. Fisher, of Waterford, has suggested to the Chief Secretary the advisability of establishing an agricultural college near Dublin, in the event of his project of erecting a Queen's College in Leinster being carried out. He expresses his belief that it would be of great advantage to a very large branch of Irish industry to consolidate the agricultural departments of the existing Queen's Colleges into one agricultural college, and to extend its range of studies, attaching to it a suitable farm to make it thoroughly practical. Sir Robert Peel, in acknowledging the communication, says that much good will result to the country from the ventilation of opinion upon the subject, and that some such plan as the one suggested might no doubt with mature consideration be advantageously grafted upon any future scheme for providing Leinster with the opportunities enjoyed in the other provinces.

THE YELVERTON CASE.—The exceptions taken by Mr. Brewster to Chief Justice Monahan's charge at the great trial in Dublin will shortly be argued before the full Court of Common Pleas. Mr. Whiteside and Mr. Serjeant Sullivan will appear for Mrs. Yelverton, while the same counsel as before will represent Major Yelverton. Although the arguments will be chiefly of a legal nature, they will, it is expected, excite considerable public interest. As regards the Scotch case, there is, it is said, no probability of a decision being given in it for at least a year or more. The evidence taken by the Scotch commission at Manchester was of such a conflicting nature that Mrs. Yelverton's advisers have decided on what, in Scotch legal phraseology, is termed "leading a counter proof." This will occupy considerable time, and will prevent any decision being given by the High Court of Session for a long time.

Scotland.

THE PRINCE CONSORT AND THE FREEMASONS.—The *North British Mail* states that the Duke of Atholl, as Grand Master Mason of Scotland, lodged a protest with the Prince Consort against his laying the foundation stones of the Post Office and Industrial Museum, on the ground that it was the province of the Grand Master Mason to perform that ceremony in the case of all public buildings. The Duke, it says, handed the protest to the Prince Consort at the station in Perth, when his Royal Highness passed through to Edinburgh to perform the ceremony.

THE EGLINTON MEMORIAL.—A public meeting was held a few days since in the County Buildings at Ayr, to consider a series of resolutions drawn up by a committee previously appointed at a private meeting, for founding a memorial in the county of Ayr to the late Earl of Eglinton. The Marquis of Ailsa took the chair, and the different resolutions were moved and seconded by Colonel Ferrier Hamilton, Mr. Oswald, of Auchincruive, Lord Ardmillan, and Major Hamilton, and were unanimously agreed to, after which a committee was appointed to take charge of the subscriptions. During the meeting it was stated that various proposals had been made as to the character of the memorial. The Marquis of Ailsa had proposed an educational institution; Major Hamilton had proposed a public park, and Lord Colville had suggested the foundation of a sailors' home in Ayrshire. The general opinion seemed to be that the only way to settle the question would be, when the funds were collected, to take the opinion of the majority of the subscribers. An influential meeting was held last week at Glasgow, the Duke of Hamilton in the chair, at which it was unanimously resolved to convene a meeting on an early day, with the view of adopting measures for obtaining subscriptions in Glasgow and its neighbourhood in aid of the memorial about to be raised in the county of Ayr. This meeting was held on Wednesday, when from 600*l.* to 700*l.* were subscribed.

Railways.

ACCIDENT ON THE OSWESTRY AND NEWTOWN.—On Saturday morning as a goods train was rounding one of the sharp curves between Abermule and Montgomery, the engine ran off the line and down an embankment of 10 feet. The driver was thrown to a considerable distance and dashed to pieces, and the stoker was crushed under the engine. Another man, who was on the engine, escaped with but a few bruises, and the guard, who was in the van, saved himself by jumping out as soon as he found the carriage had left the rails. It is said that the driver, who had on more than one occasion been warned for furious driving, had a very light train of empty trucks behind the engine, and was observed by many persons to be going too rapidly for safety. The engine was smashed to pieces, and the trucks and van more or less injured.

Law.

COURT OF EXCHEQUER.—(Sittings in Banco. Before the Lord Chief Baron and Barons Bramwell, Channell, and Wilde).—*Maden and Wife v. Catanach. Refusal of an Oath.*—This was an appeal from a decision of Mr. Christopher Temple, judge of the County Court of Rochdale, who refused to receive the evidence of the plaintiff's wife. It appeared that the plaintiff brought an action in the name of himself and wife to recover 25*l.*, the value of a pianoforte, which belonged to the latter prior to her marriage. The plaintiff's wife was a material witness in support of the case, but defendant's counsel objected to the reception of her testimony on the ground of want of religious belief, as she did not believe in the existence of a God or of a future state of rewards and punishments. It was contended on the other side that the evidence must be taken, as the witness herself did not object to be sworn, and it was not competent to defendant to make the objection, as a subject could not be deprived of her civil rights, however liable she might be to ecclesiastical censure and punishment from her want of religious faith. The County Court judge then examined the plaintiff's wife on the *voir dire*, and in reply to his questions she stated that she did not believe in the existence of a God, nor in a future state of rewards and punishments, but that she regarded her word as her bond and felt that she was bound to tell the truth for her fellow creatures. On these answers the judge refused to allow the witness to give evidence, and non-suited the plaintiffs, giving leave for an appeal to this court on the point of law. Mr. Craufurd now argued the case in support of the appeal, and contended that a witness who did not object to take the oath was not to be rendered incompetent as a witness at the option of the opposing party. Baron Wilde: Not if he does not believe in a Deity or in future rewards and punishments? Mr. Craufurd: Certainly. The Lord Chief Baron: If a person says he does not believe in God, how can you administer an oath to him? There is no case bearing on the proposition you offer to us. You are arguing on the supposition that the question as to her religious belief had not been put; but it has been put and answered. It would therefore be useless for us to send the case back to the judge now he knows that the witness does not believe in God. Mr. Craufurd: Such a thing ought not to deprive the plaintiff of her right, but go to her credibility. She was not sworn to speak the truth in all matters in the cause pending, but upon the *voir dire* only, and I contend that the judge had no right to examine her upon her religious belief before the usual oath was administered. The Lord Chief Baron: The last provision of the legislature on the subject, the 24th and 25th of Victoria, cap. 66, sect. 1, enacts, that if any person called as a witness in a criminal court, or required, or desirous of making any affidavit or deposition, shall refuse or be unwilling, from alleged conscientious motives, to be sworn, then he can make a solemn affirmation or declaration. This imports that the person should have some religious belief of some sort or another. Your proposition seems to be that a person having no religious belief is to give evidence after taking an oath ending with the words "So help me God." Mr. Craufurd: The present case is entirely a new one, and I ask your Lordships to decide upon it. Take the case of a man seeing a murder committed, and he a witness when the murderer is tried for that offence, is the murderer to be set at large because the principal witness has no religious belief? If he could not be sworn his declaration ought to be taken. In Scotland, a short time ago, an Esquimaux was called as a witness, and, having no religious belief, he was allowed to make a declaration. Baron Wilde: The misfortune there is that if a man did not speak the truth you had no means of punishing him. Mr. Craufurd: Mr. Taylor, in his book on evidence, cites a law report, on American authority, which I am unable to find, which lays down as a principle that you are to examine on a declaration in the event of a want of religious belief; and I take it for granted that Mr. Taylor agrees with him. The Lord Chief Baron: Although Mr. Taylor quotes the authority, he lays down his own opinion in accordance with the view taken by the learned County Court Judge. Baron Bramwell: Take the case of a child of tender years. It is customary to ask her questions about her religious instruction and belief before the oath is administered to her. Mr. Craufurd: That is rather to test her capacity and understanding. If the Court holds that it is absolutely necessary to administer an oath, then there is an end to the appeal. The Lord Chief Baron, in giving judgment, said:—We are all agreed that the proceeding of the judge of the county court was right according to the law and practice of this country ever since the law existed. The appeal, therefore, has failed. We are not here to make, but to administer the laws, and a party must be sworn by some religious ceremony, unless it be dispensed with by Act of Parliament, and in this case no Act of Parliament exists. The appeal was accordingly dismissed.

Sporting.

RACE FOR THE SIX-MILE CHAMPION'S BELT.—On Monday the race-grounds of Hackney Wick were thronged with people to witness the contest between Edward Mills, of Hackney, the holder of the Six Miles Challenge Champion Belt, and John Brighton, of Norwich, the four miles champion. Mills, it will be remembered, is the only pedestrian who has defeated the Seneca Indian, Deerfoot, in a level race, and as the two latter are again matched for 200*l.*, for eight miles, great interest was excited in the race. For the six miles the competitors had to make 41 circuits of the course. Mills took the lead at starting, but was passed before the second round by Brighton, who finished the first mile in 4 minutes 44 seconds. Mills then went in front, and maintained the lead during the second mile, which he finished in 5 minutes 8 seconds, fully 40 yards in front, the two miles having been run at the astonishing rate of nearly 13 miles an hour. At the end of the third mile, accomplished in about 15 minutes, the two men were shoulder to shoulder. Brighton then took the lead for two more rounds, and struggled manfully to maintain his advantage, but Mills again rushed away from him in the 23d round. Brighton tried hard to live the pace, when nature gave way, and he was compelled to succumb, much exhausted, at the 25th round, through a swelling in his left side under the heart, Mills, at a much diminished speed, finishing the four miles in 25 minutes [illegible] seconds, and running the remaining distance at his ease.

THE TEN MILE RACE AT PORTSMOUTH.—On Thursday [illegible], a great ten-mile foot race for 50*l.*, 40*l.* to the first man and 10*l.* to the second, took place at the East Hants Cricket-ground, Southsea, near Portsmouth, in the presence of more than 4000 persons. The competitors were Deerfoot, Mills, the six miles champion; Brighton, the four miles champion; and H. H[illegible]ard, of local celebrity. Deerfoot took the lead at starting, but Mills overtook and passed him in the third round, and was thirty-yards in advance at the close of the fourth mile. The two passed each other again and again, Deerfoot being ahead at the end of the fifth mile. All this time Brighton was well up, and apparently husbanding his strength to take advantage of the least falling off of the two leading men, and occasionally giving a specimen of his speed. He, however, never got in the front position, and the struggle was entirely between Deerfoot and Mills, the former being first at the finish of the sixth mile. They passed and repassed each other frequently; but at the end of the seventh mile the Indian was again first by a couple of yards. Mills then recovered his position, and was also first at the close of the 8th mile. At the finish of the 9th mile Deerfoot was four yards in advance. On entering the 10th and last mile the Indian put out his strength, and though the ground was very heavy, ran in a winner by seven yards only, Mills being much exhausted. Brighton did not give up till nine miles and a half had been done, when he was 50 yards in the rear. The race was run in 55 minutes 15 seconds. The running of Mills was much praised for its perfect style; Deerfoot ran in a loose shambling manner, half-open mouth and drooping lower jaw, and with no "style," as it is sportingly termed, about him. He had, however, an immense advantage over both his competitors in his greater length of stride.

KNUR AND SPELL MATCH FOR THE CHAMPIONSHIP.—On Saturday afternoon a contest at knur and spell, for the championship of England and 50*l.* a side, took place on the racecourse at Doncaster between William Sutcliffe, better known as "Bill [illegible]," near Bradford, and Kirk Stables, of New Wortley, near Leeds, in the presence of nearly 2000 spectators, principally persons brought by special train from Bradford, Leeds, and Sheffield. The two men had been pitted against each other several times previously, but the last contest was at Leeds, for 50*l.* a side and championship, when Stables was declared the winner by 3 scores only. In consequence of the immense number of spectators present at the Leeds contest, and the inconvenience resulting from so great a crowd, it was decided to play this return match at Doncaster. Sutcliffe for some time has held the belt, but on this occasion he appeared to feel conscious that his opponent was superior to him, for at the 23d rise he drew his spell and declined the contest any longer. His backers were greatly exasperated at this, and still more so when he left the arena, and could not be induced to resume the play. The referee suspended the contest for seven minutes to give him the opportunity of continuing the game, but at the end of that time, as he did not appear, Stables continued it alone, and at the end of 30 rises was declared the winner and consequently the champion, his total score being 2[illegible]. At the time when Sutcliffe retired he was but nine behind Stables, the score being 214 to 223. The match excited great interest, and a good deal of money changed hands.

Obituary.

THE KING OF PORTUGAL died on Tuesday at Lisbon from an attack of ague and typhus fever, in his 25th year. His most faithful Majesty Dom Pedro V., King of Portugal and Algarves, a Knight of the Garter, and a Knight Grand Cross of the Legion of Honour, was born in 1837, and was the eldest son of Prince Ferdinand Augustus Anthony Francis of Saxe-Coburg, by Maria II. da Gloria, Queen of Portugal, and received at his baptism 14 Christian names, "Pedro Maria Fernando Miguel Rafael Gabriel Gonzaga Xavier João Antonio Leopoldo Victor Francisco d'Assise Julio Amelio. His father is the Prince consort's first cousin, and his paternal uncle, Prince Augustus, married a daughter of King Louis Philippe and Queen Marie Amélie of France. The King of the Belgians and the late Duchess of Kent were his great uncle and great aunt, and the Emperor of Brazil was his uncle. He lost his mother when he was only 16 years of age, and became King in 1853, but did not assume the reins of Government till 1855. In 1858 he married the Princess Stéphanie Frederica Wilhelmina, daughter of Prince Antony Charles of Hohenzollern-Sigmaringen, who died almost suddenly of diphtheria in July, 1859, leaving no issue. It has recently been rumoured that his Majesty was about to marry a daughter of the King of Italy, but it has of late died away. In 1858 the King was invested with the order of the Garter at Belem, the Marquis of Bath and Sir Charles Young being her Majesty's Plenipotentiaries on the occasion. As his Majesty has left no issue the crown of Portugal descends to his next brother, Dom Louis Philippe Maria Fernando Pedro d'Alcantara Antonio Miguel Raphael Gabriel Gonzaga Xavier Francisco d'Assise John Augustus Jules Volfando of Braganza and Bourbon, Duke of Oporto and Duke of Saxony, a captain in the Portuguese navy, who was born in 1838, and is consequently in his 24th year.

GENERAL SIR HOWARD DOUGLAS, BART., G.C.B., died at Tunbridge Wells on Saturday, in his 86th year. He was the third son of the first baronet, and succeeded to the title on the death of his brother in 1809. He entered the army in 1794, served with his regiment in Portugal and Spain in 1808 and 1809, and was present at Corunna, for which he received the war medal and one clasp. He also took part in the Walcheren Expedition, and was present at the siege and bombardment of Flushing. Returning to the Peninsula in 1811, he remained there till the

[illegible] of 1812, and for his services received the Cross of Charles III. [illegible] He became a general in the army in 1851, since which time he has been colonel of the 15th Foot. He represented Liverpool in Parliament from 1842 to 1847, after having been an unsuccessful candidate in 1832, and again in 1835. He was Governor of New Brunswick from 1823 to 1829, and Lord High Commissioner of the Ionian Islands from 1835 till 1840; was a Groom of the Bedchamber to the late Duke of Gloucester, and received the degree of D.C.L. from Oxford in 1829. In recognition of his military services he was created a Knight Grand Cross of St. Michael and St. George in 1835, and a Knight Grand Cross of the Bath in 1841. He is succeeded by his son Robert Percy.

Sir John Cæsar Hawkins, Bart., died at Frenchay, on Saturday, in his 80th year. He was born in 1782, and was the second son of Mr. John Hawkins, and grandson of Sir Cæsar Hawkins, first baronet, Sergeant-Surgeon to the King. He was educated at Eton and Oxford, and succeeded his brother as third baronet in 1793. He married in 1804, the eldest daughter of Mr. William Surtees, of Hedley, Northumberland, by whom he had issue nine sons and four daughters. He is succeeded in his title and estate by his grandson, John Cæsar (son of his eldest son by the daughter of Mr. Thomas Bourke Ricketts, of Combe House, Hereford), who was born in 1837.

Sir Thomas Butler, Bart., of Ballintemple, in the county of Carlow, died on the 8th inst., in his 78th year. He is succeeded in the baronetcy by his son, Richard Pierce, who was born in 1813, and married in 1855 the daughter of Thomas Dickson, Esq., of Hermitage, Durham. The first baronet sat for Carlow, in 1639, and the county was represented continuously by the family from 1692 to 1800.

Thomas Slingsby Duncombe, M.P. for Finsbury, died on Wednesday at Lancing, Sussex. He was the son of Mr. T. Duncombe, of Copgrove, near Boroughbridge, Yorkshire, by the daughter of the Right Rev. Dr. Hinchcliffe, Bishop of Peterborough. He was born in 1797, and served for some time in the 4th Dragoons, which he quitted with the rank of Lieutenant shortly after the close of the war. He entered the House of Commons first in 1826, as member for Hertford; and was re-elected in 1830, and again in 1831. In 1832, on the passing of the Reform Bill, he lost his seat, and remained out of Parliament for two years. In 1834 he was elected for the new borough of Finsbury, which he has represented continuously to the present time. Mr. Thomas Duncombe was a strenuous supporter of triennial Parliaments, secular education, the ballot, separation of Church and State, and other principles of the ultra-Radical party. He had been in failing health for some time, and was in his 64th year.

Mr. J. H. H. Foley, M.P. for East Worcestershire, died at his residence at Prestwood, near Stourbridge, on Wednesday evening. He was a Liberal in politics, and had represented East Worcestershire for 14 years, previous to which he sat for Droitwich, now represented by Sir John Pakington.

M. Isidore Geoffroy De Saint Hilaire, a celebrated French naturalist, died in Paris on Sunday last. He was born in Paris in 1805, and was the son of the celebrated Stephen Geoffroy de Saint Hilaire, who died in 1844. His father's reputation inspired him from his earliest years with a love for natural history. In 1826 he published a Mémoire on the Mammalia, and at the age of 27 was elected a member of the Academy of Science in the room of M. Latreille. He afterwards became successively Professor of Zoology at the Museum, Director of the Menagerie, Inspector-General, and Counsellor of the University. In 1845 he was appointed officer of the Legion of Honour. As a zoologist he extended the ideas and experiments of his father, his especial aim being the multiplication of the number of species useful to man for food or labour. He founded the "Imperial Zoological Society of Acclimatation," of which he was elected president in 1855. In connection with [illegible] he is well known in England as having proposed, and endeavoured practically to carry out, the use of horseflesh as an article of food. M. de St. Hilaire's works on natural history are very numerous; among them may be specified "Leçons de Tératologie" (1836), "Leçons de Mammologie" (1836), "Leçons de Zoologie Générale" (1848) "Histoire Générale et Particulière des Anomalies de l'Organisation chez l'Homme et les Animaux" (1832-6), "Histoire Naturelle des Insectes et des Mollusques" (1841), "Vie, Travaux et Doctrines Scientifiques d'Etienne Geoffroy Saint Hilaire" (1847), "Report to the Minister of Agriculture on the Domestication or Naturalisation of Useful Animals," &c. Conjointly with M. Brongniart and other scientific men, he edited the natural history for Admiral Dupetit Thouars's voyage round the world.

The Rev. Professor Cumming, M.A., Professor of Chemistry in the University of Cambridge, died at his living at North Runcton, Norfolk, on Sunday last, in his 85th year. He was the Senior Professor of the University, having been elected to his office in 1815. He was entered at Trinity College in 1797, and took his degree in the first year of the present century. In due course he was elected to a Fellowship and succeeded to the rectory of North Runcton more than 40 years ago, but he resided much in the University, where he regularly delivered his lectures, and discharged the duties of his office up to last year.

Wills.—The will of Sir William Cubitt, F.R.S., has been sworn under 90,000*l.*; Rev. J. W. Cunningham, rector of Harrow, 12,000*l.*

Miscellaneous.

The Niger Expedition.—By the West African mail we have satisfactory news of the long-lost African explorer, Dr. Baikie, regarding whose fate there has been so much speculation. It will be remembered that Dr. Baikie was for some time attached to the Niger expedition, and nothing has been heard of him for upwards of two years. During this period the fate of himself and his assistant has been a mystery, but it was generally believed that he had either perished from the sickness and fatigue incident on his explorations, or had fallen a victim to some of the savage tribes of the country. We now learn that he and his assistant have at last been discovered alive and well, after a residence of two years among the natives, during which time they were without communication with Europeans. During the two years' sojourn among the natives Dr. Baikie enjoyed tolerably good health, and likewise made some interesting researches in connection with the exploration of the Niger. The last advices left Dr. Baikie at the confluence of the river. The exploring steamer Sunbeam and the other vessels engaged in the expedition had returned to the mouth of the Niger, after having been up to the confluence. Her Majesty's ship Espoir accompanied the vessel for protection.

Heidelberg Castle.—A sad misfortune seems to be impending over the magnificent old ruins of Heidelberg Castle, in consequence of the railway tunnel which is constructing through the hill upon which they stand. Since the commencement of the works several rents and fissures, some of them serious, have made their appearance along the whole length of the castle walls. In the lower parts of the structure, as in the chapel, and especially in the cellar with the great tun, the injuries are more considerable than in the upper apartments. With a view to inquire into the cause and extent of the damage, and the prevention of further mischief, a commission has been convened by Herr von Bayer, the conservator of Baden antiquities.

BIRTHS.—On the 4th inst, at 13, Hereford Street, Park Lane, the Marchioness of Caermarthen, of a son—1st inst, at Rutland Gate, the Lady William Compton, of a daughter—7th inst, at Eaton Square, Lady Emily Cavendish, of a daughter—9th inst, at Deer Park, Devon, the Lady Frances Lindsay, of a son—1st inst, at Aberdeen, the Hon. Lady Abercromby, of Birkenbog and Forglen, of a son—5th inst, at 14, Oxford Square, the Hon. Mrs. Slingsby Bethell, of twin sons—11th inst, at Devonshire Place, Portland Place, W., Lady Aitchison, wife of General Sir John Aitchison, of a son—7th inst, at 2, Imperial Square, Cheltenham, the wife of Colonel Clement A. Edwards, C.B., 49th Regiment, of a son—14th inst, at 2, Imperial Square, Cheltenham, the wife of Col. Edwards, C.B., 49th Regiment, of a son.

MARRIAGES.—On the 6th inst, the Rev. G. E. Prescott, rector of Digswell, Herts, to Caroline Mary Westby, second daughter of the late N. Westby, Esq., and of the Hon. Mrs. Westby, of 9, York Gate, Regent's Park—4th inst, at the British Embassy, Paris, William Heathcote, Esq., of Cundal Manor, Yorkshire, and Hyde Park Gate, South Kensington, to Ramona Garcia, eldest daughter of the late Don José de Torres, Marquis de Villamejor—6th inst, at Monks' Risborough Church, Bucks, the Rev. Edward Duncan Hall, M.A., rector of Coln St. Denis, in the county of Gloucester, youngest son of the late George William Hall, D.D., Master of Pembroke College, Oxford, and Canon of Gloucester Cathedral, to Sophia Elizabeth, fourth daughter of the Rev. H. W. J. Beauchamp, rector of Monks' Risborough—6th inst, at St. Mary's Church, Ripley, Surrey, Thomas Elliott Hughes, Captain H.M. Bengal Artillery, to Rosalie Jane, widow of the late Henry Lee Pennell, Esq., of Bombay, and only surviving daughter of the late Major George Walton Onslow, Madras Artillery, Brigadier Commanding the Nizam's Contingent—7th inst, at Dawlish, the Rev. Gilbert Lyon, B.A., son of Gilbert Lyon, Esq., M.D., Clifton, to Albinia Mary, daughter of William Fripp, Esq., Magistrate and Deputy Lieutenant of the county of Gloucester.

DEATHS.—On the 3d inst, at Paris, the infant son of Baron and Baroness Alphonse de Rothschild—28th ult, at Haughland, near Elgin, William Leith Hay, Esq., second son of Sir Andrew Leith Hay, of Ranoes, aged 42—5th inst, Diana Mainwaring, of Nantwich, Cheshire, sister of the late Sir H. M. Mainwaring, Bart., aged 74—26th ult., at Northampton, of paralysis, William John M'Mahon, Esq., second son of the late Sir William M'Mahon, Bart., formerly Master of the Rolls in Ireland—29th ult, at Madeira, Robert Newcomen Gore Booth, Esq., eldest son of Sir Robert Gore Booth, Bart., of Lissadel, Sligo, Ireland—28th Sept., at Gwalior Fort, India, Lieutenant Edmund Powerscourt Pakenham, 52d Light Infantry, fourth son of the late Lieutenant General the Hon. Sir Hercules Pakenham—30th Sept., at Nynee Tal, Himalayas, Captain Frederick Southcote Seale, Royal Artillery, youngest son of the late Sir John Henry Seale, Bart., of Mount Boone—7th inst, at Clifton, Miss Smythe, daughter of the late Sir Edward Joseph Smythe, of Acton Burnell Park, Shropshire, and sister of the present baronet—6th inst, at his residence, 26, Dorset Place, Dorset Square, William Stevens Richardson, Esq., youngest son of the late Sir John Richardson, Knt., aged 46—31st ult, at her residence, 4, Bladud's Buildings, Bath, Mrs. Martha Wingrove, relict of Major-General George Prescott Wingrove, R.M., aged 81—6th inst, in London, suddenly, Lieut.-Colonel James Ward, late of her Majesty's 81st Regiment, aged 63—7th inst, at Noirmont Manor, Jersey, Henriette Celine Mathilde, widow of the late J. L. Nixon, Esq., formerly Lieutenant and Captain Grenadier Guards, aged 62—2d inst, at Leaton Knolls, Salop, Charlotte Sophia, youngest daughter of the late Francis Lloyd, of Domgay, in the county of Montgomery, and Leaton, in the county of Salop, Esq., and M.P. for the former county—5th inst, at his residence, Tremerton House, Clapham Park, James Porteous, Esq., for many years a member of her Majesty's Hon. Privy Council for the Island of Jamaica, and Custos of the parish of St. Andrew's there, aged 53—7th inst, at his mother's residence, Tubney House, near Abingdon, Berks, the Rev. John Wood Kewley, M.A., Brasenose College, Oxford, aged 37—7th inst, at Preston Vicarage, the Rev. Henry Cripps, vicar of Preston All Saints, and of Stonehouse, Gloucestershire, aged 73—10th inst, in the Close, Norwich, the Rev. Edward Hibgame, vicar of Fordham, Cambridgeshire, and formerly Fellow and Tutor of Jesus College, Cambridge, aged 85—9th inst, the Rev. Peter Aubertin, rector of Chipstead, Surrey, aged 86—10th inst, at the residence of his son, Worldham Rectory, Hants, the Rev. Hunter Francis Fell, M.A., rector of Oulton, Suffolk, aged 70—30th ult, at Thirsk, the Rev. Robert James Serjeantson, vicar of Snaith, aged 58—11th inst, at Bilton, Warwickshire, the Rev. William James, Rector of Bilton and Rural Dean, aged 74—10th inst, at Malta, the Rev. J. H. J. Morison, late Curate of Chingford, Essex.

Markets.

COVENT GARDEN, Nov. 16.

Supplies, on the whole, have been rather less than those of last week, though prices have been about the same. Home grown produce is, however equal to the demand, with perhaps the exception of Pears, which are chiefly Continental. Grapes and Pine Apples are abundant. Of Cauliflowers there is still a fair supply. Potato markets have unaltered since our last report. Cucumbers, though scarce, are sufficient for the demand. Tomatoes are getting over. Cut flowers chiefly consist of Orchids, Chrysanthemums, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Oranges, per 100, 6s to 14s
Grapes, per lb., 1s 6d to 4s	Lemons, per 100, 6s to 10s
Melons, each, 1s to 3s	Nuts, Cob, per pound., 2s to 2s 6d
Pears, per doz., 1s to 6s	Walnuts, per 100, 2s
Apples, per doz., 6d to 1s	

VEGETABLES.

Cauliflowers, each, 2d to 6d	Artichokes, each, 6d to 8d
Broccoli, per bundle, 1s to 1s 3d	Beet, per doz., 1s 6d
French Beans, per sieve, 2s 6d to 3s 6d	Celery, p. bundle, 1s 6d to 2s
Cabbages, do., 1s 3d to 1s 6d	Onions, pickling, p. ½ sieve, 4s 6d
Potatoes, p. ton, 60s to 75s	Tomatoes, p. doz., 1s to 6s
— per cwt., 4s to 8s	Shallots, per lb., 5d to 10d
Turnips, per bunch, 2d to 4d	Garlic, per lb., 6d to 8d
Carrots, do., 4d to 6d	Endive, p. score, 1s 6d
Spinach, p. sieve, 1s to 2s	Horse Radish, p. bun., 1s 6d to 4s
Cucumbers, each, 6d to 9d	Mushrooms, p. pott., 2s to 3s
Veg. Marrows, p. doz, 1s to 1s 6d	Parsley, p. 12 bunches, 3s to 4s
	Savory, per bunch, 2d to 4d

HAY.—Per Load of 36 Trusses.

Smithfield, Thursday, Nov. 14.

Prime Meadow Hay	80s to 90s		Clover, old	90s to 120s	
Superior do.	95	105	New Clover	—	—
Inferior do.	40	55	Do second cut	80	105
New do.	—	—	Straw	28	34
Rowen	—	—			

Davis & Co.

Cumberland Market, Thursday, Nov. 14.

Sup. Meadow Hay	98s to 107s		Inferior Clover	84s to 100s	
Inferior do.	70	90	New do.	—	—
New do	—	—	Straw	34	40
Superior Clover	110	118			

Joshua Baker.

Whitechapel, Thursday, Nov. 14.

Fine Meadow Hay	90s to 100s		Fine 1st cut Clover	110s to 118s	
Inferior do.	60	80	Inferior do.	95	105
Prime New Hay	—	—	New 2d cut	95	105
Inferior	—	—	Inferior do.	—	—
Straw	28	32	New 1st cut	—	—

HOPS.—Borough Market, Friday, Nov. 15.

Messrs. Pattenden & Smith report a steady consumptive demand for both new and old Hops at firm rates. Currency:—

Mid and East Kent	£8 8	to £12 0
Weald Kent	7 10	— 9 0
Sussex	7 7	— 8 10

POTATOES, Southwark, Monday, Nov. 11.

During the past week the arrivals both coastwise and by rail have been more plentiful, trade much the same. The following are this day's quotations:—Kent and Essex Regents, per ton, 110s. to 130s.; Yorkshire do., 100s. to 125s.; Lincolnshire do., 90s. to 110s.; Scotch do., 60s. to 100s.; French Whites, 100s. to 110s.

BRITISH WOOLS.—London, Friday, Nov. 15

Our trade continues without animation, and previous rates maintained for orders for immediate consumption.

	s. d.	s. d.		s. d.	s. d.
South-down Hoggets	1 4	to 1 5	Leicest. Wethers	1 4	to ..
Half-bred ditto	—	1 6	Ditto Hoggs	1 5	— ..
Down Ewes	1 4	— 1 4½	Combing Skins	1 0	— 1 5
Kent Fleeces	1 5	— ..	Flannel Wool	1 0	— 1 5
			Blanket ditto	0 6	— .

Colonial Wool Sales.—These sales proceed without animation; some quantity has been withdrawn in consequence of the prices not meeting the view of the importers. The Cape wool especially seems to drag heavily on.

METROPOLITAN CATTLE MARKET.

Monday, Nov. 11.

We have a larger supply of Beasts, but choice kinds are not cheaper. The favourable weather causes a demand, and there is very little alteration from Thursday's quotations. Sheep are more plentiful, and trade on the average not quite so good; yet best quality maintain late rates. Calves are selling as on Thursday. From Germany and Holland there are 1730 Beasts, 7100 Sheep, and 114 Calves; from Ireland, 1300 Beasts and 700 Sheep; and 3650 from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c.	4 10	to 5 0	Best Long-wools	5 0	— 5 4
Best Short-horns	4 6	— 4 8	Do. Shorn	..	— ..
2d quality Beasts	3 8	— 4 0	Ewes & 2d quality	4 4	— 4 6
Best Downs and Half breds	5 6	— 5 8	Do. Shorn	..	to ..
Do. Shorn	..	— ..	Lambs	..	— ..
			Calves	4 4	— 5 2
			Pigs	4 4	— 5 4

Beasts, 6250; Sheep & Lambs, 22,890; Calves, 140; Pigs, 410.

Thursday, Nov. 14.

Our supply of Beasts is not large, but quite equal to the demand. Trade is dull at Monday's quotations. Although the number of Sheep is very small, it exceeds the demand. Prices are rather lower than on Monday last. There is no alteration in the Calf trade. Our foreign supply consists of 160 Beasts, 1400 Sheep, and 120 Calves. Milch Cows, 95.

	s d	s d		s d	s d
Best Scots, Herefords, &c.	4 10	to 5 0	Best Long-wools	5 0	to 5 2
Best Short-horns	4 6	— 4 8	Do. Shorn	..	— ..
2d quality Beasts	3 8	— 4 0	Ewes & 2d quality	4 2	— 4 6
Best Downs and Half breds	5 4	to 5 6	Do. Shorn	..	— ..
Do. Shorn	..	to ..	Lambs	..	— ..
			Calves	4 4	— 5 2
			Pigs	4 4	— 5 4

Beasts, 905; Sheep & Lambs, 4050; Calves, 160; Pigs, 170.

COAL MARKET.—Nov. 13.

Walls End Tees, 19s. 9d.; Walls End Trimdon Hartlepool, 19s. 3d.; Walls End Hartlepool, 19s. 6d.; Walls End South Kelloe, 19s. 6d.; Walls End Heugh Hall, 19s.; Walls End Kepier Grange, 19s. 3d.; Walls End Gosforth, 17s. 9d.; Walls End Hunwick, 14s. 6d.; Carr's Hartley, 16s. 6d.; Tanfield Moor, 13s.; Buddle's Hartley, 16s. 6d.; Davidson's Hartley, 16s. 6d.; Howard's Hartley, 16s. 6d.—Ships at market, 50.

MARK LANE.—Monday, Nov. 11.

The supply of Wheat from Essex and Kent to this morning's market was very small, and commanded the prices of this day se'nnight. The attendance was moderate, and business in foreign limited, but our quotations are well supported. Malting Barley is a slow sale at barely last week's rates; grinding, and Beans and Peas are unaltered in value. Fine old Oats bring full rates; new are difficult to sell, and rather cheaper. Flour is a steady sale at our quotations.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk..White	50—66	Red	50—61
— — fine selected runs..ditto	61—66	Red	54—64
— — Talavera	64—72		
— Norfolk	—	Red	—
— Foreign	48—76		
Barley, grind. & dist., 26s to 28s..Chev	36—41	Malting	35—38
— Foreign..grinding and distilling	27—5[illegible]	Malting	36—40
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire—Potato	23—28	Feed	20—24
— Irish ..Potato	26—28	Feed	20—24
— Foreign........Poland and Brew	20—24	Feed	19—24
Rye	36—38	Foreign	—
Rye-meal, foreign	—		
Beans, Mazagan....35s to 37s...Tick	36—40	Harrow	36—39
— Pigeon ......38s — 42s..Winds.	—	Longpod	—
— Foreign ..Small	42—52	Egyptian	—
Peas, white, Essex and Kent..Boilers	40—44	Suffolk	40—46
— Maple ....43s to 45s ......Grey	39—41	Foreign	35—38
Maize ..White	—	Yellow	—
Flour, best marks delivered..per sack	50—55		
— 2d do ..ditto	40—50	Country	40—50
— Foreign ..per barrel	28—36	Per sack	43—58

Friday, Nov. 15.

During the week torrents of rain have fallen accompanied by heavy gales of wind from the S.W., S.E., and N.E. The slight

improvement in the Wheat trade last week has been followed during the present by inactivity and even a slight decline in several of the principal markets. Malting Barley in several markets was quoted 1s. per qr. lower, and Oats were also rather easier of purchase in some. Beans and Peas generally maintained their previous value excepting in Liverpool and Glasgow, where they are quoted rather lower. Our quotations for Flour are barely supported, Barrels continue scarce. Since Friday last 48 vessels have been reported off the coast. The floating sale has been quiet, and prices were maintained with the exception of Maize, which declined in value at the beginning of the week, but has since been in better request. In Paris (Nov. 14), the transactions in Wheat and Flour were extremely limited, but holders show no inclination to submit to a further decline, and are consequently less pressing with their offers. The four marks closed firm last night; delivery this month is quoted equal to 52s. 6d. per 280 lbs. The arrivals of English Wheat and Barley this week have been to a fair extent, of foreign large, small of English Oats, and moderate of foreign. There was again only a thin attendance at this morning's market; trade in Wheat, both English and foreign, was firm at Monday's prices; transactions in the latter continue to be limited. Spring Corn of all descriptions is a slow sale at Monday's quotations.

ARRIVALS FROM Nov. 11 to Nov. 15.

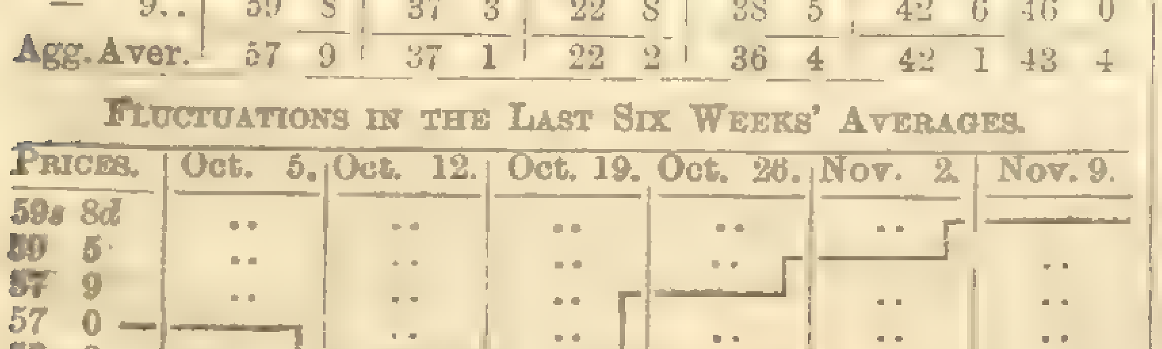
	Wheat.	Barley.	Oats.	Flour.
English ..	2280 qrs.	3170 qrs.	370 qrs.	7910 sks.
Irish	— „	— „	1080 „	— „
Foreign ..	28240 „	12790 „	14390 „	— „ 14890 brls.

LIVERPOOL, Tuesday, Nov. 12.—At this morning's market millers and dealers showed no disposition to buy either Wheat or Flour beyond their most immediate requirements, and the prices current last market day were only obtainable in retail. Indian Corn found buyers at a reduction of 6d. per qr., which was freely conceded for parcels ex ship. Oats were the turn cheaper, but Oatmeal experienced no change. Beans, Peas, and Barley each remain steady at late rates. The market closes firm, but the amount of business passing is in a very limited compass.

FRIDAY, Nov. 15.—The market has been moderately attended, and there has been very little done in Wheat and Flour since Tuesday, and prices remain as then quoted. Oats and Oatmeal rather cheaper. Beans and Peas unchanged. Indian Corn unchanged.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Oct. 5..	57s 0d	37s 4d	22s 6d	35s 4d	42s 4d	40s 4d
— 12..	56 3	37 4	21 10	37 3	41 8	42 11
— 19..	56 3	36 6	21 6	34 9	41 10	41 10
— 26..	57 9	36 7	21 11	35 1	42 3	44 8
Nov. 2..	59 5	37 1	22 7	37 5	42 3	44 4
— 9..	59 8	37 3	22 8	38 5	42 6	46 0
Agg. Aver.	57 9	37 1	22 2	36 4	42 1	43 4

FLUCTUATIONS IN THE LAST SIX WEEKS' AVERAGES.



BUTTER MARKET.—Nov. 15.

Best Fresh Butter .. .. 16s. per dozen lbs.
Second do. do. .. .. 15s. „ „
Pork, 4s. 4d. to 5s. 0d. per 8 lbs.

WANTED, a PARTNER, who is experienced in the general routine of a NURSERY and SEED BUSINESS, in the best locality South of London, near a junction and two other Railway Stations. The Nursery consists of nearly 6 acres, containing a large extent of glass, a young and general stock of Trees, Shrubs, Roses, &c., and has been established more than 30 years. Capital required about 1000l.; or arrangements can be made for disposing of the whole concern, if desired.—Application by letter to A. B. C., care of Messrs. Hurst & McMullen, Seedsmen, 6, Leadenhall Street, London, E.C.

GOOD SERVANTS.—The difficulty of procuring these is so great, that a SCHOOL has been opened in London under careful management to teach Young Women of the better class to become COOKS and KITCHENMAIDS, and places are obtained for them. No payment is required until they have obtained situations.—Full particulars on application to the Matron School of Cookery, 90, Albany Street, Regent's Park, London, N.W.

WANTED, a GARDENER, married, age not over 35; without young children. He must know something of Husbandry; Wife to attend small Dairy, and do House-washing. Terms for both 1l. 1s. per week and house partly furnished, rent-free; to find their own fuel and washing materials.—Captain PEARSE, Beaumaris, North Wales.

WANTED, an UNDER GARDENER.—A Young Man from the Country who understands Cows and Poultry would be preferred.—Apply by letter to A. B., Post Office, Wandsworth, S.W.

Farm Bailiff.

WANTED, a WORKING BAILIFF and his WIFE. The Man to Manage a Small Farm of Clay Soil on modern principles, and to Superintend Road Making, Drainage, Woods, &c. If the Wife can Cook and understands the management of a gentleman's house, it will be an advantage. Young children objected to.—Address, stating ages, and number and ages of children (if any), to B. C., at Messrs. Layton's, 150, Fleet Street, London, E.C.

To Farm Bailiffs, Foremen, and Shepherds.

WANTED, to proceed to Canada West, an intelligent and practical HEAD BAILIFF or MANAGER, to take charge of the Home Farm; he must have a thorough knowledge of the most approved modern Farming, and of the Management and getting up for Show of high-bred Shorthorns and Sheep; must be a married man, and the Wife competent to manage the Farm House after the Yorkshire system, and provide for the Farm Labourers with comfort, prudence, and economy.

An UNDER BAILIFF or FOREMAN, married, with a good knowledge of Farming, and the care of Stock; to take charge of a Farm and Stock similar to, and situated a short distance from the above.

A SHEPHERD who has had good experience as Under Shepherd with first-class Cotswold or Leicester flocks, and well understands their management and getting up for show.

None need apply for either of the situations, but such as naturally take a deep personal interest and pride in all entrusted to their care, and who are willing to make themselves generally useful.—Address, with full particulars, M. L., Leathwait & Simmons, 1, Pope's Head Alley, Cornhill, E.C.

WANTED, a TRAVELLER and SHOPMAN.—One experienced in both branches. The highest testimonials required.—Address, stating age, to A. B., Hurst & McMullen, 6, Leadenhall Street, E.C.

WANTED, a SHOPMAN or CLERK, at W. MAULE & SONS' Nurseries, Bristol.

WANTED, a SHOPMAN.—Must be able and willing to assist at anything, and understand the Retail Trade. State age, wages, qualification, &c.—J. H. COTTRELL, 15, Bull Ring, Birmingham.

WANTED, a SHOPMAN in a County Town, fully acquainted with the Retail Seed Trade, and a clever Salesman. Must write a good quick hand, as he will be required occasionally to assist with the Books.—Apply A. B., Messrs. Noble, Cooper, & Bolton, Fleet Street, London, E.C.

WANTED, a SHOPMAN about 20 years of age; must be steady and industrious, and have a good knowledge of the Retail Trade; he must also have some knowledge of Plants.—Apply, stating wages, references, &c., to EDWARD TAYLOR, Seedsman and Florist, Malton, Yorkshire.

WANT PLACES.—Letters to be Post Paid.

To Noblemen and Gentlemen contemplating Remodelling their Parks and Gardens.

JOHN GRIBBINS having just completed his engagement at the Royal Horticultural Society's Gardens, South Kensington, where he has been employed for the last 18 months in carrying out Mr. Nesfield's Designs in Embroidery, &c., is desirous of treating with any one requiring thorough practical capability, having had extensive and varied practice for the last 28 years in every branch appertaining to Horticulture. His works may be seen as above, and also at the Earl of Dudley's, Whitley Court; the Earl of Craven's, Ashdown Park, Farnham; Royal, Slough; at Dorking in Surrey; the Palace Gardens, Kensington; besides many other places, executed under Mr. Nesfield, the eminent Landscape Gardener, to whom he is kindly permitted to refer. J. G. having been successful in obtaining the assistance of Mr. NEWTON, Estate Improver, F.R.H.S., will be enabled to give Estimates for Alterations, &c., &c., on application to JOSEPH NEWTON, Estate Improver and Landscape Gardener, 30, Eastbourne Terrace, Hyde Park, W.

MANAGER, BOOK-KEEPER, CORRESPONDENT.—A practical Gardener who has the Management of a considerable Nursery Business will be free, in some months. Twenty-five years in the Trade. Extensive connections in all parts of the world where Plants and Seeds are sent to.—A. M., *Gardeners' Chronicle* Office, W.C.

GARDENER (HEAD).—Age 41, married, two children, ages 11 and 10 years; is leaving his present employer (with whom he has been more than 11 years, and from whom an unexceptional character can be obtained) on account of the Country Residence being discontinued. Is thoroughly practical in his profession, and would prefer a situation where a succession of Fruits, Flowers, &c., is required. —B. W., Mr. Aucutt, Post Office, Leyton, Essex, N.E.

GARDENER (HEAD).—Age 39, married; understands his business in all its branches, has lived with his present employers nine years, who will be pleased to answer any inquiries as to ability, &c.—E. COLE, Whitchurch, Hants.

GARDENER (HEAD).—Age 29, single; has a thorough knowledge of Vines, Stove and Greenhouse Plants, Early and Late Forcing. Good character and reference. —H. M., 5, Albion Place, High Road, Lee, Kent, S.E.

GARDENER (HEAD).—Age 27, single; late Gardener to a well-known baronet; a thoroughly practical man; fully understands Early and late Forcing of all kinds of Fruit, Flowers, and Vegetables, as also the management of Kitchen and Flower Gardens, &c. Unexceptionable references.—A. B., 32, Crown Square, Crown Street, Liverpool.

GARDENER (HEAD).—R. DALRYMPLE, Gardener to the late C. Hanbury Leigh, Esq., wishes to recommend his Foreman (age 30) to any nobleman or gentleman in want of a Head Gardener, as he can give him the highest testimonials as to ability and trustworthiness; is leaving in consequence of some alteration in the establishment.—Pontypool Park, Monmouthshire.

GARDENER (HEAD).—Age 36, married; great experience in Forcing Fruits, Flowers, and Vegetables, Kitchen and Flower Gardens; Erection and Heating Hot-houses, Improvement of Pleasure Grounds, &c. Five years' good character.—S. S., Mr. Veitch, Exotic Nursery, King's Road, Chelsea, S.W.

To Noblemen and Gentlemen.

GARDENER (HEAD).—Age 40, married; has a thorough practical knowledge of the Cultivation of Pines, Vines, Peaches, Melons, and Cucumbers, also the Management of Stove, Orchids, and Fern Houses. Has a Son (age 17) that thoroughly understands Stove Plants, Orchids, Ferns, also Greenhouse Plants. Wages requested 1l. per week, with house and firing. Can have two and a half years' unexceptionable character from last situation, also can be highly recommended by three other gentlemen.—A. B., Mr. Manning, Bookseller and Stationer, 10, Claremont Place, Hornsey Road, N.

GARDENER (HEAD), or GARDENER and BAILIFF. —JOHN COTTERELL (age 34, married, no incumbrance), for some time past in the service of J. E. Jones, Esq., Derry, Ormond Park, by Lampeter. J. C. concludes his engagement with Mr. Jones about November 18, and will be happy to engage with any nobleman or gentleman in want of a thorough practical active steady Man in either of the above capacities. J. C. has had considerable experience in Reclaiming and Planting of Waste Land, and could undertake the Planting and Drainage of Land to any extent. For character and ability apply to above address.—J. COTTERELL, Derry, Ormond Park, Lampeter.

FARM BAILIFF or LAND STEWARD.—A gentleman perfectly conversant with Farming, with 12 years' unexceptionable character and excellent testimonials from influential City gentlemen, is open to an engagement.—C. E. F., Mr. G. Street, Advertising Offices, 30, Cornhill, E.C.

LAND AGENT or STEWARD.—Age 30, married; has been engaged during lifetime in the Management of extensive Landed Property, Farming, Draining, Building, Planting, the Care of Woods, &c. The most satisfactory references, and security to any amount.—M., *Gardeners' Chronicle* Office, W.C.

WOODMAN (HEAD).—Age 28, single; has been accustomed to the work all his life.—Reference to Mr. W. L. B. FREUER, Estate Agent, Eye, Suffolk.

WOODMAN.—Has a practical knowledge of Woods and Plantations, can work a Saw Mill and Steam Engine; no objection to manage a Small Farm and Garden, having had the management of both, with 300 acres of Woods. Nine years' reference.—A. B., Post Office, Hanwell, Middlesex.

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JOHN MURRAY, Albemarle Street.

News of the Week.

BY the arrival of the La Plata from the West Indies we have news of the utmost gravity as affecting the continuance of pacific relations between this country and the United States. Messrs. SLIDELL and MASON, the Confederate Commissioners to France and England, have been forcibly taken out of the Royal Mail steamer Trent, while on her passage from Havannah to St. Thomas's, by the Federal steamship of war San Jacinto. It appears that as the Trent was approaching the narrow passage between the reefs in the Old Bahama Channel on the 8th inst. she observed a large war vessel waiting ahead, and showing no colours. On getting nearer the Trent hoisted the British ensign, which met with no response from the ship of war. When within about an eighth of a mile, the ship of war hoisted the Federal flag and fired a round shot across the Trent's bows. Immediately afterwards she fired a shell which burst about 100 yards from the Trent, and called upon Captain MOIR, her commander, to go on board with his papers. The latter refused to comply with this request, whereupon the American captain sent his lieutenant on board the Trent to demand a list of passengers, which was refused. The officer then stated that he had reliable information that Messrs. SLIDELL and MASON and their Secretaries were on board, and demanded their surrender. With this demand Captain MOIR also refused to comply, on which, at a signal from the American officer, several boats came alongside, filled with armed men, who seized Messrs. SLIDELL and MASON, with their secretaries, and took them as prisoners on board the San Jacinto. These proceedings were protested against by Captain MOIR, who denied the right of the Federal vessel to take any person from under the British flag; while Commander WILLIAMS, R.N., the Admiralty agent in charge of HER MAJESTY'S Mails, in the name of the British Government, denounced the act as a violation of international law, and as an act of "wanton piracy," adding that the Americans would not have dared to attempt it if the mail-packet had possessed the means of defence. The despatches of the Commissioners did not fall into the hands of the Americans, but have arrived in England in the La Plata. The intelligence of this outrage reached the city about noon on Wednesday, and caused such agitation on the Stock Exchange that the Funds immediately fell nearly 2 per cent. from which there was only a partial recovery. At Liverpool an indignation meeting was held in the course of the afternoon at which a resolution was adopted calling upon the Government to assert the dignity of the British flag. Meanwhile HER MAJESTY'S Ministers had lost no time in submitting the depositions of the officers of the Trent to the Law Officers of the Crown, who gave their opinion on Thursday to the effect that the proceedings of the Federal frigate were not justifiable by the law of nations, that the right of the Federal Government, acting by its officers, was confined to visiting and searching the Mail packet; and that, if any men or things believed to be contraband of war had been found on board her, the proper course was to take her into a port and submit the question to a Prize Court, which would have heard evidence and argument on both sides, and would have decided the case according to precedents and authorities. A Cabinet Council was held yesterday to consider what action shall be taken upon this opinion, and it is reported that the Federal Government will be immediately called upon to make prompt reparation by disavowing the act of their officers and by restoring Messrs. MASON and SLIDELL with a suitable apology.

In Paris the seizure of the Confederate Commissioners has caused a great sensation. The *Patrie*, *Pays*, *Constitutionnel*, and *Opinione Nationale*, concur in the opinion that the commander of the Federal vessel had no right to arrest them while on board an English mail steamer, and that his proceeding was a manifest violation of the British flag. Nothing of an official character has yet transpired in regard to M. FOULD'S contemplated measures. The *Patrie* has published an article which confirms the impression that the Government has no intention of making any effectual reductions in the army and navy. This article is headed "The Impossibility of Disarming;" it says that France could not disarm without an understanding with the other Powers to do likewise; and that while Austria, Russia, and Italy are unable, England and Prussia are unwilling to reduce their forces.

The dispute between Spain and Italy in reference to the Neapolitan archives has ended in a complete rupture. Baron TECCO, the Italian Minister, received his passports and left Madrid on Tuesday evening. A telegram from Lisbon contradicts the report of the death of the Duke of SALDANHA. The Portuguese Cortes will assemble on the 22d December. The new KING has presided at a Council of Ministers, at which it was resolved that a constitutional policy should continue to be followed.

The French Government has afforded satisfactory explanations to the Federal authorities in relation to the late violation of Swiss territory near Geneva by French gendarmes. The early settlement of the Ville la Grande affair is likewise expected.

On Saturday after a long and animated discussion the Italian Chamber of Deputies passed the Bill for levying the war tax on all the provinces in the kingdom by a majority of 191 to 10. General CIALDINI'S differences with the Government are settled, and he will resume the command of the 4th corps d'armée. In the sitting of the Chamber on Tuesday, the Duke de PROTO and Signor MADDALONI, the Neapolitan members, laid on the table a petition demanding a Parliamentary inquiry into the state of Naples. This petition was worded in extremely violent terms against Sardinia, and the Chambers decided that it should be read in public sitting. The Bishops of Umbria and the Southern Provinces have protested against the last circular of the Minister of Justice.

A despatch from Ragusa states that DERVISCH PASHA, on the 21st inst., after a fight of four hours, defeated, with great loss, a body of 8000 insurgents near Piva, in Bosnia. Another body which attempted to invade Kaloschin was also defeated, and 40 Montenegrin barges which attempted to capture a Turkish steamer on the Lake of Scutari, were repulsed with loss. In consequence of these defeats the European consuls have proposed an armistice, and negotiations have been opened between OMAR PASHA and the Prince of MONTENEGRO, which hold out some prospect of a settlement of the differences between Turkey and Montenegro.

Accounts from Constantinople state that FUAD PASHA has been appointed Grand Vizier, and AALI PASHA has been appointed Minister of Foreign Affairs. The Porte, at the suggestion of Sir HENRY BULWER, has addressed a note to the foreign representatives, consenting to the union of the Danubian Principalities during the life of Prince COUZA. There is a general disposition to accept this as a final solution of the question.

From New York we learn that a despatch has been received from Fort Monroe reporting the arrival of the United States steam sloop-of-war San Jacinto, with Messrs. SLIDELL and MASON on board. The Federal Government has received despatches from the fleet announcing that the bombardment of Port Royal commenced on the 7th inst., and that after a fight of four hours the Confederates abandoned the forts and retreated precipitately. On the following day, according to the Northern journals, the Federal army, numbering 15,000 men, landed and established themselves at Beaufort in South Carolina, which will be held as the seat of future operations. The Charlestown papers however deny that the Federals have occupied the town, and state that the Confederates were preparing to defend it. The Federals, however, have occupied Hilton Island, the cotton crop on which was fired by the residents before leaving. The New York papers assert that the Federal Government has not yet determined whether Beaufort shall be opened to commerce by being made a port of entry, and state that another expedition will shortly be despatched from New York. Colonel COCHRANE, in addressing his regiment at Washington, urged the arming of the Southern slaves against their masters. The Secretary of War was present on the occasion, and is reported to have fully endorsed this speech. The Federal army has evacuated Springfield, Missouri, and returned to Saint Louis. The Southern journals state that black flags have been hoisted at Charleston and Savannah as an indication that no quarter would be given or asked. Eighteen Federal officers, prisoners of war at Richmond, have been selected to be hanged should the Federal Government hang the crew of the privateer Savannah. General SCOTT left New York on the 9th inst. for Havre, and is now in Paris.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family continue at Windsor Castle. On Friday morning, in consequence of the unsettled state of the weather, the Queen did not leave the Castle. The Prince Consort went to the Royal Military College at Sandhurst. In the afternoon the Prince and Princess of Leiningen arrived from the

Continent on a visit to Her Majesty. On Saturday morning the Queen, accompanied by Princess Alice, rode out on horseback. The Prince Consort went out shooting with the Prince of Leiningen. Princess Helena and Princess Louisa rode on horseback. The Duke and Duchess of Somerset, the Right Hon. W. Cowper, and Major General Trollope, arrived on a visit to her Majesty. On Sunday morning the Queen and Prince Consort, the Princesses Alice, Helena, and Louisa, and Prince Arthur attended Divine service in the private chapel. The Dean of Windsor officiated. On Monday morning the Queen, accompanied by the Prince and Princess of Leiningen, drove out. The Prince Consort went to Madingley Hall, to visit the Prince of Wales. The Duke and Duchess of Somerset, the Right Hon. W. Cowper, and General Trollope, left the Castle. On Tuesday morning the Queen, accompanied by Princess Alice, walked in the grounds of the Castle. The Prince Consort returned from Cambridge. On Wednesday morning the Queen, accompanied by the Prince and Princess of Leiningen, drove out in a carriage-and-four. On Thursday morning the Queen, accompanied by Princess Alice and the Princess of Leiningen, drove out.

The Prince of Wales left Madingley Hall on Wednesday for Kimbolton Hall, on a visit to the Duke and Duchess of Manchester. On Thursday his Royal Highness went out with the hounds. It is rumoured that the Prince will shortly honour the Marquis of Bristol with a visit at Ickworth Park.

The Royal Children.—The air of Osborne during the winter has been thought too keen for the younger members of the Royal family. It is not unlikely that some of the younger children will reside at the White Lodge, Richmond Park, while her Majesty and the rest of the Royal family are at Osborne.

The Cabinet.—On Thursday the 21st there was a meeting at the Admiralty of the leading members of the Cabinet, including Lord Palmerston, the Duke of Somerset, Sir George Grey, Lord Russell, and Mr. Gladstone. The Ministers remained in consultation for upwards of an hour. On Thursday morning Lord Palmerston received Earl Russell, the Duke of Newcastle, the Chancellor of the Exchequer, and several other members of the Cabinet, at his official residence in Downing Street. After the separation of the Ministers Lord Palmerston ordered summonses to be issued for a Cabinet Council, which was held yesterday afternoon at his lordship's residence in Downing Street. After the Council despatches were sent off from the Colonial Office to the Governors of Bermuda and the North American Colonies.

Parliamentary Movements.—The Carlisle election terminated on *Tuesday* in the return of Mr. Potter, the Liberal candidate, by a majority of one over Mr. Hodgson, the numbers being 523 to 522.—Mr. Sleigh has withdrawn his name as a candidate for Finsbury, on the ground of his inability to expend 3000*l.* in the probable expenses of a contest. Mr. Remington Mills is now the only candidate in the field.

The Army.—Major-General Booth has been appointed Colonel of the 15th Foot in the room of the late Sir Howard Douglas, and Major-General Elliot has been appointed Colonel of the 55th Foot in the room of the late Sir James Schoedde.

Consecration of the First Bishop of Nassau.—The Ven. Charles Caulfield, LL.D., of Trinity College, Dublin, Archdeacon of the Bahamas, was consecrated Bishop of Nassau on Sunday last in the private chapel of Lambeth Palace. The new diocese consists of the Bahama islands and their dependencies, which have been separated by an order in Council from the diocese of Jamaica.

Resignation of Mr. Justice Hill.—In consequence of the impaired state of his health, caused by an attack of paralysis a few months ago, Mr. Justice Hill has resigned his seat in the Court of Queen's Bench.

Seizure of the West India Mail Steamer by an American Frigate.—By the arrival of the La Plata at Southampton, we learn that Messrs. Slidell and Mason, the Confederate Commissioners, were forcibly taken out of the Royal Mail steamer Trent, while on her passage from Havannah to St. Thomas's, on the 8th inst., by the American steam sloop of war San Jacinto, of 1446 tons and 13 guns, commanded by Captain Wilks. It will be remembered that the steamer Theodora, with the Commissioners on board, ran the blockade at Charleston on the 15th of October. Mr. Slidell, accredited Commissioner from the Confederate States to France, was accompanied by his wife, son, and three daughters, and Mr. Eustis, his secretary, and his wife. Mr. Mason, accredited Commissioner from the Confederate States to England, was accompanied by Mr. M'Farland as his secretary. The Trent sailed from Havannah at 8 o'clock in the morning of the 7th, and nothing occurred worthy of notice till about noon on the 8th, when, in the narrow passage of the old Bahama Channel, opposite the Paradon Grande lighthouse, a large war steamer was observed ahead, apparently waiting, but showing no colours. On approaching her, Captain Moir, of the Trent, hoisted the British ensign, which met with no response until the two vessels were within about a furlong of each other, when the stranger fired a shot across the Trent's bow, and hoisted the American flag. The Trent was still holding on her way, when a shell was fired from a long pivot gun on the American's deck forward, which burst about 100 yards from the Trent's bow. Capt. Moir immediately stopped the Trent as the American had her broadside of guns run out, and men at quarters ready to fire. Captain Moir then hailed her, and asked the American captain what he meant by stopping his ship, and why he did so by firing shotted guns, contrary to the usual custom. The reply was that he wished to send a boat on board. This was immediately followed by a boat pushing off from the side of the American, containing between 20 and 30 men, heavily armed, under the command of the first lieutenant, who came up on the quarter-deck, and demanded a list of passengers, which the captain refused to give. The officer commanding the boat stated that the name of the frigate was the "San Jacinto," of which he was the first lieutenant, and further that they had received most positive information that Messrs. Slidell, Mason, Eustis, and M'Farland were on board, and demanded that they should be given up. Captain Moir and Commander Williams, R.N., the naval agent in charge of Her Majesty's mails, positively objected to their being taken, denying their right to take any person whatever from under the English flag. The lieutenant than called out the names of the Commissioners and secretaries, and said that those were the persons he sought, and that he would take them at all hazards. The four gentlemen, who were standing near, answered to their names, and requested to know what was wanted of them. The lieutenant stated that he wished to take them on board the man-of-war, to which they replied that they would not go until they were taken by force, and, turning to Captain Moir, Mr. Slidell said, "We claim the protection of the British flag." On the captain's again refusing to give up the passengers, the lieutenant said he should take charge of the ship, and walking to the side waved his hand to the frigate, upon which three boats, containing 30 marines and about 60 sailors, officered and heavily armed, come alongside. The men at once leaped on deck, with their drawn cutlasses in hand. Commander Williams, R.N., then spoke as follows:—

"In this ship I am the representative of Her Majesty's Government, and I call upon the officers of the ship and the passengers generally to mark my words when, in the name of that Government, and in distinct language, I denounce this as an illegal act—an act in violation of international law—an act, indeed, of wanton piracy, which, had we the means of defence, you would not dare to attempt."

A party of marines with fixed bayonets then forcibly laid hands on the Commissioners and their secretaries, who retired for a few minutes to their cabins to arrange some few changes of clothing. Mr. Slidell's eldest daughter immediately threw herself in the doorway of the cabin where her father was, and declared that she would defend him with her life, till, on the order being given to the marines to advance, which they did with bayonets pointed at her, Mr. Slidell ended the painful scene by escaping from the cabin by a window, when he was immediately seized by the marines and forced with the three other gentlemen into the boat. On taking leave of his family, Mr. Slidell is reported to have said—"It is true that I may suffer great personal inconvenience, but thank God it is the best thing that could happen for my country." As the boat shoved off he called out to Captain Moir that he expected redress from the British Government for this outrage while under the protection of its flag, and hoped the captain would represent the case properly. The lieutenant stopped on board, having ordered the boat to return. He then stated that he had orders to take Captain Moir and his papers on board the San Jacinto, and that the Trent was to be moved nearer. Captain Moir replied, "You will find me on my quarter deck; if you want me, you will have to come there for me," and immediately walked on deck, taking no notice of the other order to move nearer. The lieutenant, however, did not attempt to enforce these orders, and returned to the frigate, telling Captain Moir that he could proceed. The Trent then steamed ahead for St. Thomas. The indignation felt on board the Trent by the crew and passengers, who included in their number a considerable number of foreigners of different nations, was so great that every man would have fought if called upon to do so; but, with such an opposing force, and the unarmed condition of the Trent, it was deemed impossible to make any defence. The officers of the San Jacinto asked for provisions to maintain the prisoners, as they stated that they were short of stores. Captain Moir told the four gentlemen that at their request he would supply what was needed, and on their expressing a wish that he should do so, all the necessaries were supplied. The despatches of the Confederate Emissaries escaped the vigilance of the boarding officers, and have all arrived safely at Southampton in the La Plata. The families of Mr. Slidell and of Mr. Eustis were urged by the first lieutenant of the San Jacinto to accompany them, but, being informed on inquiry that it was probable they would be separated from them on their arrival at New York, they declined the offer, and came on to England. As soon as the La Plata was announced at the Needles on Wednesday morning, Captain Peagrim, of the Nashville Confederate steamer, proceeded in a steam tug to meet her in the river, for the purpose of receiving Messrs. Slidell and Mason, the Southern Commissioners. Captain Peagrim was not at all surprised to find that they had beer forcibly taken from the mail steamer, having before stated that he was aware that it was the intention of the United States Government to do so. Captain Peagrim took charge of Mrs. Slidell and her family, and also of Mrs. Eustis, and after having entertained them on board the Nashville, saw them safely off by the 3 o'clock train for London.

Export of Saltpetre.—It was understood in commercial circles yesterday, that the Government has placed restrictions on the exportation of saltpetre.

The Iron-Cased Frigates.—The Warrior, 40, iron screw frigate, the Hon. Captain Cochrane, arrived at Spithead on Saturday evening from Plymouth, having made the run from anchorage to anchorage in 10 hours, nine of which were at full speed, the tide being unfavourable nearly the whole time. The maximum speed during the day was 17½ knots under steam and sail, with the wind on the port quarter and smooth water, the revolutions of the engines at the time being 54½.

Foreign.

France.—The *Patrie* of Thursday evening, in an article signed by M. Chucheval-Clarigny, maintains that the agent of the Washington Cabinet had no right to arrest the Southern Commissioners while on board an English mail steamer, and asserts that the English Government has ordered preparations to be made for the immediate despatch of reinforcements to Canada. The *Pays*, *Constitutionnel*, and *Opinione Nationale* also censure the conduct of the commander of the Federal vessel San Jacinto, and express the opinion that the British Government cannot dispense with exacting as a reparation the dismissal of the officers of the San Jacinto, the liberation of the passengers taken from the Trent, and an indemnity for them. The Senate on Monday confirmed the *Senatus Consultum* which approves of the basis of M. Fould's financial scheme. The Emperor's power over the national purse without the consent of the Legislative body is now legally renounced. It is said that there is discord in the Cabinet; MM. Fould and Persigny insisting on disarmament, while the Ministers of War and Marine vigorously oppose any reduction. The *Moniteur* of Thursday says:—

"The Emperor, by his memorable acts of the month of November, 1860 and 1861, has spontaneously rendered homage to the principle of the perfectibility of the constitution; but as the journals are criticising and discussing the constitution, it becomes necessary to remind them that the constitution must remain independent of any discussion, and that the law on the press protects it against all attacks of which it might become the object."

The *Patrie* of Friday contained an article signed by M. Laponterie, and headed "On the Impossibility of Disarmaments," of which the following is a summary:—

"It is impossible for France to disarm when, in view of the questions which await a solution, Austria, Prussia, Russia, and England either cannot or will not resign. A disarmament effected by France alone would not consolidate the peace of Europe. On the contrary, it would everywhere awaken the hopes of the reactionists, and would compromise the laborious work of the second Empire. France would thereby lose the benefits of our latest victories, and would, moreover, desert the cause of justice and right in the Councils of the Powers, after having made it triumph on the field of battle. The only thing that is possible is an increase in the number of furloughs."

In a second article on the same subject, the same journal says:—

"We are in favour of every saving which is consistent with our national greatness, in opposition to a disarming, which would degrade our country and compromise every just cause which we have defended. Can Austria disarm between the emancipation of Italy, the agitation in Hungary, and the disturbances in the Ottoman empire? Can Prussia do so in the face of the organised forces of Austria and the German aspirations? Can Russia do so in the midst of the movement which is carrying her forward and in presence of the revival of Polish nationality? Does England desire to do so,—England, whose traditional policy is to take no disinterested part in the conflicts which divide the continent? The army in the condition which time and the glorious experience of victory have placed it is one of the necessary elements of our national power; to diminish its force is to diminish our greatness."

These articles have created a great sensation not only in France but abroad. The most significant remark they have elicited on the part of the French press appears in the *Débats*, which briefly observes that the article instead of being headed "The Impossibility of a Disarmament," should have been entitled "The Impossibility for France in not Spending More than her Revenue." It is confidently asserted that the Emperor himself decidedly objects to any serious reduction of the land or sea forces, and has determined that he must have 400,000 men, at the very least, under arms, "to be ready for all contingencies." It is therefore believed that the reduction in the army will consist in sending home about 30,000 men on furlough. As regards the navy, four sail of the line belonging to the Mediterranean squadron are to be laid up in ordinary, but it is said that six iron-plated frigates are to be commissioned to supply the deficiency. An Imperial decree, countersigned by M. Fould, has been issued abolishing the tax levied by the city of Paris on the right of entrance into the Paris Bourse. Prince Napoleon is about to leave Paris for London to preside at the organisation of the Imperial Commission of the Exhibition of 1862, the members of which are already in England. The Prince will probably stay some time in London, as he will be accompanied by two secretaries, and several other persons attached to his household. The Duke de Magenta's charge upon the Treasury for representing France at the coronation of the King of Prussia is 60,000*l.* General Scott, the late Commander-in-Chief in America, arrived at Havre in the Arago steamer, and was received with great distinction by the officers and crews of the American merchantmen lying in the port. The vessels and streets through which he passed were decorated with American

and French flags. General Scott, who is accompanied by his son, Colonel Scott, and his daughter-in-law, has since arrived in Paris. The Bermuda steamer, which ran the blockade of Savannah on the 2d inst., has arrived at Havre with 1780 bales of cotton. The supplementary election in the department of Aube has resulted in the return of the Government candidate by a large majority. The case of the *Ami de la Religion* was heard on Thursday. The editor was fined 500f. He immediately gave notice of appeal against the judgment. The Minister of Public Works has nominated a commission to examine the following questions:—1. The construction and cheap working of railways; 2. The speed at which the trains are run; 3. The police of the station, application of the articles of the conditions of contract relative to carriages in correspondence with the lines, &c.; and 4. All the other questions connected with the working, which the Minister may think proper to submit to it. A Protestant Church is now building at Chalons for the accommodation of the troops. There is a large number of Protestants in the French army, but up to this time no provision had been made for the performance of their religious duties.

PORTUGAL.—The Portuguese Cortes will assemble on the 22d December. The report that the Duke of Saldanha was dead, is unfounded. The Duke's health has slightly improved.

SPAIN.—Fresh difficulties have arisen in reference to the affair of the Neapolitan archives, in consequence of which Baron Tecco, the Sardinian Minister, has demanded his passports. He left Madrid on Tuesday for Barcelona, where he will embark for Italy. The Secretary Baron Cavalmini will remain in Madrid to conduct the affairs of the Italian Legation. It is said that the Spanish Government consented to deliver up to the Italian Government those documents of the Neapolitan Archives which do not relate to political affairs, on condition that King Victor Emmanuel withdrew his first Notes. The Italian Government on the other hand demanded that Spain should withdraw the Notes in which she declared herself the legitimate depository of the Neapolitan Archives. Don Fernando de Castro, one of the Royal chaplains, and Professor of General History at the University, in a sermon preached before the Court in the Royal Chapel of Madrid, has surprised his audience by proclaiming his adhesion to the doctrines propounded by Father Passaglia on the temporal power of the Pope, and by advocating with much earnestness the principle of a united Italy.

MOROCCO.—Prince Muley Abbas left Madrid on the 11th to embark for Morocco at one of the ports of Andalusia, visiting on his way the cities of Grenada, Cordova, and Seville. He had given 40,000 reals vellon for the charitable establishments of the capital. The Madrid journals of the 13th publish the text of the treaty concluded between Spain and Morocco. It consists of eight articles, the most important of which provide that Tetuan shall be evacuated by the Spanish troops when the Moorish Government shall have paid 3,000,000 dols., and that the remainder of the indemnity (10,000,000 dols.) shall be paid in annual instalments until the whole is cleared off by appropriating for that purpose half the Customs' duties of the Moorish ports, which the Sultan places at the disposal of the Queen of Spain, in order that she may have them collected by means of Spanish agents.

SWITZERLAND.—France has afforded satisfactory explanations to the Government of the Canton of Geneva in reference to the late violation of Swiss territory near Geneva by French gendarmes. An early settlement of the Ville la Grande affair is likewise expected. The election of members for the Council of State of the canton of Geneva took place on Monday, when M. Fobbry was elected President by a majority of 1761 over M. James Fazy, the numbers being 4673 to 2912.

PRUSSIA.—The King of Prussia has notified that he will defray the expenses of his coronation from his privy purse. The case of Colonel Patzke, of the police force, was tried on Tuesday before a jury, when he was found guilty of having used a false passport, and sentenced to four weeks' imprisonment. He was immediately removed from the prison in which he had been confined previously to being brought to trial. Köhler was sentenced to five years', and Schmidt to four years' imprisonment with hard labour. Lieut. Greif, of the police force, was acquitted.

AUSTRIA.—Advices from Vienna of the 22d state that the Ministry has decided not to present the Budget to the Reichsrath until the Transylvanian question is settled. The Chamber of Deputies of the Reichsrath has been occupied with the discussion on the law relative to individual liberty. Several members considered the measure insufficient, but presenting a provisional guarantee. The Chamber adopted Art. I., which says:—"Liberty of person is placed under the protection of the law against the encroachments of the Government." It afterwards, by 93 votes to 74, referred to a committee an amendment of M. Klandi, reproducing the article on the fundamental rights,—"No man can be deprived of his natural judge. No exceptional tribunals can be created." The committee reported in favour of admitting the first portion of the article, but of rejecting the second. The conclusions of the committee have been adopted.

HUNGARY.—It is asserted that Count Apponyi has tendered his resignation as *Judex Curiæ*, and will be replaced by Count Almassy.

CROATIA.—The General Congregation of Croatia has, under certain reservations, ordered the military levies to be made in Croatia, and has also notified that all official correspondence is to be conducted in the Croatian language.

ITALY.—All the Turin journals of Thursday approve the recall of Baron Tecco from Madrid. On Saturday the Bill for levying the war tax in all the provinces of the kingdom passed the Chamber of Deputies by 191 against 10 votes. Several members gave notice of their intention to put questions to the Government relative to the Roman question on the 2d of December; and it is announced that Signor Rattazzi will take part in the discussion. In the sitting of the Chamber on Tuesday the Neapolitan members, the Duke di Proto and Signor Maddaloni, laid on the table of the House a petition demanding a Parliamentary inquiry into the state of things in Naples. This petition was worded in extremely violent terms against Sardinia. The Chamber decided that it should be read in public sitting. Great sensation has been created by this incident. On Thursday a bill for the temporary occupation of the convents by the military was brought forward in the Senate. Urgency was demanded for the passing of the bill, as it will shortly be necessary to provide lodging for 93,000 recruits. Baron Ricasoli stated in the Senate that the relations between Italy and France continue to be of the most cordial nature. He said also that the accounts of brigandage in the Neapolitan provinces were exaggerated; that the number of brigands in the Basilicata does not exceed 250, and that a reinforcement of 2000 carabiniers would shortly be despatched into that province. The Bishops of Umbria and the Southern Provinces have issued protests against the last circular of the Minister of Justice. It is confidently stated that the King of Italy is about to pay a visit to Naples. A delay in his journey is caused by the approaching visit of Prince Oscar of Sweden. The *Official Gazette* publishes notes which have been exchanged between the English and Italian Governments relative to a proposition that Italian vessels entering Ionian ports should enjoy certain immunities, and that English vessels entering Italian ports should be similarly favoured in return. The *Opinione* announces that in consequence of the military levy which has been ordered, the Italian army will consist in future of 90 regiments of infantry, seven brigades of bersaglieri, and 22 regiments of cavalry. The differences between General Cialdini and the Government having been settled, he will resume the command of the 4th Corps d'Armée. The *Movimento* of Sunday publishes Garibaldi's reply to the address of the Neapolitans, in which he says:—"I regret that I am unable to come to you, but I shall be with you when it is necessary." In the same letter Garibaldi exhorts every Italian to have his sword ready. The statement that Garibaldi had been appointed Commander of the Volunteers is incorrect, as this appointment has been conferred on General Sirtori. It is believed, however, that, in the event of a war breaking out in Italy, Sirtori would be replaced by Garibaldi. A despatch from Naples of Tuesday states that some brigand chiefs, bearers of important papers, have been shot. General Della Chiesa has despatched troops to meet the brigands who are concentrating near Ricigliano. On the night between the 23d and 24th inst. a detachment of French troops made 110 brigands prisoners near Alatri. They also seized two cannons in the mountains. The Abbé Filippo Perfetti, President of the Ghislieri College, Librarian of the University of Rome, and formerly Secretary of Cardinal Marini, has just published a pamphlet at Florence, entitled "Considerations on the new Conditions of the Papacy," in which he contends, like Liverani and Passaglia, that the temporal authority of the Pope is incompatible with the spirit of modern civilisation, characterised by the formula of "free inquiry and democracy," and must consequently undergo a metempsychosis, as he calls it, abandoning its mundane pretensions, and returning to the spiritual purity of its early traditions. "The edifice of Papal domination," he says, "is absolutely rotten; let the foreign prop be removed, and it will fall at once without resistance and without noise."

RUSSIA.—Accounts from St. Petersburg state that the resignation of Admiral Putiatin, Minister for Public Instruction, was momentarily expected, and that General Titoff, formerly Russian ambassador at Constantinople, will probably be his successor. Prince Suworoff-Rymnikskу, Governor-General of Livonia, Esthonia, and Courland, has been appointed Governor-General of St. Petersburg, and replaced in his former functions by General Baron de Lieven. General Rokascowsky has replaced General de Berg as Governor-General of Finland. The statutes of the "Great Society of Russian Railways" have been approved by the Emperor.

POLAND.—It is asserted that a telegram from St. Petersburg has been received at Warsaw, announcing that the Marquis Wielopolski had tendered his resignation, and that it had been accepted by the Emperor. General Kryjtnowski has been appointed to succeed the late General Gerstenzweig in the military governorship of Poland. M. Vidal, President of the Committee for Public Worship at Warsaw, who was forbidden by General Suchosanet, the former governor of Poland, to obey the orders of the Marquis Wielopolski, has been summoned by the Emperor to St. Petersburg. 15 persons, condemned for taking part in the late political demonstrations, were conveyed from Warsaw to Orenburg on the 21st inst. The funeral of the suffragan Bishop Decker took place on Friday. Only those persons who had obtained tickets from the authorities were allowed to join in the procession. It appears that the late arrest of the Administrator of the Archbishop of Warsaw was in pursuance of orders from St. Petersburg. The body of the late Military Governor of Warsaw, General Gerstenzweig, was interred on the 17th inst. at the Nevsky Cemetery with great ceremony. A letter from Warsaw, in the *Précurseur d'Anvers*, gives the following strange account of the death of General Gerstenzweig:—

"The General, partly from obedience to orders, partly from natural severity of disposition, had arrested a great many Poles, and had placed them in the citadel. Shortly after fears were entertained that an insurrection would break out, and that consequently numerous prisoners in the citadel [illegible] embarrassment. Accordingly, the commander [illegible], in conjunction with Count Lambert, ordered several of them to be released. On hearing this, General Gerstenzweig went in a state of great irritation to Count Lambert, reproached him with having acted from fear, and called him a coward. As several officers of the staff were present, a duel seemed inevitable; but as a hostile meeting between two such high personages at that moment might present great inconveniences, it was decided that one of the two should kill himself the same evening, and that lots should be drawn to decide which it should be. The lot fell on General Gerstenzweig, and he fired three times with pistols at his head, the last time inflicting a mortal wound. These incidents explain why General Lambert shortly after left suddenly for St. Petersburg."

TURKEY.—Fuad Pasha has been appointed Grand Vizier, and will return to Constantinople immediately. Until his arrival the duties of the office will be discharged by Kiamil Pasha. Aali Pasha has been appointed Minister for Foreign Affairs in place of Mehemet Djemil Bey. Riza Pasha has refused to accept the Governorship of Koniah, and it is stated that he will, therefore, be exiled to Cyprus. He remains at present at Smyrna. An issue of new small kaimés will take place without delay. Excellent relations prevail between the English and French Embassies.

THE PRINCIPALITIES.—At the suggestion of Sir Henry Bulwer, the Porte has addressed a Note to the foreign Ambassadors, consenting to the union of the Danubian Principalities during the life of Prince Couza. There is a general disposition to accept this as a final solution of the question.

SERVIA.—The Austrian official journals state that there is no truth in the report calculated by some French papers, that diplomatic relations between Austria and Servia had been broken off on account of the insult offered by some Servian officers to the Austrian Consul at Belgrade. The Austrian Cabinet confined itself to introducing greater reserve in its relations with Servia.

MONTENEGRO.—An official Turkish bulletin announces that on the 21st inst. Dervisch Pasha, with eight battalions of Turkish troops, encountered a body of 8000 insurgents near Piva, in Bosnia. After a fight which lasted four hours, the insurgents were compelled to take to flight, with the loss of 800 killed and a large number of muskets, which they left on the field of battle. The Turkish loss in killed and wounded amounted to 100 men. A numerous body of insurgents and Montenegrins who intended to invade Kaloschin has been repulsed by the Turks after a bloody fight. Forty Montenegrin barges attacked a Turkish steamer on the Lake of Scutari, but were repulsed, after a fight of several hours, with considerable loss. Two thousand Montenegrins have burnt the village of Kilasein, and carried away all the cattle. On the way back to their quarters they found the road blocked up by the Turks, who attacked them. The Montenegrins lost 300 men, and all the cattle they had seized. The Turkish army has been increased by 10,000 regular troops and Bashi-Bazouks; and six more battalions of regulars are expected to arrive at Trebigne. The insurgents have likewise received reinforcements. In consequence of the defeat of the insurgent troops at Piva the European consuls have proposed an armistice. Negotiations have been opened between Omar Pasha and the Prince of Montenegro, which hold out some prospect of a settlement of the differences between Turkey and Montenegro.

INDIA.—By the overland mail we have accounts from Calcutta to October 22; and a telegraphic despatch has since arrived with news from Bombay to the 12th Nov. The public interest was still fixed on the cotton supply, and more especially on Lord Canning's resolutions touching the waste lands and the redemption of land revenue, which are expected to have a very beneficial effect on the future prosperity of India. The telegram from Bombay states that Lord Canning is about to extend the system of permanent settlement to the north-west provinces. The amalgamation of the Supreme and Sudder Courts is also expected to have a marked effect on the administration of justice. The Governor-General was to leave Calcutta in the course of the week for Allahabad, to meet the Maharajahs of Gwalior and Puttiala, the Rajah of Rampore, and the Begum of Nepaul, and to invest them with the Order of the Star of India. Mr. James Ritchie had been appointed legal member of the Council of the Governor-General. Cholera had been making great ravages in the city of Cawnpore, especially among the natives. It had made fearful ravages at Kandahar, where 8000 individuals fell victims to the disease in 18

days. A large quantity of treasure, said to amount to 30 lacs of rupees, and to have been part of that looted from the Treasury by the 9th N. I. during the mutiny, has been found concealed in some wells near Delhi. Disturbances have taken place at Nortgong. (?)

CHINA.—A despatch from Canton of the 15th of October says that the question of the succession to the throne has been settled. The sceptre devolves on the late Emperor's eldest son, a youth of nine years, who will reign under the name of Ki-siang, with a council of regency of eight. Prince Kung is not included in the council of regency, and it was reported that he had been removed from his office as Superintendent of Foreign Affairs. The allied troops are evacuating Canton and Tientsin. Trade at Ningpo and Hangchow is obstructed by the rebels. The French are in want of men and guns to protect Chefoo.

COCHIN CHINA.—Advices from Saigon state that the French have promulgated regulations for the Chinese population.

JAPAN.—The state of affairs in Japan is reported to be more favourable, no more outrages having occurred. The British minister, however, does not consider a residence at Yeddo safe, although he keeps the embassy open there while he resides at Kanagawa. Admiral Hope had returned from a cruise in the Japan Archipelago, where he found several Russian settlements which were not previously known.

CAPE OF GOOD HOPE.—We have accounts from the Cape to the 22d October. Affairs on the frontier were still very unsettled. In Kaffraria Proper, south of Natal, Kreli threatened to attack the Tambookies from Zulu land. Panda and his son Ketchwago had demanded that the Natal Government should give up Ketchwago's younger brothers and rivals, who are *protegés* of Bishop Colenso. The lieutenant-governor refused to surrender them. Pretorius was intriguing for the possession of St. Lucia Bay, which is claimed by the English. Disturbances were threatened between Moshesh and the Free State. The battles between the natives still continued. Amapondomsi had massacred about 50 Hottentots. Sir W. Currie was on the point of starting for the frontier with a large body of mounted police. Public attention was not much occupied with the separation movement. Dr. Way had resigned the secretaryship of the League. The Great Agricultural Exhibition which was held in Cape Town on the 24th September proved very successful. In consequence of a dispute between the contractor and the company the works of the Cape Town and Wellington Railway were stopped. Legal proceedings were taken, and the Supreme Court decided in favour of the company, which will complete the works. The news received from Dr. Mackenzie is favourable. Dr. Livingstone has purchased some land for a mission at Chibisi, below the Cataracts.

UNITED STATES.—A despatch from Fort Monroe reports the arrival of the United States' steam sloop-of-war San Jacinto, with Messrs. Slidell and Mason on board. Colonel Cochrane, in addressing his regiment at Washington, urged the arming of the Southern slaves against their masters. The Secretary of War was present on the occasion, and is reported to have fully endorsed Colonel Cochrane's speech, which is described as most violent in tone. General Scott embarked at New York on the 9th inst. for Havre. Dr. Hughes, Roman Catholic Archbishop of New York, Mr. Thurlow Weed, Dr. M'Ilvaine, Bishop of Ohio, and the Hon. Edward Everett, have also embarked for Europe. Advices received by the Federal Government announce that the naval expedition commenced the bombardment of Port Royal on the 7th inst. After a fight which lasted four hours, the Confederates are said to have abandoned the forts and retreated precipitately. According to the accounts published in the Northern States, the Federals captured two forts, 43 guns, military equipments, and valuable papers. On the 8th inst. the Federal army, numbering 15,000 men, landed and established themselves at Beaufort, South Carolina, which, with the neighbouring plantations, was totally destroyed by the whites. Large numbers of negroes are said to have come into the Federal camp. It is also stated that General Sherman has seized 2,000,000 dols. worth of cotton at Beaufort; that the loyal citizens in that vicinity were soliciting arms to protect themselves against the despotism of the Confederates; and that Beaufort is to be held as the seat of future operations. Eight Federals and 100 Confederates are reported to have been killed during the bombardment. On the other hand the Charleston papers of the 12th inst. deny that the Federals have occupied the town, and state that reinforcements had been sent thither by the Confederates, who were preparing to defend the town. They admit, however, that the Federals have occupied Hilton Island, and that a large amount of cotton has fallen into the hands of the Federal army. Four Federal vessels were lost, and their crews made prisoners by the Confederates during the bombardment, and the French frigates Cantelabria and Prony were lost in the gale, the former at Beaufort, the latter at Ocracoke Creek; the crews were saved. The *Charleston Courrier* says there is little cotton stored at or near Beaufort. The New York journals state that the Federal Government has not determined whether Beaufort shall be made a port of entry. Another Federal expedition will, it is reported, sail immediately. On the 8th inst. General Nelson engaged the Confederates under General Williams at Pikeville, Kentucky. The Northern journals announced that the engagement lasted two days, and that 400 Confederates were killed and 1000 taken prisoners, including General Williams and General Howes. It now appears that there were no killed, and the number of wounded and prisoners is reduced to 80 and 50 respectively. On the night of the 10th Guyandotte in Virginia was attacked by 600 Confederate troops, who killed and took prisoners 100 Federal troops out of 150. It is alleged by the Federal authorities that the towns-people invited the Federal soldiers to their houses and then sent notice to the Confederates. Subsequently the town was burnt by the Federals under Colonel Ziegler. General Halleck has been appointed to the command of the Western Department. The Federal army has evacuated Springfield, Missouri, returning to St. Louis. Confirmatory accounts have been received of bridge burning on a most extensive scale by the Union men of East Tennessee and Missouri. The Governor of Pennsylvania has addressed a communication to the State Department in reply to Mr. Seward's circular recommending the fortification of the sea coast. The Governor, in this communication, states that he cannot understand why individual States should be asked to fortify themselves if, as stated in the circular, there is no prospect of a disturbance of foreign relations. He does not doubt that Congress would reimburse the States for their outlay, but calls attention to the delay in the payment to Pennsylvania by the Federal Government of the sums advanced for the equipment of Volunteers, and suggests that it would be better for the general Government to erect the fortifications. If necessary, however, Pennsylvania would respond patriotically to the calls of the country. It is rumoured that the Federals will abandon the Hatteras forts during the winter on account of their sufferings from sickness and privations. A telegram from Boston states that the collector at that port had received instructions from Washington to stop the export of saltpetre and gunpowder. It is stated that ex-President Buchanan is engaged on a work in vindication of the acts of his administration. He is assisted in collecting and compiling materials for this work by ex-Attorney Black and his late private secretary, Mr. Glossbrenner. The trial of Captain Gordon, of the slaver Erie, had resulted in a verdict of guilty. This is the only conviction of the kind that has taken place since 1820, when the traffic was declared piracy by the United States Congress. General Havelock, brother of the late Sir Henry Havelock, is reported to have tendered his services to the Washington Government. The Federal cruiser Powhattan had arrived at New York, after a long but vain pursuit of the privateer Sumter. Mr. Charles Greene and his sister, Mrs. Lowe, have been arrested at Detroit; the former has been sent to Fort Warren and the latter to Washington. Mr. Greene is charged with having purchased munitions of war in England for the Confederates. It is reported that an United States' war vessel has captured a large British steamer, supposed to be the Fingal, laden with arms, at Key West. The British schooner Adelso, which brought a cargo of naval stores out of Wilmington, North Carolina, and put into Newport, Rhode Island, in stress, had been condemned, together with her cargo. According to a Philadelphia despatch, the steamer Bermuda ran the blockade at Savannah on the 2d inst., with 2000 bales of cotton for Liverpool. The New Orleans papers mentions that a large fleet had been seen off Ship Island. It is stated that Mr. Breckinridge has received a commission in the Confederate army as a brigadier general. The statement which appeared last week that Mr. Jefferson Davis would certainly be "relieved from the Presidency," was a mistake of the telegraph office. It should have been "re-elected to" the Presidency. The Southern journals state that black flags have been hoisted at Charleston and Savannah as an indication that no quarter would be given, and that none would be asked. Eighteen Federal officers, prisoners of war at Richmond, have been selected to be hanged, should the Federal Government hang the crew of the privateer Savannah.

WEST INDIES.—The *Patrie* of yesterday says that it has been informed, from a private source, that Rear-Admiral Sir Alexander Milne, Commander-in-Chief on the North America and West Indies station, on hearing of the outrage committed on the Trent, had sent three steam-frigates to the Island of Cuba to escort, until further orders, the mail steamer which plies between the Havannah and St. Thomas.

CANADA.—The prosecution against Colonel Rankin, for enlisting troops for America, has fallen to the ground. The officers of the Crown found, on investigation, that the acceptance of a Federal commission at Washington being an offence against an imperial statute, committed in a foreign country, could only be tried in the Queen's Bench in England, and as the Toronto magistrates' commitment did not extend further than the assizes, the Crown officers had no alternative but to allow the prosecution to fall through. Colonel Rankin has therefore escaped fine and imprisonment, but has been dismissed from her Majesty's service.

SAN DOMINGO.—The Paris evening papers publish "under reserve" a despatch from St. Domingo, dated November 9, announcing that General Santana, who surrendered St. Domingo to Spain, had issued a *pronunciamiento* against the Spanish Government.

Public Addresses.

LORD STANLEY, M.P., attended a meeting of his constituents at Lynn on Friday, and delivered a long speech on the present state of Public Affairs, from which the following are extracts:—

"There is hardly an important State in Europe which has not been looking forward either with hope or with fear to a future in some way different from its present. The vast development of the military and material power of France—the rise of Spain from what seemed a condition of hopeless decadence into a first-class Power—the great measure of serf emancipation in Russia, involving the fate of four or five times as many human beings as are directly interested in that other question of negro emancipation of which we hear so much—the struggle for independence and self-government in Hungary—the Italian revolution, which, so far from being completed, seems to me to be hardly more than begun—all these are events which if they had occurred singly would singly and separately have filled a large space in history, and which, perhaps, lose something of their real importance in our estimation because they do not occur immediately before our eyes. Now, with some of these events England, as a nation, has no direct concern. It does not concern us, and perhaps it does not greatly affect mankind at large, if Spain retains, instead of losing, her hold upon Cuba—if she extends her power over an adjoining isle, and if she even regains some of her lost influence in her former colony of Mexico. We may be glad for the sake of humanity if the great measure of serf emancipation should succeed, but whether that measure succeeds, or whether it fails, the one result—and perhaps in the actual state of things the only result—which is certain is that the social disorganization which must inevitably accompany so great a revolution will for a considerable time to come reduce the aggressive power of Russia almost to nothing. With regard to the quarrel between Austria and Hungary, I must say that I should regret the disruption of the Austrian Empire on general grounds. I should regret it because I believe that whatever tends to break up great Empires into small and feeble States removes one obstacle out of the way of any ruler who at some future time may be disposed to play the part of a conqueror; and I am afraid that the experience we have had during the last few years shows that the days of military aggression and conquest are not so entirely gone by as it was the fashion some time ago to suppose. It is not a matter, however, in which we can in any way interfere; but at this moment it is in Italy that the chief interest of European politics centres. Personally, I sympathise with the desire of the majority of the Italian people for unity under a strong Government; but, looking at it as a matter of reason and not of mere feeling, I think it is impossible not to see that grievous difficulties exist in the way of that unity being accomplished. In the first place, its completion necessarily involves a renewal of the war with Austria. Without Venetia Italy is not complete, and Austria will not cede the Venetian territory, except by force, and the party of war who are at this moment lending the King of Italy their influence and support—will give him, and very naturally so, no rest till they obtain it. Therefore, there are the elements at hand of another European war. Then comes the Roman question. Italy is not complete any more without Rome than she is without Venetia: and, although it is possible that a change of opinion may be taking place, yet, as far as we know, we have reason to suppose that the majority at least of the Italian clergy are favourable to the temporal power of the Pope, and I need not tell you that clerical influence in Italy is a very different thing from what it is in England. In North Italy those provincial jealousies which have existed from time immemorial between State and State and town and town, although they may not wholly have disappeared, have greatly softened down; but in Naples, although there may be very few persons who regret their late rulers, and who wish to have them restored, there is a party not without numbers and influence who look with some regret upon the loss of their local independence and self-government, and upon what they consider as their annexation to Sardinia. On the whole, therefore, so far from the Italian difficulty being settled, it seems to me that its solution is hardly begun. As to the part of England in the matter, there is only one thing to be determined. We are not in this quarrel in the same position as that which is occupied by France. A nation which has expended 50,000 soldiers and many millions of treasure on behalf of another naturally claims some right to decide what the results of the victory shall be. We have not interposed by arms; we do not intend to interpose, and we are right. But in that case we ought to bear in mind that we cannot expect the advantages of interference and non-interference at the same time. We cannot at the same moment hold the secure and easy position of a neutral, and the commanding position of one who is prepared to take a principal part in the quarrel. I think, therefore, that some caution, some considerable degree of reserve and reticence, some restraint from the expression of an opinion until that opinion is absolutely called for, is not only the most dignified course, but it is also the course which is most likely to secure attention to the views we may express. This remark equally applies to the United States. I own I do not wonder at the annoyance which Americans sometimes feel and express at the summary way in which we here undertake to settle their affairs for them. I have had some lessons as to the caution which should be exercised in forming a judgment on the affairs of other countries. I travelled in America in the summer of 1848, at the time of those foolish and futile disturbances which were taking place in Ireland, and I was a good deal astonished, and not a little amused, to find that there were many persons in the United States, really well informed upon most matters, who attached very serious importance to those disturbances, who thought they were the beginning of a great movement for Irish independence, and were even inclined to doubt whether our Government was not doing a foolish thing in not recognising the independence of Ireland at once. I know what I thought of those comments; and I dare say there are many intelligent persons in North America who think much the same of some of the criticisms which reach them from this side of the Atlantic. At any rate, I do not think it is reasonable to blame the Federal Government for not having done that which as trustees for the people they hardly could do, and which no Government since the world began ever yet has done—for not giving up one half of their territory without striking a blow in its defence. They have met with armed insurrection; they have opposed it by armed resistance. How long it is wise to persist in that resistance is a question of policy, and a very difficult one; but it seems to me absurd to blame a Government for doing that which every Government in the world has done, and ever will do. Now, the result of that struggle is beyond human calculation; but I am disposed to think, on the whole, that the opinion which generally prevails in this country is the true one—that, sooner or later, a Southern Confederacy will be established. I do not come to that conclusion so much because I doubt the power of the North to subjugate the Southern States. Even as to that point there may be some doubt. A country of immense distances and of imperfect communications, is very unfavourable for aggressive war and very favourable for defensive. But putting that out of the question and allowing for the undoubted superiority of the North in resources of every kind, the real difficulty of the case seems to be this:—Supposing the Federal Government to succeed in its object—to reconquer the Southern States, what will they do

with them when they have got them? I have seen a comparison as to this war, which seems to me not an unapt one. Some one has said that it is very like the case of a husband instituting legal proceedings in order to bring back his wife to live with him. He may succeed, he may obtain his object; but the question is, when he has obtained it, whether he has done much to contribute to his own domestic happiness. Then, again, as far as we can see at present, the only party in America which is really earnest in this war is the abolition party—those who are for effecting the emancipation of the negroes by the interposition of the Federal authority. With them it is a war of principle. But their opinions do not appear to be those of the majority of persons even now at the North, and so far from their being the views entertained by the Cabinet of Washington, the very last acts of that Cabinet show that by them the abolitionist party is repudiated and disavowed. For the rest these differences between the Northern and Southern States are not new. Burke foresaw them; Washington feared them; and from that time to the present there have never been wanting men who have predicted that the difference of habits and ideas, of which slavery is rather a symptom than a cause—differences due in part to early traditions, and in part also to difference of climate—would sooner or later lead to the disruption which has actually occurred. It seems to me very idle to talk, as some people do in this country, as if the secession in the South were to bring about an utter break-down of American power. Grant that the South obtain all that they require, the North will still retain, I think, some 18 millions of the most intelligent and energetic population in the world; they will retain a territory as large as all Europe, excluding Russia; they will possess a political unity which they have not had for the last 30 years; and, unless this war is protracted through a series of years, whatever burdens it may for a time impose, they will continue to be more lightly taxed than any powerful nation upon earth. As to the duty of the Government, that is obvious, and I do not suppose that there will be any departure from it whatever administration be in power. The duty of our government is to observe a strict neutrality in word and deed—not to show irritation at casual annoyances, such as in the course of such a struggle as this we must inevitably expect; to defend any right of ours that may be attacked, temperately and firmly, giving time for any angry passion to evaporate; and, above all, to take no advantage, and to seem to take no advantage, of the temporary weakness of the American power to effect any object which that Power might regard as an encroachment upon its rights. There is only one other point of foreign policy which I will touch upon, and that relates to this expedition which is now preparing for Mexico in order to enforce against that State the claims of British and of other creditors. I do not think we are in a position to form a final decision upon the policy of that measure until we hear the explanations of it which may be given by the Minister in Parliament. As to its justice, I admit at once that there is nothing to say against that, because the conduct of the Government of Mexico is such as fully to justify our armed interference. So, again, on the score of humanity, I admit it is unobjectionable, because, whatever may be the effect of our intervention, it is quite certain that we cannot possibly make the political condition of Mexico worse than we find it. The real question is whether there is any British object involved adequate to the magnitude of such an expedition. If the only object be what we are told it is—to collect these bad debts—I apprehend that may happen which sometimes occurs in private life, that the expenses of litigation will swallow up the profit. So much for foreign affairs. As to the future of domestic legislation, we have all of us heard a great deal in the last few months of what is called a Conservative reaction. Now, the thing is real enough, but the phrase is not strictly accurate. Reaction in this country there is not, and I believe there never will be. It is our nature to make changes slowly, but when we have made them all parties agree to abide by them. There is no measure which has passed in the last 30 years which, so far as I know and believe, any considerable party in this country would now propose to repeal; therefore, I say, in the strict sense of the word, reaction there is none. But of Conservative feeling and contentment as to that which we have and of objection to any changes that may be proposed, there is undoubtedly more than at any time within my recollection. I do not believe this has anything to do with the accidents of political combinations or the working of Parliamentary parties. I believe it would be precisely the same if every politician and Minister now living were swept off from the face of the earth and if a House of Commons were returned composed entirely of new men. I believe that organic changes are out of season, and the very fact that they are out of season proves that the present time—as times of quiet generally are—is especially favourable for the carrying out of administrative reforms. I do not believe that you will have a Reform Bill introduced by the Government for two or three years at least. A trial was made in 1860, and Parliament received the measure then brought forward with disguised hostility, and the people with general indifference. It is no use now to discuss that Bill. The question of Reform cannot die, and it cannot be permanently at rest, but I do not think it will be heard of again in any serious manner for two or three Sessions. Motions will be probably made on the subject by private members, but the only object of these motions will be to test the strength of parties, and it is not likely that they can lead to any practical result. I said fairly beforehand that, as I believe that subject can only be dealt with as a whole and by the Government of the day, I shall not support any motions so made by private members. Then there is the never-ending church rate controversy to deal with, and the annual financial discussions upon the Budget. There has been a great rallying among the clergy and their friends, and a cry has been raised that the Church is in danger. First, one ought to ask, in danger of what? If it is meant that the Established Church is in danger of losing that moral influence which she possesses over men's opinions and hearts, I do not myself see any chance in that direction; but, whether it be the case or no, it is not a matter with which Acts of Parliament and political agitation can have any influence; but if it is meant that the Establishment is in danger of losing its privileges and its State endowments, then I must say that, looking as far forward as practical men are justified in looking—viz., to the lifetime of the present generation—I do not see any reasonable cause for that apprehension. Looking at the matter merely from its political aspect, and not expressing any personal feeling, it seems to me that, in England at least, the Church establishment is as secure as any institution can be reasonably expected to be. I do not say that in Ireland or Scotland the state of things may be exactly the same. In Scotland the religion there established is that of a minority of the people, and in Ireland it is that of a very inconsiderable minority, and I will own to you frankly that I look forward with uneasiness and apprehension to the discussions which some day or other will arise upon ecclesiastical affairs in those countries. But with regard to England I believe that the balance of power which now exists between the Establishment and the Nonconformist bodies—and which I may say in passing is not on the whole incompatible with individual freedom of speech—seems to be likely to endure for a considerable time. If only the two hostile parties within the Establishment itself—and who, if one may judge from the manner in which they write and speak of each other, have no great mutual love to spare—can be kept from open war, I do not see that there is any external power which is ever likely to disturb the Establishment in the enjoyment of its rights. As to the particular question of church rates, I have seen and heard nothing to alter the opinion which for some years past I have formed as to its only possible solution. I was at first not indisposed to a compromise—for in England politicians frequently end by a compromise—but I have seen no plan which appears to me to have a reasonable chance of success. At present there is greater bitterness of feeling—certainly greater combativeness—on both sides. Both sides want that which only one can have—a decisive victory; and that being the case, I don't think any settlement is likely; especially as far as I can see, there is no very strong desire on either side for peace. I am not speaking of politicians, but there are some ecclesiastical leaders on both sides who appear not sorry to have a question of this kind open. It keeps alive attention, and acts as a little stimulus to party zeal. I do not think, therefore, that you will very soon see a settlement of the question; but on grounds of justice and policy, in the interests of the Church, and for the sake of social peace, I shall continue to vote against the rate. As to the question of finance, when the temporary suffering to which I fear we must look forward is over, I own I take a very sanguine view. I have no doubt that there will be suffering and depression for the next few months; but extending one's inquiry over a wider period, and looking back for the last 10 or 12 years, I believe America itself can hardly show more rapid material progress than that which this country has made. If, therefore, we can only avert foreign war and internal disturbance, I think, after the temporary suffering of the next few months has passed away, there will be no appreciable limit to the wealth, comfort, and numbers to which the population of these islands may attain. I am not going to take upon myself the duty of the Chancellor of the Exchequer, and point out what taxes it may be his business to remit. I am afraid we must not look forward to much remission of taxation next year, but whenever that operation takes place there are three or four taxes which seem to me to have a stronger claim than all others, viz., a reduction of the Tea duty, a reduction of the Sugar duty, to which precisely similar arguments apply, and a reduction of the duty on insurances, which, although I fear it cannot be wholly abolished, is at the present rate far too high. If our neighbours allow us to reduce our armaments, by reducing their own, which seems now more probable than it has done for a long time past, I think we shall all of us agree that the income-tax ought not to remain at its present height. As to that income-tax I have never held out hopes of its entire abolition; but I confess I am anxious to see it reduced, not merely for the reasons which lead us to be glad when any tax is reduced, but especially for the reason that, do what you will, it seems not to be in the power of man to make the tax a perfectly equitable one. In ordinary years of prosperity—although I am afraid we cannot reckon on the next year as one of them—it is calculated that each year's revenue ought to exceed the last by something like 1,000,000*l.*, and if the expenditure does not rise in proportion, there is a margin sufficiently large to enable reductions of taxation to be made, if we have patience, and are not anxious to do everything at once, or adopt the counsels of a school of financiers who would relieve us from existing taxes by putting on new ones quit as inequitable in the working."

The Chancellor of the Exchequer on Friday attended a meeting held in the Sheldonian Theatre at Oxford, for the purpose of obtaining the support of the University for the cheap public schools established by the Rev. Mr. Woodard, at Laneing, Sussex, for the sons of tradesmen, farmers, and others, and spoke as follows on Middle-Class Education:—

"Mr. Vice Chancellor,—The place in which we are assembled is no inappropriate place, and the framers of the resolutions have reminded us that this is no inappropriate time, for stating the object of the work which they have in hand. The resolution I am to move states that the growth of intelligence among the lower classes is the reason why the establishment of certain schools among the middle and lower classes is of great national importance. There can be no doubt that we have now reached an epoch at which the wise munificence of the legislature directed to the cause of popular education in its broadest sense has produced a great and visible effect upon the general intelligence of the mass of the population, and depend upon it there is no community that can be in a perfectly healthy state without something in the nature of a pressure upwards. As the sap rises from the ground in vegetable nature, so it is in the various stages of human society: with a stagnant lower class no society can do well—no country can be powerful or secure. On the recognition of that principle the Universities of England have from the first been founded; and although in the lapse of time a larger portion of their special work has come into immediate connection with the higher orders of the community, yet even now they cannot afford to disregard that rich mine of wealth in the lower strata of society, from which fresh treasures may ever more be obtained to vary, to enrich, and to enlarge the resources of mind, of talent, and of character which the university has to train and to apply to the service of this country and of its institutions. But while intelligence has thus been quickened in the lowest classes, and amongst the mass of the population, there can be no doubt that the lower middle classes, to the advantage of which Mr. Woodard has addressed himself specially, is at this moment in a position of some danger. And it is no unkindness to say so in plain terms, because nothing is more difficult—so slow and unperceived, though sure, are social movements—nothing is more difficult than to bring home to the minds of the members of any class the dangers that it may have incurred in losing its relative position; and I am sure that experience must arouse us and compel us to say that at this moment in many parts of the country—and I would venture to speak more particularly of some of the manufacturing and commercial districts—the lower middle classes, and even something above the lower middle classes, are in danger of being supplanted and outstripped in the race of business and of life, owing to the great advantages that have been made by the great masses of the population, especially the rising generation, and the want of corresponding advantages by the lower middle classes. I do not believe that any danger will ever arise to any community from excess, or I would rather say from an abundance of education in quantity, provided only that the quality be good, and the distribution just. Of late years I think we may say that the higher classes have received no inconsiderable stimulus. A great change in our political constitution some 30 years ago has brought the higher classes throughout the country, and especially in the sphere of public life, into close and intermediate connection and fair competition with the middle classes of the community. What has been the result of that competition? I think I may venture to speak as a witness, and I state, and state confidently, that the result of it has been to stimulate the exertions of that higher class in the fulfilment of public and social duty. But in so stimulating its exertions and calling forth its powers, which were necessarily called forth in that competition, it strengthened—not weakened—strengthened and confirmed the position of that higher class in the esteem of their countrymen, and in the exercise of their great social power and influence. There is a class, however, which, lying between the wealthy portion of the community and the poorer, has not yet received its fair share of attention. It is right, if we move forward, that we should move forward all together; and we owe it to those friends whose efforts we have met to-day to encourage, that they have aimed, and I believe aimed with success, in directing public attention to a flaw and a defect in our proceeding which has not as yet met with a full and adequate remedy—namely, this, that while the political movements which have taken place have put the upper classes of England upon their mettle, and while the liberality of the legislature has been the means of greatly bringing forward the lower classes of the population—the liberality of the legislature, I must not say alone, but aided in the main by the self-devotion and the self-sacrifice of the clergy—whilst this has taken place in these two great portions of society, up to the present moment there have been no corresponding efforts, and no corresponding advantages have been achieved among those who are too high in the social scale to take advantage of the benefits conferred by the national schools, and too low in the scale to take advantage either of the grammar schools or the universities of the country. We may say with truth that it is but fair that we should recollect that that class for which we are now pleading is the only needy class. The wealthy or the comparatively wealthy portion of the community derive immense advantages from the foundations which are furnished by our universities, our public schools, and our grammar schools, while the lower portion of the community derive immense pecuniary aid both from the indulgent liberality of others and from the direct action of the public exchequer. But there is a class which up to this moment may with truth be called the only needy class of the community, and which on that ground has the strongest possible claims on our exertions; and were it for no other purpose than to place them on a footing of relative equality to the rest of their fellow countrymen, I think that alone justifies the attempt. What are the schools then to be, for which we are called on to give our aid as well as our hearty and cordial verdict of approval? I must say I cannot but admire the thoroughly English spirit in which Mr. Woodard has addressed himself to his work. He desires that these schools shall be cheap, and at the same time self-supporting. While he has justly limited his demand to the necessities of the case, he does not ask you to become the permanent almoners of these schools. When they are in full action they will be self-supporting schools, but he asks the University to give them the powerful aid which its recognition will convey. Above all, he seeks to give to this portion of the community the immense advantage over and above all other considerations of what we call and thoroughly know by the name of public schools. There is nothing, I believe, which to foreign ears has a greater sound of paradox than the language of an Englishman when he speaks of the benefits of public education. It certainly does seem that if there is not an exclusive, yet that there is almost an exclusive, adaptation of this peculiar institution to the soil—I may say the moral soil—the moral and social climate of England. It is not necessary for us to ask whether they are institutions well suited for the world at large. Our own particular sphere is large enough, God knows, for ourselves, and for our humble and feeble efforts; but we know that for centuries past these institutions have taken such root in England that although they owe their existence only to the action of private motives and private liberality, yet there is no law on the statute book, no law or portion of the legislative government of the country which is more distinctly and more pertinaciously asserted in this nation than the necessity of that institution which we call our public schools. While we desire that knowledge should be communicated, we desire also that it should be imparted in an atmosphere of freedom; while we desire that discipline should be received by the young, we desire also that that discipline should not deviate or diverge into a servile, mechanical obedience. We desire that education should grow up in conjunction with freedom, because, in point of fact, freedom is an essential constituent of human virtue; and it is following the constitution which the Almighty has given to the human race when we say that we will, even in the training of the young, combine the imparting of knowledge with the allowance of every opportunity for the exercise of self-control, with the exercise of thought and reflection, even within those limited spheres of public opinion which tend to repress the waywardness and the selfishness of individuals by the well-considered convictions of others. Certainly it was with no small and no disagreeable surprise that I learnt the result of Mr. Woodard's efforts in what I should conceive one of the most difficult portions of his undertaking—namely, the establishment of public schools at so cheap a rate. His figures, I confess, are startling, and almost alarming; and I think that his experience in past years is the best proof of what he will do in future. Whether he will succeed in establishing schools such as he speaks of, with 10[illegible] boys, I do not know; but if he succeeds in establishing schools that will bear the same relative position to other schools which the Great Eastern bears to other ships, I am convinced that they will enjoy a much more favourable breeze of public opinion, and many less misfortunes than unhappily the Great Eastern has had to sustain. There is another point upon which, as it seems to relate more particularly to my own occupations at this moment, I may make a remark. I cannot help stating that I feel a profound admiration for Mr Woodard's talents as a financier. I am not acquainted in any degree with the nature of his establishments, and therefore I must take his budget as he himself presents it. But I am bound to say that it is a marvellous thing; and if it had not been to some degree tested by experience I should have thought it almost impossible that for so small a sum as 2[illegible] to 30*l.* a year he should be able to give such food, such lodging, and such education to the young as it is established by undoubted testimony that they receive in these establishments. And that reminds me of another point. Mr. Woodard may be a good political economist and an enlightened philanthropist; but this I will say, he has sought a deeper source of strength, because he has taken his ground upon Christian principle, Christian love, and Christian self-denial; and that very cheapness which he has achieved could not have been obtained without appealing to higher motives in order to induce teachers of high attainments and cultivated minds to give themselves to a work that some would have found irksome and repulsive. True Christian philanthropy must have its source in the deepest principles of our religion; and those schools which are to be public schools would not have been worthy of your support, and would not have deserved and attained the popularity they enjoy had they not also been Christian schools, or had they presented to the eye the phantom of an undefined and shadowy Christianity. Mr. Woodard has sought for the source of his strength in the principles of Christian action; he has based the constitution of these schools on the Christian laws and institutions of the country, not on any individual or theoretical estimate of his own, but on that which we know and understand, on the history and usage which are agreeable to the ideas and the constitution of this University, and the religion and constitution of the people of England. I think it a wise rule that if we are to carry down the principle of public schools to the lowest parts of society to which they can be made applicable, so, likewise, we should carry downwards the application of that important principle that it is desirable to keep the education, not only of the higher, but of all classes of the community, in the hands and under the direction of the clergy. It is not that a layman may not be an able and intelligent teacher, but it is not reasonable to ask from men in the lower middle classes that they should themselves institute minute inquiries into the standard of religious instruction conveyed in every particular school throughout the country, for it would be asking what is incompatible with their condition, occupation,

the means of judgment. It is our business to offer them institutions which bear on their very front and forehead the assurance that within their precincts is to be given a religious education, as understood in the sense in which it has ever been understood by the people of England; and for that purpose education the communication of instruction in a large part by the clergy is, in my opinion, an absolute and indispensable security. It is from them that we have a right to expect conformity to the laws and standards under which they are to teach, and permit me to say that it is not alone for the sake of the clergy I desire to see them still discharging in the main these great functions, but because it is one of the closest, one of the most effective, and perhaps one of the most affectionate bonds of union between the clergy and the laity; and the reacting influence of the laity through the machinery of education on the clergy themselves, is one of the main securities for that harmony of the two great portions of the Christian community which is indispensable to the real prosecution of the work of the Church. It is not merely that when these schools are opened they should be placed under the supervision of some one who is called reverend, but we have a right to expect from the founder of public schools for the middle classes some security for the placing them in harmony, not only with what he believes to be the general sense of the Church, but also with its local institutions distributed throughout the country. I think, therefore, that it is an elementary and indispensable principle of the establishment of a new class of public schools that they should be placed under the visitorship of the bishop of the diocese. The plan which we are called on to support is so plain and intelligible, as well as so valuable, that it requires much less than the usual efforts to entitle it to confidence. The founders of those schools have, I confess, it appears to me, entitled themselves to your vigorous and hearty support. In every social respect, and therefore I will say in every political respect—speaking of course of the larger aspect of politics—in every political respect, in every moral and religious respect, they have done that which we are entitled to expect at their hands in supplying this grand social want. I trust they will create a new bond of union among all classes of society; and, if so, they will be entitled to command the hearty support of every good citizen and every earnest Christian."

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at $92\frac{3}{8}$ to $\frac{1}{2}$ for Money, and $90\frac{7}{8}$ to 91 for the Account; Bank Stock, 234; Three per Cents. Reduced, $90\frac{3}{4}$ to $\frac{7}{8}$; New Three per Cents., $90\frac{3}{4}$ to $\frac{7}{8}$; New Two and a Half per Cents., $76\frac{1}{2}$ to 76; India Stock, 228 to $227\frac{1}{2}$; Ditto Five per Cent. Stock, 106 to $105\frac{1}{2}$, *cum div.*; Ditto for Acct., 103 to $102\frac{3}{4}$ ex div.; Exchequer Bills, March, 11*s.* to 12*s.* pm.; Ditto June, 13*s.* pm.; Ditto Small, 11*s.* pm.—FOREIGN: Brazilian Old Five per Cents., $100\frac{1}{2}$; Ditto Four and a Half per Cents., 1860, $92\frac{1}{2}$ to $91\frac{3}{4}$; Chilian Four and a Half per Cents., $86\frac{1}{2}$; Equador New Consolidated, $15\frac{1}{2}$; Italian Five per Cents., 67 to $\frac{1}{2}$; Mexican Three per Cents., $26\frac{1}{4}$; Ditto for Acct., $26\frac{1}{2}$ to $\frac{3}{8}$; New Grenada Deferred, $5\frac{1}{4}$; Portuguese Three per Cents., 1853, 47; Russian Three per Cents., 1859, $59\frac{1}{4}$ to 59; Spanish Three per Cents., for Acct., 51 to $\frac{1}{2}$; Ditto New Deferred Three per Cents., *for Acct.*, 41; Turkish Six per Cents., 1858, 71; Ditto *for Acct.*, *70 to 68*; Ditto 100*l.* Bonds, 73 to $72\frac{1}{2}$; Ditto Guaranteed Four per Cents., $102\frac{1}{2}$; Venezuela Three per Cents., 22.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£28,718,710	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion	14,068,710
		Silver Bullion	—
	£28,718,710		£28,718,710

BANKING DEPARTMENT.

Proprietors' Capital	£14,553,000	Government Securities (including Dead Weight Annuity)	£10,892,859
Rest	3,133,731	Other Securities	16,194,997
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	4,203,932	Notes	8,714,330
Other Deposits	14,086,309	Gold and Silver Coin	876,068
Seven day and other bills	701,282		
	£36,678,254		£36,678,254

28th day of Nov., 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

FRIDAY: *Nov.* 22—BANKRUPTS—W. P. ARNOLD, Warner Street, Dover Road—T. ASHWORTH, Birmingham, Betting Man on Commission—A. W. BAKER, late of Hastings, Sussex, Bookseller—T. H. BAKEWELL, late of Leighton Grove, Kentish Town—M. BALL, Huddersfield, Cloth Fuller—G. BARFORD, Luton, Bedfordshire, Straw Hat Manufacturer—A. BARNASCHINA, Gravesend, General Dealer—G. BARNES, Newcastle-under-Lyme, Physician—J. BATESON, Doncaster, Tobacconist—F. BECKINGHAM, Ashford, Kent, Horse and Cattle Dealer—W. C. BELLARD, Earle Street, Edgware Road—J. BEAUMONT, Flixton, Suffolk, Innkeeper—J. C. BIBBING, North Shields, Northumberland, Master Mariner—J. B. ARUNDALE, Pudsey, Yorkshire, Cloth Manufacturer—R. BOOTH, Manchester, Packer—W. BOTT, Shrewsbury, Coalmaster—F. BOWEN, Nottingham, Draper—F. BRADLEY, Upton, Staffordshire, Surgeon—W. BROOKSBY, Bulwell, Nottinghamshire, Lime Burner—A. H. BROWN, Newcastle-upon-Tyne, Butcher—H. J. BROWN, Queen's Terrace, Marlborough Road, Chelsea, Cheesemonger—T. BUCKLEY, Hammersmith—C. BULLOCK, Warwick, Innkeeper—B. BUSSELL, Neath, Commercial Traveller—W. BUSH, Brentwood, Essex, Farmer—T. CALVERT, Rochdale, Lancashire, Iron Moulder—W. CANLER, Nedging, Suffolk, Farmer—T. CASE, Halewood, Lancashire, Boot and Shoe Maker—J. CHAPMAN, South Town, Great Yarmouth, Shipwright—A. CLARK, Liverpool, Licensed Victualler—G. F. CLARE and G. R. CLARE, Framlingham, Suffolk, Auctioneers—T. CREWE, Ecclesfield, Yorkshire, Rope Maker—A. CULLIS, Worcester, Greengrocer—W. T. DAIRY, Bruton Street, Berkeley Square—THOMAS DAVEY, Woodford, Essex—JAMES DAVIS, Peterborough, Northamptonshire, Licensed Victualler—The Rev. W. VANCRESSON DAWSON, Alfrick, Worcestershire, Clerk in Orders—H. L. DENNIS, Weymouth, Contractor—R. F. DENNIS, Fordham, Cambridgeshire—J. DOBBS, Manchester, Innkeeper—J. DODD, Nottingham, Box Manufacturer—J. J. EARDENSOHN, Mincing Lane, Wine Merchant—J. T. ELSE, Totton, Hampshire, Cattle Dealer—J. A. ELSTOB, North Row, Park Lane, Clerk—J. B. EVISON, Camden Square, Camden Town—C. B. EVANS, Cullompton, Devonshire, Fellmonger—T. FAIRFAX, Great Prescott Street, Whitechapel, Carman—S. FASTNEDGE, High Wycombe, Buckinghamshire, Milliner—D. FENNER, Sheerness, Licensed Dealer in Beer—R. FINLAYSON, Aberdare, Glamorganshire, Market Gardener—J. FINIGAN, Colebrook Terrace, Islington—J. FORTH, Eye, Northamptonshire, Innkeeper—J. FRANKESTEM, Bloomfield Street, London, Coffee House Keeper—E. T. GEDDES, Great Randolph Street, Camden Town—C. V. GOOB, Bermondsey, Surrey, Dealer in Steel Pens—J. GRANT, Strangeways, Manager of a Cotton Manufactory—K. GRAVIL, Attercliffe, Yorkshire, Grocer—T. GREENWOOD, Goswell Road, Boot and Shoemaker—B. HAGUE, Sheffield, Anvil Maker—W. HANCOCK, Barossa Place, Brompton—W. HANSON, Ossett, Yorkshire, Rag Dealer—J. HARTSHORN, Nottingham, Lace Manufacturer—G. HARVEY, Bramshaw, Wilts and Hants, Farmer—A. Y. HARVEY, North Shields, Builder—D. HEARD, Barking, Essex, Carpenter—G. HEATLEY, Canton, Glamorganshire, Painter—C. M. HERBERT, Walsall, Staffordshire, Coal Merchant—B. H. HIGGINS, Bermondsey, Surrey, Master Mariner—G. HINSLEY, Lower Norwood, Surrey, Builder and Contractor—F. HOLME, Liverpool, Butcher—J. HOLT and R. BELL, Tottington, Lancashire, Cotton Spinners—E. HOUGHTON, Daventry, Northamptonshire, Tailor—W. HOWELL, Liverpool, Iron and Tin Plate Manufacturer—W. HOWE, Coventry, Builder—F. A. HUET, Wolverhampton, Dentist—T. JENNINGS, Norman Terrace, Wandsworth Road, Button Dealer—G. JOHNSON, Liverpool, Merchant—D. JOHNSTON, North Shields, Licensed Victualler—J. KERR (not KEER, as advertised in last Tuesday's "Gazette"), Leadenhall Street, City—T. LANCASTER, St. Clement's, Oxford, Tallyman Draper—F. LAW, Manchester, Corn Factor—G. LAWRENCE, Birmingham, Cabinet Maker—J. H. LAVERTON, High Street, Poplar, Carver and Gilder—H. H. LINLEY, Sheffield, Coal Merchant—R. LIGHT, Wormbridge, Shropshire, Joiner—J. LONGHURST, Croydon, Beer Shop Keeper—T. LUCAS, Vauxhall Walk, Lambeth, Agent—J. LUMLEY, Middlesborough, Yorkshire, Journeyman Joiner—G. J. LYONS, Woodlands, Buckinghamshire—J. MARIOTT, Whittlesey, Cambridgeshire, Tailor—S. MARSHALL, Stockton, Accountant—W. MARSHALL, Ilkeston, Derbyshire, Grocer—J. MARTIN, Sleaford, Lincolnshire, Tea Dealer—W. J. MILLS, Messing, Essex, Veterinary Surgeon—W. S. MONDAY, Egham, Surrey, Grocer—G. MOORE, late of Somersham, Suffolk, Butcher—R. SCARTH, Morley, Yorkshire, Cloth Manufacturer—W. MOSS, Chancery Lane, Holborn, Boot and Shoe Maker—J. NEALE, Nettlestead, Suffolk, Farm Bailiff—J. NEWMAN, Vere Street, Clare Market, Licensed Victualler—J. NEWTON, Neath, Glamorganshire, Dealer in Cheese—W. NICHOLSON, Low Harrowgate, Yorkshire, Baker—R. NICOL, Notting Hill, Tavern Keeper—T. NIXON, Newcastle-upon-Tyne—J. W. PAGE, Princes Street, Walworth Road—F. PARSON, Edwardstone, Suffolk, Farming Bailiff—P. P. HAY, Brecknockshire, Tailor—J. N. PEQUOIR, Water Lane, City, Clerk—R. PINYL, Onslow Terrace, Walworth, Artist—T. G. PRATT, Wilby, Northamptonshire, Brickmaker—J. PORTER, Lincoln's Inn Fields, Solicitor—G. RANDS, Werrington, Northamptonshire, Farmer—T. H. REE, New Henry Street, Limehouse, Coal Weigher—THOMAS RENFREY, Penzance, Boot and Shoe Manufacturer—THOMAS RHODES, Cheetham Hill, Manchester, Patent Wadding Manufacturer—ABRAHAM RITCH, Broad Street, Golden Square, Glass Cutter—R. REES, Llanelly, Carmarthenshire, Baker—J. ROGERS, Alpha Road, St. John's Wood—E. SCHMIDT, Somerset Terrace, Pimlico, Lodging House Keeper—R. SCOTT, Everton, Lancashire—T. SCOTT, Carlisle, Cumberland, Inn Keeper—T. SHAW, Sheffield, Butcher—C. SHEPPARD, Bridgend, Glamorganshire, Mineral Agent—J. W. SIMMONS, Westbourne Park Villas, Paddington, Lodging House Keeper—A. SMITH, Sheffield, Joiner—W. SPENCER, Silverstone, Northamptonshire, Working Lath Render—S. STONNER, Steeple, Essex, Baker—W. STEPHENS, Birmingham, Builder—M. TASSOCK, North Street, Mile End, Fishmonger—J. TILLETT, Maida Hill West, Middlesex—W. J. THOMAS, Hay, Brecon, Attorney-at-law—W. TIMMIS, Norton in the Moors, Staffordshire, Cordwainer—H. TIPPER, Cheadle, Staffordshire, Confectioner—J. TRIBE, Canterbury Terrace, Beresford Street, Walworth, Wholesale Fancy Stationer—G. E. UPTON, Clarence Street, Islington, Jeweller's Assistant—J. S. WALKER, Nottingham, Commission Agent—J. WARREN, Ashton-under-Lyne, Lancashire, Provision Dealer—H. WATSON, Sheffield, Scale Cutter—W. WATTS, New Whittington, Derbyshire, Grocer—G. WEBB, Alexander Square, Brompton—T. F. WHITE, Long Buckby (not Buckley, as advertised in last Friday's "Gazette"), Northamptonshire, Miller—T. WHITEHOUSE, Falling Heath, Wednesbury—J. W. WILLIAMS, Willow Walk, Bermondsey—J. WINTERBORN, Marlborough Mews, Oxford Street, Carpenter—J. WOOD, Oxford, Maltster—W. WOODTHORPE, William Street, Islington, Carpenter—J. WRIGHT, Scarborough, Commission Agent—W. B. WYATT, Iffley, Oxfordshire, Boat Builder.

SCOTCH SEQUESTRATIONS.—A. ERSKINE, Glasgow, Victualler—I. CAMPBELL and J. KIRKWOOD, Glasgow, Fleshers—J. MACKINTOSH, Tighnallan of Aberarder, Inverness-shire, Farmer—A. RONALD, Gartlea Forge, near Airdrie, Lanarkshire, Spade and Shovel Manufacturer.

TUESDAY: *Nov.* 26—BANKRUPTS—D. ALDER, Cheltenham, Stationer—J. ALDER, jun., Cheltenham, Toy Dealer—G. AUSTEN, Ramsgate, Kent, Grocer—W. ANDREW, Lincoln, Boarding House Keeper—H. ATTKINS, Harrow Road, Paddington, Carpenter—J. BLETCHER, Hulme, Lancashire, Commission Agent—I. BENTLEY, Mold Green, near Huddersfield, Grocer—E. BLUCK, Tranmere, Cheshire, Attorney—R. BULT, Evesham, Worcestershire, Bookseller—T. BOUTTER, Cromer, Norfolk, Hotel Keeper—G. BUCKLEY, Northumberland Place, Paddington, Plumber—B. BURFORD, Great York Mews, Baker Street, Livery Stable Keeper—A. D. BELL, Sewardstone, Essex—F. BLENKARN, Manchester—R. BOSTON, Reeth, Yorkshire, Innkeeper—W. CLARK, Ross, Herefordshire, Cheese Dealer—J. BIRCH, Shelton, Warwickshire, Grocer—D. BOLLAND, Bowling, Yorkshire, Shoemaker—T. BRIGGS, Morley, Yorkshire, Cloth Manufacturer—D. BATES, Thornton, Nottinghamshire, Miller—J. BACON, York, Tea Dealer—J. BASTER, Primrose Street, Bishopsgate Without, Builder—R. E. BAMPLOUGH, Capland Street, Lisson Grove, Solicitor—J. CROWTHER, High Street, Hoxton, Grocer—A. CAVE, Carisbrooke, Isle of Wight, Baker—T. J. CRESWICK, Ranmoor, Sheffield, Electro Plate Manufacturer—J. N. CHAMPION, Abersystwith Terrace, Islington, House Decorator—C. CROFF, Portsea, Hampshire, Tailor—G. CONSTABLE, Boughton-under-the-Blean, Kent, Boot and Shoemaker—G. T. B. CLAYDON, Albert Street, Mornington Crescent, Merchant—STEPHEN HAWES CROSSWELL, St. James's Street, Piccadilly, Wine and Spirit Merchant—DUNBAR JOHN COTHER, Sloane Street, Chelsea—JAMES CRICK, Soham, Cambridgeshire, Innkeeper—G. COTTON, Coventry, Builder—J. L. CLARKE, Moorgate Street, Solicitor—C. CARTER, Grosvenor Street, Bond Street, Dentist—E. CARNELL, Tonbridge Wells, Kent, Solicitor—S. CLEMENTS, Romford, Essex, Dealer in Pigs—W. DAVISON, Wigton, Cumberland, Tanner—R. EMMERLIN, Windsor Terrace, City Road, Commercial Traveller—P. ECKHANS, Gresham Street, Importer of Jewellery, &c.—C. ELSTONE, Winchester, Hampshire, Draper—T. FOX, Great Yarmouth, Builder—J. FOXALL, Ealing, Middlesex, Tavern Keeper—E. FORSDYKE, jun., Great Ormond Yard, Queen Square—S. V. FOLCH, Cannon Row, Westminster—J. F. FRY, Sheffield, Pork Butcher—R. A. FARQUHARSON, Holland Terrace, Millbrook Road, Brixton—G. S. FRANKHAM, Mead Row, Westminster Road, Builder—I. GADSBY, Camden Town, Licensed Victualler—R. GODSELL, Whippingham, Isle of Wight—J. GRIFFITHS, Liverpool, Builder—T. C. GALE, Hercules Buildings, Lambeth—W. HUTCHINSON, Manchester, Joiner and Builder—W. HILL, Stones Street, Commercial Road East, Provision Dealer—F. HOLMES, Liverpool, Book Keeper—C. HIGHFIELD, Luard Street, Caledonian Road, Cab Proprietor—J. HURLEY, Exeter, Joiner—T. HOLLOWAY, Birmingham—E. JONES, Aberystwith, Cardiganshire, Wine Merchant—J. H. JONES, Swansea, General Dealer—W. H. KNOCK, Eton, Bucks, Fruiterer—J. KRAUSS and A. SHAW, Manchester, Calico Printers—J. LAWTON, Morley, Yorkshire, Clothmaker—J. LLOYD, West Bromwich, Staffordshire—G. LINGHAM, Bowling Green Street, Kennington—B. LAKE, Aston Clinton, Buckinghamshire—J. MOORE, Ely, Cambridgeshire, Innkeeper—S. MOORE, Lowestoft, Suffolk, Fish Merchant—T. MIRFIN, jun., Barnsley, Yorkshire, Cabinet Maker—J. MARTIN, Sleaford, Lincolnshire, Tea Dealer—H. MARLOW, Walsall, Staffordshire, Collar Maker—A. R. MUSTARD, White Conduit Terrace, Park Road, Islington, Baker—G. MARRIOTT, Darley Dale, Derbyshire, Coal Merchant—J. MORGAN, West Street, Commercial Road, Pimlico, Contractor—W. MAUNALL, Melton, Suffolk, Corn Chandler—C. NICKSON, Blackpool, Lancashire, Livery Stable Keeper—T. ORD, Sunderland, Veterinary Surgeon—M. OATES, Liverpool—J. O'NEILL GALLAGHER, Maddox Street, Regent Street—E. ORD, Crook, Durham, Draper and Tailor—F. O'HANLON, Alfred Street, Brompton, Licensed Hawker—H. PIATT, Birmingham, Cooper—S. PARNES, Levenshulme, Lancashire, Warehouseman—G. PINKNEY, Pittah, Durham, Publican—W. J. PERCIVAL, Althorne, Essex, Oyster Dredger—H. POPE, Ipswich, Bricklayer—T. N. POTTER, Smalley and Mapperly, Derbyshire, Butcher—W. PAINE, Titsey, near Godstone, Surrey, Farmer—J. POOLE, Birmingham, Brass Founder—W. PALSER, Birmingham, Brace Maker—G. REDFEARN, Leeds, Butcher—J. REEVES, Foston Heath, Derbyshire, Farmer—J. RUDD, Sheffield, Beer House Keeper—T. RIDING, Leeds, Carver and Gilder—JOSEPH REDFEARN, Birmingham, Warehouseman—ALEXANDER RAE, Took's Court, Chancery Lane, Lithographer—W. J. READ, Cumberland Row, Islington Green, China and Glass dealer—A. ROBERTSON, Birmingham, Tobacconist—C. REDGRAVE, Brydges Street, Covent Garden, Bagatelle Board Maker—J. ROBSON, Newcastle-upon-Tyne, Licensed Victualler—J. ROLFE, Gerrard Street, Soho, Licensed Victualler—B. SWALLOW, Halifax, Yorkshire, painter—G. SPARROW, Compton Street, Brunswick Square, Eating House Keeper—J. SADLER, Fishergate, Sussex, Master Mariner—W. H. SMITH, Commercial Road East—R. SMITH, Sen., Hoo, Kent, Land Surveyor—W. SMYTH, Hereford, Inn Keeper—J. SQUIRE, Harkstead, Suffolk, Farmer—W. S. SPINKS, St. John's Road, Hoxton, Carpenter and Builder—J. SALE, Jun., Wolstanton, Staffordshire, Joiner—W. STEWART, Darlington, Durham, Pipe Manufacturer—T. SCATTERGOOD, Jun., Fillongley, Warwickshire, Labourer—R. SHAW, Stanton, Derbyshire, Higgler—J. STAMMERS, Bedfield, Suffolk, Dealer—W. SHONS, Oldham, Lancashire, Wire Worker—J. SMITH, St. Paul's Road, Walworth—T. TERRY, Mirfield, Yorkshire, Beer Seller—S. TILLOTSON, Halifax, Yorkshire, Police Constable—J. A. VYSE, Hanley, Stoke-upon-Trent, Coal Dealer—E. WILKINSON, Shiffnal, Shropshire, Inn Keeper—J. WILDY, Union Crescent, New Kent Road, Law Bookseller—C. H. WHITE, Crawford Street, Marylebone, Glass and China Dealer—L. WEST, Emscote, Warwickshire, Cattle Dealer—J. WRIGHT, Enfield Road North, Kingsland, Rent Collector—B. WEBSTER, Hurworth-upon-Tees, Durham, Grocer—J. WHISKER, Great Driffield, Yorkshire, Shoemaker—G. WITHEY, Burslem, Staffordshire, Flint Grinder—T. P. WICKHAM, Upper Montagu Street, Montagu Square—J. WALKER, Ashton-under-Lyne, Grocer—R. W. WILCOX, Lamb's Conduit Street, Optician—E. WATKINS, Manchester, Tripe Dresser—W. WHITE, St. Matthew's Place, Hackney Road, Haberdasher.

Metropolis and its Vicinity.

MEMORIAL TO THE LATE LORD HERBERT.—A public meeting was held on Thursday at Willis's Rooms, to adopt such measures as may result in an appropriate memorial to the late Late Herbert. The chair was taken by the Duke of Cambridge, and the room was filled by noblemen and gentlemen of all parties, and several distinguished ladies occupied seats in the body of the hall. Lord Palmerston, in moving the first resolution, said that it was the happy fortune of Lord Herbert so to perform his public duty, so to serve his country to the best of his judgment and ability, as to secure vast numbers of political and personal friends, and not to make a single personal enemy. His lordship moved—"That this meeting desires to express its deep sense of the loss which has befallen this country by the untimely death of Lord Herbert, and is anxious to pay a fitting tribute to his eminent public services as a minister and statesman, and to the self-sacrificing zeal with which he discharged his official duties." General Peel seconded the resolution, which was carried unanimously. The Chancellor of the Exchequer moved the second resolution, which was as follows:—"That a subscription be raised for the purpose of erecting a statue to the late Lord Herbert, and also for the endowment of exhibitions or gold medals in connection with the Army Medical School at Chatham, to be given at the end of each course of instruction to the candidate or candidates for admission who evince the highest proficiency in the knowledge of the art of preserving the health of the troops at home and in the field." He said that in Lord Herbert there were some gifts so peculiar that even there they might be placed on record. He was, he thought, the gentlest man that ever undertook to confront the difficulties of public affairs. It was true that he was strong as well as gentle, but how rare in this world was a genuine union of gentleness and strength, and that gentleness too combined he thought with modesty, such as he for one had never known to be equalled, he might almost say in any station of life.—Sir John Burgoyne, in the absence of Lord Clyde, seconded the resolution, which was unanimously carried.—The Bishop of Oxford moved the third resolution, "That a committee of noblemen and gentlemen be appointed to collect subscriptions, and devise the best means for carrying out the resolutions of this meeting." He said that Lord Herbert, gifted by a gracious Providence with every mental attribute—gifted, he might say with every moral gift—gifted with a fine person which bespoke the man you had to deal with—the full and open eye and a noble and manly bearing—seemed to cast off every physical stain in the atmosphere around him, as if the purity of his inner nature breathed through the outward tabernacle. This man—instead of indulging, he would not say in ignoble and selfish indulgences, for there could be no such indulgences for him—instead of indulging himself in the arts which beautify life, and which the most refined sensibility delights in, spent himself freely for every suffering brother, and mitigated the adverse lot of every tempted sister, and had left among us memorials which will endure for ages. He was the founder of hospitals, he was the builder of churches, he was the maintainer of schools, and his left hand never knew what his right hand gave; and he himself felt that life lost one of its most blessed lights when he was removed, a heart that never sailed to feel with you in sorrow, a head that never failed to suggest to you something noble and useful.—Earl de Grey and Ripon seconded this motion, which was put and carried.—The Duke of Newcastle moved the thanks of the meeting to the Duke of Cambridge for presiding, which was seconded by Earl Grosvenor, and carried by acclamation.

THE CONFEDERATE STEAMER NASHVILLE.—On Wednesday a communication was received from Earl Russell by Messrs. Oliverson, Lavie, and Peachey, of the Old Jewry, in reply to a letter they addressed to his lordship on Monday, as the solicitors of Captain Nelson, of the Harvey Birch. In that letter they called his lordship's attention to the circumstance that, without his sanction as Minister for Foreign Affairs, the magistrates at Southampton had refused to issue a warrant or summons calling upon Captain Peagrim, commanding the Nashville, by production of the authority under which he acts, to show cause why he should not deliver up to Captain Nelson certain property belonging to the owners, which is alleged to be detained on board the Nashville. In answer to this letter Mr. Layard, the under secretary, writing by the authority of Lord Russell, states that he has no power to give authority to the magistrates either to issue any summons or warrant, or in fact to do or to abstain from doing anything in relation to the matter in question, and that his lordship must, therefore, decline to interfere in it.

ROYAL MILITARY ACADEMY.—The decision of his Royal Highness the General Commanding-in-chief in the matter of the cadet inquiry at Woolwich was communicated to the cadets by the Adjutant-General Sir James Yorke Scarlett on Friday, in the presence of General Sir Richard Dacres and Staff, the Adjutant-General of Artillery and Engineers and other officers. The announcement was to the following effect:—

"The Duke has decided that the general tenour of complaints made by the cadets is groundless and frivolous; and that they have committed acts which, in boys of more tender years, would be visited with the castigation they deserved, but which were not to be excused in gentlemen of more mature age. He wished them to understand that no amount of scientific knowledge would be of use to make them efficient officers, unless they learnt to subject themselves to discipline; that their coming to the Royal Military Academy was a voluntary act on their part, and they must consequently submit to the rules in force at the time of their admission. He finally expressed his regret that he should be obliged to visit with punishment those who should, by their influence and example, have prevented their juniors from committing the gross breach of discipline of which they have been guilty."

The names of ten cadets were then read out, of whom eight are ordered to be "rusticated" for six months, and two for twelve months.

LOSS OF THE CANADIAN STEAMSHIP NORTH BRITON.—The screw steamer North Briton was totally wrecked

on the 5th inst., in a dense fog, on Paroquette Island, on the coast of Labrador. Several of the crew and 15 passengers left in two boats, but it has since been ascertained that these boats were picked up by a schooner and a brig, so that there has been no loss of life. The remainder of those on board the North Briton were landed in safety. Part of her mails were also saved. The North Briton sailed from Quebec on the 2d inst., and had the following passengers on board:—

"*Cabin Passengers.*—From Quebec.—The Hon. P. M. Vankoughnet and lady; Major Fielding, 60th Rifles, and lady; Felix Morgan, lady, and child: Felix Briard, Ralph Jones, M. Cone, John P. Strickland, A. W. Duncan, Frederick Clarke, W. H. Carville. From Montreal.—Dr. Woods, Thomas Damson, Mr. Robinson. From Kingston.—Captain Bayley. From Toronto.—E. J. Smith, C. Jarvis, 87th Regiment; Mrs. Price, Miss Price, Miss E. Price, Miss Allan, Captain Lamerte and lady, P. Pelham, John Smith. From Hamilton.—Sir Alan and Lady M'Nab. *Steerage Passengers and Crew.*—The steerage passengers numbered 98 souls, and the crew about 90, so that the total number of souls on board was about 220."

ENLARGEMENT OF THE ADMIRALTY.—Formal notices have been issued by the Board of Works of their intention to apply to Parliament next Session for an Act enabling them to acquire the necessary space for enlarging the Admiralty at Whitehall. In the inquiry last Session before the Commons' Committee on the Board of Admiralty, the principal witnesses agreed that the whole Naval Department should be concentrated within one building as in France. Sir J. Graham stated that he considered it of primary importance, and that before he left office in 1855 he brought before the Government a scheme for this purpose, proposing an encroachment upon the Admiralty garden. When the Crimean war occurred, he found it necessary to remove the Surveyor of the Navy from Somerset House to Whitehall, for the sake of constant communication with him, and to take the residences of two Lords of the Admiralty for the purpose; but this distinction of one of the chief officers of the navy from the rest gave rise to such jealousies that the step must be regarded as an error of judgment. He stated, also, that while providing room at Whitehall for the rest of the Somerset House branch of the department, it would be necessary, f the Board of Admiralty is to remain a Board, that there should be residences for the First Lord, a Naval Lord, and the Secretary, so that there may always be a Board upon the spot.

PROPOSED NEW ROAD THROUGH HYDE PARK.—A public meeting was held in the Vestry Hall, Paddington, on Tuesday evening, to consider the expediency of having a subway through Hyde Park, to connect Paddington and Bayswater with Brompton and South Kensington. Lieut.-Colonel Wortley presided, and stated that the present meeting had been called in consequence of proceedings which had resulted from a movement made by some of the inhabitants of Bayswater to have a new road across Hyde Park, through the Haha. He had had an interview with Mr. Cowper, the First Commissioner of Works, who authorised him to state to that meeting that he saw no objection to a road or subway proposed by Miss Martin, daughter of the late Mr. Martin, the architect. Mr. Cowper saw no objection to a subway to pass under the middle walk from Lancaster Gate to Coalbrook Dale Gates. He had had a level of the property taken, and found that there was no engineering difficulty. He asked Mr. Cowper whether the Government would be likely to sanction the disbursement of the necessary sum of money out of the public funds. Mr. Cowper's reply was that he thought he could not recommend that, because the money required would not be for an ornamental improvement. He pointed out to Mr. Cowper that it would be a great advantage, because the present road down Park Lane was not sufficient to accommodate the traffic in that direction. In respect to providing the required road Mr. Cowper seemed disposed to meet him and those who acted with him; and he had been informed since his interview that at present he was even more disposed to assist them than he was at the time when that interview took place. Under those circumstances he thought they ought to consider whether they ought not to have a direct and official communication on the subject from the Chief Commissioner, as his communication with him was, after all, simply a private one. The second consideration was whether it was to be expected that the parishes adjoining were to keep up the repairs of the road running either under or over the Government property. —Mr. Roche, in proposing the first resolution, recommended the meeting not to insist on any particular project. It would be more respectful to the First Commissioner to leave that an open question for the present. He thought that there could be no doubt of the necessity for a new road. It was required at that moment, and would be much more necessary during the Great Exhibition next year. If the Government gave the land, he was satisfied that there was sufficient public spirit to make the road. Some opposition might naturally be expected. It might be said that the proposed road would interfere with those who rode in Rotten Row; but on looking at the map he saw that the subway would cross the Row at one end. Besides this, equestrians would have a new ride in Kensington Gardens next year. He concluded by proposing a resolution to the effect that, having regard to the increase of western London of late years, and the formation of large, populous, and wealthy districts on the north and south sides of Hyde Park and Kensington Gardens, which districts were at present separated from each other, and had their traffic impeded by want of a direct communication, that meeting was of opinion that a public road had become an object of urgent necessity, and should, if possible, be made before the opening of the Exhibition.—Mr. Freeman seconded the resolution.—Mr. Steadman moved an amendment, stating that the proposed road was not earnestly desired, and would be an encroachment on the people's property.—Mr. Abrahams thought it would be quite useless to ask either the Government or Parliament to sanction a grant of public money for a local object like that now under consideration.—Mr. Heywood and other gentlemen strongly advocated the making of a new road. The resolution was carried by a large majority, only two or three voting for the amendment.—Mr. D'Iffanger proposed a resolution for a deputation to Mr. Cowper. He thought that the Commissioners for the Great Exhibition ought to contribute to the proposed road. There could be no question that sooner or later there must be a road either across Kensington Gardens or Hyde Park, and now was the time to move in the matter. The public would never be satisfied with an underground subway; but he agreed with Mr. Roche that it would not be well to suggest any particular plan in the first instance. Mr. Freeman said that the people of Kensington would oppose any project for a road across Kensington Gardens. The resolution for the deputation was then adopted.

EDUCATIONAL CONFERENCE.—A conference on the education question was held at the London Coffee House on Wednesday. The chair was occupied by Mr. Barnes, M.P., who was supported by many advocates of the voluntary system. Sir S. M. Peto, M.P.; Mr. Miall, Mr. S. Morley, the Rev. J. H. Hinton, and Mr. Richard, took part in the proceedings. The resolutions declared that the national system was a costly failure, and had created a great central establishment which was unable to cope with the details of the thousands of schools entrusted to its supervision; that it encourages parents to rely upon the state to the neglect of their own duties; and that the revenues from charitable endowments if properly applied, would render grants of public money unnecessary.

INDIAN FAMINE RELIEF FUND.—The final meeting of the General Committee for the administration of this fund, was held on Monday at the Mansion House, the Lord Mayor in the chair. The balance sheet, which had been duly audited, showed that the total amount of subscriptions received by the London committee was 114,807*l.* 17*s.* 6*d.* Of this there had been remitted at various times to Calcutta, including 3498*l.* 18*s.* 10*d.* which was to be forwarded by the mail of Monday night, sums amounting in the aggregate to 54,998*l.* 18*s.* 10*d.*, and to Bombay 57,000*l.*, making together 111,998*l.* 18*s.* 10*d.* There has been expended in advertisements 1,982*l.* 2*s.* 3*d.*; printing, 112*l.* 10*s.*; stationery, 90*l.* 12*s.* 9*d.*; postage, 111*l.* 5*s.* 3*d.*; office expenses, clerks' salaries, petty disbursements, &c., 512*l.* 8*s.* 5*d.* Over and above the money forwarded to India from the committee at the Mansion House, it also appeared that there had been received in Calcutta up to the 14th of September from provincial committees in this country 16,374*l.* odd, and from British colonies about 2349*l.*

THE NEW GAS DISTRICTS.—At the last meeting of the Metropolitan Board of Works, the report of the committee on the gas acts was brought up. It recommended that the metropolis be divided into four districts; that an additional inspector of gas-meters be appointed, and that the necessary advertisements be forthwith issued inviting applications from candidates for the office; and also submitting a plan showing the proposed division of the metropolis into districts. Mr. F. Doulton moved the adoption of the report, which was seconded by Mr. R. Taylor.—Alderman Lawrence condemned the proposition as hostile to the government, as well as to the corporation of London.—Mr. Freeman said that the Board on a former occasion had discussed this subject fully, and he objected to the matter being reopened, so far as the City was concerned.—Mr. Deputy Harrison considered that a greater number of districts would be required than had been proposed by the committee, and suggested that the City should be treated as a separate district. The original motion was carried, so that the city will henceforth be treated by the Board as a mere part of the whole metropolis.

THE CLEARANCE OF THE DEBTORS' PRISONS.—The Registrars of the Court of Bankruptcy have finished their labours for the present at the metropolitan prisons. From Whitecross Street Prison 33 have been released by the Registrars, about 21 from Horsemonger Lane Gaol, and some others from the Queen's Prison. On Monday there were only 105 in Whitecross Street Prison, and in Horsemonger Lane Gaol only 18, six of whom were committed by the county courts. The next return, on the 1st December, will show the state of the prisons, contrasted with the first return.

THE BANK OF DEPOSIT.—The report of Messrs. Harding, Pullein, & Co., the accountants, on the affairs of the Bank of Deposit and National Assurance and Investment Association, was published on Saturday evening. It states that there is a deficiency of 300,550*l.*, while the assets, according to the most liberal estimate, will not exceed 56,000*l.*, so that it is doubtful whether the depositors will realise 3*s.* in the pound. It appears that the Company was formed in 1844, and started with a capital stock which was advertised down to the last moment at 100,000*l.*, but which never exceeded 20,050*l.* 10*s.*, and of [illegible] 8593*l.* 10*s.* was paid in cash; 7100*l.* being [illegible] satisfaction of claims; and 4357*l.* entered [illegible] of certain individuals as cash payments, [illegible] elsewhere as loans, which are still unpaid. In 18[illegible] deed of settlement was prepared and executed [illegible] following persons, who were voted as directors:—[illegible] George Paget, Matthew Hutton Chaytor, N[illegible] Dennys, Joseph Macardy, Frederick John Ma[illegible] Peter Morrison, William Simpson Potter, William H[illegible] Rough, Charles Sauders, George Forbes [illegible] James Adair, Benjamin Boothby, Lord Keane, W[illegible] Wells, Edward John Hobhouse, and Joseph H[illegible] Browne; and by Henry Murray and John C[illegible] Dale, as covenantees." Subsequently the Ma[illegible] Abercorn was advertised as chairman of the [illegible] The qualification of the directors up to the year 18[illegible] was stock to the amount of 100*l.*, or a mutual policy [illegible] policies for 999*l.* After the year 1857 the qualification was professedly doubled; but it appears from a [illegible] the several names of the persons who have acted [illegible] directors since 1851, that only one out of the last [illegible] directors therein named, Major Adair, held any qualification whatever. The accountants report that they can trace no appearance of any profits having at any time arisen from the business which has been carried on. Year after year the total amount allowed for interest [illegible] deposits has exceeded the amount charged to [illegible] and the income from the assurance department has never been sufficient to meet the expenses incurred [illegible] the chief office, branches, and agencies. The difference between income and expenditure was written [illegible] reduction of the "stockholders' fund," the assurance fund, and the annuity fund, in other words, of the [illegible] paid to the company by individuals for the purchase [illegible] annuities. In 1852 the loss by interest and expenses was 4969*l.*; in 1853, 12,259*l.*; in 1854, 18,105[illegible]; 1855, 33,804*l.* 17*s.* 5*d.*; and so on, until in 18[illegible] it had reached the total of 147,935*l.* 14*s.* [illegible] while on the other hand the deposits, which were 4303*l.* in 1852, had swollen to 348,096*l.* 18*s.* 9*d.* in 18[illegible] The funds have been sunk in various kinds of enterprises—to the greatest extent apparently in defunct [illegible] winding-up insurance adventures, while even foreign Credit Companies, and Bernard's Patent Boot and Sh[illegible] Company, have received assistance from the concern. The State Fire Office has been largely mixed up with the Bank of Deposit, through the manager and [illegible] rectors having also been interested in the success [illegible] that establishment, and it is feared that no important amount will be recovered, the State Insurance Company being in process of liquidation. The liabilities are returned at 364,636*l.*, of which 362,597*l.* is the total of the amount to the credit of depositors. The assets may be taken at 55,086*l.*, leaving a deficiency of 309,55[illegible] The books of the association are stated to have been imperfectly kept, and some of the receipts as yet are not fully accounted for. The expenses of the Bank of Deposit have been quite on a par with the extravagance of its aims. Under the heading of preliminary expenses is the sum of 20,175*l.*, though the capital stock of the company in cash payments was little more than 8000*l.*; whilst its total expenses, including rent of office, salaries, &c., in London and the branches, amounted to 174,788*l.* in ten years. The sum of 82,000*l.* is set down for the expenses of chief office, including 25,000*l.* for advertising, 15,000*l.* for salaries, 13,000*l.* for directors' fees, and 7900*l.* for the managing director in lieu of salary. The branch offices figure for 35,000*l.*, and the commissions for 17,000*l.* The result is that the bank has stopped with cash at banker's, 32*l.* 7*s.* 7*d.*, and cash in hand, 26*l.* 10*s.* 4*d.*, and possibly 3*s.* in the pound for the depositors.

EXTENSIVE FIRE AT PIMLICO.—At an early hour on Thursday morning a fire broke out in the premises of Messrs. Holland & Sons, Cabinet Makers, Ranelagh Street, Pimlico. The flames spread with great rapidity, and the premises, consisting of a series of workshops three storeys high, extending from Ranelagh Street to Belgrave Street, were soon one mass of flame. At 2.30 the building was gutted, and valuable property to the extent of 30,000*l.*, consisting of costly sofas, tables, and bookcases, including nearly the whole of the furniture intended for the Grosvenor Hotel, was destroyed. The fire was ultimately got under, but up to the present time it is smouldering. Messrs. Holland are partly insured, but not to the full extent of their loss.

THE PUBLIC HEALTH.—The Registrar-General's weekly report states that the mortality of London, which has been rising since the beginning of the present month, exhibits a very considerable increase for the week that ended Saturday, November 23, the deaths registered during the week having been 1434. The present return is rather higher than the average obtained from the returns of the corresponding week of the 10 years, 1851-60. During the week the births of 939 boys and 914 girls, in all 1853 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1624.

Provincial.

ALDERSHOT.—Another military murder was committed on Saturday evening in the West Block Permanent Barracks. As Sergeant John Dixon and Corporal William Campbell, the orderly-sergeant and

corporal of the 3rd Company of the 78th Highlanders, was calling the roll of the company in the usual way, Private Thomas Jackson took his rifle from the rack, and discharged it at the sergeant. The ball entered the sergeant's right shoulder blade, passed through his body diagonally, and made its exit at the left breast. It then struck and shattered the right shoulder of the corporal, which it passed through, and next penetrated a partition into the non-commissioned officers' bunk, and struck against the opposite wall, when it flattened and rebounded. Sergeant Dixon fell forward on his face, and died in a few seconds. The only words he uttered were, "Who did it?" to which Jackson replied, "I did it, old boy." As soon as the report of the rifle was heard, Privates Marshall and Milligan rushed upon Jackson and secured him, and with the assistance of some others conveyed him to the guard-room. He was there placed in the strong-room with another prisoner, who was confined for being drunk, the sergeant of the guard not then knowing his crime. Directly afterwards Marshall informed the sergeant that Jackson was charged with murder, and on the sergeant entering the cell for the purpose of handcuffing him he found that the prisoner had made an attempt to strangle the drunken man. He said he certainly would have murdered him but for the sergeant's entrance. While the irons were putting on he said to Marshall that had the room been clear his intention was to load 10 rifles and fire them at the regiment on parade. Sergeant Campbell was conveyed to the hospital, when it was found that the bone of his upper arm was much shattered, and a portion of it was removed, since which he has been going on favourably, though the result of his injury is considered doubtful. The murderer, Thomas Jackson, is only 20 years of age, and is a native of Barnardcastle, near Durham. He was a notoriously bad character, but neither the sergeant nor the corporal appear to have been at all concerned in the punishments he received. It is a noticeable fact that when the report of the rifle was heard, a man of the 53rd Regiment, who was standing outside the barracks, and who had previously been seen in the prisoner's company, was observed to make off, and Jackson, after being arrested, said, "There are to be some more shot; it is to be done on the 15th, or before Christmas."—At the inquest on Monday, the jury returned a verdict of "Wilful Murder" against Thomas Jackson, appending the following remarks:—

"We cannot separate without expressing our deep conviction that speedy and effectual steps should be taken by the military authorities and the Government to prevent the repetition of these frightful and diabolical crimes, which have been of late so frequent, and which tend to degrade the ranks and produce terror in the minds of the officers, and spread horror through all classes of the community. We do not wish to suggest any steps, but we conceive that the removal of the ready means would be the effectual remedy, or that such an example be made that would by its prompt execution on the spot in one case act as a terrible warning to others."

The Coroner then made out his warrant for the committal of the prisoner to Winchester Gaol on the charge of Wilful Murder; and, addressing the public and officers assembled, said that 12 months since, after holding an investigation into the death of a sergeant and corporal who had been shot by a soldier, the jury made a somewhat similar recommendation to the Commander-in-Chief to that which they had now presented, but nothing had been done in the matter, and the case had since been followed by a murder at Preston, by another at Plymouth, by another at Colchester, and now by this horrible catastrophe. It appeared to him that the time had arrived when, as the jury very justly and properly recommended, some alteration should take place, either with the view of preventing men having ammunition in their own hands, or of preventing in some other way the recurrence of these horrible crimes. It was not only that these men either destroyed their officers or non-commissioned officers for some injury, fancied or otherwise, but, as his experience had shown him, they often returned to barracks dreading punishment or out of spirits from some cause or other and destroyed themselves. In his official capacity he had repeatedly held inquests in cases of suicide where soldiers had taken their rifles, loaded them, and destroyed themselves. In this state of affairs it was absolutely essential for all their sakes that some stringent alteration should be made. He could not, for example, possibly understand why, as there was a non-commissioned officer in each of these rooms, he could not have charge of the ammunition of all in that room. That appeared to him to be a simple and effectual remedy. He had hoped, when a colonel and captain had been killed, that an effectual stop would have been put to this state of things; but it had gone on now to such a dreadful extent that public opinion must be brought to bear upon it. He trusted, therefore, that through the medium of the press the observations which he had made, as well as those of the jury, would go forth to the public, and that public opinion would be brought to bear on the authorities so that some alteration should be made.

CARLISLE.—A barbarous murder was perpetrated at the Botcherby level crossing on the Newcastle and Carlisle Railway, about a mile and a half from this city, early on Friday morning. An old woman 72 years of age, named Jane Emmerson, who lived in the cottage by the side of the line, and whose duty it was to open the gates of a level crossing there, was found lying dead on the road with her skull fractured and other marks of violence. It appears that she had been assailed while on her way to open the gate, and murdered with a weapon she carried for her own protection. After that the murderer proceeded to plunder the cottage, where she was known to keep a small sum of money, from 5l. to 10l., to defray the expenses of her funeral. The murderer is still at large, but the police have obtained a clue which they hope will lead to his discovery.

CHESTER.—The Queen Railway Hotel, a magnificent building opened last summer, was destroyed by fire on Monday night. The catastrophe originated about 5 P.M., from an overheated flue in the kitchen. The Mayor, the magistrates, and the Militia were all quickly on the spot, with the city fire engines. The Birkenhead and Crewe engines were telegraphed for, and soon arrived. The Saltney engines were also present in good time. Captain Humberston, M.P., heading a small body of Volunteers, supported the police, and every effort was made to protect the property. There was just time to save the plate and a large part of the furniture, which was almost new. At one period the railway station itself, which cost above a quarter of a million, was in danger. The interior of the original part of the hotel is destroyed, but the large new wing was saved, so that the establishment may be re-opened immediately. There was no loss of life. The building is partially insured in the London and Liverpool Fire Office for 7000l.

HULL.—Two more Hull steamers have been lost—the Hebe and the Beatrice. The Hebe, a new screw steamer, was wrecked off Gothland, the loss by the ship and cargo being estimated at about 30,000l. The Beatrice, which was only placed on the Rotterdam line on Sunday night, in place of the steamer Enchantress, was driven during a strong gale on the stone-pier at Helvoet, on rebounding from which she ran on a bank, whence she slipped into deep water, and sank in less than half an hour. Her crew succeeded in saving themselves, with part of her cargo. The Era, steamer, has also been stranded on the Faro reef, but, after throwing overboard part of her cargo, got into Gothenburg. The Deptford, screw steamer, has also been stranded, and got off, but sunk after entering Pillau harbour.

LIVERPOOL.—When the news of the arrest of the Confederate Commissioners reached Liverpool on Wednesday, it was resolved to call an indignation meeting. A notice was accordingly issued calling upon the public to attend a meeting to be held at 3 o'clock that afternoon in the cotton sales-room, to consider what steps should be taken with reference to this "gross insult to the British flag." At that hour the room was densely crowded, hundreds being unable to obtain admission. The following is a brief summary of the proceedings:—

The Hon. Mr. Cunard was called upon to preside, but he declined, and so also did Mr. Torr. There were then loud calls for Mr. Spence, a Liverpool merchant, who has published a work on the present American conflict. Mr. Spence accordingly took the chair, and spoke as follows:—We had all heard of the dignity of the American flag. That dignity was a means by which any vessel engaged in the slave trade could protect itself by hoisting the American flag, and so resist any attempt to search such vessel. He trusted it would not be allowed that men prosecuting so nefarious a trade should be protected, and that men peacefully proceeding on their own affairs, under the protection of our flag, might be forcibly taken out of our ships. He proceeded to read the following resolution:—"That this meeting, having heard with indignation that an American Federal ship of war has forcibly taken from a British mail steamer certain passengers who were proceeding peaceably under the shelter of our flag from one neutral port to another, do earnestly call upon the Government to assert the dignity of the British flag by requiring prompt reparation for this outrage."—Mr. H. C. Chapman moved that the resolution be adopted.—Mr. A. Forwood seconded the motion, and said that the resolution must find an echo in every English bosom.—Mr. John Campbell said he was assured that there was no Englishman, Irishman, or Scotchman who would not at once, and promptly, resent any insult offered to our flag; but he thought that the Government and the law officers of the Crown were the proper persons to take cognisance of the outrage.—The Chairman suggested that, to meet the objection thrown out by Mr. Campbell, it would be sufficient to strike out of the resolution the words "by requiring prompt reparation for this outrage."—Mr. Campbell said he could not concur in the suggestion.—Mr. Torr urged the propriety of waiting for fuller information, and of not being carried away by impulse in a case which required mature judgment and calm deliberation. A letter had been shown to him by a Southern gentleman, in which it was stated as a positive fact that the law officers of the Crown had, in anticipation, expressed a decided opinion in favour of the legality of a proceeding similar to that which had just taken place in regard to the Trent by the San Jacinto.—Mr. J. Turner next attempted to address the meeting to the same effect, but the feeling of the meeting was so decidedly opposed to that view that he was forced to desist. The resolution, as proposed to be amended by the chairman, was then put to the meeting, and carried by a tremendous majority, and amid the most deafening and enthusiastic cheers. For the negative only a few hands were held up. At the conclusion of the meeting, a number of the older merchants on 'Change expressed privately their conviction that the meeting and its proceedings had been premature.

OXFORD.—In a Congregation held on Tuesday and very numerously attended, the form of statute for endowing the Regius Professorship of Greek now held by Professor Jowett, one of the authors of "Essays and Reviews," was submitted to the vote of the House. Considerable excitement prevailed, as it was apparent that the votes were given almost equally for and against the statute. The two Proctors, having taken the votes of their respective sides of the House, compared their lists; after which the Senior Proctor, amid profound silence, declared the decision of the House to be against the statute. The numbers were—Placet, 96; Nonplacet, 99; majority, 3.

SALISBURY.—The subscriptions already received towards the proposed statue of Lord Herbert and the Herbert Convalescent Hospital, amount in the aggregate to 2424l., of which 558l. is to be devoted to the statue, and the remainder to the fund for the hospital. A misapprehension appears to have arisen with regard to the manner in which it is proposed to appropriate the latter. There has been an impression that it was intended to erect the hospital in Wiltshire, but Mr. Sotheron Estcourt, through whose instrumentality the recent meeting at Salisbury was convened, has written to the rector of Warminster in the following terms:—"Our real meaning (so far as I may be accepted as an interpreter of it) is this—that, having secured within our own county a statue which is a memorial that we Wiltshire men like to possess at our county town, we are desirous of combining our efforts with those other friends and admirers of Lord Herbert throughout the kingdom, including the army, in establishing a Convalescent Hospital—not at Salisbury, but on that spot, wherever it may be, in which the air, soil, and position of the ground, together with facility of access, seem to present the most favourable prospects for the recovery of convalescent patients. The subscribers, when the list is closed, must determine what class of patients shall be admitted, and under what conditions. If the army should resolve to take a share with us in this good work, they will, doubtless, propose certain rules or conditions beforehand, and make their concurrence depend on our acceptance of such conditions. We shall, on our part, require that room shall be provided in proportion to our contributions for convalescents sent to the establishment from the Salisbury Infirmary and the county generally, but I am sure that neither the army nor any admirer of Lord Herbert need be deterred from accomplishing what all would allow to be a much needed and most useful work by an apprehension that the Wiltshire portion of the subscribers would put forward any narrow or local pretensions. We wish to see a good object attained in the name and to the honour of our friend, and we shall be better pleased to take part in it in common with the rest of the nation than exclusively on our own separate account."

SHEFFIELD.—Another of the trade outrages for which this town has so painful a notoriety took place on Saturday morning. A man named Westnidge was working for lower wages than those sanctioned by the trades union, and the unionists determined to punish him by throwing a tin filled with gunpowder, with a burning fuse attached, into his bed-room. They mistook the room, and threw it into one where a widow was sleeping. Westnidge's wife, however, hearing the noise, ran into the room, and seeing the tin on the floor with the fuse smoking, took it up, and instead of throwing it out of the window began to examine it, when it exploded in her face. Both women were shockingly burned, but Mrs. Westnidge was also so frightened that she leaped out of the window, and is not likely to survive. A fender grinder named Joseph Thompson, residing at Woollen Lane, Gatefield, was apprehended on Tuesday morning on the charge of perpetrating this outrage. The apprehension was skilfully effected by the chief constable, aided by several detective officers, who after a long search discovered the prisoner in bed. In the house they found a tin bottle filled with powder, and plugged up as though for the purpose of another outrage, a pistol, a box containing caps, a thick stick weighted at one end, and an old coat. At noon, in consequence of a communication from Mr. Knight, the house surgeon at the Infirmary, the magistrate proceeded to the Infirmary, and took the deposition of Mrs. Westnidge, in the presence of the prisoner and his attorney. For prudential reasons the examination was taken privately. The prisoner displayed great indifference as to the crime with which he was charged, and showed no concern for the sufferings of Mrs. Westnidge, who was evidently in the greatest agony. He was remanded.

SOUTHAMPTON.—An application of a somewhat novel character in connection with the Confederate steamer Nashville, was made to the borough magistrates in petty sessions on Monday. Captain Nelson, of the late Harvey Birch, who was accompanied by Mr. Peachey, Jun., of the firm of Olverson, Lane, and Peachey, solicitors of London, applied for a search warrant, with the view of recovering from the Nashville his chronometer, barometer, and ship's papers, which were taken on board that vessel at the time of the capture, and before his ship was set on fire. Previous to the formal application being made, Mr. Peachey handed to the Chairman a letter from the Lord Mayor of London, stating that a similar application had been made to him at the Mansion House, but that as he had no jurisdiction in the case he had thought it his duty to refer the matter to the authorities at Southampton. Mr. Peachey, for the captain, questioned the legality of the commission under which Captain Pegram, the commander of the Nashville, had acted. The Chairman said he had seen the commission, which was that of a lieutenant in the navy, and it was quite correct. The magistrates' clerk pointed out that a warrant could only be granted in a case where goods were supposed to be kept from felonious intent. The Chairman said the applicant knew very well what the Nashville was when he hoisted the Federal flag on board his ship. Captain Nelson admitted this to be true. The Chairman said it was a recognised fact that an opponent had a right to take anything he chose

under such circumstances as existed in this case. After a very brief conversation between the parties, the whole proceedings not occupying many minutes, the Chairman said that the magistrates were unanimously of opinion that the application could not be granted, and Captain Nelson was referred to the Secretary of State. A communication was accordingly addressed by his solicitors to Earl Russell on the subject, and on Wednesday an answer was received from Mr. Layard, the under secretary, writing by the authority of Lord Russell, stating that he has no power to give authority to the magistrates either to issue any summons or warrant, or in fact to do or to abstain from doing anything in relation to the matter in question, and that his lordship must, therefore, decline to interfere in it. Capt. Pegram and Colonel and Mrs. Peyton left Southampton on Friday morning by express train, for the purpose of placing themselves in communication with Mr. Yancey. Mrs. Peyton's maiden name was Lizzy Washington, and she is the nearest surviving relative of General Washington. Captain Nelson, of the Harvey Birch, was also sent up to London by the American Consul to lay his case personally before Mr. Adams, the American Minister, and it is rumoured that they were to have an interview on Saturday with Lord Russell, Secretary of State for Foreign Affairs. The whole of the crew were sent to London on Saturday afternoon. Captain Pegram returned from London on Monday evening, accompanied by Mr. Yancey, one of the Southern Commissioners, who states that it has been intimated to him through a third party that the Nashville is recognised by the British Government as a national vessel, and that she will be allowed the right to refit and repair, as was the case with the James Adger, so as to exercise a perfect neutrality between the two contending parties. It is believed that the necessary arrangements have been made for the Nashville to go into the graving dock, in consequence of her having been ashore.

Ireland.

MURDER IN THE COUNTY OF LOUTH.—A shocking murder was committed on Friday evening last in a lane near the Jonesborough station of the Dublin and Belfast Junction Railway, between the towns of Dundalk and Newry. The victim was a watchman in the employ of the company, and was last seen alive about five o'clock on the evening in question, having left his own house at that hour to attend to his duties at the Faughal crossing. As the train which left Dundalk at seven o'clock passed the spot, the fireman observed the body of a man lying across the opposite line of rail, and mentioned the fact on arriving at the next station. Men were at once sent to the spot, where they found the body of Hughes stretched across the line with his head lying on the rail, so that if a train had passed on that side he would have been so crushed and mutilated that in all probability the hope of the murderer would have been realised, and death would have been attributed to the train having passed over the body. On being examined, the body was found to present a horrible spectacle. His skull was split in several places by a hatchet, and pierced by the prongs of a fork, which lay covered with blood beside him; and one of his hands, which he had evidently raised to defend himself from his assailant, was almost severed from his arm. The police were immediately informed of the crime that had been committed, and a stepson of deceased, a young man named O'Hare, has been arrested on suspicion. An inquest was formally opened on Saturday, and was adjourned to the 30th inst.

SIR ROBERT PEEL AND FATHER DALY.—In consequence of the dissatisfaction expressed in various quarters at the brief visit Sir R. Peel recently made in Galway, the Chief Secretary has signified his intention of revisiting that town. At a meeting of the Town Commissioners of Galway, on Friday, Father Daly gave the following account of a conversation he had with Sir Robert relative to his recent visit. "Can the Rev. P. Daly be of any assistance to Sir Robert Peel?" Answer.—"No." "Will Sir Robert Peel remain in Galway to-morrow to meet the people of Galway?" Answer.—"No; I leave at 6."

Scotland.

DREADFUL ACCIDENT AT EDINBURGH.—On Sunday morning one of the immense piles of building characteristic of the High Street of Edinburgh suddenly fell, burying a great number of people in the ruins. The house was situated on the east side of the High Street, about half way between the North bridge and the ancient building known as John Knox's House. To the front the building showed seven stories, and in the rear there was an additional, or sunk story, owing to the sloping character of the ground. The frontage was 60ft., the depth about 40ft., and the height of the structure was 70ft. to 80ft. On the east, or under side, a very old wooden-fronted house, three stories in height, adjoined the fallen tenement, and another house of the same character, also several stories less in height, was at the other side. In the rear, one-half of the house had windows to the alley called Bailie Fyfe's Close, and on the remainder of the rear abutted the gable of a tall house entering from the close, and communicating with the front building. Like most of the houses in that part of the old town of Edinburgh, the destroyed building, which is believed to have been one of the old wooden houses of the 16th century, masked by a more modern stone front, has seen many vicissitudes of fortune, and from being the habitation of nobles and lairds, has descended in the social scale until it has reached the humblest class, nearly every room giving shelter to a distinct family. The immense block of building was thus densely populated, and it is estimated that not less than 100 people must have dwelt in it. On Saturday afternoon the occupant of one of the shops on the street floor observed a slight break in the plaster and a deflection of the roof, and immediately sent for a builder to examine the structure. A temporary prop was inserted, and after examining the upper stories of the house without discovering signs of a general depression, the builder concluded that the flaw was merely a local one, and no further steps were taken. Within 12 hours, however, the whole house fell inwards and collapsed with a fearful crash. On the clouds of dust subsiding it was found that the roof, the whole seven floors, and the substantial stone wall in front had descended in one heap. Efforts were at once made to relieve the unfortunate sufferers, and with this view the fire brigade were summoned, and in a few minutes a large body of men were set to work. The darkness of the night added greatly to the difficulty of the labour, and the high gables, unsupported on either side, threatened at every moment to add to the fatality of the occurrence by burying the men engaged in removing the rubbish. The burners were removed from the street lamps to obtain additional light, and a large number of torches were also procured. As day dawned, the work was carried on with redoubled vigour, but after 7 o'clock in the morning no living bodies were removed. Towards afternoon it became a serious question with the authorities whether the risk of continuing the search was justifiable, and seeing that many hours had elapsed, during which only dead bodies had been exhumed, it was resolved to desist from further excavation. Up to 4 o'clock 22 deaths had been recorded—20 of that number being dead when extricated, and the other two having died in the Infirmary shortly afterwards. There were, besides, 13 persons carried to the Royal Infirmary, more or less bruised and hurt, and several children, who had been taken out unhurt, were in charge of the police. In this way about 40 of the inhabitants had been accounted for, but the number who had escaped uninjured could not be ascertained, nor could the numbers of the tenants. When the labour of extrication was put an end to for the day there was still a large quantity of stones, timber, and rubbish to be removed. Of the persons killed only two presented signs of severe laceration, the remainder having apparently died of suffocation, or from being crushed under the superincumbent weight. Those taken to the Infirmary have not received much injury, and they are all expected to recover. Many remarkable escapes were made, and one or two instances occurred of preservation of life under almost miraculous circumstances. A boy of six or eight years old was extricated while asleep five hours after the accident occurred, his life having been preserved by a thick beam lying athwart his cot, and his slumber having been undisturbed by the dreadful commotion around him. In another case a young man, named Adams, who was in one of the rooms on the fifth story, was carried down by the falling wall, and deposited on the pavement on the opposite side of the street, with only slight bruises. Just before the accident a police sergeant was passing the building, when his attention was attracted by a slight scuffle on the other side of the street, and he crossed over just in time to escape the avalanche which might have crushed him to death. A little girl, who was recovered nearly unhurt, lost her father, mother, brother, and two sisters in the calamity from which she was miraculously preserved, and another brother, who was on his way home, escaped the fate of the rest of the household by being detained in conversation with a friend whom he met in an adjoining street. A little boy was extricated by the firemen, after about five hours' digging for him in the morning, and the little fellow was heard to encourage the efforts in his behalf by calling out, "He've away, my lads; I'm no dead yet." An old woman in the same domicile was also for a long time entangled in the ruins, and a cup of water was handed to her before she could be relieved. A young woman, undressing for bed, heard a rumbling sound above; she called to her father, and both escaped just as the building fell. Another young woman, who was heard to call out from amidst the ruins, had a way excavated for her into the building in the rear. On Monday four bodies were recovered from the ruins, three more were recovered on Tuesday, and three more on Wednesday, making in all 32 lives ascertained to be lost, but it is quite certain that others are still beneath the rubbish. Nearly all the bodies extricated have been persons found in bed, indicating that most of those who were awake escaped; and that those who perished were unconscious of the fate that hurried them out of life. In one or two cases persons who, after the first moment of alarm, went back to recover property, perished. An investigation is in progress as to the cause of the accident, but according to the system followed in Scotland it is privately conducted. The catastrophe created an immense sensation in Edinburgh on Sunday, and the event was referred to in almost all the pulpits. Never before in the history of the city has there happened such prodigious loss of life from a domestic accident. There is no doubt that the event will occasion a rigid scrutiny into the condition of many of these old buildings. There are not a few inhabited houses in Edinburgh from 300 to [illegible] years old, and as the material used was then chiefly wood, these relics of antiquity are very unfitted for so long an existence, or for adaptation to modern requirements. In consequence of the accident the inmates of the houses on both sides and in the rear of the fallen building have been ordered out, and have received shelter in some of the public asylums. A public meeting has been called by the Lord Provost to take steps for the relief of the sufferers.

Sporting.

PEDESTRIAN RACE FOR THE 10-MILES CHALLENGE CUP.—Nearly 10,000 persons of every grade of society assembled at the Hackney Wick Race Ground on Monday to witness the race between Deerfoot, the Seneca Indian, and Samuel Barker, of London, for the ten miles' Champion's Challenge Cup, and [illegible]. The cup was won by the Indian a few weeks since, when he ran against Mills and White, but he was bound by the conditions as holder to contend against any one who might challenge him. Barker, the challenger of Deerfoot on this occasion, is a much smaller man, about 27 years of age, but is considered a first-class runner. The competitors had to pass the referee 68 times to make up the 10 miles. On the signal being given for the start, Barker immediately took the lead, with the Indian about two yards in the rear, and thus they continued up to the finish of the [illegible] round, when Deerfoot dashed to the front. Barker, however, soon took the lead again, and in the 17th round was again two yards a-head, and so continued up to the [illegible], when the Indian began to force the pace. They passed each other again and again, but Barker held the lead up to the 36th round, when the Indian gave a war whoop, waved his hand as if certain of victory, actually danced past Barker, and led for the next round. Barker again went in front in the [illegible] round, and so continued to the 48th. In the 49th the Indian shot ahead, increased the pace still more, and led by four yards at the 50th, Barker struggling hard to keep up with him. In the 52d round Barker appeared to be in difficulties, but kept in front from the 57th to the 60th round. In the 61st round they passed the post side by side. In the 62d the Indian dashed away to the astonishment of all. Barker struggled hard to overtake him, but the speed of the Indian baffled all his efforts, and the Englishman was run to a standstill when he had nearly accomplished the 63d round, this portion of the distance, nearly 9½ miles, having been run in 51¼ minutes. The Indian finished the remaining five rounds, but at a much lower speed, on account of the spectators crowding round him. Even with this drawback he completed the whole distance under 54 minutes, and finished as fresh as when he started.

Law.

CENTRAL CRIMINAL COURT: *The Murder in Drury Court.*—*Richard Reeve*, 18, a mild, inoffensive-looking youth, was charged upon an indictment, and also on the coroner's inquisition, with the wilful murder of his step-sister, Mary Anne Reeve. Mr. Clerk and Mr. Beasley conducted the prosecution on behalf of the Treasury; the prisoner was defended by Mr. Sleigh and Mr. Kemp, through the instrumentality of a few benevolent persons who take an interest in the prisoner on account of his youth and the extraordinary circumstances under which the offence was alleged to have been committed. The facts were so clear that there was no ground for any doubt as to the prisoner's guilt; but it was suggested for the defence that his grandfather and other relatives had been lunatics. Baron Bramwell in summing up told the jury to bear in mind that there was no evidence whatever of the prisoner's insanity. The jury, after consulting for two or three minutes in the box, inquired if there was any evidence as to the state of mind of the prisoner since he had been in custody? Baron Bramwell told them that there was no evidence that would justify them in saying that the prisoner was not guilty on the ground of insanity. The jury then retired, but again came into Court in about 10 minutes, with a verdict of *Guilty*, at the same time strongly recommending the prisoner to mercy on account of his youth and the bad example that had been set him. Mr. Baron Bramwell said he would take care that the recommendation of the jury should be immediately forwarded to the proper quarter. The prisoner was then asked in the usual form whether he had anything to say why sentence should not be passed upon him to die according to law. He replied in a low, calm tone, "No, I have nothing to say." Mr. Baron Bramwell then put on the black cap, and, addressing the prisoner, said—Richard Reeve, you have been convicted by the jury of the crime of wilful murder, and it appears to me that they could not have done otherwise than find you guilty of that offence. My duty is to pass upon you the sentence of the law for that offence, and that is my only duty. His lordship then passed the sentence of *Death* in the usual form. The prisoner, who did not exhibit the slightest emotion during any portion of the proceedings, not even while the sentence was passed upon him, was then removed from the bar. *The Deptford Murder.* — *George Inkpen*, 20 years of age, a hammerman, pleaded Not Guilty to an indictment charging him with the wilful murder of Margaret Edmunds, and also to the coroner's inquisition charging him as an accessory to the murder. It will be remembered that the prisoner and deceased were sweethearts, and that on being apprehended he said that they had agreed to drown themselves in the Surrey Canal. They tied themselves together, but the cord broke, and the prisoner who had been drinking, got out of the water without injury, while the girl was drowned. Mr. Justice Byles, in summing up, told the jury that where two persons agreed together to commit suicide and one only died, the party agreeing, and taking part in the act, was clearly guilty of murder, and liable to the consequences of that crime. The prisoner's own statement fully established that he had agreed with the deceased to join in the act which had proved fatal to her. The jury returned a verdict of *Guilty*, strongly recommending the prisoner to mercy. Mr. Justice Byles: Then you think his story was in every particular true? Foreman: We do. Mr. Justice Byles: And that there was not any malice on his part? The Jury (almost unanimously): No, not the slightest. The prisoner was then asked the usual question, whether he had anything to say why sentence of death should not be passed upon him, but he made no reply. Mr. Justice Byles then assumed the black cap, and, with great emotion, said this was a most painful case, and he entirely agreed in the opinion expressed by the jury as to the absence of all malice, and he would take every care that the recommendation to mercy and the opinion they had expressed should be forwarded to the proper quarter. At present it only remained for him to pass the sentence of the law, directing the removal of the prisoner to the gaol of the county in which the offence had been committed—namely, Kent. His Lordship then passed sentence of *Death* in the usual form and words, adding "May the Lord have mercy on your soul!" The prisoner, who maintained great self-possession during the whole of the pro

[illegible] then bowed and calmly withdrew from the dock.

[illegible] at *Railway Stations.—Henry Holloway*, 61, a person of [illegible] appearance, wearing a large grey beard and [illegible] well known for his exertions to obtain the [illegible] formerly of the hospital of St. Cross, near Winchester, and who was stated to be a clergyman of the Church of England, though his name does not appear in the Clergy List, was charged with having carried on a systematic course of plunder at different railway stations. The prosecution was instituted by the Brighton, and South Coast and South-Eastern Companies. There were four indictments against him, but only two were proceeded with, the first being a case in which the prisoner had stolen at the London Bridge station a leather bag belonging to the Rev. Mr. Gregory, containing clothes to the value of 17l.; and the other being a case in which he had stolen at the Victoria Station a carpet bag and its contents the property of Mr. Addison, the barrister, who was on his way to join the Home Circuit at Croydon. The evidence in these cases was so clear that it was unnecessary to proceed with the others, and the jury at once returned a verdict of Guilty. The prisoner, who conducted his own defence, made a long rambling statement, in the course of which he complained of railway directors being guilty of desecration of the Sabbath by running their trains on that day, and expressed his opinion that they, and every one else who received a dividend from such a source, were guilty of a great [illegible]. He also again declared his innocence of the offences of which he had been convicted, and said he had no doubt that he should be able to prove it at some future time.—The Recorder, in passing sentence, said the conclusion that had been arrived at by the jury was entirely concurred in by the court, and it was quite clear that it was not a single act, but that the prisoner had been pursuing a long course of dishonesty. The guilt was aggravated by his being a member of a sacred profession, which he had disgraced, and he had most grievously abused the advantages with which he had been favoured. He then sentenced the prisoner to be kept to hard labour for 18 calendar months.

Obituary.

The Dowager Countess Grey, widow of the late Earl Grey, died on Tuesday at her residence in Eaton Square, after an illness of only a few days. Her ladyship was the only daughter of the first Lord Ponsonby, and was born in 1775. She married in 1794 the second Earl Grey, by whom she had a family of 16 children, of whom the following survive—namely, Earl Grey, Major-General the Hon. Charles Grey, C.B., Secretary to the Prince Consort; Rear-Admiral the Hon. Sir Frederick W. Grey, K.C.B., Lord of the Admiralty; the Hon. and Rev. John Grey, the Hon. and Rev F. R. Grey, the Hon. Harry Cavendish Grey, the Hon. William George Grey; Lady Elizabeth Bulteel, widow of Mr. J. C. Bulteel; Lady Caroline Barrington, widow of Captain the Hon. George Barrington; Lady Georgiana Grey, unmarried, and Lady Mary Wood, wife of the Right. Hon. Sir Charles Wood, M.P.

Lady Charlotte Chetwynd, wife of Sir George Chetwynd, of Grendon Hall, near Atherstone, died on Sunday morning from injuries received in being thrown from her horse on the previous day. The house was full of company, and during the afternoon Lady Charlotte was out riding in the neighbourhood with a party of her friends, when the animal she rode shied and bolted, and ultimately threw her with great violence. Her ladyship fell on her head and sustained several severe contusions, from which she never rallied; and died on Sunday morning without having recovered sensibility after her fall. Lady Charlotte had just attained her 47th year. She was a daughter of the late Marquis of Downshire, and married Sir George Chetwynd in 1843.

Sir Richard De Lautour St. George, Bart., of Woodgift, in the county of Kilkenny, died recently at Landor, in the Upper Provinces of India, in his 25th year. He was born in 1837, and was the eldest son of the third baronet, who was resident magistrate and colonel of the Colonial Carbineers at Port Natal, by his first wife, the daughter of Mr. Joseph Lautour, of Hexton House, Hampshire. He succeeded his father, who died at Petermauritzburg, in 1857, and is in his turn succeeded as fifth baronet by his next brother William Edmund, born in 1838.

Wills.—The will of the Right Hon. Sir James Graham, Bart., M.P., has been sworn under 35,000l. personalty; Mr. George Henry Littledale, of Crick, Northamptonshire, 7000l.; Mr. Charles Tilt, formerly a publisher in Fleet Street, 180,000l.

BIRTHS.—On the 24th inst, at 1, Grafton Street, the Countess of Cork, of twins, a son and heir and daughter—23d inst, at Mansfield Street, the Hon. Mrs. Liddell, of a daughter—26th inst, at 8, Great Cumberland Street, the Lady Agnes Hylton Joliffe, of a son, stillborn—25th inst, at 2, Gloucester Place, Portman Square, Lady M'Gregor, wife of Sir Charles Roderic M'Gregor, Bart., of a son—10th ult, at Mazagon Castle, Bombay, Lady Jejeebhoy, wife of Sir Jamsetjee Jejeebhoy, Bt., of a daughter—25th inst, at 29, Upper Brook Street, the wife of Dudley Coutts, Marjoribanks, Esq., M.P., of a son—22d inst. at Hertford Street, May Fair, Mrs. Peacocke, wife of F. M. W. Peacocke, Esq., M.P., of a son—23d inst, at Chotkyll, Laurie Park, Sydenham, the wife of Lieut.-Colonel William Jervis, of a son, stillborn—28th inst, at Hanover Park, Peckham, the wife of H. T. Smith, Esq., of a daughter.

MARRIAGES.—At St. John's, Paddington, Edward Cholmeley, eldest son of Sir Edward Cholmeley Dering, Bart., to Viscountess Forth, eldest daughter of the Hon. Adolphus Capel, and granddaughter of Viscount Maynard—21st inst, at Liston-on-the-Hill, Captain Herrick Augustus Palmer, late 63d Regt., youngest son of the late Rev. Henry Palmer, of Withcote Hall, in the county of Leicester, to Dorothy Susan, second daughter of Sir Arthur Grey Hazlerigg, Bart., of Nosely Hall, in the same county—21st inst, at the parish church, Twickenham, Henry John King, Esq., Major late 3d Buffs, only son of the late General Sir Henry King, C.B., K.C.H., K.C., to Harriet Augusta Maria, third daughter of the late George Barnard, Esq., of Cross Deep, Twickenham, and granddaughter of the late Sir Frederick Barnard, of the Stable Yard, St. James's Palace—21st inst, at the Church of the Holy Trinity, Windsor, Charles Compton Abbott, late Captain 47th Regiment, son of the late Major Abbott, of Tasmania, to Janet Elizabeth, widow of the late Captain Charles George Butler, 86th Regiment, son of the late Hon. Lieutenant-General Henry Edward Butler, and eldest daughter of the late Captain Prosser, 7th Fusiliers—21st inst, at the parish church, Aston-on-Trent, the Rev. John Fitz-Herbert Bateman, M.A., Fellow of St. John's College, Cambridge, and rector of Lopham, Norfolk, to Susan Elizabeth, eldest daughter of Edward Anthony Holden, Esq., of Aston Hall, Derbyshire—27th inst, at Bexley Church, William Spottiswoode, Esq., F.R.S., eldest son of Andrew Spottiswoode, Esq., to Eliza Taylor, eldest daughter of W. U. Arbuthnot, Esq., of Bridgen Place, Kent.

DEATHS.—On the 23d inst, at Philorth, Aberdeenshire, of scarlet fever, the Hon. Alexandrina Charlotte Hannah Fraser, the youngest daughter of Lord and Lady Saltoun, aged 18 months—22d inst, at Hampton Court Palace, Lady Stephenson, widow of the late Major General Sir Benjamin Stephenson, G.C.H., aged 80—25th inst, at Richmond, Lady Campbell, wife of Sir John Campbell, K.C.T.S., of 51, Charles Street, Berkeley Square, aged 81—24th inst, at Southsea, Lady Chads, wife of Vice Admiral Sir Henry Ducie Chads, K.C.B., aged 67—21st inst., at her residence, 45, Regency Square, Brighton, Elizabeth, third daughter of Vice-Admiral Sir Richard Onslow, Bart., K.G.C.B., and relict of Lieutenant Robert Lewis, R.N., fifth son of the late Michael Lewis, Esq., of Dublin, and Springhill, county Dublin, and Kilicullen, county Kildare—17th inst. at Worthing, suddenly, Annie Elizabeth, the wife of John Wood, Esq., of Thedden Grange, Hampshire, and eldest daughter of the late John Hardy, Esq., M.P.—22d inst, at his residrnce, 4, Beaufort Villas, Cheltenham, Major-General B. V. Derinzy, K.H., aged 73—20th inst, at 80, Coleshill Street, Eaton Square, Harriott, wife of Lieut.-General Freeth, K.H., aged 78—23d inst, at East Bolton, Northumberland, Eleanor, wife of William Gray, Esq., and eldest daughter of the late Lieutenant-General Walker Ker—19th inst, at Russell Lodge, Morningside, Edinburgh, Commander Patrick C. MacDougall, Royal Navy, second son of Rear-Admiral Macdougall—11th inst, at 97, Inverness-terrace, Elizabeth Caroline Ouseley, the second daughter; and on the 24th inst, Adelaide Rose Ouseley, the third daughter, of Colonel J. W. J. Ouseley—23d inst, at Nutfield, Surrey, Capt. Walter Cope Sheppard, late of the 6th Inniskilling Dragoons, third son of the late Thos. Sheppard, Esq., of Folkington Place, Sussex—21st inst, at Bearsted House, near Maidstone, Anne Wayth, the widow of the late Major Charles Wayth, aged 82—24th inst, at Brighton, David Latimer St. Clair, Esq., Captain, R.N., of Staverton Court, Gloucestershire, for many years a magistrate and deputy-lieutenant of that county, aged 78—24th inst, at his residence, 7, Norfolk Crescent, Bath, William Clark, Esq., magistrate and deputy-lieutenant for the county of Somerset—22d inst, at The Firs, Wimbledon, Mrs. Beaumont, widow of the late Thomas Wentworth Beaumont, Esq.—14th ult, at Dominica, West Indies, suddenly, Thomas Bell, Esq., Senior Member and President of her Majesty's Council of that island, aged 61—21st inst, at 72, Westbourne Terrace, Hyde Park, James Turing Bruce, Esq., aged 74—19th inst, at his Chambers, Raymond Buildings, Gray's Inn, William George Carter, Esq., aged 74—24th inst, at his residence, Warren Lodge, Edmonton, Thomas Firminger, LL.D., Assistant Astronomer at the Royal Observatory, Greenwich, between the years 1799 and 1808, aged 86—21st inst, at his residence, Canonbury Villas, Islington, William Shearman, Esq., M.D., for many years Senior Physician to the Charing Cross Hospital, aged 94—22d inst, at 28, Maddox Street, the Rev. George Moyle, M.A., of the Grammar School, Chudleigh, Devon, aged 46—22d inst, the Rev. Thomas Henry Lane Fox, Rector of Sturminster, Dorsetshire—21st inst, at Staverton Vicarage, Devon, the Rev. Beauchamp Mark Pearse Kerr, aged 25—24th inst, at The Mythe, Gloucestershire, the Rev. Francis Laing, aged 88—19th inst, at Munich, of typhus fever, the Rev. Henry Theodore James Bagge, only son of the Rev. James Bagge, rector of Crux Easton, Hants, aged 37—20th inst, at Liverpool, the Rev. Charles Washington Lawrence, M.A., incumbent of St. Luke's Church, in that town, aged 57—20th inst, at Seaforth, near Liverpool, the Rev. John Boughey Monk, M.A., chaplain of St. George's Church, Liverpool, and formerly a Fellow of Trinity College, Cambridge, aged 70—18th inst, at Redcar, the Rev. H. Clarke, incumbent of Guisbro', Yorkshire, aged 49—24th inst, at St. George's Hospital, after a sudden attack of paralysis, the Rev. William Sturges, M.A., Oxon, Chaplain to the Forces, second son of the late John Sturges, Esq., of Connaught Square, aged 42—21st inst, the Rev. William Stackhouse, of Trehane, Probus, Cornwall, aged 88.

Markets.

COVENT GARDEN, Nov. 30.

Supplies and prices about the same as they were last week. Home-grown produce is still equal to the demand, with perhaps the exception of Pears, which come chiefly from the Continent and the Channel Islands. They comprise Glou Morceau, Marie Louise, Chaumontel, and Brown Beurré. Of Apples we noticed some good examples of American New Town Pippin, Ribstone Pippin, and Fearn's Pippin. Grapes and Pine Apples are abundant. Of Cauliflowers there is still a small supply. Potato markets have not altered since our last report. Cucumbers, though scarce, are sufficient for the demand. Cut flowers chiefly consist of Orchids, Chrysanthemums, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Oranges, per 100, 6s to 14s
Grapes, per lb., 3s to 6s	Lemons, per 100, 6s to 10s
Melons, each, 1s to 3s	Nuts, Cob, per pound., 4s to 4s 6d
Pears, per doz., 1s to 6s	Walnuts, per 100, 2s
Apples, per doz., 6d to 1s	

VEGETABLES.

Broccoli, per bundle, 1s to 1s 3d	Beet, per doz., 1s 6d
French Beans, per sieve, 2s 6d to 3s 6d	Celery, p. bundle, 1s 6d to 2s
Cabbages, do., 1s 3d to 1s 6d	Onions, pickling, p. ½ sieve, 4s 6d
Potatoes, p. ton, 60s to 75s	Tomatoes, p. doz., 1s to 6s
— per cwt., 4s to 8s	Asparagus, p. bundle, 30s
Turnips, per bunch, 2d to 4d	Seakale, per punnet, 4s
Carrots, do., 4d to 6d	Shallots, per lb., 8d to 10d
Spinach, p. sieve, 1s to 2s	Garlic, per lb., 6d to 8d
Cucumbers, each, 1s to 1s 9d	Endive, p. score, 1s 6d
Veg. Marrows, p. doz, 1s to 1s 6d	Horse Radish, p. bun., 1s 6d to 4s
Artichokes, each, 6d to 8d	Mushrooms, p. pott., 2s to 3s
	Parsley, p. 12 bunches, 3s to 4s
	Savory, per bunch, 2d to 4d

HAY.—Per Load of 36 Trusses.

Smithfield, Thursday, Nov. 28.

Prime Meadow Hay	80s to	90s	Clover, old	90s to	120s
Superior do. ..	95	105	New Clover	—	—
Inferior do... ..	40	55	Do. second cut ..	80	105
New do.	—	—	Straw	28	34
Rowen	—	—			

Davis & Co.

Cumberland Market, Thursday, Nov. 28.

Sup. Meadow Hay..	100s to	107s	Inferior Clover ..	84s to	98s
Inferior do.	70	92	New do.	—	—
New do.	—	—	Straw	36	40
Superior Clover ..	108	115			

Joshua Baker.

Whitechapel, Thursday, Nov. 28.

Fine Meadow Hay	90s to	97s	Prime Clover ..	100s to	116s
Inferior do.	70	80	Inferior do.	80	90
Prime New Hay ..	—	—	Prime 2d cut ..	90	102
Inferior	—	—	Inferior do.	—	—
Straw	30	34	New 1st cut ..	—	—

HOPS.—Borough Market, Friday, Nov. 29.

Messrs. Pattenden & Smith report the trade in a quiet state at about last week's prices.

POTATOES, Southwark, Monday, Nov. 25.

During the past week the arrivals both coastwise and by rail have been more plentiful; the trade remains dull. The following are this day's quotations:—Kent and Essex Regents, per ton, 120s. to 140s.; Yorkshire Flukes, 120s to 140s.; do. Regents, 100s to 130s.; Lincolnshire do., 90s to 110s.; Scotch do., 70s. to 110s.; French Whites, 100s. to 110s.

BRITISH WOOLS.—London, Friday, Nov. 29.

We have had a fair demand for most sorts, and at full rates.

	s. d.		s. d.		
South-down Hoggets	1 4	to	1 5	Leicest. Wethers	1 4 to ..
Half-bred ditto.. ..		—	1 6	Ditto Hoggs ..	1 5 — ..
Down Ewes ..	1 4	—	1 4½	Combing Skins	1 0 — 1 5
Kent Fleeces ..	1 5	—	1 6	Flannel Wool ..	1 0 — 1 5
				Blanket ditto ..	0 6 — .

Colonial Wool Sales.—These sales proceed fully as well for all descriptions.

METROPOLITAN CATTLE MARKET.

Monday, Nov. 25.

There are a few more Beasts than on Monday last; choicest qualities are not very plentiful, and realise fully late rates. The number of Sheep is not larger, but the demand is smaller; consequently prices for all kinds are rather lower. Calves are selling about the same as on Thursday. From Germany and Holland there are 820 Beasts, 5240 Sheep, and 128 Calves; from Scotland, 200 Beasts; from Ireland, 1200; from Norfolk and Suffolk, 800; and 2400 from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 10 to 5 0	Best Long-wools.	4 10 — 5 2
Best Short-horns	4 6 — 4 8	Do. Shorn ..	.. — ..
2d quality Beasts	3 4 — 4 0	Ewes & 2d quality	4 0 — 4 6
Best Downs and Half breds ..	5 4 — 5 6	Do. Shorn ..	.. to ..
Do. Shorn ..	.. — ..	Lambs ..	.. — ..
		Calves ..	4 0 — 5 0
		Pigs ..	4 4 — 5 6

Beasts, 5120; Sheep & Lambs, 21,200; Calves, 146; Pigs, 360.

Thursday, Nov. 28.

The number of Beasts is not so large as on Thursday last; they cannot, however, all be sold. Choicest descriptions are making nearly as much as on Monday; other kinds are not in demand. Trade for Sheep is exceedingly bad, there is scarcely any inquiry for them. The supply is short, and a few realise nearly late rates. Calf trade is dull at about Monday's prices. From Germany and Holland there are 180 Beasts, 1060 Sheep, and 170 Calves; from Ireland, 170 Beasts; Milch Cows, 110.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 8 to 5 0	Best Long-wools.	4 10 to 5 2
Best Short-horns	4 6 — 4 8	Do. Shorn ..	.. — ..
2d quality Beasts	3 4 — 3 10	Ewes & 2d quality	4 0 — 4 6
Best Downs and Half-breds ..	5 2 to 5 4	Do. Shorn ..	.. — ..
Do. Shorn ..	.. to ..	Lambs ..	.. — ..
		Calves ..	4 0 — 5 0
		Pigs ..	4 4 — 5 6

Beasts, 1180; Sheep & Lambs, 3150; Calves, 210; Pigs, 170.

BUTTER MARKET.—Nov. 29.

Best Fresh Butter .. .. 16s. per dozen lbs.
Second do. do. .. .. 13s. ,,
Pork, 4s. 4d. to 5s. 0d. per 8 lbs.

MARK LANE.—Monday, Nov. 25.

The supply of Wheat from Essex and Kent to this morning's market was small, and factors resisting any decline in prices, a large proportion remained unsold towards the close; we had rather an increased attendance of buyers, nevertheless foreign Wheat was taken only in retail at our quotations, which for American were barely supported. Finest malting Barley is 1s. per qr., and secondary and distilling qualities 1s. to 2s. per qr. cheaper. Beans and Peas are unaltered in value. The Oat trade is dull, and all but fine old Corn 6d. per qr. lower. Flour is a steady sale at late rates.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk..White	50—63	Red	50—61
— — fine selected runs..ditto	61—68	Red	54—64
— — Talavera	64—72		
— Norfolk	—	Red	—
— Foreign	48—76		
Barley, grind. & dist., 26s to 28s..Chev.	36—40	Malting .	34—36
— Foreign..grinding and distilling	26—32	Malting .	34—38
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire—Potato	26—28	Feed ..	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign........Poland and Brew	21—24	Feed ..	20—24
Rye	36—38	Foreign ..	—
Rye-meal, foreign..........	—		
Beans, Mazagan....35s to 37s ...Tick	36—39	Harrow .	36—39
— Pigeon ......38s—42s..Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
Peas, white, Essex and Kent..Boilers	40—44	Suffolk .	40—46
— Maple ....43s to 45s ......Grey	39—41	Foreign .	35—38
Maize ....White	—	Yellow..	—
Flour, best marks delivered..per sack	50—55		
— 2d do ....ditto	40—50	Country	40—50
— Foreign ....per barrel	28—36	Per sack	43—58

Friday, Nov. 29.

The weather since the 22d has been variable, frosty and wet, with heavy south-westerly gales in the early part of the week; the last day or two fine, with white frost at night. As is almost invariably the case at this particular period of the year, the Wheat trade during the past week has been extremely quiet, and in many of the principal markets of the kingdom purchases might have been effected on slightly easier terms. Barley, and, in some instances, Oats have declined in value 1s. per qr. In the prices of Beans and Peas little alteration has occurred. We observe no change in the value of Flour. Since Friday last 54 vessels have been reported off the coast. The floating trade has been inactive, but a firmer tone has been experienced since Wednesday. In Paris (Nov. 28), there was very little doing in Flour, although prices have advanced slightly since last week. The arrivals of English grain this week have been to a fair extent, of foreign Wheat, Barley, and Flour good, and small of Oats. The attendance at this morning's market was limited. English Wheat was held for more money, but no advance obtained: some portion of the foreign was withdrawn from sale, and although an improvement was reluctantly paid, it was generally insisted upon by holders, and little business resulted. Spring Corn of all descriptions is steady at Monday's quotations. Flour is held for an advance of 6d. per barrel.

Arrivals from Nov. 25 to Nov. 29.

	Wheat.	Barley.	Oats.	Flour.
English ..	1870 qrs.	1910 qrs.	1150 qrs.	1120 sks.
Irish	— ,,	60 ,,	1100 ,,	— ,,
Foreign ..	20020 ,,	4280 ,,	8090 ,,	500 ,, / 14300 brls.

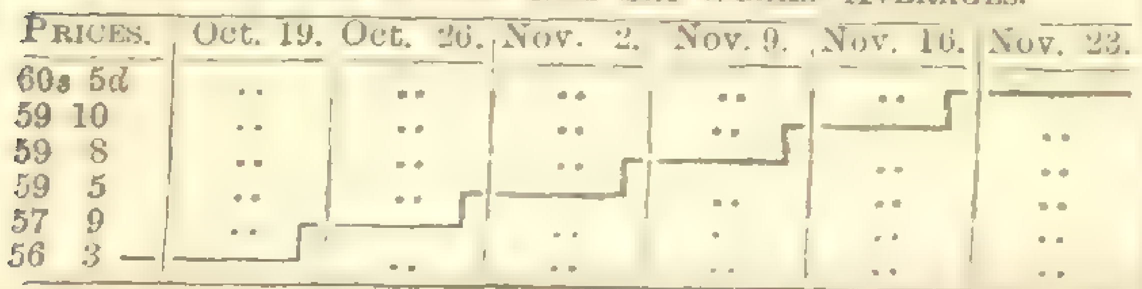
Liverpool, Tuesday, Nov. 26.—At our market to-day there was only a poor attendance of buyers, and the demand for

Wheat was trifling at nominally the prices of this day week. Flour was unchanged in value with a moderate inquiry. Oats and Oatmeal unaltered. Beans 6d. per qr. cheaper. Barley steady. Indian Corn was not in much request, and prices must be written as before—32s 9d. for mixed, 33s. 3d. for yellow, and 36s. to 37s. for white.

FRIDAY, Nov. 29.—Good attendance at to-day's market. Wheat meets a ready sale at an advance of 3d. to 4d. per cental; Flour, 1s. to 1s. 6d. per barrel; and Indian Corn 1s. to 1s. 6d. per 480 lbs. Mixed, 34s. 3d. to 34s. 6d. Egyptian Beans steady sale at late rates. Other articles rather neglected.

AVERAGES.	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Oct. 19..	56s 3d	36s 6d	21s 6d	34s 9d	41s10d	41s10d
— 26..	57 9	36 7	21 11	35 1	42 3	44 8
Nov. 2..	59 5	37 1	22 7	37 5	42 3	44 4
— 9..	59 8	37 3	22 8	38 5	42 6	46 0
— 16..	59 10	37 6	22 7	37 7	42 6	47 5
— 23..	60 5	37 6	23 0	39 1	42 9	44 11
Agg. Aver.	58 11	37 2	22 4	37 1	42 4	44 10

FLUCTUATIONS IN THE LAST SIX WEEKS' AVERAGES.



COAL MARKET.—Nov. 29.

Walls End Hetton, 19s.; Walls End Haswell, 19s.; Walls End South Hetton, 19s.; Walls End South Hartlepool, 18s.; Walls End Kepier Grange, 18s.; Walls End Kelloe, 18s. 6d.; Walls End Acorn Close, 17s. 6d.; Walls End Hedley, 17s. 6d.; West Hartley, 15s. 9d; Bebside Hartley, 15s. 9d.; Howard's Hartley, 15s. 9d.—Ships at marke,t 72.

HORTICULTURE. — A Nurseryman having an extensive business and an excellent residence situate in one of the most healthy counties in the West of England, is desirous of meeting with one or two Young Gentlemen as BOARDERS and PUPILS. They will have every opportunity of learning the business and enjoy all the comforts of home. —Address X. Z., *Gardeners' Chronicle* Office, Covent Garden.

Agricultural Instruction.

WANTED, to place a Youth with an Experienced Gentleman Farmer.—Apply, with terms and particulars, to X. Y. Z., Post Office, Chatteris, Cambs.

CONSULTING GARDENER.—JOSEPH ROBINSON begs to offer, on moderate terms, his services as above to any lady or gentleman contemplating Alterations, Improvements, or Additions to their Gardens, Pleasure Grounds, or Horticultural Buildings—assured that from his long practical experience he would be able to effect the same judiciously and economically.—Slough, Bucks.

GOOD SERVANTS.—The difficulty of procuring these is so great, that a SCHOOL has been opened in London under careful management to teach Young Women of the better class to become COOKS and KITCHENMAIDS, and places are obtained for them. No payment is required until they have obtained situations.—Full particulars on application to the Matron School of Cookery, 90, Albany Street, Regent's Park, London, N.W.

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News of the Week.

THE *Moniteur* of Monday publishes an Imperial decree convening the Senate for the 2d Dec. next. The Ministerial journals announce that the Government is preparing a reduction of the army to the extent of from 80,000 to 100,000 men, but state that this reduction will not cause any change in the system now in force, as all the existing regimental lists are to be maintained, the men being allowed to return to their homes on a year's furlough. It is said that M. FOULD does not intend to resort to a loan at present, or to propose any increase of taxes which may fetter agriculture, industry, and commerce. A tax on lucifer matches, a tax on pianos, a tax on all incomes above 130*l.* a year, and an increase in the stamp duty, are said to be the measures under consideration. It is rumoured that the EMPEROR and EMPRESS, accompanied by the PRINCE IMPERIAL, will pay a visit to QUEEN VICTORIA during the International Exhibition of next year.

The Austrian Government has officially informed all foreign Courts that the measures taken towards Hungary are essentially provisional, until that country consents to accept the privileges granted by the Crown, instead of claiming those which it possessed before the revolution of 1848.

The election of the persons qualified to vote for

the return of members to the Prussian Chamber of Deputies took place on Monday throughout the kingdom. The result of the elections both in Berlin and in the provinces was decidedly in favour of the Liberal party.

Accounts from Breslau state that the Administrator of the Archbishopric of Warsaw was arrested in pursuance of orders from St. Petersburgh, and that he is to be tried by court-martial. The Chapter has refused to comply with the demand of the Government to elect another administrator, and has appealed to Rome. The reported discovery of 15,000 muskets in a Convent on the estate of Count ZAMOYSKI is said to be without foundation.

A despatch from Ragusa states that the war in Montenegro has been interrupted by the severity of the weather, and that a heavy fall of snow has compelled OMAR PACHA to go into winter quarters. The insurgents had previously cut off the communications between Ragusa and Trebigne, and both armies had been strongly reinforced.

From Turin we learn that the Italian Parliament was opened on Wednesday, when Baron RICASOLI, as President of the Council, explained the present state of the Roman question, and laid upon the table a project which he had submitted to the Papal Court with the view of effecting a reconciliation between the State and the Church. He had, he said, requested the Emperor NAPOLEON to become mediator, but owing to the little disposition to conciliation on the part of the Roman Court, the mediation had not been attended with any result. After the speech of Baron RICASOLI, an animated discussion took place on the state of the Neapolitan provinces, and the Chamber ultimately resolved to discuss the state of Naples at the same time as the Roman question. It is reported from Rome that the Papal Government is preparing an expedition against Umbria, and that bands of brigands still infest some of the Neapolitan provinces under CHIAVONE and BORGES. The former is hotly pursued by the Italian troops, who have succeeded in cutting him off from the Papal States, and it is expected that he will soon be captured. BORGES has sacked or occupied three towns in the province of Basilicata, and has made attempts on other towns, but has been repulsed. The inhabitants of the province have called on General DELLA MARMORA to adopt active measures for the suppression of this brigandage.

Accounts from New York state that General SCOTT has resigned the Command-in-Chief of the Federal army, and has been succeeded by General M'CLELLAN. General FREMONT has obeyed the orders of the Washington Government and laid down his command, but his removal has caused much discontent among the officers and men of the army in Missouri. A report from Fort Monroe states that the Federal fleet was bombarding Port Royal, and was meeting with a warm reception from the Confederates, who are commanded by Commodore PATRICK. Another account states that Port Royal was in a critical condition and on the point of surrendering to the fleet. Two of the Federal steamers had been wrecked on the coast of North Carolina, and their crews taken prisoners by the Confederates. Important movements are taking place on the Lower Potomac indicative of the departure of large bodies of Confederates to the points threatened on the Southern coast, and it is reported that General BEAUREGARD has relinquished the command on the Potomac, and proceeded to take the command in South Carolina. An engagement has taken place at Belmont, on the Mississippi, between the Confederate garrison at that place, and a Federal expedition from Cairo. Great loss was sustained on both sides, and the Federals ultimately retired.

The Confederate war steamer, Nashville, arrived at Southampton on Thursday, and landed the crew of the American ship Harvey Birch, of New York, which she captured and burnt on Tuesday morning at the mouth of the Channel. The Nashville, which is commanded by Captain PEGRIM, an old officer of the United States navy, has since gone into dock to be repaired.

The ratifications of the Convention between France, England, and Spain, relative to their joint intervention in Mexico, were exchanged on Friday, and the Convention was published in a Supplement to the *Gazette* on Saturday.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family continue at Windsor Castle. On Saturday morning the Queen rode out on horseback. The Right Rev. Dr. Baring had an audience of her Majesty, and did homage on being translated to the See of Durham. Dr. Colquhoun was introduced and received the honour of knighthood from the Queen. Sir George Grey had an audience of her Majesty. On Sunday morning the Queen and Prince Consort, the Princesses Alice, Helena and Louisa, and Prince Arthur, attended Divine service in the Private Chapel. The Dean of Windsor officiated. On Monday morning the Queen and Prince Consort walked in the Home Park. The Princess Helena rode in the Riding House; the Princess Louisa took a carriage drive. Lord Methuen, Lord in Waiting to the Queen, and Colonel Seymour, C.B., Groom in Waiting to the Prince Consort, left Southampton for Lisbon, with letters of condolence from her Majesty and his Royal Highness to the King and Royal family of Portugal, on the death of the late King. In the afternoon the Queen and Prince Consort, accompanied by Princess Alice, drove out and honoured the Belgian Minister and Madame Van de Weyer with a visit at New Lodge, Windsor Forest. On Tuesday morning the Queen walked in the grounds of the Castle. The Prince Consort went out shooting. The Princess Alice drove to Watford in a carriage and four, and honoured the Countess of Clarendon with a visit at the Grove. Her Royal Highness returned to the Castle in the afternoon. The Right Hon. Sir George Lewis arrived on a visit. On Wednesday morning the Queen, Prince Consort, and the Princess Alice rode out on horseback. The Princess Helena rode in the Riding House, and Princess Louisa took a carriage drive. Prince Arthur rode out on horseback. In the afternoon the Queen held a Privy Council at which the Duke of Somerset was sworn as Lord Lieutenant of Devon, Earl Cowper was sworn as Lord Lieutenant of Bedfordshire, and Lord Llanover was sworn as Lord Lieutenant of Monmouthshire. Her Majesty gave audiences to the Duke of Somerset, Lord Palmerston, and Earl Granville. Earl Fortescue had an audience, and delivered to her Majesty the insignia of the Order of the Garter worn by his late father. On Thursday morning the Queen, with the Princess Alice, drove out in an open carriage. The Prince Consort accompanied her Majesty on horseback. Prince Arthur rode out on horseback. Princess Helena and Princess Louisa rode in the Riding House. The Right Hon. Sir G. C. Lewis left the Castle for London. The Judge-Advocate-General had an audience of the Queen, and submitted the proceedings of some courts-martial.

THE PRINCESS ROYAL.—Thursday was the birthday of the Princess Royal, and was duly observed with the usual salutes and ringing of bells in the town of Windsor, but no festivities took place at the Castle in consequence of the Court mourning.

THE PRINCE OF WALES.—It is stated that the Prince of Wales will visit the Ionian Islands shortly after Christmas, and then proceed to Syria and Egypt. His Royal Highness will return to England before the opening of the Great Exhibition. The Osborne Admiralty yacht will proceed to the Mediterranean about the middle of December, to be in attendance on the Prince, who will proceed by way of Trieste, and meet the yacht at Malta.

PRINCE LEOPOLD arrived at Cannes on the 15th, having travelled from Paris by easy stages. The Prince occupies the Villa Leader, near that of Lord Brougham.

THE CABINET.—A Cabinet Council was held on Tuesday at the official residence of the First Lord of the Treasury in Downing Street. Another Council was held yesterday.

PARLIAMENTARY MOVEMENTS.—A meeting of the leading Conservatives of East Worcestershire was held on Monday, Sir John Pakington in the chair, at which it was resolved that no opposition should be offered to the return of Mr. Foley Vernon, the Liberal candidate. The Lord Mayor has been invited to offer himself for Finsbury, vacant by the death of Mr. T. Duncombe, but has declined the invitation. A requisition has since been presented to Mr. Lusk, one of the late Sheriffs, inviting him to come forward; and Mr. Sleigh, of the Old Bailey Bar, has issued an address to the electors. Mr. Knatchbull has announced his intention to follow the example of his colleague, Sir William Miles, and to retire from East Somerset at the next general election. Sir Frederic Slade, Bart., and Mr. Ralph Neville Grenville, of Butleigh Court, will be the Conservative candidates for the vacant seats. It is stated that Mr. Horsfall intends to retire from Liverpool on the next dissolution, and to become a candidate for Warwickshire; and that Mr. J. A. Tobin and Mr. S. R. Graves are to be brought forward as the Conservative candidates for the borough. Mr. W. J. Fox has announced his intention of retiring from Parliament at the next dissolution, on account of his failing health. Mr. R. W. Johnson, of Bucklehampton Hall, has been invited by the Conservatives of Worcester to allow himself to be put in nomination for that city at the next general election.

KNIGHTHOOD.—The Queen has conferred the honour of knighthood upon Dr. Patrick Mac-Combaich Colquhoun, LL.D., one of the Judges of the Supreme Court of the Ionian Islands.

COURT APPOINTMENT.—The Queen has appointed Dr. Robert Adams, M.D., President of the Royal College of Surgeons in Ireland, to be Surgeon in Ordinary to her Majesty in Ireland, in the room of the late Dr. Cusack.

THE CHINA COMMAND.—Rear-Admiral Erskine, late second in command of the Channel squadron, has been nominated by the Duke of Somerset to succeed Sir James Hope, K.C.B., as Commander-in-Chief of the naval forces in China.

THE IRON PLATED FRIGATES.—The Black Prince, screw, iron plated frigate, arrived at Spithead on Monday morning from Greenock. She steered remarkably well during the passage, answering the slightest touch of her helm, and the speed attained was as satisfactory as could be desired. Messrs. Napier, the builders of the ship, and Mr. T. Penn, of the firm of Messrs. Penn and Sons, the builders of the engines, were on board. The preliminary light draught trial of her speed took place at the measured mile in Stokes Bay on Tuesday, when she made four runs, realising nearly 11½ knots per hour. The trial was considered in every respect satisfactory, seeing that she is not yet fully rigged or weighted, and that she had only Scotch coal on board. On Thursday she went into harbour to be fitted for immediate commission in the first-class reserve.—The Octavia, 51, screw-frigate, was tried on Wednesday, at the measured mile. Unusual interest was felt in this trial in consequence of a new principle being introduced in the machinery, that of three cranks and three cylinders, with a surface condenser. The result was highly satisfactory. The ship worked very easily, the vibration was very slight, and in six runs at full speed the average was 12¼ knots. The trial lasted six hours.

THE GUN-BOATS.—An order was received on Tuesday at Portsmouth and Plymouth to hold in readiness for active service, at an hour's notice, all the gun-boats in the first class steam reserve at those ports. To enable the order to be carried out in the most efficient manner, the officers and crew for each vessel were told off to her from the ships in harbour. It is understood that this order is merely a piece of naval "drill," in order to test how quickly these vessels may be got ready for sea in case of emergency.

THE NEW ADMIRALTY REGULATIONS.—The new instructions recently issued by the Admiralty direct that the officers, petty officers, and seamen of the fleet shall not wear moustaches or beards, and state that moustaches, but not beards, may be worn by the officers and men of the Royal Marines. They also direct that officers under 18 years of age and boys are not to be allowed to take up tobacco or to smoke, either on shore or afloat.

THE MEXICAN EXPEDITION.—The ratifications of the Convention relative to the combined intervention in Mexico were exchanged on Friday, and the Convention was published in a Supplement to the *Gazette* on Saturday. The following are the articles of this Convention:

"*Art.* I.—Her Majesty the Queen of the United Kingdom of Great Britain and Ireland, her Majesty the Queen of Spain, and his Majesty the Emperor of the French, engage to make, immediately after the signature of the present Convention, the necessary arrangements for despatching to the coasts of Mexico combined naval and military forces, the strength of which shall be determined by a further interchange of communications between their Governments, but of which the total shall be sufficient to seize and occupy the several fortresses and military positions on the Mexican coast. The commanders of the Allied forces shall be, moreover, authorised to execute the other operations which may be considered, on the spot, most suitable to effect the object specified in the preamble of the present Convention, and specifically to insure the security of foreign residents. All the measures contemplated in this article shall be taken in the name and on account of the high contracting parties, without reference to the particular nationality of the forces employed to execute them.

"*Art.* II.—The high contracting parties engage not to seek for themselves, in the employment of the coercive measures contemplated by the present Convention, any acquisition of territory nor any special advantage, and not to exercise in the internal affairs of Mexico any influence of a nature to prejudice the right of the Mexican nation to choose and to constitute freely the form of its Government.

"*Art.* III.—A Commission, composed of three Commissioners, one to be named by each of the contracting Powers, shall be established, with full authority to determine all questions that may arise as to the application or distribution of the sums of money which may be recovered from Mexico, having regard to the respective rights of the three contracting parties.

"*Art.* IV.—The high contracting parties desiring, moreover, that the measures which they intend to adopt should not bear an exclusive character, and being aware that the Government of the United States, on its part, has, like them, claims to enforce upon the Mexican Republic, agree that immediately after the signature of the present Convention a copy thereof shall be communicated to the Government of the United States; that that Government shall be invited to accede to it; and that in anticipation of that accession their respective Ministers at Washington shall be at once furnished with full powers for the purpose of concluding and signing, collectively or separately, with the Plenipotentiary designated by the President of the United States, a Convention identic, save the suppression of the present article, with that which they sign this day. But as by delaying to put into execution Articles I. and II. of the present Convention, the high contracting parties would incur a risk of failing in the object

which they desire to attain, they have agreed not to defer, with the view of obtaining the accession of the Government of the United States, the commencement of the above-mentioned operations beyond the time at which their combined forces can be assembled, in the neighbourhood of Vera Cruz.

Art. V.—The present Convention shall be ratified, and the ratifications thereof shall be exchanged at London within 15 days. In witness whereof the respective Plenipotentiaries have signed it, and have affixed thereto the seal of their arms. Done at London, in triplicate, the 31st of October, 1861. Signed, RUSSELL, XAVIER DE ISTURIZ, FLAHAULT."

Foreign.

FRANCE.—The *Moniteur* of Monday publishes a decree convening the Senate for the 2d of December. It is said that the Emperor will pay a visit to Her Majesty Queen Victoria during the International Exhibition of next year, accompanied by the Empress and the Prince Imperial. The programme of M. Fould, the new Minister of Finance, was published in the official journals of Friday. It is of great length, and fills three columns of the daily papers. The following are some of the details:—

"During the last ten years the public debt has been increased by 2,800,000,000 francs, or one hundred and twelve millions sterling. To meet the expenditure of the Government, the loans negociated in 1854, 55, and 59 amounted to no less than eighty millions sterling. When the privilege of the Bank was renewed, that establishment was compelled to increase its capital by four millions sterling, the whole of which was absorbed by the Government. The Army Endowed Fund lent the whole of its funds, amounting to 5,400,000*l.*, to the Government, and this year "recourse has been had to a new form of loan, the trentenary obligations, to the amount of 132 millions of francs, or 5,280,000*l.*, making a total of 94,800,000*l.*" It states that "the supplementary and extraordinary credits, which were 83,000,000 francs in 1859, rose to 115,000,000 francs in 1860, and in 1861 they must approach 200,000,000 francs, without counting those which it will be necessary to open in consequence of the high price of food." This system however has not been the creation of the Empire, but was inherited from the preceding dynasty. During the last eight years of Louis Philippe's reign the extraordinary credits realised 1,200,000,000 francs, being an average of 150,000,000 francs a year; while during the first eight years of the Empire the extraordinary credits opened for works of peace averaged not higher than 130,000,000 francs, or nearly 1,000,000*l.* per annum less than during the reign of Louis Philippe. Taking the ordinary revenue of France, in round figures, at 70,000,000*l.* a year, the expenditure in 1859 was 73,340,000*l.*; in 1860, 74,600,000*l.*; in 1861, 78,000,000*l.*"

This programme has been well received by the Paris journals. The *Revue des Deux Mondes*, however, observes that the facts disclosed by M. Fould are much more serious than those it pointed out in the article for which it was warned by M. de Persigny, who designated it as a "tissue of falsehoods." The *Temps* also takes the same view, and laments that so many papers have been suppressed, suspended, and warned for having hinted at what M. Fould now so unreservedly proclaims. The *Patrie* contains the following article on the mode in which M. Fould will proceed to carry out his financial programme:—

"The first care of the Minister of Finance on taking the direction of the Ministerial department intrusted to him is, of course, the study of the Budget of 1863. Thus, M. Fould (so we are informed) has lost no time in examining the modifications which must be made in the receipts and expenditure of the State, according to the new regulations which he has induced the Emperor to adopt, and which will be confirmed by a *Senatus Consultum*. The problem to be resolved is this—to increase the receipts by diminishing the expenses, and at the same time to provide suitably for the public service. If we are rightly informed, the first reform under consideration is a reduction of the army without infringing upon the system so happily established—that is to say, maintaining the actual organisation. Thus the military power of France would remain in full force, and would assure to our policy the influence which it has achieved, at the same time that the war estimates would be sensibly diminished. The creation of new resources, rendered necessary by the suppression of supplementary credits, is a delicate question, which the new Minister of Finance will certainly examine with that maturity and reserve which such great interests command. We believe we may state that he does not propose to add any additional tax which might fall heavily on industry, agriculture, or commerce, and which would affect the working classes. A tax on lucifer matches is spoken of. This measure is, in fact, contemplated at the Ministry of Finance, and in such a manner that the consumer will scarcely feel the difference. An increase on stamps is also under consideration. We are not acquainted with the Minister's views on the tax which weighs upon the transfer of personal property, but, on the one hand, the revenue from that tax is so small, scarcely reaching 6,000,000f., and, on the other hand, the liberal ideas of M. Fould are so well known, that we may be allowed to suppose that a modification of the law of the 23d of June, 1857, is not impossible. If this modification is carried out it will, we trust, lead to the suppression of the turnstiles at the Bourse."

The *Constitutionnel* contains the following article, signed by Dr. Veron:—

"If we are rightly informed, his Excellency the Minister of the Interior has submitted to the Emperor a project which we may style 'a political and financial project:'—a disarmament, with the maintenance of the regimental organization. This project would be a supplement to the new financial measures the execution of which is intrusted to M. Fould. The disarmament would not only be a new and happy guarantee of confidence and prosperity for France, but also a new and powerful guarantee to Europe. It would be general peace crowning the glory acquired by our army on the field of battle. If we are rightly informed, the Emperor will pay a visit to her Majesty the Queen of England during the Universal Exhibition of London. The project of M. de Persigny submitted to the Emperor would, therefore, be at the same time a new and great political and financial measure. False reports are circulating respecting the proposed taxes that are to be submitted to the Legislative Body next session. We have reason to believe that the only projects under consideration are a very small tax on lucifer matches, which is assuredly justified by the many deplorable accidents that have occurred, and which it is time Government should look to; and a tax on pianos, which will not weigh upon the working classes." [It has since been reported that a tax on all incomes above 3000 francs (120*l.*) is in contemplation.]

It is understood that M. Fould called before him on Monday the Syndicat of the Agents de Change, and intimated that he does not intend raising any loan for the present. He is also reported to have said that, in his opinion, the measures about to be taken will inspire sufficient confidence to enable the immediate wants of the Treasury to be supplied through the floating debt, though it had been currently reported that the balance of the Treasury at the Bank was insufficient to pay the forthcoming dividends. M. Fould further mentioned that within these few days there has been a commencement of a return of silver to the Bank of France.—A solemn service was celebrated at the Church of the Madeleine on Thursday for the repose of the soul of the late King of Portugal, Dom Pedro V., and of his brother, the Infante Dom Fernando. A numerous Italian deputation attended without invitation, to do homage to the memory of a Sovereign who was among the first to recognise the Italian nationality.—At the recent trial of M. Mires, it will be remembered that among his partners who were placed at the bar at the same time was Count Pontalba, but who was acquitted of the criminal charge of swindling, of which M. Mires was found guilty. Subsequently the assignees of M. Mires' estate brought an action against the count for the restitution of the sum of 1,700,000 francs, which M. Mires had made over to him by deed for services said to be rendered to the bank. The Tribunal of Commerce, on Tuesday, gave judgment, and ordered Count Pontalba to repay the above sum to the shareholders, and condemned him in costs. The Bishop of Poitiers, Monsigneur Pie, who has already made himself notorious by comparisons between the Emperor and certain famous personages of Biblical history, last year celebrated with all the pomp of the Church a funeral service in honour of Louis Gisquel, a Pontifical Zouave, 21 years of age, who had been enlisted by himself, and whom he described as having fallen gloriously at Castelfidardo. The Bishop delivered a glowing funeral oration, in which he described the young hero as celebrated for his piety, his virtues, and his courage, and besought for him the prayers of his congregation in terms so touching as to draw tears from the most obdurate. A few months afterwards the subject of this funeral oration made his appearance in his native town, in the vicinity of Poitiers, and soon found his way into gaol on a charge of swindling. It appeared that he had lived on the benevolence of ecclesiastics by passing himself off as a Protestant and allowing them to convert him to Catholicism; that he had never been at Castelfidardo at all; that he had himself written the letter announcing his glorious but untimely death to the Bishop; and that he has since traversed France as a wounded soldier of the Papal army, wearing in his button-hole a decoration, placed there by the hand of his Holiness himself, and has reaped a good harvest. A few days ago he was brought before the Court of Assize at Laval, within sight of the cathedral where his virtues had been celebrated by the bishop, and was tried on a charge of swindling preferred by one of the curés, whom he had defrauded by pretending to be a convert from Protestantism. He was found guilty and sentenced to 15 months' imprisonment, 50 francs' fine, and five years' surveillance of the police.—The Emperor has redeemed the pledge he gave in April last to a deputation from the Royal Society for the Prevention of Cruelty to Animals, that an inquiry should be instituted into the practice stated to be carried on at Alfort and other veterinary colleges of France, in the dissection of living horses and other animals. His Majesty, through the Minister of Agriculture, Commerce, and Public Works, has submitted the question of "vivisection" to the Academy of Medicine, with a request that they will consider and report upon it to the Government, and the Academy in its turn has nominated a Commission to conduct the inquiry. This Commission is composed of men eminent in the schools of medicine, physiology, anatomy, and the veterinary department, including MM. Cruveilhier, Cloquet, Claude Bernard, Robile, Moquin Tandon, and Leblanc. Meanwhile the Government has prohibited all vivisections at Alfort and the other veterinary colleges until further notice, and the Prefect of Police has put an interdiction on the delivery for vivisection of animals impounded and not claimed. The directors of the veterinary schools at Alfort, Lyons, &c., have also been charged to report to the Emperor on the subject of their several colleges.

SPAIN.—The Queen is again *enceinte*. Senor Ros de Olano has been sent on an extraordinary mission to Portugal. Marshal O'Donnell has been ill, but is now convalescent. The Queen has ordered Court mourning for 24 days for the late King of Portugal. The Staff of General Prim, as commander of the expedition to Mexico, has been formed; its chief is Major-General Torres Jurado, and it consists of not fewer than 17 other persons, military and civil. Orders have been given to the General and the Staff to hold themselves in readiness to leave for Mexico without delay, instead of at the end of the month, as originally intended. The *Espana* says:—

"In political circles the project of forming in America a confederation of all the Republics of Spanish origin, with Spain at the head of it, is now being discussed. Such a measure, it is affirmed, would possess great advantages, both for Spain and for those little States."

PORTUGAL.—The Duke of Oporto arrived from England on the 14th, and was saluted as King. On the following day his Majesty took the oaths to the Constitution by the title of Luis I. The Ministry remains unaltered, but the Duke of Saldanha is very ill from the shock of the late King's death. The funeral of the late King took place on the 16th inst., and was numerously attended. The *cortége* occupied five hours in passing from the Palace of the Necessidades to the Church of St. Vincent. The ministers of state, the officers of the household, and the army and navy, the Municipal Chambers, and all the foreign ambassadors, with the exception of the English ambassador, took part in the procession. The Infante Dom Augusto is still dangerously ill. The kingdom is tranquil. The death of his Majesty a few days after that of his brother, Dom Fernando, and the continued illness of his other brother, Dom Augusto, has caused a great sensation, and given rise to reports of their having been poisoned during their excursion to the province of Alemtejo. Among the common people the report that their deaths had been occasioned by foul means was generally believed, and had caused much agitation in the capital.

SWITZERLAND.—The Federal commissioners have returned to the valley of Dappes, in order to complete their protocol from the verbal depositions of witnesses. A fresh violation of territory has taken place near Geneva.

PRUSSIA.—The election of the persons qualified to vote for the return of members to the Prussian Chamber of Deputies took place on Tuesday throughout the kingdom. The result of the elections in Berlin was decidedly in favour of the Liberals, and the telegrams received announce that similar results have been obtained in the provinces.

AUSTRIA.—The Vienna journals declare that the entrance into the French Cabinet of M. Fould, who possesses the confidence of the financial world, is a solemn programme of peace for many months to come, and is especially reassuring for Europe.

HUNGARY.—The Austrian Government has addressed a circular to its representatives at all foreign Courts, to be communicated by them to the respective Governments to which they are accredited, stating that the measures taken towards Hungary are essentially provisional until that country consents to accept the privileges granted to it by the Crown, instead of claiming those which belonged to it before the revolution of 1848.

THE ADRIATIC.—An Austrian squadron of evolution is now assembled in the Adriatic. It consists of 50 vessels, of which 34 are steamers and 16 sailing vessels. Among the steamers are some fast screw line-of-battle ships; three frigates of 31 guns; three corvettes of 22 guns; and 10 first class gun boats, armed with five rifled cannon each. This squadron is under the command of Archduke Maximilian, Lord High Admiral of Austria, whose second in command is Rear Admiral Bourguignon. The crews are chiefly Sclaves, Dalmatians, or Germans. Independently of the organisation of this squadron, the Austrian Government is building 10 ships of war, including two iron-cased frigates, and is converting six sailing vessels into steamers. Great works are under construction at Pola.

IONIAN ISLANDS.—A shocking murder was committed at Corfu on the 26th October. A soldier of the 1st Battalion of the 9th Regiment, called Chadwick, shot Corporal Donollan, of the same regiment, under circumstances very similar to those of the recent military murder at Aldershott. The corporal was in his barrack room, standing up on his bed, arranging some of his things in the rack fixed above it, when Chadwick entered, and without even raising his rifle to his shoulder discharged the contents into his side. The murderer was immediately secured, but the unfortunate victim, of whom at first hopes of recovery were entertained, died in the greatest agony after lingering for two days in the hospital. The immediate cause of this crime was the award of six days' confinement to barracks, to which Chadwick had been sentenced by the officer commanding his regiment for insubordinate conduct to the corporal. The crime was committed on Saturday, the 26th October, and the corporal died on the morning of Monday, the 28th. On the same day an inquest and court of inquiry were held, and the general court-martial, which sat on the 30th, sentenced the murderer to be hanged. This sentence was carried into effect on the 8th inst., on the South Parade in the citadel.

ITALY.—The Italian Parliament was reopened on Wednesday. In the Chamber of Deputies, Baron Ricasoli, President of the Council, explained the present state of the Roman question. He said that he had drawn up a plan of reconciliation between religion and liberty, and between the State and the Church. He had requested the Emperor Napoleon to become mediator; but, owing to the little disposition to conciliation on the part of the Roman Court, the mediation had not been attended with any result. Baron Ricasoli then laid on the table of the House the documents relating to this project of arrangement. The project contains 11 Articles, of which the following is a summary:—

"The Pope and the Cardinals are to preserve their dignity and inviolability. Full liberty is guaranteed to the Sovereign Pontiff for his acts of Divine rights as chief of the Church. The Pope is empowered to send Nuncii to communicate with the Bishops and the faithful, and to convene Synods and Councils without the intervention of the Government. The King of Italy renounces his right in respect of ecclesiastical benefices. The Italian Government also relinquishes all right of interference in the nomination of Bishops. The King of Italy will guarantee to the Pope a certain revenue."

The 11 Articles are preceded by an address to the Pope, accompanied by a letter to Cardinal Antonelli

requesting him to give the plan a favourable consideration. A note addressed by Baron Ricasoli to the Chevalier di Nigra was also laid on the table of the house. It instructs the Sardinian Minister at Paris to request the good offices of France in order to bring this project before the Pope, and says that, should the proposals it contains be rejected, the Italian Government could not, without difficulty, restrain the impatience of the people, who claim Rome as their capital. After the speech of Baron Ricasoli an animated discussion took place on the state of things in the Neapolitan provinces. The Chamber resolved on discussing the state of things in Naples at the same time as the Roman question. It is said that the opposition programme of the southern deputies is settled as follows:—1. To attack the Government in regard to the means resorted to by General Cialdini for putting down brigandage; 2. To oppose any increase of taxation; 3. To demand the translation of the seat of Government to Naples until Rome shall become the capital of Italy. It is reported from a reliable source that the Pope's health is daily becoming more impaired. The *Nationalités* of Turin asserts that Signor Rattazzi has obtained the intervention of the Emperor in order to decide Francis II. to quit Rome shortly. The Turin journals of Friday circulate a rumour that General Cialdini has tendered his resignation of the 4th Corps d'Armée, and that Signor Rattazzi will relinquish the Presidency of the Chamber of Deputies. It is believed that the resignation of General Cialdini will not be accepted by the King. The general was to have set out on Sunday for Paris on a temporary leave of absence; but he has now postponed his intended journey. General Bixio fought a duel on Sunday, in which, it is said, he was wounded in the hand by a pistol shot. The Government has granted the concession for the construction of a railway from Turin to Savona to an English company, represented by Messrs. Palten, Cargill, Greenfield, Gombert and others. A box of gunpowder exploded on Tuesday on the railway works near Orbitello, killing seven persons and wounding five others. It is said that the Papal Government is secretly preparing an expedition against Umbria, and that fresh enrolments of brigands are making at Rome. The *Nazione* of Friday publishes news from Rome to the 13th inst., announcing that two despatches, dated the 2d September, and addressed by the Brigadier of the Pontifical Gendarmes to Chiavone, whom he addressed by the title of "General," fell into the hands of the French troops in an encounter which they had with the brigands. Chiavone, being pursued by the French troops, re-entered Italian territory, passed the river Leri, and after a short resistance occupied Isoletta. He was then driven from San Giovanni and fled successively to Monte Lenola and Rocca-Guglielma' and unsuccessfully endeavoured to regain the Papal States. He is closely pursued by the Italian troops. Twenty seven brigands, who formed part of his band, have been killed. Among their number was Belga de Suguer, who commanded the attack on Castelluccio. Borges has appeared in the province of Basilicata, with 200 brigands, and has sacked Tivegno and Salandra, and occupied Vaglio. One of his bands, however, has been put to flight near Pietragalla, with the loss of 33 killed and several wounded. The remainder of the band has taken refuge in the mountains and woods surrounding Lake Pesolo. A deputation from Basilicata has demanded from General Della Marmora the adoption of energetic measures for the suppression of brigandage in that province. It is rumoured that disembarkations of small numbers of brigands, coming from Malta, have taken place in Ponille and the Calabrias, and that Bourbon intrigues are carried on at Naples and in the province of Terra di Lavoro. General Della Marmora has held a review of the National Guard of Naples, at which he addressed them in a speech. The following is an extract from a speech delivered by the ex-King of Naples, in reply to an address presented to him by the Neopolitan nobility in exile at Rome, accompanied by a sword of honour for himself and a diadem for the Queen:—

"The Queen and I shall preserve eternally engraved on our hearts the names of you all; and the sword which you offer to me I hope shall soon rise in its scabbard in defence of its sacred rights. If the chances of war have been one day unfavourable to us, when we essayed with our brave soldiers to repulse an invasion, as unexpected as it was unworthy, I have full confidence that we shall see better days, and that supported by the concourse of my people, and surrounded by you, I shall remount the throne of my ancestors to restore, like the immortal Charles III., for the second time, the independence of my well-beloved people. Be, meantime, the interpreters of my sentiments and those of the Queen towards all those who are associated with you in this new and striking homage of attachment and fidelity. Communicate, I pray you, the expression of our sentiments to the absent, who, wandering in the different kingdoms of Europe, co-operate by their incessant efforts towards my restoration; and with that good feeling which distinguishes you, find a way to make known the expression of our gratitude to those who, though abiding under the ferocious yoke of the foreign invader, have not hesitated to inscribe their names alongside of yours."

Poland.—The *Preussische Zeitung* of Saturday publishes news from Warsaw to the 14th inst. announcing that, on account of the military being continually insulted, and the regulations of martial law being set at defiance by the people, it was expected that the Government would shortly proclaim a special and formal state of siege in the city of Warsaw. At the recent meeting of the Council of State, only eight members out of 35 attended. M. Biatobrzeski, Administrator of the Archbishopric of Warsaw, was arrested on the 13th inst. on account of the churches being continually closed, and because he had written a letter, worded in disrespectful terms, to General Luders. It appears that his arrest was in pursuance of orders from St. Petersburg. The Prelate, who is ill, has been conducted to the citadel, and will be tried before a court-martial. The Government demands from the Chapter the election of another administrator. The Chapter, however, refuses to comply with this demand, and has appealed to Rome. The statement that 15,000 muskets had been found in a convent on the estate of Count Zamoyski, is said to be pure fiction.

Turkey.—Riza Pasha has been removed from Smyrna to the inferior government of Coniah. Namik Pasha proceeded to Bagdad on the 9th inst. The Armenian Patriarch has resigned. A commission has been appointed to settle the affairs of the community.

Montenegro.—A heavy fall of snow has compelled Omar Pasha to go into winter quarters. The Turkish army has been increased by 10,000 regular troops and Bashi-Bazouks. The insurgents have likewise received reinforcements. They returned on Tuesday to Ljubowa, which place they had left on the 16th inst. A slight skirmish has taken place between the Turks and the insurgents, but it led to no result. The insurgents of the Herzegovina have retired to Zubzi, and have sent their wives and children into Austrian territory. The Turks are continually strengthening the fortifications of their positions. Communication between Ragusa and Trebigne has been interrupted by the insurgents.

India.—By the overland mail we have news from Bombay to Oct. 28, and from Calcutta to Oct. 17. The Governor-General was to leave Calcutta for Allahabad and Agra on the 24th. The Commander-in-Chief is forming his camp at Jullundur, whence he will march to make his military inspection of the Punjaub. It was rumoured that Sir George Clerk would retire from the Governorship of Bombay in January next, but it is now said that the Home Government has not accepted his resignation. It is said that Mr. Cecil Beadon will succeed Mr. J. P. Grant as Governor of Bengal. Lord Canning has published resolutions permitting the absolute sale of waste lands and the redemption of the land revenue on conditions of clearance and cultivation. The price of unassessed lands is not to exceed 5s. an acre, and that of cleared lands is not to be above 10s. per acre. These rates are to rule for five years. The Governor of Madras has refused to annex North Canara to Bombay. Colonel Baird Smith, in his final report on the famine, recommends the permanent settlement of the land and water revenue in the North-West Provinces. The Great India Peninsular Railway from Nassick to Challisgaum in Khandeish, was opened on the 23d Sept. A railway locomotive is actually on the soil of the Punjaub. Locomotives, tenders, &c., have been landed at Mooltan, and are on their road to Lahore. The great Central Asiatic Exploring Expedition, which was to have been led by Captain Smith, has been abandoned. Cholera is making fearful ravages in Cabool; the average mortality from this scourge is said to be 300 daily. Amongst its victims is Sirdar Peer Mahomed Khan, brother of the Ameer of Cabool.

United States.—General Scott has resigned his position as commander-in-chief of the Federal army, and General M'Clellan has been placed at the head of the entire armies of the United States. President Lincoln announced in person to General Scott, at the general's residence, the acceptance of his resignation, and expressed the sorrow which he and his Cabinet experienced at the necessity which compelled him to withdraw from active service in consequence of age and ill health. General M'Clellan has made a speech at Washington, in which he said that "the war cannot be long, although it may be desperate," and that "with forbearance, patience, and confidence they can accomplish all in the great drama which may have their hearts' blood." Secretary Cameron, in a speech delivered at Astor House, New York, said that the day of reverses for the Federal Army had passed. He urged the people to wait patiently till General M'Clellan's preparations were completed, and said that the General had "settled matters for future victory, and would pledge his life upon success." On the same occasion Adjutant-General Thomas delivered a speech in which he said that they now possessed an army such as never was marshalled before since the foundation of the world, and which when moved would be found irresistible, and would pour over the whole Southern country like the sea. A despatch from Springfield, Missouri, states that General Fremont had received an unconditional order from the War Department, removing him from the command of the western military district. The greatest excitement and indignation was manifested by the troops at the intelligence; several companies laid down their arms, declaring that they would not serve under any other commander, and many of the officers declared that they would either resign or make him Dictator of the south-west, independent of the Federal Administration. This mutinous spirit was suppressed by General Fremont, who expostulated with the officers and men, and immediately issued a farewell address, in which he conjured them to remain faithful to his successor, thanked them for the confidence they had always placed in him, and regretted that he would not have the honour of leading them to the victory they were about to win. He then prepared to set out for St. Louis, and has been succeeded by General Hanks. It is reported from Fort Monroe that the commander of the Minnesota has received information that the Federal fleet was bombarding Port Royal, and was meeting with a warm reception, the Confederates having been prepared for an attack some time before. The Confederates were commanded by Commodore Patrick. Another despatch states that Port Royal is in a critical condition, and just ready to surrender to the fleet. The accounts received are very confused. Two Federal steamers have been wrecked off the coast of North Carolina. The crews were taken prisoners by the Confederates. Important movements are taking place on the Lower Potomac indicative of the despatch of large Confederate reinforcements to the points threatened on the southern coast. It is reported that General Beauregard has relinquished the command of the Confederate army on the Potemac, and has proceeded to take the command in South Carolina. A despatch from Cairo announces that a Federal expedition from that place, numbering 3500 men, had landed at Belmont on the Mississippi, and attacked the Confederate forces there, capturing cannon, horses, and 100 prisoners. After the Federals had taken possession of the Confederate camp it was reported that the Confederates were crossing the river from Columbus in order to attack the Federals in the rear. The Federals were then ordered to return to the boats, when a severe engagement took place, and the Federals ultimately retired. The Confederate force was reported to number 7000 men. The loss was heavy on both sides. It is asserted that the Federal army in Missouri will not advance beyond Springfield. A despatch to the War Department from General Rosencranz states that General Floyd made an attack upon him on the 1st inst., but was repulsed with great loss. General Rosencranz further states that one of his officers, with a pretty large force, had got in the rear of General Floyd, and the presumption was that the entire force under his command would be surrounded and captured. There is a large majority for union tickets in Maryland. The captain of the slaver Erie has been convicted of the capital offence of piracy. The southern journals report the arrival of the Confederate steamer Theodora at Savannah with a valuable cargo. The privateer Sumter is again said to have been captured near Barbadoes. It is reported that President Davis will certainly be relieved of the presidency. The Powhattan arrived at Washington on the 2d inst. from Annapolis. She passed the Confederate batteries without being fired on. Mr. Edwin James has become an American citizen, and has made an application to the Supreme Court to be admitted to the New York Bar.—The American ship Maritana, from Liverpool to Boston, was wrecked near Boston Light on the night of the 3d inst. She left the Mersey on the 25th of September with a crew of 22, including officers, and 15 passengers—5 male and 10 female. The ship held together until morning, when Captain Williams, who was amidships, noticed that she was breaking in two, and shouted, "Look out for yourselves." At the same time the vessel separated just where he stood; he fell below, and was crushed to death as she closed together again. Five seamen swam on shore, and seven saved themselves by clinging to the poop. The remainder of the crew and passengers, 27 in all, were swept off the wreck and drowned.

Newfoundland.—A telegram from St. John's, of the 4th inst., reports that there had been more rioting at Harbour-Grace. One policeman was killed, and others badly wounded. A man-of-war had gone there, and a detachment of troops was to follow. The telegraph wires had been cut.

Mexico.—A despatch from Algeria, dated the 18th, announces that the Masséna, bearing the flag of Rear-Admiral Jurien de Lagravière, had sailed from Oran for Martinique. Fort St. John d'Ulloa, the chief point of defence of Vera Cruz, is the first point to be attacked. General Prim, Commander-in-Chief of the Spanish contingent, embarks on the 22d inst. in the Ulloa for Cuba, for which place most of his officers have already left. The combined squadron is expected to meet there about the 10th of December.

Public Addresses.

Viscount Enfield, M.P., at the annual meeting of the British Schools at Brentford, spoke as follows on the new Education Minute:—

"I confess that, at the first glance of this new code, I was rather disposed to join in what I may almost call the outcry which has been raised throughout the United Kingdom against the proposed changes, but I think it only fair and honest to say that a closer study of the question, a little more insight into the details, has convinced me that, although the scheme is open to some grave objections, yet it contains much that is valuable, and much that ought to be embodied in a modified plan. The Commissioners on National Education had only one object in view—namely, to present to the nation, as I believe they have done, a full, fair, and dispassionate report of their inquiries. I also think we may assume that the President and Vice-President of the Education Committee of the Privy Council have been actuated by only one motive—namely, a desire to embody in the revised code such alterations, such amendments, and such modifications as after a careful scrutiny of the report of the Commissioners, might appear to them most likely to conduce to the end in view. I at once admit that there are classes who have been and who, if the new Minute is enforced, will be treated with considerable harshness.

I allude, of course, to the certificated teachers. If the proposed scheme is carried out as as it now stands great injustice will be done to those persons; but I am consoled by the reflection that when Parliament has to deal with vested interests there is always a fair and just reservation made in their favour, and I feel persuaded that the Committee of Council and the Legislature will listen with a ready ear to the complaints and remonstrances of those who will materially suffer if the new code is put into force exactly in its present shape. I am certain, on the other hand, that if the proposed changes are carried out there will be a different class of persons employed in the capacity of certificated teachers. That intelligent class of persons who from the outset of life have devoted themselves to this particular branch of the educational profession will become, I am afraid, neither so numerous nor so valuable as at present. While, however, I admit that some parts of the scheme are open to grave objection, I may also be permitted to say that other portions are so valuable that I should be sorry if they were omitted from any proposal which may be made. When the country sees the grants for education increasing and swelling year after year to an enormous extent, it has a right to ask for results in some degree commensurate with the large and lavish grants of public money which during the last 10 years have been devoted to educational purposes. The grants have increased during the last 15 years from 30,000*l.* to 800,000*l.*, and therefore every succeeding year the public should and will demand an increasing equivalent. I am afraid, if we may believe the report of the Commissioners, that the country has not hitherto obtained value for its money. Let us hope that, whatever good may have been obtained from the Parliamentary grants in past years, by means of increased stringency on the part of the inspectors, greater good may result under the revised code. In many cases greater precision is required with respect to the attendance, the qualifications, and the examination of the children. These are all sound and valuable elements in the new scheme, and I hope they will not be overlooked. I am sorry to say that there are other points not so satisfactory. The proposed classification of the scholars, for example, is liable to serious objection. I believe age is a most fallible test with respect to classification. A child of 8 years of age may be equal in point of intellect and attainments to another of 12, while one of 12 may very probably be placed on the same form with children of 8. I trust, therefore, that the portion of the new code which refers to classification will be modified, if not altogether altered. It has been said—and great stress has been laid on this—that the religious element is to a great extent eliminated from the instruction by the new scheme. I feel I am touching upon dangerous ground here, but I may be allowed to say that I think the spiritual instruction given in the elementary schools throughout the country is open to objection. It is objectionable in this way, that you are, in a great measure, dependent upon the instructor as to what he shall teach; and, therefore, though it may sound heretical in some ears, I confess I would far rather intrust the spiritual portion of the instruction to the parents of the children than to their schoolmasters and schoolmistresses. I believe that those parents who are aware of the inestimable advantages which their children derive from the elementary schools would not neglect at home the most important portion of knowledge—namely, spiritual instruction. Although it is to be regretted that a little more notice was not given of the publication of the new scheme—although I think an intimation should have been made before Parliament dispersed of the intention of the Committee of Council to promulgate during the recess a scheme which materially affects so many and such conflicting interests; yet, as the proposed code will not come into operation until after the month of March, and as there will thus be ample time for the Legislature to consider it carefully in all its details, full justice will eventually be done both to the special interests involved and to the public at large."

THE RIGHT HON. R. C. NISBET-HAMILTON at the annual dinner of the Alford Agricultural Society on Friday spoke as follows on Foreign and Colonial Affairs:—

"He could not avoid referring to the happy condition of this country as compared with the condition of many countries in Europe and with America. The discontent which existed in many of these countries arose from dissatisfaction with their institutions, and the people in the central parts of Europe and in America were in a very distracted state. Fortunately, within the last few years, by increasing the efficiency of our navy, our army, and our militia, and, above all, by the energetic manifestation of the feelings of the people in raising an army of Volunteers, we had placed ourselves in such a position as effectually to protect our shores against any foreign invader. We desired no aggression upon other States. Our only desire was to maintain our national honour and those valued institutions which had been handed down to us from generation to generation. In making these remarks he could not help referring to the disruption which had taken place in what was termed the model republic of the world. When that unfortunate civil commotion commenced he felt, like many other people, that it would give rise to a great deal of bloodshed and a great deal of anarchy in that country. But, like many other persons, he never entertained any strong sentimental feeling for the prosperity of that model republic in the United States. Those gentlemen who had been in the habit of talking a great deal about their power of carrying their arms into other nations, if it should be necessary to do so, had certainly as yet in everything that had taken place proved that they considered discretion the better part of valour. At the very earliest period they had executed what Lord Palmerston had pleasantly described as a rapid movement at Bull's Run, and had completely verified the old adage that 'He that fights and runs away may live to fight another day.' We had, fortunately, been spared anything like the horrible civil wars that had so long been raging in some other countries; and, although our manufacturing interests might suffer to a certain extent from the present deplorable condition of affairs in the United States—and he deeply regretted that suffering—still good must arise out of those events, for it would teach Englishmen to place the highest value on their own institutions, and would show to the world that under our constitutional monarchy and institutions we enjoy a greater amount of rational liberty than falls to the lot of any republic in the world. While we were satisfied with our own institutions, events which were occurring elsewhere would teach us another lesson—would teach us the necessity of abandoning that anti-national or anti colonial policy which for so many years had been forced upon the Government of this country, whoever the Minister of the day might be. From the pressure of the manufacturing districts we had been induced, unfortunately, to neglect our colonies, in order that the manufacturer might obtain his cotton perhaps a quarter of a farthing per pound cheaper. We now found that it was only from those colonies that we could derive that staple article which employed such a large portion of our population, and he hoped the public at large would be convinced that when we have the means in our own possessions of providing that supply which will enrich the manufacturer and clothe the people, we ought to be induced to rely more upon our own resources and the resources of our colonies, instead of trusting to the resources of foreign countries. These opinions might not be exactly in unison with what were called the principles of free trade, but he was glad to find that many of our journals possessing the largest circulation were gradually coming round to this view—that we had made a great mistake in not relying upon our colonies in time of war to keep our manufacturers in full operation. If these colonies had been encouraged to the same extent that slave-grown cotton had been encouraged in the United States, we could have depended on them for the supply of that commodity which is necessary for the employment of our population. It was a most absurd thing for people to go and denounce slavery in Exeter Hall when they were at the same time encouraging the produce of slave labour. He repeated, it was a most absurd thing for a man to go to Exeter Hall and denounce slavery and slave labour wherever it might be, and immediately afterwards jump into an express train and go to Manchester or elsewhere, and set his mill running 18 hours a day for the purpose of working up that very produce which he had obtained by means of slave labour. He hoped we should soon return to a sounder system in dealing with our colonies, and that we should place a greater value on our institutions than in many cases we had hitherto done. It had frequently been said that the people of the United States possessed a free Government and free institutions; but every one now saw how rotten was the state of things in that country, and what a contrast they presented to our free and permanent institutions. In this country there existed a greater amount of rational liberty and self-government than in any other part of the world. For this we were indebted to the good conduct and good feelings of the people, in whose hands we could safely place arms for the maintenance of our honour and the preservation of our country from invasion."

GENERAL SIR DE LACY EVANS, M.P. has issued an address to his constituents, in which he makes the following allusions to the Volunteer Movement, and its extension to Ireland:—

"I believe I was the first person who had the honour of presiding at a metropolitan meeting for the formation of a Volunteer force. The progress of this spontaneous movement has been most interesting. At first the Government were faint-hearted, or disposed to throw cold water upon it, the least intelligent of the aristocracy feared it, the Peace party ridiculed or disparaged it; and yet the Volunteers have already done more for peace than the so-called Peace party will probably ever do. Before the Crimean war, this party despatched a mission of peace to the Emperor Nicholas. The mission was most amiably intended, and had a reception the most gracious and flattering; but we all know with what species of success it was attended. But now European tranquillity and national rights are more seriously menaced from another quarter than they ever were from the banks of the Neva. And the device recently hit upon by our esteemed pacific friends is that of diminishing our means of resistance to foreign cupidity or ambition by setting treaty limits to the navy of England—England, whose existence depends on an absolute maritime supremacy. But the Premier unanswerably explained, with his usual good sense, that this unwise proposition was far more likely to bring about misunderstandings and war than security or peace. In 1807-8 General Sir Arthur Wellesley was Chief Secretary to the Irish Government. The following are from dispatches of his to the then Secretary of State for War, which have been recently published by the present Duke of Wellington. 'I wish you would let me know as soon as you can to what extent you would wish to carry the yeomanry force of this country. We have now from 40,000 to 50,000 effectives, which we could with ease make 60,000 effectives; but I doubt whether any force ought to go beyond that number. According to the existing system, the captains of yeomanry are middling gentry or agents to absentee landlords, and all resident, who for their own sakes take care that their corps shall be well composed.' In respect to the other points on which you have called for my opinion, I have to tell you that I have a very good opinion of the yeomanry of Ireland in general. They say that there are some disaffected persons, and even corps, among them, but I have seen no proofs of the truth of this assertion. They are disciplined as well as corps of this description can be expected to be, and I doubt very much the policy of attempting to make any improvements in their discipline. I think that both in England and Ireland we have attempted too much in the way of teaching parade discipline to the yeomanry and volunteers. In the event of operations in these countries we should be greatly in want of light troops, particularly infantry of the description of these troops. The parade discipline which they receive in large bodies would be entirely useless, nay, would embarrass them when they would be called upon to act as light troops, and I would, therefore, leave them as they are, in detached companies of various strength throughout the country.' Such then, above half a century back, were the opinions on Irish volunteers of the late illustrious Duke. He had no distrust of such carefully chosen volunteers. 'We could with ease,' he says, 'raise this force to 60,000 effectives.' Since that period the great question of Catholic emancipation has been carried. The wages of labour are now doubled or trebled in all parts of Ireland. An advancing prosperity has awaited her, such as she has not enjoyed for centuries. Her Majesty has just made a tour through that portion of her dominions, and has been received throughout with an ovation of enthusiastic loyalty. And yet we have in effect been told, that, of all her subjects, Irishmen alone are not to be allowed to acquire a knowledge of the use of arms for their own and the Queen's defence. I did my best in the Commons to assist to rectify this blunder of the authorities. It is true, indeed, that in a few localities a few broken heads or broken limbs have been occasioned in sectarian riots, and this has been the paltry pretext set forth for the injudicious distrust adverted to. In England and Scotland the more public spirited of the nobles, gentry, middle classes, and others, have induced the Government to acquiesce in, and even give some support to, the patriotic armament which has thus sprung up throughout the length and breadth of Great Britain. The people of Ireland have not been hitherto thought wanting in valour, good faith, or military aptitude. In my humble opinion it is now the duty of the same classes in the sister island to emulate the patriotic conduct in this matter of their fellow subjects on this side the Channel. I venture to believe that, instead of sectarian differences being the real cause of this affronting exclusion, it is more likely to be attributable to the bureaucracy of the Viceregal government, whose repugnance to deviate from their habitual routine as is usually the case with other bureaucracies, led them to thwart this movement. Sir Robert Peel, however, I am glad to find, at present fills the office formerly held by Sir Arthur Wellesley. I conclude that he has duly weighed the statements on this subject of his great predecessor; and I have too high an estimation of his intelligence and vigour to doubt of his setting this whole matter right, by which he will free his colleagues from deserved reproach, and inaugurate advantageously his own official career."

MR. H. BERKELEY, M.P., at the Colston Anniversary at Bristol, on the 13th, made the following remarks on the American question:—

"I consider that our Government has adopted the wisest course, that of entirely leaving the American people to the settlement of their own affairs. And yet we are sorely taxed to do that. In the first place, by that which I consider a great imprudence on the part of the various Governments which have hitherto existed, we are allowed to depend upon America for the produce of that cotton which gives bread to so many millions of our countrymen. It is a sad thing that it [illegible] be so; and I am only astonished, seeing the temper which the American people have shown towards this country, that some means were not previously taken to produce cotton in other countries. The insulting tone displayed by the American Government and the American press towards our Government and our press surely should have forewarned our people of the rupture that was likely to take place. As regards the press of America, with some honourable exceptions, every one appears to have studied the first address of Othello to the Venetian senate—'Rude am I in speech.' They say of us everything which is [illegible] that we deserve, and much that we don't deserve. They speak of a set of despicable tyrants in this country hanging upon an overweening aristocracy. We don't deserve that. Let no one believe that the object is to get rid of American slavery. The Northern people are endeavouring to raise an anti-slavery cry. Why, these men have been the very means themselves of fostering slavery by refusing us permission to put it down. How the contest may end it is impossible to say; but I do see that the North can never subjugate the South so as to compel them to be their vassals. The only faint streak of daylight that I see in that miserable civil war is that I think a fatal blow has been given to slavery. And yet do not suppose that this is an anti-slavery war—it is no such thing. The fact is that America is an immense country, having two very different climates, and what suits one end of the country does not suit the other. The tariff that would bring prosperity to one end would bring ruin to the other; and they disagree upon matters of pounds, shillings, and pence. True, there is an earnest body of men—the Society of Friends—who consider slavery sinful, and would put it down by every means in their power. True it is that, in the United States, they are supported by an earnest body of religious men, but they are a very small minority even in the Northern States. I have been in the States of America, and I say I would sooner be a slave in the South, under a kind master, than a free black in the North, under the persecution which the latter character suffers there. It is all very well to talk about free states and free blacks, but what are the negroes treated as in the North? They are mere hewers of wood and drawers of water. That is giving them the highest degree to which they could ever expect to rise—they are, in fact, viewed as something between the man and the gorilla. Can a black man worship in the same church with the white man? In that sacred place where all men should humble themselves, the pride of distinction is kept up. If you go into the Northern States you will find that the black man is not permitted to worship God by the side of the white man. Can he go into the theatre? Yes; he may go there, for the almighty dollar is all-powerful in America; but he is compelled to go into a part allotted to him, and is parted off from the white man because of his species. To such an extent is this distinction carried out that when, on the 4th July, the anniversary of American independence is celebrated, the black man is not allowed to celebrate it on the same day as the white man; and therefore the whites celebrate their great national festival on the 4th, and the blacks on the 5th."

MR. BRIGHT, M.P., has addressed the following letter to the Secretary of the Glasgow Council of United Trades on the subject of a trades' organisation in favour of Reform:—

"Rochdale, Nov. 13, 1861.

"Dear Sir,—I have received your letter with much pleasure, and I need not tell you that I regard your movement as most important and most wise. It is now nearly three years since, on more than one occasion, I advised the unenfranchised classes to take the course which your Council has now adopted, a course which, if followed by the trades' organisation throughout the country, cannot fail to bring about a speedy concession of the suffrage to a very considerable number of those to whom, up to this time, it has been denied. At this moment there are at least six millions of men in the United Kingdom who have no more political power, through any system of representation, than they would have if they were inhabitants of Russia or Austria; they are more in number than all the men in the new Italian kingdom, and they are purposely excluded from every political franchise in a country which professes a great anxiety for the establishment of representative institutions in other lands. Up to the year 1832, the year of the Reform Bill, the Government of England was entirely in the hands of the territorial aristocracy. They formed, as they still form, the House of Lords; and in the House of Commons they were supreme through the influence of rotten boroughs. The Reform Bill destroyed many of the rotten boroughs, and gave a limited suffrage, and a number of seats to populous towns; it also increased the number of county members, confirming the power of that branch of the representation in the hands of the territorial proprietors by extending the county franchise mainly to the occupying tenants of farms without affording to them the security of the ballot. Looking at the Reform Bill in the most favourable light, it left many boroughs whose population is too small to secure their independence; it continued a distribution of seats without any regard to industry, wealth, or population; and while it cut off several channels by which working men enfranchised themselves as freemen in boroughs, it effectually barred them out from the new franchises it created by the high range of rents in counties and boroughs which it fixed as the line below which the right of voting should not be permitted to descend. Nearly 30 years have passed since the Reform Bill became law, and it is, I think, universally felt that the arrangement then made can no longer be defended or maintained. Three Whig Governments, one Coalition Government, and one Tory Government have within the last 10 years admitted this. The Queen has admitted it by express declarations in several speeches to Parliament, and by consenting to the introduction of Government Bills proposing to extend the franchise to 10*l.* occupiers in counties, and to 6*l.* occupiers in boroughs. Last year, in the Session of 1860, a Bill was brought in by the present Government, proposing a 10*l.* franchise for counties and a 6*l.* franchise for boroughs. It was introduced feebly, and without any apparent earnestness; and, as its authors did not even pretend that they staked their position as a Government on its success, it had to encounter not only the opposition of its own open foes, but the hostility of some whose professions on the hustings are liberal, but who rather retard than urge forward any liberal measures in Parliament. The existing constituencies, with all the disadvantages of small and dependent boroughs and nomination counties, returned a majority, at the general election in 1859, pledged to Reform to the extent proposed in the Government Bill. But Reform to any extent, if hated by the Tory party, is at least not welcome to some of the Whigs; and in the absence of dangerous manifestations of impatience on the part of the people, and with an Administration not believed to be zealous even for its own measure, Parliament thought it as safe as it was pleasant to forget its solemn pledges, and to disregard the just expectations of the nation. The position is this,—The Queen has admitted your case. Statesmen, the most eminent of every party, have admitted it. The existing constituencies have admitted it. The House of Commons has admitted it, for it read a second time, without a division, the Bill of 1860. What, then, is wanting to your success, so far as that measure grants your claim? Nothing is wanting but your own earnest resolution, manifested during a few months of political discussion. I speak to the great unenfranchised class, and especially to those resident in towns and villages. You have an organi-

... more or less complete, almost everywhere. Cannot ... organization, for a single year, be made an instrument for your political deliverance? Is good or bad government of no consequence to the millions who toil? Is representation good in every country but in this? I know how opinion has ..., and that accident and combination only are wanting to ... an omnipotent force on this question. Accident rarely ... a good cause, and combination is a weapon that may ... invincible in your hands. Your correspondence with the unenfranchised throughout the country will show you how ... your countrymen are to help you. I would advise you ... upon them in every town and in every trade. They ... see that the hour is come. And, while you manfully assert ... right to free citizenship in your own country, there will ... wanting those in classes not now excluded to take you ... the hand in a real fellowship, and to work cordially with ... to throw down a barrier which is as personally insulting to ... themselves as it is injurious to the country. Wishing you every success in the work you have undertaken, I am, yours very truly,

JOHN BRIGHT."

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 93⅞ to 94 for Money, and 92½ to ⅝ for the Account; Bank Stock, 231 to 233; Reduced and New Three per Cents., 92 to ⅛; India Five per Cent. Stock, 104½ to ¾; Ditto for Acct., 104½; Ditto Four per Cent. Debentures, 1864, 99 to 98¾; Five and a Half per Cent. Enfaced Rupee Paper, 105½; Exchequer Bills, March, 7s. to 10s. pm.; Ditto June, 12s. to 15s. pm.—FOREIGN: Dutch Four per Cent. Certificates, 99¾; Mexican Three per Cents., for Acct., 27¾; Peruvian Three per Cents., for Acct., 83; Portuguese Three per Cents., 1853, for Acct., 48 to 47⅞; Ditto, 1856, 1857, 1859, and 1860, for Acct., 47; Russian Five per Cents., 100; Spanish Three per Cents., 52; Committee's Certificates, 6¼ to ⅜; Turkish Six per Cents., 1854, for Acct., 81; Ditto, 1858, for Acct., 71 to 70¾; Ditto 100*l.* Bonds, 72¾; Venezuela Three per Cents., for Acct., 23 to ¼.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£28,518,290	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion ..	13,868,290
		Silver Bullion	—
	£28,518,290		£28,518,290

BANKING DEPARTMENT.

Proprietors' Capital ..	£14,553,000	Government Securities (including Dead Weight Annuity) ..	£10,706,646
Rest	3,178,047	Other Securities	16,294,532
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	4,104,901	Notes	8,035,140
Other Deposits	13,270,277	Gold and Silver Coin ..	845,297
Seven day and other bills	775,390		
	£35,881,615		£35,881,615

... day of Nov., 1861. M. MARSHALL Chief Cashier.

Gazette of the Week.

FRIDAY · *Nov.* 15—BANKRUPTS—J. ANDERSON, Church St., Hackney, ...ourman—E. ASHTON, Newcastle-upon-Tyne, Draper—W. ASPLAND, ..., Cambridgeshire, Harness Maker—W. ASTON, Handsworth, Staffordshire, Locksmith—S. BAILES, Charles Street, Portman Square, Grocers, ...—R. BAKER, Ashford, Kent, Boot and Shoemaker—B. R. BARLOW, ... Terrace, Kings Road, Chelsea, Journeyman Stonemason—W. ..., Croydon, Surrey, Corn Dealer—J. O. BATE, Wednesfield, Stafford..., Iron Merchant—H. BATES, Westbromwich, Staffordshire, Ale and ... Dealer—W. BATTIN, Birmingham, Licensed Victualler—J. H. ..., Birkenhead, Cheshire, Builder—J. BENNETT, Norwich, Tailor—..., Church Road, Homerton, Electioneering Agent—J. BIGSBY, ... Terrace, Eglinton Road, Old Ford—W. BROOKES, Birmingham, ... Manufacturer—F. A. BUCKLEY, Theobald's Road, Bedford ..., Tobacconist—A. M. BURTON, Liverpool, Outfitter—F. W. BUTLER, ..., Oxfordshire, Farmer—D. CALLAHAN, James Street, Oxford ..., Greengrocer—J. CAMPBELL, New Suffolk Street, Turner Street, ... Road East, Comedian—R. C. MACRAE, Great Winchester ..., City, Merchant—J. CLARKE, Leamington, Warwickshire, Estate ..., and Coventry, Pawnbroker—J. CLARKE, Coventry, Clothier—C. ..., Bourn, Lincolnshire, Hatter and Clothier—G. COOKE, Knighton, ..., Upholsterer—F. COOPER, Portobello, Staffordshire, Innkeeper ..., King's Heath, Worcestershire—J. CROWTHER, Rotherham, ..., Grocer—W. CULLEY, West Stockwith, Nottinghamshire, Inn...—M. A. DARBYSHIRE, Liverpool, Lodging House Keeper—R. DAVIES, ... St., Kennington Park, Attorney's Clerk—T. R. DICKINSON, Falcon ..., Battersea, Clerk in Holy Orders—W. DODD, Birkenhead, Cheshire ... Dealer—W. DORCHESTER, Salisbury, China and Glass Ware...—CHARLES DRAKE, Queen's Terrace, Dalston, Attorney—... DUNN, Birmingham, Iron Broker—JOSEPH ENTWISLE, Long ..., Lancashire—MARY GRIFFIN, Ewell, Surrey—WILLIAM MARMA... FOSTER, Bridlington, Yorkshire, Wine and Spirit Merchant—T. ..., Vassall Road, Brixton, Cab Proprietor—W. FOWLES, Bermondsey ..., Butcher—T. C. GILL, Manchester Street, Manchester Square—T. ..., Grove Mews, Marylebone, Wheelwright—J. HALL, High ..., Battersea, Colour Grinder—G. HANDLEY, Warcop, Westmoreland, ...—W. HAMER, Great Grimsby, Hosier—H. R. HAMP, Milcombe, ..., Farmer—F. J. HARE, Thames Ditton, Clerk—G. HAWKER, ..., Bermondsey—J. HAWKEY, Tywardreath, Cornwall, ...—R. HAWTON, Redditch, Worcestershire, Needle Finisher—J. ..., Stalybridge, Lancashire, Pawnbroker—H. HEARE, Thrapstone, ...amptonshire, Fishmonger—THOMAS J. HILDITCH, Strangeways, ..., Beer Retailer—W. HOGG, Manningtree, Essex, Licensed Dealer ...—J. HOLLOWAY, West Bromwich, Staffordshire, Boatman—F. ..., Liverpool, Butcher—J. J. HOUGHTON, Lower Street, St. Luke's, ..., and Watch Material Manufacturer—W. HOULDCROFT, Cheslyn ..., Staffordshire, Miner—E. HOUGHTON, Daventry, Northamptonshire, ...—H. HOWARTH, Bagslate, Lancashire, Farmer—R. HOWELL, Bristol, ... Dealer—J. HOWS, Brentwood, Essex, Butcher—H. W. HUNT, ...—G. H. JAMESON, Ramsgate, Kent, Auctioneer—C. H. JOBERNS, ... Lane, Cannon Street, City—J. G. KAMMERER, also known as G. ..., ... Street, Leicester Square, Victualler—J. KENDALL, Grange ..., Kent Road, Commission Agent—J. KIRWAN, Birmingham, Dyer ..., Charles Street, Westbourne Terrace, Builder—T. LEAKE, ..., Upholsterer—E. B. LOCKYEAR, Plymouth—J. LUCAS, Louth, ...shire, Licensed Victualler—W. LUNT, Mitcham, Surrey, Market ...—J. MANN, Church Row, Stepney, General Provision Dealer—J. ..., Devonshire, Butcher—J. MILES, Banbury, Oxfordshire, ... Builder—J. and A. MILLS, Banbury, Oxfordshire, Coach Builders—..., North Street, Lambeth—J. MOSS, Tunstall, Staffordshire, Grocer ... NAYLOR, Wellington Place, Southampton Street, Camberwell, ...—J. NEALE, Doncaster, Yorkshire, Wholesale Druggist—... NICHOLSON, Sandown, Isle of Wight, Grocer—C. C. M. ..., Nottingham, Land Agent and Valuer—J. NINNES, St. Ives, ..., Plumber and Glazier—G. L. NOONE, Southampton Street, Cam..., Builder—J. OVERHAGE, Sherrard Street, Golden Square, General ...—A. OTTERIDGE, Singleton Street, South Hoxton, Provision ...—H. P. M. OWEN, Pentrefelin, Carnarvonshire, Land Surveyor—J. ..., Bolton Street, Hanover Square, Regent Street, Coffee House ...—E. PARTRIDGE, Redditch, Worcestershire, Needle Finisher—J. ..., Bowdon, Cheshire, Grocer—W. PERRIN, East Malling, Kent, ...—A. PETHERICK, Stangate, Lambeth—W. PITT, Colchester, Essex, ... Victualler—W. PRATT, Birmingham, Tailor—J. E. PRIOR, Eden ... Kent Road, Cheesemonger—J. G. RICE, Liverpool, Merchant—... RICHARDS, Adam Street, Adelphi, Commission Agent—THOMAS ..., ...urbage, Leicestershire, Grocer—JOHN ROBERTS, Conway, ...onshire, Painter—JOHN ROBERTS, Nevin, Carnarvonshire, Mariner—WILLIAM ROBERTS, Chester, Cab Proprietor—..., jun., Faversham, Kent, Grocer—R. SCOTT and J. FORSTER, New... upon Tyne, Linen Drapers—T. SCOTT, Idle, Yorkshire, Cloth ...facturer—J. C. SHAW, Southampton, Rag and Iron Merchant—J. ...HAM and JAMES BRABIN, Newcastle-under-Lyme, Staffordshire, ... and Spirit Merchants—A. SMITH, Sandgate, Kent, Grocer—J. SMITH, ...ingham, Ale and Porter Dealer—H. SMITH, St. Thomas Street, Borough—T. H. SMITH, Westminster Bridge Road, Stationer—G. SPEISER, Liverpool, Hotel Keeper—G. STREET, Darlaston, Staffordshire, Lock Filer—W. STEVENS, Lupus Street, Pimlico, Commission Agent—T. P. STOKES, Dudley, Worcestershire, Auctioneer—G. STROSS, Penrith, Cumberland, Beerhouse Keeper—J. F. SUTCLIFFE, Halifax, Yorkshire, Cotton Spinner—T. S. SLADEN, Manchester, Silk Broker—P. SWIFT, Liverpool, Builder—W. C. TAYLOR, Portland Place, Islington, Harness Maker—S. TURNER, Deptford, Grocer—J. O. URCH, Llandaff, Glamorganshire, Beerhouse Keeper—F. VICKERY, Great Marylebone St., Glass and China Dealer—R. VINCE, Kersey, Suffolk, Cattle Dealer—E. M. VINES, Basingstoke, Southampton, Corn Dealer—R. WAGSTAFF, Hyde, Cheshire, Smith—H. WATSON, Rotherham, Yorkshire, Stove Grate Manufacturer—T. G. WELLS, Bishops Stortford, Hertfordshire, Veterinary Surgeon—J. P. WEBSTER, Clarence Road, Clapton, Merchant—H. WHALLEY, Castle Church, Staffordshire, Spinster—T. T. WHITE, Long Buckley, Northamptonshire, Miller—J. WHITE, Dunstable, Bedfordshire, Builder—W. H. WHITE, Birmingham, Builder—C. WHITLEY and J. WHITLEY, Manchester, Engineers—W. H. WICKETT, Leman Street, Whitechapel, Baker—J. WILLES, Charles Street, Goswell Road, Grocer—H. R. WILLCOCK, Postern Row, Tower Hill—H. WINKWORTH, Bursledon, Hampshire, Brewer—J. B. WINN, Heckmondwike, Yorkshire, Inn Keeper—J. WINTERBURN, Guiseley, Yorkshire, Cloth Manufacturer—G. J. DE WINTON DE WINTON (commonly known as G. J. DE WINTON), Milk Street, Cheapside—A. WITHEY, Church Lane, Whitechapel, Coach Trimmer—J. WOOLLEY, Chester, Publican.

TUESDAY—BANKRUPTS—W. H. C. ALLEN, Bolton Row, Piccadilly—L. ARCH, Chapel Street, Tottenham Court Road—E. ARNOLD, Farnworth, Lancashire, Grocer—E. ASTEN, Atcham, Shropshire, Brickmaker—W. AUSTON, Birmingham, Farmer—C. R. BAGGS, Plymouth, Lithographer—J. A. BALL, Binsey, Oxfordshire, Grazier—A. BASTEN, Westminster Bridge Road, Builder—J. BARKER, Newcastle-upon-Tyne, Cabinet Maker—B. BARNARD and A. ROSENTHALL, Cheapside, Warehousemen—T. B. BALDWIN, Fenton, Staffordshire, Earthenware Manufacturer—E. BELLAMY, Leamington Priors, Warwickshire, Fishmonger—J. BISHOP, Burlington Quay, Yorkshire, Builder—H. BISHOP, St. James's Place, Clerkenwell—W. C. BODDINGTON, Hanley, Staffordshire, Dealer in Potter's Materials—W. BLEAKLEY, Manchester, Beerhouse Keeper—T. E. BOULTON, London Street, Paddington, Omnibus Proprietor—T. BROGDEN, Blackpool, Lancashire, Linen Draper—F. BREININGER, Lucas Place, Commercial Road East, Baker—G. BRISTOW, Duke Street, London Bridge, Coffee House Keeper—W. BURGESS, Bristol, Harness Maker—W. CAPERS, Southsea, Tailor—H. CAMPBELL, Liverpool—F. G. CHAUNDY, Oxford, Chemist and Druggist—J. CLARKE, Great Warley, Essex, Timber Merchant—J. COOK, Portsdown Road, Maida Hill—R. COULSON, Gulden Terrace, Barnsbury Road, Islington—C. B. CRISP, Stanley Road, Kingsland, Clerk to an Attorney—J. B. CROSS, Moorgate Street, City, Watch Manufacturer—J. CUNLIFFE, Hamer Bottom, near Rochdale, Lancashire, Tanner—D. H. DAVIES, Aberdare, Glamorganshire, Grocer—F. DIKE, Denbigh Place, Pimlico—W. S. DOBB, Ventnor, Southampton, Plumber—M. EASTON, Gravesend—H. EATON, Newcastle-under-Lyme, Staffordshire, Gardener—J. A. ELSTOB, North Row, Park Lane, Clerk—J. ELSWORTH, High Harrowgate, Yorkshire, Cab Proprietor—W. EMMERSON, Gt. Grimsby, Lincolnshire, Licensed Victualler—J. EVANS, Essex Street, Hoxton, Fancy Box Maker—A. FANTHAM, Wendover, Buckinghamshire, Coal Merchant—J. FEAVER, Wincanton, Somersetshire, Common Brewer—D. FEGAN, Bishop Auckland, Durham, Clothier—J. D. FELL, Gainsborough, Lincolnshire, Innkeeper—G. FENTEM, Southampton, Grocer—E. J. FIANDER, Camberwell, Surrey, Builder—J. FISH, Little Lever, Lancashire, Grocer—H. FISHER, Avenue Road, Hammersmith, Painter—T. FISHER, West Ham, Essex, Builder—T. T. FLYNN, Washington Street, Bow Common Lane, Ruler of Ballast Heavers—F. G. FRANCIS, Great Ormond Street, Bloomsbury, Commission Agent—T. F. FRY, Wells Street, Hackney, Clerk in Docks—W. GILES, Padstow, Cornwall, Sawyer—M. GILLINGHAM, Warren Street, Tottenham Court Road, Builder—F. GOLDTHORP, Merton, Surrey, Journeyman Cabinet Maker—J. GOLLEDGE, Cardiff, Glamorganshire, Stationer—S. F. GREEN, Whiting Street, Lambeth—J. GRIFFITH, Castletown, Cheshire, Farmer—H. GRINT, Acre Lane, Brixton—H. HATCH, Landport, Hampshire, Gunner in the Royal Navy—T. HARMER, Leeds, Joiner—J. E. HEATH and T. W. L. HILTON, Mark Lane, City, Oil Merchants—R. HETHERINGTON, Newcastle-upon-Tyne, House Carpenter—A. HEWITT, London Road, Southwark, Furniture Dealer—J. E. HILL, Jeffrey's Square, St. Mary Axe, City, Merchant's Clerk—H. HILL, Gipsy Terrace, Maldon Road, Kentish Town, Builder—B. HINCHLIFFE, Pudsey, near Leeds, Cloth Manufacturer; J. H. PEDDER, Halifax, Porter Merchant; R. RAYNOR, Barnsley, near Leeds, Innkeeper; S. FOX, Leeds, Commission Agent; T. THOMPSON, Bradford, Beerseller; and J. JACKSON, Swinegate, Leeds, Grinder of Flints—W. HOLDEN and W. R. HOLDEN, Southampton, Coal Merchants—J. HOOPER, Dulverton, Somersetshire, Cattle Dealer—B. HORT, Harmood Street, Hampstead Road, Boot and Shoemaker—J. HUDSON, sen., Snape, Suffolk, Labourer—J. INGALL (sued with E. INGALL), Corporation Lane, Clerkenwell, Carpenter—J. JAMIESON, Great Carter Lane, Doctors Commons—G. JENKINS, Darlaston, Staffordshire, Beer House Keeper—S. H. JONAS, Kingsland Green—S. JONES and A. S. WARWICK, Luton, Bedfordshire, Ironmonger—T. KINSEY, Tattenhall, Cheshire, Labourer—M. KNOTT, North Shields, Ship Owner—J. KNOTT, Howdon, Northumberland, Butcher—G. KNOWLES, Willenhall, Staffordshire, Lock Manufacturer—L. DE LABELLEVILLE, Brunswick Terrace, Camberwell Gate, Professor of Literature—T. LAWRENCE, Halifax, Fishmonger—F. L. LEYSER, Great George Street, Bermondsey, Enameller and Japanner of Leather—G. H. LILLY, Dames Street, Islington, Clerk to a Tallow Broker—H. LONGDEN, Marlborough Place, Kennington Road, Railway Clerk—S. F. M'DONALD, Tavistock, Devonshire, Lodging House Keeper—J. MACHIN, Reading, Sack Manufacturer—C. MADDER, Crescent Place, Burton Crescent, St. Pancras, Commission Agent—J. MANN, Church Row, Stepney, General Provision Dealer—C. MARSHALL, Plymouth, Bookseller—E. J. MASKELL, Great Marlow, Buckinghamshire, Ginger Beer Manufacturer—J. MASON, Wilmslow, Cheshire, Tailor—J. H. MILLS, Brighton—W. J. MOORE, Bermondsey, Surrey—E. MORTLOCK, Aldermanbury, Manufacturer of Fancy Goods—I. MOSS, King St., Poplar, Merchant—H. NEWPORT, Ramsgate, Kent, Lodging House Keeper—B. OVENDEN, Newcastle upon-Tyne—H. PAGE, Blackheath, Kent, Bread and Biscuit Baker—E. PARLSOT, Rotherfield Street, Islington, Commission Agent—R. PARKER, Bishopsgate Street Without, Traveller—F. PARKER, Hoxton Old Town, Wholesale Cabinet Manufacturer—C. T. A. PAVEY, Bristol, Accountant—J. PAULL, Probus, Cornwall, Gardener—C. P. PEARMAN, St. Martin's Court, Leicester Sq.—J. PILKINGTON, Cotton Manufacturer, and JOHN HARDMAN, Warehouseman, both of Heywood, Lancashire—T. PLUMB, Northampton, Licensed Victualler—W. W. POND, Knaith Terrace, Devonshire Street, Mile End, Ship Broker—W. PROBERT, Llanwonno, Glamorganshire, Shoe Maker—G. PURKIS, Warwick, Assistant to a Licensed Victualler—I. RAYNER, Old Quebec Street, Portman Square, Doctor of Medicine—H. READY, Basinghall Street, Surveyor—W. F. REED, Charlotte Street, Fitzroy Square, Musician—B. REGESTER, Hampton Wick, Licensed Victualler—J. ROBINSON, Hatfield Broad Oak, Essex, Butcher—D. RUSTON, Cottingham, Yorkshire, Farmer—W. RUSS, Gloucester Street, Clerkenwell, Jeweller—J. SAUNDERS, East Stonehouse, Devonshire, Builder—J. SCARRATT, Birkenhead, Cheshire, Cement Dealer—W. SCOTT, Bilston, Bricklayer, and F. W. BARNES, Wolverhampton, Staffordshire, Dealer in Cattle Food—C. SCRIMSHIRE, Welford, Northamptonshire, Bootmaker—R. SILL, Birmingham, Attorney—R. SHILLING, jun., Selling, Kent, Bricklayer—F. SMITH, Plymouth, Perfumer—J. STICER, Aldersgate Street, City, Oil and Colourman—H. STAMMERS, Southminster, Essex, Builder—J. STANYER, Manchester, Beer Retailer—J. STEVENS, Smarden, Kent—G. TAGG, Farnham, Surrey, Toy and Fancy Shopkeeper—S. TATHAM, Heywood, Lancashire, Machine Maker—T. TAYLER, Wickham Market, Suffolk, Saddler—E. THOMAS, St. Fagans, Glamorganshire, Butcher—G. THOMAS, Aberdare, Glamorganshire, Draper—E. B. THOMAS, Ludlow, Shropshire—J. THORN, Liverpool, Licensed Victualler—J. TICKNER, Kingston-upon-Thames, Fishmonger—S. TIMSON, Hallaton, Leicestershire, Carrier—J. TIERNEY, Liverpool, Ship Bread Baker—T. G. TOLLEY, Lamb Street, Spitalfields, Builder—J. TOY, Bristol, Dealer in Grease—J. WADE and G. WADE, Ipswich, Saddlers and Harness Makers—W. WARNER, Trimley Saint Martin, Suffolk, Grocer—G. W. WATTS, Devonshire Terrace, Notting Hill, Dealer in Berlin Wool—H. F. WEBSTER, Darlington, Durham, Grocer—J. WESTON, Chobham, Surrey—J. WENHAM, Hertford, Assistant to a Leather Dealer—W. WHITEHOUSE, Holywell, Flintshire, Ironmonger—T. WHITWORTH, Mortimer Road, Hackney, Labourer—L. L. WHITTLE, Bolton, Lancashire, Cheese and Butter Factor—W. H. WILD, Lambeth Walk, Appraiser—J. WILLIS, Ross, Herefordshire, Grocer—T. WILLIAMS, Bridgewater, Somersetshire, Fireman—G. WILLIAMS, Llanwonno, Glamorganshire—J. WILLIAMS, Brecon, Maltster—W. WILLIAMS, Swansea, Mining Engineer—T. WILSON, Newcastle-upon-Tyne, Builder—W. WRIGHT, Ticehurst, Sussex, Grocer—J. YATES, Leeds, Dealer in Mungo—E. YOUNG, Mile-End-Road, Cow Keeper.

Metropolis and its Vicinity.

DESTRUCTION OF AN AMERICAN SHIP IN THE CHANNEL BY A CONFEDERATE SHIP OF WAR.—Great excitement was caused at Southampton on Thursday morning by the arrival in the river of a steamer of war bearing the flag of the Confederate States of America. She came up the river about 8 o'clock, and anchored off the mouth of the Itchin, with the Confederate flag flying at the peak and a pennant at the main. Soon afterwards she landed a number of men who proved to be the crew of a Federal merchant ship, named the Harvey Birch, which she had captured and burnt on Tuesday morning near the entrance of the Channel. The steamer in question was called the Nashville before she was purchased for the Confederate navy, and is of 1120 tons burden. She is commanded by Captain Peagrim, his chief subordinate officers being First-Lieutenant Fauntleroy and Second-Lieutenant Bennett, and she has a crew of 80 men, all whites, mostly English and Irish. She carries only two long 12-pounder rifled cannon. The Nashville is from Charleston, last from Bermuda, for England, on "special service." It will be remembered that this ship ran the blockade in Charleston harbour, about 12 o'clock at night, towards the end of October, within sight of two Federal cruisers, but, exhibiting no lights she ran close along shore and escaped unnoticed. She put into Bermuda for coals, and the captain states that he was treated while there with every attention and politeness by the Governor of Bermuda. About 8 o'clock on Tuesday morning, when in lat. 49° 6′ N., long. 9° 52′ W., the Nashville fell in with the American ship Harvey Birch, Captain Nelson, bound from Havre to New York, in ballast, with the American flag flying. She ran alongside her, and opening her ports, ordered the ship to heave to, the flag to be hauled down, and the captain to come on board immediately. This was done, and Captain Nelson soon returned to his ship, with orders from the captain of the Nashville for all the crew to get their things ready as soon as possible, and go on board the Nashville, as they intended to destroy the Harvey Birch. They were allowed an hour or an hour and a half for this purpose, and got part of their things out. The men from the steamer took most of the provisions, with the ship's chronometer, barometer, and some of the charts, permitting Captain Nelson to retain his own chronometer, but he has lost 1200 dols. or 1400 dols. worth of personal effects, books, charts, &c. They then set fire to the ship fore and aft, apparently in the deck-houses, and the vessel was soon in flames from stem to stern. The three masts were seen to go over the side, and the hull was still burning when the steamer left her. The Harvey Birch was a fine full rigged ship of 1,187 tons, American measurement, and cost about 125,000 dols. in her construction. She had a total of 29 souls on board, including Mr. Blydenburg (a son of her owner), who was a passenger, Captain Nelson, two mates, two boatswains, cook, steward, carpenter, and 20 seamen. The men were put in irons on board the steamer (with the exception of the captain and mate, who were treated with great politeness), and kept as prisoners until the arrival of the vessel at Southampton, when they were immediately landed in the docks, and set at liberty, with all the personal effects belonging to them. It is stated that before they were put in irons the Confederate oath was tendered to the men, which they refused to take. Immediately on landing Captain Nelson waited upon Captain Britton, the American Consul, who caused the crew to be temporarily boarded at the Sailors' Home, and made arrangements for them to be forwarded home to New York in the Hansa steamer, which sails on Wednesday next. Captain Britton also put himself in communication with Mr. Adams, the American Minister in London, and made that gentleman acquainted with the facts of the case. On leaving the Nashville, Captain Peagrim told Captain Nelson that he hoped they would not part bad friends, for what had been done was a simple act of retaliation on the Northern States for invading their territories, burning their houses, ill-treating their women, and stealing their negroes, and they were bound to retaliate on the property of the North in every way they could. About 12 o'clock the Nashville steamed into dock, where she now lies, and soon after she was berthed Captain Patey, the Admiralty superintendent of mail packets at this port, went on board and had an interview with the captain. Colonel Peyton, an agent of the Southern Confederacy, and his wife were on board the Nashville, and left for London by the 3 o'clock train. The captain states that the Nashville has put into Southampton to have her top deck taken off and be fitted out as a vessel of war. It is stated that she has some spare officers on board for ships building or preparing in England for the Confederate navy. The Nashville is a sister ship to the Federal steamer James Adger, which was sent over about three weeks since to intercept a vessel loading at Liverpool with warlike stores for a Southern port, and put into Southampton for repairs and sailed again on the 12th inst. About five or six years ago she was temporarily chartered for the mail service between Havre, Southampton, and New York, and made a few voyages each way with the mails. Captain Pegrim, her commander, is an old officer of the United States navy, and bore a conspicuous part in the Mexican war, in the Paraguay and Japan expeditions, and during the war waged by the English and French in China. For his distinguished services his native State of Virginia voted him a splendid sword by the unanimous voice of the General Assembly of the Legislature.

THE INTERNATIONAL EXHIBITION.—The first consignment of goods for the Exhibition of next year arrived in London on Friday. As was the case in 1851, these earliest contributions are from Russia. It is understood that they are mainly raw products and manufactures of iron and steel, a branch of industry in which Russia occupies a high position, and which was acknowledged at the Exhibition of 1851 by the award of one of the council medals. The goods have been sent at this early period in consequence of the closing of the navigation of the Neva. The nave of the building is complete, except where it joins the domes. In the first or eastward dome the columns are erected as far

as the spring. The refreshment question is not yet decided. Twenty firms, including two foreign caterers, have tendered. The area assigned to the dining and refreshment rooms in both sections is 43,000 square feet; that of the kitchens, store-rooms, &c., 38,018 square feet: 40,000 square feet is assigned for cheap refreshments, and 2000 for the sale of tea, coffee, &c. The ground floor areas will be suited for light and general refreshments; the rooms on the gallery for more substantial fare, and for 216 diners; and the small dining rooms and the saloons on the upper floors for set dinners at higher charges and *diners à la carte*. With regard to the approaches, the Paddington vestry have appointed a committee to confer with the Kensington vestry to consider the best means of promoting the formation of a new carriage road or subway across Hyde Park to connect Paddington with South Kensington, and a project has been started for a pneumatic railway supported on columns between the Kensington Basin and the Exhibition building.

SOUTHERN EMBANKMENT OF THE THAMES.—On Wednesday afternoon a numerous deputation waited upon Lord Palmerston, at his private residence in Piccadilly, for the purpose of presenting a memorial and calling his attention to the proposal for embanking the north side of the Thames and to the mischiefs which must necessarily result to the inhabitants on the south side unless a similar protection were afforded to them against the encroachments of high flood tides. The deputation consisted of Mr. Roupell, M.P.; Mr. Williams, M.P.; Mr. Briscoe, M.P.; Mr. A. H. Layard, M.P.; Mr. Brady, M.P.; Mr. Doulton, and a number of the most influential inhabitants of the parishes of Lambeth, Newington, Southwark, Camberwell, Clapham, Tooting, Streatham, Putney, Wandsworth, Roehampton, Battersea, &c. The deputation was introduced by Mr. Williams, M.P., and Mr. Doulton, as its leading member, presented his lordship with a memorial, strongly urging the question on the consideration of the Government. A short discussion of a conversational character ensued, in which Mr. Doulton, Mr. Newman, Mr. Brady, Mr. Williams, Mr. Layard, and Mr. Briscoe explained the wishes of the deputation. There were, they contended, reasons in favour of embanking the south side of the Thames, far stronger and more apparent than existed for a similar measure being adopted on the northern shore. It was unfortunately far from an uncommon occurrence for the districts on the south side of the water, lying near the river, to be flooded by a high tide, and none but those acquainted either by residence or place of business with those localities could form an adequate idea of the misery and damage caused by these repeated inundations. They did not hesitate to say that had no question ever existed of embanking the north side of the river it would sooner or later have become imperative, both from sanitary and other reasons, to give the inhabitants of the south side such a protection against the water. The evils they complained of, such as dense and widespread mudbanks on the shores, and the generally low sanitary condition of many of the parishes they represented, would be much aggravated by the embankment of the north side only, and they ventured to think that no proposition of embankment could be complete which did not include the south side also. The cost of the construction of the northern embankment was to be paid out of the proceeds of the coal tax, which Parliament had extended for that purpose for 10 years longer for metropolitan improvements. That tax was paid equally by the whole inhabitants of the metropolis, yet, with the exception of the new street, the south side of the river had not benefited by it at all, though on the south side there were 14 manufactories which alone contributed no less than 10,000*l.* annually to the tax. In fact, the south side of the river was made to pay for works which, when complete, would prove their own destruction. In this matter the inhabitants felt they had been hardly dealt with, for a metropolitan tax paid by all should, when devoted to such public works, be equally administered for the benefit of all. The deputation wished to have the tax prolonged for such a time as would enable the southern embankment to be completed as well as the northern, and all plans for the former scheme would, of course, be submitted to the approval of the Board of Works and the First Commissioner. No one could justly complain of such an arrangement. During the 10 years that the coal tax had been prolonged the amount that would be raised by that impost from large firms and manufactories on the south side of the river would alone be much more than sufficient to build the embankment they required, and this calculation was made without taking into account the large amounts which would be contributed to the same tax by the general inhabitants of the whole district. The expense of the work for the same length of shore embanked on the south side as that proposed to be embanked on the north—namely, from Westminster to Blackfriars bridges, would be about 250,000*l.*, but to make a perfect and good embankment along Rotherhithe and the districts that really required protection against the water would cost about 400,000*l.* The proceeds of the coal tax, however, were more than 170,000*l.* per annum, and they were increasing yearly. Lord Palmerston, in reply, said:—

He thought that there was a great deal of reason and truth in the arguments which had been advanced, and as far as he was concerned he certainly would wish to see both sides of the Thames properly embanked. He had heard officially a great deal about the misery and loss caused by the inundations of the Thames over the low-lying districts on its southern banks, and he certainly thought that if the north was embanked the south side ought to be so too. In fact, as far as the interests of the south side of the river went, it was, in his opinion, even more important that that should be protected, as it was more exposed to all the nuisances arising from the flooding of the Thames. He entirely agreed with them in their principle that it ought to be done; the question as to the manner and extent of the protection afforded would have to be considered hereafter.

ROYAL MILITARY ACADEMY.—The decision arrived at by the Commissioners appointed to investigate the proceedings of the cadets at Woolwich has not yet been made public, but the rations are now served on a much more liberal scale, and his Royal Highness the Commander-in-chief, in compliance with the representations of the Committee, is willing to grant permission for the use of tobacco to the gentlemen cadets in the grounds of the establishment.

THE EVANGELICAL ALLIANCE.—The fifteenth annual conference of the British organisation of the Evangelical Alliance was opened on Wednesday morning in Freemasons' Hall; Sir Culling Eardley presiding. The annual opening address was to have been delivered by the Rev. W. Arthur, but the sudden death of a relative prevented the rev. gentleman from being present. The "practical resolutions" were afterwards read and enforced by the Rev. T. A. Aston. Sir Culling Eardley addressed the meeting at some length, after which the report, which was of a congratulatory character, was read and adopted. Dr. Davis, Secretary to the Religious Tract Society, then moved a resolution expressing the deep regret of the Conference that the names of influential clergymen should be attached to the volume entitled *Essays and Reviews*, that volume containing opinions which strike at the very foundation of Christian verity and all revealed religion, and large portions of it tending directly to destroy the faith which most of its authors have entered into a solemn and public obligation to preach.—Major-General Alexander seconded the resolution, which was agreed to.—The Rev. Mr. Thornton moved a resolution on the subject of the better observance of the Lord's Day, expressing the satisfaction of the meeting that communications had been addressed to the Alliance from Switzerland and Germany relative to a combined action in those countries for a better observance of the Sabbath. The resolution was unanimously agreed to.—The Rev. S. Minton moved a resolution stating that, as the Evangelical Alliance was especially constituted for the promotion of Christian union, they deplored the bitterness and alienation too often connected even with the unavoidable controversies between Christians, and enforcing on the members the duty of watchfulness over their own spirits, especially in reference to the impending agitation on church-rates.—The Rev. R. Hackett fully concurred in the principles of the resolution, but was not quite satisfied that it was judicious to introduce the subject of church-rates into the resolution, for this might be declared to be an attempt to prevent those who were opposed to church-rates from taking up that position in future.—Professor Hoppus considered that it would be desirable not to retain the words in the resolution; and the Rev. Mr. Bunting suggested the insertion of some general phrase covering all the controversies of the time. After some discussion the resolution was amended in accordance with this suggestion, the words "in reference to the ecclesiastical controversies of the times" being inserted in place of the words which had given rise to objection. The resolution then passed.—The next resolution was moved by the Rev. T. James, and seconded by Mr. Carr Tucker. It recorded the gratification of the Conference at the steps taken at Geneva on behalf of their Christian brethren suffering in Spain, and instructed the Council to take such steps as might be expedient in aiding the Geneva Committee in procuring the liberation of the prisoners.—The Chairman stated that their suffering friends had been visited in gaol in Granada by the Rev. A. R. C. Dallas, and it was gratifying to learn that Senor Mattamoros said on the occasion that the attitude assumed by the foreign Protestants had a notable effect already on his trial, that he saw new activity and an air of kindness towards him among those in power, and that he now saw a ray of hope. Arrangements were making for a deputation to go to Madrid, and for the presentation of an address to the Cortes on the subject. The resolution was then put and agreed to, and the adoption of other resolutions declaring satisfaction at the proceedings of the Geneva Conference, approving of steps being taken for facilitating the preaching of the Gospel in various tongues during the Exhibition of 1862, and expressing the deep regret of the meeting at the absence on account of indisposition of the Rev. Dr. Steane, terminated the afternoon's business. In the evening a *conversazione* was held on subjects arising out of the day meeting. A public meeting of the Alliance took place on Thursday evening at Freemasons' Hall, the Hon. A. Kinnaird, M.P. in the chair. The meeting was addressed by the Chairman, by the Rev. T. R. Birks, the Rev. Dr. Winslow, Rev. A. R. C. Dallas, and Sir Culling Eardley, on the prospects of the Gospel in Italy, the state of the Papacy, the religious persecutions in Spain, and the results of the Geneva Conference. The proceedings of the meeting were then brought to a conclusion with prayer.

SCHEME FOR THE UNION OF CITY BENEFICES.—A meeting of the commissioners appointed under the recent Act 23d and 24th Vict., c. 142, to consider and report upon the expediency of the union of City benefices in the City of London, was held at the Mansion House on Tuesday under the presidency of the Lord Mayor, when a scheme of union was proposed and settled. The commission is composed of the Lord Mayor and Mr. Blomfield Burnell, representing the lay element, and nominated by the Court of Common Council; the Rev. R. B. Gibson, rector of St. Mary Abchurch, acting for the Dean and Chapter of St. Paul's; the Rev. Michael Gibbs, vicar of Christ Church, Newgate Street; and the Rev. T. J. Rowsell, rector of St. Margaret, Lothbury, appointed by the bishop of the diocese. They have been engaged on the project in question for nearly six months, and have held about 80 meetings at the Mansion House from first to last. Of 17 proposed unions reported upon by the commissioners three have been deemed by them to be, at least for the present, inexpedient; the remaining 14 unions the commissioners consider to be expedient, and they recommend the terms on which these unions may be effected. They, first of all, recommend various things which affect the parishes to be united, and the result of their recommendations is that the church expenses of the several parishes of each united benefice will be greatly diminished by the union. After specifying the alterations which the union will render necessary in the arrangement of the patronage, which they have succeeded to a great degree in simplifying, by doing away in many instances with alternate turns of presenting, they recommend what should be done with the disused church. They suggest that a tomb of a suitable and substantial character be erected in the adjacent churchyard, and that the human remains found under the church be carefully deposited in it; that the pulpit, organ, bells, &c., be transferred, if required, to the new church which the Act of Parliament requires to be erected in the stead of each church which is taken down; that the materials and sites of disused churches be sold, and that out of the produce of such sales, aided by glebe property, and other assistance, the new churches be erected, and a new benefice be created for each of them, and an endowment provided sufficient to compensate the patron for accepting such new church in the stead of the City benefice which he formerly owned; but in no instance have the Commissioners recommended the alienation of the Fire Act tithe from a City parish. That tithe is to belong to the incumbent of the united benefice. In one instance the disused City church is recommended to be granted for Divine service in the Welsh language, a committee of Welsh people having offered the security which the act of parliament requires for the maintenance of the fabric. In another union the disused church is recommended to be used as a school: 14 churches are recommended to be removed altogether. The suggestions which the commissioners make respecting the new churches which the Act requires to be erected in their stead show the relief which the unions, if effected, will give to the spiritual destitution which exists in many places in the metropolis. The following are the parishes thus relieved, the figures denoting the population as taken at the census of 1851:—In St. Dunstan's, Stepney, having 24,843 inhabitants, two new benefices are created, one of which comprehends a small portion of St. Philip, Stepney, which has 13,447 inhabitants. Another new benefice is formed out of St. Peter and Trinity, Stepney, which, in 1851, had 7597 and 6264 inhabitants, but have been greatly augmented in numbers during the last ten years. In St. George's-in-the-East, having a population of 27,000, two new benefices are formed, one of which comprehends a small portion of the parish of Wapping. St. Mark, Whitechapel, having 15,790, has some thousands taken from it by a new benefice, which also comprises a portion of Wapping, and in exchange for these portions of Wapping a part of St. George's-in-the-East, having about 2000 persons, and situated near to Wapping Church, is added to the charge of the rector of Wapping. Another new benefice will afford relief to St. Leonard, Shoreditch, 25,111 people, St. John the Baptist, Hoxton, 21,370, and St. Mary Haggerstone, 26,627. The first of these parishes is further relieved by other portions of it being annexed to other benefices, and by the formation of a new benefice out of it, which a private gentleman has undertaken to endow and supply with a church, independently of any aid from disused city churches. In St. Mary Haggerstone two new benefices are formed, and St. John the Baptist, Hoxton, is further relieved by the formation of a benefice, partly out of it and partly out of Christ Church, Hoxton. Another new benefice is intended to relieve St. James, Curtain Road (11,10[illegible] persons), being formed partly out of it and partly out of St. Paul, Bunhill Row, the latter of which receives in exchange a part of St. Luke, Old Street (22,825), which lies near to St. Paul's Church. St. Luke is further relieved by another new benefice formed out of it, and St. John the Baptist and Trinity, Hoxton, and a small portion of St. Barnabas, King's Square. Another new benefice gives further relief to St. Luke, and also comprehends a part of St. Thomas, Charterhouse (9577), viz., the part contained between Golden Lane and Whitecross Street. St. James, Clerkenwell, supplies a locality for another new benefice, and the united parishes of St. Sepulchre, London, and Middlesex (13,452), are recommended for severance, and the

... portion, having a population of between ... and 5000, to be made a distinct benefice with a new church supplied out of the produce of a disused ... in the City. The proposed new benefices will contain from 5000 to 9000 persons each, and in the selection of the localities for them the commissioners have availed themselves of the recommendations of the London Diocesan Church-building Society. Four other proposed unions are still under the consideration of the commissioners, and if they can mature a scheme for such unions then relief will be recommended for other ... parishes in the east of London. The act of parliament requires the bishop to cause proposals for schemes based on the terms recommended by the commissioners to be prepared. These proposals will then have to be submitted to the patrons, and on receiving their approval will next have to be sent by the bishop to the vestries of the parishes proposed to be united, which vestries have the power of exercising a veto or of proposing modifications. The commissioners hope that neither the patrons nor the vestries will prevent the completion of the schemes, and cause the opportunity to be lost which the legislature has given them of bestowing upon the destitute places of the metropolis those means of grace which the diminished inhabitants of the City no longer require. The following are the parishes embraced in the scheme of amalgamation:—

St. Alban, Wood Street, with St. Olave, Silver Street; St. ..., Wood Street, with St. Mary Staining; Allhallows, Bread Street, with St. John the Evangelist; St. Mary-le-Bow with Allhallows, Honey Lane, and St. Pancras; St. Mildred, Bread Street, with St. Margaret Moses; Allhallows the Great with Allhallows the Less; St. Michael, Paternoster Royal, with St. Martin, Vintry; Allhallows, Lombard Street, St. Benet, Gracechurch Street, with St. Leonard, Eastcheap; St. Anne and Agnes with St. John Zachary; Christchurch with St. Leonard, Foster Lane; St. Antholin with St. John Baptist; St. Mary, Aldermanbury, with St. Thomas Apostle; St. Clement, Eastcheap, with St. Martin, Ongar; St Mary Abchurch with St. Laurence Pountney; St. Edmund the King with St. Nicholas Acons; St. Mary Woolnoth with St. Mary Woolchurch Haw; St. Ethelburga, St. Helen, St. Martin Outwich; St. James, Garlickhithe, St. Michael, Queenhithe, with Holy Trinity the Less; St. Mary, Aldermanbury, with St. Michael, Bassishaw; St. Mary Somerset with St. Mary Mounthaw; St. Nicholas Cole Abbey with St. Nicholas Olave; St. Matthew, Friday Street, with St. Peter, Westcheap; St. Vedast with St. Michael-le-Quern; St. Mildred, Poultry, with St. Mary Colechurch; St. Olave, Jewry, with St. Martin, Ironmonger Lane.

The Gas Question in the City.—At the last meeting of the City Commissioners of Sewers, Dr. Abraham moved that the Remembrancer be instructed to give the necessary Parliamentary notices that application will be made to Parliament by this commission for leave to introduce, in the next Session, a Bill to amend the Metropolis Gas Act, or to exempt the City of London from its operation. He contended that, although the *Great Central* at their commencement in 1851 guaranteed that their maximum price should never exceed 4*s.* a thousand feet, and that it might possibly be reduced to 3*s.* 6*d.* or 3*s.*, their recent determination to raise the price to 4*s.* 6*d.* would entail a serious loss to the citizens, especially the numerous class of small tradesmen. Alderman Dakin argued, on the other hand, that the circumstances were now wholly altered, and that the Great Central, by the recent Act, were compelled to raise their illuminating power 14 per cent. at least, and that to recoup themselves they had increased their price an additional 6*d.* a thousand. The motion was also opposed by Deputy Elliot, and supported by Deputy Fry, Deputy Jones, Mr. Saunders, Mr. Fricker, and Deputy Farrar, and was ultimately carried. —A Wardmote of the householders of the Ward of Farringdon Without was held on Tuesday, Alderman Sir James Duke in the chair, at which it was unanimously resolved to support the Commissioners of Sewers in their application to Parliament for the exemption of the City from the operations of the Bill.—At the last meeting of the Metropolitan Board of Works a question of privilege in reference to the gas question was discussed. It appears that the recent Act of Parliament for the sale of gas gives the control of all matters in the metropolitan area to this Board. It was however, asserted that neither the Government nor the framers of the Act intended to embrace the City within its jurisdiction; that the clause including the City must have passed inadvertently, and that the Board ought not to exercise powers which were not intended to be given. After a long discussion, during which one of the suburban members expressed his opinion it was quite time they showed themselves jealous of their privileges, the question was adjourned,

The New Meat Market in Smithfield.—At the last meeting of the Court of Common Council the report of a committee on the projected dead meat market in Smithfield was brought up, stating that an unexpected difficulty has arisen. The act of Parliament authorising the change requires that a new street should be made from Farringdon Street to the new market; but provides no funds for its construction. The committee, therefore, recommend that a fresh act should be applied for, either relieving the Corporation from the responsibility of the new street, or providing them with necessary funds for the purpose. This report after some discussion was agreed to.

Illness of Miss Nightingale. — The *Bath Chronicle* publishes a letter from Miss Nightingale, dated from Hampstead, and addressed to a resident at Bath, in which she states that she continues seriously ill, and entertains no hope of her recovery. "I have passed," she says, "the last four years between four walls, only varied to other four walls once a year; and I believe there is no prospect but of my health becoming worse and worse till the hour of my release."

Discharge of Prisoners for Debt.—In accordance with the provisions of the new Bankruptcy Act, the Registrars of the Court of Bankruptcy, during the last 10 days, have held Courts at the debtors' prisons in the metropolis for the purpose of investigating the cases of the prisoners for debt, the causes of their detention, and in appropriate cases of adjudicating them bankrupts and giving them their provisional discharge. Several of the cases presented features of singular interest, especially where the confinement had been voluntary and obstinate, or where the prisoners had outlived revenge, or long estrangement from the outer world had narrowed their sympathies to the dimensions of his prisonhouse. Some of them preferred the private suffering of a gaol to the disrepute of a published bankruptcy. Some hoped to settle with their creditors, others claimed the right to be contumacious, and in one case, the singular objection was urged that a debtor having undergone the old formality of being proclaimed an outlaw, had become disentitled to the rights given by the new statute to other subjects. Another prisoner, who had been in gaol since July, 1858, admitted that he had had his discharge from his creditor in his pocket for some months past, but that he had preferred to remain where he was, being enabled to live free from expense by acting as cook to his co-prisoners on that side of the gaol in which the debtors are allowed to pay for their own maintenance. Another prisoner who had also been in gaol since the summer of 1858, appeared before the registrar "scrupulously clean, but in a state of the most woful déshabille," and earnestly prayed to be left in prison rather than be thrust into the streets in clothes that would deprive him of any chance of getting employment. Among the prisoners examined in the Queen's Bench was Mr. Cobbett, whose case has long been familiar to the public. He complained of beng asked the question whether he had been a trader or not, but, as his case was not ripe for judgment, it was ordered to stand over. Of the total number of cases investigated at Whitecross Street Prison, about a dozen were discharged; of those investigated at Horsemonger Lane about 21 were discharged; whilst at the Queen's Prison there were very few discharges, some of the cases being in the jurisdiction of the Insolvent Court, others allowed to remain unadjudicated on account of their affairs being in process of settlement by arrangement with their creditors, while others were not within the jurisdiction of the registrar, being non-traders who had not completed their two months' residence under the Act. As a rule, persons who had petitioned the Insolvent Debtors' Court were not eligible to be made bankrupt, and therefore could not be discharged At the Court of Aldermen, on Tuesday, a report was brought up from a committee on the duties and emoluments of the governors of the Debtors' Prison in Whitecross Street, recommending that the appointment of a successor to Colonel Hicks should be delayed for a short time, as the daily decreasing number of debtors under the operation of the new law had upset all the old calculations. The recommendation was agreed to, the chairman of the committee adding that he believed the day was near at when there would not be an imprisoned debtor in London.

Murder and Suicide in the Surrey Canal.—A few days since a servant girl, called Margaret Edmonds, was found drowned in the Surrey Canal. Suspicion fell on a young man, named George Inkpen, who kept company with her; and who on being apprehended stated that he and deceased agreed to drown themselves, that they tied themselves together for that purpose, with a leather lace and piece of tape, that after being in the water together for some time the tape broke, and the woman was drowned, while he saved himself by swimming ashore after endeavouring to rescue the deceased. The jury at the inquest returned a verdict of *felo de se* against the girl, and of feloniously inciting her to commit murder against the young man, who was accordingly committed for trial. The coroner then issued his warrant for the burial of deceased between the hours of 9 and 12 at night, and without the rites of Christian burial. The prisoner was brought before the magistrate of Greenwich Police Court on Tuesday on remand, and after a long examination was fully committed for trial at the next session of the Central Criminal Court on the charge of Wilful Murder.

The Murder in Drury Court.—On Saturday Richard Reeve was brought before the magistrate at Bow Street on the charge of having murdered his half-sister by hanging her in the coal cellar in Drury Court. It appeared from the evidence of several witnesses that both the parents were dissipated people, and frequently fought terribly; and that they were both drunk when the deed was committed. The prisoner, who is a mere boy, and the son of a former wife, worked at his father's business of a basket maker, and was said to be exceedingly industrious; indeed, so much so, that the business mainly depended upon him. He frequently quarrelled with deceased, who was his half-sister, of whom he was exceedingly jealous, as whilst he was ill treated by his step-mother, she was a great favourite, and was permitted to aggravate and annoy him with impunity, besides being often made the instrument of the step-mother's ill-usage. The magistrate committed the prisoner for trial on the charge of Wilful Murder. The inquest was held on Tuesday, when the foreman made a long and unavailing attempt to induce his brother jurymen to agree to a verdict of Manslaughter. After a long discussion on this point the coroner insisted on their retiring and considering their verdict in private. After deliberating for a quarter of an hour they returned a verdict to the effect that deceased died from strangulation by a rope placed round her neck by the prisoner, who was therefore guilty of murder; but the jury believed that he was hardly treated by his parents and deceased. The coroner said he could make no record of the latter part of the verdict. It would be exceeding his duty to do so, and he must therefore record a verdict of Wilful Murder against the prisoner.

Attempted Murder and Burglary at Paddington.—A short time ago a murderous assault was committed on Mr. Sarah Green, an aged lady of independent property at Fulham Place, Paddington, by two burglars, in masks, who entered her bedroom in the evening while the servants were down stairs, beat her about her head till she was senseless, and then plundered the house of the plate and of a gold watch. Two men were apprehended on suspicion, and were under remand for some time, but the evidence as to identification being insufficient they were ultimately discharged. On Monday two men called Puzey and Reeve, both well-known to the police, the former for a plate robbery at Lord Foley's in Grosvenor Square, and the latter for a plate robbery in Cleveland Square, were brought before the magistrate at Marylebone, with a woman called Colley, on suspicion of being concerned in the affair. It appeared that the woman Colley had formerly been employed by Mrs. Green as a nurse, and that on the night of the robbery she called ostensibly to see the cook, and while in the kitchen offered to go out and get some gin. The cook agreed to her doing so and gave her the latch key, and it was suggested for the prosecution that she took advantage of the opportunity to let the prisoners in at the front door, the housemaid having shortly afterwards discovered the two men in her mistress's room, which they had rifled of the plate and other valuables which were kept there, while her mistress, who was seated in her arm chair, had her head beaten in and her clothes covered with blood. The housemaid raised a cry of murder, upon which the female prisoner, who was drinking with the cook in the kitchen, exclaimed that she was innocent and knew nothing about it. The men immediately rushed out of the house with the plate they had secured, and succeeded in eluding the detective police until Sunday morning, when they were apprehended in bed together in a house in Walmer Street. They had shaved their whiskers and altered their dresses for the purpose of escaping recognition. The magistrate said that the evidence showed that there had been a most daring and almost unheard of robbery and outrage, which was likely to make everybody feel insecure in their own homes. The evidence against the woman rested on more than mere suspicion. He should like to have some corroborative evidence about the identity of the male prisoners, and with that view, and in order to stimulate the vigilance of the police, he should remand the case. On Thursday the prisoners were again brought before the magistrate, when the daughter of the woman with whom the prisoner Reeves lodged, swore that she had often seen the three prisoners together, that they met together in her mother's house on the night of the robbery, and went out before the hour at which it was committed. The magistrate said that this evidence was of importance, and further remanded the prisoners for a week.

Burglary by a Female Servant.—A few days since the house of Mr. Barker, in Bessborough Gardens, was apparently broken into and robbed in the absence of the family, and the maid-servant was found missing. It was then ascertained that the girl, dressed as a man, in the clothes of a gentleman living in the house, had absconded with a large portion of the property, and would probably have escaped altogether had she resumed her own clothes when she got into the country. She was traced and apprehended at Great Yarmouth, where she had taken lodgings, and had passed her time in smoking cigars, escorting the landlady to theatres, and other amusements of the same kind. She was brought back to London, and was placed at the bar of the police-court on Tuesday in the male attire in which she had escaped. Her solicitor endeavoured to set up a plea of insanity, but the magistrate stated that he was unable to deal with such a question, even if there was evidence to support it, and ultimately committed the prisoner for trial.

The Public Health.—The Registrar-General's Weekly Report states that the high mortality that attends the inclement months of the year has begun to appear in the weekly returns, the deaths in London having risen to 1288 in the week that ended Saturday November 16. The corrected average for the corresponding week of the ten years 1851-60, is 1294; so that the mortality of last week agrees very closely with the result obtained by calculation. During the week the births of 876 boys and 898 girls, in all 1774 children, were registered in London. In the ten corresponding weeks of the years 1851-60 the average number was 1617.

Provincial.

Aldershott.—At the Petty Sessions on Monday the soldier, John Nicholas, who recently attempted to shoot the sergeant of his regiment, was again brought up for

examination. Since his last appearance at Odiham he had been confined in Winchester Gaol; he looked very wretched, and expressed great contrition. On being placed at the bar, Sergeant Howard, of the Aldershott constabulary, again applied for a remand. Surgeon F. E. Reynolds was called, and said that he was in attendance on the wounded man, who was still in a very dangerous state, but it was impossible to say whether he is likely to die from his wounds or not. He is a young man with a good constitution, and having been a steady, sober person, has everything in his favour. He was shot on the night of the 6th inst., and he had no doubt that in a week he should be able to give a positive opinion as to the chances of recovery or otherwise. Upon this evidence the prisoner was again remanded for a week.

HULL.—The steamer Lion of this port, a fine iron vessel of 1015 tons burden, and 380-horse-power, was totally lost on the Isle of Gothland last week on her voyage from St. Petersburg. Her departure had been hastened on account of the rapid setting in of the ice in the Baltic, and she was caught in the storm which appears to have been as general in the Baltic as it was in the North Sea. The crew and passengers succeeded in getting on the island, but the ship soon went to pieces. The steamer Enchantress, a fine vessel of 300 tons, left this port on the 13th for Rotterdam and has not since been heard of. It is feared that she foundered in the gale of the 14th, and that all on board went down with her.

LEEDS.—A conference of delegates on Parliamentary Reform commenced its sittings on Monday morning in the Town Hall of this borough. About 200 delegates attended from various reform associations in different parts of the country, but the greater portion of them were from Yorkshire and Lancashire towns, and had been appointed at meetings of extreme Liberals, held for the especial purpose. The business committee and secretaries having been appointed, the local president read letters of apology for non-attendance from the Earl of Carlisle, Earl Russell, Lord Londesborough, Sir J. V. B. Johnstone, M.P.; Mr. Bright, M.P.; Earl De Grey and Ripon; Mr. Stansfield, M.P.; Sir C. Wood, M.P.; Hon. C. W. Fitzwilliam; M. Hadfield, M.P.; Mr. Roundell Palmer, M.P., Solicitor-General; Mr. Brown, M.P.; Mr. Vyner, M.P.; Mr. Greenwood, M.P.; Mr. Clay, M.P.; Mr. Cobden, M.P.; Mr. Westhead, M.P.; and other gentlemen. Mr. George Wilson, of Manchester, then delivered an inaugural address, of which the following is a summary:—

"On making a division of the people into voters and non voters, they presented very great inequalities. At present the voting power of the country was 1,221,000; 950,000 being in England, 10,000 in Ireland, and 170,000 in Scotland. If each of these voters represented a family of five there would be six millions who would be directly or indirectly interested in the election of members; but taking the population of the United Kingdom in 1861, exclusive of the Isle of Man and the Channel Islands, at 29 millions, there would remain 23,500,000 unaccounted for who had no more connection, or were no more recognised in the election of Parliamentary representatives than a foreigner. Of those at least six or seven millions were grown-up people who had no right of voting, and who comprised six-sevenths of the rising young men of the country. But the present distribution of electoral districts was of still more importance. He then gave some statistics showing the disproportionate number of representatives of Lancashire and the West Riding, considering the increase of population, and said if, in the face of such facts, reformers were prepared to endorse the present arrangements of electoral districts, he would wipe his hands of them altogether. Was it not time to declare aloud that all such inequalities should cease? What right had decaying towns to the same electoral influence as energetic ones; and would thriving and strong constituencies submit any longer to be linked to dead bodies? During the 30 years that the Reform Bill had been in operation the population had increased as nothing in comparison with the increase in the mental and moral improvement of the people. He did not say all working men were educated—the barons signed Magna Charta with a cross; but a man might have good principles in him without being educated. He had taken great interest in the well-being of working men, and he knew they were qualified to vote, because they were industrious and moral, loyal and patriotic; they were dangerous only to redtapeism and the circumlocution-office. A working man in seven years paid 84l. in taxes, and should he not have a vote, although some said this was not the time? It was the working man's fault; but he had his rights before him, and therefore there should be no delay in redressing his grievances. He considered that mutual intolerance had hitherto been the great obstruction to the cause of reform; but he appealed to all for co-operation as far as they could go in carrying out those principles which had been enunciated by great constitutional authorities of former ages."

The meeting was subsequently addressed by various delegates, and a long discussion ensued, the great feature of which was whether the Conference should express opinions in favour of manhood suffrage, universal suffrage, household suffrage, or a 6l. franchise coupled with vote by ballot, triennial or annual Parliaments and equal electoral districts. The majority of the speakers appeared to hold nearly the whole of these principles; but many of them counselled that the Conference should support a measure of Parliamentary reform of a less extensive character. Mr. Baines, M.P., expressed his opinion that the day for passing a great and comprehensive measure of Parliamentary reform had passed away; but he thought reform was still to be had bit by bit. The first object was to get the franchise lowered, and then other things would follow. He thought at present there was no chance of obtaining household suffrage. Mr. Forster agreed with him that there would not be 25 members in the present House of Commons who would vote for household suffrage. A 6l. franchise would increase the borough constituencies 50 per cent. He was willing to bring forward again his bill of last session if thought desirable; but the members of the conference should sink their individual differences, and unite in declaring themselves in favour of such a measure as was likely to obtain the assent of the Legislature.—Mr. Barnes, M.P., said that in the present House of Commons there was not so strong a feeling in favour of household suffrage and vote by ballot as there was in the Parliament elected in 1852. He instanced the question of church rates, too, as tested by what had taken place in the late session, as one on which the feeling of the House of Commons was not so liberal as formerly. He had lately been at Birmingham and Liverpool, and at both places he found even among professing Liberals that there was not that affection for further Parliamentary Reform. People thought that Reformers such as Mr. Bright were going too far. After several delegates had addressed the meeting, Mr. Baines said in answer to a question that he meant a 6l. rental, and not a 6l. rating, in his Bill, for the latter would be equivalent to an 8l. rental, and a 6l. rental was what Lord John Russell proposed in his last Bill. The Chairman said, if nothing was done which would exclude the co-operation of certain Reform associations, the object of the conference would be half accomplished. He recommended that after this another conference should be held before the meeting of Parliament, and then delegates should be authorised to operate in London. The question should be put directly to the Government whether they intended bringing forward a Reform Bill or not this Session. If a negative answer was returned, then steps should be taken for bringing forward an independent measure. Mr. Baines, M.P., Mr. Barnes, M.P., Mr. Forster, M.P., Mr. Smith, of York, Mr. Dodson, of Hull, and Mr. Hobson were added to the business committee, who were instructed to bring in a definite proposition on the subject of Reform. The first sitting of the conference then terminated. The second day's sitting was held on Tuesday at the Town Hall, Mr. Barnes, M.P. in the chair. The Secretary read the following resolutions, which had been adopted by the business committee appointed on the previous day:—

"1. That this conference regards the present state of the representation of the people as a gross injustice to the working classes, who are almost entirely excluded from the franchise, and without any constitutional protection for their labour, their property, their liberty, or their families. 2. That the members of this conference, whilst differing considerably among themselves as to the degree to which the franchise ought to be extended, are unanimous in declaring that they and those whom they represent are deeply dissatisfied with the state of the franchise, and claim such an extension of the franchise in counties and boroughs as will give the working classes a fair, honest, and effectual representation in the House of Commons as well as the protection of voters by the ballot, and the distribution of the right to return members of Parliament more in accordance with population and property. 3. That, regarding the union of all classes of real reformers as essential to the attainment of any great amendment of the representation, they recommend the formation of Reform Associations on a broad basis, with a view to bringing them to bear on Government and Parliament by means of public meetings, petitions, memorials, deputations, and all other constitutional means, including action in the registration and at elections. 4. That the committee, recommending petitions to Parliament from every town, village, and workshop, would not attempt to prescribe the kind of reform to be asked for, but would leave each body of petitioners to the exercise of its own judgment, at the same time advising that friendly support should be given to every honest measure which may be proposed for the extension of the suffrage to the working classes as well as for the protection of the voters by the ballot, and for a more equitable distribution of seats. 5. That a meeting of delegates be held in London soon after the commencement of the next session of parliament to consider with each other, and with friends in parliament, and to decide upon a measure to be presented to the House of Commons. 6. That a committee be appointed for calling a conference in London, and if it should be desirable, after corresponding with the friends of reform, to convene another conference in Birmingham, Manchester, or some other great town, before the meeting of parliament. 7. This conference cannot dissolve without expressing its deep regret and disappointment that her Majesty's government appear to have abandoned the reform question, and that unless the present Cabinet introduce a Reform Bill immediately on the opening of parliament they must forfeit the confidence of the people."

These resolutions were discussed *seriatim*, and at great length. Almost the whole time of the sitting was taken up with a debate on the second resolution, to which Mr. Stokes, of Manchester, moved an amendment for the purpose of inserting a clause in favour of manhood suffrage. The majority, however, thought that such an addition to the resolution would pledge the conference and drive off many who would otherwise be powerful supporters. Mr. Stokes eventually withdrew his amendment, and the other resolutions were adopted unanimously. The Chairman then declared the business of the conference at an end. In the evening a demonstration on a large scale took place in the Victoria Hall, Mr. Edward Baines, M.P., in the chair. Speeches were delivered by the chairman; by Mr. James Heywood, late M.P. for North Lancashire; Mr. Forster, M.P.; Mr. Leatham, M.P.; Mr. Robert Cooper, of Manchester; and other gentlemen, some of whom expressed their opinion that if societies like the Leeds Working Men's Association were formed throughout the country, they would get a Reform Bill, not next session, but certainly in the course of the session following.

LIVERPOOL.—The Mersey Dock Board have decided to lease a site on the Great Orme's Head, for the construction of a new lighthouse. The cost of the edifice will be 5000l., and the annual charge for maintenance 380l.—A telegram was received on Thursday from Queenstown, announcing the total loss of the Liverpool ship British Flag, of 1329 tons, outward bound to Bombay, with a valuable cargo. She was dismasted in the gale of the 13th inst., and was shortly afterwards abandoned by the crew, who were saved by the Ernst, which has landed them at Queenstown. Both ship and cargo were insured.

NOTTINGHAM.—On Wednesday, two men, named Henry Curzon and William Berry, were brought before Lord Belper and the bench of magistrates, at the Shire-hall, charged with poaching on the estate of Mr. John Chaworth Musters, at Edwalton. It appeared that a few evenings ago a rural policeman saw about 12 poachers on the preserves about midnight. He procured the assistance of four gamekeepers belonging to Mr. Musters and went in pursuit. They soon obtained sight of the poachers, and attempted to capture some of them. The poachers resisted, and a fight took place. The keepers at length succeeded in capturing two of the poachers, when the latter immediately attempted a rescue, and succeeded in dragging their companion from the watchers. The poachers were armed with three-grained forks and short bludgeons, and threatened the lives of the keepers until they had liberated their companion. The whole of the men then got clear away. The gang, however, was well known to the keepers, and warrants for the apprehension of them were issued. In the meantime, the poachers left their homes, and the two prisoners were apprehended in this town. The Bench remanded them until Saturday.

OTLEY.—James Waller, the poacher, who on the 5th inst. deliberately shot William Smith, gamekeeper to Mr. T. Horsfall, of Hawksworth Hall, remained at large until Sunday morning, when he was apprehended in a barn about two miles from the scene of the tragedy, and within a mile of his own house at Sconce, near Baildon. He was concealed in the straw, and was haggard in the extreme. He had 16s. 6d. in his watch fob, and a handkerchief, containing bread, has since been found among the straw. He absconded on the 5th November, the day of the murder, and since that time he has been living the life of an outcast, sheltering in barns and on the moors by day, and at night crawling to the house of some fellow-poacher in order to get a mouthful of food. Colonel Cobbe, Chief Constable of the West Riding, had issued a placard cautioning people against harbouring or sheltering him, and apprising them of the penal consequences of doing so; and a reward of 75l., of which 50l. will be given by the Secretary of State, and 25l. by Mr. Horsfall, had been offered for his apprehension. But there is such a spirit of fellow-feeling between the poachers on the Otley Moors that even the reward did not induce them to give him up. It is also well known to the authorities that money has been largely subscribed in Bradford and the neighbourhood with the object of getting him out of the country. On Wednesday he was taken before the Keighley bench of magistrates and fully committed for trial on the charge of Wilful Murder.

ROBERTSBRIDGE.—A large and influential meeting of the hop-growers of Sussex was held in this town on Thursday for the purpose of deciding on the steps to be taken in the ensuing Session to promote the total repeal of the excise duty on hops. Lord Harry Vane, M.P., presided. Mr. Dodson, M.P., moved the first resolution, that a memorial be presented to the Chancellor of the Exchequer, showing the unjust, unequal, and oppressive operation of the duty upon hops, especially since the recent legislative enactments respecting the plant, and urging the total and immediate repeal of that impost. Mr. H. Coleman seconded the resolution, which was carried unanimously. Mr. Frewen moved the next resolution,—"That petitions in favour of the repeal of the hop duty be circulated and signed throughout the hop-growing parishes, and that the Repeal Associations and the hop-planters in other counties be invited to obtain memorials and petitions to the like effect." Mr. Beresford Hope seconded the resolution, which was also unanimously agreed to. It was then voted on the motion of Mr. John Bourne, seconded by Mr. Boddy, that the members for the county be requested to assist the association in endeavouring to obtain the repeal of the duty.

STRATFORD-ON-AVON.—The following subscriptions have been added to the Shakespere Fund since our last notice:—The Prince Consort, 100l.; the Marquis of Lansdowne, K.G., 50l.; Marquis of Northampton, 100l.; Mr. Charles Kean, 20l.; Mrs. Andry, 5l.; Messrs. Drummond, 10l.; Mr. F. Haines, 5l.; Mr. C. T. Warde, 20l.; Dr. Beke, 5l.; Mr. Thomas Brooke, 5l.; Rev. Professor Thompson, Cambridge, 5l.; Mr. J. W. Butterworth, 5l.; Mr. D. D. Hopkyns, 5l.; Mr. S. W. Browne, 5l.; Mr. Thomas Watts, of the British Museum, 20l.; Mrs. Sotheby, 5l.; Mr. Frederic Ouvry, 10l.; Mr. W. P. Hunt, 5l.; Mr. J. B. Langhorne, 5l.; Mr. F. W. Cosens (additional), 10l.; Mr. William Ewing, 5l.; Mr. Ewart, M.P., 5l.; Messrs. Clutton & Ade, 5l. Total at present subscribed, 2756l.

Ireland.

VISIT OF THE CHIEF SECRETARY TO BELFAST.—Sir Robert Peel, accompanied by Lady Emily Peel, and Sir Henry Brownrigg, inspector general of constabulary, arrived in Belfast from the Giant's Causeway, to which they had gone from Derry, on Friday morning. Soon after their arrival they visited the Lunatic Asylum, the Model School, the Queen's College, the County Gaol, and York Street Spinning Mill, and then drove through the principal streets. On Saturday morning the Mayor and Corporation presented Sir Robert with an address, congratulating him on his first visit to the town, referring in terms

commendation to his conduct while he had been in Ireland, especially to his endeavours for the further development of education, and for making himself acquainted by personal observation with the requirements of the country; and expressing a confident hope that he would, like his illustrious father, have the satisfaction of receiving the grateful thanks of the country for his enlightened and impartial policy. Sir Robert, in reply, spoke at great length, and was loudly cheered at several passages of his speech. The following are extracts from the more important portions of the speech:—

"Gentlemen, when I came to this country I was led to suppose that her Majesty's Government, however popular in England and in the House of Commons, was unpopular with a section in this country, because it refused to involve the people of this country in a European war, in defence, or rather by the advocacy, of that subjugation under which Italians have groaned during many years. Well, I am happy to find that men of independent character, of all classes and creeds in this country, unite in affirming and approving the policy of her Majesty's Government; and I must say that I am glad to find that this is the case, because, depend upon it, no Government in the United Kingdom could hope to remain four-and-twenty hours in power if it ventured to have followed any other policy; and no coquetting with the Ultramontane section would be able; no coquetting, I say, with the Ultramontane section would be able to ward off the indignation and the censure of Parliament. Now, as regards myself, from the experience I have had, if anything were wanting to induce me to sympathise with Italy—if anything were wanting to cause me to applaud the policy of the Government in this respect, it is the very melancholy and unhappy practice which I have seen ever existing in this country, of mixing up purely secular subjects with ecclesiastical censure. Now, this mixing up of purely secular subjects with ecclesiastical censure is very objectionable, and I must say, for my part, that I highly disapprove the principle of fulminating ecclesiastical denunciations against the political acts of public men who may chance to differ from the authors of the denunciations on the grounds of religious observance. Now, gentlemen, just figure to yourselves his Grace the Archbishop of Canterbury exhuming from the sepulchre of our Parliamentary debates extracts from 'Hansard,' and incorporating them in a circular to the clergy of his province, denouncing, with the most severe ecclesiastical censure, political views upon the extension of the franchise, or upon Irish tramways. Or go further;—suppose the Archbishop of Canterbury holding up to popular indignation a Roman Catholic who goes for purposes of charity into the outlying districts of Stepney and Spitalfields for the purpose of doing good. Why, such conduct as that would only raise a smile of pity in England, and would tend, unquestionably, to lower the character of that sacred office which he so worthily fills. But I am sorry to say that it is precisely that I complain of in this country. Now, fortunately, that it only exists on one or two occasions, and I know this, that it meets with the condemnation of every man, no matter what his creed or class—that it meets with general condemnation. Why, his Grace the Archbishop [illegible] of this country, not following the example which was set by his honoured predecessor, Dr. Murray, has thought proper to collate extracts from *Hansard* upon various subjects—Spain, Italy, and I know not what—and with Jesuitical ingenuity to endeavour to construe them into an accusation against myself, as a charge against the Irish people. Gentlemen, I am not sure that the Archbishop is quite right in the course which he is now following in placarding me in a pastoral [illegible] insinuations, to whom do you think? The clergy of the diocese of Dublin. Well, now, I do pity the man—I may say that my heart bleeds for the man, who would attach any weight on such insinuations as these. For myself, thank God, I am made of sterner stuff than to suppose that my countrymen for one moment would believe or place faith in acts or language which savour rather of monkish superstitions of the Middle Ages than the bold features of religious toleration. I know not, gentlemen, how far the ecclesiastical discipline and doctrine of the Church of Rome may approve such conduct; but this I do know, and I echo the sentiments of every man in the room—this I do know, that these blasphemous denunciations of public men at the sacred altar of the Most High, the ultimate Judge of all men, is incompatible with the sacred precepts of the Gospel, and receives, as it deserves, the universal condemnation of every man of a liberal and enlightened mind. For my part, I deplore from the bottom of my heart the course of the Legate, and I accept by anticipation the apology which his calmer moments must suggest for the uncivil and unjust denunciations with which he has thought proper to visit me. But why has he thought proper to denounce me? I will tell you the reason—it is what was mentioned in this address. It is because I have expressed myself on more than one occasion in favour of the intellectual and educational development of this country. I took occasion in St. Patrick's Hall to proclaim, and to declare that my idea of the progress of this country was wrapped up in the development of that educational progress; and I told the audience there that the best way to foster and improve it was not by looking to Government for support, but by your own unaided exertions—unaided, that is, by Government—and by public grants to endow those great institutions, the Queen's Colleges, with scholarships, bursarships, and fellowships, consistent with similar institutions in different parts of the country. And what has been the result of what I said there? Mr. Thom, of Dublin, has promised 1000*l.*; Mr. Malcolmson, 600*l.*; and Mr. [illegible], 250*l.* During the last fortnight I have travelled with Sir Henry Brownrigg through a large extent of district, and have been enabled to derive from personal observation more information than could be collected from whole files of different reports. I can confidently assert that the reports and rumours which have been circulated about a famine in this country have been greatly exaggerated. I speak on the authority of personal observation. I leave those who can write from secluded districts of Connaught the task of refuting, if they can, what I know to be true. In Sligo, in Donegal, I hear very different accounts from those which I had been led to expect, and from personal observation in Mayo and Galway and from letters I have received I am assured that nothing of the kind that was alleged exists. Of course, I am ready to admit that there has been a comparative failure of the Potato crop, and that food will be dear, but a scarcity of food is not necessarily a famine, and it is very easy to understand the interested motives of some who are anxious to gain public applause by a feigned zeal for the public in spreading about these exaggerated rumours. Now, I must say, as far as I myself am concerned, I do not find that these apprehensions are in any way likely to be realized. I have travelled over a very large extent of country—from Galway to Belfast—I have seen a vast range of country, not like a trunk, not in a railway, but with my own eyes, and from the best of ability which personal observation and personal inquiry can enable me to obtain. Now, I admit I have been rather disappointed with Galway. I had only a limited opportunity of judging of it, but it bore to me a very hungry appearance. I speak honestly in saying that it did not convey to my mind the impression of a town that quite came up to the expectations that I had formed from its ambition to become the great centre of oceanic communication between America and this country. At all events, what I saw ill contrasted with the stirring community of Sligo, or with the extraordinary mercantile development which I witnessed in the distinguished city of Derry; and here, again, in Belfast, one of the noblest cities of the empire. I have learnt to admire the prodigious energy and commercial prosperity which are the results of your own unaided exertions. No Government grant. If you had had Government grants, depend upon it you would not be what you are. Gentlemen, I should be very sorry longer to delay you with observations upon a subject which I could dilate upon at considerable length. This I may say, that in coming to Ireland I represent England's love for the sister isle. I bring with me England's love, which elicited Ireland's gratitude in her season of famine and distress; that same love which is still felt with undiminished ardour in her happier days of progress and social improvement. I come here to carry out the instructions of her Majesty's Government towards all classes and towards all creeds, without respect of persons, impartially and without prejudice; and so far as is consistent, or, rather, so far as depends upon the political action of Government and of Parliament, to assist in promoting works of public utility and national advantage. And if by acquiring a knowledge of the wants and resources of this country, I can in any way, so far as depends upon my humble power, aid, or sustain, or strengthen the pedestal upon which it is based—the development of Ireland's commercial prosperity and social well-being—it will be to me a source of such gratification that I should be unable to convey it in adequate terms. And, if that be so, if it is permitted to me to do anything good in this country, I shall have the satisfaction of feeling, not only that I have done my duty, but that I have been able to show that I am not unmindful of my father's example—that I am not altogether unworthy to reap those fruits which I here gather at your generous hands of his conspicuous fame."

MURDER IN DUBLIN.—On Wednesday morning an hotel waiter called John Molley, who had been reduced to great destitution by want of employment, made a desperate attempt to kill his wife and sister-in-law with the poker. Both escaped with their lives, but the wife was seriously injured. He then cut the throats of his two children, one of whom died immediately, while the other died on being taken to the hospital. The murderer, whose appearance was wretched in the extreme, was taken into custody, to await the result of the inquest on the two children.

Railways.

FALL OF A BRIDGE ON THE GREAT NORTHERN.—One of the bridges on this line, in the neighbourhood of Huntingdon, fell to the ground last week just after the mail train from the north had crossed it. The bricks, it is supposed, being loosened by the rain, gave way, and the whole structure fell to the ground. The railway is rendered useless till the bridge can be rebuilt, and arrangements have been made to send all the through traffic by the London and North-Western.

Law.

ARCHES COURT.—*Burder v. Heath.*—On Saturday the Rev. D. I. Heath, vicar of Brading, was again brought before Dr. Lushington, who had given him a fortnight to consider whether he would retract, before sentence was pronounced on the recent judgment against him. Mr. Heath now declined to retract, whereupon Dr. Lushington said he had no option, and pronounced sentence of deprivation. Notice of appeal to the Judicial Committee of Privy Council was afterwards given.

Obituary.

SIR JOHN FORBES, M.D., physician to her Majesty's household, died at Whitchurch, near Reading, on Wednesday, in his 74th year. He was the fourth son of the late Mr. Alexander Forbes, and was born at Cuttelbrae in 1787. He was educated at the Endowed Grammar School and at Marischal College, Aberdeen, but received his medical education at the University of Edinburgh, and served for several years in the medical department of the navy. In 1814 and 1815 he was flag surgeon to the Commander-in-Chief in the West Indies, where he was present in several naval engagements, and received the naval war medal. In 1817 he graduated as M.D. at Edinburgh University; in 1821 he introduced to English practitioners the great discovery of auscultation by translating Laennec's treatise, and wrote an original work on the same subject in 1824. In 1830 he was appointed physician in ordinary to the late Duke of Cambridge, physician extraordinary to his Royal Highness the Prince Consort in 1840, and physician to the Queen's household in the following year. Sir John was an honorary member of the principal medical societies of Europe and America, one of the editors of the "Cyclopædia of Practical Medicine," and the author of several professional and other works. He received the honour of knighthood in 1853, was a Fellow of the Royal College of Physicians, a D.C.L. of Oxford, Fellow of the Royal Society, and for several years consulting physician to the Consumption Hospital.

MAJOR-GENERAL SIR JAMES H. SCHOEDDE, K.C.B., Colonel of the 55th Regiment, died on the 14th inst. in his 75th year. He began his military career at the commencement of the present century. In 1801 he served with his regiment in Egypt, and was present during the Peninsular War from 1808 to the end of the campaign, taking part in the battles of Roleia, Vimiera, Talavera, Busaco, and Fuentes d'Onor, the sieges of Ciudad Rodrigo and Badajos, the battles of Salamanca, Vittoria, Pyrenees, Nivelle, Nive, Orthes, and Toulouse, besides numerous other minor actions and skirmishes. He commanded a brigade in the China war, and was present at the attack and capture of Chapoo, Woosung, Shanghai, and Chin-Kiang foo, for which services he was created a Knight of the Bath, received the thanks of both Houses of Parliament, and was appointed one of her Majesty's aides-de-camp. In recognition of his services in the Egyptian campaign he had received a gold medal from the Sultan, and for the Peninsular campaign the gold medal for Nivelle, and the silver war medal with 14 clasps for the other engagements in which he took part. He became a major-general in 1854.

COLONEL FARQUHARSON died on the 8th inst., at Clifton, in his 78th year. He served with the 65th Regiment at the capture of the Isle of France, in 1810; at the capture of the Fort of Now Nuggur, in India, in 1814; against the Pindarees in 1814 and 1815; in Kattywar, on the Brigade Staff, in 1815; at the capture of Joorin and other places in 1816; Dhingee and Dwarka; and in 1817 at the action and capture of Poona, for which he received a medal. In 1818 he served at Ashtee, where the Mahratta general, Gokla, was killed, and Satteria Reya captured. In 1819, he served at the storm and capture of the Boojee Fort in Cutch, and also those of Rass-el-Kyma and Zama. He also served in 1812 in Arabia, and was present in the action of Beni-Boo-Ali. He held the office of deputy adjutant-general in Jamaica for 10 years.

LIEUT.-COLONEL GEORGE C. LOFTUS died suddenly on the 5th inst., in Wimpole Street, aged 7[illegible]. He served in the Scots Fusilier Guards under the Duke of Wellington in Spain and Portugal, and received a Peninsular medal. On retiring from the army he became a Colonel of the Dorset Militia. He was the son of the late General Loftus by his second wife, Lady Elizabeth, daughter of the first Marquis Townshend, and the Baroness de Ferrars and Compton.

LIEUT.-COLONEL JAMES JOHNSTON died at Mount Lodge, Portobello, on the 12th inst. He entered the army as an ensign of the 40th Regiment in 1805, and accompanied his regiment to South America in 1806. He was severely wounded at the assault on Monte Video in 1807. He proceeded to the Peninsula in 1808, and served during the whole of that war, with the exception of three months when laid up by sickness. He obtained the war medal with nine clasps for the battles of Roleia, Vimiera, Talavera, Badajoz, Salamanca, Vittoria, Pyrenees, Nivelle, and Albuera, where he was again severely wounded. He had received the Portuguese Order of the Tower and Sword, and the medal of Portugal for Vittoria, Pyrenees, and Nivelle.

MR. J. R. GODLEY, Assistant-Under-Secretary for War, died on Sunday morning at his residence at Gloucester Place, Portman Square, in his 47th year. He was the eldest son of John Godley, Esq., of Killigar, county of Leitrim.

MR. WROTH, the Vice-Consul Chancellier of the Supreme Consular Court at Constantinople, died at Bebec on the [illegible] of October, after a short illness, and was buried in the English cemetery at Scutari on the following Monday. About 250 of the leading members of the English, Ionian, and Maltese colonies followed him to the grave.

WILLS.—The will of Mr. Charles Prater, the army tailor of Charing Cross, and 71, Portland Place, has been sworn under 200,000*l.* personalty; Mr. John William Sturges, of Doncaster, 18,000*l.*; Mr. Thomas Newnham, of Chapel Street, Grosvenor Square, 30,000*l.*

BIRTHS.—On the 18th inst, at Barry's Hotel, Edinburgh, Lady HUNTER BLAIR, of a son—On the 3d inst, at Bert House, county Kildare, the residence of General Lord DOWNES, the Hon. Mrs COLBORNE, of a daughter—12th inst, the wife of the Hon. W. HARBORD, of a son—10th inst, at No. 6, Eaton Terrace, Edinburgh, the Hon. Mrs. WALKER, of Dalry, of a daughter—15th inst, at Veitch's Hotel, 129, George Street, Edinburgh, the wife of the Hon. GEORGE FREDERICK BOYLE, of a daughter—16th inst, at Shoeburyness, the wife of Col. W. B. GARDNER, Royal Artillery, of a daughter.

MARRIAGES.—On the 12th inst, at St. Peter's Church, Dublin, Major the Hon. LEWIS W. MILLES, late Rifle Brigade, second son of Lord Sondes, to ELIZABETH GEORGINA, only daughter of ROBERT TURLE, Esq., Armagh—18th inst, at Brighton, FERGUSSON FLOYER HOGG, Esq., of the Bengal Civil Service, third son of Sir James Weir Hogg, Bart., to ELIZABETH HELEN, daughter of the Hon. LAWRENCE and the late Lady ELIZABETH PARSONS—20th inst, at St. James's, Piccadilly, Captain HENRY MEUX SMITH, only son of the late Captain Henry Neal Smith, Royal Engineers, and nephew to Colonel Gilpin, M.P.; to MINNIE, youngest daughter of J. DORRIEN MAGENS, Esq., of Hammerwood, Sussex—19th inst, at St. Mark's Church, Regent's Park, CHARLES DICKENS, jun., Esq., to ELIZABETH MOULE, second daughter of FREDERICK M. EVANS, Esq., of 19, Queen's Road West, Regent's Park, and Whitefriars—12th inst, at St. Bride's Church, Liverpool, EDW. GEO. M'DOUGALICK, Esq., 2d Royal Cheshire Militia, to MARIA ELIZA BRIDGET, third daughter of the Rev. LEWIS F. THOMAS, B.A., Cambridge, incumbent of St. James's, Toxteth Park, Walton, and granddaughter of the late General Lewis Thomas, C.B., some time Acting Commander-in-Chief in the East Indies—14th inst, at the Oratory, Brompton, and at the Church of the Holy Trinity, Brompton, VINCENZA COSTANGA MAZINI, Esq., of Brescia, to LINDA MARY, eldest daughter to JAMES WHITE, Esq., M.P. for Brighton—19th inst, at St. Marylebone Church, Dr. WILLIAM STEER RIDING, M.D., of 36, Euston Square, to MIMI, only daughter of EDWARD JAMES, Esq., Q.C., of 24, Upper Wimpole Street.

DEATHS.—On the 14th inst, at 8, Clarges Street, after a short illness, Lady MARIA SAUNDERSON, the beloved wife of Colonel Hardress Robert Saunderson, and daughter of the late Earl of Carhampton, aged 61—1st inst, Mrs. JULIA MONTPRIVAT, sister to the late Countess Cornwallis, and relict of the late Richard Montprivat, Esq., aged 72—12th inst, at 1, Park Terrace, Park Road, Regent's Park, after a short illness, JOHN PARKE, Esq., brother of the late Sir William Parke, Kt., aged 73—17th inst, at her residence, Spring Lawn, Grove Road, Southsea, ELIZABETH, widow of Rear-Admiral JOHN HANCOCK, C.B.—13th inst, at Leamington, CATHERINE ANNE, the wife of Lieut.-Col. GRANT ALLAN, of the 3d Regt. H. M.'s Indian Army—14th inst, suddenly, at Smith Street, Chelsea, Major de KRETSCHMAR—30th Sept., at Flamstead, in Jamaica, Captain SAMUEL MORRISH, R.N., of H.M.S. Imaum, aged 49—13th inst, at his residence, Linden Hall, near Lancaster, WILLIAM SHARP, Esq., a magistrate for the counties of Lancashire and Westmoreland, aged 87—7th inst, at Rolleston Hall, in Leicestershire, HENRY GREENE, Esq., aged 67—12th inst, at Bucharn, near Huntley, Aberdeenshire, ALEXANDER M'WILLIAM, Esq., J.P., aged 33—16th inst, at Margate, DAVID ROSS CLARKE, Esq., of New Broad Street, and Devonshire Place, Portland Place, London, aged 61—15th inst, at Pisa, FREDERICK DAVIES, Esq., of H.M.'s Customs, and of 38, Weymouth Street, Portland Place, aged 51—15th inst, at his residence, 28, Upper Seymour Street, Portman Square, Dr. AUGUSTIN SAYER, M.D., Fellow of the Royal College of Physicians of London, aged 71—20th inst, at No. 55, Hunter Street, CAROLINE, widow of the late Rev. JOHN HEWLETT, Rector of Hilgay, Norfolk, and many years Morning Preacher at the Foundling Hospital—13th inst, at Snitterby Parsonage, near Kirkton-in-Lindsey, Lincolnshire, the Rev. RICHARD MOREY, B.A., Perpetual Curate of that parish, aged 54—13th inst, at Hoddesdon, Herts, the Rev. GEORGE FRANCIS OTTEY, late Vicar of Isleham, Cambs, aged 68—18th inst, at Quendon, Essex, the Rev. JOHN COLLIN, 59 years Rector of that parish, aged 86—12th inst, at Bilton, Warwickshire, the Rev. WILLIAM JAMES, Rector of that parish, aged 74—17th inst, at his residence, Marnwood, Shropshire, the Rev. JOHN BARTLETT, aged 67—11th inst, at his residence, 4, Lansdown Place, Clifton, the Rev. J. H. NURSE, M.A., aged 50.

Markets.

HOPS.—BOROUGH MARKET, FRIDAY, Nov. 22.

Messrs. Pattenden & Smith report a fair demand for both new and old Hops at very firm rates. Coloury descriptions are becoming scarce. Currency:—

Mid and East Kent	£8 8	to	£12	0
Weald Kent	7 15	—	9	0
Sussex	7 10	—	8	10

COVENT GARDEN, Nov. 16.

Supplies and prices about the same. Home-grown produce is still equal to the demand, with perhaps the exception of Pears, which come chiefly from the Continent and the Channel Islands. Grapes and Pine Apples are abundant. Of

Cauliflowers there is still a small supply. Potato markets have unaltered since our last report. Cucumbers, though scarce, are sufficient for the demand. Cut flowers chiefly consist of Orchids, Chrysanthemums, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 3s to 5s	Oranges, per 100, 6s to 14s
Grapes, per lb., 1s 6d to 4s	Lemons, per 100, 6s to 10s
Melons, each, 1s to 3s	Nuts, Cob, per pound., 2s to 2s 6d
Pears, per doz., 1s to 6s	
Apples, per doz., 6d to 1s	Walnuts, per 100, 2s

VEGETABLES.

Cauliflowers, each, 2d to 6d	Artichokes, each, 6d to 8d
Broccoli, per bundle, 1s to 1s 3d	Beet, per doz., 1s 6d
	Celery, p. bundle, 1s 6d to 2s
French Beans, per sieve, 2s 6d to 3s 6d	Onions, pickling, p. ½ sieve, 4s 6d
	Tomatoes, p. doz., 1s to 6s
Cabbages, do., 1s 3d to 1s 6d	Shallots, per lb., 8d to 10d
Potatoes, p. ton, 60s to 75s	Garlic, per lb., 6d to 8d
— per cwt., 4s to 8s	Endive, p. score, 1s 6d
Turnips, per bunch, 2d to 4d	Horse Radish, p. bun., 1s 6d to 4s
Carrots, do., 4d to 6d	Mushrooms, p. pott., 2s to 3s
Spinach, p. sieve, 1s to 2s	Parsley, p. 12 bunches, 3s to 4s
Cucumbers, each, 6d to 9d	Savory, per bunch, 2d to 4d
Veg. Marrows, p. doz, 1s to 1s 6d	

HAY.—Per Load of 36 Trusses.

SMITHFIELD, THURSDAY, Nov. 21.

Prime Meadow Hay	80s to	90s	Clover, old	90s to	120
Superior do. ..	95	105	New Clover	—	—
Inferior do.	40	55	Do. second cut ..	80	105
New do.	—	—	Straw	28	34
Rowen	—	—			

DAVIS & Co.

CUMBERLAND MARKET, THURSDAY, Nov. 21.

Sup. Meadow Hay ..	100s to	107s	Inferior Clover ..	84s to	98s
Inferior do.	70	90	New do.	—	—
New do.	—	—	Straw	34	40
Superior Clover ..	180	115			

JOSHUA BAKER.

WHITECHAPEL, THURSDAY, Nov. 21.

Fine Meadow Hay	90s to	96s	Prime Clover ..	110s to	115s
Inferior do.	75	84	Inferior do.	95	105
Prime New Hay ..	—	—	Prime 2d cut ..	96	100
Inferior	—	—	Inferior do.	84	90
Straw	30	33	New 1st cut ..	—	—

POTATOES, SOUTHWARK, Monday, Nov. 18.

During the past week the arrivals both coastwise and by rail have been moderate, the trade much in the same state. The following are this day's quotations:—Kent and Essex Regents, per ton, 110s. to 130s.; Yorkshire do., 100s. to 125s.; Lincolnshire do., 90s. to 110s.; Scotch do., 60s. to 110s.; French Whites, 100s. to 110s.

BRITISH WOOLS.—LONDON, FRIDAY, Nov. 22

There has been more business doing in both fleece and skin, and rates fully supported. In fact, skin wool may be quoted ½d. per lb. higher on many sorts.

	s. d.	s. d.		s. d.	s. d.
South-down Hoggets	1 4 to	1 5	Leicest. Wethers	1 4 to	..
Half-bred ditto	—	1 6	Ditto Hoggs ..	1 5 —	..
Down Ewes ..	1 4 —	1 4½	Combing Skins	1 0 —	1 5
Kent Fleeces ..	1 5 —	..	Flannel Wool ..	1 0 —	1 5
			Blanket ditto ..	0 6 —	.

COLONIAL WOOL SALES.—These sales proceed fully as well on all descriptions as the first week.

BUTTER MARKET.—Nov. 22.

Best Fresh Butter .. .. 16s. per dozen lbs.
Second do. do. .. .. 13s. „ „
Pork, 4s. 4d. to 5s. 0d. per 8 lbs.

COAL MARKET.—Nov. 22.

Walls End Tees, 19s. 6d.; Walls End Russell Hettons, 19s.—Ships at market, 17.

MARK LANE.—MONDAY, Nov. 18.

The supply of Wheat from Essex and Kent to this morning's market was very small, and met with a quick sale at the extreme prices of this day se'nnight. There was an increased attendance, and foreign Wheat met a somewhat improved inquiry at our last week's quotations. Barley barely supports last week's prices. Beans and Peas bring late rates. The Oat trade is firm, and old corn in fair request. Flour is a steady sale at our quotations.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk .. White	50—66	Red	50—61
— — fine selected runs .. ditto	61—66	Red	54—64
— — Talavera	64—72		
— Norfolk	—	Red	—
— Foreign	48—76		
BARLEY, grind. & dist., 26s to 28s .. Chev.	36—41	Malting .	35—38
— Foreign .. grinding and distilling	27—30	Malting .	36—40
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire—Potato	26—28	Feed ..	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign ....Poland and Brew	20—24	Feed ..	19—24
RYE	36—38	Foreign .	—
RYE-MEAL, foreign	—		
BEANS, Mazagan ....35s to 37s ...Tick	36—39	Harrow .	36—39
— Pigeon ......38s — 42s .. Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
PEAS, white, Essex and Kent .. Boilers	40—44	Suffolk .	40—46
— Maple ....43s to 45s ...... Grey	39—41	Foreign .	35—33
MAIZE ....White	—	Yellow ..	—
FLOUR, best marks delivered .. per sack	50—55		
— 2d do ....ditto	40—50	Country	40—50
— Foreign ....per barrel	28—36	Per sack	43—58

FRIDAY, Nov. 22.

The frost which commenced on the 16th lasted until the 20th, when the dull mild weather returned; to-day we have heavy rain. The wind is westerly, alternating from N. to S. During the present week the Wheat trade has remained inactive, but prices have not undergone any quotable alteration. On Wednesday rather more tone was given to the trade here by the improved accounts of the French markets, and large orders for the sale of cargoes on French were cancelled. Some shipments to this country have been made from Marseilles, but they consist chiefly of Egyptian and inferior qualities. Barley continues to decline in value, and is generally quoted lower throughout the country. In a few markets Oats and Beans have only been saleable on reduced terms. The value of Flour has not undergone any alteration. Since Friday last 48 vessels have been reported off the coast. The floating trade has been inactive, owing partly to the limited supply, but importers are firm, and the last sales have been at more money. In Paris (Nov. 21), the better feeling which took place a few days previously had been firmly established, and in some instances holders had obtained a slight advance. The arrivals of all foreign grain as well as English Wheat and Barley this week have been large, of English Oats small. The attendance at this morning's market, although small, included two or three buyers from a distance; the value of English Wheat is unaltered from Monday; foreign was not extensively inquired for, but commanded the full prices of that day. Barley is a slow sale, and secondary qualities are 1s. per qr. cheaper. Beans and Peas bring Monday's quotations. The Oat trade is dull, and all but the finest qualities are 6d. per qr. cheaper. Flour is a steady sale at late rates.

ARRIVALS FROM Nov. 18 to Nov. 22.

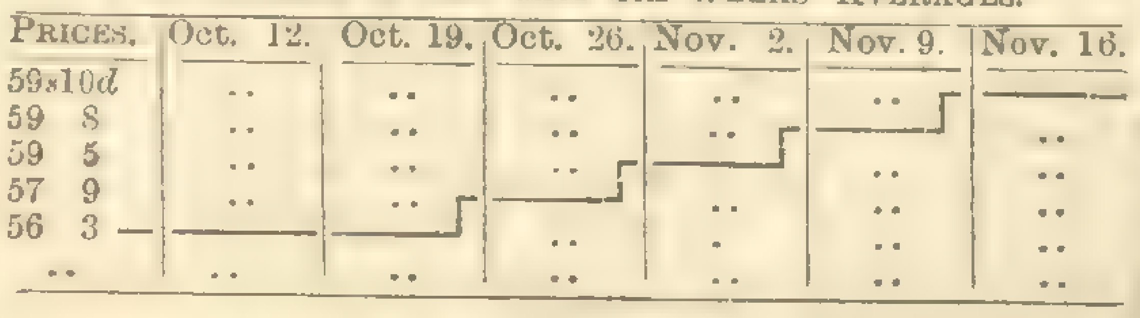
	Wheat.	Barley.	Oats.	Flour.
English ..	3440 qrs.	1850 qrs.	410 qrs.	1330 sks.
Irish	— „	— „	2670 „	— „
Foreign ..	19890 „	6380 „	51410 „	40 „ 4850 brls.

LIVERPOOL, Tuesday, Nov. 19.—We had a better attendance of buyers at this morning's market, and both Wheat and Flour have had a fair consumptive demand at the quotations of Friday last. A few sales of Indian Corn were made early in the market, at a reduction of 3d. per qr. ex quay; as these parcels, however, became cleared sellers gathered confidence, and it is now held for fully late rates. Oats and Oatmeal remain dull of sale. Beans, Peas, and Barley each steadily maintain former prices. The market closes much firmer than it opened.

FRIDAY, Nov. 22.—The market has been moderately attended, and there is no alteration whatever in Wheat and Flour, both of which are inactive, and have undergone no change in prices, holders refusing to submit to any reduction. Indian Corn unaltered. Oats and Oatmeal dull. Supplies small.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Oct. 12..	56s 3d	37s 4d	21s 10d	37s 3d	41s 8d	42s 11d
— 19..	56 3	36 6	21 6	34 9	41 10	41 10
— 26..	57 9	36 7	21 11	35 1	42 3	44 8
Nov. 2..	59 5	37 1	22 7	37 5	42 3	44 4
— 9..	59 8	37 3	22 8	38 5	42 6	46 0
— 16..	59 10	37 6	22 7	37 7	42 6	47 5
Agg. Aver.	58 2	37 2	22 2	36 9	42 2	44 6

FLUCTUATIONS IN THE LAST SIX WEEKS' AVERAGES.



METROPOLITAN CATTLE MARKET.

MONDAY, Nov. 18.

The number of Beasts is considerably less than of late; trade is consequently brisk at advanced rates. The supply of Sheep is also smaller, but it is quite equal to the demand. Prices are about the same as on Monday last. Good Calves are in demand at fully late rates. From Germany and Holland there are 650 Beasts, 5200 Sheep, and 122 Calves; from Scotland, 100 Beasts; from Ireland, 1230 Beasts and 300 Sheep; and 2650 from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	5 0 to 5 2	Best Long-wools.	5 0 — 5 4
Best Short-horns	4 8 — 4 10	Do. Shorn	— ..
2d quality Beasts	4 0 — 4 4	Ewes & 2d quality	4 4 — 4 8
		Do. Shorn	to ..
Best Downs and Half breds ..	5 6 — 5 8	Lambs	— ..
		Calves	4 4 — 5 2
Do. Shorn	— ..	Pigs	4 4 — 5 4

Beasts, 4980; Sheep & Lambs, 21,100; Calves, 144; Pigs, 440.

THURSDAY, Nov. 21.

The number of Beasts is rather larger than on Thursday last; but choicest kinds are not very plentiful. The trade is dull at rather lower rates. The supply of Sheep is not large, but it exceeds the demand. Prices on the average are lower, but there is not much alteration in best qualities. Calf trade is steady. Our foreign supply consists of 810 Beasts, 1110 Sheep, and 158 Calves. Milch Cows, 90.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	4 8 to 5 0	Best Long-wools.	4 10 to 5 2
		Do. Shorn	— ..
Best Short-horns	4 6 — 4 8	Ewes & 2d quality	4 0 — 4 6
2d quality Beasts	3 4 — 4 0	Do. Shorn	— ..
Best Downs and Half-breds ..	5 4 to 5 6	Lambs	— ..
		Calves	4 4 — 5 4
Do. Shorn	to ..	Pigs	4 0 — 5 0

Beasts, 1920; Sheep & Lambs, 4020; Calves, 190; Pigs, 290.

CONSULTING GARDENER.—JOSEPH ROBINSON begs to offer, on moderate terms, his services as above to any lady or gentleman contemplating Alterations, Improvements, or Additions to their Gardens, Pleasure Grounds, or Horticultural Buildings—assured that from his long practical experience he would be able to effect the same judiciously and economically.—Slough, Bucks.

HORTICULTURE.—A Nurseryman having an extensive business and an excellent residence situate in one of the most healthy counties in the West of England, is desirous of meeting with one or two Young Gentlemen as BOARDERS and PUPILS, They will have every opportunity of learning the business and enjoy all the comforts of home.—Address X. Z., *Gardeners' Chronicle* Office, Covent Garden.

PARTNER.—An experienced Landscape Gardener and Contractor, extensively engaged in Sanatory Works, wishes for a PARTNER with sufficient capital to carry on an increasing business, and to manufacture under patent an article in great demand for sanatory purposes.—X. Y. Z., Mr. White, Accountant, 13, Old Jewry Chambers, E.C.

WANTED, a PARTNER, who is experienced in the general routine of a NURSERY and SEED BUSINESS, in the best locality South of London, near a junction and two other Railway Stations. The Nursery consists of nearly 6 acres, containing a large extent of glass, a young and general stock of Trees, Shrubs, Roses, &c., and has been established more than 20 years. Capital required about 1000*l.*; or arrangements can be made for disposing of the whole concern, if desired.—Application by letter to A. B. C., care of Messrs. Hurst & McMullen, Seedsmen, 6, Leadenhall Street, London, E.C.

GOOD SERVANTS.—The difficulty of procuring these is so great, that a SCHOOL has been opened in London under careful management to teach Young Women of the better class to become COOKS and KITCHENMAIDS, and places are obtained for them. No payment is required until they have obtained situations.—Full particulars on application to the Matron School of Cookery, 90, Albany Street, Regent's Park, London, N.W.

WANTED, an ACTIVE YOUNG MAN to Assist in the Houses where Fruit and Flowers are grown for Market.—R. CLARKE, Market Gardener, Twickenham, S.W.

WANTED, a SHOPMAN, about 20 years of age; must be steady and industrious, and have a good knowledge of the Retail Trade.

Apply, stating where last lived and the wages required, to W. W., care of Messrs. Hurst & M'Mullen, 6, Leadenhall Street, City, London, E.C.

WANTED, a TRAVELLER, by Messrs. E. G. HENDERSON & SON, Wellington Nursery, St. John's Wood, N.W.—He must be well acquainted with the Nursery Business, and be thoroughly qualified for the position. Messrs. H. & Son hereby give notice also, that Mr. JOHN W[illegible] has now ceased to represent their Establishment.

WANT PLACES.—Letters to be Post Paid.

To Noblemen and Gentlemen contemplating Remodelling their Parks and Gardens.

JOHN GRIBBINS having just completed his engagement at the Royal Horticultural Society's Gardens, South Kensington, where he has been employed for the last [illegible] in carrying out Mr. Nesfield's Designs in Embroidery, &c., is desirous of treating with any one requiring thorough practical capability, having had extensive and varied practice for the last 28 years in every branch appertaining to Horticulture. His works may be seen as above, and also at the Earl of Dudley's, Whitley Court; the Earl of Craven's, Ashdown Park, [illegible] Royal, Slough; at Dorking in Surrey; the Palace Gardens, Kensington; besides many other places, executed under Mr. Nesfield, the eminent Landscape Gardener, to whom he is kindly permitted to refer. J. G. having been successful in obtaining the assistance of Mr. NEWTON, Estate Improver, F.R.H.S., will be enabled to give Estimates for Alterations, &c., &c., on application to JOSEPH NEWTON, Estate Improver and Landscape Gardener, 30, Eastbourne Terrace, Hyde Park, W.

MANAGER, BOOK-KEEPER, CORRESPONDENT.—A practical Gardener who has the Management of a considerable Nursery Business will be free in some months. Twenty-five years in the Trade. Extensive connections in all parts of the world where Plants and Seeds are sent to.—A. M., *Gardeners' Chronicle* Office, W.C.

GARDENER (HEAD).—Age 37, married; has had many years' experience in every branch of Gardening. No single-handed place accepted. Testimonials of the highest order.—A. B., 135, St. Alban's Place, Edgeware Road, W.

GARDENER (HEAD).—Age 38, no incumbrance; perfectly understands his profession in all its branches. Five years in last situation.—A. B., 60, Mildmay Street, [illegible] Pond Road, Islington, London, N.

GARDENER (HEAD).—Age 36, married, no incumbrance; understands his profession in all its branches, sole cause of leaving his late situation through his present employer leaving his estate. Can have two years and three months' good character from his late employer, and seven years in situation before.—A. B., Post Office, Beckley, Sussex.

GARDENER (HEAD.)—Age 30; understands Early and Late Forcing Fruits, Flowers, and Vegetables, the Management of Kitchen, Fruit, and Flower Gardens, Erecting and Heating Hothouses &c., Laying Out and Improving Pleasure Grounds. Good character from present employer, and also from previous employers.—G. GUPPY, 10, Centurion Road, Brighton, Sussex.

To Noblemen and Gentlemen.

GARDENER (HEAD).—Age 40, married; has a thorough practical knowledge of the Cultivation of Pines, Vines, Peaches, Melons, and Cucumbers, also the Management of Stove, Orchids, and Fern Houses. Has a Son (age 17) who thoroughly understands Stove Plants, Orchids, Ferns, and Greenhouse Plants. Wages requested 1*l.* per week, with house and firing. Can have two and a half years' unexceptionable character from last situation, also can be highly recommended by three other gentlemen.—A. B., Mr. Manning, Bookseller and Stationer, 10, Claremont Place, Hornsey Road, N.

GARDENER.—Age 36, married; thoroughly competent and practical; experienced in all the various branches of the profession. Character unexceptionable.—H. W., Post Office, Fenstanton, Hunts.

GARDENER (UNDER or SECOND), in a nobleman's or gentleman's Garden.—Age 20; accustomed to Plants, Pines, Grapes, &c. No objection to pay a premium.—ALPHA, Mr. Burbidge, Draper, 30, Sheep Street, Rugby.

WOODMAN (HEAD).—Age 28, single; has been accustomed to the work all his life.—Reference to Mr. W. L. B. FREUER, Estate Agent, Eye, Suffolk.

LAND AGENT or STEWARD.—Age 30, married; has been engaged during lifetime in the Management of extensive Landed Property, Farming, Draining, Building, Planting, the Care of Woods, &c. The most satisfactory references, and security to any amount.—M., *Gardeners' Chronicle* Office, W.C.

BAILIFF.—Practically acquainted with Modern Farming and Steam Cultivation. A good judge of Stock, and a good Accountant.—A. B., 66, Herbert Street, Hoxton, London, N.

To the Seed Trade.

SHOPMAN or CLERK.—Age 20; has a thorough knowledge of the Trade in all its various branches. Can furnish unexceptionable references as to character, ability, &c. Salary not so much an object as a comfortable situation.—ALPHA, Post Office, Saling, Braintree, Essex.

To the Seed Trade.

SHOPMAN and TRAVELLER.—Age 20; with great perseverance and good address. Can furnish unexceptionable references as to character, ability, &c. Flatters himself he could work up or extend a business. Salary not so much an object.—A. L., Post Office, Wolverhampton, Staffordshire.

To the Seed Trade.

SHOPMAN.—Age 23; has had considerable experience in the first houses in Scotland. Satisfactory references as to character and capabilities can be given.—M. J., 33, Beaumont Street, Stapleton Road, Bristol.

APPRENTICESHIP or SITUATION for a YOUTH in a Gentleman's or Nursery Gardens. He can be thoroughly recommended.—T. M., Kirby-under Dale Rectory, York.

To Seedsmen.

ASSISTANT.—A well-educated Young Man, who has some knowledge of the Seed Business. Can be highly recommended.—A. HENDERSON, Esq., Pine Apple Place, Edgeware Road, London, W.

GLENFIELD PATENT STARCH, used in the Royal Laundry.—The ladies are respectfully informed that this Starch is exclusively used in the Royal Laundry, and Her Majesty's Laundress says, that although she has tried Wheaten, Rice, and other Powder Starches, she has found none of them equal to the Glenfield, which is the finest Starch she ever used.

WOTHERSPOON & Co., Glasgow and London.

The Gardeners' Chronicle Newspaper.

SATURDAY, DECEMBER 7, 1861.

Drainage Season.

MR. BAILEY DENTON undertakes the DRAINAGE of ESTATES by Commission or Contract.
52, Parliament Street, Westminster, S.W.

DRAINAGE OUTFALLS. — The most simple, expeditious, and inexpensive powers for obtaining the right of making Outfall Drains, Cuttings, &c., through the lands of adjoining Proprietors, are under the WEST of ENGLAND DRAINAGE and INCLOSURE COMPANY'S ACT, and there is no necessity for separate proceedings such as Petitions, Special Act of Parliament, Commissions of Sewers, or Drainage Boards, &c.

Draining, Inclosing, Irrigating, Warping, Road Making, and every kind of Land Improvements executed on Entailed, Mortgaged, or other Properties; the whole cost can be a Charge on the Lands permanently, or it might be made redeemable at any fixed time in one or more sums or by half-yearly instalments over any term of years, at the option of Proprietors.

FREDERICK BRODIE, Secretary.
Offices—Exeter, and 30, Parliament Street, London, S.W.

Land Drainage.

WORKS of DRAINAGE of any extent are EXECUTED by the GENERAL LAND DRAINAGE and IMPROVEMENT COMPANY on all descriptions of property, whether freehold, entailed, mortgaged, trust, ecclesiastical, corporate, or collegiate.

Repayment may be made by the Landowner as successive portions of the works are completed; or the actual expenditure, with a commission thereon, may be charged on the property improved, by way of rentcharge on the estate created for various terms of years so as to adapt the rate per cent. of annual charge to the circumstances of the tenants.

No investigation of title being required, or notices given to Reversioners or Mortgagees, no legal expenses are incurred.

Works of Irrigation, Enclosing, Wood Grubbing, Road Making, and Farm Buildings are executed in a similar manner.

Landowners desirous to execute any of the Improvements by their own Agents, and charge the outlay and expenses on the Estate, may obtain Loans for the purpose.

Applications to be made to WILLIAM CLIFFORD, the Secretary, at the Offices of the Company, 52, Parliament Street, S.W.

THE LANDS IMPROVEMENT COMPANY.—
Incorporated by Special Act of Parliament in 1853.
2, Old Palace Yard, Westminster, S.W.
TO LANDOWNERS, THE CLERGY, ESTATE AGENTS, SURVEYORS, &c. IN ENGLAND AND WALES AND IN SCOTLAND.

The Directors beg leave to announce that the Company's Amendment Bill, 1859, has received the sanction of the Legislature. The Company now advance money, unlimited in amount, for the following works of Agricultural Improvement, the whole outlay and expenses in all cases being liquidated by a rent charge for 25 years.

1. Drainage, Irrigation and Warping, Embanking, Inclosing, Clearing, Reclamation, Planting, for any beneficial purpose, Engines or Machinery for Drainage or Irrigation.
2. Farm Roads, Tramways and Railroads for agricultural or *farming purposes.*
3. Jetties or Landing places on the sea coast or on the banks of navigable rivers or lakes.
4. The erection of Farm Houses, Labourers' Cottages, and other Buildings required for Farm purposes, and the improvement of and additions to Farm houses and other buildings for farm purposes.

Landowners assessed under the provisions of any Act of Parliament, Royal Charter, or Commission, in respect of any public or general works of drainage or other improvements, may borrow their proportionate share of the cost, and charge the same with the expenses on the lands improved.

No investigation of title is required, and the Company being of a strictly financial character do not interfere with the plans and execution of the Works, which are controlled only by the Government Enclosure Commissioners.

For further information, and for forms of application, apply to the Honourable WILLIAM NAPIER, Managing Director, 2, Old Palace Yard, Westminster, S.W.

THE CATTLE SHOW—THE CATTLE SHOW.
TO FARMERS and AGRICULTURISTS.

Parties proceeding to the Smithfield Cattle Show, desirous of combining comfort with amusement, should Visit the LONDON PAVILION, the Saloon of which is unequalled in point of elegance and convenience, and the entertainment the best in London. Vocalists of first-rate talent are engaged. Selections from the most popular Operas are performed nightly; added to which the astonishing feats of the Elliott Family, and the extraordinary daring of J. Henderson à la Blondin on the Flying Wire, the Greatest Wonder of the day, with a variety of other novelties, such as cannot fail to attract and delight the country friends.

THE LONDON PAVILION, Tichborne Street, top of the Haymarket.
Open at 7.—Admission 6*d.* and 1*s.*
RUSSELL GROVER, Musical Director. E. LOIBL & C. SONNHAMMER, Proprietors.

Captain White's

CURRY or MULLIGATAWNY PASTE, Curry Powder, Curry Sauce, and Oriental Pickle, may be obtained from all Sauce Vendors, and Wholesale of
CROSSE & BLACKWELL, Purveyors to the Queen,
Soho Square, London, W.C.

TAYLOR BROTHERS' GENUINE MUSTARD.— Dr. Hassell, in his report on Taylor Brothers' Genuine Mustard, says, "I find this Mustard perfectly genuine, and of superior quality, possessing a delicate flavour and much pungency." Sold by all Grocers and Oilmen.

SAUCE.—LEA AND PERRINS beg to caution the Public against Spurious Imitations of their world-renowned

WORCESTERSHIRE SAUCE.
Purchasers should
ASK FOR LEA & PERRINS' SAUCE,
Pronounced by Connoisseurs to be
"THE ONLY GOOD SAUCE."

*** Sold Wholesale and for Export, by the Proprietors, Worcester; Messrs. CROSSE & BLACKWELL, London, &c., &c., and by Grocers and Oilmen universally.

GLENFIELD PATENT STARCH, used in the Royal Laundry.—The ladies are respectfully informed that this Starch is exclusively used in the Royal Laundry, and Her Majesty's Laundress says, that although she has tried Wheaten, Rice, and other Powder Starches, she has found none of them equal to the Glenfield, which is the finest Starch she ever used.

WOTHERSPOON & Co., Glasgow and London.

NETTING for SHEEPFOLDS, made of Cocoa Nut Fibre. Price 4*d.* per yard. COCOA NUT CORD for THATCHING.—WILDEY and Co., Manufacturer of Cocoa Nut Matting and Mats, Holland Street, Blackfriars Road, S.E.

E. T. ARCHER'S "FRIGI DOMO."—Patronised by her Majesty the Queen, the Duke of Northumberland for Syon House, his Grace the Duke of Devonshire for Chiswick Gardens, Professor Lindley for the Horticultural Society, Sir Joseph Paxton for the Crystal Palace, Royal Zoological Society, late Mrs. Lawrence of Ealing Park, &c

PROTECTION from the COLD WINDS & MORNING FROST.

"FRIGI DOMO," a Canvas made of patent prepared Hair and Wool, a perfect non-conductor of Heat and Cold, keeping, wherever it is applied, a fixed temperature. It is adapted for all horticultural and floricultural purposes, for preserving Fruits and Flowers from the scorching rays of the sun, from wind, from attacks of insects, and from morning frosts. To be had in any required lengths.

Two yards wide .. .. 1*s.* 6*d.* per yard run.
Four yards wide .. .. 3*s.* per yard.
An improved make, 3 yards wide, 2*s.* 6*d.* per yard run.

Also "Frigi Domo" Netting, 2 yards wide, 1*s.* 4*d.* per yard run.

ELISHA THOMAS ARCHER, Whole and Sole Manufacturer, 7, Trinity Lane, Cannon St., City, E.C., and of all Nurserymen and Seedsmen throughout the kingdom.

"It is much cheaper than Mats as a covering."

"How Cold it has been."

NEGRETTI AND ZAMBRA'S celebrated THERMOMETERS will correctly Register the lowest Temperature. Price 3*s.* 6*d.*

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*** AGENTS WANTED. For terms apply at the Manufactory, 1, Hatton Garden, E.C.

CHUBB'S PATENT SAFES, the most secure against Fire and Thieves.
CHUBB'S FIRE PROOF STRONG ROOM DOORS; CHUBB'S PATENT DETECTOR LOCKS and STREET DOOR LATCHES; CHUBB'S CASH and DEED BOXES.
Illustrated Price List gratis and post free.
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HEAL AND SON'S EIDER-DOWN QUILTS, from One Guinea to Ten Guineas. Also GOOSE-DOWN QUILTS, from 8*s.* 6*d.* to 24*s.* List of prices and sizes sent free by post. HEAL & SON'S Illustrated Catalogue of Bedsteads and Priced List of Bedding, also sent post free.
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DINNEFORD'S PURE FLUID MAGNESIA has been, during 25 years, emphatically sanctioned by the medical profession, and universally accepted by the public, as the best remedy for acidity of the stomach, heartburn, headache, gout, and indigestion, and as a mild aperient for delicate constitutions, more especially for ladies and children. Combined with the Acidulated Lemon Syrup, it forms an agreeable Effervescing Draught, in which its aperient qualities are much increased. During hot seasons and in hot climates, the REGULAR use of this simple and elegant remedy has been found highly beneficial.

Manufactured (with the utmost attention to strength and purity) by DINNEFORD & Co., 172, New Bond St., London, W.; and sold by all respectable Chemists throughout the Empire.

NO MORE PILLS nor any other MEDICINE.— Perfect health can only be restored by DU BARRY'S delicious health-restoring REVALENTA ARABICA FOOD, as it effectually cures diseases which medicine only aggravates, such as constipation, indigestion (dyspepsia), flatulency, phlegm, diarrhœa, hæmorrhoids, dysentery, nervousness biliousness, torpidity of the liver, fevers, sore throats, catarrhs, colds, noises in the ears, rheumatism, gout, impurities, eruptions, irritability, sleeplessness, acidity, palpitation, heartburn, headache, debility, dropsy, despondency, cramps, spasms, nausea, sinking fits, coughs, asthma, bronchitis, consumption. Certificate No. 37,418.—We find it the safest remedy. Andrew Ure, M.D., F.R.S., Dr. Harvey, Dr. Wurzer, Dr. Shorland, Dr. Campbell. 1 lb., 2*s.* 9*d.*; 12 lbs., free of carriage, 22*s.* It saves all doctors' bills, and 50 times its cost in other remedies.

BARRY DU BARRY & Co., 77, Regent Street, W.; also at 182, Piccadilly, W.; 60, Gracechurch Street, E C.; 4, Cheapside, E.C.; 63 and 150, Oxford Street, W.; 229, 330, 430, and 451, Strand, W.C. and all Grocers and Chemists.

DESIGNS for FLOWER BEDS and GARDENS.— Now ready, Four Sets of DESIGNS for RIBBON BORDERS and BEDS, 2*s.* 6*d.* Plain, 6*s.* Coloured.

Also 3d Ed. of 80 DESIGNS for FLOWER BEDS and GARDENS, 2*s.* Forwarded on receipt of Postage Stamps, by J. MARSHALL, Derby Road, Nottingham.

WHAT will this COST to PRINT? is a thought often occurring to literary men, public characters, and persons of benevolent intentions. An immediate answer to the inquiry may be obtained.

A SPECIMEN BOOK of TYPES and information for Authors sent on application by
RICHARD BARRETT, 13, Mark Lane, London, E.C.

HENRY C. LUNN'S popular PIANOFORTE COMPOSITIONS:—Le Papillon—La Fête des Fées—Adeline (Reverie)—Alicia (Mazurka). "Every bar bespeaks the accomplished musician."—*Observer.*

Just published, The Mountaineer's Evening Song.
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CUTHILL'S PAMPHLETS, containing all the New Systems.—Strawberry, 1*s.*; Mushroom, 2d Edition, 1*s.*; Market Gardening, 3d Edition, 1*s.* 6*d.*; Vine, 1*s.*; best System of Growing Early Potatoes, Asparagus, Seakale, Rhubarb, Cucumbers, Melons, Herbs and Salads, 3d Edition, 2*s.*; or the five for 5*s.*, post free.
JAMES CUTHILL, F.R H.S., Camberwell, London. S.

Just published, price 1s., cloth, 1*s.* 6*d.*,

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News of the Week.

AT the Cabinet Council on Friday, her Majesty's Ministers came to the conclusion that the act of the Captain of the San Jacinto, in seizing passengers on board a British vessel and carrying them forcibly away, was a clear violation of the Law of Nations, and one for which reparation must be at once demanded. Another Cabinet Council was held on Saturday, at which the despatch demanding reparation was revised and finally settled. A Privy Council was held on the same afternoon at Windsor Castle, at which the despatch was approved by HER MAJESTY, and in the course of the evening it was transmitted by a QUEEN'S Messenger to Washington. It is understood that these despatches instruct Lord LYONS to claim the persons of the four gentlemen taken from under the protection of the English flag, with an adequate apology for the outrage committed by the Captain of the San Jacinto. If these demands are not complied with, Lord LYONS will at once break off diplomatic relations with the Cabinet of Washington and return to this country, with all the members of the Legation. Meanwhile preparations for war are making on an extensive scale in all our arsenals and ports. Large reinforcements of men and ammunition are to be sent immediately to Canada, and upwards of 20 sail of ships, including the new iron-plated frigates Warrior and Defence, are under orders to prepare for sea with all possible despatch, for the purpose of joining the large fleet already under the orders of Admiral MILNE on the North American and West Indian station.

The French papers publish a letter addressed by General SCOTT to the United States' consul in Paris, in which he declares that there is no truth in the report that the Cabinet of Washington had ordered the seizure of the Southern Commissioners, even if under the protection of a neutral flag. He states that he is quite ignorant of the decision of his Government, but that it is necessary to preserve the good relations between America and England. He hopes that Earl RUSSELL and Mr. SEWARD will agree on a solution of the question whether the persons who were arrested on board the Trent were contraband of war or not. "If," he says, "they were agents of the rebels, it will be difficult to convince even impartial minds that they were less contraband of war than rebel soldiers or cannons." In conclusion, he expresses his conviction that a war between America and England cannot take place without more serious provocations than those at present given. The Paris press, without a single exception, and more especially the semi-official journals, warmly espouse the side of England in her quarrel with the Federal Government. The *Temps* says that the EMPEROR has tendered his good offices to our Government, while the *Patrie* proposes that in case of a rupture France should coincide with England in any recognition of the Southern Confederacy. The Americans in Paris are giving proof of their belief in an approaching war by their rapid flight homeward.

From New York we learn that the San Jacinto has arrived at Fort Monroe with Messrs. SLIDELL and MASON, who have been sent as state prisoners to Fort Warren in Boston harbour. A Cabinet Council was immediately held on the subject of their seizure, but the intention of the Government had not transpired. The *New York Herald* however asserts that when the PRESIDENT first received the news of the capture of Messrs. SLIDELL and MASON, he emphatically declared that they should not be surrendered even if a war with England were the consequence. Mr. EVERETT, Mr. G. SUMNER, and other American authorities have declared their opinion that the capture of the Commissioners was in accordance with international law, and the New York papers contend that the capture was not only legal, but justified by precedents supplied by the acts of the British Government. The people at large were thrown into a state of wild exultation by the first news of the seizure, but the latest accounts state that there is universally an uneasy feeling in the public mind as to its effect upon the relations of America with England. The Secretary of War has informed the Governor of Maine that an officer will be immediately appointed to report on the sea defences of that state. The Federal Secretary of the Interior has disavowed the policy endorsed by the Secretary of War, of putting arms into the hands of the slaves, declaring that such is not the policy of the Federal administration. Governor JACKSON and the State Legislature of Missouri have passed a secession ordinance. The Unionists of North Carolina have established a provisional state government at Hatteras, and Fort Pickens, assisted by two Federal steamers, has opened the bombardment of Pensacola. Mr. JEFFERSON DAVIS has been elected President, and Mr. STEPHENS Vice-President of the Confederate States for a period of six years. President DAVIS in his message to the Confederate Congress states that the military means and financial condition of the South are stronger now than at the commencement of the struggle, and that the reconstruction of the Union has become impossible. He says that the Confederates shrink with aversion from the idea of being re-united to the North, and that though the South will be content to live at peace with the North the separation is final. He then refers to the seizure of Messrs. SLIDELL and MASON, and says that "the claim of the United States to seize them in the streets of London would have been as well founded as the seizure on board the Trent. He concludes by saying that the Confederates ask no aid from foreign powers, but they intend to lay before the European governments evidence of the total insufficiency of the blockade.

Two important Proclamations by the QUEEN in Council have been issued this week, the first prohibiting the export or coastwise conveyance of gunpowder, saltpetre, nitrate of soda, and brimstone; and the second prohibiting the export of arms, ammunition, lead, percussion caps, tubes, and other military stores. The necessity of these precautions is proved by the fact that within the last 10 days an agent of the Federal Government has bought up three thousand tons of saltpetre in London and the provinces, and that another agent arrived at Birmingham on Monday with very extensive orders for rifles, percussion caps, lead for bullets, and other munitions of war.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family continue at Windsor. On Thursday, the 28th ult., the Duke de Nemours, the Earl of Carlisle, the Right Hon. W. E. and Mrs. Gladstone, and the Hon. John H. T. Manners Sutton arrived on a visit to the Queen. On Friday morning the Queen walked and drove, accompanied by the Princess of Leiningen. The Duke de Nemours and Prince Leiningen went out shooting. In the afternoon the Queen inspected the Eton College Volunteers, consisting of four companies, with the band of the Scots Fusilier Guards, in the Home Park. Her Majesty was accompanied by the Prince Consort, Princesses Alice, Helena, Louisa, and Beatrice, Prince Arthur, the Duke de Nemours, and the Prince and Princess of Leiningen. The line was under the command of Mr. Arkwright, and received her Majesty with a Royal salute; the companies then marched past and went through several manœuvres, which were concluded by an advance in parade order and a Royal salute. After the inspection luncheon was served in the conservatory of the Castle for the companies, in the presence of the Queen, Prince Consort, and the Royal family. On the conclusion of the luncheon the Volunteers marched back to Eton College. In the evening the Queen had a dinner party. On Saturday morning the Duke de Nemours, the Earl of Carlisle, the Right Hon. the Chancellor of the Exchequer and Mrs. Gladstone, and the Hon. John H. T. Manners Sutton left the Castle. The Queen with Princess Alice rode out on horseback. In the afternoon the Queen, accompanied by Princess Alice, Prince Arthur, and the Princess of Leiningen, drove out in a carriage and four. Her Majesty afterwards held a Privy Council. On Sunday morning the Queen and Prince Consort, the Princesses Alice, Helena and Louisa, Prince Arthur, and the Princess of Leiningen, attended Divine Service in the private chapel of the Castle. The Rev. F. C. Cook, one of her Majesty's Chaplains in Ordinary, preached the sermon. On Monday morning the Queen, accompanied by the Princess of Leiningen, drove out. The Prince of Leiningen went out shooting. Lord Methuen and Colonel Seymour returned from Lisbon, after delivering letters of condolence to the King of Portugal and Royal family, from her Majesty and the Prince Consort. The Duke of Newcastle, Viscount Palmerston, Viscount Bury, and Sir Alan M'Nab, Bart., arrived on a visit to the Queen. On Tuesday morning the Queen, accompanied by Princess Alice and Princess Leiningen, drove out in a carriage and four. Lord Palmerston returned to London. Lord Methuen and Colonel Seymour, C.B., left the Castle. Sir Andrew Buchanan, her Majesty's Minister at the Hague, was presented to her Majesty by Earl Russell, Secretary of State for Foreign Affairs, on returning to his post. Earl Russell had an audience of the Queen. On Wednesday morning the Queen walked in the grounds of the Castle. The Prince and Princess of Leiningen, the Duke of Newcastle, Viscount Bury, and Sir Alan M'Nab, left the Castle for London. In the afternoon the Queen held a Privy Council at the Castle. Earl Granville had an audience of her Majesty. On Thursday morning the Queen drove out in an open carriage and four.

ILLNESS OF THE PRINCE CONSORT.—His Royal

Highness the Prince Consort has been suffering for several days from a feverish cold, which has confined his Royal Highness to his room.

THE CABINET.—A Cabinet Council was held on Saturday in Downing Street, after which the Ministers proceeded to Windsor to attend the Privy Council held by her Majesty at the Castle. After the Council a special Queen's messenger was sent to Queenstown, with despatches addressed to our Minister at Washington. On Monday a Committee of the Lords of the Privy Council had a meeting at the Council Office. The Law Officers of the Crown, the Queen's Advocate, the Attorney-General and the Solicitor-General were in attendance upon their Lordships. A Cabinet Council was held on Wednesday at the official residence of the First Lord of the Treasury in Downing Street. Three of the Ministers afterwards proceeded to Windsor, and attended the Privy Council held by her Majesty at the Castle.

LORD LIEUTENANCY.—The Marquis of Ailsa has been appointed Lord Lieutenant of Ayrshire, in the room of the late Earl of Eglinton.

THE JUDICIAL BENCH.—The Lord Chancellor has nominated Mr. Mellor, Q.C., M.P. for Nottingham, and Recorder of Leicester, to the seat on the Bench vacant by the resignation of Mr. Justice Hill. The vacant judgship was declined by the Attorney-General, Sir W. Atherton, M.P.

PARLIAMENTARY MOVEMENTS.—Mr. Cox, the late member, has offered himself for Finsbury on the condition that he is not required to defray more than the strictly legal expenses of the election, and that the electors guarantee his return. Mr. Remington Mills is still in the field.—The elevation of Mr. Mellor to the bench has caused a vacancy at Nottingham. Sir Robert Clifton has issued an address in the Radical interest, and Mr. Bromley, son of the late Sir R. Bromley, of Stoke, has consented to come forward in the Conservative interest.—The nomination for Birkenhead will take place on Monday and the polling on the following day. There are two candidates, Mr. Laird, the local ship builder, in the Conservative interest; and Mr. Brassy, a son of the great railway contractor, on the Liberal side.

THE ARMY IN CANADA.—Brevet Colonel Mackenzie, C.B., late 92d Foot, has been appointed Deputy Quartermaster General in Canada, in the room of Brevet Colonel Napier, who has been appointed Major General on the Staff in North America. Brevet Lieut.-Colonel Conolly has been appointed Deputy Adjutant General in Canada.

COLONIAL APPOINTMENTS.—The Queen has appointed Francis Hincks, Esq., now Governor of Barbadoes, to be Governor of British Guiana, and James Walker, Esq., C.B., to be Governor of Barbadoes, Grenada, St. Vincent, Tobago, and St. Lucia, and their dependencies.

PREPARATIONS FOR WAR.—Great preparations are making in all the arsenals and dockyards in anticipation of a war with the United States. Troops are to be despatched immediately to Canada, and a large quantity of munitions of war, clothing, &c., for that and the other colonies in North America, is preparing for shipment. The Melbourne, screw transport, left Woolwich yesterday morning for Halifax, with Colonel Gordon, R.E., commanding the Royal Engineer district in the south-west; Capt. Vesey's battery of Royal Artillery, 2,500,000 rounds of small arms' cartridges, 30,000 stand of arms and accoutrements, 1,500 rounds of Armstrong ammunition, and warm clothing for 10,000 men. In order to protect this valuable cargo from American cruisers, the Melbourne will be adequately convoyed to her destination by the Orpheus, 21, screw frigate. The Cunard steamers Australasian and Persia have been chartered by the Government to convey troops to Halifax. The 1st Battalion of the Rifle Brigade now stationed at Cork, and the 1st Battalion of the 16th Regiment, stationed at Sheffield, have received orders to embark for Canada, and orders were received at Aldershott on Wednesday evening for the following troops to hold themselves in readiness to proceed at once to the same destination; Capt. Leslie's battery of Royal Artillery; the 2d battalion of the 20th; 2d of the 16th, and 45th regiment of the line, and a detachment of the 16th Lancers. A telegraphic despatch was received at the Royal Engineer establishment at Chatham on Thursday, directing the commandant to select and hold in readiness for embarkation 150 of the most skilful non-commissioned officers and men attached to the companies at that establishment. At all the naval ports notices have been issued by the Commanders-in-Chief requiring all men on leave from ships paid off, to return to their respective ships immediately. At Portsmouth orders were received on Monday by telegraph directing the Commander-in-Chief to hold in readiness for immediate commission at that port the 51-gun screw frigates Shannon, Euryalus, and Sutlej, the Stromboli 6-gun paddle sloop, the Pandora. 5, screw three-masted schooner, and the Vigilant, 4, screw-despatch vessel. The Warrior, 40, iron-cased frigate, Capt. the Hon. A. A. Cochrane, C.B., is also refitting for sea with all speed, and the Hero and Edgar line-of-battle ships at Spithead are ordered to be in readiness to leave at an hour's notice. Orders have been received at Chatham for the Pylades, 21, Rattlesnake, 21, and Galatea, 26, to be prepared for sea with all possible despatch, in order to be immediately commissioned. The Defence, 22, iron-cased frigate, has been commissioned by Captain Richard A. Powell, C.B., at Chatham, and is ordered to prepare for immediate service. Orders have been received at Sheerness to hold in readiness for immediate commission the Severn, 51, screw frigate, and the Barossa, 21, screw corvette, and also to bring forward two first-class vessels for commission. Orders have been received at Plymouth to prepare the Orlando 50, screw frigate, Phœbe, 50, screw frigate, Perseus, 21, screw sloop; Magicienne, 16, paddle sloop; Styx, 6, paddle sloop; and Petrel, 11, screw sloop; for sea with all possible dispatch. Orders have been received at Woolwich to prepare the Devastation, 7, steam sloop, for immediate commission. At all the dockyards large numbers of additional hands have been taken on, while many of the workmen who were recently discharged have been re-entered for service. The actual force at present on the North American and West India station under the command of Vice-Admiral Sir Alexander Milne, K.C.B., consists of 2 line-of-battle ships, 7 frigates, 4 corvettes, 10 sloops, and 2 gunboats, all screw or paddle steamers, carrying altogether 503 guns, and manned by 6182 men. In addition to these, 3 screw line-of-battle ships, 1 screw frigate and 2 sloops, carrying altogether 331 guns, and manned by 2317 men, are on their passage to join the fleet. The force on the south-east coast of America under Rear-Admiral Warren consists of 2 screw frigates and 6 steam sloops, mounting together 110 guns and manned by 1332 men. The force in the Pacific under Rear-Admiral Sir Thomas Maitland consists of 2 screw frigates, 5 corvettes, and 5 sloops, mounting 223 guns, and manned by 2695 men.

THE NAVAL RESERVE.—The seamen belonging to the Royal Naval Reserve at the ports of London, Liverpool, Bristol, Sunderland, and Shields have addressed letters to the captains of their respective training ships expressing their readiness, in consequence of the insult offered to the national flag by the Americans, to join the navy for immediate service. The Lords of the Admiralty, in acknowledging these offers, express their high satisfaction at the loyal and patriotic feeling so readily and cheerfully manifested by the Royal Naval Reserve, and state that they rely with the most entire confidence that the hearty services of the Reserve will be forthcoming should her Majesty see fit, by Royal proclamation, to call for them. The Royal Naval Reserve now numbers about 8000 able seamen actually enrolled in the Reserve, a number which would enable the Government, with the ordinary additions of hands always procurable, to send to sea a fleet of 30 line-of-battle ships.

SUSPENSION OF THE EXPORT OF SALTPETRE, ARMS, LEAD, AND MILITARY STORES.—An extraordinary *Gazette* was issued on Saturday containing a Proclamation by the Queen in Council prohibiting gunpowder, saltpetre, nitrate of soda, and brimstone, either to be exported from the United Kingdom or carried coastwise. Another Order in Council prohibits their export from the Channel Islands. Another extraordinary *Gazette* was issued on Wednesday night, adding "arms, ammunition, and military stores (including percussion caps and tubes), and also lead," to the previous list of articles forbidden to be exported or carried coastwise.

THE ARMSTRONG GUN.—It is understood that the 100-pounder Armstrong guns, the issue of which had been temporarily suspended during some experiments, will now be again delivered for service. Sir William Armstrong has published a long statement in answer to the charges of inefficiency and danger which have recently been brought against his guns. It appears that the total number of Armstrong guns proved from first to last is 1622, of which about half have been issued for use, and half retained in store. The distribution between store and service has been by no means uniform in the different calibres. Of the 6-pounder piece, 49 specimens only have been manufactured, and 5 issued. Of the 12-pounder there are upwards of 300 in use, against 150 in store. The 25-pounder, like the 6-pounder, appears never to have got much into favour, but the 40-pounders and the 100-pounders, being the guns employed in the sea service and for fortifications, are largely in use. Altogether 796 guns of various calibres have been actually issued for service, and of this number not one single piece has ever burst, and only 20 have been returned for repair. With regard to vent-pieces, Sir William Armstrong observes that they are not expected to possess the same durability as the rest of the gun. The vent-piece is formed of a separate piece of metal, is removed every time the gun is loaded, and is always issued in duplicate, by way of providing against natural contingencies. For the 796 guns, therefore, there have been issued 1592 vent-pieces, of which 5 have been blown away, and 32, of which 24 were steel and 8 iron, rendered otherwise unserviceable. A considerable proportion of the accidents recorded are, however, attributable to the ignorance or inexperience of the men serving the gun. The official report actually speaks of one class of mishaps as "always" arising from carelessness, and Sir William asserts that "no vent-piece would ever have been blown away had the gunners known their drill from the first." With regard to the case mentioned by Captain Halsted of an Armstrong gun which had been returned from a gunboat as unsafe, but which was retained for "cautious use" at Shoeburyness, it appears that there was no insecurity about it, and that the captain of the gunboat in question has actually written to Sir William, stating candidly that, if he had known the guns at first as well as he knows them now, he would not have thought it necessary to complain of them as he did. It appears also that a large per centage of the reported failures occurred at one spot, and under one particular system of handling, while thousands of rounds were fired from guns of the same kind at other places without the least mishap. On the general merits of his guns, Sir William Armstrong says that so far from their having never been subjected to continuous and rapid firing, there is no class of them which has not stood that test. He asserts that the strength and endurance of his gun cannot be doubted, though the proofs to which it has been subjected have been incredibly severe. He states that the new gun, with its new projectiles, new appendages, and new incidents of drill, has been introduced into the service "without loss of either life or limb, or injury to a single individual." One of the 100-pounders actually threw a 1,000 lb. shot without strain or fracture. In regard to their cost he states the latest contract price for every description of gun after proof at the butts, from which it appears that the heaviest of the guns can be manufactured at the rate of 650*l.* a-piece instead of 2000*l.*, as its opponents had alleged, while the ordinary 12-pounder costs less than a third of that sum.

Foreign.

FRANCE.—The French Senate held an extraordinary sitting on Monday. M. Troplong, the President, having taken his seat, an Imperial edict was read, announcing the opening of the Senate. The nomination of three new Senators—Vicomte de Laguéronnière, General Montauban, Commander of the French troops in China, and M. de Forcade, was then proclaimed. M. Baroche afterwards laid on the table the following draft of a Senatus Consultum, modifying Articles 4 and 12 of the Senatus Consultum of Dec. 25, 1852:—

"Art. 1. The budget of expenses is presented to the Corps Legislatif divided into sections, chapters, and articles. The budget of each Ministry is voted in sections, in conformity with the list hereunto annexed. The division by chapters of the sums voted for each department is settled by an Imperial decree issued in the Council of State. Special decrees issued in the same form may authorise the transfer of sums from one chapter to another in each ministerial budget.—Art. 2. No extraordinary or supplementary credits can be granted except in virtue of a law. No change is to take place in the provisions of existing laws as far as regards the expenditure of previous years to be paid off, the expenses of departments, communes, and local services, nor as regards the *fonds de concours* for expenses of public interest.—Art. 3. The articles 4 and 12 of the Senatus Consultum of December 25, 1852, are modified in so far as they are contrary to the provisions of the present act."

The sitting was suspended after the reading of this draft. The Senate will not meet for the next few days, and the discussion on the projected Senatus Consultum is not likely to commence till the end of this or the beginning of next week. The *Moniteur* of Saturday says:—"The director of the customs has reported that the surplus of grain imported into France is 10½ millions of hectolitres. At present, therefore, the wants of consumers appear to be guaranteed." The *Moniteur* publishes a letter addressed to the Emperor by the stockbrokers of Paris, thanking His Majesty for the abolition of the tax levied on the right of entrance to the Bourse, and asking permission to erect a statue to the Emperor within the building. The Emperor in his reply thanks them for their appreciation of his efforts for the good of France and the progress and credit of the country; but says that however flattered he may be by the proposal of the stockbrokers to erect his statue in the Bourse he must be allowed not to accede to it. At the same time he offers them his portrait, to be placed in their Council-chamber, in order to remind them how much he has valued the manifestation of their feelings. A Cabinet Council and a Privy Council were held on Thursday, the Emperor having arrived from Compiègne for the purpose of presiding. It is said that the subjects of discussion were the finance and American questions. The *Temps* announces that the Emperor of the French has tendered his good offices to the British Government to settle "the difficulty" which has arisen out of the case of the Trent. The United States' Consul in Paris has communicated to the French papers a letter of General Scott, in which he declares there is no truth in the report that the Cabinet of Washington had ordered the seizure of the Southern Commissioners, even if under the protection of a neutral flag. He says that it had been supposed that the Commissioners would come over in the Nashville, and that the James Adger, which was allowed to refit at Southampton two or three weeks ago, and other cruisers were sent out to capture them on board that vessel. He adds:—

"I am quite ignorant of the decision of the Government, but it is necessary to preserve good relations between America and England. I hope that Earl Russell and Mr Seward will agree on a solution to the question, whether the persons who were arrested on board the Trent were contraband of war or not. If they were agents of the rebels, it will be difficult to convince even impartial minds that they were less contraband of war than rebel soldiers or cannons." In conclusion, he expresses his conviction that "a war between America and England cannot take place without more serious provocations than those at present given."

The French press unanimously express their admiration at the indignation which is felt in England for the insult offered to the British flag, and state that the sympathy of France is entirely with us in this question. The following extracts will be read with interest:—

La Presse says:—

"England offers at the present moment one of those spec-

tacles which are the glory of a free people. Whatever opinion may be entertained respecting this affair of the Trent, it is impossible not to admire the public spirit which has manifested itself from one end of England to the other, and which, so to say, vibrates a chord of indignation in every English heart. This public spirit, a mixture of national pride and an invincible attachment to the glory and interests of the country, displays itself in every place—in the newspapers, in public meetings, at the theatres, in the public squares. There is always something grand and instructive in the agitation of this people, which is passionately devoted to commerce, but at the same time jealous of its rights and of the honour of its flag, and which, wherever it assembles or labours, expresses, in a thousand ways, the incomparable energy of its feelings. The interest which must always be attached to so noble a spectacle is doubled to-day in consequence of the violent act which has produced this general explosion of indignation. The English people are averse to war, as, more than any other country in the world, they are engaged in great commercial enterprises. England will only go to war as a last extremity; but we know how little the great sacrifice will cost to her patriotism. In this respect experience is at hand to imform us, and, moreover, we have only to read the English daily papers received this morning."

La Patrie says:—

"An English ship in the open sea, like a French ship, is national territory; such is the admitted principle. If the Americans had the right to carry off by force the envoys of the South between St. Thomas, a Danish possession, and the Havana, a Spanish possession, have they not the same right forcibly to seize the envoys of the South in the Channel between Dover and Calais? It is by absurdity that absurdity must be met. England has, therefore, the incontestable right of making herself respected, and we will applaud everything that is done to shield that law of nations which is too much disregarded. It appears to us that it is impossible that the great maritime nations should remain indifferent upon a question which concerns all their rights and interests. It will at least be difficult for France to remain indifferent in presence of such a violation of international law. The Northern States will very likely refuse to accede to the demands of England; in that case we may presume that war will be immediately declared, and the first act of hostility will be the recognition of the Southern States. * * * We are convinced that the war between the two countries will be an interminable one, but, on the other hand, we cannot remain idle spectators of a struggle between North America and England. It is quite clear that it is not the duty of France to avenge the wrongs of England, but the recognition of the South by that Power, which would imply a final separation from the United States, could not be regarded as an isolated act, and would impose upon France the necessity of assuming a decisive attitude in this question. The result would be that two great maritime Powers of Europe might be drawn into a common action with the same identical political object; and, that being the case, as we have observed before, President Lincoln, by provoking an act of brutality, may perhaps have acted with foresight by preparing a separation which he can neither propose nor accept. * * * If England recognises the Southern States the Powers must necessarily take such a change into consideration for the sake of their commercial interests, and must desire the termination of the war. If the Southern Confederacy, by its recognition by one of the Great Powers, should enjoy public rights as a nation, the other States would have to consider what attitude such an important modification would impose upon them, and the Cabinet of Washington would bear the responsibility of a resolution which the necessities of commerce and political influence would impose upon Europe."

The *Débats* says:—

"The act committed by the officers of the Federal navy is deeply to be regretted, for while it furnishes a complaint at the least specious to the adversaries of the cause which is represented by the Government of Washington in its struggle with the Southern States, its effect will be to weaken the just sympathies which that cause has deservedly met with in Europe. We hesitate to think that the Government of President Lincoln could have wished to involve itself in a war with England at a moment when all its efforts barely suffice to maintain its struggle with the South. If President Lincoln had really given positive orders to the commander of the San Jacinto to arrest the Southern Commissioners on board the English packet, we do not hesitate to affirm, with the English journals, that it will have committed an act of madness and a complete suicide."

The *Constitutionnel* says:—

"We hope that the American Government will make reparation and satisfy the claims of England. We count upon its doing so in its own interests, which have always served as a guide to its policy. In fact, it is impossible that the Americans should not understand how irregular is the arrest of Messrs. Slidell and Mason on board the Trent, how contrary it is to the law of nations, and how prejudicial the consequences of this act would be to themselves. It would be the consecration of the 'right of search,' against which they have always protested, and which was one of the chief causes of the war they themselves waged with England in 1812—a right of search exercised not only on commercial vessels but on ships of war, for the mail-steamers are Royal vessels, having on board a lieutenant of the Royal Navy, and their officers wear the uniform of the British Navy. By declaring contraband of war simple passengers, with or without a diplomatic mission, the Americans strike a mortal blow against the privileges of neutral States, which it is to their interest more than that of any one else to see respected."

The *Opinion Publique* says:—

"We perfectly understand the deep sensation this event has caused in London; for if the French flag had received such an insult the whole country would have risen as one man to demand striking satisfaction. We have, in fact, always proclaimed respect for a neutral flag, and the national dignity would invincibly make us exact from others the same respect we should pay to them."

The *Gazette de France* says:—

"The affair has been submitted by the English Government to the law officers of the Crown. We Frenchmen, who are accustomed to consult only our conscience in questions involving an outrage on the national flag, cannot understand such formalities, and are bound to say that under such an affront we would fight first, and exchange explanations afterwards. In old times when about to seize upon her guest on board the Bellerophon, to seize upon Perim, to bombard Naples, to compel King Ferdinand to restore the Cagliari, England did not consult the law officers of the Crown, now assembled to decide whether Brother Jonathan was not justified in snatching from a British ship passengers claiming the protection of the British flag."

The *Courrier du Havre* says:—

"A fourth-rate state might submit to force whilst protesting in favour of its right. England cannot do so. She is bound, under the penalty of falling from the high rank she occupies in the world, to take up the matter with a high hand, and do justice to herself. This is for her wholly a personal affair, about which she has no need of consulting her friends or allies; the care of avenging her outraged honour concerns her alone, and if by this unspeakable insult the Federal Government hastens the recognition by England of the Southern Confederacy, it will have no one but itself to blame."

The *Revue des Deux Mondes* expresses its opinion at considerable length, and unreservedly condemns the conduct of the American captain, entertains not the slightest doubt that he acted according to orders previously received from Washington, and considers England bound either to obtain reparation or take signal vengeance for the insult. It bears witness to the moderation and impartiality displayed by England towards America since the outbreak of the civil war, and as a proof of the spirit of fair play which the Washington Cabinet has so ill requited, quotes the recent remarks of Lord Stanley at King's Lynn, in terms of the highest commendation. It expresses a decided opinion that the American Government will make no reparation or apology, and that war is inevitable. It says:—

"Though the motive which led to the aggression on the Trent is wholly unaccountable, we must by no means conclude that that incident will not lead to those extremities which all men of sense must deprecate. It is the peculiarity of revolutionary situations, such as that of Northern America at present, that the Governments are equally unable to control their own actions and the impulses from below which cause them. All the available and characteristic passions of a people become excited at once. Now among the national passions the most deeply rooted in the soul of the American people we must unfortunately include hatred of England, and among the practices of United States' politicians habitual insolence towards England and her policy is unquestionably the rule. Its peculiar organisation renders it subservient to the blindest instincts of the mob, and thus we may account for its wonderful alternatives of unspeakable rashness and deplorable weakness, which give rise to a legitimate fear that it may be led to extremities which its members neither wished for nor contemplated."

The Marquis de Flers, Councillor Referendary to the Court of Accounts, has just been tried under the *loi des suspects*, for having "kept up communications with foreign journals with a view to disturb the public peace and excite to the hatred and contempt of the Government." The communications in question were merely letters from M. de Flers, published chiefly in the *Journal de Genève* and the *Indépendance Belge*. The Court found him guilty, and sentenced him to two months' imprisonment and 2000f. fine. A prosecution has also been commenced against M. Eugène Pelletan for exciting hatred and contempt against the Government of the Emperor by publishing an article in the *Courrier du Dimanche*, under the title of "Liberty as it is in Austria," in which it is insinuated that France would be but too glad to enjoy as much liberty as is possessed in that misnamed despotic country. A man called Collat, *huissier* of the Court of Riom, his wife, and her friend Madlle. Pierrette Legaye, have just been tried before the Court of Assizes of the Puy de Dôme on the charge of having concealed a young Jewess named Sarah Meyer from her parents, for the purpose of converting her to the Roman Catholic religion. The trial occupied the Court for several days, and terminated in a verdict of acquittal so far as the charge of abduction was concerned. The Court, however, sentenced them to pay 3000f. damages to the father and mother of Sarah Meyer.

SPAIN.—On arriving at Barcelona on Saturday, Baron Tecco, the Italian Minister, was received by a numerous body of Spanish, Italian, and French Democrats. His Excellency delivered a speech in which he expressed a hope that Italy would triumph over all her enemies, and that the Italian flag would wave over Venice and Rome. An immense number of persons accompanied Baron Tecco to the quay, whence he embarked for France.

PORTUGAL.—The Infante Dom Augusto continues very ill, and his condition is considered precarious. The French and Italian residents at Lisbon have announced their intention to celebrate public masses for the repose of the soul of the late King. A meeting of British merchants has been held to determine upon an appropriate way of expressing their sympathy. Lord Methuen and Colonel Seymour, with letters of condolence from Queen Victoria, have been received at the palace by his Majesty Dom Luis, and have since returned to England.

BELGIUM.—The discussion on the address was continued on Saturday in the Belgian Chamber of Representatives, when the Church party violently opposed the recognition of Italy. An amendment was moved by the Right tending to throw an indirect censure on the conduct of the Government, upon which a sub-amendment was moved, which confined itself to reserving the neutrality of Belgium, and to declaring that she would continue to abstain from interfering in the affairs of other nations. This amendment was accepted by the Ministers, and carried by 62 votes to 47, giving Ministers a majority of 15. A fearful fire broke out on Monday at the Napoleon Docks, Antwerp. The Belgian sugar refinery and the St. Felix bonding warehouses were burnt down, and 7 or 8 lives were lost. The estimated loss is 5,000,000f. All the insurance offices are severely affected. The forest of Ardennes, for the first time for 20 years, is infested with wild boars, which are daily seen in droves numbering as many as 100 in each.

SWITZERLAND.—The Federal Council has addressed another note to France in reference to the affair of the Valley of Dappes, renewing its demand for satisfaction for the violation of Swiss territory, on the ground of the Federal Commissioners' report. The Federal Council also states in this note that Switzerland will not enter into any negotiations with the French Government under present circumstances.

PRUSSIA.—The plenipotentiaries appointed to negotiate the conclusion of a treaty of commerce between France and the Zollverein held a conference on Friday, which lasted several hours. The Ministers of Foreign Affairs and Commerce were present at the Conference.

AUSTRIA.—The Emperor left Vienna on Saturday evening for Venice, where he intends to remain for eight days. It is rumoured that during the Emperor's stay a meeting of reactionary and retrograde agents, including, it is said, the ex-King of Naples, is to take place at Venice. Dr. Hein, President of the Chamber of Deputies, has been appointed Minister of Justice.

HUNGARY.—All the new functionaries have already been appointed in all the Comitats. The Cardinal Archbishop of Gran will be superseded in his functions as Obergespan of the Comitat of Gran.

ITALY.—In the sitting of the Chamber of Delegates at Turin on Saturday Baron Ricasoli stated that he should shortly lay on the table of the House the documents relative to the differences between Italy and Spain concerning the Neapolitan archives. Signor Massari proposed that a pension of 1000 francs should be granted to every one of the 1000 persons who accompanied Garibaldi in his expedition to Marsala. On Sunday a meeting of the majority of the Deputies, at which the Ministers were also present, was held. Baron Ricasoli gave explanations on the state of Naples and the brigandage in the Basilicata and on the frontiers of the Papal States. He said that, in pursuance of an understanding between the French and Italian Governments, the French troops will energetically co-operate in the suppression of brigandage on the frontiers of the Papal States. He also announced that the Lieutenancy of Sicily would be shortly abolished. In consequence of these explanations the majority of the Deputies present resolved not to concur in any vote of want of confidence in the Ministry which might be proposed by the Opposition. In the sitting of Monday Signor Ferrari said that, by the documents which had been communicated to the Chamber, the Ministry had not solved the Roman question. They had said that Rome was necessary to Italy, but was in the hands of the French; but they dared not draw the conclusion. He urged the Ministry to follow the example of Piedmont after the battle of Novara, when, retaining her arms, she made her provinces so prosperous that other Italian provinces desired to be annexed to her. He then spoke of the brigandage in Naples, and called upon the Government to render an account for the blood that had been shed there. On Tuesday the debate on the Roman question was continued by Signor Musalino, who was called to order by the President for declaring that the French alliance was not a sincere one. On Wednesday the debate was resumed by Signor Rattazzi, who said:—

"It would be unjust to make the Government responsible for the failure of the negotiations relative to Rome and for the disturbances in the Neapolitan provinces. Another Ministry would be in the same situation. I will not discuss the documents which have been communicated to the Chamber by the Government, as it is useless to consider whether the concessions offered to the Church were dangerous to the State, because they have been without any result. Rome is naturally, and will soon really be, the capital of Italy. I am convinced that the French Government desires that the occupation of Rome may cease. It is the interest of France to have a strong Italy as an ally. The French Government is our sincere friend. It recognized us after we had proclaimed Rome as the capital of Italy. Our adversaries are their adversaries." He then alluded to his visit to Paris, which, he said, was of a purely personal character. He denied the malevolent rumours which had been circulated with regard to his intentions. He condemned the proposition of Signor Ricciardi, and said he believed that France would aid the Italians against the brigandage in Naples. He concluded by urging the union of all the constitutional factions."

Signor Rattazzi's speech was received with unanimous applause. On Thursday the debate was resumed by Signor Buoncompagni, who approved the policy of the Government, and said:—

"The path followed by the Government in regard to the Roman question is the one which was recommended to it by a vote of the Chamber. It could not think of acting otherwise than in accord with France, it being necessary that Italy should still have a stranger in her bosom. As long as Venice is in the possession of Austria, Italy will always be at war. We could not obtain Rome without first having Venice. Italy will go to Venice when she shall have an army of 300,000 men."

Two members of the left afterwards spoke against the policy pursued by the Government in the interior. General Bixio was present at the sitting. The law suppressing feudal rights in Lombardy has been adopted. The *Italia* announces that a decree will shortly be published ordering the exchange of the old bonds of the Italian Debts against new bonds of the Consolidated Debt. The Bishop of Potenza has exhorted the clergy to support the national Government. Garibaldi unexpectedly arrived at Genoa on Monday and proceeded to the office of the Central Italian Committee, of which he is the President. He eulogised the work undertaken by the committee, and urged its vigorous prosecution. In the evening a grand demonstration was made in his honour, and an immense crowd of people assembled before the house in which he was staying. Garibaldi appeared on the balcony and made a short speech, in which he said, "With you it must be deeds, not words. At the moment of battle I shall be with you." Another demonstration took place on Tuesday. Garibaldi, in reply to an address from the Italian inhabitants of the Tyrol, said that he hoped for the early deliverance of Italy, for which the people should prepare. On Wednesday, contrary to all expectation, Garibaldi arrived in Turin, but he did not

attend the sitting of the Chamber of Deputies. The Papal Government has addressed a circular to the Bishops of Maritimo, ordering them to afford every assistance to all Bourbonites entering that province. General Goyon arrived at Rome on Sunday, and was received by the Pope. The Marquis de Lavalette, the new French Ambassador, has also arrived at Rome. The *Irpino* of Tuesday announces that 700 brigands had been surrounded by the Royal troops at Romagnano, in the Principato Citra.

RUSSIA.—Letters from St. Petersburgh state that the Emperor of Russia intends shortly to grant an amnesty to all persons implicated in the recent disturbances among the students.

POLAND.—The Marquis de Wielopolski has withdrawn his resignation. There had been great and general agitation in Warsaw, on account of his resignation. General Luders will leave Warsaw very shortly. It is stated on reliable authority that General Bezak will be appointed Governor of Poland. The Council of State continues to discuss the question whether civil rights shall be granted to the Jews in Poland. Notwithstanding the assertions of the *Breslauer Zeitung* to the contrary, perfect tranquillity prevails in Warsaw and throughout the provinces. Personal security is nowhere threatened.

TURKEY.—Mouchtar Effendi has been appointed Minister of Finance in the place of Teffik Pasha. This appointment caused a panic in the money-market, and during the week the rate of exchange rose to 246. Confidence, however, is now returning. A reduction has been effected in the Army Budget to the extent of 25,000,000 piastres yearly.

SYRIA.—It is said that the Porte will replace Fuad Pasha in Syria by one Governor with a political Commissioner.

MONTENEGRO.—Austrian forces entered the Herzegowina on Sunday for the purpose of removing the batteries which had been erected on the Austrian frontier, and of securing free transit through the military road between Klek and Ragusa. After attaining that object they re-entered their own territory. On Monday last 16 battalions of Turkish troops were concentrated at the position taken up by Omar Pasha. Dervisch Pasha, in pursuance of his orders, proceeded to attack the camp of the insurgents at Piva, but found they had fled, after having burnt their camp. Their arms and baggage, however, fell into the hands of the Turks.

INDIA.—By the arrival of the Bombay mail we have accounts from that presidency to the 12th of November, and a telegram has been received with news from Calcutta to the 18th of November. Lady Canning, wife of the Governor-General, died on the 16th ult. Sir Richmond Shakespear died on the 29th October of bronchitis. Lord Canning invested the Maharajahs of Scindia and Puttiala, the Begum of Bhopal, and the Nawab of Rampore with the Order of the Star of India at Allahabad on the 1st November. Holkar and the Guicowar were also invested with the Order on the same day, the former at Indore, the latter at Baroda. The Nizam makes a difficulty of accepting the insignia of the Order, from religious scruples. Lord Canning will signalise the last month of his administration by conceding a fixed assessment of the land revenue in the North West Provinces. He has decided the question of the seat of government there in favour of Allahabad, and has sanctioned the erection of buildings for Government offices. Lieutenant Singer, of the 75th Regiment, has been killed by an armed mob in Nowgong, Assam, while trying to collect the taxes. Troops have been ordered up to restore quiet. The people of Oude, headed by Maharajah Maun Singh and Mr. Menzies, have embarked in cotton cultivation on an extensive scale. Cholera is still raging in Cabool, though not so violently. The victims of the disease were said to be 50 daily.

UNITED STATES.—The principal topic of discussion in the New York journals is the seizure of Messrs. Slidell and Mason, the Confederate Commissioners. The account of the capture, as furnished by the officers of the San Jacinto, agrees in the main with the version given by the commander of the Trent. It is stated that Captain Wilkes, of the San Jacinto, acted in the matter purely on his own responsibility, and that before he committed the outrage on the Trent he searched the French vessel Jules et Marie, a Danish trader called the Jutland, from the Havannah to Santa Cruz; and a Portuguese vessel. The search of the French vessel was effected with such violence that the Frenchman's masts and bulwarks were carried away, and the San Jacinto was obliged to take her in tow to prevent her being wrecked by the current. It is said that on going ashore at Fort Monroe with the Federal Commissioners, Captain Wilkes had an interview with General Wool, and "expressed his opinion that he had done right, and said that, right or wrong, these men had to be secured; and if he had done wrong he could be no more than cashiered for it." On his arrival at New York in the San Jacinto, Captain Wilkes was presented with a resolution, passed by the Common Council, thanking him for "his bold and patriotic conduct in arresting Messrs. Slidell and Mason on board the British steamer Trent, and offering him the hospitalities of the city." Captain Wilkes soon after his arrival was ordered to take the prisoners to Fort Warren, Boston. The Washington correspondent of the *New York Times* states that Lord Lyons had expressed his opinion that Messrs. Mason and Slidell would be given up to England. There is nothing authentic to indicate the sentiments of the Washington Cabinet on the matter, but the Washington correspondent of the *New York Herald* telegraphs that "when the information of the arrest of Mason and Slidell on board of a British vessel was first communicated to the President, he declared emphatically that they should not be surrendered by this Government, even if their detention should cost a war with Great Britain." The New York journals are filled with legal quotations and precedents of the acts of the British Government to prove that the seizure of the Commissioners is no breach of international law. They argue that the steamer Trent was liable to seizure for carrying rebel despatches, and urge that promotion and testimonials should be conferred on Commander Wilkes for his spirited conduct. Mr. Edward Everett, Mr. George Sumner, and other leading American legal authorities, declare the capture of Messrs. Mason and Slidell to be in accordance with international law. The subject, nevertheless, causes a universally uneasy feeling in the public mind in respect to the relations of America with England. The *New York Herald* says:—

"The legal advisers of the Government not only completely justify the proceeding of Captain Wilkes but even furnish authority for the seizure and confiscation of the neutral vessel upon which the rebel ambassadors and their despatches were discovered."

The *New York Tribune* says:—

"Whatever complications may arise from the arrest on board a British ship of the Lord High Commissioners of Secession to the Great Powers of Western Europe, it is certain that the faces of loyal Americans broadened into a universal grin at the intelligence of their capture. But what will Great Britain say to the taking of these two would-be envoys by force from one of her merchant vessels? We do not know, and do not greatly care. We shall endeavour to say nothing on the law of the case that may even seem calculated to forestall or embarrass the action of our Government. If Great Britain demands the liberation of these gentlemen, and reparation for their capture, we propose to sustain such response as our Government shall see fit to make."

The *New York World* says:—

"Should England, following her custom of interpreting international law to suit her own convenience, complain of the insult offered to her flag by the San Jacinto, two modes suggest themselves of disposing of the prisoners taken from the Trent. Either they might be landed by a national vessel at their respective destinations, with whatever diplomatic dignity and influence chanced to survive the ridicule of their capture and release; or the Government might follow in every point the precedent set in the case of the Chesapeake and Leopard, by hanging its deserting subjects first and making amends to the insulted Power afterwards."

The *New York Times* says:—

"We do not believe the American heart ever thrilled with more genuine delight than it did yesterday, at the intelligence of the capture of Messrs. Slidell and Mason. The only mistake Capt. Wilkes committed was in not seizing the ship from which he dragged the traitors. . . . We have not the slightest idea that England will even remonstrate. On the contrary, she will applaud the gallant act of Capt. Wilkes, so full of spirit and good sense, and such an exact imitation of the policy she has always stoutly defended and invariably pursued. There is, consequently, no drawback whatever to our jubilations. The universal Yankee nation is getting decidedly awake. . . . As for Commodore Wilkes and his command, let the handsome thing be done. Consecrate another Fourth of July to him. Load him down with services of plate and swords of the cunningest and costliest art. Let us encourage the happy inspiration that achieved such a victory."

The *New York Journal of Commerce* says:—

"It was a pure act of mercy that the American commander did not bring his ship and cargo into our ports, and condemn them in an Admiralty Court in America. The right to do this implies the right to take out of her despatches and their bearers, as well as any soldiers or civilians found on board in the service of our enemy. It is an act of grace that the British merchantman has been allowed to go to England, and it is far from likely that England will bother herself with any complaint from her commander, who escaped with his vessel and cargo from the fate of which the Queen's proclamation warned him."

It is stated that the seizure of the Trent is but the first of a series of similar acts; that steamers are fitting out at New York for the express purpose of committing similar outrages upon our flag; that they have been designedly intrusted to the command of "young officers;" and that these "young officers have been authorised to exercise great latitude in the execution of their instructions, and have received assurances in advance of the support of the Government." Besides Messrs. Mason and Slidell the Federal Government has seized Messrs. Gwin, Brent, and Benham—three California Secessionists, who were on their way from that State to join their associates at the South. They were taken on board the Orizaba, while passing from San Francisco to Panama, by a military force under General Sumner, who disregarded the protest of the New Grenadian authorities against the violation of their neutrality involved in their being conveyed across the Isthmus. It is stated that the New York detectives had seized a large number of private letters, despatches, bills of exchange, draughts, &c., which had been sent after Messrs Mason and Slidell, from Havannah to New York, to follow them to Europe. The Secretary of War has notified to the Government of Maine that an officer will immediately be appointed to report on the sea coast defences of that State. The Federal troops are reported to be in full possession of Accomac, Northampton County, on the eastern shore of Virginia. Mr. Smith, Federal Secretary of the Interior, has disavowed the policy endorsed by Mr. Cameron, Secretary of War, of putting arms into the hands of the slaves, declaring that such is not the policy of the Federal administration. Twenty-five vessels, which are to be sunk at the entrance of a Southern harbour, have sailed laden with stones. General M'Clellan reviewed 70,000 men at Washington on the 20th inst., being the largest body of troops ever reviewed on the American continent. General Halleck has issued a proclamation, notifying that no more fugitive slaves will be allowed to enter the Federal camp, as they have carried valuable information to the enemy. Mr. George Francis Train has addressed a letter from London to the *New York Herald*, declaring that a number of vessels are fitting out at English ports with ammunition for the South. He makes a violent attack on the British Government, and declares that England's neutrality is contemptible. Governor Jackson and the State Legislature of Missouri have passed a secession ordinance. The Confederates have burnt Warsaw, Missouri, in order to prevent the Federals making winter quarters there. The Union men of North Carolina have established a provisional state government at Hatteras. Governor Pickens, of South Carolina, in his message to the Legislature of that State, recommends that the Confederate Government be not allowed to "tamper with produce," in order to raise its support. He desires that Fort Moultrie should be kept by the State of South Carolina. He expresses doubts of the endurance of republican institutions, and looks to "the stronger forms of the Old World." Southern accounts report that Fort Pickens, assisted by two Federal steamers, has opened a bombardment on Pensacola. The rumour of the capture of the Sumter privateer is not confirmed, and the British screw steamer Fingal, alleged to have been taken into Key West, was the Confederate steamer Salvor. The British schooner Adelso, which brought a cargo of naval stores out of Wilmington, North Carolina, and put into Newport, Rhode Island, in stress, had been condemned, together with her cargo. The British bark Deobey (?), which arrived at New York for provisions, has been seized for an alleged violation of the blockade. The French frigate Bellona arrived at New York on the 21st ult., and the British frigate Immortalité arrived at Port Royal on the 18th ult. Mr. Jefferson Davis has been elected President, and Mr. Stephens Vice-President of the Confederate States, for a term of six years. President Davis has delivered his message to the Confederate Congress. It is most determined in tone, and states that, after seven months, the Federals have failed to extend their occupancy of Southern soil, and at many points have been driven to act on the defensive. It says:—

"The military means and the financial condition of the Confederates are stronger now than at the commencement of the struggle. It praises the people of Missouri, and defends the occupancy of Kentucky. The Confederate financial system is stated to have worked well, and to promise good results for the future. The system of issuing treasury notes," continues the message, has "fully answered the expectation of the Confederates, and if they husband their means, and make judicious use of their resources, it would be difficult to fix a limit to the period during which the Confederates will be able to carry on the war against the Federals. The reconstruction of the Union, which the Federals seek to effect by force of arms, has become more and more palpably impossible. The causes which induced the separation not only remain in full force, but have been strengthened. The Confederates shrink with aversion from the bare idea of renewing connection with the North. The South will be content to live at peace with the North, but the separation is final. The South will accept no alternative." President Davis then informs the Congress that Messrs. Slidell and Mason, commissioned to represent the Confederacy abroad, had being seized while under the protection and within the dominion of a neutral nation, and says:—"The claim of the United States to seize them in the streets of London would have been as well founded as the seizure on board the Trent. Had they been malefactors, their arrest could not have taken place on board British ships except according to the law provided for the extradition of criminals. The Confederates asked no aid from foreign powers, but perhaps had a right to inquire if the European doctrine that the blockade to be binding must be effective was to be generally applied, or only in particular cases. Evidence will be laid before the European Government of the total inefficiency of the blockade."

MEXICO.—Advices from Havannah to the 15th ult. state that the Spanish fleet had not started for Mexico. The *Morning Post* of Saturday states that the Mexican Government, alarmed at the naval expedition which has been sent out to enforce our claims, has agreed to a convention conceding all our requirements. It says:—

"We are to have compensation for outrages, the repayment of money stolen, and the fulfilment of the engagements which the Mexican Government has by treaty stipulated towards the bondholders. We shall not however accept the proffered satisfaction; and our fleet, with those of France and Spain, will proceed to seize upon the ports and custom duties of Mexico. We shall not trust the faith of Mexicans, not even when they bring peace-offerings. The intervention in the affairs of the Republic will therefore pursue its course, and we shall make assurance doubly sure."

Public Addresses.

EARL DE GREY AND RIPON, as Under Secretary for War, on Monday evening distributed to the 19th Middlesex, or Working Men's College Corps, the prizes they have won at the Government range in Plumstead Marshes, and in so doing made the following remarks on the Volunteer Movement:—

He looked upon these contests as a most important and valuable result of the Volunteer movement, and he was happy to learn that the result of this particular contest proved that the 19th Middlesex was fully able to hold its own in this respect with the other Volunteer corps throughout the country. He sincerely congratulated those who were winners, not merely because they were winners, but because by their devotion to a noble science—for science it was—they had made themselves good shots and had put themselves in a position to do good

service to their country should an emergency arise. He did not look upon the mere money value of the prizes as being a matter of any importance. If their funds had been expended in promoting the practical efficiency of the corps in other ways, it had been much better spent than in the purchase of more costly prizes, and he was sure every true Volunteer would value the prize he received not as representing so many guineas, but because it was a witness of the proficiency which he had attained to among his comrades. He hoped that those who were among the vanquished would not relax in their efforts to make themselves good shots; for though there might be many occasions in war in which great services might be performed by good shots, yet in ordinary military operations the effective value of a battalion would not be measured so much by the shooting of the prize-winners as by the average shooting of the whole body of men. When the Volunteer movement began, there were many persons who not unnaturally at the time said that if too much attention were paid to these contests they would take the place of other equally important parts of the duties of Volunteers, and that, while they were labouring to make themselves good shots, they would forget the no less urgent part of their instruction comprised in the short word 'drill.' He was happy to believe that that anticipation had not been fulfilled in the case of the Volunteers generally. They had attained a great proficiency in rifle shooting—in fact, they might be said to have changed in that respect the character of our countrymen. Three years ago when the movement commenced, we were a nation which had very good shots, but we might now claim to be equal in that respect to any other nation in the world. But it would have been a great mistake if that proficiency had been obtained by the sacrifice of attention to those military formations and movements which were essential to their efficiency in the field. He was happy to know that that was not the case generally with the Volunteers, and with regard to the 19th Middlesex he had ascertained before coming there, from the highest authority, that he should be perfectly justified in speaking in high terms of their proficiency both in company and battalion drill. He hoped that while they still continued to labour to make themselves good shots they would bear in mind the importance of drill. The amount of service they might do the country would depend not on the possession of cups and medals, but on the attention which they had paid to this branch of their duty. He would also impress upon them the great value of that general discipline without which, as had recently been seen, any body of armed men would become a mere rabble. He did not wish to sing the praises of what some people called "pipe clay," or to expect from them that perfect regularity and precision which could only be attained by a regiment of the regular army, constantly and exclusively devoted to military exercises; but there were certain general principles of discipline and subordination without which no body of men partaking of a military character could ever be thoroughly efficient. So long as they remembered that those under whose command they served were entitled to their obedience in military matters, and to their respect on all occasions, they would every day become more and more capable of taking part in the noble work of national defence which they would inevitably be called on to undertake should danger ever threaten our shores. The Volunteer movement was a great social as well as military movement; it was one of the most useful and elevated ideas which had ever animated the people of this country, but half its value would be lost if it did not teach men not only how to shoot, to march and manœuvre, but also those principles of discipline which were as valuable in civil as in military life. In conclusion, he said, "I thank you, gentlemen, for having invited me here to-night, and I am glad to meet face to face a body of men who I am sure are animated by a determination that in no quarter of the world, whether north or south, east or west, shall the flag of England ever be insulted." [This allusion to the great topic of the day was received by a loud burst of cheering from all parts of the hall.]

MR. BRIGHT, M.P., at a dinner given to him by his fellow-townsmen at Rochdale on Wednesday evening, spoke as follows on American affairs:—

"The war in America was one of the highest interest to England and humanity at large. 85 years ago they were colonies sprung from this country, and already numbering a population of 3,000,000 souls. A year ago they were the United States of America, and comprised 30,000,000 of people. In agriculture and manufactures no country in the world except our own could be placed in comparison with them. They were equally distinguished for their inventions, their enterprises, their schools, their prisons, and their religious establishments. The public expenditure of these United States was 23,000,000*l.* a year, and they were able to boast an amount of comfort, prosperity, and abounding plenty such as no other country in any age has displayed. But there was another side. While this country secured the utmost liberty for the white population, it held the black population in bondage and degradation. England sowed the seeds of the slavery system. Jefferson two years before the Declaration of Independence issued a protest against the conduct and policy of the English Government in preventing the colonists from forbidding the importation of fresh negroes from Africa. Ultimately every State was left to legislate on slavery for itself. But the growth of cotton has increased since that time, and become an article of value to an extent which no man dreamt of when Jefferson wrote. And this cotton, cultivated under the slavery system, now threatened the overthrow of that which is a million times more valuable—the great Republic of the United States. Newspapers say the question of secession was much like that which occurred when the colonies revolted against the mother country. The question in 1780 was whether a corrupt Ministry in Downing Street, and a boroughmongering Parliament in Westminster, should tax 3,000,000 unrepresented colonists without their consent. Now, the representation of the South in the American Legislature was not only complete, but in excess. Three out of every five slaves are counted as white men, and the consequence is that the South has returned about 20 more members than it had a natural right to do. This shows that there was no similarity between the two cases. Another reason for the secession alleged on this side is the protective tariff. No American, however, attributes the dissolution of the Union to that cause. The South has been dominant during the whole period since the Declaration of Independence, and the tariff has existed during that time. There have no doubt been occasional symptoms of dissatisfaction, but when Congress met, a twelvemonth ago, to discover how the Union could be maintained, among all the compromises suggested the question of the tariff was never referred to. Whatever the influence of the tariff may be, it must also be remembered that it is as pernicious to the West as to the South, but the West has not seceded. The question is not one of Protection or Free Trade. It is of a different and graver character. For 30 years slavery has been constantly coming to the surface as the difficulty of American politicians. The object of the South in seceding is to escape from the votes of those who wish to limit the area of slave territory. What course should England pursue? We should be neutral. We were neutral in Italy, but were not neutral in sympathy; and, although no English ships or soldiers appeared on the shores of that country, the sympathy of England was spoken of in Europe, and did much to aid the establishment of the free Italian kingdom. We had not given a similar cordial sympathy to the people of the Northern States of America, although one or two statesmen, as, for instance, the Duke of Argyll and Lord Stanley, had spoken with liberality, fairness, and friendliness of the United States. Earl Russell however at Newcastle had misrepresented the question when he said that the North were contending for empire and the South for independence; and the leading journal, since Mr. Lincoln took office, had not published one fair, honourable, and friendly article on American affairs. It was asked, "Why should there be war? why this fratricidal strife? Why should the North and South not separate peaceably?" He thought there were insurmountable geographical obstacles to a separation as well as strong political objections. If the Northern States had done what some newspaper writers advised, and had allowed the South to withdraw from the Union without making any effort to retain them, we should have been told that Democracy was a failure, that the Northern Government was guilty of cowardice and worthy only of unmeasured contempt. These candid friends tell us American freedom is gone, the Habeas Corpus Act has been suspended, and other laws and liberties have been endangered. But had not we suspended the Habeas Corpus Act during the Irish Rebellion of 1848, and if an insurgent army ever encamped within sight of London what regard would Government have for the personal liberty of the subject in any measures they took for securing the safety of the State? We are told that it would be better for us if the United States were divided, and Sir Edward Lytton had predicted that there would ultimately be four or five separate nations or federations. The former he considered a mean argument, and as for the latter, he would far rather see the whole of that vast continent combined in one great federation of States where there would be no Custom Houses, but freedom everywhere, equality everywhere, law everywhere, and room for the expanding energies of our race. Referring to the seizure of the Confederate Commissioners, he said he considered the act both impolitic and bad, but it might turn out to be wholly unauthorised by the American Government, and in this case there was no doubt they would make ample reparation. No Government had evinced a greater desire to be guided by wise and moderate counsels in the construction of cases under the maritime law. It was said this was only one of a series of acts showing ill-will on the part of the North. There would be irritating accidents in the course of this struggle. Let us be calm. Recollect how we were dragged into the Russian war; we drifted into it. It cost 100,000,000*l.* It cost the lives of 40,000 Englishmen. It injured our trade; it doubled the armies of Europe, and it did not accomplish a single thing that was promised. Statesmen now said, in exculpation, 'What could we do in the frenzy of the public mind at that time?' Don't let them add to the frenzy, and don't let us be driven." He then read an extract from General Scott's letter, which was loudly cheered, and concluded by reminding the meeting of the large number of English people who have emigrated during the last 15 years to the States. "Only misrepresentation the most gross, or calumny the most wicked, could involve in war a people with such close ties. In a few years the 20,000,000 free men in the North will be 30,000,000, or even 50,000,000. He prayed it might not be said among them that in their darkest hour of need the English people, from whom they sprung, had looked with icy coldness on the trials and sufferings of their terrible struggle."

MR. COBDEN, M.P., being unable from ill health to attend the dinner given to Mr. Bright at Rochdale on Wednesday, addressed a long letter to the chairman, of which the following is a summary:—

"As regards the seizure of Messrs. Slidell and Mason, he urged the propriety of suspending a final judgment on the subject until we had had time to hear whether the American Government had authorised the act of their naval officer, and, if so, on what ground they justified the proceeding. It had been assumed in certain quarters that when our legal authorities have given their opinion on the point at issue the question was settled, and that we have only to proceed to enforce the award. But the matter in dispute must be decided, not by British, but international law, and if the President's Government should assume the responsibility of the act of their naval officer, they will claim for the reasoning and precedents of their legal advisers the same consideration which they are bound to give to the arguments of the British law officers. Whatever the issue of the legal controversy, however, we could not hope to bring the question to a more satisfactory issue by an appeal to arms. He urged complete revision of the International Maritime Code, especially as regards merchant vessels in time of war, and concluded by expressing his belief that any interference by England or France in the affairs of America, whether by breaking the blockade or prematurely acknowledging the independence of the South, would only aggravate and protract the quarrel. A servile war might be kindled in the South, leading ultimately, perhaps, to the destruction of the cotton plant itself throughout the Southern States of America."

THE RIGHT HON. W. COWPER, M.P., presided on Monday at a public meeting held in the Shire Hall, at Hertford, for the purpose of presenting prizes to the candidates examined in connection with the Society of Arts, and spoke as follows on the subject of Education:—

"The necessities of labour were so great as to allow but a short time for instruction in schools, and if they desired to have an educated population it must be by means of what conventionally was termed self-education—education at home. It might, however, be said that if self education was all that was required, there could not be any necessity for all this apparatus of boards and examiners, but that self education might be left to itself uncontrolled and uninterfered with. In answer to such a proposition as that they had only to point to the extremely limited and confined range of self-education. They had only to consider how exceedingly difficult and dreary it must be for a young man in his own room in the evening to pursue his study of arithmetic, geometry, trigonometry, or history, without the stimulus of sympathy or competition, without the direction of teachers, without any authoritative decision as to where he had succeeded or where he had failed. They must feel that self-education without any assistance, except in some very rare instances of strong will and great application, would be a most inefficient and insufficient means of education. He was quite sure that the adults for whom these examinations were instituted were persons who deserved as much care, assistance, direction, and support as any other class of persons who were pursuing a course of education. Education was not now a matter which could be left entirely to those who needed it. It was not like a commodity or merchandise that could be left to the ordinary action of supply and demand, or to the self-interests of producers and consumers. As a general rule the persons who most needed education were sure to be the least aware of that need, and those teachers who would supply education upon trade principles would be certain to offer an article which was inferior, if it was worth having at all. Education in this country had, from the earliest times, been a subject in which persons who took a deep interest in the public welfare had thought themselves bound to interfere and assist, not merely in respect to the primary schools, which have been brought into existence by private benevolence or by grants of public money, but in respect of all our public schools; for not only had our grammar schools been founded by the benevolence of our ancestors, but even those schools in which the highest classes of the community are educated are schools which owe their origin to charitable endowments. All our great public schools, all our universities, have been founded by the wisdom, the benevolence, or the charity of great personages or private individuals. Eton was a Royal foundation; Harrow was founded by wealthy and benevolent individuals; Westminster School was a Royal and ecclesiastical foundation; Rugby was a charter house; and they knew very well that the universities of the country were not the spontaneous growth of supply following the demand for education, but that, on the contrary, they preceded that demand, being founded in times when education was not appreciated, and they alone possessed that learning which afterwards they enabled other people to enjoy. He said, therefore, that it was necessary that self-education should in like manner receive assistance. If our national wealth consisted, not merely in the productions of cotton or of agriculture, in the various branches of manufacture in which we were pre-eminent, but rather in the mental energy and moral character of the race generally, surely it was one of the most important of our national duties to assist the youthful generation in cultivating their understandings and developing their faculties; and that was a work which ought as much to occupy the attention of the statesman and the minister of religion as the political economist or the philanthropist. In alluding to this question in a national point of view they must feel that England was a very small country among rivals and competitors. She could not bring so large an army into the field as many other continental nations, and therefore, as she could not hope to excel in the magnitude of her armaments or the extent of her population, she must endeavour to do so in the intelligence of the people, by their superior energy and moral character and by all those qualities which tended to make a great nation. It was certainly one of the fortunate results of the great improvement that had been made in the weapons of war that intelligence was more brought out than on any previous occasions, for the very weapons which were put into the hands of our soldiers—the Enfield rifle, for instance—were weapons which could not be used with any advantage by an uninstructed man. In point of fact, they would be worse than useless in the hands of a stupid, dull, ignorant person. Therefore, even our common soldier required to be educated to a higher degree than had ever previously been attempted. That was the case with all branches of our national industry. Day by day it was more requisite that intelligence should be developed—that men should be taught to think as well as to act—that they should all have the best instruction given to them and the greatest amount of assistance that could be supplied. Examinations of this kind, he believed to be the very thing that was required for the self-education of the working and middle classes, who had already left school, but who desired to improve their minds and make themselves more useful in the ordinary occupations of life. What, then, were the means by which that education could be aided? They might be divided into two classes—a supply of good teaching and a test of the results of the teaching. In the Privy Council system they had already obtained the most admirable results during the last 15 years. The Privy Council system supplied certificated masters and pupil-teachers, and at the same time it supplied a most admirable and competent system of inspection which ascertained the results of teaching in schools, both with regard to the instruction itself and the manner in which it was tested. In our universities, in the same way, not only was there good teaching supplied, but such an opportunity of obtaining degrees, fellowships, scholarships, as must inevitably test the quality of the instruction previously given. At the same time it directed the course which education should follow, and the aim to which it should be directed. The class of persons under consideration to-day had the means of inspection provided for them by such institutions as the Mutual Instruction Society; they also possessed free libraries and evening classes, all of which were useful in enabling them to enter into competition for these examinations. Then the examinations themselves were a means of testing the results, and in that point of view their value could hardly be overrated. These examinations enabled young men who had been studying by themselves to ascertain, first of all, what they knew; and, secondly, what they thought they knew, but found when they were examined that their knowledge was really of a very superficial character, or more properly speaking, perhaps, nothing at all. These examinations, then, directed the studies and developed those powers that lay dormant in the minds of the people, and they also enabled persons to test the value of the instruction received, and its applicability to the ordinary concerns of life. Nobody could be insensible to the advantage of being regarded as sensible and well educated, and they could not do better than to work steadily on in some particular branch of knowledge, and they could not in the end fail in obtaining a certificate in that branch, while if they chose subjects of study which had an actual bearing upon their occupation in life, that study and application would prove of the highest possible benefit to them. The progress of education in the lower and middle classes was a matter of the most vital importance to the public generally, and employers could find no better means of stimulating it than by asking young men who came to them for employment whether they had passed these or kindred examinations. By doing this they would help on the cause of education most wonderfully. They need not be afraid that because young men who offered themselves were educated that they would be what was termed above their business. He knew that there was an old prejudice existing in the minds of some persons that the only valuable man for work was the plodder—the man who never looked beyond the vista of the shop door, and scarcely across the counter; but experience had proved the contrary, and it had been shown over and over again that youths who had exerted themselves to compete with others were the very youths who by their energy and perseverance were most likely to succeed and prove of the greatest value to those who employed them."

MR. NEWDEGATE, M.P., at the Annual Dinner of the Rugby and Dunchurch Association spoke as follows on Education, Reform, and the American dispute:—

"He was happy to find that throughout the length and breadth of England, and at meetings of every agricultural association, those general topics which are so interesting to every Englishman were now discussed by those who were closely connected with the land, and who more than any other class were interested in the well-being of the country. He rejoiced at this the more because that forced reticence which prevailed for years at meetings of agricultural societies was used against the body of which they formed so worthy a part by those who would imply some inferiority of intellect and education as the characteristic of the agricultural mind. He was happy to find that that delusion was dispelled. The truth was that among no class in the United Kingdom had education made such rapid strides in the last 20 years as among the agricultural classes. Every day the feeling was spreading among their fellow countrymen that their opinions were entitled to respect, and that on these grounds The evil of the present day was that occurrences succeeded each other so rapidly that, such was the pressure of business on the minds of the other classes, they are replete with subjects of meditation which they had scarcely time to reflect upon. The great characteristic of agriculturists was this, that their minds were fresh, and their occupations such that, though they might read less perhaps than any other

...ess they had more time to deliberate and mature opinions ... what they did read. He felt and appreciated the importance ... fresh mind, and contended that no mind was so benevolent, ... qualified for consulting upon an important point, as that ... the agricultural class of this country. The question of ... Reform had been again agitated, and he had been asked to ... express his opinion on that topic. On this subject, however, ... had expressed his opinion three times last Session. Mr. Bright had written to the Reform Association to say that all that was needed was popular excitement. Now he would humbly tell Mr. Bright that something more was required than popular excitement. What was required was that a measure should be introduced, the chief element of which should be that the great majority of the people of this country should be relieved from their present gross inferiority in the direct representation, which was represented by the fact that beyond the limits of the boroughs there was a population of 10,495,000 persons represented only by 159 members, while within the boroughs there was a population of 7,431,000, represented by ... members. He adduced these facts at their meeting in 1858, and he acknowledged that these figures were based on the census of 1851. But at the close of last Session he moved for a return founded on the census of 1861, and he believed the figures were but little changed. He would say to those who were now agitating for reform, 'You must meet this gross anomaly in the representation of the people; you must propose a remedy for the present gross inadequacy in the representation, or no general feeling in favour of reform will be elicited.' The fact was, the last Reform Bill was talked to death. The truth was, in 1858 the public mind was not educated on the subject, and Parliament was not prepared with such information as would enable it to deal with the question. Still, the discussions which took place elicited two or three important facts—that if the county franchise were reduced to 10*l.* those qualified under the 10*l.* franchise would utterly swamp the forty shilling freeholders, the representatives of property and labour. Another fact was that the 10*l.* householders in boroughs have a dominant power in the House of Commons, and the only effect of merely reducing that qualification by one half would be to transfer that domination to a less educated and a less intelligent class. These were the facts which had been elicited, and when they saw that no excitement prevailed upon the subject of reform, that was not merely brought about by the contentment of the people, but by the fact that of late years no measure of reform had been introduced that would give to the residents beyond the boundaries of the boroughs any remedy for the present inadequacy of the representation. He was a Conservative, and he believed that the reason why they had no dangerous revolution in this country was that Pitt—that great and wise statesman—prepared the way for a reasonable change by raising the question of Reform at the commencement of the present century, and by showing that the representation of the people was a principle, but that the principle by which it should be brought into action was a question of detail, and that that principle should be from time to time modified to meet the altered circumstances of the country. Grey followed Pitt and took up the question of Reform, and continued the education of the public mind on that subject until he was enabled to secure the passing of the Act of 1832. He was glad the question of Reform had been discussed, because he desired a re-adjustment of the electoral system; and he saw in all that had passed, and the course the discussion of that question had taken, a preparation which would enable them to hope for such a change as would enable them to perpetuate the stability of our institutions. In regard to the American war, he was sure they had all seen in the newspapers of that day the announcement of a summary act which the Federal Government had ventured to perpetrate in arresting the progress of a British mail steamer and exercising the right of search and taking persons from under the protection of the British flag. They had seen that fact, and he would not then express any opinion upon the question of international law involved. Suffice it to say that it appeared that England in former years had exercised the right of search herself, and it appeared that the right of search to some extent was essential to naval warfare; but how this act could be reconciled with international law as it exists now, since the stern resistance of the Americans themselves to the right of search in order to prevent the slave trade,—how far the international law had been modified by the conferences at Paris and recent treaties, he would not pretend to say. But this he would say, that the English Government would deeply consider before they undertook retaliation, and that the English people would be patient until they were clearly informed whether our flag had been insulted or not. If it had been insulted, he trusted the retaliation would be ample. But he had a most friendly feeling towards the American people, he had travelled among them, and he owed his life to one of them, who took him in when he was injured; and, if his voice could reach the American people (and they lived not ... in fear of the States), he would say to the people of the Federal States, 'Don't be offended; it is not Tom Sayers now that is disabled; it is Heenan. By the secession that has happened you have lost a great part of the strength that was yours before the disunion took place.' And he would say to the English people, 'Wait till it is quite clear that it was the purpose of the Northern States to offend your dignity and insult your flag;' but if such was the purpose, he trusted that the whole spirit of England would break out, and that that effect would be given if it necessary for the vindication of our power, which alone was sufficient to secure the permanent safety of our wide extended empire—extended and honoured as the result of our free institutions. It appeared to him that the position of England was this—we have stood by as a neutral while these contending parties have been engaged in active strife; and if a man stands by while two fellows are having a match he must not take it hard if he gets a black eye, unless he is sure that the blow was given with the intention of insulting him. He trusted they would be sure of that before the power of England was used against a people of the same blood and origin as ourselves. He then adverted to the effects of the new French treaty and its prejudicial effects upon the riband and watch trades of Coventry, many thousands of persons in which place and the surrounding districts, he said, would have perished last year, but for the liberal response of her Majesty and the public to the appeal on their behalf. He expressed a hope that the treaty would at an early day receive such modifications as were needed to remedy its present defects. In conclusion he alluded at some length to the Educational Minute, and to the church-rate question, and expressed his conviction that the time had arrived when the last might be satisfactorily settled."

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 89⅝ to ⅞ for Money, and 89⅞ to 90 for the 9th Jan.; Bank Stock, 234; Three per Cents. Reduced, 89¾ to ½; New Three per Cents., 89⅝ to ⅛; Thirty Years Annuities, 1885, 15½; India Five per Cent. Stock, 101¾ to ½—101 to ⅜, ex div.; Ditto Four per Cent. Debentures, 1864, 98⅜; Exchequer Bills, March, 13*s.* to 15*s.* pm.; Ditto June, 18*s.* pm.—FOREIGN: Brazilian Four and a Half per Cents., 1860, 87 to 85, ex div.; Chilian Six per Cents., 100; Danish Three per Cents., 1825, 81½; Mexican Three per Cents., for Acct., 26⅜ to ⅝; Sardinian Five per Cents., for Acct., 78, ex div.; Committee's Certificates, 5¾; Turkish Six per Cents., 1854, for Acct., 76 to 75½; Ditto, 1858, 67½; Ditto for Acct., 67 to 66; Ditto 100*l.* Bonds, 70; Ditto Guaranteed Four per Cents., for Acct., 101½; Venezuela Three per Cents., for Acct., 21 to 20½.

Gazette of the Week.

FRIDAY: *Nov.* 29—BANKRUPTS—DAVID ASPINALL, Huddersfield, Journeyman Slater—JOHN ANDREWS, Horsham, Sussex, Miller—JOHN AUSTIN, Newcastle, Glamorganshire, Carpenter—WILLIAM HENRY ABLETT, Lee, Kent, Commission Agent—GEORGE EBENEZER ALLEN, St. James's Terrace, Southgate Road—DANIEL BATES, Thoroton, Nottinghamshire, Miller—L. BROWN, Pembridge, Herefordshire, Surveyor—W. BEHNES, Osnaburgh Street, Regent's Park, Sculptor—H. BAYLISS, Birmingham, Draper—R. BELL, Alnwick, Northumberland, Fishmonger—G. BARNSLEY, Bradbourne, Derbyshire—S. BRAND, Liverpool, Licensed Victualler—H. J. BUTCHER, Great Yarmouth, Agent—A. BEATER, F. DENNANT, and J. RUSS, Aldermanbury, Warehousemen—F. B. BIGGS and H. P. BIGGS, Willesden, Farmers—W. J. BROOKS, Aldersgate Street, Baker—Rev. R. W. BELT, Brompton Row, Clerk in Holy Orders—J. BANNISTER, Liverpool—W. BURTON, Halifax, Yorkshire, Box Maker—N. BRUCE, Staines, Middlesex, Tobacconist—S. BARNES, Lowestoft, Shoemaker—C. BARTHOLOMEW, Bristol, Chemical Manufacturer—T. CALVERT, Exeter, Professor of Music—J. COWLEY, Landport, Hampshire, Cattle Dealer—R. CAMPION and E. H. JONES, Wolverhampton, Druggists—C. CORNWELL, Great Hermitage Street, Wapping, Milk Dealer—J. C..., Great Berkhamstead, Hertfordshire, Labourer—G. COZENS, Langport, Somersetshire, Cattle Dealer—W. CURREY, Bolton-le-Moors, Lancashire, Photographic Artist—R. CHALKLIN, jun., Forest Hill, Kent, Carrier—W. COLEMAN, Northampton, Baker—J. DUERDEN, Blackburn, Lancashire, Fish Curer—J. DORMER, Caversham, Oxfordshire, Builder—T. DOBSON, Blackburn, Lancashire, Journeyman Plasterer—GEORGE DIMOND, Gosport, Hampshire, Dealer in Stationery—T. DALY, Woolwich, Journeyman Blacksmith—T. ETHERINGTON, Kirkdale, Liverpool, Servant to a Team Owner—P. ECKHAUS, Gresham Street, Importer of Jewellery and Fancy Goods—O. EDWARDS, Liverpool, Joiner—J. G. EARDENSOHN, Mincing Lane, Wine Merchant—F. G. FIELD, Barnsley, Yorkshire, Shoemaker—W. FINCH, Fyfield, Essex, Innkeeper—T. GARWOOD, Bury St. Edmonds, Suffolk, Innkeeper—W. G. GIBBONS, Upper Whitecross Street, St. Luke's, Journeyman Cabinet Maker—J. J. GIBSON, Kilburn Terrace, Commercial Road, Peckham—G. GIOVONNOVICH, Manchester, Merchant—E. GREENHOUSE, Kingsland, Herefordshire, Maltster—G. W. HUTCHINSON, Basinghall Street, Accountant—J. HARRISON, Cain Place, Kentish Town, Corn Merchant—R. HAWKINS, Huntspill, Somersetshire, Farmer—H. HUMPHREYS, Hendy Towyn, Merionethshire, Merchant—H. HUNTER, Walsall, Staffordshire, Draper—T. HILL, Lee, Kent, Builder—G. HARVEY, Leigh, Essex, Plumber—T. HAILD, Manchester, Job Dyer—F. HUTCHINSON, Elton, Lancashire, Grocer—D. P. HARDY, Grantham, Lincolnshire, Milliner—G. HEPPENSTALL, Sheffield, Steel Converter—R. HOLDEN, Preston, Lancashire, Brazier—C. HEMMING, Birmingham, Cabinet Maker—H. HENRIONNET, Oakley Square, Regent's Park—T. HARRIS, Wolverhampton, Provision Dealer's Assistant—J. HOARE, Piccadilly, Tobacconist—J. HALFORD, Nicol Square, Hackney, Auctioneer—A. JACKSON, Bradford, Yorkshire, Lodging House Keeper—E. JARVIS, Registrar's Office, Chancery Lane—G. JOHNSON, Northampton, Shoe Factor's Assistant—J. JEPSON, Sheffield, Grocer—J. L. JONES, Ruabon, Denbighshire, Machineman—L. M. A. JAMES, Burton Street, Eaton Square, Lodging House Keeper—WILLIAM KEYLOCK, Ironmonger Lane, Commission Agent—GEORGE WILLIAM KING, Portsea, Hampshire, Butcher—WILLIAM ALEXANDER LAW, Mercer's Terrace, Stepney, Commercial Traveller—H. LUFF, Roundhurst, Sussex, Farmer—G. W. LOCK, Liverpool Street, King's Cross, Surgeon—W. LUMLEY, Oldham, Lancashire, Journeyman Mechanic—J. S. LISTER, Bilston, Staffordshire, Timber Merchant—E. LEE, Oxford, Corkcutter—J. F. LOCKETT, Brunswick Cottages, Hackney Road, Butcher—E. LEES, Halifax, Yorkshire, Innkeeper—T. LAMPIN, Oxford Road, Norwood, Lime Merchant—W. F. MARSHALL, Shipley, Yorkshire, Reed Maker—F. MILNES, Kirkheaton, Yorkshire—W. MITCHELL, Landport, Hampshire, Veterinary Surgeon—J. MATHER, Warrington, Lancashire, Musicseller—J. MORRISON, Greenhithe, Carpenter—J. MORRIS, Montpelier Terrace, Notting Hill—H. M'NULTY, Belgrave Street, Commercial Road East, Master Mariner—B. B. NICHOLLS, Chapeltown, Yorkshire, Commission Merchant—W. OLIVER, Newcastle-upon-Tyne, Grocer—J. T. OWEN, Dulwich, Carman and Contractor—R. O..., Tonge, Lancashire, Farmer—W. J. OLIVE, Heathfield, Sussex, Nurseryman—J. PHILLIPS, Llanguicke, Glamorganshire, Beerhouse Keeper—E. PRIESTLEY, Huddersfield, Fulling Miller—J. PROSSER, Cheltenham, Gardener—J. PERRY, Birmingham, Broker—J. PARTRIDGE, Willenhall, Staffordshire, Painter—J. POWELL, Mitcham, Surrey, Printer—E. PIGNEY, New Catton, Norwich, Bricklayer—W. PETT, Lavender Road, Battersea, Grocer—S. PALMER, Oak Village, Kentish Town, Printer—J. PARRY, Ardwick, Manchester, Tailor—S. J. PITTAR, Regent Street, Umbrella Manufacturer—W. RICHARDSON, Heigham, Norwich, Shopkeeper—J. RILEY, Hooton Pagnell, Yorkshire, Bootmaker—D. REES, Rudbaxton, Pembrokeshire, Farmer—O. ROBERTS, Liverpool, Cowkeeper—J. ROBBINS, Lytchett Matravers, Dorsetshire, Grocer—A. P. RADFORD, Nottinghamshire, Beer Seller—J. ROBERTS, Goudhurst, Kent, Dealer in Wood—I. S. PARKINS, Blackburn, Lancashire, Commission Agent—S. ROGERS, London Street, Paddington, Corn Dealer—G. SMETHURST, Huddersfield, Baker—J. SWEETING STOREY, Hartlepool, Durham, Blacksmith—J. SHOTT, Exmoor, Somersetshire, Tea Dealer—J. STILES, Patricroft, Lancashire, Attorney-at-Law—W. SHIRT, Ashby Road, Islington—T. STOCK, Great Coggleshall, Essex, Merchant—T. STUBBS, Blore, Staffordshire, Joiner—T. SPENCER, Argyll Street, Regent Street, Tailor—A. SMITH, King Street, Hammersmith, Baker—J. SMITH, Jun., Greenwich, Fruiterer—J. SHAW, Broughton in Furness, Lancashire, Druggist—F. SPENCER, Birmingham, Painter—T. REES, St. Dogwells, Pembrokeshire, Farmer—W. SHOARE, Strand, Newspaper Clerk—T. STOCKFORD, Goswell Street, Clerkenwell, Bread and Biscuit Baker—T. STONE, Reedham, Norfolk, Cordwainer—A. TRENAM, Mansfield, Nottinghamshire, Licensed Victualler—H. TAYLOR, Greenheys, Manchester, Commission Agent—J. TAYLOR, Sutton, Lancashire, Labourer—J. R. TREMLETT and E. HILL, Salford, Lancashire, Stone Masons—J. TILLEY, Widness, Lancashire, Joiner—J. WENN, Downham Market, Norfolk, Ironmonger—W. WYER, Attleborough, Norfolk, Boot and Shoemaker—S. WICKENS, Tonbridge Wells, Kent, Corn Dealer—J. H. O. WILSON, Rathmell, Yorkshire, Schoolmaster—F. WILLIS, Chelmsford, Innkeeper—C. WORMALD, Leeds, Machine Comb Manufacturer—J. P. WILLMOTT, Plymouth, Chemist—H. WALKINSHAW, Birmingham, Engraver—C. WILLS, The Weir, Winchester, Millwright—T. WALTERS, Llanguicke, Glamorganshire, Grocer—J. YATES, Whitechapel Road, Boot and Shoe Manufacturer.

SCOTCH SEQUESTRATIONS.—M. MURPHY, Coatbridge, Lanarkshire, Bootmaker—J. STEEL, Burnhouse, Ayrshire, Hay Dealer.

TUESDAY, *Dec.* 3—BANKRUPTS—A. ALLEN, Dennybottom, Kent, Bricklayer—J. ARCHER, South Shoebury, Essex, Farmer—J. BASFORD, Birmingham, Marine Store Dealer—W. BEARDSALL, Nottingham, Painter—R. BRAGG, Trafalgar Street, Walworth, Builder—C. BEARDSHAW, Sherborne Lane, King William Street, City, Licensed Victualler—G. BROWN, Wigan, Lancashire, Tailor—J. BANNISTER, Liverpool—R. BAILEY, Hastings, Sussex, Tailor—J. BRIGDEN, Wolverhampton, Stationer—W. BAGGOTT, Bromyard, Herefordshire, Innkeeper—J. CUNNINGHAM, Stowey, Somersetshire, Horse Dealer—C. F. W. CROWTHER, Canterbury, Clerk—E. COLLIS, Bristol, Dealer and Chapman—T. CORKHILL, Liverpool, Cabinet Maker—W. DAVENPORT, Leamington Priors, Warwickshire, Car Driver—T. DOBSON, Blackburn, Journeyman Plasterer—W. DRURY, Kingston upon Hull, Merchant—H. DOBSON, Bolton, Bleacher—T. FRENCH, Gorleston, Suffolk, Shopkeeper—J. FLINTOFF, Cannon Street Road, St. George's in-the-East, Grocer—G. W. FLETCHER, Radcliffe Bridge, Lancashire, Cotton Manufacturer—Rev. J. GROOMES, Essex, Stratford, vicar of Stratford—R. GOTOBED, Park Place, Lock's Fields, Walworth, Baker—J. J. GARRAWAY, Batheaston, Somersetshire, Baker—W. GOYMOUR, Bradfield St. Clare, Farmer, Suffolk—J. GRAYSON, Southampton Row, Bloomsbury—S. GRANGER, Murray Street, Hoxton, Baker—F. GOLDING, Bermondsey Square, Beershop Keeper—E. A. ATHERLEY, Southampton, Tailor—H. HUMPHREYS, Hendy Towyn, Merionethshire, Merchant—G. HAYWARD, Goudhurst, Kent, Farmer—N. HEYES, Bolton le Moors, Lancashire, Brewer—W. H. HARLEY, Todmorden, Lancashire, Confectioner—S. HOSKIN, Plymouth, Boot and Shoemaker—G. HEATHCOTE, Fitzroy Terrace, Haverstock Hill, Builder—R. HIRSHFIELD, Clifton Street, Finsbury, Printer—R. Higginbotham, Sheffield, Steel Melter—J. T. HALL, Holywell Lane, Shoreditch, General Dealer—M. JACKSON, North Shields, Northumberland, Travelling Glazier—J. JACKSON, Romsey, Hampshire, Ironmonger—K. KAUFMAN, Cannon Street Road, St. George's East, Slipper Manufacturer—M. LEACH, Wisbeach St. Peter, Cambridgeshire, Wine and Spirit Merchant—SAMUEL LOMAS, Stretford, Lancashire, Canvasser—THOMAS LOMAS, Stretford, Lancashire—J. S. A. MIDDLETON, New Holland, Lincolnshire, Licensed Victualler—J. MERRISON not MORRISON, as advertised in "Gazette" of 29th Nov last. Greenhithe, Grocer—G. MILLS, Radnor Street, Chelsea, Cab Proprietor—R. METCALF, Middlesborough, Yorkshire, Beerhouse Keeper—J. NICOL, Kingston-upon Hull, Coal Merchant—L. PARSLEY, Minster Lovell, Oxfordshire, Tailor—J. PARISH, Crowland, Lincolnshire, Basket Maker—T. PHILLIPS, Chester, Brewer—W. PARKES, Bromsgrove, Worcestershire, Farmer—E. C. PRAGAM, Bicester, Oxfordshire, Attorney—J. W. RICHARDSON, Kingston upon Hull, Painter—T. H. REE, New Henry Street, Cotton's Estate, Limehouse, Coal Weigher—W. RUSSELL, Portsmouth, Grocer—H. SANDERSON, York, Timber Merchant—I. SHERMAN, Manchester, Cap Manufacturer—R. SQUIRES, Brierley Hill, Staffordshire, Licensed Victualler—W. STUBBINGTON, Winchester, Carpenter—W. STANLEY, Hulme, Lancashire, Baker—C. H. SMITH, Barton upon Irwell, Lancashire, Commission Agent—H. STUBBS, Winchester, Corn Factor—W. HOWE SMITH and MILES BOWEN SMITH, King Street, Cheapside, General Merchants—P. S. THWAITE, Hulme, Lancashire, Grocer's Assistant—W. TREVOR, Birmingham, Baker—P. THORNHILL, Stone, Staffordshire, Coal Dealer—G. H. USHER, Carlisle, Photographic Artist—C. VANDRANT, Essex, Stratford, Stationer—J. WHEATLEY, Cambois, Northumberland, Mariner—J. WORRALL, Congleton, Cheshire, Joiner—J. WILL, Stafford, Gunsmith—W. WHITELAW, Briton Ferry, Glamorganshire, Grocer—A. WINSCOM, Kimbolton, Huntingdonshire, Grocer—J. WEST, Woolsay Road, Islington, Haberdasher—A. WILKINS, Borough Road, Southwark, Architect—H. C. WILSON, Southdown, Gorleston, Corn Factor—J. WIGG, Emneth, Norfolk—W. WARD, Birmingham, Cab Proprietor—S. YOUNGMAN, Albert Villa, Eleanor Road, Hackney, Timber Merchant.

SCOTCH SEQUESTRATIONS.—J. FORRESTER, Glasgow, Slater—H. ALLISON, Glasgow, Grocer—H. GIRVAN, Ayr, Auctioneer—R. WILSON, Glasgow, Starcher—J. CAIRNS & SON, Glasgow, Tailors—G. GREEN, Motherwell, Lanarkshire, Bricklayer—A. M'TAGGART, Glasgow, Flesher.

Metropolis and its Vicinity.

ROYAL SOCIETY.—General Sabine, R.A., has been elected President of the Royal Society in the room of Sir Benjamin Brodie, who has retired on account of his failing sight. The Copley medal has been awarded to Professor Agassiz. One of the two Royal medals has been awarded to Dr. Carpenter for his works on physiology and comparative anatomy. The other Royal medal has been awarded to Professor J. J. Sylvester, of the Royal Military Academy, Woolwich, for his important contributions to mathematical science.

EMBANKMENT OF THE THAMES.—At the last meeting of the Metropolitan Board of Works the Chairman stated that he had received a letter from the Right Hon. W. Cowper, her Majesty's Chief Commissioner of Works, stating that he was anxious that the Royal commission should meet again as soon as possible to consider the embankment of the Surrey side, so that the second report might be made before the meeting of parliament, and requesting his attendance. He had replied to the communication, expressing his willingness to attend the commission, but at the same time adhering to the protest he had made against the former report. In adopting this course he confessed himself influenced by the belief that the strong expression of public opinion in behalf of this work, backed by Lord Palmerston's and Mr. Cowper's cordial sympathy, would materially contribute to remove all difficulties in the way of its execution.

ROYAL MILITARY ACADEMY.—In consequence of the disclosures which have been made respecting the system of discipline in force at the Woolwich Academy, and its entire unfitness for the class of young men whom the abolition of Addiscombe has transferred to that establishment, the Commander-in-Chief has appointed a committee of experienced officers to revise the regulations by which the Academy is governed. These officers are General Knollys as President; Colonel Charles Bingham, and Colonel F. E. Chapman, C.B., Deputy-Adjutants-General of the Artillery and Engineers, the two branches studied at the Academy.

REFRESHMENTS AT THE INTERNATIONAL EXHIBITION OF 1862.—At a meeting of the Commissioners of the International Exhibition, held on Friday, the tenders sent in for the supply of refreshments were considered and decided upon. The successful competitors are—Mr. F. E. Morrish, of Liverpool, and Mr. W. Sanders, late of the Great Western Hotel, for the western division; and M. Veillard, of 59, Mark Lane, and M. Martin, of Paris, for the eastern block. Mr. Morrish, although not unknown in London, has at the present moment four large restaurants in full operation in Liverpool, where his management is so much appreciated that he generally secures the supply of refreshments at all the balls and great assemblies in St. George's Hall. Mr. Sanders, who is associated with Mr. Morrish, has had great experience as a caterer at some of the principal clubs in London—last at the Senior United Service, in Pall Mall. M. Veillard has been largely concerned for some years in the importation of French provisions into this country, and his partner, M. Martin, has a reputation founded upon his successful management for some years of the Café de Paris, on the Boulevard des Italiens. These gentlemen have made arrangements with the eminent house of Valentin, of Paris, for the exclusive supply of French and German wines in their division of the Exhibition. Without presuming to state the precise sum tendered by the two successful competitors, the daily papers state that they can very confidently name it as exceeding 30,000*l.*

THE GAS QUESTION IN THE CITY.—At a meeting of the City Commission of Sewers on Tuesday, a report was read stating that the Remembrancer and City Solicitor, in accordance with the resolution of the Board, had taken the opinion of counsel as to whether the 24th clause of the special Act of the Great Central Gas Company, which restrains that company from charging more than 4*s.* per thousand cubic feet for its gas, had been repealed or modified by the Metropolis Gas Act of 1860. The case had been laid before Mr. Russell Gurney, the Recorder, Mr. Bovill, Q.C., and Mr. Gibbons, a special pleader, and the two former had stated their opinion that as there was no special clause in the Metropolis Gas Act repealing the provision of the special Act of the Great Central Company, the company was bound by its own Act of incorporation, and could not increase the price of its gas beyond 4*s.* a thousand feet. Mr. Gibbons, the junior counsel, gave a contrary opinion, to the effect that the Great Central Company having elected to come within the operation of the Metropolis Gas Act, the provisions of which overrode those of their Act of incorporation, the contract between the company and the public was at an end, and the company was at liberty to increase its charge. It was then resolved that the special committee of the Commission on the supply of gas be

requested to put themselves in communication with the Great Central Company, with the view to agree upon a case for the opinion of the Court of Queen's Bench, so as to settle the question in dispute.

THE BANK OF DEPOSIT.—It is understood that the solicitors for the official manager have applied to the Master of the Rolls to take the examination of the directors of the National Assurance and Investment Association in open Court, and that an early day will be fixed for that purpose. Mr. Jacob Henry Cotterell, the chairman of the Bath board of directors, has voluntarily conveyed the whole of his property, except the house in which he resides and the furniture, to proper parties, for the benefit of the poorer of the Bath depositors. Mr. Cotterell is a member of the Society of Friends, and has had a large practice as a land surveyor for many years, and is a member of the Bath town council. The property which he has thus devoted amounts in value to several thousand pounds. The business done by the bank in Bath was large, consequent on the confidence reposed by the public in the local board, all of them being citizens of high standing, and with one exception members of the municipal body. Mr. Cotterell had no stake in the bank at the time of the stoppage, but has felt it his duty to take this step from a conscientious appreciation of the disastrous results which have followed the association of his name with the concern.

POISONING FROM ARTIFICIAL FLOWER MAKING.—An inquest was held a few days since on the body of Matilda Scheurer, a good-looking girl of 19, who died from poison imbibed into the system in the manufacture of artificial flower leaves. Her mother, a widow, deposed that in the previous week her daughter was seized with vomiting, and that the refuse of the stomach was of a very greenish colour. She had been ill several times before during the past year and a half, complaining of pains in the stomach and sickness. Witness took her to the doctor who had seen her on those occasions, and who told her she was again suffering from the effects of poison. She was engaged as an artificial florist in the warehouse of M. Bergerond, of Judd Street, Brunswick Square, and up to the time of her death had been engaged in leafmaking. She was in the greatest pain until she became insensible, when death put an end to her sufferings. Mr. Paul, surgeon, of Burton Crescent, said he had attended deceased four times within 18 months, while suffering from the same causes. He had made a *post mortem* examination, and found that the lungs showed the presence of arsenite of copper, and that the liver and mesenteric glands were highly impregnated. The cause of death was acute inflammation of the mucous membrane of the stomach, produced by the inhalation of the arsenite of copper. A sister of deceased had died under similar circumstances. M. Bergerond said he employed 98 girls in his establishment, and for their protection he had suggested the wearing of masks, but it was objected to by them as producing excessive heat. They, however, wore muslin over their mouths. It was stated by a juror that the arsenite of copper in such manufactures was prohibited in France, as injurious to workpeople. The jury returned a verdict to the effect that deceased died accidentally, from the effects of mortal disease in her stomach and other organs, occasioned by arsenite of copper used in her employment.

DEMOLITION OF THE EAST INDIA HOUSE.—The operations for pulling down the India House, which were commenced some days since by the contractors, are making rapid progress. In the first instance that portion of the structure which is already sold, consisting of the north-east portion of the building abutting upon Lime Street, will be removed. An extensive shoring has been constructed over half the length of Lime Street to facilitate the delivery of the materials, which consist of some hundred thousand tons. On the ground being cleared the sale of the other half of the building abutting on Leadenhall Market will be proceeded with.

DESTRUCTIVE EXPLOSION.—On Monday night an alarming explosion of "paraffin" oil occurred in the oil and Italian shop of Mr. Masters, in Great College Steet, Camden Town, causing the entire destruction of the premises and stock, and serious injury to a man and boy, who narrowly escaped with their lives. It appears that about 7 o'clock a cask of paraffin was removed from a van in the street to a room behind the shop, for the purpose of being emptied into another cask, and while the carman and a boy were in the act of so doing a candle held by the boy ignited the vapour of the oil and produced an explosion so violent as to break the casks and blow out a large window, the burning oil setting fire to the clothes of the man and boy, who ran into the street calling for assistance. The flames spread rapidly through the building, which was completely gutted, while the adjoining premises were more or less damaged before the fire was finally extinguished. The injured man and boy were so much burnt that they had to be removed to the University College Hoipital.

THE METROPOLITAN DEBTORS' PRISONS.—On Monday the gaolers of the three debtors' prisons made their second monthly return to the Court of Bankruptcy under the new Act. The prisons present a very different appearance now to what they did a short time ago, and it is anticipated that in course of time but few persons need remain in prison for debt before the hearing. On Monday there were 104 inmates of Whitecross Street Prison, and of that number 14 were County Court commitments, which do not come under the new law, leaving 90 "sheriffs." When the first return was made there were 186 sheriffs and 19 County Court cases. In Horsemonger Lane Gaol there are now only 12 "sheriffs" and about 8 County Court commitments. In the Queen's Prison the number is under 100. Besides the prisoners discharged by the registrars many took the hint and arranged with the detaining creditors, and thus avoided being made bankrupts against their will.

BRITISH MUSEUM.—The regulations for the renewal of tickets of admission to the reading-room having been of late in a great degree neglected, causing considerable inconvenience in making the periodical returns of the number of readers, the attendants have received instructions to demand the production of the cards whenever they may deem it necessary. The tickets are granted for a term not exceeding six months, and any reader, once admitted, may apply at the close of his term for the renewal of his ticket. Failing so to do, he becomes subject to the forfeiture of his privilege.

ST. BARTHOLOMEW'S HOSPITAL.—The enlargement of this Hospital, which has been some time in progress, was completed a few days since. The frontage of the hospital now covers the whole south side of Smithfield, extending from Giltspur Street to Duke Street. An entirely new surgery and operation room, with all the modern improvements of light and ventilation, have been added to the building, and patients requiring to undergo operations will now be carried direct into the surgery.

INTENDED NEW BRIDGE AT BLACKFRIARS. — On Friday a meeting was held at the Guildhall of the Committee for Letting the Bridge House Lands, at which it was resolved by a large majority to recommend the design of an iron bridge with three arches, by Mr. Thomas Page, as the one to be adopted by the Common Council.

THE WRECK OF THE ROYAL CHARTER.—On Thursday the 28th ult. the diver engaged in operations at Moelfra, the scene of the wreck of the Royal Charter, recovered the captain's chest, containing from 40,000*l.* to 50,000*l.*

GREAT FIRE AT THE HAMMERSMITH DISTILLERY—MESSRS. HAIG'S.—On Thursday evening a fire broke out in the still-house of Messrs. Haig's distillery, and destroyed the whole of that portion of the building; being only stopped by the admirable construction of the works. The value of the property burnt was upwards of 10,000*l.* The firm are fully insured. The fire is supposed to have been caused by a workman inserting a gimblet in the still in order to steal spirits.

THE PUBLIC HEALTH.—The Registrar - General's Weekly Report states that the number of deaths registered in London in the week that ended Saturday, November 30, were 1121, which is nearly the same number as that returned in the previous week, and exhibits a tolerably close approximation to that which is obtained by calculation from the returns of corresponding weeks in ten previous years. During the week the births of 880 boys and 911 girls, in all 1791 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1684.

Provincial.

ASHTON-UNDER-LYNE.—On Tuesday night a public meeting was held in this town to hear addresses on the present state of American affairs from the Hon. Joseph Howe, Prime Minister of Nova Scotia; and the Hon. John Tilley, of the Cabinet of New Brunswick. Mr. Hugh Mason was in the chair. The meeting was fully attended, and the speakers were very well received. Messrs. Howe and Tilley said that they had no sympathy with the Northern States, and a strong wish for the success of the South. They had no desire for war, were quite sure that the colonies would fight for England if their help was needed, and equally hopeful that England would fight for the colonies, and they were, therefore, of opinion that war ought to be begun, if war were necessary for the honour of England.

CAMBRIDGE.—Several meetings of Churchmen from all parts of the country took place at King's College last week, under the presidency of the Archdeacon of Ely. On Wednesday, the 27th ult. Mr. Cross, M.P., read a paper on the subject of Church rates. He recommended the scheme he proposed in Parliament last session—namely, that any one might be exempted from the payment of Church rates who objected. Archdeacon Denison said that in the West of England they were determined not to submit to any compromise on the subject of Church rates. He considered Mr. Cross's plan a miserable one, for it destroyed the principle of Church rates; and he would prefer abolition to compromise. It was also not practicable, for abolitionists objected to it; and he asked if it was wise, when the enemy were battering at the gate, to pull down part of the wall. He moved—"That in the opinion of this congress, having heard the papers put before us, it is not desirable to meet the movement for abolition of Church rates by any scheme for compromise." The Rev. J. Fendall seconded the resolution, and combated the notion that church-rates were paid for the benefit of an individual, as it was a tax on property, not on the person. Mr. Beresford-Hope moved the previous question, considering that it would be a fatal policy to decide on hoisting the no surrender flag. He stated that under Lord Blandford's Act district churches of which the incumbents had all the surplice fees could rate themselves. Mr. Mowbray, M.P., seconded the amendment, believing the Church's position on this question was better at this moment than it was ever likely to be in future. If it could be hoped that Radical Dissenters would not bring in each year their abolition bill, the archdeacon's advice would be sound; but his experience of Parliament precluded such an idea. Two Liberal members, Mr. Western Wood and Mr. Vernon, the elect of East Worcestershire, had each declared that they would not vote for the abolition of church-rates; but this state of public feeling could not last. He was certain that there was a large majority in the House in favour of a settlement of the question, and also against total abolition. Last year there had been meetings in the tea-room of the House, composed of members on both sides, who were most anxious to arrive at some practical settlement. The question he considered far too grave a one to be dealt with by any one but Government. It was impossible for a private member to carry a bill even if it was desirable, which he thought it was not. Mr. Hubbard, M.P., expressed his approval of Mr. Cross's scheme. After a long discussion Archdeacon Denison withdrew his resolution.—On Thursday morning a discussion took place on the increase of the episcopate. Mr. Beresford-Hope said it was gratifying to feel that on this subject the most perfect unanimity amongst Churchmen prevailed. He thought that in considering the question of the increase of the episcopate, the appointment of a new bishop was not the first consideration. The earliest consideration would be the existence of a chapter, or of a fitting church in some town in which it was desirable to establish the seat of a bishop. The primary thought should be the creation of the cathedral body, for the purpose of maintaining the services in a manner worthy of the model church of the diocese. The new bishops might take their turn to sit in Parliament. To the idea of permanent suffragans Mr. Hope was decidedly opposed, although it was possible that suffragans might well be appointed, as suffragans, to supply a temporary need. The Hon. Colonel Lindsay contended that the existing number of bishops could not possibly fulfil the duties of the episcopate. Professor Harold Browne was opposed to the creation of suffragans inferior in rank to existing bishops, and deprecated the idea of turning deans into bishops. While, however, he opposed the creation of a large number of bishops, he singled out Exeter and Durham as most requiring assistant bishops. On Thursday evening the Dean of Ely read a paper on the education question. He observed that a large majority of those engaged in education were hostile to the new code, and no doubt it would be greatly modified or withdrawn. He professed his belief that the old system needed revision, but it did not require revolution. The Rev. J. Martin expressed his approval of parts of the revised code. Archdeacon Denison considered that the new minute was a daring and most insidious attempt to sever the connection of the state with any form of religion whatever. A long discussion took place, in which Lord Alwyne Compton, Mr. Hubbard, M.P., Professor Grote, Professor Harold Browne, the Dean of Ely, and others took part. The Rev. H. Mackenzie read a paper, urging that an increase of clergy was only requisite in towns. The Rev. W. Cadman thought that the parochial system had not been fairly tried, and attributed much of the alienation of the poor to the pew system. Mr. Hubbard, M.P., read a paper on the desirability of increasing the number of the clergy, rather than building new churches. He deprecated strongly the notion that the endowments of the Church could be equalised without injury to the social state of the clergy. On Friday a long discussion took place on the insufficient incomes of the working clergy, on co-operative societies, on tenths, Crown livings, the endowments of parishes, local associations for the endowment of poor livings, the offertory, &c. In the evening a paper was read by the Rev. G. Venables, on the necessity of a cordial co-operation between the clergy and laity in all measures for the defence or extended usefulness of the Church. Mr. Henry Hoare detailed the plans recommended for the purpose by the Convocation of both provinces, which had been adopted by the Association of London Churchwardens. The Rev. J. B. Sweet then read a paper on the importance of diocesan synods, and after a few words from Archdeacon Denison, in acknowledgment of the courtesies shown to the strangers present, the conferences terminated.

CARLISLE.—The adjourned inquest on Jane Emmerson, the aged woman who for years had charge of the level crossing of the Newcastle and Carlisle Railway at Botcherby, and who was found murdered on the morning of the 22d ult., was resumed on Monday. Since the last meeting of the jury the police have obtained a clue which may lead to the apprehension of the murderer. A bundle has been found on the banks of the river Peterell, containing a shirt and a pair of trousers, stained with blood and very dirty. Hopes are entertained of tracing the owner of these clothes, which were doubtless those worn by the murderer. The inquest was again adjourned.

DURHAM.—The equestrian statue erected to the memory of the late Marquis of Londonderry was inaugurated in this city on Monday. All places of business were closed at noon by request of the Mayor, and the inhabitants kept holyday in honour of the occasion. After the statue, which is the work of Signor

Monti, the Italian sculptor, had been uncovered and formally presented to the Mayor and Corporation by the Duke of Cleveland, a numerous company met at luncheon in the Town Hall. The Mayor presided, and among the guests were the Duke of Cleveland, the Right Hon. B. Disraeli, M.P., and the Right Hon. J. R. Mowbray, M.P. The Duke of Cleveland proposed "The Memory of the late Marquis of Londonderry," which was drunk in silence. Lord Adolphus Vane Tempest in reply said that the kindness and generosity of appreciation shown that day to the departed one's memory had touched the hearts of the family he had left behind; and that if anything had been wanting to increase that debt of gratitude, he hoped that each member of that family would be prepared to return it with interest back to the county of Durham. The Duke of Cleveland next responded to the toast of the House of Lords, and Mr. Disraeli responded to that of the House of Commons in a speech of which the following is a summary:—

"The House of Commons has two great functions to perform at the present day. It has to contribute in a great degree to the transaction of public business. It has also another function, equally important, and that is to express public opinion. Now, with regard to the transaction of public business, I will venture to say that there is no public assembly in the world that transacts half the business which the House of Commons does, and does it so efficiently; while, on the other hand, looking to its other great function—namely, the expression of opinion, I am convinced that I am not exaggerating when I say that there is no possible public grievance, no shade of public sentiment, which is not brought before the House, and which is not there legitimately discussed. And I think that the complaints that have been made against that House of Commons of late years really have arisen from a misconception among the constituencies as to the two great functions which distinguish the nature and the character of the House of Commons. When it has expressed opinion, some, who have thought that it ought only to transact business, say it wastes its time in making speeches. When it only transacts business, and does not sufficiently discuss questions which greatly interest the public, then we are told that it no longer possesses the confidence of the people of England. But the truth is that it transacts its business efficiently, because, at the same time, it faithfully represents opinion; and it represents opinion faithfully because this country, itself a practical country, knows that those who are members of the House of Commons are competent at the same time to attend to the interests of the country in detail. It is by the combination of these two qualities, and by the performance and accomplishment of these two important functions, that the House of Commons has obtained the respect and the confidence of the people, and it can only be by faithfully adhering to the same line that that confidence and affection can be maintained. It is very true that for the last century and a half the public business of this country in Parliament, in both Houses, has been conducted on the principles of party, and I am convinced myself that it is owing to the principles of party that Parliament has become so powerful in this country. For what would be 500 or 600 men if they were not connected by feelings of public principle and private honour—if they were not thus bound together, what would be 500 or 600 men in comparison to an organised and powerful Ministry, but a mob, which would be distinguished only by their timidity, and, perhaps, by their corruption? It is very true that there may have been moments when the spirit of party has led both parties in the State to do things which they might have regretted; but this I will say for both parties in this country that when the interests of this empire, and especially when the honour of the nation is concerned, there is no longer party spirit; there is no longer personal complication, and the leading men on all sides, whoever may be the servants of the Queen, are animated only by one feeling, and propose to themselves only one object—to maintain the greatness and the glory of their common country. Although I am a stranger among you, I cannot forget the cause of my being in this hall to-day. Although I am, unfortunately, a stranger to the people of Durham, I am not a stranger to that eminent man whose virtues and whose public services you have this day commemorated in so interesting and signal a manner. For more than a quarter of a century I was bound to the late Lord Londonderry by the ties of a most intimate and devoted friendship. I knew him well. I am fain to believe that I rightly appreciated the qualities of his mind and character. He was the most energetic individual that I was ever acquainted with. But there was this characteristic of the late Lord Londonderry—that he combined the greatest energy of character with a singular softness of heart. He was, above all men, a faithful friend. It has sometimes been said that he, as all other public characters, was occasionally deficient in that judgment which is necessary to a perfect character; but this must be said of Lord Londonderry—that he succeeded in everything which he undertook; and where I find general and signal success I am not prepared to admit that there has been a deficiency of judgment. As a soldier, no one will deny his eminence at one of the most important crises of modern times; in an age celebrated for its cavalry commanders, in the age which produced Murat and Anglesea, Charles Stewart was second to no one. But, though he was a noble and successful soldier, he was an extremely able and adroit diplomatist. The valuable records of the important age of the Revolutionary War, which are now regularly unfolding their secrets to the generation of which we are members, only bring forth evidence of the great abilities of the late Lord Londonderry. In the work of Sir Robert Wilson, one of his opponents in politics, which has recently been published, we find very frequent, abounding, and indubitable evidence of the great services which Lord Londonderry, then Lord Stewart, accomplished for his country, many of which until that publication were unknown. His services, when he was at the head-quarters of the King of Sweden, have taken their place in history as human efforts which considerably contributed to the great result which crowned that long revolutionary war. What his character was in private life, how he dealt with his great affluence of fortune—which he partly inherited, and which he otherwise, in a still more interesting manner, acquired—you, who sit in this hall, are better able to judge than myself. Having had much communication with him upon public affairs, I can truly say that Lord Londonderry was, although a party man, more superior to prejudice than most individuals whom you can encounter; but he was a man of a very enlightened mind—a man who thoroughly understood the interests and the wants of his age, and a man who truly understood that in a country like England the aristocracy of the country should place themselves at the head of the great commercial interest; and in all this we find Lord Londonderry was not wanting. But, on the contrary, I think I am only speaking the language of accurate truth when I say that he individually gave no mean impulse to the enterprise of the county of Durham. Well, then, I say that a man who has done these things, who in his youth was a successful warrior, who in his middle age, intrusted with the interests of his country, represented them at foreign Courts, or conducted negotiations in the field of battle even, with signal success; who, in private life, and in the more contracted sphere of the counties of Ireland and England with which he was connected, showed himself capable of all the qualities of an eminent citizen, was no mean character—he was one that deserved to be recollected in the affections of his countrymen. I think that it is equally to the honour of himself and his family and of the county of Durham that you this day have, in so public a manner, recorded your sense of his character and services, and in so doing encouraged those who come after him to remember his great example, and to retain, by the utmost efforts of their nature, the affections of this great community."

MAIDSTONE.—A respite was received on Tuesday by Mr. Bannister, the Governor of Maidstone Gaol, for George Inkpen, who was convicted at the last session of the Central Criminal Court of the murder of his sweetheart, by drowning in the Surrey Canal.

NEEDHAM MARKET.—The Rectory House at Creeting, near this town, was totally destroyed by fire on Monday morning during the absence of the rector, the Rev. George J. Dupuis, at Eton College, of which he is one of the fellows. The fire was first discovered at 5 o'clock in the morning by the coachman, who saw the flames issuing from the drawing-room. Prompt assistance was obtained, but the fire spread with such rapidity that the house and its contents, including the valuable plate, furniture, and effects, were consumed in a few hours. Mr. Dupuis was only partially insured.

NORWICH.—James Bloomfield Rush whose apprehension on a charge of burglary was reported recently, has been discharged, the evidence against him not being sufficient to warrant his committal for trial.

OXFORD.—The Rev. Dr. Scott, Master of Balliol, has been elected by the heads of colleges and halls to Dean Ireland's Professorship of the Exegesis of Holy Scripture, vacant by the resignation of the Rev. Dr. Hawkins, provost of Oriel.

PLYMOUTH.—The American ship Lady Franklin, of 1300 tons, under the command of Captain Jordan, from London to New York, in ballast, put into Plymouth Sound on Tuesday. On the following morning about 1 o'clock a fire was discovered in her fore hold. An alarm was immediately given, when assistance was promptly sent by the naval authorities of the port. The Government fire-float was speedily in play on her. The revenue cutter Hamilton was towed nearly alongside, and fired shot into her; and a crew of carpenters, from the ships in Hamoaze, cut two large holes in her bow, which scuttled her, and she sunk in about four fathoms water. There is strong ground for suspicion that the fire was the work of incendiaries, several of the crew having Confederate tendencies, and seven of them having absconded shortly after the alarm of fire was given. They were however overtaken by a man-of-war's boat and brought back to the ship. All the property belonging to the captain, officers, and remaining crew, together with the ship's portable stores, were saved by the Government tugs.

PORTSMOUTH.—In reply to a memorial from the Portsmouth town council, praying that the Britannia training ship for naval cadets may not be removed to Portland, the Admiralty have replied that, after mature deliberation, they have decided to remove the ship, for sanitary and other good reasons.

REIGATE.—On Saturday morning a private lunatic asylum, in which there were seven patients, was burnt down in the neighbourhood of this town. The charred remains of one of the patients were discovered in the ruins; and it is supposed that another who is missing made his escape in the excitement of the scene. There is no clue at present to the origin of the fire.

ROCHDALE.—On Tuesday night Mr. Bright, M.P., distributed the prizes to the successful competitors of the Rochdale Working Men's Institute. The vicar of Rochdale delivered an address, and Mr. Bright afterwards delivered a speech on popular education.

SHEFFIELD.—Sarah O'Rourke, one of the victims of the trade outrage perpetrated in this town on the 23d ult., died at the infirmary on Monday morning. Mrs. Wastnidge, though far more severely injured, is progressing favourably, being a young and very strong woman. It was at first supposed to be hardly possible that she could recover, but hopes are now entertained of her doing so, though she is by no means out of danger. An inquest on the body of Mrs. O'Rourke was opened on Monday and adjourned. On Saturday night an attempt was made to blow up the works of Mr. H. Houldsworth, by lowering a milk-can, containing several pounds of powder, with a fuse, into the cellar of the engine-house. Considerable damage was done to the engine-room, but no lives were lost. The shattered remains of the can are in the possession of the police, and it is hoped they will be the means of affording a clue to the perpetrator of the outrage. It seems that a non-unionist grinder has been working on the premises, and the explosion was, it is thought, intended as a warning.

SITTINGBOURNE.—A serious case of wrecking on the Essex coast, near the mouth of the Thames, was investigated by the magistrates in this town a few days since. Seven boatmen belonging to Brightlingsea, near Colchester, were charged with feloniously stealing and carrying away a large quantity of tallow and ships' stores from the wreck of the ship Regina, of Whitby, which stranded on the Swin Middle Sand, on the night of the 13th ult. The evidence showed that the men in custody were engaged in plundering the vessel, and that as many as 30 boats and smacks surrounded the vessel at one time, and refused to leave when requested to do so by the captain. The agent of Lloyd's, who had been sent for, ultimately obtained the assistance of a party of Royal Marines from Sheerness. When the troops were seen nearing the ship, several of the boats, which are stated to have been filled with tallow, left for the Essex shore. They were hailed to proceed to Sheerness, but no heed was paid to the order, and two or three of the smacks were taken to the Medway by force. The defence set up was that the ship was abandoned by her crew, and that the cargo had therefore become the prize of the first comer. The magistrates fined the prisoners 100*l.* each man. It is said that the value of the property stolen was about 10,000*l.*

Ireland.

THE IMPENDING WAR.—The Irish journals, with the sole exception of the organs of the Ultramontane party, concur with the English press in expressing unqualified indignation at the recent outrage of the Federal Government on the British flag. The *Irish Times* hopes it will "put an end to all apologies for the Northerners," as it "renders further forbearance a degradation," and "international law affords not the shadow of a pretext for the commission of such an outrage." It says that if "such an act be tolerated, our empire, nay, our safety on the seas is gone;" and that "there are deeds which cannot be forgiven, if national honour is to be upheld, and this unexampled instance of audacious piracy is one of them." The *Daily Express* says that the Prime Minister should resent the "audacious outrage," by sending out a squadron "to break the blockade of the Southern ports, and let the cotton come forth. The French Emperor will join him in this, as he has done in the expedition to Mexico. If the Prime Minister adopts this bold course, he will add 50 per cent. to his popularity." The *Evening Packet* says:—"That of late years the bluster and swagger of the North American press and people towards England have been only tolerable because we knew the feebleness of those who brayed so ludicrously. When we were engaged with Russia, every American journal had rejoicing accounts of how Britishers had been humiliated, and their Government exhibited a sympathy with Russia, which the Czar has paid back by a recent letter of encouragement to President Lincoln. These circumstances have an abiding recollection in the minds of the English people, and from almost every lip now the form which comment upon the crisis takes is, a declaration that these braggarts shall at last be cured of their national vice." On the other hand the Ultramontane journals repeat the old cry that "England's difficulty is Ireland's opportunity." The *Nation* says that "the act was worthy of the spirit, daring, and dash of the Americans; it was one to make Irish hearts jump with joy. The news has created wild excitement and enthusiasm in Dublin, and it will awaken similar feelings and sensations throughout the entire country. If the English do not resent this violation and defiance of their flag then is their honour gone for ever, and the world will be able to regard them only as a spiritless people, whom any strong nation may insult with impunity. If Irishmen act well their part in this crisis as brave men, they can, most certainly, establish the independence of Ireland." The *Nation* also announces that "a mass meeting of Irish Nationalists" will be held in a few days under the patronage of the O'Donoghue, Mr. John Martin, and Mr. George Henry Moore. The *Morning News* and other Ultramontane journals have indulged in the idea that France will take the part of the Federal Government against England. The *Freeman* however reminds them that the probabilities are all the other way, and that France will back up the legal and moral attitude which England has assumed.

THE ORDNANCE FRAUDS.—The trial of Messrs. Conolly and M'Ilwaine for a conspiracy to defraud the Ordnance Office in Ireland, was brought to a conclusion on Saturday. It was proved that Mr. Hamilton Conolly, the chief clerk in the office of the Royal Engineers in Dublin, systematically increased the charges of Mr. M'Ilwaine the contractor, sometimes by altering the figures, sometimes by interpolating items in his bill of work which were not orginally charged, and which in fact had not been done. The contractor always drew for the higher and fraudulent amount. Conolly the clerk was found guilty of conspiracy and forgery, and M'Ilwaine the contractor was found guilty of conspiracy, and recommended to mercy. Sentence was postponed to the next sessions.

Scotland.

THE LATE ACCIDENT IN EDINBURGH.—On Friday night, when the foundations of the house in the High Street were laid bare, about 18 feet below the level of the street, the cause of the recent catastrophe was disclosed. There was a concealed stone wall, three feet thick, which ran parallel to the front and back walls, in the middle of the huge building, but which was not carried into either of the gables, and it was found that on the west side it had been to a large extent undermined to make way for a boiler, the heat from which had helped to crumble the thin remainder of the wall. The boiler had been there for probably 30 or 40 years, but of late it had been very little used. The wall had been further weakened by hollowing out a chimney for the boiler, and by carrying

through a door to open the shop from front to rear, two pillars of the wall only being left for support. This wall was not only undermined, but was utterly decayed. The timbers, also, were perfectly rotten with age. On Friday—the sixth day after the catastrophe—a cat and a dog were extricated alive, both much emaciated. Some of the animals dug out alive from the ruins, including two birds taken down from the walls in their cages, have been since sold for considerable sums, one gentleman giving 20*l.* for a little mongrel previously not worth as many pence. The fund for the relief of the sufferers amounts to about 1200*l.* or 1500*l.*

National Education in Scotland. — At a recent meeting of the Commission of the General Assembly of the Free Church of Scotland, held at Edinburgh, a report was approved relative to the new Privy Council code and legislative measures for education in Scotland. It condemned the new code as going far to destroy all that had been gained during the last eight or 10 years in the direction of the efficient preparatory training of teachers. It strongly deprecated many of the arrangements for the examination of the pupils, in grouping children from three to seven, and subjecting them to an examination which only children from six to seven could pass, and in excluding from the examination those who were 11 years of age. It also objected to the code financially, from the uncertainty of its operations, and the impossibility under it of maintaining schools in thinly-inhabited districts. The report, in short, objected to the regulations as involving changes inconsistent with previous engagements—as unsatisfactory to the teachers, and as unnecessarily burdensome to managers—as unsettling the public mind, and as instituting an educational system unsuitable to the circumstances of this country; and it expressed, in conclusion, an earnest hope that a comprehensive measure will be introduced into Parliament, a national system, framed to meet the educational condition of Scotland, and freeing the people from the agitation and anxiety consequent on a fluctuating policy. Dr. Candlish, in moving the adoption of the report, said that the Lord Advocate, in reply to a deputation which lately waited upon him, stated that it was his full intention to submit next Session a further measure on the question of education in Scotland. The Earl of Dalhousie said that the Lord-Advocate, by his Bill last Session for removing the test, had taken away the only obstacle that existed to a national education in Scotland.—A deputation from the Free Church Teachers' Association has since had an interview with the Lord Advocate on the subject of the minute. The deputation pointed out to his lordship the main objections urged against the revised code, referring particularly to the subject of the breach of faith. This grave charge, they stated, they preferred, not against Parliament, but against the Educational Committee of Privy Council. They have all along been alive to the fact that Parliament could at any time withdraw the grants, but this temporary character of the scheme does not, they conceive, touch the question at issue. The teachers have gone on the assumption, acknowledged on almost all hands to be quite sound, that so long as Parliament continues to furnish the funds, the Privy Council is bound to implement engagements on the faith of the permanency of which men became teachers, and incurred obligations of various kinds. These engagements are in the revised code almost all repudiated. Hence the charge of breach of faith. His lordship in reply said:—

"As the education minute had emanated from a Government department, he could not be expected to give any opinion on its merits. He was aware that it was thought in many quarters that it would press hardly on Scotch schoolmasters. As the Privy Council system had never been particularly well fitted for Scotland, as it was only temporary, and as it was moreover a spendthrift system, his own opinion was that the time was now come when it might be dispensed with here altogether. The universities have been opened up, so substantially have the parish schools, and therefore the way was much clearer for a national system. There were, however, still difficulties to be encountered. There was, for instance, the financial one—how to supply the void caused by the withdrawal of voluntary contributions; and there was also the much more delicate question of the management of schools. He trusted and believed that the difficulties, though great, were not insurmountable, and should he see his way to introduce a measure, he hoped to have the cordial and effective support of the intelligent class of the community."

Railways.

Metropolitan Subterranean Railway. — The first trial trip on the Metropolitan Railway took place on the 28th ult., in the presence of a large party of invited visitors. The trip was divided into several separate journeys, the first being from the Great Western to the site of the Chapel Street Station, Paddington; the second, accomplished on foot, from Church Street to the baths and wash-houses through the tunnel under the New Road; the third also on foot, from Marylebone Workhouse to Trinity Church; the fourth from Trinity Church to Gower Street, where an engine was waiting to convey the party to Euston Square, and thence to King's Cross and Clerkenwell. The visitors were agreeably surprised to find that this underground railway is for nearly half its length not underground at all, and that where it does pass for various lengths beneath the streets, the tunnels, instead of being close, dark, damp, and ill-smelling passages, are wide, spacious, clean, and excellently well lit, resembling more a well-kept street by night than a subterranean passage through the very heart of the metropolis. From the Great Western to Victoria Street the line is nearly 3½ miles long, having stations at Paddington, Edgware Road, Baker Street, Portland Road, Euston Square, King's Cross, and Victoria Street. From west to east the average slope downwards of the whole line is about 1 in 300 feet, though after entering the city it again rises, but there is no steeper gradient throughout than 1 in 100. Its greatest curve is of 200 yards radius, and its greatest depth from the ground above to the rails not less than 54 feet, and there are not more than 1200 yards of straight line throughout. The span of the arch of the tunnel is 28½ feet, its form is elliptical, and its height 17 feet, except in the parts where there is great superincumbent pressure, when the form of the arch is altered to give it greater strength and to take the crown to a height of 19 feet. The foundations of the tunnel go from 4 to 5 feet into the solid ground on each side below the rails, except in some few places, where the close vicinity of very heavy buildings rendered extra strength necessary, and here the tunnel has been driven like a shaft, and is a solid ring of massive brickwork above and below; in fact, in all parts of the tunnel itself the most zealous care has been taken to insure the structure being every where greatly in excess of the strength it actually requires. Thus, even the lightest parts of the tunnel have six rings of brickwork, though railway arches of 7 feet greater span are never built with more than 5. The outer sides of the arches also are filled in with solid beds of concrete, and the whole covered over with a layer of asphalte to keep it water-tight. The tunnel has been constructed in 12 feet lengths, at the rate of 72 feet a week, quicker than any work of the kind has ever yet been accomplished. It has not all, however, been done at this rapid rate. Near the churches and heavy buildings it has been regularly driven in 4 feet lengths by skilled miners; and such portions, being conducted with the greatest care, have advanced but slowly. Through the gravel and London clay the labour has been very easy, but in parts where there was light, loose, sandy soil a great deal of difficulty was experienced from the quantity of water. All the really difficult parts have now however been surmounted. The rails are laid through many lengths, each line being double gauge, intended for both the broad and narrow traffic. At King's Cross the work was rendered unusually difficult by the fact that at precisely the most difficult part of all the junctions the great Fleet Ditch sewer crossed it through the crown of the tunnel arch. As the sewer, of course, could not be disturbed, the obstacle was met by carrying it across, slung, as it were, in a powerful cast iron trough, and there it now hangs, peering through the brickwork like a colossal main, and with all beneath it as dry and sweet smelling as if Fleet Ditch were 100 miles away. All the stations but two will be open air stations, and even those that are to be underground will be amply lit by daylight through apertures in the roof of the arch. One of the greatest difficulties of the many that had to be overcome consisted in constructing an engine that should be at once of great power and speed, capable of consuming its own smoke, and, above all, of giving off no steam. This has been successfully accomplished by Mr. Fowler, who has invented an engine which, while in the open air, works like a common locomotive, but, when in the tunnel, makes no smoke, and by condensing its own steam gives off not a particle of vapour. The greater part of the line is now so far advanced towards completion, that the first length will be opened for public traffic, from the Victoria Street Station to Paddington, before the 1st of May next. The trains are intended to start every 10 minutes, and will accomplish the distance from end to end in 13 minutes, at a rate of fares which it is said will compete with those of the cheapest omnibuses.

South-Eastern Direct Line.—A special general meeting of the South Eastern Company was held on the 21st ult., when the directors were empowered to apply to Parliament for powers to construct a direct line from the Greenwich Junction to Tunbridge and Dartford, thereby cutting off the Red Hill angle, and effecting a saving in the transit of the continental traffic of 13 miles. The cost is expected to be about 1,000,000*l.*

London, Chatham, and Dover.—The report that this Company intend to abandon their Farringdon Street Station is said to be erroneous. It appears to have arisen from the fact that the company has given notice of an intended application to Parliament to modify the restrictions as to the height of the arches of the bridge over the river. This modification affects only the superstructure, and the foundations of the bridge will be commenced forthwith. The trains of this company have been provided with carriages for the special accommodation of ladies. First and second class carriages have also been attached to the trains for the exclusive use of "smokers," so that ladies need not avail themselves of special carriages in order to escape the fumes of tobacco.

The War of the Gauges in the West.—The battle between the broad and narrow gauges, which was fought some years since with such costly consequences to both sides in the North, appears about to be renewed in the West. The South-Western Company propose to extend their line from Gillingham, in Dorsetshire, to Bristol, there to join the Midland line and complete the direct narrow gauge communication. This scheme is a competing one with that of the Great Western line from Keynsham to Radstock, and will be opposed both by the Great Western and the Bristol and Exeter, who, it is said, seriously contemplate laying down the narrow gauge on the whole of their lines. Public meetings have been held by the advocates of the broad and narrow gauges at various places through which the projected lines pass, and the contest promises to be obstinately contested on both sides.

Sporting.

Great Foot Race at Leeds.—On Monday afternoon the Seneca Indian, Deerfoot, E. Mills, of London; J. Brighton, the "Milk Boy," of Norwich; S. Barker, of London; and D. Cliffe, an amateur, of Leeds, competed for the great miles' champion cup, at the Victoria Race Grounds, [illegible] Road, Leeds. The cup was of the value of 30 guineas, the second prize was one of 10*l.*, and the third a 5*l.* prize. The grounds were crowded, nearly 15,000 persons being present, and the roofs of the adjoining houses were also covered with sightseers. The distance round the course being [illegible] yards, the runners had to go round the ground 41 times to make up the 10 miles. Barker took the lead in the first lap, Deerfoot being the second, and Mills the third, and each [illegible] travelled in about a minute throughout the [illegible]. Deerfoot did not put on any pressure during the first 20 [illegible], and the consequence was that his competitors had an opportunity of showing their prowess. Mills sprang over the ground with great agility and grace, but began to be distressed at the sixth mile, and in the 20th lap retired from the contest. Brighton kept up to the last, and did not appear to suffer until the 41st lap, when it was apparent that he was in great distress. But his pluck carried him through the match, and he reached the winning post but two yards behind Deerfoot. Barker, in the [illegible] lap, was hampered by the crowd, and did not appear until two more laps had been run, when he again appeared in the match, and kept up a good running to the end. Deerfoot performed [illegible] with a great deal of mobility in the earlier laps, being content with keeping up the running, and his somewhat ungainly gait told against him in public estimation, but he soon showed that his wind and pluck was good, for he kept in the front throughout the whole of the match, and was not distressed when the necessity arrived for the final spurt, which carried him in a winner by a couple of yards. The 10 miles were run in 53m. 10s., being the shortest time on record.

Great Match at Cambridge.—On Wednesday Deerfoot, Brighton, Lang, and S. Barker contended in a six mile foot race at Mr. Fenner's grounds in Cambridge. About 5[illegible] spectators were present, including the Prince of Wales and suite, General Bruce, the Heads of Colleges, and most of the surrounding noblemen, gentry, and a large number of ladies. The Indian took the lead at starting, Lang gave in at the 3d mile, Barker was defeated before the end of the [illegible], and the last mile was gallantly contested by Deerfoot and Brighton, the Indian beating by four yards and leaving off as fresh as when he commenced. The Prince shook hands with him, presented him with a purse, and also gave a handsome gratuity to the three Englishmen.

Law.

Court of Queen's Bench.—*The Queen* v. *Havens.—Criminal Information.*—In this case a rule had been obtained calling upon Mr. William Rawden Havens, a magistrate for the county of Essex, to show cause why a criminal information should not be filed against him for scandalous and defamatory matter published by him, imputing corruption in the discharge of their office to certain county magistrates. The application was made on behalf of nine magistrates, and Mr. [illegible], who had been for 24 years clerk to the magistrates. There appeared to have been some misunderstanding between the parties, and on the 5th December, 1860, a memorial was addressed by the defendant's brother magistrates who acted with him in petty sessions at Colchester to the Lord Chancellor, who declined to interfere. On the 23d February following Mr Havens brought the matter of the memorial before the Bench, and intimated his intention to move the dismissal of their clerk. In doing so he made use of the remarks upon which this application was founded, declaring his conviction that there had been a corrupt administration of justice in the court for several years past. Mr. Bovill, who appeared for defendant, now said that he was satisfied there were no grounds for charging corruption on any one, and he tendered the most ample apology for what had occurred. Sir F. Kelly on the part of the applicants having accepted the apology, the Lord Chief Justice said the defendant had given way to rash and ill-advised language, and if an apology had not been given the court would have made the rule absolute. Mr. Havens having disclaimed all intention of imputing intentional corruption to the magistrates or their clerk, to all of whom the court was bound to afford protection, he thought the case would be satisfied by the rule being discharged with costs. Rule discharged accordingly.

Court of Exchequer, Common Jury.—*Beattie* v. *Brady.—Libel.*—This was an action to recover compensation in damages for a libel contained in a letter written by defendant to Colonel Sykes. The plaintiff, who was originally a [illegible], was the promoter of a Society for promoting National Education and the physical, industrial, religious, moral, and [illegible] training of the people, having an office at 13, Paternoster Row. A prospectus was issued, having the names of many distinguished persons at the head of it as patrons, and subscriptions were received by plaintiff from many persons. The plaintiff stated that it was originally intended to form a company, but upon the matter being mentioned to Sir John Pakington, he suggested that it had better exist as a society, as there would be considerable difficulty in getting persons to be associated with it if it were called and known as a company; that suggestion was adopted, and many persons of distinction were induced to subscribe to it. An educational inspector and agents were appointed, and the society put in motion. Works were written by the plaintiff, called "Education as It Is, Ought to Be, and Might Be;" "Health Made Easy for the People;" "Wealth—How to Get, Preserve, and Enjoy It;" "[illegible] Made Easy for the People," and many others, and sold at the office in Paternoster Row. Tha names of all subscribers were printed, with the amounts subscribed by them, as well as the names of a committee of reference, consisting of [illegible]. The educational inspector visited schools in various parts of the country, and gave free lectures on subjects connected with the "National Education Movement;" yearly accounts of the expenditure of the funds were made out by the plaintiff, and audited by persons appointed by him; and letters were sent to the subscribers, inviting them to attend a meeting. The letters were written by defendant to Colonel Sykes, and printed, in which he said that, having been informed that the Colonel was about to preside at a meeting for promoting national education, he wished to call his attention to several letters he had received from many noblemen and gentlemen, wherein they stated that their names had been used without their authority; that at the time they were written he had reason to believe that no such society existed, and that plaintiff and his agents had been collecting large subscriptions for a society that did not exist, and which were chiefly applied to the benefit of the plaintiff and his auditors, who were allowed half of all they could get. The plaintiff w[illegible]

[illegible]-examined to show that there was no society at all, or if [illegible] was, that plaintiff was himself the society, and that the [illegible] of the gentlemen appearing on the prospectus were put [illegible] their knowledge or consent. Baron Martin, in [illegible] after defining a libel, left it to the jury to say, [illegible] whether the letters in question were libellous or not, [illegible] opinion to be that they were libellous—if so, [illegible] would be for the plaintiff on the first issue; [illegible] whether they were true, because it was an answer to [illegible] that the matters contained in it were true. [illegible] were true, the verdict would be for the defendant on [illegible] issue. The jury found a verdict for the defendant.

[illegible] *London and Brighton Railway.—The Clayton Tunnel* [illegible]—This was the first of the actions brought against the [illegible] Brighton Company arising out of the catastrophe [illegible] Clayton Tunnel, on Sunday, the 25th August last. The [illegible] stated that the plaintiff sued as widow of James Gardener and administratrix of his estate, to recover damages for the loss sustained by the death of her husband, by reason [illegible] negligence of defendants. The deceased was a cab proprietor, possessing at the time of his death three cabs and eight [illegible], each cab earning on an average 17s. a week profit. When the body of the unfortunate man was searched two flash [illegible] were found upon it, and the plaintiff was cross-examined [illegible] a view to show that her husband had been employed as a [illegible] worker. She stated that he had been employed in that [illegible] at a house called the Olive Branch 7 or 8 years ago, but [illegible] time of his death he was engaged in his occupation as a [illegible]. The negligence of the company was admitted, and [illegible] question for the jury was reduced to one of damages only. [illegible] in summing up, said that both the jury and [illegible] great cause to complain of the course defendants [illegible] thought proper to pursue. They had admitted their negligence [illegible] endeavoured to blacken the character of deceased with a view of reducing the amount of damages. If they advertised to carry passengers for half-a-crown to enjoy 8 hours at the sea-side, they had no right to be particular as to the passengers they obtained. The jury returned a verdict for [illegible], and assessed the damages at 500*l*.

WINTER ASSIZES, HOME CIRCUIT, MAIDSTONE: *The Convict* [illegible]—*George Burkett*, 20, soldier, a determined-looking young man, was charged with feloniously cutting and wounding John Cooper with intent to murder him. The [illegible] was a warder in the convict prison at Chatham, and [illegible] prisoner had been sent to that establishment in June, 1859, [illegible] a sentence of five years' penal servitude for a robbery at [illegible]. He had misconducted himself on several occasions, and [illegible] warder had been compelled to report him. He had, in [illegible] consequence, been placed in solitary confinement and kept on bread and water, and had repeatedly threatened the prosecutor with violence. On the 22nd of June last a gang of convicts was employed in some works at Chatham, under the charge of the prosecutor and some other warders, and while the former [illegible] back to him, the prisoner, who was one of the gang, attacked him in a most savage manner with a spade, and [illegible] him several blows on the head, inflicting very serious injury. The prosecutor raised his arm to protect his head, [illegible] received a tremendous blow from the spade on his right [illegible], which broke several of the bones. The prisoner would, in all probability, have inflicted still further injury if the dockyard [illegible] had not come up; he was then charged by one of the officers with a bayonet before he would give up the spade, and [illegible] being secured and taken before the governor, the only excuse he made for his conduct was that he did not intend to [illegible] the warder. The prosecutor, it appeared, was under medical treatment for the injuries he received for four months, and was then found to be incapacitated for the performance of his duty as a warder, and was discharged the service. The [illegible] in defence denied that he intended to take the prosecutor's [illegible] and said that his object was merely to assault him. [illegible] found the prisoner *Guilty* of wounding [illegible] intent to murder. Mr. Justice Williams, addressing the prisoner, said that as the offence of which he had been convicted was committed before the passing of the recent statute, [illegible] bound to order sentence of *Death* to be recorded against [illegible]. At the same time he thought it right to inform him that the offence of which he had been convicted was no longer a capital one, and that consequently the capital sentence would not be carried out; but he must expect a very severe punishment, and very probably one of penal servitude for life. *The* [illegible] *Malling Murder.—John Atkins*, who was remanded from [illegible] Summer Assizes, was indicted for the wilful murder of his wife, Elizabeth Atkins, at West Malling. It will be remembered that the prisoner had been long jealous of his wife, apparently without any cause, and that on the day of her death he stabbed her in the neck with a knife. She ran into an adjoining field [illegible] there died. The defence was that the prisoner was insane, and that the jealousy which had led to the crime was the result of monomania. The jury, after a few minutes' deliberation, returned a verdict of *Not Guilty* on the ground of insanity.

Obituary.

THE COUNTESS CANNING, wife of the Governor-General of India, died on the 18th ult. at Calcutta. Her ladyship was the [illegible] daughter of the late Lord Stuart de Rothesay, G.C.B., [illegible] third daughter of Philip, third Earl of Hardwicke, and [illegible] in 1817. She married, in 1835, Earl Canning, then Hon. C. J. Canning, the only son of the well-known [illegible] statesman. Her ladyship was for many years Lady in Waiting [illegible] the Queen, and was sister of the Marchioness of Waterford.

LADY GEORGIANA FITZROY, widow of Admiral Lord William [illegible], K.C.B., died on the 2d inst. at Hastings, in her 73d [illegible] year after a protracted illness. Her ladyship was the second [illegible] daughter of Mr. Thomas Raikes, and married, in 1816, Lord [illegible], fourth son of the third Duke of Grafton, and uncle of the present duke. By his lordship, who died in 1857, her [illegible] had two daughters, and a son, married to the second [illegible] of Lord Feversham.

[illegible] ARMSTRONG, the oldest general in the army, died at [illegible] Park, Bath, on the 2d inst. at the advanced age of [illegible]. He entered the army as far back as 1783, went to Flanders [illegible] Lord Moira in 1794, joined the Duke of York at Antwerp, [illegible] was in the disastrous retreat through Holland in the winter [illegible] year, and embarked at Bremen. He served in Ireland [illegible] the rebellion in 1798; and was Assistant-Adjutant-General [illegible] of the centre district under General Dundas, until [illegible] of 1802. He also served for many years in the Royal Artillery. He attained the rank of Major-General in [illegible] and that of General in 1854.

[illegible] CONER R. M. OGLE, BART., died on the 29th ult., of [illegible], at Withdean Court, Sussex. He succeeded his [illegible] in 1832, and had only just attained his 18th year.

ALDERMAN SIR PETER LAURIE, the oldest member of the [illegible] Aldermen of the city of London, died on the 3d inst. [illegible] year. He served the office of sheriff in 1823, was [illegible] an Alderman for the ward of Aldersgate in 1826, and [illegible] Lord Mayor in 1832. For full three generations, Sir [illegible] was well known for his homely, *brusque* manners and his [illegible] honesty of purpose; and the way in which his [illegible] qualities displayed themselves on the bench often [illegible] the public. For the last 10 years he has taken a comparatively small part in public or civic affairs.

[illegible] MACONOCHIE WELWOOD, formerly well known in legal [illegible] as Lord Meadowbank, died at his seat, Meadowbank, Mid-Lothian, on Saturday, at a very advanced age. He was the son of Mr. Allan Maconochie, who sat on the Scotch Bench as Lord Meadowback from 1804 till his death in 1816, and he himself filled the judicial office under the same title from 1819 till his retirement in 18[illegible]. [illegible] of Scotland from 18[illegible] [illegible] three following years. [illegible] Parliament for a borough in the Isle of Wight, and afterwards for a Fifeshire group. Mr. Maconochie was a Tory of the old school. As Lord Advocate, his period of office was cast in a time of great political [illegible], and at a time when strict measures were deemed the only course of safety. As a judge, he was called upon, with his colleagues, to pronounce upon ecclesiastical questions, which subsequently split the Church of Scotland in two. His ability and [illegible] as a lawyer were only exceeded by his estimable private character. He took the name of Welwood some years ago on succeeding to some estate in Fifeshire.

CAPTAIN PRYCE DEVEREUX died at Arcot, Madras, on the 12th September. He was the fourth son of the late Pryce Devereux Devereux, Esq., of Bryn Glas Hall, Montgomeryshire, for many years a magistrate of that county. He was educated at Addiscombe, and received his commission in the Indian army in 18[illegible]; he served with the [illegible]th Native Infantry in Goomsor, and with the 37th Grenadiers in the expedition to China; was present at the capture of the fort and works of Chuenpee, of the forts on the Bocca Tigris, and at the storming of the heights of Canton in 1841. For his services on this occasion he received the medal.

WILLS.—The will of Lord Herbert of Lea has been sworn under 160,000*l*.; Capel Hanbury Leigh, Esq., of Pontypool Park, Monmouthshire, and Penrith, Glamorganshire, 1[illegible]0,000*l*.; Alexander John Colvin, Esq., 40,000*l*.

BIRTHS.—On the 29th ult, the Marchioness of HUNTLY, of twin daughters—30th ult, at Castle Forbes, Aberdeenshire, the wife of Major-General SIR JOHN INGLIS, K.C.B., of a daughter—27th ult, at Western House, Brighton, the residence of her father-in-law, Sir F. Graham Moon, Bart., the wife of the Rev. E. G. MOON, prematurely, of a son, stillborn—5th ult, at 1, Great Cumberland Street, the Hon. Mrs. WM. BECKETT DENISON, of a son.

MARRIAGES.—On the 4th inst, at St. George's Church, Hanover Square, the Hon. NORMAN LESLIE MELVILLE, Captain Grenadier Guards, son of the Earl of Leven and Melville, to GEORGINA, daughter of WM. SHIRLEY BALL, Esq., Abbeylara, county Longford, Ireland, late Captain 8th Hussars—30th ult., at St. Margaret's, Westminster, FREDERICK WILDER, Esq., of Purley Hall, Berks, to SARAH FOX, daughter of Sir BENJAMIN HAWES, K.C.B.—26th ult, at St. Luke's Church, Cheltenham, THOMAS WILLIAM CARR, only son of the late Major General THOMAS DICKINSON, of her Majesty's Indian Army, to ELIZABETH CHARLOTTE, second daughter of Major General HOPE DICK, of her Majesty's Indian Army, and of Cheltenham—3d Oct., at Murree, Punjaub, Lieutenant-Colonel WILLIAM OLPHERTS, C.B., Victoria Cross, H.M.'s Horse Artillery, to ALICE MARIA, youngest daughter of Colonel GEORGE CAUTLEY, H.M.'s 5th Bengal Cavalry—24th Oct., at Ootacamund, Madras, Colonel JAMES BRIND, C.B., of the Bengal Horse Artillery, to GEORGINA, daughter of the Rev. H. G. PHILLIPS, rector of Great Whelnetham and vicar of Mildenhall, Suffolk—3d inst, at Marylebone Church, CÆSAR H. HAWKINS, F.R.S., of Grosvenor Street, President of the Royal College of Surgeons, to ELLEN, youngest daughter of the late HENRY ROUSE, Esq., of Stamford Hill.

DEATHS.—On the 27th ult, at Edinburgh, the Lady ROBERT KERR—25th ult, at Dover, Lieutenant-General the Hon. JOHN FINCH—23d inst, in Cavendish Square, Miss ELIZABETH FOLEY, of Newport House, Herefordshire, and Newent, Gloucestershire, eldest daughter of the late Hon. ANDREW FOLEY—26th ult, at his residence, 2, Tenterden Street, Hanover Square, aged 71, JAMES ADOLPHUS MOORE, Esq., R.M.A., grandson of Sir Emmanuel Moore, Bart., county of Cork, Ireland—1st inst, at Tunbridge Wells, WILLIAM EDWARD, third son of Sir GEORGE ARMYTAGE, Bart., of Kirklees Park, Yorkshire, aged 14—25th Oct., at Brighton House, St. Vincent, BOUVERIE ALLEYNE, Esq., third son of Sir Reynold Alleyne, Bart., Colonial Secretary of the Island of St. Vincent, aged 33—24th ult, at Bridge of Allan, GEORGE RAMSAY CAMPBELL, Esq., late of the H.E.I.C. Civil Service, son of the late Sir Archibald Campbell, of Succoth, Bart.,—24th ult., at Cliftonville, Brighton, very suddenly, of disease of the heart, JAMES BRANT, Esq., C.B., late her Majesty's Consul at Damascus—5th inst., at No. 24, Hyde Park Square, Gilbert Henderson, Esq., Recorder of Liverpool.—27th ult, at his residence, 31, Promenade, Cheltenham, THOMAS PILKINGTON, Esq., for many years chairman of the Cheltenham Bench of magistrates, aged 82—29th ult, at Ventnor, Isle of Wight, HUNTLEY BACON, Esq., of Colchester, J.P. for the county of Essex, son of Huntley Bacon, Esq., of Gloucester Terrace, Hyde Park—27th ult., at Kingshill, near Dursley, Gloucestershire, ROBERT JOHN PURNELL, Esq., magistrate and deputy-lieutenant of the county of Gloucester, aged 72—26th ult., at the Brunswick Hotel, Blackwall, a few days after her return from Madras, ELIZABETH, relict of EYRE BURTON POWELL, Esq., late Comptroller-General of Inland Revenue, Ireland, aged 60—26th ult., at Preston, THOMAS WALKER SHEPPARD, late chief constable of the county Palatine of Lancaster, and formerly Lieut.-Colonel in the service of her Majesty the Queen of Spain, aged 48—27th ult, at Park Gate, Wanstead, Essex, ANN LYDIA, wife of Mr. Alderman FINNIS, aged 56—28th ult, at his residence in Ulverstone, BERNARD GILPIN, Esq., Fellow of the Royal College of Surgeons of England, and Medico Chirurgical Society, aged 71—27th ult, at Upper Clapton, the Rev. WILLIAM KUPER, D.D., K.H., Minister of the German Chapel Royal, St. James's, aged 89—21st ult. the Rev. RICHARD GARVEY, M.A., Prebendary and Minor Canon of Lincoln Cathedral, aged 7[illegible]—[illegible] ult, the Rev. FREDERICK BUSSELL, Vicar of Great Marlow, aged 41—3d inst, at St. Mary Church, near Torquay, the Rev. JOHN CHAPMAN, age 32—25th Oct., on his voyage to England, the Rev. JOHN FRY, M.A., for 25 years Chaplain of St. Paul's Church, Rondebosch, near Cape Town, Cape of Good Hope.

Markets.

HAY.—Per Load of 36 Trusses.

SMITHFIELD, THURSDAY, Dec. 5.

Prime Meadow Hay	80s to	90s	Clover, old	90s to	120s
Superior do. ..	95	105	New Clover	—	—
Inferior do... ..	40	55	Do. second cut ..	80	105
New do.	—	—	Straw	28	34
Rowen	—	—			

DAVIS & CO.

CUMBERLAND MARKET, THURSDAY, Dec. 5.

Sup. Meadow Hay..	97s to	107s	Inferior Clover ..	86s to	100s
Inferior do.	68	88	New do.	—	—
New do.	—	—	Straw	36	40
Superior Clover ..	108	116			

JOSHUA BAKER.

WHITECHAPEL, THURSDAY, Dec. 5.

Fine Meadow Hay	90s to	95s	Prime Clover ..	110s to	116s
Inferior do.	80	90	Inferior do.	90	100
Prime New Hay ..	—	—	Prime 2d cut ..	98	103
Inferior	—	—	Inferior do. . ..	—	—
Straw	30	34	New 1st cut ..	—	—

COVENT GARDEN, Dec. 7.

Supplies and prices have altered but little since last report. Home-grown produce is equal to the demand. Pears comprise Glou Morceau, Marie Louise, Chaumontel, and Brown Beurré. Among Apples are some good examples of American Newtown Pippin, Ribston Pippin, and Foran's Pippin. Grapes and Pine Apples are abundant. Of Vegetables there is still a fair supply. Potato markets have not altered since our last. Cucumbers, though scarce, are still sufficient for the demand. Cut flowers chiefly consist of Orchids, Chrysanthemums, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 4s to 6s	Oranges, per 100, 6s to 14s
Grapes, per lb., 3s to 6s	Lemons, per 100, 6s to 10s
Melons, each, 1s to 2s	Nuts, Cob, per pound., 4s to 4s 6d
Pears, per doz., 1s to 6s	Walnuts, per 100, 2s
Apples, per doz., 6d to 1s	

VEGETABLES.

Broccoli, per bundle, 1s to 1s 3d	Celery, p. bundle, 1s 6d to 2s
French Beans, per 100, 2s 6d to 3s 6d	Onions, pickling, p. ½ sieve, 4s 6d
Cabbages, do., 1s 3d to 1s 6d	Tomatoes, p. doz., 1s to 6s
Potatoes, p. ton, 60s to 75s	Asparagus, p. bundle, 30s
— per cwt., 4s to 8s	Seakale, per punnet 4s
Turnips, per bunch, 2d to 4d	Shallots, per lb., 10d to 1s
Carrots, do., 4d to 6d	Garlic, per lb., 6d to 8d
Spinach, p. sieve, 1s to 2s	Endive, p. score, 1s 6d
Cucumbers, each, 1s to 1s 6d	Horse Radish, p. bun., 1s 6d to 4s
Artichokes, each, 6d to 8d	Mushrooms, p. pott., 2s to 3s
Beet, per doz., 1s 6d	Parsley, p. 12 bunches, 3s to 4s
	Herbs, per bunch, 2d to 4d

HOPS.—BOROUGH MARKET, FRIDAY, Dec. 6.

Messrs. Pattenden & Smith report a fair demand for both new and old Hops at about the same prices as this day week.

POTATOES, SOUTHWARK, Monday, Dec. 2.

During the past week the arrivals both coastwise and by rail have been quite equal to the demand; trade still dull. The following are this day's quotations:—Kent and Essex Regents, per ton, 120s. to 140s.; Yorkshire Flukes, 120s. to 140s.; do. Regents, 100s. to 130s.; Lincolnshire do., 90s. to 110s.; Scotch do. 70s. to 110s.; French Whites, 90s. to 110s.

METROPOLITAN CATTLE MARKET.

MONDAY, Dec. 2.

The number of Beasts is rather larger than on Monday last, but choice qualities are not plentiful. Trade is slow, but prices are not much altered. The supply of Sheep is very small, yet they are with difficulty disposed of. The demand is unusually small, and prices consequently are not higher than of late. Trade is dull for Calves. From Germany and Holland there are 950 Beasts, 5300 Sheep, and 99 Calves; from Spain, 100 Beasts; from Scotland, 300; from Ireland, 1000; from Norfolk and Suffolk, 150; and 2600 from the northern and midland counties.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 8 to	5 0	Best Long-wools.	4 10 —	5 0
Best Short-horns	4 6 —	4 8	Do. Shorn	—	..
2d quality Beasts	3 4 —	3 10	Ewes & 2d quality	4 0 —	4 6
Best Downs and Half-breds ..	5 4 —	5 6	Do. Shorn	to	..
Do. Shorn	—	..	Lambs	—	..
			Calves	4 0 —	5 0
			Pigs	4 6 —	5 6

Beasts, 5420; Sheep & Lambs, 18,240; Calves, 107; Pigs, 380.

THURSDAY, Dec. 5.

There are not quite so many Beasts as on Thursday last. Trade is more active, but there is no quotable advance in price. There are very few Sheep on offer, and rather more demand. Monday's quotations are more readily realised, and in a few instances are exceeded. Good Calves are scarce and dearer. From Germany and Holland there are 110 Beasts, 800 Sheep, and 87 Calves; from Ireland, 200 Beasts; Milch Cows, 105.

	s d	s d		s d	s d
Best Scots, Herefords, &c. ..	4 8 to	5 0	Best Long-wools.	4 10 to	5 2
Best Short-horns	4 6 —	4 10	Do. Shorn	—	..
2d quality Beasts	3 6 —	4 0	Ewes & 2d quality	4 4 —	4 8
Best Downs and Half-breds ..	5 4 to	5 6	Do. Shorn	—	..
Do. Shorn	to	..	Lambs	—	..
			Calves	4 6 —	5 8
			Pigs	4 4 —	5 4

Beasts, 1135; Sheep & Lambs, 2900; Calves, 120; Pigs, 180.

BUTTER MARKET.—Dec. 5.

Best Fresh Butter .. .. 17s. per dozen lbs.
Second do. do. .. .. 13s. " "
Pork, 4s. 4d. to 5s. 0d. per 8 lbs.

MARK LANE.—MONDAY, Dec. 2.

The supply of Wheat from Essex and Kent to this morning's market was small, and the condition bad; it was disposed of at an improvement of 1s. per qr. upon the prices of this day se'nnight. The attendance was only moderate. Foreign Wheat at the commencement was held for a considerable advance, the majority of holders being disinclined to realise; eventually the sales effected were only to a limited extent, and at a rise of 1s. to 2s. per qr. upon American descriptions. The Barley trade is quiet, and malting qualities are 1s. per qr. cheaper. Beans and Hog Peas are unaltered in value, white are rather lower. Oats are a slow sale at last week's rates. Flour is in fair request, and American barrels 1s. dearer.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk ..White	50—6[illegible]	Red	50—62
— — fine selected runs...ditto	61—67	Red	54—65
— — Talavera	64—72		
— Norfolk	—	Red	—
— Foreign	48—76		
BARLEY, grind. & dist. 26s to 28s. .Chev.	36—40	Malting .	34—36
— Foreign..grinding and distilling	26—32	Malting .	34—38
OATS, Essex and Suffolk	2[illegible]—2[illegible]		
— Scotch and Lincolnshire—Potato	26—28	Feed	20—24
— Irish .... Potato	26—28	Feed ..	20—24
— Foreign.. . . Poland and Brew	21—24	Feed ..	20—24
RYE	[illegible]—[illegible]	Foreign .	—
RYE-MEAL, foreign	—		
BEANS, Mazagan.... [illegible]s to [illegible]s .. Tick	[illegible]—[illegible]	Harrow .	36—39
— Pigeon ......38s — 42s..Winds.	—	Longpod	—
— Foreign ....Small	42—[illegible]	Egyptian	—
PEAS, white, Essex and Kent..Boilers	40—44	Suffolk ..	40—46
— Maple ... 43s to 45s ..... Grey	39—41	Foreign .	35—38
MAIZE................................White	—	Yellow ..	—
FLOUR, best marks delivered..per sack	50—[illegible]		
— 2d do ....ditto	40—[illegible]	Country	40—50
— Foreign ....per barrel	28—37	Per sack	43—58

FRIDAY, Dec. 6.

Since the 29th ult. the weather has been mild, with the exception of the nights of the 3d and 4th inst, which were frosty, with heavy fog. The wind has been principally from the south. The probability of a rupture with America, in

addition to the short deliveries of English Wheat throughout the kingdom, has given an impulse to the trade, and prices have advanced 1s. to 2s. per quarter. Barley continues neglected, and is 1s. per qr. lower, under the pressure of large deliveries from farmers. Oats are slightly firmer, while Peas and Beans remain unaltered with a slow demand. Flour must be written 1s. per sack and barrel dearer, except at Leith, where it is one to 2s. higher. Since Friday last 62 vessels have been reported off the coast. The floating trade has been firm and animated, and an advance of about 2s. per qr. in most articles, and even more for Wheat in some instances, has been obtained. In Paris (Dec. 5), the Flour trade was not very active, and sales were difficult at former prices. Wheat is firm, and a good business has been done at the close of the market at late rates. The arrivals of English Wheat this week have been small, good of Barley, and small of Oats; of foreign Wheat large, fair of Barley and small of Oats. The attendance at this morning's market was only moderate. English Wheat sold freely at Monday's prices. Foreign was held for some advance, but on the business done, which was not large, our previous quotations were not generally exceeded. In Spring Corn there is but little doing, and prices are unaltered. Flour is generally held for a slight advance, and sales are limited.

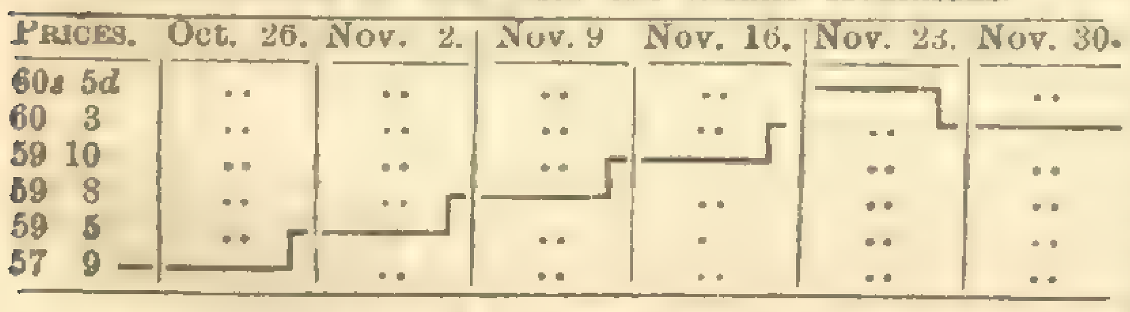
ARRIVALS FROM Dec. 2 to Dec. 6.

	Wheat.	Barley.	Oats.	Flour.
English ..	1830 qrs.	2640 qrs.	90 qrs.	1220 sks.
Irish	— ,,	60 ,,	— ,,	— ,,
Foreign ..	34060 ,,	4350 ,,	5760 ,,	{ 120 ,, 21030 brls.

LIVERPOOL, Tuesday, Dec. 3. — We have had a very numerous attendance of millers and dealers at our market to-day and a good consumptive business has been done in Wheat and Flour, at an advance of 2d. per cental and 6d. per barrel over the quotations of Friday last; the former article being in most favour. The heavy supplies keep Indian Corn in check, and buyers operate cautiously at the rates of last market day. Oats and Oatmeal are without alteration. Beans, Peas, and Barley are each 6d. per qr. dearer. The market closes with a healthy tone of feeling.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Oct. 26..	57s 9d	36s 7d	21s 11d	35s 1d	42s 3d	44s 8d
Nov. 2..	59 5	37 1	22 7	37 5	42 3	44 4
— 9..	59 8	37 8	22 8	38 5	42 6	46 0
— 16..	59 10	37 6	22 7	37 7	42 6	47 5
— 23..	60 5	37 6	23 0	39 1	42 9	44 11
— 30..	60 3	37 4	23 0	36 10	42 8	45 2
Agg. Aver.	59 7	37 3	22 8	37 5	42 6	45 5

FLUCTUATIONS IN THE LAST SIX WEEKS' AVERAGES.



BRITISH WOOLS.—LONDON, FRIDAY, Dec. 6

Since the American news has arrived and been duly considered our trade has been completely stopped, and prices are quite nominal. The circumstance of the consumers having just supplied their requirements for a time has enabled them to keep entirely out of the market.

	s. d.		s. d.					
South-down Hoggets	1 4	to	1 5	Leicest. Wethers	1 4	to	..
Half-bred ditto		—	1 6	Ditto Hoggs ..	1 5	—	..
Down Ewes ..	1 4	—	1 4½	Combing Skins	1 0	—	1 5
Kent Fleeces ..	1 5	—	1 6	Flannel Wool ..	1 0	—	1 5
				Blanket ditto ..	0 6	—	.

COLONIAL WOOL SALES.—These sales continue to go off at the previous rates, low inferior descriptions having a tendency to sluggishness, whilst first-class marks maintain their value.

COAL MARKET.—Dec. 6.

Walls End Lambton, 17s. 6d.; Walls End Haswell, 18s.; Walls End Stewarts, 17s. 6d.; Walls End Tunstal, 16s. 9d.; Walls End Byron, 17s.; Walls End Hunwick, 15s. 6d.; Walls End Whitworth, 15s. 6d.; Wylam, 16s.; Tanfield Moor Butes, 14s.; Bedside Hartley, 15s. 6d; Davidson's Hartley, 15s. 6d.; Hastings Hartley, 15s. 6d.—Ships at market, 87.

PARTNERSHIP. — The Advertiser, who has a knowledge of the Nursery and Seed Business, wishes to meet with a Gentleman who will join him as PARTNER with equal capital to establish a Nursery and Seed Business, where a good opportunity offers, or would take a share in an Established Business.—Address M. H., *Gardeners' Chronicle* Office, W.C.

HORTICULTURE. — A Nurseryman having an extensive business and an excellent residence situate in one of the most healthy counties in the West of England, is desirous of meeting with one or two Young Gentlemen as BOARDERS and PUPILS. They will have every opportunity of learning the business and enjoy all the comforts of home. —Address X. Z., *Gardeners' Chronicle* Office, Covent Garden.

TO FARMERS.—The Friends of a Youth, aged 15, wish to place him till he is 21 with a respectable and intelligent Farmer, occupying not less than 300 acres, using Steam and all the modern appliances, who would receive him into his house as one of the family, and thoroughly instruct him in everything pertaining to Farming. References exchanged.—Terms and all particulars to be addressed to R. B. Messrs. Poppleton & Letchford, Seething Lane, London, E.C.

CONSULTING GARDENER.—JOSEPH ROBINSON begs to offer, on moderate terms, his services as above to any lady or gentleman contemplating Alterations, Improvements, or Additions to their Gardens, Pleasure Grounds, or Horticultural Buildings—assured that from his long practical experience he would be able to effect the same judiciously and economically.—Slough, Bucks.

GOOD SERVANTS.—The difficulty of procuring these is so great, that a SCHOOL has been opened in London under careful management to teach Young Women of the better class to become COOKS and KITCHENMAIDS, and places are obtained for them. No payment is required until they have obtained situations.—Full particulars on application to the Matron School of Cookery, 90, Albany Street, Regent's Park, London, N.W.

WANTED, a PERSON fully acquainted with the Breeding and Rearing of Sheep and Cattle, having 1000l. to 2000l. at command, to go out to an English Colony and take an interest in and charge of an establishment already well stocked. This presents an excellent opportunity and scope for a persevering man. The climate is very healthy and similar to that of England. The returns would be largely remunerative.—Address Box S.1, Post Office, Liverpool.

WANTED, a GARDENER, capable of growing Peaches and Grapes in an Orchard-house and Vinery, and who is also a good General and Kitchen Gardener.—Apply to F. WHITE, East Retford, Notts.

WANTED, a strong, active Young Man as UNDER GARDENER; he will be chiefly employed attending to Forcing and Plant Houses, Pruning, Nailing, &c.—A. B., 2, Digbeth, Birmingham.

WANTED, a SHOPMAN or CLERK; a Young Man who has a knowledge of the Seed Trade.—Apply, W. MAULE & SONS, Nurseries, Bristol.

Seed Trade.

WANTED, Two UNDER SHOPMEN in a London house.—Address by letter only, stating where last engaged and Salary expected, to Mr. W. C. WILSON, 30, Primrose Street, E.C.

WANTED, a PACKER. — Apply at WILLIAM BULL'S Establishment for New and Rare Plants, King's Road, Chelsea, S.W.

WANT PLACES.—Letters to be Post Paid.

To Gentlemen, Landed Proprietors, and Others.

SOLE SUPERINTENDENT of TILERY WORKS. —Married; practical. Has had great experience in all the branches connected with a Tilery, both for Building and Drainage purposes. Is a good judge of Clays at first sight as to its qualities; will prove Clay for any gentleman on moderate terms, by their forwarding samples carriage paid. Kilns and Sheds built upon the most improved principle so as to prove effectual. Good references. A gentleman's Estate preferred.— S. B. D., Widworthy Court Tilery, near Honiton, Devonshire.

GARDENER (HEAD).—Age 34, married; practically acquainted with Horticulture in all its branches. Wife a first-class Laundress.—C. J., Sketty, Swansea.

GARDENER (HEAD).—W. HUBBARD, Gardener to E. T. Flower, Esq., Stratford-on-Avon, will be disengaged on Dec. 23; age 32, married, no incumbrance. Practically understands his profession in all its branches. Good references.

GARDENER (HEAD).—Age 24; perfectly understands his profession in all its branches, including Early and Late Forcing, and the general Management of Stove and Greenhouse Plants, &c. Can be highly recommended by his present and previous employers.—Mr. THOS. BAILEY, Jno. Gott, Esq., Armley House, Leeds.

GARDENER (HEAD).—Age 40, married; has had great practice in some of the best situations in the country, the two last of seven years each. Left both owing to the death of his employers. The highest references can be given to members of the noble family he has recently left, who are very anxious to recommend the Advertiser.—D., 12, Lowther Street, York.

GARDENER (HEAD).—Age 38, married; thoroughly understands Early Forcing Vines, Pines, Melons, and Cucumbers, Stove and Greenhouse Plants, the Orchard House, Flower and Kitchen Gardens, Laying out, Erecting and Heating Horticultural Buildings, and has a practical knowledge of Park and Plantation work, having had 22 years' practice. Good testimonials as to character and ability.—B. B., Messrs. Cutbush, Highgate Nursery, London, N.

GARDENER.—Age 37, married; thoroughly understands his profession in every department; four years' character from a nobleman; with other first-class references. No single-handed place accepted.—H., 29, New Church Street, Edgware Road, London, W.

To Nurserymen.

FOREMAN or MANAGER.—Has a thorough practical knowledge of Stove and Greenhouse Plants, also Fruits, Hardy Trees, Shrubs, and American Plants.—X. X., 33, Chichester Place, Gray's Inn Road, W.C.

PROPAGATOR, PLANT GROWER, or FOREMAN, &c.—Experienced.—GARDENER, Messrs. Fairhead, Seedsman, Borough Market, S.E.

To Nurserymen.

PROPAGATOR.—Age 22; has a thorough knowledge of the Propagation and Cultivation of Hard and Soft-wooded Plants. Satisfactory references, &c.—A. B., Post Office, Beverley, Yorkshire.

To Noblemen and Gentlemen.

STEWARD or BAILIFF.—Age 38, married; a Farmer's Son; has been accustomed to Agriculture and Management of all kinds of Soil, also Buying and Selling of Stock all his life. Most satisfactory references can be given. —A. Z., Post Office, Edenbridge, Kent.

STEWARD, or STEWARD and BAILIFF.—In the prime of life; will shortly be at liberty. Active, energetic, thoroughly efficient, and well versed in the Modern System of Agriculture, and has had the management of a large holding under Steam Cultivation for years. Reference to his employer, and several gentlemen and first-rate Agriculturists. —S. P., Slapton Farm, near Leighton, Beds.

IMPROVER, with any nobleman's or gentleman's Gardener where Gardening is carried on with spirit.— Age 19.—A. F., The Gardens, Stockgrove, Leighton Buzzard, Bedfordshire.

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TRAVELLER or CLERK, &c. — Is well known amongst Gardeners, and is open to an engagement in either or both of the above capacities.—A. B., 9, Paradise Cottages, Albion Road, Hammersmith, W.

To Nurserymen and Seedsmen.

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SHOPMAN, &c.—Fifteen years' experience in two first-class Wholesale and Retail Seed Establishments (Nurseries combined) in London and the Country.—ALPHA, 33, Chichester Place, King's Cross, London, W.C.

Coughs, Asthma, and Incipient Consumption, are effectually cured by

KEATING'S COUGH LOZENGES. — Statistics show that 50,000 persons annually fall victims to pulmonary disorders, including consumption, diseases of the chest, and the respiratory organs. Prevention is at all times better than cure; be, therefore, prepared during the wet and wintry season with a supply of KEATING'S COUGH LOZENGES, which possess the virtue of averting, as well as of curing a cough or cold; they are good alike for the young or for the aged.

Prepared and Sold in Boxes, 1s. 1½d., and Tins, 2s. 9d., 4s. 6d., and 10s. 6d. each, by THOMAS KEATING, Chemist, &c., 79, St. Paul's Churchyard, London. Retail by all Druggists, &c.

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Bedsteads, from .. .. 12s. 6d. to £20 0s. each
Shower Baths, from .. 8 0 to 6 0 ,,
Lamps (Moderateur), from 6 0 to 7 7 ,,
(All other kinds at the same rate).
Pure Colza Oil .. .. 4s. per gallon.

CUTLERY, WARRANTED.—The most varied assortment of TABLE CUTLERY in the world, all warranted, is on sale at WILLIAM S. BURTON'S, at prices that are remunerative only because of the largeness of the sales. Three and a half inch Ivory-handled Table Knives, with high shoulders, 12s. 6d. per dozen; Desserts to match, 10s.; if to balance, 6d. per dozen extra; Carvers, 4s. 3d. per pair; larger sizes from 20s. to 27s. per dozen; extra fine Ivory, 32s.; if with Silver Ferrules, 40s. to 50s.; White-bone Table Knives, 6s. per dozen; Desserts, 5s.; Carvers, 2s. 3d. per pair; Black-horn Table Knives, 7s. 4d. per dozen; Desserts, 6s.; Carvers, 2s. 6d.; Black-wood handled Table Knives and Forks, 6s. per dozen; Table Steels from 1s. each. The largest stock in existence of Plated Dessert Knives and Forks in cases and otherwise, and of the new plated Fish Carvers.

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	s. d.	s. d.	s. d.	s. d.	s.	s.	s.
Table Knives, per doz. ..	14 0	16 0	19 0	23 0	25	29	33
Dessert ditto ,, ..	12 0	12 0	15 0	18 0	20	23	28
Carvers, Joint, per pair..	4 6	5 6	6 6	7 6	8	9	11

DISH COVERS and HOT-WATER DISHES.— DEANE & Co. invite particular attention to their varied and excellent assortment of these Goods, to which they are continually adding all modern approved patterns in Electro Plate, Britannia Metal, and Tin.

	£ s.	£ s.	£ s.	£ s.	£ s.	£ s.
Britannia Metal, set of 5 ..	3 0	3 6	3 10	4 0	6 10	5 15
,, ,, ,, 6 ..	4 5	4 13	5 0	5 8	7 7	7 17
Block Tin, set of 6 ..	0 18	1 10	2 0	2 2	2 8	2 17
,, ,, ,, 7 ..	1 4	2 0	2 13	2 17	3 4	3 14
Electro Plate, set of 4 ..	12 8	12 12	14 0	15 0	15 15	26 0

ELECTRO-PLATED SPOONS and FORKS.—The best manufacture, well finished, strongly plated. Every article stamped with our mark, and guaranteed.

	FIDDLE.		REEDED.		KING'S.		LILY.
	Second quality.	Best.	Second.	Best.	Second.	Best.	Best.
	s. d.	s.	s.	s.	s.	s.	s.
Table Spoons, per doz.	33 0	40	44	58	54	66	58
Table Forks ,,	31 0	38	44	56	54	64	56
Dessert Forks ,,	23 0	29	32	40	37	46	40
Dessert Spoons ,,	24 0	30	32	42	37	48	42
Tea Spoons ,,	14 6	18	22	26	26	32	26

DEANE & Co.'s New Illustrated Catalogue and Priced Furnishing List may be had on application or post free. This List embraces the leading articles from all the various departments of their Establishment, and is arranged to facilitate purchasers in the selection of goods. It comprises Table Cutlery, Electro-plate, Lamps, Baths, Fenders, Fire-irons, Iron Bedsteads, Bedding, Britannia Metal, Copper, Tin, and Brass Goods, Culinary Utensils, Turnery, Brushes, Mats, &c.

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WHITE and SOUND TEETH are indispensable to personal attraction, and to health and longevity, by the proper mastication of food. ROWLANDS' ODONTO, or Pearl Dentifrice, compounded of Oriental ingredients, is of inestimable value in preserving and beautifying the Teeth, strengthening the Gums, and in giving a delicate fragrance to the Breath. It eradicates Tartar from the Teeth, removes spots of incipient decay, and polishes and preserves the enamel, to which it imparts a pearl-like whiteness. Price 2s. 9d. per box.

Sold at 20, Hatton Garden, E.C.; and by Chemists and Perfumers. Ask for "ROWLANDS' Odonto."

Prize Medal, Paris Exhibition 1855.

METCALFE, BINGLEY, AND CO.'S New Pattern and Penetrating Tooth Brushes, Penetrating unbleached Hair Brushes, Improved Flesh and Clothes Brushes, and genuine Smyrna Sponges; and every description of Brush, Comb, and Perfumery for the Toilet. The Tooth Brushes search thoroughly between the divisions of the Teeth and clean them most effectually—the hairs never come loose.

M., B., & Co.'s new and delicious Perfumes the Fairy Bouquet and the Oxford and Cambridge Bouquet, in bottles 2s., 3s. 6d., and 5s. METCALFE'S celebrated Alkaline Tooth Powder, 2s. per box.

Sole Establishment, 130B and 131, Oxford Street, 2d and 3d doors West from Holles Street, London, W.

The Gardeners' Chronicle Newspaper.

SATURDAY, DECEMBER 14, 1861.

THE LIVERPOOL and LONDON FIRE and LIFE INSURANCE COMPANY.
The Annual Fire Premiums £315,000
Mercantile Risks in London and elsewhere, at home and abroad, freely insured by Floating Policies and otherwise.
20 and 21, Poultry, E.C.

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ZADKIEL'S ALMANAC for 1862.—The Forty fourth Thousand, price 6d., contains:—Result of the War in America, and Warlike Doings in England. See page 38.
G. BERGER, Holywell St., London, W.C.; and all Booksellers.

On the 24th inst. will be published, price 7s. 6d.,
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ONCE A WEEK.
Handsomely bound and Illustrated with many Engravings on Wood.

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Vol. 1 (for 1841) .. 6s.	Vols. 4 and 5 (1843) .. 10s. 6d.
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*** Any Volume or Double Volume may always be had separately.

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DESCRIPTIVE BOTANY; OR, THE ART OF DESCRIBING PLANTS correctly, in Scientific Language, for Self-Instruction and the Use of Schools. Price 1s.

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The NOVEMBER NUMBER contains:—
- Colocasia macrorhiza fol. variegat.
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- Seaforthia elegans (view in its native country).

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- Begonia longipila (double plate).
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- Paritium elatum.
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News of the Week.

THE preparations for war have been continued this week with unabated vigour. Seven of the finest steamships of the Cunard and Royal Mail companies have been chartered for the immediate conveyance of troops to Canada; the 1st battalion of the Grenadier Guards, the 2d battalion of the Scotch Fusileer Guards, six battalions of Infantry of the Line, four batteries of Field Artillery, five batteries of Garrison Artillery, and three companies of Royal Engineers, are to be immediately despatched to Halifax, in addition to the Rifle Brigade and other troops already on their way, making together a force of about 12,000 strong. These troops are to be accompanied by two battalions of the Military Train, with waggons for land transport and ambulances for the sick, by a large staff of the Hospital Corps, a numerous staff of Commissariat officers, and an extra complement of Sappers and Miners for road and bridge making, and, if necessary, for hutting or superintending the erection of earthworks. The whole of this force will be sent out in the highest state of organisation and efficiency, and nothing has been neglected to protect the health and comfort of the troops against the severity of the Canadian winter.

From New York we have a report that the Minister of the Navy has addressed a letter to Captain WILKES, entirely approving of his conduct in the affair of the Trent. Captain WILKES has stated at a public reception at Boston that he depended on his own judgment in capturing the Southern Commissioners. The news of the burning of the Harvey Birch by the Confederate steamer Nashville in the British Channel reached New York just before the departure of the mail, and caused a great sensation. Nothing had transpired in regard to the views and intentions of the Government on the affair of the Trent. General FREMONT has arrived at New York on his way to Washington. It is stated that his policy of making use of the slaves to crush the rebellion is rapidly gathering force, especially among the old Democrats of the North, and that President LINCOLN and his Cabinet are divided on the question. The result of the bombardment of Pensacola is still doubtful, one account stating that the Federal steamers were disabled by the fire from Fort Macrae, while another asserts that the place was evacuated by the Confederates, and the navy yard destroyed. The Federals are constructing fortifications at Port Royal, and the Confederates are sinking vessels in the channel to obstruct the advance of the Federal fleet. The armies on the Potomac still remain inactive. In Missouri Generals PRICE and M'CULLOCH are concentrating their forces at Springfield. The State Convention at Kentucky has passed a secession ordinance. The Confederate Congress has passed a resolution for removing the seat of Government from Richmond to Nashville.

The French papers announce that General SCOTT, late Commander-in-Chief of the United States Army, who came to Europe only a few weeks ago for the restoration of his health, has suddenly returned to America in compliance with an urgent despatch from the Government of Washington. In spite of this announcement, it is the general impression in Paris that he has not been summoned to return by the Federal Cabinet, but that he is the bearer of some important communication from the French Government in relation to the pending difficulties with England. It is stated that President LINCOLN has displayed a very conciliatory spirit in the affair of the French ship Jules et Marie, and has intimated to the French Government that she was boarded by the San Jacinto in consequence of some mistake. The Paris papers continue to support the views of England in regard to the outrage on the Trent. The *Constitutionnel*, *Patrie*, *Débats*, and several other journals have published articles declaring that, in the event of war, France will maintain a strict neutrality. The *Constitutionnel* however in a subsequent article asserts that though it is the business of England to avenge the insult inflicted upon her, yet that all nations are interested that the audacious violation of public law shall not pass with impunity; that the American Union has *de facto* ceased to exist; and that there is no plausible reason why France should withhold her sympathy from the South, or abandon the English alliance in the present conflict.

The great debate on the Roman question in the Italian Chamber of Deputies terminated on Wednesday in the adoption of an order of the day in favour of the Ministry by a majority of 153, the numbers being 232 to 79. On the previous day the Senate approved the bill for the temporary occupation of the religious houses for the service of the State.

The election of members of the Prussian Chamber of Deputies took place on Friday throughout the kingdom. At Berlin eight of the candidates elected belong to the more advanced faction of the Liberal party, and one to the old Liberal party. The results of the elections in the provinces are also in favour of the Liberal party.

Despatches from Pekin received through St. Petersburgh, state that there was no foundation for the apprehensions that the change in the Chinese Government would disturb the friendly relations between China and the European Powers, Prince KUNG, the chief of the party favourable to intercourse with Europe, had visited the EMPEROR at Zehol, and returned to Pekin highly gratified with the results of his journey. The reports from the foreign Legations at Pekin are satisfactory, and the English and French troops had assisted the Chinese to hold Che-foo against the rebels. The state of affairs in Japan continues unsatisfactory. The European representatives are awaiting instructions from their respective Governments, and the head-quarters of the British Minister are still at Yokuhama. According to the latest advices from Cochin China, hostilities were likely to be resumed at Saigon.

The accounts from New Zealand are unsatisfactory. Sir GEORGE GREY, the new Governor, landed at Melbourne on the 26th ult., on his way to Auckland.

Home News.

THE COURT.—The Queen, Prince Consort, and the Royal family continue at Windsor Castle. On Friday morning the Queen, accompanied by Princess Alice, drove out in a carriage and four. On Saturday morning the Queen, accompanied by Princess Alice, drove out in an open carriage. In the afternoon the Prince and Princess of Leiningen returned from London. Princess Helena, Princess Louisa and the Prince and Princess of Leiningen, drove to Claremont, and visited Queen Marie Amélie. On Sunday morning the Queen, Princesses Alice, Helena, and Louisa, Prince Arthur, and the Prince and Princess of Leiningen, attended Divine service in the private chapel of the Castle. The Rev. C. Kingsley preached the sermon. On Monday morning the Queen, accompanied by Princess Alice, drove out in a carriage and four. Princess Helena and Princess Louisa rode out on horseback. The Prince of Leiningen went out shooting. In the afternoon the Right Hon. T. E. Headlam, Judge Advocate-General, had an audience of her Majesty. On Tuesday morning the Queen, accompanied by Princess Alice, drove out in a carriage and four. The Princesses Helena and Louisa rode out on horseback. The Prince of Leiningen left the castle. The Princess of Leiningen remains on a visit. On Wednesday morning the Queen drove out in a carriage and four. The Princess Helena, Princess Louisa, and the Princess of Leiningen drove to Kew, and took luncheon with the Duchess of Cambridge and Princess Mary. On Thursday morning the Queen, accompanied by Princess Alice and the Princess of Leiningen, drove out.

THE ILLNESS OF THE PRINCE CONSORT.—His Royal Highness the Prince Consort is still suffering from a feverish cold, with pains in the limbs. On Saturday, in consequence of his continued illness, the party which had been invited by Her Majesty's command to assemble at Windsor Castle on Monday was countermanded. On Wednesday a bulletin signed by Sir James Clark, Sir Henry Holland, Dr. Watson, and Dr. Jenner was issued, stating that his Royal Highness was suffering from fever, unattended by unfavourable symptoms, but likely, from its nature, to continue for some time. The following bulletin was issued on Thursday:—

"His Royal Highness the Prince Consort has passed a quiet night. The symptoms have undergone little change."

THE PRINCE OF WALES.—On Monday next his Royal Highness will leave Cambridge University, and proceed on a visit to the Earl and Countess of Hardwicke, at Wimpole Hall, where on Tuesday the 17th there will be a party on a grand scale to meet the Prince. On the following day his Royal Highness will join the Court at Windsor and remain at the Castle until after Christmas, when he will proceed in the Osborne to the Mediterranean, on his way to the East.

PRINCE LEOPOLD has been at Cannes since the 14th ult. His Royal Highness was obliged to travel slowly, owing to the indisposition of Sir Edward Bowater, who is not yet quite recovered. The Prince is expected shortly to visit Nice, accompanied by the Prince of Wales, who will pass through that city on his way to Egypt and Syria.

THE ORLEANS PRINCES.—A Paris correspondent of the *Brussels Independance* states that an urgent request has been sent by the ex-Queen of the French to the Count de Paris and the Duc de Chartres, who are serving in the Federal army, to return as quickly as possible to Claremont. "Without taking into consideration," says the writer, "the possibility of France becoming involved in the antagonism between England and the United States, it will be understood that these young princes could scarcely expose themselves to serve under a flag which has already almost become hostile to England."

LORD LIEUTENANCY.—The Queen has appointed the Marquis of Ailsa, K.T., to be Lieutenant and Sheriff-Principal of Ayrshire, in the room of the late Earl of Eglinton.

PARLIAMENTARY MOVEMENTS.—The *Gazette* of Tuesday contains a notice further proroguing Parliament from Tuesday next, the 17th inst., to Tuesday the 7th of January. The first election for Birkenhead took place on Tuesday, and terminated in the return of Mr. Laird, the Conservative candidate, by a majority of 347 over Mr. Brassey, the numbers being 1643 to 1296. The nomination for Finsbury takes place to-day, and the polling on Tuesday, Mr. Cox having finally resolved to go to the poll in opposition to Mr. Remington Mills. The Worcestershire election takes place on Monday, the 23d inst., when Mr. E. H. Vernon will be returned without opposition.

CONSECRATION OF THE NEW BISHOPS.—The consecration of the Bishop of Gloucester and Bristol and of the Bishop of Honolulu in the Sandwich Islands, will take place to-morrow in the chapel of Lambeth Palace.

COLONIAL BISHOPRICS.—The bishopric of St. Helena, vacant by the translation of the Right Rev. Dr. Piers Calveley Claughton to the Bishopric of Colombo, has been conferred by the Duke of Newcastle on the Ven. T. E. Welby, M.A., Archdeacon of George Town, in the Cape of Good Hope.

RANGERSHIP OF GREENWICH PARK.—The Queen has appointed Lord Canning Ranger of Greenwich Park, with a residence, in the room of the late Lord Aberdeen.

LAW APPOINTMENT.—The Queen has appointed William Mathewson Hindmarch, Esq., Barrister-at-Law, to be Attorney-General of the County Palatine of Durham, vacant by the resignation of Robert Ingham, Esq., M.P.

THE ARMY IN CANADA.—It is stated that Major-General Lord F. Paulet, C.B., is to command the brigade of Guards ordered to Canada. Major-General Rumley and Brigadier-General David Russell have been appointed to the staff of the army in Canada. Colonel E. R. Wetherall, has been appointed Chief of the Staff.

PREPARATIONS FOR WAR.—On Friday a Committee of the Lords of the Privy Council had a meeting at the Council Office. Their Lordships were attended by the Queen's Advocate, the Attorney-General and the Solicitor-General. On Monday the War Committee of the Cabinet met at the War Office, Pall Mall. Their lordships were attended by the Queen's Advocate, the Solicitor-General, and Lord Clyde. In addition to the Melbourne, which is now on her way to Halifax, the Cunard steamers Persia, Australasian, Adriatic, and Panama, and the Royal mail steam ships Magdalena and Parana, and the Inman steamer Glasgow, have been chartered for the immediate conveyance of troops to Canada. Each of them will carry out a complement of 1100 soldiers, 5000 stand of arms, 300 tons of stores, a field battery and a large quantity of ammunition. The force which has either been embarked, or has received orders for Canada, consists of the 1st Battalion of Grenadier Guards, 2d Battalion of Scots Fusilier Guards, 1st Battalion of the Rifle Brigade, 1st Battalion of 15th Foot, 1st Battalion of 16th Foot, 2d Battalion of 16th Foot, the 96th Foot, and 2d Battalion of the 17th, accompanied by five batteries of field artillery, comprising 30 guns, and about 1250 men, five batteries of heavy ordnance, for garrison and citadel duty, also manned by about 1250 men, two battalions of the Military Train, with companies of Engineers, and some companies of the new Commissariat and Hospital Corps. At present these are all the troops under orders; but if the present difficulty should resul in open war, there is no doubt that an army

of from 35,000 to 40,000 men will be assembled in Canada by midsummer. The Rifle Brigade embarked at Liverpool on Thursday in the Australasian; the 1st battalion of the 16th Foot, with detachments of the Royal Engineers and Commissariat Staff, will embark at Liverpool to-day in the Persia; and it is understood that the Guards will be sent out next week in the Adriatic and the Parana. Orders have been sent to Aldershott and Shorncliffe calling upon each regiment to furnish three sergeants for service in Canada as drill instructors to the Militia. The screw steamship Hero, 89, has sailed this week with supernumeraries for Admiral Milne's squadron; and a telegram has been sent to the Mediterranean, ordering several vessels of the fleet to proceed direct to the North American station. The Warrior, 40, iron-cased frigate, is ordered to replace her 68-pounders by Armstrong 100-pounders, and to exchange her 40-pounder Armstrongs for the new naval pattern 70-pounder Armstrong as soon as possible. The Black Prince, iron-cased frigate, is fitting out as rapidly as possible in the steam basin at Portsmouth. Orders were sent to Chatham on Monday directing the iron screw steamer Resistance, 22, to be got ready for sea with all possible speed. Considerable progress has been made in fitting the Defence, 22, at Chatham; and it is said that she will be ready to make her first trip in about six weeks.

THE NAVAL RESERVE.—Following the example set by their gallant comrades in other ports throughout the kingdom, the members of the Naval Reserve at Southampton, Barking, Hartlepool, Seaham, Dundee, Aberdeen, Alloa, and Maryport, have addressed letters to the Admiralty, declaring that they are "ready to fulfil their engagements, and protect the honour of their flag, Queen, and country, whenever called upon." Mr. Disraeli, M.P., attended the drill of the Reserve at Seaham on Friday, and addressed the men as follows:—

"I have very great pleasure in addressing you on the loyal and patriotic sentiments which I have listened to from you to your Queen and country. I sincerely trust that your offer to defend your country against attack will never be required. I am a man of peace, but if we are attacked, the honour of England must be asserted and vindicated. But I am sure, when I see around me so many fine able men ready to go forward at a moment's warning to maintain the honour of England, I have no fear that we should be able to bid defiance to the world. I have had the pleasure of seeing a great many addresses from the various seaports of the kingdom, offering their services to the Government to defend us, if need be; but in no seaport have I seen a more unanimous devoted feeling than in the port of Seaham and in the county of Durham generally. I had the honour of being a member of the Government which adopted the recommendation of the Manning Committee to establish a Royal Naval Reserve, and I have great pleasure in witnessing the great success in the formation of that body."

OFFICERS OF RESERVE.—The *Gazette* of last evening announces that the Admiralty have decided on a supplementary plan for attaching officers of Reserve to the Royal Navy, under the provisions of the recent Act of Parliament. The number of officers will be limited to 400, and will consist of two classes, Lieutenants and Sub-Lieutenants, the former not to exceed 130, and the latter not to exceed 270. These officers are to be eligible for promotion from the one to the other, and to be rewarded for special merit by regular commissions in the Navy. Their pay during actual service will be the same as that of naval officers of corresponding rank, and the title of themselves and their widows, in case of wounds or death, will be exactly the same. Their uniform will be similar, though distinctive, and when called out they will mess with officers of their nominal rank. Like the able seamen of the Reserve, they will be required to undergo a periodical drill at some training station, but while on drill they will be entitled to an allowance for subsistence. It is also intended to create an honorary order in connexion with the Naval Reserve, open to those who shall be above the prescribed age of enrolment, and, in its higher grades, to those who shall have distinguished themselves by service.

Foreign.

FRANCE.—The *Moniteur* of Thursday publishes the following imperial decree:—

"Considering that it imports essentially to the order of the finances that the charges on the budget should not be augmented without the Minister of Finance having been enabled to appreciate and to acquaint us whether there may be sufficient resources to meet such additional charges, we decree that for the future, no decree authorising or ordering any works or measures whatever, which may add to the charges on the budget, shall be submitted to us for our signature unless accompanied by an opinion from the Minister of Finance."

The *Moniteur* also announces that the reopening of the Chamber of Deputies will probably take place in the second fortnight in January. The Emperor, Empress, and Prince Imperial, have returned to the Tuileries from Compiègne. General Scott has left Paris in order to return to America. It is asserted that his departure took place in consequence of an urgent despatch from the Washington Cabinet; but there is an impression in Paris that he is the bearer of a momentous communication from the French Government. American affairs have again been under discussion at the Council of Ministers. It is understood that the Minister for Foreign Affairs is of opinion that the violence committed by the captain of the San Jacinto is indefensible; that by regarding the Confederate Commissioners as "contraband of war," President Lincoln and his Ministers contradict themselves, for they always refused to admit that they were at war. To seize them on board a neutral vessel as contraband of war implies that, after all, the Southern States are entitled to belligerent rights, while, even supposing the Northern States not to be at war, but merely repressing a rebellion, they had no right to seize men who were at that moment in the character of refugees under shelter of the English flag. It is said that the Emperor does not materially dissent from his Minister, and that not very long ago he had all but made up his mind to take the initiative in recognising the independence of the Southern States, as a means of relieving France, which is suffering severely from the war. Prince Napoleon, on the other hand, is of opinion that the struggle is one of Abolition against Slavery, and has strong tendencies in favour of the North, and it is understood that the speech which he is now elaborately preparing for the Senate will express these sentiments. The *Moniteur*, the *Constitutionnel*, *Patrie*, *Débats*, and several other papers, say that in the event of a war between England and America, France will remain neutral. The *Moniteur* says:—

"The attitude of the people of England and of the London press increases in firmness and resolution. The dilemma which could not be avoided has been accepted without hesitation, and, by the force of arms, that satisfaction will be acquired which could not be procured by diplomatic means. Discussion is left aside. To the arguments of General Scott these simple words are replied:—'Give back the guests of England whom you have made prisoners, and then we will discuss the point with you.' The people accept beforehand the idea of war, and regard it as a good opportunity to obtain satisfaction for a long series of wrongs and insults which, in their opinion, have been too patiently submitted to."

The Paris papers of Saturday assert that the English Cabinet, in reply to petitions from the great manufacturing districts, has declared that the cotton crisis will be of short duration, and that by February next at the latest the Southern ports will be open for the exportation of cotton. The *Pays* denies the statement made by some French papers, that President Lincoln had proposed to refer the differences between England and the United States to the mediation of the Emperor Napoleon. The *Constitutionnel*, in an article on the American question, notwithstanding its previous declaration of neutrality, says:—

"We are aware that this insult regards England alone, and we know likewise that England is proud enough to resent it, and powerful enough to obtain satisfaction if it is required. It would be folly for the French Government to appear in the chivalrous character of second in this quarrel, but yet it is not without utility that, above the particular fact relating to England directly, there is the law of nations and the rights of neutrals forgotten, or rather violently and insultingly trampled under foot. It was by accident that England was insulted. There is no doubt that the North Americans deliberately resolved to arrest the Southern Ambassadors in any place and under any flag. They would have captured them in the same manner in the neighbourhood of Cherbourg or of Toulon, and under the tricoloured flag, as in Transatlantic waters and under the banner of Great Britain. Can a proceeding so contrary to all natural law and to all written law be tolerated, and are there not grounds for indignantly protesting against so flagrant an abuse of brute force? * * * Finally, we do not find anywhere the shadow of a good reason to refuse our sympathies to the Southern States, or to make terms for so doing. Neither do we perceive any plausible reason to sacrifice the English alliance in the present conflict. The Anglo French alliance is peace and general security—it is the foundation of civilisation, it is the pivot of the modern world. For our part, we wish with all our soul that this union of two great, intelligent, strong, and liberal nations may last for ever. In the peculiar circumstances which we are traversing, we desire that England, having justice on her side, shall obtain that satisfaction to which she is entitled; and, naturally recurring to our own interests, we call for the moment when the important markets of America shall be re-opened to our industry and commerce, both of which are languishing in consequence of a crisis which is prolonged to the loss of the whole world."

The *Monde*, the clerical organ, which seldom says a good word of England, is still impartial enough to speak as follows on the Anglo-American quarrel:—

"We must not count too much on a pacific issue. The Americans are no longer in a state to listen to reason, and England cannot now draw back. The whole world is looking on; people ask themselves if Great Britain will again submit to American arrogance, if she will again allow her flag to be insulted; and public opinion, which openly blames the United States in this affair, encourages her to go on. The friends of peace at any price—for there are some in England as in France—are preaching in vain; they cannot shut out evidence of the facts; and the facts are these:—England, with respect to the belligerents, was a neutral State; the Trent belongs to the Royal British navy: it carried despatches—if one can assimilate the Southern envoys to living despatches—not from one belligerent State to another belligerent State, but to a neutral State. In this there was nothing whatever resembling contraband of war; and a State at war with another has not the right to prevent neutral States from communicating with this other in all that is not contraband of war. By violating the laws of nations in the affair of the Trent the Americans have not merely insulted England, but have alarmed all neutral states, and thus attacked the public rights of civilised nations. England, charged by the circumstances with defending the general interests which she has so often wounded, has a noble mission to fulfil. We shall see how she acquits herself."

The *Débats*, in an article signed by M. Prevost Paradol, thus speaks of the relative interests of France and England in American affairs:—

"We cannot endure in silence the attempts of a portion of the press to identify, under these circumstances, the interests and duty of France with those of England. It cannot be questioned that England has a double interest in the definitive break up of the American Union. Not only will that rupture check for many years the development of the naval and political power of the United States, but it would also constitute in the South a great republic, purely agricultural, which would be worked by the capital, the industry and the marine of England, as it has been worked up to this day, we must admit, by the capital, industry, and navy of the Northern States. That vast farm, as soon as it had achieved its fancied independence, would pass, in all that concerns her commerce, from the hands of the United States into those of England. If the interest of England appears to us beyond question, at the same time we do not think that it can receive any lasting satisfaction by war or even by victory. Under the most favourable circumstances it does not appear to us likely that the Southern republic could be prosperous for any length of time. To suppose the maintenance of slavery in a continental state in contact, all along an immense frontier line, with a neighbour openly hostile to that institution, is nursing a chimera. We do not, therefore, think that England will reap any lasting reward for her sacrifices if, on the occasion afforded by the Trent difficulty, she attempts to complete by war and to consolidate [illegible] the break up of the United States. But, however [illegible] the interest of France is not involved in any [illegible]. We cannot pretend to prevent by arms the [illegible] of the American Union, but we cannot hesitate to regard it [illegible] fortune. If ever we found ourselves, which Heaven forbid, at war with England, we should be cruelly at a loss for the [illegible] of the neutral American flag, the only one which England [illegible] accustomed and had an interest in respecting, and which could, in time of war, maintain to our advantage the freedom of the seas. Before the Northern states, separated [illegible] South, shall be able, in time of war, to cause to be respected French commerce under their neutral flag, many years must elapse, during which a war with England might exclude France from every port in the Atlantic. Besides [illegible] of slavery, which cannot find us insensible, our [illegible] fore, must cause us to wish for the maintenance [illegible] tion of the American Union. All our wishes are [illegible] Anglo-American war with which civilisation and [illegible] now threatened; but if that war does break out, [illegible] we refuse to receive the abundant harvest which [illegible] offered to our mercantile marine? In the midst of [illegible] cruisers which England will despatch to every [illegible] globe—in the midst of the swarm of privateers [illegible] Northern States will send after the immense commerce of their enemy—the neutral flag of France will [illegible] respected, the more so that the two parties will [illegible] all, to compel France to throw the weight of her sword [illegible] the scale."

It is reported in Paris that the despatch of Lord [illegible] to the Cabinet of Washington has been communicated to the French Government. This accounts for the following article in the *Patrie*:—

"We are assured that the despatch addressed by the [illegible] Cabinet to Lord Lyons, to be communicated to President Lincoln, is based exclusively on legal considerations. [illegible] document, it is said, establishes that the commander [illegible] San Jacinto, by acting as he has done, has committed a flagrant breach of maritime law and insulted the English flag; [illegible] the only right that officer possessed was to compel the [illegible] to go to some American port, where the case could have been brought before the proper authorities in presence of the English Consul; that if, in this search, despatches [illegible] been found establishing that Messrs. Slidell and Mason were on a mission directly or indirectly connected with military operations, the commander would have been justified in seizing those despatches and arresting the envoys, [illegible] in a detailed report of the transaction, with such notes and observations as the English Consul might think fit to [illegible]. These formalities not having been fulfilled, no charge [illegible] established against the two persons arrested; their arrest [illegible] be regarded as *nul* and *non avenu*; that the Trent [illegible] victim of an arbitrary act, contrary to every [illegible] England, acting in a conciliatory and friendly point of view, has asked as the only reparation of this grave act the liberation of Messrs. Slidell and Mason; but that, if she does not obtain it, Lord Lyons would leave Washington with all the members of the Legation. We are assured that the despatch is drawn up with great moderation; that it carefully avoids any hurtful expression, but that it is firm in its conclusion. From the information we have received up to the present we do not think it likely that Mr. Lincoln will give up the prisoners."

The same journal states that President Lincoln has displayed a very conciliatory spirit in the affair of the French merchantman Jules et Marie, and states that she was boarded by the San Jacinto in consequence of some mistake. It also states that the Federal frigate James Adger, which was recently refitted at Southampton, called at the Azores on the 21st ult. homeward bound. Letters from Havre state that the Federal shipping of that port had been thrown into a state of consternation by the report of the presence of Confederate privateers in the Channel, coupled with the appearance in the roadstead of two large clippers, who on being signalled did not make their number, but stood out to sea again.—The French Government have taken the first step to check the expenditure. Orders have been sent to stop the construction of the Rempart iron-cased frigate, at Cherbourg, and of the floating batteries Orgueilleuse and Arrogante at Lorient.—The *Temps* publishes an article, showing that the upholders of the vast standing army are the [illegible] ocracy, the declaimers for liberty everywhere but at home, while the intellectual portion of the community are the advocates of reduction and disarmament. The *Moniteur* publishes a report to the Emperor from the Minister of Foreign Affairs and the Minister of War concerning the indemnity stipulated in favour of the victims, or families of the victims, of the outrage committed by the Chinese on the 18th of September, 1860, at Tang-Tchéou. The Chinese indemnity amounted to 200,000 taels, which in French money produced a sum of 1,539,918f. 87c. After deducting indemnities already paid and expenses incurred, the *Moniteur* publishes a table showing how the remainder of the indemnity money has been divided between the families of the survivors. The *Ami de la Religion* has received a first warning for having published an article entitled "Reform in Russia," "which," states the warning, "under the pretext of criticising the reforms of a foreign government, contains an attack against the French Constitution." The supplementary election to the Corps Législatif in Aube has resulted in the return of M. Pla[illegible], by 16,339 votes against 11,004 obtained by his opponent, M. Liguier.

SPAIN.—Prince Muley Abbas and his suite embarked at Cadiz on the 1st in the steamer Isabel II., on his way to Tangier. It was stated that the prince would visit Rabat before proceeding to the Morocco Court. An unpleasant incident occurred a few days back at Valencia. The Duke de Malakoff, on his way in a French frigate from Algiers to France, put in [illegible]

[illegible] the vessel fire a salute of 21 guns; but the [illegible] being a military one, had no battery to return [illegible]. General Orozco, the Captain-General, [illegible] the necessary representations to the Duke and [telegra]phed to Madrid on the subject, but the Duke of [illegible] treated him in such an offensive way that he [illegible]. It is now announced that the Emperor [Napole]on has charged M. Barrot, the French Ambas[sador], to express to the Queen his profound regret [illegible] of what passed between the Duke of Magenta [and] the Captain-General at Valencia, and at the same [time] assure her Majesty of his friendly sentiments. [illegible] states that Spain will pay the debt of [illegible] contracted with France in 1823.

[BELGIUM].—There is a rumour in diplomatic circles at Brussels that mediation in the American conflict will [be] offered by King Leopold. The Secretary of the British Legation at Brussels has left for London.

ITALY.—The debate in the Chamber of Deputies on the Roman question was resumed on Saturday by Baron Ricasoli, who gave some additional explanations regarding the state of public security in the city of Bologna, which, he said, was not so bad as had been represented. Count Bastogi, Minister of Finance, refuted some erroneous assertions which had been made by Signor Rattazzi in [reference] to the state of the national finances. Signor [illegible], in the name of the Government, declared that [in] drawing up their plan of arrangement with [the] Pope the Ministry had no intention of making [a di]plomatic document, but simply an appeal to [public] opinion on the pretensions of Rome and Italy. [Dr.] Bertani made a lengthy speech against the Ministry, which drew forth loud protestations and [many] questions from several deputies. In the course of [his] speech he asserted that on some occasions the [Ad]ministration had been guilty of opening letters [passing] through the post, upon which the Ministry [demanded] that the charge should be investigated by the Chamber. After a long discussion a committee was appointed to receive the deposition of Dr. Bertani. In the sitting of Sunday Signor Spaventa, having asked for permission to reply to a personal question raised on [Sat]urday by Dr. Bertani, reviewed at some length the [acts] of his administration at Naples. In this retrospect [he made] several recriminations against Dr. Bertani and [his] political friends, who frequently interrupted him [with] protestations. After some speeches, also relating [to] personal questions, the debate was adjourned. On Monday, Baron Ricasoli resumed it by announcing that [the] Ministers would give an explanation on the subjects which had been brought forward by some members of [the] Opposition. In speaking of the Venetian emigra[tion he] said, "We have 12,000 Roman and Venetian [emigrants], of whom 5000 receive pecuniary aid from [the] Government." General Della Rovere justified the [pro]hibition which he issued in Sicily against the public collection of signatures to a protest against the occupa[tio]n of Rome by the French. Signor Mellani spoke at great length against the Ministry. A letter being, however, delivered to him while speaking, he suddenly discontinued his speech, and sent the letter to Baron [Ric]asoli, who read it to the House. It was [a] correspondence, not yet published, addressed [fro]m Naples to a French journal in Turin, [which] asserted that General Della Marmora [had], in a recent report, requested the Ministry [to alt]er their policy in Naples, or he should be obliged [to fol]low the example of General Cialdini by tendering [his] resignation. Baron Ricasoli declared this news to [be ab]solutely false, a statement which was received with [ap]plause by the Chamber. He also censured the [sys]tematic invention of false news, intended to have the [eff]ect of embarrassing the Government in its external [rela]tions. In the sitting of Tuesday Signor Dondes [Reggio] stated his opinion that it was necessary to maintain the Lieutenancy of Sicily, and censured the [sup]pression of that of Naples. He spoke in favour [of] the privileges of the Sicilian clergy, and said [he] wished that the principle of the liberty of the Church should not endanger those privileges. The Minister of Agriculture and Commerce defended the abolition of the Lieutenancies, and said that dangerous political circles were formed around the Lieutenancies, whose power presented obstacles to the authority of Parliament and the responsibility of the Ministers. The Minister also alluded to the brigandage [in] the Neapolitan provinces, and to the projected [eco]nomic reforms, which he stated would entirely [dest]roy it. This statement was received with general applause. Signori Miceli, Sandonato, and Crispi spoke against the Ministry. On Wednesday Baron Ricasoli [rea]d a telegraphic despatch from General Della Marmora, declaring that he had never written reports nor spoken against the policy of the Government, and that he had [not] expressed any intention of tendering his resig[na]tion. Long discussions took place on several orders of the day which were afterwards presented to the Chamber. The closing of the discussion on the Nea[po]litan and Roman questions was then resolved on, and the following order of the day, agreed to by the Ministry, was put to the vote:—

"The Chamber confirms the vote which it passed on the [27th] of March, declaring Rome to be the capital of Italy, and [trusting] that the Government will provide with alacrity for the [completion] of the national armament, the organization of the [illegible] and the effectual protection of persons and property. [Taking] into consideration also the declarations of the Ministry [with regard] to the public safety, to the elections to the Chambers, [to] the bestowal of public offices on persons of known probity, ability, and patriotism, the [illegible], the greater development of public works, the [organisation] of the National Guard, and, finally, to their promise to take all other measures which may procure the wellbeing of the Southern Provinces, the Chamber passes to the order of the day."

The votes of the Deputies on this order of the day were recorded orally, and gave the following results:— Ayes, 232; Noes, 79; Majority for the order of the day, 153. Signor Rattazzi voted with the majority. On Thursday the Chamber took into consideration the Bill, presented by Signor Lamasa, relative to the recognition of the military grades and pensions conferred by the Sicilian Government in 1848. A Bill for extending the application of the Sardinian penal code to Lombardy was passed by the Chamber. The Senate on Tuesday approved the Bill for the temporary occupation of the religious houses for the service of the State. The documents relating to the affair of the Neapolitan archives have been published. General Garibaldi left Turin quietly on Friday morning for Caprera, without having appeared in the Chamber. The object of his visit remains a mystery. The *Official Gazette* announces that 29 brigands, among whom was José Borgès, have been shot or killed near Tagliacozzo. The brigands taken at Allatri by the French troops, and delivered over by them to the Papal Government, have been sent back again to the frontier with regular instructions as to the route they are to take. Five Spanish officers have been sent to command the reactionary bands in the Neapolitan provinces, and to organise the reactionary movements. Fresh disembarkations of brigands have taken place in the province of Apulia. The reactionists will endeavour to surround the Italian troops in the Basilicata. It is asserted that Francis II. will assume the command early in January. A box has been seized, containing the correspondence of an agent of Monsignor Sentucci with Cardinal Antonelli and the Bourbon authorities.

SICILY.—A despatch from Palermo, dated 6th inst., announces the discovery of a Bourbon conspiracy in that city. The principal conspirators, among whom were a great number of priests, have been arrested.

PRUSSIA.—The election of members for the Chamber of Deputies took place on Friday throughout the kingdom. At Berlin eight of the candidates elected belong to the more advanced section of the Liberal party, and one to the old Liberal party. The results of the elections in the provinces, as far as they have been announced by telegraph, are also in favour of the party of progress and the Liberal party. The Ministers of State, Baron Auerswald, Herr von der Heydt, and Count Schwerin, have been elected. The *Preussische Zeitung* of yesterday says:—

"The statement made by some journals, that the Government is about to introduce an extensive system of furloughs, is a pure invention. All the assertions that the Government intends to modify its present attitude, in regard to the question of the military budget, must be considered as unfounded conjectures."

AUSTRIA.—The Austrian *Gazette* of Sunday, in announcing that the Budget will be submitted to the Council of the Empire immediately, says:—

"It is not in consequence of the finances being in a desperate state that the Government is about to take this step, because the wants of the State for the next few months are provided for, and the taxes are coming in better than ever. The deficit scarcely amounts to 50,000,000 florins, to meet which means are not wanting. The Government only desires that the Budget may be examined by the representatives of the people. A Bill on Ministerial responsibility will be presented at the same time as the Budget."

HUNGARY.—The Second Palatine and the Commissioner of Public Safety have been brought into Pesth in fetters, in order to be tried before a Court-martial on a charge of high treason. It is asserted that the First Palatine, Count Syaparry, is also accused of high treason. Advices from the south of Hungary state that any functionary refusing to co-operate with the Government will have 18 soldiers lodged in his house until he resumes his functions.

VENETIA.—In consequence of the visit of the Emperor of Austria at Venice, where the Empress is passing the winter for the benefit of her health, a kind of political congress, composed of friends of the exiled sovereigns of Italy, has been held there. Among those present on the occasion have been the Archdukes Albert and Joseph, Prince Louis and Prince Leopold of Bavaria, Baron Bach, Austrian Ambassador to the Pope, General [illegible], and the representatives of the King of Naples and the Duke of Modena. It is said that the health of the Empress is progressing favourably. The physicians attribute the cough from which her Majesty suffered less to a lesion of the lungs than to a tendency of the blood to the chest; they state that the lungs, if they ever were diseased, are now quite sound; and that consequently her Majesty's complete recovery may be expected.

POLAND.—The Marquis de Wielopolski has withdrawn his resignation. Bialobrzeski, the substitute of the Archbishop of Warsaw, has been condemned to ten years' transportation to Siberia. Forty persons, of whom eight are priests, and seven Jewish and eight Christian students of the medical faculty of the University of Warsaw have been arrested in Warsaw, and sent as recruits to the Russian army at Orenburg. One hundred and sixty-two priests have been imprisoned in the citadel at Warsaw. Great excitement prevails in the city.

GREECE.—Advices from Athens state that Dousios, the young man who lately made an attempt on the life of the Queen of Greece, has been condemned to death.

TURKEY.—An intense monetary panic has prevailed at Constantinople, and the Bourse has been closed. The *Pays* of Thursday publishes a despatch, dated the 11th inst., stating that the panic was caused by fraudulent speculations in the *[illegible]* market, but that, in consequence of the energetic measures taken by the authorities, order was not disturbed in any part of Constantinople. Fuad Pasha was expected to arrive on Wednesday.

THE PRINCIPALITIES.—Prince Couza has been named by the Porte governor of the Danubian principalities during his lifetime. There is to be one Parliament and one Administration. The relations of the Porte with the Couza Government are satisfactory.

COAST OF AFRICA.—Some difficulties had arisen between the French and the natives of Gaboon, in consequence of which the former were about to take energetic measures. It was reported that Gambia was to be exchanged for Gaboon, Grand Bassam, Assinee, &c. The English residents were desirous of the change, Gaboon being the head-quarters of the slave trade. Mr. Thomas B. Lee, formerly secretary to the British Consul at Fernando Po, had been murdered by the aborigines, who mistook him for a Spaniard. Several influential men had taken up the question of the cultivation of cotton in the Bight of Benin.

CHINA.—News received at St. Petersburg from Pekin to the 13th of October states that the apprehensions that the change in the Chinese Government would disturb the friendly relations between China and the European Powers appeared to be unfounded. Prince Kung, chief of the party favourable to intercourse with Europe, had visited the Emperor at Zehol, notwithstanding that he had received orders not to leave Pekin. Prince Kung returned to Pekin highly gratified with the results obtained by his journey. The Court would return to Pekin shortly. The reports from the Foreign Legations at Pekin are satisfactory. The English and French troops assisted the Chinese to hold Chefoo against the rebels, who ultimately retreated. Shanghai is in a state of alarm on account of the proximity of the rebels. Mr. Henry Parkes has been ordered to proceed to Shanghai. Canton was evacuated on the 21st Oct.

COCHIN CHINA.—According to the latest advices from Cochin China, hostilities were likely to be resumed at Saigon.

JAPAN.—The state of affairs in Japan continues unsatisfactory. The European representatives are awaiting instructions from their respective Governments. The head-quarters of the British Minister are still at Yokuhama.

NEW ZEALAND.—Sir George Grey landed at Melbourne on the 26th Sept. on his way to Auckland. The accounts from New Zealand are unsatisfactory.

UNITED STATES.—The intelligence respecting the burning of the Harvey Birch reached New York on the 30th, and occasioned great excitement. The Federal Minister of Marine has addressed a congratulatory letter to Captain Wilkes, entirely approving his conduct. It was reported that the Commissioners would not be given up. The Government, it was said, would rather try a war first; but expressed a belief that England would not go to war. Mr. Edwin James had published a letter in the New York papers respecting the Trent affair. He says the whole question in regard to Messrs. Mason and Slidell would rest on the answers of the captain of the Trent to the following questions:—1st. Were you acquainted with the terms of Her Majesty's proclamation commanding strict neutrality on the part of all her subjects during the term of hostilities between the Northern and Southern States? 2d. Did you not know that the two gentlemen, when they became passengers, not refugees, on board your vessel, were employing themselves or were employed in an enterprise of direct hostility to the constituted Government of the United States? The answer to these two questions in the affirmative, he maintains, and consistently with truth they could not be answered otherwise, would reduce the question to very narrow dimensions; and should any doubt exist upon the second proposition, the Message recently sent by Mr. Jefferson Davis to his Parliament at Richmond would much facilitate its solution. Captain Wilkes and the officers of the San Jacinto were entertained on the 26th ult. at a public reception by the citizens of Boston. The following is a brief summary of the proceedings:—

The Hon. J. W. [illegible] presided, and said that the achievement of Captain Wilkes [illegible] the people [illegible] man for the hour—a man who had resources enough to [illegible], and who had [illegible] and prudence sufficient to carry through successfully the plans which he might conceive. Captain Wilkes in returning thanks said:—"Before deciding upon the course I adopted, I examined the authorities—Kent, Wheaton, and the rest—and satisfied myself that these 'Commissioners' or 'Ministers,' as they styled themselves, had no rights which [illegible] when properly appointed, and finding that I had a right to take written despatches, I took it for granted that I had a right to take these 'Commissioners' as the embodiment of despatches. I therefore took it upon myself to say to these gentlemen that they must produce their passports from the General Government, and, as they could not do that, I arrested them. I will say, for the officers and crew of the ship, that the orders I gave were carried out in the spirit in which they were given, and not a word said or act done which would not [illegible] the honour of the American navy. I should have [illegible] in seizing the Trent itself, but I concluded to

allow the vessel to proceed, though I thus deprived my men of a prize worth 150,000 dollars; and I take pride and pleasure in saying that there was not a man on board the San Jacinto who said I did not do right. Governor Andrew, who followed, said that the Federal navy, of which Capt. Wilkes was so proud a representative, though it was at the beginning of this struggle dismantled and dispersed all over the world, had been extemporised by the vital and elastic energy of democratic Republican institutions, until at last it had made no ensign prouder or more respectable than that borne at the masthead of an American ship; "and that there might be nothing left to crown the exultation of the American heart, Commodore Wilkes had fired his shot across the bows of the ship that bore the British lion at its head." Lieutenant Fairfax also addressed the meeting, and said that though a Virginian by birth he had abided by his allegiance to the Federal Government, and though it was by no means an agreeable duty to go on board the Trent and arrest his old friend, Mr. Mason, whose family was connected with his by marriage, he had something more to contend with in dealing with Mrs. Slidell and her daughters. When he took leave of these gentlemen Mr. Mason said he could not express how much gratitude he felt for the attention and kindness he had received. Judge Bigelow next spoke and said that Commodore Wilkes acted more from the noble instincts of his patriotic heart than from any sentence he read in any law-book. A man did not want to look into law-books, to ask counsel, or to consult Judges upon his duty; his heart his instincts, told him what he ought to do. England unless she falsified her own conduct, unless she falsified the statements of her own statesmen, unless she set aside the judgments of her own judiciary, could not undertake to make an issue with them upon that great act. He contended that Messrs. Slidell and Mason were "contraband of war," and he trusted that if the issue did come, they were prepared to meet it like men; that they were not only ready, as citizens of the United States, to endorse the conduct of their gallant officer, but ready to maintain it through the channels of diplomacy, and, if necessary, at the cannon's mouth. The Mayor of Boston said that Captain Wilkes had shown unselfish motives by relinquishing the Trent as a prize, and Judge Russell said that if England would not have peace, it was good for her to know that the blood of '76 and 1812 flowed as warmly in American veins as ever, and that Stewart and Bainbridge and Decatur had not been left without successors in the land.

It is reported that no despatches were found in the baggage of Messrs. Mason and Slidell. Washington letters state that Lord Lyons had taken no action in the Mason and Slidell case. The New York journals state that there exists not the least apprehension of a difficulty with England arising out of the arrest of Messrs. Slidell and Mason, which they state is universally deemed to be justified by the law of nations, and by the traditional policy of the British Government. The *New York Herald* says that England takes advantage of the Mexican expedition to keep her fleet in the waters of the Gulf without exciting alarm. It also says:—

"The legal advisers of the Government not only completely justify the proceeding of Captain Wilkes but even furnish authority for the seizure and confiscation of the neutral vessel upon which the rebel ambassadors and their despatches were discovered. . . . When the real facts of the case are known, and the authorities and precedents investigated, the capture of the Confederate Commissioners will have the best effect in England, as it will show that we are not to be intimidated from prosecuting our just rights."

The *New York Times*, in referring to the warlike preparations in Canada, says there is nothing in the action or language of the Federal Government calculated to wound the susceptibilities of the English Government, and the real mischief has been done by the newspapers, and principally by the violent articles of the *Herald*. It also makes the following remarks on the report of the British Government having sent a steamer to watch the James Adger:—

"If the James Adger had actually been commissioned to search a British packet, the Government might have felt justified in balking a deliberate purpose of that sort, but it will be remembered that all vessels detailed to intercept the two runaways were despatched upon the assumption that they had put to sea in the Nashville, a vessel of the enemy, so that no intention of stopping and searching an English vessel can be imputed to the American Government."

The Governor of New Granada has entered a protest against the legality of the recent transport of prisoners by General Sumner across the neutral territory in the Isthmus of Panama. The President's message had not been completed on the 27th ult., but it was reported that it would be unusually short, that it would recommend 700,000 men and 700,000,000 dols. for the next fiscal year, and an uncompromising and energetic prosecution of the war. Mr. Smith, Federal Secretary of the Interior, has disavowed the policy endorsed by Mr. Cameron, Secretary of War, of emancipating and putting arms in the hands of the slaves belonging to the rebels. It is stated, however, that the policy of making use of slaves to crush the rebellion gathers force rapidly, and that the old Democrats of the North have recently seized it in order to be on the flank of the Abolitionists, and to recover themselves from the disasters of the political defeats they have sustained through their alliance with the slaveholders. General Fremont arrived at New York on the 29th. Mr. Sumner addressed a crowded meeting of the Young Men's Republican Union in New York on the 27th. He argued that slavery was the sole cause of the rebellion, and that the only remedy adequate to meet it was abolition. Resolutions were adopted endorsing the proclamation of General Fremont, the instructions of Mr. Cameron to General Sherman, and the speech of Colonel Cochrane. The Treasury Department had notified all postmasters that Treasury notes were to be received by them as equivalent in all respects to coin in the payment for stamps and stamped envelopes. The army of the Potomac has not yet been ordered to march, nor have orders yet been given for it to be hutted for the winter. The apprehension felt by some that the enormous machinery gathered together for the suppression of the rebellion will be unused before six months is said to be groundless, as neither the policy of the Government nor the temper of the people will admit of placing an army of half a million in winter quarters. A despatch in the *New York Times* states that the withdrawal of the Federal forces from Western Virginia has commenced. The Secretary of the Treasury has announced that he will want no more money until February next, but it is reported that he will recommend increased duties on woollens, iron, and sugar. The Washington correspondent of the *New York Herald* estimates that the requirements of the Federal Government during next year will make it necessary to ask Congress for an appropriation to the amount of 160,000,000 dollars. Large quantities of Sea Island cotton will soon be gathered on Government account in the Beaufort district. A vessel has arrived at Philadelphia from Venezuela with 800 bales of cotton. Large reinforcements for General Sherman's naval expedition, and two new expeditions under Generals Butler and Burnsides, will move in a few days. The Kentucky Confederate State Convention has passed a Secession ordinance. Generals Price and M'Culloch are concentrating their forces at Springfield, Missouri. Commerce in Missouri, below St. Louis, will be conducted by the Federal Government only. The Union men of North Carolina have established a provisional state government at Hatteras. Southern accounts report that Colonel Brown opened fire from Fort Pickens on Pensacola on the 19th ult., but the details are so contradictory and confused that it is impossible to tell what has been the result of the engagement. One account says that Pensacola was entirely evacuated by the Confederates, and the Navy Yard destroyed, and that General Bragg had sent for reinforcements. Advices from Port Royal state that Tybee Island was deserted by the Confederates, and that a detachment of Federal Marines had landed on it, and commenced constructing new fortifications. Another account says that the Confederates had sunk two vessels between Tybee and Fort Pulaski, in the narrow part of the Savannah River Channel, to prevent the fleet from coming up, that five Federal vessels were riddled with shot, and that the Federal steamers Niagara and Colorado took part in the bombardment, but were obliged to haul off, having been disabled by the fire from Fort Macrae. The Pensacola Navy Yard was three times on fire. The great naval expedition was ready to sail from Port Royal for points further south. The fortifications on Ship Island had been completed, and were garrisoned by 150 Federal troops. A small schooner has been sent from Hilton Head to load cotton at one of the islands above Hilton, by order of the Federal naval authorities. The privateer Beauregard has been captured at Key West. Beaufort was still unoccupied on the 20th ult. Three Confederate officers and seven cannon have been captured on the eastern shore of Virginia. The British brig Cornucopia has been captured off Mobile while endeavouring to run the blockade, and the British schooner Mabel has been captured and taken into Port Royal.

CANADA.—Lord Monck was sworn in as Governor-General of Canada on the 28th ult. Winter had commenced to set in, snow having fallen. A council of war had been held, at which it was determined to place the Canadian frontier in a state of defence. It was rumoured that it had been resolved to call out 10,000 volunteers. The Canadian press unanimously express the same view of the outrage committed on the Trent as is entertained in this country. They express a hope that prompt acknowledgment and reparation will be made by the Washington Cabinet to the Imperial Government, and equally acknowledge the justice of having Messrs. Slidell and Mason restored to the protection of the British flag. They state their belief that a war on the part of Great Britain with the Federal States would be short, sharp, and decisive, and could have but one result—their severe humiliation and the loss probably of Maine and some other State—a lesson they would not forget for the next half century. They admit that Canada would have to bear the brunt of the struggle by being made the battle ground of the two Powers, but declare that she is ready and willing to take her part in the conflict, and to assist in vindicating the honour of the British flag, as every Canadian feels this last outrage as a personal insult.

Public Addresses.

THE RIGHT HON. J. R. MOWBRAY, M.P., met a large body of his constituents in the Town Hall, Durham, on Saturday, for the purpose of addressing them on the political questions of the day, and made the following remarks on the policy of the Conservative party in relation to American affairs:—

"He thought he was entitled to claim credit for the forbearance and patriotism displayed in Parliament by the great Conservative party with which he had the honour to be connected. He thought it was a remarkable thing that with a party so strong as they were—numbering, indeed, nearly a moiety of the House, having more than 300 supporters—during the whole of last session they had never brought forward one single motion which could be considered of a factious character. They had neither attempted to impeach the foreign policy of Earl Russell or the domestic policy of Lord Palmerston, but were content to give on every occasion when their duty permitted them, a cordial support to the Government of the day in all the measures they had brought forward. They had, it was true, taken issue with them on one [illegible] was with regard to the repeal of the [illegible] reckless waste connected with which they [illegible] to prevent. Flushed as they had been [illegible] Conservative victories which had taken [illegible] the country, it might have been considered [illegible] would have endeavoured to embarrass the [illegible] harass them with hostile motions; but he did [illegible] party at large had great reason to be satisfied with [illegible] and with the spirit with which their [illegible] conducted in Parliament throughout the session. W[illegible] to the future, there were two questions, [illegible] interest, and the other of great public inter[illegible] likely to call the attention of Parliament. [illegible] words regarding each of them it was not so [illegible] any decided opinion as to the course which Parl[illegible] be likely to take as to give his own idea of them. [illegible] were subjects which at the present moment were [illegible] the public mind. For some years past the [illegible] tion had formed a very prominent topic both [illegible] in Parliament, and successive Chancellors of the [illegible] had seen with alarm the growth of an education[illegible] had now reached something like a million a year. [illegible] crease of expenditure, under the head of education, [illegible] 'revised code' upon the subject, which Government [illegible] wisely at the very conclusion of July, within a [illegible] close of Parliament, had laid upon the table of the [illegible] Commons. That proposed change had been the [illegible] criticism and remark, and in the town and [illegible] had taken part in the discussion arising out of it. H[illegible] only say upon the subject that, while parliament [illegible] faith with any individuals to whom it was pledged, [illegible] the government was entitled to see that it really [illegible] result for which it paid, yet he considered the [illegible] plan for procuring that end must require great [illegible] and careful scrutiny; and he was very happy to [illegible] was to be given to parliament to enter into [illegible] care and attention. There was one comfort, and [illegible] a question of that kind could not be a party question [illegible] whole desire of men on every side of the House of C[illegible] would be to do what they could to prevent a heavy [illegible] being imposed by an increased educational grant, and [illegible] other hand to see that the rules for teachers and [illegible] managers were respected, and that the progress of [illegible] was not checked by any new operations. The only [illegible] ject was the state of our relations with the dis United States [illegible] North America. Until last week it was very little the [illegible] Englishman had to say with respect to them. In the [illegible] of the last ten days, however, news of a most stirring [illegible] had reached us from America, which had aroused the [illegible] of the British nation. An outrage—as far as he knew, [illegible] paralleled—had been committed on board an English vessel, and the blood of Englishmen had naturally boiled with [illegible] nation at the tidings. But whilst our feelings [illegible] excited, he thought that it had been highly creditable [illegible] country that the first question asked, was 'What is the [illegible] national law?' for it was by that law that England would [illegible] guided. The cabinet had the advantage of the very best [illegible] advisers, and upon them rested the dread responsibility [illegible] determine what their demands should be upon the Nor[illegible] states, and in what mode the reparation, if denied, should [illegible] obtained. It was not for him to express any individual [illegible] of his own upon the precise bearings of the internat[illegible] law, but he was sure that the Cabinet of Lord Pal[illegible] would have acted under a sense of great responsibility, and he trusted that the Parliament of England would [illegible] the Cabinet in that course which their sense of respo[illegible] bility to God and their country should advise them to take. He hoped that no party views would be allowed to interpose at this most momentous crisis, and that when Parliament assembled the Irish members would [illegible] in the spirit of that letter, which he was [illegible] had been written by Mr Smith O'Brien, a man wh[illegible] life to the clemency of his Sovereign after his futi[illegible] tion had justly forfeited that life. He trusted, also, [illegible] representatives of England would not follow the example of the member for Birmingham, who, whether in a quarrel w[illegible] Russia or America, always assumed in the first instance [illegible] his own country was in the wrong. But he believed the House of Commons would be almost unanimous on the question, and that Mr. Bright would be informed by his constituency at Birmingham that he is as little entitled to [illegible] their views as some years back he was told that he was [illegible] entitled to speak the sentiments of the men of Manchester. It had been his lot to have their interests [illegible] during the anxious period of the Russian war. Great anxiety was felt at that time as to how the reformed House of Commons would conduct itself. He thought that those [illegible] entertained any doubts on the subject had reason to be satisfied by the patriotic way in which the House of Commons supported the minister of the day during those struggles, [illegible] he could not help thinking that if it should be the lot of those who formed the Opposition now, as then, to sit opposite to the ministry while the struggle was being carried on, they [illegible] show that the patriotic spirit which animated them was [illegible] the spirit which animated the Whigs in 17[illegible], but that [illegible] the patriotic spirit of Englishmen resolved to sink all party differences, and determined to stand up for the honour and interests of the Queen and country. He knew nothing of the terms of the despatches sent by Government to the United States; but he did think that during the solemn three weeks while a message was passing to and fro between one government and the other; whilst we were waiting for the [illegible] upon which might depend the fatal issue of peace or war, [illegible] the voice of Englishmen should be as the voice of one man, and that they would say that, come what may, all party considerations should be sunk in a determination to uphold the honour of the Queen and the interests of the country."

THE HON. JOSEPH HOWE, late Prime Minister of Nova Scotia, attended public meetings at Ashton-under-Lyne and Oldham last week, and spoke at great length on American affairs. The following are extracts from his addresses:—

"If the United States had the power to close their frontiers upon the people of this country to-morrow, there was in the northern provinces of their own empire a country larger than the United States open to them all. It was a mistake to suppose that Republican America owned the whole continent; for the flag of England floated over more than one-half of that vast country. The British subjects who lived in that [illegible] portion of America were 3,000,000 now, and they had [illegible] for 100,000,000 if they would come. Canada, Nova Scotia, New Brunswick, Newfoundland, Prince Edward's Island, and the territory of the Hudson's Bay Company, comprised [illegible] square miles. They were larger than the United States [illegible] those States were divided; and they could, [illegible] see that there would be ample room for all the British subjects who might wander across the Atlantic for cen[illegible] come. They could give a home and 100 acres of land to every spare man in Lancashire, and not feel that their territory was diminished. Alluding to the exciting topic of the day, he said he had travelled among the Republican Americans, and there was no man who would be disposed to do them more ample justice. God forbid that he should entertain any narrow prejudices, and hate a Yankee merely because he chose to live under the stars and stripes, and not under the British flag. He was bound in honour and good faith to say that a country

which had more rapidly improved, which was more practically [illegible] with more of the advantages of education, with a more [illegible] commerce, and more prosperous manufactures, was not [illegible]. But let them not deceive themselves. In [illegible] England and her institutions were in bad odour. [illegible] 4th of July, the day on which they declared their [illegible], they read the Bill of Indictment against [illegible] country, called the Bill of Independence, [illegible] was full of the grievances of the period, and thousands [illegible] believe that everything that was true of England [illegible] was true now. Let them fancy what effect [illegible] upon the rising generation. They believed that Lord [illegible] was worse than Lord North, and that the people of [illegible] hated them just as badly now as the people of England [illegible] at the time of the old revolution. The annual [illegible] was in the present contest producing its natural [illegible]. In the British provinces they had no personal, party, [illegible] hostilities. They were in daily intercourse with [illegible], but after all they had all along seen that there was [illegible] in that country, for some reason or other, a marked [illegible] of England. From the moment the Queen's proclamation was issued, announcing the determination of the Imperial [illegible] to hold a neutral position between the contending [illegible], every newspaper in the United States, not merely the [illegible] newspapers of New York, had breathed hatred and enmity to England; and the Northern provinces had been menaced every hour of the day that they would be annexed as compensation for the loss of the [illegible]. For six months they had thus been menaced, bullied, and bragged at. Perhaps seven-eighths of the people in the Northern provinces six months ago wished the North success. Now they felt as though every man in the provinces had been personally insulted, and they wished the South success with all their hearts and souls. He would tell them in a few words what he thought of the results of the contest. They read in the Northern papers that the Southerners were a beggarly parcel of rascals, with no pluck, no courage, no wealth, no patriotism. But, notwithstanding this, every time they fought the South licked them. From the bottom of his soul, supposing England held her hand, he did not believe the North could ever overrun and conquer the South. Washington, the 'city of distances,' was the type of the rest of the country, and there were 'magnificent distances' which the Northern army would have to travel. A Southerner, when told that the States to which he belonged were to be conquered, said, 'You were four months marching 30 miles to Bull's Run, and you ran those 30 miles back in four hours.' Supposing, however, that the Southern States were overrun, the Northerns would require what Sam Slick called a [illegible] as "big as all outdoors' to keep the Southerners in. An enormous standing army would have to be kept up, and their national debt would be large enough before the war ended, and would have to be made larger for the maintenance of a standing army. With a national debt and a standing army, and no aristocratic influence to keep things steady and [illegible] ambitious chieftains, some great soldier, sneering at a Presidency of four years' standing, would build a throne where the Republic now stood, and wipe out the history of the Northern Republic altogether. For the good therefore of the Northern States, that they might hereafter be prosperous and powerful and useful in the world, the wisest thing they could have done when the Southern States declared their independence would have been to have said, "Go and frame institutions for yourselves." The events of the past week had given an extraordinary and startling commentary upon the whole position of affairs. Two gentlemen taken out of a British packet upon the high seas and carried to an American prison! Since the days when an old English sea-captain who had been [illegible] by a Spanish man-of-war, was tied up to the chains on [illegible], and his ears cut off—since the day when that [illegible] Englishman carried his ears to the bar of the House of Commons and provoked a war, he knew of no outrage in [illegible] history equal to that perpetrated upon this country within the last month. Englishmen had been taught to regard certain things as essential to national honour; and the right of asylum was not only essential to national honour, but to the civilisation of the world. Would they allow a French privateer to violate the British flag, and take from a ship an Orleans prince or any [illegible] fallen Frenchman? If two of the blackest slaves in the South had escaped to a British vessel, would Englishmen have allowed them to be seized? Suppose Garibaldi or Bixio coming to England from Italy to negotiate for peace, or fair-play, or anything else, had been taken out of an English ship in the Mediterranean by a Neapolitan man-of-war? In either case would not every Englishman have demanded and enforced redress? General Scott said that the North would disavow the act and make reparation. Did Mr. Adams, the American Minister in London, believe it? One of the newspapers announced that Mr. Adams was preparing to go home, and it was very likely. Mr. Adams must know that, right or wrong, the [illegible] would attempt to justify the seizure, and that they would not make the *amende* they ought to do. Mr. Charles Sumner, with Mr. Everett, had attempted to justify the seizure. What might be inferred from that? Why, that men of the most moderate temper had made up their minds how the current was setting, and that England was to be insulted. He had been told recently that England was answerable for the slavery of the South. Why, when England was in favour of slavery in North America she was in favour of thumb-screws, of old rotten boroughs, of no representation for the masses of the people, of the corn laws, and of 10,000 other absurdities or wrongs, which the 'enlightened conscience' of the country had long since repudiated. Let not any Southern slaveholder or Northern slavetrader, nor any intelligent man in England, blame this country for American slavery as it now exists. See what England did in the West Indies. It might be said that the Americans had abolished slavery in the North. In fact, it passed away because the climate and the soil did not suit it, for wherever free white labour could be brought to bear, it would assuredly drive out slavery. When President Lincoln's Government hoisted the flag of universal emancipation—or when the North had paid and had suffered, as England did to free the West Indian slaves—then the North would deserve, and no doubt receive, English sympathy. The example of Russia had been quoted in connection with this matter, and what the Emperor had done was a spectacle for all to admire. But suppose that he had simply confined slavery, or serfdom, to nine provinces of his empire, had drawn a line round the slaves there, and had said to their holders, 'Keep them there, and so, for ever and a day. Hold them, not only by the power of your own right hand, but by the whole power of the empire, which I will place at your disposal.' What would Englishmen have thought then of his emancipation? But that was just what the North had done, all appeals to the 'enlightened conscience' of Englishmen notwithstanding. Who carried on the slave trade for the South and for Havana? Not the planters; they had only slaves to spare for the work, and they could not be trusted on the sea. It had been carried on for [illegible] years by Northerners. The Government winked at it, and in the North found smart men for the 'wool and ivory trade,' as it was called—men who would run a cargo at a Southern port, and then attend a meeting at Boston or East [illegible], where very pious sentiments would be uttered. He saw the other day, in a very excellent speech, the statement that the American constitution left each State to take care of slavery for itself. True. But what had occurred since the [illegible] of the constitution? Why the Fugitive Slave Law had been passed; and the North submitted to have escaped slaves dragged off from its territory. From that moment an act had been done which was the beginning of the trouble which had ever since been rapidly growing. The Northern men, in order to form an unhallowed compact with the Southern slaveholder, gave to him an additional vote for every two or three slaves he held. True, there was in the North an honest minority,—men who would sacrifice their lives even to liberate all the slaves in the republic. But that minority was trampled upon and despised. President Lincoln and Secretary Seward from first to last in this unhappy contest had taken care to make it plain that they were not in favour of emancipation—that they were, in fact, for leaving slavery just as it had been stereotyped for generations. There were ten millions of white men in the South. What did England want with them? Free trade and amicable relations; saying to them, however, 'We have shown you by our acts what we think of slavery. If you will not follow our example, take your own course.' But it was the clear interest, as well as the duty and the right, of England to have free trade with these ten millions of people. He knew the arts by which it was sought to deceive England. The interest of Americans in the Northern States—in Boston, Laurence, Lowell, and other places, was to cripple the English trade with the South, and to keep in thraldom their brethren there; to let them have slaves to raise cotton for the North to use, and to consume goods imported under the high Morrill tariff. The North was like the 'dog in the manger.' When he saw the Northerners sitting upon five or six million bales of cotton which they could not eat or manufacture, and which they did not know what to do with—when he saw the people of Lancashire looking blue at the aspect of the times, and by no means certain as to the result of the coming winter—his 'enlightened conscience' taught him to apply the fable, and to conclude that England would be as entirely justified in getting her share of that cotton as the hungry cattle would have been in tossing into the air the dog who lay in the way of their getting the hay they needed. The comparison between the suspension of the English Habeas Corpus Act in 1848 and of that in the United States was entirely mistaken and incorrect; and to claim for the Northern press that it enjoyed freedom was ridiculous in the face of the fact that nine or ten editors and publishers in the North had been tarred and feathered, ridden on rails, or had their establishments smashed, simply for freely expressing their opinions."

The Hon. J. L. Tilley, a Cabinet Minister of New Brunswick, attended the meeting at Oldham on Friday evening, and spoke as follows on American Affairs:—

"He took issue with those both in the United States and in England, who asserted that secession was caused by the tariff of the United States alone. He did so because that tariff, with some slight interruptions, had been the policy of the United States for the last 20 years. It was true that it had been opposed by a section of the South, but there was a preponderating influence in favour of protection, and still more the demands of the revenue where there was no excise rendered a high tariff necessary. The South submitted to the tariff, and if there had been no other question at issue the tariff alone would not have provoked secession. He did not accord with the opinions sometimes expressed in this country and in the United States, that secession was not occasioned by the question of slavery. He felt that it was so occasioned. The 'platform' of President Lincoln was this:—'We are opposed to slavery, and without violating the constitution of the country, we will take means to prevent its extension and its increase of power in any new State formed out of the territories of the great Republic. They shall not have a slave in them.' What Englishman would not have endorsed that principle? On the principle of the non-extension of slavery South Carolina seceded; and in the British provinces, and in England also, there was one general feeling of favour manifested towards the North at that time. But that favour and that sympathy had been destroyed. And how? When the British Government decided to be neutral between the contending parties they took a wise and judicious course, and one which was adopted and acted upon by the United States when England and France and Russia were at war. But that very course had induced the American press, which perhaps represented the majority of the people, to attack England in a most unwarrantable manner, and with animosity which could not have been exceeded if England had declared in favour of the South. He had hoped that there would have been a reaction, and that the American Government would have declared that they had misjudged England, and that England was in the right. But a contrary course seemed to be pursued. If any persons could feel intensely and earnestly the critical position of affairs at the present time, it was those who resided in British North America. They felt it because, if war should result, it was upon their soil that the conflict would take place. Their prayer was that America would look at the matter in a calm and dignified manner, and with a magnanimity which would enshrine them with glory, say, 'We were wrong; we have violated international law; we will give up the men, and make the restitution you demand.' They hoped for that; but he was sorry to say that to his mind it was hoping against hope. The memorable battle of Bull Run was, it was well known, precipitated by the cry of the press, 'On to Richmond,' and against the opinions of General Scott; and he could well believe that such would be the excitement in America, that, whatever might be the opinions of the persons to whom the subject might be referred, they might not be able to resist the public feeling, and war might occur before they knew where they were. Under the circumstances they must all approve of the preparations made by the British Government, and he hoped that the result would be a speedy relief from the embarrassments in which they were now placed. They must recollect that the American Government had seven lines of railway terminating on the borders of the British provinces, and he only regretted that England had not placed the British provinces in a position to [illegible] as they should have been able, if they had had a railroad from Halifax to Quebec, to have planted troops along the frontier in 14 days. If the war occurred he felt convinced that it would be but a short one, and he hoped that out of evil good would result. They might be assured of the loyalty of the British colonists, and that they were all for the maintenance of the integrity and honour of our glorious old flag."

Mr. Bright, M.P., in distributing the prizes awarded in the classes connected with the Rochdale Working Men's Educational Institute, on Tuesday week, spoke as follows on Popular Education:—

"The things which form the best and only foundation of any considerable progress in education are reading, writing, arithmetic, grammar, and geography. I have a great respect for all those, except for grammar. When I was at school, which is a long time ago, we learned a grammar written by a gentleman who was, I believe, a member of the religious society to which I belong, and who was a native of the United States of America, Lindley Murray. Lindley Murray's grammar had a great reputation, and, for anything I know, has yet. But if it has, I pity the lads who have to learn it, as I had to learn it—for as far as I recollect now (it is a [illegible] sort of recollection), there were no end of rules, and no end of examples, and rules within rules, and exceptions of all kinds: and I have now a feeling of the utter confusion of my mind in endeavouring to understand all the rules of Lindley Murray's Grammar. My opinion is that grammar may be very easily learned without all that, and it is very difficult for any person who reads well-written books, and understands them, not to acquire a very competent knowledge of grammar without finding it necessary to learn all the rules in that [illegible] and unhappy book. But, leaving grammar, and coming to reading, writing, arithmetic, and geography—although they are what may be called the bases of education, yet if a man can read well, and write well, and [illegible] figures well, there is no kind of position, almost, that a [illegible] and sensible [illegible] he is not competent to fill. Reading now is a different thing from what it was a few years ago. In the days of our fathers and grandfathers, if a man did learn to read there was comparatively very little for him to read. Books were far more expensive, the circle of literature was far more restricted, and he had not the wide and varied field of interest, and instruction, and delight which is now placed before us by the wonders of type and the printing press. Then if he could write it was not easy to carry on correspondence with friends at a distance, for those whose means were very limited, for the price of postage was very considerable. Now I believe the number of letters has increased sevenfold in this country since the time when the postage was reduced to a penny; and there can be no doubt if the working class of this country were as capable of writing as they ought to be, the number of letters, in all probability, would be double and treble what it is. For as it is you find in the houses of many persons the postman every morning brings a handful of letters, but if he only brought a letter a week to the houses of all the working men of this country from their children, or parents, or brothers, or sisters, or friends, at some distance, it would be an object of great interest to them, and I have no doubt whatever the total number of letters passing through the Post Office would be doubled. With regard to arithmetic, everybody knows that there is nothing that is a greater stumbling-block to any working man who has otherwise a chance of improving his condition than the fact that he does not know figures, and cannot do the simplest sum. It is a constant difficulty with those who have mills and workshops, and a large number of persons in their employment, that when they have wanted an overlooker, when they want to fill some office or other for which five, or 10, or 15 shillings a week more than the ordinary amount of wages would be paid, there is many a man, as I have known, who might have filled such a position, and improved his place in the world if he had only had a moderate knowledge of the science of arithmetic. We now come to the science of geography. That is not so essential, but it is calculated to give equal pleasure. I am sorry to say that, of late years, people have learned a great deal of geography by the disastrous conflicts that have been going on in various parts of the world. We learned a great deal some years ago of Turkey and some parts of Russia during the Russian war. A year or two ago we learned a great deal of Italy, because there was an Italian war; and I suppose now people are learning a great deal about America, on account of the calamitous events which are taking place there. There is one other respect in which geography is of great interest to men in this country, and it is with regard to the question of emigration. I want no man to cross the ocean, to establish himself in another land, who finds a path open for him here; but millions have left this country and other parts of Europe, and found their condition very much improved. Many have gone in total ignorance, put themselves on board ship, paid their passage money, and been transported they knew not to what point of the compass. They landed in Canada, in the United States, or in Australia, and probably have done extremely well. But it is of the greatest consequence that working men should know something of the geography and condition of their own country as well as of those abroad. There is no doubt that, during the last two or three years, in this neighbourhood—as you all know—labour has been extremely scarce, wages—as compared with 20 years ago—have been very high, and it has been extremely difficult to get any work done to keep machinery going even; at the very same time there were multitudes of people in the south of England, strong labouring men—the fathers of families—working all day in the open air on farms, getting their nine to twelve shillings a week, and their children probably getting almost nothing. If the men down in those counties could know accurately where Lancashire and Yorkshire were, very likely some might find their way here, doing no harm to the population here, but doing great good to the population they might leave; because, if there was rather less labour there than there is, wages there in all probability would rise, and there would be some greater equality between the conditions of labour in the various parts of the country. It seems to me that we are at a time just now when everybody in this district ought to learn, and will learn, that which he ought to have learned a great while ago. Everybody who knew anything, knew that, some time or other, there would be a catastrophe in the United States. Everybody knew who knew anything on such topics that there was a country under the dominion of the British crown that was abundantly able to supply whatever deficiency might happen to arise in the supply of the raw material of our manufactures from the United States. Yet scarcely one single thing had been done during the whole of that time to enable us to make up from India for that which we find no longer, and perhaps for years to come we may not be able to have, from the United States. Men passed on. They always had cotton, and there always would be cotton somehow. It would only be a question of paying so much more for it, and then it would come. But the fact is that things do not always come just as reckless and heedless men like; but instead great calamity comes, and we at this moment are threatened with great suffering to multitudes of honest labourers' families, and great suffering also to persons conducting their business, arising mainly from their own ignorance in past years, and the neglect of those precautions which [illegible], and [illegible] especially, would have enabled them to take. I never consider this question of education without looking at the wonderful scene of strife which the world is almost continually affording us—strife in our own localities, social strife—strife between those who work and those who employ—strife on all kinds of subjects; but, particularly, I look at the strife in our social relations, causing immense embarrassment and great suffering. Then, if we look wider over the world, we find strife of a still more disastrous and even of a sanguinary character. I know not how all this is to be avoided, or if it ever can be avoided. But if it be within the intention of Heaven that it ever should cease, it can only cease, in my mind, from the growing instruction, and information, and thoughtfulness, and morality of the people of this and of every other country. We all feel that these are but truisms. We all know that education is a great advantage. Any of us who have got any of it know that we have very little compared with what we might have had if we had applied ourselves thoroughly to it. And we know, further, that we do not make a good use of what we have got. Every man must think for himself. He knows his position; he feels his own powers. Let him do what he can to improve himself, if means like this are offered; and to the very last hour of his life he will rejoice that he has not spent his time in idleness and frivolity, but in gaining instruction which will be of value to him all his days."

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 90¼ to ⅜ for Money, and 90⅜ to ½ for the 9th of January; Reduced and New Three per Cents., 89¾ to 89⅞; India Five per Cent. Stock, 102⅞ to ⅛, 103, ex div.; Ditto for Acct., 102⅞ to ⅛, ex div.; Ditto Four per Cent. Debentures, 1863, 98½; Ditto 1864, 98¼; Ditto Bonds, 14s. pm.; Five per Cent. Enfaced Rupee Paper, 96¼; Ditto Five and a Half per Cent., 101⅞; Exchequer Bills, June, 12s. to 15s. pm.—FOREIGN: Brazilian Old Five per Cents., 98; Ditto Four and a Half per Cents., 1860, 87¼, ex div.; Dutch Four per Cent. Certificates, 100; Mexican Three per Cents., for Acct., 27 to ¼; Peruvian Four and a Half per Cents., for Acct., 96½; Portuguese Three per Cents., 1856, 1857, 1859, and 1860, 45; Russian Three per Cents., 1859, 59¼; Spanish New Deferred Three per Cents., for Acct., 41¼; Committee's Certificates, 5⅞ to ⅞; Turkish Six per Cents., 1858, for Acct., 67 to ⅞; Ditto 100l. Bonds, 70.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£29,080,410	Government Debt	£11,015,100
		Other securities	3,634,900
		Gold Coin and Bullion	14,430,410
		Silver Bullion	..
	£29,080,410		£29,080,410

BANKING DEPARTMENT.

Proprietors' Capital	£14,553,000	Government Securities (including Dead Weight Annuity)	£10,896,109
Rest	3,129,723	Other Securities	16,329,817
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	5,920,166	Notes	9,378,825
Other Deposits	13,097,426	Gold and Silver Coin	837,576
Seven day and other bills	742,012		
	£37,442,327		£37,442,327

12th day of Dec., 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

FRIDAY: *Dec.* 6.—BANKRUPTS.—S. ASTON, Stourbridge, Worcestershire, Licensed Victualler—F. ADAMS, Peterborough, Northamptonshire, Hairdresser—T. F. ASHFORD, Lorimore Square, Walworth, Commission Agent—H. ASHDOWN, Woolwich, Confectioner—J. J. ALBRECHT, Cornwall Road, Lambeth—W. ANDREW, Pattrington, Yorkshire—W. ATKINSON, Leeds, Commercial Traveller—S. BATES, Peterborough, Northamptonshire, Horse Breaker—J. W. R. BAXTER, Emsworth, Southampton, Surgeon—T. BAKER, Bristol, Plasterer—The Rev. A. G. BROWNE, Beaminster, Dorsetshire, Clerk in Holy Orders—G. BROWN, sen., and G. BROWN, jun., Edgware, Bakers—T. BOOTH, York, Licensed Victualler—M. BLOOM, Manchester, Furniture Dealer—S. BATH, Widegate Street, Bishopsgate, Coal Merchant—H. J. BLAKE, Portsea, Hants, Journeyman Carpenter—E. BAKER, Willenhall, Staffordshire, Butcher—R. BIGGON and W. DAY, Nottingham, Lacemakers—J. BORLAND, jun., High Street, Camberwell, Cheesemonger—G. BREEZE, Hanley, Staffordshire—T. BOWMAN, Ashfield, Nottinghamshire, Lime Burner—J. BRICE, Bristol, Auctioneer—J. S. CATON, Bidston, Cheshire, Post Office Clerk—J. CHAPLIN, Wolston, Warwickshire, Labourer—W. CHAPMAN, Heighington, near Darlington, Durham, Artist—W. CRANG, Combmartin, Devonshire, Farmer, and J. SHAPLAND, Braunton, Devonshire, Veterinary Surgeon—J. CHILD, Oxford Square, Paddington, Lodging House Keeper—T. CHARLES, Withington, near Manchester, Plumber—J. CHILTON, Knockholt, Kent, Farmer—TEESDALE COCKELL, Leadenhall Street, Printer—[illegible]NAN, Deal, Carpenter—ABEL DAVIES, Tunstall, Staffordshire, Miner—W. DESOER, Liverpool, Steam Owner—W. H. DUTTON, Theydon Bois, Epping, Farmer—J. DUFFY, Manchester, Chair and Cabinet Maker—M. DAVIS, St. John Street, Islington, Traveller to a Woollen Draper—S. J. EVANS, Birmingham, Machinist—C. FAULKNER, Mickleton, Gloucestershire, Licensed Victualler—T. FACER, Sulgrave, Northamptonshire, Baker—T. FROGGAT, Sheffield, Table Knife Cutler—S. H. FAIERS, Ipswich, Furrier—J. FEARNLEY, Hunslet, Yorkshire, Inland Revenue Officer—F. GREETHAM, Liverpool, Flour Dealer and Baker—J. GROOMES, Shalford, Essex, Clerk—J. F. GEE, Laurence Pountney Lane, Mining Agent—J. GROOME, Manchester, Millwright—H. GOWEN, Colchester, Widow, Bootmaker—H. HOLLAND, Brighton, Farmer—A. H. [illegible], Bronti Place, East Street, Walworth, Laundryman—E. HARDISTY, Leadenhall Market, Licensed Victualler—J. HIBBARD, Bennett Street, Blackfriars Road, Cattle Dealer—F. HINSLEY, Birmingham, Carpenter—G. HOLMES, Ashchurch, Gloucestershire, Beerhouse Keeper—S. HAY, Eaton Street, Regent's Park, Retired Captain—J. HORNBY, Liverpool, Grocer—T. HACKSHAW, Oxford, Haircutter—J. HOPKINS and H. HACKETT, Banbury, Oxfordshire, Builders—EDWARD CALVERT ARNEMAN HAWORTH, Elizabeth Street, Eaton Square, Pimlico—PHILIP ISAACS, Curtain Road, Chair Maker—ANN JOHNSTON, Warrington, Lancashire, Provision Dealer—DAVID JEVONS, Tipton, Staffordshire, Innkeeper—W. F. JENKINS, Aldershot, Hampshire, Baker—T. E. JENKINSON, Whitby, Yorkshire, Confectioner—J. JAMBLIN, Jun., Fletton, Huntingdonshire, Photographic Artist—EDWARD JACKSON, Leeds, Cloth Manufacturer—W. R. KING, Granaries, Camberwell Green, Corn Merchant—T. KINGSTON, Manchester, Journeyman Watchmaker—E. LAWSON, Sheffield, Boot and Shoemaker—J. LUND, York, Cattle Dealer—D. LOVATT, Wolstanton, Staffordshire, Draper—L. W. LLOYD, New Road, Hammersmith, Brickmaker—S. MARRIOTT, Greenwich, Smith and Bellhanger—J. MOORE, Hope Cottages, Clapham, Builder's Clerk—T. MOON, Victoria Terrace, Belsize Road, St. John's Wood, Fishmonger—J. E. MERCER, Birmingham, Furniture Remover—J. P. MEW and G. THORNE, Newport, Isle of Wight, Engineers—E. MARCHANT, Burnham, Somersetshire—J. MOSLYN, Great Windmill Street, Haymarket, Saddler—E. MORGAN, Chapel Row, Kentish Town, Corn Dealer—H. R. MENDHAM, Eye, Suffolk, Coach Builder—T. MERRICKS, King Street, Clerkenwell, Watchmaker—J. M'BRIDE, Broadway, Hackney, Chief Usher of Worship Street Police Court—H. NICHOL, Tweedmouth, Berwick-upon-Tweed, Agricultural Implement Maker—J. NUTTALL, Elton within Bury, Lancashire, Clothier—J. PEACE, Almondbury, Yorkshire, Woollen Cloth Weaver—A. PINCHBECK, Horncastle, Lincolnshire, Bricklayer and Builder—E. PETCHELL and C. PETCHELL, Sheffield, Milliners—T. ROBERTS, Bryngwran, Anglesey, Surgeon—T. R. RUTHE, Bridport Place, Hoxton, Draper—HELEN ROSS, Pentonville Road—W. RAWLINGS, Peterborough, Northamptonshire, Agent for the Sale of Flour—J. RABBDON, King's Road, Chelsea, Tailor—T. H. RENTON, Spittle, Berwick-upon-Tweed, Carpenter—R. ROGERS, Nottingham, Cabinet Maker—J. M. SOUTHAN, Newington Causeway, Clerk—S. S. SOUTHEE, Cottage Grove, Walworth, Bookseller's Clerk—T. SMYTH, Vassal Place, North Brixton—C. SHAKESPEAR and J. AUDLEY, Coventry, Ribbon Weavers—W. SLADDEN, Maidstone, Kent, Farmer—J. F. SWANN, Canterbury, Dealer in Linseed Cake—T. SHORT, Simonsbath, Somersetshire, Travelling Tea Dealer—W. SEWELL, Appleby, Westmoreland, Cooper—H. SYME, Cecil Street, Strand, Merchant—J. SHUBOTHAM, Swinnerton, Staffordshire, Farm Bailiff—J. SMITHERS, Grayswood, Surrey, Underwood Dealer—W. SMART, Bilston, Staffordshire, Fruiterer—T. SPICER, Brewood, Staffordshire, Farmer—G. SEABRIGHT, Farm Lane, Fulham, Laundryman—J. TAYLOR, Birmingham, Retail Brewer—A. E. TUCKER, Stanhope Street, Hampstead Road, Commercial Traveller—S. TURNER, Maidstone, Licensed Victualler—J. TOWNS, Cross Street North, Bermondsey, Carman—J. UNWIN, Ecclesfield, Yorkshire, Tallow Chandler—T. UMPLEBY, Burley Lawn, near Leeds, Cattle Dealer—G. WOLLASTON, Gotham, Nottinghamshire, Bootmaker—C. WRIGHT, Lambeth Walk, Clothier—R. WILLIAMS, Liverpool, Labourer—J. WALLETT, Bilston, Staffordshire, Butty Miner—R. WEBB, Yalding, Kent, Farmer—S. YAGER, Plymouth, General Dealer.

SCOTCH SEQUESTRATIONS.—R. BELL, Ruthvenfield, near Perth, Calico Printer—J. B. CREASE, Jedburgh, Manufacturer—W. and G. DOBBIE, Glasgow, Watchmakers and Jewellers—W. FORBES, Buckie, Banffshire, Rope and Sail Maker—FORBES, MILNE, and Company, Buckie, Banffshire, Rope and Sail Manufacturers—J. FORBES, jun., Banffshire, Rope and Sail Maker—J. IRVINE, Glasgow, Book and Shoemaker—D. PIRIE, Aberdeen, Merchant and Commission Agent.

TUESDAY: *Dec.* 10.—BANKRUPTS.—J. ADAMS, Southampton, Baker—J. ARMFIELD, Addington Road, Bow, Clerk to a Commission Agent—R. BURY, Little Bolton, Lancashire, Finisher—T. BOWEN, Kerry, Montgomeryshire—M. BLOOM, Manchester, Furniture Dealer—W. S. C. W. BASSETT, Sheerness, Grocer—E. BUSFIELD, Leeds, Cloth Manufacturer—W. BARRON, Gellidowell, Glamorganshire, Nurseryman—H. BOND, Fressingfield, Suffolk, Grocer—J. BARTON, Bookham Street, Hoxton, Merchant's Clerk—W. BURROWS, Tonbridge Wells, Journeyman Bookbinder—F. S. BROWN, Kingston-upon-Hull, Merchant—R. K. BENSON, Thrapstone, Northamptonshire, Commercial Traveller—W. COLLINSON, Durham, Draper and Grocer—J. CHITTY, Southampton, Farmer—W. COLLINS, Dean Street, Soho, Cabinet Manufacturer—D. COOPER, Gainsborough, Lincolnshire, Baker—C. CHAMBERS, Heath Street, Hampstead, Builder—T. CAMPKIN, Victoria Dock Road, Plaistow Marsh, Essex, Draper—F. COHEN and L. COHEN, Newcastle-upon-Tyne, Clothiers—T. COLLENS, Balsall Heath, Worcestershire, Licensed Victualler—J. COOK, Birmingham, Coach Builder—M. [illegible], Beccles, Suffolk, Schoolmistress—W. DUNCAN, High Street, Bloomsbury, Eating House Keeper—T. DALTON, Bristol, Horse Keeper—W. DAVIES, Northop, Flintshire, Wheelwright—A. DYER, Corfe Castle, Dorsetshire, Surgeon—W. EMERY, Bath, Carpenter—WILLIAM EVANS, St. Asaph, Flintshire, Pig and Sheep Dealer—J. ELLISON, New Street, Bedford Square, Commercial Road East, and High Street, Poplar, Furnishing Warehouseman—F. W. EVANS, Union Row, New Kent Road, Cab Driver—J. FELTUS, Salford, Beerseller—W. FRY, Mount Ct., Westmorland Road, Walworth, Journeyman Baker—J. FRASER, Pen-y-Park, Monmouthshire, Farmer—J. H. T. [illegible], Devonport, Commander in the Royal Navy—E. GREEN, Marsh Gibbon, Buckinghamshire, Schoolmaster—W. GREEN, Hurst, Berkshire, Carrier—S. GREGORY, Filey, Yorkshire, Innkeeper—W. H. GRIER, Hinderwell, Yorkshire, Cooper—F. GILL, Walthamstow, Omnibus Proprietor—E. GRANDONNA, Albany Street, Regent's Park, Cook—J. GREEN, Luard Street, Caledonian Road, Islington, Hackney Carriage Driver—W. H. GRAVES, Northwold, Norfolk, Ironmonger—S. GODFREY, Well Street, Falcon Square, Bonnet Shape Manufacturer—S. HARDY, Manchester, Blacksmith—W. HIGGINBOTTOM, Whittington, Derbyshire, Dealer in Ironstone—S. HOLLIDAY, Pudsey, Yorkshire, Coal Agent—W. HUNT, Norwich, Bookseller—J. HEMMINGS, Knowle, Warwickshire, Painter—T. HANCOCK, Newton Heath, near Manchester, Journeyman Dyer—T. HARRIS, Stafford, Baker—A. HARDING, Bristol, Carpenter—H. HUDSON, Birmingham, Iron Brazier—C. HUNT, Spring Street, Paddington, House Decorator—G. HADLEY, Rowley Regis, Staffordshire, Licensed Victualler—H. KNIGHT, Portsmouth, Assistant Paymaster in the Royal Navy—E. W. LAWRENCE, Liverpool, Auctioneer—JOSEPH LUSH, Anglesea Yard, Haymarket, Carman—T. MARSH, Southampton, Watchmaker—F. G. MASTIN, Holbeach, Lincolnshire, Journeyman Butcher—R. MORRISSON, Upper Gloucester Street, Dorset Square, Clerk in the Audit Office—R. MILLS, Sedgley, Staffordshire, Beerhouse Keeper—G. MASON, Sheffield, Razor Blade Forger—J. MARTINDALE, Chesterfield, Derbyshire, Travelling Draper—T. MOORE, Goodman's Yard, Minories, Wheelwright—P. MORRISON, Pall Mall East, Banker—R. M'KENZIE, Cecil Street, Strand, Merchant—J. MORTIMER, Hornsey Street, Holloway Road, Stone Merchant—J. MATHEWS, Edward Terrace, Caledonian Road, Hosier—J. J. NEWCOMBE, Devenport, Coach Proprietor—D. JONES, Goyallt, Carmarthenshire, Farmer—J. JACKSON, Cross Street, Hatton Garden, Coffee House Keeper—A. OAKES, Sheffield, Shoe Dealer—E. OLDHAM, Blackley, near Manchester, Butcher—M. PROSSER, Eothney, Carmarthenshire, Farmer—W. S. PORTCH, Henry Street, Hampstead Road, Cheesemonger—J. PRIME, Westbromwich, Staffordshire, Boat Steerer—J. POSTLETHWAITE, Ulverstone, Lancashire, Woodmonger—H. W. PORTER, Lamb's Buildings, Chiswell Street, Engraver—A. B. PIKE, Greenwich, Clerk—W. PEAKE, Newnham Street, Edgware Road, Dressing Case Maker—J. RIPPON, Boston, Lincolnshire, Engine Driver—G. RICHARDSON, Horsham, Sussex, Music and Musical Instrument Seller—DAVID ROBINSON, Lincoln, Carpenter—ROBERT RAINEY, Birmingham, Livery Stable Keeper—GEORGE REANEY, Smith Street, Clerkenwell, Cutler—JAMES RABY, Ockendon Road, Southgate Road, Builder—W. RILEY, Todmorden, Yorkshire, Tailor—P. M. RODIGUE, Little Tower Street, City, Wine Merchant—R. S. RILEY and J. E. GINNER, Upper East Smithfield, Coal Merchants—W. SIMPSON, Wolstanton, Staffordshire, Greengrocer—D. T. SPENCE, Portsea, Boatswain in the Royal Navy—F. SUGDEN, Oldham, Lancashire, Machinist—H. STIRKE, Manchester, Attorney—O. C. SETCHELL, Sidmouth Street, Gray's Inn Road, Draper—W. VAN TRUMP, North Petherton, Somersetshire, Farmer—T. TURRALL, Coventry, Cattle and Pig Dealer—G. THOROGOOD, Romford, Essex, Carpenter—J. TEMPLE, Mortlake, Surrey, Grocer—J. TUNBRIDGE, St. George's Circus, Blackfriars Road, Baker—J. THOMAS, Kea, Cornwall, Butcher—J. USHER, Cheetham, Tailor—C. UTTING, Park Street, Camberwell, Shorthand Writer—H. J. WILLIAMS, Bristol, Commercial Traveller—W. WOODWARD, West Bromwich, Staffordshire, Licensed Victualler—P. WARD, Red Lion Street, Holborn, Chemist—C. WEEDON, New Inn Yard, Marylebone, Jobmaster—E. WILSON, Birmingham, Stationer—D. B. WALLEGRAVE, Jun., Spilsby, Lincolnshire, Draper—J. WATKINS, Wellington Road West, Kentish Town, Engraver on Wood—A. WARREN, Deptford, Warehouseman's Assistant—F. D. WILSON, Trafalgar Road, Old Kent Road, Accountant—E. W. YARROW, Arundel Square, Islington, Mercantile Clerk—W. H. YEOWARD, Liverpool, Shipbroker.

SCOTCH SEQUESTRATIONS.—R. DALE, Dumbarton, Baker—J. STEEN, Glasgow, Tailor—N. CAMERON, Fort William, Inverness shire, Flesher.

Metropolis and its Vicinity.

THE REVISED EDUCATIONAL CODE.—A deputation, consisting of about 200 clergymen and gentlemen interested in the "revised code" of July last, had an interview with Earl Granville, Lord President of the Council, on Tuesday, to present a memorial praying for its withdrawal. Among those present were Lord H. Cholmondeley, Rev. Lord Alwyne Compton, Mr. A. Kinnaird, M.P., Rev. Sir H. Compton, Mr. Puller, M.P., Mr. J. C. Colquhoun, clergymen from nearly every metropolitan district, and from upwards of 40 counties. Archdeacon Sinclair introduced the deputation and read the memorial. It stated that the deputation did not act in their individual capacity, but were connected with the National Society, the Church of England Educational Society, the metropolitan training institutions, provincial training institutions, &c. It showed that the Revised Code introduced changes so organic and fundamental that no modification of its regulations could give satisfaction. It therefore prayed his Lordship to withdraw a document which had occasioned such wide-spread alarm, and thereby to restore that confidence and co-operation between the Educationists of Great Britain and the Committee of Council which had hitherto so happily prevailed; the interruption of which, for however short a period, the deputation regarded as a public calamity. Earl Granville in reply spoke as follows:—

"Mr. Lowe and I have been most desirous for information on the subject ever since this question arose, and we are anxious for the fullest discussion. We have received in our communications a large amount from each side, many approving the principle which the memorial condemns, and many complaining of it. I admit that in dealing with so large a measure as this we expected that certain blots would be hit. We are anxious to make such alterations in the details as may meet the wishes of the country, but the prayer of the memorial is, if I understand it, that the Minute should be withdrawn, and I am bound at once to say that I cannot give any satisfactory answer to the deputation on that point. I believe that the principle is one which is perfectly defensible, and that the more it is considered the more it will be approved by the country (Cries of "No, no!") You are certainly a large majority against me, but I state what is my own opinion. I would point out to the deputation that all are agreed upon one principle—a principle which I feel very strongly myself—namely, that it is desirable that State assistance should continue to be given in aid of voluntary effort for promoting education, and I think it is worthy of your attention, collectively and individually, to consider whether, after a Royal Commission has been appointed by one Government, and has reported to another Government, and that Government has found, rightly or wrongly, that although great results have undoubtedly arisen from the existing code, those results are not tantamount to the sum of money given for the purpose, and have in consequence proposed a system by which they consider those results may be augmented,—I think it is worthy of your consideration whether, under these circumstances, it is desirable that we should revert entirely to the old system of the Minute of 1846. I will not go into details. In short, I abstain from making any pledge whatever as to the course which Her Majesty's Government may pursue upon this subject. There is only one point I would remark upon. In the presence of many gentlemen, the great majority of whom are clergymen, I hardly expected to see, notwithstanding the violence of the denunciations we have heard as to the apprehended effect of the code, the same charge repeated of danger to the religious instruction of the people. Almost every great [illegible] been subject to some charge of that sort. At one time the objection was lest we should inspect the religious instruction given in the schools, and I do not wonder that there is extreme jealousy on this point, for it shows that in the [illegible] great majority of educationalists it is necessary [illegible] in one way or another combine religious with secular [illegible] but I cannot understand, and I assure you I have [illegible] best attention to the subject, how the new code [illegible] question. The very first deputation I received [illegible] very interesting one of about a dozen or [illegible] labouring in schools in populous or poor districts of the metropolis. They unquestionably made out a strong case—a case, unfortunately, almost too strong for themselves—as to the pecuniary results of the new code upon their schools. One gentleman adverted to the injury that it would do to the religious teaching, whereupon another clergyman got up and said he was sure that every one present would agree with him when he said that he did not attach a feather's weight to the religious part of the subject, and he added that he should be ashamed of himself as a manager of schools—and the great majority of the clergy were, he believed, of the same opinion—if he thought that this code would enable them or allow them to make the slightest alteration in the religious instruction given then in the schools. It is clear that as to teaching, reading and writing are with us as much a part of the religious as of secular education. If you keep a child at school for a certain length of time, and do not teach him to read and write, the religious instruction you may give him would have but very little effect upon that child when he left school. I do not wish to argue the question, but I am anxious that so large and respectable a deputation should not for one moment suppose that the Committee of Privy Council [illegible] in the slightest degree the notion that it was [illegible] diminish the efficacy of the religious teaching in schools. I do not think it would be proper, before the [illegible] of Parliament, to enter into any discussion in defence of the new code, or to refer to any alterations of detail which [illegible] hereafter be thought desirable to make. I do not agree [illegible] it would have been better to have worked with an [illegible] system, nor do I think it can be held that a system depending upon an annual Parliamentary vote can be regarded as permanent. But, whatever the differences of opinion on the subject, I am convinced that all feel honestly and sincerely desirous of promoting the education of the poor and of combining religious and secular instruction. That is the desire of the Government, and I have no doubt it is equally the wish of [illegible] present. The Government will make their full explanation [illegible] Parliament, and Parliament alone, to whose verdict I am bound respectfully to bow, must be the judges of the advantage of adopting a new code. Certainly, on the part of the Government, I can give no hope that it will be withdrawn until Parliament has had an opportunity of pronouncing an opinion upon it."

Another deputation subsequently waited on the Lord President and Mr. Lowe, consisting of the lecturers at the various training colleges, and headed by Lord Enfield and a numerous body of members of parliament. The object of the deputation was to induce the Education Board to continue the allowances made to the lecturers under the old system, but for which no provision was made under the new. They received very little encouragement. After a good deal of discussion on the point whether or not these lecturers were to be considered Government officers, a position which Mr. Lowe strenuously denied, the interview closed with an intimation from Lord Granville that the lecturers must lay their account with the cessation of the allowances they at present receive from Government after Christmas of next year.

THE PEACE SOCIETY AND THE AMERICAN DIFFICULTY.—The following memorial has just been sent from the Committee of the Peace Society to Lord Palmerston:—

"My Lord,—We ask permission, as the Committee of the Peace Society, but representing also, in this instance, we are happy to believe, the sentiments of a large number of persons not formally connected with that body, to express the deep concern with which we have learnt of recent events that are likely to create serious misunderstandings between this country and the United States of America. We rejoice in the assurance that, notwithstanding the irritating nature of the matter in dispute and the excited state of the public mind, your lordship's Government are prepared to conduct the negotiations with the Cabinet of Washington with the utmost moderation and forbearance; nor can we doubt that the generous people of this country, when the first natural irritation has subsided, will amply sustain your lordship in such a policy of conciliation as that which under the circumstances would be most worthy of our character as a powerful Christian nation. England can, without any derogation of her dignity, afford to be magnanimous in her dealings with a sister State struggling in the agonies of a domestic revolution. We earnestly hope that the answer which may be received from the American Government will be such as to open the way for a speedy adjustment of the point in dispute. But, should difficulties interpose in the way of its satisfactory solution by ordinary diplomatic negotiation, we venture respectfully to submit to your Lordship whether the question on which the controversy turns is not of a nature which renders it specially suitable for reference to arbitration. We beg leave to recall to your lordship's remembrance that the principle of arbitration which the British Government, to its great honour, was the first to commend to the attention of the Paris Conference of 1854, through the mouth of Lord Clarendon, was recognised and ratified by the unanimous consent of that august body, and embodied in a resolution expressed in the following terms:—'The Plenipotentiaries do not [illegible] to express, in the name of their Governments, the wish that States between which any serious misunderstanding may arise should, before appealing to arms, have recourse, so far as circumstances might allow, to the good offices of a friendly Power.' The principle thus formally consecrated by the sanction of all the great Governments of Europe has since received the spontaneous and cordial homage of eminent statesmen of this country of various political parties. It was described by Mr. Gladstone 'as a great triumph, a powerful engine on behalf of civilisation and humanity.' The Earl of Derby referred to it, as 'the principle which, to its endless honour, was embodied in the protocols of the Conference of Paris.' The Earl of Malmesbury pronounced the act of the Conference in acknowledging and recommending the principle, as, in his judgment and that of the Government of which he was a member, 'one of the most important to civilisation and to the security of the peace of Europe,' because 'it recognised and established the truth, that time, by giving place for reason to operate, is as much a preventive as a healer of hostilities.' We would further remind your lordship that Great Britain and the United States have already in their relations with each other solemnly recognised this principle even in its most rigid form of application. In a treaty between the two Governments relative to fisheries, commerce, and navigation, ratified at Washington, September 9, 1854, there is a clause which

[illegible] in case of differences arising between the contracting parties on any matter connected with the treaty, the [illegible] in dispute shall be referred first to Commissioners [illegible] in the last resort to an arbitrator or umpire to be mutually [illegible] by the high contracting parties'—such are the terms [illegible] treaty—'solemnly engaging to consider the decision [illegible] Commissioners conjointly, or of the arbitrator or [illegible] as the case may be, as absolutely final and conclusive [illegible] each case decided upon by them or him respectively.' We respectfully suggest, my lord, that here are [illegible] and precedents abundantly sufficient to warrant the [illegible] Government in proposing that the question now [illegible] between them and the Government of the United [illegible] if it cannot be otherwise settled, should be referred to [illegible] of some friendly and impartial arbitrator. If it be [illegible] of no other advantage, it will at least afford time [illegible] exasperation of the public mind to subside which [illegible] prevails on both sides of the Atlantic, and which, [illegible] more than any difficulty inherent in the subject itself, [illegible] to embarrass the two Governments in their attempts [illegible] a pacific solution. We earnestly pray, my Lord, that [illegible] Lordship and the Government of which you are the head [illegible] be endowed with 'that wisdom which is profitable to [illegible] which is pure, peaceable, gentle, and easy to be entreated,' so as to avert from these two great civilised and Christian nations a war which would be a reproach to their civilisation and a bitter satire upon their professed Christianity. JOSEPH PEASE, President, HENRY RICHARD, Secretary."

PROPOSED ROAD ACROSS HYDE PARK.—A committee appointed last week by a deputation connected with the parishes interested in this scheme to confer with the Right Hon. W. Cowper, Chief Commissioner of Works, relative to the means of constructing a public road across Hyde Park, had an interview with the right hon. gentleman on Saturday at her Majesty's Office of Works, at Whitehall. The committee consisted of Col. Worthy, Mr. James Heywood, F.R.S.; Mr. Tite, M.P.; Mr. R. Freeman, Mr. Morris Kemshead, Mr. Tillett, Dr. Percy, and Mr. C. M. Roche. Colonel Worthy having stated that they had waited upon the right hon. gentleman to know whether he had any proposal or suggestion to make on the subject, Mr. Cowper said that the Queen would consent to a road through the Park from Bayswater to Kensington provided it be a subway, and that her Majesty would reserve to herself the entire control over it, as well as decide at what hours it should be opened and closed. Two modes had been suggested for accomplishing the object; one by a road in Hyde Park along the boundary of Kensington Gardens and passing under the Serpentine by a tunnel; the other by a road across Kensington Gardens, which avoided the Serpentine, which, he said, greatly contributed to the beauty of the landscape, and should not, if possible, be interfered with. He then exhibited a plan, which he had directed to be prepared, of a subway through Kensington Gardens from Lancaster Gate on the Uxbridge Road to Prince Albert's Road on the Kensington side, and described its principal features to the committee. The subway, which was between 21 and 23 feet deep, and on a line with the middle walk, was entered by a short incline, running nearly parallel with the Uxbridge Road, and was crossed by four bridges for foot passengers. It was nearly a mile in length, and passed through Rotten Row, and the drive beyond, by a tunnel, coming out at the nearest point to the Exhibition of 1862 by another incline of a similar description to that at the other end. Sections of the road showed that it could be laid out in two different ways, so as to have a picturesque effect, and rather to improve than deteriorate the surrounding scenery. In one, the sloping banks were turfed and planted with shrubs, with a gravel walk along the top; and in the other the banks were broken by a second walk, half way down, for which small arches were inserted in the viaduct. Mr. Cowper said that he thought this plan preferable to the one through Hyde Park, as it would be easier and more cheaply constructed, as well as get rid of the objection to any interference with the Serpentine; but, at the same time, he was not prepared to pledge himself at present to the adoption of any particular project. In reply to some questions, he said that a subway was a *sine quâ non* to her Majesty's assent, and that the cost of the one he had suggested would be about 40,000*l.*; that the subway proposed by Mr. Page, along the ha-ha and underneath the Serpentine, would be longer and not so agreeable to persons travelling along it, and could not well be finished before the opening of the Exhibition. On the question of expense, Mr. Cowper gave the deputation distinctly to understand that as the proposed road would be for the accommodation of the localities interested, and not for park purposes, or a national object, the Government could not give any assistance towards its formation by a grant out of the Imperial revenue. He further stated that if the different parishes in the neighbourhood were disposed to raise money for carrying out the object, it would be necessary to pass an Act of Parliament to enable them to do so, and that could not be done without delay, though probably in time to make the road before May. Mr. Freeman said that the inhabitants of Kensington were determinedly opposed to any road being made through the gardens which would interfere with that quietude and retirement so delightful to artists, students, and others. Mr. Cowper replied, that the traffic would not be seen except by persons on the very edge of the subway, and that the noise occasioned by it would be extremely light. Mr. Tite, Mr. Heywood, and other gentlemen expressed their approval of the right hon. gentleman's plan as the least objectionable of the two, and said that the only difficulty would be in providing the necessary funds. It was suggested that the Royal Commissioners of the Exhibition might contribute a portion, but Mr. Cowper stated that under their charter they were prohibited from doing so; and the proposal that the Great Western Railway Company, together with other metropolitan railway companies, should be solicited to aid the work was generally thought not to be likely to bring about any satisfactory results, considering the small dividend which many of them were only able to pay. In reply to other questions, Mr. Cowper said he thought it but right that if the parishes made the subway the Government should keep it in repair at their own expense, and that if any annoyances were caused by the traffic to persons frequenting the gardens, it could be easily covered over with glass. He suggested that the road should be closed between twelve at night and five in the morning; but it was stated that much of its advantage would be lost to the residents in Tyburnia and Belgravia if they could not use it during those hours. A member observed that the gravel which would be dug out in making the road would, at a minimum, be worth 17,000*l.*, and might go towards the reduction of the expense, but the right hon. gentleman did not say whether the Crown would give up its right to the soil removed. Colonel Worthy said that if the money required were raised by a loan it might be paid off in a series of years by a trifling rate, which would scarcely be felt by the inhabitants of the parishes. After some other topics had been discussed, the committee stated that they would consult the vestries which they represented, the Metropolitan Board of Works, the principal owners of property, and others, with a view of ascertaining whether the requisite funds could be raised without the aid of Government.

EMBANKMENT OF THE THAMES.—The Queen has appointed the Lord Mayor of the City of London; Major-General Sir Joshua Jebb, K.C.B.; John Thwaites, Esq., Chairman of the Metropolitan Board of Works; Captain Douglas Galton, R.E.; Commander Burstal, Secretary of the River Thames Conservancy Board; Henry Arthur Hunt, Esq., Surveyor of her Majesty's Works and Public Buildings; and J. R. M'Clean, Esq., C.E., to be her Majesty's Commissioners to examine into plans for embanking the Surrey side of the Thames simultaneously with that of the Middlesex side. The Commissioners are the same gentlemen who investigated the project of a northern embankment in the past summer, and the Lord Mayor has again been invited to act as chairman. It is understood that, in the event of the Commissioners recommending the embankment on the Surrey side to be undertaken contemporaneously with that on the north, the Government are prepared to embody both projects in the Bill which they will introduce in the approaching session of Parliament.

GREAT PRAYER MEETING AT EXETER HALL.—An aggregate prayer meeting of Christians of all denominations, convened by the committee of the Evangelical Alliance, was held on Thursday at Exeter Hall for the purpose of uniting in prayer to God to avert the calamity of war with the United States. Sir Culling Eardley presided, and the Hall was densely crowded with people, including a considerable number of clergymen of the Church of England and ministers of dissenting denominations, with some influential laymen. A hymn having been sung, the Rev. E. G. Arnold, Rector of Battersea, read a passage from the 46th Psalm, after which prayers were offered up successively by the Rev. Ridley Herschel, the Rev. Marshall Hall Vine, M.A., rector of St. Mary-le-Bow, and the Hon. and Rev. Baptist Noel, M.A. Appropriate hymns were sung, and further prayers were offered by the Rev. Thomas Alexander, Presbyterian Minister, and the Rev. Samuel Minton, M.A. of Worcester College, Oxford, who dismissed the meeting with the blessing.

THE VACANT ALDERMANSHIP.—Mr. Besley, the type founder, one of the representatives of the ward of Aldersgate in the Common Council, was yesterday elected Alderman of the ward in the room of the late Sir Peter Laurie. There was no other candidate.

POST OFFICE SAVINGS BANKS.—Another list of Post Office Savings Banks which are to be opened in the course of the present month at the money order offices in the metropolis and suburbs, and also in the provinces, has been issued under the authority of the Postmaster General. The entire list is upwards of 700 in number, and a very large proportion of the new offices will be opened in London and its vicinity, within the Post Office district.

LOSS OF ANOTHER BALTIC STEAMER.—The Onda steamer, from Cronstadt to London, has been lost on the Anholt reef, being the 17th steamer lost in the Baltic this year. She was a fine vessel of 700 tons, and had a cargo of 700 casks of tallow, 700 quarters of wheat, some wool, &c. The loss will fall partly on Lloyd's, and partly on the marine insurance offices.

BRITISH MUSEUM.—The trustees of the Museum at a very large meeting held last week, the Archbishop of Canterbury in the chair, resolved by a large majority to confirm the vote which was carried last year by a majority of one, in favour of separating the Natural History department of the Museum from the Library and Antiquities.

THE OVERCROWDED THOROUGHFARES OF THE CITY.—At a recent meeting of the Court of Common Council Mr. Deputy Lott called the attention of the Court to the continual overcrowding of the thoroughfares, which had grown to be an intolerable evil, endangering human life, and prejudicing the retail traders in the leading streets in the City. Of late years in particular there had been a great deal of additional traffic, in the shape of those monster vans and unsightly waggons belonging to people like Pickford and Chaplin, bearing merchandise to the large warehouses in the City. He submitted that the retail houses were as much entitled to consideration as the great millionaires in the City, and he supposed it would be acknowledged that foot passengers had some rights, but these were regularly set at nought. He held in his hand a document showing the number of persons ascertained to have entered the City of London daily, as taken at the commencement of May, 1860. The figures were perfectly marvellous. The daily number of vehicles was 57,765; the number of passengers in vehicles, 171,086; the number of foot passengers, 535,535; the total number of passengers, 706,621. He concluded by moving—"That it be referred to the police committee to consider the propriety of the Corporation making application to Parliament for further powers to be given to the magistrates of the City of London to regulate the traffic of carts, cabs, carriages, and omnibuses, which at present, by overcrowding certain streets and wholly avoiding others, causes great inconvenience to the citizens."—Mr. Besley seconded the motion, but said that though he admitted the existence of the evil he almost despaired of finding a remedy.—Alderman Lawrence said it would be most undesirable to adopt such a resolution. He did not deny that the various thoroughfares were crowded up; but he, for one, rejoiced in that great traffic, and in all those heavily-laden waggons, indicating as they did the enormous trade and prosperity of the City of London. The true remedy for the existing inconveniences lay in furnishing fresh outlets and thoroughfares, by which the traffic would be diverted and renewed. At present great measures were in progress or in contemplation which would eventually have that effect. Railways, underground and others, were advancing into the City; Newgate Market was about to be removed to a part of the town where it would be comparatively convenient, and it was proposed by the Government to make a street from Blackfriars Bridge to the Mansion House, as a necessary adjunct to the Thames embankment. Until they saw the operation of these public improvements it would not be wise to apply to parliament for a measure to restrict the traffic, which was an unavoidable result of the growing trade. He moved the "previous question" as an amendment.—Mr. Deputy Harrison suggested that it had better be left to the magistrates and the City police commissioner, who had between them very considerable powers, to deal with the subject, than to apply to parliament.—Alderman Rose said that the traffic had so enormously overgrown the accommodation afforded by the streets as to defy all regulations which parliament or any other body of men, might lay down for its control. He agreed with Alderman Lawrence that new street accommodation was the only solution of the difficulty.—Mr. Deputy Jones, speaking from personal experience, said that in the height of the day the passage of the principal streets in the City by foot passengers was always more or less attended with danger to life or limb.—Mr. Deputy Pewtress said he had recently seen a return from the office of the commissioner of police, showing that in the last year 60 or 70 persons received injuries in the street from the crowded thoroughfares, resulting in death in some cases. If the magistrates had not now sufficient power to deal with this crying evil, parliament, on a proper application, would probably invest them with more, and if they had sufficient power they ought to exercise it.—Mr. R. N. Philipps supported the motion, and reminded the Court that whatever powers the magistrates had for regulating the traffic they had possessed them for a considerable period, and still the evil continued to exist.—Mr. Deputy Lott, in reply, observed that the only opposition to the motion had come from two of the aldermen of London, and two of the most juvenile among them. The amendment of Alderman Lawrence having been negatived on a show of hands, the original motion was put and carried.

ST. THOMAS'S HOSPITAL AND THE CHARING CROSS RAILWAY.—Mr. John Stewart, of Liverpool, the umpire appointed by the Board of Trade, made his award on the 7th inst. to the effect that the compensation to be paid by the Charing Cross Railway Company, for the purchase in fee simple of the whole of St. Thomas's Hospital and premises, and for the damage sustained from the construction of the railway, shall be 296,000*l.* The claim of the Hospital was 750,000*l.*

ST. GEORGE'S-IN-THE-EAST.—It is understood that the Rev. Bryan King will not return for another twelvemonth. He has, however, nominated a clergyman to take the place of the Rev. Alfred Cay, the present curate in charge, who holds his appointment from the Bishop of London. A meeting of the Vestry was held a few days since, at which it was resolved to call a meeting of the parishioners, for the purpose of presenting a testimonial to Mr. Cay for the satisfactory manner in which he had conducted the affairs of the church and parish. The Bishop of London preached in the church on Tuesday evening in the presence of an immense and orderly congregation.

THE PUBLIC HEALTH.—The Registrar-General's Weekly Report states that 1300 deaths were registered in London in the week that ended Saturday, December 7, being a large decrease on the two previous weeks. The average rate calculated on the returns of corresponding weeks in ten previous years (1851-60), would have been

1395. During the week the births of 837 boys and 819 girls, in all 1656 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1660.

Provincial.

BRIXHAM.—The American ship Elephant Greely, 1000 tons, belonging to Portland, Maine, was found to be on fire in the Channel on Tuesday morning, and was towed by two fishing smacks into Elbury Cove, near this town. Mr. Milton, R.N., the commanding officer of the Coastguard, immediately went on board, and by the assistance of the town engine succeeded in extinguishing the flames, which were confined to the after part of the ship. The Elephant Greely, in consequence of the civil war, is sailing under Hamburgh colours, and was bound from that city in ballast for Akyab. It is said that a mutiny has since broken out among her crew, and that it has been necessary to send an armed party of coastguardmen on board to maintain order.

CAMBRIDGE.—Mr. George D. Liveing, M.A., of St. John's College, was on Friday unanimously elected Professor of Chemistry in this University, in the room of the late Professor Cumming.

EAST RETFORD.—On Friday last six poachers were brought before the magistrates in this town on remand charged with poaching on the estate of the Duke of Newcastle, and seriously maltreating two of the watchers. The prisoners were found on the lands at Bothemsall, trespassing after game, and the duke's watchers came in collision with them. The poachers, being the strongest in number, had the advantage, and in the fight that took place they beat two keepers, father and son, in a most brutal manner. The magistrates committed them for trial at the next assizes, but offered to take bail, each in 100*l.* and two sureties of 100*l.* In default, the prisoners on Saturday were removed in custody to the county gaol, where they will remain till March, as there is no winter gaol delivery for Nottinghamshire.

HAYWARD'S HEATH.—On Thursday the 5th inst., Mrs. Agate, the wife of a farmer at Slaugham, about 6 miles from this place, in a fit of insanity killed her youngest child, a girl about 5 years of age, by nearly severing her head from her body. She then endeavoured to cut the throat of her son, 6 years of age, and afterwards attempted to commit suicide. The boy is in a critical state, and the mother herself is so much injured that her recovery is doubtful. It appears that she has been for some time affected in her mind, and has been closely watched. At the inquest on Friday the jury returned a verdict of Wilful Murder against her, coupled with the opinion that she was labouring under a fit of insanity at the time. On Thursday another member of the family, Mr. Stephen Agate, a draper at Cuckfield, a cousin of Mr. Agate, the farmer, committed suicide by shooting himself in the head. It is supposed that his mind had been affected by the tragedy which had occurred to the other branch of his family. The jury at the inquest returned a verdict of Temporary Insanity.

HECKINGTON.—A melancholy event took place on Sunday last in the church of this parish during divine service. The Rev. Charles Cameron, Vicar of Christ's Church, Long Lane, Trusley, Derbyshire, aged 54, brother of the vicar of this place, had ascended the pulpit and given out the text, when he was attacked with paralysis, which at first greatly affected his speech; in the course of three or four minutes he became inaudible, and fell on the seat in an unconscious state, to the great consternation of the congregation. His brother and several gentlemen went immediately to his assistance and brought him down into the church, where he was attended by a surgeon who was present, but he never rallied, and died in the course of the afternoon.

SHEFFIELD.—An inquest was held in this town on Saturday on the body of Thomas Townsend, a scissors maker, who committed suicide on the previous afternoon, after deliberately shooting his step-daughter, Eliza Fisher. It appeared that a criminal intercourse had taken place between the parties, resulting in the birth of a child. The child died about a year ago, and the man having latterly desired to renew his intimacy with the girl, she determined to resist his attempts, left the house and went into service. On Friday afternoon he called at the house where she was in service and shot her in the side with a pistol, and afterwards shot himself in the stomach. He died instantly, and the girl is not likely to recover. The jury returned a verdict to the effect that deceased was not in an unsound state of mind, and that therefore he was guilty of self-murder.

SPILSBY.—A bronze statue of Sir John Franklin was formally inaugurated in this town, his birthplace in Lincolnshire, on the 26th ult. A procession, headed by the Volunteer Rifle Corps, marched to the Market Place, where Sir John Richardson, C.B., F.R.S., delivered an address on the services of Sir John Franklin to his country and to the cause of science. After the inauguration, a public luncheon took place, at which "The memory of the late Sir John Franklin" was proposed by the chairman, and drunk in solemn silence by the large company. There were present on the occasion a grandson of Sir John Franklin, and also Captain Pym, one of the explorers for the lost expedition. The statue, which is the work of Mr. Bacon, was erected at a cost of 700*l.*

SOUTHAMPTON.—The Nashville, Confederate steamer, which damaged her bottom whilst running the blockade at Charleston, was taken into the graving dock on Friday for repairs.

WORCESTER.—A meeting of the hop growers of Worcestershire and Herefordshire was held in this city on Saturday, Sir Thomas Winnington in the chair, to consider the means necessary to procure the total repeal of the hop duties. Lord Holmesdale, Mr. Beresford Hope, Mr. Dodson, M.P., and Mr. Kintrea, attended as a deputation from the Central Association for the Repeal of the Hop Duties. Mr. Knight, M.P., Mr. J. P. Smith, Mr. King King, M.P., Mr. Taylor, and the members of the deputation addressed the meeting, and the following resolutions were carried unanimously:—

"1. That this meeting is of opinion that the burden and grievance of the Excise duty on hops is becoming year by year more intolerable alike to the hop planters and to all who are interested in the cultivation of hops. 2. That this meeting considers it advisable that a general deputation from all the hop growing districts be organised to wait upon the Chancellor of the Exchequer for the purpose of urging upon him the justice and policy of providing for the repeal of the duty in his next Budget, and that a memorial to that effect be prepared and circulated for signature throughout the hop-growing districts of the two counties of Worcester and Hereford."

Ireland.

THE NATIONALIST DEMONSTRATION.—The mass meeting of Irish Nationalists was held on Thursday the 5th inst. in the Rotunda, under the presidency of the O'Donoghue, M.P. It was densely crowded by labourers and mechanics, but no public man of position in the country was present. The meeting was addressed by the Chairman, Mr. P. J. Smyth and Mr. Cavanagh, two of the M'Manus deputation from America, Mr. M. A. Brennan, Mr. T. D. Sullivan, of the *Nation*, and others, who were vehemently cheered when any sentiment was uttered particularly hostile to the British Government. The only result of the meeting was a resolution appointing a committee to consider the advisability of an organisation in the present state of affairs at home and abroad.

MR. SMITH O'BRIEN ON THE AMERICAN CRISIS.—Mr. Smith O'Brien has published a long letter, which he has addressed to Mr. Seward, on the seizure of the Confederate Commissioners. The following are extracts:—

"By the recent seizure of the Confederate Commissioners on board of a British mail steamer the Government of Mr. Lincoln has incurred a fearful responsibility. I take for granted that this act will not be disavowed. I take for granted that it was intended as a deliberate affront to the English nation. I take for granted that it was designed as a bold and defiant answer to the insolence which has been directed against the American nation by every organ of British opinion ever since the civil war broke out in the United States. However this may be, it is assuredly an act which is fraught with consequences that may hereafter become most disastrous to both the parties who are now contending with each other. Unless England consent to forego all claims to manhood or national honour, she must resent this seizure, and, if the South be disposed to accept her co-operation, the successors of Washington must be prepared to encounter hazards more dangerous than have ever menaced the Western Republic. United, the States of America might defy the world; but whilst they are divided, the interposition of a powerful arbiter must rule their destinies. The navy of England, issuing from the ports of Halifax, St. John's, Bermuda, and of the West Indies, and co-operating with a land force which appears to be little short of half a million of men, will not only raise the blockade of every Southern port, but will sweep the American coast from New Brunswick to the Potomac, burning every town and city which lies within reach of the formidable projectiles of modern artillery, and capturing every commercial vessel that may venture to quit the protection of a Federal fortress. As for Canada, the modern statesmen of England care little whether it call itself British or American; but if an attempt be made by the Federal States to force the Canadians into an incorporation with the Northern section of the Republic, they will simply bring upon themselves an additional foe. They will be attacked on their northern as well as on their southern frontier, and thus overmatched, they will be compelled to yield to the dictates of necessity, and submit to an ignominious peace. This is the course of events which British opinion now anticipates. Scarcely a single Englishman or Irish West Briton is to be found who did not rejoice when the civil war broke out in America, because the English people have been made to feel that the United States were becoming a Power with whose ascendancy they would soon be unable to cope. For the same reason I am convinced that they would now rejoice to obtain an opportunity of destroying the Northern section of the Republic by forming an alliance with the Southern. They would thus acquire, without impediment, the Cotton and other raw materials with which the Southern States have been accustomed to supply them, whilst they would extinguish the political and commercial greatness of a formidable rival. * * * In view of these contingencies do I ask you to lower 'the stars and stripes,' and to humble yourselves to England? By no means. But I earnestly entreat you to renew relations of amity, if not of affection, with those who are your natural friends, who ought to be your brothers in affection as they are your brothers by the relation of kindred. Answer the British in the language of diplomacy. Quote authorities and precedents to show that you are justified by the law of nations, and specially by the example of England, in the seizure of these commissioners. Such discussions will give you time for deliberation and for preparation; but lose not an hour in liberating the commissioners. Send them to the Confederate head-quarters, and tell them to return to Washington as plenipotentiaries duly authorised to treat respecting the terms of an immediate suspension of arms, and respecting an early adjustment of the questions at issue between the Northern and Southern States. If this be the language of common sense, do not despise it because it comes from an island which has for ages been the victim of misgovernment. I believe that the language which I now hold bespeaks the sentiments of a large majority of my fellow countrymen, and there is not among the nations of the earth a people who entertain towards the United States of America so much affection as is felt by the Irish." * * * "If you make peace with the South there will be no war with England. Some convenient and plausible pretext will be discovered for forbearing to resent the affront which has been offered to the British flag. England would not hesitate to assail you, as she assailed the Chinese, if you were unable to defend yourselves; but when she shall find that the shores of America are to be protected by a million armed men who have profited by the experience of at least one campaign—when she shall find that every harbour and every river from the frontier of Maine to the [illegible] Texas is about to send out privateers which will intercept, even in Australia, the gold-laden vessels of England—when she recollects that if she places a regiment on the borders of Canada, a large portion of that regiment will desert to the United States—when she reflects that if she go to war with united America she will be met by 200,000 Irish [illegible] pant for an opportunity of avenging the wrongs of their race—when she is conscious that five millions of Irishmen [illegible] an island which lies by her side will sympathise with America rather than with England in such a struggle—when she forebodes, with gloomy forecast, that the glory of England will ever pass away, and become matter of history, if ever France and America should unite in hostility to her—when she knows that the ruler of France is watching like an eagle for an opportunity to pounce upon his prey, and that France will be supported by the sympathy of Spain and the gratitude of Italy, she will be slow to encounter these hazards, even in defence of the flag that 'has braved a thousand years the battle and the breeze.'"

THE LATE MURDER IN DUBLIN.—In the Commission Court, on Thursday, the jury found without hesitation that John Molloy murdered his two children while labouring under insanity, to which he had been previously subject, and which had been greatly aggravated by the wretched state of destitution to which his family had been reduced, by his having been for eleven weeks out of employment. He was therefore acquitted on the plea of insanity.

THE LATE CASE OF ASSAULT.—At the same assizes Agnes Wyles, the girl who perjured herself on the trial of Curran, the carman, for the assault on Miss J[illegible], pleaded guilty to the charge of perjury, and was sentenced to imprisonment and hard labour for one year, the judge expressing his opinion that she had been suborned to commit the crime by the woman with whom she lived, and directed the police to investigate the case, and, if possible, to bring the far more guilty suborner to justice.

MIXED MARRIAGES.—In the Consistorial Court a few days since, Judge Radcliff gave judgment in a marriage case very like the Yelverton case. The suit was instituted by the lady for the restitution of conjugal rights. It appeared that the impugnant, who is a Protestant, is a millowner, and the possessor of a considerable property at Tullymills, Moate, in the King's County. Anne Gibbons, the promovent, who is a Roman Catholic, claimed to be his wife, and relied on a marriage alleged to have taken place in February, 1856, at Deerpark, near Ballymahon, in the King's County, and to have been celebrated by the Rev. Patrick Manion, a Roman Catholic priest. The judge declared the marriage null and void. In doing so he vindicated the reasonableness of the law, which declares the nullity of such marriages. The Protestant clergymen, he said, submit to certain restrictions in their celebration of marriage which were all framed in the interests of the laity, and intended to prevent persons, whether male or female, from being entrapped into improper marriages. The Roman Catholic clergymen have always refused to submit to these restrictions, and insist on celebrating marriage without notice in any place or at any hour. As the Roman Catholic laity submit to this the law does not interfere so far as they are concerned; but it does not follow that they are to extend their ministrations in forms so liable to abuse to persons who are not of their communion. When the Roman Catholic priests consent to be under the same regulations in celebrating marriage as Protestants, their marriages will be held valid with all classes of her Majesty's subjects.

Railways.

METROPOLITAN AND THAMES VALLEY.—A prospectus has been issued of a new suburban line, to be called the Metropolitan and Thames Valley Railway. It will connect the Great Western and South Western lines with Hampton, Sunbury, and Chertsey, and, passing through a favourable country, can be constructed at small cost. The enterprise has good local support, and the proposed capital is 250,000*l.* in 10*l.* shares.

Law.

COURT OF COMMON PLEAS (Sittings in Banco): *Collier* v. *King* (*Registration Appeal*).—This was a case of some interest in relation to the Registration Courts. The appellant was the minister of a congregation of particular baptists at Downton, in Wiltshire, and he claimed to vote for the [illegible] on the ground that he had a freehold interest in the [illegible] occupied by him in that capacity. The question therefore was whether the minister of a dissenting congregation held his appointment for life, and thus became entitled to vote in right of his interest in the chapel property. The revising barrister held that there was nothing in the terms of the appointment to lead him to infer that it was for life, and therefore disallowed the claim. The present appeal was against this decision. The Lord Chief Justice then gave judgment to the effect that the question of inference from the evidence was specially within the province of the revising barrister, and that they saw no reason to disturb the decision to which he had come. The judgment was therefore affirmed. *O'Hara* v. *London and Brighton Railway*.—This was another case arising out of the fatal accident in the Clayton tunnel in August last. The plaintiff was a billiard marker in Brighton, and was coming up to London by the train to which the accident happened. He was able to walk back to his house in Brighton; but he was severely shaken, and had never been himself since the accident. He claimed damages to the amount of 300*l.* The company paid 50*l.* into court, and attempted to show that the illness to which plaintiff was now subject was caused by his own irregular habits rather than by the accident. The jury, however, returned a verdict awarding the plaintiff 130*l.* beyond the 50*l.* paid into court.

BAIL COURT: *Coombs* v. *Duckering and others* (*The New Union*

Loan Company).—This was an action to recover the sum of 19..l., and was a case of some interest to depositors in friendly societies, loan societies, and others. The plaintiff is a sempstress, and was formerly a cook in a gentleman's family, and the defendants were the directors of the New Union Loan Society. The plaintiff having saved a little money in service, deposited it with the Company, and received upon it a high rate of interest. Circumstances afterwards occurred to the detriment of the society, in connection with the defalcations of Mr. Martin, the late secretary, which induced her to withdraw her deposit. This was objected to by the directors of the society; an attempt was made to prove that she was a shareholder, and it was argued that no person could become a depositor without being a shareholder. Mr. Justice Blackburn referred to some of the provisions in the society's rules of settlement which clearly contemplated a distinction between depositors and shareholders, and said it was idle to keep up such a defence without a shadow of pretence for doing so. The jury said they were entirely of the same opinion, and returned a verdict for the plaintiff for 198l. 11s. including interest.

ROLLS COURT: *Marsh v. the Secretary of State in Council for India.*—This bill was filed by the personal representative of the late Lord Clive, praying a declaration as to trust of certain moneys under the following circumstances:—By a deed dated the 6th April, 1770, and made between the East India Company of the one part, and Lord Clive of the other part, after reciting that Lord Clive, being zealous for the prosperity of the Company, the security of their territories and territorial revenue in India, and their trade and commerce, which greatly depended on the bravery and conduct of the Company's troops, and considering that the establishment of a provision for such of the officers and private men employed in the Company's service as should be disabled by age, war, or disease contracted during their service, would tend to induce fit persons to enter into the said service and encourage the bravery of the soldiery employed therein, had proposed to the directors of the Company to appropriate the interest of five lacs of sicca rupees, amounting to 62,833l., for the support of a certain number of officers, non-commissioned officers, and private men in the service of the Company who from wounds, length of service, or diseases contracted during their service, were unable or unfitting to serve any longer, and whose fortunes might be too scanty to afford the officers a decent and the privates a comfortable subsistence in their native country, and also to make provision for the widows of such officers and private men as would have been entitled to the said bounty, and reciting that Syful-Dowla, the then Nabob of Bengal, had contributed three lacs of rupees to the same purpose, it was declared that the Company should be perpetual trustees of the eight lacs of rupees for the benefit of the officers and privates in the Company's service and their widows, but it was provided that in case at any time after the year 1781 the Company should cease to employ a military force in their actual pay and service in the East Indies, and also ships for carrying on their trade and commerce, then and in such case the Company would pay to Lord Clive, his executors, administrators, and assigns, for his and their own use, the sum of five lacs of rupees, but subject nevertheless to the payment of all such pensions and annuities as should at such time be chargeable upon the said trust funds. In 1834 the East India Company ceased to exist as a trading corporation, and from that time they ceased to employ any ships for the purpose of trade and commerce. In 1858 all the real and personal property, and all the rights, privileges, powers, and authorities, whether military or civil, formerly vested in the East India Company, were by Act of Parliament transferred to and vested in the Crown. The plaintiff alleged that by reason of such Act of Parliament the Company had, within the terms of the deed, ceased to employ in their actual pay and service a military force in the East Indies, and that *consequently*, as the representative of Lord Clive, he was entitled to the payment of the five lacs of rupees, subject to the existing annuities and pensions charged thereon. The case was argued on the 18th and 19th November last, when judgment was reserved. His honour now gave judgment to the following effect:—The question appeared to him to turn principally upon the construction of the statute transferring the rights, duties, and liabilities of the Company to the Crown, for he was quite of opinion that the event had happened contemplated by the deed—namely, the Company ceasing to employ in their actual service any military force, and to have any ships for the purposes of commerce. If there were nothing else in the case, it would be the right of the plaintiff to sue the Company at law for payment of the money, but the Act of Parliament intervened, and in fact regulated the whole matter. By the Act all the real and personal property of the Company was vested in her Majesty, and the first question which arose was whether these five lacs of rupees formed part of the property of the East India Company. He was of opinion that no distinction could be drawn between one species of property and another, and he was at a loss to understand to whom, according to the plaintiff's calculations, the three lacs of rupees belonged. By the terms of the Act the Company were expressly discharged from all duties of a fiduciary character, and if therefore it was held that these moneys did not pass to the Crown from the Company, the Company would be entitled to hold them discharged from the trust. According to the plain construction of the deed, these five lacs of rupees were trust moneys in the hands of the Company, and according to the scope and clear meaning of the whole Act these trust moneys, in common with all other trust funds, passed to Her Majesty, to be applied in the same manner as they had previously been applied by the Company. In coming to this conclusion, he was glad to know that the effect would be to keep these funds applicable to the purposes for which they were originally intended, the only difference being that they would be administered by the hands of the Crown, instead of by the Company. The bill must, therefore, be dismissed.

NORTHERN CIRCUIT: LIVERPOOL.—*The Child Murder at Drysden*—*Susy Armfield*, 37, widow, was tried and found Guilty of the wilful murder of her illegitimate child. The verdict was accompanied with a recommendation to mercy on the ground of her poverty, and because Sheppard, the father of the child, had not paid the prisoner the necessary sums for its support. Mr. Baron Channell having put on the black cap, passed sentence of *Death* on the prisoner, but said he would not fail to forward the recommendation to mercy to the proper quarter. The prisoner was then removed in a fainting condition. *The Murder of Colonel Crofton and Captain Hanham—Trial of M'Caffrey.*—*Patrick M'Caffrey*, 20, was indicted for the wilful murder of Adjutant John Hanham and Colonel Hugh Dennis Crofton on the 14th Sept., at Fulwood Barracks, near Preston. The case was chiefly proved by the prisoner's confession, and by the medical and other evidence. The defence was that the punishment which the prisoner had received at the hands of his officers was entirely disproportionate to the offence he had committed; that he had formed no deliberate intention of murder; and that the act was committed under a momentary impulse of rage and vexation, when he found the authors of his shame and punishment were before him, and when he had the weapon in his hand. The jury immediately found the prisoner *Guilty* of wilful murder, and Mr. Baron Channell having put on the black cap, passed sentence of *Death* in the usual form, holding out no hope of mercy.

NORTH WALES CIRCUIT, CHESTER: *The Double Suicide at Chester.*—*Jemima Morgan* was charged with the wilful murder of George Henry Davies on the 27th October. It will be remembered that deceased was a young chemist at Rhyl, who had some property left to him, and went to Chester, where he squandered the money in dissipation. He then bought some laudanum, and proposed to the prisoner, who had been living with him, that they should die together. She consented to take the poison after some hesitation, but gave an alarm after she had done so, upon which they were both removed to the infirmary, where the young man died, and the prisoner recovered. The defence was that she acted under the influence of deceased, and was not an assenting party. The jury returned a verdict of *Acquittal*. The announcement was instantly followed by several rounds of perhaps the most enthusiastic cheering ever heard in a court of justice. The huzzas were continued by the populace outside. *Night Poaching at Capesthorne.*—*Thomas Ridgway*, 30, tailor, Macclesfield, and *Richard Walker*, Macclesfield, were indicted with being armed on land in the occupation of Arthur Davenport, Esq., at Capesthorne on the night of the 16th Sept. The prisoners were also charged with assaulting the keepers in the discharge of their duty. It appeared that on the night in question, whilst on their rounds, three gamekeepers in Mr. Davenport's employ surprised a gang of about a dozen poachers in a grass field. The men made a violent onslaught with large stones and sticks upon the watchers, severely injuring more than one of them. For the defence several witnesses were called, whose evidence strangely conflicted with that of the keepers who had identified the prisoners. The case simply resolved itself into a question as to the credibility of the witnesses for the defence, who clearly proved an alibi. The jury returned a verdict of *Acquittal*.

OXFORD CIRCUIT: GLOCESTER.—*George Cooper*, 23, collier, *Thomas Cooper*, 29, collier, *Richard Roberts*, 34, collier, and *Thomas Gwilliam*, 30, quarryman, were charged with the wilful murder of Samuel Beard, on the 17th of August, at West Dean. The deceased, who was a superintendent of police, while watching for some men, not the prisoners, who were expected to make an attempt to steal some sheep, saw the prisoners in the act of night poaching and attempted to apprehend them. An affray took place, in the course of which the prisoners, or some of them, attacked the deceased, beat him while upon the ground, and left him half dead. After lying several hours in the forest in a state of insensibility, the deceased was found and carried to a neighbouring publichouse, where he died in about a week. The jury found all the prisoners *Guilty* of Manslaughter, recommending Roberts to mercy on account of his wife and family. Mr. Justice Willes, in passing sentence, said the deceased had been set upon by the prisoners in the most cruel and dastardly manner, and beaten to death. Notwithstanding the recommendation of the jury in favour of Roberts, his Lordship said he could not make any distinction in their sentences, though, if he should see reason to alter his opinion, he would take care to express it in the proper quarter. His Lordship then sentenced each of the prisoners to 15 years' penal servitude. The prisoners were then removed from the dock amid the groans and cries of their relatives in court.

HOME CIRCUIT: MAIDSTONE: *Arson.*—*John Coston*, 47, *Edward Parker*, 16, *George Bliss*, 18, *William Wickes*, 33, *David Jones*, 29, a soldier, *William Young*, 22, and *William Beale*, 31, pleaded guilty to charges of feloniously and maliciously setting fire to stacks of corn and other farming property. In the case of the prisoner Beale, it appeared that he had deliberately set fire to a barn, and that the fire burned with so much rapidity that a man who was inside the building thrashing very narrowly escaped, his clothes being actually partially burned while he was endeavouring to get out of the burning building. Mr. Justice Williams, in passing sentence, said that with regard to Coston and Parker, he should make some distinction in their cases, because it was possible that the younger prisoner might to some extent have been under the influence of his older companion; he should, therefore, sentence the former to be kept in penal servitude for 8 and the latter for 3 years. In the cases of George Bliss and William Wickes there were many aggravating circumstances, and he should therefore sentence them to be kept in penal servitude for 8 years. The case of the prisoner David Jones was a very bad one. He was a soldier, whose duty it was to protect the property and lives of the public, and it also appeared that he had been tried six times by court-martial, and punished for different offences; he had also been convicted of felony, and had only been out of prison two months when he committed the offence of which he was now convicted. He should therefore sentence him to be kept in penal servitude for 14 years. The cases of William Young and William Beale were also very bad ones; and with regard to the latter, it was almost miraculous that human life had not been sacrificed; and the sentence upon the former, therefore, would be penal servitude for 8, and upon the latter for 10, years. *Child Murder.*—*Jane Anne Moore*, 19, was charged by an indictment, and also on the coroner's inquisition, with the wilful murder of her new-born female child, at Stone, by strangling it at its birth. The evidence was not altogether conclusive; and the jury, giving the prisoner the benefit of the doubt, found her guilty of unlawful concealment only, and she was sentenced to imprisonment for one year with hard labour.

NORTHERN CIRCUIT, DURHAM: *The Marwood Shooting Case.*—*John Little*, aged 12 years, was indicted for the manslaughter of Ann Middleton at Marwood near Barnard Castle on the 15th of September by shooting her with his master's gun. Mr. Justice Wightman left it to the jury to say whether the prisoner, an ill-grown boy of 12 years of age, was *doli capax*, or whether this was not an act of wanton and boyish mischief, resulting in a sad accident which the prisoner did not intend, and the possible results of which he was not old enough to contemplate. If they were of the latter opinion they must acquit him. The jury found the prisoner *Not Guilty.*

Obituary.

SIR RICHMOND SHAKESPEAR, K.C.B., died on the 29th Oct. at Indore, in his 49th year. He joined the Bengal Artillery as a second-lieutenant in 1829. For 32 years he faithfully served the Government of India, and during that long period but once visited England, and then only for a few months and on public duty. In his military capacity he saw much service, was present in eight general engagements, and was badly wounded at the battle of Goojerat in the Sikh war. In 1840, when only a young lieutenant, he had the good fortune to be the means of rescuing from almost hopeless slavery in Khiva 416 subjects of the Emperor of Russia, and of reconciling the Khan to the Czar. For this service he received the honour of knighthood. Two years later he greatly contributed to the recovery of our own prisoners from a similar fate in Cabul. For his subsequent services in connection with the Indian mutinies he was made a K.C.B. Lord Canning, to mark his high sense of Sir Richmond Shakespear's public services, had lately offered him the Chief Commissionership of the Mysore, which he had accepted, and was about to undertake, when death terminated his useful career.

WILLS.—The will of Lieut.-Colonel Connop, late of Chorleywood House, Rickmansworth, has been sworn under 100,000l.; General Dennis Herbert, 7000l.

Miscellaneous.

ERUPTION OF MOUNT VESUVIUS.—On Sunday afternoon at 3 o'clock an eruption of Vesuvius took place near Torre del Greco, of a more alarming character than any that has taken place for a long period. On Monday the eruption increased so much in intensity, that the population of Torre del Greco abandoned the town and fled; nearly all the houses being damaged. The stream of lava was then 28 palms in depth, and three quarters of a mile broad. During the whole week the eruption has continued with violence, and it is impossible to foresee the disasters which it may cause. On Wednesday six thousand inhabitants of the surrounding district were flying from their homes. Shocks of earthquake continued to be felt, and chasms had opened in the earth forming perfect gulfs. The houses were falling in Torre del Greco, and the whole village was likely to be destroyed by the advancing lava. All communication between the places in the vicinity of the mountain was interrupted. In the Bay of Naples the sea has receded to a distance of 50 mètres.

BIRTHS.—On the 7th inst, at 51, Portland Place, the Lady CECELIA BINGHAM, of a son—2d inst, at Donnington Hall, Herefordshire, the Hon. Mrs. WEBB, of a daughter—3d inst, at Hertingfordbury Rectory, Hertford, the wife of the Hon. and Rev. GODOLPHIN HASTINGS, of a daughter—10th inst, at 27, Berkeley Square, the Hon. Mrs. MAYNARD, of a daughter—7th inst, at West Park, Elgin, the Hon. Mrs. LEWIS GRANT, of a daughter—4th inst, at Fettercairn, Kincardineshire, the seat of Sir JOHN STUART FORBES, Bart., the Hon. Mrs TREFUSIS, of a daughter—7th inst, at Downton, Radnorshire, Lady COCKBURN, wife of Sir Edward Cockburn, Bart., of a son—5th inst, at Manor House, St. John's Wood, London, Lady HEARSEY, wife of Major General Sir John Hearsey, of a son—9th inst, at the residence of Sir Wm. Worsley, Bart., 41, Harley Street, Mrs. ARTHINGTON WORSLEY, relict of the late Arthington Worsley, Esq., Hovingham, of a son—11th inst, at Hallfield House, Wetherby, the wife of Major INGLIS, late 5th Dragoon Guards, of a daughter.

MARRIAGES.—On the 4th inst, at St. George's, Hanover Square, the Hon. NORMAN LESLIE MELVILLE, Captain Grenadier Guards, third son of the Earl of Leven and Melville, to GEORGIANA, daughter of WM. SHIRLEY BALL, Esq., of Abbeylara, county Longford, Ireland, late Captain 8th Hussars—5th inst, at St. Mary's, Bryanston Square, JOHN BLENCOWE ROBINSON, Esq., eldest son of the Rev. Sir George S. Robinson, Bart., to WINIFRED, the eldest daughter of the Rev. EDWARD STEWART, and grand daughter of Lady Katharine and the late Hon. Edward Stewart—3d inst, at Burton Agnes, RICHARD STERN CARROLL, Esq., Tolston Lodge, Tadcaster, to LOUISA, seventh daughter of the late Sir Henry Boynton, Bart., and widow of JOHN RICKABY, Esq., late of Bridlington Quay—3d inst, by special license, at Hauteville, Jersey, HENRY SCOTT SIMEON, Esq., H.M.'s 27th Regiment, son of the late Admiral Simeon, and grandson of Sir John Simeon, Bart., to ISABEL MARIA, daughter of the late D. C. MACREIGHT, Esq., M.D., Hauteville, and grand-daughter of Sir William Paxton, Middleton Hall, Carmarthenshire—4th inst, at St. George's, Hanover Square, JOSEPH SHUTTLEWORTH, Esq., of Hartsholme, near Lincoln, to CAROLINE JANE, younger daughter of Lieutenant-Colonel Richard Ellison, of Boultham Hall, near Lincoln.

DEATHS.—On the 27th ult, at Myddelton Lodge, the Hon. Mrs. MIDDLETON—8th inst, at Maids Moreton Lodge, WILLIAM FFOLLIOTT, youngest son of Captain and the Hon. Mrs. EDWARD WINGFIELD, aged 8 months—5th inst, at Letterfourie House, Banffshire, Sir WILLIAM GORDON, Bart., of Gordonstown and Letterfourie, aged 58—7th inst, at 61, Eaton Place, Lady LOUIS, wife of Admiral Sir John Louis, Bart., of Cadwell, Devon—5th inst, at 48, Portland Place, Lady ARBUTHNOT, widow of Lieut. General Sir Robert Arbuthnot, K.C.B.—4th inst, at 7, Sion Hill, Bath, FRANCES PICKFORD, sixth daughter of the late Sir JOSEPH RADCLIFFE, Bart., of Milnsbridge House, Yorkshire, and Royton Hall, Lancashire, aged 83—9th inst, at Bath, Mrs. MARY MASSIE, relict of Watkin Williams Massie, Esq., sister of General Sir Alexander Mackenzie, Bart., of Fairburn, Strathconnan and Monar, and aunt of Sir Roderick Murchison, aged 89—4th inst, at Walton Hall, Warrington, MARY, wife of GILBERT GREENALL, Esq., M.P.—8th inst, at Exmouth, Devon, ELIZABETH, relict of Admiral NESHAM, and youngest daughter of the late Colonel Nicholas Bayley, M.P., of Plas Newydd, Anglesea, formerly of the 1st Foot Guards, and R.W.M.M., brother of the first Earl of Uxbridge, aged 70—10th inst, at The Priory, Newnton, CHARLOTTE ESTCOURT, daughter of the late T. Estcourt, Esq., of Estcourt, Tetbury, aged 80—7th inst, at East Sheen, Surrey, HUGH LEYCESTER, only son of Major LEYCESTER PENRHYN, aged 51—8th ult, at Monkbretton, near Barnsley, Lieut.-Col. ROBERT DALY, formerly of the 14th Foot, aged 59—2d ult, at Government House, Allahabad, HENRY OTWAY MAYNE, Captain and Brevet-Major late 6th Madras Cavalry, second son of the late Charles Otway Mayne, Esq., of Manor House, Great Stanmore, Middlesex, aged 42—7th Oct., of fever, on board H.M.S. Espoir, west coast of Africa, W. J. STEVENSON, Lieutenant Royal Navy, eldest son of Lieut.-Colonel Stevenson, Oriel Terrace, Cheltenham, aged 23—7th inst, at her house, 43, Upper Grosvenor Street, ANNA MARIA, widow of the late WM. JOHN BETHELL, Esq., and daughter of Wm. Challoner, Esq., of Gisbro', Yorkshire, aged 81—2d inst, at the Hotel du Louvre, Paris, of malignant fever, OCTAVIA, the beloved wife of EDWARD MOSELEY PERKINS, of Birtley Hall, in the county of Durham, Esq., aged 35—6th inst, at his residence, Poole, Dorsetshire, after a long and painful illness, TOM RICKMAN, Esq., J.P., aged 68—3d inst, suddenly, at Lydd, DAVID DENNE, of Lydd, Esq., Deputy-Lieutenant and Justice of the Peace for the county of Kent, aged 68—8th inst, at Merfield House, Road, Somerset, HENRY BATTEN POOLL, Esq., J.P. for Somerset and Wilts, aged 85—3d inst, at Everton House, Lymington, Capt. PEERS, J.P. for the county of Southampton, aged 70—25th ult, at King Sq., Bridgwater, WM DEANE BATH, Esq., J.P., aged 64—3d inst, at St. Mary Church, near Torquay, the Rev. JOHN CHAPMAN, aged 32—5th inst, the Rev. EDWIN PRODGERS, rector of Ayott St. Peter, Herts, aged 75—4th inst, at Ramsgate, the Rev. RICHARD HARVEY, M.A., late Fellow of St. John's College, Oxford, 34 years vicar of Ramsgate, aged 65—4th inst, at Borley Rectory, Essex, the Rev. JOHN PHILIP HERRINGHAM, aged 72—3d inst, at Bournemouth, the Rev. WILLIAM DALBY, M.A., rector of Compton Basset, Wilts, and prebendary of Salisbury, formerly Fellow and Tutor of Exeter College, Oxford, and vicar of Warminster, aged 69—4th inst, at Wath Rectory, Ripon, the Rev. JOHN WARD, rector of Wath, and formerly vicar of Great Bedwyn, Wilts, aged 66—5th inst, at the Rectory, High Laver, Essex, the Rev. PHILIP BUDWORTH, of Greensted Hall, Essex, and for 52 years rector of High Laver—7th inst, at The Mount, Shrewsbury, the Rev. ESSEX HOLCOMBE, aged 52.

Markets.

COVENT GARDEN, Dec. 14.

Prices have altered but little since last report. Home-grown produce is still equal to the demand. Pears comprise Glou Morceau, Marie Louise, Chaumontel, Winter Nelis, and Brown Beurré. Among Apples are some good examples of American Newtown Pippin, Ribston Pippin, and Fearn's Pippin. Grapes and Pine Apples are abundant. Of Vegetables there is still

a fair supply. Potato markets have not altered since our last. Cut flowers chiefly consist of Orchids, Pompone Chrysanthemums, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 4s to 6s	Oranges, per 100, 6s to 14s
Grapes, per lb., 4s to 7s	Lemons, per 100, 6s to 10s
Melons, each, 1s to 3s	Nuts, Cob, per pound, 4s to 4s 6d
Pears, per doz., 1s to 6s	Walnuts, per 100, 2s
Apples, per doz., 6d to 1s	

VEGETABLES.

Broccoli, per bundle, 1s to 1s 3d	Celery, p. bundle, 1s 6d to 2s
French Beans, per 100, 2s 6d to 3s 6d	Onions, pickling, p. ½ sieve, 4s 6d
Cabbages, do., 1s 3d to 1s 6d	Tomatoes, p. doz., 1s to 6s
Potatoes, p. ton, 60s to 75s	Asparagus, p. bundle, 30s
— per cwt., 4s to 8s	Seakale, per punnet, 4s
Turnips, per bunch, 2d to 4d	Shallots, per lb., 10d to 1s
Carrots, do., 4d to 6d	Garlic, per lb., 6d to 8d
Spinach, p. sieve, 1s to 2s	Endive, p. score, 1s 6d
Cucumbers, each, 1s to 1s 9d	Horse Radish, p. bun., 1s 6d to 4s
Artichokes, each, 6d to 8d	Mushrooms, p. pott., 2s to 3s
Beet, per doz., 1s 6d	Parsley, p. 12 bunches, 3s to 4s
	Herbs, per bunch, 2d to 4d

HOPS.—Borough Market, Friday, Dec. 13.

Messrs. Pattenden & Smith report a steady demand for both new and old Hops at firm rates.

HAY.—Per Load of 36 Trusses.

Smithfield, Thursday, Dec. 12.

Prime Meadow Hay	80s to	90s	Clover, old	90s to	120s
Superior do.	95	105	New Clover	—	—
Inferior do.	40	55	Do. second cut	80	105
New do.	—	—	Straw	28	34
Rowen	—	—			

Davis & Co.

Cumberland Market, Thursday, Dec. 12.

Sup. Meadow Hay	100s to	107s	Inferior Clover	84s to	98s
Inferior do.	70	90	New do.	—	—
New do.	—	—	Straw	36	40
Superior Clover	108	115			

Joshua Baker.

Whitechapel, Thursday, Dec. 12.

Fine Meadow Hay	90s to	95s	Prime Clover	110s to	115s
Inferior do.	80	90	Inferior do.	85	90
Prime New Hay	—	—	Prime 2d cut	98	105
Inferior	—	—	Inferior do.	—	—
Straw	28	36	New 1st cut	—	—

POTATOES, Southwark, Monday, Dec. 9.

During the past week the arrivals both coastwise and by rail have been more plentiful, owing to so many of inferior quality. The consumption of Potatoes is still very limited. The following are this day's quotations:—Kent and Essex Regents, per ton, 120s. to 140s.; Yorkshire Flukes, 120s. to 140s.; do. Regents, 100s. to 130s.; Lincolnshire do., 90s. to 110s.; Scotch do., 70s. to 110s.; French Whites, 90s. to 95s.

BUTTER MARKET.—Dec. 13.

Best Fresh Butter	18*s.* per dozen lbs.
Second do. do.	14*s.* ,, ,,

Pork, 4*s.* 4*d.* to 5*s.* 0*d.* per 8 lbs.

BRITISH WOOLS.—London, Friday, Dec. 13

Our trade continues inactive. Scarcely any business doing in any department.

	s. d.		s. d.		s. d.		s. d.
South-down Hoggets	1 4	to	1 5	Leicest. Wethers	1 4	to	..
Half-bred ditto		—	1 6	Ditto Hoggs	1 5	—	..
Down Ewes	1 4	—	1 4½	Combing Skins	1 0	—	1 5
Kent Fleeces	1 5	—	1 6	Flannel Wool	1 0	—	1 5
				Blanket ditto	0 6	—	.

Low Wool Foreign Sales.—These sales are going off at about 1d. a lb. under the last Liverpool series.

COAL MARKET.—Dec. 13.

Walls End Tees, 17s. 9d.; Walls End Hartlepool, 17s. 6d.; Wylam, 16s.; Buddle's Hartley, 15s. 9d.; Davidson's Hartley, 15s. 9d.; Hastings Hartley, 15s. 9d.—Ships at market, 32.

MARK LANE.—Monday, Dec. 9.

The supply of Wheat from Essex and Kent to this morning's market was very small, and met a slow sale at the prices of this day se'nnight. The market was fairly attended; but owing to the more pacific tone of the "Times," buyers confined their purchases to their immediate requirements, and only a retail business was transacted on about the terms of Monday last. Barley brings last week's prices. Beans and Peas sell slowly at late rates. The Oat trade is steady. Flour is very quiet, and American rather cheaper.

Per Imperial Quarter.	s. s.		s. s.
Wheat, Essex, Kent, & Suffolk..White	50—66	Red	50—62
— — fine selected runs..ditto	61—67	Red	54—65
— — Talavera	64—72		
— Norfolk	—	Red	—
— Foreign	48—76		
Barley, grind. & dist., 26s to 28s..Chev.	36—40	Malting .	34—36
— Foreign..grinding and distilling	26—32	Malting .	34—38
Oats, Essex and Suffolk	20—24		
— Scotch and Lincolnshire—Potato	26—28	Feed ..	20—24
— Irish ......Potato	26—28	Feed ..	20—24
— Foreign........Poland and Brew	21—24	Feed ..	20—24
Rye	36—38	Foreign .	—
Rye-meal, foreign	—		
Beans, Mazagan....35s to 37s....Tick	36—39	Harrow .	36—39
— Pigeon ......38s — 42s..Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
Peas, white, Essex and Kent..Boilers	40—44	Suffolk .	40—46
— Maple ....43s to 45s ...... Grey	39—41	Foreign .	35—37
Maize........White	—	Yellow ..	—
Flour, best marks delivered..per sack	50—55		
— 2d do........ditto	40—50	Country	40—50
— Foreign ....per barrel	28—37	Per sack	43—58

Friday, Dec. 13.

During the last eight days the weather has been mild, the days fine, and the nights very wet, yesterday and to day also wet. Wind S W., and often very high. The somewhat subdued tone of the American Press has caused the Wheat trade to be dull, and in the principal ports of the kingdom a decline of 1s. per qr. in the prices has been general. The arrivals here and in Liverpool are considerable. The sale of Spring Corn of all kinds was inactive, and the value of Barley and Oats barely supported. Flour has been easier of purchase at rather receding prices. Since Friday last 32 vessels have been reported off the coast. The floating trade has been quiet this week with a downward tendency; prices remained nominally unaltered, excepting for Barley, which must be written a little cheaper. In Paris (Dec. 12), the Flour trade was not very active, and millers were not disposed to make a further reduction in prices. The four marks for delivery this month are quoted equal to 52s. per 280 lbs. The transactions in Wheat are next to nothing. The supplies of English grain this week have been moderate, of foreign Wheat and Flour considerable, good of Barley, but very small of Oats; The attendance at this morning's market was small, and little disposition was evinced to purchase Wheat, either English or foreign, which might have been done at somewhat lower prices than on Monday. Spring Corn remains without alteration in value.

Arrivals from Dec. 9 to Dec. 13.

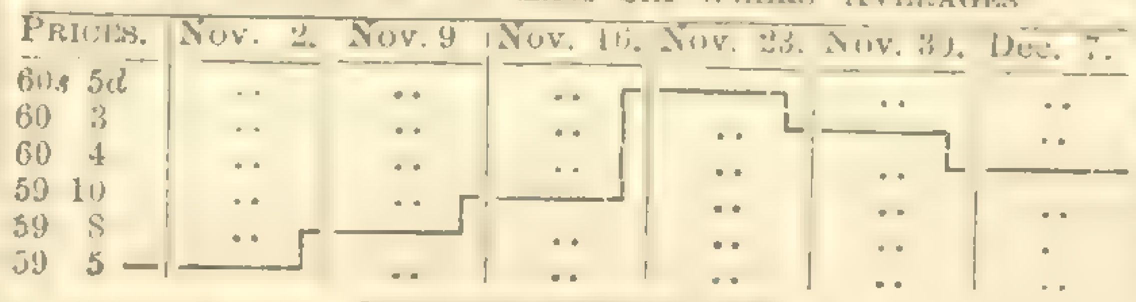
	Wheat.	Barley.	Oats.	Flour.
English ..	2110 qrs.	1520 qrs.	130 qrs.	2590 sks.
Irish	— ,,	110 ,,	1120 ,,	— ,,
Foreign ..	47470 ,,	5630 ,,	7290 ,,	620 ,, / 27910 brls.

Liverpool, Tuesday, Dec. 10.—We have had a very small attendance of millers and dealers at our market to-day, and the business passing has been on the most limited scale, sellers in vain offering to submit to a reduction of 3d. per cental on Wheat and 6d. to 1s. per barrel and sack on Flour. Indian Corn is difficult to move even at a decline of 1s. per quarter, but importers refuse to give way further. Oats and Oatmeal both dull of sale without change in prices. Beans, Peas, and Barley are each 6d. per qr. cheaper The market closes without the least animation.

Friday, Dec 13.—The demand for Wheat is inactive, but the sales made to-day have been done at about Tuesday's rates. Flour quiet, and no material change in value. Indian Corn in good request, at an advance of 6d. to 9d. Holders firm at 33s. 9d. to 34s.

Averages	Wheat	Barley.	Oats.	Rye.	Beans.	Peas.
Nov. 2..	59s 5d	37s 1d	22s 7d	37s 5d	42s 3d	44s 4d
— 9..	59 8	37 3	22 8	38 5	42 6	46 0
— 16..	59 10	37 6	22 7	37 7	42 6	47 5
— 23..	60 5	37 6	23 0	39 1	42 9	44 11
— 30..	60 3	37 4	23 0	36 10	42 8	45 2
Dec. 7..	60 4	37 0	22 8	37 10	42 7	43 8
Agg. Aver.	60 0	37 3	22 9	37 11	42 6	45 3

Fluctuations in the Last Six Weeks' Averages



METROPOLITAN CATTLE MARKET.

Monday, Dec. 9.

We have a much shorter supply of Beasts, and prices consequently are higher for all kinds. The number of Sheep is also smaller; indeed it is unusually small. Prices have advanced. Owing to the mild weather trade is rather dull, considering the shortness of supply. Calves are selling about the same as on Thursday. From Germany and Holland there are 95 Beasts, 2680 Sheep, and 69 Calves; from Spain, 366 Beasts; from Scotland, 330; from Ireland, 680; from Norfolk and Suffolk, 200; and 2300 from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c.	4 10 to 5 2	Best Long-wools.	5 2 — 5 4
Best Short-horns	4 8 — 5 0	Do. Shorn	.. — ..
2d quality Beasts	3 8 — 4 0	Ewes & 2d quality	4 6 — 4 10
Best Downs and Half breds	5 6 — 5 8	Do. Shorn	.. to ..
Do. Shorn	.. — ..	Lambs	.. — ..
		Calves	4 4 — 5 6
		Pigs	4 4 — 5 4

Beasts, 4420; Sheep & Lambs, 16,230; Calves, 87; Pigs, 370.

Thursday, Dec. 12.

The number of Beasts is large and the weather unfavourable, consequently trade is dull, and Monday's quotations are barely maintained. We have also a larger supply of Sheep than of late. There is very little business transacted, and prices are rather lower on the average. Good Calves are scarce and dearer Our foreign supply consists of 240 Beasts, 930 Sheep, and 95 Calves. Milch Cows, 115.

	s d s d		s d s d
Best Scots, Herefords, &c.	4 8 to 5 0	Best Long-wools.	5 0 to 5 4
Best Short-horns	4 6 — 4 10	Do. Shorn	.. — ..
2d quality Beasts	3 6 — 4 0	Ewes & 2d quality	4 4 — 4 8
Best Downs and Half-breds	5 4 to 5 8	Do. Shorn	.. — ..
Do. Shorn	.. to ..	Lambs	.. — ..
		Calves	4 4 — 5 8
		Pigs	4 4 — 5 4

Beasts, 1785; Sheep & Lambs, 4390; Calves, 146; Pigs, 170.

CONSULTING GARDENER.—Joseph Robinson begs to offer, on moderate terms, his services as above to any lady or gentleman contemplating Alterations, Improvements, or Additions to their Gardens, Pleasure Grounds, or Horticultural Buildings—assured that from his long practical experience he would be able to effect the same judiciously and economically.—Slough, Bucks.

IN an Old Established Seed Business there is an OPENING for a YOUTH for a term of three or four years; to live with employer on the premises. Premium required. Further particulars on application to R. S., Messrs. Cooper & Bolton, 152, Fleet Street, London, E.C.

To Farmers.

WANTED, for a YOUTH of 16, 3 years' practical instruction in Farming in all its branches; terms must be moderate.—Address, A. B., 11, Great Castle Street, Regent Street, W

WANTED, a PERSON fully acquainted with the Breeding and Rearing of Sheep and Cattle, having 1000*l.* to 2000*l.* at command, to go out to an English Colony and take an interest in and charge of an establishment already well stocked. This presents an excellent opportunity and scope for a persevering man. The climate is very healthy and similar to that of England. The returns would be largely remunerative.—Address Box S.1, Post Office, Liverpool.

WANTED, a PLANT COLLECTOR, &c.—A gentleman much attached to the study of Botany and the collection of objects of Natural History, is looking out for a well educated, energetic, persevering young Gardener, who would like to undertake a Collecting Mission; a sufficient knowledge of the French language to enable him to converse is very desirable.—Applications, stating age, qualifications, and remuneration expected, to be addressed to W. W. S., *Gardeners' Chronicle* Office, W.C.

WANTED, a GARDENER and his WIFE; the Man should be able to Lay Out a New Garden, construct Orchard Houses, make Paths, Fencing, &c.; and if he is able and willing to assist at waiting at Table occasionally it will be in his favour. The Wife must be a good Cook or Laundry Woman. A Cottage with Fuel and Vegetables found. Young children objected to.—Address, stating ages, the number and ages of children, if any, also length of character and wages expected, to H. P., Messrs. Layton's, 150, Fleet Street, London, E.C.

WANTED, a SHOPMAN or CLERK; a Y[illegible] Man who has a knowledge of the Seed Trade.—A[illegible] W. Maule & Sons, Nurseries, Bristol.

Seed Trade.

WANTED, a SECOND SHOPMAN, compet[illegible] Execute Orders. Strict testimonials as [illegible] required.—Apply, stating last engagement and salary [illegible] to S. Ward & Son, Seed Merchants, Bristol.

WANTED IMMEDIATELY, in a gentl[illegible] Family, a strong active GIRL about 25, wh[illegible] understands the Dairy, and care of Poultry. A [illegible] brought up in a Farm House would suit. Good [illegible] a competent person.—Apply personally, or by letter, to Mr. L Scarlett, Twyford Station, Great Western Railway.

WANT PLACES.—Letters to be Post Paid.

To Noblemen, Landed Proprietors, &c.

ESTATE SUPERINTENDENT.—A thoroughly prac[illegible] tical and experienced Man; can Superintend the [illegible] of New Buildings, Alteration or Enlargement of [illegible] Structures, Furnish Designs and Estimates, and carry out general improvements. Undeniable references as to [illegible] and respectability, and security given if required.—J. Arlidge, The Folly, Deanshanger, near Stony Stratford, [illegible]

To Gentlemen, Landed Proprietors, and Others

SOLE SUPERINTENDENT of TILERY WORKS—Married; practical. Has had great expe[illegible] the branches connected with a Tilery, both for B[illegible] and Drainage purposes. Is a good judge of Clays at first [illegible] its qualities; will prove Clay for any gentlemen [illegible] terms, by their forwarding samples carriage paid. K[illegible] Sheds built upon the most improved principle so as to [illegible] effectual. Good references. A gentleman's Estate pref[illegible]—S. B. D., Widworthy Court Tilery, near Honiton, Devon.

GARDENER (Head).—Married; thoroughly experienced in all the various branches of Gardening, in[illegible] Early and Late Forcing. Unexceptionable references.—A [illegible] Mr. Shillinglaw's, Walthamstow, Essex, N.E.

GARDENER (Head).—Age 38, married; thorough[illegible] understands his profession in every department. F[illegible] years in last situation. First-class testimonials.—W., 77, [illegible] Street, Edgware Road, London, W.

GARDENER (Head).—Age 31, married, one child, age 3 years. Highest character as to ability, honesty and sobriety.—A. B., 18, Portland Street, Wandsworth R[illegible], Vauxhall, S.W.

GARDENER (Head).—Middle aged; thoroughly understands his profession in all its branches, and [illegible] have an excellent character from present and former employe[illegible] Wife an excellent Laundress.—N. D., Mr. Carter, Nurse[illegible] Keighley, Yorkshire.

GARDENER.—Wilkinson Boott, Gardener, &c. to the Right Hon. the Earl of Pomfret, Easton Neston, Towcester, Northampton, will be disengaged in Feb. 1862, and at liberty to engage with any nobleman or gentleman in want of an experienced Gardener, &c. Satisfactory references given.

GARDENER (Foreman).—Age 24; understands Early and Late Forcing; also Stove and Greenhouse Plants, &c. Good references.—C. S., *Gardeners' Chronicle* Office.

To Noblemen and Gentlemen.

GARDENER and BAILIFF. For many years has had the Management of the Garden, Pleasure Grounds, &c., also the Management of a large Farm, Breeding, Feeding, Buying and Selling of Stock and Farm Produce, Draining, care of Woods and Plantations, and the superintendence of all repairs Wife understands the Dairy and Poultry. Leaving in consequence of the death of his employer. The most unexceptionable references can be given from last situation, and from other gentlemen of distinction.—C. M., Post Office, Claines, Worcester.

FOREMAN or SECOND GARDENER.—Age 25, single; has had several years' experience, and is strongly recommended as sober, honest, and active, by his present [illegible] former employers.—E. R., Post Office, Solihull, Warwickshire.

PROPAGATOR, PLANT GROWER, or FOREMAN, &c.—Experienced.—Gardener, Messrs. Fairbeai[illegible] Seedsman, Borough Market, S.E.

PROPAGATOR, or PROPAGATOR and FOREMAN. First class, in a Country Nursery.—C. M., A. Laing, Nurseryman, Beverley, Yorkshire.

PROPAGATOR, or PROPAGATOR and FOREMAN. —Messrs. A. Henderson & Co. will be happy to recommend a thorough practical experienced Man as above. Has had considerable experience in the London Nurseries.—R. W., A. Henderson & Co., Pine-Apple Place, Edgeware Road, W.

STEWARD or BAILIFF over 500 or 600 Acres of Land.—Age 28; well educated; has a practical knowledge of Farming in all its branches.—H. W. E., *Gardeners' Chronicle* Office, W.C.

STEWARD, or STEWARD and BAILIFF.—Of good practical experience, having a thorough knowledge of English and Scottish husbandry, good judge of Stock and Estate management.—X. Y. Z., Mr. Bowick, Stoneleigh Abbey Farm, Kenilworth.

To Noblemen and Gentlemen Farmers.

STEWARD or BAILIFF.—Married; Farmer's Son, from Devon; is well accustomed to Agricultural Pur[illegible], also to Rearing and Breeding of Stock. References [illegible] highest respectability.—T. Stranger, 32, Lower East Smithfield, Aldgate, London, E.

BAILIFF.—Age 43, married, no incumbrance; thoroughly practical in modern Farming. A good [illegible] and Manager of Stock, and a good Accountant.—A. B., [illegible] Herbert Street, Hoxton, London, N.

To Seedsmen or Nurserymen and Seedsmen.

SEEDSMAN.—Young; well acquainted with the Nursery and Seed Business, having been six years in first-class houses in Scotland, and six years in a first-class house in the South of Ireland. Satisfactory references given.—Seedsman, Sutherland & Horne, 112, New City Road, Glasgow.

SHOPMAN.—Age 30; 16 years' experience in first-class Houses. Has been accustomed to Travelling.—X. X., 7, Borough Market, London, S.E.

Seed Trade.

SHOPMAN.—Age 20; experienced in the various branches of the Trade. Can be highly recommended.—A. B. C., Post Office, Saling, near Braintree, Essex.

The Gardeners' Chronicle Newspaper.

SATURDAY, DECEMBER 21, 1861.

THE QUARTERLY REVIEW.—ADVERTISEMENTS for insertion in the forthcoming Number of the above Periodical must be forwarded to the Publisher by the 27th, and Bills by the 30th instant.
JOHN MURRAY, Albemarle Street, W.

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News of the Week.

SINCE the death of the Princess CHARLOTTE no event connected with the Royal family has caused such profound grief throughout the country as the intelligence of the death of the PRINCE CONSORT. During the whole of Sunday the feeling caused by the suddenness of the bereavement for which the previous announcement of his illness had left the public unprepared, was one of consternation and sorrow. His Royal Highness died at 10 minutes before 11 on Saturday night, and before midnight the great bell of St. Paul's told the citizens of London of the irreparable loss sustained by the QUEEN, the Royal family, and the nation at large. HER MAJESTY, with the Prince of WALES, and the Princesses ALICE and HELENA, were with HIS ROYAL HIGHNESS at his death. The country will be rejoiced to know that the QUEEN, though overwhelmed with grief, has borne her affliction with admirable fortitude, and by the advice of her physicians left Windsor on Thursday for the Isle of Wight, accompanied by the PRINCESSES and the younger members of the Royal family. HER MAJESTY has not suffered in health, and in her present retirement she will derive consolation from the assurance that her bereavement has called forth the deepest sympathy and sorrow not only from all classes of her subjects

but from every nation in Europe. In France the people at large, and the press of every shade of political opinion, have joined the EMPEROR and EMPRESS in an unanimous expression of sympathy which cannot fail to win the good will of the British people. In Prussia the PRINCE'S death has awakened the deepest sympathy among all classes of the people, and on the receipt of the intelligence the KING and QUEEN hastened to condole with the PRINCESS ROYAL on her sad bereavement. It is officially announced that the funeral of HIS ROYAL HIGHNESS will take place in St. George's Chapel, Windsor, on Monday next, at 12 o' clock, and that, in accordance with the expressed wishes of HIS ROYAL HIGHNESS, the funeral will be private.

M. TROPLONG on Tuesday presented to the French Senate his report on the Senatus Consultum conferring on the Corps Législatif additional powers on voting the Budget. He spoke at great length on the suppression of extraordinary credits by the EMPEROR, on the privilege to be granted to the Corps Législatif of voting the Budget by sections, and on the limits to be fixed to the transfer of voted supplies. He, however, declared himself opposed to all idea of re-establishing Ministerial responsibility, which, he said, formed the basis of a Parliamentary system of Government expressly repudiated by the French constitution. Treating of the financial question, he said that the floating debt was comparatively less than in 1848, and that the existing deficits were unimportant compared with the great things which had been done since 1850, which had "served," he said, "to raise the French name to the highest rank; to link the chain of our victories; to carry our civilisation and our influence to the extremity of the world; and lastly to free Italy from a foreign yoke." The *Moniteur* publishes a decree disbanding the 103d Regiment of the Line and the 1st Regiment of the Foreign Legion, and the *Pays* says that orders have been given by the French Government to suspend the construction of three floating batteries at the ports of L'Orient and Brest.

The Budget of the Austrian Empire was presented to the Reichsrath on Tuesday by the Minister of Finance. It stated that the deficit for 1861 is estimated at 6,500,000*l.*; and that for 1862 at 5,800,000*l.*, upon a total income of 30,000,000*l.* It is proposed to cover this deficit partly by increased taxation, partly by the sale of the Crown domains, and partly by credit operations with the National Bank, the charter of which is to be renewed in return for a loan of 8,000,000*l.* bearing no interest. The Upper House of the Reichsrath on Saturday passed three important laws for preserving the inviolability of letters, for securing personal liberty, and for maintaining the right of domicile.

A despatch from Breslau says that Archdeacon BIALOBRZESKI, Administrator of the Archbishopric of Warsaw, has been condemned to death, and that since his arrest the authorities have made the clergy and the superiors of the convents responsible for the churches remaining closed. The prisons of Kiew and Zitomir were crowded, and 40 students of the University of Kiew had been sent to Siberia.

In the sitting of the Italian Chamber of Deputies on Thursday, a letter from Signor RATTAZZI was read, announcing that the state of his health compelled him to resign the Presidency of the Chamber. On the motion of Signor MINGHETTI, the Chamber unanimously resolved to request Signor RATTAZZI to retain the post at least until the end of the session. A despatch from Rome states that the Marquis DE LAVALETTE, the French Ambassador, had a conference of two hours with FRANCIS II. on Tuesday, at which he demanded that his Majesty should quit Rome. The Cardinals however who were consulted in the matter, advised the ex-KING o relinquish his apartments in the Quirinal and reside at the Farnese Palace.

A telegraphic despatch from Bombay of the 27th November, states that Sir CHARLES WOOD has decided that the seat of the Government shall be removed from Calcutta to the Hills. The export of cotton from Bombay to England during the present year is estimated at 920,000 bales. Sir BARTLE FRERE will, it is rumoured, succeed Sir GEORGE CLERK in the Governorship of Bombay.

From New York we have the PRESIDENT'S Message at the opening of the Federal Congress. The language of the Message and the subsequent proceedings of Congress give little hope of the preservation of peace. The PRESIDENT does not mention the affair of the Trent, but he intimates that "foreign dangers necessarily attend domestic difficulties," and urges upon Congress the consequent duty of fortifying the coasts, lakes, and rivers, erecting fortifications and depots of arms, and making harbour and navigation improvements at well-selected points. He expresses confidence in the ultimate conquest of the Confederates, but still denies to them the title of belligerents. He states that under the Confiscation Act of last session a number of emancipated slaves have been thrown upon the protection of the Government; and with a view of getting rid of them, he suggests that Congress should acquire some territory in a congenial climate where these liberated negroes and the free coloured population of the States may be colonised. The Navy department in its report declares that Captain WILKES showed too much forbearance in not capturing the Trent, and insists that this leniency must not be drawn into a precedent in future. The House of Representatives at its first sitting passed a vote of thanks to Captain WILKES for his conduct in capturing the Confederate Commissioners; and also adopted a resolution requesting the PRESIDENT to confine Messrs. MASON and SLIDELL in the cell appropriated for convicted felons, until Colonel CORCORAN and Colonel WOOD shall be treated by the Confederates as prisoners of war. Subsequent accounts from Washington state that President LINCOLN has declared that it is his intention to preserve a prudent policy in regard to foreign relations, and that there need be no fear of war with Great Britain unless the latter should seek a pretext for hostilities. The despatches add that no anxiety is felt by the Administration on the subject.

Home News.

DEATH OF THE PRINCE CONSORT.

The illness under which the Prince Consort had been labouring for the previous fortnight took an unfavourable turn on Friday, and terminated fatally on Saturday night at 10 minutes to 11. Soon after his Royal Highness was taken ill symptoms of fever accompanied by a general indisposition made their appearance. For some days the complaint was not considered to be serious, but from the early part of last week the medical men in attendance and the persons about the Court began to feel anxious. It became evident that, even if the disorder did not take a dangerous turn, a debilitating sickness would at least confine the Prince for some time to the Palace. No statement, however, was made which could unnecessarily alarm her Majesty or the public. It was not till Wednesday, when the fever had gained head and the Prince was much weakened, that the first bulletin was issued, and even then it was said that the fever was unattended by unfavourable symptoms. In short, it was considered to be an ordinary though severe case of gastric fever, from which the Prince, with all his advantage of age and strength, might be reasonably expected to recover. The usual routine of the Court was consequently not departed from, and it was not thought necessary to communicate these apprehensions to the Queen. The Prince himself however is said to have had for some days a melancholy conviction that his end was at hand. The recent death of his relative the King of Portugal from a similar disorder is understood to have had an unfortunate influence upon him, and possibly assisted the progress of the malady. It is said that as early as Wednesday morning his Royal Highness expressed his belief that he should not recover. On Thursday no material change took place in his condition, and on Friday morning the Queen took a drive, having at that time no suspicion of immediate danger. When, however, her Majesty returned to the Castle, the extremities of the Prince were already cold, so sudden had been the fresh access of the disorder. A bulletin signed by Sir James Clark, Sir Henry Holland, Dr. Watson, and Dr. Jenner was immediately issued, stating that his Royal Highness had passed a restless night, and that the symptoms had assumed an unfavourable character during the day. From that time the state of the Prince was one of the greatest danger. On Friday evening it was thought probable that he would not survive the night, and the Prince of Wales, for whom the Princess Alice on her own responsibility had telegraphed to Cambridge, arrived at the Castle by special train about 3 o'clock on Saturday morning. During the whole night the Prince continued very ill, but in the morning of Saturday a change for the better took place. A bulletin was accordingly issued stating that his Royal Highness had passed a restless night, and that there was some mitigation of the severity of the symptoms. In the afternoon his Royal Highness again relapsed, and at 4 o'clock the physicians issued a bulletin stating that the Prince was then in "a most critical condition." From that hour his Royal Highness, who had since Friday been sustained by stimulants, sank with alarming rapidity. When the improvement took place on Saturday morning, it was agreed by the medical men that if the patient could be carried over one more night he would in all probability be saved. But the sudden failure of vital power which occurred in the afternoon frustrated these hopes. Congestion of the lungs, the result of complete exhaustion, set in, the Prince's breathing became continually shorter and feebler, and he expired without pain at a few minutes before 11 o'clock. The Queen, the Prince of Wales, the Princesses Alice and Helena, and the Prince and Princess of Leiningen, were with his Royal Highness at his death. The Prince was sensible, and knew the Queen to the last. The following gentlemen connected with the Court were also present—General Bruce, Sir Charles Phipps, General Grey, General Bentinck, Lord Alfred Paget, Major Du Plat, General Seymour, Colonel Elphinstone, and the Dean of Windsor. The *Times*, from which we take these details, says that of "the devotion and strength of mind shown by the Princess Alice all through these trying scenes it is impossible to speak too highly. Her Royal Highness has, indeed, felt that it was her place to be a comfort and support to her mother in this affliction, and to her dutiful care we may perhaps owe it that the Queen has borne her loss with exemplary resignation, and a composure which under so sudden and so terrible a bereavement could not have been anticipated. This fact will, we are sure, give the greatest satisfaction to the country, and we may add that, after the death of the Prince, the Queen, when the first passionate burst of grief was over, called her children around her, and with a calmness which gives proof of great natural energy, addressed them in solemn and affectionate terms, which may be considered as indicating the intentions of a Sovereign who feels that the interests of a great nation depend on her firmness. Her Majesty declared to her family that though she felt crushed by the loss of one who had been her companion through life, she knew how much was expected of her, and she accordingly called on her children to give her their assistance, in order that she might do her duty to them and to the country. That her Majesty may have health and strength to fulfil these noble intentions, and that she may live many years in placid cheerfulness and peace of mind, alleviating the recollection of her loss by sharing the happiness of her children, will be the earnest prayer of all her subjects." On Tuesday, according to the custom observed on the death of the Kings of England, the body of his Royal Highness was dressed in a field marshal's uniform, and placed in a shell, when, by command of her Majesty, those of the Royal household who desired to do so were permitted to take a last farewell, and in the evening the inner shell and outer leaden case were sealed down by the officers of the Board of Works. On the leaden coffin is a massive silver plate, with the following inscription:—

"Depositum
Illustrissimi et Celsissimi Alberti,
Principis Consortis,
Ducis Saxoniæ,
de Saxe-Coburg et Gotha Principis,
Nobilissimi Ordinis Periscelidis Equitis,
Augustissimæ et Potentissimæ Victoriæ Reginæ
Conjugis percarissimi,
Obiit die decimo quarto Decembris, MDCCCLXI,
Anno ætatis suæ XLIII."

The outer State coffin will not be ready before to-day. This will be an exceedingly rich and elaborate case. At the head will be fastened a massive silver gilt crown in high relief. This is the crown the Prince was entitled to bear as Prince Consort, and much resembles that of the Imperial House of Austria. In the centre of the coffin will be another massive silver gilt plate, with the inscription we have already given. At the foot will be the Star and insignia of the Garter, also in silver gilt. On the coffin, during and after the interment, two heraldic crowns will be laid—that of his Royal Highness as Prince Consort and his crown as Duke of Saxe-Coburg and Gotha. On Tuesday evening the Lord Chamberlain issued his orders for the final details connected with the burial of the Prince. It will take place at 12 o'clock on Monday next, and, in accordance with the expressed wishes of his Royal Highness, will be private and strictly limited in all that relates to funeral pomp and ceremonial, nor will the body lie in state. In only one important particular will it differ from the funeral of the Duchess of Kent, and that is in there being a carriage procession from the Castle to St. George's Chapel. It will be recollected that the remains of the Duchess of Kent were privately conveyed

at Frogmore during the previous night, and deposited in the Chapel to await the ceremony of the following day. This course will not be followed on this occasion, as the body will remain in the private apartments at Windsor till the procession starts. From the Castle the remains will be conveyed in a hearse drawn by eight horses, the hearse and the housings of the horses bearing heraldic escocheons of the arms of England and Saxe-Coburg and Gotha. No private carriages will be used, but all the invited mourners, the Ministers, the Foreign Ministers, the chief officers of the household, and the personal friends of the Prince will be conveyed to the chapel in 15 mourning coaches. It is understood that none but gentlemen will take part in the ceremony. Those who are not entitled by rank to form part of the procession will await the arrival of the *cortège* at the chapel itself. No visitors will be admitted to the courtyard or within the walls of the Castle during the funeral. The Prince of Wales will act as chief mourner, supported by the Duke of Cambridge and by the Crown Prince of Prussia. The body will not be laid in the Royal vault, but will be temporarily placed in the passage outside the iron grating of the vault, in the same manner as the Duchess of Kent's remains were deposited until removed to the mausoleum at Frogmore, and it is the intention of her Majesty to erect a tomb of granite in the garden at Frogmore, near that of the royal duchess, to which, when finished, the remains of the Prince Consort will be removed. The alterations and fittings of the Chapel are progressing with the utmost rapidity. It was at first thought almost impossible that the work necessary to be done could be accomplished in the time, but, owing to the great efforts made by Mr. Myers and Messrs. Banting, this difficulty has been overcome, and all the preparations will be completely finished by to-morrow afternoon. The arrangements are almost precisely similar to those made for the funeral of the late Duchess of Kent. A raised dais has been erected along the entire length of the chapel, from the western door to the communion rails. This, and all the side passages, the aisles, and, in fact, all the basement of the building, will be covered with black cloth. Two porches, to be similarly draped with black, are erecting on the side entrances at the east and west ends. The western porch will be very wide and lofty, capable of containing the hearse, which will stop at this point. The mourners are to alight at the eastern porch, and pass at once to the south aisle, where the procession will be arranged in order of rank. The body will be received by the Dean and Canons and great officers of State at the door of the Chapel; it will then be placed at once upon the bier, and wheeled slowly up till it is placed on the platform, worked by machinery, by which it is lowered to the entrance of the Royal vault at the proper period of the service. Cardinal Wolsey's chapel is also fitting up with a covered entrance from the cloisters for the exclusive use of the members of the Royal family, who, as the procession moves down the south aisle, will proceed along the north aisle, so as to join the procession as it advances up the nave into the chapel. From all parts of the country intelligence has been received of the deep sympathy manifested for the Royal family under their recent bereavement. The news of the sad event, widely circulated by telegram on Sunday morning, was referred to from the pulpit in almost every church, at least during the afternoon service. At all the metropolitan churches the bells tolled at intervals, and most of the preachers made touching allusion to the great national loss, and earnestly commended her Majesty and the Royal family, in their state of grief and desolation, to the sympathies and prayers of the congregation. Nor was this manifestation of feeling confined to the clergymen of the Established Church. At the Roman Catholic, the Jewish, and the Greek churches, and most of the Dissenting chapels, similar prayers and condolences were offered. During the whole week the metropolis and suburbs have shown the most loyal and general respect to the memory of his Royal Highness. The shops have been partially closed; the ships of all nations in the river have had their flags hoisted half mast high, and the Royal parishes, in which the different residences of the Sovereign are situated, have displayed the Royal standard from their steeples in the same position. The regiments of Life and Foot Guards have had crape attached to their colours, and throughout the whole metropolis symbols of mourning have met the eye. The judges met in consultation early on Monday morning to consider whether they ought not to adjourn on the melancholy occasion; but considering the delay and the expense that would thereby accrue both to suitors and witnesses they concluded that it would be acting more in accordance with their duty to her Majesty if they did not suspend the administration of justice. In the Court of Common Council on Monday all business was suspended, and a resolution was unanimously adopted recording the Court's high admiration of the distinguished virtues of the late Prince Consort, of his constant solicitude for the protection of British interests, and his encouragement of education, art, and science, and offering her Majesty, and every member of the Royal family, its deep sympathy and condolence on the irreparable loss sustained by her Majesty, her august family, and the nation at large. Similar resolutions have been adopted by the Town Councils of several provincial towns. In consequence of the death of his Royal Highness the theatres were closed on Monday evening, and will again be closed on the evening of the funeral. The Lord Chancellor has issued orders for the closing of the Law Courts on Monday, the Stock Exchange will be closed at 12 o'clock, and there is no doubt that all public business will be generally suspended.

The Queen's Departure for the Isle of Wight.—On Thursday morning, in compliance with the advice of the physicians, the Queen, accompanied by the Princesses Alice, Helena, and Louisa, left Windsor Castle at 12 o'clock for Gosport, where they embarked for Osborne in the Fairy. Prince Arthur and Princess Beatrice, accompanied by the Prince and Princess of Leiningen, had previously left for Osborne by a special train. The strictest privacy was observed through the whole journey. The Royal party crossed the park to the private station of the South-Western terminus, all of them as a matter of course in the deepest mourning, the Queen wearing a widow's cap. The Prince of Wales and Prince Louis of Hesse escorted her Majesty to Gosport, and returned immediately to Windsor Castle, where the Duke of Saxe-Coburg is shortly expected from the Continent. Directly her Majesty quitted the Castle, the Royal standard, which is never put at half-mast save on the death of the reigning monarch, was hauled down, and the Union hoisted in its place, half-mast high. A bulletin was exhibited at Buckingham Palace and the Mansion House on Sunday, stating that the Queen, although overwhelmed with grief, bore her bereavement with calmness, and had not suffered in health. On Monday the bulletin stated that the Queen had had some quiet sleep during the night, and remained as calm as under her affliction could be expected. In the course of the day the Duchess Dowager of Sutherland arrived at the Castle at the request of the Queen, and remained with her Majesty. The Duchess of Wellington, Mistress of the Robes, had previously arrived on a visit of condolence to her Majesty. In the afternoon the Duchess of Cambridge and Princess Mary arrived from Kew. The Duke of Cambridge left the Castle for London. In the evening Prince Louis of Hesse arrived at the Castle from the Continent. On Tuesday a bulletin was issued announcing that the Queen had passed a quiet night, and slept several hours, and that her Majesty continued calm. On Wednesday the bulletin stated that the Queen had several hours of undisturbed sleep at night, and was calm that morning.

Court and General Mourning.—An order has been issued from the Lord Chamberlain's Office for the Court to go into mourning for the Prince Consort from the date of the order, the 16th inst. The Deputy Earl Marshal has given notice that all persons are expected forthwith to put themselves into decent mourning. The Commander-in-Chief has issued the usual order for the mourning for the army, and the Lords of the Admiralty have issued a similar order for the navy and Marines.

Alteration of the Liturgy.—The *Gazette* of last evening contains the usual Order in Council, under the Act of Uniformity, directing the omission of the name of the Prince Consort from the Prayer Book. A similar order applies to the prayers for the Royal Family in the Church of Scotland.

Prince Alfred.—Despatches have been received at Grenada from Governor Hincks and Major Cowell announcing that his Royal Highness will return to the West Indies early in January, to visit those colonies which he was unable to visit last season. His Royal Highness after calling at Halifax and Bermuda, will proceed in the St. George to Grenada, where he is expected to arrive on the 12th of January. From Grenada the Prince will go to Tobago and Trinidad. Great preparations were making at all these islands to give a cordial welcome to his Royal Highness.

Prince Leopold.—In consequence of the death of Sir Edward Bowater, Lord Rokeby has been despatched from Paris to Cannes to take charge of Prince Leopold, who will spend the winter there.

The Cabinet.—The Lords of the Privy Council had a meeting on Wednesday at the Council Office. After the meeting a Cabinet Council was held at the Council Office.

Illness of Lord Palmerston.—Rumours of an alarming nature were current on Wednesday with respect to the health of Lord Palmerston, and his death even was reported in the City in the course of the day. His lordship had for several days been suffering from an attack of gout in the wrist and in one foot, and had been confined to the house for a day or two, but was never prevented either from receiving his colleagues in the Ministry, or transacting the immense amount of business which, especially at such a moment, devolves upon the head of the Government. It is understood that the attack was much aggravated by the shock of the Prince Consort's death; but his lordship is now convalescent.

Parliamentary Movements.—The election for Finsbury has terminated in the return of Mr. Cox by a majority of 42 over Mr. Remington Mills, the numbers being 4864 to 4842. Mr. Slaney will retire from Shrewsbury at the close of the present Parliament; and Mr. Brassey, jun., who was defeated at Birkenhead last week, is announced as the Liberal candidate for the seat to be thus vacated.

The Army.—The Colonelcy of the 24th Foot, vacant by the death of Lieut.-Gen. the Hon. J. Finch, has been conferred on Major-General Pringle Taylor.

The Navy.—Rear-Admiral Dacres, C.B., has been appointed second in command to Admiral Sir Alexander Milne, K.C.B., the Commander-in-Chief on the North-American Station. Admiral Dacres is to hoist his flag on board the Edgar, at Portsmouth.

The Naval Reserve.—The members of the Naval Reserve enrolled in the ports of Whitehaven and Peterhead, have, like their brother sailors in other ports, spontaneously offered their services to the Inspecting Commanders of Coastguard in their respective districts.

The Army in Canada.—Colonel E. R. Wetherall has been appointed Chief of the Staff in Canada. Lieut.-Colonel Shakespeare, 9th Brigade Royal Artillery, has been selected by the Commander-in-Chief to proceed on special service to North America. Sir Alan M'Nab has been entrusted with the organisation of the Canadian Militia.

Preparations for War.—The 1st battalion of the Grenadier Guards and the 2d battalion of the Scots Fusiliers left the Wellington Barracks on Thursday for Southampton, and there embarked in the Parana and Adriatic steamers, which left the river early yesterday morning for Halifax. The 4th battery of the 6th brigade of Royal Artillery and the 1st battalion of the Military Train also embarked in the Adriatic, and the 18th Company of Royal Engineers embarked in the Parana. General Lord F. Paulett, commanding the brigade of Guards, has also gone out in the Adriatic. The 2d battalion of the 16th Regiment will embark to-day in the Magdalena at Southampton. In addition to these vessels, the Adelaide, Mauritius, and Calcutta have been chartered to embark 1957 men from the Thames, and the Cleopatra, 1279 tons, has been taken up to embark the 17th Regiment at Queenstown. A War-office telegram was received at Woolwich Arsenal on Wednesday, ordering 10 Armstrong 100-pounder guns to be shipped with the earliest despatch for the sea and land defences of Halifax, and a report was ordered to be transmitted by the authorities of the dockyard to the Lords Commissioners of the Admiralty, stating what ships would be available for their transport. The Warrior iron-cased frigate will be completely ready for sea in the course of next week. The exchange of her armament for 100-pounder Armstrong guns is now in progress, and the erection on her after deck, which it was at first intended to make a rifle tower, is now fitting up with a telegraphic apparatus communicating with the engine-room and other portions of the vessel, so that the master may take his station in it, and in comparative security witness all that is going on, and at the same time transmit his orders to all parts of the ship. The iron frigate Defence is rapidly completing her fitments, and there is every reason to believe that she will be ready to leave the dock by the 2d of January.

Arming the Mail Steamers.—The Union Steamship Company, under contract for the conveyance of the mails to the Cape of Good Hope, have received instructions from the Government to arm their steamers forthwith. It is said that the new steamer Peru, belonging to the Pacific Steam Navigation Company, which is to sail from Liverpool for Valparaiso, will be armed with some of Colonel Clay's wrought iron guns.

Court Appointment.—The Queen has appointed Dr. Francis Hawkins, M.D., to be Physician to Her Majesty's Household, in the room of the late Sir John Forbes.

Law Appointments.—The Queen, by a Commission under the Great Seal, has appointed Theophilus Bennett Hoskyns Abrahall, Esq., Barrister-at-Law, one of the Registrars of the London Court of Bankruptcy, to be Commissioner at Newcastle upon Tyne in the room of the late Mr. Ellison; and Mr. H. P. Roche has been appointed Registrar for London, in the room of Mr. Abrahall.

Foreign.

France.—The news of the Prince Consort's death has awakened throughout France an unanimous expression of regret, respect, and sympathy from all classes of society. As soon as the intelligence reached Paris on Sunday morning the Emperor and Empress sent a telegraphic despatch to Windsor, expressing to the Queen their deep regret; in the evening the Emperor still further testified his condolence by despatching one of his aides-de-camp to Windsor with an autograph letter to the Queen; and on the following day another officer was despatched with an autograph letter to the Queen from the Empress Eugenie. The Emperor also, without waiting for the official announcement of the death, issued an order on Tuesday in the *Moniteur* for the Court to go into mourning for 21 days; the flag of the Tuileries has been hoisted half-mast high during the whole week, and the festivities and receptions at the Tuileries have been countermanded. All the papers join in the expression of public feeling which the mournful event has called forth. The *Moniteur* says:—

"This sad event, this most sudden and premature death, plunges into sorrow the august Queen of England, the Royal family of England, and the English nation. The Emperor, the Imperial family, and the whole of France associate themselves with all their sympathies to these regrets and sorrows."

The *Débats* says:—

"The mournful and premature event which has befallen the Queen and the Royal family, in the midst of the gravest political difficulties, will be keenly felt, not only in England, but throughout Europe. In France especially, where Prince Albert has left personal recollections, public opinion will, we are confident, unite in the private but severe grief into which this great misfortune has plunged Queen Victoria, the constant and faithful ally of France."

The *Siècle* observes:—

"In a difficult position, Prince Albert won the esteem of the English nation and the sympathy of all those who, artists, literary men, inventors, scientific men, form the party in England of intellectual progress, in which the deceased Prince was specially interested. Frankly accepting the subordinate part of the Sovereign's husband, he sought in learning and the protection of the arts and of industry an employment, useful to his new country, of that intellectual activity which he was prevented by the traditional susceptibilities of the nation from applying to political affairs."

The *Presse* says:—

"His elevated tastes, the dignity of his character, obtained for the deceased Prince a well-deserved popularity."

The *Constitutionnel* remarks:—

"As his position did not allow him to take any part in political life, Prince Albert turned all the activity of his capacious and cultivated intellect to the promotion of the arts, letters, industry, and agriculture. In that sphere his influence has been most beneficially felt, and memorable traces of it will remain in the history of our times. The Universal Exhibition of 1851 was due to his initiation, as was also the Manchester Art Exhibition. His death must overwhelm the Royal Family with inconsolable grief, and will be sincerely mourned by all England."

Galignani's Messenger says:—

"The feeling created by the sad intelligence has been throughout Paris one of profound sorrow. The American residents and many of the French are earnest and most sincere in their expressions of sympathy and condolence. The event is announced by the Paris journals in terms of unaffected regret. They dwell on the elevated example which he gave as a husband and a father, and pay a just tribute to his intelligence and his encouragement of every enterprise likely to benefit his adopted country."

The only journal that refers to the political opinions of the Prince is the *Pays*, which says:—

"Notwithstanding the perfect reserve with which the Prince Consort had always refrained from meddling with public affairs, his death cannot fail to have a serious influence on the future policy of England. It is true that he kept himself aloof as much as possible, but the intelligence and clearness of his views gave great weight to his opinions, and it was to his inspiration that the Tory party owed some of its rare successes. Unfortunately, the war of Italy placed the Prince in a difficult situation. Being compelled to choose between his reminiscences and the counsels of reason, he committed the error of departing from that neutrality which he had before observed, and the fall of the Derby Ministry, which was caused by their listening too much to his advice, proved to him that when he adopted England he ought no longer to have thought of Germany. The Prince had very liberal tendencies, but the recent conquests of the democratic party had weakened his judgment, and there happened to him what too frequently occurs to Princes who find themselves involved with an unknown future; he felt alarm, and through fear of revolution he threw himself into the path of unpopular reaction. He, however, we must hasten to say, used no effort to secure the triumph of his ideas, and sought for no other participation in politics than that which was assured to him by the authority of his judgment over the chiefs of the Tory Cabinet personally."

Several of the Paris journals express their opinion of the President's Message, and unanimously consider it unfavourable to peace. The *Débats* publishes an article hinting at the armed intervention of France, and saying that, as England, notwithstanding her determination to remain strictly neutral, finds herself drifting into a war, so France may, against her will, be led by the inexorable course of events also to take part in the conflict, a maritime war rendering it "especially difficult for the non-belligerents to preserve their neutrality for any length of time." The *Presse* announces that the French squadron on the West India station is ordered to proceed before Charleston, where the English squadron under Admiral Milne is already collected. The *Patrie* and *Presse* say that France and the other great Powers, having been consulted by England, have expressed their opinion that the act of the San Jacinto was a violation of the rights of neutrals.—In the Senate on Tuesday M. Troplong presented his report on the Senatus Consultum in reference to the extension of the privileges of the Corps Legislatif. He discussed at great length the suppression of extraordinary credits and the plan of voting the Budget in detail. He rejected all idea of re-establishing Ministerial responsibility, which, he said, formed the basis of a Parliamentary system of Government expressly repudiated by the French Constitution. Referring to the advantages of the system of transferring credits from one department to another, he said:

During the last war in Italy all France thought that immense and hasty efforts had been made to prevent our being forestalled by Austria, whereas the fact was the victories of the French army commenced before it had hardly been provided for, and that without any transfers or extraordinary credits. In our day it is difficult to pursue an obscure policy. The Emperor shows by the measures now under discussion the loyalty of his policy. The real and infallible preparations for war in France are a good system of enlistment, the discipline of the soldier, order in the administration, and the martial genius of the nation. France, although unprepared, is always ready, even against those who have taken their measures long beforehand. The Committee does not, however, reject the hypothesis, that measures might quietly be taken in presence of great external dangers. The system of transferring credits has been instituted for that purpose; but these precautions cannot long remain concealed. Treating of the financial question and the existing deficits, he called attention to the great things that had been done since 1850, and said,—'They have served to raise the French name to the highest rank, to link the chain of our victories, to carry our civilisation and our influence to the extremity of the world, and, lastly, to free Italy from a foreign yoke.' In conclusion, he maintained that the amount of the floating debt was comparatively less than in 1848."

The *Moniteur* officially contradicts the rumours of further Ministerial modifications. It also contains an Imperial decree disbanding the 103d Regiment of the Line, and the 1st Regiment of the Foreign Legion. Another decree deprives M. Laprade of his Professorship of Literature and Fine Arts. A ministerial report, which precedes the decree, in explaining the motive of this resolution, states that "M. Laprade published a piece of poetry in the *Correspondant*, containing injurious allusions to the Sovereign, elected by universal suffrage, and to the nation which he gloriously governs." The *Moniteur* also announces that the *Correspondant* has received a first warning for publishing M. Laprade's verses. The *Constitutionnel* publishes a paragraph stating that, 'although barely five and a half years old, the Prince Imperial is already learning three foreign languages, and speaks fluently English, German, and Italian." Count Pourtalès, Prussian Minister to the Court of the Tuileries, is dead. The collection of the "Peter's pence" took place on Sunday in the churches of Paris, at each mass and at vespers. The contributions are said to have been liberal, and to have included bank notes, small rouleaux of napoleons, silver and copper coins. Last year one parish in Paris sent 10,000f., a second 30,000f., and a third 23,000f. One of the most ancient monuments in France, the Château de la Marché, in the department of the Saône and Loire, built in 1682 by Claude Fyot, Count of Basjean, and Abbé of St. Etienne of Dijon, has just been destroyed by fire. The saloon was magnificently decorated with paintings in fresco, representing the Feast of the Gods, by Nanini. It likewise contained a remarkable collection of paintings, including the embarkation of Charles II. at Antwerp on his return to England, the portrait of Olivier de la Marche, and that of John Fyot, preceptor of a son of Charles VII. The gallery of family portraits was partly preserved, but a valuable collection of china, worth 40,000f., was broken or destroyed. A remarkable collection of carpets likewise fell a prey to the flames. The chapel is the only part of the chateau which remains uninjured. The Marquis de la Marche, the proprietor, regrets more than the loss of his property the destruction of so many curious antiquities, the collection of ages, transmitted from generation to generation.

SPAIN.—The address of the Congress, in reply to the Queen's speech, was passed on Monday by 228 to 79 votes. Senores Olozaga and Madoz protested against the accusations which had been made against them, and stated that they professed dynastic principles. The Marquis Vega Armigo has been appointed Minister of Public Works. Mr. Schurz, the American Minister, has left Madrid on leave of absence.

PORTUGAL.—The news of the probable rupture between England and the Northern States of America has created a strong sensation in Portugal. Most of the Lisbon journals contain articles on the subject, and the sympathy of the press and of the people generally is quite in favour of England. The Infante Dom Augusto continues very unwell, and his recovery is still doubtful.

SWITZERLAND.—The report of the mixed commission, appointed to inquire into the affair of Ville la Grande, agrees in all the principal points with the report of the Genevese commission.

BELGIUM.—The long discussion on the Address in the Belgian Chamber of Representatives terminated in its sitting of the 13th in the adoption of the Address by 56 votes to 42. The report that the Secretary of the British Legation at Brussels had left that city for London on a political mission is said to be totally devoid of foundation. The King of the Belgians has gone into mourning for two months for the Prince Consort.

HOLLAND.—Capt. Semmes, commander of the celebrated Southern States privateer Sumter, arrived at Rotterdam on the 10th. He came to England as a passenger in the Trent, but was not recognised by the officers of the San Jacinto, who would no doubt have seized him with even more eagerness than Messrs. Mason and Slidell. Neither the motive of his visit to Rotterdam nor his ulterior destination is known.

DENMARK.—The *Berlingske Tidende* of the 15th publishes a semi-official article announcing that Prussia has declined the propositions of the Danish Government for the settlement of the Holstein question, on the ground that they had already been rejected by the Estates of Holstein.

PRUSSIA.—The news of the death of the Prince Consort has awakened the greatest sympathy among all classes of the Prussian people, and has plunged the Royal family into the deepest mourning. On receipt of the intelligence the King and Queen paid a visit of condolence to the Crown Princess. The King also sent his aide-de-camp to Lord Loftus to express his sympathy for the Royal family of England. The Prussian Court will go into mourning for four weeks. The Crown Prince left for Windsor on Wednesday in order to attend the funeral. The Crown Princess was compelled to renounce her intention of accompanying her husband on account of the state of her health. The Prussian corvette Amazon has been wrecked near the Helder, and there seems to be no doubt that all on board, consisting of 118 persons, perished with her.

AUSTRIA.—On Saturday the Upper House of the Reichsrath voted the laws for preserving the inviolability of letters, for assuring personal liberty, and for maintaining the right of domicile. The Budget was presented to both Houses of the Reichsrath on Tuesday by the Minister of Finance. The following is a summary of the financial statement:—

"The revenue for 1861 is estimated at 300,600,000, the expenditure at 344,000,000, and the deficit at 65,000,000 florins. This deficit is to be covered by means of several credit operations, which will leave a balance of 8,000,000 florins in the Treasury. The returns for 1861 are not quite completed, but the deficit is expected to amount to about 40,000,000 florins. The excess of expenditure, which is not fully provided for, amounts to 59,000,000 florins. The unsettled state of Hungary has caused a loss to the revenue of 11,[illegible]. The total decrease in the revenue of 1861 amounts to [illegible] florins, which will be covered by credit operations. The National Bank has not been applied to for a loan, nor have any public bonds been issued. The estimates for 1862 are as follows:—The Court and Civil Administration, [illegible] florins; Army, 108,500,000 florins; interest on the Public Debt, 124,500,000 florins; sundries, 21,500,000 florins; altogether about 354,500,000 florins. The revenue for 1862 is estimated at 296,500,000 florins, and the deficit at 58,000,000 florins. The army estimates show an increase of 52,000,000 florins. The deficit is partly to be covered by increased taxes, and partly by credit operations with the National Bank, the charter of which is to be renewed in return for a loan of 80,000,000 florins, bearing no interest. Twenty millions of this loan will be repaid in monthly instalments of 1,000,000 florins each, and 44,000,000 by 18[illegible]. The State domains are to be sold at certain fixed periods. Twenty-three millions of the Lottery Loan of 1860 have not been taken up. The Financial Administration has, however, received from the agents 100,000,000 florins for bonds of that loan, and 3,000,000*l*. of the English loan. The National Bank is to be made independent of the State."

On the conclusion of the Ministerial statement, the Council of the Empire appointed a Committee of [illegible] members to examine the Budget. The Parliamentary Clubs have agreed upon the course to be pursued in reference to the Budget. The resolutions of the Reichsrath on financial questions will be as legal as if all the provinces of the Empire were represented. These resolutions will, however, only refer to the non-Hungarian provinces. Austria agrees with England in the Anglo-American dispute.

HUNGARY.—The telegram from Pesth, announcing the arrest on a charge of high treason of the Second Palatine and the Commissioner of Public Safety, is said to be a pure invention.

RUSSIA.—The *Journal de St. Petersbourg* publishes in that part of the paper usually containing articles inspired by the Minister of Foreign Affairs a short article energetically protesting against the invasion of the Sutorina by Austria.

FINLAND.—General Bokascowsky, the new Governor of Finland, has officially declared that the Emperor of Russia intends to convoke the Diet of that province as soon as the Committee of the Estates, which meet in January, have terminated their labours. In consequence of this announcement the city of Helsingfors was illuminated. It is asserted that the censorship is to be abolished.

POLAND.—The Breslau *Gazette* of Wednesday says that Monsignor Bialobrzeski, administrator of the Archbishopric of Warsaw, has been condemned to death. He refused to appeal for pardon, and said, "I have done nothing which should be punished with death." The Paris papers publish a telegram from Breslau, dated the 10th inst., which states that since the arrest of M. Bialobrzeski, the authorities have made the clergy and the superiors of the convents responsible for the churches remaining closed. The keeper of the Bernardin Church had been imprisoned for refusing to open it. The Basilian Church, belonging to the United Greeks, had been opened by force. The wax tapers were lighted by the soldiers, who compelled the priests to officiate. The offices of the Bank of Warsaw and the Finance Commission had been searched, and two of the clerks arrested. Two others managed to escape. The system of repression had become more severe in Volhynia. The prisons of Kiew and Zitomir were crowded. Forty students of the University of Kiew had been sent to Siberia. The Marquis Wielopolski has definitively resigned his official duties, but remains a member of the Council of State.

ITALY.—In the Italian Chamber of Deputies on Saturday, on the proposition of Dr. Bertani, the report of the committee appointed to inquire into the opening of letters passing through the post was read. The report expressed a conviction that if, under certain circumstances, some letters were consigned by certain postal agents to political authorities, such a proceeding took place without the knowledge of the Ministerial chiefs. The Chamber, after the report had been read, passed to the order of the day. Validity was given by the Chamber to a Royal decree relative to free trade in corn in the Southern provinces. In the sitting of Tuesday the Minister of Finance announced that he would make his financial statement on Thursday. The Chamber then proceeded with the discussion of the Registration Law. In the sitting of Thursday a letter from Signor Rattazzi was read announcing that the state of his health compelled him to resign the Presidency of the Chamber. Signor Minghetti proposed that the Chamber should express a desire that Signor Rattazzi might retain the post at least until the end of the session. The proposal was unanimously agreed to. Baron Ricasoli declared that the Ministry would not prorogue the Chamber until the Bills presented by the Government had been fully discussed. The *Opinione Nationale* of Tuesday announces that all the officers of the Southern Italian army have been ordered not to leave their homes until further orders, and that all temporary furloughs are for the present suspended. King Victor Emmanuel, it is said, will go to Naples at the beginning of February next. The *Movimento* of Monday publishes a letter addressed by Garibaldi to the Genoa Committee, which says:—

"We are near the final solution of the national question. Notwithstanding the obstacles thrown in our way by enemies, by false friends, and by the timid, whereby our progress has been arrested, we must go on to the end. The rivalry of individuals must cease. We must leave it to history to pass judgment on our task. Let us be still more closely united around

the flag of our *Rè Galantuomo*. Let us mutually and solemnly agree to meet on the last battlefield at the side of our brave ... will still find companions worthy of its brotherly ... All is a token of victory."

... concludes by calling upon the committees of ... Provvedimento Society to lend their active co-operation. The *Corriere Mercantile* of Wednesday states that a disagreement has arisen between Garibaldi and the leader of the majority of the Genoa committee, who had voted that the authority of the committee was superior to that of Garibaldi. On the night of the 13th inst. 28 persons, dressed as Carabineers, presented themselves at the railway station in Bologna, stating that they had orders to lie in wait there for thieves. Being admitted to the office, these individuals broke open the cash-box, and abstracted 80,000f. On the same night the General Post-office of Turin itself was broken into by burglars and its strong-box rifled, and a pistol shot was fired at the sentry at the gate of the Arsenal. A despatch from Rome says that the Marquis de Lavalette, the French Ambassador, had a conference of two hours with Francis II. on Tuesday, at which he demanded that the ex-King should quit Rome. The Cardinals who were consulted in the matter have, it is stated, advised Francis II. to relinquish his apartments in the Quirinal and reside at the Palace Farnese. The Papal Government has announced that the funds for the payment of the dividends on the foreign debt falling due at the end of the month are ready. Advices from Naples state that Muratist intrigues are again going on in that city. A band of brigands had entered Cervinara, in the Principato-Ultra, plundered the warehouses, opened the prisons, and released seven prisoners. The band of Cipriani has been routed, with the loss of 100 killed and 20 prisoners. The Bourbon General Marcelli was arrested while in the act of receiving a letter addressed to him by Francis II. The *Pungolo* of Friday, in reference to the recent execution of the Spanish brigand Borgès, says:—

"A report from a consular agent of a foreign Power at ... affirms that Borgès, before dying, declared that he had been deceived by the Legitimist Committee at Paris, and that the elements for a revolution against the Italian Government existed in the Neapolitan provinces. He said also that the only force that could be collected by the aid of gold would consist of assassins and thieves, that Langlois was an imbecile, and Crocco a scoundrel, and concluded by stating that he wished to go to Rome to expose to Francis II. the crimes which had been committed in his name. Borgès died courageously. A journal of his operations, with other important correspondence, was found among his papers."

IONIAN ISLANDS.—The Ionian Parliament was dissolved on the 7th inst., pursuant to a proclamation by her Majesty in Council passed on the 20th November. The Lord High Commissioner issued instructions to the Government officers not to interfere in favour of or against candidates during the new elections.

TURKEY.—An intense monetary panic has prevailed at Constantinople, in consequence of which the Turkish lira rose to 370 piastres, and paper money was generally refused. It appears that on the 11th inst. some Greek stockjobbers combined with a few intriguers of Galata and pushed speculations for a rise to such an extent as to cause a general panic. The Government immediately took the necessary measures to reassure the public mind and to arrest the further prosecution of the attempt. The monetary crisis still continued on the 17th, and it is asserted that the that the English ambassador supports the efforts of Turkey to raise one million sterling in London.

THE HERZEGOVINA AND MONTENEGRO.—Hostilities have entirely ceased in the Herzegovina. The Turkish troops who were posted at Piva have been distributed among the towns of Gatzko, Lejubinie, Stolaz, and Mostar. The irregular troops have been disbanded. Numerous detachments of volunteers have been sent to Antivari and Spizza, in order to defend these places against any attack by the Montenegrins. The latter, however, have retreated. A considerable sum of money has been received at the Turkish camp for the payment of the arrears due to the troops.

INDIA.—Telegraphic despatches have been received in anticipation of the Bombay mail of Nov. 27. The *Friend of India* states that Sir Charles Wood has decided that the seat of the Government shall be removed from Calcutta to the Hills. The export of cotton from Bombay to England during the present year is estimated at 920,000 bales. Sir Bartle Frere will, it is rumoured, succeed Sir George Clerk in the Governorship of Bombay. The Semiramis, of the Indian navy, has been wrecked on the Island of Johanna.

UNITED STATES.—President Lincoln delivered his Message to the Federal Congress on the 4th inst. The following is a summary of that portion which refers to the foreign policy of his Government:—

"You will not be surprised to hear that in the peculiar exigencies of the times our intercourse with foreign nations has been attended with profound solicitude, chiefly turning upon our own domestic affairs. A nation which endures factions and domestic divisions is exposed to disrespect abroad, and one party, if not both, is sure, sooner or later, to invoke foreign invervention. The disloyal citizens who offered the ruin of their country in return for foreign aid have received less encouragement than they expected. If no higher principles actuated foreign nations than the restoration of commerce, and especially the acquisition of cotton, they could reach their aim more easily by aiding to crush the rebellion than by encouraging it. Foreign nations must perceive that one strong nation produces more durable peace and more extensive commerce than the same nation broken into hostile factions. It is not my purpose to review our discussions with foreign States, because, whatever might be their wishes or disposition, the integrity of the country and the stability of the Government depend not upon them, but on the loyalty and patriotism of the American people. The foreign correspondence submitted to Congress will show that the Government has practised prudence and liberality towards foreign nations, averting the causes of irritation, but maintaining with firmness the rights and the honour of the country. Since it is, however, apparent that foreign dangers necessarily attend domestic difficulties, I recommend Congress to adopt ample measures for the coast, lake, and river defences, and it would be important for the national preservation to erect fortifications and depots of arms, and to make harbour and navigation improvements at well selected points. I recommend an appropriation to satisfy the legal demands of the owners of the British ship Perthshire, detained, under a misapprehension, by the United States steamer Massachusetts for a supposed breach of the blockade. I also recommend that authority be given to the commanders of sailing vessels to recapture United States vessels or cargoes taken by pirates, and that the Consular Courts in Eastern countries should adjudicate the cases, but only with the permission of the local authorities. I am unable to discern any reason for farther withholding the recognition of the independence of Hayti and Liberia. I respectfully recommend the reconstruction of the Supreme Courts, the condensation of the Acts and Resolutions of Congress into one or two volumes, and the adoption of a system for the recovery of debts by Northern men in districts where, through the insurrection, the civil tribunals are suppressed. I submit for your consideration the restoration of the original boundaries of the district of Columbia, including that portion on the Virginia side of the Potomac. The efforts of the Government to suppress the slave trade have been recently unusually successful. Under the Confiscation Act, the legal claims of certain persons to slaves are forfeited, and numbers thus liberated are dependent upon the Federal Government, and must be provided for, as it is possible that some States will pass similar enactments, by which persons of this class will be thrown upon them for disposal. I would recommend Congress to provide for accepting slaves from such States according to some mode of valuation, so that the Slaves, on acceptance by the Federal Government, would be at once deemed free. Steps might then be taken for colonising such slaves in a climate congenial to them. The free coloured people in America might also be included in such colonisation. The plan of colonisation may involve an acquisition of territory and the appropriation of a sum of money beyond the sum expended for the territorial acquisition. It is gratifying to know that the expenses made necessary by the rebellion are not beyond the resources of the loyal people, and to believe that the same patriotism which has thus far sustained the government will continue to sustain it till peace and union shall again bless the land. The progress of events is plainly in the right direction. Maryland, Kentucky, and Missouri, who refused to supply troops, now have 40,000 men in the field. No armed insurrection is left north of the Potomac or east of the Chesapeake. The union is advancing steadily southwards. The present insurrection is a war upon the first principles of popular government, and the right of the people. The insurgents even hint at monarchy. In my present position I should scarcely be justified in omitting to raise a warning voice against the approach of returning despotism, but denounce the effort to place capital upon an equal footing with labour in the structure of the Government. The struggle of to-day is not altogether of to-day, but is also for a vast future."

The reports of the Secretaries of State were then read. That of the Secretary of the Navy stated that the navy comprised 264 vessels of all classes, with 2557 guns, and about 22,000 men. It also stated that the Navy Department had expressed its emphatic approval of the capture of Messrs. Mason and Slidell; that Captain Wilkes displayed too much forbearance in not capturing the Trent, but that this must not form a precedent for any future similar infraction of neutral obligations by foreign commercial vessels. The report of the Secretary of War estimated the present strength of the army as follows:—Volunteers, three months, 77,845; volunteers for the war, 640,637; regulars, 20,334. The report of the Foreign Secretary was a document of great length, and contained extracts from the diplomatic correspondence showing the relations of the Federal Government with foreign Powers. The following is published in a New York paper as a telegraphic summary of this correspondence:—

"England entertains, or expresses, no sympathy for the United States, but rather the reverse; France has not been cordial, but has been less offensive than England; Austria has been friendly, and from the outset has declared that she would not recognise the rebel Confederacy; Prussia, and all the German States, have been equally cordial; Russia has been friendly, but anxious for the war to end; Belgium undecided and passive; Holland disposed to follow the lead of England, at a respectful distance; Italy full of warm sympathy for our Government and for freedom; Spain, though not aggressive, has an evident leaning towards the Republic; Denmark is friendly; the Pope, though he announces that his government is not of this world, and that he is concerned with spiritual things, yet if he were to express an opinion he, as a good Christian, will always be on the side of law and order."

The report also stated that, though the United States early offered to accept the Paris declaration in reference to privateering, both England and France desired to make an exception in favour of the Southern Confederacy, to which the Government refused to yield, leaving the United States free from any obligations to accept the Paris declaration. The appropriations asked for the next fiscal year were for a service of half a million men. The money actually paid out of the treasury for war expenses for the quarter which elapsed between the end of June and the end of September last was in round numbers 20 millions sterling, or at the rate of 80 millions a year. In the House of Representatives Mr. Lovejoy, of Illinois, offered a joint resolution tendering the thanks of Congress to Captain Wilkes "for his arrest of the traitors Slidell and Mason." Mr. Edgerton, of Ohio, moved as an amendment "that the President be requested to present Captain Wilkes with a gold medal with suitable emblems and devices expressive of the high sense of confidence entertained for him by Congress in his prompt arrest of the rebels Mason and Slidell." The amendment was rejected and the original resolution adopted. Resolutions were also adopted calling on the President to treat Messrs. Mason and Slidell, prisoners at Fort Warren, in the same manner as the Confederates were treating Colonels Corcoran and Wood, two Federal prisoners of war. Mr. Breckenridge has been expelled from the Senate. A committee has been appointed to inquire into the expediency of abolishing slavery in the district of Columbia. Subsequent despatches from Washington state that President Lincoln had declared that it was his intention to preserve a prudent policy in regard to foreign relations, and that there need be no fear of war with Great Britain unless the latter should seek a pretext for hostilities. The despatches add that no anxiety is felt on this subject by the Administration. On the other hand there is no longer any doubt of a deliberate and long-cherished intention on the part of Mr. Seward, the Secretary of State, to bring about a war with England. It is said that during the visit of the Prince of Wales to the United States, Mr. Seward took advantage of an entertainment which was given to the Prince and his suite to tell the Duke of Newcastle that he was likely to occupy high office, that when he did so it would become his duty to insult England, and that he should insult her accordingly. Capt. Wilkes, of the San Jacinto, was in New York, and was receiving marked attention at the hands of the citizens of that place. The intelligence respecting the burning of the Harvey Birch reached New York on the 30th ult., and occasioned great excitement. The Federal Government has ordered the release of a fugitive slave confined at Washington, and Mr. Seward has directed General M'Clellan that the seizure of any future fugitives must be immediately followed by the military arrest of those concerned in the seizure. The Unionists of East Tennessee have routed a large Confederate force at Morristown, killing large numbers. Advices from Port Royal state that the regiment which made a reconnoissance towards Charleston went within 20 miles of the city, and captured three batteries, the guns of which they spiked. They found quantities of cotton, but the Confederates were destroying much of that article. The party returned in safety. An attack on Fort Pulaski, Savannah, is hourly expected. The New York papers announce with great exultation that the stone fleets sent out from New London and New Bedford have been sunk in the channels leading to Savannah and Charleston, so that for years to come those cities are destroyed as commercial ports by a "petrified death in life!" The accounts from Fort Pickens give us no definite accounts of the engagement there, but the Federal troops have evacuated Tybee Island. A skirmish occurred on the 30th, near Rolla, Missouri, in which the Confederates are reported to have been worsted. The Confederates in that State are now said to be retreating. General Wool has asked the Government for troops to advance on Richmond from Fort Monroe. Captain Gordon, of the slaver Erie, had been condemned to be hung on the 7th of February next. A Canadian steamer, laden with arms, is said to have been captured off Maine by a Federal revenue cruiser.

WEST INDIES.—Accounts from all parts of the West Indies show that great indignation was felt by people of all classes throughout the Islands at the attack on the Trent by the American frigate San Jacinto. Her Majesty's screw steamship Cadmus, 21 guns, Captain H. Hillyar, C.B., senior officer of the Windward station, had arrived at St. Thomas's from Barbadoes, to protect British vessels from any similar outrage; and in consequence of the affair, the West India Mail Company has ordered its agents to furnish no more coal to United States' vessels. The American ship Montmorenci, from Newport, with 1718 tons of coal on board for the Royal Mail Company, which arrived at St. Thomas's on the 28th November, had been boarded and captured on the 25th by the Sumter, but, in consideration of the cargo belonging to British subjects, the vessel, which had been ordered to be burnt, was released, the master being compelled to give bonds for 20,000 dols. payable three months after the establishment of peace between the United and Confederate States. It was reported that an American vessel laden with molasses had been captured and burnt subsequently to this occurrence. In the early part of November the Sumter arrived at St. Pierre, Martinique, and landed the crews of two Federal vessels which she had captured and burnt at sea. While she was in the harbour the United States' steamer Iroquois arrived off St. Pierre, and found that the Sumter had just coaled and provisioned, and was ready for sea; the Iroquois remained standing on and off the port, closely watching her. On the 23d a French steamer sailed in the evening, and the Sumter, availing herself of the darkness, went out at the same time, but in an opposite direction; the Iroquois chased the Frenchman and found on discovering the mistake that the Sumter had gone off entirely. On the 28th the Sumter was seen only a short distance from St. Thomas's, and the Iroquois, which had been in the harbour four days, proceeded to sea on the afternoon of the 29th to search for her, without even taking in coals. The United States' frigate Macedonian was also in port; the Powhattan and Keystone State had returned to the States, both having been sent to the West Indian islands to endeavour to capture the Sumter, the latter having steamed 15,000 miles without even seeing her once.

THE PACIFIC.—The establishment of a line of steamers between the Atlantic and Pacific, through the Straits of Magellan, was urgently demanded in Chili. The accounts from Bolivia are deplorable. The Commandant General of La Paz, Colonel Yanez, had ordered 220 persons engaged in the late revolutionary movement to be shot. In accordance with these orders

General Cordova, ex-President of Bolivia, General Hermosa, the priests Zegada, Larriva, Borgas, &c., Colonels Espejo, Silva, Larriva, Mendizabel, and many other persons of distinction were shot in prison, and 200 Cholos were executed in the street.

Public Addresses.

THE BISHOP OF OXFORD on Monday presided at a meeting in aid of the Missionary work of the Society for the Propagation of the Gospel, and spoke as follows on the death of the Prince Consort:—

"He could not refrain from saying one word upon a topic which was in the hearts and in the thoughts of every one throughout this wide realm that day. For any ordinary purpose, for any meeting of pleasure, or for any common matter of business, that day would have been an unseasonable time to have gathered the people of Reading together. It was a day rather for sad-hearted reflections upon the national sins which have brought upon us a great national chastisement at this moment, and robbed our beloved Queen of the support of that affection and of that intellectual power and true-hearted probity such as is rarely combined in one man in high station among us. If this had been a meeting of a different kind, he thought they would have done right to postpone it, but he trusted, if anything, the effect of God's judgment being abroad among them would only tend to quicken them in such a work as this for which they had gathered together. Surely they ought to review at such a time their national responsibilities, and take some measure of their national discharge of what those responsibilities involved. Surely they ought to turn to Him who has so smitten this country, and to remember that all such turning which wasted itself in mere feeling was unacceptable in His sight, and that true turning involved this,—the doing His work more diligently and with more self-denial, the loving of the work and doing the work from love, so that the beginning of this judgment, if it stirred up, through His goodness, such a temper as that among them, might be turned by His mighty hand into the remainder of the blessing. He could not open the meeting without one word on this subject with which their hearts are so full, for if they believed in the truth of Christ's everlasting Gospel they must regard it as a loud call to labour most earnestly to spread it. And, surely, at such a time of sadness, if at any time in their lives, the truth of that Gospel must rise bolder before their sight, drawing their eyes away from the petty impertinences which so often dazzled them, and make them feel that the true end of living for each one of them was the doing of God's work before the night comes, when no man can work. And he wanted every one of them there present to join with him in a prayer—not a mere formal, cold prayer—during these weeks of sorrow, for God to remember our beloved Queen. Oh! let them remember that in such a trial as this, instead of her exalted rank taking from the sting of widowhood, it only added to it; that the weight of her crowned authority, so much supported by the loving hand wrenched from her, must needs press upon that true womanly heart with an almost intolerable weight. Let their prayers for her be real, and let not the reality of those prayers be made weak and powerless by their encouraging in their heart the palsy of selfishness, or the miserable pettiness of suspicion. God grant that they all might have a determination to do His work through our churches' agencies more abundantly than they had ever done."

THE RIGHT HON. E. HORSMAN, M.P., in an address to his constituents at Strond on the 10th inst., spoke as follows on American affairs:—

"I am very anxious that we should come to a right understanding upon the American question, both as regards the Northern and the Southern States, and as regards our own relation to them. The question seems to me to be a very simple, although it is a very large one, and in order to a right understanding of it you must look at the origin, the objects, and the probable results of the war between the Northern and the Southern States in order that we may understand their relations to one another, and what are and ought to be England's relations towards them. The origin of the war, as we all know, was the determination of the Southern States to separate from the Union with the North upon the election of President Lincoln, whose election, in consequence of the views which he entertained of slavery, was considered a great triumph to the Northern States, and was taken as a signal by the Southern States to place their house in order. The first question we naturally ask is, was the secession of the Southern States, upon the ground alleged for it, a justifiable secession? Upon those grounds I think we may assert that the secession was not justifiable, because, if in any great Confederation the minority may break off the moment they are in a minority the Confederation becomes a farce. And if the secession itself cannot be justified, still less can we justify the manner in which the secessionists commenced the war. However, the secession having been proclaimed, war ensued, and the determination of the North to proceed against the South became a fact. We now ask what was the course which it was the duty of England to pursue in that war between the North and the South? Manifestly it was the duty of England once more to proclaim and adhere to the great principle of non-intervention. But this application of the principle of non-intervention gave great offence to the Northern States, who said there could be no neutrality when there was no war, and who insisted that the Southerners should be treated as rebels and pirates and could be speedily put down. But the English Government took a far more accurate measure of the power and prospects of the contending parties. They saw that it was going to be a real war, and probably a very serious and protracted war, and the Government of England at once established for England the position of neutrality by two prompt and most judicious measures—first, they acknowledged the South as a belligerent Power, and next they acknowledged, with all its inconveniences, the Northern blockade of the Southern ports. So much for the origin of the war and the duty of neutrality observed and affirmed by England. Then, I ask you, this war being commenced, what were its objects? I think there is one opinion in which you will all concur—that the fairest and safest way is to take the objects of the contending parties as stated by themselves. The partisans of the North say it is a war for the abolition of slavery. Well, what evidence is there of that? President Lincoln denies it *in toto*, and says he would be no party to a war for the abolition of slavery. The official members of the Cabinet have all repeated the same denial. The North has declared that, if successful in the war, it would not abolish slavery. It has gone further, and offered to make every concession and give every security for the perpetuation of slavery if the South will continue in the Union. And it is a matter of notoriety that the hatred of the Northerners to the negro race is far more deep, unrelenting, and cruel than that of the Southerners. If the abolition of slavery is not the cause of the war, still less can the commercial differences and the protective tariff be the cause. What, then, is the cause? I believe that 99 out of every 100 impartial Englishmen feel that Earl Russell told the truth clearly and forcibly, when, in a speech which he made not many weeks ago, he defined the cause to be that the North was fighting for empire and the South for independence. I believe that if a man were to write a volume he could not express the cause more truly and forcibly than is stated in that one sentence; and if another man with the tongue of an angel were to speak for a month he could not refute the truth that is contained in that definition—"The North are fighting for empire—the South for independence." So far as our interests and sympathies are concerned, they would go with the South. But when the war first broke out all our sympathies were ready to enlist themselves with the North, because we believed the cause of the North was that of emancipation, and it was only when we found that they were ready to compound with slavery, to perpetuate slavery, to combine all the profits of slavery with all the advantages of professed abolition, that the reaction took place, and that the English public determined to observe that strict neutrality which to this moment has never been departed from. Well, the war proceeds, and in a short time it is shown that the English Government were right in their estimate of the power and the prospects of the contending parties. The South has proved itself able to hold its own, and the North has shown not only military failures, but a complete breakdown of civil Government. There is not a security that was established for liberty of speech, writing, or motion which has not been swept away, and there is not among the most despotic Governments of Europe one spot on the earth in which every constitutional right has been so entirely suspended and in which the freedom of individuals is so utterly destroyed as in the States of North America. It is obvious that the Union is not easily to be restored, and, even if it could be, we all know that union cemented by blood will not be the old Union founded by the original fathers of the republic. It is not, therefore, a question of the restoration of the Union. It is rather a question as to the terms of separation, as to the boundary to be established. That is a question for arbitration, that could be more easily carried out before more blood is shed, than after a long and calamitous war. As we were coming to that conclusion we were astounded by the intelligence of the outrage on board the Trent. As to the character of that outrage the law officers of the Crown have advised her Majesty that it is a breach of international law, and the Government have sent a despatch to Lord Lyons laying down the terms in which he is instructed to demand reparation from the Cabinet at Washington; and I believe there are two characteristics of that message which are generally acceptable to Europe—the first is, that the demand is said to have been made with great firmness; and the second is, that it is said to be couched in terms the most conciliatory, so as to give the American Government every possible opening to recede with honour, and not imposing upon them the slightest humiliation. I believe that the proceedings of the Government have been approved from one end of the kingdom to the other, and I believe it is the consciousness of the people that the right course has been pursued and steadily persisted in that has produced the calm which pervades the whole community. There is a general apprehension of war, and everybody is asking what is to be the upshot of these proceedings. It is my sincere belief that there will be no war. In the first place, it is not the interest of the Northern States to go to war. I am not saying anything disrespectful of them when I say that interest is an ingredient which the native of the Northern States is too smart to lose sight of in his warlike and peaceful arrangements. What are they to do if they go to war? At present they are occupied altogether in the South. But they say, "We are dealing with the South. We may lose territory there; but we shall compensate ourselves by taking Canada." But what do the Canadians say to that? They say they live in too great a proximity to the great Republic and have formed a very correct notion of the value of its connection. They think the English monarchy is far more respectable, and there is another argument. If the Americans are unwise enough to show themselves over the frontiers of Canada, they may probably meet with rather a hot reception, and they will find some difference between a war with Canada and a war with the Southern States. After an engagement with Canadian regiments, when the Northern heroes run away, they will be followed over the frontier, and, instead of the States annexing Canada, it may happen that Canada may annex a goodly portion of the States themselves. Well, then, what are they to do by sea? In the last war the American privateer was a very dangerous element to be considered, and people say you will have the American privateers again. But where are they to sail from? The whole south seaboard of the States, on which were then great harbours both of exit and refuge, will be closed against them. No Northern privateer can sail from these harbours, aud if one enters she will be captured. The whole of the ports of the European Powers are closed against privateers, and there are only two or three harbours which the Americans have, which can easily be blockaded, so that any attempt at privateering would be checkmated. I believe when it is not the interest of America to go to war with us, it may also be shown to them that it is consistent with their character and honour to remain at peace. I believe that these two motives combined will make them ready to meet half way the judicious concessions asked by England. But if, unhappily, the reverse is to be the case, if war is to decide these unhappy difficulties, there never was a time when England was in such a condition to make the results of that war both brief and certain. Commercially, our position is sound. Financially, it is so good that, while other nations are endeavouring to extricate themselves from the prospect of bankruptcy, the only quarrel with the House of Commons is, whether the Chancellor of the Exchequer shall put on, or take off, another million of taxes. Practically speaking, our people are the most loyal on the face of the whole earth. If we go into war, there is not a man in England, who will not regard the commencement of it with great reluctance, and with great pain; there is not one who would not hail its termination with joy. All we can pray is that, if this war is to take place, it may be as brief as possible, as bloodless as possible; and that, while it may give safety to England, it may also be a blessing from the lesson it teaches and the high inducement it holds out to America herself."

THE RIGHT HON. SIR F. BARING, M.P., at a dinner at Portsmouth on the 11th inst., spoke as follows on the American question:—

"They knew that it was not his habit always to think England in the right. On several occasions he had differed from them on great international questions. He had never shrunk from expressing those opinions, but had acted like an honest man. Not having concealed those opinions when he thought his country to be in the wrong, he did not see the slightest reason for his doing so when he was satisfied his country was in the right. He had most narrowly watched the conduct of this country towards America, and he was satisfied that neither party—the North or the South—had the slightest cause of complaint prior to the act of Captain Wilkes. If this country had been called upon to express an opinion at the unfortunate disruption, it would have been unhesitatingly one of sympathy and sincere regret at the calamity which had fallen upon them. He might go a little further, and say that, although they were neutral in the matter, the feeling was a little in favour of the North, as they were believed to be favourable to freedom, and that there was not sufficient cause for the secession. Those were the opinions which were generally entertained by the people of this country. If they were changed now, it was not the fault of England. It was not necessary that he should rake up the causes which had irritated the public mind. It was perfectly right—nay, it was [illegible] duty—that they should consider the two parties in the [illegible] affairs as belligerents. This act of Captain Wilkes [illegible] have justified any search except that given as a [illegible]. The act naturally roused a strong feeling, as it [illegible] two points which were probably more sacred with [illegible] than any other—he referred to the honour of the British [illegible] and to the right of protection to strangers. [illegible] living in the first naval port in the kingdom, felt very warm on the first point, but they must not think they were [illegible] nest for the honour of the British flag than those residing in the most remote inland district. The same feeling [illegible] throughout England. With regard to the second question, there was no matter of which we were more proud—and [illegible] we had the right to be—than our determination to protect the stranger. The Protestant refugee under Louis XIV [illegible] home here, the Catholic priest in the French Revolution was received and protected, the Spanish patriot, the [illegible] exile, the Hungarian, the French of all classes and opinions, all were received; and, without wishing to know so much as their opinions, they at least found a resting place. Mad indeed must be the man who would arouse the country on such points. It was no wonder that the feelings of the people should have been aroused, but it was not by their feelings that they must be actuated. They must deal with the question in a strictly legal manner—not what they would wish, but what they had the right to enforce. In that view, the question required all the [illegible] which it was possible to command. He was no lawyer, yet he believed that which had been demanded by our Government was right and proper. It is not a question whether they were contraband or not. The law of nations gives the right to search for contraband of war, but not to take possession of [illegible] not to set up an officer's opinion as conclusive of the law of nations; but to convey the vessel into a neighbouring port, and to take the opinion of a competent tribunal. Until that was done the action was illegitimate. He would not go into the question of what was contraband—that was quite aside. If that ship had contained arms and ammunition for the Southern States, Captain Wilkes would have had no right to have touched a single gun or a particle of the powder until he had obtained the sanction of a competent court. The act was an illegal one, and this country must have restitution of the prisoners at the hands of the Americans. War was inconvenient, but they must be prepared at certain times to make many inconveniences. He hoped that they would have peace but this country could not be trampled upon, and he hoped America would by her reply save himself from the consequences of the foolish act of taking the prisoners from the Trent."

THE RIGHT HON. F. PEEL, M.P., at a meeting of his constituents at Bury on the 11th inst, spoke as follows on the affair of the Trent:—

"It was notorious that England had submitted for years to acts of encroachment and rudeness on the part of the United States Government which she could hardly have tolerated from any other. And why? Not from a dread of their strength, but from the instinctive aversion felt by this country to war with a nation which comprised in its population, descended mainly from Englishmen, tens of thousands who a few years ago were our fellow-countrymen. He feared that our patience had been misunderstood, and that it had encouraged the Americans to proceed to acts against us which they would not have ventured upon towards other nations. At last an act had been committed which had roused the feeling of the country, which had touched its honour in its most sensitive part; and the people had come to a firm, but melancholy resolve that they must rouse themselves if they would take security against a renewal of such acts. The taking of two gentlemen from an English mail packet, we believed to have been an illegal act. It had to be considered, first, whether they were liable to seizure. They were not liable to be seized as rebels, because a country which was carrying on a war against its own subjects as rebels had no rights of war whatever over a neutral country. They might be treated as rebels by the Northern States, but in their negotiations with this country they must argue as if they were belligerents, or they had no right whatever to do what they had done. The Southern Commissioners were not liable to seizure as contraband of war, because, elastic as that term was, he never yet heard it extended to things and persons which were coming from the seat of war and proceeding to a neutral country. They were not liable to seizure as enemy's goods, although they might have been if they were of African descent. But they were free men. They were envoys, or, at least, they were coming to this country to clothe themselves with that character. It had been laid down that ambassadors might be seized by their enemies while on their passage; but the question he had to consider was whether they might be seized upon the deck of a neutral vessel. Was there any difference between territory afloat on the high seas, which the deck of a vessel was, and territory on land? President Davis thought there was no difference, for he said that the American Government had as much right to seize the two gentlemen in the streets of London as upon the deck of the vessel. He confessed that he was not clear on that point, and he would rather reserve his opinion until he had heard the question more fully discussed. As to the other ground on which we impeached the legality of the act, there could be no question whatever. The men might have been liable to seizure, but they were not legal prizes until they were condemned by a decree of a competent court of justice. They were under the protection of England, of which they could not be divested except by judicial sentence. It would be idle to speculate upon the answer of the American Government. In the interim, our course should be to hope for the best, and prepare for the worst. The act was not yet the act of the American Government. She might disavow, she might adopt as her own, and assert the perfect legality of, the act of Captain Wilkes. If she did the latter, let us hear her reasons. But if she could not deny the wrong, and yet would deny us redress, then it would be for us to consider whether we should surrender, or whether we should maintain our right, which was the common right of all civilised nations. A weak nation in Central America, under like provocation, the other day protested, and then remained inactive. But England was strong, and her arm, which Providence had endowed with strength, would never be stronger than when it was uplifted in the cause of self-defence, and iu the cause of right and justice."

MR. SEYMOUR FITZGERALD, M.P., Under Secretary of State for Foreign Affairs in Lord Derby's Administration, at a public dinner at Horsham on the 11th inst. made the following remarks on the prospects of war with America:—

"I am sure that there is not a man in this room—there is not indeed a man in this country, who would not deplore as a national calamity our being forced to go to war to assert the rights and honour of the country. This does not arise from any fear of war. Thank God, [illegible] England is strong enough and she is rich enough to hold her own, be her enemies who they may. Nor is it necessary for us to go to war for glory. Old England has enough of that. But I believe that there is among all classes and all ranks a general wish to avoid war if it be possible. We all know the burdens which it imposes upon the people; we know the interruption which it causes to our trade and commerce; we know also the grief and distress which it some-

... spreads among private families around us; and ... all I believe there is in this country a still ... feeling—a conviction that a war which is not ... for the honour and for the interests of the country, a war instituted merely for ambition or for glory, is not only a political mistake but is also a national crime. And ... I am sure that I speak the sentiments of all when I say that it will be with the deepest pain that we draw the sword, if unhappily we are forced to do so. We love peace, but there is something that we love even more, and that is the maintenance of the national honour. And I am sure of this, that even in the interests of peace—peace is not best secured by concessions that are not due concessions, and which are inconsistent with the honour and dignity of the country. In private life it is not the bully who goes through life with ... neither is it the man who seeks by concession and by ... to everybody, and by being put down by everybody, to obtain what he calls a quiet life. It is, on the contrary, the man who is determined to take no liberties with others, is equally determined that no liberties shall be taken with him. And what is true in private life is true in politics. Of this I am assured—that there is that spirit throughout the land, that if, unhappily, we are driven to war there will be one unanimous feeling in every class, and in every rank ... We may hope—and I, for one, do hope—that by reasonable concessions on the one side, and by a generous forbearance upon the other, it is possible that peace may be maintained; but if that hope should be falsified, then I feel that there is that spirit in England that will insure the full and ample vindication of our rights and honour. Whatever may be our regret at the result of what has now been going on for some time, of this I am sure, and have the most unhesitating confidence in, that the honour of the country will be supported by Lord Palmerston, who has never been wanting in the vindication of the national rights. And side by side with that unhesitating belief I have the certain knowledge and confidence that in such a course, however much we may differ upon other subjects, Lord Palmerston will receive the unhesitating and unflinching support of those who, upon other subjects, are opposed to him. Under these circumstances, gentlemen, I have no anxiety as to the result. On Saturday the first battalion of the Guards for foreign service sails on board the steamship Persia for the stores of Canada, and we well know that the flower of our nobility and gentry are the officers of that corps, and that they are considered the fortunate and lucky ones who are selected to vindicate the honour of the country. As to the Navy, I believe there is not one here who has not read, and has not felt his heart throb as he has done so, the letters and addresses of the Naval Reserve force in our outports, who have voluntarily come forward, and in the simplest language have said that they are ready at a moment's notice to shed their heart's blood in defence of their Queen and country. Fortunately and happily the Volunteers will not be required to make any such sacrifice as that; but I am satisfied that whatever sacrifices they are called upon to make they will cheerfully make, and if every soldier be removed from these shores the force of Volunteers, with their courage, their spirits, and their unanimity, is quite sufficient to insure that the homes and hearths of Englishmen will be as safe as ever."

Mr. Danby Seymour, M.P., at the annual dinner of the Sherborne Agricultural Society, made the following remarks on the question of our cotton supply, and the mode of dealing with the American difficulty:—

"Good is always springing out of evil, and so this famine of cotton from the United States has made us look to other regions. We were before dependent entirely upon America, and it was anticipated that the loss of this supply would throw some millions of people out of employment, and leave them to starve. Now, what do we see? Cotton pouring in from other parts of the world; and the result of this interruption of the supply from America would be that we should no longer be dependent upon that country as the sole source of supply. The cotton famine had produced what no representations could from those who managed the affairs of the ... of India, which was now as free to the settler as the soil of England; but nothing would have extorted this but the failure of the cotton supply. They would scarcely believe that in some parts of India the cultivator had to pay ... per cent. of the produce of the soil to the Government, and it was easy to presume that very little capital would be employed under such circumstances. That ancient tax was exacted with great severity, so that the cultivation of the soil was kept in a state of depression, and cotton could not be produced, nor scarcely anything else. But now within the last month or so this great impediment had been removed, and India was freely open to Englishmen. That was one result of the failure of cotton from America. Then it was known that cotton grew as a weed in Africa. He had taken a great deal of interest in the suppression of that horrible traffic in slaves. He had been one of the council of a society recently formed for the suppression of that traffic—called the African Aid Society—to send the free negro back to Africa, in order to civilize his country. What would be the effect of this cotton famine? The inhabitants of Africa had been carried away to America, to Cuba, to cultivate sugar and cotton; whereas cotton was growing as a weed in their own country, and the great effect would be to promote the growth of that plant in its native soil. There was also a topic to which he must advert, and which was now stirring the hearts of all England to the lowest depth; he alluded to the affair of the Trent. Nothing could be more creditable to this country than the manner in which this terrible news had been received. Although we had been deeply indignant, still a desire had been freely expressed to abide by what was right. We said let the authorities be consulted, and if we have suffered wrong, we will look for reparation; but we will abide strictly by the law of the case. It was this respect for law which distinguished civilized from uncivilized nations. It was this respect for law which had characterized England from the first period of her existence as a nation, and which had been in a great degree the secret of her prosperity. Well, if this respect for the law is felt on the other side of the Atlantic, he did not anticipate any other than a pacific solution. Our despatch had gone forth, stating that we considered ourselves wronged according to international law, and that we demanded reparation; but when an answer came to that despatch then a new question might be brought before the nation. If the ... of America state that they are of the same opinion as ours, then, of course, they must give reparation, and the affair would be settled. But supposing they gave a contrary opinion, there would then be two courses open to us. One was instantly to send an army to demand satisfaction. The other was to take the opinion of some dispassionate jurist or neutral State before proceeding to the ultimate and last resource. Living in this 19th century, and in these civilised times, it was our duty, as far as we possibly could, to avoid entering into a quarrel, although we knew how well we should behave when once in. While it was most improbable the opinion of any dispassionate person would be against us—while it was almost certain we had suffered wrong at the hands of America, we should be adding to our strength, and our reputation for forbearance, if we took the opinion of some independent party. Then if America refused to give reparation after that, we should instantly resort to force, and never lay down our arms as long as we had power to wield them in a just cause. And he was certain they would be considered as out of the pale of civilisation, and as a lawless mob instead of a nation, in declining to listen to a dispassionate arbiter."

Mr. Cobden, M.P., has addressed a letter to Mr. Henry Catt, in reply to one inviting him to attend a meeting at Brighton for the purpose of advocating arbitration in the existing dispute with America. The following are extracts:—

"I am glad to hear that the working men of Brighton are promoting a meeting on the American question. The object of all rational men and true patriots at this moment should be to enforce upon the Government that principle of mediation or arbitration which was proposed by the British Plenipotentiary and sanctioned by the Congress of the Great Powers at Paris in 1856. The protocols of the Conferences then held, which were laid before Parliament at the time, but to which few persons have now access, disclose to us the excellent motives alleged by Lord Clarendon for proposing this 'happy innovation,' which he designed as 'a barrier against conflicts which frequently only break forth because it is not always possible to enter into explanation and to come to an understanding.' The question thus enforced in the name of the British Government was solemnly debated, every Plenipotentiary taking a part, and was adjourned for two days to enable Count Orloff to obtain the 'definitive adherence' of the Russian Government, when the following declaration was unanimously agreed to:—'The Plenipotentiaries do not hesitate to express, in the name of their Governments, the wish that States between which any serious misunderstanding may arise should, before appealing to arms, have recourse, as far as circumstances might allow, to the good offices of a friendly Power.' Now, is it possible that any case will ever arise to which this principle of mediation can be more applicable than the present? In perfect ignorance of what the answer of the American Government may be, I will assume the worst,—that they refuse to surrender the captured envoys, and offer to justify their course by appeals to international law. What can be more within the scope of the Paris resolution than that where two interested parties differ on a subtle point of international law it should be referred to the decision of a disinterested third Power? Looking at it even with a view to a practical redress of our present grievance, what other course offers so good a hope of success? The object desired is to place at liberty the gentlemen who were taken from a British vessel. I happen to know Messrs. Slidell and Mason personally, and to the latter I am indebted for many courtesies at Washington; and although, as they must know, I can have no sympathy for their cause, few persons would more rejoice more than myself to see them released from an irksome confinement. But assuming that to effect this object we declare war against the Federal States, and that these gentlemen are in consequence transferred from Boston Harbour to the interior, does any one acquainted with America believe that it would be possible for England to release them? We could destroy each other's commerce and spend countless treasure,—might pour out blood like water, and ruin for a generation two great civilizations; but the object aimed at could not be accomplished. On the contrary, if we submit the question to the adjudication of a third Power, the first step will be to place the two envoys at the disposal of the recognised tribunal. Should it be decided that they were illegally captured, they will be released; if their seizure be pronounced justifiable by international law, they will be liable to detention as prisoners of war only, and not as rebels, for the Government of Washington can have no right of appeal to the law of nations in justification of their act except by acknowledging the belligerent rights of the South. But it has been said that the Washington Government wish to insult us, with a view to provoke a war. There may be traitors or madmen in the North who would like to see their Government involved in the embarrassment of a war with England; but that a Government and people who require at this moment half a million of men in arms to meet a civil war and guard their capital should look with anything but dismay at the prospect of a war with the most powerful maritime State in the world is too monstrous a supposition to be seriously believed by those who pretend to entertain it. At all events, the true test of the disposition of the American people will be the expressed willingness on our part to resort, if necessary, to the mediation of a third party. Should such a conciliatory step meet with no better response than a desire to insult and wrong us, we should be united as one man to repel the outrage; and, unless the solemn declaration of Paris is to be impotent for all practical good, and a mere dead letter, all the Powers of Europe would in such a case be ranged on our side and ready to brand with outlawry a nation guilty of so barbarous and wanton an aggression."

City Intelligence.

Money Market, Friday.—British Funds: Consols closed at 90⅛ to ¼ for Money, and 90¼ to ⅜ for the 9th Jan.; Bank Stock, 232; Three per Cents. Reduced, 89⅝ to ½; New Three per Cents., 89⅝; India Five per Cent. Stock, 102¾ to ⅝, ex div.; Five per Cent. Enfaced Rupee Paper, 96½; Ditto Five and a Half per Cent., 102½ to 102; Exchequer Bills, March, 9s. to 12s. pm.; Ditto June, 14s. pm.—Foreign: Brazilian Four and a Half per Cents., 1852, 87 to ½, ex div.; Ditto Four and a Half per Cents., 1860, 86½, ex div.; Dutch Four per Cent. Certificates, 99¾ to ¼; Italian Five per Cents., 65½ to 65; Mexican Three per Cents., for Acct., 26⅝; Russian Three per Cents., 1859, 58½; Spanish Committee's Certificates, 5⅜; Turkish Six per Cents., 1854, for Acct., 76½.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£29,426,390	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion ..	14,776,390
		Silver Bullion	—
	£29,426,390		£29,426,390

BANKING DEPARTMENT.

Proprietors' Capital ..	£14,553,000	Government Securities (including Dead Weight Annuity) ..	£10,963,147
Rest	3,133,688	Other Securities	16,522,564
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts.)	6,794,788	Notes	9,984,680
Other Deposits	13,132,844	Gold and Silver Coin ..	834,957
Seven day and other bills	691,028		
	£38,305,348		£38,305,348

18th day of Dec., 1861. M. MARSHALL, Chief Cashier.

Gazette of the Week.

FRIDAY; *Dec.* 13—BANKRUPTS—T. Allwood, Pembroke Dock, Pembrokeshire, Dealer in Toys—T. Benton, Nottingham, Grocer—E. Bradbury, Balsall Heath, Worcestershire, Journeyman Cabinet Maker—H. Bentley, Birstal, Yorkshire, Woollen Cloth, Manufacturer—J. Bird, Nottingham, Grocer—R. Brown, Sen., Croydon Common, Butcher—W. Butler, Poole, Dorsetshire, Coach Builder—T. Bowman and ... Bowman, as advertised in the "Gazette" of 6th inst., Ashford, Nottinghamshire—G. Boswall, Richmond, Surrey, Commission Agent—J. Beckett, Stanley Mills, Staffordshire, Miller—G. Bates, Kingston upon Hull, Poulterer—R. Bryar, Halifax, Yorkshire, Traveller—C. C. Covell, Ramsgate, Kent, Poulterer—W. Cokayne, Nottingham, Schoolmaster—J. Cox, Worcester, Selling Horses by Commission—S. Clarke, Torquay, Devonshire, Fruiterer—R. Cross, Torquay, Devonshire, Cabinet Maker—F. Calan, Strand, Tailor—J. Carter, Exeter, Licensed Victualler—A. Cameron, Wellington Terrace, St John's Wood, Hotel Keeper—J. Cooper, Duffield, Derbyshire, Victualler—J. Davis, Wilmot Road, Dalston Rise, Professor of Music—E. W. Dow, Goswell Terrace, Goswell Road, Tailor—C. R. Dann, Nottingham, Optician—W. Dalby and J. Hadfield, Burton-upon-Trent, Staffordshire, Joiners—Samuel Evans, Great Coggeshall, Essex, Gardener—E. Fellows, Augustus Square, Regent's Park, Licensed Victualler—J. Frankland, Commercial Road East, Schoolmaster—W. Frayter, Norwich, Baker—A. Faulkner, B. W. Faulkner and C. J. Faulkner, Birmingham, Common Brewers—J. A. Fasana, Salford, Lancashire, Cordwainer—W. Gough, Gloucester, Innkeeper—R. Gascoyne, Peterborough, Northamptonshire, Cattle Dealer—S. George, Tregaron, Cardiganshire, Draper—W. Gillin, Chipping Wycombe, Buckinghamshire, Boot Maker—W. Gibson, Lizzard Street, St. Luke's, Ironfounder—J. W. Garrett, Woodbridge, Suffolk, Grocer—T. Gould, Cradley Heath, Staffordshire, Butcher—F. L. Gorbell, Whitechurch, Somersetshire, Schoolmaster—J. George, Brimscombe, Gloucestershire, Coal and Slate Merchant—W. Huckell, Willingham, Cambridgeshire, Farmer—M. Henderson, Castle Eden, Durham, Groom—H. G. Harrison, Half Moon Crescent, Islington—G. A. H. Hepworth, Gloucester, Surgeon—F. J. Howard, Oakley Square, Merchant's Clerk—W. Holly, Charterhouse Hinton, Somersetshire, Labourer—J. Henson, Newark-upon-Trent, Nottinghamshire, Jobber—A. Horne, Felix Terrace, Liverpool Road, Islington, Grocer and Commission Agent—H. T. P. Ireland, Torquay, Devonshire, Livery Stable Keeper—E. James, Aberystwith, Cardiganshire, Shipwright—S. O. Kingsbury, Great Oakley, Essex, Baker—F. H. Lely, Market Deeping, Lincolnshire, Glazier—J. Lloyd, Heaton Norris, Lancashire, Journeyman Bricklayer—Thomas Lee, Wymondham, Leicestershire, Jobber—T. Mollard, Birmingham, Schoolmaster—J. C. Moore, Little Tower Street, Wholesale Tea Dealer—H. A. Morris, Brighton, Widow—J. P. Mew and G. Thome, Newport and West Cowes, Isle of Wight, Engineers—P. Maguire, Arthur Street East, London Bridge, General Commission Agent—H. Monnery, New Shoreham, Sussex, Builder—W. Marshman, Frome, Somersetshire, Brush Manufacturer—S. Mitchell, Congleton, Cheshire, Tailor—J. A. Miles, Banbury, Oxfordshire, Coach Builder—W. H. Owen, Albany Road, Camberwell, Land Surveyor—T. N. Potter, Smalley, Derbyshire, Butcher—H. Pedgrift, Laxfield, Suffolk, Surgeon—J. Porter, Lisson Grove, Marylebone, Looking Glass Manufacturer—J. Pattison, Gateshead, Durham, Farmer—T. J. Pike, North Audley Street, Gilder—S. L. Philips, Gloucester, Licensed Brewer—B. M. Ryder, Kingston-upon-Hill, Bottle Dealer—J. N. Rooke, Princes Street, Chelsea, Solicitor's Clerk—F. Roberts, Manchester, Engraver—J. Roebuck, Woburn, Bedfordshire, Baker—S. Reeves, Barkby, Leicestershire—W. Sketchley, Leicester, Builder—T. Stamp, Devonshire, Builder—R. Sugden, Newcastle, Alkali Manufacturer—Charles Sissons, Bingham, Nottinghamshire, Smallware and General Dealer—William Thomas Spain, Albion Terrace, Chelsea, Solicitor's Clerk—James Stevensson, Leeds, Yorkshire, Salesman to a Horsedealer—J. Sawyer, Curtain Road, Shoreditch, Livery Stable Keeper—F. Smith, Fulham, Middlesex, Brewer—S. Smith, Bushall, Staffordshire, Licensed Victualler—H. W. Shaller, Munster Street, Regent's Park, Greengrocer and Coal Dealer—D. Simpson, Wolstanton, Staffordshire, Beerseller—J. T. Newton, Walsall, Staffordshire, Lime Master—W. B. Twyman, Ramsgate, Kent, Upholsterer—G. Twyman, Ramsgate, Kent, Upholsterer—W. Tassell, Liverpool, Hosier—L. Toft, Newchapel, Staffordshire, Potter—A. Uttley, Bacup, Lancashire, Chemist and Druggist—S. VinEall, Rotherfield, Sussex, Corn and Coal Merchant—J. R. Vivian, Redruth, Cornwall, Cabinet Maker—J. Wilson, Margate, Kent, Dealer in Toys—D. Wood, Bramley, Yorkshire, Cloth Manufacturer—R. J. Waugh, Lanchester, Durham, Mason—R. Williams, Llantrissant, Glamorganshire, Beer Retailer—E. Wyatt, Dwygyfylchi, Carnarvonshire, Hotel Keeper—J. Wilder, Aston-juxta-Birmingham, Licensed Victualler—J. Ward, Escomb, Durham, Bootmaker—G. Winter, Kingston upon Hull, Yorkshire, Out of Business—T. C. Wilkinson, New Hatcham, Old Kent Road, Baker.

SCOTCH SEQUESTRATIONS—Aitken and Co., Glasgow, Manufacturers and Warehousemen—J. G. Campbell and Co., Bridgeton, Glasgow, Silk Spinners and Merchants—A. Carmichael, Edinburgh, Flesher—Campsie and W. Reid, A. M'Neilage, and J. Beattie, Glenmill Bleaching Company—D. Napier, Glasgow, Contractor.

TUESDAY: *Dec.* 17—BANKRUPTS.—T. Aston, Wolverhampton, Engine Manufacturer—E. Brown, Shieldfield, Newcastle-upon-Tyne, Draper's Assistant—J. Burke, Louth, Lincolnshire, Tailor—J. Beadsmoore, Ashby-de-la-Zouch, Leicestershire, Printer—W. H. Bradbury, Longton, Staffordshire, Grocer—F. Burt, Meriden, Warwickshire, Maltster—G. Burridge, Birmingham, Lapidary—B. Burdett, Cumberworth, Yorkshire, Skirt Manufacturer—T. Bulbeck, Chichester, Timber Merchant—W. Blundell, Edward's Street, Portman Square, Dentist—G. Barrett, Landport, Hampshire, Greengrocer—W. Bull, St. John's Square, Clerkenwell, Bath Proprietor—A. Colebrook, Maidstone, Kent, Butcher—J. H. Collier, Princes End, Staffordshire, Tailor—A. Campbell, Newcastle upon Tyne, Master Mariner—B. Clarke, Hullavington, Wiltshire, Cattle Dealer—E. Cahan (and not Capan, as previously advertised), Strand, Tailor—H. R. Carr, sen., Rochester Place, Tothill Fields, Ironfounder—W. Dransfield, Milnhouse Dale, Derbyshire, Licensed Victualler—G. Dimond, Gosport, Hampshire, Dealer in Stationery—G. Dollimore, Ivinghoe, Buckinghamshire, Grocer—J. Drew, High Street, Camberwell, Attorney's Clerk—R. A. J. Davies, Kingston Russell Place, Oakley Square, Surgeon—W. Everest, Brighton, Attorney-at-Law—T. Evans, Liverpool, Car Proprietor—J. Eglinton, Euston Road, Dealer in Carriages—L. Evans, Portmadoc, Carnarvonshire, Tailor—J. Eccles, Paddock, Yorkshire, Grocer—Charles Ford, Poulton-le-Sands, Lancashire, Doctor of Medicine—Edmund Fellows, Hove, Sussex, Licensed Victualler—J. Foxall, Ealing—J. Gallagher, Liverpool, Fruit Dealer—Robert German, Regent Street, Journeyman Carpenter—T. Gribble, West Teignmouth, Devonshire, Innkeeper—J. Glover, Swansea, Oil and Grease Manufacturer—H. C. Hopkins, Dorset Place, Pall Mall, Confectioner—H. T. Hunt, Goldsmith Row, Hackney Road, Tailor—F. Hoggard, Rudston, Yorkshire, Tailor—W. L. Howard, Bolwell Terrace, Lambeth, Clerk in the Admiralty, Somerset House—J. Home, Eversholt Street, Hampstead Road—J. Harrison, Chin Place, Kentish Town, Corn Merchant—T. Hilkins, Carbrooke, Norfolk, General Smith—A. Harrison, Fatfield, Durham, Licensed Victualler—A. Haines, Cheltenham, Labourer—J. Hiles, Bloxwich, Staffordshire, Victualler—J. Hardman, Newchurch, Lancashire, Confectioner—E. How, Golden Lane, St. Luke's, Glass Dealer—T. Holroyd, Halifax, Yorkshire, Blacksmith—L. Hindson, Newcastle upon Tyne, Tailor—J. Holmes, Doncaster, Tailor—R. Hicks, Bristol, Egg Dealer—C. Inch, Torquay, Devonshire, Fly or Cab Proprietor—W. Inman, Little Preston, Yorkshire, Banksman—W. Jones, Liverpool, General Dealer—A. Jennings, Deal, Butcher—W. Johns, West Derby, Lancashire, Commercial Traveller—C. Keogh, Park Road, Old Kent Road, Cab Proprietor—G. W. Keenan, Great St. Andrew Street, Bloomsbury, Undertaker—Thomas Lister, Whittington, Derbyshire, Colliery Proprietor—William Leedham, Sherburn, Yorkshire, Shopkeeper—Charles Edmund, Meredith, Manchester, Law Stationer—A. C. Marsden, Colchester, Essex, Draper—E. Maxted, Lower Eaton Street, Pimlico, Hairdresser—J. Mills, Dudley, Worcestershire, Baker—H. Morris, Guildford Street, Russell Square, Railway Clerk—I. Mason, Aberaman, Glamorganshire, Shoemaker—J. P. Mew and G. Thorne (not Thome as advertised in last Friday's "Gazette"), Newport, Isle of Wight, Engineers—J. Newall, Crewe, Cheshire, Licensed Victualler—C. Parkinson, Newmarket, Schoolmistress—J. Potter, Cotmanhay, Derbyshire—J. Purdue, Brook Street, Holborn—J. Palmer, Cheyne Walk, Chelsea, Printer—G. Pauley, Danvers Street, Chelsea, Commercial Clerk—G. Richards, Birmingham, Packing Case Maker—R. Russell, Liverpool, Lithographic Printer—J. Rees, Cardiff, Glamorganshire, Grocer—J. Rogers, Feltham, Middlesex, Market Gardener—J. Rackett, Bell Yard, Carey Street, Tin Box Manufacturer—C. Sills, Uxbridge, Horse Dealer—W. Stanley, Blackden, Cheshire, Farm Servant—W. Sheppard, Manchester, Licensed Victualler—J. Stack, Sheffield, Leather Cutter—J. Starr, Frome Selwood, Somersetshire, Cloth Dresser—C. Smart, Thetford, Norfolk, Ironmonger—A. Stackrengri, otherwise Stowrengri, Cardiff, Glamorganshire, Cattle Dealer—I. Samuel, Bury Street, St. Mary Axe, Jeweller—F. Sturt, Thomas's Terrace, Islington, Beer Retailer—Z. Sickling, Butler's Alley, Moor Lane, Fancy Stick Maker—H. Shimell (known and calling himself H. Smith), White Horse Yard, Islington, Livery Stable Keeper—Griffith Thomas, Llanot, Carnarvonshire, Corn Dealer—J. B. Tapp & C. Tapp, Chesterfield, Derbyshire, Boiler Makers—T. Turrall, Coventry, Cattle Dealer—W. Thomasson, Liverpool, Wheelwright—S. W. L. Thurburn, Wolverhampton, Commis. Agent—B. Tayler, Frederick Villas, Dalston, Merchant's Clerk—C. J. Tanner, Portland Terrace, Dalston, Linendraper—R. Thornton, Huddersfield, Woollen Dyer—W. Vaughan, Bristol, Fish Dealer—D. W. Vimbs, Cadoxton juxta Neath, Glamorganshire, Shorthand Writer—J. H. B. Vaughan, Leinster Square, Hyde Park—W. White, Pembroke Dock, Pembrokeshire, Licensed Victualler—S. Wood, Huddersfield, Dealer in German Yeast—S. Whitehouse, Birmingham, Boot and Shoe Maker—W. Ward, Coventry, Ribbon Manufacturer—A. Worrall, Dudley, Worcestershire, Architect—A. Watts, Freemantle, Hampshire, Builder—R. Whitehead, Coventry, Butcher—W. Williamson, College Street, Putney, Linendraper—P. Waterhouse, Watford, Herefordshire, Baker—J. Walker, Manchester, Agent—J. Wymark, Brighton, Carpenter.

SCOTCH SEQUESTRATIONS.—W. Murdoch, Glasgow, Wine and Spirit Merchant—A. King, Motherwell, Lanarkshire, Innkeeper—W. M. Young, Paisley, Manufacturer—J. M'Kinlay, Rothesay, Tailor—A. Taylor, Barrhead, Grocer—A. Dunbar, Cothall, Farmer.

Metropolis and its Vicinity.

Embankment of the South Side of the Thames.—The Royal Commission appointed to consider the embankment of the Thames on the southern side held their first meeting at the Mansion House on Tuesday, the Lord Mayor in the chair. The first witness called was Mr. Taylor, one of the churchwardens of Lambeth, who described the injury sustained by the poor of that district from the inundations of the river, and said that the damage done was so great that they had raised a "flooding fund," out of which the sufferers by the floods were assisted. Nothing but an universal raising of the wharves would remedy the evil, but there was a difficulty in embanking the shore throughout the whole length, as in Lambeth there were certain ancient rights of way existing which could not be blocked up. It might, however, be possible to increase the incline. Mr. Knyvett, secretary to the Archbishop of Canterbury, said that these floods occurred about twenty times a year; they came up to the Palace gates, and the porter had to make a barricade 18 inches deep to keep the water out of the lodge. The mud bank at the side of the river was perfectly pestilential; the conservators of the Thames some time since improved the state of things by throwing rubbish into it at the sides, but that had now become covered, and the benefit derived from it had consequently been decreased. He hoped that any scheme for embanking the Thames would lead to the abolition of the bone boiling and manure establishments between the Palace and Vauxhall Bridge. The floods in Bishop's Walk had increased in depth during the last two years. Any system of embankment to do away with the mud bank in some degree and cover it with water would be a benefit. Mr. Silk, architect and engineer, said he was acquainted with the south side of the river for some distance above and below London Bridge. He had been engaged in the erection of some of the wharves destroyed by the late disastrous fire in Tooley Street, and although every precaution to prevent flooding had been taken, those wharves were occasionally inundated. He was now engaged in reconstructing them and the warehouses, and the level would be 12 inches higher than they were before to prevent any further inundation. With regard to making a roadway in front of the wharves, he thought it quite impracticable on the east side of London Bridge, though it might perhaps be feasible on the west side. The inquiry was then adjourned.

International Exhibition.—The difficulties connected with the allotment of the space are now nearly overcome. Within the last few days notices have been sent to the intending exhibitors in eight classes, stating whether their claims for space have been acceded to or rejected. The following is the list of the classes, with the number of persons applying for space to exhibit in them:—Class 1. Mining, metallurgy, &c., 402 applicants; Class 5. Railway plant, 132 applicants; Class 7A. Spinning and weaving machinery, 116 applicants; Class 7B. Machines and tools employed in the manufacture of wood, metal, &c., 288 applicants; Class 8. Machinery in general, 257 applicants; Class 9. Agricultural and horticultural machines and implements, 288 applicants; Class 11. Military engineering, architectural, and building contrivances, 178 applicants; Class 12. Naval architecture, ships' tackle, 192 applicants; Class 17. Surgical instruments and appliances, 163 applicants. About one-fifth of the entire number of applicants are disposed of in these classes; the proportion rejected is said to be about 40 per cent., and the reductions in the space granted have been very extensive. Each person to whom an allotment has been made has been requested to signify his acceptance thereof, and in those cases in which this acceptance was not signified at once the space so placed at his disposal has been allotted to other applicants. Notice has also been issued that no letter can be attended to which is not headed with the number of the class in which the exhibitor's goods are to be shown. It appears that in addition to the sums paid down by Mr. Morrish, Mr. Sanders, M. Viellard, and M. Martin, for the privilege of supplying the refreshments, they will also pay a certain sum per head upon all visitors. The two English contractors pay five-eighths of a penny, the French contractors are to pay ½d. on the first 4,000,000 of visitors, and ¼d. for each visitor above that number. The sum expected to be received under the contracts is 30,000*l*. The arrangements which are making by foreign countries to stand well at the Exhibition are of the most extensive character. The French courts will be fitted and furnished in a most superb manner, and everything that money and taste can do to make it worthy of the empire and of the occasion will be done. The whole of the space assigned to France has been treated with a view to its general effect. The sides of the principal court will be formed entirely of mirrors. It is confidently expected that the Emperor and Empress of the French will be present at the opening of the Exhibition on the 1st of May. The Emperor of Austria has given his consent to the famous band of the Wellington Regiment of the Austrian army visiting London during the Exhibition. This band consists of 184 performers, each of whom is capable of performing on various instruments. The pictures and works of art to be selected from the palaces of the Emperor, and from many of the principal Austrian nobles, will form a striking feature in the fine art collection. Should the peace of the world not be disturbed by hostilities, it is anticipated that every crowned head in Europe will visit London next year.

Blackfriars Bridge.—At a meeting of the Common Council last week the chairman of the Bridge House Committee brought up a report of that committee, to whom it had been referred to obtain designs and estimates for the construction of a new bridge at Blackfriars, recommending for adoption a design sent in by Mr. Thomas Page, for an iron bridge of three arches, at the estimated cost of 245,000*l*. After some discussion, the court resolved that nothing should be done until the report is printed.

Battersea, Putney, and Hampton Bridges.—The Conservators of the Thames have had an interview with Mr. Cowper, the First Commissioner of Works, to represent to him the dangerous obstructions which the old pile bridges across the river at Battersea, Putney, and Hampton offer to the navigation. The deputation pressed upon the right hon. gentleman the necessity for the Government taking steps to cause their removal, and the substitution of structures which would not impede the navigation. They stated that Battersea and Putney bridges really exclude from the Thames, between Chelsea and Richmond, vessels of the size now rendered necessary by the traffic to the Brentford Dock and the extension of the metropolis on both sides of the river nearly as far as Richmond. It is understood that the subject will receive the attention of the Government.

The late Bishop Blomfield.—A committee, consisting of the Marquis of Lansdowne, Lord Overstone, the Bishop of Oxford, Sir Walter James, Bart., and Mr. Beresford Hope, having been appointed to make choice of a design for a monument to the late Dr. Blomfield, Bishop of London, have selected a model by Mr. George Richmond, R.A., and the Dean and Chapter of St. Paul's have granted an eligible site for it in the south aisle of the Cathedral.

The Main Drainage.—At the last meeting of the Metropolitan Board of Works the report of the main drainage committee, recommending the acceptance of the tender of Mr. Thomas Pearson for the execution of the works in connection with the southern high level sewer for the sum of 18,087*l*., subject to the result of inquiries as to his responsibility and that of his sureties being satisfactory, was agreed to. It was also resolved, on the recommendation of the committee, that the arrangements for the execution of the northern middle level sewer works along Oxford Street, during the period of the Exhibition of 1862, be left to the discretion of the engineer under the provisions of the contract.

Shilling Telegrams.—The United Kingdom Telegraph Company for the last few weeks have been working their lines between London, Birmingham, Manchester, and Liverpool at the reduced charge of a shilling for 20 words, the same charge being made between any of the intermediate stations. The former rate for telegrams of the same number of words from London to Manchester or Liverpool was 4*s*., and the reduction is therefore very considerable. This is only the first section of a network of telegraph lines which is intended to embrace all the large towns of the kingdom at the uniform charge of 1*s*. a message, whatever may be the distance.

New Mission in the Upper Indus.—Sir Herbert Edwardes, K.C.B., who is about to return to India as Commissioner of the Cis-Sutlej States, Punjaub, has recently brought before the committee of the Church Missionary Society a letter from Colonel Reynell Taylor, Commissioner of the Trans-Sutlej States, earnestly recommending a new mission at two or three of the great towns on the Upper Indus, offering 1000*l*. on its establishment, and enclosing a letter of encouragement from Sir Robert Montgomery, Lieutenant-Governor of the Punjaub, in which he promises a further donation of 300*l*. Sir H. Edwardes has given the committee a description of the vigorous and energetic character of the travelling merchant tribes, Lohanis, Beluchis, and others who would thus be reached, whose caravans penetrate from Bokhara to Calcutta, and has pointed out how they, if brought to acknowledge the truth of the Gospel, would indeed be "itinerant Christians." The committee unanimously resolved to accept Colonel Taylor's generous offer.

Adulteration of Food.—The *Lancet* has again taken up the important question of the adulteration of food, and has recently published a report on the adulteration of pickles, bottled fruits, and vegetables. Of seven samples of greengages examined four were found to be coloured with copper. Of five samples of gooseberries analysed, three contained copper. A sample of rhubarb was also coloured with copper. Of 10 samples of pickles, including French beans, gherkins, mixed pickles, and West India pickles, copper was found in seven samples, and in some of them in large amount. Of five tins of preserved Peas this poisonous metal was present in two of the samples. Of four samples of haricots verts or French beans, three were highly coloured with copper, as well as a sample of mixed vegetables. Thus of 33 samples analysed, copper was present, frequently in considerable amount, in no less than 21 of the samples, or nearly two-thirds. This result the *Lancet* regards as "most disgraceful," and states that there is no excuse for it whatever. Bottled and preserved fruits and vegetables do not in their preparation come in contact with copper at all, and pickles may be prepared in utensils of iron. The pickles thus made are less green; but the fact of their being of better flavour and much more wholesome ought to be more than sufficient to counterbalance so trifling a disadvantage. The blame in the case is asserted to rest mainly with certain of the manufacturers and preparers of these articles. If these would set their faces against a practice so dangerous there would soon be an end of this adulteration, particularly as the addition of copper to any vegetable substance used as an article of food is a violation of the recent Act for the Prevention of Adulteration, and exposes the parties to prosecution. In a former article the *Lancet* gave the results of the analysis of 33 samples of mustard. Of these 29 consisted of mixtures of turmeric, wheat flour, and mustard; and in addition, in one sample, sulphate of lime or plaster of Paris; while four only were genuine, and were composed wholly of mustard. As a rule, the prices paid for the adulterated mustard were quite as great as for the genuine.

Clearance of the Debtors' Prisons.—The second monthly visitation of the debtors' prisons in Whitecross Street and Horsemonger Lane has been commenced by Mr. Registrar Millar and Mr. Registrar Hazlitt. The list of prisoners detained in Whitecross Street on the 1st December, numbered 75, showing a considerable diminution as compared with the list of the 1st November, which numbered 186. Mr. Registrar Millar went through 26 cases, in five of which he adjudicated the prisoners bankrupts, discharging three forthwith. The remaining cases were those of persons who had been discharged since the date of the gaoler's return, or of those who had proceedings pending in the Insolvent Debtors' Court, or in the Bankruptcy Court. At Horsemonger Lane the list of prisoners detained in custody on the 1st December amounted to only 12, while those in prison on the 1st November numbered 47. Of the cases on the list only 9 came before Mr. Registrar Hazlitt, 3 having been discharged since the date of the return. In 5 cases the prisoners were adjudicated bankrupts, and 4 others received an immediate discharge. In the other case a discharge could not be given, as the debt was for damages for breach of promise of marriage, and the act expressly deprives registrars of the power of liberating prisoners detained under such circumstances.

The Christmas Holidays.—It is understood that the usual steps will be taken to cause Thursday next, the day after Christmas Day, to be kept as a holiday to such extent as may be practicable at the Stock Exchange and in the city generally. It is considered probable that as the produce markets will be closed, there will not be much business after Christmas Day till the Monday following, as it is not expected that the reply of the Washington Cabinet, determining the question of peace or war, will be received until Sunday the 29th, or Monday the 30th.

The Loss of the North Briton.—Mr. Raffles, stipendiary magistrate at Liverpool, and Captain Harris, nautical assessor to the Board of Trade, have held an inquiry into the loss of the North Briton on the morning of the 5th of November on the coast of Labrador. They report that Captain Grange, the commander of the vessel, countermanded an order he had previously given to the second mate to take soundings during the night, and that for this single omission he must be pronounced in default, notwithstanding his previous vigilance and caution. They therefore recommend that their lordships should return his certificate to Capt. Grange, with a caution, which will, in their opinion, meet the merits of the case. They conclude by saying that the result of this inquiry following so closely upon that which took place into the loss of the Canadian clearly shows that the passage by the Canadian Channel and the Straits of Belleisle is fraught with danger and difficulty, except during the height of the season and in the clearest weather.

The Drury Lane Murder.—A respite has been received from the Home Office for the boy Reeves. He was to have been executed on Monday next. It is understood that the sentence will be commuted to penal servitude for life.

Great Fire at the Thames Iron Ship Works.—On Monday morning between 2 and 3 o'clock, a fire broke out in the premises of the Thames Iron Shipbuilding Company, on the lower side of Blackwall, near the Barking Road. It broke out in the mould-room, a building 90 feet long and 46 feet wide, containing the patterns of the Warrior, and the models for another vessel. A plentiful supply of water being at hand the firemen succeeded in preventing the flames from spreading beyond the room, but both it and its contents were destroyed. The angle iron bending departments were also considerably damaged by fire and water. The company, it is understood, were insured.

The Public Health.—The Registrar-General's Weekly Report states that the number of deaths registered in the week that ended Saturday, Dec. 14, was 1283 If the rate of mortality had been equal to that obtained by calculation from the returns of the corresponding weeks in the 10 previous years, the deaths would have been 1384. During the week the births of 924 boys and 876 girls, in all 1800 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 704.

Provincial.

CAMBRIDGE.—By the death of the Prince Consort the Chancellorship of the University of Cambridge becomes vacant. The election of a Chancellor must be within 14 days after the vacancy, and is *more burgen*-[illegible] His Royal Highness was elected in 1847, on the death of the Duke of Northumberland, on which occasion he was opposed by the late Earl of Powis. On the part of many members of the University, a desire prevails to elect the Prince of Wales as successor to his father, but his youth it is thought may be a bar to that wish being fulfilled. The other names which are freely mentioned in connection with the Chancellorship are the Marquis of Lansdowne, of Trinity (LL.D. 1811); Lord Palmerston, of St. John's (M.A. 1806); the Duke of Devonshire, of Trinity, who was second wrangler in 1829; the Earl of Hardwicke, of Queen's (LL.D. 1835); the Earl of Zetland, of Trinity (M.A. 1815); the Duke of Buccleuch, of St. John's (M.A. 1837); and Lord Lyndhurst, of Trinity, at present Lord High Steward of the University. It is generally believed that Lord Palmerston will be brought forward by the Liberals, and the Duke of Buccleugh by the Conservatives.

CARDIFF.—On Friday, in accordance with a warrant from the Secretary of State, eight foreign seamen (Italians, Americans, Germans, and Austrians), comprising the crew of the American ship Pleiades, were brought before the magistrates, charged with the murder of Edward Blyn, the chief mate, on the 12th inst. It appeared from the evidence of the captain and second mate that the crew for some time had manifested very bitter feelings against the mates for their harsh conduct towards them, and had at length decided in council to murder them, on a favourable opportunity presenting itself. About midnight on the 12th, when the chief mate went to call the watch, they rushed upon him and stabbed him in two places. They then knocked down the second mate and stabbed him with their knives in seven places, and would no doubt have killed him if the captain had not rushed on deck with a loaded pistol and fired it at the men. A third officer called the interpreter is supposed to have been thrown overboard, for he was never seen afterwards. The chief mate lingered in great agony until the 15th, when he died from the effects of his wounds. The magistrates dismissed five of the prisoners and detained the three others, who will be handed over to the American authorities on a charge of wilful murder.

COCKERMOUTH.—A meeting of land-owners who have frontage on the river Derwent was held in this town on the 20th ult., to receive the report of the committee appointed at a former meeting. The Hon. Percy Wyndham, M.P., presided. The committee recommended that all the landowners having river frontage should be invited to co-operate in preserving the Derwent and its tributaries, the necessary expenses being defrayed by voluntary contributions made in proportion to the extent of the frontage owned. Landowners were to have tickets, giving the bearer leave to fish on certain days, in proportion to the amount contributed; and visitors were to have tickets at certain rates. They recommended that a donation fund should be opened to defray the cost of erecting a fish ladder at the Fitz weir, which will be the chief obstacle to salmon, and that the secretary should engage watchers at once. The rate suggested by the committee for the voluntary contribution of landowners was one halfpenny per yard of bank frontage for the Derwent, and one farthing per yard for the Cocker. The committee mentioned that in the last fortnight of the season 20 salmon, averaging 15lb. weight a piece, had been caught in the Derwent, in a distance of not more than 10 miles of water. The committee expressed a hope that the proprietors would net with extreme moderation. Proposals had been made for breeding fish artificially, and the committee had no doubt the river might some day become a first-rate salmon-producing stream. Considerable discussion took place upon the report, in which Mr. Steel, M.P., the chairman, and several gentlemen of the neighbourhood took part. The chairman said that it had been ascertained since the report was drawn up that a good many more salmon had been caught in the last fortnight of the season than the 20 mentioned in the report. The recommendations of the committee, with some slight modifications, were agreed to. Mr. Eden, one of the newly appointed inspectors of fisheries, said he had no doubt from what he had seen of the river that if they could only protect it from poachers they might make the Derwent a first-rate salmon-producing river. The proceedings concluded with a vote of thanks to the chairman.

EXETER.—At the last Court of Quarter Sessions for Devon a committee was appointed to devise the best means of carrying into effect the Salmon Fisheries Act passed in the last Session of Parliament. On Friday the committee, consisting of Mr. Kekewich, M.P.; the Earl of Devon, Sir S. Northcote, M.P.; Sir L. Palk, M.P.; the Hon. Mark Rolle, Sir M. Lopes, M.P.; Sir J Duckworth, M.P.; Colonel Davie, M.P.; and others, held a meeting in the Castle. A report was adopted, in which it was recommended that associations in connection with the rivers of Devon should be formed, with a view to the appointment and payment of conservators. It also suggested the employment of the county police in seizing unseasonable fish, and giving information of any such fish which they may discover being sent off by railway or other conveyance. If the permission of the Admiralty could be obtained, it was thought that the Coastguard might be employed in preventing fishing with illegal nets, during close time, in the estuaries of rivers. Mr. Eden, one of the inspectors of salmon fisheries, attended and gave information as to the provisions of the Act, and the best way of carrying them out.

LIVERPOOL.—The chief mate of the American ship Southampton, which arrived at Liverpool on the 10th inst. from New York, was murdered on the voyage by a seaman named Duffy. The vessel sailed on the 16th ult., and on the 1st inst. the chief officer directed Duffy to go aloft to perform some duty. He grumbled a good deal, but went aloft, and on being told to come down immediately made a rush upon the mate with a knife, and stabbed him to the heart. The officer fell dead upon the deck, and Duffy, walking to the forecastle, gave the knife, stained with blood, to one of the seaman, telling him what he had done with it. When taken into custody at Liverpool, he told the officer that deceased had, in the first instance, struck him with a belaying pin, and grumbled at him so much that he could stand it no longer. He then struck deceased with the knife, but did not intend to kill him. The prisoner will be detained in custody until some action is taken by the American Minister.

NORWICH.—For the third time within a comparatively limited period, James Blomfield Rush, son of the notorious criminal, is in custody, charged with breaking into the dwelling house of Charles Bradfield, coachman to the Rev. W. W. Andrews, at Hethersett, on Sunday, the 1st inst. Footmarks corresponding with his boots were found under the window, and the prisoner was seen close by about the time of the robbery. On Saturday he was brought up for examination, and remanded for further inquiry.

PENZANCE.—A monument is about to be erected in this town to the memory of Sir Humphrey Davy. It will consist of a granite column and base, surmounted with a statue of the great chemist, holding a safety lamp in his hand.

PLYMOUTH.—Commander Williams, R.N., of the Trent, was entertained at dinner on Thursday the 12th inst. by the Royal Western Yacht Club, of which he is a member, in the club dining room, at Millbay. The chairman, Mr. J. C. Thierens, in proposing the toast of the evening, remarked that, however much they might differ in opinion as to the course of events, they were united in their approval of the prompt, dignified, and happily worded protest made by their guest under trying circumstances against the recent violation of the sanctity of asylum. They were proud of him as a member of their body. Commander Williams, in acknowledging the toast, referred to the distorted accounts of the affair which had appeared in America, and detailed at great length the particulars of the outrage. The following is an abstract of his speech:—

"One paper asserted that 'if the act itself was justifiable, the manner in which it had been performed was unexceptionable.' The facts plainly told would lead to a widely different conclusion. When he was told that a suspicious vessel had come in sight, little dreaming of what was to happen, he was on the main deck smoking a pipe and reading the Essays and Reviews. A few minutes afterwards the Trent hoisted her ensign, but this signal was not responded to. As they approached the San Jacinto a shot was fired across their bows. They then put the helm of the Trent astarboard and approached the Federal ship. They were not a cable's length from her when a shell was fired across her bows; and that was the manner of exercising the right of search which had been referred to by the American press as unexceptionable. Again, it was said by the American papers 'that Captain Wilkes could not have received instructions from his Government at Washington, for that he was on his return from the western coast of Africa.' That was not the case. On the night of the 16th of October, or on the morning of the 17th, he saw the San Jacinto off St. Thomas. On his return to Havannah on the 6th of November he found that the San Jacinto had been to Havannah, from St. Thomas, that she had coaled there, and that two of her officers, passing themselves off as Southerners in their hearts, had lunched with Mr. Slidell and family and extracted from them their intended movements. Miss Slidell branded one of the officers to his face with his infamy, having been her father's guest not 10 days before. Mr. Fairfax had denied that the marines made a rush towards Miss Slidell, at the charge, with fixed bayonets. He knew that his hearers would believe they did when he laid his hand on his heart, and said it was true that they had done so. He had been accused of gasconade. Certainly when the marines rushed on at the point of the bayonet, he had just time to put his body between their bayonets and Miss Slidell, and to order them back as cowardly poltroons; but he bullied no one. After giving other details of the scene on board the Trent, he said that since his arrival in England he had received the approbation of the Government."

SALISBURY.—A meeting of the subscribers to the Herbert memorial took place at the Council House in this city on Tuesday, Mr. Sotheron Estcourt, M.P., in the chair, to receive the report of a committee appointed at the general meeting held a few months ago. It stated that the sums received and promised up to the 3d ult. were, for the Convalescent Hospital 3095*l.*, for the statue 1078*l.* 1*s.* 6*d.*, and for disposal by the committee 369*l.* 12*s.* The committee recommended that the statue should be of bronze. They estimated the cost at 2000*l.*, and proposed to intrust its erection to Baron Marochetti, an artist in whom Lady Herbert was known to have confidence. With regard to the second object subscribed for, they recommended the adoption of the existing hospital at Charmouth, which was established by Lord Herbert. They thought that the funds collected should be laid out in good securities, and that the interest should be employed in augmenting the funds of this institution, which has been hitherto dependent on voluntary benevolence, they at the same time reserving a right, if they thought fit, to remove the home to another spot. They trusted that Miss Nightingale would yet be able to bestow her care upon the institution, and so discharge a service of love to the memory of the chief whom she so highly prized. The report was adopted, and a committee nominated to carry out the purposes of its recommendation, consisting of Mr. G. Wingfield Digby, of Sherborne Castle; Mr. J. H. Jacob, of Salisbury; and Mr. Hinsman, of Dumford House, Wilts.

SHEFFIELD.—Another dreadful crime was committed in the neighbourhood of this town on the evening of the 12th inst. Alfred Hinchliffe, a gardener, about 27 years of age, residing in the village of Treeton, had sold a pig for 10*l.* 8*s.* to Mr. Watts, grocer of Attercliffe, and obtained the assistance of an old schoolfellow named Thomas Fawley, a butcher at Attercliffe, in killing the pig. After receiving the 10*l.* 8*s.*, the price of the pig, he left the premises of Mr. Watts about 4 o'clock in the afternoon, and went with Fawley to a neighbouring beerhouse, where the two remained drinking until about half-past 5, when they left in company. Hinchliffe was "fresh," but apparently able to walk home. Shirland Lane, a dark, narrow road, leads from Attercliffe to the village of Darnall, and was Hinchliffe's nearest way home. The two friends parted at the end of this lane, Fawley declining the invitation of Hinchliffe to go into an adjoining public-house and have a final glass, and advising him to go straight home. A few minutes afterwards Hinchliffe was seen a short distance up the lane, with his clothes in a disordered state, by a young man named Wood. He had not then been attacked, but Wood heard the sound of approaching footsteps when he had passed Hinchliffe only a short distance, and also heard a conversation between Hinchliffe and two men who had gone up the lane. He, however, proceeded to Darnall, not supposing that anything was wrong. Between 7 and 8 o'clock two miners found Hinchliffe lying helpless on the footpath in a dark part of the lane, about 200 yards from the main street at Attercliffe. They supposed the man was intoxicated, and reported the circumstance in Attercliffe. Some of the residents went to the place, and found that the man was dead. The body was removed to a public-house, and it was then found that one of his trousers pockets had been cut out and the other torn open. He had been robbed of 10*l.* 8*s.* and everything else he had upon him except a pocket-book. There were no marks of violence on the body externally, except that the face appeared to be a little swollen. Death is believed to have been caused by strangulation, but that is not yet positively known. The eyes were filled with mud, which had evidently been thrust in by his assailants, to prevent him from recognising them. At a late hour on Thursday night the police apprehended Fawley on suspicion of being concerned in the robbery and murder, but no money was found upon him, and as yet the evidence against him is but slight. Deceased was a single man, but was making preparations for being married at Christmas.

SOUTHAMPTON.—On Friday morning, about 2 o'clock, as the West India mail steamer Atrato was coming up Channel off the Start, she observed a steamer, with two green lights and one white, coming at full speed towards her. Captain Woolley promptly altered the course of his ship, and thus avoided a collision. The steamer then continued chasing, and altered her lights, taking in one green and putting red in its place. The Atrato was going slow at the time, it being very thick and dark. She was however put to full speed, and left the other behind.—The Nashville, Confederate steamer, which damaged her bottom whilst running the blockade at Charleston, was taken into the graving dock on Friday for repairs.

STOCKTON.—On Thursday morning, a fire broke out in the north bedroom at Wynyard Hall, the seat of the Marchioness of Londonderry, near this town. At one time it threatened to be of a very destructive character, but fortunately the flames were confined to the bedroom and the chapel, both of which were destroyed. The fire was then extinguished without any very serious damage.

WHITTLESEY.—It has been decided that the memorial to the late Sir Harry Smith in this town shall consist of a marble bust and a mural tablet, and that the remainder of the funds subscribed shall be expended in restoring the chapel of St. Mary's Church, in which the General was educated, and which was used as a schoolroom in his boyhood.

WORCESTER.—Some workmen employed on the restorations now in progress in the Cathedral of this city, while making an excavation in the north wall of the choir, near the high altar, last week, came upon a stone coffin, portions of which falling away exposed to view the remains of a man dressed in canonicals. At first, the coffin was supposed to be that of a church dignitary buried in the reign of Charles II., a tablet to whose memory stood on the wall above. On further examination, however, the remains turned out to be those of a Roman Catholic bishop. Part of the mitre, a piece of remarkably fine gold, was in good preservation, as were also portions of the chasuble. On the breast of the skeleton lay a golden paten, which is now in the possession of the dean. The bones were black and decayed, but the skull was in very good preservation. Some parts of the vestments were still firm and tolerably

perfect, but the rest were brittle and decayed. Outside the wall, and just opposite the place where the coffin was discovered, is a tomb of a bishop, the length and dimensions of which correspond to those of the coffin, but the inscription is illegible, from the ravages of time. From a plan of the cathedral, however, it would seem that at this spot was placed the body of Bishop de Constantius, once Dean of Rouen, and afterwards Bishop of Worcester, who died in 1198. It is expected that further researches will be made in the presence of the dean.—A meeting of members of the United Association for the Protection of the Fisheries of the Severn and its Tributaries was held on the 24th ult. in the Guildhall, the Mayor in the chair, with the object of uniting in a system of combined action with other parties in different parts of the kingdom for proper protection of the salmon fisheries of England and Wales. Considerable discussion took place on the provisions of the new Act, and the best means for supplying its deficiencies, and especially the omission to give full powers to conservators, and to provide funds for efficiently carrying out the regulations for protecting the fish while in a breeding state. At the close of the discussion the following, among other formal resolutions, were unanimously passed:—

"That this association hails the enactment in the new Salmon Fisheries Act of an uniform close time, in accordance with the habits of the salmon, as a most important step towards restoring the salmon fisheries to their former productiveness, but at the same time regrets that the Act is deficient in many important points, which, in their opinion, must be supplied before its provisions can be effectually carried out; and particularly they desire to note the absence of any adequate provisions for enforcing the law, the want of power to conservators, and more stringent measures to insure a strict keeping of the fence time, as well as the entire abolition of fixed engines, and also the omission to fix the minimum size of the salmon to be taken, and minimum penalties for the various offences. That the experience of this association convinces it that the necessary funds for defraying the cost of an efficient protection of salmon rivers cannot be obtained by the voluntary principle; also, that while voluntary associations are entirely inadequate to provide the necessary funds, they are as unable to perform efficiently the function of inspection and management of the salmon fisheries of any river or district. And it is the opinion of this association that the wholesome provisions of the Act cannot be carried out in any efficiency until the Legislature has provided the necessary machinery for superintendence and management, and the provision of funds to defray the expenditure."

Ireland.

The Prince Consort's Death.—The citizens of Dublin on Monday manifested their sympathy with the Queen in the most loyal manner. Business was nearly suspended. Numbers of shops were closed, wholly or partially, and others had their shutters up. The courts of equity and law were shut, according to a notice from the Lord Chancellor, and the hall of the Four Courts was nearly deserted. The vessels in the river carried their flags half-mast high; the bells of the cathedrals, parish churches, and College chapel tolled at short intervals, and the whole city wore an aspect of mourning. The meeting on the subject of the Eglinton testimonial, and all other meetings which had been summoned for Monday were at once postponed, and the loss sustained by the Queen and Royal family was the sole topic of conversation among all classes of the people. On Tuesday a special meeting of the Council of the City of Dublin was held, the Lord Mayor in the chair, at which an address of condolence to the Queen was adopted by acclamation.

Removal of the O'Donoghue from the Commission of the Peace.—The *Evening Mail* announces that her Majesty's writ has passed the Great Seal superseding The O'Donoghue in the commission of the peace for the counties of Cork and Kerry. Previous to this decision, the O'Donoghue had himself become fully aware of the false position in which he was placed, as chairman of the late "Nationalist" meeting. He accordingly wrote to the committee, intimating that he withdrew from that body, as upon reflection he saw that the resolution appointing it was too hastily adopted; "and, moreover, that the committee, as at present constituted, in the absence of many well-known names, cannot command the confidence of the country."

Anti-Maynooth Demonstration.—A meeting of Protestants to consider the position of the Maynooth question was held on the 11th inst. in the Rotunda, Dublin. There was a densely crowded attendance, and the utmost enthusiasm and unanimity prevailed throughout the proceedings. The chair was occupied by Sir Edward Grogan, Bart., and addresses were delivered by the chairman, the Rev. T. Wallace, Mr. W. Johnston, Sir W. Verner, Bart., M.P.; Mr. Vance, M.P.; Mr. Whalley, M.P.; Mr. Stewart Blacker, Mr. Joshua Nunn, Mr. Thomas H. Thomson, and Mr. John Judkin Butler. Resolutions condemning the continuance of the grant, and a petition to Parliament praying for its repeal, were unanimously adopted. In the course of the meeting Mr. Whalley, M.P., who was introduced by Sir W. Verner, as the successor of Mr. Spooner, delivered a long speech, which was received with rounds of Kentish fire and waving of hats, handkerchiefs, and Orange scarves, which lasted several minutes. He said:—

"A few nights since there was a meeting of Roman Catholics in that very hall, which passed resolutions in support of America against England, and in favour of Irish independence. A few months since Ireland disgraced herself in the eyes of Europe by sending forth brigands to assist the Pope of Rome, and only the other day there was another disloyal demonstration at the funeral of M'Manus. All are but the natural results of the teachings of Maynooth. This hostility to England arises from the teaching of the priests. Where does the teaching of the priests come from but from Maynooth, and Maynooth from the Parliament of England? I have not spared myself night or day in endeavouring to get at the nature of the teachings and principles which are taught in this College of Maynooth. I could prove to you that disloyalty and sedition are the first principles and groundwork of its teaching; that the disregard of oaths is the second principle; that there is not a principle that is held sacred by the common feeling of humanity that is not prepared to be sacrificed, and taught to be sacrificed, in Maynooth, endowed and supported by the Parliament of England; and, therefore, in addition to those appeals to the reason and to the sympathy of the Protestant people of England which you have so long in vain addressed to them, you can now, by what took place in this hall the other night—you can now say to them, 'We warned you; we told you what would happen if you supported this College, and if you gave 30,000*l.* a year to send out 400 or 500 priests annually through Ireland that you would be organising a power against yourselves—you would be creating a nest of vipers. We told you that; you now see that we were your best friends. Now, we ask you, look at Ireland, read those resolutions carried by acclamation. They may pass by here like the idle wind, but what is their effect in America? What is their effect in Europe? They tend to degrade, not Ireland alone, but England too. They show disunion and disloyalty here almost equal to that in America. In how different a position you stand, Orangemen and Protestants of Ireland! For 30 years your voice has been raised in vain; in vain it has been raised on behalf of Protestants and the principles of the British Constitution: during that period every favour that the Government could bestow has been lavished by both parties alternately on those who by political intrigue and contrivance could give weight to the party in the House of Commons, but you have not murmured, your loyalty has never wavered. You have ever been true to your country, true to your Queen, your principles and your religion. Well, now the time has come when you can point to the realisation of your prophecies. On Thursday last, perhaps for the first time for 30 years, war appeared imminent, and then the results you had foretold came forth, and the voice of treason and sedition was freely uttered within this hall, and that, too, in a cause and on an occasion when the whole voice of Europe is on the side of England, and nothing but a principle that must disturb and destroy all order, such as the right of the strongest and Lynch law, was on the other side. I hope that your petition to Parliament against the Maynooth Grant will mention those things, and the claims you have on the attention of Parliament by the circumstances to which I have referred—that all your prophecies—all that you have foretold, knowing Maynooth, has been substantially realised in the case of America and the campaign in Italy; and if that does not succeed, there is no class in the community, in my opinion, can with such entire confidence demand access to the Throne and bring before the Queen herself their complaints, and remind her Majesty sitting on the Throne that, as has been observed here, the Constitution of 1688 does still exist, that Orangeism is, in fact, an institution co-ordinate with the Crown itself."

The Irish Constabulary.—Immediately on the announcement of a probable war with America, all the officers of the reserve constabulary in Phœnix Park volunteered for active service in Canada. At the commencement of the Crimean war they did likewise, and 16 of them were at once appointed to important posts.

Sporting.

Great Eight-mile Race between Deerfoot and Mills.—From 12,000 to 15,000 spectators assembled at the Hackney Wick Grounds on Monday to witness a match between these celebrated runners for a stake of 200*l.* Never since Deerfoot has been in this country was a scene of such excitement witnessed, and so much importance did the Indian or his friends attach to the race, and the heavy stake at issue, that he on this occasion appeared in the usual dress of an English runner. Since his last appearance on these grounds he has defeated Brighton and Lang at Norwich, and Barker, Jackson, and Lang at Yarmouth, and as he has declined further provincial engagements for the present this race excited unusual interest. It took 53 rounds and 200 yards to make up the eight miles. On starting, the Indian took the lead, which he held for the first five or six rounds, when Mills passed him; but the Indian passed him at the finish of the next round, and so they continued passing and repassing each other up to the end of the 48th round, from which distance Mills maintained the lead to within a few yards of the winning post, when Deerfoot made a rush; and the referee being unable to separate them, it was pronounced a dead heat. The race was run in 5 seconds under 43 minutes.

Law.

Northern Circuit: Liverpool.—*Murder on the High Seas.*—*Captain William Wilson*, late commander of the British ships Express and Severn, trading to Africa, was arraigned upon two indictments—one charging him with the murder of William Henderson, on the 23d January last, on board the Express, and the other with the manslaughter of Charles Jones, on board the British ship Severn, on the 4th April of the present year. The jury returned a verdict of *Manslaughter*, and he was sentenced to 20 years' penal servitude.—York: *The Attempted Murder at Wakefield.*—*Thomas Scott* was charged with shooting Caroline Furniss at Wakefield with intent to murder her, because she refused to marry him. The jury found him *Guilty*, and Mr. Justice Wightman, in passing sentence, said it was fortunate for the prisoner that the prosecutrix was not shot dead, or he would most certainly have had to suffer for the crime of murder. As it was, he had committed an offence of a grave nature, for which he must suffer seven years' penal servitude. *Forgery.*—*Vane Jadis*, a clerk in the War Office at Hull, was charged with forging a bill of exchange for 165*l.* The prisoner, who is nephew to one of the magistrates for the East Riding, and is highly connected, had become involved in some gambling transactions, and forged the name of Mr. Aylmer Greene, one of his fellow clerks, to a bill. He was found *Guilty*, and sentenced to four years' penal servitude. *George Wilson* and *John Swallow Wilson* were found *Guilty* of forging several bills of exchange, and sentenced, the former to four years', and the latter to five years' penal servitude. *Murder of a Gamekeeper at Otley.*—*James Waller*, 34, was charged with the wilful murder of William Smith on the 5th November at Low Springs, an obscure nook at the bottom of Baildon Moor, near Bingley and Otley. The deceased was about 32 years of age, and was head gamekeeper to Mr. T. Horsfall, of Hawksworth Hall. The prisoner resided in the neighbourhood, and was noted as a daring poacher, deceased having been the means on one occasion of getting him convicted for the offence. The prisoner was very bitter against deceased for this act, and had stated that he would think no more of shooting him than he would a rabbit. He had escaped the vigilance of the murdered man and his assistants [illegible] times, and on the night before the murder, while he was poaching, finding that the deceased was following him, suddenly turned round and fired his gun twice [illegible] body. The keeper was mortally wounded, and was afterwards found lying on the ground carefully guarded by his dog, which was trying to pull his master's coat over his head. Before he died deceased stated to those about him that it was Waller who had shot him. The jury returned a verdict of *Guilty*. Mr. Justice Wightman put on the black cap and passed sentence of *Death* in the usual form, without any hope of mercy.

Midland Circuit: Warwick.—*The Birmingham Murder.*—*John Grayson Farquhar*, a man of some property, was charged with the wilful murder of Elizabeth Brookes, at Birmingham, on the 29th of August last. The deceased was the [illegible] of the prisoner, who was a widower, and they were [illegible] be married, when the prisoner, in a fit of jealousy, shot [illegible] the breast with a pistol. The prisoner seems to have [illegible] repented of what he had done, for he went across the street to a neighbour, and voluntarily told him that "murder had been done." From that time he continued to make [illegible] which were conclusive as to the crime and its cause, [illegible] jealousy. After a long consultation the jury returned a verdict of Manslaughter; and the Judge, remarking on the prisoner's narrow escape, sentenced him to penal servitude for life. [illegible] *Thomson*, 42, wire-drawer, was indicted for murdering [illegible] Walker, at Birmingham, on the 29th of September. The prisoner had been living with deceased, who returned [illegible] a state of intoxication, when the prisoner's jealousy having been excited he cut her throat with a knife under circumstances of great deliberation and ferocity. The jury immediately returned a verdict of Guilty; and the learned Judge, [illegible] put on the black cap, pronounced sentence of *Death*, leaving the prisoner no hope that mercy would be extended, and warning him to prepare for his end. *The Arsenic Poisonings at Coventry.*—*William Beamish*, [illegible] weaver, was indicted for having murdered Betsy Beamish, his wife, by poison. It will be remembered that two children of the prisoner were also poisoned in the same way and at the same time, and that a girl named Emma Statham, employed by the prisoner in his domestic factory, had been in custody for the same offence, an alleged improper intimacy between the prisoner and this woman supplying a motive for the crime. The evidence proved the purchase of the arsenic by the prisoner, his relations with the girl Statham, the death of the wife from arsenical poisoning, and his placing in her pocket after death a forged letter purporting to have been addressed by her to her sister, and intimating that she had committed suicide. The jury returned a verdict of *Guilty*. Mr. Justice Willes, having put on the black cap, said that the prisoner had caused the death of his wife and child, and had been convicted on the clearest evidence—evidence which he was bound to say had produced upon his own mind the same conviction which the jury had pronounced by their verdict against him. His Lordship then pronounced sentence of *Death*, warning the prisoner that there was no mercy for him to expect in this world, and urging him to attend as a dying man to the admonitions of the clergyman who would attend him. *Child Murder.*—*Louisa Hobbins* and *Sarah Hobbins*, the latter an old woman of 85, and grandmother to the former, were charged with the wilful murder of the illegitimate son of Louisa Hobbins, at Solihull, in September last. This was a shocking case, and there could be little doubt of the moral guilt of the prisoners, although the legal testimony was insufficient to bring the capital crime home to them. The surgeon who examined the body of the child said that it was covered with burns all down one side, and gave his opinion that they had been caused during the life of the child. There was also an indented mark round the neck, as if it had been strangled. The prisoners made various admissions to the policeman, but they could not be admitted in evidence against them, as he had obtained them without giving the usual legal caution, having cautioned the prisoners that what they said would be used "for or against them," instead of "against" them. The younger prisoner was, therefore, found guilty of concealment of birth only, and sentenced to 18 months' Imprisonment. The old woman was *Acquitted*.

Norfolk Circuit: Norwich.—*Arson.*—*Henry Farrow* was convicted of setting fire to a stack of wheat, and three other prisoners, *Daniel Codling*, *Henry Whitbread*, and *John Pearce*, pleaded *Guilty* to a similar offence. Baron Martin having addressed the prisoners on the enormity of their crime, sentenced them to be kept in penal servitude for the term of five years. Bury St. Edmund's: *Arson.*—*Charles* and *Arthur Holder*, aged respectively 10 and 12 years, and who both looked younger, were convicted of setting fire to a haulm stack, but strongly recommended to mercy. Mr. Baron Martin sentenced them to a fortnight's imprisonment, and then to be sent for five years to a reformatory school.

Oxford Circuit: Stafford.—*Arson.*—*Moses Green*, [illegible] puddler, and *James Sullivan*, 24, described as of no occupation, pleady *Guilty* to a charge of setting fire to four stacks of grain at Willenhall, on the 30th of September, and were sentenced to six years' penal servitude. *Attempt to Murder.*—*William Brown*, 35, labourer, was charged with cutting and wounding his wife Amelia Brown with intent to murder her, and also with intent to do her some grievous bodily harm, on the [illegible] of November, at Stoke-upon-Trent. The jury found the prisoner *Guilty* of wounding with intent to do grievous bodily harm, and Mr. Baron Martin sentenced him to five years' penal servitude. *Manslaughter.*—*Thomas Clarke*, [illegible] pit sinker, was charged with killing and slaying Martha Clarke, alias Jane Clarke, on the 25th or 26th of July in Wolverhampton. The deceased was a native of New York and the wife of the master of an American vessel, who some time ago was sentenced at the Liverpool assizes to a long term of imprisonment for the manslaughter of a portion of his crew, and she was a well educated woman. She had, however, after the trial of her husband, taken to a dissolute life, and in Wolverhampton became the paramour of the prisoner, a man of forbidding appearance and very ignorant, a pit sinker. At his hands she was subjected to frequent and cruel ill-usage, the result of which was a rupture of a blood vessel in the brain, which caused paralysis and death. The jury found the prisoner *Guilty*, and Baron Martin, in passing sentence, said it was seldom that in a court of justice such barbarous treatment as that of which he had been found guilty occupied attention. His lordship then sentenced him to [illegible] years' penal servitude. Worcester.—*Poaching and Attempted Murder.*—*William Baylis*, 21, labourer, and *Thomas Groves*, [illegible] carpenter, were charged with feloniously and maliciously shooting at Giles Bradley, one of the Earl of Coventry's keepers, with intent to do some grievous bodily harm, on the 22d November, at Pirton. The jury found Groves *Guilty* of firing with intent to do grievous bodily harm, and Baylis with aiding and abetting him. Mr. Justice Willes sentenced both prisoners to 10 years' penal servitude. *Burglary.*—*Alfred Doughty*, 32, cordwainer, and *John Harris*, 29, tailor, were charged with burglariously breaking and entering the dwelling-house of Ann Mason, and stealing therein 7 gold watches, 26 silver watches, and 10 gold chains, on the 30th September, at St. Swithin's, in the city of Worcester. The jury found Doughty *Guilty*, and acquitted Harris. Mr. Justice Willes, in passing sentence upon Doughty, said he had already been convicted on various occasions in 1849 and [illegible], and in 1856 he had been sentenced to four years' penal servitude, and he was now found again committing burglary. His Lordship then sentenced the prisoner to 15 years' penal servitude.

WESTERN CIRCUIT: WINCHESTER.—*The Aldershott Murder.*—[illegible], 19, was indicted for the wilful murder of [illegible] Dickson at Aldershott, on the 23d November [illegible] details of this case are already familiar to our readers, [illegible] few facts were elicited during the trial. The charge [illegible] by the clearest possible evidence, and the jury [having found] him *Guilty*, the judge put on the black cap and [passed] sentence of *Death* in the usual form, telling him that [there] was not the slightest hope of mercy on this side the [grave]. *Bramsholt Manslaughter.*—*George Trussler*, sawyer, [was] indicted for the manslaughter of his father William [illegible], at Bramsholt, on the 3d October. It appeared that [the prisoner] had been a good son and supported his father and [mother] as they were not able to work. The old man, who [illegible] and passionate, said something very insulting to the [prisoner's] wife, upon which the prisoner caught up a kind of [illegible] shovel, and struck his father on the head with it. The [old man] never spoke afterwards, and died in about 12 hours. [The prisoner] helped to carry the old man into the house, and [attended] to him with great kindness until his death. The jury [found] the prisoner *Guilty*, but recommended him to mercy on [account] of the provocation the prisoner had received. The [Judge] said he felt sincere compassion for the prisoner. [No] doubt he had undergone inexpressible anguish, and [had] suffered a great punishment, but still, under any circum[stances] of provocation, a son could not be justified in [using] such a weapon towards his father. The sentence would [be] one year's imprisonment without hard labour. EXETER: [Arson].—Several young persons pleaded *Guilty* to the crime of [arson]. Mr Justice Williams said this was an offence which he [was sorry] to say was increasing to a frightful extent. It did [not] appear to be done from any feeling of revenge, but from [wanton]ness and wickedness. A severe example must be made, [in] the hope that a stop might be put to these dangerous prac[tices]. The prisoners must be kept in penal servitude for [six] years.

MIDDLESEX SESSIONS: *Robbery.*—*Mary Newell*, 22, servant, was indicted for stealing a box containing a coat, other articles [of] wearing apparel, and a watch, the property of Mr. John [Barker], her master, and also other property belonging to a [gentle]man named Heath, who lodged in Mr. Barker's house. [It] will be remembered that the prisoner in her master's [ab]sence disguised herself in male attire, and went off to Yar[mouth], where she was apprehended making love to her land[lady]. The charge was clearly proved, but the defence set up was that the prisoner, though not actually a lunatic, had a [mo]nomania for theft of a romantic character. The jury, how[ever] found her *Guilty* of felony, and the Court sentenced her [to] [illegible] months' hard labour.

Obituary.

LORD RIVERSDALE, Bishop of Killaloe, who had been in a [dang]erous state of health for some time, died a few days since. He was born in 1784, consecrated Bishop of Killaloe in 1839, and succeeded his brother William, as third Baron Riversdale, [in] 1848.

GENERAL SIR EDWARD BOWATER, K.C.B., Colonel of the [illegible] Foot, died at Cannes on Saturday evening. The gallant [offic]er as Groom in waiting to the Queen was selected by Her Majesty to take charge of Prince Leopold during the Prince's sojourn in the south of France. He had [be]en declining in health ever since his arrival at Cannes. The late General, who was in his 74th year, was the only son of the late Admiral Edward Bowater, of Hampton Court. He entered the 3d Foot Guards in 1804, and saw much active service with that gallant regiment during the war. He [was wounded] both at Talavera and Waterloo. He was made a Knight Commander of the Guelphic Order in 1837, by King William IV. and had received the silver war medal and five [clas]ps for Talavera, Salamanca, Vittoria, Nivelle, and Nive. [Sho]rtly after the late Prince Consort's arrival in this country in 184[0] the deceased General was appointed Equerry to his Royal Highness. In 1846 he was appointed a Groom-in-waiting in ordinary to Her Majesty, and in the same year Colonel of the [illegible] Regiment of Foot.

GEORGE GRANVILLE HARCOURT, Esq., M.P. for Oxfordshire, died on Thursday, in his 77th year. Although not the oldest man in the House of Commons, he was the oldest member—the "Father" of the House. He was the eldest son of the late Archbishop of York, and has represented Oxfordshire since 1831. In 1847 he married, as his second wife, Frances Countess Dowager of Waldegrave.

MR. COMMISSIONER ELLISON, of the Newcastle-upon-Tyne District Court of Bankruptcy, died on the 12th inst. at [Jes]mond, in his 76th year. He belonged to the old Newcastle family of Ellisons, and was for many years Commissioner of the Eleventh List, which was abolished by Lord Brougham's Act in 18[illegible]. On the opening of the local Court of Bankruptcy in 184[illegible] he was appointed Commissioner of the district, and in the discharge of the duties of that office was highly respected by the members of the profession generally in the three [cou]nties of Durham, Northumberland, and Cumberland, over [which] he had jurisdiction.

MR. EX-SHERIFF WHEELTON, whose name is well known in [con]nection with the Shrievalty of London, and the memorable [con]flict between the House of Commons and the Court of Queen's Bench, died at his residence, Gloucester Terrace, Hyde Park, on the 6th inst. Mr. Wheelton and Mr. Evans were the Sheriffs of London and Middlesex in 1840, when, notwithstand[ing] a resolution of the House of Commons, prohibiting any proceedings in the celebrated case of "Howard *v* Gosset," they, as sheriffs, obeyed the writ of the Court of Queen's Bench, and levied execution upon the goods of Sir Wm. Gosset, for which proceedings they were called to the bar of the House of Commons. They were committed for contempt, and kept [in] confinement by the Serjeant-at-Arms in one of the strong [rooms] of the old Palace. They were however permitted to [rec]eive their friends, and there was a general levee every day. Meanwhile it was found that the proceedings of the Queen's Bench were legal, and the result was, after lengthened debates, [th]at they were again called to the bar of the House of Com[mon]s, and discharged without payment of fees.

THE REV. WILLIAM DODSWORTH, formerly a clergyman of the Established Church, who went over to the Church of Rome [m]any years ago during the agitation about "The Tracts for the Times," died a few days since. Mr. Dodsworth had been [prev]iously minister of Margaret Street Chapel, on the site of [whi]ch the church of All Saints is now erected, and had for his assistant minister the Rev. F. Oakeley, now priest of the Roman Catholic church at Islington. Mr. Oakeley succeeded Mr. Dodsworth in the ministry of Margaret Street Chapel, and [soo]n after followed him into the Church of Rome. Mr. Dods[wo]rth in early life was an energetic clergyman of the Church [of] England, and was an ardent worker with the late Bishop of [Lo]ndon in carrying on the Diocesan Church Building Society. He did not take holy orders in the Church of Rome, but since [his] secession has led a quiet and unobtrusive life as a layman [in th]at community.

MR. COMMISSARY GENERAL FILDER, C.B., died at St. John's, [Ex]mouth, on the 10th inst, in his 72d year. Previous to his connection with the Crimean war, which brought his name prominently before the public, he saw a great deal of service in the Commissariat. He received the war medal with nine clasps for Talavera, Albuera, Salamanca, Vittoria, Pyrenees, Nivelle, Nive, Orthes, and Toulouse. He commanded the Crimean commissariat until the end of July, 1855, and was present at the battles of Alma, Balaklava, and Inkerman, and the siege of Sebastopol. In acknowledgment of his public services, extending over 56 years, he received the Companionship of the Bath, the Crimean medal, clasps, and the third class of the Turkish Order of the Medjidie.

DR. JOHN O'DONOVAN, LL.D., the Irish historian and archæologist, died a few days since at his residence in Dublin, in his 51st year. He was pre-eminently distinguished for his labours in Celtic literature. He published a translation of "The Four Masters," and contributed largely to a series of works issued by the Irish Archæological and Ossianic Societies, and also to various local periodicals. He devoted much of his time to cataloguing Irish MSS. in our public libraries. He was Professor of the Irish Language and Archæology in the Queen's College, Belfast, and enjoyed a Civil List pension of 50*l*. per annum.

THE REV. DR. CUNNINGHAM, Principal of the Free Church College, Edinburgh, died on the 11th inst. in his 56th year. He was one of the leaders of the great secession from the Scotch Kirk in 1843, and took a prominent part in the conflicts of debate in the Church Courts that preceded that event. After the "disruption," as it was called, Dr. Cunningham, who had previously been minister of Trinity College Church, Edinburgh, was appointed Professor of Church History and Divinity in the new College then instituted, and in 1847, on the death of Dr. Chalmers, he was chosen to fill the office of Principal. He was regarded as one of the ablest theologians in Scotland, and was a stanch defender of the Calvinistic divinity. His last great effort on the platform was a speech at Edinburgh about a year ago on the Cardross case, which was generally regarded as the most lucid exposition and defence of the views maintained by the Free Church in opposition to the Civil Courts on the question of ecclesiastical discipline. In 1859 he was chosen Moderator of the Free Church Assembly. Dr. Cunningham was a native of Berwickshire. About two years ago, on showing indications of failing health, some friends proposed to unite in subscribing to a testimonial of personal esteem for him, and in a few days the sum of 7000*l*. was raised for that purpose.

WILLS.—The will of the Dowager Countess of Newburgh, of Slindon House, Arundel, has been sworn under 14,000*l*.; Sir John Forbes, M.D., Physician to the Queen's Household, 5000*l*.; William Stevenson Richardson, Esq., formerly of Tanfield Court, Temple, brother-in-law to Bishop Selwyn of New Zealand, 30,000*l*.

Miscellaneous.

THE ERUPTION OF VESUVIUS.—The director of the Observatory at Naples has issued a report on the eruption of Vesuvius, stating that on the 10th inst. the eruption was rapidly diminishing in force, and appeared to be ceasing. At the lower craters it only manifested itself by slight puffs of smoke, and the principal crater cast forth ashes and globules of smoke. On the night of the 12th there were two very slight shocks of earthquake, lasting two minutes. The mephitic exhalations which issued from the mountain, at the close of former eruptions, have been very prevalent on this occasion, especially at Torre del Greco, and have extended to the sea shore. About 20 houses have fallen near Torre del Greco, which is not yet out of danger. Another report has since been issued stating that on the 14th there were fresh shocks of earthquake, and the mountain cast forth quantities of ashes and smoke until 8 A.M. A telegraphic despatch has since been received announcing that on Wednesday Vesuvius recommenced casting forth ashes, after which the eruption began to diminish. The sismograph, however, continued to indicate slight shocks of earthquake. An official report states that Torre del Greco has risen to the extent of one mètre.

BIRTHS.—On the 14th inst., at 63, Eccleston Square, the Hon. Mrs. RUSSELL, of a daughter—11th inst, at Niddrie House, near Edinburgh, the Hon. Mrs. DE MOLEYNE, of a son—15th inst, at Worsborough Hall, Barnsley, the Hon. Mrs. FRANCIS STUART WORTLEY, of a daughter—11th inst, at Kirkby Mallory, Leicestershire, the Hon. Mrs. OAKELEY, of a son, who only survived his birth a short time—12th inst, at St. Leonard's Forest, Horsham, the Hon. Mrs. KEITH FALCONER, of a son—7th inst., at Southsea, Hants, the Hon. Mrs. FREDERICK FITZ-MAURICE, of a son.

MARRIAGES.—On the 14th inst, at St. Martin's-in-the Fields, Lord OTHO FITZGERALD, third son of the Duke of Leinster, to the Lady LONDESBOROUGH, widow of the late Lord Londesborough—16th inst, at the Church of St. Philippe de Roule, Paris, JAMES FARRELL, Esq., of Robertstown, Meath, and of Merrion Square, Dublin, to GABRIELLE COMTESSE DE POLIGNAC, daughter of the late Melchior Comte de Polignac, and niece of the late Prince de Polignac—12th inst, at St. Michael's, Chester Square, EDWARD JOHN, eldest son of the Hon. EDWARD PARKER JERVIS, of Aston Hall, Staffordshire, to GRACE CATHERINE, daughter of the late Right Hon. Sir JOHN JERVIS, Chief Justice of the Common Pleas, and Lady Jervis—17th inst, at St. Jude's Church, Southsea, Sir FRANCIS BLACKWOOD, Bart, R.N., to LAURA OLIVIA, second daughter of ROBERT S. PALMER, Esq., of Merrion Square, Dublin—16th inst, at St. George's, Hanover Square, Sir CHARLES BURTON, Bart., of Pollarton, county Carlow, to GEORGIANA MARY, only daughter of the late DAVID HALIBURTON DALLAS, Esq., and granddaughter of the late Sir Thomas Dallas, G.C.B.—10th inst, at Shenstone Church, FRANCIS ABBOTT, Esq., Secretary to the General Post Office in Scotland, to FRANCES JANE, eldest daughter of Admiral Sir WILLIAM PARKER, Bart., G C.B., of Shenstone Lodge, Staffordshire—12th inst, at Weeford, CHARLES WILSONE BROUN, Esq., of Linburn, Dumbartonshire, to PATIENCE SWINFEN, widow of the late Henry John Swinfen, Esq., of Swinfen Hall, Staffordshire—12th inst, at St. John's, Bedminster, Bristol, R. SYDNEY LAMBERT, Esq., of White Hall, Clevedon, to HENRIETTA MARIA, second daughter of the Hon. JAMES HENRY KEENS, President of H.M.'s Privy Council in the island of Tobago.

DEATHS.—On the 10th inst, at his residence, Castle Knock, near Dublin, Colonel PHILIP HILL, formerly of the 53d Regiment, and brother of Viscount Hill, of Hawkstone, aged 55—4th inst, at Dresden, STUART C. MAITLAND, Esq., of Compstone and Dundrennan, N.B, eldest son of the late Lord Dundrennan, aged 45—16th inst, at 8, Queen's Parade, Bath, AUGUSTA LOUISA, wife of the Rev. WILLIAM WILDER, rector of Carleton-cum-Willingham, Cambs, and of Great Bradley, Suffolk, and youngest daughter of the late Lieutenant-General Sir Henry Cosby, of Barnsville Park, Gloucestershire, aged 66—14th inst, at Wickham, Hants, Miss GARNEIR, sister to the Dean of Winchester, aged 93—29th ult, at Grove Place, Brompton, HANNAH FRASER BAILEY, widow of the late Lieutenant-Colonel C. F. MACKENZIE, 60th Royal Rifles—11th inst, at Rosa Villa, Clevedon, AUGUSTA, only child of the late Lieut.-Col. ERSKINE, of H.M.'s 45th Regiment, aged 14—9th inst, at 10, Camden Crescent, Dover, HORATIO VACHELL, Esq., J P., and Deputy-Lieutenant of the county of Kent, aged 63—12th inst, at his residence, The Glebe, Lee, JOHN SUTTON, Esq., Justice of the Peace and Deputy-Lieutenant for the county of Kent, aged 81; also, on the 5th inst, SUSAN, his wife, aged 83—13th inst, suddenly, of apoplexy, EDWARD BARNARD, Esq., one of her Majesty's Agents-General for Crown Colonies, aged 75—10th inst, at Florence, Dr. SOUTHWOOD SMITH, M.D., formerly Physician to the Fever Hospital, and Member of the General Board of Health, aged 73—29th ult, at Upper Swainswick, near Bath, CHARLES DAVID CURRIE, M.D., of H.M.'s Madras Army, second surviving son of the late Claud Currie, Esq., Physician General, Madras, aged 44—10th inst, at Bury St. Edmund's, NATHANIEL SHIRLY HARNESS HODSON, Esq., alderman of that borough, and formerly of the War Office, aged 78—16th inst, at Beech House, the Rev. W. J. HALL, M.A., vicar of Tottenham, Minor Canon of St. Paul's Cathedral and Priest in Ordinary to her Majesty, aged 68—8th inst, at Otten Belchamp, the Rev. E. H. DAWSON, rector of that parish, aged 57—10th inst, at Corston, the Rev. GEORGE PHILIP SIMPSON, M.A., vicar of that parish, aged 66—14th inst, of congestion of the lungs, the Rev. WILLIAM HENRY FOSTER, rector of Loughgilly, county of Armagh, aged 66—16th inst, at 45, Bryanston Square, the Rev. GEORGE PORCHER, aged 70.

Markets.

COVENT GARDEN, Dec. 21.

Fruit and Vegetables are plentiful, and of Christmas Evergreens there is abundance; but trade is comparatively dull. Pears comprise Glou Morceau, Chaumontel, Winter Nelis, and Brown Beurré, and among Apples are some good examples of American Newtown Pippin, Ribston Pippin, and Fearn's Pippin. Grapes and Pine Apples are abundant. Excellent Oranges may be bought for 1s. a dozen. Of Vegetables there is a good supply Potato markets have not altered since our last. Cut flowers chiefly consist of Orchids, Pompone Chrysanthemums, Chinese Primulas, Camellias, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 4s to 6s	Oranges, per 100, 8s to 12s
Grapes, per lb., 4s to 7s	Lemons, per 100, 6s to 10s
Melons, each, 1s to 3s	Nuts, Cob, per pound., 4s to 4s 6d
Pears, per doz., 6s to 12s	Walnuts, per 100, 2s
Apples, per doz., 18 to 3s	

VEGETABLES.

Broccoli, per bundle, 1s to 1s 3d	Celery, p. bundle, 1s 6d to 2s
French Beans, per 100, 2s 6d to 3s 6d	Onions, pickling, p. ½ sieve, 4s6d
Cabbages, do., 1s 3d to 1s 6d	Tomatoes, p. doz., 1s to 6s
Potatoes, p. ton, 60s to 75s	Asparagus, p. bundle, 30s
— per cwt., 4s to 8s	Seakale, per punnet, 4s
Turnips, per bunch, 2d to 4d	Shallots, per lb., 10d to 1s
Carrots, do., 4d to 6d	Garlic, per lb., 6d to 8d
Spinach, p. sieve, 1s to 2s	Endive, p. score, 1s 6d
Cucumbers, each, 1s to 1s 9d	Horse Radish, p. bun., 1s 6d to 4s
Artichokes, each, 6d to 8d	Mushrooms, p. pott., 2s to 3s
Beet, per doz., 1s 6d	Parsley, p. 12 bunches, 3s to 4s
	Herbs, per bunch, 2d to 4d

HOPS.—BOROUGH MARKET, FRIDAY, Dec. 20.

Messrs. Pattenden & Smith report that the market continues firm at late prices.

HAY.—Per Load of 36 Trusses.

SMITHFIELD, THURSDAY, Dec. 19.

Prime Meadow Hay	80s to	90s	Clover, old	95s to	112s
Superior do. ..	95	100	New Clover	—	—
Inferior do... ..	55	70	Do. second cut ..	85	100
New do.	—	—	Straw	30	36
Rowen	—	—			

DAVIS & Co.

CUMBERLAND MARKET, THURSDAY, Dec. 19.

Sup. Meadow Hay..	98s to	107s	Inferior Clover ..	80s to	98s
Inferior do.	65	90	New do.	—	—
New do.	—	—	Straw	36	42
Superior Clover ..	108	115			

JOSHUA BAKER.

WHITECHAPEL, THURSDAY, Dec. 19.

Fine Meadow Hay	90s to	95s	Prime Clover ..	105s to	114s
Inferior do.	80	90	Inferior do.	90	100
Prime New Hay ..	—	—	Prime 2d cut ..	98	105
Inferior	—	—	Inferior do.	—	—
Straw	28	34	New 1st cut ..	—	—

POTATOES, SOUTHWARK, Monday, Dec. 16.

During the past week the arrivals both coastwise and by rail have been quite equal to the demand. Trade continues dull. The following are this day's quotations: — Kent and Essex Regents, per ton, 120s. to 140s.; Yorkshire Flukes, 120s. to 140s.; do. Regents, 100s. to 130s.; Lincolnshire do., 90s. to 110s.; Dunbar do., 120s. to 130s.; Perth, Forfar, and Fife do., 95s. to 120s.; French Whites, 90s. to 95s.

BUTTER MARKET.—Dec. 20.

Best Fresh Butter	.. ..	18s. per dozen lbs.
Second do. do.	.. ..	12s. " "

Pork, 4*s*. 8*d*. to 5*s*. 4*d*. per 8 lbs.

BRITISH WOOLS.—LONDON, FRIDAY, Dec. 20

We have no transactions to report on this last week. The consumers having provided for their requirements are indisposed to make further purchases in the present unsettled state of political and commercial matters. The much lamented death of the late Prince Consort is likely to conduce towards a stagnation of home demand, inasmuch as the mourning will preclude the use of all fancy articles during the holiday season.

	s. d.	s. d.		s. d.	s. d.
South-down Hoggets	1 4 to	1 5	Leicest. Wethers	1 4 to	..
Half-bred ditto.. ..	—	1 6	Ditto Hoggs ..	1 5 —	..
Down Ewes ..	1 4 —	1 4½	Combing Skins	1 0 —	1 5
Kent Fleeces ..	1 5 —	1 6	Flannel Wool ..	1 0 —	1 5
			Blanket ditto ..	0 6 —	..

METROPOLITAN CATTLE MARKET.

MONDAY, Dec. 16.

This being the "Great Market" day, Beef is the article most in demand. Trade is very dull for it, but prices are not much altered. Some few choice qualities have made rather more than we quote. The number of Sheep is large. We are not however overdone with choice qualities. The mild weather causes a heavy trade in all departments, and it is difficult to maintain prices throughout. From Germany and Holland there are 405 Beasts, 4950 Sheep, and 171 Calves; from Scotland, 700 Beasts; from Ireland, 900; from Norfolk and

Suffolk, 500; and 3300 from the northern and midland counties.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	5 0 to 5 2	Best Long-wools.	5 0 — 5 4
Best Short-horns	4 8 — 5 0	Do. Shorn	.. .. — ..
2d quality Beasts	4 0 — 4 4	Ewes & 2d quality	4 6 — 4 10
Best Downs and Half breds ..	5 4 — 5 6	Do. Shorn	.. .. to ..
Do. Shorn	.. .. — ..	Lambs ..	.. .. — ..
		Calves ..	.. 4 4 — 5 8
		Pigs ..	.. 4 4 — 5 4

Beasts, 8040; Sheep & Lambs, 26,300; Calves, 202; Pigs, 465.

THURSDAY, Dec. 19.

The supply of Beasts is, for the day after the "Great Market," very short. The weather has favourably changed; consequently prices have advanced for choice qualities. The number of Sheep is nearly the same as on the corresponding day last year. There is rather a brisk sale, at a slight advance on Monday's quotations. Calves are not selling quite as well as on Monday. Our foreign supply consists of 95 Beasts, 650 Sheep, and 180 Calves. Milch Cows, 115.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	5 0 to 5 4	Best Long-wools.	5 2 to 5 4
Best Short-horns	4 10 — 5 0	Do. Shorn	.. .. — ..
2d quality Beasts	4 0 — 4 6	Ewes & 2d quality	4 8 — 4 10
Best Downs and Half-breds ..	5 6 to 5 8	Do. Shorn	.. .. — ..
Do. Shorn	.. .. to ..	Lambs ..	.. .. — ..
		Calves ..	.. 4 0 — 5 4
		Pigs ..	.. 4 0 — 5 4

Beasts, 1535; Sheep & Lambs, 3770; Calves, 231; Pigs, 140.

MARK LANE.—MONDAY, Dec. 16.

The supply of Wheat from Essex and Kent to this morning's market was small; having a better attendance at market, and the American news being of a more warlike character, a portion of it was disposed of at the prices of this day se'nnight, and the remainder held for an advance. Foreign met an improved inquiry, and the depression of Friday was recovered, re-establishing our quotations of this day week. Barley was firm, and in some instances rather dearer. Peas and Beans are rather cheaper. Oats were a steady sale, prices unaltered. Flour trade quiet at our quotations. This market will be closed next Monday.

PER IMPERIAL QUARTER.	s. s.		s. s.
WHEAT, Essex, Kent, & Suffolk..White	50—66	Red	50—62
— — fine selected runs..ditto	61—67	Red	54—65
— — Talavera	64—72		
— Norfolk	—	Red	—
— Foreign	48—76		
BARLEY, grind. & dist., 26s to 28s..Chev.	36—40	Malting .	34—36
— Foreign..grinding and distilling	26—32	Malting .	34—38
OATS, Essex and Suffolk	20—24		
— Scotch and Lincolnshire—Potato	26—28	Feed ..	20—24
— Irish ....Potato	26—28	Feed ..	20—24
— Foreign........Poland and Brew	21—24	Feed ..	20—24
RYE	36—38	Foreign .	—
RYE-MEAL, foreign..................	—		
BEANS, Mazagan....35s to 37s....Tick	36—39	Harrow .	36—39
— Pigeon ......38s — 42s..Winds.	—	Longpod	—
— Foreign ....Small	42—52	Egyptian	—
PEAS, white, Essex and Kent..Boilers	40—44	Suffolk .	40—46
— Maple ....43s to 45s ...... Grey	39—41	Foreign .	35—37
MAIZE.............................White	—	Yellow ..	—
FLOUR, best marks delivered..per sack	50—55		
— 2d do..........................ditto	40—50	Country	40—50
— Foreign ....per barrel	28—36	Per sack	43—58

FRIDAY, Dec. 20.

From the 13th the weather remained unchanged, with S.W. and W. wind until yesterday, when we had a clearer and drier atmosphere with a lower temperature and N.E. wind, which continues. The American advices being considered of a less peaceful character than at the close of last week caused a reaction in the Wheat trade, which has exhibited great firmness, notwithstanding the large importations, and in many markets improved prices have been realised. A firmer tone has also been manifested in the Barley trade, and fine malting qualities have generally brought rather more money, but this does not apply to other descriptions of spring corn. Previous rates for Flour have been fully realised. Since Friday last 17 vessels have been reported off the coast. The floating trade had improved a little on Monday, but not much was done; afterwards the trade was very quiet, prices remaining nominally unaltered, only Linseed is a little cheaper. In Paris (Dec. 19), the Flour trade was very dull, and prices have declined a little. The four marks for delivery this month are quoted equal to 51s. 6d. per 280 lbs. The arrivals of English grain this week have been moderate, of foreign considerable, and good of Flour. The market was only moderately attended this morning, English Wheat must be quoted the same as on Monday; business in foreign was not extensive, but it was generally held firmly for that day's prices. Barley is firm at Monday's quotations. Beans and Peas are unaltered in value. Oats are a steady sale at late rates. For Flour there is but little inquiry, and American are rather cheaper. No market will be held until Friday next, the 27th inst.

ARRIVALS FROM Dec. 16 to Dec. 20.

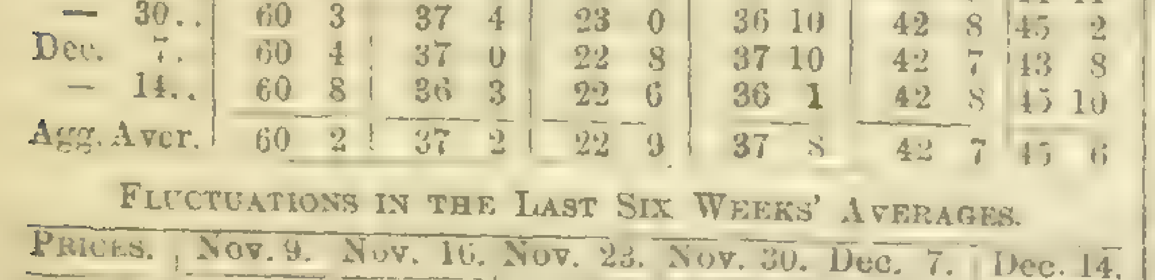
	Wheat.	Barley.	Oats.	Flour.
English ..	1580 qrs.	2420 qrs.	230 qrs.	1730 sks.
Irish	— "	—	—	— "
Foreign ..	44060 "	9940 "	45470 "	1260 " / 18670 brls.

LIVERPOOL, Tuesday, Dec. 17.—We have had a good attendance of millers and dealers at our market to-day, and with a fair consumptive business passing in both Wheat and Flour, the advance of 2d. per cental and 6d. per barrel made yesterday was firmly maintained, but there was not nearly the same excitement in the trade. Holders of Indian Corn commenced by asking 1s. per qr. over the rates of Frida, but not being able to obtain this, they came down 6d., when a moderate quantity found buyers. Oats and Oatmeal have undergone no change. Beans, Peas, and Barley are all held for 6d. per qr. advance. The market closes tolerably steady at the advance, but with more sellers than buyers.

FRIDAY, Dec. 20.—The market has been rather quiet, but Wheat and Flour commanded very good prices, without any material change since Tuesday. Oats and Oatmeal quiet. Indian Corn firm.

AVERAGES.	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Nov. 9..	59s 8d	37s 3d	22s 8d	38s 5d	42s 3d	46s 0d
— 16..	59 10	37 6	22 7	37 7	42 6	47 5
— 23..	60 5	37 6	23 0	39 1	42 9	44 11
— 30..	60 3	37 4	23 0	36 10	42 8	45 2
Dec. 7.	60 4	37 0	22 8	37 10	42 7	43 8
— 14..	60 8	36 3	22 6	36 1	42 8	45 10
Agg. Aver.	60 2	37 2	22 9	37 8	42 7	45 6

FLUCTUATIONS IN THE LAST SIX WEEKS' AVERAGES.



To Parents and Guardians.

A GENTLEMAN, Farming about 500 Acres of Land, 35 miles N.W. of London, has a vacancy for a PUPIL. The situation is remarkably healthy, and it is within an hour and a half of London by rail. References given and required. For further particulars address P. H., *Gardeners' Chronicle* Office.

MAJOR R. C. BARNARD, late of H. M.'s 41st Regt., B.A. (1861) of Emmanuel College, Cambridge, F.L.S., wishes to receive PUPILS to be prepared for Public Schools or for College, for the Army or other Professions.—Address at present, 3, Pittville Villas, Cheltenham; after 31st Jan., 1862, Cambridge House, Bays Hill, Cheltenham.

CONSULTING GARDENER.—JOSEPH ROBINSON begs to offer, on moderate terms, his services as above to any lady or gentleman contemplating Alterations, Improvements, or Additions to their Gardens, Pleasure Grounds, or Horticultural Buildings—assured that from his long practical experience he would be able to effect the same judiciously and economically.—Slough, Bucks.

WANTED, a PLANT COLLECTOR, &c.—A gentleman much attached to the study of Botany and the collection of objects of Natural History, is looking out for a well educated, energetic, persevering young Gardener, who would like to undertake a Collecting Mission; a sufficient knowledge of the French language to enable him to converse is very desirable.—Applications, stating age, qualifications, and remuneration expected, to be addressed to W. W. S., *Gardeners' Chronicle* Office, W.C.

To Propagators.

MR. JAMES VEITCH, JUNR., is in want of a first-rate general PROPAGATOR. A thoroughly competent man will be liberally paid. Also an active and thoroughly good GROUND WORKMAN, to take charge of and work with a lot of men.—Royal Exotic Nursery, King's Road, Chelsea, S.W.

WANTED, in February next, a honest, sober, industrious married Man, who thoroughly understands BUDDING, GRAFTING, also the PROPAGATION of Hardy Shrubs and Trees. A member of some Christian church preferred. A Cottage provided.—Apply, stating wages, &c., to GEO. WRIGHT, Erdington Nursery, near Birmingham.

WANTED, a GARDENER, capable of growing Grapes and Cucumbers, and who is a good General and Kitchen Gardener.—Apply, January 27th and 28th, to E. LEE, Loampit Hill, Lewisham, Kent, S.E.

WANTED, a GARDENER and his WIFE; the Man should be able to Lay Out a New Garden, construct Orchard Houses, and make Paths, Fencing, &c.; and if he is able and willing to assist at waiting at table occasionally it will be in his favour. The Wife must be a good Cook or Laundry Woman. A Cottage with Fuel and Vegetables found. Young children objected to.—Address, stating ages, the number and ages of children, if any, also length of character and wages expected, to H. P., Messrs. Layton's, 150, Fleet Street, London, E.C.

WANTED, a Steady YOUNG MAN, well up in the Propagation of Soft-wooded Plants.—Apply to W. HOLMES, Frampton Park Nursery, Hackney.

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The Gardeners' Chronicle Newspaper.

SATURDAY, DECEMBER 28, 1861.

NOTICE IS HEREBY GIVEN to the SHAREHOLDERS of the SCOTTISH UNION INSURANCE COMPANY, that a DIVIDEND of 10 per cent. (free of income tax) on the capital stock of this Corporation will become PAYABLE on the 2d January next, and Proprietors resident in or near London can receive the same at the Office, 37, Cornhill, on that or any subsequent day, between the hours of 10 and 4 o'clock.

The printed report for the year ending 1st August last is now ready, and may be had at the Office, together with prospectuses and forms for fire and life proposals.

By order of the Board, F. G. SMITH, Secretary.

Scottish Union Office, 37, Cornhill, December, 1861.

Lecture on Gloxinias.

MR. THOS. PULLEN, Gardener to W. D. ADAMS, Esq., of Lower Sydenham, begs to state that in compliance with the request of the Committee of the Sydenham Horticultural Society, he will give a LECTURE (not READ a PAPER as suggested) on the CULTIVATION of GLOXINIAS, on THURSDAY, January 2, 1862, at the National School Room, to commence at 7 o'clock. Gardeners will be admitted free.—Dec. 28.

CANDOVER SCHOOL.

Visitor.—The LORD BISHOP of WINCHESTER.

A Senior Department for the Education of Ladies and for the Special Training of Governesses has been opened under the sanction of the Bishops of London, Lichfield, and Oxford, and other Members of the Council of Queen's College for Ladies.

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REDUCTION in PRICE of the ATHENÆUM.—The Proprietors, taking advantage of the Abolition of the Paper Duty, have resolved that the Price should be REDUCED to THREEPENCE.

THE QUARTERLY REVIEW.—ADVERTISEMENTS for insertion in the forthcoming Number of the above Periodical must be forwarded to the Publisher by the 27th, and Bills by the 30th instant.

JOHN MURRAY, Albemarle Street, W.

THE EDINBURGH REVIEW, No. CCXXXIII.—ADVERTISEMENTS intended for insertion are requested to be forwarded to the Publishers immediately.

London: LONGMAN & Co., 14, Ludgate Hill, E.C.

RAY SOCIETY.—NOTICE TO MEMBERS. The Volume for 1860, Dr. CARPENTER on "FORAMINIFERA," will soon be ready for issue. The Subscription List for that Volume will be closed on the 31st January, 1862.

RAY SOCIETY.—NOTICE TO MEMBERS. The Volume for 1861, Mr. CURREY'S Translation of Dr. HOFMEISTER on "THE HIGHER CRYPTOGAMIA," is also in a forward state. The Subscription List for that Volume will be closed on the 31st January, 1862.

By order of Council,
H. T. STAINTON, Secretary.

Mountsfield, Lewisham, S.E.

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News of the Week.

THE funeral of the PRINCE CONSORT took place at 12 o'clock on Monday in St. George's Chapel, Windsor, and in accordance with the expressed wishes of HIS ROYAL HIGHNESS, was as private as possible consistently with his exalted position. The PRINCE OF WALES was the chief mourner, supported by Prince ARTHUR and the Duke of SAXE COBURG AND GOTHA, and attended by the CROWN PRINCE OF PRUSSIA, the Duke de BRABANT, the Count de FLANDRES, the Duke de NEMOURS, Prince LOUIS OF HESSE, Prince EDWARD OF SAXE WEIMAR, Count GLEICHEN, and the Maharajah DHULEEP SINGH. In all parts of the United Kingdom the day was observed with the greatest solemnity; special services were performed in the churches and most of the dissenting chapels; the Mayors and Corporations in the principal towns attended the services in procession, accompanied by the Volunteers and Yeomanry; the bells rang muffled peals, minute guns were fired, factories and shops were closed, and all public and private business was as far as possible suspended. The whole country, in fact, wore the aspect of deep mourning, and so national a manifestation of grief has not occurred in the memory of the present generation.

M. THOUVENEL, the French Minister of Foreign Affairs, has addressed a highly important despatch to the French Minister at Washington, declaring the opinion of the Imperial Government on the affair of the Trent. M. THOUVENEL commences by saying that the news of the arrest of Messrs. MASON and SLIDELL had been received with "great astonishment and extreme sensation" in France, and that public opinion, on inquiry into the legality of the act, at once came to the conclusion that it was at variance with all the rules of international law. The EMPEROR'S Government also felt called upon to consider the question, not only by the desire to prevent a conflict between two Powers towards which it is animated by equally friendly sentiments, but also by the duty of putting the rights of its own flag beyond the danger of attack, and of maintaining certain principles essential to the security of neutrals. M. THOUVENEL then shows that if the Cabinet of Washington approve the conduct of the Captain of the San Jacinto they must consider Messrs. SLIDELL and MASON either as enemies or rebels. "In either case," he says, "there would be an extremely regrettable forgetfulness of principle on which we have always found the United States agreed with us." In the first case there could be no excuse for the capture of persons not engaged in military service who had embarked at one neutral port for another in the vessel of a neutral Power, and who were not bound to any port belonging to either of the belligerents. In the supposition of the envoys being rebels there is just as little, he says, to be urged in defence of the Captain of the San Jacinto, for in such a case there would be a contempt of the principle in virtue of which a ship is held to be a portion of the territory whose flag it bears, and there would be a violation of the immunity which forbids a foreign Sovereign to exercise jurisdiction on that territory. From this argument M. THOUVENEL concludes that the Cabinet of Washington cannot hesitate as to the course to be taken.

He recommends immediate compliance with the demands which the British Cabinet has been "under the necessity of making," and which consist in "the immediate release of the persons taken from the Trent, and explanations which shall relieve the act of the captain of the San Jacinto of its offensive character to the British flag." The discussion on the *Senatûs Consultum* was resumed in the Senate on Saturday, and after an explanation by M. Fould of the statements contained in his report, it was all but unanimously agreed to, only one senator out of the 133 present voting against the measure.

In the sitting of the Italian Chamber of Deputies on Saturday Count Bastogi made his financial statement. It showed a deficit for the year 1862 of 159,000,000 lire, of which it is proposed to raise 139,000,000 by new taxes, and to cover the remaining 20,000,000 by a fresh issue of Treasury Bonds. This statement produced a very favourable impression, and was provisionally agreed to by a majority of 202 to 39. On Monday the Budget was submitted to the Senate, and it was agreed that it should be adopted on the understanding that the vote should be considered as expressing neither confidence nor distrust in the Ministry.

A despatch from Lisbon informs us that the King of Portugal has taken the oath to the Constitution in a special session of the Cortes. The Infante Dom Augusto is better and there are at length hopes of his recovery; but Dom Joao, another of the King's brothers, has been attacked by gastric fever of so dangerous a character that he has received the last sacraments. In consequence of these outbreaks of disease in the Royal Palace, the people have become greatly excited, and there have been tumults in the streets rendering it necessary to call out the troops to preserve order. In compliance with the request of the Municipal Chamber and the people the King has removed to the country palace of Caxias, and the Cortes in a special session have passed a decree, appointing a medical commission to examine the royal palaces and report on their sanitary condition. It is also said that the body of the late King is to be disinterred and analysed.

From the United States we learn that the steamer Hansa, which left Southampton on the 28th ult., arrived at New York on the 12th inst., with accounts of the manner in which the Trent outrage had been received in England. The effect of the news and especially of the indignation meeting at Liverpool, had created uneasiness in commercial circles; but the New York papers generally regarded the news as favourable to the maintenance of peace. The correspondence of the Secretary of State with foreign Governments during the recess had been published, from which we learn that Earl Russell had officially avowed that there was a mutual understanding between England and France on American affairs; and had informed Mr. Adams that British troops had been sent to Canada as a proper measure of precaution, and because a threat had been uttered by Mr. Seward to Lord Lyons that British vessels would be seized on Lake Ontario without ceremony. We learn also from these documents that Mr. Seward, having ascertained on examining certain despatches that they took cognisance of both parties as belligerents, assuming thereby that the United States were not one sovereign power, would not allow the despatches to be communicated to the Federal Government. The report of the Secretary of the Treasury had been presented to Congress. It shows great falling off in the customs' revenue, and recommends an increase of duties on sugar, green tea, and coffee, and an increase in the direct taxes of 20 million dollars, and also various miscellaneous duties calculated to produce 20 million dollars. The estimated expenditure for the financial year ending July, 1862, is 540 million dollars, of which only 329 have been received, leaving 240 millions to be provided. This is proposed to be accomplished by substituting a Federal currency for the present bank currency, which, it is calculated, will produce 150 millions, a loan of 50 millions, and the remaining 140 millions to be provided in various ways. Should the war be continued beyond Midsummer the amount required for the fiscal year 1863 will be 379 million dollars, and in July, 1862, the public debt will be 900 millions. This report does not receive much favour in financial circles. Congress has passed a resolution in favour of the adoption of measures for an exchange of prisoners, and has also approved of the suppression of *habeas corpus* by President Lincoln. An engagement has taken place in Western Virginia, in which the Federals are reported to have been successful.

A despatch has been received in Paris announcing that the troops of the Spanish expedition against Mexico, without waiting for the arrival of the English and French divisions, have sailed from Cuba and landed at Vera Cruz, with the alleged intention of marching on Mexico. It is said that Marshal Serrano had received despatches announcing the existence of a vast conspiracy against the lives of the Spanish residents in Mexico, and that it was with the object of saving his countrymen that he started without waiting for the forces of the other Powers.

Home News.

The Funeral of the Prince Consort.—On Monday the mortal remains of the Prince Consort were interred in St. George's Chapel, Windsor, with little of the pomp and pageantry of a State ceremonial, but with every outward mark of respect, and with all the solemnity which befitted his high station. By the express desire of his Royal Highness the funeral was of the plainest and most private character; but in the Chapel, to do honour to his memory, were assembled all the chief men of the State, and throughout England, by every sign of sorrow and mourning, the nation manifested its sense of the loss which it has sustained. Windsor itself wore an aspect of the most profound gloom. The streets were silent and almost deserted, and all who appeared abroad were dressed in the deepest mourning. The great bell of the Castle tolled dolefully at intervals from an early hour, and minute bells were tolled also at St. John's Church. At the parish church of Clewer and at St. John's there were services in the morning and afternoon, and the day was observed throughout the Royal borough in the strictest manner. The weather was in character with the occasion; a chill, damp air, with a dull leaden sky above, increased the gloom which hung over all. There were but few visitors in the town, for the procession did not pass beyond the immediate precincts of the Chapel and Castle, and none were admitted except those connected with the Castle and their friends. At 11 o'clock a strong force of the A division took possession of all the avenues leading to the Chapel Royal, and from that time only the guests specially invited and those who were to take part in the ceremonial were allowed to pass. Shortly afterwards a guard of honour of the Grenadier Guards, of which regiment his Royal Highness was Colonel, with the colours of the regiment shrouded in crape, marched in and took up its position before the principal entrance to the Chapel Royal. Another guard of honour from the same regiment was also on duty in the Quadrangle at the entrance to the State apartments. They were speedily followed by a squadron of the 2d Life Guards dismounted, and by two companies of the Fusilier Guards, who were drawn up in single file along each side of the road by which the procession was to pass, from the Norman gateway to the Chapel door. The officers wore the deepest military mourning—scarves, sword-knots, and rosettes of crape. In the Home Park was stationed a troop of Horse Artillery, which commenced firing minute guns at the end of the Long Walk, advancing slowly until it reached the Castle gates just at the close of the ceremony. The Ministers, the officers of the Queen's Household, and other distinguished personages who had been honoured with an invitation to attend the ceremonial, reached Windsor by a special train from Paddington. They were met by carriages provided for them at the station, and as they alighted at the door of the chapel they were received by the proper officials and conducted to the seats appointed for them in the Choir. In the Great Quadrangle were drawn up the hearse and the mourning coaches, and after all the preparations had been completed within the Castle, the procession began to form in that quadrangle shortly before 12 o'clock. It had been originally intended that it should leave the Castle by the St. George's gate, and, proceeding down Castle Hill, approach the Chapel through Henry VIII.'s gateway, but at a late hour this arrangement was changed, and the shorter route by the Norman gateway was chosen. The Prince of Wales and the other Royal mourners assembled in the Oak Room, but did not form part of the procession. They were conveyed to the Chapel in private carriages before the coffin was placed in the hearse, passing through St. George's gateway into the Lower Ward. Scarcely had they alighted at the door of Wolsey's Chapel, when the first minute gun fired in the distance, and the rattle of the troops reversing arms announced that the procession had started. It was then exactly 12 o'clock. The procession was headed by nine mourning coaches, each drawn by four horses. The coaches and trappings were of the plainest description; the horses had velvet housing and feathers, but on the coaches there were no feathers or ornaments of any kind. The first contained the Prince's personal attendants and jägers; the second the officers of his household, the third three of the physicians; the fourth and fifth the equerries and gentlemen ushers; the sixth the Lord and Grooms in waiting to the Queen, the Clerk Marshal and the Master of the Household; the seventh and eighth the eight pallbearers; and the ninth the three great Officers of her Majesty's Household, the Lord Steward, the Lord Chamberlain, and the Master of the Horse. These were followed by one of the Queen's carriages, drawn by six horses, the servants in State liveries, conveying the Crown of his Royal Highness, borne by Earl Spencer, Groom of the Stole, and the baton, sword, and hat of his Royal Highness, borne by Lord George Lennox, Lord of the Bedchamber. The Hearse followed, drawn by six horses and attended by an escort of Life Guards; the hearse and the housings of the horses bearing heraldic escutcheons of the arms of England and Saxe-Coburg and Gotha. The procession was closed by four carriages, each drawn by six horses and attended by servants in state liveries; the first carriage belonging to the Queen, the second to the Prince of Wales, the third to the Duke of Cambridge, and the fourth to the Duchess of Cambridge. The procession wound slowly round the base of the Round Tower into the Lower Ward. There was no military music; the distant boom of the minute guns and the knell of the Castle bell were the only sounds which broke the silence of the scene. Though the distance to be traversed was so short, it was not until 20 minutes past 12 o'clock that the hearse arrived at the door of the Chapel Royal. The seats in the choir reserved for those who had been invited to attend the funeral by her Majesty's commands were already filled. The Knights of the Garter took their own stalls under their banners at the back of the choir; the other mourners sat in front, nearest to the grave, Only one or two wore orders, and even these were almost entirely concealed under the broad black silk mourning scarves. Among those present were the Belgian, Portuguese, and Prussian Ambassadors, her Majesty's Ministers, with the exception of Lord Palmerston and the Duke of Argyll, who were prevented by illness from attending; the Lord Lieutenant of Ireland, the Officers of the Household, the Dukes of Buccleugh, Newcastle, Rutland, Manchester, Wellington, and Athol, the Marquises of Abercorn, Exeter, and Breadalbane, the Earls of Derby, De la Warr, Clarendon, and Cowley, Viscount Torrington, Lords Colville of Culross, Ebury, Portman, and Bagot, the Archbishop of Canterbury, the Bishops of London, Oxford, Chester, and Worcester, the Speaker of the House of Commons, the Vicars of Old and New Windsor, and other noblemen and gentlemen who had held office in the Royal household. On its arrival at the Chapel the coffin was carried in by 10 bearers and laid upon the bier. Here it was entirely hidden under the heavy black velvet pall, adorned at the sides with large funeral escocheons bearing the arms of her Majesty and the Prince on separate shields. Both shields were surrounded by the Garter and surmounted with their proper crowns; first, those of the Queen were on a ground of silver tissue, those of the late Prince on deep black; so that the contrast between these rich armorial bearings was as startling and marked as that between the white border of the pall and its gloomy centre. When all was arranged, Lord Sydney the Lord Chamberlain, accompanied by the Vice-Chamberlain, Lord Castlerosse, proceeded up the choir to Wolsey's chapel, where the Royal mourners had already assembled, and who at once slowly crossed the chapel and took their stations in the south aisle at the head of the corpse. The Prince of Wales, as chief mourner, stood in the centre; having Prince Arthur on his right, and the Duke of Saxe-Coburg and Gotha on his left and attended by Major-General the Hon. R. Bruce, the Crown Prince of Prussia, the Duke de Brabant, the Count de Flanders, the Duke de Nemours, Prince Louis of Hesse, Prince Edward of Saxe-Weimar, Count Gleichen, and the Maharajah Dhuleep Singh. The pall bearers, Colonel the Hon. Sir Charles Phipps, Lord Waterpark, the Hon. General Grey, the Hon. Colonel A. N. Hood, General Wylde, the Hon. Colonel Dudley De Ros, Colonel Francis Seymour, and Major Du Plat. Some two or three minutes were consumed in marshalling the procession before it began to move forward, and during this time the chief mourners remained motionless at the head of the coffin. The Prince of Wales bore up with great fortitude, and though, like all the rest, at times gave way to irrepressible bursts of tears, he evidently tried to the utmost to restrain his feelings, though it could be seen sometimes from the working of his countenance that the effort was too violent for long endurance. The Duke of Saxe-Coburg Gotha, who was devotedly attached to his deceased brother, to whom he bears a strong resemblance, was deeply moved and wept incessantly throughout the ceremony. The Crown Prince of Prussia, too, was equally affected. Prince Arthur's grief was enough to move the sternest, and he made no attempt to check or hide his feelings. His eyes were red

... and the tears were running down his cheeks as ... the Chapel. As they stood at the head of ...'s coffin, the Prince of Wales turned and ... apparently a few soothing words, for after ... Arthur, for a minute or so, seemed to ...tter. It was not until the procession began ...ward, and the long melancholy wail of the ...ed through the building, that all the little ...rtitude gave way, and hiding his face in his ...ief, he sobbed as if his very heart was break-... was nearly 20 minutes before the bier reached ...rm over the entrance to the Royal vault. ...king at the feet of the corpse filed off to the ... left as the bier neared the Communion rails, ... slowly placed, amid solemn silence, on the ... it was to be lowered out of sight for ever. ...earers took their stand near low crape-covered ...ither side of the coffin. Viscount Sydney, as ...berlain, stood at the foot of the bier, with ...erosse. Garter King at Arms stood on the ...he Prince of Wales, with Prince Arthur ... Duke of Saxe-Coburg, remained standing ... of the coffin, and the other mourners in ... which they had entered the choir. The ... Rev. Gerald Wellesley, Dean of Windsor, ...anced to the Communion rails, and in a ... voice, at some times almost inaudible, com-...ading the service. After the lesson, a German ... music of which is said to have been com-... his late Royal Highness, was chanted. Once ...during its progress the Prince of Wales, Prince ... the Crown Prince of Prussia, and Duke of Saxe-... were totally unable to restrain their tears, in ... were silently joined by nearly all present in ... The first part of the service and the anthem ... Luther's Hymn) having been performed, the ... attendants of his late Royal Highness ad-... slowly removed the heavy pall, leaving the ...overed. As this was done Earl Spencer, ... the Stole to the deceased Prince, placed ... above the inscription plate the crown ... Consort. At the same time Lord George ... of the Bedchamber, laid the baton of the ... Field Marshal, crossed with the sword, and ... with the Field Marshal's hat and plume, on ... the coffin, above the insignia of the Garter. ... memorials were fastened to the heavy black ...s on which they were laid. As this last ...ended the attendants retired, and there was ...use, during which the quick, sharp rattle of ... outside reversing arms was plainly audible. ... the muffled toll of the bell, the boom of ... guns, and the coffin slowly and at first ...ceptibly began to sink into the grave. ... moment the Princes hid their faces and ..., and all in the chapel allowed their tears ... unchecked, the Crown Prince of Prussia ...sonal attendants of his late Royal Highness ... pall-bearers appearing not less deeply moved ... Royal orphans themselves. As the coffin dis-... the service was continued. At the proper ... earth was thrown upon the coffin, and fell ...aments and plate with a sharp rattle that ...roughout the building. Towards the close ... the choir chanted an English translation ... the late Prince's favourite chorales. After ...oncluding the service, Garter King at Arms, ... the head of the grave, proclaimed the ...s of the deceased Prince, saying:—

"... pleased Almighty God to take out of this ... His Divine mercy the Most High, Most ... Illustrious Prince Albert, the Prince Con-... Saxony, Prince of Saxe-Coburg and Gotha, ... Most Noble Order of the Garter, and the most ... Her Most Excellent Majesty Victoria, by the ... the United Kingdom of Great Britain and ... Defender of the Faith, &c., whom God bless ... long life, health, and honour."

...ers then advanced to take a last look into ... The Prince of Wales advanced first, and ... brief moment, with hands clasped, look-...hen all his fortitude seemed suddenly to ... and bursting into a flood of tears he hid his ...tered by the Lord Chamberlain, slowly left ... Of the two, Prince Arthur seemed the ...d at the end of the ceremony, as if his ... grief had worn itself out. The Royal ...er Royal personages were then con-... the chapel, and the others composing ... retired, the organ playing the "Dead ...ul. The coffin of the late Prince was then ... gates of the Royal vault. There it remains, ... not left to the gloom of its last home till ... memorials of love and fond regret from the ...en and children were sorrowfully depo-...red hands upon the coffin. On Monday ...een's messenger brought from Osborne to ... little wreaths and a bouquet. The ... simple chaplets of moss and violets, ... the three elder Princesses—the bouquet ... a white camellia in the centre, was sent ...ed Queen. Between the heraldic insignia ...ntoes from his widow and orphan daughters ... the coffin—mementoes of domestic love ...bove all heraldry that ever was emblazoned. ... be mentioned that previous to the ... shell, a wreath of flowers, made by the ... Alice, was placed over the corpse, and a ... portrait of her Majesty laid by the hands ... Royal Highness. The Duke of Cambridge and the Prince of Leiningen were prevented by indisposition from attending the funeral. Lord Palmerston, the Marquis of Lansdowne, Count Kielmansegge, the Hanoverian Minister; Count Vitzthum, the Saxon Minister; the Duke of Argyll, Lord Byron, the Earl of Morley, Viscount Clifden, and several gentlemen formerly connected with the Court, were likewise prevented by indisposition from being present. Dr. Jenner was also absent, being in attendance on the Queen at Osborne. The representatives of the King of Portugal, Don Manoel da Camara and Lieutenant A. de Sampayo E. Pina, did not arrive in time to take part in the ceremony. In the course of the afternoon the Duke of Saxe-Coburg, Prince Arthur, and Prince Louis of Hesse, left Windsor for Osborne. The Crown Prince of Prussia left the Castle in the evening for Dover to embark for the Continent. The Duke de Nemours returned to Claremont, and Prince Edward of Saxe Weimar returned to London. The Prince of Wales, accompanied by the Duke de Brabant and the Count de Flandres, remained for the night at the Castle, and left for Osborne on Tuesday morning. On Saturday, the 21st, Major Graham, the Registrar-General, attended at Windsor Castle for the purpose of superintending the civil registration of the death of the Prince Consort previous to the funeral. The death was recorded in the register-book of the Windsor district by Mr. Travers, the registrar of births and deaths, the Prince of Wales signing the entry as informant, "present at death." The fatal disease was recorded "Typhoid fever, duration 21 days," as certified in writing by the physicians who had attended the deceased. The Court of Aldermen on Saturday, and the Liverymen of the City on Tuesday, unanimously adopted addresses of condolence and sympathy to her Majesty, and similar addresses have been adopted by the Town Councils of several provincial towns. The German residents in Great Britain held a meeting at Crosby Hall on Saturday, and adopted resolutions of condolence with the Queen and Royal family. Funeral sermons were preached on Sunday in the churches and chapels of the metropolis. On Monday, by order of the Lord Chancellor, the Law Courts were shut, the afternoon delivery of letters in the London district was suspended, the Stock Exchange, the Government Offices, the principal shops and mercantile establishments were entirely closed, and at the suggestion of the Lord Mayor all commercial business, so far as it was possible to postpone it, was generally suspended. At 12 o'clock the great bells of Westminster Palace and St. Paul's were tolled for an hour, and minute guns were fired from the Tower and Woolwich. Compared with the ordinary traffic on a Monday the streets have seldom been so deserted, and the whole city wore the aspect of deep mourning. The day was observed with no less solemnity in the chief towns of England, Ireland, and Scotland. Special services were performed in all the churches and in most of the dissenting chapels and Jewish synagogues, the bells being tolled and muffled peals rung in the early part of the day. The Mayors and Corporations in several places attended service in church, accompanied by the Volunteers and Yeomanry. In the cathedral cities the services were rendered specially effective by the performance of the "Dead March" in Saul, and in many of the cathedrals the sermons were preached by the bishops of the diocese. The factories in several large towns in the manufacturing districts were shut for the day. In the sea-ports the ships of all nations hoisted their flags half-mast high, and the Volunteer Artillery added by the discharge of minute guns to the gloomy feelings awakened by the muffled peals from the church steeples. No minute guns however were fired at Southampton and Portsmouth, in consequence of orders that there should be no discharge of large ordnance within hearing of her Majesty at Osborne. At Edinburgh and other towns of Scotland all business was suspended during the hours of the funeral, and prayer meetings were held in the churches. In Dublin and its suburbs nothing like the manifestation of grief which was everywhere visible has been witnessed in Ireland during the memory of the present generation. Not only the cathedrals, the Castle Chapel, and the College Chapel, but the parochial and district churches and all the dissenting places of worship were hung with black, and with a few exceptions every place of business was closed.

The Court.—The Queen and Royal family continue at Osborne. On Friday the Court Circular announced that the Queen had slept several hours during the night, and was calm in mind in the morning. The Crown Prince of Prussia and Princess Hohenlohe arrived at Osborne from the Continent. On Saturday it was announced that the Queen had passed a quiet night, and continued to bear her grief with calmness. In the evening the Duke of Saxe-Coburg arrived from Germany on a visit of condolence to her Majesty. On Sunday it was announced that the Queen had several hours' sleep on the previous night, and was tranquil in the morning. On Monday it was announced that the Queen had several hours' sleep during the night, and was as calm as could be expected in the morning. The Crown Prince of Prussia, the Duke of Saxe Coburg, Prince Arthur, and Prince Louis of Hesse, left Osborne at an early hour for Windsor, and returned to Osborne after the funeral. On Tuesday the Prince of Wales, accompanied by the Duke de Brabant and the Count de Flandres, arrived at Osborne from Windsor. On Wednesday it was announced that the Queen had some hours' sleep at night and was tranquil in the morning. On Thursday it was announced that the Queen had some hours' sleep at night and was calm in the morning. The Duke of Brabant and the Count of Flanders took leave of the Queen and left Osborne for Dover, on their return to Belgium. The Duke of Saxe-Coburg left for London, and was to return to Osborne yesterday. Dr. Jenner has remained at Osborne during the week in attendance on her Majesty.

Arrival of the King of the Belgians.—His Majesty King Leopold arrived at Dover on Thursday evening from Ostend. His Majesty was met on landing by the Duke of Brabant and Count of Flanders, who had arrived from Osborne during the day. The King slept at the Lord Warden Hotel on Thursday night, and proceeded to Osborne yesterday morning on a visit to the Queen. The Duke of Brabant and the Count of Flanders sailed yesterday morning for Ostend.

Prince Leopold.—Lieut.-Colonel Cavendish left London on Saturday for Cannes to relieve Lord Rokeby in charge of Prince Leopold. It has been decided to allow his Royal Highness to remain at Cannes, as he has already derived extraordinary benefit from the climate, having quite recovered his appetite, and being now able to take any fair amount of exercise.

Health of Lord Palmerston.—The daily papers announce that the Premier was able to leave his bedroom for the library on Thursday, with the aid of crutches, and that during his attack of gout his lordship has been able to discharge his official business without interruption.

Parliamentary Movements.—The nomination for Nottingham took place on Thursday. The show of hands was in favour of Sir Robert Clifton, and a poll was demanded on behalf of the Earl of Lincoln. The poll commenced yesterday, and at half-past eleven the numbers were—for Sir R. Clifton, 1677; for Lord Lincoln, 792. Sir H. W. Dashwood, of Kirtlington Park, near Woodstock, has announced himself as a candidate for Oxfordshire, vacant by the death of Mr. G. G. Harcourt.

Preparations for War.—Another battery of Royal Artillery, a battalion of the Military Train, and several officers of the Staff, sailed from Liverpool on Saturday in the Asia for Halifax. The 4th company of Royal Engineers, two batteries of Royal Artillery, and a detachment of the 15th Foot will sail from Liverpool in a few days for New Brunswick. The 5th company of Royal Engineers, two batteries of Royal Artillery, and a detachment of the Army Hospital Corps will sail from Woolwich to-day in the steamer Calcutta for Canada, New Brunswick, and Newfoundland. A party of telegraphists, surveyors, and photographists, selected from the most intelligent of the Royal Engineers connected with those departments, will accompany that corps, and will take out with them about 400 miles of telegraph wire, the Government having decided on connecting, as far as possible, the whole of the stations at which troops will be quartered, so that the Commander-in-Chief may be in instant communication with the entire force under his command. Admiralty orders were issued on Saturday for the whole of the screw gunboats attached to the first division of the steam reserve at Chatham, to be removed from their stations in the Medway for immediate service. Each of those gunboats has been supplied with a 100-pounder and 40-pounder Armstrong pivot-gun on the upper deck. The screw-frigate Orlando, 50, which was only commissioned on the 15th inst., left Plymouth Sound on Tuesday for Halifax, calling at Gibraltar on her way. The screw-frigate Emerald, 51, which has been some days at Plymouth expecting to sail direct for Halifax, received orders on Wednesday to proceed to Liverpool, there to await further instructions. The Devastation, paddle-sloop, will leave Portsmouth in a few days for the Pacific, taking supernumeraries for the ships on that station.

Coast and Harbour Defences.—Six of the gunboats in the first-class reserve at Portsmouth have been ordered away to the following stations, for the protection of the coasts and harbours, in the event of war with America. The Highlander has been ordered to Kingstown; Escort, Blazer, and Rose, to the coast of Ireland; and the Amelia and Raven to Greenock. They are armed with 68-pounders on traversing platforms, and are commanded by lieutenants from her Majesty's ships Victory, Asia, St. Vincent, and Excellent, and manned by crews told off from the same ships under the "gunboat flotilla" regulations. The second-class gunboats at Portsmouth are now to be brought forward as the first-class reserve. The Pandora, 6, screw, in the first-class reserve at Portsmouth, has been ordered to complete her armament, and to proceed to Liverpool to be stationed in the Mersey for the protection of that port.

The Whitworth Ordnance.—During the debate of last session in the House of Commons on Mr. Vivian's motion for a committee of inquiry into the merits of the Whitworth and Enfield rifles, Lord Palmerston promised that the subject should be properly investigated during the recess. In accordance with this promise his Lordship in the course of the autumn himself visited Hythe and Shoeburyness to see the practice with the Whitworth rifled guns. The result of the investigation is an order that some Whitworth rifles are to be manufactured forthwith at Enfield and distributed among various regiments of Infantry, and that a number of

Mr. Whitworth's rifled guns are forthwith to be tried in the ordinary use of the service.

Foreign.

FRANCE.—The following important despatch has been addressed by the French Minister of Foreign Affairs to the representative of France at Washington:—

"THE MINISTER OF FOREIGN AFFAIRS TO THE FRENCH MINISTER AT WASHINGTON.

"PARIS, Dec 3, 1861.

"Monsieur,—The arrest of MM. Mason and Slidell on board the English packet Trent by an American cruiser has produced in France, if not the same emotion as in England, at least great astonishment and an extreme sensation. Public opinion at once inquired, with anxiety for the consequences, whether such an act could possibly be legitimate, and there cannot be the slightest doubt of the general impression. The act seems to the public so entirely at variance with the ordinary rules of international law that it throws the responsibility exclusively upon the commander of the San Jacinto. We cannot know yet whether this supposition is well founded, and the Emperor's Government has therefore felt called upon to consider the question raised by the capture of the two passengers on board the Trent. The desire to contribute to prevent a conflict, which is, perhaps, imminent, between two Powers towards whom it is animated by equally friendly sentiments, and the duty of maintaining—with a view to put the rights of its own flag beyond the danger of attack—certain principles essential to the security of neutrals, have, after mature reflection, convinced the French Government that it cannot remain completely silent under existing circumstances. If, to our great regret, the Washington Cabinet should be disposed to approve the conduct of the commander of the San Jacinto, they must consider MM. Slidell and Mason either as enemies or as rebels. In either case there would be an extremely regrettable forgetfulness of principle on which we have always found the United States agreed with us. On what ground, in the first supposed case, can the American cruiser have arrested MM. Mason and Slidell? The United States have admitted, with us, in treaties concluded between the two countries, that the freedom of the flag extends to persons found on board, even though they be enemies, except in the case of military men actually in the service of the enemy. MM. Mason and Slidell were, therefore, by virtue of this principle, which we have never found any difficulty in getting inserted in our treaties of friendship and commerce, perfectly free under the neutral flag of England. It will not, doubtless, be pretended that they could be considered as contraband of war. What constitutes contraband of war is not, it is true, precisely settled; the limits are not absolutely the same for all Powers, but, as far as regards persons, the stipulations found in treaties relative to military persons clearly define the character of the individuals who alone are liable to be captured by belligerents. Now it cannot be necessary to demonstrate that MM. Mason and Slidell can in no way be assimilated to persons in this category. There would, therefore, remain no ground to explain their capture but the pretext that they were bearers of official despatches from the enemy. But this is the place to call to mind a circumstance which overrides the whole case, and shows the conduct of the American cruiser to have been unjustifiable. The Trent was not bound to a point belonging to either of the belligerents. It was carrying its cargo and passengers to a neutral country, and moreover, it was at a neutral port that it had taken them up. If it were admissible that under such circumstances the neutral flag did not completely cover the persons and goods transported under it, the immunities of that flag would be a vain word; the commerce and navigation of third Powers would be liable to suffer at any moment for their innocent or even indirect relations with either of the belligerents. The latter would not have a right to require from the neutral the most complete impartiality, and to interdict him from being mixed up in any way with acts of hostility, but they would inflict restrictions upon the liberty of commerce and navigation which modern international law refuses to acknowledge as legitimate. There would be a return, in a word, to those vexatious practices against which in former times no Power protested more energetically than the United States. If the Washington Cabinet should regard the two persons arrested as rebels, whom it has always a right to seize, the question, though shifting its ground, could not be more resolved in a sense favourable to the commander of the San Jacinto. In such a case there would be a contempt of the principle in virtue of which a ship is held to be a portion of the territory whose flag it bears, and there would be a violation of the immunity which forbids a foreign Sovereign to exercise jurisdiction on that territory. It cannot, doubtless, be necessary to call to mind the energy with which the United States has, on every occasion, defended this immunity, and the right of asylum, which is a consequence of it. Without wishing to enter upon a more thorough discussion of the questions raised by the capture of MM. Mason and Slidell, I have said enough, I think, to show that the Cabinet of Washington cannot, without infringing those principles which all neutral Powers are alike interested in maintaining, nor without putting itself in contradiction with its own conduct up to the present time, give its approbation of the conduct of the San Jacinto. In this state of things the Cabinet of Washington cannot, in our opinion, hesitate as to the course to be taken. Lord Lyons is already charged to present the demand for satisfaction which the English Cabinet is under the necessity of making, and which consists in the immediate release of the persons taken from the Trent, and explanations which shall relieve the act of the captain of the San Jacinto of its offensive character to the British flag. The Federal Government would be inspired by a just and elevated sentiment in yielding to these demands. It is impossible to conceive any object or any interest that it could have to run the risk of provoking a rupture with Great Britain by assuming a different attitude. For ourselves, who would see in such a rupture a complication in every way deplorable of the difficulties with which the Cabinet of Washington has already to struggle, and a proceeding calculated to occasion serious uneasiness to all the Powers not parties to the present conflict, we think we are giving a testimony of loyal friendship to the Cabinet of Washington in not concealing from it our opinion. I request you, sir, to take the first opportunity of speaking frankly with Mr. Seward, and, if he desire it, to leave him a copy of this despatch.—Receive, &c.,

"THOUVENEL."

The French press generally approves of this despatch, but does not desire that France should be dragged into active warfare should hostilities really break out between England and America. The anti-English party in the press, however, strongly condemn M. Thouvenel for the "moral support" he affords to England. The *Opinion Nationale* broadly intimates that he ought to be ashamed of the approval which the despatch has met with in England. The *Débats* admits that the Federal Government has acted most injudiciously towards England in having affected to treat so great a nation with an inexcusable degree of haughtiness, which has naturally given it great offence. It admits that England has for a long time pursued a peace policy, which is as acceptable with the educated classes as among the majority of the people. It says that if, on account of the affair of the Trent, England now makes war against the Northern States, one of her principal motives will be to secure her predominance at sea, and that the war will finally militate against this object, by compelling America to create a formidable navy, and thereby become one of the first maritime Powers. The *Temps* fears that England, no longer "kept in her place by the counterpoise of the United States," might prove too powerful an ally for France. Rumours without end are current in Paris as to the state of feeling in America, but they cannot be traced to any authentic source, and are no doubt to be attributed to the anxiety for news. On Monday it was reported that a well-known firm in Paris had communicated to the American Minister a despatch they had received to the effect that the Washington Cabinet had decided on surrendering the Southern Commissioners; while on Tuesday it was asserted that the house of Rothschild had received a letter, stating that the Washington Cabinet would receive the ultimatum of England "with indignation and contempt." The *Patrie* states that it is informed that General M'Clellan had officially informed the President that he disapproved of the seizure of Messrs. Mason and Slidell. The *Temps* of Saturday evening asserts that a despatch has arrived in London from Mr. Seward, replying to a communication from Earl Russell on the subject of neutral rights. "In this despatch," says the *Temps*, "Mr. Seward assures Earl Russell that the Cabinet of Washington, faithful to its past policy, is ready to guarantee to neutrals every facility compatible with the rights of belligerents, and that satisfaction will loyally be given by the Federal Government in case an infraction of the rule adopted in common should take place. This despatch, although bearing a date anterior to that of the English ultimatum, was written after the arrest of the Confederate Commissioners became known in America." The *Constitutionnel* states that 13 British merchantmen have lately made their escape from one of the "blockaded Southern Ports," and that seven of them made their way into Havannah, pursued by two Federal steamers, at present cruising before the port. The American commanders having declared that they would capture the British vessels if they ventured out, the British Consul has applied to Admiral Dunlop, commanding on the Jamaica station, for a sufficient force to convoy them. The *Presse* says that two new Commissioners from the South have arrived at some German port on their way to Paris and London. The *Opinion Nationale* had previously announced that two Commissioners from the Southern States, despatched by way of Mexico at the same time as Messrs. Mason and Slidell, have arrived in Paris.—The discussion of the *Senatus Consultum* was resumed on Friday in the Senate. Baron Brenier, formerly ambassador at Naples, spoke in favour of continuing to the Emperor the absolute prerogative to open extraordinary credits, and disputed the accuracy of the late report of M. Fould on the French finances. M. Casabianca was the next speaker. Count de Segur d'Aguesseau, one of the leaders of the Ultramontane party, then addressed the Senate. He said that the financial embarrassment of France was not caused by the Imperial prerogative of resorting to extraordinary and supplementary credits, but by the successive political and military mistakes of the Imperial Government. Its first great error was the war against Russia; its second great error was the war against Austria. This second blunder had been partially atoned for by the sudden termination of the Italian campaign after the battle of Solferino, and by the conditions of the peace concluded at Villafranca. But the hopes inspired by that peace were unhappily short-lived. The sanction given to the principle of non-intervention had for its practical result that Piedmont might intervene against everybody, but that no one might intervene against Piedmont. Since then matters had constantly been going from bad to worse. Not even the presence of a French garrison of 7000 men in Rome was able to secure respect for the opinions and character of the Pope and Cardinal Antonelli. But the most ominous sign of all had been the speech against Rome addressed to the Senate itself a year before by Prince Napoleon. That speech was the real cause of the blow given to public confidence, of the constantly increasing financial distrust, of the undeniable and at length openly acknowledged financial embarrassment. The utterance of this opinion was the signal for a complete uproar in the Senate. Marshal Canrobert, Marshal Vaillant, M. Pietri, M. Dupin, M. Billault, M. Baroche, and the President protested against this departure from the question, but the Count recurred again and again to Prince Napoleon's speech, and at length the Senate, after an extraordinary scene of clamour and interruption, refused to hear him. On Saturday the discussion was resumed by M. Fould, who spoke to the following effect:—

"He justified the statements contained in his recent report, the effect of which, he said, had been to re-establish a feeling of security. Since then the indirect revenue had increased, and the public funds had risen, and would probably have continued to rise but for the incident which had caused apprehensions of war between England and America. He demonstrated, by the experience of the late war in Italy, the uselessness of extraordinary credits, and called attention to what was at this moment taking place in England, where, without transfers or extraordinary credits, large bodies of [illegible] a formidable fleet, carrying 1800 guns, had been [illegible] Canada, and that without convoking Parliament. [illegible] he said, 'nothing will be added to the deficit, [illegible] necessary that a real equilibrium should be [illegible] between the revenue and expenditure, and [illegible] sources should be sufficient and even more [illegible] ficient. Should unforeseen events come to [illegible] country, the Government will agree with the [illegible] Législatif upon the measures to be taken. [illegible] Treasury has nothing to give, the Corps L[illegible] will engage its responsibility with that of the Government [illegible] will no longer happen that two years pass away [illegible] Corps Législatif is called upon to exercise a control [illegible] credits and expenditure. Every desirable guarantee [illegible] exists if we have the strength to respect the laws [illegible] have made.'

After some explanations from M. Forcade la R[illegible] respecting the state of the finances, the *Senatus Consultum* was all but unanimously agreed to, Mons[illegible] Mathieu, Archbishop of Besançon, being the only Senator out of 133 present who voted against the [illegible] The *Moniteur* of Wednesday, in announcing th[illegible] *Journal des Débats* has received a first warning [illegible] article published on the 23d inst., and signed by M. [illegible] Marc-Girardin, says:—

"This article is written in a party spirit, and [illegible] shake the faith of the people in their natural [illegible] The doctrines which it professes are in flagrant [illegible] to the principles on which the French people agreed [illegible] an Imperial throne and the future of a dynasty."

The following passage is quoted from the *Débats* as [illegible] principal motive of the warning:—

"Nor have we any wish to discuss with M. Tr[illegible] fundamental principles of the Constitution of 1852; we [illegible] perhaps affirm, with the assent of many a person, [illegible] most fundamental principle of that Constitution is the [illegible] and that it is to indulge in the illusion of a jurisconsult, [illegible] too easily captivated by texts, to believe that it is the [illegible] that sustains the Emperor, and not the Emperor [illegible] the Empire."

The *Moniteur* of yesterday announces the appointment of 2 vice-admirals, 3 rear-admirals, [illegible] captains, and 40 lieutenants of men-[illegible] and 14 captains of frigates. Count Pourtalès, [illegible] Prussian Ambassador, who died on Thursday [illegible] was only 34 years old. He dropped down in [illegible] apoplectic fit, on the staircase of his embassy, [illegible] died in a few minutes.—The shops in Paris [illegible] by Englishmen remained closed on Monday as a [illegible] of respect to the memory of the Prince Consort; [illegible] on Saturday a numerous meeting of the French [illegible] English inhabitants of Cannes was held under the [illegible] sidency of Lord Brougham, at which an address [illegible] Queen Victoria on her bereavement was unanimously carried. M. Legoff, Mayor of Cannes, attended the meeting and signed the address, as representing [illegible] feeling and sympathy of the town, and the address was signed by every Englishman residing in [illegible] At the sitting of the Société Impériale d'Acclimatation on the 20th, M. Drouyn de Lhuys expressed [illegible] follows on the Prince Consort's death:—

"Gentlemen,—At the last sitting I enumerated the [illegible] members we have lost. To-day it is my painful duty to [illegible] august name to this list, which is already but too long—that of his Royal Highness Prince Albert of Saxe-Coburg. His [illegible] is in every mouth; the remembrance of him will live [illegible] heart. The British Constitution did not admit [illegible] Consort to an official participation in the Royal [illegible] the Prince did in reality reign by his public and pr[illegible] by his love of all that was good, his distinguished [illegible] his vast acquirements. His personal merit had in a [illegible] raised an undisputed throne for him, sheltered from [illegible] storms, in the noble and tranquil empire of the [illegible] sciences, agriculture, and manufacture. He loved [illegible] title of President of the Zoological Society of L[illegible] the other titles which decorated his name. Hence, [illegible] I believe I am not wanting in the respect due to [illegible] in saying that he was one of us, and that his death [illegible] family mourning among learned societies. The [illegible] deceased had, moreover, a particular claim on our [illegible] You have not forgotten, gentlemen, with what kindness [illegible] what Royal generosity he had granted his patronage [illegible] society. And I am therefore only interpreting your [illegible] and anticipating your wishes in proposing that the [illegible] ful testimony of our deep and unanimous regrets be [illegible] in our minutes."

The *Moniteur* publishes in its London correspond[illegible] the following article on the Prince Consort's [illegible]

"The growing aversion to expensive funerals in [illegible] again shown in the instance of Prince Albert. [illegible] remarked that of late the English nobility are [illegible] buried in a private manner. The last Duke of Port[illegible] the wealthiest noblemen in England, expressly di[illegible] will that the expense of his funeral should not ex[illegible] The mortal remains of the late Lord Herbert were [illegible] his own servants from his mansion to the Byzantine [illegible] which his lordship had built, and were followed by his [illegible] his children, and his tenantry, all on foot. The body [illegible] James Graham reposes in a country churchyard [illegible] stone, bearing only his name with the dates [illegible] death. The late Duke of Sussex, the Duchess [illegible] and the Princess Sophia, the uncle and aunts [illegible] who were entitled to a royal funeral in the chapel [illegible] chose to be interred in one of the public cemeteries [illegible] The Duchess of Kent, the Queen's mother, desired [illegible] in the garden of Frogmore, and her funeral was quite private, with no official pomp. The obsequies of the Prince [illegible] have been ordered in the same spirit. His body [illegible] placed in the royal vaults, but near the [illegible] bably be afterwards removed to a tomb which [illegible] intends to erect for him, perhaps at Frogmore, by [illegible] her mother's."

SPAIN.—Most of the Madrid journals of the [illegible] speak with regret of the death of the Prince [illegible] The *Epoca*, after referring to the affliction [illegible] Queen, says:—"The love of her family and [illegible] the sole consolations which remain to her." [illegible] quence of the death the French Ambassador had [illegible] a ball which was to have been given on the evening of the 16th. In the sitting of the Cortes on the [illegible] inst. a Government Bill for levying an import [illegible] raw cotton was laid on the table. The Madrid [illegible] state that Prince Muley-el-Abbas has proposed to [illegible]

[illegible] electric cable laid down between Morocco and Spain, and that the Spanish Government has readily consented.

PORTUGAL.—The King has taken the oath to the constitution in a special Session of the Cortes. In his speech from the Throne his Majesty spoke feelingly of his brother's death. Lisbon was illuminated at night, and great enthusiasm prevailed among the inhabitants. The Infante Dom Augusto continues to improve, and strong hopes are entertained that he will recover; but Prince Joao, another brother of the King, has been dangerously ill, and has received the last sacraments. In consequence of these repeated illnesses in the Royal family, there have been tumults in the street, and the people have demanded that the King should leave the Palace. The Municipal Chamber supported this demand. A Council of Ministers was held, and in accordance with the popular request the King on Christmas-day [illegible] to his country Palace of Caxias. A decree [illegible] a medical commission to examine the Royal [illegible] and report on their sanitary condition was also [illegible] in a special session of the Cortes. The body of the late King was to be disinterred and analysed. The public was still so greatly excited that detachments of troops were parading the streets. The Duke of Saldanha was convalescent. The Trent question is still discussed in the Portuguese newspapers, and the writers in the *Jornal do Commercio* coincide with the opinions of the English jurisconsults. The Portuguese squadron in the [illegible] had their flags half-mast high, in token of respect for the late Prince-Consort of England.

DENMARK.—After the adoption of the Budget by the Danish Chamber of Deputies, on Saturday, the session of the Kingdom of Denmark was closed.

HOLLAND.—The Second Chamber of the Hague, in its sitting of the 20th, adopted by 37 votes to 25 a declaration that the Ministry did not possess its confidence. The retirement of the Cabinet is therefore imminent.

SWEDEN.—It is said that at the next Diet a Bill will be presented extending the succession to the throne to the female line when a deceased king has no direct male heir, or brother fit to succeed him, as took place with Queen Christina, daughter of Gustavus Adolphus. If this Bill be voted, the Princess Louisa, only child of King Charles XV., will succeed her father, and the Scandinavian union will then be realised by a marriage between the Princess and the eldest son of the Prince of Denmark. In that case the Duke of Ostgothland, brother of King Charles XV., who is the zealous partisan of the Scandinavian union, will renounce the succession to the throne of Sweden for himself and his heirs. The Princess Louisa is now 12 years of age.

PRUSSIA.—A funeral service was celebrated on Monday in the chapel of the English Embassy for the late Prince Consort, and was attended by the Royal family, the Ministers of State, and the Diplomatic Corps. The rumours of a Prussian Ministerial crisis were denied on Saturday in well informed quarters. It is stated that in the Council of Ministers held on Friday, it was resolved to convoke the Chambers for the 14th of January.

AUSTRIA.—It is stated that Count Rechberg, the Minister for Foreign Affairs, has written a despatch to the Austrian Minister at Washington, in which he states that he considers the Government of her Britannic Majesty to be fully justified in requiring reparation for the proceedings of the San Jacinto, and urges the American Government not to complicate their own affairs by any hesitation in satisfying the just demands of her Majesty's Government. The Emperor left Vienna on Saturday afternoon for Venice. On the 28th inst. his Majesty is expected at Verona, where a grand review of troops will take place. The Emperor will not return to Vienna until the 15th of January. On his way home his Majesty will inspect the fortifications which have recently been made in the Southern Tyrol. Count de Chambord, who only recently returned to Frohsdorf from his pilgrimage to Jerusalem, arrived in Vienna on Saturday. The official Vienna *Gazette* publishes the following article on the death of the Prince Consort.—

"The startling message has produced a deep impression in this capital, but the excitement created by it in England is necessarily more immediate and painful in its character. It is well known that in all Great Britain, and more especially in London, the exemplary family life of the deceased was a [illegible] for the imitation of the people. The domestic happiness [illegible] by the Royal family and the excellent education of the Royal children were reflected in all the households of [illegible], and thus a mutual loss befalls alike the Queen and the people. By his vivid sympathies with everything beautiful [illegible], and the dignity and tact with which he filled his station, the Prince won for himself the love and admiration of all classes. In all Great Britain there was hardly a philanthropic institution, a great industrial enterprise, or any artistic or scientific society, in whose labours he did not co-operate, or which he had not assisted with his active support. When death closed his eyes, it was not only his Royal relations and the large circle of his personal acquaintances, but England in general who lost a man that ever worked for her welfare."

TRANSYLVANIA.—All Obergespans who fail to declare themselves loyal to the Government are to be dismissed. Every individual condemned for political offences during the last 11 years is declared disqualified for any judicial or Government office. The Assemblies in the Magyar districts of Transylvania have been dissolved.

RUSSIA.—The latest accounts from St. Petersburg state that if the Government does not relax its system of oppression a catastrophe may be expected. The general discontent has reached even the Imperial Guard. Several copies of Hertzen's "Cloche" have been discovered in the possession of officers at Cronstadt, who were immediately arrested. To add to these complications, a financial crisis prevails in the government of Kiev. Several manufacturers have closed their works. The engagements of the houses which have already stopped payment amount to nearly a million pounds sterling. The engagements of one banker who has failed at Berdyschev are estimated at two million roubles; and the managers of the joint-stock bank at St. Petersburg and at Moscow have informed the Minister of Finance that they consider the undertaking impossible under existing circumstances. The news of the Prince Consort's death had produced a most painful impression, not only on the English residents in St. Petersburg, but also on the Russians. The Court went into mourning for 12 days, and a grand ball which was to be given on the occasion of the hereditary grand duke's *fête*, was countermanded. The *Journal de St. Petersbourg* contains the following article on the death of the Prince Consort:—

"We shall not enlarge to-day upon the claims of Prince Albert to the gratitude of the English, but must defer until another occasion to advert to a career which, although too short, will leave after the memory of many excellent actions, and of a constant and intelligent support of the ideas which were calculated to promote the prosperity or the glory of his adopted country. The Prince had a noble heart and a great mind. Standing upon the highest step of the throne, he held a place which the institutions of the three kingdoms could, under circumstances, make a difficult one. He understood, however, how to display a tact and preserve a loyal dignity of action, which, coupled with so many eminent qualities of mind and so many noble and solid virtues, gained for him the sympathies of the nation that had adopted him, and rewarded his merits with universal esteem."

POLAND.—Accounts from Warsaw state that arrests continue to be made on a most extensive scale throughout the kingdom of Poland. Twelve beneficed priests have been sent to Siberia. The official journal of Warsaw contains three Imperial Ukases, announcing the acceptance of the Marquis Wielopolski's resignation, and appointing Senator Hube Minister for Public Worship, and the Municipal Councillor Dembrowski Minister of Justice.

ITALY.—The Court of Turin has gone into mourning for the Prince Consort. *L'Italia* states that the negotiations for the entry of Signor de Martino into the Ministry have fallen through. In the Chamber of Deputies on Saturday, a letter from Signor Rattazzi was read, thanking the Chamber for the resolution expressive of its wish that he should retain the post of President, and withdrawing his resignation. Count Bastogi then made his financial statement, of which the following is a summary:—

After enumerating the measures which had been taken to improve the public credit, he stated that the ordinary deficit in 1861 amounted to 400,000,000 lire, and that the deficit in 1862 [illegible], the sum of 63,000,000 lire obtained by the alienation of 35,000,000 of Neapolitan and 28,000,000 of Sicilian Rentes, and also part of the proceeds of the last National Loan, the deficit in 1862 would be reduced to 159,000,000 lire. He proposed to cover this deficit by means of several new taxes, which he estimated would yield 139,000,000 lire. His estimate in detail is as follows:—Registration fee, 50,000,000 lire; Duties on salt and tobacco, 5,000,000 lire; Duties on other necessaries, 5,000,000 lire; Railways, 4,000,000 lire; Land-tax, 25,000,000 lire; Duties on wines and other beverages 20,000,000 lire; Tax on Negotiable Securities, 30,000,000 lire.—Total 139,000,000 lire. The balance of 20,000,000 lire, he said, might be covered by a fresh issue of Treasury-bonds, the amount of those already in circulation being only 36,000,000 lire. After remarking that in 1830 the French finances were in a more unsatisfactory state, and pointing out the great latent resources of Italy, her domains, railways, and other sources of national wealth, he concluded by calling upon the Chamber to vote the proposed new taxes and thus re-establish the public credit, which the enemies of the country were endeavouring to shake.

An extraordinary sitting of the Chamber was held in the evening, in which the Budget was provisionally approved by 202 against 39 votes. On Monday evening an extraordinary sitting of the Senate was held for the discussion of the Budget. In reply to questions addressed to him by some of the senators, Signor Bastogi gave an explanatory statement of the Budget analogous to that which he made on Saturday to the Chamber of Deputies. Signor Arnulfo disputed the conclusions drawn by the Minister, and stated that he believed the deficit for 1862 would be greater than had been estimated; that the yield of the new taxes was uncertain, and that no definite financial plan for the future had been presented to the Chamber. Signor Bastogi replied, that the deficit for 1862 would be less than that for 1861, and said:—"We are living in extraordinary times. If the produce of the tax be not sufficient it will be necessary to have recourse momentarily to the issue of Treasury bonds, as I have announced to the Chamber of Deputies." Some of the Senators declared that the vote of the Senate on the Budget would neither express confidence nor distrust in the Ministry, but that in view of the urgency of the case the propositions of the Government would be adopted. The official *Gazette* of Turin publishes the law recently voted for extending the war tax to 10 per cent. to the provinces hitherto exempt from it. A despatch from Rome states that after the private audience recently granted to the Marquis de Lavalette, the French Ambassador, the Pope said to a Bishop, who inquired the result, "We have yet a quarter of an hour to live." In a Consistory held on Monday, the Pope expressed to the Cardinals his desire to proceed to the canonization of 23 martyrs who fell in Japan. The Pope also announced that another Consistory would be held for the nomination of three Archbishops and ten Bishops, most of whom are Spaniards. The Spanish Ambassador has had an interview with Count Trapani, the object of which, it is asserted, was to urge Francis II not to yield to the solicitations of France with reference to his departure from Rome. Monsignor Chigi, the new Papal Nuncio at Paris, has adjourned his departure until the 12th of January, in order to obviate the necessity of his being present at the reception of the diplomatic corps by the Emperor on New Year's day in company with the Italian Ambassador. Tristani is at Rome, and has received the title of General, and a sum of money to be employed in reviving the brigandage in the Neapolitan provinces. Father Passaglia has just published a pamphlet entitled "Schism not a threat of Revolutionists, but a well-founded apprehension of Catholics. Warning by a Catholic Priest."

MALTA.—The Maltese tribunals have sentenced Captain Cavaliere Dino, of the Italian frigate Mozambano, to three months', and his lieutenant to two months' imprisonment, with hard labour, for committing an assault on the editor of the *Portafoglio*.

TURKEY.—The monetary panic has subsided. The Government has forcibly suspended all financial operations. The Turkish pound, which at the height of the panic reached 400 piastres, is now quoted at 240. Sir Henry Bulwer has proposed that the Porte should make a material deposit against the caimés which are in circulation. This proposal is likely to be carried out. An official announcement has been made to the effect that the Sultan pledges himself to introduce reforms on the arrival of Fuad Pasha. The latest news states that Fuad Pasha, accompanied by Yusuf Bey Karam, who was apprehended on a charge of inciting his people to the late disturbances in the Kesrouan, arrived at Constantinople on Friday. It is stated that the illness of Yusuf Karam has become so serious as to leave no hope of his recovery. Halim Pasha, Commander-in-Chief of the Syrian *corps d'armée*, has been appointed provisional successor of Fuad Pasha in Syria. An impost on the upper classes is intended. Riza Pasha will remain at Smyrna during the winter on account of continued ill health.

SERVIA.—Prince Garaschanin has been appointed Predstawnick and Minister for Foreign Affairs. M. Marinovitz has been appointed President of the Senate.

TUNIS.—According to advices received at Marseilles, Prince Sidi, brother of the Bey of Tunis, is dead.

THE DANUBIAN PRINCIPALITIES.—Prince Couza on Monday transmitted to the authorities, by telegraph, a proclamation announcing his consent to the union of the Principalities. In consequence of this proclamation the city was illuminated, and the Chamber unanimously voted its thanks to the Prince. The United Assembly for Moldavia and Wallachia is convened for the 24th of January at Bucharest.

EGYPT.—The greatest discontent prevails in Egypt, and it seems to be the general opinion that Said Pasha has for a long time been doing his utmost to ruin the country. It is even said that there is imminent danger of an outbreak, having for its object the forcible removal of the Viceroy.

INDIA.—The Calcutta mail of Nov. 19 has arrived, and telegraphic despatches have been received in anticipation of the Bombay mail of Nov. 27. The death of Lady Canning has been received throughout India with the deepest sorrow. Her ladyship had just returned to Calcutta from a tour in the up country when the symptoms of jungle fever presented themselves, which rapidly increased, and in a few days ended fatally. The greatest sympathy has been shown for Lord Canning under his bereavement at the moment when he was laying down his high office. Sir C. Wood has decided that the seat of the Government shall be removed from Calcutta to the Hills, probably to Simla. The estimates for 1861-62 show a surplus of a million and a half. The whole peninsula was yielding a plentiful harvest, and the health of the country was generally good, though there were some indications of cholera in Bombay.

UNITED STATES.—The steamer Hansa, which sailed from Southampton on the 28th ult., the day after that on which the arrest of Messrs. Mason and Slidel became known in England, arrived at New York on the 12th inst. The intelligence of the feeling in England had created uneasiness, and the report of the indignation meeting at Liverpool was much commented upon. The European advices, however, were generally interpreted by the New York press as favourable to the maintenance of peace. The *New York Herald* talks largely of "British bluster," and of "John Bull's second thoughts," and predicts that the British Government will lay to heart the recommendations of the Peace Party. It says:—"England has found in us for the first time a navy that is not afraid of her. If she were inequitable enough to make the act of the San Jacinto a *casus belli*, England knows it would be bringing disaster upon herself." In a previous article on the 9th inst., it said that according to the opinion of the British law officers, as given in the correspondence between Mr. Adams and the English Government, the case was fairly and distinctly settled in favour of the Federal Government, and that there might have been fair grounds for seizing the steamer in British waters. The same paper, on the 10th inst., says "The British Government will be unable to find a pretext for a quarrel in the action of Captain Wilkes; that England has too many interests at stake to risk a rupture with the United States; Canada is within

two days' railway journey of half a million of armed men, and has a frontier that can offer no resistance to an invading force; and England will be in no hurry to embroil herself in another American difficulty." The *New York Times* also argues that, after the first outburst of indignation in England, a reaction had set in, it being almost unanimously acknowledged by the English journals that America had the law on her side. Mr. Buchanan, the late President, is said to have expressed his opinion that the arrest of the Commissioners was illegal, and that they must of course be given up to England. General Cass, however, who was Mr. Buchanan's Secretary of State, says that Captain Wilkes did exactly what the Buchanan Administration approved in regard to the question of search in principle. The New York Journals publish some further diplomatic correspondence between Mr. Adams and Mr. Seward. In this correspondence Mr. Adams states that, while in conversation with Lord John Russell in June last, he referred to the fact of British troops having been sent to Canada. Lord John Russell replied that, as Canada had been denuded of troops some time since, it was only a proper measure of precaution, and said that he did not know what the United States might do. Lord John Russell also said something about a threat uttered by Mr. Seward to Lord Lyons, that British vessels would be seized on Lake Ontario without ceremony. The report of the Secretary of the Treasury has been presented to Congress, but it has not been received with much favour in financial circles. The following is a summary of its leading features:—

"The amount derived by the Government from loans since July last is 197,000,000 dollars. The Secretary says he is compelled to reduce his estimate of the revenue from the Customs during the financial year 1862 from 57,000,000 dollars to 32,000,000 dollars. He recommends that the duty on sugar should be increased to 2½c., on clayed sugar to 3c., on green tea to 25c., and on coffee to 5c. Other alterations in the tariff are also recommended. He further recommends that the direct taxes in the loyal States should be increased to 20,000,000 dollars, and that duties should be levied on stills, distilled liquors, tobacco, bank-notes, legacies, carriages, and paper, sufficient to produce another 20,000,000 dols. 10,000,000 dols. is expected to be derived from the income-tax. The estimated expenditure of the fiscal year terminating in July, 1862, is 543,000,000 dols.; 329,000,000 dols. have already been received, leaving a deficit of 214,000,000 dols. to be provided for. The Secretary proposes to raise 150,000,000 dols. by substituting for the present Bank currency of the States a Federal currency to that amount, redeemable in coin on presentation, and secured by United States' stocks; 50,000,000 dols. by loan, and the remaining 14,000,000 dols. to be provided in various ways. In conclusion, the Secretary states that, should the war be continued beyond Midsummer, the amount required for the fiscal year 1863 will be 379,000,000 dols., and in July, 1863, the public debt will be 900,000,000 dols."

Congress has passed a resolution in favour of the adoption of measures for an exchange of prisoners, and has also approved the suppression of *habeas corpus* by President Lincoln. President Lincoln has refused to furnish Congress at present with the correspondence between the Federal Government and foreign Powers relative to the Mexican intervention. Five hundred Federals will immediately occupy Tybee island. The "stone fleet" was off the island on the 6th. A Government agent has been appointed to superintend the packing of cotton by the aid of negroes in the neighbourhood of Beaufort. According to advices from Kentucky, the Federals have destroyed the bridges between Bowling Green and Memphis. Vessels from Southern ports continue to arrive at Havannah. Federal accounts state that Fort Pickens was unhurt in the late engagement, but that Warrington and part of the Pensacola Navy Yard were burnt. An engagement has taken place in Western Virginia, in which the Federals are reported to have been successful, but the details are not stated. It appears very probable that an engagement will soon take place in Kentucky. The Europa, which took out the British ultimatum, passed Cape Race on the 13th of December, but was not intercepted. The British gunboat Landrail and the Swedish frigate Norkoping have arrived at New York. A despatch from Charleston, South Carolina, states that a fire broke out in that place on the 11th inst., which was supposed to have been the work of an incendiary. The theatre, the Institute, and several public buildings had been destroyed.

CANADA.—The Canada journals report considerable activity throughout Canada in organising the Militia and Volunteers.

MEXICO.—The *New York Herald* states that agents from the Mexican Government have arrived at New York for the purpose of fitting out privateers to prey upon French, English, and Spanish merchant vessels. It is asserted that a Spanish expedition, under the command of General Serrano, has disembarked at Vera Cruz, in order to protect the Spanish inhabitants, who had discovered the existence of a conspiracy against their lives. Advices from Havannah to the 6th inst. state that the steamer Clyde passed the Spanish fleet 36 hours' sail from Vera Cruz. It is reported from Mexico that no resistance will be offered either at Vera Cruz or Tampico to the allied expedition. There is, however, a strong feeling in favour of making a determined resistance against any Spanish invasion in the interior of the country.

The late Prince Consort.

THE DEAN OF ST. PAUL'S, DR. MILMAN, preached a funeral sermon on the Prince Consort on Sunday morning in St. Paul's Cathedral, from Job, chap. i., v. 9.—"The Lord hath given, and the Lord hath taken away; blessed be the name of the Lord." He said:—

"The magnitude of the loss we had sustained could only be judged of by the void which the death of the Prince Consort would leave, and by the want which must be felt for a long time to come of his valuable services. He had been blessed with 20 years of wedded love, as intimate and tender as ever was found in the most retired walk of life, or in the most sequestered happy valley of peace and contentment. He had around him a family of children, rising up with every promise which could gladden the heart of a parent. His intellectual tastes found enjoyment not in frivolous amusement, but in those works of art which delight and purify without enfeebling the soil. He had powers of mind which could follow out clearly comprehend, and intelligently foster all those wonderful developments of science which have conduced to the glory, the prosperity, and the general advancement of our age and country. For 20 years he had enjoyed, at first the respect, then the admiration and love of a great nation, and though not ostensibly mingling in affairs of State, and though jealously excluded from the councils of the realm, yet his influence was felt and acknowledged for good without ever awakening the mistrust of conflicting statesmen. Such a lot as his, commencing with the bright days of early youth, and continuing unalloyed and uninterrupted to the prime of manhood, could not be said to have been a scanty apportionment of the Divine blessing. But that it should have been brought to so sudden and so unexpected a close was a grievous affliction, not merely to those more tenderly and intimately attached to the departed Prince, but to the whole nation, to every one who speaks the language of England, to every one who takes honest pride in being a subject of our Queen and in enjoying the privilege of living under our constitutional Monarchy. All the period of happiness assigned to him had, to the same extent, been a blessing to the country as to himself. It was the conviction of this which had laid England prostrate with one great universal sorrow, which when the great bell of the cathedral tolled at midnight spread a heavy gloom, as for some personal bereavement, through this vast city. Our country could not well spare an influence, powerful if unseen, which had been quietly working for good. In our troubled times we needed sagacious counsel; we needed the continuance of that sober and discerning judgment of which we might conjecture the bearing by the constant harmony which had so happily prevailed between the will of the Sovereign and the will of the nation. If ours had been an epoch of the most perfect constitutional government—if the rulers and the ruled had acted together without one jarring conflict and with the most complete unity of purpose—surely there must have been a felicitous concurrence of all influences to this blessed end. Nor was this influence necessarily shrouded in what might be called modest constitutional secresy. It had its public as well as its private sphere; it had its occasions in which to show its fine discernment of the public interests, and to proclaim openly that it held those public objects to be the dearest objects and aim of life. Among all classes, therefore, from the highest to the lowest, it was felt that a great example had been removed from among us, an example of the highest and the humblest duties equally fulfilled, of the household everyday virtues of the husband and father, practised in a quiet, unostentatious way, without effort and, as it were, by the spontaneous workings of a true and generous nature. To be not only blameless, but more than blameless in these relations, was not too common in such high positions. But his duties to the Queen's subjects as well as to the Queen, his duties to the great English family dispersed throughout all the world, as well as to the young family within the [illegible] and with silent assiduity. No waste of time in frivolous amusement, in vain pomp and glory, but usefulness in its highest sense, schemes of benevolence promoted, plans for the education of the people suggested and fostered with prudent and farseeing counsel, and with profound personal interest; great movements for the improvement of all branches of national industry, if not set on foot, maintained with a steady and persevering impulse; in short, notwithstanding foreign birth and education, a full and perfect identification of himself with English interests, English character, English social advancement;—all these things had sunk gradually, if slowly, into the national mind, and the prejudices against strangers, peculiar in their intensity, at least, to our modes of thought and feeling, had thoroughly worn out. As in his remarkable addresses—hardly to be surpassed in our language—which he had delivered on various occasions, the faint foreign accent and intonation alone lingered behind, while the substance, the solid part, even to language, was admirable English, so his mind, his character, had become acclimated, and he was ours not merely by adoption, but, as it were, by a second nature. All must have been deeply affected to read that the first thought at that agonising moment of the Royal widow—and that widow a Queen, tenderly nurtured and early crowned—was to dedicate herself and her family to the welfare of the people. By this noble self-dedication she had earned a perpetual title to the loyalty of her subjects, not the mere servile worship of pomp and power common to ignoble minds, nor the cold, abstract, jealous, hardly conceded respect and acquiescence in legal superiority, but that genuine loyalty which is consistent with the most fervent, devout, self-sacrificing reverence, and with love deep and personal. Such a sentiment of loyalty he was sure would be evoked by the conduct of the Queen, and it would be one of the greatest of all comforts in her present trial."

THE DEAN OF WESTMINSTER (DR. TRENCH) preached a funeral sermon on Sunday afternoon in Westminster Abbey from the 20th verse of the 3d chapter of Ecclesiastes, "All go unto one place; all are of the dust, and all turn to dust again." He said:—

"Though in many things the lots of men were most unequal, yet in the chiefest things of all they were equal. Birth and death, the cradle and the grave, all the uncertainties of life, the insidious attacks of disease, and what men called the blind effects of accident, were common to all. When He in whose hands was the time of every man saw good to reclaim the spirit which He had given, there was not one who could retain it. Love might cast its shield over the dear one, and yet was impotent to save him. If the Angel of Death had a message for him he would deliver it. At his bidding every man must arise and gird himself for his longest journey and his last; and of all that a man had here called his own he would carry nothing away with him when he died. These truths were so obvious, so trite, so often repeated, that they had ceased to move us at all. At length God had taken the words out of His ministers' lips; He had Himself become the preacher; it was His sermon to which they were all listening now; but, ah! a sermon with how mournful a text! Yet, let them not refuse to hear it; let them give heed to the words which God spoke to them now in the solemn and awful silence of their souls. How suddenly, how almost without warning, was our sky darkened over our heads! A little month ago we might have had our passing inquietudes, such as at our best estate we can never be wholly without; but in the main all appeared well with us. We looked down with too little sympathy, perhaps, on the nations around us; we saw the cup of pain and tribulation as it passed from the lips of one to those of another, and [illegible] deemed that it was never destined for our own. W[illegible] with, perhaps, too much pride and complacency, [illegible] them. So fortunate at home, so fortunate abroad [illegible] 'Peace and safety are ours; to-morrow will be as [illegible] its prosperity even more abundant.' But, lo! in [illegible] the huge black wings of the tempest had stretched [illegible] whole horizon, shrouding it with thickest darkness; and Christmas, on the eve of which we stood, seemed almost to mock us with its untimely mirth, so painfully did it contrast with the sorrow and sadness in our hearts. One great [illegible] already overtaken us, and there was another [illegible] travelling up behind, the tidings of which might [illegible] way to us; but that threatening evil still might, [illegible] mercy, be averted. He would not, therefore, [illegible] it then. It was sufficient that he should speak [illegible] the sad event which, without exaggeration, had made the land to mourn. And well it felt that it had a right to mourn; for it might be only after long years to come that our children or our children's children could take the full measure of England's loss, and estimate how great and how [illegible] that loss was—how severe a stroke of God's disp[illegible] descended upon us when He took from us one whose worth, now he was gone, we should apprehend as we had, perhaps, never apprehended it before. For, doubtless, it was a sort of penalty which waited on the very successful performance of an arduous task that only the discerning—who must always be the few—perceived how arduous the task was, and how serious were the difficulties to be overcome. And such a task was his. What various contradictions he needed to reconcile, what contending claims to adjust! A husband, and th[illegible] God's ordinance, superior to the wife, though ye[illegible] subject; the foremost man in the land, the nearest to the Throne, and yet, by that very nearness, shut out from the whole region of active political life. How hard [illegible] erred on the one side or the other! On the one [illegible] temptations to ease and self-indulgence, by yielding [illegible] he would have fallen into insignificance, and become [illegible] perhaps, the foremost figure in the pageantry of a Court. [illegible] the other hand, by following the promptings of ambition [illegible] would have intruded into the arena reserved for others, [illegible] have sought to obtain a position for himself which the British Constitution denied him. So wisely and so well did he [illegible] both these dangers that we hardly took account how real [illegible] how great they were. His rare wisdom enabled him [illegible] perceive that there was a domain as wide, as honourable, [illegible] to him, in which he might find useful employment. Recognising the dignity of God's ordinance of labour, he accepted [illegible] part of a worker from the first by the conscientious improvement of his faculties by industry and toil, reaching back [illegible] his earliest years; for it was only through having [illegible] vain delights and lived laborious days' that he could [illegible] made his immense acquisitions in science and in art. So, [illegible] it was only in the genuine sympathy for his fellow-men, [illegible] favoured by fortune than himself, that he could have laboured so diligently as he did to make those acquisitions pr[illegible] all. To adorn, beautify, and elevate the social life of the [illegible] of his adoption, to aid, encourage, and set forward every scheme of thoughtful benevolence, of some of which he was the first promoter—that was the task which he assumed for his own. But that was not all. There was one who, it must be said, even at this moment, was still dearer to England than the Prince they all deplored. England knew, if not all, yet something of what that Prince was to her—a counsellor, friend, supporter—a wise counsellor, it might confidently be affirmed, seeing what her reign had been—a strenuous supporter, helping to bear that weight of empire which, even when lightest, must still press as a mighty burden on the heart of England's Sovereign. What a further debt they owed [illegible] of the land, the observed of all observers, had been a pattern household, a model of domestic purity, of pure re[illegible] What a fountain of bitterness a corrupt Court might have, [illegible] often had, been! What a fountain of sweet purifying wat[illegible] Queen Victoria's Court had been, everywhere by its influence strengthening good, rebuking evil, honouring virtue, [illegible] countenancing vice! Recollecting, also, that in that p[illegible] atmosphere had been trained the Prince or Princes who sh[illegible] hereafter reign over us, that their minds had been moulded [illegible] his care, formed upon his example, enriched out of the a[illegible] treasures of his mind, surrounded by tutors and governors [illegible] his choice—and in nothing did his excellent wisdom m[illegible] display itself than in the selection of these—it might be a[illegible] what amount of gratitude could repay a debt like that? W[illegible] they had lately looked on the long and unbroken happiness of that household, and saw that no star had become ext[illegible] in that bright firmament, Englishmen had half persuaded themselves that such serene felicity would abide [illegible] In a world like this how vain was such an expectation! It might be a little sooner or a little later, but [illegible] the common lot of all, would come at last. Flesh [illegible] blood would fain have it otherwise, but the way [illegible] Cross was still the way, the only way, to the [illegible] crown. Every Christian, high or low, rich or poor, must [illegible] the cup and be baptised in the baptism of his Lord. Ten [illegible] ago none would have thought that the hearts of this pe[illegible] could be knit more closely to their Sovereign. Yet what [illegible] tenderness now pervaded all their relation to that Sovere[illegible] What offerings of an homage more devoted, if possible, [illegible] ever they would seek to lay at her feet! For what [illegible] was like the fellowship of pain? Of all the sacraments [illegible] earth, what sacrament bound us so intimately as the [illegible] ment of suffering? All were near to one another in the [illegible] pany of the cross-bearers. To-morrow all that was mortal of the departed Prince would be committed to the dust. Oh, [illegible] agony of such a day for those who had to part, as it were, a second time with all which they had loved! Let Englishmen, then, devote some portion of to-morrow to special [illegible] one whose sceptre of dominion could not shield her from a single pang to which our poor humanity was heir. No grief which the world knew was like the grief of a wife for her husband,—it was unique, it was the crown of sorrows. Let them, then, forget not to implore for her that strength, that peace, that consolation which none could give but He who was at this time born an infant of days into this [illegible] anguish and trouble."

THE REV. DR. CUMMING preached a funeral sermon on Sunday morning in the National Scotch Church, [illegible] Crown Court, from Hebrews xi, 4,—"He being dead yet speaketh." He said:—

"I have no more means of forming a judgment [illegible] departed Prince than those that are around me. In this [illegible] —the pulpit—more sacred than a throne, where the responsibility is greater than in a palace, I would neither [illegible] praise excessively, nor affect to censure, but I think it [illegible] us to let his voice, wherever we ourselves can speak, [illegible] heard and to let his light so shine that others, seeing [illegible] works, may glorify, not the Prince Consort, but our Father who is in Heaven. From so lofty a position as that which he occupied vast influence must necessarily descend. Our very first and deep regret must be for that illustrious personage thus bereaved of an adviser, a counsellor, a guide [illegible] remarkable sagacity and tact and practical wisdom [illegible] doubt, notwithstanding her vigorous and powerful mind, [illegible] have been benefited and directed and inspired by one [illegible] and so dear to her as he was. And one can feel vastly [illegible] don't misunderstand me when I say—one can feel [illegible]

... a Queen made suddenly a widow than, to use her ...'s own words, "when the poorest woman in her ... is involved in the same calamity. A Queen must ... in secret. She has few, from the very peculiarity ... position, to sympathise with her with that freedom— ... fulness, which makes weeping with them that do ... strength, at least relief to the overloaded heart; ... is diluted whenever it can express itself in tears. For ... Majesty we prayed together last Sunday most fervently; ... we will pray still, not merely with the cold formalism ..., but with the loyalty of Britons, with the love of Christians, and with that deep and earnest sympathy which we all ... that illustrious lady who is as popular as she is ..., and who has only to express the word and there is not a ... that would not leap from the scabbard to defend her, or ... in England that would not brave and bear and risk and ...pard, in order to shelter and honour her. But our ... are very much mitigated by recollecting the admirable ... which the illustrious Prince who is gone has bequeathed ... after him. He speaks to us in many-sided relations, in ... aspects, through various oracles, 'Being dead, he yet speaketh.' And never did a sermon from the pulpit or from the ... the most gifted and most eloquent preacher so strikingly ... or so deeply thrill the heart as that dull, cold, dead ... that is spoken in the silence and under the shadow of ..., where we can see what sin has done, and where, if we look higher, we could also trace what grace has achieved. ..., then, that as the husband of our Queen, "he being ... yet speaketh." I am old enough to recollect the wedding ... Prince Albert, quite a youth, to our most gracious Queen. ... the 22 years he spent as the husband of the Queen, the ...ness of his life, the warmth, and yet unostentatious ... of his attachment to the Queen, the delicacy with ... he occupied the most delicate and difficult position— ...ely, that of the second personage in the empire, the ...unsels as far as Queen could ask or he give, the deep, the ..., and respectful affection which he bore the Queen— ...ction that faltered not in the worst and wearied not in ...est of times—remind one of those beautiful lines of Mrs. ...rett Browning addressed to Prince Albert on marrying the Queen:—

'Hold that wedded hand less dear for sceptre than for ring;
And count her uncrowned womanhood to be the Royal thing.'

... Prince Albert did I am sure—if of anything on earth— ... as husband of our Queen, being dead, he speaketh to ... husband now present; and I am sure I neither flatter ... indulge in eulogy when I say, "Go thou and, in thy ..., do likewise." Let us look at him, again, as the ... of that interesting family, those boys, for such they ... are, growing up to manhood, in the midst of whom, in ... health, I saw him only a few months ago on the banks ... Dee. View him as the father of those sons, and of that ... especially who has now come out of obscurity into greater ...minence, and must one day sway the sceptre of these ... realms. From all I can gather, and I have conversed ... those who are competent to testify and give evidence of ...—from all I can gather, these sons have been reared with ..., with consideration, with rare tact, with exquisite ... sense; and in every respect he has, as the father of ... family, set a precedent for the fathers of England. If ... allude especially to the education of the Prince of Wales, he was, you will remember, sent first to study at ... University of Edinburgh, next to the University of ..., next to the University of Cambridge, that he ... thus acquire a breadth of thought, a liberality of ...king, and might at the same time, by such a remarkable distribution of his studies, convey a kind yet delicate ...ment to nations that under one Imperial sceptre are ... jealous of each other. He also, you will recol... visited Rome, I think in 1859, and that was one of the ... lessons that the Prince of Wales should have been sent to ... there, for it has been found, from the time of Martin ... down to the present day, that no thoughtful mind ever ... to Rome to see what the Pope and the cardinals are in ... without coming back an intenser Protestant than ... there. He was also, you will recollect, sent to travel ... United States. That was a good lesson. He has ... there to appreciate more profoundly that limited ...archy which, I think, is the glory of our nation and our ..., as contrasted with the fierce democracy of Republican... Then he visited very recently—and all this, I believe, ... the inspiration of the Prince Consort—he visited very ...ly the Canadas. What a happy event was that! One ... Canadas was thought to be a little wavering; speaking ... French language, their sympathies, it was supposed, ... not wholly or perfectly English. The Prince of ... visited the Canadas, and the enthusiastic loyalty ... which he was greeted as the eldest son of our ... Queen found eloquent expression in every newspaper, and especially in those reports and statements that were ... to the *Times* newspaper, and which we all read ... much interest. And the probability is that the Canadas ... the gallant Guards have recently gone, for whom ... that they may come back safe and unscathed—the ... is, if war should break out the Canadas would show ... more attached to England in 1861 than they would ... before the Prince of Wales paid them that visit. ... I state these things? Because I am given to understand these steps were taken on the particular suggestion ... Prince Consort as well as of the Queen. In the education of his sons I see a precedent set by the Prince Consort ... of all praise. Then, it is, in these two aspects, the ... and the husband, that we see the happy home. The ... our Queen may be a palace, but it is still home, and I ... given to understand, having conversed with some who ... speak with authority, that it is a model English ... No words of mine can express the moral, political, ... national weight of that fact. A pure English home ... the country, and our country is simply a great home, ... the homes of a people are the country of a people ... become. Again, if we look at the character ... Royal Highness as interested in the well-being of the ... classes, we have a very remarkable precedent for ... It is a great mistake that the noblest and the ... lose influence or part with power when they descend ... instruct, to benefit, and to be useful to the poor. Never do ... so gain. Why are the aristocracy of this country so ... because they throw themselves to a great extent ... all the interests and currents and influences that are ... building the country, and showing that they are ... Englishmen as well as peers. Prince Albert ... eminent illustration of this. I recollect perfectly well ... in Freemasons' Hall at a meeting of the Society ... improving the Condition of the Labouring Classes, ... I was amazingly struck with the strong good sense, ... warm and earnest sympathy, the gentleness of heart, ... practical wisdom he exhibited on that occasion. I ... that his farms in England are models, and his attention ... tenants beyond all praise. On the Dee side I ... seen the cottages which he and our Most Gracious ... constructed there, and as long as they reflect the suns ... set behind dark Lochnagar so long will those cottages ... his good sense, his kindness as a landlord, his practi... ... the duties and responsibilities of his station. ... knows that the people appreciate all this, as one of ... elders told me yesterday, is that in conversing with ... one of the largest drapery establishments in the ... perhaps, he said 'The poor people are coming in crowds to buy mourning; they will have good mourning; they will be satisfied with nothing but the best;' showing the great sacrifices they are prepared to make in order to testify their regard for the Prince who has gone. This is one of those traits which, if it could be known in a palace, would be received as the most precious, because the unbought but costly sacrifice of the labouring poor. Then, again, I need not say that as a patron of the arts and sciences the character, conduct, and career of the Prince Consort has been most conspicuous. The arts beautify, they don't support; they are the capital of the column, they are not its foundation; but, wherever Christianity has flourished in its purity, there the arts,—painting, poetry, science, literature, have all flourished also. The Great Exhibition of 1851, I am told, was his idea. The original idea was that the Crystal Palace was to be, as it were, a mart, to show what England had done; and it was his suggestion that it should not be sectarian but catholic, not national but universal. He too I am told originated the Great Exhibition for 1862. But that has lost a mighty attraction. We shall not be able to look upon its beauty and splendour without seeing the shadow of one who was expected to be present to take the chief part. The very appearance of that exquisite and beautiful structure will be suggestive of a loss to science, a loss to the arts, a loss to the country—a loss that we all earnestly and deeply deplore. Then, lastly, I would notice his character as a Christian. I have every reason to believe, from the information I have received, that he did love those everlasting, those distinctive precious truths which lie at the foundation of a beggar's hope, and out of the reach of which a prince cannot be saved. It is not very long ago that it was my duty to occupy the pulpit in Crathie Church, and in the Royal pew were her Most Gracious Majesty, Prince Albert, and the children of the Royal family. I never saw listeners more intensely attentive, and I know from letters in my possession that the truths uttered were deeply appreciated; and I cannot but believe God's promise—my word shall not return unto me void. I was grieved and distressed the other day to notice, in the report of a speech delivered by an eloquent prelate of the Church of England, that the death of the Prince must be looked upon as the consequence of our national sins—that our national sins had robbed our beloved Queen of her husband. I don't like that language at all. I think that it is neither for prelate nor presbyter to mount the judicial seat and fulminate judicial sentences. In what sense was it judicial? To his Royal Highness we may hope it was a transference from what even Windsor Castle is, a cold crypt in comparison with that sun-lit and glorious and beautiful creation where there is happiness without suspension, blessing without alloy, and progress without end. And to her Majesty was it judicial? In what sense was it so? We can feel deeply for her; but sorrow enriches the heart as the dews refresh the soil. Her Majesty has lost one link that bound her to an earthly crown, and she has gained one link more to unite her to a crown of glory that fadeth not away. You have often heard me say, I don't believe in chance or accident. I believe every event has a mission, and for every event, however startling or painful, depend upon it there was a needs-be, or it would not have been. His Royal Highness had crowded into a few years more practical usefulness to his country than many have crowded into many years. He had finished his work; and each of us, you may depend upon it, is immortal till God Almighty has nothing more for us to do. Many of you are old enough to recollect the Princess Charlotte and her dead babe gathered together in the same tomb. That was thought at the time a shock, a disaster that no language could express and no time exhaust. But would any now, would any subject of Queen Victoria wish at this day it had been otherwise? If the Princess Charlotte and her infant had lived England would have been England, but it would not have been the ... it now is. What we know not now we shall know hereafter. I have heard, and state it to you as true, that under the shadow of this great loss, in which a Palace is disenchanted of all its beauty and the Throne of all its lustre, the mind of our Queen is now what it ever has been—strong, vigorous, perfectly possessed, and her broken heart as much interested in our country's good as when, with bounding heart, she stood by the altar and pledged her troth to Prince Albert."

The Rev. Mr. Spurgeon preached a funeral sermon on Sunday morning in the Metropolitan Tabernacle to a congregation of about 5000 persons from Amos, chap. iii., v. 6—"Shall there be evil in a city, and the Lord hath not done it?" He said:—

"They had nothing to do to-day with the question of moral evil, and with the question of the origin of moral evil they had nothing to do at any time. All they were concerned with was how it was to be driven out. The evil mentioned in the text was 'calamity,' and the passage might be read, 'Shall there be a calamity in the city, and the Lord hath not done it?' There had been evil in the city, and a calamity had fallen on the nation. They had lost one who to-day would find ten thousand tongues to eulogise him, and who, therefore, needed not his praise—one whom we suspected as long as he lived, and who could do little without arousing our distrust; and now that he had departed we bitterly regretted that we had treated him in the manner we had done. It was not that he had to complain of the want of due homage for his rank, but that we had suspected him without a cause, and had been jealous of him without reason. He had been much pleased with a remark made by the leading journal on this subject—that the Prince had been but ill-requited and not duly appreciated, and that he had been taken from our eyes as if in retribution for our thrifty homage and measured respect. We felt our calamity the more because we did not know what might come next. We did reckon upon war, but did not count upon a Royal funeral—upon strife abroad, but not upon losses at home. Now the corner-stone of our Royal house had been taken away, and we looked with sorrow not unmixed with apprehension to the future. It might be the removal of some eminent Minister—the ... prominent in the Commonwealth. There had been evil in the city because a parent had been taken away from his children, and those children Princes, whom no man would venture to instruct as a father could, who needed his counsel to steer through the trials of their minority, and enable them to fight the battle of life. What the loss might be to the future character of those Royal children time only could reveal. More than this—and here he knew he touched the tenderest string—our Queen had lost her husband, in whom only she found an equal. Now she stood more a widow than the poorest widow in the land, for the poorest had friends who could console her, but none there knew what it was to stand in the cold isolation of Royalty. By that isolation the most illustrious lady of the land was bereft of that close sympathy so dear to some of them. They no doubt felt that they would not stand in her place at any time, but more especially at a moment when none could come to her as our friends and neighbours came to us, being restrained therefrom by due and proper reverence and humility. Would that some Robert Hall or Chalmers were there to sound the depths of such a sorrow! For himself, his lips were so unaccustomed to courtly phrases, and he understood so little of such phases of grief, that he could but stammer and blunder where there was room for a stretching wing and a soaring imagination. But there was not a heart that had felt more tenderly, or an eye that had wept more sincerely than his own for the sorrows of the Royal lady who was now left alone in her widowhood. An evil had fallen upon the city—such an evil as had never befallen this nation in the lifetime of any now present. There was but one death, and that he trusted very far removed from us, which could have caused greater sorrow in the land. The Lord had afflicted us with a design, and had left us to endeavour to find out what that design was. Whence then came that fever? It was not bred in courts and alleys. How came it too to baffle the physician's skill? For an answer to these questions we must look to the Great First Cause. He gave the breath, and He took it away—He moulded the manly form and caused it to return to dust. Such events were neither the work of chance nor fate, nor had the spirit of evil the power to drag men to their graves. A kind and tender hand had removed him for whom we mourn from the evil to come. Like as a father chasteneth his children, the Lord had chastened them that feared Him. Perhaps the greatest temptation of modern times was the tendency to impute everything to the laws of nature. There was a notion that the world was like a great clock, that was wound up many years ago, and which was now going of itself, without needing the Divine interposition. But theology went a little further than philosophy, and they knew that this version was not true. It was no doubt our duty to take every sanitary means to remove the seeds of disease, and they erred who proclaimed a fast when they ought rather to sweep the streets of a city. Yet it was also true that this and every other calamity could not have befallen us except the Lord had put out His hand. If then the Lord had done it, with what awe was not every calamity invested! Standing by a Royal death-bed he thought he saw a Prince, when, lo! he found himself in the presence of God. Where men saw nothing but calamity, the eyes of faith saw the Eternal. Since then God had done it, let them be sure the Prince had died at the best hour, and that it would have been neither wise nor kind if he had been spared. All had been for the best, the wisest, and the kindest. Let them all learn to say this in every trouble,—What! weep for what God had done? "The Lord gave and the Lord hath taken away. Blessed be the name of the Lord." Once a gardener had a choice flower that he nursed and tended above all the flowers of the garden. One morning he missed it. He thought a servant had taken it, and went about asking them all if they had plucked it. Then a servant said, "I saw the master walking in the garden early, and he plucked it." The gardener answered, "It is well. The flower was his. For him I nursed and tended it, and if he has taken it it is well." Before the dead was yet buried should we not say with the gardener, "It is well?" It was for the best, and the Lord's name be praised. As to that frivolous affectation of piety which led even Christian men to call every individual affliction a judgment, he detested it from his very soul. He was sick of the cant of a portion of the religious world when a sort of howl was raised against him for saying that an accident on a railway was not a judgment, but that it happened in the common course of Divine Providence. Yet he would draw a line between private and national calamities. He did think there were judgments in the case of nations, and when a death, as in the present instance, became a national calamity, they might ask why God had been pleased to take away the Consort of the Queen. In the first place, He had given a most solemn monition to all the Kings and Princes of the earth. If deaths did not sometimes happen in the ranks of such, they might deem themselves demigods. Now, a voice had gone out to warn Czars and Kings that they should sleep like their serfs and slaves, and die like their subjects. Who could tell also how many careless hearts among courtiers and nobles might not be touched by a sermon from a preacher whom none could despise? Perhaps that very day knees might be bowed in prayer, and eyes might weep for sin, and hearts might be breaking with a consciousness of guilt as well as a sense of loss. It was not easy to gain the ... of those immersed in the gaieties of Court life. Yet it might be that God was about to raise up some in high places, like Lady Huntingdon and Anne Erskine a hundred years ago, or was tutoring some woman like Anne of Bohemia, the friend of the Reformers, who would lend her influence for the promotion of Gospel truth and vital godliness. God had spoken to us as a people, and we could not but feel our dependence upon Him. He might take away from us every Cabinet Minister and every Privy Councillor. He might remove the head from the realm and let the vessel drift out to sea. Let England, so honoured of God, see that she forgot him not. The Almighty had not only spoken to the nation, but also to every one of us as individuals. He had heard a voice saying to the preacher of that church, to its officers, to its members, and to those who were yet unconverted, 'Prepare to meet your God.'"

The *Lancet* publishes the following article on the medical questions connected with the Prince Consort's death:—

"The death of the Prince Consort came upon the majority of the people of this land as a heavy and sudden blow; for although much anxiety had been felt for some days previously by those who feared his power of bearing up against so depressing a disease, yet even the least sanguine had no anticipations of the slowly but surely decreasing debility—resisting all efforts to stay its advance—under which the Prince gradually sank, dying at last from pulmonary engorgement. The disease was typhoid fever, not very severe in its early symptoms, but from its very nature taxing heavily the resistant vital powers and energies of the sufferer—that reserve force of which the physician so carefully takes stock in every case of fever; for he knows not how soon it may be tried to the uttermost, or all his efforts be unavailing to keep the fortress of life. The insidious character of this disease is always opposed to any early and decisive diagnosis of its precise character. Moreover, its first symptoms are common to various mild forms of febrile disorder. It should not however be omitted to note that typhoid fever, although less to be dreaded than typhus fever, inasmuch as it is not considered to be communicable from one member of a household to another by contagion, is, nevertheless, in respect to mortality, ... The death-rates of those attacked by typhoid and typhus fever are nearly equal, both being fever of a very fatal character. If the disease by which the Prince Consort fell was by no means of that ambiguous and usually innocent character which popular report has assigned to it, no doubt from misinterpretation of the necessary official reticence of the early bulletins, so also it should be observed that the illness was of longer duration than at first appeared. The Prince Consort had been attacked at least a fortnight before the fatal termination. On Sunday week he was unable to attend Divine service,—a duty he ever held as of paramount importance in his well-balanced mind. On the Monday following Dr. Jenner was summoned, and from that time the Prince was under continuous medical advice. It is perhaps commonly thought that, as a man of middle age, well nourished, and of course highly cared for in all material wants, the Prince might have been less than usually liable to fall a victim to low fever of this kind. But the opposite series of relations may always be predicated in typhoid fever. This is a disease which has invariably proved far more fatal to sufferers of the upper class and of middle period of life than to patients of the poorer kind. The unhappy issue must therefore be regarded as a source of deep lamentation rather than of surprise. There is nothing in the known course of the disease during the last week of the attack to take it out of the ordinary character of typhoid fever. The immediate cause of death is believed to have been congestion of the lungs, as above stated. This con-

gestion was, of course, hypostatic or gravitative, and such as occurs in the last stages of weakness of the circulation. On the other hand, there was enough of suddenness in the immediate termination of the disease to raise the question whether it might not have been due to ulcerative perforation of the bowel,—a well-known complication of typhoid fever. But we are unaware of any facts which sufficiently uphold this belief. The melancholy occurrence must induce the profession to revert to the former epidemic of typhoid fever which raged severely in Windsor two years since. The attack was traced by Dr. Murchison very clearly and distinctly to bad drainage as its cause. The question has been asked whether the Castle itself is as badly drained as the town, and whether there be anything in the drainage of Windsor Castle which could be expected to favour the growth or dissemination of the disease. It must be remembered that this is one of those zymotic ailments essentially connected in their origin with bad defects of sanitary arrangements. So close is the connection between bad drainage and typhoid fever that Dr. Murchison has, with the assent of Dr. W. Farr, denominated it pythogenic fever, or fever generated by dirt. In the case of the epidemic of Windsor, two years since, this was very observable. A plan of the drainage of the Castle and town, given by Dr Murchison in his valuable description of the cause of the epidemic, shows, however, that the Royal residence is directly and perfectly drained into the Thames. It deserves, perhaps, to be mentioned, also, that this good drainage is peculiar to the Castle, only one half of the Royal mews participating in its benefits. These two blocks of buildings are separated merely by a roadway, and, while that half which has the benefit of the Castle drainage remained free from fever, in the other ill-drained block there occurred 30 cases of fever and three deaths among the Royal servants."

The *Medical Times* makes the following remarks on the nature and probable causes of the disease:—

"There were fluctuations from time to time, and even within an hour of his death the Prince expressed himself as strong enough to get out of bed; nevertheless, a terrible fit of congestion of the lungs ensued, in which he expired, shortly before 11 at night. The Prince's constitution was one of those which was not calculated to bear the brunt of an enfeebling zymotic disease. In spite of an active athletic life and of careful diet, he displayed an early tendency to increase of bulk, which is rarely compatible with a healthy rigidity of fibre. He was easily depressed by a common cold or any other slight accidental illness, had a feeble circulation, and firmly believed that any severe illness would at any time be fatal to him. How and when he contracted his fatal illness is matter of conjecture purely. All maladies of this class have a 'period of incubation.' The fatal zymotic poison is imbibed, but it does not at once show its full effects. It broods for a certain number of days, like leaven, in the veins of the victim before there ensues that shivering fit, of greater or less intensity, which is the starting point of the actual fever. Some poisons, like the smallpox, have fixed periods of incubation; others, as the scarlet fever, are uncertain, for there may be no interval whatever—the fever may begin immediately on the receipt of the poison. In the typhoid the period of incubation is probably about a week, and the source of the fatal poison must have been at some place which the Prince visited during the last week of November. Was it Cambridge? Was it South Kensington? It is vain to speculate. The causes of typhoid fever still abound even in places which ought to be the most exempt from them. Like poisons of their class, they evidently do not affect all alike, but only some persons who are predisposed, and no one who travels much can be sure that he may not meet with them. So soon as unfavourable symptoms manifested themselves, Sir James Clarke and Dr. Jenner requested that the patient should have the benefit of additional advice, and that their own responsibility should be divided. This proposition was very unwillingly entertained at first by the personage most nearly interested, partly from her unbounded confidence in her advisers, and partly from fear of still further depressing the vital powers of the Prince, and increasing his despondency by alarm at indications of increased danger. The repeated request of the physicians, however, was at length complied with; and two physicians were specially selected by the Royal family—Sir Henry Holland and Dr. Watson. The confidence which the Royal family placed in their advisers is fully shared by the public and by the profession. They may be sure that the most refined and energetic resources of medicine and diet were employed to save and sustain the patient's vital powers. After the fatal event the Queen, with a calmness and dignity which never desert her, expressed her warmest thanks to Sir James Clark, as one of her oldest and best friends; and more than one member of the Royal family testified to Dr. Jenner their gratitude for the attention which he had lavished—unavailingly, alas!—on their departed relative. We have these details from one high in office, who received them from a member of the Royal family."

City Intelligence.

MONEY MARKET, FRIDAY.—BRITISH FUNDS: Consols closed at 90½ to ¾ for Money, and 90⅝ to ¾ for the Account; Bank Stock, 234; Three per Cents. Reduced, 90¼ to 90; New Three per Cents., 90 to ¼; India Five per Cent. Stock, 103¾ to 104, ex div.; Ditto for Acct., 103⅞, ex div.; Ditto Bonds, 15s. to 12s. pm.; Ditto Four per Cent. Debentures, 1861, 98½ to ⅝; Ditto 1859, 98½ to ⅜; Exchequer Bills, 10s. pm.—FOREIGN: Dutch Four per Cent. Certificates, 100¼; Italian Five per Cents., 64 to ½; Mexican Three per Cents. for Acct., 27 to 26⅞; Portuguese Three per Cents., 1853, for Acct., 47; Russian Four and a Half per Cents., 91¼ to ½; Spanish Three per Cents., for Acct., 51⅞; Ditto New Deferred Three per Cents., 42¼; Committee's Certificates, 5¾ to ⅞; Turkish Six per Cents., 1854, for Acct., 77½ to 77; Ditto, 1858, for Acct., 67½.

Gazette of the Week.

FRIDAY: *Dec.* 20—BANKRUPTS.—J. W. L. ALDRIDGE and W. OSMAN, Hatcham Park Brewery, Old Kent Road, Brewers—E. AUST and E. TINSON, Corsham, Wiltshire, Masons—B. BUCKLE, Cheltenham, Beer Retailer—P. BREWIS, Gateshead, Durham, Baker—G. BARKER, Swansea, Glamorganshire, Retailer of Beer—H. BAXTER, Wolverhampton, Dyer—C. BRADSHAW, Ladbrooke, Warwickshire, Innkeeper—P. BINT, Meriden, Warwickshire, Maltster—J. BAILEY, Spennymoor, Durham, Grocer—R. BECK, Great Castle Street, Oxford Market—W. G. BOYES, Great Tichfield Street, Marylebone, Dry Cooper—W. D. BLACKMAN, Queen Street, Edgware Road, Milliner—G. BRITCHER and E. LUCKING, Hatfield Place, Westminster Road, Greengrocers—F. BERNE, Liverpool, Butcher—D. L. BENNUSAN, St Helens, Lancashire, Ironmonger—G. BOUSKILL, Liverpool, Joiner—M. BROOKS, Manchester, Coffee House Keeper—J. P. BOWEN, Tettenhall, Staffordshire, Grocer—J. BESZANT, New Street, Portland Town, Greengrocer—J. CARR, jun., Tudeley, Kent, Licensed Victualler—H. B. CLARK, Tuxford, Nottinghamshire, Labourer—J. CARVER, Coventry, Watchmaker—THOMAS COLEBROOK, Maida Vale—JOHN SHERARD COLEMAN, Saint Ann's Gardens, Kentish Town, Hotel Keeper—W. CHILCOTT, New Street, Kennington Road, Commission Agent—J. CRABB, Staple Fitzpane, Somersetshire, Farmer—E. DAVIS, Hexham, Northumberland, Gunsmith—J. DICKIN, Bilston, Staffordshire, Carter—JOHN DENNIS, Beall Place, Hornsey Road, General Shopkeeper—J. METCALFE DOBSON, Abbey Gardens, St. John's Wood, Attorney—T. DODD, Ettingshall New Village, Staffordshire, Chartermaster—R. DENMAN, Cannock, Staffordshire, Beerhouse Keeper—S. H. DAVIES, Aldershot, [illegible], Lieutenant in the 16th Foot—J. EVENDEN, St Mary Cray, Kent, [illegible]—W. [illegible], [illegible], Hampshire, Carpenter—J. FADY, [illegible], Northamptonshire, [illegible]—W. H. L. FENNELL, Brighton, [illegible]—[illegible], Great Yarmouth, Cordwainer—A. FORD, Wolverhampton, [illegible]—[illegible], Great Yarmouth, Fish Merchant—[illegible], Boot and Shoe Maker—W. GODDINGTON, [illegible], Dealer in Breezes—W. GREAVES, [illegible], Coal Agent—J. W. GILBERT, St. Day, Cornwall—S. GRANGER, Murray Street, Hoxton, Baker—H. HOWELL, West Bromwich, Staffordshire, Beer Retailer—W. H. ROFFEY, Stratford-upon-Avon, [illegible], Devonshire, Labourer—J. H[illegible], [illegible], Coal Merchant—J. HANCOCK, Halifax, Yorkshire, [illegible]—W. H[illegible], Portsea, Hampshire, Auctioneer—R. H[illegible], [illegible], Cornwall—J. J. H[illegible], carrying on business as JOHN [illegible], Northampton, Lace Finisher—J. HOWARD, High Wycombe, Buckinghamshire, [illegible]—A. H[illegible], [illegible], Wiltshire, Inn Keeper—W. H[illegible], [illegible], Corn Dealer—R. IMPEY, Hague St., Bethnal Green, Baker—J. I. LOCKHART, Slough, Buckinghamsh., Practising Homœopathy—T. JOHNSON, Northampton, Builder—J. W. JEWELL, Ampton Street, Gray's Inn Road, Clerk—S. KINGSTON, Milk St., Cheapside, Manufacturer of [illegible]—C. KYLE, Portswood, Hampshire, Saddler—[illegible], Manchester, [illegible]—J. A. LOWENTHAL and R. T[illegible], Little Tower Street, General Merchants—R. R. LUCAS, Brighton, Professor of Literature—J. MAKEPEACE, Lower Tottenham, Carpenter—W. MANS[illegible], [illegible], Deane, Painter—P. MAKIN, Deane, Lancashire, [illegible]—S. MOORE, Middleton, Suffolk, Labourer—H. M. M[illegible], Union Street, Kennington Road, Livery Stable Keeper—R. MORGAN, Talgarth, Brecknockshire, Farmer's Assistant—G. MOORE, Holderness, East Riding, Yorkshire, [illegible]—J. MARKS, Goodman's Fields, Dealer in Jewellery—[illegible]—F. C. MAGUIRE, Wyndham Road, Camberwell, [illegible]—[illegible], Llyswen, Brecknockshire—R. N[illegible], [illegible]—J. NAYLOR, Warmfield, Yorkshire, [illegible]—R. N[illegible], New Compton Street, Soho, Cowkeeper—J. NEWALL, Crewe, Cheshire, Licensed Victualler—R. NURCOMBE, [illegible], Somersetshire, [illegible]—L. OMMEN, Trinity Square, Tower Hill, [illegible]—W. P[illegible], [illegible], Leicestershire, Farmer—J. A. PETTIT, jun., Bildeston, Suffolk, Builder—W. P. PEAKE, Wray Terrace, Old Bethnal Green Rd, General Commission Agent—H. PRIBRAM, Nicholas Lane, City, Commission Agent—R. POWNING, St. Day, Cornwall, Grocer—J. POWELL, Oldbury, Worcestershire, Grocer—H. RUSSELL, York Pl., Battersea [illegible]—[illegible], Accountant—G. RUSSELL (known also as C. RUSSELL), Beaumont Street, Marylebone, Lodging House Keeper—S. STEVENS, Brighton, Carver and Gilder—H. SERJEANT, Messing, Essex, Plumber—J. H. SLADE, East Stonehouse, Devonshire, Painter—J. SIMPSON, Groton, Suffolk, Cattle Dealer—S. SHIPP, Bilton, Gloucestershire, Mason—C. SOMERSHILL, Welford, Northamptonshire, Boot Maker—S. SWAIN, Dudley, Worcestershire—J. STOCKBRIDGE, Kilburn, Cab Driver—T. E. SMITH, Westbourne Terrace, Hyde Park—J. SOWER, Deepfields, Staffordshire, Blank Tray Maker—G. TARBECK, Wolverhampton, Journeyman Cabinet Lock Maker—G. TOMLINSON, Wolverhampton, Licensed Victualler—C. T[illegible], Penge, Surrey, Publican—G. WRIGHT, Great Warley, Essex, Schoolmistress—J. WHITE, Worcester, Fishmonger—T. H. WHEELER, Wolverhampton, Grocer's Assistant—W. WALL, Brading, Isle of Wight, Licensed Victualler—T. WARHURST, Hadfield, Derbyshire, Grocer—J. WOOD, Croydon, Surveyor.

SCOTCH SEQUESTRATIONS.—J. BEVERIDGE, Aberdeen, Writer—L. GRANT, Grantown, Inverness-shire, Carrier—T. GORDON, Glasgow, Writer—A. KIRKLAND, Glasgow, Civil Engineer—W. LINCOLNE, Glasgow, Commission Agent—J. P. M'WATT, Dunse, Berwickshire, Writer.

TUESDAY: *Dec.* 24.—BANKRUPTS.—W. M. AVANT, North Petherton, Somersetshire, Tailor—J. BIRD, Eddlesborough, Buckinghamshire, Labourer—T. BINGHAM, Holbeach, Lincolnshire, Grocer—J. BOYCE, Colston Bassett, Nottinghamshire, Cordwainer—W. BRADLEY, Wakefield, Yorkshire, Stonemason—J. BROWNING, Coggeshall, Essex, Carpenter—F. W. BENNETT, Lieutenant in the Navy—L. BROWN, Tenby, Pembrokeshire, Butcher—J. BOLTON, Blackburn, Lancashire—R. BRECKON, Whitby, Yorkshire, Attorney-at-Law—J. R. BENTLEY, Ashby-de-la-Zouch, Leicestershire, Tanner—H. BENT, Birmingham—E. BEST, West Hartlepool, Ironfounder—T. BACKHOUSE, Richmond, Surrey—HARRY BELLINGHAM (sued as HENRY BELLINGHAM), Johnson's Place, Hanover Square, Builder—J. T. CANNING, Hounslow, Middlesex, Miller—A. CAMPBELL, Newcastle-upon-Tyne, Master Mariner—S. CORY, Northampton, Tailor—C. H. W. COOPER, Oxford, Journeyman Tailor—P. COOLEY, Northshore, Newcastle-upon-Tyne, Rag and Metal Merchant—R. CARTOON, Burton-upon-Trent, Staffordshire, Bricklayer—G. CASTLE, Lockwood, Yorkshire, Coal Agent—P. J. C. BEDFORD, York Buildings, Adelphi, Clerk—W. CARRINGTON, sen., Birmingham, Painter—J. CRAWFORD, Liverpool, Wholesale Stationer—JOHN ROWLAND CONBOY, Ratcliff Street, St. George's-in-the-East, Lodging-House Keeper—J. DRINKWATER, Manchester, Stuff Manufacturer—L. B. DELANAY, Blackley, Lancashire, Dyer—T. DEWELL, Redcar, Yorkshire, Mason—P. DEE, Birmingham, Licensed Victualler—J. DANDO, Cardiff, Glamorganshire, Stonemason—H. DOLL, Red Lion Street, Holborn, Baker—H. EDMONDSON, Manchester, Traveller on Commission—R. B. EDEN, Royal Road, Kennington Park, Butcher—W. J. ELL, Basinghall—J. FORSETT, Broom Edge, Cheshire, Fustian Cutter—J. FLYNN, Liverpool, Tobacconist—W. J. H[illegible], [illegible] Street, Gray's Inn Road—D. GUILLEMIN, St. Swithin's Lane—E. GROVE, Kidderminster, Worcestershire, Butcher—C. GARRETT, Worcester, Greengrocer—C. GINGELL, Bath, General Shopkeeper—J. GREEN, Rickinghall Inferior, Suffolk, Shoemaker—H. GIBBS, sen., Manchester, Quarry Master—E. HEWLETT, Bristol, Clerk—A. G. HUNTER and H. SUGDEN, Newcastle-upon-Tyne, Caustic Alkali Manufacturers—T. HERBERT, Manchester, Flour Merchant—W. HILDEN, King's Lynn, Norfolk—J. HILL, Westhall, Suffolk, Veterinarian—W. HAMBLING, Melton, Suffolk, Farmer—C. F. HOLMES, Spondon, Derbyshire, Lieutenant-Colonel in the Army—A. HENDERSON, Bristol, Baker—J. HUGHES, Clydey, Pembrokeshire—ALFRED JAMES, Dorking, Surrey, Watchmaker—RICHARD T. JONES, Branksea Island, Dorsetshire, Grocer—G. H. JOHNSON, South Shields, Grocer—T. KELLY, Kirkby Lonsdale, Westmorland, Stonemason—W. KLOSS, Birmingham, Professor of Music—J. KNAPP, Northampton, Boot Manufacturer—F. G. J. LASCELLES, Twickenham, Retired Brevet-Colonel in the late Hon. East India Company's Service—G. LEVY (known and calling himself G. LEWIS, and sued and detained as G. H. SPENCER), Dyer's Buildings, Holborn, Auctioneer—W. LASHFORD, Brighton, Grocer—J. MAKEPIECE, Blaydon, Durham, Baker—J. A. M'DONALD, Brighton, late an officer in her Majesty's Army—E. MASON, Crich, Derbyshire, Attorney's Clerk—J. MARTIN, Lower Clapton, Bookseller—G. MASON, Birmingham, Jeweller—J. MILLARD, Eversholt, Bedfordshire, Steam Engine Proprietor—E. NOON, Burslem, Staffordshire, Clothier—T. NECK, Mill Pond Row, Bermondsey, Draper—N. NETTLETON, Manchester, Grocer—H. NICHOLSON, Princes Street, Chelsea, Currier—W. PERROTT, Cardiff, Glamorganshire, Tailor—E. PHILLIPS, Manchester, Provision Dealer—C. PITTS and J. PITTS, Sheffield, Razor Manufacturers—R. PILKINGTON, Manchester, Packing Case Maker—T. J. PATTERSON, Bristol, Nailmaker—R. PEARKS, Bellbroughton, Worcestershire, Farmer—C. PROFFER, Meredith Street, Clerkenwell, Watch Dial Maker—J. ROBERTS, Manchester, Staymaker—W. ROGERS, Cardiff, Glamorganshire, Agent—H. ROSS, Pentonville Road—T. ROWLANDS, Lampeter Velfrey, Pembrokeshire—J. ROSE, Harwich, Beer House Keeper—WILLIAM SHAW, Batley, Yorkshire, Joiner—S. STOKES, Handsworth, Staffordshire, Jeweller—W. SAMPSON, Farleigh, Surrey—S. STEPHENS, Alfreton, Derbyshire, Butcher—H. SUGDEN and J. MORLEY, Manchester, Yarn and Cloth Agents—W. SWIFT, Leominster, Herefordshire, Innkeeper—T. SMITH, Cockerton, Durham, Farmer—W. H. STONE, [illegible] Street, Camberwell Green, Cab Proprietor—W. SPOONER, Tredegar, Monmouthshire, Marine Store Dealer—W. C. SMITH, Great Dover Street, Borough, Baker—P. SIMPSON, Newcastle-upon-Tyne, Publican—R. SANDFORD, Everton, Lancashire—J. SPRINGETT, Wadhurst, Sussex, Hop Merchant—J. TOWERS, Farnworth, Lancashire, Boot Maker—W. J. TANNER, Great Dover Street, Newington, Army Contractor—F. V. WEBSTER, Manchester St., Manchester Sq., Teacher of Elocution—JOHN RICHARD WEST (sued and committed as J. R. WEST), Rushton St., Hoxton, [illegible]—[illegible] WILKES, Liverpool—J. WORSLEY, Northwich, Cheshire, Boot [illegible]—[illegible] WASHINGTON, New Corn Exchange, Mark Lane, Corn Merchant—W. YAMARA, Willoughby Terrace, Park, Tottenham, Ship Broker—G. L. WORTH, Wellington Place, Hornsey, Newspaper Reporter.

SCOTCH SEQUESTRATIONS.—R. FOTHERINGHAM, Edinburgh, Cabinet Maker—T. [illegible], Glasgow, [illegible]—A. B. TODD, New Cumnock, Tile Maker—J. MILLAR, Kirkmichael, Farmer—C. GEDDES, Glasgow, Wine and Spirit Merchant—H. MOHRING, Glasgow, Fruit Merchant—M'COTON & THOMAS, Glasgow, Accountants—J. BROWN, Balmungo, Fifeshire, Millwright.

Bank of England.

ISSUE DEPARTMENT.

Notes issued	£29,588,845	Government Debt	£11,015,100
		Other Securities	3,634,900
		Gold Coin and Bullion ..	14,938,845
		Silver Bullion	—
	£29,588,845		£29,588,845

BANKING DEPARTMENT.

Proprietors' Capital ..	£14,553,000	Government Securities (including Dead Weight Annuity) ..	£11,063,147
Rest	3,141,742	Other Securities	16,826,024
Public Deposits (including Exchequer, Savings Banks, Commissioners of Nat. Debt, and Dividend Accts	7,090,141	Notes	10,022,150
Other Deposits	13,309,642	Gold and Silver Coin ..	817,088
Seven day and other bills	638,884		
	£38,728,409		£38,728,409

26th day of Dec., 1861. M. MARSHALL, Chief Cashier.

Metropolis and its Vicinity.

THE SOCIETY OF FRIENDS AND THE AMERICAN DIFFICULTY.—The following memorial in [illegible] arbitration in the difficulty with the United States [illegible] been addressed to Lord Palmerston and Earl Russell by the Religious Society of Friends:—

"TO VISCOUNT PALMERSTON, K.G., FIRST LORD OF THE TREASURY, AND EARL RUSSELL, PRINCIPAL SECRETARY OF STATE FOR FOREIGN AFFAIRS.

"The undersigned, acting on behalf of the S[illegible] throughout Great Britain, request the consideration [illegible] the First Lord of the Treasury and the Secretary [illegible] Foreign Affairs to a few observations on the present aspect of affairs between this country and the United [States of] North America, offered, as they are, under a [illegible] religious duty. We have on former occasions [illegible] our conviction that all war is unlawful for [illegible] that it is needless now to repeat it. But the [circum]stances connected with the present difficulties [illegible] two countries of so marked and peculiar a character [illegible] apprehension, to justify this special appeal [illegible] There are, perhaps, no two independent nations [illegible] the earth so closely united together as England [illegible] by the combined ties of blood, of language, of re[illegible] stitutional freedom, and of commercial interest, [illegible] nations between whom a war would be a more [illegible] our common Christianity, or a more serious [illegible] welfare and progress of the human race. Th[illegible] brother when once offended is a proverb. N[illegible] feelings which existed between England and Am[erica] [illegible] War of Independence and the war respecting the rights of neutrals by any means an exception to this proverbial tr[illegible] By degrees, however, animosity and mutual susp[icion] [illegible] The reciprocal visits of enlightened travellers, the [illegible] of commercial relations, and the healthy emulation in [illegible] philanthropy, in science, and in literature, we[re] [illegible] Divine blessing, producing an improved tone of [illegible] and national feeling, when at length, in 1860, the v[isit of the] Heir-Apparent of the British Throne to the Canadas [illegible] and to the United States seemed to complete [illegible] *cordiale* between the two countries. It is little m[ore than] [illegible] months since English subjects and American citizens [illegible] alike rejoicing in this healthy condition of the [illegible] between these two great divisions of the Anglo-Saxon [race]. Now, however, with sadness of heart we see all this [illegible] fully changed, and a question of international law w[hich] could be submitted to a competent tribunal of [illegible] whether European or American, or to the mediation [illegible] ment of any independent State, might probably in [illegible] be settled to the satisfaction of all parties, appears [illegible] imminent danger of occasioning a vast destruction [illegible] life, a prodigious waste of treasure, a total interruption [of] trade and social intercourse, and an incalculable amount [of] moral evil; while it is just as impossible, in the [illegible] things, for the question of right or wrong to be [illegible] up by such an appeal to the sword, as it was for the g[uilt or] innocence of the accused in mediæval times to be settled by the wager of battle or the passage over burning ploughshares. Under these circumstances we look with confidence to the Government and legal advisers of our beloved Queen, fully believing that it is their honest desire that so awful and so unnecessary a calamity—we might say [illegible] national sin—as a war with America should be averted. [In] this confidence we are emboldened respectfully to [illegible] whether it is not possible to use the interval which [must] necessarily elapse between the transmission of the views [of the] British Cabinet to Washington and the arrival of the reply [in] preparing so to meet that reply, whatever it may be, that the next step may not be a declaration of war, but the put[ting of] the remaining issue, if any, between the two counties in [illegible] for a pacific decision. We rejoiced to see the principle [of arbi]tration strongly recommended by the Plenipotentiaries [of the] European Powers who were parties to the Treaty of [illegible] Where a prospective provision of this kind exists in [inter]national treaties, any difficulty which may [illegible] naturally take the course thus prescribed for its settlement [illegible] the question of right becomes merged in the storm of passion. And though there may be no such prospective provision applicable to the present difficulty, we would respectfully submit that it may not be too late for our Government, s[illegible] sciousness of right, to propose such a reference, [illegible] from Washington not contain the happy and [illegible] mination of the dispute. There are many circumstances [in] the present position of England which enable [illegible] tain a perfectly temperate and conciliatory a[illegible] would it not seem ungenerous to drive matters [illegible] ties with the United States at the time wh[illegible] engaged in a struggle for their national inte[illegible] their national existence? May we, then, as Christians [illegible] to the enlightened rulers of this highly [illegible] country, imploring them, while commendably [illegible] interests and the character of England, to end[illegible] out the Gospel rule of doing as they would be d[illegible] not less binding on nations than on individuals [illegible] we thus address those whose counsels direct the [illegible] with whom may rest the final decision for peace or for war. [We] are well aware that much depends upon the avoidance of all exasperated feeling on the part of the public at large, often too ready to encourage a war at the first outbreak [illegible] and we greatly desire that a thoroughly pacific temper may be maintained and increased among us as a nation, [illegible] cially that it may be promoted by all those who [illegible] preach the Gospel of peace. There may have been [illegible] as well as deeds on the part of the Government of the [illegible] of the United States which have tried the temper and the patience both of our statesmen and of our fellow-countrymen generally; but it is surely more truly dignified, as [illegible] more truly Christian, to meet provocation with [illegible] ence to law, than to exhibit a retaliatory spirit. [illegible] further suggest that, after the vast sacrifices w[hich] [illegible] has made for the abolition of the slave trade and s[lavery in its] own possessions, and by other countries, which [illegible] object so consistently promoted through life by [illegible] whom we are now addressing, it would be deep[ly] [illegible] if, by being involved in this war, our country sh[ould] find itself in active co-operation with the South [illegible] against the North and freedom; though, in saying [illegible] do not intend to express our approval in [illegible] of the course pursued by the North in reference [illegible] We may, perhaps, be permitted to mention [an] additional reason for our strong advocacy of the [preser]vation of peace with America, that as the [illegible] founders of two of its States, and many of the [illegible] settlers of other States, were our brethren in re[ligious profes]sion, between whose descendants and ourselves [illegible] correspondence has been maintained for nearly two [illegible] we have a special religious as well as national interest [in this] question. And though the government of those States [illegible] passed into less pacific hands, yet our brethren there [illegible] a considerable influence on their State Legislatures, [illegible] voice has often been heard with effect in Washington. [illegible] shall, therefore, at once apprise our American friends [illegible] step which we have now taken, and shall urge them [illegible] their influence in furtherance of the cause of peace. Ma[illegible]

who still ruleth the earth by His providence as well as by His grace grant that the wisdom which is from above, and which is pure, peaceable, gentle, and easy to be entreated, may so prevail in the Councils of the two Governments and in the hearts of the people that the impending scourge of war may be averted from the kindred nations on each side of the Atlantic, and from the waters of that ocean which should unite rather than divide them.—London, the 9th of the 12th month, 1861."

WESTMINSTER ABBEY.—It has been found necessary to close the Abbey in order that it may receive a thorough cleaning, and that the organ may be repaired. The services will therefore be suspended during the whole of the next month. The daily services on week days will be carried on at the usual hours (7 45 A.M., 10 A.M., and 3 P.M.), by permission of the rector, in the Church of St. Margaret's.

WOOLWICH MILITARY ACADEMY.—General Knollys, the Vice-President of the Board of Military Education, presided at the recent distribution of the half-yearly prizes at the Academy, and delivered a speech on the late disturbances and the grievances complained of by the cadets. He said:—

"The recent commotion at the Academy was scandalous, and betrayed a disposition to create and encourage breaches of discipline. The conduct of the persons concerned was that of idle and wilful boys, rather than of young officers, but he felt certain that their own good sense would guard them against a recurrence of such behaviour. One of their complaints he found was the admission of the competitive class from Addiscombe. Were they not there on the principle of competition? By exercising that principle large numbers had now passed for commissions in the Academy. The extinction of the Seminary of Addiscombe was not, he said, their act, but that of the country, and he found by the result of the examination that the admission of the class had in no way impeded their advancement, as the numbers proved. The minor grievance, it appeared, was the mess complaint, or the mode of cooking. That was a frivolous ground of discontent. The irregularity was occasioned by the bad state of the kitchen range, which was out of order for a short time only. His Royal Highness had therefore come to the conclusion that there was nothing in their complaints which he could consider to justify the commotion."

EMBANKMENT OF THE SOUTH SIDE OF THE THAMES.—The Commissioners for embanking the south side of the Thames held their second meeting on Friday at Westminster; Colonel Galton, in the absence of the Lord Mayor, in the chair. Mr. Frederick Doulton was the first witness examined. He said the embankment of the Thames on the south side was rendered necessary by the fact that floods frequently took place there, by which the poor and the wharfingers were seriously affected. The poor were driven from their homes, and on returning to them after the water subsided disease was caused by the dampness of their dwellings and the filth left after the flood. The wharfingers also suffered by having their places of business flooded. These serious inconveniences could be prevented by the construction of an embankment on the south side of the river, which embankment would afford the means of making a new road and thus relieving the over-crowded thoroughfares, the crowding of which would be increased by the construction of Lambeth Bridge, which would be opened next year. A new street was undoubtedly necessary, and it might be made by an embankment, or by widening the waterside thoroughfare street. As to heightening the wharves on the river side it would interfere with all the existing thoroughfares of the neighbourhood, and would entail the entire reconstruction of the wharves; indeed most of the existing wharf walls were so bad that any attempt to patch them up would be a failure, and would not remove the evils of flooding, or remedy the over-crowding. The floods came over the embankments and went up through the sewers. It would be most injurious to abolish the free landing-places; from one of them 1000 tons were carted a week; and any road on the south side must be constructed in communication with free landing places. The objectionable slime of the sandbanks was due to the sewage. He was of opinion that no other course than an embankment would remedy the existing evils. It must be remembered that those on the south side spent a large amount in coal tax, which went to pay for the embankment of the north side. Mr. Mackintosh, surveyor to the Lambeth vestry, said he had heard the evidence of the last witness, and could strongly support all he had said. He had held his present position for 12 years. The vestry had no means of relieving the inhabitants from the evils they suffered. They had served notices on the wharfingers to improve their wharves, but they took no notice of them, and the board had no power to enforce the improvements. The flood extended sometimes back from the river to Broad Street — a distance of 250 yards. The water from the flood got into the sewers and filled them, so that their contents were mixed with the flood. There were also floods from rain water which affected Stamford Street and the neighbourhood. The main drainage works would remedy this, but not the tidal floods. Beyond this the inhabitants were subject to a daily inconvenience. The subsoil on the banks being gravel, and the walls rotten, the water penetrated through, and affected the wells as far back as Kennington Oval and the ponds on Kennington Common, the water in those ponds and wells rising and falling with the tide. The poor, whose dwellings were inundated, suffered not only from the dampness of their dwellings occasioned by the flood, but by the filth that was left in them when the flood subsided, and he believed a good sound wall and solid embankment would cure the evil, but without a substantial wall the soil must percolate through the gravel. As to the necessity of improved communication between Lambeth and the West-end there could be no doubt. If the opportunity of making the embankment was now lost it could not be done hereafter without causing great expense. Now the streets could be widened and the district improved at a small expense, as the compensation would not be large. The old buildings in Fore Street were flooded frequently, but the vestry did not allow the basements of new buildings to be made lower than the level at which good drainage could be secured. Unless power was given to do away with the free draw docks on the south side of the river any raising of the docks would be abortive. Mr. Goddard, a vestryman of Lambeth, said he had paid considerable attention to the state of the south bank of the river. He could bear testimony to the percolation which had been referred to by the other witnesses. He lived in the neighbourhood of Nine Elms—300 yards from the river. The bottom of his garden was nearly always under water, and in any part of it if he dug three spades, or 16 inches deep, he got water. His garden was below water mark, and in the height of summer he found water at 24 inches deep. He apprehended that the whole district was entirely built on a quagmire, and this was proved by the fact that the houses were continually settling. His house had a crack down it sufficiently large to thrust one's fist into it. It had been stopped up with mason's putty, and the doors of his house had frequently to be reduced on one side and pieced on another to make them shut. In his neighbourhood sickness was common. He had frequently seen Bishop's Walk flooded. He was an auctioneer and valuer, and in that capacity he knew that it was in contemplation to form a company to embank the south side of the Thames; it promised a large profit, and the only difficulty was in getting the necessary powers. Mr. Oddley, medical officer for the Lambeth district, corroborated the other witnesses, and explained that a low typhoid fever was always prevalent in the district, owing mainly to the floods and the deposits they left behind. Mr. Legg, district surveyor of Bermondsey and Rotherhithe, stated that those districts were but little better off than those which the preceding witnesses had described.

HUNTERIAN MUSEUM.—The Council of the Royal College of Surgeons of England have appointed Mr. William Henry Flower, F.R.C.S., of Queen Anne Street, Cavendish Square, formerly surgeon of the 63d Regiment, and for some time assistant surgeon to the Middlesex Hospital, to be conservator of the Hunterian Museum, in the room of the late Professor Quekett.

REMOVAL OF NEW PALACE YARD.—The block of houses reaching from the clock tower of the New Palace and terminating with Fendall's Hotel, opposite to the north entrance of Westminster Hall, is in process of demolition, and it is expected that it will be removed before the meeting of parliament. The whole space between Westminster Hall and the north side of Bridge Street will thus be opened, and from Westminster Bridge a fine view of the Houses of Parliament, the Abbey, and adjacent buildings will be obtained.

THE CITY MUNICIPAL ELECTIONS.—Saturday being St. Thomas's Day, the annual wardmotes were held in the city of London for the election of common councilmen and other officers for the year ensuing. The subjects under discussion were somewhat various. The gas question was adverted to in several of the wards, as was also the metropolitan improvements, including the building of Blackfriars Bridge, the widening of the thoroughfares, and the erection of new markets; while resolutions of condolence to the Queen on the death of the Prince Consort, accompanied by fervent expressions of loyalty and feeling, were unanimously adopted.

THE NEW MEAT MARKET IN SMITHFIELD.—At a special meeting of the Court of Common Council last week Mr. H. Lowman Taylor, Chairman of the Markets Improvement Committee, presented a report signed by Aldermen Humphrey, Conder, Moon, Rose, Salomons, and the other members of the Committee, detailing the various proceedings that had taken place with reference to the proposed new meat and poultry market in Smithfield, and the negotiations that had taken place with the Dean and Chapter of St. Paul's and the Ecclesiastical Commissioners in reference to the dismarketing of Newgate Market, the whole of which have been repeatedly before the public. The material portion of the report was that which recommended that immediate steps should be taken to apply to Parliament, and give the necessary notices for the purpose of purchasing the property that would be required, with a view to immediately commence the erection of the market and the streets connected with it at a cost of 525,000*l*. Several plans and models of the proposed new market were exhibited in the court. Mr. H. L. Taylor moved that the report be received and agreed to, and after a long and animated discussion, chiefly on the probable cost of the market, and the proposed design for the buildings connected with it, the motion was unanimously agreed to, and the report was referred to the coal, corn, and finance committee, to take all necessary steps for proceeding with the new market as soon as possible.

THE GAS QUESTION IN THE CITY.—At the last meeting of the City Commission of Sewers it was resolved to accept a tender from the City of London Gas Company for supplying public lamps within their present district, on condition that, in the event of the Commissioners requiring the adoption of the carburating process to all or any of their lamps lighted by the company, the annual charge for each bat's-wing burner, consuming 3 feet of gas per hour, should be 3*l.* 11*s.*; and that the carburating process, if adopted, should be at the risk and cost of the Commissioners. The effect of this new arrangement is to exclude the Great Central Company from the public lighting over an area hitherto lighted by the Great Central at a cost of 8000*l.* a-year.

NATIONAL TEMPERANCE LEAGUE.—A crowded meeting of young men engaged in trade in the City was held on the 19th inst., in the Egyptian Hall, under the auspices of the National Temperance League, and was convened by the Lord Mayor, in compliance with a numerously signed and influential requisition. His lordship occupied the chair, and in opening the proceedings said he was most happy in being instrumental in promoting the great cause of temperance. Although he did not go the entire length of those who said that all crime was to be ascribed to the use of intoxicating drinks, yet he believed a vast amount of crime sprung from habitual drunkenness. He was, therefore, anxious to induce those who formed the lower stratum of our social system to refrain from that which might lead them into excess, and thereby produce great misery. He wished to say, however, that while he thought temperance should prevail, he meant temperance in what he believed was its proper sense. He did not concur with those who thought that, because a small minority of our fellow beings having unruly appetites and feeble minds were unable to resist temptation, that we should therefore impose an unqualified restriction upon all our fellow-creatures, and deny to them the proper use of those gifts which a beneficent Providence had conferred upon us. It was not for him to quote the Scriptures among those gentlemen on the platform whose vocation it was to instruct the people in religious truths, but there was one verse which he would like to repeat, as it seemed to him to show that within certain limits we were permitted to enjoy that which beyond these limits might and did lead to great mischief. The verse was, "Eat thy bread with joy, and drink thy wine with a merry heart, for God now accepteth thy works." At the same time he wished them to observe that he was fully convinced of the great mischiefs which arose from intemperance, and that it was always his desire to promote the cause of temperance.—Mr. Scott, the City Chamberlain, thanked his lordship for convening the meeting, and informed the young men that they had not been asked to be present on the ground of its being supposed that intemperance was the vice of their class. It was, however, their object to warn the young men of the dangers to which the drinking customs of society exposed them. He adduced statistics to show that intemperance had decreased to a considerable degree among the higher and middle classes during the last 60 years, and said that as a Christian he had felt constrained to adopt the principles of total abstinence. When he saw the great evils that were produced by the use of intoxicating drinks, he confessed he could not "drink his wine with a merry heart." Christianity was emphatically the religion of self-sacrifice, and in order that poor drunkards might be saved from ruin it was the duty of Christian men to abstain from intoxicating drinks.—Dr. Carpenter said he had for a long period abstained, but he had never signed the pledge. He preferred to offer arguments to the meeting which could be taken for what they were worth, rather than to come before them as the organ of any movement. He had, he said, recently called public attention to the scientific aspect of the question in the "Westminster Review," which had some years ago opposed the principies he advocated. He arged that alcohol did not impart strength to the drinkers of intoxicating liquors. He admitted that it was a valuable medicine, but when taken as a beverage it had a deteriorating effect on the mental powers. It weakened the will, and rendered the practice of self-denial extremely difficult. Some medical men asserted that alcohol made food go further, and that it checked the waste of tissue. He did not say this argument was quite devoid of truth, but it had no application to a well-fed man. The development of strength depended on the metamorphosis of tissue proceeding constantly; when it was checked the result was prejudicial.—Mr. Samuel Morley was glad that the meeting had been convened, and that the important subject of temperance had been submitted to the consideration of the young men. He did not find in the Scripture any direct command for the profession of total abstinence, but he had adopted it from the conviction that if his services were to be effective in raising men from the degradation of drunkenness he ought to be able to say to them that he followed the course which he advised them to adopt. He was most anxious for the elevation of the poorer classes by moral means, but looking at the great evils which intemperance was producing he felt himself rapidly drifting towards the advocacy of some kind of legislative interference. The licensing system he conceived required great amendment. If he wanted the country to be ill governed he would try to get it filled with public-houses.—Mr. Samuel Bowley maintained that education would never prevent drunkenness. He knew that many highly educated men and women were now addicted to the vice. He dilated on the moral and social advantages of total abstinence at great length, comparing it to a broad-gauge railway, which carried everybody in safety, whereas numerous lives were los on the narrow-gauge line of moderation. He would

wish to see a bishop a passenger on the broad-gauge line, and he would be specially glad to see the Lord Mayor a passenger there also.—The Lord Mayor said if the gauge comparison was appropriate, he would confess himself a narrow-gauge man.—Mr. Bowley said he would be most happy to give his lordship the amplest time for considering the question.—Mr. Gurney, M.P., moved a vote of thanks to the Lord Mayor for presiding. He said he had nothing to regret in having adopted the total abstinence principle, and had never before enjoyed better health. He might just state that he knew one of the greatest brewers had recently visited Switzerland, where he had to cross some of the most difficult passes, and that instead of taking with him a quart of treble X, he had taken a quantity of portable soup. The motion was seconded by Mr. C. J. Leaf, and carried unanimously.

DEPARTURE OF MISSIONARIES.—A special meeting of the Society for the Propagation of the Gospel was held on Tuesday at the office in Pall Mall, to hear an address from the Bishop of London to four missionaries about to go abroad on behalf of the society. The first on the list was Mr. Prentis, educated at King's College, who was going to Barbary. The second was Mr. Culpepper, educated at St. Augustine's College, Canterbury, who was going to the West India Islands; the remaining two were of Turkish extraction; the first, Mahmoud Effendi, who had been baptised under the name of Mahmoud, had been a major in the Turkish army, and having come to this country to get instruction in engineering, had been converted from Mahometanism, and had sacrificed his high prospects in the Ottoman army, and entered himself as a student at St. Augustine College, with the view of entering the Church; the second was the son of a Christian Turk at Constantinople, named Selim Effendi, who had been baptised in the name of John Williams, and who had also entered St. Augustine. The Bishop of London delivered an impressive address to the young men, exhorting them to remain steadfast in the life they had chosen, and expressing the pleasure he felt at ordaining men of education for missionaries, who would thereby afford the heathen an example of Christian education and civilisation, as well as Christian religion. The new Bishop of Honolulu also addressed a few words of sympathy to the missionaries, reminding them that he was about to be engaged in the same missionary work in another part of the world.

PREVENTION OF STEAM BOILER EXPLOSIONS.—An association has been formed in London for the prevention of steam boiler explosions. A similar body has existed in Manchester for six years under the presidency of Mr. Fairbairn, and has now 6000 boilers under its inspection. Mr. Fairbairn will also be the president of the metropolitan society, and the council comprises the names of 19 well-known engineers.

FALL OF A HOUSE.—On Tuesday morning a dilapidated house or shed in Nelson Court, Poplar, occupied by an Irish labourer named Cogan, with his wife and two daughters, fell to the ground, burying the inmates in the ruins. They all slept in one bed, the parents at the top and the girls at the bottom, and they were asleep in bed at the time of the accident. Cogan and his wife were dug out of the ruins quite dead. The eldest daughter was brought out in a dying state, and died on her way to the Poplar Hospital. The youngest daughter, 11 years old, was severely injured, but is doing well. The house was a kind of "lean-to," quite unfit for the habitation of human beings, its fall had been long anticipated, and the building ought to have been long since removed. It belonged to a person residing in Hackney, who drew a rental of 1s. per week from it. There are plenty of similar tenements in the neighbourhood of Poplar.

THE PUBLIC HEALTH. — The Registrar-General's Weekly Report states that the number of deaths registered in London in the week that ended Saturday, December 21st, was 1248. The average number in the corresponding weeks of the 10 previous years (1851-60), corrected for increase of population, was 1337. The present return is therefore 89 below the average. During the week the births of 958 boys and 944 girls, in all 1902 children, were registered in London. In the 10 corresponding weeks of the years 1851-60 the average number was 1550.

Provincial.

ARTHURET.—A plain slab of red freestone has been erected in the churchyard of this parish, to the memory of the late Sir James Graham, with the following simple inscription:—"Sir J. R. G. Graham, Bart., born June 1st, 1792, died Oct. 25th, 1861."

BILSTON.—One of the three men convicted of the murder of Mr. Bagott, in this town, has confessed enough of his participation in the crime to justify the verdict of the jury. He further declares that the four men against whom the prosecution was abandoned at the instance of Baron Martin were not concerned in the crime at all. If his own statement is to be believed he had no part in the actual perpetration of the murder; but as he made a former confession before the trial in which he did not admit so much of his guilt, it is inferred that it will not be before Jones and Brandrick have unburthened their minds that the whole truth will be known. In their cells the convicted men do not display much emotion in anticipation of their approaching execution, which it is at present understood will take place on Saturday, the 5th of next month.

BIRMINGHAM.—A tragical affair occurred in this town on the 19th inst., a man named James Millward, aged 42, a stamper, living in Adelaide Street, having been shot in the head by his son, a youth aged 17 years, under circumstances of the most extraordinary character. It appears that on Wednesday night the son went home with a pistol he had bought, and after playing with it for some time, loaded it. Soon afterwards, his father, who had been out drinking, came home intoxicated, and sat down. He watched his son playing with the pistol for some time, and then quietly asked him to shoot him. He repeated this several times, and each time the son lifted up the pistol, which was at full cock, as though he would shoot the father, but each time the mother interfered, and said such jokes were dangerous. She had afterwards occasion to leave the house, and had not gone far when she heard the report of a pistol, and immediately saw her son rushing from the house, and exclaiming that he had shot his father. She at once hastened into the house, when she found her husband lying on the floor, shot in the head with a pistol bullet. Surgeons were called in, who discovered that the ball had penetrated the head near the left ear, and had lodged in the brain. The sufferer, who was insensible, was removed to the Queen's Hospital without any hope of recovery. At the Police Court, on the following morning, the youth John Millward was charged with shooting his father; but only sufficient evidence was taken to justify a remand. The magistrate afterwards went to the hospital to take the depositions of the wounded man; but, though he was able to speak, and could tell his name, he could remember nothing about what had happened on the previous night. He died shortly afterwards, and at the inquest held on Saturday evening, the jury returned a verdict of Wilful Murder against the prisoner.

CAMBRIDGE.—The Duke of Devonshire has consented to be put in nomination for the vacant Chancellorship of this University, in compliance with a requisition signed by members of the Senate of all parties. His Grace was Second Wrangler, First Smith's Prizeman, and First-class Classic. The Duke of Buccleuch having declined to be put in nomination, the Conservative party resolved to bring forward the Duke of Northumberland as a candidate. His Grace however has declined to be put in nomination, and the Duke of Devonshire will therefore be unopposed.

CARLISLE.—A man named William Charlton, an engine-driver on the Newcastle and Carlisle Railway, was apprehended on Sunday night, on the charge of murdering the old woman, Jane Emmerson, at the Durran Hill crossing of that Railway, and afterwards robbing her house. On the morning after the murder the prisoner had to go to Newcastle in charge of a mineral train at 4.33 A.M. According to the rules of the company he went to the engine-shed about an hour before that time to prepare his engine. He soon left, however, telling the fire-lighter that he was going for his breakfast—a very unusual thing to do. When he was away, the stoker came and oiled the engine. The prisoner, on returning, told the stoker, not that he had been for his breakfast, but that he had been for a knife. They started with their train in about half an hour, and when approaching the scene of the murder, about an mile from this city, the prisoner directed the attention of the stoker to a nursery garden on the opposite side of the line, and as they were going through the gates and past the cottage where the body of the murdered woman was lying, he ordered the stoker to put more coke on the fire—an unusual and needless thing so early on the journey. The stoker therefore did not observe anything peculiar about the gates or cottage as he passed through. They arrived at Newcastle about 10 o'clock, and on being told by the driver of the next train from Carlisle that a murder had been committed, and asked what he had seen, the prisoner said he had seen a light in the cottage, and appealed to the stoker on the subject. The stoker, however, remembered that he had been firing at the time they passed. The prisoner afterwards said he might be mistaken about the light, and made other conflicting statements, and has latterly appeared to be in a despondent state. On one occasion he directed the attention of the stoker to a man working with a pickaxe on the sloping banks of the railway when there was really no such man there. The police are in possession of other evidence against the prisoner which they expect will lead to a conviction.

GLOUCESTER. — The local papers state that the intention to erect a monument in Gloucestershire, in honour of William Tyndale, the translator of the Bible into English, is likely to fall to the ground. The original proposition was to erect a monument on Nibley Knoll, in the village of North Nibley, Tyndale's birthplace, where a site was presented by the owner of the soil, Lord Fitzhardinge. Some of the subscribers subsequently suggested that the memorial should consist of a column, to be erected on Stinchcombe Hill, surmounted by a mirror which would flash light over a wide expanse, and be emblematical of Tyndale's work. The committee adopted this plan, but Lord Fitzhardinge objected to it; while other gentlemen were equally opposed to the original plan, and the result was a division of feeling which probably had some effect upon the subscriptions, which amounted only to 500*l.*; and, though letters were sent to every beneficed clergyman and Nonconformist minister in the county, urging them to raise 1*l.* each in their respective parishes or congregations, only about half-a-dozen responses were made, and the amount raised by these appeals was only sufficient to defray the expense of postage. Under these circumstances a meeting was lately held to decide on a definite course of action. The Lord Lieutenant, the Right Hon. Sotheren Estcourt, M.P., Mr. J. C. Hayward, and other gentlemen were present, and after considerable discussion, resolutions were adopted to the effect that the subscriptions should be returned to the persons who desired it, and that the balance, which it is estimated will amount to 200*l.*, should be spent in erecting a fountain over a well near the house in which Tyndale was born. The latter resolution was, however, adopted by a very small majority, and nothing will be done in the matter for the present, in the hope that the public may yet enable the committee to carry out some design more worthy of the object.

HOLBEACH.—Within the last month no less than six incendiary fires have taken place on various farms in the village of Long Sutton near this town. Straw, hay, and corn stacks of great value have been entirely destroyed, and it has only been by timely discovery and strenuous exertions that the loss of buildings and human life has been averted. The whole place is in commotion; no motive can be discovered, as the gentlemen upon whose farms the fires have taken place are much respected. After the first four fires a public meeting was held, magistrates having communicated with the Secretary of State, and rewards to the extent of 300*l.* were offered for the discovery of the offender, but no trace of him has been discovered. After the last fire great excitement was caused by an accusation brought against a young surgeon in the village by his housekeeper and her husband, who expressed their suspicion that he had been the incendiary in the whole of the six fires. This suspicion, they said, was produced by their finding in his pocket a lucifer match on the night after the first conflagration, and by their afterwards finding some touch-paper in one of his pockets. When the woman discovered that she said, "There'll be a fire to-night," and to use her own expression, "Sure enough there was." In consequence of these reports the surgeon demanded a magisterial investigation, and left the court with "unblemished reputation." Thus the matter remains as mysterious as ever. Two or three cases of stock-poisoning have also occurred within the last few days.

LIVERPOOL.—Several parties of returned emigrants from America have arrived at this port during the last three weeks by the steamers from America. They have consisted chiefly of persons of small means who left this country four or five years ago, and established themselves as shopkeepers in New York and Boston. One cause of their return is stated to have been the annoyance the British residents were subjected to by the lower class of the population since the affair of the Trent. They state that numerous English families are about to leave the Northern States in apprehension of a war with England.

MANCHESTER.—Nancy Armfield, who was convicted on Wednesday week of the murder of her infant child at Droylesden, and sentenced to death, has been respited.

PRESTON.—It is stated in the local papers that a letter was recently left on the table of the orderly-room at Fulwood Barracks, intimating that Lieut.-Colonel Hardy and Assistant Staff Surgeon Clarke must beware lest they meet a similar fate to that of the late Colonel Crofton and Captain Hanham, who were shot by Patrick M'Cafferay whilst they were walking across the quadrangle of the same barracks in September last. The reason alleged in the letter for this warning is strict disciplinarianism. The authorities at once commenced a rigid inquiry, and it is said that a clue has been obtained to the writer of the letter.

SHEFFIELD.—The adjourned inquest on the body of Bridget O'Rourke, who died from injuries received by the trade outrage committed at Sheffield on the morning of the 23d ult., was held on the 19th inst., when the jury returned a verdict of Wilful Murder against Joseph Thompson, who was committed for trial at the assizes.

WINCHESTER.—The execution of Thomas Jackson, a private in the 78th Highlanders, for the murder of Sergeant Dickson at Aldershott, took place yesterday morning in front of the county gaol. Though the morning was fine and clear, the number of persons present did not amount to 300, of whom only 15 were soldiers. The prisoner made no confession, and exhibited the most hardened indifference to his fate.

WOODSTOCK.—On Saturday a murder was committed by a poacher on the estate of Lord Dillon, of Ditchley Park. Between two and three o'clock that morning Stephen Moulder, an under gamekeeper, accompanied by a watcher named Curtis, were in a wood called Shear's Copse, situate about a mile from the mansion, when they noticed an unusual flutter in a covert, and shortly afterwards encountered two notorious poachers named John Hall and John Tucker, one of whom was carrying a gun. Moulder, who was a strong powerful man, seized Tucker, when the other poacher, Hall, immediately fired his gun and shot the keeper through the heart, and he fell dead upon the spot. The two men ran off, followed by the watcher, who speedily overtook them, and a desperate struggle ensued between the watcher and Tucker, who was ultimately secured. Hall, who fired the gun, made his escape, but he was

…ently taken into custody while in bed at a public-house in Charlbury. On examining the body of the gamekeeper it was found that the contents of the gun entered the chest, and that some of the shots penetrated the heart, causing, no doubt, instant death. The prisoners were taken before the county magistrates at Charlbury on Saturday, and remanded. On Thursday, at the adjourned examination, Tucker was admitted Queen's evidence, and the prisoner Hall was fully committed for trial on the capital charge. The jury at the inquest also returned a verdict of Wilful Murder against him.

Ireland.

YOUNG IRELAND AND THE WAR QUESTION.—The …tion publishes a long letter from Mr. John Mitchell, one of the State prisoners of 1848, who is now a proprietor of Virginian slave property, and exults over the probability of an Anglo-American war. Whilst the Union lasted, he says, America was weak, because of her efforts to combine incompatible and discordant elements; but now, instead of one weak Power that dared not, a few years back, cast an angry look in the direction of England, there exist across the Atlantic two great Powers, each of which can, with impunity, pluck John Bull by the beard! The North will soon see that it is impossible to coerce the South into a union, and the war will cease; whereupon the 35,000 Irishmen in the Southern service will join the 65,000 Irishmen in the service of the North, and cordially co-operate in any operations against the oppressors of their enslaved race in the old land. Another state prisoner of 1848, Mr. John Martin, writes to the same paper that he disapproves of the committee formed at the recent meeting at the Rotunda under the presidency of the O'Donoghue, and therefore advises that Mr. Smith O'Brien be appointed a dictator, and entrusted with the formation of a new council of about a dozen members, men qualified by their own experience and honourable character, and by the public confidence, to direct and control the general organisation of the national body—in short, to form the head of the national body." Mr. Walter Thomas Meyler, however, another Young Irelander of 1848, who was arrested as a state prisoner, tried, condemned and imprisoned for a considerable period, has replied to Mr. John Martin in a letter published in the Irish *Times*, in which he says that having seen what liberty is under the stars and stripes, and having been all over the world, he finds no place so free and happy as Ireland is at present. Within these 18 years a revolution such as he never dreamt of has occurred: the people are contented and prosperous, and he declares emphatically that he accepts the rule of her Majesty as a blessing to his native land. The following are extracts from this letter:—

"Like you I went to the mass meeting at the Rotunda, and could only discern the worn-out stuff of 'England's adversity, Ireland's opportunity,' &c. &c. The presidency of The O'Donoghue on the occasion gave me little hope of future profit from the proceedings. What experience I have had of his intelligence, prudence, or ability, gave me but small encouragement. Thought I to myself ''tis head is wanting.' The necessary presence of such a man, who seeks to make his appearance an era in the Senate, is a strong argument that there is not a weighty man in the kingdom ready to undertake the patronage of a movement which the movers are afraid to name. Subsequently, I read with pain your letter suggesting that Wm. Smith O'Brien should be nominated a dictator, with power to select a council of 21 for an undefined species of agitation. I hold O'Brien to be in every sense as highly honourable, gentlemanly, and courageous a man as any in the community; but one of the few acts of my life which I regret was procuring his election as leader of the clubs at the D'Olier Street meeting. As matters turned out perhaps it was for the best; but 50,000 organised clubmen watched anxiously the formation of that directory, and the firing of a rocket would have filled the city with them in half-an-hour. Where was O'Brien and the rest of the directory? Nowhere. Thousands whose lives were as deeply at stake as theirs, watched and waited anxiously for orders, but watched in vain; not a message was sent to a club, president, or secretary—not a hint as to the course to be pursued. After a lapse of time we discovered our leader had moved off to the wilds of Ballingary, leaving the devoted clubmen behind in Dublin in a maze of ignorance, doubt and exasperation. Fintan Lalor was caught wandering in some provincial village with the voting papers (which should have been buried on being used), and which caused the convictions and sentences at Clonmel. Another hid in a tailor's garret in Wicklow Street; and I think that it was hard to find you for several days. So much for leadership, which has always its risks, but, unfortunately, not always its glories. Here, notwithstanding the temptation to say much, I must be abrupt. You and O'Brien were admitted to parade in Van Diemen's Land. You afterwards received and accepted the Government pardon. O'Brien's first movement on arriving home was an attempted renewal of the old agitation, 'Ireland for the Irish,' &c. Taking his antecedents into account, and remembering the cab-hole scene in the House of Commons. I was not much surprised, as I had arrived at the conclusion that he was an eccentric; but when I saw the amiable, kind-hearted John Martin appearing in his letter this week, I confess I was deeply grieved to think that one of the truest spirits of '48 had learned nothing by experience, and shut his eyes to the material advantage of political rest for the land he loves so well. A time may rise when political organisation may be necessary, and the people of the three kingdoms require and decree the establishment of a cheaper and simpler form of government; but this is certainly not the time to renew animosity, but, on the contrary, let us beg—ay, pray, and petition that no hostilities may be entered with, I may say, our brethren. Summon a Council of Twenty, with O'Brien as leader! Do you want an Irish Theocracy, or King Smith O'Brien? It is a small matter what my opinions are; but, under the circumstances, it is only fair to avow them. Republican as I am, I feel myself bound to imitate the virtuous example of Garibaldi, and reconcile my principles without relinquishing them, to the interests of my country. I behold Ireland awaken after a sleep of political agitation into health, vigour, and prosperity. I appreciate the material, social, and moral improvement which I see around me, the result of rest, thought, moderation, and wisely-directed work of energy. I see that prosperity has flourished under liberty, and that liberty is secured by just laws justly administered. We have, in short, come to this—we are as free and as prosperous as any people of this globe; these things have come to pass under the Government of Queen Victoria. I accept her reign as a blessing to my native land."

LEGAL APPOINTMENTS.—The office of Clerk of the Crown for the county of Limerick, vacant by the death of Mr. George Fleetwood, has been conferred upon Sir Croker Barrington, son of the late Sir Matthew Barrington, Bart., Crown solicitor for the Munster circuit. The Chairmanship of Kilkenny, vacant by the resignation of Mr. Corballis, has been conferred on Mr. De Moleyns, who is to be succeeded in the county of Cork by Mr. D. R. Kane; Mr. West is to be removed to the county of Leitrim, in succession to Mr. Kane, leaving the King's County vacant for the present.

Scotland.

THE FREE CHURCH COLLEGE.—Mr. William Binny Webster, one of the elders of the Free Church, Edinburgh, has handed over to the Senatus of the Free Church College, Edinburgh, the sum of 5000*l.*, for the purpose of endowing fellowships for students who have completed their curriculum at that institution.

Law.

OXFORD CIRCUIT. STAFFORD.—*The Bilston Murder.*—*William Jones*, 21, miner; *David Brandrick*, 20, puddler; *William Maddox*, 28, puddler; *Thomas Jukes*, 28, snuffer maker; *Samuel Bill*, 26, puddler; *Hezekiah Webb*, 25, miner; and *Thomas Lilley*, 24, potter, were charged with the Wilful Murder of John Bagott, at Bilston, on the 29th of September last. The details of this case were fully noticed at the time in our provincial news. After a trial which lasted two days, Baron Martin ruled that there was no evidence against Jukes, Bill, Webb, and Lilly. The jury thereupon found the three prisoners William Jones, David Brandrick, and W. Maddox *Guilty* of Murder, and acquitted the other four prisoners. Mr. Baron Martin said he entirely concurred in the verdict, and could hold out no hopes of mercy His Lordship exhorted the prisoners to prepare for death, for he warned them that they would soon cease to live, and then pronounced upon them sentence of *Death* in the usual form. Jukes, Lilley, Bills, and Webb, the four men who had been acquitted, were then arraigned on the charge of the burglary, for which the grand jury found a true bill against them, but the prosecution tendered no evidence, and, the jury returning a verdict of *Not Guilty*, they were all liberated from confinement. *The Checkley Poaching Case.*—*William Summerfield*, 28, joiner, *William Brindley*, 24, stonemason, and *Henry Mace*, 22, labourer, were charged with having entered by night, armed with bludgeons, certain enclosed land at Checkley, for the purpose of taking game there, on the 18th October. On the night in question a gamekeeper named Smith, was out watching game on the land belonging to the Hon. Mr. Cavendish, in the parish of Chickley, and being attracted by the cry of a dog he went to a field, where he saw two or three dogs running about and rabbit nets set. The prisoner Summerfield struck the gamekeeper with a rail, which he tore from the fence, five men also assailed and knocked him down, and the prisoner Mace struck him with a stake. Brindley was identified as one of the party, but it did not appear that he inflicted any blow. The injuries inflicted upon the gamekeeper were so serious that for a day or two his life was in danger. The jury found them all *Guilty*, and Baron Martin sentenced Summerfield and Mace to 15, and Brindley to six months' imprisonment, with hard labour. *The Biddulph Poaching Case.*—*John Baxter*, 38, brickmaker; *Thomas Sanders*, 23, puddler; *Joseph Sanders*, 53, miner; *John Windsor*, 35, puddler; and *Henry Baxter*, were charged with having on the night of the 25th July, armed with bludgeons, entered certain enclosed land at Biddulph, for the purpose of taking game there. The prisoners were caught in the act. They were all armed with bludgeons, but offered no violence. The gamekeeper happened to know them all, and having got the assistance of a policeman he took them all into custody. The jury found all the prisoners *Guilty*, and Baron Martin sentenced each of them to three calendar months' imprisonment with hard labour. It was then stated that John Baxter had eaten 21 Christmas dinners in gaol, being confined there for poaching. Baron Martin said he had heard of a man who had been confined for the same offence 22 times in Winchester gaol, and on one occasion he was released two days before Christmas-day, and then sent a brace of pheasants and a hare to the gaoler for his Christmas dinner, as an acknowledgment of his attention to him in gaol. *The Stone Poaching Case.*—*Aaron Harrison*, 38, lute-maker; *John Yardley*, 48, miner; *Philip Wyatt*, 35, miner; and *Henry Johnson*, 28, were charged with being armed with a gun and bludgeons, and entering certain enclosed land at Stone, for the purpose of taking game there. On the night in question, three keepers belonging to the Duke of Sutherland, were watching game and saw a man cross a field. One of the gamekeepers had a muzzled dog, which he let loose, and the dog kept the man at bay till the keeper got up to him. A struggle then ensued, and the man, who turned out to be the prisoner Johnson, called on his mates to come to his assistance. From 7 to 12 men then came up, who knocked down and beat the keeper with sticks and stones, so that it became necessary to have him taken home in a van. The other keepers were also injured, and the poachers made their escape; but Johnson and Wyatt were identified by the keepers, and various witnesses identified Yardley, Wyatt, and Johnson, but the evidence against Harrison was less conclusive. Baron Martin, in summing up, said he very much doubted the legality of keepers letting dogs loose upon men, and intimated his opinion that, if a case should occur in which the dog so used was unmuzzled, an indictment should be preferred against the gamekeeper in order to obtain the decision of the judges upon the question. The jury *Acquitted* Harrison, and found the other three prisoners *Guilty*. Baron Martin then sentenced the three prisoners, Yardley, Wyatt, and Johnson, to 15 calendar months' imprisonment, with hard labour.

WESTERN CIRCUIT: TAUNTON.—*The Frome Murder.*—*Byard Greenland*, a powerful looking labourer, 31 years of age, was charged on an indictment, and on the coroner's inquisition, with the wilful murder of his nephew, Uriah Greenland, at Frome, on the 10th August. It appeared by the evidence that the prisoner was the uncle of the deceased. They were both labouring men residing at the village of Buckland, near Frome. In April and May last, on two occasions, they had quarrelled, and the prisoner struck deceased, who took out a summons against him. Prisoner had to pay for this summons, and had a bad feeling towards his nephew in consequence, having said shortly before his death that he had a mind to kill him and himself too. On the 5th August, the prisoner, deceased, and a man named Millgrove, proceeded together from Buckland to Codford, near Salisbury, for the purpose of reaping. They worked together during the whole week, apparently in perfect amity. On Saturday evening, the 10th of August, they left Codford to return home, and had got as far as between Frome and Buckland, where they stopped to rest themselves, laying down their scythes by the roadside. While they were sitting there deceased proposed that they should settle their accounts, but the prisoner refused to do so until he was paid 1*s.* 6*d.* for some injury to his gun. The deceased made no answer, but the prisoner raised his hand and aimed a blow at deceased, who fell back, exclaiming that the prisoner had stabbed him with his clasp knife. Before surgical assistance could be obtained the young man died on the spot where he received the blow, and on his body being examined it was found that an instrument like the blade of a knife had penetrated the heart, causing almost immediate death. The prisoner asserted that deceased had fallen upon the scythe, but the surgeon said the wound could not have been caused by a scythe. There were also two scythes tied together, so that had the injury been inflicted by them there must have been two wounds. The defence was, that if deceased did not fall upon the scythe as the prisoner alleged, the prisoner was not answerable for his acts; that he was subject to fits, and was violent, and did not know what he did. His father and uncle were both born deaf and dumb; and the prisoner some years since was struck by a man with a pick, which had left an indentation in his head now visible. The surgeon said that the depression in the prisoner's skull would not be likely to affect the wits or self-control, but might cause fits. Epilepsy sometimes resulted in insanity, and an epileptic tendency would be increased by drinking. The jury returned a verdict of *Guilty*, but recommended the prisoner to mercy on the ground of there being no premeditation. Mr. Justice Williams put on the black cap, and sentenced him to *Death* in the usual form.

Obituary.

GENERAL SIR WILLIAM RICHARDS, K.C.B., Colonel of the 26th Bengal Light Infantry, almost the father of the Indian army, died at Nynee Tal, on the 1st inst., after an uninterrupted residence in India of nearly 70 years. He was nominated a cadet in 1794, at the early age of 15, landed in Calcutta in the same year, and immediately after joined his corps at Dinapore, where he obtained his lieutenancy in 1796. He was nominated a K.C.B in 1838, and in December following his tour on the staff terminated, and he went to live at Agra, at his well-known kotee on the banks of the river Jumna. He went up to Nynee Tal, when that sanatarium was in its infancy, and lived there till his death. Not more than one or two officers who were present at the fall of Tippoo Sultan survive General Richards.

LIEUT.-GENERAL DENNIS DALY, formerly of the 7th Dragoon Guards, and for many years Brigade Major of the South-Western district, died at his residence, in Green Row, on the 19th inst., in his 76th year. He entered the army in 1800, and served with the 24th in the expedition to Egypt in 1801. In 1805, he embarked with the 56th Regiment for Bombay, and commanded four companies of the second battalion employed in 1809, with a division in the field, under Colonel Walker, at the storming of Mallia, and at the reduction of other forts in the Kattiwar district. He attained the rank of Lieut.-General in 1859.

MAJOR H. O. MAYNE, of the 6th Madras Cavalry, and of Mayne's Horse, died at Government House, Allahabad, on the 2d inst.

BIRTHS.—On the 20th inst, at 115, Eaton Square, the Countess GLEICHEN, of a daughter—At Turin, Marchioness DE LA VALLE DI CASA NOVA, of a son—16th inst, at Brussels, the Countess DE LALAING, of a daughter—23d inst, at 13, Eaton Square, the Hon. Mrs. TREMAYNE, of a daughter—18th inst, at Chaddlewood, the Hon. Mrs. SOLTAU-SYMONS, of a daughter—21st inst, at 79, Eaton Place, Lady CAIRNS, of a son—19th inst, at 12, John Street, Berkeley Square, the wife of E. H. KNATCHBULL-HUGESSEN, Esq., M.P., of a daughter—24th inst, at 10, Grosvenor Square, the wife of HEDWORTH D. BARCLAY, Esq., of a son.

MARRIAGES.—On the 10th of August last, at Southampton, the Hon. HENRY CAVENDISH, to ALETHEA, youngest daughter of the late WILLIAM MILLETT THOMAS, Esq., of the county of Cornwall—19th inst, at Harrow, the Rev. H. MONTAGU BUTLER, Head Master of Harrow School, to GEORGINA ISABELLA, daughter of EDWARD F ELLIOT, Esq., and granddaughter of the late Right Hon. Hugh Elliot—19th inst, at the Parish Church, Walton-on-Thames, FRANCIS CHARLES TURNER, Captain 39th Regiment. son of the late Major-General Turner, C.B., Bombay Cavalry, to EMMA GRACEOSA, second daughter of EDWARD DOERING, Esq., The Hurst, Walton-on-Thames—19th inst, at Tilmanstone, Kent, JOHN, eldest son of FRANCIS WRIGHT, Esq., of Osmaston Manor, Derby, to FLORENCE MARY, youngest daughter of EDWARD ROYD RICE, Esq., of Dane Court, Kent—19th inst, at St. Mary's Church, Cheltenham, the Rev. THOMAS TWEDDLE, M.A., of St. John's College, Cambridge, second son of the late Thomas Tweddle, Esq., of Askerton Castle, Cumberland, to AUGUSTA MOUNT, daughter of Lieut.-Colonel SCHREIBER, late 18th Hussars, of Roden House, Cheltenham—21st inst, at the parish church, Mansfield Woodhouse, HARRINGTON OFFLEY SHORE, of Farnsfield, Esq., eldest son of Offley Shore, of Clifton, in the county of Derby, Esq., to ISABEL EMMA, third daughter of Lieut.-Colonel COKE, of Debdale, Notts.

DEATHS—On the 16th inst, at Malta, GEORGE PARNELL, Midshipman of H.M.S. Agamemnon, fourth son of the Hon. Henry Parnell, aged 17—20th inst, at Norwood, JOHN BAGSHAW, Esq., late of Cliff House, Dovercourt, Essex, formerly M.P. for Harwich, aged 77—23d inst, at Cheltenham, FRANCES, the wife of Major-General DIGGLE, K.H.—6th inst, at Jersey, A. G. CRAWFORD, Esq., third son of Major-General A. F. Crawford, Royal Artillery, aged 22—21st inst, at Hayle Cottage, near Maidstone, MARIA SOPHIA, wife of Rear Admiral JONES MARSHAM, aged 55—21st inst, at Braemorriston, near Elgin, N.B., Mrs. FRANCES DUFF, relict of Admiral Archibald Duff, of Drummuir, R.N., aged 74—9th inst, at Cheltenham, ROWLEY YOUNG LLOYD, Esq., Barrister-at-law, eldest son of the late Rear-Admiral Edward Lloyd, K.H., aged 43—7th Nov., at Allahabad, of fever, Lieut.-Colonel THOMAS SMITH, C.B., Lieutenant-Colonel of the 90th Light Infantry, youngest son of the Rev. Dr. Smith, some time Dean of Christ Church, Oxford, and Prebendary of Durham, aged 38—19th inst, at Kingscote, Gloucestershire, THOMAS HENRY KINGSCOTE, Esq., Colonel Royal North Gloucestershire Militia, aged 61—17th inst, at his residence, Sharstead Court, near Sittingbourne, EDMUND BARRELL FAUNCE, Esq., Captain of the H.E.I.C., 15th Regiment, and Deputy-Lieutenant for the counties of Kent and Surrey—20th inst, at Slines Oakes, near Croydon, Surrey, EDMUND B. BENYON, Esq., J.P., of the above place, and of Carshalton, in the same county, aged 55—20th inst, at St. Leonard's Place, York, BARBARA, daughter of the late Henry Darrell, Esq., of Cale Hill, Kent, and relict of FRANCIS CHOLMELEY, Esq., of Brandsby Hall, Yorkshire—15th inst, at his residence, Rose Hill, Northenden, Cheshire, ABSALOM WATKIN, Esq., Justice of the Peace for the city of Manchester and county of Lancaster, aged 74—18th inst, at Brighton, JOSEPH HUMPHRY, Esq., of Elm Bank

Barnes, Surrey, Q.C., late one of the Masters in Chancery, aged 66—31st October, on board H.M S. Naiad, in Callao Bay, where he had gone from Lima for the benefit of his health, WILLIAM MILLER, Esq., H.M. Commissioner and Consul-General for the Islands of the Pacific since 1843, aged 66—18th inst, at Springfield Lodge, Worthing, Sussex, ROBERT GEORGE PEAD, Esq., 16 years member of the Corporation of London for the Ward of Cheap, aged 70—19th inst, at Eton, FRANCES MARY ANNE, wife of the Rev. JOHN WM. HAWTREY—23d inst, at Bury St. Edmund's ANN, the wife of the Rev. HENRY HERVEY BABER, Rector of Stretham-cum-Thetford, in the Isle of Ely and formerly Assistant Librarian of the British Museum.

Markets.

COVENT GARDEN, Dec. 28.

Fruit and Vegetables continue plentiful, but trade is comparatively dull. Pears comprise Glou Morceau, Chaumontel, Winter Nelis, and Brown Beurré, and among Apples are some good examples of American Newtown Pippin, Ribston Pippin, and Fearn's Pippin. Grapes and Pine Apples are abundant. Excellent Oranges may be bought for 1s. a dozen. Potato markets have not altered since our last. Cut flowers chiefly consist of Orchids, Pompone Chrysanthemums, Chinese Primulas, Camellias, Violets, Mignonette, Heaths, and Roses.

FRUIT.

Pine Apples, per lb., 4s to 6s	Oranges, per 100, 8s to 12s
Grapes, per lb., 4s to 7s	Lemons, per 100, 6s to 10s
Melons, each, 1s to 3s	Nuts, Cob, per pound., 4s to 4s 6d
Pears, per doz., 6s to 12s	Walnuts, per 100, 2s
Apples, per doz., 18 to 3s	

VEGETABLES.

Broccoli, per bundle, 1s to 1s 3d	Celery, p. bundle, 1s 6d to 2s
French Beans, per 100, 2s 6d to 3s 6d	Onions, pickling, p. ½ sieve, 4s 6d
Cabbages, do., 1s 3d to 1s 6d	Asparagus, p. bundle, 30s
Potatoes, p. ton, 60s to 75s	Seakale, per punnet, 4s
— per cwt., 4s to 8s	Shallots, per lb., 10d to 1s
Turnips, per bunch, 2d to 4d	Garlic, per lb., 6d to 8d
Carrots, do., 4d to 6d	Endive, p. score, 1s 6d
Spinach, p. sieve, 1s to 2s	Horse Radish, p. bun., 1s 6d to 4s
Cucumbers, each, 1s to 1s 9d	Mushrooms, p. pott., 2s to 3s
Artichokes, each, 6d to 8d	Parsley, p. 12 bunches, 3s to 4s
Beet, per doz., 1s 6d	Herbs, per bunch, 2d to 4d

HOPS.—BOROUGH MARKET, FRIDAY, Dec. 27.

Messrs. Pattenden & Smith report but little doing; holders are firm, expecting a better demand to set in in January. No alteration in prices.

HAY.—Per Load of 36 Trusses.

SMITHFIELD, THURSDAY, Dec. 26.

Prime Meadow Hay	80s to	90s	Clover, old	95s to	112s
Superior do. ..	95	100	New Clover	—	—
Inferior do.	55	70	Do. second cut ..	85	100
New do.	—	—	Straw	30	36
Rowen	—	—			

DAVIS & Co.

CUMBERLAND MARKET, THURSDAY, Dec. 26.

Sup. Meadow Hay..	98s to	105s	Inferior Clover ..	78s to	95s
Inferior do.	65	88	New do.	—	—
New do.	—	—	Straw	36	42
Superior Clover ..	108	115			

JOSHUA BAKER.

WHITECHAPEL, THURSDAY, Dec. 26.

Fine Meadow Hay	90s to	95s	Prime Clover ..	105s to	114s
Inferior do.	[illegible]	[illegible]	Inferior do.	90	100
Prime New Hay ..	—	—	Prime 2d cut ..	98	105
Inferior	—	—	Inferior do.	—	—
Straw	28	34	New 1st cut ..	—	—

POTATOES, SOUTHWARK, Monday, Dec. 23.

During the past week the arrivals both coastwise and by rail have been larger, and prices have consequently declined. The following are this day's quotations:—Kent and Essex Regents, per ton, 120s. to 140s.; Yorkshire Flukes, 120s. to 140s.; do. Regents, 100s. to 130s.; Lincolnshire do., 90s. to 110s.; Dunbar do., 120s. to 130s.; Perth, Forfar, and Fife do., 90s. to 115s.; French Whites, 80s. to 90s.

BUTTER MARKET.—Dec. 20.

Best Fresh Butter .. .. 18*s*. per dozen lbs.
Second do. do. .. .. 14*s*. „ „
Pork, 5*s*. 0*d*. to 5*s*. 4*d*. per 8 lbs.

BRITISH WOOLS.—LONDON, FRIDAY, Dec. 27

Our market continues in a very quiet state, unsettled political matters and the usual dulness of the season having produced an indisposition on the part of both manufacturers and dealers to operate, especially as the north country markets are now well stocked with wool, in consequence of the briskness occasioned by the French demand, which raised the prices of deep grown and bright-haired wool, and brought a considerable supply of those descriptions from all parts of the country. It is not expected that under the present circumstances of Lancashire, which are throwing large numbers of operatives out of employ almost daily, that wool can continue at a very high price, inasmuch as the population dependent upon the employment of the Cotton machinery is so very considerable, and the calculation is that about half will soon be out of employ, and will consequently have to depend on their previous savings (if any) for their subsistence, and will have no surplus to spend for clothes. Prices of deep grown and bright-haired and lustre wool have been on the decline for weeks in Yorkshire, and are not likely to see the late high rates again for some time.

	s. d. s. d.		
South-down Hoggets	1 4 to 1 5	Leicest. Wethers	1 4 to ..
Half-bred ditto	— 1 6	Ditto Hoggs ..	1 5 — ..
Down Ewes ..	1 4 — 1 4½	Combing Skins	1 0 — 1 5
Kent Fleeces ..	1 5 — 1 6	Flannel Wool ..	1 0 — 1 5
		Blanket ditto ..	0 6 — ..

METROPOLITAN CATTLE MARKET.

MONDAY, Dec. 23.

As usual, on the day after the "Great Market," and being this year so near Christmas Day, there is very little business doing. We have a fair supply of Beasts, and the choicest kinds meet with purchasers at about last Thursday's quotations. The number of Sheep is very small, quite equal, however, to the demand. Prices remain unaltered. Our foreign supply consists of 190 Beasts and 590 Sheep.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	5 0 to 5 2	Best Long-wools.	5 2 — 5 4
Best Short-horns	4 10 — 5 0	Do. Shorn	— ..
2d quality Beasts	4 0 — 4 6	Ewes & 2d quality	4 8 — 4 10
Best Downs and Half breds ..	5 6 — 5 8	Do. Shorn	to ..
Do. Shorn	— ..	Lambs	— ..
		Calves	4 0 — 5 0
		Pigs	4 0 — 5 4

Beasts, 1560; Sheep & Lambs, 4230; Calves, 2; Pigs, 260.

THURSDAY, Dec. 26.

The supply of Beasts is very small indeed. Trade is brisk for them, at rather higher rates. The number of Sheep is also small; but the demand is not large, and prices are about the same as on Monday last. Calf trade remains unaltered. Our foreign supply consists of 107 Beasts, 205 Sheep, and 9 Calves. Milch Cows, 90.

	s d s d		s d s d
Best Scots, Herefords, &c. ..	5 3 to 5 4	Best Long-wools.	5 2 to 5 4
Best Short-horns	5 0 — 5 2	Do. Shorn	— ..
2d quality Beasts	4 2 — 4 6	Ewes & 2d quality	4 8 — 4 10
Best Downs and Half-breds ..	5 6 to 5 8	Do. Shorn	— ..
Do. Shorn	to ..	Lambs	— ..
		Calves	4 4 — 5 0
		Pigs	4 0 — 5 4

Beasts, 730; Sheep & Lambs, 1830; Calves, 10; Pigs, 110.

MARK LANE.—MONDAY, Dec. 23.

Last Monday being appointed for the funeral of his Royal Highness the Prince Consort, the Committee of the Corn Exchange decided that no market should be held. As also on Wednesday, being Christmas Day.

FRIDAY, Dec. 27.

The weather during the last eight days has been fine with a lower temperature, and frost since the 23d inst. During the above interval no Corn Market has been held here; but the Wheat trade throughout the kingdom appears to have been dull, and in many places prices were scarcely maintained. Other descriptions of grain have not undergone any quotable change in value. During the past eight days 5 vessels have been reported off the coast. The floating trade was quiet, and was of a holiday character. In Paris (Dec. 26), the transactions in Flour were very small; prices of the four and six marks began on Tuesday evening to decline a little, and continued to-day drooping. The four marks for delivery this month are quoted equal to 52s. per 280 lbs. The arrivals of English grain this week have been small, of foreign large. The market was poorly attended this morning. The supply of Wheat from Essex and Kent was small and neglected; our late quotations must be considered nominal, and those of foreign barely supported, with very little business doing, Prime malting Barley is unaltered in value, other descriptions are 1s. per qr. cheaper. Beans and Peas sell slowly at late rates. The Oat trade is dull, and all but the very finest qualities are 6d. per qr. lower. In Flour there is but little doing, and prices are unaltered.

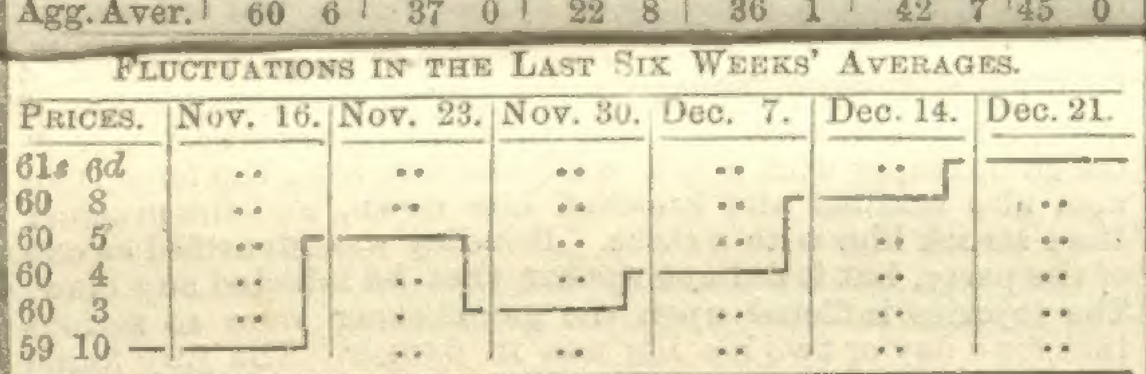
ARRIVALS FROM Dec. 23 to Dec. 27.

	Wheat.	Barley.	Oats.	Flour.
English ..	780 qrs.	1310 qrs.	830 qrs.	870 sks.
Irish	— „	120	700	— „
Foreign ..	21620 „	8550 „	32130 „	3240 „ / — brls.

LIVERPOOL, FRIDAY, Dec. 27.—The market has been quiet, and there is no change in any article. Wheat, however, is a shade easier; and if there is a tendency either one way or the other in the other articles, it is for a slight and almost immediate reduction. Imports—Wheat, Ireland and coastwise.

AVERAGES	Wheat.	Barley.	Oats.	Rye.	Beans.	Peas.
Nov. 16..	59*s* 10*d*	37*s* 6*d*	22*s* 7*d*	37*s* 7*d*	42*s* 6*d*	47*s* 5*d*
— 23..	60 5	37 6	23 0	39 1	42 9	44 11
— 30..	60 3	37 4	23 0	36 10	42 8	45 2
Dec. 7..	60 4	37 0	22 8	37 10	42 7	43 8
— 14..	60 8	36 3	22 6	36 1	42 8	45 10
— 21..	61 6	36 2	22 5	29 0	42 2	42 11
Agg. Aver.	60 6	37 0	22 8	36 1	42 7	45 0

FLUCTUATIONS IN THE LAST SIX WEEKS' AVERAGES.



To Parents and Guardians.

A GENTLEMAN, Farming about 500 Acres of Land, 35 miles N.W. of London, has a VACANCY for a PUPIL. The situation is remarkably healthy, and it is within an hour and a half of London by rail. References given and required. For further particulars address P. H., *Gardeners' Chronicle* Office

MAJOR R. C. BARNARD, late of H. M.'s 41st Regt., B.A. (1861) of Emmanuel College, Cambridge, F.L.S., wishes to receive PUPILS to be prepared for Public Schools or for College, for the Army or other Professions.—Address at present, 3, Pittville Villas, Cheltenham; after 31st Jan., 1862, Cambridge House, Bays Hill, Cheltenham.

CONSULTING GARDENER.—JOSEPH ROBINSON begs to offer, on moderate terms, his services as above to any lady or gentleman contemplating Alterations, Improvements, or Additions to their Gardens, Pleasure Grounds, or Horticultural Buildings—assured that from his long practical experience he would be able to effect the same judiciously and economically.—Slough, Bucks.

To Propagators.

MR. JAMES VEITCH, JUN., is in want of a first rate General PROPAGATOR. A thoroughly competent Man will be liberally paid.—Royal Exotic Nursery, King's Road, Chelsea, S.W.

To Gardeners, &c.

WANTED, a Young Man of good character as GARDENER, and to attend to a Cow, Pigs, &c.; he will live in the house.—Address by letter only, 54, Mr. SOUTHBY'S, Florist, &c., Clapham, S.

WANTED, by a gentleman in Dorsetshire, a good plain, working GARDENER. He must be unmarried and of good character, as he will live in the house, and be of active and industrious habits. The garden has been just remade, with new walls, &c., and there are two greenhouses. Salary about 25*l*. per annum, with board, lodging, &c.—Apply, by letter only, to W. W., care of Mr. Veitch, Royal Exotic Nursery, Chelsea, S.W.

WANTED, a GARDENER and WIFE.—A gentleman in the neighbourhood of London requires the services of a Married Couple; the Man to act as Gardener, with one man under him, and the Wife as Laundress. Unexceptionable references as to character, &c., will be required. One or two grown-up children not objected to. Wages for the two, 33s. 6d. per week. A good House, Coals, Candles, and Soap, and Vegetables when to spare.—Apply by letter only to E. B. W., care of Mr. Veitch, Royal Exotic Nursery, Chelsea.

WANTED, a CORRESPONDING CLERK and BOOK-KEEPER.—A person who has previously been engaged in a similar capacity, who has had experience in, and is competent to manage a general Seed Business.—Address in own handwriting, stating age, reference, and salary required, to A. B., 208, Goswell Road, E.C.

WANTED, a SHOPMAN or CLERK; a Young Man who has a knowledge of the Seed Trade.—Apply, stating terms, W. MAULE & SONS, Nurseries, Bristol.

WANTED, a SHOPMAN, who understands well the Retail Trade, for a Provincial House. State age, wages, &c., to H. I., care of Messrs. Cooper and Bolton, 1.., Fleet Street, London.

WANT PLACES.—Letters to be Post Paid.

GARDENER (HEAD).—Age 30, single; has a thorough practical knowledge of his profession in all its branches.—X. Y. Z., 67, George Street, Ryde, Isle of Wight.

GARDENER (HEAD).—Age 33, married, without incumbrance; thoroughly understands his profession in all its branches. References of the highest order.—A. B., Mr. George Davies, Nurseryman, Old Swan, near Liverpool.

GARDENER (HEAD).—Age 38, married, without incumbrance; thoroughly understands his profession in all its branches. No single-handed place accepted; five years character.—A. B., 60, Mildmay Street, Islington, N.

GARDENER (HEAD).—Age 32, married, no incumbrance; has a practical knowledge of Stove and Greenhouse Plants, Vines, Melons, Kitchen and Flower Garden, &c.—WM. HUBBARD, Mr. John Butcher, Nurseryman, Stratford-on-Avon.

GARDENER (HEAD).—Age 37, married; has had great experience in Early Forcing, the Culture of Vines, Pines, Peaches, &c.; also Stove and Greenhouse Plants. The Management of Kitchen and Flower Gardens. Understands Laying out Grounds, &c. Good references.—H. B., 2.., New Church Street, Edgware Road, London, N.

GARDENER (Head), or GARDENER and BAILIFF.—Thoroughly understands the Cultivation of Pines, Vines, Peaches, Melons, Cucumbers, Orchids, Ferns, and Stove Plants; also the Laying-out of Pleasure Grounds. Has been accustomed to Agriculture and Management of all kinds of Soils; also the Buying and Selling of Stock for many years. Has a Son (aged 17) who thoroughly understands Plants of all classes, also the Agricultural line. Can be highly recommended from his last employer; also from three other gentlemen.—A. B., Mr. Manning, 10, Claremont-place, Hornsey-road.

GARDENER (SINGLE-HANDED or SECOND) where others are kept.—Age 28; understands his profession; good character. Wife as first rate Cook, where a Kitchen Maid is kept, or to take charge of a Dairy. In Town preferred.—A. B., Messrs. Lane's Nursery, near St. Mary Cray, Kent.

GARDENER, or GARDENER and STEWARD.—B. A. has a thorough knowledge of both the above capacities. Any nobleman or gentleman wishing to improve their Gardens or Estates on first class principles, may have the same done by employing Advertiser. Good reference.—B. A., .., St. John's Wood Terrace, St. John's Wood, London, N.W.

To Noblemen and Gentlemen.

GARDENER and BAILIFF.—For many years has had the Management of the Garden, Pleasure Grounds, &c., also the Management of a large Farm, Breeding, Feeding, [illegible] Draining, care of Woods and Plantations, and the superintendence of all repairs. Wife understands the Dairy and Poultry. Leaving in consequence of the death of his employer. The most unexceptionable references can be given from last situation, and from other gentlemen of distinction.—C. M., Post Office, Claines, Worcester.

PROPAGATOR or FOREMAN of the House Department.—Twenty years' active experience in the trade.—ALPHA, *Gardeners' Chronicle* Office, W.C.

STEWARD, or STEWARD and BAILIFF.—Age 35; thoroughly efficient; and has had many years practical experience of both Fowler's and Smith's systems of Steam Cultivation. Reference to the gentleman he has just left.—S. S., *Gardeners' Chronicle* Office, W.C.

To Noblemen, Gentlemen, Estate Agents, &c.

MASTER CARPENTER on an Estate.—Used to Farm Buildings, Labourers' Cottages, and General Estate Work. Unexceptionable testimonials as to character and abilities.—C. M., 78, Moscow Road, Bayswater, S. W.

SHOPMAN (in the Seed Business).—Age 2..—Y., Messrs. Youell & Co., Royal Nurseries, Great Yarmouth.

DAIRY MAID.—A Person fully competent and well recommended from last situation.—Y. Z., 1, Upper Southwick Street, Cambridge Terrace, Hyde Park, W.

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LIGHT BROWN COD LIVER OIL prescribed by the most eminent medical men throughout the world as the safest, speediest, and most effectual remedy for CONSUMPTION, CHRONIC BRONCHITIS, ASTHMA, COUGHS, RHEUMATISM, GOUT, GENERAL DEBILITY, DISEASES of the SKIN, RICKETS, INFANTILE WASTING, and all SCROFULOUS AFFECTIONS. Is incomparably superior to every other variety.

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